1032-08-70 KENOSHA COUNTY

1032-05-76, 1032-08-70

FILE NAME: 2940/PLANS/GEN/2940TL01.DGN 12-06-01

INDEX OF SHEETS

Sheet No.	1	Title
Sheet No.		Typical Sections and Details (Includes Erosion Control Plans)
Sheet No.		Estimate of Quantities
Sheet No.		Miscellaneous Quantities
Sheet No.		Right of Way Plat
Sheet No.		Plan and Profile
Sheet No.		Standard Detail Drawings
Sheet No.		Sign Plates
Sheet No.		Structure Plans
Sheet No.		Computer Earthwork Data
Sheet No.		Cross Sections

TOTAL SHEETS = 560

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1032-05-76	IM 2002608	1
1032-08-70	IM 2002609	1

STATE LINE TO MILWAUKEE ROAD
CTH ML OVERPASS
IH-94
KENOSHA COUNTY

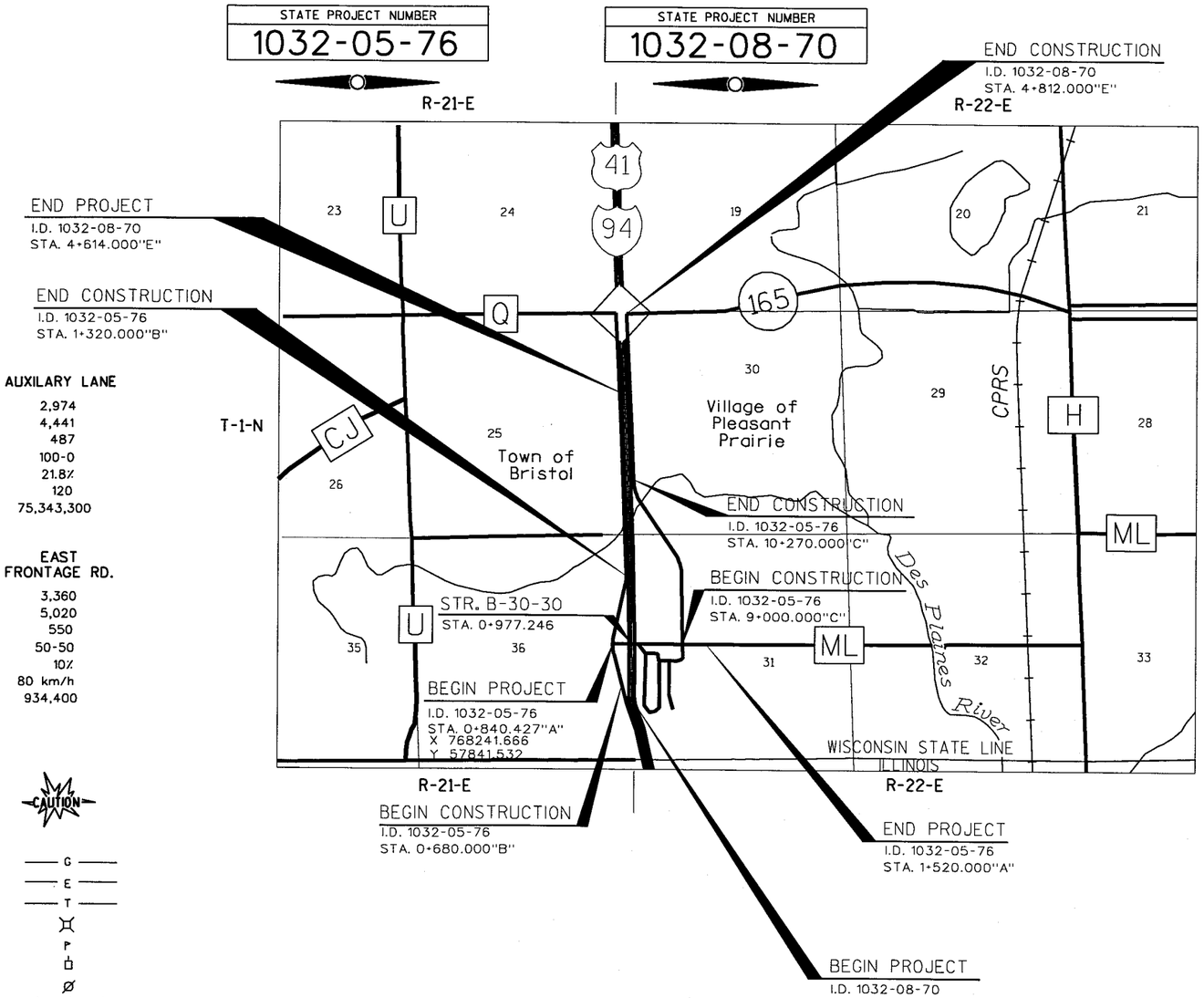
EAST-WEST FREEWAY (WB)
KENOSHA SAFETY & WEIGHT FACILITY, No. 21
IH-94
KENOSHA COUNTY

DESIGN DESIGNATION		I-94NB	BYPASS LANE	AUXILARY LANE
A.D.T. (1999-CONSTR. YR.)	=	43,470	2,974	2,974
A.D.T. (2019-DESIGN YR.)	=	68,350	4,441	4,441
D.H.V.	=	7,115	487	487
D.	=	100	100-0	100-0
T. % of A.D.T.	=	21.8%	21.8%	21.8%
DESIGN SPEED	=	120 km/h	80	120
ESALS	=	———	125,041,700	75,343,300

DESIGN DESIGNATION		CTH ML	WEST FRONTAGE RD.	EAST FRONTAGE RD.
A.D.T. (1999-CONSTR. YR.)	=	1,400	2,575	3,360
A.D.T. (2019-DESIGN YR.)	=	2,000	3,625	5,020
D.H.V.	=	229	421	550
D.	=	50-50	50-50	50-50
T. % OF A.D.T.	=	10%	10%	10%
DESIGN SPEED	=	80 km/h	80 km/h	80 km/h
ESALS	=	438,000	693,500	934,400

CONVENTIONAL SYMBOLS

COUNTY LINE		COMBUSTIBLE FLUIDS	CAUTION
CORPORATE LIMITS			
PROPERTY LINE	P.L. + 58.1		
LOT LINE		UNDERGROUND UTILITIES	
LIMITED EASEMENT		GAS	G
EXISTING RIGHT OF WAY		ELECTRIC	E
PROPOSED OR NEW R/W LINE		TELEPHONE OR TELEGRAPH	T
SURVEY LINE		SERVICE PEDESTAL	
		CABLE MARKER	
SLOPE INTERCEPT		POWER POLE	
ORIGINAL GROUND		TELEPHONE POLE	
MARSH OR ROCK PROFILE		RAILROAD	
EXISTING CULVERT		MARSH AREA	
PROPOSED CULVERT (Box or Pipe)			
CULVERT (Profile View)		WOODED OR SHRUB AREA	



LAYOUT
SCALE 0 1 km

TOTAL NET LENGTH OF CENTERLINE = 0.6796 km I.D. 1032-05-76
2.615 km I.D. 1032-08-70
3.2946 km RURAL

NOTE:
ALL COORDINATES ON THIS PLAN ARE GRID COORDINATES BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 83(91). TO CONVERT TO GRID COORDINATES (X & Y) TO GROUND COORDINATES (N & E), DIVIDE GRID COORDINATES (X & Y) BY 0.99997810.

CAUTION:
THIS PLAN IS IN GRID COORDINATES AND RIGHT-OF-WAY PLAT IS IN GROUND COORDINATES.

ORIGINAL PLANS PREPARED BY
ALFRED BENESCH & COMPANY
KENOSHA, WISCONSIN

WISCONSIN
RICHARD A. HILL
E-31586
KENOSHA, WIS.
PROFESSIONAL ENGINEER

1/11/02 DATE
SIGNATURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor ALFRED BENESCH & COMPANY
Designer ALFRED BENESCH & COMPANY
District Examiner
District Supervisor
Proj. Dev. Engineer
C.O. Examiner E.N. BENISCH

APPROVED FOR DISTRICT OFFICE
DATE: 1-23-02 Beth Blum (Signature)

M

WISCONSIN D.O.T. STANDARD DETAIL DRAWINGS

DRAINAGE
CATCH BASINS AND COVERS

8A5-17a	Inlet Covers Type A, H, A-S & H-S
8A5-17b	Inlet Covers Type B, B-A, C, MS, MS-A & WM
8A5-17d	Inlet Cover, Type Z Manhole Covers, Type K, J, J-S, L & M
8A6-4	Catch Basins, Types 1 and 2

MANHOLES

8B6-3	Manholes, Type 1
8B7-3	Manholes, Types 2 and 3

INLETS

8C1-5	Inlets, Types 1, 2, 3 and 4
8C5-2	Inlets, Types 8, 9, 10, and 11

CURB AND GUTTER, AND SURFACE DRAINS

8D1-13	Concrete Curb, Concrete Curb and Gutter and Pavement Ties
8D2-4	Concrete Surface Drains, Flume Type at Structures
8D4-3	Concrete Surface Drain & Asphaltic Flume
8D5-8	Curb Ramps
8D15-3a	Edgedrain Outlet and Outfall Markers
8D15-3b	Edgedrain and Crushed Aggregate Base Course, Open Graded, No. 1 or No. 2

EROSION CONTROL DEVICES

8E8-2	Typical Installations of Erosion Bales
8E9-6	Silt Fence
8E10-1	Inlet Protection Type A, B and C

PIPE AND CULVERT

8F1-11	Apron Endwalls for Culvert Pipe
8F6-4	Reinforced Concrete Apron Endwall for Pipe Underdrain
8F9-1	Mortar Rubble Masonry Endwalls for Culvert Pipe and PipeArch

INTERSECTION DESIGN
GEOMETRIC LAYOUTS

9A1-11a	At-Grade Side Road Intersections, Types "B1", "B2", "C" and "D" and Tee Intersection Bypass Lane
9A1-11b	At-Grade Side Road Intersection, Type "A".

CONDUIT

9B2-6	Conduit
9B4-4	Pull Box

BASES

9C5-2	Concrete Control Cabinet Bases
9C8-1	Concrete Base, Type 7
9C9-1	Concrete Base, Type 8
9C3-2	Transformer/PEDESTAL BASES

LOOP DETECTORS

9F2-2	Loop Detector Installed in new Concrete Pavement, 200mm x 200mm x 200mm Junction Box

FREEWAY LIGHTING DESIGN

10HL1-1	Electrical Handhole Wiring
10HL2-1	Identification Plaques Light Poles
10HL3-2	Circuit Identification Plaques Sign Bridges
10HL5-1	Electrical Details Ground Mount Light Poles Isolated Neutral Systems
10HL17-2b & c	Poles Type 7 & 7BR, A, ABR, A2, E, EBR, E2
10HL18-2a & b	Luminaire Arms Single Member & Truss Type, 150 mm Clamp

GEOMETRIC DESIGN
MEDIANS

11B1-2	Concrete Corrugated Median

STRUCTURES
SLOPE PAVING

12A2-3	Slope Paving - Structures (Crushed Aggregate)
12A3-7	Name Plate (Structures)
12A4-1	Structure Identification Plaques, Sign Bridge & Overhead Sign Support

PAVEMENT DESIGN
GENERAL

13A3-3	Concrete Shoulders

APPROACH DETAILS

13B2-4	Concrete Pavement Approach Slab

JOINTS

13C1-10	Concrete Pavement Longitudinal Joints & Pavement Ties
13C11-6a & b	Rural Doweled Concrete Pavement
13C13-3	Urban Doweled Concrete Pavement
13C17-1a & b	Concrete Joint Detail for Exit Ramp Termini

VEHICLE BARRIER SYSTEMS

14A2-1	Tree Planting Detail
14B3-2	Tree Planting Detail
14B7-9a	Temporary Precast Concrete Barrier
14B7-9b	Precast Concrete Barrier End Section and Portable Crash Cushion
14B15-4a	Steel Plate Beam Guard, Class "A", Installation & Elements
14B15-4b	Steel Plate Beam Guard, Class "A", Installation & Elements
14B18-5a	Steel Plate Beam Guard, Class "A"
14B20-7a	Steel Thrie Beam Structure Approach
14B20-7b	Steel Thrie Beam Structure Approach, Connection to Squared End and Vertical Faced Parapets
14B22-3a	Concrete Barrier, Single-Faced (With Anchorage)
14B22-3b	Concrete Barrier, Single-Faced
14B24-4a, b & c	Steel Plate Beam Guard, Energy Absorbing Terminal
14B25-1	Steel Plate Beam Guard, Class "A", over Low Fill Culverts

R/W, ACCESS CONTROL AND TRAFFIC CONTROL
MARKER POSTS

15A1-7	Marker Posts for Right-Of-Way
15A2-5	Delineator Posts, Delineator Bracket and Delineators
15A3-1	Marker Post, Flexible, for Culvert End

FENCING

15B1-7a & 7b	Woven Wire Fence

MARKING AND SIGNING

15C2-3	Barricades and Signs for Road Closures
15C6-4	Signing and Marking for Two Lane Bridges
15C8-9a	Pavement Marking (Mainline)
15C8-9b	Pavement Marking (Intersections)
15C8-9f	Pavement Marking (Ramps and Gores)
15C10-6b	Raised Pavement Markers (Ramps and Arrows)
15C10-6c	One Way Raised Pavement Markers (Casting and Sawcut Details)
15C12-2	Traffic Control for Lane Closure (Suitable for Moving Operations)
15D12-2	Traffic Control, Lane Closure, Speeds Greater Than 40 MPH
15D14-1	Traffic Control, Two Lane Closure on Freeway or Expressway, Short-Term (Less than 24 Hours)
15D15-1	Traffic Control, Exit and Entrance Ramp Within Lane Closure
15D27-1	Traffic Control, Shoulder Closure on Divided Roadway, Speeds Greater than 40 MPH
15D28-1	Traffic Control, Work on Shoulder or Parking Lane, Undivided Roadway

SURVEYING
MONUMENTS

16A1-6	Landmark Reference Monuments and Covers

R 5-7-02

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GN04.DGN 12-06-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

UTILITIES

TELEPHONE

VERIZON
100 COMMUNICATION DRIVE
PO BOX 149
SUN PRAIRIE, WI 53590-0049
DEB HUNTER (608) 837-1741

CINGULAR WIRELESS/CE DESIGN (TOWER)
1875 ROHLWING ROAD
ROLLING MEADOWS, IL 60008
JASON KILPS (847) 392-1339
DESIGN ENGINEER

ELECTRIC

WISCONSIN ELECTRIC POWER CO.
231 W. MICHIGAN AVENUE RM 440
MILWAUKEE, WI 53201
LARRY KRUECK (262) 886-7014

ELECTRIC
(SITE DEVELOPMENT)

WISCONSIN ELECTRIC POWER CO.
201 1st STREET
RACINE, WI 53406
Lee Englund-Cust. Svc. Technician
(262) 552-2222

HIGH VOLTAGE

ATC/LLC (AMERICAN TRANSMITION COMPANY,
LIMITED LIABILTIY COMPANY)
N19 W23993 RIDGEVIEW PARKWAY WEST
PO BOX 47
WAUKESHA, WI 53187-0047
TERESA KOCHAVEN (262) 506-6875

LIGHTING

WISCONSIN DEPT OF TRANSPORTATION
2000 PEWAUKEE ROAD
PO BOX 798
WAUKESHA, WI 53187-0788
CHARLES LANDEY (262) 521-5346

FIBER OPTIC

TOUCH AMERICA
PO BOX 5329
HALENA, MT 59604-5329
JOE ROBERTSON (406) 495-9059

FTMS

ADESTA COMMUNICATIONS
JAY JORGANSON (630) 739-0546

WISCONSIN AGENCIES

DNR LIASON

DEPARTMENT OF NATURAL RESOURCES
SOUTHWEST REGIONAL HEADQUARTERS
2300 N. M.L. KING JR. DRIVE
BOX 12436
MILWAUKEE, WI 53212-0436
MAUREEN MILLMANN (414) 263-8613

COUNTY

COUNTY OF KENOSHA PUBLIC WORKS
PO BOX 609
BRISTOL, WI 53104-0609
GARY SIPSMA (262) 857-1859

PLEASANT PRAIRIE

VILLAGE OF PLEASANT PRAIRIE
DEPARTMENT OF PUBLIC WORKS
8600 GREENBAY ROAD
PLEASANT PRAIRIE, WI 53158
JOHN STEINBRINK JR. (262) 694-1403
FAX (262) 694-2941

FREEWAY OPERATIONS

WISCONSIN DEPARTMENT OF TRANSPORTATION
TRAFFIC OPERATION CENTER
633 W. WISCONSIN AVE.
SUITE 1200
MILWAUKEE, WI 53203
HEBBANI LOKESH (414) 227-2149

ILLINOIS AGENCIES

ILLINOIS DEPARTMENT
OF TRANSPORTATION

BUREAU OF TRAFFIC
201 WEST CENTER COURT
SCHAUMBERG, ILL 60196
JOE SEPP OBERLE (847) 705-4470
ARTERIAL TRAFFIC CONTROL SUPERVISOR

ILLINOIS TOLLWAY

BUREAU OF TRAFFIC
201 WEST CENTER COURT
SCHAUMBERG, ILL 60196
JOE SEPP OBERLE (847) 705-4470
ARTERIAL TRAFFIC CONTROL SUPERVISOR

DIGGERS HOTLINE

Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

CALL JULIE TOLL FREE 1-800-892-0123

STATE PROJECT NO: 1032-05-76,1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	UTILITIES	SHEET NO: 3	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GN02.DGN 12-21-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

ABBREVIATIONS

AC.	ACRES
ALUM.	ALUMINUM
A.P.	ACCESS POINT
B.	BARN
C.S.M.	CERTIFIED SURVEY MAP
C.M.P.	CORRUGATED METAL PIPE
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE
DOC.	DOCUMENT
F.E.	FIELD ENTRANCE
G.	GARAGE
H.	HOUSE
ha	HECTARES
km	KILOMETER
L.	LENGTH OF VERTICAL CURVE
L.C.	LONG CORD OF CURVE
L.C.B.	LONG CORD BEARING
m	METER
mi	MILE
NO.	NUMBER
P.H.E.	PERMANENT HIGHWAY EASEMENT
P.O.B.	POINT OF BEGINNING
P.C.	POINT OF COMPOUND CURVATURE
P.C.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.R.C.	POINT OF REVERSE CURVATURE
P.T.	POINT OF TANGENCY
P.V.C.	POINT OF VERTICAL CURVE
P.V.I.	POINT OF VERTICAL INTERCEPT
P.V.R.C.	POINT OF VERTICAL REVERSE CURVATURE
P.V.T.	POINT OF VERTICAL TANGENCY
P.L.	PROPERTY LINE
R.	RADIUS
R.C.P.	REINFORCED CONCRETE PIPE
R.C.P.A.	REINFORCED CONCRETE PIPE ARCHES
R.D.E.	RESTRICTED DEVELOPMENT EASEMENT
R/W	RIGHT OF WAY
S.D.	SPECIAL DITCH
S.L.	SECTION LINE
S.	SILO/SHED
sq	SQUARE
S.F.	SQUARE FEET
STA.	STATION
T.	TANGENT
T.I.	TEMPORARY INTEREST
T.L.E.	TEMPORARY LIMITED EASEMENT
TYP.	TYPICAL ELSEWHERE IN PLAN
e	SUPERELEVATION RATE
VOL.	VOLUME
W.I.M.	WEIGH-IN-MOTION

ORDER OF DETAIL SHEETS

SHEET TITLE
STANDARD DETAIL DRAWINGS LIST
GENERAL NOTES

UTILITIES

PROJECT OVERVIEW

TYPICAL SECTIONS

CONSTRUCTION DETAILS

BUILDING LANDSCAPE/WELL/SEPTIC PLANS

FTMS PLAN

PAVING DETAILS

REMOVALS

INTERSECTIONS

CROSS SECTION MATCH LINE

EROSION CONTROL AND DRAINAGE

STORM SEWER AND UTILITIES

SIGNING

LIGHTING

WEIGH & MOTION SYSTEM

STATIC SCALE SYSTEM

BUILDING ARCHITECTURAL PLANS

PAVEMENT MARKING

TRAFFIC CONTROL AND CONSTRUCTION STAGING

FENCING

ALIGNMENT PLAN/SUPER ELEVATION DIAGRAMS/TIES & CONTROL

SOIL BORINGS

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GN03.DGN 12-21-01
LEVELS ON = 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATIONS OF UTILITIES AND EXERCISE CARE DURING CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM.

2. NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

3. ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR BACKFILL.

4. MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER.

5. CURB AND GUTTER GRADES GIVEN ARE ON THE FLANGE LINE. DISTANCES SHOWN FOR CURB AND GUTTER IN RADII ARE MEASURED ALONG FLANGE.

6. ALL DISTANCES ARE GROUND DISTANCES.

7. EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADII POINTS IN CURB & GUTTER.

8. LOCATIONS OF MANHOLES, CATCH BASINS AND INLETS ARE TO CENTER OF STRUCTURE. GRATE ELEVATIONS ARE AT EDGE OF PAVEMENT FOR INLETS ADJACENT TO PAVEMENT. ALL OTHER GRATE ELEVATIONS ARE TO CENTER OF STRUCTURE.

9. CONTRACTOR SHALL EXERCISE EXTREME CARE SO AS TO NOT DAMAGE MAINLINE PAVEMENT STRUCTURE WHEN REMOVING EXISTING SHOULDER MATERIAL. IF DAMAGE OCCURS DURING REMOVAL OF THE EXISTING SHOULDER MATERIAL, ALL REPAIRS WILL BE DONE AT CONTRACTORS EXPENSE.

10. ALL PULL BOXES AND POWER POLES SHALL BE ADJUSTED AND/OR RELOCATED BY THE CORRESPONDING UTILITY, UNLESS OTHERWISE NOTED IN PLAN.

11. EXISTING DRIVEWAYS WILL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD.

12. ALL PIPE UNDERDRAIN SHALL BE PLACED AFTER CONCRETE PAVEMENT IS IN PLACE TO PREVENT FROM BEING DAMAGED DURING CONSTRUCTION.

13. ALL DIMENSIONS GIVEN TO EXISTING FEATURES SHALL BE CONSIDERED AS APPROXIMATE.

14. THE ITEM "SAWING CONCRETE PAVEMENT, FULL DEPTH" WHEN USED FOR CONCRETE BARRIER REMOVAL WILL BE MEASURED AS 1.0m FOR THE FOOTING AND 0.9m FOR THE WALL.

15. DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE FERTILIZED, SALVAGED TOPSOIL 100mm, (OR TOP SOILED) SEEDED, AND COVERED WITH EROSION MAT AND MULCH AS DIRECTED BY THE ENGINEER.

16. ALL ASPHALTIC PAVEMENT IMPACTED BY CONSTRUCTION ACTIVITIES, SHALL BE REMOVED AND STOCKPILED AS SPECIFIED IN THE BID ITEM, ASPHALTIC PAVEMENT, BASE COURSE.

18. TRAFFIC CONTROL SIGNS WHICH ARE APPLICABLE TO RAMP CLOSURES, SHALL BE COVERED WHEN THE RAMPS ARE OPEN TO TRAFFIC AS DIRECTED BY THE ENGINEER IN THE FIELD.

19. THE ITEM "SAWING CONCRETE PAVEMENT, FULL DEPTH" SHALL INCLUDE THE ENTIRE PAVEMENT STRUCTURE (CONCRETE AND ASPHALTIC SURFACE).

20. THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION AND DIMENSIONS. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

21. ALL CONDUIT WILL BE PLACED IN TRENCHES AS OUTLINED IN SECTION 652 OF THE STANDARD SPECIFICATIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR BORING.

22. REFER TO CROSS SECTIONS FOR AREAS USING SPECIAL DITCHING.

23. THE PROJECT GEOTECHNICAL CONSULTANT RECOMMENDS THE INSTALLATION OF A DEWATERING SYSTEM FOR EXCAVATION ACTIVITIES WITHIN AND AROUND THE BUILDING.

24. AS PART OF THIS PROJECT THERE WILL BE FREEWAY TRAFFIC MANAGEMENT SYSTEM (FTMS) CONDUIT EXTENDED FROM JUST NORTH OF THE CTH ML BRIDGE ON THE WEST SIDE OF I-94 TO SOUTH OF THE ILLINOIS STATE LINE. THIS WORK SHALL BE COORDINATED WITH ADESTA COMMUNICATIONS.

25. ALL CONSTRUCTION ACTIVITIES WHICH INTERFERE WITH MORE THAN ONE LANE ON INTERSTATE 94 SHALL BE DONE DURING NIGHT TIME OPERATIONS. SEE SPECIAL PROVISIONS FOR NON-PEAK NIGHT TIME OPERATIONS.

26. THE WEST FRONTAGE ROAD MUST BE OPEN TO TRAFFIC BETWEEN JUNE 29th AND AUGUST 25th, 2002 AND BETWEEN MID JUNE AND THE END OF AUGUST 2003. CONTACT LINDA MCFETERS (BRISTOL RENAISSANCE FAIRE) AT (847 395-7773 FOR EXACTTIMES AND/OR CHANGES.

27. ASPHALTIC CONCRETE PAVEMENT LAYER BREAKDOWN BY ROADWAY:

CTH ML

SURFACE: 50mm OF 12.5mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE, PG 58-28
LOWER: 75mm OF 19.0mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE PG 58-28
PAVED PORTION OF SHOULDER WILL BE THE SAME.

EAST AND WEST FRONTAGE ROAD, PARKING LOT

SURFACE: 40mm OF 12.5mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE, PG 58-28
LOWER: 2-60mm OF 19.0mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE PG 58-28
PAVED PORTION OF SHOULDER WILL HAVE SURFACE AND ONE LOWER LAYER.

S&W ACCESS ROAD

SURFACE: 40mm OF 12.5mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE, PG 58-28
LOWER: 60mm OF 19.0mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE PG 58-28
SHOULDERS ARE NOT PAVED.

120th AVE.

SURFACE: 40mm OF 12.5mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE, PG 58-28
LOWER: 60mm OF 19.0mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE PG 58-28
PAVED PORTION OF SHOULDER WILL BE THE SAME.

LINE "E" RAMP FROM STA. 3+002 TO 3+480 (SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION)
(WISCONSIN DEPARTMENT OF TRANSPORTATION DESIGN:)

SURFACE: 50mm OF 12.5mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, 40726, PERFORMANCE GRADE, PG 76-28
MIDDLE LAYER: 125mm OF 25.0mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, 40726, PERFORMANCE GRADE PG 70-22
LOWEST LAYER: 100mm OF 25.0mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, 40726, PERFORMANCE GRADE PG 64-22
PAVED PORTION OF SHOULDER WILL HAVE SURFACE AND ONE LOWER LAYER.

LINE "E" RAMP FROM STA. 3+480 TO 3+958 (SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION)
(WAPA & MARSHALL THOMPSON'S DESIGN:)

SURFACE: 50mm OF 12.5mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, 40726, PERFORMANCE GRADE, PG 70-28
MIDDLE LAYER: 125mm OF 25.0mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, 40726, PERFORMANCE GRADE PG 70-22
LOWEST LAYER: 100mm OF 25.0mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, 40726, PERFORMANCE GRADE PG 64-22
PAVED PORTION OF SHOULDER WILL HAVE SURFACE AND ONE LOWER LAYER.

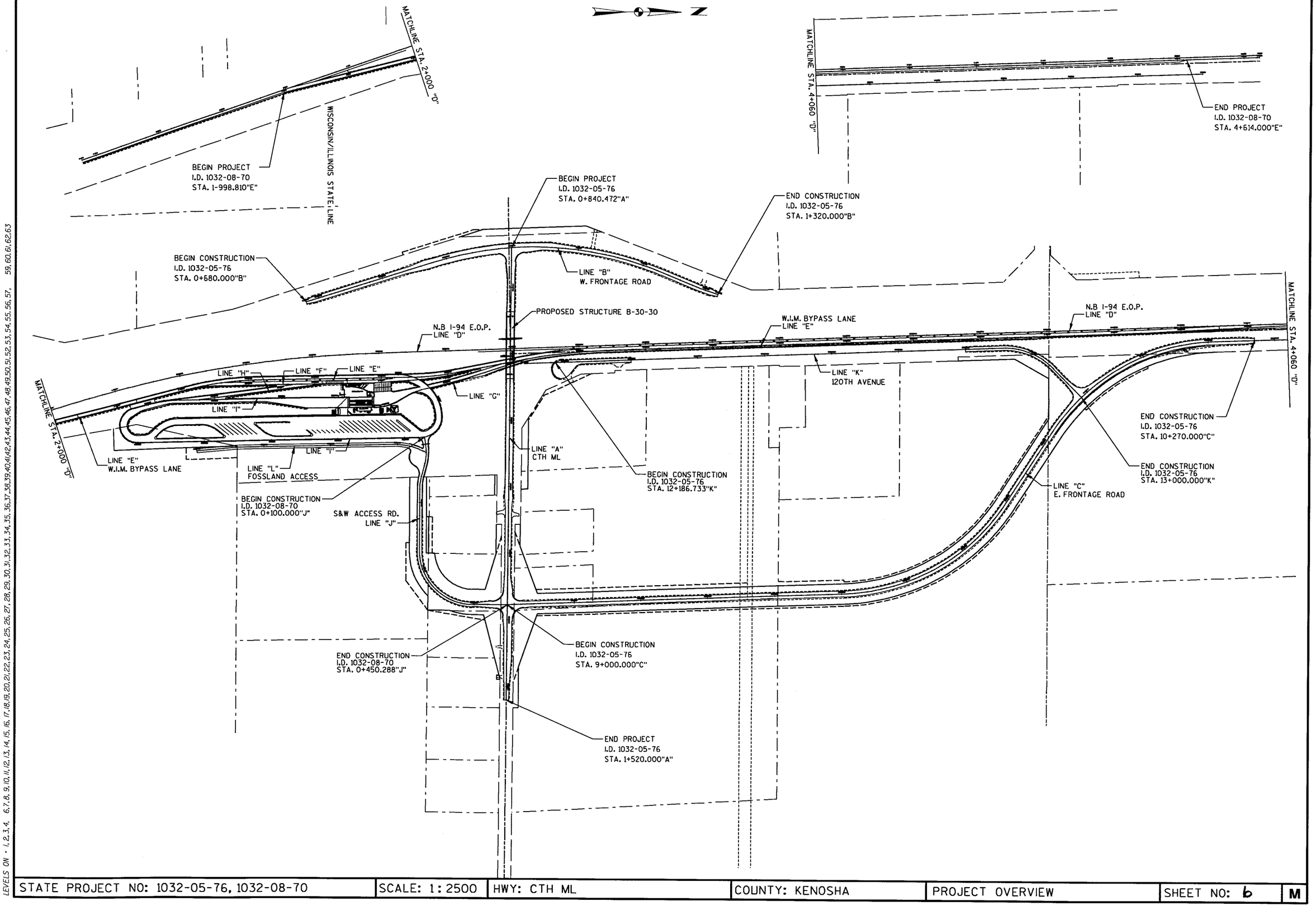
LINE "E" RAMP SHOULDER FROM STA. 3+958 TO 4+614

SURFACE: 50mm OF 12.5mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, PERFORMANCE GRADE, PG 70-28
LOWER: 125mm OF 25.0mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE PG 70-22

ALL INTERNAL RAMP SHOULDERS

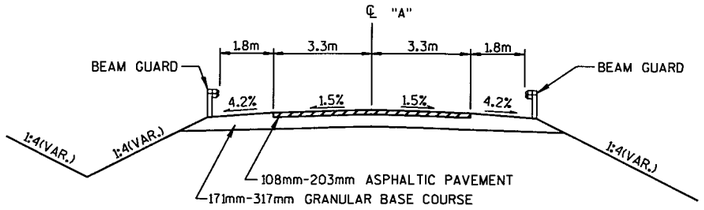
SURFACE: 40mm OF 12.5mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X, PERFORMANCE GRADE, PG 70-28
LOWER: 60mm OF 25.0mm ASPHALT CONCRETE PAVEMENT, TYPE E-1, PERFORMANCE GRADE PG 70-22

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GN01.DGN 12-06-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

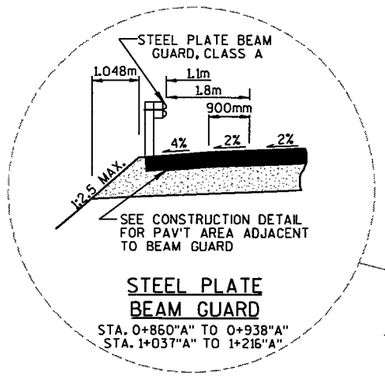


STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:2500	HWY: CTH ML	COUNTY: KENOSHA	PROJECT OVERVIEW	SHEET NO: 6	M

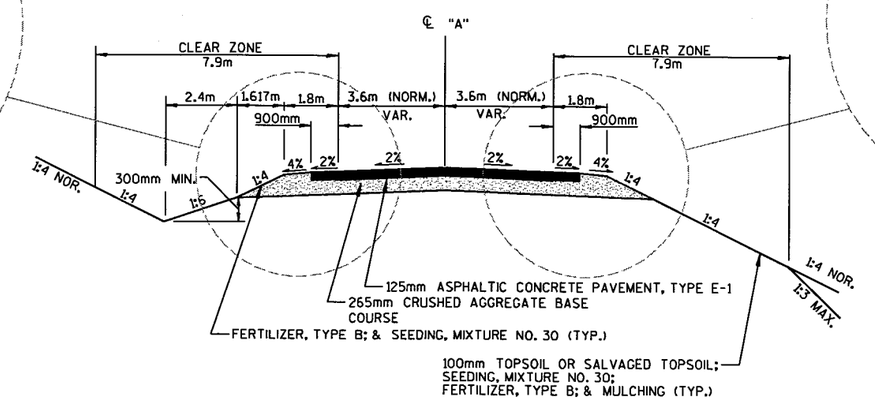
FILE NAME: PROJECTS/2940/PLANS/GEN/2940ALOV.DGN 11-20-01
LEVELS ON - 1,2,3,4, 6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57, 59,60,61,62,63



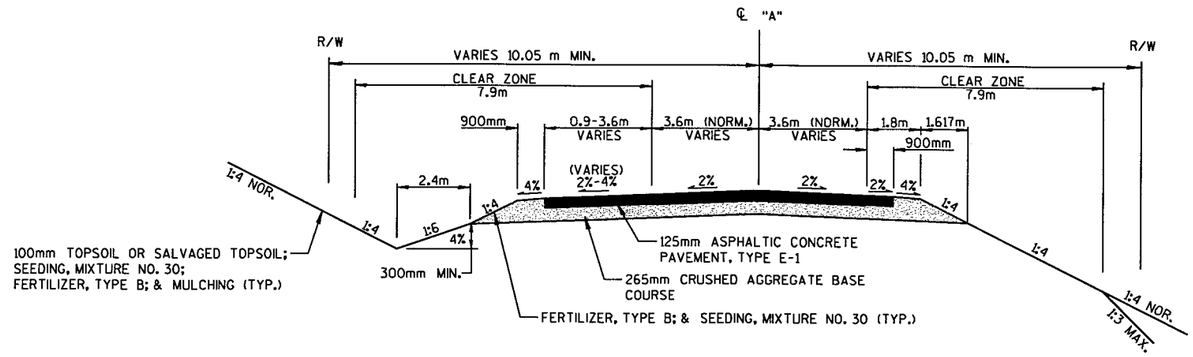
EXISTING CTH "ML"
STA. 0+840"A" TO 0+950"A"
STA. 1+025"A" TO 1+520"A"



STEEL PLATE BEAM GUARD
STA. 0+860"A" TO 0+938"A"
STA. 1+037"A" TO 1+216"A"



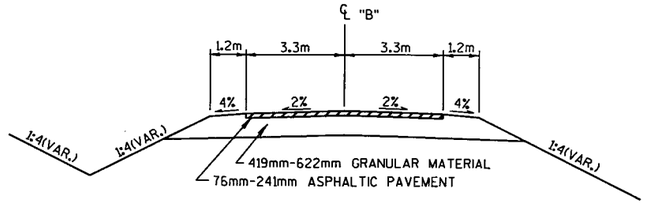
PROPOSED CTH ML
STA. 0+840"A" TO 0+944"A"
STA. 1+031"A" - 1+360"A"



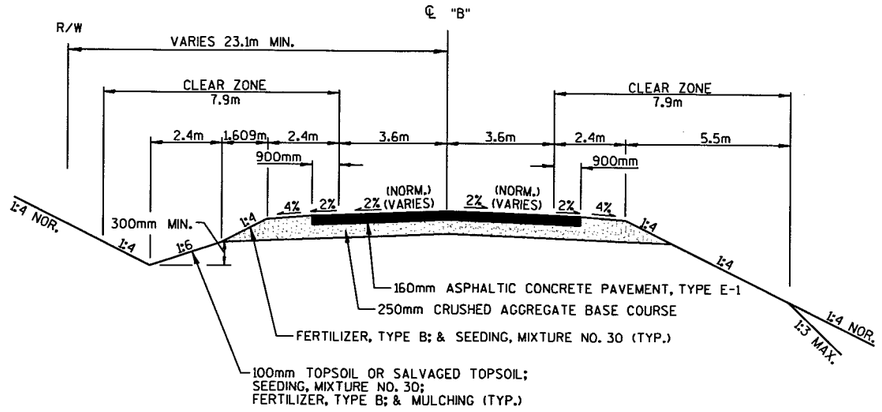
PROPOSED CTH ML
STA. 1+360"A" - 1+520"A"

STATE PROJECT NO: 1032-05-76	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "A" (CTH ML)	SHEET NO: 7	M

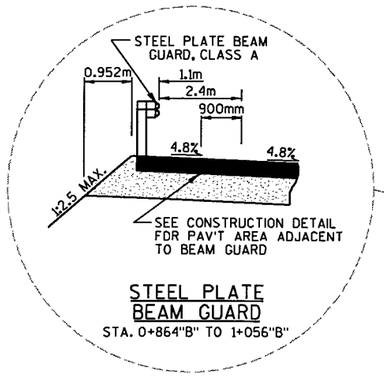
FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYP1.DGN(1) 12-06-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



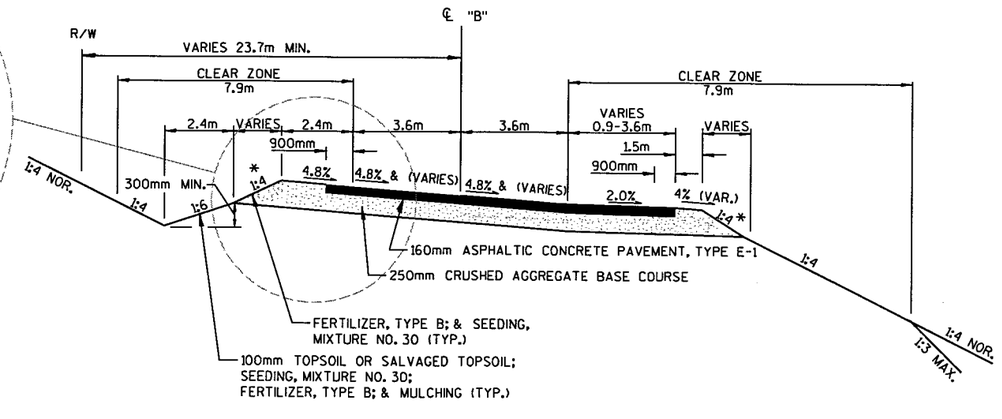
EXISTING WEST FRONTAGE ROAD
STA. 0+680"B" TO 1+320"B"



PROPOSED WEST FRONTAGE ROAD
STA. 0+680"B" - 0+837"B"
STA. 1+230"B" - 1+320"B"



STEEL PLATE BEAM GUARD
STA. 0+864"B" TO 1+056"B"

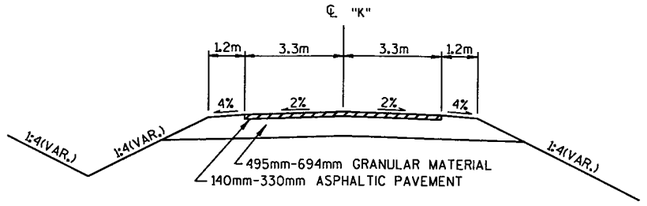


* SLOPE VARIES, 3:1 MAXIMUM SLOPE WITHOUT BEAM GUARD

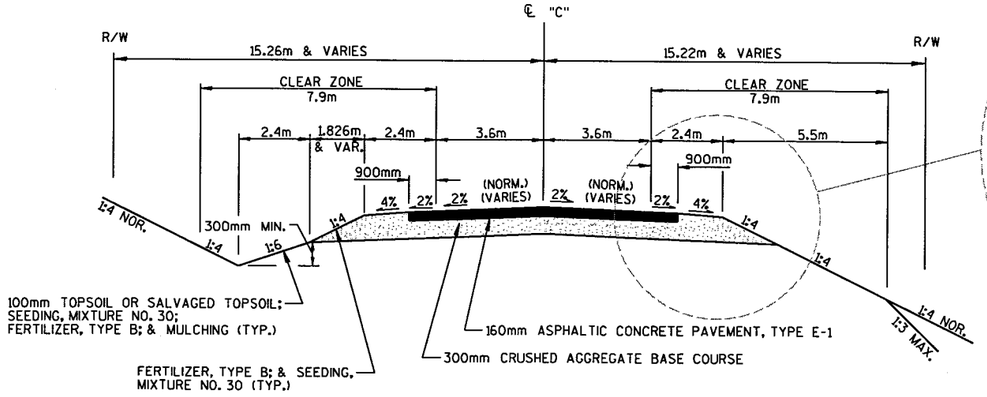
PROPOSED WEST FRONTAGE ROAD
SUPERELEVATED SECTION
STA. 0+837"B" - 1+230"B"

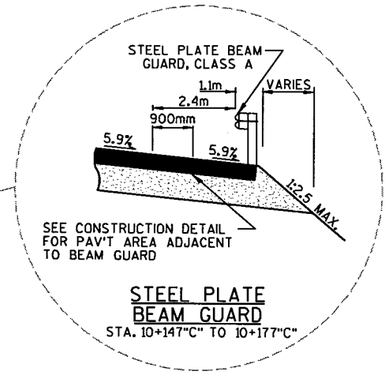
STATE PROJECT NO: 1032-05-76	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 8	M

FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYP1.DGN(2) 12-06-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



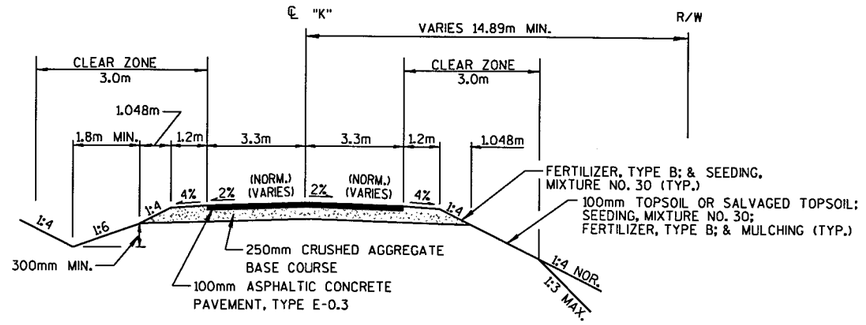
EXISTING EAST FRONTAGE ROAD (120TH AVENUE)
STA. 12+140"K" TO 12+880"K"
STA. 10+180"C" TO 10+980"C"





STEEL PLATE BEAM GUARD
STA. 10+147"C" TO 10+177"C"

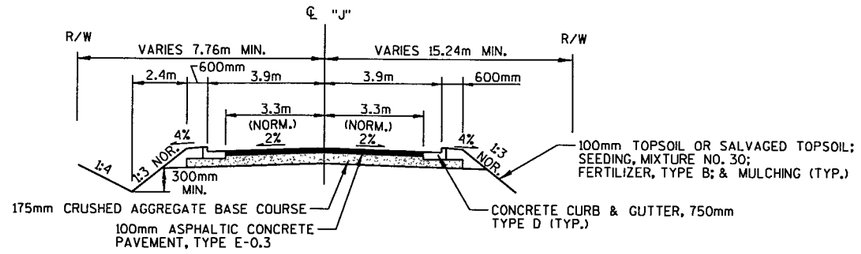
PROPOSED EAST FRONTAGE ROAD
STA. 9+000"C" - 10+270"C"



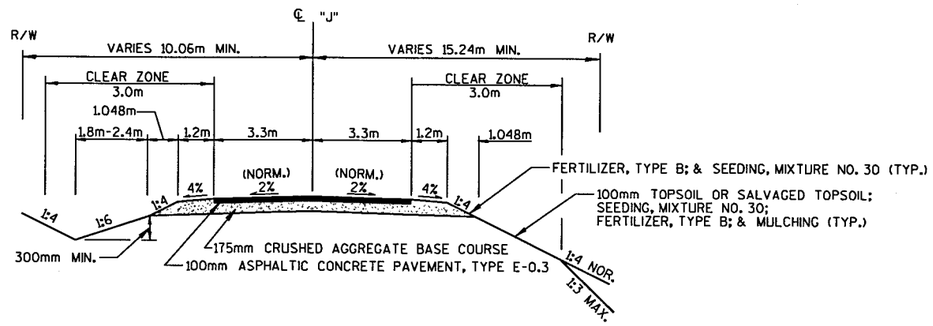
PROPOSED 120TH AVENUE
STA. 12+227"K" - 12+300"K"
STA. 12+800"K" - 12+996"K"

STATE PROJECT NO: 1032-05-76	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 9	M

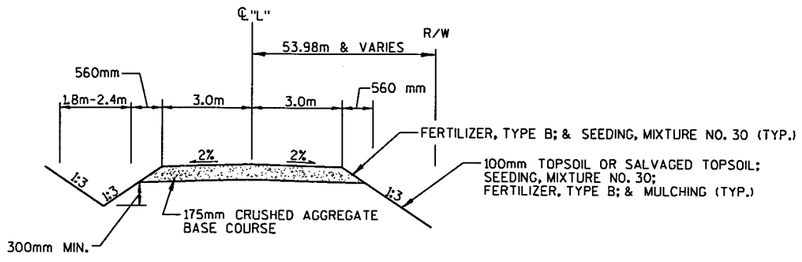
FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYP1.DGN(3) 12-06-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



PROPOSED SAFETY & WEIGHT ACCESS ROAD
STA. 0+100"J" - 0+220"J"

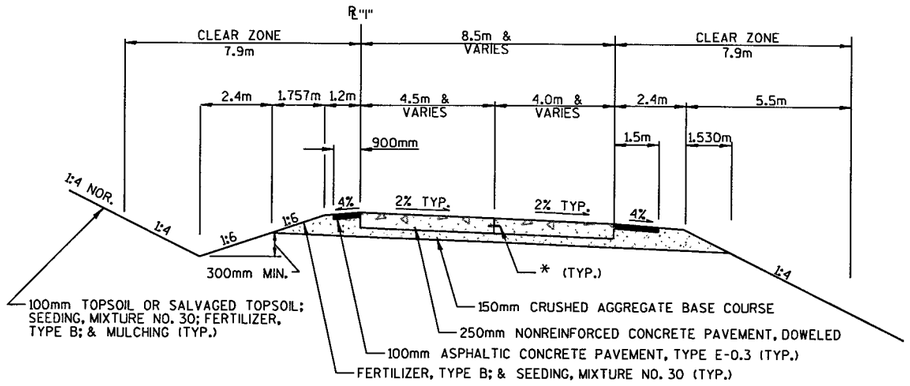


PROPOSED SAFETY & WEIGHT ACCESS ROAD
STA. 0+220"J" - 0+439"J"



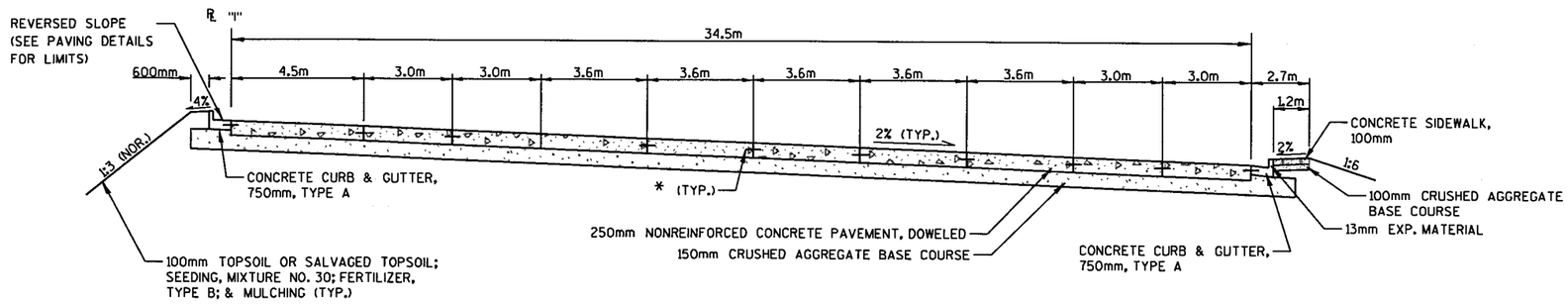
FOSSLAND DRIVEWAY
STA. 1+000"L" - 1+318"L"

FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYP1.DGN(4) 12-06-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS

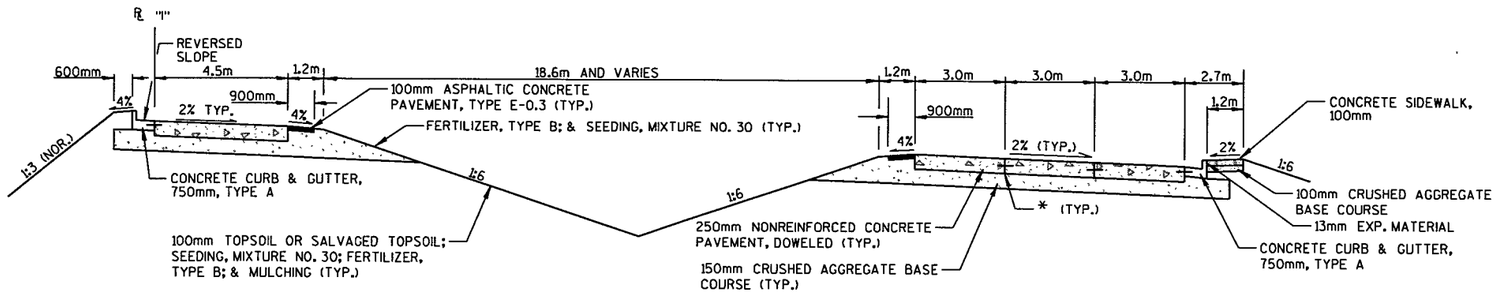
STA. 6+725"I"-6+867"I"



PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS

STA. 6+867"I" - 7+038"I"
STA. 7+125"I" - 7+169"I"
(LOOKING SOUTH)

*13M FOR LONGITUDINAL JOINTS
*10M FOR MAINLINE SHOULDERS



PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS

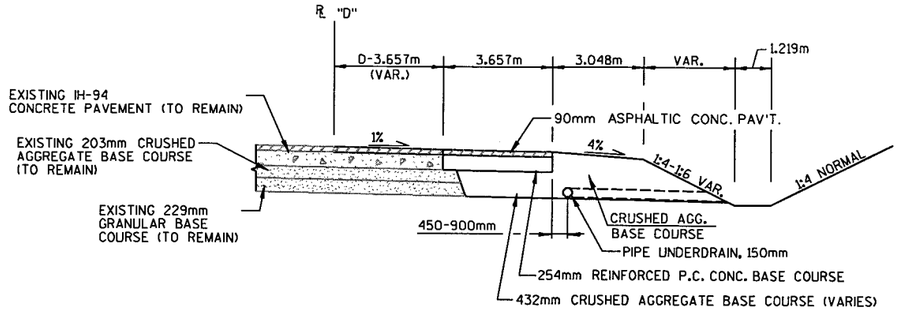
STA. 7+038"I" - 7+125"I"
STA. 7+169"I" - 7+274"I"
(LOOKING SOUTH)

NOTE:

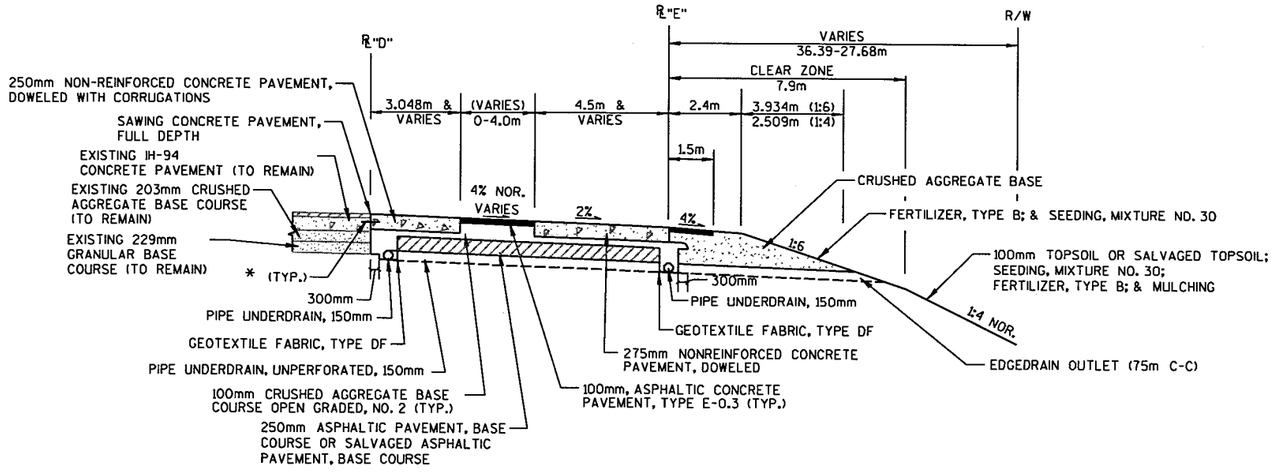
ALL TYPICAL SECTIONS SHOW PAVEMENT STRUCTURE FOR VARIOUS ALIGNMENTS. FOR EXACT DETAILS ON WIDTHS OF PAVEMENT THROUGHOUT SAFETY & WEIGHT FACILITY, SEE PAVING DETAILS.

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "I" (KENOSHA S&W FACILTY)	SHEET NO: 11	M

FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYPS&W.DGN(1) 12-07-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

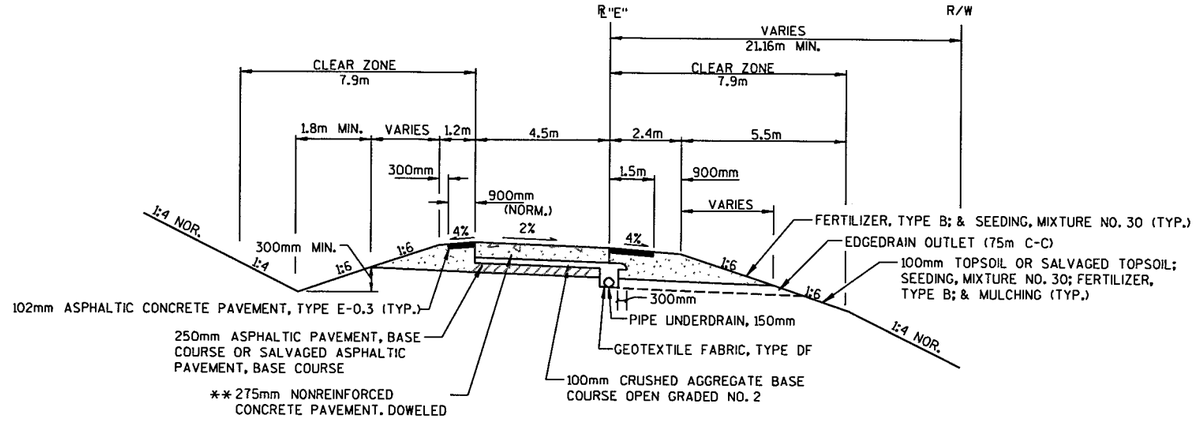


EXISTING RAMP
STA. 1+000"D" TO 1+147"D"



PROPOSED IH-94 AUXILARY LANE
STA. 1+999"E" - 2+099"E"

*13M FOR LONGITUDINAL JOINTS
*10M FOR MAINLINE SHOULDERS

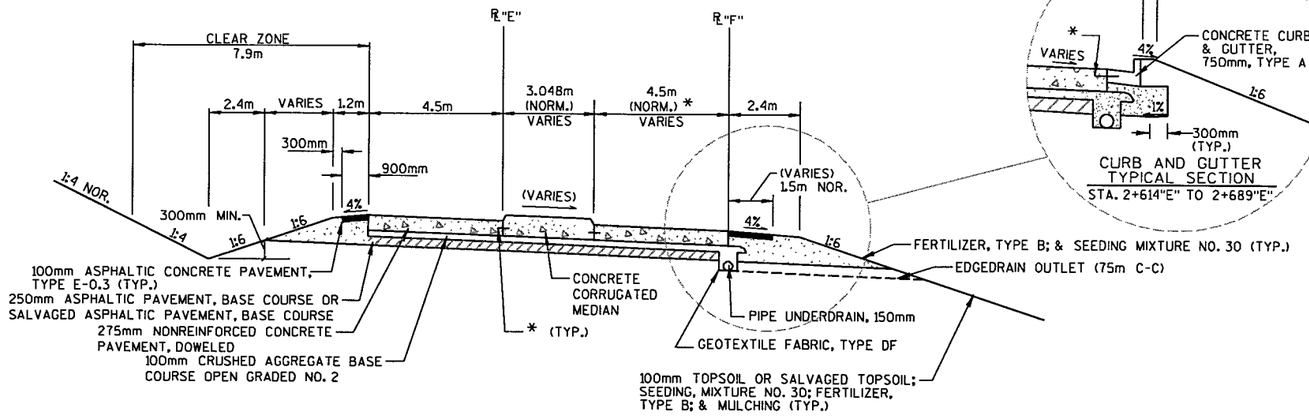


PROPOSED SAFETY & WEIGHT FACILITY BYPASS LANE
STA. 2+099"E"-2+407"E"
STA. 2+839"E"-2+879"E"

** CONCRETE PAVEMENT APPROACH SLAB TO WIM IS CONTINUOUSLY REINFORCED STA. 2+239"E"-2+330.5"E" (SEE CONSTRUCTION DETAILS)

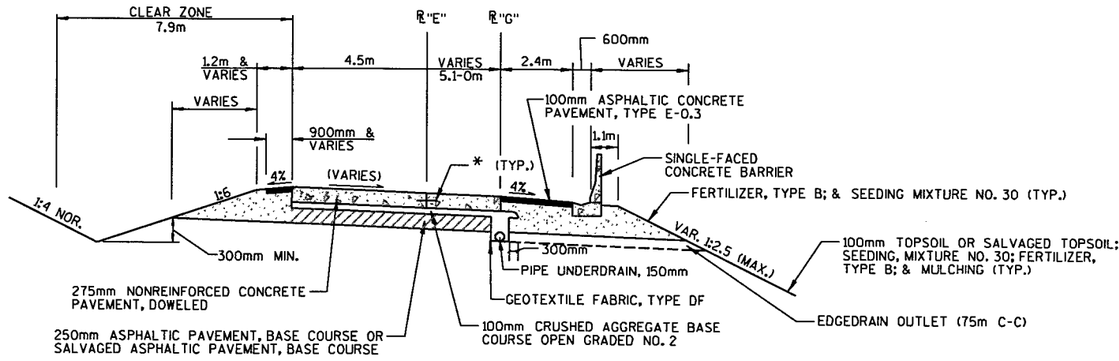
STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "E" (KENOSHA S&W FACILTY)	SHEET NO: 12	M

FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYPS&W.DGN(2) 12-07-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



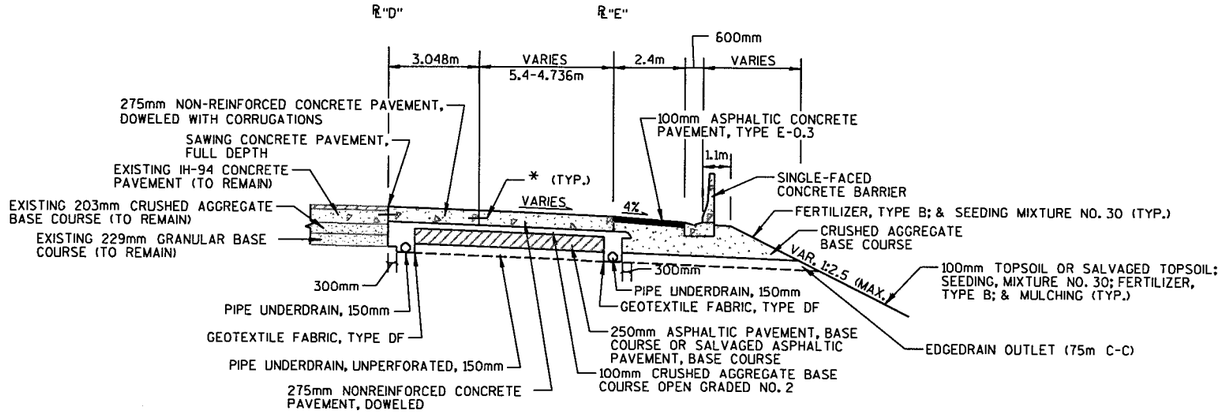
PROPOSED SAFETY & WEIGHT FACILITY BYPASS LANE
STA. 2+407"E"-2+839"E"

** CONCRETE PAVEMENT APPROACH SLAB TO WIM IS CONTINUOUSLY REINFORCED.
STA. 3+594"F" - 3+600"F"
STA. 3+626"F" - 3+632"F"



PROPOSED SAFETY & WEIGHT FACILITY BYPASS LANE
STA. 2+879"E" - 3+002"E"

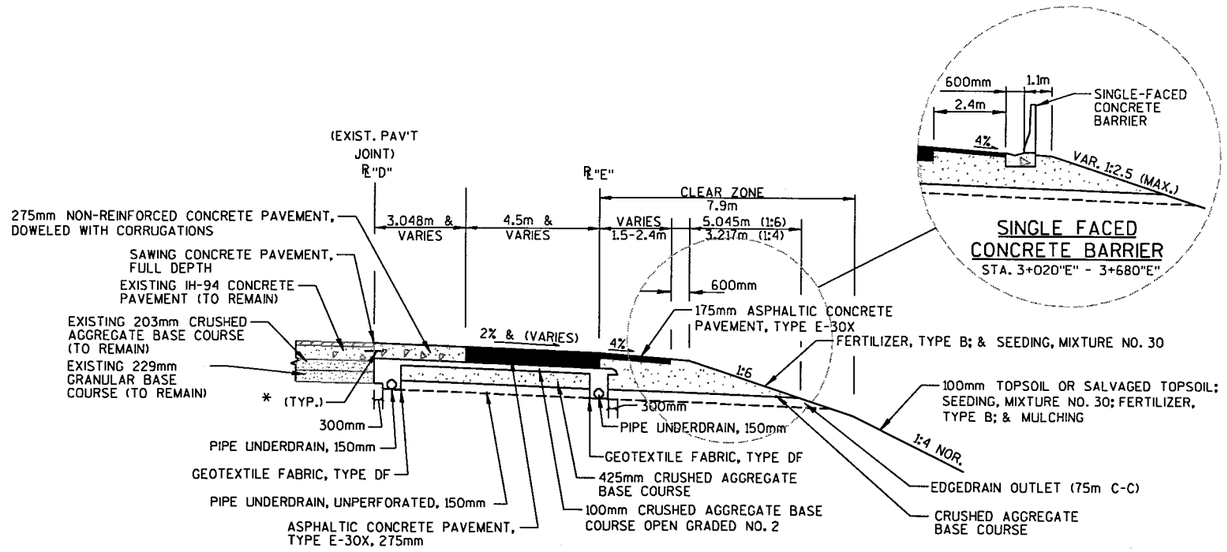
*13M FOR LONGITUDINAL JOINTS
*10M FOR MAINLINE SHOULDERS



PROPOSED IH-94 AUXILARY LANE
STA. 3+002"E" - 3+020"E"

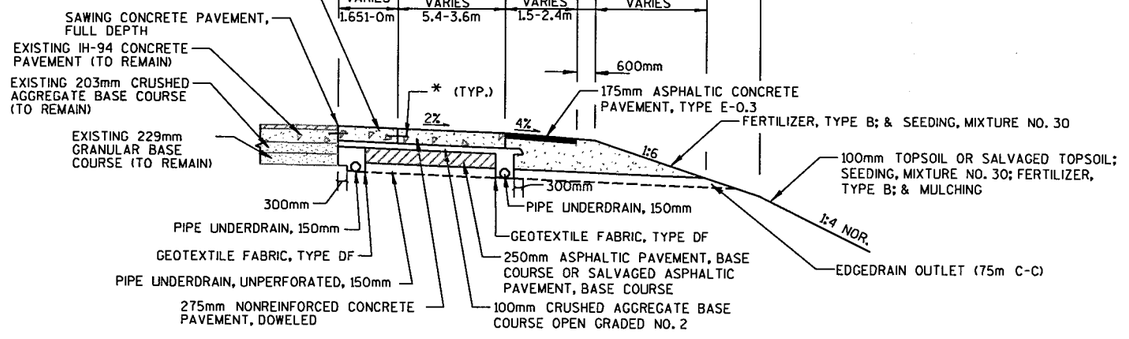
STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "E" (KENOSHA S&W FACILTY)	SHEET NO: 13	M

FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYPS&W.DGN(3) 12-07-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

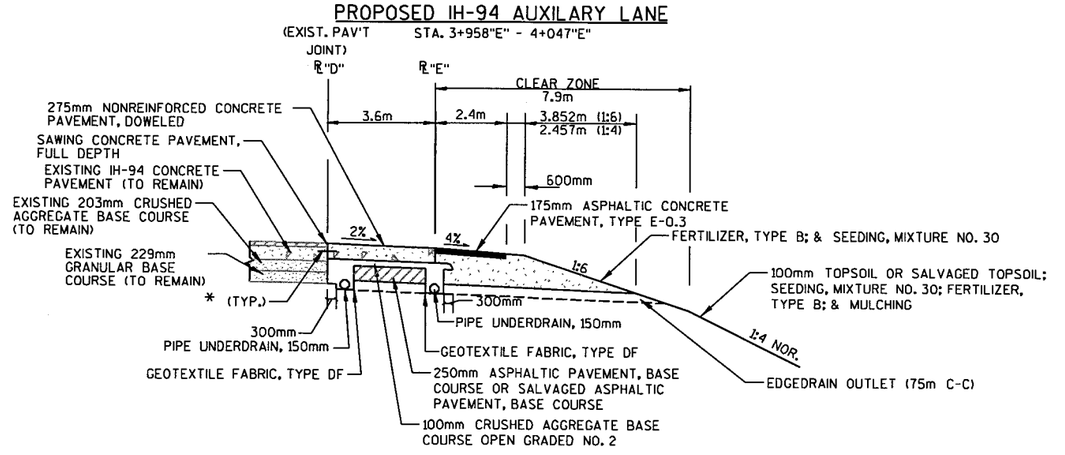


SINGLE FACED CONCRETE BARRIER
STA. 3+020"E" - 3+680"E"

PROPOSED IH-94 AUXILARY LANE ASPHALTIC CONCRETE
STA. 3+200"E" - 3+958"E"



PROPOSED IH-94 AUXILARY LANE
STA. 3+958"E" - 4+047"E"

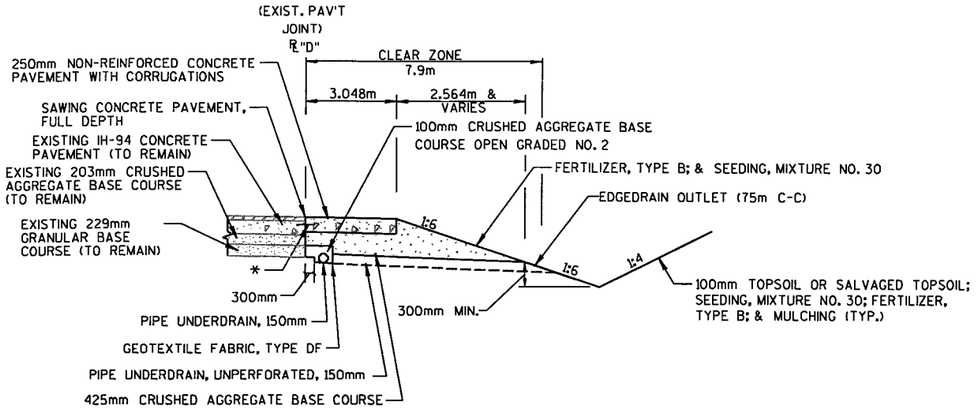


PROPOSED IH-94 AUXILARY LANE
STA. 4+047"E" - 4+614"E"

*13M FOR LONGITUDINAL JOINTS
*10M FOR MAINLINE SHOULDERS

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "E" (KENOSHA S&W FACILTY)	SHEET NO: 14	M

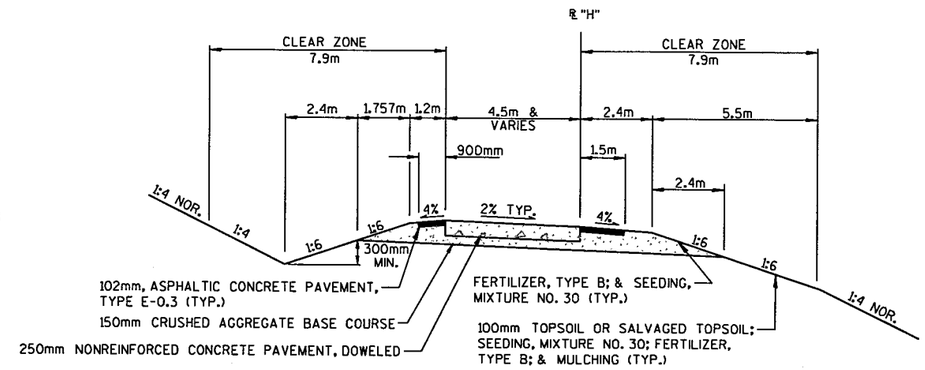
FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYPS&W.DGN(4) 12-07-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



PROPOSED IH-94 CONCRETE SHOULDER

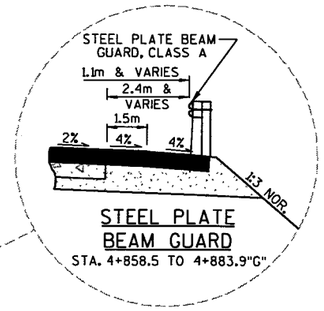
STA. 1+100"D"-1+188"D"
STA. 1+875"D"-2+005"D"

*13M FOR LONGITUDINAL JOINTS
*10M FOR MAINLINE SHOULDERS



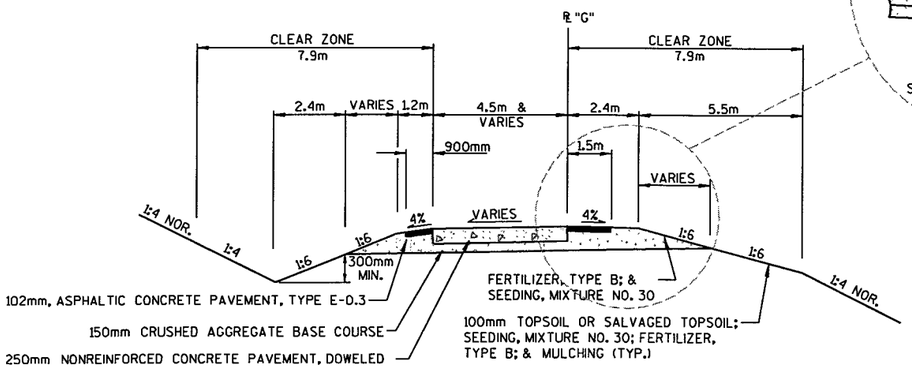
PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS

STA. 7+477"H" - 7+665"H"



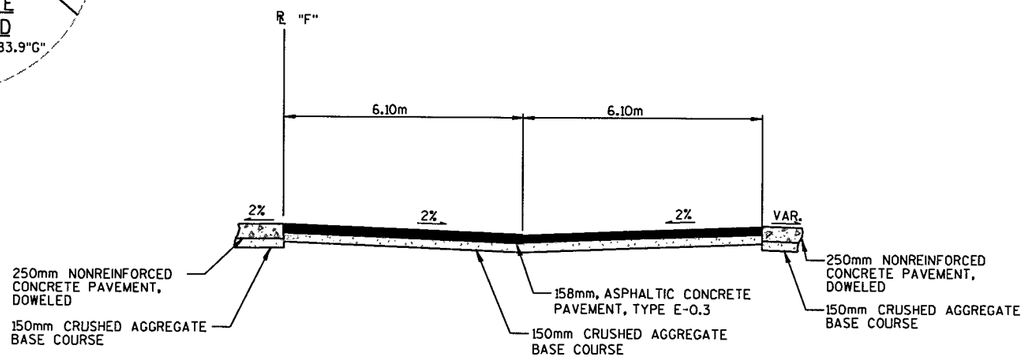
STEEL PLATE BEAM GUARD

STA. 4+858.5 TO 4+883.9"G"



PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS

STA. 4+760"G" - 4+884"G"



PROPOSED ASPHALTIC PARKING AREA

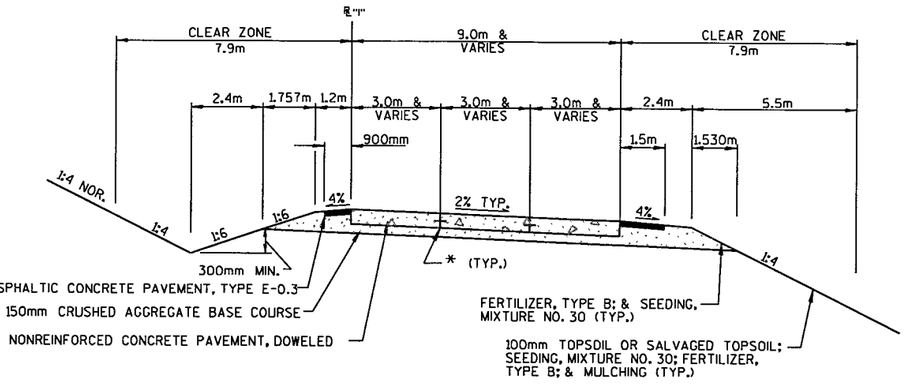
STA. 3+688"F" - 3+714"F"

NOTE:

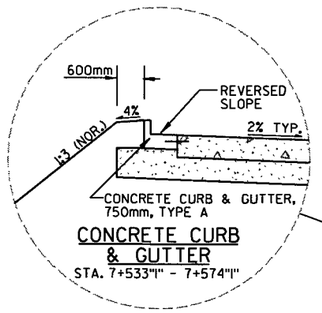
ALL TYPICAL SECTIONS SHOW PAVEMENT STRUCTURE FOR VARIOUS ALIGNMENTS. FOR EXACT DETAILS ON WIDTHS OF PAVEMENT THROUGHOUT SAFETY & WEIGHT FACILITY, SEE PAVING DETAILS.

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - MISC. (KENOSHA S&W FACILTY)	SHEET NO: 15	M

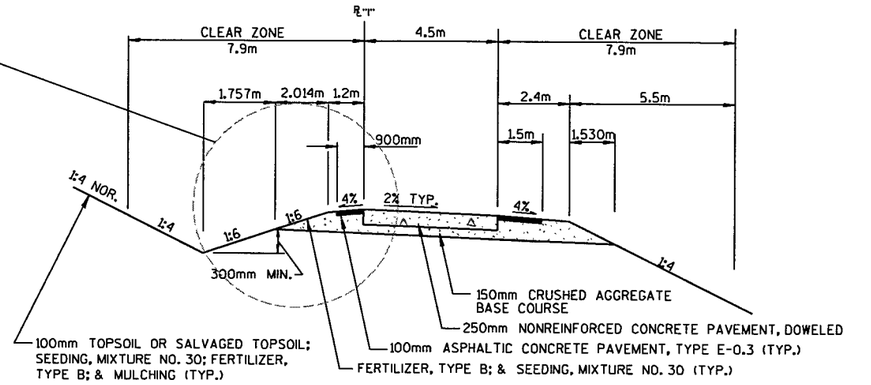
FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYPS&W.DGN(5) 12-07-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



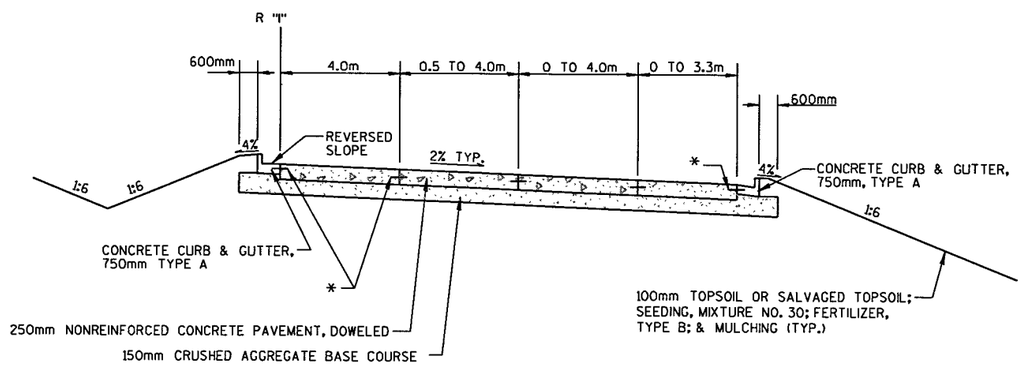
PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS
STA. 7+274"I"-7+430"I"



CONCRETE CURB & GUTTER
STA. 7+533"I" - 7+574"I"



PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS
STA. 7+430"I"-7+574"I"



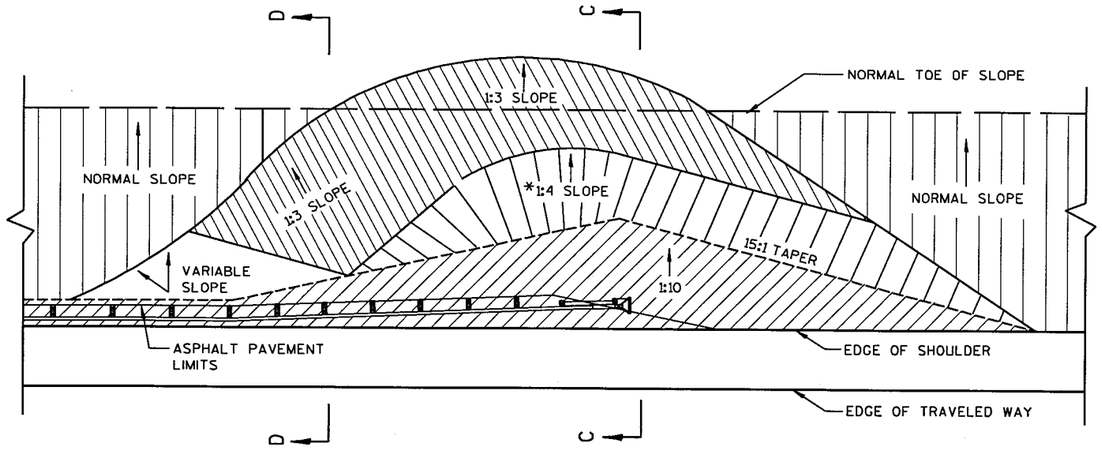
PROPOSED SAFETY & WEIGHT FACILITY INTERNAL ROADS
STA. 7+574"I" - 7+694"I"

*13M FOR LONGITUDINAL JOINTS
*10M FOR MAINLINE SHOULDERS

NOTE:
ALL TYPICAL SECTIONS SHOW PAVEMENT STRUCTURE FOR VARIOUS ALIGNMENTS. FOR EXACT DETAILS ON WIDTHS OF PAVEMENT THROUGHOUT SAFETY & WEIGHT FACILITY, SEE PAVING DETAILS.

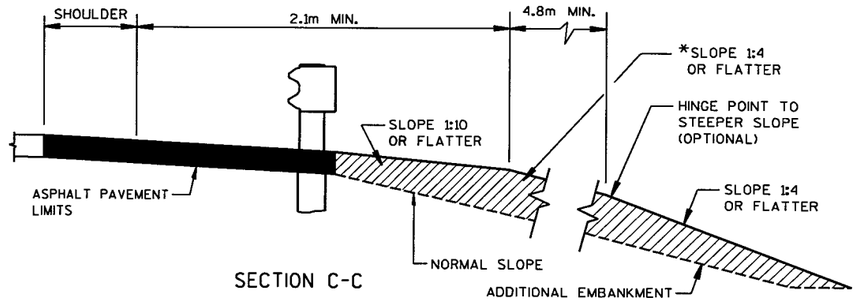
STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PROPOSED TYPICAL SECTIONS - LINE "I" (KENOSHA S&W FACILTY)	SHEET NO: 16	M

FILE NAME: PROJECTS/2940/PLANS/TYP/2940TYPS&W.DGN(6) 12-07-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

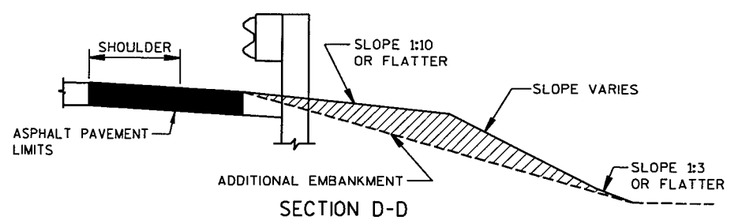


PLAN VIEW

*A 1:3 MAXIMUM SLOPE MAY BE USED FOR INSTALLATIONS ON EXISTING HIGHWAYS



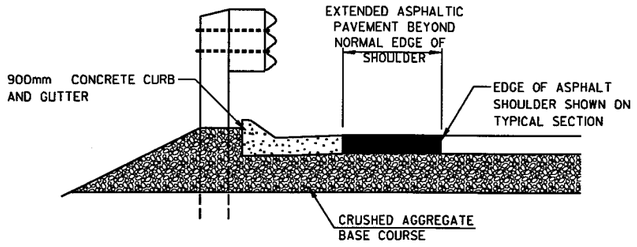
SECTION C-C



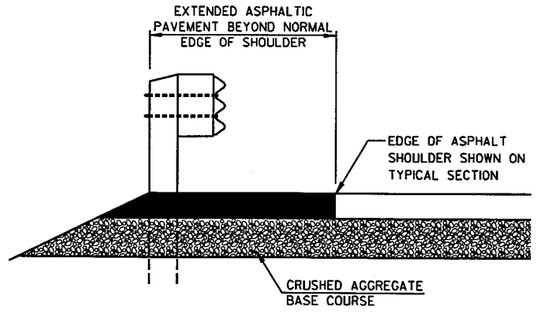
SECTION D-D

FILL AREA AT GUARD RAIL

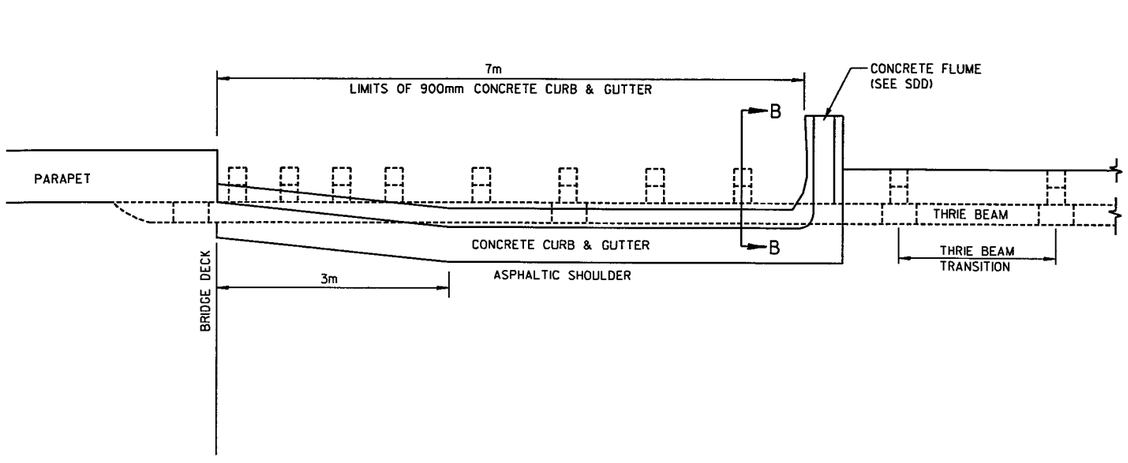
FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD0101.DGN 12-10-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

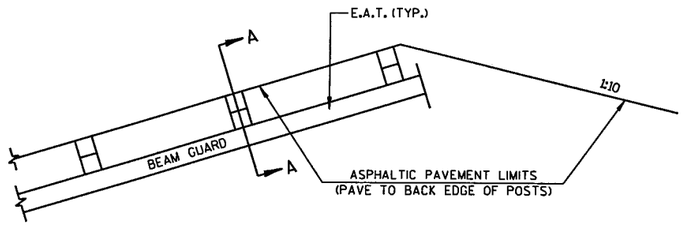


B-B
ASPHALTIC PAVEMENT & CURB & GUTTER
AT STA. 1+031"A" TO 1+215"A" RT. & LT.



A-A
ASPHALTIC PAVEMENT LIMITS AT
BEAM GUARD ALL LOCATIONS



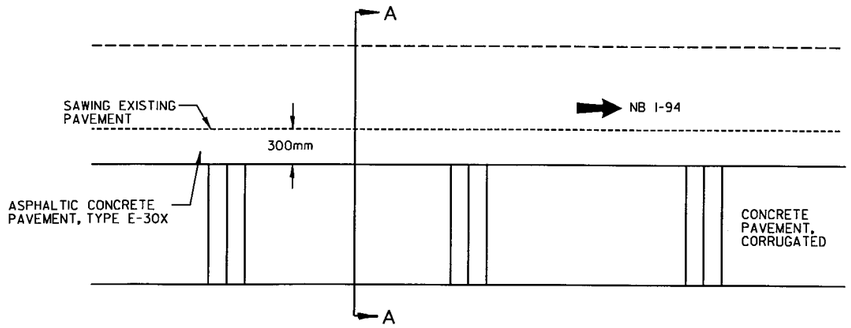


CONCRETE CURB & GUTTER & PAVEMENT LIMITS
AT BEAM GUARD & AT BRIDGE LOCATIONS

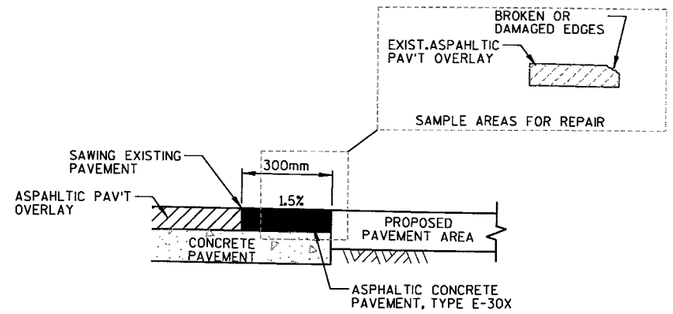
STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 18	M

R 5-7-02

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(16).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

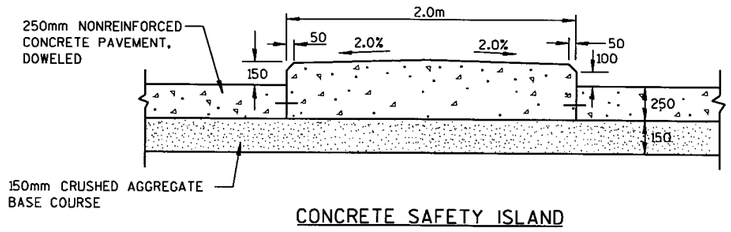


PLAN VIEW



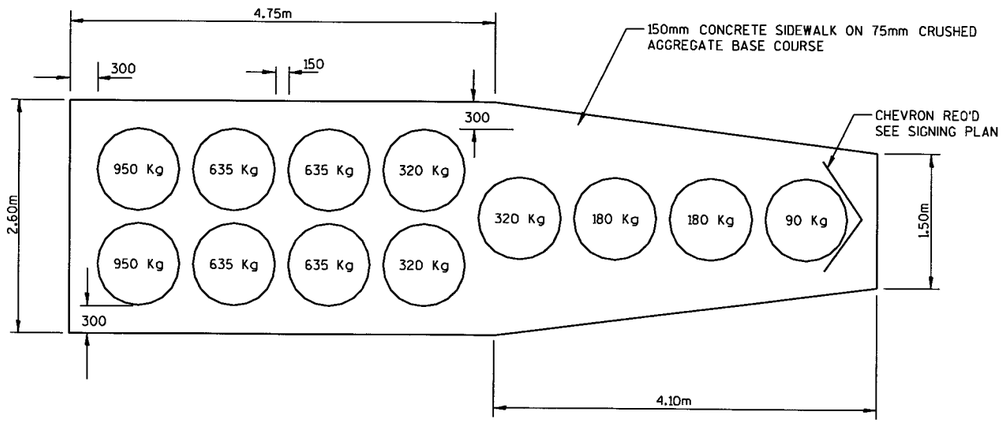
SECTION A-A

ASPHALTIC SURFACE REPAIR DETAIL ALONG I-94 E.O.P.



CONCRETE SAFETY ISLAND

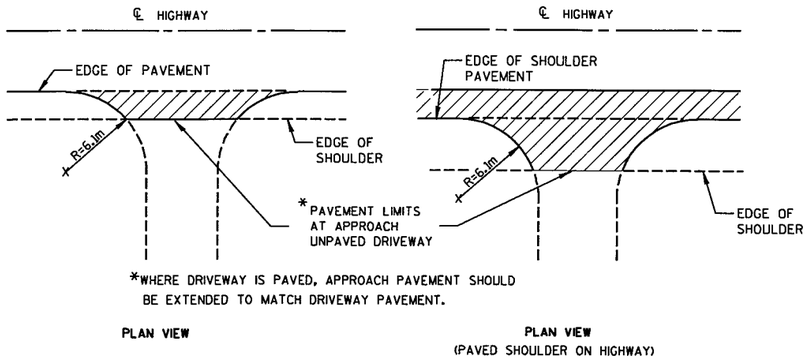
STA. 6+891, RT. TO STA. 6+912, RT. "I"



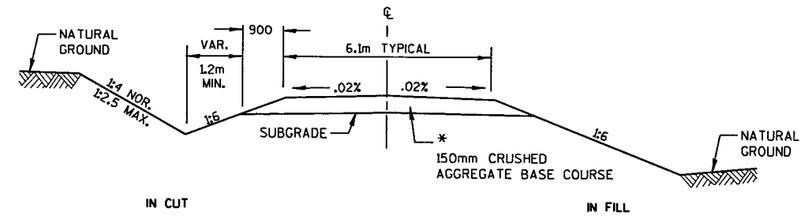
IMPACT ATTENUATORS ON CONCRETE PAD

STA. 2-890"E"

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(2).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

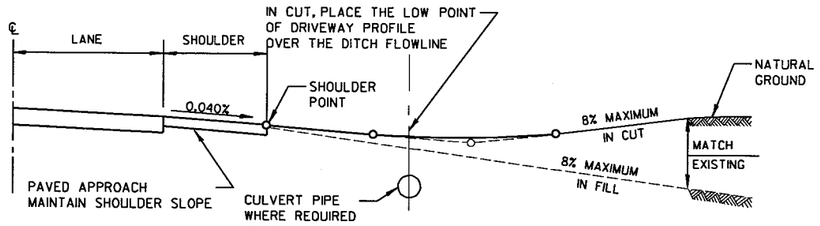


RURAL DRIVEWAY INTERSECTION DETAIL



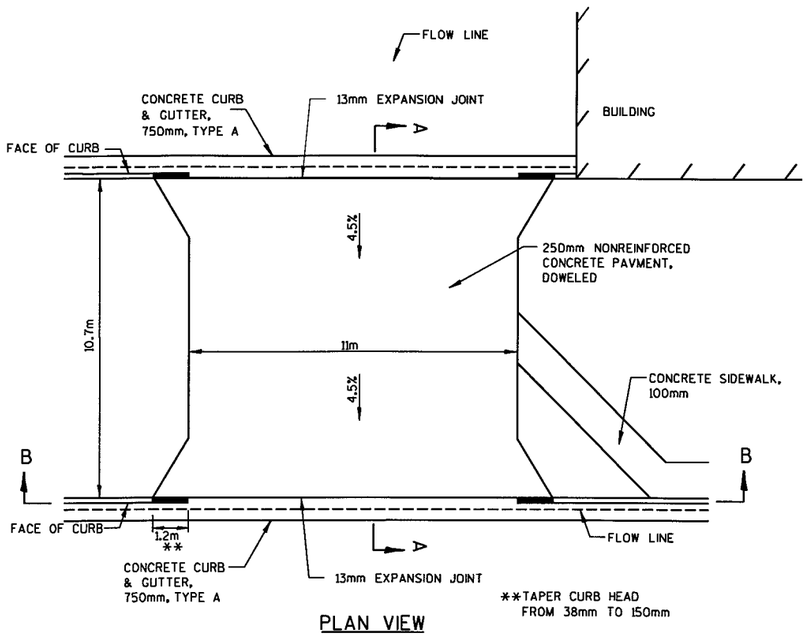
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE

* REPLACE DRIVEWAY IN KIND.
FOR ASPHALT:
75mm ASPHALTIC CONCRETE PAVEMENT, TYPE E-03
OVER 150mm C.A.B.C.
NO CONCRETE DRIVEWAYS ON PROJECT.

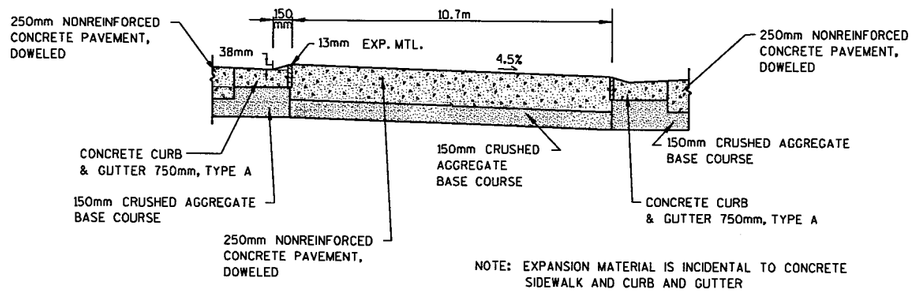


TYPICAL DRIVEWAY PROFILES

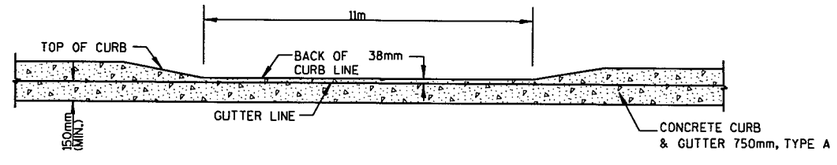
RURAL DRIVEWAY DETAIL



PLAN VIEW



SECTION A-A

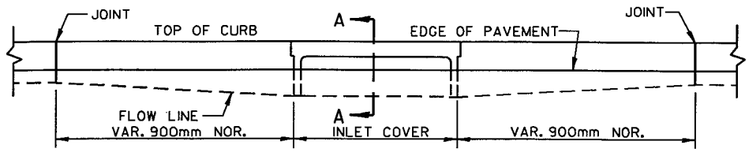


SECTION B-B

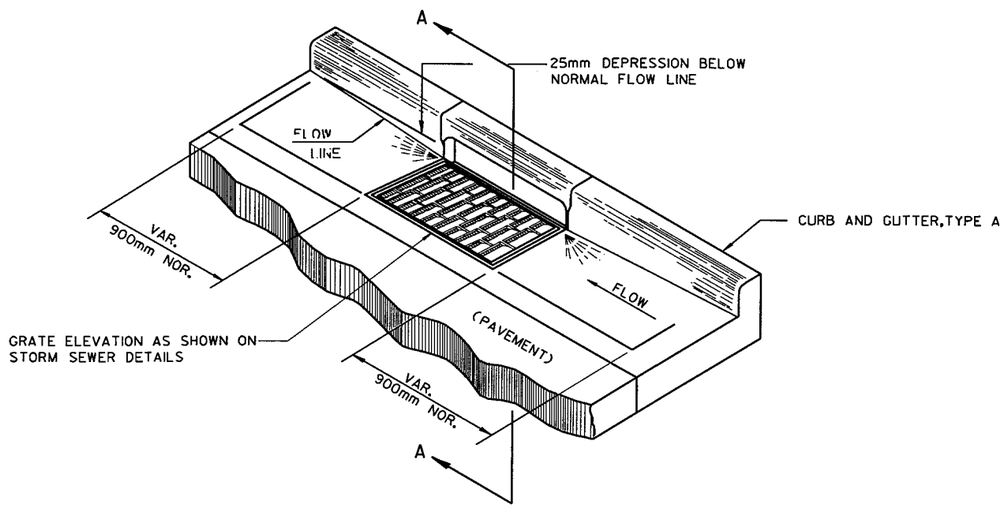
PLOW CROSSOVER DETAIL

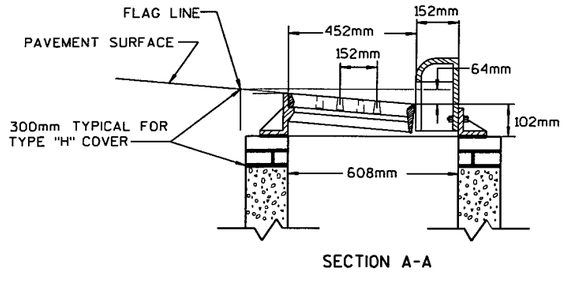
STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 20	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(3).DGN 12-10-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



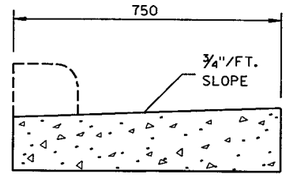
ELEVATION



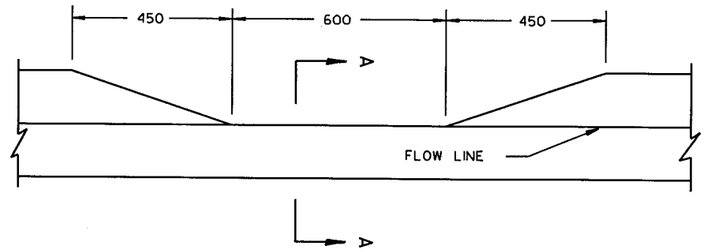


SECTION A-A

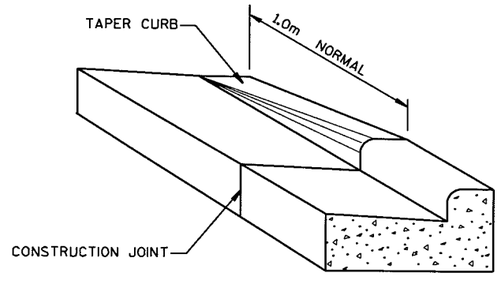
DETAIL OF CURB AND GUTTER AT INLETS
(TYPE 3-H INLET SHOWN)



SECTION A-A

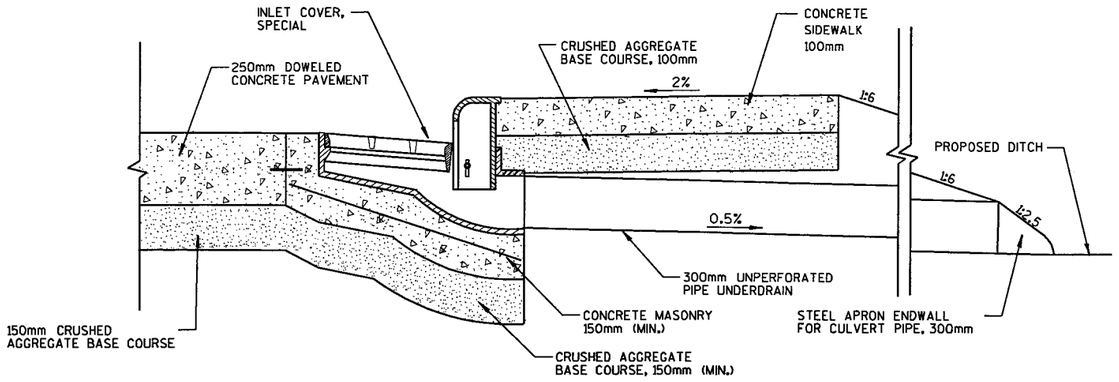


DETAIL OF CURB HEAD DEPRESSION FOR
DRAINAGE AT CURB & GUTTER SECTION
0+140 "J", LT, (IN CULDESAC)



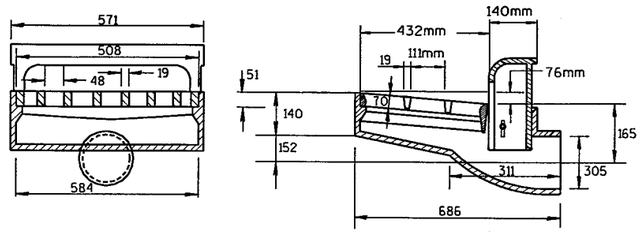
DETAIL OF CURB & GUTTER TERMINI

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(14).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



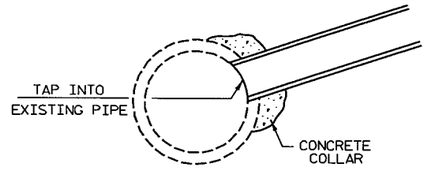
SPECIAL INLET DETAIL

INLET STA. 7+160 "I"
INLET STA. 7+165 "I"

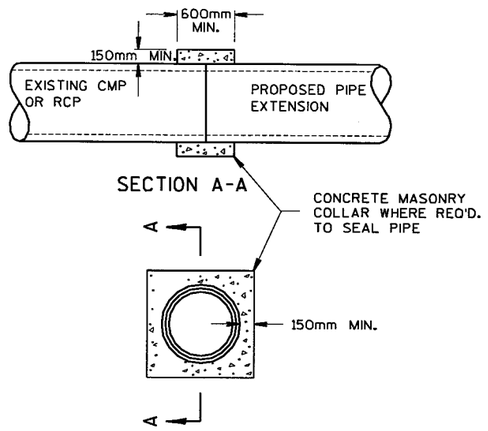


INLET COVER SPECIAL

(APPROXIMATE WEIGHT 132 kg)



CONCRETE COLLAR TAP

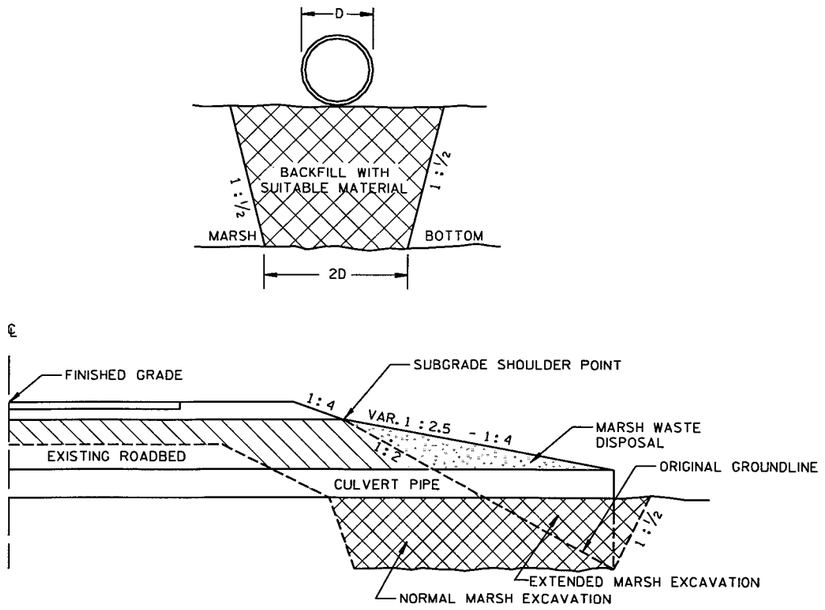


CONCRETE COLLAR DETAIL

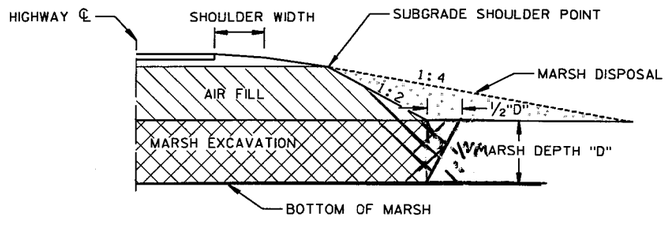
STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 22	M

RS-1-02

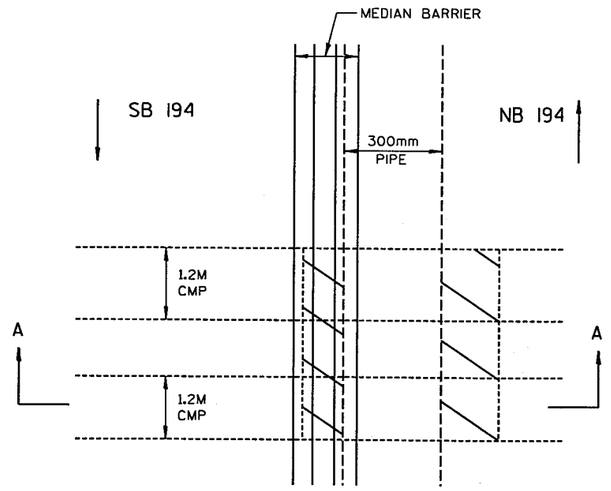
FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(15).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



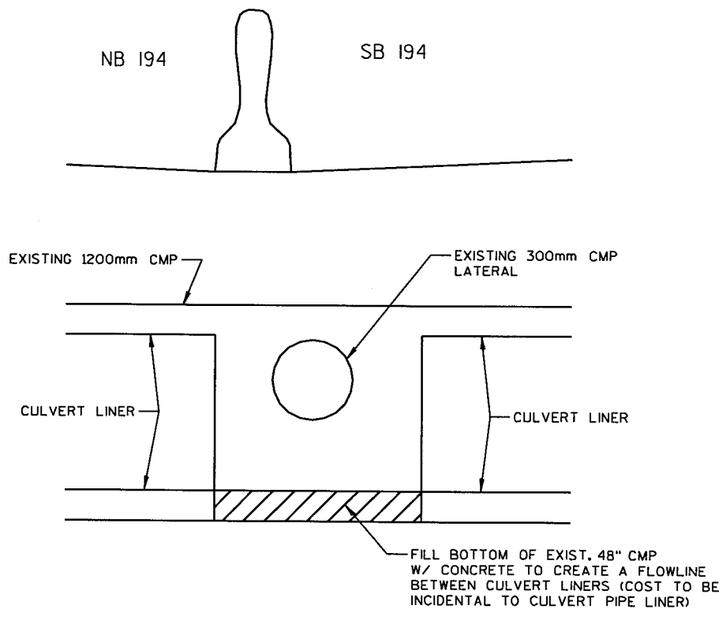
MARSH EXCAVATION AT CULVERT EXTENSIONS



TYPICAL MARSH EXCAVATION



PLAN VIEW OF PIPELINER
STA 1+615 "D"



CONSTRUCTION DETAIL OF PIPELINER SECTION A-A
STA 1+615 "D"

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(17).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

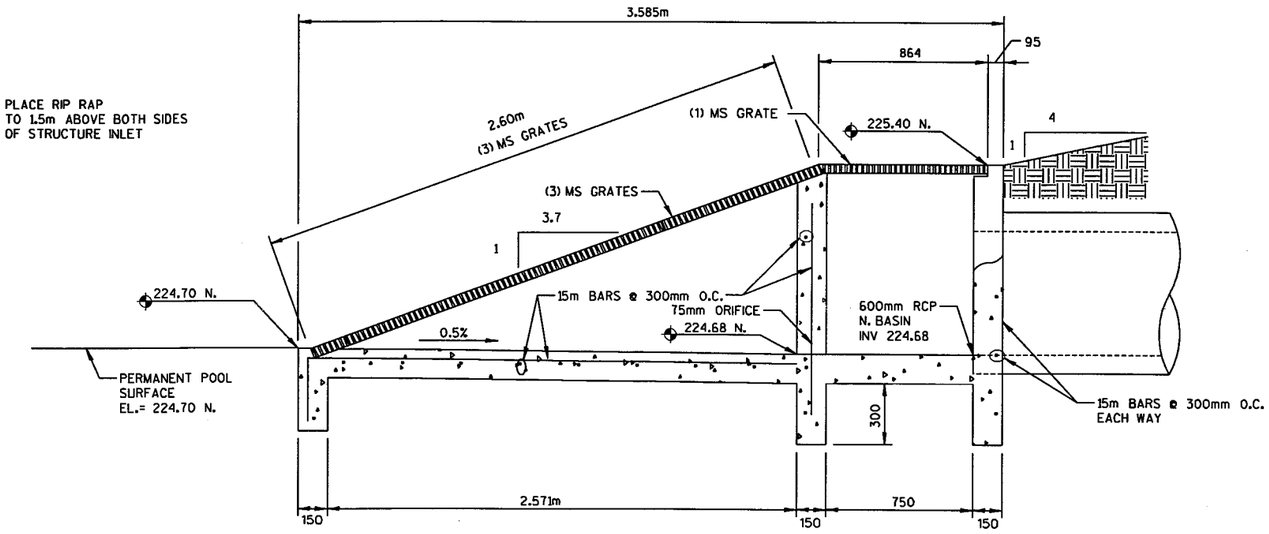
NOTES:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

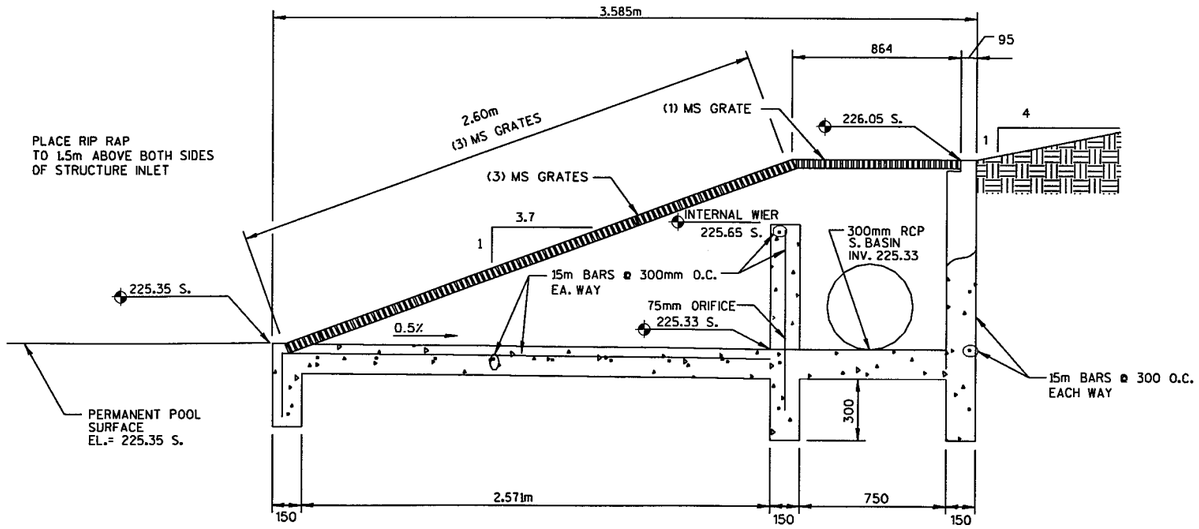
DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS

DRAWING SHOWS THE OUTLET CONTROL STRUCTURE FOR BOTH THE NORTH AND SOUTH DETENTION BASINS. LENGTHS AND ELEVATIONS SPECIFIC TO THE SOUTH OR NORTH DETENTION BASIN ARE INDICATED WITH AN S. OR N.

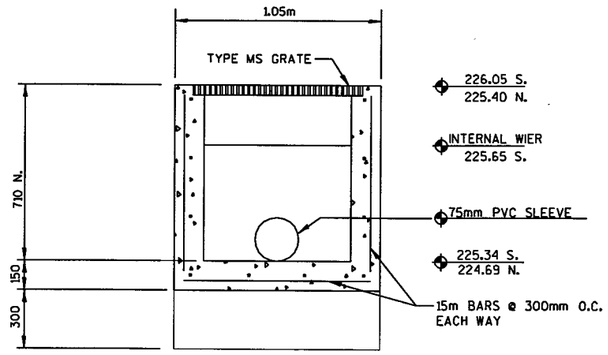
NORTH DETENTION BASIN DOES NOT HAVE AN INTERNAL WIER.



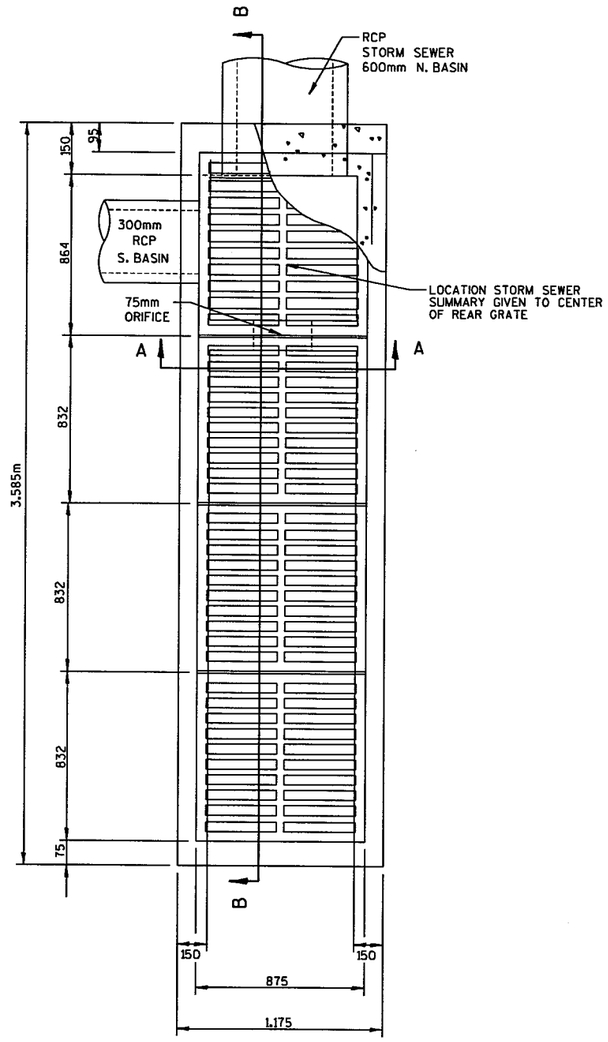
SECTION B-B NORTH DETENTION BASIN



SECTION B-B SOUTH DETENTION BASIN



SECTION A-A

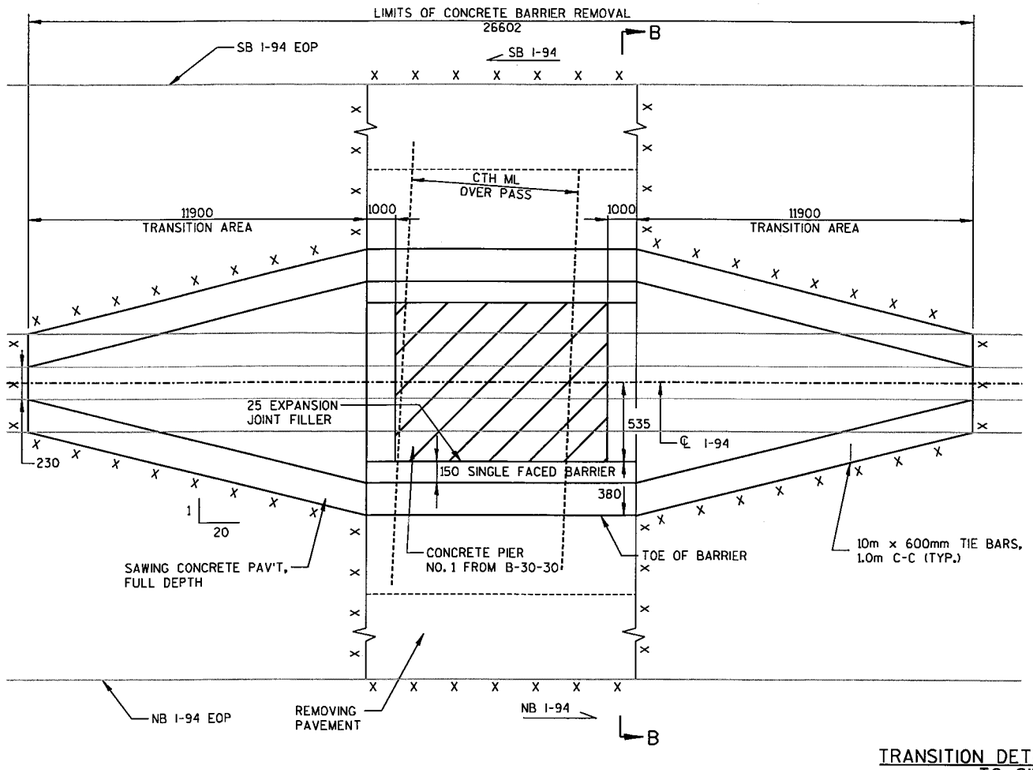


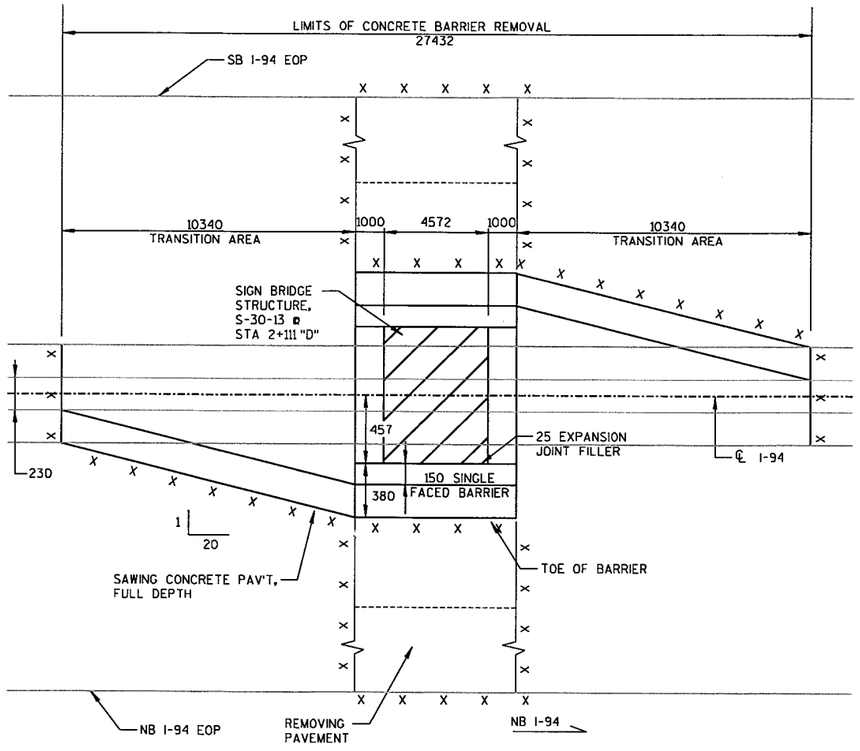
CONCRETE MASONRY, OUTLET CONTROL STRUCTURE

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 24	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(8).DGN 12-10-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

R 5-7-02



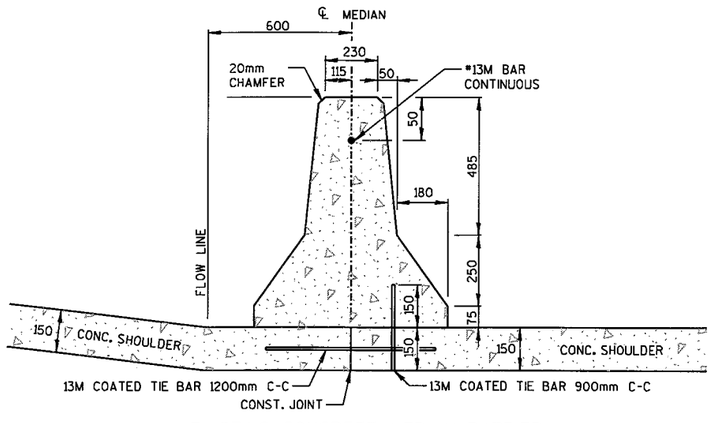


TRANSITION DETAIL OF DOUBLE FACED TO SINGLE FACED

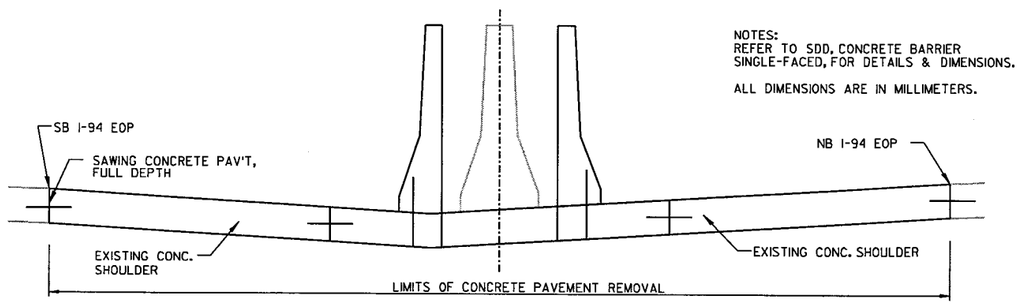
CONCRETE MEDIAN BARRIER
(FOOTINGS ARE NOT SHOWN)

LIMITS OF CONCRETE STRUCTURE

EXISTING CONCRETE BARRIER



EXISTING CONCRETE MEDIAN BARRIER



DETAIL B-B

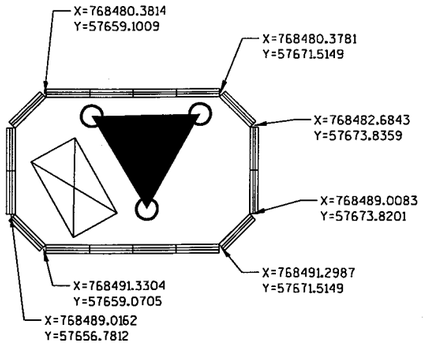
NOTES:
REFER TO SDD. CONCRETE BARRIER SINGLE-FACED, FOR DETAILS & DIMENSIONS.

ALL DIMENSIONS ARE IN MILLIMETERS.

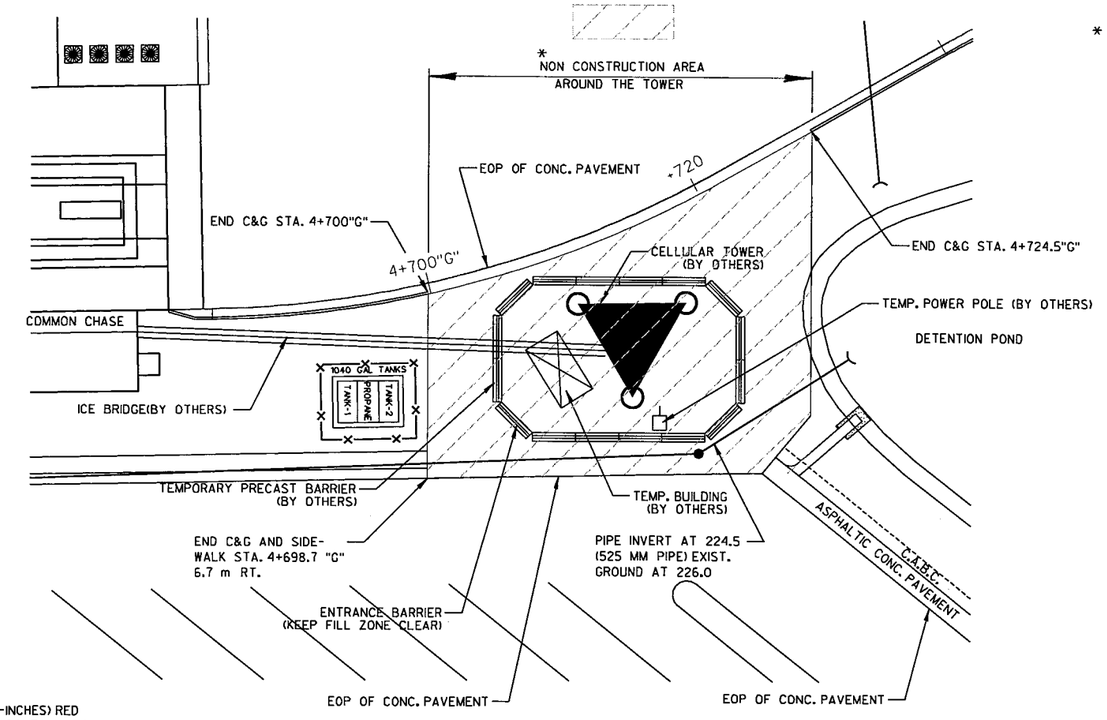
STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 25	M

R 5-7-02

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(13).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



CONCRETE BARRIER LOCATION



* APPROXIMATE LIMITS THAT CONSTRUCTION ACTIVITIES WILL NOT BE COMPLETED. THIS IS DUE TO THE TOWER AND TEMPORARY BUILDING BEING IN PLACE PRIOR TO THE PERMANENT CELLULAR BUILDING BEING CONST-RUCTED. THESE LIMITS WILL HAVE TO BE COMPLETED AFTER TEMPORARY BUILDING IS REMOVED IN THE AREA OF THE TOWER.

CINGULAR WIRELESS RESPONSIBILITIES

CINGULAR WIRELESS WILL BE RESPONSIBLE FOR REMOVAL OF THE ASPHALTIC PAVEMENT IN AND AROUND THE TOWER AND FOR FURNISHING, INSTALLING AND THE REMOVAL OF THE CONCRETE BARRIER WHICH WILL BE PLACED PRIOR TO SITE CONSTRUCTION. IN ADDITION, CINGULAR WILL PLACE AND REMOVE THE TEMP. BUILDING ASSOCIATED WITH THE TOWER. THE TOWER WILL HAVE A TEMP. ELECTRIC SERVICE PROVIDED UNTIL THE PERMANENT BUILDING AND TRANSFORMER IS IN PLACE.(SEE BUILDING PLANS FOR PERMANENT SERVICE LOCATION. AFTER TEMP. BUILDING IS REMOVED, CINGULAR WILL BE RESPONSIBLE FOR CONNECTING THE COMMUNICATION LINKS BETWEEN THE TOWER AND THE PERMANENT BUILDING AS WELL AS THE ICE BRIDGE.

CONTRACTOR RESPONSIBILITIES

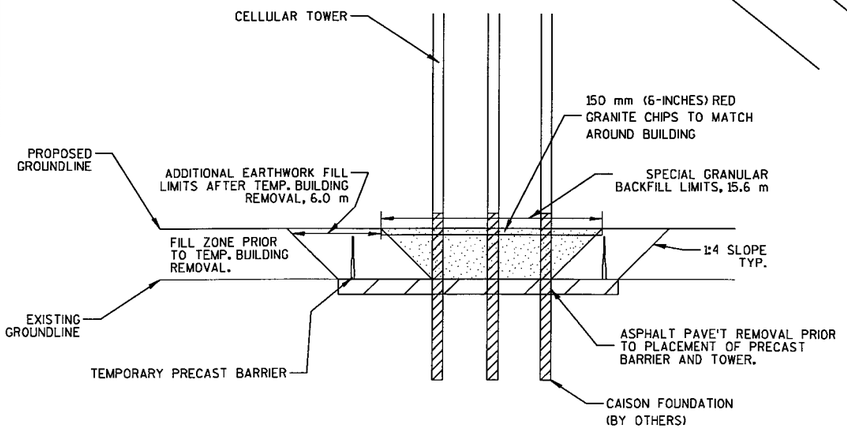
ALL PERMANENT CONCRETE PAVEMENT CAN BE PLACED IN THE PARKING LOT AND INSPECTION LANE. IN ADDITION, THE STORM SEWER CAN BE CONSTRUCTED ADJACENT TO TOWER. HOWEVER, THE MANHOLE WILL HAVE TO BE PROTECTED FROM DAMAGE DUE TO BEING ABOVE GROUND. THERE WILL BE CONCRETE CURB & GUTTER, SIDEWALK, BORROW EXCAVATION, AND LANDSCAPING ITEMS THAT WILL HAVE TO BE COMPLETED AFTER THE TEMPORARY TOWER BUILDING IS REMOVED. IN ADDITION, SPECIAL GRANULAR BACKFILL WILL BE REQUIRED DUE TO NOT BEING ABLE TO PLACE OR COMPACT THE EARTHWORK IN AND AROUND THE TOWER. THE ESTIMATED QUANTITIES ARE AS FOLLOWS:

ITEMS BY CONTRACTOR

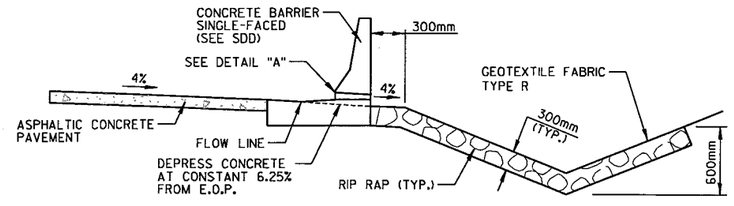
CONCRETE CURB & GUTTER	50 METERS
CONCRETE SIDEWALK	30 SQUARE METERS
BORROW EXCAVATION	300 CUBIC METERS
SPECIAL GRANULAR BACKFILL	288 Mg
TOPSOIL	400 SQUARE METERS

ITEMS BY OTHERS(CINGULAR WIRELESS)

PRECAST CONCRETE BARRIER FURNISHED & DELIVERED	16 EACH
ASPHALT PAVEMENT REMOVAL	1.2 Mg
RED GRANITE CHIPS	17 CUBIC METERS
CONDUIT & ICE BRIDGE BETWEEN TOWER AND BUILDING	
FURNISHING & REMOVAL OF TEMP. BUILDING	
PERMANENT FENCING AROUND TOWER	
TEMPORARY ELECTRICAL CONECTION	



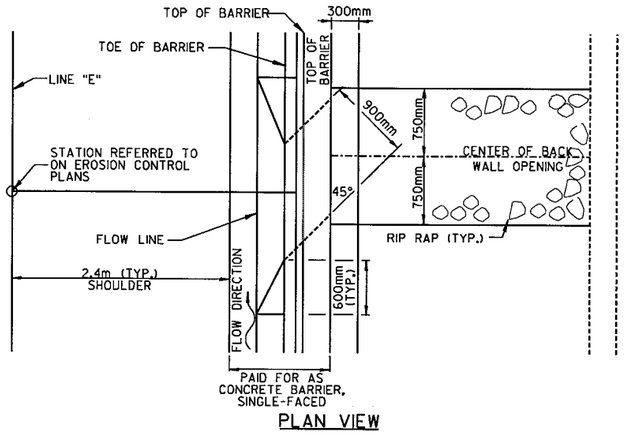
TOWER PLACEMENT DETAIL PRIOR TO CONSTRUCTION



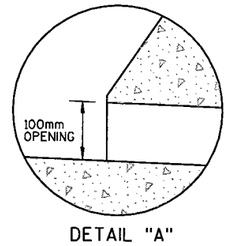
ELEVATION VIEW

DRAINAGE DETAIL UNDER BARRIER

2+920"E" TO 3+610"E" RT.
(AT EVERY 50 METERS)



PLAN VIEW



DETAIL "A"

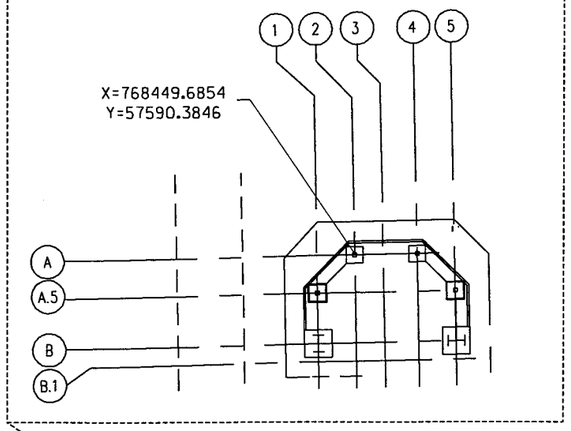
NOTE: PROVIDE DRAIN OPENINGS AT 50m INTERVALS OR AS DIRECTED BY THE ENGINEER

DRAIN OPENING INCIDENTAL TO SINGLE FACED CONCRETE BARRIER CONSTRUCTION

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 26	M

R5-7-02

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(14).DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



STATIC SCALE BLDG

WELL

WEP CO

SAN

INSPECTION BLDG

CELLULAR BLDG

OSEPO

OSEPO

OSEPO

GENERATOR

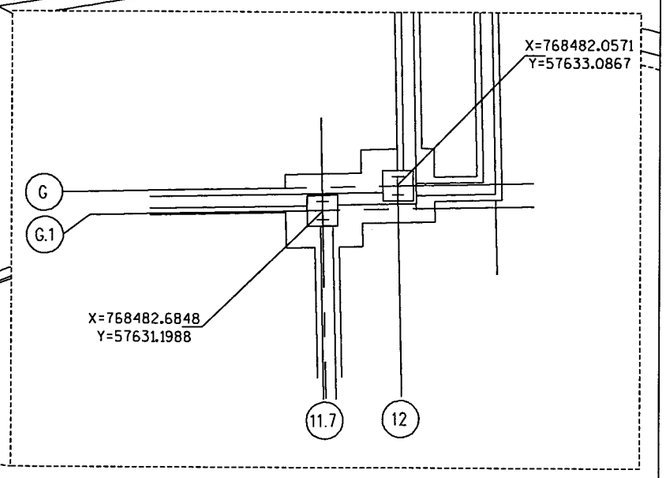
WEP CO

1000-GAL TANKS

TANK-2

PROPANE

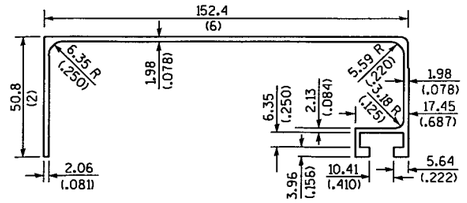
TANK-1



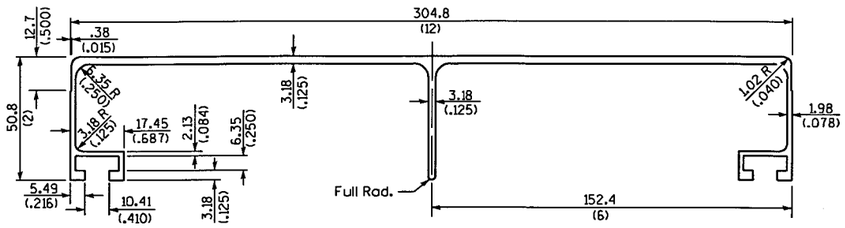
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38, 40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: N.T.S.	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	BUILDING/SITE CONTROL	SHEET NO: 27	M

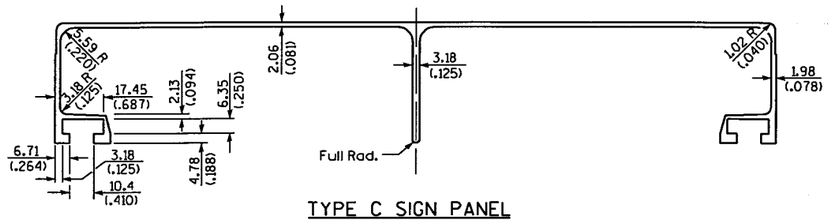
K:PROJECTS\MASTER\2940\BUILDING-SITE CONTROL.DGN 1-9-02



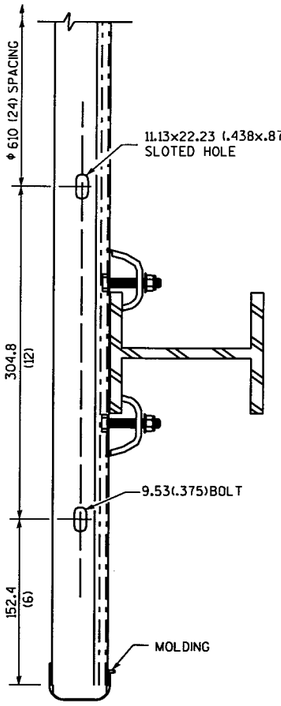
150 (6) PANEL



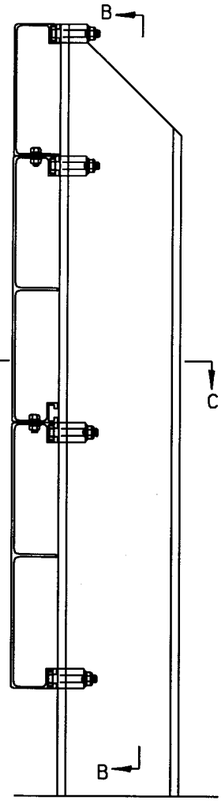
TYPE B SIGN PANEL



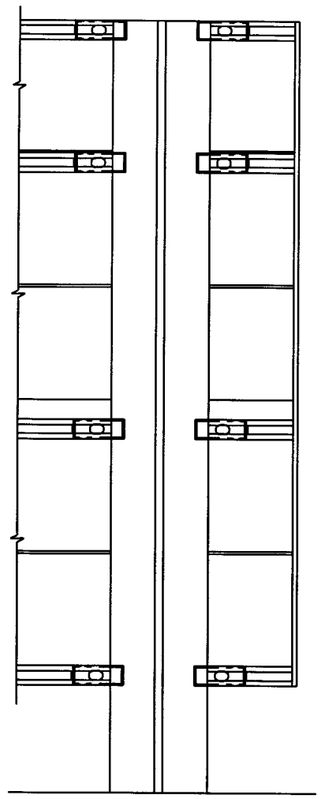
TYPE C SIGN PANEL



SECTION C-C

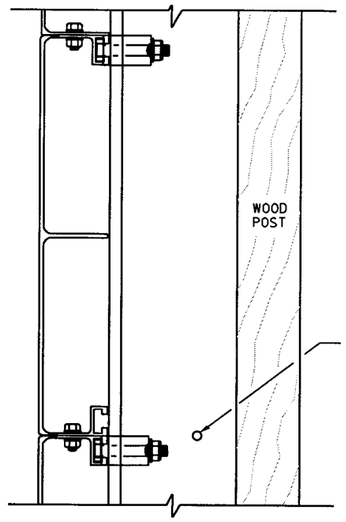


SECTION A-A

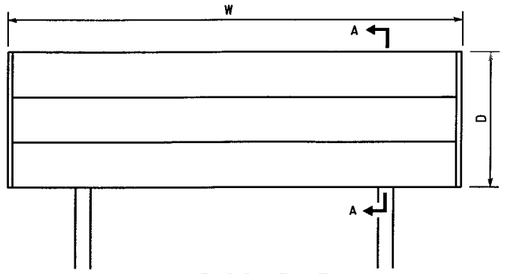


SECTION B-B

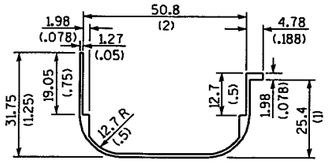
Provide two post clips top and bottom. Alternate at interior panel joints on ground-mounted signs, and provide two clips at all panel joints on over-head mounted signs.



SECTION D-D

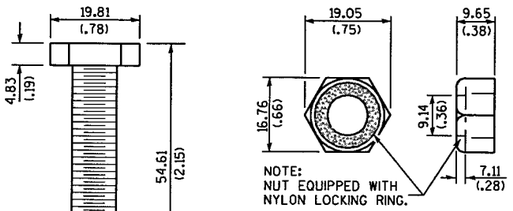


FACE OF SIGN PANEL

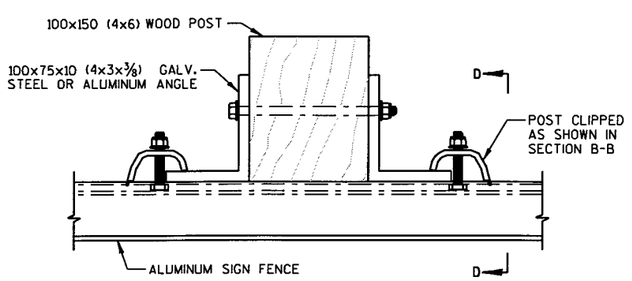


SIGN MOLDING

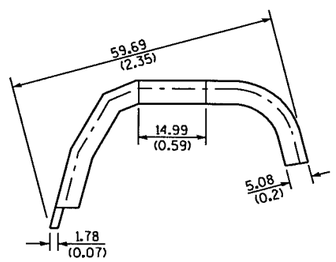
COLOR SHALL MATCH SIGN FACE MATERIAL. (TO BE RIVITED TO SIGN PANEL AT 600 (24) O.C.)

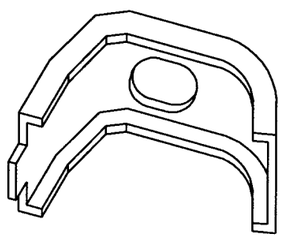


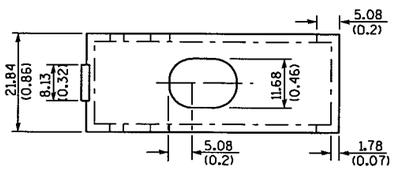
NUT, BOLT AND WASHER ASSEMBLY



SIGN PANEL ATTACHMENT TO WOOD POST







STAINLESS STEEL CLAMP DETAIL

NOTES:

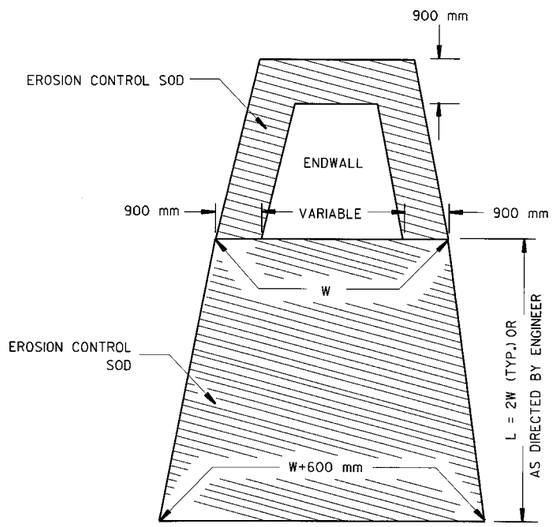
This detail applies to sign bridge LL1 (Illinois).
See sheet 1 of 12 of Permanent Signing.
Detail provided by Illinois Department of Transportation.
All dimensions are in millimeters (inches) unless otherwise shown.

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS, (ILLINOIS SDD)	SHEET NO: 28	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(15).DGN 12-10-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

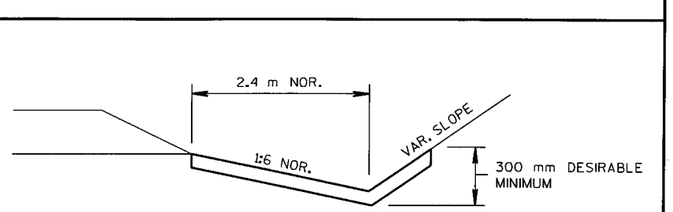
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE- TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 25 HECTARES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 20.5 HECTARES



SOD TREATMENT AT CULVERTS

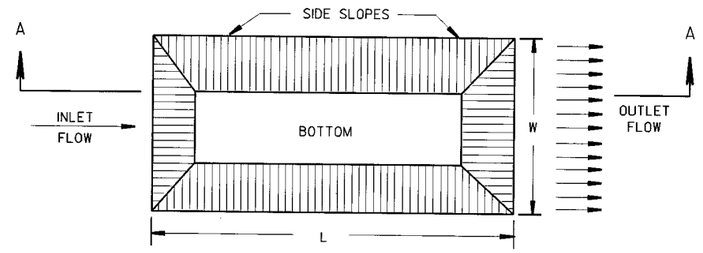
TO BE USED AT ALL CULVERT PIPE INLETS AND OUTLETS



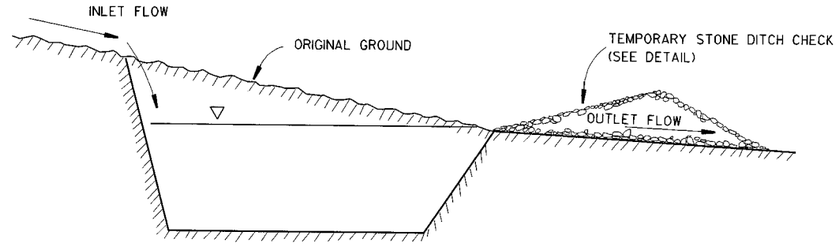
EROSION MAT DETAIL FOR DITCHES

SIDE VIEW

CULVERT PIPE DITCH CHECK



PLAN VIEW

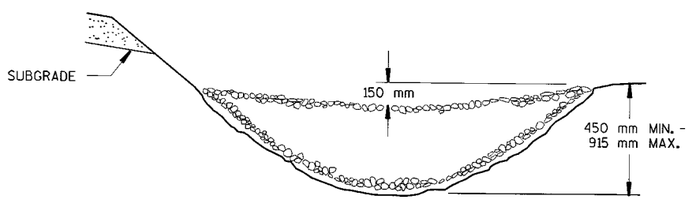


SECTION A-A

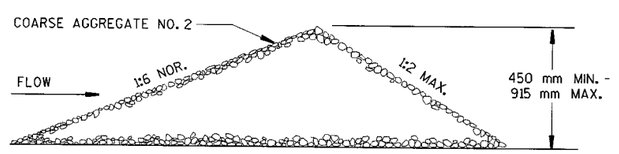
TEMPORARY EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK

NOTE: EXCAVATION AND BACKFILL FOR SEDIMENT TRAP TO BE PAID FOR UNDER "COMMON EXCAVATION" ITEM. (EXACT DIMENSIONS TO BE AS DIRECTED BY THE ENGINEER.)

CLEANING OF SEDIMENT TRAPS, WHEN DIRECTED BY THE ENGINEER, IS PAID FOR UNDER THE ITEM OF "CLEANING SEDIMENT BASINS."



CROSS SECTIONAL VIEW

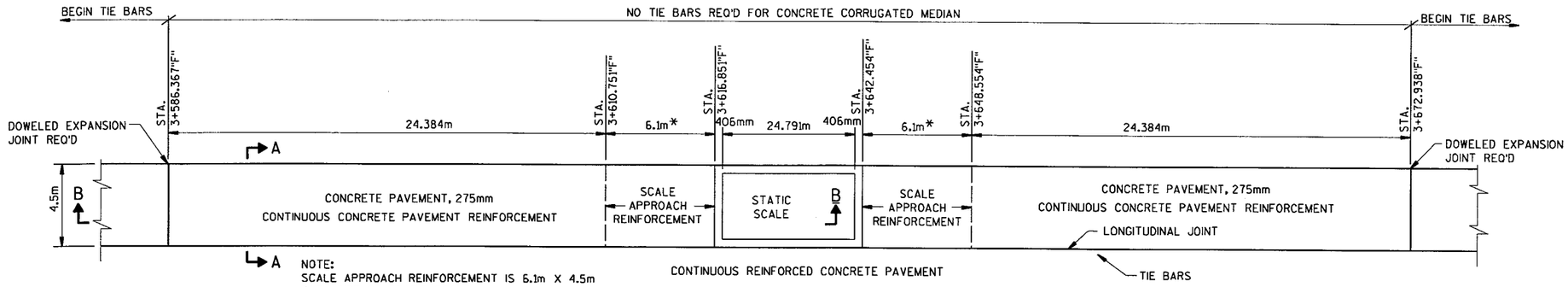


SIDE VIEW

TEMPORARY STONE DITCH CHECK

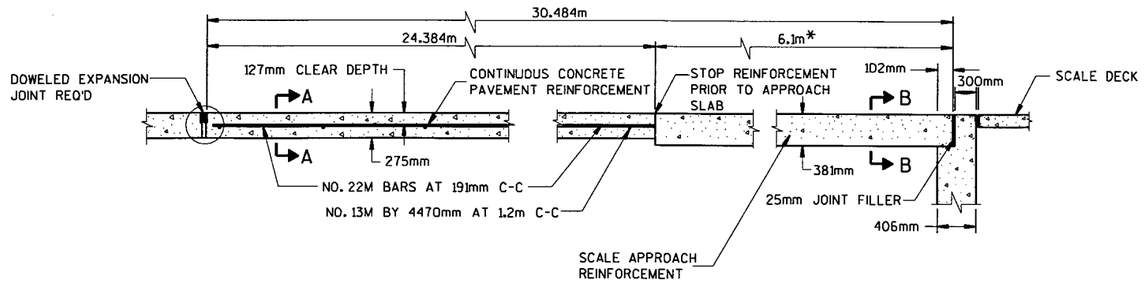
STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	EROSION CONTROL	SCALE:	SHEET NO: 29	M

12/21/01 03:10:31 PM p:\38xx\3874\plan\erosion control\022201.ec.dgn



*6.1 METER APPROACH SLAB WILL BE DONE BY SCALE CONTRACTOR. SEE CONSTRUCTION DETAILS FOR SCALE APPROACH SLAB.

PLAN VIEW
SCALE APPROACH



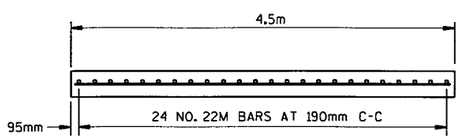
TRANSITION DETAIL

SECTION B-B

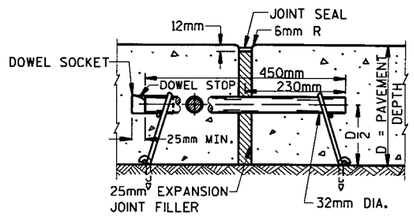
APPROACH SLAB

GENERAL NOTES

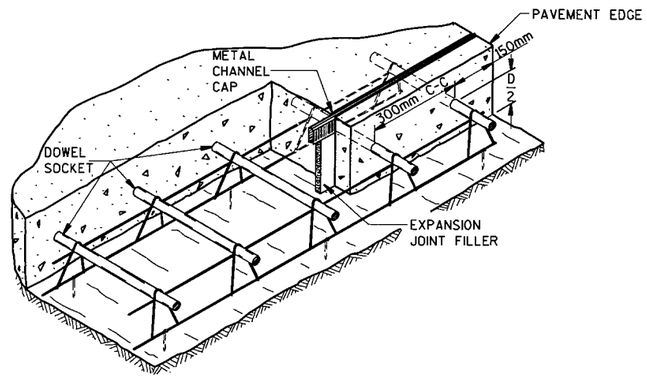
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.



SECTION A-A
CONTINUOUS REINFORCED CONCRETE APPROACH



EXPANSION JOINT

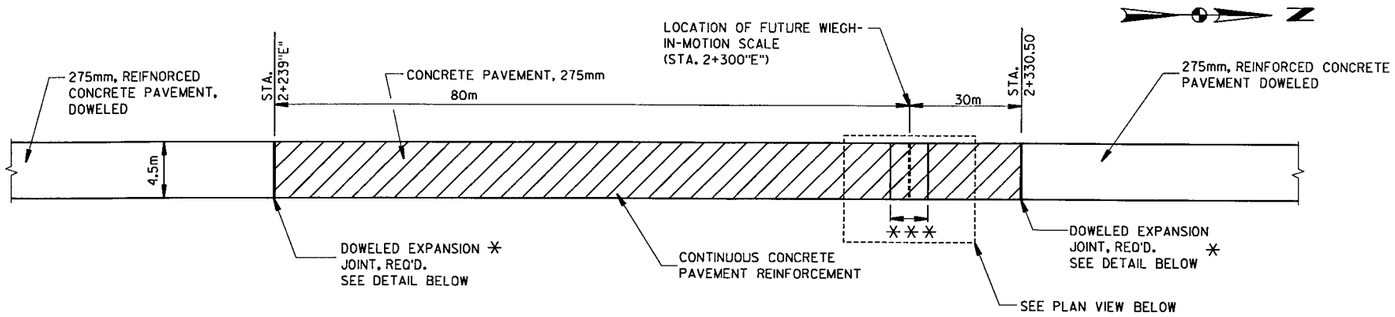


INSTALLING DEVICE FOR DOWEL BARS
AND EXPANSION JOINT ASSEMBLY

NOTE: ALL DIMENSIONS ARE IN MILLIMTERES UNLESS OTHERWISE SHOWN.

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CONSTRUCTION DETAIL PAVEMENT SECTION AT STATIC SCALE	SHEET NO: 30	M

FILE NAME: PROJECTS/2940/PLANS/GEN/PITAPPR.DGN 12-10-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



TYPICAL PLAN AT W.I.M. SCALE

✳ DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT, 275mm.

✳✳✳ 1.5m WIDTH FOR WEIGH-IN-MOTION. (W.I.M.) THIS AREA WILL NOT HAVE ANY REINFORCEMENT. CONTRACTOR SHALL ADEQUATELY LABEL WHERE BARS START & STOP. AREA TO BE CUT AND REMOVED BY W.I.M. CONTRACTOR. SEE CONSTRUCTOIN DETAIL FOR REINFORCEMENT & W.I.M. LAYOUT.

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS

DOWEL BARS ACROSS EXPANSION JOINTS SHALL BE CORROSION RESISTANT COATED CONFORMING TO THE REQUIREMENTS OF AASHTO DESIGNATION M 254.

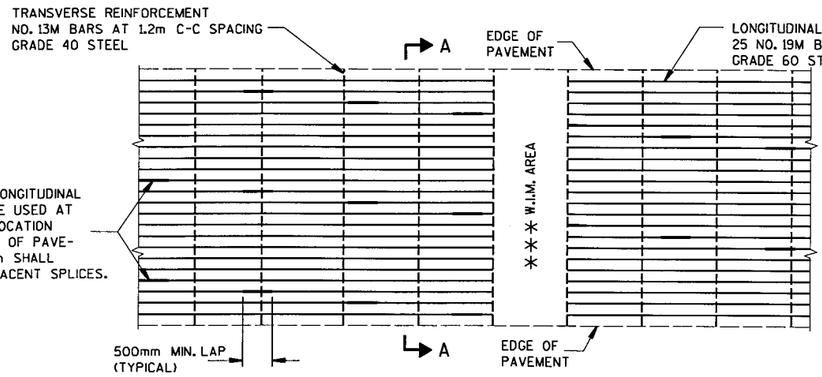
THE COATING TYPE SHALL BE, TYPE B - THERMOSETTING EPOXY.

JOINT SEALING

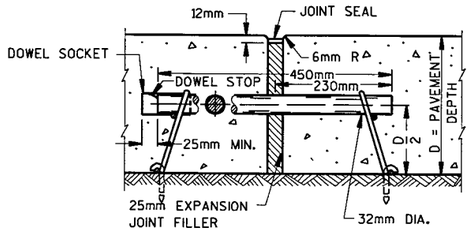
EXPANSION JOINTS SHALL BE SEALED AS FOLLOWS:

1. ON PAVEMENTS HAVING TRANSVERSE CONTRACTION JOINTS SEALED WITH A POURED TYPE SEALER, EXPANSION JOINTS SHALL BE SEALED WITH THE SAME TYPE SEALANT, 6mm BELOW PAVEMENT SURFACE.
2. ON PAVEMENTS WITH NO CONTRACTION JOINTS, UNSEALED CONTRACTION OR CONTRACTION JOINTS SEALED WITH COMPRESSION TYPE SEALS, EXPANSION JOINTS SHALL BE SEALED WITH A POURED TYPE SEALER AS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

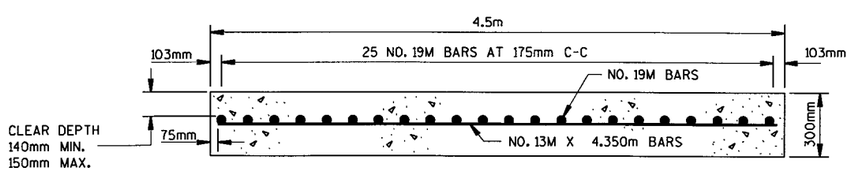
NOTE:
"PROTECTIVE SURFACE" TREATMENT REQUIRED ON CONTINUOUS REINFORCED CONCRETE PAVEMENT.



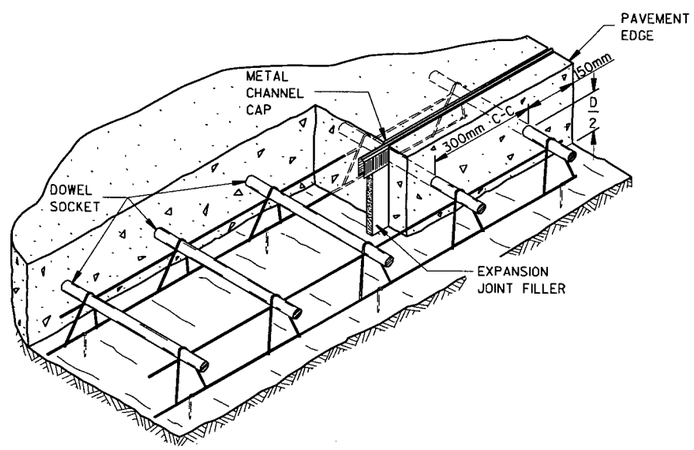
PLAN VIEW



EXPANSION JOINT



SECTION A-A
REINFORCEMENT STEEL PLACEMENT



INSTALLING DEVICE FOR DOWEL BARS AND EXPANSION JOINT ASSEMBLY

NOTE: ALL DIMENSIONS ARE IN MILLIMTERES UNLESS OTHERWISE SHOWN.

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CONSTRUCTION DETAIL PAVEMENT SECTION AT WEIGH-IN-MOTION SCALE	SHEET NO: 31	M

FILE NAME: PROJECTS/2940/PLANS/GEN/PAVWIM1.DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

NOTES

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

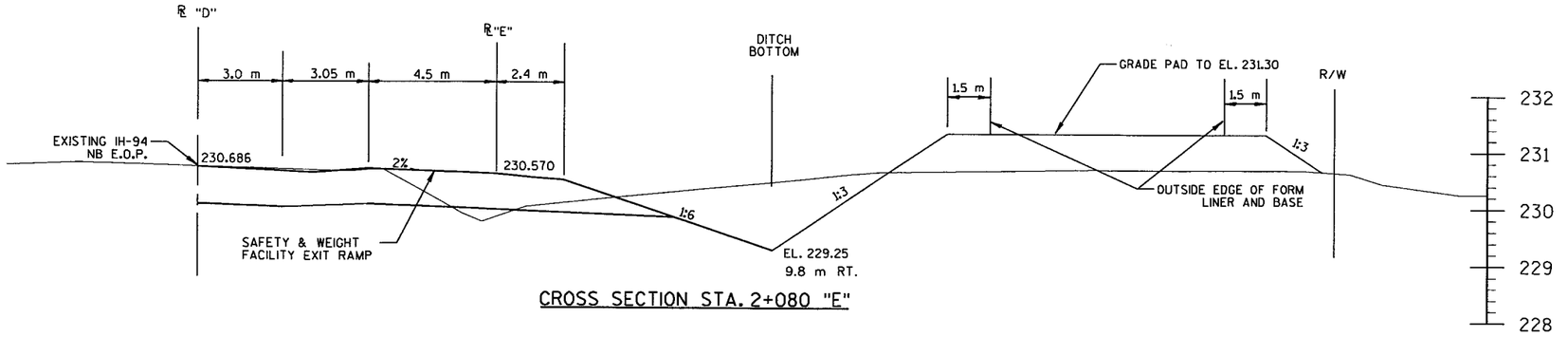
WELCOME TO WISCONSIN SIGN IS SET AT A 10° ANGLE TO THE EDGE OF PAVEMENT OF NORTHBOUND IH-94.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

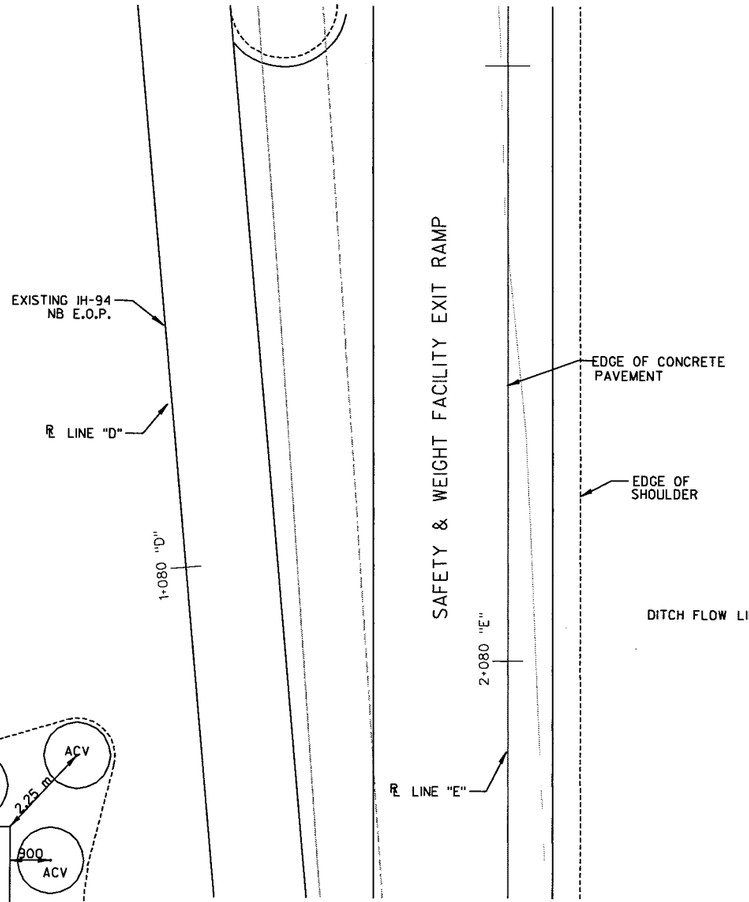
(A99) ARCHITECTURAL SURFACE TREATMENT ON THESE SURFACES. (SEE FORM LINER DETAIL AND SPECIAL PROVISIONS)

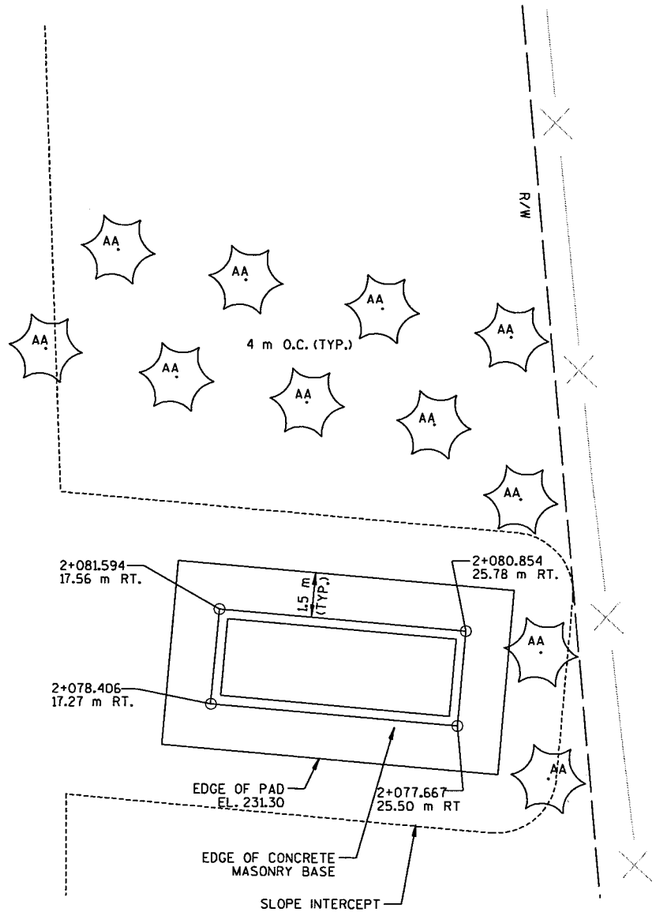
PLANT LIST

SYMBOL	NAME	QUANTITY	SIZE(mm)	ROOT CONDITION
MJ	MANNEY JUNIPER	3	455	B&B
SGJ	SEA GREEN JUNIPER	13	455	BR
ACV	AMERICAN CRANBERRYBUSH VIRBURNUM	3	610	B&B
AA	AMERICAN ARBORVITAE	11	1500	B&B

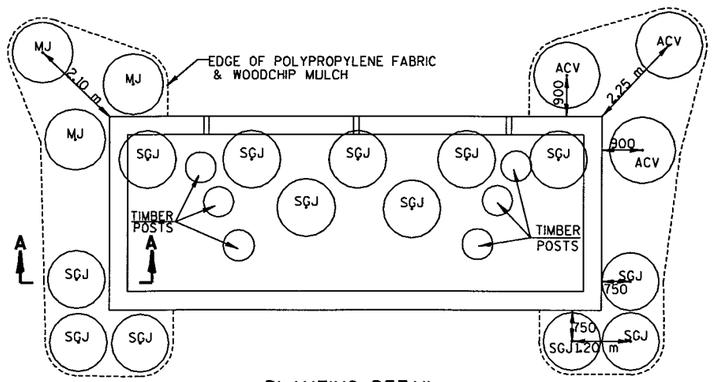


CROSS SECTION STA. 2+080 "E"

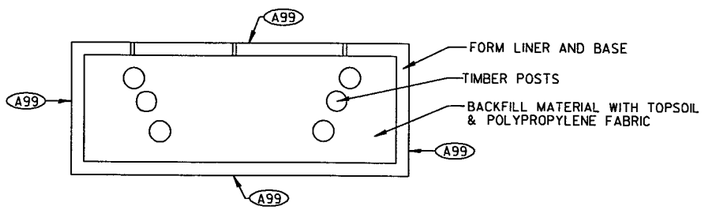




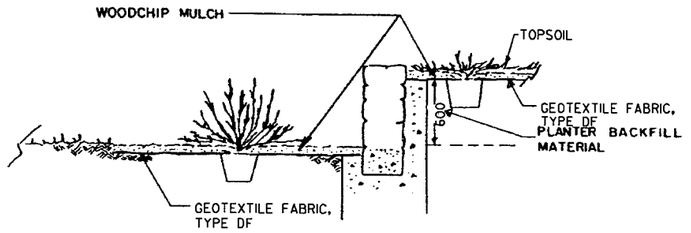
PLAN VIEW
SCALE 1:200



PLANTING DETAIL
BASE OF SIGN
SCALE 1:100



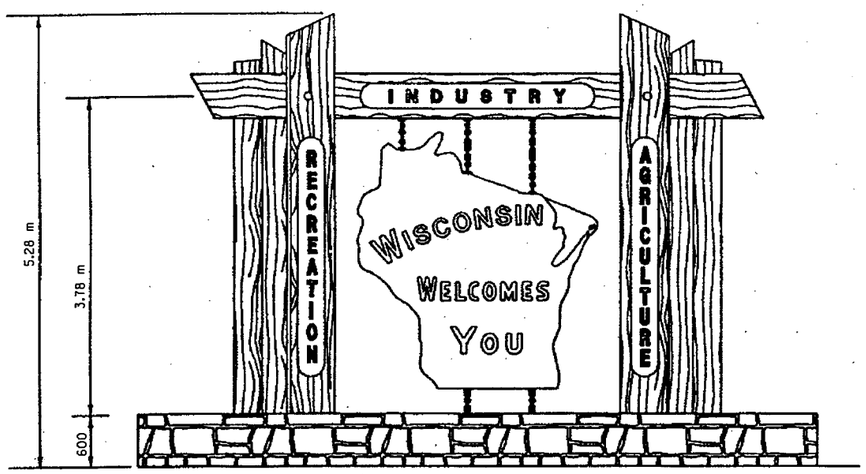
WELCOME SIGN PLANTER DETAIL



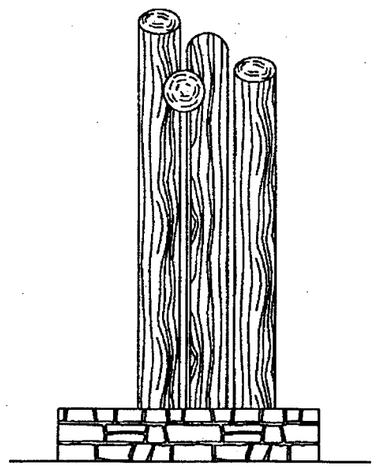
SECTION A-A
PLANTER DETAIL

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS - WELCOME SIGN	SHEET NO: 32	M

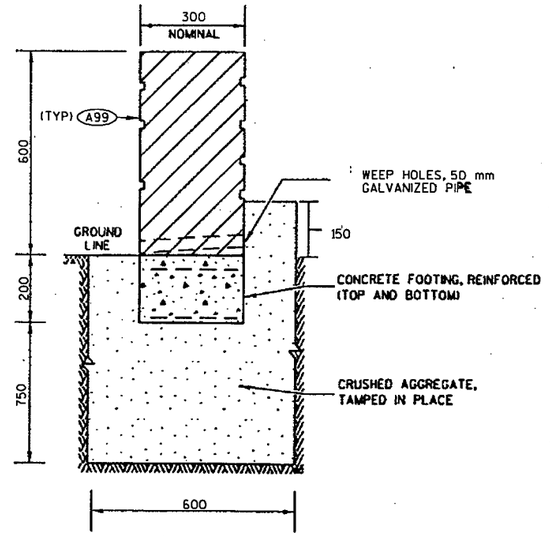
FILE NAME: PROJECTS/2940/PLANS/GEN/2940WISIGN10.DGN 09-17-01
LEVELS ON • 1,2, 4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



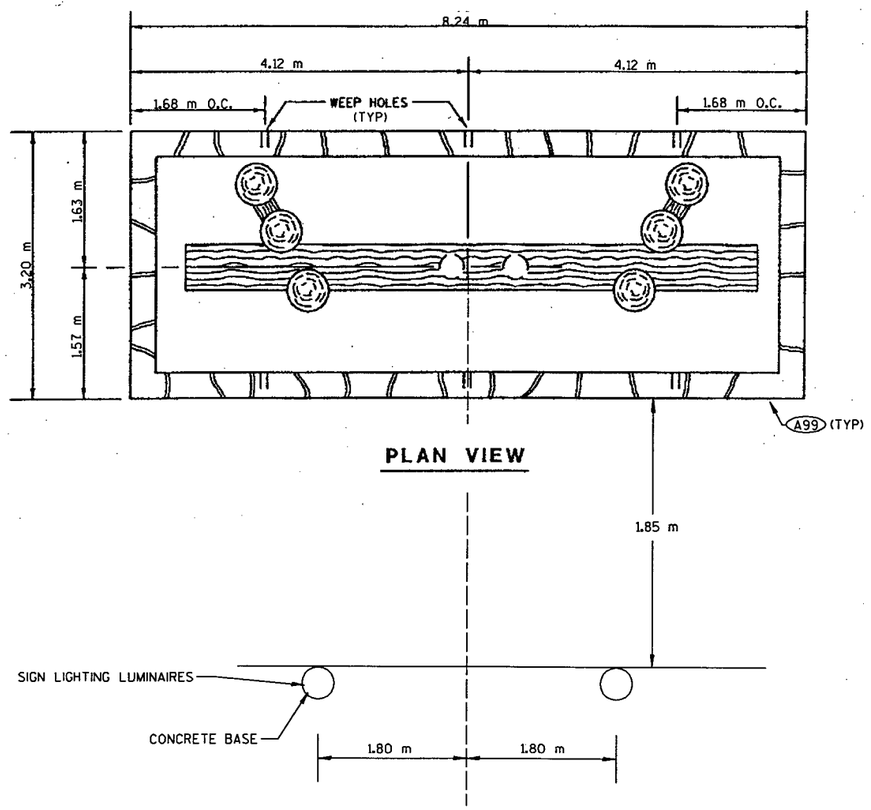
FRONT VIEW



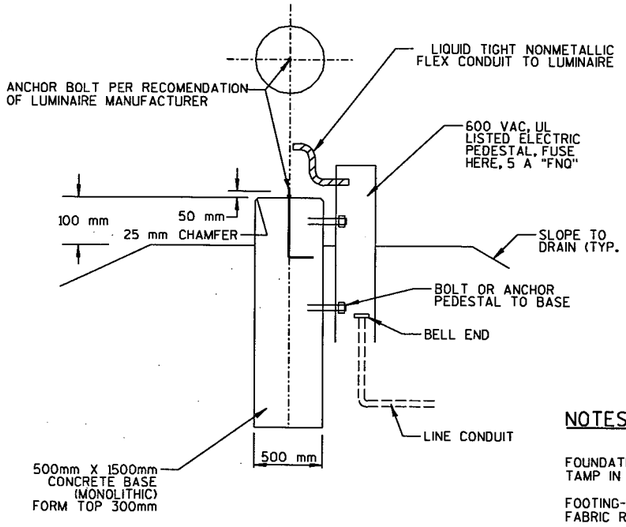
END VIEW



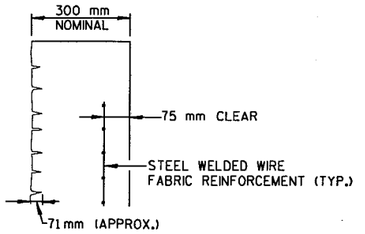
SECTION



PLAN VIEW



CONCRETE BASE DETAIL
WELCOME SIGN LIGHT



FORM LINER DETAIL

NOTES

FOUNDATION -EXCAVATE AND BACKFILL WITH CRUSHED AGGREGATE AND TAMP IN PLACE.

FOOTING-USE CONCRETE MASONRY AND STANDARD STEEL WELDED WIRE FABRIC REINFORCEMENT.

WALLS SHALL BE CONCRETE MASONRY. PLACE WEEP HOLES AS INDICATED.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

SEE LIGHTING PLAN FOR ELECTRICAL CONNECTION TO SIGN LIGHTING LUMINARIES AND LIGHTING QUANTITIES.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

CONCRETE BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

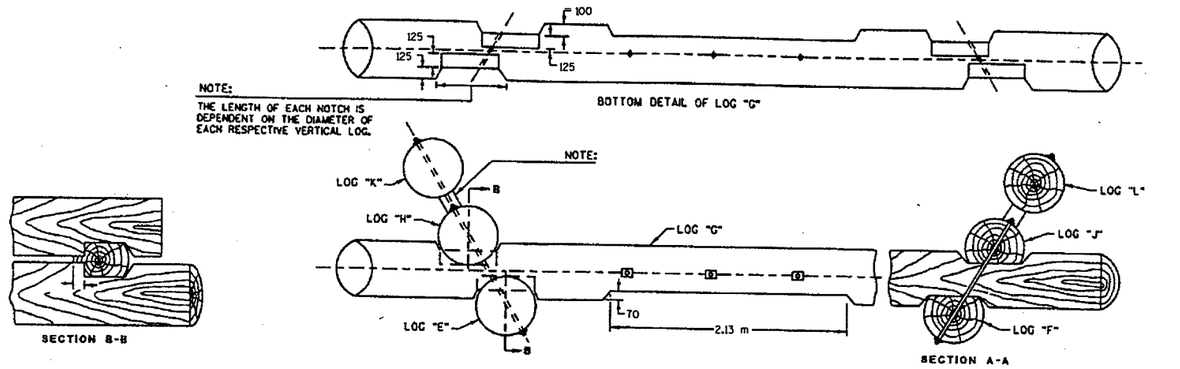
ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

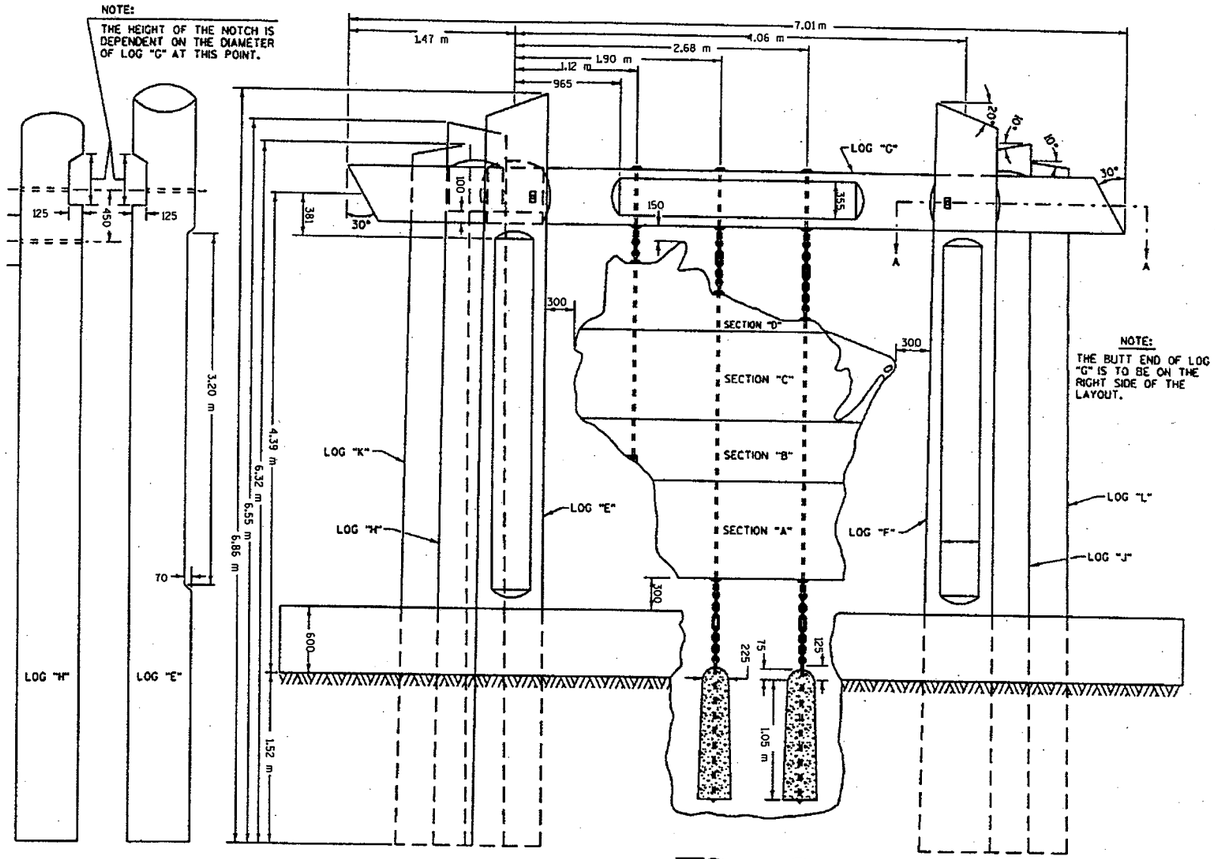
ANCHOR RODS SHALL BE THREADED 300 mm IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS. ASTM A-449, OR ASTM A-687 (GRADE 105).

A99 ARCHITECTURAL SURFACE TREATMENT ON THESE SURFACES. (SEE FORM LINER DETAIL AND SPECIAL PROVISIONS)

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS - WELCOME SIGN	SHEET NO: 33	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940WISIGN(2).DGN 09-17-01
LEVELS ON = 1,2, 4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63





NOTE:
LAYOUT NUMBER ONE WILL CONSIST OF SIGN SECTIONS 1-A, 1-B, 1-C, 1-D AND A MATCHED SET OF SEVEN LOGS NUMBERED 1-E, 1-F, 1-G, 1-H, 1-J, 1-K AND 1-L EACH ADDITIONAL LAYOUT SHALL BE NUMBERED CONSECUTIVELY IN THE SAME MANNER.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS - WELCOME SIGN	SHEET NO: 34	M

FILE NAME: PROJECTS/2940/PLANS/GENV2940WISIGN(3).DGN 09-17-01
LEVELS ON - 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

SITE PLAN GENERAL NOTES:

1. SEE ROADWAY PLANS FOR ADDITIONAL SITE INFORMATION INCLUDING LAWN AREAS.
2. EDGE OF PLANTING BED IS EDGE OF PAVEMENT AND/OR BUILDING UNLESS OTHERWISE NOTED
3. EDGE OF PLANTING BED IN OPEN AREAS (NOT ADJACENT TO PAVEMENT) IS TO BE LOCATED 18" BEYOND THE MATURE WIDTH (HGT.) OF PLANT – MEASURED FROM CENTER.
4. CONTRACTOR SHALL FIELD VERIFY LOCATIONS FOR WELL, SEPTIC, AND FLAGPOLE WITH OTHER TRADES.
5. SEE STR.PLANS FOR CONCRETE PAD DETAIL INTO FOUNDATION WALL

* TO BE DONE BY BUILDING CONTRACTOR, PAID FOR AS CONCRETE SIDEWALK 150-MM.

+640 +660 +680

23 BT
13 SBG
4 TMT
52 TMT
18 SBG
6 SBG
3 HAB
1 MP
2 TMT
9 HAB
24 JSB
20 HH
18 PF
3 VTW
TMH

EDGE OF PLANTING BED TYPICAL – SEE NOTES

WELL–REFER TO CONSTRUCTION DETAILS

FLAGPOLE, REFER TO CONSTRUCTION DETAILS

OPEN STAIR

* ENTRANCE SLAB

9M
3M
3.2M

SCALE BUILDING
TYPE 6 CONSTRUCTION
5460 SQUARE FEET
CHAPTER 54 OCCUPANCY

4.9M 16'-0"
25'-0" 7.6M
27'-0" 8.2M
2.4M 8'-0"

3 HOUR OCCUPANCY SEPARATION

ELEC. TRANS.

ALL LANDSCAPED AREA WILL HAVE RED GRANITE CHIPS — 75 MM DEPTH

ACCESSIBLE ROUTE

SANITARY PIPING TO SEPTIC HOLDING TANKS, CONSTRUCTION DETAILS

SAN

SEPTIC HOLDING TANKS, REFER TO CONSTRUCTION DETAILS

INSPECTION BUILDING
TYPE 6 CONSTRUCTION
5850 SQUARE FEET
CHAPTER 59 OCCUPANCY

3.2 M 10'-6"
OSEPO
OSEPO
20.1 M 66'-0"
20'-0" 6.0 M
OSEPO
1.5 M 5'-0"
* 1.5MX4.6M
SEPTIC HOLDING TANK, REFER TO CONSTRUCTION DETAILS

3 HOUR OCCUPANCY SEPARATION

CELLULAR BUILDING
TYPE 6 CONSTRUCTION
1270 SQUARE FEET
CHAPTER 54 OCCUPANCY

* 1.5MX1.5M
* 1.5MX1.5M
* 3.6MX1.5M
GENERATOR
WEP CO

13.0M
1.5M

1000 GAL TANKS
TANK-2 PROPANE
TANK-1

ICE BRIDGE

CELLULAR TOWER

150 MM DEPTH

* 3.6 M X 5.5 M X 0.15 M CONCRETE SLAB PAID FOR AS CONCRETE SIDEWALK 150-MM

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	BUILDING SITE PLAN/PLANTING PLAN	SHEET NO: 35	M

FILE NAME: PROJECTS/2940/PLANS/GEN/landscaping1.DGN 11-27-01
LEVELS ON *

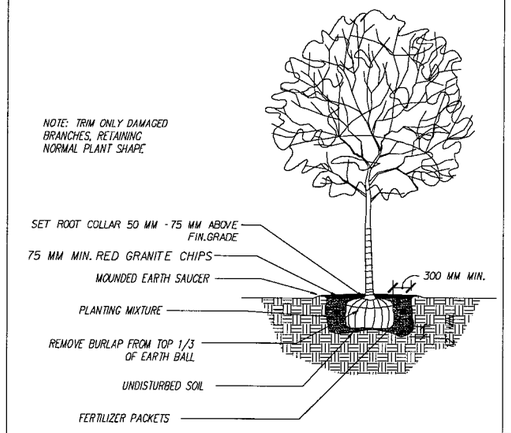
LEGEND
APPROX.+- = APPROXIMATELY
B&B = BALLED & BURLAPPED
CONT. = CONTAINER GROWN
CAL. = CALIPER AT ROOT COLLAR
DIAM. = DIAMETER
HGT. = HEIGHT
SPD. = SPREAD
Y = YEAR
O.C. = ON CENTER SPACING
LOC. = LOCATE

ITEM	QTY.
RED GRANITE CHIPS	
AROUND BUILDING	27
AROUND TOWER	17
TOTAL (C.Y.)	44

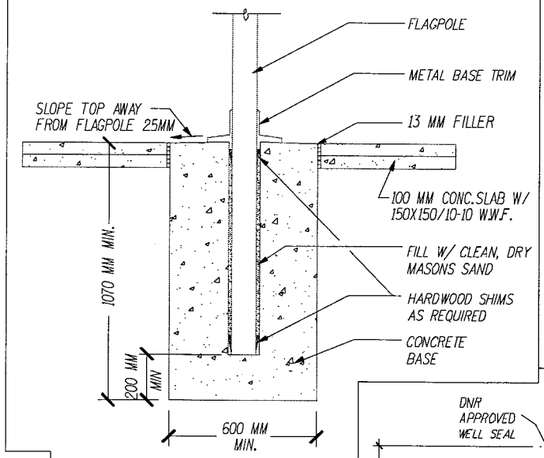
SEPTIC SIZING CHART

ITEM	QTY.	LITERS PER DAY (LPD)	TOTAL (LPD)	X 5 (LPD)	REMARKS
SCALE BUILDING					
EMPLOYEES	12	74	888	4440	3 SHIFTS OF 4
PUBLIC USE	75	11.5	862.5	4312.5	DAILY TRUCKER STOPS
FLOOR DRAINS	14	142	1988	9940	
		SCALE	SUBTOTAL	18692.5	
INSPECTION					
CATCH BASINS	2	369	738	3690	TRENCH DRAINS & INSPECTION PITS
		INSPECTIONS	SUBTOTAL	3690	

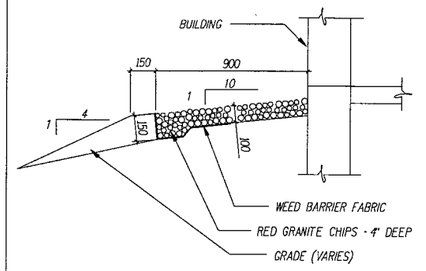
NOTE: REFER TO SPECIFICATIONS FOR TANK SIZES



TREE PLANTING DETAIL



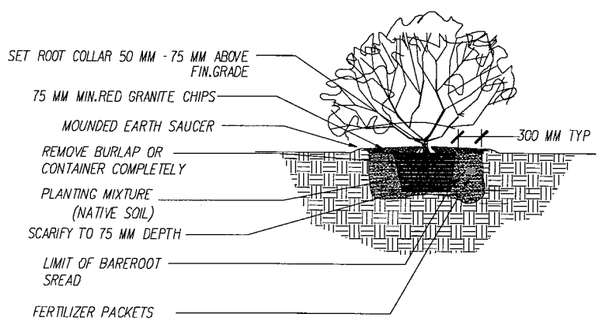
FLAGPOLE BASE DETAIL



X/XX BUILDING DRIP EDGE

PLANT QUANTITIES

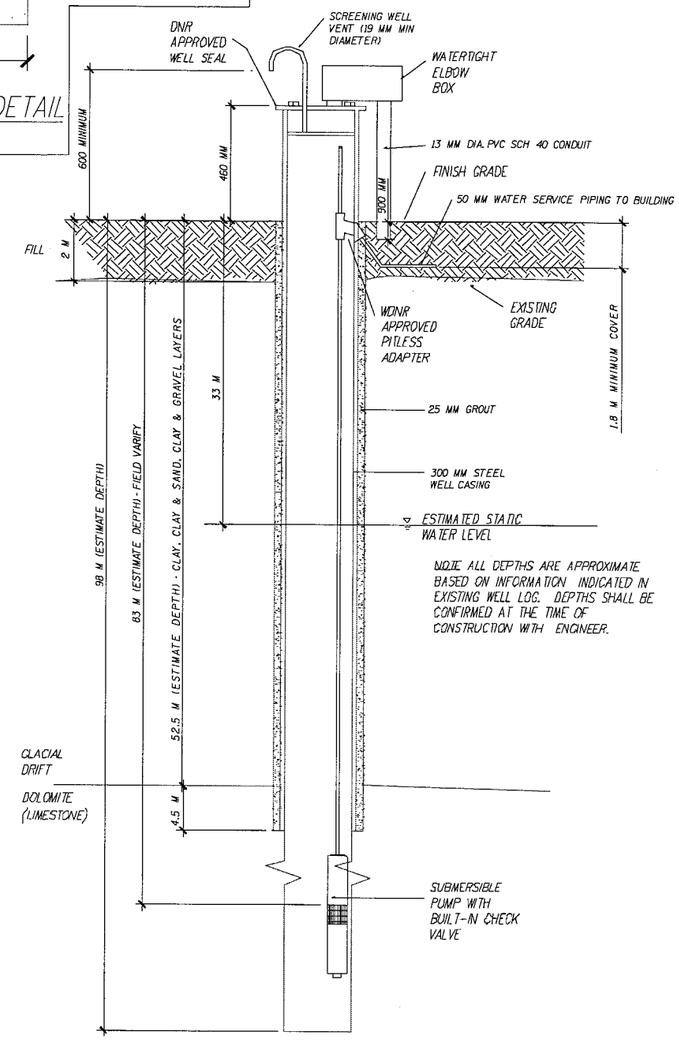
SYM.	BOTANICAL NAME	COMMON NAME	SIZE AT PLNTG (MM)	SHEET NO.	TOTALS
				C101	
				EACH	
	SMALL DECIDUOUS TREES				
MP	MALUS 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE	50 CAL.	1	1
	LARGE DECIDUOUS SHRUBS				
VTW	VIBURNUM TRILOBUM 'WENTWORTH'	WENTWORTH AM.ERICAN CRANBERRY	760 HGT.	3	3
	SMALL DECIDUOUS SHRUB				
SBG	SPIRAEA X BUMALDA 'GOLDMOUND'	GOLDMOUND SPIREA	460 HGT.	37	37
PF	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER POTENTILLA	460 HGT.	18	18
BT	BERBERIS THUNBERGII VAR ATROPURPUREA 'CRIMSON PYGMY'	CRIMSON PYGMY BARBERRY	380 HGT.	23	23
	CONIFEROUS SHRUBS				
JSB	JUNIPERUS SABINA 'BROADMOOR'	BROADMOOR JUNIPER	460 SPD.	24	24
TMT	TAXUS X MEDIA 'TAUNTONII'	TAUNTON ANGLOJAP YEW	460 SPD.	58	58
TMH	TAXUS X MEDIA 'HICKSII'	HICKS ANGLOJAP YEW	900 HGT.	1	1
	PERENNIALS				
HH	HEMEROCALLIS 'STELLA D' ORO'	STELLA D'ORO DAYLILY	150	20	20
HAB	HOSTA FORTUNEI 'ALBO-MARGINATA'	ALBO-MARGINATA HOSTA	150	12	12



SHRUB PLANTING DETAIL

PLANT LIST

SYM.	TYPE	BOTANICAL NAME	COMMON NAME	AVG. MATURE HGT. (M)	SIZE AT PLNTG (MM)	ROOT TYPE	MIN. BALL OR POT SIZE (MM) DIAM.	MIN. BALL OR POT SIZE (MM) DEPTH	MINIMUM HOLE SIZE (MM) DIAM.	MINIMUM HOLE SIZE (MM) DEPTH	BRACE OR GUY	FERT. UNITS REQ'D.	RODENT PROT. REQ'D.	MULCH RING DIA. (M)	PLANT BED DETAIL	REMARKS (M)
		SMALL DECIDUOUS TREES														
MP	3	MALUS 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE	5.5	50 CAL.	B&B	600	400	1070	400	YES	3	YES	1.2	PLAN	SINGLE LEADER
		LARGE DECIDUOUS SHRUBS														
VTW	3	VIBURNUM TRILOBUM 'WENTWORTH'	WENTWORTH AM.ERICAN CRANBERRY	1.8	760 HGT.	CONT.	300	280	600	280	NO	2	NO	BED	PLAN	LOC. 1.5 O.C.
		SMALL DECIDUOUS SHRUB														
SBG	1	SPIRAEA X BUMALDA 'GOLDMOUND'	GOLDMOUND SPIREA	1.2	460 HGT.	CONT.	250	200	560	200	NO	2	NO	BED	PLAN	LOC. 1.2 O.C.
PF	1	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER POTENTILLA	.9	460 HGT.	CONT.	250	200	560	200	NO	2	NO	BED	PLAN	LOC. AS SHOWN
BT	1	BERBERIS THUNBERGII VAR ATROPURPUREA 'CRIMSON PYGMY'	CRIMSON PYGMY BARBERRY	.6	380 HGT.	CONT.	250	200	560	200	NO	2	NO	BED	PLAN	LOC. AS SHOWN
		CONIFEROUS SHRUBS														
JSB	1	JUNIPERUS SABINA 'BROADMOOR'	BROADMOOR JUNIPER	.6	460 SPD	CONT.	250	200	560	200	NO	2	NO	BED	PLAN	LOC. AS SHOWN
TMT	1	TAXUS X MEDIA 'TAUNTONII'	TAUNTON ANGLOJAP YEW	.6	460 SPD	CONT.	250	200	560	200	NO	2	NO	BED	PLAN	LOC. 1.2 O.C.
TMH	3	TAXUS X MEDIA 'HICKSII'	HICKS ANGLOJAP YEW	4.6	900 HGT.	CONT.	300	280	600	280	NO	2	NO	BED	PLAN	LOC. AS SHOWN
		PERENNIALS														
HH	N/A	HEMEROCALLIS 'STELLA D' ORO'	STELLA D'ORO DAYLILY	.6	150	POT	150	130	300	200	NO	1	NO	BED	PLAN	LOC. AS SHOWN
HAB	N/A	HOSTA FORTUNEI 'ALBO-MARGINATA'	ALBO-MARGINATA HOSTA	.9	150	POT	150	130	300	200	NO	1	NO	BED	PLAN	LOC. AS SHOWN



WELL PROFILE

FILE NAME: PROJECTS/2940/PLANS/GEN/landscaping2.DGN 11-27-01
LEVELS ON •

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	BUILDING SITE PLAN/PLANTING PLAN	SHEET NO: 36	M

R 5-7-02

NOTES

1) EXISTING UTILITY INFORMATION NOT SHOWN.
2) FINAL LOCATIONS OF ALL ELEMENTS TO BE DETERMINED BY PROJECT ENGINEER.
3) REFERENCE LINE SHOWN ON FTMS PLANS IS NOT RELATED TO ALIGNMENT ON OTHER PLANS AND IS FOR REFERENCE ONLY.
4) PRIOR TO BEGINNING FTMS WORK, CONTRACTOR MUST NOTIFY ADESTA OF INTENT TO BEGIN WORK.

LEGEND

- PROPOSED 50 MM COMMUNICATIONS CONDUIT
- V — PROPOSED COMMUNICATIONS VAULT
- ▲ — QUANTITY POINT (NON-PHYSICAL ITEM)
- EXISTING WILLIAMS COMMUNICATIONS CONDUIT
- V — EXISTING WILLIAMS COMMUNICATIONS VAULT

SIGN

194 SB OFF-RAMP TO RUSSELL ROAD

RUSSELL RD.

INSTALL PROPOSED CONDUIT INTO EXISTING COMMUNICATIONS VAULT (QTY. 1)
SPLICE NEW 24-COUNT FIBER OPTIC CABLE TO EXISTING STUBBED 24-COUNT FIBER OPTIC CABLE IN EXISTING SPLICE CLOSURE

0+200 SB = NORTH EDGE OF RUSSELL RD. BRIDGE AND IS BASED ON EXISTING EDGE OF PAVEMENT OF 194 / USH 41 SOUTHBOUND

INL

MATCH LINE 450 SB

EXCV 10

V

0+400 SB

0+300 SB

0+200 SB

194 / USH 41 SOUTHBOUND

CV 20

100 SB

INSTALL 1-50 MM HDPE CONDUIT WITH 1-24 COUNT FIBER OPTIC COMMUNICATIONS CABLE
INSTALL CONDUIT APPROXIMATELY 1 M FROM EXISTING WILLIAMS COMMUNICATION CONDUIT

194 / USH 41 NORTHBOUND

INSTALL 1-50 MM HDPE CONDUIT WITH 1-24 COUNT FIBER OPTIC COMMUNICATIONS CABLE
INSTALL CONDUIT APPROXIMATELY 1 M FROM EXISTING WILLIAMS COMMUNICATION CONDUIT

194 NB ON-RAMP FROM RUSSELL RD.

STATE PROJECT NO: 1032-08-70	SCALE: 1:100	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FTMS PLAN	SHEET NO: 37	M

FILE NAME: PROJECTS/2940/PLANS/GEN/KNFTM01.DGN 12-17-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

LEGEND

PROPOSED 50 MM COMMUNICATIONS CONDUIT

PROPOSED COMMUNICATIONS VAULT

QUANTITY POINT (NON-PHYSICAL ITEM)

EXISTING WILLIAMS COMMUNICATIONS CONDUIT

EXISTING WILLIAMS COMMUNICATIONS VAULT

NOTES

1) EXISTING UTILITY INFORMATION NOT SHOWN.
2) FINAL LOCATIONS OF ALL ELEMENTS TO BE DETERMINED BY PROJECT ENGINEER.
3) REFERENCE LINE SHOWN ON FTMS PLANS IS NOT RELATED TO ALIGNMENT ON OTHER PLANS AND IS FOR REFERENCE ONLY.
4) PRIOR TO BEGINNING FTMS WORK, CONTRACTOR MUST NOTIFY ADESTA OF INTENT TO BEGIN WORK.

INSTALL 1-50 MM HDPE CONDUIT WITH 1-24 COUNT FIBER OPTIC COMMUNICATIONS CABLE
INSTALL CONDUIT APPROXIMATELY 1 M FROM EXISTING WILLIAMS COMMUNICATION CONDUIT

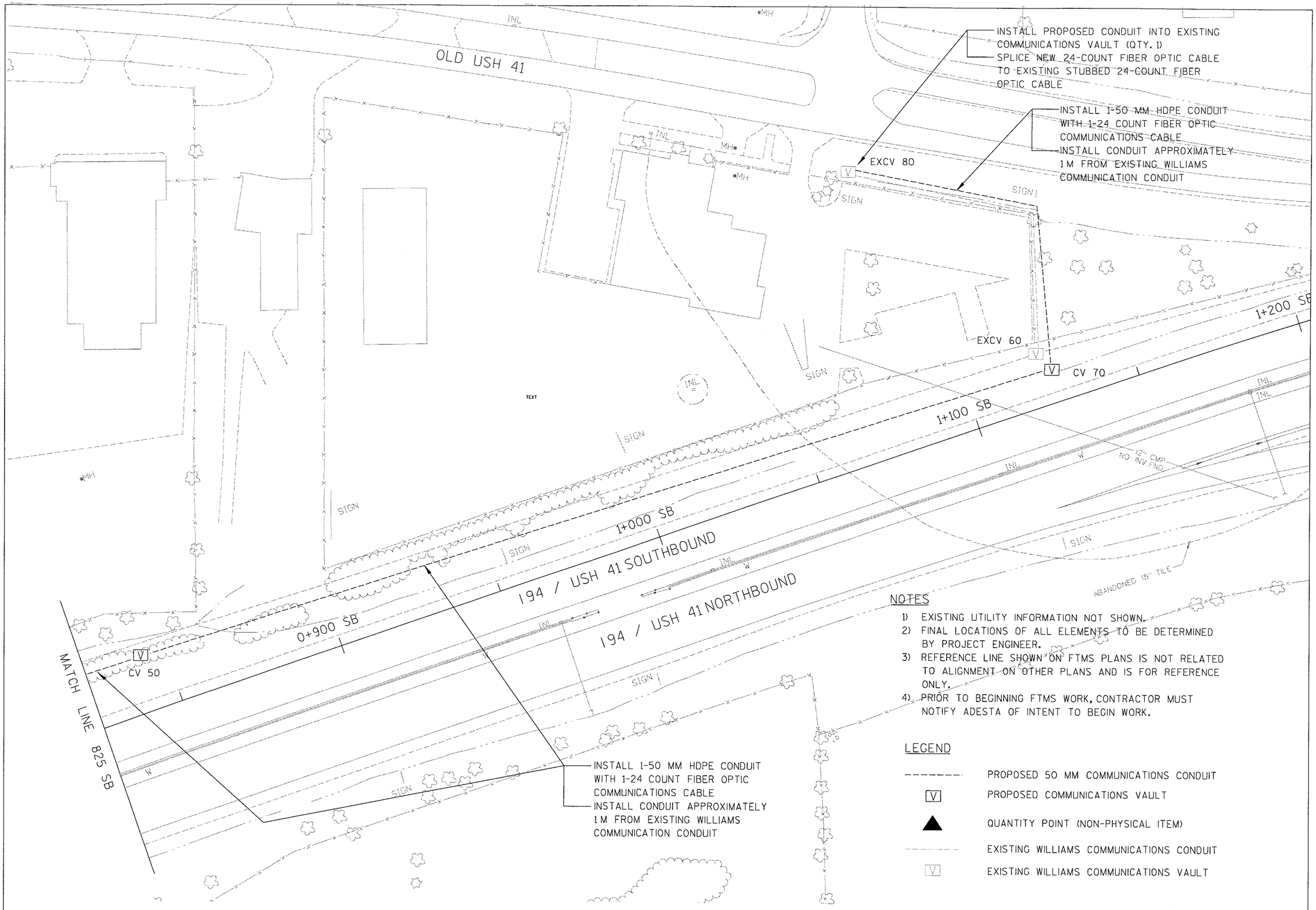
INSTALL 1-50 MM HDPE CONDUIT, DIRECTIONAL BORE WITH 1-24 COUNT FIBER OPTIC COMMUNICATIONS CABLE
INSTALL CONDUIT APPROXIMATELY 1 M FROM EXISTING WILLIAMS COMMUNICATION CONDUIT

INSTALL 1-50 MM HDPE CONDUIT WITH 1-24 COUNT FIBER OPTIC COMMUNICATIONS CABLE
INSTALL CONDUIT APPROXIMATELY 1 M FROM EXISTING WILLIAMS COMMUNICATION CONDUIT

SIGN
EXCV 30
CV 40
QP 10 0+500 SB
0+600 SB
0+700 SB
0+800 SB SIGN
194 SB OFF-RAMP TO RUSSELL ROAD
194 / USH 41 SOUTHBOUND
194 / USH 41 NORTHBOUND
194 NB ON-RAMP FROM RUSSELL RD.
MATCH LINE 450 SB
MATCH LINE 825 SB

STATE PROJECT NO: 1032-08-70	SCALE: 1:100	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FTMS PLAN	SHEET NO: 38	M

FILE NAME: PROJECTS/2940/PLANS/GEN/KNFTM02.DGN 12-17-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16, 17,18,19,20,21,22,23,24,25,26,27, 28,29,30,31,32,33,34,35, 36,37,38,39,40,41,42,43,44,45,46,47, 48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES

1) EXISTING UTILITY INFORMATION NOT SHOWN.
2) FINAL LOCATIONS OF ALL ELEMENTS TO BE DETERMINED BY PROJECT ENGINEER.
3) REFERENCE LINE SHOWN ON FTMS PLANS IS NOT RELATED TO ALIGNMENT ON OTHER PLANS AND IS FOR REFERENCE ONLY.
4) PRIOR TO BEGINNING FTMS WORK, CONTRACTOR MUST NOTIFY ADESTA OF INTENT TO BEGIN WORK.

LEGEND

- PROPOSED 50 MM COMMUNICATIONS CONDUIT
- [V] PROPOSED COMMUNICATIONS VAULT
- ▲ QUANTITY POINT (NON-PHYSICAL ITEM)
- EXISTING WILLIAMS COMMUNICATIONS CONDUIT
- [V] EXISTING WILLIAMS COMMUNICATIONS VAULT

STATE PROJECT NO: 1032-08-70	SCALE: 1:100	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FTMS PLAN	SHEET NO: 39	M

FILE NAME: PROJECTS/2940/PLANS/GEN/KNFTM03 12-17-01
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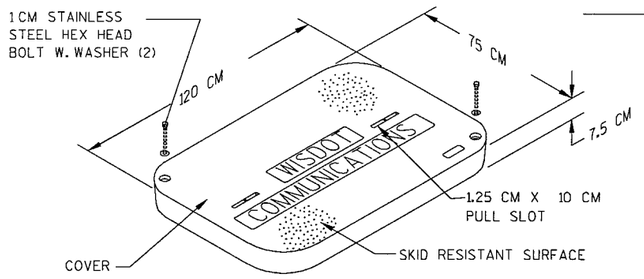
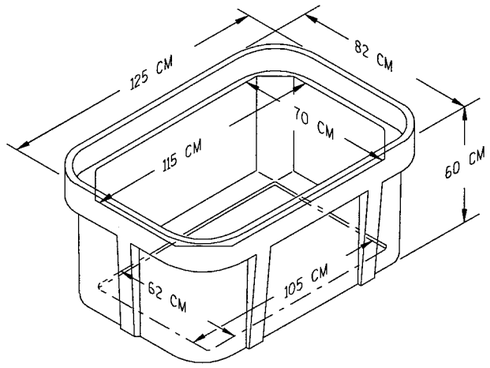
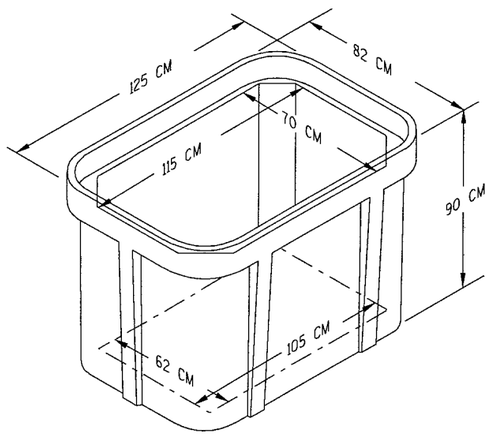
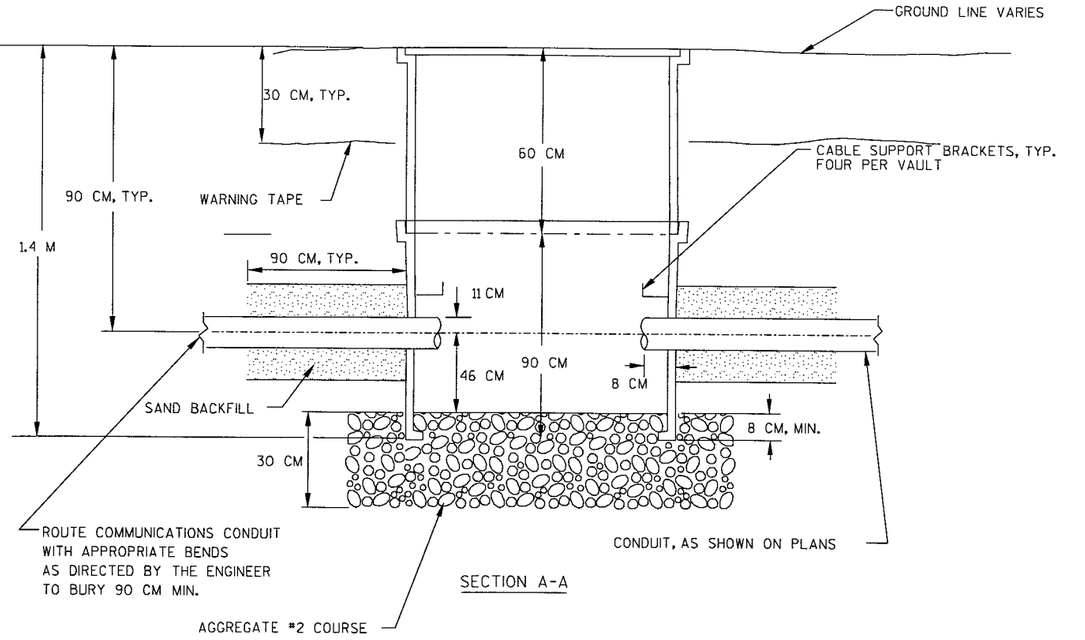


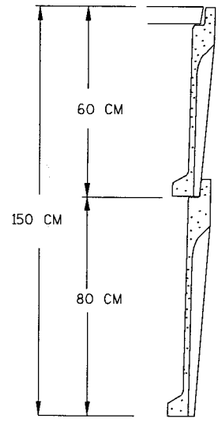




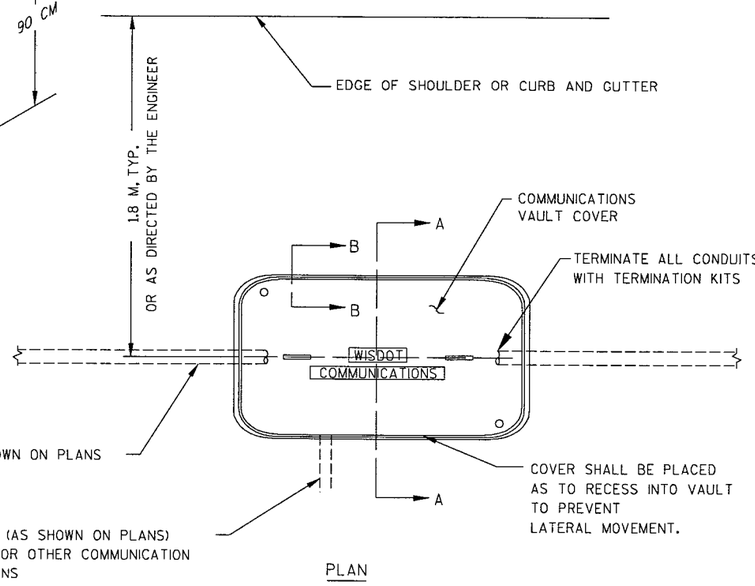
ISOMETRIC



SECTION A-A



SECTION B-B



PLAN

COMMUNICATIONS VAULT

NOTES

1) BOX SHALL HAVE AN OPEN BASE

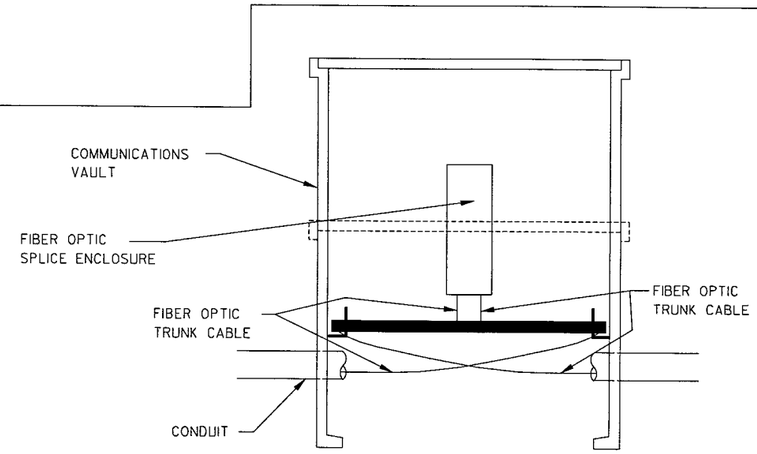
2) COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 3,000 KG AND SHALL LOCK.

3) ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT

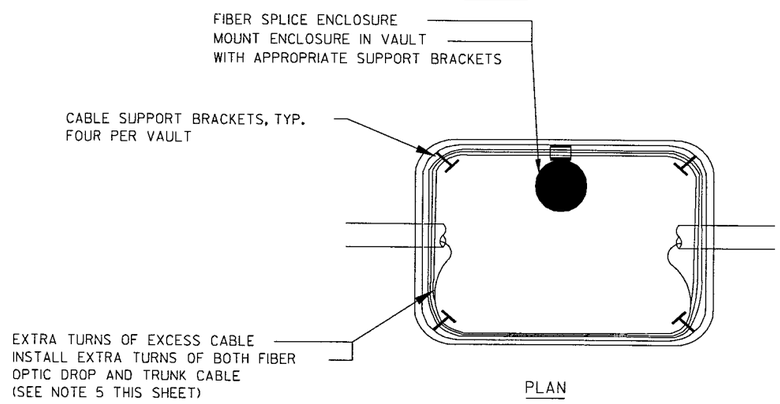
4) FIELD PLACEMENT OF COMMUNICATIONS VAULT SHALL BE DIRECTED BY THE ENGINEER

5) INSTALL EXTRA TURNS OF CABLE IN EACH COMMUNICATIONS VAULT ACCORDINGLY:
   - COIL 30 M OF EXTRA CABLE FOR BOTH DROP AND TRUNK CABLES AT SPLICE LOCATIONS
   - COIL 9 M OF EXTRA TRUNK CABLE AT NON-SPLICE LOCATIONS

6) CONDUIT SHALL BE INSTALLED IN SUCH A MANNER TO INDUCE WATER TO FLOW OUT FROM THE MIDDLE OF THE CONDUIT RUN INTO CONNECTED MANHOLES OR VAULTS



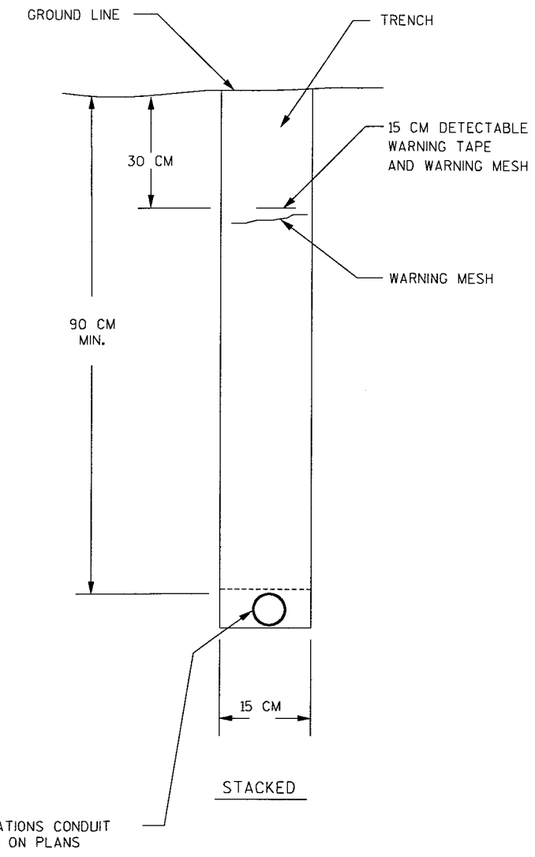
PROFILE



PLAN

FIBER OPTIC DROP SPLICE
IN COMMUNICATIONS VAULT

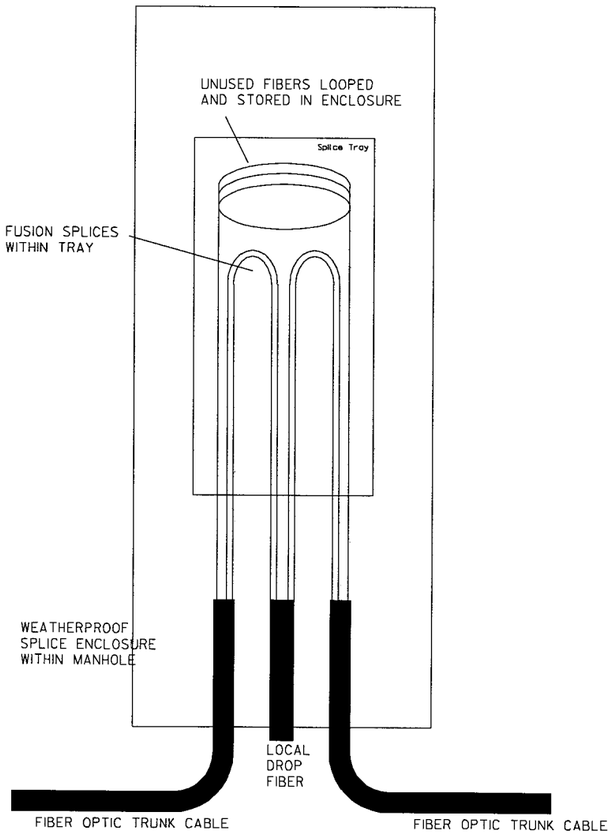
FILE NAME: PROJECTS/2940/PLANS/GEN/KNICD012D.DGN 12-17-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



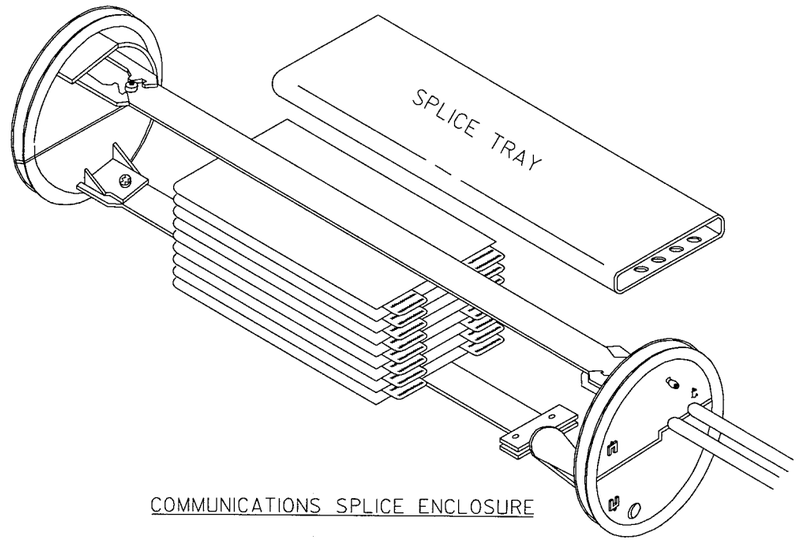
MULTICELL CONDUIT INSTALLATION

NOTE

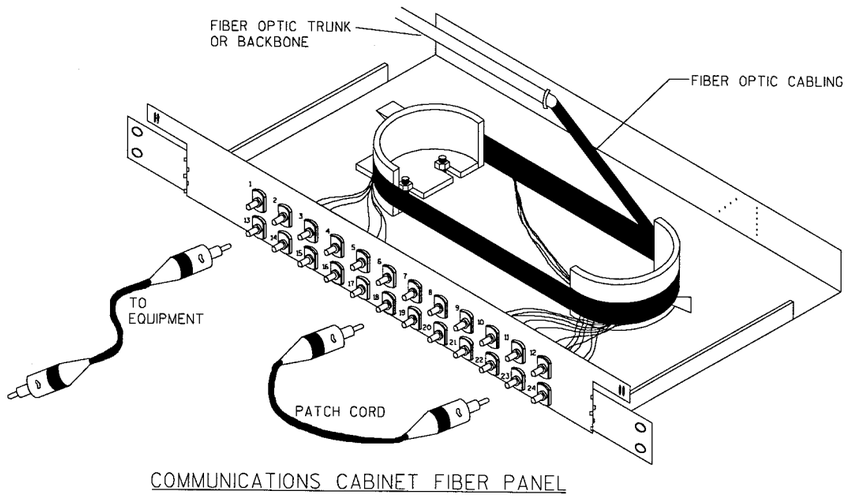
1) CONDUIT SHALL BE INSTALLED IN SUCH A MANNER TO INDUCE WATER TO FLOW OUT FROM THE MIDDLE OF THE CONDUIT RUN INTO CONNECTED MANHOLES OR VAULTS.



FIBER OPTIC SPLICE ENCLOSURE



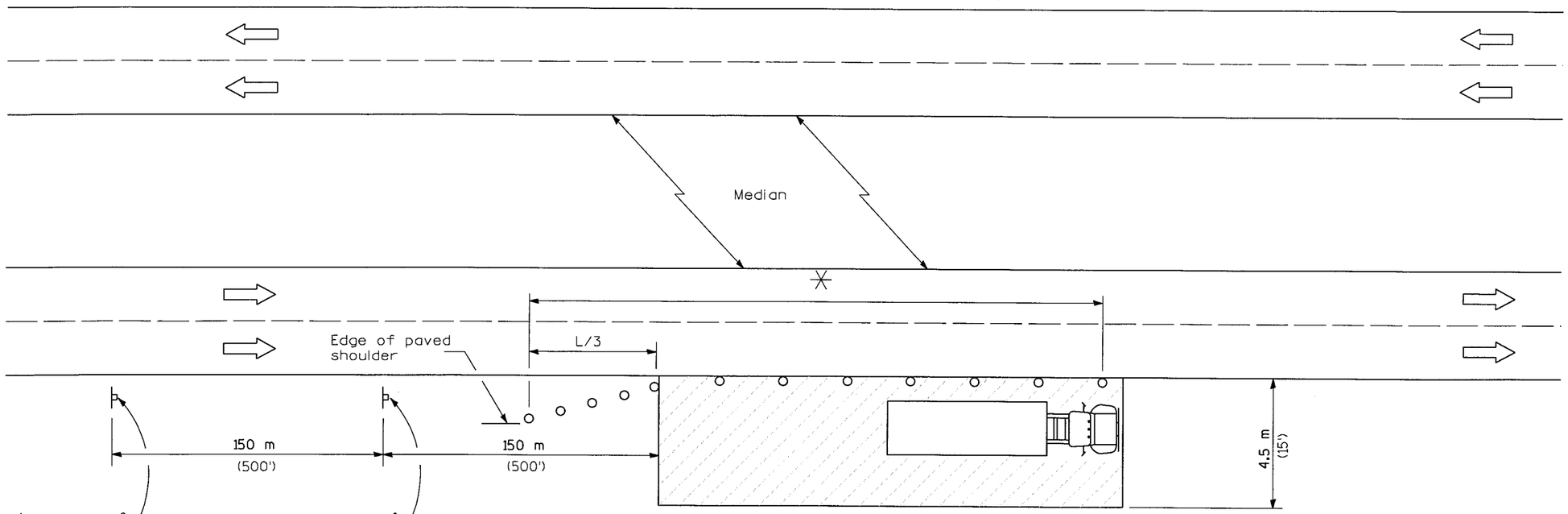
COMMUNICATIONS SPLICE ENCLOSURE



COMMUNICATIONS CABINET FIBER PANEL

FILE NAME: PROJECTS/2940/PLANS/GEN/KNICD042.DGN 12-17-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	NOT TO SCALE	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FTMS CONSTRUCTION DETAILS	SHEET NO: 41	M



For contract construction projects

W20-1(0)-48

W21-1a(0)-48
Or

For maintenance and utility projects

W21-4(0)-48

W21-1110(0)-48

TYPICAL APPLICATIONS

Utility operations
Culvert extensions
Side slope changes
Guardrail installation and maintenance
Delineator installation
Landscaping operations
Shoulder repair
Sign installation and maintenance

SYMBOLS

Work area

Sign

Cone, drum or barricade

GENERAL NOTES

This Standard is used where at any time, any vehicles, equipment, worker or their activities will encroach in the area closer than 4.5 m (15') up to the edge of pavement.

✳ Cones, drums or barricades at 8 m (25') centers for L/3 distance, 15 m (50') centers through remainder of work area when work occurs within 600 mm (24") of the edge of pavement.

Shoulder tapers should have a minimum length of L/3.

Where L is:

SPEED LIMIT	FORMULAS	
	Metric	(English)
70 km/h (40 mph) or less:	$L = \frac{WS^2}{150}$	$L = \frac{WS^2}{60}$
80 km/h (45 mph) or greater:	$L = 0.65(W)(S)$	$L = (W)(S)$

W = Width of offset in meters (feet).

S = Normal posted speed km/h (mph).

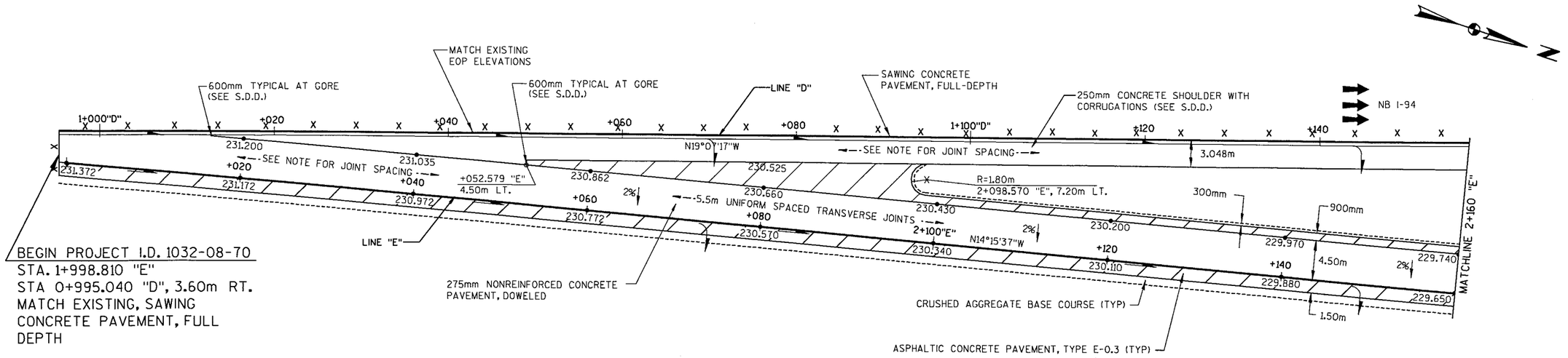
All dimensions are in millimeters (inches) unless otherwise shown.

OFF- RD OPERATIONS, MULTILANE LESS THAN 4.5 M (15') AWAY FOR SPEEDS ≥ 45 MPH

FTMS TRAFFIC CONTROL WHEN WITHIN 4.5 METERS OF MAINLINE

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET NO: 42	M

FILE NAME: PROJECTS/2940/PLANS/GEN/FTMS TRAFFIC CONTROL DETAIL.DGN 12-19-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



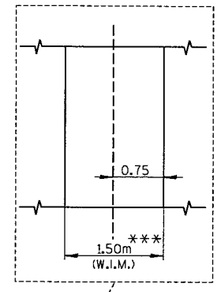
BEGIN PROJECT I.D. 1032-08-70
STA. 1+998.810 "E"
STA 0+995.040 "D", 3.60m RT.
MATCH EXISTING, SAWING CONCRETE PAVEMENT, FULL DEPTH

NOTE:
1. LOCATION OF TRANSVERSE JOINTS WILL MATCH EXISTING JOINTS ALONG I-94. CONTRACTOR MUST FIELD VERIFY THE LOCATION OF EXISTING JOINT AFTER REMOVAL OF EXISTING PAVEMENT, AND PLACE A MARK ON EXISTING PAVEMENT TO REMAIN.
2. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
3. ALL TRANSVERSE JOINTS REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD).

CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	E:%	S.E. RUNOUT
4	1+429.778"D"	57369.097	768411.589	1+172.437"D"	57125.955	768495.886	1+683.378"D"	57626.246	768401.649	1731.444m	16°54'28"R	510.941m	257.341m	---	N/A

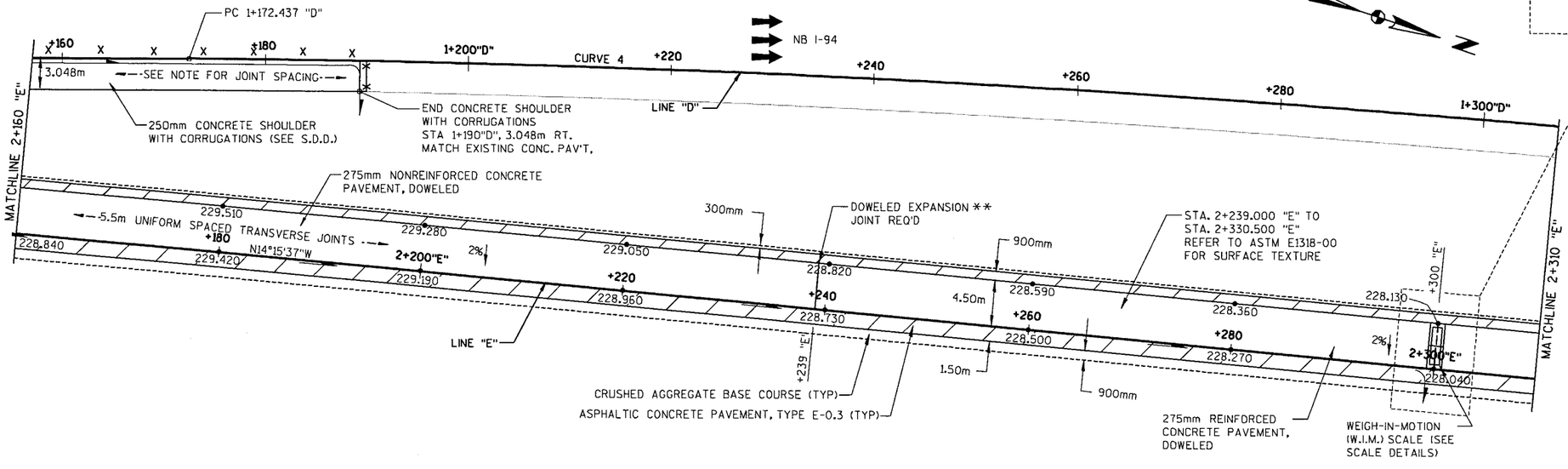
** DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT.

*** 1.5m WIDTH FOR WEIGH-IN-MOTION. (W.I.M.) THIS AREA WILL NOT HAVE ANY REINFORCEMENT. CONTRACTOR SHALL ADEQUATELY LABEL WHERE BARS START & STOP. AREA TO BE CUT AND REMOVED BY W.I.M. CONTRACTOR. SEE CONSTRUCTOIN DETAIL FOR REINFORCEMENT & W.I.M. LAYOUT.



ASPHALT CONCRETE PAVEMENT

PIPE UNDERDRAIN



FILE NAME: PROJECTS/2940/PLANS/PAVDET/PAVDET1.DGN 12-14-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT DETAILS, GRADES & JOINTS	SHEET NO: 43	M

NOTES:
1. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
2. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD)

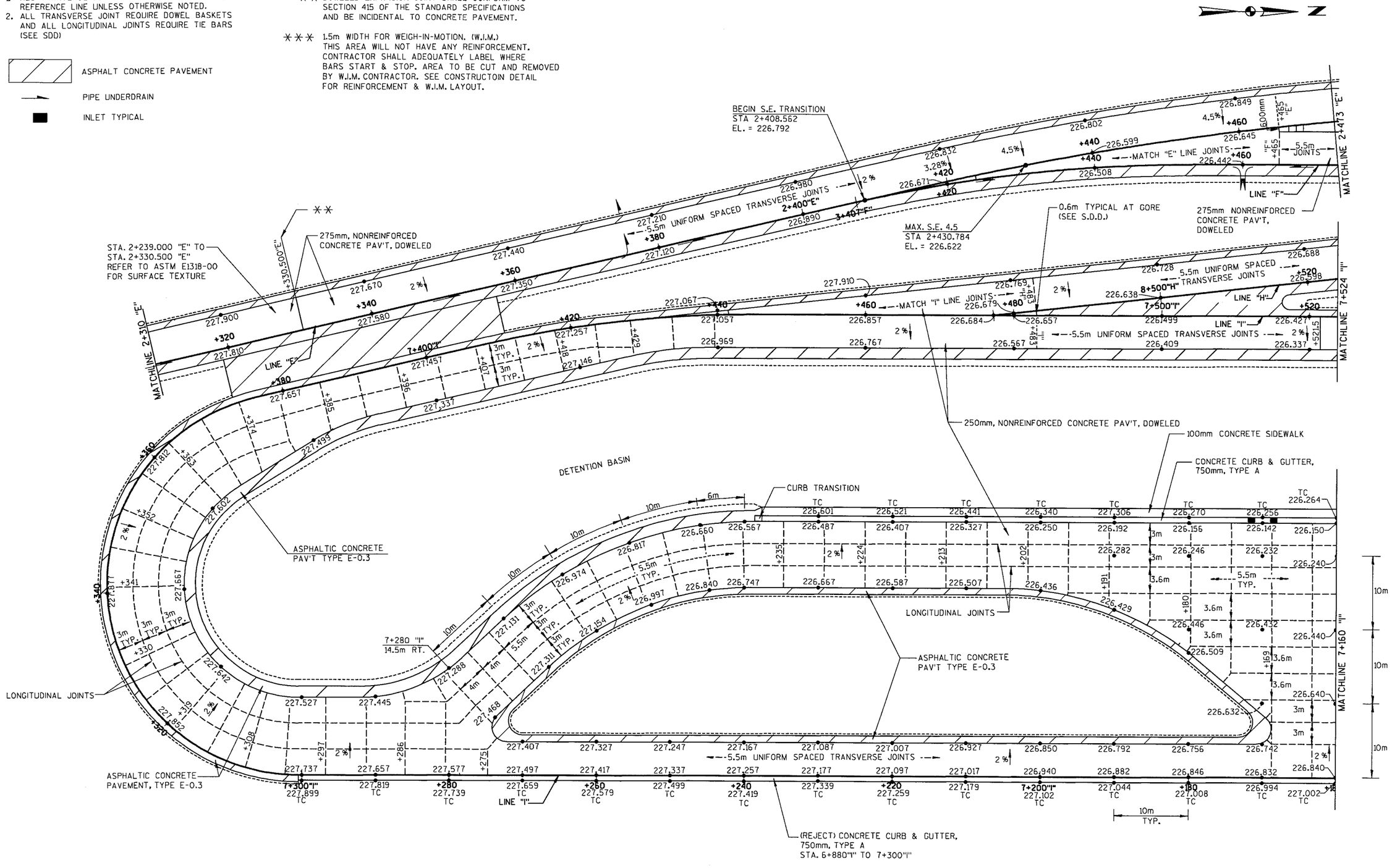
ASPHALT CONCRETE PAVEMENT

PIPE UNDERDRAIN

INLET TYPICAL

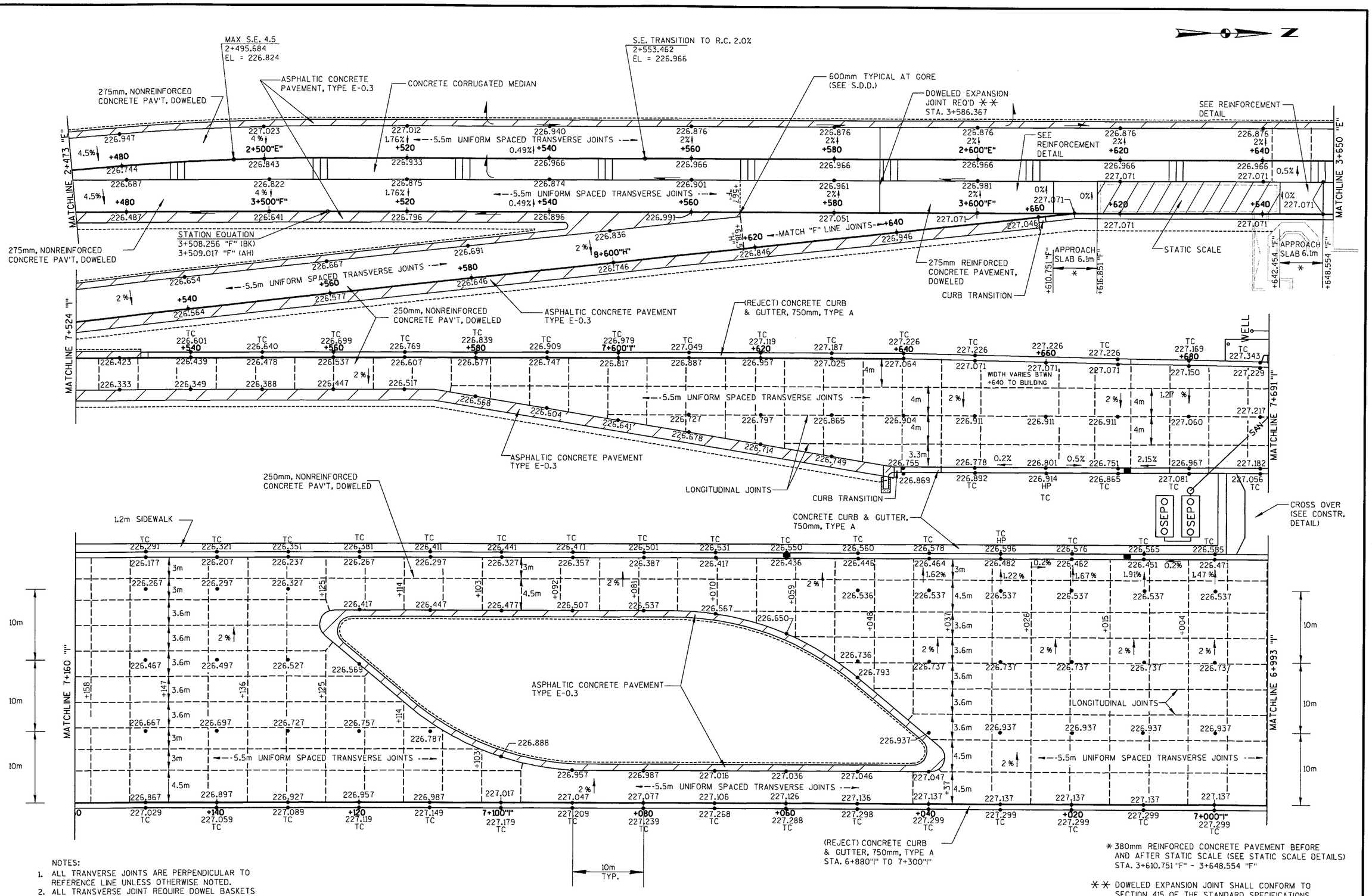
** DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT.

*** 1.5m WIDTH FOR WEIGH-IN-MOTION. (W.I.M.) THIS AREA WILL NOT HAVE ANY REINFORCEMENT. CONTRACTOR SHALL ADEQUATELY LABEL WHERE BARS START & STOP. AREA TO BE CUT AND REMOVED BY W.I.M. CONTRACTOR. SEE CONSTRUCTOIN DETAIL FOR REINFORCEMENT & W.I.M. LAYOUT.



FILE NAME: PROJECTS/2940/PLANS/PAVDET/PAVDET2.DGN 12-10-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT DETAILS, GRADES & JOINTS	SHEET NO: 44	M



NOTES:
1. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
2. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD)

ASPHALT CONCRETE PAVEMENT — PIPE UNDERDRAIN — INLET TYPICAL

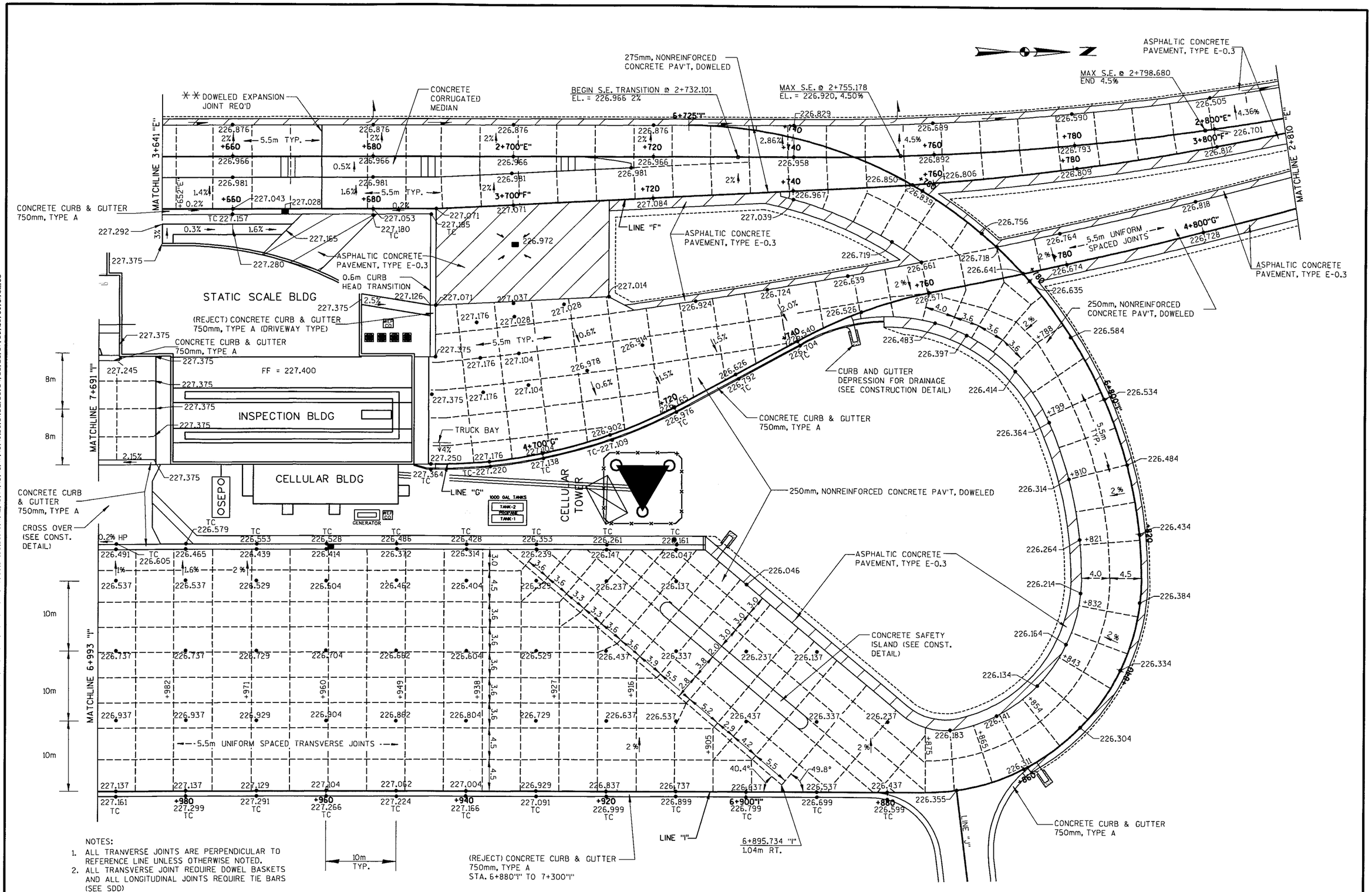
✳ 380mm REINFORCED CONCRETE PAVEMENT BEFORE AND AFTER STATIC SCALE (SEE STATIC SCALE DETAILS) STA. 3+610.751 "F" - 3+648.554 "F"

✳✳ DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT.

✳✳✳ 1.5m WIDTH FOR WEIGH-IN-MOTION. (W.I.M.) THIS AREA WILL NOT HAVE ANY REINFORCEMENT. CONTRACTOR SHALL ADEQUATELY LABEL WHERE BARS START & STOP. AREA TO BE CUT AND REMOVED BY W.I.M. CONTRACTOR. SEE CONSTRUCTOIN DETAIL FOR REINFORCEMENT & W.I.M. LAYOUT.

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT DETAILS, GRADES & JOINTS	SHEET NO: 45	M

FILE NAME: PROJECTS/2940/PLANS/PAVDET/PAVDET3.DGN 11-27-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:

1. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
2. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD)
3. JOINTS FROM 4+680 "G" TO 4+760 "G" ARE PERPENDICULAR TO LEFT E.O.P.

ASPHALT CONCRETE PAVEMENT

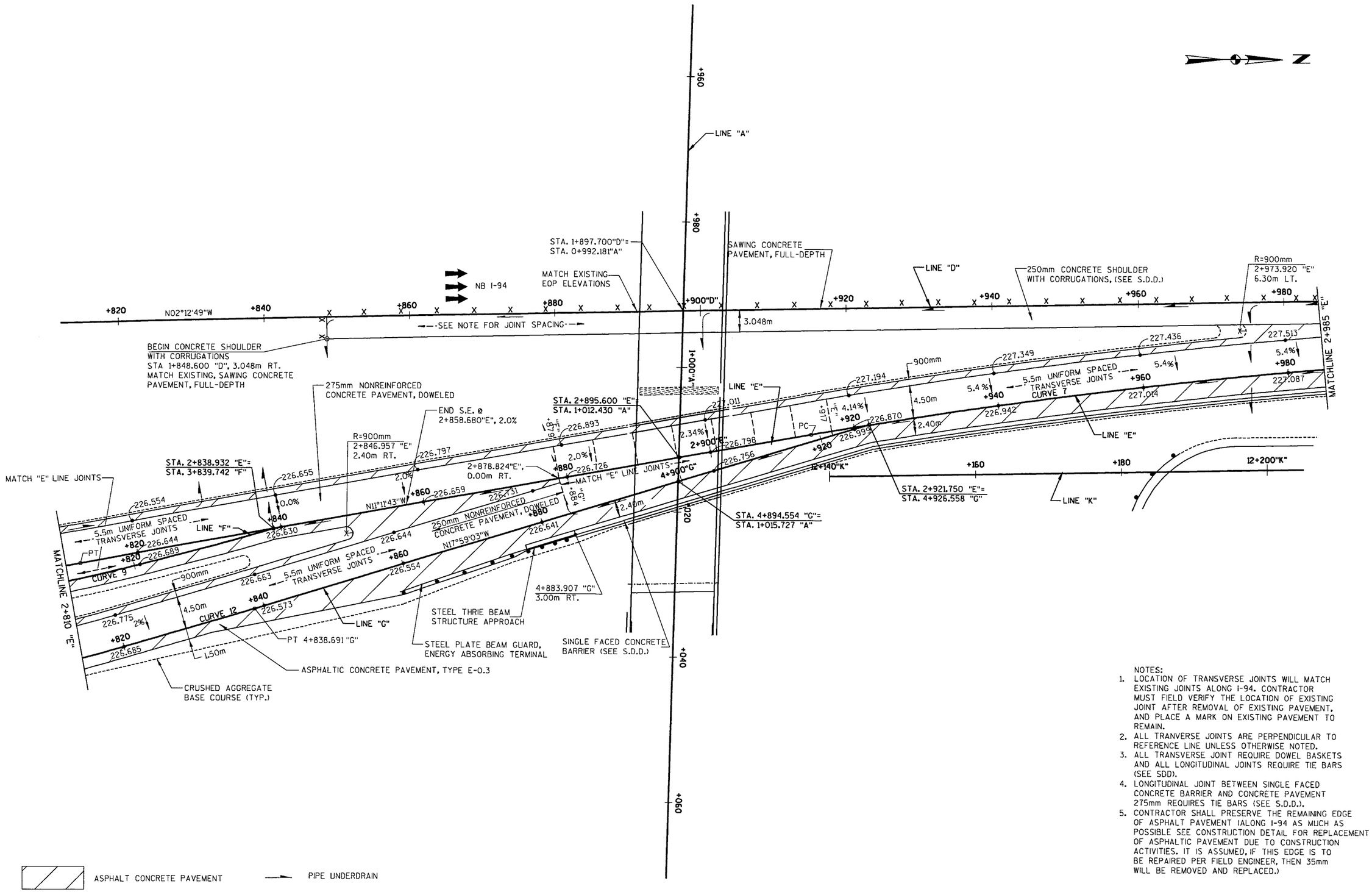
PIPE UNDERDRAIN

INLET TYPICAL

✳✳ DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT.

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT DETAILS, GRADES & JOINTS	SHEET NO: 46	M

FILE NAME: PROJECTS/2940/PLANS/PAVDET/PAVDET4.DGN 11-27-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:
1. LOCATION OF TRANSVERSE JOINTS WILL MATCH EXISTING JOINTS ALONG I-94. CONTRACTOR MUST FIELD VERIFY THE LOCATION OF EXISTING JOINT AFTER REMOVAL OF EXISTING PAVEMENT, AND PLACE A MARK ON EXISTING PAVEMENT TO REMAIN.
2. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
3. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD).
4. LONGITUDINAL JOINT BETWEEN SINGLE FACED CONCRETE BARRIER AND CONCRETE PAVEMENT 275mm REQUIRES TIE BARS (SEE S.D.D.).
5. CONTRACTOR SHALL PRESERVE THE REMAINING EDGE OF ASPHALT PAVEMENT (ALONG I-94 AS MUCH AS POSSIBLE SEE CONSTRUCTION DETAIL FOR REPLACEMENT OF ASPHALTIC PAVEMENT DUE TO CONSTRUCTION ACTIVITIES. IT IS ASSUMED, IF THIS EDGE IS TO BE REPAIRED PER FIELD ENGINEER, THEN 35mm WILL BE REMOVED AND REPLACED.)

CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	E:%	S.E. RUNOUT
7	2+976.821"E"	57919.934	768397.850	2+913.989"E"	57858.298	768410.049	3+039.396"E"	57982.719	768395.423	800.000m	8°58'54"R	125.407m	62.832m	-5.4	60m
9	3+794.709"F"	57741.341	768438.354	3+749.257"F"	57696.005	768441.619	3+839.742"F"	57784.669	768424.622	385.000m	13°27'58"L	90.486m	45.452m	4.7	N/A
12	4+799.589"G"	57745.093	768447.800	4+760.425"G"	57706.839	768456.196	4+838.691"G"	57782.344	768435.708	800.000m	05°36'20"L	78.267m	39.165m	2.0	N/A

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT GRADES & JOINTS	SHEET NO: 47 M

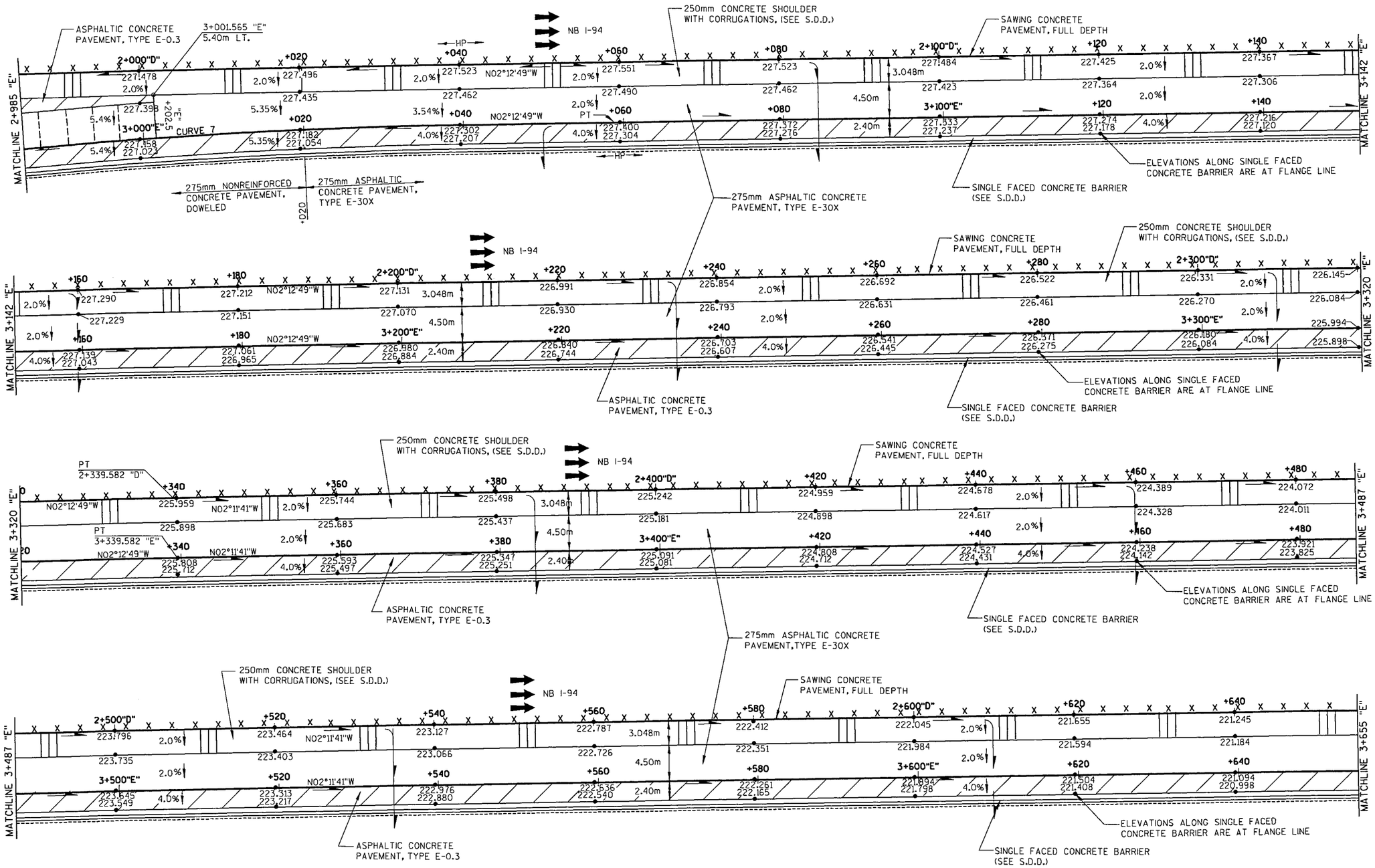
FILE NAME: PROJECTS/2940/PLANS/PAVDET/PAVDET15.DGN 12-14-01
LEVELS ON - 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

NOTES:

1. LOCATION OF TRANSVERSE JOINTS THROUGH CONCRETE AND BARRIER WALL WILL MATCH EXISTING JOINTS ALONG I-94. CONTRACTOR MUST FIELD VERIFY THE LOCATION OF EXISTING JOINT AFTER REMOVAL OF EXISTING PAVEMENT, AND PLACE A MARK ON EXISTING PAVEMENT TO REMAIN.
2. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
3. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD).
4. (SEE S.D.D.) FOR BACKFILL REQUIREMENTS AT BARRIER WALL.
5. CONTRACTOR SHALL PRESERVE THE REMAINING EDGE OF ASPHALT PAVEMENT (ALONG I-94 AS MUCH AS POSSIBLE SEE CONSTRUCTION DETAIL FOR REPLACEMENT OF ASPHALTIC PAVEMENT DUE TO CONSTRUCTION ACTIVITIES. IT IS ASSUMED, IF THIS EDGE IS TO BE REPAIRED PER FIELD ENGINEER, THEN 35mm WILL BE REMOVED AND REPLACED.)

ASPHALT CONCRETE PAVEMENT

PIPE UNDERDRAIN



CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	E:%	S.E. RUNOUT
7	2+976.821"E"	57919.934	768397.850	2+913.989"E"	57858.298	768410.049	3+039.396"E"	57982.719	768395.423	800.000m	8°58'54"R	125.407m	62.832m	-5.4	60m

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT GRADES & JOINTS	SHEET NO: 48	M

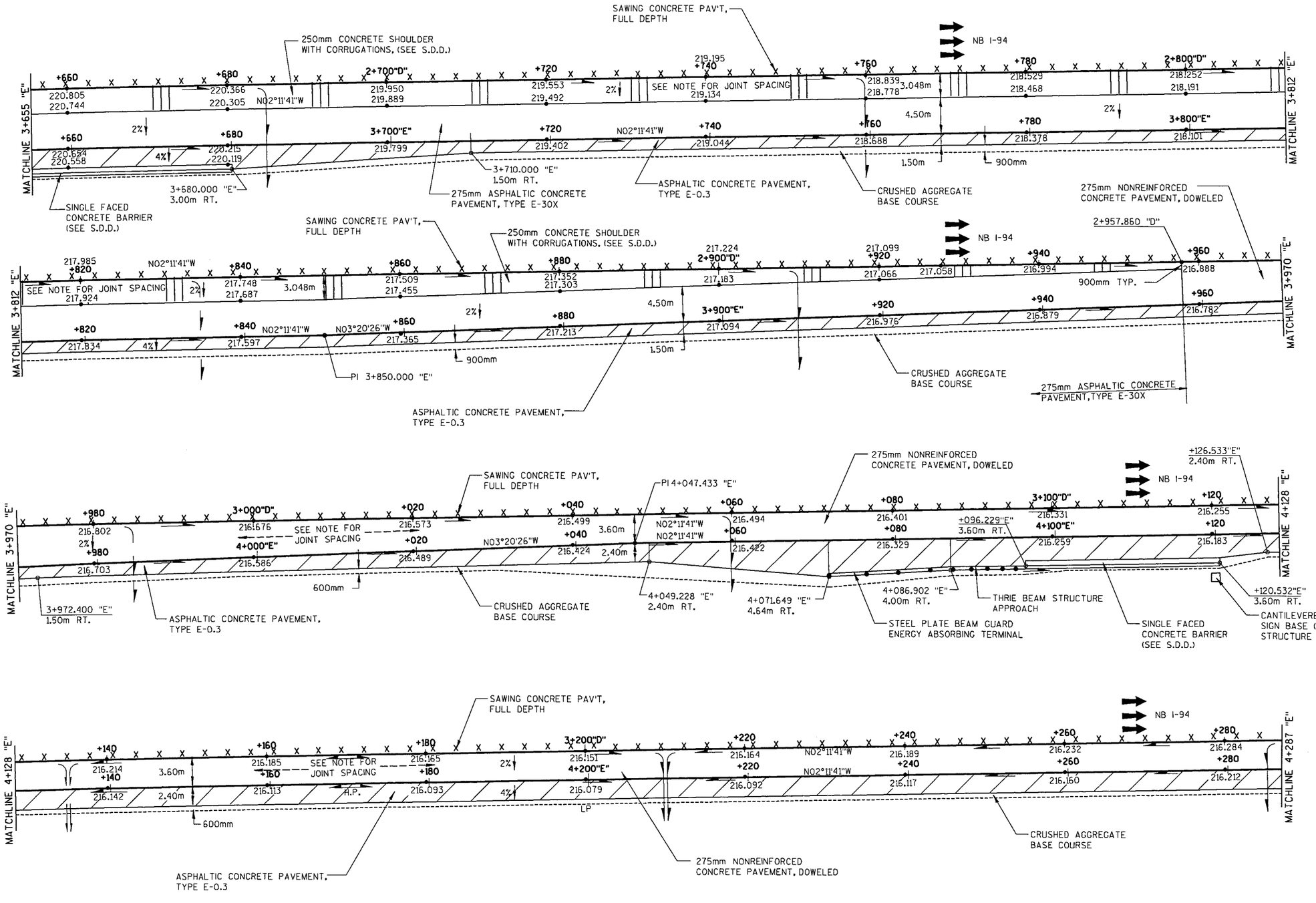
FILE NAME: PROJECTS/2940/PLANS/PAVDET/PAVDET6.DGN 12-14-01
LEVELS ON - 1,2,3,4, 6,7,8, 9,10,11,12,13, 14, 15, 16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

NOTES:

1. LOCATION OF TRANSVERSE JOINTS THROUGH CONCRETE PAVEMENT AND SINGLE FACED CONCRETE BARRIER WILL MATCH EXISTING JOINTS ALONG I-94. CONTRACTOR MUST FIELD VERIFY THE LOCATION OF EXISTING JOINT AFTER REMOVAL OF EXISTING PAVEMENT, AND PLACE A MARK ON EXISTING PAVEMENT TO REMAIN.
2. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
3. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD).
4. (SEE S.D.D.) FOR BACKFILL REQUIREMENTS AT BARRIER WALL.
5. CONTRACTOR SHALL PRESERVE THE REMAINING EDGE OF ASPHALT PAVEMENT (ALONG I-94 AS MUCH AS POSSIBLE SEE CONSTRUCTION DETAIL FOR REPLACEMENT OF ASPHALTIC PAVEMENT DUE TO CONSTRUCTION ACTIVITIES. IT IS ASSUMED, IF THIS EDGE IS TO BE REPAIRED PER FIELD ENGINEER, THEN 35mm WILL BE REMOVED AND REPLACED.)
6. TRANSVERSE JOINTS ARE SPACED AT 5.5m MAXIMUM.

ASPHALT CONCRETE PAVEMENT

PIPE UNDERDRAIN

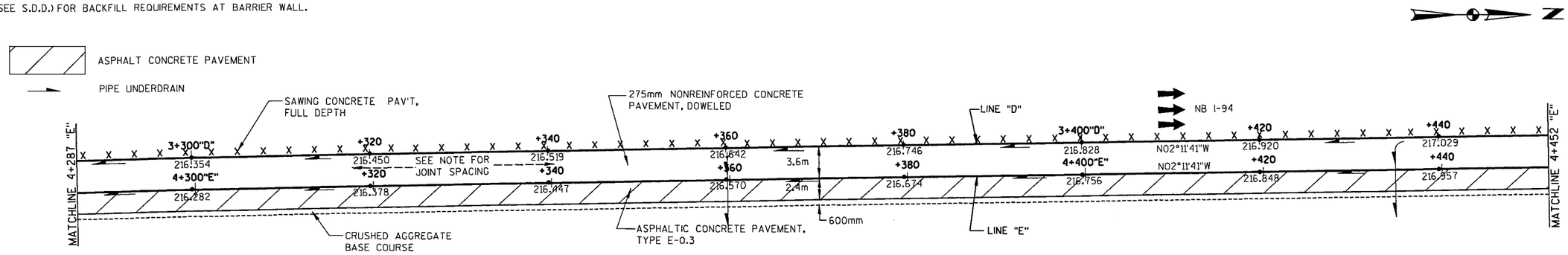


STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT GRADES & JOINTS	SHEET NO: 49	M

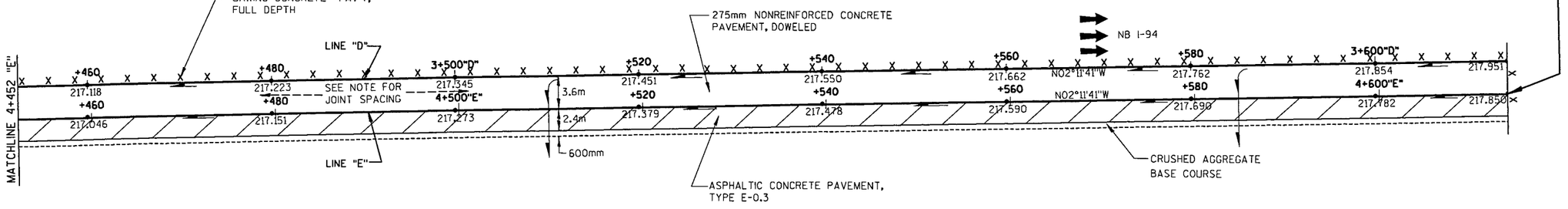
FILE NAME: PROJECTS/2940/PLANS/PAVEDET/PAVDET7.DGN 11-27-01
LEVELS ON • 1.2.3.4. 6.7.8. 9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63

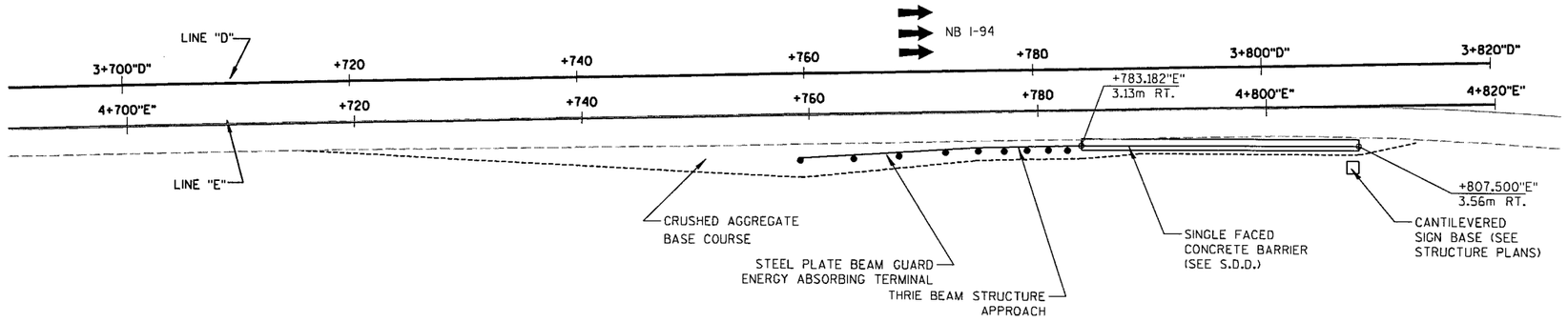
NOTES:

1. LOCATION OF TRANSVERSE JOINTS THROUGH CONCRETE AND BARRIER WALL WILL MATCH EXISTING JOINTS ALONG I-94. CONTRACTOR MUST FIELD VERIFY THE LOCATION OF EXISTING JOINT, AFTER REMOVAL OF EXISTING PAVEMENT, AND PLACE A MARK ON EXISTING PAVEMENT TO REMAIN.
2. ALL TRANVERSE JOINTS ARE PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.
3. ALL TRANSVERSE JOINT REQUIRE DOWEL BASKETS AND ALL LONGITUDINAL JOINTS REQUIRE TIE BARS (SEE SDD)
4. (SEE S.D.D.) FOR BACKFILL REQUIREMENTS AT BARRIER WALL.
5. CONTRACTOR SHALL PRESERVE THE REMAINING EDGE OF ASPHALT PAVEMENT (ALONG I-94 AS MUCH AS POSSIBLE SEE CONSTRUCTION DETAIL FOR REPLACEMENT OF ASPHALTIC PAVEMENT DUE TO CONSTRUCTION ACTIVITIES. IT IS ASSUMED, IF THIS EDGE IS TO BE REPAIRED PER FIELD ENGINEER, THEN 35mm WILL BE REMOVED AND REPLACED.)
6. TRANSVERSE JOINTS ARE SPACED AT 5.5m MAXIMUM.



END PROJECT I.D. 1032-08-70
STA. 4+614.000 "E"
STA. 3+614.000 "D", 3.6m RT.
MATCH EXISTING, SAWING CONC. PAVEMENT, FULL DEPTH



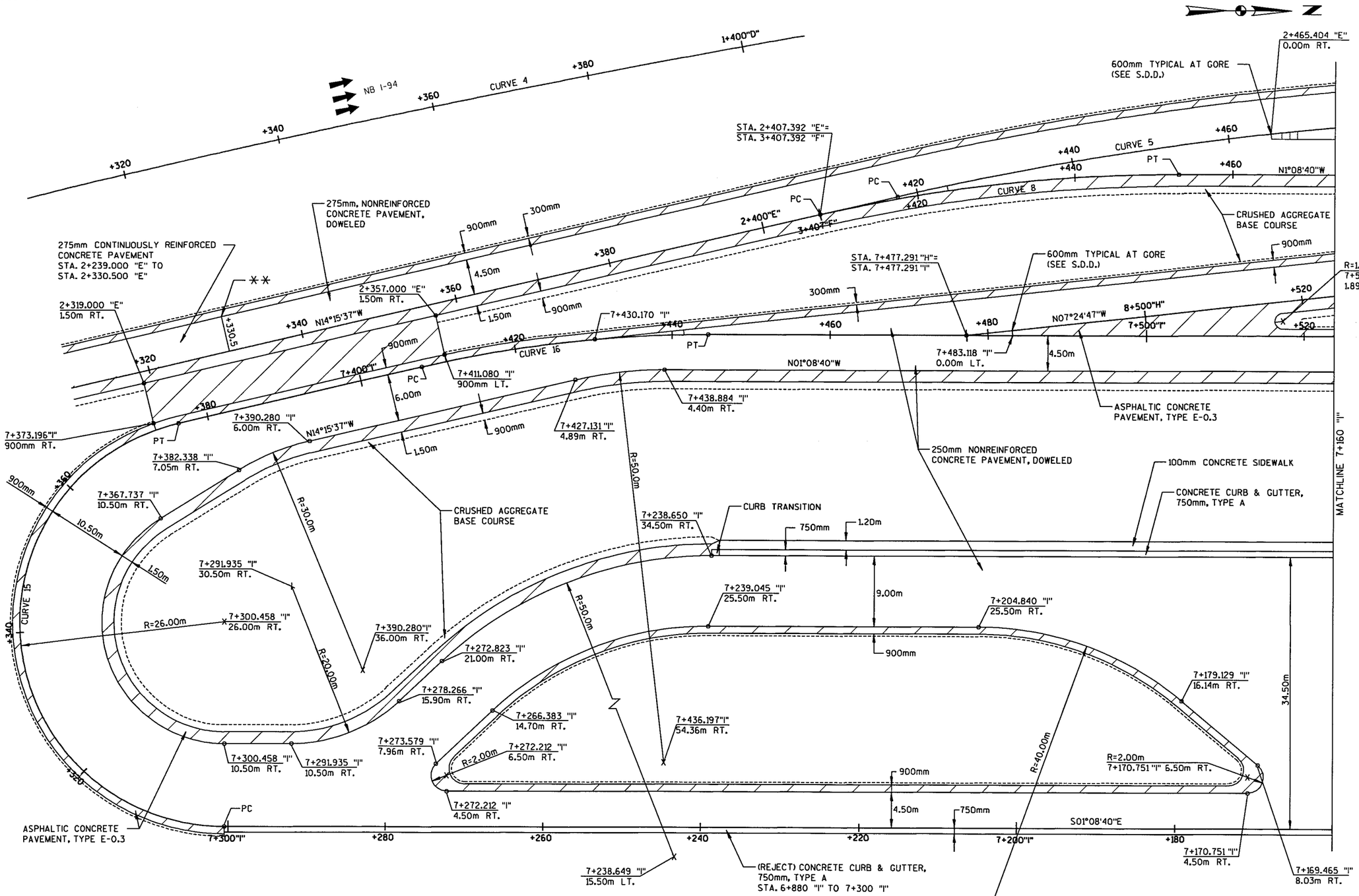


FILE NAME: PROJECTS/2940/PLANS/PAVEDET/PAVDET8.DGN 12-11-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13, 14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PAVEMENT GRADES & JOINTS	SHEET NO: 50	M

** DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT.

ASPHALT CONCRETE PAVEMENT



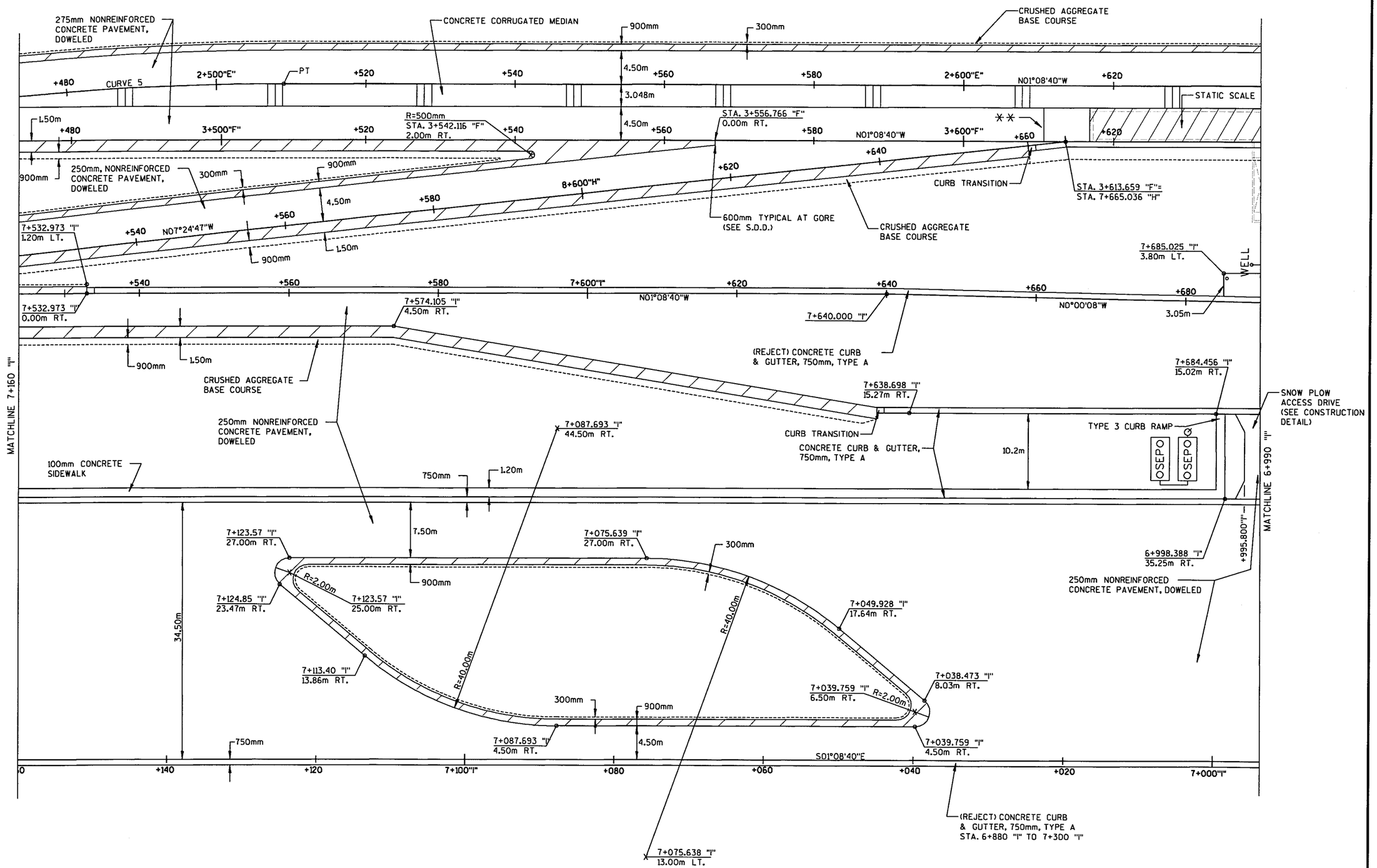
CURVE #	PISTA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	E:%	S.E. RUNOUT
4	1+429.778"D"	57369.097	768411.589	1+172.437"D"	57125.955	768495.886	1+683.378"D"	57626.246	768401.649	1731.444m	16°54'28"R	510.941m	257.341m	---	N/A
5	2+463.435"E"	57409.833	768442.948	2+417.451"E"	57365.266	768454.275	2+509.017"E"	57455.808	768442.030	400.000m	13°06'57"R	91.566m	45.984m	-4.7	40m
8	3+430.384"F"	57377.800	768451.090	3+407.392"F"	57355.517	768456.753	3+453.175"F"	57400.788	768450.631	200.000m	13°06'57"R	45.783m	22.992m	-4.7	N/A
15	7+526.625"I"	57055.494	768540.745	7+300.458"I"	57281.615	768536.228	7+376.188"I"	57274.692	768485.034	26.000m	166°53'03"R	75.730m	226.166m	-2.0	N/A
16	7+426.330"I"	57323.289	768472.683	7+407.936"I"	57305.462	768477.214	7+444.563"I"	57341.678	768472.316	160.000m	13°06'57"R	36.626m	18.394m	-2.0	N/A

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	RAMP & PARKING LOT DETAILS	SHEET NO: 51 M

FILE NAME: PROJECTS/2940/PLANS/GEODET/2940GE02.DGN 12-14-01
LEVELS ON - 1,2,3,4, 6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

** DOWELED EXPANSION JOINT SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS AND BE INCIDENTAL TO CONCRETE PAVEMENT.

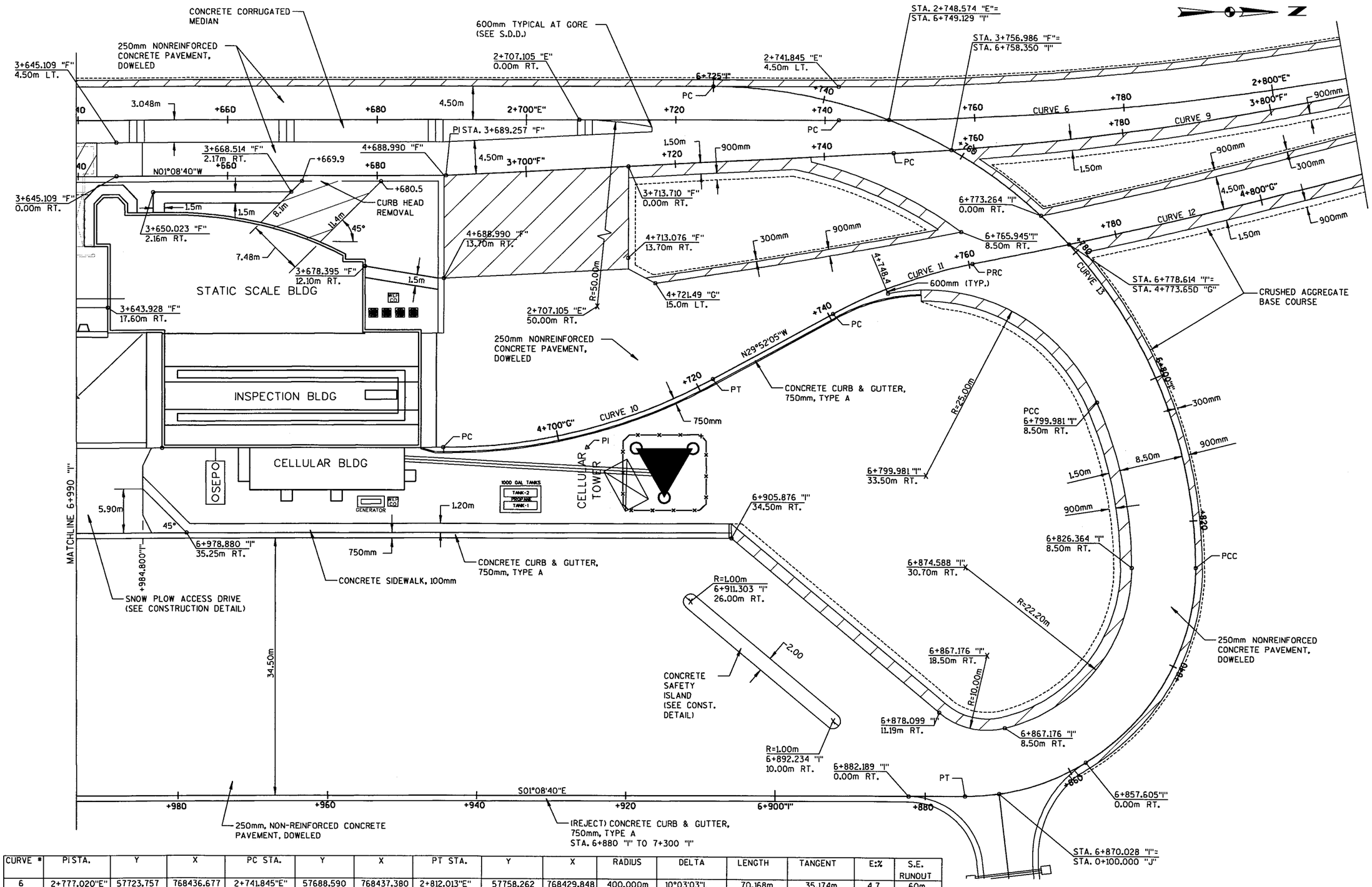
ASPHALT CONCRETE PAVEMENT



CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	E:%	S.E. RUNOUT
5	2+463.435"E"	57409.833	768442.948	2+417.451"E"	57365.266	768454.275	2+509.017"E"	57455.808	768442.030	400.000m	13°06'57"R	91.566m	45.984m	-4.7	40m

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	RAMP & PARKING LOT DETAILS	SHEET NO: 52	M

FILE NAME: PROJECTS/2940/PLANS/GEODET/2940GE03.DGN 12-14-01
LEVELS ON - 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

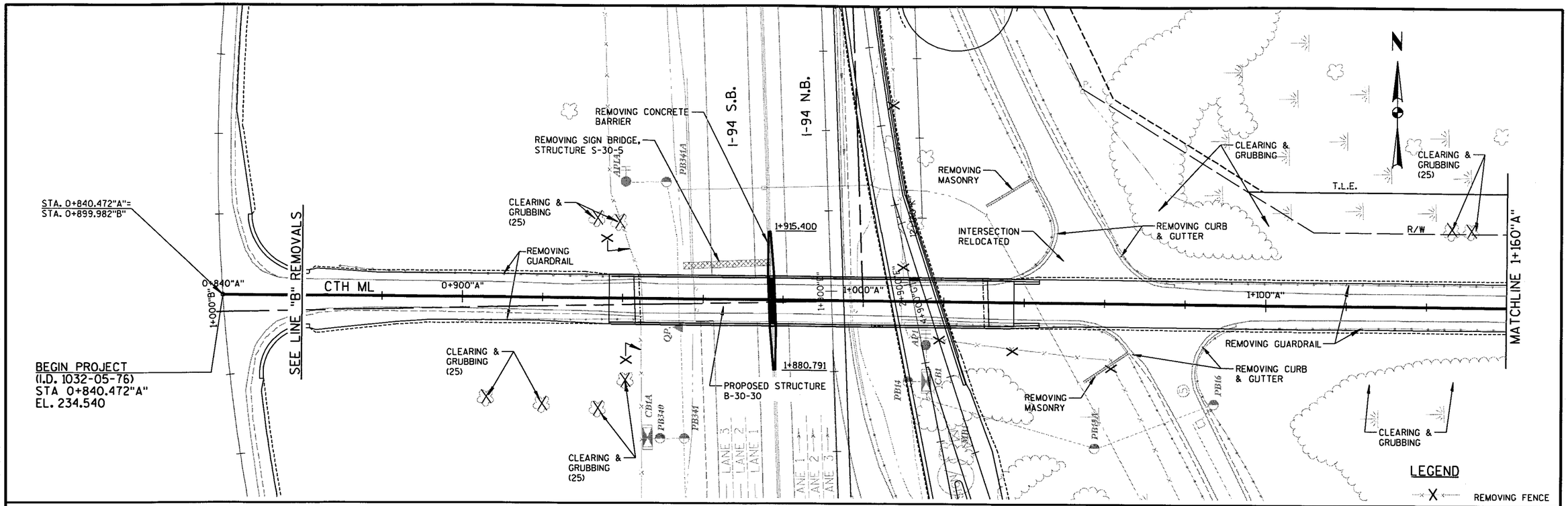


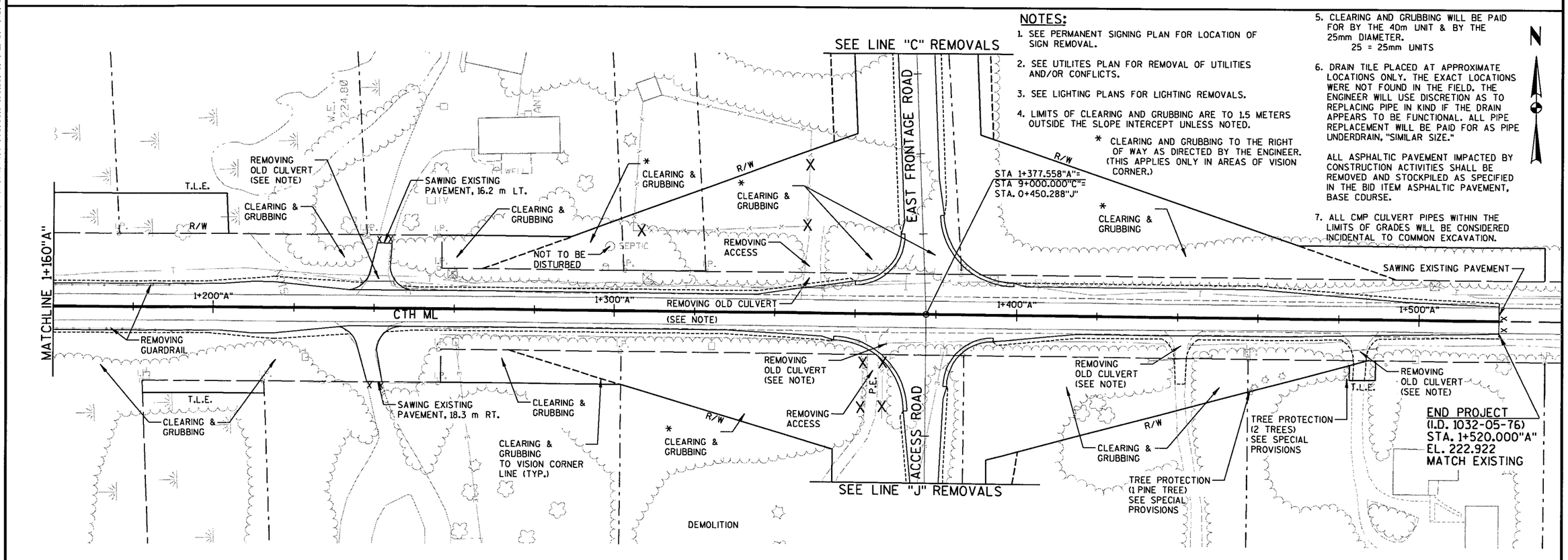
CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	E:%	S.E. RUNOUT
6	2+777.020"E"	57723.757	768436.677	2+741.845"E"	57688.590	768437.380	2+812.013"E"	57758.262	768429.848	400.000m	10°03'03"L	70.168m	35.174m	4.7	60m
9	3+794.709"F"	57741.341	768438.354	3+749.257"F"	57696.006	768441.619	3+839.742"F"	57784.669	768424.622	385.000m	13°27'58"L	90.486m	45.452m	4.7	N/A
10	4+703.792"G"	57655.798	768482.044	4+684.589"G"	57636.599	768482.427	4+722.188"G"	57672.451	768472.480	75.000m	28°43'25"L	37.599m	19.203m	*	N/A
11	4+750.584"G"	57697.075	768458.339	4+740.587"G"	57688.406	768463.317	4+760.425"G"	57706.839	768456.196	64.990m	17°29'21"R	19.838m	9.997m	*	N/A
12	4+799.589"G"	57745.093	768447.800	4+760.425"G"	57706.839	768456.196	4+838.691"G"	57782.344	768435.708	800.000m	05°36'20"L	78.267m	39.165m	2.0	N/A
13	6+789.548"I"	57736.193	768431.928	6+725.048"I"	57671.706	768433.216	6+826.364"I"	57737.482	768496.415	64.500m	90°00'00"R	101.316m	64.500m	-2.0	N/A

N.C.=NORMAL CROWN
R.C.=REVERSE CROWN

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	RAMP & PARKING LOT DETAILS	SHEET NO: 53	M

FILE NAME: PROJECTS/2940/PLANS/GEODET/2940GE04.DGN 12-14-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63





NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.

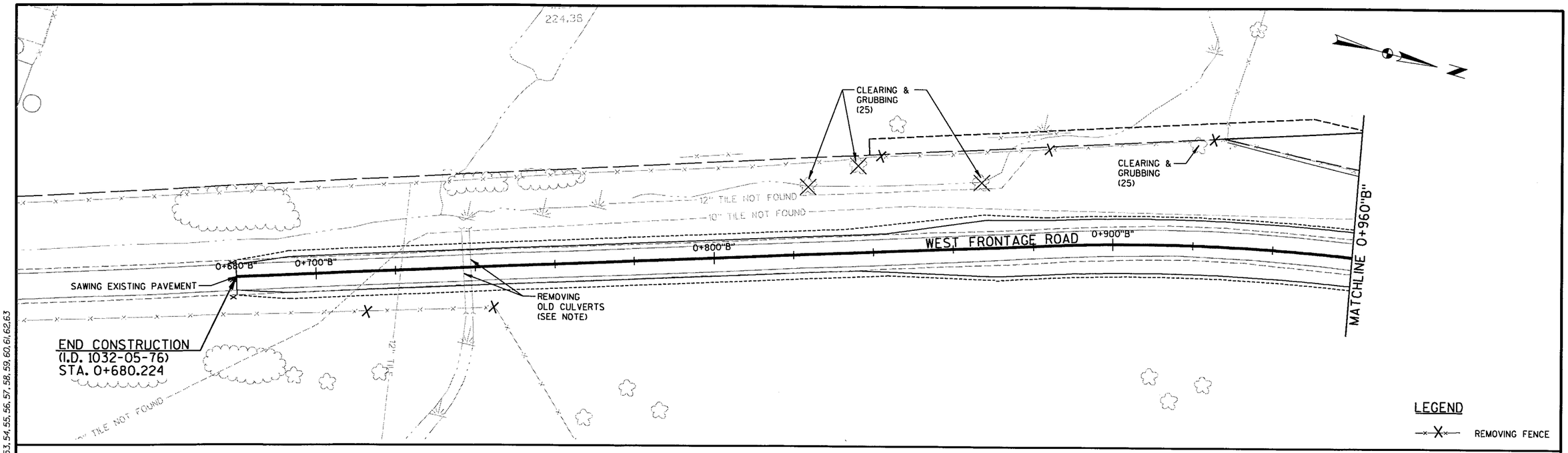
* CLEARING AND GRUBBING TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (THIS APPLIES ONLY IN AREAS OF VISION CORNER.)

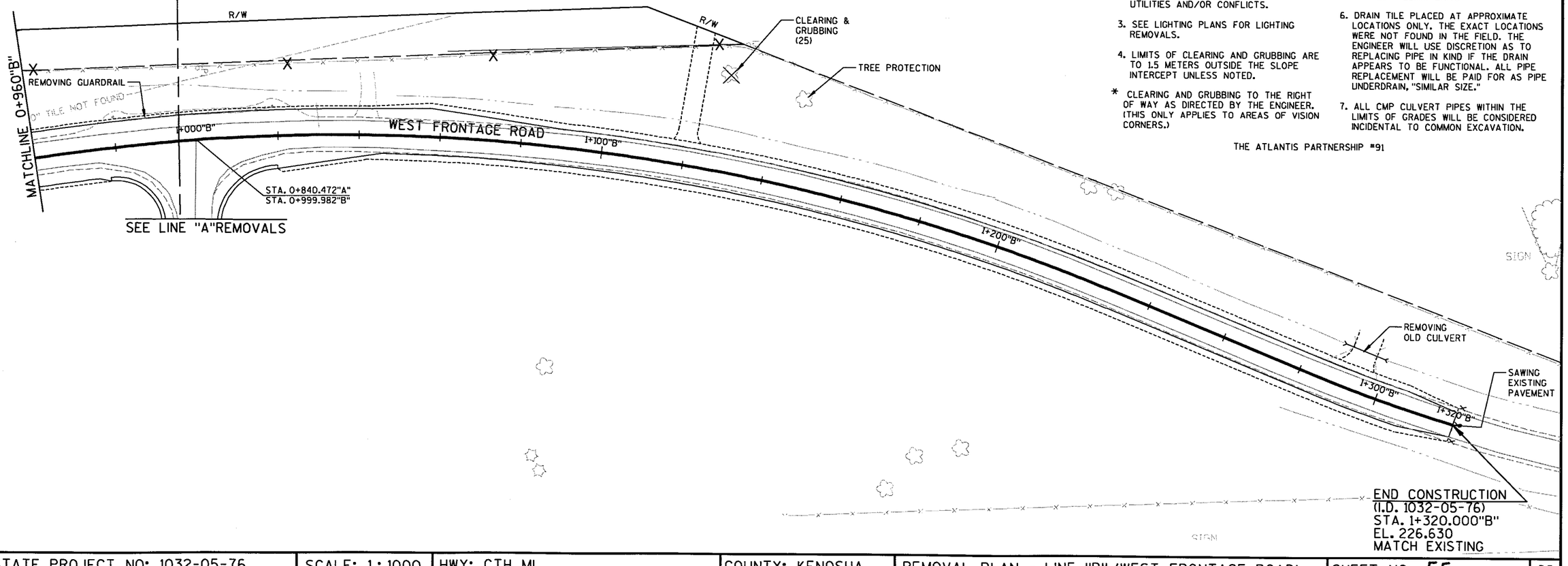
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS
6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."

   ALL ASPHALTIC PAVEMENT IMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE REMOVED AND STOCKPILED AS SPECIFIED IN THE BID ITEM ASPHALTIC PAVEMENT, BASE COURSE.
7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	REMOVAL PLAN - LINE "A" (CTH ML)	SHEET NO: 54	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM01.DGN 12-11-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63





NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.

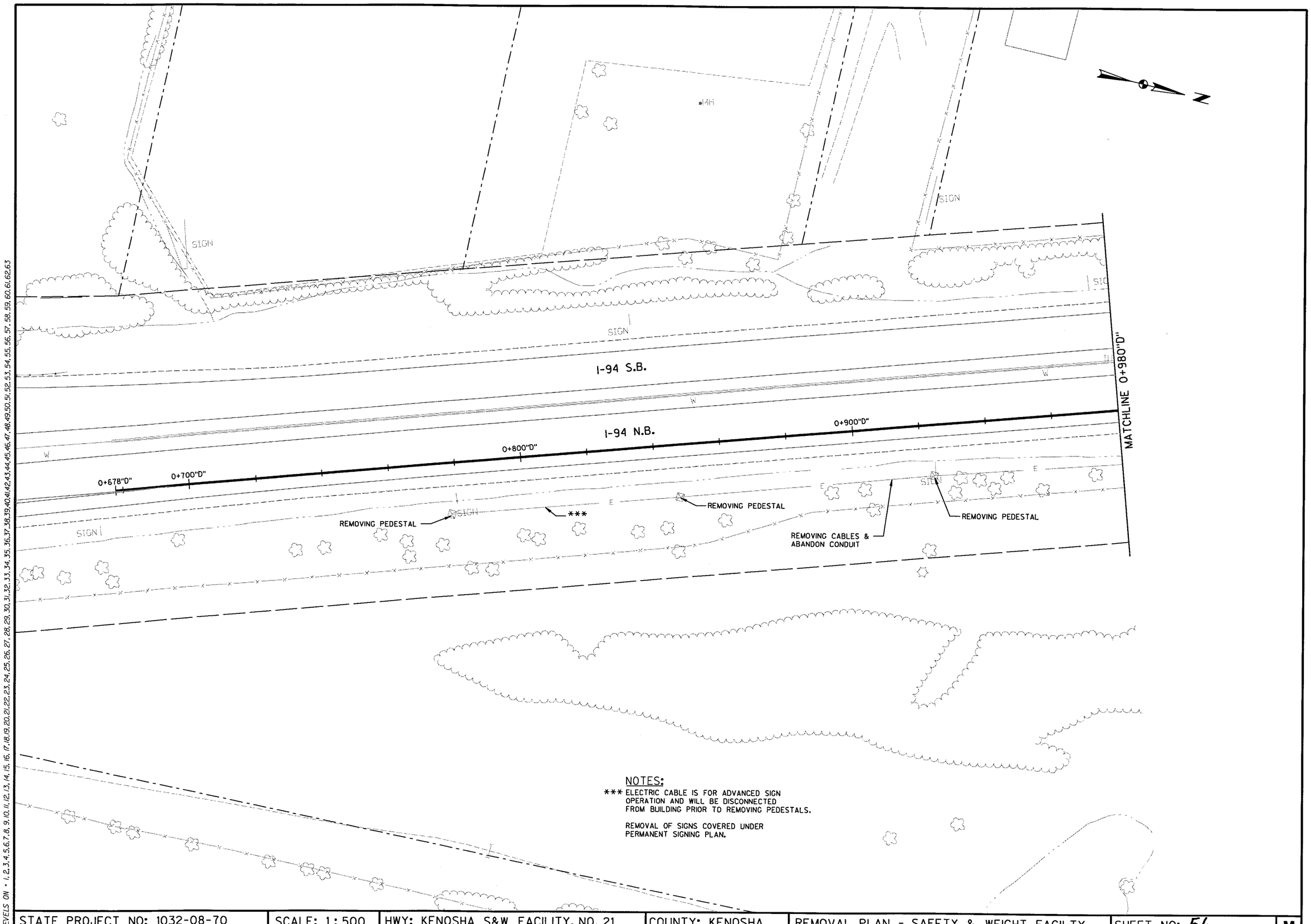
* CLEARING AND GRUBBING TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (THIS ONLY APPLIES TO AREAS OF VISION CORNERS.)

5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS
6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."
7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

THE ATLANTIS PARTNERSHIP #91

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	REMOVAL PLAN - LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 55	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM02.DGN 12-12-01
LEVELS ON * 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:

*** ELECTRIC CABLE IS FOR ADVANCED SIGN OPERATION AND WILL BE DISCONNECTED FROM BUILDING PRIOR TO REMOVING PEDESTALS.

REMOVAL OF SIGNS COVERED UNDER PERMANENT SIGNING PLAN.

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	REMOVAL PLAN - SAFETY & WEIGHT FACILTY	SHEET NO: 56 M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REMO3A.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS

* CLEARING AND GRUBBING TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (THIS APPLIES ONLY IN AREAS OF VISION CORNERS.)

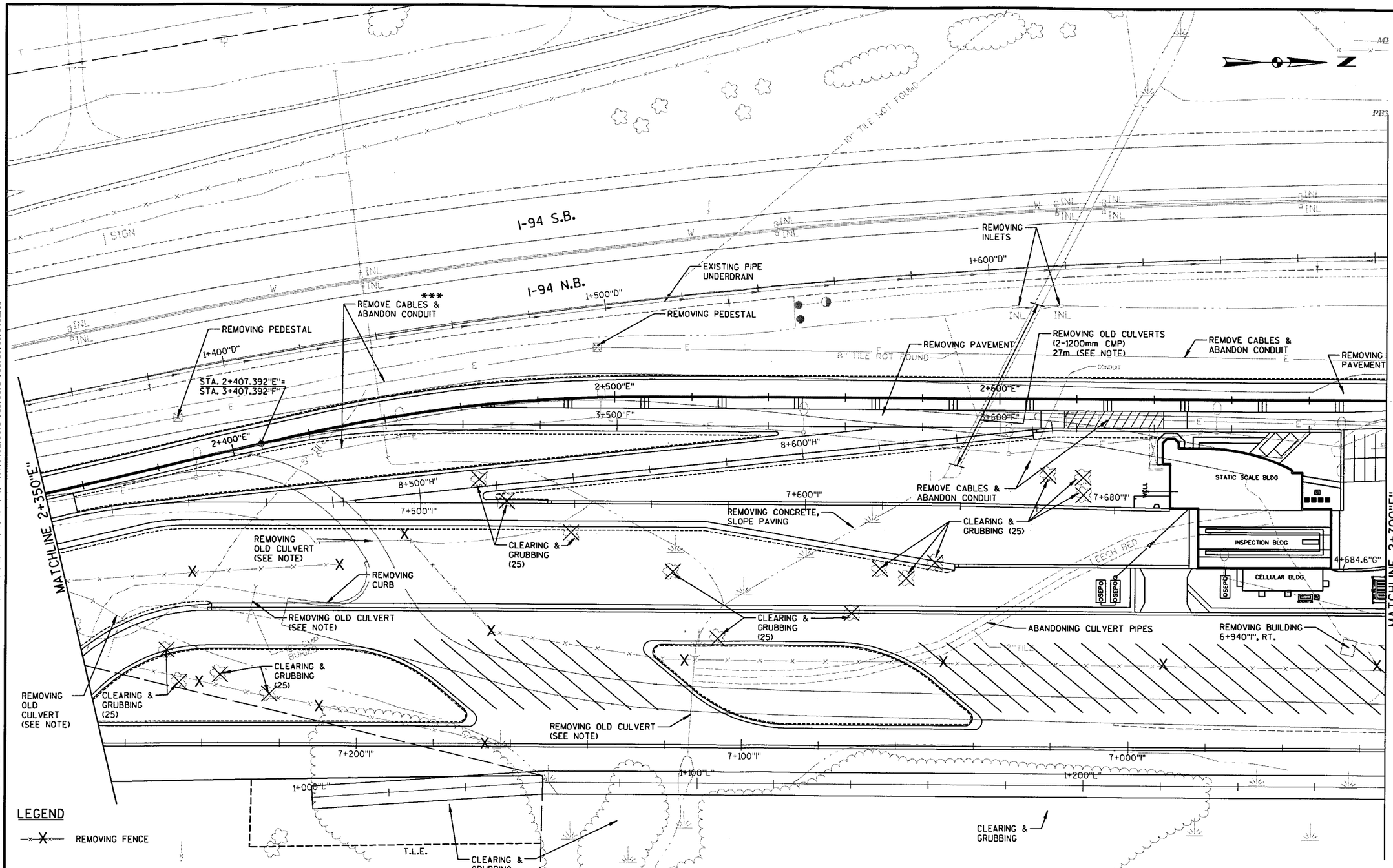
6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."

** SAWING CONCRETE PAV'T, FULL DEPTH SHALL INCLUDE ASPHALT CONCRETE LAYER. CONTRACTOR SHALL EXERCISE EXTREME CARE SO AS TO NOT DAMAGE MAINLINE PAV'T. STRUCTURE. ANY DAMAGE WILL BE REPAIRED AT CONTRACTORS EXPENSE.

7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	REMOVAL PLAN - LINE "E"	SHEET NO: 57	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM03.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



LEGEND

REMOVING FENCE

NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.

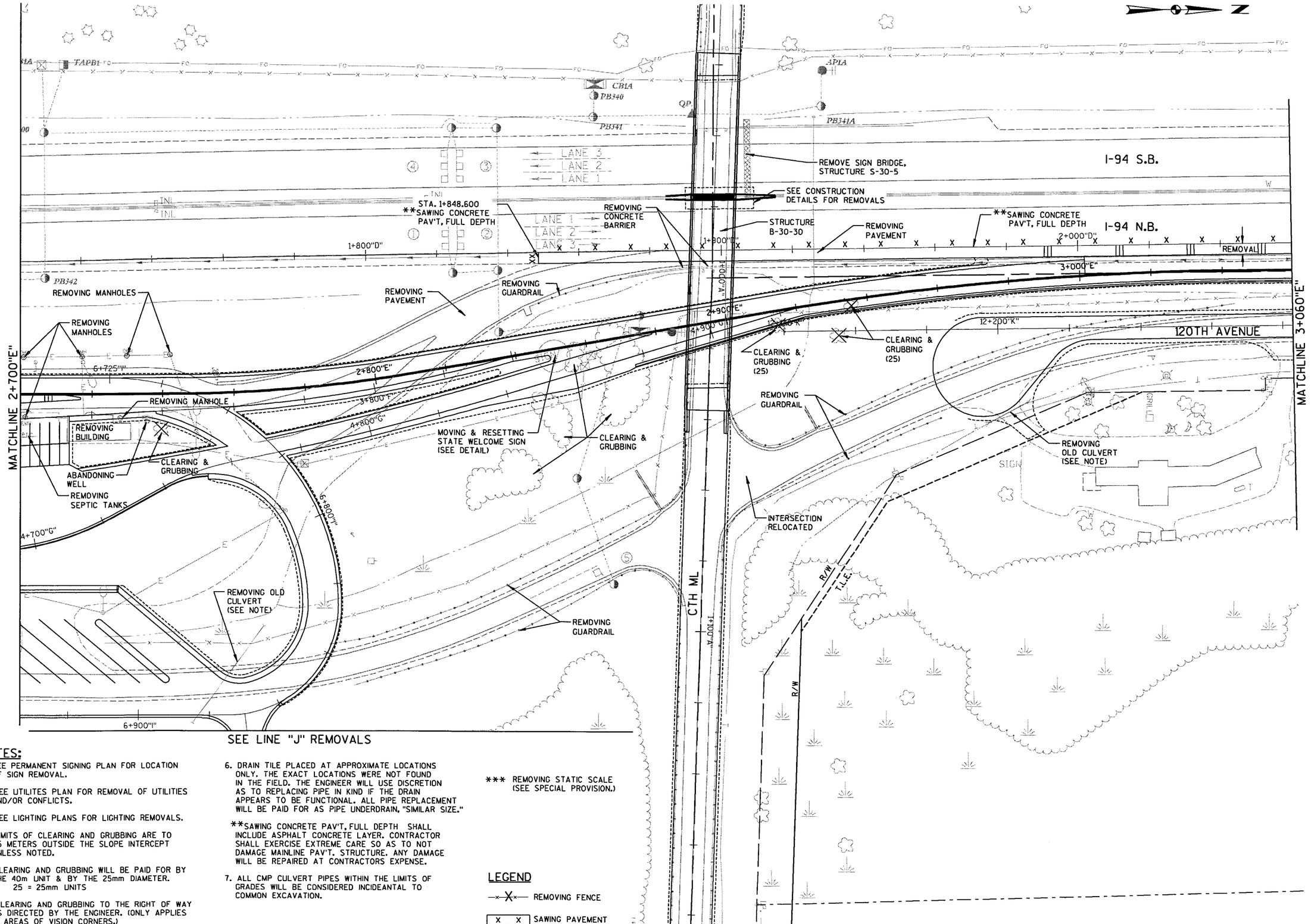
* CLEARING AND GRUBBING TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (THIS APPLIES ONLY IN AREAS OF VISION CORNERS.)

5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS
6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."
7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

*** ELECTRIC CABLE IS FOR ADVANCED SIGN OPERATION AND WILL BE DISCONNECTED FROM BUILDING PRIOR TO REMOVING PEDESTALS.

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	REMOVAL PLAN - SAFETY & WEIGHT FACILITY	SHEET NO: 58	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM04.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 15 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER. 25 = 25mm UNITS

* CLEARING AND GRUBBING TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (ONLY APPLIES IN AREAS OF VISION CORNERS.)

6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."

**SAWING CONCRETE PAV'T, FULL DEPTH SHALL INCLUDE ASPHALT CONCRETE LAYER. CONTRACTOR SHALL EXERCISE EXTREME CARE SO AS TO NOT DAMAGE MAINLINE PAV'T. STRUCTURE. ANY DAMAGE WILL BE REPAIRED AT CONTRACTORS EXPENSE.

7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDEANTAL TO COMMON EXCAVATION.

*** REMOVING STATIC SCALE (SEE SPECIAL PROVISION.)

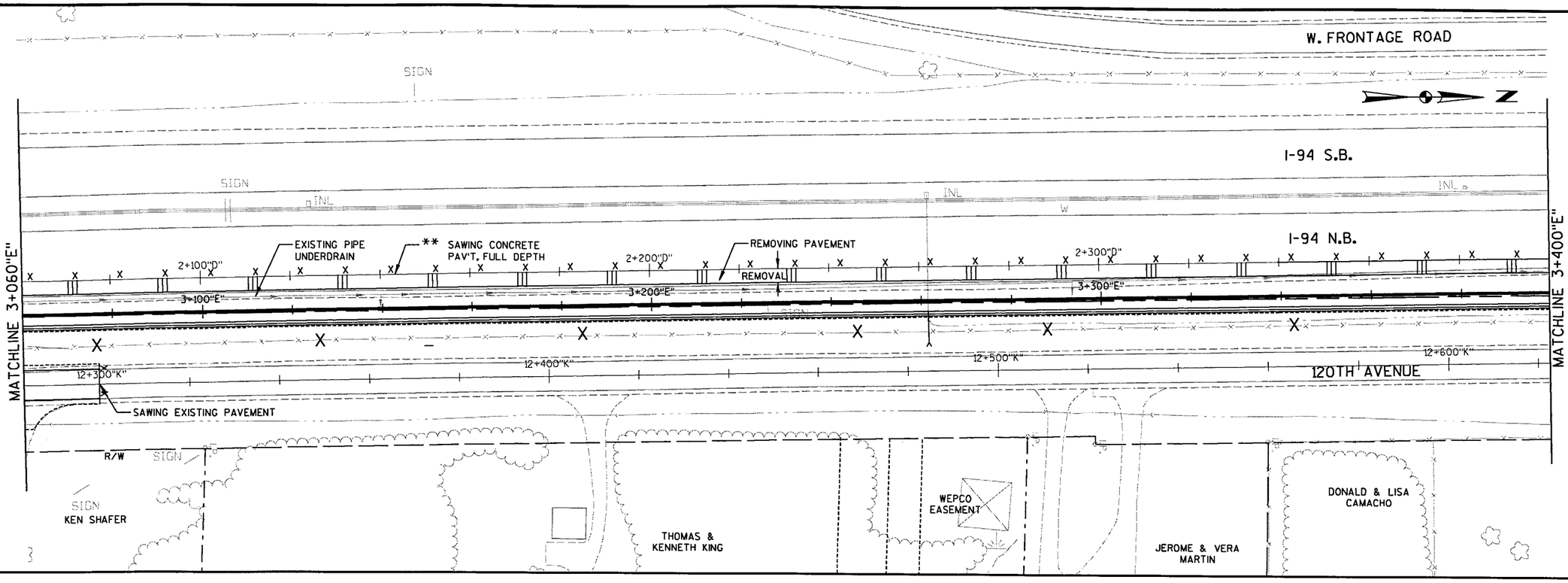
LEGEND

-x-X-x- REMOVING FENCE

X X SAWING PAVEMENT

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	REMOVAL PLAN - SAFETY & WEIGHT FACILITY	SHEET NO: 59	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM05.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMTER.
   25 = 25mm UNITS

* CLEARING AND GRUBBING UNITS TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (ONLY APPLIES IN AREAS OF VISION CORNERS.)

6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."

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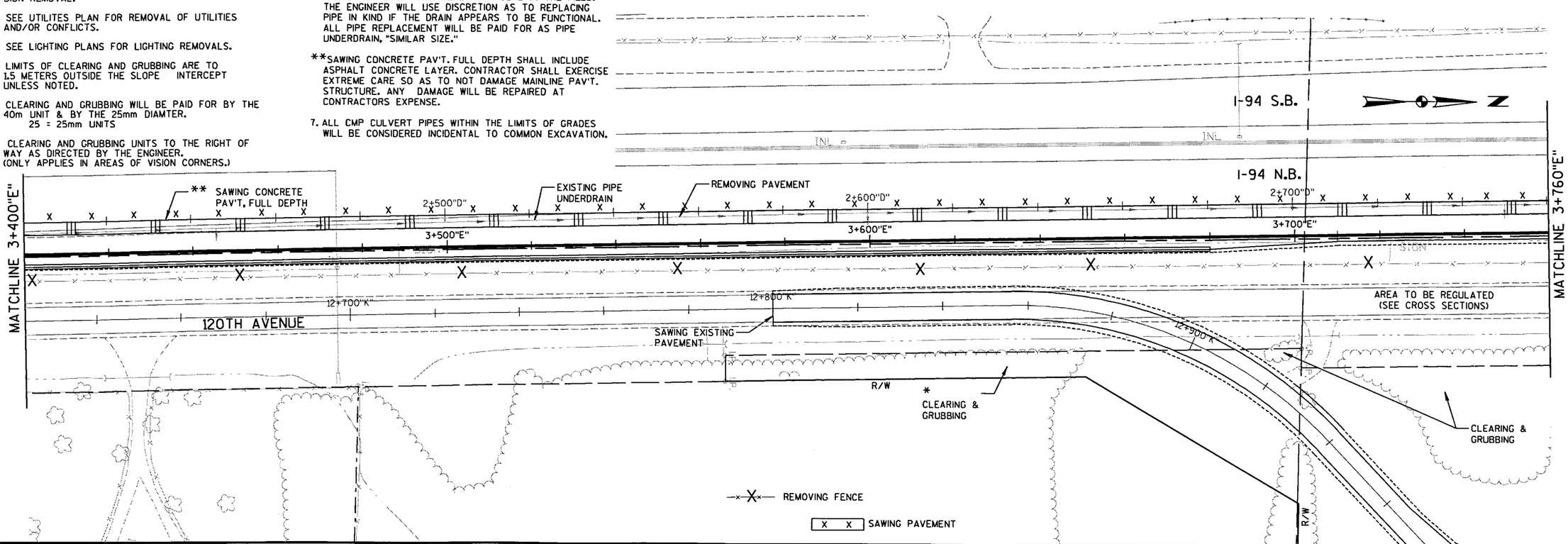
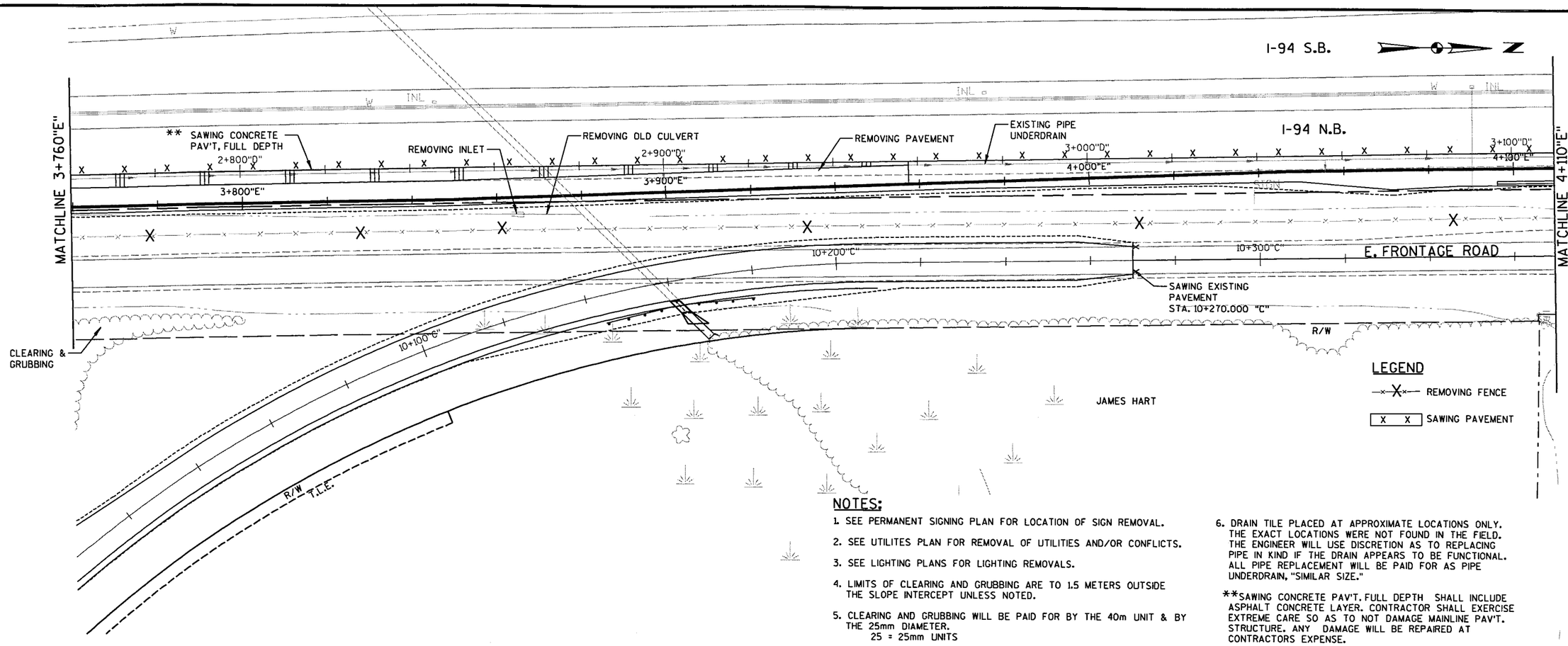
7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.



STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	REMOVAL PLAN - LINE "E"	SHEET NO: 60	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM06.DGN 12-12-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:

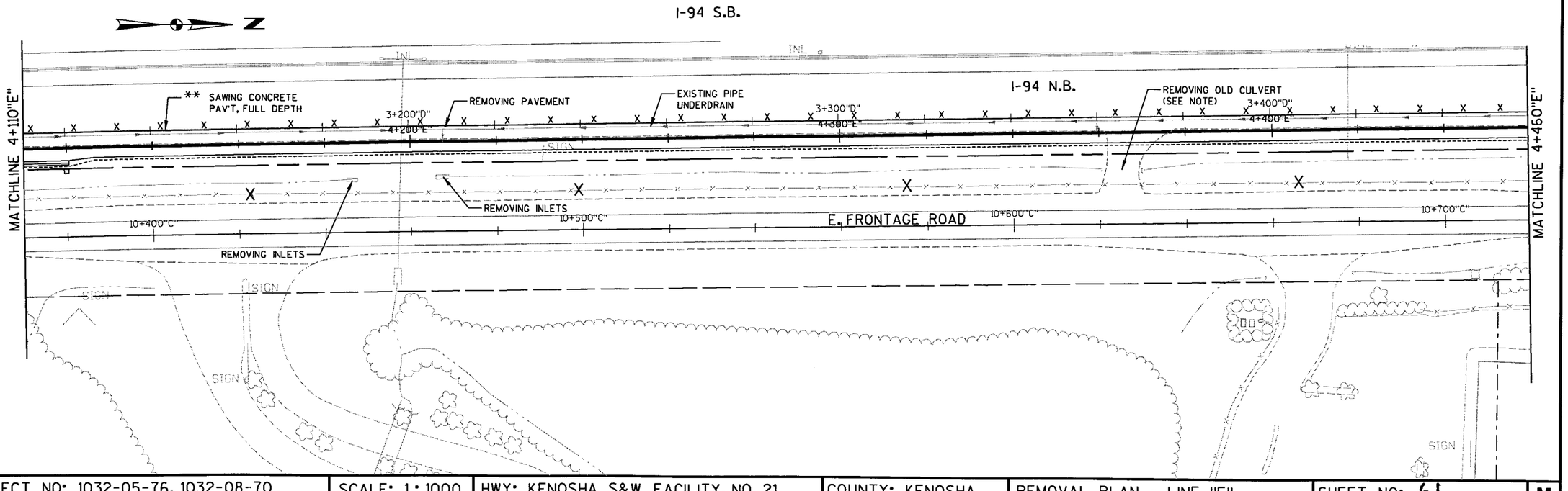
1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS

*CLEARING AND GRUBBING UNITS TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (ONLY APPLIES IN AREAS OF VISION CORNERS.)

6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."

**SAWING CONCRETE PAV'T. FULL DEPTH SHALL INCLUDE ASPHALT CONCRETE LAYER. CONTRACTOR SHALL EXERCISE EXTREME CARE SO AS TO NOT DAMAGE MAINLINE PAV'T. STRUCTURE. ANY DAMAGE WILL BE REPAIRED AT CONTRACTORS EXPENSE.

7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES ARE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.



STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	REMOVAL PLAN - LINE "E"	SHEET NO: 61	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM07.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

I-94 S.B.

I-94 N.B.

MATCHLINE 4+460"E"

** SAWING CONCRETE PAV'T, FULL DEPTH

REMOVING PAVEMENT

3+500"D" 4+500"E"

EXISTING PIPE UNDERDRAIN

3+600"D" 4+600"E"

END PROJECT
I.D. 1032-08-70
STA. 4+614.000"E"

3+700"D" 4+700"E"

SAWING CONCRETE PAVEMENT, FULL DEPTH

10+700"C"

10+800"C"

10+897"C"

END FENCE REMOVAL
STA. 4+654.5 "E"

E. FRONTAGE ROAD

INL

SIGN

NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS

*CLEARING AND GRUBBING UNITS TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (ONLY APPLIES IN AREAS OF VISION CORNERS.)

6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."

**SAWING CONCRETE PAV'T. FULL DEPTH SHALL INCLUDE ASPHALT CONCRETE LAYER. CONTRACTOR SHALL EXERCISE EXTREME CARE SO AS TO NOT DAMAGE MAINLINE PAV'T. STRUCTURE. ANY DAMAGE WILL BE REPAIRED AT CONTRACTORS EXPENSE.

7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES ARE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

LEGEND

REMOVING FENCE

X X SAWING PAVEMENT

N

SEE LINE "A" REMOVALS

VINCENT & MARY BUGNER

R/W

CLEARING & GRUBBING (25)

CLEARING & GRUBBING

HERMAN F. & W.F. DARTH

T.L.E.

RICHARD L. & LENNIEA T. NELSON

REMOVING BUILDING 0+370"J", LT.

CLEARING & GRUBBING (25)

TREE PROTECTION

REMOVING SEPTIC TANK

LIGHT TO REMAIN

REMOVING FENCE

ACCESS ROAD

0+200"J"

0+300"J"

0+400"J"

SEE LINE "E" REMOVALS

STA. 6+763.404"I"=
STA. 0+100.000"J"

0+360"J"

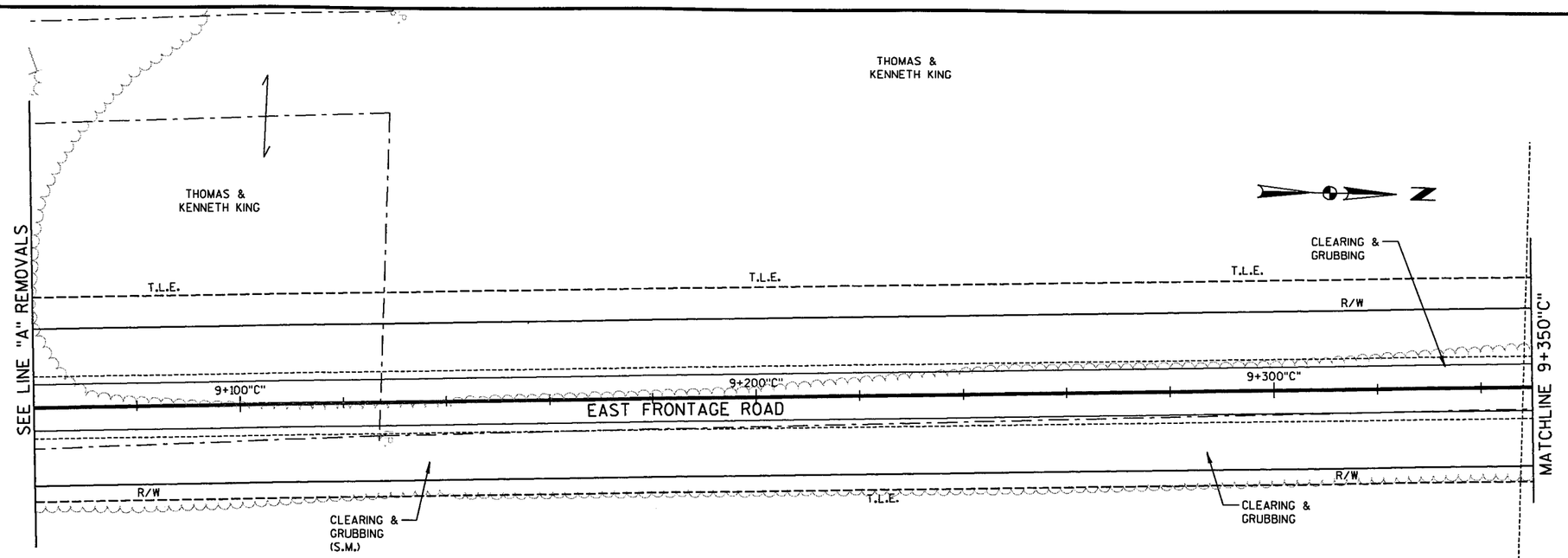
CLEARING & GRUBBING (25)

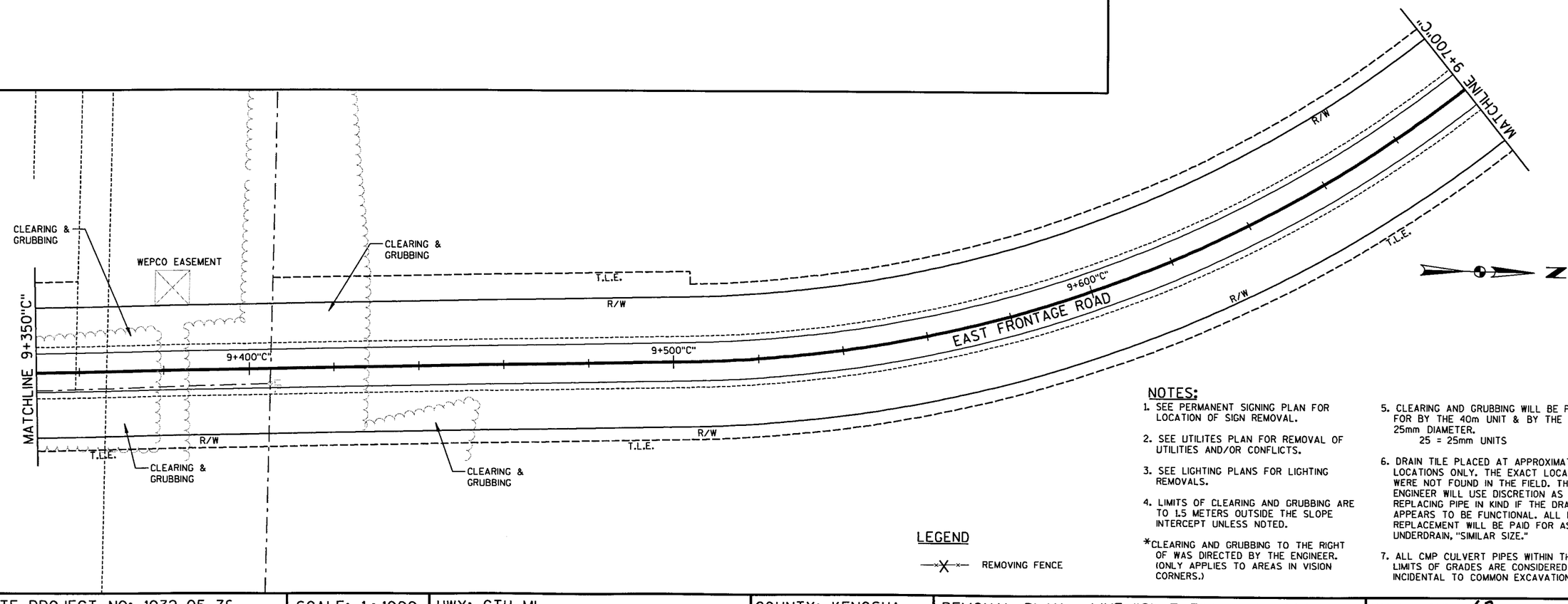
CLEARING & GRUBBING

VINCENT & MARY BUGNER

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	REMOVAL PLAN - LINE "E" TOP, LINE "J" BOTTOM	SHEET NO: 62	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM08.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63





LEGEND

—×—×— REMOVING FENCE

NOTES:

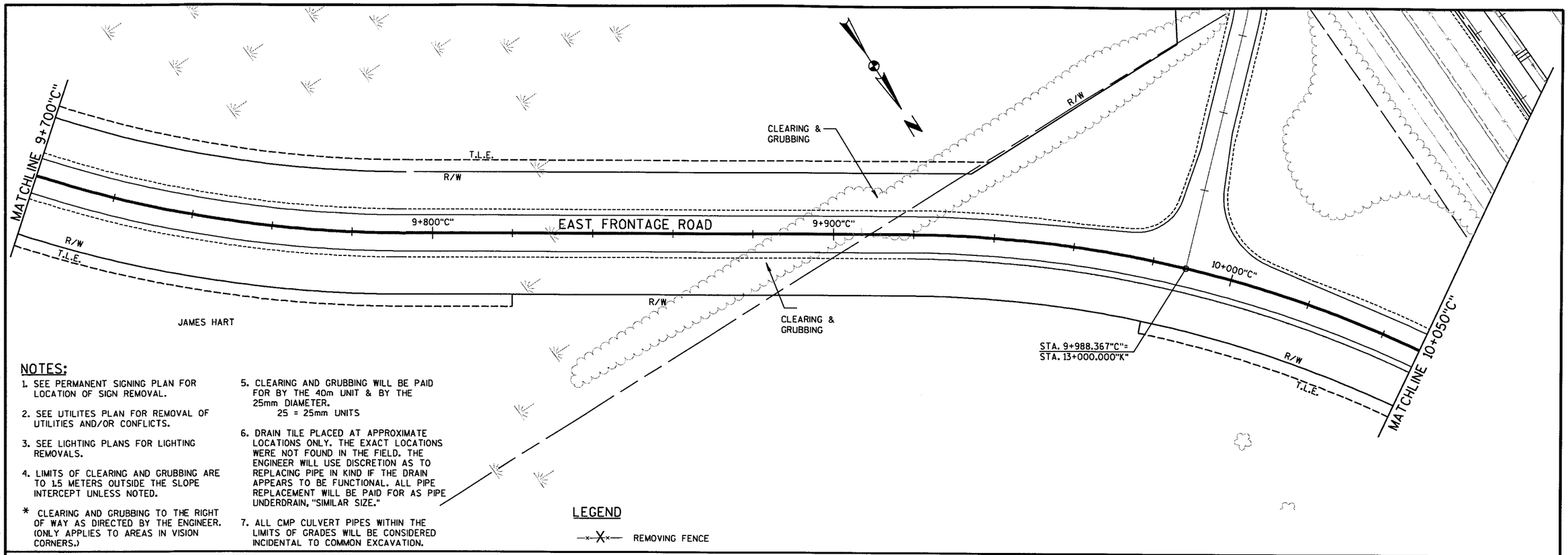
1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.

*CLEARING AND GRUBBING TO THE RIGHT OF WAS DIRECTED BY THE ENGINEER. (ONLY APPLIES TO AREAS IN VISION CORNERS.)

5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
   25 = 25mm UNITS
6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."
7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES ARE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	REMOVAL PLAN - LINE "C" (E. FRONTAGE RD.)	SHEET NO: 63	M

FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM09.DGN 12-12-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

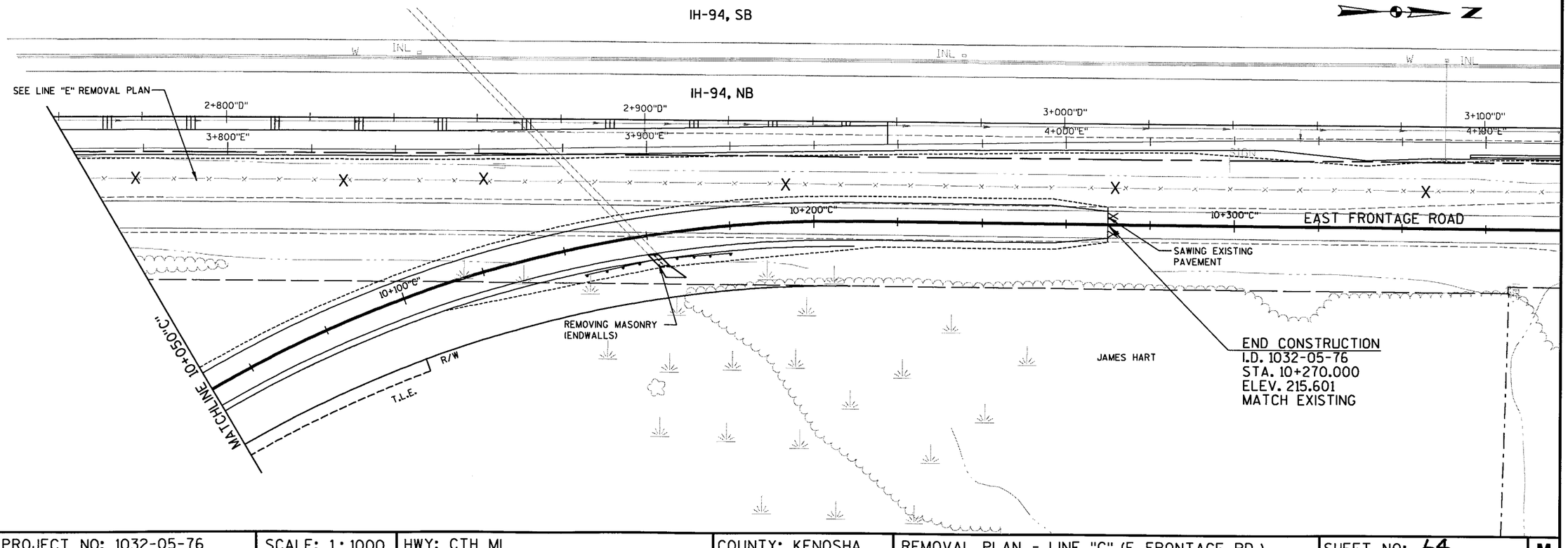


NOTES:

1. SEE PERMANENT SIGNING PLAN FOR LOCATION OF SIGN REMOVAL.
2. SEE UTILITES PLAN FOR REMOVAL OF UTILITIES AND/OR CONFLICTS.
3. SEE LIGHTING PLANS FOR LIGHTING REMOVALS.
4. LIMITS OF CLEARING AND GRUBBING ARE TO 1.5 METERS OUTSIDE THE SLOPE INTERCEPT UNLESS NOTED.
* CLEARING AND GRUBBING TO THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. (ONLY APPLIES TO AREAS IN VISION CORNERS.)
5. CLEARING AND GRUBBING WILL BE PAID FOR BY THE 40m UNIT & BY THE 25mm DIAMETER.
25 = 25mm UNITS
6. DRAIN TILE PLACED AT APPROXIMATE LOCATIONS ONLY. THE EXACT LOCATIONS WERE NOT FOUND IN THE FIELD. THE ENGINEER WILL USE DISCRETION AS TO REPLACING PIPE IN KIND IF THE DRAIN APPEARS TO BE FUNCTIONAL. ALL PIPE REPLACEMENT WILL BE PAID FOR AS PIPE UNDERDRAIN, "SIMILAR SIZE."
7. ALL CMP CULVERT PIPES WITHIN THE LIMITS OF GRADES WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

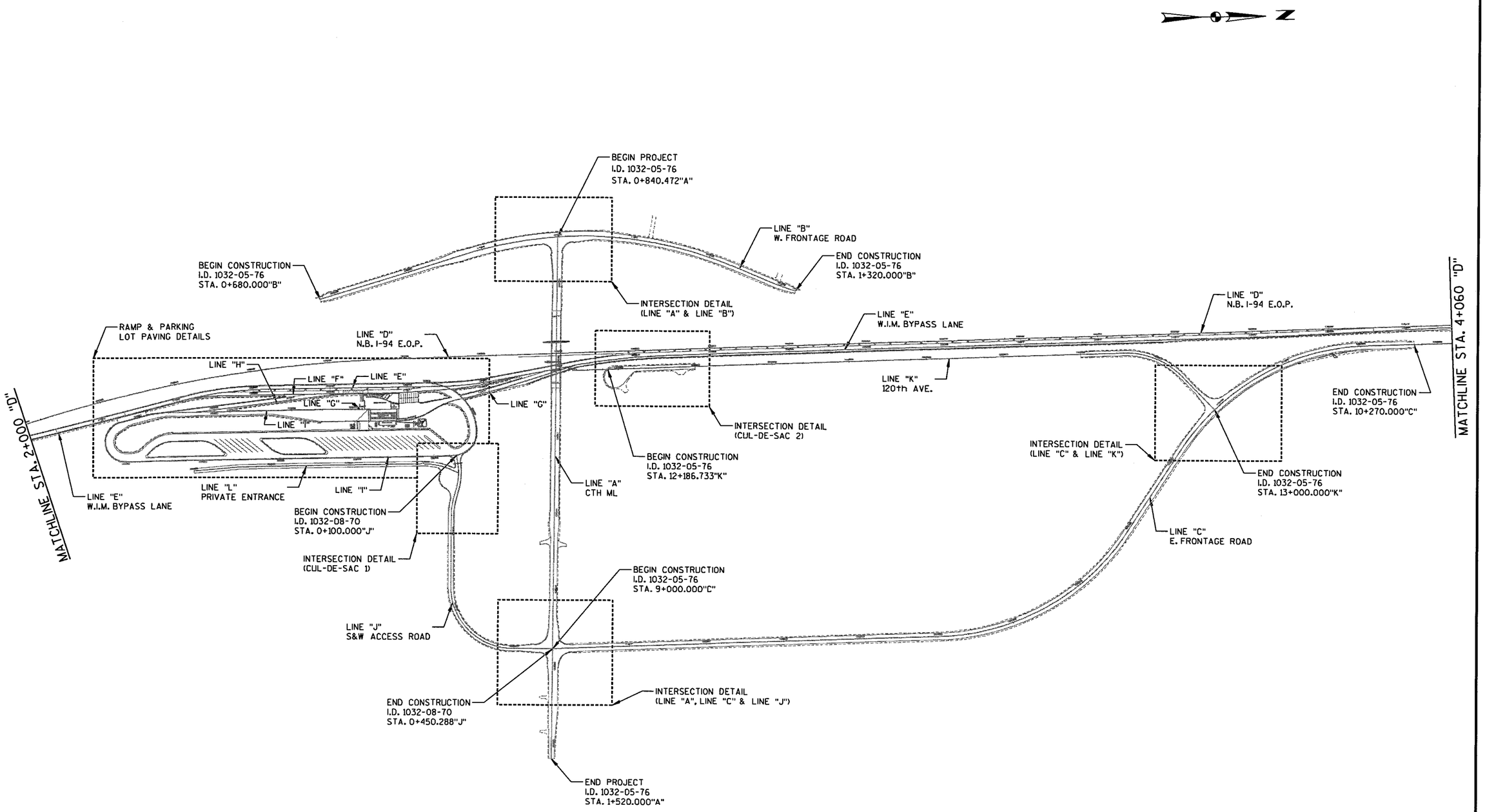
LEGEND

—×—X—×— REMOVING FENCE



STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	REMOVAL PLAN - LINE "C" (E. FRONTAGE RD.)	SHEET NO: 64	M

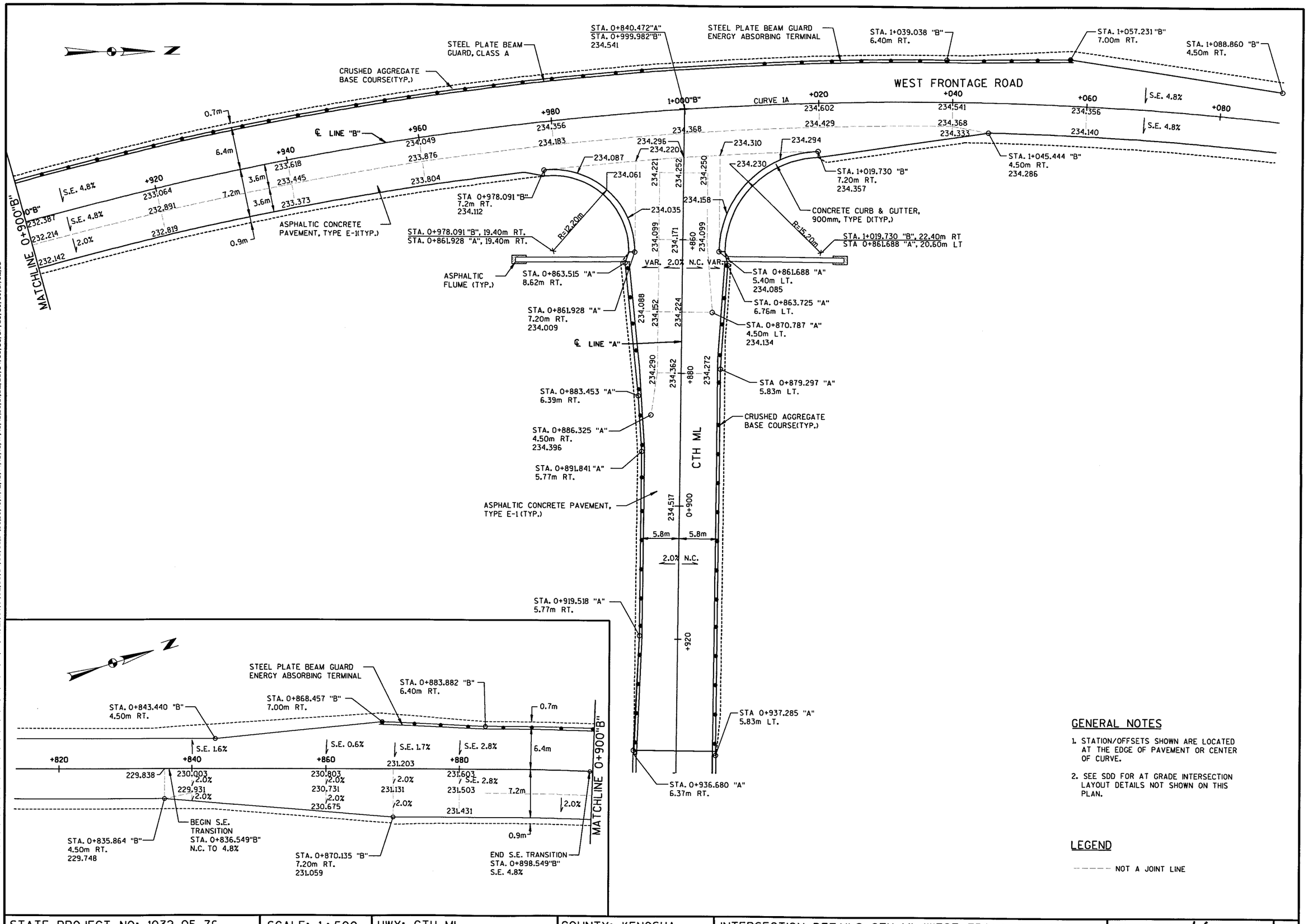
FILE NAME: PROJECTS/2940/PLANS/REMOVAL/2940REM10.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:2500	HWY: CTH ML	COUNTY: KENOSHA	INTERSECTION DETAIL OVERVIEW	SHEET NO: 65	M

FILE NAME: PROJECTS/2940/PLANS/INTDET/2940INTDOV.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: PROJECTS/2940/PLANS/INTDT01.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



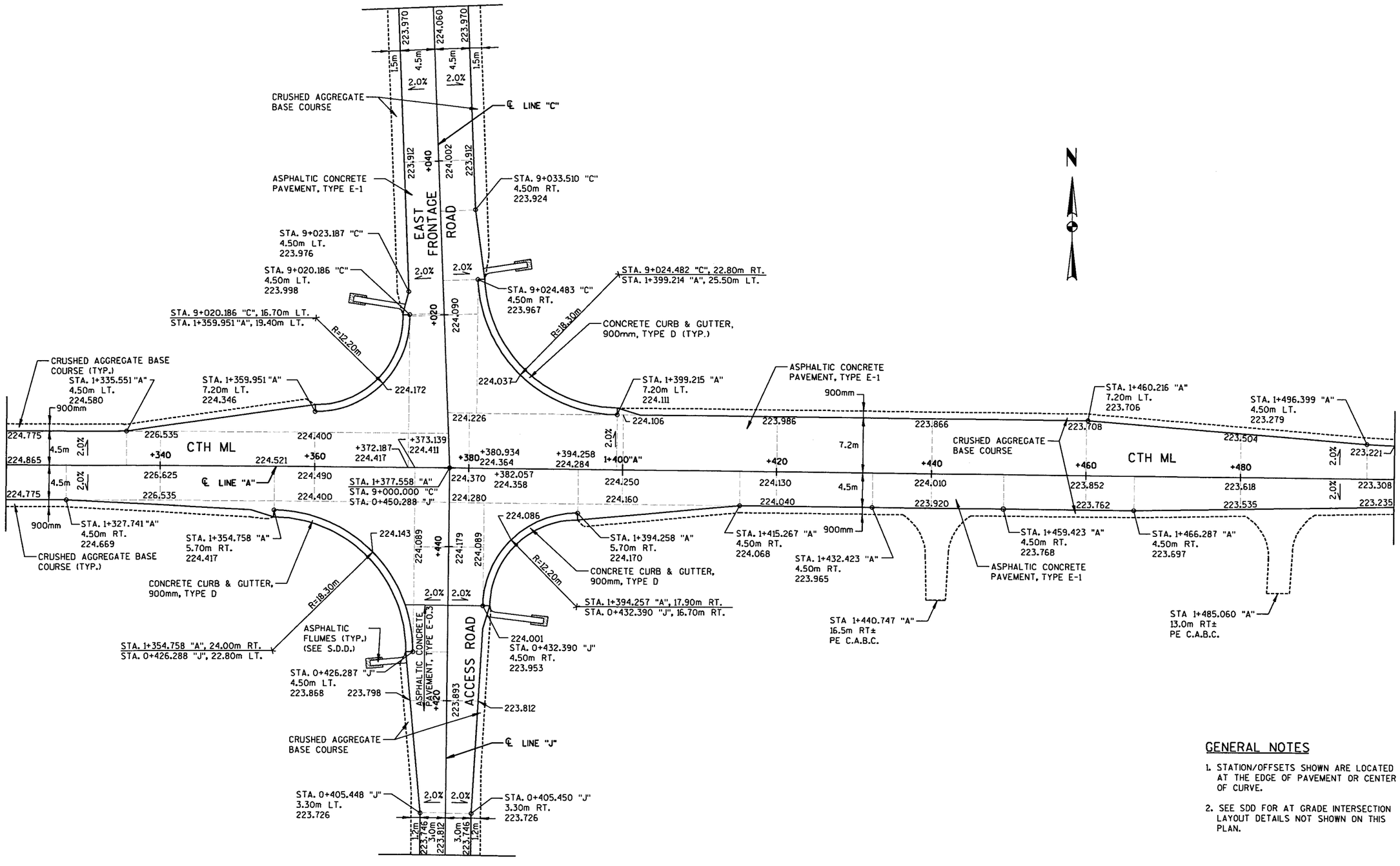
GENERAL NOTES

1. STATION/OFFSETS SHOWN ARE LOCATED AT THE EDGE OF PAVEMENT OR CENTER OF CURVE.
2. SEE SDD FOR AT GRADE INTERSECTION LAYOUT DETAILS NOT SHOWN ON THIS PLAN.

LEGEND

- - - - - NOT A JOINT LINE

STATE PROJECT NO: 1032-05-76	SCALE: 1:500	HWY: CTH ML	COUNTY: KENOSHA	INTERSECTION DETAILS CTH ML/WEST FRONTAGE RD.	SHEET NO: 66	M



GENERAL NOTES

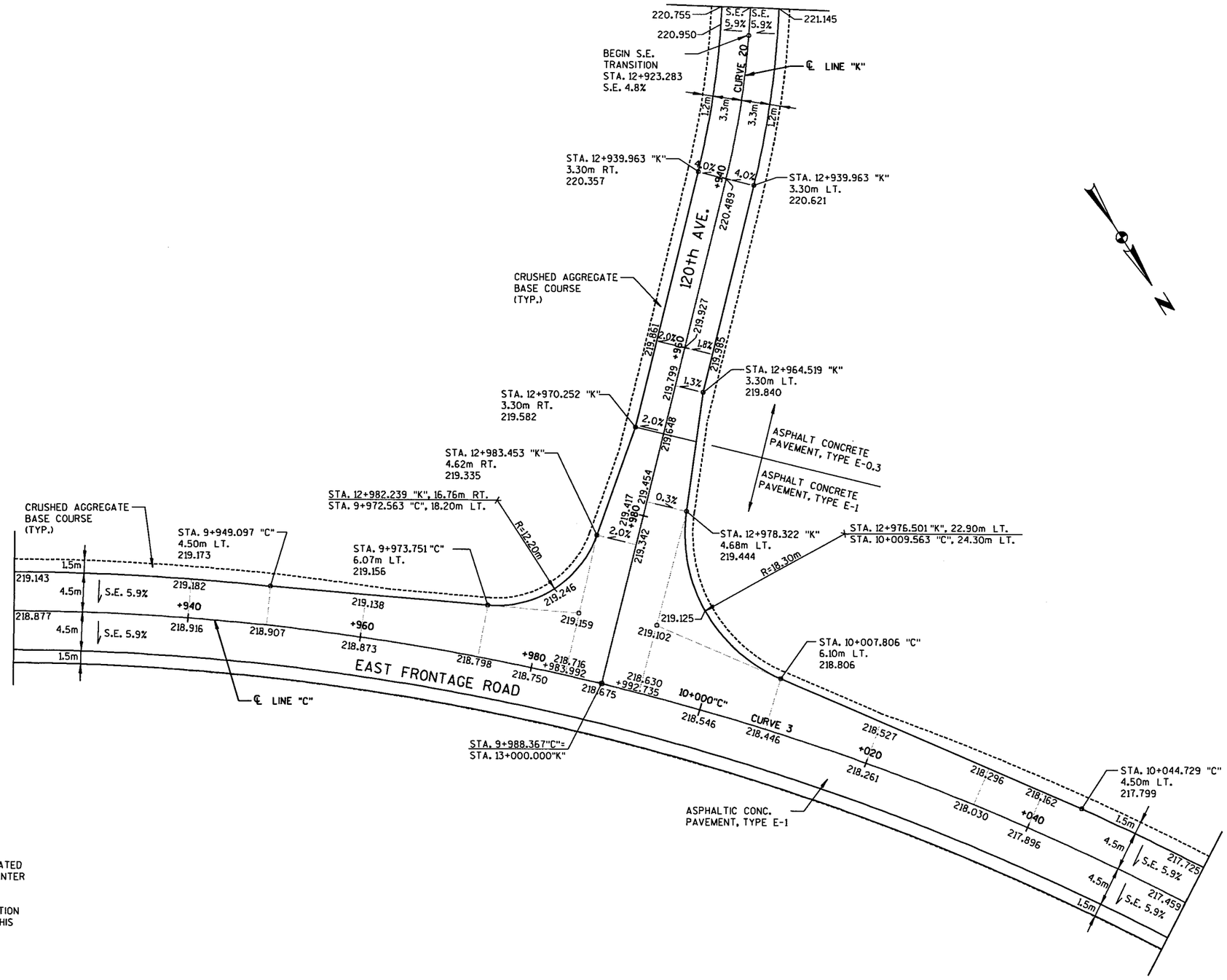
1. STATION/OFFSETS SHOWN ARE LOCATED AT THE EDGE OF PAVEMENT OR CENTER OF CURVE.
2. SEE SDD FOR AT GRADE INTERSECTION LAYOUT DETAILS NOT SHOWN ON THIS PLAN.

LEGEND

– – – – – NOT A JOINT LINE

STATE PROJECT NO: 1032-05-76	SCALE: 1:500	HWY: CTH ML	COUNTY: KENOSHA	INTERSECTION DETAILS (LINE "A", LINE "C" & LINE "J")	SHEET NO: 67	M

FILE NAME: PROJECTS/2940/PLANS/INTDT02.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



GENERAL NOTES

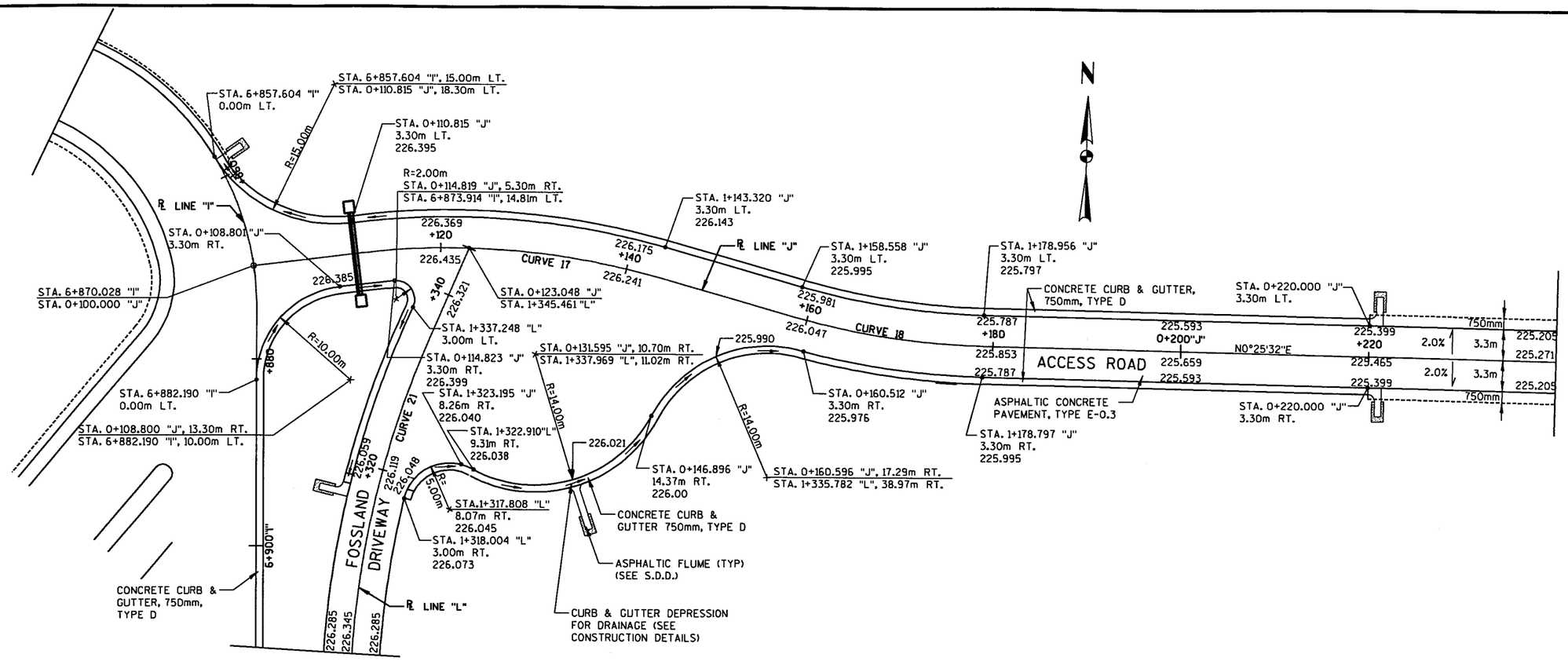
1. STATION/OFFSETS SHOWN ARE LOCATED AT THE EDGE OF PAVEMENT OR CENTER OF CURVE.
2. SEE SDD FOR AT GRADE INTERSECTION LAYOUT DETAILS NOT SHOWN ON THIS PLAN.
3 MATCH END OF SUPER ELEVATION TRANSITION INTO CROSS SLOPE OF "C"-LINE.

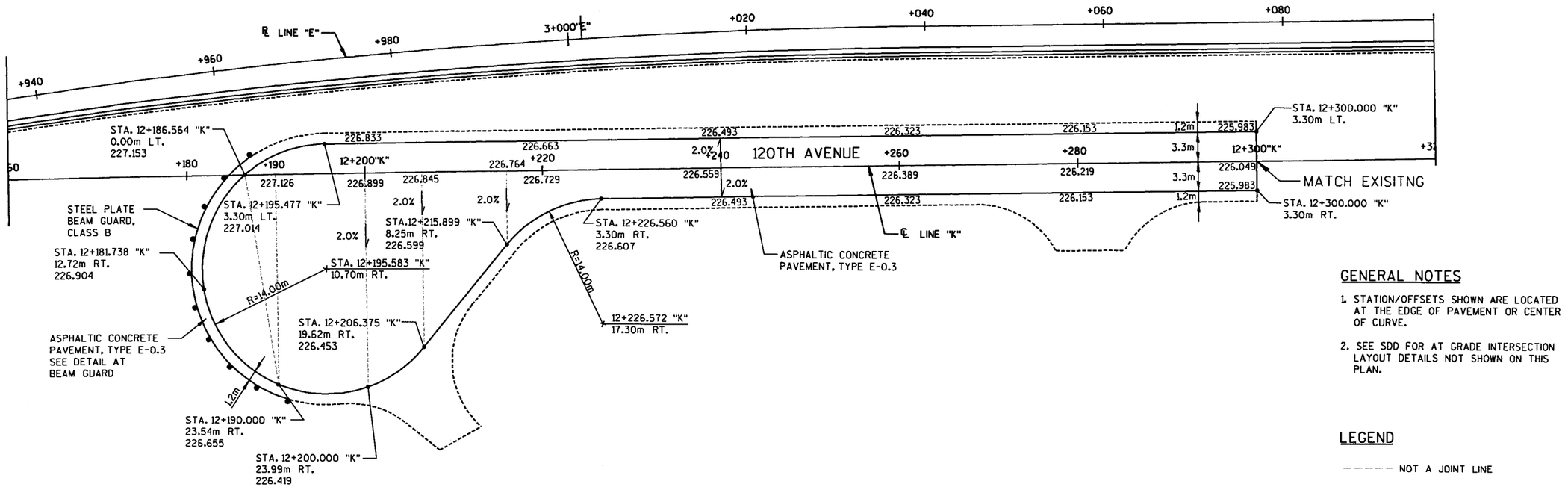
LEGEND

------ NOT A JOINT LINE

STATE PROJECT NO: 1032-05-76	SCALE: 1:500	HWY: CTH ML	COUNTY: KENOSHA	INTERSECTION DETAILS (LINE "C" & LINE "K")	SHEET NO: 68	M

FILE NAME: PROJECTS/2940/PLANS/INTDT03.DGN 12-12-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63





GENERAL NOTES

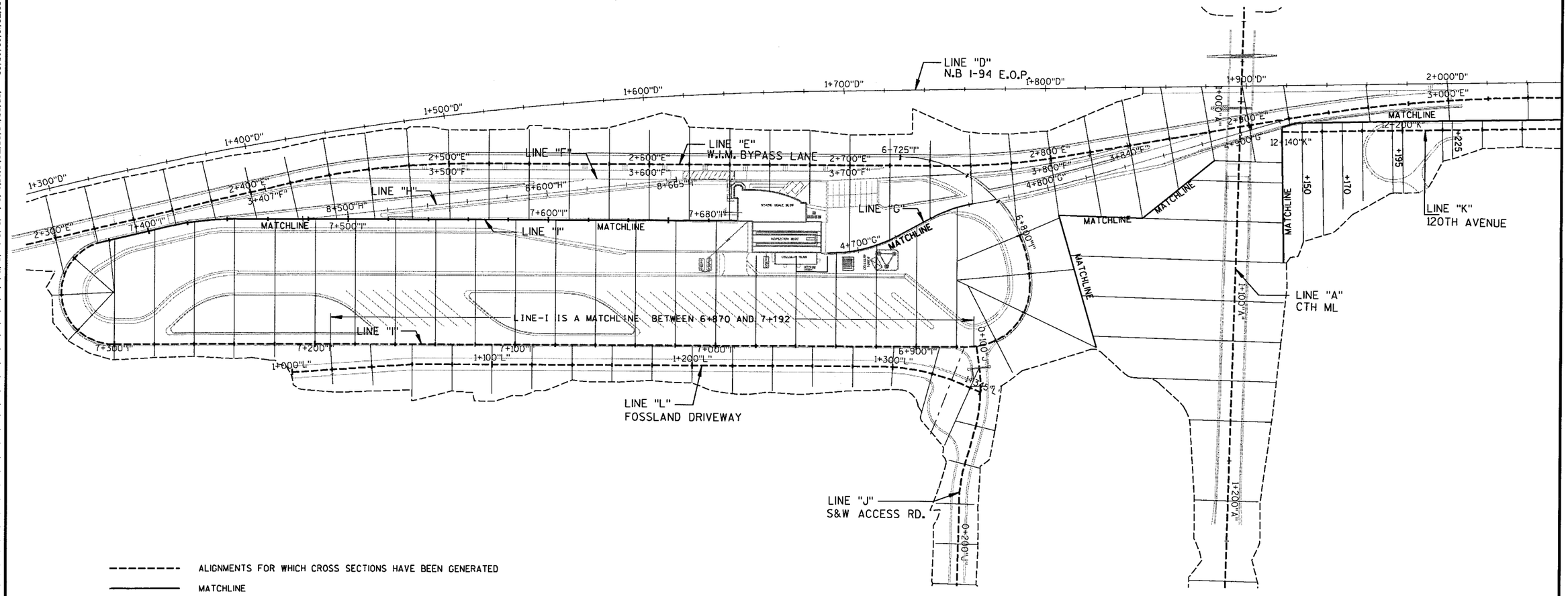
1. STATION/OFFSETS SHOWN ARE LOCATED AT THE EDGE OF PAVEMENT OR CENTER OF CURVE.
2. SEE SDD FOR AT GRADE INTERSECTION LAYOUT DETAILS NOT SHOWN ON THIS PLAN.

LEGEND

- - - - - - NOT A JOINT LINE

STATE PROJECT NO: 1032-05-76	SCALE: 1:500	HWY: CTH ML	COUNTY: KENOSHA	INTERSECTION DETAILS (CUL-DE-SAC 1& 2)	SHEET NO: 69	M

FILE NAME: PROJECTS/2940/PLANS/INTDT04.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTES:

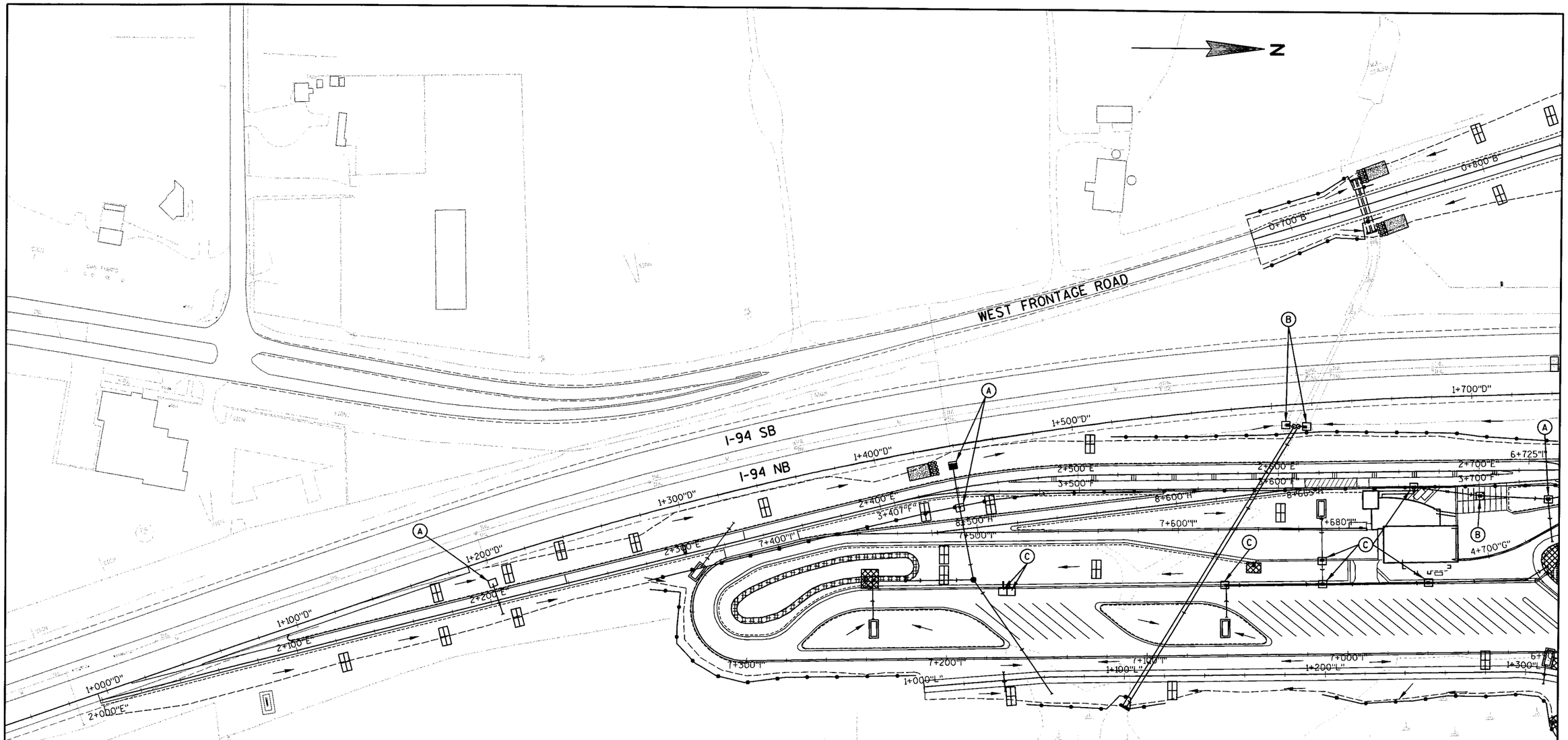
ALL CROSS SECTIONS ARE AT EVEN STATIONS UNLESS OTHERWISE NOTED

CROSS SECTIONS HAVE BEEN GENERATED ON LINES:

A-LINE(CTH ML)	I-LINE (RING ROAD)
B-LINE(WEST FRONTAGE RD.)	J-LINE(S&W ACCESS ROAD)
C-LINE(EAST FRONTAGE RD.)	K-LINE(120th AVENUE)
E-LINE(S&W BYPASS LANE)	L-LINE(FOSSLAND DRIVEWAY)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTION MATCHLINES	SHEET NO: 10 M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940MATCHLINE-PLAN.DGN 08-18-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56, 58,59,60,61,62,63



LEGEND:

- EROSION MAT. CLASS I, TYPE B
- EROSION MAT. CLASS II, TYPE B
- SILT FENCE
- CULVERT PIPE DITCH CHECK
- TEMPORARY DITCH CHECK
- TEMP. EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK
- EROSION CONTROL SOD
- (A) INLET PROTECTION, TYPE A
- (B) INLET PROTECTION, TYPE B
- (C) INLET PROTECTION, TYPE C

EROSION CONTROL NOTES:

PERTINENT TEMPORARY EROSION CONTROL DEVICES TO BE PLACED PRIOR TO ASSOCIATED CONSTRUCTION ACTIVITIES AS PER STAGE CONSTRUCTION PLANS.

(SILT FENCE 8.4 METERS EAST OF "E-LINE" TO BE PLACED PRIOR TO STAGE I. SILT FENCE EAST OF "I & L-LINE" TO BE PLACED PRIOR TO STAGE II.)

PERMANENT EROSION CONTROL DEVICES TO BE PLACED AS TOPSOILING IS COMPLETED.

THE EROSION CONTROL ITEMS SHOWN ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE ENGINNEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	EROSION CONTROL	SCALE: 1:2000	SHEET NO: 71	M

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LEGEND:

- EROSION MAT, CLASS I, TYPE B
- EROSION MAT, CLASS II, TYPE B
- SILT FENCE
- CULVERT PIPE DITCH CHECK
- TEMPORARY DITCH CHECK
- TEMP. EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK
- EROSION CONTROL SOD
- (A) INLET PROTECTION, TYPE A
- (B) INLET PROTECTION, TYPE B
- (C) INLET PROTECTION, TYPE C
- (R) RIPRAP & TYPE R FABRIC AT BARRIER OPENING (SEE CONSTRUCTION DETAIL)

N

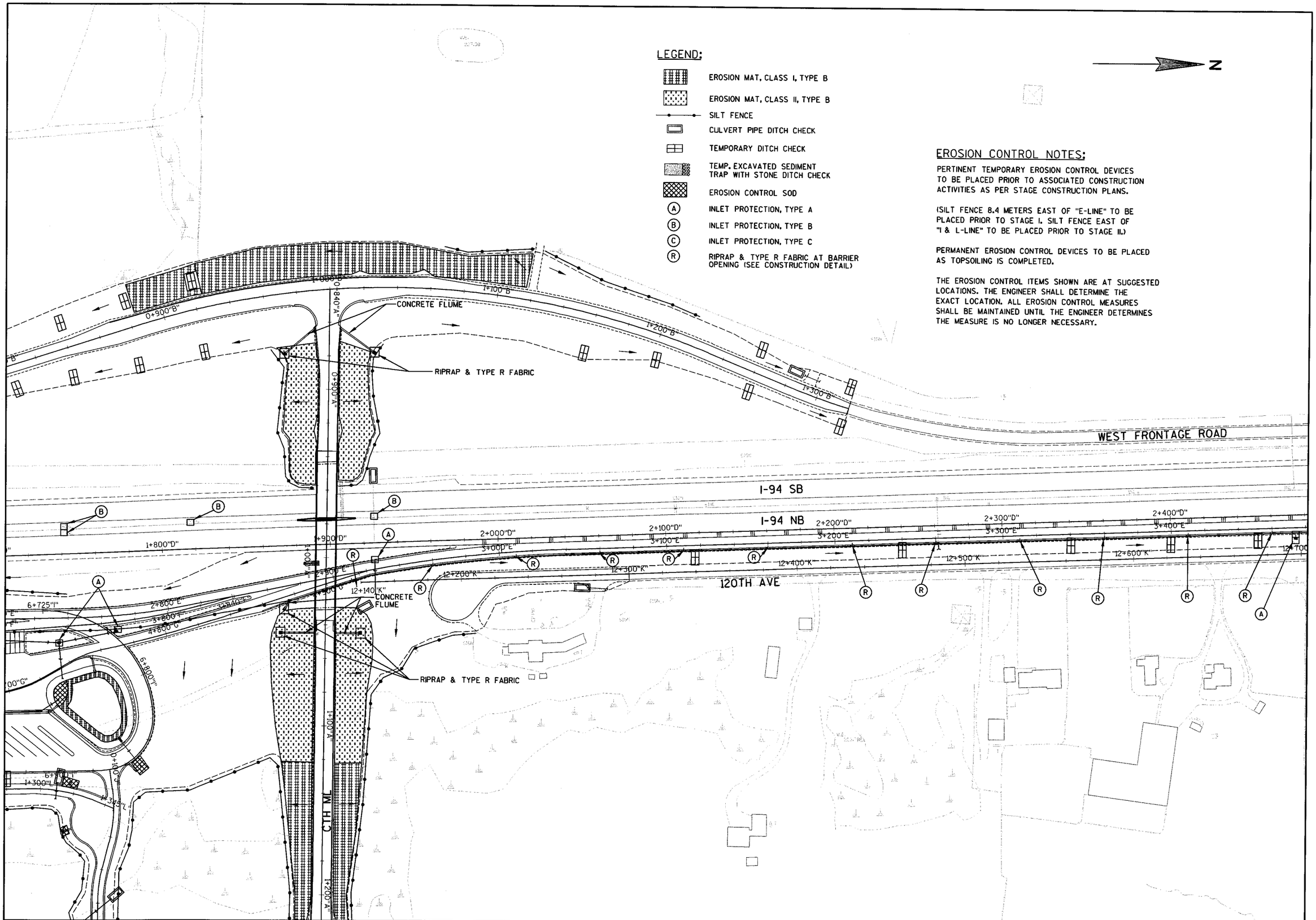
EROSION CONTROL NOTES:

PERTINENT TEMPORARY EROSION CONTROL DEVICES TO BE PLACED PRIOR TO ASSOCIATED CONSTRUCTION ACTIVITIES AS PER STAGE CONSTRUCTION PLANS.

(SILT FENCE 8.4 METERS EAST OF "E-LINE" TO BE PLACED PRIOR TO STAGE I. SILT FENCE EAST OF "I & L-LINE" TO BE PLACED PRIOR TO STAGE II.)

PERMANENT EROSION CONTROL DEVICES TO BE PLACED AS TOPSOILING IS COMPLETED.

THE EROSION CONTROL ITEMS SHOWN ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	EROSION CONTROL	SCALE: 1:2000	SHEET NO: 72	M

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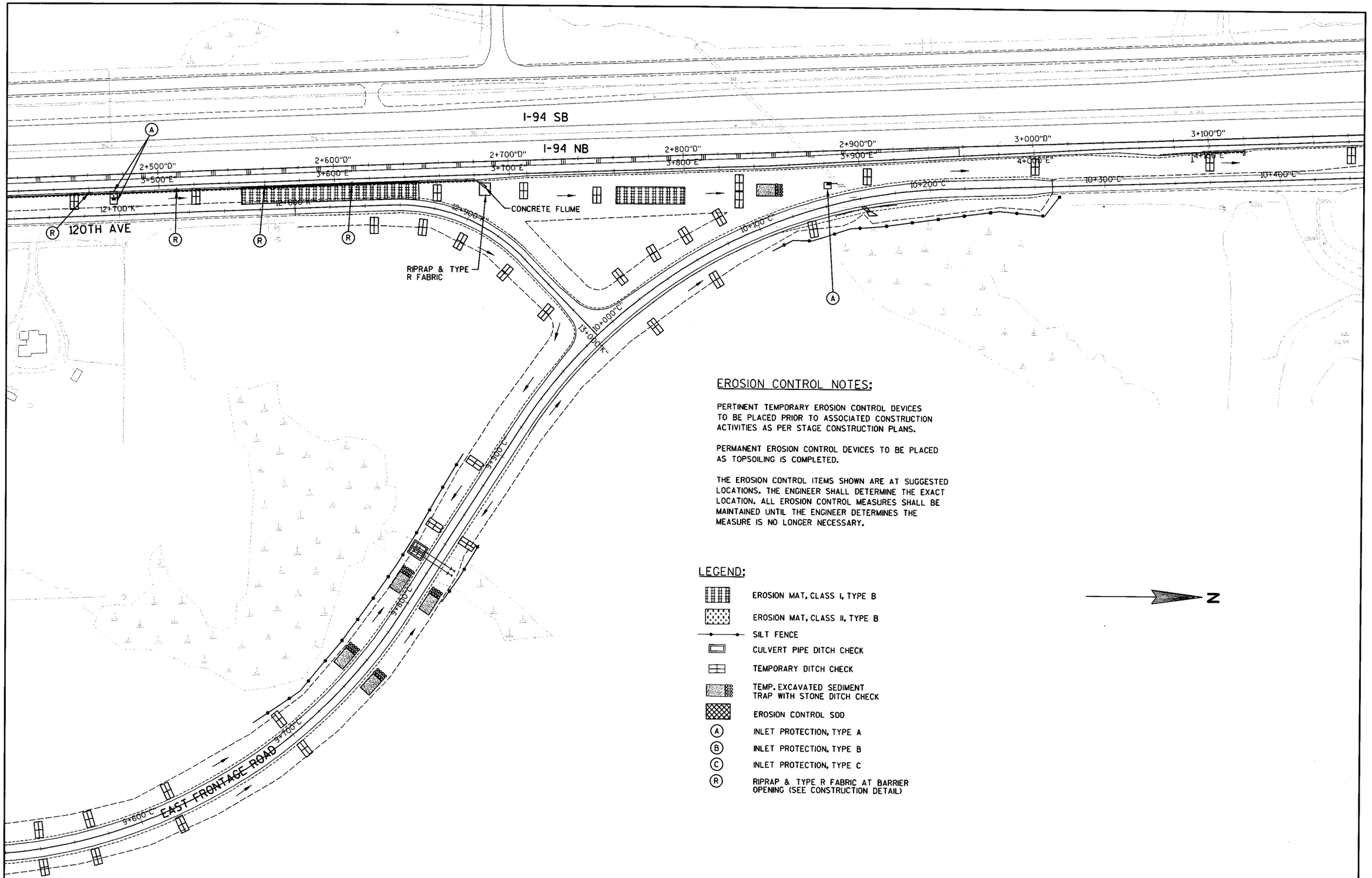

EROSION CONTROL NOTES:

PERTINENT TEMPORARY EROSION CONTROL DEVICES TO BE PLACED PRIOR TO ASSOCIATED CONSTRUCTION ACTIVITIES AS PER STAGE CONSTRUCTION PLANS.

PERMANENT EROSION CONTROL DEVICES TO BE PLACED AS TOPSOILING IS COMPLETED.

THE EROSION CONTROL ITEMS SHOWN ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

LEGEND:

- EROSION MAT, CLASS I, TYPE B
- EROSION MAT, CLASS II, TYPE B
- SILT FENCE
- CULVERT PIPE DITCH CHECK
- TEMPORARY DITCH CHECK
- TEMP. EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK
- EROSION CONTROL SOD
- (A) INLET PROTECTION, TYPE A
- (B) INLET PROTECTION, TYPE B
- (C) INLET PROTECTION, TYPE C
- (R) RIPRAP & TYPE R FABRIC AT BARRIER OPENING (SEE CONSTRUCTION DETAIL)

N

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	EROSION CONTROL	SCALE: 1:2000	SHEET NO: 73	M

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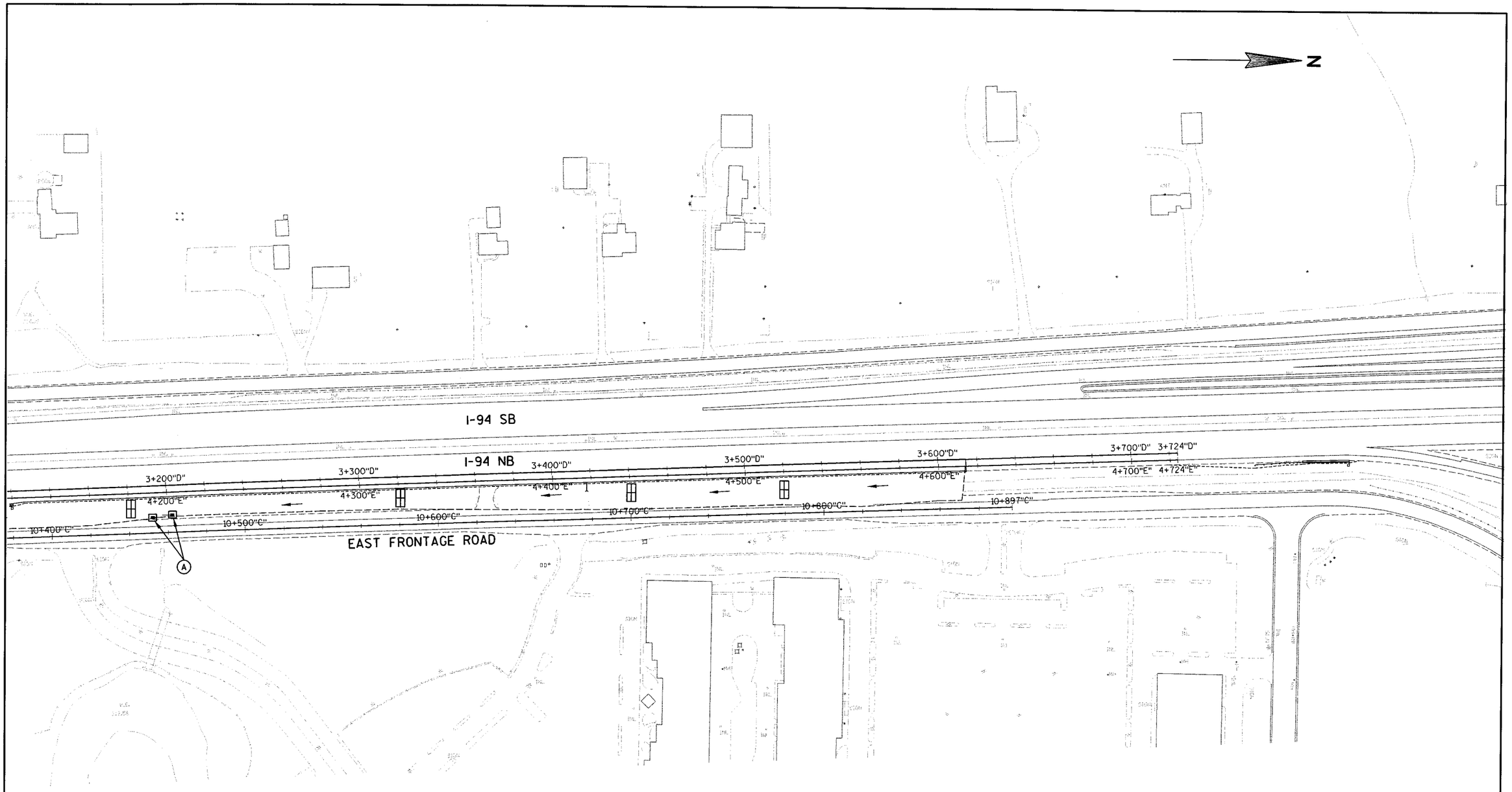

LEGEND:

- EROSION MAT, CLASS I, TYPE B
- EROSION MAT, CLASS II, TYPE B
- SILT FENCE
- CULVERT PIPE DITCH CHECK
- TEMPORARY DITCH CHECK
- TEMP. EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK
- EROSION CONTROL SOD
- (A) INLET PROTECTION, TYPE A
- (B) INLET PROTECTION, TYPE B
- (C) INLET PROTECTION, TYPE C

EROSION CONTROL NOTES:

PERTINENT TEMPORARY EROSION CONTROL DEVICES TO BE PLACED PRIOR TO ASSOCIATED CONSTRUCTION ACTIVITIES AS PER STAGE CONSTRUCTION PLANS.

PERMANENT EROSION CONTROL DEVICES TO BE PLACED AS TOPSOILING IS COMPLETED.

THE EROSION CONTROL ITEMS SHOWN ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

N

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	EROSION CONTROL	SCALE: 1:2000	SHEET NO: 74	M

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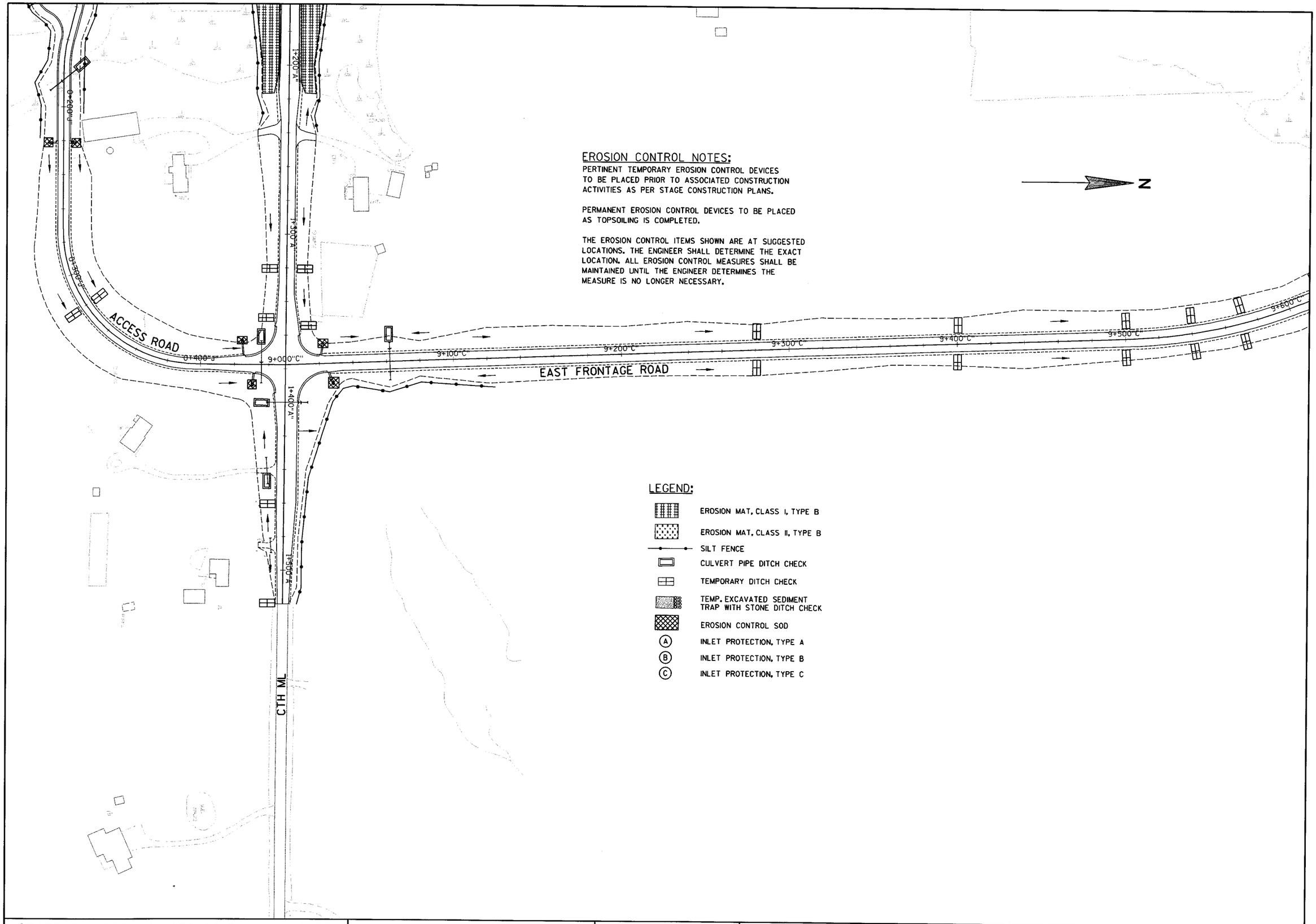

EROSION CONTROL NOTES:

PERTINENT TEMPORARY EROSION CONTROL DEVICES TO BE PLACED PRIOR TO ASSOCIATED CONSTRUCTION ACTIVITIES AS PER STAGE CONSTRUCTION PLANS.

PERMANENT EROSION CONTROL DEVICES TO BE PLACED AS TOPSOILING IS COMPLETED.

THE EROSION CONTROL ITEMS SHOWN ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

LEGEND:

- EROSION MAT, CLASS I, TYPE B
- EROSION MAT, CLASS II, TYPE B
- SILT FENCE
- CULVERT PIPE DITCH CHECK
- TEMPORARY DITCH CHECK
- TEMP. EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK
- EROSION CONTROL SOD
- (A) INLET PROTECTION, TYPE A
- (B) INLET PROTECTION, TYPE B
- (C) INLET PROTECTION, TYPE C

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	EROSION CONTROL	SCALE: 1:2000	SHEET NO: 75	M

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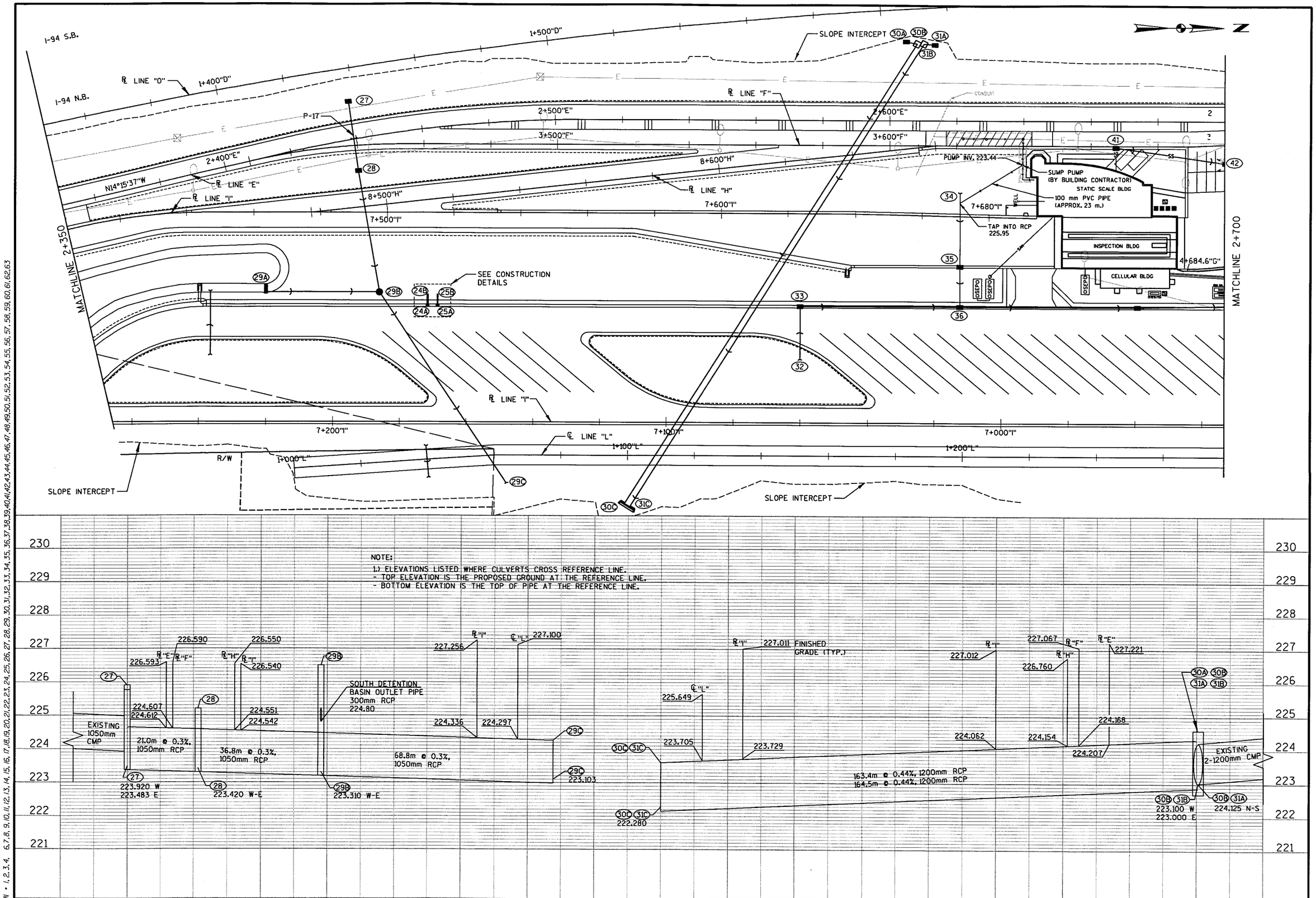
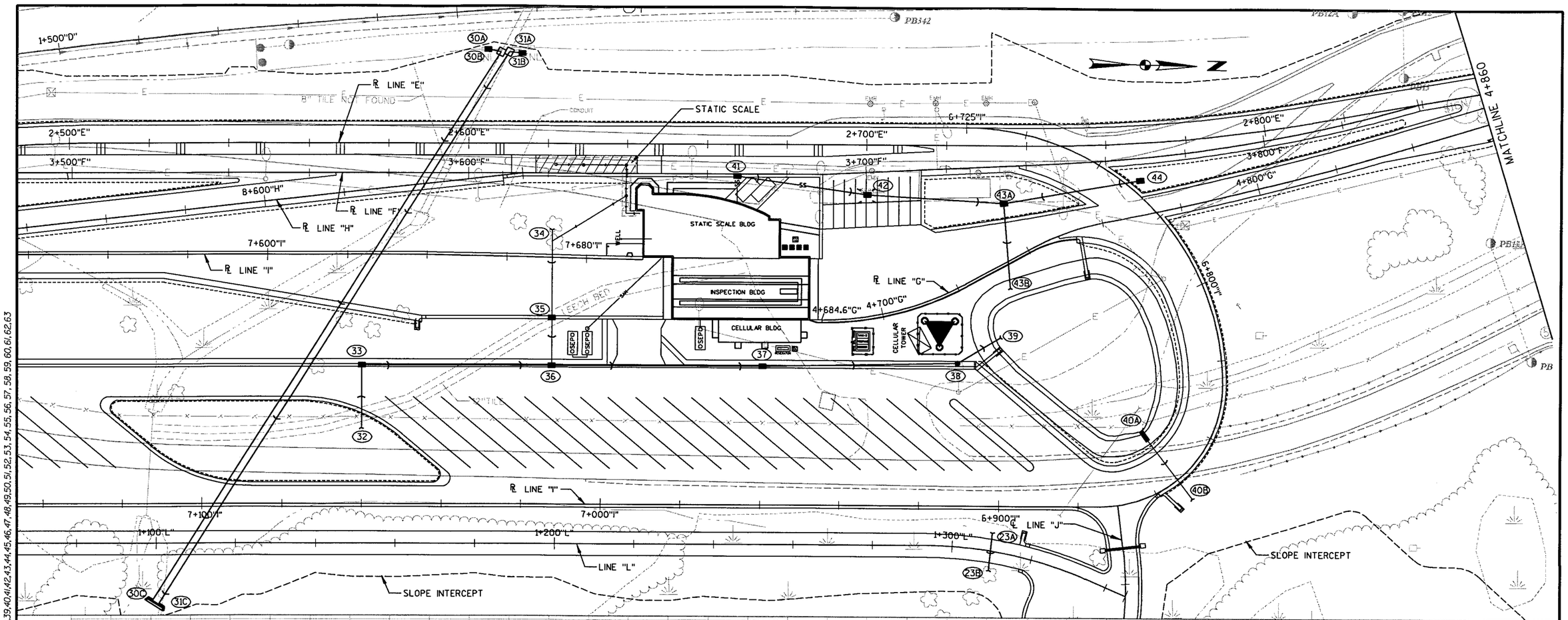
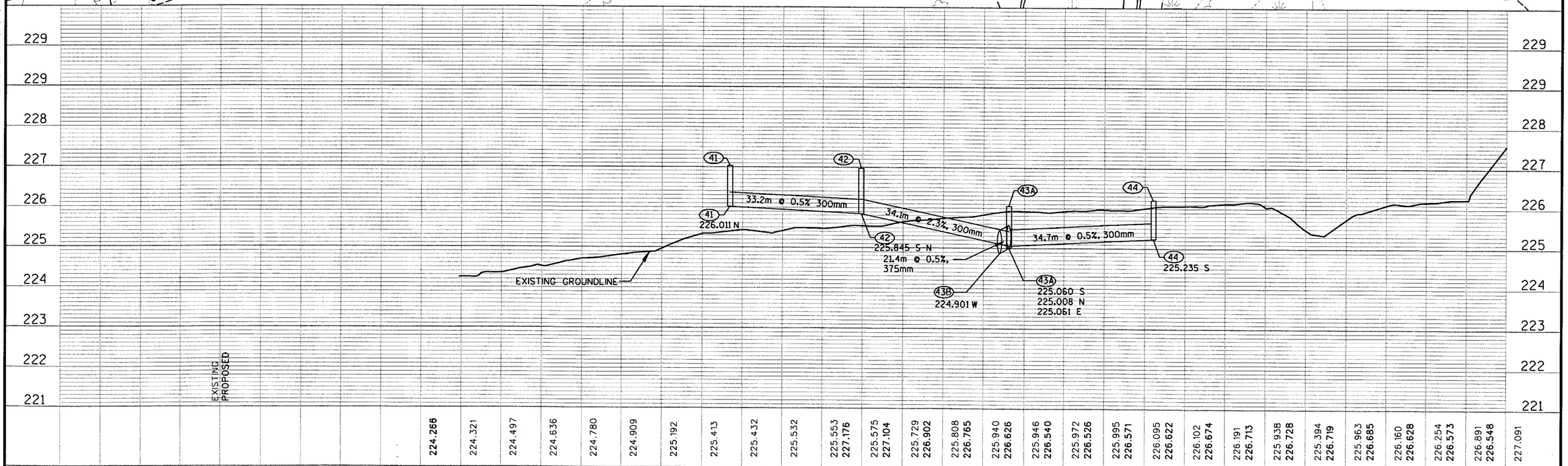


STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	STORM SEWER PROFILES	SHEET NO: 76	M

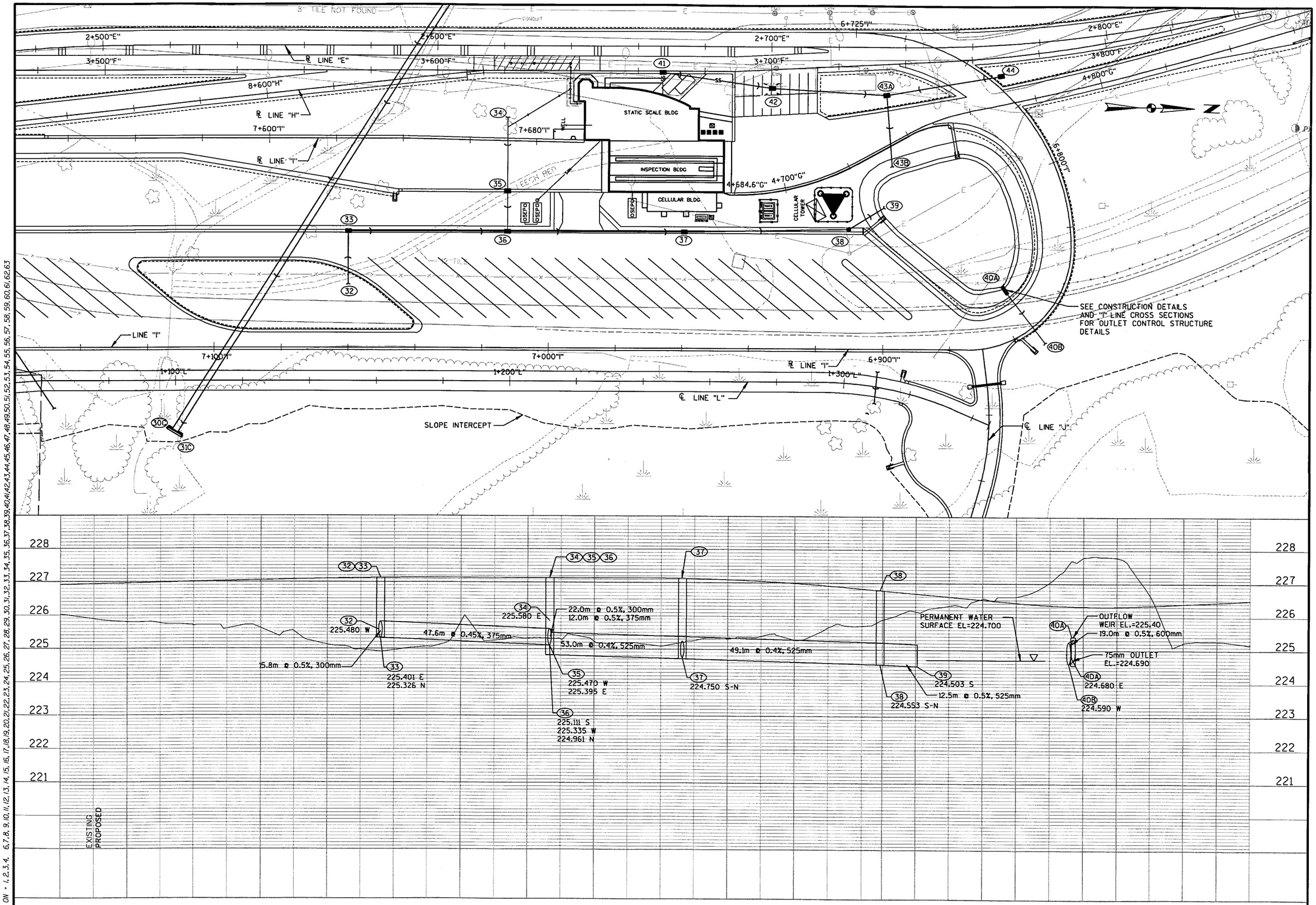
FILE NAME: PROJECTS/2940/PLANS/STORM/2940SS06.DGN 12-11-01
LEVELS ON • 1.2.3.4. 6.7.8. 9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63





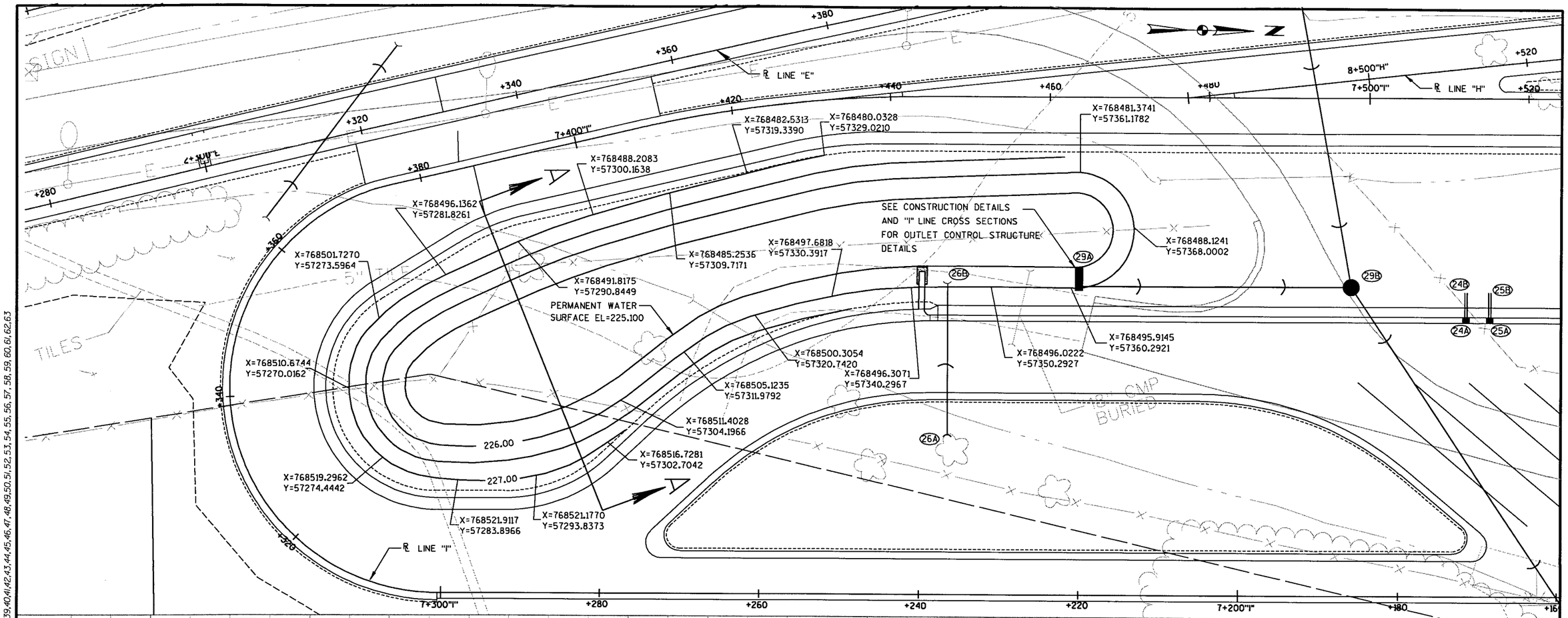
STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	STORM SEWER PROFILES	SHEET NO: 77 M

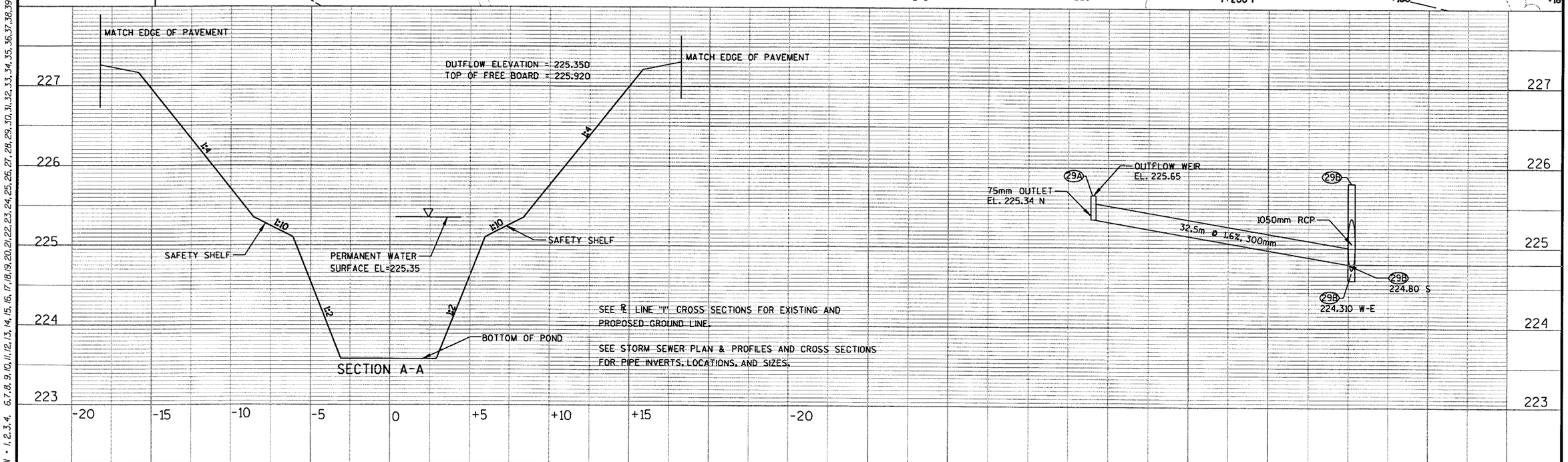
FILE NAME: PROJECTS/2940/PLANS/STORM/2940SS15.DGN 12-11-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



FILE NAME: PROJECTS/2940/PLANS/STORM/2940SS19.DGN 12-11-01
LEVELS ON - 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	STORM SEWER PROFILES	SHEET NO: 78	M





STATE PROJECT NO: 1032-08-70	SCALE: N.T.S.	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	WET DETENTION BASIN	SHEET NO: 79	M

FILE NAME: PROJECTS/2940/PLANS/STORM/2940SOUTHDB.DGN 12-14-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATIC SCALE BLDG

INSPECTION BLDG

CELLULAR BLDG

OSEP

GENERATOR

CELLULAR TOWER

℄ LINE "G"

4+700"G"

+720

+740

+760

+800"G"

+820

+840

+860

+880

+900

X=768474.3923
Y=57677.3237

X=768466.9794
Y=57695.8323

X=768465.0445
Y=57705.6313

X=768468.6764
Y=57714.8480

226.00

225.00

X=768470.0969
Y=57686.2912

X=768483.3781
Y=57674.0000

X=768476.4412
Y=57721.0714

PERMANENT WATER
SURFACE EL. 224.70

X=768492.3783
Y=57678.1040

X=768485.8455
Y=57724.5281

X=768499.0565
Y=57685.5706

DETENTION
BASIN OUTLET

X=768495.7483
Y=57726.0546

X=768505.2137
Y=57693.4994

X=768505.5304
Y=57724.5215

X=768511.2231
Y=57701.5398

X=768515.0208
Y=57710.4950

X=768512.7723
Y=57717.7642

℄ LINE "I"

6+700

+980

+960

+940

+920

6+900"I"

+880

MATCH BACK OF CURB

SEE ℄ LINE "I" CROSS SECTIONS FOR EXISTING AND PROPOSED GROUND LINE.

SEE STORM SEWER PLAN & PROFILES AND CROSS SECTIONS FOR PIPE INVERTS, LOCATIONS, AND SIZES.

1:4

1:10

1:2

SAFETY SHELF

PERMANENT WATER
SURFACE EL. 224.700

BOTTOM OF POND

MATCH EDGE OF PAVEMENT

OUTFLOW ELEVATION = 224.700
TOP OF FREE BOARD = 226.050

226
225
224
223
222

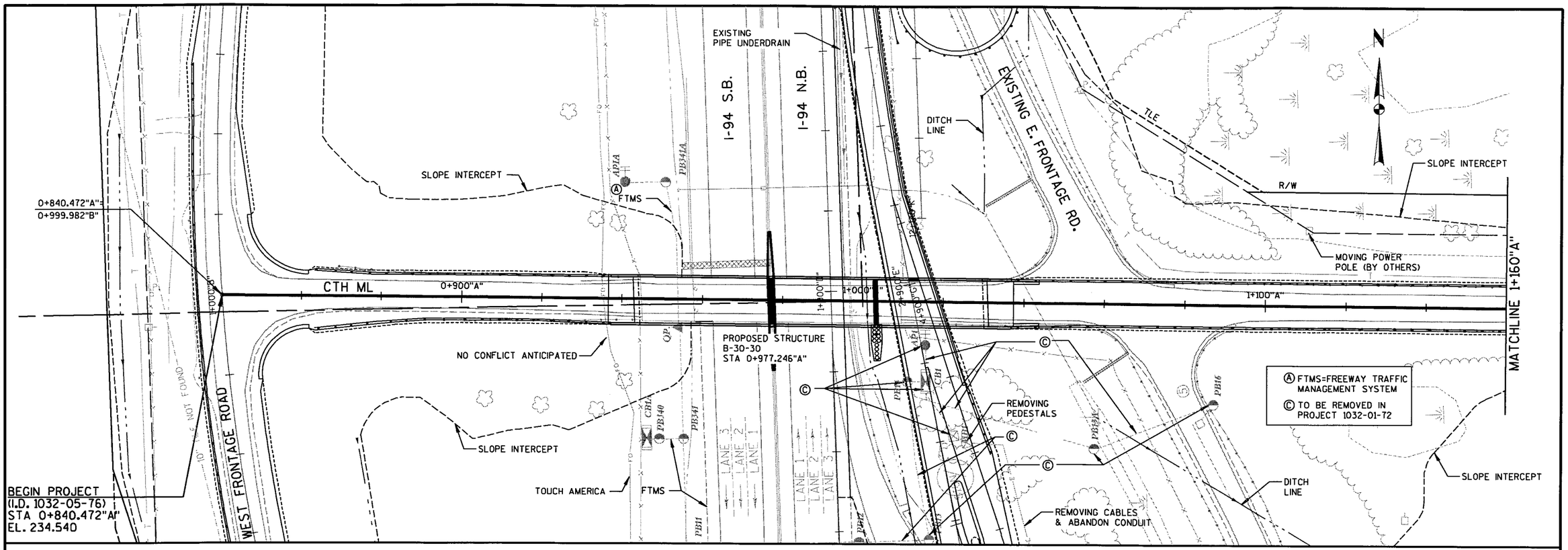
-35 -30 -25 -20 -15 -10 -5 0 +5 +10 +15 +20 +25 +30 +35

SECTION A-A

STATE PROJECT NO: 1032-08-70	SCALE: N.T.S.	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	WET DETENTION BASIN	SHEET NO: 80	M

FILE NAME: PROJECTS/2940/PLANS/STORM/2940NORTHDB.DGN
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

12-14-01



FILE NAME: PROJECTS/2940/UTIL/2940UT01.DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	UTILITIES - LINE "A" (CTH ML)	SHEET NO: 81	M

FILE NAME: PROJECTS/2940/UTIL/2940UT02.DGN 09-18-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

224.38

REMOVING PEDESTAL (BY OTHERS)

VERIZON

MOVING POWER POLE (BY OTHERS)

12" TILE NOT FOUND

10" TILE NOT FOUND

0+680"B"

0+700"B"

0+800"B"

WEST FRONTAGE ROAD

0+900"B"

MATCHLINE 0+960"B"

END CONSTRUCTION
(I.D. 1032-05-76)
STA. 0+680.224

DITCH LINE

SLOPE INTERCEPT (TYP.)

NO CONFLICT ANTICIPATED

10" TILE NOT FOUND

MOVING POWER POLE (BY OTHERS)

R/W

VERIZON TELEPHONE

PI 1+054.054"B"

R/W

THE ATLANTIS PARTNERSHIP #91

0+840.472"A"
0+999.982"B"

MATCHLINE 0+960"B"

1+000"B"

WEST FRONTAGE ROAD

1+100"B"

1+200"B"

CTH ML

0+900"A"

DITCH LINE

SLOPE INTERCEPTS (TYP.)

1+300"B"

1+320"B"

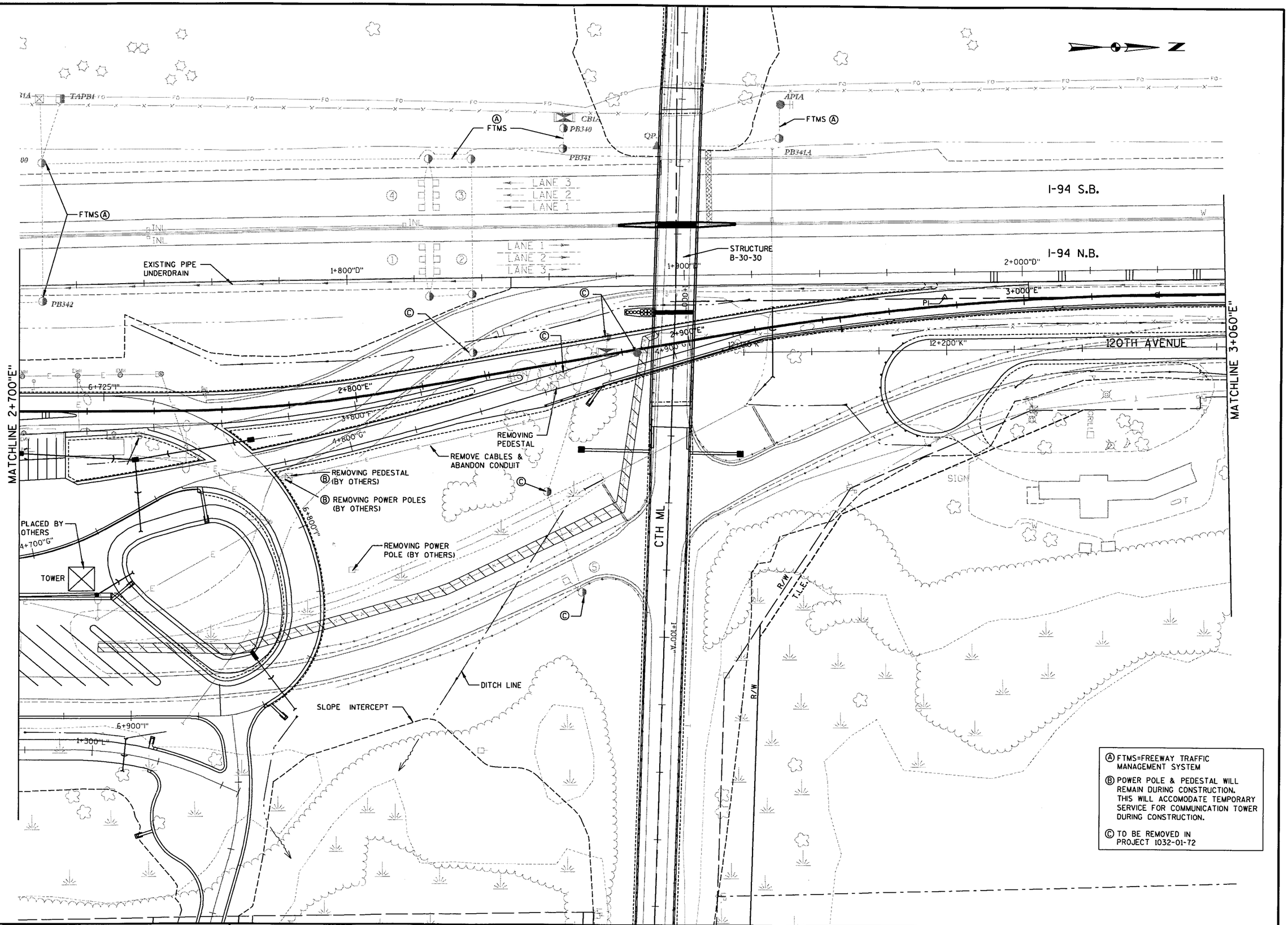
TOUCH AMERICA

NO CONFLICT ANTICIPATED

FO

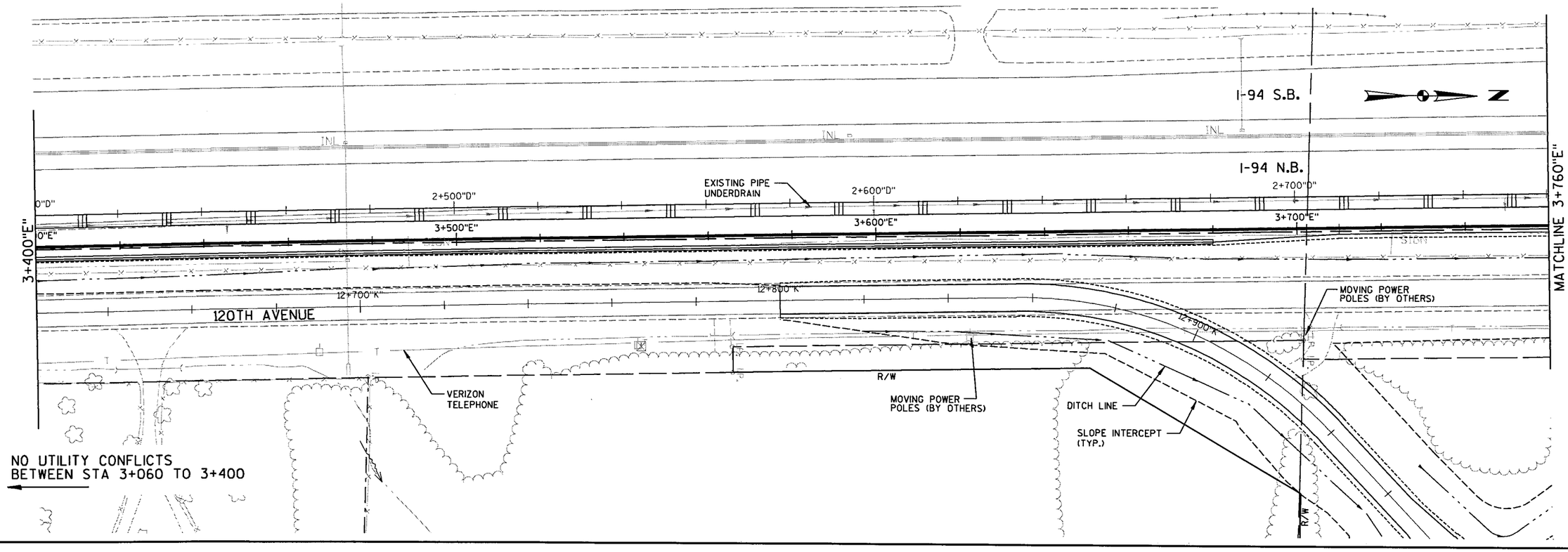
END CONSTRUCTION
(I.D. 1032-05-76)
STA. 1+320.000"B"
EL. 226.630
MATCH EXISTING

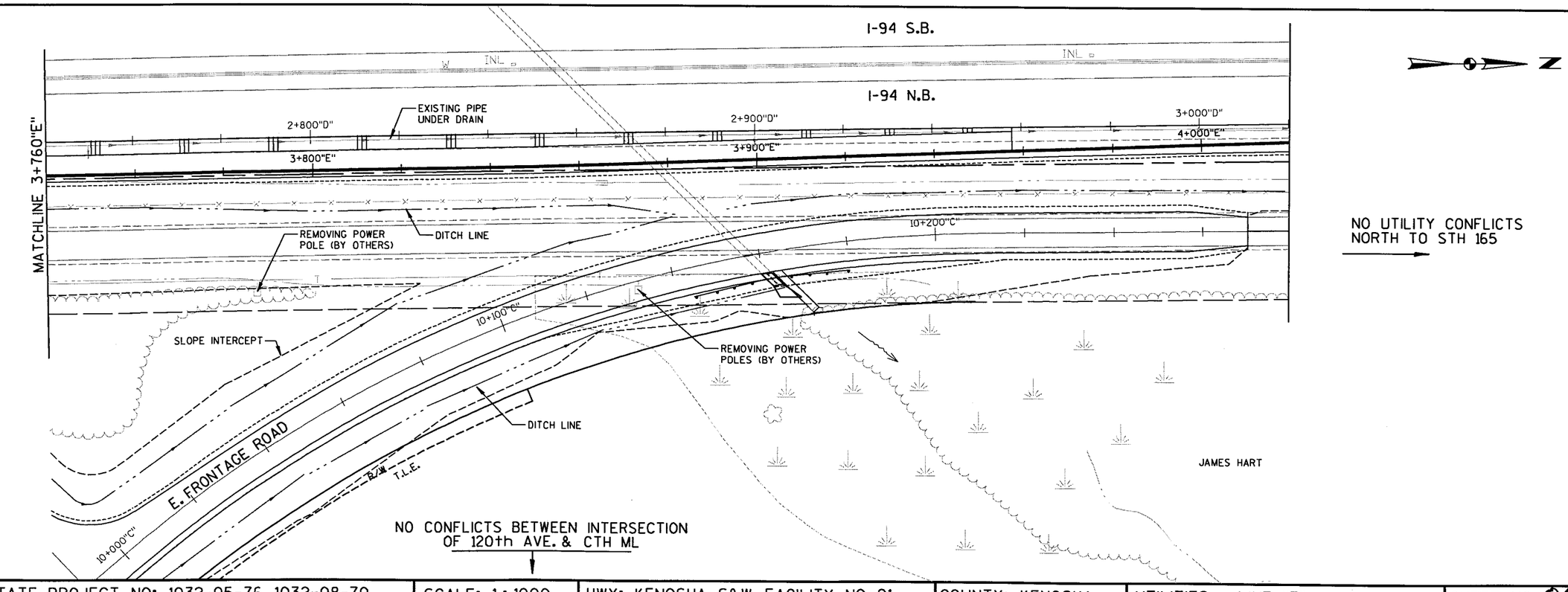
STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	UTILITIES - LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 82	M



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	UTILITIES - SAFETY & WEIGHT FACILITY	SHEET NO: 83	M

FILE NAME: PROJECTS/2940/UTIL/2940UT03.DGN 11-29-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63





STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	UTILITIES - LINE "E"	SHEET NO: 84	M

FILE NAME: PROJECTS/2940/UTIL/2940UT04.DGN 11-29-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

I-94 S.B.

I-94 N.B.

N

MATCHLINE 4+460"E"

3+500"D"
4+500"E"

3+600"D"
4+600"E"

3+700"D"
4+700"E"

END PROJECT
I.D. 1032-08-70
STA. 4+614.000"E"

10+700"C"

10+800"C

10+897"C"

E. FRONTAGE ROAD

SIGN

INL

CTH ML

T.L.E.

R/W

VINCENT & MARY
BUGNER

STA. 0+450.288"J"=
STA. 1+377.558"A"=
STA. 9+000.000"C"

SUZETTE
LANDON

HERMAN F. &
W.F. DARTH

RICHARD L. &
LENNIEA T. NELSON

MOVING POWER
POLE (BY OTHERS)

SLOPE
INTERCEPTS
(TYP.)

ABANDONING
SEPTIC TANK

STA. 6+763.404"I"=
STA. 0+100.000"J"

0+200"J"

0+300"J"

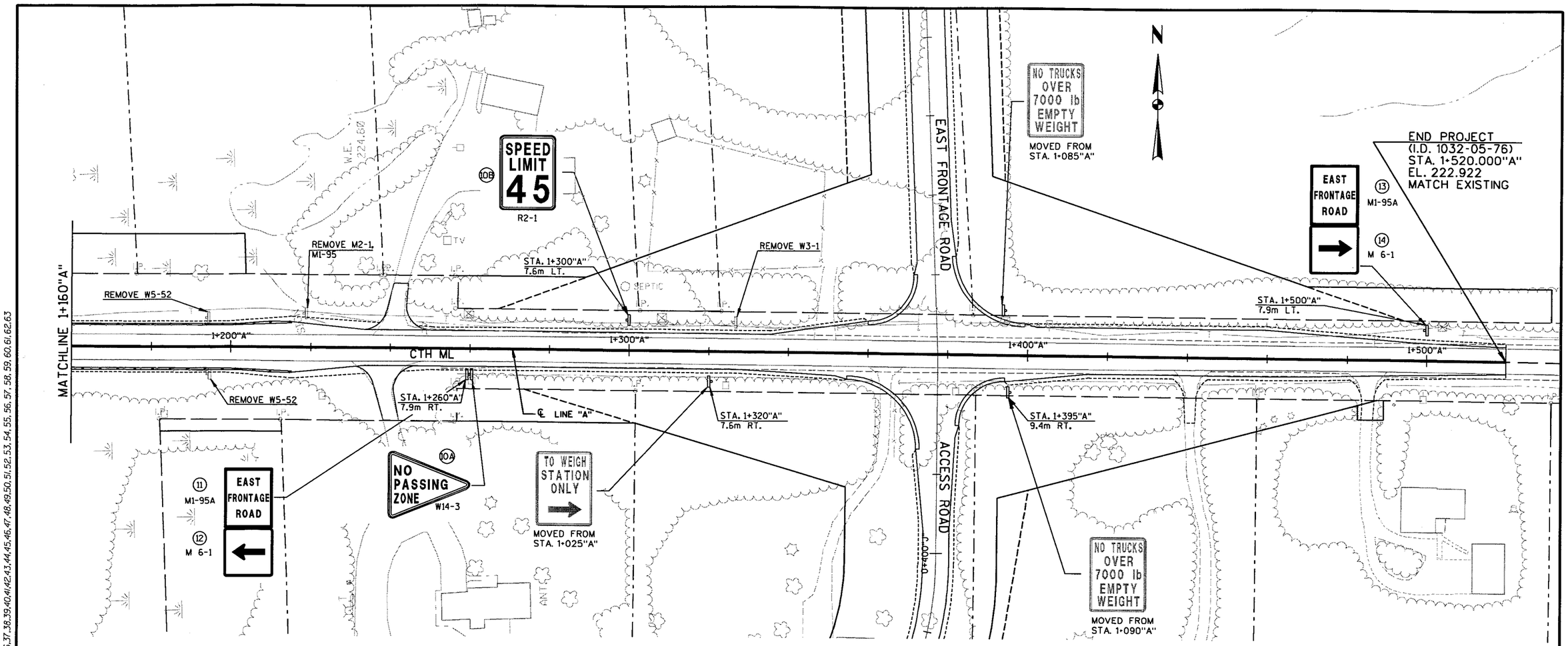
ACCESS ROAD

5+900"I"

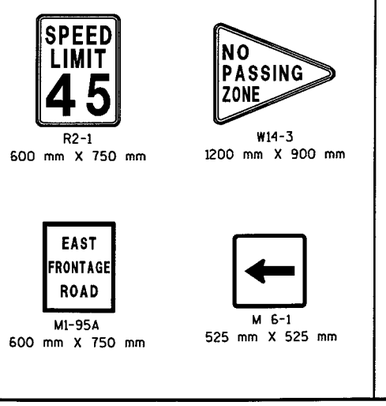
1+300"I"

FILE NAME: PROJECTS/2940/UTIL/2940UT05.DGN 11-29-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	UTILITIES - LINE "E" TOP, LINE "J" BOTTOM	SHEET NO: 85	M



SIGN LEGEND



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

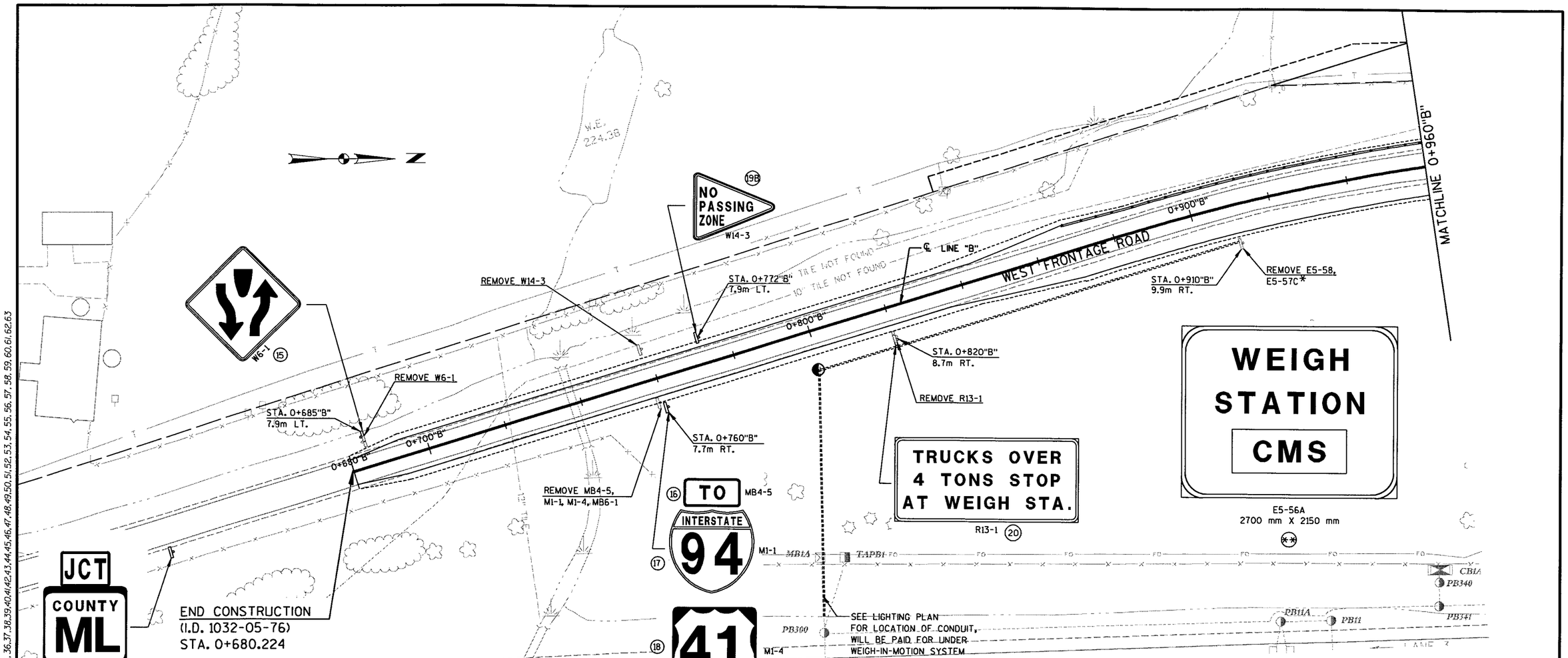
SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

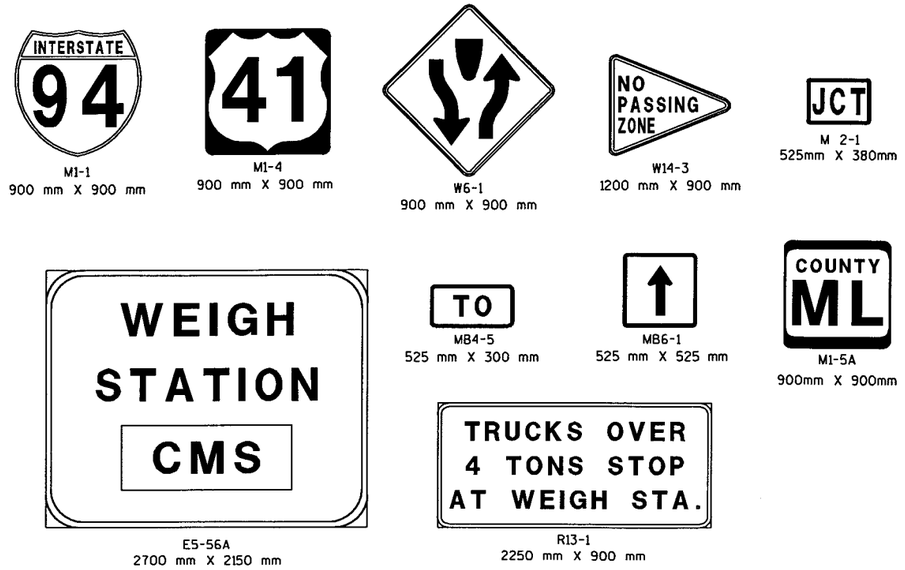
ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "A" (CTH ML)	SHEET NO: 86	M

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN02.DGN 12-11-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



SIGN LEGEND



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

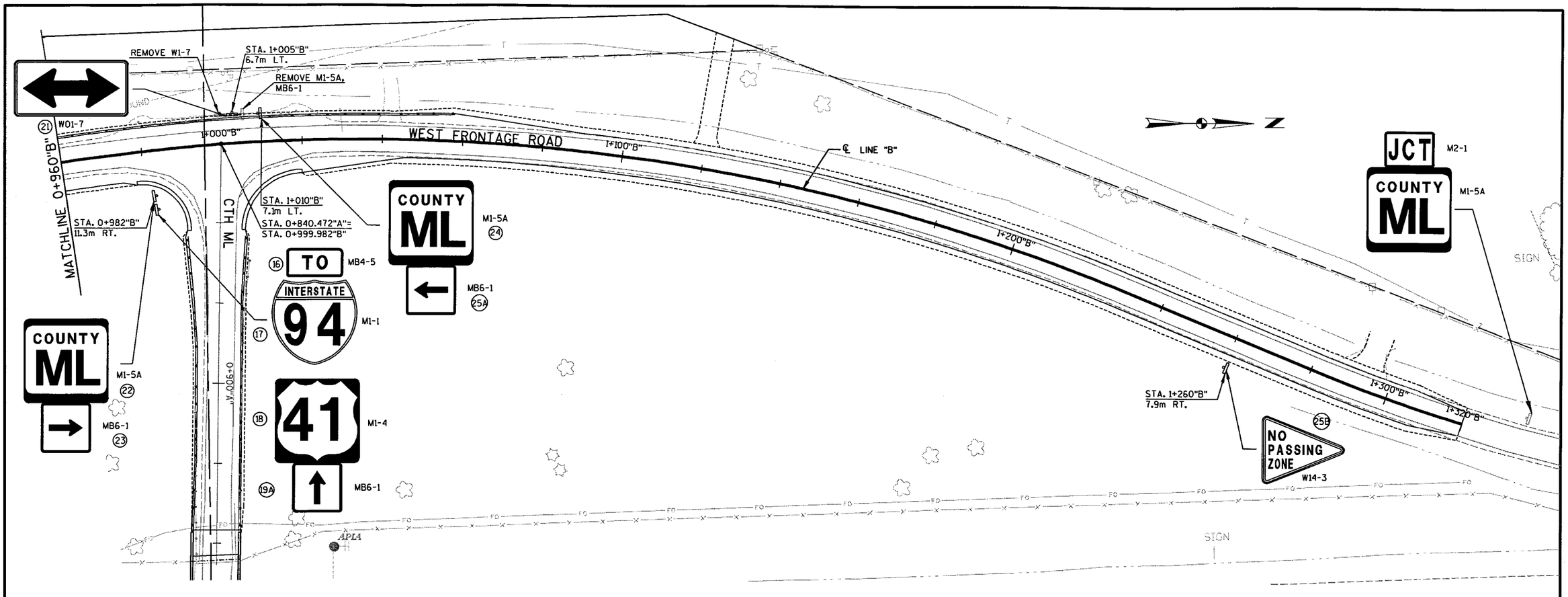
ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

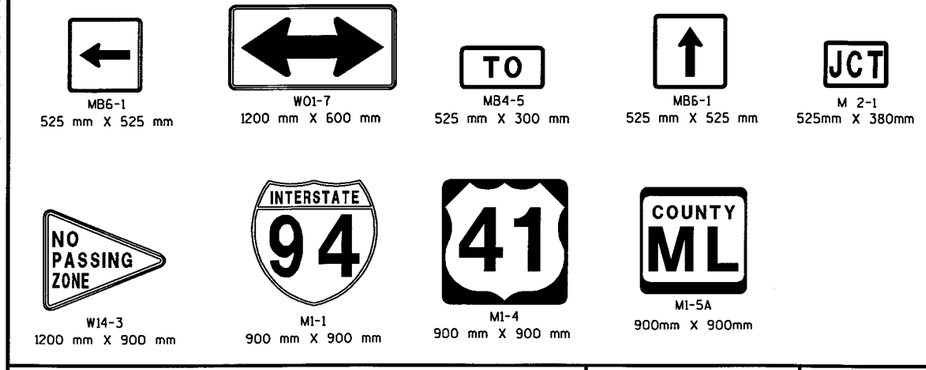
** FOR CONDUIT AND WIRE LEADING UP TO THIS SIGN, SEE LIGTHING PLAN. CONDUIT AND WIRE IS INCLUDED IN WEIGH-IN-MOTION PLANS.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "B" (W. FRONTAGE ROAD)	SHEET NO: 87	M

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN04.DGN 12-11-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



SIGN LEGEND



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (X) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

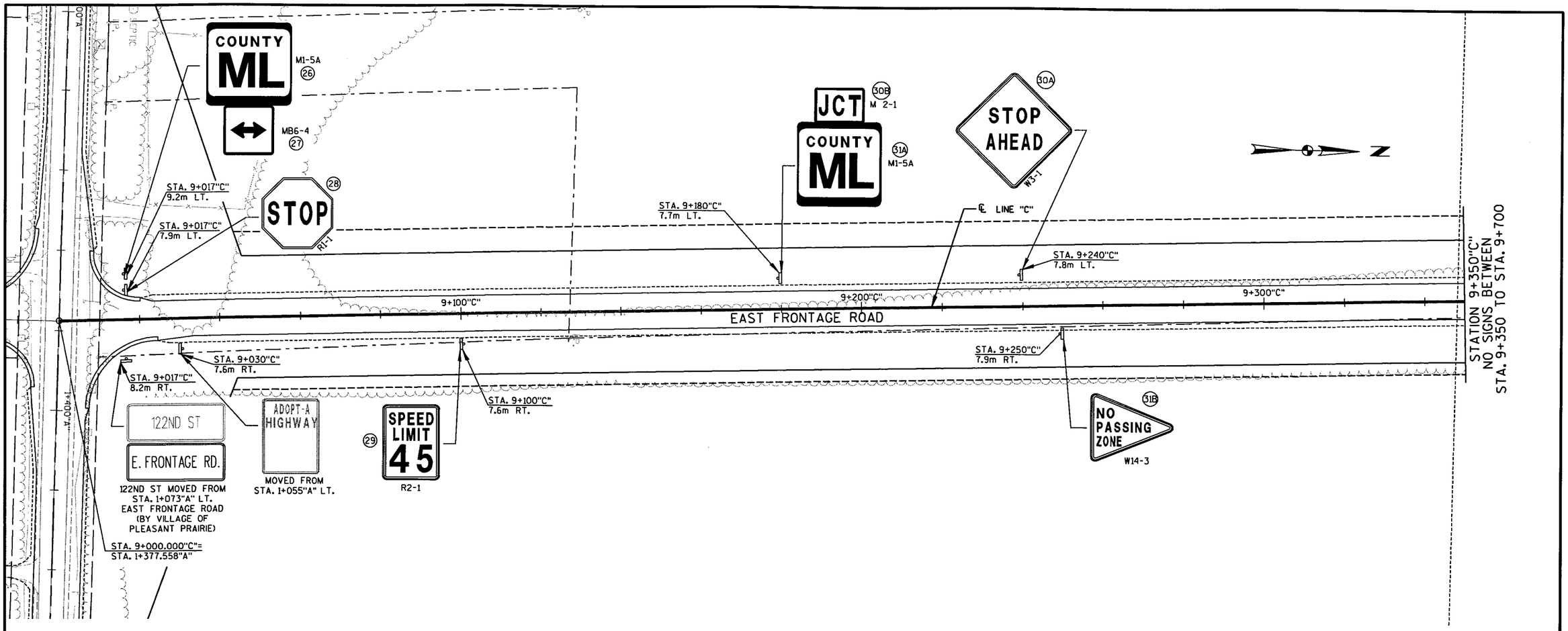
SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

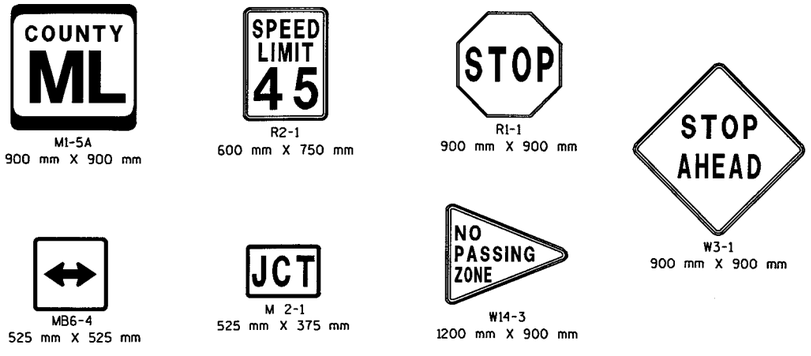
ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "B" (W. FRONTAGE ROAD)	SHEET NO: 88	M

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN03.DGN 12-11-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



SIGN LEGEND



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

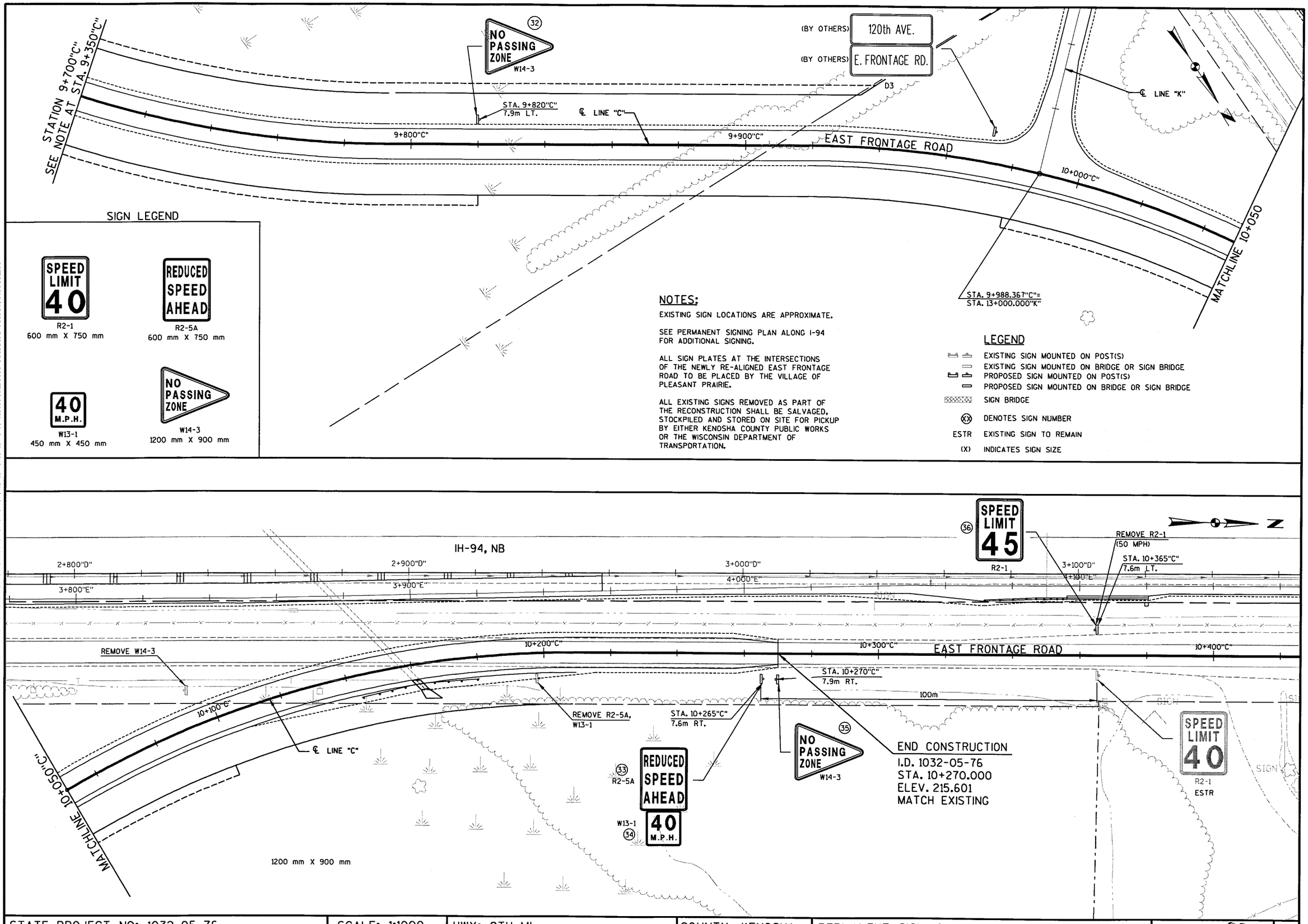
SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "C" (E. FRONTAGE ROAD)	SHEET NO: 89	M

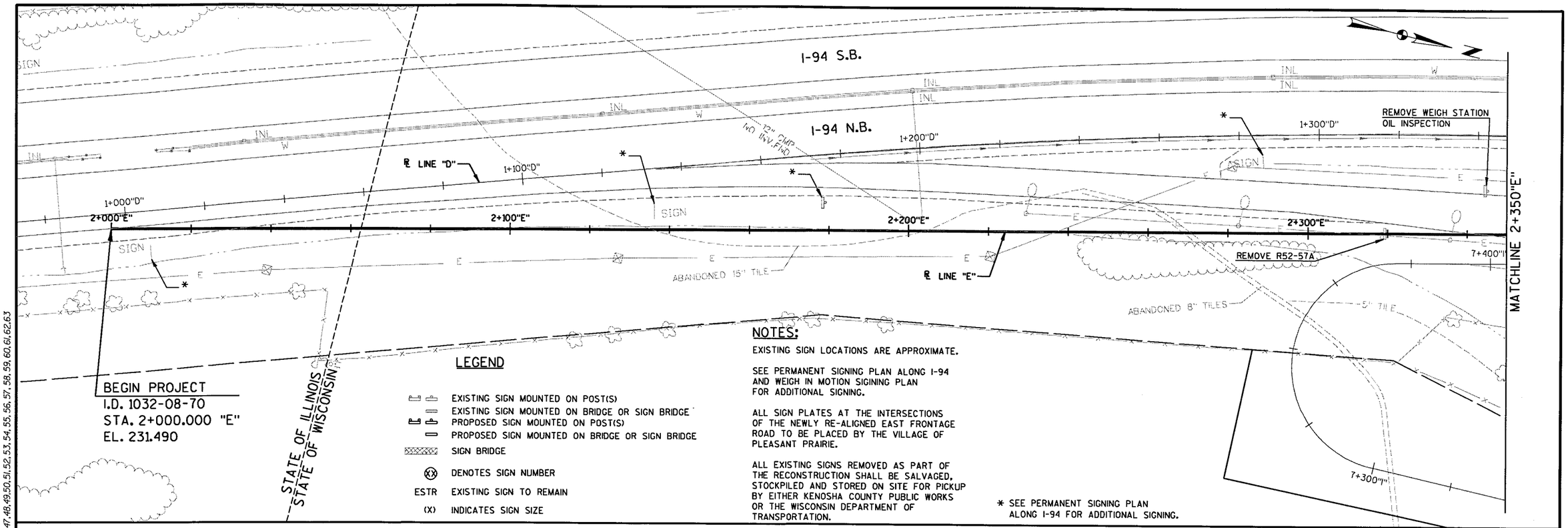
FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN22.DGN 12-11-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

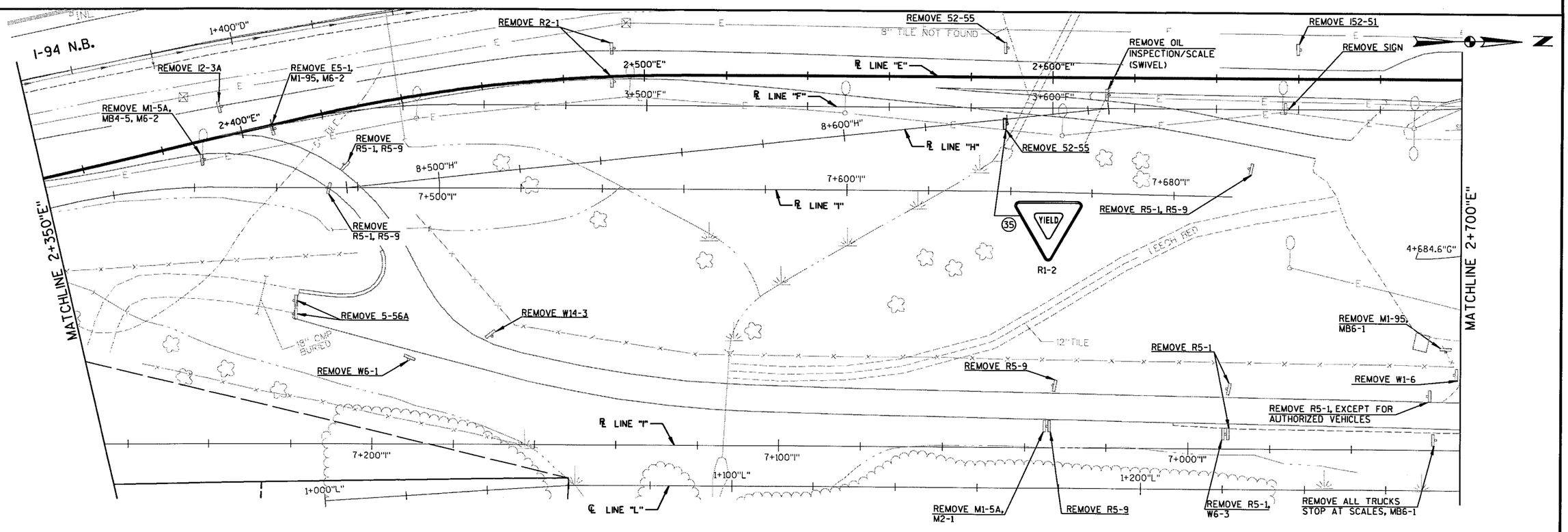


STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "C" (E. FRONTAGE ROAD)	SHEET NO: 90	M

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN24.DGN
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

12-11-01



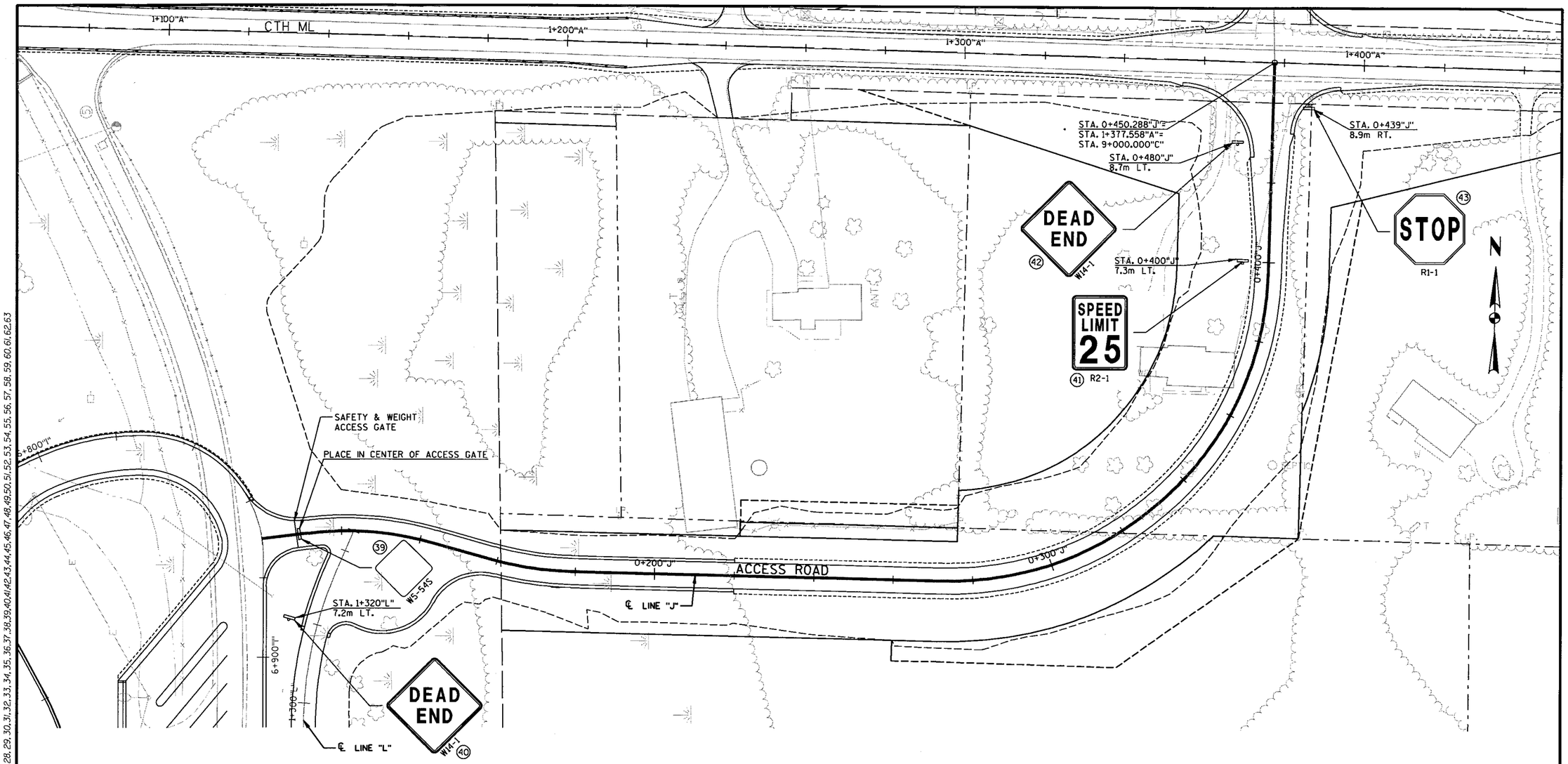


STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PERMANENT SIGNING - S & W FACILITY	SHEET NO: 91	M

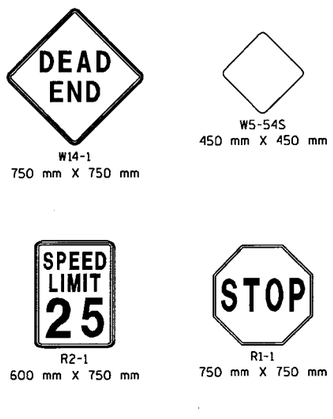
FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN05.DGN 12-11-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PERMANENT SIGNING - S & W FACILITY	SHEET NO: 92	M

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN06.DGN 12-11-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



SIGN LEGEND



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

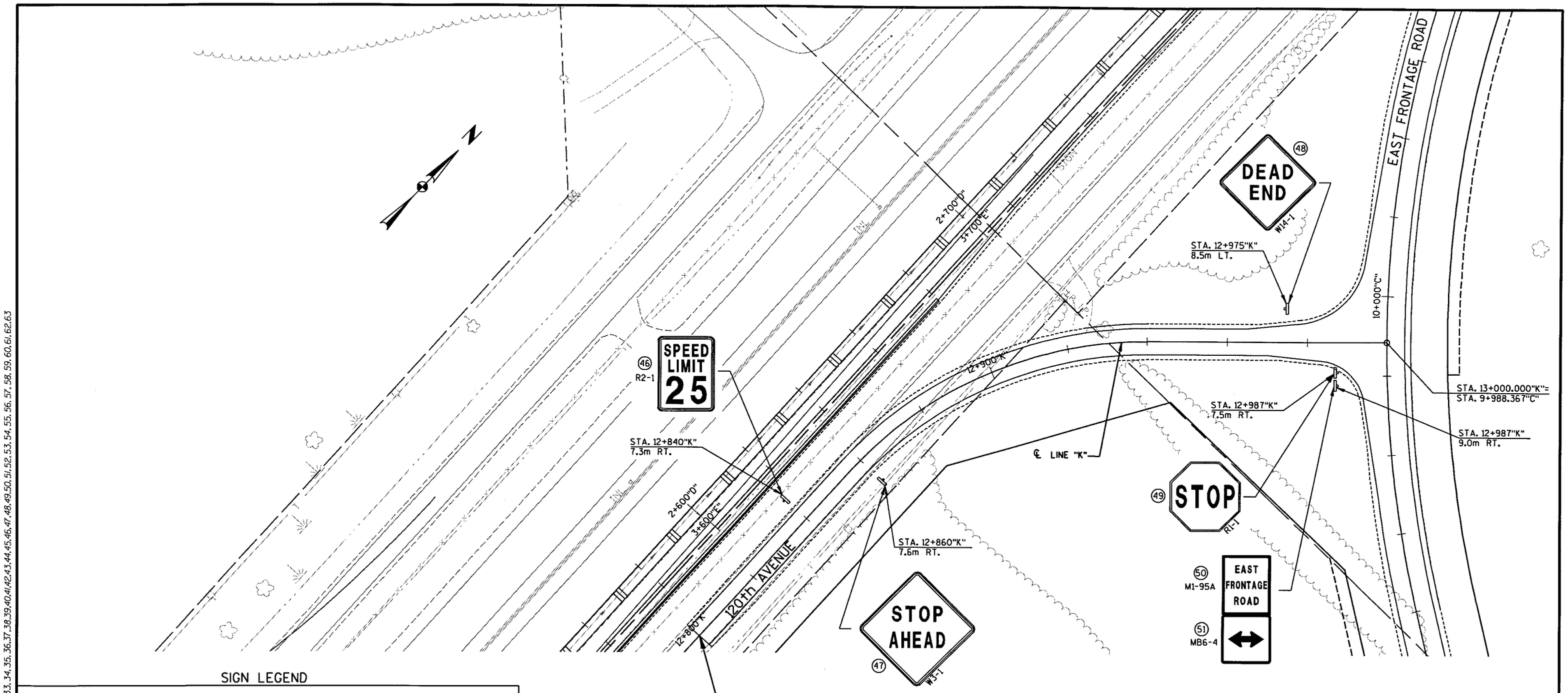
ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "J" (ACCESS ROAD)	SHEET NO: 93	M

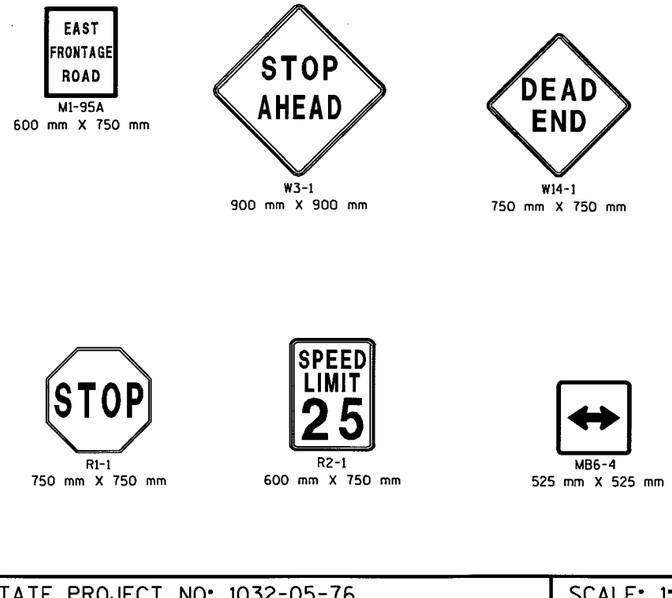
R5-7-02

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN21.DGN 12-11-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



BEGIN CONSTRUCTION
I.D. 1032-05-76
STA. 12+800
ELEV. 223.284
MATCH EXISTING

SIGN LEGEND



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

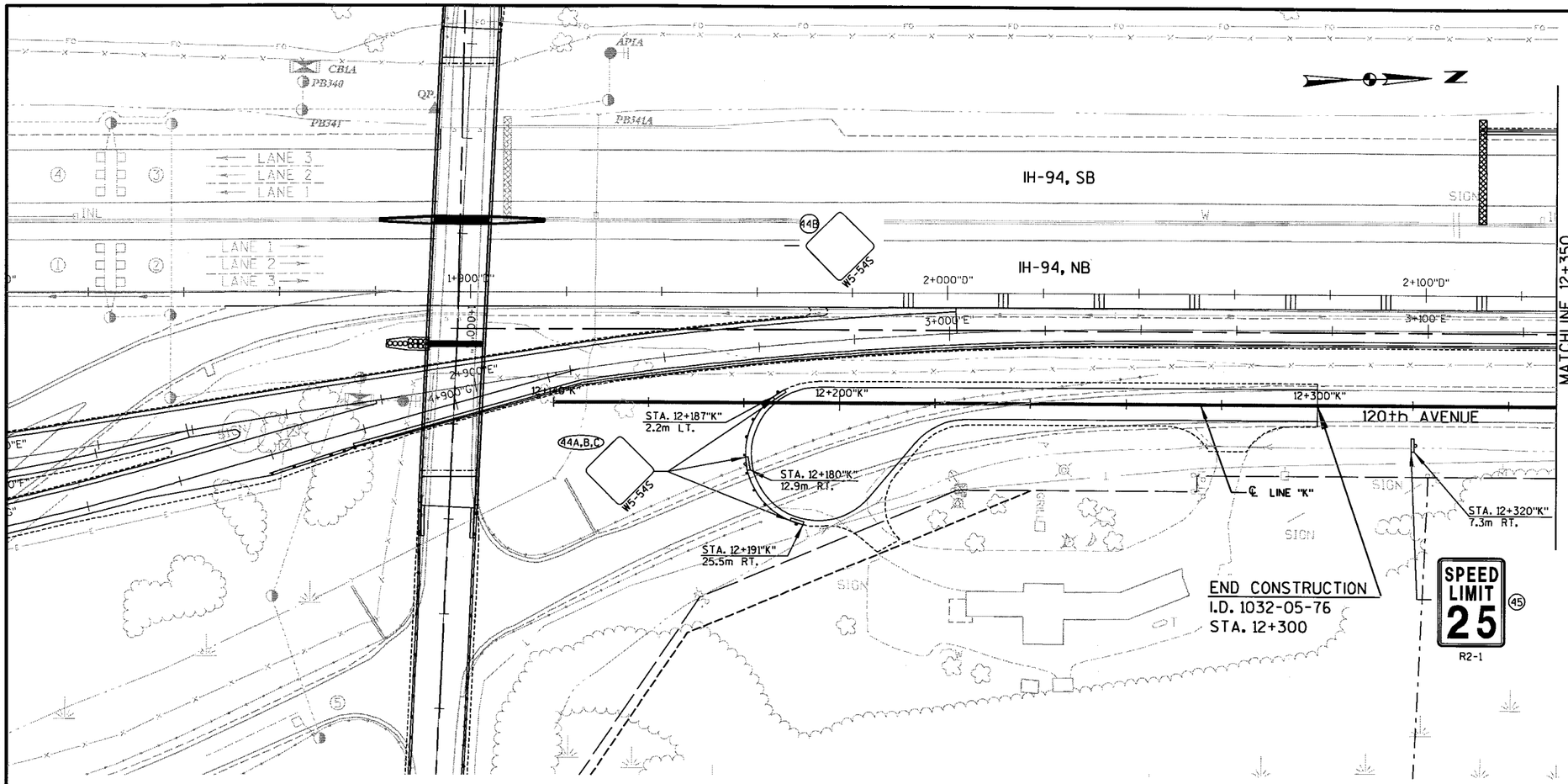
SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "K" (120TH AVENUE)	SHEET NO: 94	M

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN28.DGN 12-11-01
LEVELS ON • 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63



SIGN LEGEND

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- SIGN BRIDGE
- (XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

NOTES:

EXISTING SIGN LOCATIONS ARE APPROXIMATE.

SEE PERMANENT SIGNING PLAN ALONG I-94 FOR ADDITIONAL SIGNING.

ALL SIGN PLATES AT THE INTERSECTIONS OF THE NEWLY RE-ALIGNED EAST FRONTAGE ROAD TO BE PLACED BY THE VILLAGE OF PLEASANT PRAIRIE.

ALL EXISTING SIGNS REMOVED AS PART OF THE RECONSTRUCTION SHALL BE SALVAGED, STOCKPILED AND STORED ON SITE FOR PICKUP BY EITHER KENOSHA COUNTY PUBLIC WORKS OR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PERMANENT SIGNING - LINE "K" (120TH AVENUE)	SHEET NO: 95	M

R5-7-02

FILE NAME: PROJECTS/2940/PLANS/SIGN/2940SIGN29.DGN 12-11-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

N

WEIGH STATION 1 MILE

E5-56A
108" X 72"

INSTALL TYPE I SIGN, 9X6
ONTO EXISTING SIGN BRIDGE
(CENTER SIGN ON SIGN BRIDGE
VERTICALLY)

IH 94 EB

94 WEST 41 NORTH
MILWAUKEE
ESTR

FRONTAGE RD
WEIGH STATION
1 MILE
REMOVE 13X9 SIGN

RUSSELL RD
ESTR

3

IH 94 WB

OFF RAMP TO RUSSELL RD

SIGN BRIDGE - LL1(ILLINOIS)

SHEET 1 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 96	M

FILE NAME: H:\projects\d2_signing_ms\in94_nb_weighstation\PLNSHT01.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 07:30 WisDOT: MSHT20

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16, 20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

N

I 94 & U.S.H. 41

SIGN

SIGN

SIGN

I 94 & U.S.H. 41

SIGN

SIGN

4

MOVE TYPE I SIGN, 15X7 (BLACK/WHITE)
FROM STATION 2+040 TO THIS
LOCATION. PRIVIDE NEW STEEL POSTS

TRUCKS OVER
4 TONS STOP
AT WEIGH STATION

5

INSTALL TYPE II SIGN, 7 1/2 X3
ONTO 3 WOOD POSTS

**TRUCKS OVER
4 TONS STOP
AT WEIGH STA.**

R13-1
BLACK/WHITE

LEGEND

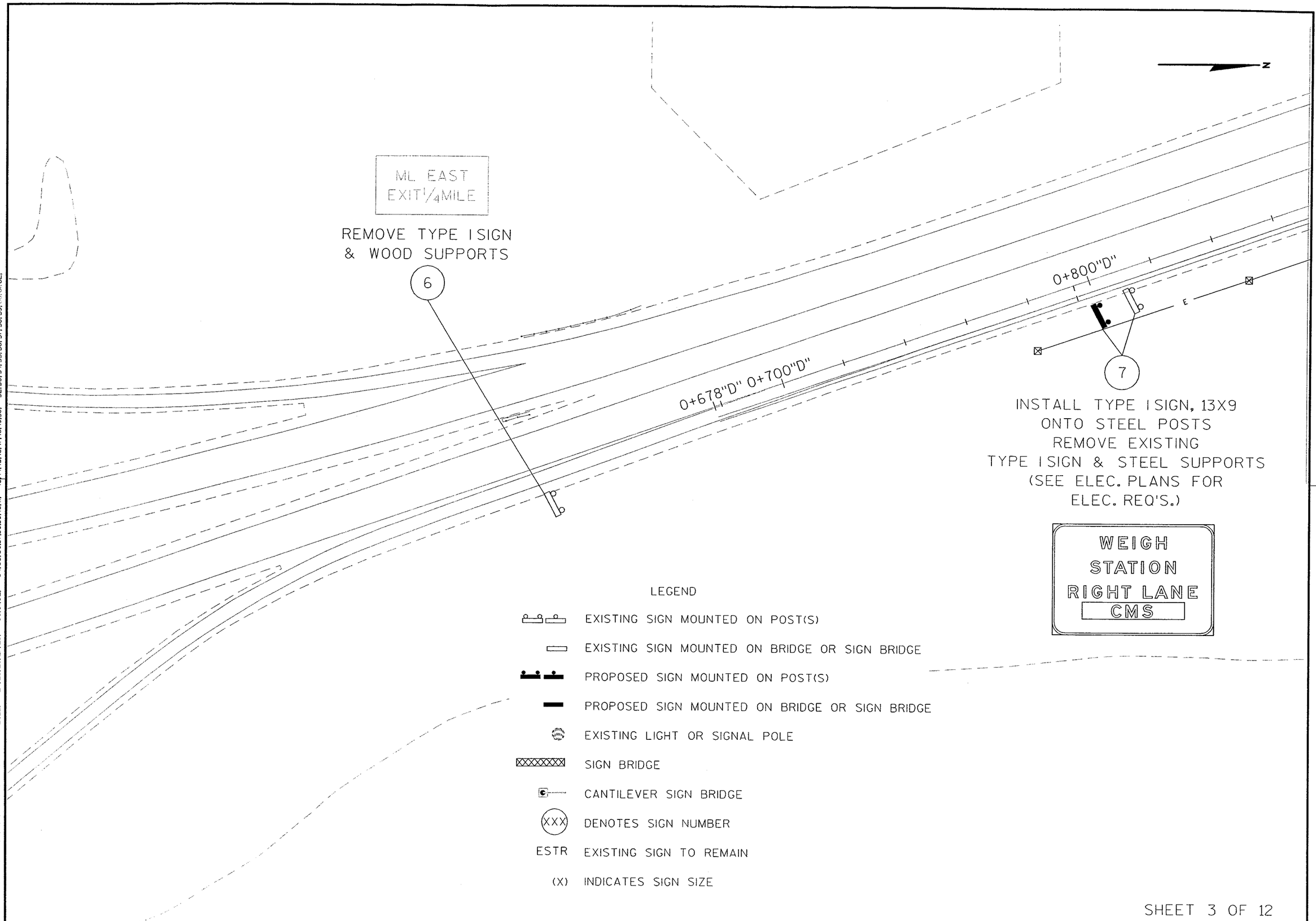
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

SHEET 2 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 97	M

FILE NAME: H:\projects\d2_signing_ms\in94_nb_weighstation\PLNSHT02.dgn ORIGINATOR:
REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 07:34
WisDOT: MSHT20

LEVELS ON • 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

SHEET 3 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 98	M

FILE NAME: H:\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT03.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 07:35

WisDOT: MSHT20

LEVELS ON • 1, 2, 5, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,

N

WELCOME TO WISCONSIN

WOOD SIGN MOVED TO THIS LOCATION (SEE OTHER PLAN SHEET FOR EXACT LOCATION)

SPEED LIMIT 65

R2-1

REMOVE TYPE II SIGN & WOOD SUPPORT

9

WEIGH STATION CMS

INSTALL TYPE I SIGN, 10X8 ONTO STEEL POSTS MOUNT IN GORE SEE ELEC. PLANS FOR ELEC. REQ'S

10

ML EAST

REMOVE TYPE II SIGN & WOOD SUPPORTS

11

TRUCKS OVER 4 TONS STOP AT WEIGH STATION

MOVE TYPE I SIGN PART OF SIGN #4

1+000"D"

1+100"D"

2+100"E"

1+200"D"

2+200"E"

E

12

REMOVE TYPE I SIGN & STEEL SUPPORTS (SEE ELEC. PLANS)

WEIGH STATION CLOSED

0+900"D"

8

MOVE TYPE II SIGN, PROVIDE NEW WOOD POST

RIGHT LANE FOR EXIT ONLY

R3-75(5)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 99	M

FILE NAME: H:\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT04.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 07:39 WisDOT: MSHT20

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

VILLAGE OF
PLEASANT PRAIRIE

MILE
3
4
9

MOVE TYPE II SIGN
ONTO NEW WOOD POSTS

14

15

WISCONSIN
TRAVEL INFO
TUNE RADIO TO
1610 AM

MOVE TYPE I SIGN, 12X6.5
ONTO NEW STEEL POSTS
REMOVE EXISTING STEEL SUPPORTS
IF GRADING IMPACTS SIGN

16

W4-1R

MOVE TYPE II SIGN
TO STATION 1+840
PART OF SIGN #20

SLOWER TRAFFIC KEEP RIGHT
R4-3(5)

INSTALL TYPE II SIGN
ONTO WOOD POST

17

1+600"D"

1+500"D"

1+400"D"

300"D"

2+500"E"

2+600"E"

2+400"E"

8+600"H"

8+665"H"

8+500"H"

8+477"H"

7+600"I"

7+680"I"

7+400"I"

7+500"I"

2+300"E"

CONDUIT

EMH

SEPTIC

CELLULAR BLDG

13

INSTALL TYPE II SIGN
& WOOD POST

SPEED LIMIT 65
R2-1(5)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

SHEET 5 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 100	M

FILE NAME: H:\projects\d2_signing_ms\in94_nb_weighstation\PLNSHT05.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 08:05

WisDOT: MSHT20

LEVELS ON • 2, 7,8,9,10,11,12,13,14, 16, 21,22, 24,25,26,27,28, 30,31,32, 34,35, 39,40,41, 43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,

WISCONSIN VETERANS MEMORIAL HIGHWAY

MOVE TYPE II SIGN
PROVIDE 2 WOOD POSTS

18

REMOVE EXISTING SIGN BRIDGE S-30-5

EXIT 1 B

41 SOUTH
Waukegan
LEFT 1½ MILES

EXIT 1 A

Russell Road
1 MILE

2
2A
1
1A

INSTALL TYPE I SIGNS, 16X10, 10X2, 16X6, 10X2 ONTO SIGN BRIDGE. REMOVE EXISTING TYPE I SIGNS FROM S-30-5

NEW SIGN BRIDGE S-30-13

1+800"D"
1+900"D"
2+000"D"
2+100"D"
3+000"E"
3+100"E"
12+200"K"
12+300"K"
4+900"G"
12+140"K"
3+840"E"
3+800"F"
4+800"C"
6+725"I"
6+800"I"
4+700"G"
6+900"I"

21

REMOVE TYPE II SIGN & SUPPORT

38

REMOVE EXISTING MEDIAN BUTTERFLY SIGN BRIDGE S-30-200

RUSSELL RD	1¼
HWY 41	1¾

(EB)

REMOVE TYPE I SIGN FROM S-30-200

22

19

REMOVE TYPE II SIGN & SUPPORT

NO TURNS
R3-3

SLOWER TRAFFIC KEEP RIGHT
R4-3

20

MOVE TYPE II SIGN TO HERE. PROVIDE NEW WOOD POST

W4-1

MOVE TYPE II SIGN ONTO NEW WOOD POSTS

FINES DOUBLE IN WORK ZONES

(WB)

HWY 165	1
HWY C	2¼
HWY 50	3¼

37

MOVE EXISTING TYPE I SIGN 15X7.5 FROM S-30-200 TO S-30-13

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

SHEET 6 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 101 M

FILE NAME: s:\Files\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT06.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 27-DEC-2001 07:30 WisDOT: MSHT20

LEVELS ON • 2, 5, 7,8, 9, 10, 11, 12, 13, 14, 16, 17, 21,22, 24,25,26,27,28, 30,31,32, 34, 36,37,38,39,40,41, 43,44,45,46,47,48, 52,53,54,55,56,57,58,59,60,61,62,

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

N

J4-1
EAST
INTERSTATE 94
SOUTH
41

TYPE I SIGN TO BE MOVED
BY DERSE CO.
CONTACT DERSE AT
1-800/345-5772

GAS-EXIT	1A
FOOD-EXIST	1A

SPEED LIMIT 65
R2-1

39
MOVE, PROVIDE
NEW WOOD POST

MOVE, PROVIDE
NEW WOOD POST
40

1+300"B"
1+320"B"

SPEED LIMIT 65
R2-1

MOVE TYPE II SIGN
PROVIDE NEW
WOOD POST
23

2+200"D"
3+200"E"
12+400"K"

2+300"D"
3+300"E"
12+500"K"

2+400"D"
3+400"E"
12+600"K"

2+500"D"
3+500"E"
12+700"K"

24
MOVE TYPE II SIGN
PROVIDE NEW
WOOD POSTS

WEST NORTH
INTERSTATE 94 41
J4-1

FOOD EXIT 347
SIS
TYPE I SIGN TO BE MOVED
BY DERSE CO.
CONTACT DERSE AT
1-800/345-5772

25
MOVE TYPE II SIGN
PROVIDE NEW
WOOD POST

ADOPT
-A-
HIGHWAY

26
MOVE TYPE II SIGN
PROVIDE NEW
WOOD POST

WISCONSIN
ROAD
EMERGENCY
CELLULAR
911

SHEET 7 OF 12

LEVELS ON • 2, 5, 7,8, 9,10, 11,12,13,14, 16,17, 21,22, 24,25,26,27,28, 30,31,32, 34,35,36,37,38,39,40,41, 43,44,45,46,47,48,49, 52,53,54,55,56,57,58,59,60,61,62,

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 102 M

FILE NAME: s:\Files\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT07.dgnORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 27-DEC-2001 07:35 WisDOT: MSHT20

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

2+600"D"
3+600"E"
2+700"D"
3+700"E"
2+800"D"
3+800"E"
2+900"D"
3+900"E"
12+800"K"
12+900"K"
13+000"K"

27

REMOVE TYPE I
SIGN & STEEL SUPPORTS

EXIT 347
0.3E
LAKEVIEW PKWY
¾ MI

28

MOVE TYPE II
SIGN PROVIDE
NEW WOOD POST

EMERGENCY
STOPPING
ONLY
R8-7

GAS - EXIT 347
LODGING - EXIT 347
SIS

TYPE I SIGN TO BE
MOVED BY DERSE CO.
CONTACT DERSE AT
1-800/345-5772

SHEET 8 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 103	M

FILE NAME: H:\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT08.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 08:12 WisDOT: MSHT20

LEVELS ON • 1, 2, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,

EXIT 347

165 Q

Lakeview Pkwy

1/2 MILE

EXIT ⇩ ONLY

INSTALL TYPE I SIGNS, 19X12.5, 11X2
ONTO NEW SIGN BRIDGE

29 29A

REST AREA
WISCONSIN
TRAVEL INFO
EXIT 347
VENDING MACHINES

MOVE TYPE I SIGNS
TO STATION 4-460
PART OF SIGNS #31 + #32

N

CORRUGATIONS END
3+930

END OF TAPER

3+000"D"

3+100"D"

3+200"D"

3+300"D"

4+000"E"

4+100"E"

4+200"E"

4+300"E"

NEW CANTILEVER SIGN BRIDGE
S-30-14, STATION 4+120

30

MOVE TYPE I SIGN, 17X5
ONTO NEW STEEL POSTS
REMOVE EXISTING STEEL POSTS

PLEASANT PRAIRIE
EXIT 347

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

SHEET 9 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 104	M

FILE NAME: H:\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT09.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 08:13

WisDOT: MSHT20

LEVELS ON • 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,

LEVELS ON · 21,22, 24,25,26,27,28, 30,31,32, 34,35,36,37,38,39,40,41, 43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,

N

3+400"D" 4+400"E"

3+500"D" 4+500"E"

3+600"D" 4+600"E"

3+700"D" 4+700"E"

3+724"D" 4+724"E"

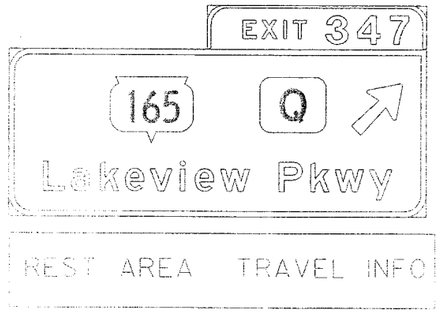
31 32

MOVE TYPE I SIGNS, 14X10, 14X1.5
ONTO NEW STEEL POSTS
REMOVE EXISTING SUPPORTS

REST AREA
WISCONSIN TRAVEL INFO EXIT 347
VENDING MACHINES

34 35

REMOVE TYPE I SIGNS
& SUPPORTS
TURN OVER "REST AREA"
PLAQUE TO SIGN SHOP



33

MOVE TYPE I SIGN, 13X11
ONTO STEEL POSTS
REMOVE EXISTING SUPPORTS

CRASH INVESTIGATION SITE EXIT 347

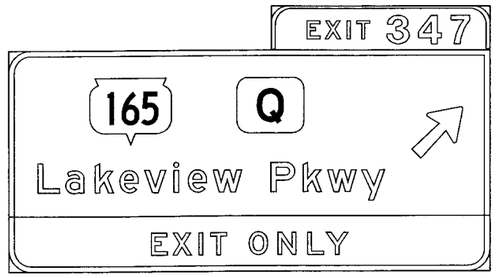
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

SHEET 10 OF 12

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 105	M

FILE NAME: H:\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT10.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 08:15 WisDOT: MSHT20



INSTALL TYPE 1 SIGNS, 22X10, 11X2
ONTO NEW SIGN BRIDGE

36 36A

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

N

165 OFF RAMP NB

NEW CANTILEVER SIGN BRIDGE
S-30-15, AT STATION 4+807.5"E"

SHEET 11 OF 12

LEVELS ON • 1,2, 5, 7,8, 9,10,11,12,13,14, 16,17, 21,22, 24,25,26,27,28, 30,31,32, 34,35,36,37,38,39,40,41, 43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 106	M

FILE NAME: s:\Filec\projects\d2_signing_ms\ih94_nb_weighstation\PLNSHT11.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 27-DEC-2001 07:52 WisDOT: MSHT20

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- (X) INDICATES SIGN SIZE

N

S.T.H. 165

S.T.H. 165

LANE 3
LANE 2
LANE 1

LANE 1
LANE 2
LANE 3

V246
622.79

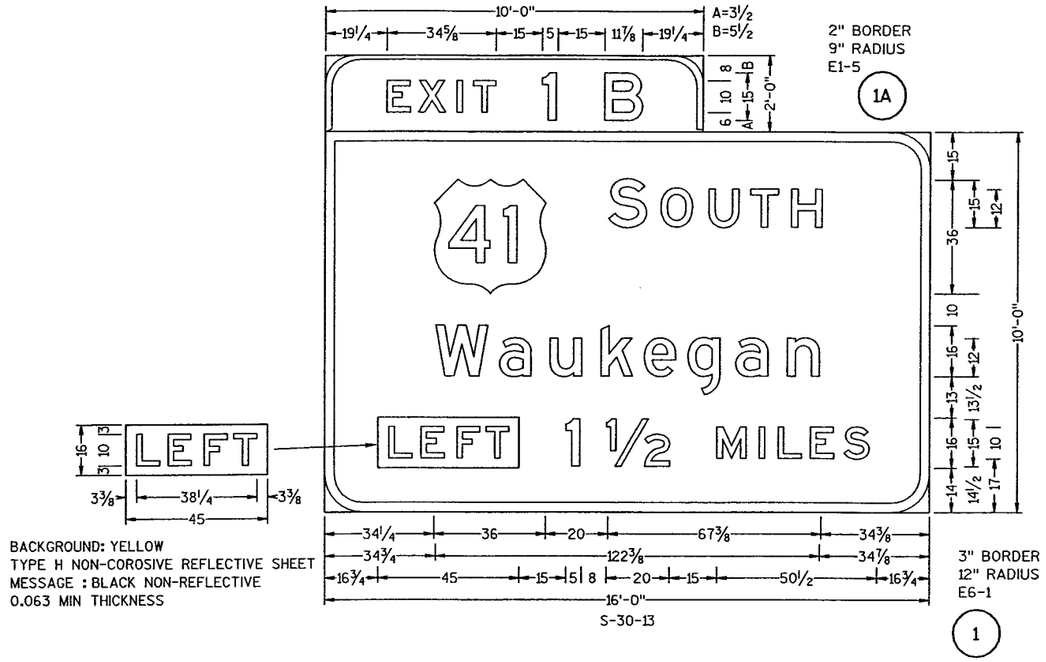
MH

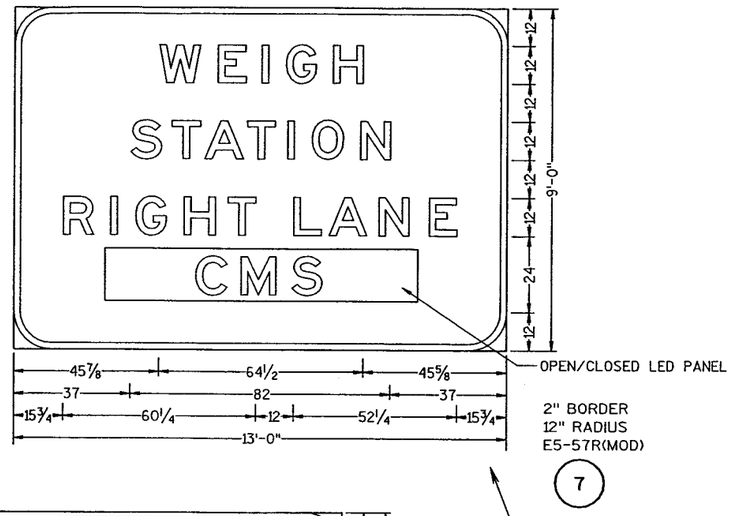
SHEET 12 OF 12

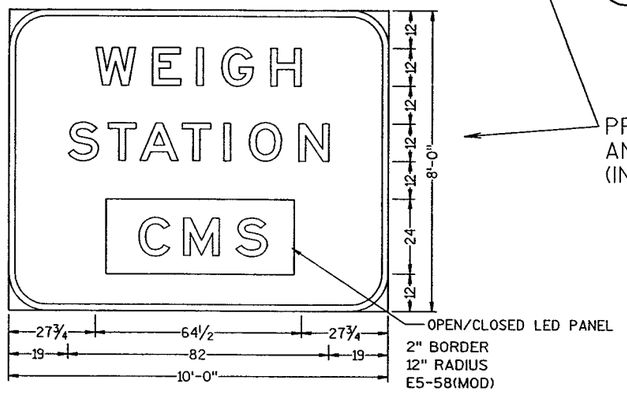
LEVELS ON • 1, 2, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,

STATE PROJECT NO: 1032-08-70	HWY: IH 94 - WEIGH STATION	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET NO: 107	M

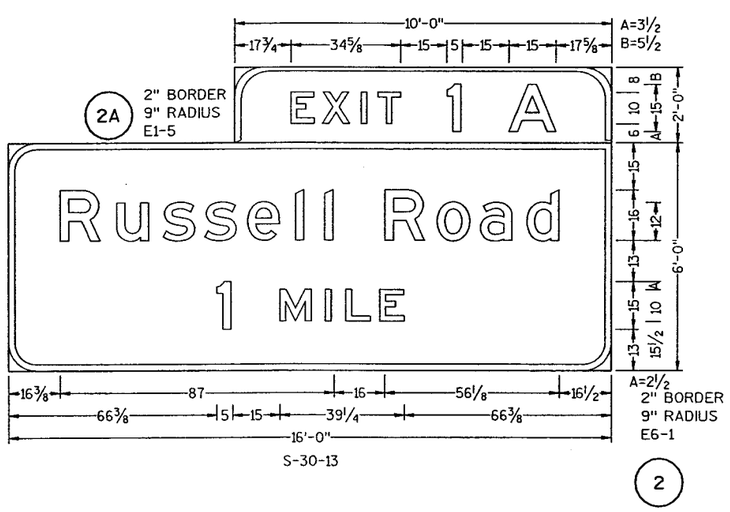
FILE NAME: H:\projects\d2_signing_ms\in94_nb_weighstation\PLNSHT12.dgn ORIGINATOR: REV. DATE: PLOT SCALE : 1045.095004:1.000000 PLOT DATE: 29-AUG-2001 11:10 WisDOT: MSHT20







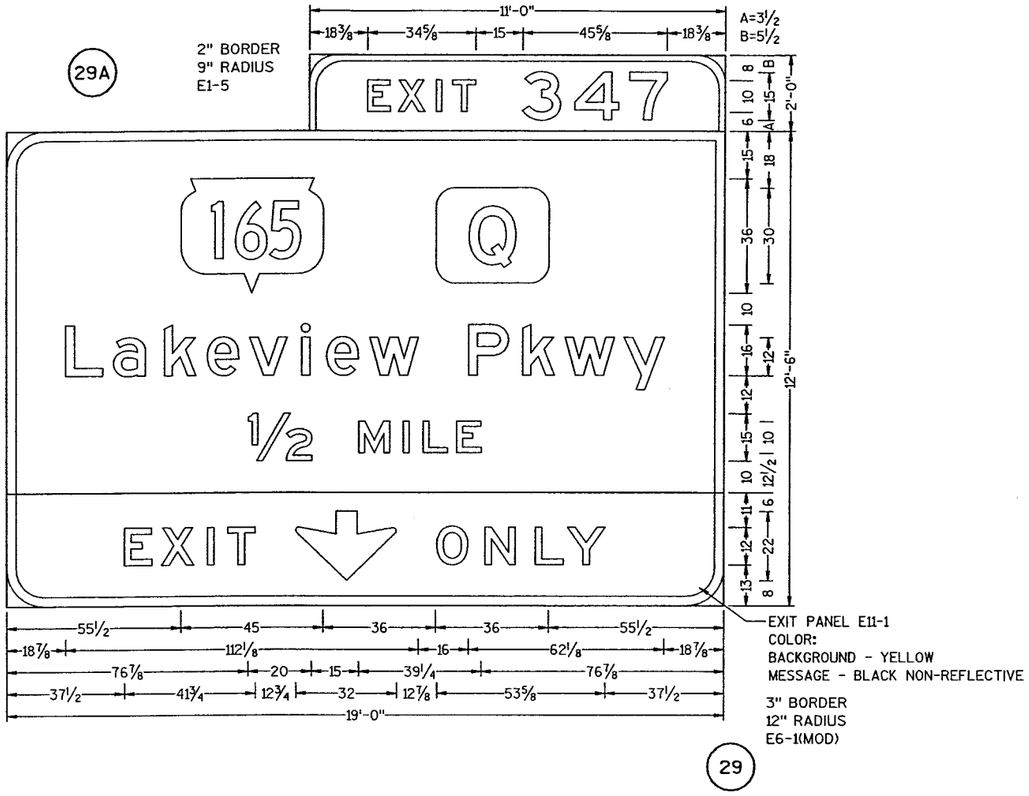
PROVIDE SPACE FOR LED PANEL AND MOUNTING BRACKET (INCIDENTAL TO SIGN)



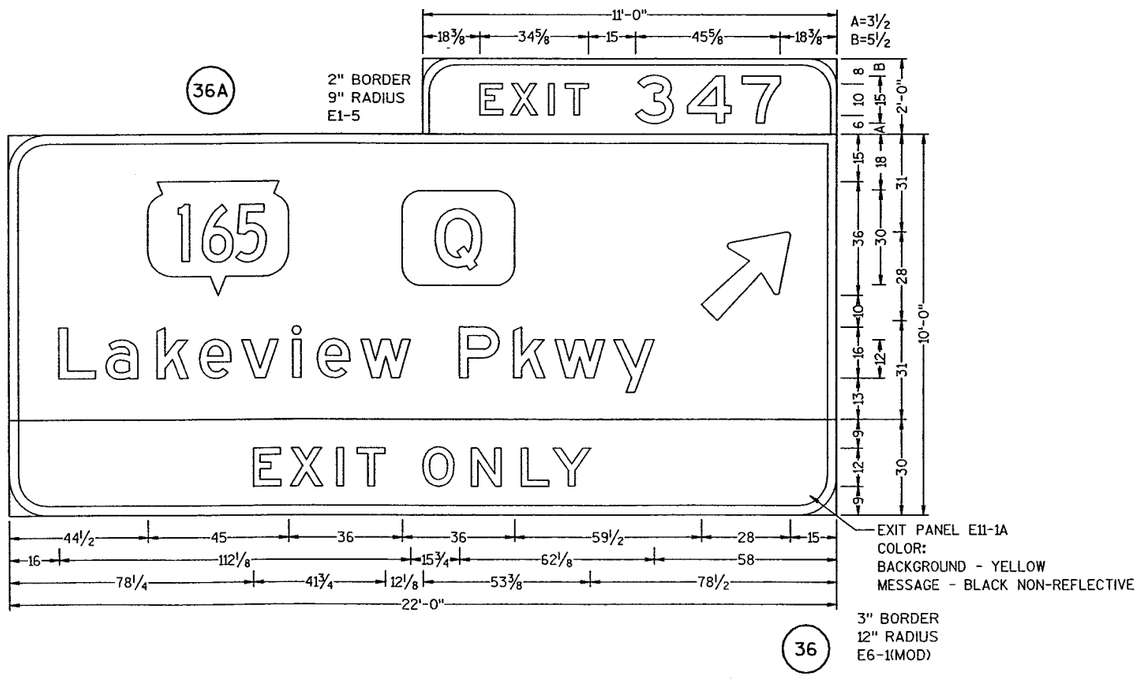
GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIRMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE I".
3. UNLESS OTHERWISE NOTED, TYPE I SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL". TYPE II SIGNS SHALL BE ENGINEER GRADE SHEETING.
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E, MODIFIED". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E, MODIFIED".
6. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
7. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
8. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
9. DO NOT SCALE.

STATE PROJECT NO: 1032-08-70	SCALE: 1:24	HWY: IH 94	COUNTY: KENOSHA	SIGNING DETAIL - TYPE 1 SIGNS	SHEET NO: 108	M



29



36

GENERAL NOTES:

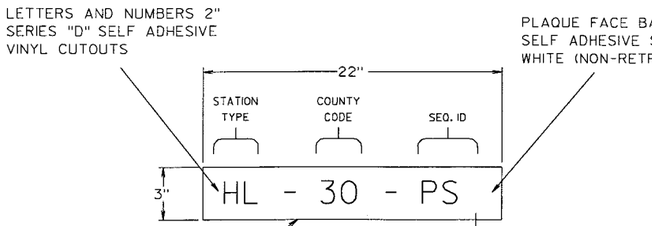
1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIRMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE I".
3. UNLESS OTHERWISE NOTED, TYPE I SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL". TYPE II SIGNS SHALL BE ENGINEER GRADE SHEETING.
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E, MODIFIED". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E, MODIFIED".
6. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
7. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
8. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
9. DO NOT SCALE.

FILE NAME: H:\PROJECTS\02_SIGNING_MS\IH94_NB_WEIGHSTATION\SGNDTLS.DGN
ORIGINATOR: BE TRAFFIC OPERATIONS UNIT

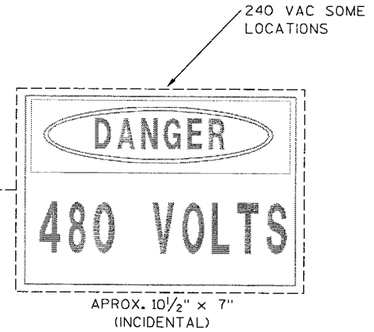
STATE PROJECT NO: 1032-08-70	SCALE: 1:24	HWY: IH 94	COUNTY: KENOSHA	SIGNING DETAIL - TYPE 1 SIGNS	SHEET NO: 109	M

WISDOT: MSHT20

PLOT NAME: PROJECTS/2940/PLANS/LIGHT/2940LT01.DGN
REV. DATE: 08-20-01

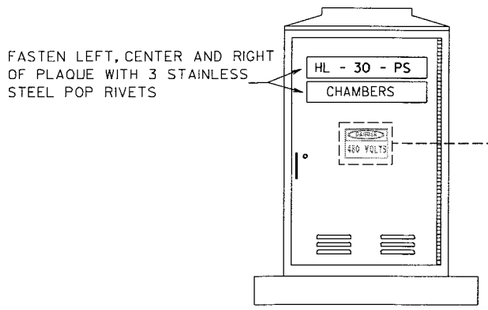


DISTRIBUTION CENTER
IDENTIFICATION PLAQUE



CHAMBERS

MNEMONIC
(SEE MISC. QTYS.)
(NO. OF CHARACTERS VARIES
THIRD PLAQUE MAY BE
NECESSARY)



NOTES:
1. TWO OR MORE PLAQUES PER CABINET REQUIRED

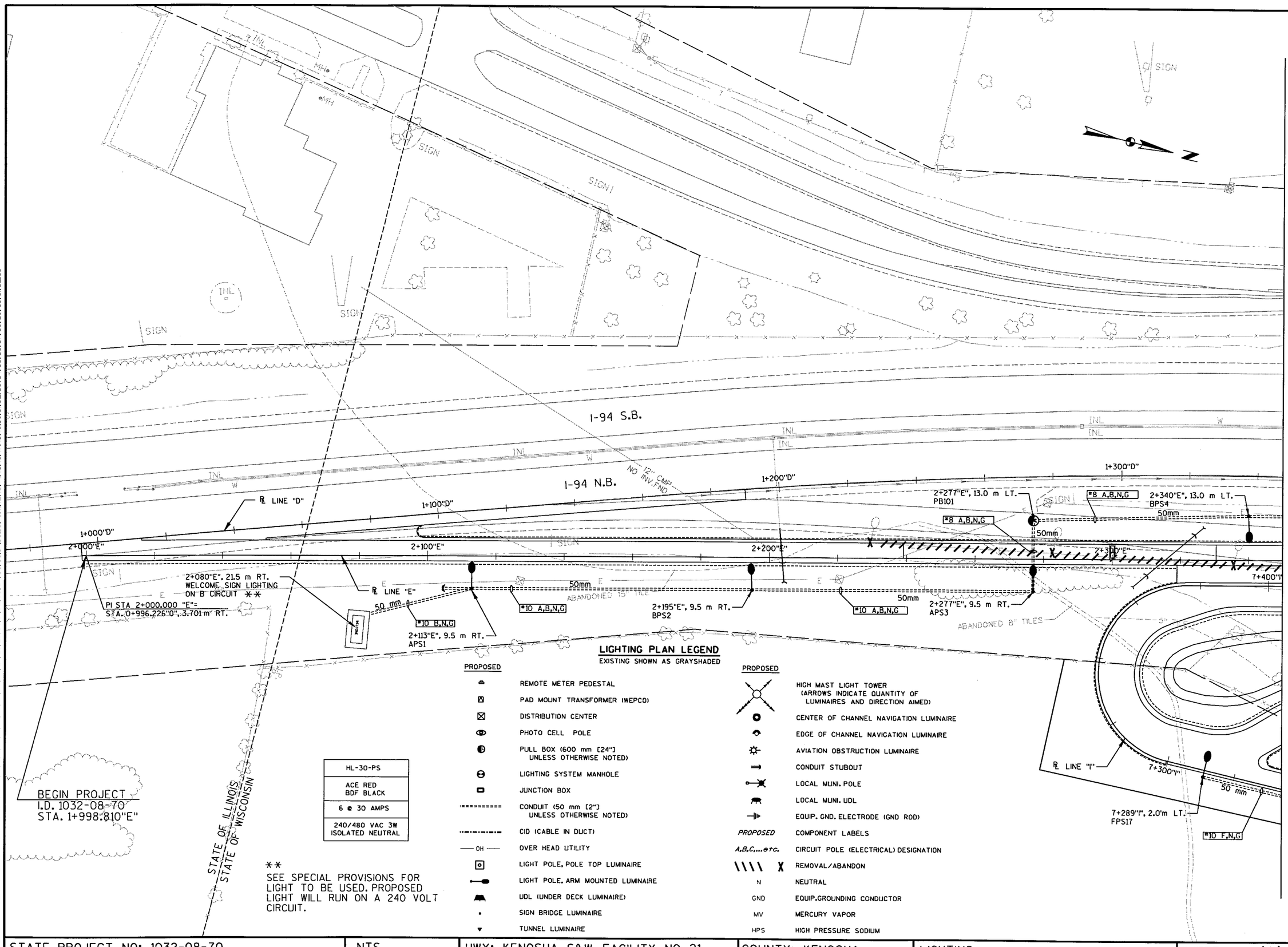
DISTRIBUTION CENTER IDENTIFICATION PLAQUE
REQUIREMENTS AND PLACEMENTS

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.

REMOTE METER INSTALLATIONS SHALL CONFORM TO UTILITY REQUIREMENTS.

ALL CONDUIT WILL BE PLACED IN TRENCHES AS OUTLINED IN SECTION 652 OF THE STANDARD SPECIFICATIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR BORING.



HL-30-PS
ACE RED BDF BLACK
6 @ 30 AMPS
240/480 VAC 3W ISOLATED NEUTRAL

** SEE SPECIAL PROVISIONS FOR LIGHT TO BE USED. PROPOSED LIGHT WILL RUN ON A 240 VOLT CIRCUIT.

LIGHTING PLAN LEGEND

EXISTING SHOWN AS GRAYSHADED

PROPOSED		PROPOSED	
	REMOTE METER PEDESTAL		HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
	PAD MOUNT TRANSFORMER (WEPCO)		CENTER OF CHANNEL NAVIGATION LUMINAIRE
	DISTRIBUTION CENTER		EDGE OF CHANNEL NAVIGATION LUMINAIRE
	PHOTO CELL POLE		AVIATION OBSTRUCTION LUMINAIRE
	PULL BOX (600 mm [24"] UNLESS OTHERWISE NOTED)		CONDUIT STUBOUT
	LIGHTING SYSTEM MANHOLE		LOCAL MUNI. POLE
	JUNCTION BOX		LOCAL MUNI. UDL
	CONDUIT (50 mm [2"] UNLESS OTHERWISE NOTED)		EQUIP. GND. ELECTRODE (GND ROD)
	CID (CABLE IN DUCT)	*PROPOSED*	COMPONENT LABELS
— OH —	OVER HEAD UTILITY	*A,B,C,...etc.*	CIRCUIT POLE (ELECTRICAL) DESIGNATION
	LIGHT POLE, POLE TOP LUMINAIRE	\\\\ X	REMOVAL/ABANDON
	LIGHT POLE, ARM MOUNTED LUMINAIRE	N	NEUTRAL
	UDL (UNDER DECK LUMINAIRE)	GND	EQUIP.GROUNDING CONDUCTOR
	SIGN BRIDGE LUMINAIRE	MV	MERCURY VAPOR
	TUNNEL LUMINAIRE	HPS	HIGH PRESSURE SODIUM

STATE PROJECT NO: 1032-08-70	NTS	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	LIGHTING	SHEET NO: 111	M

FILE NAME: PROJECTS/2940/PLANS/LIGHT/2940LT01.DGN 09-17-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23, 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

LIGHTING PLAN LEGEND

EXISTING SHOWN AS GRAYSHADED

PROPOSED		PROPOSED	
	REMOTE METER PEDESTAL		HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
	PAD MOUNT TRANSFORMER (WEPCO)		CENTER OF CHANNEL NAVIGATION LUMINAIRE
	DISTRIBUTION CENTER		EDGE OF CHANNEL NAVIGATION LUMINAIRE
	PHOTO CELL POLE		AVIATION OBSTRUCTION LUMINAIRE
	PULL BOX (600 mm [24"] UNLESS OTHERWISE NOTED)		CONDUIT STUBOUT
	LIGHTING SYSTEM MANHOLE		LOCAL MUNI. POLE
	JUNCTION BOX		LOCAL MUNI. UDL
	CONDUIT (50 mm [2"] UNLESS OTHERWISE NOTED)		EQUIP. GND. ELECTRODE (GND ROD)
	CID (CABLE IN DUCT)	*PROPOSED*	COMPONENT LABELS
— OH —	OVER HEAD UTILITY	*A,B,C,...etc.*	CIRCUIT POLE (ELECTRICAL) DESIGNATION
	LIGHT POLE, POLE TOP LUMINAIRE		REMOVAL/ABANDON
	LIGHT POLE, ARM MOUNTED LUMINAIRE	N	NEUTRAL
	UDL (UNDER DECK LUMINAIRE)	GND	EQUIP.GROUNDING CONDUCTOR
	SIGN BRIDGE LUMINAIRE	MV	MERCURY VAPOR
	TUNNEL LUMINAIRE	HPS	HIGH PRESSURE SODIUM

HL-30-PS
ACE RED BDF BLACK
6 @ 30 AMPS
240/480 VAC 3W ISOLATED NEUTRAL

* CONDUIT IS PART OF THE WEIGH IN MOTION (WIM) SYSTEM WHICH WILL OPERATE THE OPEN & CLOSED SIGN AT STATION 0+910"B", RT. TO BE PAID FOR AS PART OF WIM SYSTEM.
320 METERS OF 50 mm CONDUIT

** CONDUIT IS PART OF THE GARY/CHICAGO/MILWAUKEE CORRIDOR FIBER OPTIC SYSTEM FOR TRAFFIC OPERATIONS AND WILL BE DONE AS PART OF THIS PROJECT.

I-94 S.B.

I-94 N.B.

℄ LINE "D"

℄ LINE "E"

℄ LINE "F"

℄ LINE "H"

℄ LINE "I"

MATCHLINE 2+350 "E"

MATCHLINE 2+700 "E"

0+680"B"

0+700"B"

1+400"D"

1+500"D"

1+600"D"

1+700"D"

2+400"E"

2+415"E", 13.0m LT. APS5

2+490"E", 13.0m LT. BPS6

2+500"E"

2+565"E", 13.0m LT. APS7

2+570"E", 13.0m LT. PB102

2+600"E"

2+640"E", 30.0m LT. BPS8

2+644"E", 30.0m LT. PB 105

2+700"E"

3+500"F"

3+600"F"

8+500"H"

8+600"H"

7+500"I"

7+508"I", 8.0m RT. CPS11

7+523"I", 23.0m RT. DPS12

7+572"I", 8.0m RT. CPS14

7+589"I", 23.0m RT. DPS13

7+600"I"

7+610"I", 23.0m RT. INSTALL CONCRETE CONTROL CABINET BASE, TYPE 9 AND STATE FURNISHED DISTRIBUTION CENTER. DOOR TO FACE NORTH.

7+620"I", 23.0m RT. PB103

7+656"I", 23.0m RT. CPS15 DPS15

7+680"I"

7+100"I"

7+200"I"

7+210"I", 2.0m LT. FPS18

7+235"I", 23.0m RT. EPS19

7+135"I", 2.0m LT. EPS20

7+058"I", 2.0m LT. FPS21

6+984"I", 2.0m LT. EPS22

1+000"L"

1+100"L"

1+200"L"

4+584.6"C"

4+688"C", 9.0m RT. CPS16

*10 C,N,G

*8 A,B,N,G

*8 C,D,N,G

*10 C,D,N,G

*10 E,N,G

*8 E,F,N,G

*4 E,F,N,G

*6 A,B,N,G

*10 C,D,N (TO POLE *15)
*6 A,B,N (TO POLE *7)
*4 E,F,N,G (TO POLE *21)

50mm

75mm

50 mm CONDUIT

50 mm CONDUIT **

CONDUIT ① 1-2C+GND, #8 AWG(GATE POWER)
CONDUIT ② 1-6PR, #20 AWG(GATE SIGNAL)

TO NEW SERVICE POLES(BY WEPCO)

STATIC SCALE BLDG

TRANSFORMER(BY WEPCO)

INSPECTION BLDG

CELLULAR BLDG.

TECH BLD

WELL

DSEPG

SSEPG

OSEPG

SIGN

CONDUIT

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	LIGHTING	SHEET NO: 112	M

FILE NAME: PROJECTS/2940/PLANS/LIGHT/2940LT02.DGN 09-17-01
LEVELS ON • 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

FILE NAME: PROJECTS/2940/PLANS/LIGHT/2940LT03.DGN 09-17-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

*50 mm CONDUIT

*CONDUIT IS PART OF THE WEIGH IN MOTION (WIM) SYSTEM WHICH WILL OPERATE THE OPEN & CLOSED SIGN AT STATION 0+910"B", RT. TO BE PAID FOR AS PART OF WIM SYSTEM.
320 METERS OF 50 mm CONDUIT

TAPB1 APIA CBL PB340 QP PB341 PB341A PB342

I-94 S.B.
I-94 N.B.
LANE 3
LANE 2
LANE 1
INL

MATCH INTO EXISTING CONDUIT. USE ONE OF THE TWO SPARES UNDER I-94.

℄ LINE "D"
℄ LINE "E"
℄ LINE "G"
℄ LINE "I"
℄ LINE "K"

1+800"D"
1+900"D"
2+000"D"
3+000"E"
2+900"E"
2+800"E"
2+793"E", 13.0m LT. BPS10
2+717"E", 13.0m LT. APS9
6+725"I"
3+800"F"
4+800"G"
4+865"G", 10.0m RT. FPS26
4+784"G", 7.0m RT. PB104 PULL BOX SPLICE ALLOWED IN CIRCUIT E/N
4+728"G", 4.0m RT. EPS25
4+700"G"
6+910"I", 2.0m LT. FPS23
6+900"I"
6+860"I", 4.0m LT. EPS24
6+800"I"
1+300"L"
12+146"K"
12+200"K"

50mm
75mm
*10 E.N.G
*4 E.F.N.G
*8 F.N.G

E. FRONTAGE ROAD DEAD END
SIGN
CELLULAR TOWER
ELECTRONIC CONTROL GATE
CTH ML
MATCHLINE 2+700 "E"
MATCHLINE 3+060 "E"
MATCHLINE 0+160 "J"
CONDUIT 11-2C+GND, #8 AWG(GATE POWER)
CONDUIT 2 1-6PR, #20 AWG(GATE SIGNAL)

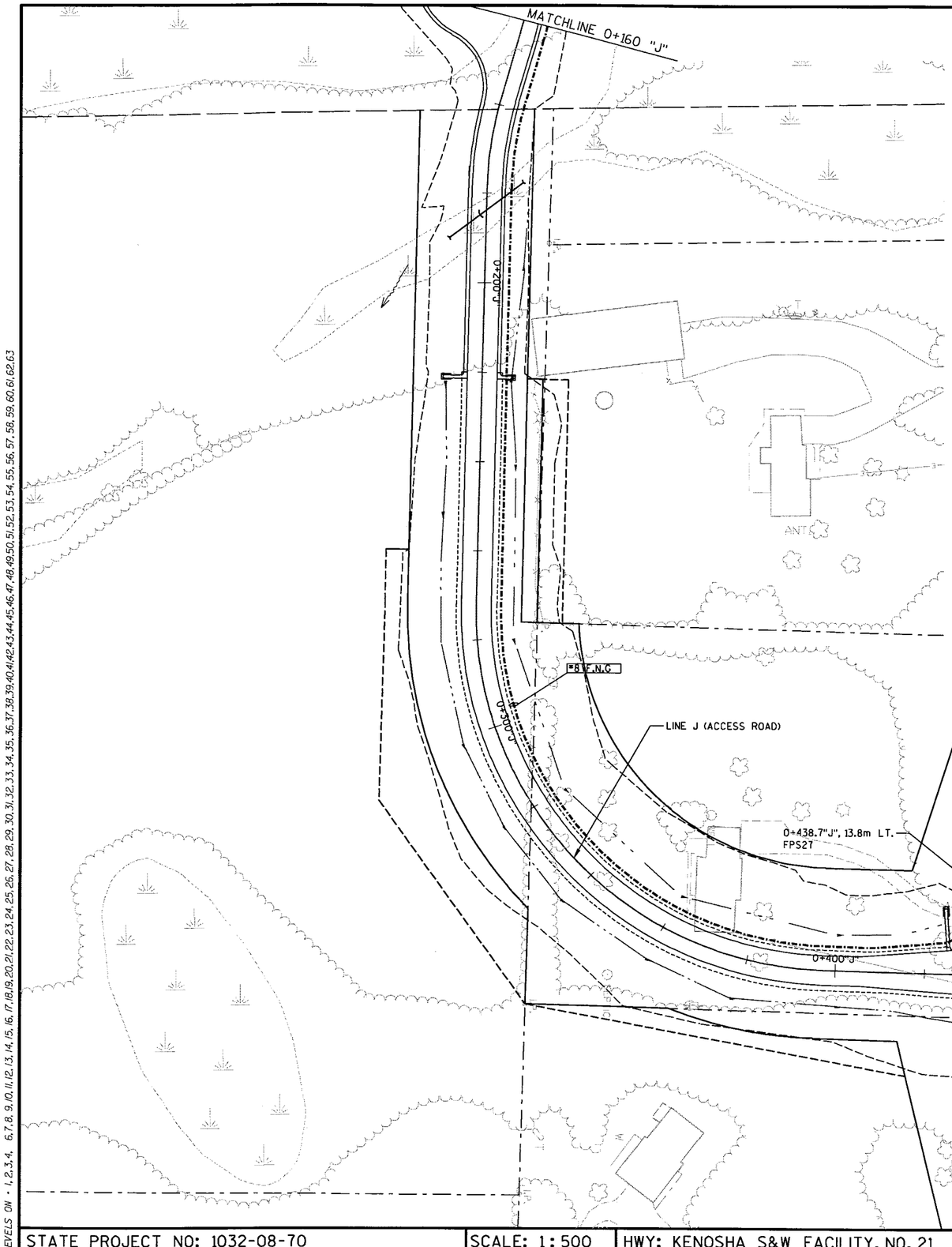
HL-30-PS
ACE RED BDF BLACK
6 @ 30 AMPS
240/480 VAC 3W ISOLATED NEUTRAL

LIGHTING PLAN LEGEND

EXISTING SHOWN AS GRAYSHADED

PROPOSED		PROPOSED	
	REMOTE METER PEDESTAL		HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
	PAD MOUNT TRANSFORMER (WEPCO)		CENTER OF CHANNEL NAVIGATION LUMINAIRE
	DISTRIBUTION CENTER		EDGE OF CHANNEL NAVIGATION LUMINAIRE
	PHOTO CELL POLE		AVIATION OBSTRUCTION LUMINAIRE
	PULL BOX (600 mm [24"] UNLESS OTHERWISE NOTED)		CONDUIT STUBOUT
	LIGHTING SYSTEM MANHOLE		LOCAL MUNI. POLE
	JUNCTION BOX		LOCAL MUNI. UDL
	CONDUIT (50 mm [2"] UNLESS OTHERWISE NOTED)		EQUIP. GND. ELECTRODE (GND ROD)
	CID (CABLE IN DUCT)	*PROPOSED*	COMPONENT LABELS
OH	OVER HEAD UTILITY	*A,B,C,...etc.*	CIRCUIT POLE (ELECTRICAL) DESIGNATION
	LIGHT POLE, POLE TOP LUMINAIRE	X	REMOVAL/ABANDON
	LIGHT POLE, ARM MOUNTED LUMINAIRE	N	NEUTRAL
	UDL (UNDER DECK LUMINAIRE)	GND	EQUIP.GROUNDING CONDUCTOR
	SIGN BRIDGE LUMINAIRE	MV	MERCURY VAPOR
	TUNNEL LUMINAIRE	HPS	HIGH PRESSURE SODIUM

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	LIGHTING	SHEET NO: 113	M



LIGHTING PLAN LEGEND

EXISTING SHOWN AS GRAYSHADED

PROPOSED	
	REMOTE METER PEDESTAL
	PAD MOUNT TRANSFORMER (WEPCO)
	DISTRIBUTION CENTER
	PHOTO CELL POLE
	PULL BOX (600 mm [24"] UNLESS OTHERWISE NOTED)
	LIGHTING SYSTEM MANHOLE
	JUNCTION BOX
==========	CONDUIT (50 mm [2"] UNLESS OTHERWISE NOTED)
	CID (CABLE IN DUCT)
—OH—	OVER HEAD UTILITY
	LIGHT POLE, POLE TOP LUMINAIRE
	LIGHT POLE, ARM MOUNTED LUMINAIRE
	UDL (UNDER DECK LUMINAIRE)
	SIGN BRIDGE LUMINAIRE
	TUNNEL LUMINAIRE

PROPOSED	
	HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
	CENTER OF CHANNEL NAVIGATION LUMINAIRE
	EDGE OF CHANNEL NAVIGATION LUMINAIRE
	AVIATION OBSTRUCTION LUMINAIRE
	CONDUIT STUBOUT
	LOCAL MUNI. POLE
	LOCAL MUNI. UDL
	EQUIP. GND. ELECTRODE (GND ROD)
PROPOSED	COMPONENT LABELS
A,B,C,...etc.	CIRCUIT POLE (ELECTRICAL) DESIGNATION
\\\\ X	REMOVAL/ABANDON
N	NEUTRAL
GND	EQUIP.GROUNDING CONDUCTOR
MV	MERCURY VAPOR
HPS	HIGH PRESSURE SODIUM

HL-30-PS
ACE RED BDF BLACK
6 @ 30 AMPS
240/480 VAC 3W ISOLATED NEUTRAL

STATE PROJECT NO: 1032-08-70	SCALE: 1:500	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	LIGHTING	SHEET NO: 114 M

FILE NAME: PROJECTS/2940/PLANS/LIGHT/2940LT04.DGN 12-11-01
LEVELS ON - 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

R5-7-02

GENERAL NOTES:

ALL CONNECTIONS BETWEEN SENSORS AND LEAD CABLES ARE DONE IN PULL BOX AND ARE SOLDERED THEN SEALED FOR WATERPROOFING. NUMBER AND PLACEMENT OF PULL BOXES NOT SHOWN.

POWER CABLES MUST BE RUN IN SEPARATE CONDUITS FROM SIGNAL CABLES.

SENSOR SPACING SHOWN IS TYPICAL SPACING REQUIREMENT, ACTUAL SENSOR SPACING MAY BE ALTERED TO SUIT SITE CONDITIONS BY THE IRD FIELD REPRESENTATIVE.

ROAD SURFACE MUST MEET ASTM 1318-00 SPECIFICATION FOR PAVEMENT CONDITIONS TO ACHIEVE OPTIMAL SYSTEM PERFORMANCE.

CABLES MUST BE PROTECTED BY PVC SLEEVES WHERE THEY CROSS PAVEMENT JOINTS/CRACKS.

PIEZO SENSORS MUST BE A MINIMUM OF 1.83m [6'] AWAY FROM CRACKS, JOINTS OR SAWCUTS WHEN POSSIBLE.

ADDITIONAL DRAINAGE MAY BE REQUIRED DEPENDING ON SLOPE OF ROADWAY.

IRD RECOMMENDS THAT PULL BOXES BE NO FURTHER THAN 61m [200'] APART.
IRD RECOMMENDS THE MINIMUM SIZE FOR PULL BOXES IS 450mm X 600mm [18" X 24"].

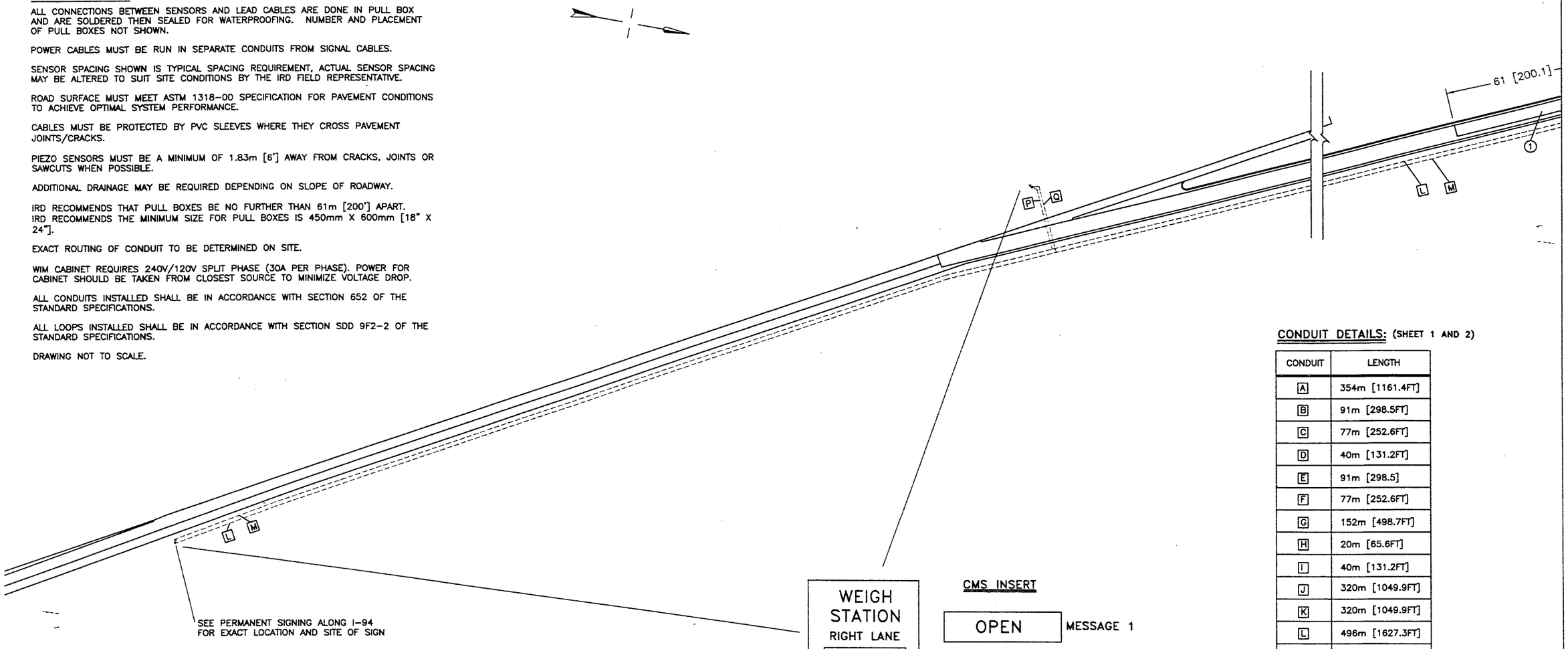
EXACT ROUTING OF CONDUIT TO BE DETERMINED ON SITE.

WIM CABINET REQUIRES 240V/120V SPLIT PHASE (30A PER PHASE). POWER FOR CABINET SHOULD BE TAKEN FROM CLOSEST SOURCE TO MINIMIZE VOLTAGE DROP.

ALL CONDUITS INSTALLED SHALL BE IN ACCORDANCE WITH SECTION 652 OF THE STANDARD SPECIFICATIONS.

ALL LOOPS INSTALLED SHALL BE IN ACCORDANCE WITH SECTION SDD 9F2-2 OF THE STANDARD SPECIFICATIONS.

DRAWING NOT TO SCALE.



NOTE: SEE PERMANENT SIGNING PLAN FOR I-94

CONDUIT DETAILS: (SHEET 1 AND 2)

CONDUIT	LENGTH
A	354m [1161.4FT]
B	91m [298.5FT]
C	77m [252.6FT]
D	40m [131.2FT]
E	91m [298.5]
F	77m [252.6FT]
G	152m [498.7FT]
H	20m [65.6FT]
I	40m [131.2FT]
J	320m [1049.9FT]
K	320m [1049.9FT]
L	496m [1627.3FT]
M	496m [1627.3FT]
N	20m [65.6]
O	20m [65.6]
P	40m [131.2FT]
Q	40m [131.2FT]

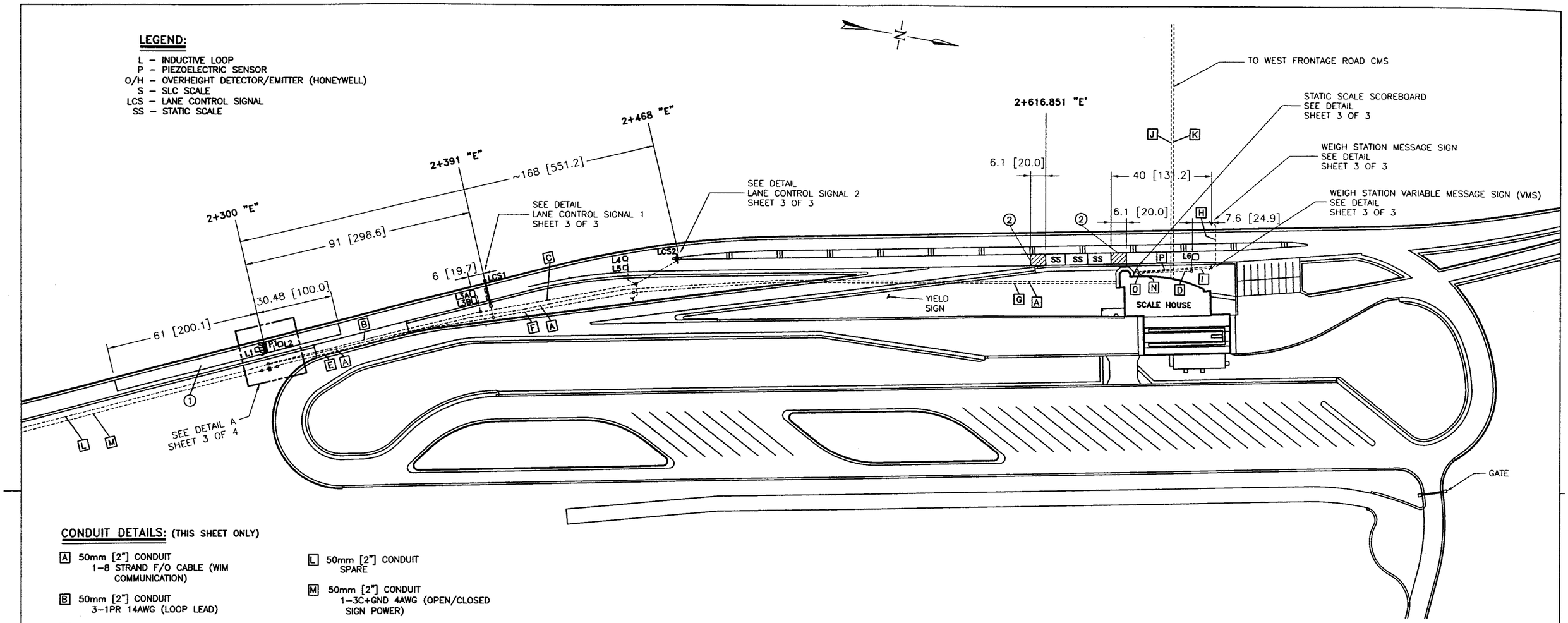
CONDUIT DETAILS: (THIS SHEET ONLY)

- L 50mm [2"] CONDUIT
  SPARE
- M 50mm [2"] CONDUIT
  1-3C+GND 4AWG (OPEN/CLOSED SIGN POWER)
- P 50mm [2"] CONDUIT
  SPARE
- Q 50mm [2"] CONDUIT
  1-3G+GND 4AWG (OPEN/CLOSED SIGN POWER)

STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	WIM SYSTEM: ADVANCED CONDUIT SIGNING PLAN	SCALE: NONE	SHEET NO: 115	M

LEGEND:

L – INDUCTIVE LOOP
P – PIEZOELECTRIC SENSOR
O/H – OVERHEIGHT DETECTOR/EMITTER (HONEYWELL)
S – SLC SCALE
LCS – LANE CONTROL SIGNAL
SS – STATIC SCALE



CONDUIT DETAILS: (THIS SHEET ONLY)

A 50mm [2"] CONDUIT
1–8 STRAND F/O CABLE (WIM COMMUNICATION)

B 50mm [2"] CONDUIT
3–1PR 14AWG (LOOP LEAD)

C 50mm [2"] CONDUIT
2–1PR 14AWG (LOOP LEAD)

D 50mm [2"] CONDUIT
1–1PR 14AWG (LOOP LEAD)

E 75mm [3"] CONDUIT
2–3C+GND 14AWG (LCS POWER)
1 – WIM CABINET POWER

F 75mm [3"] CONDUIT
1–3C+GND 14AWG (LCS POWER)
1 – WIM CABINET POWER

G 75mm [3"] CONDUIT
1 – WIM CABINET POWER

H 50mm [2"] CONDUIT
1–3C+GND 14AWG (WEIGH STATION MESSAGE SIGN POWER)

I 50mm [2"] CONDUIT
2–3C+GND 14AWG (WEIGH STATION MESSAGE SIGN POWER)

J 50mm [2"] CONDUIT
1–3C+GND 4AWG (OPEN/CLOSED SIGN POWER)

K 50mm [2"] CONUIT
SPARE

L 50mm [2"] CONDUIT
SPARE

M 50mm [2"] CONDUIT
1–3C+GND 4AWG (OPEN/CLOSED SIGN POWER)

N 50mm [2"] CONDUIT
1–4C 20AWG (SCOREBOARD COMMUNICATION)

O 50mm [2"] CONDUIT
1–2C+GND 14AWG (SCOREBOARD POWER)

P 50mm [2"] CONDUIT
1–8 STRAND F/O CABLE (VMS COMMUNICATION)

NOTES:

① WIM CONTROL APPROACHES (ASTM 1318–00 SPECIFICATION).

② STATIC SCALE 6.1m [20'] LEVEL APPROACHES 381mm [15"] THICK.

LOOP DETAILS:

LOOP #	SIZE	NUMBER OF TURNS
1	1.83m x 1.83m [6' X 6']	4
2	1.83m x 1.83m [6' X 6']	4
3A	1.83m x 2.44m [6' X 8']	5
3B	1.83m x 2.44m [6' X 8']	5
4	2.44m x 2.44m [8' X 8']	6
5	2.44m x 2.44m [8' X 8']	6
6	2.44m x 2.44m [8' X 8']	4

2 OF 3

STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	WIM SYSTEM: LAYOUT	SCALE: NONE	SHEET NO: 3/6	M

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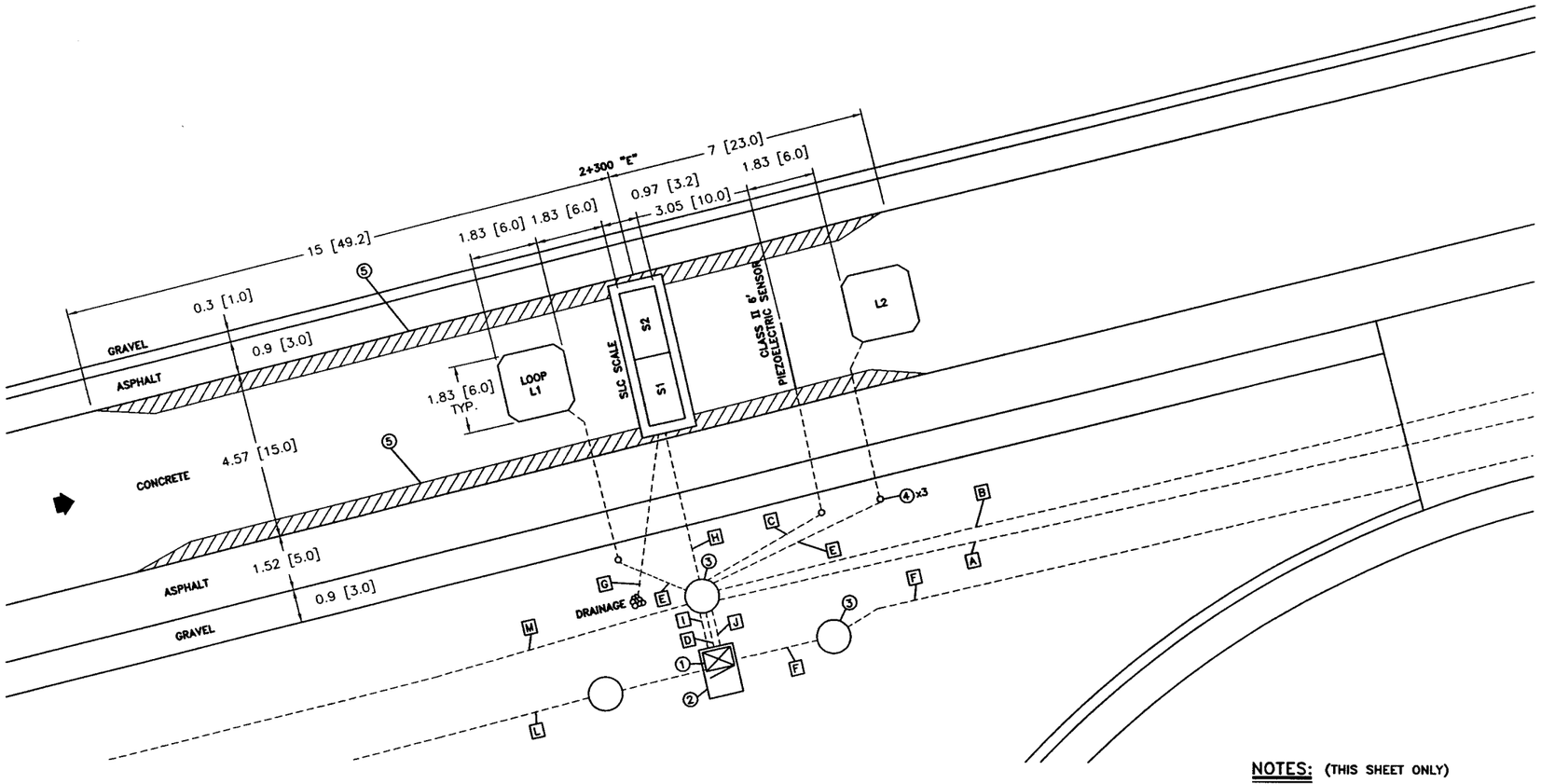


DETAIL A

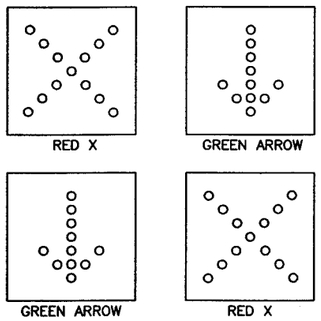
CONDUIT DETAILS: (THIS SHEET ONLY)

- [A] 50mm [2"] CONDUIT
  1–8 STRAND F/O CABLE (WIM COMMUNICATION)
- [B] 50mm [2"] CONDUIT
  3–1PR 14AWG (LOOP LEAD)
- [C] 25mm [1"] CONDUIT
  1– RG58 (PIEZO LEAD)
- [D] 75mm [3"] CONDUIT
  2–3PR 22AWG (SLC LEAD)
  4–2C 18AWG (OFF–SCALE LEAD)
  1– RG58 (PIEZO LEAD)
- [E] 25mm [1"] CONDUIT
  1–1C 14AWG (LOOP WIRE)
- [F] 75mm [3"] CONDUIT
  1– WIM CABINET POWER
  2–3C+GND (LCS)
- [G] 38mm [1 1/2"] ABS CONDUIT (DRAINAGE)
- [H] 50mm [2"] CONDUIT
  2–3PR 22AWG (SLC LEAD)
  4–2C 18AWG (OFF–SCALE LEAD)
- [I] 75mm [3"] CONDUIT
  5–1PR 14AWG (LOOP LEAD)
- [J] 75mm [3"] CONDUIT
  1–8 STRAND F/O CABLE (WIM COMMUNICATION)
- [L] 50mm [2"] CONDUIT
  SPARE
- [M] 50mm [2"] CONDUIT
  1–3C+GND (OPEN/CLOSED SIGN POWER)

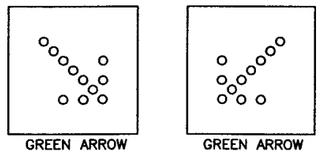
NOTES: (THIS SHEET ONLY)

1. CABINET WITH WIM ELECTRONICS.
2. CABINET BASE.
3. PULL BOX. (450mm x 600mm)
4. DRILL THROUGH SHOULDER FOR CONDUIT.
5. STRIPING.

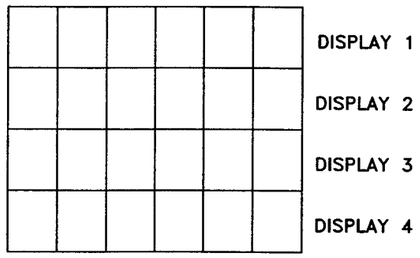
LANE CONTROL SIGNAL1 DETAIL



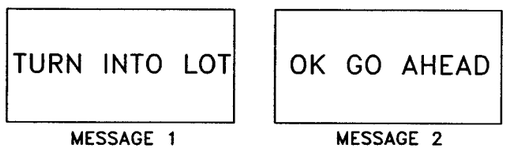
LANE CONTROL SIGNAL2 DETAIL



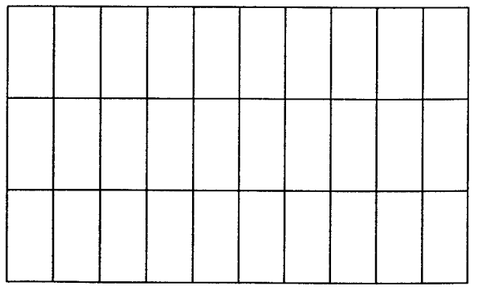
STATIC SCALE SCOREBOARD



WEIGH STATION MESSAGE SIGN



WEIGH STATION VARIABLE MESSAGE SIGN (VMS)



STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	WIM SYSTEM: LAYOUT	SCALE: NONE	SHEET NO: 3 of 3	M

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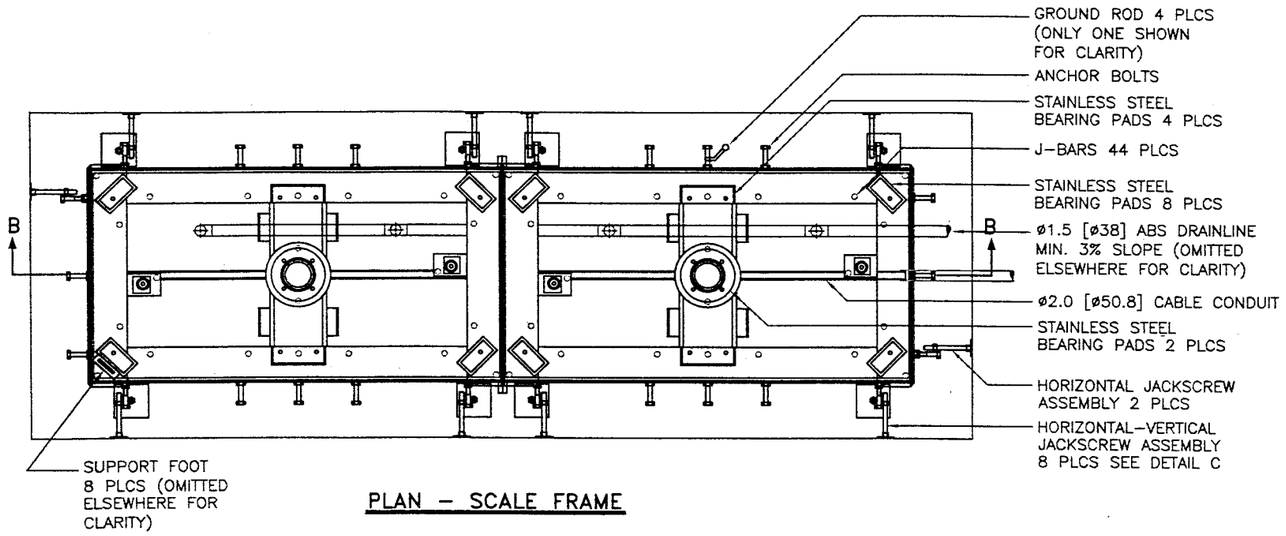
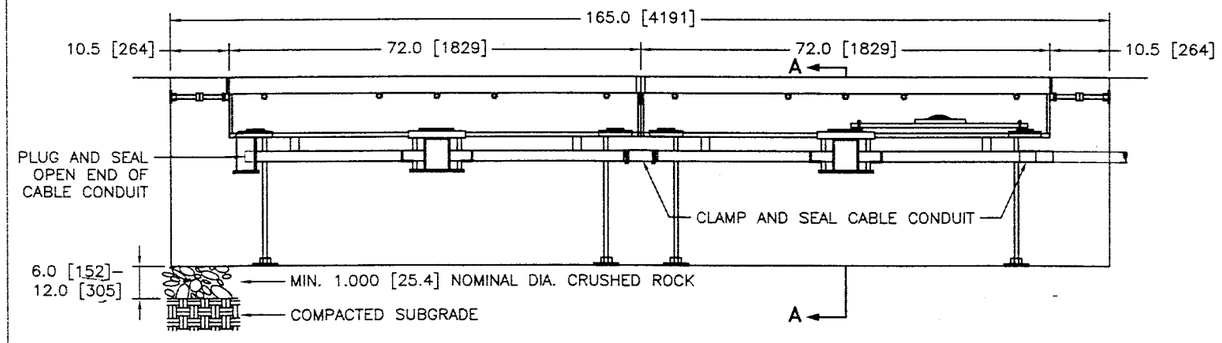


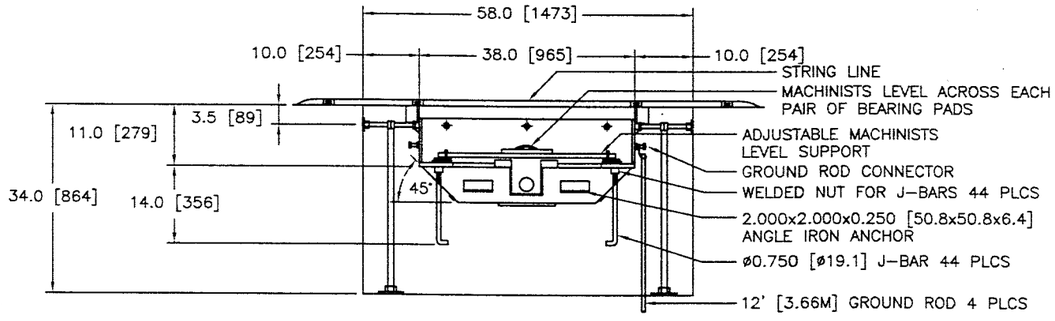
PLAN – SCALE FRAME

GENERAL INSTALLATION INSTRUCTIONS:

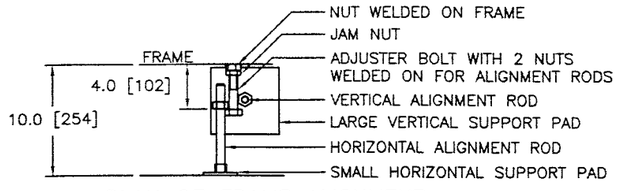
1. SHIPMENT INCLUDES: FRAMES, J–BARS, O–RINGS, GROUND ROD CONNECTORS, 2–10'[3658] LENGTHS OF DRAIN PIPE – 3 TEES AND 1 ELBOW, ALL NECESSARY CONCRETE ANCHOR BOLTS, JACK SCREWS, LOCATING SCREWS, SUPPORT PADS, CONDUIT CONNECTING HOSE AND CLAMPS, AND GROUND RODS.
2. INSTALL CONCRETE ANCHOR BOLTS, JACK SCREWS AND J–BARS ONTO SCALE FRAMES.
3. EXCAVATE SCALE VAULT TO DEPTH OF 40"[1016] AND COMPACT PIT BOTTOM.
4. PLACE 6"[152.4] OF 1"[25.4] NOMINAL CRUSHED ROCK AND VIBRATE COMPACT.
5. SET FRAME IN PREPARED PIT WITH NECESSARY REBAR CAGE IN PLACE.
6. INSTALL DRAIN PIPES AND CONDUITS. SEAL ALL CONNECTIONS. DRAINAGE AT EDGE OF ROADWAY MUST ALLOW FREE FLOW AWAY FROM THE OUTLET OF DRAIN PIPE. THE OUTLET MUST BE WELL ABOVE THE HIGH WATER LEVEL OF THE DITCH OR MANHOLE. THE FLOW ALONG THE DRAIN AND AWAY FROM THE OUTLET MUST BE MAINTAINED AT ALL TIMES.
7. USE JACK SCREWS TO POSITION FRAME PROPERLY – HORIZONTALLY AND VERTICALLY.
8. INSTALL GROUND CLAMPS AND GROUND RODS.
9. LOCATE THE EDGE OF THE SCALE FRAME FLUSH WITH THE SURROUNDING ROAD SURFACE USING A STRING LINE FROM THE ROADWAY ACROSS THE CORNERS OF THE SCALE FRAME.
10. FINAL SET OF THE SCALE USING A MACHINISTS LEVEL MOUNTED ON AN ADJUSTABLE SUPPORT, SPANNING ACROSS ADJACENT SCALE BEARING PADS TO ENSURE THAT ALL FRAME EDGES ARE PARALLEL AND THERE IS NO TWIST IN THE SCALE FRAME.
11. WET PIT WALLS.
12. POUR AND VIBRATE CONCRETE AROUND FRAME. CONCRETE SHOULD HAVE MAX. SLUMP OF 3"[76.2].
13. SLOPE AND FINISH PIT SURFACE AND SCALE FRAME FLOOR FOR PROPER DRAINAGE TO DRAINPIPE INLET.
14. INSTALL SCALES WHEN CONCRETE IS CURED. MIN. 4000PSI [27.6 MPA] ULTIMATE COMPRESSIVE STRENGH.



SECTION B–B



SECTION A–A



PLAN OF FRAME ALIGNMENT
JACK SCREWS – DETAIL C

REV.	DESCRIPTION	DWN/DSN	APPR.	APPR.	DATE
A	RELEASED AS REV. A.	B.B.	R.Cz.	R.J.K.	DEC 1/95
B	ADD ANGLE BRACKETS. CHANGE DRAIN TO ABS PIPE.	D.J.B.	DPr	RCz	NOV 7/97
C	CHANGE CABLE CONDUIT FROM 1.5" TO 2". ECO-06	LHo/GDo			

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NOT TO SCALE

SIZE: B

DIMENSIONS IN: INCHES[MM]

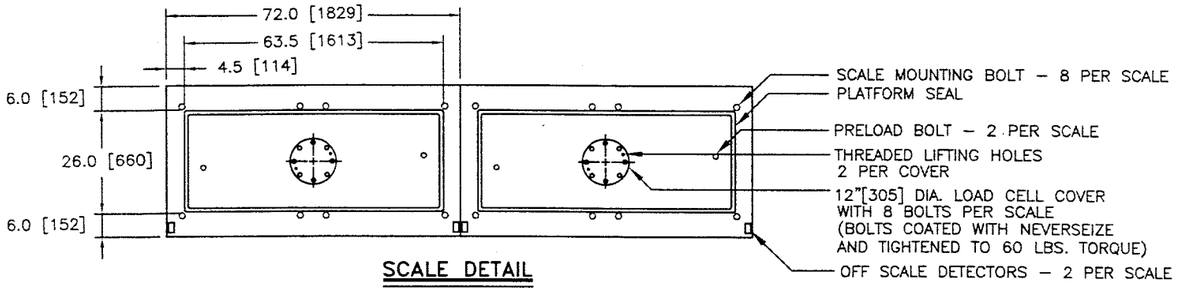
INTERNATIONAL ROAD DYNAMICS INC.
SASKATOON SASKATCHEWAN CANADA

DWG. TITLE:
INSTALLATION
SINGLE LOAD CELL SCALE
SCALE FRAME DETAIL

DWG. No. **10014701** REV.: C

CAD FILE: 10014701.DWG

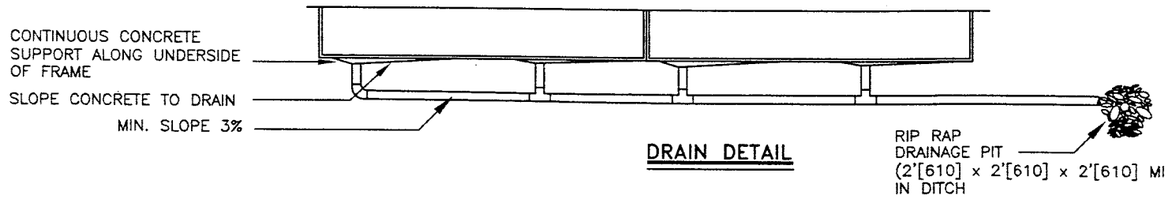
SHEET 1 OF 2



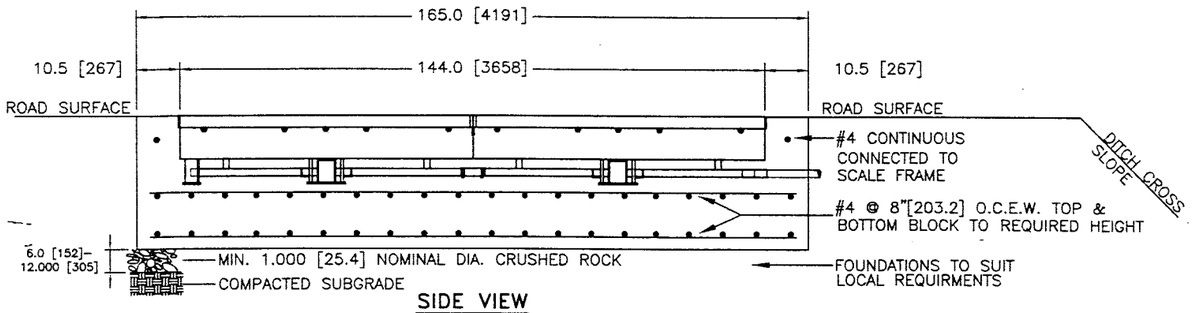
SCALE DETAIL

NOTES:

1. REINFORCEMENTS AND DOWELS AS SHOWN ARE MINIMUM REQUIREMENTS AND MAY BE SUPERCEDED BY STATE CONSTRUCTION CODES.
2. FOR PCC PAVEMENTS INSTALL 5/8"[16]ø x 16"[406] EPOXY COATED DOWELS IN 3/4"[19]ø x 8"[203] DEEP HOLE @ 16"[406] O.C. SECURE DOWEL INTO HOLE WITH EPOXY. ENSURE DOWELS ARE EXACTLY 90° TO LONGITUDINAL PAVEMENT DIRECTION BOTH VERTICALLY AND HORIZONTALLY.

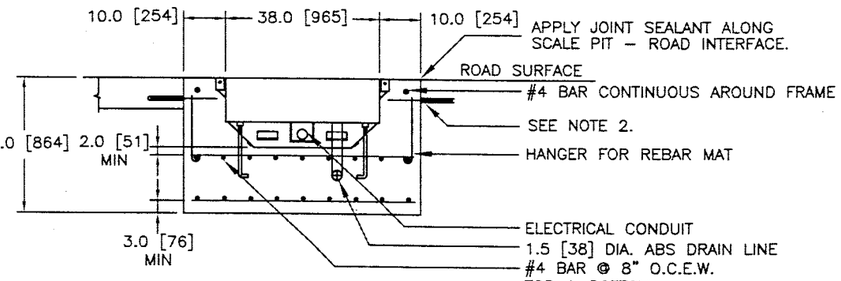


DRAIN DETAIL



SIDE VIEW

DRAIN AND J–BARS OMITTED FOR CLARITY



END VIEW

REV.	DESCRIPTION	DWN/DSN	APPR.	APPR.	DATE
A	RELEASED AS REV. A.	B.B.	R.Cz.	R.J.K.	DEC 1/95
B	ADD ANGLE BRACKETS. CHANGE DRAIN TO ABS PIPE.	D.J.B.	DPr	RCz	NOV 7/97
C	CHANGE CABLE CONDUIT FROM 1.5" TO 2". ECO-06	LHo/GDo			

CONFIDENTIAL

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO IRD AND IS THEREFORE NOT TO BE DISCLOSED TO OTHERS OR USED FOR PRODUCTION WITHOUT WRITTEN PERMISSION FROM INTERNATIONAL ROAD DYNAMICS INC.

NOT TO SCALE

SIZE: B

DIMENSIONS IN: INCHES[MM]

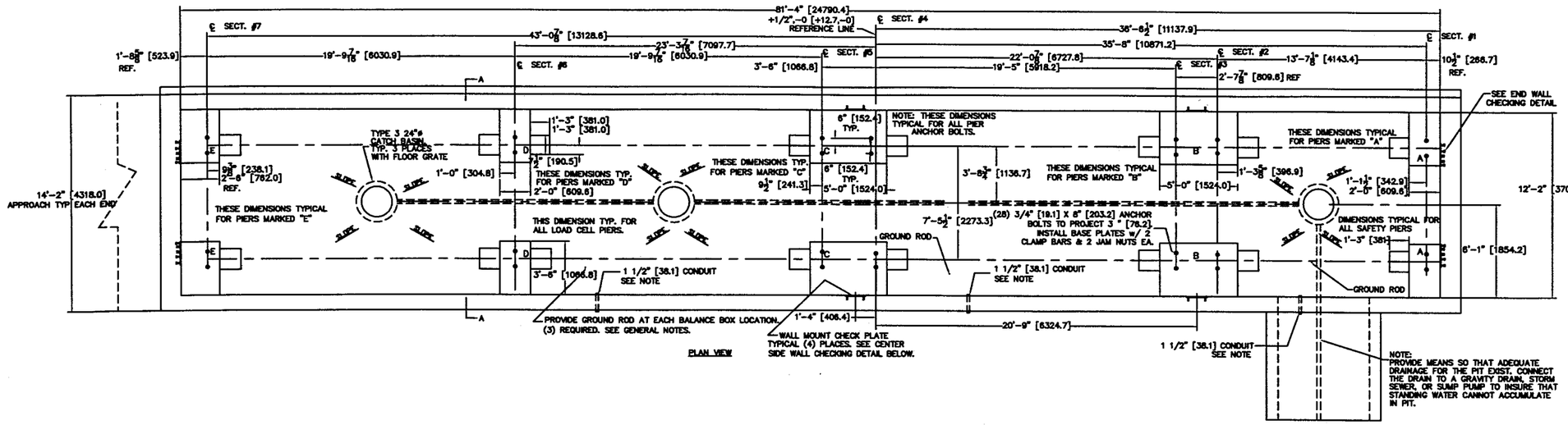
INTERNATIONAL ROAD DYNAMICS INC.
SASKATOON SASKATCHEWAN CANADA

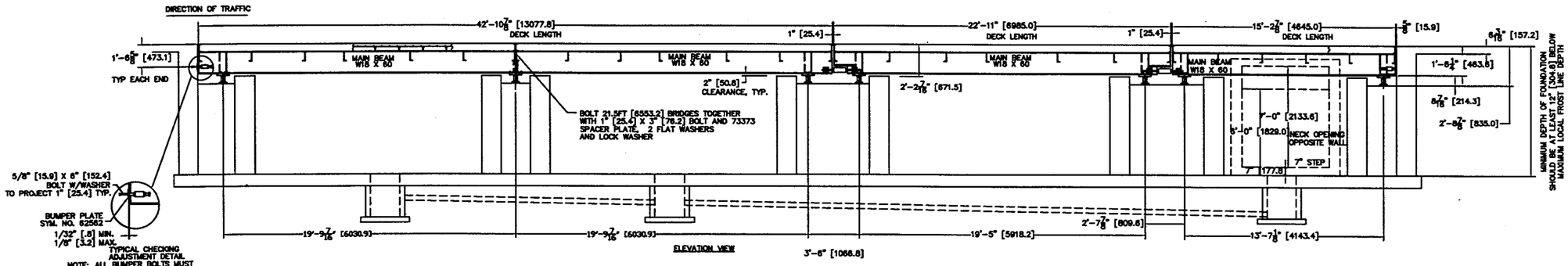
DWG. TITLE:
INSTALLATION
SINGLE LOAD CELL SCALE
SCALE REINFORCING AND DRAIN DETAIL

DWG. No. **10014701** REV.: C

CAD FILE: 10014701.DWG

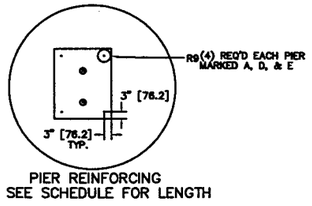
SHEET 2 OF 2



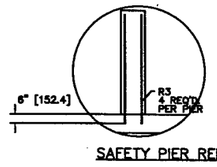


GENERAL NOTES:

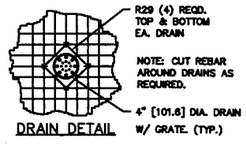
1. USE 4000 PSI [281.2 K.SQ.CM.] CONCRETE @ 28 DAYS. CONCRETE SHALL BE A MIX DESIGN UTILIZING TYPE II PORTLAND CEMENT AND NORMAL WEIGHT AGGREGATES. NO FLY ASH WILL BE ALLOWED. MAXIMUM ALLOWABLE SLUMP SHALL BE 4 1/2" [114.3] CONCRETE TO BE MECHANICALLY VIBRATED TO INSURE PROPER CONSOLIDATION. USE 5-7% AIR ENTRAINMENT.
2. USE A MIX DESIGN WHICH WILL DEVELOP 4000 PSI [281.2 K. SQ. CM] STRENGTH IN 7 DAYS ON THE APROACHES.
3. REINFORCING BARS ARE TO EQUAL ASTM A615, GRADE 60. BEND BARS COLD TO CONFORM WITH REQUIRED DETAILS. REMOVE SCALE, LOOSE FLAKEY RUST, DIRT, AND OTHER COATING THAT WOULD IMPAIR BONDING. SPACE BARS PROPERLY AND TIE SECURELY IN POSITION BEFORE PLACING CONCRETE. TACK WELDING TO KEEP REINFORCING IN PLACE IS NOT PERMITTED.
4. ALL CONCRETE SURFACES SHALL BE FORMED WITH WOOD OR METAL FORMS USING APPROVED METHODS. NO CONCRETE VERTICAL SURFACES SHALL BE POURED AGAINST DIRT.
5. MAKE 3 CONCRETE TEST CYLINDERS, LABLE WITH POUR DATE AND DESCRIPTION OF POUR. WRAP CYLINDERS IN 6 MIL POLY.
6. WORK FROM CENTERLINES WHEN ERECTING FORMS AND PLACING FOUNDATION EMBEDMENTS. PLACE EMBEDMENTS TO WITHIN ±1/8" [3.175] OF POSITIONS INDICTED ON DRAWING. (EMBEDMENTS MUST BE PLACED WITHIN ±1/8" [3.175] OF TOTAL DIMENSIONS FROM CENTERLINE OF SCALE.)
7. FOR SETTING PLAN, SEE DRAWING DMM74752-SP.
8. BOTTOM OF PIT SHOULD BE SUPPORTED ON NON-EXPANSIVE WELL DRAINED MATERIAL CAPABLE OF SAFELY SUPPORTING 1000 PSF [4882.4 K.SQ.M.].
9. SUITABLE CONDUIT FOR LOW VOLTAGE CONDUCTOR SHIELDED CABLE MUST PASS THRU THE PIT WALL AS INDICATED ON THIS DRAWING. CONDUIT MUST EXTEND BEYOND PIT WALL A MINIMUM OF 2" [50.8].
10. ALL BACK FILL SHOULD BE PLACED IN 8" [203.2] LIFTS & COMPACTED TO 95% OF MAXIMUM DENSITY PER ASTM 1557. ALL WORK TO BE IN ACCORDANCE WITH ACI 301.
11. PROVIDE MEANS SO THAT ADEQUATE DRAINAGE FOR THE PIT EXIST. CONNECT THE DRAIN TO A GRAVITY DRAIN, STORM SEWER, OR SUMP PUMP TO INSURE THAT STANDING WATER CANNOT ACCUMULATE IN PIT.



PIER REINFORCING
SEE SCHEDULE FOR LENGTH



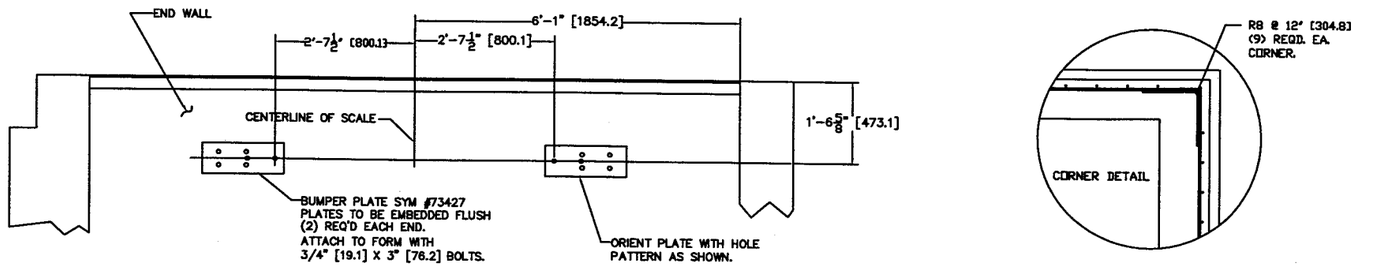
SAFETY PIER REINFORCING



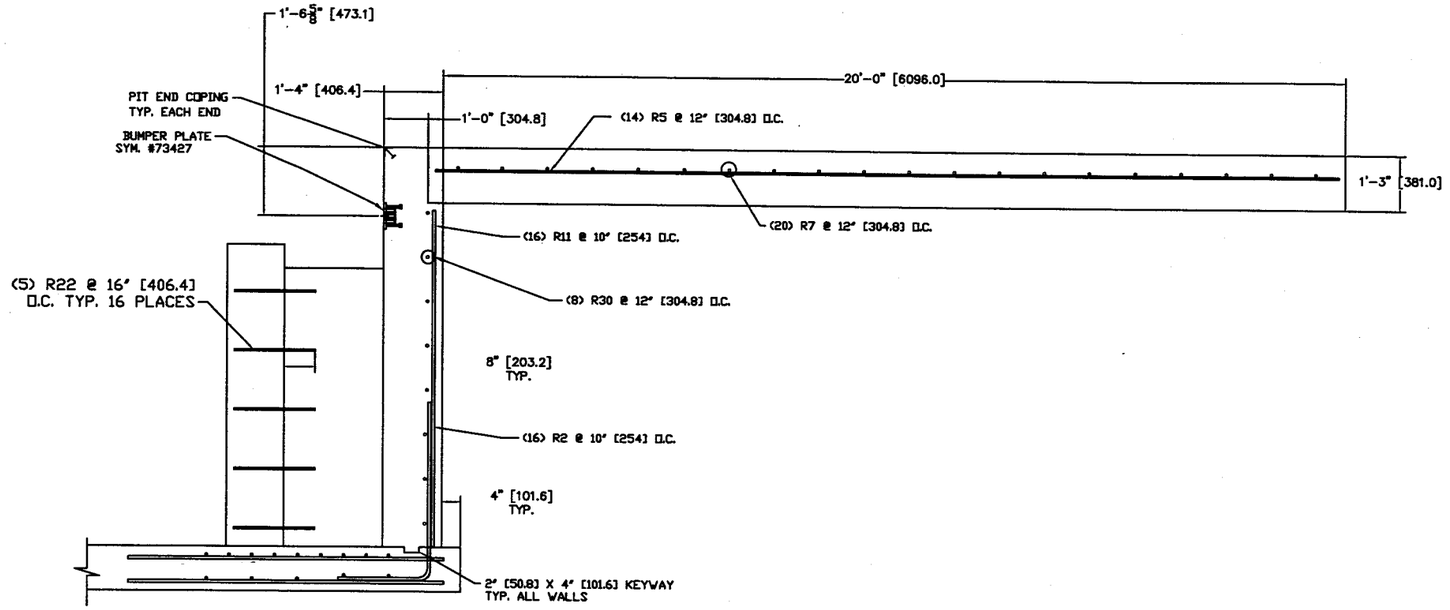
DRAIN DETAIL

STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	STATIC SCALE: REINFORCING PIT	SCALE: NONE	SHEET NO: 120	M

REINFORCING BAR SCHEDULE					
SYM.	QTY.	SIZE	LENGTH	BENDING	WEIGHT
R1	190	#6	7'-0" [2133.6]	4'-0" [1219.2] | 3'-0" [914.4]	1998 [906.3 KG]
R2	32	#6	6'-0" [1828.8]	4'-0" [1219.2] | 2'-0" [609.6]	289 [131.1 KG]
R3	154	#4	7'-0" [2133.6]	7'-0" [2133.6]	720 [326.6 KG]
R4	61	#6	14'-8" [4470.4]	14'-8" [4470.4]	1344 [609.6 KG]
R5	106	#4	20'-0" [6096]	20'-0" [6096]	1416 [642.3 KG]
R6	84	#5	14'-10" [4521.2]	14'-10" [4521.2]	832 [377.4 KG]
R7	40	#4	13'-8" [4165.6]	13'-8" [4165.6]	365 [165.6]
R8	54	#4	4'-0" [1219]	2'-0" [609.6] | 2'-0" [609.6]	144 [65.3 KG]
R9	56	#4	6'-7" [2006.6]	6'-7" [2006.6]	246 [111.6 KG]
R10	6	#4	16'-7" [5054.6]	16'-7" [5054.6]	84 [29 KG]
R11	50	#4	7'-6" [2286]	7'-6" [2286]	251 [113.9 KG]
R12	63	#4	10'-0" [3048]	10'-0" [3048]	421 [191 KG]
R13	39	#4	15'-6" [4724.4]	15'-6" [4724.4]	404 [183.3 KG]
R14	117	#5	8'-9" [2667]	8'-9" [2667]	1068 [484.4 KG]
R15	13	#4	8'-0" [2438.4]	8'-0" [2434.4]	69 [31.3 KG]
R16	4	#4	11'-0" [3352.8]	11'-0" [3352.8]	29 [13.2 KG]
R17	6	#4	9'-0" [2743.2]	9'-0" [2743.2]	36 [16.3 KG]
R18	9	#4	6'-4" [1930.4]	6" [152.4] 32" [812.8] | 32" [812.8] 6" [152.4]	38 [17.2 KG]
R19	17	#4	7'-7" [2311.4]	7'-7" [2311.4]	86 [39 KG]
R20	18	#5	3'-0" [914.4]	3'-0" [914.4]	56 [25.4 KG]
R21	6	#4	5'-5" [1651]	5'-5" [1651]	22 [10 KG]
R22	160	#4	1'-9" [533.4]	1'-9" [533.4]	187 [84.8 KG]
R23	20	#4	4'-8" [1422.4]	4'-8" [1422.4]	62 [28.1 KG]
R24	10	#4	2'-4" [711.2]	2'-4" [711.2]	16 [7.3 KG]
R25	80	#4	3'-10" [1168.4]	3'-10" [1168.4]	205 [93 KG]
R26	10	#4	2'-10" [863.6]	2'-10" [863.6]	19 [8.6 KG]
R27	10	#4	1'-8" [508]	1'-8" [508]	11 [5 KG]
R28	99	#5	7'-9" [2362.2]	7'-9" [2362.2]	800 [362.9 KG]
R29	24	#4	2'-0" [609.6]	2'-0" [609.6]	32 [14.5 KG]
R30	16	#4	14'-2" [4318]	14'-2" [4318]	151 [68.5 KG]
				TOTAL	11,381 [5166.5 KG]



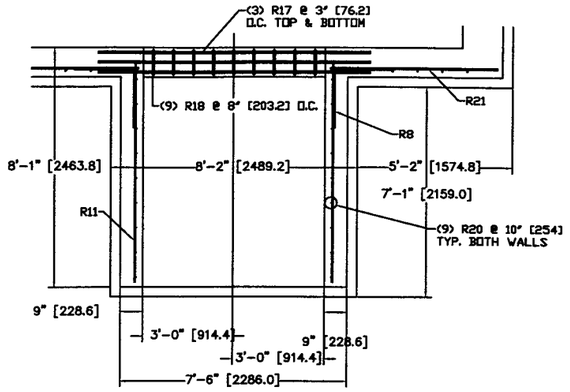
END WALL CHECKING DETAIL (R)
TYPICAL FOR EACH END WALL



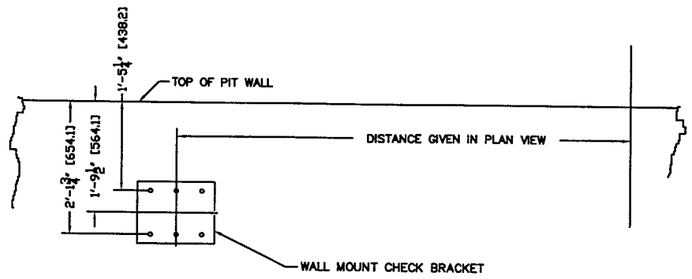
END WALL AND APPROACH
TYPICAL EACH END

APPROX. CONCRETE REQ'D.	
SLAB/PIERS	78 CU. YDS. [59.6 CM]
WALLS	85 CU. YDS. [65 CM]
APPROACHES	26 CU. YDS. [19.9 CM]
TOTAL W/O SAFETY PIERS	189 CU. YDS. [144.5 CM]
TOTAL W/ SAFETY PIERS	195 CU. YDS. [149.1 CM]

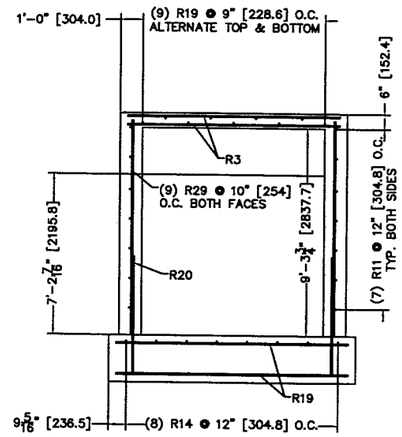
STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	STATIC SCALE: REINFORCING PIT	SCALE: NONE	SHEET NO: 121	M



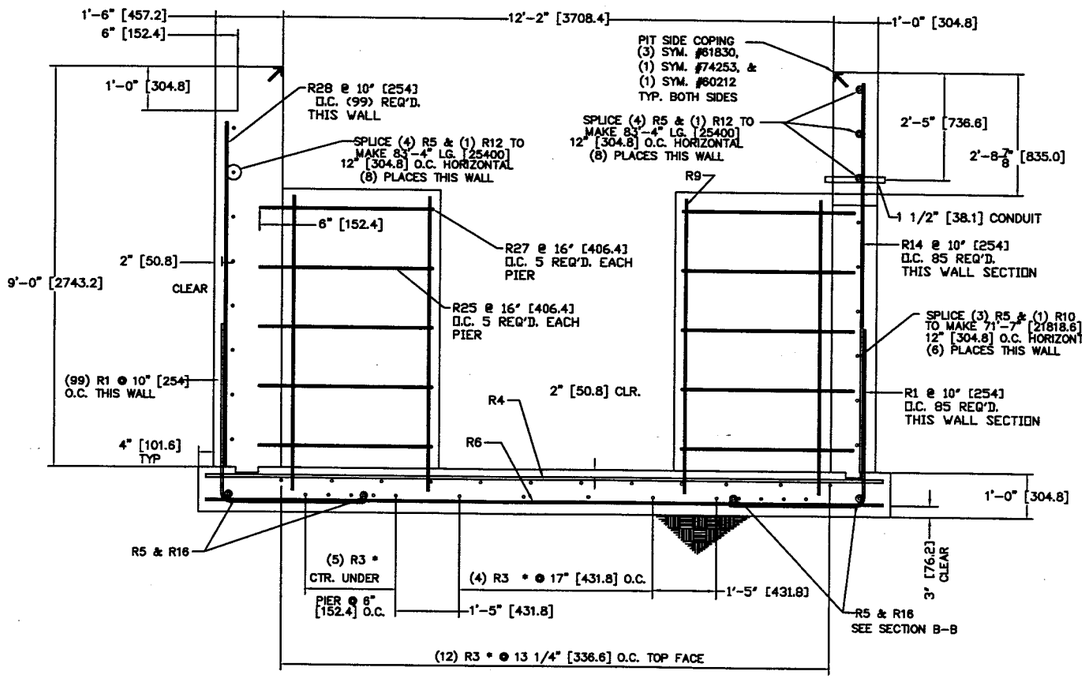
NECK PLAN



CENTER SIDE WALL CHECKING DETAIL



NECK DETAIL



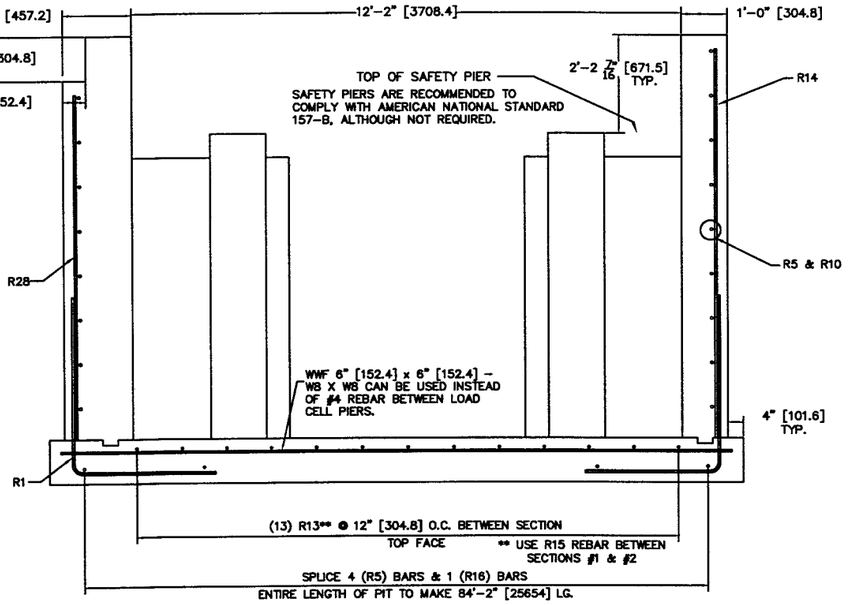
SECTION A-A

TYPICAL (3) PLACES
SECTION #1, #6, & #7

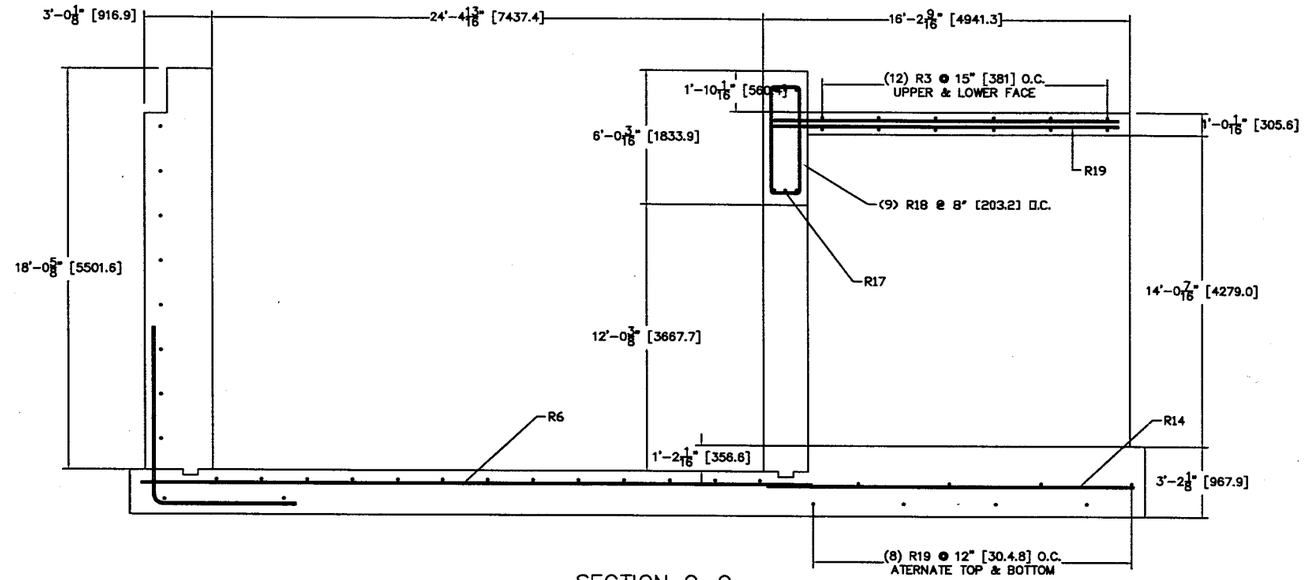
* USE R12 REBAR ON PIERS WITH 2 LOAD CELLS, SECTION #2/#3 & #4/#5

NOTE: END AND CENTER SECTIONS IN ADDITION TO BARS SHOWN ON SECTION B-B

STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	STATIC SCALE: REINFORCING PIT	SCALE: NONE	SHEET NO: 122	M



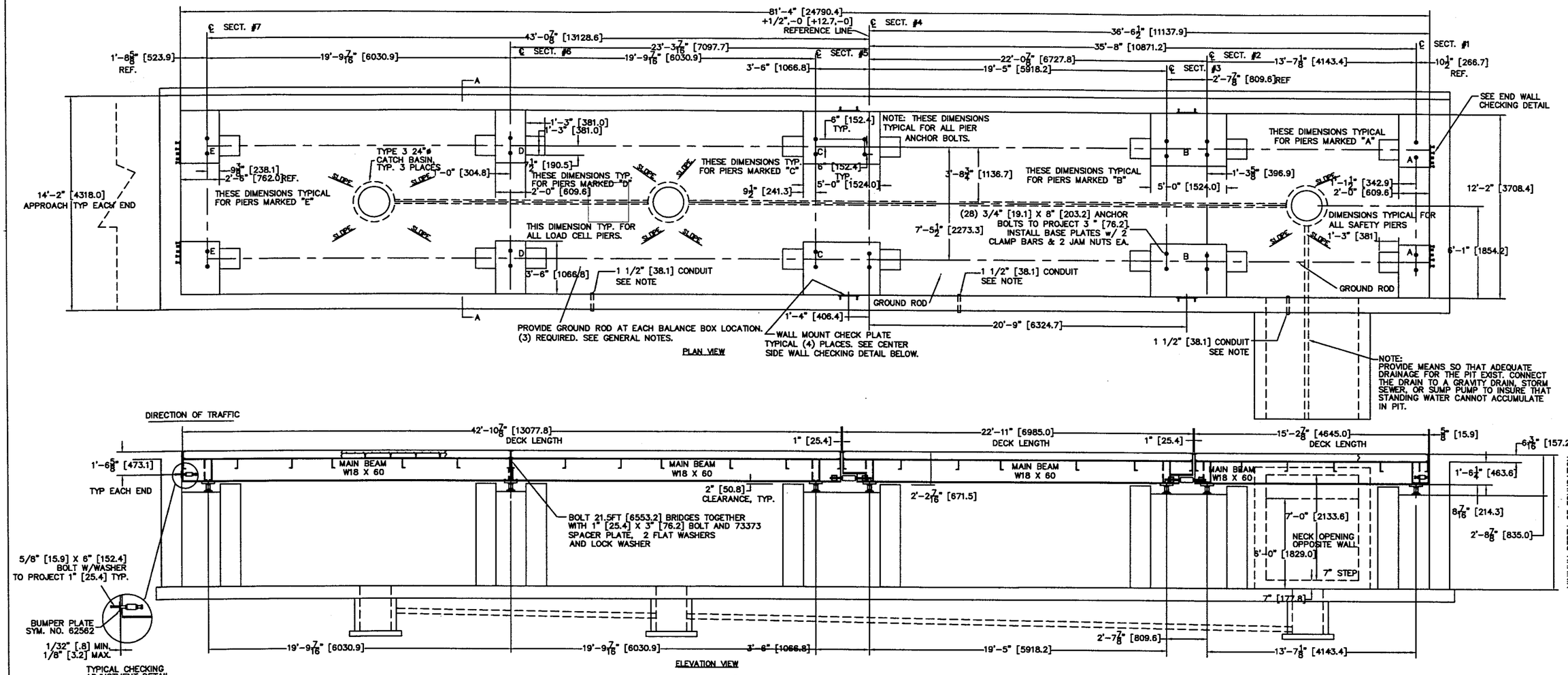
SECTION B-B



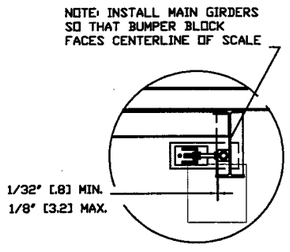
SECTION C-C

4 OF 4

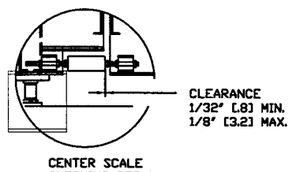
STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	STATIC SCALE: REINFORCING PIT	SCALE: NONE	SHEET NO: 123	M



NOTE: ALL BUMPER BOLTS MUST BE INSTALLED BEFORE MAIN GIRDERS ARE PLACED IN FINAL POSITION.



SIDE BUMPER CHECK ADJUSTMENT

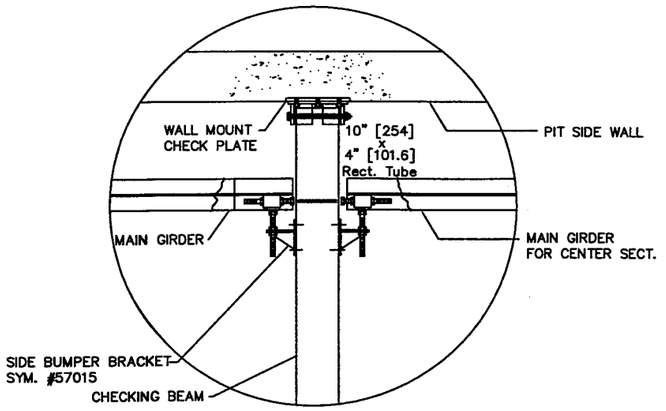


CENTER SCALE CHECKING DETAIL

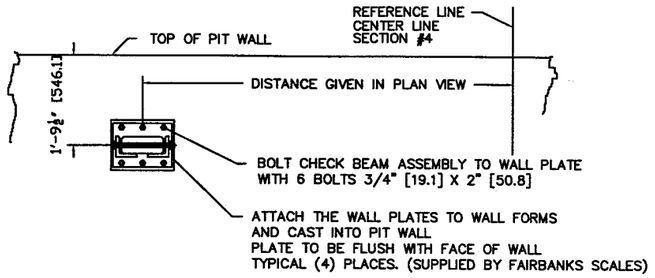
GENERAL NOTES:

1. EXCAVATION, FOUNDATION FORMS, REBARS, AND CONCRETE IS TO BE FURNISHED BY CONTRACTOR OR CUSTOMER.
2. THE PIT AS SHOWN IS THE MINIMUM REQUIRED TO ACCOMMODATE THE SCALE. N.I.S.T. REQUIREMENTS AND LOCAL WEIGHTS AND MEASURE REGULATIONS MAY SPECIFY ADDITIONAL INSTALLATION REQUIREMENTS. IN ORDER TO INSURE COMPLIANCE, CONSULT THE GOVERNING WEIGHTS AND MEASURE DEPARTMENT PRIOR TO INSTALLATION.
3. TO COMPLY WITH SPECIFICATIONS OF N.I.S.T., ANY ENDS OF A VEHICLE SCALE INSTALLED IN ONE LOCATION FOR A PERIOD OF SIX MONTHS OR MORE SHALL HAVE A STRAIGHT APPROACH AT LEAST AS WIDE AS THE PLATFORM AND AT LEAST ONE-HALF THE LENGTH OF THE PLATFORM. NOT LESS THAN 15 FEET [4572] ON ANY APPROACH ADJACENT TO THE PLATFORM SHALL BE CONSTRUCTED OF CONCRETE OR OTHER DURABLE MATERIAL TO INSURE THAT THIS PORTION REMAINS SMOOTH AND IS IN THE SAME PLANE AS THE PLATFORM. WHERE NECCESSARY FOR DRAINAGE, THE REMAINING PORTION OF THE APPROACH MAY SLOPE SLIGHTLY.
4. WORK FROM CENTERLINES WHEN ERECTING FORMS AND PLACING FOUNDATION BOLTS. PLACE BOLTS TO WITHIN ±1/8" [3.175] OF POSITIONS INDICATED ON DRAWING. (BOLTS MUST BE PLACED WITHIN ±1/8" [3.175] OF TOTAL DIMENSIONS FROM CENTERLINE OF SCALE.)
5. ADEQUATE PROVISION MUST BE MADE FOR READY ACCESS TO THE PIT FOR INSPECTION OR MAINTENANCE.
6. VEHICLES SHOULD ENTER AND EXIT SCALE FROM APPROACHES ONLY. ALL CROSS TRAFFIC SHOULD BE RESTRICTED.
7. IT IS RECOMMENDED THAT THE WEIGHBRIDGE BE SET AND BLOCKED IN THE PIT BEFORE THE LOAD CELL ASSEMBLIES ARE INSTALLED.
8. WHEN WELDING IN PIT OR ON WEIGHBRIDGE, LOAD CELLS MUST BE DISCONNECTED AND LEADS TAPED TO PREVENT THEM FROM TOUCHING EACH OTHER AND FROM GROUNDING.

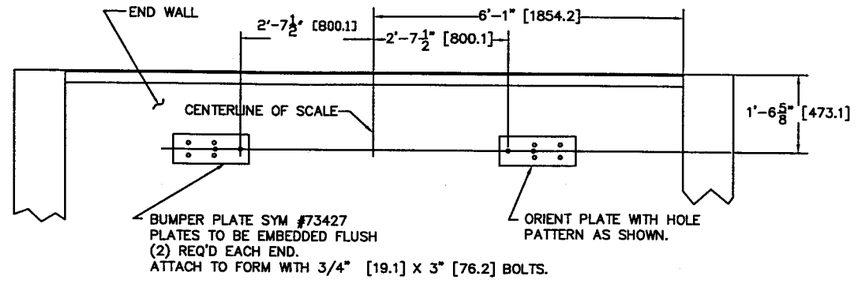
STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	STATIC SCALE: SETTING PLAN	SCALE: NONE	SHEET NO: 124	M



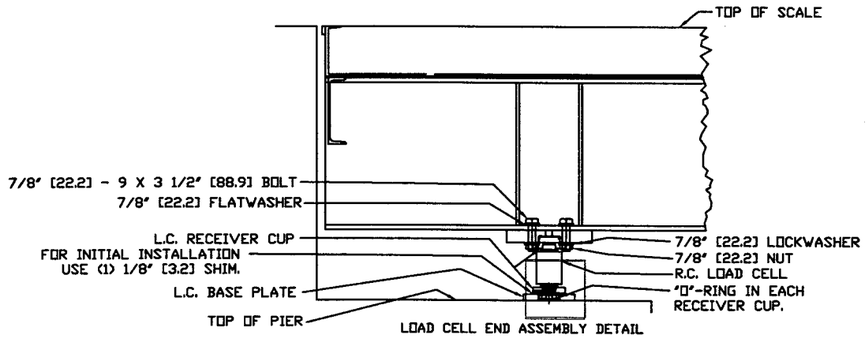
CENTER SCALE
CHECKING INSTALLATION DETAIL
(TOP VIEW)



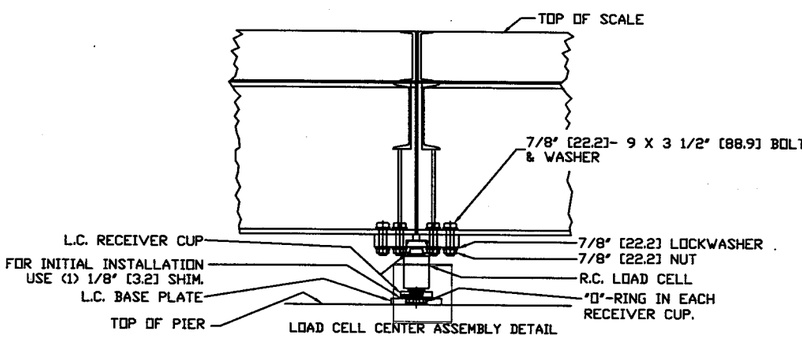
CENTER SIDE WALL CHECKING DETAIL



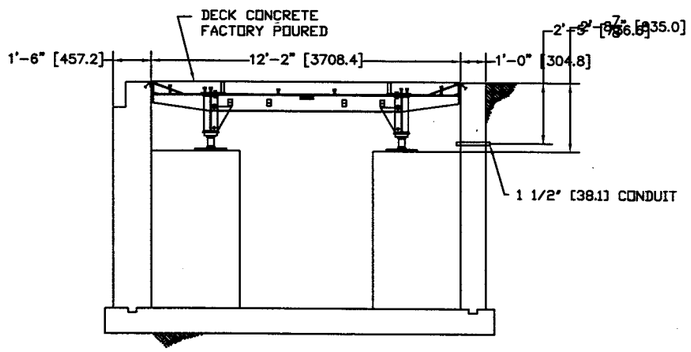
END WALL CHECKING DETAIL (S)
TYPICAL FOR EACH END WALL



LOAD CELL END ASSEMBLY DETAIL



LOAD CELL CENTER ASSEMBLY DETAIL



SECTION D-D

STATE PROJECT NUMBER: 1032-08-70	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	STATIC SCALE: SETTING PLAN	SCALE: NONE	SHEET NO: 125	M

WITH:

COUNTY:

STANDARD ABBREVIATIONS

AB ANCHOR BOLT
A/C AIR CONDITIONING
AFF ABOVE FINISHED FLOOR
ALUM ALUMINUM
ALT ALTERNATE
AP ACCESS PANEL
ASPH ASPHALT

BD BOARD
BLDG BUILDING
BLKG BLOCKING
BM BEAM, BENCH MARK
BO BY OTHERS
BRG BEARING
BS BOTH SIDES
BTM BOTTOM

CF CUBIC FEET
CJ CONSTRUCTION JOINT
CLG CEILING
CLJ CONTROL JOINT
CLK CAULK(ING)
CMU CONCRETE MASONRY UNIT
CO CLEANOUT
COL COLUMN
CONC CONCRETE
CONT CONTINUE, CONTINUOUS
CONTR CONTRACT(OR)
CPT CARPET(ED)
CT CERAMIC TILE
CY CUBIC YARD

DBL DOUBLE
DF DRINKING FOUNTAIN
DIA DIAMETER
DIM DIMENSION
DN DOWN
DR DOOR, DRAIN
DS DOWN SPOUT
DTL DETAIL
DW DISHWASHER
DWALL DRYWALL
DWG DRAWING

E EXTINGUISHER
EA EACH
EIFS EXTERIOR FINISH INSULATION SYSTEM
EL ELEVATION
ELEC ELECTRIC(AL)
ELEV ELEVATOR
EPDM ETHYLENE, PROPYLENE, DIENE TERPOLYMER
EPI EXTRUDED POLYSTYRENE INSULATION
EQUIP EQUIPMENT
EW EACH WAY
EWC ELECTRIC WATER COOLER
EXH EXHAUST
EXIST EXISTING
EXP EXPOSED, EXPANSION
EXT EXTERIOR

FEC FIRE EXTINGUISHER CABINET
FD FLOOR DRAIN
FE FIRE EXTINGUISHER
FIN FINISH
FLR FLOOR
FLUR FLUORESCENT
FNDTN FOUNDATION
FT FOOT
FTG FOOTING, FITTING

G GAS
GA GAUGE
GALV GALVANIZED
GB GRAB BAR
GC GENERAL CONTRACT(OR)
GL GLASS, GLAZING
GYP GYPSUM

HB HOSE BIB
HC HOLLOW CORE
HDWR HARDWARE
HGT HEIGHT
HM HOLLOW METAL
HORIZ HORIZONTAL
HTG HEATING
HVAC HEATING/VENTILATING/AIR CONDITIONING
HW HOT WATER
HYD HYDRANT

ID INSIDE DIAMETER
IE INVERT ELEVATION
IN INCH
INCL INCLUDE(D), INCLUDING
INSUL INSULATE(D), INSULATION
INT INTERIOR

JST JOIST
JT JOINT

LAV LAVATORY
LF LINEAR FOOT
LL LIVE LOAD

MANUF MANUFACTURED
MAX MAXIMUM
MB MOP BASIN
MECH MECHANICAL
MEMB MEMBRANE
MFR MANUFACTURER
MIN MINIMUM
MISC MISCELLANEOUS
MJ MOVEMENT JOINT
MO MASONRY OPENING
MTL METAL

NIC NOT IN CONTRACT
NO NUMBER
NOM NOMINAL
NTS NOT TO SCALE

OC ON CENTER
OD OUTSIDE DIAMETER
OH OVERHEAD, OVERHANG
OPNG OPENING

PART PARTITION
PCF POUNDS PER CUBIC FOOT
PKT POCKET
PLAS PLASTIC
PLBG PLUMBING
PLF POUNDS PER LINEAL FOOT
PNL PANEL
POLY POLYETHYLENE
PROJ PROJECT, PROJECTED
PROP PROPERTY
PSF POUNDS PER SQUARE FOOT
PSI POUNDS PER SQUARE INCH
PT PRESSURE TREATED
PTD PAINT(ED)
PVC POLYVINYL CHLORIDE
PVMT PAVEMENT
PWD PLYWOOD

QT QUARRY TILE

R RADIUS, RISER
RA RETURN AIR
RD ROOF DRAIN
REF REFRIGERATOR
REINF REINFORCING
REQD REQUIRED
REV REVISE, REVISION
RM ROOM
RO ROUGH OPENING

SA SUPPLY AIR
SC SOLID CORE
SF SQUARE FOOT
SH SHELF, SHELVING, SHOWER
SHT SHEET
SIM SIMILAR
SPKR SPEAKER
SQ SQUARE
SS STAINLESS STEEL
STC SOUND TRANSMISSION COEFFICIENT
STD STANDARD
STL STEEL
SUSP SUSPENDED
SY SQUARE YARD

T TREAD
TELE TELEPHONE
T/G TONGUE AND GROOVE
THK THICK(NESS)
TOF TOP OF FOOTING
TOS TOP OF STEEL
TOW TOP OF WALL
TYP TYPICAL

UH UNIT HEATER

VB VAPOR BARRIER
VCT VINYL COMPOSITION TILE
VERT VERTICAL
VT VINYL TILE

W WATER
W/ WITH
WD WOOD
W/O WITHOUT
WP WATERPROOF(ING)
WSCT WAINSCOT
WWF WELDED WIRE FABRIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

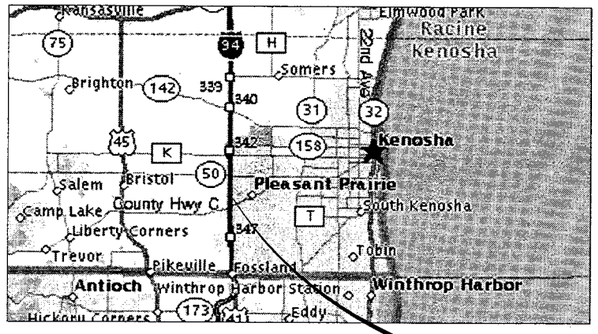
PLAN OF PROPOSED IMPROVEMENT

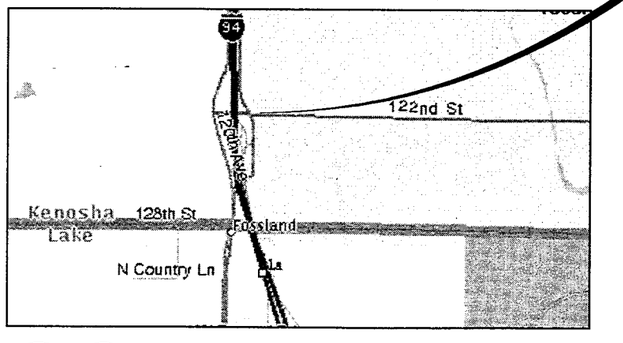
SAFETY & WEIGHT FACILITY NO. 21

INTERSTATE 94 AT ML
KENOSHA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT

STATE PROJECT NUMBER
1032-08-70 (c)





1 LOCATION MAP
Not to Scale

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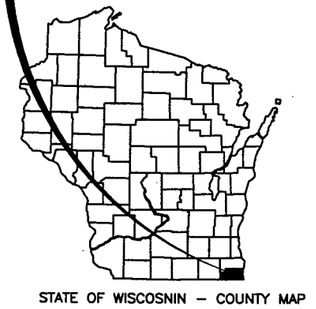
PROJECT LOCATION
SAFETY & WEIGHT FACILITY NO.21
I-94 at ML
KENOSHA, WI



STATE OF WISCOSNIN - COUNTY MAP

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor
Designer
District Examiner
District Supervisor
Proj. Dev. Engineer
C.O. Examiner

APPROVED FOR DISTRICT OFFICE
DATE: (Signature)

FINAL P, S, & E

AUTHORIZED FOR BUREAU OF HIGHWAY DEVELOPMENT
DATE: (Signature)

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

TITLE, LOCATION MAPS, DRAWING INDEX

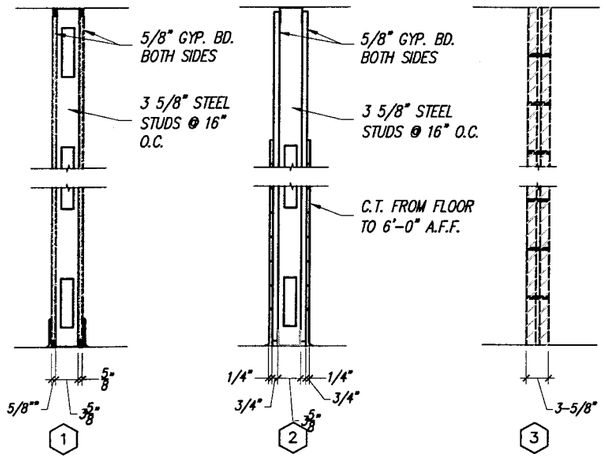
SAFETY & WEIGHT FACILITY NO. 21 | SCALE, FEET 0

DATE: 1/1/02

SHEET NO: 126 OF | DWG. G101

NOTE: TOP OF INTERIOR PARTITIONS AT 110'-0" ELEV. (TYP.). DIAGONAL BRACING BACK TO STRUCTURE AT 4'-0" O.C. REFER TO STRUCTURAL.

AT ROOMS WITHOUT SUSPENDED CEILING (OPEN TO STRUCTURE), RUN PARTITIONS FULL HEIGHT TO UNDERSIDE OF STRUCTURE. REFER TO ROOM FINISH SCHEDULE.



1 — 3-5/8" STEEL STUD WITH 5/8" DRYWALL

2 — 3-5/8" STEEL STUD WITH THIN SET CERAMIC TILE BOTH SIDES

2A — 3-5/8" STEEL STUD WITH 5/8" DRYWALL ONE SIDE, CERAMIC TILE THE OTHER

3 — 4" NOMINAL GROUND FACE C.M.U.

4 — 8" NOMINAL GROUND FACE C.M.U.

4A — 8" NOMINAL GROUND FACE C.M.U. 2 HR RATED

4B — 8" NOMINAL GROUND FACE C.M.U. W/ THIN SET C.T. ON ONE SIDE

5 — NOT USED

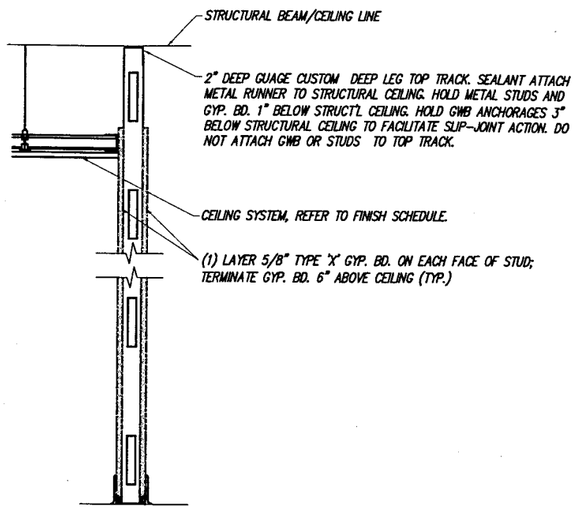
6 — 10" NOMINAL GROUND FACE C.M.U.

6A — 10" NOMINAL GROUND FACE C.M.U. 3 HOUR RATED

1/G102 PARTITION TYPES

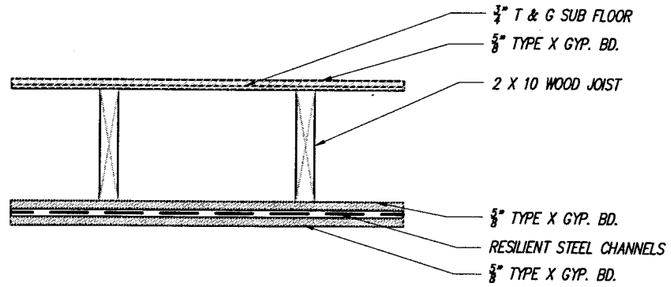
NOT TO SCALE

REFER TO DETAIL 3/G102 FOR ADDITIONAL INFORMATION



3/G102 STANDARD WALL APPLICATION

(ALL STEEL STUD TYPES)



WOOD FLOOR, WOOD JOISTS, GYPSUM WALLBOARD, RESILIENT CHANNELS

BASE LAYER 5/8" PROPRIETARY TYPE X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED AT RIGHT ANGLES TO 2 X 10 WOOD JOISTS 16" O.C. WITH 8D NAILS, 2½" LONG, 0.113" SHANK, 19/64" HEADS, 7" O.C. RESILIENT FURRING CHANNELS 24" O.C. APPLIED AT RIGHT ANGLES TO JOISTS THROUGH BASE LAYER WITH ONE 8D NAIL, 2½" LONG, 0.113" SHANK, 19/64" HEAD, AT EACH JOIST.

FACE LAYER 5/8" PROPRIETARY TYPE X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED AT RIGHT ANGLES TO RESILIENT FURRING CHANNELS WITH 1" TYPE S DRYWALL SCREWS 12" O.C. DOUBLE CHANNEL INSTALLED AT FACE LAYER END JOINTS. WOOD JOISTS SUPPORTING 1" NOMINAL T & G WOOD SUBTLER AND 1" NOMINAL WOOD FINISH FLOOR OR 19/32" PLYWOOD FINISHED FLOOR WITH LONG EDGES T & G AND 15/32" INTERIOR PLYWOOD WITH EXTERIOR GLUE SUBTLER PERPENDICULAR TO JOISTS WITH JOINTS STAGGERED.

2/G102 2 HOUR RATED CEILING

NOT TO SCALE

(GA FC 5710 PROPRIETARY UL DESIGN L511)

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			PARTITION TYPES / RATED ASSEMBLIES	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 127 OF / DWG. G102

OBSERVATION DECK

SCALE BUILDING

TYPE 6 CONSTRUCTION
5460 SQUARE FEET
CHAPTER 54 OCCUPANCY

3 HOUR OCCUPANCY SEPARATION

ACCESSIBLE ROUTE

INSPECTION BUILDING

TYPE 6 CONSTRUCTION
5850 SQUARE FEET
CHAPTER 59 OCCUPANCY

3 HOUR OCCUPANCY SEPARATION

CELLULAR BUILDING

TYPE 6 CONSTRUCTION
1270 SQUARE FEET
CHAPTER 54 OCCUPANCY

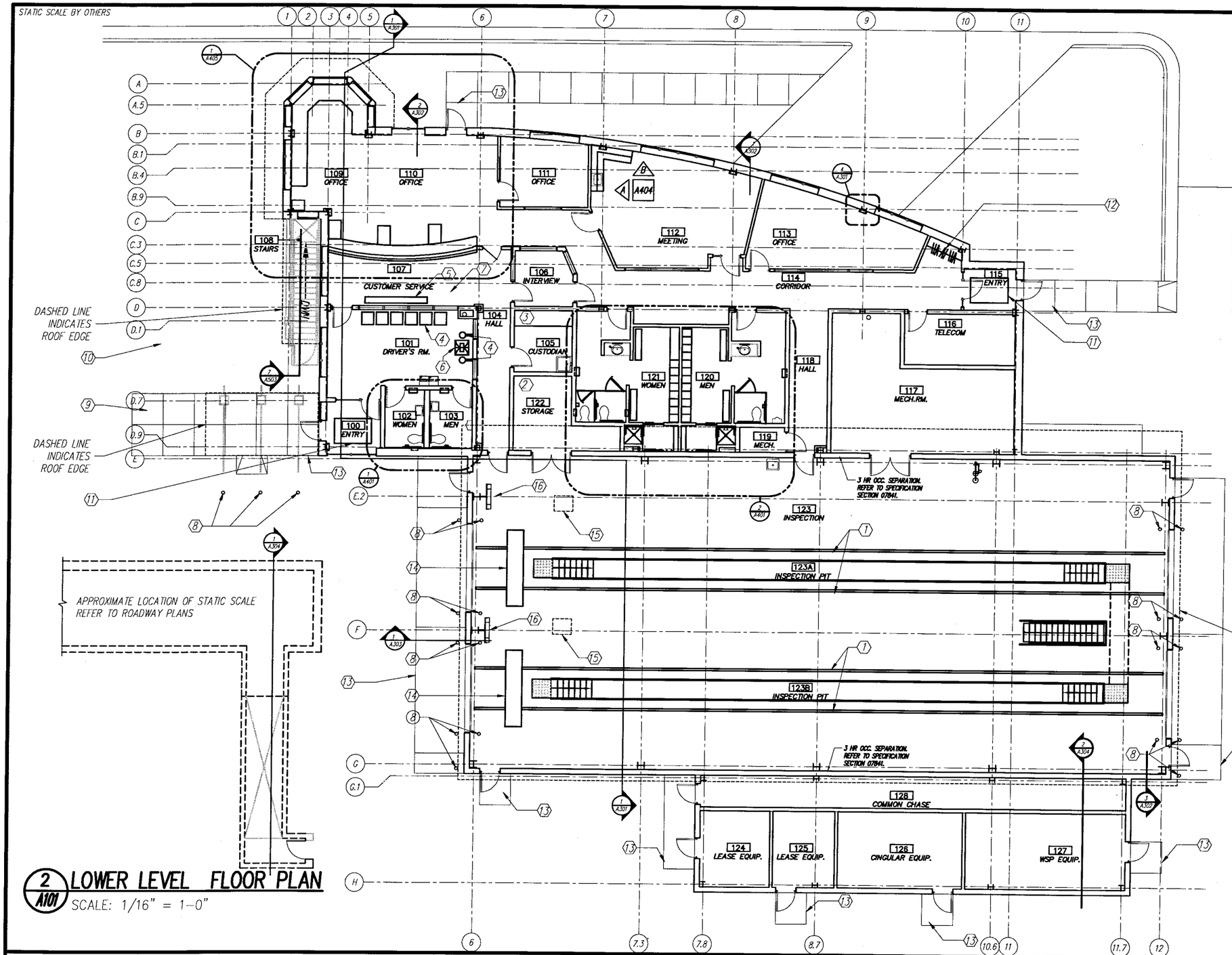
THIS PLAN IS INTENDED TO ILLUSTRATE RELATIONSHIPS BETWEEN THE DIFFERENT OCCUPANCIES AND THE TERMINOLOGY USED IN THE BUILDING PLANS AND SPECIFICATIONS.

REFER TO THE ROADWAY PLANS FOR SITE FEATURES RELATED TO THE BUILDING.

1 G103 KEY PLAN

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			BUILDING KEY PLAN		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0 10' 20'	SHEET NO: 128 OF	DWG. G103

STATIC SCALE BY OTHERS



2 A101 LOWER LEVEL FLOOR PLAN

SCALE: 1/16" = 1-0"

1 A101 GROUND FLOOR PLAN

SCALE: 1/16" = 1-0"

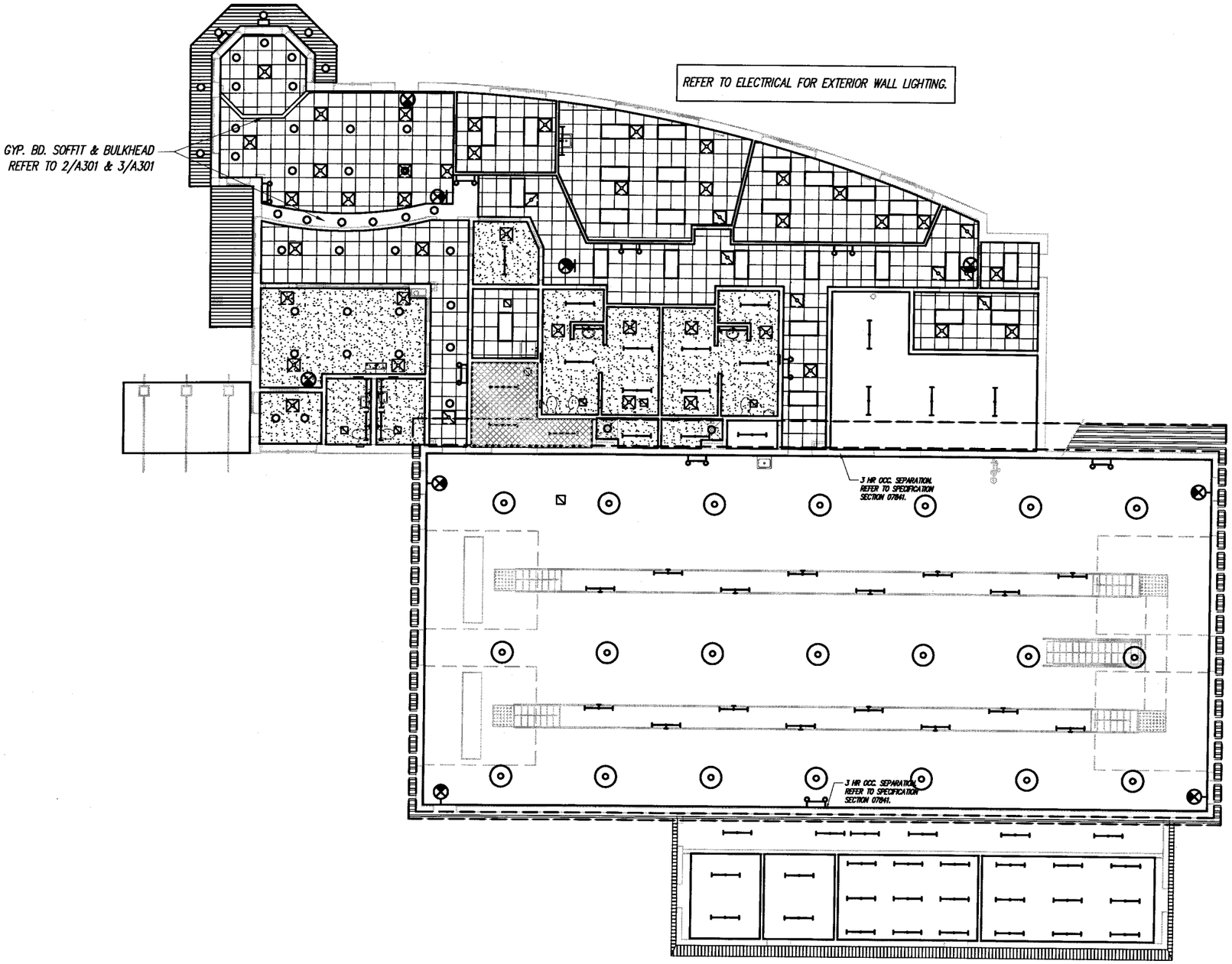
KEY NOTES

1. PAINTED TRAFFIC STRIPE, REFER TO SECTION 09900 SPECIFICATIONS
2. 2 HOUR RATED CEILING THIS ROOM. REFER TO 2/ G102.
3. SHELVING. REFER TO 2/A507.
4. FIXED AUDIENCE SEATING. REFER TO SECTION 12610 SPECIFICATIONS.
5. FLOOR MOUNTED BENCH. REFER TO SECTION 10505 SPECIFICATIONS.
6. FLOOR MOUNTED TELEPHONE ENCLOSURES. REFER TO SPECIFICATIONS AND 4/A506.
7. CEILING MOUNTED TV BRACKET. MINIMUM CLEAR HEIGHT 80" A.F.F. REFER TO SECTION 11132 SPECIFICATIONS
8. PIPE BOLLARD (TYPICAL). REFER TO 1/A509.
9. FLAGPOLE BY OTHERS.
10. WELL BY OTHERS.
11. RECESSED ENTRY MAT 4'-0" X 6'-0" REFER TO 2/A104.
12. COAT RACK. REFER TO SPECIFICATION SECTION 10914.
13. CONCRETE STOOPS AND APRONS BY GENERAL BUILDING CONTRACTOR, REFER TO BUILDING LANDSCAPING/WELL/SEPTIC PLAN IN ROADWAY DRAWINGS, REFER TO 4/A507 FOR CLEARANCE REQUIREMENTS.
14. BRAKE TEST EQUIPMENT PIT- REFER TO STRUCTURAL, ELECTRICAL AND PLUMBING.
15. BRAKE TESTING COMPUTER / PRINTER SUPPLIED BY OTHERS. INSTALLATION BY OTHERS. REFER TO ELECTRICAL.
16. BRAKE TESTING DISPLAY AND CONTROL PANEL & BRACKETS SUPPLIED BY OTHERS, INSTALLED BY GENERAL BUILDING CONTRACTOR.

NOTE: REFER TO DIMENSION PLAN, A106 FOR STRUCTURAL GRID AND BUILDING DIMENSIONS.

NOTE: REFER TO SHEET A105 & G102 FOR PARTITION TYPES

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			FLOOR PLAN	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0 8 16	SHEET NO: 129 OF / DWG. A101

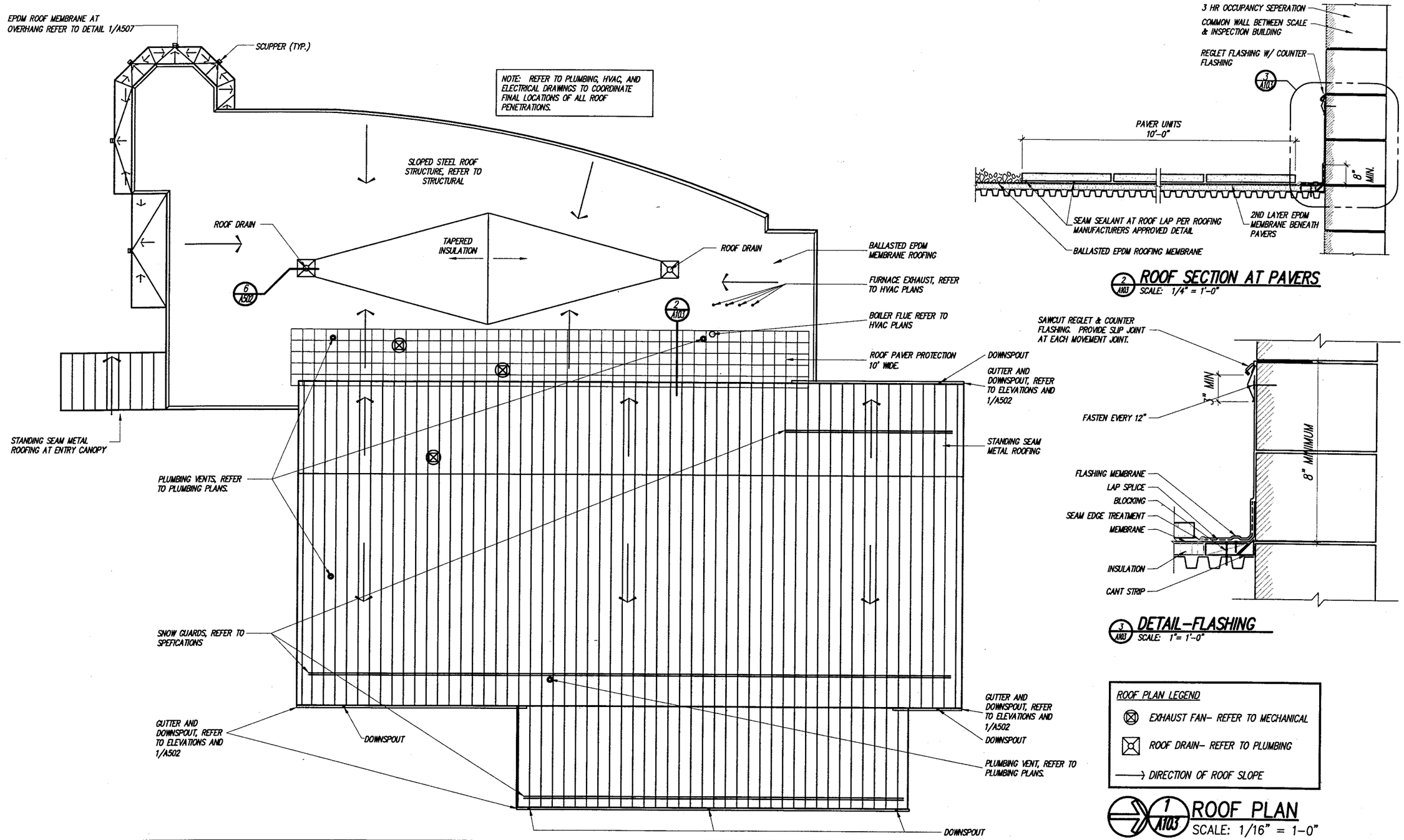


REFLECTED CEILING PLAN SYMBOL/MATERIAL KEY

SYMBOL:	DESCRIPTION:
	2' X 4' LAY-IN FLUORESCENT LIGHT FIXTURE REFER TO "E" DRAWINGS.
	1' X 4' SURFACE MTD. FLUORESCENT LIGHT FIXTURE REFER TO "E" DRAWINGS.
	RECESSED FIXTURE – REFER TO "E" DRAWINGS
	CEILING MOUNTED EXIT FIXTURE REFER TO "E" DRAWINGS.
	CEILING SUPPLY-AIR DIFFUSER – REFER TO "H" DRAWINGS FOR SIZES.
	CEILING RETURN-AIR DIFFUSER – REFER TO "H" DRAWINGS FOR SIZES.
	LAY-IN CEILING DIFFUSER – REFER TO "H" DRAWINGS FOR SIZES.
	CEILING ACCESS PANEL, SIZE INDICATED.
	EXPOSED STRUCTURE / SURFACE, REFER TO ROOM FINISH SCHEDULE.
	GYPSUM BOARD, REFER TO ROOM FINISH SCHEDULE.
	SUSPENDED ACOUSTICAL TILE, REFER TO ROOM FINISH SCHEDULE.
	METAL SOFFIT PANEL
	BATTERY POWERED EMERGENCY LIGHTING
	FLUSH MOUNT FLORESCENT FIXTURE
	SODIUM LIGHTING
	2 HOUR RATED CEILING. REFER TO 2/G102

1 / A102 REFLECTED CEILING PLAN
SCALE: 1/16" = 1-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			REFLECTED CEILING PLAN		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 130 OF	DWG. A102



2/A103 ROOF SECTION AT PAVERS
SCALE: 1/4" = 1'-0"

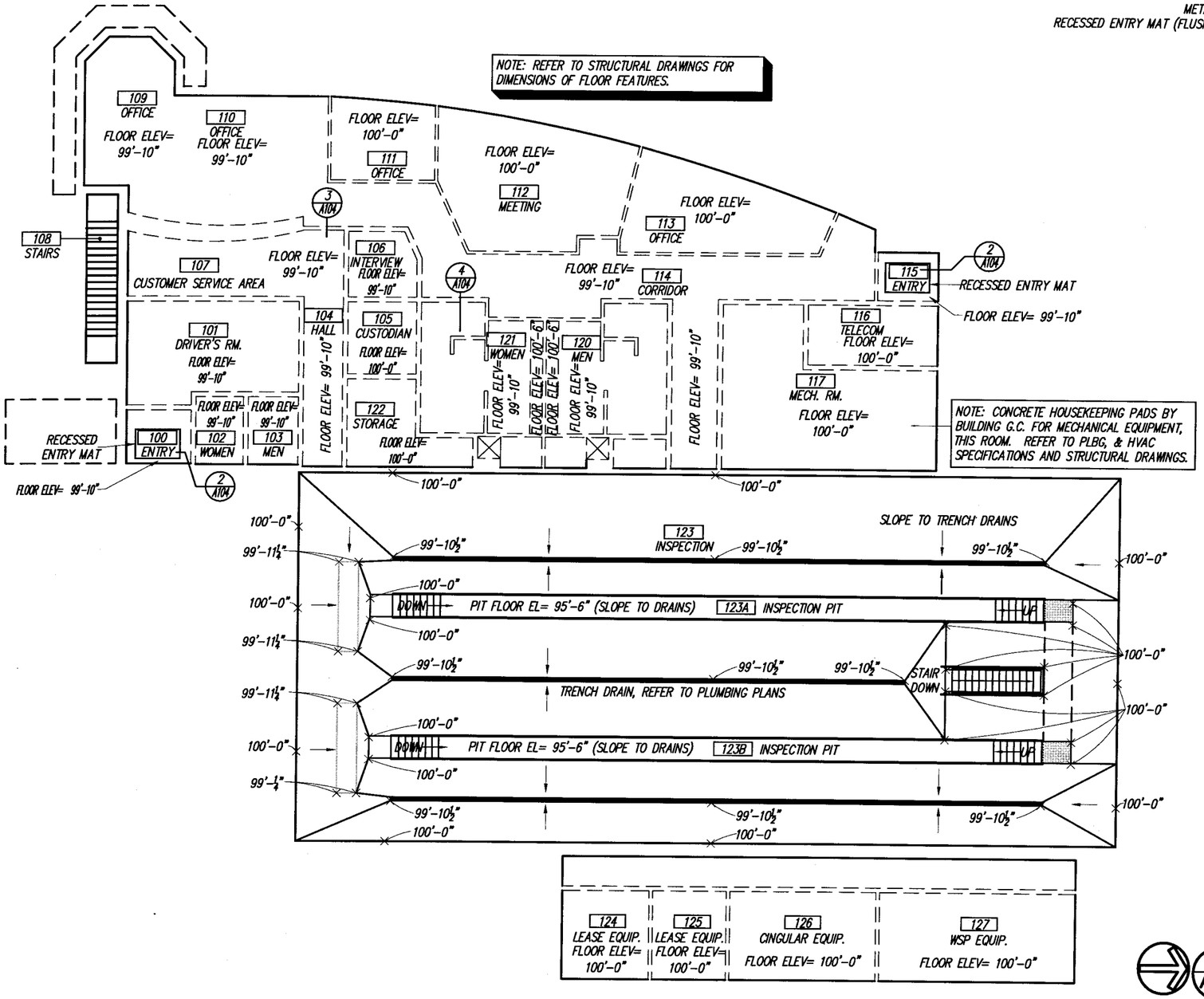
3/A103 DETAIL-FLASHING
SCALE: 1"= 1'-0"

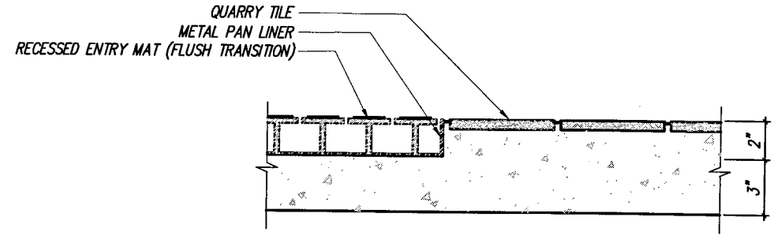
ROOF PLAN LEGEND

- EXHAUST FAN- REFER TO MECHANICAL
- ROOF DRAIN- REFER TO PLUMBING
- DIRECTION OF ROOF SLOPE

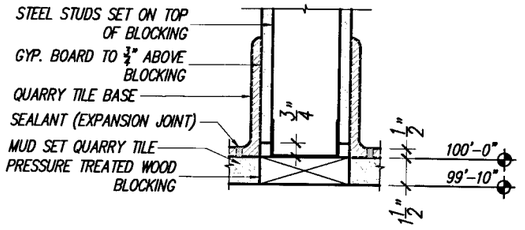
1/A103 ROOF PLAN
SCALE: 1/16" = 1-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			ROOF PLAN	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 131 OF / DWG. A103

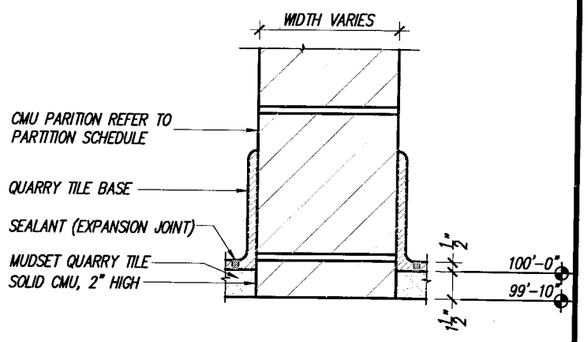




(2/A104) SECTION– ENTRY MAT
SCALE: 1 1/2" = 1'-0"



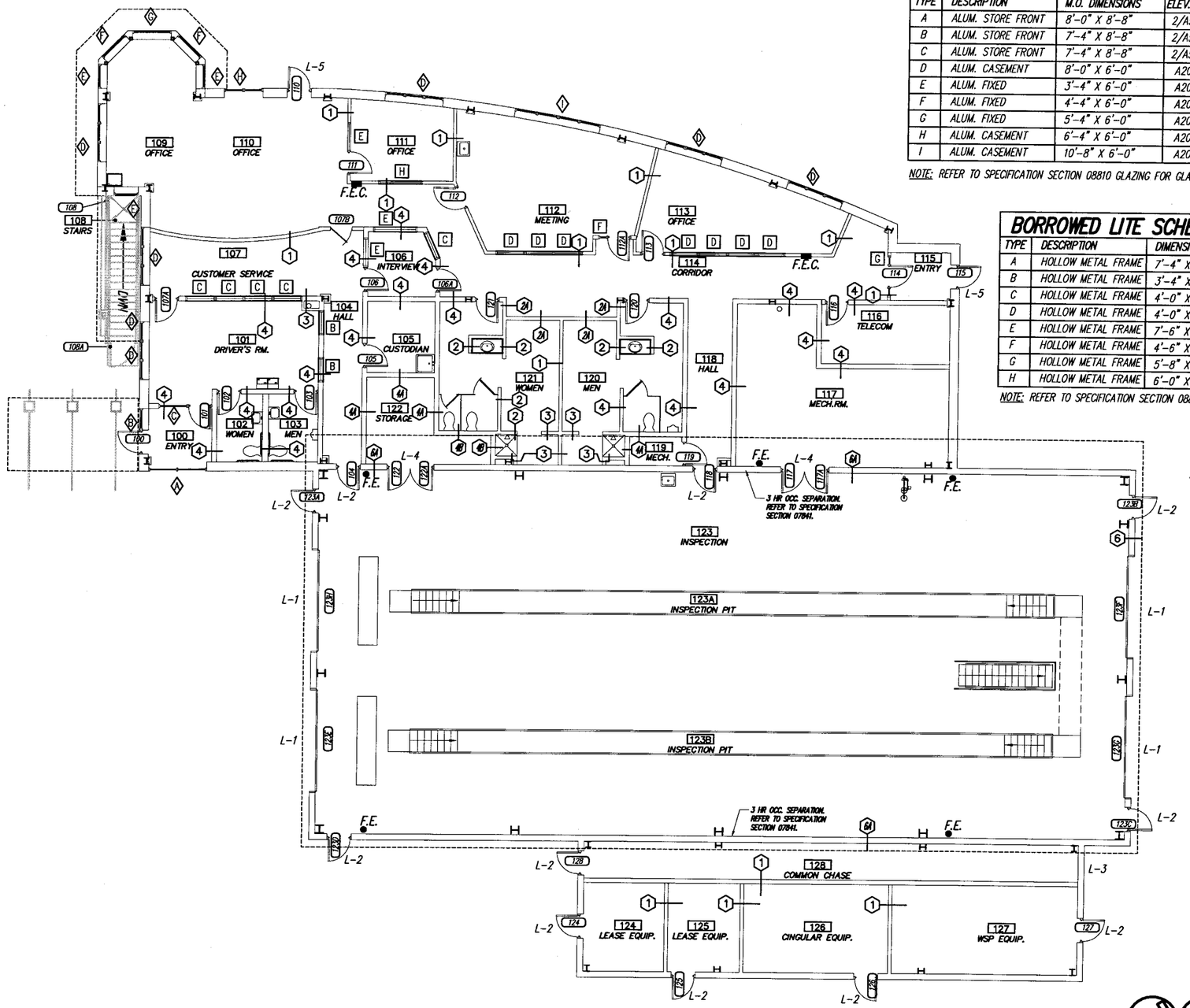
(3/A104) SECTION– COVE BASE AT STUD WALL
SCALE: 1 1/2" = 1'-0"



(4/A104) SECTION– COVE BASE AT BLOCK WALL
SCALE: 1 1/2" = 1'-0"

(1/A104) FLOOR SLAB PLAN
SCALE: 1/16" = 1–0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			FLOOR SLAB PLAN	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 132.x OF / DWG. A104



WINDOW AND LINTEL SCHEDULE

TYPE	DESCRIPTION	M.O. DIMENSIONS	ELEV. REF.	LINTEL	REMARKS
A	ALUM. STORE FRONT	8'-0" X 8'-8"	2/A504	∠ 7 X 4 X 1/2	
B	ALUM. STORE FRONT	7'-4" X 8'-8"	2/A504	∠ 7 X 4 X 3/8	
C	ALUM. STORE FRONT	7'-4" X 8'-8"	2/A504	∠ 7 X 4 X 3/8	
D	ALUM. CASEMENT	8'-0" X 6'-0"	A201	∠ 7 X 4 X 3/8	ROLLER SHADE OFFICE 109; MINIBLIND OFFICE 111 & OFFICE 113. SEE SPECIFICATION SECTIONS 12491 & 12494.
E	ALUM. FIXED	3'-4" X 6'-0"	A201	∠ 7 X 4 X 3/8	ROLLER SHADE OFFICE 109. SEE SPECIFICATION SECTION 12494.
F	ALUM. FIXED	4'-4" X 6'-0"	A201	∠ 7 X 4 X 3/8	ROLLER SHADE THIS WINDOW TYPE IN OFFICE 109 ONLY. SEE SPECIFICATION SECTION 12494.
G	ALUM. FIXED	5'-4" X 6'-0"	A201	∠ 7 X 4 X 3/8	ROLLER SHADE THIS WINDOW TYPE IN OFFICE 109 ONLY. SEE SPECIFICATION SECTION 12494.
H	ALUM. CASEMENT	6'-4" X 6'-0"	A201	∠ 7 X 4 X 3/8	ROLLER SHADE THIS WINDOW TYPE IN OFFICE 110 ONLY. SEE SPCIFICATION SECTION 12494.
I	ALUM. CASEMENT	10'-8" X 6'-0"	A201	∠ 7 X 4 X 1/2	MINIBLIND IN MEETING 112 ONLY. SEE SPECIFICATION SECTION 12491.

NOTE: REFER TO SPECIFICATION SECTION 08810 GLAZING FOR GLASS TYPES.

BORROWED LITE SCHEDULE

TYPE	DESCRIPTION	DIMENSIONS	ELEV. REF.	REMARKS
A	HOLLOW METAL FRAME	7'-4" X 3'-4"	1/A504	
B	HOLLOW METAL FRAME	3'-4" X 5'-0"	1/A504	
C	HOLLOW METAL FRAME	4'-0" X 5'-0"	1/A504	MINIBLIND INTERVIEW 106 ONLY. REFER TO SPECIFICATION SECTION 12491.
D	HOLLOW METAL FRAME	4'-0" X 5'-10"	1/A504	MINIBLIND MEETING 112 & OFFICE 113 ONLY. REFER TO SPECIFICATION SECTION 12491.
E	HOLLOW METAL FRAME	7'-6" X 7'-2"	1/A504	MINIBLIND OFFICE 111 & INTERVIEW 106 ONLY. REFER TO SPECIFICATION SECTION 12491.
F	HOLLOW METAL FRAME	4'-6" X 7'-2"	1/A504	
G	HOLLOW METAL FRAME	5'-8" X 7'-2"	1/A504	
H	HOLLOW METAL FRAME	6'-0" X 5'-0"	1/A504	MINIBLIND OFFICE 111 ONLY. REFER TO SPECIFICATION SECTION 12491.

NOTE: REFER TO SPECIFICATION SECTION 08810 GLAZING AND A504 FOR GLASS TYPES.

LINTEL SCHEDULE

TYPE	DESCRIPTION	M.O. DIMENSIONS	DETAIL REF.	LINTEL	REMARKS
L-1	OVERHEAD DOOR	14'-0" X 16'-0"	1/A508	WT 8 X 18	INSPECTION BUILDING
L-2	SINGLE WALK DOOR	3'-4" X 7'-4"	E/A508	(1) NO. 4 CONT.	BOND BEAM, GROUT 1 COURSE ABOVE
L-3	KNOCK OUT PANEL	3'-4" X 1'-4"	1/A202	WT 8 X 18	CELLULAR BUILDING
L-4	DOUBLE WALK DOOR	6'-8" X 7'-4"	E/A508	(1) NO. 4 CONT.	BOND BEAM, GROUT 2 COURSES ABOVE
L-5	WALK DOOR	3'-4" X 7'-4"	-	∠ 4 X 4 X 3/8	SCALE BUILDING

NOTE: REFER TO WINDOW SCHEDULE FOR WINDOW LINTELS.

LEGEND

- WINDOW
- DOOR
- BORROWED LITE (HOLLOW METAL FRAME), REFER TO A504
- PARTITION TYPE, REFER TO PARTITION KEY G102
- F.E. – FIRE EXTINGUISHER ON WALL MOUNTED BRACKET, REFER TO SPECIFICATIONS
- F.E.C. – FIRE EXTINGUISHER CABINET, REFER TO SPECIFICATIONS

1/A105 DOOR/WINDOW/BORR. LITES/PARTITION TYPES

SCALE: 1/16" = 1-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

DOOR/WINDOW/BORR. LITE/PARTITION TYPE PLAN

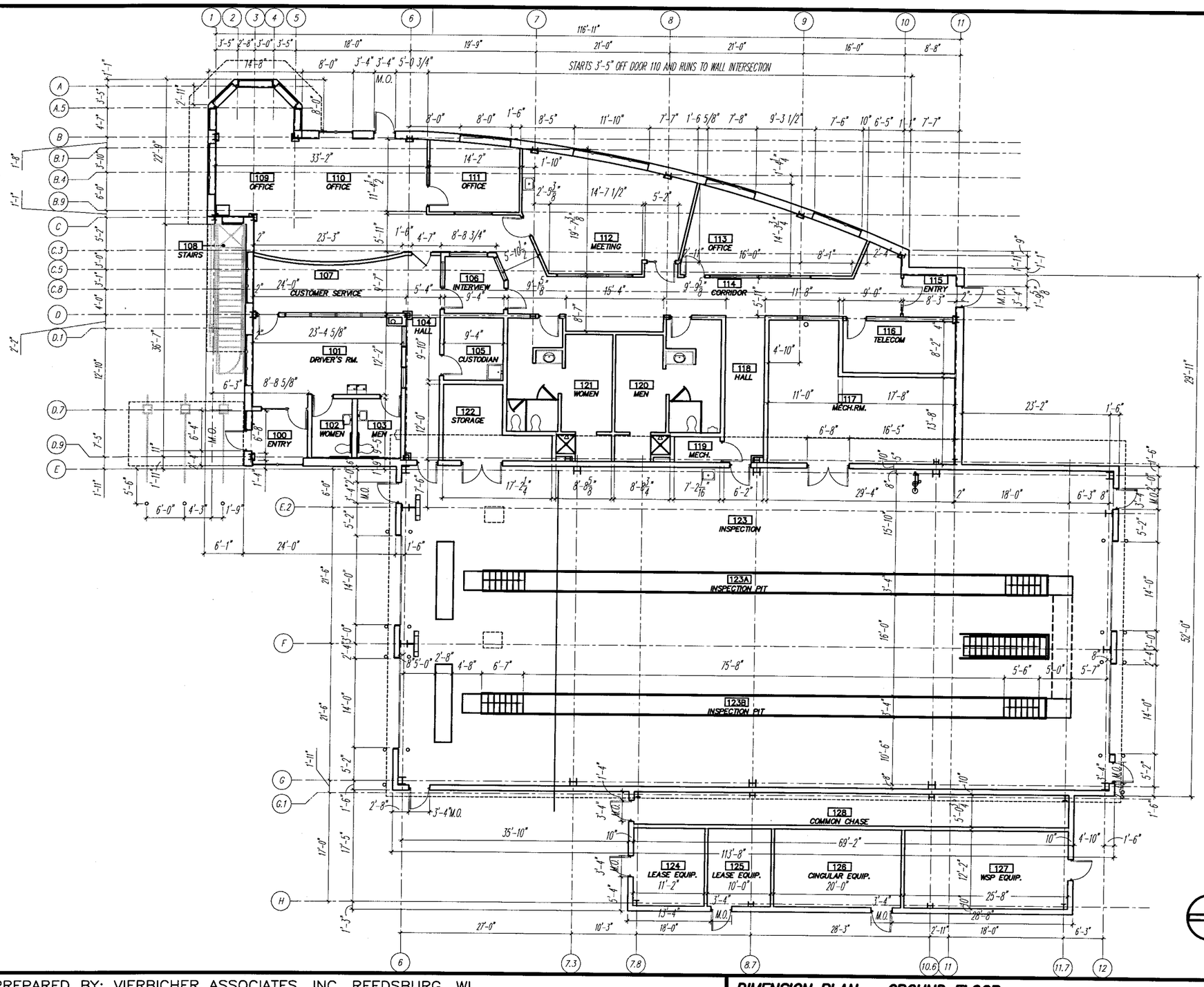
SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0 8 16

DATE: 1/1/02

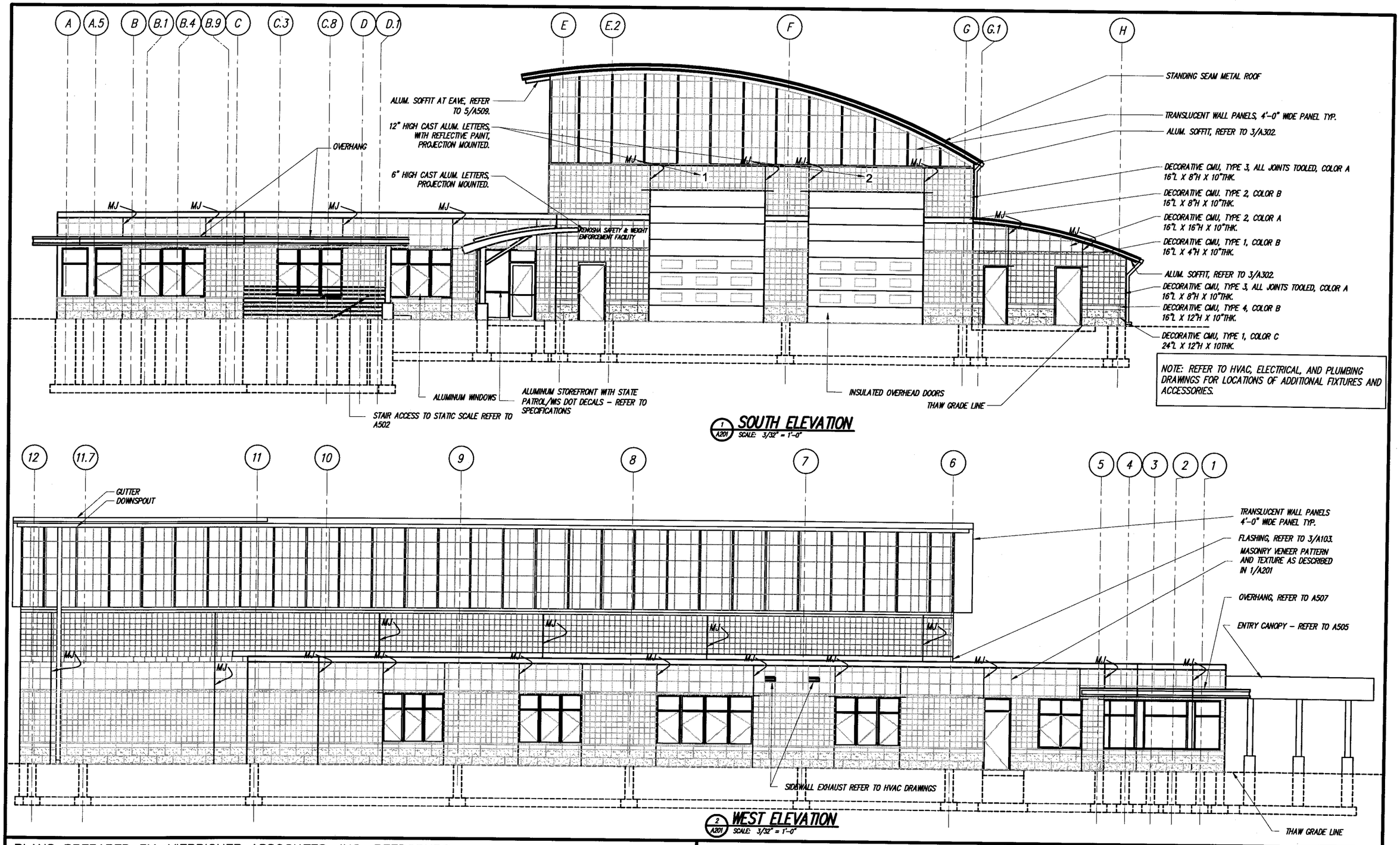
SHEET NO: 133 OF

DWG. A105



1 A106 GROUND FLOOR PLAN
SCALE: 1/16" = 1-0"

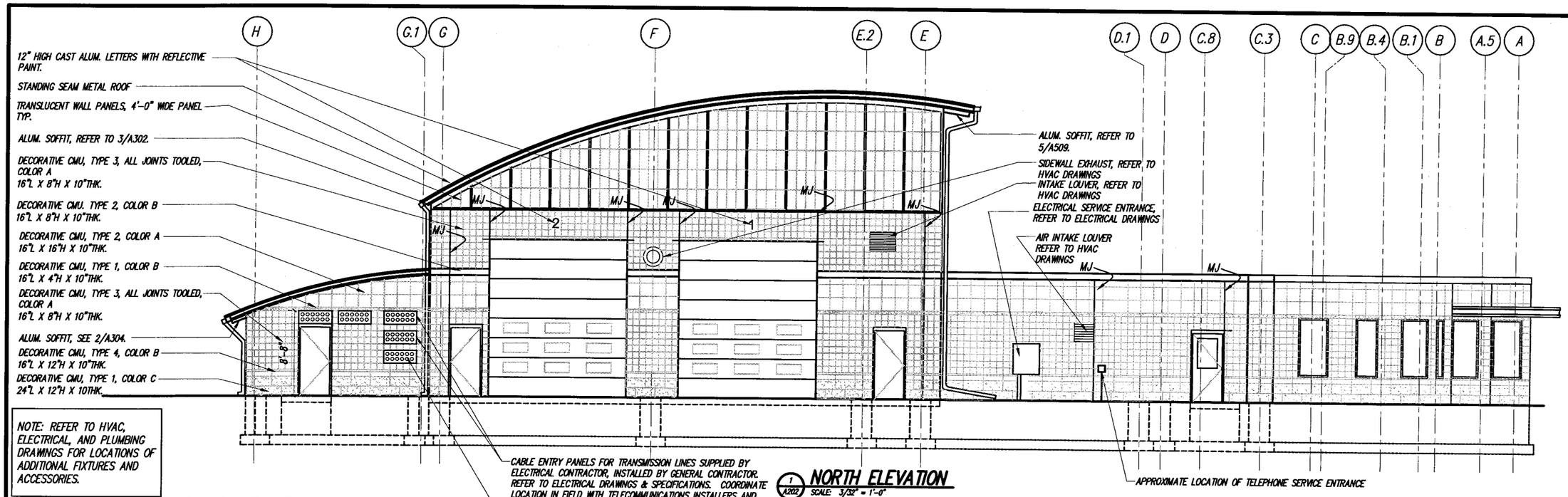
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DIMENSION PLAN – GROUND FLOOR	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0 8 16	SHEET NO: 134 OF / DWG. A106



1 A201 **SOUTH ELEVATION**
SCALE: 3/32" = 1'-0"

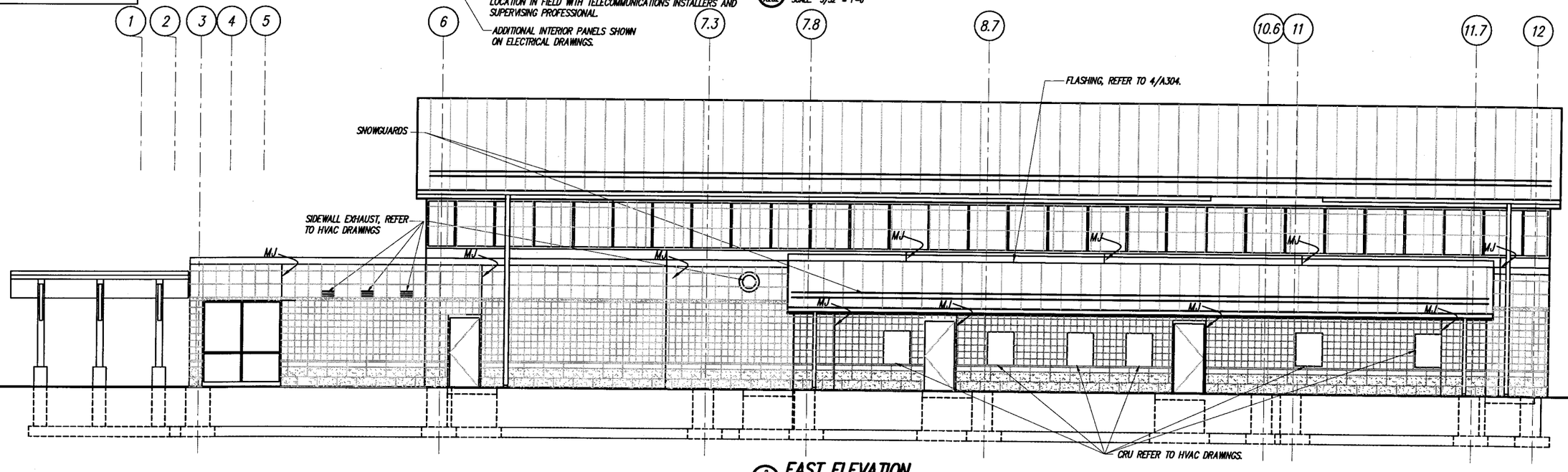
2 A201 **WEST ELEVATION**
SCALE: 3/32" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			BUILDING ELEVATIONS – SOUTH & WEST		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 135 OF / DWG. A201



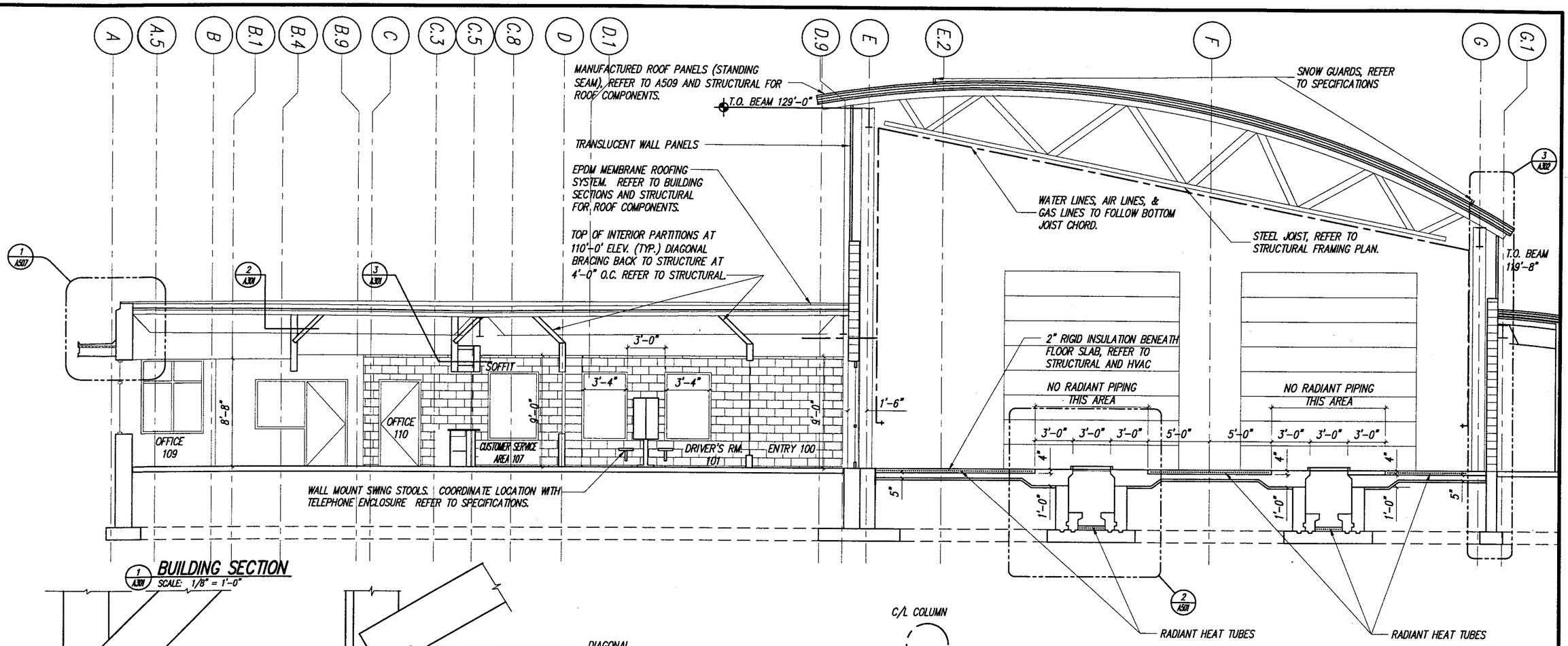
NOTE: REFER TO HVAC, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATIONS OF ADDITIONAL FIXTURES AND ACCESSORIES.

1/A202 NORTH ELEVATION
SCALE: 3/32" = 1'-0"



2/A202 EAST ELEVATION
SCALE: 3/32" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			BUILDING ELEVATIONS – NORTH & EAST		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 136 OF	DWG. A202



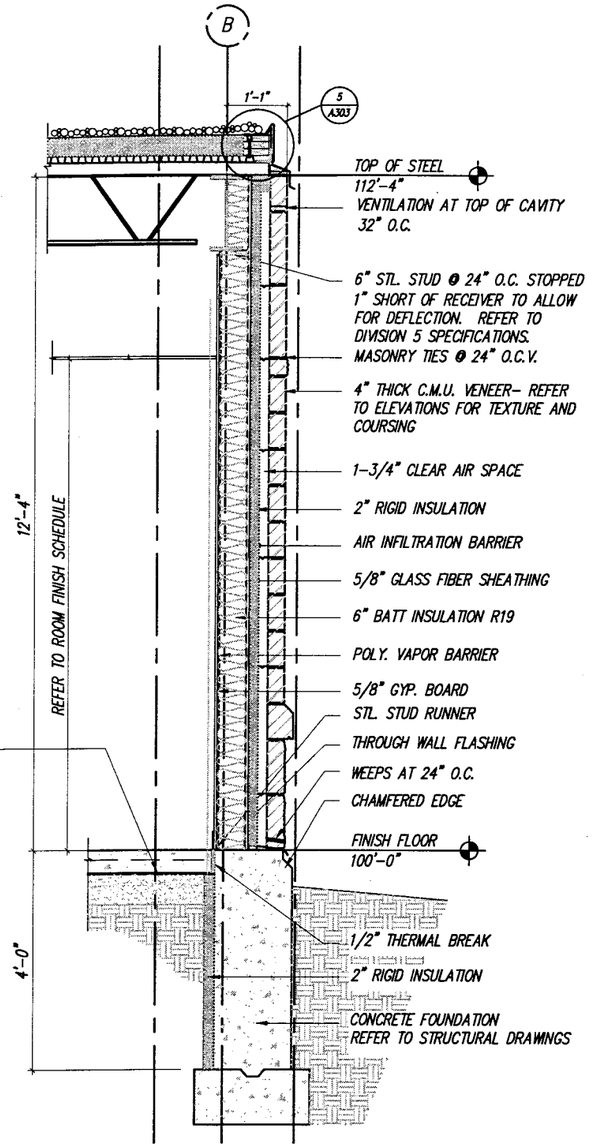
2 A301 SECTION- BULKHEAD
SCALE: 1-1/2" = 1'-0"

3 A301 SECTION- SOFFIT
SCALE: 1-1/2" = 1'-0"

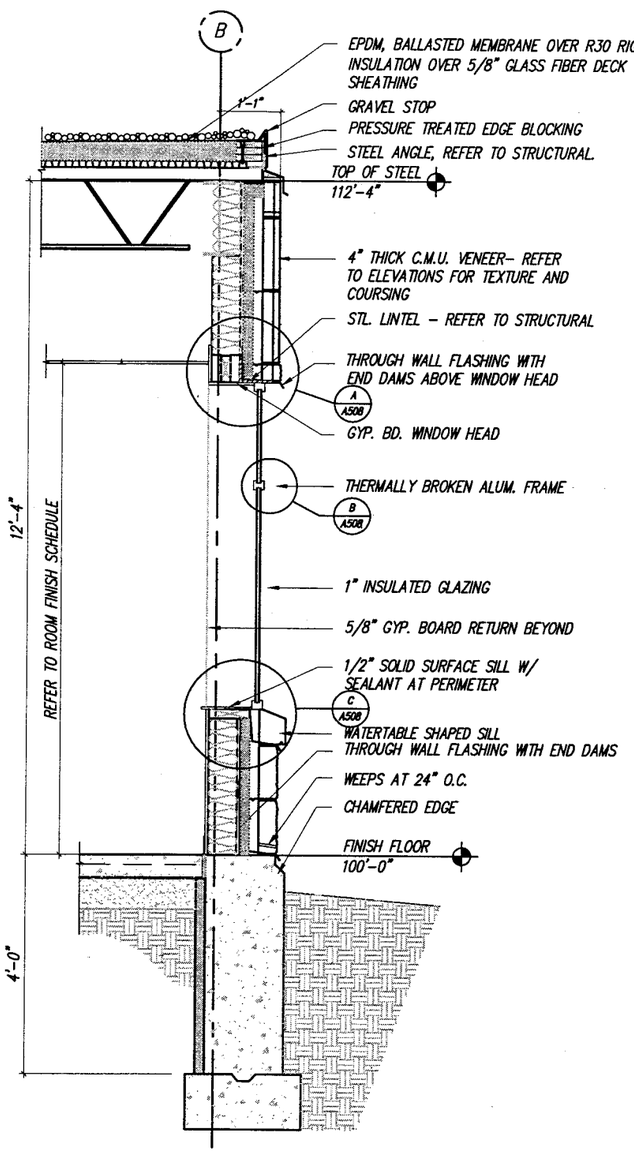
4 A301 PLAN DETAIL - COL. AT WALL
SCALE: 1" = 1'-0"

5 A301 TILE EXPANSION JOINT (TYP.)
SCALE: 1" = 1'-0"

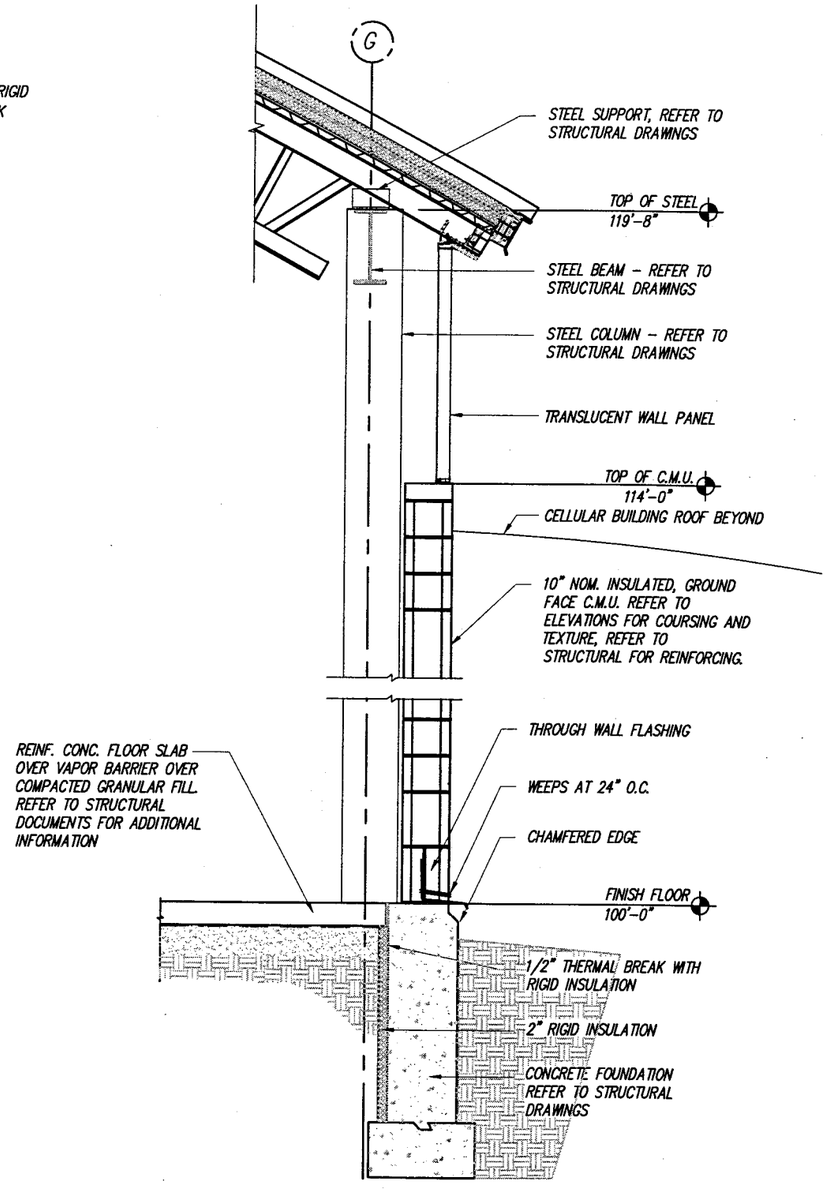
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			BUILDING SECTIONS	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET	SHEET NO: 137 OF / DWG. A301



1/A302 WALL SECTION
SCALE: 3/8" = 1'-0"

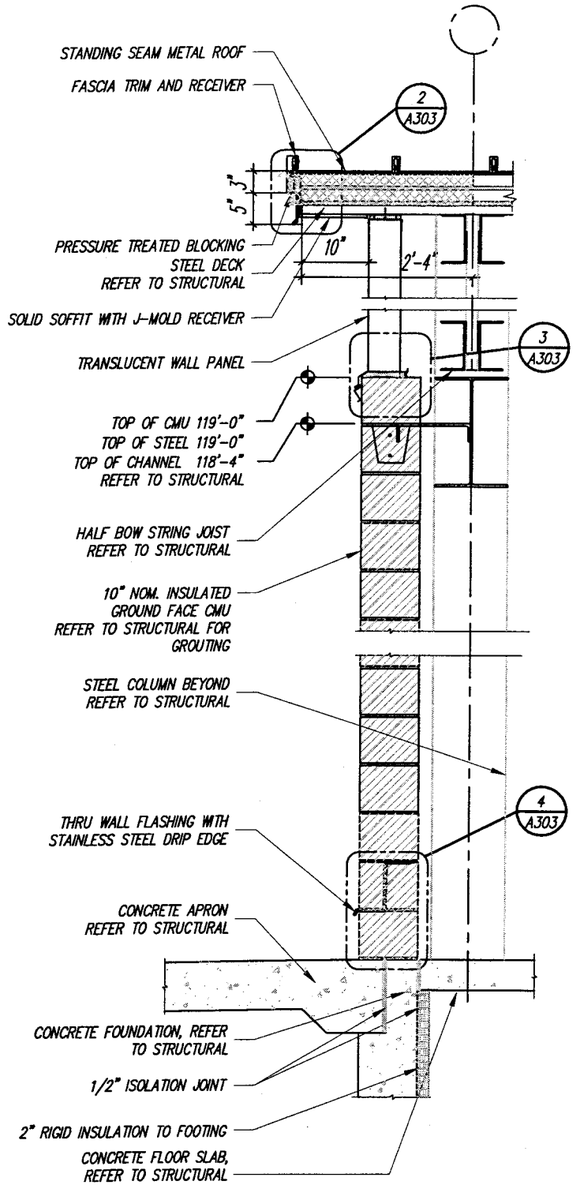


2/A302 WALL SECTION
SCALE: 3/8" = 1'-0"

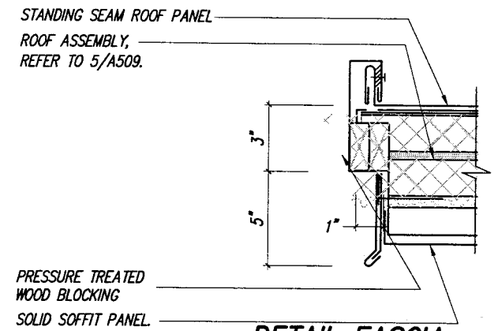


3/A302 WALL SECTION
SCALE: 3/8" = 1'-0"

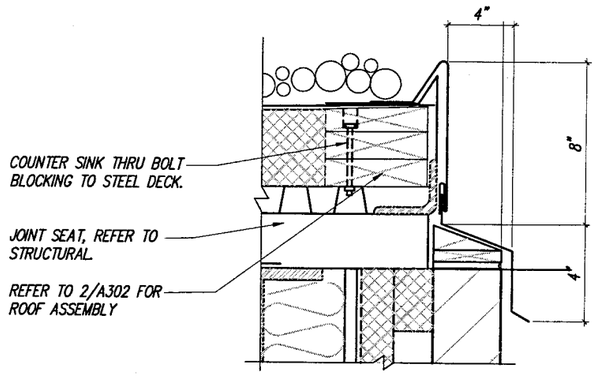
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			WALL SECTIONS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 138 OF / DWG. A302



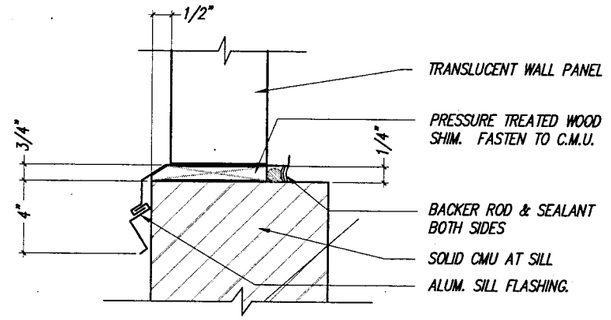
1 A303 **SECTION- INSPECTION WALL**
1/2"=1'-0"



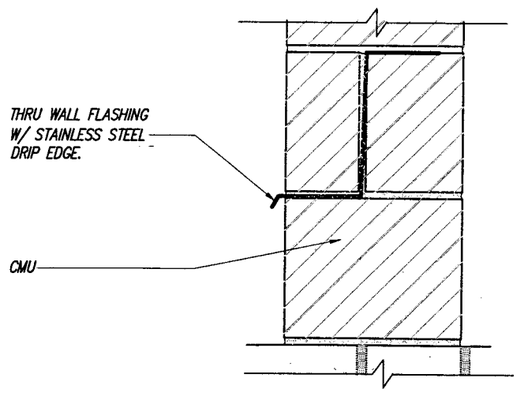
2 A303 **DETAIL FASCIA**
1 1/2"=1'-0"



5 A303 **DETAIL- ROOF EDGE**
1 1/2"=1'-0"

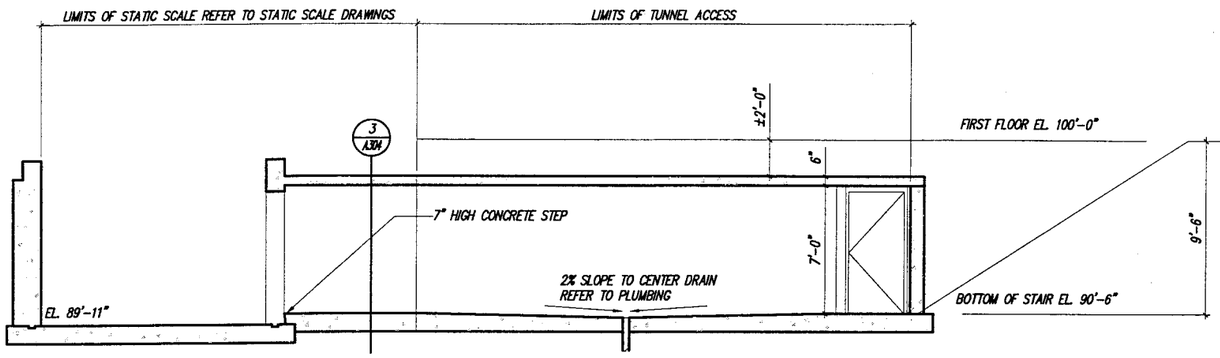


3 A303 **DETAIL- SILL**
1 1/2"=1'-0"



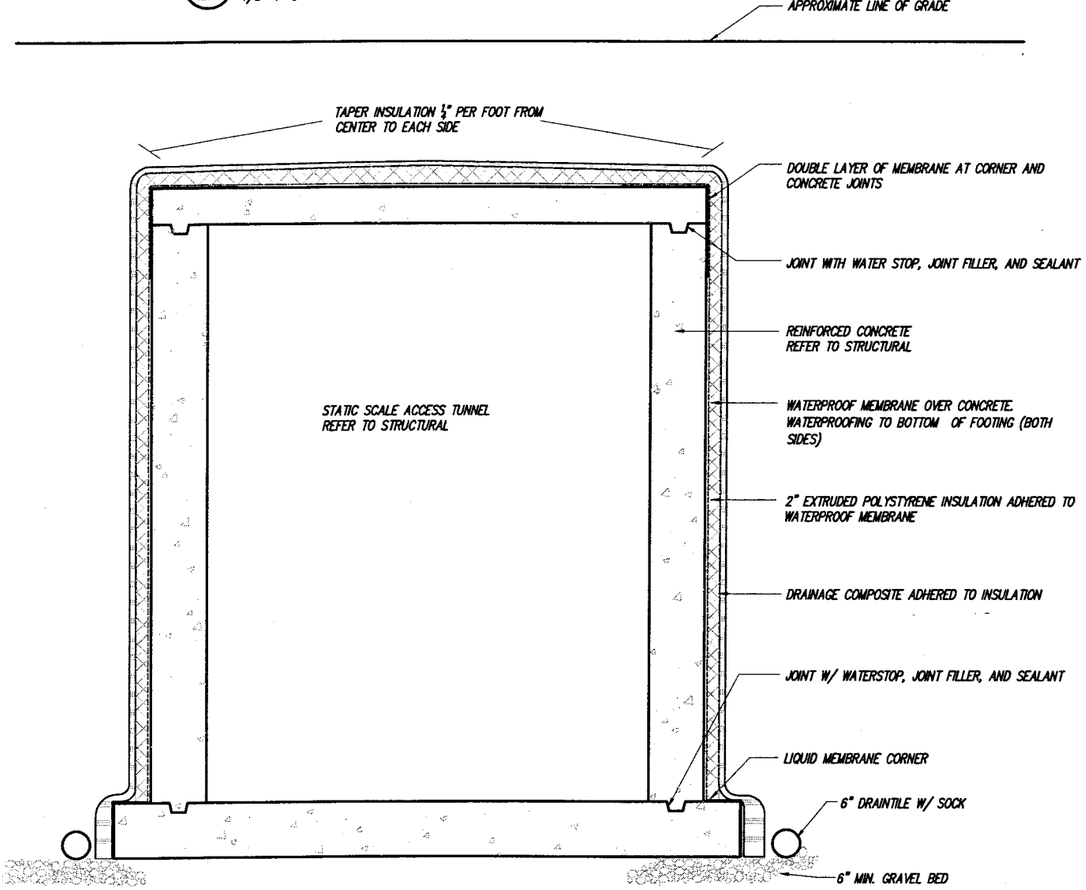
4 A303 **DETAIL- FLASHING**
1 1/2"=1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			WALL SECTIONS & DETAILS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 139 OF	DWG. A303



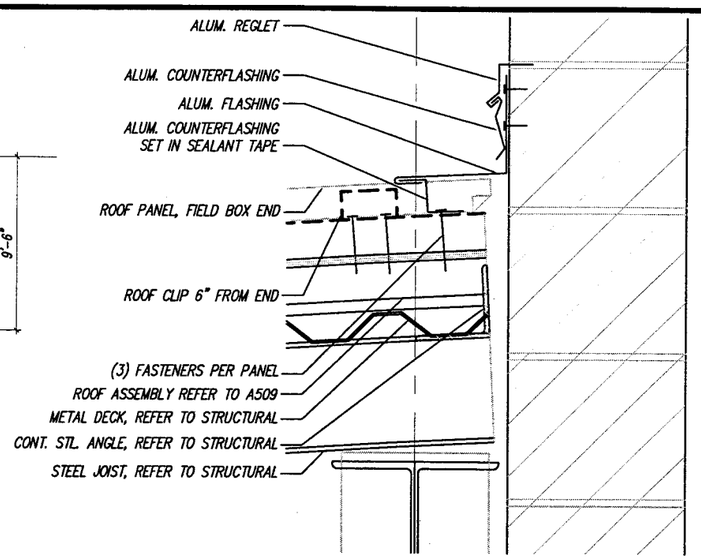
1 A304 SECTION– STATIC SCALE TUNNEL

1/8"=1'-0"



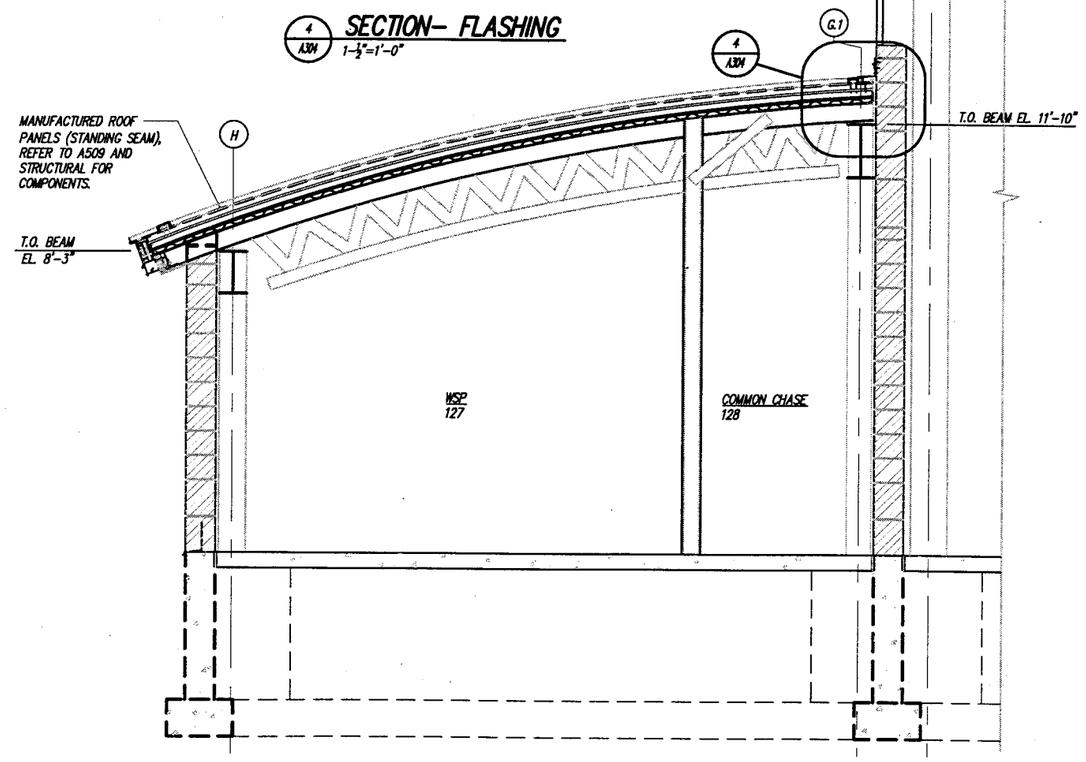
3 A304 SECTION– STATIC SCALE TUNNEL WATERPROOFING

1/2"=1'-0"



4 A304 SECTION– FLASHING

1–½"=1'-0"

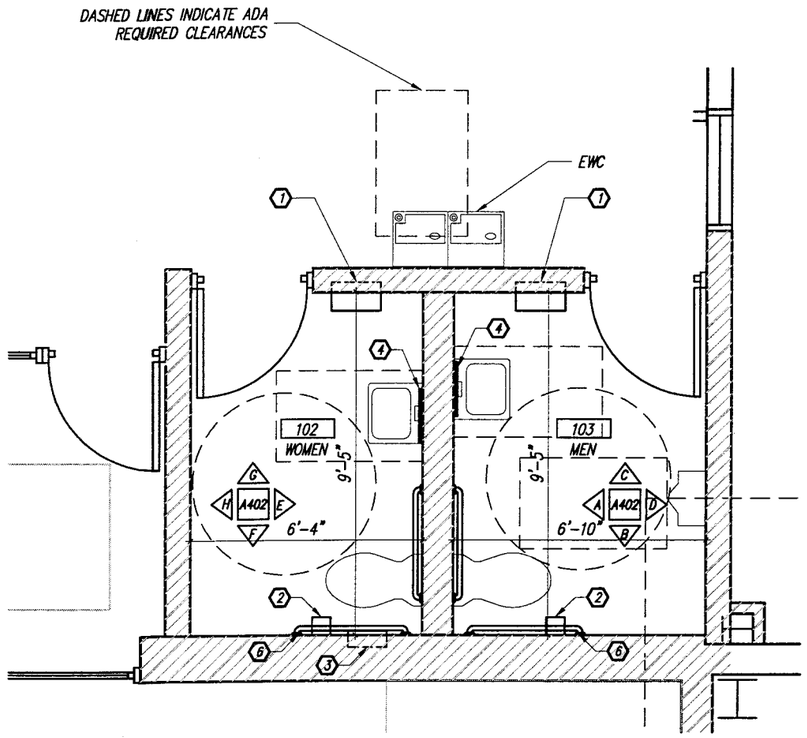


2 A304 SECTION– CELLULAR BUILDING

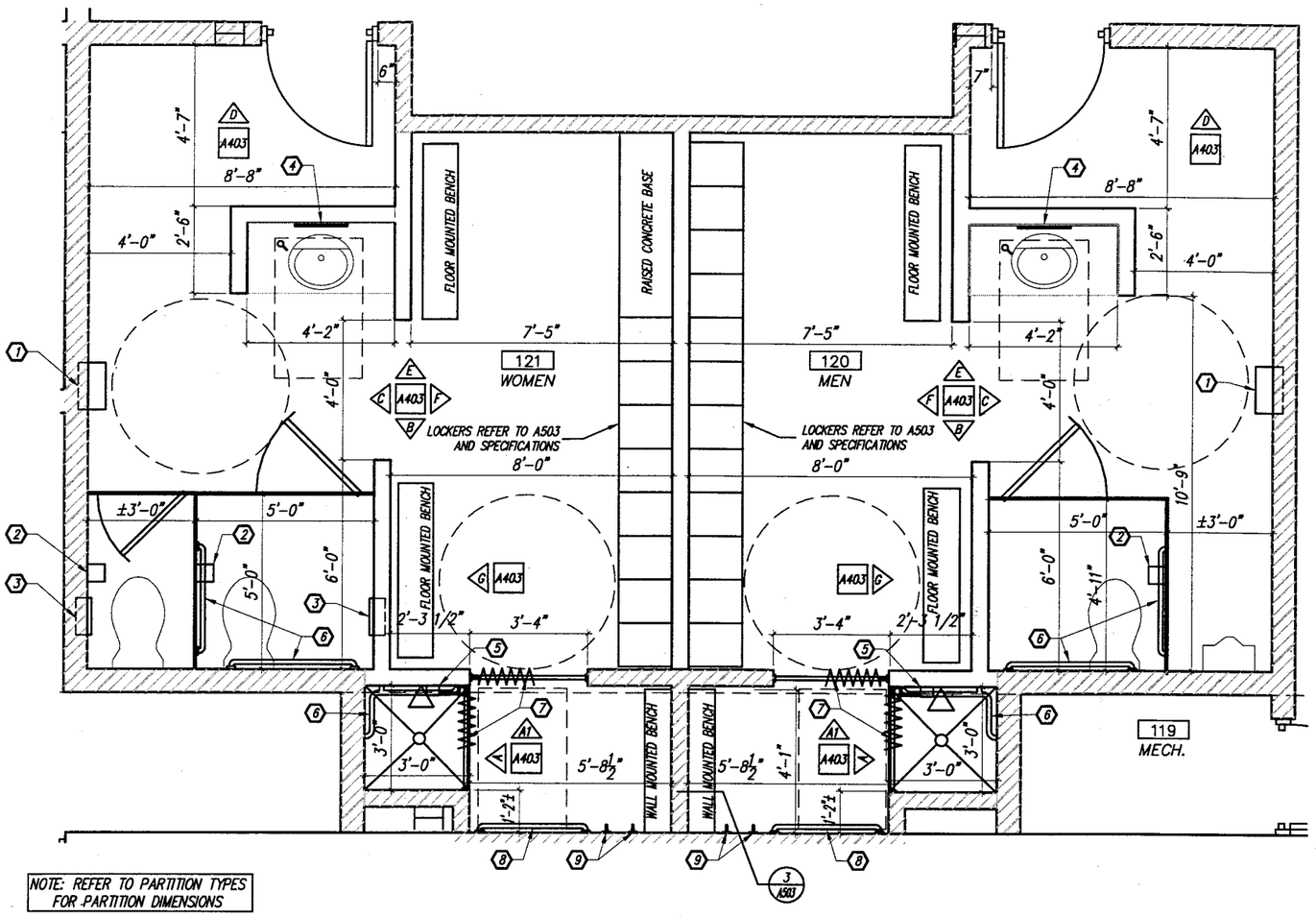
1/4"=1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			SECTIONS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 140 OF	DWG. A304

1. SEMI RECESSED PAPER TOWEL / TRASH. REFER TO SPECIFICATION SECTION 10800.
2. SURFACE MOUNTED TOILET PAPER DISPENSER. REFER TO SPECIFICATIONS.
3. RECESSED SANITARY NAPKIN DISPOSAL. REFER TO SPECIFICATIONS.
4. SURFACE MOUNTED MIRROR. REFER TO SPECIFICATIONS.
5. SURFACE MOUNTED SOAP DISH & BAR. REFER TO SPECIFICATIONS.
6. SURFACE MOUNTED GRAB BAR. REFER TO SPECIFICATIONS.
7. SHOWER CURTAIN ROD. REFER TO SPECIFICATIONS.
8. SURFACE MOUNTED TOWEL BAR. REFER TO SPECIFICATIONS.
9. SURFACE MOUNTED CLOTHES HOOK. REFER TO SPECIFICATIONS.

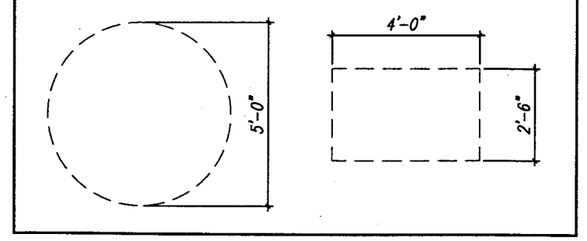


1/A401 ENLARGED PLAN – TOILET ROOMS 102 & 103
1/4" = 1'-0"

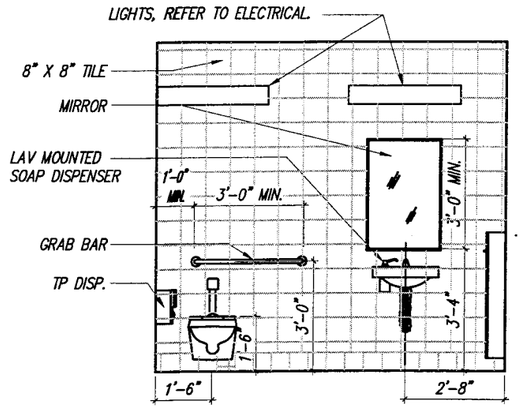


2/A401 ENLARGED PLAN – LOCKER ROOMS
1/4" = 1'-0"

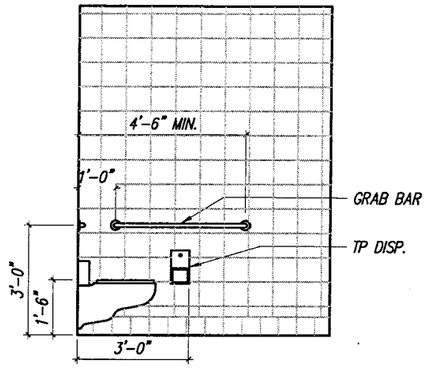
LEGEND
CLEAR FLOOR SPACE REQUIRED BY ADA



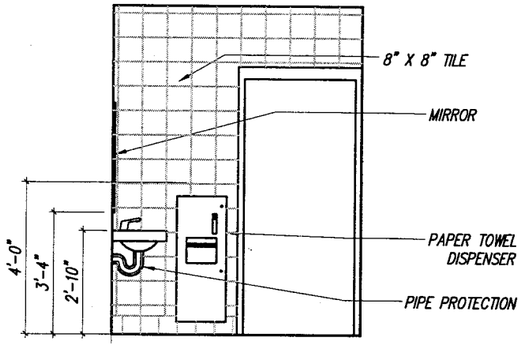
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			ENLARGED PLANS – LOCKER / TOILET ROOMS	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 141 OF / DWG. A401



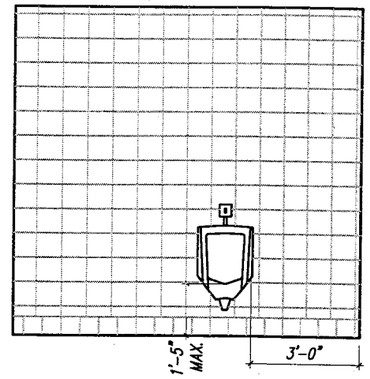
A / A402 **INT. ELEV.– MEN 103**
SCALE: 1/4" = 1'-0"



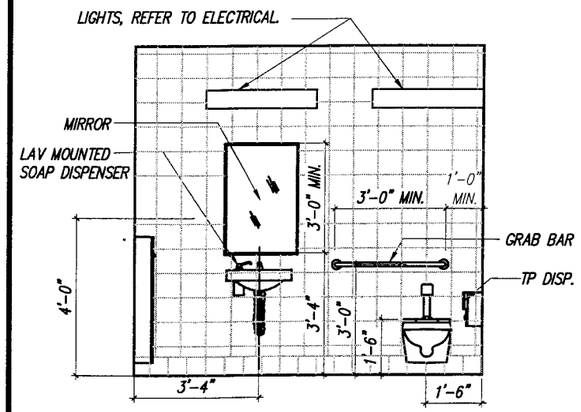
B / A402 **INT. ELEV.– MEN 103**
SCALE: 1/4" = 1'-0"



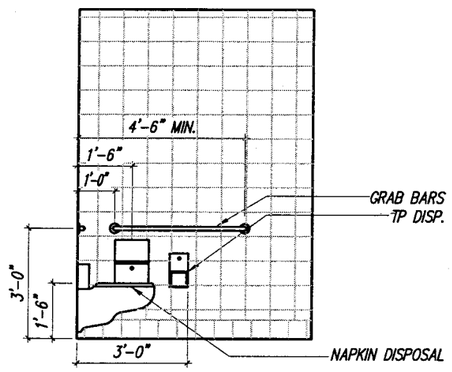
C / A402 **INT. ELEV.– MEN 103**
SCALE: 1/4" = 1'-0"



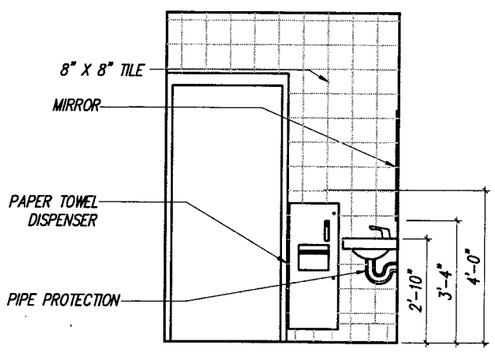
D / A402 **INT. ELEV.– MEN 103**
SCALE: 1/4" = 1'-0"



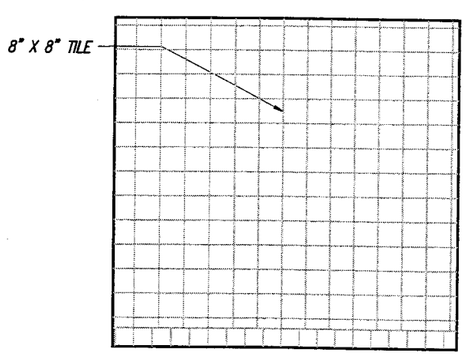
E / A402 **INT. ELEV.– WOMEN 102**
SCALE: 1/4" = 1'-0"



F / A402 **INT. ELEV.– WOMEN 102**
SCALE: 1/4" = 1'-0"

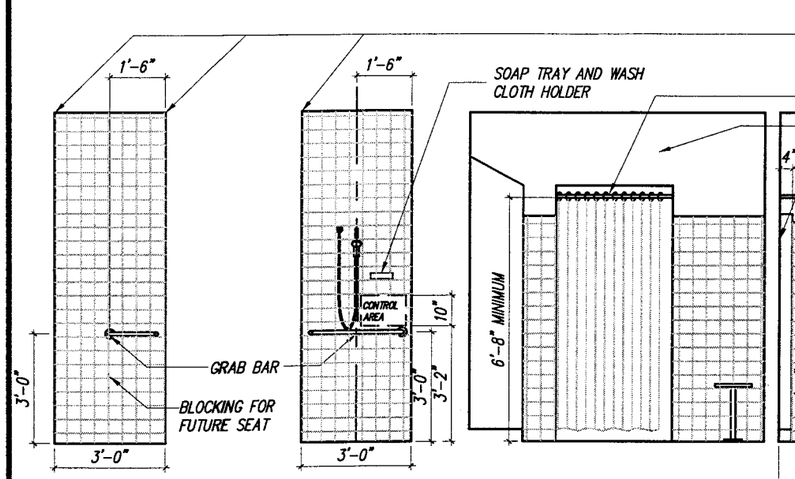


G / A402 **INT. ELEV.– WOMEN 102**
SCALE: 1/4" = 1'-0"



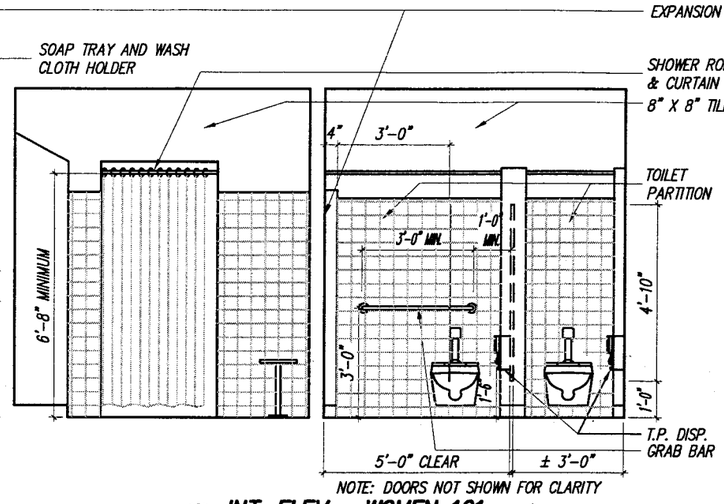
H / A402 **INT. ELEV.– WOMEN 102**
SCALE: 1/4" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			INTERIOR ELEVATIONS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 142 OF / DWG. A402

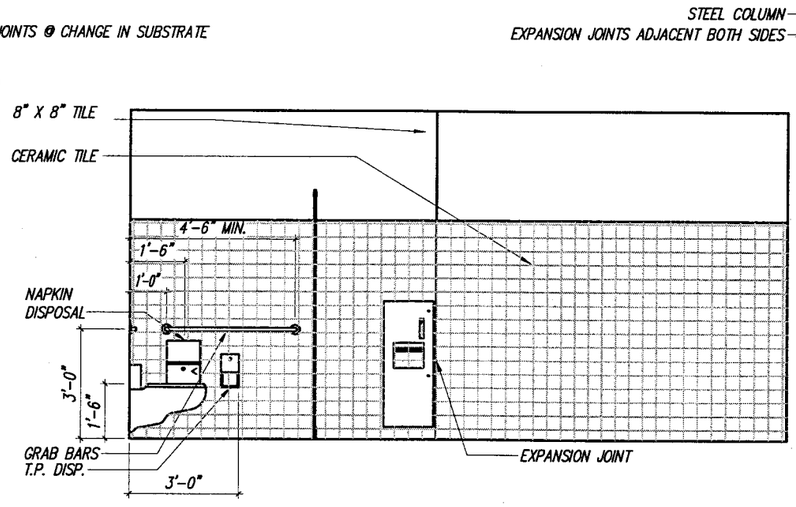


A/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"

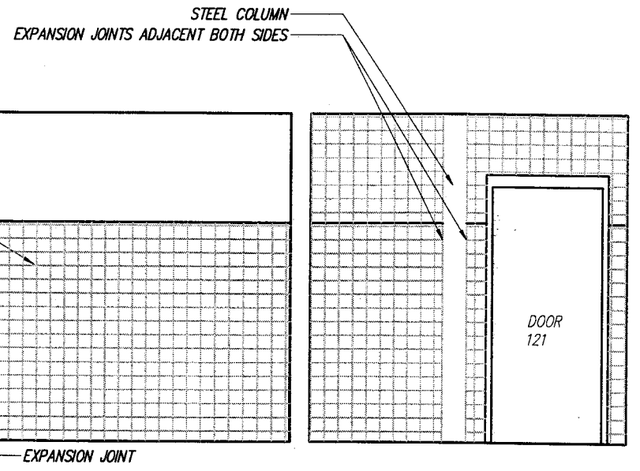
A1/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"



B/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"

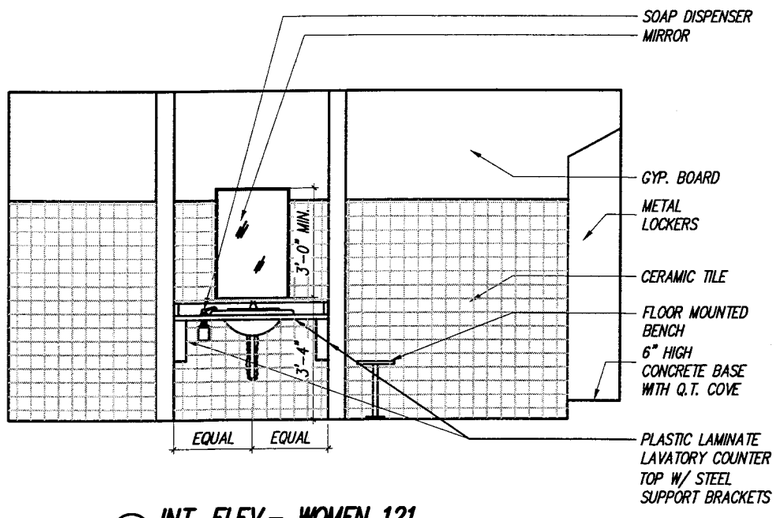


C/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"

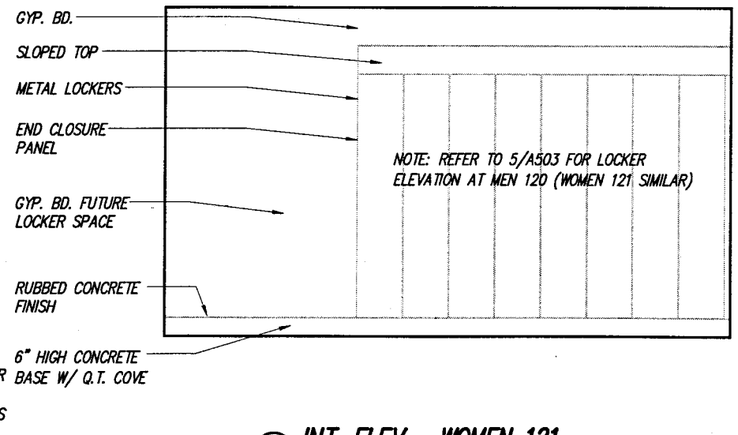


D/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"

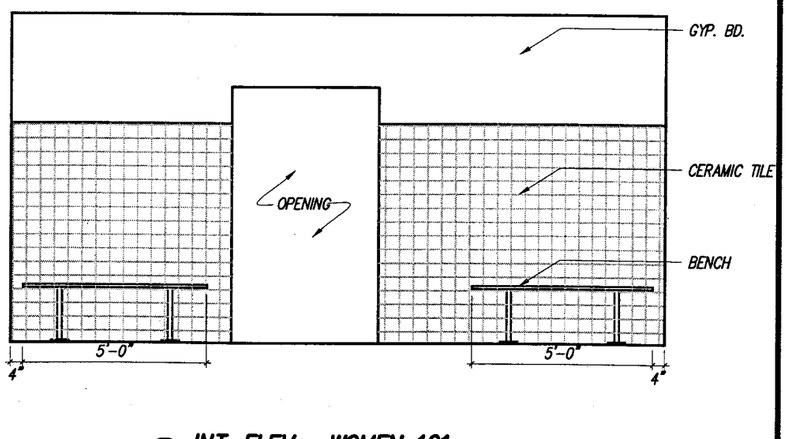
NOTE: MEN 120 SIMILAR



E/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"

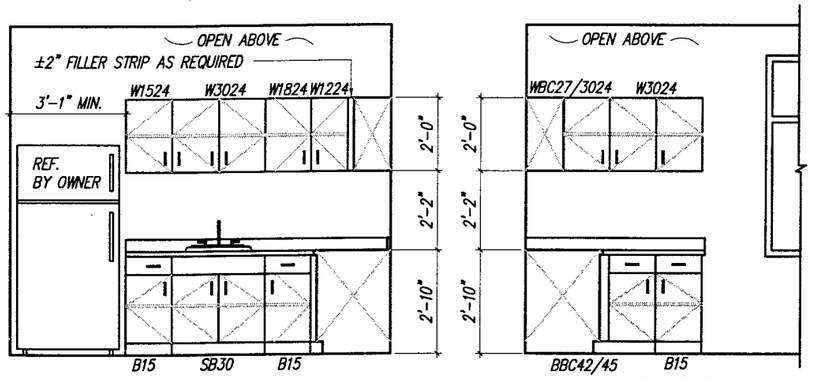


F/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"



G/A403 **INT. ELEV.– WOMEN 121**
SCALE: 1/4" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			*INTERIOR ELEVATIONS*		DATE: 1/1/02
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 143 OF / DWG. A403

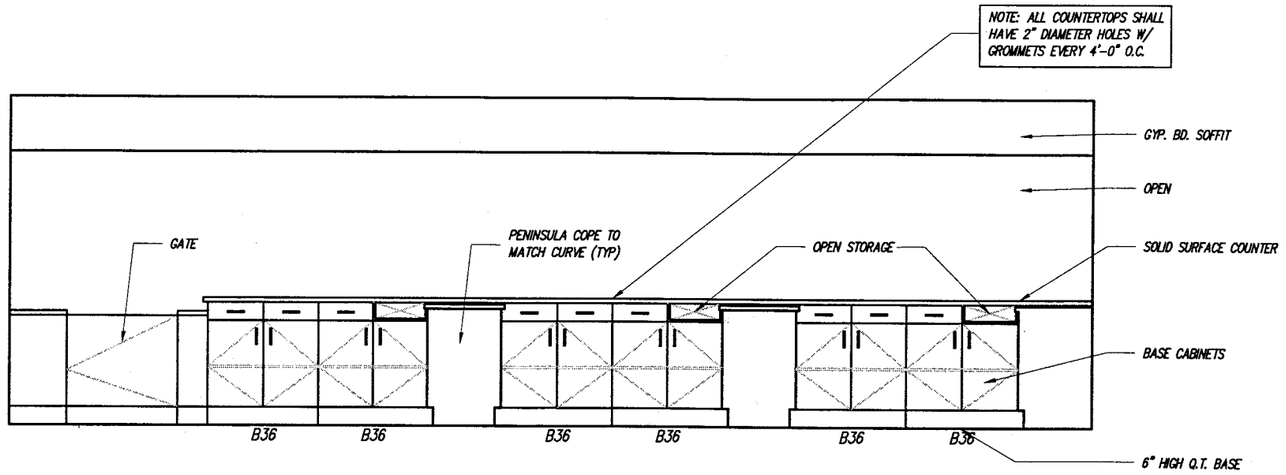


NOTE: PROVIDE FINISHED END PANELS, BACKSPLASH, AND SIDE SPLASHES AS REQUIRED FOR FINISHED APPEARANCE (TYP. ALL CASEWORK).

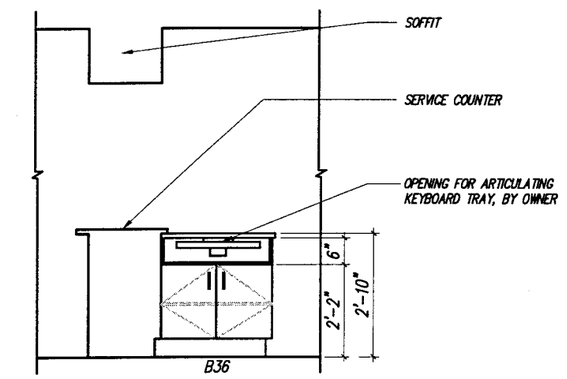
A/M01 INT. ELEV.– MEETING 112
SCALE: 1/4" = 1'-0"

NOTE: PROVIDE FINISHED END PANELS, BACKSPLASH, AND SIDE SPLASHES AS REQUIRED FOR FINISHED APPEARANCE (TYP. ALL CASEWORK).

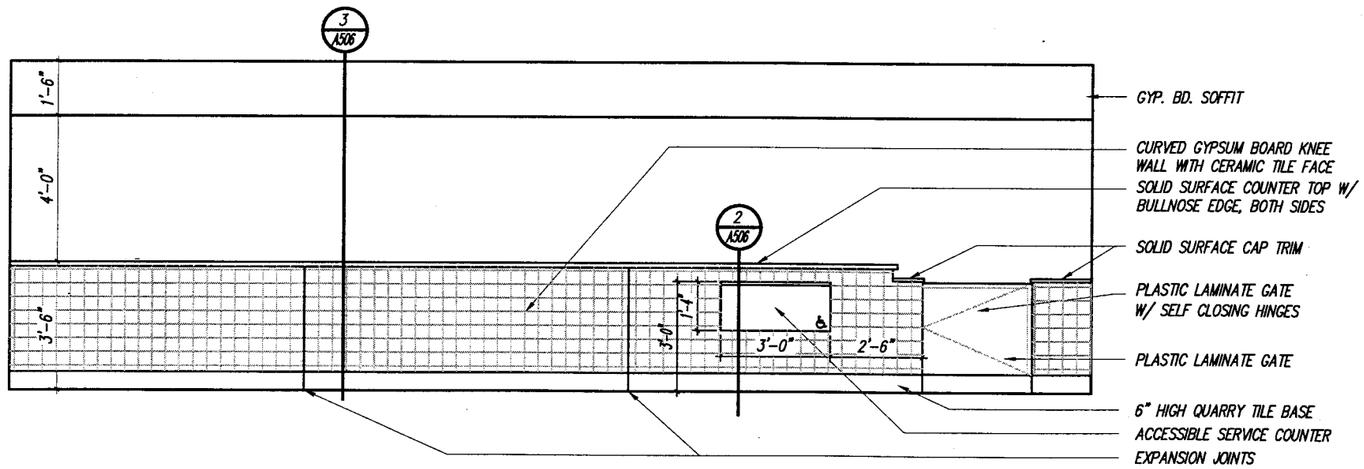
B/M01 INT. ELEV.– MEETING 112
SCALE: 1/4" = 1'-0"



C/M01 INT. ELEV.– OFFICE 110
SCALE: 1/4" = 1'-0"

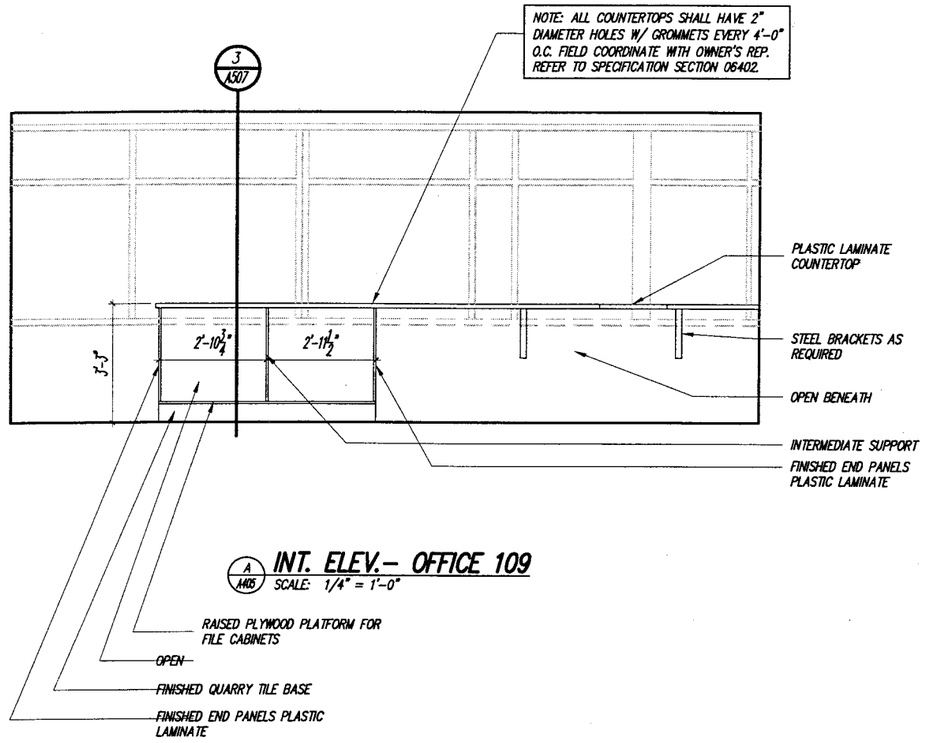


D/M01 INT. ELEV.– OFFICE 110
SCALE: 1/4" = 1'-0"

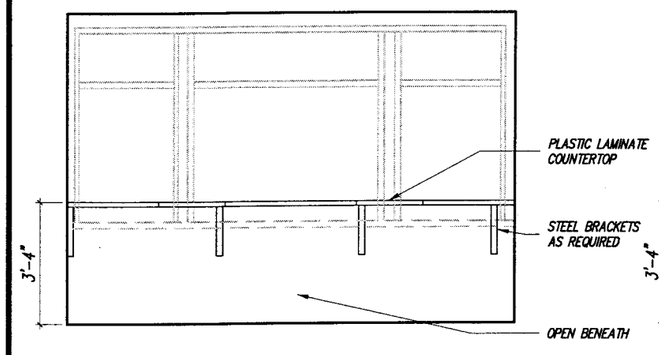


E/M01 INT. ELEV.– CUSTOMER SERVICE 107
SCALE: 1/4" = 1'-0"

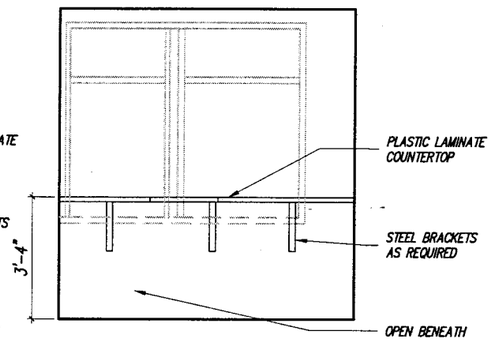
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			INTERIOR ELEVATIONS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 144 OF	DWG. A404



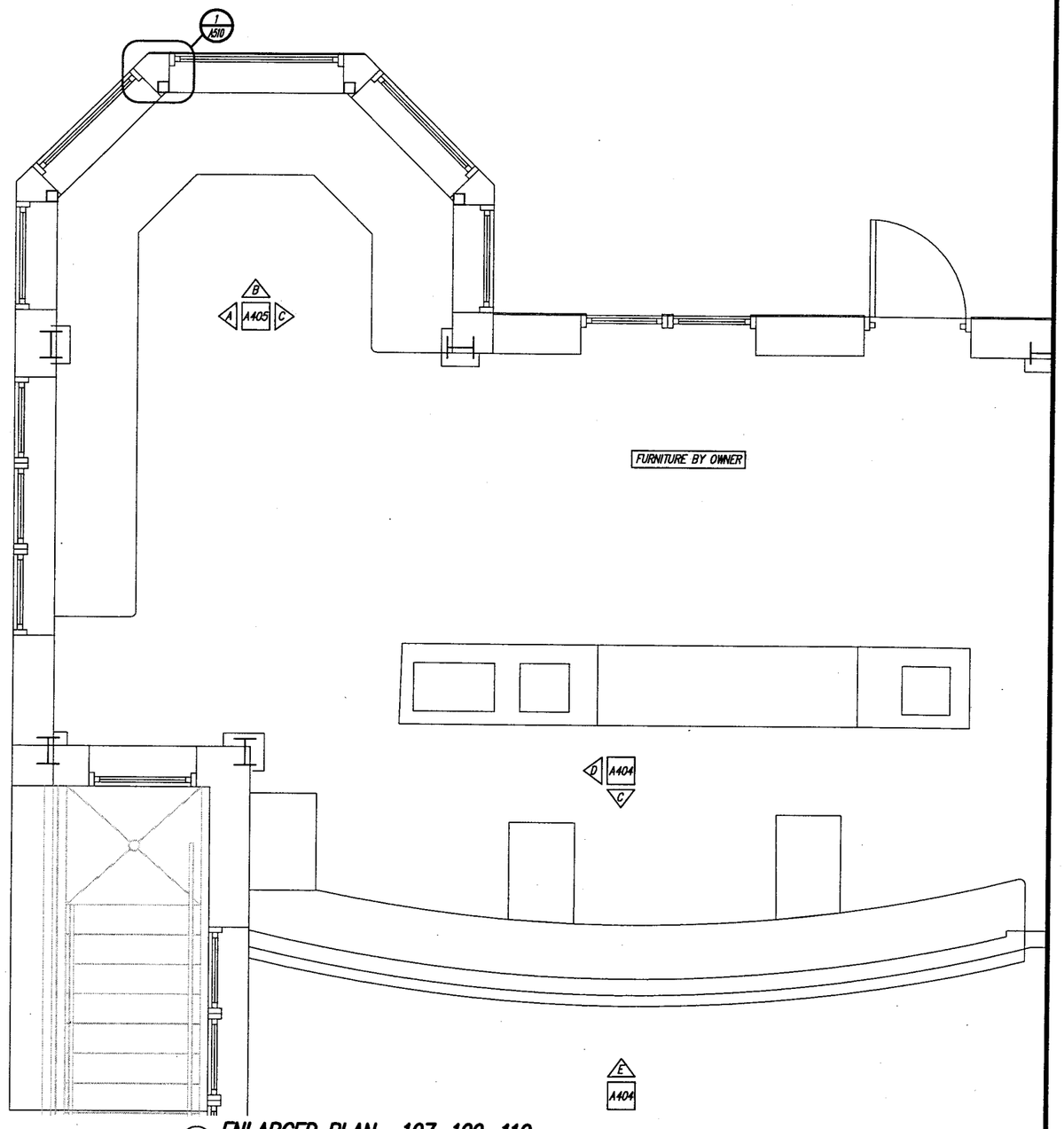
A A405 — **INT. ELEV.– OFFICE 109**
SCALE: 1/4" = 1'-0"



B A405 — **INT. ELEV.– OFFICE 109**
SCALE: 1/4" = 1'-0"

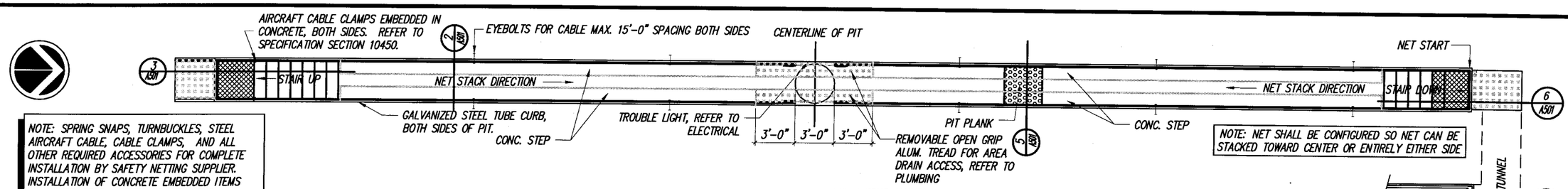


C A405 — **INT. ELEV.– OFFICE 109**
SCALE: 1/4" = 1'-0"



1 A405 — **ENLARGED PLAN– 107, 109, 110**
SCALE: 1/4" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			**INTERIOR ELEVATIONS**		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 145 OF	DWG. A405

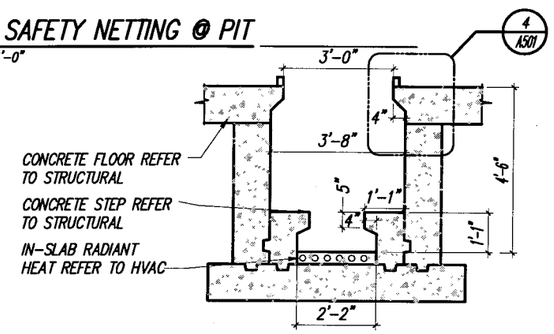


NOTE: SPRING SNAPS, TURNBUCKLES, STEEL AIRCRAFT CABLE, CABLE CLAMPS, AND ALL OTHER REQUIRED ACCESSORIES FOR COMPLETE INSTALLATION BY SAFETY NETTING SUPPLIER. INSTALLATION OF CONCRETE EMBEDDED ITEMS BY CONTRACTOR. REFER TO STRUCTURAL DRAWINGS FOR INSTALLATION OF ALL CONCRETE EMBEDDED ITEMS.

NOTE: NET SHALL BE CONFIGURED SO NET CAN BE STACKED TOWARD CENTER OR ENTIRELY EITHER SIDE

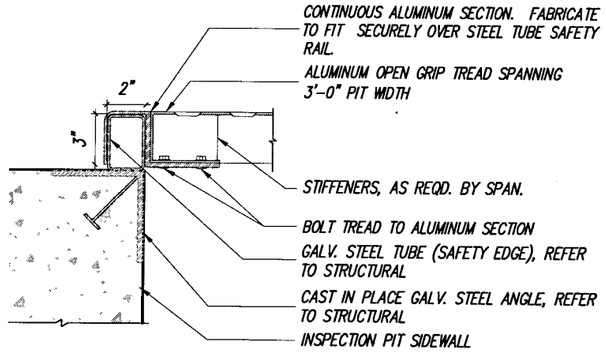
1 A501 PLAN – SAFETY NETTING @ PIT

SCALE: 1/8" = 1'-0"



2 A501 SECTION – PIT

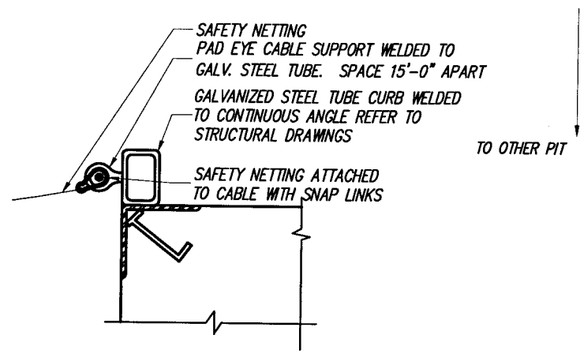
SCALE: 1/4" = 1'-0"



NOTE: PROVIDE ONE PIT PLANK FOR EACH INSPECTION PIT.

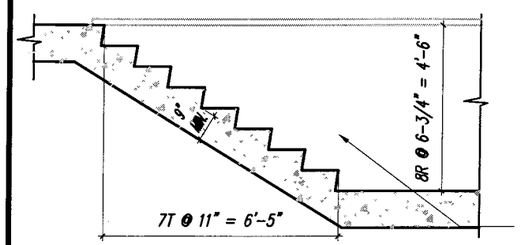
5 A501 DETAIL – MOVEABLE PIT PLANK

SCALE: 1 1/2" = 1'-0"



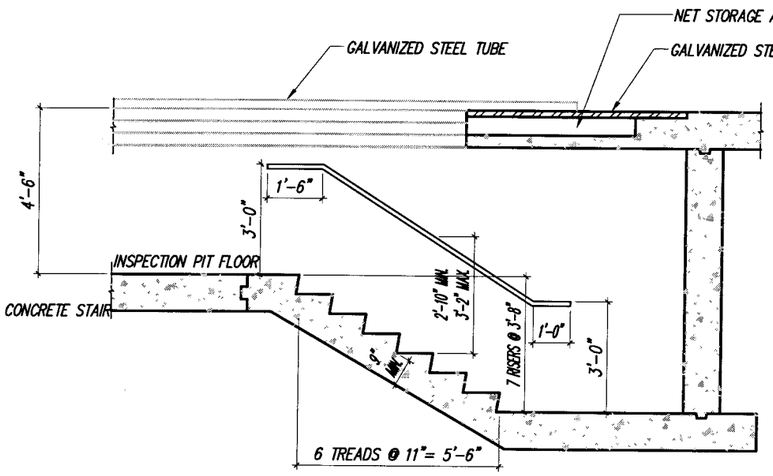
4 A501 DETAIL – NET ATTACHMENT

SCALE: 1 1/2" = 1'-0"



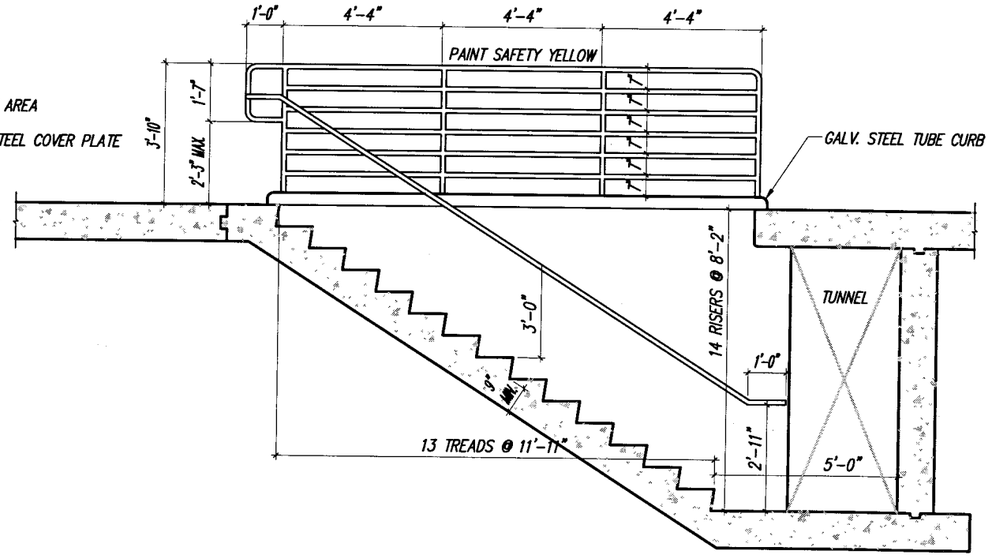
3 A501 SECTION – PIT STAIRS

SCALE: 1/4" = 1'-0"



6 A501 SECTION – TUNNEL ACCESS

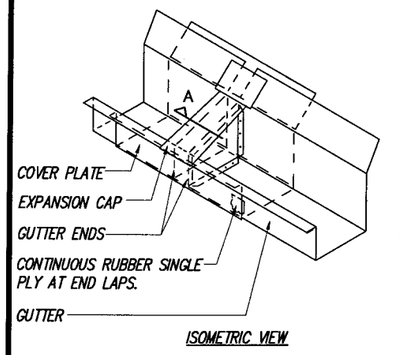
SCALE: 1/4" = 1'-0"



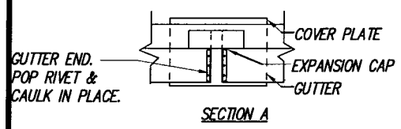
7 A501 SECTION – PIT ACCESS

SCALE: 1/4" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 146 OF / DWG. A501



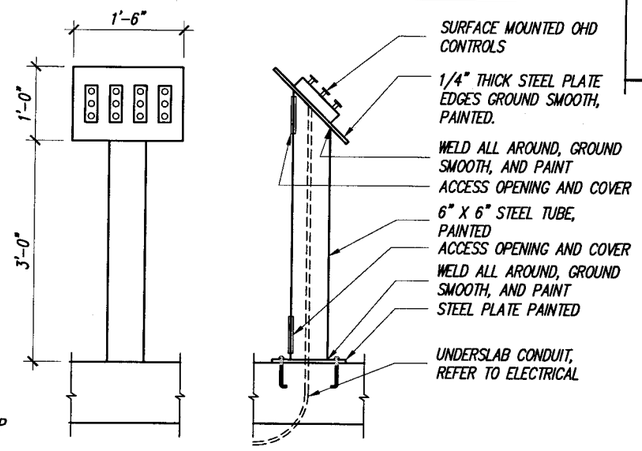
ISOMETRIC VIEW



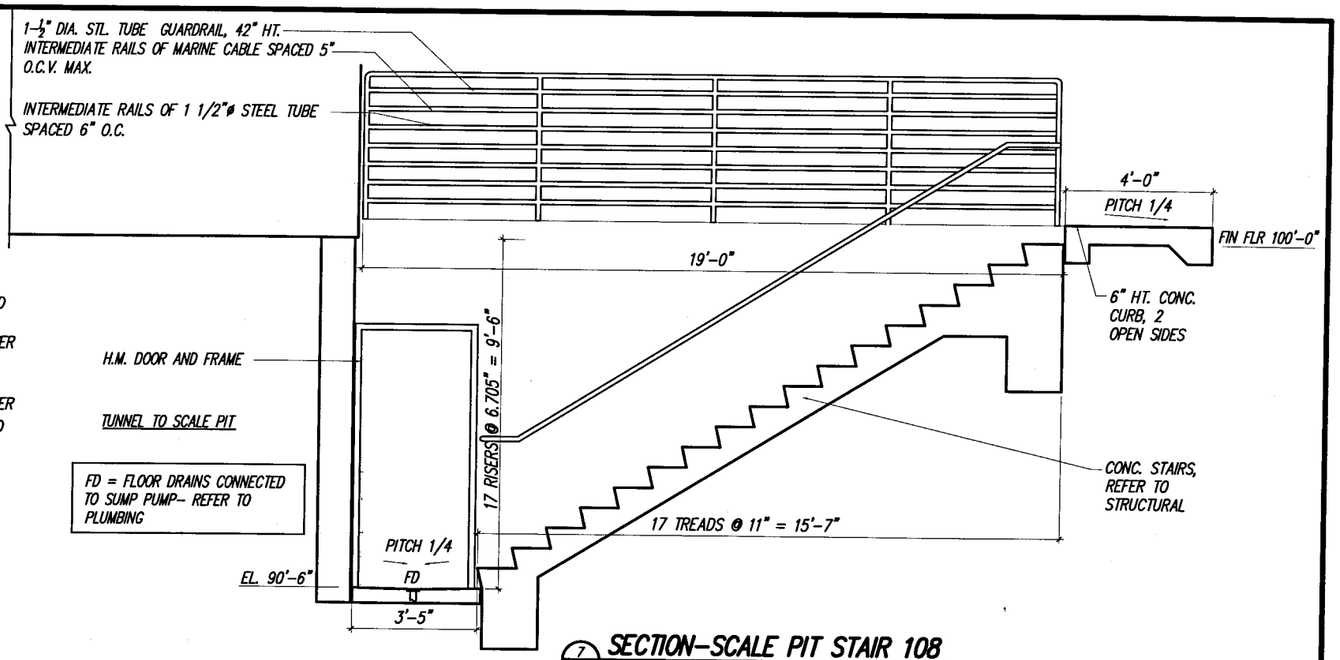
SECTION A

1 A502 GUTTER EXPANSION JOINT
SCALE: 1/2" = 1'-0"

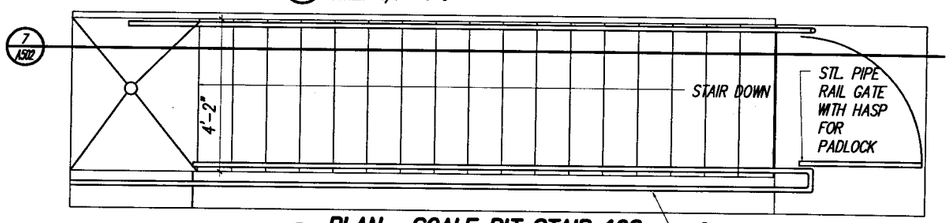
NOTE: COORDINATE INSTALLATION OF ELECTRICAL CONDUIT & CUT OUTS FOR OVERHEAD DOOR OPENING DEVICES W/ OVERHEAD DOOR CONTRACTOR AND ELECTRICAL CONTRACTOR



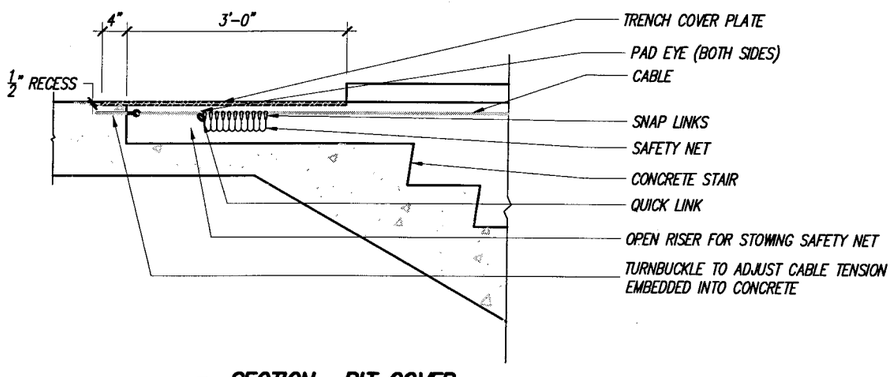
2 A502 DETAIL- OVERHEAD DOOR CONTROL CONSOLE
SCALE: 1/2" = 1'-0"



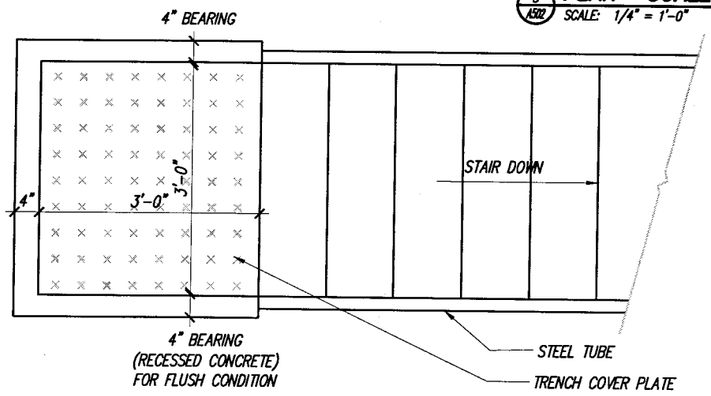
7 A502 SECTION-SCALE PIT STAIR 108
SCALE: 1/4" = 1'-0"



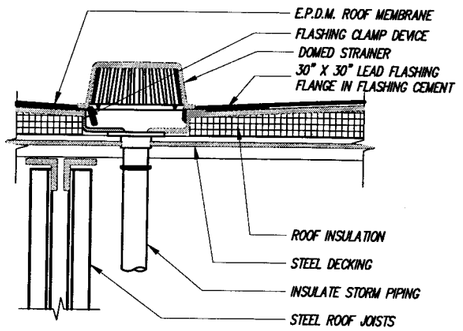
3 A502 PLAN- SCALE PIT STAIR 108
SCALE: 1/4" = 1'-0"



4 A502 SECTION- PIT COVER
SCALE: 1/2" = 1'-0"

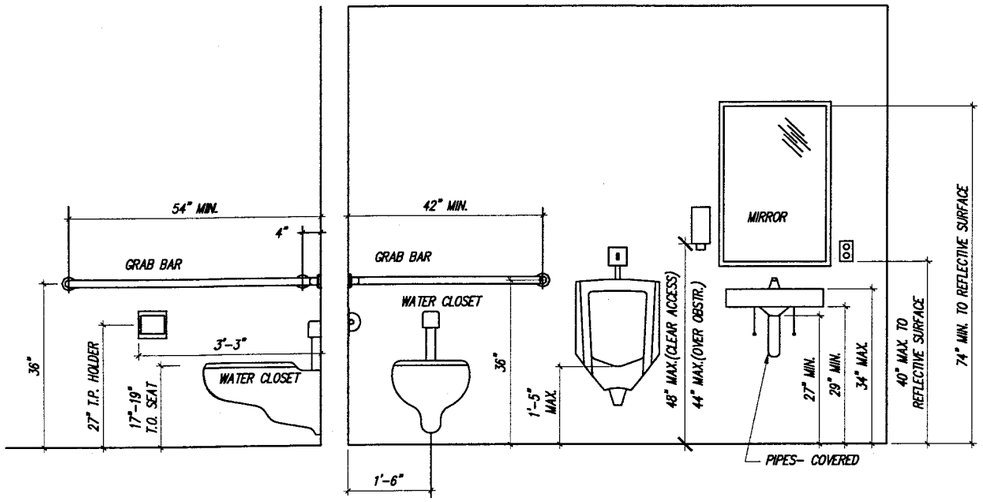


5 A502 PLAN VIEW- SOUTH PIT PLANK
SCALE: 1/2" = 1'-0"



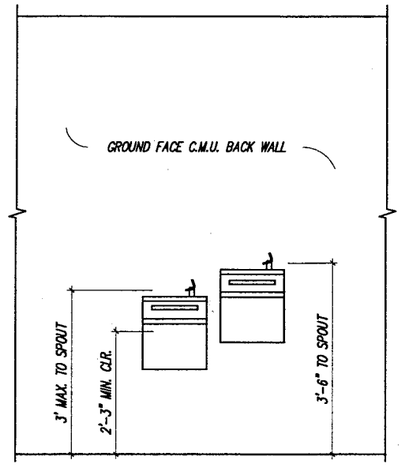
6 A502 ROOF DRAIN SECTION
SCALE: 1/2" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 147 OF	DWG. A502

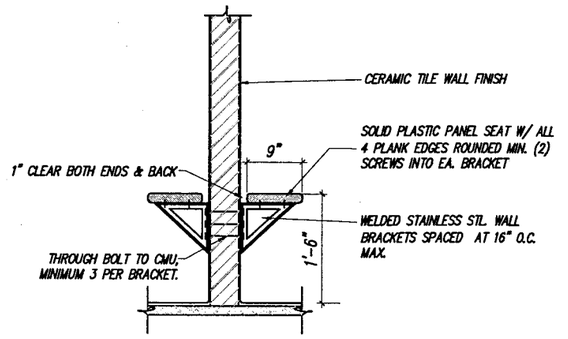


1/A503 **TYPICAL TOILET ACCESSORY MOUNTING DIMENSIONS**
SCALE: 3/8" = 1'-0"

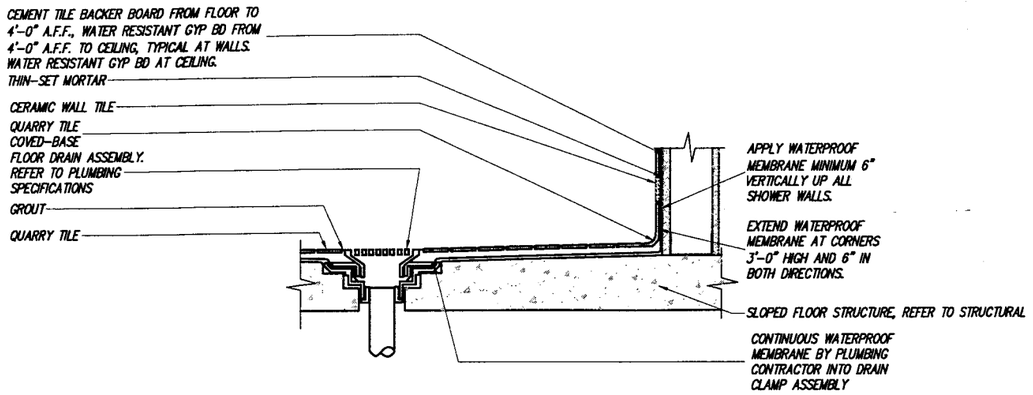
NOTE: REFER TO INTERIOR ELEVATIONS FOR ACCESSORY LOCATIONS



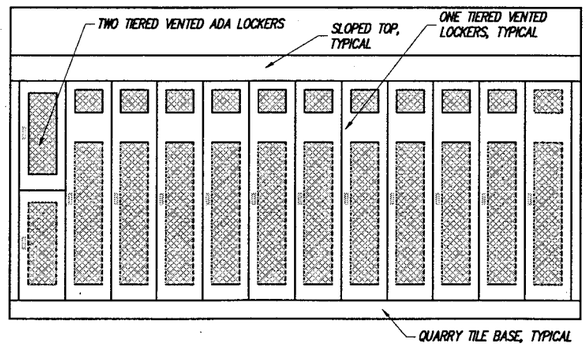
2/A503 **ELEVATION- ELECTRIC WATER COOLER**
SCALE: 3/8" = 1'-0"



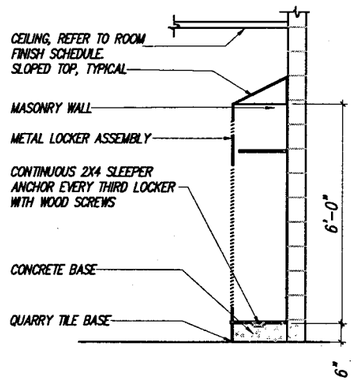
3/A503 **SECTION - WALL MOUNTED BENCH AT SHOWER**
SCALE: 1/2" = 1'-0"



4/A503 **SECTION- SHOWER PAN**
SCALE: 1/2" = 1'-0"

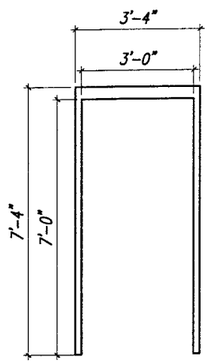


5/A503 **ELEVATION- LOCKERS**
SCALE: 1/8" = 1'-0"



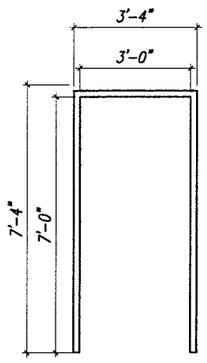
6/A503 **SECTION- LOCKER**
SCALE: 1/8" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 148 OF	DWG. A503



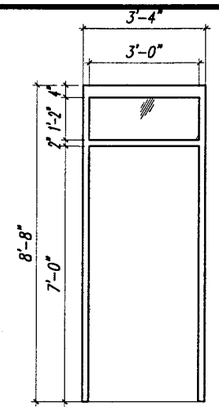
TYPE A
SCALE: 1/4" = 1'-0"

HOLLOW METAL DOOR FRAME FOR MASONRY (TYP.)



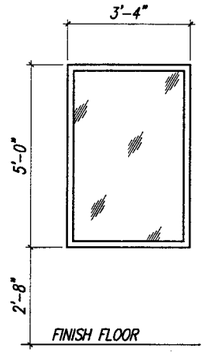
TYPE A1
SCALE: 1/4" = 1'-0"

HOLLOW METAL DOOR FRAME FOR GYP. BD. (TYP.)



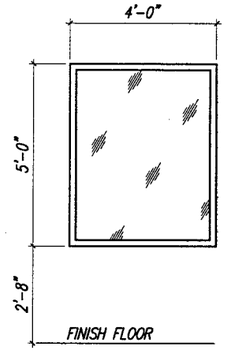
TYPE A2
SCALE: 1/4" = 1'-0"

HOLLOW METAL DOOR FRAME FOR GYP. BD. (TYP.)



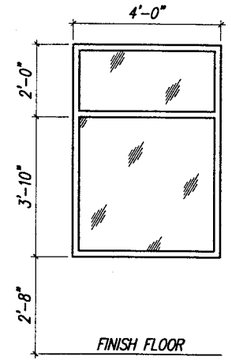
TYPE B
SCALE: 1/4" = 1'-0"

HOLLOW METAL FRAME BORROWED LITE ASSEMBLY, SUBSTRATE VARIES



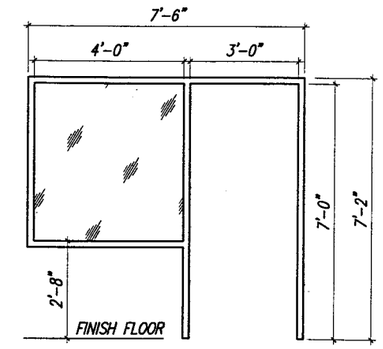
TYPE C
SCALE: 1/4" = 1'-0"

HOLLOW METAL FRAME BORROWED LITE ASSEMBLY, SUBSTRATE VARIES



TYPE D
SCALE: 1/4" = 1'-0"

HOLLOW METAL FRAME BORROWED LITE ASSEMBLY GYP. BD. FRAME

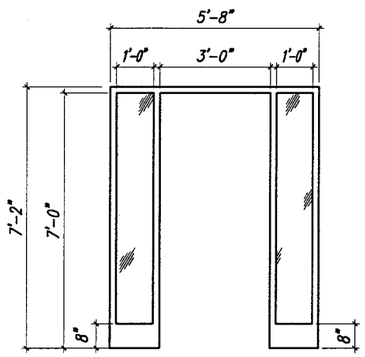


TYPE E
SCALE: 1/4" = 1'-0"

HOLLOW METAL FRAME DOOR ASSEMBLY SUBSTRATE VARIES

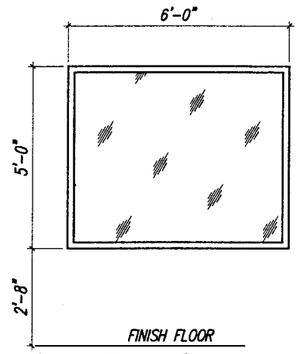
TYPE F
SCALE: 1/4" = 1'-0"

HOLLOW METAL DOOR FRAME WITH SIDELIGHT, SUBSTRATE VARIES



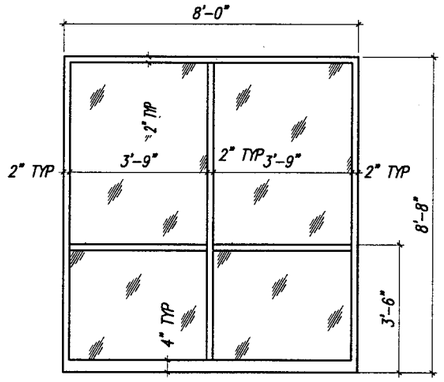
TYPE G
SCALE: 1/4" = 1'-0"

HOLLOW METAL FRAME BORROWED LITE ASSEMBLY, SUBSTRATE VARIES



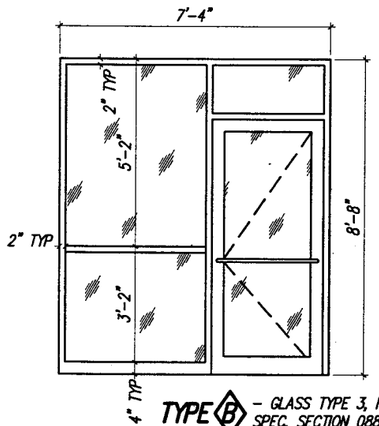
TYPE H
SCALE: 1/4" = 1'-0"

HOLLOW METAL FRAME BORROWED LITE ASSEMBLY, SUBSTRATE VARIES



TYPE A – GLASS TYPE 3, REFER TO SPEC. SECTION 08810.
SCALE: 1/4" = 1'-0"

ALUMINUM STORE FRONT DOOR FRAME WITH SIDELIGHT ASSEMBLY, SUBSTRATE VARIES



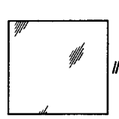
TYPE B – GLASS TYPE 3, REFER TO SPEC. SECTION 08810.
SCALE: 1/4" = 1'-0"

ALUMINUM STORE FRONT DOOR FRAME WITH SIDELIGHT ASSEMBLY, SUBSTRATE VARIES

TYPE C – GLASS TYPE 1, REFER TO SPEC. SECTION 08810.
SCALE: 1/4" = 1'-0"

ALUMINUM STORE FRONT, SIMILAR, WITH DOOR HINGED ON OPPOSITE SIDE.

(1/A504) H.M. FRAME TYPES

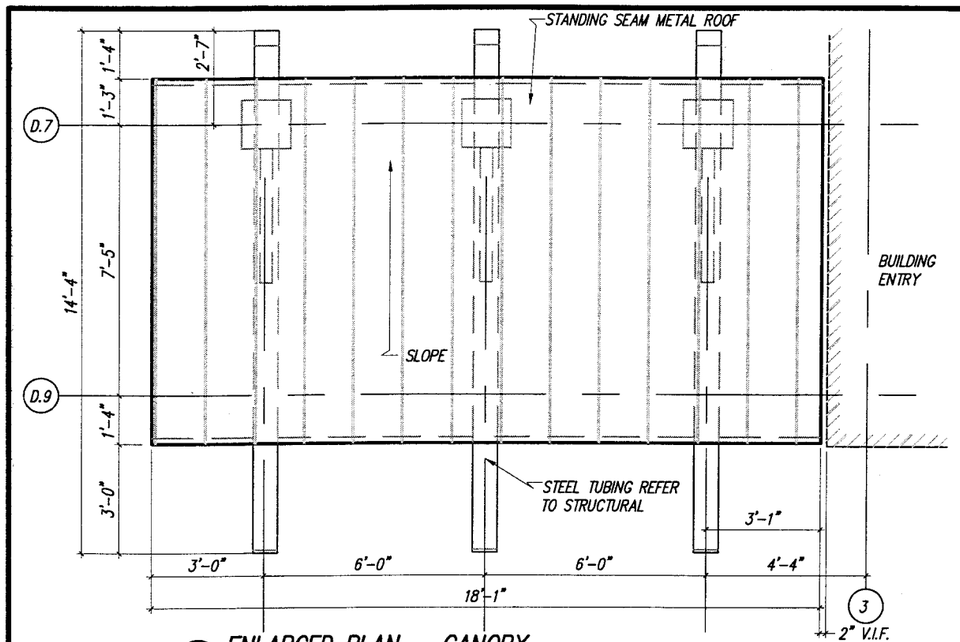


INDICATES GLAZING

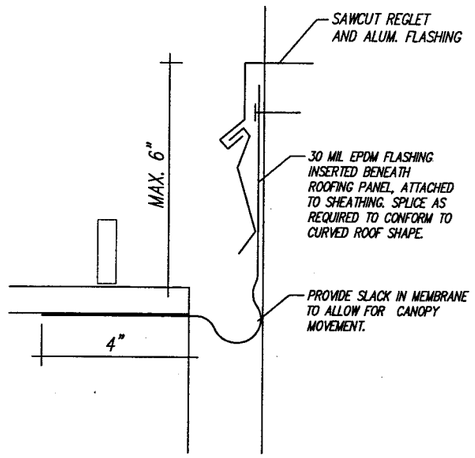
NOTE: GLASS TYPE 1. REFER TO SPECIFICATION SECTION 08810.

(2/A504) ALUMINUM STORE FRONT FRAME TYPES

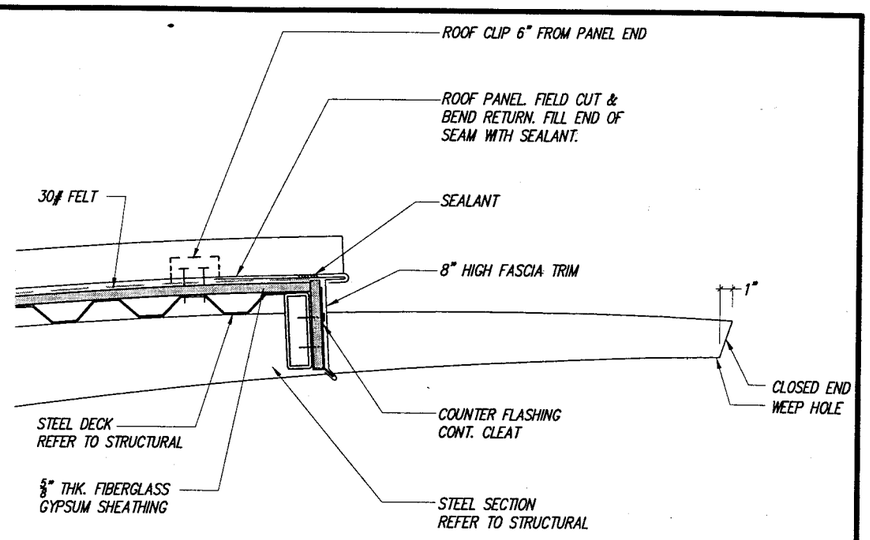
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 149 OF / DWG. A504



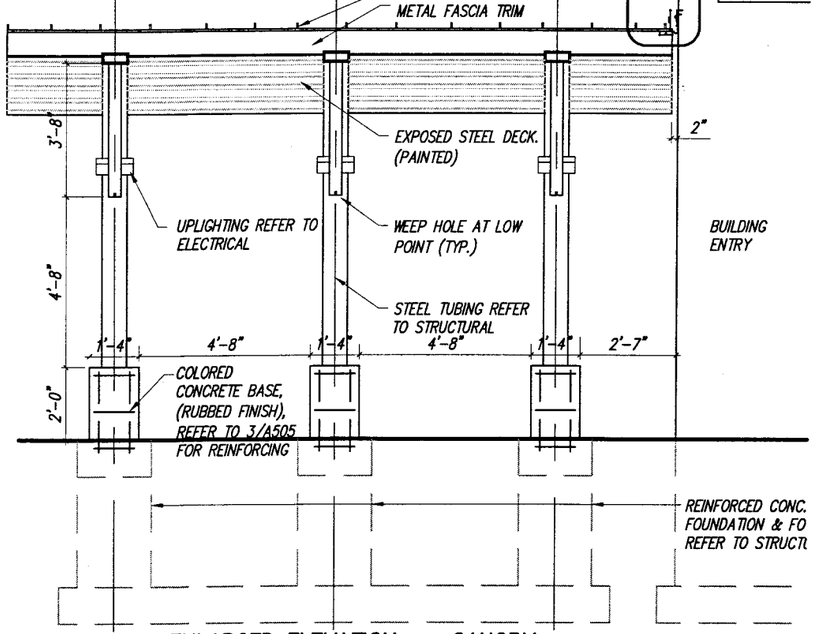
1/A505 ENLARGED PLAN – CANOPY
SCALE: 1/4" = 1'-0"



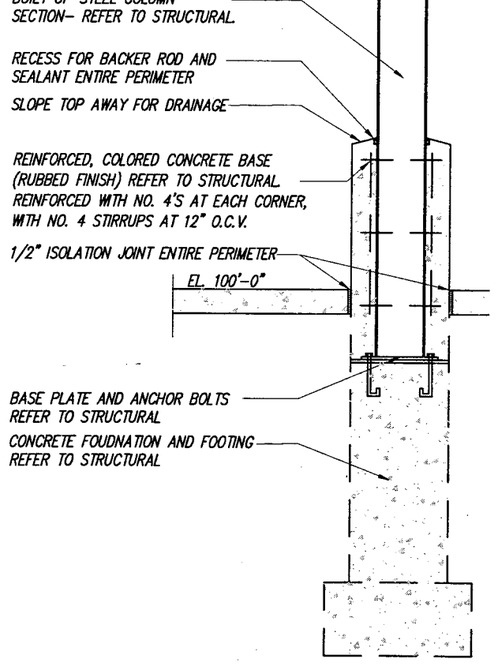
6/A505 DETAIL – FLASHING AT BUILDING
SCALE: 3" = 1'-0"



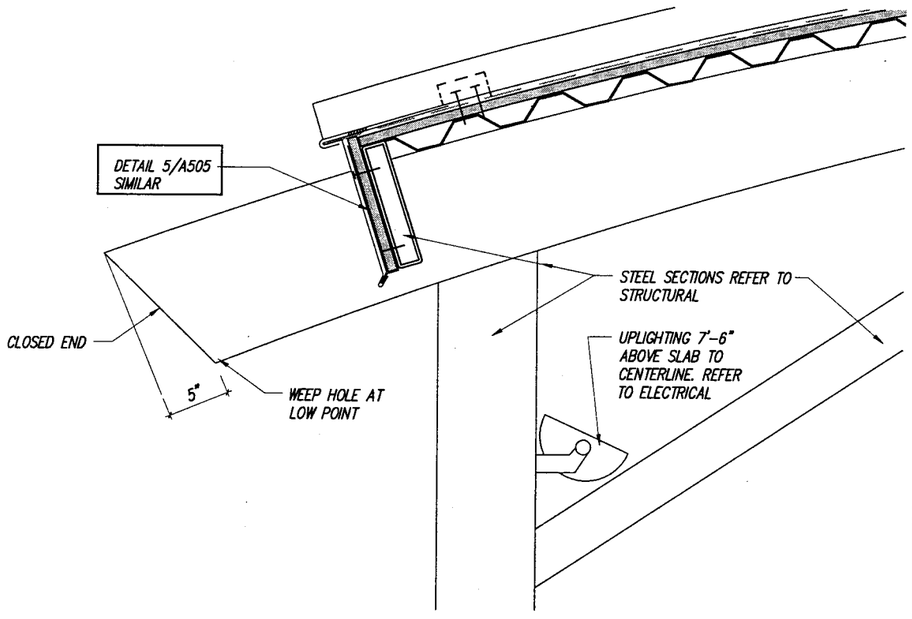
5/A505 SECTION – CANOPY ROOF
SCALE: 1" = 1'-0"



2/A505 ENLARGED ELEVATION – CANOPY
SCALE: 1/4" = 1'-0"



3/A505 SECTION – CANOPY BASE
SCALE: 1/2" = 1'-0"



4/A505 SECTION – CANOPY ROOF
SCALE: 1" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI

DETAILS

DATE: 1/1/02

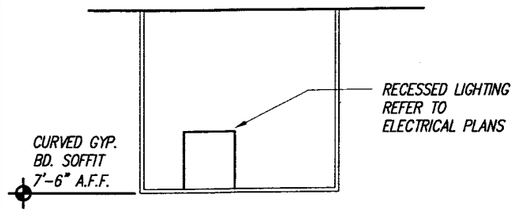
STATE PROJECT NUMBER: 1032–08–70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

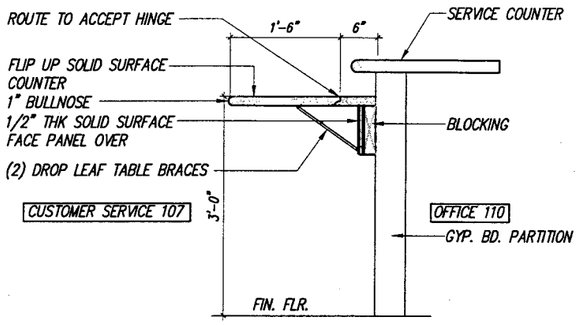
SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0

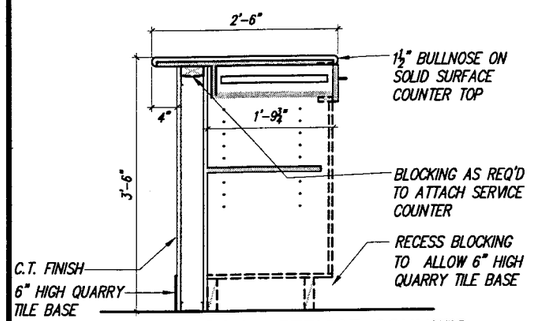
SHEET NO: 150 OF

DWG. A505



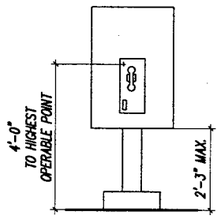


CUSTOMER SERVICE 107 OFFICE 110

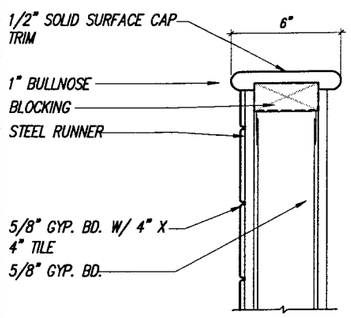


3/A506 SECTION– SERVICE COUNTER
SCALE: 1/4" = 1'-0"

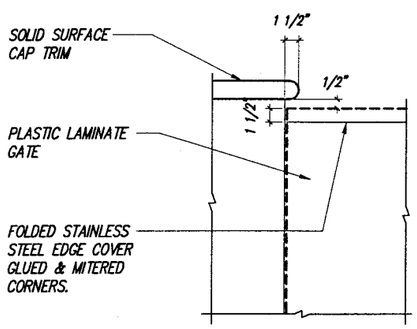
2/A506 SECTION @ ACCESSIBLE COUNTER
SCALE: 1/2" = 1'-0"



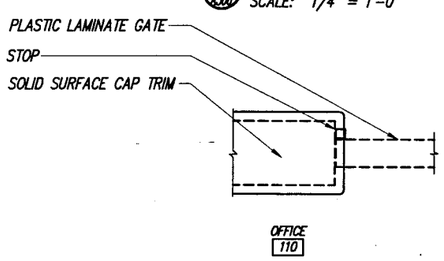
4/A506 PHONE HEIGHT
SCALE: 1/4" = 1'-0"



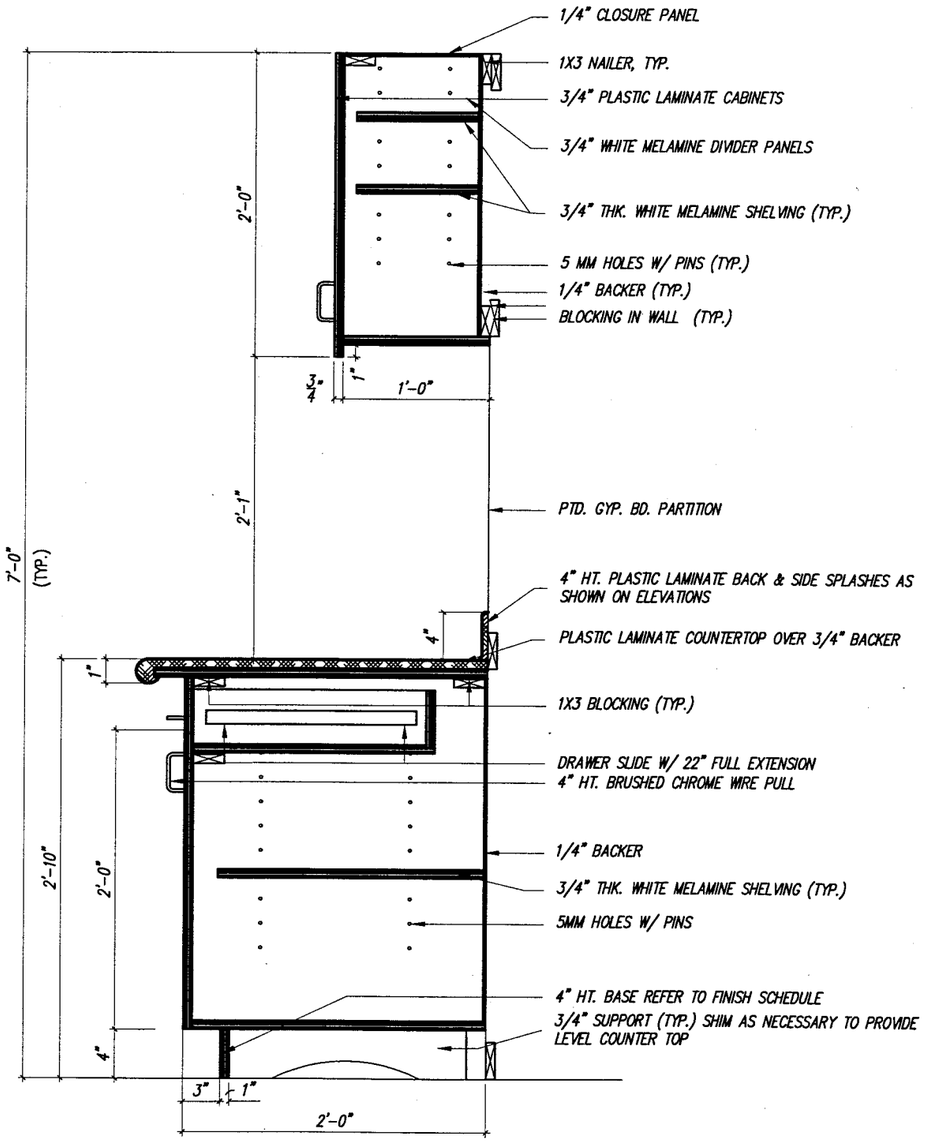
5/A506 SECTION– CAP TRIM
SCALE: 1 1/2" = 1'-0"



6/A506 ELEVATION– CAP TRIM TO GATE
SCALE: 1 1/2" = 1'-0"

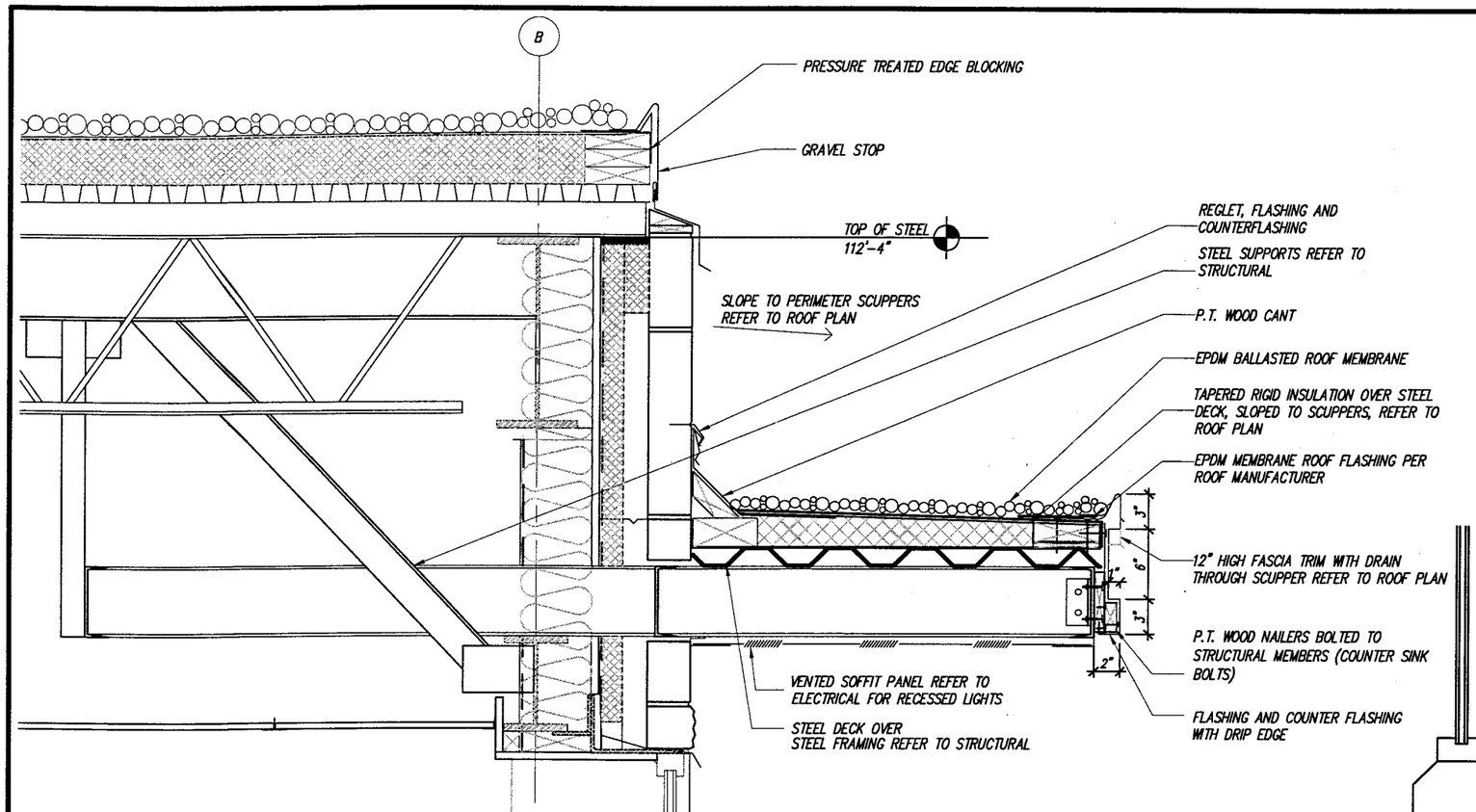


7/A506 PLAN–GATE STOP
SCALE: 1 1/2" = 1'-0"

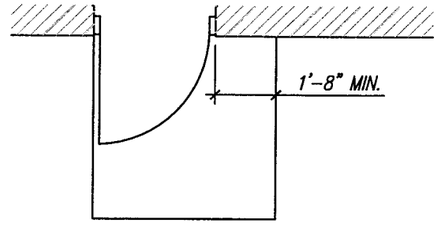


1/A506 SECTION– CABINET (TYP)
SCALE: 1" = 1'-0"

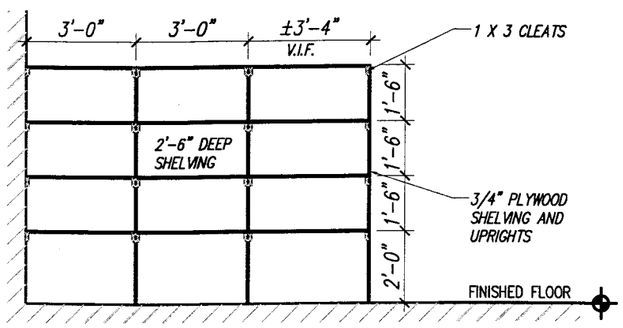
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 151 OF	DWG. A506



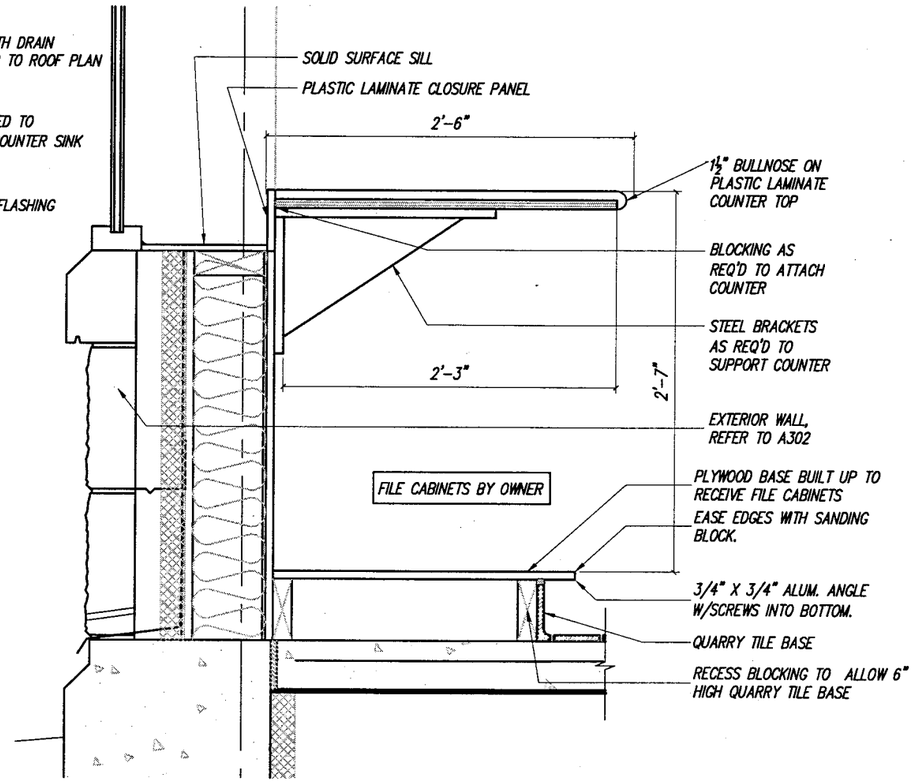
1/A507 SECTION – OBSERVATION CANOPY
SCALE: 1" = 1'-0"



4/A507 PLAN – CLEARANCE AT CONC. STOOP (TYP.)
SCALE: 1/4" = 1'-0"

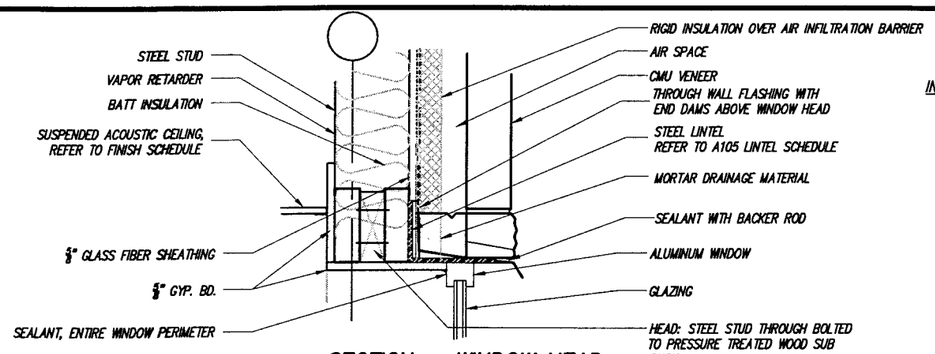


2/A507 SHELVING– CUSTODIAL 105
SCALE: 1/4" = 1'-0"

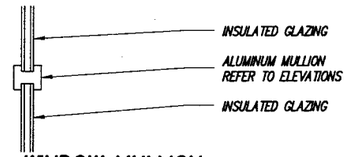


3/A507 SECTION– COUNTER AT OFFICE 109
SCALE: 1" = 1'-0"

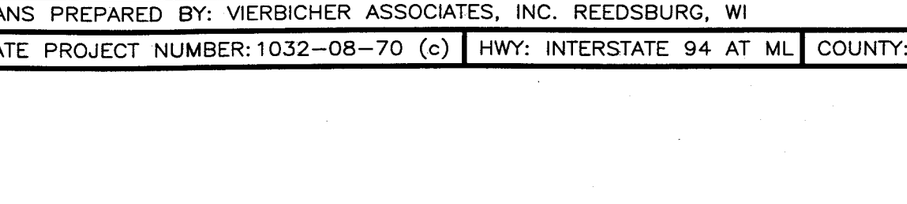
PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 152 OF	DWG. A507



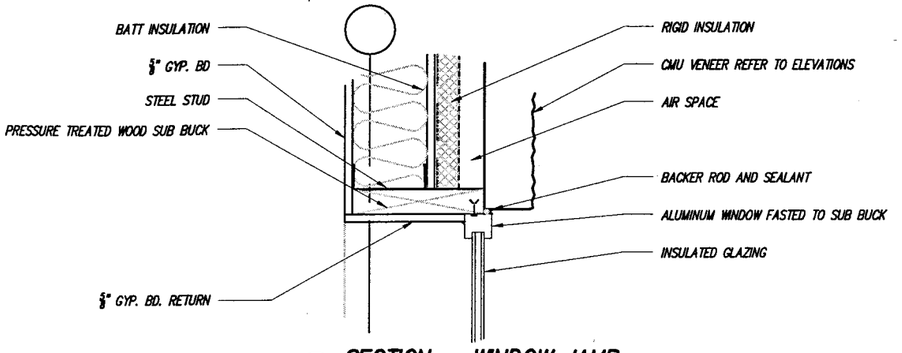
A/A508 **SECTION – WINDOW HEAD**
SCALE: 1" = 1'-0"



B/A508 **SECTION – WINDOW MULLION**
SCALE: 1" = 1'-0"

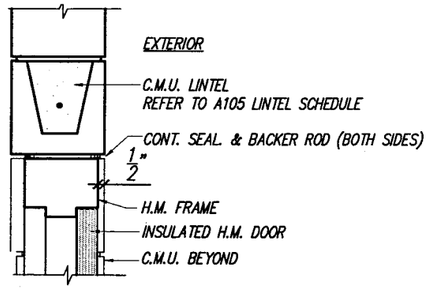


C/A508 **SECTION – WINDOW SILL**
SCALE: 1" = 1'-0"

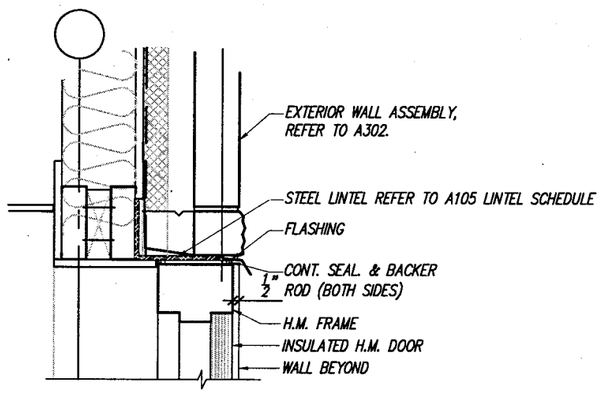


D/A508 **SECTION – WINDOW JAMB**
SCALE: 1" = 1'-0"

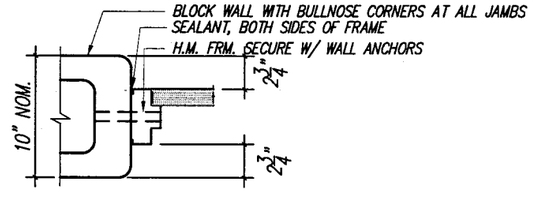
INTERIOR EXTERIOR

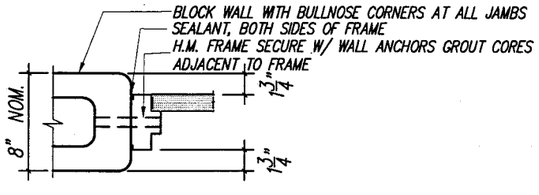


E/A508 **DETAIL– EXTERIOR DOOR HEAD (INSPECTION)**
SCALE: 1" = 1'-0"

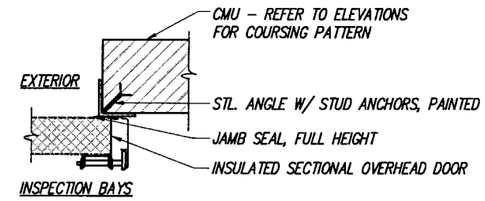


F/A508 **DETAIL–EXTERIOR DOOR HEAD (SCALE)**
SCALE: 1" = 1'-0"



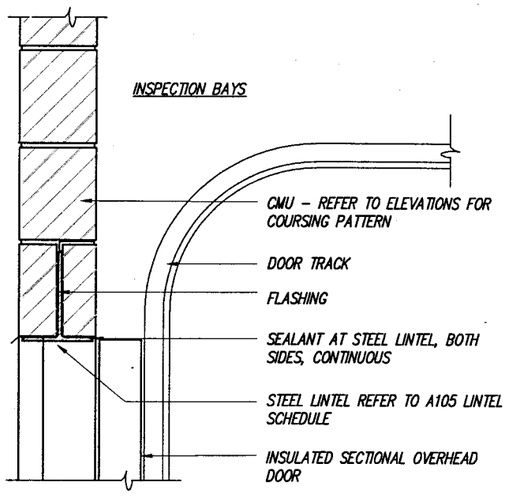


G/A508 **DETAIL–INTERIOR DOOR JAMB (TYP.)**
SCALE: 1" = 1'-0"



H/A508 **DETAIL– JAMB @ O.H. DOOR**
SCALE: 1" = 1'-0"

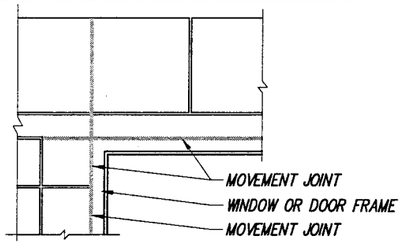
EXTERIOR INSPECTION BAYS



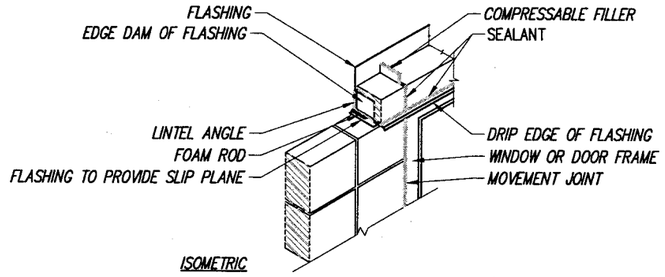
I/A508 **DETAIL–HEAD AT OVERHEAD DOOR**
SCALE: 1" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 153 OF / DWG. A508

1 A509 SECTION–BOLLARD
SCALE: 1/2" = 1'-0"

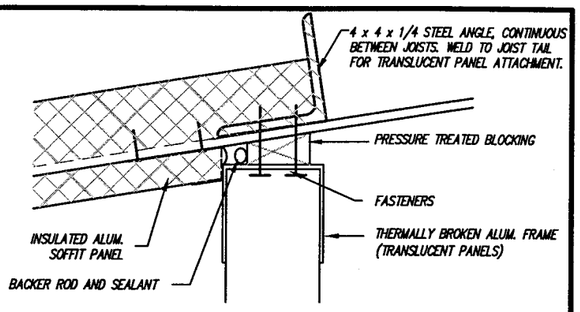


ELEVATION

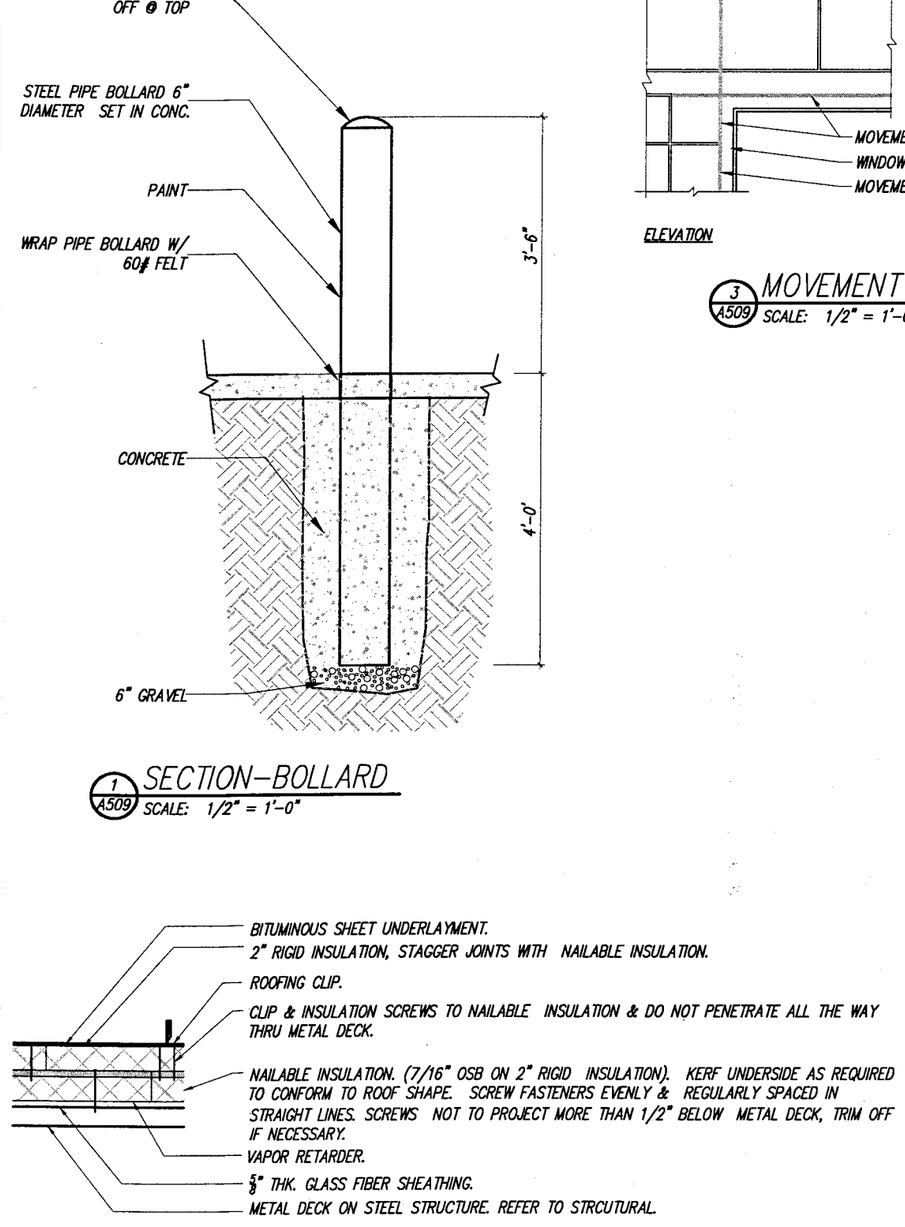


ISOMETRIC

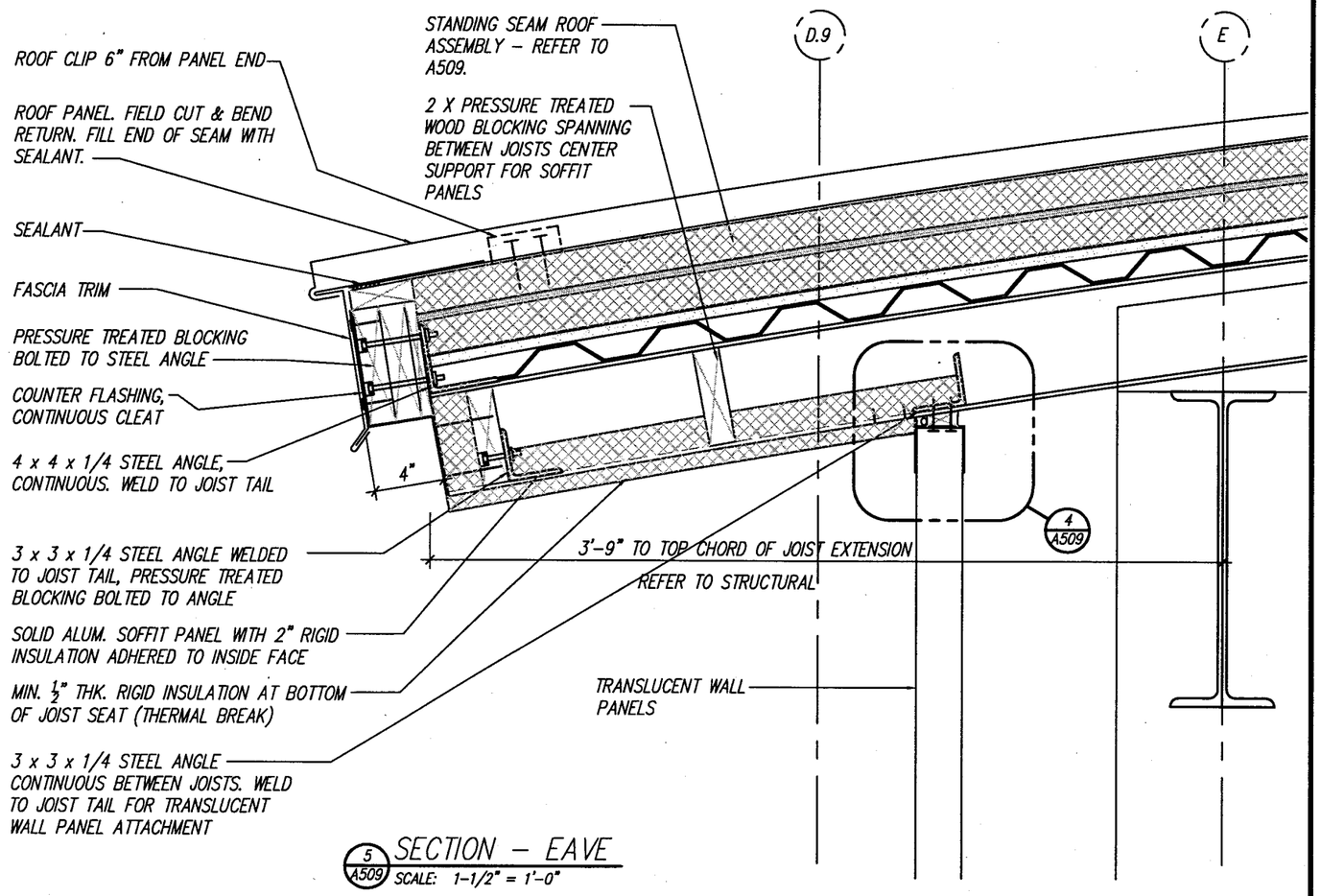
3 A509 MOVEMENT JT. AT OPENING LINTELS
SCALE: 1/2" = 1'-0"



4 A509 DETAIL–TRANSLUCENT PANEL HEAD
SCALE: 3" = 1'-0"

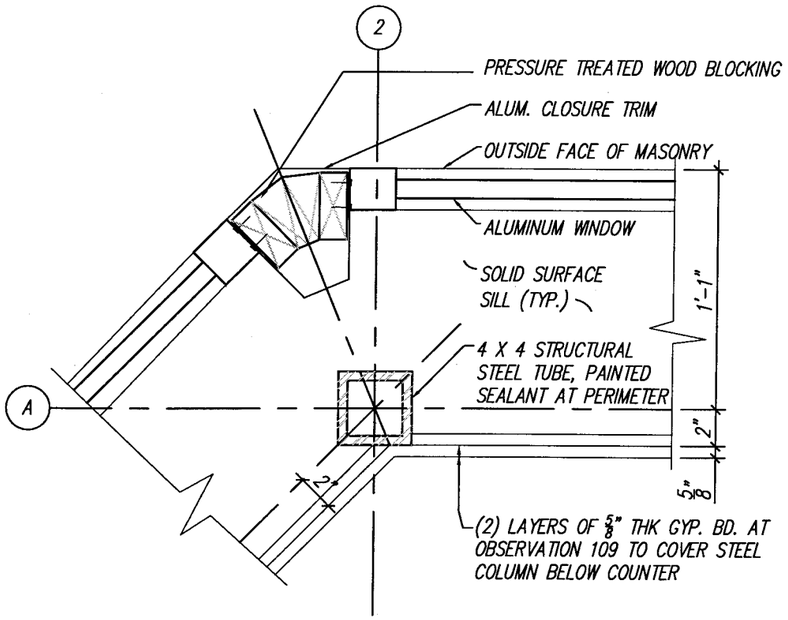


2 A509 SECTION–ROOF
SCALE: 1/2" = 1'-0"



5 A509 SECTION – EAVE
SCALE: 1-1/2" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 154 OF / DWG. A509



1 / A510 PLAN – WINDOW DETAIL AT OBS. 109

SCALE: 1-1/2" = 1'-0"

Room Finish Schedule

Room Number	Room Name	Floor Material	Floor Color #	Base Material	Base Color #	Walls North Finish	Walls North Color #	Walls South Finish	Walls South Color #	Walls East Finish	Walls East Color #	Walls West Finish	Walls West Color #	Ceiling Material	Ceiling Finish	Ceiling Color #	Fin. Clg. Ht.	Notes
100	Entry	QT	-	QT	-	NONE	-	NONE	-	NONE	-	NONE	-	SGC	PAINT	-	9'-0"	1,5,7
101	Driver's Room	QT	-	QT	-	NONE	-	NONE	-	NONE	-	NONE	-	SGC	PAINT	-	9'-0"	1,5,7
102	Women	QT	-	QT	-	CT-2	-	CT-2	-	CT-2	-	CT-2	-	SGC	PAINT	-	9'-0"	1,5,7
103	Men	QT	-	QT	-	CT-2	-	CT-2	-	CT-2	-	CT-2	-	SGC	PAINT	-	9'-0"	1,5,7
104	Hall	QT	-	QT	-	NONE	-	NONE	-	NONE	-	NONE	-	SAT	A	-	9'-0"	1,5,7
105	Custodian	SEAL	-	NONE	-	NONE	-	NONE	-	NONE	-	NONE	-	SAT	A	-	9'-0"	1,5,7
106	Interview	QT	-	QT	-	NONE	-	NONE	-	NONE	-	NONE	-	SGC	PAINT	-	9'-0"	1,5,7
107	Customer Service	QT	-	QT	-	NONE	-	NONE	-	NONE	-	NONE	-	SAT	A	-	9'-0"	1,5,7
108	Stair	N-SLIP	-	RC	-	RC	-	RC	-	RC	-	RC	-	-	OPEN	-	VARIES	2
109	Office	QT	-	QT	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	8'-8"	7
110	Office	QT	-	QT	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	9'-0"	7
111	Office	CPT	-	VWB	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	9'-0"	
112	Meeting	CPT	-	VWB	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	9'-0"	
113	Office	CPT	-	VWB	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	9'-0"	7
114	Corridor	QT	-	QT	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	9'-0"	4,5,7
115	Entry	QT	-	QT	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SAT	A	-	8'-0"	1,5
116	Telecom	SEAL	-	NONE	-	NONE	-	NONE	-	NONE	-	NONE	-	SAT	A	-	9'-0'	5
117	Mech. Rm.	SEAL	-	NONE	-	NONE	-	NONE	-	NONE	-	NONE	-	OPEN	PAINT	-	VARIES	5
118	Hall	QT	-	QT	-	NONE	-	NONE	-	NONE	-	NONE	-	SAT	A	-	9'-0"	4,5
119	Mech.	SEAL	-	VWB	-	NONE	-	NONE	-	NONE	-	NONE	-	OPEN	PAINT	-	VARIES	
120	Men	QT	-	QT	-	CT	-	CT	-	CT	-	CT	-	SGC	PAINT	-	9'-0"	7
121	Women	QT	-	QT	-	CT	-	CT	-	CT	-	CT	-	SGC	PAINT	-	9'-0"	7
122	Storage	SEAL	-	SEAL	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	SGC	PAINT	-	9'-0"	6
123	Inspection	N-SLIP	-	NONE	-	NONE	-	NONE	-	NONE	-	NONE	-	OPEN	PAINT	-	VARIES	2, 8
124	Lease Equipment	SEAL	-	NONE	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	OPEN	PAINT	-	VARIES	2
125	Lease Equipment	SEAL	-	NONE	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	OPEN	PAINT	-	VARIES	2
126	Cingular Equipment	SEAL	-	NONE	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	OPEN	PAINT	-	VARIES	2
127	WSP Equipment	SEAL	-	NONE	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	OPEN	PAINT	-	VARIES	2
128	Common Chase	SEAL	-	NONE	-	PAINT	-	PAINT	-	PAINT	-	PAINT	-	OPEN	PAINT	-	VARIES	2

MATERIAL ABBREV.

AL	Aluminum
CBU	Cementitious Backer Units applied to framing.
CPT	Carpet
CT	Ceramic Tile
GYP	Gypsum Board applied to framing
N-SLIP	Non-Slip Finish on concrete. Refer to Division 3 specifications.
SAT	Suspended Acoustical Tile
SEAL	High-Gloss Sealed Concrete.
SGC	Suspended Gypsum Board Ceiling
SS	Stainless Steel
STL	Steel
WD	Wood
VWB	Vinyl Wall Base
RC	Rubbed Concrete

NOTES

1. Space contains a recessed pedigrid.
2. Ceiling height varies with stairs or open structure
3. UL Fire Rated Assembly - 3 hour
4. Ground face CMU, exposed finish
5. Paint gypsum board exposed to view, this area
6. UL Fire Rated Ceiling Assembly - 2 hour
7. Provide floor expansion joints in quarry tile beneath all control joints and as indicated in detail 5/A301.
8. Paint interior guardrails, handrails, edge guards safety yellow.

FINISH NOTES / ABBREV.

AN	Anodized
FAF	Factory Applied Finish
OPEN	Structure is exposed or open to above
PAINT	Paint
S&V	Stain & Varnish

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			DETAILS & SCHEDULES	DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0 — SHEET NO: 155 OF — DWG. A510

HARDWARE SCHEDULE

TAG	DESCRIPTION	QUANT. / LEAF	MFGR.	MODEL	FINISH	REMARKS
L1	Lockset - Passage	1 ONLY	Schlage	D10S	US 32 D	
L2	Lockset - Privacy	1 ONLY	Schlage	D40S	US 32 D	
L3	Lockset - Entrance/Office	1 ONLY	Schlage	D50PD	US 32 D	
L4	Lockset - Store Lock	1 ONLY	Schlage	D66PD	US 32 D	
L5	Lockset - Storeroom	1 ONLY	Schlage	D80PD	US 32 D	
L6	Lockset - Classroom Lock	1 ONLY	Schlage	D70PD	US 32 D	
L7	Lockset - Vestibule	1 ONLY	Schlage	D60PD	US 32 D	
L8	Lockset - Entrance/Office	1 ONLY	Ilco / Unican	L1021	US 32 D	
H1	Hinges - Ball Bearing	3 ONLY	Hager	BB1199	US 32 D	4.5 in. x 4.5 in.
H2	Hinges - Spring Hinge	2 ONLY	Hager	BB1250	US 32 D	3.5 in. x 3.5 in. for self-closing gate
H3	Hinges	2 ONLY	-	-	PAINTED	Fabricated by gate manufacturer.
S1	Stop - Wall mounted	1 ONLY	Hager	236W	US 32 D	
C1	Closer	1 ONLY	LCN	4040 Super Smoothee	GREY	Metal Cover
P1	Push Plate & Push Plate With Pull Handle	1 ONLY	Hager	30S & 33G	US 32 D	1 Set of push pulls per door
T1	Threshold	1 ONLY	Reese	S483AN	-	ADA Compliant, Fire Rated
T2	Threshold	1 ONLY	Reese	S205A	-	ADA Compliant, 5 in. Wide
SW1	Sweep	1 ONLY	Reese	F377C		Fire Rated
SW2	Sweep	1 ONLY	Reese	377C		
W1	Weatherstriping - Perimeter Seal	1 ONLY	Reese	F797B		Fire Rated
W2	Weatherstripping	1 ONLY	Reese	797B		
K1	Kick plate	2 ONLY	Rockwood	35" wide x 16" high	US32D	One kickplate each side
K2	Kick plate	2 ONLY	Rockwood	35" wide x 6" high	US32D	One kickplate each side
M1	Coordinator	1 ONLY	Glynn-Johnson	COR2XFB2	Clear Anod.	
M2	Latch guard	1 ONLY	Hagar	3320	US32D	
M3	Automatic Flush Bolts	2 ONLY	Glynn-Johnson	FB7	US32D	Top and bottom
M4	Dust Proof Strike	1 ONLY	Glynn-Johnson	DP2	US32D	Bottom only

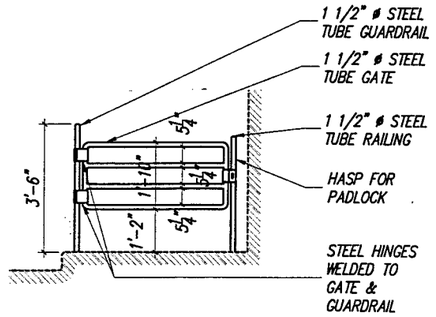
DOOR SCHEDULE

		DOOR										FRAMES					HARDWARE														FINISH			REMARKS
NO.	SIZE	TYPE	STEEL - INSULATED	STEEL - LABELED (hourly rating)	STEEL - FLUSH	WOOD - SOLID CORE	ALUMINUM STOREFRONT	PLASTIC LAMINATE GATE - FLUSH	PIPE RAIL GATE	INSULATED OVERHEAD DOOR	HOLLOW METAL - DRYWALL FRAME - TYP.	HOLLOW METAL MASONRY	HOLLOW METAL - LABELED (hourly rating)	ALUMINUM STOREFRONT	PIPE RAIL FABRICATION	MISCELLANEOUS STEEL	LOCKSET	HINGES	STOP	CLOSER	PUSH / PULL	THRESHOLD	SWEEP	WEATHER-STRIPPING	KICK PLATE	POWER OPERATED	MISCELLANEOUS	MISCELLANEOUS	PAINT - ENAMEL	STAIN & VARNISH	FACTORY FINISHED	1/2" UNDERCUT	
100	36"x84"	A					X							X			-	-	-	-	-	-	-	-	K2	-	-	-			X		
101	36"x84"	A					X							X			-	-	-	-	-	-	-	-	K2	-	-	-			X		
102	36"x84"	B				X						X					L2	H1	S1	C1	-	-	-	-	K1	-	-	-		X		X	
103	36"x84"	B				X						X					L2	H1	S1	C1	-	-	-	-	K1	-	-	-		X		X	
104	36"x84"	D		3									3				L1	H1	S1	C1	-	T1	SW1	W1	K1	-	-	-	X				
105	36"x84"	B				X						X					L5	H1	S1	-	-	-	-	-	K1	-	-	-		X		X	
106	36"x84"	C				X						X					L6	H1	S1	C1	-	-	-	-	K1	-	-	-		X		X	
106A	36"x84"	E				X						X					L4	H1	S1	C1	-	-	-	-	K1	-	-	-		X		X	
107A	36"x84"	C				X						X					L7	H1	S1	C1	-	-	-	-	K1	-	-	-		X			
107B	36"X36"	-						X			X						-	H2	-	-	-	-	-	-	-	-	-	-			X		
108	36"x84"	B	X									X					L5	H1	S1	C1	-	T2	SW2	W2	-	-	-	-	X				Note 1
108A	36"x36"	G							X						X		-	H3	-	-	-	-	-	-	-	-	-	-					Refer to 1/A601, note 1
110	36"x84"	E	X				X					X					L3	H1	-	C1	-	T2	SW2	W2	K1	-	-	-	X				Note 1
111	36"x84"	C				X					X						L3	H1	S1	-	-	-	-	-	K1	-	-	-		X			
112	36"x84"	E				X					X						L3	H1	S1	-	-	-	-	-	K1	-	-	-		X			
112A	36"x84"	E				X					X						L3	H1	S1	-	-	-	-	-	K1	-	-	-		X			
113	36"x84"	C				X					X						L3	H1	S1	-	-	-	-	-	K1	-	-	-		X			
114	36"x84"	C	X								X						L1	H1	-	C1	-	T2	SW2	W2	-	-	-	-	X				
115	36"x84"	C	X									X					L8	H1	-	C1	-	T2	SW2	W2	-	-	-	-	X				
116	36"x84"	B				X						X					L5	H1	S1	-	-	-	-	-	K1	-	-	-		X			
117	36"x84"	B		3									3				L5	H1	-	-	-	T1	SW1	W1	K1	-	M3	M4	X				Active Leaf
117A	36"x84"	B		3									3				-	H1	-	-	-	T1	SW1	W1	K1	-	M2	-	X				Inactive Leaf
118	36"x84"	D		3									3				L1	H1	-	C1	-	T1	SW1	W1	K1	-	-	-	X				
119	36"x84"	B			X							X					L5	H1	S1	C1	-	-	-	-	-	-	-	-	X				
120	36"x84"	B				X						X					-	H1	S1	C1	P1	-	-	-	K1	-	-	-		X			Refer to HVAC for Door Grille
121	36"x84"	B				X						X					-	H1	S1	C1	P1	-	-	-	K1	-	-	-		X			Refer to HVAC for Door Grille
122	36"x84"	B		3									3				L5	H1	-	C1	-	T1	SW1	W1	K1	-	M3	M4	X				Active Leaf
122A	36"x84"	B		3									3				-	H1	-	C1	-	T1	SW1	W1	K1	-	M2	-	X				Inactive Leaf
123A	36"x84"	E	X									X					L3	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
123B	36"x84"	E	X									X					L3	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
123C	36"x84"	B	X									X					L3	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
123D	36"x84"	B	X									X					L3	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
123E	14ftx16ft	F								X					X		-	-	-	-	-	-	-	-	-	X	-	-	X				Refer to Specifications, Note 1
123F	14ftx16ft	F								X					X		-	-	-	-	-	-	-	-	-	X	-	-	X				Refer to Specifications, Note 1
123G	14ftx16ft	F								X					X		-	-	-	-	-	-	-	-	-	X	-	-	X				Refer to Specifications, Note 1
123H	14ftx16ft	F								X					X		-	-	-	-	-	-	-	-	-	X	-	-	X				Refer to Specifications, Note 1
124	36"x84"	B	X									X					L8	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
125	36"x84"	B	X									X					L8	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
126	36"x84"	B	X									X					L8	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
127	36"x84"	B	X									X					L8	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1
128	36"x84"	B	X									X					L8	H1	-	C1	-	T2	SW2	W2	K1	-	M2	-	X				Note 1

NOTES:
1. Field paint to match manufacturered roof panel.

NOTES:
1. PROVIDE FULL LENGTH ASTRAGAL ON ALL PAIRS OF DOORS.
2. REFER TO DOOR SCHEDULE AND HVAC DRAWINGS FOR DOOR GRILLES.

1 A601 ELEVATIONS-DOOR TYPES
SCALE: 1/8" = 1'-0"



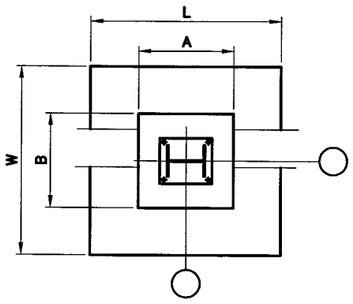
2 A601 ELEVATION-GATE
SCALE: 1/4" = 1'-0"

PLANS PREPARED BY: VIERBICHER ASSOCIATES, INC. REEDSBURG, WI			SCHEDULES	DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0 — SHEET NO: 156 OF — DWG. A601

STATE PROJECT NUMBER	SHEET NO.
1032-08-70	157

MARK	FTG. L X W	FTG. DEPTH	FTG. ③ T&B REINF.	COL. A X B	T/PED. EL.	T/FTG. EL.	PED. REINF.	TIES	COMMENTS
F1	6'-0"x 6'-0"	1'-3"	8#6 E.W.	24"x 24"	99'-0"	98'-0"	8#6	#4 @ 6" @ ANCHORS, R. #4 @ 12"	INT. FTG.
F2	8'-0"x 8'-0"	1'-3"	10#6 E.W.	30"x 28"	99'-0"	96'-9"	8#7	#4 @ 4" @ ANCHORS, R. #4 @ 8"	EXT. FTG.
F3	8'-0"x 8'-0"	1'-3"	10#6 E.W.	32"x 34"	99'-0"	96'-9"	8#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	EXT. FTG.
F4	8'-0"x 9'-11"	1'-3"	10#6x13#6	32"x 53"	99'-0"	96'-9"	14#7	#4 @ 4" @ ANCHORS, R. #4 @ 12"	COMB. EXT. PED.
F5	9'-6"x 9'-11"	1'-3"	12#6x13#6	50"x 53"	99'-0"	96'-9"	18#8	#4 @ 4" @ ANCHORS, R. #4 @ 12"	COMB. EXT. PED.
F6	14'-0"x 8'-0"	1'-3"	18#6x10#6	(2)32"x 34"	99'-0"	96'-9"	(2)8#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	DBL. EXT. PED.
F7	10'-11"x 9'-11"	1'-3"	14#6x13#6	67"x 53"	99'-0"	96'-9"	24#8	#4 @ 4" @ ANCHORS, R. #4 @ 12"	COMB. EXT. PED.
F8	8'-0"x 8'-0"	1'-3"	10#6 E.W.	32"x 33"	99'-0"	96'-9"	8#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	DBL. EXT. PED.
F9	19'-4"x 8'-4"	2'-6"	12#8x26#8	(3)24"x 24"	99'-0"	96'-9"	(3)10#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	ENT.CANOPY FTG.
F10	10'-0"x 14'-1"	2'-0"	12#6x18#6	(2)30"x 28"	99'-0"	89'-6"	(2)8#9	#4 @ 4" @ ANCHORS, R. #4 @ 12"	DBL.EX.WALL PED
F11	15'-1"x 8'-0"	1'-3"	19#6x10#6	(2)30"x 28"	99'-0"	96'-9"	(2)8#7	#4 @ 4" @ ANCHORS, R. #4 @ 8"	EXT. FTG.
F12	20'-6"x15'-0"	1'-3"	26#6x20#6	SEE PLAN	99'-0"	90'-6"	8#8	#4 @ 4" @ ANCHORS, R. #4 @ 12"	(6) EXT. PED'S.
F13	8'-0"x 12'-1"	1'-3"	10#6x15#6	(2)30"x 28"	99'-0"	90'-6"	8#9	#4 @ 4" @ ANCHORS, R. #4 @ 8"	FTG. @ STAIR
F14	8'-0"x 8'-0"	2'-6"	11#8 E.W.	30"x 28"	99'-0"	96'-9"	8#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	EXT. FTG.
F15	15'-11"x 8'-0"	1'-3"	20#6x10#6	(3)32"x 34"	99'-0"	96'-9"	(3)8#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	COMB. EXT. PED.
F16	8'-0"x 8'-0"	1'-3"	10#6 E.W.	32"x 35"	99'-0"	96'-9"	8#8	#4 @ 4" @ ANCHORS, R. #4 @ 8"	EXT. FTG.

FOOTING SCHEDULE



DETAIL: TYPICAL EXTERIOR COLUMN

NOTES:

1. FOR 5" S.O.G. W/SAND ON VAPOR BARRIER ON 6" COMPACTED GRANULAR BASE WITH 6x6 W2.9/W2.9 W.W.F. (FOR 8" S.O.G. USE 6x6 W5/W5 W.W.F.)
2. FOR 12" SLAB REINFORCEMENT, REFER TO SECTION 8 ON SHEET S502.
3. FOR RECTANGULAR FOOTINGS, REINF. LISTED PER PERPENDICULAR TO DIM. L THEN DIM. W. FOR ARRANGEMENT, REFER TO DETAIL 7/S501.
4. FOR SITE LOCATION REFER TO CONSTRUCTION DETAILS IN CIVIL DRAWINGS.
5. EXCAVATION FOR FOOTINGS, SUBTERRANEOUS HALLWAYS, AND PITS SHALL EXTEND BELOW EXISTING FILL TO NATIVE SOIL. (REFER TO SOIL BORINGS)
6. FOR STAIR DETAILS, SEE SECTIONS 2,6,7,& 8 ON SHEET S503.

NOTE: ALL CONCRETE WORK MUST BE COORDINATED WITH PLUMBING, HEATING, ELECTRICAL, AND B.T. PIT MFG. BEFORE CONSTRUCTION BEGINS

WISCONSIN
RICHARD A. HILL
E-31586
KENOSHA, WIS.
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

KENOSHA S&W FACILITY, NO. 21

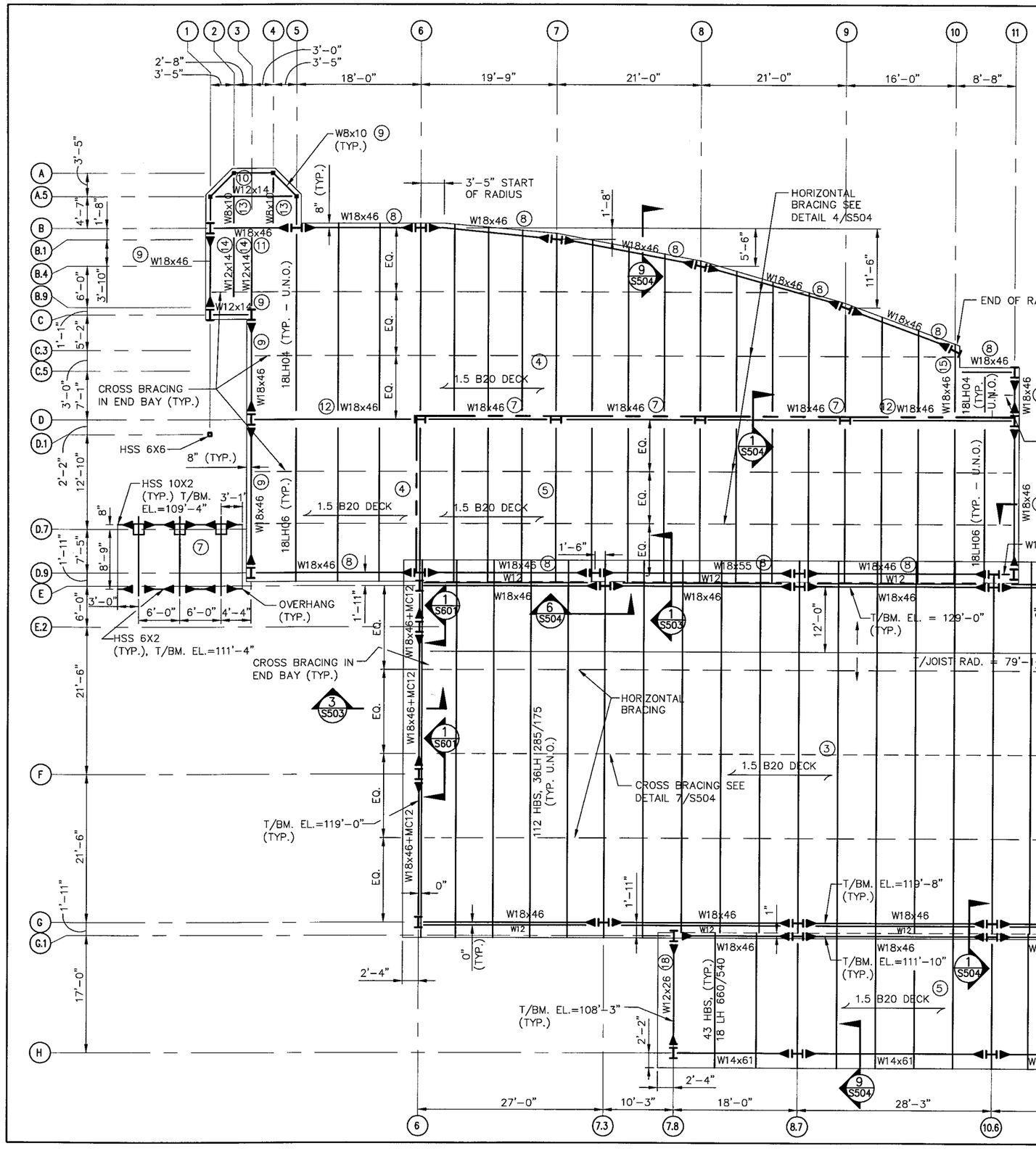
CONST. SPEC.	DRAWN BY	PLANS CK'D.
WI Comm 53	BLM	JWC

FOUNDATION PLAN

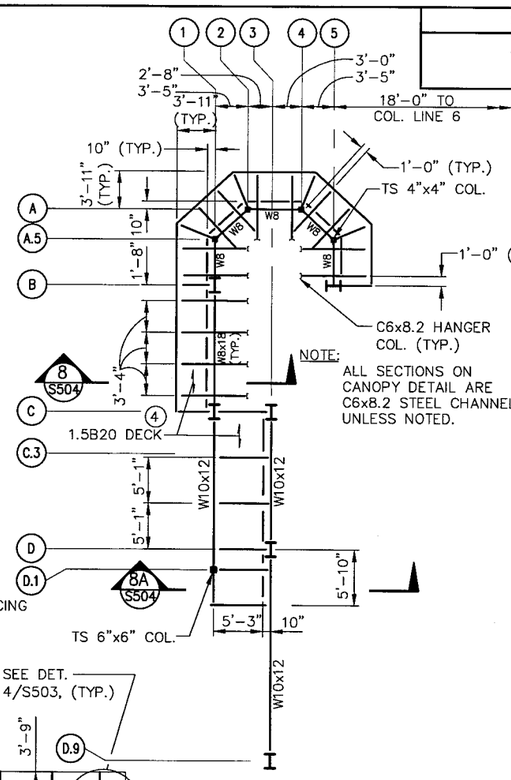
SHEET S101

FILE = K:\PROJECTS\5116\PLANS\STRUCT\S101
SCALE F =

STATE PROJECT NUMBER	SHEET NO.
1032-08-70	158



OBS. DECK CANOPY FRAMING PLAN (EL. 110'-0")



NOTE:
ALL SECTIONS ON CANOPY DETAIL ARE C6x8.2 STEEL CHANNEL UNLESS NOTED.

NOTES:

1. __HBS = HALF BOWSTRING TRUSS JOIST SEAT ELEV. DIFF., IN.
   __LH = LONGSPAN JOIST DEPTH, IN.
   __/__ = TOTAL DEAD LOAD/LIVE LOAD ON JOIST IN PLF.
2. ▶ = MOMENT CONNECTION
3. DECK MUST BE CONTINUOUS OVER A MINIMUM OF 1 SPAN
4. DECK MUST BE CONTINUOUS OVER A MINIMUM OF 2 SPANS
5. DECK MUST BE CONTINUOUS OVER A MINIMUM OF 3 SPANS
6. FOR CANOPY FRAMING & DETAILS, SEE SHEET S504
7. T/BM. EL. = 111'-11", ALONG COL. LINE D.
8. T/BM. EL.=112'-4"
9. T/BM. EL. =112'-10"
10. T/BM. EL. = 112'-9 1/2"
11. T/BM. EL. = 112'-9"
12. T/BM. EL. VARIES FROM 112'-4" TO 111-11"
13. T/BM. EL. VARIES FROM 112'-9 1/2" TO 112'-9"
14. T/BM. EL. VARIES FROM 112'-10" TO 112'-9"
15. T/BM. EL. VARIES FROM 112'-10" TO 111'-11"
16. HVAC UNIT SUSPENDED FROM JOIST. COORD. WITH MECHANICAL.
17. W12 BM IS HORIZONTAL, TYP. (SEE DETAIL 4/S503)
18. W12x26 IS CAMBERED 7 1/2" TO FOLLOW ROOF LINE. (SEE ARCH. DWGS FOR GEOMETRY)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

KENOSHA S&W FACILITY, NO. 21

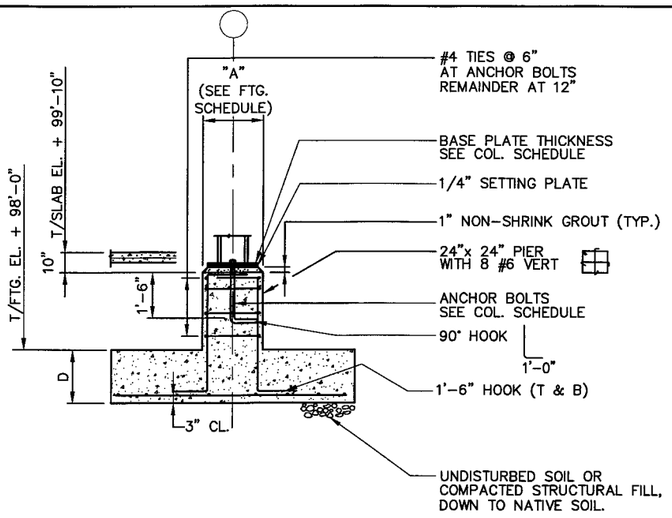
CONST. SPEC.	WI Comm 53	DRAWN BY	BLM	PLANS CK'D.	JWC

ROOF PLAN

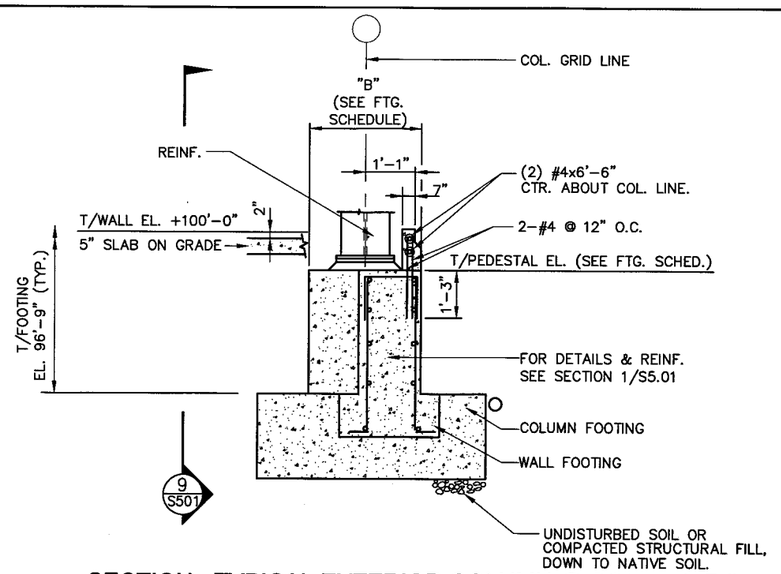
SHEET S102

FILE= K:\PROJECTS\5116\PLANS\STRUCT\S102
SCALE =

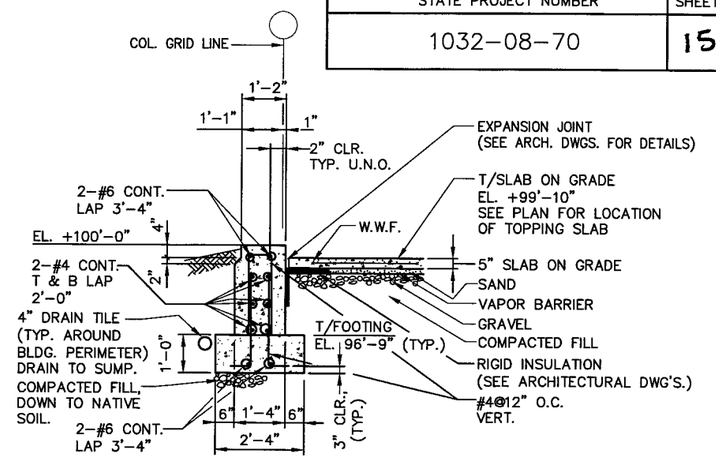
STATE PROJECT NUMBER	SHEET NO.
1032-08-70	159



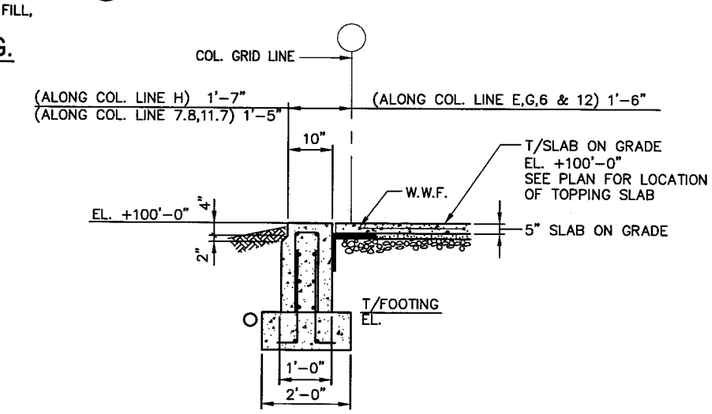
7 ELEVATION - TYPICAL INTERIOR FOOTING



4 SECTION - TYPICAL EXTERIOR COLUMN @ SCALE BLDG.

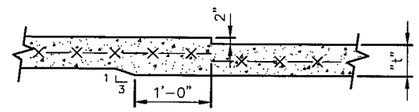


1 SECTION - TYPICAL WALL FOOTING

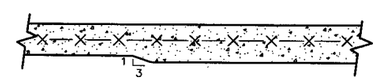


2 SECTION - TYPICAL WALL FOOTING @ CELLULAR & INSP. BLDG.

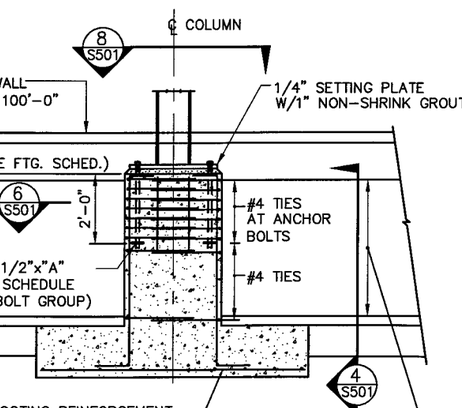
FOR DETAILS & REINF., SEE SECTION 1/S5.01



2A TYPICAL DETAIL AT SLAB DEPRESSION OR SLAB THICKNESS CHANGES

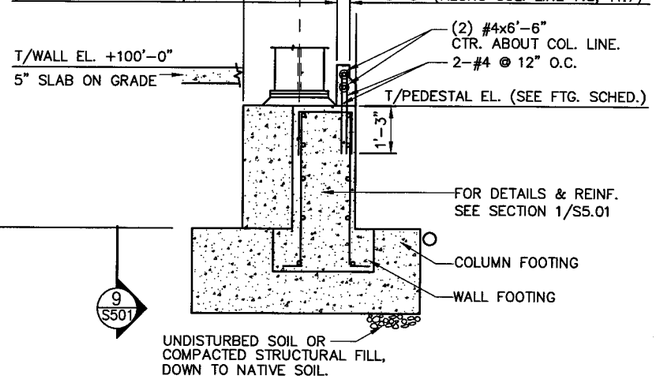


2B TYPICAL DETAIL AT THICKENED SLAB

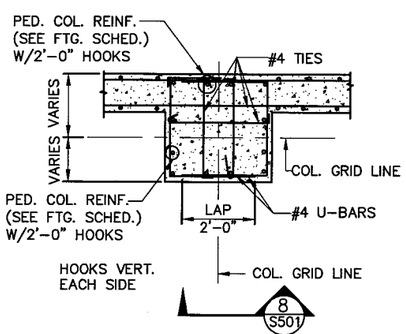


8 DETAIL @ EXTERIOR COLUMN

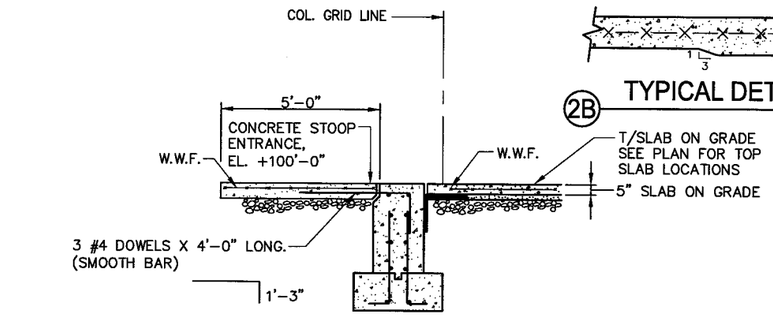
9 ELEVATION



5 SECTION - TYPICAL EXTERIOR COLUMN @ CELLULAR & INSP. BLDG.



6 SECTION



3 SECTION - TYPICAL WALL FOOTING @ ENTRANCE

FOR DETAILS & REINF., SEE SECTION 1/S501

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

KENOSHA S&W FACILITY, NO. 21

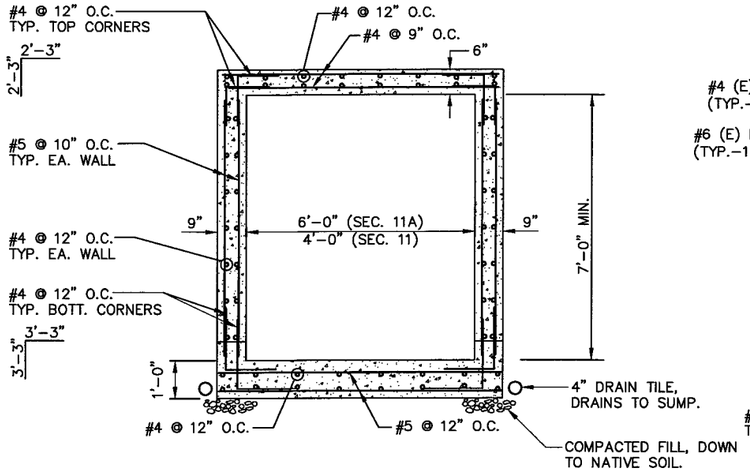
CONST. SPEC.	DRAWN BY	PLANS CK'D.
WI Comm 53	BLM	JWC

FOUNDATION DETAILS

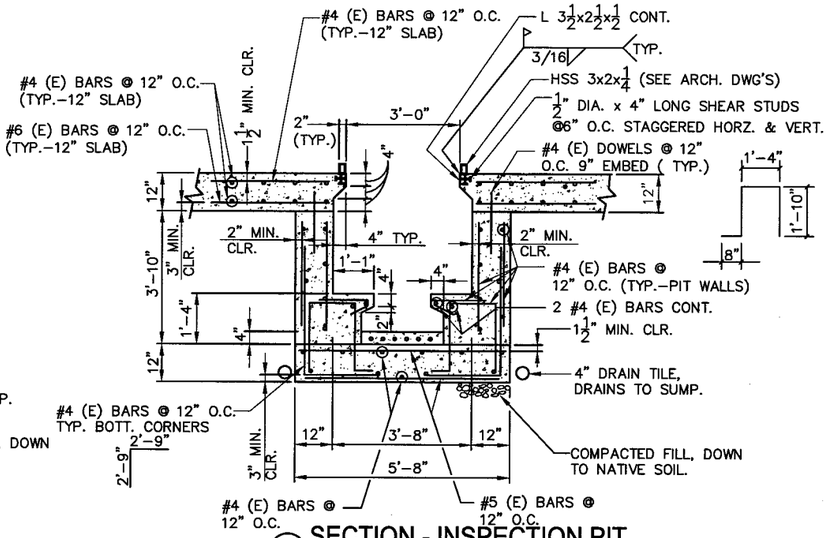
SHEET S501

FILE= K:\PROJECTS\5116\PLANS\STRUCT\S501
SCALE =

STATE PROJECT NUMBER	SHEET NO.
1032-08-70	160

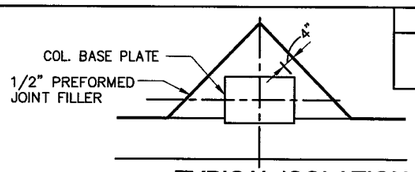


11 & 11A SECTION - HALLWAY ENTRANCE TO SCALE

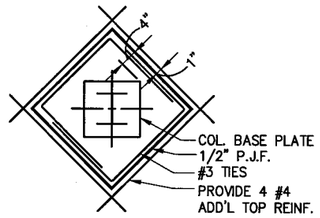


8 SECTION - INSPECTION PIT

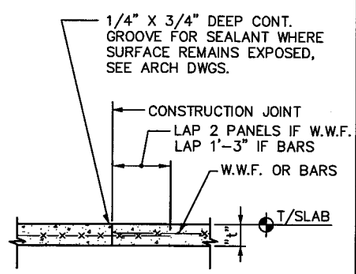
NOTE: (E) = EPOXY COATED BARS



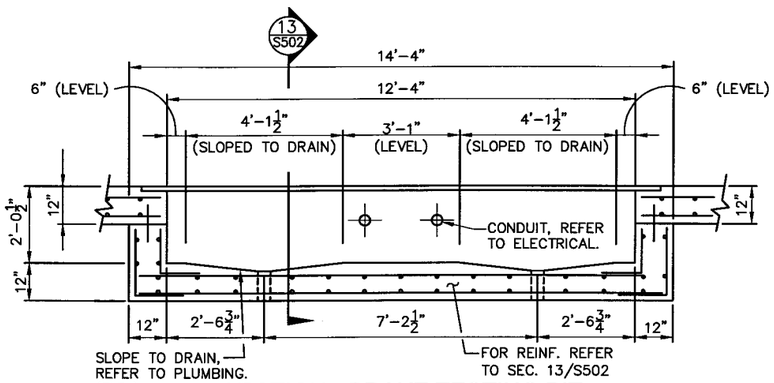
4 TYPICAL ISOLATION JOINT AT EXT. COLUMN



5 TYPICAL ISOLATION JOINT AT INT. COLUMN

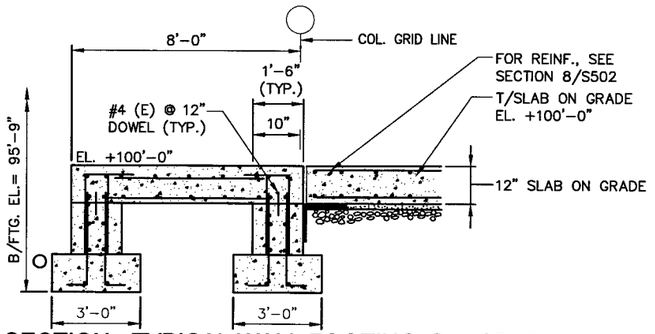


1 TYPICAL SLAB ON GRADE CONSTRUCTION JOINT



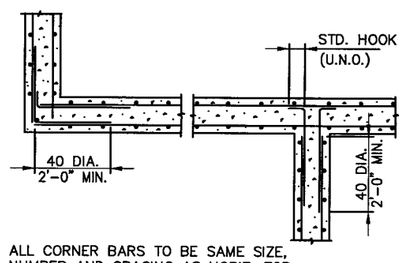
12 SECTION - BRAKE TESTING PIT

NOTE: LEVEL AREAS SHOWN ARE NEEDED TO SUPPORT SUBFRAME.



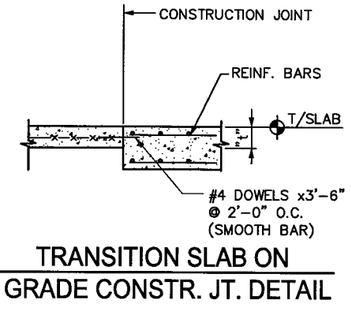
9 SECTION - TYPICAL WALL FOOTING @ INSP. BUILDING

FOR DETAILS & REINF., SEE SECTION 1/S501 & FOUNDATION PLAN

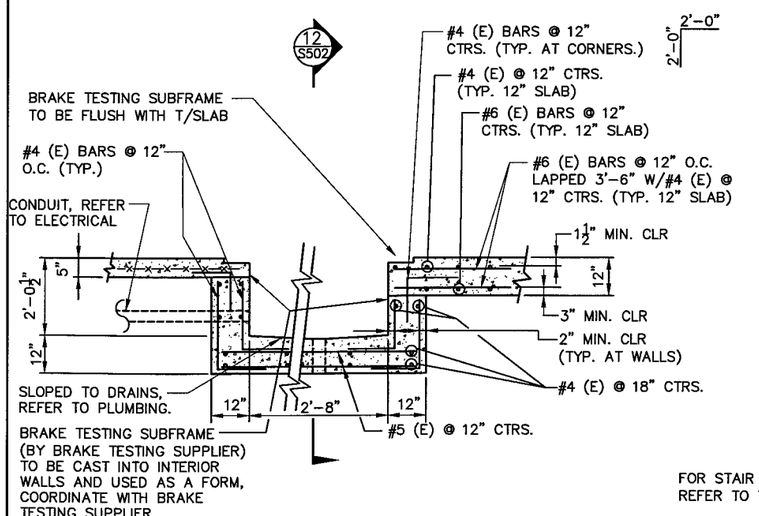


ALL CORNER BARS TO BE SAME SIZE, NUMBER AND SPACING AS HORIZ. TOP AND BOTTOM BARS IN WALLS AND/OR GRADE BEAM.

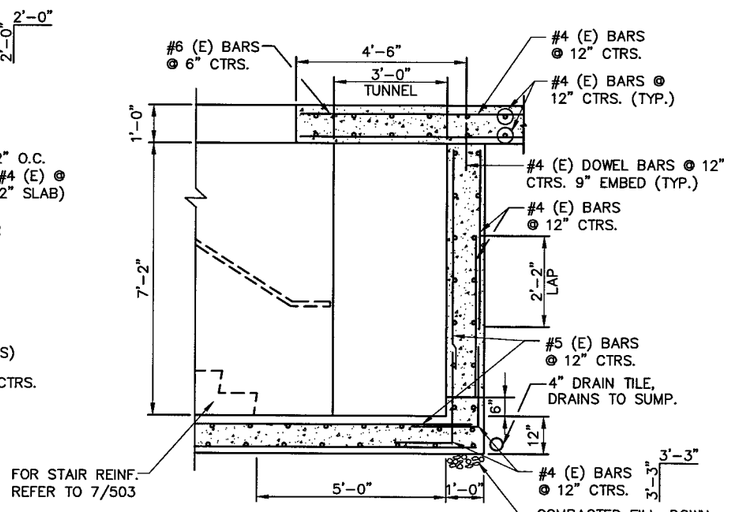
6 TYPICAL CORNER BAR DETAIL



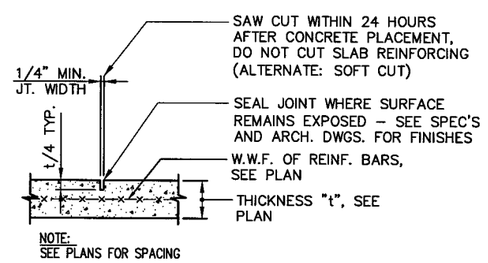
2 TRANSITION SLAB ON GRADE CONSTR. JT. DETAIL



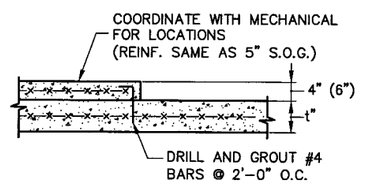
13 SECTION - PIT ACCESS



10 SECTION - BRAKE TESTING PIT



7 TYPICAL SLAB ON GRADE CONTROL JOINT



3 TYPICAL DETAIL 4" TO 6" HIGH HOUSEKEEPING SLAB

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WI Comm 53	BLM	JWC

FOUNDATION DETAILS

SHEET S502

FILE= K:\PROJECTS\5116\PLANS\STRUCT\S502
SCALE =

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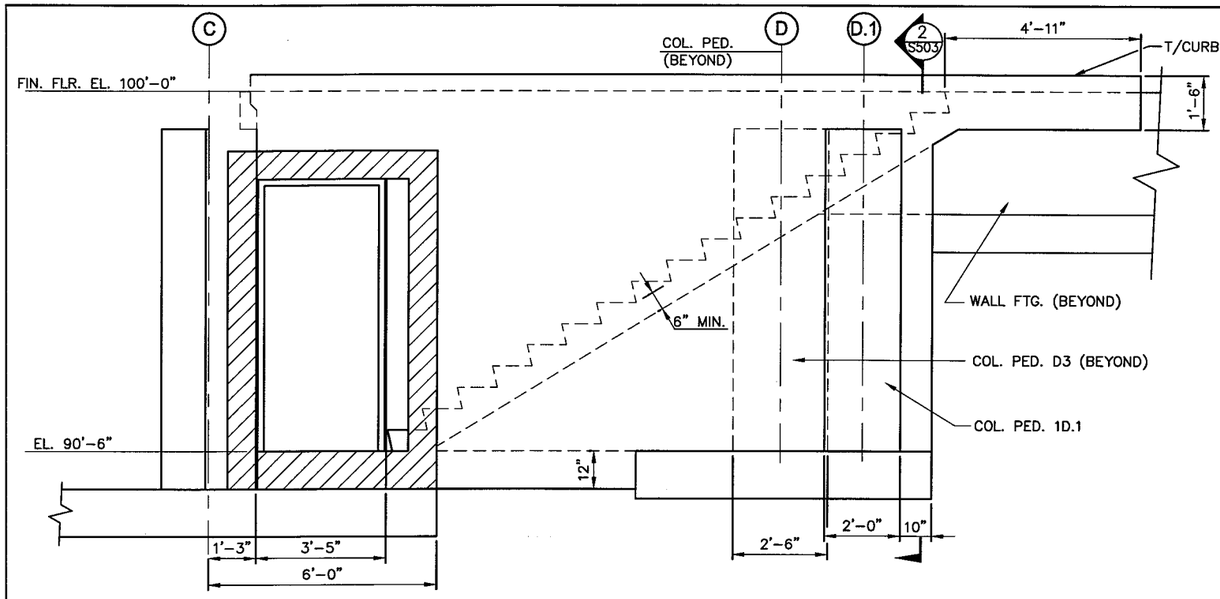
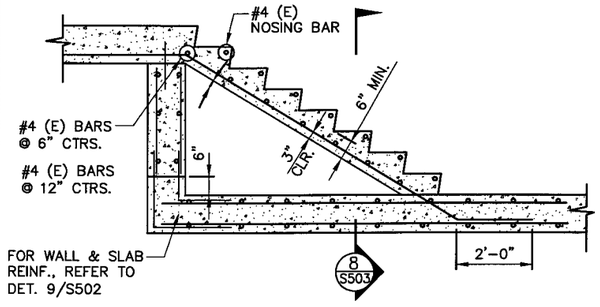
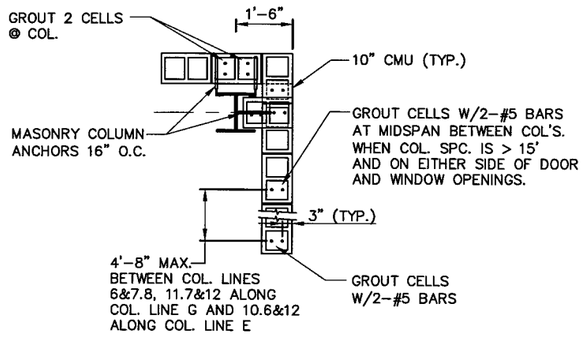


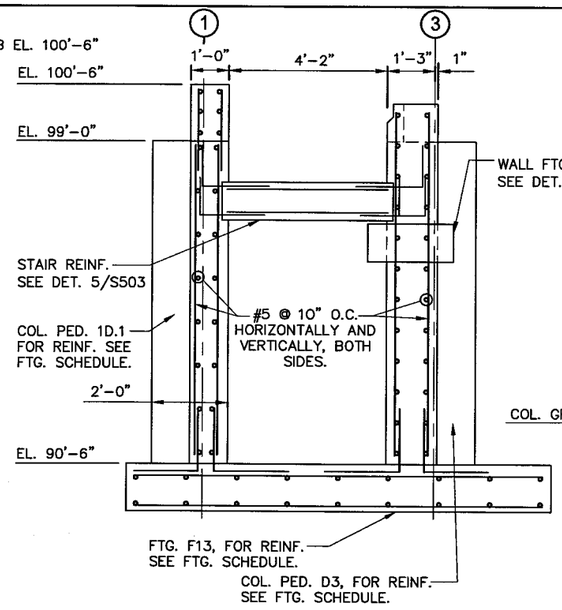
6 SECTION - STATIC SCALE ENTRY



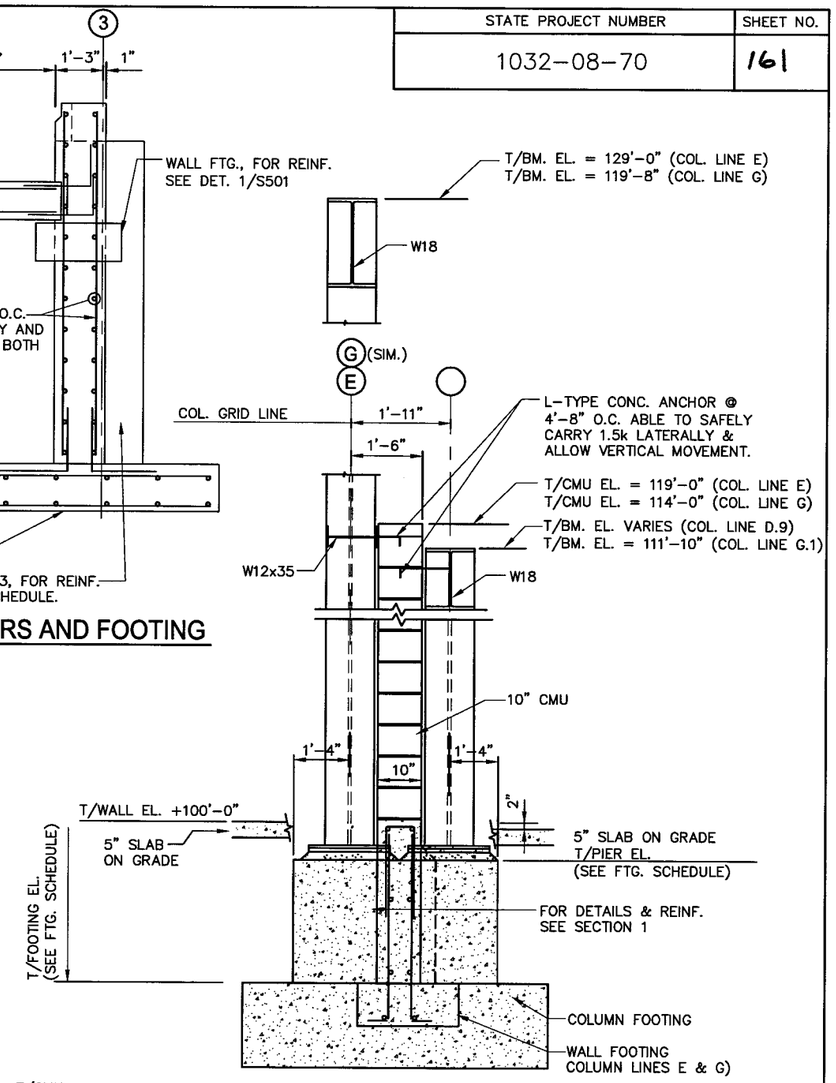
7 TYPICAL STAIR REINFORCEMENT DETAIL



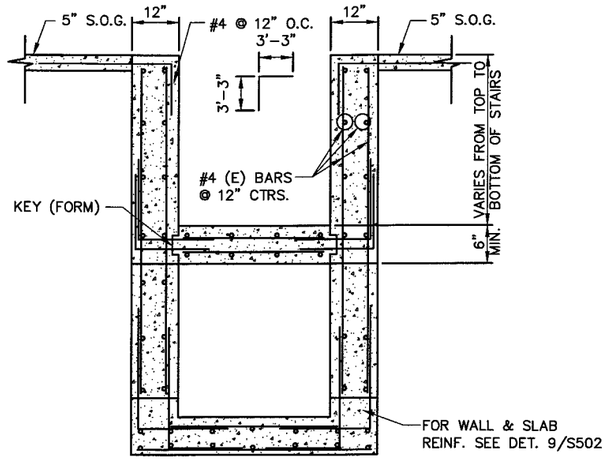
4 MASONRY WALL REINF. TYP. DETAIL @ COLUMNS. & BETWEEN COLUMNS.



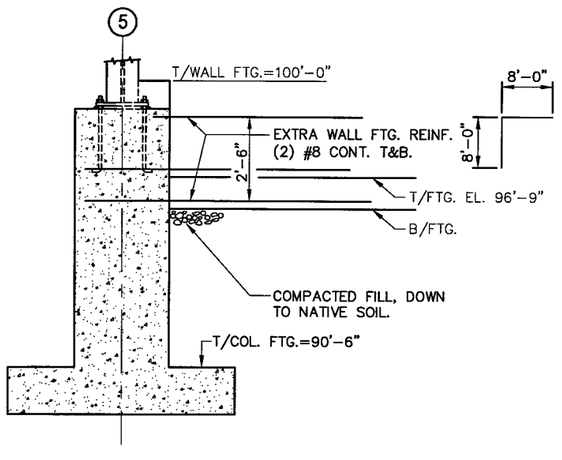
2 SECTION - STAIRS AND FOOTING



1 SECTION - TYPICAL COLUMN WALL @ COL. LINES E & G

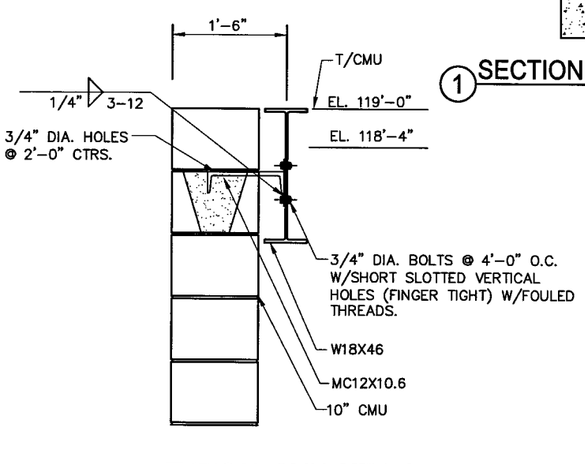


8 TYPICAL STAIR REINFORCEMENT SECTION DETAIL



5 TYPICAL STEPPED DETAIL @ FTG.

FOR COL'S. ON FTG. F12, COL'S. B1 TO C1, AND COL D3



3 TYPICAL CMU-STRUCTURAL STEEL LATERAL TIE BACK CONNECTION

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FOUNDATION/WALL DETAILS

SHEET S503

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SCALE =

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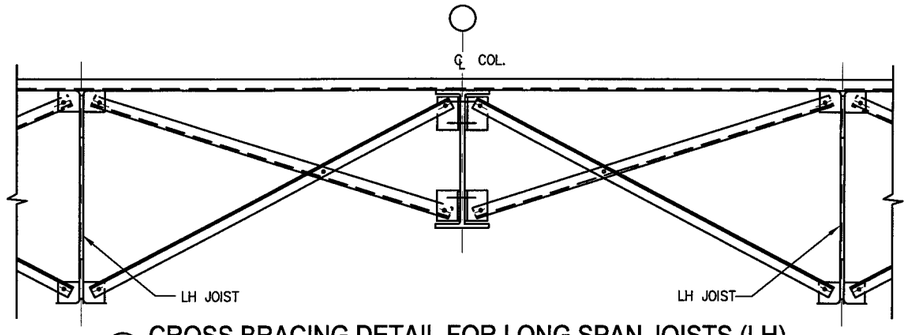
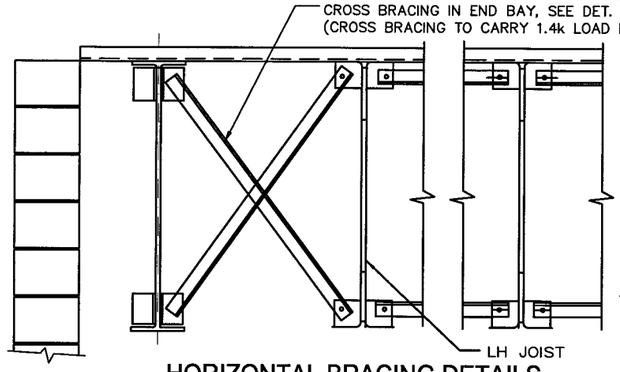
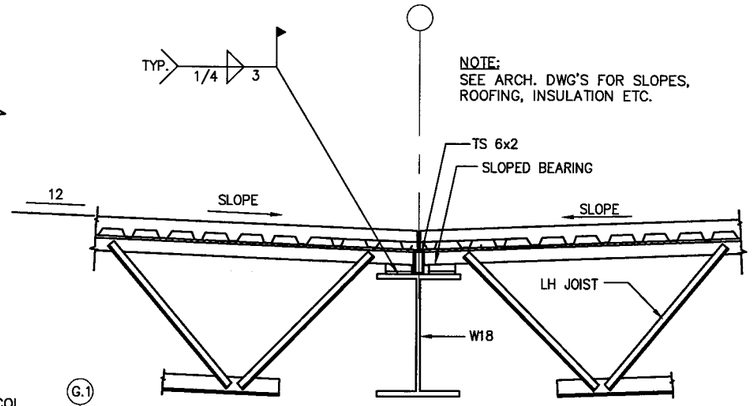
1032-08-70	162



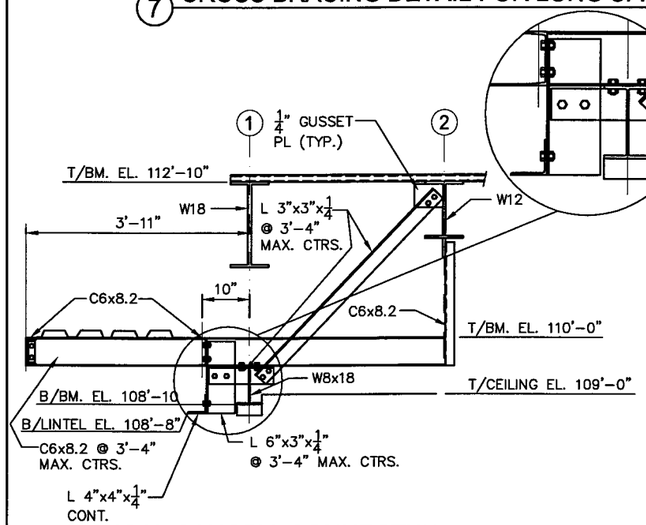
7 CROSS BRACING DETAIL FOR LONG SPAN JOISTS (LH)



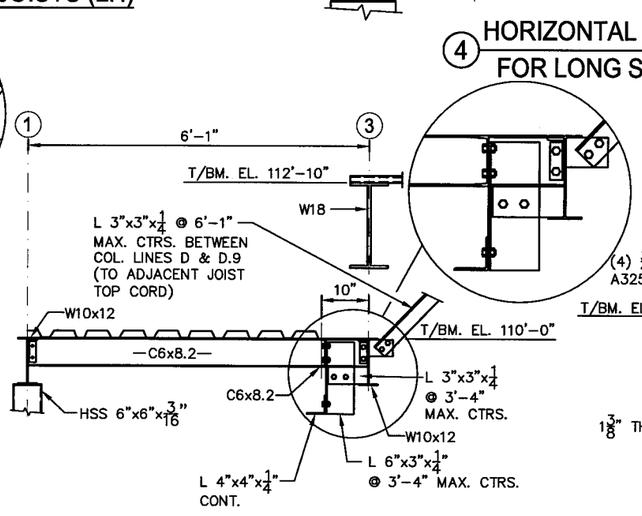
4 HORIZONTAL BRACING DETAILS FOR LONG SPAN JOISTS (LH)



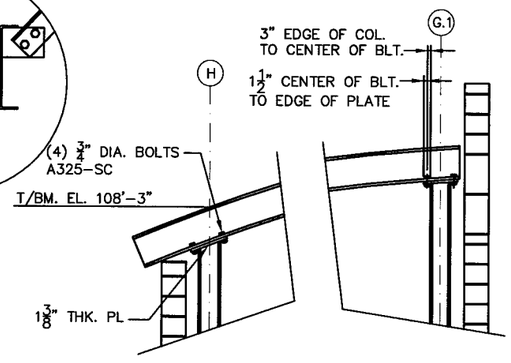
1 TYPICAL JOIST-TO-BEAM CONNECTION



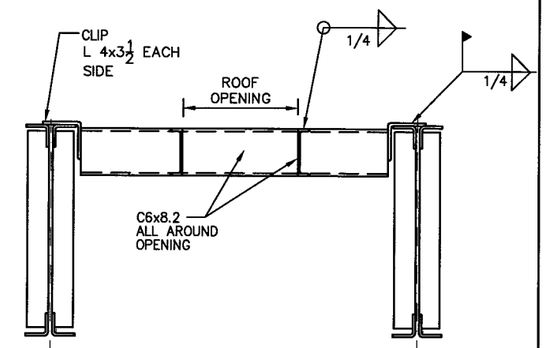
8 TYPICAL CANOPY CONNECTION



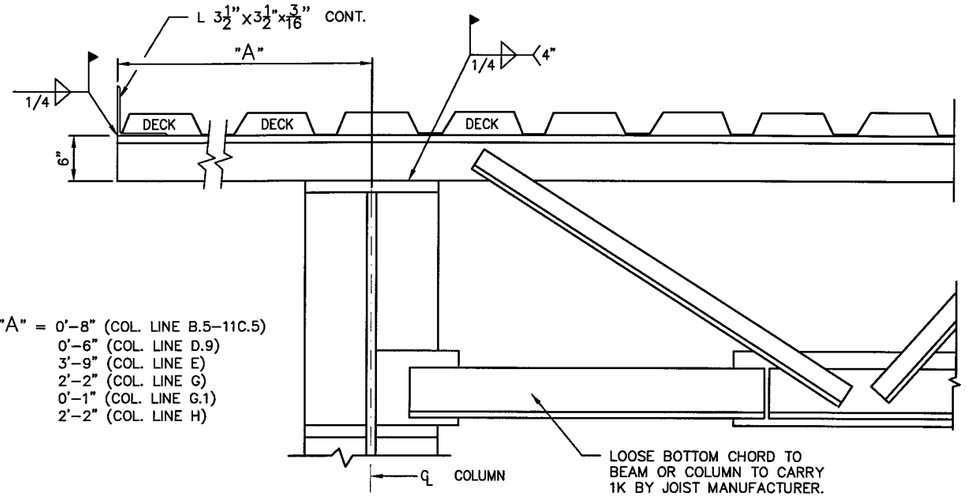
8A TYPICAL CANOPY CONNECTION



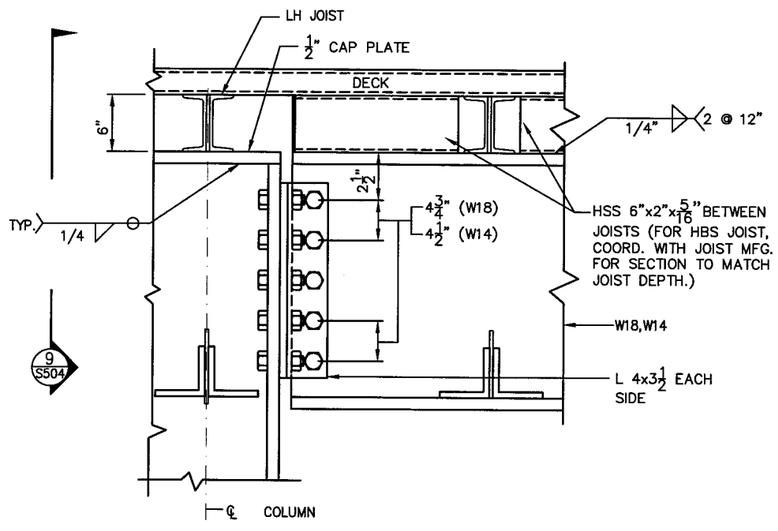
5 W12 MOMENT CONNECTION



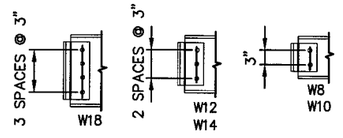
2 TYPICAL ROOF OPENING DETAILS



9 SECTION - JOIST SEAT @ COLUMN & BEAM



6 MOMENT CONNECTION, (TYPE 2)



ALL ANGLES: 2- L 4" X 3 1/2" X 5/16"
ALL BOLTS: 3/4" DIA. A325 (MINIMUM)

3 TYPICAL BEAM CONNECTION
(UNLESS DETAILED ELSEWHERE)
(SLIP CRITICAL U.N.O.)

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STRUCTURES DESIGN SECTION

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CONST. SPEC.	DRAWN BY	PLANS CK'D.
WI Comm 53	BLM	JWC

STEEL DETAILS

SHEET S504

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SCALE =

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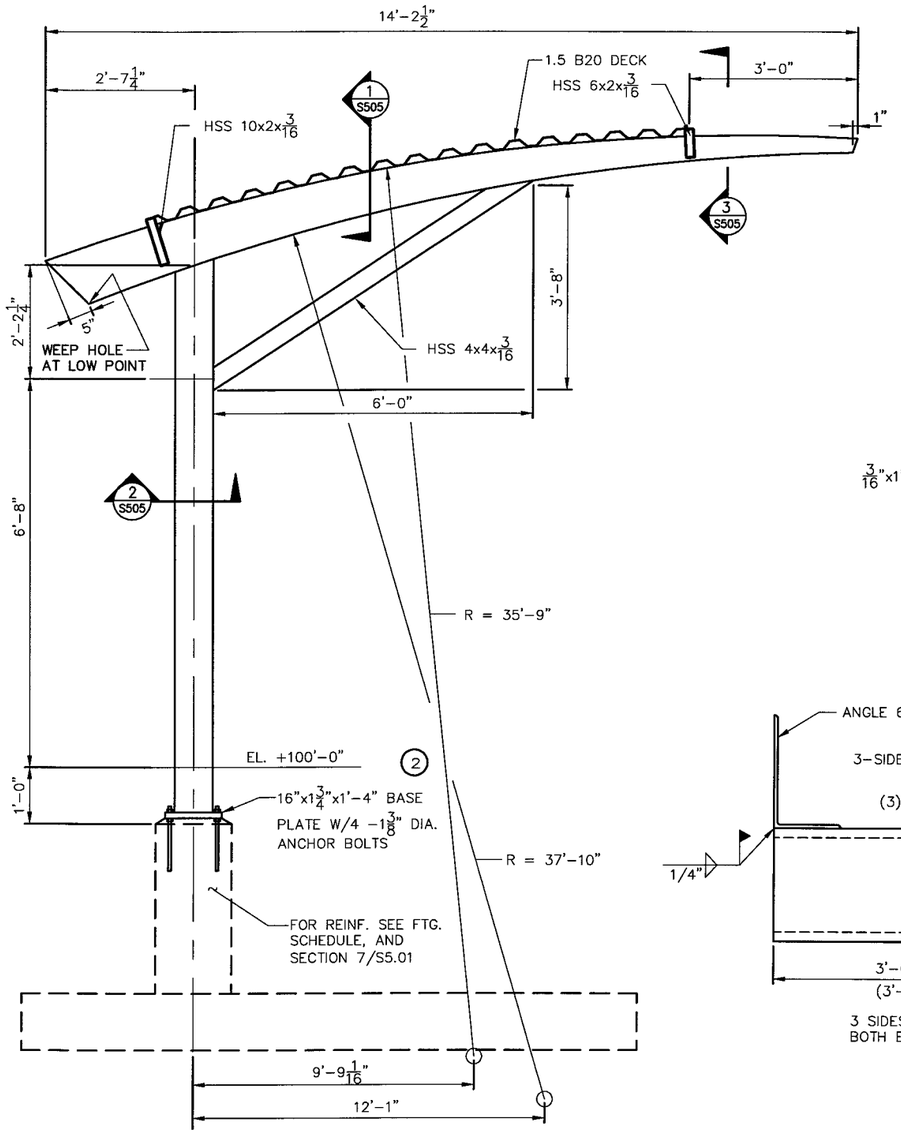
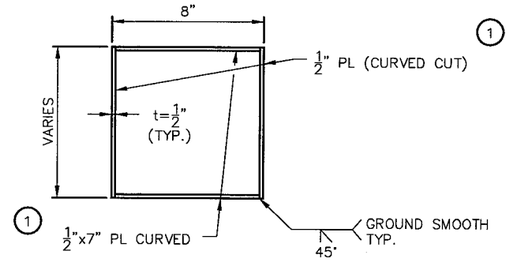
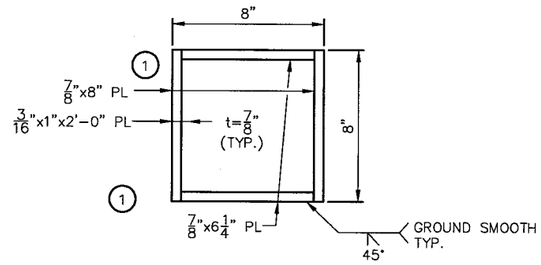


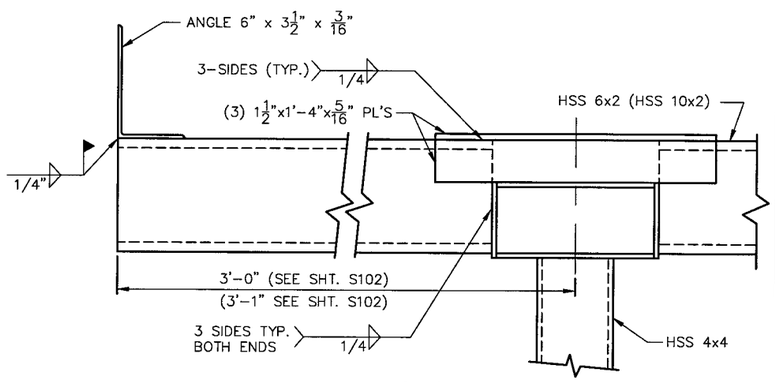
1 SECTION: CANOPY



1 CURVED BEAM SECTION



2 COLUMN SECTION



3 SECTION MOMENT CONNECTION

COLUMN LOCATION / ELEVATION		SCALE BUILDING COLUMNS (22)	OBSERVATION DECK COLUMNS (5)		TOWER COMMUNICATION BUILDING COLUMNS (8)	INSPECTION BUILDING COLUMNS (14)	
		B1,B5,6B-9B.6 C1,C3,10C.3, 11C.5,D3,D6-D9, D11 3D.9,6D.9-11D.9	1D.1	A2,A4,1A.5, 5A.5	7.8G.1-11.7G.1 7.8H-11.7H	G6,G7.3, G8.7,G10.6, G12	E6,E7.3, E8.7,E10.6, E12	6E.2,12E.2 F6,F12
INSP. BLDG: B/HBS JOISTS						W18	W18	W18
SCALE BLDG: B/LH JOISTS INSP. BLDG: B/KAYWALL PANELS (G-LINE)		W18	W10	W12	W18	W12	W12	W12
T/FNDN WALL EL. + 100'-0"		W10x33	HSS 6x6x1/4"	HSS 4x4x1/2"	W10x33	W12x87	W12x87	W12x87
SLAB ON GRADE ELEV. +99'-10"								
TOP/PEDESTAL		11"	11"	11"	11"	11"	11"	11"
BASE PLATE	SIZE(AxtxB)	11"x1 1/4"x1'-6 1/4"	7"x3/4"x1'-0"	11"x3/4"x1'-0"	14"x1"x1'-6 1/4"	14"x1 1/2"x1'-9"		
		9"x1/2"x10 3/4" (2)						
		10"x1 1/2"x16" (3)				14"x2 3/8"x1'-6" (3)		
ANCHOR BOLTS		4-1" DIA. 2-3/4" DIA. (2) 4-1" DIA. (3)	4-1" DIA.		4-1" DIA.	4-1" DIA. 4-1 1/2" DIA. (3)		

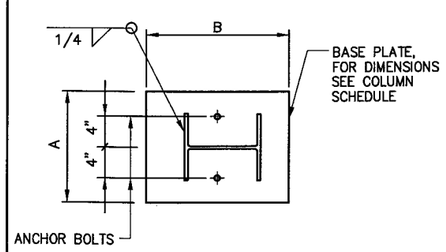
ALL STRUCTUAL STEEL SHALL BE A36. (SEE PLAN FOR T/BEAM ELEVATIONS).

ALL ANCHOR BOLTS SHALL BE A325.

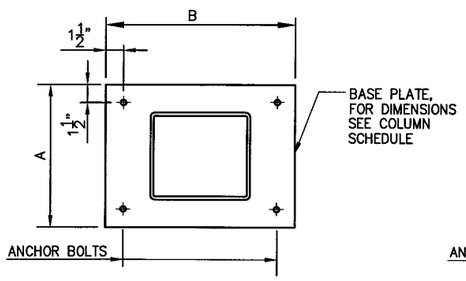
COLUMN SCHEDULE

NOTE :

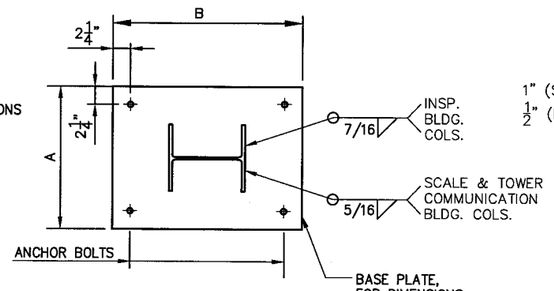
1. ALL BUILT UP SECTIONS FOR CANOPY SHALL BE FABRICATED FROM ASTM A572, GR. 50 GALVANIZED PLATES
2. BASE PLATE AND ANCHOR BOLT SIZES FOR INTERIOR COLUMNS ONLY. (4 COLUMNS)
3. BASE PLATE AND ANCHOR BOLT SIZES FOR EXTERIOR CORNER COLUMNS AND COLS. 6E.2, 12E.2, F6, F12. (7 COLUMNS SCALE BLDG.), (4 COLUMNS INSP. BLDG.)



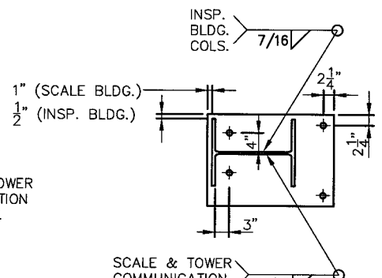
INTERIOR COLUMN



CANOPY COLUMN, TYP.



EXTERIOR COLUMN



EXTERIOR CORNER COLUMN @ SCALE BUILDING

4 TYPICAL BASE PLATE DETAILS

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

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CONST. SPEC.	DRAWN BY	PLANS CK'D.
WI Comm 53	BLM	JWC

STEEL DETAILS

SHEET S505

FILE= K:\PROJECTS\5116\PLANS\STRUCT\S505
SCALE =

STATE PROJECT NUMBER	SHEET NO.
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GENERAL NOTES:

1. SHOP DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC., WILL BE REVIEWED BY THE DESIGN TEAM FOR CONFORMANCE WITH THE DESIGN CONCEPT ONLY. NO WORK SHALL BE STARTED WITHOUT SUCH REVIEW.
2. THE GENERAL CONTRACTOR, PRIOR TO SUBMISSION TO THE DESIGN TEAM, SHALL REVIEW SHOP DRAWINGS PREPARED BY SUPPLIERS OR THE GENERAL CONTRACTOR.
3. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LINTELS, SHELF ANGLES, SIZE AND LOCATION OF FLOOR SLOPES, DEPRESSED AREAS, FLOOR DRAINS, FLOOR FILLS AND FINISHES, CURBS, CHAMBERS, TRENCHES, PITS, GROOVES, OPENINGS, SLEEVES, HANGERS, CONDUIT RUNS IN WALLS OR SLABS, MACHINE OR EQUIPMENT SUPPORTS, EQUIPMENT PADS, INSERTS AND OTHER EMBEDDED ITEMS.
4. UNLESS OTHERWISE SHOWN OR NOTED, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND PLACEMENT OF THE ABOVE ITEMS.

ELEVATIONS

5. ALL ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED ON FINISHED FIRST FLOOR ELEVATION 100'-0", WHICH EQUALS ELEVATION 227.400 METERS (746.06') ON THE ROADWAY DRAWINGS.

FOUNDATIONS

6. ALLOWABLE FOUNDATION LOADS: ALL FOOTINGS ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 2900 P.S.F. (DEAD LOAD) AND/OR 2900 P.S.F. (DL&LL).
7. REFER TO THE ROADWAY DRAWINGS, SPECIFICATIONS, SUBSURFACE EXPLORATION REPORTS, AND TEST BORINGS FOR EXCAVATION, SUBSURFACE PREPARATION, AND GRANULAR FILL REQUIREMENTS.
8. THE TEST BORING RECORDS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO REPRESENT ALL CONDITIONS THAT WILL BE ENCOUNTERED.
9. ANCHOR BOLTS SHALL BE SET, AND CONCRETE BEARING SURFACES FOR COLUMNS SHALL BE FINISHED, TO THE FOLLOWING TOLERANCES:
   A. TOP OF CONCRETE ±3/8"
   B. TOP OF ANCHOR BOLTS +1" TO -3/8"
   C. OUT OF POSITION OF BOLTS ±1/8"
10. WATERSTOPS SHALL BE PROVIDED AT ALL WALL CONSTRUCTION JOINTS BELOW GRADE AND AT ALL JOINTS SO DETAILED ON THE DRAWINGS. WATERSTOP SHALL BE 6" PVC DOUBLE DUMBBELL TYPE.
11. CONCRETE FOR ANY FOOTING SHALL NOT BE POURED ON FROZEN GROUND OR WHEN WATER IS PRESENT.
12. BUILDING IS CONSTRUCTED ON ENGINEERED FILL. UNSUITABLE EXISTING TOP LAYER SHALL BE EXCAVATED, FILLED WITH A COMPACTED ENGINEERED FILL TO FLOOR SLAB LEVEL, AND THEN EXCAVATED AT FOOTINGS, PITS, HALLWAYS AND STAIRS TO POUR CONCRETE. COORDINATE WITH ROADWAY PLANS AND SPECIFICATIONS.

CONCRETE

13. THE CONTRACTOR SHALL SUBMIT PLANS SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS FOR THE ENGINEER'S APPROVAL PRIOR TO CONSTRUCTION.
14. REINFORCING STEEL SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS.
15. WHERE A JOINT IS MADE, THE SURFACE OF THE CONCRETE SHALL BE ROUGHENED, THOROUGHLY CLEANED, AND ALL LAITANCE REMOVED. IN ADDITION, VERTICAL JOINTS SHALL BE THOROUGHLY WETTED AND SLUSHED WITH A COAT OF NEAT CEMENT GROUT IMMEDIATELY BEFORE PLACING NEW CONCRETE.
16. ALL FOOTINGS, WALLS AND SLABS ON GRADE SHALL BE NORMAL WEIGHT CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4,000 P.S.I.
17. ALL SLABS ON GRADE SUPPORTING TRUCK LOADS SHALL BE NORMAL WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 P.S.I., CONTAINING 5 TO 7 PERCENT AIR ENTRAINMENT ADMIXTURE, AND FREE OF CHERT. SEE SPECIFICATIONS TO SEAL THE SURFACE AND PROVIDE SKID RESISTANCE.
18. THE CONTRACTOR SHALL SUBMIT MIX DESIGNS FOR REVIEW PRIOR TO ORDERING CONCRETE.
19. CONCRETE SHALL NOT HAVE ANY CHLORIDE ADDITIVE.
20. ALL REINFORCING BARS SHALL BE ASTM A615 (GRADE 60).
21. THE ARRANGEMENT OF ACCESSORIES SHALL BE IN ACCORDANCE WITH A.C.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. ANY PART OF AN ACCESSORY WHICH WILL BE EXPOSED ON ANY CONCRETE SURFACE AFTER REMOVAL OF THE FORMS SHALL BE GALVANIZED OR PLASTIC TIPPED.
22. THE MINIMUM PROTECTIVE COVERING FOR MAIN REINFORCING STEEL SHALL BE AS FOLLOWS:
   A. WHERE CONCRETE IS PLACED AGAINST GROUND, 3".
   B. FOR CONCRETE DEPOSITED AGAINST FORMS, BUT WHICH WILL BE EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND AFTER REMOVAL OF THE FORMS, 2".
   C. FOR WALLS AND SLABS, EXCEPT AS NOTED ABOVE OR ON DETAILS, 1 1/2".
23. ALL SLABS ON GRADE SHALL BE REINFORCED WITH 6X6-W2.9XW2.9 WELDED WIRE FABRIC USING 9" LAPS AT SPLICES, EXCEPT AS NOTED OTHERWISE. REINFORCING SHALL BE PLACED 1 1/2" CLEAR FROM TOP OF SLAB. FILL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY (ASTM D1557-70, MODIFIED PROCTOR). THE MINIMUM MODULUS OF SUBGRADE REACTION, K, SHOULD BE GREATER THAN 200pci. PROVIDE KEYED CONSTRUCTION JOINTS AND LAP MESH. POUR SLABS IN AN ALTERNATE LONG-STRIP PATTERN. THE CONTRACTOR SHALL SUBMIT PLANS SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS FOR THE ENGINEER'S APPROVAL PRIOR TO CONSTRUCTION.
24. SUBMIT REINFORCING SHOP DETAIL PLANS FOR REVIEW. CONCRETE SHALL NOT BE PLACED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
25. SLOPE CONCRETE SLABS TO FLOOR DRAINS SHOWN ON ENGINEERING AND ARCHITECTURAL DRAWINGS.
26. SEE SPECIFICATION DIVISION 3 "CAST-IN-PLACE CONCRETE" FOR GENERAL REQUIREMENTS.
27. CONCRETE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI1318).
28. ALL WELDED WIRE FABRIC SHALL BE LAPPED TWO (2) FULL MESH PANELS AND TIED SECURELY.
29. THE CONTRACTOR SHALL NOT WELD REINFORCING STEEL WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER.
30. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A186.
31. WELDED WIRE FABRIC AT EXTERIOR EXPOSED SLABS SHALL BE COATED CONFORMING TO ASTM A775-81.
32. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. REINFORCING AT EXTERIOR EXPOSED CONCRETE SHALL BE EPOXY-COATED CONFORMING TO ASTM A775.
33. PROVIDE VAPOR BARRIER OF 8 MIL MINIMUM THICKNESS POLYETHYLENE FILM WITH FIBERGLASS REINFORCING ON APPROVED SUBGRADE FOR ALL SLABS ON GRADE.

STRUCTURAL STEEL

34. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST A.I.S.C. SPECIFICATION.
35. ALL STRUCTURAL STEEL SHALL BE ASTM A36. ALL STRUCTURAL TUBING SHALL BE ASTM A500, GRADE B, COLD FORMED. EXTERIOR TUBES SHALL BE GALVANIZED.
36. ALL BEAMS SHALL BE FABRICATED WITH NATURAL CAMBER UP.
37. HIGH STRENGTH STEEL BOLTS SHALL BE ASTM A325. USE ONE HARDENED WASHER UNDER THE TURNED PORTION OF THE CONNECTION BOLT.
38. NO CONNECTION SHALL CONSIST OF LESS THAN TWO 3/4" BOLTS OR WELD DEVELOPING LESS THAN 10 KIPS.
39. ALL CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE SHEAR CONNECTIONS WITH HIGH STRENGTH BOLTS (FRICTION-TYPE).
40. CUTS, HOLES, OPENINGS, ETC., REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL BE SHOWN ON SHOP DRAWINGS FOR STRUCTURAL STEEL AND SHALL BE MADE IN THE SHOP. BURNING OF HOLES, OR CUTS IN STRUCTURAL STEEL MEMBERS IN THE FIELD, WILL NOT BE PERMITTED EXCEPT BY WRITTEN PERMISSION FROM THE ENGINEER.
41. SIZES OF STRUCTURAL STEEL CANNOT BE VARIED FROM THOSE SHOWN ON THE DRAWINGS WITHOUT WRITTEN CONSENT OF THE ENGINEER.
42. TESTING OF WELDS SHALL BE AS FOLLOWS:
   1. VISUAL INSPECTION SHALL BE MADE ON 100% OF ALL WELDS.
   2. MAGNETIC-PARTICLE TEST SHALL BE MADE ON 25% OF ALL FILLET WELDS.
   3. ULTRASONIC TESTS SHALL BE MADE ON 100% OF ALL FULL PENETRATION WELDS.
43. STRUCTURAL STEEL FABRICATOR SHALL SUBMIT THREE SETS OF SHOP DRAWING PLANS FOR REVIEW.
44. INTERIOR FRAMES MAY REQUIRE TEMPORARY BRACING DURING CONSTRUCTION.
45. ALL WELDING ELECTRODES SHALL BE E70XX, UNLESS NOTED OTHERWISE.
46. CHECK PROPER USAGE OF DIRECT TENSION INDICATORS AT SLIP CRITICAL BOLTS WITH THE SPECIFICATIONS.
47. THE INDEPENDENT TESTING AGENCY SHALL PERFORM ALL SHOP AND FIELD INSPECTION AND TESTING. THE STRUCTURAL STEEL FABRICATOR AND ERECTOR SHALL SCHEDULE WORK TO ALLOW THE ABOVE TESTING REQUIREMENTS TO BE COMPLETED.
48. THE CONSTRUCTION MANAGER SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION PROCEDURES AND SEQUENCES WITH RELATION TO TEMPERATURE DIFFERENTIAL AND TEMPORARY STRUCTURAL STABILITY.
49. STEEL SHALL BE CLEANED OF RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS FOR PROPER FABRICATION, FITTING UP, OR WELDING.
50. PRIME PAINT ALL STRUCTURAL STEEL EXCEPT THAT WHICH RECEIVES SPRAY-ON FIREPROOFING OR IS ENCASED IN CONCRETE. DO NOT PRIME PAINT STRUCTURAL STEEL AT CONNECTIONS.
51. ALL SHEAR CONNECTIONS SHALL BE DESIGNED TO SUSTAIN A LOAD AT LEAST EQUAL TO 1/2 THE TOTAL UNIFORM CAPACITY OF THE BEAM FOR NON-COMPOSITE BEAMS AND 3/4 THE TOTAL UNIFORM CAPACITY OF THE BEAM FOR COMPOSITE BEAMS.
52. FOR STEEL LINTELS, REFER TO ARCH. DRAWINGS.

STEEL JOISTS

53. FOR STEEL JOISTS, THE LATEST EDITION OF "THE STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS CONSTRUCTION". ADOPTED BY THE STEEL JOIST INSTITUTE WILL APPLY EXCEPT WHERE OTHERWISE SHOWN OR NOTED.
54. JOIST CAMBER SHALL NOT EXCEED THE DEAD LOAD DEFLECTION. ALL CORRECTIVE WORK REQUIRED DUE TO EXCESSIVE CAMBER SHALL BE DONE BY THE CONTRACTOR AT HIS OWN EXPENSE.
55. PROVIDE SLOPED END BEARINGS FOR SLOPED JOISTS.
56. JOISTS BEARING ON STEEL BEAMS SHALL BE WELDED TO BEAMS WITH 1/4" FILLET WELDS 2" LONG AT EACH SIDE OF EACH END, UNLESS OTHERWISE NOTED.
57. USE CONTINUOUS HORIZONTAL OR DIAGONAL BRIDGING CONNECTED TO THE TOP AND BOTTOM CHORDS AS SHOWN ON THE DRAWINGS. SUBMIT BRIDGING CONNECTION DETAILS FOR APPROVAL.
58. WHERE THE BRIDGING OF JOISTS PARALLEL TO BEAMS OR WALLS CANNOT BE ANCHORED INTO THE BEAM OR WALL DURING THE CONSTRUCTION OF THE ROOF, SPECIAL TEMPORARY BRACING MUST BE PROVIDED BY SOME MEANS TO ADEQUATELY HOLD THE JOISTS IN PLACE DURING THE SETTING OF THE ROOF DECK.
59. ALL STEEL JOISTS SHALL RECEIVE ONE COAT OF PROTECTIVE PAINT (SEE SPECIFICATIONS).

METAL ROOF DECK

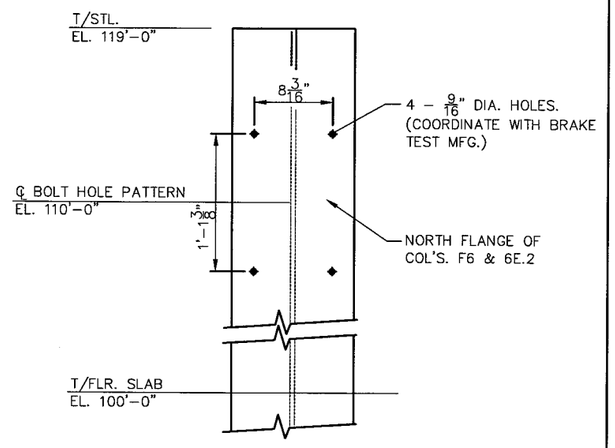
60. DESIGN OF DECK UNITS SHALL CONFORM TO REQUIREMENTS OF SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS OF THE AMERICAN IRON AND STEEL INSTITUTE, LATEST EDITION.
61. ALL METAL DECKING SHALL BE FABRICATED FROM STEEL TYPE ASTM 1-446, GRADE A OR EQUIVALENT HAVING A MINIMUM YIELD STRENGTH OF 33,000 PSI.
62. ALL ROOF METAL DECK SHALL BE ERECTED BY LAPPING ENDS OF SHEETS A MINIMUM OF 2 INCHES.
63. PRIOR TO START OF ERECTION OF STEEL DECK, A WELDING PROCEDURE SHALL BE ESTABLISHED FOR THE PLUG WELDING OF THE STEEL DECKING TO THE STRUCTURAL STEEL FOR THE PARTICULAR GAGE USED. EACH WELDER SHALL BE QUALIFIED USING THIS PROCEDURE AS WITNESSED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER.
64. PROVIDE CONTINUOUS SHEET METAL CLOSURES AT ALL SLAB OPENINGS AND SLAB EDGES AND CONTINUOUS DECK CLOSURES AT ALL DECK ENDS. PROVIDE STEEL ANGLE OR BENT STEEL PLATE CLOSURES AS REQUIRED BY DRAWINGS.
65. ALL METAL DECKS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD DETAILS AND SPECIFICATIONS. ATTACHMENT SHALL BE MADE BY WELDING.
66. DECKING SHALL BE ATTACHED TO EACH JOIST AND/OR STRUCTURAL BEAMS WITH 36/4 PATTERN USING 5/8" DIA. PUDDLE WELDS. DECKING SHALL BE SIDE LAPPED WITH #10 TEK SCREWS @ 12" O.C.
67. METAL ROOF DECKING SHALL BE 1-1/2" THICK, 20 GAUGE, TYPE B, AS MANUFACTURED BY VULCRAFT, OR APPROVED EQUAL. ALL DECKS SHALL BE GALVANIZED.

MISCELLANEOUS

68. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY FOR SUCH DEVIATION BY THE ENGINEER'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ENGINEER OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE ENGINEER HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.
69. ALL ITEMS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS OR AMBIGUITIES, IN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. PLANS AND/OR SPECIFICATIONS WILL BE CORRECTED, OR WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, OMISSION, CONTRADICTION OR AMBIGUITY WILL BE MADE BY THE ENGINEER BEFORE THE AFFECTED WORK PROCEEDS.

DESIGN AND LOADING

70. ALLOWABLE UNIT STRESSES ARE IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE WISCONSIN COMM. 53/2000.
71. LIVE LOADS IN POUNDS PER SQUARE FOOT ARE AS FOLLOWS:
   A. ROOF (SNOW): 30 + DRIFT (KENOSHA COUNTY)
   B. MECHANICAL: ACTUAL WEIGHTS
   C. WIND: 20 (BELOW 50' HIGH)



1 ELEVATION

STANDARD ABBREVIATIONS

BM	-	BEAM
B/	-	BOTTOM OF
B.T. PIT	-	BRAKE TEST PIT
CMU	-	CONCRETE MASONRY UNIT
CTRS.	-	CENTERS
COL.	-	COLUMN
DIM.	-	DIMENSION
E.W.	-	EACH WAY
EL.	-	ELEVATION
(E)	-	EPOXY
FTG.	-	FOOTING
MFG.	-	MANUFACTURING
O.C.	-	ON CENTER
PED.	-	PEDESTAL
RAD.	-	RADIUS
REINF.	-	REINFORCEMENT
SC	-	SLIP CRITICAL
S.O.G.	-	SLAB ON GRADE
SPC.	-	SPACES
SQ.	-	SQUARE
T&B	-	TOP AND BOTTOM
T/	-	TOP OF
TYP.	-	TYPICAL
U.N.O.	-	UNLESS NOTED OTHERWISE
W.W.F.	-	WELDED WIRE FABRIC

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

KENOSHA S&W FACILITY, NO. 21

CONST. SPEC.	DRAWN BY	PLANS CK'D.
WI Comm 53	BLM	JWC

GENERAL STRUCTURE NOTES & MISC. DETAILS

SHEET S601

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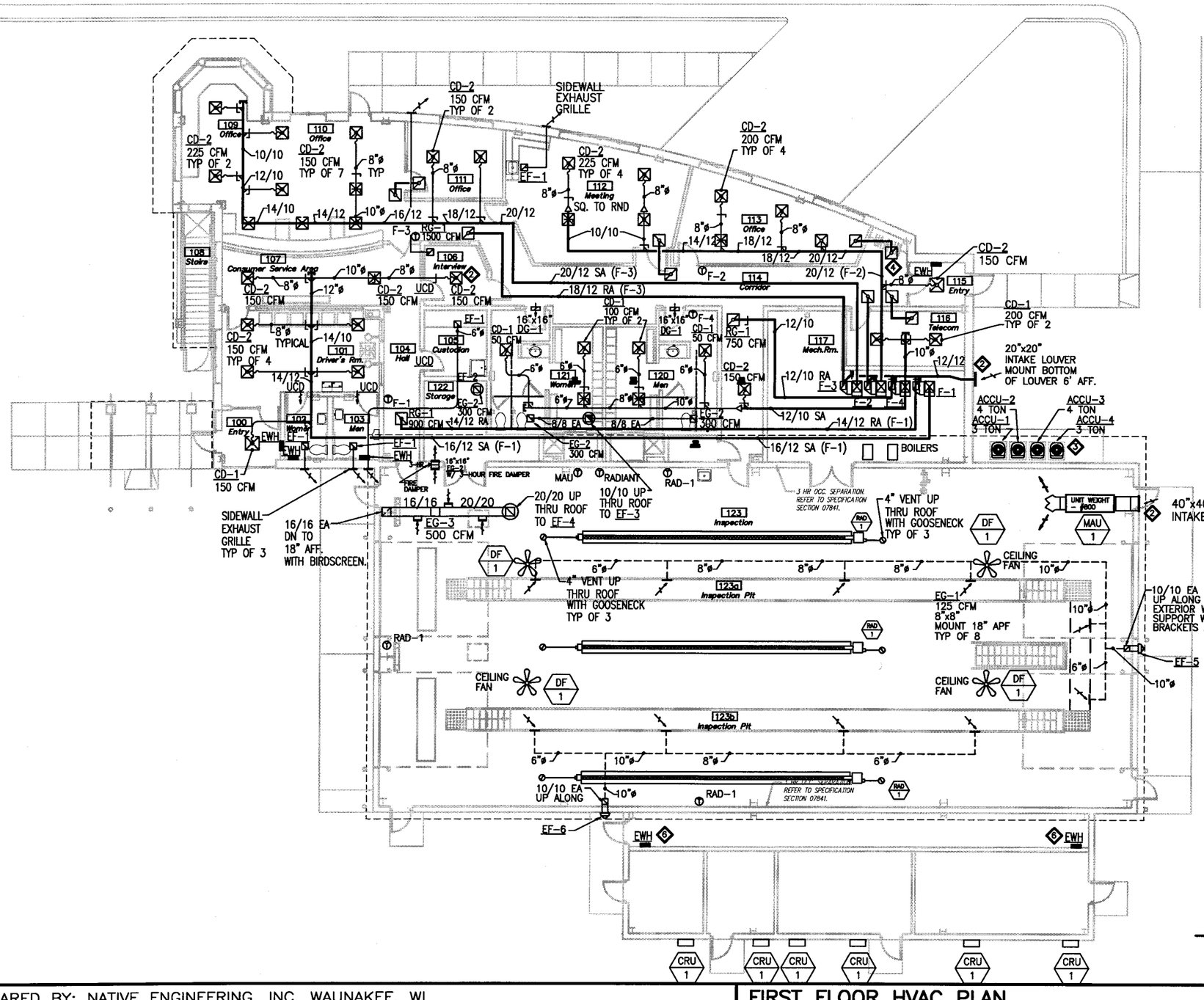


HVAC PLAN KEYED NOTES:

1. HVAC CONTRACTOR TO PROVIDE ELECTRIC WALL HEATER. SIMILAR TO QMARK 7.5 KW WITH LINE VOLTAGE THERMOSTAT.
2. PROVIDE INTAKE AND EXHAUST LOUVERS SIMILAR TO GREENHECK TYPE.
3. HVAC CONTRACTOR TO PROVIDE MOUNTING PAD FOR AIR COOLED CONDENSING UNITS. SEE MANUFACTURERS RECOMMENDATION OF SIZE.
4. TYPICAL TRANSFER DUCTS TO BE 14/12 LINED DUCTWORK. UNLESS OTHERWISE NOTED.
5. CEILING DIFFUSER TO BE STEEL CONSTRUCTION AND VANDAL RESISTANT.
6. PROVIDE SURFACE MOUNTED ELECTRIC WALL HEATER.
7. PROVIDE LP GAS-FIRED RADIANT HEATERS WITH THERMOSTAT AND ACCESSORIES COMPLETE. LOCATE RADIANT HEATERS OVER TRENCH DRAIN AS A REFERENCE POINT.

HVAC PLAN NOTES:

1. HVAC CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING HVAC EQUIPMENT, ACCESSORIES SHOWN ON PLANS AND NOT SHOWN FOR A COMPLETE SYSTEM.
2. HVAC CONTRACTOR TO PROVIDE COMB. AIR AND VENT FOR FURNACE. ROUTE THRU WALL AND PROVIDE NECESSARY WEATHERPROOF SEALING THRU WALL.
3. HVAC CONTRACTOR TO PROVIDE 2-POSITION MOTORIZED DAMPER OPERATOR FOR OUTSIDE AIR. DAMPER TO BE TIED IN WITH FURNACE SO THAT WHEN FURNACE IS OPERATING THE DAMPER SHALL BE OPEN.
4. THE LAYOUT OF DUCT IS ONLY FOR SCHEMATIC PURPOSES. HVAC CONTRACTOR TO COORDINATE CLEARANCES WITH BUILDING TRADES AND STRUCTURE TO MAINTAIN CEILING HEIGHT OF 9'-0" AFF. MINIMAL AMOUNT OF DUCT TRANSITIONS SHOULD BE MAINTAINED WHERE APPLICABLE.
5. HVAC CONTRACTOR TO COORDINATE GRILLES, REGISTER, AND DIFFUSERS WITH CEILING FINISH SCHEDULE.
6. ALL GAS FIRED HVAC EQUIPMENT SHALL BE SETUP FOR LP GAS.

FIRST FLOOR – HVAC

1/16" = 1'-0"

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			FIRST FLOOR HVAC PLAN		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 165 OF / DWG. H101

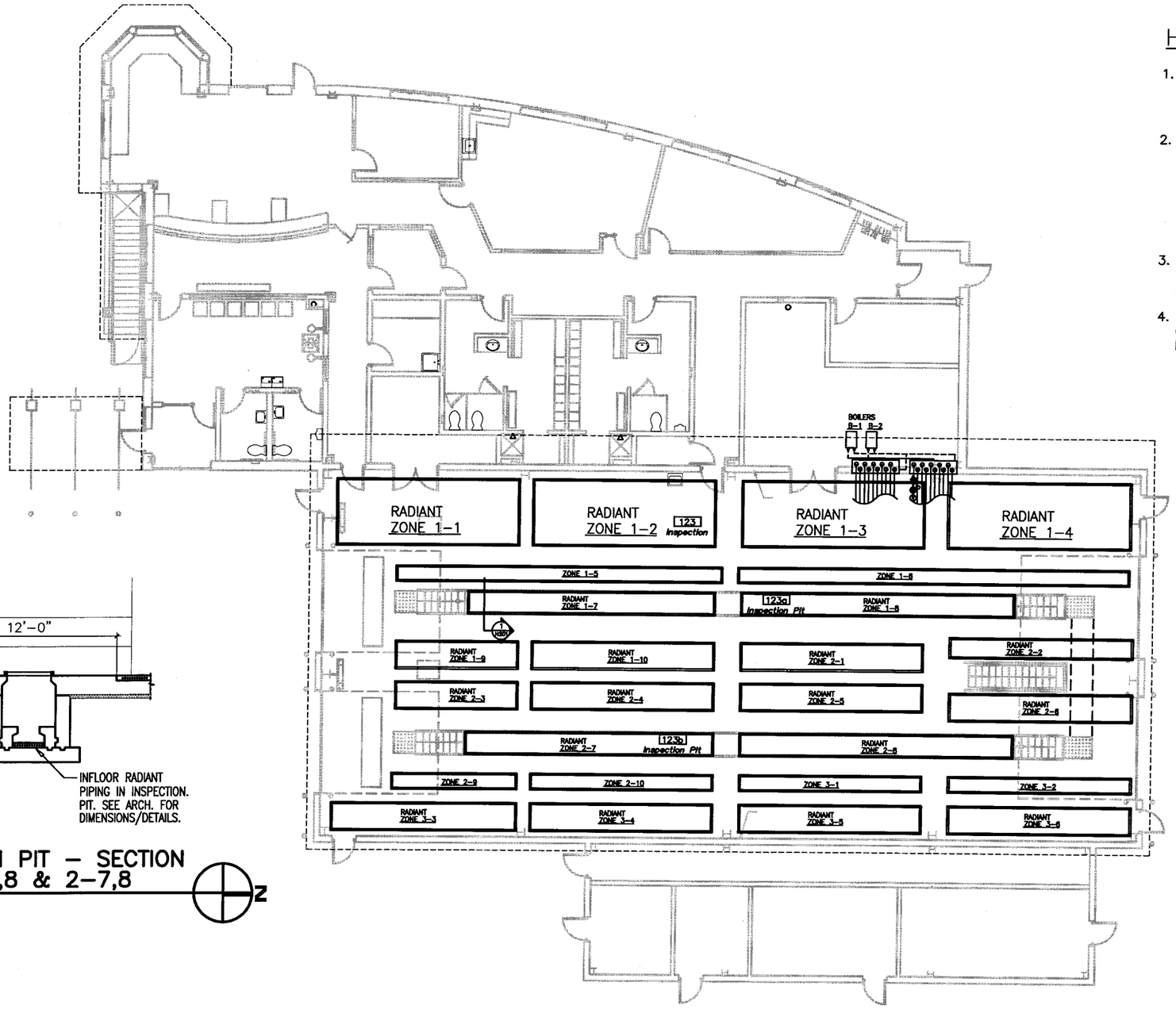
HVAC RADIANT PIPING PLAN NOTES:

1. HVAC CONTRACTOR IS TO PROVIDE AN IN-FLOOR RADIANT PIPING SYSTEM. INSTALL PER MANUFACTURERS RECOMMENDATIONS AND INSTALLATION GUIDELINES.

2. RADIANT PIPING SYSTEM IS COMPRISED OF TWO HOT WATER BOILERS WITH ONE PRIMARY LOOP CIRCULATING PUMP (P-1), A SYSTEM CIRCULATING PUMP (P-2), AND A INJECTION PUMP (P-3). TWO MANIFOLDS WITH 10 CIRCUTIS FOR EACH MANIFOLD. THE RADIANT PIPE IS TO BE A PEXa TYPE POLYETHYLENE TUBING. THERE IS AS SHOWN ON THE PLAN (16) RADIANT CIRCUITS. THE CIRCUITS SHOULD BE LAID OUT ON 12" CENTERS. SEE DETAILS THIS SHEET FOR IN FLOOR DIRECTIONS.

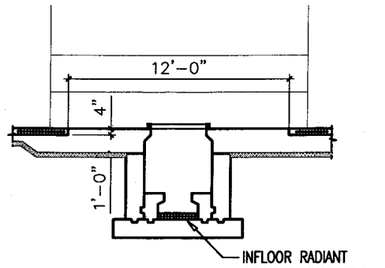
3. THE RADIANT FLOOR PIPING SYSTEM HAS BEEN LAID OUT BASED ON THE MANUFACTURER "REHAU". HVAC CONTRACTOR TO PROVIDE PER REHAU MANUFACTURERS INSTALLATION INSTRUCTIONS OR PER APPROVED EQUAL.

4. THE RADIANT FLOOR PIPING SHALL BE ONLY 200 FEET PER CIRCUIT. HVAC CONTRACTOR TO PROVIDE THE PIPE MANIFOLD TO COVER ALL CIRCUITS WITH PROVISIONS FOR 4 ADDITIONAL CIRCUITS FOR FUTURE.



FIRST FLOOR - HVAC PIPING

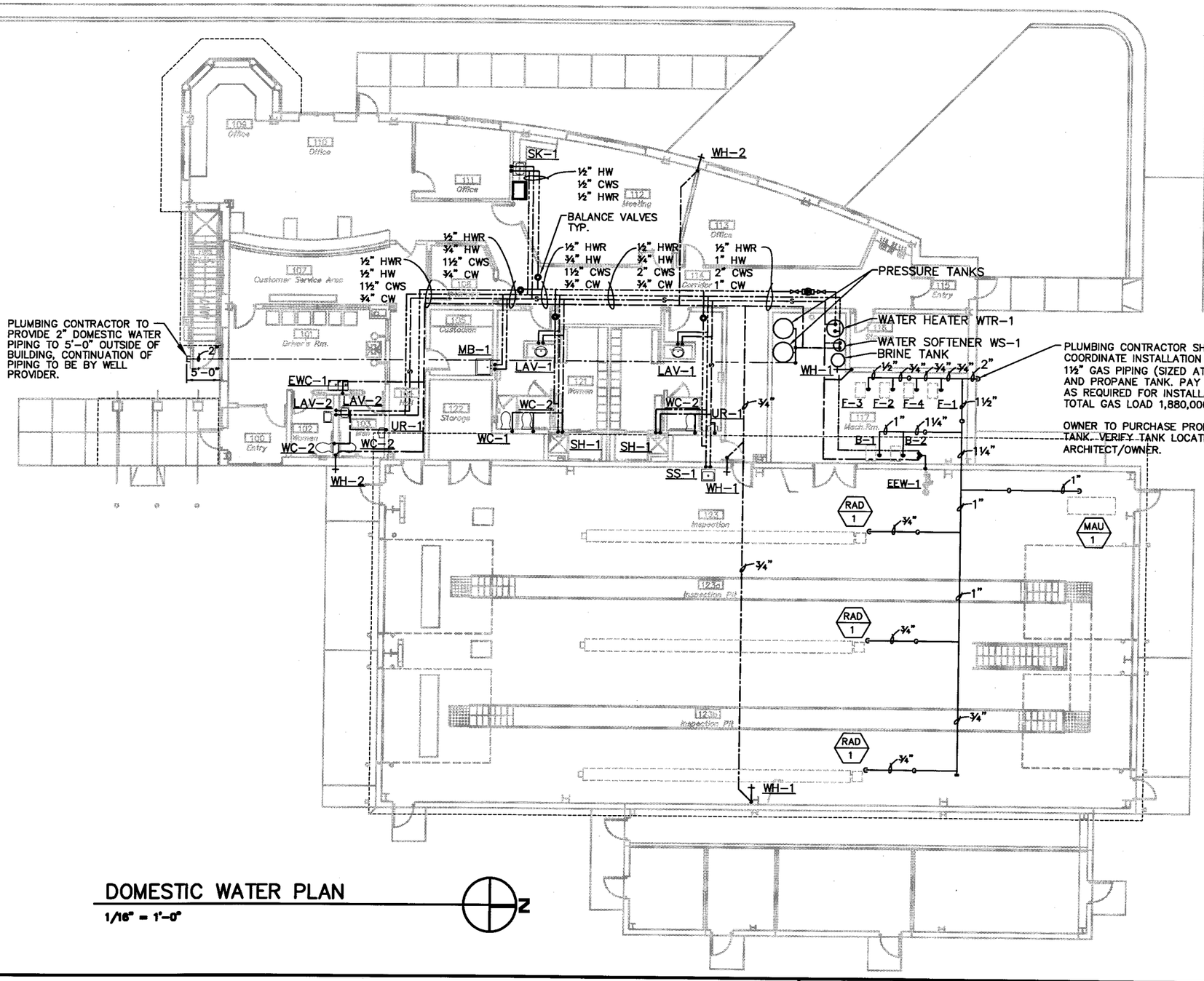
1/16" = 1'-0"



INSPECTION PIT - SECTION ZONE 1-7,8 & 2-7,8

1/8" = 1'-0"

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			FIRST FLOOR HVAC PIPING PLAN		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 166 OF	DWG. H201



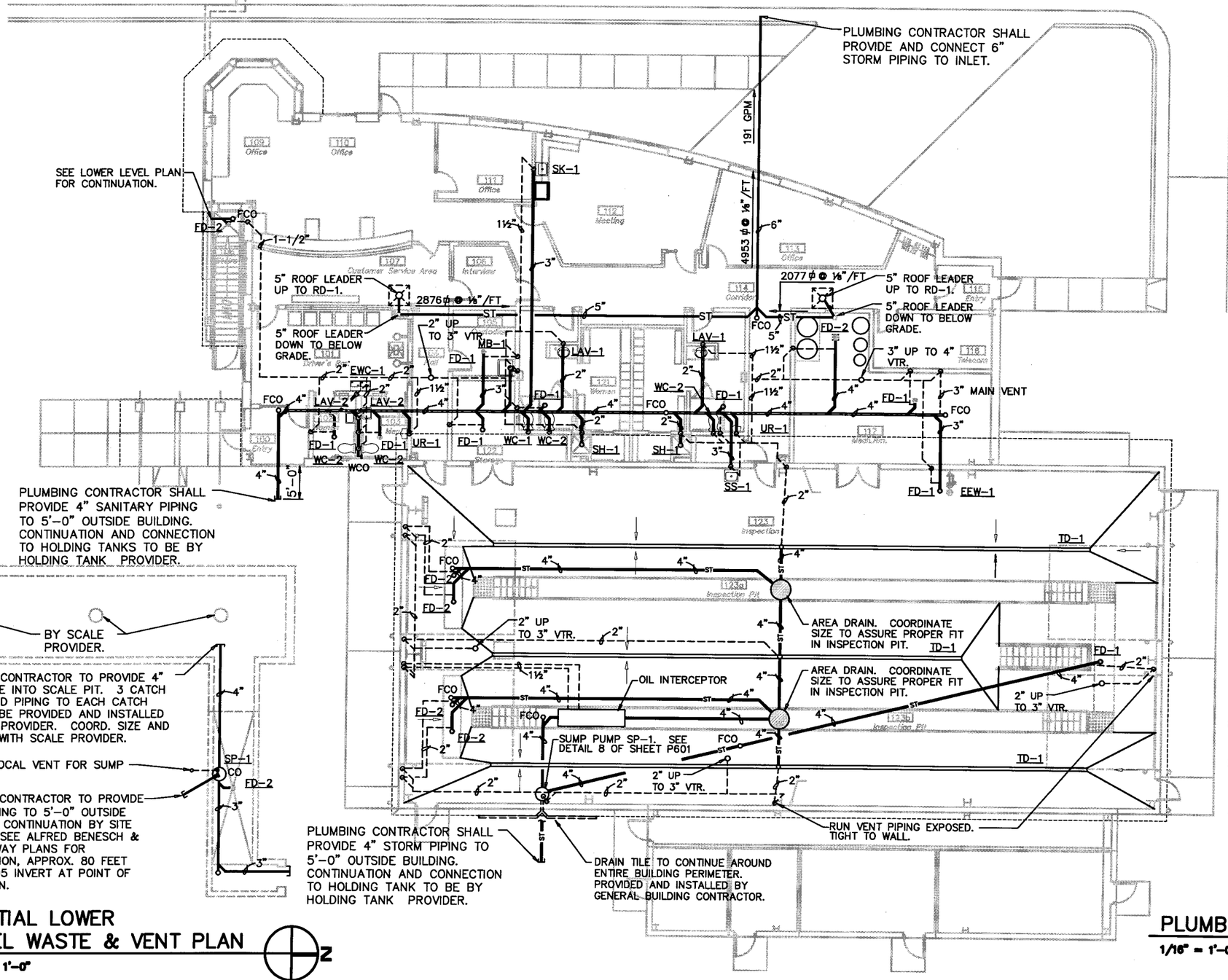
DOMESTIC WATER PLAN

1/16" = 1'-0"

PLUMBING PLAN NOTES:

1. PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY PIPING, FITTINGS AND VALVES AS REQUIRED FOR A COMPLETE AND OPERATIONAL PLUMBING SYSTEM THAT MEETS ALL STATE AND LOCAL CODES.
2. PLUMBING CONTRACTOR TO FURNISH AND INSTALL ACCESS PANELS WHERE NECESSARY TO ACCESS SHUT-OFF VALVES.
3. PLUMBING CONTRACTOR SHALL INSTALL ALL PIPING AND FIXTURES WITH THE COORDINATION OF ALL OTHER TRADES.
4. REFER TO RISER DIAGRAMS SHEET P201 FOR MORE WATER PIPE SIZES.
5. PLUMBING CONTRACTOR TO PROVIDE GAS SHUT-OFF VALVES AT ALL EQUIPMENT CONNECTIONS AND PRESSURE REGULATING VALVES AS REQUIRED. GAS PIPING IS SIZED AT 2 PSI. COORDINATE GAS CONNECTION LOCATIONS WITH HVAC CONTRACTOR.
6. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL ALL FURNACE CONDENSATE PIPING. PIPE TO NEAREST FD-1.
7. PLUMBING CONTRACTOR TO RUN ALL WATER, VENT AND GAS PIPING AS TIGHT TO CEILING STRUCTURE AS POSSIBLE IN INSPECTION AREA. SEE ARCHITECTURAL SECTION 1/A301.

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			DOMESTIC WATER PLAN		DATE: 1/1/12	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 167 OF	DWG. P101



PARTIAL LOWER LEVEL WASTE & VENT PLAN

1/16" = 1'-0"

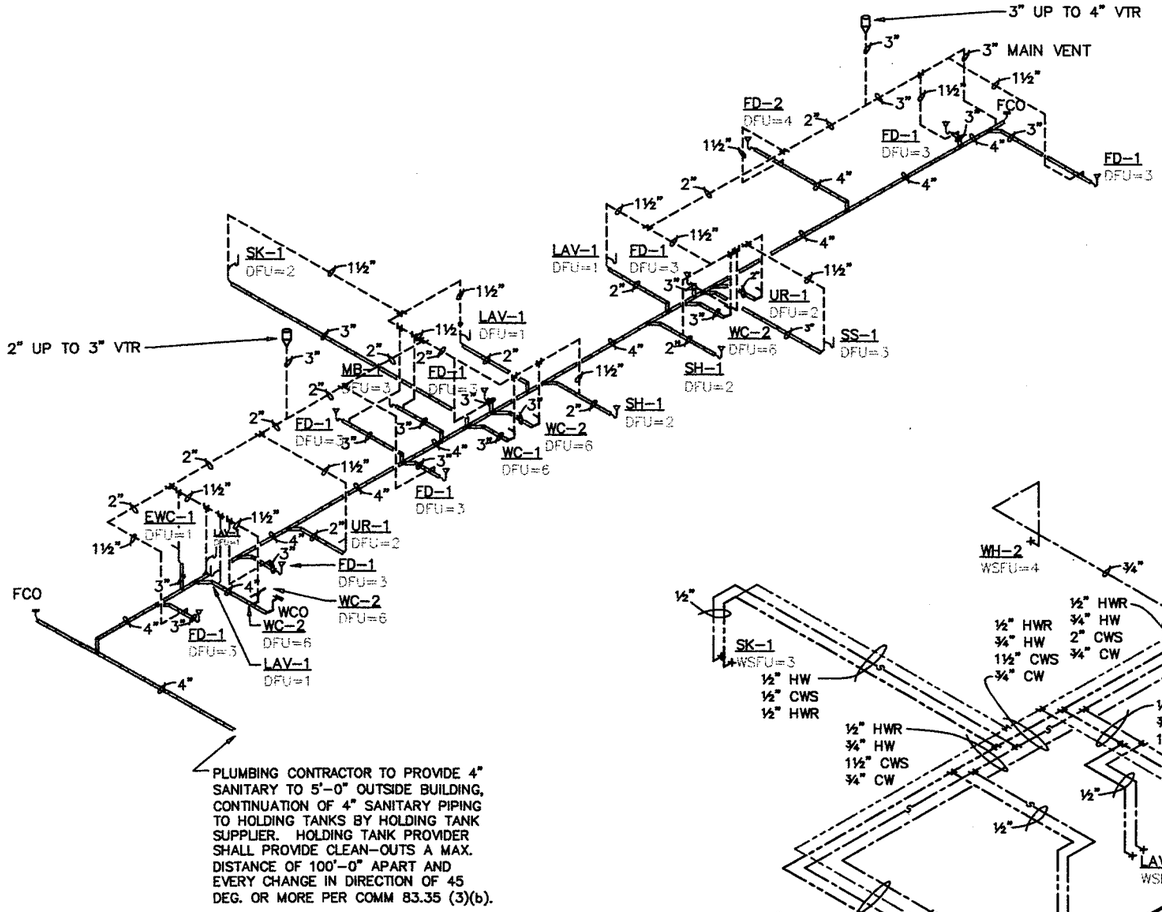
PLUMBING PLAN NOTES:

1. PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY PIPING, FITTINGS AND VALVES AS REQUIRED FOR A COMPLETE AND OPERATIONAL PLUMBING SYSTEM THAT MEETS ALL STATE AND LOCAL CODES.
2. PLUMBING CONTRACTOR TO PROVIDE ACCESS PANELS WHERE NECESSARY TO ACCESS SHUT-OFF VALVES.
3. ALL SANITARY PIPING BELOW GRADE TO BE A MINIMUM OF 2" AND NOT EXCEED 20'-0" IN LENGTH PER CODE.
4. ALL VENT PIPING TO BE 1-1/2" UNLESS NOTED OTHERWISE.
5. PLUMBING CONTRACTOR TO PIPE CONDENSATE DRAIN FROM EACH FURNACE TO NEAREST FLOOR DRAIN.
6. IT IS THE RESPONSIBILITY OF THE SEPTIC/HOLDING TANK PROVIDER TO SIZE, DESIGN AND INSTALL THE SEPTIC SYSTEM, HOLDING TANK & CONNECT TO THE BUILDING SEWERS 5'-0" OUTSIDE OF BUILDING.
7. PLUMBING CONTRACTOR SHALL INSTALL ALL PIPING AND FIXTURES WITH THE COORDINATION OF ALL OTHER TRADES.
8. SEE RISER DIAGRAMS SHEET P201 FOR MORE WASTE AND VENT PIPING SIZES.
9. PLUMBING CONTRACTOR TO RUN ALL WATER, VENT AND GAS PIPING AS CLOSE TO CEILING STRUCTURE AS POSSIBLE IN INSPECTION AREA.
10. REFER TO ARCHITECTURAL DRAWINGS FOR SLOPES TO DRAINS.
11. GENERAL BUILDING CONTRACTOR TO PROVIDE AND INSTALL DRAIN TILE AROUND ENTIRE BUILDING PERIMETER.

PLUMBING WASTE & VENT PLAN

1/16" = 1'-0"

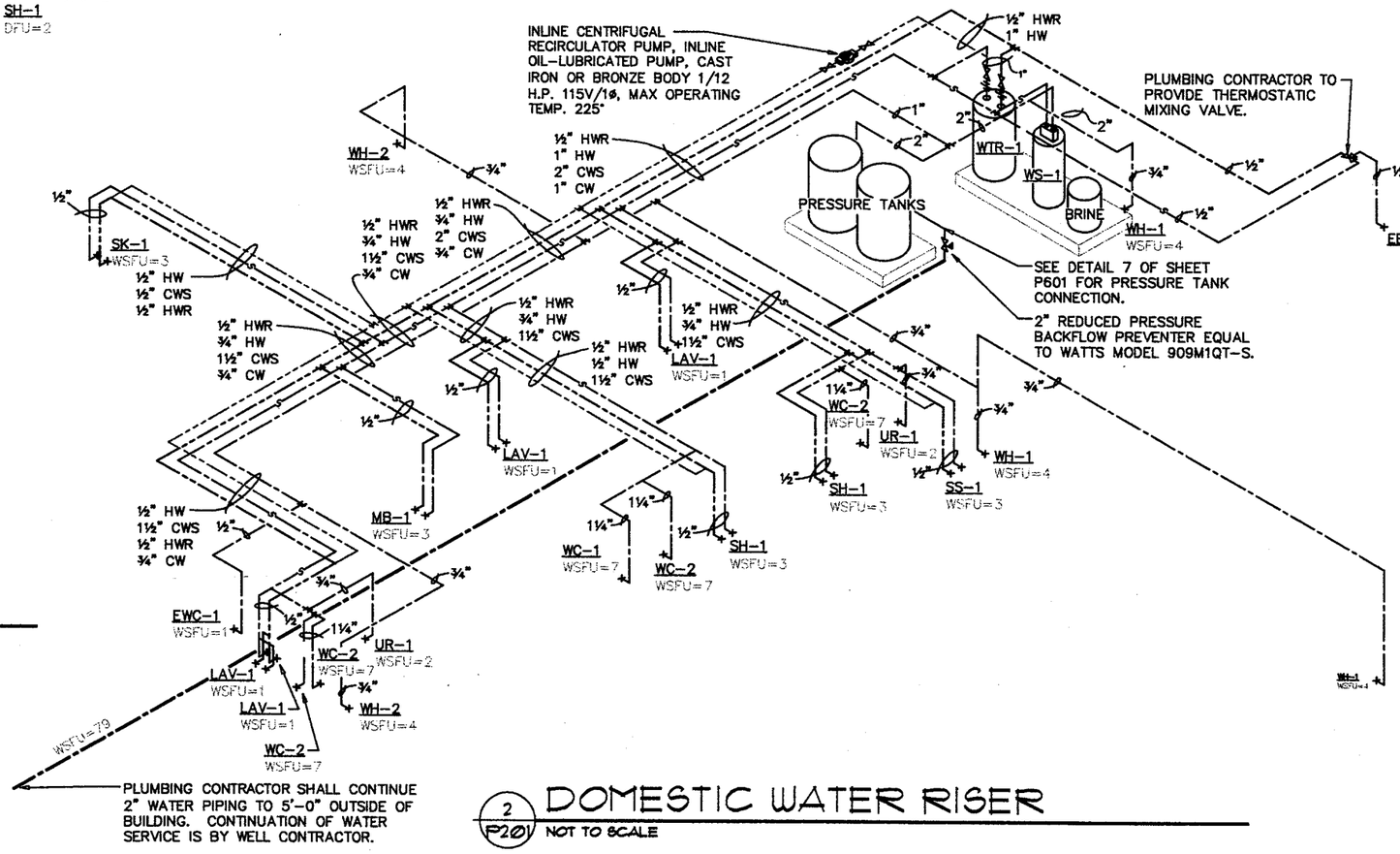
PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			PLUMBING WASTE & VENT PLAN		DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 168 OF	DWG. P102



1 P201 WASTE & VENT RISER
NOT TO SCALE

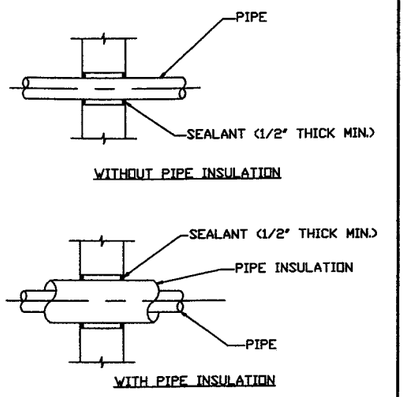
PLUMBING PLAN NOTES:

1. PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY PIPING, FITTINGS AND VALVES AS REQUIRED FOR A COMPLETE AND OPERATIONAL PLUMBING SYSTEM THAT MEETS ALL STATE AND LOCAL CODES.
2. PLUMBING CONTRACTOR PROVIDE ACCESS PANELS WHERE NECESSARY TO ACCESS SHUT-OFF VALVES.
3. ALL SANITARY PIPING BELOW GRADE TO BE A MINIMUM OF 2" AND NOT EXCEED 20'-0" IN LENGTH PER CODE.
4. ALL VENT PIPING TO BE 1-1/2" UNLESS NOTED OTHERWISE.
5. PLUMBING CONTRACTOR TO PIPE CONDENSATE DRAIN FROM EACH FURNACE TO NEAREST FLOOR DRAIN.
6. IT IS THE RESPONSIBILITY OF THE SEPTIC/HOLDING TANK PROVIDER TO SIZE, DESIGN AND INSTALL THE SEPTIC SYSTEM, HOLDING TANK & CONNECT TO THE BUILDING SEWERS 5'-0" OUTSIDE OF BUILDING.
7. PLUMBING CONTRACTOR SHALL INSTALL ALL PIPING AND FIXTURES WITH THE COORDINATION OF ALL OTHER TRADES.
8. CONCRETE PAD FOR PRESSURE TANKS, WATER HEATER AND WATER SOFTENER EQUIPMENT BY GENERAL BUILDING CONTRACTOR

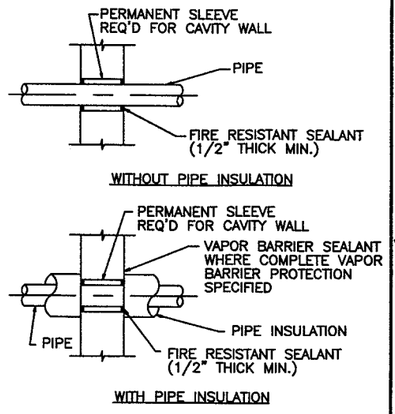


2 P201 DOMESTIC WATER RISER
NOT TO SCALE

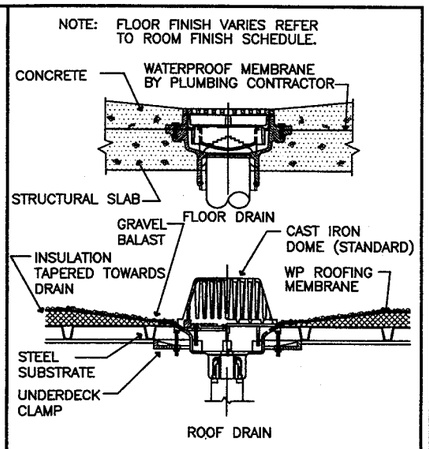
PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			PLUMBING WASTE & VENT PLAN		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 169 OF / DWG. P201



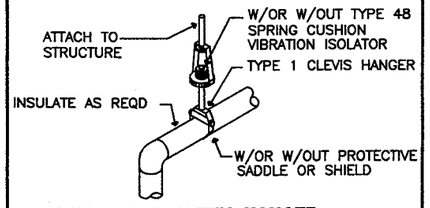
1 PIPE THRU NON-RATED INTERIOR WALL
NOT TO SCALE



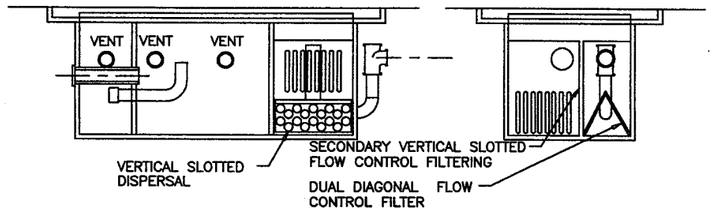
2 PIPE THRU FIRE-RATED INTERIOR WALL
NOT TO SCALE



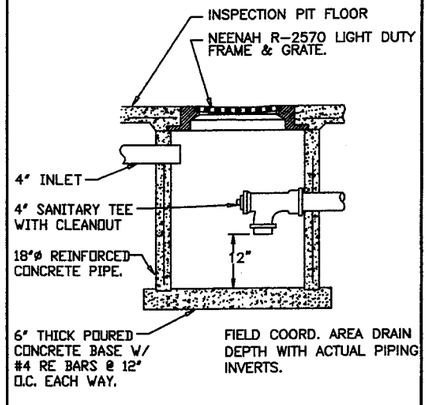
3 AREA DRAINS
NOT TO SCALE



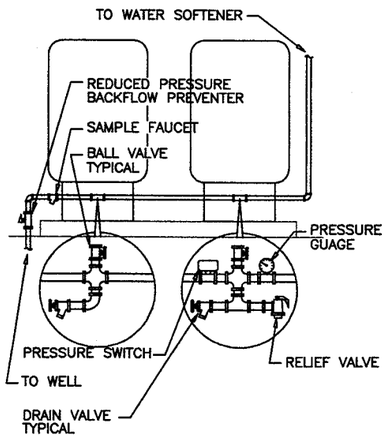
4 SINGLE PIPE CLEVIS HANGER
NOT TO SCALE



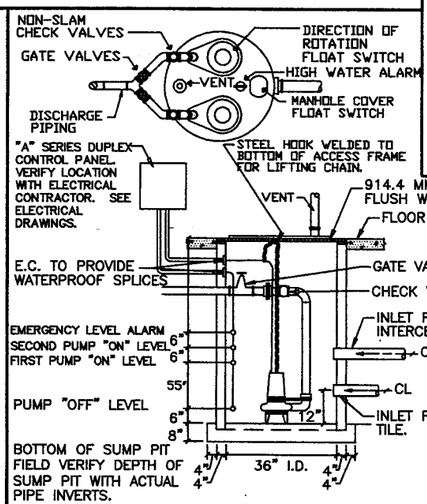
5 INSPECTION PIT OIL INTERCEPTOR DETAIL
NOT TO SCALE



6 INSPECTION PIT AREA DRAIN DETAIL
NOT TO SCALE



7 PRESSURE TANK CONNECTION DETAIL
NOT TO SCALE



8 DUPLEX SUMP PUMP DETAIL
NOT TO SCALE

DUPLEX SUMP PUMP DETAIL NOTES:

1. (2) HYDROMATIC SUBMERSIBLE PUMPS. SEE FIXTURE SCHEDULE FOR SIZES AND CAPACITIES.
2. DUPLEX CONTROL PANEL; NEMA 1; REMOTE MOUNTED; P.C. TO PROVIDE. COORDINATE WITH ELECTRICAL CONTRACTOR.
3. HIGH WATER ALARM TO BE CONNECTED TO BUILDING FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR.
4. (4) SUSPENDED FLOAT SWITCHES WITH RELAYS & CABLES, LENGTH AS REQUIRED PER MANUFACTURERS RECOMMENDATION.
5. (1) DUPLEX BASIN COVER ASSEMBLY, 3/8" THICK FLUSH MOUNTEDTREAD PLATE STEEL ACCESS LIDS (BITUMASTIC COATING ON BOTTOM) AND SECURING BOLTS. "L" BRACKETS FOR SUSPENDING FLOAT SWITCHES.
6. BASIN WALL SHALL BE MINIMUM 4" THICK POURED CONCRETE OR PRECAST SECTIONS. BASE SHALL BE POURED CONCRETE WITH #4 RE-BARS AT 12" O.C. EACH WAY. ENTIRE BASIN SHALL BE COMPLETELY WATERPROOFED.
7. RUN VENT AS TIGHT TO WALL AS POSSIBLE.

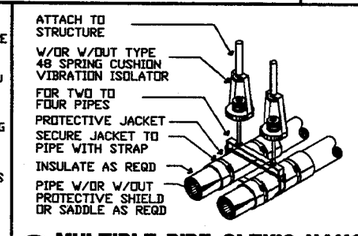
PLUMBING FIXTURES AND EQUIPMENT PROVIDED BY PLUMBING CONTRACTOR

P#	FIXTURE	WASTE	VENT	CW.	HW.	DESCRIPTION
WC-1	WATER CLOSET	4"	1½"	1½"	---	WALL HUNG BACK OUTLET WHITE VITREOUS CHINA SIPHON JET SENSER OPERATED WATER CLOSET WITH ELONGATED BOWL, OPEN FRONT SEAT WITHOUT COVER, 1-1/2" TOP SPUD AND 1.6 GALLON FLUSH.
WC-2	WATER CLOSET-(FOR ADA)	4"	1½"	1½"	---	WALL HUNG BACK OUTLET WHITE VITREOUS CHINA SIPHON JET SENSER OPERATED WATER CLOSET WITH ELONGATED BOWL WITH RIM HEIGHT OF 16-1/2" , OPEN FRONT SEAT WITHOUT COVER, 1-1/2" TOP SPUD AND 1.6 GALLON FLUSH.
UR-1	URINAL	2"	1½"	¾"	---	WALL MOUNTED WHITE VITREOUS CHINA SENSER OPERATED WASHOUT URINAL. MOUNT FOR ADA, WITH REMOVABLE STRAINER AND 1 GALLON FLUSH.
LAV-1	LAVATORY	1½"	1½"	½"	½"	SELF RIMMING COUNTER MOUNT WHITE VITREOUS CHINA LAVATORY. WITH SENSER OPERATED FAUCET, PERFORATED STRAINER AND 1-1/4" OFFSET TAILPIECE.
LAV-2	LAVATORY	1½"	1½"	½"	½"	WALL MOUNTED BARRIER FREE WHITE VITREOUS CHINA LAVATORY DRILLED FOR CONCEALED ARM CARRIER WITH SENSER OPERATED FAUCET AND LEFT HAND SOAP DISPENSER WITH PERFORATED STRAINER AND 1-1/4" OFFSET TAILPIECE.
EWC-1	ELECTRIC WATER COOLER	2"	1½"	½"	---	BARRIER FREE, DUAL LEVEL WALL MOUNTED, STAINLESS STEEL FINISH ELECTRIC WATER COOLER WITH FRONT PUSH BAR OPERATORS AND OPTIONAL GLASS FILLER.
SK-1	SINK	2"	1½"	½"	½"	COUNTER MOUNTED 18 GA. TYPE 302 STAINLESS STEEL SINGLE COMPARTMENT SINK WITH 3 FAUCET OPENINGS 4" ON CENTER.
SS-1	SERVICE SINK	3"	1½"	¾"	¾"	WALL MOUNTED ENAMELED CAST IRON SERVICE SINK WITH STAINLESS STEEL RIM GUARD AND WALL HANGER SUPPORTS.
SH-1	SHOWER	3"	1½"	¾"	¾"	SHOWER TO BE FORMED BY G.C. PLUMBING CONTRACTOR SHALL PROVIDE FD-1 FOR DRAIN AND FAUCET. SEE SPECIFICATIONS.
FD-1	FLOOR DRAIN	3"	1½"	---	---	3" ENAMELED CAST IRON 2-PIECE BODY FLOOR DRAIN WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING ADJUSTABLE COLLAR, SQUARE POLISHED NICKLE-BRONZE STRAINER WITH THREADED COLLAR.
FD-2	FLOOR DRAIN	4"	1½"	---	---	4" CAST IRON BODY SANI-FLOR RECEPTOR 8x8x6 WITH WHITE ACID RESISTANT PORCELAIN ENAMEL INTERIOR AND TOP, WITH ALUMINUM ANTI-SPLASH INTERIOR BOTTOM DOME STRAINER.
MB-1	MOP BASIN	3"	1½"	½"	½"	FLOOR MOUNTED PRECAST TERRAZZO MOP BASIN, 24"x24", WITH STAINLESS STEEL STRAINER AND STAINLESS STEEL CURB CAPS.
WH-1	WALL HYDRANT	---	---	¾"	---	FREEZEPROOF AUTOMATIC DRAINING WALL HYDRANT WITH EXPOSED CHROME PLATED BRONZE WALL PLATE, HOSE THREAD BACKFLOW PREVENTER LOOSE KEY OPERATOR.
WH-2	WALL HYDRANT	---	---	¾"	---	FREEZEPROOF AUTOMATIC DRAINING WALL HYDRANT IN FLUSH MOUNTED CAST BRASS WALL BOX WITH LOCKING DOOR, LOOSE KEY OPERATOR, POLISHED BRASS FINISH.
WTR-1	WATER HEATER	---	---	2"	2"	COMMERCIAL ELECTRIC WATER HEATER 80 GALLON STORAGE, 3-ELEMENTS @ 6000 WATTS, 61,000 BTU/HR, 208/3ø, 50 AMPS, 18 KW INPUT WITH 82 GALLON RECOVERY @ 90° RISE.
WS-1	WATER SOFTNER	---	---	2"	---	SINGLE UNIT SOFTENERS 21"x62" 2" WATER CONNECTIONS, 128,000 GRAINS @ 36 LBS, CONTINUOUS FLOW OF 63 GPM @ 15 PSI, PEAK FLOW OF 77 GPM @ 25 PSI. WITH 24"x50" BRINE TANK.
SP-1 (TYP-2)	DUPLEX SUMP PUMP	4	1½"	---	---	(2) SUBMERSIBLE SEWAGE PUMPS WITH 4" DISCHARGE, CAST IRON OR BRONZE IMPELLER DOUBLE TANDEM SEAL 100 GPM @ 40 FEET OF HEAD, 5 HP, 1150 RPM, 208/3ø. 72" DEEP BASIN, FIELD VERIFY.
EEW-1	EMERGENCY EYE WASH	---	---	½"	½"	EMERGENCY EYE WASH AND SHOWER EQUAL TO BRADLEY S19-310. PROVIDE THERMOSTATIC MIXING VALVE AS REQUIRED BY CODE.
TD-1	TRENCH DRAIN	4"	1½"	---	---	MODULAR PRECAST POLYMER CONCRETE, CAST IRON OR POLYESTER FIBERGLASS TRENCH SECTIONS WITH PRESLOPED 4" WIDE RADIUSED INTERIOR WATERWAYS, CAST IRON FRAME, EXTRA HEAVY DUTY STAINLESS STEEL GRATE WITH S.S. GRATE HOLDOWNS.
RD-1	ROOF DRAIN	5"	---	---	---	BOTTOM OUTLET ROOF DRAIN, ENAMELED CAST IRON BODY WITH FLASHING COLLAR AND GRAVEL STOP, CAST IRON DOME STRAINER, ADJUSTABLE EXTENSION, UNDERDECK CLAMP, 15"ø.

PLUMBING SYMBOL SCHEDULE

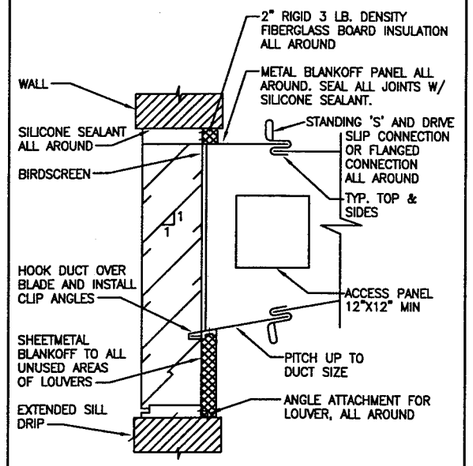
SYMBOL	DESCRIPTION
	WASTE BELOW SLAB
ST	BELOW GRADE STORM PIPING
	WASTE ABOVE SLAB
W	WATER SERVICE
	COLD WATER SUPPLY
	HOT WATER SUPPLY
	HOT WATER RECIRCULATION
	VENT
G	GAS LINE
	PIPE UP
	PIPE DOWN
	CLEAN OUT
	BALL VALVE
	CHECK VALVE
	UNION
	GAS VALVE

FCO	FLOOR CLEAN OUT
YCO	YARD CLEAN OUT
VTR	VENT THROUGH ROOF
FD	FLOOR DRAIN
OSD	OPEN SITE DRAIN
GC	GENERAL CONTRACTOR
PC	PLUMBING CONTRACTOR
HC	HVAC CONTRACTOR
CW	DOMESTIC COLD WATER
HWS	DOMESTIC HOT WATER SOFT
CWS	DOMESTIC COLD WATER SOFT
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
GC	GENERAL CONTRACTOR
PC	PLUMBING CONTRACTOR
HC	HVAC CONTRACTOR
EC	ELECTRICAL CONTRACTOR



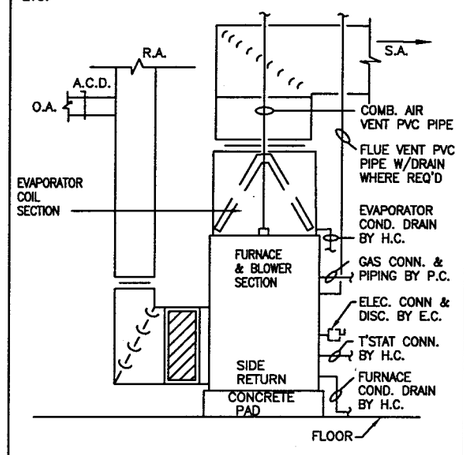
9 MULTIPLE PIPE CLEVIS HANGER
NOT TO SCALE

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			PLUMBING SCHEDULES & DETAILS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 170 OF / DWG. P601

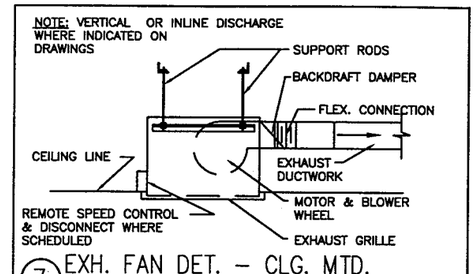


NOTE: ALL DUCT JOINTS, CORNERS, AND SEAMS SHALL BE SEALED WITH SILICONE SEALANT OR SOLDERED LEAK TIGHT.

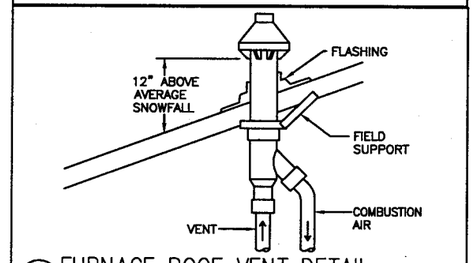
1 LOUVER DETAIL



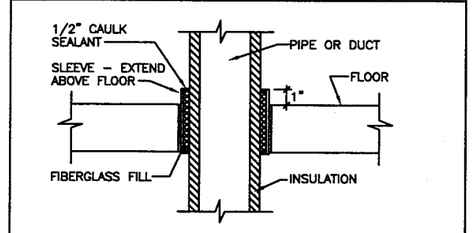
4 FURNACE SCHEMATIC – UPFLOW F-1-4



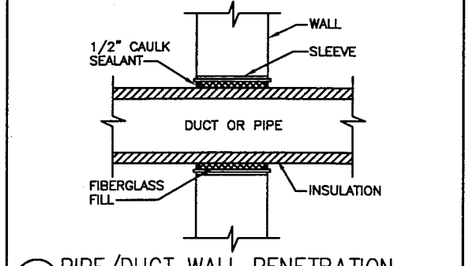
7 EXH. FAN DET. – CLG. MTD.



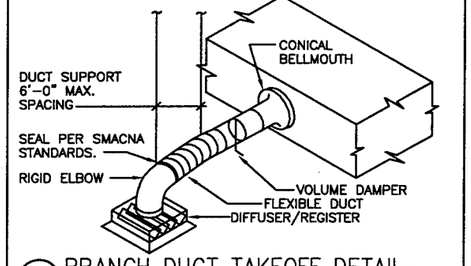
8 FURNACE ROOF VENT DETAIL



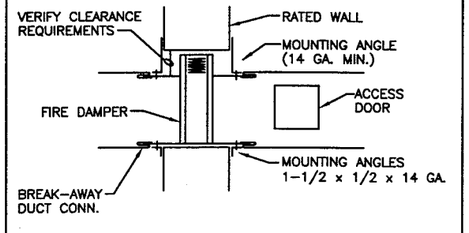
9 PIPE/DUCT FLOOR PENETRATION DETAIL



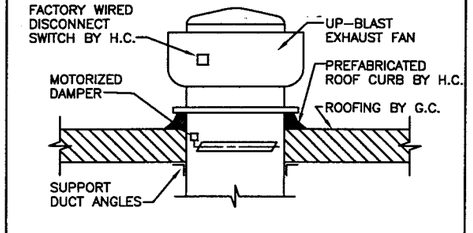
2 PIPE/DUCT WALL PENETRATION DETAIL



5 BRANCH DUCT TAKEOFF DETAIL– ROUND FLEXIBLE



3 FIRE DAMPER DETAIL – VERTICAL



6 UP-BLAST EXHAUST FAN & CURB DETAIL

HVAC SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
	SQUARE/RECTANGULAR SUPPLY DIFFUSER, GRILLE OR REGISTER–HORIZONTAL MOUNT
	SQUARE/RECTANGULAR RETURN/EXHAUST REGISTER OR GRILLE–HORIZONTAL MOUNT
	SUPPLY REGISTER OR GRILLE VERT. MOUNT
	RETURN/EXHAUST REGISTER OR GRILLE VERT. MOUNT
	VERTICAL SUPPLY DUCT UP
	VERTICAL RETURN/EXHAUST DUCT UP
	VERTICAL SUPPLY DUCT DOWN
	VERTICAL RETURN/EXHAUST DUCT DOWN
	VOLUME DAMPER
ACD	AUTOMATIC CONTROL DAMPER
	FLEXIBLE CONNECTION
	ROUND/FLEXIBLE DUCT
	ROUND RIGID DUCT
	SQUARE ELBOW W/TURNING VANES
	DUCT RISE(R) OR DROP(D)
CD TYPE 100 CFM	DIFFUSER/REGISTER/GRILLE
	BRANCH TAKEOFF
T	THERMOSTAT

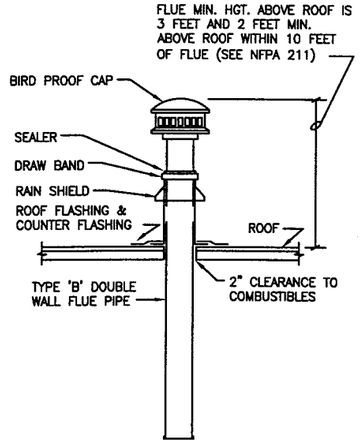
EQUIPMENT SYMBOLS

AC	AIR CONDITIONING UNIT
CU	CONDENSING UNIT
EF	EXHAUST FAN
F	FURNACE
L	LOUVER

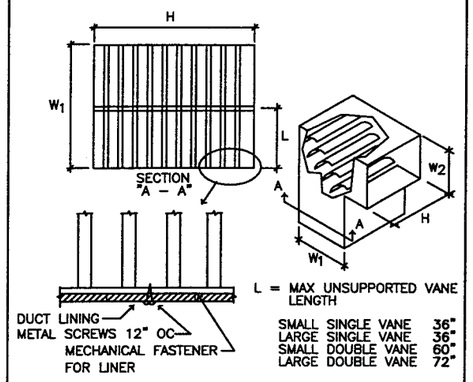
ABBREVIATIONS

ACD	AUTOMATIC CONTROL DAMPER
EA	EXHAUST AIR
FA	FRESH AIR
RA	RETURN AIR
SA	SUPPLY AIR
AFF	ABOVE FINISHED FLOOR
BOD	BOTTOM OF DUCT
DED	OPEN END DUCT
Ø	ROUND DUCT DIAMETER
TG	TRANSFER GRILLE
UC	UNDER CUT OF DOOR (BY G.C.)
UC	UNDER CUT OF DOOR (BY G.C.)
DG	DOOR GRILLE (INSTALLED BY G.C.)
H.C.	HEATING CONTRACTOR
G.C.	GENERAL CONTRACTOR

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			HVAC – DETAILS	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 171 OF / DWG. H501

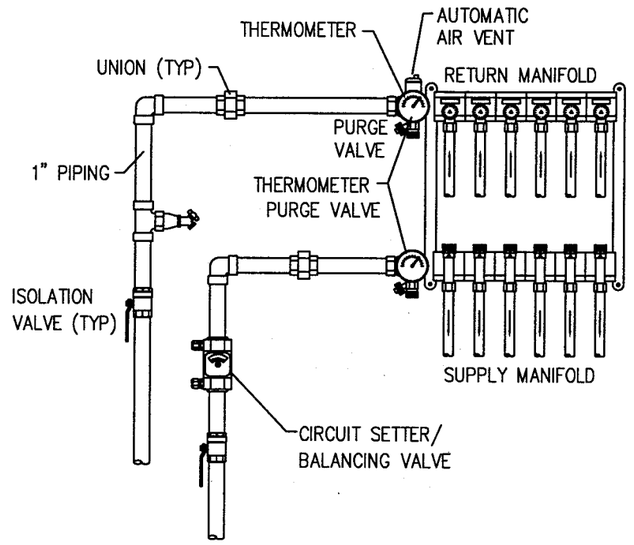


1 FLUE TERMINATION DETAIL
N.T.S. AD-155

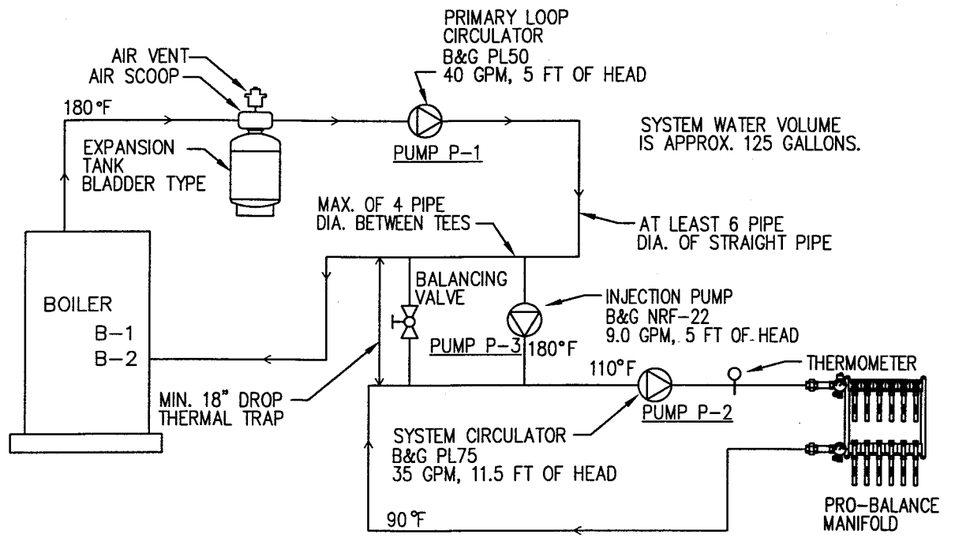


NOTES:
1 INSTALL VANES IN SECTIONS OR USE TIE RODS TO LIMIT UNBRACED VANE LENGTH
2 SECURELY FASTEN VANES TO RUNNERS TO ELIMINATE VIBRATION
3 PREVENT LINING DAMAGE WHEN INSTALLING VANES IN LINED OR FIBROUS GLASS DUCT
4 IF $W_1 \neq W_2$, SPECIAL PROVISIONS MUST BE MADE IN VANE SHAPE, ANGLE OF ENTRY, OR EXIT. APPLIES TO ALL TYPES OF VANES

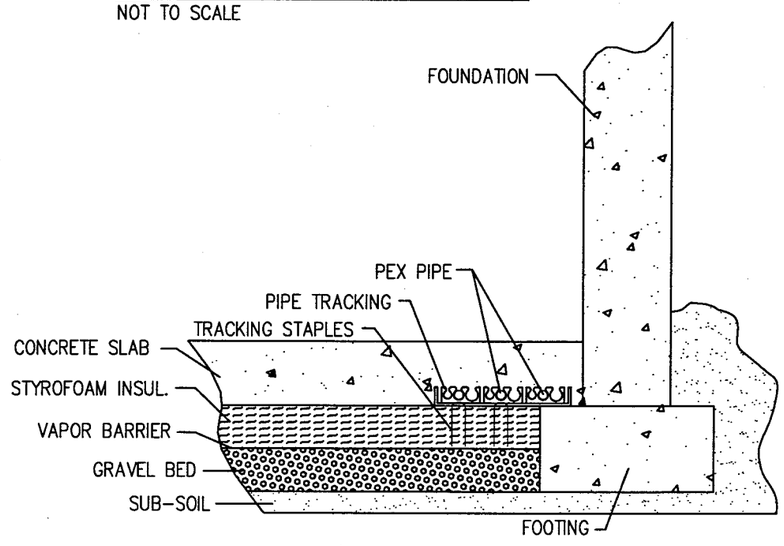
2 TURNING VANES IN ELBOW
N.T.S. DL-55



MANIFOLD PIPING & ACC'S DETAIL
NOT TO SCALE



BOILER SCHEMATIC – INJECTION SYSTEM
NOT TO SCALE



"WET" INSTALLATION FOR SLAB ON GRADE TYPICAL DETAIL
NOT TO SCALE

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			HVAC – DETAILS		DATE: 1/1/02
STATE PROJECT NUMBER: 1032-08-70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 172 OF / DWG. H502

FURNACE UNIT SCHEDULE

GENERAL: TAG	F-1	F-2	F-3	F-4
MANUFACTURER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NO.	58MXA060-16	58MXA080-16	58MXA080-16	58MXA060-16
TYPE	UPFLOW SEALED COMB.	UPFLOW SEALED COMB.	UPFLOW SEALED COMB.	UPFLOW SEALED COMB
FAN: CFM	1500	1700	1700	1500
ESP ("WG)	0.40	0.40	0.40	0.40
SPEED	MED-HIGH	MED-HIGH	MED-HIGH	MED-HIGH
MIN. FA CFM (%)	180	300	300	180
DE COIL: MANUFACTURER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NO.	CK5BXA036	CK5BXA048	CK5BXA048	CK5BXA036
COIL APD ("WG)	0.30	0.30	0.30	0.30
COOLING CAP. (MBH)	36.0	48.0	48.0	36.0
SENSIBLE CAP. (MBH)	29.2	37.1	37.1	29.2
EAT DB/WB (deg F)	80/67	80/67	80/67	80/67
LAT DB/WB (deg F)	37.2/35.3	37.2/35.3	37.2/35.3	37.2/35.3
BONNET: INPUT (MBH)	60.0	80.0	80.0	60.0
OUTPUT (MBH)	55.2	75.0	75.0	55.2
EAT DB (deg F)	56.4	56.4	56.4	56.4
LAT DB (deg F)	108.1	108.1	108.1	108.1
FILTER SECTION: TYPE	HIGH EFF. PLEATED	HIGH EFF. PLEATED	HIGH EFF. PLEATED	HIGH EFF. PLEATED
QUANTITY	1	1	1	1
SIZES	16x25x1	20x25x1	20x25x1	16x25x1
FILTER FRAME	EXTERNAL	EXTERNAL	EXTERNAL	EXTERNAL
ELECTRICAL: HORSEPOWER	1/2	1/2	1/2	1/2
VOLTAGE/PHASE	115/1	115/1	115/1	115/1
MAX UNIT AMPS	14.1	14.1	14.1	14.1
MAX FUSE SIZE	20	20	20	20
REMARKS:	(1)(2)(3)	(1)(2)(3)	(1)(2)(3)	(1)(2)(3)

(1) FILTER UNIT SHALL BE A THROWAWAY TYPE FILTER.
(2) PROVIDE CONCENTRIC ROOF/WALL VENT
(3) PROVIDE AND INSTALL 7-DAY PROGRAMMABLE THERMOSTAT.

DIFFUSERS REGISTERS AND GRILLES SCHEDULE

TAG	MANUFACTURER	MODEL#	SIZE NECK (WxH)	SIZE FACE (L)	MOUNTING	SERVICE	CFM	REMARKS
CD-1	METAL-AIRE	-	6" DIA.	--	SEE ARCH	SUPPLY	0-100	(1)(3) 4-WAY CD
CD-2	METAL-AIRE	-	8" DIA.	--	SEE ARCH	SUPPLY	101-250	(1)(3) 4-WAY CD
CD-3	METAL-AIRE	-	10" DIA.	--	SEE ARCH	SUPPLY	251-450	(1)(3) 4-WAY CD
RG-1	METAL-AIRE	-	22"x22"	--	SEE ARCH	RETURN	900-1500	(2)(3) RETURN GRILLE
TG-1	METAL-AIRE	-	22"x22"	--	SEE ARCH	TRANSFER	-	(2) TRANSFER GRILLE
EG-1	METAL-AIRE	-	-	8"x8"	WALL	EXHAUST	125	(3) EXHAUST GRILLE
EG-2	METAL-AIRE	-	-	8"x8"	SURFACE	EXHAUST	300	(3) EXHAUST GRILLE
EG-2	METAL-AIRE	-	-	8"x8"	DUCT	EXHAUST	500	(3) EXHAUST GRILLE
DG-1	METAL-AIRE	-		16"x16"	DOOR	TRANSFER	500	DOOR GRILLE
DG-2	METAL-AIRE	-		16"x16"	DOOR	TRANSFER	500	W/ FIRE DAMPER

(1) WHITE FINISH.
(2) WHITE FACE PANEL WITH BLACK INTERIOR.
(3) OPPOSED BLADE DAMPER.

NOTE: EG-2 - PROVIDE 3-HOUR FIRE DAMPER.

CD = CEILING DIFFUSER RG = RETURN GRILLE DG = DOOR GRILLE

LOUVER SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	METAL	LOUVER DEPTH x W x HT	FREE AREA S.F.	SERVICE	REMARKS
L-1	GREENHECK	ESD-403	STAT.	EXT. ALUM.	4" x 20" x 20"	1.15	FRESH AIR	(1)
L-2	GREENHECK	ESD-403	STAT.	EXT. ALUM.	4" x 40" x 40"	5.33	FRESH AIR	(1)

REMARKS:
(1) COLOR SELECTION BY ARCHITECT.

ELECTRIC HEAT SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	SIZE HTxWxDEPTH	WATTS	CAP. BTU/HR	ELECTRICAL VOLTS/PHASE	AMPS	REMARKS
EWH-1	Q-MARK	AWH-4208	RECESSED WALL HEATER	14"x18"x4"	1500	5412	208/1	10.0	(1)(2)
EUH-1	Q-MARK	MUH-10-81	UNIT HEATER	19"x21"x7"	10k	34100	208/3	48.0	(1)(2)

(1) INTEGRAL THERMOSTST (TAMPERPROOF).
(2) DISCONNECT SWITCH @ UNIT.

LP GAS-FIRED RADIANT TUBE HEATING SYSTEM

TAG	MANUFACTURER	MODEL	TYPE	SIZE HTxWxDEPTH	CAP. BTU/HR	ELECTRICAL VOLTS/PHASE	AMPS	REMARKS
RAD-1	STERLING	SLR-100-40	INFRARED RADIANT HEATER	14"x18"x4"	100,000	120/1	5.0	(1)(2)

(1) THERMOSTST (TAMPERPROOF) WITH INSULATED SUB-BASE.
(2) DISCONNECT SWITCH @ UNIT.

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

HVAC - SCHEDULES

SAFETY & WEIGHT FACILITY NO. 21 | SCALE, FEET 0

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AIR COOLED COND. UNIT SCHEDULE

TAG	ACCU-1,4	ACCU-2,3	
MANUFACTURER	CARRIER	CARRIER	
MODEL NO.	38TKB036	38TKB048	
REFRIG. TYPE	R-22	R-22	
COOLING CAP BTU/HR	36,000	48,000	
AMBIENT TEMP. F	95	95	
SEER	10.0	10.0	
COND. DISCHARGE	VERTICAL	VERTICAL	
REF. LINE SIZE RS RL	7/8" 3/8"	7/8" 3/8"	
ELECTRICAL: VOLTAGE/PHASE	208/1	208/1	
FAN FLA	1.4	1.4	
MIN. CKT AMP	31.0	31.0	
MOCP AMPS	50	50	
SERVES	F-1,4	F-2,3	
REMARKS:			

NOTE: ALL LINE VOLTAGE WIRING BY E.C.
PROVIDE NECESSARY PADS FOR SETTING OF UNIT.

MAKE-UP AIR HANDLING UNIT SCHEDULE

TAG	MAU-1		
MANUFACTURER	REZNOR		
MODEL NO.	ADF 500		
TYPE	DIRECT		
CFM	5,000		
ESP ("WG)	0.55		
RPM	1170		
BONNET: INPUT (BTU/HR)	468,078		
OUTPUT	--		
EAT DB(°F)	0		
LAT DB(°F)	110.3		
FILTER: TYPE	PERM		
FILTER FRAME	33"x34"		
ELECTRICAL: VOLTAGE/PHASE	3		
VOLTAGE/PHASE	208/1		
FAN FLA	17.0		
REMARKS:	(1)		

NOTE: ALL LINE VOLTAGE WIRING BY E.C.
(1) PROVIDE 12" BURNER, INDOOR FILTER CABINET WITH 2" PERMANENT FILTERS & REMOVE CONSOLE W/ DISCHARGE AIR SELECTOR MOUNTED ON REMOTE CONSOLE.

EXHAUST FANS SCHEDULE

TAG	EF-1	EF-2	EF-3	EF-4	EF-5	EF-6
MANUFACTURER	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK
MODEL NO.	SP-7	GB-101-4	GB-101-4	GB-200-5	GB-101-4	GB-101-4
AREA SERVED	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN
CFM	110	300	600	3,100	750	500
ESP "WG	0.125	0.375	0.25	0.25	0.75	0.50
RPM	950	976	953	667	1,270	1,137
MOUNTING	CEILING	ROOF	ROOF	ROOF	WALL	WALL
DRIVE	DIRECT	BELT	BELT	BELT	BELT	BELT
SONES	2.2	2.6	4.0	8.7	5.1	4.2
ELECTRICAL: MOTOR HP (BHP)	FRAC.	FRAC.	FRAC.	FRAC.	FRAC.	FRAC.
FAN F.L.A.	1.4	1.4	2.0	3.2	3.4	3.2
VOLTAGE/PHASE	120/1	120/1	120/1	120/1	120/1	120/1
CONTROL	(1)	(1)	(1)	(1)	(1)	(1)
REMARKS:						

(1) CONTROL TYPE:
EF: BUILDING OCCUPANCY TIME-CLOCK. PROVIDED BY HEATING CONTRACTOR.

NOTE: ALL LINE VOLTAGE WIRING BY E.C.
H.C. TO PROVIDE EXHAUST SOFFIT VENT.

PUMP SCHEDULE

TAG	P-1	P-2	P-3	
MANUFACTURER	B & G	B & G	B & G	
MODEL NO.	PL50	PL75	NRF-22	
TYPE	BOILER CIRCULATOR	SYSTEM CIRCULATOR	INJECTION PUMP	
LOCATION	MECHNICAL ROOM	MECHNICAL ROOM	MECHNICAL ROOM	
SERVICE	RADIANT	RADIANT	RADIANT	
GPM	40	35	9	
HP(BHP)	-	-	-	
EFFICIENCY (%)	55	54	50	
SUCTION I.D.	1-1/2"	1-1/2"	1-1/2"	
DISCHARGE I.D.	1-1/2"	1-1/2"	1-1/2"	
MOTOR: HORSEPOWER	1/6	1/6	1/20	
VOLTAGE/PHASE	115/1	115/1	115/1	
RPM	1760	1760	1600	
REMARKS:				

HOT WATER SPECIALTIES SCHEDULE

TAG	SERVICE	MANUFACTURER	MODEL NO.	CAPACITY	REMARKS
AIR SEPERATOR AS-1	PRIMARY HOT WATER	B & G	R-3	2"	W/STRAINER
EXPANSION TANKS ET	HOT WATER	TACO	CA140	45	(1) BLADDER TYPE
AUTOMATIC AIR VENT	HOT WATER	TACO	426	1/4"ø	HIGH CAP 12SCFM @ 30 PSIG
PRESSURE REDUCING VALVES	MAKE-UP WATER	TACO	334	1/2"ø	BRASS NPT
BYPASS CHEM FEEDER	HOT WATER	CHEM-TRT SUPPLIED	--	2 GAL	W/DRAIN VALVE

(1) PROVIDED PAINTED EXPANSION TANKS WITH SADDLE SUPPORTS, GAUGE GLASS AND VALVES.

HOT WATER BOILER SCHEDULE

TAG	MANUFACTURER	MODEL NO.	TYPE	FUEL	INPUT MBH	OUTPUT MBH	EFF %	VENT SIZE	REMARKS
B-1	FULTON	PHW 500	PULSE COMB.	PROP.	500	440	90	3"ø	(1)
B-2	FULTON	PHW 500	PULSE COMB.	PROP.	500	440	90	3"ø	(1)

(1) PROVIDE CONTROL PANEL FOR LEAD/LAGGING OF BOILERS.

COMPUTER ROOM UNIT CRU-

CRU-1, LIEBERT ET-060, SCROLL COMPRESSOR, 80°F DB, 67°F WB, 0.1 IN. WG, 1910 CFM, 5kW ELECTRICAL HEAT, 23.4 FLA, 240 V, 470 LBS.

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

HVAC - SCHEDULES

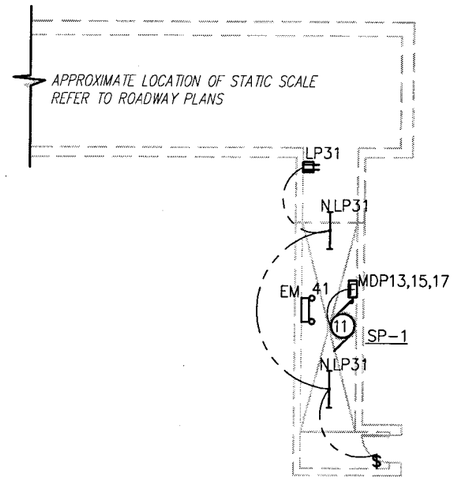
SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0

DATE: 1/1/02

SHEET NO: 174 OF

DWG. H602



PARTIAL SCALE TUNNEL ELECTRICAL PLAN

1/16" = 1'-0"

ELECTRICAL SYMBOL SCHEDULE

MOUNTING HGT.	SYMBOL	DESCRIPTION
		SECURITY
	CCTV	SECURITY CAMERA LOCATION
		TELEPHONE AND COMMUNICATION SYSTEMS
18"		TELEPHONE OUTLET IN WALL
		TELEPHONE OUTLET ABOVE COUNTER
18"		DATA OUTLET IN WALL
		EQUIPMENT AND WIRING
		DIRECT EQUIPMENT CONNECTION
	#	MOTOR CONNECTION–SEE EQUIP. SCHEDULE FOR TYPE, WIRING, ETC.
	J	JUNCTION BOX–CONCEALED IN FINISHED AREAS, SURFACE IN UNFINISHED AREAS
	$F	FUSE HOLDER W/FUSESTAT AND TOGGLE SWITCH (1/2 HP MOTORS AND UNDER)
		PUSHBUTTON CONTROL–UP/DOWN/STOP
		SAFETY DISCONNECT SWITCH WITH COVER INTERLOCK–W.P. INDICATES WATERPROOF (NON–FUSED UNLESS INDICATED BY 'F'–FUSED)
		COMB. MOTOR STARTER/ FUSED DISCONNECT
		ELECTRICAL POWER PANEL

ABBREVIATIONS

SUBSCRIPTS

AFF=ABOVE FINISH FLOOR
GFI=GROUND FAULT INTERRUPTER
NL=NIGHT LIGHT–24 HOURS
PC=PHOTOCELL CONTROLLED
PC/TC=PHOTOCELL ON/ TIMECLOCK OFF
TC=TIMECLOCK CONTROLLED
WP=WEATHERPROOF

ELECTRICAL SYMBOL SCHEDULE

MOUNTING HGT.	SYMBOL	DESCRIPTION
	PANEL/CIRC.# A 2 TYPE SWITCHING a	**LIGHTING FIXTURES**
		INCANDESCENT: SURFACE/ PENDANT
		HID: LOW BAY/PENDANT
		HID: SURFACE WALL MOUNTED
		COMPACT FLUORESCENT: RECESSED
		FLUORESCENT: RECESSED
		FLUORESCENT: SURFACE, CEILING MOUNTED
		FLUORESCENT: SURFACE, WALL MOUNTED
		EXIT LIGHT: ARROWS, FACES & MOUNTING AS SHOWN ON DRAWINGS
		EMERGENCY LIGHT W/ BATTERY PACK: WALL MOUNTED
		SWITCHES
48"	$	SINGLE POLE
48"	$3	THREE WAY
48"	$4	FOUR WAY
48"	$D	DIMMER SWITCH
48"	$PL	PILOT LIGHT SWITCH
		RECEPTACLES
18"		DUPLEX: RECESSED – W.P. INDICATES WATERPROOF
18"		DUPLEX: SURFACE
18"	GFI	DUPLEX: W/GROUND FAULT INTERRUPTION PROTECTION
		DUPLEX RECEPT. MOUNTED ABOVE COUNTER–TOP
18"	S	DUPLEX: W/DEDICATED GRND. AND SURGE PROTECTION
90"		CLOCK OUTLET – RECESSED WALL MOUNTED
90"	TV	CABLE TV OUTLET – SURFACE W/RECEPTACLE AND CABLE CONNECTION

EQUIPMENT

AC=AIR CONDITIONER
EF=EXHAUST FAN
EWH=ELECT. WALL HEATER
AC=AIR COOLED CONDENSER
RCP=RECIRCULATING PUMP
UH=UNIT HEATER
EWH ELECTRIC WALL HEATER
B=BOILER
AHU=AIR HANDLING UNIT

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI			ELECTRICAL – SCALE TUNNEL SCALE AND POWER PLAN	DATE: 1/1/02	
STATE PROJECT NUMBER: 1032–08–70 (c)	HWY: INTERSTATE 94 AT ML	COUNTY: KENOSHA	SAFETY & WEIGHT FACILITY NO. 21	SCALE, FEET 0	SHEET NO: 175 OF / DWG. E101

SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF "Q" FIXTURES.

GROUND MOUNTED FLAG POLE LIGHT

PANEL "MDP"

PANEL "LP"

PANEL "PP"

PANEL "LE1"

PANEL "LE2"

PANEL "C"

PANEL "WSP"

X' FMR

GEN.

NOTE:

ELECTRICAL CONTRACTOR MUST VERIFY ALL LIGHT FIXTURE LOCATIONS WITH ARCHITECTURAL DRAWINGS.

NOTE:

ALL CIRCUITS SHOWN ON THIS PLAN ARE FROM PANEL "LP" UNLESS NOTED OTHERWISE.

ELECTRICAL LIGHTING PLAN

1/16" = 1'-0"

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

ELECTRICAL – FIRST FLOOR LIGHTING PLAN

SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0

DATE: 1/1/02

SHEET NO: 176 OF

DWG. E102

(2) DUPLEX OUTLETS ABOVE CEILING FOR CCTV MONITORS. MONITORS AND HARDWARE BY OWNER. EXTEND CABLE RACEWAY TO ASSESSABLE CEILING.

PROVIDE DUPLEX OUTLET FOR "TV" SUSPENDED FROM CEILING. MONITORS & HARDWARE BY OWNER

PROVIDE 3/4" CONDUIT BELOW FLOOR FOR TROUBLE LIGHT CORD

GARAGE DOOR OPENER CONSOLE SEE ARCHITECTURAL DRAWINGS

PROVIDE (2) 4" PVC CONDUITS BELOW FLOOR FROM #116 TO #127

PROVIDE 3/4" CONDUIT BELOW FLOOR FOR TROUBLE LIGHT CORD

SUMP PUMP CONTROLLER BY PLUMBING CONTRACTOR

4" CONDUIT W/CAPS

PANEL "LE1"

PANEL "LE2"

PANEL "C"

GENERATOR

TRANSFORMER

PANEL "WSP"

UGE

NOTE:
PROVIDE "J" BOX W/ BLANK COVER AND CONDUIT STUB AT ALL SECURITY CAMERA LOCATIONS SHOWN. CAMERA & WIRING BY OWNER.

NOTE:
ALL CIRCUITS SHOWN ON THIS PLAN ARE FROM PANEL "LP" UNLESS NOTED OTHERWISE.

NOTE:
ELECTRIC SERVICE FEEDERS BY LOCAL UTILITY. FEEDERS UNDER PAVEMENT TO BE IN CONDUIT PROVIDED FROM TRANSFORMER TO BUILDING BY ELECRICAL CONTRACTOR

NOTE:
ELECTRICAL CONTRACTOR TO COORDINATE ALL UNDERGROUND AND BELOW FLOOR WORK WITH ALL OTHER CONTRACTORS.

NOTE:
ELECTRICAL CONTRACTOR TO PROVIDE (3) CABLE ENTRY PANELS. PANELS TO BE INSTALLED BY BUILDING GENERAL CONTRACTOR. SEE SPECIFICATIONS AND ARCHTECTURAL DRAWINGS

NOTE:
ELECTRICAL CONTRACTOR TO EXTEND 3/4" CONDUIT WITH (3)#10 THHN CU&#8 GROUND COUNDUCTORS FROM CINGULAR PANEL TO TOWER BASE FOR TOWER LIGHTING.

NOTE:
ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL THIS GENERATOR. PROVIDE AND INSTALL AUTOMATIC TRANSFER SWITCH.

ELECTRICAL POWER PLAN

1/16" = 1'-0"

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

ELECTRICAL – FIRST FLOOR POWER PLAN

DATE: 1/1/02

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0

SHEET NO: 177 OF

DWG. E103

LIGHTING FIXTURE SCHEDULE

TAG	LAMPS NO.	TYPE	WATTS	* DESCRIPTION	MOUNTING	DESCRIPTION	REMARKS
A	2	F	32	F32T8/SPX41	RECESSED/CEILING	CEILING GRID MOUNTED TROFFER LIGHT ELECTRONIC BALLAST	(1)2L 2x4 SINGLE BALLAST 1/8" ACRYLIC LENS
A1	3	F	32	F32T8/SPX41	RECESSED/CEILING	CEILING GRID MOUNTED TROFFER LIGHT 3" DEEP PARABOLIC LENS	(1)3L 2x4 SINGLE BALLAST ELECTRONIC BALLAST
B	2	F	32	F32T8/SPX41	SURFACE/CEILING	WET LOCATION, ENCLOSED FIBERGLASS BODY, ELECTRONIC BALLAST	(1)2L 2x4 SINGLE BALLAST WP, 1/8" ACRYLIC LENS
C	1	F	32	F32T8/SPX41	SURFACE/WALL	ALL-PURPOSE WALL BRACKET LIGHT UP-DOWN LIGHT	(1) 1L 1X4 ONE BALLAST ENERGY SAVING BALLAST
D	2	F	32	F32T8/SPX41	SURFACE/CEILING	GENERAL-PURPOSE CHANNEL ELECTRONIC BALLAST	(1) 2L 1x4 SURFACE ALUMINUM BODY
E ⊗	--	LED	6.5	W/FIXTURE	SURFACE/WALL	BATTERY PACK EXIT LIGHT PVC CONSTRUCTION	EXIT LIGHT (3) W/BATTERY BACK-UP
EM	2	TH	5.4	5.4W WEDGE BASE	SURFACE/WALL	BATTERY PACK EGRESS LIGHT PVC CONSTRUCTION	EMERGENCY EGRESS LIGHT W/BATTERY BACK-UP
F	1	MH	100	100M/MED/U	SURFACE/WALL	VISA - OW605H100	(2) 1L RECESSED WALL MT'D 14" SQUARE FLAT SHIELD
G	1	CF	18	18DTT	RECESSED/CEILING	I/C RATED RECESSED LIGHT CLEAR SPECULAR CONE	(2) 1L RECESSED "CAN" ELECTRONIC BALLAST
G1	1	CF	18	18DTT	RECESSED/CEILING	SIMILAR TO "G" ABOVE WITH DIMMABLE BALLAST	1L RECESSED "CAN" DIMMABLE BALLAST
H	1	MH	250	250M/MED/U	SURFACE/CEILING	LOW BAY HID LIGHT WITH POWER HOOK CONNECTION	(2) 1L PENDANT MT'D LOW-BAY HID
J	2	F	34	F40T12/ES	SURFACE/WALL	HAZLUX - XFM244ES12GG	(1)2L 2X4 SINGLE BALLAST EXPLOSION-PROOF WALL MT'D
K	2	CF	26	26DTTQUAD	SURFACE/WALL	SPI - ECI 4801 120 BFT PM FL	(1) 2L 1X1 SINGLE, INTEGRAL BALLAST, PIER MT'D
L	1	CF	13	13DTT	RECESSED/CEILING	I/C RATED RECESSED LIGHT ACRYLIC DROP LENS & PLASTIC FRAME	1L SINGLE BALLAST RECESSED SHOWER LIGHT
M	2	CF	26	26DTT	SURFACE/SOFFIT	EXTERIOR DOWNLIGHT, HORIZONAL LAMP OPEN CONSTRUCTION - 8" MAX. DEPTH	(1) 2L OPEN CYLINDER DIMMABLE BALLAST
N	2	F	32	F32T8/SPX41	SURFACE/CEILING	CEILING MOUNTED WRAP-AROUND ELECTRONIC BALLAST	2L 1x4 SINGLE BALLAST 1/8" ACRYLIC LENS
P	1	MH	70	70M/MED/U	RECESSED/SIDEWALK	HYDREL - M9400	1L EXTERIOR RECESSED FLAG POLE LIGHT
Q	1	MH	70	70M/MED/U	SURFACE/WALL	GE POWERFLOOD - SBF 07 MH 1 H	(2) 1L EXTERIOR FLOODLIGHT MOUNTED BELOW SILL

LAMP ABBREVIATIONS:
LED = LIGHT EMITTNG DIODE, F = FLOURSCENT, TH = TUNGSTEN HALOGEN, MH = METAL HALIDE, LV = LOW VOLTAGE
CF = COMPACT FLOURSCENT, IN = INCANDESCENT, HPS = HIGH PRESSURE SODIUM
* BASED ON GE LAMPS.

REMARKS:
(1) ELECTRONIC BALLAST - SEE SPECIFICATIONS.
(2) PROVIDE HIGH POWER FACTOR, CLASS 'A' SOUND RATED BALLAST.
(3) CONTRACTOR TO PROVIDE SINGLE OR DOUBLE PANEL EXIT FACE AS REQ'D AND MOUNT FIXTURE AS INDICATED ON DWGS.

GENERAL LIGHTING NOTES
- ALL FIXTURES TO BE 120V UNLESS NOTED OTHERWISE.
- SEE SPECIFICATIONS FOR FIXTURE AND BALLAST REQUIREMENTS.
- COORDINATE LAMP BURNING POSITIONS TO BE COMPATIBLE WITH FIXTURE.
- ALL FASTENERS TO BE STAINLESS STEEL AND TAMPER-PROOF.

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

ELECTRICAL - LIGHT FIXTURE SCHEDULE

SAFETY & WEIGHT FACILITY NO. 21 | SCALE, FEET 0

DATE: 1/1/02

SHEET NO: 178 OF

DWG. E601

ELECTRICAL MOTOR/EQUIPMENT SCHEDULE

TAG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PANEL NO.	"PP"	"PP"	"PP"	"PP"	"PP"	"PP"	"PP"	"PP"	"MDP"	"MDP"	"MDP"	"PP"	"PP"	"PP"	"PP"	"MDP"
CIRCUIT	1	3	5	7	2,4	6,8	10,12	9,11	8,10,12	7,9,11	13,15,17 14,16,18	13 & 15	17 & 19	21	23	19.21.23 20.22.24
BREAKER	20	20	20	20	30	50	50	30	50	15	35	15	15	15	15	100
POLE	1	1	1	1	2	2	2	2	3	3	3	1	1	1	1	3
WIRING NO. ①	2+G	2+G	2+G	2+G	3+G	3+G	3+G	3+G	4+G	4+G	4+G	2+G	2+G	2+G	2+G	4+G
TYPE	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU	THHN/CU
SIZE	#12	#12	#12	#12	#10	#8	#8	#10	#8	#12	#10	#12	#12	#12	#12	#3
COND.	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1-1/4"
ELECTRICAL HP (KW)	1/2	1/2	1/2	1/2	(4.6)	(6.5)	(6.5)	(4.6)	(18.0)	3/4	5	(.75)	(.53)	(.53)	(.25)	(31.8)
VOLT	120	120	120	120	208	208	208	208	208	208	208	120	120	120	120	208
PHASE	1	1	1	1	1	1	1	1	3	3	3	1	1	1	1	3
FLA (MCA)	14.1	14.1	14.1	14.1	22.3	31.0	31.0	22.3	50.0	3.22	17.5	6.0	4.4	4.4	2.0	80.0
STARTER TYPE	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT	–	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT	W/UNIT
SIZE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
BY	E.C.	E.C.	E.C.	E.C.	H.C.	H.C.	H.C.	H.C.	–	H.C.	P.C.	H.C.	H.C.	H.C.	H.C.	G.C.
CONTROL TYPE	B.A.S.	B.A.S.	B.A.S.	B.A.S.	B.A.S.	B.A.S.	B.A.S.	B.A.S.	AQUASTAT	B.A.S.	FLOAT SW.	B.A.S.	B.A.S.	B.A.S.	B.A.S.	W/UNIT
BY	H.C.	H.C.	H.C.	H.C.	H.C.	H.C.	H.C.	H.C.	P.C.	H.C.	P.C.	H.C.	H.C.	H.C.	H.C.	G.C.
DISCONNECT TYPE	F.T.S. NEMA 1	F.T.S. NEMA 1	F.T.S. NEMA 1	F.T.S. NEMA 1	HD NEMA 3R	HD NEMA 3R	HD NEMA 3R	HD NEMA 3R	HD NEMA 1	HD NEMA 1	HD W/UNIT	F.T.S. NEMA 1	F.T.S. NEMA 1	F.T.S. NEMA 1	F.T.S. NEMA 1	HD NEMA 1
SIZE	20	20	20	20	30A	60A	60A	30A	60A	30A	--	20A	20A	20A	20A	100A
FUSE	20	20	20	20	30A	50A	50A	30A	50A	5	–	10	8	8	3	80
BY	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.	E.C.	--	E.C.	E.C.	E.C.	E.C.	E.C.
REMARKS	F-1 FURNACE	F-2 FURNACE	F-3 FURNACE	F-4 FURNACE	ACCU-1 CONDENSING UNIT	ACCU-2 CONDENSING UNIT	ACCU-3 CONDENSING UNIT	ACCU-4 CONDENSING UNIT	WH-1 WATER HEATER	MAU-1 MAKE-UP UNIT	SP-1(2 REQ'D) SUMP PUMP	B-1(2 REQ'D) BOILER	P-1(2 REQ'D) BL'R CIRC. PUMP	P-2 RAD. PN'L. PUMP	P-3 INJECTOR PIMP	BRAKE TESTER 2 REQUIRED

E.C. = ELECTRICAL CONTRACTOR
H.C. = HVAC CONTRACTOR
P.C. = PLUMBING CONTRACTOR
G.C. = GENERAL CONTRACTOR

HOA = HAND-OFF-AUTO SWITCH
T.S = TOGGLE SWITCH
F.T.S. = FUSED TOGGLE SWITCH
FVNR = FULL VOLTAGE NON-REVERSING
COMB S/D = COMBINATION STARTER/DISCONNECT

MAG. = MAGNETIC STARTER
H.D. = HEAVY DUTY
P.L. = PILOT LIGHT
M.S. = MANUAL STARTER
B.A.S. = BUILDING AUTOMATION SYSTEM

① PROVIDE GREEN WIRE GROUND TO ALL MOTORS AND EQUIPMENT PER NEC 250-95.

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

ELECTRICAL – MOTOR SCHEDULE

SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0

DATE: 1/1/02

SHEET NO: 179 OF

DWG. E602

PANEL MAIN DISCONNECT PANEL ("MDP") TYPE "QED"

AMPS MAIN 800 FUSIBLE | VOLTS PHASE 120/208 3 | MOUNTING LOCATION SURFACE MECH. #117

BRKR A	BRKR P	DESCRIPTION	CIRCUIT WATT	CIRCUIT NO.	PHASELOADS A	PHASELOADS B	PHASELOADS C	CIRCUIT NO.	CIRCUIT WATT	DESCRIPTION	BRKR A	BRKR P
200	3	LIGHTING PANEL "PP"	20,000	1	40,000			2	20,000	POWER PANEL "PP"	200	3
--	-	LIGHTING PANEL "PP"	20,000	3		40,000		4	20,000	POWER PANEL "PP"	--	-
--	-	LIGHTING PANEL "PP"	20,000	5			40,000	6	20,000	POWER PANEL "PP"	--	-
15	3	MAKE-UP UNIT "MAU-1"	390	7	6390			8	6000	WATER HEATER "WH-1"	50	3
--	-	MAKE-UP UNIT "MAU-1"	390	9		6390		10	6000	WATER HEATER "WH-1"	--	-
--	-	MAKE-UP UNIT "MAU-1"	390	11			6390	12	6000	WATER HEATER "WH-1"	--	-
35	3	SUMP PUMP "SP-1"	2100	13	2820			14	2100	SUMP PUMP "SP-1"	35	3
--	-	SUMP PUMP "SP-1"	2100	15		2820		16	2100	SUMP PUMP "SP-1"	--	-
--	-	SUMP PUMP "SP-1"	2100	17			2820	18	2100	SUMP PUMP "SP-1"	--	-
100	3	BRAKE TEST EQUIPMENT	10610	19	21220			20	10650	BRAKE TEST EQUIPMENT	100	3
--	-	BRAKE TEST EQUIPMENT	10610	21		21220		22	10650	BRAKE TEST EQUIPMENT	--	-
--	-	BRAKE TEST EQUIPMENT	10610	23			21220	24	10650	BRAKE TEST EQUIPMENT	--	-
				25				26				
				27				28				
				29				30				
				31				32				
				33				34				
				35				36				
				37				38				
				39				40				
				41				42				
					70430	70430	70430					

ESTIMATED DEMAND LOAD: 180,000 WATTS / 500.2 AMPS

TOTAL CONNECTED LOADS: 211,290 WATTS / 587.2 AMPS

PANEL LIGHTING PANEL ("LP")

AMPS MAIN 225 M.L.O. | VOLTS PHASE 12/208 3 | MOUNTING LOCATION SURFACE MECH. #117

BRKR A	BRKR P	DESCRIPTION	CIRCUIT WATT	CIRCUIT NO.	PHASELOADS A	PHASELOADS B	PHASELOADS C	CIRCUIT NO.	CIRCUIT WATT	DESCRIPTION	BRKR A	BRKR P	
20	1	LIGHTS-#102 TO #110	1610	1	2410			2	800	RECPT'S - #109-#110	20	1	*
20	1	LIGHTS-#111 TO #113	1530	3		2330		4	800	RECPT'S - #109-#110	20	1	*
20	1	LIGHTS-#116 TO #121	1230	5			2670	6	1440	RECPT'S - #109-#110	20	1	
20	1	EXTERIOR LIGHTS	1375	7	2875			8	1500	COPIER - #110	20	1	
20	1	EXTERIOR LIGHTS	1325	9		2325		10	1000	FAX - #110	20	1	
20	1	LIGHTS-#126	1300	11			1900	12	600	RECPT'S - #107	20	1	*
20	1	LIGHTS-#126	1300	13	2300			14	1000	RECPT'S - #113	20	1	*
20	1	LIGHTS-#126	1300	15		2300		16	1000	RECPT'S - #112	20	1	
20	1	LIGHTS-#126	1300	17			2740	18	1440	RECPT'S - #112	20	1	
20	1	LIGHTS-INSPECTION PIT	1280	19	2390			20	1080	RECPT'S - #114-#116	20	1	
20	1	FLAGPOLE LIGHT	95	21		895		22	800	RECPT'S - #116	20	1	*
20	1	TROUBLE LIGHTS #123	250	23			1510	24	1260	RECPT'S - #114&#117	20	1	
20	1	PORT. AIR COMP. #123	1500	25	2940			26	1440	RECPT'S - #105-#122	20	1	
20	1	LIGHTS & RECPT. #108	400	27		1660		28	1260	RECPT'S - #100-#106	20	1	
20	1	TRUCK APPROACH LT'S.	500	29			2000	30	1500	ELECTRIC WATER CL'R.	20	1	
20	1	BRAKE TEST COMPT'R.	500	31	2100			32	1600	SECURITY CAMERAS	20	1	
20	1	BRAKE TEST COMPT'R.	500	33		1940		34	1440	RECPT'S - #123	20	1	
20	1	BRAKE TEST PRINTER	1000	35			2440	36	1440	RECPT'S - #123	20	1	
20	1	BRAKE TEST PRINTER	1000	37	1600			38	600	EXTERIOR RECPT'S.	20	1	
				39		500		40	500	TELECOMM EQUIP. #116	20	1	*
20	1	EXIT & EGRESS LITES	500	41			1600	42	1100	NIGHT LITES	20	1	
					16615	11950	14860						

ESTIMATED DEMAND LOAD: 35,000 WATTS / 97.3 AMPS

TOTAL CONNECTED LOADS: 44,425 WATTS / 123.5 AMPS

(*) PROVIDE SURGE PROTECTION AND ISOLATED GROUND FOR THESE CIRCUITS.

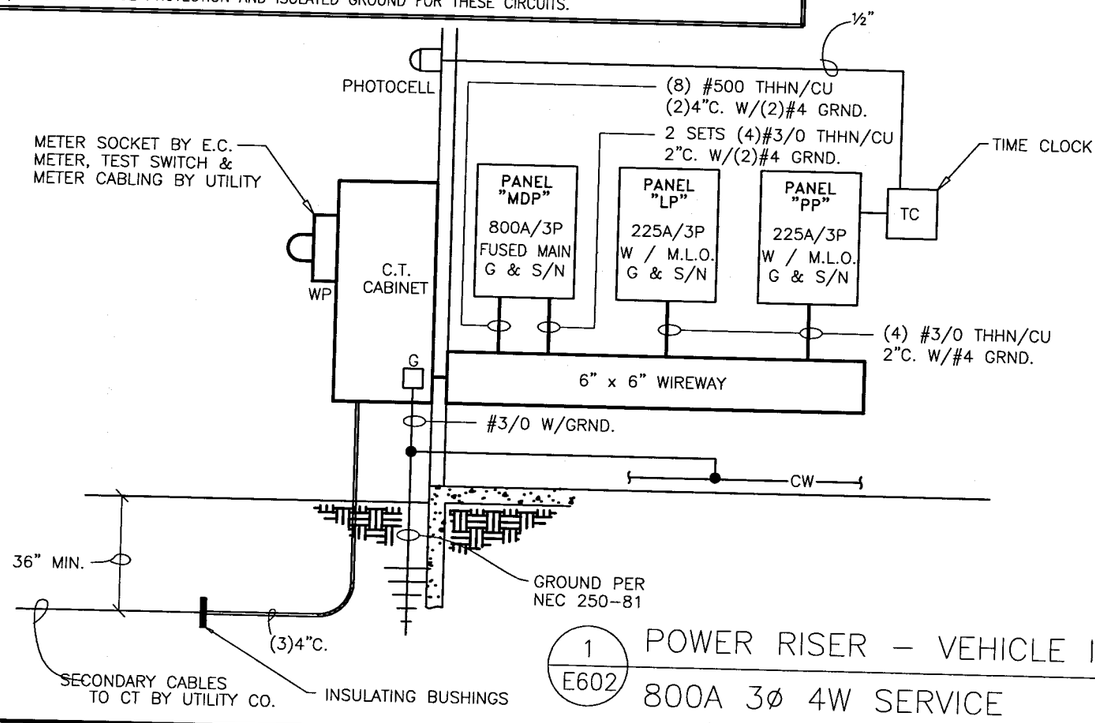
PANEL POWER PANEL ("PP")

AMPS MAIN 225 M.L.O. | VOLTS PHASE 12/208 3 | MOUNTING LOCATION SURFACE MECH. #117

BRKR A	BRKR P	DESCRIPTION	CIRCUIT WATT	CIRCUIT NO.	PHASELOADS A	PHASELOADS B	PHASELOADS C	CIRCUIT NO.	CIRCUIT WATT	DESCRIPTION	BRKR A	BRKR P
20	1	FURNACE "F-1"	1700	1	4000			2	2300	COND. UNIT "ACCU-1"	30	2
20	1	FURNACE "F-2"	1700	3		4000		4	2300	COND. UNIT "ACCU-1"	--	-
20	1	FURNACE "F-3"	1700	5			4950	6	3250	COND. UNIT "ACCU-2"	50	2
20	1	FURNACE "F-4"	1700	7	4950			8	3250	COND. UNIT "ACCU-2"	--	-
30	2	COND. UNIT "ACCU-4"	1700	9		4950		10	3250	COND. UNIT "ACCU-3"	50	2
--	-	COND. UNIT "ACCU-4"	1700	11			4950	12	3250	COND. UNIT "ACCU-3"	--	-
15	1	BOILER "B-1"	750	13	2600			14	1100	EXH. FANS "EF-1,2, 3"	20	1
15	1	BOILER "B-1"	750	15		2685		16	1185	EXH. FANS "EF-4,5,6"	20	1
15	1	BL'R.CIRC.PUMP "P-1"	530	17			2830	18	1130	GARAGE DOOR OPENER	20	1
15	1	BL'R.CIRC.PUMP "P-1"	530	19	2830			20	1130	GARAGE DOOR OPENER	20	1
15	1	RAD. PNL. PUMP "P-2"	530	21		2830		22	1130	GARAGE DOOR OPENER	20	1
15	1	INJECTOR PUMP "P-3"	250	23			2830	24	1130	GARAGE DOOR OPENER	20	1
15	2	"EWH1" - RM #115	750	25	1550			26	800	DESTRAIFICATION FANS	20	1
--	-	"EWH1" - RM #115	750	27		1500		28	750	"EWH-1" - RM #108	15	2
15	2	"EWH1" - RM #100	750	29			1500	30	750	"EWH-1" - RM #108	--	-
--	-	"EWH1" - RM #100	750	31	1750			32	1000	BRAKE TEST DISPLAY	20	1
15	2	"EWH1" - RM #102	750	33		1750		34	1000	BRAKE TEST DISPLAY	20	1
--	-	"EWH1" - RM #102	750	35			750	36				
15	2	"EWH1" - RM #103	750	37	750			38				
--	-	"EWH1" - RM #103	750	39		750		40				
				41				42				
					18430	18465	16310					

ESTIMATED DEMAND LOAD: 45,000 WATTS / 125.1 AMPS

TOTAL CONNECTED LOADS: 53,205 WATTS / 147.9 AMPS



1 / E602 POWER RISER - VEHICLE INSP. BLDG.

800A 3Ø 4W SERVICE

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

ELECTRICAL - SCHEDULES AND DETAILS

SAFETY & WEIGHT FACILITY NO. 21

SCALE, FEET 0

DATE: 1/1/02

SHEET NO: 180 OF

DWG. E603

PANEL "WSP" PANEL

AMPS MAIN 200 M.C.B. | VOLTS PHASE 120/240 1 | MOUNTING LOCATION SURFACE WSP EQUIP. #127

BRKR A	BRKR P	DESCRIPTION	CIRCUIT WATT	CIRCUIT NO.	PHASELOADS A	PHASELOADS B	CIRCUIT NO.	CIRCUIT WATT	DESCRIPTION	BRKR A	BRKR P
20	1	LIGHTS	576	1	.		2	200	RECEPTACLES	20	1
				3		.	4				
				5	.		6				
				7		.	8				
				9	.		10				
				11		.	12				
				13	.		14				
				15		.	16				
				17	.		18				
				19		.	20				
				21	.		22				
				23		.	24				
				25	.		26				
				27		.	28				
				29	.		30				
				31		.	32				
				33	.		34	2500	THRU-WALL UNIT	50	2
				35		.	36	2500	THRU-WALL UNIT	--	--
				37	.		38	2500	THRU-WALL UNIT	50	2
				39		.	40	2500	THRU-WALL UNIT	--	--
					XX	XX					

ESTIMATED DEMAND LOAD: EST. @ 54,000 WATTS / EST. @ 136 AMPS

TOTAL CONNECTED LOADS: EST. @ 54,000 WATTS / EST. @ 150 AMPS

(*) PROVIDE SURGE PROTECTION AND ISOLATED GROUND FOR THESE CIRCUITS.

PANEL "C" CINGULAR PANEL

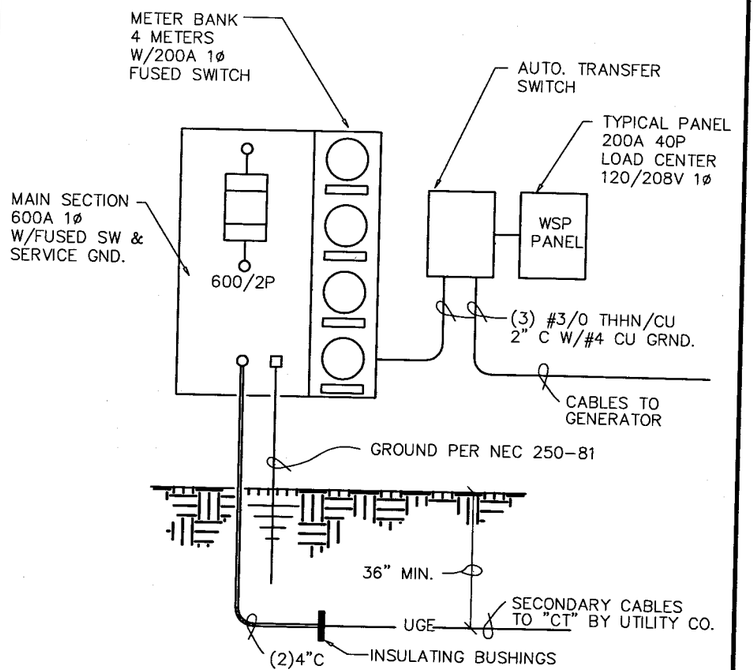
AMPS MAIN 200 M.C.B. | VOLTS PHASE 120/240 1 | MOUNTING LOCATION SURFACE CINGULAR EQUIP. #126

BRKR A	BRKR P	DESCRIPTION	CIRCUIT WATT	CIRCUIT NO.	PHASELOADS A	PHASELOADS B	CIRCUIT NO.	CIRCUIT WATT	DESCRIPTION	BRKR A	BRKR P
20	1	LIGHTS	576	1	.		2	500	RECEPTACLES	20	1
20	2	TOWER LIGHTS	1000	3		.	4				
--	--	TOWER LIGHTS	1000	5	.		6				
				7		.	8				
				9	.		10				
				11		.	12				
				13	.		14				
				15		.	16				
				17	.		18				
				19		.	20				
				21	.		22				
				23		.	24				
				25	.		26				
				27		.	28				
				29	.		30				
				31		.	32				
15	2	ELECTRIC WALL HEATER	1000	33	3500		34	2500	HVAC UNIT	50	2
--	--	ELECTRIC WALL HEATER	1000	35		3500	36	2500	HVAC UNIT	--	--
15	2	ELECTRIC WALL HEATER	1000	37	3500		38	2500	HVAC UNIT	50	2
--	--	ELECTRIC WALL HEATER	1000	39		3500	40	2500	HVAC UNIT	--	--
					XX	XX					

ESTIMATED DEMAND LOAD: EST. @ 54,000 WATTS / EST. @ 136 AMPS

TOTAL CONNECTED LOADS: EST. @ 54,000 WATTS / EST. @ 150 AMPS

(*) PROVIDE SURGE PROTECTION AND ISOLATED GROUND FOR THESE CIRCUITS.



2 / E601 POWER RISER – TENANT SPACES

600A 1ø 3W SERVICE

PANEL "LE" LEASE EQUIP. PANEL (2 REQUIRED)

AMPS MAIN 200 M.C.B. | VOLTS PHASE 120/240 1 | MOUNTING LOCATION SURFACE ROOMS #124 & #125

BRKR A	BRKR P	DESCRIPTION	CIRCUIT WATT	CIRCUIT NO.	PHASELOADS A	PHASELOADS B	CIRCUIT NO.	CIRCUIT WATT	DESCRIPTION	BRKR A	BRKR P
20	1	LIGHTS	64	1	.		2	500	RECEPTACLES	20	1
				3		.	4				
				5	.		6				
				7		.	8				
				9	.		10				
				11		.	12				
				13	.		14				
				15		.	16				
				17	.		18				
				19		.	20				
				21	.		22				
				23		.	24				
				25	.		26				
				27		.	28				
				29	.		30				
				31		.	32				
				33	.		34				
				35		.	36				
				37	.		38	2500	HVAC UNIT	50	2
				39		.	40	2500	HVAC UNIT	--	--
					XX	XX					

ESTIMATED DEMAND LOAD: EST. @ 54,000 WATTS / EST. @ 136 AMPS

TOTAL CONNECTED LOADS: EST. @ 54,000 WATTS / EST. @ 150 AMPS

(*) PROVIDE SURGE PROTECTION AND ISOLATED GROUND FOR THESE CIRCUITS.

NOTE:

FINAL LOADS FOR THESE THREE PANELS WILL BE DETERMINED UPON COMPLETION OF INDIVIDUAL CELLULAR PROVIDER'S AND/OR INSTALLER'S DESIGN. BUILDING GENERAL CONTRACTOR TO PROVIDE AND INSTALL PANELS WITH BREAKERS AS SHOWN.

PLANS PREPARED BY: NATIVE ENGINEERING, INC. WAUNAKEE, WI

STATE PROJECT NUMBER: 1032-08-70 (c) | HWY: INTERSTATE 94 AT ML | COUNTY: KENOSHA

ELECTRICAL – SCHEDULES AND DETAILS

SAFETY & WEIGHT FACILITY NO. 21 | SCALE, FEET 0

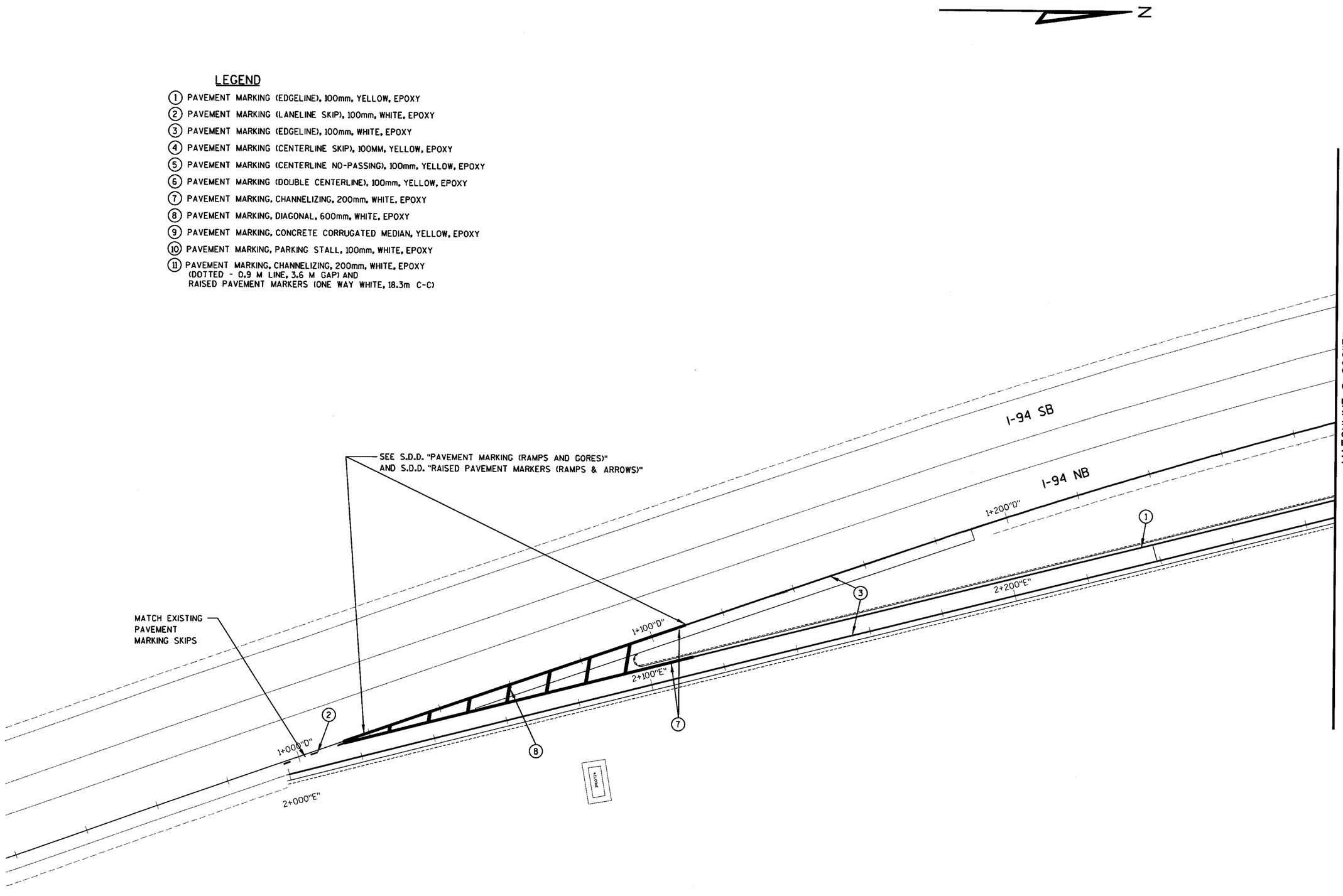
DATE: 1/1/02

SHEET NO: 181 OF

DWG. E604

LEGEND

(1) PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
(2) PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
(3) PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
(4) PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
(5) PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
(6) PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
(7) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(8) PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
(9) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
(10) PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
(11) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(DOTTED - 0.9 M LINE, 3.6 M GAP) AND
RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)



(2) REQ'D IN AREAS OF LONG-TERM LANE CLOSURE TAPERS

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 182	M

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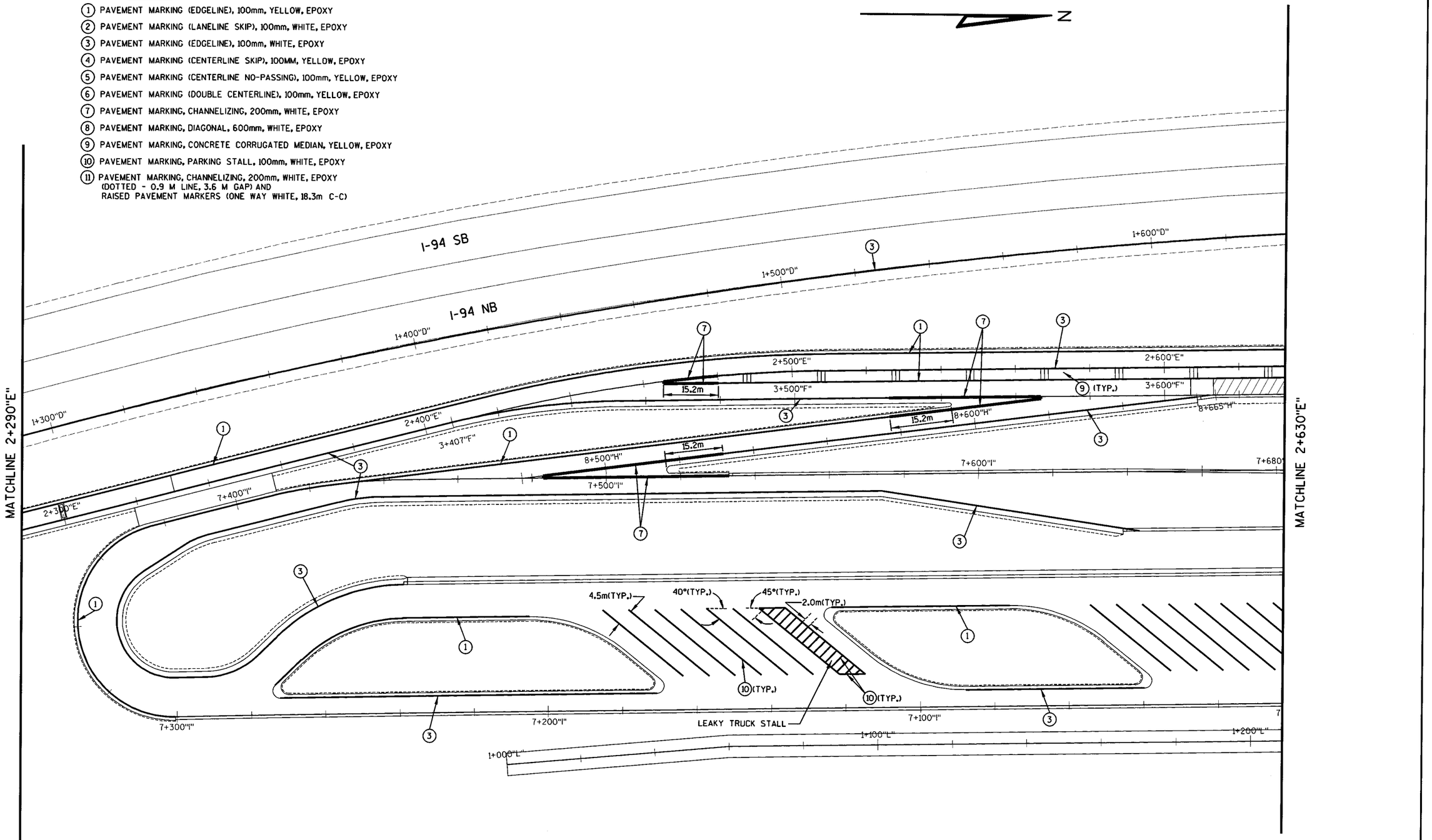
LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY (DOTTED - 0.9 M LINE, 3.6 M GAP) AND RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 183	M

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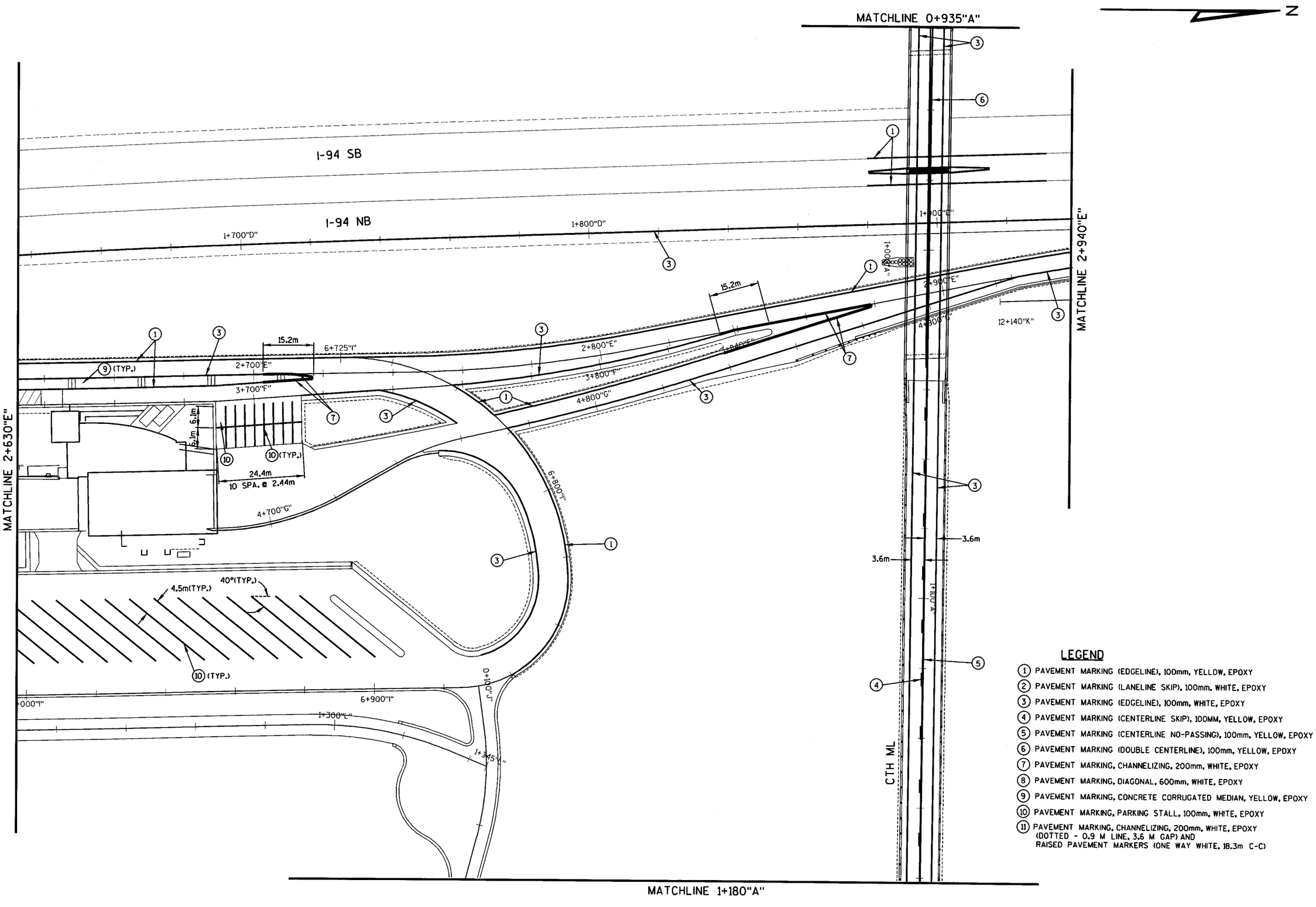
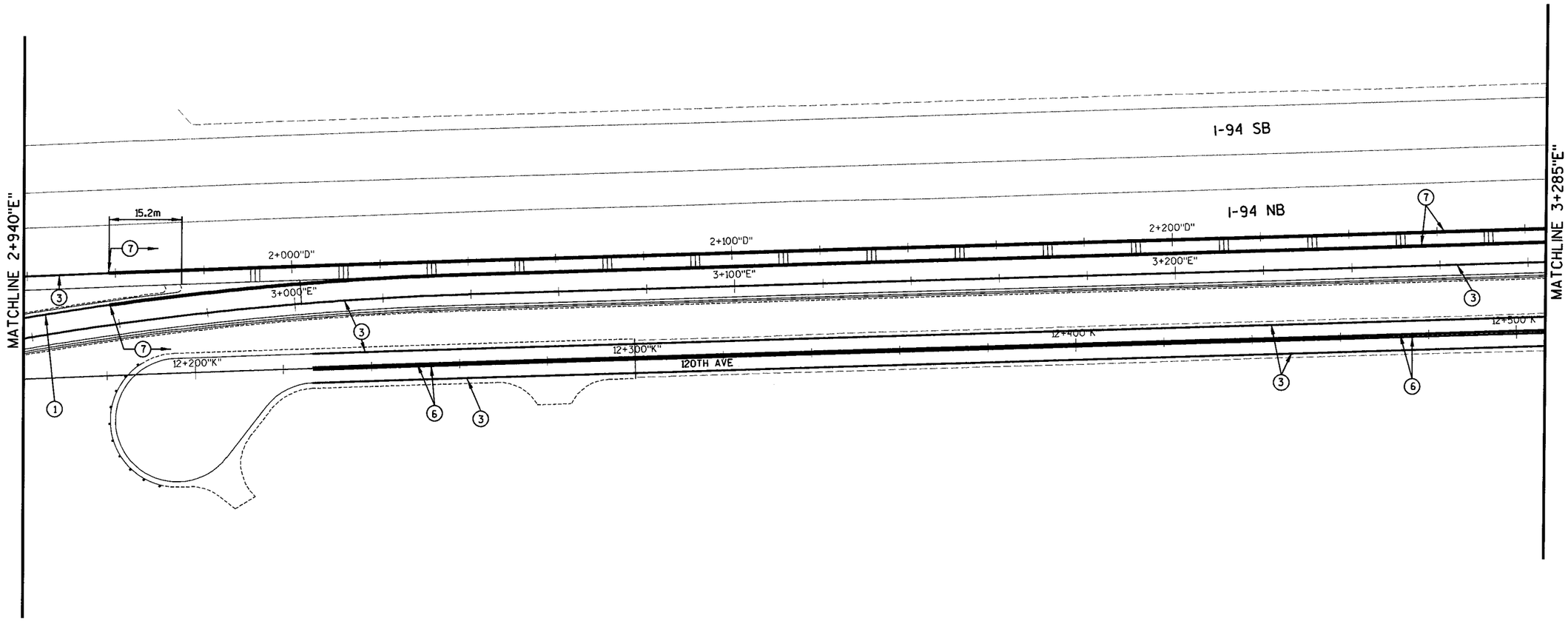


LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY (DOTTED - 0.9 M LINE, 3.6 M GAP) AND RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 184	M



LEGEND

(1) PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
(2) PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
(3) PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
(4) PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
(5) PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
(6) PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
(7) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(8) PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
(9) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
(10) PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
(11) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(DOTTED - 0.9 M LINE, 3.6 M GAP) AND
RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

N

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 185	M

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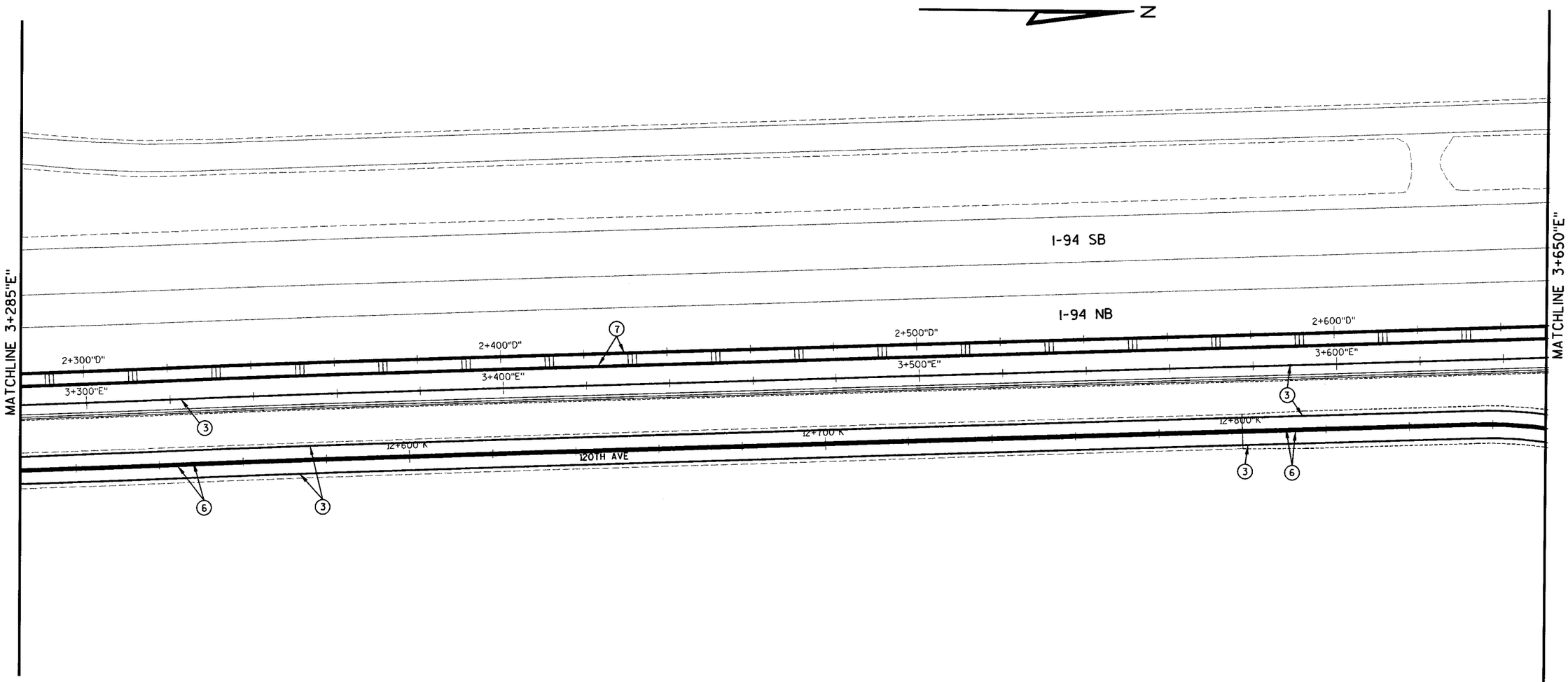
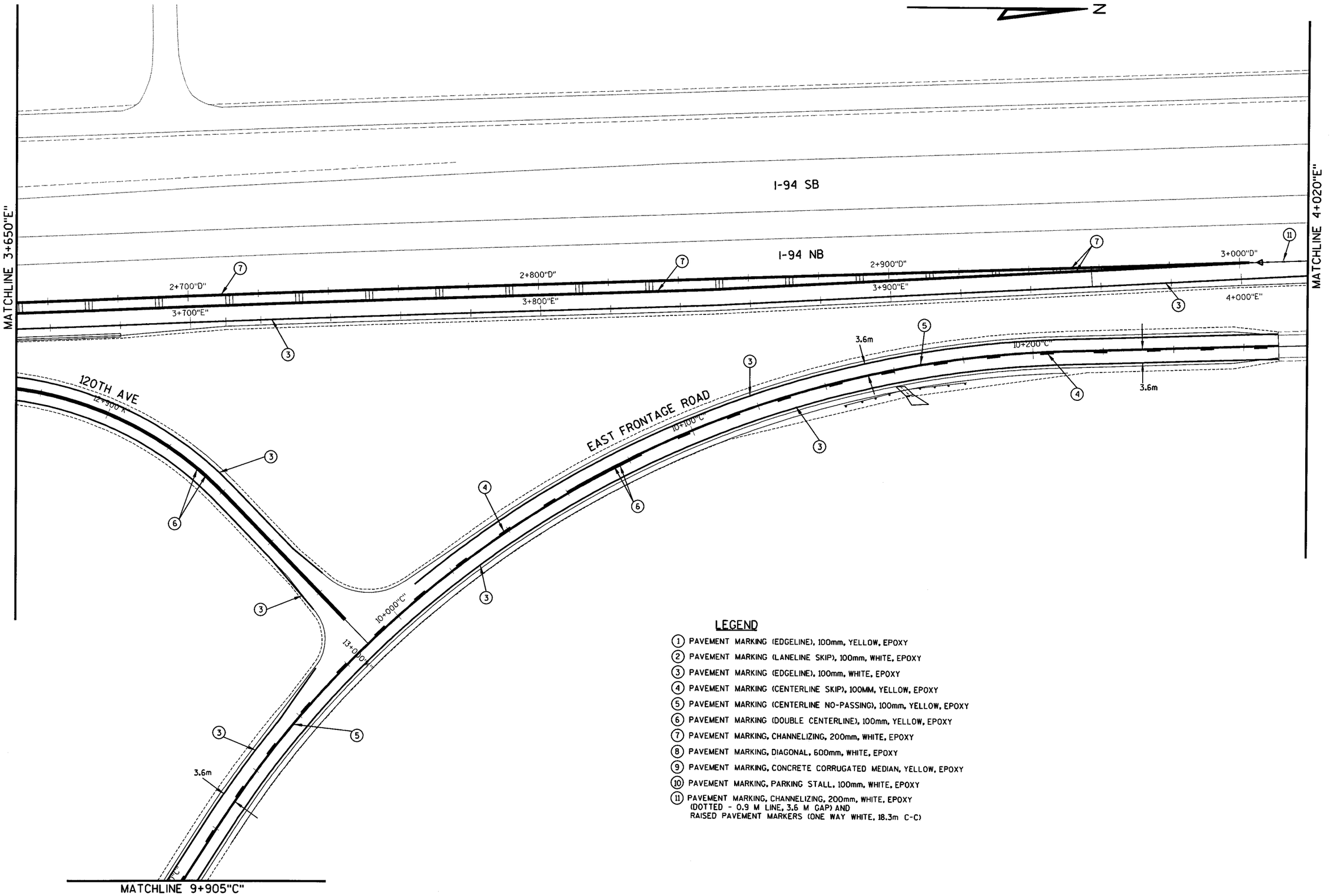


LEGEND

(1) PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
(2) PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
(3) PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
(4) PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
(5) PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
(6) PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
(7) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(8) PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
(9) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
(10) PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
(11) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(DOTTED - 0.9 M LINE, 3.6 M GAP) AND
RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 186	M



LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY (DOTTED - 0.9 M LINE, 3.6 M GAP) AND RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 187	M

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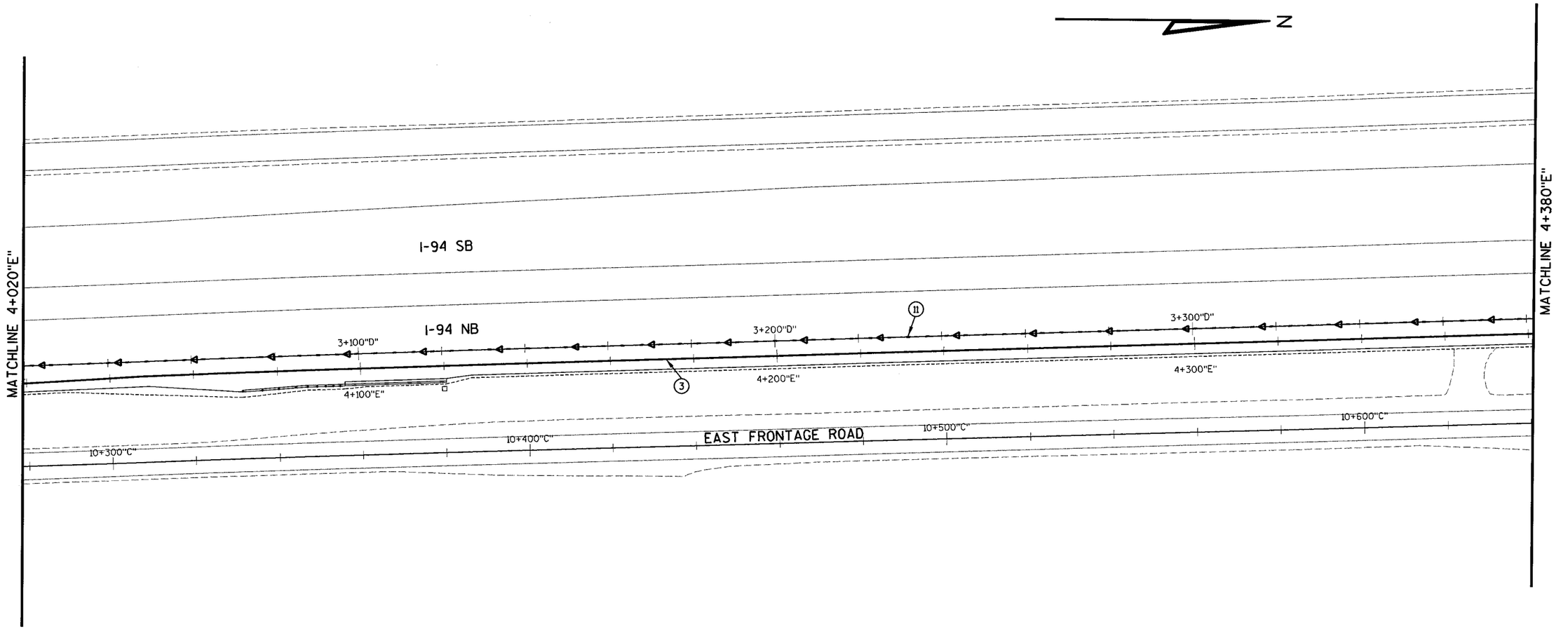

LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
    (DOTTED - 0.9 M LINE, 3.6 M GAP) AND
    RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 188	M

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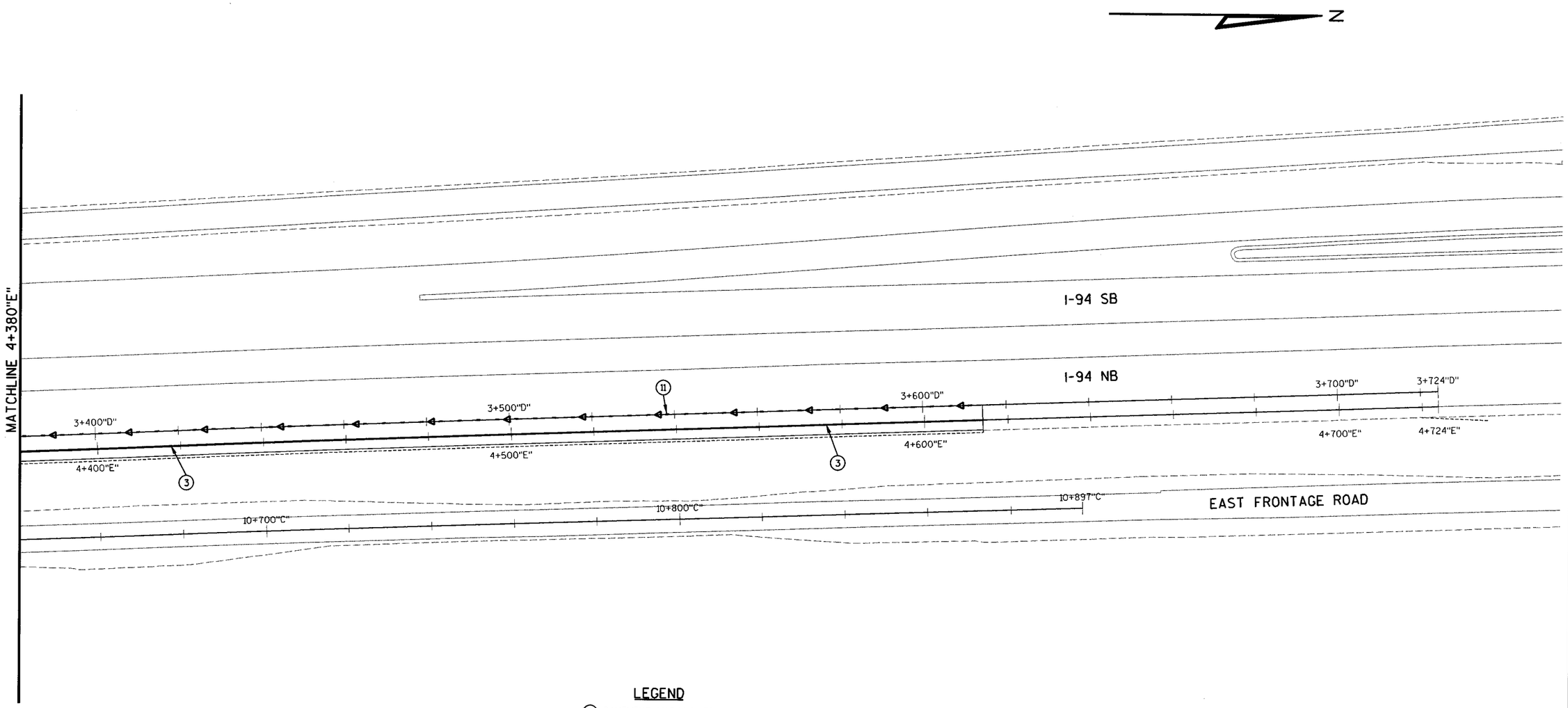

LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY (DOTTED - 0.9 M LINE, 3.6 M GAP) AND RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 189	M

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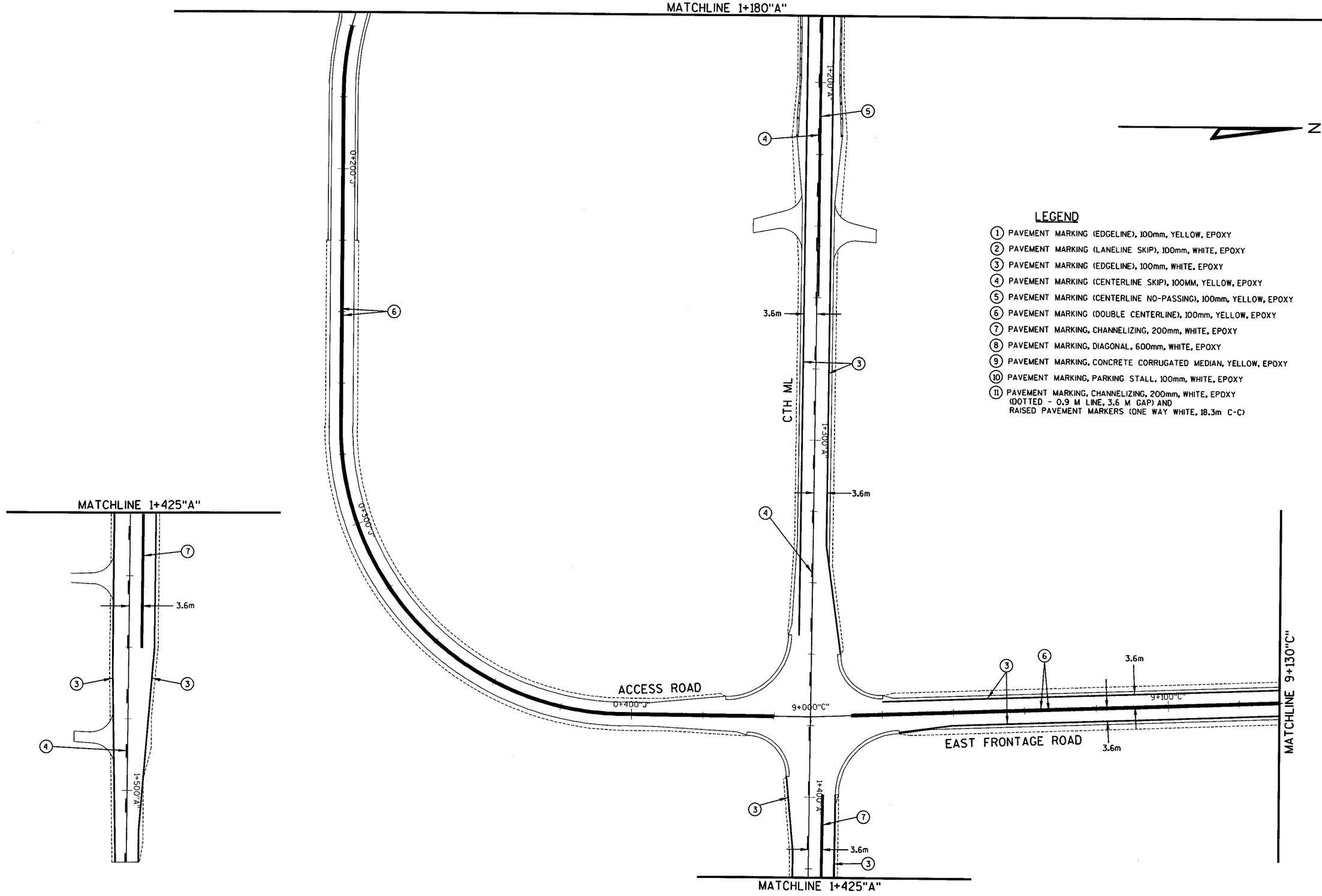
MATCHLINE 1+180"A"



LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY (DOTTED - 0.9 M LINE, 3.6 M GAP) AND RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 190	M

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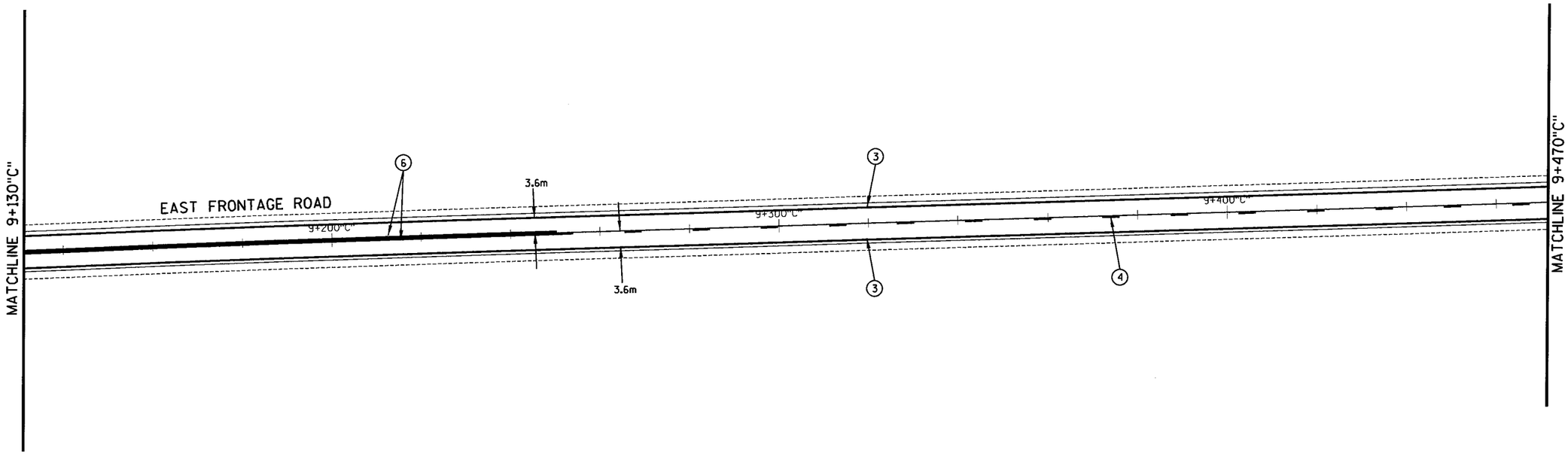
LEGEND

(1) PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
(2) PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
(3) PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
(4) PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
(5) PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
(6) PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
(7) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(8) PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
(9) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
(10) PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
(11) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(DOTTED - 0.9 M LINE, 3.6 M GAP) AND
RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

N



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 191	M

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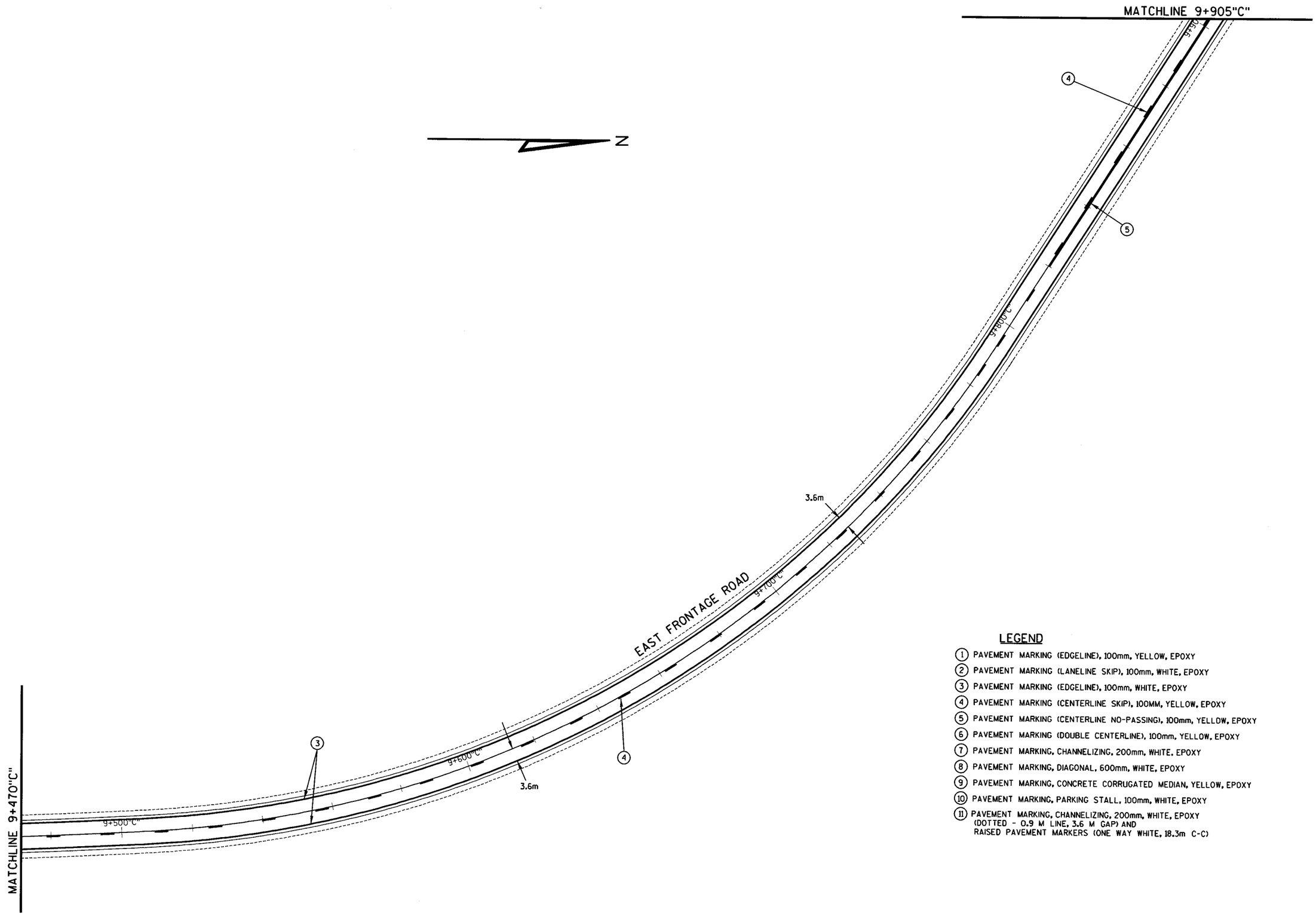

LEGEND

1. PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
2. PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
3. PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
4. PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
5. PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
6. PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
7. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
8. PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
9. PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
10. PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
11. PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY (DOTTED - 0.9 M LINE, 3.6 M GAP) AND RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 192	M

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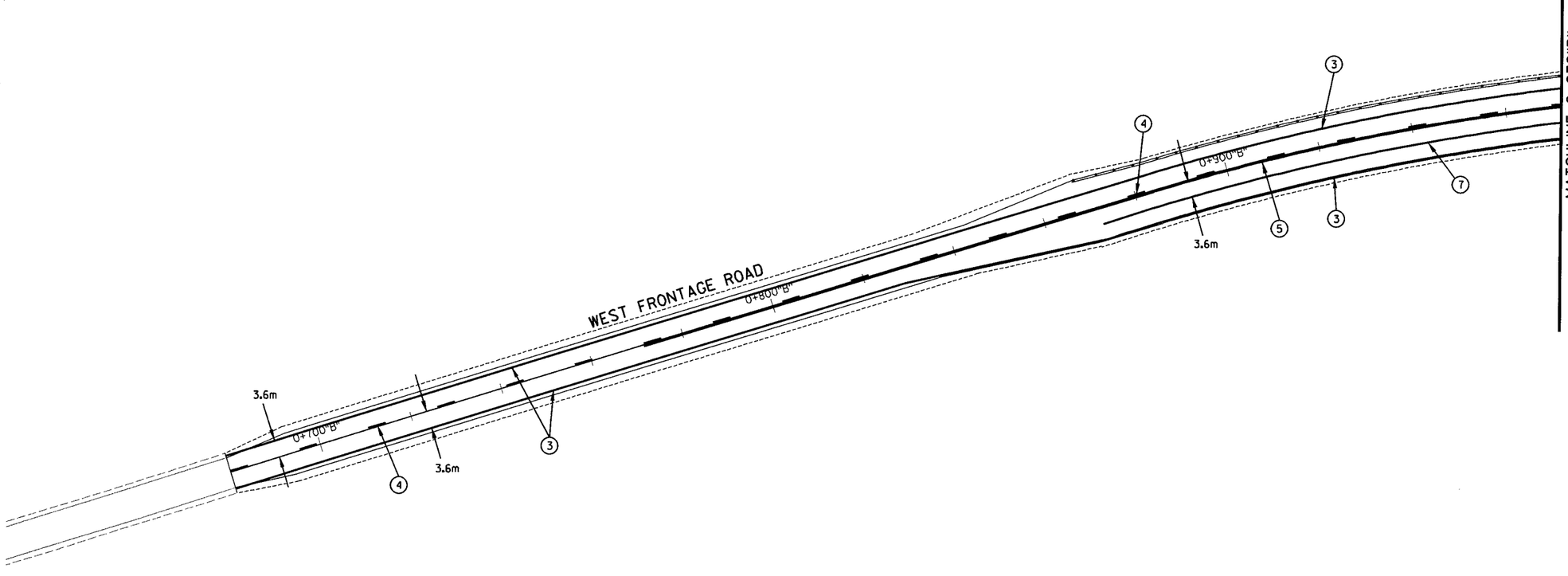
LEGEND

(1) PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
(2) PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
(3) PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
(4) PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
(5) PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
(6) PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
(7) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(8) PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
(9) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
(10) PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
(11) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(DOTTED - 0.9 M LINE, 3.6 M GAP) AND
RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

N



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 193	M

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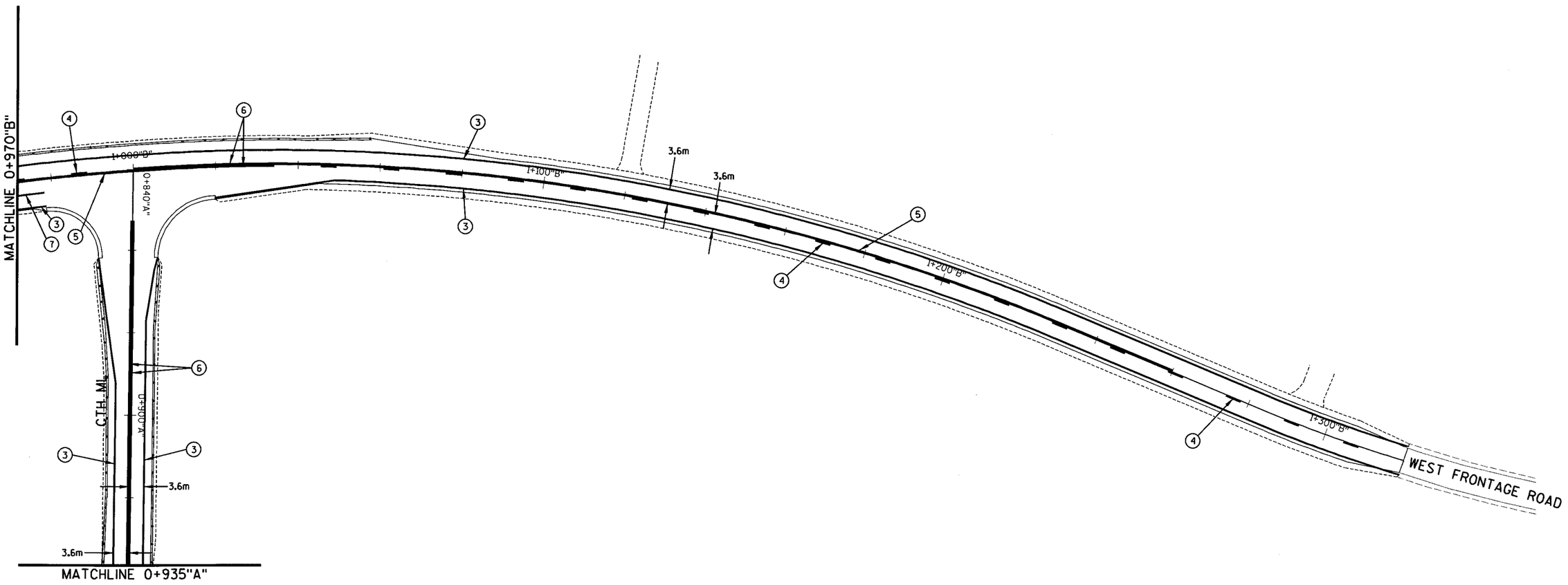
LEGEND

(1) PAVEMENT MARKING (EDGELINE), 100mm, YELLOW, EPOXY
(2) PAVEMENT MARKING (LANELINE SKIP), 100mm, WHITE, EPOXY
(3) PAVEMENT MARKING (EDGELINE), 100mm, WHITE, EPOXY
(4) PAVEMENT MARKING (CENTERLINE SKIP), 100MM, YELLOW, EPOXY
(5) PAVEMENT MARKING (CENTERLINE NO-PASSING), 100mm, YELLOW, EPOXY
(6) PAVEMENT MARKING (DOUBLE CENTERLINE), 100mm, YELLOW, EPOXY
(7) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(8) PAVEMENT MARKING, DIAGONAL, 600mm, WHITE, EPOXY
(9) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, YELLOW, EPOXY
(10) PAVEMENT MARKING, PARKING STALL, 100mm, WHITE, EPOXY
(11) PAVEMENT MARKING, CHANNELIZING, 200mm, WHITE, EPOXY
(DOTTED - 0.9 M LINE, 3.6 M GAP) AND
RAISED PAVEMENT MARKERS (ONE WAY WHITE, 18.3m C-C)

N



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	PAVEMENT MARKING	SCALE: 1:1000	SHEET NO: 194	M

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LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N

END ROAD WORK
G20-2A
1200x600

WEST FRONTAGE ROAD

30m (TYP)

120TH AVE

SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)" FOR TRAFFIC CONTROL DURING FRONTAGE ROAD CONNECTION.

LAKE COUNTY, ILLINOIS
KENOSHA COUNTY, WISCONSIN

PROPOSED EAST FRONTAGE ROAD

ROAD CLOSED
R11-2
1200x750

CTH ML

STAGE 1A NOTES:

TRAFFIC:

- CTH ML AND THE WEST FRONTAGE ROAD TO REMAIN OPEN TO TRAFFIC.
- CONSTRUCTION OF CONNECTIONS FROM PROPOSED EAST FRONTAGE ROAD TO EXISTING EAST FRONTAGE ROAD TO BE PERFORMED UNDER TRAFFIC, IN ACCORDANCE WITH SPECIAL PROVISIONS.

CONSTRUCTION:

- BEGIN CONSTRUCTION ON BYPASS LANE. CONSTRUCT PORTION OF LINE "E" (SOUTH OF CTH ML) THAT WILL NOT DISRUPT TRAFFIC FLOW ON I-94 (I.E. CONSTRUCT LINE "E" FROM STA 2+200 "E" TO 2+860"E").
- BEGIN CONSTRUCTION ON MAIN WEIGHT FACILITY.
- CONSTRUCT NEW EAST FRONTAGE ROAD.
- CONSTRUCT CONCRETE BOX CULVERT EXTENSION

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1A	SCALE: 1:5000	SHEET NO: 195	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

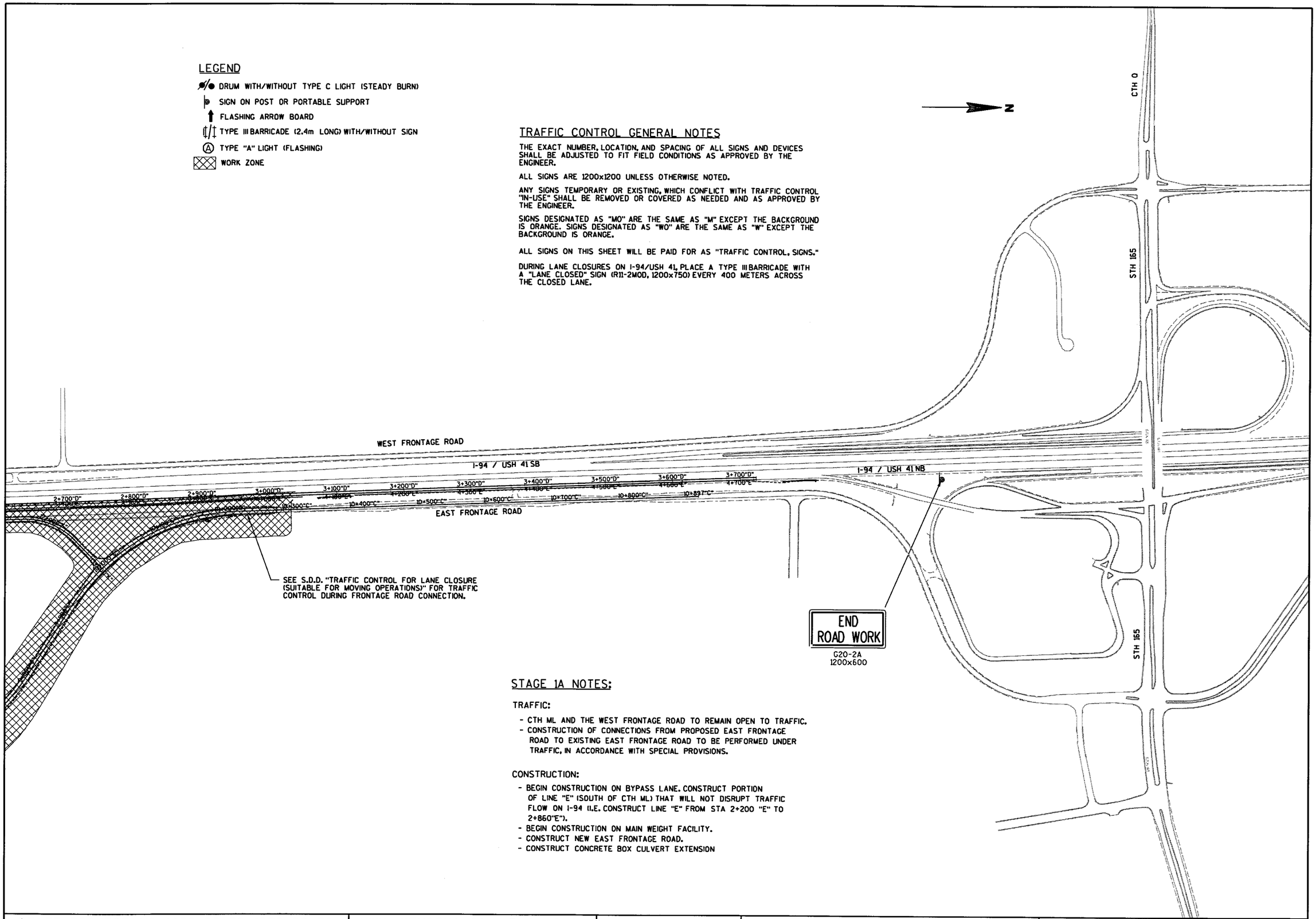
ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.



STAGE 1A NOTES:

TRAFFIC:

- CTH ML AND THE WEST FRONTAGE ROAD TO REMAIN OPEN TO TRAFFIC.
- CONSTRUCTION OF CONNECTIONS FROM PROPOSED EAST FRONTAGE ROAD TO EXISTING EAST FRONTAGE ROAD TO BE PERFORMED UNDER TRAFFIC, IN ACCORDANCE WITH SPECIAL PROVISIONS.

CONSTRUCTION:

- BEGIN CONSTRUCTION ON BYPASS LANE. CONSTRUCT PORTION OF LINE "E" (SOUTH OF CTH ML) THAT WILL NOT DISRUPT TRAFFIC FLOW ON I-94 I.E. CONSTRUCT LINE "E" FROM STA 2+200 "E" TO 2+860"E").
- BEGIN CONSTRUCTION ON MAIN WEIGHT FACILITY.
- CONSTRUCT NEW EAST FRONTAGE ROAD.
- CONSTRUCT CONCRETE BOX CULVERT EXTENSION

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1A	SCALE: 1:5000	SHEET NO: 196	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

N

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

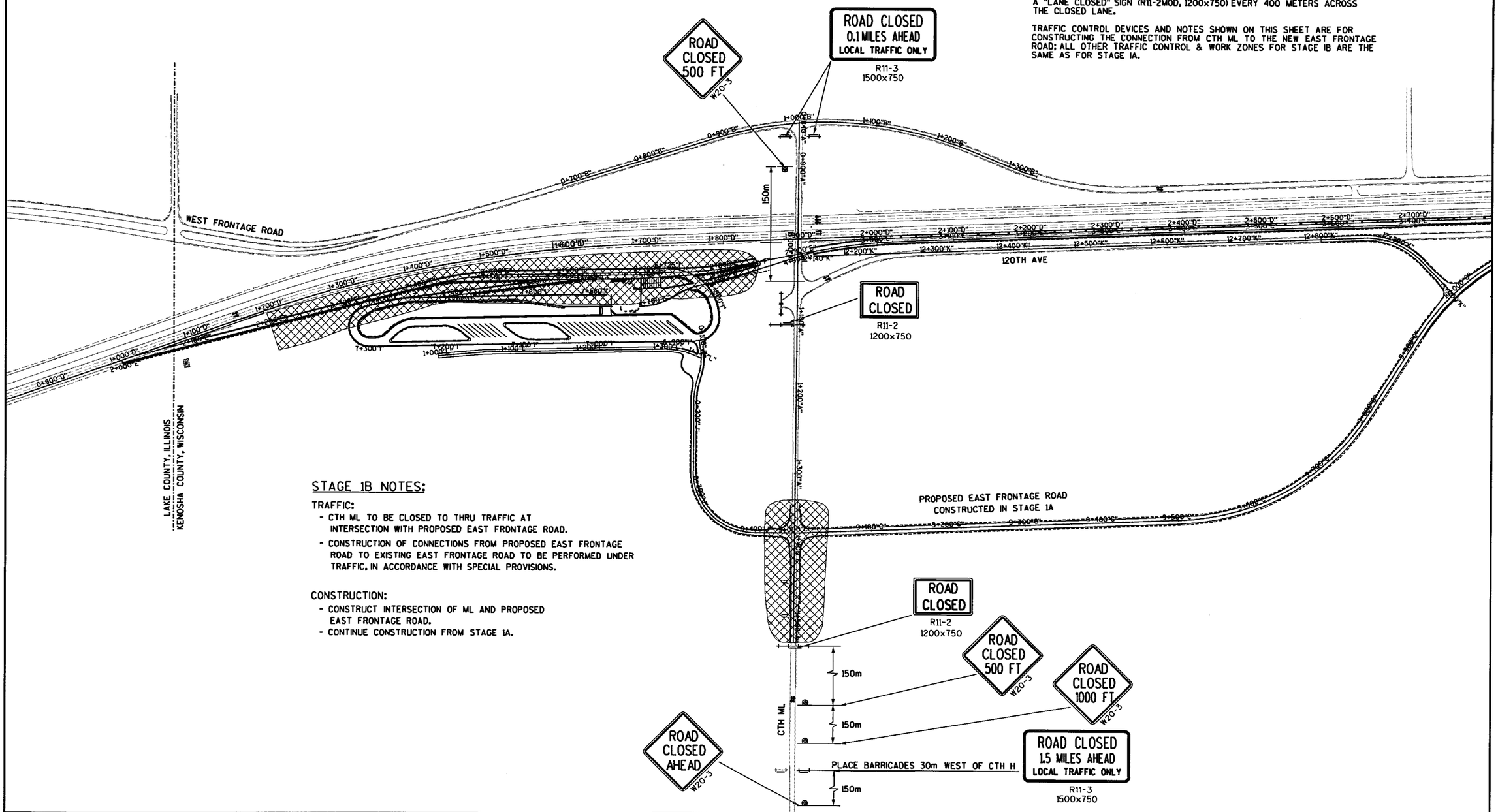
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

TRAFFIC CONTROL DEVICES AND NOTES SHOWN ON THIS SHEET ARE FOR CONSTRUCTING THE CONNECTION FROM CTH ML TO THE NEW EAST FRONTAGE ROAD; ALL OTHER TRAFFIC CONTROL & WORK ZONES FOR STAGE IB ARE THE SAME AS FOR STAGE IA.



STAGE 1B NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO THRU TRAFFIC AT INTERSECTION WITH PROPOSED EAST FRONTAGE ROAD.
- CONSTRUCTION OF CONNECTIONS FROM PROPOSED EAST FRONTAGE ROAD TO EXISTING EAST FRONTAGE ROAD TO BE PERFORMED UNDER TRAFFIC, IN ACCORDANCE WITH SPECIAL PROVISIONS.

CONSTRUCTION:

- CONSTRUCT INTERSECTION OF ML AND PROPOSED EAST FRONTAGE ROAD.
- CONTINUE CONSTRUCTION FROM STAGE 1A.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1B	SCALE: 1:5000	SHEET NO: 197	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

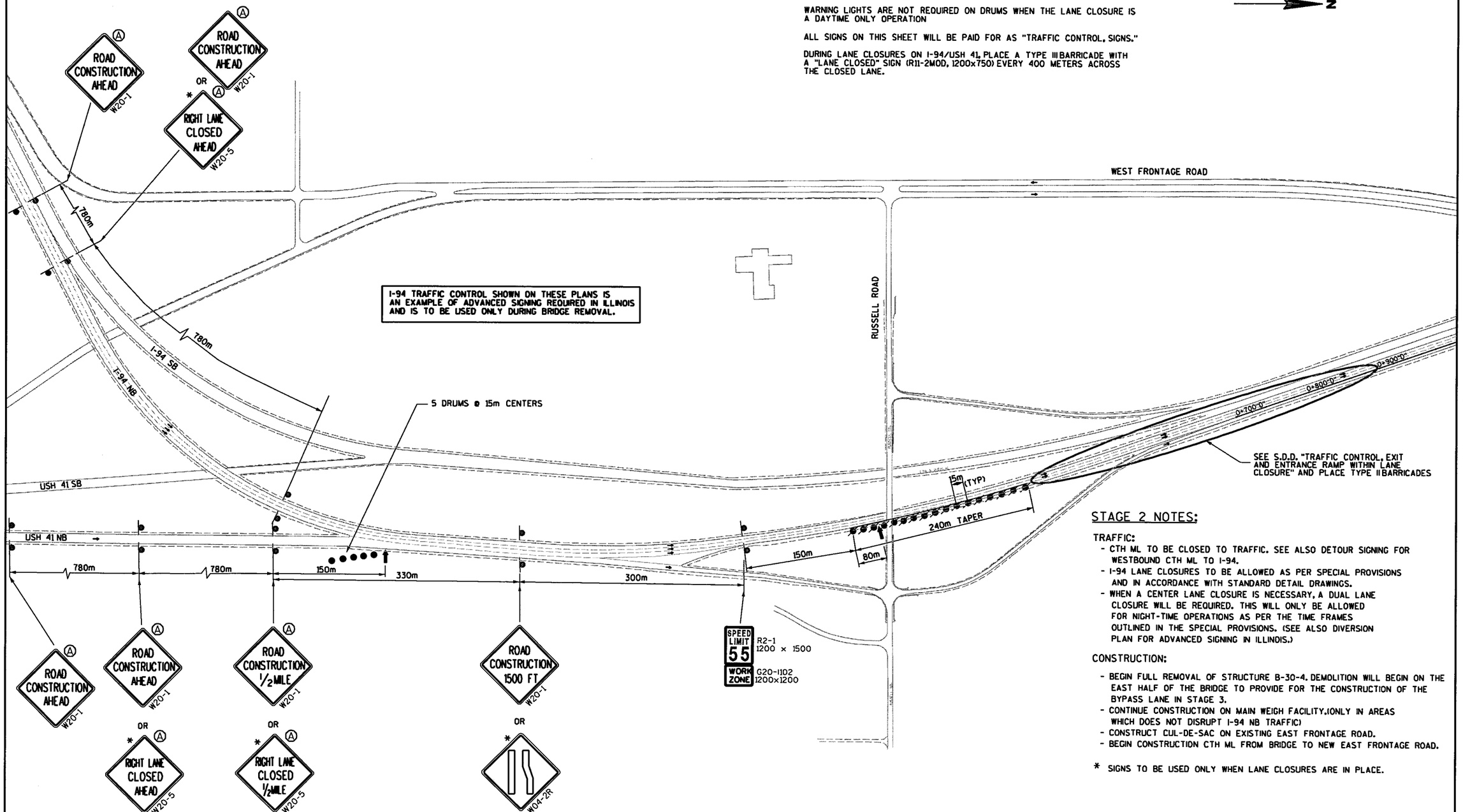
SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

WARNING LIGHTS ARE NOT REQUIRED ON DRUMS WHEN THE LANE CLOSURE IS A DAYTIME ONLY OPERATION

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N



STAGE 2 NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- I-94 LANE CLOSURES TO BE ALLOWED AS PER SPECIAL PROVISIONS AND IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.
- WHEN A CENTER LANE CLOSURE IS NECESSARY, A DUAL LANE CLOSURE WILL BE REQUIRED. THIS WILL ONLY BE ALLOWED FOR NIGHT-TIME OPERATIONS AS PER THE TIME FRAMES OUTLINED IN THE SPECIAL PROVISIONS. (SEE ALSO DIVERSION PLAN FOR ADVANCED SIGNING IN ILLINOIS.)

CONSTRUCTION:

- BEGIN FULL REMOVAL OF STRUCTURE B-30-4. DEMOLITION WILL BEGIN ON THE EAST HALF OF THE BRIDGE TO PROVIDE FOR THE CONSTRUCTION OF THE BYPASS LANE IN STAGE 3.
- CONTINUE CONSTRUCTION ON MAIN WEIGH FACILITY.(ONLY IN AREAS WHICH DOES NOT DISRUPT I-94 NB TRAFFIC)
- CONSTRUCT CUL-DE-SAC ON EXISTING EAST FRONTAGE ROAD.
- BEGIN CONSTRUCTION CTH ML FROM BRIDGE TO NEW EAST FRONTAGE ROAD.

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 2	SCALE: 1:5000	SHEET NO: 198	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

I-94 TRAFFIC CONTROL SHOWN ON THESE PLANS IS AN EXAMPLE OF ADVANCED SIGNING REQUIRED IN ILLINOIS AND IS TO BE USED ONLY DURING BRIDGE REMOVAL.

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N

END ROAD WORK
G20-2A
1200x600

BRIDGE OUT
R11-2 (MOD)
1200x750

ROAD CLOSED
R11-2
1200x750

NOTE: SEE ALSO S.D.D "TRAFFIC CONTROL, LANE CLOSURE (SPEEDS GREATER THAN 40 MPH)" FOR SB I-94

WEST FRONTAGE ROAD

120TH AVE

30m (TYP.)

50m

75m

SEE I-94 TYPICAL SECTION - STAGE 2 AND STAGE 2 DETAIL FOR TEMPORARY CONCRETE BARRIER

LAKE COUNTY, ILLINOIS
KENOSHA COUNTY, WISCONSIN

BRIDGE OUT
R11-2 (MOD)
1200x750

PROPOSED EAST FRONTAGE ROAD

NOTE: SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.

ROAD CLOSED
R11-2
1200x750

150m

ROAD CLOSED 500 FT
W20-3

150m

ROAD CLOSED 1000 FT
W20-3

CTH ML

ROAD CLOSED AHEAD
W20-3

PLACE 150m EAST OF CTH H

STAGE 2 NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- I-94 LANE CLOSURES TO BE ALLOWED AS PER SPECIAL PROVISIONS AND IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.
- WHEN A CENTER LANE CLOSURE IS NECESSARY, A DUAL LANE CLOSURE WILL BE REQUIRED. THIS WILL ONLY BE ALLOWED FOR NIGHT-TIME OPERATIONS AS PER THE TIME FRAMES OUTLINED IN THE SPECIAL PROVISIONS. (SEE ALSO DIVERSION PLAN FOR ADVANCED SIGNING IN ILLINOIS.)

CONSTRUCTION:

- BEGIN FULL REMOVAL OF STRUCTURE B-30-4. DEMOLITION WILL BEGIN ON THE EAST HALF OF THE BRIDGE TO PROVIDE FOR THE CONSTRUCTION OF THE BYPASS LANE IN STAGE 3.
- CONTINUE CONSTRUCTION ON MAIN WEIGH FACILITY. (ONLY IN AREAS WHICH DOES NOT DISRUPT I-94 NB TRAFFIC)
- CONSTRUCT CUL-DE-SAC ON EXISTING EAST FRONTAGE ROAD.
- BEGIN CONSTRUCTION CTH ML FROM BRIDGE TO NEW EAST FRONTAGE ROAD.

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 2	SCALE: 1:5000	SHEET NO: 199	M

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LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

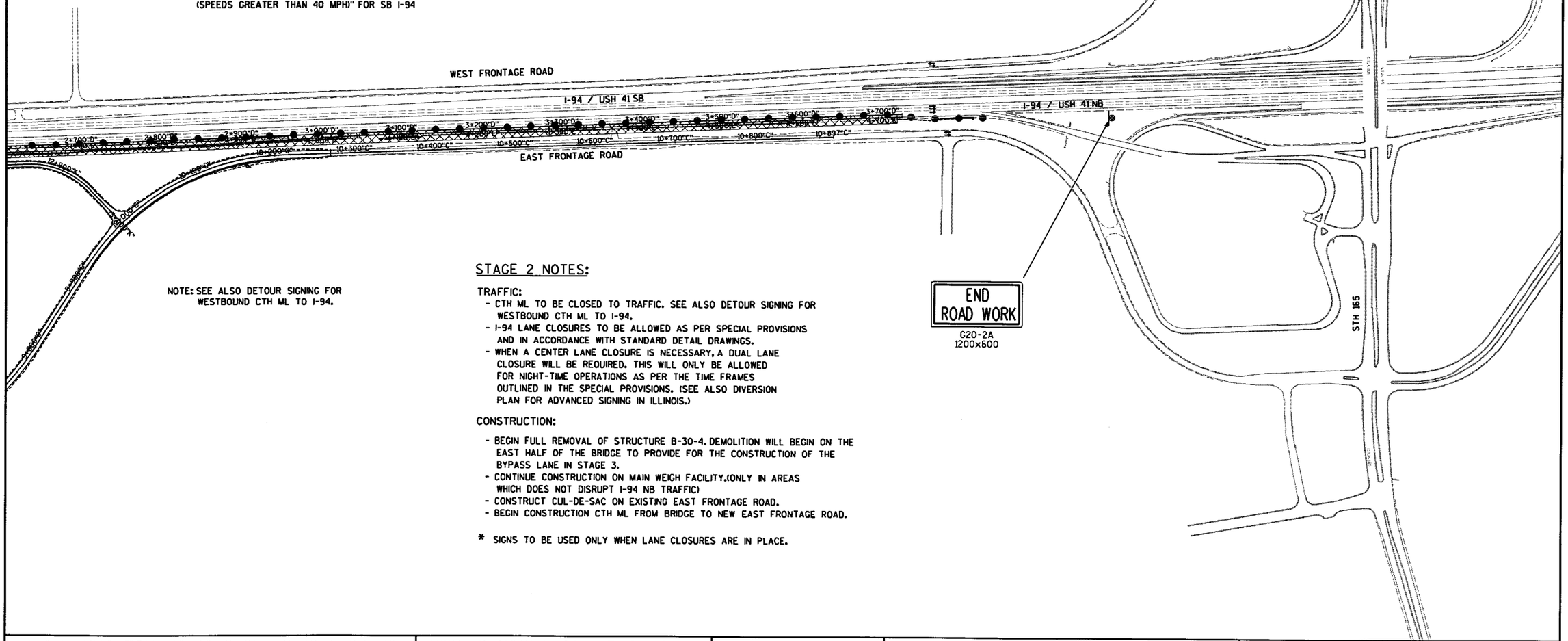
ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N

I-94 TRAFFIC CONTROL SHOWN ON THESE PLANS IS AN EXAMPLE OF ADVANCED SIGNING REQUIRED IN ILLINOIS AND IS TO BE USED ONLY DURING BRIDGE REMOVAL.

NOTE: SEE ALSO S.D.D "TRAFFIC CONTROL, LANE CLOSURE (SPEEDS GREATER THAN 40 MPH)" FOR SB I-94



NOTE: SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.

STAGE 2 NOTES:

TRAFFIC:

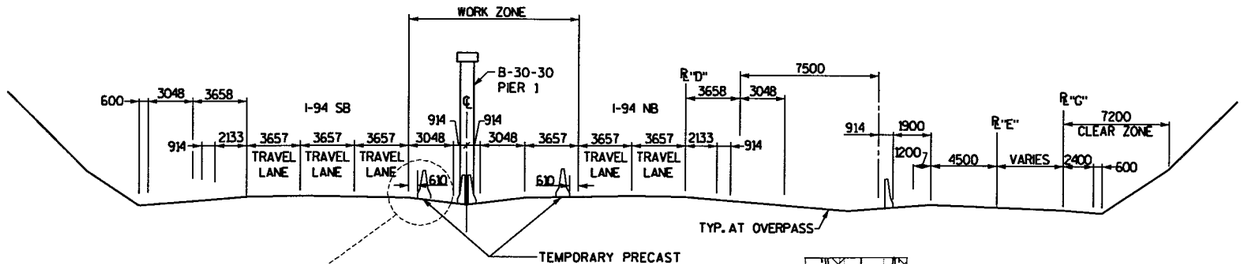
- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- I-94 LANE CLOSURES TO BE ALLOWED AS PER SPECIAL PROVISIONS AND IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.
- WHEN A CENTER LANE CLOSURE IS NECESSARY, A DUAL LANE CLOSURE WILL BE REQUIRED. THIS WILL ONLY BE ALLOWED FOR NIGHT-TIME OPERATIONS AS PER THE TIME FRAMES OUTLINED IN THE SPECIAL PROVISIONS. (SEE ALSO DIVERSION PLAN FOR ADVANCED SIGNING IN ILLINOIS.)

CONSTRUCTION:

- BEGIN FULL REMOVAL OF STRUCTURE B-30-4. DEMOLITION WILL BEGIN ON THE EAST HALF OF THE BRIDGE TO PROVIDE FOR THE CONSTRUCTION OF THE BYPASS LANE IN STAGE 3.
- CONTINUE CONSTRUCTION ON MAIN WEIGH FACILITY.(ONLY IN AREAS WHICH DOES NOT DISRUPT I-94 NB TRAFFIC)
- CONSTRUCT CUL-DE-SAC ON EXISTING EAST FRONTAGE ROAD.
- BEGIN CONSTRUCTION CTH ML FROM BRIDGE TO NEW EAST FRONTAGE ROAD.

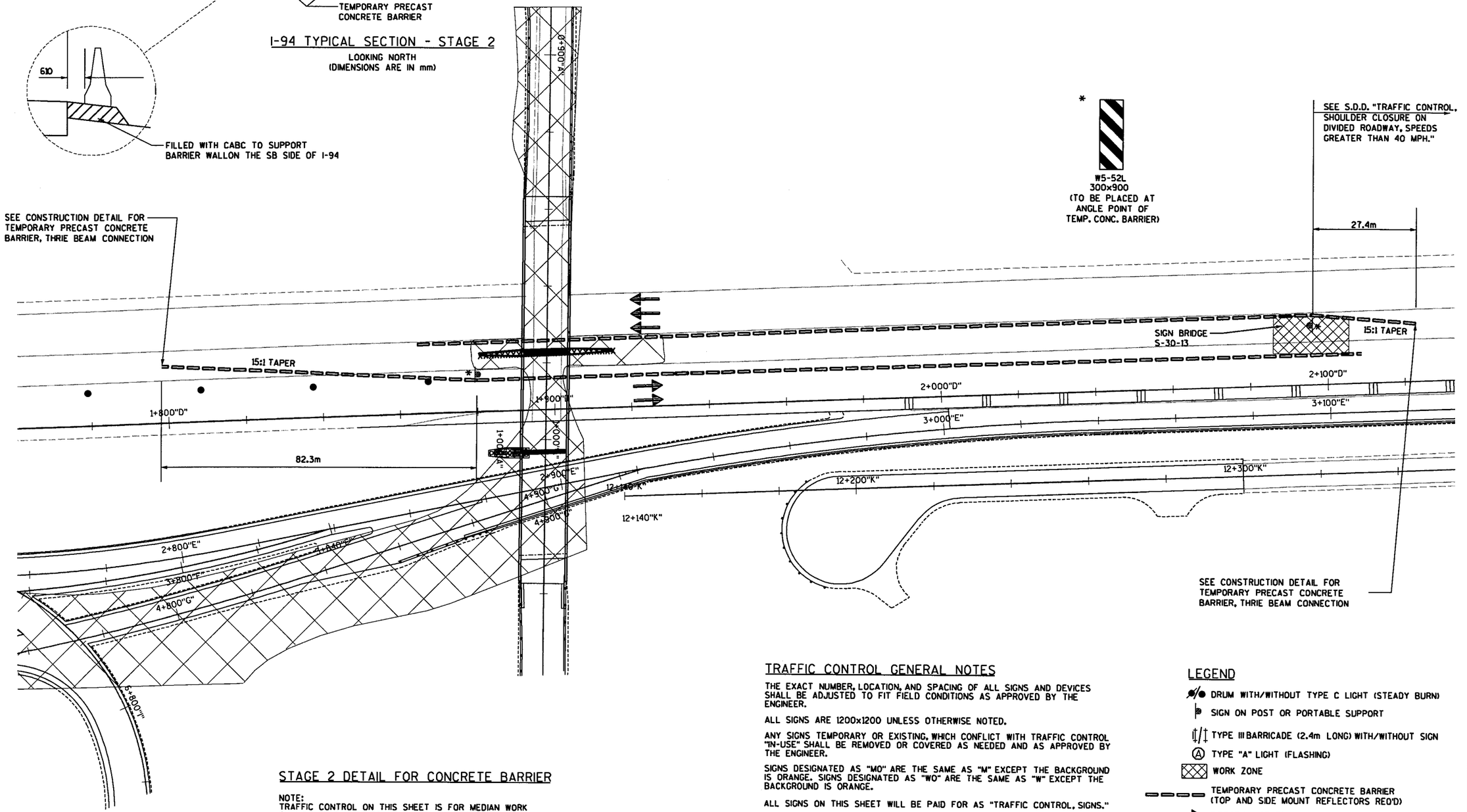
* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 2	SCALE: 1:5000	SHEET NO: 200	M



I-94 TYPICAL SECTION - STAGE 2

LOOKING NORTH
(DIMENSIONS ARE IN mm)



STAGE 2 DETAIL FOR CONCRETE BARRIER

NOTE:
TRAFFIC CONTROL ON THIS SHEET IS FOR MEDIAN WORK ON I-94 NEAR B-30-30 AND SIGN BRIDGE S-30-13. SEE OTHER SHEETS FOR REMAINDER OF STAGE 2 TRAFFIC CONTROL.

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2 MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- TYPE "A" LIGHT (FLASHING)
- WORK ZONE
- TEMPORARY PRECAST CONCRETE BARRIER (TOP AND SIDE MOUNT REFLECTORS REQ'D)
- DIRECTION OF TRAVEL

XXXXX LIMITS OF MEDIAN BARRIER WALL REPLACEMENT

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 2	SCALE: 1:1000	SHEET NO: 201	M

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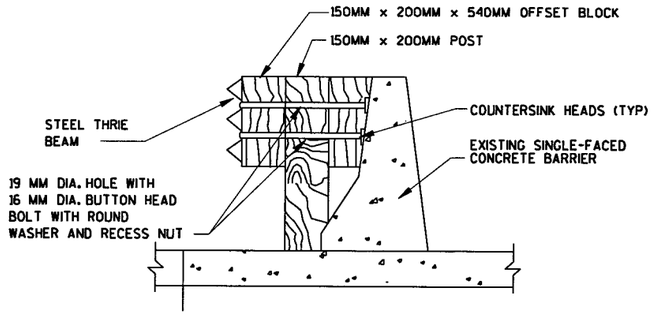
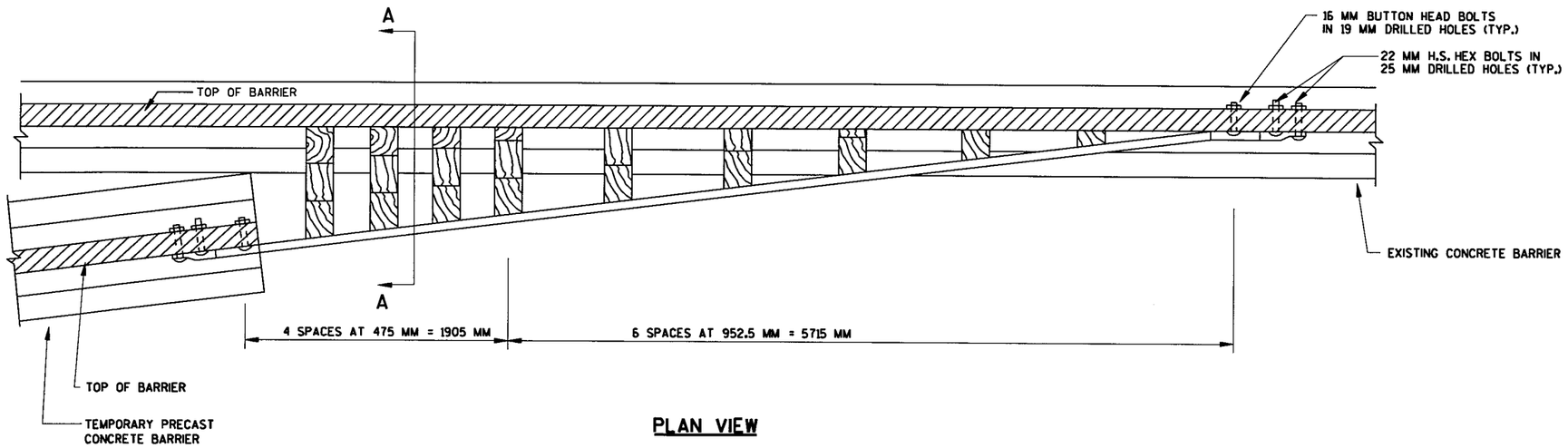


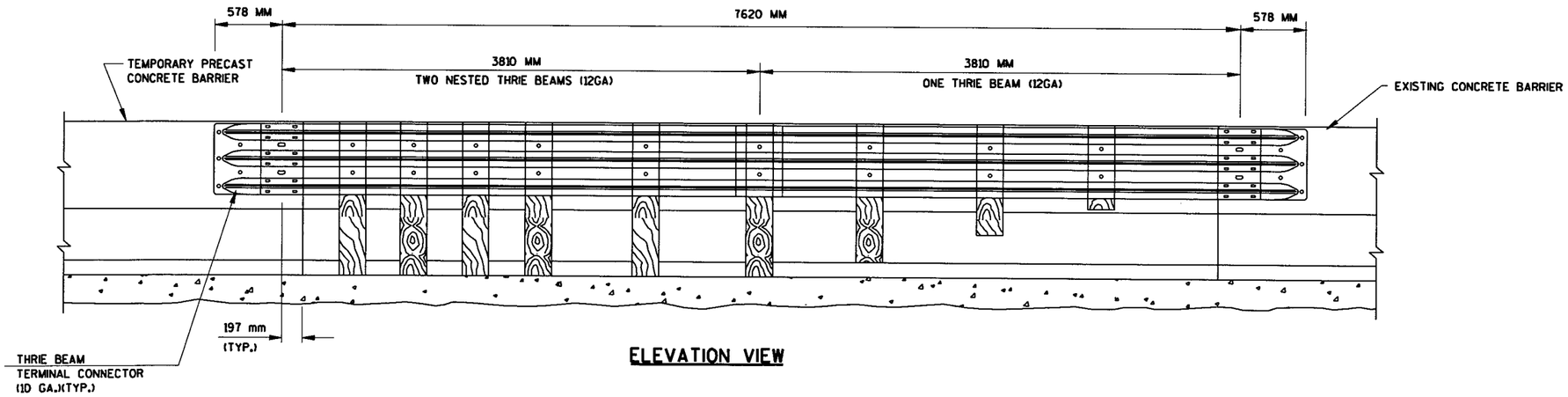
SECTION A-A

NOTES:

1) CUT POSTS TO FIT SHAPE OF BARRIER.
2) PROVIDE POST MATERIAL AS NECESSARY TO COMPLETELY FILL SPACE BETWEEN THRIE BEAM AND BARRIER.
3) DRILL 25 MM DIA. HOLES THRU BARRIER. (FOR CONNECTION OF TERMINAL CONNECTOR TO BARRIER FACE). PAYMENT FOR DRILLING BOLT HOLES THRU THE CONCRETE BARRIER AND ALL BOLTS, NUTS AND WASHERS REQUIRED SHALL BE INCLUDED IN THE ITEM TEMPORARY PRECAST CONCRETE BARRIER, THRIE BEAM CONNECTION.
4) ALL CONSTRUCTION INFORMATION NOT INDICATED ON THIS DETAIL SHALL BE IN ACCORDANCE WITH S.D.D. "STEEL THRIE BEAM STRUCTURE APPROACH."
5) 16 MM DIA BUTTON HEAD AND 22 MM H.S. HEX HEAD BOLT LENGTH VARIES. CONTRACTOR TO PROVIDE APPROPRIATE LENGTH BOLT FOR EACH POST OR CONNECTOR LOCATION.



PLAN VIEW



ELEVATION VIEW

TEMPORARY PRECAST CONCRETE BARRIER, THRIE BEAM CONNECTION

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SCALE: N.T.S.	SHEET NO: 202	M

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LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

WARNING LIGHTS ARE NOT REQUIRED ON DRUMS WHEN THE LANE CLOSURE IS A DAYTIME ONLY OPERATION

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

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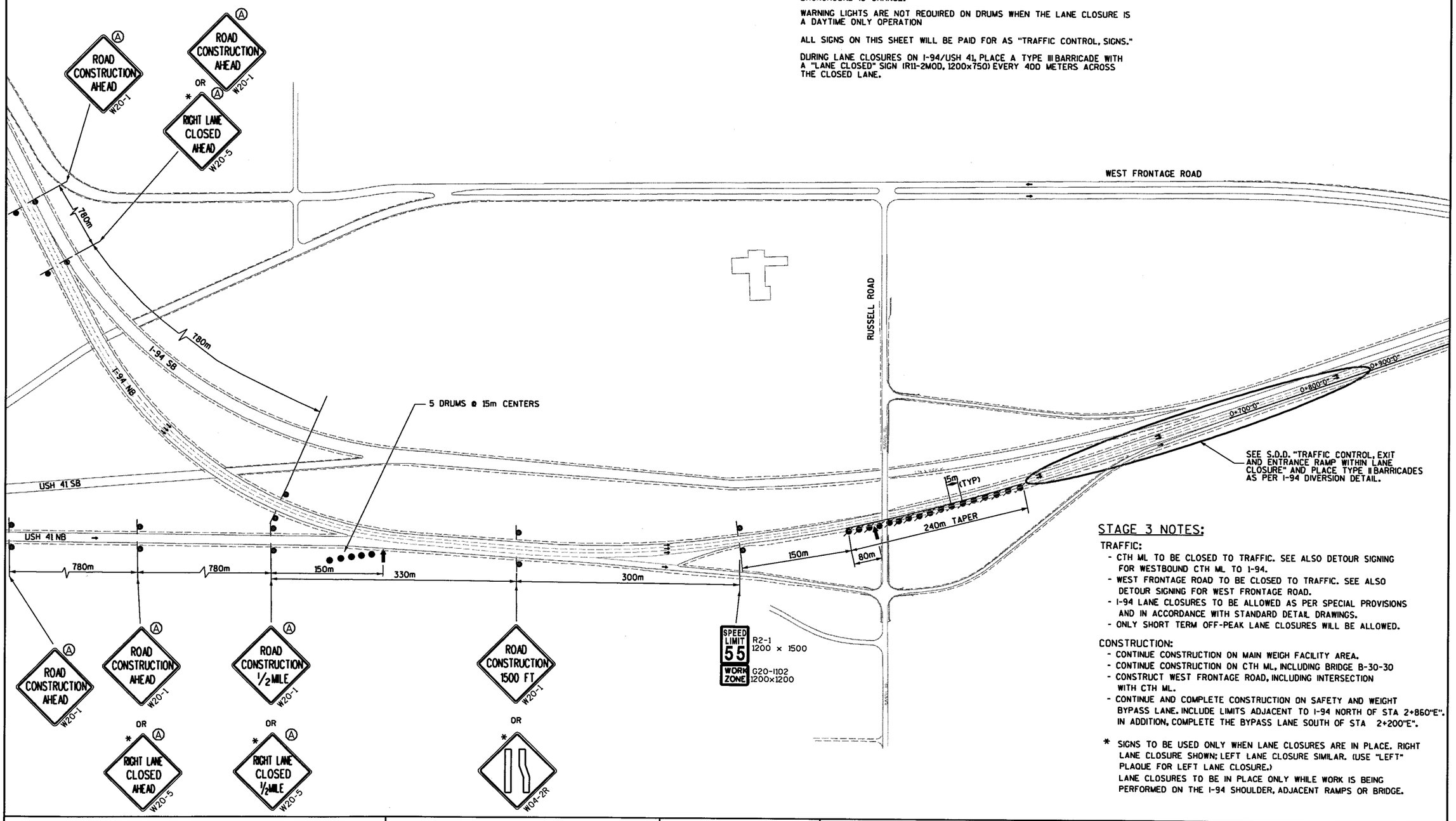

STAGE 3 NOTES:

TRAFFIC:
- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- WEST FRONTAGE ROAD TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WEST FRONTAGE ROAD.
- I-94 LANE CLOSURES TO BE ALLOWED AS PER SPECIAL PROVISIONS AND IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.
- ONLY SHORT TERM OFF-PEAK LANE CLOSURES WILL BE ALLOWED.

CONSTRUCTION:
- CONTINUE CONSTRUCTION ON MAIN WEIGH FACILITY AREA.
- CONTINUE CONSTRUCTION ON CTH ML, INCLUDING BRIDGE B-30-30
- CONSTRUCT WEST FRONTAGE ROAD, INCLUDING INTERSECTION WITH CTH ML.
- CONTINUE AND COMPLETE CONSTRUCTION ON SAFETY AND WEIGHT BYPASS LANE. INCLUDE LIMITS ADJACENT TO I-94 NORTH OF STA 2+860"E". IN ADDITION, COMPLETE THE BYPASS LANE SOUTH OF STA 2+200"E".

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE. RIGHT LANE CLOSURE SHOWN; LEFT LANE CLOSURE SIMILAR. (USE "LEFT" PLAQUE FOR LEFT LANE CLOSURE.)
LANE CLOSURES TO BE IN PLACE ONLY WHILE WORK IS BEING PERFORMED ON THE I-94 SHOULDER, ADJACENT RAMPS OR BRIDGE.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 3	SCALE: 1:5000	SHEET NO: 203	M

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LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

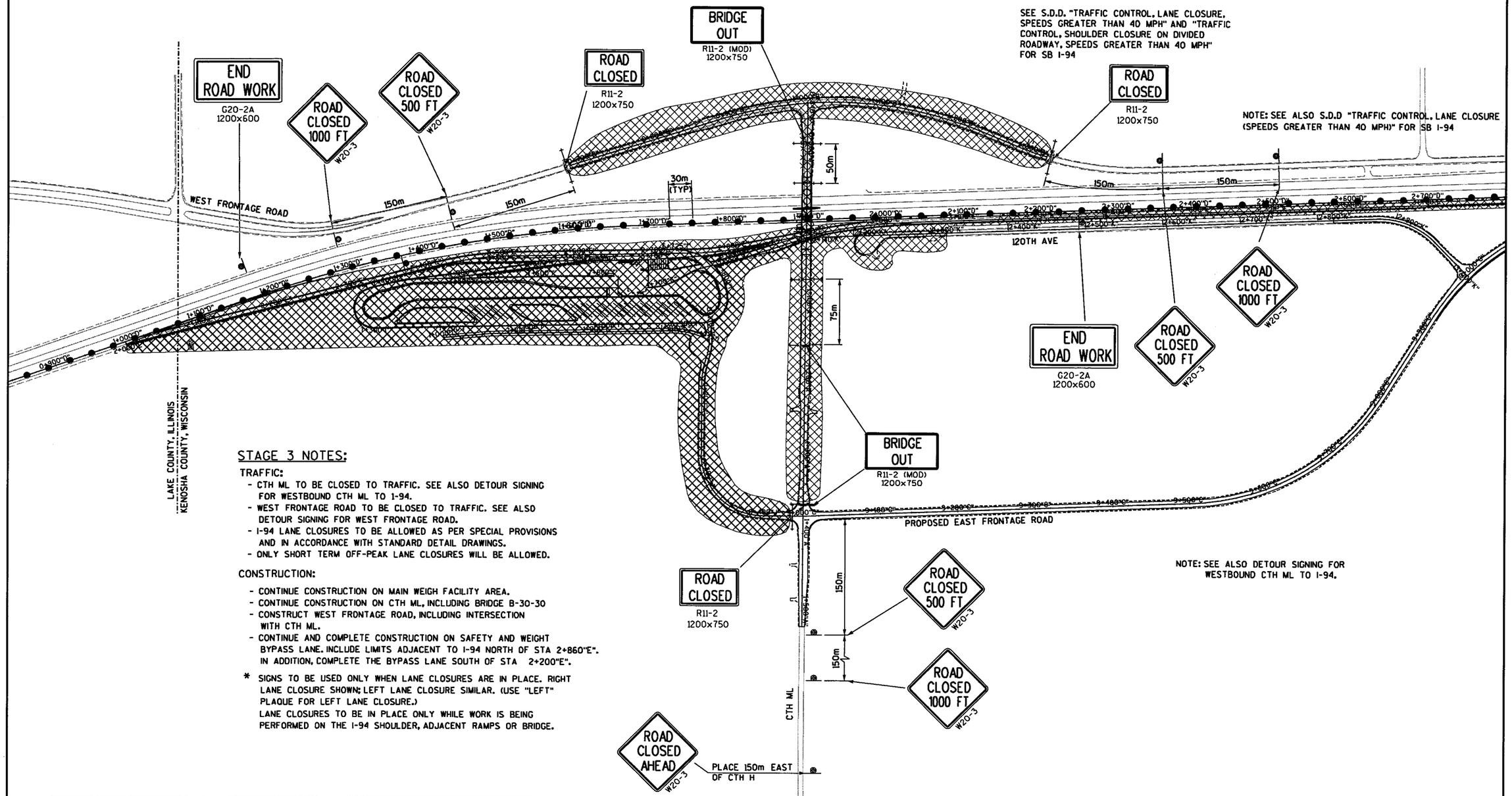
DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N

NOTE: SEE ALSO DETOUR SIGNING FOR WEST FRONTAGE ROAD.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH" AND "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR SB I-94

NOTE: SEE ALSO S.D.D "TRAFFIC CONTROL, LANE CLOSURE (SPEEDS GREATER THAN 40 MPH)" FOR SB I-94



NOTE: SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.

STAGE 3 NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- WEST FRONTAGE ROAD TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WEST FRONTAGE ROAD.
- I-94 LANE CLOSURES TO BE ALLOWED AS PER SPECIAL PROVISIONS AND IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.
- ONLY SHORT TERM OFF-PEAK LANE CLOSURES WILL BE ALLOWED.

CONSTRUCTION:

- CONTINUE CONSTRUCTION ON MAIN WEIGH FACILITY AREA.
- CONTINUE CONSTRUCTION ON CTH ML, INCLUDING BRIDGE B-30-30
- CONSTRUCT WEST FRONTAGE ROAD, INCLUDING INTERSECTION WITH CTH ML.
- CONTINUE AND COMPLETE CONSTRUCTION ON SAFETY AND WEIGHT BYPASS LANE. INCLUDE LIMITS ADJACENT TO I-94 NORTH OF STA 2+860"E". IN ADDITION, COMPLETE THE BYPASS LANE SOUTH OF STA 2+200"E".

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE. RIGHT LANE CLOSURE SHOWN; LEFT LANE CLOSURE SIMILAR. (USE "LEFT" PLAQUE FOR LEFT LANE CLOSURE.)
LANE CLOSURES TO BE IN PLACE ONLY WHILE WORK IS BEING PERFORMED ON THE I-94 SHOULDER, ADJACENT RAMPS OR BRIDGE.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 3	SCALE: 1:5000	SHEET NO: 204	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

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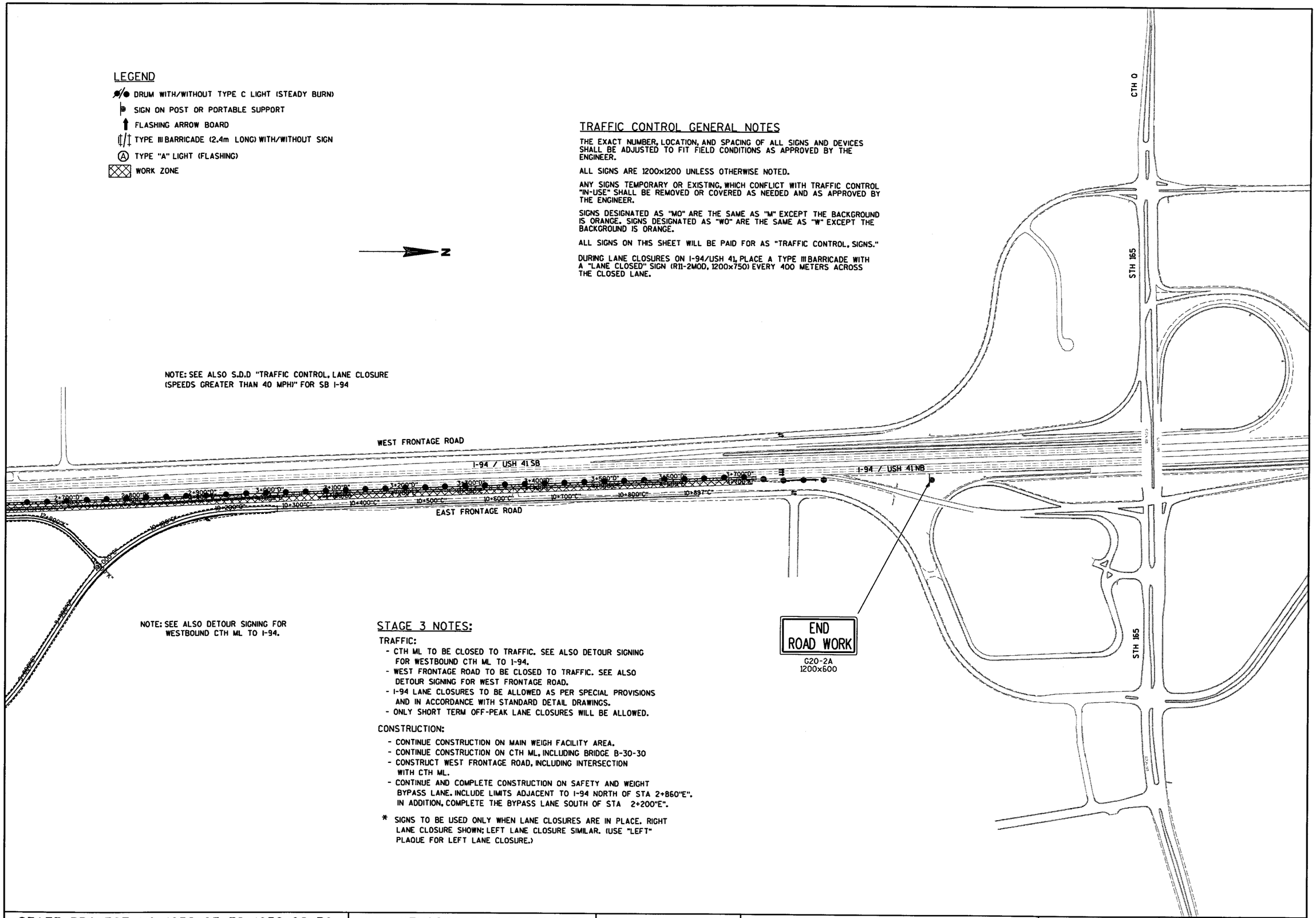
NOTE: SEE ALSO S.D.D "TRAFFIC CONTROL, LANE CLOSURE (SPEEDS GREATER THAN 40 MPH)" FOR SB I-94



NOTE: SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.

STAGE 3 NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- WEST FRONTAGE ROAD TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WEST FRONTAGE ROAD.
- I-94 LANE CLOSURES TO BE ALLOWED AS PER SPECIAL PROVISIONS AND IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.
- ONLY SHORT TERM OFF-PEAK LANE CLOSURES WILL BE ALLOWED.

CONSTRUCTION:

- CONTINUE CONSTRUCTION ON MAIN WEIGH FACILITY AREA.
- CONTINUE CONSTRUCTION ON CTH ML, INCLUDING BRIDGE B-30-30
- CONSTRUCT WEST FRONTAGE ROAD, INCLUDING INTERSECTION WITH CTH ML.
- CONTINUE AND COMPLETE CONSTRUCTION ON SAFETY AND WEIGHT BYPASS LANE. INCLUDE LIMITS ADJACENT TO I-94 NORTH OF STA 2+860"E". IN ADDITION, COMPLETE THE BYPASS LANE SOUTH OF STA 2+200"E".

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE. RIGHT LANE CLOSURE SHOWN; LEFT LANE CLOSURE SIMILAR. (USE "LEFT" PLAQUE FOR LEFT LANE CLOSURE.)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 3	SCALE: 1:5000	SHEET NO: 205	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

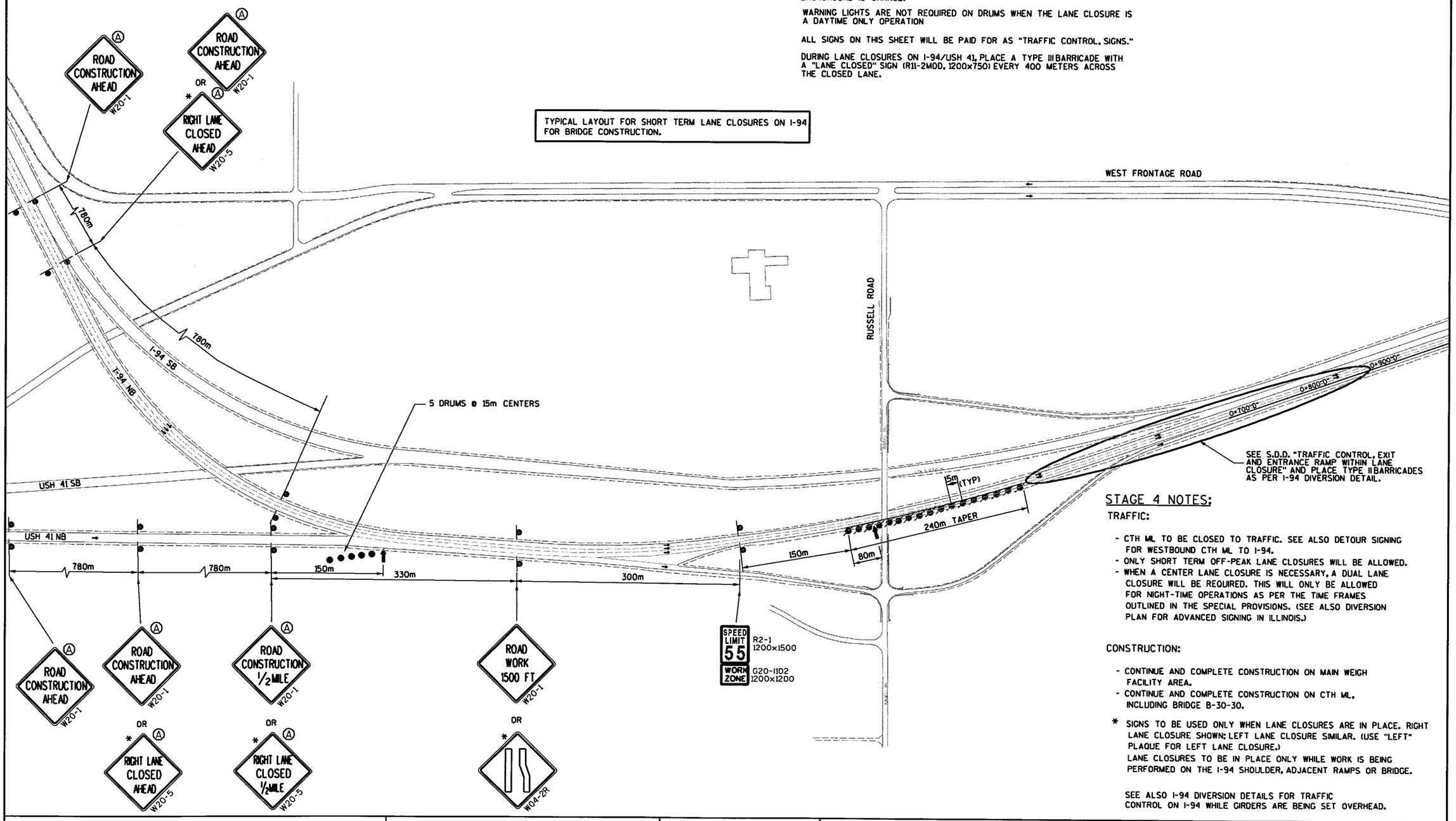
WARNING LIGHTS ARE NOT REQUIRED ON DRUMS WHEN THE LANE CLOSURE IS A DAYTIME ONLY OPERATION

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N

TYPICAL LAYOUT FOR SHORT TERM LANE CLOSURES ON I-94 FOR BRIDGE CONSTRUCTION.



STAGE 4 NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- ONLY SHORT TERM OFF-PEAK LANE CLOSURES WILL BE ALLOWED.
- WHEN A CENTER LANE CLOSURE IS NECESSARY, A DUAL LANE CLOSURE WILL BE REQUIRED. THIS WILL ONLY BE ALLOWED FOR NIGHT-TIME OPERATIONS AS PER THE TIME FRAMES OUTLINED IN THE SPECIAL PROVISIONS. (SEE ALSO DIVERSION PLAN FOR ADVANCED SIGNING IN ILLINOIS.)

CONSTRUCTION:

- CONTINUE AND COMPLETE CONSTRUCTION ON MAIN WEIGH FACILITY AREA.
- CONTINUE AND COMPLETE CONSTRUCTION ON CTH ML, INCLUDING BRIDGE B-30-30.

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE. RIGHT LANE CLOSURE SHOWN; LEFT LANE CLOSURE SIMILAR. (USE "LEFT" PLAQUE FOR LEFT LANE CLOSURE.)
LANE CLOSURES TO BE IN PLACE ONLY WHILE WORK IS BEING PERFORMED ON THE I-94 SHOULDER, ADJACENT RAMPS OR BRIDGE.

SEE ALSO I-94 DIVERSION DETAILS FOR TRAFFIC CONTROL ON I-94 WHILE GIRDERS ARE BEING SET OVERHEAD.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 4	SCALE: 1:5000	SHEET NO: 206	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

WARNING LIGHTS ARE NOT REQUIRED ON DRUMS WHEN THE LANE CLOSURE IS A DAYTIME ONLY OPERATION

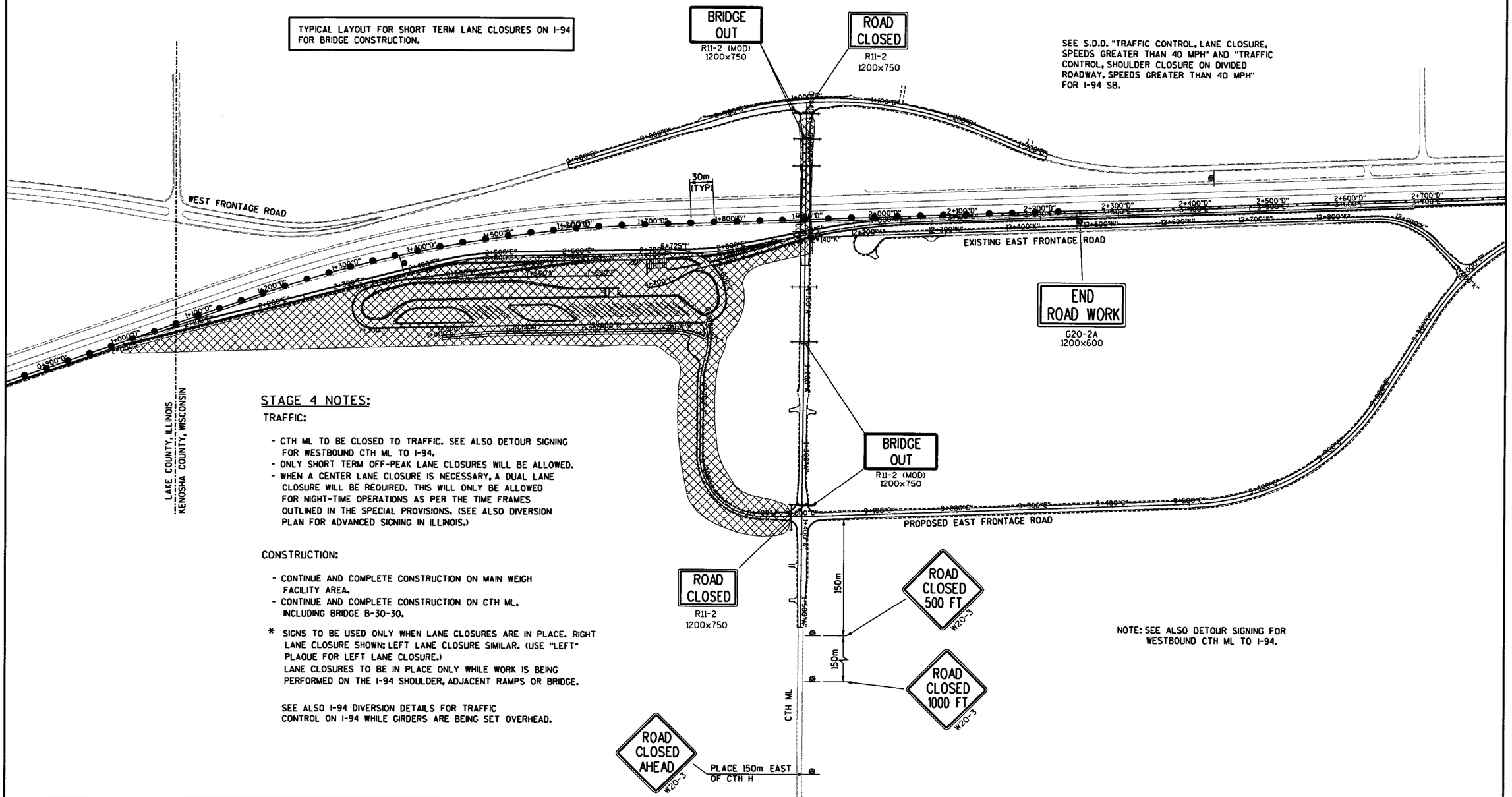
ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

N

TYPICAL LAYOUT FOR SHORT TERM LANE CLOSURES ON I-94 FOR BRIDGE CONSTRUCTION.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH" AND "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR I-94 SB.



STAGE 4 NOTES:

TRAFFIC:

- CTH ML TO BE CLOSED TO TRAFFIC. SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.
- ONLY SHORT TERM OFF-PEAK LANE CLOSURES WILL BE ALLOWED.
- WHEN A CENTER LANE CLOSURE IS NECESSARY, A DUAL LANE CLOSURE WILL BE REQUIRED. THIS WILL ONLY BE ALLOWED FOR NIGHT-TIME OPERATIONS AS PER THE TIME FRAMES OUTLINED IN THE SPECIAL PROVISIONS. (SEE ALSO DIVERSION PLAN FOR ADVANCED SIGNING IN ILLINOIS.)

CONSTRUCTION:

- CONTINUE AND COMPLETE CONSTRUCTION ON MAIN WEIGH FACILITY AREA.
- CONTINUE AND COMPLETE CONSTRUCTION ON CTH ML, INCLUDING BRIDGE B-30-30.

* SIGNS TO BE USED ONLY WHEN LANE CLOSURES ARE IN PLACE. RIGHT LANE CLOSURE SHOWN; LEFT LANE CLOSURE SIMILAR. (USE "LEFT" PLAQUE FOR LEFT LANE CLOSURE.)
LANE CLOSURES TO BE IN PLACE ONLY WHILE WORK IS BEING PERFORMED ON THE I-94 SHOULDER, ADJACENT RAMPS OR BRIDGE.

SEE ALSO I-94 DIVERSION DETAILS FOR TRAFFIC CONTROL ON I-94 WHILE GIRDERS ARE BEING SET OVERHEAD.

NOTE: SEE ALSO DETOUR SIGNING FOR WESTBOUND CTH ML TO I-94.

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 4	SCALE: 1:5000	SHEET NO: 207	M

NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

TRAFFIC CONTROL GENERAL NOTES

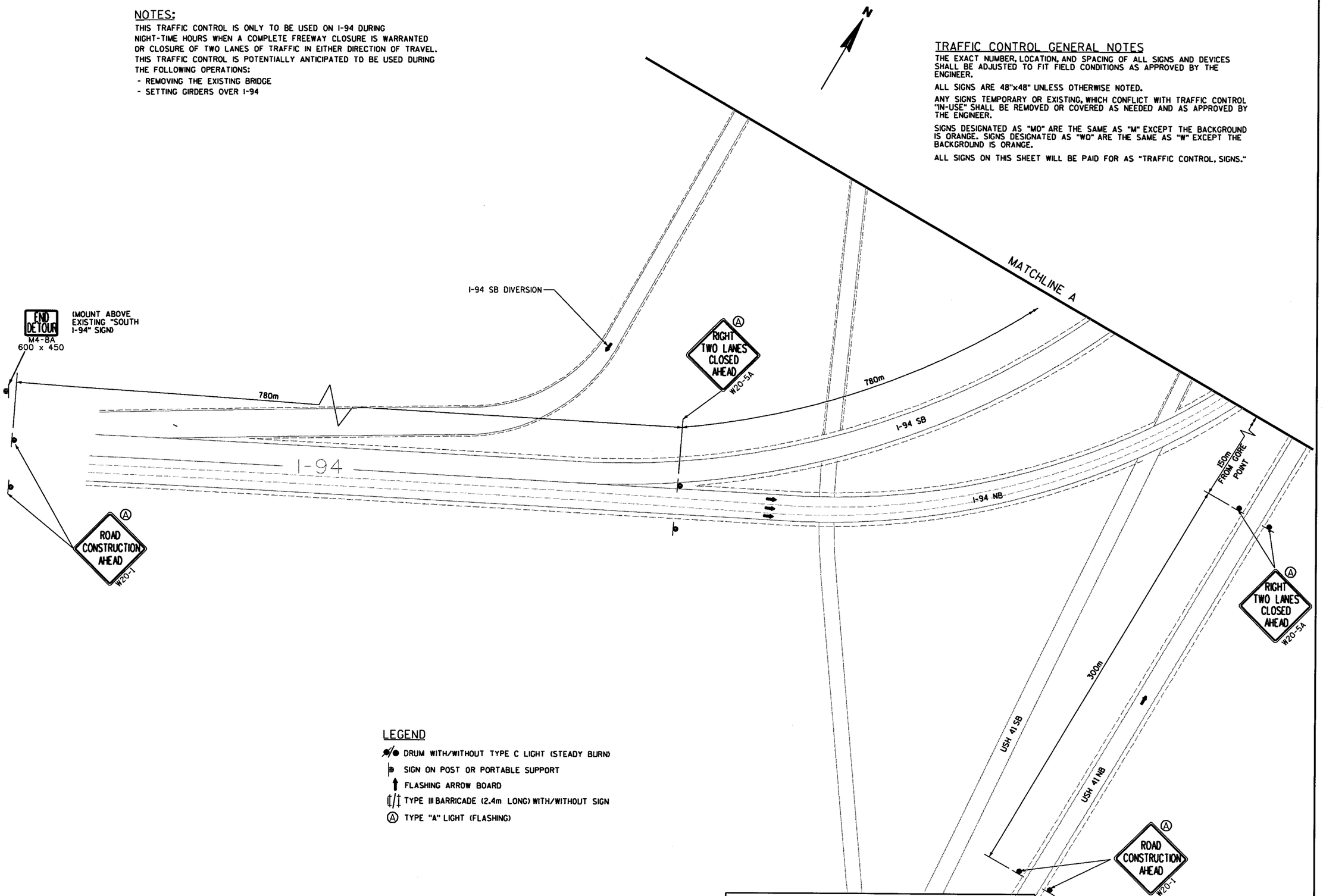
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."



LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)

TRAFFIC CONTROL - I-94 SB DIVERSION
TRAFFIC CONTROL - I-94 NB 2 RT LANES CLOSED

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	SCALE: 1:2500	SHEET NO: 208	M

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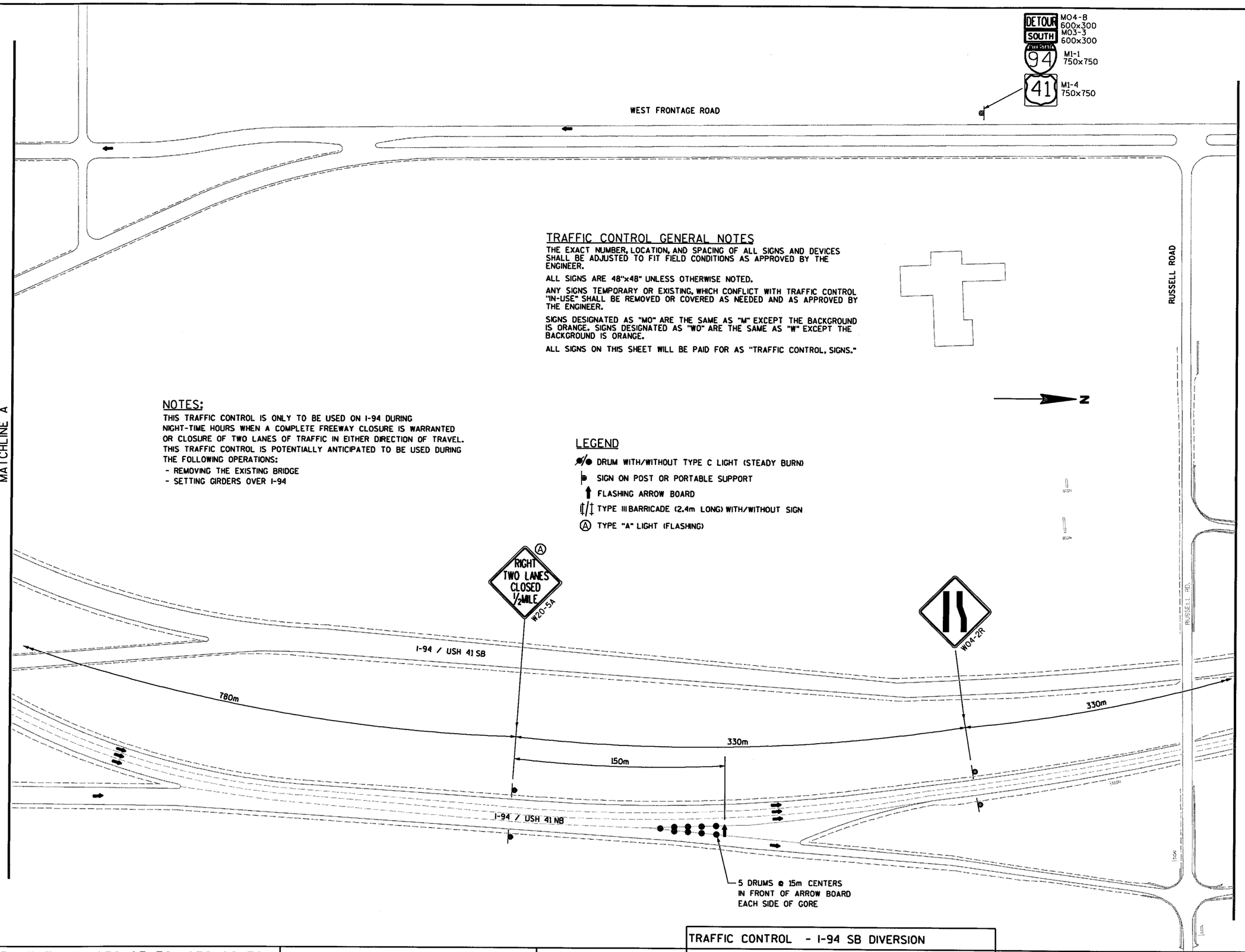

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION TRAFFIC CONTROL - I-94 NB 2 RT LANES CLOSED	SCALE: 1:2500	SHEET NO: 2.09	M

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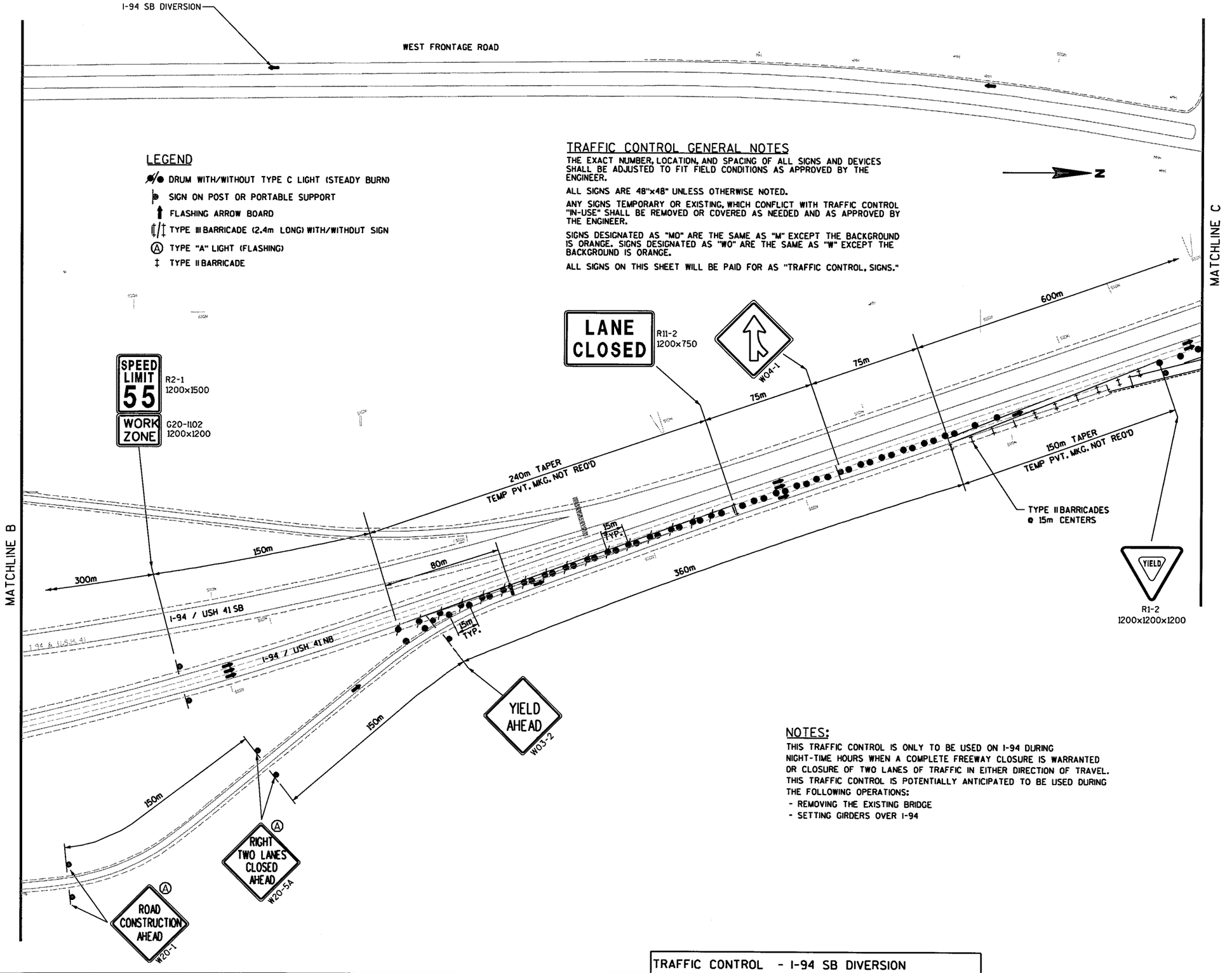

NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION TRAFFIC CONTROL - I-94 NB 2 RT LANES CLOSED	SCALE: 1:2500	SHEET NO: 210 M

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TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

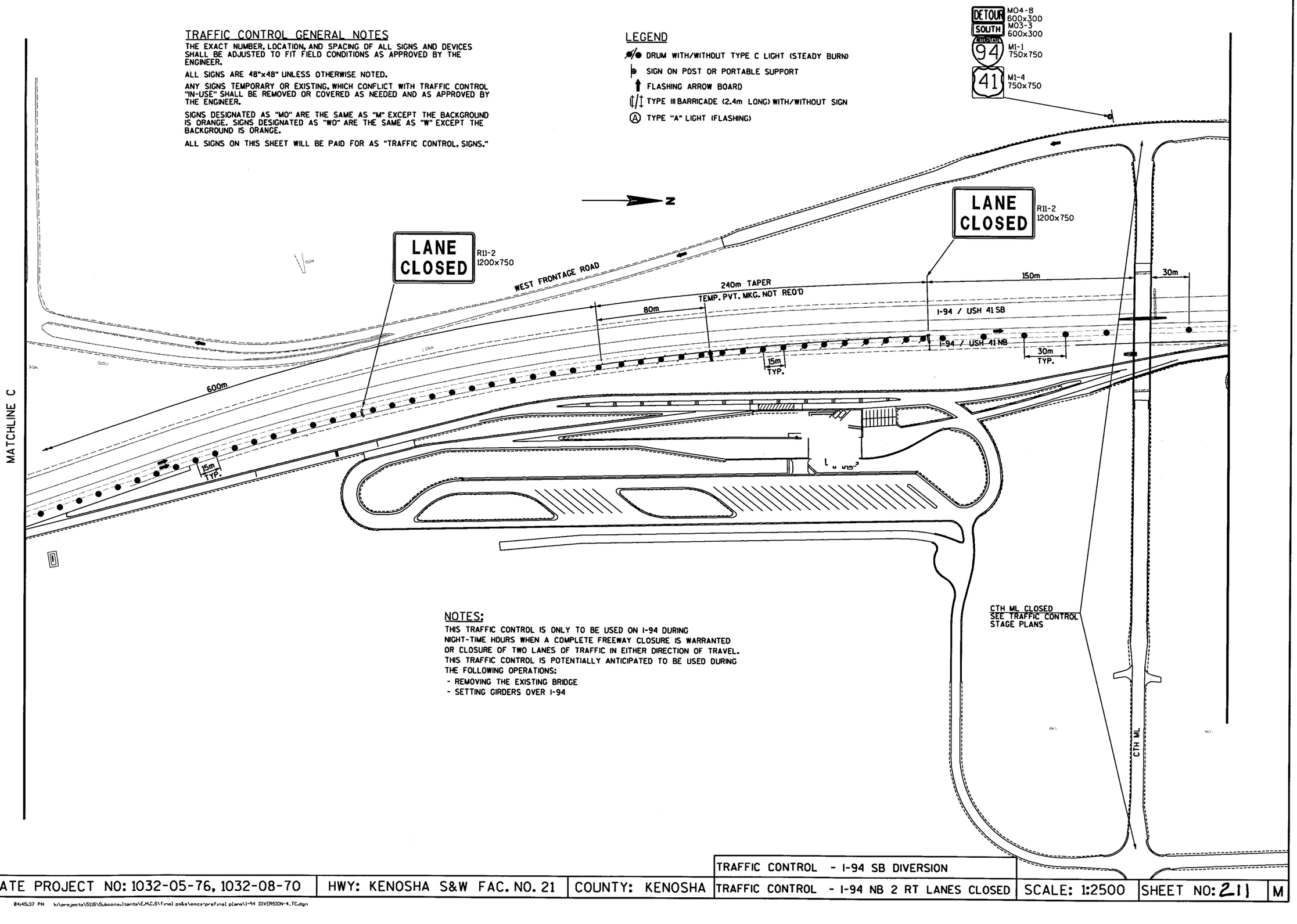
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)



NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION TRAFFIC CONTROL - I-94 NB 2 RT LANES CLOSED	SCALE: 1:2500	SHEET NO: 2.11	M

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LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)

TRAFFIC CONTROL GENERAL NOTES

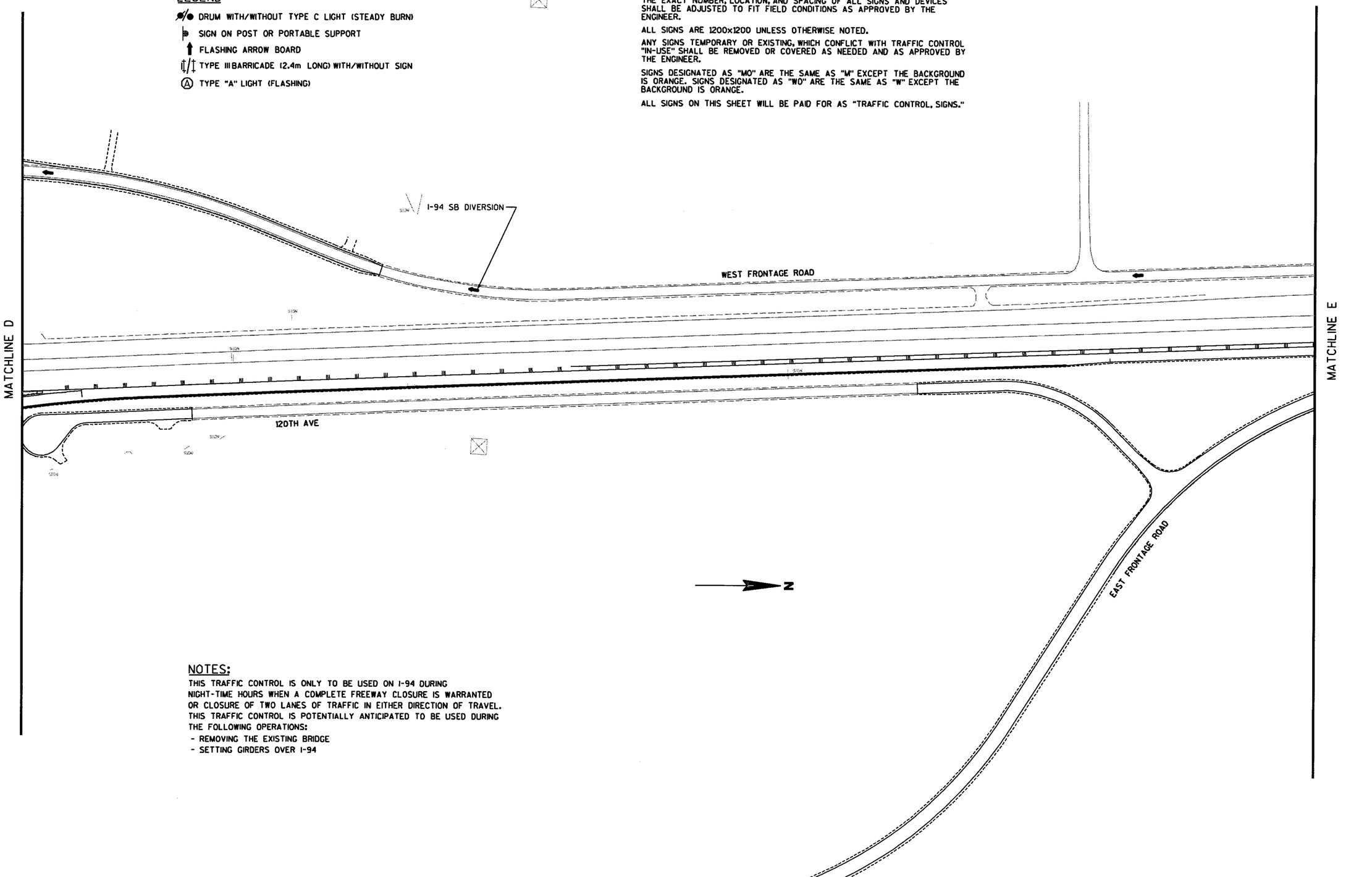
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."



NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

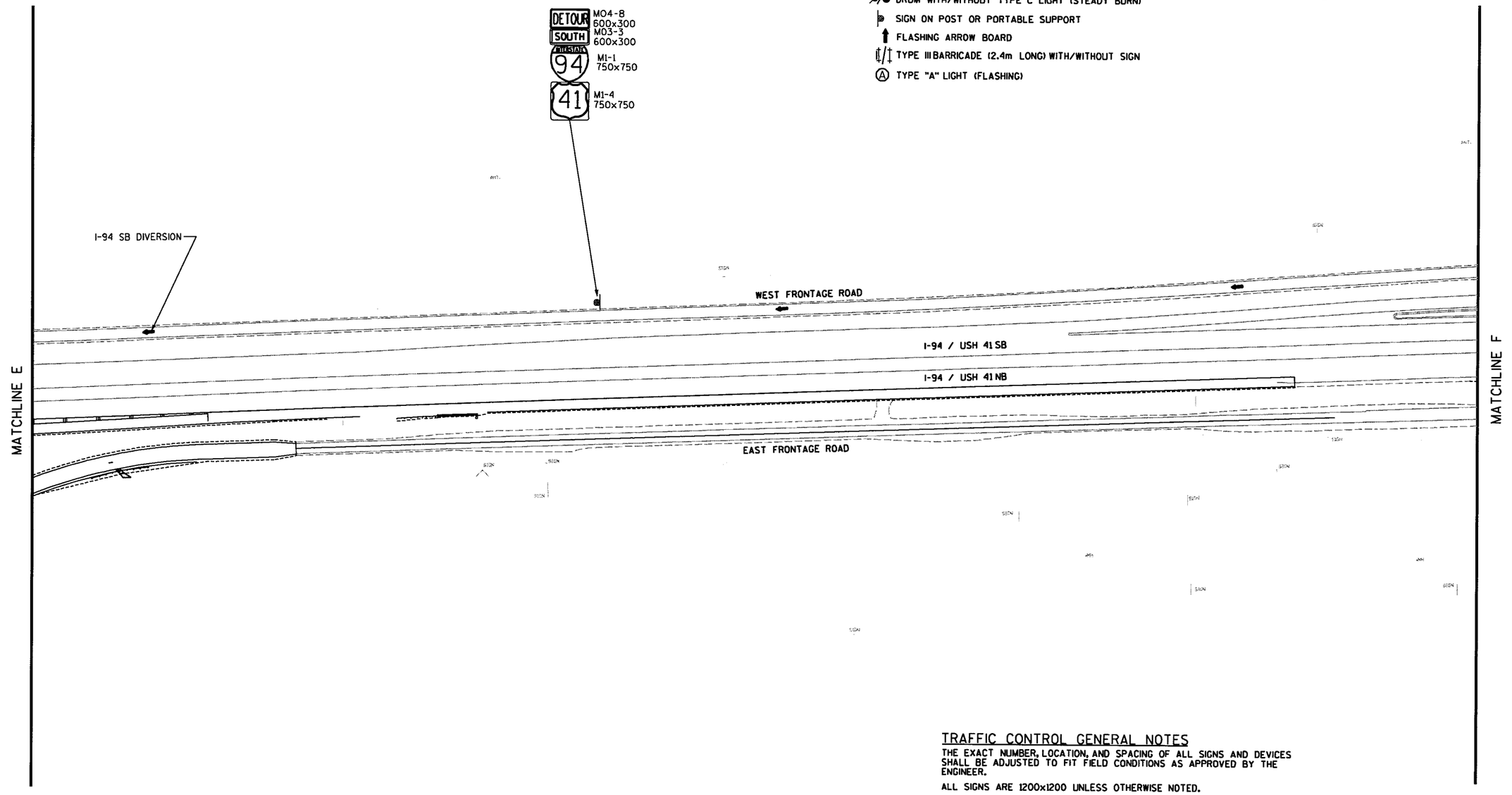
- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION	SCALE: 1:2500	SHEET NO: 2.12	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)

N



NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION	SCALE: 1:2500	SHEET NO: 213	M

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)

TRAFFIC CONTROL GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

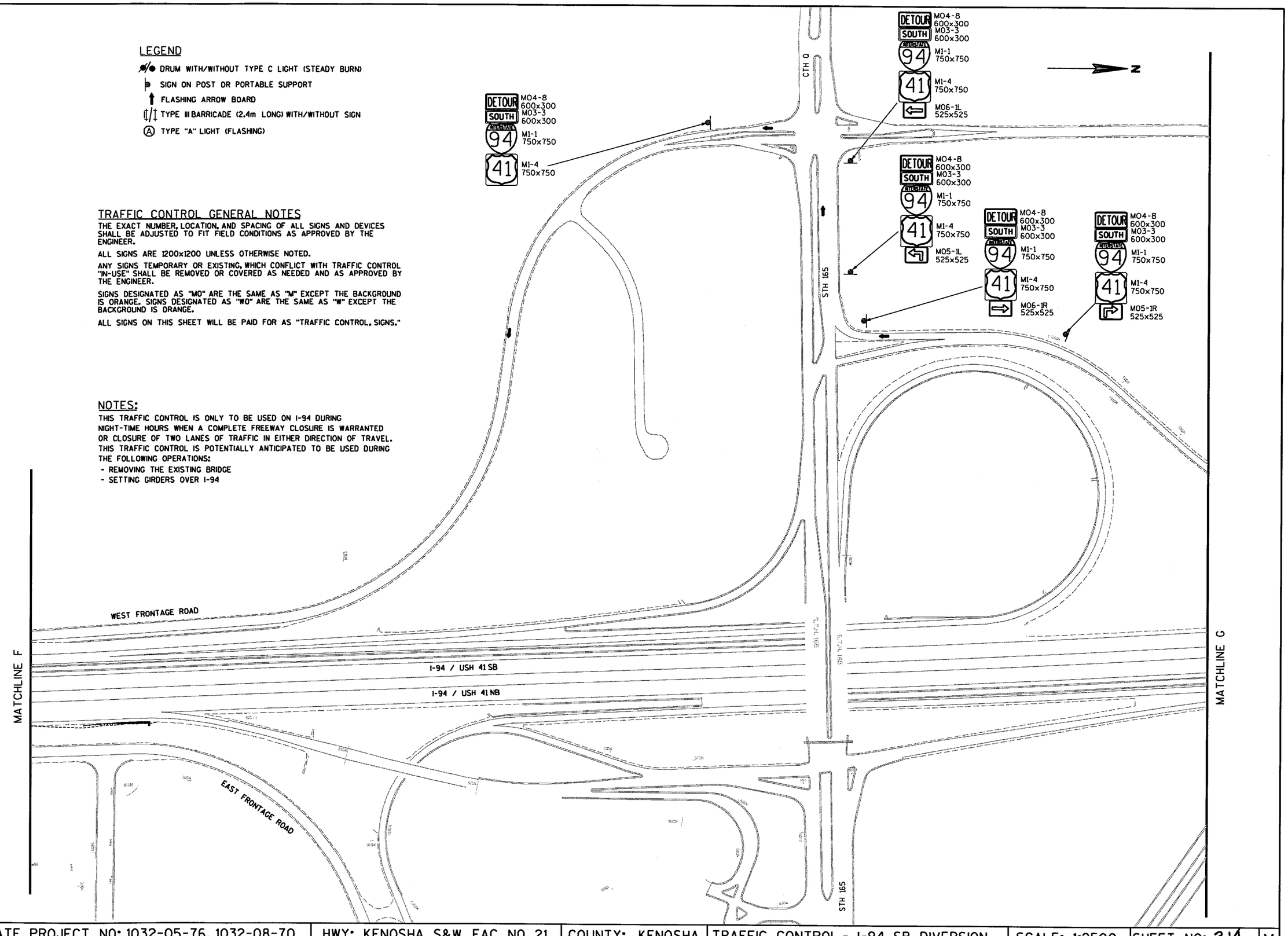
SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS DRANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."

NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION	SCALE: 1:2500	SHEET NO: 214	M

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NOTES:

THIS TRAFFIC CONTROL IS ONLY TO BE USED ON I-94 DURING NIGHT-TIME HOURS WHEN A COMPLETE FREEWAY CLOSURE IS WARRANTED OR CLOSURE OF TWO LANES OF TRAFFIC IN EITHER DIRECTION OF TRAVEL. THIS TRAFFIC CONTROL IS POTENTIALLY ANTICIPATED TO BE USED DURING THE FOLLOWING OPERATIONS:

- REMOVING THE EXISTING BRIDGE
- SETTING GIRDERS OVER I-94

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)

N

TRAFFIC CONTROL GENERAL NOTES

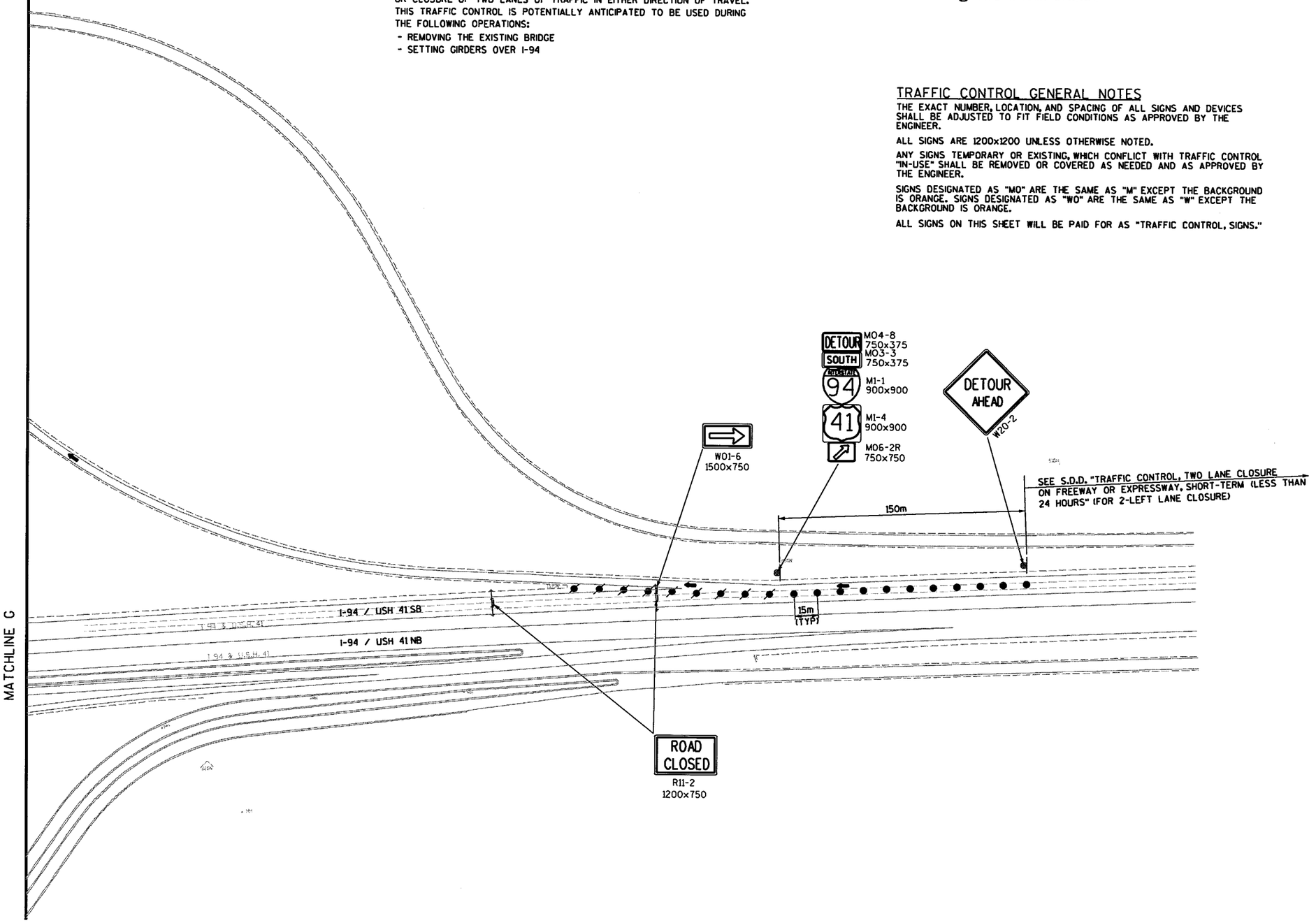
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200x1200 UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, SIGNS."



STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 SB DIVERSION	SCALE: 1:2500	SHEET NO: 215	M

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LEGEND

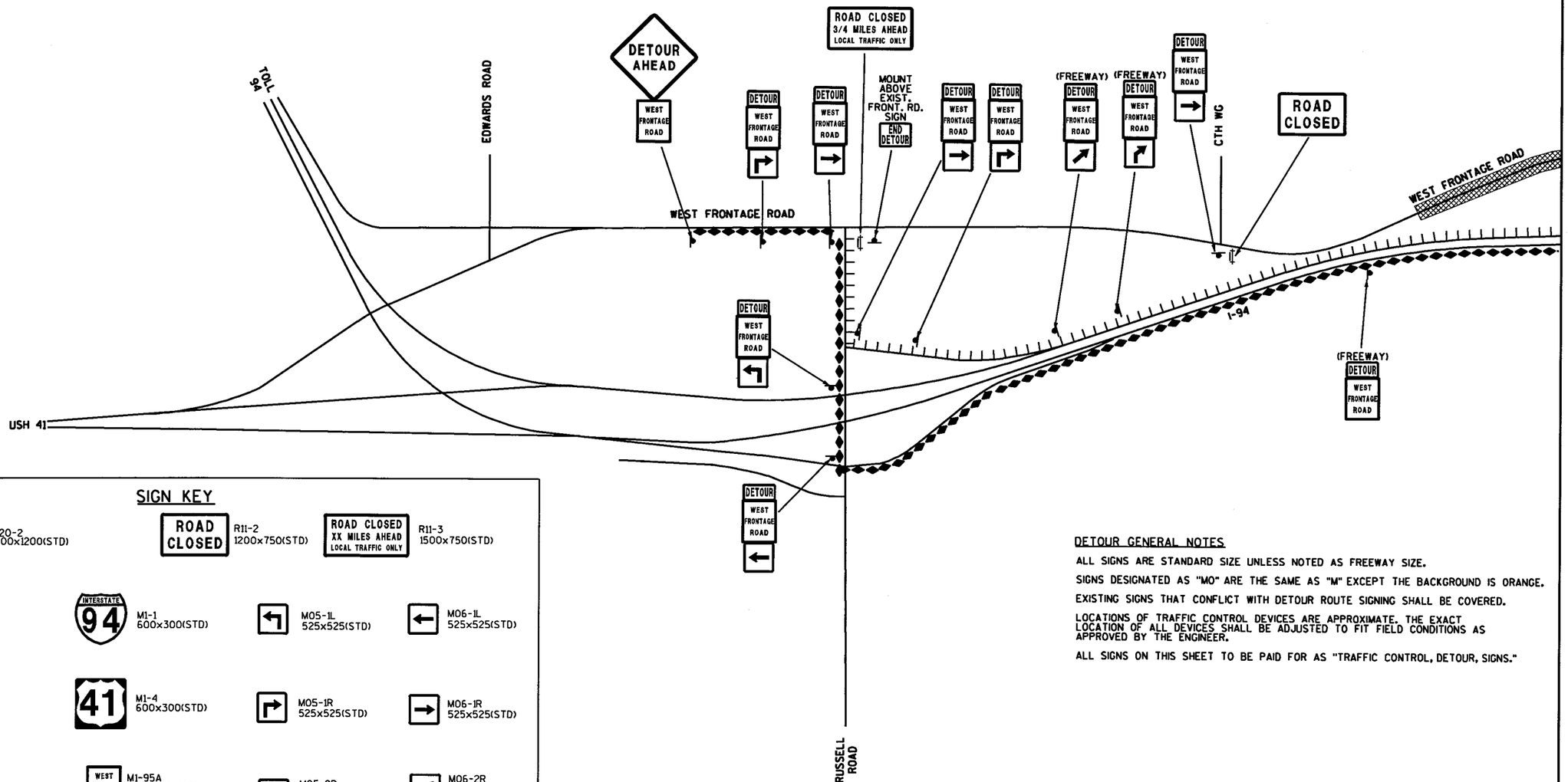
- ●●●●● WEST BOUND CTH ML TO 94/41 ROUTE*
- ◆◆◆◆ NORTHBOUND WEST FRONTAGE ROAD DETOUR ROUTE**
- | | | | | SOUTHBOUND WEST FRONTAGE ROAD DETOUR ROUTE**
- SIGN ON WOOD POST
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A WARNING LIGHTS
- WORK ZONE

*THIS DETOUR ROUTE SHALL BE POSTED AFTER THE NEW EAST FRONTAGE ROAD IS CONSTRUCTED AND DURING CONSTRUCTION OF CTH ML AND THE BRIDGE IN STAGES 2-4.

**THIS DETOUR ROUTE SHALL BE POSTED DURING CONSTRUCTION OF THE WEST FRONTAGE ROAD AND CTH ML INTERSECTION DURING STAGE 4A.

N

NOTE: ADDITIONAL DETOURS MAYBE NECESSARY ON I-94 WHILE REMOVING THE EXISTING BRIDGE OR SETTING GIRDERS ON THE NEW BRIDGE; SEE "I-94 DIVERSION" SHEETS.



SIGN KEY

DETOUR AHEAD W20-2 1200x1200(STD)	ROAD CLOSED R11-2 1200x750(STD)	ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3 1500x750(STD)	
DETOUR M04-8 600x300(STD) 750x375(FWY)	INTERSTATE 94 M1-1 600x300(STD)	M05-1L 525x525(STD)	M06-1L 525x525(STD)
TO M04-5 600x300(STD)	41 M1-4 600x300(STD)	M05-1R 525x525(STD)	M06-1R 525x525(STD)
END DETOUR M4-8A 600x450(STD)	WEST FRONTAGE ROAD M1-95A 600x750(STD) 900x1050(FWY)	M05-2R 525x525(STD) 750x750(FWY)	M06-2R 525x525(STD) 750x750(FWY)

DETOUR GENERAL NOTES

ALL SIGNS ARE STANDARD SIZE UNLESS NOTED AS FREEWAY SIZE.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE.

EXISTING SIGNS THAT CONFLICT WITH DETOUR ROUTE SIGNING SHALL BE COVERED.

LOCATIONS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATION OF ALL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ON THIS SHEET TO BE PAID FOR AS "TRAFFIC CONTROL, DETOUR, SIGNS."

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	DETOUR PLAN - CTH ML & W. FRONT. RD.	SCALE: NTS	SHEET NO: 216	M

SIGN KEY

DETOUR AHEAD — W20-2, 1200x1200(STD)

ROAD CLOSED — R11-2, 1200x750(STD)

ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY — R11-3, 1500x750(STD)

DETOUR — M04-8, 600x300(STD) 750x375(FWY)

INTERSTATE 94 — M1-1, 600x300(STD)

M05-1L, 525x525(STD)

M06-1L, 525x525(STD)

TO — M04-5, 600x300(STD)

41 — M1-4, 600x300(STD)

M05-1R, 525x525(STD)

M06-1R, 525x525(STD)

END DETOUR — M4-8A, 600x450(STD)

WEST FRONTAGE ROAD — M1-95A, 600x750(STD) 900x1050(FWY)

M05-2R, 525x525(STD) 750x750(FWY)

M06-2R, 525x525(STD) 750x750(FWY)

NOTE: ADDITIONAL DETOURS MAYBE NECESSARY ON I-94 WHILE REMOVING THE EXISTING BRIDGE OR SETTING GIRDERS ON THE NEW BRIDGE; SEE "I-94 DIVERSION" SHEETS.

N

ROAD CLOSED 1.5 MILES AHEAD LOCAL TRAFFIC ONLY

DETOUR AHEAD — WEST FRONTAGE ROAD

DETOUR — WEST FRONTAGE ROAD

CTH O

STH 165

END DETOUR — MOUNT ABOVE EXIST. FRONT. RD. SIGN

(FREEWAY) DETOUR — WEST FRONTAGE ROAD

WEST FRONTAGE ROAD

I-94

EAST FRONTAGE ROAD

120TH AVE

108TH AVE

TO INTERSTATE 94 41

CTH ML

*THIS DETOUR ROUTE SHALL BE POSTED AFTER THE NEW EAST FRONTAGE ROAD IS CONSTRUCTED AND DURING CONSTRUCTION OF CTH ML AND THE BRIDGE IN STAGES 2-4.

**THIS DETOUR ROUTE SHALL BE POSTED DURING CONSTRUCTION OF THE WEST FRONTAGE ROAD AND CTH ML INTERSECTION DURING STAGE 4A.

LEGEND

- WEST BOUND CTH ML TO 94/41 ROUTE*
- NORTHBOUND WEST FRONTAGE ROAD DETOUR ROUTE**
- SOUTHBOUND WEST FRONTAGE ROAD DETOUR ROUTE**
- SIGN ON WOOD POST
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A WARNING LIGHTS
- WORK ZONE

DETOUR GENERAL NOTES

ALL SIGNS ARE STANDARD SIZE UNLESS NOTED AS FREEWAY SIZE.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE.

EXISTING SIGNS THAT CONFLICT WITH DETOUR ROUTE SIGNING SHALL BE COVERED.

LOCATIONS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATION OF ALL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ON THIS SHEET TO BE PAID FOR AS "TRAFFIC CONTROL, DETOUR, SIGNS."

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	DETOUR PLAN - CTH ML & W. FRONT. RD.	SCALE: NTS	SHEET NO: 217	M

DATE *TIME* *FILE*

DETOUR GENERAL NOTES

ALL SIGNS ARE STANDARD SIZE UNLESS NOTED AS FREEWAY SIZE.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE.

EXISTING SIGNS THAT CONFLICT WITH DETOUR ROUTE SIGNING SHALL BE COVERED.

LOCATIONS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATION OF ALL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ON THIS SHEET WILL BE PAID FOR AS "TRAFFIC CONTROL, DETOUR, SIGNS."

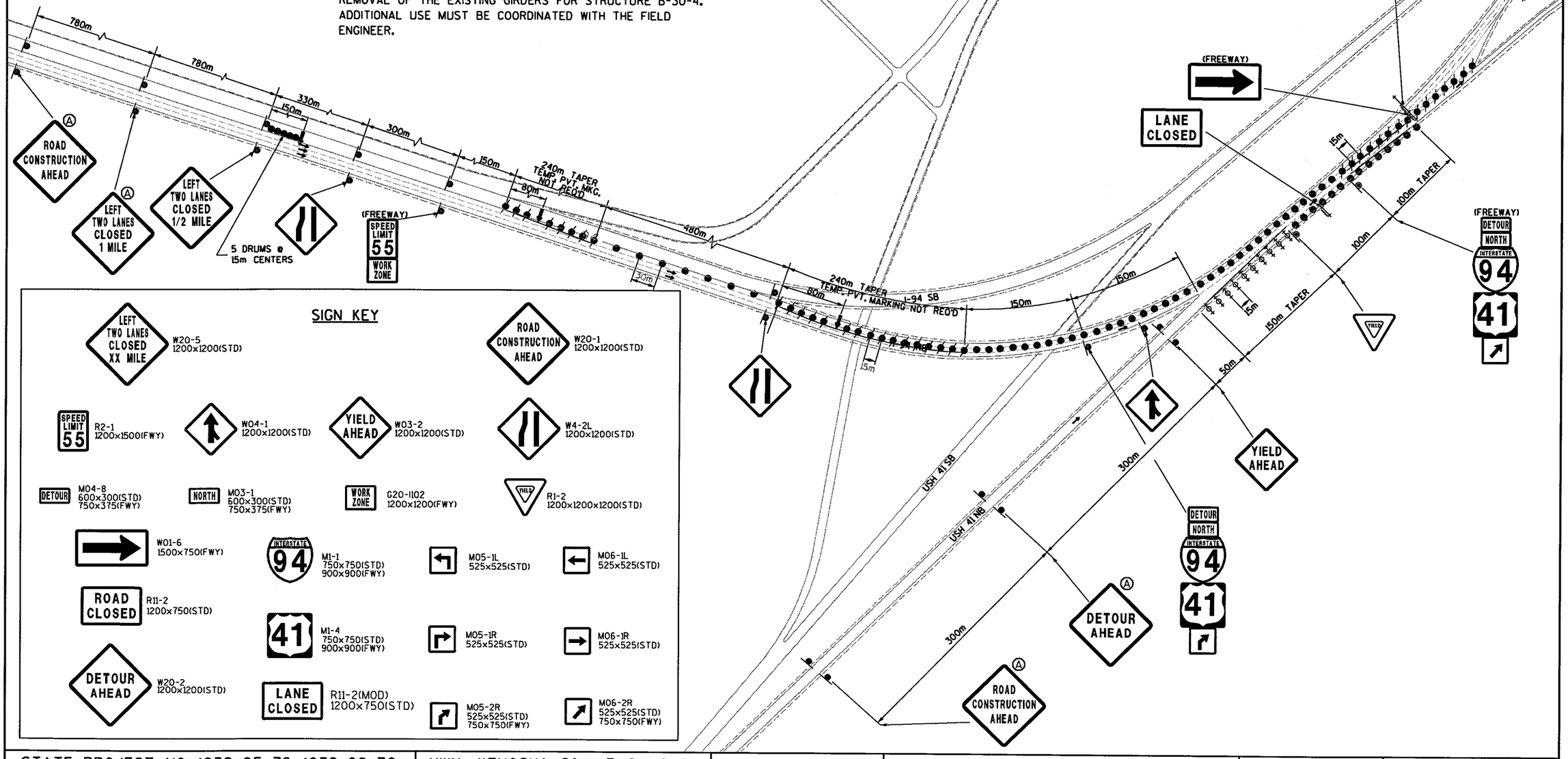
DURING LANE CLOSURES ON I-94/USH 41, PLACE A TYPE III BARRICADE WITH A "LANE CLOSED" SIGN (R11-2MOD, 1200x750) EVERY 400 METERS ACROSS THE CLOSED LANE.

LEGEND

- DRUM WITH/WITHOUT TYPE C LIGHT (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4m LONG) WITH/WITHOUT SIGN
- (A) TYPE "A" LIGHT (FLASHING)
- WORK ZONE
- TYPE II BARRICADE WITH TYPE C LIGHT(STEADY BURN)

CONSTRUCTION NOTES

THIS DETOUR ROUTE WILL ONLY BE USED DURING NIGHT TIME OPERATIONS(SEE SPECIAL PROVISIONS FOR EXACT TIMES). IT IS ANTICIPATED THAT THIS WILL BE REQUIRED DURING THE REMOVAL OF THE EXISTING GIRDERS FOR STRUCTURE B-30-4. ADDITIONAL USE MUST BE COORDINATED WITH THE FIELD ENGINEER.



SIGN KEY

LEFT TWO LANES CLOSED XX MILE	W20-5 1200x1200(STD)	ROAD CONSTRUCTION AHEAD	W20-1 1200x1200(STD)
SPEED LIMIT 55	R2-1 1200x1500(FWY)		W04-1 1200x1200(STD)
YIELD AHEAD	W03-2 1200x1200(STD)		W4-2L 1200x1200(STD)
DETOUR	M04-8 600x300(STD) 750x375(FWY)	NORTH	M03-1 600x300(STD) 750x375(FWY)
WORK ZONE	G20-1102 1200x1200(FWY)	YIELD	R1-2 1200x1200x1200(STD)
	W01-6 1500x750(FWY)	INTERSTATE 94	M1-1 750x750(STD) 900x900(FWY)
			M05-1L 525x525(STD)
			M06-1L 525x525(STD)
ROAD CLOSED	R11-2 1200x750(STD)		
		41	M1-4 750x750(STD) 900x900(FWY)
			M05-1R 525x525(STD)
			M06-1R 525x525(STD)
DETOUR AHEAD	W20-2 1200x1200(STD)		
LANE CLOSED	R11-2(MOD) 1200x750(STD)		
			M05-2R 525x525(STD) 750x750(FWY)
			M06-2R 525x525(STD) 750x750(FWY)

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	TRAFFIC CONTROL - I-94 NB ADV. SIGN	SCALE: 1:5000	SHEET NO: 218	M

DATE *TIME* *FILE*

SIGN KEY

R1-2
1200x1200x1200(STD)

W4-2L
1200x1200(STD)

DETOUR AHEAD
W20-2
1200x1200(STD)

ROAD CLOSED
R11-2
1200x750(STD)

W01-6
1500x750(FWY)

YIELD AHEAD
W03-2
1200x1200(STD)

LEFT TWO LANES CLOSED XX MILE
W20-5
1200x1200(STD)

DETOUR
M04-8
600x300(STD)
750x375(FWY)

INTERSTATE 94
M1-1
750x750(STD)
900x900(FWY)

M05-1L
525x525(STD)

M06-1L
525x525(STD)

W04-1
1200x1200(STD)

NORTH
M03-1
600x300(STD)
750x375(FWY)

41
M1-4
750x750(STD)
900x900(FWY)

M05-1R
525x525(STD)

M06-1R
525x525(STD)

SPEED LIMIT 55
R2-1
1200x1500(FWY)

ROAD CONSTRUCTION AHEAD
W20-1
1200x1200(STD)

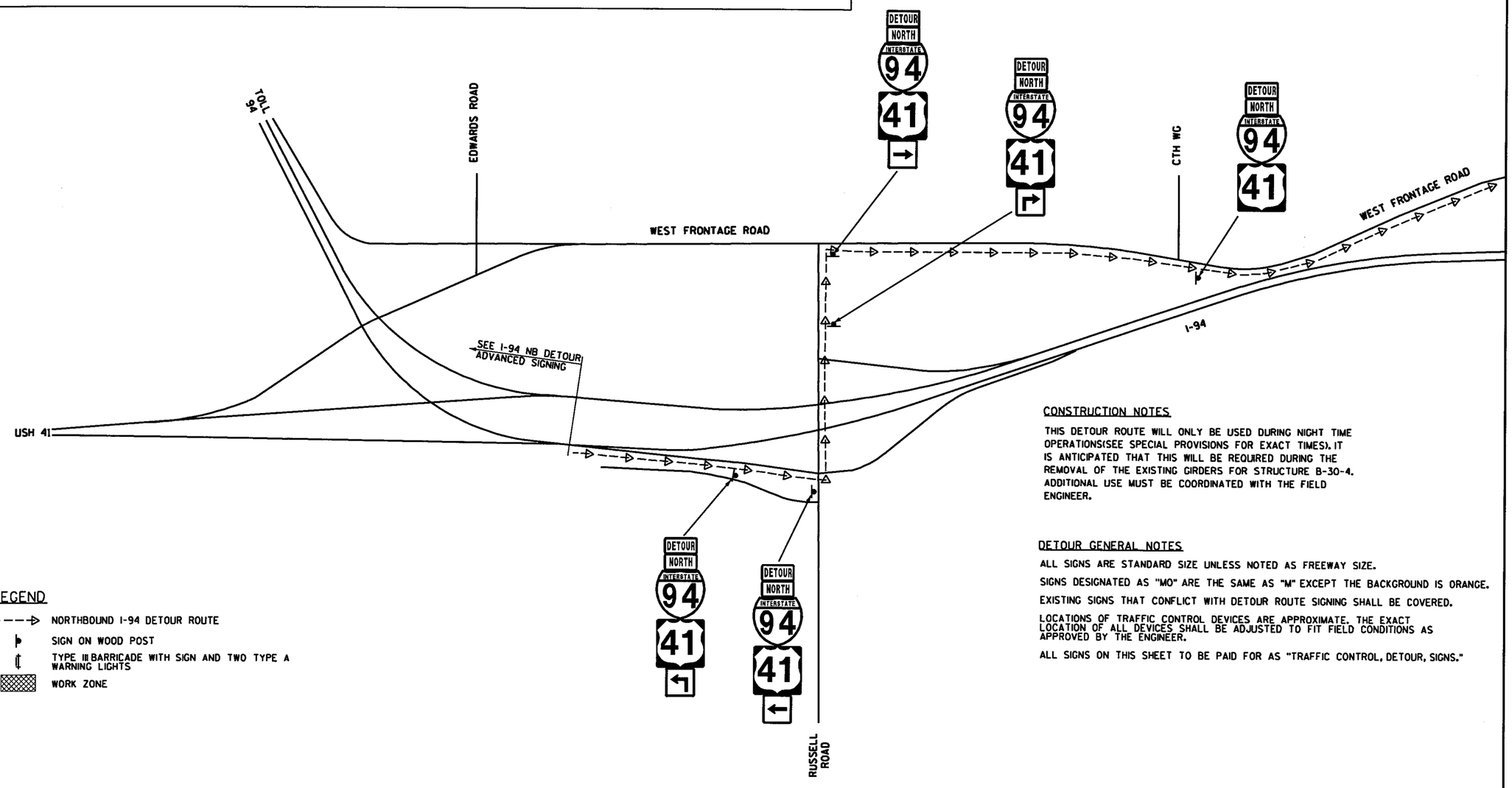
WORK ZONE
G20-1102
1200x1200(FWY)

LANE CLOSED
R11-2(MOD)
1200x750(STD)

M05-2R
525x525(STD)
750x750(FWY)

M06-2R
525x525(STD)
750x750(FWY)

N



CONSTRUCTION NOTES

THIS DETOUR ROUTE WILL ONLY BE USED DURING NIGHT TIME OPERATIONS(SEE SPECIAL PROVISIONS FOR EXACT TIMES). IT IS ANTICIPATED THAT THIS WILL BE REQUIRED DURING THE REMOVAL OF THE EXISTING GIRDERS FOR STRUCTURE B-30-4. ADDITIONAL USE MUST BE COORDINATED WITH THE FIELD ENGINEER.

DETOUR GENERAL NOTES

ALL SIGNS ARE STANDARD SIZE UNLESS NOTED AS FREEWAY SIZE.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE.

EXISTING SIGNS THAT CONFLICT WITH DETOUR ROUTE SIGNING SHALL BE COVERED.

LOCATIONS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATION OF ALL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ON THIS SHEET TO BE PAID FOR AS "TRAFFIC CONTROL, DETOUR, SIGNS."

LEGEND

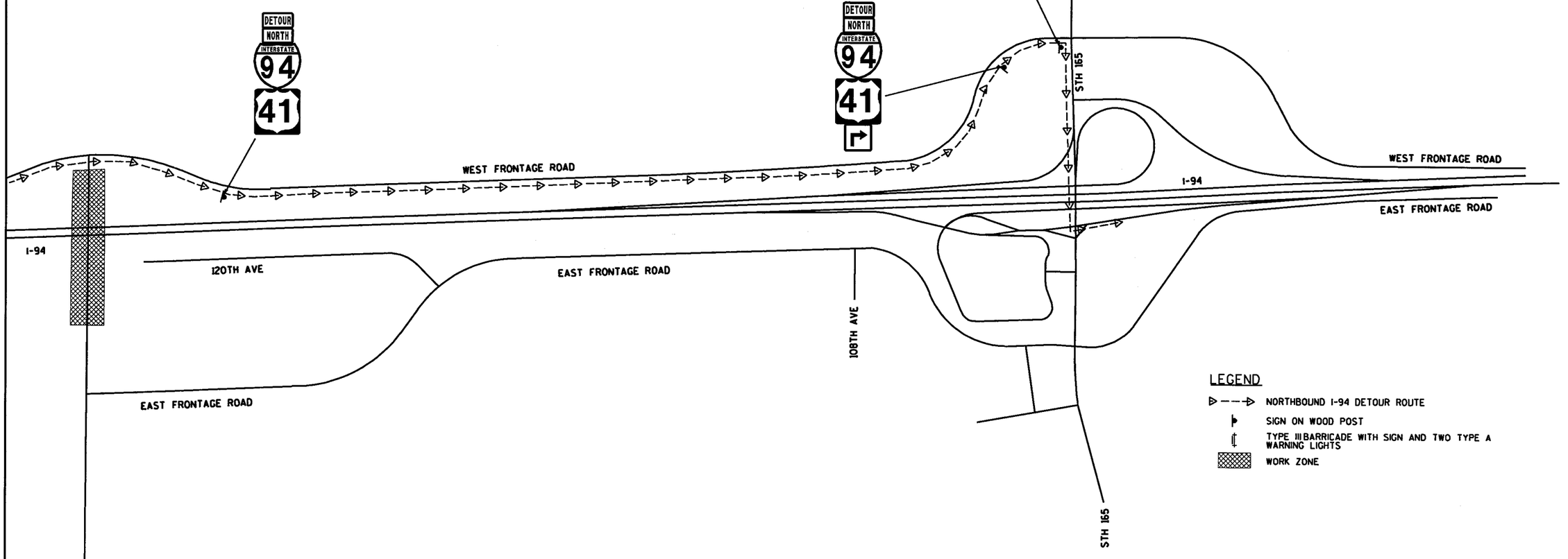
- NORTHBOUND I-94 DETOUR ROUTE
- SIGN ON WOOD POST
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A WARNING LIGHTS
- WORK ZONE

STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	DETOUR PLAN - I-94 NB	SCALE: NTS	SHEET NO: 219	M

DATE *TIME* *FILE*

SIGN KEY

R1-2 1200x1200x1200(STD)	W4-2L 1200x1200(STD)	DETOUR AHEAD W20-2 1200x1200(STD)		ROAD CLOSED R11-2 1200x750(STD)		W01-6 1500x750(FWY)	
YIELD AHEAD W03-2 1200x1200(STD)	LEFT TWO LANES CLOSED XX MILE W20-5 1200x1200(STD)	DETOUR M04-8 600x300(STD) 750x375(FWY)		M1-1 750x750(STD) 900x900(FWY)	M05-1L 525x525(STD)		M06-1L 525x525(STD)
W04-1 1200x1200(STD)		NORTH M03-1 600x300(STD) 750x375(FWY)		M1-4 750x750(STD) 900x900(FWY)	M05-1R 525x525(STD)		M06-1R 525x525(STD)
SPEED LIMIT 55 R2-1 1200x1500(FWY)	ROAD CONSTRUCTION AHEAD W20-1 1200x1200(STD)	WORK ZONE G20-1102 1200x1200(FWY)		LANE CLOSED R11-2(MOD) 1200x750(STD)	M05-2R 525x525(STD) 750x750(FWY)		M06-2R 525x525(STD) 750x750(FWY)



LEGEND

- NORTHBOUND I-94 DETOUR ROUTE
- SIGN ON WOOD POST
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A WARNING LIGHTS
- WORK ZONE

CONSTRUCTION NOTES

THIS DETOUR ROUTE WILL ONLY BE USED DURING NIGHT TIME OPERATIONS(SEE SPECIAL PROVISIONS FOR EXACT TIMES). IT IS ANTICIPATED THAT THIS WILL BE REQUIRED DURING THE REMOVAL OF THE EXISTING GIRDERS FOR STRUCTURE B-30-4. ADDITIONAL USE MUST BE COORDINATED WITH THE FIELD ENGINEER.

DETOUR GENERAL NOTES

ALL SIGNS ARE STANDARD SIZE UNLESS NOTED AS FREEWAY SIZE.

SIGNS DESIGNATED AS "MO" ARE THE SAME AS "M" EXCEPT THE BACKGROUND IS ORANGE.

EXISTING SIGNS THAT CONFLICT WITH DETOUR ROUTE SIGNING SHALL BE COVERED.

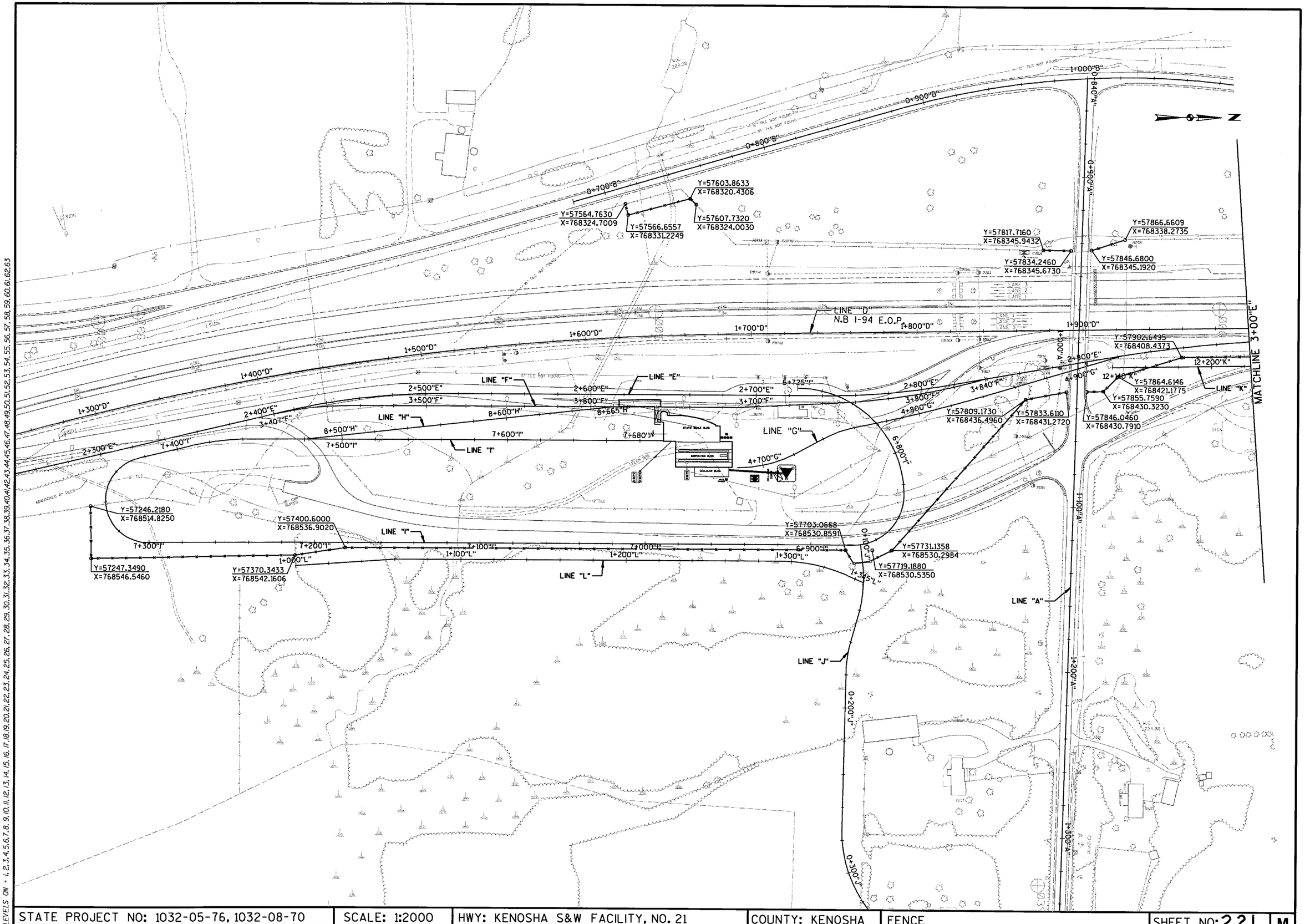
LOCATIONS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATION OF ALL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ON THIS SHEET TO BE PAID FOR AS "TRAFFIC CONTROL, DETOUR, SIGNS."

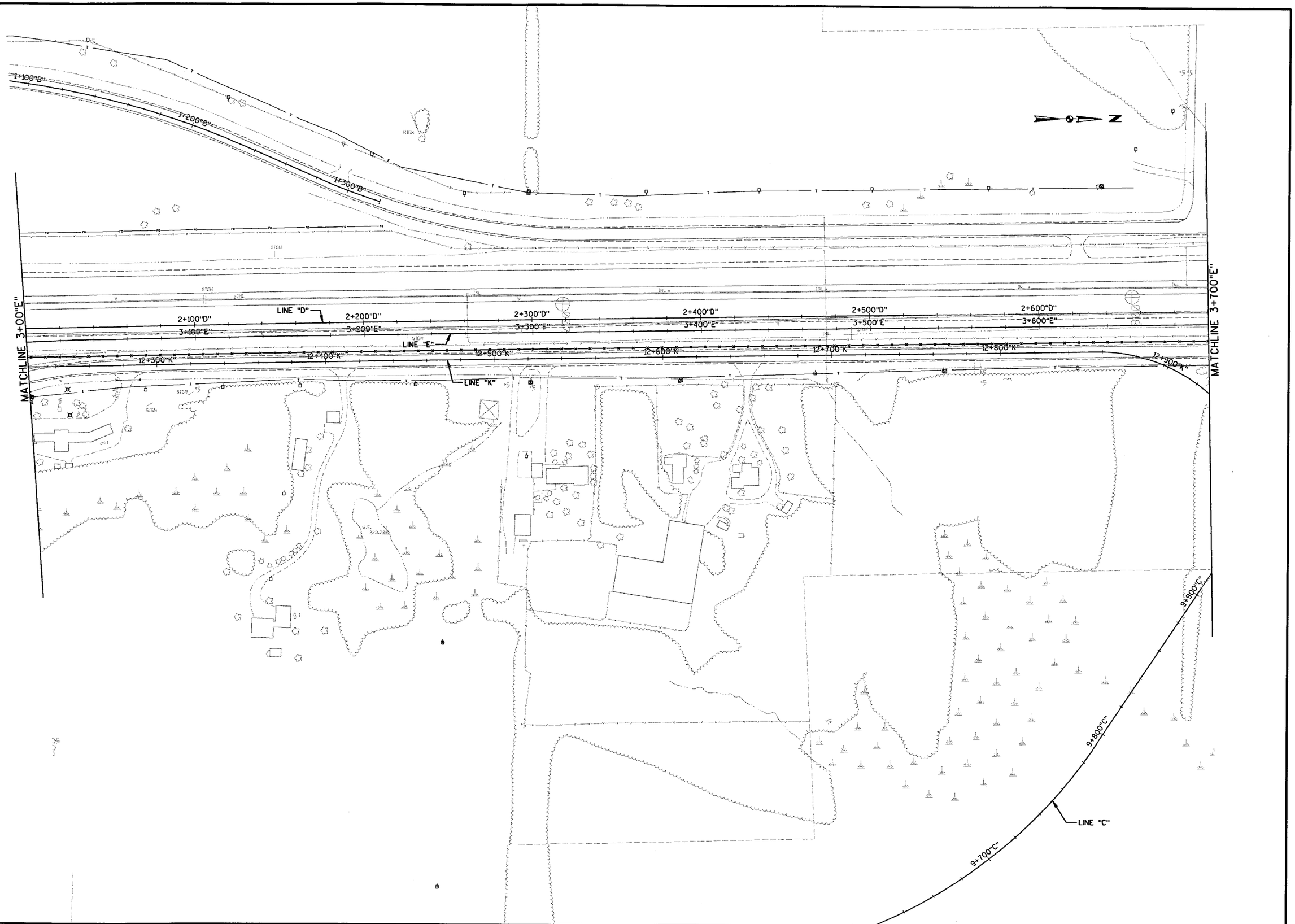
STATE PROJECT NO: 1032-05-76, 1032-08-70	HWY: KENOSHA S&W FAC. NO. 21	COUNTY: KENOSHA	DETOUR PLAN - I-94 NB	SCALE: NTS	SHEET NO: 2.20	M

DATE *TIME* *FILE*

FILE NAME: PROJECTS/2940/PLANS/GEN/2940FENCE01.DGN 09-13-01
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

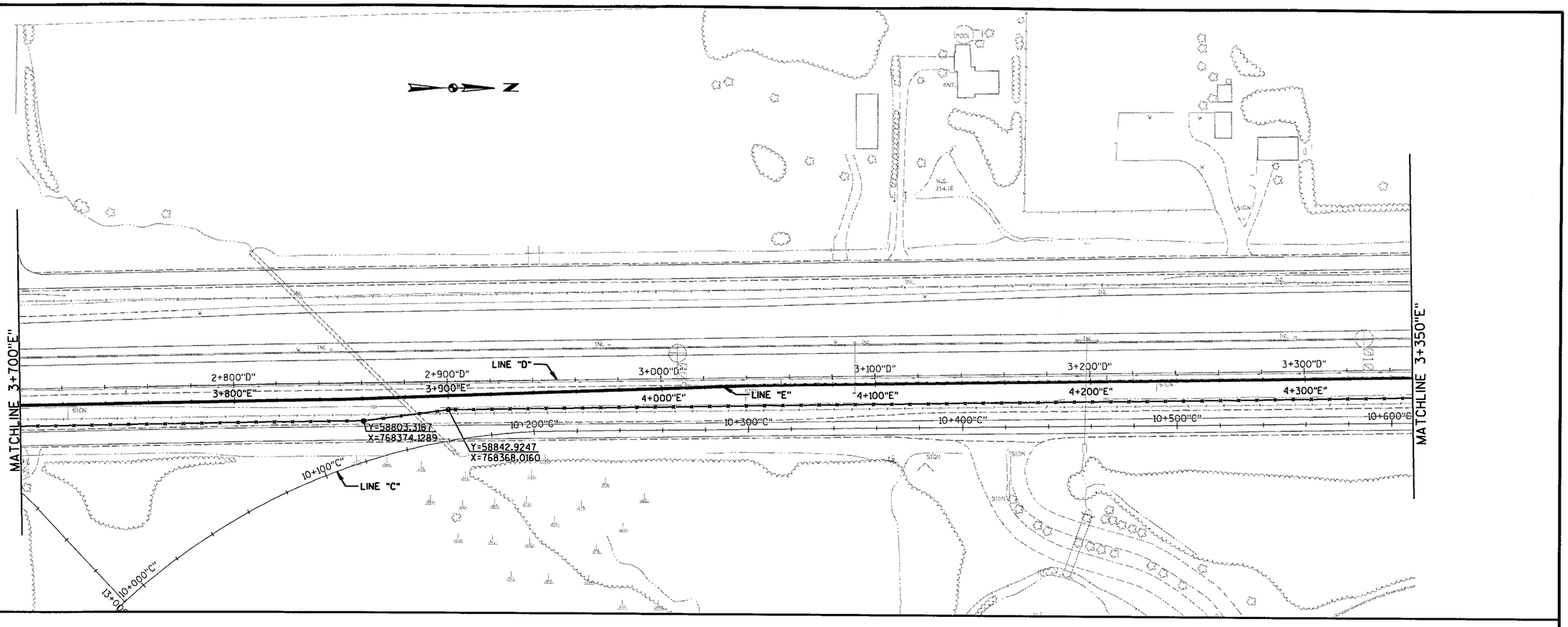


STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:2000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FENCE	SHEET NO: 221	M



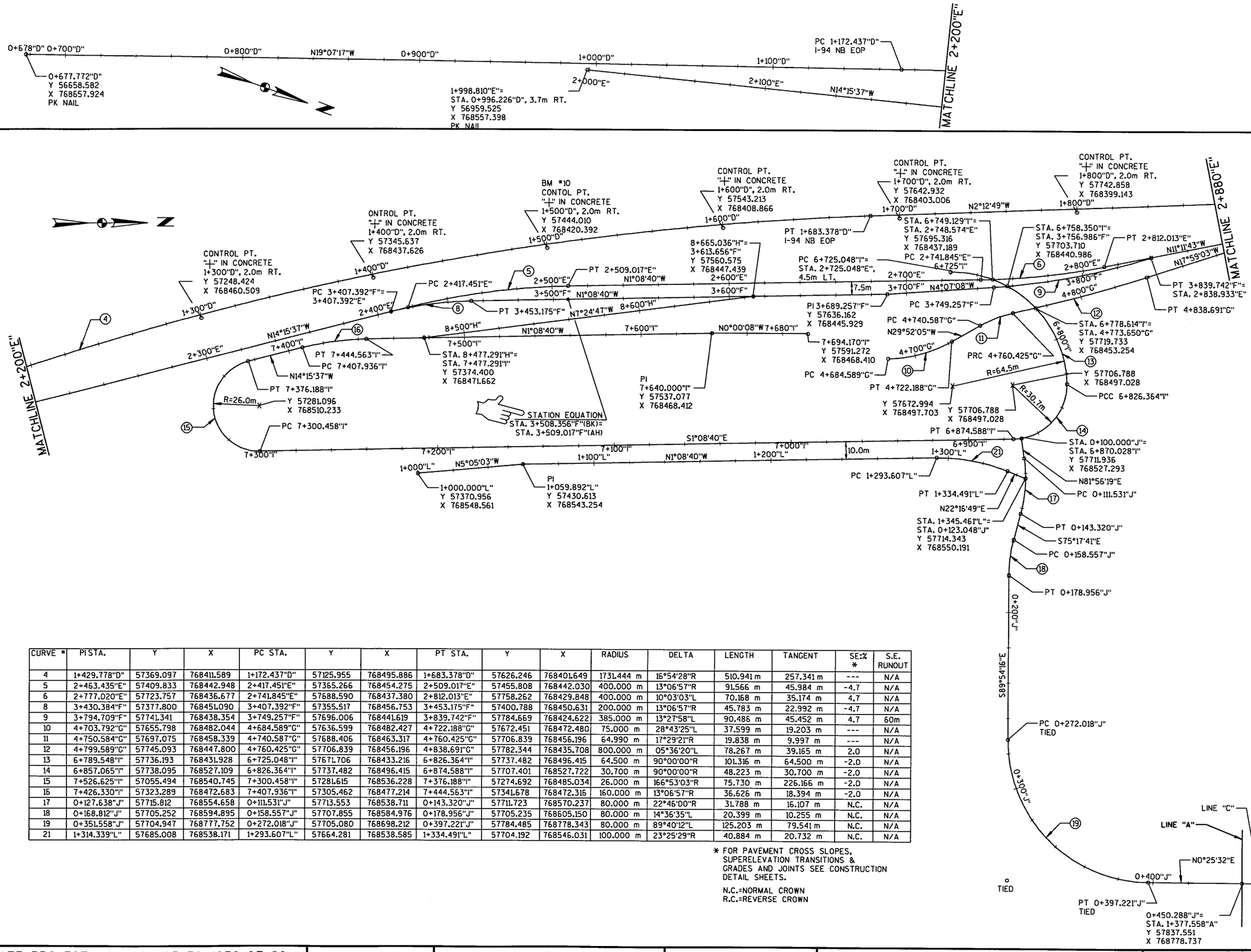
STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:2000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FENCE	SHEET NO: 222	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940FENCE(2).DGN 09-13-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:2000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	FENCE	SHEET NO: 223	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940FENCE(3).DGN 09-13-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



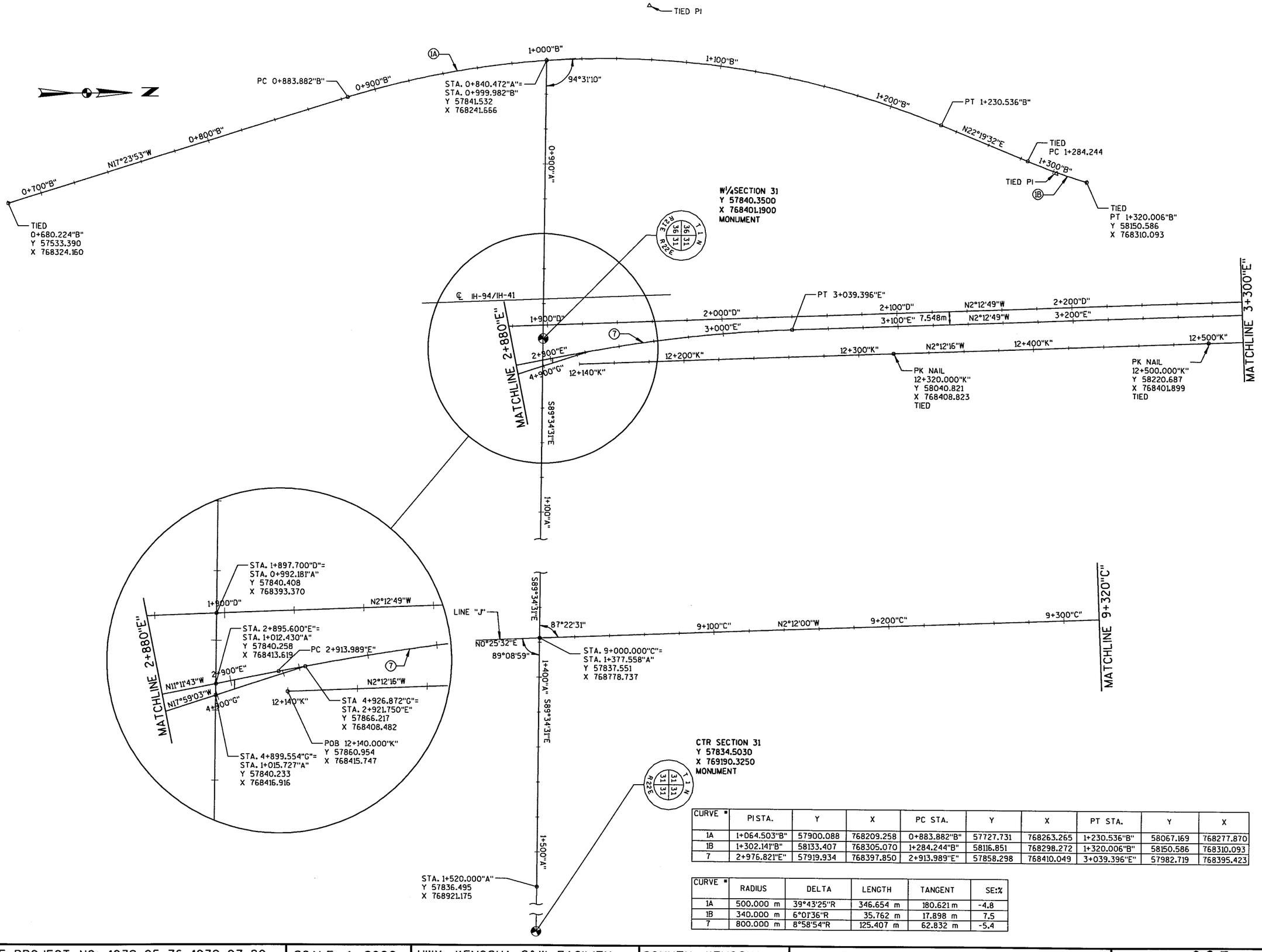
CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	SE:% *	S.E. RUNOUT
4	1+429.778"D"	57369.097	768411.589	1+172.437"D"	57125.955	768495.886	1+683.378"D"	57626.246	768401.649	1731.444 m	16°54'28"R	510.941 m	257.341 m	---	N/A
5	2+463.435"E"	57409.833	768442.948	2+417.451"E"	57365.266	768454.275	2+509.017"E"	57455.808	768442.030	400.000 m	13°06'57"R	91.566 m	45.984 m	-4.7	N/A
6	2+777.020"E"	57723.757	768436.677	2+741.845"E"	57688.590	768437.380	2+812.013"E"	57758.262	768429.848	400.000 m	10°03'03"L	70.168 m	35.174 m	4.7	N/A
8	3+430.384"F"	57377.800	768451.090	3+407.392"F"	57355.517	768456.753	3+453.175"F"	57400.788	768450.631	200.000 m	13°06'57"R	45.783 m	22.992 m	-4.7	N/A
9	3+794.709"F"	57741.341	768438.354	3+749.257"F"	57696.006	768441.619	3+839.742"F"	57784.669	768424.622	385.000 m	13°27'58"L	90.486 m	45.452 m	4.7	60m
10	4+703.792"G"	57655.798	768482.044	4+684.589"G"	57636.599	768482.427	4+722.188"G"	57672.451	768472.480	75.000 m	28°43'25"L	37.599 m	19.203 m	---	N/A
11	4+750.584"G"	57697.075	768458.339	4+740.587"G"	57688.406	768463.317	4+760.425"G"	57706.839	768456.196	64.990 m	17°29'21"R	19.838 m	9.997 m	---	N/A
12	4+799.589"G"	57745.093	768447.800	4+760.425"G"	57706.839	768456.196	4+838.691"G"	57782.344	768435.708	800.000 m	05°36'20"L	78.267 m	39.165 m	2.0	N/A
13	6+789.548"I"	57736.193	768431.928	6+725.048"I"	57671.706	768433.216	6+826.364"I"	57737.482	768496.415	64.500 m	90°00'00"R	101.316 m	64.500 m	-2.0	N/A
14	6+857.065"I"	57738.095	768527.109	6+826.364"I"	57737.482	768496.415	6+874.588"I"	57707.401	768527.722	30.700 m	90°00'00"R	48.223 m	30.700 m	-2.0	N/A
15	7+526.625"I"	57055.494	768540.745	7+300.458"I"	57281.615	768536.228	7+376.188"I"	57274.692	768485.034	26.000 m	166°53'03"R	75.730 m	226.166 m	-2.0	N/A
16	7+426.330"I"	57323.289	768472.683	7+407.936"I"	57305.462	768477.214	7+444.563"I"	57341.678	768472.316	160.000 m	13°06'57"R	36.626 m	18.394 m	-2.0	N/A
17	0+127.638"J"	57715.812	768554.658	0+111.531"J"	57713.553	768538.711	0+143.320"J"	57711.723	768570.237	80.000 m	22°46'00"R	31.788 m	16.107 m	N.C.	N/A
18	0+168.812"J"	57705.252	768594.895	0+158.557"J"	57707.855	768584.976	0+178.956"J"	57705.235	768605.150	80.000 m	14°36'35"L	20.399 m	10.255 m	N.C.	N/A
19	0+351.558"J"	57704.947	768777.752	0+272.018"J"	57705.080	768698.212	0+397.221"J"	57784.485	768778.343	80.000 m	89°40'12"L	125.203 m	79.541 m	N.C.	N/A
21	1+314.339"L"	57685.008	768538.171	1+293.607"L"	57664.281	768538.585	1+334.491"L"	57704.192	768546.031	100.000 m	23°25'29"R	40.884 m	20.732 m	N.C.	N/A

* FOR PAVEMENT CROSS SLOPES, SUPERELEVATION TRANSITIONS & GRADES AND JOINTS SEE CONSTRUCTION DETAIL SHEETS.

N.C.=NORMAL CROWN
R.C.=REVERSE CROWN

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ALO1.DGN 12-14-01
LEVELS ON - 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-05-76, 1032-07-80	SCALE: 1:2000	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET NO: 224	M

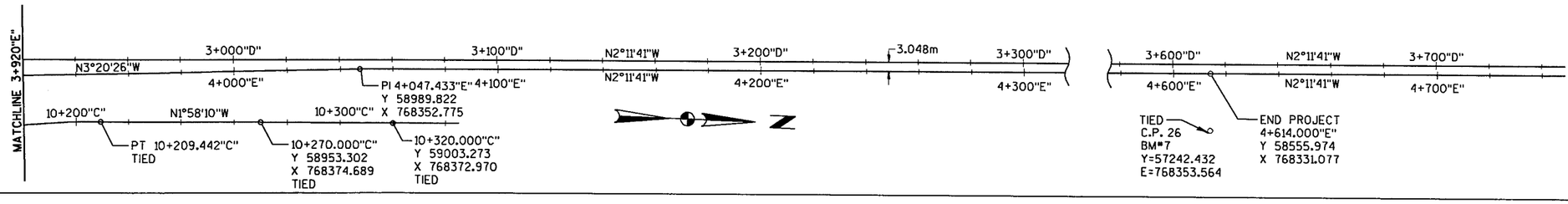


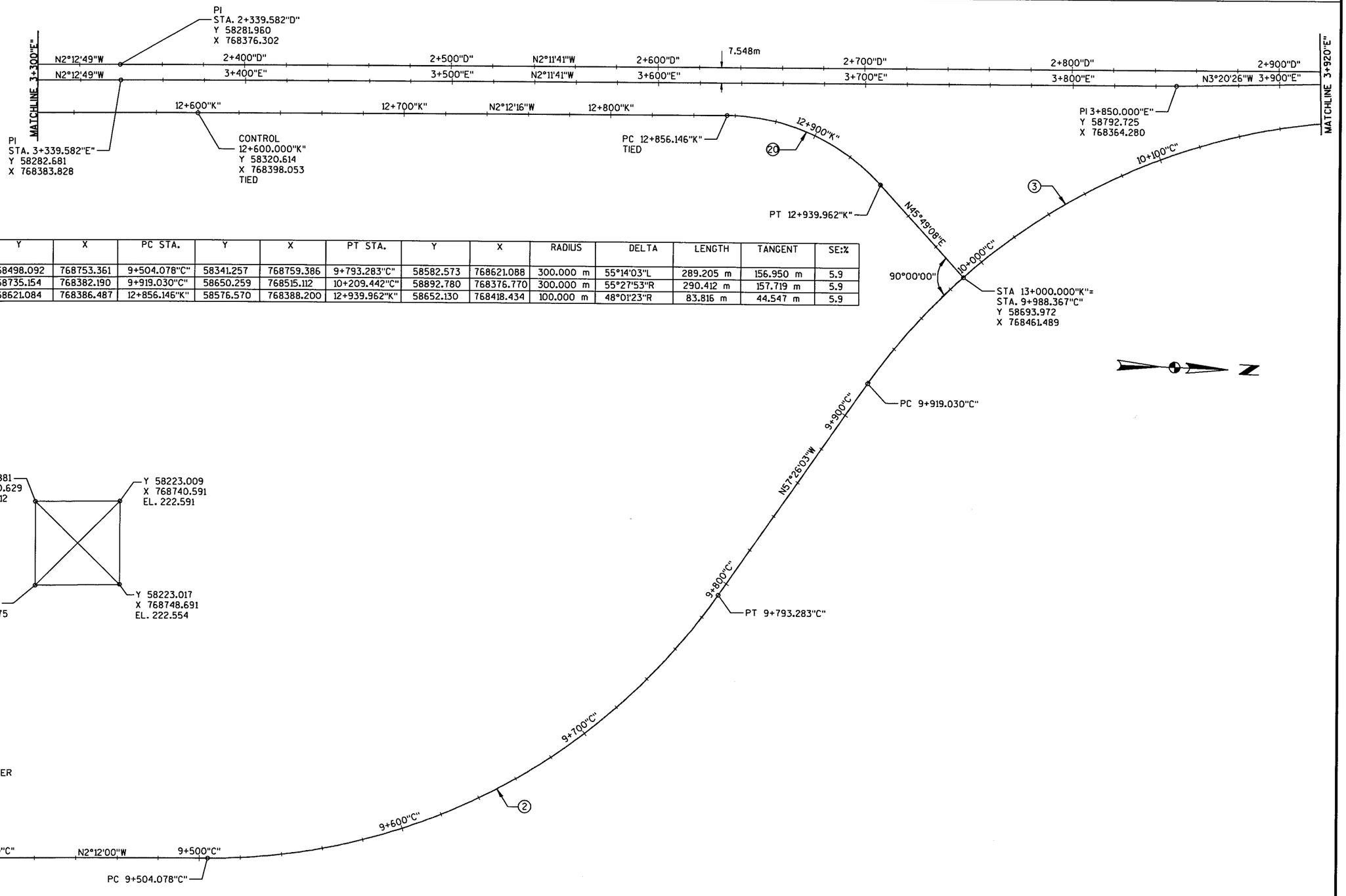
CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X
1A	1+064.503"B"	57900.088	768209.258	0+883.882"B"	57727.731	768263.265	1+230.536"B"	58067.169	768277.870
1B	1+302.141"B"	58133.407	768305.070	1+284.244"B"	58116.851	768298.272	1+320.006"B"	58150.586	768310.093
7	2+976.821"E"	57919.934	768397.850	2+913.989"E"	57858.298	768410.049	3+039.396"E"	57982.719	768395.423

CURVE #	RADIUS	DELTA	LENGTH	TANGENT	SE:%
1A	500.000 m	39°43'25"R	346.654 m	180.621 m	-4.8
1B	340.000 m	6°01'36"R	35.762 m	17.898 m	7.5
7	800.000 m	8°58'54"R	125.407 m	62.832 m	-5.4

STATE PROJECT NO: 1032-05-76, 1032-07-80	SCALE: 1:2000	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET NO: 225	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ALO2.DGN 12-14-01
LEVELS ON • 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

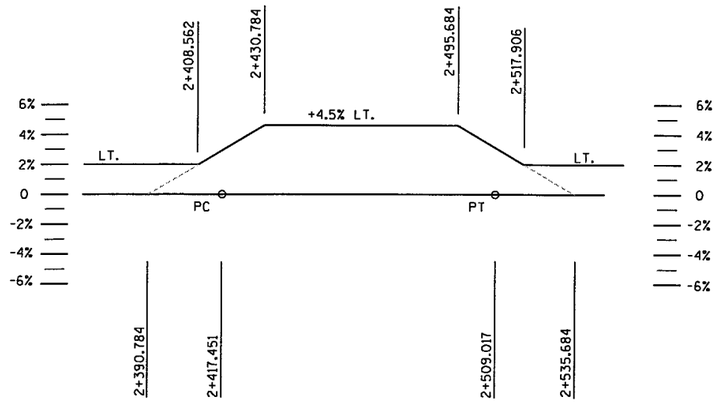




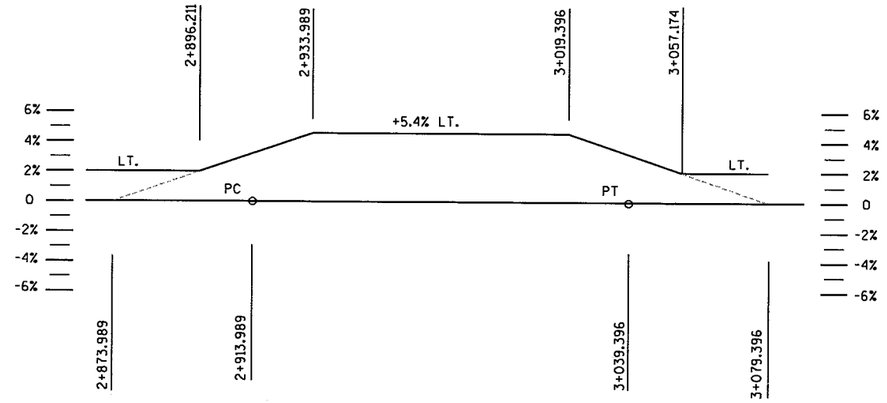
CURVE #	PI STA.	Y	X	PC STA.	Y	X	PT STA.	Y	X	RADIUS	DELTA	LENGTH	TANGENT	SE:%
2	9+661.028"C"	58498.092	768753.361	9+504.078"C"	58341.257	768759.386	9+793.283"C"	58582.573	768621.088	300.000 m	55°14'03"L	289.205 m	156.950 m	5.9
3	10+076.750"C"	58735.154	768382.190	9+919.030"C"	58650.259	768515.112	10+209.442"C"	58892.780	768376.770	300.000 m	55°27'53"R	290.412 m	157.719 m	5.9
20	12+900.693"K"	58621.084	768386.487	12+856.146"K"	58576.570	768388.200	12+939.962"K"	58652.130	768418.434	100.000 m	48°01'23"R	83.816 m	44.547 m	5.9

FILE NAME: PROJECTS/2940/PLANS/GEN/2940AL03B.DGN 12-14-01
LEVELS ON - 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

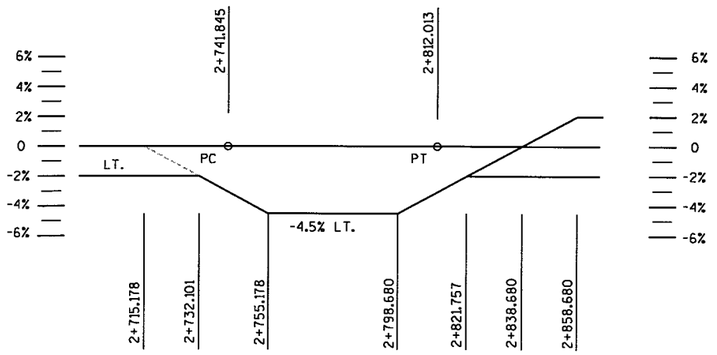
STATE PROJECT NO: 1032-05-76, 1032-07-80	SCALE: 1:2000	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET NO: 226	M



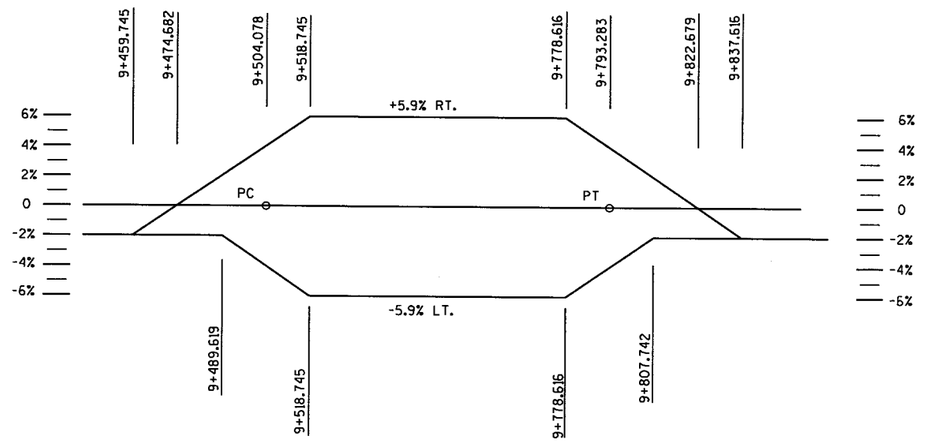
E-LINE (CURVE 5)



E-LINE (CURVE 7)

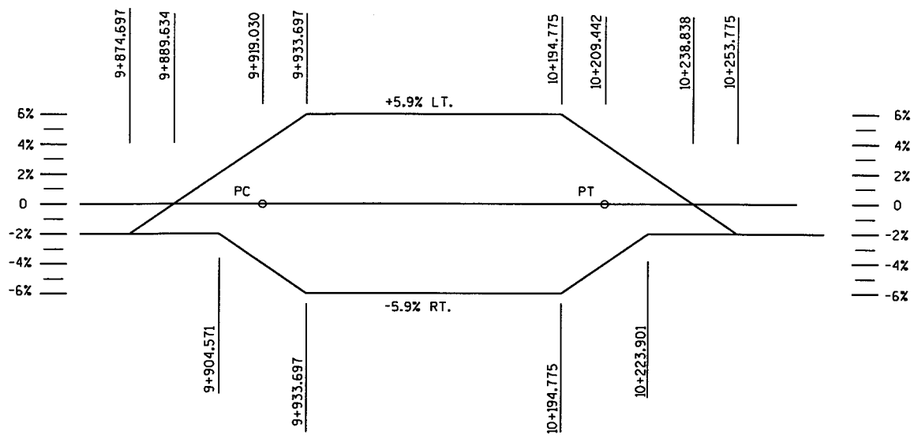


E-LINE (CURVE 6)

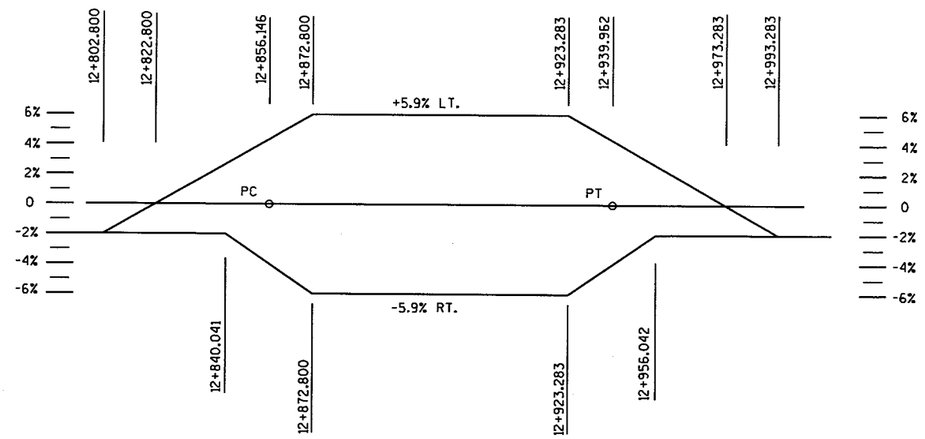


C-LINE (CURVE 2)

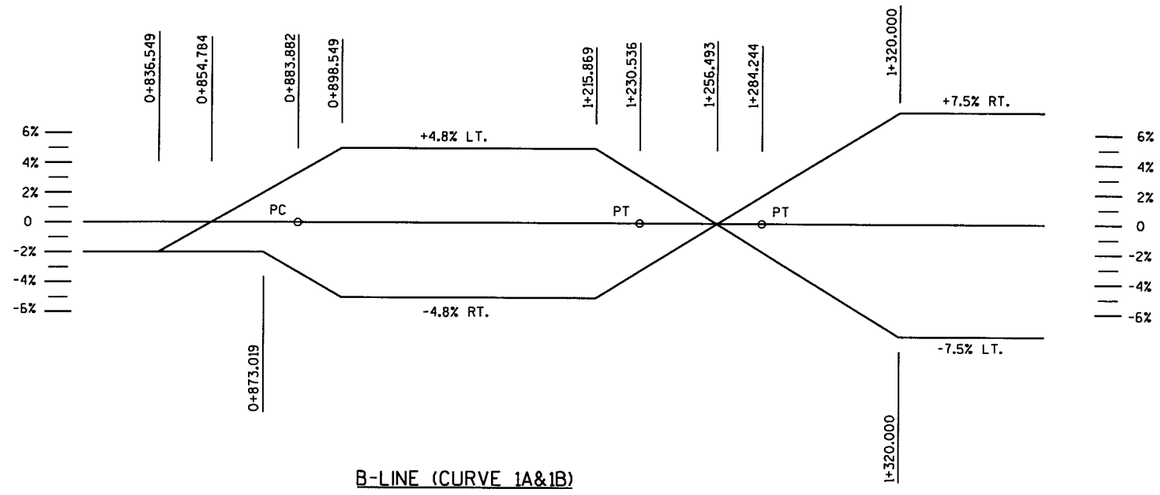
FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(11).DGN 11-29-01
LEVELS ON = 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



C-LINE (CURVE 3)

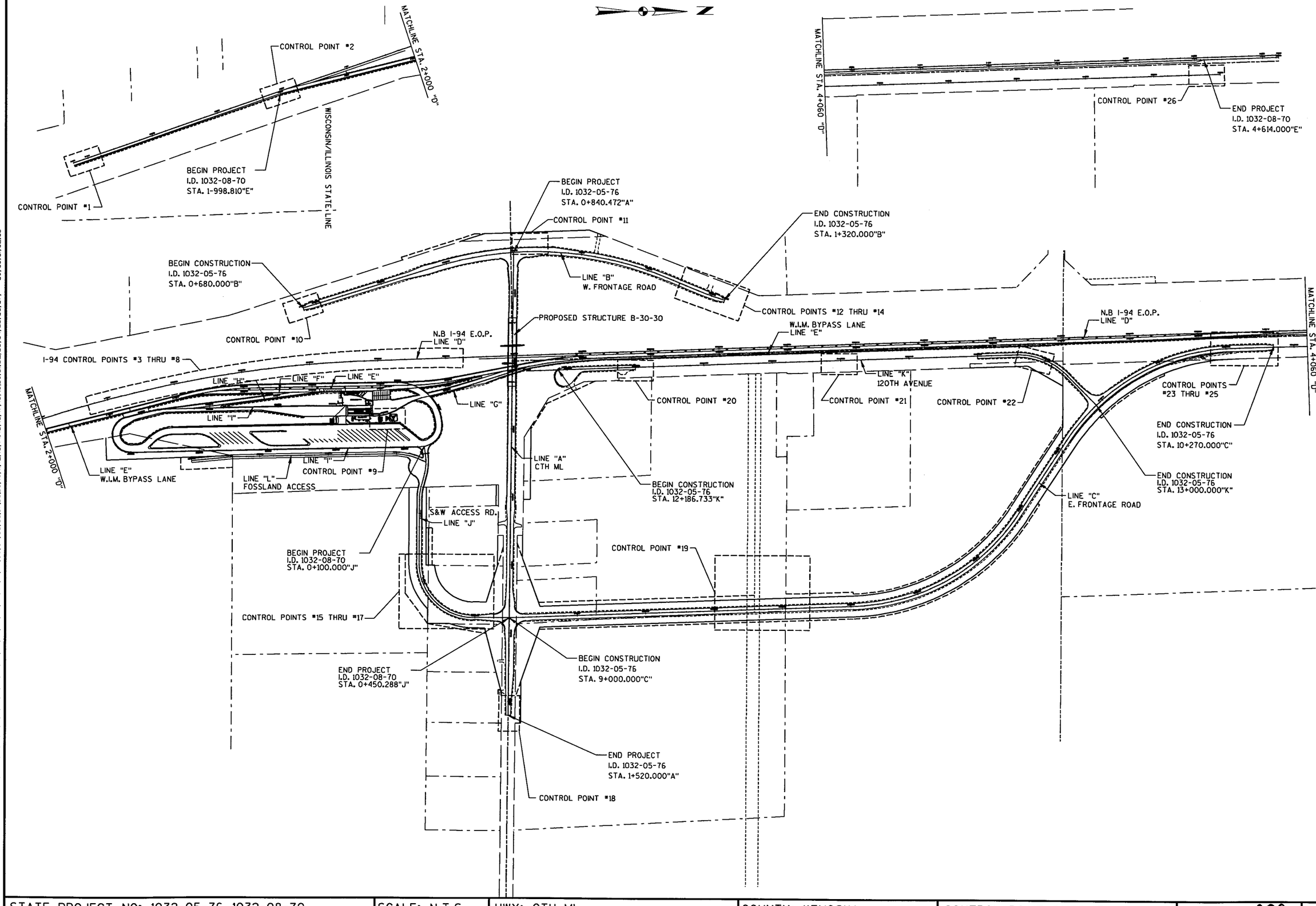


K-LINE (CURVE 20)



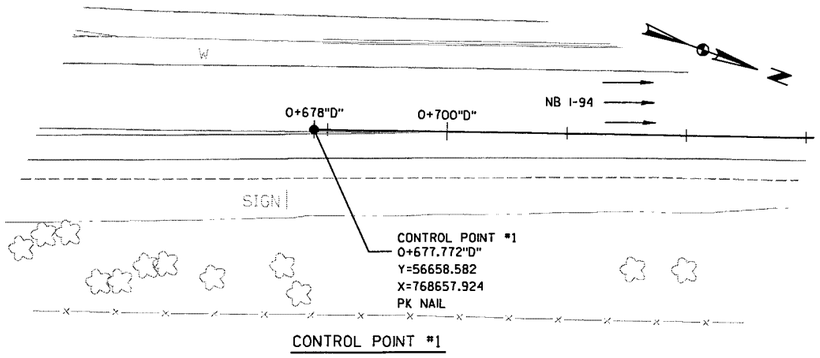
B-LINE (CURVE 1A&1B)

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CD01(12).DGN 11-29-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

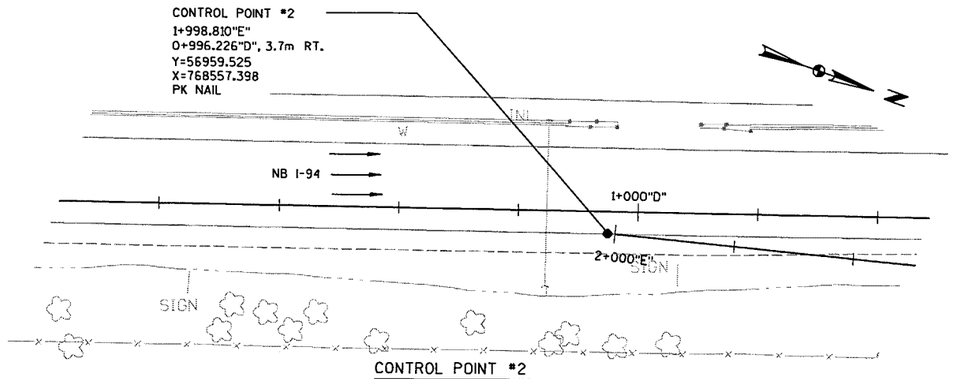


STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: N.T.S.	HWY: CTH ML	COUNTY: KENOSHA	CONTROL POINT OVERVIEW	SHEET NO: 229	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ALTIESITE.DGN 12-12-01
LEVELS ON - 1,2,3,4, 6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57, 59,60,61,62,63



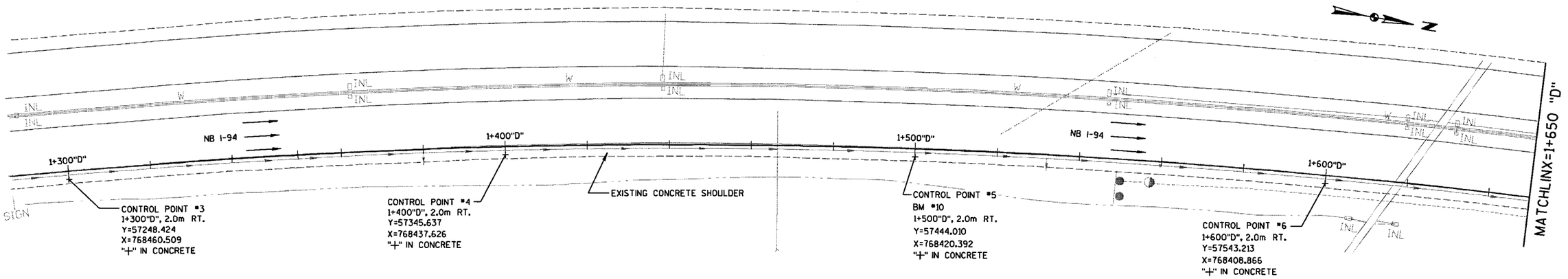
CONTROL POINT #1



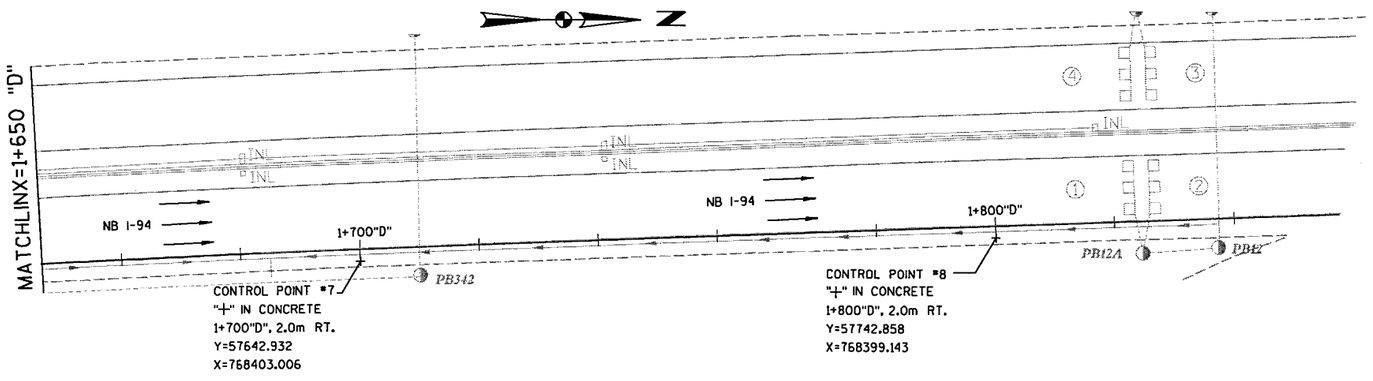
CONTROL POINT #2

LEGEND

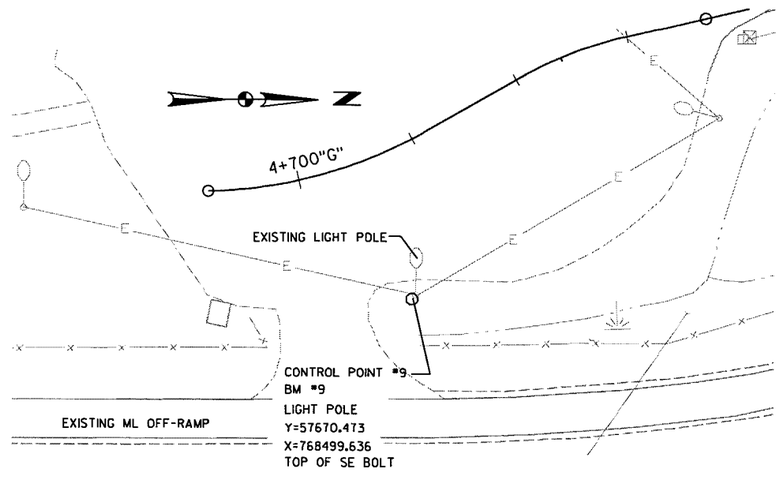
"+" CROSS CUT IN CONCRETE
* 5/8" REBAR
5/8" REBAR, W/CAP
1" IRON PIPE
PK NAIL
PK NAIL IN TREE
PK NAIL IN POWER POLE
TOP OF BOLT



I- 94 CONTROL POINTS
FOR SAFETY & WEIGHT FACILITY
CONTROL POINTS #3 THRU #6



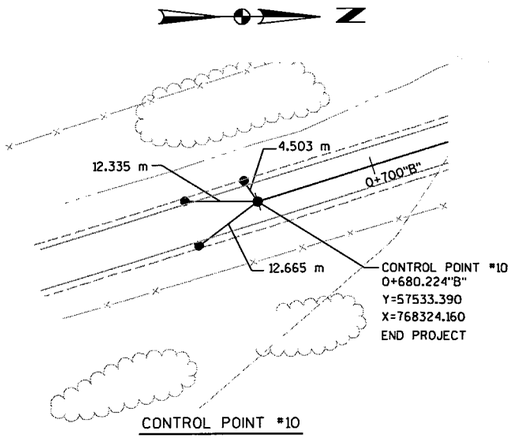
I- 94 CONTROL POINTS
FOR SAFETY & WEIGHT FACILITY
CONTROL POINTS #7 & #8



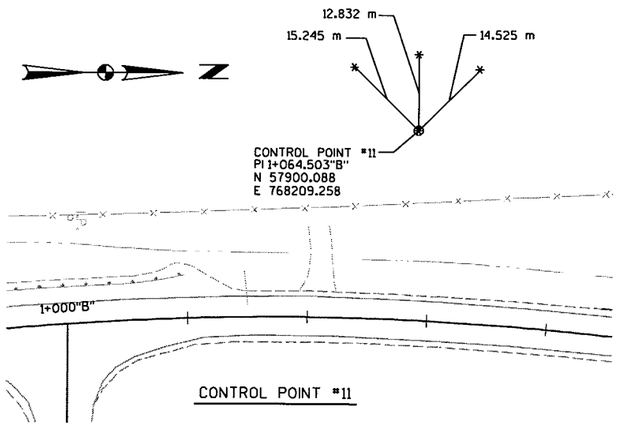
CONTROL POINT #9

STATE PROJECT NO: 1032-08-70	SCALE: N.T.S.	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	ALIGNMENT TIES/CONTROL POINTS	SHEET NO: 230	M

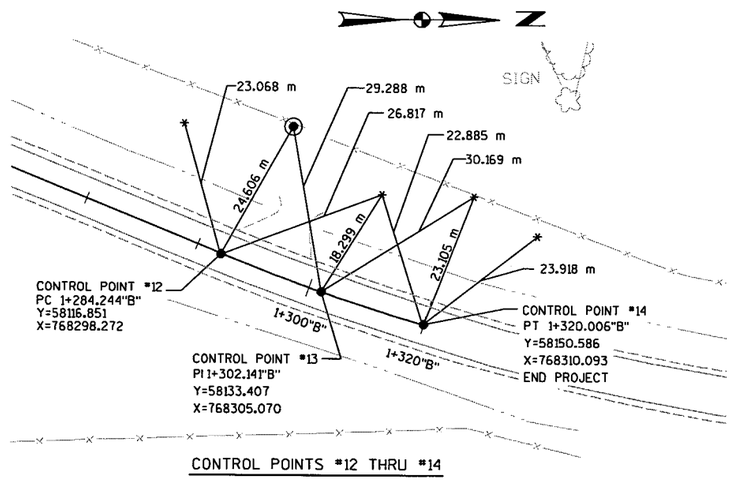
FILX-NAME: PROJECTS/2940/PLANS/GEN/2940ALDIALTIE.DGN 12-12-01
LEVELS OFF= 1,2,3,4, 6,7,8, 9,10,11,12,13, 14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



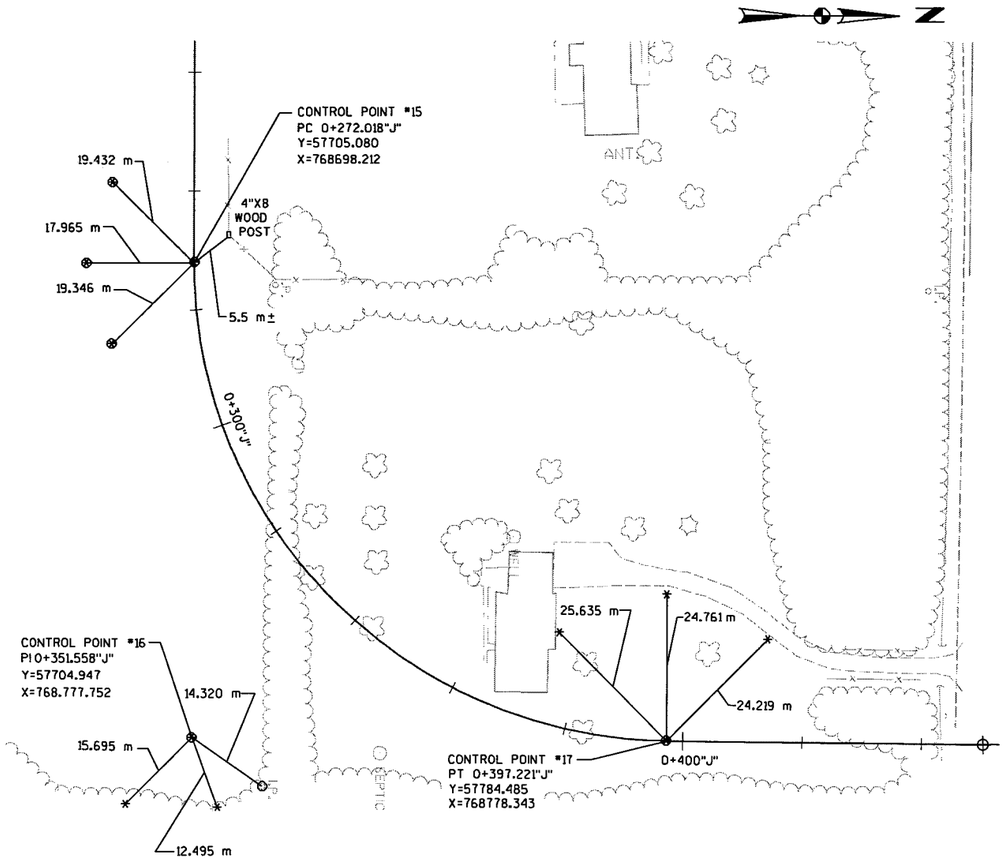
CONTROL POINT #10



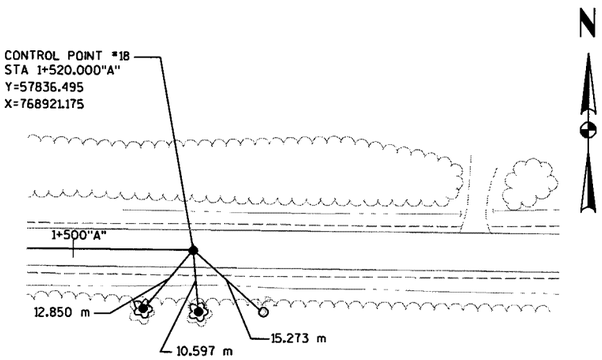
CONTROL POINT #11



CONTROL POINTS #12 THRU #14



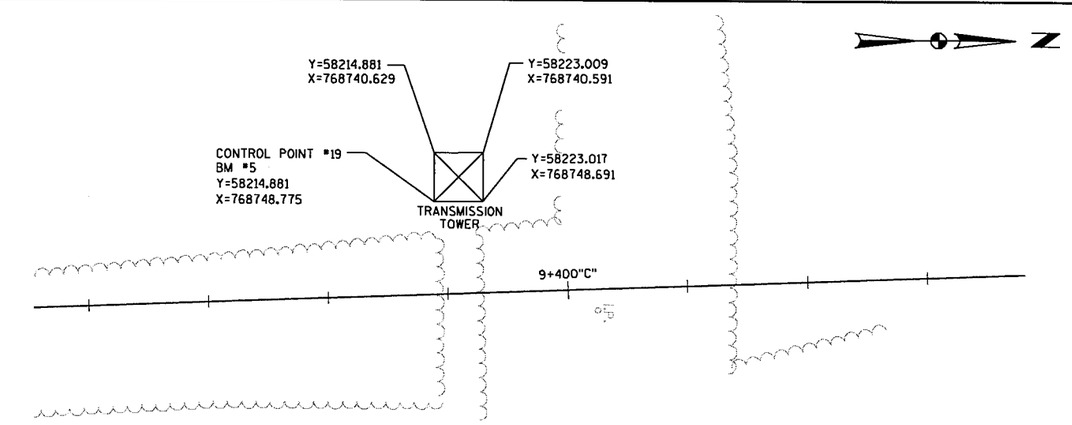
CONTROL POINTS #15 THRU #17



CONTROL POINT #18

LEGEND

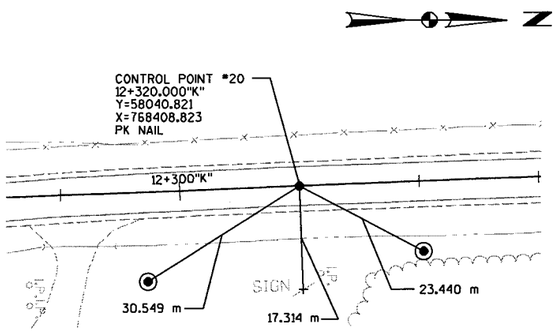
"+"	CROSS CUT IY=CONCRETE
*	5/8" REBAR
⊛	5/8" REBAR, W/CAP
○	1" IROY=PIPE
●	PK NAIL
❀	PK NAIL IY=TREE
◉	PK NAIL IY=POWER POLE
○	TOP OF BOLT



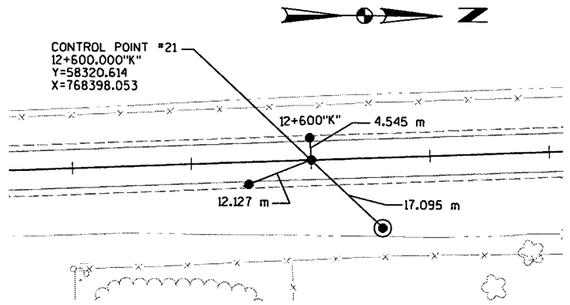
CONTROL POINT #19

STATE PROJECT NO: 1032-08-70	SCALE: N.T.S.	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	ALIGNMENT TIES/CONTROL POINTS	SHEET NO: 23 M

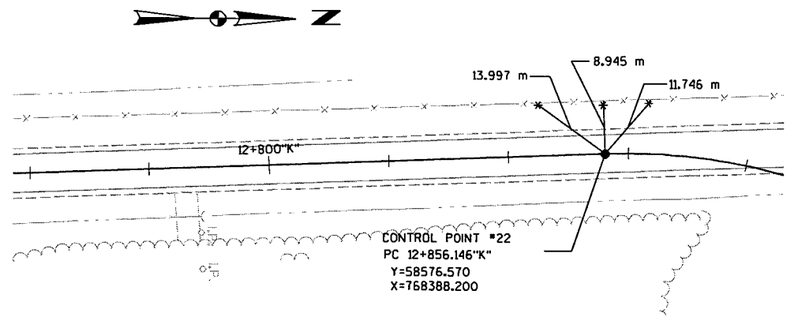
FILX=NAME: PROJECTS/2940/PLANS/GEN/2940ALO1ALTIE.DGN 12-12-01
LEVELS OFF= 1,2,3,4, 6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51, 53,54,55,56,57,58,59,60,61,62,63



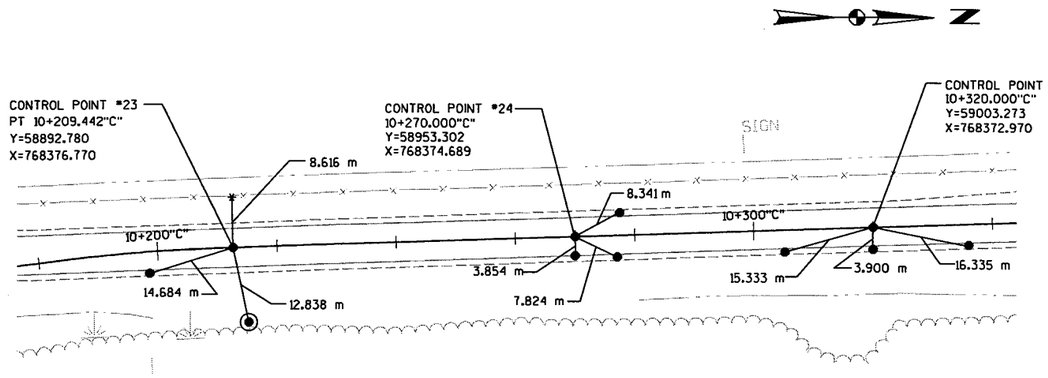
CONTROL POINT #20



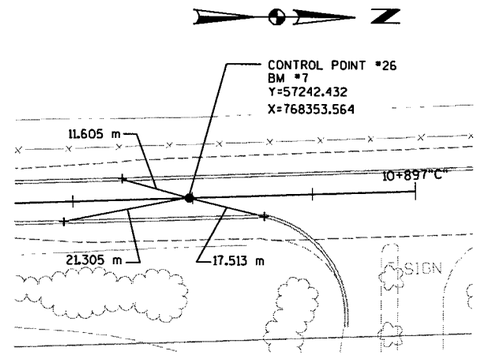
CONTROL POINT #21



CONTROL POINT #22



CONTROL POINTS #23 THRU #25



CONTROL POINT #26

LEGEND

"+" CROSS CUT IY=CONCRETE
* 5/8" REBAR
⊛ 5/8" REBAR, W/CAP
○ 1" IROY=PIPE
● PK NAIL
PK NAIL IY=TREE
◉ PK NAIL IY=POWER POLE
○ TOP OF BOLT

STATE PROJECT NO: 1032-08-70	SCALE: N.T.S.	HWY: KENOSHA S&W FACILITY	COUNTY: KENOSHA	ALIGNMENT TIES/CONTROL POINTS	SHEET NO: 232	M

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ALOIALTIE.DGN 12-12-01
LEVELS ON 1,2,3,4, 6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: PROJECTS/2940/GEN/SOILBOR.DGN 09-18-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,
26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

N

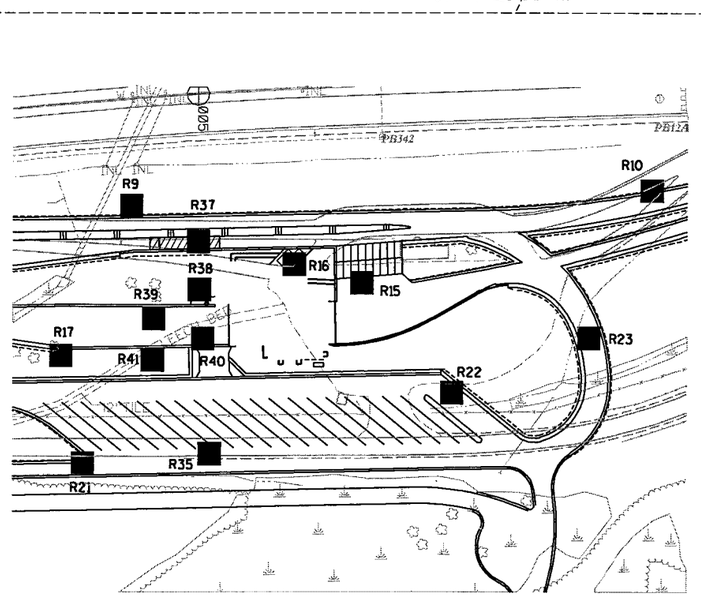
BORING No. 2

I-94

R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R23 R24 R25 R26 R27 R28 R29 R30 R31 R32 R33

S1 S2 S3 S4

M1 M2 M3 M4



LEGEND

- 41 ROADWAY BORINGS 3.0 m (10')
- 4 MARSH BORINGS 6.0 m (20')
- 4 STRUCTURAL BORINGS 24.0 m (80')

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: 1:2500	HWY: CTH ML	COUNTY: KENOSHA	SOIL BORINGS	SHEET NO: 233	M

BORING: M1

BORING COMPLETED: 08/22/97

Station 6+683.89; 13.2 m right

DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
					TOPSOIL	NM=38.5 LI=5.7
	2				Brown to black with lenses of peat	NM=58.8 LI=10.8
1					**FAT TO LEAN CLAY (CH-CL)**	
	2				Gray and brown mottled 914 mm to 2.44 m	qp=70, 40 NM=35.6 LL=55 PL=23
2	3					poor recovery qp=25 NM=30.1 LL=49 PL=19
	15					qp=430
3					Grayish-brown to gray with little gravel	
4						
	12					
5						Water level at completion
	16					qp=310, 380
6					End of boring	
7						
8						
9						
10						
11						
12						
13						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916-4

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-43

BORING: M2

BORING COMPLETED: 08/22/97

Station 1+196.93; 19.6 m right

DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
	2				**TOPSOIL** Black with lenses of peat	qp<25 NM=63.6 LI=11.3
1	8				**SILTY CLAY (CL-ML)**	qp=150, 190 NM=14.6 LL=21 PL=14
2	7				Gray and brown mottled to gray with little gravel 914 mm to 2.44 m	qp=115 NM=14.2 LL=22 PL=15
	17					Water level at completion
3					Grayish-brown 2.44 m to 6.1 m	qp=210, 165
4						
	18					qp=240, 315
5						
	23					
6					End of boring	
7						
8						
9						
10						
11						
12						
13						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916-4

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-44

BORING: M3

BORING COMPLETED: 08/22/97

Station 1+176.48; 17.98 m left

DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
	3				**TOPSOIL** Black with lenses of peat	Water level at completion
1						NM=47.5 LI=6.9
	4				**LEAN CLAY (CL)**	qp=190, 140, 115, 100
2	5				Gray and brown mottled sandy with little gravel 914 mm to 1.83 m	qp=100, 190
					Grayish-brown to gray 1.83 m to 4.42 m	NM=15.2 LL=24 PL=14
3	14					qp=320, 240
4						
	14					qp=340, 380
5					Silty 4.42 m to 6.1 m	
	14					qp=315, 340
6					End of boring	
7						
8						
9						
10						
11						
12						
13						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916-4

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-45

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(1).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BORING: M4 — BORING COMPLETED: 08/21/97

ELEVATION: 217.23 — Station 9+823.48; 11.93 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
217					**TOPSOIL**	
		5			**LEAN CLAY (CL)** Brown 406 mm to 914 mm	qp=75, 115 NM=28.7 LL=62 PL=23
216	1	8			Brown and gray mottled with occasional seams of silt 914 mm to 1.83 m	qp=100, 115 NM=17.1 LL=28 PL=18
215	2	15			Brown with little gravel 1.83 m to 3.96 m	qp=340, 430
		27				Water level at completion qp=430+
214	3					
	4					
213		28			**SANDY CLAY (CL)** Gray with seams of gray clayey fine to medium sand and little gravel	wet
212	5				**LEAN CLAY (CL)** With occasional seams of fine to medium sand, brownish-gray	
		24				qp=240, 265
211	6				End of boring	
210	7					
209	8					
208	9					
207	10					
206	11					
205	12					
204	13					

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-46

BORING: S1 — BORING COMPLETED: 08/13/97

ELEVATION: 232.51 — Station 0+942.588; 2.1 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
232		4			**FILL MATERIAL** Bituminous pavement 0 mm to 191 mm Base course 191 mm to 508 mm	NM=8.1
	1	8				qp=115
231	2	12			Mix of brown clay with some gravel 508 mm to 5.64 m	qp=140 NM=8.5
230		6				qp=165, 290
	3					
229	4					
228		12				NM=18.7
	5					
227		10			**LEAN CLAY (CL)** Grayish-brown silty with some gravel 5.64 m to 7.62 m	qp=190
226	6					
	7					
225		24				qp=240, 290 NM=11.6 LL=19 PL=13
	8				Gray to brownish-gray 7.62 m to 10.06 m	
224						
	9	65				qp=430+
223						Water level at completion
	10					qp=240, 340 NM=21.9 qu=351.3 Dw=20.3 Dd=16.6
222		19			Gray 10.06 m to 25.9 m	
	11					
221		20				qp=240
	12					
220						
	13					
219		16				qp=100, 115, NM=24.73 LL=44

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-3

BORING: S1 — BORING COMPLETED: 08/13/97

ELEVATION: 232.51 — Station 0+942.588; 2.1 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
218						PL=20
	15	14				qp=215, 240
217						
	16					
216		16				qp=240 NM=22.6 LL=36 PL=15
	17					
215						
	18	19				qp=430
214						
	19					
213		22				no recovery
	20					
212						
	21	24				qp=240
211						
	22					
210		21				qp=265, 315
	23					
209						
	24	22				qp=190, 240
208					Partings of silt at 24.23 m	
	25					
207		26				qp=380
	26				End of boring	
206						
	27					
205						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-4

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 235	M

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(2).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BORING: S3 — BORING COMPLETED: 08/19/97

ELEVATION: 232.91 — Station 1+012.200; 2.32 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
232	1	15				**FILL MATERIAL** Bituminous pavement 0 mm to 203 mm Brown fine to medium sand with some gravel and occasional clay lenses 203 mm to 1.83 m	
		7					
231	2	8				Mix of gray and brown lean clay with silt and gravel 1.83 m to 7.62 m	pushed stone, no recovery
230	3	13				SEE LINE "B" REMOVAL	qp=140, 240 NM=15.7
229	4						
		13					qp=260, 340 NM=15.5 qu=238.5 Dw=20.50 Dd=17.74
228	5						
227	6	19					qp=430
226	7						
		18					qp=340, 405
225	8					**STRATIFIED LENSES AND SEAMS OF SILT (ML), FINE SAND (SP), AND LEAN CLAY (CL)** Gray	
224	9	11					qp=240
223	10						Water level at completion
		32				**SILTY SAND AND GRAVEL (SM-GM)** Gray	
222	11					**SILT (ML)** Gray with seams of lean clay	
221	12	29					NM=19.9
220	13						
		26					pushed stone
219							

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-5

BORING: S3 — BORING COMPLETED: 08/19/97

ELEVATION: 232.91 — Station 1+012.200; 2.32 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
218	15	24				**LEAN CLAY (CL)** Some gravel, and occasional partings and seams of silt 14.63 m to 16.76 m	qp=380 NM=10.4 qu=656.1 Dw=23.0 Dd=20.8
217	16						
		13				Gray 14.63 m to 18.29 m	pushed stone, no recovery
216	17						
215	18	14					qp=240 NM=25.8 LL=40 PL=21
214	19						
		16					qp=140, 240 NM=12.8
213	20					Brown 18.29 m to 25.91 m	
212	21	20					qp=170, 190 NM=21.4 qu=247.7 Dw=20.7 Dd=17.1
211	22						
		24					qp=160, 265
210	23						
209	24	24					qp=190 NM=25.3
208	25						
		26					qp=190, 165
207	26					End of boring	
206	27						
205							

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-18

BORING: S4 — BORING COMPLETED: 08/19/97

ELEVATION: 232.69 — Station 1+026.843; 2.37 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
232	1	12				**FILL MATERIAL** Bituminous pavement 0 mm to 121 mm Base course 121 mm to 305 mm	
		7					qp=100, 380
231	2	6				Mix of primarily brown to dark brown lean clay and sandy clay with some silt, sand, and topsoil	qp=190
230	3	12					qp=240 NM=12.4 LL=24 PL=16
229	4						
		100/406 mm				Concrete rubble 3.35 m to 6.4 m	
228	5						
227	6	100/51 mm					pushed stone, poor recovery
226	7						
		9				**LEAN CLAY (CL)** Gray and brown mottled with occasional seams of silt	qp=100, 130 NM=23.3 LL=34 PL=19 qu=140.9 Dw=20.4 Dd=16.5
225	8						
224	9	13				Brown silty sand with some gravel and dark gray silt layer 8.53 m to 8.76 m	
223	10					**SILTY SAND AND GRAVEL (SM-GM)** Brown	Water level at completion
		26					
222	11					**LEAN CLAY (CL)**	
221	12	20					qp=380 NM=12.6 qu=554.0 Dw=22.5 Dd=19.9
220	13					Gray to brownish-gray sandy with little to some gravel 10.97 m to 18.29 m	
		27					qp=380, 430+ NM=11.1 LL=17
219							

FOR NOTES AND LEGEND SEE DRAWING 1091

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-7

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(3).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 236	M

BORING: S4 — BORING COMPLETED: 08/19/97

ELEVATION: 232.69 — Station 1+026.843; 2.37 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
						PL=13
218	15	30				qp=210, 290 NM=11.7
217	16					
216	17	28				qp=190, 290
215	18	18				qp=190 NM=25.7 qu=162.2 Dw=20.5 Dd=16.3
214	19					
213	20	16				qp= 215 NM=25.0
212	21	21			With occasional layers of sand and little to some gravel 18.29 m to 25.91m	qp=165 NM=25.3
211	22					
210	23	25				qp=230, 310
209	24	24				qp=190, 240 NM=23.9 LL=45 PL=20
208	25					
207	26	26				qp=315
206	27				End of boring	
205						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-8

BORING: R1 — BORING COMPLETED: 08/20/97

ELEVATION: 225.52 — Station 0+724.416; 3.4 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
225		10			FILL MATERIAL Bituminous pavement 0 mm to 102 mm Brown silty fine to medium sand and gravel 102 mm to 711 mm	
224	1	10			Mix of brown lean clay, silt, and gravel 711 mm to 1.83 m	qp=190, 290
223	2	9			LEAN CLAY (CL) Brown with little to some gravel	qp=430, 380
222	3	9			Dry at completion	qp=380, 355
221	4				End of boring	
220	5					
219	6					
218	7					
217	8					
216	9					
215	10					
214	11					
213	12					
212	13					

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-9

BORING: R2 — BORING COMPLETED: 08/20/97

ELEVATION: 227.40 — Station 0+833.778; 3.54 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
227		10			FILL MATERIAL Bituminous pavement 0 mm to 89 mm Brown silty fine to medium sand and gravel 89 mm to 711 mm	damp
226	1	13				qp=260, 340
225	2	13			Brown lean clay with some gravel 711 mm to 2.44 m	qp=190, 380
224	3	10			LEAN CLAY (CL) Gray and dark gray mottled with little gravel (possible fill material) Dry at completion	qp=240 NM=21.2 qu=208 Dw=19.5 Dd=16.1
223	4				End of boring	
222	5					
221	6					
220	7					
219	8					
218	9					
217	10					
216	11					
215	12					
214	13					

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-10

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(4).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 237	M

BORING: R3 — BORING COMPLETED: 08/20/97

ELEVATION: 229.76 — Station 0+998.181; 3.85 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
229	1	6			**FILL MATERIAL** Bituminous pavement 0 mm to 76 mm Brown silty fine to medium sand and gravel 76 mm to 610 mm	damp
		8			Mix of brown lean clay with some silt, sand, and gravel 610 mm to 1.83 m	qp=265, 290 NM=15.2
228	2	11			**LEAN CLAY (CL)** Brown with little gravel and sandy at 2.9 m	qp=240, 265 NM=19.5 qu=292 Dw=20.5 Dd=17.2 LL=44 PL=21
227	3	21			Dry at completion	qp=430+
226	4				End of boring	
225	5					
224	6					
223	7					
222	8					
221	9					
220	10					
219	11					
218	12					
217	13					
216						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-11

BORING: R4 — BORING COMPLETED: 08/20/97

ELEVATION: 228.80 — Station 1+137.16; 3.21 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
228	1	21			**FILL MATERIAL** Bituminous pavement 0 mm to 241 mm Brown silty fine to medium sand and gravel 241 mm to 660 mm	damp
		9			Brown	qp=265, 240
227	2	8			**LEAN CLAY (CL)** Light brown (Posible fill material)	qp=215, 250 NM=19.6 LL=28 PL=19
226	3	10			**SILTY FINE TO MEDIUM SAND (SM)** Brown with little to some gravel and seams of brown silt and lean clay Dry at completion	wet
225	4					
224	5					
223	6					
222	7					
221	8					
220	9					
219	10					
218	11					
217	12					
216	13					
215						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-12

BORING: R5 — BORING COMPLETED: 08/20/9

ELEVATION: 227.16 — Station 1+246.0; 3.6 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
227	1	8			**FILL MATERIAL** Bituminous pavement 0 mm to 83 mm Brown silty fine to medium sand and gravel 83 mm to 660 mm	
226		11			Brown sandy lean clay with little gravel 660 mm to 1.24 m	qp=290, 355, 430+ NM=36.3 LI=6.1
225	2	10			**TOPSOIL** Black, clayey	qp=200, 265
224	3	6			**LEAN CLAY (CL)** Gray and brown mottled With silt lenses 2.74 m to 3.05 m Dry at completion	qp=50, 130, NM=21.1 LL=27 PL=16
223	4				End of boring	
222	5					
221	6					
220	7					
219	8					
218	9					
217	10					
216	11					
215	12					
214	13					

FOR NOTES AND LEGEND SEE DRAWING 1091

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-13

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(5).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 238	M

BORING: R6 — BORING COMPLETED: 08/20/97

ELEVATION: 230.14 — Station 2+127.253; 8.39 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
230					**FILL MATERIAL**	
		22			Bituminous pavement 0 mm to 152 mm	damp
229	1				Base course (crushed dolomite) 152 mm to 279 mm	
		34			Brown silty fine to medium sand and gravel 279 mm to 914 mm	Water level at completion ▼
228	2				Mix of brown lean clay with silt, sand, and gravel, and concrete rubble at 1.37 m	qp=430+
		20			Brown clayey sand and gravel with concrete rubble at 2.74 m	
227	3	100/76 mm				poor recovery wet
		7			**LEAN CLAY (CL)**	qp=75, 100 moist to wet
226	4				Gray sandy with little gravel	
					End of boring	
225	5					
224	6					
223	7					
222	8					
221	9					
220	10					
219	11					
218	12					
217	13					

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-14

BORING: R7 — BORING COMPLETED: 08/20/97

ELEVATION: 227.00 — Station 2+373.046; 1.02 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
227					**FILL MATERIAL**	
		9			Bituminous pavement 0 mm to 184 mm	qp=430+
226	1				Crushed dolomite base course 184 mm to 305 mm	
		14			Brown silty fine to medium sand and gravel 305 mm to 457 mm	qp=355, 380
225	2	17			Brown lean clay with little gravel and occasional seams of silt, possibly native soil 457 mm to 2.44 m	qp=380, 430
		18			**LEAN CLAY (CL)**	qp=430
224	3				Brown	
					Dry at completion	
223	4				Dry at completion	
222	5					
221	6					
220	7					
219	8					
218	9					
217	10					
216	11					
215	12					
214	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-15

BORING: R8 — BORING COMPLETED: 08/20/97

ELEVATION: 226.28 — Station 2+504.082; 6.14 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
226		11			**FILL MATERIAL** Bituminous pavement 0 mm to 35 mm Concrete 35 mm to 289 mm	qp=430
	1				**LEAN CLAY (CL)**	
225		9			Brown with little gravel (possible fill material) 289 mm to 1.83 m	qp=380, 430+
	2	9				qp=340 NM=24.5 LL=44 PL=19
224						
	3	11				qp=380, 430+
223					Dry at completion	
	4				End of boring	
222						
	5					
221						
	6					
220						
	7					
219						
	8					
218						
	9					
217						
	10					
216						
	11					
215						
	12					
214						
	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-16

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(6).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 239	M

BORING: R9 — BORING COMPLETED: 08/20/97

ELEVATION: 225.70 — Station 2+619.23; 3.2 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
225	1	4			**FILL MATERIAL** Bituminous pavement 0 mm to 38 mm Concrete 38 mm to 311 mm Fine to medium sand and gravel 311 mm to 438 mm Brown lean clay with some gravel, topsoil, and silt 438 mm to 1.6 m	qp=160, 240
224	2	13				qp=380, 430
223	3	9				qp=140
222	4	10			**LEAN CLAY (CL)** Brown to grayish-brown with some roots 1.6 m to 2.44 m Brown silty 2.44 m to 3.05 m Dry at completion	qp=190, 165
221	5					
220	6					
219	7					
218	8					
217	9					
216	10					
215	11					
214	12					
213	13					
212						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-17

BORING: R10 — BORING COMPLETED: 08/20/97

ELEVATION: 226.41 — Station 2+805.247; 0.47 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
226	1	100/330 mm			**FILL MATERIAL** Bituminous pavement 0 mm to 210 mm Brown silty sand and gravel 210 mm to 914 mm	damp
225	2	13			**LEAN CLAY (CL)** With seams of clayey sand and sandy silt 914 mm to 2.44 m	qp=340
224	3	14				pushed stone, no recovery
223	4	12			Gray with little to some gravel and little sand 2.44 m to 3.05 m Dry at completion End of boring	qp=380, 240
222	5					
221	6					
220	7					
219	8					
218	9					
217	10					
216	11					
215	12					
214	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 1091

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-18

BORING: R11 — BORING COMPLETED: 08/25/97

ELEVATION: 225.72 — Station 2+965.905; 2.79 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
225	1	5			**FILL MATERIAL** Topsoil 0 mm to 25 mm	
224	2	9			Mix of brown silty fine sand with some gravel and lean clay 25 mm to 1.22 m	
223	3	8			**TOPSOIL**	
222	4	6			**LEAN CLAY (CL)** Gray and brown mottled	Water level at completion qp=140, 165
221	5	14			**SILTY FINE TO MEDIUM SAND (SM)** Grayish-brown Root fibers with little to some gravel with occasional clayey layers	
220	6	15			**LEAN CLAY (CL)** Gray sandy	qp=290
219	7	16				qp=290
218	8	14				qp=190, 265
217	9				End of boring	
216	10					
215	11					
214	12					
213	13					
212						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 1091

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-19

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(7).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BORING: R12 — BORING COMPLETED: 08/25/97

ELEVATION: 255.71 — Station 3+220.870; 7.05 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
255	0	8			**TOPSOIL**	
					LEAN CLAY (CL) Brown trace to little sand 127 mm to 1.83 m	qp=240, 190 NM=14.3 LL=22 PL=15
254	1	8				qp=240, 290 NM=16.5
	2	16			With little to some gravel 1.83 m to 3.05 m	qp=430+
253	3	24				qp=430+
252	4				Dry at completion	
251	5				End of boring	
250	6					
249	7					
248	8					
247	9					
246	10					
245	11					
244	12					
243	13					
242						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-20

BORING: R13 — BORING COMPLETED: 08/25/97

ELEVATION: 221.09 — Station 3+588.471; 3.64 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
221	0	10			**TOPSOIL**	
					LEAN CLAY (CL) Brown with trace to little sand and little gravel 152 mm to 1.83 m	qp=430+ NM=13.8
220	1	15				qp=430, 380 NM=14.4
219	2	19			Brownish-gray 1.83 m to 3.05 m	qp=165, 190
218	3	11				qp=240, 265
217	4				Dry at completion	
216	5				End of boring	
215	6					
214	7					
213	8					
212	9					
211	10					
210	11					
209	12					
208	13					

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-21

BORING: R14 — BORING COMPLETED: 08/21/97

ELEVATION: 230.74 — Station 1+038.128; 42.6 left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
230	0	12			**FILL MATERIAL** Bituminous pavement 0 mm to 140 mm	
	1	11			Brown silty fine to medium sand and gravel 191 mm to 686 mm	qp=320
229					Brown lean clay 686 mm to 1.83 m	
	2	20			Mix of lean clay, silt, sand, and gravel 1.83 m to 2.44 m	
228	3	19			Brown lean clay with sand, gravel, and occasional bituminous pieces 2.44 m to 3.05 m	qp=430+
227	4				Dry at completion	
226	5				End of boring	
225	6					
224	7					
223	8					
222	9					
221	10					
220	11					
219	12					
218	13					
217						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-22

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(8).DGN 09-18-01
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 241	M

BORING: R15 — BORING COMPLETED: 08/25/97

ELEVATION: 226.00 — Station 4+697.221; 6.98 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
226						
		19			**FILL MATERIAL** Bituminous pavement 0 mm to 95 mm	qp=380
225	1	11			Brown silty fine to medium sand and gravel 95 mm to 914 mm	NM=20.1 LL=35 PL=22
					Brown lean clay with little gravel	
224	2	7			**TOPSOIL**	qp=190, 210
					LEAN CLAY (CL) Brown and gray mottled with little gravel	NM=20.6 LL=44 PL=19
223	3	13				qp=290, 380
					Dry at completion	
222	4				End of boring	
221	5					
220	6					
219	7					
218	8					
217	9					
216	10					
215	11					
214	12					
213	13					
212						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-23

BORING: R16 — BORING COMPLETED: 08/21/97

ELEVATION: 225.80 — Station 3+673.588; 6.79 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		18			**FILL MATERIAL** Bituminous pavement 0 mm to 324 mm	pushed stone, no recovery
225	1	12			Brown silty fine to medium sand with gravel 324 mm to 451 mm	qp=405
224	2	9			Brown lean clay 451 mm to 2.13 m	
223	3	7			Brown to gray lean clay with little to some gravel and little sand 2.13 m to 2.74 m	
		2			Black	NM=71.7 LI=14.3 LL=140 PL=75
222	4	5			**ORGANIC SILT (OH)** Dark brown to black with occasional seams of peat and wood particles 3.96 m to 4.72 m	▼ Water level at completion NM=127.1 LI=33.6 LL=103 PL=79
221	5	10			Gray with small white shells 4.72 m to 4.95 m	
220	6				**SILTY FINE TO MEDIUM SAND (SM)** Gray with some gravel	
219	7				End of boring	
218	8					
217	9					
216	10					
215	11					
214	12					
213	13					
212						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-24

BORING: R17 — BORING COMPLETED: 08/21/97

ELEVATION: 224.06 — Station 7+585.733; 6.8 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
224						
		21			**FILL MATERIAL** Topsoil 0 mm to 152 mm	
223	1	6			Mix of brown lean clay, gravel, silty sand, and rubble 152 mm to 914 mm	qp=100, 115 NM=26.6 LL=50 PL=20
					LEAN CLAY (CL) Gray to dark gray with trace organic matter 914 mm to 1.83 m	qp=75, 70 NM=25.2 LL=35 PL=18
222	2	4			Gray and brown mottled 1.83 m to 2.44 m	
		14			Brownish-gray with little gravel 2.44 m to 3.05 m	qp=150, 190
221	3				Dry at completion	
220	4				End of boring	
219	5					
218	6					
217	7					
216	8					
215	9					
214	10					
213	11					
212	12					
211	13					

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-25

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 242	M

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10191.DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BORING: NO. 2 — BORING COMPLETED: 07/26/56

ELEVATION: 226.50 — Station 0+979 m

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
226						PAVEMENT	
	1	16				SILT AND CLAY Trace of sand	qp=240
225		3					qp=50
	2	1				SILT Some clay, trace of sand	
224							
	3	22				FINE TO COARSE SAND Some silt, trace of gravel, dark gray	Water level after casing removal
223							
	4						
222		18				SILT Some clay, trace of sand and gravel, gray	qp=400
	5						Water level before casing removal
221							
	6	39					qp=430
220							
	7						
219							
	8	62					
218						CLAY Some silt	
	9					Trace of sand 8.08 m to 10.36 m	
217		16					qp=150 LL=45 PL=18 NM=24.6
	10						
216							
	11	15					qp=190
215							
	12						
214		18					qp=310
	13						
213							
	19						qp=240

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOIL BORING RECORD
Existing CTH ML Bridge
Wisconsin State Highway Commission
Boring Performed in 1956

DRAWING 10916-47

BORING: NO. 2 — BORING COMPLETED: 07/26/56

ELEVATION: 226.50 — Station 0+979 m

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
212	15						
211		16					qp=220
	16						
210							
	17	13					qp=270
209							
	18					CLAY AND SILT Trace of sand	
208		24					qp=290
	19						
207						End of boring at 19.35 m	
	20						
206							
	21						
205							
	22						
204							
	23						
203							
	24						
202							
	25						
201							
	26						
200							
	27						
199							

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
Existing CTH ML Bridge
Wisconsin State Highway Commission
Boring Performed in 1956

DRAWING 10916-48

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 243	M

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1-10(10).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BORING: R18 — BORING COMPLETED: 08/20/97

ELEVATION: 226.42 — Station 6+163.336; 6.35 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
226		11			**FILL MATERIAL**	qp=430+
	1				Bituminous pavement 0 mm to 146 mm	
		9			Brown silty sand and gravel 146 mm to 381 mm	qp=240, 265
225					Brown to gray lean clay with little sand and gravel 381 mm to 1.83 m	
	2	10			**LEAN CLAY (CL)**	qp=140, 165
					Dark gray with little gravel 1.83 m to 2.44 m	NM=28.5 LL=50
224						PL=21
	3	7			Gray and brown mottled with trace gravel 2.44 m to 3.05 m	qp=75, 100
223					Dry at completion	
	4				End of boring	
222						
	5					
221						
	6					
220						
	7					
219						
	8					
218						
	9					
217						
	10					
216						
	11					
215						
	12					
214						
	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-26

BORING: R19 — BORING COMPLETED: 08/21/97

ELEVATION: 226.89 — Station 6+299.180; 7.66 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		13			**TOPSOIL**	qp=430+ NM=21.6
226	1				**LEAN CLAY (CL)**	
		17			Brown sandy with little gravel 152 mm to 1.83 m	qp=430+
225	2	19				qp=430+
224	3	24			Dry at completion	qp=430+
223	4					
222	5					
221	6					
220	7					
219	8					
218	9					
217	10					
216	11					
215	12					
214	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-27

BORING: R20 — BORING COMPLETED: 08/21/97

ELEVATION: 226.54 — Station 6+376.563; 12.27 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
					TOPSOIL	
226		11			**SANDY CLAY AND SILTY CLAY (CL)**	
	1				Light brown trace gravel	
		13				wet
225					**SILTY FINE TO MEDIUM SAND (SM)**	
	2	14			Brown	
224					**CLAYEY SAND (SC) WITH GRAVEL**	
	3	24			Brown	qp=430+
223					**LEAN CLAY (CL)**	
	4				Gray sandy with little gravel	
222					Dry at completion	
	5				End of boring	
221						
	6					
220						
	7					
219						
	8					
218						
	9					
217						
	10					
216						
	11					
215						
	12					
214						
	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-28

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(11).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 244	M

BORING: R21 — BORING COMPLETED: 08/27/97

ELEVATION: 224.99 — Station 6+588.089; 0.21 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		13			**TOPSOIL**	
224	1				**LEAN CLAY (CL)** Brown 0 mm to 2.44 m	qp=380, 340 NM=24.4
		15			Silty with seams of silt 914 mm to 2.44 m	qp=290, 340 NM=21.9
223	2	18				qp=430+
		15			Gray 2.44 m to 3.05 m	qp=240, 265
222	3				Dry at completion	
221	4				End of boring	
220	5					
219	6					
218	7					
217	8					
216	9					
215	10					
214	11					
213	12					
212	13					
211						

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-29

BORING: R22 — BORING COMPLETED: 08/18/97

ELEVATION: 224.85 — Station 6+732.656; 24.5 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		6			**FILL MATERIAL**	
224	1	12			Mix of brown lean clay, topsoil, brown and gray mottled sandy clay, and little gravel	
223	2	17			**LEAN CLAY (CL)** Gray trace to little gravel	qp=190
222	3	18			Dry at completion	qp=340, 380
221	4				End of boring	
220	5					
219	6					
218	7					
217	8					
216	9					
215	10					
214	11					
213	12					
212	13					
211						

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-30

BORING: R23 — BORING COMPLETED: 08/18/97

ELEVATION: 224.95 — Station 6+828.743; 5.19 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		10			**FILL MATERIAL** Topsoil and lean clay	qp=210, 290
224	1				**TOPSOIL**	
		6			**LEAN CLAY (CL)** Gray 533 mm to 914 mm	NM=16.3 LL=21 PL=15
223	2	12			Gray and brown mottled with seams of clayey silt, silt, sandy clay, and occasional seams of silty fine sand 914 mm to 3.05 m	▼ Water level at completion wet
		14				qp=190, 290
222	3				End of boring	
221	4					
220	5					
219	6					
218	7					
217	8					
216	9					
215	10					
214	11					
213	12					
212	13					
211						

FOR NOTES AND LEGEND SEE DRAWING 1091

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-31

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(12).DGN 09-18-01
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 245	M

BORING: R24 — BORING COMPLETED: 08/25/97

ELEVATION: 224.96 — Station 0+109.562; 4.82 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
					TOPSOIL	
		17			LEAN CLAY (CL)	qp=430+
224	1	12			Light brown to brown sandy with little gravel	qp=340, 380
223	2	16				qp=240, 380
222	3	14			Brownish-gray 2.13 m to 3.05 m	qp=165, 240
221	4				Dry at completion	
220	5				End of boring	
219	6					
218	7					
217	8					
216	9					
215	10					
214	11					
213	12					
212	13					
211						

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-32

BORING: R25 — BORING COMPLETED: 08/19/9

ELEVATION: 266.25 — Station 0+281.064; 7.1 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
					TOPSOIL	
266		10			LEAN CLAY (CL)	qp=430+
265	1	9			Brown and gray mottled with trace to little gravel	qp=430+
264	2	20			CLAYEY SAND (SC) WITH GRAVEL	damp to moist
263	3	18			Brown	
262	4				LEAN CLAY (CL)	qp=355, 380
261	5				Brown with trace to little gravel	
260	6				Dry at completion	
259	7				End of boring	
258	8					
257	9					
256	10					
255	11					
254	12					
253	13					

FOR NOTES AND LEGEND SEE DRAWING 10

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-33

BORING: R26 — BORING COMPLETED: 08/19/97

ELEVATION: 226.70 — Station 1+200.099; 2.78 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		6			FILL MATERIAL	qp=215, 140
226	1	18			Bituminous pavement 0 mm to 174 mm	
225	2	21			Brown silty fine to medium sand with some gravel 174 mm to 381 mm	qp=355, 265
224	3	5			Mix of lean clay, sandy clay, silty sand, and gravel 381 mm to 2.59 m	qp=80, 50
223	4	4			TOPSOIL	
222	5				LEAN CLAY (CL)	qp=80, 100
221	6				Dark gray and brown mottled	
220	7				Dry at completion	
219	8				End of boring	
218	9					
217	10					
216	11					
215	12					
214	13					
213						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 1091

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-34

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS1L-18(13).DGN 09-18-01
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 2.46	M

BORING: R27 — BORING COMPLETED: 08/19/97

ELEVATION: 223.72 — Station 1+368.715; 2.17 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
223	0	10				**FILL MATERIAL** Bituminous pavement 0 mm to 108 mm Base course 108 mm to 279 mm	
	1	7				Mix of brown lean clay, silt, sand, and gravel 279 mm to 1.37 m	
222	2	6				**TOPSOIL**	qp=100 NM=31.1 LL=54 PL=21
221	3	12				**FAT CLAY (CH)** Dark gray with trace organic matter 1.52 m to 2.13 m Brown with little gravel 2.13 m to 3.05 m Dry at completion	qp=380, 340
220	4						
219	5						
218	6						
217	7						
216	8						
215	9						
214	10						
213	11						
212	12						
211	13						
210							

FOR NOTES AND LEGEND SEE DRAWING 1091

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-35

BORING: R28 — BORING COMPLETED: 08/21/97

ELEVATION: 223.75 — Station 9+100.668; 3.72 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
						TOPSOIL	
223	1	11				**LEAN CLAY (CL)**	qp=430+
		15				Brown with little gravel, sandy	qp=430+
222	2	14					qp=315, 380
221	3	21					qp=340
						Dry at completion	
220	4					End of boring	
219	5						
218	6						
217	7						
216	8						
215	9						
214	10						
213	11						
212	12						
211	13						
210							

FOR NOTES AND LEGEND SEE DRAWING 1091

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-36

BORING: R29 — BORING COMPLETED: 08/21/97

ELEVATION: 224.16 — Station 9+237.418

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV.	SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
224						**TOPSOIL**	
		10				**LEAN CLAY (CL)**	qp=430+ NM=12.6 LL=33 PL=18
223	1	17				Brown with little to some gravel	qp=430+
222	2	17					qp=340
		23					qp=430+
221	3					Dry at completion	
						End of boring	
220	4						
219	5						
218	6						
217	7						
216	8						
215	9						
214	10						
213	11						
212	12						
211	13						

FOR NOTES AND LEGEND SEE DRAWING 10916

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-37

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(14).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 247	M

BORING: R30 — BORING COMPLETED: 08/21/97

ELEVATION: 221.68 — Station 9+471.926; 11.86 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
221	0	12			TOPSOIL	
					LEAN CLAY (CL) Brown with little to some gravel 229 mm to 2.9 m	qp=430+
	1	16				qp=430+
220	2	26				poor recovery
219	3	25			Grayish-brown 2.9 m to 3.05 m Dry at completion	qp=360, 340
218	4				End of boring	
217	5					
216	6					
215	7					
214	8					
213	9					
212	10					
211	11					
210	12					
209	13					
208						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-38

BORING: R31 — BORING COMPLETED: 08/21/97

ELEVATION: 218.05 — Station 9+633.923; 12.4 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
218	0	9			TOPSOIL	
					LEAN CLAY (CL) Dark brown to brown, possible fill material	qp=265, 320
217	1	4				qp=70, 50
					LEAN CLAY (CL) Gray with organic matter	
216	2	15				qp=430
					LEAN CLAY (CL) Brown with little gravel	
215	3	20				qp=430+
					Dry at completion	
214	4				End of boring	
213	5					
212	6					
211	7					
210	8					
209	9					
208	10					
207	11					
206	12					
205	13					

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-39

BORING: R32 — BORING COMPLETED: 08/21/97

ELEVATION: 217.44 — Station 9+722.861; 5.3 left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
217	0	9			TOPSOIL	
					LEAN CLAY (CL) Brown and gray mottled 229 mm to 914 mm	qp=190, 340 NM=22.0 LL=47 PL=22
216	1	14			Brown with some gravel 914 mm to 2.44 m	qp=290, 380
215	2	17				pushed stone, no recovery
	3	15			Brownish-gray with partings of silt 2.44 m to 3.05 m Dry at completion	qp=190, 160
214	4				End of boring	
213	5					
212	6					
211	7					
210	8					
209	9					
208	10					
207	11					
206	12					
205	13					
204						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-40

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(15).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 248	M

BORING: R33 — BORING COMPLETED: 08/21/97

ELEVATION: 219.21 — Station 9+988.518; 4.08 m left

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
219		8			TOPSOIL	
	1				LEAN CLAY (CL) Brown with little to some gravel 152 mm to 1.83 m	qp=165, 265
218		14				qp=430+
	2					
217		24				qp=430+
	3	26				qp=430
216					Dry at completion	
	4				End of boring	
215						
	5					
214						
	6					
213						
	7					
212						
	8					
211						
	9					
210						
	10					
209						
	11					
208						
	12					
207						
	13					
206						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-41

BORING: R34 — BORING COMPLETED: 08/21/97

ELEVATION: 215.98 — Station 10+201.369; 2.64 m right

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		8			FILL MATERIAL Bituminous pavement 0 mm to 330 mm Gray and brown mottled lean clay with gravel and sand 220 mm to 914 mm	qp=380
215	1	7			Gray sandy lean clay 914 mm to 1.22 m	Water level at completion NM=42.8 LI=10.9 wet
214	2	8			PEAT (Pt) Black	
					LEAN CLAY (CL) Gray sandy	
213	3	13			SILT (ML) Sandy	
					End of boring	
212	4					
211	5					
210	6					
209	7					
208	8					
207	9					
206	10					
205	11					
204	12					
203	13					
202						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML Overpass
IH 94 and CTH ML
Kenosha County, Wisconsin

DRAWING 10916-42

BORING: R35 — BORING COMPLETED: 02/05/98

ELEVATION: 224.71

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
		23			TOPSOIL	
224	1				LEAN CLAY (CL) Brown	qp=380, 430+ moist
		27				qp=355, 380 NM=26.1 LL=47 PL=24 qu=305 Dw=19.7 Dd=15.7 qp=380 moist
223	2	20				
222		26				qp=430+ moist
	3				Dry at completion	
221					End of boring	
	4					
220						
	5					
219						
	6					
218						
	7					
217						
	8					
216						
	9					
215						
	10					
214						
	11					
213						
	12					
212						
	13					
211						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-49

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 249	M

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(16).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BORING: R36

ELEVATION: 225.40

BORING COMPLETED: 02/05/98

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
225		15			**FILL MATERIAL** Topsoil 0 mm to 76 mm Clay 76 mm to 1.07 m	qp=340, 240 moist
	1	21			Mix of silty sand and gravel 1.07 m to 1.83 m	▼ Water level at completion
224						
	2	19			**LEAN CLAY (CL)** Brown sandy with gravel	qp=380 wet to saturated
223		18			**VARVED LEAN CLAY (CL) AND SILT (ML)** Gray	NM=17.5 LL=26 PL=17 qu=316 Dw=22.3 Dd=19.0
	3				End of boring	
222						
	4					
221						
	5					
220						
	6					
219						
	7					
218						
	8					
217						
	9					
216						
	10					
215						
	11					
214						
	12					
213						
	13					
212						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-50

BORING: R37

ELEVATION: 225.70

BORING COMPLETED: 02/05/98

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
225		8			**FILL MATERIAL** Bituminous pavement 0 mm to 51 mm Concrete pavement 51 mm to 305 mm Mix of sand and gravel 305 mm to 533 mm Clay 533 mm to 1.07 m Mix of sandy silt and gravel 1.07 m to 1.83 m Mix of clay, sand, gravel, and occasional topsoil 1.83 m to 3.35 m	
	1	30				
224						
	2	19				
223		10				
	3					
222		8			**LEAN CLAY (CL)** Gray and brown mottling, with trace gravel Sandy with little gravel 4.1 m to 6.1 m	qp=50 NM=28.6 LL=31 PL=18 qp=165, 100 moist
	4	13				
221						
	5	17			Grayish-brown	▼ qp=165 Water level at completion qp=140, 190 wet to saturated
220						
	6	23			End of boring	
219						
	7					
218						
	8					
217						
	9					
216						
	10					
215						
	11					
214						
	12					
213						
	13					
212						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916-

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-51

BORING: R38

ELEVATION: 224.63

BORING COMPLETED: 02/05/98

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
224		25			**FILL MATERIAL** Topsoil 0 mm to 305 mm Mix of clay and occasional concrete pieces 305 mm to 1.12 m	
	1	7			**TOPSOIL**	NM=18.6, 18.2 LI=2.6
223					**LEAN CLAY (CL)** Gray with brown mottling and trace gravel Sandy with little gravel 2.6 m to 4.6 m	qp=50 NM=26.6 LL=34 PL=19 qu=29 Dw=19.0 Dd=15.0
	2	4				qp=115, 190 moist
222		12				
	3				Grayish-brown	▼ qp=265, 240 Water level at completion
221		20				
	4					qp=165, 190 wet to saturated
220		26				
	5				End of boring	
219						
	6					
218						
	7					
217						
	8					
216						
	9					
215						
	10					
214						
	11					
213						
	12					
212						
	13					
211						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 1091

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-52

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(17).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:250	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	EARTHWORK - SOIL BORINGS	SHEET NO: 250	M

BORING: R39 — BORING COMPLETED: 02/05/98

ELEVATION: 223.95

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
223	1	17			**FILL MATERIAL** Topsoil 0 mm to 152 mm Mix of clay, sand, and gravel 152 mm to 1.07 m	▼ Water level at 2 hours
		8			**LEAN CLAY (CL)** Dark gray with brown mottling and with trace organics 1.07 m to 1.52 m	
222	2	4			Gray with brown mottling and with trace gravel 1.52 m to 2.59 m	qp=100, 140 LL=24 PL=19
221	3	18			Sandy with little gravel 2.6 m to 4.6 m	▼ Water level at completion
		30			Grayish-brown 2.59 m to 3.66 m	qp=430, 290 wet and saturated
220	4	32			Gray 3.4 m to 4.57 m	qp=430 wet to saturated
						qp=430+ wet to saturated
219	5				End of boring	
218	6					
217	7					
216	8					
215	9					
214	10					
213	11					
212	12					
211	13					
210						

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-53

BORING: R40 — BORING COMPLETED: 02/05/98

ELEVATION: 224.36

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
224					**TOPSOIL**	
	1	18			**LEAN CLAY (CL)** Sandy with trace to little gravel	qp=190, 115 moist
223		20			Brown 152 mm to 2.9 m	▼ Water level at 11 hours
	2	35			Silty at 1.4 m	qp=190, 240 LL=20 PL=15
222						qp=380, 430 moist
	3	31				qp=430+ moist
221					Gray 2.9 m to 4.57 m	
	4					
220		45				qp=430+ moist
	5				Dry at completion End of boring	
219						
218	6					
217	7					
216	8					
215	9					
214	10					
213	11					
212	12					
211	13					

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-54

BORING: R41 — BORING COMPLETED: 02/05/98

ELEVATION: 224.31

ELEVATION METERS	DEPTH METERS	BLOW COUNTS	RECOV. SAMPLE	LITHO.	DESCRIPTION OF MATERIALS	LAB RESULTS, REMARKS
224					**TOPSOIL**	
		12			**LEAN CLAY (CL)** Brown, sandy with trace to little gravel	qp=190, 275 NM=19.3 LL=35 PL=20
223	1	24				qp=290, 380 moist
					Grayish-brown 1.07 m to 2.97 m	
222	2	26				qp=340, 380 moist
		39				▼ qp=430 moist
221	3				Silty 1.07 m to 4.6 m Gray 2.97 to 4.57 m	Water level at 2-1/2 hours
	4					
220		26				qp=430+ moist
	5				Dry at completion End of boring	
219						
218	6					
217	7					
216	8					
215	9					
214	10					
213	11					
212	12					
211	13					

SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

FOR NOTES AND LEGEND SEE DRAWING 10916

SOIL BORING RECORD
CTH ML & IH 94
Kenosha Weight & Safety Facility No. 21
Kenosha County, Wisconsin

DRAWING 10916-55

FILE NAME: PROJECTS/2940/PLANS/SOIL/2940SOILBORINGS11-18(18).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

DATE 15MAY02

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
0010	20101	CLEARING	40M	43.30	28.80	14.50
0020	20102	CLEARING	25MM	703.00	328.00	375.00
0030	20104	GRUBBING	40M	43.30	28.80	14.50
0040	20105	GRUBBING	25MM	703.00	328.00	375.00
0050	20301	REMOVING OLD CULVERT, STATION 10+157.5"C"	LS	1.00	1.00	
0060	20351	REMOVING OLD BRIDGE, STATION 0+988.54"A"	LS	1.00	1.00	
0070	20401	REMOVING PAVEMENT	M2	13,580.00	80.00	13,500.00
0080	20403	REMOVING CURB	M	29.00		29.00
0090	20405	REMOVING CURB AND GUTTER	M	162.00	162.00	
0100	20408	REMOVING MASONRY	M3	10.60	5.40	5.20
0110	20411	REMOVING GUARDRAIL	M	931.00	456.00	475.00
0120	20412	REMOVING FENCE	M	2,974.00	516.00	2,458.00
0130	20416	REMOVING INLETS	EACH	6.00		6.00
0140	20417	REMOVING SEPTIC TANKS	EACH	2.00		2.00
0150	20423	REMOVING CONCRETE SLOPE PAVING	M2	1,100.00		1,100.00
0160	20424	REMOVING MARKER POSTS	EACH	18.00	5.00	13.00
0170	20460	REMOVING BUILDING, STATION 3+720"F", RT.	LS	1.00		1.00
0180	20461	REMOVING BUILDING, STATION 0+370"J", LT.	LS	1.00		1.00
0190	20462	REMOVING BUILDING, STATION 6+940"I", RT.	LS	1.00		1.00
0200	20483	ABANDONING WELLS	EACH	2.00		2.00
0210	20494	ABANDONING CULVERT PIPES	EACH	1.00		1.00
0220	20501	COMMON EXCAVATION	M3	99,947.00	50,446.00	49,501.00
0230	20610	EXCAVATION FOR STRUCTURES, BRIDGES B-30-30	LS	1.00	1.00	
0240	20620	EXCAVATION FOR STRUCTURES, CULVERTS STATION 10+162"C"	LS	1.00	1.00	
0250	20801	BORROW EXCAVATION	M3	83,209.00	54,809.00	28,400.00
0260	20901	GRANULAR BACKFILL	M3	482.90	6.10	476.80
0270	21001	STRUCTURE BACKFILL	M3	627.00	627.00	
0280	21111	PREPARATION OF FOUNDATION FOR CONCRETE PAVEMENT	LS	1.00		1.00
0290	21302	FINISHING ROADWAY, PROJECT 1032-05-76	LS	1.00	1.00	
0300	21303	FINISHING ROADWAY, PROJECT 1032-08-70	LS	1.00		1.00
0310	30404	CRUSHED AGGREGATE BASE COURSE	MG	63,386.00	29,619.00	33,767.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
0320	30420	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NUMBER 2	MG	5,401.00		5,401.00
0330	30422	ASPHALTIC PAVEMENT, BASE COURSE	MG	9,500.00		9,500.00
0340	30424	SALVAGED ASPHALTIC PAVEMENT, BASE COURSE	MG	3,006.00		3,006.00
0350	30425	BREAKER RUN STONE	M3	7,991.00	3,061.00	4,930.00
0360	40204	ASPHALTIC MATERIAL FOR TACK COAT	L	5,093.00	3,111.00	1,982.00
0370	40301	QMP, ASPHALTIC MIXTURE	MG	16,047.00	9,412.00	6,635.00
0380	40501	ASPHALTIC MATERIAL FOR PLANT MIXES	MG	346.00	280.00	66.00
0390	40721	ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3	MG	2,777.00	683.00	2,094.00
0400	40722	ASPHALTIC CONCRETE PAVEMENT, TYPE E-1	MG	8,729.00	8,729.00	
0410	40726	ASPHALTIC CONCRETE PAVEMENT, TYPE E-30X	MG	4,541.00		4,541.00
0420	40728	DENSITY INCENTIVE, ASPHALTIC CONCRETE PAVEMENT	DOL	11,540.00	6,850.00	4,690.00
0430	41510	CONCRETE PAVEMENT, 250 MM	M2	16,743.00		16,743.00
0440	41511	CONCRETE PAVEMENT, 275 MM	M2	9,175.00		9,175.00
0450	41551	CONTINUOUS CONCRETE PAVEMENT REINFORCEMENT	M2	625.00		625.00
0460	41620	CONCRETE SURFACE DRAINS	M3	12.50	12.50	
0470	41621	CONCRETE PAVEMENT APPROACH SLAB	M2	146.00	146.00	
0480	41653	PAVEMENT TIES	EACH	3,237.00		3,237.00
0490	41654	DOWEL BARS	EACH	18.00		18.00
0500	50201	CONCRETE MASONRY, BRIDGES	M3	667.00	667.00	
0510	50232	EXPANSION DEVICE, STRUCTURE B-30-30	LS	1.00	1.00	
0520	50251	CONCRETE MASONRY ANCHORS, TYPE L, NO. 20M BARS	EACH	18.00	18.00	
0530	50265	PROTECTIVE SURFACE TREATMENT	M2	1,190.00	1,190.00	
0540	50401	CONCRETE MASONRY, CULVERTS	M3	11.00	11.00	
0550	50405	CONCRETE MASONRY, RETAINING WALLS	M3	5.20		5.20
0560	50409	CONCRETE MASONRY, ENDWALLS	M3	10.70	8.70	2.00
0570	50504	HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	KG	6,645.00	6,645.00	
0580	50505	HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	KG	772.00	772.00	
0590	50511	COATED HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	KG	36,790.00	36,790.00	
0600	50601	STRUCTURAL CARBON STEEL	KG	9,850.00	9,850.00	
0610	50606	HIGH STRENGTH STRUCTURAL STEEL	KG	148,100.00	148,100.00	

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
0620	50627	LAMINATED ELASTOMERIC BEARING PADS	EACH	8.00	8.00	
0630	50632	WELDED STUD SHEAR CONNECTORS, 22 X 150 MM	EACH	1,328.00	1,328.00	
0640	50634	WELDED STUD SHEAR CONNECTORS, 22 X 200 MM	EACH	1,328.00	1,328.00	
0650	51121	STEEL PILING, DELIVERED AND DRIVEN, HP 250 MM X 62 KG/M	M	840.00	840.00	
0660	51210	TEMPORARY STEEL SHEET PILING	M2	180.00	180.00	
0670	51605	RUBBERIZED MEMBRANE WATERPROOFING	M2	37.00	37.00	
0680	51706	PAINTING, EPOXY SYSTEM, STRUCTURE B-30-30	LS	1.00	1.00	
0690	51801	MORTAR RUBBLE MASONRY	M3	8.50	6.80	1.70
0700	52105	CORRUGATED STEEL CULVERT PIPE, 450 MM	M	71.00	51.00	20.00
0710	52147	STEEL APRON ENDWALLS FOR CULVERT PIPE, 300 MM	EACH	2.00		2.00
0720	52149	STEEL APRON ENDWALLS FOR CULVERT PIPE, 450 MM	EACH	12.00	8.00	4.00
0730	52202	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 375 MM	M	14.00		14.00
0740	52203	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 450 MM	M	13.00		13.00
0750	52205	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 600 MM	M	91.00	23.00	68.00
0760	52207	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 750 MM	M	51.00	30.00	21.00
0770	52212	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 1350 MM	M	54.00	54.00	
0780	52260	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 300 MM	EACH	4.00		4.00
0790	52261	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 375 MM	EACH	4.00		4.00
0800	52262	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 450 MM	EACH	1.00		1.00
0810	52263	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 525 MM	EACH	1.00		1.00
0820	52264	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 600 MM	EACH	8.00	2.00	6.00
0830	52266	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 750 MM	EACH	5.00	3.00	2.00
0840	52268	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 1050 MM	EACH	1.00		1.00
0850	60123	CONCRETE CURB AND GUTTER, 750 MM, TYPE A	M	1,110.00		1,110.00
0860	60133	CONCRETE CURB AND GUTTER, 750 MM, TYPE D	M	315.00		315.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
0870	60170	CONCRETE CURB AND GUTTER, 900 MM, TYPE D	M	136.00	88.00	48.00
0880	60204	CONCRETE SIDEWALK, 100 MM	M2	497.00		497.00
0890	60206	CONCRETE SIDEWALK, 150 MM	M2	88.00	21.00	67.00
0900	60224	CONCRETE SAFETY ISLANDS	M2	53.00		53.00
0910	60302	CONCRETE BARRIER, SINGLE FACED	M	903.00	34.00	869.00
0920	60304	CONCRETE BARRIER, TRANSITION SECTION	M	33.00	22.00	11.00
0930	60305	TEMPORARY PRECAST CONCRETE BARRIER, CONTRACTOR FURNISHED AND DELIVERED	M	579.00	579.00	
0940	60308	TEMPORARY PRECAST CONCRETE BARRIER, CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	M	579.00	579.00	
0950	60405	SLOPE PAVING, CRUSHED AGGREGATE	M2	167.00	167.00	
0960	60601	RIPRAP	M3	186.00	44.00	142.00
0970	60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 300 MM	M	216.70		216.70
0980	60826	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 375 MM	M	81.10		81.10
0990	60828	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 525 MM	M	114.50		114.50
1000	60829	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 600 MM	M	19.00		19.00
1010	60834	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 1050 MM	M	126.50		126.50
1020	60835	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 1200 MM	M	327.90		327.90
1030	61102	CATCH BASINS, TYPE 2	EACH	2.00		2.00
1040	61110	MANHOLES, TYPE 1	EACH	7.00		7.00
1050	61112	MANHOLES, TYPE 3	EACH	2.00		2.00
1060	61122	INLETS, TYPE 3	EACH	3.00		3.00
1070	61124	INLETS, TYPE 9	EACH	1.00		1.00
1080	61125	INLETS, TYPE 10	EACH	3.00		3.00
1090	61126	INLETS, TYPE 11	EACH	2.00		2.00
1100	61151	MANHOLE COVERS, TYPE J	EACH	4.00		4.00
1110	61163	INLET COVERS, TYPE C	EACH	5.00		5.00
1120	61167	INLET COVERS, TYPE H	EACH	5.00		5.00
1130	61170	INLET COVERS, TYPE MS	EACH	24.00		24.00
1140	61201	PIPE UNDERDRAIN, 150 MM	M	4,682.00	32.00	4,650.00
1150	61211	PIPE UNDERDRAIN, UNPERFORATED, 150 MM	M	411.00	12.00	399.00
1160	61214	PIPE UNDERDRAIN, UNPERFORATED, 300 MM	M	6.00		6.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
1170	61221	PIPE UNDERDRAIN, DRAIN TILE, 125 MM	M	10.00		10.00
1180	61223	PIPE UNDERDRAIN, DRAIN TILE, 200 MM	M	10.00		10.00
1190	61224	PIPE UNDERDRAIN, DRAIN TILE, 250 MM	M	10.00		10.00
1200	61251	DRAIN TILE EXPLORATION	M	40.00	20.00	20.00
1210	61254	REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN, 150 MM	EACH	42.00		42.00
1220	61407	STEEL THRIE BEAM STRUCTURE APPROACH	M	90.00	40.00	50.00
1230	61408	STEEL PLATE BEAM GUARD, CLASS A	M	591.00	591.00	
1240	61409	STEEL PLATE BEAM GUARD, CLASS B	M	36.00	36.00	
1250	61410	STEEL PLATE BEAM GUARD, CLASS A, OVER LOW FILL CULVERTS	M	4.00	4.00	
1260	61422	MARKER POSTS FOR RIGHT OF WAY	EACH	11.00	11.00	
1270	61423	IMPACT ATTENUATORS	EACH	1.00		1.00
1280	61433	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	8.00	4.00	4.00
1290	61435	STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL	EACH	13.00	8.00	5.00
1300	61601	WOVEN WIRE FENCE	M	2,540.00	89.00	2,451.00
1310	61910	MOBILIZATION	LS	1.00	0.50	0.50
1320	62001	CONCRETE CORRUGATED MEDIAN	M2	3,470.00		3,470.00
1330	62101	LANDMARK REFERENCE MONUMENTS	EACH	15.00	5.00	10.00
1340	62203	ASPHALTIC FLUMES	M2	96.00	17.00	79.00
1350	62501	TOPSOIL	M2	100.00	50.00	50.00
1360	62502	TOPSOIL	M3	20.00		20.00
1370	62505	SALVAGED TOPSOIL	M2	101,302.00	53,890.00	47,412.00
1380	62702	MULCHING	M2	101,302.00	53,890.00	47,412.00
1390	62815	SILT FENCE, DELIVERED	M	3,685.00	1,895.00	1,790.00
1400	62816	SILT FENCE, INSTALLED	M	3,685.00	1,895.00	1,790.00
1410	62817	SILT FENCE MAINTENANCE	M	370.00	190.00	180.00
1420	62819	MOBILIZATIONS, EROSION CONTROL	EACH	11.00	6.00	5.00
1430	62820	CLEANING SEDIMENT BASINS	M3	1,360.00	1,020.00	340.00
1440	62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	20.00	10.00	10.00
1450	62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	M2	11,030.00	8,190.00	2,840.00
1460	62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	M2	11,030.00	8,190.00	2,840.00
1470	62832	EROSION MAT, DELIVERED, CLASS II, TYPE B	M2	8,430.00	8,430.00	

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
1480	62833	EROSION MAT, INSTALLED, CLASS II, TYPE B	M2	8,430.00	8,430.00	
1490	62866	SOIL STABILIZER, TYPE B	HA	2.00	1.70	0.30
1500	62870	INLET PROTECTION, TYPE A	EACH	11.00		11.00
1510	62871	INLET PROTECTION, TYPE B	EACH	7.00		7.00
1520	62872	INLET PROTECTION, TYPE C	EACH	7.00		7.00
1530	62875	TEMPORARY DITCH CHECKS, DELIVERED	M	405.00	240.00	165.00
1540	62876	TEMPORARY DITCH CHECKS, INSTALLED	M	405.00	240.00	165.00
1550	62880	CULVERT PIPE DITCH CHECKS	EACH	15.00	9.00	6.00
1560	62905	FERTILIZER, TYPE B	KG	4,280.00	2,181.00	2,099.00
1570	63003	SEEDING, TEMPORARY	KG	1,713.00	664.00	1,049.00
1580	63010	SEEDING, MIXTURE NO. 30	KG	1,529.00	779.00	750.00
1590	63103	WATERING SODDED AREAS	KL	123.00	48.00	75.00
1600	63111	EROSION CONTROL SOD	M2	1,230.00	480.00	750.00
1610	63201	TREES, AMERICAN ARBORVITAE, 1.5M HT., B&B	EACH	11.00		11.00
1620	63202	TREES, MALUS PRAIRIFIRE, 50MM CAL., B&B	EACH	1.00		1.00
1630	63261	SHRUBS, AMERICAN CRANBERRYBUSH VIRBURNUM, 610MM HT., B&B	EACH	3.00		3.00
1640	63262	SHRUBS, SEA GREEN JUNIPER, 455MM HT., BR	EACH	13.00		13.00
1650	63263	SHRUBS, MANNEY JUNIPER, 455MM HT., B&B	EACH	3.00		3.00
1660	63264	SHRUBS, VIBURNUM TRILOBUM WENTWORTH, 760MM HT., CG	EACH	3.00		3.00
1670	63265	SHRUBS, SPIRAEA X BUMALDA GOLDMOUND, 460MM HT., CG	EACH	37.00		37.00
1680	63266	SHRUBS, POTENTILLA FRUTICOSA GOLDFINGER, 460MM HT., CG	EACH	18.00		18.00
1690	63267	SHRUBS, BERBERIS THUNBERGII VAR ARTOPURPUREA, CRIMSON PYGMY, 380MM HT., CG	EACH	23.00		23.00
1700	63268	SHRUBS, JUNIPPERUS SABINA BROADMOOR, 460MM SPREAD, CG	EACH	24.00		24.00
1710	63269	SHRUBS, TAXUS X MEDIA TAUNTONII, 460MM SPREAD, CG	EACH	58.00		58.00
1720	63270	SHRUBS, TAXUS X MEDIA HICKSII, 900MM HT., CG	EACH	1.00		1.00
1730	63301	DELINEATOR POSTS	EACH	93.00		93.00
1740	63305	DELINEATORS	EACH	187.00		187.00
1750	63310	DELINEATOR BRACKETS	EACH	36.00		36.00
1760	63411	WOOD POSTS, 100 X 150 MM X 4.3 M	EACH	38.00	29.00	9.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
1770	63412	WOOD POSTS, 100 X 150 MM X 4.9 M	EACH	9.00	9.00	
1780	63413	WOOD POSTS, 100 X 150 MM X 5.5 M	EACH	21.00		21.00
1790	63414	WOOD POSTS, 100 X 150 MM X 6.1 M	EACH	3.00	3.00	
1800	63502	HIGH STRENGTH STRUCTURAL STEEL, SIGN SUPPORTS	KG	2,634.00		2,634.00
1810	63601	CONCRETE MASONRY, SIGN SUPPORTS	M3	35.70		35.70
1820	63610	HIGH STRENGTH BAR STEEL REINFORCEMENT, SIGN SUPPORTS	KG	1,708.60		1,708.60
1830	63701	SIGNS, TYPE I	M2	107.16		107.16
1840	63702	SIGNS, TYPE II, REFLECTIVE	M2	39.59	27.92	11.67
1850	63821	MOVING SIGNS, TYPE I	EACH	6.00		6.00
1860	63822	MOVING SIGNS, TYPE II	EACH	18.00	5.00	13.00
1870	63826	REMOVING SIGNS, TYPE I	EACH	11.00		11.00
1880	63827	REMOVING SIGNS, TYPE II	EACH	100.00	55.00	45.00
1890	63830	REMOVING SMALL SIGN SUPPORTS	EACH	86.00	32.00	54.00
1900	63831	REMOVING STRUCTURAL STEEL SIGN SUPPORTS	EACH	20.00	2.00	18.00
1910	63840	MOVING SMALL SIGN SUPPORTS	EACH	5.00	5.00	
1920	64112	SIGN BRIDGE, CANTILEVERED, STRUCTURE S-30-14	LS	1.00		1.00
1930	64113	SIGN BRIDGE, CANTILEVERED, STRUCTURE S-30-15	LS	1.00		1.00
1940	64166	SIGN BRIDGE, STRUCTURE S-30-13	LS	1.00		1.00
1950	64301	TRAFFIC CONTROL	LS	1.00	1.00	
1960	64310	TRAFFIC CONTROL, ARROW BOARDS	DAYS	185.00	185.00	
1970	64313	TRAFFIC CONTROL, DRUMS	DAYS	23,000.00	23,000.00	
1980	64317	TRAFFIC CONTROL, BARRICADES, TYPE II	DAYS	1,460.00	1,460.00	
1990	64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	5,173.00	5,173.00	
2000	64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	11,500.00	11,500.00	
2010	64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	1,050.00	1,050.00	
2020	64326	TRAFFIC CONTROL, SIGNS	DAYS	12,216.00	12,216.00	
2030	64334	TRAFFIC CONTROL, DETOUR	LS	1.00	1.00	
2040	64343	TRAFFIC CONTROL, DETOUR, SIGNS	DAYS	11,786.00	11,786.00	
2050	64503	GEOTEXTILE FABRIC, TYPE DF	M2	7,923.00	74.00	7,849.00
2060	64505	GEOTEXTILE FABRIC, TYPE R	M2	632.00	160.00	472.00
2070	64602	PAVEMENT MARKING, 100 MM, EPOXY	M	17,375.00	11,430.00	5,945.00
2080	64618	PAVEMENT MARKING, CHANNELIZING, 200 MM, EPOXY	M	2,770.00	1,365.00	1,405.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
2090	64635	PAVEMENT MARKING, RAISED MARKERS	EACH	59.00		59.00
2100	64636	LOCATING NO-PASSING ZONES	KM	2.57	2.57	
2110	64642	REMOVING PAVEMENT MARKINGS	M	120.00	120.00	
2120	64774	PAVEMENT MARKING, DIAGONAL, 600 MM, EPOXY	M	45.00		45.00
2130	64786	PAVEMENT MARKING, PARKING STALL, EPOXY	M	975.00		975.00
2140	64904	TEMPORARY PAVEMENT MARKING, 100 MM, REMOVABLE TAPE	M	480.00	480.00	
2150	65040	CONSTRUCTION STAKING, STORM SEWER SYSTEM	EACH	32.00		32.00
2160	65045	CONSTRUCTION STAKING, SUBGRADE	M	4,044.00	43.00	4,001.00
2170	65050	CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE	M	3,918.00	2,773.00	1,145.00
2180	65055	CONSTRUCTION STAKING, CURB, GUTTER, AND CURB AND GUTTER	M	422.00	92.00	330.00
2190	65060	CONSTRUCTION STAKING, PIPE CULVERTS	EACH	12.00	6.00	6.00
2200	65070	CONSTRUCTION STAKING, CONCRETE PAVEMENT	M	4,044.00	43.00	4,001.00
2210	65075	CONSTRUCTION STAKING, CONCRETE BARRIER	M	800.00		800.00
2220	65085	CONSTRUCTION STAKING, ELECTRICAL, PROJECT 1032-08-70	LS	1.00		1.00
2230	65219	NONMETALLIC CONDUIT, SCHEDULE 40, 50 MM	M	1,439.00		1,439.00
2240	65221	NONMETALLIC CONDUIT, SCHEDULE 40, 75 MM	M	443.00		443.00
2250	65306	PULL BOXES, STEEL, 600 X 900 MM	EACH	5.00		5.00
2260	65404	CONCRETE BASES, TYPE 7	EACH	1.00		1.00
2270	65405	CONCRETE BASES, TYPE 8	EACH	26.00		26.00
2280	65418	CONCRETE CONTROL CABINET BASES, TYPE 9	EACH	1.00		1.00
2290	65432	TRANSFORMER BASES, BREAKAWAY, 375-425 MM BOLT CIRCLE	EACH	25.00		25.00
2300	65507	CABLE IN DUCT, 3 CONDUCTOR, NO. 8	M	333.00		333.00
2310	65566	ELECTRICAL WIRE, LIGHTING, NO. 12	M	1,596.00		1,596.00
2320	65567	ELECTRICAL WIRE, LIGHTING, NO. 10	M	1,767.00		1,767.00
2330	65568	ELECTRICAL WIRE, LIGHTING, NO. 8	M	3,963.00		3,963.00
2340	65569	ELECTRICAL WIRE, LIGHTING, NO. 6	M	383.00		383.00
2350	65570	ELECTRICAL WIRE, LIGHTING, NO. 4	M	1,659.00		1,659.00
2360	65572	ELECTRICAL WIRE, LIGHTING, NO. 1	M	6.00		6.00
2370	65645	ELECTRICAL SERVICE, MAIN LUGS ONLY METER PEDESTAL, HL-30-PS	LS	1.00		1.00
2380	65707	POLES, TYPE 7	EACH	1.00		1.00
2390	65711	POLES, TYPE A	EACH	14.00		14.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
2400	65713	POLES, TYPE E	EACH	12.00		12.00
2410	65928	LUMINAIRE ARMS, SINGLE MEMBER, 150 MM CLAMP, 1.2 M	EACH	3.00		3.00
2420	65930	LUMINAIRE ARMS, SINGLE MEMBER, 150 MM CLAMP, 3.0 M	EACH	14.00		14.00
2430	65938	LUMINAIRE ARMS, TRUSS TYPE, 150 MM CLAMP, 6.1 M	EACH	11.00		11.00
2440	66501	SAWING EXISTING PAVEMENT	M	2,010.00	46.00	1,964.00
2450	66502	SAWING CONCRETE PAVEMENT, FULL DEPTH	M	2,081.00	107.00	1,974.00
2460	90001	MISC 90001A REINFORCED CONCRETE CULVERT PIPE ARCH, CLASS IV, 1300 MM X 795 MM	M	52.00	52.00	
2470	90001	MISC 90001B REMOVING CABLES & ABANDONING CONDUIT	M	1,985.00		1,985.00
2480	90001	MISC 90001C REMOVING CONCRETE BARRIER	M	91.90	36.60	55.30
2490	90001	MISC 90001D CULVERT PIPE LINER, 450 MM	M	33.00		33.00
2500	90001	MISC 90001E CULVERT PIPE LINER, 1050 MM	M	74.00		74.00
2510	90001	MISC 90001F CULVERT PIPE LINER, 1200 MM	M	122.00		122.00
2520	90001	MISC 90001G HIGH-DENSITY POLYETHYLENE (HDPE) CONDUIT, 50MM	M	948.00		948.00
2530	90001	MISC 90001H HIGH-DENSITY POLYETHYLENE (HDPE) CONDUIT, 50 MM, DIRECTIONAL BORE	M	200.00		200.00
2540	90001	MISC 90001J 24 COUNT FIBER OPTIC COMMUNICATONS CABLE	M	1,258.00		1,258.00
2550	90001	MISC 90001K CONSTRUCTION STAKING, FENCE	M	2,540.00	89.00	2,451.00
2560	90002	MISC 90002A ARCHITECTURAL SURFACE TREATMENT	M2	515.00	501.00	14.00
2570	90002	MISC 90002B CONCRETE SHOULDER, 250 MM WITH CORRUGATIONS	M2	1,016.00		1,016.00
2580	90002	MISC 90002C PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, EPOXY	M2	260.00		260.00
2590	90002	MISC 90002D PRECAST PRESTRESSED DECK PANELS	M2	817.00	817.00	
2600	90002	MISC 90002E TEMPORARY SHORING B-30-30	M2	40.00	40.00	
2610	90003	MISC 90003A TEMPORARY STONE DITCH CHECKS	M3	40.00	30.00	10.00
2620	90003	MISC 90003B GROUT	M3	7.00	7.00	
2630	90003	MISC 90003C CONCRETE MASONRY, OUTLET CONTROL STRUCTURE	M3	3.30		3.30
2640	90003	MISC 90003D CRUSHED RED GRANITE CHIPS	M3	44.00		44.00
2650	90004	MISC 90004A REMOVING EXISTING SIGNAL EQUIPMENT	LS	1.00		1.00
2660	90004	MISC 90004B SWEF BUILDING, GENERAL CONSTRUCTION	LS	1.00		1.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
2670	90004	MISC 90004C SWEF BUILDING, PLUMBING	LS	1.00		1.00
2680	90004	MISC 90004D SWEF BUILDING, HEATING AND VENTILATING	LS	1.00		1.00
2690	90004	MISC 90004E SWEF BUILDING, ELECTRICAL	LS	1.00		1.00
2700	90004	MISC 90004F STATIC SCALE SYSTEM	LS	1.00		1.00
2710	90004	MISC 90004G WEIGH-IN-MOTION RAMP SORTER SYSTEM	LS	1.00		1.00
2720	90004	MISC 90004H CONTROL GATE SYSTEM	LS	1.00		1.00
2730	90004	MISC 90004J PACKAGED ENGINE GENERATOR SYSTEM	LS	1.00		1.00
2740	90004	MISC 90004K TRANSFER SWITCH	LS	1.00		1.00
2750	90004	MISC 90004L MOVING STATE WELCOME SIGN	LS	1.00		1.00
2760	90004	MISC 90004M REMOVING SIGN BRIDGE, STRUCTURE S-30-5	LS	1.00		1.00
2770	90004	MISC 90004N TUBULAR RAILING WITH FENCING, SPECIAL, STRUCTURE B-30-30	LS	1.00	1.00	
2780	90004	MISC 90004Q WELL CONSTRUCTION	LS	1.00		1.00
2790	90004	MISC 90004R FLAG POLES	LS	1.00		1.00
2800	90004	MISC 90004S PRIVATE ONSITE WASTEWATER TREATMENT SYSTEM	LS	1.00		1.00
2810	90004	MISC 90004T FTMS DOCUMENTATION	LS	1.00		1.00
2820	90004	MISC 90004U REMOVING STATIC SCALE	LS	1.00		1.00
2830	90004	MISC 90004V LIQUID PROPANE TANK	LS	1.00		1.00
2840	90004	MISC 90004W REMOVING MEDIAN SINGLE POLE, SIGN BRIDGE, STRUCTURE S-30-200	LS	1.00		1.00
2850	90005	MISC 90005A LANDSCAPING PLANTING SURVEILLANCE AND CARE	EACH	16.00		16.00
2860	90005	MISC 90005AA LAMP DISPOSAL, HIGH INTENSITY DISCHARGE	EACH	15.00		15.00
2870	90005	MISC 90005B ACCESS DOORS	EACH	4.00	4.00	
2880	90005	MISC 90005C FLOOD LIGHT, 175 WATT MH, WITH MOUNTING	EACH	2.00		2.00
2890	90005	MISC 90005D INSTALLING STATE-FURNISHED HIGHWAY LIGHTING DISTRIBUTION CENTER	EACH	1.00		1.00
2900	90005	MISC 90005E LUMINAIRS, HIGHWAY LIGHTING, 310 WATT HPS	EACH	27.00		27.00
2910	90005	MISC 90005F REINFORCED CONCRETE BOX CULVERT TAP	EACH	3.00		3.00
2920	90005	MISC 90005G REMOVING LIGHT POLE	EACH	15.00		15.00
2930	90005	MISC 90005H REMOVING PEDESTALS	EACH	9.00		9.00
2940	90005	MISC 90005J TEMP. PRECAST CONCRETE BARRIER, STEEL THRIE BEAM CONNECTION	EACH	2.00	2.00	

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
2950	90005	MISC 90005K COMMUNICATIONS VAULT	EACH	4.00		4.00
2960	90005	MISC 90005L 24-FIBER MAINLINE FIBER SPLICE	EACH	1.00		1.00
2970	90005	MISC 90005M 24-FIBER MAINLINE FIBER SPLICE IN EXISTING SPLICE CLOSURE	EACH	1.00		1.00
2980	90005	MISC 90005N INSTALL CONDUIT INTO AN EXISTING ITEM	EACH	2.00		2.00
2990	90005	MISC 90005P BURIED FIBER OPTIC CABLE MARKERS	EACH	10.00		10.00
3000	90005	MISC 90005Q PERENNIALS, STELLA D'ORO DAYLILLY, 150MM POT	EACH	20.00		20.00
3010	90005	MISC 90005R PERENNIALS, ALBO-MARGINATA HOSTA, 150MM POT	EACH	12.00		12.00
3020	90005	MISC 90005S LUMINAIRS, HIGHWAY LIGHTING, 200 WATT HPS	EACH	1.00		1.00
3030	90005	MISC 90005T MARKER POST, FLEXIBLE FOR GUARD RAIL TERMINAL	EACH	13.00	8.00	5.00
3040	90005	MISC 90005U REMOVING REINFORCED CONCRETE APRON ENDWALLS FOR PIPE UNDERDRAIN	EACH	15.00		15.00
3050	90005	MISC 90005V REMOVING UTILITY MANHOLES	EACH	6.00		6.00
3060	90005	MISC 90005W FIELD OFFICE, TYPE D	EACH	1.00	0.50	0.50
3070	90005	MISC 90005X CONCRETE MASONRY, ANCHOR BOLTS	EACH	8.00		8.00
3080	90005	MISC 90005Y INLET COVER, SPECIAL	EACH	2.00		2.00
3090	90005	MISC 90005Z NON-LAMINATED ELASTOMERIC BEARING PADS, SPECIAL	EACH	8.00	8.00	
3100	90006	MISC 90006A ASPHALTIC MATERIAL FOR PLANT MIXES, PG 76-28	MG	12.00		12.00
3110	90006	MISC 90006B ASPHALTIC MATERIAL FOR PLANT MIXES, PG 70-28	MG	18.00		18.00
3120	90006	MISC 90006C ASPHALTIC MATERIAL FOR PLANT MIXES, PG 70-22	MG	70.00		70.00
3130	90006	MISC 90006D ASPHALTIC MATERIAL FOR PLANT MIXES, PG 64-22	MG	15.00		15.00
3140	90006	MISC 90006E ASPHALTIC MATERIAL FOR PLANT MIXES, PG 58-28	MG	16.00		16.00
3150	90008	MISC 90008A PARTABLE CHANGABLE MESSAGE SIGN	DAY	60.00	60.00	
3160	90066	MISC 90066A MONTHLY MOBILE TELEPHONE BILLS	DOL	3,600.00	1,800.00	1,800.00
3170	90307	DEBRIS CONTAINMENT, STRUCTURE B-30-30	LS	1.00	1.00	
3180	90345	SPECIAL GRANULAR BACKFILL	MG	300.00	12.00	288.00
3190	90365	QMP, BASE COURSES	MG	80,486.00	29,619.00	50,867.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1032-05-76 QUANTITY	1032-08-70 QUANTITY
3200	90375	QMP, NUCLEAR DENSITY FOR ASPHALTIC PAVEMENT	MG	16,047.00	9,412.00	6,635.00
3210	90410	QMP, CONCRETE PAVEMENT	M2	30,603.00	146.00	30,457.00
3220	90412	QMP, PAVEMENT STRENGTH INCENTIVE, CONCRETE	DOL	30,603.00	146.00	30,457.00
3230	90501	QMP, READY MIXED CONCRETE MASONRY FOR BRIDGES, 5 CYLINDERS	M3	667.00	667.00	
3240	90502	QMP, BRIDGE STRENGTH INCENTIVE, CONCRETE MASONRY	DOL	8,004.00	8,004.00	
3250	90545	CONCRETE COLLAR	EACH	7.00	1.00	6.00
3260	90565	PORTABLE DECONTAMINATION FACILITY	LS	1.00	1.00	
3270	90616	MARKER POSTS, FLEXIBLE, FOR CULVERT END	EACH	35.00	9.00	26.00
3280	90637	SAFETY FENCE	M	15.50	12.40	3.10
3290	90778	PAVEMENT MARKING, OUTFALL MARKERS	EACH	39.00		39.00
3300	90997	ON-THE-JOB TRAINING, ASP-1T GRADUATE AT $2.00/HOUR 90997, 4 TRANS GRADUATES	HRS	950.00		950.00
3310	90998	ON-THE-JOB TRAINING, ASP-1T APPRENTICE AT $4.00/HOUR	HRS.	950.00		950.00
3320	90999	ON-THE-JOB TRAINING, ASP-1	HRS	3,800.00		3,800.00

GROUP CODE 0010	L.S. (EACH)
21302 FINISHING ROADWAY, PROJECT 1032-05-76	1
21303 FINISHING ROADWAY, PROJECT 1032-08-70	1

GROUP CODE 0010	L.S. (EACH)
PROJECT 1032-05-76	
61910 MOBILIZATION	0.5
PROJECT 1032-08-70	
61910 MOBILIZATION	0.5
TOTAL	1

GROUP CODE 0010	EACH
PROJECT 1032-08-70	
90005W FIELD OFFICE, TYPE D	0.5
PROJECT 1032-05-76	
90005W FIELD OFFICE, TYPE D	0.5
TOTAL	1

GROUP CODE 0010	DOL
PROJECT 1032-08-70	
90066A MONTHLY TELEPHONE BILL	1800
PROJECT 1032-05-76	
90066A MONTHLY TELEPHONE BILL	1800
TOTAL	3600

* BASED ON A 12 MONTH PROJECT DURATION
@ $300 PER MONTH (FOR 2 PHONES)

PROJECT 1032-08-70

GROUP CODE 0010	HRS.
90998 ON THE JOB TRAINING ASP-1T : APPRENTICE	950
TOTAL	950

PROJECT 1032-08-70

GROUP CODE 0010	HRS.
90999 ON THE JOB TRAINING ASP-1 1 : APPRENTICE	3800
TOTAL	3800

PROJECT 1032-08-70

GROUP CODE 0010	HRS.
90997 4-TRANS GRADUATES	950
TOTAL	950

PROJECT 1032-08-70

GROUP CODE 0010	L.S.
21111 PREAPARATION OF FOUNDATION FOR CONCRETE PAVEMENT	1
TOTAL	1

STRUCTURE WASTE CONTAINMENT

PROJECT 1032-05-76
GROUP CODE 0020

ITEM	DESCRIPTION	TOTAL (L.S.)
90307	DEBRIS CONTAINMENT, STRUCTURE B-30-30	1
90565	PORTABLE DECONTAMINATION FACILITY	1

CLEARING AND GRUBBING

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	OFFSET	(ITEM 20101) CLEARING (40M)	(ITEM 20102) CLEARING (25MM)	(ITEM 20105) GRUBBING (25MM)	(ITEM 20104) GRUBBING (40M)
1032-05-76	1	0+906 "A"	25m RT		16	16	
	1	0+920 "A"	27m RT		16	16	
	1	0+934 "A"	28m RT		16	16	
	1	0+940 "A"	20m RT		20	20	
	1	0+941 "A"	20m RT		20	20	
	1	0+933 "A"	20m LT		16	16	
	1	0+939 "A"	19m LT		16	16	
	1	0+938 "A"	19m LT		16	16	
	1	1+005 - 1+035 "A"	30m RT	0.8			0.8
	1	1+060 - 1+532 "A"	LT,RT	11.8			11.8
	1	1+146 "A"	19m LT		20	20	
	1	1+151 "A"	19m LT		20	20	
	1	0+825 "B"	17m LT		13	13	
	1	0+837 "B"	22m LT		13	13	
	1	0+838 "B"	22m LT		13	13	
	1	0+839 "B"	22m LT		13	13	
	1	0+867 "B"	16m LT		20	20	
	1	0+920 "B"	25m LT		20	20	
	1	1+127 "B"	24m LT		17	17	
	1	1+146 "B"	21m LT		20	20	
	1	12+788 - 12+981 "K"	LT,RT	4.8			4.8
	1	12+929 "K"	5m LT		23	23	
	1	9+080 - 9+454 "C"	LT,RT	9.4			9.4
	1	9+850 - 9+938 "C"	LT,RT	2.0			2.0
		SUB TOTAL		28.8	328	328	28.8
1032-08-70	1	2+842 - 2+873 "E"	LT,RT	0.8			0.8
	1	2+242 - 2+303 "E"	7m RT	1.5			1.5
	1	2+336 "E"	21m RT		3	3	
	1	2+350 "E"	35m RT		3	3	
	1	1+000 - 1+233 "L"	LT,RT	5.8			5.8
	1	2+460 "E"	20m RT		20	20	
	1	2+470 "E"	25m RT		20	20	
	1	2+487 "E"	35m RT		16	16	
	1	2+517 "E"	45m RT		16	16	
	1	2+526 "E"	62m RT		20	20	
	1	2+562 "E"	55m RT		20	20	
	1	2+569 "E"	45m RT		20	20	
	1	2+576 "E"	47m RT		20	20	
	1	2+585 "E"	43m RT		32	32	
	1	2+613 "E"	20m RT		11	11	
	1	2+622 "E"	20m RT		5	5	
	1	2+622 "E"	25m RT		13	13	
	1	0+112 "J"	7m RT		11	11	
	1	0+122 "J"	34m RT		13	13	
	1	0+135 "J"	23m RT		13	13	
	1	0+147 - 0+220 "J"	LT,RT	1.8			1.8
	1	0+263 - 0+445 "J"	LT,RT	4.6			4.6
	1	0+322 "J"	7m LT		17	17	
	1	0+330 "J"	0m LT		19	19	
	1	0+330 "J"	15m LT		17	17	
	1	0+335 "J"	10m LT		17	17	
	1	0+344 "J"	1m LT		17	17	
	1	0+383 "J"	0m LT		5	5	
	1	0+383 "J"	11m LT		7	7	
	1	0+405 "J"	15m LT		20	20	
		SUB TOTAL		14.5	375	375	14.5
		TOTAL		43.3	703	703	43.3

BUILDING ITEMS

GROUP CODE 0010 / PROJECT I.D.	(ITEM 90004Q) WELL CONSTRUCTION (L.S.)	(ITEM 90004R) FLAG POLES (L.S.)	(ITEM 90004S) PRIVATE ONSITE WASTE WATER TREATMENT SYSTEM (L.S.)
1032-08-70	1	1	1

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CLRGRUBOT.DGN 09-19-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

RS-7-02

DRAINAGE REMOVALS

GROUP CODE 010 PROJECT I.D.	STAGE	LOCATION	(ITEM 20494) ABANDONING CULVERT PIPES (EACH)	(ITEM 20423) REMOVING CONCRETE SLOPE PAVING (m2)	(ITEM 20416) REMOVING INLETS (EACH)	(ITEM 20424) REMOVING MARKER POSTS (EACH)	(ITEM 90005U) REMOVING REINFORCED CONCRETE APRON ENDWALLS FOR PIPE UNDERDRAIN (EACH)
1032-05-76	1	1+370"A", LT.				1	
	1	1+370"A", RT.				1	
	3	0+737"B"				1	
	3	0+739"B"				1	
	1	10+163"C"				1	
		SUBTOTAL	0	0	0	5	0
1032-08-70	1	0+984"D" RT.				1	
	1	2+440"E", RT.				1	
	1	2+520 - 2+623"E"	1				
	1	2+521, 66m RT. - 2+588"E", 18m RT.		1100			
	1	2+605"E", LT.			1		
	1	2+613"E", LT.			1		
	1	2+925"E"				1	
	1	3+262"E", RT.				1	
	1	3+474"E", 5m RT.			1	1	
	1	3+865"E", 4m RT.			1	1	
	1	4+090"E", RT.				1	
	1	4+185"E", 9m RT.			1	1	
	1	4+207"E", 8m RT.			1	1	
	1	4+418"E", RT.				1	
	2	8+640"H", RT.				1	
	2	6+872"I", LT.				1	
	2	6+884"I", LT.				1	
	2	7+114"I", LT.				1	
	1	LINE "D", RT.					15
		SUBTOTAL	1	1100	6	13	15
		TOTAL	1*	1100	6	18	15

* 300 mm DRAIN TILE, 110 m

CONCRETE REMOVALS

GROUP CODE 010 PROJECT I.D.	STAGE	LOCATION	(ITEM 20405) REMOVING CURB & GUTTER (m)	(ITEM 20403) REMOVING CURB (m)	(ITEM 20408) REMOVING MASONRY (m3)	(ITEM 90001C) REMOVING CONCRETE BARRIER (m)	(ITEM 20401) REMOVING PAVEMENT (m2)
1032-05-76	2	1+010 - 1+066"A", RT.	58				
	2	1+010 - 1+042"A", LT.	59				
	2	1+062 - 1+078"A", LT.	20				
	2	1+085 - 1+092"A", RT.	25				
	2	1+037"A", 26m LT.			2.7		
	2	1+060"A", 16m RT.			2.7		
	2	1+885 - 1+923"D", LT.					80
	2	1+880.8 - 1+915.4, 15m LT.				36.6	
		SUBTOTAL	162	0	5.4	36.6	80
1032-08-70	1-2	1+880 - 3+614"D"				26.3	5400
	2	2+406 - 2+430"E", RT.		29			
	1	2+000 - 2+885"E"					8100
	1	2+875, 13m LT. - 2+905"E", 15m LT.				29	
	1	4+855"G", LT.			5.2		
		SUBTOTAL	0	29	5.2	55.3	13500
		TOTAL	162	29	10.6	91.9	13580

REMOVING GUARDRAIL

GROUP CODE 010 PROJECT I.D.	STAGE	LOCATION	(ITEM 20411) REMOVING GUARDRAIL (m)
1032-05-76	2	0+868 - 0+944 "A", LT.	77
	2	0+900 - 0+945 "A", RT.	45
	2	1+011 - 1+057 "A", RT.	46
	2	1+011 - 1+036 "A", LT.	25
	2	1+092 - 1+194 "A", RT.	102
	2	1+073 - 1+194 "A", LT.	121
	3	0+980 - 1+020 "B", LT.	40
		SUBTOTAL	456
1032-08-70	2	2+780, 73m RT. - 2+881"E", 43m RT.	113
	2	2+788, 85m RT. - 2+874"E", 76m RT.	106
	2	2+890, 62m RT. - 2+956"E", 32m RT.	73
	2	2+896, 25m RT. - 3+044"E", 9m RT.	154
	2	2+847, 13m LT. - 2+875"E", 16m LT.	29
		SUBTOTAL	475
		TOTAL	931

FENCE REMOVALS

GROUP CODE 010 PROJECT I.D.	STAGE	LOCATION	(ITEM 20412) REMOVING FENCE (m)
1032-05-76	2	0+944, 23m RT. - 0+945"A", 6m RT.	19
	2	0+940, 23m LT. - 0+945"A", 6m LT.	21
	2	1+304, 25m LT. - 1+350"A", 40m LT.	71
	2	1+362, 11m RT. - 1+362"A", 25m RT.	14
	1	1+368, 10m RT. - 1+368"A", 27m RT.	17
	3	0+680, 10m RT. - 0+748"B", 16m RT.	69
	3	0+841, 24m LT. - 1+129"B", 32m LT.	305
		SUBTOTAL	516
1032-08-70	1	2+288, 29m RT. - 2+322"E", 32m RT.	35
	1	2+322, 32m RT. - 2+350,"E" 44m RT.	30
	1	2+322, 32m RT. - 2+350"E", 24m RT.	32
	1	2+350, 24m RT. - 2+424"E", 35m RT.	74
	1	2+365, 50m RT. - 2+455"E", 88m RT.	94
	1	2+442, 30m RT. - 2+700"E", 70m RT.	281
	1	2+725, 70m RT. - 2+892"E", 3m LT.	221
	1	2+936, 1m LT. - 4+614"E", 13m RT.	1683
	3	0+230, 14m LT. - 0+231"J", 6m LT.	8
		SUBTOTAL	2458
		TOTAL	2974

MISC. REMOVALS

GROUP CODE 010 PROJECT I.D.	STAGE	LOCATION	(ITEM 90004M) REMOVING SIGN BRIDGE, STR S-30-5 (L.S.)	(ITEM 20417) REMOVING SEPTIC TANKS (EACH)	(ITEM 20483) ABANDONING WELLS (EACH)	(ITEM 20460) REMOVING BUILDING, STATION 3+720"F", RT. (L.S.)	(ITEM 20461) REMOVING BUILDING, STATION 0+370"J", LT. (L.S.)	(ITEM 20462) REMOVING BUILDING, STATION 6+940"I", RT. (L.S.)	(ITEM 90004U) REMOVING STATIC SCALE (L.S.)	(ITEM 20301) REMOVING OLD CULVERT (L.S.)	(ITEM 90004A) REMOVING EXISTING SIGNAL EQUIPMENT (L.S.)
1032-05-76	2	0+965"A", 8m LT.	1	0	0	0	0	0	0	0	0
		SUBTOTAL	1	0	0	0	0	0	0	0	0
GROUP CODE 020 PROJECT I.D.											
1032-05-76	1	10+157"C"	0	0	0	0	0	0		1	
		SUBTOTAL	0	0	0	0	0	0		1	0
GROUP CODE 010											
1032-08-70	2	2+700"E", 12m RT.		1					1		1
	2	2+735"E", 7m RT.			1						
	2	3+720"F", RT.				1					
	2	6.940"I", 26m RT.						1			
	4	0+370"J", RT.		1							
	4	0+370"J", 15m LT.					1				
	4	0+355"J", 27m LT.			1						
		SUBTOTAL	0	2	2	1	1	1	1	0	1
		TOTAL	1	2	2	1	1	1	1	1	1

FILE NAME: PROJECTS/2940/PLANS/GEN/2940REMOT(1).DGN 09-19-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	REMOVALS	SHEET NO: 265	M

R 5-7-02

EARTHWORK SUMMARY

① IF RESULT IS NEGATIVE THEN BORROW IS REQUIRED
IF RESULT IS POSITIVE THEN HAVE EXCESS.

② TOTAL SUBTRACTS EXCESS FROM PREVEOUS COLUMN ①

GROUP CODE 010

PROJECT	STATION	(ITEM 20501) COMMON EXCAVATION (M3)		TOTAL FILL VOLUME REQUIRED (M3)		BORROW VOLUME AFTER PAV'T REMOVED (M3)		① SUB-TOTAL (M3)	(ITEM 20801) BORROW EXCAVATION (M3)	(ITEM 30425) BREAKER RUN STONE (*) (M3)	EXCAVATION BELOW SUBGRADE (M3)***
1032-05-76	LINE "A" (CTH ML) EARTHWORK	16835	-	29969	-	580	=	-13714	13714	1761	1761
	LINE "B" (WEST FRONTAGE ROAD) EARTHWORK	838	-	66305	-	500	=	-65467	65467	30	30
	LINE "C" (EAST FRONTAGE ROAD) EARTHWORK	19040	-	4502	-		=	14538	0	1270	1270
	LINE "K" (120th AVENUE) EARTHWORK	10162	-	38	-	1100	=	9024	0	0	0
	EROSION CONTROL	510	-		-		=	510			
	E.B.S.	3061									
	SUBTOTAL	50446	-	100814	-	2180		=	54809 ②	3061	3061
1032-08-70	LINE "E" (BYPASS LANE) EARTHWORK	19062	-	17222	-	5195	=	-3355	3355	0	0
	LINE "I" (RING ROAD) EARTHWORK	13139	-	35772	-		=	-22633	22633	3860	3860
	LINE "J" (ACCESS ROAD) EARTHWORK	11657	-	1639	-		=	10018	0	1070	1070
	LINE "L" (FOSSLAND ACCESS) EARTHWORK	543	-	12843	-		=	-12300	12300	0	0
**	CINGULAR TOWER		-	300	-		=	-300	300		
	EROSION CONTROL	170	-		-		=	170	0		
	E.B.S.	4930									
	SUBTOTAL	49501	-	67776	-	5195		=	28400	4930	4930
	TOTALS	99947		168590					83209 ②	7991	7991

(*) TO REPLACE AREAS OF E.B.S.
(**) TO REPLACE AREAS AFTER TEMPORARY BUILDING IS REMOVED AT TOWER
(***) QUANTITY INCLUDED IN AND PAID FOR AS COMMON EXCAVATION

SUMMARY BY STAGE

	COMMON EXCAVATION (M3)	BORROW EXCAVATION (M3)
Stage 1A, 1B	30627	19404
Stage 2	31153	12879
Stage 2-4	13311	-29560
Stage 4A, 4B	16100	-80206
Total	91190	-77483
E.B.S.	7991	
EROSION CONTROL	680	680
ADDITIONAL FILL REQUIRED FOR TOWER & PAV'T REMOVAL		-7675
TOTAL	99861	-84478

EXCAVATION FOR STRUCTURES

GROUP CODE D020

PROJECT I.D.	STAGE	(ITEM 20620) EXCAVATION FOR STRUCTURES CULVERTS STA. 10+162"C" (L.S.)
1032-05-76	1	1

SAWING PAVEMENT

GROUP CODE 010

PROJECT I.D.	STAGE	STATION	(ITEM 66501) SAWING EXISTING PAVEMENT (m)	(ITEM 66502) SAWING CONCRETE PAVEMENT FULL-DEPTH (m)
1032-05-76	1	1+238.4"A", RT.	4	
	1	1+241.6"A", LT.	4	
	1	1+520"A"	6	
	1	0+680.0"B"	6	
	1	1+320.0"B"	6	
	1	10+270"C"	6	
	1	12+300"K"	6	
	1	12+800"K"	6	
	2	1+880.8-1+932.7"D" (MEDIAN)		107
		SUBTOTAL	46	107
1032-08-70	1	0+995 -1+190"D"	194	202
	1	1+999"E"	2	
	1	1+849 - 3+614"D"	1765	1772
	1	4+614"E"	3	
		SUBTOTAL	1964	1974
		TOTAL	2010	2081

SAWING CONCRETE PAVEMENT, FULL DEPTH ON CONCRETE BARRIER WALL WILL BE PAID AS 1.0 m ON THE CONCRETE BASE AND 0.9 m ON THE WALL

UTILITIES

GROUP CODE 010

PROJECT I.D.	STAGE	LOCATION	(ITEM 90005H) REMOVING PEDESTALS (EACH)	(ITEM 90001B) REMOVING CABLES & ABANDONING CONDUIT (M)	(ITEM 90005G) REMOVING LIGHT POLE (EACH)	(ITEM 90005V) REMOVING UTILITY MANHOLES (EACH)	(ITEM 90005AA) LAND DISPOSAL HIGH INTENSITY DISCHARGE (EACH)
1032-08-70	1	0+778 "D", 15m RT	1				
	1	0+847 "D", 16m RT	1				
	1	0+778, 15m RT - 1+216, 29m RT "D"		505			
	1	0+923 "D", 15m RT	1				
	1	2+039 "E", 10m RT	1				
	1	2+127 "E", 7m RT	1				
	1	2+220 "E", 6m RT	1				
	1	2+220, 6m RT - 2+281, 16m LT "E"		65			
	1	2+230 "E", 4m LT			1		
	1	2+283 "E", 2m LT			1		1
	1	2+336 "E", 1m RT			1		1
	1	2+281 "E", 16m LT	1				
	1	2+230, 4m LT - 2+702, 7m RT "E"		480			
	1	2+389 "E", 5m RT			1		
	1	2+443 "E", 5m RT			1		1
	1	2+496 "E", 5m RT			1		1
	1	2+550 "E", 9m RT			1		1
	1	2+602 "E", 14m RT			1		1
	1	2+656 "E", 8m RT			1		1
	1	2+689 "E", 12m RT			1		1
	1	2+388 "E", 12m LT	1				
	1	2+496 "E", 13m LT	1				
	1	2+281, 16m LT - 2+743, 11m LT "E"		470			
	1	2+658 "E", 45m RT			1		
	1	2+614, 5m RT - 2+702, 7m RT "E"		90			1
	1	2+609, 16m RT - 2+618, 7m LT "E"		25			
	1	2+718, 6m RT - 2+718, 11m LT "E"		20			
	1	2+743, 11m LT - 2+782, 34m RT "E"		60			
	1	2+659, 47m RT - 2+782, 34m RT "E"		130			
	1	2+733, 13m RT - 2+859, 6m RT "E"		140			
	1	2+701 "E", 10m LT				1	
	1	2+701 "E", 7m RT				1	
	1	2+717 "E", 10m LT				1	
	1	2+730 "E", 11m LT				1	
	1	2+741 "E", 11m LT				1	
	1	2+727 "E", 6m RT				1	
	1	2+718 "E", 9m LT			1		1
	1	2+750 "E", 11m RT			1		1
	1	2+773 "A", 34m RT			1		1
	1	2+723 "E", 62m RT			1		1
		TOTAL	9	1985	15	6	15

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	EARTHWORK SUMMARY	SHEET NO: 266	M

RS-7-02
RS-15-02

FILE NAME: PROJECTS/2940/PLANS/GEN/2940REMOT12).DGN 09-19-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

BASE COURSE

GROUP CODE 0010 PROJECT I.D.	STAGE	STATION	(ITEM 30404) CRUSHED AGGREGATE BASE COURSE (Mg)	(ITEM 30420) CRUSHED AGGREGATE BASE COURSE OPEN GRADED NO. 2 (Mg)	(ITEM 30422) ASPHALTIC PAVEMENT BASE COURSE*** (Mg)	(ITEM 30424) SALVAGED ASPHALTIC PAVEMENT BASE COURSE (Mg)	(ITEM 90365) QUALITY MANAGEMENT PROGRAM BASE COURSES (Mg)
1032-05-76	1-3	0+840.4 - 1+520.0"A"	5817				5817
	3	0+680.2 - 1+320.0"B"	6260				6260
	1	9+000.0 - 10+270.0"C"	14614				14614
	2	12+186.7 - 13+000.0"K"	2928				2928
		SUBTOTAL	29619	0	0	0	29619
1032-08-70	1	1+000.0 - 3+614.0"D"	1300				1300
	1	2+000.0 - 4+614.0"E"*	19103	4594	9500	3006	36203
	2	4+684.6 - 4+926.9"G"	1296				1296
	2-3	6+725.0 - 7+700.0"I"**	9176				9176
	3	0+100.0 - 0+450.3"J"	1922				1922
	4	1+000.0 - 1+345.5"L"	958				958
	4	WELCOME TO WISIGN	12				12
		PIPE UNDERDRAIN		807			
		SUBTOTAL	33767	5401	9500	3006	50867
		TOTAL	63386	5401	9500	3006	80486

* INCLUDES "F" LINE
** INCLUDES "H" LINE
***ASPHALTIC MATERIAL AVAILABLE ON SITE IS 9500 Mg.

GRANULAR BACKFILL

GROUP CODE 0010 PROJECT I.D.	STAGE	LOCATION	DESCRIPTION	(ITEM 20901) GRANULAR BACKFILL (m3)	(ITEM 90345) SPECIAL GRANULAR BACKFILL (mg)
1032-05-76	2	1+058"A", RT.	CULVERT	1.0	
	1	1+400"A"	CULVERT	0.8	
	3	0+738"B"	CULVERT	1.9	
	1	9+062"C"	CULVERT	1.0	
	1	9+830"C"	CULVERT	1.4	
	1	10+163"C"	CULVERT		12.0
		SUBTOTAL		6.1	12.0
1032-08-70	1	2+204"E"	CULVERT	0.8	
	1	2+310"E"	CULVERT	0.8	
	1	2+920"E"	CULVERT	0.6	
	1	3+262"E"	CULVERT	0.6	
	1	4+090"E"	CULVERT	0.6	
	1	4+417"E"	CULVERT	0.6	
	3	0+184"J"	CULVERT	1.0	
	3	0+436"J"	CULVERT	0.8	
	2	EXIST. STATIC SCALE	36 s.m. ø 3 m DEEP	108.0	
	2	EXIST. BUILDING	121 s.m. ø 3 m DEEP	363.0	
	2	TEMP CELL BUILDING			288.0
		SUBTOTAL		476.8	288.0
		TOTAL		482.9	300.0

FTMS DOCUMENTATION

PROJECT 1032-08-70

GROUP CODE 0020	L.S.
90004T FTMS DOCUMENTATION	1
TOTAL	1

COMMUNICATIONS INFRASTRUTURE, FTMS

GROUP CODE 0020 PROJECT I.D.	ITEM NO. LOCATION	LOCATION	VAULT, COMMUNICATIONS 90005K EACH	FIBER SPLICE, 24-FIBER MAINLINE 90005L EACH	24-FIBER MAINLINE FIBER SPLICE IN EXISTING SPLICE CLOSURE 90005M EACH	INSTALL CONDUIT INTO AN EXISTING ITEM 90005N EACH	MARKERS, BURIED FIBER OPTIC CABLE 90005P EACH
1032-08-70	EXCV 10	0+183 SB, 15 LT	--	1	--	1	--
	CV 20	0+183 SB, 7 LT	1	--	--	--	--
	CV 40	0+537 SB, 17 LT	1	--	--	--	--
	CV 50	0+842 SB, 16 LT	1	--	--	--	--
	CV 60	1+123 SB, 15 LT	1	--	--	--	--
	EXCV 80	0+088 SB, 85 LT	--	--	1	1	
	UNDISTRIBUTED		--	--	--	--	10
	TOTALS, FTMS		4	1	1	2	10

CONDUIT AND CABLE QUANTITIES, FTMS

GROUP CODE 0020 PROJECT I.D.	LOCATION FROM	LOCATION TO	DIST. (M)	CONDUITS (NO.)	CONDUIT, HIGH DENSITY POLYETHYLENE (HDPE), 50 MM 90001G M	CONDUIT, HIGH DENSITY POLYETHYLENE (HDPE), DIRECTIONAL BORE, 50 MM 90001H M	CABLE, FIBER OPTIC COMMUNICATIONS, 24 COUNT 90001J M
1032-08-70	FTMS COMMUNICATIONS SYSTEM						
	EXCV 10	CV 20	8	1	8	--	8
	CV 20		--	--	--	--	15
	CV 20	OP 10	300	1	300	--	300
	OP 10	CV 40	200	1	--	200	210
	CV 40		--	--	--	--	10
	CV 40	CV 50	305	1	305	--	305
	CV 50		--	--		--	10
	CV 50	CV 70	285	1	285	--	285
	CV 70		--	--	--	--	10
	CV 70	EXCV 80	105	1	--	--	105
	BUILDING CONNECTION (SEE ELECTRICAL DETAILS)			1	50	--	--
			TOTALS, FTMS		948	200	1258

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CABCONT.DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

R 5-7-02

LOCATING NO-PASSING ZONE

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	(ITEM 64636) LOCATING NO-PASSING ZONES KM
1032-05-76	1A	EAST FRONTAGE ROAD	1.26
	1B	CTH ML STA 1+360"A" - 1+520"A"	0.16
	4A	WEST FRONTAGE ROAD	0.64
	4B	CTH ML STA 0+850"A" - 1+360"A"	0.51
		TOTALS	2.57

PAVEMENT MARKING, RAISED MARKERS

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	(ITEM 64635) PAVEMENT MARKING, RAISED MARKERS (ONE-WAY WHITE) EACH
1032-08-70	2	1+013"D" - 1+110"D"	13
	2	3+005"D" - 3+615"D"	34
	2	2+020"E" - 2+110"E" - LT	12
		TOTALS	59

WOVEN WIRE FENCE

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	(ITEM 61601) WOVEN WIRE FENCE (m)
1032-05-76	4	0+940 - 0+944"A", 25.60 m LT.	21
	4	0+944"A", 23.02 m RT.	17
	4	0+710, 9.98 m RT. - 0+751"B", 22.07 m RT.	51
		SUBTOTAL	89
1032-08-70	4	1+030 "A", 6.00 m RT. - 6+870 "I", 8.80 m LT.	157
	4	0+112, 8.80 m RT. - 7+320 "I", 23.92 m LT.	461
	4	7+320, 23.92 m LT. - 7+338"I", 9.10 m LT.	32
	4	1+030 "A", 6.00 m LT. - 2+922 "E", 5.63 m RT.	28
	4	2+922 "E", 5.63 m RT. - 4+645 "E" 5.02 m RT.	1773
		SUBTOTAL	2451
		TOTAL	2540

REMOVING PAVEMENT MARKING AND TEMPORARY PAVEMENT MARKING

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	(ITEM 64642) REMOVING PAVEMENT MARKINGS (M)	(ITEM 64904) TEMPORARY PAVEMENT MARKING, 100mm, REMOVABLE TAPE (M)	TAPE COLOR
1032-05-76	1A	I-94 NB LANE CLOSURE TAPER	60	240	WHITE
	3	I-94 NB LANE CLOSURE TAPER	60	240	YELLOW
		TOTALS	120	480	

TEMPORARY PRECAST CONCRETE BARRIER

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	(ITEM 60305) TEMPORARY PRECAST CONCRETE BARRIER CONTRACTOR FURNISHED & DELIVERED (M)	(ITEM 60308) TEMPORARY PRECAST CONCRETE BARRIER CONTRACTOR FURNISHED, INSTALLED (M)	(ITEM 90005J) TEMPORARY PRECAST CONCRETE BARRIER STEEL THRIE BEAM CONNECTION (EACH)
1032-05-76	3	STA 1+869"D" - 2+128"D" I-94 SB	259	259	1
	3	STA 1+794"D" - 2+114"D" I-94 NB	320	320	1
			579	579	2

TREE PROTECTION

GROUP CODE 0010

PROJECT I.D.	STAGE	STATION	(ITEM 90637) SAFETY FENCE* (m)
1032-05-76	1	1+458"A", RT.	3.1
	1	1+481"A", RT.	3.1
	1	1+482"A", RT.	3.1
	1	1+125"B", LT.	3.1
		SUBTOTAL	12.4
1032-08-70			
	1	0+300"J", LT.	3.1
		SUBTOTAL	3.1
		TOTAL	15.5

*SAFETY FENCE IS TO BE PLACED AROUND THE BASE OF THE SPECIFIED TREE IN A 1m DIAMETER RING.

CONSTRUCTION STAKING

GROUP CODE 0010

PROJECT I.D.	STAGE	POINT FROM	(ITEM 65040) CONSTRUCTION STAKING, STORM SEWER SYSTEM (EACH)	(ITEM 65045) CONSTRUCTION STAKING, SUBGRADE (M)	(ITEM 65050) CONSTRUCTION STAKING CRUSHED AGGREGATE BASE COURSE (M)	(ITEM 65055) CONSTRUCTION STAKING, CURB, GUTTER, AND CURB & GUTTER (M)	(ITEM 65060) CONSTRUCTION STAKING, PIPE CULVERTS (EACH)	(ITEM 65070) CONSTRUCTION STAKING, CONCRETE PAVEMENT (M)	(ITEM 65075) CONSTRUCTION STAKING, CONCRETE BARRIER (M)	(ITEM 65085) CONSTRUCTION STAKING, ELECTIRCAL, PROJECT 1032-08-70 (L.S.)	(ITEM 90001K) CONSTRUCTION STAKING, FENCE (M)
1032-05-76	1-3	0+840.40 - 1+520.00"A"		43	550	92	1	43			38
	3	0+680.22 - 1+320.00"B"			640		2				51
	1	9+000.00 - 10+270.00"C"			1270		3				
	2	12+186.73 - 12+300.00"K"			113						
	2	12+800.00 - 13+000.00 "K"			200						
		SUBTOTAL	0	43	2773	92	6	43	0	0	89
1032-08-70	1	2+000.00 - 4+614.00"E"	10	2164	450		2	2164	800		2451
	2	3+407.39 - 3+839.74"F"	2	432				432			
	2-4	4+684.60 - 4+926.87"G"	3	242				242			
	2-4	7+477.00 - 7+665.00"H"		188				188			
	2-4	6+725.00 - 7+700.00"I"	16	975				975			
	3	0+100.00 - 0+450.288"J"			350	260	2				
	4	1+000.00 - 1+345.46"L"	1		345	70	2				
		UNDISTRIBUTED								1	
		SUBTOTAL	32	4001	1145	330	6	4001	800	1	2451
		TOTAL	32	4044	3918	422	12	4044	800	1	2540

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ECONT.DGN(3) 09-18-01
LEVELS ON - 1, 2, 4,5,6,7,8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

EROSION CONTROL

GROUP CODE 0010			(ITEM 62875) (ITEM 62876) TEMPORARY DITCH CHECKS,		(ITEM 62824) (ITEM 62825) EROSION MAT, CLASS I, TYPE B		(ITEM 62832) (ITEM 62833) EROSION MAT, CLASS II, TYPE B		(ITEM 62815) (ITEM 62816) (ITEM 62817) SILT FENCE			(ITEM 62880) CULVERT PIPE DITCH CHECKS	(ITEM 62870) (ITEM 62871) (ITEM 62872) INLET PROTECTION			(ITEM 62856) SOIL STABILIZER TYPE B
PROJECT I.D.	STAGE	POINT FROM	DEL. (M)	INST. (M)	DEL. (M2)	INST. (M2)	DEL. (M2)	INST. (M2)	DEL. (M)	INST. (M)	MAINT. (M)	(EACH)	TYPE A (EACH)	TYPE B (EACH)	TYPE C (EACH)	(HA)
1032-05-76	1A	E. FRONTAGE RD.	115	115					520	520	50	3				
	1B	CTH ML	15	15					130	130	10	3				
	2	CTH ML	10	10	2,340	2,340	6,740	6,740	570	570	60	2				1.0
	3	W. FRONTAGE RD.	50	50	4,210	4,210			295	295	30	1				0.4
		UNDISTRIBUTED	50	50	1,640	1,640	1,690	1,690	380	380	40					0.3
		SUBTOTAL	240	240	8,190	8,190	8,430	8,430	1,895	1,895	190	9	0	0	0	1.7
1032-08-70	1A	"E-LINE"	100	100	1,340	1,340			820	820	80	2	7	6		0.1
	2	WEIGH FAC./ACCESS RD.	35	35	930	930			610	610	60	4	4	1	7	0.1
		UNDISTRIBUTED	30	30	570	570			360	360	40					0.1
		SUBTOTAL	165	165	2,840	2,840	0	0	1,790	1,790	180	6	11	7	7	0.3
		TOTALS	405	405	11,030	11,030	8,430	8,430	3,685	3,685	370	15	11	7	7	2.0

TRAFFIC CONTROL

GROUP CODE 0010		(ITEM 64310) ARROW BOARDS		(ITEM 64313) DRUMS		(ITEM 64317) BARRICADES, TYPE II		(ITEM 64318) BARRICADES, TYPE III		(ITEM 64321) WARNING LIGHTS, TYPE A		(ITEM 64323) WARNING LIGHTS, TYPE C		(ITEM 64326) SIGNS		(ITEM 64343) DETOUR SIGNS		(ITEM 90008A) PORTABLE CHANGEABLE MESSAGE SIGN (DAYS)	(ITEM 64301) TRAFFIC CONTROL L.S.	(ITEM 64334) TRAFFIC CONTROL DETOUR L.S.
PROJECT I.D.	STAGE	**NO.	(DAYS)	**NO.	(DAYS)	**NO.	(DAYS)	**NO.	(DAYS)	**NO.	(DAYS)	**NO.	(DAYS)	**NO.	(DAYS)	**NO.	(DAYS)			
1032-05-76	1A	2	50	140	5,550	10	180	13	360	29	1,080	21	400	28	1,190	---	---	---		
	1B	--	---	100	680	---	---	13	120	36	260	---	---	32	230	---	---	---		
	2	2	35	140	2,280	10	90	30	290	49	520	21	380	35	560	23	400	30		
	3	4	35	120	990	10	100	29	630	45	1,290	21	110	47	1,390	87	2,860	---		
	4	5	75	120	1,740	10	110	26	1,225	40	4,430	32	160	42	4,730	---	---	30		
	UNDISTRIBUTED			120	11,760	10	980	26	2,548	40	3,920			42	4,116	87	8,526		1	1
	TOTAL		185		23,000		1,460		5,173		11,500		1,050		12,216		11,786	60	1	1

** NUMBER OF DEVICES SHOWN IS APPROXIMATE AND WILL VARY ACCORDING TO WORK OPERATIONS
UNDISTRIBUTED = ESTIMATED (DAYS) ITEMS ARE ON SITE BUT NOT USED.

PAVEMENT MARKING

GROUP CODE 0010			(ITEM 64602) PAVEMENT MARKING, 100 MM, EPOXY		(ITEM 64618) PAVEMENT MARKING, CHANNELIZING, 200 MM, EPOXY	(ITEM 64774) PAVEMENT MARKING, DIAGONAL, 600 MM, EPOXY	(ITEM 64786) PAVEMENT MARKING, PARKING STALL, 100 MM, EPOXY	(ITEM 90002C) PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, EPOXY
PROJECT I.D.	STAGE	LOCATION	WHITE (M)	YELLOW (M)	WHITE (M)	WHITE (M)	WHITE (M)	YELLOW (M2)
1032-05-76	1A	E. FRONTAGE RD.	2,825	1,565	---	---	---	---
	1B	CTH ML	250	45	60	---	---	---
	2	CTH ML / I-94 / 120TH AVE	2,400	785	1,200	---	---	---
	3	W. FRONTAGE RD.	1,230	670	105	---	---	---
	4	CTH ML	990	670	---	---	---	---
		SUB TOTALS	7,695	3,735	1,365	---	---	---
1032-08-70	2	"E-LINE"	1,820	1,255	1,090	45	---	---
	2	I-94 NB LANE CLOSURE TAPER	60	---	---	---	---	---
	3	I-94 MEDIAN EDGELINE	---	105	---	---	---	---
	3	I-94 NB LANE CLOSURE TAPER	60	---	---	---	---	---
	4	WEIGH FAC./ACCESS RD.	1,285	1,360	315	---	975	260
		SUB TOTALS	3,225	2,720	1,405	45	975	260
		TOTALS	10,920	6,455	2,770	45	975	260
			17,375					

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ECONT.DGN(2) 09-18-01
LEVELS ON - 1,2, 4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

TEMPORARY SEEDING

GROUP CODE 0010			(ITEM 63003) SEEDING TEMPORARY (Kg)
PROJECT I.D.	STAGE	LOCATION	
1032-05-76	1-4	0+840 - 0+937"A", RT.	10
	1-4	0+840 - 0+937"A", LT.	9
	1-4	1+031 - 1+338"A", RT.	38
	1-4	1+031 - 1+338"A", LT.	26
	1-4	1+338 - 1+520"A", RT.	5
	1-4	1+338 - 1+520"A", LT.	4
	1-4	0+680 - 1+320"B", LT	47
	1-4	0+680 - 1+000"B", RT	21
	1-4	1+100 - 1+320"B", RT	21
	1-4	9+000 - 10+280"C", RT.	57
	1-4	9+000 - 9+988"C", LT.	51
	1-4	9+988 - 10+280"C", LT.	7
	1-4	12+140 - 12+300"K", RT.	6
	1-4	12+800 - 13+000"K", RT.	7
	1-4	12+860 - 13+000"K", LT.	5
	1-4	UNDISTRUBUTED	350
		SUBTOTAL	664
1032-08-70			
	1-4	2+100 - 2+970"E", LT	49
	1-4	1+999 - 2+530"E", RT.	21
	1-4	2+920 - 4+614"E", RT.	72
	1-4	4+720 - 4+123"E", RT.	3
	1-4	3+614 - 3+820"F", RT.	8
	1-4	4+750 - 4+927"G", RT.	9
	1-4	8+525 - 8+660"H", RT.	6
	1-4	6+800 - 6+984"I", RT.	8
	1-4	6+800 - 6+870"I", LT.	16
	1-4	6+870 - 7+373"I", LT.	17
	1-4	7+040 - 7+688"I", RT.	38
	1-4	0+100 - 0+450"J", LT	18
	1-4	0+100 - 0+450"J", RT.	19
	1-4	1+000 - 1+345"L", RT.	15
	1-4	UNDISTRUBUTED	750
		SUBTOTAL	1049
		TOTAL	1713

FLUMES

GROUP CODE 0010			(ITEM 62203)) ASPHALTIC FLUMES (m2)	(ITEM 41620) CONCRETE SURFACE DRAINS (m3)	(ITEM 64505) GEOTEXTILE FABRIC TYPE R* (m2)
PROJECT I.D.	STAGE	STATION			
1032-05-76	3	0+863"A", RT.		3.0	4
	3	0+863"A", LT.		3.6	4
	4	1+045"A", RT.		3.4	4
	4	1+045"A", LT.		2.5	4
	1	9+021"C", LT.	8		
	1	9+026"C", RT.	8		
		SUBTOTAL	17	12.5	16
1032-08-70	4	3+680"E", RT.	5		
	4	4+749"G", RT.	5		
	4	4+879"G", RT.	5		
	4	6+858"I", LT.	7		
	4	6+904"I", RT.	7		
	4	7+240"I", RT.	6		
	4	7+638"I", RT	5		
	4	0+140"J", RT.	6		
	4	0+241"J", RT.	6		
	4	0+241"J", LT.	5		
	4	0+425"J", LT.	11		
	4	0+431"J", RT.	8		
	4	1+317"L", LT.	4		
		SUBTOTAL	79	0	0
		TOTAL	96	12.5	16

* PARTIAL QUANTITIES LISTED. COMPLETE QUANTITIES SHOWN ELSWHERE

EROSION CONTROL MOBILIZATION

GROUP CODE 0010			(ITEM 62819) MOBILIZATIONS EROSION CONTROL (EACH)	(ITEM 62821) MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
PROJECT I.D.	STAGE	STATION		
1032-05-76	1A	E. FRONTAGE RD.	2	
	1B	CTH ML	2	
	2	CTH ML		
	3	W. FRONTAGE RD.	2	
		UNDISTRIBUTED		10
		SUBTOTAL	6	10
1032-08-70	1A	"E-LINE"	2	
	2	WEIGH FAC./ACCESS RD.	2	
	2	I-94 MEDIAN	1	
		UNDISTRIBUTED		10
		SUBTOTAL	5	10
		TOTALS	11	20

RIPRAP

GROUP CODE 0010				(ITEM 60601) RIPRAP (M3)	(ITEM 64505) GEOTEXTILE FABRIC, TYPE R (M2)
PROJECT I.D.	STAGE	STATION	L X W X D (METERS)		
1032-05-76	2	CTH ML - 0+880"A" LT	9 X 4 X 0.3	11	36
	2	CTH ML - 0+880"A" RT	9 X 4 X 0.3	11	36
	2	CTH ML - 1+045"A" LT	9 X 4 X 0.3	11	36
	2	CTH ML - 1+045"A" RT	9 X 4 X 0.3	11	36
		SUB TOTALS		44	144
1032-08-70	2	2+870"E" RT	9 X 4 X 0.3	11	36
	2	"E"-LINE BARRIER OPENINGS	VAR. X 5 X 0.3	120	400
	2	3+685"E" RT	9 X 4 X 0.3	11	36
		SUB TOTALS		142	472
	TOTALS			186	616

TEMPORARY SEDIMENT BASINS

GROUP CODE 0010			(ITEM 2050) COMMON EXCAVATION* (M3)	(ITEM 62820) CLEANING SEDIMENT BASINS (M3)	(ITEM 90003A) TEMPORARY STONE DITCH CHECKS (M3)
PROJECT I.D.	STAGE	STATION			
1032-05-76	1A	E. FRONTAGE RD.	340	680	20
	3	W. FRONTAGE RD.	170	340	10
		SUBTOTAL	510	1,020	30
1032-08-70	1A	"E-LINE"	170	340	10
		SUBTOTAL	170	340	10
		TOTALS	680	1,360	40

* PARTIAL QUANTITIES LISTED. COMPLETE QUANTITIES SHOWN ELSWHERE

EROSION CONTROL SODDING

GROUP CODE 0010			(ITEM 63111) EROSION CONTROL SOD (M2)	(ITEM 63103) WATERING SODDED AREAS (KL)
PROJECT I.D.	STAGE	STATION		
1032-05-76	1A	E. FRONTAGE RD.	160	16
	1B	CTH ML	140	14
	2	CTH ML	---	---
	3	W. FRONTAGE RD.	80	8
	--	UNDISTRIBUTED	100	10
		SUB TOTALS	480	48
1032-08-70	1A	"E"-LINE	100	10
	2	WEIGH FAC./ACCESS RD.	500	50
	--		150	15
		SUB TOTALS	750	75
	TOTALS		1,230	123

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ECONT.DGN(1) 09-18-01
LEVELS ON - 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

CORRUGATED STEEL CULVERT PIPE

GROUP CODE 0010 PROJECT I.D.	STAGE	POINT FROM	POINT TO	(ITEM 52105) CORRUGATED STEEL CULVERT PIPE, 450 mm (m)
1032-05-76	1	3A	3B	16
	1	4A	4B	9
	3	6A	6B	11
	2	10A	10B	15
			SUBTOTAL	51
1032-08-70	4	22A	22B	10
	4	23A	23B	10
			SUBTOTAL	20
			TOTAL	71

NOTE: SEE STORM SEWER SUMMARY FOR INVERT ELEVATIONS AND LOCATIONS.

STEEL APRON ENDWALLS

GROUP CODE 0010 PROJECT I.D.	STAGE	POINT NO.	(ITEM 52147) STEEL APRON ENDWALLS FOR CULVERT PIPE 300 mm (EACH)	(ITEM 52149) STEEL APRON ENDWALLS FOR CULVERT PIPE 450 mm (EACH)
1032-05-76	1	3A		1
	1	3B		1
	1	4A		1
	1	4B		1
	3	6A		1
	3	6B		1
	2	10A		1
	2	10B		1
		SUBTOTAL	0	8
1032-08-70	3	24B	1	
	3	25B	1	
	4	22A		1
	4	22B		1
	4	23A		1
	4	23B		1
		SUBTOTAL	2	4
		TOTAL	2	12

NOTE: SEE STORM SEWER SUMMARY FOR INVERT ELEVATIONS AND LOCATIONS.

CULVERT PIPE LINERS

GROUP CODE 0010 PROJECT I.D.	STAGE	STATION	(ITEM 90001D) CULVERT PIPE LINER, 450 mm* (m)	(ITEM 90001E) CULVERT PIPE LINER, 1050 mm* (m)	(ITEM 90001F) CULVERT PIPE LINER, 1200 mm* (m)
1032-08-70	1	1+200"D" NB IH-94	33		
	1	1+438"D" NB IH-94		48	
	1	1+438"D" SB IH-94		26	
	1	1+615"D" NB IH-94			30
	1	1+615"D" NB IH-94			30
	1	1+615"D" SB IH-94			31
	1	1+615"D" SB IH-94			31
		TOTAL	33	74	122

*PIPES TO BE SLIP-LINED ARE SHOWN AS ACTUAL METRIC SIZE. CONTRACTOR SHALL DETERMINE SIZE OF SLIP-LINING PIPE TO BE HYDRALICALLY EQUAL TO THE CURRENT PIPE.

MARKER POSTS, FLEXIBLE FOR CULVERT END

GROUP CODE 0010 PROJECT I.D.	STAGE	LOCATION		(ITEM 90616) MARKER POSTS FLEXIBLE FOR CULVERT END (EACH)
1032-05-76	4	1+058"A"	26.9 m RT.	1
	4	1+400"A"	10.8 m RT.	1
	4	1+400"A"	13.3 m LT.	1
	4	0+738"B"	13.6 m RT.	1
	4	0+738"B"	13.6 m LT.	1
	4	9+062"C"	10.9 m RT.	1
	4	9+062"C"	11.1 m LT.	1
	4	9+830"C"	12.8 m RT.	1
	4	9+830"C"	12.8 m LT.	1
			SUBTOTAL	9
1032-08-70	4	2+204"E"	7.1 m RT.	1
	4	2+306"E"	7.1 m RT.	1
	4	2+327"E"	9.5 m RT.	1
	4	2+920"E"	6.9 m RT.	1
	4	3+262"E"	6.5 m RT.	1
	4	4+090"E"	8.7 m RT.	1
	4	4+417"E"	6.7 m RT.	1
	4	4+731"G"	6.3 m RT.	1
	4	6+854"I"	6.1 m LT.	1
	4	6+900"I"	42.5 m RT.	1
	4	7+060"I"	19.1 m RT.	1
	4	7+769"I"	34.9 m RT.	1
	4	7+172"I"	34.9 m RT.	1
	4	7+236"I"	20.2 m RT.	1
	4	7+236"I"	39.2 m RT.	1
	4	7+671"I"	7.0 m RT.	1
	4	0+184"J"	8.0 m RT.	1
	4	0+184"J"	8.0 m RT.	1
	4	0+436"J"	13.9 m LT.	1
	4	0+436"J"	10.9 m RT.	1
	4	1+040"L"	4.1 m LT.	1
	4	1+040"L"	5.3 m RT.	1
	4	1+064"L"	8.3 m RT.	1
	4	1+100"L"	14.9 m RT.	1
	4	1+310"L"	4.4 m LT.	1
	4	1+310"L"	4.9 m RT.	1
			SUBTOTAL	26
			TOTAL	35

CONCRETE COLLAR

GROUP CODE 0010 PROJECT I.D.	STAGE	POINT FROM	SIZE (mm)	(ITEM 90545) CONCRETE COLLAR (EACH)
1032-05-76	2	1A	750	1
		SUBTOTAL		1
1032-08-70	1	11A	600	1
	1	13A	450	1
	1	14A	375	1
	1	15A	750	1
	1	17A	375	1
	1	19A	375	1
		SUBTOTAL		6
		TOTAL		7

NOTE: SEE STORM SEWER SUMMARY FOR INVERT ELEVATIONS AND LOCATIONS.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CULQNT.DGN(1) 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

REINFORCED CONCRETE CULVERT PIPE

GROUP CODE 0010 PROJECT I.D.	STAGE	POINT FROM	POINT TO	(ITEM 52202) REINFORCED CONCRETE CULVERT PIPE CLASS III 375 mm (m)	(ITEM 52203) REINFORCED CONCRETE CULVERT PIPE CLASS III 450 mm (m)	(ITEM 52205) REINFORCED CONCRETE CULVERT PIPE CLASS III 600 mm (m)	(ITEM 52207) REINFORCED CONCRETE CULVERT PIPE CLASS III 750 mm (m)	(ITEM 52212) REINFORCED CONCRETE CULVERT PIPE CLASS III 1350 mm (m)	(ITEM 90001A) REINFORCED CONCRETE CULVERT PIPE ARCH CLASS IV 1300x795 mm (m)
1032-05-76	2	1A	1B				7		
	1	2A	2B			23			
	3	5A	5B					27	
	3	5C	5D					27	
	1	7A	7B				23		
	1	8A	8B						
	1	8C	8D						52
			SUBTOTAL	0	0	23	30	54	52
1032-08-70	1	11A	11B			16			
	1	12A	12B			27			
	1	13A	13B		13				
	1	14A	14B	5					
	1	17A	17B	5					
	1	19A	19B	4					
	3	20A	20B				21		
	3	21A	21B			25			
			SUBTOTAL	14	13	68	21	0	0
			TOTAL	14	13	91	51	54	52

NOTE: SEE STORM SEWER SUMMARY FOR INVERT ELEVATIONS AND LOCATIONS.

REINFORCED CONCRETE APRON ENDWALLS

GROUP CODE 0010 PROJECT I.D.	STAGE	POINT FROM	(ITEM 52260) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 300 mm (EACH)	(ITEM 52261) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 375 mm (EACH)	(ITEM 52262) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 450 mm (EACH)	(ITEM 52263) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 525 mm (EACH)	(ITEM 52264) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 600 mm (EACH)	(ITEM 52266) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 750 mm (EACH)	(ITEM 52268) REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 1050 mm (EACH)	(ITEM 50409) CONCRETE MASONRY ENDWALLS (m3)	(ITEM 51801) MORTAR RUBBLE MASONRY (m3)	(ITEM 90003C) CONCRETE MASONRY OUTLET CONTROL STRUCTURE (m3)
1032-05-76	3	1B						1				
	1	2A					1					
	1	2B					1					
	3	5A, 5C								2.3	1.9	
	3	5B, 5D								2.6	1.9	
	1	7A						1				
	1	7B						1				
	1	8A, 8C								1.8	1.5	
	1	8B, 8D								2.0	1.5	
		SUBTOTAL	0	0	0	0	2	3	0	8.7	6.8	0
1032-08-70	1	11B					1					
	1	12A					1					
	1	12B					1					
	1	13B			1							
	1	14B		1								
	1	17B		1								
	1	19B		1								
	2	43B		1								
	2	40B					1					
	2	40A										1.7
	2	39				1						
	2	32	1									
	2	29A										1.6
	2	26A	1									
	2	26B	1									
	2	34	1									
	3	20A						1				
	3	20B						1				
	3	21A					1					
	3	21B					1					
	4	29C							1			
	4	30C, 31C								2.0	1.7	
		SUBTOTAL	4	4	1	1	6	2	1	2.0	1.7	3.3
		TOTAL	4	4	1	1	8	5	1	10.7	8.5	3.3

NOTE: SEE STORM SEWER SUMMARY FOR INVERT ELEVATIONS AND LOCATIONS.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940CULQNT.DGN(2) 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

CONCRETE PAVEMENT AND RELATED ITEMS

GROUP CODE 0010 PROJECT I.D.	STAGE	STATION	(ITEM 41510) CONCRETE PAVEMENT 250 mm (m2)	(ITEM 41511) CONCRETE PAVEMENT 275 mm (m2)	(ITEM 62001) CONCRETE CORRUGATED MEDIAN (m2)	(ITEM 90002B) CONCRETE SHOULDER, 250mm WITH CORRUGATIONS (m2)	(ITEM 60224) CONCRETE SAFETY ISLAND (m2)	(ITEM 41621) CONCRETE PAVEMENT APPROACH SLAB (m2)	(ITEM 90410) QUALITY MANAGEMENT PROGRAM CONCRETE PAVMENT (m2)	(ITEM 90412) QUALITY MANAGEMENT PROGRAM PAVEMENT STRENGTH INCENTIVE, CONCRETE (DOL)	(ITEM 41653) PAVEMENT TIES (EACH)	(ITEM 41551) CONTINUOUS CONCRETE PAVEMENT REINFORCEMENT (M2)	(ITEM 41654) DOWEL BARS (EACH)
1032-05-76	4	0+936.7 - 0+943 "A"						73	73	73			
	4	1+031 - 1+037.4 "A"						73	73	73			
		SUBTOTAL	0	0	0	0	0	146	146	146	0	0	0
1032-08-70	1	1+096 - 1+190"D", RT.				509			509	509	157		
	1	1+848 - 2+020"D", RT.				467			467	467	287		
	1	1+881 - 1+933"E", LT.				40			40	40	110		
	1	1+999"E"							0	0			9
	1	1+999 - 2+239"E", LT.		1349					1349	1349			
	1	2+239 - 2+299"E", LT.*		271					271	271		270	
	1	2+301 - 2+331"E", LT.*		134					134	134		135	
	1	2+331 - 2+749"E", LT.		1850					1850	1850			
	1	2+749"E" - 3+002"E", LT.		1266					1266	1266			
	1	3+002 - 3+956"E", LT.			2800				2800	2800	1590		
	1	3+958 - 4+614"E"		2444					2444	2444	1093		
	1	4+614"E"							0	0			9
	3	3+417 - 3+752"F"		1258**					1258	1258		220	
	3	3+465 - 3+715"F", LT.			670				670	670			
	3	3+752 - 3+840"F", LT.		223					223	223			
	4	4+684.6 - 4+760"G", LT.	1070						1070	1070			
	4	4+771 - 4+880"G", LT.	540						540	540			
	4	4+880 - 4+926"G", LT.		109					109	109			
	4	7+435 "I" LT - 8+620 "H" LT.	693						693	693			
	4	8+620 - 8+660"H", LT.		119					119	119			
	4	6+773 - 6+883"I", RT.	791						791	791			
	4	6+883 - 7+060"I", 30 m RT.	5591						5591	5591			
	4	6+891 - 6+912"I", RT.					53		53	53			
	4	7+040 - 7+ 100"I", RT.	272						272	272			
	4	7+060 - 7+124"I", 27 m RT.	495						495	495			
	4	7+100 - 7+205"I", 35 m RT.	2585						2585	2585			
	4	7+260 - 7+288"I", RT.	1226						1226	1226			
	4	7+288 - 7+390"I", RT.	824						824	824			
	4	7+390 - 7+500"I", RT.	531						531	531			
	4	7+ 500 - 7+642"I", RT.	1047						1047	1047			
	4	7+642 - 7+699"I", RT.	793						793	793			
	4	6+982 - 6+996"I", 40 m RT.	285						285	285			
		UNDISTRIBUTED		152					152	152			
		SUBTOTAL	16743	9175	3470	1016	53	0	30457	30457	3237	625	18
		TOTAL	16743	9175	3470	1016	53	146	30603	30603	3237	625	18

* REFER TO ASTM E1318-00 FOR SURFACE TEXTURE FOR APPROACH SLAB TO SCALE AT STA. 2+300"E"

** TOTAL PAVEMENT AREA MINUS STATIC SCALE AND APPROACHES

SIDEWALK AND CURB & GUTTER

GROUP CODE 0010 PROJECT I.D.	STAGE	STATION	(ITEM 60123) CONCRETE CURB AND GUTTER 750 mm, TYPE A (m)	(ITEM 60133) CONCRETE CURB AND GUTTER 750 mm, TYPE D (m)	(ITEM 60170) CONCRETE CURB AND GUTTER* 900 mm, TYPE D (m)	(ITEM 60204) CONCRETE SIDEWALK 100 mm (m2)	(ITEM 60206) CONCRETE SIDEWALK 150 mm (m2)
1032-05-76	3	0+847 - 0+861"A", LT.			22		
	3	0+847 - 0+862"A", RT.			19		
	1	9+007 - 9+020"C", LT.			20		
	1	9+007 - 9+024"C", RT.			28		
	3	IMPACT ATTENUATOR					21
		SUBTOTAL	0	0	88	0	21
1032-08-70	4	3+650 - 3+668"F", RT.				29	
	4	3+679 - 3+689"F", RT.				15	
	3	3+608 - 3+689"F", RT.	60	26			
	3	4+684.6 - 4+760"G", LT.	77	12			
	3	7+642 - 7+703"I", RT.	60				
	3	6+880 - 7+300"I" LT.	418				
	3	6+905 - 7+239"I", 35 m RT.	334				
	3	7+533 - 7+694"I", LT.	161			27	
	4	6+905 - 6+983.5"I", RT.				99	
	4	6+998, 46 m RT. - 7+238.5"I", 35 m RT.				301	
	4	7+685 - 7+694"I", LT.				26	
	3	0+100 - 0+118"J", RT.		20			
	3	0+160 - 0+220"J", RT.		61			
	3	0+100 - 0+220"J", LT.		126			
	3	0+426 - 0+444"J", LT.			29		
	3	0 +432 - 0 +444"J", RT.			19		
	3	1+315 - 1+350"L", RT.		50			
	3	1+318 - 1+337"L", LT.		20			
	4	CONCRETE PADS					67
		SUBTOTAL	1110	315	48	497	67
		TOTAL	1110	315	136	497	88

* 150 mm MOUNTABLE

FILE NAME: PROJECTS/2940/PLANS/GEN/2940PAVEQNT.DGN(1) 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	QUANTITIES	SHEET NO: 273	M

R 5-7-02

ASPHALT

GROUP CODE 0010 PROJECT I.D.	STAGE	STATION	(ITEM 40301) QUALITY MANAGEMENT PROGRAM ASPHALTIC MIXTURE (Mg)	(ITEM 40721) ASPHALTIC CONCRETE PAVEMENT TYPE E-0.3 (Mg)	(ITEM 40722) ASPHALTIC CONCRETE PAVEMENT TYPE E-1 (Mg)	(ITEM 40726) ASPHALTIC CONCRETE PAVEMENT TYPE E-30X (Mg)	(ITEM 40204) ASPHALTIC MATERIAL FOR TACK COAT (L)	(ITEM 40501) ASPHALTIC MATERIAL FOR PLANT MIXES (Mg)	(ITEM 90006A) ASPHALTIC MATERIAL FOR PLANT MIXES PG 76-28 (Mg)	(ITEM 90006B) ASPHALTIC MATERIAL FOR PLANT MIXES PG 70-28 (Mg)	(ITEM 90006C) ASPHALTIC MATERIAL FOR PLANT MIXES PG 70-22 (Mg)	(ITEM 90006D) ASPHALTIC MATERIAL FOR PLANT MIXES PG 64-22 (Mg)	(ITEM 90006E) ASPHALTIC MATERIAL FOR PLANT MIXES PG 58-28 (Mg)	(ITEM 90375) QUALITY MANAGEMENT PROGRAM NUCLEAR DENSITY FOR ASPHALTIC PAVEMENT (Mg)
1032-05-76	3	0+847 - 0+937"A"			346		133	10						346
	1-3	1+037 - 1+520"A"	1542		1542		593	46						1542
	3	1+238"A", RT.	18	18			9							18
	3	1+242"A", LT.	16	16			8							16
	3	0+680 - 1+320"B"	1992		1992		599	60						1992
	3	0+680 - 1+320"B", LT.	377		377		113	11						377
	3	0+680 - 0+836"B", RT.	50		50		15	1						50
	3	1+045 - 1+320"B", RT.	89		89		27	3						89
	1	9+000 - 10+270"C"	3526		3526		1060	106						3526
	1	9+024 - 10+270"C",RT.	420		420		126	13						420
	1	9+020 - 9+949"C", LT.	313		313		94	9						313
	1	10+045 - 10+270"C", LT.	74		74		22	2						74
	2	12+180 - 12+300"K"	312	312			150	9						312
	2	12+800 - 13+000"K"	337	337			162	10						337
		SUBTOTAL	9412	683	8729	0	3111	280	0	0	0	0	0	9412
1032-08-70	3	0+100 - 0+220"J"	342	342			164	10						342
	3	0+220 - 0+450"J"	391	391			188	12						391
	4	PARKING LOT	114	114			34	3						114
	4	CHASE VEHICLE PAD	27	27			8	1						27
	1	1+999 - 2+420"E", RT.	148	148			71	4						148
	1	2+052 - 3+002"E", LT.	222	222			107	7						222
	1	2+922 - 3+002"E", RT.	45	45			22	1						45
	1	3+002 - 3+480"E", RT.	485			485	130		4		10			485
	1	3+002 - 3+480"E", LT.	1424			1424	245		8		19		16	1424
	1	3+480 - 3+958"E", LT.	1413			1413	243			8	19	15		1413
	1	3+480 - 3+680"E", RT	203			203	54			2	4			203
	1	3+680 - 3+958"E", RT.	178			178	47			2	4			178
	1	3+958 - 4+614"E", RT.	682			682	182			6	14			682
	1	4+778 - 4+813"E", RT.	22	22			10	1						22
	2-3	3+420 - 3+566"F", RT.	55	55			26	2						55
	2-3	4+721 - 4+760"G", LT.	25	25			12	1						25
	2-3	4+761 - 4+884"G", LT.	69	69			33	2						69
	2-3	4+774 - 4+926"G", RT.	82	82			40	2						82
	4	8+477 - 8+594"H", LT.	25	25			12	1						25
	4	8+477 - 8+660"H", RT.	73	73			35	2						73
	4	6+765 - 6+904"I", LT	44	44			21	1						44
	4	6+780 - 6+859"I", LT.	17	17			8	1						17
	4	7+038 - 7+126"I", RT.	42	42			20	1						42
	4	7+169 - 7+639"I", RT.	181	181			87	5						181
	4	7+300 - 7+477"I", LT.	170	170			82	5						170
	4	0+995 - 1+189"D"*	10			10	7	0						10
	4	1+849 - 4+614"D"*	146			146	94	4						146
		SUBTOTAL	6635	2094	0	4541	1982	66	12	18	70	15	16	6635
		TOTAL	16047	2777	8729	4541	5093	346	12	18	70	15	16	16047

* NB IH-94, 0.3 m ADJACENT TO SAFETY & WEIGHT CONSTRUCTION ACTIVITIES.
SEE CONSTRUCTION DETAILS.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940PAVEQNT.DGN(2) 09-18-01
LEVELS ON * 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	QUANTITIES	SHEET NO: 274	M

DRAINAGE SUMMARY

POINT NO.	STATION	OFFSET	Y	X	STR. TYPE	COVER TYPE	GRATE(*) ELEV.	STR. DEPTH (m)	MIN COVER (m)	MANHOLES & INLETS PIPE INVERTS/PIPE DIAMETERS (mm) N	S	E	W
1A	1+053.676 "A"	19.67 RT.			COLLAR	N/A	N/A	N/A					
1B	1+056.372 "A"	24.50 RT			RCAE(1)	N/A	N/A	N/A					
2A	1+400.000 "A"	10.90 RT.			RCAE	N/A	N/A	N/A					
2B	1+400.000 "A"	13.30 LT.			RCAE	N/A	N/A	N/A					
3A	1+433.000 "A"	10.77 RT.			SAE(2)	N/A	N/A	N/A					
3B	1+448.537 "A"	9.74 RT.			SAE	N/A	N/A	N/A					
4A	1+481.084 "A"	7.87 RT.			SAE	N/A	N/A	N/A					
4B	1+489.522 "A"	7.18 RT.			SAE	N/A	N/A	N/A					
5A	0+736.578 "B"	13.60 RT.			MRME(3)	N/A	N/A	N/A					
5B	0+736.578 "B"	13.60 LT.			MRME	N/A	N/A	N/A					
5C	0+739.023 "B"	13.60 RT.			MRME	N/A	N/A	N/A					
5D	0+739.023 "B"	13.60 LT.			MRME	N/A	N/A	N/A					
6A	1+288.916 "B"	9.87 LT.			SAE	N/A	N/A	N/A					
6B	1+298.300 "B"	9.73 LT.			SAE	N/A	N/A	N/A					
7A	9+162.000 "C"	11.10 LT.			RCAE	N/A	N/A	N/A					
7B	9+162.000 "C"	10.90 RT.			RCAE	N/A	N/A	N/A					
8A	9+826.946 "C"	12.80 LT.			MRME	N/A	N/A	N/A					
8B	9+826.946 "C"	12.80 RT.			MRME	N/A	N/A	N/A					
8C	9+830.000 "C"	12.80 LT.			MRME	N/A	N/A	N/A					
8D	9+830.000 "C"	12.80 RT.			MRME	N/A	N/A	N/A					
9	10+163.555 "C"	3.60 RT.			RCB	N/A	N/A	N/A					
10A	12+274.961 "K"	7.54 RT.			SAE	N/A	N/A	N/A					
10B	12+286.775 "K"	8.66 RT.			SAE	N/A	N/A	N/A					
11A	2+203.009 "E"	8.70 LT.			COLLAR	N/A	N/A	N/A					
11B	2+204.325 "E"	7.10 RT.			RCAE	N/A	N/A	N/A					
12A	2+306.043 "E"	7.91 RT.			RCAE	N/A	N/A	N/A					
12B	2+326.816 "E"	9.50 LT.			RCAE	N/A	N/A	N/A					
13A	2+926.130 "E"	5.98 LT.			COLLAR	N/A	N/A	N/A					
13B	2+922.882 "E"	14.66 RT.			RCAE	N/A	N/A	N/A					
14A	3+261.552 "E"	2.23 RT.			COLLAR	N/A	N/A	N/A					
14B	3+261.689 "E"	6.50 RT.			RCAE	N/A	N/A	N/A					
15A	3+473.930 "E"	4.29 RT.			COLLAR	N/A	N/A	N/A					
15B	3+473.930 "E"	6.50 RT.			INL-TYPE 9	2-MS	222.75	1.21	0.38			221.530/750	221.530/750
16A	3+882.000 "E"	11.90 RT.	58825.36	768374.30	INL-TYPE 10	3-MS	215.490	0.76	0.40	214.730/300			
16B	3+388.703 "E"	11.90 RT.			TAP						214.260/300		
17A	4+090.272 "E"	4.48 RT.			COLLAR	N/A	N/A	N/A					
17B	4+090.248 "E"	8.70 RT.			RCAE	N/A	N/A	N/A					
18A	4+192.400 "E"	12.80 RT.	59135.18	768360.12	INL-TYPE 10	3-MS	214.300	0.08	0.29	213.620/300			
18B	4+197.408 "E"	12.80 RT.			TAP	N/A	N/A	N/A			213.500/300		
18C	4+202.500 "E"	12.00 RT.	59145.24	768358.83	INL-TYPE 10	3-MS	214.520	0.08	0.29		213.840/300		
18D	4+197.456 "E"	12.00 RT.			TAP	N/A	N/A	N/A		213.500/300			
19A	4+417.693 "E"	2.67 RT.			COLLAR	N/A	N/A	N/A					
19B	4+417.639 "E"	6.70 RT.			RCAE	N/A	N/A	N/A					
20A	0+177.280 "J"	8.00 LT.			RCAE	N/A	N/A	N/A					
20B	0+190.130 "J"	8.00RT.			RCAE	N/A	N/A	N/A					
21A	0+436.000 "J"	13.90 LT.			RCAE	N/A	N/A	N/A					
21B	0+436.000 "J"	10.90 RT.			RCAE	N/A	N/A	N/A					
22A	1+020.000 "L"	4.10 LT.			SAE	N/A	N/A	N/A					
22B	1+020.000 "L"	5.30 RT.			SAE	N/A	N/A	N/A					
23A	1+309.344 "L"	4.40 LT.			SAE	N/A	N/A	N/A					
23B	1+309.912 "L"	4.90 RT.			SAE	N/A	N/A	N/A					
24A	7+168.498 "I"	34.94 RT.	57412.85	768498.66	SPECIAL	SPECIAL	226.140	N/A					N/A
24B	7+168.498 "I"	38.32 RT.			SAE	N/A	N/A	N/A					
25A	7+171.499 "I"	34.94 RT.	57409.85	768498.72	SPECIAL	SPECIAL	226.140	N/A					N/A
25B	7+171.499 "I"	38.32 RT.			SAE	N/A	N/A	N/A					
26A	7+235.950 I	20.20 RT.	57345.22	768514.75	RCAE	N/A	N/A	N/A					
26B	7+235.950 I	39.20 RT.	57344.84	768495.76	RCAE	N/A	N/A	N/A					

FROM STR.	TO STR.	INVERT ELEV.	DISCHARGE ELEV.	SIZE SIZE (mm)	LENGTH (m)	PIPE MATERIAL	REMARKS
1A	1B	224.81	224.78	750	7.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.45 PERCENT
2A	2B	222.51	222.39	600	23.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.5 PERCENT
3B	3A	222.74	222.67	450	16.0	CORRUGATED STEEL CULVERT PIPE	PIPE AT 0.45 PERCENT
4B	4A	222.84	222.80	450	9.0	CORRUGATED STEEL CULVERT PIPE	PIPE AT 0.45 PERCENT
5A	5B	223.75	223.67	1350	27.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.3 PERCENT
5C	5D	223.75	223.67	1350	27.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.3 PERCENT
6A	6B	225.93	225.88	450	9.0	CORRUGATED STEEL CULVERT PIPE	PIPE AT 0.55 PERCENT
7A	7B	222.53	221.74	750	23.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.35 PERCENT
8A	8B	216.71	216.64	1300x795	26.0	REINFORCED CONCRETE CULVERT PIPE ARCH CLASS-III	PIPE AT 0.3 PERCENT
8C	8D	216.71	216.64	1300x795	26.0	REINFORCED CONCRETE CULVERT PIPE ARCH CLASS-III	PIPE AT 0.3 PERCENT
N/A	N/A	N/A	N/A	N/A	N/A	REINFORCED CONCRETE BOX CULVERT	SEE STRUCTURE PLANS
10A	10B	225.72	225.67	450	12.0	CORRUGATED STEEL CULVERT PIPE	PIPE AT 0.4 PERCENT
11A	11B	227.51	227.43	600	16.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.5 PERCENT
12A	12B	226.60	226.50	600	27.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.4 PERCENT
13A	13B	225.17	225.11	450	13.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.45 PERCENT
14A	14B	224.37	224.36	375	5.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 2.0 PERCENT
15A	15B	221.54	221.53	750	2.2	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.45 PERCENT
16A	16B	214.730	214.260	300	5.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.95 PERCENT
17A	17B	214.66	214.64	375	5.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.4 PERCENT
18A	18B	214.225	213.500	300	5.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 2.4 PERCENT
18C	18D	214.445	213.500	300	5.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 6.8 PERCENT
19A	19B	215.63	215.46	375	4.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 4.3 PERCENT
20A	20B	224.15	224.04	750	21.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.5 PERCENT
21A	21B	222.72	222.59	600	25.0	REINFORCED CONCRETE CULVERT PIPE CLASS-III	PIPE AT 0.5 PERCENT
22A	22B	225.34	224.87	450	10.0	CORRUGATED STEEL CULVERT PIPE	PIPE AT 0.5 PERCENT
23A	23B	225.29	225.10	450	10.0	CORRUGATED STEEL CULVERT PIPE	PIPE AT 1.9 PERCENT
24A	24B	na	225.55	300	3.0	PIPE UNDERDRAIN, UNPERFORATED	PIPE AT 0.5 PERCENT
25A	25B	na	225.55	300	3.0	PIPE UNDERDRAIN, UNPERFORATED	PIPE AT 0.5 PERCENT
26A	26B	225.430	225.330	300	19.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT

CONTINUED

(1) REINFORCED CONCRETE APRON ENDWALLS, RCAE
(2) STEEL APRON ENDWALLS, SAE
(3) MORTAR RUBBLE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH, MRME
(4) SPECIAL REFERS TO THE SHALLOW INLETS IN THE PARKING AREA. (SEE SPEICAL INLET DETAIL IN CONSTRUCTION DETAILS)

* GRATE ELEVATIONS ARE GIVEN AT EDGE OF PAVEMENT FOR INLETS ADJACENT TO CONCRETE PAVEMENT
ALL OTHER GRATE ELEVATIONS ARE GIVEN TO THE CENTER OF STRUCTURE

NOTE: STRUCTURE LOCATIONS ARE TO CENTER OF STRUCTURE EXCEPT FOR THE DB OUTFALL STRUCTURE. (SEE DETENTION BASIN OUTFALL CONSTRUCTION DETAILS FOR LOCATION REFERENCE POINT)

FILE NAME: PROJECTS/2940/PLANS/GEN/2940STORMONT.DGN(1) 09-18-01
LEVELS ON * 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

DRAINAGE SUMMARY

CONTINUED

POINT NO.	STATION	OFFSET	Y	X	STR. TYPE	COVER TYPE	GRATE(*) ELEV.	STR. DEPTH (m)	MIN COVER (m)	MANHOLES & INLETS PIPE INVERTS/PIPE DIAMETERS (mm) N	S	E	W	FROM STR.	TO STR.	INVERT ELEV.	DISCHARGE ELEV.	SIZE SIZE (mm)	LENGTH (m)	PIPE MATERIAL	REMARKS
27	2+439.553 "E"	11.40 RT.	57384.63	768438.24	MH-TYPE 1	C	225.900	2.42	1.25			223.483/1050	223.920/1050	27	28	223.483	223.420	1050	21.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.3 PERCENT
28	2+439.037 "E"	10.04 RT.	57388.17	768458.89	MH-TYPE 1	C	225.320	1.90	0.74			223.420/1050	223.420/1050	28	29B	223.420	223.310	1050	36.8	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.3 PERCENT
29A	7+220.000 "I"	38.90 RT.	57361.28	768495.73	DB OUTFALL	4-ML	N/A	N/A		225.330/300				28A	29B	225.330	224.800	300	34.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 1.6 PERCENT
29B	7+185.966 "I"	38.96 RT.	57395.31	768494.99	MH-TYPE 1	J	225.890	2.58	0.73		224.80/300	223.310/1050	223.310/1050	29B	29C	223.310	223.103	1050	68.8	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.3 PERCENT
29C	1+063.609 "L"	8.30 RT.	57434.49	768551.48	RCAE	N/A	N/A	N/A													
30A	2+604.822 "E"	23.83 LT.	57551.12	768416.29	INL-TYPE 11	4-MS	224.200	0.07	0.25	224.125/300				30A	30B	224.125	224.109	300	3.3	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
31A	2+313.380 "E"	22.89 LT.	57559.69	768417.06	INL-TYPE 11	4-MS	224.200	0.07	0.25		224.125/300			31A	31B	224.125	224.109	300	3.2	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
30B	2+608.087 "E"	23.17 LT.	57554.40	768416.89	MH-TYPE 3	J	224.700	1.70	0.37		224.109/300	223.000/1200	223.100/1200	30B	30C	223.000	222.280	1200	163.3	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.44 PERCENT
31B	2+610.156 "E"	23.17 LT.	57556.46	768416.85	MH-TYPE 3	J	224.700	1.70	0.37	224.109/300		223.000/1200	223.100/1200	31B	31C	223.000	222.280	1200	164.5	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.44 PERCENT
30C	1+099.243 "L"	14.41 RT.	57470.24	768556.88	MRME	N/A	N/A	N/A													
31C	1+100.757 "L"	15.39 RT.	57471.78	768557.82	MRME	N/A	N/A	N/A													
32	7+060.000 "I"	19.10 RT.	57521.64	768512.33	RCAE	N/A	N/A	N/A						32	33	225.480	225.401	300	15.8	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
33	7+060.000 "I"	34.94 RT.	57521.33	768496.49	INL-TYPE 3	H	226.436	1.11	0.68	225.326/375		225.401/300		33	36	225.326	225.111	375	47.6	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.45 PERCENT
34	7+671.180 "I"	7.01 LT.	57568.27	768461.49	RCAE	N/A	N/A	N/A						34	35	225.580	225.470	300	22.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
35	7+671.675 "I"	14.85 RT.	57568.71	768483.49	INL-TYPE 3	H	227.470	2.08	1.64			225.395/300	225.470/300	35	36	225.395	225.335	375	12.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
36	7+012.363 "I"	34.94 RT.	57568.96	768495.54	MH-TYPE 1	H	226.446	1.48	0.89	224.961/525	225.111/375		225.335/300	36	37	224.961	224.750	525	53.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.4 PERCENT
37	6+959.390 "I"	34.94 RT.	57621.91	768494.48	MH-TYPE 1	H	226.414	1.66	1.07	224.750/525	224.750/525			37	38	224.750	224.553	525	49.1	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.4 PERCENT
38	6+910.330 "I"	35.96 RT.	57670.95	768492.48	MH-TYPE 1	J	226.161	1.61	1.01	224.553/525	224.553/525			38	39	224.553	224.503	525	12.5	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.4 PERCENT
39	6+899.713 "I"	42.47 RT.	57681.43	768485.77	RCAE	N/A	N/A	N/A													
40A	6+852.877 "I"	12.85 RT.	57718.67	768510.35	DB OUTFALL	4-MS	N/A	N/A				224.680/600		40A	40B	224.680	224.590	600	19.0	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
40B	6+853.684 "I"	6.10 LT.	57730.52	768525.15	RCAE	N/A	N/A	N/A													
41	3+667.449 "F"	0.44 RT.	57614.37	768446.80	INL-TYPE 3	H	227.071	1.06	0.70	226.011/300				41	42	226.011	225.845	300	33.2	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
42	3+700.000 "F"	5.62 RT.	57647.28	768450.76	CB-TYPE 2	C	226.970	1.13	0.77	225.845/300	225.845/300			42	43A	225.845	225.060	300	34.1	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 2.3 PERCENT
43A	4+740.138 "G"	13.28 LT.	57681.40	768452.03	MH-TYPE 1	C	226.050	1.04	0.61	225.008/300	225.060/300	225.061/300		43A	43B	225.008	224.901	375	21.4	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
44	4+771.320 "G"	8.59 LT.	57715.51	768445.42	CB-TYPE 2	C	226.200	0.97	0.61		225.235/300			44	43A	225.235	225.061	300	34.7	REINFORCED CONCRETE PIPE CLASS-III, STORM SEWER	PIPE AT 0.5 PERCENT
43B	4+731.422 "G"	6.25 RT.	57683.57	768473.30	RCAE	N/A	N/A	N/A													

(1) REINFORCED CONCRETE APRON ENDWALLS, RCAE
(2) STEEL APRON ENDWALLS, SAE
(3) MORTAR RUBBLE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH, MRME
(4) SPECIAL REFERS TO THE SHALLOW INLETS IN THE PARKING AREA. (SEE SPEICAL INLET DETAIL IN CONSTRUCTION DETAILS)
* GRATE ELEVATIONS ARE GIVEN AT EDGE OF PAVEMENT FOR INLETS ADJACENT TO CONCRETE PAVEMENT
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STORMSEWER PIPE SUMMARY

GROUP CODE 0010

PROJECT I.D.	ITEM	DESCRIPTION	TOTAL (M)
1032-08-70	60825	REINFORCED CONCRETE PIPE, CLASS III STORM SEWER, 300 mm	216.7
	60826	REINFORCED CONCRETE PIPE, CLASS III STORM SEWER, 375 mm	81.1
	60828	REINFORCED CONCRETE PIPE, CLASS III STORM SEWER, 525 mm	114.5
	60829	REINFORCED CONCRETE PIPE, CLASS III STORM SEWER, 600 mm	19.0
	60834	REINFORCED CONCRETE PIPE, CLASS III STORM SEWER, 1050 mm	126.5
	60835	REINFORCED CONCRETE PIPE, CLASS III STORM SEWER, 1200 mm	327.9

STORMSEWER STRUCTURE SUMMARY

GROUP CODE 0010

PROJECT I.D.	ITEM	DESCRIPTION	TOTAL (EACH)
1032-08-70	61122	INLETS, TYPE 3	3
	61124	INLETS, TYPE 9	1
	61125	INLETS, TYPE 10	3
	61126	INLETS, TYPE 11	2
	61110	MANHOLES, TYPE 1	7
	61112	MANHOLES, TYPE 3	2
	61102	CATCH BASINS, TYPE 2	2

STORMSEWER CASTINGS SUMMARY

GROUP CODE 0010

PROJECT I.D.	ITEM	DESCRIPTION	TOTAL (EACH)
1032-08-70	61163	INLET COVERS, TYPE C	5
	61167	INLET COVERS, TYPE H	5
	61170	INLET COVERS, TYPE MS	24
	90005Y	INLET COVERS, SPECIAL	2
	61151	MANHOLE COVERS, TYPE J	4

REINFORCED CONCRETE BOX CULVERT TAP

GROUP CODE 0010

PROJECT I.D.	STAGE	LOCTION	(ITEM 90005F) REINFORCED CONCRETE BOX CULVERT TAP (EACH)
1032-08-70	1	3+887"E", 11.9m RT.	1
	1	4+197"E", 13.1m RT.	1
	1	4+197"E", 11.8m RT.	1
		TOTAL	3

FILE NAME: PROJECTS/2940/PLANS/GEN/2940STORMGNT.DGN(2) 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

25-7-02

CONCRETE BARRIER WALL

GROUP CODE 010 PROJECT I.D.	STAGE	STATION	(ITEM 60302) CONCRETE BARRIER SINGLE-FACED (m)	(ITEM 60304) CONCRETE BARRIER TRANSITION SECTION (m)	(ITEM 61433) ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD (EACH)
1032-05-76	3	1+883 - 1+935"D", LT.	34		
	3	1+894 - 1+924"D", LT.		11	
	3	1+924 - 1+934"D", LT.		11	
	3	BRIDGE PARAPETS			4
		SUBTOTAL	34	22	4
1032-08-70	1	4+884"G" - 3+680"E"	800		1
	4	4+096.2 - 4+120.5"E", RT.	24		1
	4	4+788.2 - 4+812.5"E", RT.	24		1
	2	2+105.5 - 2+129.9"D" LT.	21	11	1
		SUBTOTAL	869	11	4
		TOTAL	903	33	8

STEEL PLATE BEAMGUARD

GROUP CODE 010 PROJECT I.D.	STAGE	STATION	(ITEM 61407) STEEL THRIE BEAM STRUCTURE APPROACH (m)	(ITEM 61408) STEEL PLATE BEAM GUARD CLASS A (m)	(ITEM 61410) STEEL PLATE BEAM GUARD CLASS A OVER LOW FILL CULVERTS (m)	(ITEM 61435) STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (EACH)	(ITEM 90005T) MARKER POSTS FLEXIBLE FOR BEAM GUARD TERMINAL (EACH)	(ITEM 61409) STEEL PLATE BEAM GUARD CLASS B (m)
1032-05-76	4	0+863.9 - 0+879.1"A", RT.				1	1	
	4	0+863.9 - 0+879.1"A", LT.				1	1	
	4	0+879.1 - 0+928.5"A", RT.		50				
	4	0+879.1 - 0+928.5"A", LT.		50				
	4	0+928.5 - 0+938.6"A", RT.	10					
	4	0+928.5 - 0+938.6"A", LT.	10					
	4	1+036.0-1+046.1"A", RT.	10					
	4	1+036.0 - 1+046.1"A", LT.	10					
	4	1+046.1 - 1+198.5"A", RT.		152				
	4	1+046.1 - 1+198.5"A", LT.		152				
	4	1+198.5 - 1+213.7"A", RT.				1	1	
	4	1+198.5 - 1+213.7"A" LT.				1	1	
	3	0+840.0 - 0+855.4"B", LT.				1	1	
	3	0+855.4 - 1+042.0"B", LT.		187				
	3	1+042.0 - 1+057.7"B", LT.				1	1	
	4	10+143.7 - 10+159.9"C", RT.				1	1	
	4	10+159.9 - 10+163.8"C", RT.			4			
	4	10+163.8 - 10+180.1"C", RT.				1	1	
	4	12+180.5 "K"						36
		SUBTOTAL	40	591	4	8	8	36
1032-08-70	1	4+858.5 - 4+874.4"G", RT.				1	1	
	1	4+874.4 - 4+883.9"G",RT.	10					
	4	4+071.7 - 4+086.9"E", RT.				1	1	
	4	4+086.9 - 4+097.0"E", RT.	10					
	4	4+764.0 - 4+779.3"E" RT.				1	1	
	4	4+779.3 - 4+789.4"E", RT.	10					
	2	2+129.9 - 2+139.1"D", LT.	10			1	1	
	2	2+139.1 - 2+154.4"D", LT.	10			1	1	
		SUBTOTAL	50	0	0	5	5	0
		TOTAL	90	591	4	13	13	36

FINISHING ITEMS

GROUP CODE 010 PROJECT I.D.	STAGE	STATION	GRAVEL SEED (M2)	TOPSOIL SEED (M2)	(ITEM 62505) SALVAGED TOPSOIL (M2)	(ITEM 62501) TOPSOIL (M2)	(ITEM 62702) MULCHING (M2)	(ITEM 62905) FERTILIZER TYPE B (Kg)	(ITEM 63010) SEEDING MIXTURE NO. 30 (Kg)	(ITEM 62502) TOPSOIL (M3)
1032-05-76	4	0+840 - 0+937"A", RT.	127	1915	1915		1915	71	20	
	4	0+840 - 0+937"A", LT.	125	1661	1661		1661	63	18	
	4	1+031 - 1+338"A", RT.	516	7011	7011		7011	263	75	
	4	1+031 - 1+338"A", LT.	527	4724	4724		4724	184	53	
	4	1+338 - 1+520"A", RT.	186	816	816		816	35	10	
	4	1+338 - 1+520"A", LT.	159	561	561		561	25	7	
	4	0+680 - 1+320"B", LT.	1014	8356	8356		8356	328	94	
	4	0+680 - 1+000"B", RT.	476	3661	3661		3661	145	41	
	4	1+100 - 1+320"B", RT.	478	3627	3627		3627	144	41	
	4	9+000 - 10+280"C", RT.	2141	9295	9295		9295	400	114	
	4	9+000 - 9+988"C", LT.	1542	8558	8558		8558	354	101	
	4	9+988 - 10+280"C", LT.	445	905	905		905	47	14	
	4	12+140 - 12+300"K", RT.	243	866	866		866	39	11	
	4	12+800 - 13+000"K", RT.	200	1251	1251		1251	51	15	
	4	12+860 - 13+000"K", LT.	218	683	683		683	32	9	
	4	UNDISTRUBUTED				50			156	
		SUBTOTAL			53890	50	53890	2181	779	0
1032-08-70	4	1+999 - 2+530"E", RT.	2044	2073	2073		2073	144	41	
	4	2+920 - 4+614"E", RT.	3738	10649	10649		10649	504	144	
	4	4+720 - 4+123"E", RT.	212	400	400		400	21	6	
	4	3+614 - 3+820"F", RT.	493	1059	1059		1059	54	16	
	4	4+750 - 4+927"G", RT.	244	1502	1502		1502	61	17	
	4	8+525 - 8+660"H", RT.	232	1039	1039		1039	44	13	
	4	6+800 - 6+984"I", RT.	175	1431	1431		1431	56	16	
	4	6+800 - 6+870"I", LT.	140	3140	3140		3140	115	33	
	4	6+870 - 7+373"I", LT.	139	3237	3237		3237	118	34	
	4	7+040 - 7+688"I", RT.	1214	6400	6400		6400	266	76	
	4	0+100 - 0+450"J", LT	231	3345	3345		3345	125	36	
	4	0+100 - 0+450"J", RT.	207	3494	3494		3494	130	37	
	4	1+000 - 1+345"L", RT.	262	2688	2688		2688	103	30	
	4	UNDISTRUBUTED				50			149	
	4	CINGULAR TOWER**		400	400		400	14	4	
	4	TREE PLANTING								20
		SUBTOTAL			47412	50	47412	2099	750	20
		TOTAL			101302	100	101302	4280	1529	20

(*) TO REPLACE AREAS AFTER TEMPORARY BUILDING IS REMOVED AT TOWER. DIRECTLY AROUND TOWER, WITHIN FENCING, WILL HAVE RED GRANITE CHIPS. SEE LANDSCAPING DETAIL.

WELCOME TO WISCONSIN SIGN

GROUP CODE 010 PROJECT I.D.	STAGE	STATION	(ITEM 90004L) MOVING STATE WELCOME SIGN (L.S.)	(ITEM 50405) CONCRETE MASONRY RETAINING WALLS (m3)	(ITEM 30404) CRUSHED AGGREGATE BASE COURSE (m3)*	(ITEM 90002A) ARCHITECTURAL SURFACE TREATMENT (m2)*
1032-08-70	4	2+080, RT.	1	5.2	12	14
		TOTAL	1	5.2	12	14

* PARTIAL QUANTITY LISTED. ADDITIONAL QUANTITIES LISTED UNDER STRUCTURE B-30-30

FILE NAME: PROJECTS/2940/PLANS/GEN/2940QT02.DGN 09-19-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	QUANTITIES	SHEET NO: 277	M

25-7-02

PIPE UNDERDRAIN

GROUP CODE 010 PROJECT I.D.	STAGE	STATION	(ITEM 61201) PIPE UNDERDRAIN 150 mm (m)	(ITEM 61211) PIPE UNDERDRAIN UNPERFORATED 150 mm (m)	(ITEM 61214) PIPE UNDERDRAIN UNPERFORATED 300 mm (m)	(ITEM 61221) PIPE ① UNDERDRAIN DRAIN TILE 125 mm (m)	(ITEM 61223) PIPE ① UNDERDRAIN DRAIN TILE 200 mm (m)	(ITEM 61224) PIPE ① UNDERDRAIN DRAIN TILE 250 mm (m)	(ITEM 64503) GEOTEXTILE FABRIC TYPE DF** (m2)	(ITEM 61254) REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN 150 mm (EACH)	(ITEM 30420) CRUSHED AGGREGATE BASE COURSE OPEN GRADED NO. 2* (Mg)	(ITEM 90778) PAVEMENT MARKING OUTFALL MARKERS (EACH)
1032-08-70	1	0+995 - 1+189"D", RT.	194						369		34	
	1	1+151"D", RT.		5						1		1
	1	1+189"D", RT.		5						1		1
	1	1+849 - 3+614"D", RT.	1765						3354		306	
	1	1+849"D", RT.		5						1		1
	1	1+907"D", RT.		5						1		1
	1	1+999 - 2+407"E", RT.	408						620		71	
	1	1+999"E", RT.		10						1		1
	1	2+074"E", RT.		16						1		1
	1	2+149"E", RT.		6						1		1
	1	2+224"E", RT.		6						1		1
	1	2+299"E", RT.		6						1		1
	1	2+376"E", LT.		9						1		1
	1	3+460"F", RT.		12						2		1
	1	2+540 - 2+840"E", LT.	300						456		52	
	1	2+605"E", LT		4						1		1
	1	2+680"E", LT.		4						1		1
	1	2+755"E", LT.		4						1		1
	1	2+830"E", LT.		8						2		1
	1	2+840 - 2+878"E", RT.	45						68		8	
	1	2+922 - 4+614"E", RT.	1692						2572		294	
	1	2+975"E", RT.		15						1		1
	1	3+084"E", RT.		12						1		1
	1	3+159"E", RT.		13						1		1
	1	3+234"E", RT.		13						1		1
	1	3+309"E", RT.		13						1		1
	1	3+384"E", RT.		13						1		1
	1	3+459"E", RT.		13						1		1
	1	3+534"E", RT.		13						1		1
	1	3+609"E", RT.		13						1		1
	1	3+684"E", RT.		13						1		1
	1	3+759"E" ,RT.		15						1		1
	1	3+834"E", RT.		15						1		1
	1	3+909"E", RT.		13						1		1
	1	3+984"E", RT.		11						1		1
	1	4+059"E", RT.		12						1		1
	1	4+134"E", RT.		10						1		1
	1	4+209"E", RT.		20						2		1
	1	4+285"E", RT.		10						1		1
	1	4+359"E", RT.		10						1		1
	1	4+435"E", RT.		10						1		1
	1	4+510"E", RT.		10						1		1
	1	4+614"E", RT.		10						1		1
	1	3+407- 3+540"E", RT.	133						202		23	
	1	2+531"E", LT.		12						1		1
	3	3+530 - 3+600"F", 4.5m LT.	70						106		12	
	3	4+884 - 4+926"G"	43						65		7	
	3	4+908"G", RT.		5						1		1
	3	7+168"I", RT.***			3							
	3	7+171"I", RT.***			3							
		WI SIGN PLANTER UNDISTRIBUTED****				10	10	10	37			
		TOTAL	4650	399	6	10	10	10	7849	42	807	39

* PARTIAL QUANTITY LISTED. COMPLETE QUANTITIES LISTED ELSEWHERE.

**1900 mm WIDTH FOR RURAL POST PAVING INSTALLATION
1520 mm WIDTH FOR RURAL PRE-PAVING INSTALLATION

*** SEE SHALLOW INLET DETAIL FOR USE OF PIPE UNDERDRAIN, UNPERFORATED, 300 mm

****FOR REPLACEMENT OF EXISTING DRAIN TILE IMPACTED DURING CONSTRUCTION.

① THESE ITEMS ARE AN UNDISTRIBUTED AMOUNT OF VARIOUS SIZE PIPE UNDERDRAINS. THIS WOULD REPLACE ANY DAMAGED UNDERDRAIN IN THE FIELD. THE EXACT TYPE IS NOT KNOWN DUE TO INSUFFICIENT INFORMATION ON THE ASBUILT PLANS. IF PIPE UNDERDRAIN IS OF A DIFFERENT MATERIAL, CONTRACTOR SHOULD REPLACE IN KIND. PIPE UNDERDRAIN DRAIN TILE WILL BE PAID FOR UNDER THE ABOVE ITEM NUMBERS.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940QT02.DGN 09-19-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

25-7-02

WELCOME TO WISCONSIN SIGN PLANTING

GROUP CODE 010			(ITEM 63201) TREES AMERICAN ARBORVITAE 1.5 m HEIGHT, B&B (EACH)	(ITEM 63261) SHRUBS, AMERICAN CRANBERRYBUSH VIRBURNUM 610 mm HEIGHT, B&B (EACH)	(ITEM 63262) SHRUBS SEA GREEN JUNIPER 455 mm HEIGHT, BR (EACH)	(ITEM 63263) SHRUBS MANNEY JUNIPER 455 mm HEIGHT, B&B (EACH)	(ITEM 64503) GEOTEXTILE FABRIC TYPE DF* (M2)
PROJECT I.D.	STAGE	STATION					
1032-08-70	4	2+080, RT.(INSIDE BASE)			7		20
	4	2+080, RT.(OUTSIDE BASE)	11	3	6	3	17
		TOTAL	11	3	13	3	37

* PARTIAL QUANTITY LISTED. COMPLETE QUANTITIES LISTED ELSEWHERE.

BUILDING LANDSCAPING

GROUP CODE 010			(ITEM 63202) TREES, MP 50mm CAL (EACH)	(ITEM 63264) SHRUBS, VTW 760mm HEIGHT (EACH)	(ITEM 63265) SHRUBS, SBG 460mm HEIGHT (EACH)	(ITEM 63266) SHRUBS, PF 460mm HEIGHT (EACH)	(ITEM 63267) SHRUBS, BT 380mm HEIGHT (EACH)	(ITEM 63268) SHRUBS, JSB 460mm SPREAD (EACH)	(ITEM 63269) SHRUBS, TMT 460mm SPREAD (EACH)	(ITEM 63270) SHRUBS, TMH 900mm HEIGHT (EACH)	(ITEM 90005Q) PERENNIALS, HH 150mm C.C. (EACH)	(ITEM 90005R) PERENNIALS, HAB 150mm C.C. (EACH)
PROJECT I.D.	STAGE	STATION										
1032-08-70	4	BUILDING	1	3	37	18	23	24	58	1	20	12
		TOTAL	1	3	37	18	23	24	58	1	20	12

LANDSCAPING LEGEND

SYM.	BOTANICAL NAME	COMMON NAME
	SMALL DECIDUOUS TREES	
MP	MALUS 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE
	LARGE DECIDUOUS SHRUBS	
VTW	VIBURNUM TRILOBUM 'WENTWORTH'	WENTWORTH AM.ERICAN CRANBERRY
	SMALL DECIDUOUS SHRUB	
SBG	SPIRAEA X BUMALDA 'GOLDMOUND'	GOLDMOUND SPIREA
PF	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER POTENTILLA
BT	BERBERIS THUNBERGII VAR ATROPURPUREA 'CRIMSON PYGMY'	CRIMSON PYGMY BARBERRY
	CONIFEROUS SHRUBS	
JSB	JUNIPERUS SABINA 'BROADMOOR'	BROADMOOR JUNIPER
TMT	TAXUS X MEDIA 'TAUNTONII'	TAUNTON ANGLOJAP YEW
TMH	TAXUS X MEDIA 'HICKSII'	HICKS ANGLOJAP YEW
	PERENNIALS	
HH	HEMEROCALLIS 'STELLA D' ORO'	STELLA D'ORO DAYLILY
HAB	HOSTA FORTUNEI 'ALBO-MARGINATA'	ALBO-MARGINATA HOSTA

IMPACT ATTENUATORS

GROUP CODE 010			(ITEM 61423) IMPACT ATTENUATORS (EACH)
PROJECT I.D.	STAGE	STATION	
1032-08-70	3	1+890.5"D", RT.	1
		TOTAL	1

LANDSCAPE PLANTING SURVEILLANCE AND CARE

GROUP CODE 010			(ITEM 90005A) LANDSCAPING PLANTING SURVEILLANCE AND CARE (EACH)**
PROJECT I.D.	STAGE	LOCATION	
1032-08-70	4	WELCOME SIGN & BUILDING	16
		TOTAL	16

** BASED ON A SITE VISIT ONCE EVERT TWO WEEKS BETWEEN MAY 15 AND SEPTEMBER 15 FOR TWO GROWING SEASONS (8 MONTHS AT 2 TIMES A MONTH).

DELINEATORS

GROUP CODE 010			(ITEM 63305) DELINEATORS			(ITEM 63301) DELINEATOR POSTS (EACH)	(ITEM 63310) DELINEATOR BRACKETS (EACH)
PROJECT I.D.	STAGE	LOCATION	WHITE (EACH)	YELLOW (EACH)	RED (EACH)		
1032-08-70	4	1+000 - 1+480"D", 4.1m RT.	6			6	
	4	1+850 - 2+000"D", 4.1m RT.	3			3	
	4	2+000 - 2+400"E", 3.4m RT.	30		6	15	
	4	2+000 - 2+400"E", 6.7m LT.		22		11	
	4	2+400 - 2+480"E", 3.5-9.1m RT.	6			3	
	4	2+400 - 2+760"E", 6.7m LT.		24		12	
	4	4+760 - 4+920"G", 3.0-3.6m RT.	11			5	3
	4	4+760 - 4+840"G", 6.3m LT.		3		3	
	4	2+760 - 2+840"E", 3.7-6.6m RT.	3			3	
	4	2+760 - 2+980"E", 6.7m LT.		16		8	
	4	2+920 - 3+680"E", 3.0m RT.	27				27
	4	3+680 - 3+980"E", 3.4m RT.	10			10	
	4	3+980 - 4+140"E", 3.6-4.3m RT.	8			5	3
	4	4+140 - 4+620"E", 4.0m RT.	7			7	
	4	4+760 - 4+820"E", 3.0-3.8m RT.	5			2	3
		SUBTOTAL	116	65	6	93	36
		TOTAL		187		93	36

LANDMARK REFERENCE MONUMENTS

(ITEM 62101)

GROUP CODE 010						
PROJECT	STAGE	Y	X	DESCRIPTION	DESCRIPTION	
1032-05-76	4	57840.350	768401.190	W 1/4 SEC 31	5	
	SUBTOTAL				5	
1032-05-76	4	58645.026	768370.596	NW 1/4 SEC 31	5	
	4	59453.291	768341.487	W 1/4 SEC 30	5	
	SUBTOTAL				10	
	TOTAL				15	

ROW MARKER POSTS

GROUP CODE 010			(ITEM 61422) MARKER POSTS FOR RIGHT-OF-WAY (EACH)
PROJECT	STAGE	Y	
1032-05-76	4	9+046.13 "C", 15.26m LT.	1
	4	9+044.73 "C", 15.22m RT.	1
	4	9+503.58 "C", 15.26m LT.	1
	4	9+503.58 "C", 15.22m RT.	1
	4	9+795.76 "C", 15.25m LT.	1
	4	9+793.80 "C", 15.25m RT.	1
	4	9+918.34 "C", 15.23m RT.	1
	4	9+933.07 "C", 15.60m RT.	1
	4	10+209.35 "C", 15.40m RT.	1
	4	12+876.19 "K", 15.33m RT.	1
	4	12+945.40 "K", 15.37m RT.	1
		TOTAL	11

DRAIN TILE EXPLORATION

GROUP CODE 010			(ITEM 61251) DRAIN TILE EXPLORATION (m)
PROJECT I.D.	STAGE	STATION	
1032-05-76	1-4	UNDISTRIBUTED	20
		SUBTOTAL	20
1032-08-70	1-4	UNDISTRIBUTED	20
		SUBTOTAL	20
		TOTAL	40

FILE NAME: PROJECTS/2940/PLANS/GEN/2940OT02.DGN 09-19-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	QUANTITIES	SHEET NO: 279	M

12-5-02

SIGNS

GROUP CODE 0010 PROJECT I.D.	LOCATION	CODE NO.	SIGN MESSAGE	SIZE INCHES	(ITEM 63702) SIGNS, TYPE II REFLECTIVE (M2)*	SAME POST AS SIGN NO	SUPPORT	(ITEM 63411) WOOD POSTS, 150X100-mm X 4.3m (EACH)	(ITEM 63412) WOOD POSTS, 150X100-mm X 4.9m (EACH)	(ITEM 63414) WOOD POSTS, 100X150-mm X 6.1m (EACH)
1032-05-76	1	MB4-5	TO	21 × 12	0.16	2,3,4,5,6	POST			2
	2	MB3-3	SOUTH	21 × 12	0.16	1,3,4,5,6	SAME			
	3	M1-1(94)	INTERSTATE SHIELD (94)	36 × 36	0.84	1,2,4,5,6	SAME			
	4	MB6-1	ARROW- RIGHT, LEFT, OR AHEAD	21 × 21	0.28	1,2,3,5,6	SAME			
	5	M1-95	FRONTAGE ROAD MARKER	24 × 28	0.43	1,2,3,4,6	SAME			
	6	M6-4	DIRECTIONAL ARROW - LEFT OR RIGHT	21 × 21	0.28	1,2,3,4,5	SAME			
	7	R1-1	STOP	30 × 30	0.58		POST	1		
	8A	R2-1	SPEED LIMIT 45 MPH	24 × 30	0.46		POST	1		
	8B	W5-52R	CLEARANCE MARKER	12 × 36	0.28		POST	1		
	8C	W5-52R	CLEARANCE MARKER	12 × 36	0.28		POST	1		
	8D	W5-52R	CLEARANCE MARKER	12 × 36	0.28		POST	1		
	8E	W5-52R	CLEARANCE MARKER	12 × 36	0.28		POST	1		
	9	W3-1	STOP AHEAD WORD MESSAGE	36 × 36	0.84		POST		1	
	10A	W14-3	NO PASSING ZONE	48 × 36	0.56		POST	1		
	10B	R2-1	SPEED LIMIT 45 MPH	24 × 30	0.46		POST	1		
	11	M1-95	FRONTAGE ROAD MARKER	24 × 24	0.37	12	POST	1		
	12	M6-1	ARROW- RIGHT, LEFT, OR AHEAD	21 × 21	0.28	11	SAME			
	13	M1-95	FRONTAGE ROAD MARKER	24 × 24	0.37	14	POST	1		
	14	M6-1	ARROW RT OR LT	21 × 21	0.28	13	SAME			
	15	W6-1	DIVIDED HIGHWAY BEGINS	36 × 36	0.84		POST		1	
	16	MB4-5	TO	21 × 12	0.16	17,18,19	POST			1
	17	M1-1(94)	INTERSTATE SHIELD (94)	36 × 36	0.84	16,18,19	SAME			
	18	M1-4(41)	US ROUTE MARKER (41)	36 × 36	0.84	16,17,19	SAME			
	19A	MB6-1	ARROW- RIGHT, LEFT, OR AHEAD	21 × 21	0.28	16,17,18	SAME			
	19B	W14-3	NO PASSING ZONE	48 × 36	0.56		POST	1		
	20	R13-1	TRUCKS OVER 4 TONS STOP AT WEIGH STA.	90 × 36	2.09		POST		2	
	21	W1-7	LARGE ARROW SIGN, LEFT & RIGHT	48 × 24	0.74		POST	1		
	22	M1-5A(ML)	COUNTY MARKER (ML)	36 × 36	0.84	23	POST		1	
	23	M6-1	ARROW- RIGHT, LEFT, OR AHEAD	21 × 21	0.28	22	SAME			
	24	M1-5A(ML)	COUNTY MARKER (ML)	36 × 36	0.84	25	POST		1	
	25A	M6-1	ARROW- RIGHT, LEFT, OR AHEAD	21 × 21	0.28	24	SAME			
	25B	W14-3	NO PASSING ZONE	48 × 36	0.56		POST	1		
	26	M1-5A(ML)	COUNTY MARKER (ML)	36 × 36	0.84	27	POST		1	
	27	M6-4	DIRECTIONAL ARROW - LEFT OR RIGHT	21 × 21	0.28	26	SAME			
	28	R1-1	STOP	30 × 30	0.00		POST	1		
	29	R2-1	SPEED LIMIT 45 MPH	24 × 30	0.46		POST	1		
	30A	W3-1	STOP AHEAD WORD MESSAGE	36 × 36	0.84		POST		1	
	30B	M2-1	JCT	21 × 15	0.20	31	POST	1		
	31A	M1-5A(ML)	COUNTY MARKER (ML)	36 × 36	0.84	30	SAME			
	31B	W14-3	NO PASSING ZONE	48 × 36	0.56		POST	1		
	32	W14-3	NO PASSING ZONE	48 × 36	0.56		POST	1		
	33	R2-5A	REDUCED SPEED AHEAD	24 × 30	0.46	35	POST	1		
	34	W13-1	ADVISORY SPEED 40 MPH	18 × 18	0.21	34	SAME			
	35	W14-3	NO PASSING ZONE	48 × 36	1.11		POST	1		
	36	R2-1	SPEED LIMIT 45 MPH	24 × 30	0.46		POST	1		
	44A	W5-56	END OF ROAD MARKER W/ RED DELINEATOR	18 × 18	0.21		POST	1		
	44B	W5-56	END OF ROAD MARKER W/ RED DELINEATOR	18 × 18	0.21		POST	1		
	44C	W5-56	END OF ROAD MARKER W/ RED DELINEATOR	18 × 18	0.21	U	POST	1		
	45	R2-1	SPEED LIMIT 25 MPH	24 × 30	0.46		POST	1		
	46	R2-1	SPEED LIMIT 25 MPH	24 × 30	0.46		POST	1		
	47	W3-1	STOP AHEAD WORD MESSAGE	36 × 36	0.84		POST		1	
	48	W14-1	DEAD END	30 × 30	0.58		POST	1		
	49	R1-1	STOP	30 × 30	0.58		POST	1		
	50	M1-95	FRONTAGE ROAD MARKER	24 × 24	0.37	51	POST	1		
	51	M6-4	DIRECTIONAL ARROW - LEFT OR RIGHT	21 × 21	0.28	50	SAME			
	52	W1-8	IMPACT ATTENUATOR	18 × 24	0.28		IMPACT ATTENUATOR			
			SUBTOTAL		27.92			29	9	3
1032-08-70	37	R5-1	DO NOT ENTER	30 × 30	0.58		POST	1		
	38	R5-1	DO NOT ENTER	30 × 30	0.58		POST	1		
	39	W5-54S	END OF ROAD MARKER W/ RED DELINEATOR	21 × 21	0.28		S & W ACCESS GATE			
	40	W14-1	DEAD END	30 × 30	0.58		POST	1		
	41	R2-1	SPEED LIMIT 25 MPH	24 × 30	0.46		POST	1		
	42	W14-1	DEAD END	30 × 30	0.58		POST	1		
	43	R1-1	STOP	30 × 30	0.58		POST	1		
	53	R1-2	YIELD	48 × 48	0.74		POST	1		
	54	R1-2	YIELD	48 × 48	0.74		POST	1		
	55	R1-2	YIELD	48 × 48	0.74		POST	1		
	MAINLINE IH-94*				5.81					
			SUBTOTAL		11.67			9	0	0
			TOTAL		39.59			38	9	3

* SEE I-94 PERMANENT SIGNING PLAN FOR DETAILED LOCATIONS.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940SIGNONT.DGN(1) 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76, 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	QUANTITIES	SHEET NO: 280	M

REMOVING SIGNS

GROUP CODE 0010

PROJECT I.D.	STAGE	CODE NO.	LOCATION	(ITEM 63827) REMOVING SIGNS, TYPE II (EACH)	(ITEM 63830) REMOVING SMALL SIGN SUPPORTS (EACH)	(ITEM 63831) REMOVING STRUCTURAL STEEL SIGN SUPPORTS (EACH)
1032-05-76	1	M1-5A	0+850"A", RT.	1	1	
	1	M6-1	0+850"A", RT.	1		
	1	R1-1	0+853"A", LT.	1	1	
	1	MB4-5	0+853"A", LT.	1	2	
	1	MB3-3	0+853"A", LT.	1		
	1	M1-1	0+853"A", LT.	1		
	1	MB6-1	0+853"A", LT.	1		
	1	M1-95	0+853"A", LT.	1		
	1	M6-4	0+853"A", LT.	1		
	1	W3-1	0+920"A", RT.	1	1	
	1	W3-1	1+018"A", LT.	1	1	
	1	M4-5	1+046"A", LT.	1	2	
	1	M3-3	1+046"A", LT.	1		
	1	M1-51	1+046"A", LT.	1		
	1	M6-1	1+046"A", LT.	2		
	1	M1-5A	1+046"A", LT.	1		
	1	R1-1	1+051"A", RT.	1	1	
	1	M1-95	1+051"A", RT.	1	1	
	1	R6-1	1+051"A", RT.	1		
	1	M4-5	1+067"A", LT.	1	1	
	1	M1-1	1+067"A", LT.	1		
	1	M1-4	1+067"A", LT.	1		
	1	M6-1	1+067"A", LT.	1		
	1	W14-1	1+067"A", RT.	1	1	
	1	M1-95	1+080"A", LT.	1	1	
	1	M6-4	1+080"A", LT.	1		
	1	R1-1	1+080"A", LT.	1	1	
	1	M1-5A	1+085"A", RT.	1	1	
	1	M6-1	1+085"A", RT.	1		
	1	W5-52	1+195"A", LT.	1	1	
	1	W5-52	1+195"A", RT.	1	1	
	1	M2-1	1+219"A", LT.	1	1	
	1	M1-95	1+219"A", LT.	1		
	1	W3-1	1+327"A", LT.	1	1	
	1	W6-1	0+685"B", LT.	1	1	
	1	W14-3	0+758"B", LT.	1	1	
	1	MB4-5	0+758"B", RT.	1	1	
	1	M1-1	0+758"B", RT.	1		
	1	M1-4	0+758"B", RT.	1		
	1	MB6-1	0+758"B", RT.	1		
	1	R13-1	0+819"B", RT.	1	2	
	1	E5-58	0+910"B", RT.	1		2
	1	E5-57C	0+910"B", RT.	1		
	1	W1-7	1+000"B", LT.	1	1	
	1	M1-5A	1+000"B", LT.	1	1	
	1	M6-1	1+000"B", LT.	1		
	1	W14-3	10+095"C", LT.	1	1	
	1	R2-5A	10+197"C", RT.	1	1	
	1	W13-1	10+197"C", RT.	1		
	1	R2-1	10+365"C", LT.	1	1	
	1	M1-5A	12+400"K", LT.	1	1	
	1	M2-1	12+400"K", LT.	1		
	1	W14-3	12+420"K", RT.	1	1	
	1	W14-3	12+506"K", LT.	1	1	
CONTINUED		SUBTOTAL		55	32	2

CONTINUED
GROUP CODE 0010

PROJECT I.D.	STAGE	CODE NO.	LOCATION	(ITEM 63827) REMOVING SIGNS, TYPE II (EACH)	(ITEM 63830) REMOVING SMALL SIGN SUPPORTS (EACH)	(ITEM 63831) REMOVING STRUCTURAL STEEL SIGN SUPPORTS (EACH)
1032-08-70	1	R52-57A	2+319"E", RT.	1	1	
	1	(WEIGH STATION/OIL INSPECTION)	2+345"E", LT.	1	2	
	1	M1-5A	2+389"E", RT.	1	1	
	1	M4-5	2+389"E", RT.	1		
	1	M6-2	2+389"E", RT.	1		
	1	I2-3A	2+395"E", LT.	1	2	
	1	E5-1	2+408"E", RT.	1	1	
	1	M1-95	2+408"E", RT.	1		
	1	M6-2	2+408"E", RT.	1		
	1	R2-1	2+493"E", LT.	1	1	
	1	R2-1	2+493"E", RT.	1	1	
	1	R52-55	2+589"E", LT.	1	1	
	1	R52-55	2+589"E", RT.	1	1	
	1	(OIL INSPECTION/SCALE)	2+614"E", RT.	1	1	
	1	SIGN	2+658"E", RT.	1	2	
	1	I52-51	2+660"E", LT.	1	2	
	1	M4-5	2+765"E", RT.	1	1	
	1	M1-95	2+765"E", RT.	1		
	1	M6-1	2+765"E", RT.	1		
	1	R5-1	6+905"I", RT.	1	1	
	1	W1-6	6+934"I", RT.	1	1	
	1	M1-95	6+938"I", RT.	1	1	
	1	M6-1	6+938"I", RT.	1		
	1	R5-1	6+940"I", RT.	1	1	
	1	M6-1	6+940"I", RT.	1	1	
	1	R5-1	6+990"I", RT.	2	1	
	1	R5-1	6+992"I", RT.	1	1	
	1	W6-3	6+992"I", RT.	1		
	1	R5-9	7+032"I", RT.	1	1	
	1	R5-9	7+034"I", RT.	1	1	
	1	M1-5A	7+035"I", RT.	1		
	1	M2-1	7+035"I", RT.	1		
	1	W14-3	7+170"I", RT.	1	1	
	1	W6-1	7+190"I", RT.	1	1	
	1	S-56A	7+219"I", RT.	2	2	
	1	R5-1	7+474"I", RT.	1	1	
	1	R5-9	7+474"I", RT.	1		
	1	R5-1	7+477"I", LT.	1	1	
	1	R5-9	7+477"I", LT.	1		
	1	R5-1	7+700"I", LT.	1	1	
	1	R5-9	7+700"I", LT.	1		
			MAINLINE IH-94*	2	21	18
		SUBTOTAL		45	54	18
		TOTAL		100	86	20

MOVING SIGNS

GROUP CODE 0010

PROJECT I.D.	STAGE	DESCRIPTION	LOCATION	(ITEM 63822) MOVING SIGNS, TYPE II (EACH)	(ITEM 63840) MOVING SMALL SIGN SUPPORTS (EACH)
1032-05-76	1&4	TO WEIGH STATION ONLY	1+320"A", 7.6m RT.	1	1
	1&4	NO TRUCKS OVER 7000 LB EMPTY WEIGHT	1+395"A", 9.4m RT.	1	1
	1&4	NO TRUCKS OVER 7000 LB EMPTY WEIGHT	1+395"A", 11.2m LT.	1	1
	1&4	120TH AVE / 122ND ST	9+017"C", 8.2 RT.	1	1
	1&4	ADOPT A HIGHWAY	9+030"C", 7.6 RT.	1	1
		SUBTOTAL		5	5
1032-08-70			MAINLINE IH-94*	11	
		SUBTOTAL		11	0
		TOTAL		16	5

* SEE I-94 PERMANENT SIGNING PLAN FOR DETAILED LOCATIONS.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940SIGNQNT.DGN(2) 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

PROJECT NO. 1032-08-70
GROUP CODE 010
SUMMARY OF LIGHTING QUANTITIES

Item	Description	Unit	Qty
65219	Nonmetallic Conduit, Schedule 40, 50 mm	m	1,439.00
65221	Nonmetallic Conduit, Schedule 40, 75 mm	m	443.00
65306	Pull Boxes, Steel, 24x36-Inch	Each	5.00
65404	Concrete Bases, Type 7	Each	1.00
65405	Concrete Bases, Type 8	Each	26.00
65418	Concrete Control Cabinet Bases, Type 9	Each	1.00
65432	Transformer Bases, Breakaway, 15-17 Inch Bolt Circle	Each	25.00
65507	Cable in Duct, 3 Conductor, No. 8	m	333.00
65566	Electrical Wire, Lighting, No. 12	m	1,596.00
65567	Electrical Wire, Lighting, No. 10	m	1,767.00
65568	Electrical Wire, Lighting, No. 8	m	3,963.00
65569	Electrical Wire, Lighting, No. 6	m	383.00
65570	Electrical Wire, Lighting, No. 4	m	1,659.00
65572	Electrical Wire, Lighting, No. 1	m	6.00
65645	Electrical Service, M.L.O. Meter Pedestal, HL-30-PS	LS	1.00
65707	Poles, Type 7	Each	1.00
65711	Poles, Type A	Each	14.00
65713	Poles, Type E	Each	12.00
65928	Luminaire Arms, Single Member, 150 mm Clamp, 1.2 m	Each	3.00
65930	Luminaire Arms, Single Member, 150 mm Clamp, 3.0 m	Each	14.00
65938	Luminaire Arms, Truss Type, 150 mm Clamp, 6.1 m	Each	11.00
90005C	Flood Light, 175 Watt MH, With Mounting	Each	2.00
90005D	Installing State-Furnished Highway Lighting Distribution Center	Each	1.00
90005E	Luminaires, Highway Lighting, 310 Watt HPS	Each	27.00
90005S	Luminaires, Highway Lighting, 200 Watt HPS	Each	1.00

LIGHTING BRANCH CIRCUIT CONDUIT

65219 NONMETALLIC CONDUIT, SCHEDULE 40, 50 mm
65221 NONMETALLIC CONDUIT, SCHEDULE 40, 75 mm

SYSTEM	LOCATION TO LOCATION	65219 50 mm m	65221 75 mm m
HL-30-PS	PB102 TO BPS8	70	0
HL-30-PS	BPS8 TO APS9	77	0
HL-30-PS	APS9 TO BPS10	76	0
HL-30-PS	BPS10 TO STUBOUT NORTH	3	0
HL-30-PS	PB102 TO PB103	64	0
HL-30-PS	PB103 TO HL-30-PS (3-75)	0	30
HL-30-PS	CPS11 TO DPS12	24	0
HL-30-PS	DPS12 TO DPS13	66	0
HL-30-PS	DPS13 TO CPS14	23	0
HL-30-PS	DPS13 TO HL-30-PS	21	0
HL-30-PS	PB103 TO CPS15/DPS15	36	0
HL-30-PS	CPS15/DPS15 TO FLAG POLE	40	
HL-30-PS	CPS15/DPS15 TO CPS16	87	0
HL-30-PS	FPS17 TO FPS18	79	0
HL-30-PS	EPS18 TO FPS19	37	0
HL-30-PS	FPS18 TO EPS20	75	0
HL-30-PS	EPS20 TO FPS21	77	0
HL-30-PS	PB103 TO FPS21	0	44
HL-30-PS	FPS21 TO EPS22	0	74
HL-30-PS	EPS22 TO FPS23	0	74
HL-30-PS	FPS23 TO EPS24	0	52
HL-30-PS	EPS24 TO PB104	0	84
HL-30-PS	PB104 TO EPS25	58	0
HL-30-PS	PB104 TO FPS26	0	82
HL-30-PS	FPS26 TO STUBOUT NORTH	0	3
	TOTALS	1,439	443

NOTE: ALL CONDUIT WILL BE PLACED IN TRENCHES AS OUTLINED IN SECTION 652 OF THE STANDARD SPECIFICATIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR BORING.

LIGHTING BRANCH CIRCUIT WIRE - ISOLATED NEUTRAL SYSTEM

65507 CABLE IN DUCT, 3 CONDUCTOR, NO. 8
65567 ELECTRICAL WIRE, LIGHTING, NO. 10
65568 ELECTRICAL WIRE, LIGHTING, NO. 8
65569 ELECTRICAL WIRE, LIGHTING, NO. 6
65570 ELECTRICAL WIRE, LIGHTING, NO. 4

SYSTEM	NETWORK	LOCATION TO LOCATION	DISTANCE	65567 10 AWG m	65568 8 AWG m	65569 6 AWG m	65570 4 AWG m	CABLE IN DUCT m
HL-30-PS	B,N,G	WELCOME SIGN TO APS1	40	129	0	0	0	0
HL-30-PS	A,N,G	APS1 TO BPS2	82	340	0	0	0	0
HL-30-PS	A,B,N,G	BPS2 TO APS3	82	0	425	0	0	0
HL-30-PS	A,B,N,G	APS3 TO PB101	21	0	120	0	0	0
HL-30-PS	A,B,N,G	PB101 TO BPS4	63	0	330	0	0	0
HL-30-PS	A,B,N,G	BPS4 TO APS5	77	0	400	0	0	0
HL-30-PS	A,B,N,G	APS5 TO BPS6	77	0	400	0	0	0
HL-30-PS	A,B,N,G	BPS6 TO APS7	76	0	395	0	0	0
HL-30-PS	A,B,N,G	APS7 TO PB102	5	0	40	0	0	0
HL-30-PS	A,B,N,G	PB102 TO BPS8	70	0	292	0	0	0
HL-30-PS	A,B,N,G	BPS8 TO APS9	77	0	320	0	0	0
HL-30-PS	B,N,G	APS9 TO BPS10	76	0	237	0	0	0
HL-30-PS	A,B,N,G	PB102 TO PB103	64	0	0	335	0	0
HL-30-PS	A,B,N,G	PB103 TO HL-30-PS (3-75)	10	0	0	65	0	0
HL-30-PS	C,D,N,G	PB103 TO HL-30-PS (3-75)	10	52	0	0	0	0
HL-30-PS	E,F,N,G	PB103 TO HL-30-PS (3-75)	10	0	0	0	52	0
HL-30-PS	C,N,G	CPS11 TO DPS12	24	81	0	0	0	0
HL-30-PS	C,D,N,G	DPS12 TO DPS13	66	0	276	0	0	0
HL-30-PS	C,N,G	DPS13 TO CPS14	23	78	0	0	0	0
HL-30-PS	C,D,N,G	DPS13 TO HL-30-PS	21	0	96	0	0	0
HL-30-PS	C,D,N,G	PB103 TO CPS15/DPS15	36	156	0	0	0	0
HL-30-PS	D,N,G	CPS15/DPS15 TO FLAG POLE	40	129	0	0	0	0
HL-30-PS	C,N,G	CPS15/DPS15 TO CPS16	87	270	0	0	0	0
HL-30-PS	F,N,G	FPS17 TO FPS18	79	246	0	0	0	0
HL-30-PS	E,N,G	EPS18 TO FPS19	37	120	0	0	0	0
HL-30-PS	E,F,N,G	FPS18 TO EPS20	75	0	312	0	0	0
HL-30-PS	E,F,N,G	EPS20 TO FPS21	77	0	320	0	0	0
HL-30-PS	E,F,N,G	PB103 TO FPS21	44	0	0	0	188	0
HL-30-PS	E,F,N,G	FPS21 TO EPS22	74	0	0	0	308	0
HL-30-PS	E,F,N,G	EPS22 TO FPS23	74	0	0	0	308	0
HL-30-PS	E,F,N,G	FPS23 TO EPS24	52	0	0	0	220	0
HL-30-PS	E,F,N,G	EPS24 TO PB104	84	0	0	0	348	0
HL-30-PS	E,N,G	PB104 TO EPS25	58	183	0	0	0	0
HL-30-PS	F,N,G	PB104 TO FPS26	82	0	0	0	255	0
HL-30-PS		DEDUCT FOR SHARED GROUNDS		-17	0	-17	-20	0
HL-30-PS	F,N,G	EPS24 TO FPS27	330	0	0	0	0	333
		TOTALS		1,767	3,963	383	1,659	333

LIGHT POLES BASED ON 150 mm ARM CLAMPS - ALL UNITS 240 VAC

65405 CONCRETE BASES, TYPE 8
65432 TRANSFORMER BASES, BREAKAWAY, 375-425 mm BOLT CIRCLE
65566 ELECTRICAL WIRE, LIGHTING, NO. 12 (POLE WIRE)
65711 POLES, TYPE A
65713 POLES, TYPE E
65928 LUMINAIRE ARMS, SINGLE MEMBER, 150 mm CLAMP, 1.2 m
65930 LUMINAIRE ARMS, SINGLE MEMBER, 150 mm CLAMP, 3.0 m
65938 LUMINAIRE ARMS, TRUSS TYPE, 150 mm CLAMP, 6.1 m
90005C FLOOD LIGHT, 175 WATT MH, WITH MOUNTING
90005E LUMINAIRES, HIGHWAY LIGHTING, 310 WATT, HPS
90005S LUMINAIRES, HIGHWAY LIGHTING, 200 WATT, HPS

SYSTEM	PROPOSED SEQUENCE I. D.	LOCATION	REQUIRED WORK MOUNTING/POLE/ARM(S)	BREAKAWAY STATUS FOR INFO. ONLY	BOLT PROJECTION mm	65404 CONCRETE BASES 7 EACH	65405 CONCRETE BASES 8 EACH	65432 TRANSFRMR BASES 375-425 mm EACH	65566 WIRE NO. 12 m	65707 POLES TYPE 7 EACH	65711 POLES TYPE A EACH	65713 POLES TYPE E EACH	65928 ARMS 1.2 m EACH	65930 ARMS 3.0 m EACH	65938 ARMS 6.1 m HPS EACH	90005E LUMIN. 310 W HPS EACH	90005S LUMIN. 200 W HPS EACH	90005C FLOOD LIGHT 175 W MH EACH
HL-30-PS	APS1	2+113 "E", 9.5 m RT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	2
HL-30-PS	BPS2	2+195 "E", 9.5 m RT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	APS3	2+277 "E", 9.5 m RT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	BPS4	2+340 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	APS5	2+415 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	BPS6	2+490 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	APS7	2+565 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	BPS8	2+640 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	APS9	2+717 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	BPS10	2+793 "E", 13.0 m LT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	CPS11	7+508 "I", 8.0 m RT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	DPS12	7+523 "I", 23.0 m RT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	DPS13	7+589 "I", 23.0 m RT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	CPS14	7+572 "I", 8.0 m RT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	CPS15/DPS15	7+656 "I", 23.0 m RT.	TB3 - A - 3.0 m	TB3	75	0	1	1	108	0	1	0	0	2	0	2	0	0
HL-30-PS	CPS16	4+688 "G", 9.0 m RT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	FPS17	7+289 "I", 2.0 m LT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	FPS18	7+210 "I", 2.0 m LT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	EPS19	7+235 "I", 23.0 m RT.	ANCHOR - E - 2@ 3.0 m	ANCHOR	100	0	1	0	54	0	0	1	0	1	0	1	0	0
HL-30-PS	EPS20	7+135 "I", 2.0 m LT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	FPS21	7+058 "I", 2.0 m LT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	EPS22	6+984 "I", 2.0 m LT.	ANCHOR - A - 1.2 m	ANCHOR	100	0	1	0	49	0	1	0	1	0	0	1	0	0
HL-30-PS	FPS23	6+910 "I", 2.0 m LT.	TB3 - A - 3.0 m	TB3	75	0	1	1	54	0	1	0	0	1	0	1	0	0
HL-30-PS	EPS24	6+860 "I", 4.0 m RT.	TB3 - A - 1.2 m	TB3	75	0	1	1	49	0	1	0	1	0	0	1	0	0
HL-30-PS	EPS25	4+728 "G", 4m RT.	TB3 - A - 1.2 m	TB3	75	0	1	1	49	0	1	0	1	0	0	1	0	0
HL-30-PS	FPS26	4+865 "G", 10 m RT.	TB3 - E - 6.1m TRUSS	TB3	75	0	1	1	63	0	0	1	0	0	1	1	0	0
HL-30-PS	FPS27	0+438.7 "J", 13.8 m LT.	TB3 - A - 3.0 m	TB3	75	1	0	1	54	1	0	0	0	1	0	0	1	0
		TOTALS				1	26	25	1596	1	14	12	3	14	11	27	1	2

DISTRIBUTION CENTER QUANTITIES
HL-30-PS PLEASANT PRAIRIE SUBSTATION - 24D/480 VAC 3-WIRE
LOCATION STA. 7+610"I", 23.0m RT.

ITEM	DESCRIPTION	UNIT	QTY.
65418	CONCRETE CONTROL CABINET BASE, TYPE 9	EACH	1
65572	ELECTRICAL WIRE, LIGHTING, NO. 1 (FEEDERS)	m	6
65645	ELECTRICAL SERVICE, MAIN LUGS ONLY METER PEDESTAL, HL-30-PS	LS	1
90005D	INSTALLING STATE-FURNISHED HIGHWAY LIGHTING DISTRIBUTION CENTER	EACH	1

PLAQUE TEXT (INCIDENTAL)
HL-30-PS
PLEASANT
PRAIRIE

LIGHTING PULL BOXES

65306 PULL BOXES, STEEL, 600 x 900 mm

SYSTEM	LOCATION	LABEL	65306 PULL BOX EACH
HL-30-PS	2+277"E", 13.0m LT.	PB101	1
HL-30-PS	2+570"E", 13.0m LT.	PB102	1
HL-30-PS	7+620"I", 23.0m RT.	PB103	1
HL-30-PS	4+784"G", 7.0m RT.	PB104	1
W.I.M. Sign	2+644"E", 30m LT.	PB105	1
	TOTAL		5

FILE NAME: PROJECTS/2940/PLANS/GEN/2940ECONT.DGN(3) 09-18-01
LEVELS ON - 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

PERMANENT SIGNING QUANTITIES

1032-08-70 IH 94 @ WEIGH STATION / KENOSHA CO.

SIGN NO.	I-94 DIR	SIGN CODE	SIGN MESSAGE	SIGN TYP	SIGN SIZE W × H [FT] × [FT]	63701 SIGNS TYPE I [M2]	63702 SIGNS TYPE II REFLC. [M2]	STEEL POST TYPE	63601 CONC MSNRY SIGN SUP [M3]	63602 HIGH STR STRUCT STEEL SIGN SUP [KG]	63610 HIGH STR BAR STEEL REINF SIGN SUP [KG]	63613 WOOD POSTS 100X150X5.5 [EA]	63821 MOVING SIGNS TYPE I [EA]	63822 MOVING SIGNS TYPE II [EA]	63826 REM SIGNS TYPE I [EA]	63827 REM SIGNS TYPE II [EA]	63828 REM SIGNS TYPE III [EA]	63829 REM SIGNS TYPE IV [EA]	63831 REM STR STEEL SIGN SUP [EA]	63830 REM SMALL SIGN SUP [EA]	OFF SET DIST [FT]	REMARKS / NEW SIGN LOCATION
1	EB	E6-1 (MOD)	41 SOUTH WAUKEGAN LEFT 1.5 MILES	I	16 × 10	14.88	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	MOUNT ON SIGN BRIDGE S-30-13 REMOVE SIGN FROM S-30-5
1A	EB	E1-5	EXIT 1B	I	10 × 2	1.86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGN *1
2	EB	E6-1	RUSSELL RD 1 MILE	I	16 × 6	8.93	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	MOUNT ON SIGN BRIDGE S-30-13 REMOVE SIGN FROM S-30-5
2A	EB	E1-5	EXIT 1A	I	10 × 2	1.86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGN *2
3	WB	E5-56A	WEIGH STATION 1 MILE	I	9 × 6	5.02	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	MOUNT ON ILLINOIS SIGN BRIDGE LL1 USE IDOT MOUNTING - DETAIL IN PLANS, INCIDENTAL TO SIGN
4	WB	---	TRUCKS OVER 4 TONS STOP AT WEIGH STA	I	15 × 7	9.76	---	B	1.2	450 (EST)	44.3	---	1	---	---	---	---	---	2	---	17'-6"	MOUNT _____ FT. BEFORE RUSSELL ROAD BRIDGE
5	WB	R13-1	TRUCKS OVER 4 TONS STOP AT WEIGH STA	II	7.5 × 3	---	2.09	---	---	---	---	3	---	---	---	---	---	---	---	---	---	
6	WB	E1-1	[ML] EAST EXIT 1/4 MILE	I	×	---	---	---	---	---	---	---	---	---	1	---	---	---	---	2	---	
7	WB	E5-57R	WEIGH STATION RIGHT LANE [CMS]	I	13 × 9	10.88	---	B	1.2	425	44.3	---	---	---	1	---	---	---	2	---	20'-0"	MOUNT 20' BEFORE EXISTING COORDINATE WITH ELECTRICAL CONDUIT TO SIGN POST *1 = 20.05 POST *2 = 20.45 MOUNTING OF CMS INCIDENTAL TO SIGN
8	WB	R3-75 (5)	RIGHT LANE FOR EXIT ONLY	II	×	---	---	---	---	---	---	1	---	1	---	---	---	---	---	1	---	
9	WB	R2-1	SPEED LIMIT 65	II	×	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	
10	WB	E5-58 (MOD)	WEIGHT STATION [CMS]	I	10 × 8	7.44	---	A	0.9	285 (EST)	30.8	---	---	---	---	---	---	---	---	---	17'-6"	MOUNT IN GORE PER SDD COORDINATE WITH ELECTRICAL CONDUIT TO SIGN DETERMINE POST LAYOUTS AFTER GRADING WORK COMPLETE MOUNTING OF CMS INCIDENTAL TO SIGN

3

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

R 5-8-02

PERMANENT SIGNING QUANTITIES

1032-08-70 IH 94 @ WEIGH STATION / KENOSHA CO.

SIGN NO.	I-94 DIR	SIGN CODE	SIGN MESSAGE	SIGN TYP	SIGN SIZE W x H [FT] x [FT]	63701 SIGNS TYPE I [M2]	63702 SIGNS TYPE II REFLC. [M2]	STEEL POST TYPE	63601 CONC MSNRY SIGN SUP [M3]	63602 HIGH STR STRUCT STEEL SIGN SUP [KG]	63610 HIGH STR BAR STEEL REINF SIGN SUP [KG]	63613 WOOD POSTS 100X150X5.5 [EA]	63821 MOVING SIGNS TYPE I [EA]	63822 MOVING SIGNS TYPE II [EA]	63826 REM SIGNS TYPE I [EA]	63827 REM SIGNS TYPE II [EA]	63828 REM SIGNS TYPE III [EA]	63829 REM SIGNS TYPE IV [EA]	63831 REM STR STEEL SIGN SUP [EA]	63830 REM SMALL SIGN SUP [EA]	OFF SET DIST [FT]	REMARKS / NEW SIGN LOCATION
11	WB	E4-1	[ML] EAST	I	x	---	---	---	---	---	---	---	---	---	1	---	---	---	---	2	---	
12	WB	E5-58	WEIGHT STATION	II	x	---	---	---	---	---	---	---	---	---	1	---	---	---	2	---	---	COORDINATE WITH ELECTRIC REMOVAL
13	WB	R2-1 (5)	SPEED LIMIT 65	II	4 x 5	--- --- --- ---	1.86	---	---	---	---	1	---	---	---	---	---	---	---	---	---	
14	WB	D1-3	MILE 349	II	x	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	MOUNT BELOW SIGN #15
15	WB		VILLAGE OF PLEASANT PRAIRIE	II	x	---	---	---	---	---	---	2	---	1	---	---	---	---	---	2	---	
16	WB		WISCONSIN TRAVEL INFO TUNE RADIO TO 1610 AM	I	12 x 6.5	---	---	A	0.9	285 (EST)	30.8	---	1	---	---	---	---	---	2	---	20'-0"	MOUNT 20' BEFORE EXISTING SIGN IF IMPACTED BY GRADING WORK. 9' POST SPACING
17	WB	R4-3 (5)	SLOWER TRAFFIC KEEP RIGHT	II	4 x 5	---	1.86	---	---	---	---	1	---	---	---	---	---	---	---	---	---	
18	WB	---	WISCONSIN VETERANS MEMORIAL HIGHWAY	II	x	---	---	---	---	---	---	2	---	1	---	---	---	---	---	2	---	
19	WB	---	NO TURNS	II	x	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	---	
20	WB	W4-1	MERGE SIGN	II	x	---	---	---	---	---	---	1	---	1	---	---	---	---	---	1	---	
21	WB	R4-3	SLOWER TRAFFIC KEEP RIGHT	II	x	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	---	

3

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: IH94-WEIGHT STATION	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET NO: 284	M

FILE NAME : D:\OWork\junk\OTYS.dgn PLOT DATE : 08-MAY-2002 14:13 PLOT BY : DOTMLK PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : 9.571250:1.000000 WisDOT: MSHT43

R5-8-02

PERMANENT SIGNING QUANTITIES

1032-08-70 IH 94 @ WEIGH STATION / KENOSHA CO.

SIGN NO.	I-94 DIR	SIGN CODE	SIGN MESSAGE	SIGN TYP	SIGN SIZE W x H [FT] x [FT]	63701 SIGNS TYPE I [M2]	63702 SIGNS TYPE II REFLC. [M2]	STEEL POST TYPE	63601 CONC MSNRY SIGN SUP [M3]	63602 HIGH STR STRUCT STEEL SIGN SUP [KG]	63610 HIGH STR BAR STEEL REINF SIGN SUP [KG]	63613 WOOD POSTS 100X150X5.5 [EA]	63821 MOVING SIGNS TYPE I [EA]	63822 MOVING SIGNS TYPE II [EA]	63826 REM SIGNS TYPE I [EA]	63827 REM SIGNS TYPE II [EA]	63828 REM SIGNS TYPE III [EA]	63829 REM SIGNS TYPE IV [EA]	63831 REM STR STEEL SIGN SUP [EA]	63830 REM SMALL SIGN SUP [EA]	OFF SET DIST [FT]	REMARKS / NEW SIGN LOCATION
22	WB	---	FINES DOUBLE IN WORK ZONES	II	x	---	---	---	---	---	---	2	---	1	---	---	---	---	---	2	---	
23	WB	R2-1 (5)	SPEED LIMIT 65	II	x	---	---	---	---	---	---	1	---	1	---	---	---	---	---	1	---	
24	WB	J4-1	J ASSEMBLY WEST 94 NORTH 41	II	x	---	---	---	---	---	---	2	---	1	---	---	---	---	---	2	---	
25	WB		ADOPT A HIGHWAY	II	x	---	---	---	---	---	---	1	---	1	---	---	---	---	---	1	---	
26	WB		WISC ROAD EMERGENCY CELLULAR 911	II	x	---	---	---	---	---	---	1	---	1	---	---	---	---	---	1	---	
27	WB	E1-1	[0] [165] LAKEVIEW PKWY	I	x	---	---	---	---	---	---	---	---	---	1	---	---	---	2	---	---	23 x 10 SIGN
28	WB	R8-7	EMERGENCY STOPPING ONLY	II	x	---	---	---	---	---	---	1	---	1	---	---	---	---	---	1	---	
29	WB	E6-1 (MOD)	[165] [0] LAKEVIEW PKWY 1/2 MILE EXIT ONLY [DOWN ARROW]	I	19 x 12.5	22.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON NEW SIGN BRIDGE S-30-14
29A	WB	E1-5	EXIT 347	I	11 x 2	2.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGN # 29
30	WB		PLEASANT PRAIRIE	I	17 x 5	---	---	A	0.9	285 (EST)	30.8	---	1	---	---	---	---	---	2	---	17'-6"	DETERMINE POST LENGTHS AFTER GRADING WORK

3

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70 | HWY: IH94-WEIGHT STATION | COUNTY: KENOSHA | MISCELLANEOUS QUANTITIES | SHEET NO: 285 | M

FILE NAME : D:\OWork\junk\OTYS.dgn PLOT DATE : 08-MAY-2002 14:14 PLOT BY : DOTMLK PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : 9.571250:1.000000 WisDOT: MSHT43

RS-8-02

PERMANENT SIGNING QUANTITIES

1032-08-70 IH 94 @ WEIGH STATION / KENOSHA CO.

SIGN NO.	I-94 DIR	SIGN CODE	SIGN MESSAGE	SIGN TYP	SIGN SIZE W x H [FT] x [FT]	63701 SIGNS TYPE I [M2]	63702 SIGNS TYPE II REFLC. [M2]	STEEL POST TYPE	63601 CONC MSNRY SIGN SUP [M3]	63602 HIGH STR STRUCT STEEL SIGN SUP [KG]	63610 HIGH STR BAR STEEL REINF SIGN SUP [KG]	63613 WOOD POSTS 100x150X5.5 [EA]	63821 MOVING SIGNS TYPE I [EA]	63822 MOVING SIGNS TYPE II [EA]	63826 REM SIGNS TYPE I [EA]	63827 REM SIGNS TYPE II [EA]	63828 REM SIGNS TYPE III [EA]	63829 REM SIGNS TYPE IV [EA]	63831 REM STR STEEL SIGN SUP [EA]	63830 REM SMALL SIGN SUP [EA]	OFF SET DIST [FT]	REMARKS / NEW SIGN LOCATION
31	WB		REST AREA WISCONSIN TRAVEL INFO EXIT 347	I	14 x 10	---	---	B	1.2	452 (EST)	44.3	---	1	---	---	---	---	---	2	---	17'-6"	8.5 VERTICAL CLEARANCE TO MAIN SIGN. 9' BETWEEN POSTS. DETERMINE POST LENGTHS AFTER GRADING. OFFSET FROM RIGHT EDGE LINES
32	WB		VENDING MACHINES	I	14 x 1.5	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	MOUNT UNDER SIGN #31
33	WB		CRASH INVESTIGATION SITE EXIT 347	I	13 x 11	---	---	B	1.2	452 (EST)	44.3	---	1	---	---	---	---	---	2	---	17'-6"	9' BETWEEN POSTS. DETERMINE POST LENGTHS AFTER GRADING. OFFSET FROM RIGHT EDGE LINES
34	WB	E4-1	[165] [Q] LAKEVIEW PKWY EXIT ONLY [TILT ARROW]	I	26 x 8	---	---	---	---	---	---	---	---	---	1	---	---	---	2	---	---	
35	WB		REST AREA TRAVEL INRO	I	x	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	TURN OVER TO WISDOT SIGN SHOP
36	WB	E6-1 (MOD)	[165] [Q] LAKEVIEW PKWY EXIT ONLY [TILT ARROW]	I	22 x 10	20.46	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON NEW SIGN BRIDGE S-30-15
36A	WB	E1-5	EXIT 347	I	11 x 2	2.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGN #36
37	WB	HWY 165 1 HWY C 2¼ HWY 50 3¼											1									MOVE FROM EXISTING SIGN BRIDGE S-30-200 TO NEW SIGN BRIDGE S-30-15
38	EB	RUSSELL RD 1¼ HWY 41													1							REMOVE FROM S-30-200
39	EB	R2-1										1		1								
40	EB	J4-1										1		1								
TOTALS						107.26	3.72 •	---	7.0	2,634	269.6	21 •	6	13	11	2 •	---	---	18	21 •	---	

• PARTIAL QUANTITIES LISTED
SEE 1032-05-76 FOR ADDITIONAL QTYS

3

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: IH94-WEIGHT STATION	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET NO: 286	M

FILE NAME : D:\0Work\junk\QTYS.dgn PLOT DATE : 08-MAY-2002 14:14 PLOT BY : DOTMLK PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : 9.571250:1.000000 WisDOT: MSHT43

RS-8-02

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

TOWNSHIP AND RANGE LINES
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE — P.L.
CORPORATE LIMITS — NAME
LOT, TIE AND OTHER MINOR LINES
SLOPE INTERCEPTS — SLOPE INTERCEPTS
UNDERGROUND FACILITY (GAS, TELEPHONE, ELECTRIC, ETC.) — G (TYPE)
FENCE — X — X
LIMITED EASEMENT

SECTION CORNER — T5N, R9E, sections 5, 4, 8, 9

HAZARDOUS UTILITY SITE — CAUTION

CULVERT (BOX, PIPE OR CATTLE PASS)

RAIL LINE — (SMALL SCALE) / (LARGE SCALE)

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	■	□
TELEPHONE POLE	⌀	⌀
SIGN	⚑	⚐

NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
NO ACCESS (BY PROJECT # 1-I(52) 101-1(2))

FOUNDATION OR RUIN — (TYPE)
BUILDING — (TYPE)
CEMETERY — †

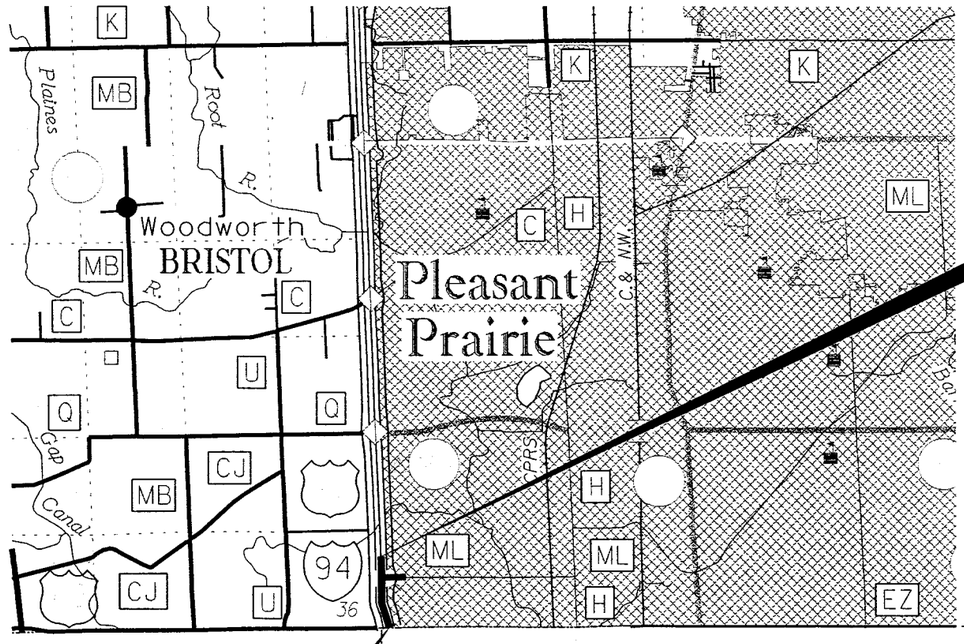
GAS MARKER OR TELEPHONE PEDESTAL — ⊠ IP
IRON PIN — ●
R/W MONUMENT — ○
VALVE — GAS (TYPE)
SILO, MANHOLE, VENT, SEPTIC, VENT, WELL, ETC. — M.H. (TYPE)
BUSHES
TREES (DECIDUOUS) (CONIFEROUS)
WOODS
GAS PUMPS — G.P.

AC.	ACRES	P.O.B.	POINT OF BEGINNING
ALUM.	ALUMINUM	P.C.	POINT OF CURVATURE
A.P.	ACCESS POINT	P.I.	POINT OF INTERSECTION
B.	BARN	P.T.	POINT OF TANGENCY
C.S.M.	CERTIFIED SURVEY MAP	P.L.	PROPERTY LINE
DOC.	DOCUMENT	R.	RADIUS
G.	GARAGE	R.D.E.	RESTRICTED DEVELOPMENT EASEMENT
H.	HOUSE	R/W	RIGHT OF WAY
ha	HECTARES	S.L.	SECTION LINE
km	KILOMETER	S.	SILO/SHED
L.	LENGTH	sq	SQUARE
L.C.	LONG CORD OF CURVE	S.F.	SQUARE FEET
L.C.B.	LONG CORD BEARING	STA.	STATION
m	METER	T.	TANGENT
mi	MILE	T.I.	TEMPORARY INTEREST
NO.	NUMBER	T.L.E.	TEMPORARY LIMITED EASEMENT
P.H.E.	PERMANENT HIGHWAY EASEMENT	VOL.	VOLUME

R/W PROJECT NUMBER 1032-08-20	SHEET NUMBER	TOTAL SHEETS
CONSTRUCTION PROJECT NUMBER 1032-08-72/1032-08-70	4.0	

PLAT OF RIGHT OF WAY REQUIRED FOR
IH-94
CTH ML & WEIGHT FACILITY NO. 21
IH 94 KENOSHA COUNTY
1032-05-76 & 1032-08-70 | 287

GN



END RELOCATION ORDER
1062.981 m (3487.46') N. OF AND 24.784 m (81.31') W. OF THE W. 1/4 COR. OF SEC. 31, T. 1 N., R. 22 E.

BEGIN RELOCATION ORDER
0.328 m (1.08') N. OF AND 111.197 m (364.82') E. OF THE SW. 1/4 COR. OF SEC. 31, T. 1 N., R. 22 E.

R 21 E R 22 E

LAYOUT
SCALE 0 1.6 km

TOTAL NET LENGTH OF CENTERLINE = 8.100 km RURAL
= 5.033 mi RURAL

NOTES

EXISTING HIGHWAY R/W SHOWN HEREIN IS BASED ON PREVIOUS R/W PLAT - PROJECT I-I(52) 101-1(2), REVISION MARCH 19, 1971, AND GPS LOCATION OF SECTION CORNERS.

DIMENSIONING FOR THE RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

COORDINATES AND BEARINGS ON THE PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE, NAD 83 (91 ADJUSTMENT) AND BASED ON WHPGN GPS STATION MILWAUKEE, ELKHORN AND KENOSHA.

ALL PLAT DISTANCES ARE GROUND LENGTH AND MAY BE CONVERTED TO GRID LENGTH BY MULTIPLYING THE DISTANCE BY THE GRID FACTOR PROVIDED ON THE DETAIL SHEETS.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

ALL PLAT COORDINATES ARE METRIC GROUND.

ORIGINAL PLAT PREPARED BY
TN & A — T N & Associates, Inc.
Engineering and Science

WISCONSIN — THOMAS L. McCORMACK 2048 HARTFORD, WI — LAND SURVEYOR

MARCH 7, 2000 (Date) (Signature)

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	APPROVED FOR DISTRICT OFFICE:
	DATE: _____ M

WISDOT: MSHT50

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	TOTAL ACRES OR S.F.	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	TOTAL ACRES OR S.F. REM.	T.L.E., ACRES OR S.F.	R.D.E. ACRES OR S.F.	TOTAL HECTARES OR sq. m	R/W HECTARES OR sq. m REQUIRED NEW	EXISTING	TOTAL	TOTAL HECTARES OR sq. m REM.	T.L.E., HECTARES OR sq. m	R.D.E. HECTARES OR sq. m	PARCEL NUMBER
1 (2)	4.3	FOSSLAND TRUST	FEE, A.R., T.L.E.	70.86	1.010	- - -	1.010	69.850	0.184	- - -	28.677	0.409	- - -	0.409	28.268	0.074	- - -	1
2 (2)	4.4	VINCENT R. BUGNER	FEE, A.R., T.L.E.	20.01	1.114	- - -	1.114	18.896	0.390	- - -	8.098	0.451	- - -	0.451	7.647	0.158	- - -	2
3	4.4	SUZETTE K. A. AND JOSEPH LAMBIN	FEE, A.R., T.L.E.	2.30	1.358	- - -	1.358	0.942	0.339	- - -	0.931	0.549	- - -	0.549	0.382	0.137	- - -	3
4	4.4	THE IRREVOCABLE DRATH FAMILY TRUST	FEE, A.R., T.L.E.	1.91	0.367	- - -	0.367	1.543	0.080	- - -	0.773	0.149	- - -	0.149	0.624	0.032	- - -	4
5 (2)	4.4	THE LINNEA T. NELSON REVOCABLE TRUST	FEE, T.L.E.	2.00	0.031	- - -	0.031	1.969	0.007	- - -	0.809	0.012	- - -	0.012	0.797	0.003	- - -	5
6	4.4	OTTO H. & MARY J. SPRENGER	FEE, A.R., T.L.E.	28.56	1.407	- - -	1.407	27.153	0.225	- - -	11.558	0.569	- - -	0.569	10.989	0.091	- - -	6
7	4.4	THOMAS H. KING AND KENNETH A. KING	FEE, A.R., T.L.E.	24.95	2.458	- - -	2.458	22.492	0.518	- - -	10.095	0.995	- - -	0.995	9.100	0.210	- - -	7
8 (2)	4.4	JAKUP & SUNA BESHIRI	H.E.,A.R., R.D.E.	1.89	0.046 (HE)	- - -	0.046 (HE)	1.890	- - -	0.101	0.765	0.018 (HE)	- - -	0.018 (HE)	0.765	- - -	0.041	8
9 (2)	4.3	GLEN A. SCHAEFER	FEE, T.L.E.	6.00	0.179	- - -	0.179	5.821	0.124	- - -	2.428	0.072	- - -	0.072	2.356	0.050	- - -	9
10 (2)	4.5	JAMES G. HART & DELAINE FARM PARTNERS	FEE, A.R., T.L.E.	67.60	4.206	- - -	4.206	63.394	0.763	- - -	27.358	1.702	- - -	1.702	25.656	0.309	- - -	10
11 (2)	4.5	RIES PARTNERS LP	FEE,_ _ _, T.L.E.	37.00	2.635	- - -	2.635	34.365	0.084	- - -	14.974	1.066	- - -	1.066	13.908	0.034	- - -	11
12	4.3	FAIRE PARTNERS, LLC	FEE,_ _ _, T.L.E.	80.00	0.454	- - -	0.454	79.546	0.117	- - -	32.376	0.184	- - -	0.184	32.192	0.047	- - -	12
90	4.5	WISCONSIN ELECTRIC POWER COMPANY	CONVEYANCE OF RIGHTS	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	90

NOTE: ALL PARCELS ARE IN ACRES AND HECTARES
ONE ACRE = 0.4047 HECTARES

PLOT SCALE:

PLOT NAME: 62.63

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

REV. DATE:

ORIGINATOR: KEF

REVISION DATE ⚠ DEC. 12, 2000	DATE MARCH 7, 2000		HWY: IH-94 @ CTH ML COUNTY: KENOSHA	CONSTRUCTION PROJECT NO: 1032-05-76, 1032-08-70 STATE R/W PROJECT NO: 1032-08-20	SHEET NO: 288 SHEET NO: 4.1 M

FILE NAME: 7074PS01.DGN

WisDOT: MSHT60

BEGIN RELOCATION ORDER
STA 2+063.012 "E"

T 1 N R 21 E 36

T 1 N R 21 E 36 31 R 22 E

T 1 N R 21 E 36 31 R 22 E

T 1 N R 21 E 25 30 36 31 R 22 E

GN

INTERSTATE 94 41

TOWN OF BRISTOL

VILLAGE OF PLEASENT PRAIRIE

INTERSTATE 94 41

WISCONSIN
KENOSHA COUNTY
LAKE COUNTY
ILLINOIS

T 1 N R 22 E 31

ML

T 1 N R 22 E 30 31

END RELOCATION ORDER
STA 10+220.00 "C"

REVISION DATE	DATE		HWY: IH-94 @ CTH ML	CONSTRUCTION PROJECT NO: 1032-05-76, 1032-08-70	SHEET NO: 289	
Dec. 12, 2000	MARCH 7, 2000	NOT TO SCALE	COUNTY: KENOSHA	STATE R/W PROJECT NO: 1032-08-20	SHEET NO: 4.2	M

FILE NAME: 7074PL01.DGN

WI DOT: MSHT70

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: KEF

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

GN

NOTE: EXISTING HIGHWAY R/W SHOWN HEREIN IS BASED ON PREVIOUS R/W PLAT - PROJECT I-(52) 101-(2) REVISION MARCH 19, 1971.

COORDINATES AND BEARINGS SHOWN ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE, NAD 83 (91 ADJUSTMENT), AND BASED ON WHPGN GPS STATION MILWAUKEE, ELKHORN AND KENOSHA.

CURVE 1
P.I. = 1+064.503"B"
N = 57 901.353 m
E = 768 226.090 m
Δ = 39°43'25"
T. = 180.621 m (592.59 FT)
L. = 346.654 m (1137.32 FT)
R. = 500.000 m (1640.42 FT)
P.C. = 0+883.882"B"
P.T. = 1+230.536"B"

CURVE 2
P.I. = 2+463.435"E"
N = 57 411.095 m
E = 768 459.780 m
Δ = 13°06'57"
T. = 45.984 m (150.87 FT)
L. = 91.566 m (300.38 FT)
R. = 400.000 m (1312.34 FT)
P.C. = 2+417.451"E"
P.T. = 2+509.017"E"

CURVE 3
P.I. = 2+777.020"E"
N = 57 725.019 m
E = 768 453.510 m
Δ = 10°03'03"
T. = 35.174 m (115.40 FT)
L. = 70.168 m (230.21 FT)
R. = 400.000 m (1312.34 FT)
P.C. = 2+741.845"E"
P.T. = 2+812.013"E"

CURVE 4
P.I. = 3+002.110"E"
N = 57 946.003 m
E = 768 409.772 m
Δ = 8°58'54"
T. = 62.832 m (206.14 FT)
L. = 125.407 m (411.44 FT)
R. = 800.000 m (2624.67 FT)
P.C. = 2+939.278"E"
P.T. = 3+064.685"E"

MONUMENT
N 57 826.480 m
E 767 612.074 m

MONUMENT
N 57 022.632 m
E 768 447.217 m

MONUMENT
STA 1+000.000
N 57 841.614 m
E 768 418.022 m

T 1 N R 21 E 36
T 1 N R 22 E 31

12 FAIRE PARTNERS, LLC

(1) FOSSLAND TRUST

(2) BUGNER

(9) SCHAEFER

BEGIN RELOCATION ORDER
STA 2+063.012 "E"
Y 57 021.771 m
X 768 541.582 m
N 57 023.020 m
E 768 558.414 m

WISCONSIN
KENOSHA COUNTY
LAKE COUNTY
ILLINOIS

TOWN OF BRISTOL
VILLAGE OF PLEASANT PRAIRIE

SE - SE
NE - SE
SE - NE
SW - SW

R. WEST FRONTAGE ROAD "B"
R. EAST FRONTAGE ROAD "E"
R. "L"
CONSTRUCTION ℄ AND R ACCESS ROAD
CONSTRUCTION ℄ CTH "ML" "A"

P.I. P.L. P.T. T.L.E. SLOPES SLOPE INTERCEPT, TYP.

CONSTRUCT DRIVEWAY TO ACCESS ROAD (1) A.P. 40'

SEE SHEET 4.5
SEE SHEET 4.4

CONVERSION FACTOR USED BETWEEN ENGLISH AND METRIC: 1 ft = 0.3048006096 m

REVISION DATE: ⚠ DEC. 12, 2000	DATE: MARCH 7, 2000	SCALE, METERS 0 62.5 125	HWY: IH-94 ℄ CTH ML	CONSTRUCTION PROJECT NO: 1032-05-76, 1032-08-70
	GRID FACTOR: 0.99997810		COUNTY: KENOSHA	STATE R/W PROJECT NO: 1032-08-20

SHEET NO: 290
SHEET NO: 4.3
M

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

FILE NAME: 7074PD01OGN

WISDOT: MSHT75

GN

NOTE: EXISTING HIGHWAY R/W SHOWN HEREIN IS BASED ON PREVIOUS R/W PLAT - PROJECT 1-I(52) 101-1(2) REVISION MARCH 19, 1971 AND GPS LOCATION OF SECTION CORNERS.

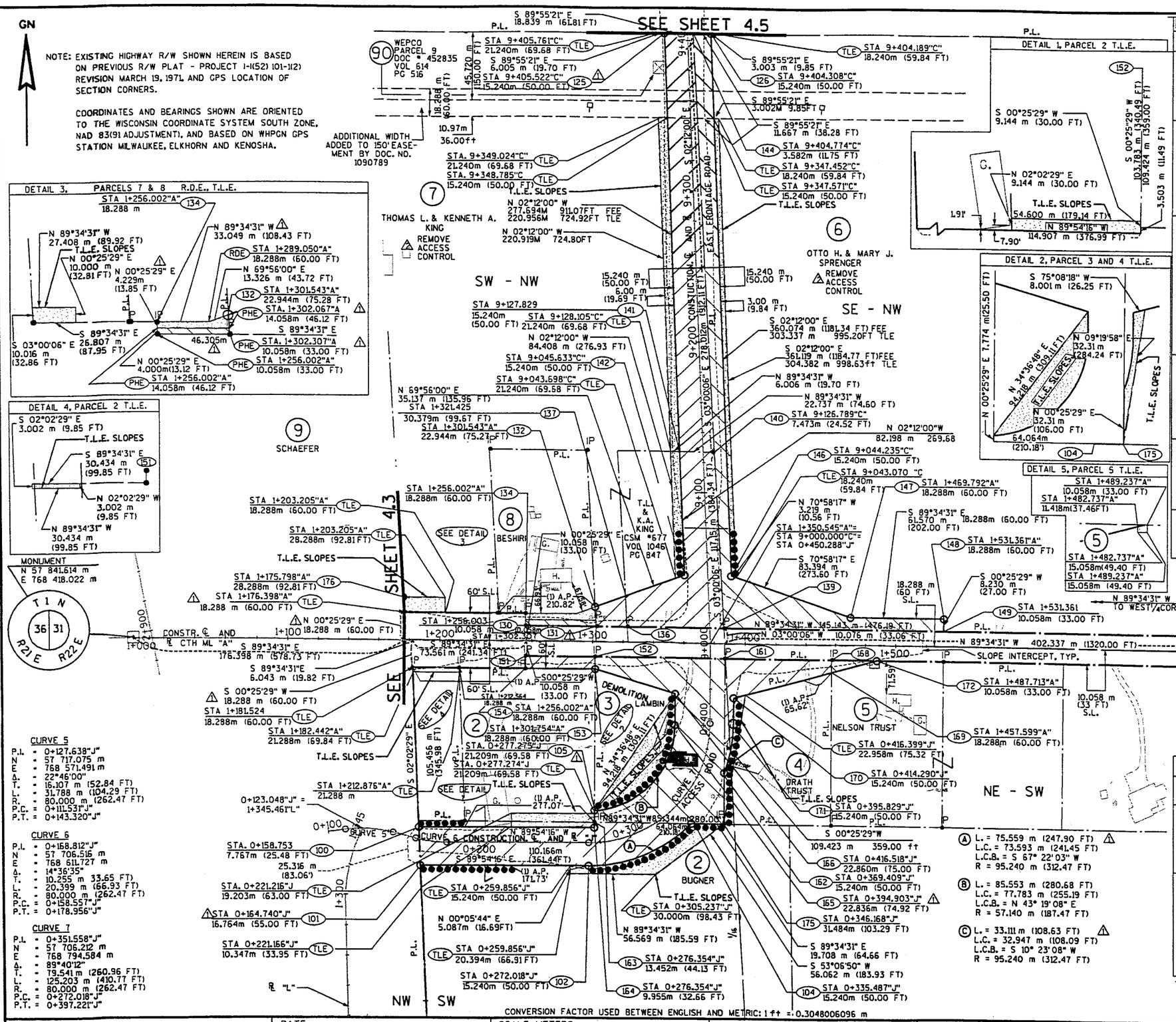
COORDINATES AND BEARINGS SHOWN ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE, NAD 83(91 ADJUSTMENT), AND BASED ON WHPGN GPS STATION MILWAUKEE, ELKHORN AND KENOSHA.

SEE SHEET 4.5

CURVE 5
P.I. = 0+127.638"J"
N = 57 717.075 m
E = 768 571.491 m
Δ = 22°46'00"
T. = 16.107 m (52.84 FT)
L. = 31.788 m (104.29 FT)
R. = 80.000 m (262.47 FT)
P.C. = 0+111.531"J"
P.T. = 0+143.320"J"

CURVE 6
P.I. = 0+168.812"J"
N = 57 706.516 m
E = 768 611.727 m
Δ = 14°36'35"
T. = 10.255 m 33.65 FT)
L. = 20.399 m (66.93 FT)
R. = 80.000 m (262.47 FT)
P.C. = 0+158.557"J"
P.T. = 0+178.956"J"

CURVE 7
P.I. = 0+351.558"J"
N = 57 706.212 m
E = 768 794.584 m
Δ = 89°40'12"
T. = 79.541 m (260.96 FT)
L. = 125.203 m (410.77 FT)
R. = 80.000 m (262.47 FT)
P.C. = 0+272.018"J"
P.T. = 0+397.221"J"


S 89°55'21" E
18.839 m (61.81 FT)
P.L.
WEPCO PARCEL 9 DOC # 452835 VOL 614 PG 516
90
STA 9+405.761"C"
21.240m (69.68 FT)
TLE
S 89°55'21" E
6.005 m (19.70 FT)
STA 9+405.522"C"
15.240m (50.00 FT)
125
45.720 m (150.00 FT)
18.288 m (60.00 FT)
10.97m
36.00ft
ADDITIONAL WIDTH ADDED TO 150' EASEMENT BY DOC. NO. 1090789
STA. 9+349.024"C"
21.240m (69.68 FT)
STA. 9+348.785"C"
15.240m (50.00 FT)
T.L.E. SLOPES
7
THOMAS L. & KENNETH A. KING
REMOVE ACCESS CONTROL
N 02°12'00" W
277.694M 911.07FT FEE
220.956M 724.92FT TLE
N 02°12'00" W
220.919M 724.80FT
SW - NW
15.240 m (50.00 FT)
6.00 m (19.69 FT)
STA 9+127.829
15.240m (50.00 FT)
STA 9+128.105"C"
21.240m (69.68 FT)
141
N 69°56'00" E
35.137 m (135.96 FT)
STA 1+321.425
30.379m (99.67 FT)
STA 1+301.543"A"
22.944m (75.27 FT)
137
132
IP
P.L.
N 02°12'00" W
84.408 m (276.93 FT)
STA 9+045.633"C"
15.240m (50.00 FT)
142
STA 9+043.698"C"
21.240m (69.68 FT)
9
SCHAEFER
STA 1+256.002"A"
18.288m (60.00 FT)
134
STA 1+203.205"A"
18.288m (60.00 FT)
TLE
STA 1+203.205"A"
28.288m (92.81FT)
SEE DETAIL 3
8
BESHIRI
T.L.E. SLOPES
STA 1+175.798"A"
28.288m (92.81FT)
176
STA 1+176.398"A"
18.288 m (60.00 FT)
N 00°25'29" E
18.288 m (60.00 FT)
1+100
1+000
CONSTR. ℄ AND ℄ CTH ML "A"
S 89°34'31" E
176.398 m (578.73 FT)
S 89°34'31"E
6.043 m (19.82 FT)
S 00°25'29" W
18.288 m (60.00 FT)
STA 1+181.524
18.288m (60.00 FT)
STA 1+182.442"A"
21.288m (69.84 FT)
T.L.E. SLOPES
SEE SHEET 4.3
STA 1+212.876"A"
21.288 m
0+123.048"J" = 1+345.461"L"
STA. 0+158.753
7.767m (25.48 FT)
100
25.316 m (83.06')
STA. 0+221.215"J
19.203m (63.00 FT)
STA. 0+164.740"J"
16.764m (55.00 FT)
101
STA 0+221.166"J"
10.347m (33.95 FT)
℄ "L"
NW - SW
T.L. & K.A. KING CSM #677 VOL 1046 PG 847
N 00°25'29" E
10.058 m
(33.00 FT)
(1) A.P.
210.82'
60' S.L.
1+900
1+200
1+300
1+400
1+500
1+600
1+700
1+800
1+900
2+000
2+100
2+200
2+300
2+400
2+500
2+600
2+700
2+800
2+900
3+000
3+100
3+200
3+300
3+400
3+500
3+600
3+700
3+800
3+900
4+000
4+100
4+200
4+300
4+400
4+500
4+600
4+700
4+800
4+900
5+000
5+100

PLOT SCALE:

PLOT NAME: 43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

REV. DATE:

ORIGINATOR: LEVELS ON • 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46

NOTE: EXISTING HIGHWAY R/W SHOWN HEREIN IS BASED ON PREVIOUS R/W PLAT - PROJECT I-I(52) 101-1(2) REVISION MARCH 19, 1971, AND GPS LOCATION OF SECTION CORNERS.

COORDINATES AND BEARINGS SHOWN ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE, NAD 83 (91 ADJUSTMENT), AND BASED ON WHPGN GPS STATION MILWAUKEE, ELKHORN AND KENOSHA.

GN

SE - NE

NE - NE

SW - NW

SE - NW

NW - NE

SW - SW

N 20°57'16" E
25.434 m (83.44 FT)
182 STA 1+129.237"B"
32.043m (105.13 FT)

181 STA 1+105.930"B"
37.147m (121.87 FT)

MONUMENT
N 57 841.614 m
E 768 418.022 m

MONUMENT
N 58 646.306 m
E 768 387.455 m

END RELOCATION ORDER
STA 10+220.000 "C"
Y 58 903.305m
X 768 376.410m
N 58 904.595 m
E 768 393.238 m

STA 9+988.367"C"=
STA 13+000.000"K"

S 2° 10' 31" E 805.272 m (2641.96 FT)

N 89°43'50" E
25.908 m (85.00')

N 89°43'50" E
30.480 m (100.00')

N 87°49'29" E
6.096 m (20.00 FT)

32.004 m S.L.
(105.00 FT)

105' S.L.

100' S.L.

STA 12+876.778"K"
15.249m (50.03 FT) 120

N 02°10'31" W
85.000 m (278.87 FT)

S 89°43'50" W
36.766 m (120.62 FT)

STA 12+930.526"K"/B S.L.
S 02°03'48" E 237.745m(780.00 FT)

CURVE 23

CURVE 22

CONSTRUCTION & MAINTENANCE

STA 12+945.897"K"
15.240m (50.00 FT) 121

STA 12+788.509"K"
17.005m (55.79 FT) 119

STA 9+933.529"C"
15.608m (51.21 FT) 122

S 57° 26'00" E
15.463 m (50.73 FT)

N 32°34'00" E
3.000m (9.84 FT)

STA 10+198.327"C"
15.240m (50.58 FT) 115

STA 10+100.000"C"
15.240m (50.00 FT)

N 67°07'38" E
3.000 m (9.84 FT)

STA 10+100.000"C"
18.240m (59.84 FT)

TLE FOR SLOPES
L = 265.110 m (869.78 FT)
L.C. = 255.642 m (838.72 FT)
L.C.B. = N 30°45'44" W
R = 284.760 m (934.25 FT)

STA 9+980.000"C"
18.240m (59.84 FT)

S 43°49'51" W
3.000 m (9.84 FT)

STA 9+919.030"C"
18.240m (59.84 FT)

STA 9+919.030"C"
15.240m (50.00 FT)

S 89°43'50" W
56.214 m (184.43 FT)

N 57°26'00" W
125.747 m (412.55 FT)

S 57°26'00" E
140.994 m (462.58 FT)

N 57°26'00" W
93.765 m (307.63 FT)

STA 9+910.661"C" S.L.
N 57° 26'00" W
31.984 m (104.93 FT)

S 57° 26'00" E
67.047 m (219.95 FT)

STA 9+887.256"C"
15.240m (50.00 FT) 113

STA 9+820.000"C"
15.240m (50.00 FT)

S 32°34'00" W
3.000 m (9.84 FT)

STA 9+820.000"C"
18.240m (59.84 FT)

S 57°26'00" E
26.718 m (87.66 FT)

N 57°26'00" W
26.718 m (87.66 FT)

STA 9+793.283"C"
18.240m (59.84 FT)

STA 9+793.283"C"
15.240m (50.00 FT) 128

TLE CURVE DATA
A L = 57.872 m (189.87 FT)
K L.C. = 57.773 m (189.54 FT)
L.C.B. = N 51°36'45" W
R = 284.760 m (934.25 FT)

L = 113.869 m (373.59 FT)
L L.C. = 113.113 (371.10 FT)
L.C.B. = N 34°17'08" W
R= 284.760 m (934.25 FT)

J L = 112.670 m (369.65 FT)
L.C. = 111.921 (367.19 FT)
L.C.B. = S 34°17'08" E
R = 281.760 m (924.41 FT)

STA 9+793.283"C"
18.240m (59.84 FT)

STA 9+793.283"C"
15.240m (50.00 FT) 123

STA 9+504.078 "C"
18.240m (59.84 FT)

STA 9+405.761 "C"
21.240 m

N 87°48'00" E
3.000 m (9.84 FT)

N 89°55'21" W
6.005 m (19.70 FT)

STA 9+504.078 "C"
21.240m (69.68 FT)

STA 9+405.623
15.240m (50.00 FT) 125

N 02°12'00" W
98.316 m (322.56 FT)

S 02°12'00" E
98.556 m (323.34 FT)

TLE FOR SLOPES
L = 274.514 m (900.63 FT)
L.C. = 264.007 m (866.16 FT)
L.C.B. = S 29°49'02" E
R = 284.760 m (934.25 FT)

STA 9+504.078"C"
15.240m (50.00 FT) 124

L = 271.622 m (891.15 FT)
L.C. = 261.226 (857.04 FT)
L.C.B. = N 29°49'02" W
R= 281.760 m (924.41 FT)

TLE FOR SLOPES
L = 303.897 m (997.04 FT)
L.C. = 292.266 m (958.88 FT)
L.C.B. = N 29°49'02" W
R = 315.240 m (1034.25 FT)

10.97 m (36.00 FT)

45.72 m (150.00 FT)

SEE SHEET 4.4

SEE SHEET 4.3

SEE SHEET 4.4

STA 9+504.078"C"
15.240m (50.00 FT) 127

S 89°55'21" E
30.505 m (100.08 FT)

N 02°12'00" W
99.770 m (327.33 FT)

STA 9+404.308"C"
15.240m (50.00 FT) 126

S 89°55'21" E
3.003 m (9.85 FT)

STA 9+404.189"C"
18.240m (59.84 FT)

STA 9+504.078"C"
18.240m (59.84 FT)

N 02°12'00" W
99.889 m (327.72 FT)

L = 306.789 m (1006.52 FT)
L.C. = 295.047 (968.00 FT)
L.C.B. = N 29°49'02" W
R= 318.240 m (1044.09 FT)

SLOPE INTERCEPT, TYP.

P.I. = 9+661.028"C"

S 89°43'50" E
149.156 m (489.35 FT)

S 89°43'50" W
402.337 m (1320.00 FT)

MONUMENT
58 649.961 m
769 164.723 m

8 KING

9 SCHAEFER

6 SPRENGER

10 HART & DELAINE PARTNERSHIP
A REMOVE ACCESS CONTROL

10 JAMES G. HART & DELAINE FARM PARTNERS, L.P.

11 RIES PARTNERS L.P.
A REMOVE ACCESS CONTROL

A REMOVE ACCESS CONTROL

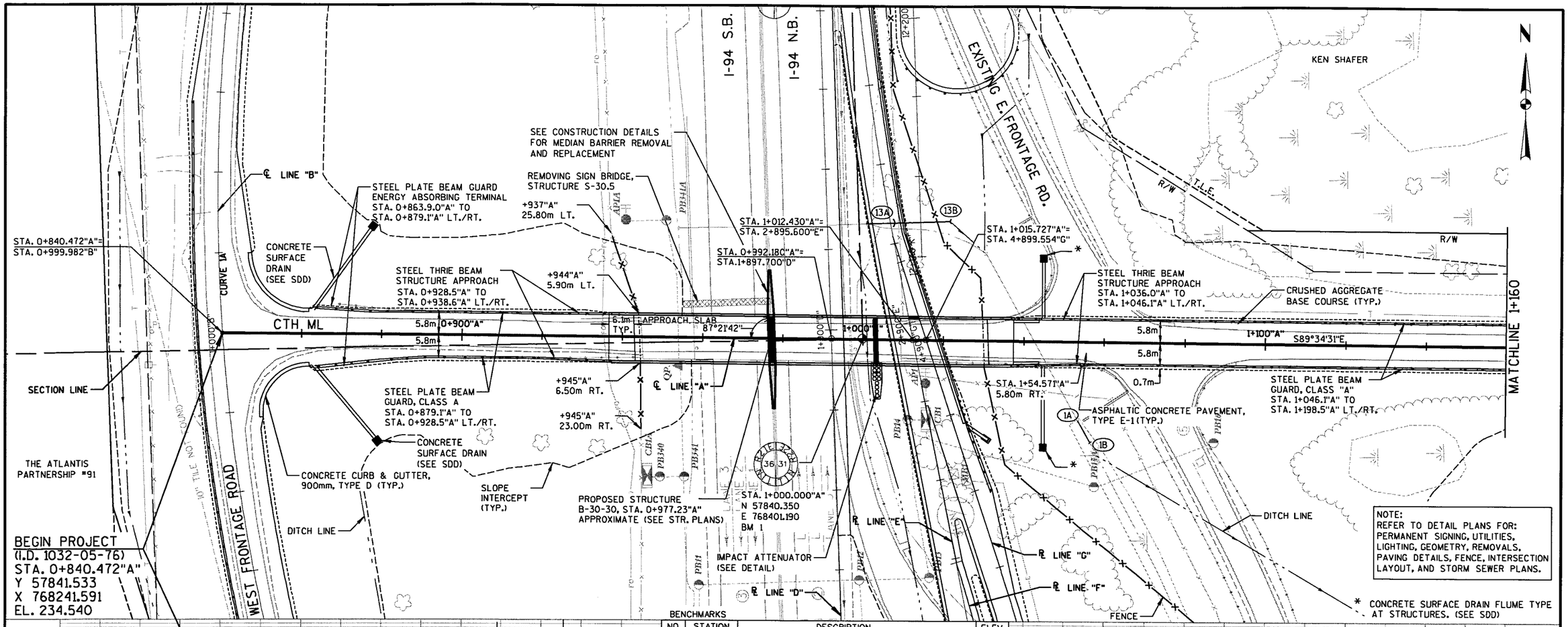
CURVE 21		CURVE 22		CURVE 23	
P.I.	= 9+661.028"C"	P.I.	= 10+076.750"C"	P.I.	= 12+900.693"K"
N	= 58 499.365 m	N	= 58 736.421 m	N	= 58 622.347 m
E	= 768 770.193 m	E	= 768 399.020 m	E	= 768 403.319 m
Δ	= 55°14'03"	Δ	= 55°27'53"	Δ	= 48°01'23"
T	= 156.950m (514.93 FT)	T	= 157.714m (517.43 FT)	T	= 44.547m (146.15 FT)
L	= 289.205m (948.84 FT)	L	= 290.412m (952.80FT)	L	= 83.816m (274.99 FT)
R	= 300.000m (984.25 FT)	R	= 300.000m (984.25 FT)	R	= 100.000m328.08 FT)
P.C.	= 9+504.078"C"	P.C.	= 9+919.030"C"	P.C.	= 12+856.146"K"
P.T.	= 9+793.283"C"	P.T.	= 10+209.442"C"	P.T.	= 12+939.963"K"

CONVERSION FACTOR USED BETWEEN ENGLISH AND METRIC: 1 ft = 0.3048006096 m

REVISION DATE	DATE	SCALE, METERS	HWY: CTH ML	CONSTRUCTION PROJECT NO: 1032-05-76, 1032-08-70	SHEET NO: 292	
A DEC. 12, 2000	MARCH 7, 2000	0 62.5 125	COUNTY: KENOSHA	STATE R/W PROJECT NO: 1032-08-20	SHEET NO: 4.5	M
	GRID FACTOR 0.99997810					

FILE NAME: T04PD03.DGN

WisDOT: MSHT75



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM1	1+000.000"A"	SECTION CORNER ON BRIDGE	233.040

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "A" (CTH ML)	SHEET NO: 293	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP01.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

KEN SHAFER

THOMAS & KENNETH KING

FRANCIS & SALLY MATTESON

THOMAS & KENNETH KING

OTTO & MARY SPRENGER

EAST FRONTAGE ROAD

℄ LINE "C"

T.L.E.

R/W

N

BM #2

MATCHLINE 1+160

CTH ML

℄ LINE "A"

STA. 1+241.582"A"
ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3
SAWING EXISTING PAV'T REQ'D, MATCH 16.2m LT.

CRUSHED AGGREGATE BASE COURSE (TYP.)

STA. 1+209.910"A"
5.80m LT.

STA. 1+214.746"A"
6.40m LT.

STA. 1+201.851"A"
5.80m LT.

STA. 1+233.748"A"
4.50m LT.

REMOVING F.E.

ASPHALTIC CONCRETE PAVEMENT, TYPE E-1

STA. 1+377.558"A"=
STA. 9+000.000"C"=
STA. 0+450.288"J"

SLOPE INTERCEPT

1+496.399"A",
4.50m LT. 3.13m RT.

1+460.216"A"
7.20m LT.

N89°34'31"E

1+200"A" 1+300"A" 1+400"A" 1+500"A"

5.8m 4.5m

0.7m 0.9m

STA. 1+201.846"A"
5.80m RT.

STA. 1+214.744"A"
6.40m RT.

STA. 1+233.765"A"
4.50m RT.

STA. 1+209.909"A"
6.40m RT.

STEEL PLATE BEAM BEAM GUARD CLASS"A"
STA. 1+046.1"A" TO
STA. 1+198.5"A" LT./RT.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL
STA. 1+198.5"A" TO
STA. 1+213.7"A" LT./RT.

STA. 1+238.402"A"
ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3
SAWING EXISTING PAV'T REQ'D, MATCH 18.3m RT.

SEE LINE "J" PLAN & PLAN & PROFILE

1+466.287"A"
4.50m RT.

STA. 1+485.195,
C.A.B.C. (SEE DETAIL)
MATCH 15.1m RT.

STA. 1+440.810"A"
CRUSHED AGGREGATE BASE COURSE (SEE DETAIL)
MATCH 16.4m RT.

VINCENT & MARY BUGNER

PROPERTY TO BE ABANDONED & RELOCATED
SUZETTE LAMBIN

HERMAN F. & W.F. DARTH

RICHARD L. & LENNIEA T. NELSON

℄ LINE "J"

0+400"J"

END PROJECT
(I.D. 1032-05-76)
STA. 1+520.000"A"
EL. 222.922
MATCH EXISTING
SAW EXISTING PAV'T

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM1	1+000.000"A"	SECTION CORNER ON BRIDGE	223.040
BM2	1+552.000"A"	SOUTH FACE OF P.P.	222.260

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

PROPOSED PROFILE

EXISTING GROUNDLINE

-4.21%

PVC 1+230.000
EL. 227.437

K=33.229
VC=120.000m

PVI 1+290.000
EL. 224.910

PVT 1+350.000
EL. 224.550

-0.600%

-0.600%

PVI 1+480.000
EL. 223.770

VC=80.000m
K=52.632

PVC 1+440.000
EL. 224.010

PVT 1+520.000
EL. 222.922

STORM PIPE (2)

	1+200	1+250	1+300	1+350	1+400	1+450	1+500
EXISTING	228.143	227.779	227.419	227.076	226.823	226.539	226.335	226.110	226.005	225.853	225.722	225.678	225.484	225.256	225.132	224.818	224.507	224.336	224.155	223.992	223.804	223.798	223.865	223.940	223.981	224.036	224.002	224.024	223.965	223.925	223.859	223.884	223.840	223.652	223.412	223.127	222.922
PROPOSED	230.385	229.964	229.542	229.121	228.700	228.279	227.858	227.437	227.031	226.655	226.309	225.993	225.707	225.452	225.226	225.031	224.865	224.730	224.625	224.550	224.490	224.430	224.370	224.310	224.250	224.190	224.130	224.070	224.010	223.940	223.852	223.744	223.618	223.472	223.308	223.124	222.922

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "A" (CTH ML)	SHEET NO: 2.94	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP02.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29, 30,31,32, 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

THE ATLANTIS PARTNERSHIP #91

W.E. 224.38

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL STA. 0+840.0"B" TO STA. 0+855.4"B" LT.

SLOPE INTERCEPT (TYP.)

T.L.E.

R/W

MATCHLINE 0+960

0.7m

5.4m

CURVE 1A

7.2m

900mm

PC 0+900"B"

STEEL PLATE BEAM GUARD, CLASS A STA. 0+855.4"B" TO STA. 1+042.0"B" LT.

STA. 0+870.135"B" 7.20m RT.

12" TILE NOT FOUND

10" TILE NOT FOUND

WEST FRONTAGE ROAD

0+800"B"

ASPHALTIC CONCRETE PAVEMENT, TYPE E-1 (TYP.)

STA. 0+835.864"B" 4.50m RT.

1.5m

4.5m

4.5m

1.5m

℄ LINE "B"

CRUSHED AGGREGATE BASE COURSE (TYP.)

BM#3

13m TAPER

0+680"B"

0+700"B"

N17° 23'53"W

5A 5C 5B 5D

DITCH LINE

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM3	0+692.000"B"	REBAR IN LT. SHOULDER	225.199
		RR SPIKE IN N.W. FACE OF TREE	

MBIA TAPDI FO FO FO FO FO FO FO FO CBLA

END CONSTRUCTION
(I.D. 1032-05-76)
STA. 0+680.224
EL. 225.200
MATCH EXISTING
SAWING EXISTING PAV'T

VC=90.000m
K=27.516

PVI 0+680.224
EL. 225.200

PVC 0+683.789
EL. 225.226

PVI 0+728.789
EL. 225.554

PVT 0+773.789
EL. 227.354

PVC 0+890.000
EL. 232.003

0.729%

4.000%

4.000%

PROPOSED PROFILE

EXISTING GROUNDLINE

STORM PIPE (5A/5B)

STORM PIPE (5C/5D)

	EXISTING	PROPOSED
0+680	225.200	225.200
0+700	225.140	225.278
	225.306	225.392
	225.375	225.542
	225.487	225.728
	225.641	225.951
0+750	225.722	226.210
	225.858	226.505
	226.066	226.837
	226.256	227.205
	226.434	227.603
	226.594	228.003
0+800	226.730	228.403
	226.931	228.803
	227.172	229.203
	227.285	229.603
	227.480	230.003
0+850	227.707	230.403
	227.901	230.803
	228.032	231.203
	228.226	231.603
	228.383	232.003
0+900	228.584	232.387
	228.829	232.741
	228.869	233.064
	229.032	233.356
	229.223	233.618
0+950	229.289	233.849
	229.278	234.049
	229.378	234.218
	229.474	234.356

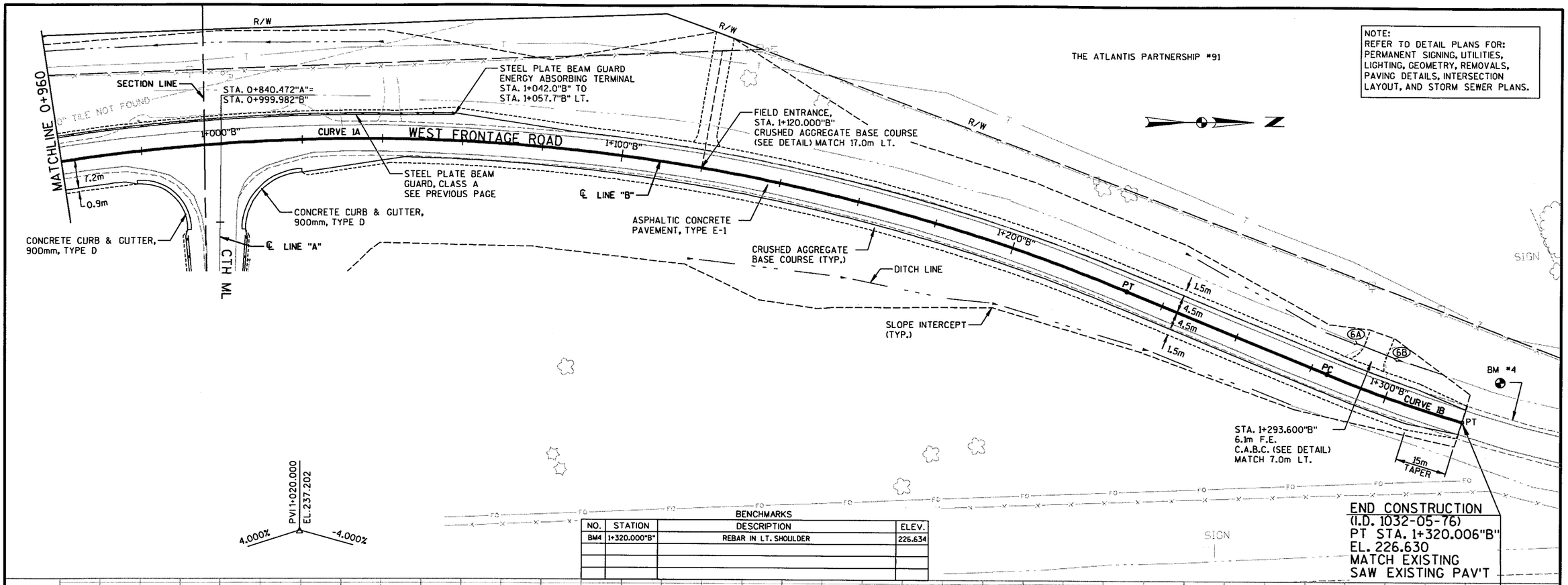
STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 295	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP04.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

12-7-02

THE ATLANTIS PARTNERSHIP #91

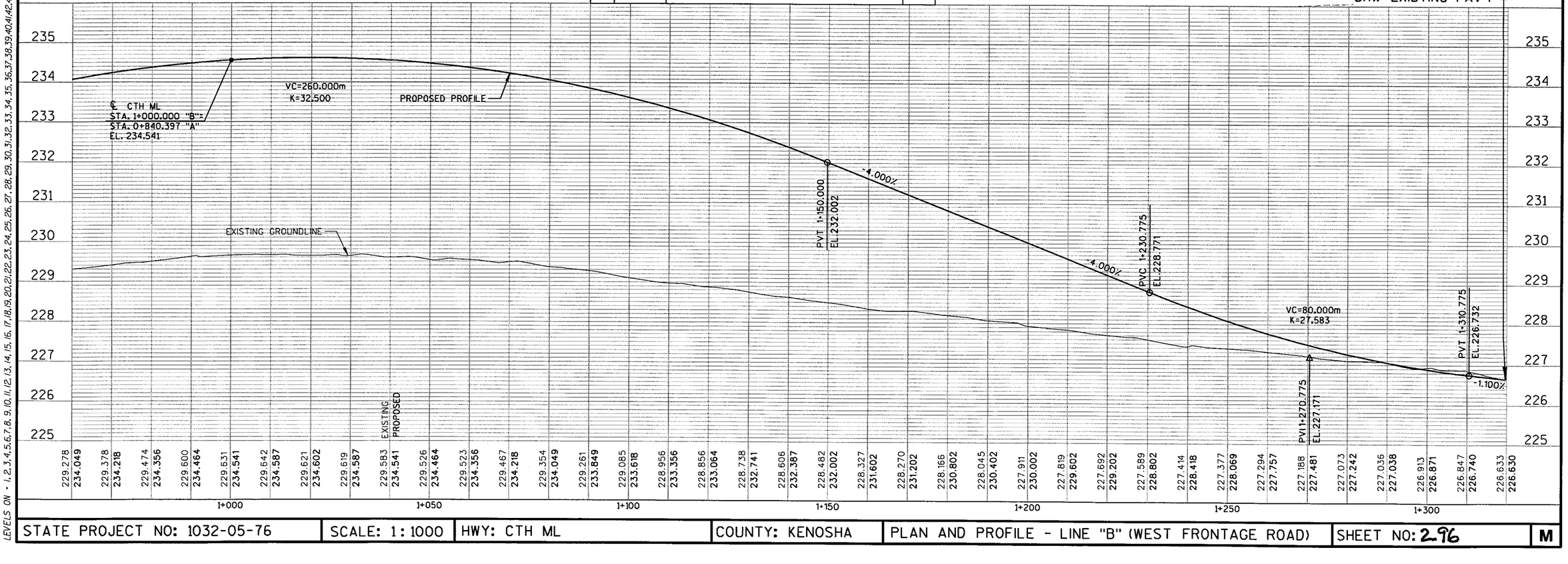
NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, INTERSECTION LAYOUT, AND STORM SEWER PLANS.



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM4	1+320.000"B"	REBAR IN LT. SHOULDER	226.634

END CONSTRUCTION
(I.D. 1032-05-76)
PT STA. 1+320.006"B"
EL. 226.630
MATCH EXISTING
SAW EXISTING PAV'T



STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 2.96 M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP03.DGN 12-12-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

THOMAS & KENNETH KING

THOMAS & KENNETH KING

CTH ML

R/W

CONCRETE CURB & GUTTER, 900mm, TYPE D

ASPHALTIC FLUME (SEE SDD)

SLOPE INTERCEPT (TYP.)

ASPHALTIC CONCRETE PAVEMENT, TYPE E-1

CRUSHED AGGREGATE BASE COURSE (TYP.)

T.L.E.

℄ LINE "C"

1.5m

4.5m

4.5m

1.5m

9+100"C"

9+200"C"

9+300"C"

N02°12'00"W

EAST FRONTAGE ROAD

DITCH LINE

MATCHLINE 9+350

7A

7B

2A

2B

STA. 9+000.000"C" =
STA. 1+377.558"A"

ASPHALTIC FLUME (SEE SDD)

SLOPE INTERCEPT (TYP.)

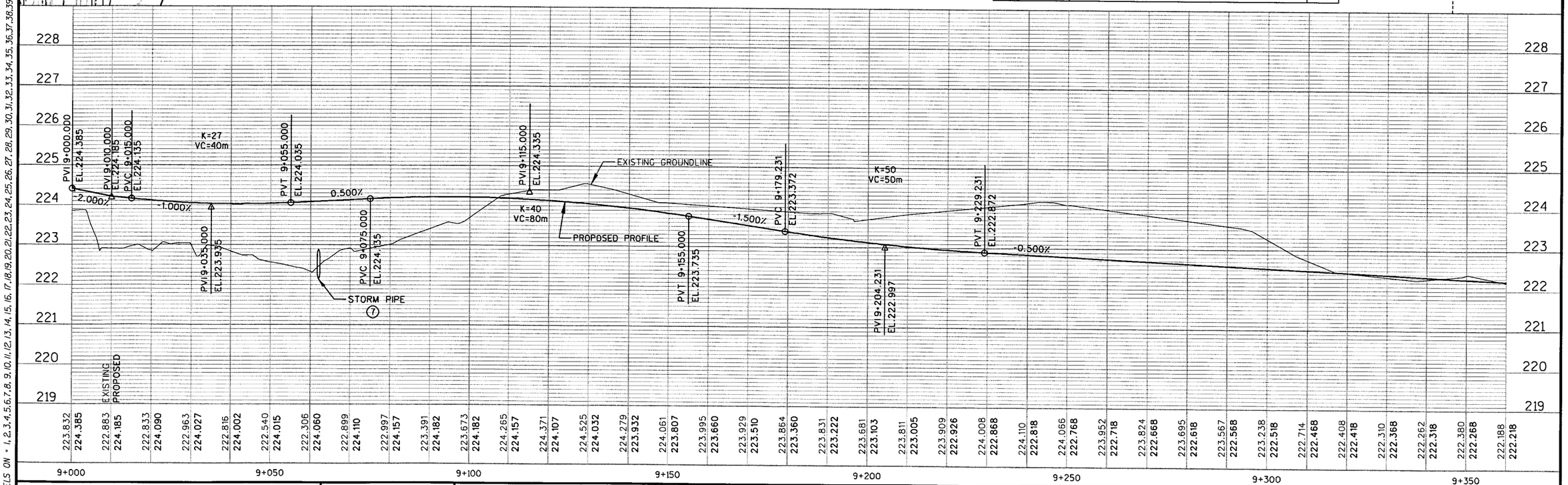
OTTO & MARY SPRENGER

℄ LINE "A"

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM2	1+552.000"A"	SOUTH FACE OF P.P.	222.260
BM5	9+380.000"C"	"□" S.E. CORNER OF TRANSMISSION TOWER	222.557



STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 297	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP22.DGN
LEVELS ON * 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
12-14-01

THOMAS & KENNETH KING

ATC/LLC

JAMES HART

JAMES HART

MATCHLINE 9+100

MATCHLINE 9+350

T.L.E.

R/W

TRANSMISSION TOWER

BM "5"

℄ LINE "C"

T.L.E.

SLOPE INTERCEPT (TYP.)

R/W

1.5m

4.5m

4.5m

1.5m

R/W

T.L.E.

9+400"C"

N02°12'00"W

9+500"C"

PC

9+600"C"

CURVE 2

EAST FRONTAGE ROAD

ASPHALTIC CONCRETE PAVEMENT, TYPE E-1

CRUSHED AGGREGATE BASE COURSE (TYP.)

TOTAL EASEMENT WIDTH
56.771m

NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM2	1+552.000"A"	SOUTH FACE OF P.P.	222.260
BM5	9+380.000"C"	"□" S.E. CORNER OF TRANSMISSION TOWER	222.557

EXISTING GROUNDLINE

PROPOSED PROFILE

-0.500%

PVC 9+460.000
EL.221.718

PVI 9+500.000
EL.221.518

-0.500%

-2.000%

VC=80m
K=53

PVT 9+540.000
EL.220.718

-2.000%

PVC 9+570.000
EL.220.118

-2.000%

VC=80m
K=53

PVI 9+610.000
EL.219.318

-0.500%

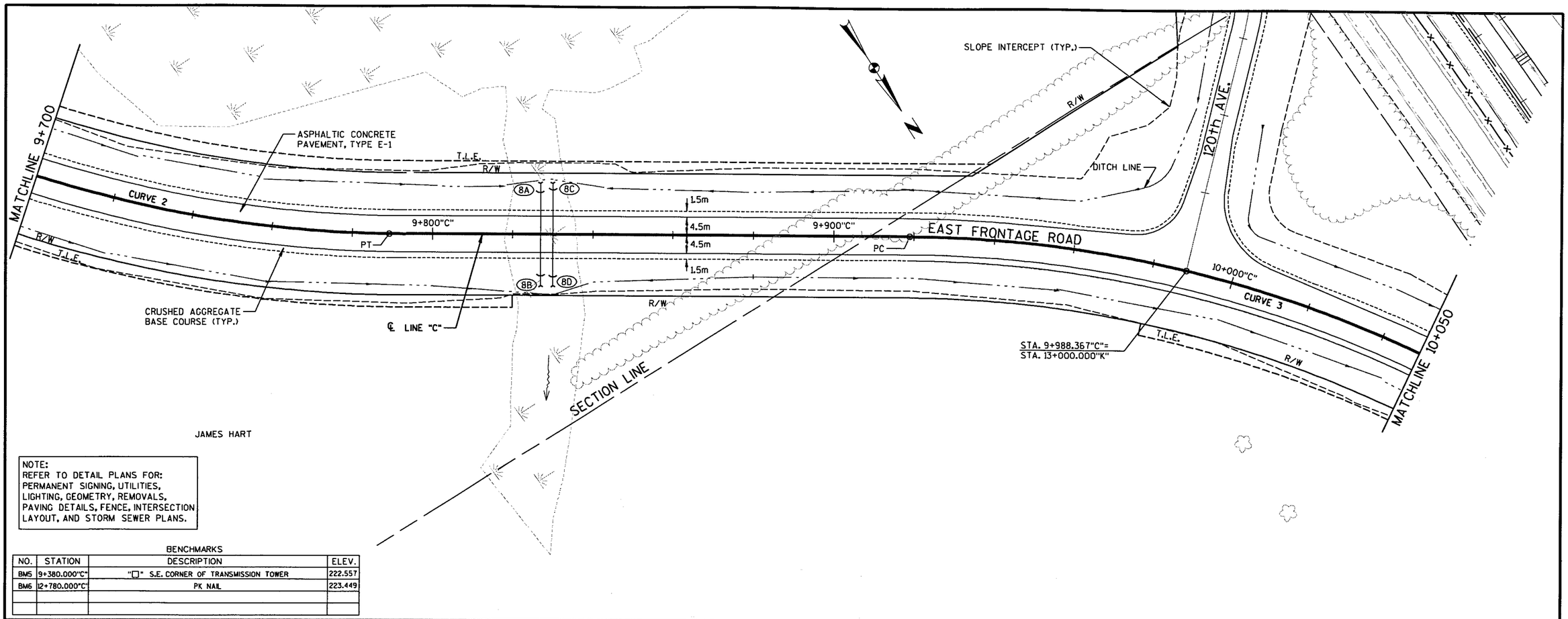
PVT 9+650.000
EL.219.118

-0.500%

	9+350	9+400	9+450	9+500	9+550	9+600	9+650	9+700
EXISTING	222.380	222.188	221.990	221.792	221.697	221.955	222.239	222.644
PROPOSED	222.268	222.218	222.168	222.118	222.068	222.018	221.968	221.918
EXISTING	222.919	222.824	222.719	222.487	222.224	221.962	221.712	221.461
PROPOSED	221.868	221.818	221.768	221.718	221.659	221.580	221.484	221.368
EXISTING	221.213	220.987	220.797	220.620	220.449	220.133	219.763	219.460
PROPOSED	221.234	221.080	220.909	220.718	220.518	220.318	220.118	219.927
EXISTING	219.154	218.846	218.746	218.743	218.691	218.623	218.563	218.444
PROPOSED	219.755	219.602	219.468	219.352	219.255	219.177	219.118	219.068
EXISTING	218.266	218.095	217.938	217.790	217.757			
PROPOSED	219.018	218.968	218.918	218.868	218.818			

STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 2-98	M

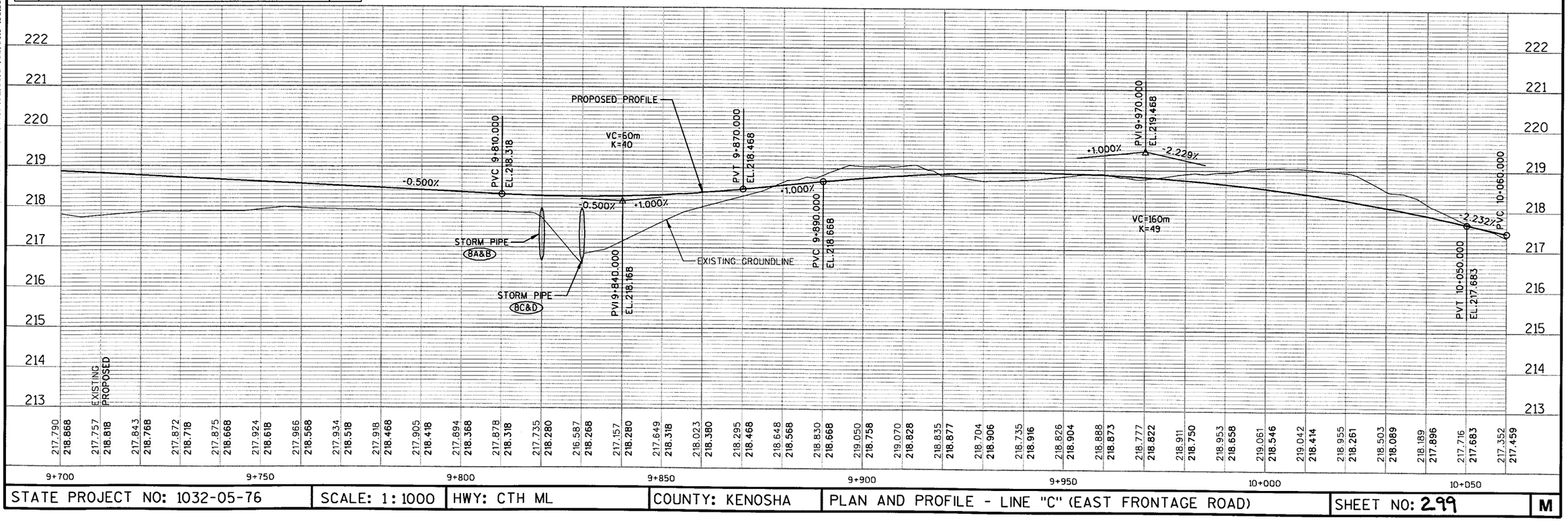
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP23.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

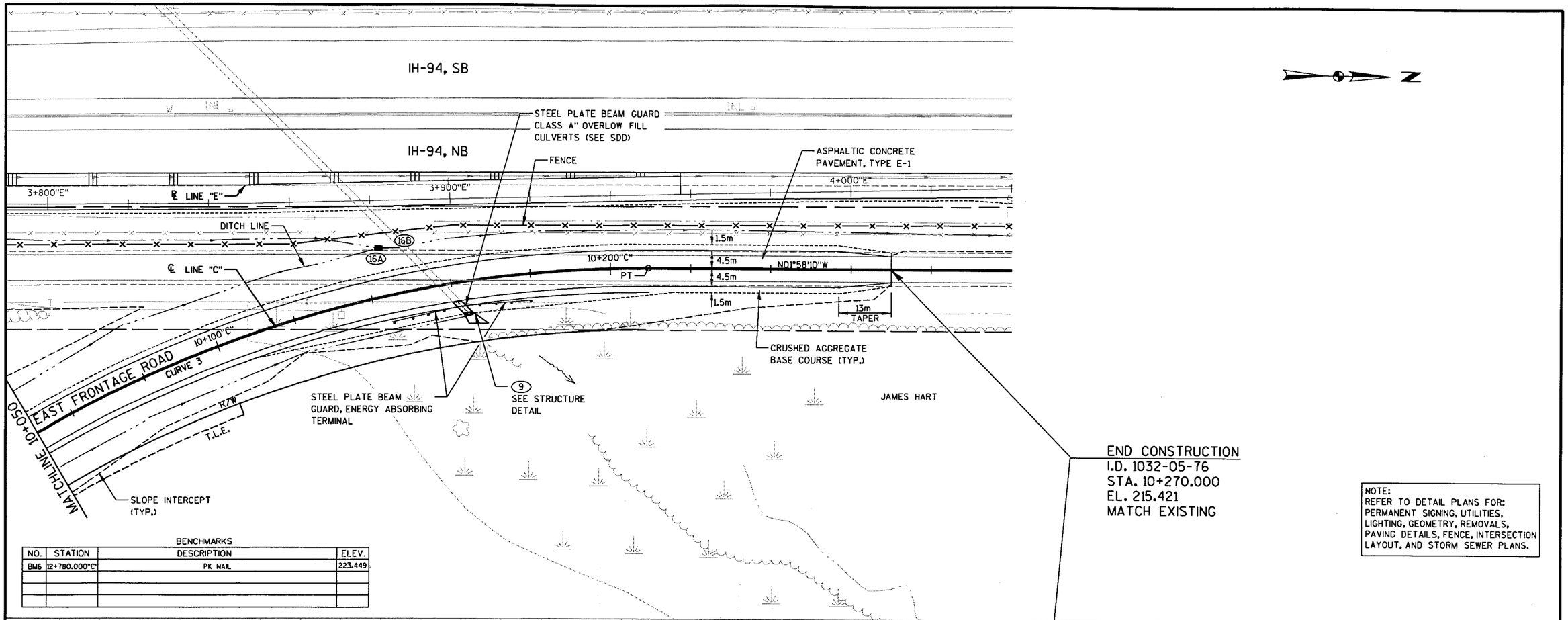
BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM5	9+380.000"C"	"□" S.E. CORNER OF TRANSMISSION TOWER	222.557
BM6	12+780.000"C"	PK NAIL	223.449



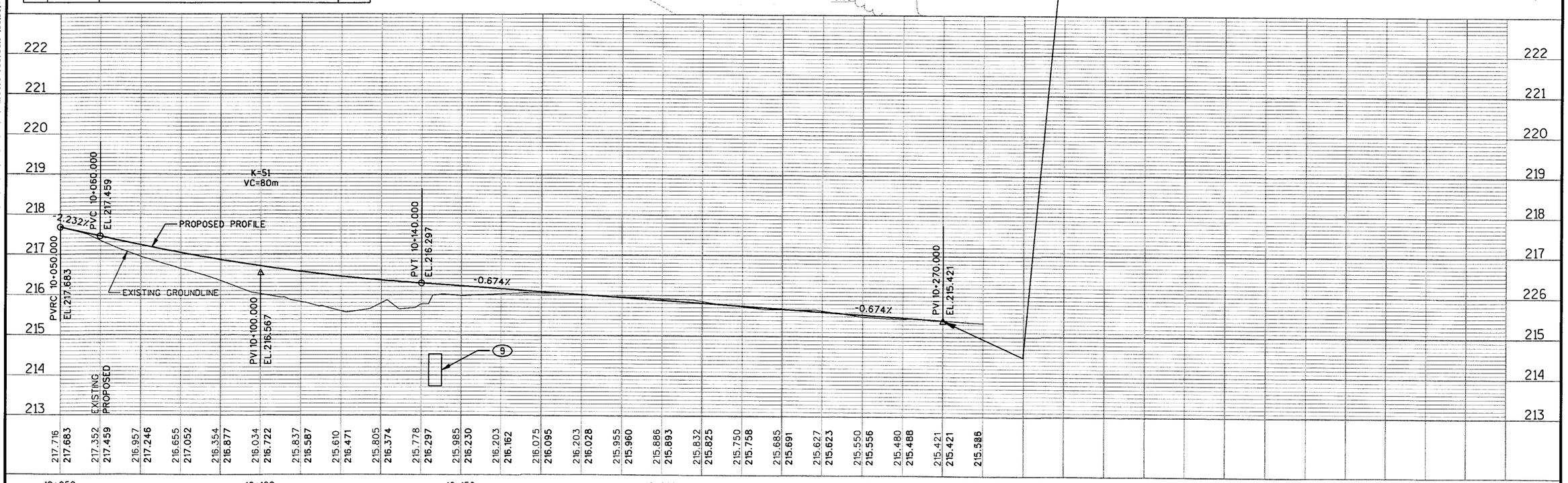
STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 299	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP24.DGN 12-14-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM6	12+780.000"C"	PK NAIL	223.449



STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 300	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP25.DGN 09-17-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

I-94 S.B.

I-94 N.B.

ASPHALTIC CONCRETE PAVEMENT

250mm NONREINFORCED CONCRETE PAVEMENT, DOWELED, WITH CORRUGATIONS

END CONCRETE SHOULDERS

EXISTING PIPE UNDERDRAIN

SLOPE INTERCEPT (TYP.)

W.I.M. (SEE DETAILS)

℄ LINE "D"

℄ LINE "E"

℄ LINE "I"

N19°07'17"W

N14°15'37"W

N01°08'40"W

1+000"D"

1+100"D"

1+200"D"

1+300"D"

2+000"E"

2+100"E"

2+200"E"

2+300"E"

7+400"I"

7+300"I"

CURVE 4

3.048m

PC

900mm

300mm

4.5m

1.2m

60 m

30 m

11A

11B

12A

12B

DITCH LINE

ABANDONED 15" TILE

275mm NONREINFORCED CONCRETE PAVEMENT, DOWELED

CRUSHED AGGREGATE BASE COURSE (TYP.)

REFER TO ASTM E1318-00 FOR SURFACE TREATMENT

ABANDONED 8" TILES

5" TILE

R/W

PI STA. 1+998.810"E"= STA. 0+995.040"D", 3.60m RT.

PROPOSED WELCOME TO WISCONSIN SIGN (SEE CONSTRUCTION DETAILS) STA. 2+080"E" RT.

WOVEN WIRE FENCE

SLOPE INTERCEPT (TYP.)

MATCHLINE 2+350

BEGIN PROJECT
I.D. 1032-08-70
STA. 1+998.810
Y 56959.525
X 768557.398
EL. 231.372
MATCH EXISTING
SAWING EXISITING PAV'T

STATE OF ILLINOIS
STATE OF WISCONSIN

FOSSLAND TRUST

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

PVI 2+000.000
EL. 231.372

PVI 2+080.000
EL. 230.971

-1.000%

-1.150%

-1.150%

PROPOSED PROFILE

EXISTING GROUNDLINE

STORM POINT (11)

STORM PIPE (12)

	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350
EXISTING	231.372	231.361	231.263	231.242	231.078	230.656	230.193	229.994	229.932	229.957	229.659	229.509	229.548	229.399	229.245	229.194	228.878	228.686	228.710	228.156	228.087	227.840	228.002	228.001	227.709	227.554	227.549	227.292	227.299	227.220	227.258	227.382	227.290	227.315	227.182	227.044
PROPOSED	231.372	231.272	231.172	231.072	230.972	230.872	230.772	230.672	230.570	230.455	230.340	230.225	230.110	229.995	229.880	229.765	229.650	229.535	229.420	229.305	229.190	229.075	228.960	228.845	228.730	228.615	228.500	228.385	228.270	228.155	228.040	227.925	227.810	227.695	227.580	227.465

234	233	232	231	230	229	228	227	226	225

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP05.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (WIM SCALE BYPASS LANE)	SHEET NO: 301	M

I-94 S.B.

I-94 N.B.

STA. 2+407.392"E"=
STA. 3+407.392"F"

EXISTING PIPE UNDERDRAIN

℄ LINE "D"

1+400"D"

1+500"D"

BM #10

CURVE 4

SLOPE INTERCEPT

ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3 (TYP.)

275mm NONREINFORCED CONCRETE PAVEMENT, DOWELED

CRUSHED AGGREGATE BASE COURSE (TYP.)

CONCRETE CORRUGATED MEDIAN

300mm

900mm

CONCRETE CORRUGATED MEDIAN

℄ LINE "E"

2+500"E"

PT

N01°08'40"W

3.048m

3+600"E"

4.5m

DITCH LINE

CURVE 5

PC

2+400"E"

900mm

N14°15'37"W

4.5m

3.2m

3+500"F"

3+600"F"

℄ LINE "F"

8+600"H"

℄ LINE "H"

STATIC SCALE (SEE DETAIL)

STATIC SCALE BLDG

SEE NOTE

WELL

8+500"H"

7+600"I"

7+680"I"

7+500"I"

℄ LINE "I"

INSPECTION BLDG

CELLULAR BLDG.

FEECH BED

WET DETENTION BASIN

MATCHLINE 2+350

MATCHLINE 2+700

4+684.6"G"

℄ LINE "I"

7+200"I"

7+100"I"

7+000"I"

1+100"L"

1+200"L"

1+000"L"

NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

SEE CONSTRUCTION DETAILS FOR LANDSCAPING AROUND BUILDING.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

PVC 2+408.000
EL.226.798

VC=50m
K=30

PVT 2+458.000
EL.226.636

PROPOSED PROFILE

PVI2+525.000
EL.226.966

K=61
VC=30m

PVC 2+510.000
EL.226.892

PVT 2+540.000
EL.226.966

PVI 2+433.000
EL.226.511

-1.150%

0.500%

0.000%

EXISTING GROUNDLINE

STORM PIPE
27/28

STORM PIPE
30B/30C

STORM PIPE
31B/31C

	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700
EXISTING	227.044	226.978	226.930	226.872	226.797	226.747	226.645	226.569	226.499	226.444	226.361	226.251	226.285	226.198	226.136	226.113	226.072	226.022	225.957	225.890	225.858	225.809	225.771	225.722	225.654	225.629	225.638	225.650	225.693	225.721	225.779	225.861	225.921	225.967	225.988	226.076	226.078
PROPOSED	227.465	227.350	227.235	227.120	227.005	226.890	226.776	226.684	226.625	226.599	226.606	226.645	226.694	226.744	226.793	226.843	226.892	226.933	226.958	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966	226.966

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (WIM SCALE BYPASS LANE)	SHEET NO: 302	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP06.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

I-94 N.B.
EXISTING PIPE UNDERDRAIN
℄ LINE "D"
250mm NONREINFORCED CONCRETE PAVEMENT, DOWELED, WITH CORRUGATIONS
1+800"D"
LANE 1
LANE 2
LANE 3
STRUCTURE B-30-30
STA. 2+922.062"E"=
STA. 4+926.872"G"
250mm NONREINFORCED CONCRETE PAVEMENT, DOWELED, WITH CORRUGATIONS
2+000"D"
275mm ASPHALT CONCRETE PAVEMENT, TYPE E-30x
PT
N02°12'49"W
3+060
MATCHLINE
275mm NONREINFORCED CONCRETE PAVEMENT, DOWELED
PB342
SLOPE INTERCEPT (TYP.)
STA. 2+838.933"E"=
STA. 3+839.742"F"
STA. 2+895.600"E"=
STA. 1+012.430"A"
2+900"E"
PC
4+900"G"
CURVE 7
3+000"E"
12+200"K"
ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3
℄ LINE "D"
2+800"E"
PT
N11°11'43"W
CURVE 6
N01°08'40"W
300mm
6+725"H"
900mm
4.5m
PC
5.6m
3+800"F"
4+800"G"
℄ LINE "G"
CRUSHED AGGREGATE BASE COURSE (TYP.)
ASPHALTIC FLUME
℄ LINE "K"
STA. 2+969.302"E"
6.877m RT.
CONCRETE BARRIER, SINGLE-FACED (TYP.)
(SEE PAVING DETAILS)
120TH AVENUE
WOVEN WIRE FENCE
MATCHLINE 2+700
42
43A
44
13A
13B
1A
1B
℄ LINE "A"
T.L.E.
SLOPE INTERCEPT (TYP.)
KEN SHAFER
4+700"G"
43B
CELLULAR TOWER
39
38
6+800"I"
℄ LINE "I"
CTH ML
40A
40B
5
R/W
T.L.E.
6+900"I"
1+300"L"
℄ LINE "J"

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM8	12+320.000"K"	PK NAIL	225.918
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

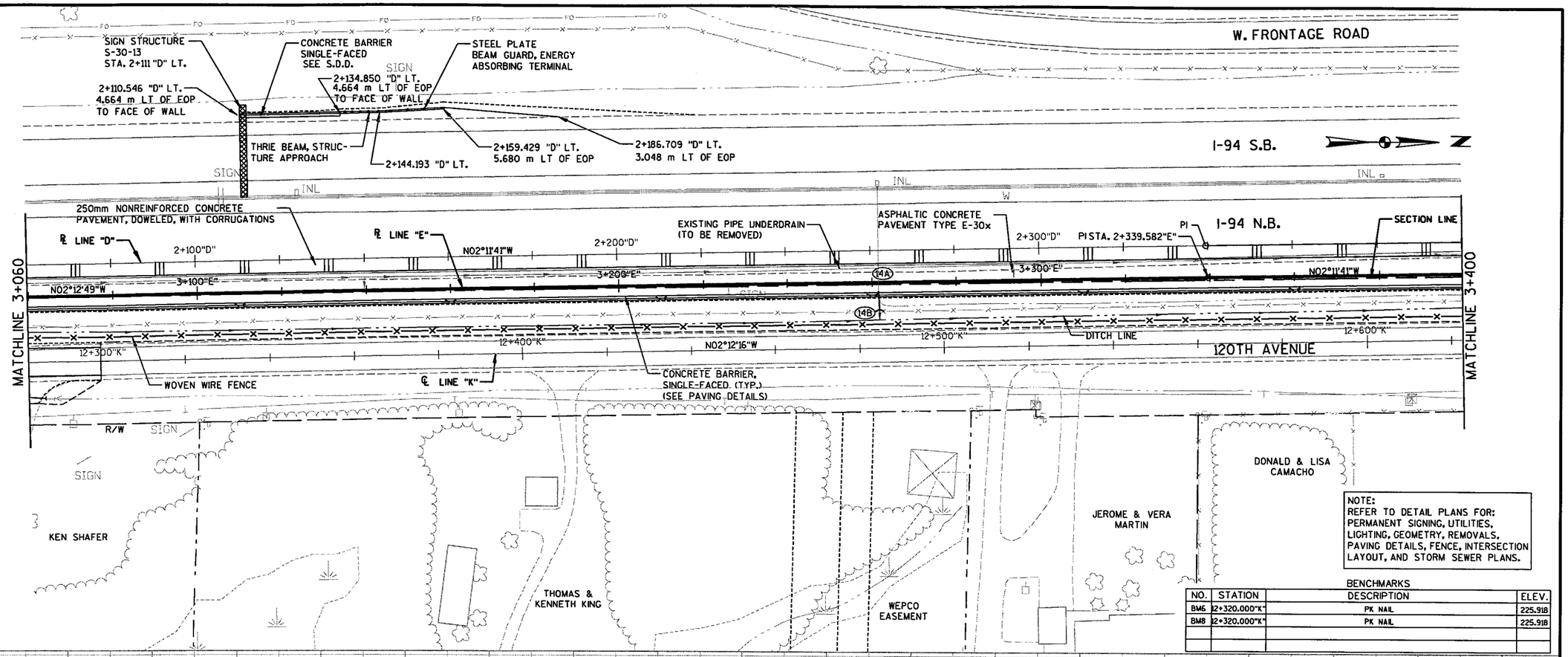
233 232 231 230 229 228 227 226 225 224

PROPOSED PROFILE
EXISTING GROUNDLINE
PVC 2+730.000 EL.226.966
PVI 2+745.000 EL.226.966
PVT 2+760.000 EL.226.892
PVC 2+790.000 EL.226.746
PVI 2+830.000 EL.226.546
PVT 2+870.000 EL.226.690
0.000%
-0.500%
-0.500%
+0.360%
+0.360%
K=61
VC=30m
VC=80m
K=79
STORM PIPE 13
SEE PAVEMENT GRADES AND JOINTS DETAIL FOR PROPOSED GRADES

	EXISTING	PROPOSED
2+700	226.076	226.966
	226.078	226.966
	226.053	226.966
	226.124	226.966
	226.133	226.958
2+750	226.125	226.933
	226.168	226.892
	226.254	226.843
	226.303	226.793
	226.425	226.746
2+800	226.435	226.701
	226.374	226.668
	226.074	226.644
	225.691	226.632
	226.106	226.630
2+850	227.927	226.640
	226.799	226.659
	226.476	226.690
	229.158	226.726
	232.738	226.762
2+900	232.767	226.798
	229.189	226.834
	226.028	226.870
	225.979	226.906
	225.861	226.942
2+950	225.827	226.978
	226.336	227.014
	226.690	227.050
	227.105	227.086
	227.134	227.122
3+000	227.389	
		227.408
		227.435
		227.493
		227.547
3+050		227.549
		227.532

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (WIM SCALE BYPASS LANE)	SHEET NO: 303	M

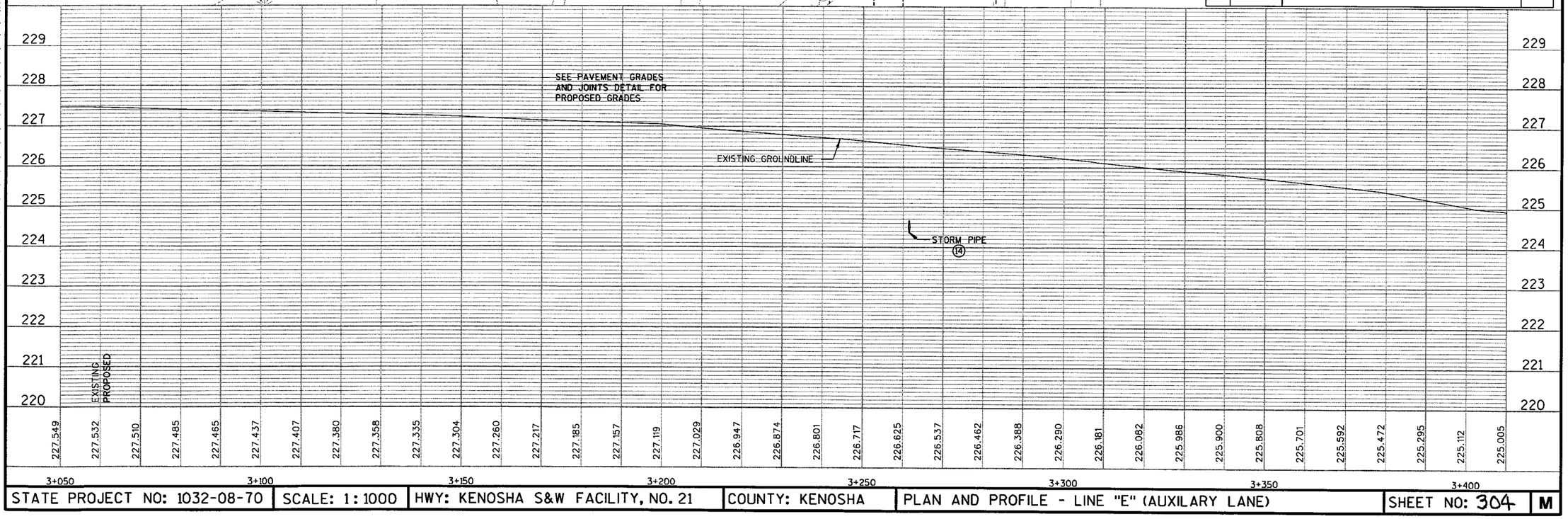
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP07.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM6	12+320.000"K"	PK NAIL	225.918
BM8	12+320.000"K"	PK NAIL	225.918



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (AUXILARY LANE)	SHEET NO: 304	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP08.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

12-7-02

W. FRONTAGE ROAD

SIGN STRUCTURE S-30-13 STA. 2+106 "D" LT.

CONCRETE BARRIER SINGLE-FACED SEE S.D.D.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL

2+105.546 "D" LT. 4.664 m LT OF EOP TO FACE OF WALL

2+129.850 "D" LT. 4.664 m LT OF EOP TO FACE OF WALL

THRIE BEAM, STRUCTURE APPROACH

2+139.193 "D" LT.

2+154.429 "D" LT. 5.680 m LT OF EOP

2+181.709 "D" LT. 3.048 m LT OF EOP

I-94 S.B.

250mm NONREINFORCED CONCRETE PAVEMENT, DOWELED, WITH CORRUGATIONS

℄ LINE "D"

2+100"D"

℄ LINE "E"

N02°11'41"W

2+200"D"

EXISTING PIPE UNDERDRAIN (TO BE REMOVED)

ASPHALTIC CONCRETE PAVEMENT TYPE E-30x

2+300"D"

PI

PI STA. 2+339.582"E"

I-94 N.B.

SECTION LINE

MATCHLINE 3+060

3+100"E"

N02°12'49"W

3+200"E"

3+300"E"

N02°11'41"W

MATCHLINE 3+400

12+300"K"

12+400"K"

N02°12'15"W

12+500"K"

DITCH LINE

12+600"K"

120TH AVENUE

WOVEN WIRE FENCE

℄ LINE "K"

CONCRETE BARRIER, SINGLE-FACED (TYP.) (SEE PAVING DETAILS)

R/W

SIGN

KEN SHAFER

THOMAS & KENNETH KING

WEPCO EASEMENT

JEROME & VERA MARTIN

DONALD & LISA CAMACHO

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM6	12+320.000"K"	PK NAIL	225.918
BM8	12+320.000"K"	PK NAIL	225.918

SEE PAVEMENT GRADES AND JOINTS DETAIL FOR PROPOSED GRADES

EXISTING GROUNDLINE

STORM PIPE (14)

229 228 227 226 225 224 223 222 221 220

EXISTING
PROPOSED

3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400
227.549	227.532	227.510	227.485	227.465	227.437	227.407	227.380
227.358	227.335	227.304	227.260	227.217	227.185	227.157	227.119
227.029	226.947	226.874	226.801	226.717	226.625	226.537	226.462
226.388	226.290	226.181	226.082	225.986	225.900	225.808	225.701
225.592	225.472	225.295	225.112	225.005			

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (AUXILARY LANE)	SHEET NO: 305	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP08.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

250mm NONREINFORCED CONCRETE PAVEMENT, DOWELED, WITH CORRUGATIONS

EXISTING PIPE UNDERDRAIN (TO BE REMOVED)

℄ LINE "D"

2+500"D"

N02°11'41"W

3+500"E"

ASPHALTIC CONCRETE PAVEMENT, TYPE E-30x

2+600"D"

3.048m

3+600"E"

4.5m

END CONCRETE BARRIER SINGLE-FACED STA. 3+680"E"

℄ LINE "E"

I-94 S.B.

I-94 N.B.

2+700"D"

3+700"E"

SECTION LINE

MATCHLINE 3+400

MATCHLINE 3+760

INL

SIGN

15A

15B

12+700"K"

12+800"K"

12+900"K"

120TH AVENUE

CONCRETE BARRIER, SINGLE-FACED (TYP.) (SEE PAVING DETAILS)

SLOPE INTERCEPT (TYP.)

R/W

ASPHALTIC FLUME

WOVEN WIRE FENCE

DITCH LINE

℄ LINE "K"

DONALD & LISA CAMACHO

JAMES HART

JAMES HART

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM6	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

SEE PAVEMENT GRADES AND JOINTS DETAIL FOR PROPOSED GRADES

EXISTING GROUNDLINE ℄"E"

STORM PIPE (15)

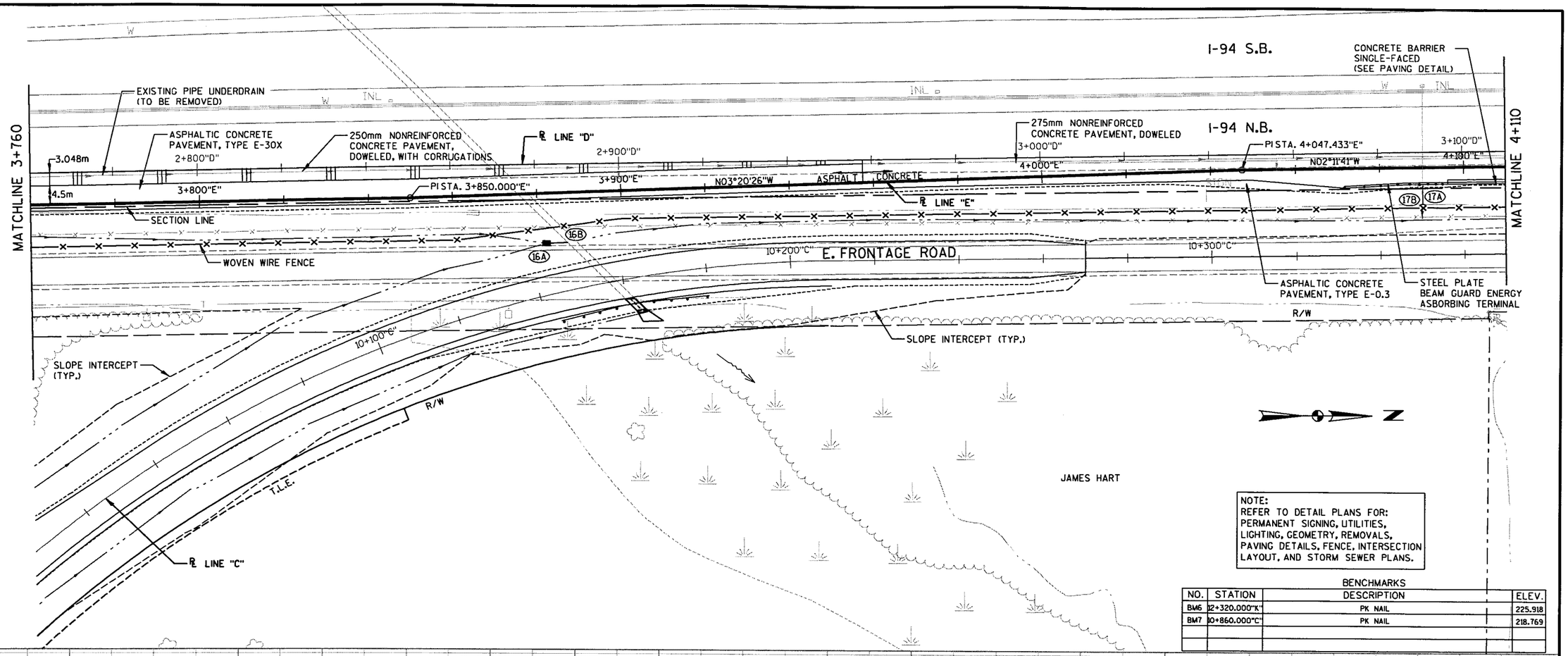
	226	225	224	223	222	221	220	219	218	217
EXISTING	225.112	224.724	224.489	224.133	223.814	223.504	223.331	223.149	222.982	222.826
PROPOSED	225.005	224.891	224.627	224.270	223.979	223.671				

222.602	222.490	222.292	222.020	221.869	221.657	221.438	221.225	221.012	220.812	220.660	220.458	220.280	220.054	219.881	219.601	219.433	219.111	219.004	218.744	218.618

3+400 3+450 3+500 3+550 3+600 3+650 3+700 3+750

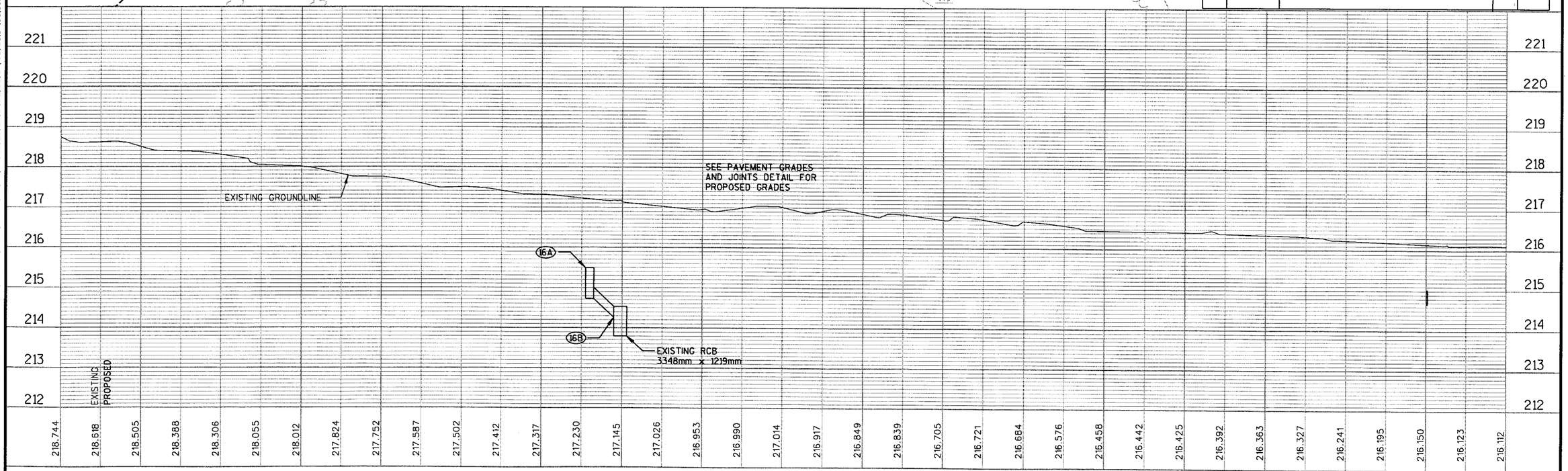
STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (AUXILARY LANE)	SHEET NO: 306	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PPP09.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM6	12+320.000"K"	PK NAIL	225.918
BM7	10+860.000"C"	PK NAIL	218.769



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (AUXILARY LANE)	SHEET NO: 307	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP10.DGN 12-12-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

W. FRONTAGE ROAD

I-94 S.B.

I-94 N.B.

MATCHLINE 4+110

MATCHLINE 4+460

CONCRETE BARRIER SINGLE-FACED (SEE PAVING DETAIL)

50:1 TAPER DN ASPHALT

℄ LINE "D"

WOVEN WIRE FENCE

3+200"D" 4+200"E"

EXISTING PIPE UNDERDRAIN (TO BE REMOVED)

275mm NON REINFORCED CONCRETE PAVEMENT, DOWELED

℄ LINE "E"

3+300"D" 4+300"E"

3.6m

2.4m

600mm

ASPHALTIC CONCRETE PAVEMENT, TYPE E-30x

3+400"D" 4+400"E"

N02°11'41"W

SECTION LINE

18A 18B 18C 18D

DITCH LINE

SLOPE INTERCEPT (TYP.)

19A 19B

10+400"C" 10+500"C" 10+600"C" 10+700"C"

E. FRONTAGE ROAD

SIGN STRUCTURE S-30-14 STA. 4+120.000"E"

℄ LINE "C"

R/W

SIGN

NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM7	10+860.000"C"	PK NAIL	218.769

220 219 218 217 216 215 214 213 212 211

SEE PAVEMENT GRADES AND JOINTS DETAIL FOR PROPOSED GRADES

EXISTING GROUNDLINE

18A 18B 18C 18D

TAP INTO EXISTING RCB (USE 300mm RCP) INL. 213.50

EXISTING / PROPOSED

| | | |

I-94 S.B.

N

I-94 N.B.

MATCHLINE 4+460

EXISTING PIPE UNDERDRAIN

3+500"D"
4+500"E"

℄ LINE "D"

275mm NONREINFORCED CONCRETE PAV'T, DOWELED

2.4m

3.6m

℄ LINE "E"

ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3

3+600"D"
4+600"E"

END PROJECT
I.D. 1032-08-70
STA. 4+614.000"E"
MATCH EXISTING

3+700"D"
4+700"E"

STEEL PLATE BEAM GUARD ENERGY ASBORBING TERMINAL

3+800"D"
4+800"E"

N02°11'41"W

DITCH LINE

600mm

SECTION LINE

PI STA. 4+724.172"E"

CONCRETE BARRIER SINGLE-FACED (SEE PAVING DETAIL)

10+800"C"

10+897"C"

STA. 4+645.500"E"
12.96m RT.
MATCH EXISTING

E. FRONTAGE ROAD

SIGN STRUCTURE S-30-15
STA. 4+807.500"E"

BM #7

** WOVEN WIRE FENCE

SLOPE INTERCEPT (TYP.)

R/W

SIGN

INL

NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM7	10+860.000"C"	PK NAIL	218.769

SEE PAVEMENT GRADES AND JOINTS DETAIL FOR PROPOSED GRADES

EXISTING GROUNDLINE

EXISTING
PROPOSED

216.850	216.940	216.975	216.966	217.120	217.203	217.267	217.315	217.363	217.421	217.473	217.519	217.574	217.645	217.728	217.783	217.887	217.978	218.024	218.054	218.085	218.114	218.131	218.148	218.133	218.126	218.213	218.116	218.406

220 219 218 217 216 215 214 213 212 211

4+450 4+500 4+550 4+600 4+650 4+700 4+724

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "E" (AUXILARY LANE)	SHEET NO: 309	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP12.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3

STA. 2+407.392"E" = STA. 3+407.392"F"

℄ LINE "E"

PT

CURVE 8

PC

DITCH LINE

STATION EQUATION
STA. 3+508.356"F"(BK)=
STA. 3+509.017"F"(AH)

CRUSHED AGGREGATE BASE COURSE (TYP.)

300mm

900mm

℄ LINE "F"

3.048m

4.5m

NO1°08'40"W

8+600"H"

275mm NONREINFORCED CONCRETE PAV'T, DOWELED

℄ LINE "H"

8+500"H"

7+500"I"

7+600"I"

CONCRETE CURB & GUTTER, 750mm, TYPE A

STATIC SCALE

7+680"I"

WELL

STATIC SCALE BLDG
(SEE BUILDING DETAILS)

INSPECTION BLDG

CELLULAR BLDG

OSPO

CELLULAR TOWER

LEECH BED

4+684.6"G"

4+700"G"

℄ LINE "G"

WET DETENTION BASIN

ASPHALTIC FLUME (TYP.)

CONCRETE CORRUGATED MEDIAN

(1) 275mm CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, DOWELED

STA. 3+756.986"F"= STA. 6+758.350"I"

6+725"I"

2+700"E"

PI STA. 3+689.257"F"

3+700"F"

N04°07'08"W

6+900

CURVE 9

PC

ASPHALT CONCRETE PAVEMENT TYPE E-0.3

MATCHLINE 3+770

WET DETENTION BASIN

ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3

℄ LINE "I"

7+200"I"

7+100"I"

7+000"I"

6+900"I"

1+000"L"

1+100"L"

1+200"L"

1+300"L"

℄ LINE "J"

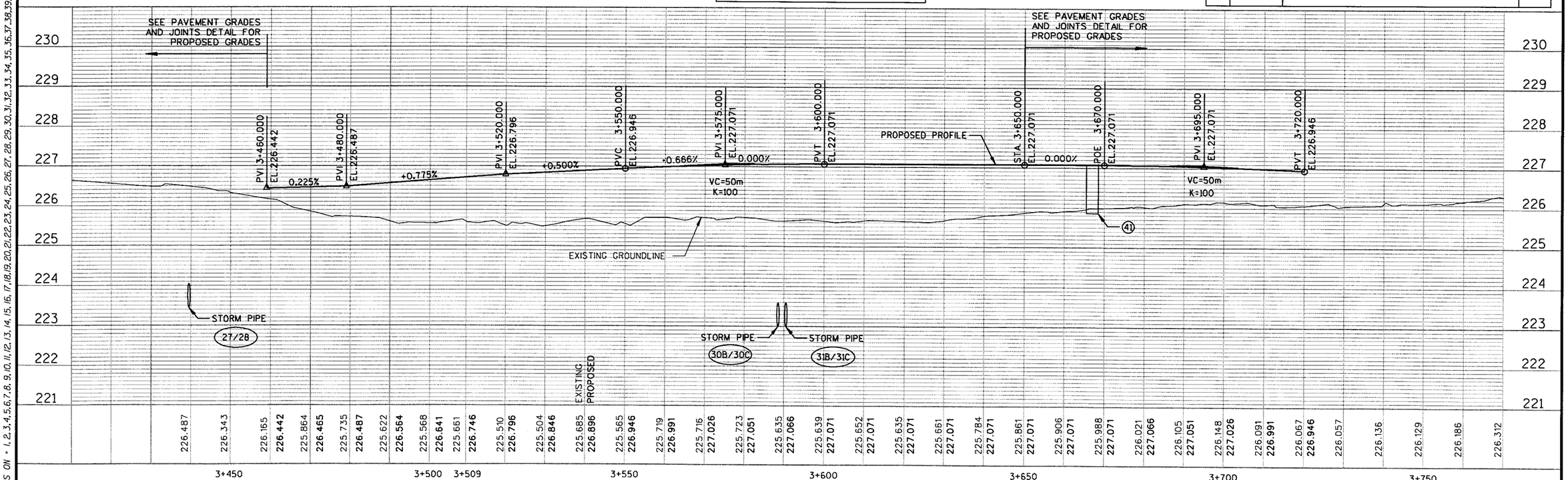
℄ LINE "L"

(1) 380mm REINFORCED CONCRETE PAVEMENT BEFORE & AFTER STATIC SCALE (SEE STATIC SCALE DETAILS) STA. 3+613.900"F"-3+652.000"F".

NOTE: REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "F" (STATIC SCALE)	SHEET NO: 310	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP13.DGN
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
12-12-01

STA 2+838.933"E"=
STA. 3+839.742"F"

ASPHALTIC CONCRETE PAVEMENT, E-0.3 (TYP.)

275mm NONREINFORCED CONCRETE PAVEMENT, DOWELED

℄ LINE "E"

2+800"E"

1.5m

CURVE 9

3+800"F"

900mm

℄ LINE "F"

4+800"G"

℄ LINE "G"

MATCHLINE 3+770

6+800"I"

℄ LINE "I"

PB12A

PB14

AP1

PB15

PT

CB1

MH1

STRUCTURE B-30-30

1A

1B

PB15A

PB16

℄ LINE "A"

CTH "M"

T.L.E.

900mm

300mm

13A

2+900"E"

4+900"G"

12+100"K"

4.5m

2.4m

600mm

13B

12+200"K"

12+300"K"

120TH AVENUE

R/W

SIGN

R/W

SIGN

SIGN

R/W

KEN SHAFER

SLOPE INTERCEPT (TYP.)

NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

230
229
228
227
226
225
224
223
222
221

SEE PAVEMENT GRADES AND JOINTS DETAIL FOR PROPOSED GRADES

EXISTING GROUNDLINE

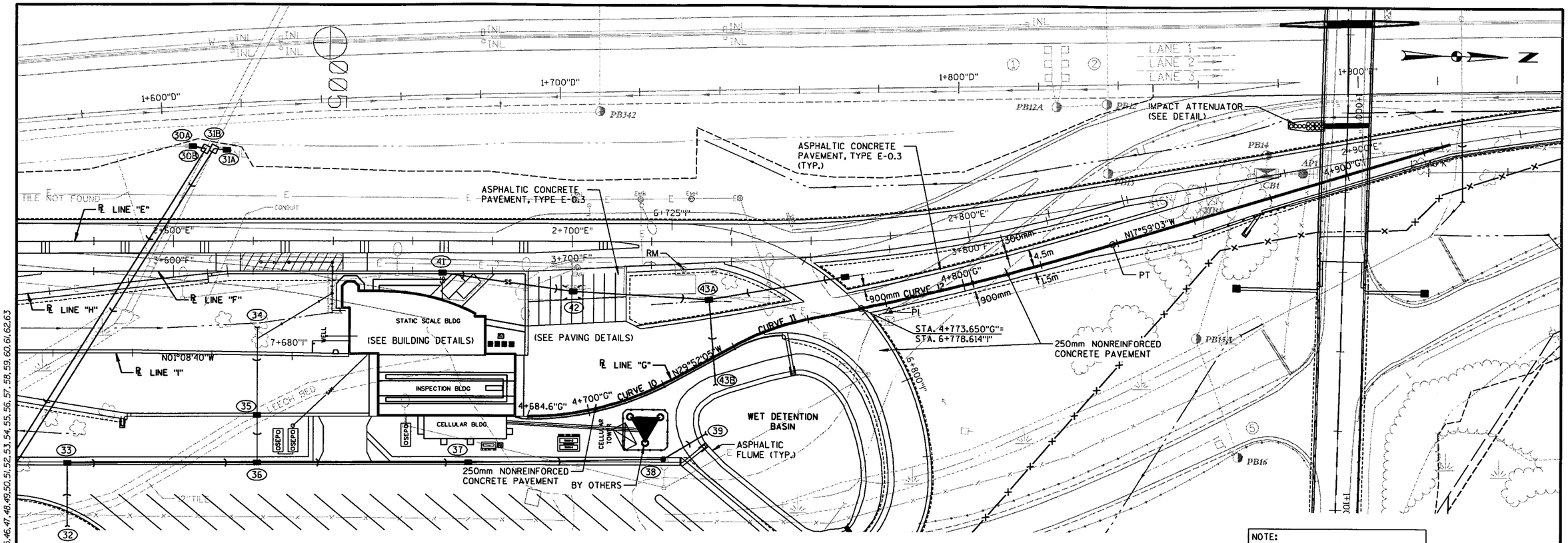
EXISTING
PROPOSED

226.186
226.312
226.395
226.426
226.371
226.335
225.885
225.724
226.027

3+800
3+840

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "F" (STATIC SCALE)	SHEET NO: 311	M

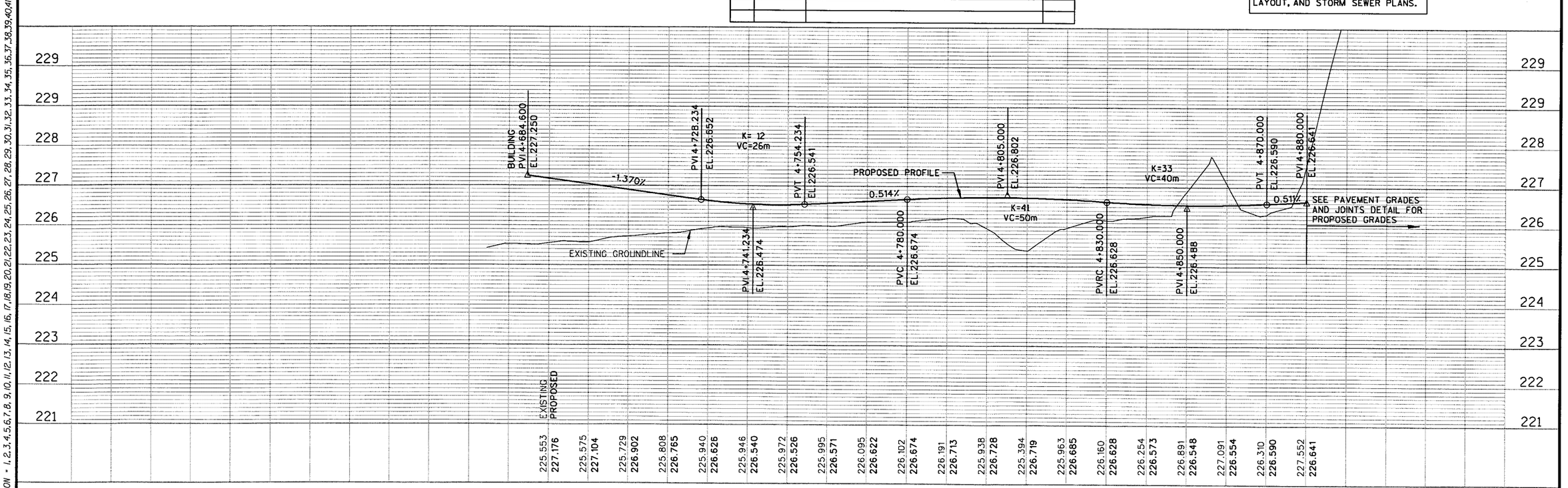
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP14.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



BENCHMARKS

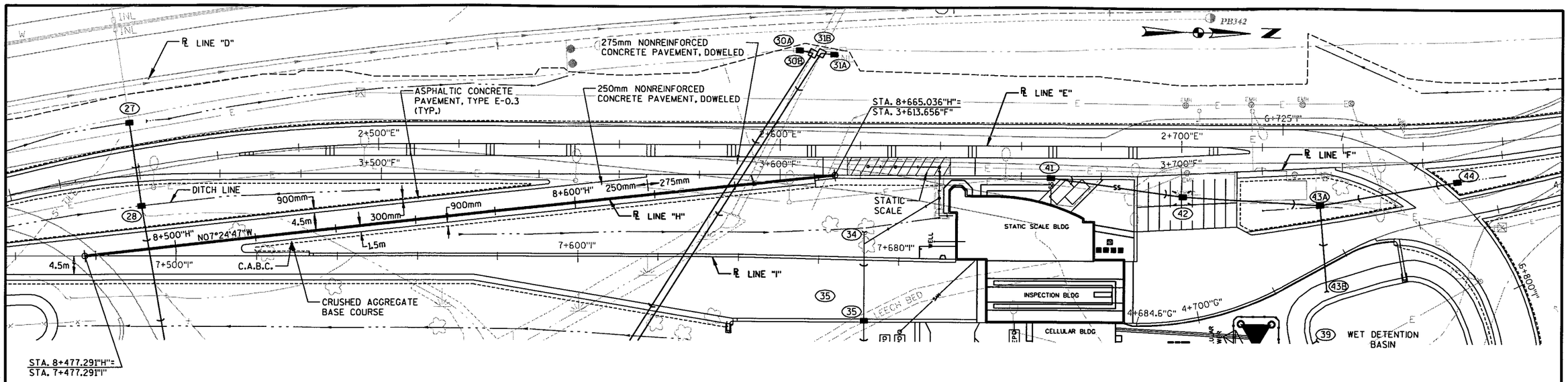
NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "G" (INSPECTION BUILDING LANE)	SHEET NO: 312	M

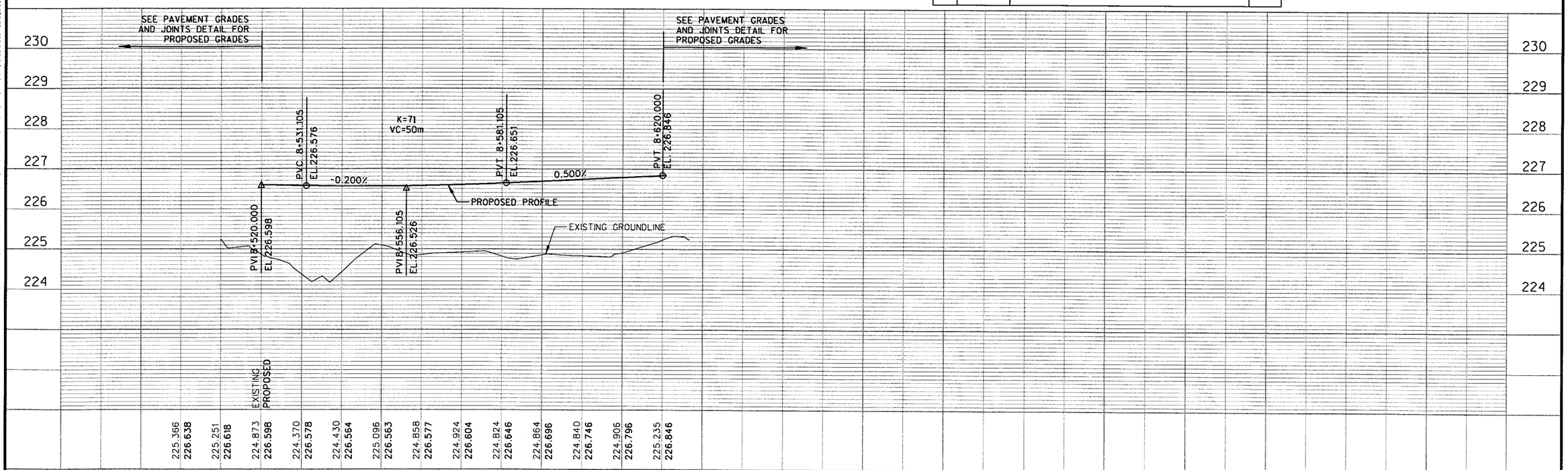
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP15.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "H" (RE-WEIGH)	SHEET NO: 313	M

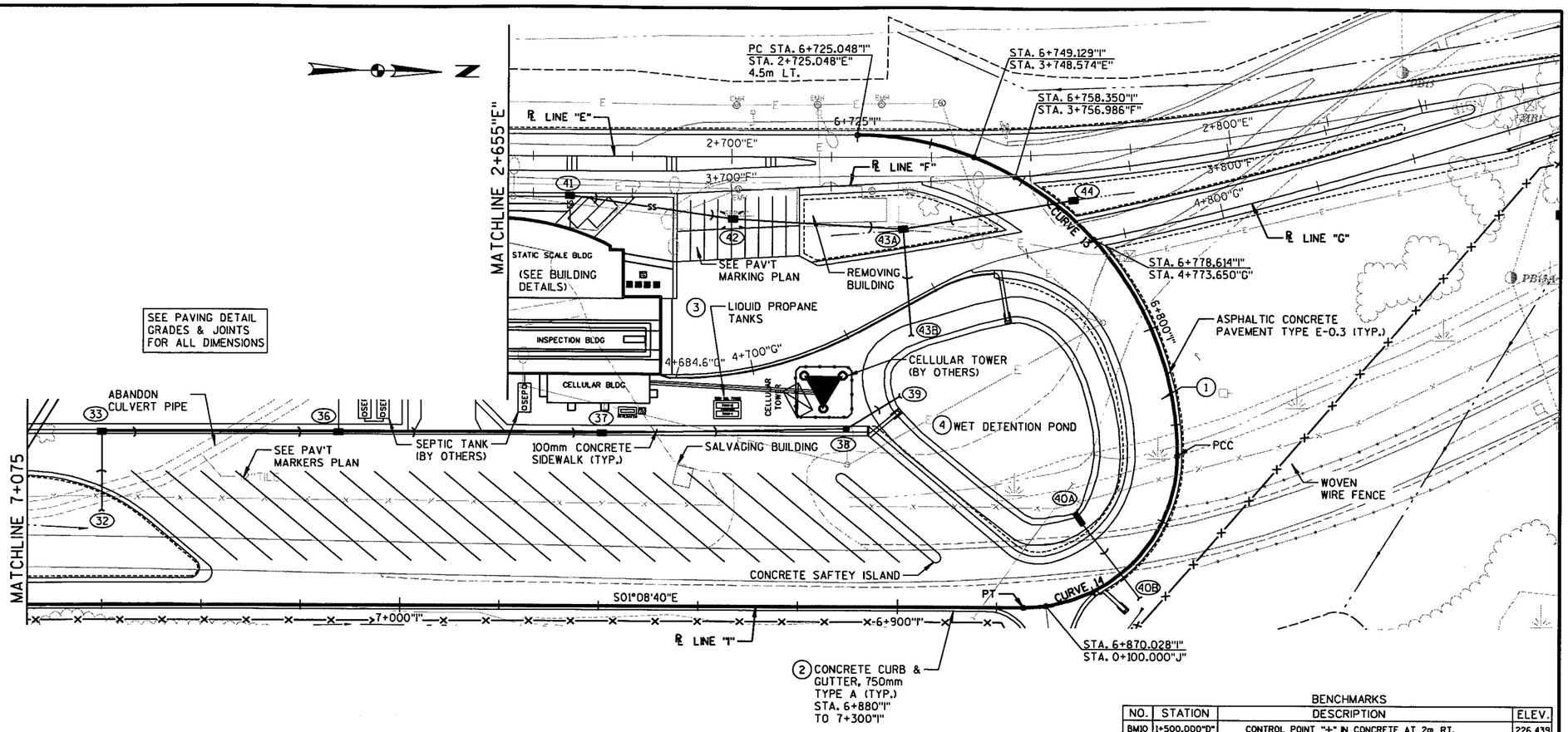
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP17.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

1. ALL PAVEMENT EAST OF ℄ LINE "F" IS 250mm NONREINFORCED CONCRETE PAVEMENT DOWELED.
2. REFER TO PAVING PLAN FOR AREAS WHERE C&G IS REJECT FOR DRAINAGE.
3. CONTRACTOR RESPONSIBLE FOR CONCRETE PAV'T SLAB BENEATH TANKS.
4. SEE CONSTRUCTION DETAILS & STORM SEWER PLAN & PROFILES, AND CONTOUR GRADING PLAN FOR MORE INFORMATION.

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

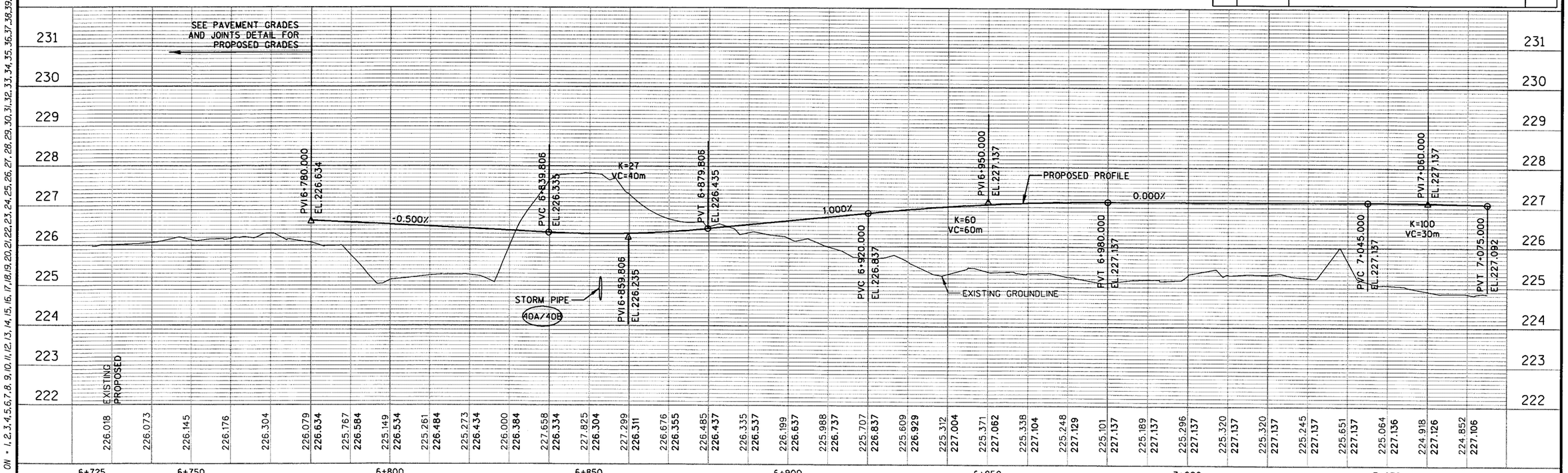
FOR MISC. DRAINAGE STRUCTURES & UNDERGROUND PIPES REFER TO CROSS SECTIONS & STORM SEWER PLAN & PROFILES.

SEE SITE PLAN IN BUILDING PLANS FOR MISCELLANEOUS ITEMS AROUND BUILDING.



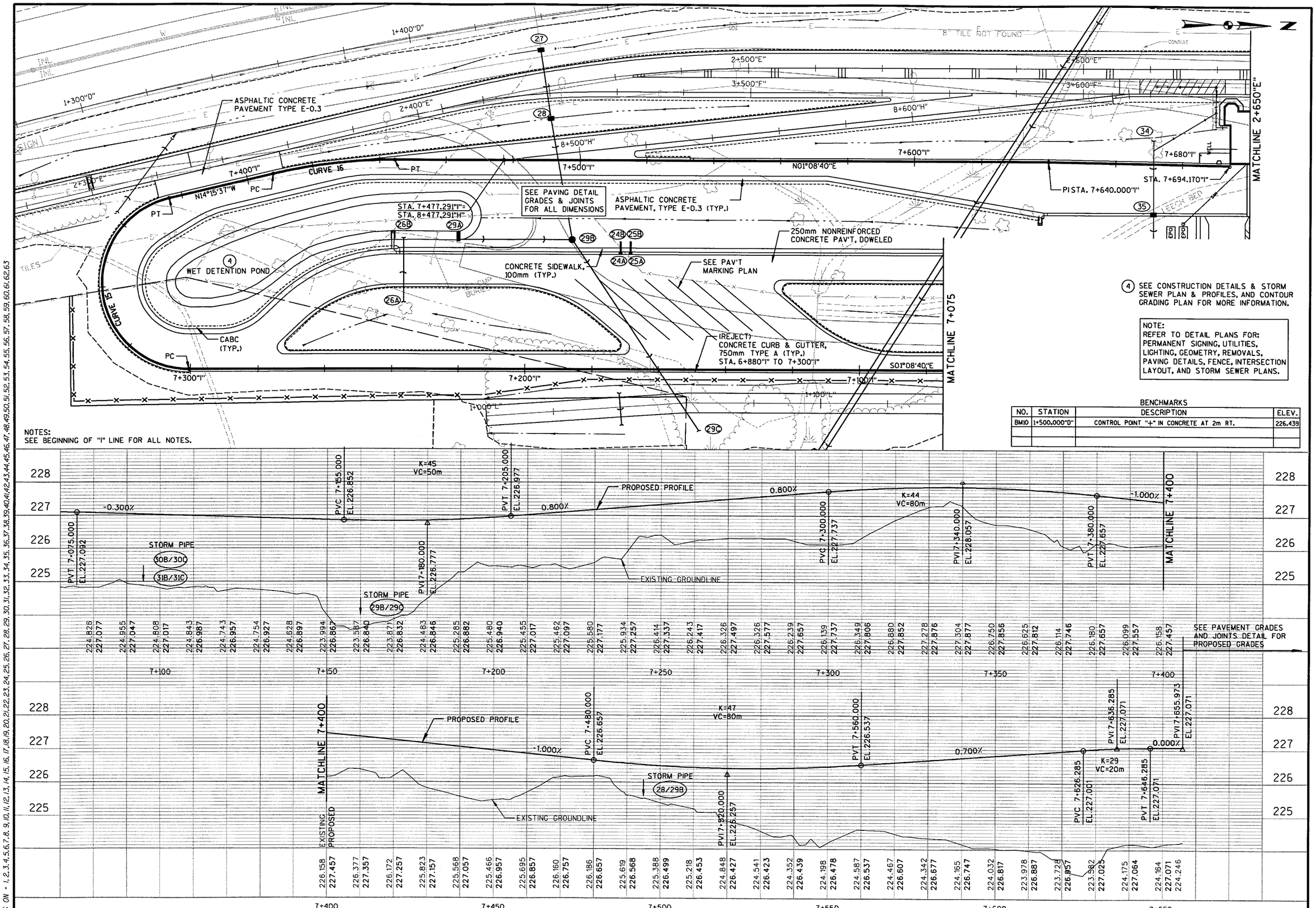
BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439



STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "I" (RING ROAD)	SHEET NO: 314	M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP19-B.DGN 12-12-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

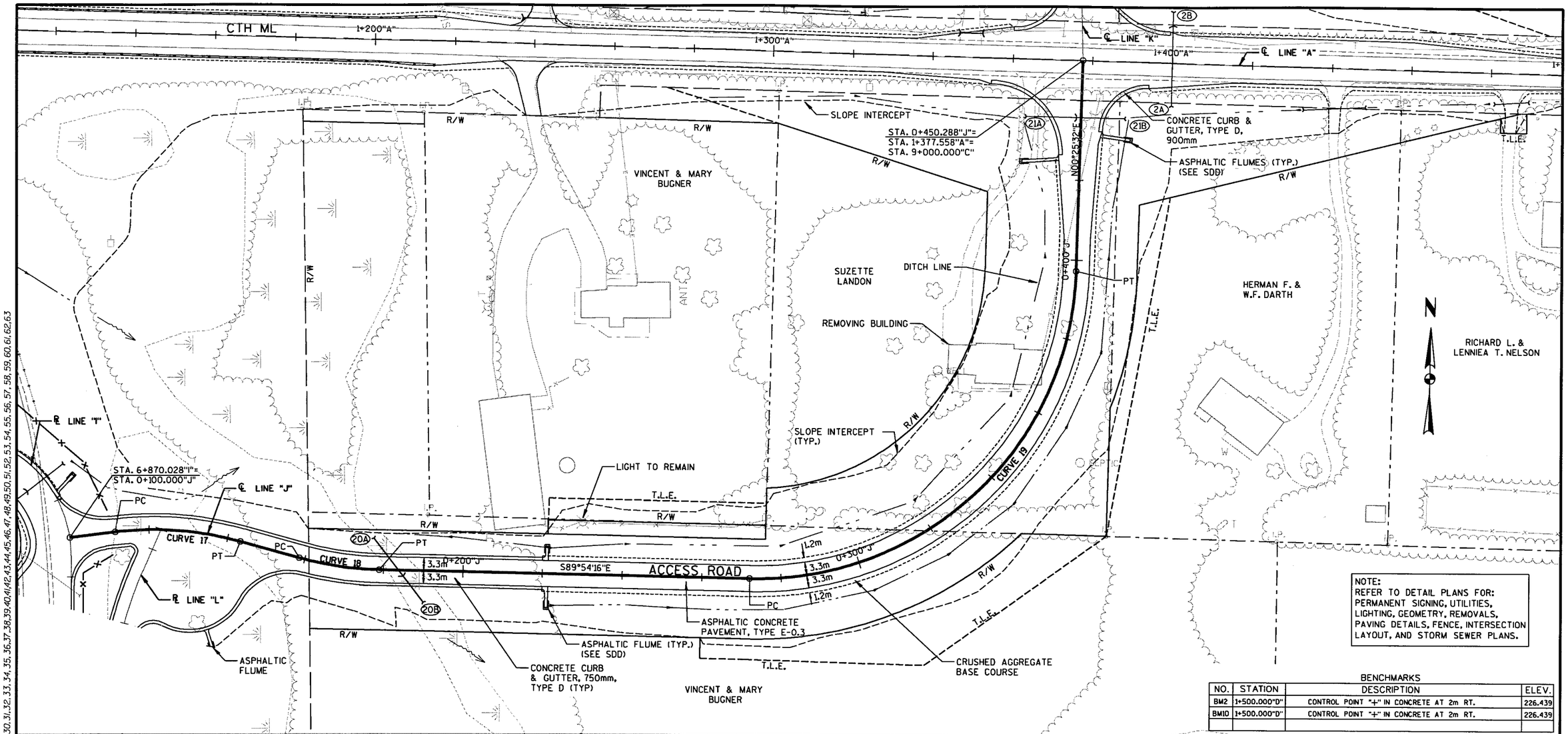


BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "I" (RING ROAD)	SHEET NO: 315	M

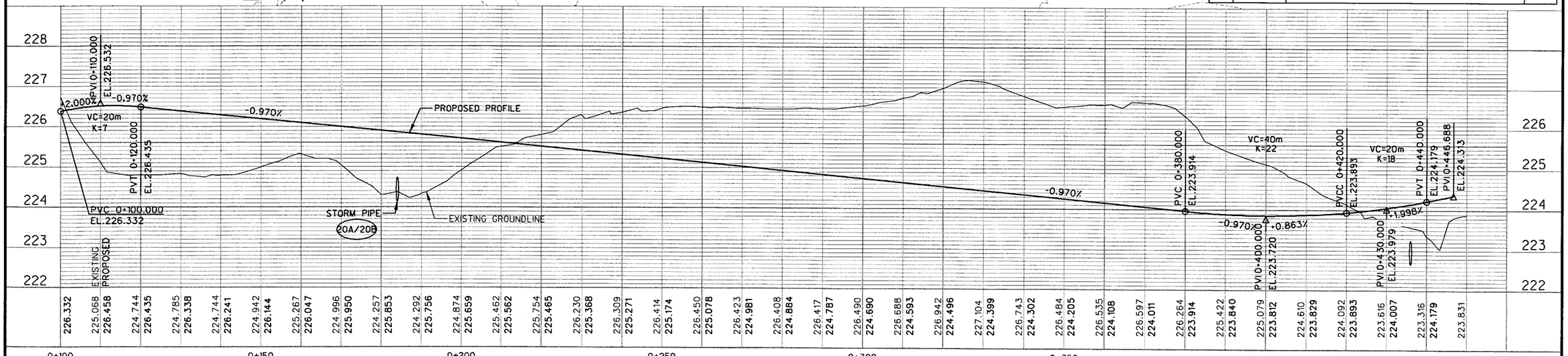
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP19.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM2	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439



STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "J" (S&W ACCESS ROAD)	SHEET NO: 316 M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP21.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

IH-94, SB

IH-94, NB

SIGN

LANE 1
LANE 2
LANE 3

1+900"D"
2+000"D"
2+100"D"
℄ LINE "D"
3+000"E"
3+100"E"
2+900"E"
2+900"G"
12+200"K"
12+300"K"
12+400"K"
120TH AVENUE
1.2m
3.3m
3.3m
1.2m

13A
13B
10A
10B
1A
1B

℄ LINE "E"
CRUSHED AGGREGATE BSE COURSE MATCH 17.0m
CRUSHED AGGREGATE BASE COURSE (TYP.)
STA. 12+280"K" CRUSHED AGGREGATE BASE COURSE MATCH 10.0m RT.
BM #8
℄ LINE "K"
WOVEN WIRE FENCE
R/W
T.L.E.

BEGIN CONSTRUCTION
I.D. 1032-05-76
STA. 12+186.733
EL. 227.012

RELOCATED INTERSECTION
ASPHALTIC CONCRETE PAVEMENT, TYPE E-0.3
SEE INTERSECTION DETAILS
MOTEL
HOUSE
GARAGE

NOTE:
REFER TO DETAIL PLANS FOR: PERMANENT SIGNING, UTILITIES, LIGHTING, GEOMETRY, REMOVALS, PAVING DETAILS, FENCE, INTERSECTION LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM8	12+320.000"K"	PK NAIL IN ℄	225.918

END CONSTRUCTION
I.D. 1032-05-76
STA. 12+300.000
MATCH EXISTING SAWING EXISTING PAVEMENT

PVI 12+186.733
EL. 227.154
-0.850%
EXISTING GROUNDLINE
PROPOSED PROFILE
-0.850%
PVI 12+300.000
EL. 226.049

	EXISTING	PROPOSED
12+140	226.987	
12+150	226.144	
	226.224	
	226.336	
	226.538	227.069
12+200	227.135	226.984
	227.603	226.899
	227.911	226.814
	228.025	226.729
12+250	227.702	226.644
	227.308	226.559
	226.944	226.474
	226.646	226.389
	226.459	226.304
	226.264	226.219
12+300	226.145	226.134
	226.049	226.049
	226.004	
	225.927	

231 230 229 228 227 226 225 224 223

STATE PROJECT NO: 1032-05-76 | SCALE: 1:1000 | HWY: CTH ML | COUNTY: KENOSHA | PLAN AND PROFILE - LINE "K" (120th AVE.) | SHEET NO: 317 | M

FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP29.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES,
LIGHTING, GEOMETRY, REMOVALS,
PAVING DETAILS, FENCE, INTERSECTION
LAYOUT, AND STORM SEWER PLANS.

R21E
T1N
S13
S14
S18
S19
R22E
T1N

WOVEN WIRE FENCE

℄ LINE "E"

EAST FRONTAGE ROAD

℄ LINE "C"

ASPHALTIC CONCRETE
PAVEMENT, TYPE E-0.3

CRUSHED AGGREGATE
BASE COURSE (TYP.)

2+700"E"

3+700"E"

PI

PT

10+000"C"

T.L.E.

N45°49'98"E

CURVE 20

12+900"K"

℄ LINE "K"

STA. 13+000.000"K"=
STA. 9+988.367"C"

℄ LINE "D"

IH-94, SB

IH-94, NB

2+600"D"

3+600"E"

1.2m

3.3m

3.3m

1.2m

PC

R/W

SLOPE INTERCEPT (TYP.)

N02°12'16"W

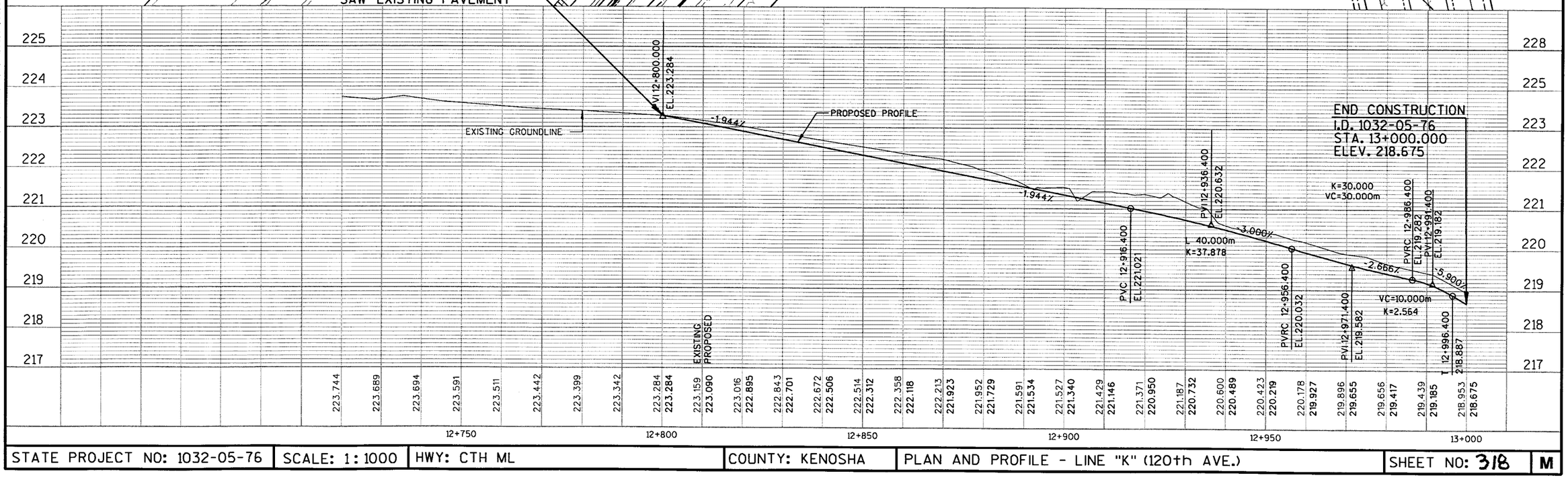
120TH AVENUE

END CONSTRUCTION
I.D. 1032-05-76
STA. 13+000.000
ELEV. 218.675

BEGIN CONSTRUCTION
I.D. 1032-05-76
STA. 12+800.000
ELEV. 223.284
MATCH EXISTING
SAW EXISTING PAVEMENT

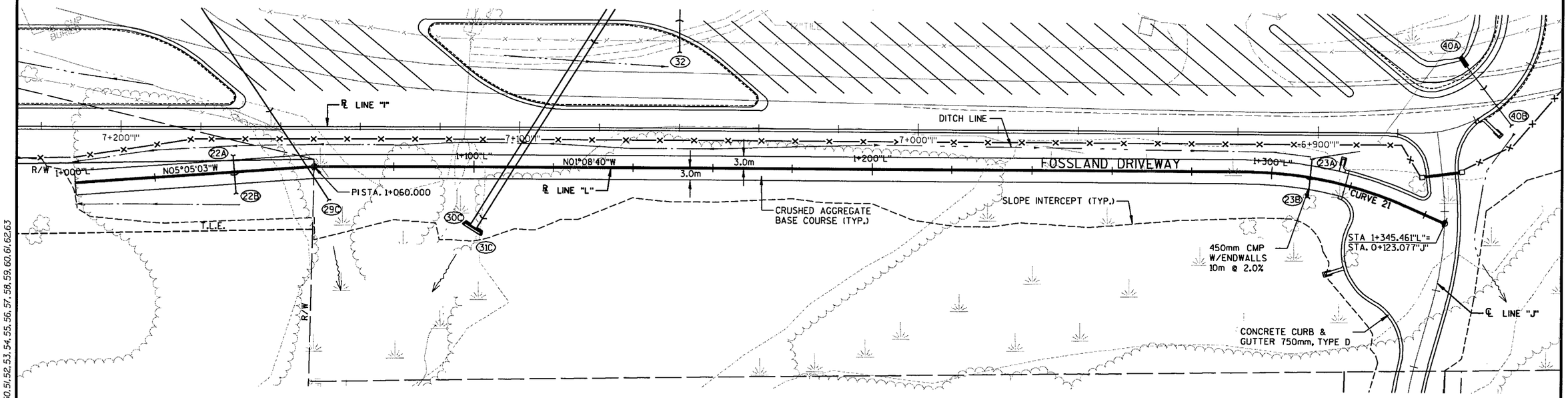
BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM6	12+780.000"K"	PK NAIL	223.449



STATE PROJECT NO: 1032-05-76	SCALE: 1:1000	HWY: CTH ML	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "K" (120th AVE.)	SHEET NO: 318	M

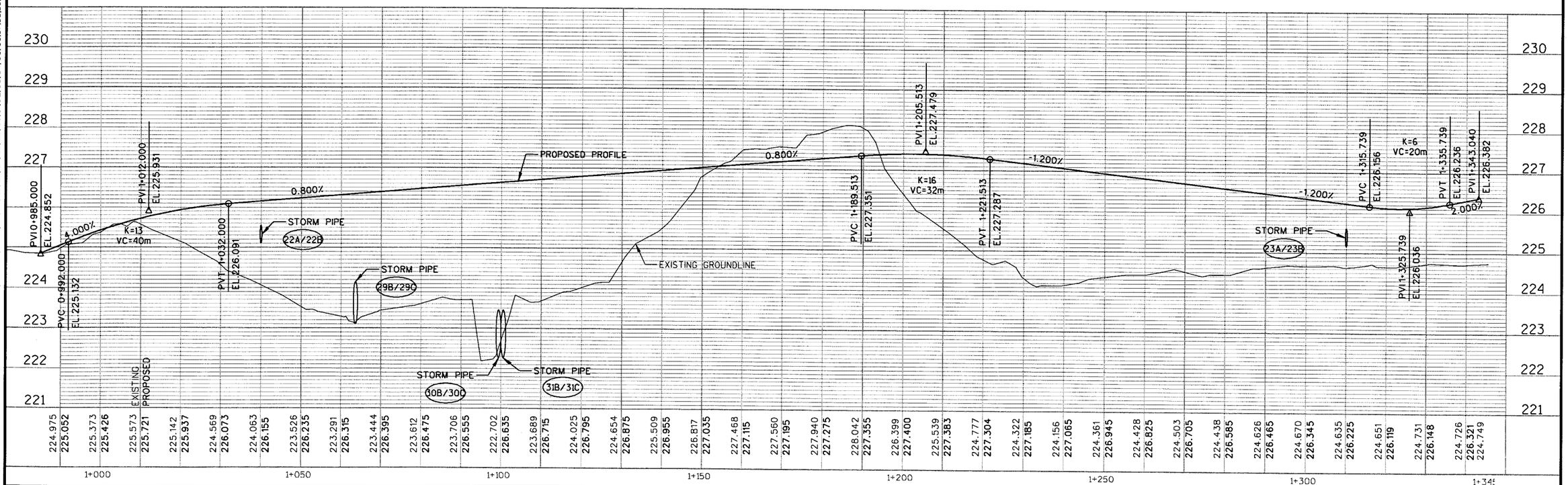
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP28.DGN 12-12-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOTE:
REFER TO DETAIL PLANS FOR:
PERMANENT SIGNING, UTILITIES,
LIGHTING, GEOMETRY, REMOVALS,
PAVING DETAILS, FENCE, INTERSECTION
LAYOUT, AND STORM SEWER PLANS.

BENCHMARKS

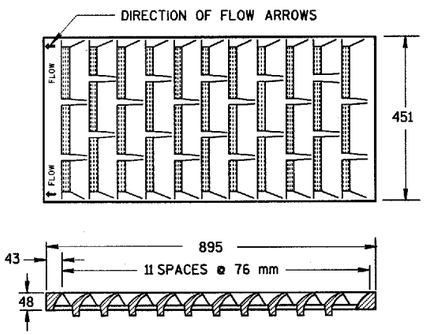
NO.	STATION	DESCRIPTION	ELEV.
BM10	1+500.000"D"	CONTROL POINT "+" IN CONCRETE AT 2m RT.	226.439

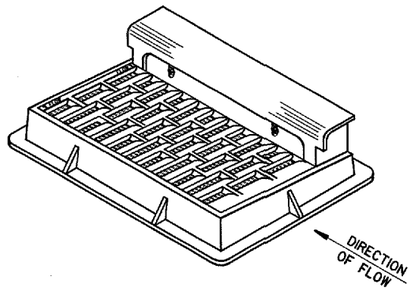


STATE PROJECT NO: 1032-08-70	SCALE: 1:1000	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	PLAN AND PROFILE - LINE "L" (FOSSLAND DRIVEWAY)	SHEET NO: 319	M

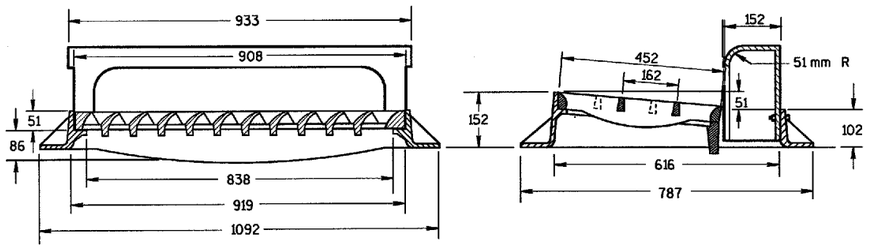
FILE NAME: PROJECTS/2940/PLANS/PLANP/2940PP30.DGN 12-12-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

NOTE:
GRATE IS REVERSIBLE.





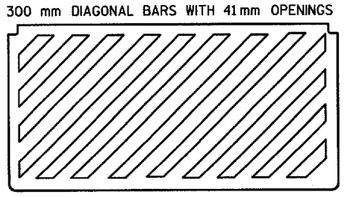
NOTE: CURB BOX HEIGHT ADJUSTABLE 150 mm TO 230 mm



TYPE "H"

(APPROXIMATE WEIGHT 191 kg)
FRAME..... 79 kg
GRATE..... 63 kg
CURB BOX..... 49 kg

300 mm DIAGONAL BARS WITH 41 mm OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 895 mm X 451 mm X 51 mm)
(APPROXIMATE WEIGHT 78 kg)

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

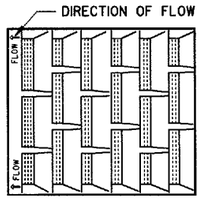
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

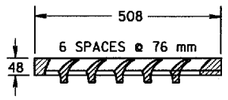
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

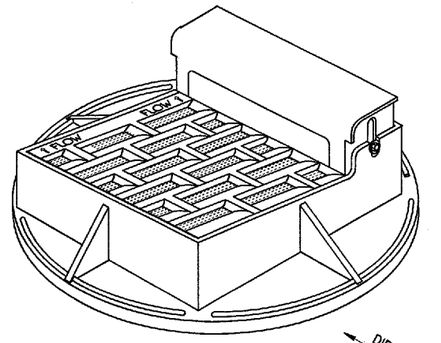
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.

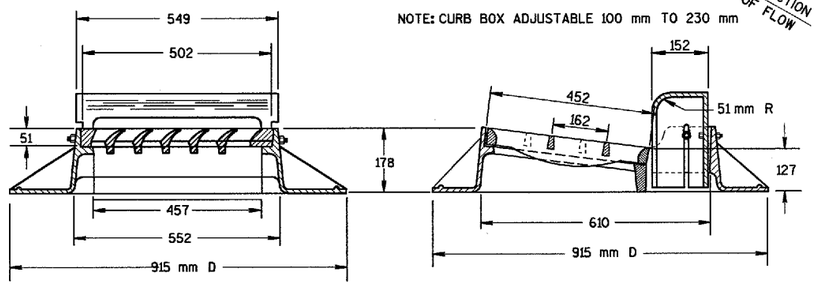






NOTE: CURB BOX ADJUSTABLE 100 mm TO 230 mm

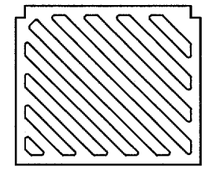
NOTE:
GRATE IS REVERSIBLE.



TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

30 mm DIAGONAL BARS WITH 30 mm OPENINGS



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 502 mm X 432 mm X 51 mm
GRATE..... 38 kg
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

NOTE:
GRATE IS REVERSIBLE.

INLET COVERS
TYPE A, H, A-S, & H-S

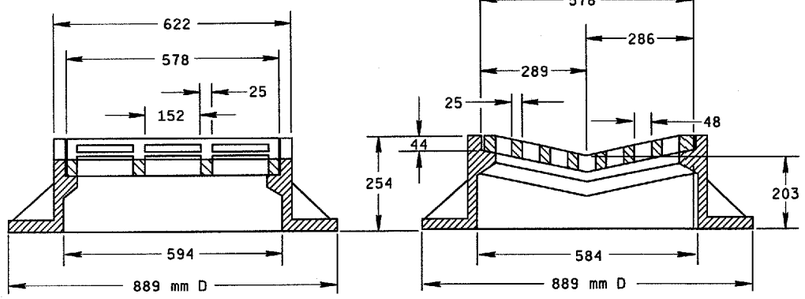
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

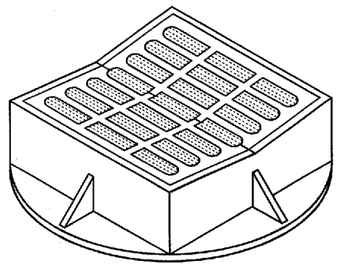
APPROVED 03/06/00
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 8 A 5-17a

S.D.D. 8 A 5-17a

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:

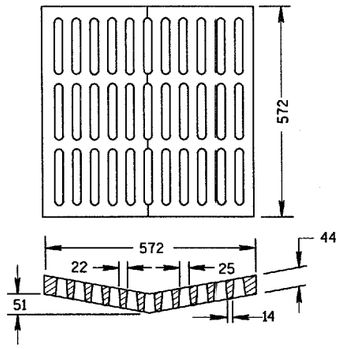




TYPE "B"

(APPROXIMATE WEIGHT 179 kg)

FRAME..... 129 kg
GRATE..... 50 kg

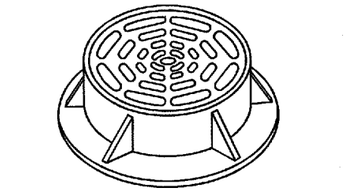


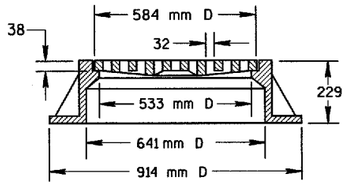
ALTERNATIVE GRATE FOR FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 57 kg)
GRATE.....57 kg

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE





TYPE "C"

(APPROXIMATE WEIGHT 154 kg)

FRAME..... 107 kg
GRATE..... 48 kg

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

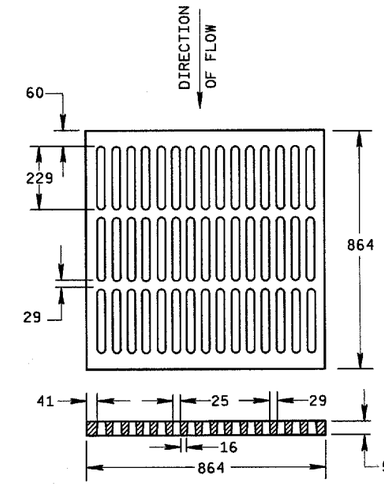
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTES

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

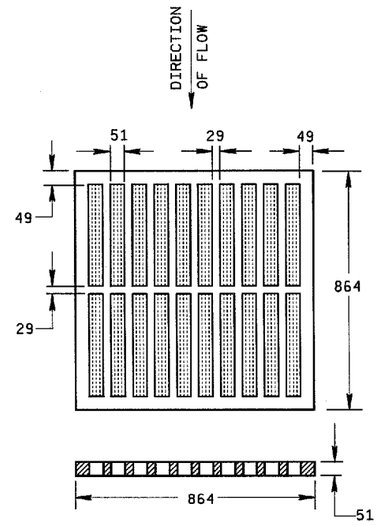


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 166 kg)
GRATE.....166 kg

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

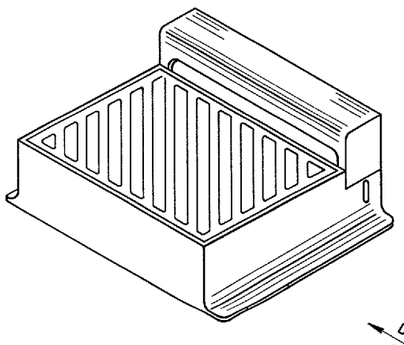


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 122 kg)
GRATE.....122 kg

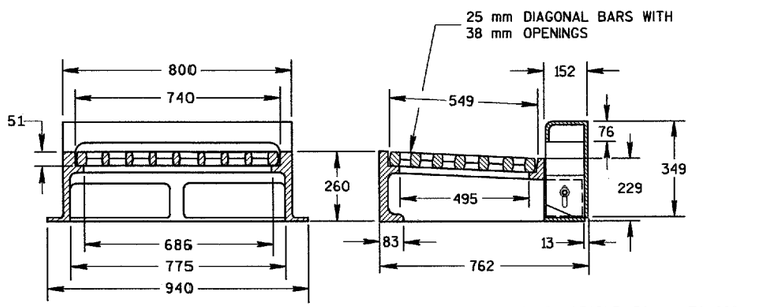
USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 152 mm TO 229 mm

TYPE "WM"

(APPROXIMATE WEIGHT 304 kg)

FRAME..... 163 kg
GRATE..... 73 kg
CURB BOX..... 68 kg

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 09/06/00
DATE

Tony L. Thurmer
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

S.D.D. 8 A 5-17b

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:

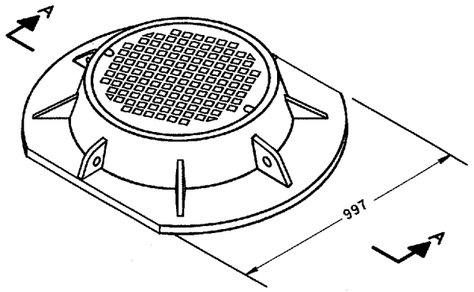
S.D.D. 8 A 5-17b

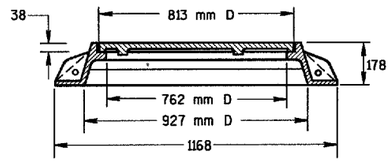
PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:



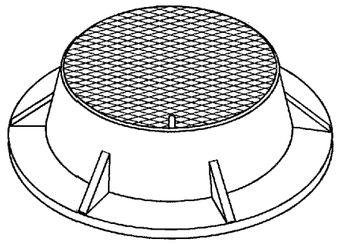


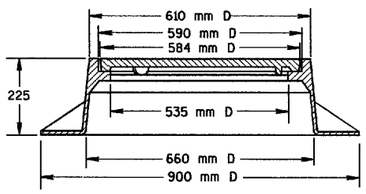
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 188 kg)

FRAME.....95 kg
LID.....93 kg

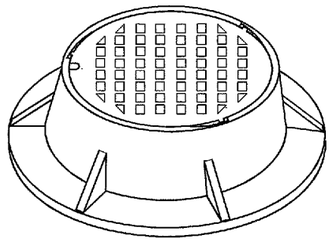


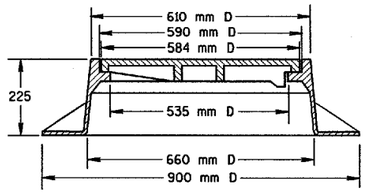


TYPE "J"

(APPROXIMATE WEIGHT 113 kg)

FRAME.....61 kg
LID.....52 kg





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 111 kg)

FRAME.....66 kg
LID.....45 kg

(NOTED AS TYPE J-S ON DRAINAGE TABLE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

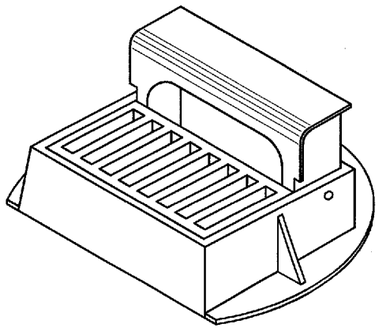
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

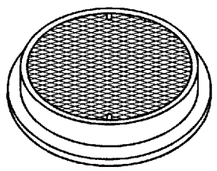
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

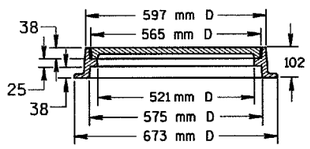
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



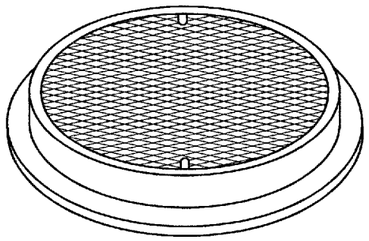


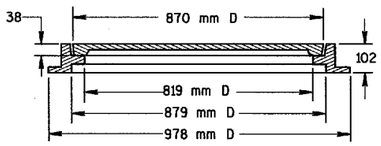


TYPE "L"

(APPROXIMATE WEIGHT 66 kg)

FRAME.....34 kg
LID.....32 kg



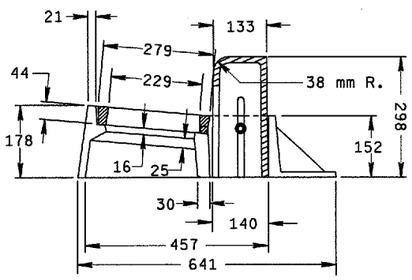


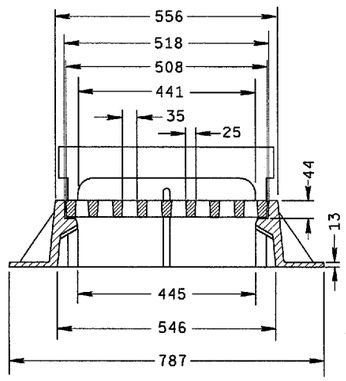
TYPE "M"

(APPROXIMATE WEIGHT 175 kg)

FRAME.....57 kg
LID.....118 kg

CURB BOX ADJUSTABLE 102 mm TO 254 mm





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 155 kg)

FRAME.....90 kg
GRATE.....23 kg
CURB BOX.....42 kg

INLET COVER, TYPE Z
MANHOLE COVERS, TYPE
K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 03/06/00
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

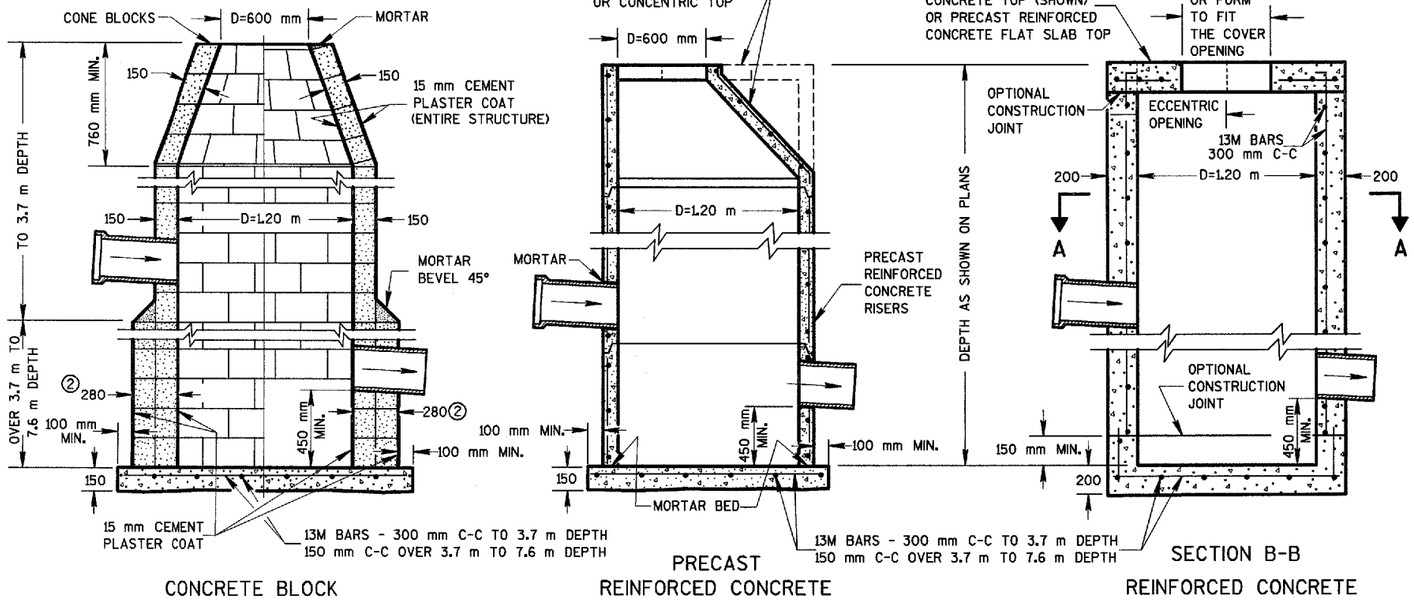
FHWA

M

S.D.D. 8 A 5-17d

S.D.D. 8 A 5-17d

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

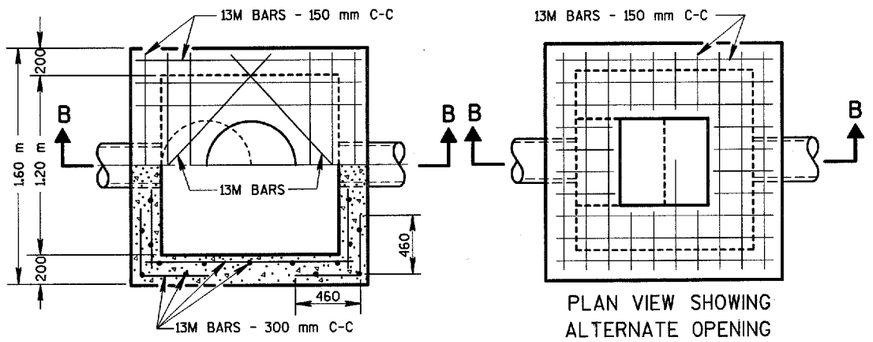


CONCRETE BLOCK

PRECAST REINFORCED CONCRETE

SECTION B-B REINFORCED CONCRETE

CATCH BASINS, TYPE 1



HALF SECTION A-A

PLAN VIEW SHOWING ALTERNATE OPENING

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 1.5 m OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 1.5 m IN DEPTH: 405 mm C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 100 mm FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 250 mm AND A MINIMUM WALL EMBEDMENT OF 75 mm. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 25 mm.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 3600 N AND A HORIZONTAL LOAD OF 1800 N.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199M.

THE "PRECAST REINFORCED CONCRETE FLAT SLAB TOP" OPTION IS REQUIRED ON CATCH BASINS, TYPE 1 WHEN 600 mm X 900 mm OPENING INLET COVERS ARE REQUIRED.

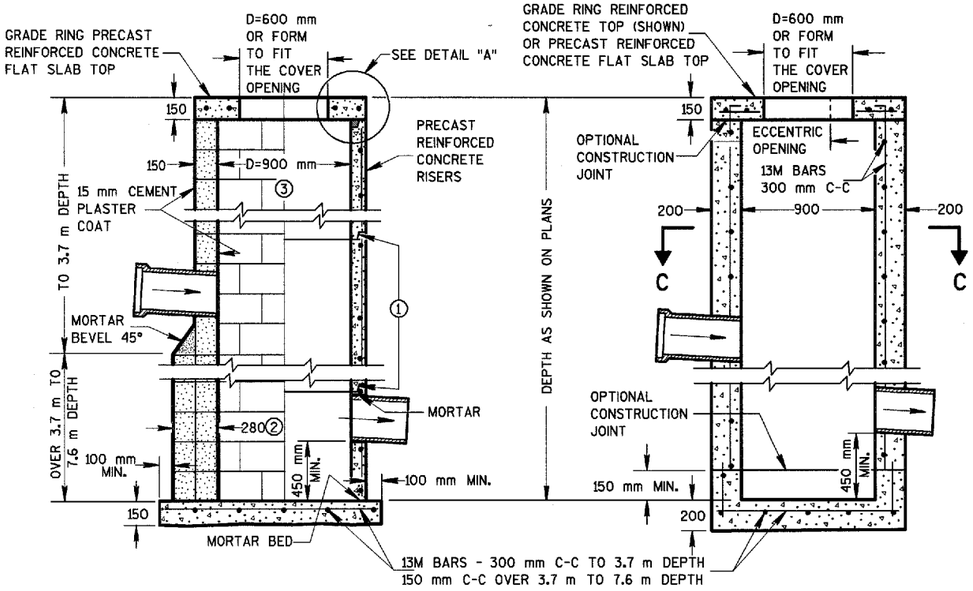
① PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH THE TONGUE DOWN WHEN GRADE RINGS ARE USED FOR THE SLAB TOP.

② 2 COURSES 140 mm BLOCK.

③ WHEN THE CONNECTING PIPES ARE 600 mm OR LARGER THE PRECAST CATCH BASIN MAY BE INCREASED TO 1.05 m.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

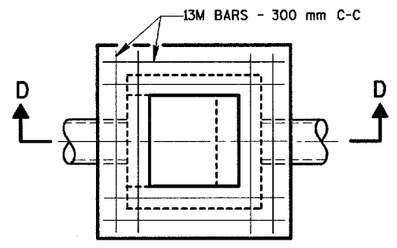


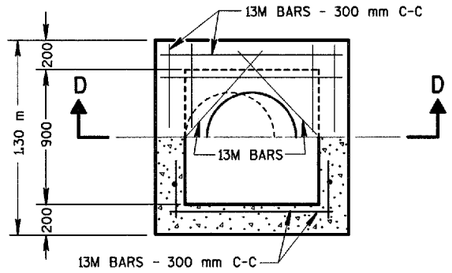
CONCRETE BLOCK

PRECAST REINFORCED CONCRETE

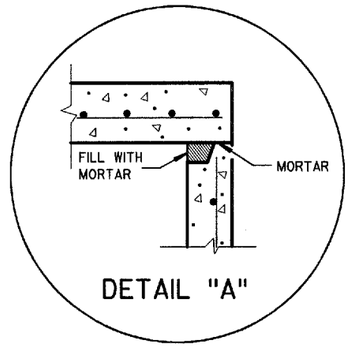
SECTION D-D REINFORCED CONCRETE

CATCH BASINS, TYPE 2





HALF SECTION C-C



DETAIL "A"

CATCH BASINS TYPE 1 & 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 06/09/99 DATE

Roy L. Hanson
CHIEF ROADWAY DEVELOPMENT ENGINEER

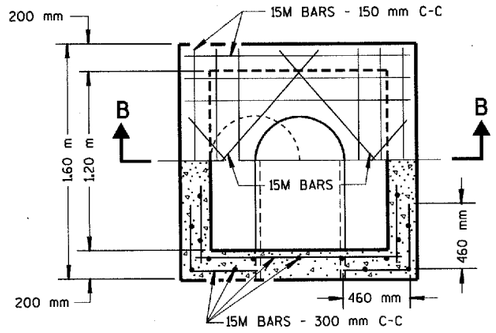
FHWA

M

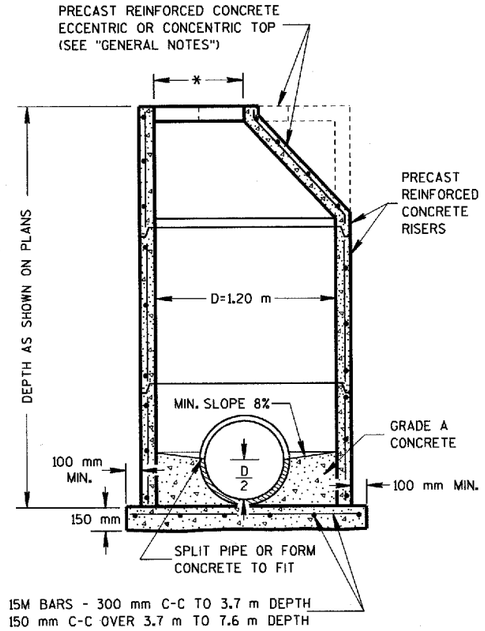
S.D.D. 8 A 6-4

FILE NAME:

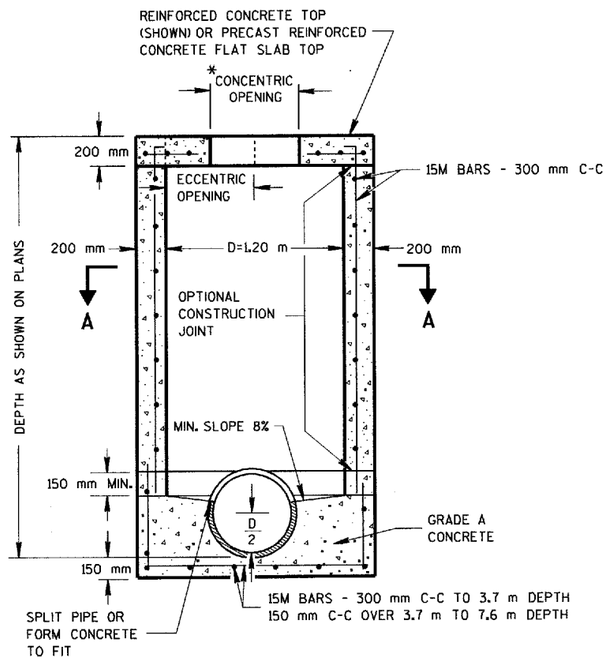
S.D.D. 8 A 6-4



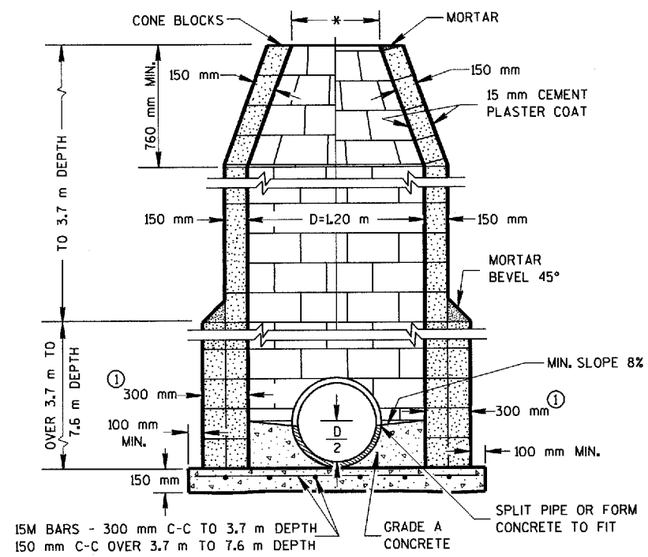
HALF SECTION A-A



PRECAST REINFORCED CONCRETE



SECTION B-B
REINFORCED CONCRETE



CONCRETE BLOCK

MANHOLES TYPE 1

GENERAL NOTES

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ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 1.5 m OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 1.5 m IN DEPTH: 400 mm C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 100 mm FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 250 mm; MINIMUM WALL EMBEDMENT OF 75 mm; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 136 kg FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 25 mm.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 19 mm. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199M.

* USE 600 mm DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 900 mm DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 150 mm BLOCK.

MANHOLES TYPE 1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 02/07/85 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

M

S.D.D. 8 B 6-3

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

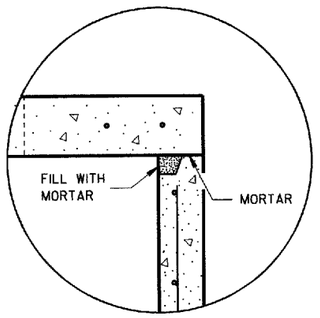
PLOT SCALE:

PLOT NAME:

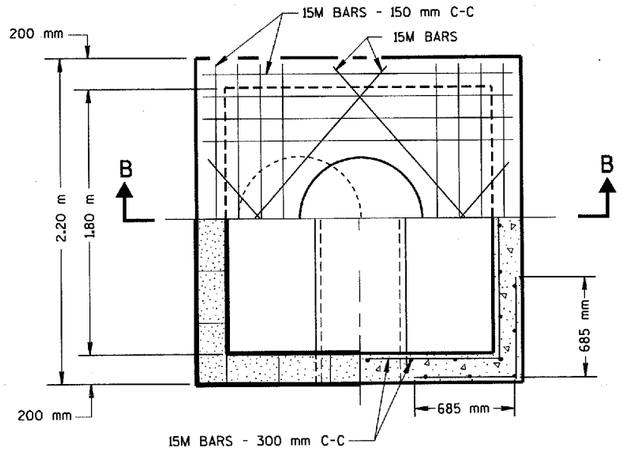
REV. DATE:

ORIGINATOR:

LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,5051,52,53,54,55,56,57,58,59,60,61,62,63



DETAIL "A"



HALF SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 1.5 m IN DEPTH: 400 mm C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 100 mm FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 150 mm; MINIMUM WALL EMBEDMENT OF 75 mm; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 136 kg FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 25 mm.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 19 mm. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

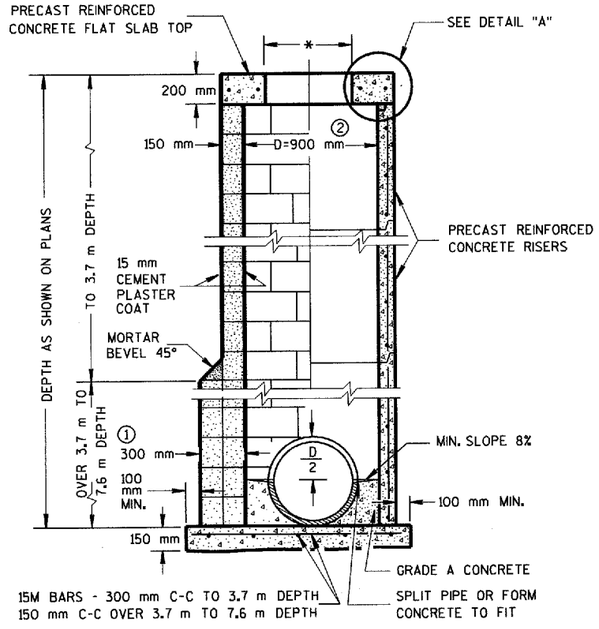
PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199M.

* USE 600 mm DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 900 mm DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 150 mm BLOCK.

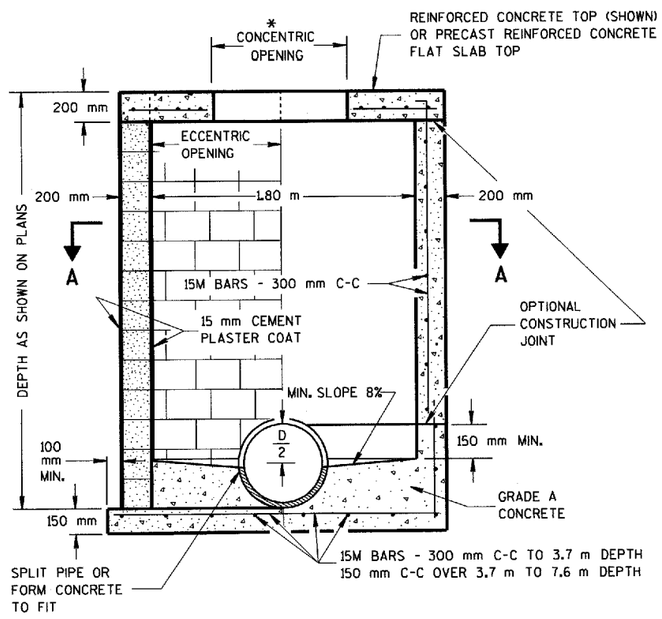
② WHEN CONNECTING PIPES ARE 600 mm OR LARGER THE PRECAST MANHOLES MAY BE INCREASED TO 1.07 m DIAMETER.



CONCRETE BLOCK

② PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2

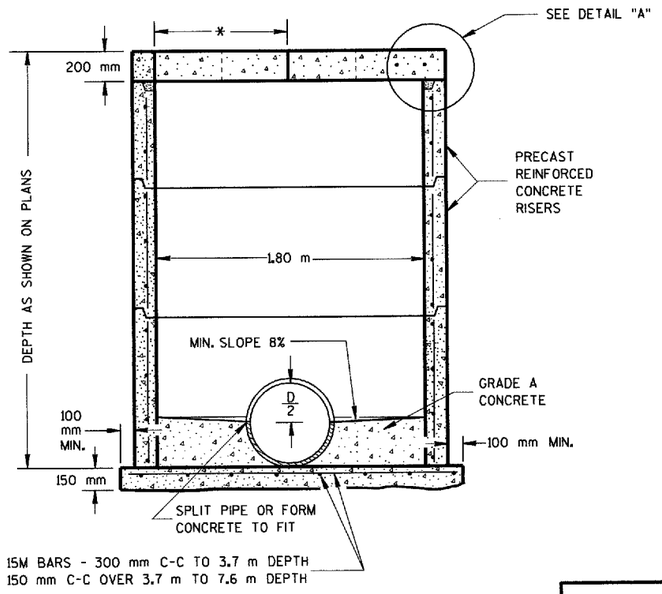


SECTION B-B

CONCRETE BLOCK

REINFORCED CONCRETE

MANHOLES TYPE 3



PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2 & 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 01/27/95 DATE
FHWA

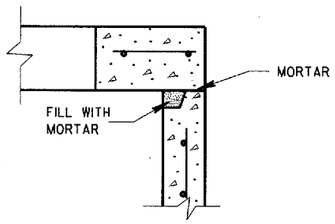
Rory L. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER

M

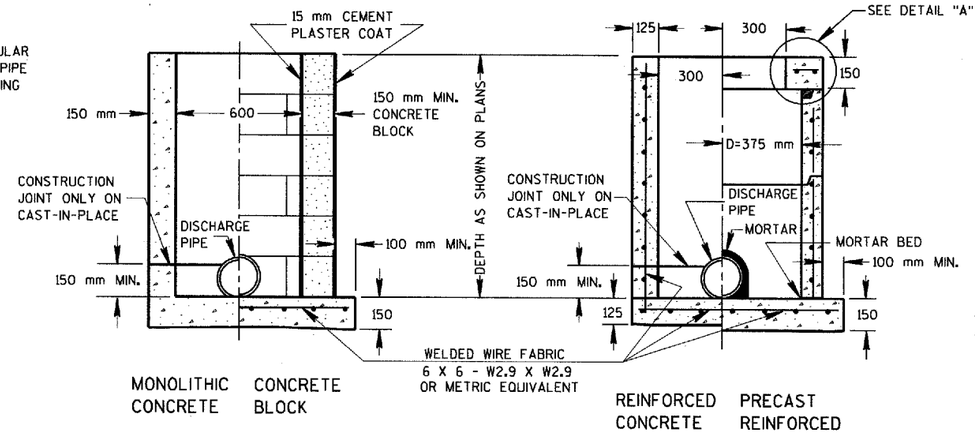
S.D.D. 8 B 7-3

S.D.D. 8 B 7-3

*SELECTION OF SQUARE OR CIRCULAR DESIGN WILL BE BASED ON THE PIPE SIZES AND THE INLET COVER BEING UTILIZED



DETAIL "A"



INLETS TYPE 1

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION 199 M.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

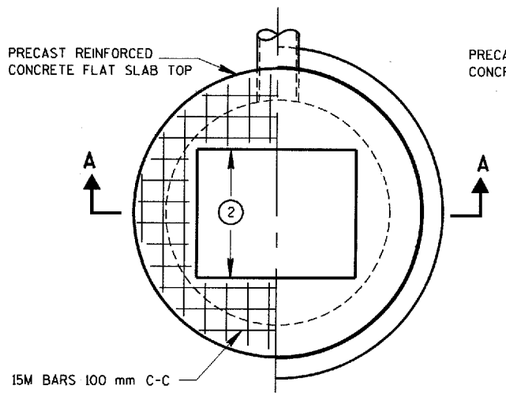
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

(1) USE 760 mm OPENING FOR TYPE 2 INLETS, 915 mm OPENING FOR TYPE 3 INLETS, AND 890 mm TYPE 4 INLETS.

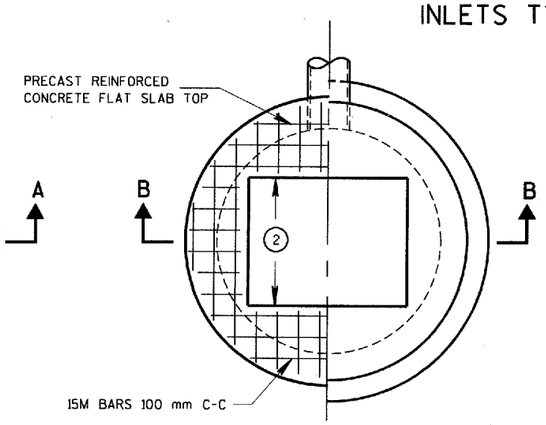
(2) USE 610 mm OPENING FOR TYPE 1, 2 & 3 INLETS, 775 mm OPENING FOR TYPE 4 INLETS.

NOTE

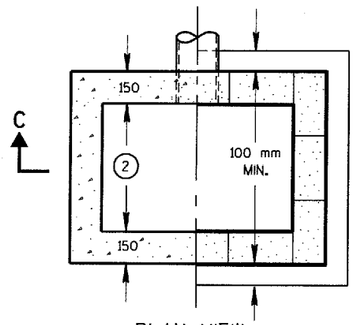
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



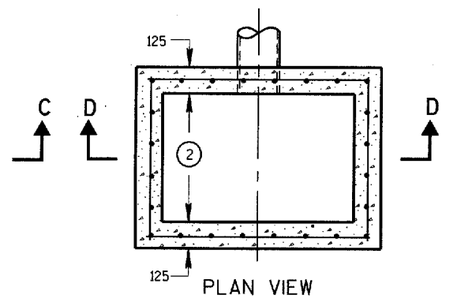
PLAN VIEW



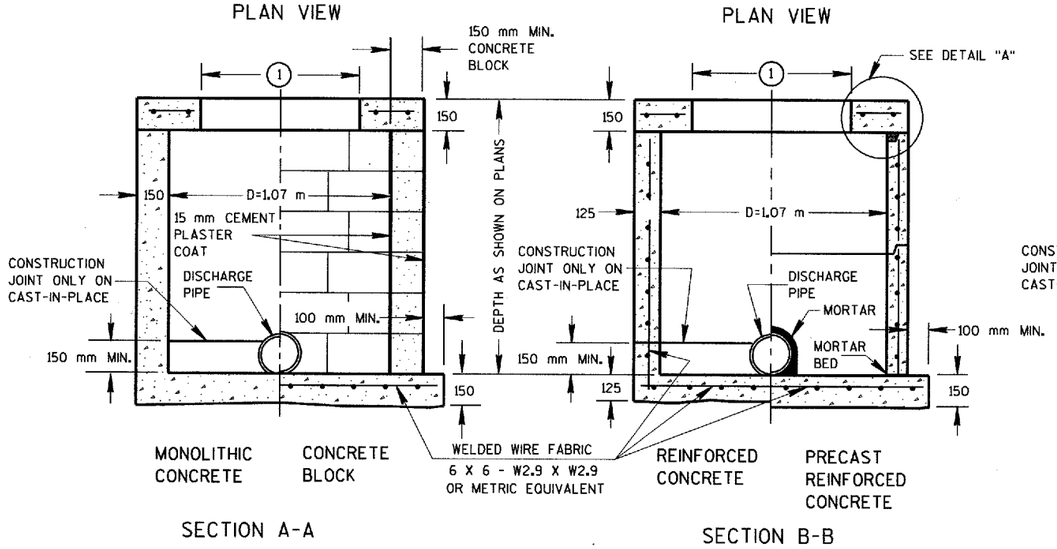
PLAN VIEW



PLAN VIEW

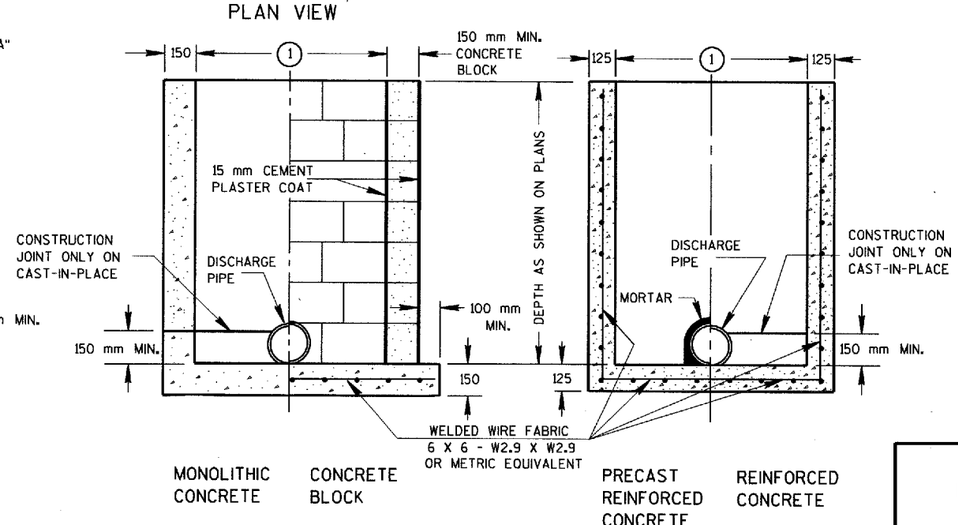


PLAN VIEW



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

INLETS TYPE 2, 3 & 4

INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 01/31/95 DATE

Roy L. Thimann
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

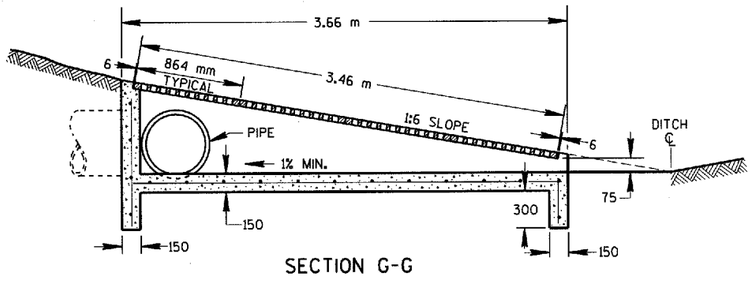
M

S.D.D. 8 C 1-5

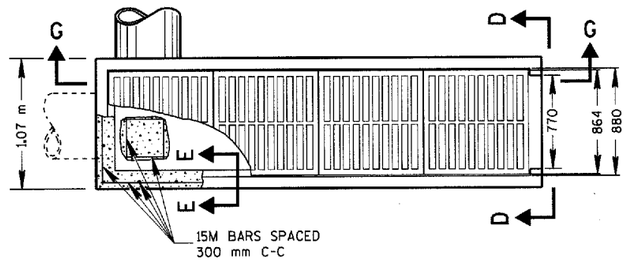
S.D.D. 8 C 1-15

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,505/1,52,53,54,55,56,57,58,59,60,61,62,63
FILE NAME:

PLOT SCALE:
PLOT NAME:
REV. DATE:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
ORIGINATOR:
S.D.D. 8 C 5-2
FILE NAME:

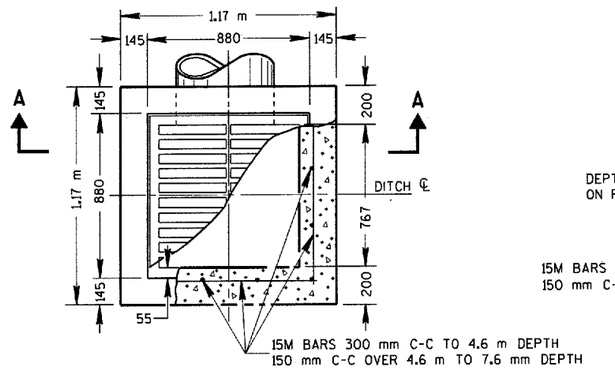


SECTION G-G

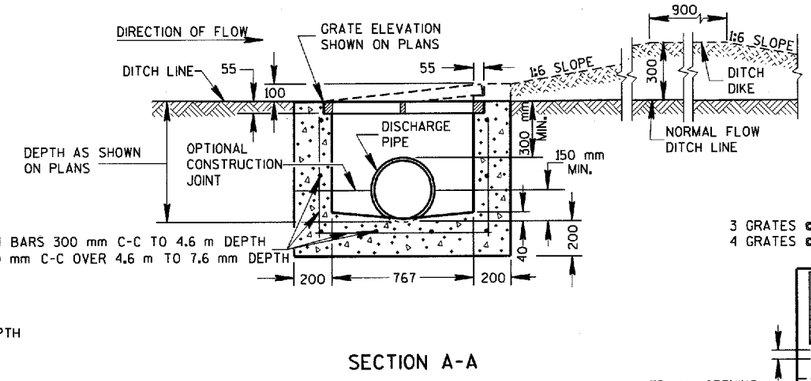


PLAN VIEW

REINFORCED CONCRETE INLET TYPE 11



PLAN VIEW



SECTION A-A

REINFORCED CONCRETE INLET TYPE 8

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

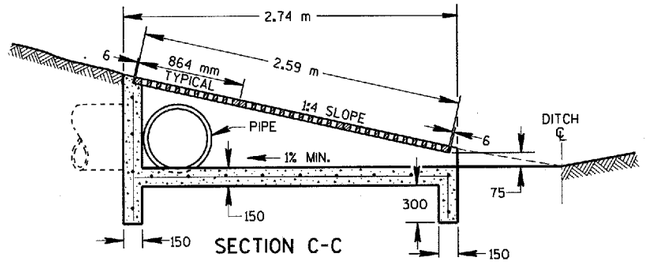
PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, B-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

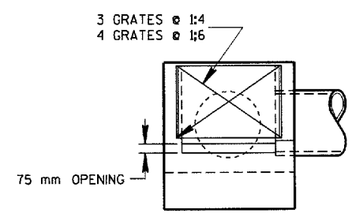
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

NOTE

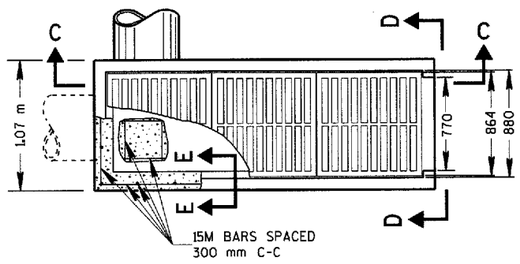
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



SECTION C-C

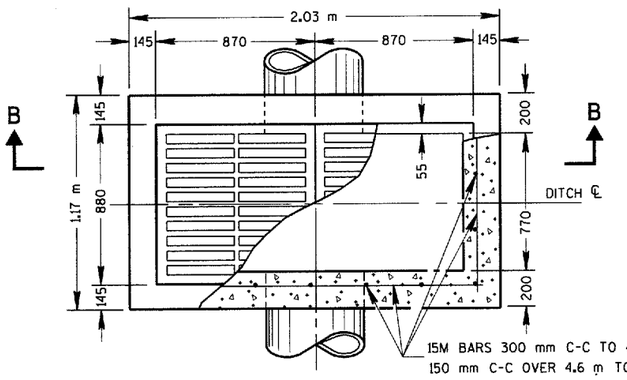


SECTION D-D

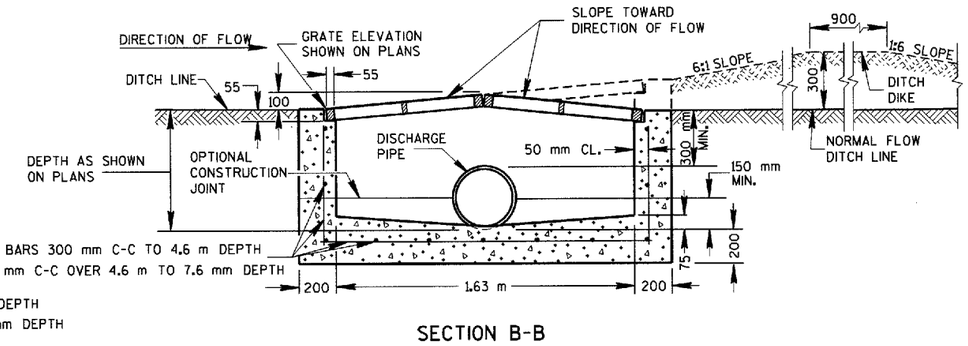


PLAN VIEW

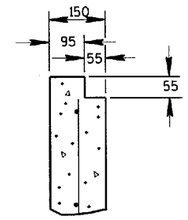
REINFORCED CONCRETE INLET TYPE 10



PLAN VIEW



SECTION B-B



SECTION E-E

REINFORCED CONCRETE INLET TYPE 9

INLETS TYPE 8, 9, 10 & 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

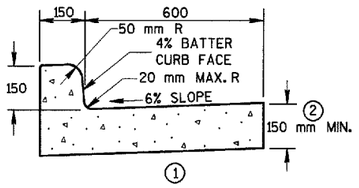
APPROVED
01/30/95
DATE

Roy L. Thimsen
CHIEF ROADWAY DEVELOPMENT ENGINEER

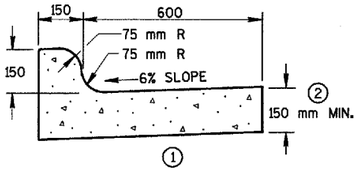
FHWA

M

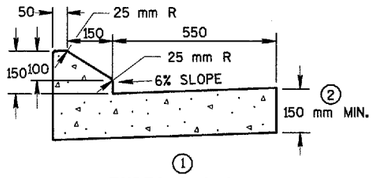
S.D.D. 8 C 5-2



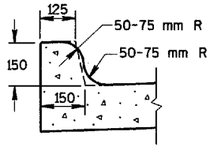
TYPES A & D



TYPES K & L

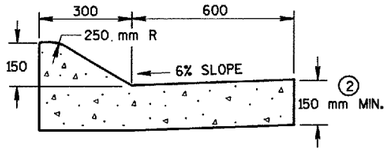


TYPES G & J

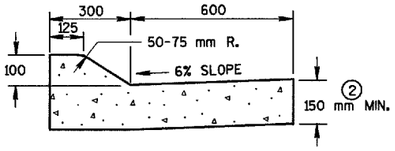


OPTIONAL CURB SHAPE
1
FOR TYPES K & L

CONCRETE CURB & GUTTER 750 mm



(150 mm MOUNTABLE CURB)



(100 mm MOUNTABLE CURB)

1
TYPES A & D

CONCRETE CURB & GUTTER 900 mm

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 600 mm BEHIND THE BACK OF CURBS.

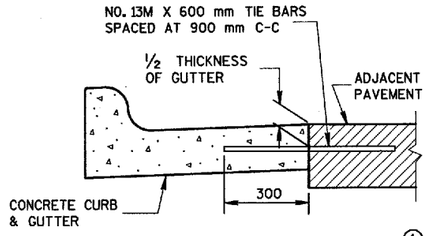
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 150 mm MINIMUM GUTTER THICKNESS IS MAINTAINED.

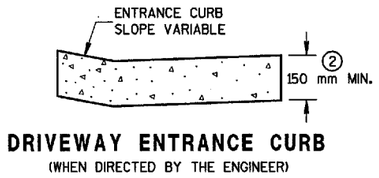
(3) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

NOTE

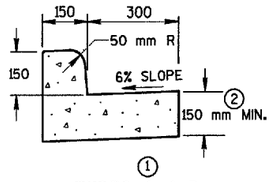
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



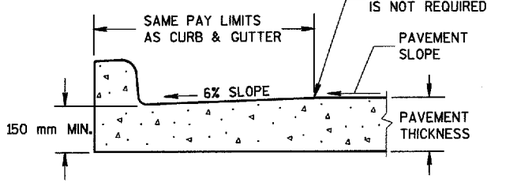
1
TYPICAL TIE BAR LOCATION



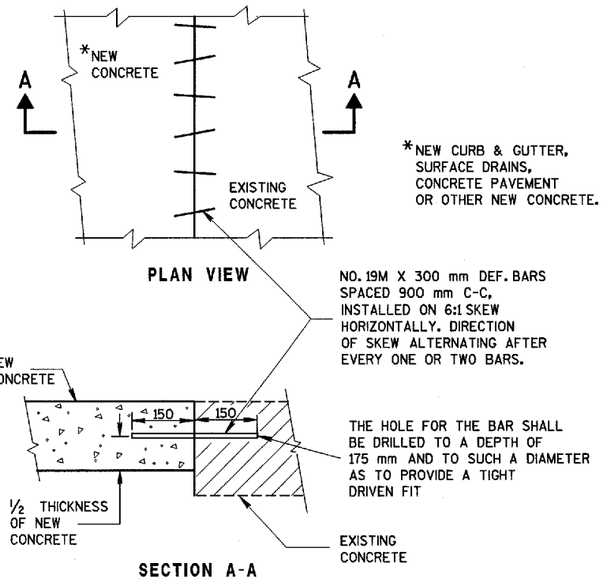
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



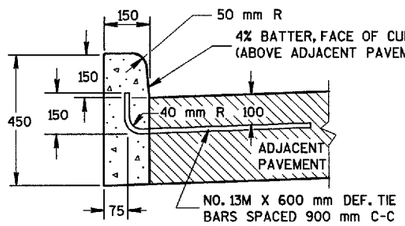
1
TYPES A & D
CONCRETE CURB & GUTTER 450 mm



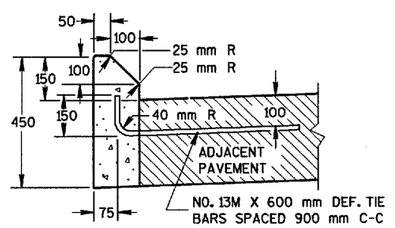
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



PAVEMENT TIES

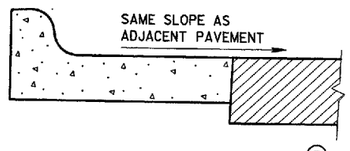


1
TYPES A & D



1
TYPES G & J

CONCRETE CURB



REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 04/12/99 DATE
Tony L. Thurmaier
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

S.D.D. 8 D 1-13

PLOT SCALE:
PLOT NAME:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
REV. DATE:
ORIGINATOR:
FILE NAME:

S.D.D. 8 D 1-13

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

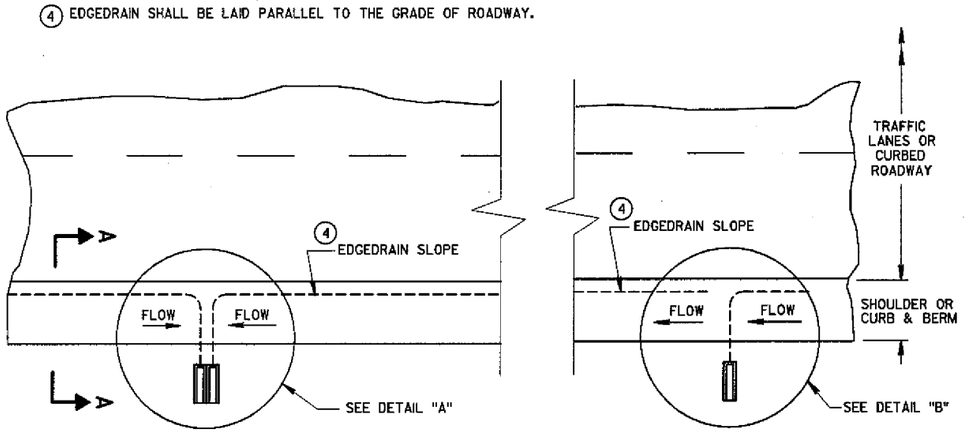
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 75 m UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

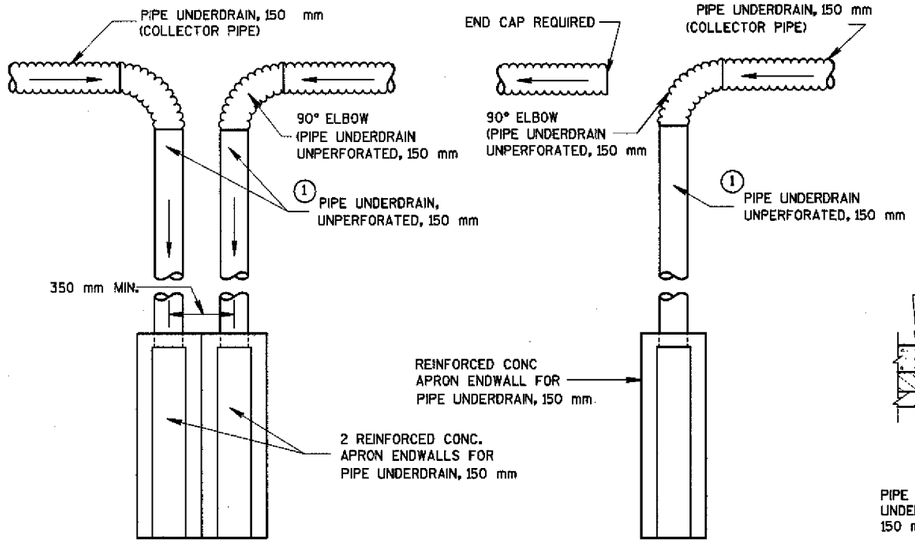
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

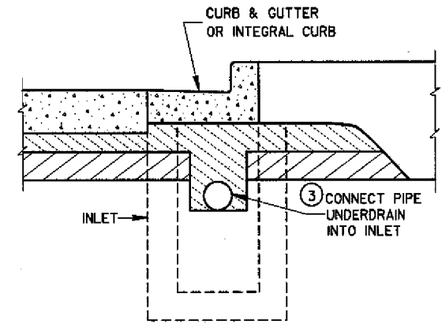
(EDGEDRAIN OUTLETS TO ROADSIDE)(2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

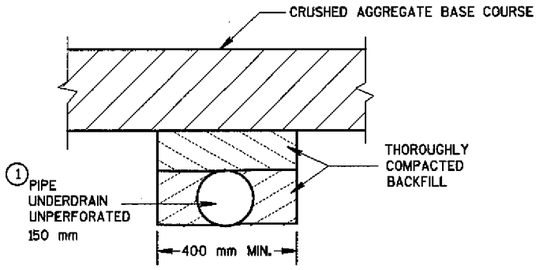
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



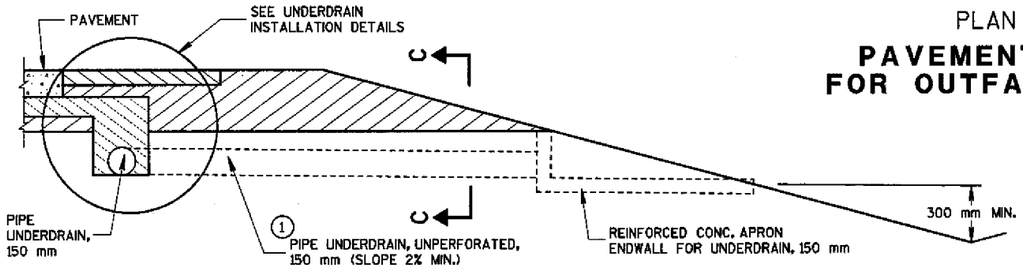
SECTION B-B

URBAN CROSS SECTION



SECTION C-C

(TRENCH FOR OUTFALL PIPE)

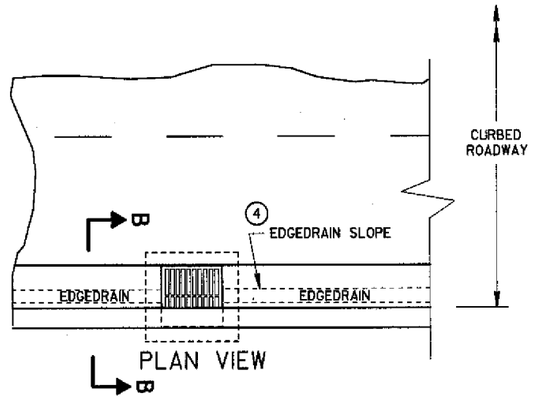


SECTION A-A

RURAL CROSS SECTION

NOTE

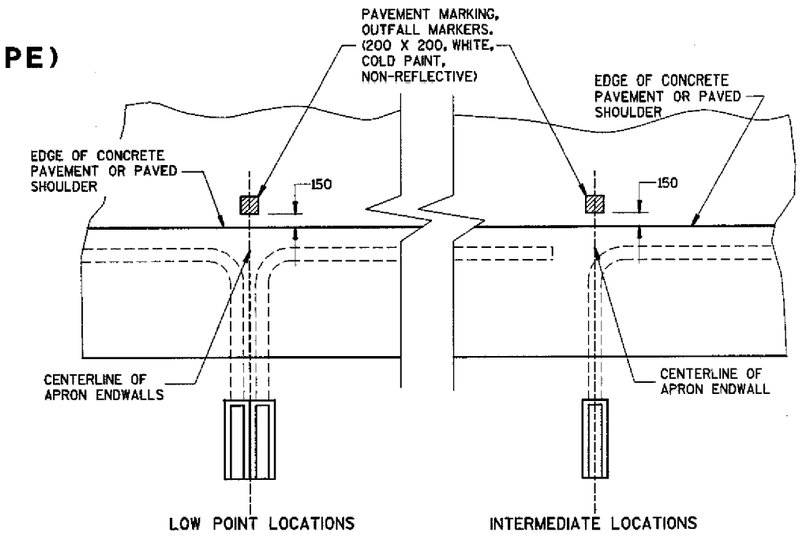
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



PLAN VIEW

ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



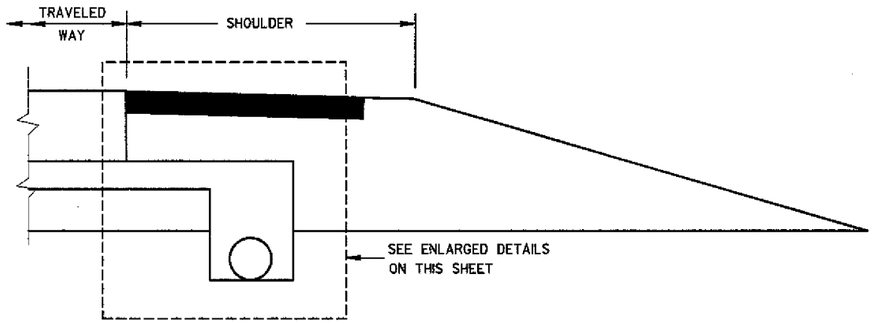
PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 15-3c



RURAL CROSS SECTION

NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

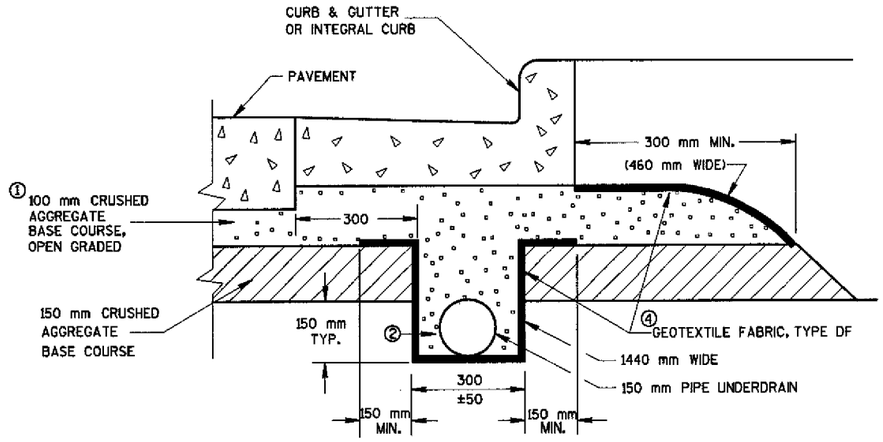
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

① THE GRADATION OF THE OPEN GRADED BASE COURSE SHALL BE EITHER NO. 1 OR NO. 2 AS SPECIFIED ELSEWHERE IN THE CONTRACT.

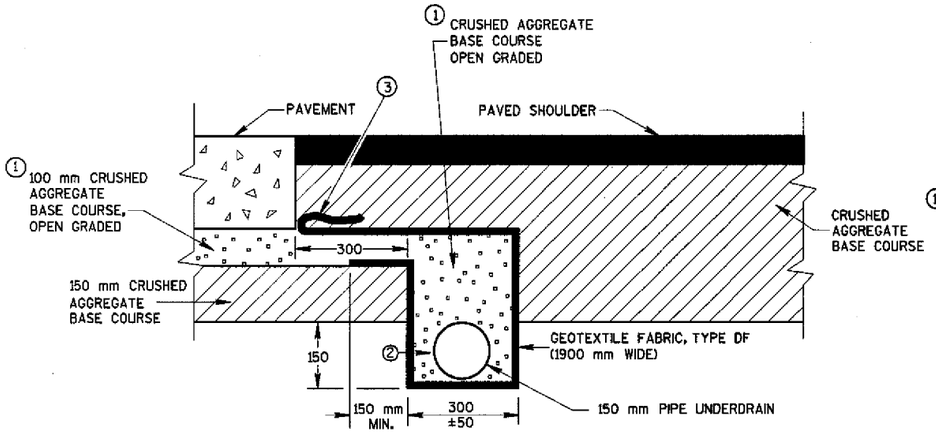
② TRENCH BACKFILL WILL BE PAID FOR AS CRUSHED AGGREGATE BASE COURSE, OPEN GRADED NO. 1 OR NO. 2 AS SPECIFIED.

③ FOLD OVER EXCESS GEOTEXTILE FABRIC AT THIS LOCATION.

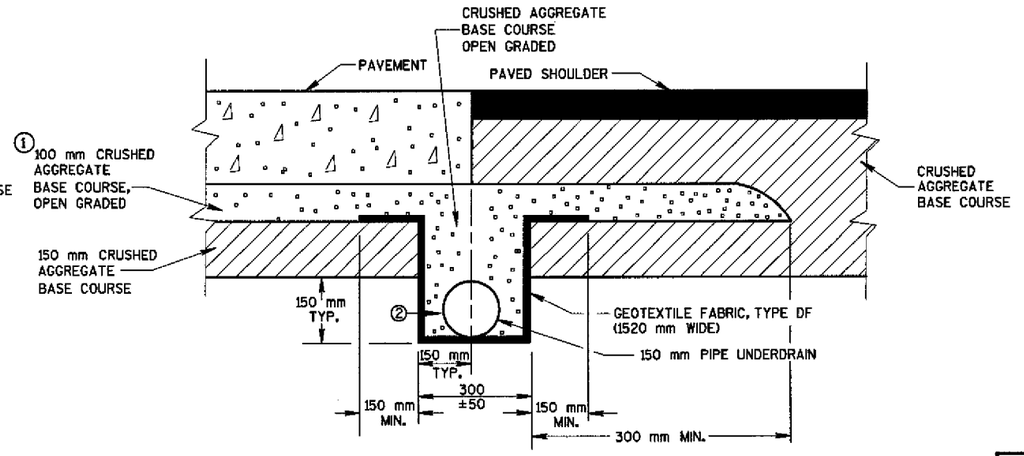
④ TOTAL FABRIC WIDTH IS 1900 mm FOR PAYMENT.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

EDGEDRAIN AND CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NO. 1 OR NO. 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 01/19/99 — Tony L. Thomsen
DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER

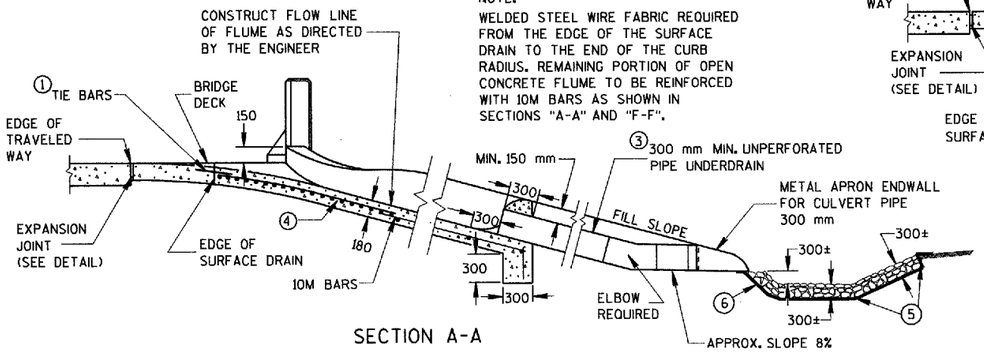
FHWA M

S.D.D. 8 D 15-3b

FILE NAME:

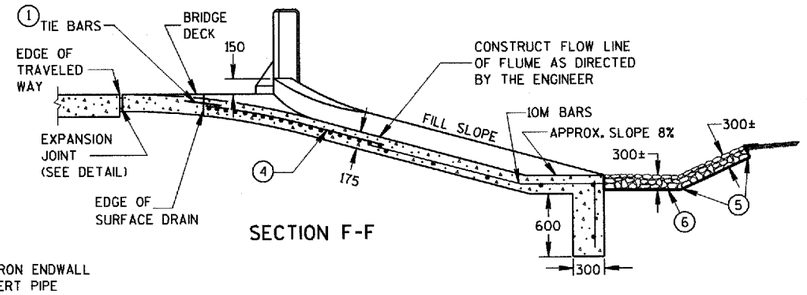
S.D.D. 8 D 15-3b

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,3233,3435,3637,38,39,40,41,42,43,44,45,46,47,48,49,5051,52,53,54,55,56,57,58,59,60,61,62,63



SECTION A-A

NOTE:
WELDED STEEL WIRE FABRIC REQUIRED FROM THE EDGE OF THE SURFACE DRAIN TO THE END OF THE CURB RADIUS. REMAINING PORTION OF OPEN CONCRETE FLUME TO BE REINFORCED WITH 10M BARS AS SHOWN IN SECTIONS "A-A" AND "F-F".



SECTION F-F

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISION.

(1) 10M X 600 mm TIE BARS SPACED AT 900 mm CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) 10M X 600 mm TIE BARS SPACED AT 300 mm CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR PAVEMENT TIES PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

(4) MINIMUM REINFORCEMENT SHALL BE 6 X 6 - W4.0 X W4.0 (OR METRIC EQUIVALENT) OR 10M BARS LONGITUDINAL AND TRANSVERSE SPACED @ 300 mm C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

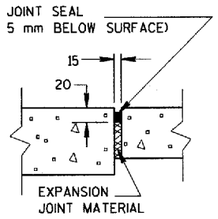
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

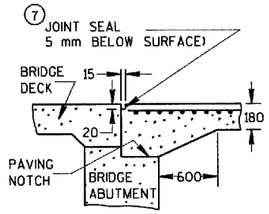
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 950 mm.

NOTE

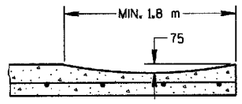
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED



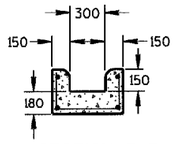
EXPANSION JOINT DETAIL



SECTION D-D

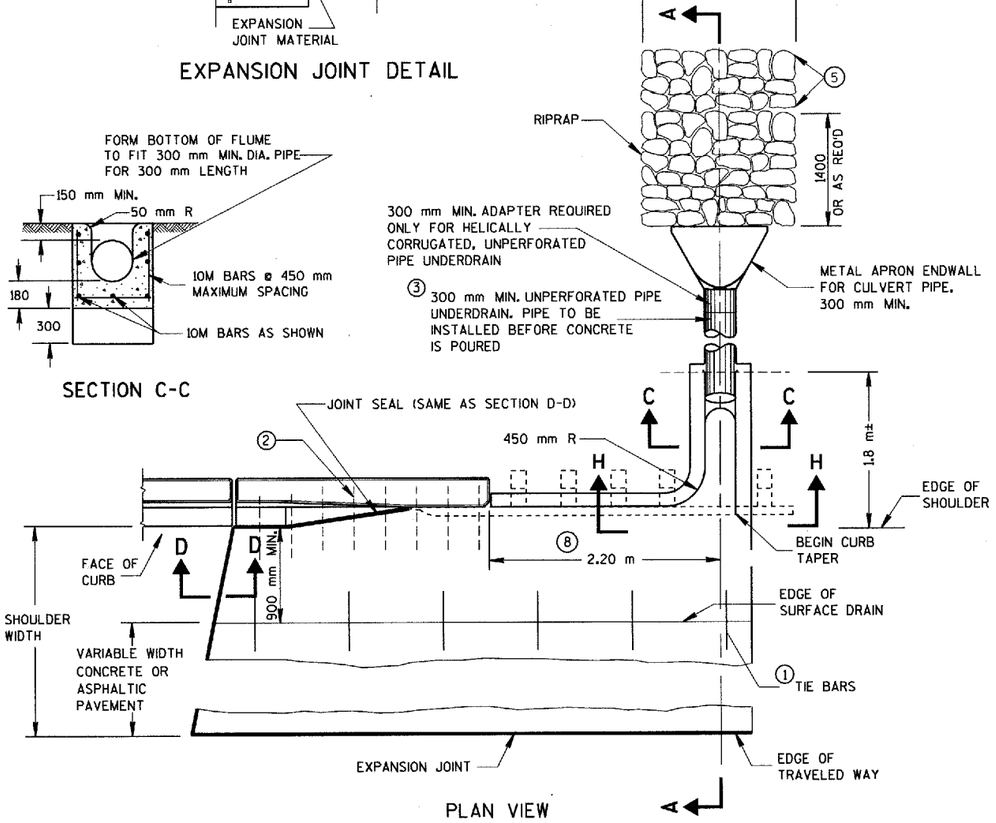


SECTION H-H

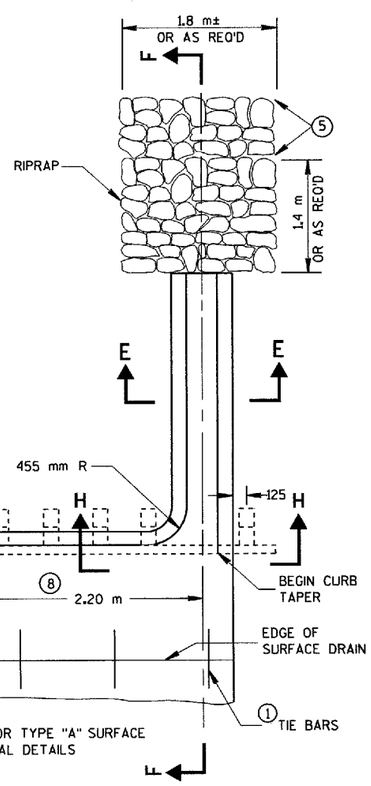


SECTION E-E

SECTION C-C

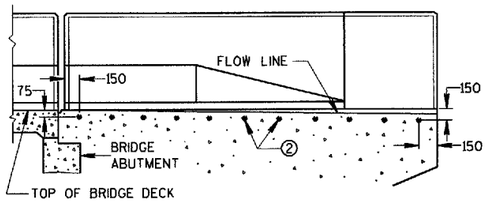


PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"



*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"



LOCATION OF TIE BARS IN WINGWALL

CONCRETE SURFACE DRAIN
FLUME TYPE
AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
02/08/95
DATE

Roy L. Thuesen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

S.D.D. 8 D 2-4

S.D.D. 8 D 2-4

FILE NAME: BE_MSRD

PLOT SCALE:

PLOT NAME:

REV. DATE:

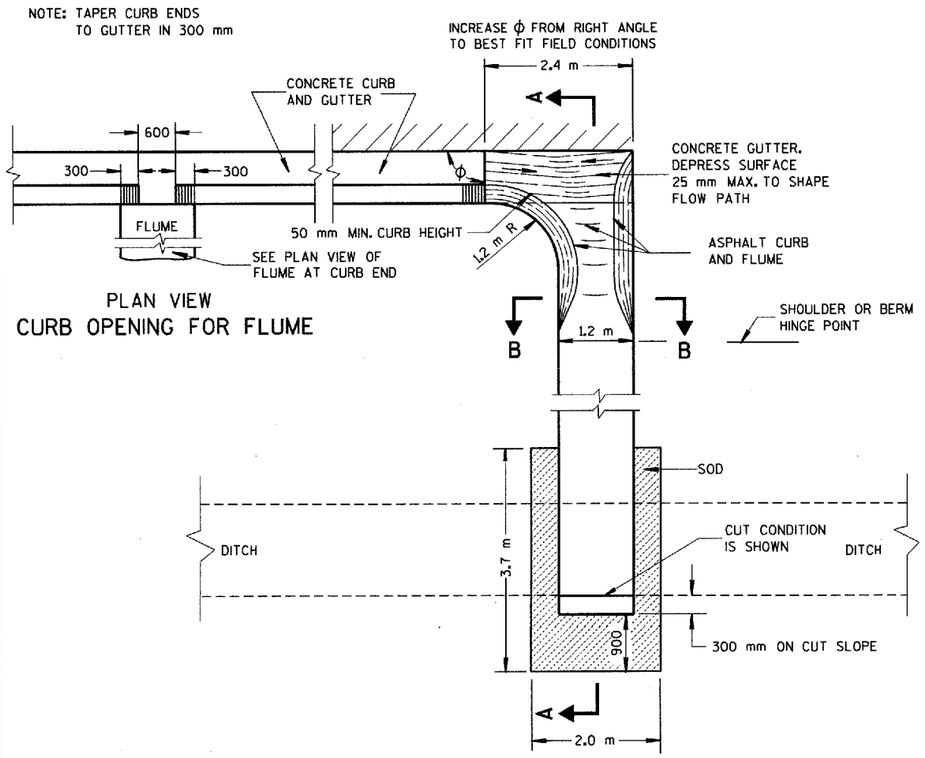
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

ORIGINATOR:

S.D.D. 8 D 4-3

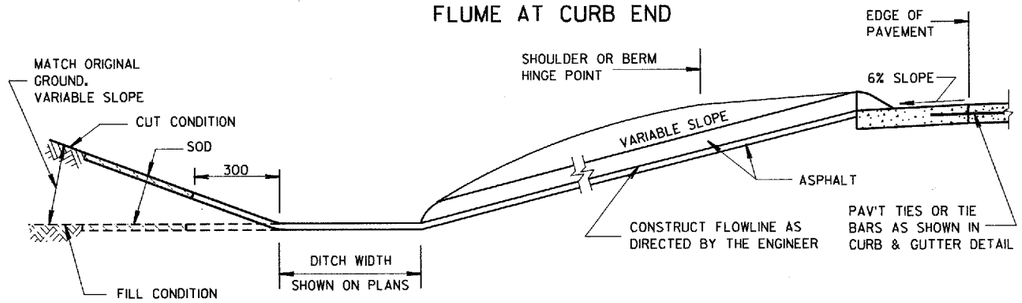
FILE NAME:

ASPHALTIC FLUME

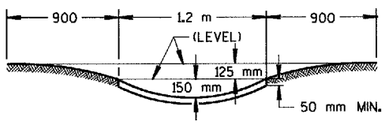


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE 5 mm WIDE BY 40 mm DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 1.2 m.

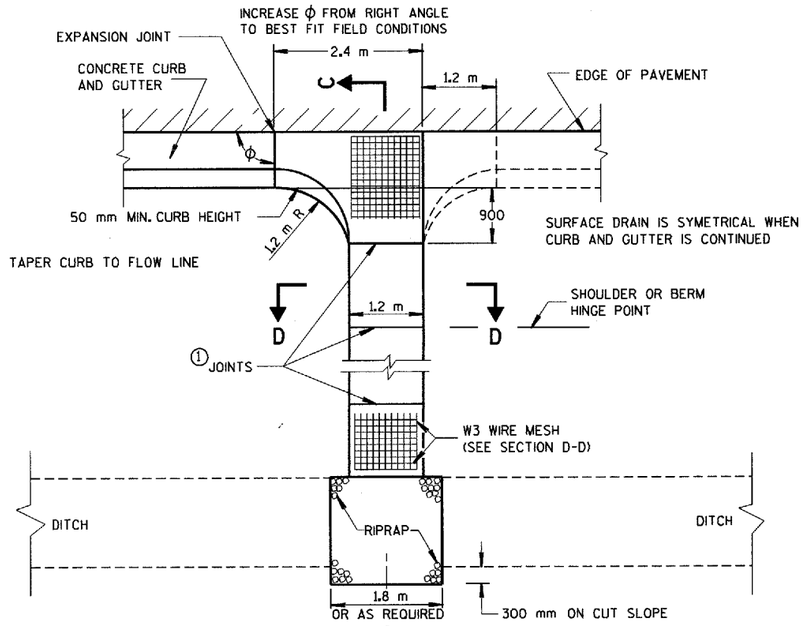
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

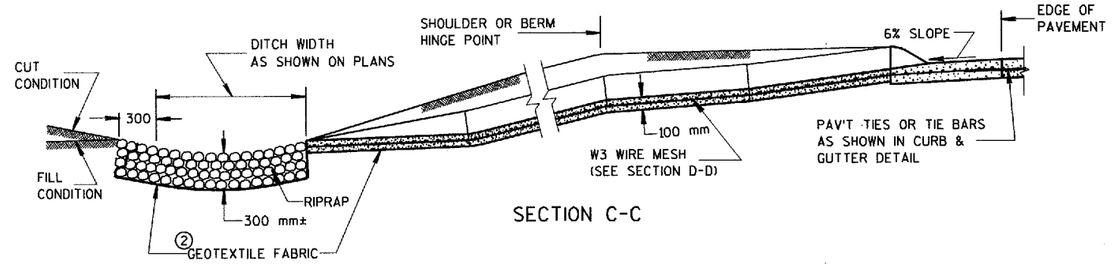
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

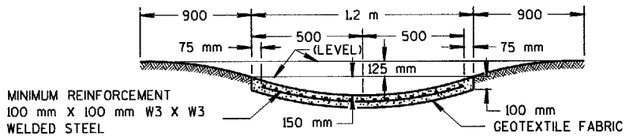
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

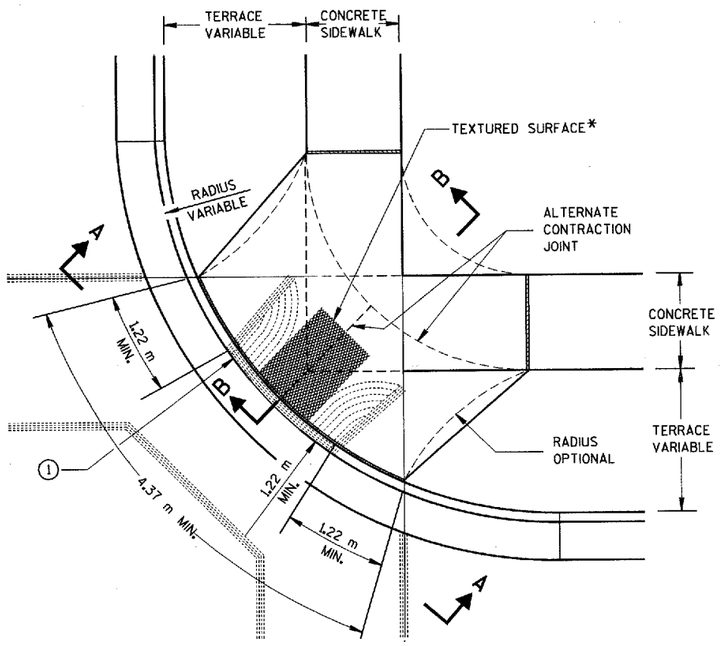
CONCRETE SURFACE DRAIN & ASPHALTIC FLUME

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

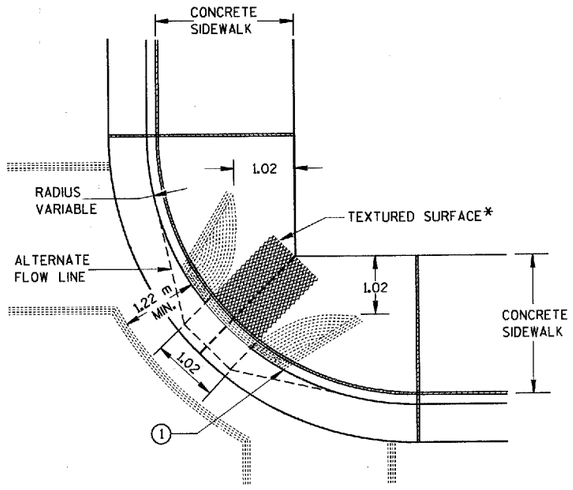
APPROVED 02/00/95 DATE
Roy L. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 8 D 4-3

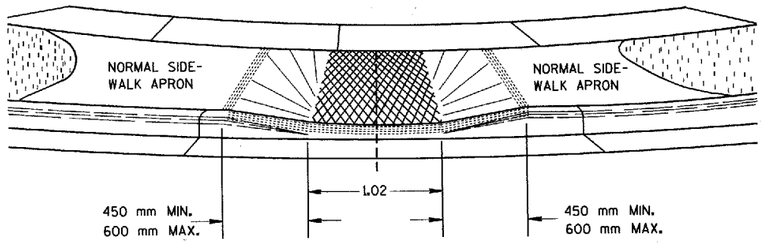
PLOT NAME:
PLOT SCALE:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



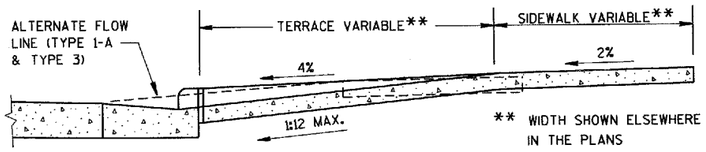
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



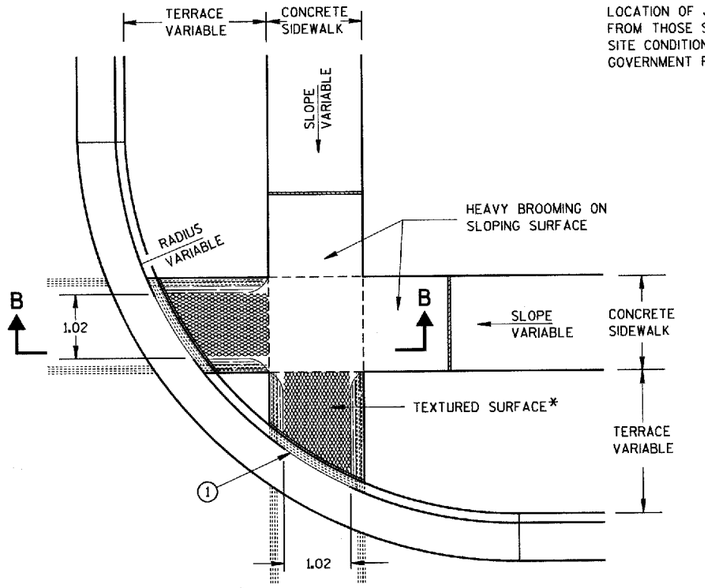
VIEW A-A



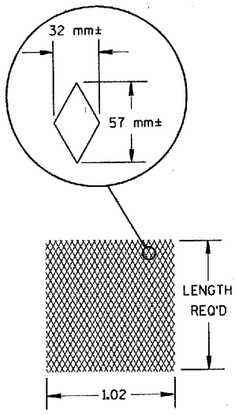
SECTION B-B

13 mm ═══ EXPANSION JOINT-SIDEWALK
- - - - - CONTRACTION JOINT

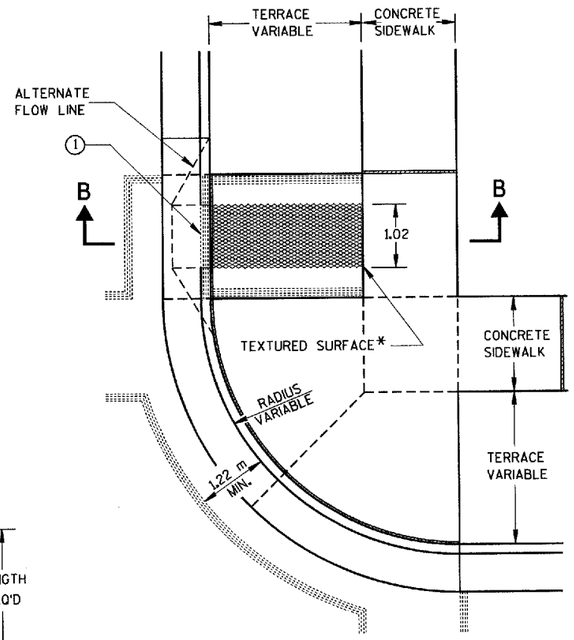
LOCATION OF JOINTS MAY BE VARIED FROM THOSE SHOWN TO BETTER FIT SITE CONDITIONS AND/OR LOCAL GOVERNMENT PREFERENCE.



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN*



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 1:12 OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 OR TYPE 1-A RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

CURB RAMPS SHALL BE MEASURED AND PAID FOR AS CONCRETE SIDEWALK AND CONCRETE CURB AND GUTTER.

SURFACE TEXTURING SHALL CONSIST OF LINEAR IMPRESSIONS APPROXIMATELY 6 mm TO 9 mm IN DEPTH AND WIDTH, ORIENTED TO PROVIDE A UNIFORM PATTERN OF DIAMOND SHAPES MEASURING APPROXIMATELY 32 mm IN WIDTH BY 57 mm IN LENGTH, WITH THE LENGTH BEING PARALLEL TO THE DIRECTION OF PEDESTRIAN MOVEMENT. THIS SURFACE TEXTURE MAY BE ACHIEVED BY IMPRESSING AND REMOVING A PIECE OF EXPANDED METAL REGULAR INDUSTRIAL MESH INTO THE SURFACE OF THE RAMP WHILE THE CONCRETE IS IN A PLASTIC STATE.

(1) THE RAMP SHALL BE BORDERED ON BOTH SIDES AND ON THE CURB LINE WITH A 100 mm WIDE YELLOW PAINT STRIPE OR WITH BRICK OF A CONTRASTING COLOR. NORMALLY THE PAINT STRIPE ALTERNATE WILL BE USED. THE MUNICAPALITY OR THE DEPARTMENT WILL APPLY THIS STRIPPING UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

IF A MUNICAPALITY REQUIRES THE BRICK ALTERNATE, SPECIAL DETAILS AND PROVISIONS ARE SHOWN ELSEWHERE IN THE PLANS.

NOTE: ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

CURB RAMPS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

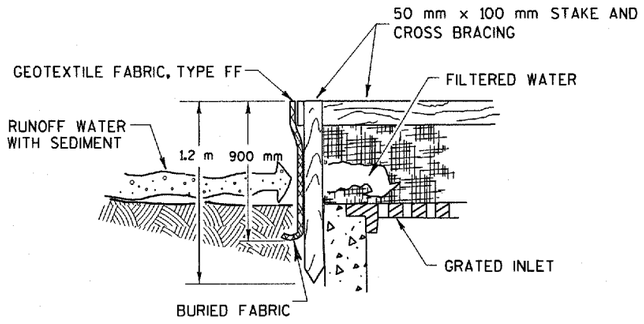
APPROVED 01/27/95 DATE
Roy A. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER

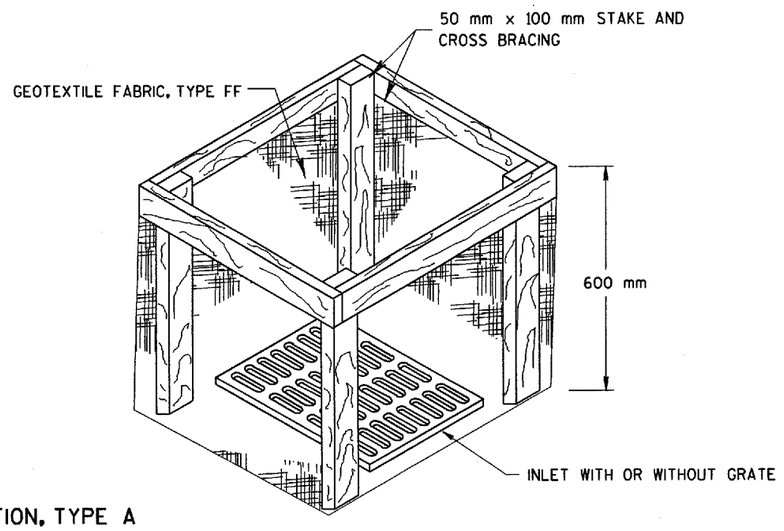
FHWA

M

S.D.D. 8 D 5-8

NOTE: ATTACH GEOTEXTILE FABRIC, TYPE FF TO THE TOP OF STAKES AND CROSS BRACINGS.





INLET PROTECTION, TYPE A

GENERAL NOTES:

FABRIC SHALL BE REPLACED AT THE ENGINEERS DISCRETION.

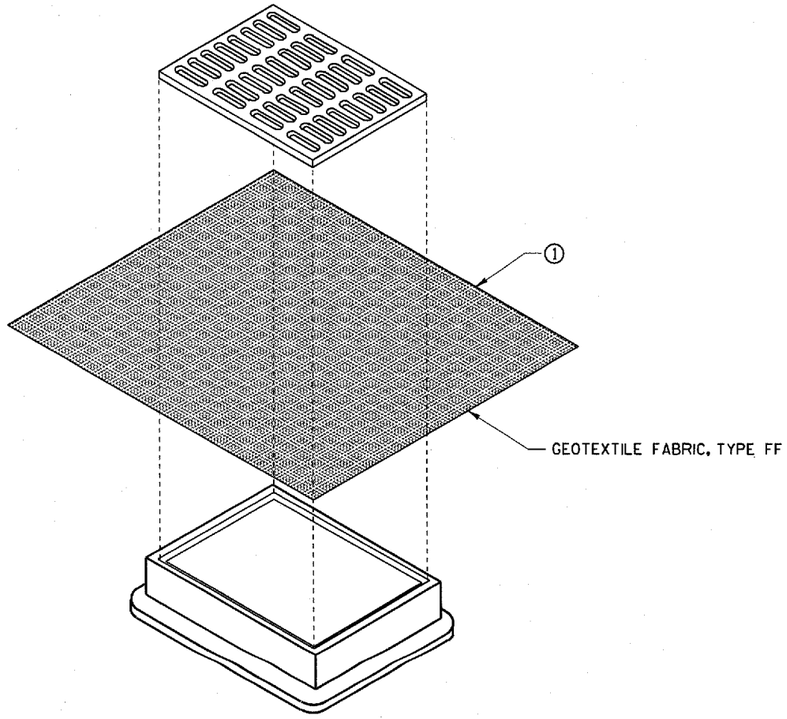
THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTIBILITY LIST MAY BE SUBSTITUTED.

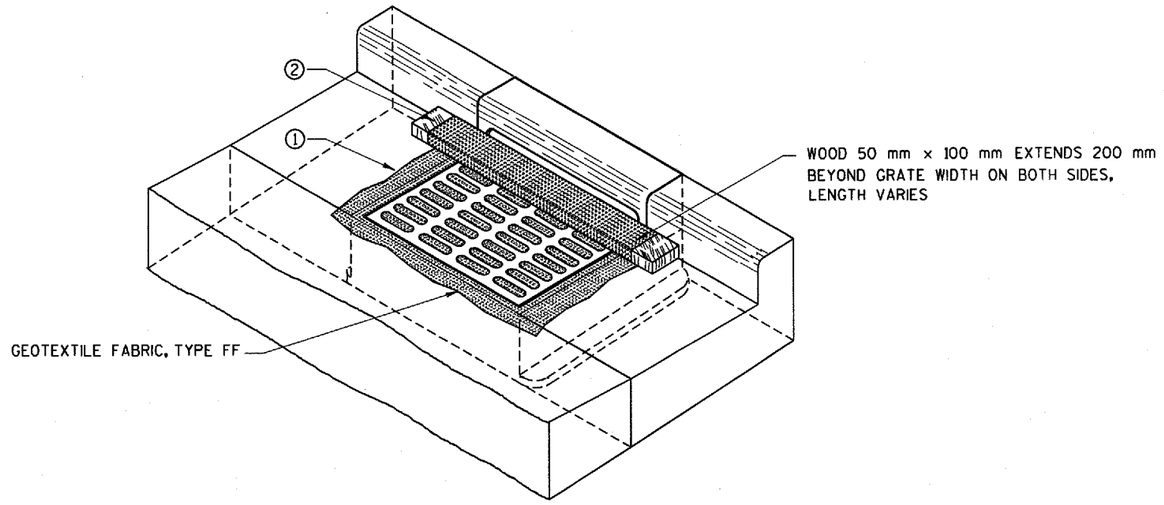
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FABRIC SIZE SHALL BE 200 mm (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.

② FOR INLET PROTECTION, TYPE C, WITH A CURB BOX, AN ADDITIONAL 450 mm OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES.



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED ON ANY INLET TYPE)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INLET PROTECTION
TYPE A, B AND C

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 03/06/00
DATE
Roy L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 8 E 10-1

S.D.D. 8 E 10-1

PLOT SCALE:

PLOT NAME:

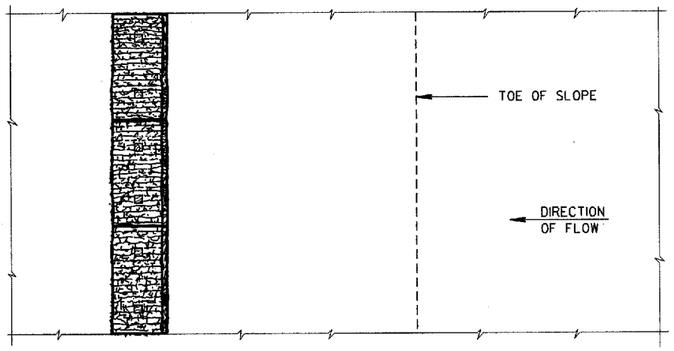
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

REV. DATE:

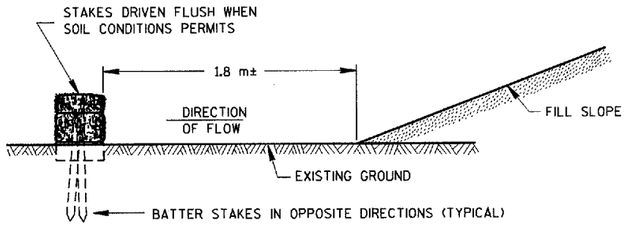
ORIGINATOR:

S.D.D. 8 E 8-2

FILE NAME:



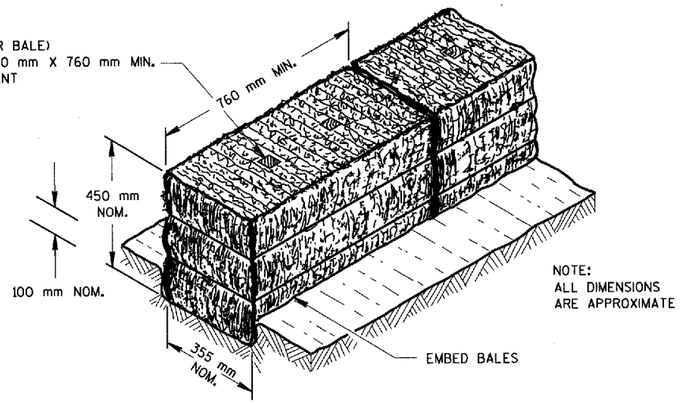
PLAN VIEW

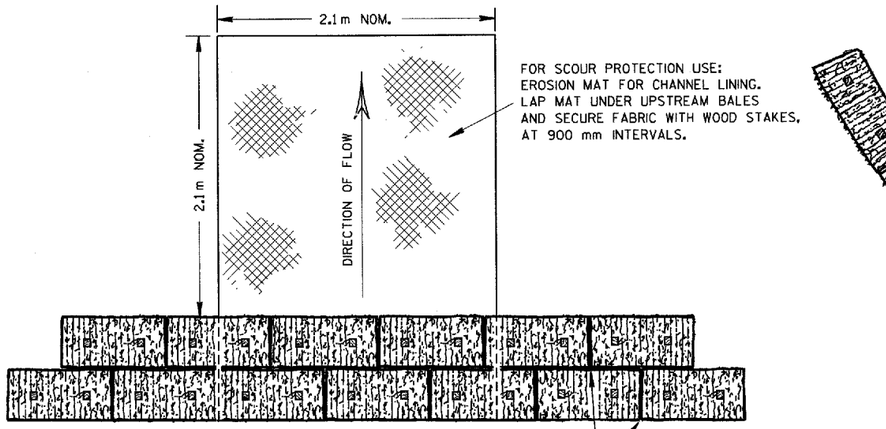


FRONT ELEVATION

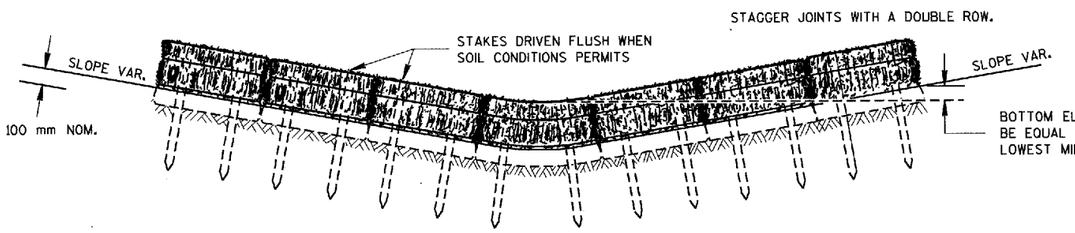
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW





PLAN VIEW

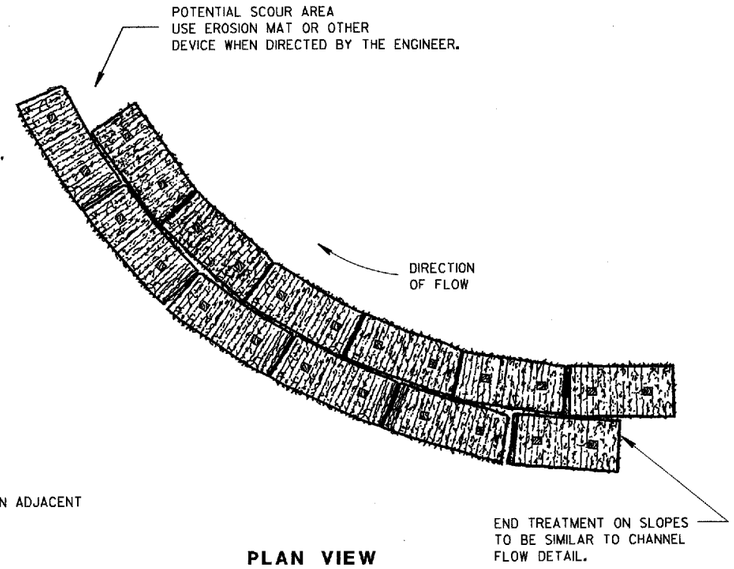


FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

EROSION BALES WHEN ALTERING THE DIRECTION OF FLOW

TYPICAL INSTALLATIONS OF EROSION BALES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

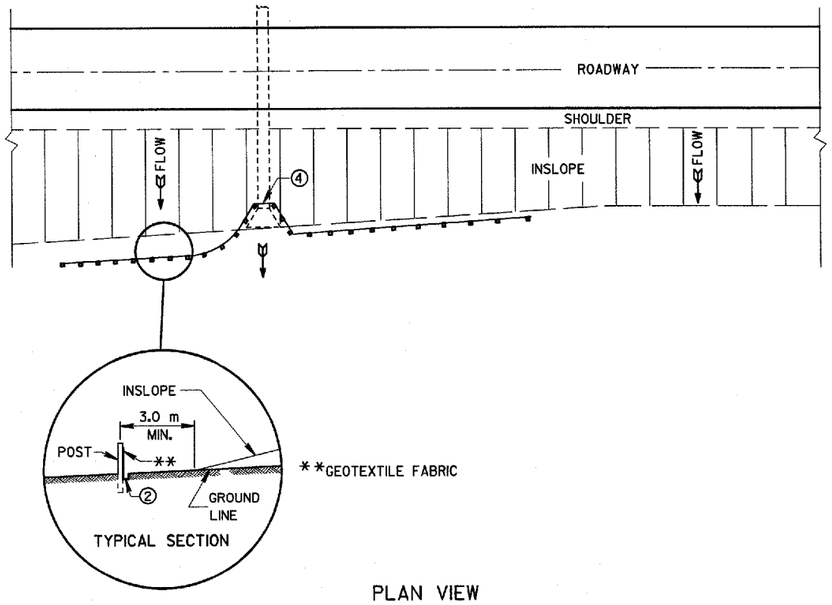
APPROVED 01/27/95 DATE

Roy L. Thimsen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

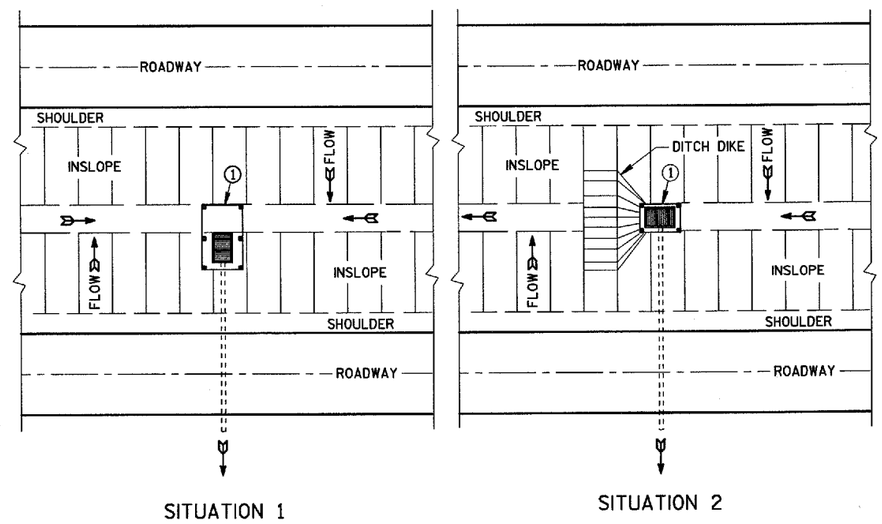
M

S.D.D. 8 E 8-2



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

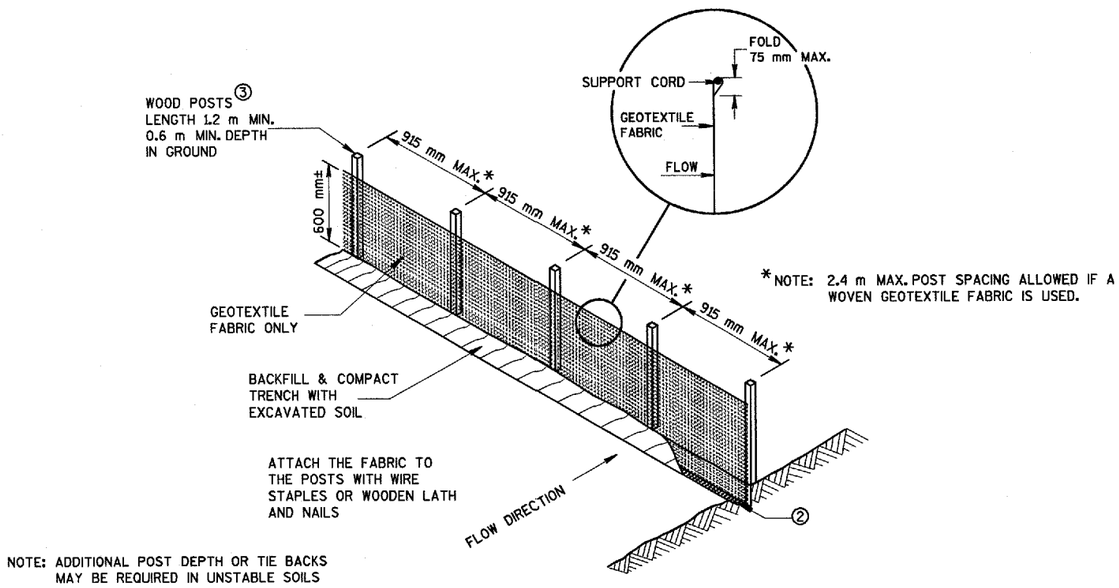
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

(1) HORIZONTAL BRACE REQUIRED WITH 50 mm X 100 mm WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

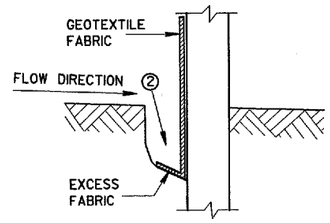
(2) TRENCH SHALL BE A MINIMUM OF 100 mm WIDE & 150 mm DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 30 mm X 30 mm OF OAK OR HICKORY.

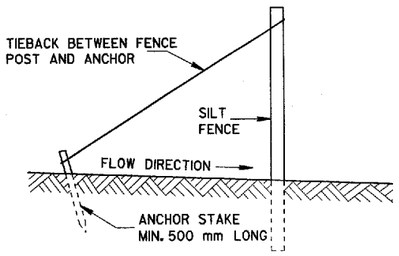
(4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.



SILT FENCE
(NON-REINFORCED)



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 03/06/00 (DATE)
Roy L. Thiessen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

S.D.D. 8 E 9-6

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
S.D.D. 8 E 9-6
FILE NAME:

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON · 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

METAL APRON ENDWALLS

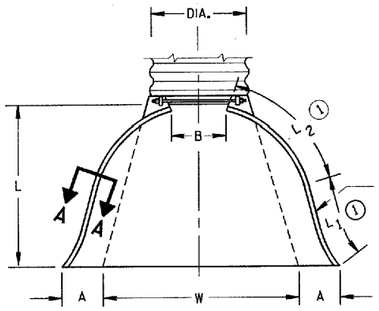
PIPE DIA. (mm)	MIN. THICK. (mm) STEEL	MIN. THICK. (mm) ALUM.	DIMENSIONS (MILLIMETERS) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
300	1.6	1.5	150	150	150	535	305	445	610	1:2.5	1 Pc.
375	1.6	1.5	180	205	150	660	355	552	760	1:2.5	1 Pc.
450	1.6	1.5	205	255	150	790	380	718	915	1:2.5	1 Pc.
525	1.6	1.5	230	305	150	915	455	752	1065	1:2.5	1 Pc.
600	1.6	1.5	255	330	150	1040	455	949	1220	1:2.5	1 Pc.
750	2.0	1.9	305	405	205	1300	455	1327	1525	1:2.5	1 Pc.
900	2.0	1.9	355	480	230	1525	610	1905	1830	1:2.5	2 Pc.
1050	2.8	2.7	405	560	280	1755	610	1921	2135	1:2.5	2 Pc.
1200	2.8	2.7	455	685	305	1980	610	2057	2285	1:2.5	3 Pc.
1350	2.8	2.7	455	760	305	2140	760	2172	2590	1:2.25	3 Pc.
1500	2.8×	2.7×	455	840	305	2210	—	—	2895	1:2	3 Pc.
1650	2.8×	2.7×	455	915	305	2210	—	—	3050	1:2	3 Pc.
1800	2.8×	2.7×	455	990	305	2210	—	—	3200	1:2	3 Pc.
1950	2.8×	2.7×	455	1070	305	2210	—	—	3355	1:1.5	3 Pc.
2100	2.8×	2.7×	455	1145	305	2210	—	—	3505	1:1.5	3 Pc.
2250	2.8×	2.7×	455	940	305	2210	—	—	3660	1:1.5	3 Pc.
2400	2.8×	2.7×	455	890	305	2210	—	—	3960	1:1.5	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

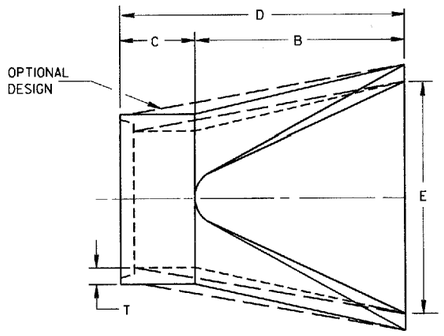
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (mm)	DIMENSIONS (MILLIMETERS) T	A	B	C	D	E	G	APPROX. SLOPE
305	51	102	610	1241	1851	610	51	1:3
380	57	152	686	1168	1854	762	57	1:3
450	64	229	686	1168	1854	914	64	1:3
525	70	229	915	953	1867	1067	70	1:3
600	76	241	1105	762	1867	1219	76	1:3
675	83	267	1257	610	1867	1372	83	1:3
750	89	305	1372	502	1867	1524	89	1:3
900	102	381	1600	883	2483	1829	102	1:3
1050	114	533	1600	889	2489	1981	114	1:3
1200	127	610	1829	660	2489	2134	127	1:3
1350	140	686	1651	* 635 ** 889	* 2496 ** 2540	2286	140	1:2.4
1500	152	* 762 ** 924	1524	991	2515	2448	127	1:2
1650	165	* 610 ** 762	* 1829 ** 1981	* 533 ** 686	2515	2591	140	1:2
1800	178	* 610 ** 915	1981	533	2515	2743	152	1:2
1950	190	* 610 ** 915	1981	533	2515	2896	165	1:2
2100	203	915	2299	533	2832	3048	165	1:1.5
2250	216	1041	2222	610	2832	3353	165	1:1.5

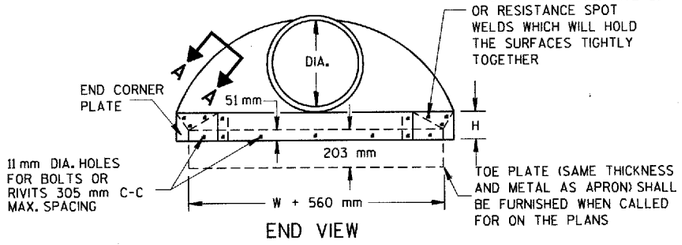
* MINIMUM
** MAXIMUM



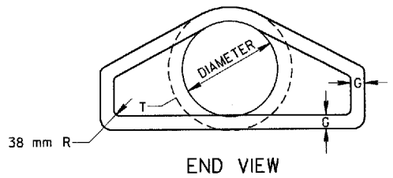
PLAN VIEW



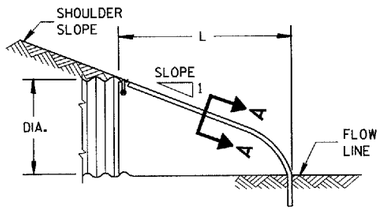
PLAN



END VIEW

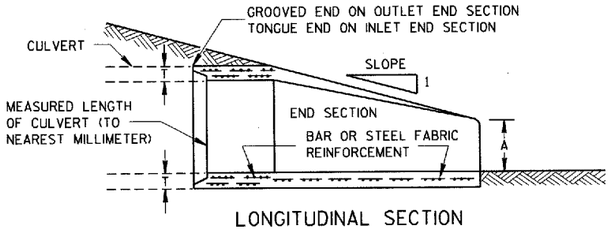


END VIEW



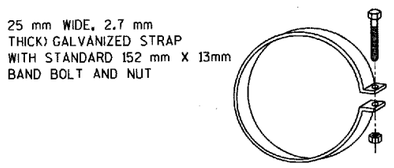
SIDE ELEVATION

METAL ENDWALLS



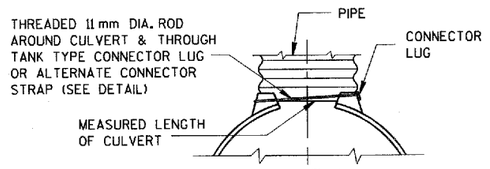
LONGITUDINAL SECTION

CONCRETE ENDWALLS

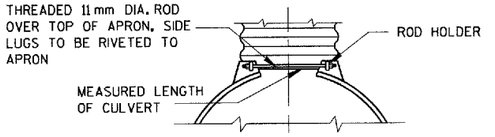


ALTERNATE FOR TYPE 1 CONNECTION

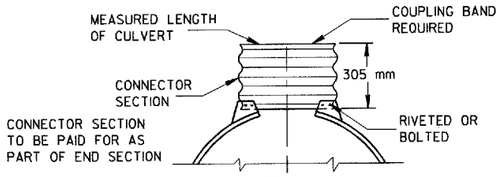
END SECTION CONNECTOR STRAP



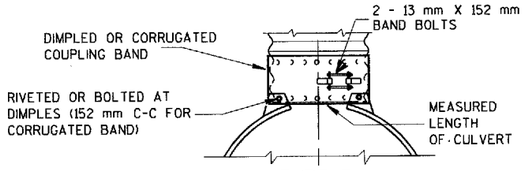
TYPE 1
FOR 300 mm THRU 600 mm CORR. PIPE



TYPE 2
FOR 750 mm THRU 2400 mm CORR. PIPE



TYPE 3
FOR 1050 mm THRU 2400 mm CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

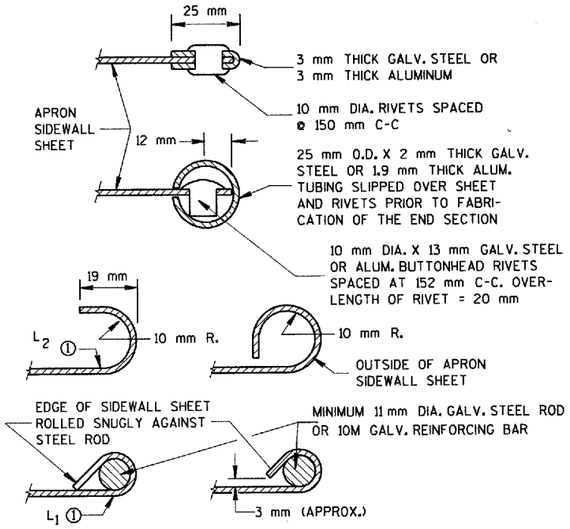
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 1500 mm DIAMETER PIPE AND LARGER SHALL HAVE 2.8 mm SIDES AND 3.5 mm CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 1500 mm DIAMETER PIPE AND LARGER SHALL HAVE 3.4 mm SIDES AND 3.4 mm CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 1500 mm THROUGH 2400 mm DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 152 mm BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 1500 mm DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

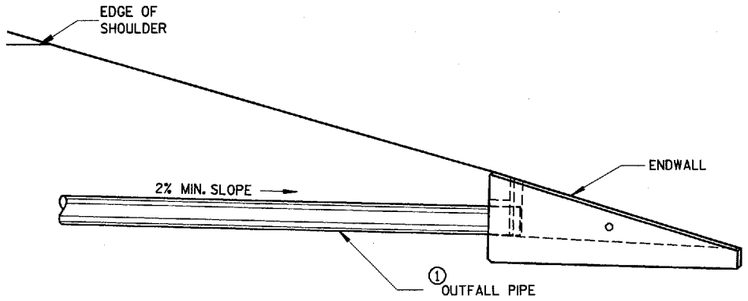
APPROVED 01/27/95 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 8 F 1-11

S.D.D. 8 F 1-11

DIMENSIONS IN MILLIMETERS											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**100	155	305	135	230	205	815	915	280	60	165	100
150	205	355	185	280	255	1 065	1115	330	90	215	150

**APRON ENDWALL FOR 150 mm DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 100 mm DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

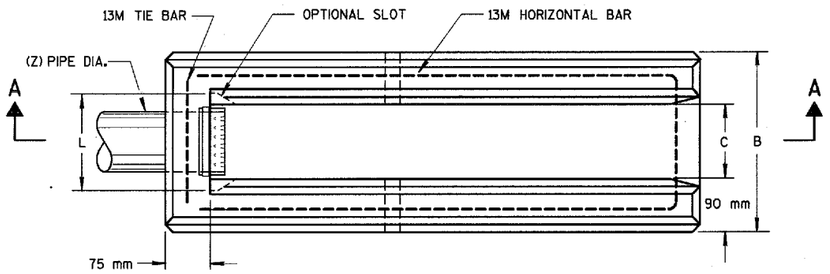
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

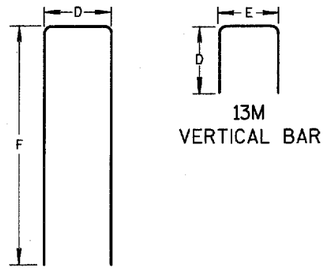
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

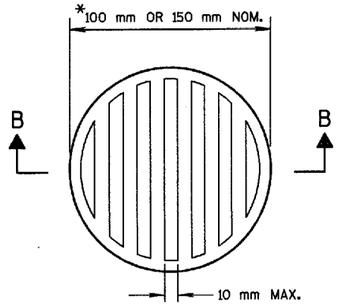
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE M5 X 30 mm STAINLESS STEEL SHEET METAL SCREWS.

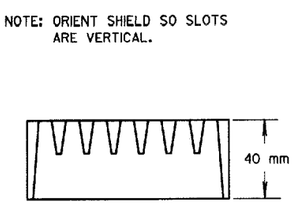


PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

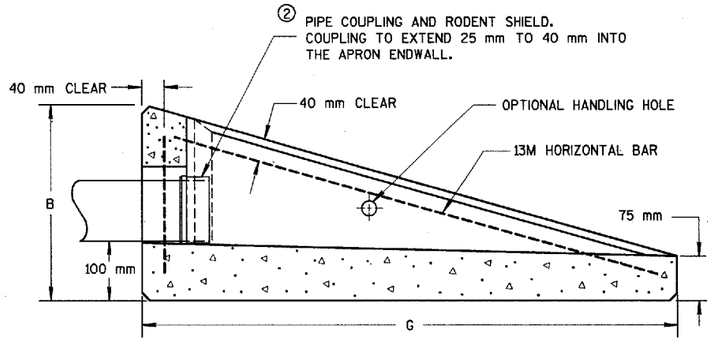




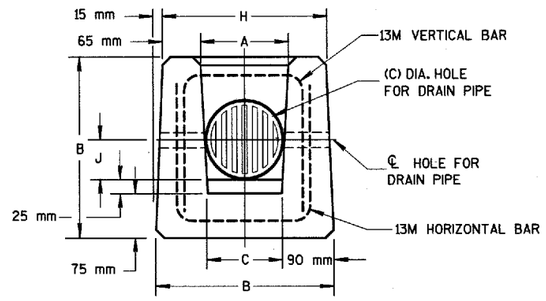
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

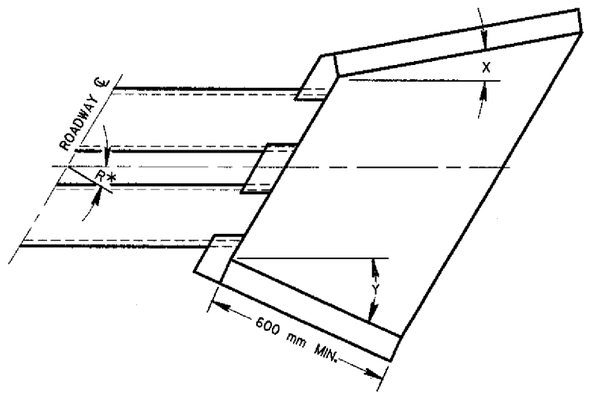
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 3/10/98 DATE
Tony L. Thomsen
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 8 F 6-4

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16,17,18,19, 20,21,22, 23,24,25, 26,27, 28,29,30,31,32,33,34,35,36,37,38,39, 40,41,42,43,44,45,46,47,48, 49,50,51, 52,53,54,55,56,57,58,59,60,61,62,63



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

PIPE SIZE (D) (mm)	FRONT FACE ("F")	BACK FACE ("B")	"W" (mm)
600 to 1200	1:2	1:2	300
1500 C.M.P. 1500 R.C.C.P.	1:2	1:4	660 720
1800 C.M.P. 1800 R.C.C.P.	1:2	1:4	720 810

ALL ENDWALLS FOR PIPE ARCHES SHALL HAVE A 1:2 SLOPE ON FRONT AND BACK FACE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

FILL SLOPES FLATTER THAN 1:2.5 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

HEADWALLS AND WINGWALLS SHALL BE CONSTRUCTED OF MORTAR RUBBLE MASONRY.

APRONS AND CUT-OFF WALLS SHALL BE CONSTRUCTED OF CONCRETE MASONRY REINFORCED AS SHOWN ON THIS DRAWING.

ALL WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6 X 6 - W4.0 X W4.0 (OR METRIC EQUIVALENT) OR 15M BARS SPACED 300 mm C-C IN BOTH DIRECTIONS.

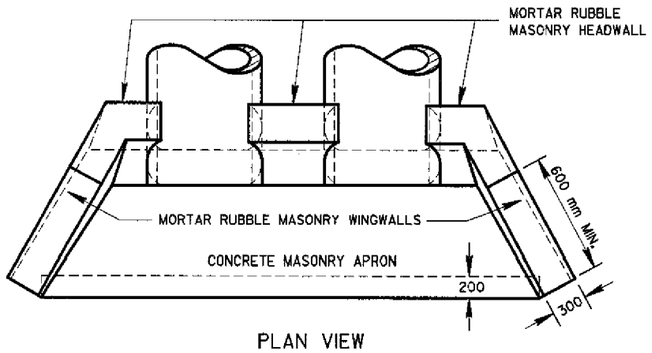
(2) THE SPACE BETWEEN CULVERT PIPES OR PIPE ARCHES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 1200 mm	600 mm
OVER 1200 mm TO 1800 mm	½ DIA. OR SPAN
OVER 1800 mm	900 mm

NOTE

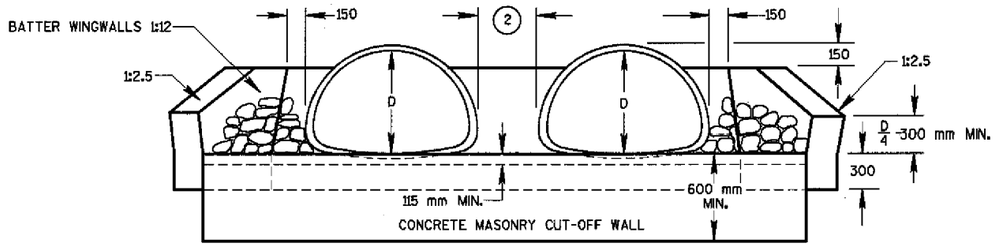
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

SLOPE RATIOS ARE SHOWN WITH THE VERTICAL COMPONENT FIRST AND THEN THE HORIZONTAL (RISE:RUN).



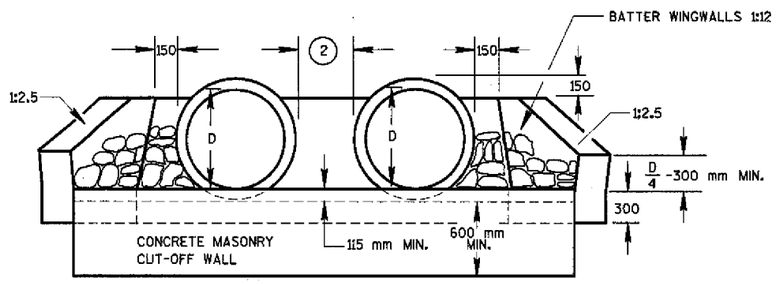
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



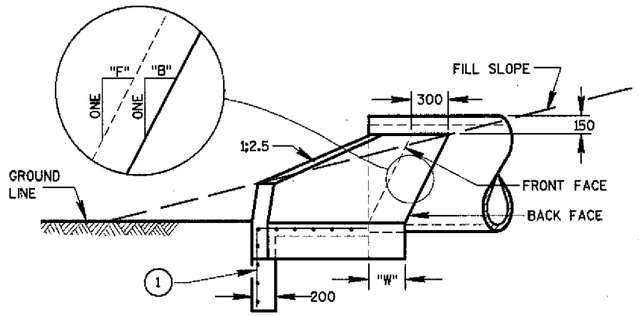
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

MORTAR RUBBLE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

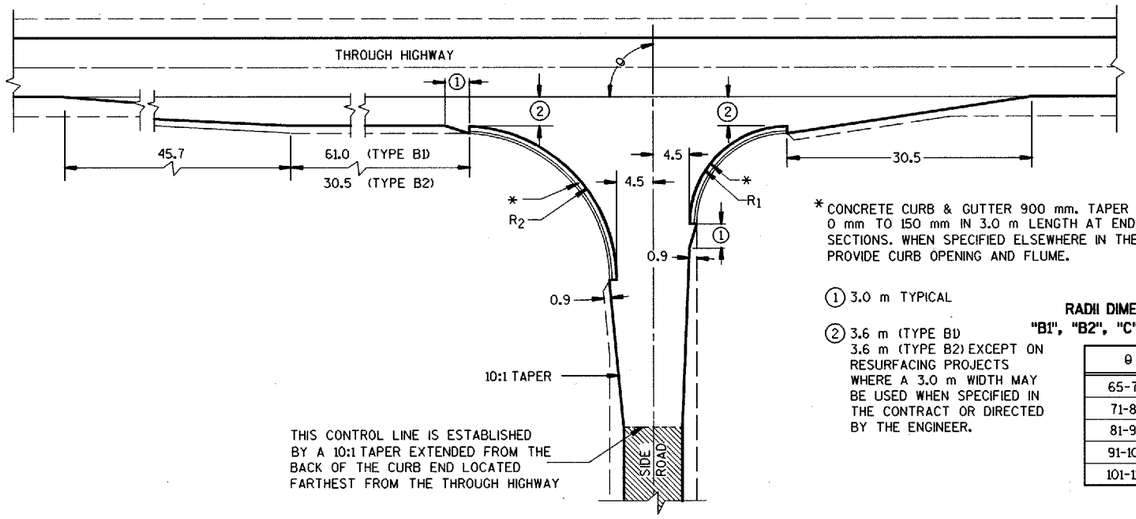
APPROVED 9/14/98 DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA M

S.D.D. 8 F 9-1

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
S.D.D. 8 F 9-1
FILE NAME:



TYPE "B1" AND "B2"

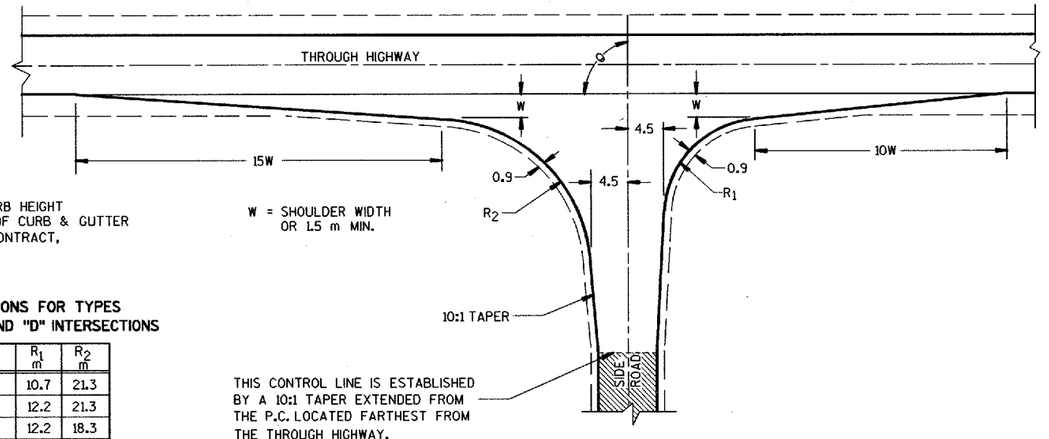
* CONCRETE CURB & GUTTER 900 mm. TAPER CURB HEIGHT 0 mm TO 150 mm IN 3.0 m LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 3.0 m TYPICAL

② 3.6 m (TYPE B1)
3.6 m (TYPE B2) EXCEPT ON RESURFACING PROJECTS WHERE A 3.0 m WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

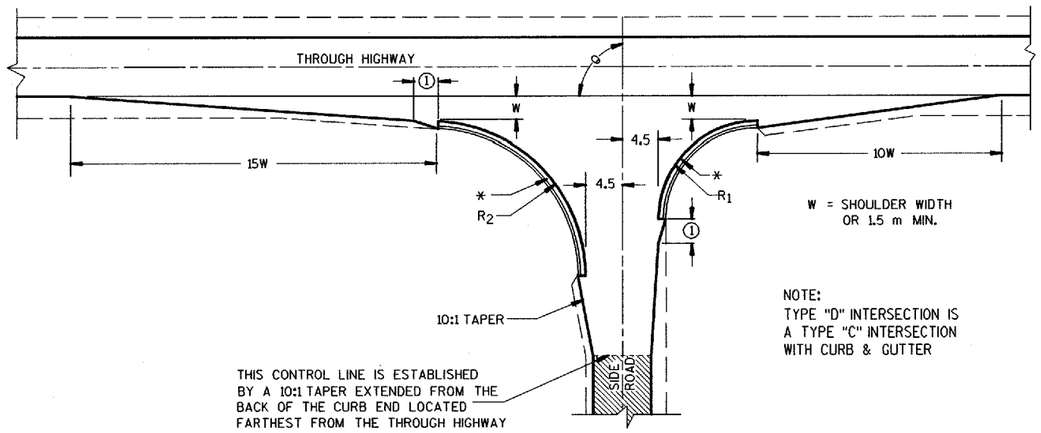
RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1 m	R_2 m
65-70	10.7	21.3
71-80	12.2	21.3
81-90	12.2	18.3
91-100	15.2	16.8
101-110	18.3	13.7



W = SHOULDER WIDTH OR 1.5 m MIN.

TYPE "C"



W = SHOULDER WIDTH OR 1.5 m MIN.

NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

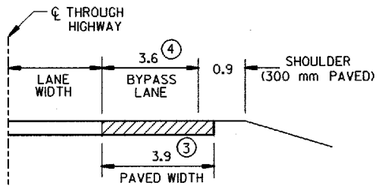
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

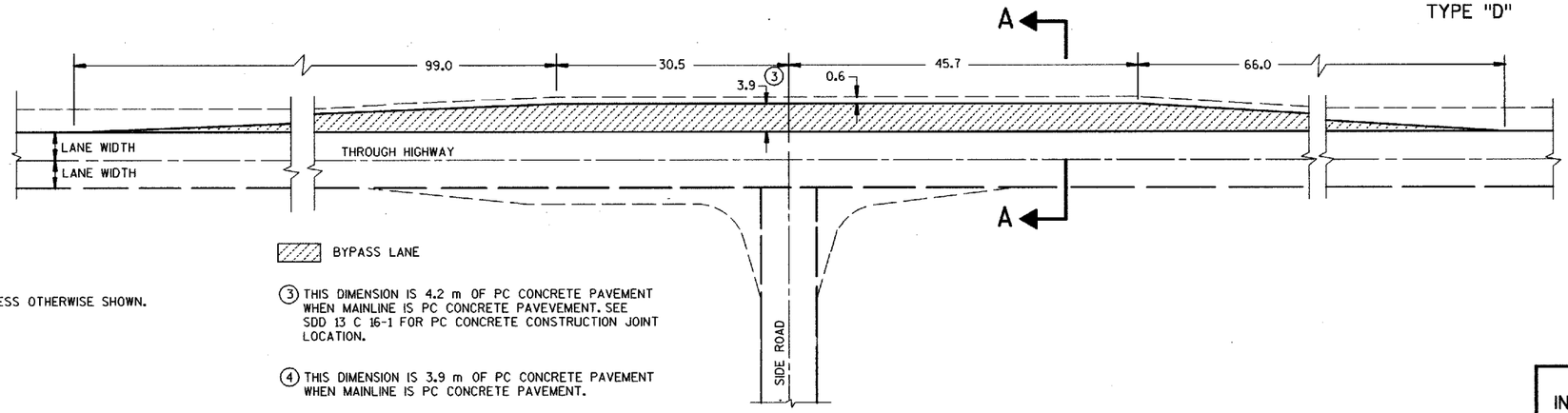
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

▨ EXISTING SURFACE



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



▨ BYPASS LANE

③ THIS DIMENSION IS 4.2 m OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEVEMENT. SEE SDD 13 C 16-1 FOR PC CONCRETE CONSTRUCTION JOINT LOCATION.

④ THIS DIMENSION IS 3.9 m OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT.

TEE INTERSECTION BYPASS LANE DETAIL

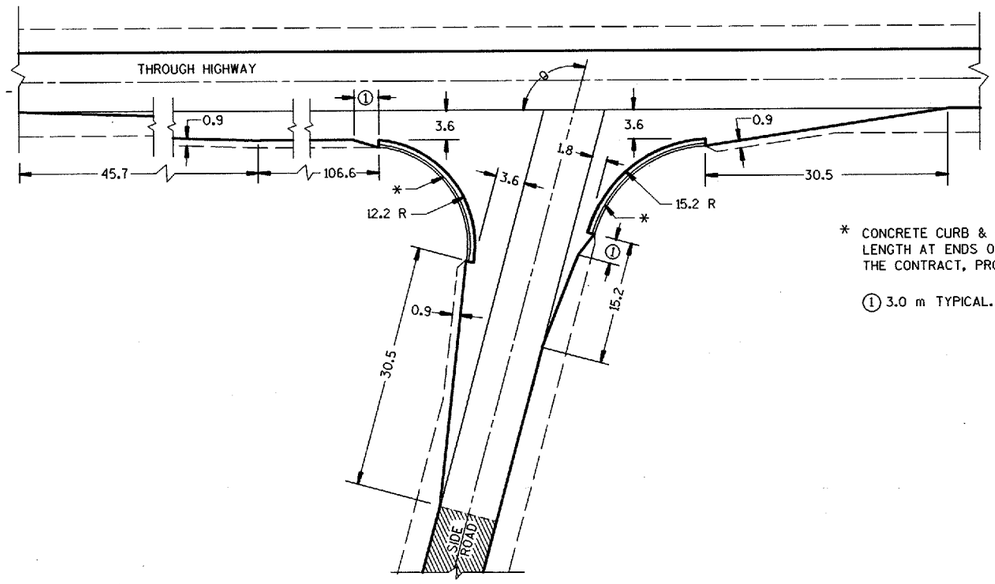
NOTE:

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND 'D' AND TEE INTERSECTION BYPASS LANE

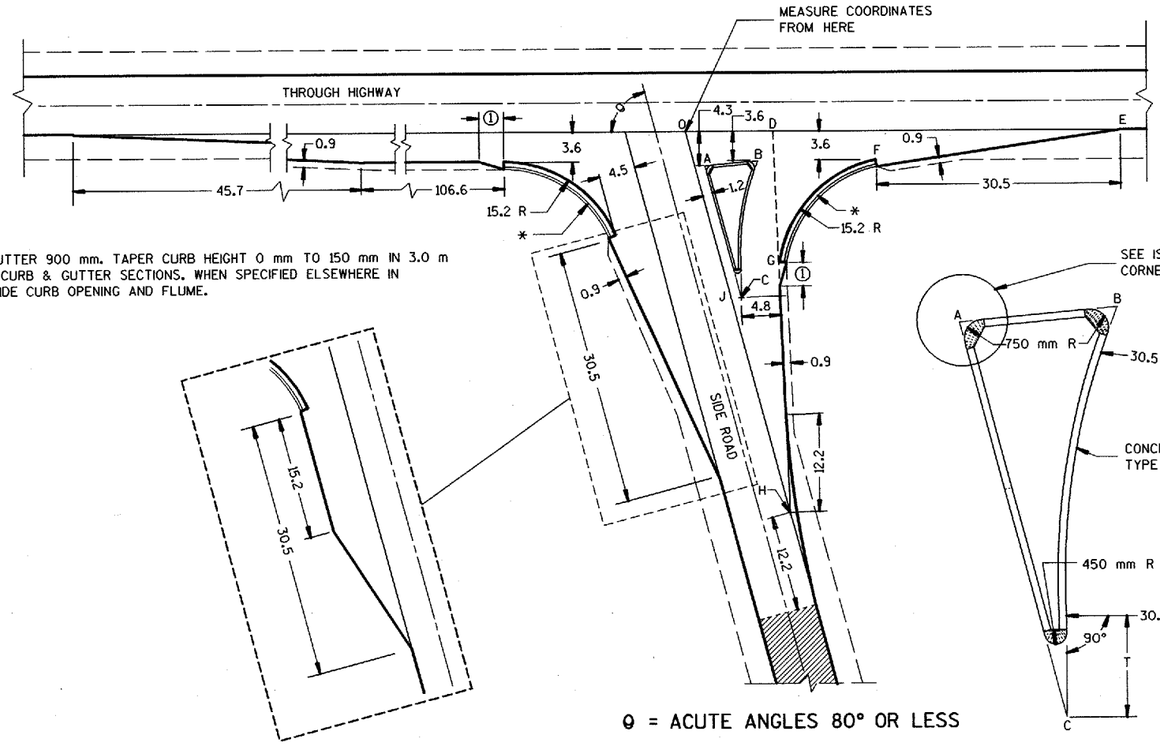
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 A 1-11a



θ = MORE THAN 80°

EXISTING SURFACE

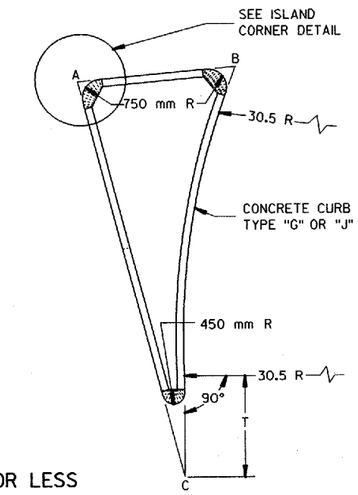


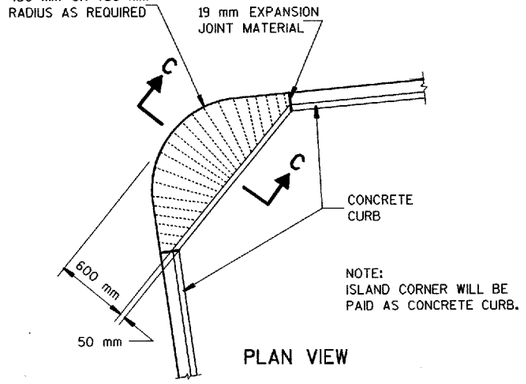
θ = ACUTE ANGLES 80° OR LESS

* CONCRETE CURB & GUTTER 900 mm. TAPER CURB HEIGHT 0 mm TO 150 mm IN 3.0 m LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 3.0 m TYPICAL.

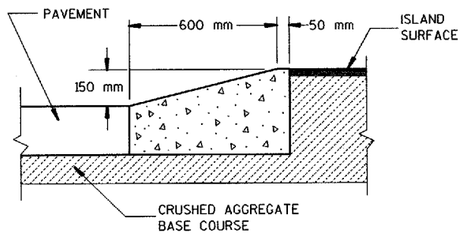
SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS





NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

NOTE:

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN METERS (MEASURED FROM POINT "0") X/Y								LENGTH IN METERS				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	3.87 / -4.30	13.52 / -3.60	14.13 / -22.07	12.59 / 0.0	61.85 / 0.0	31.72 / -3.60	19.40 / -22.96	25.90 / -44.85	9.68	20.52	1.80	26.18	51.79
65	3.33 / -4.30	11.74 / -3.60	11.51 / -21.84	11.84 / 0.0	59.15 / 0.0	29.02 / -3.60	16.39 / -21.75	21.50 / -46.10	8.44	19.36	2.90	24.66	50.87
70	2.84 / -4.30	10.19 / -3.60	9.06 / -21.39	11.22 / 0.0	56.76 / 0.0	26.62 / -3.60	13.79 / -20.52	17.11 / -47.00	7.38	18.19	3.78	23.20	50.02
75	2.39 / -4.30	8.82 / -3.60	6.79 / -20.71	10.72 / 0.0	54.60 / 0.0	24.47 / -3.60	11.53 / -19.28	12.73 / -47.51	6.46	16.99	4.46	21.76	49.19
80	1.98 / -4.30	7.61 / -3.60	4.72 / -19.87	10.32 / 0.0	52.67 / 0.0	22.54 / -3.60	9.60 / 18.02	8.41 / -47.69	5.68	15.81	5.02	20.39	48.43

TYPE "A" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A"

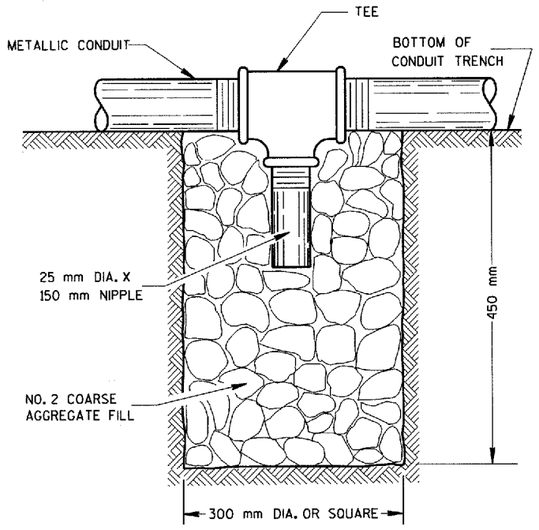
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 4/09/98 DATE
Roy L. Thimesch
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

M

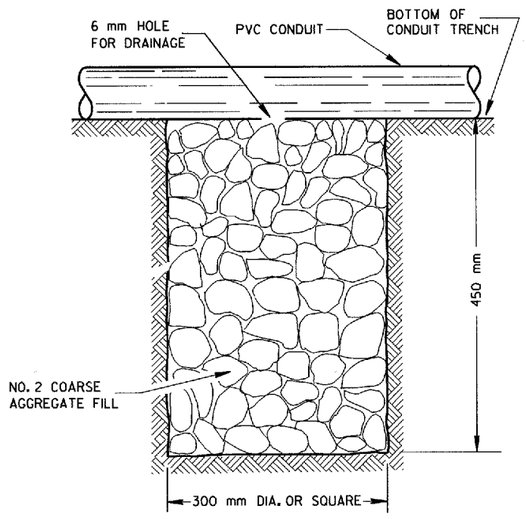
S.D.D. 9 A 1-11b

S.D.D. 9 A 1-11b



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm MINIMUM AND 900 mm MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 450 mm MIN. AND 900 mm MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

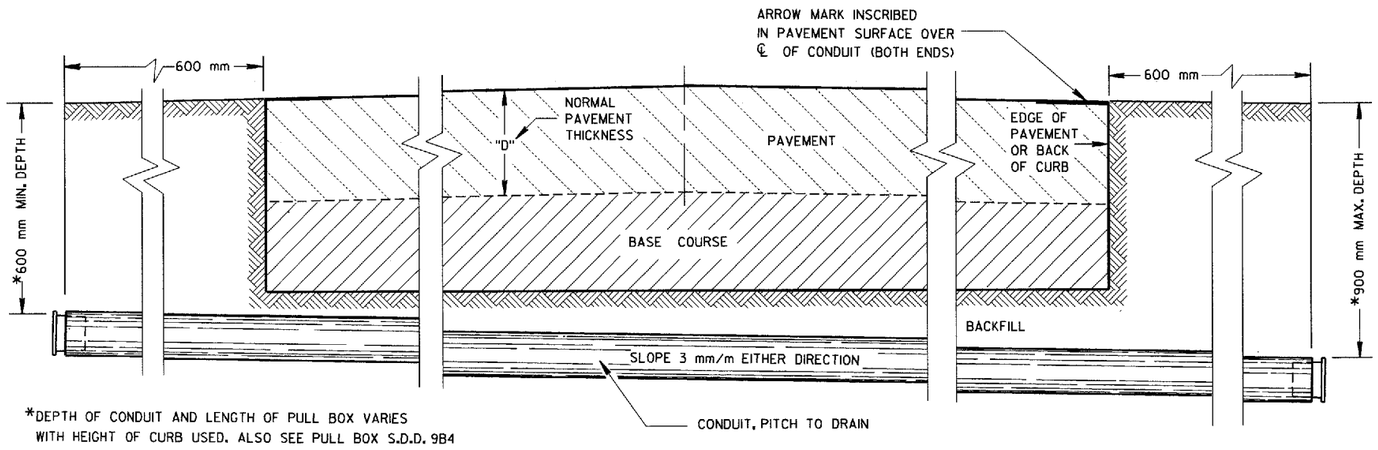
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

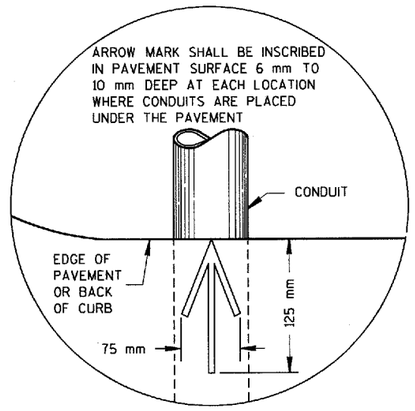
ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS



PLAN VIEW

ARROW MARK

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

M

S.D.D. 9 B 2-6

PLOT NAME:

PLOT SCALE:

REV. DATE:

ORIGINATOR:

LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

S.D.D. 9 B 2-6

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN MILLIMETERS		TYPE OF PIPE									
		CORRUGATED STEEL									POLYETHYLENE SDR 32.5
PIPE DIAMETER (INSIDE)	A	300	300	300	450	450	450	600	600	600	300
PIPE LENGTH **	B	600	750	900	600	750	900	900	1050	1200	600
WALL THICKNESS	C	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	10
COVER	D	260	260	260	413	413	413	565	565	565	260
FRAME	E	368	368	368	521	521	521	676	676	676	368
FRAME	F	217	217	217	368	368	368	521	521	521	217
FRAME	G	293	293	293	445	445	445	597	597	597	293
WEIGHT IN kg											
FRAME AND COVER		27	27	27	50	50	50	70	70	70	27

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 1200 mm (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 6 mm.

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

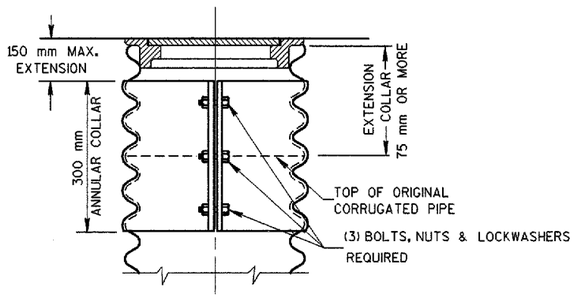
RODENT WIRE SCREEN SHALL BE 3 mm STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 15 mm X 2400 mm, COPPERCLAD, AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 1200 mm IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.



CORRUGATED PIPE EXTENDER

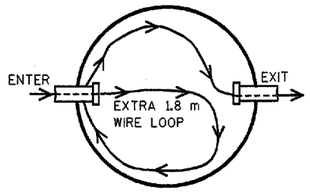
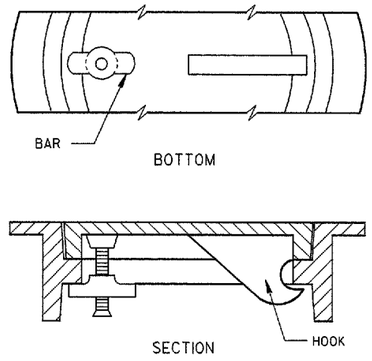
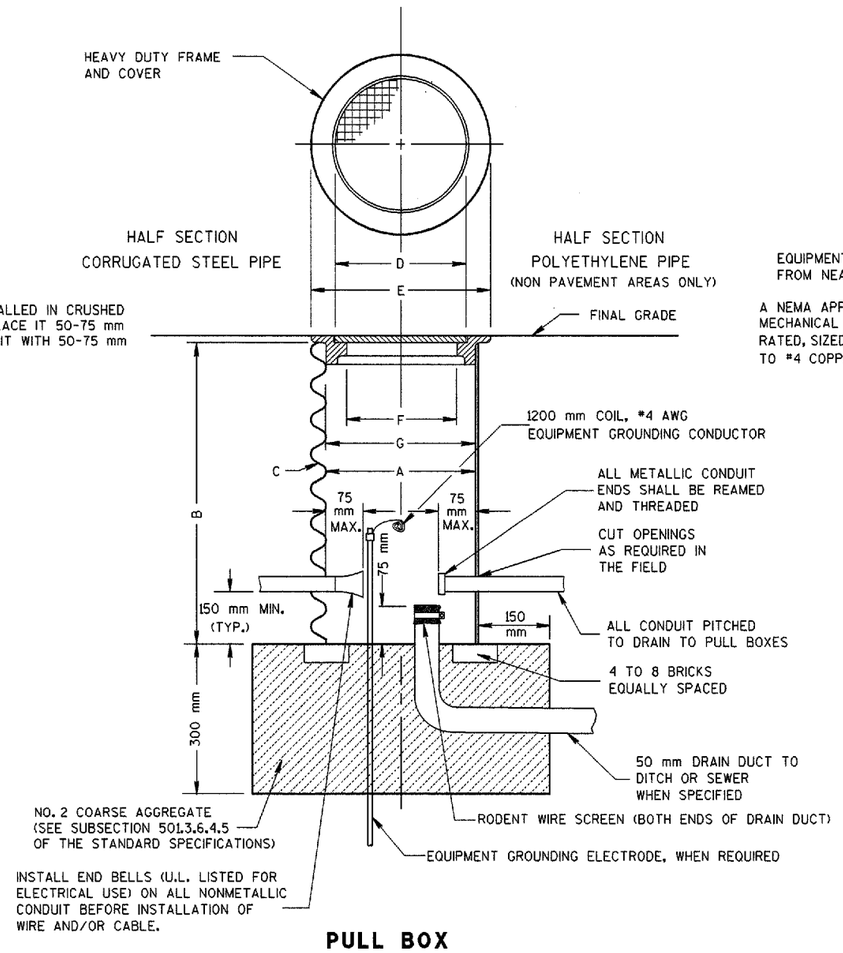


ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX



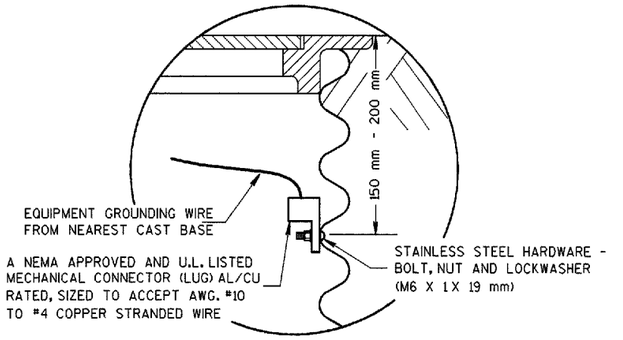
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



PULL BOX

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 50-75 mm BELOW GRADE AND COVER IT WITH 50-75 mm OF CRUSHED AGGREGATE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 1/1/00 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

M

S.D.D. 9 B 4-4

PLOT SCALE:
PLOT NAME:
REV. DATE: 1-6-99
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19, 20,21,22, 23,24, 25, 26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41, 42,43,44,45,46,47, 48, 49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
ORIGINATOR:
S.D.D. 9 B 4-4
FILE NAME:

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

FOUR (4) BOLTS (25.4 mm X 3.00 X 100 mm) TO BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 25.4 mm DIAMETER, 100 mm IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (634 MPa YIELD) HEAVY HEX NUT, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

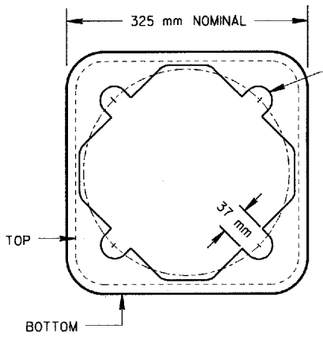
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING AN M6 X 1.00 X 19 mm STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

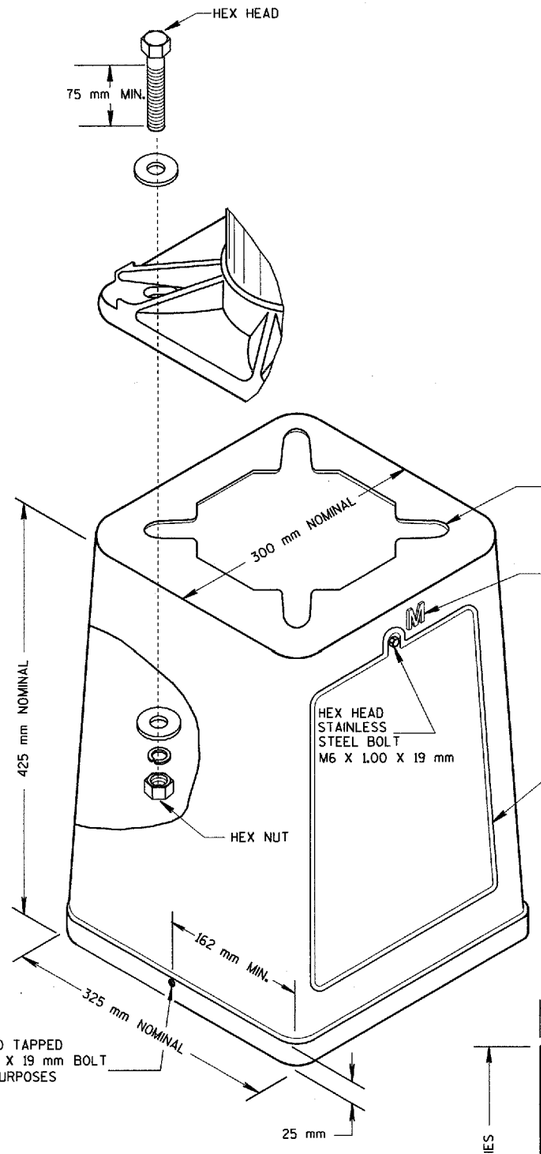
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 37 mm, THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

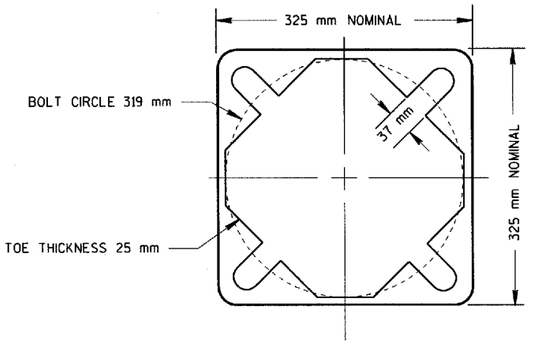
THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



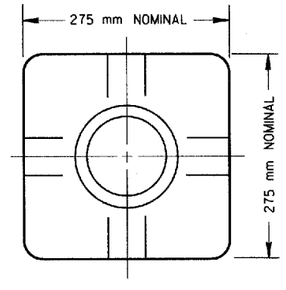
BOTTOM VIEW (TRANSFORMER BASE)



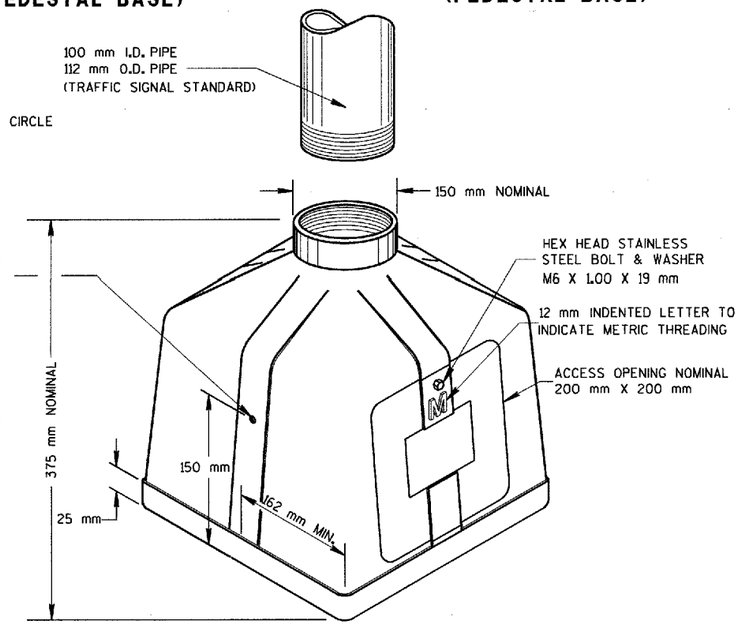
ISOMETRIC VIEW



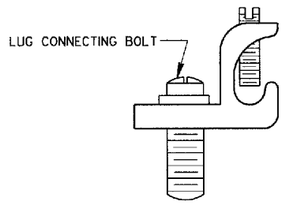
BOTTOM VIEW (PEDESTAL BASE)



TOP VIEW (PEDESTAL BASE)



ISOMETRIC VIEW PEDESTAL BASE

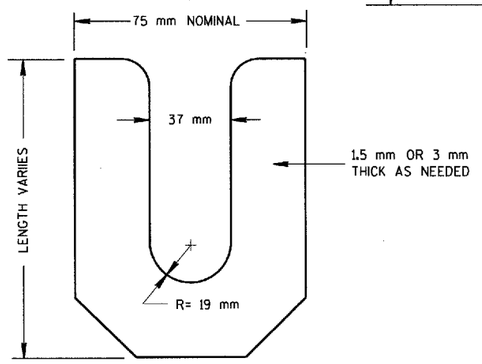


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

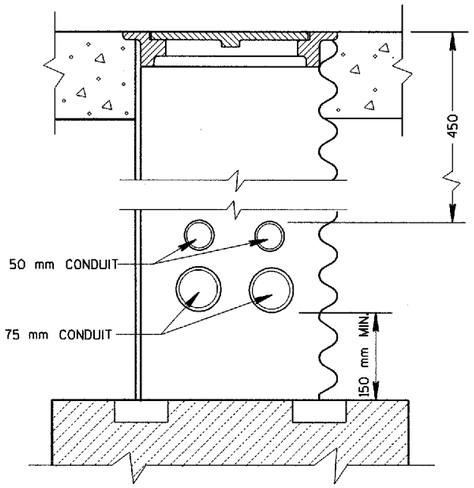
M

S.D.D. 9 C 3-2

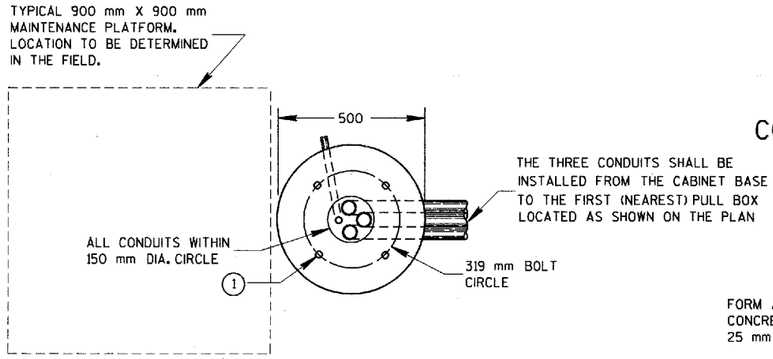
PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
FILE NAME:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

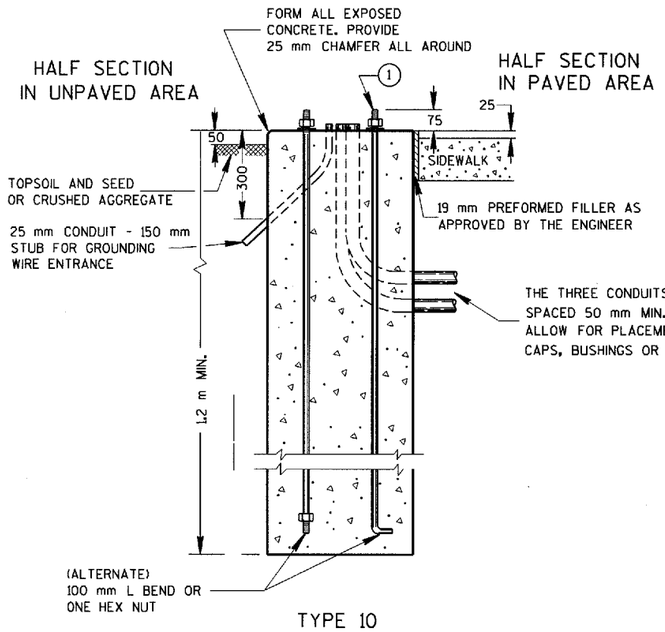
S.D.D. 9 C 3-2

CONTROL CABINET BASE TYPE	DIMENSIONS mm				m^3 CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 750 mm CABINET	850	1500	250	425	.49
TYPE 7 - 950 mm CABINET	1050	1500	250	525	.71
TYPE 8 - 950 mm CABINET	1050	1800	300	525	.99
TYPE 9 - VARIABLE	1350	1800	350	675	1.19
TYPE 10 - POST MOUNT	AS SHOWN				.24

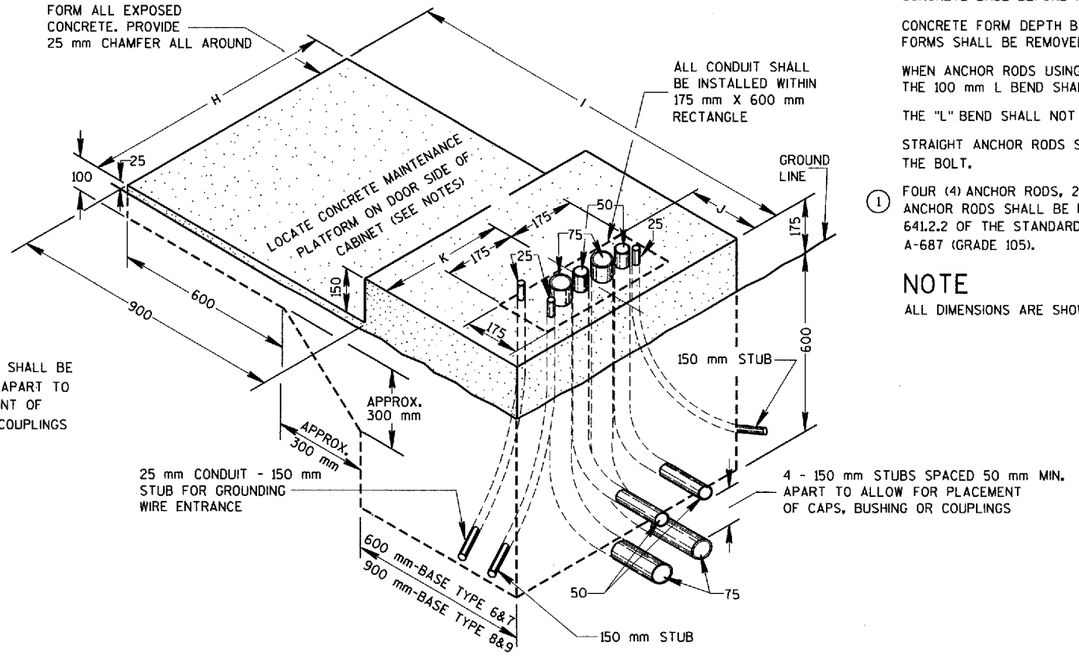


CONDUIT LOCATIONS IN 600 mm X 900 mm PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)





TYPE 10



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

INSTALL FOUR 12 mm MINIMUM DIAMETER X 100 mm MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR RODS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 25 mm.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm MINIMUM AND 900 mm MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 450 mm MINIMUM AND 900 mm MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 900 mm SQUARE 100 mm THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 25 mm SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (50 mm AND 75 mm) CONDUITS SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 150 mm MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 100 mm L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 300 mm IN LENGTH ON EACH END OF THE BOLT.

(1) FOUR (4) ANCHOR RODS, 25 mm DIA. X 1050 mm. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449, OR ASTM. A-687 (GRADE 105).

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

M

S.D.D. 9 C 5-2

PLOT SCALE:
PLOT NAME:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
REV. DATE:
ORIGINATOR:
S.D.D. 9 C 5-2
FILE NAME:

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:

LEVELS ON * 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

S.D.D. 9 C 8-1

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 150 mm EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 25 mm. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 300 mm OR LESS.

A NO. 4 AWG. STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 25 mm CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 1200 mm COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE 25.4 mm X 1500 mm.

ANCHOR RODS SHALL BE THREADED 300 mm IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE THE 100 mm "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 450 mm. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 900 mm EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 25.4 mm DIA. X 1500 mm ANCHOR RODS

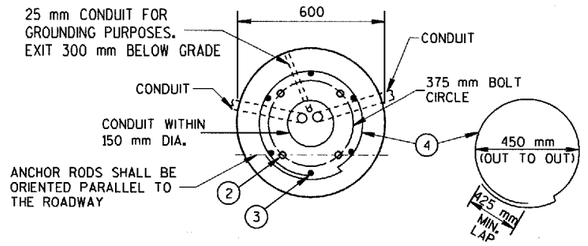
(3) (6) NO. 19 X 2000 mm BAR STEEL REINFORCEMENT.

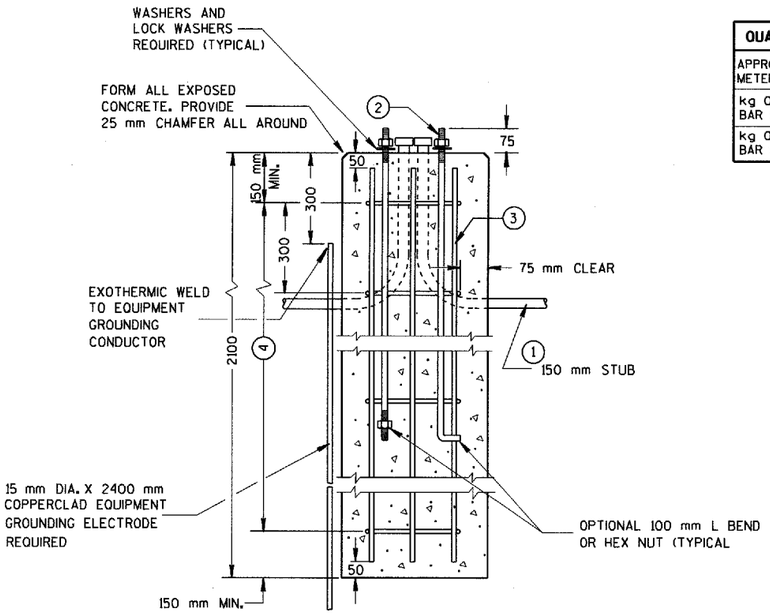
(4) (7) NO. 13 X 1850 mm BAR STEEL REINFORCEMENT @ 300 mm C-C.

NOTE:

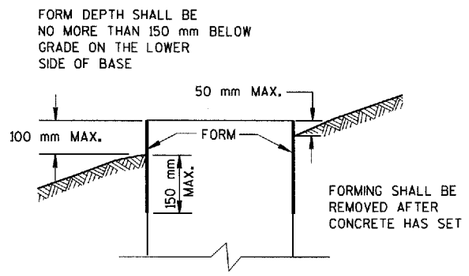
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

METRIC ANCHOR ROD SIZES SHOWN ARE SOFT CONVERTED ENGLISH SIZES.



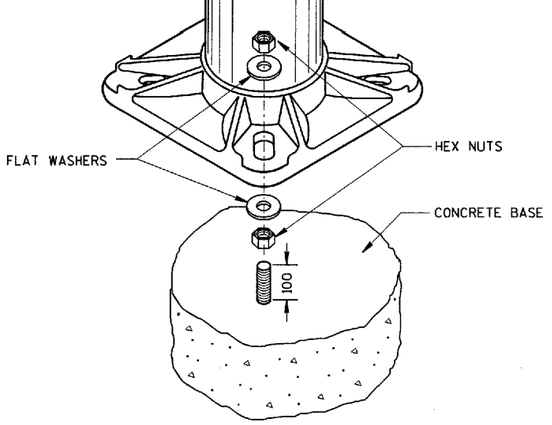


CONCRETE BASE, TYPE 7 (FOR 12.2 m LIGHT POLES)



FORMING DETAIL

QUANTITY REQUIREMENTS	
APPROX. CUBIC METERS OF CONCRETE	.612
kg OF HOOP BAR STEEL	13.2
kg OF VERTICAL BAR STEEL	27.2



NON-BREAKAWAY INSTALLATION (LEVELING NUT)

CONCRETE BASE, TYPE 7

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

M

FILE NAME:

S.D.D. 9 C 8-1

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:

LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

S.D.D. 9 C 9-1

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 150 mm EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 25 mm. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 300 mm OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 1200 mm COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE 25.4 mm X 1500 mm.

ANCHOR RODS SHALL BE THREADED 300 mm IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS. ASTM A-449, OR ASTM A-687 (GRADE 105).

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 450 mm. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 900 mm EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 25.4 mm DIA. X 1500 mm ANCHOR RODS

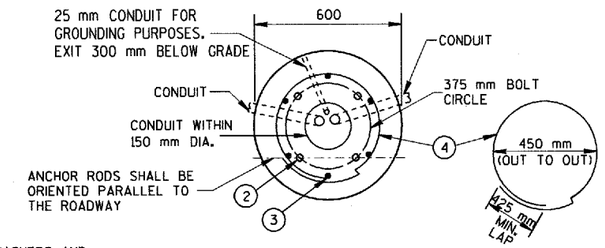
(3) (6) NO. 19 X 2900 mm BAR STEEL REINFORCEMENT.

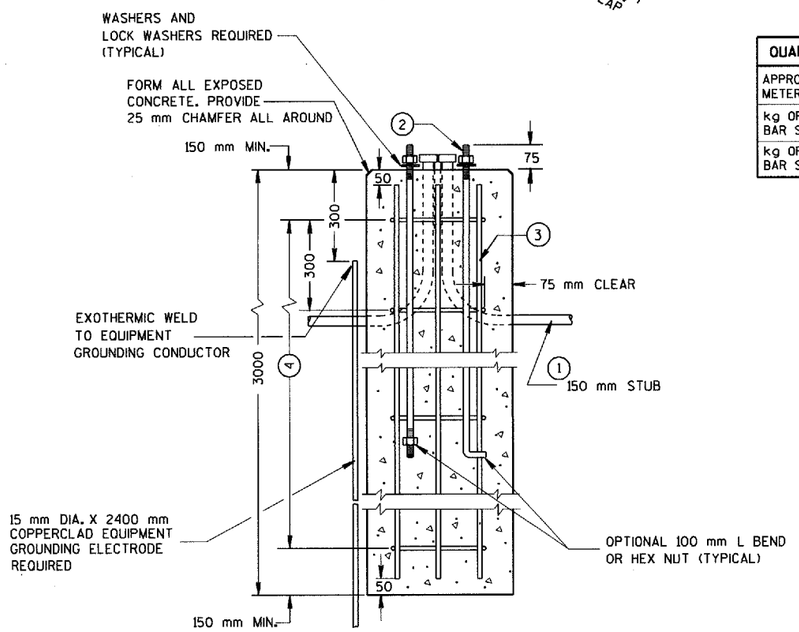
(4) (10) NO. 13 X 1850 BAR STEEL REINFORCEMENT @ 300 mm C-C.

NOTE:

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.

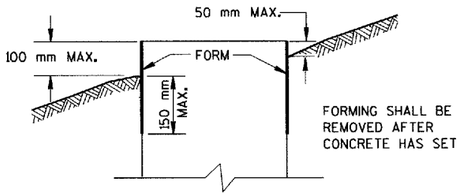
METRIC ANCHOR ROD SIZES SHOWN ARE SOFT CONVERTED ENGLISH SIZES.





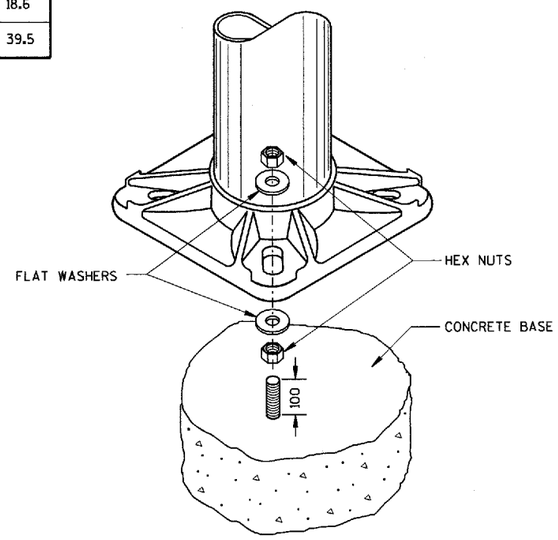
CONCRETE BASE, TYPE 8 (FOR 15.2 m LIGHT POLES)

FORM DEPTH SHALL BE NO MORE THAN 150 mm BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	
APPROX. CUBIC METERS OF CONCRETE	.932
kg OF HOOP BAR STEEL	18.6
kg OF VERTICAL BAR STEEL	39.5



NON-BREAKAWAY INSTALLATION (LEVELING NUT)

CONCRETE BASE, TYPE 8,

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/66 DATE
FHWA

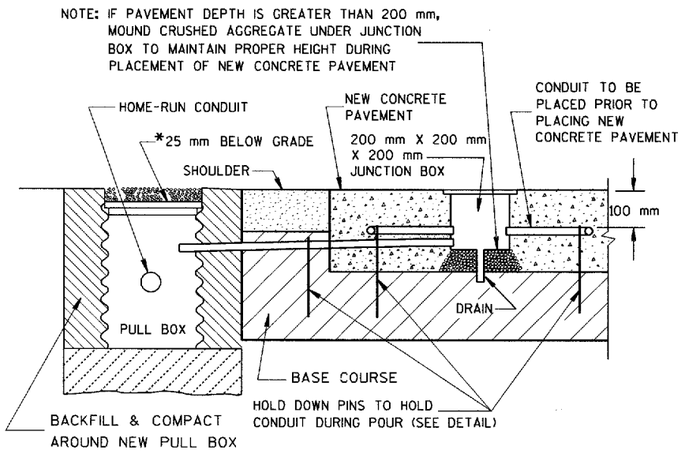
STATE ELECTRICAL ENGINEER FOR HIGHWAYS

M

FILE NAME:

S.D.D. 9 C 9-1

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



SECTION A-A
NO CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 75 mm BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

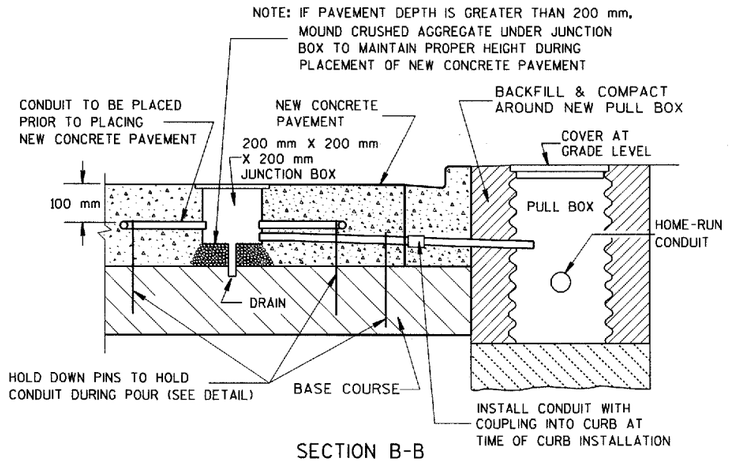
ANY PVC LEADOUT CONDUIT CONTAINING MORE THAN ONE TWISTED PAIR OF LOOP LEAD WIRE SHALL BE 50 mm.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER 300 mm BEFORE INSTALLATION.

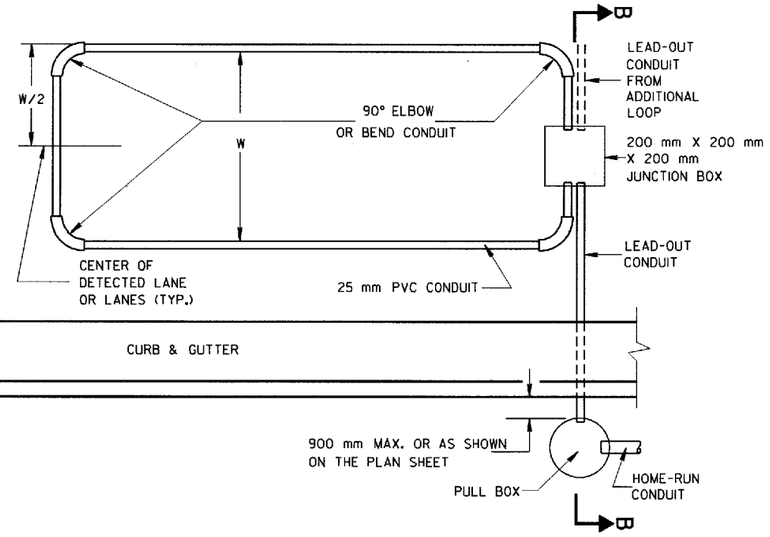
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROAD SIDE PULL BOX, THROUGH THE JUNCTION BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

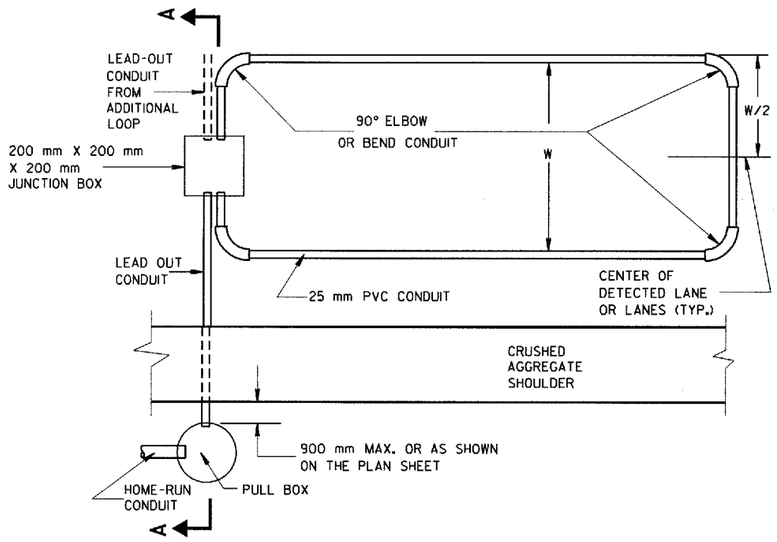
PROTECTION OF THE JUNCTION BOX AND RELATED CONDUITS SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW CONCRETE PAVEMENT IS POURED.



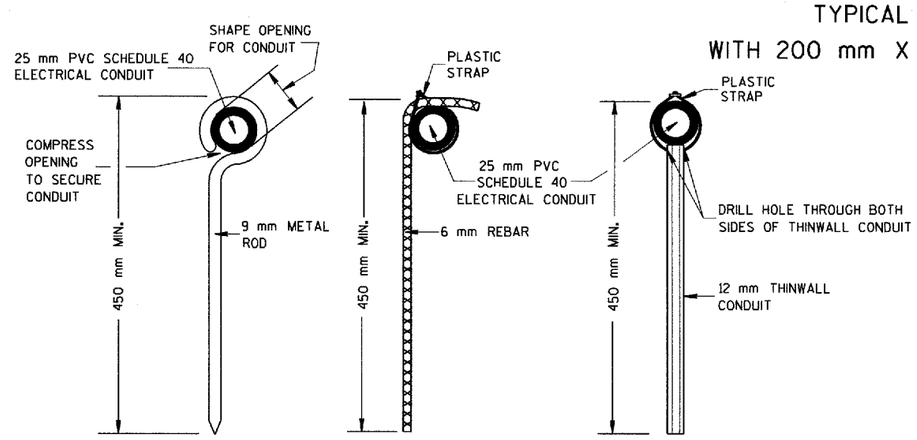
SECTION B-B
CURB & GUTTER
DETECTOR LOOP INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR
WITH 200 mm X 200 mm X 200 mm JUNCTION BOX



TYPICAL PLAN OF LOOP DETECTOR
WITH 200 mm X 200 mm X 200 mm JUNCTION BOX



TYPICAL DETAILS FOR HOLD DOWN PINS

LOOP DETECTOR INSTALLED
IN NEW CONCRETE PAVEMENT
200 mm X 200 mm X 200 mm
JUNCTION BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

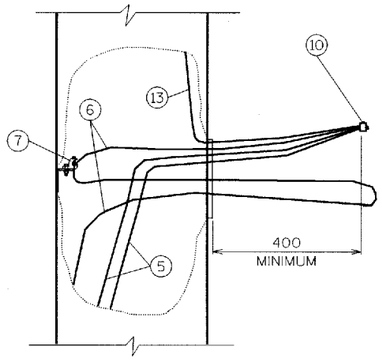
M

S.D.D. 9 F 2-2

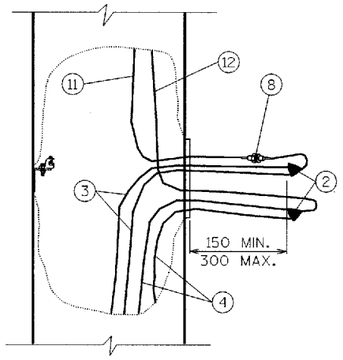
FILE NAME:

S.D.D. 9 F 2-2

REVISION DATE: 11-14-96
IPLOT PEN TABLE: SSOLID.PEN OR BSOLID.PEN
FILE NAME: IOHL11.DGN
ORIGINATOR: D2 ELECTRICAL OPERATIONS UNIT G.E.

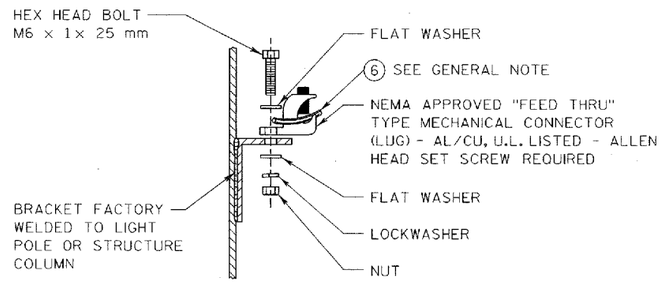


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



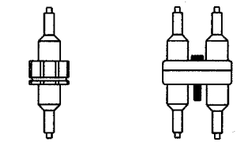
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

GENERAL NOTES:

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

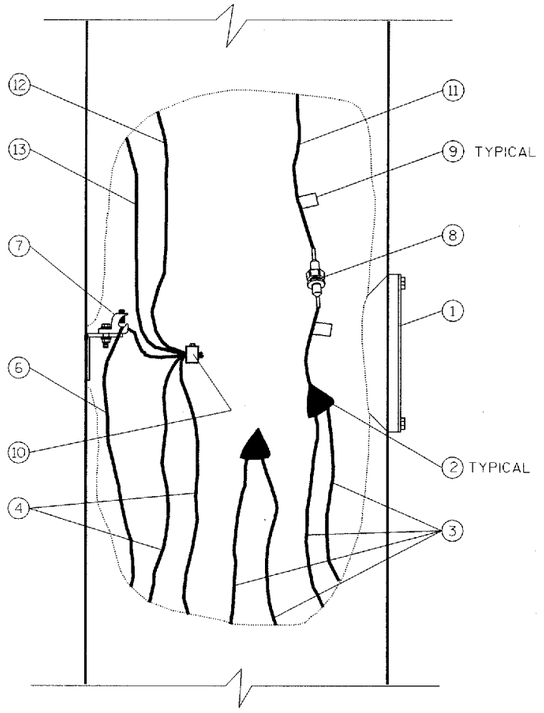
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

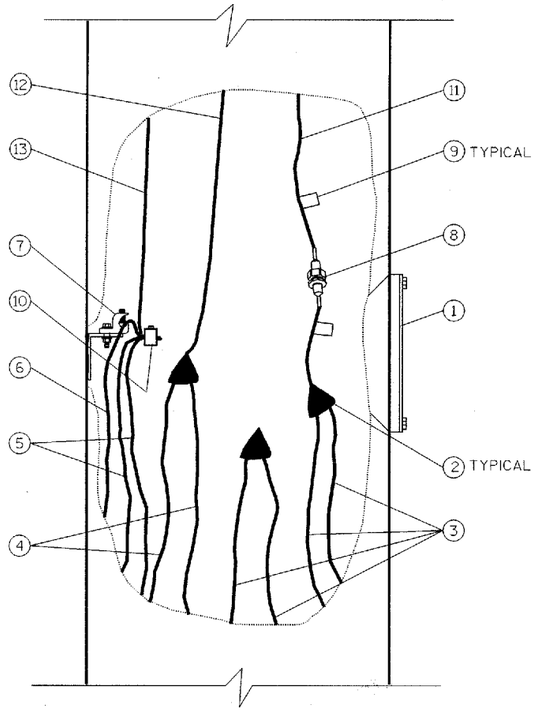
THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

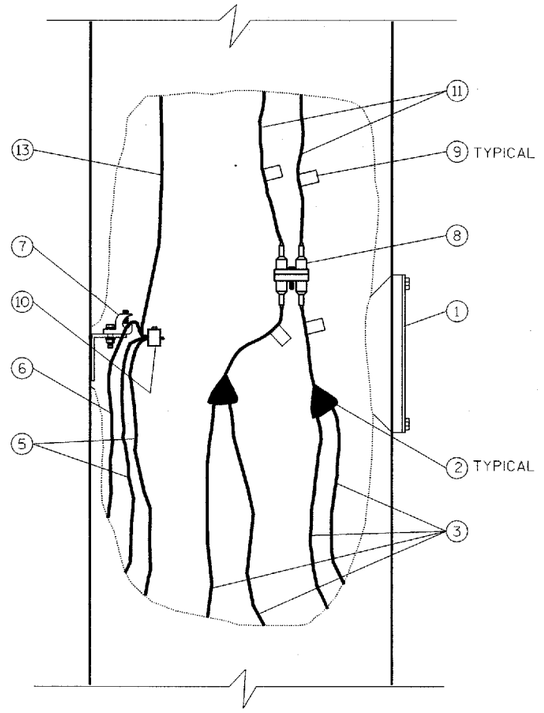
CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



CUTAWAY HAND HOLE DETAIL
GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HAND HOLE DETAIL
ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HAND HOLE DETAIL
PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY. SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

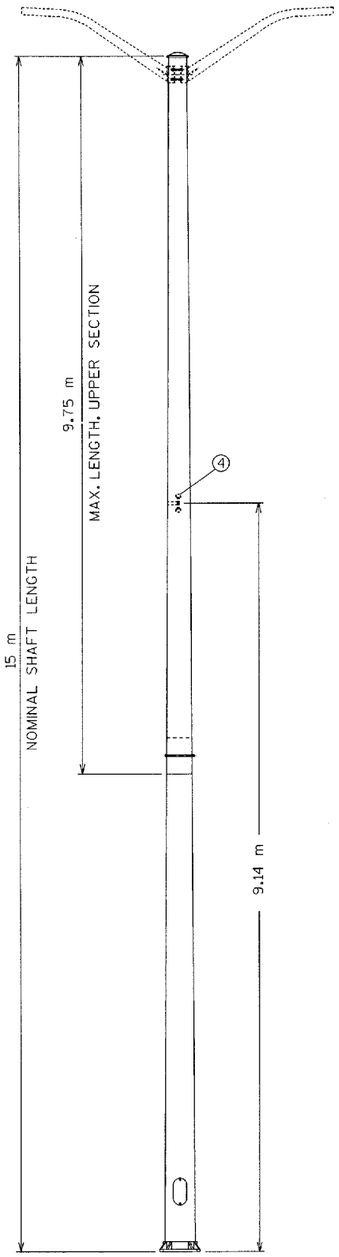
ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

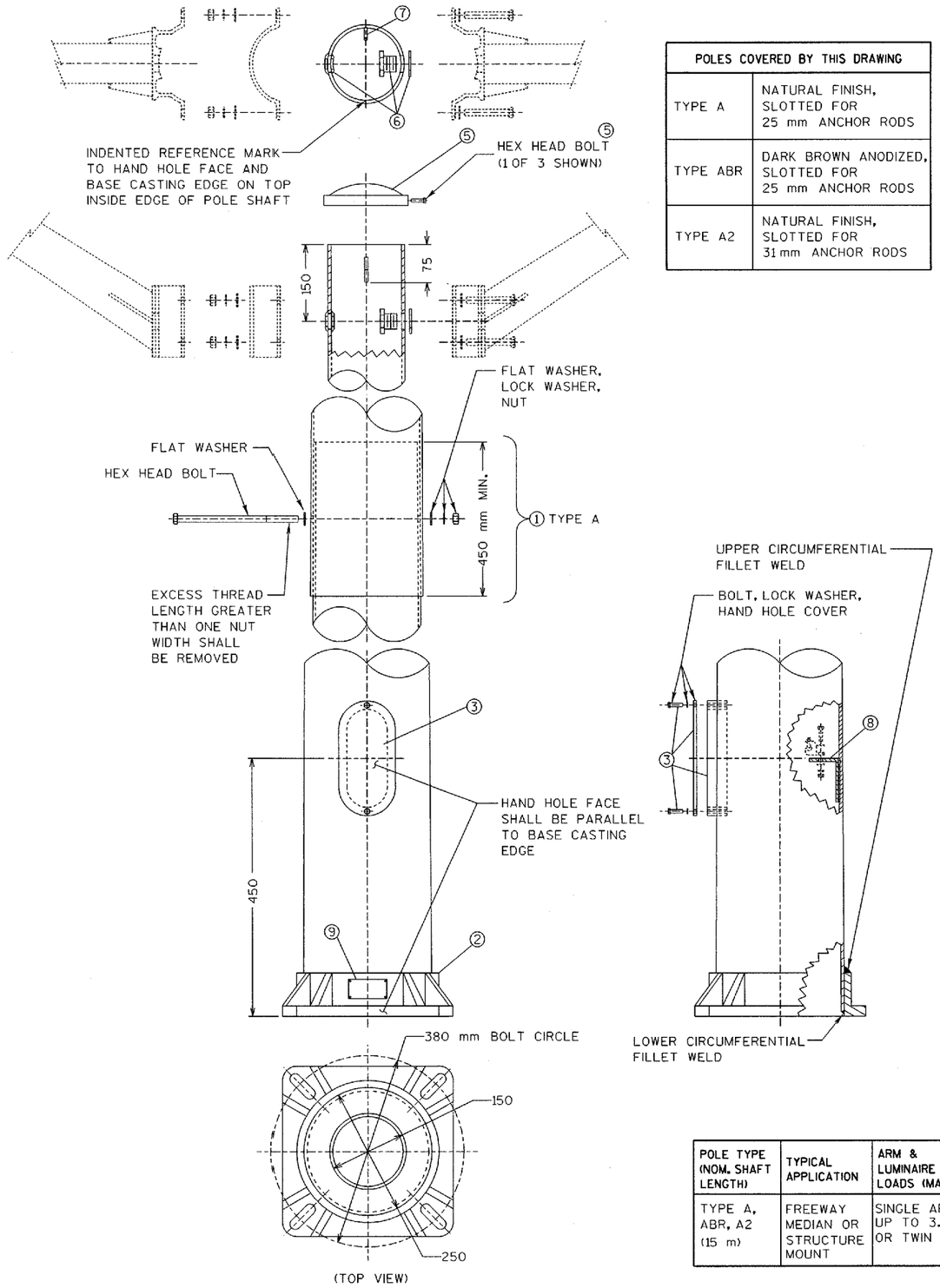
APPROVED
11/19/96
DATE
STATE ELECTRICAL ENGINEER FOR HWYS
FHWA
M

S.D.D. 10 HL 1-1

S.D.D. 10 HL 1-1



POLE, TYPE A



POLES COVERED BY THIS DRAWING	
TYPE A	NATURAL FINISH, SLOTTED FOR 25 mm ANCHOR RODS
TYPE ABR	DARK BROWN ANODIZED, SLOTTED FOR 25 mm ANCHOR RODS
TYPE A2	NATURAL FINISH, SLOTTED FOR 31 mm ANCHOR RODS

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM.
EXCEPT THAT BASE CASTINGS SHALL BE CONSTRUCTED OF 356-T6 ALUMINUM.
THE SHAFT SHALL BE ROUND AND UNIFORMLY TAPERED FROM 254 mm X 152 mm.

HEAT TREATMENT OF WELDMENTS IN STRUCTURAL AREAS (e.g. BASE CASTING, HAND HOLE, BRACKET FOR GROUNDING LUG) REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE ARMS AND CLAMP ASSEMBLIES SHOWN FOR INFORMATION ONLY (PAID SEPARATELY).

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 22.7 kg IN WEIGHT AND 0.14 m^2 FOR E.P.A.

① OPTIONAL TELESCOPING FIELD JOINT SECURED BY A 5/8"-11UNC THROUGH BOLT OR STUD.

THE OVERLAP OF THE UPPER AND LOWER SECTIONS SHALL BE NOT LESS THAN 450 mm.

② SHOE BASE.

③ 100 mm x 150 mm REINFORCED HANDHOLE & COVER ASSEMBLY SECURED BY TWO (2) M6 X 1.0 X 20 mm TPI STAINLESS STEEL HEX HEAD BOLTS.

HANDHOLE SHALL BE 90 DEGREES FROM LUMINAIRE ARMS OF TWIN LUMINAIRE POLES; 180 DEGREES FROM LUMINAIRE ARM OF SINGLE LUMINAIRE POLES; 0 DEGREES FROM LUMINAIRE ARM FOR STRUCTURE MOUNTED POLES.

④ INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

⑤ FURNISH AND INSTRALL CAST OR METALLIC (ALUMINUM ALLOY) POLE CAP. FASTEN CAP WITH THREE M6 X 1.0 X 20 mm STAINLESS STEEL HEX HEAD BOLTS.

⑥ 34 mm FIELD DRILLED HOLE WITH 25 mm CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET), PER EACH REQUIRED LUMINAIRE ARM.

⑦ FACTORY-WELDED "J" HOOK FOR POLE WIRE STRAIN RELIEF.

⑧ FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE. (LUG AND HARDWARE PAID UNDER SEPARATE ITEMS; SHOWN FOR INFORMATION ONLY). PROVIDE HOLE IN BRACKET FOR M6 X 1.0 X 20 mm STAINLESS STEEL HEX HEAD BOLTS.

⑨ MANUFACTURER'S PLATE SHOWING WIsDOT POLE TYPE, MANUFACTURER, AND DATE.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

POLE TYPE (NOM. SHAFT LENGTH)	TYPICAL APPLICATION	ARM & LUMINAIRE LOADS (MAX.)	ADDITIONAL (MAX.) LOADS
TYPE A, ABR, A2 (15 m)	FREEWAY MEDIAN OR STRUCTURE MOUNT	SINGLE ARM, UP TO 3.0 m., OR TWIN 1.22 m ARMS	UP TO 1.86 m^2 OF TRAFFIC SIGNS, MOUNTED AS HIGH AS 4.57 m TO TOP OF SIGN

POLES, TYPES A, ABR, A2 ALUMINUM 14.48 m SHAFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 1/11/00 DATE
STATE ELECTRICAL ENGINEER FOR HWYS
FHWA
M

S.D.D. 10 HL 17-2b

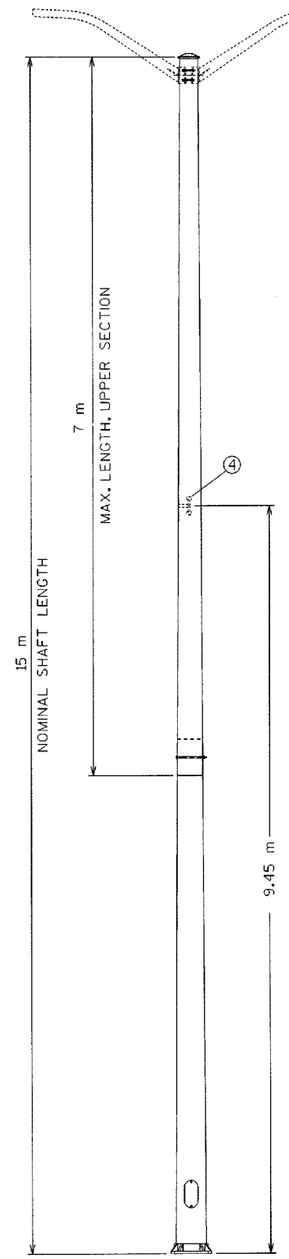
REVISION DATE: 6-1-99
IPLOT PEN TABLE:
FILE NAME:
ORIGINATOR:
S.D.D. 10 HL 17-2b

REVISION DATE: 6-1-99

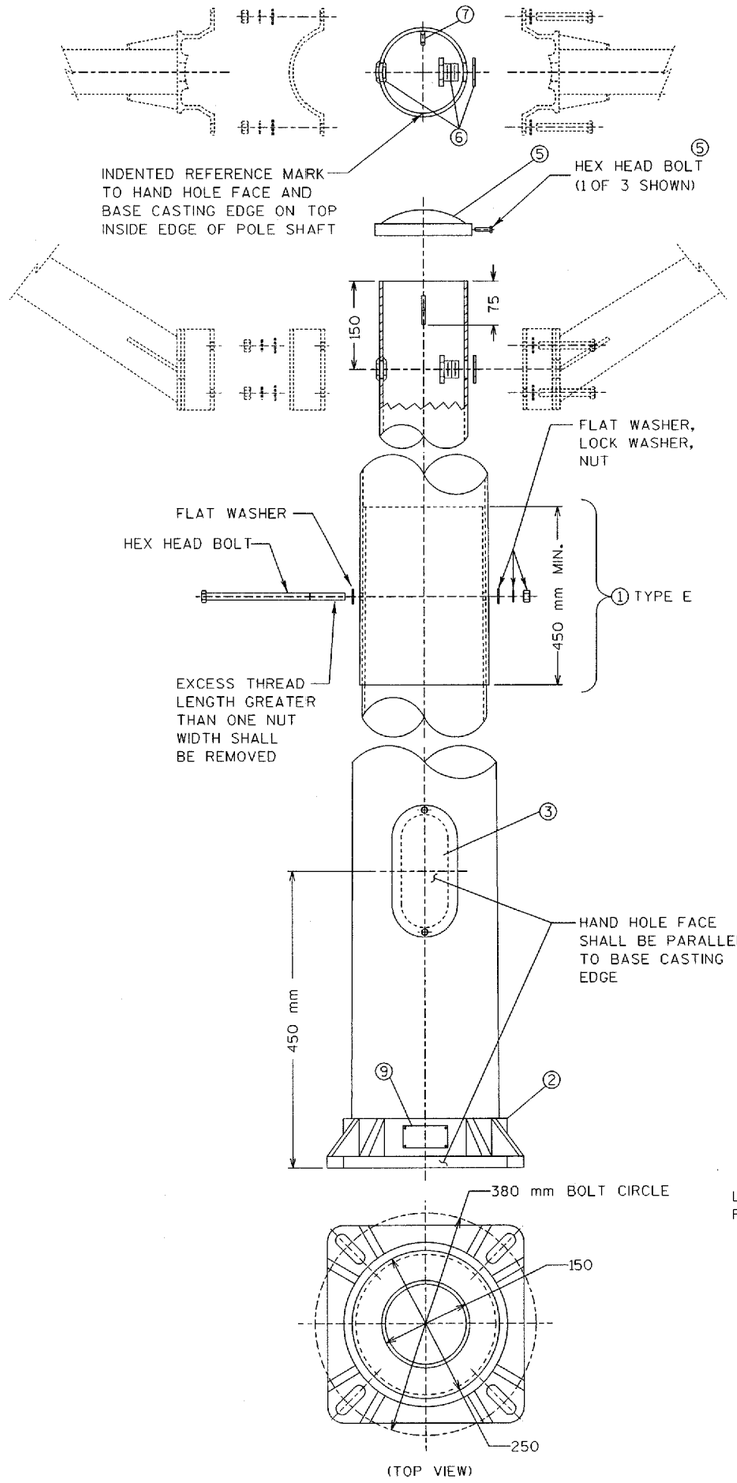
IPLOT PEN TABLE:

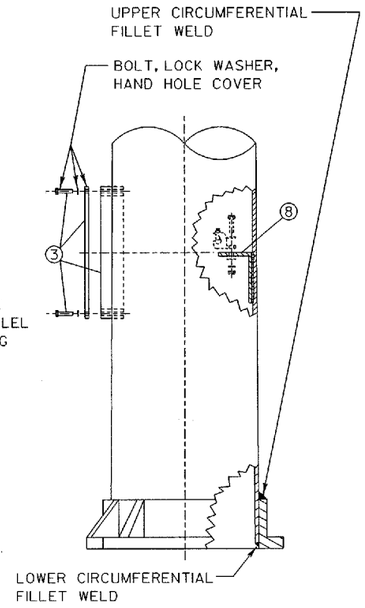
FILE NAME:

ORIGINATOR:



POLE, TYPE E





POLES COVERED BY THIS DRAWING	
TYPE E	NATURAL FINISH, SLOTTED FOR 25 mm ANCHOR RODS
TYPE EBR	DARK BROWN ANODIZED, SLOTTED FOR 25 mm ANCHOR RODS
TYPE E2	NATURAL FINISH, SLOTTED FOR 31 mm ANCHOR RODS

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM.
EXCEPT THAT BASE CASTINGS SHALL BE CONSTRUCTED OF 356-T6 ALUMINUM.

HEAT TREATMENT OF WELDMENTS IN STRUCTURAL AREAS (e.g. BASE CASTING, HAND HOLE, BRACKET FOR GROUNDING LUG) REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE ARMS AND CLAMP ASSEMBLIES SHOWN FOR INFORMATION ONLY (PAID SEPARATELY).

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 22.7 kg IN WEIGHT AND 0.14 m^2 E.P.A..

① OPTIONAL TELESCOPING FIELD JOINT SECURED BY A $\frac{5}{8}$"-11UNC THROUGH BOLT OR STUD.

THE OVERLAP OF THE UPPER AND LOWER SECTIONS SHALL BE NOT LESS THAN 450 mm.

② SHOE BASE.

③ 100 mm x 150 mm REINFORCED HANDHOLE & COVER ASSEMBLY SECURED BY TWO (2) M6 X 1.0 X 20 mm STAINLESS STEEL HEX HEAD BOLTS.

HANDHOLE SHALL BE 90 DEGREES FROM LUMINAIRE ARMS OF TWIN LUMINAIRE POLES; 180 DEGREES FROM LUMINAIRE ARM OF SINGLE LUMINAIRE POLES; 0 DEGREES FROM LUMINAIRE ARM FOR STRUCTURE MOUNTED POLES.

④ INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

⑤ FURNISH AND INSTRALL CAST OR METALLIC (ALUMINUM ALLOY) POLE CAP. FASTEN CAP WITH THREE M6 X 1.0 X 20 mm STAINLESS STEEL HEX HEAD BOLTS.

⑥ 34 mm FIELD DRILLED HOLE WITH 25 mm CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET), PER EACH REQUIRED LUMINAIRE ARM.

⑦ FACTORY-WELDED "J" HOOK FOR POLE WIRE STRAIN RELIEF.

⑧ FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE. (LUG AND HARDWARE PAID UNDER SEPARATE ITEMS; SHOWN FOR INFORMATION ONLY). PROVIDE HOLE IN BRACKET FOR M6 X 1.0 X 20 mm STAINLESS STEEL HEX HEAD BOLTS.

⑨ MANUFACTURER'S PLATE SHOWING WisDOT POLE TYPE, MANUFACTURER, AND DATE.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

POLE TYPE (NOM. SHAFT LENGTH)	TYPICAL APPLICATION	ARM & LUMINAIRE LOADS (MAX.)	ADDITIONAL (MAX.) LOADS
TYPE E, EBR, E2 (15 m)	FREEWAY SLOPE MOUNT	SINGLE ARM, UP TO 6.1 m, TRUSS TYPE OR TWIN ARMS UP TO 3.05 m SINGLE MEMBER	UP TO 1.86 m^2 OF TRAFFIC SIGNS, MOUNTED AS HIGH AS 4.57 m TO TOP OF SIGN

POLES, TYPES E, EBR, E2 ALUMINUM 14.94 m SHAFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 1/11/00 DATE

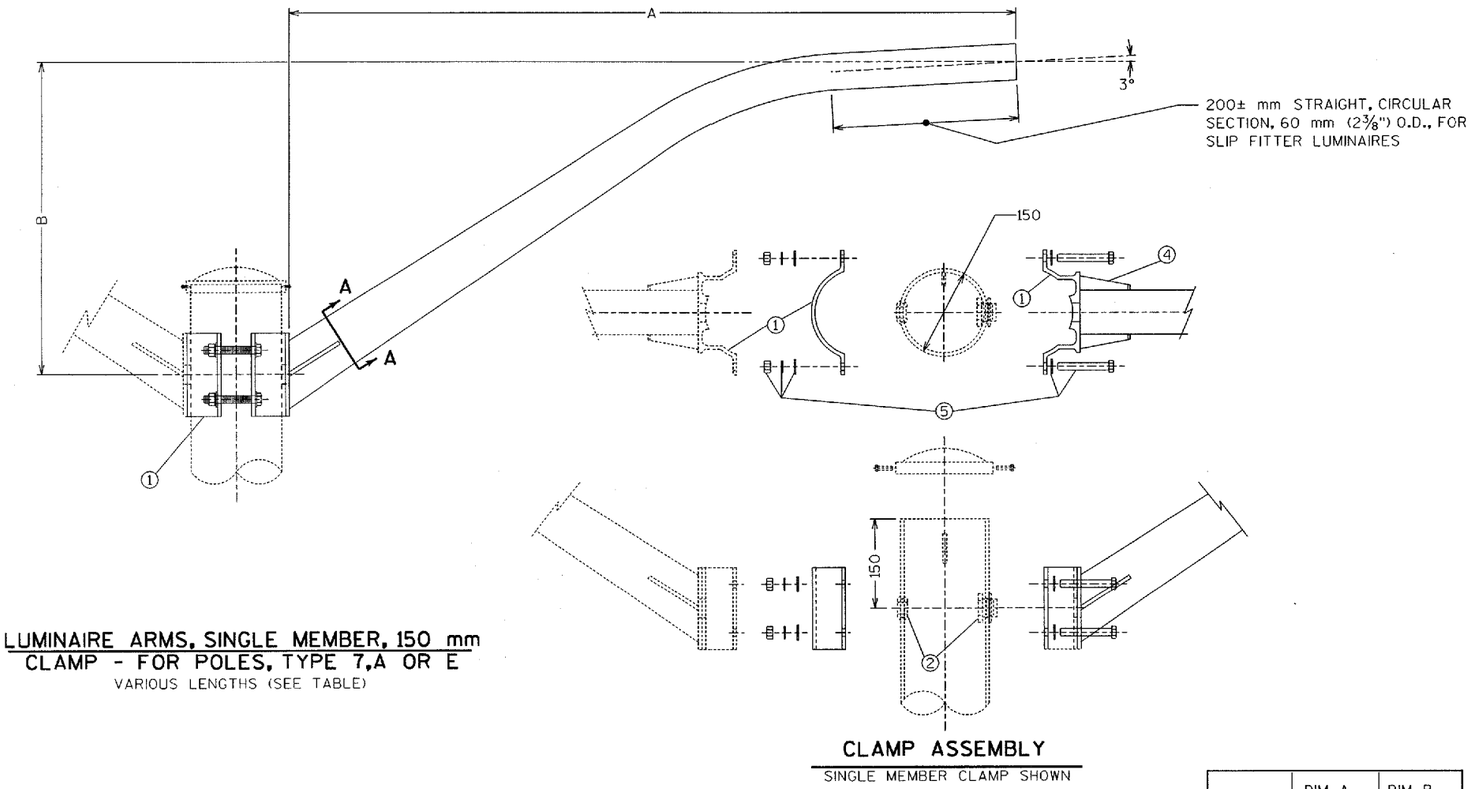
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA

M

S.D.D. 10 HL 17-2c

S.D.D. 10 HL 17-2c



LUMINAIRE ARMS, SINGLE MEMBER, 150 mm
CLAMP - FOR POLES, TYPE 7,A OR E
VARIOUS LENGTHS (SEE TABLE)

CLAMP ASSEMBLY
SINGLE MEMBER CLAMP SHOWN

TYPE	DIM. A NOMINAL ARM LENGTH (m)	DIM. B APPROX. RISE (m)
SINGLE MEMBER	1.2	0.61
SINGLE MEMBER	2.4	0.91
SINGLE MEMBER	3.0	0.91
SINGLE MEMBER	4.6	0.91

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM (OR DARK BRONZE ANODIZED IF SO STATED IN THE CONTRACT).

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 22.7 kg IN WEIGHT AND 0.14 m^2 FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 34 mm FIELD DRILLED HOLE WITH 25 mm CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINARE ARM. PROVIDE HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.

③ STIFFENER

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - ½"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTERWISE SHOWN.

LUMINAIRE ARMS, SINGLE MEMBER
150 mm CLAMP

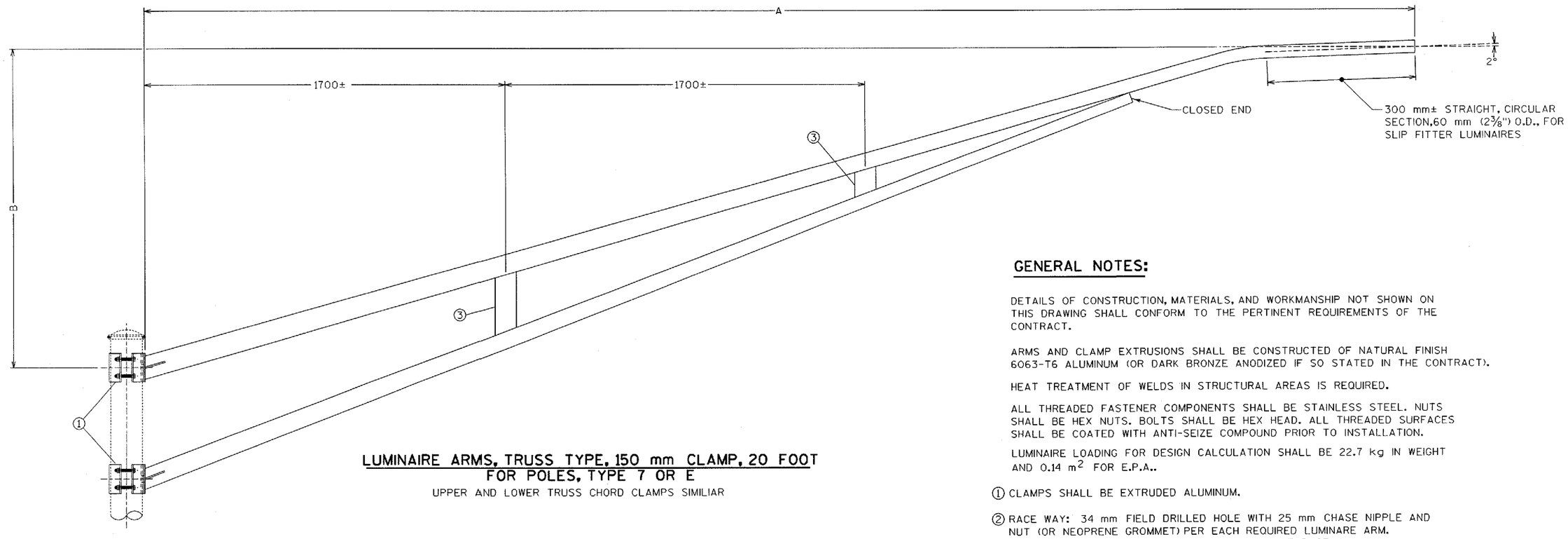
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 1/1/00 DATE
STATE ELECTRICAL ENGINEER FOR HWYS
FHWA
M

S.D.D. 10 HL 18-2a

REVISION DATE: 5-12-99
IPLOT PEN TABLE:
FILE NAME:
ORIGINATOR:
S.D.D. 10 HL 18-2a

REVISION DATE: 5-12-99
IPLOT PEN TABLE:
FILE NAME:
ORIGINATOR:



LUMINAIRE ARMS, TRUSS TYPE, 150 mm CLAMP, 20 FOOT FOR POLES, TYPE 7 OR E

UPPER AND LOWER TRUSS CHORD CLAMPS SIMILIAR

TYPE	DIM. A NOMINAL ARM LENGTH (m)	DIM. B APPROX. RISE (m)
TRUSS TYPE	6.1	1.52

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM (OR DARK BRONZE ANODIZED IF SO STATED IN THE CONTRACT).

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 22.7 kg IN WEIGHT AND 0.14 m^2 FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 34 mm FIELD DRILLED HOLE WITH 25 mm CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINARE ARM. PROVIDE HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.
NOTE: NO RACEWAY ON LOWER TRUSS CORD CLAMP. FOR INFORMATION ONLY.

③ STIFFENER.

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - ½"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

LUMINAIRE ARMS, TRUSS TYPE 150 mm CLAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 1/11/00 DATE
STATE ELECTRICAL ENGINEER FOR HWYS

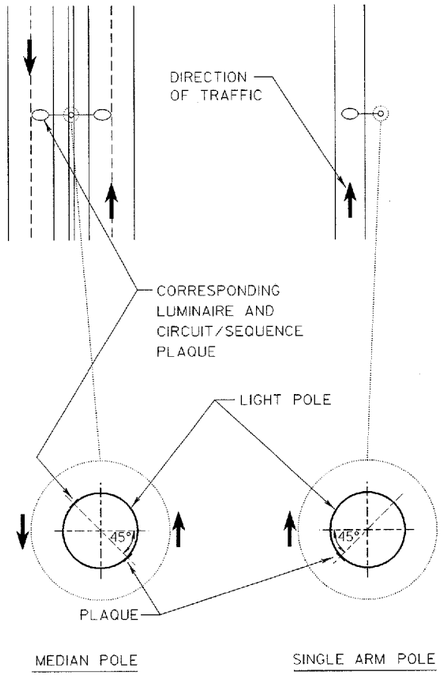
FHWA

M

S.D.D. 10 HL 18-2b

S.D.D. 10 HL 18-2b

REVISION DATE: 11-14-96
IPLOT PEN TABLE: SSOLID.PEN OR BSOLID.PEN
FILE NAME: I0HL2I.DGN
ORIGINATOR: D2 ELECTRICAL OPERATIONS UNIT G.E.



LOCATION OF LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

GENERAL NOTES:

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS: FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 1500 mm ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 1.5 mm THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, 12 mm WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

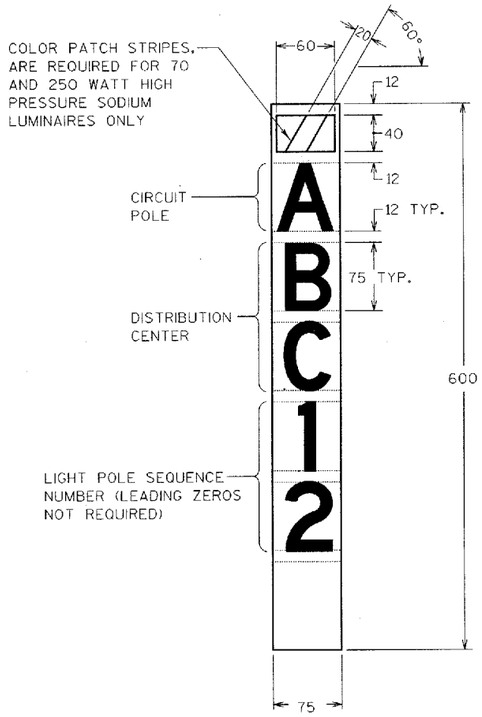
COLOR PATCHES - VARIOUS COLORS, SELF-ADHESIVE VINYL SHEETING

WITH THE APPROVAL OF THE ENGINEER, THE BASE MATERIAL MAY BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE SURFACE, IN CASES SUCH AS SMOOTH, CLEAN ALUMINUM POLES.

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.

COLOR PATCH CODE FOR HPS LUMINAIRES

1000 WATT - NO PATCH
400 WATT - ORANGE
310 WATT - BLUE
250 WATT - ORANGE WITH WHITE STRIPE
200 WATT - RED
150 WATT - GREEN
100 WATT - BROWN
70 WATT - BROWN WITH WHITE STRIPE



LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

IDENTIFICATION PLAQUES
LIGHT POLES

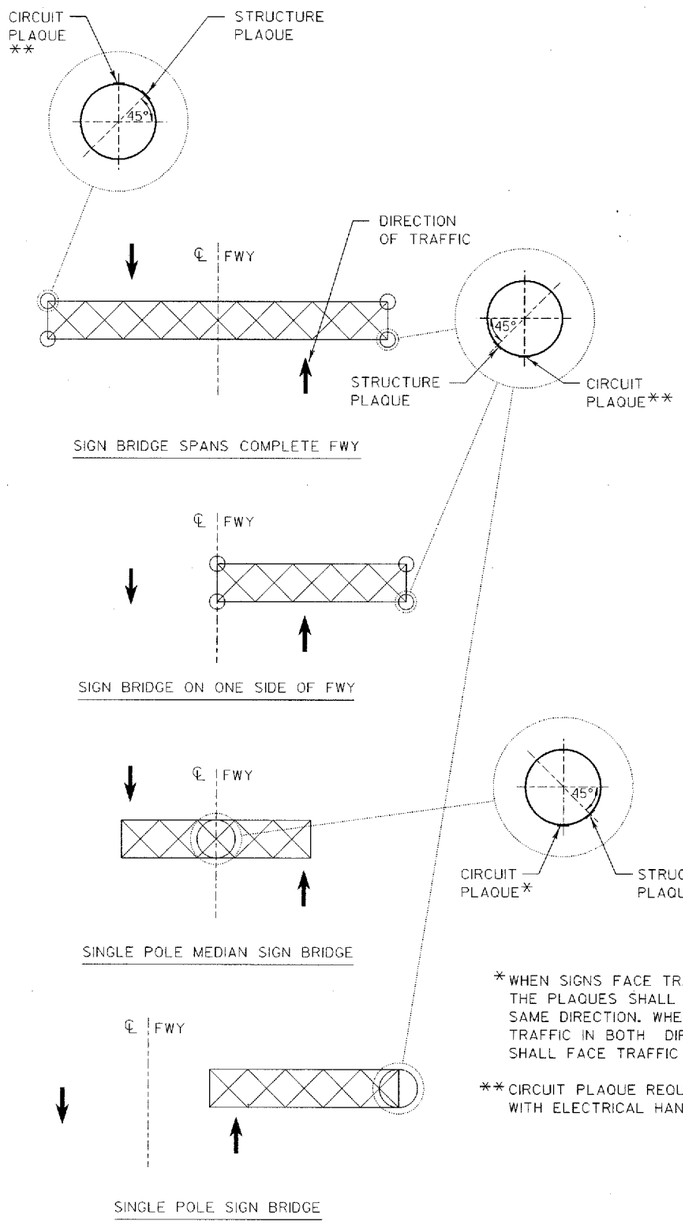
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/14/96
DATE
STATE ELECTRICAL ENGINEER FOR HWYS
FHWA
M

S.D.D. 10 HL 2-1

S.D.D. 10 HL 2-1

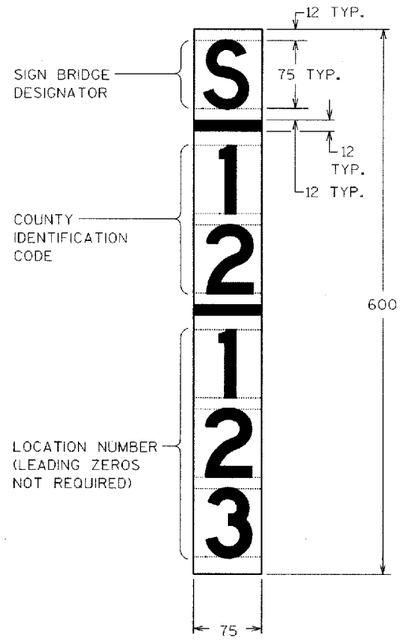
REVISION DATE: 11-14-96
IPLOT PEN TABLE: SSOLID.PEN OR BSOLID.PEN
FILE NAME: IOHL2I.DGN
ORIGINATOR: D2 ELECTRICAL OPERATIONS UNIT G.E.



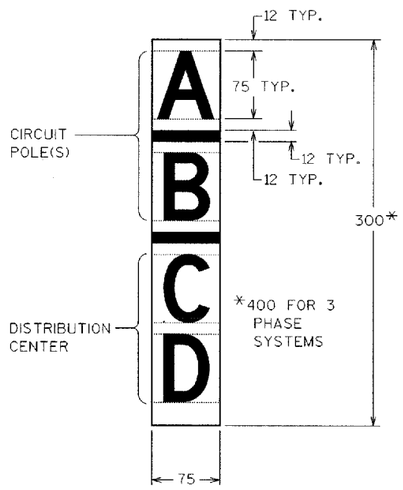
LOCATION OF SIGN BRIDGE
STRUCTURE AND CIRCUIT PLAQUES

*WHEN SIGNS FACE TRAFFIC IN ONE DIRECTION, THE PLAQUES SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUES SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

**CIRCUIT PLAQUE REQUIRED ONLY ON STEM WITH ELECTRICAL HANDHOLE.



SIGN BRIDGE
STRUCTURE PLAQUE



SIGN BRIDGE
CIRCUIT PLAQUE

GENERAL NOTES:

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 1500 mm ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 1.5 mm THICK.

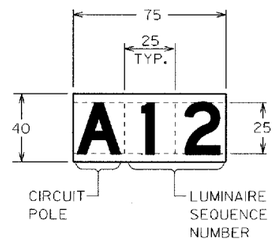
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, 12 mm WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

WITH THE APPROVAL OF THE ENGINEER, THE BASE MATERIAL MAY BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE SURFACE, IN CASES SUCH AS SMOOTH, CLEAN ALUMINUM STRUCTURES.

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.



SIGN BRIDGE LUMINAIRE
SEQUENCE DECAL
(MOUNT ON LUMINAIRE)

IDENTIFICATION PLAQUES
SIGN BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/14/96
DATE
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA

M

S.D.D. 10 HL 3-1

S.D.D. 10 HL 3-1

REVISION DATE: 11-14-96
IPLOT PEN TABLE: SSOLID.PEN OR BSOLID.PEN
FILE NAME: IOHL51.DGN
ORIGINATOR: D2 ELECTRICAL OPERATIONS UNIT G.E.

GENERAL NOTES:

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

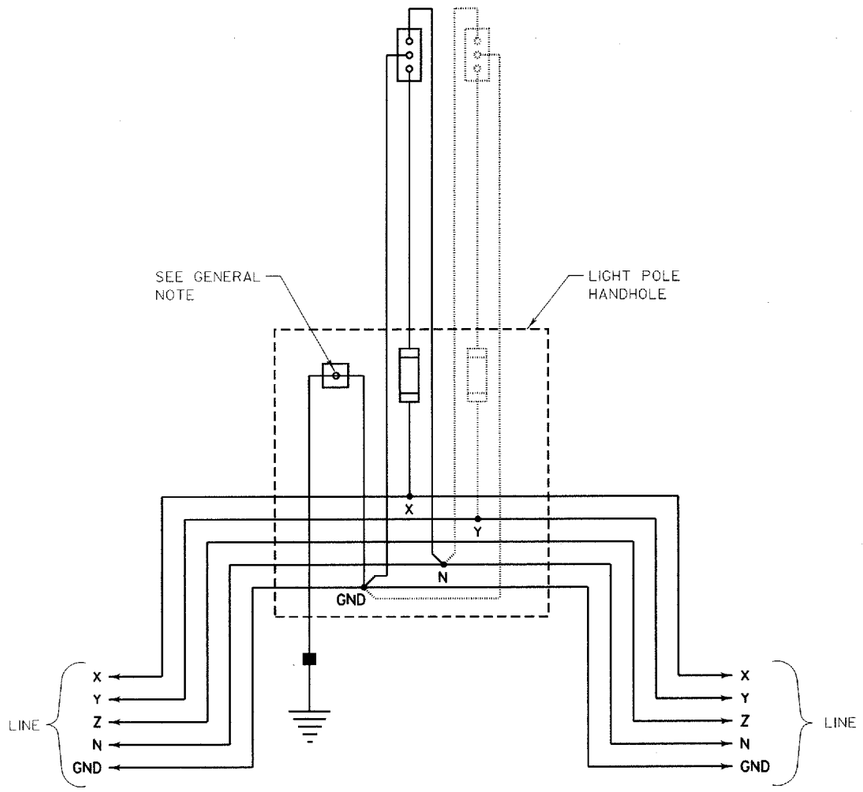
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

HANDHOLE FUSE SCHEDULES

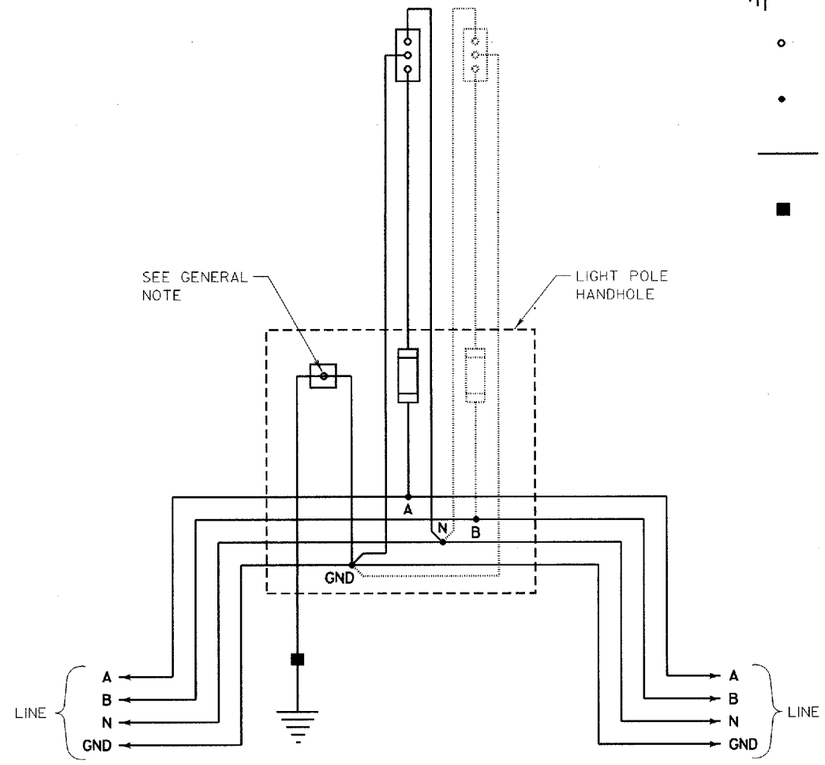
LINE VOLTAGE Φ-GROUND	BALLAST WATTAGE 70-200 W	BALLAST WATTAGE 250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
Φ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-Φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-Φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

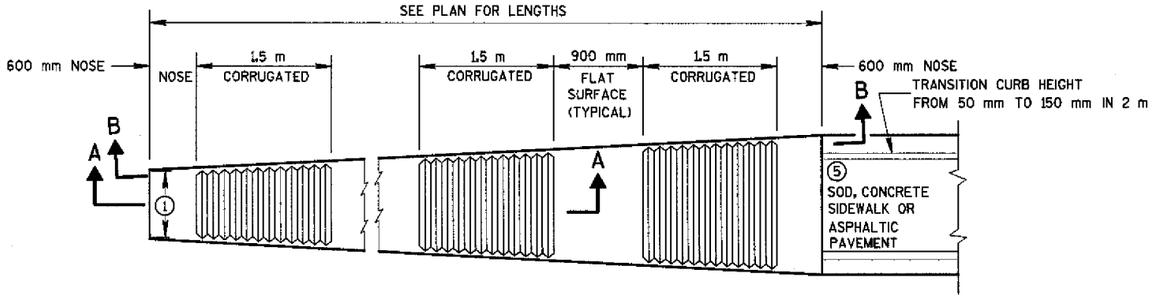
APPROVED
11/19/96
DATE
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA

M

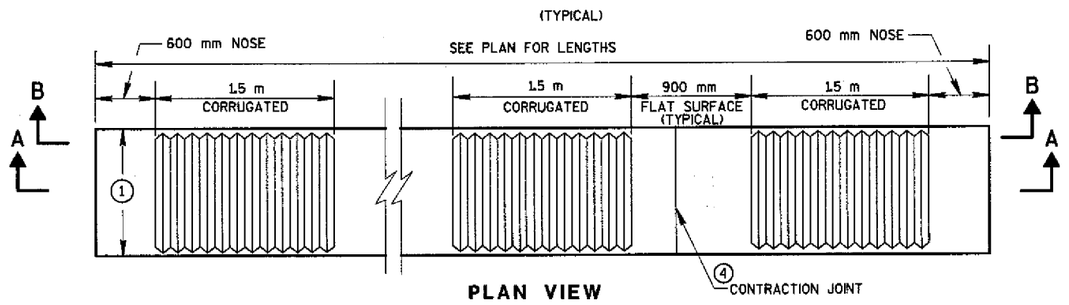
S.D.D. 10 HL 5-1

S.D.D. 10 HL 5-1



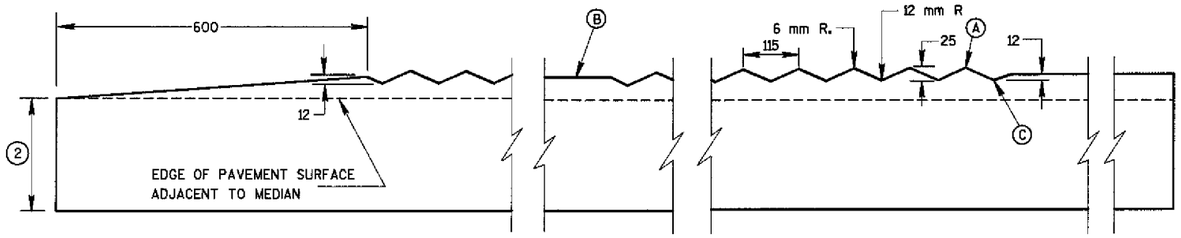
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN REQUIRED IN THE CONTRACT, FLAT SURFACES BETWEEN THE CORRUGATIONS SHALL BE MARKED WITH YELLOW PAVEMENT MARKING.

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE MEDIAN SHALL EQUAL THE DEPTH OF THE ADJACENT PAVEMENT STRUCTURE.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE.

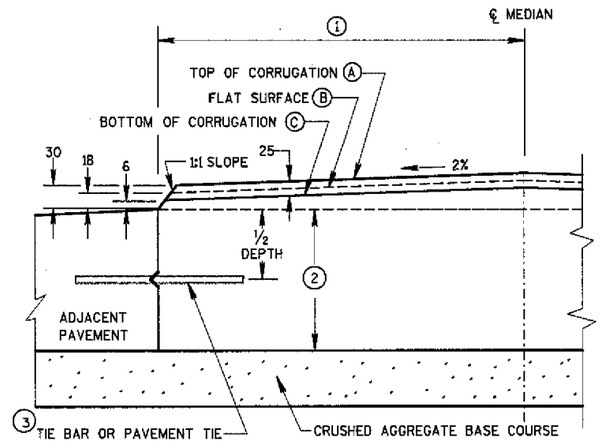
(3) ASPHALTIC PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 13 X 600 mm SPACED AT 600 mm C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 19 X 300 mm SPACED AT 900 mm C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

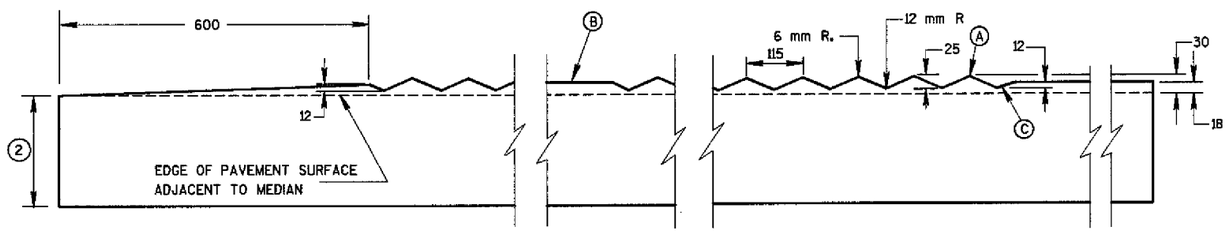
(4) CONCRETE PAVEMENT TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH CRUSHED AGGREGATE BASE, TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 6 m INTERVALS.

(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/08/98 DATE

Roy L. Peterson
CHIEF ROADWAY DEVELOPMENT ENGINEER

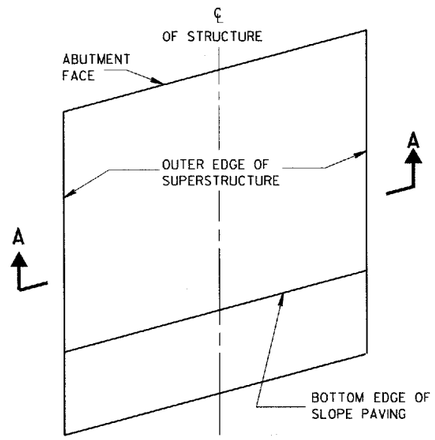
FHWA

M

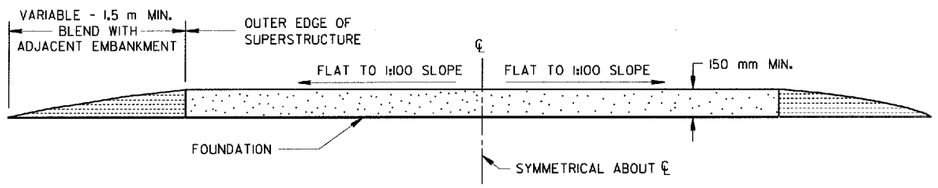
S.D.D. 11 B 1-2

S.D.D. 11 B 1-2

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16,17, 18,19, 20,21,22, 23,24, 25, 26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41, 42,43, 44,45,46,47, 48, 49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
S.D.D. 12 A 2-3
FILE NAME:



PLAN VIEW



SECTION A-A

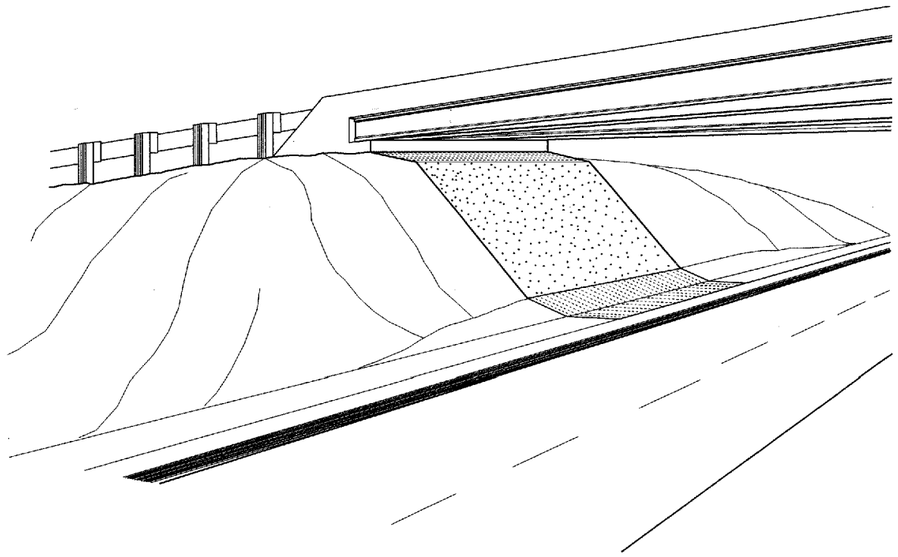
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

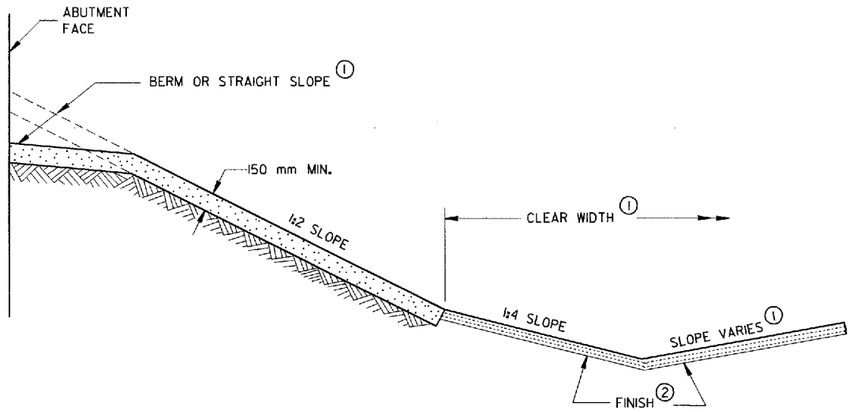
WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

① DIMENSIONS, SLOPES AND SLOPE LIMITS ARE DETAILED ON THE STRUCTURE PLANS.

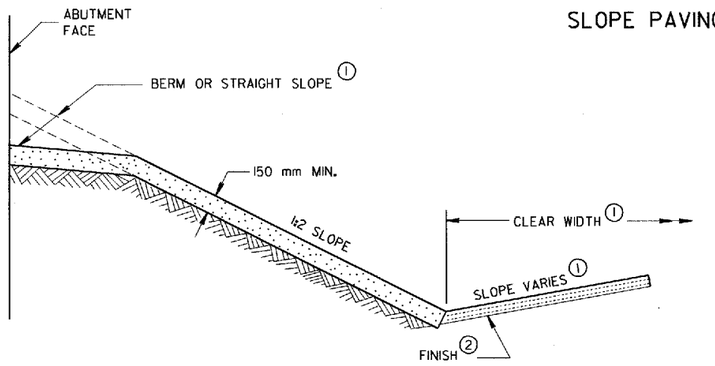
② MATCH EXISTING FINISH OR FINISH AS SHOWN ELSEWHERE IN THE CONTRACT.



SLOPE PAVING UNDER STRUCTURES



STANDARD CROSS SECTION



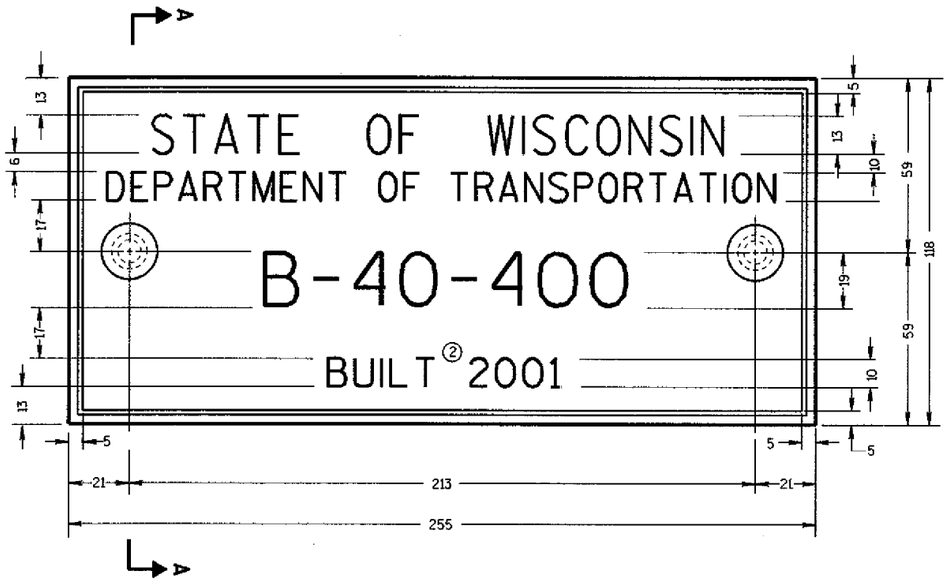
ALTERNATE CROSS SECTION

SLOPE PAVING - STRUCTURES (CRUSHED AGGREGATE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
01/25/95
DATE
Roy L. Thimsen
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 12 A 2-3



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 506.2.4 OF THE STANDARD SPECIFICATIONS.

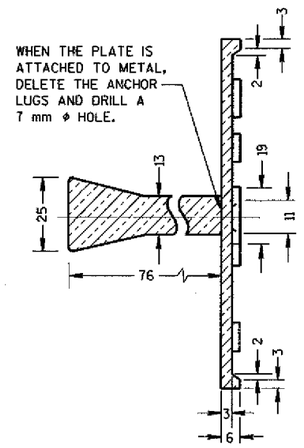
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

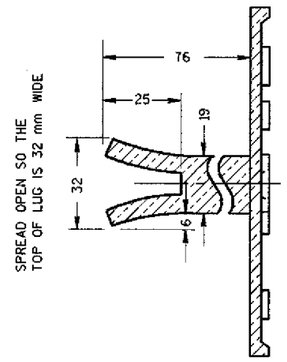
② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

NOTE

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS

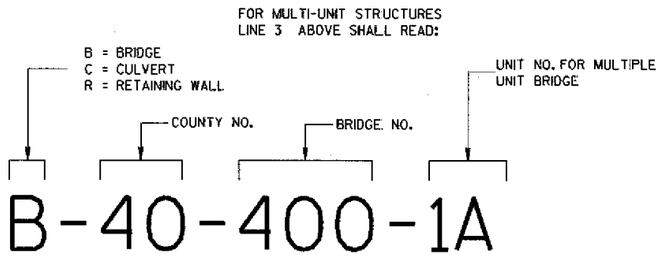


SECTION A-A

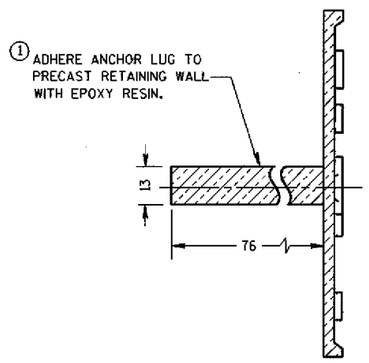


ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ:



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE
(STRUCTURES)

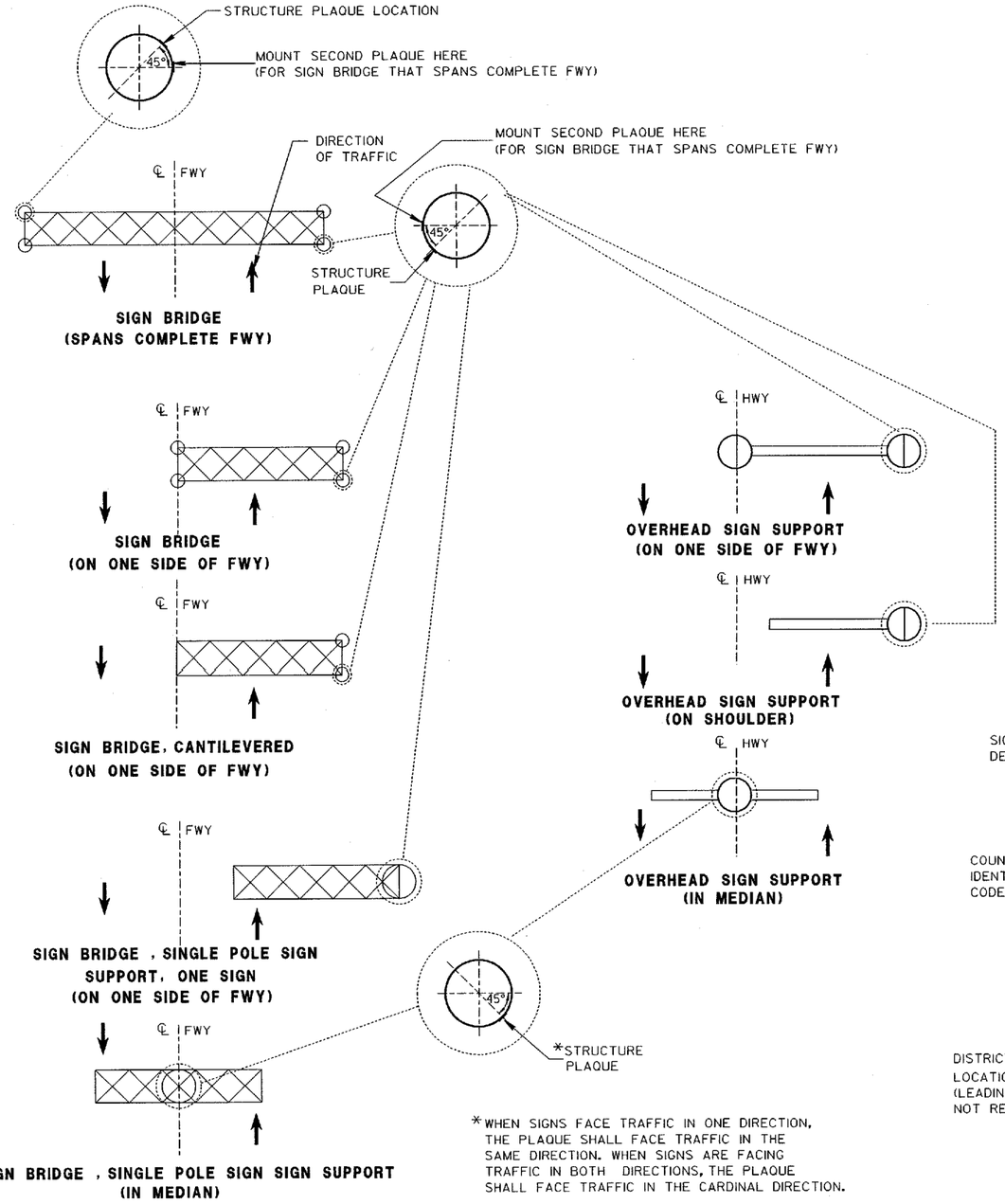
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/28/00 DATE
S. D. Woods
CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 12 A 3-7

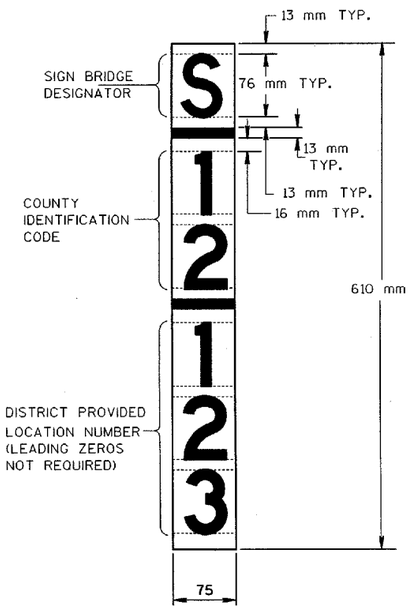
S.D.D. 12 A 3-7

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



LOCATION OF SIGN BRIDGE & OVERHEAD SIGN SUPPORT STRUCTURE PLAQUES

*WHEN SIGNS FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



SIGN BRIDGE AND OVERHEAD SIGN SUPPORT STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 1.5 m ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 1.5 mm THICK.

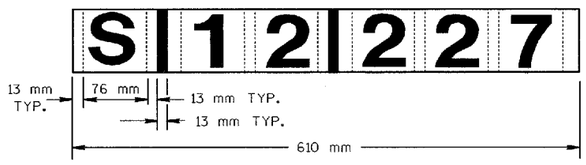
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, 13 mm WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, SIGN BRIDGES & OVERHEAD SIGN SUPPORT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-22-99
DATE

Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

FHWA

M

S.D.D. 12 A 4-1

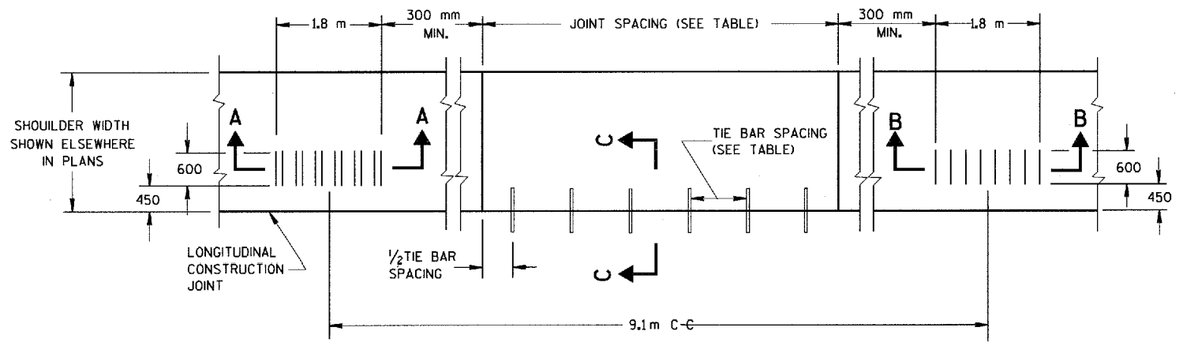
S.D.D. 12 A 4-1

FILE NAME:

PAVEMENT TYPE OF TRAFFIC LANES	TIE BAR SPACING (mm)	SHOULDER JOINT SPACING
NON-REINFORCED	600	MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
REINFORCED	600	6.0 m AND MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
CONTINUOUSLY REINFORCED	600	3.6 m FOR 1.8 m TO 3 m WIDE SHOULDERS
CONTINUOUSLY REINFORCED	720	3.6 m FOR 0.9 m SHOULDERS

NOTE

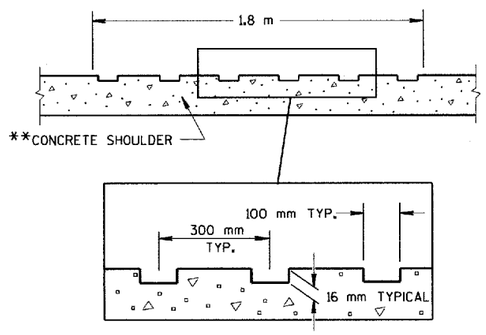
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



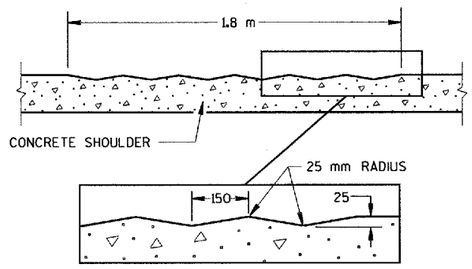
**SAWED CORRUGATION

FORMED CORRUGATION

PLAN VIEW OF CONCRETE SHOULDER



** SECTION A-A (SAWED)



SECTION B-B (FORMED)

CORRUGATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

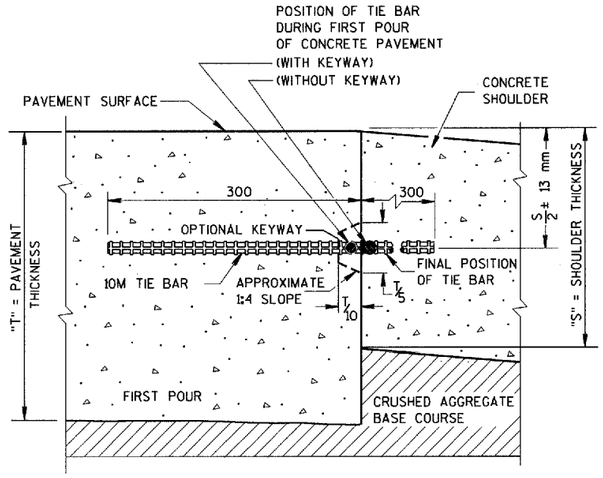
CORRUGATIONS SHALL BE PERPENDICULAR TO THE PAVEMENT EDGE.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

THE SHOULDER PAVEMENT SHALL RECEIVE A FINISH WITH AN ARTIFICIAL TURF DRAG IN CONFORMANCE WITH SUBSECTION 415.5.9.6.2 OF THE STANDARD SPECIFICATIONS

TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

**SAWED CORRUGATIONS SHALL NOT BE USED UNLESS SPECIFIED ELSEWHERE IN THIS CONTRACT.



SECTION C-C

LONGITUDINAL CONSTRUCTION JOINT

CONCRETE SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 01/25/95 DATE
FHWA

Ross L. Thimmesch
CHIEF ROADWAY DEVELOPMENT ENGINEER

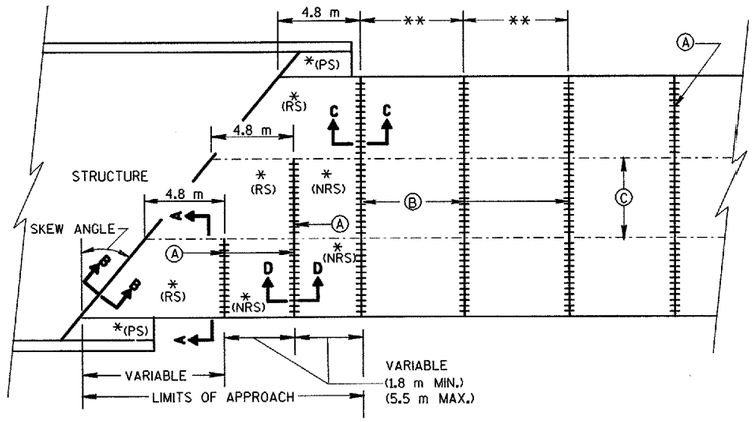
M

S.D.D. 13 A 3-3

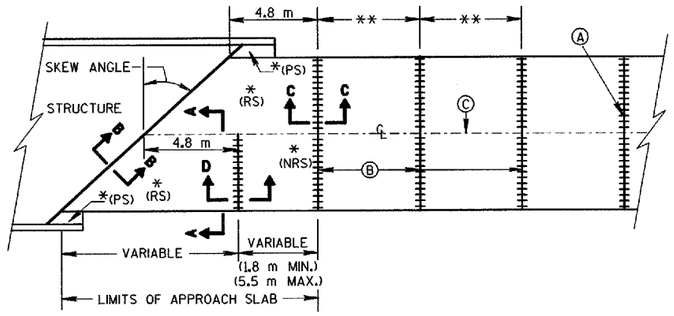
S.D.D. 13 A 3-3

PLOT NAME:
PLOT SCALE:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
FILE NAME:

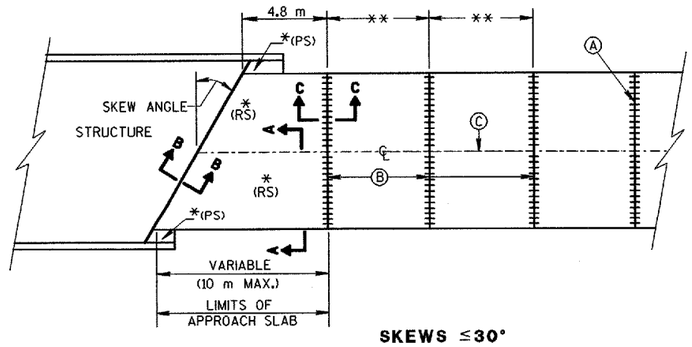
PLOT SCALE:
PLOT NAME:
REV. DATE:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
ORIGINATOR:



SKEWED PAVEMENT
MORE THAN 2 LANES



SKEWS >30°
(PAVEMENT WIDTH ≤9.0 m)



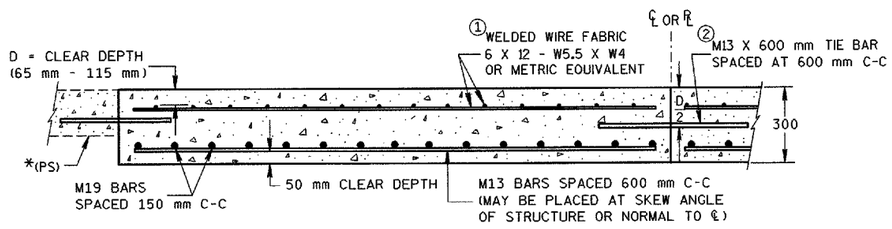
SKEWS ≤30°
(PAVEMENT WIDTH ≤9.0 m)

APPROACH SLAB AND ADJACENT PAVEMENT

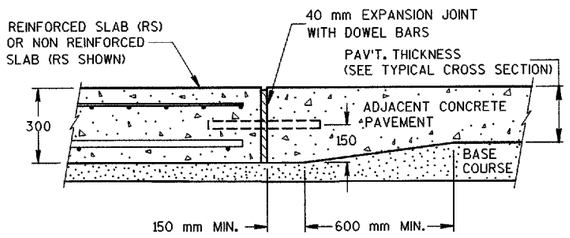
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C11 & SDD 13C12)

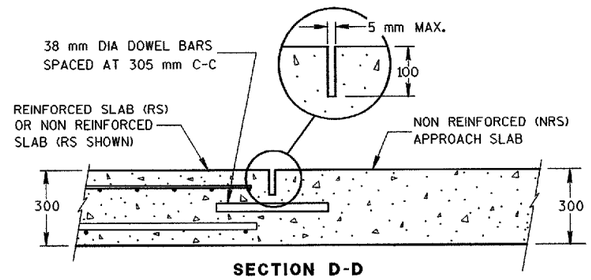
Ⓐ STANDARD CONTRACTION JOINT NORMAL OR SKEWED TO ℄ OR ℄
Ⓑ 40 mm EXPANSION JOINT WITH DOWEL BARS NORMAL OR SKEWED TO ℄ OR ℄
Ⓒ STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS ARE NOT REQUIRED WHEN THE APPROACH SLAB ABUTS AN ASPHALT PAVEMENT OVER BASE COURSE.

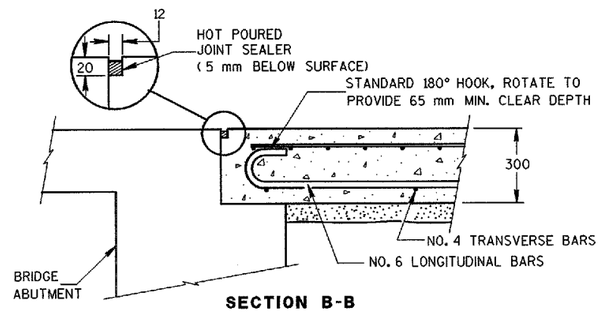
SPLICING OF M19 BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP SHALL BE 510 mm.

① M13 BARS SPACED AT 610 mm C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS MAY BE USED FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

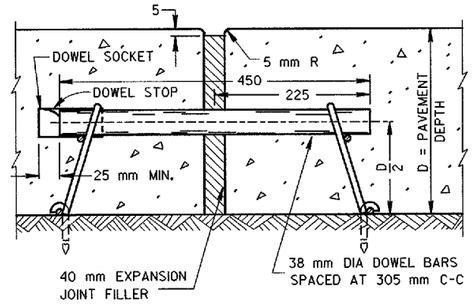
② TIE BARS BETWEEN REINFORCED SLABS MAY BE OMITTED WHERE SLAB REINFORCEMENT EXTEND ACCROSS THE CENTERLINE OR REFERENCE LINE.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

CONCRETE PAVEMENT
APPROACH SLAB

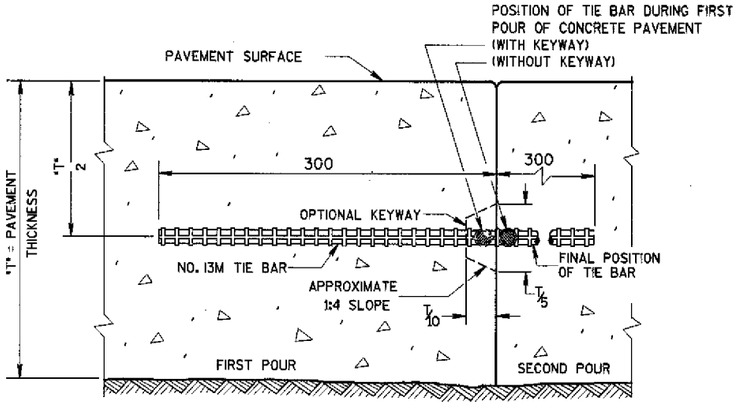
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-14-99
DATE
CHIEF PAVEMENTS & REASEARCH ENGINEER
FHWA
M

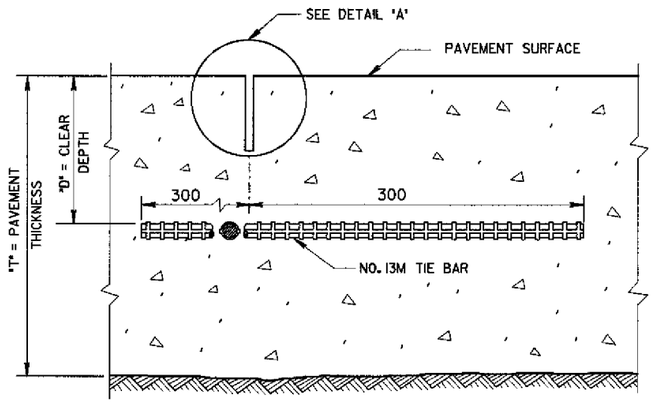
S.D.D. 13 B 2-4

S.D.D. 13 B 2-4

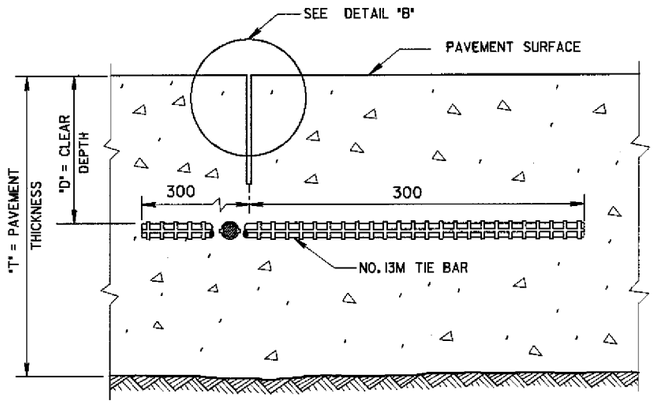
FILE NAME:



CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

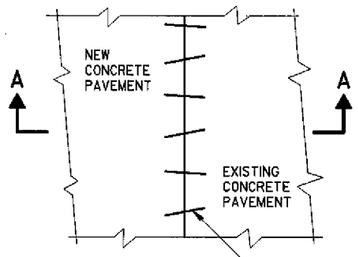
TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.

NOTE

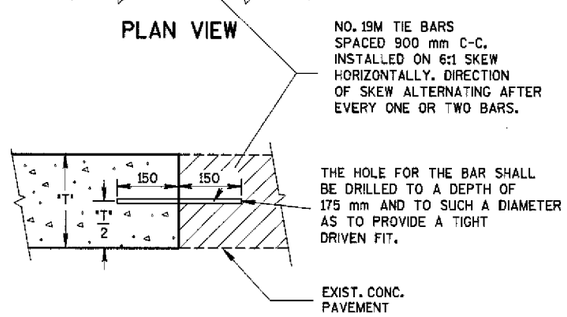
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

DETAIL "A"

DETAIL "B"

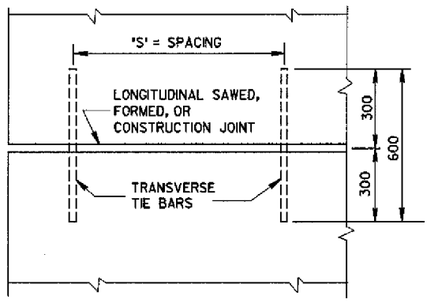


PLAN VIEW



SECTION A-A
PAVEMENT TIES

PAVEMENT THICKNESS "T" (mm)	CLEAR DEPTH "D" (mm)	SAW CUT GROOVE "G" (mm)	MAXIMUM TIE BAR SPACING "S" (mm)		PARTING STRIP WIDTH "W" (mm)
			PAVEMENT WIDTH (m)		
			7.2 OR 7.8	9.0	
150,165	75 ± 13	50	1 000	900	50
175,190	85 ± 25	55	850	800	55
200,215	95 ± 25	65	750	700	65
225,240	110 ± 25	75	650	600	75
250,265	120 ± 25	85	600	550	85
275,290	135 ± 25	95	550	500	95
300	145 ± 25	100	500	450	100



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS
AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-24-98
DATE

CHIEF PAVEMENTS & RESEARCH ENGINEER

FHWA

M

S.D.D. 13 C 1-10

PLOT SCALE: 111

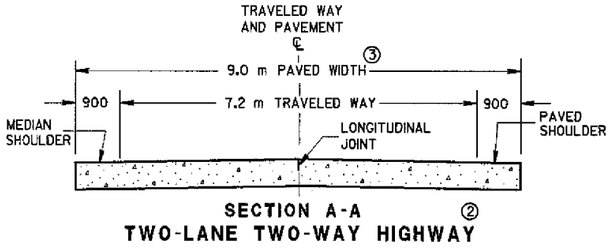
PLOT NAME:

REV. DATE:

ORIGINATOR:

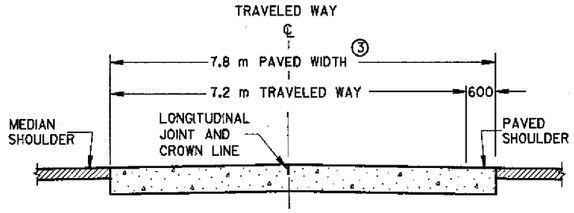
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

S.D.D. 13 C 1-10

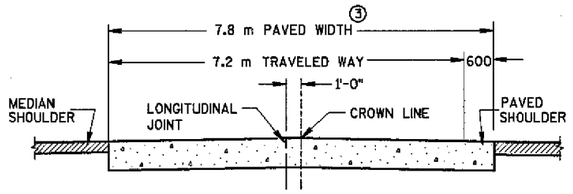


SECTION A-A ②

TWO-LANE TWO-WAY HIGHWAY



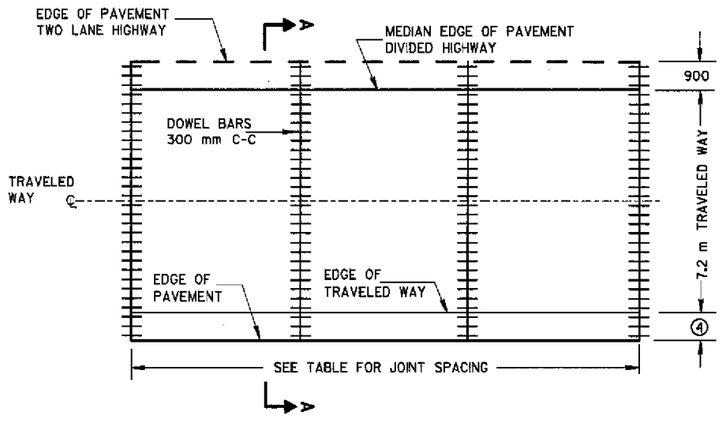
SECTION A-A



ALTERNATIVE SECTION A-A

②

DIVIDED HIGHWAY



CONTRACTION JOINT LOCATIONS

DOWEL BAR SIZE & JOINT SPACING TABLE

PAVEMENT DEPTH	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
≤240 mm	32 mm	4.5 m
>240 mm	38 mm	5.5 m

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

CONTRACTION JOINTS

CONTRACTION JOINTS MAY BE SKEWED 1:6 WITH THE CENTERLINE OR BE NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 1.2 m FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO THE CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.

② REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

③ THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER WILL BE MEASURED AS CONCRETE PAVEMENT.

④ 600 mm DIVIDED HIGHWAYS
900 mm TWO-LANE TWO-WAY HIGHWAYS
SEE SECTION A-A

⑤ DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.

⑥ THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKING GREASE.

⑦ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 380 mm ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 150 mm AND A MAXIMUM OF 355 mm.

NOTES

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

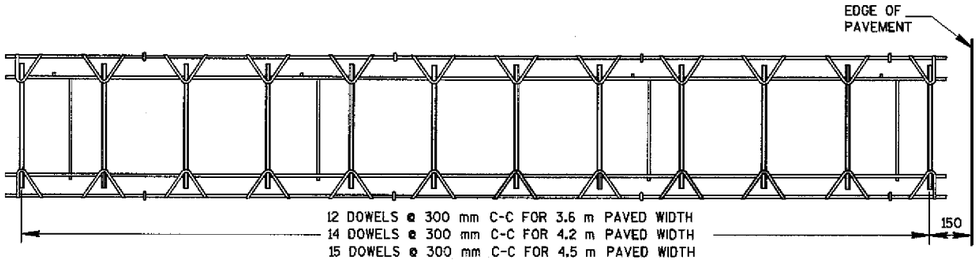
RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION M

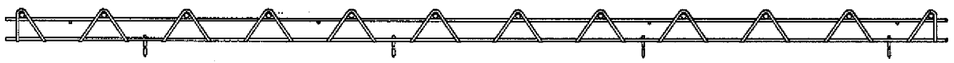
S.D.D. 13 C 11-6a

PLOT SCALE:
PLOT NAME:
REV. DATE:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,5051,52,53,54,55,56,57,58,59,60,61,62,63
ORIGINATOR:
FILE NAME:

S.D.D. 13 C 11-6a

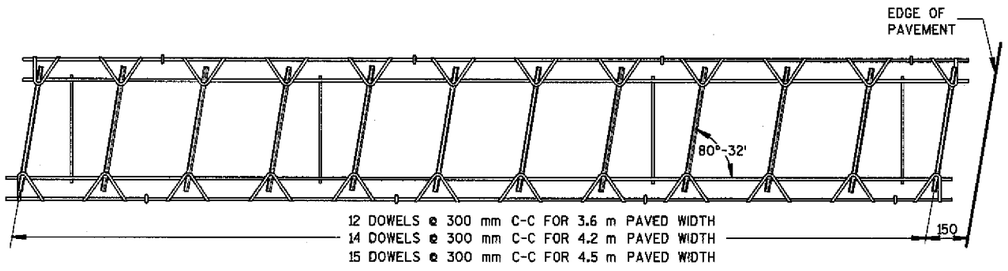


PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

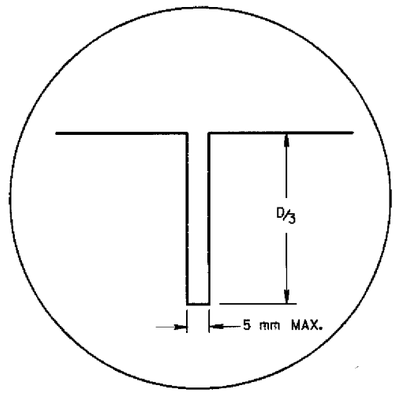


PLAN VIEW

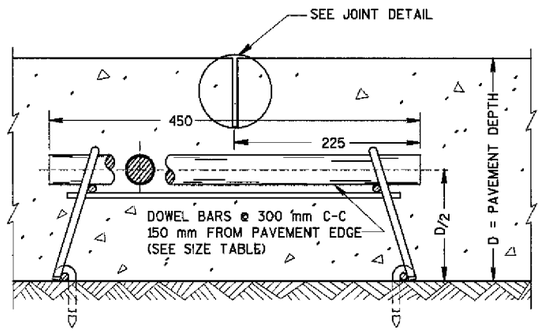
SIDE VIEW

(SKEWED)

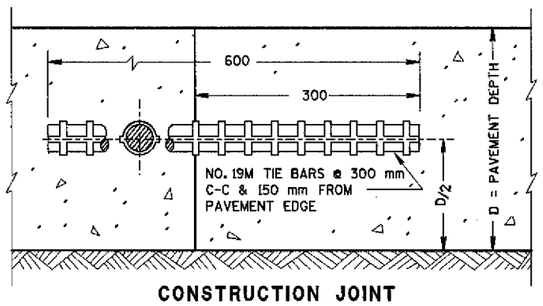
CONTRACTION JOINT DOWEL ASSEMBLY ①



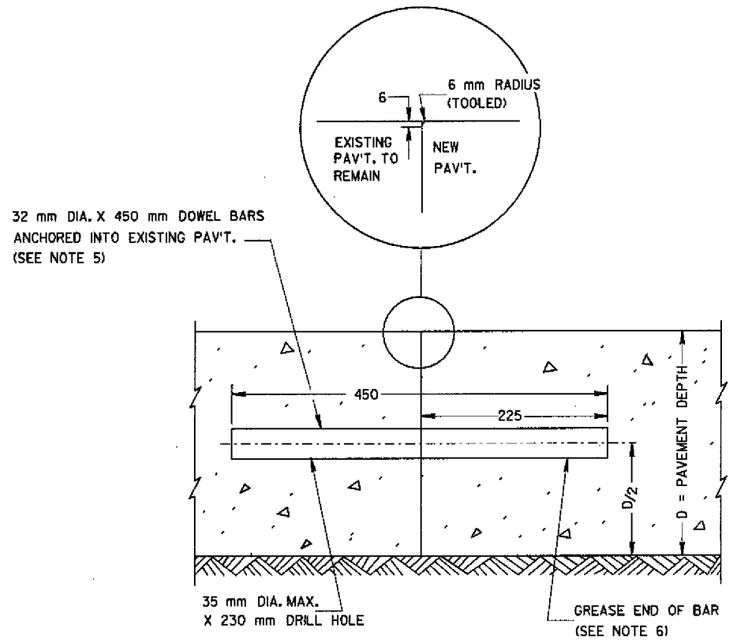
JOINT DETAIL



DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

⑦ **DOWEL BAR DETAIL**

RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-24-98
DATE

CHIEF PAVEMENTS & RESEARCH ENGINEER

FHWA

M

S.D.D. 13 C 11-6b

PLOT SCALE:

PLOT NAME:

REV. DATE:

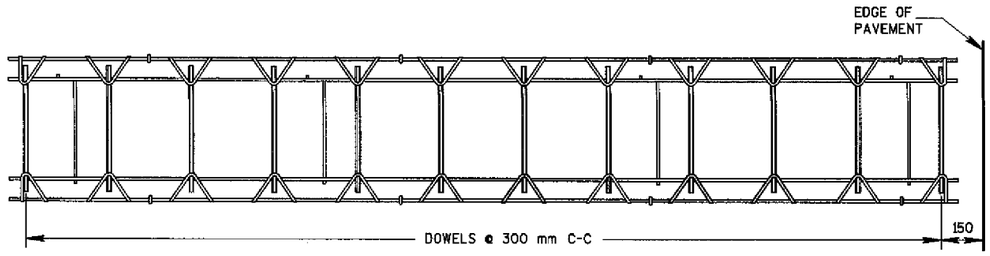
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

ORIGINATOR:

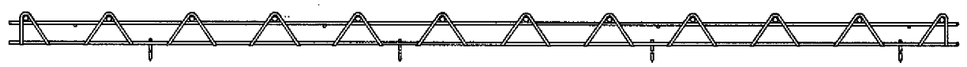
S.D.D. 13 C 11-6b

FILE NAME:

S.D.D. 13 C 11-6b

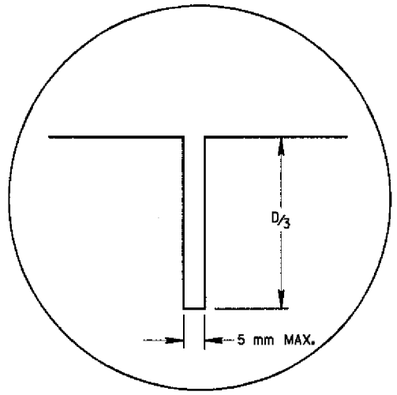


PLAN VIEW

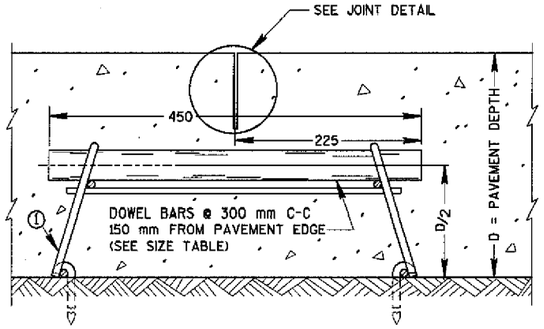


SIDE VIEW

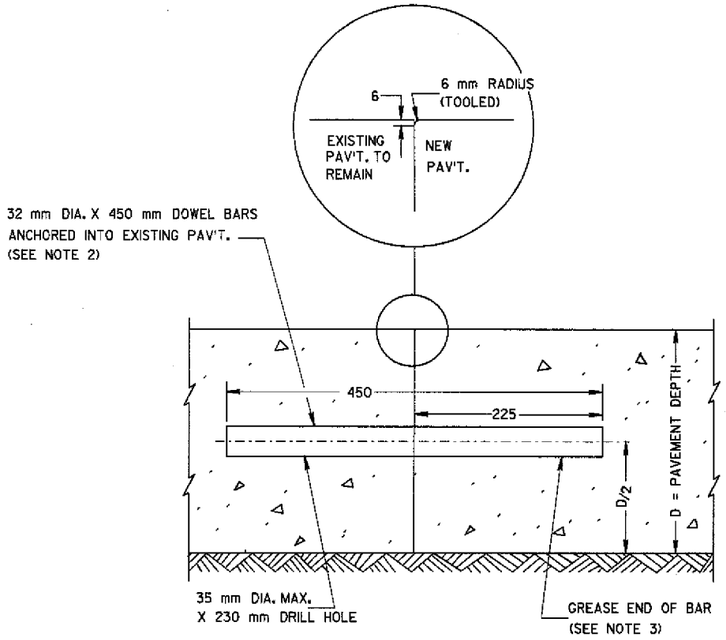
CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

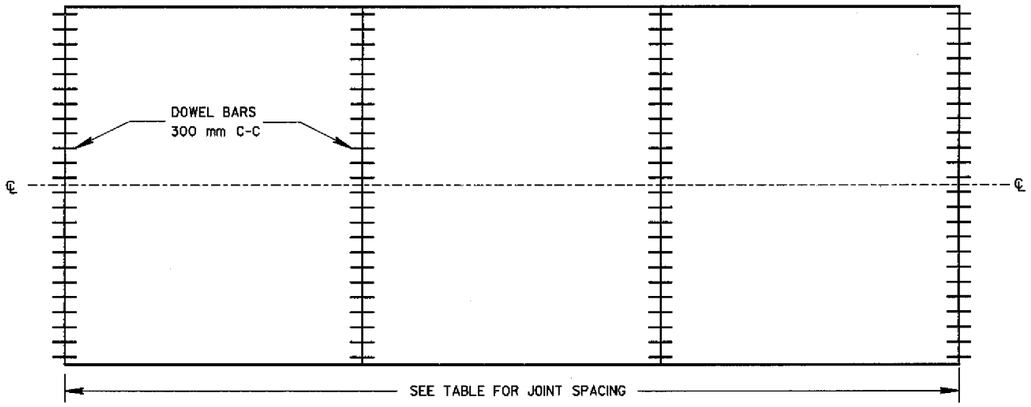


DOWELED CONTRACTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ DOWEL BAR DETAIL



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

CONTRACTION JOINTS

UNLESS OTHERWISE SPECIFIED, CONTRACTION JOINTS SHALL NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 1.2 m FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.

② DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.

③ THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKING GREASE.

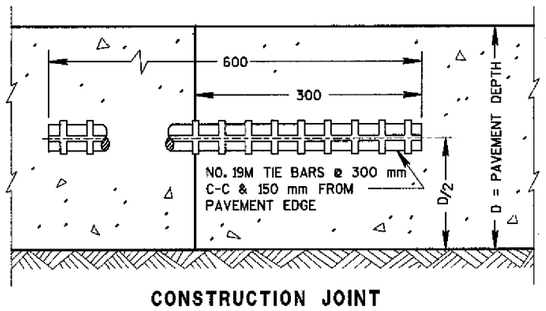
④ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 380 mm ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 150 mm AND A MAXIMUM OF 355 mm.

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.



CONSTRUCTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
150,165 mm	32 mm	3.6 m
175,190 mm	32 mm	4.3 m
200,215 mm	32 mm	4.5 m
225,240 mm	32 mm	4.5 m
250 mm & ABOVE	38 mm	5.5 m

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-24-98
DATE

CHIEF PAVEMENTS & RESEARCH ENGINEER

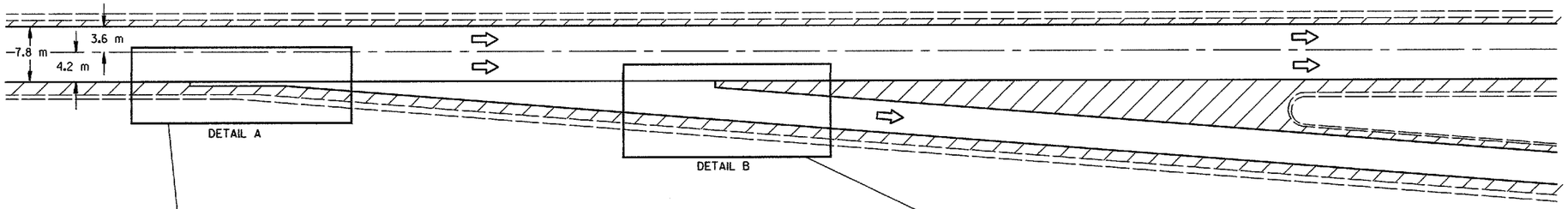
FHWA

M

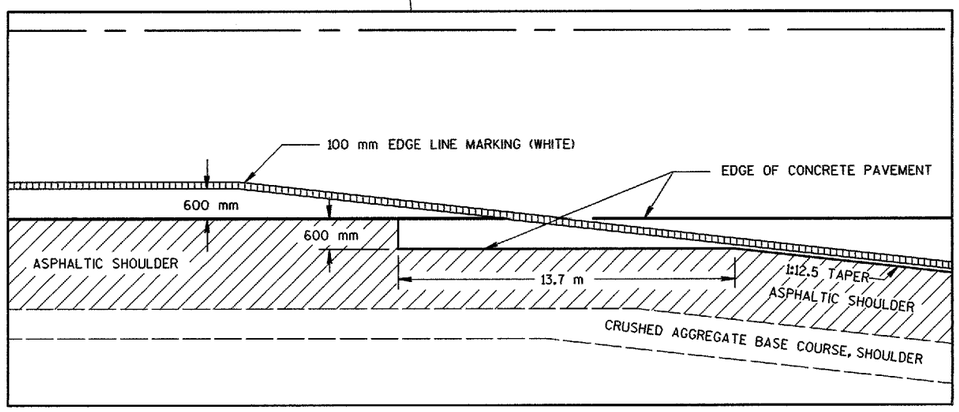
S.D.D. 13 C 13-3

PLOT SCALE:
PLOT NAME:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
REV. DATE:
ORIGINATOR:
FILE NAME:

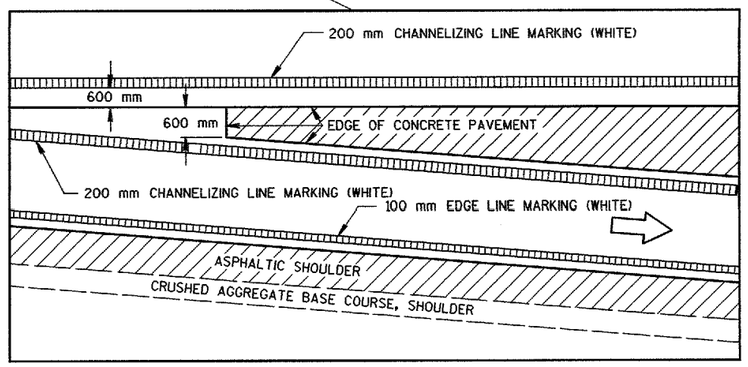
S.D.D. 13 C 13-3



EXIT RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

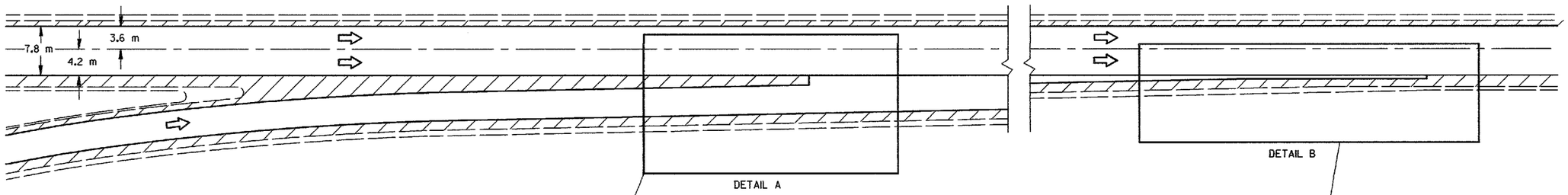
CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

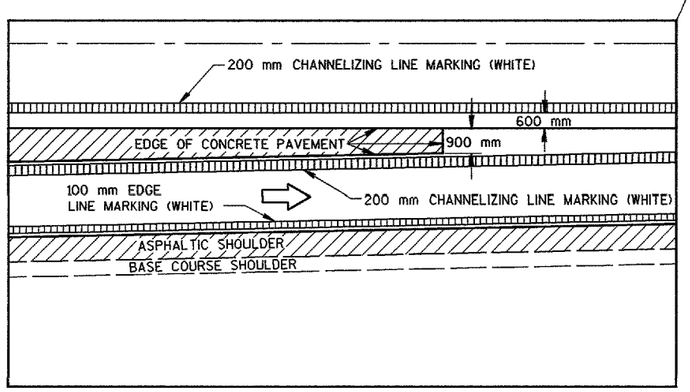
S.D.D. 13 C 17-1a

PLOT SCALE:
PLOT NAME:
REV. DATE: 3-30-98
ORIGINATOR:
FILE NAME:
S.D.D. 13 C 17-1a

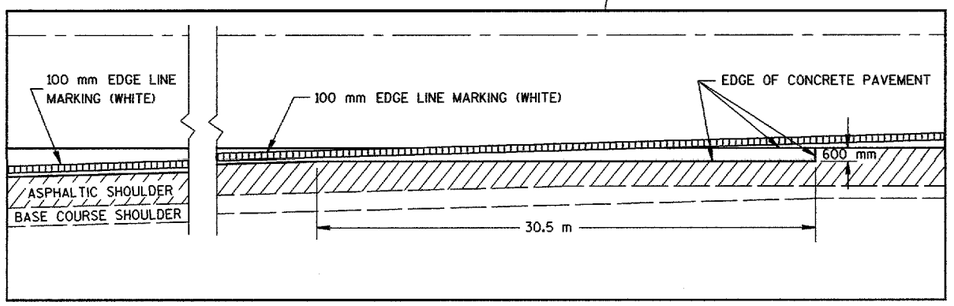
PLOT SCALE:
PLOT NAME:
REV. DATE: 3-31-98
ORIGINATOR:



ENTRANCE RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 05/27/98 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

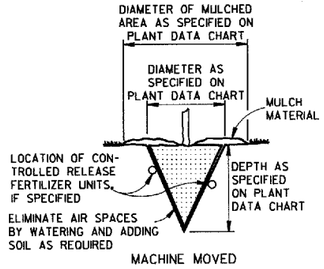
M

S.D.D. 13 C 17-1b

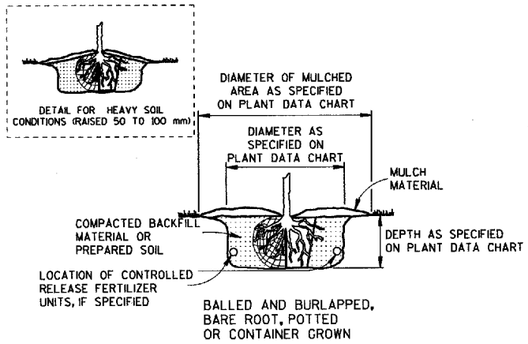
FILE NAME:

S.D.D. 13 C 17-1b

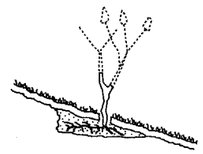
PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,3233,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,5051,52,53,54,55,56,57,58,59,60,61,62,63



MACHINE MOVED

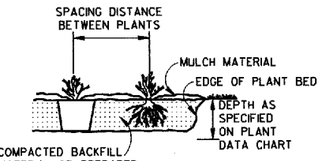


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



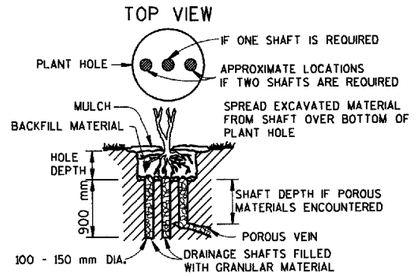
ACCOMMODATE ROOTS
(SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



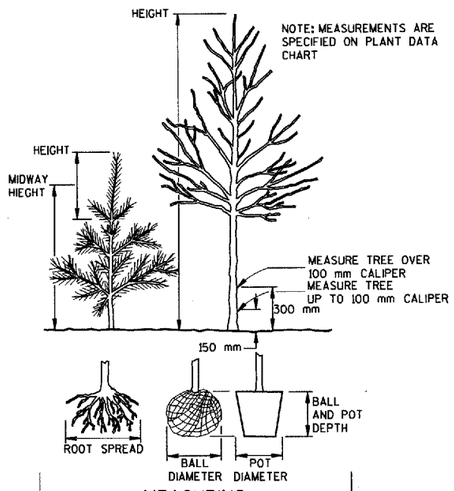
PREPARED BED
(BARE ROOT AND POTTED)

PLANTING

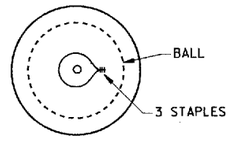


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

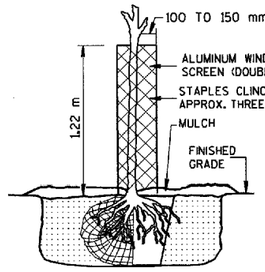
DRAINING



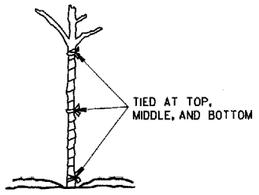
MEASURING



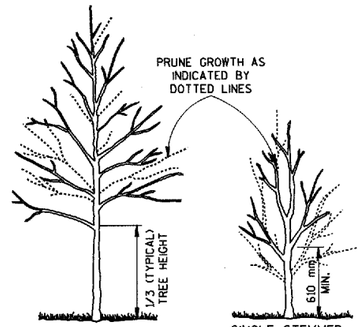
TOP VIEW



RODENT PROTECTION



WRAPPING

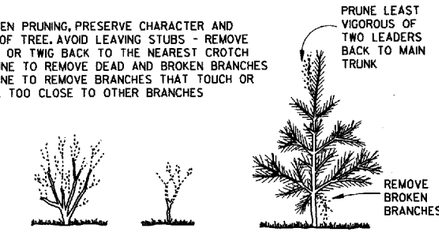


TALL DECIDUOUS TREES
(ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES
(CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS
(HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

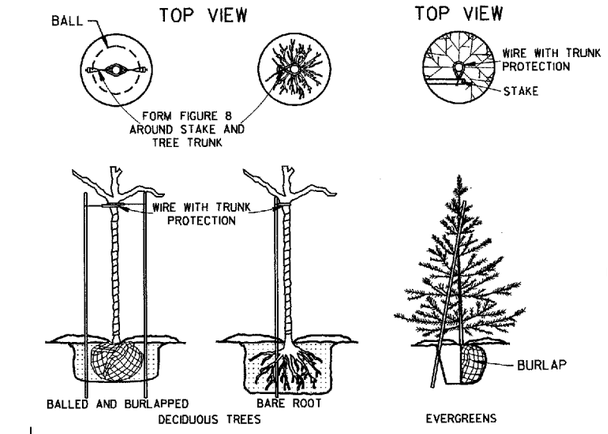


SHRUBS
(GRAY DOGWOOD
ARROWWOOD VIBURNUM)

SUMAC

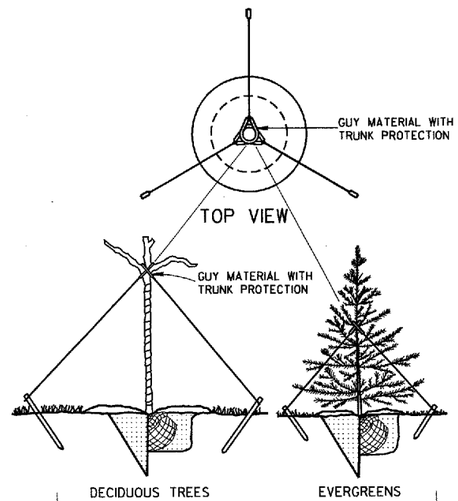
TREE TYPE EVERGREENS
(PINE, SPRUCE, FIR)
EVERGREENS USUALLY ARE NOT PRUNED

PRUNING

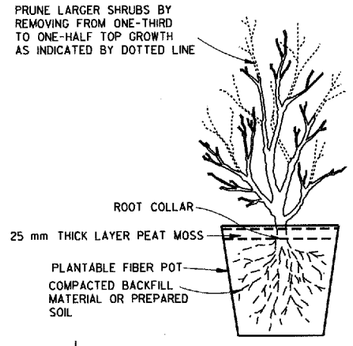


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 02/07/13 (DATE)
Rory L. Rhinearson
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

M

S.D.D. 14 A 2-1

S.D.D. 14 A 2-1

FILE NAME:

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

(1) W150 X 13.5 OR W150 X 12.6 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 150 mm X 200 mm WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO AASHTO M183. GALVANIZE ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

(5) WHEN SPECIFIED IN THE PLANS, THE 610 mm MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 1.1 m IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

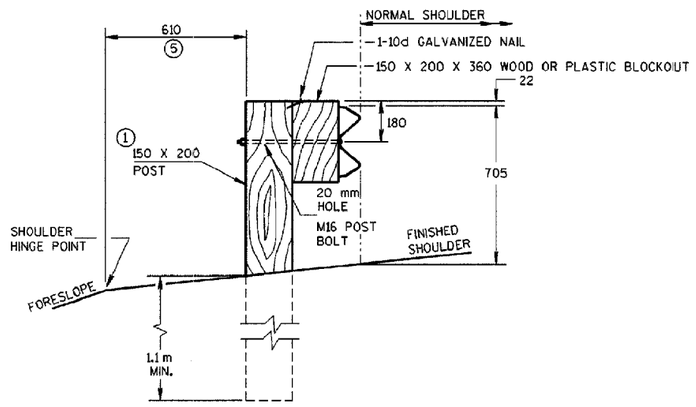
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 305 mm DIAMETER POST HOLE EXTENDING 510 mm DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 65 mm DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

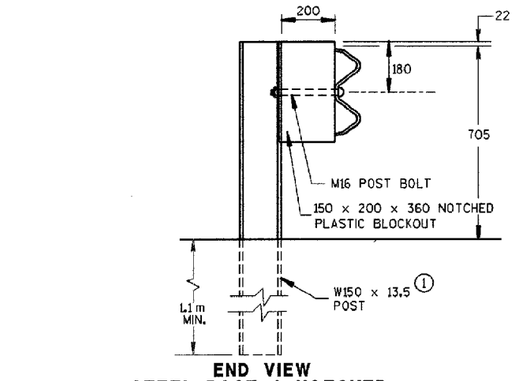
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.

NOTE

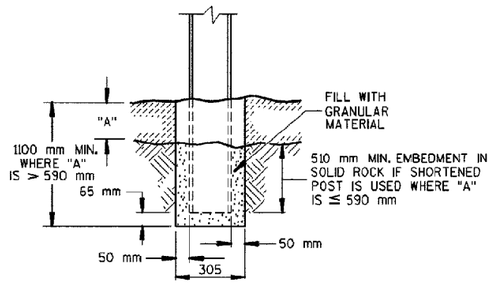
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



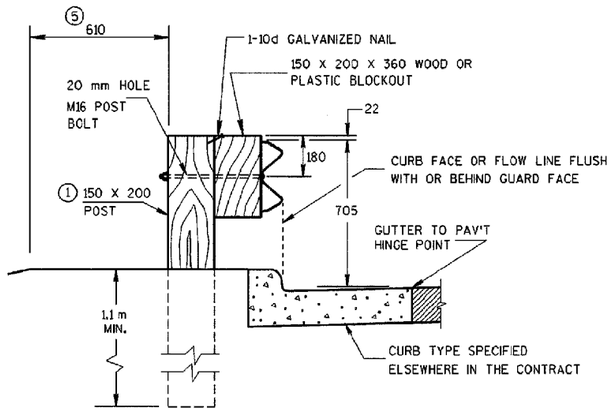
END VIEW
LOCATED ALONG A ROADWAY SHOULDER



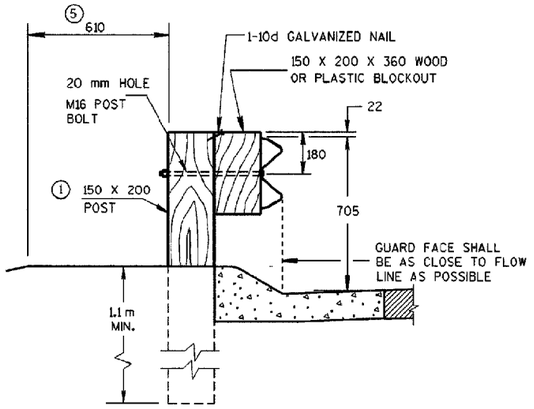
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE



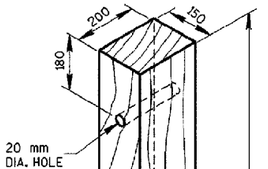
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



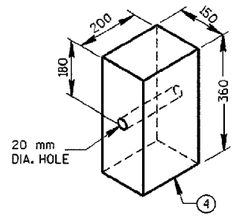
END VIEW
LOCATED ALONG A CURBED ROADWAY



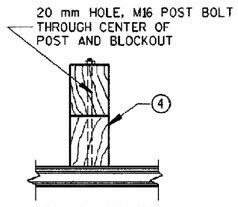
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



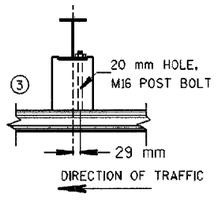
WOOD POST
(6"X8") NOMINAL



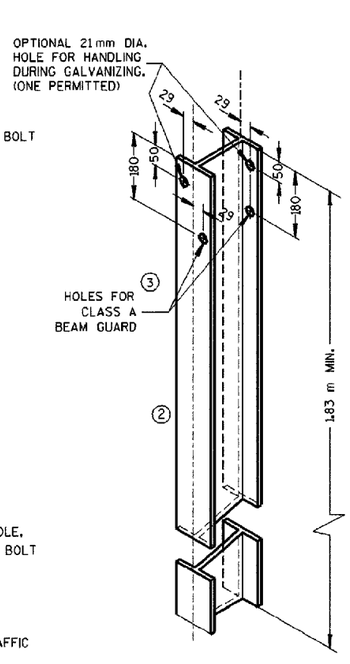
WOOD OR PLASTIC
BLOCKOUT FOR WOOD POSTS



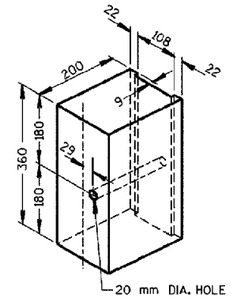
PLAN VIEW
WOOD POST,
BLOCKOUT & BEHIND



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



STEEL POST &
HOLE PUNCHING DETAIL (1)
(W150 X 13.5)
ALL HOLES 21 mm DIAMETER EXCEPT AS NOTED



NOTCHED PLASTIC BLOCKOUT
FOR STEEL POSTS

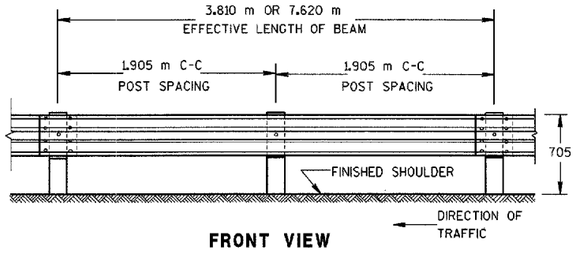
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

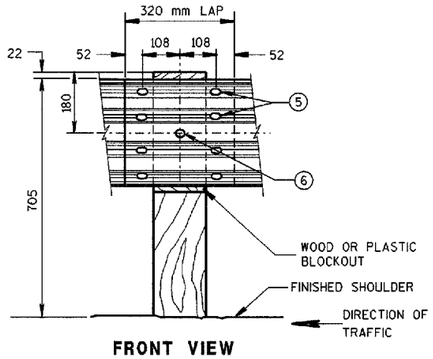
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION M

S.D.D. 14 B 15-4a

S.D.D. 14 B 15-4a



FRONT VIEW



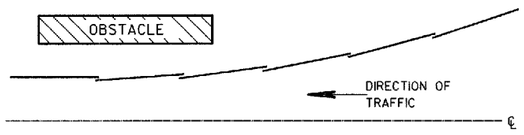
FRONT VIEW
BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

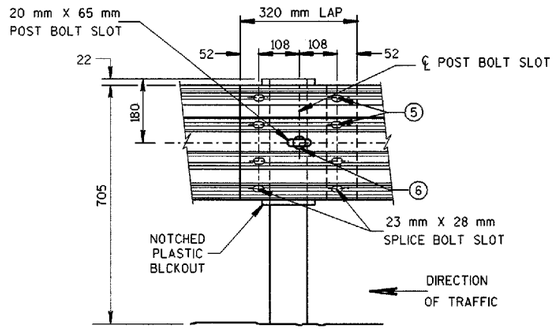
1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 15.24 m OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 - M16 X 35 mm BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. M16 X 450 mm BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



PLAN VIEW
BEAM LAPPING DETAIL

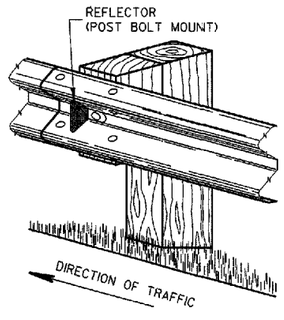


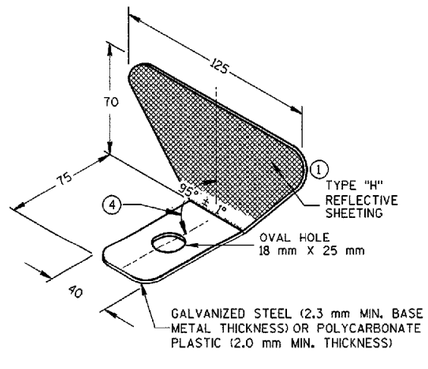
FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

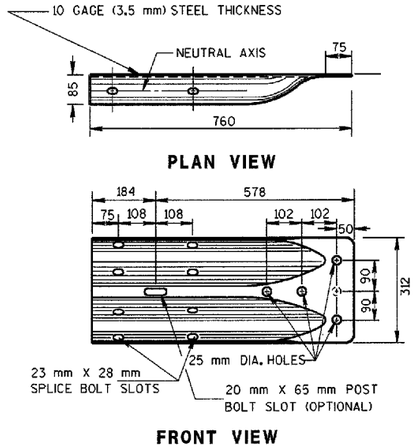
REFLECTOR SPACING (2)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 60 m	15 m C-C	1	3
	> 60 m	30 m C-C	1	
TWO WAY TRAFFIC	< 60 m	8 m C-C	1	6
	> 60 m	15 m C-C	1 (3)	
TWO WAY TRAFFIC	< 60 m	15 m C-C	2	3
	> 60 m	30 m C-C	2 (4)	

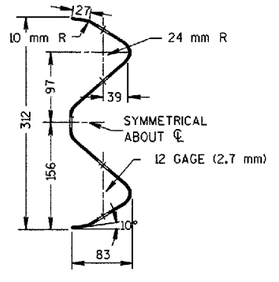




ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (1)



FRONT VIEW
W BEAM TERMINAL CONNECTOR
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION THRU W BEAM

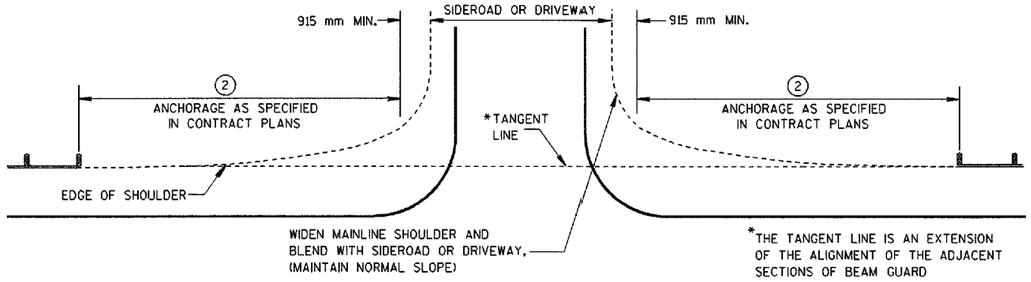
STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

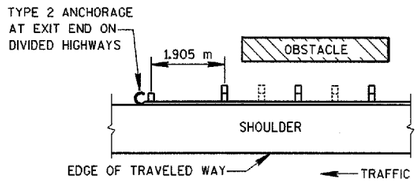
APPROVED 12/08/00 DATE
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 14 B 15-4b

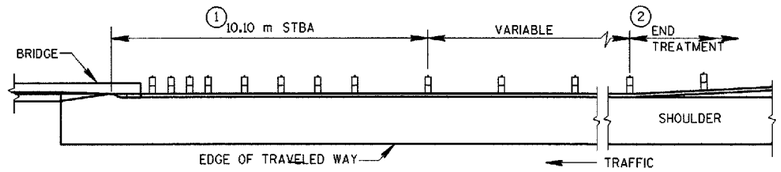
S.D.D. 14 B 15-4b



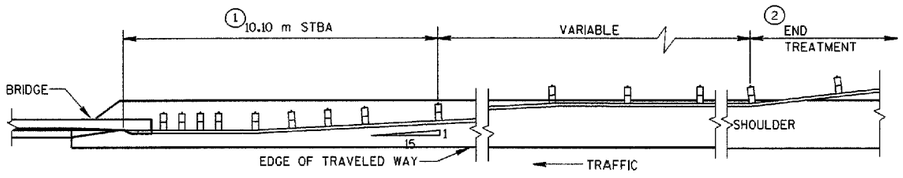
BEAM GUARD AT MINOR SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES
EXIT END - ONE WAY TRAFFIC



BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

GENERAL NOTES

W150 X 13.5 OR W150 X 12.6 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 150 mm X 200 mm WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) USE STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA).

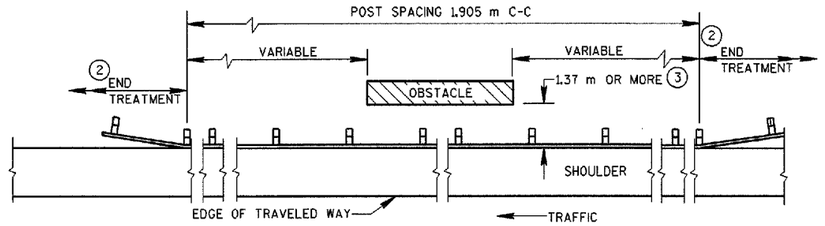
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3) DESIGN DEFLECTION OF W-BEAM BARRIER SYSYTEM

LATERAL DISTANCE TO FIXED OBJECT	POST SPACING
1.07 - 1.37 m	952 mm
1.37 m AND OVER	1.905 mm

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC
(RAIL TO OBSTACLE CLEARANCE 1.37 m OR MORE)

STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

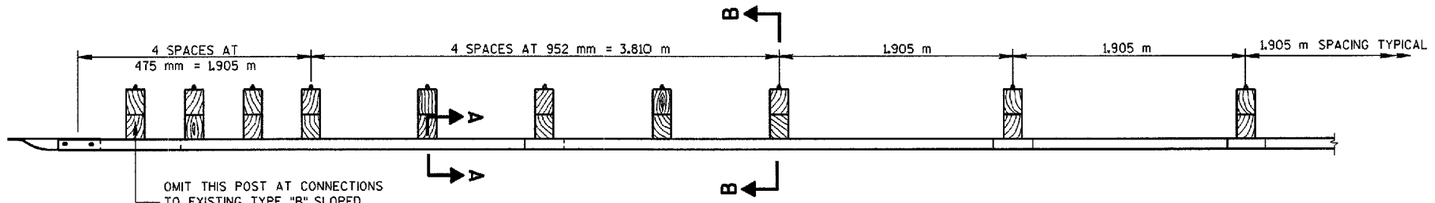
APPROVED
12/08/00
DATE
FHWA

John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

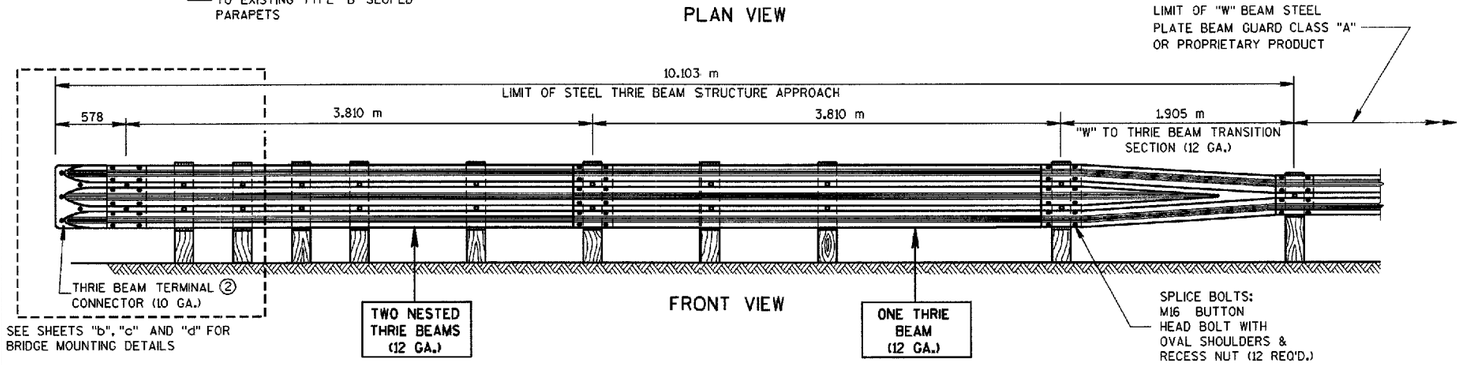
M

S.D.D. 14 B 18-5a

S.D.D. 14 B 18-5a



PLAN VIEW



FRONT VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 1.905 m.

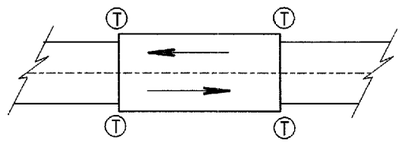
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 305 mm DIAMETER POST HOLE EXTENDING 510 mm DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 65 mm DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

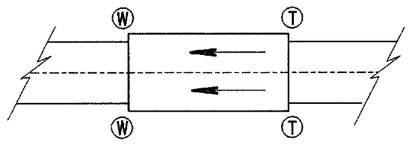
① INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 1.2 m IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

② BRIDGE RAILING TYPE "W" DO NOT REQUIRE A TERMINAL CONNECTOR.

③ WHEN SPECIFIED IN THE PLANS THE CONTRACTOR MAY REDUCE OR ELIMINATE THE 610 mm MINIMUM TO HINGE POINT IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.



TWO WAY TRAFFIC

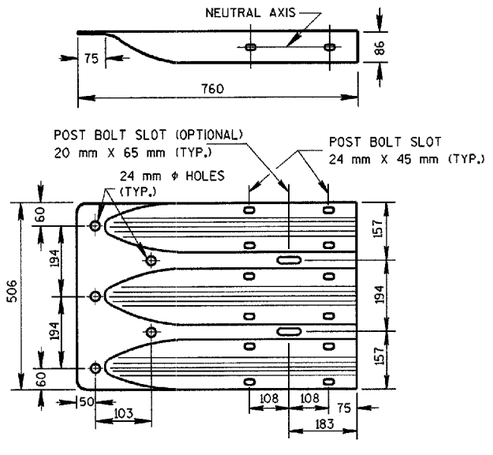


ONE WAY TRAFFIC

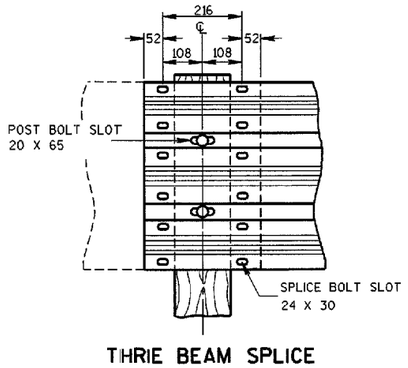
Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

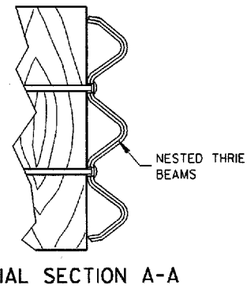
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



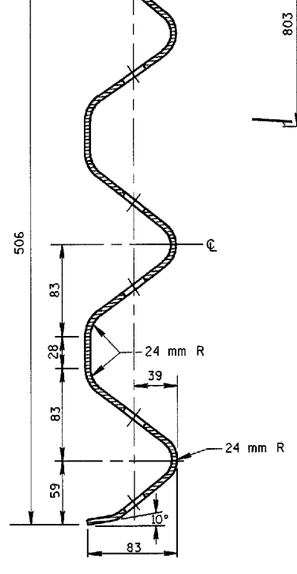
THRIE BEAM TERMINAL CONNECTOR



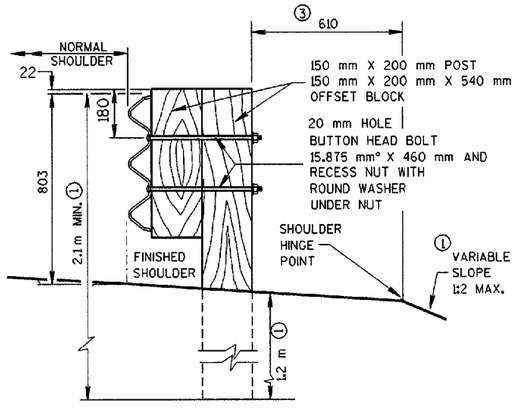
THRIE BEAM SPLICE



PARTIAL SECTION A-A



SECTION THRU THRIE BEAM RAIL ELEMENT



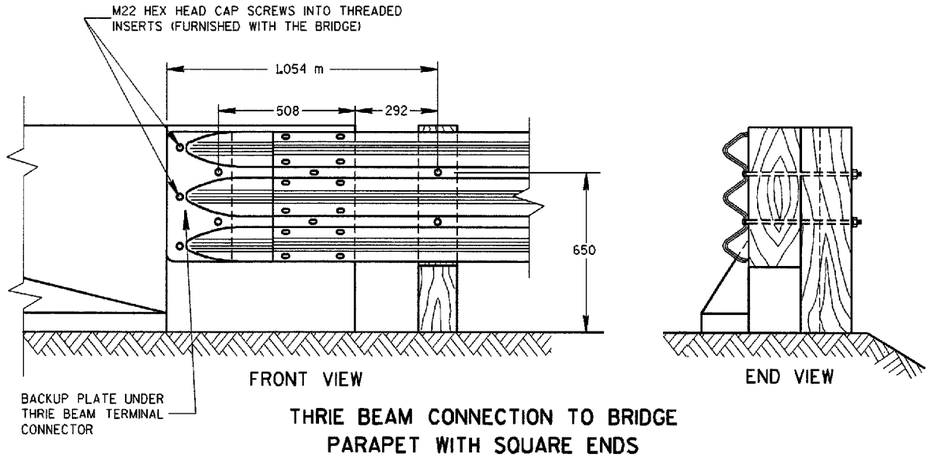
SECTION B-B

STEEL THRIE BEAM
STRUCTURE APPROACH

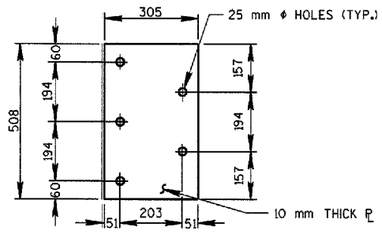
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION M

S.D.D. 14 B 20-7a

S.D.D. 14 B 20-7a



THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



② BACKUP PLATE DETAIL

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② HARDENED STEEL WASHER, MIN. SIZE 56 mm O.D. X 3.4 mm REQUIRED WITH EACH BOLT AT THE BACKFACE OF PARAPET.

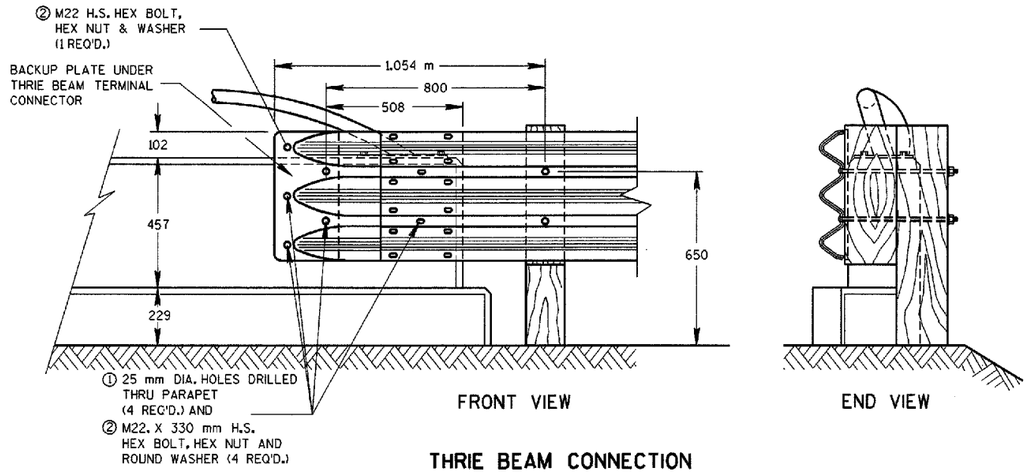
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 455 mm X 610 mm X 90 mm.

④ W150 x 13.5 OR W150 x 12.6 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 150 mm X 200 mm WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

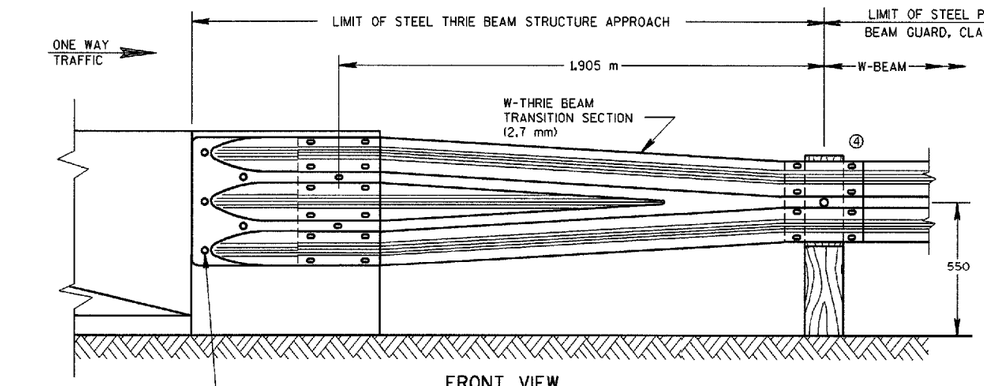
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

NOTE

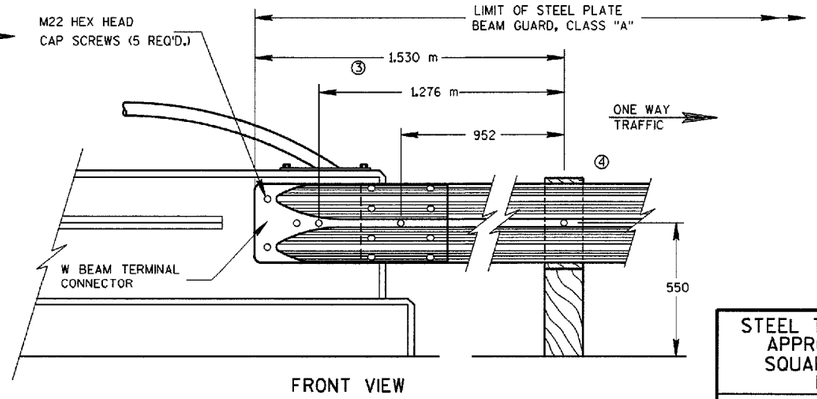
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED



THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

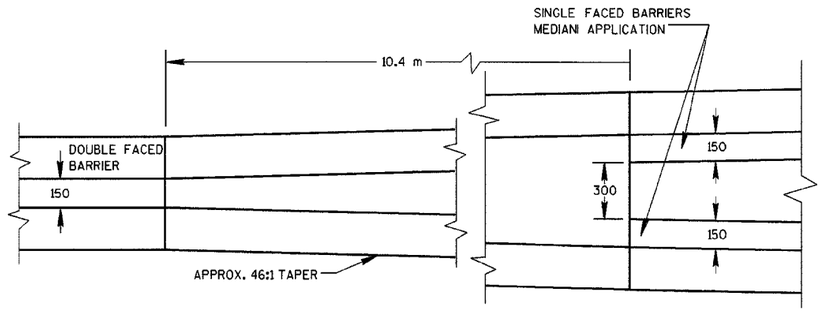
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 14 B 20-7b

S.D.D. 14 B 20-7b

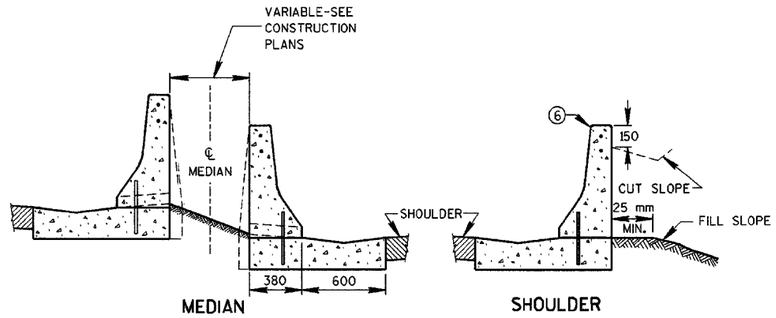


PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

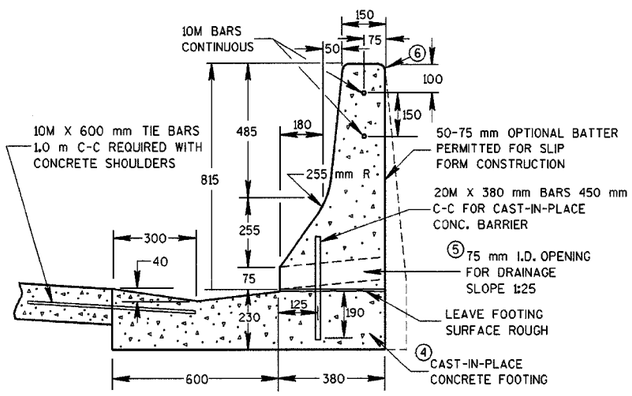
(FOOTINGS ARE NOT SHOWN)

HIGH SIDE CONCRETE BARRIER DETAIL

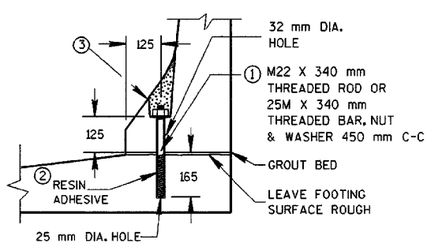


MEDIAN SHOULDER

TYPICAL APPLICATIONS



SECTION VIEW



ANCHORAGE DETAIL FOR PRECAST CONCRETE ALTERNATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

PRECAST UNITS SHALL BE FIRMLY BUTTED TOGETHER IN A CONTINUOUS LINE AND BE INTERCONNECTED BY VERTICAL MALE-FEMALE SHEAR CONNECTORS FORMED IN THE BARRIER ENDS.

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 460 mm AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31M, GRADE 60.

(1) THREADED RODS SHALL MEET THE REQUIREMENTS OF ASTM A572M, GRADE 50, AND BE THREADED A MINIMUM LENGTH OF 64 mm AT THE TOP AND 165 mm AT THE BOTTOM. 25M REINFORCEMENT BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31M, GRADE 60 AND BE THREADED A MINUMIM LENGTH OF 64 mm AT THE TOP. THE THREADED ROD OR 25M REINFORCEMENT BAR, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153M. NUTS SHALL BE TORQUED TO 407 N.

(2) THE RESIN ADHESIVE SHALL BE MADE BY AN APPROVED MANUFACTURER AND CERTIFIED TO PROVIDE A PULLOUT STRENGTH OF 89 KN FOR THE ANCHORS AND CONCRETE EMBEDMENT SHOWN.

(3) BLOCKED OUT OPENINGS SHALL BE FILLED WITH A COMMERCIAL NON-SHRINK GROUT AFTER BARRIER IS INSTALLED.

(4) BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN CONTRACT.

(5) OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.

(6) 20 mm BEVEL OR 25 mm RADIUS (TYPICAL).

(7) 10M BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.

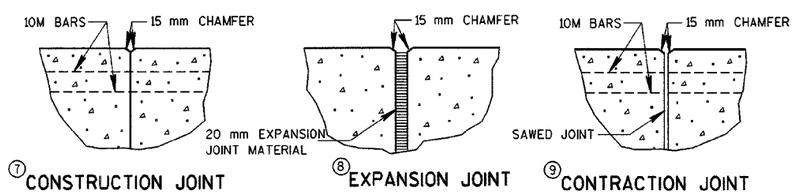
(8) EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES.

(9) SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 7.6 m.

NOTE:

DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

SLOPE RATIOS ARE SHOWN WITH THE VERTICAL COMPONENT FIRST THEN THE HORIZONTAL (RISE:RUN).



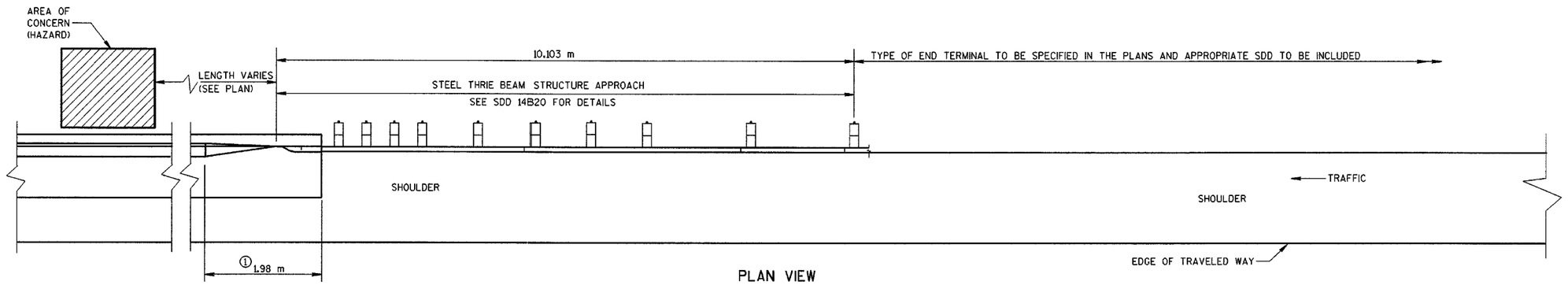
JOINT DETAILS

CONCRETE BARRIER,
SINGLE-FACED
(WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION M

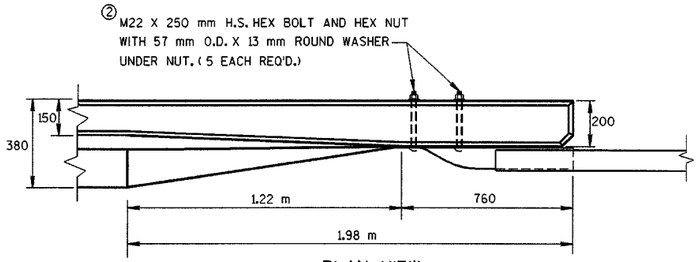
S.D.D. 14 B 22-3a

S.D.D. 14 B 22-3a

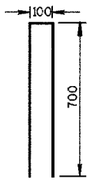


PLAN VIEW

TRANSITION TO STEEL PLATE BEAM GUARD AND END TERMINAL



PLAN VIEW



BENT BAR DETAIL

GENERAL NOTES

① A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.

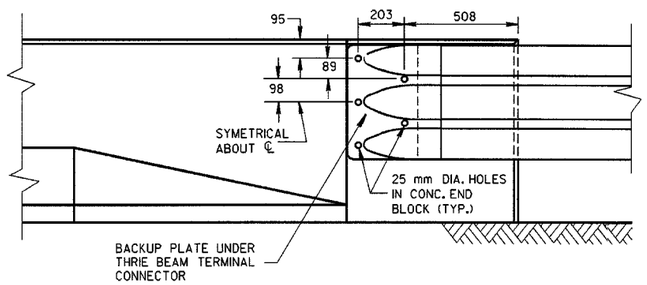
② HIGH STRENGTH BOLTS SHALL MEET REQUIREMENTS OF ASTM A325.

③ REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.

④ PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.

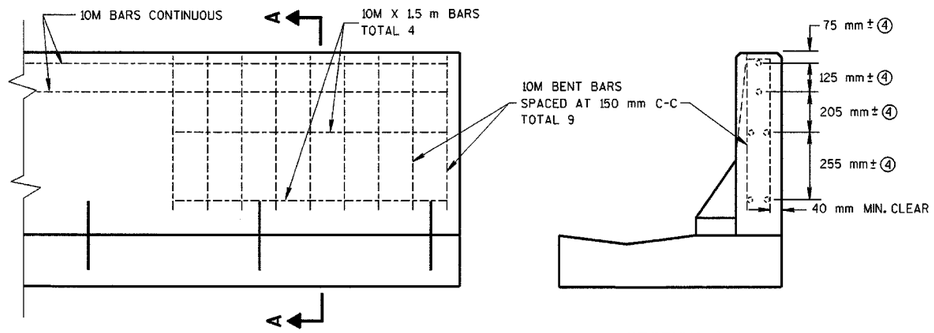
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLAT BEAM GUARD, CLASS "A" INSTALLATIONS.



FRONT VIEW

CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW SECTION A-A

③ REINFORCEMENT AT BARRIER END

CONCRETE BARRIER
SINGLE-FACED
(WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE

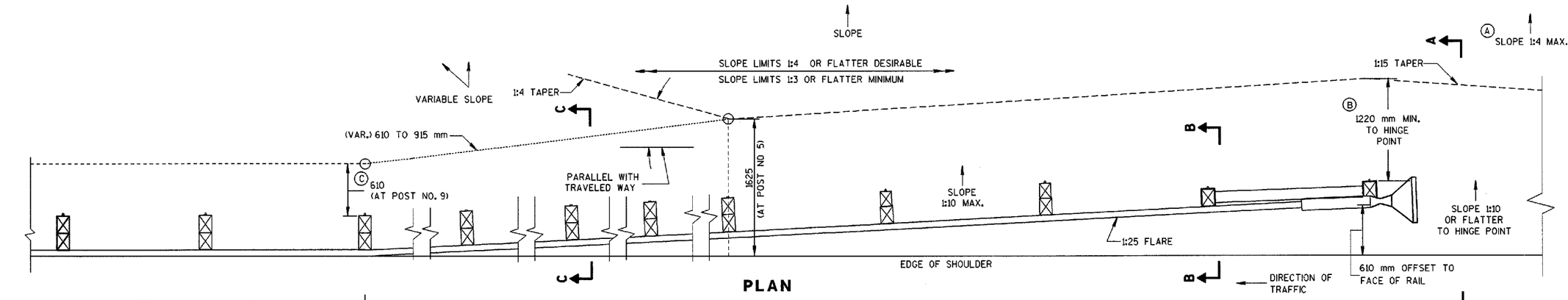
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

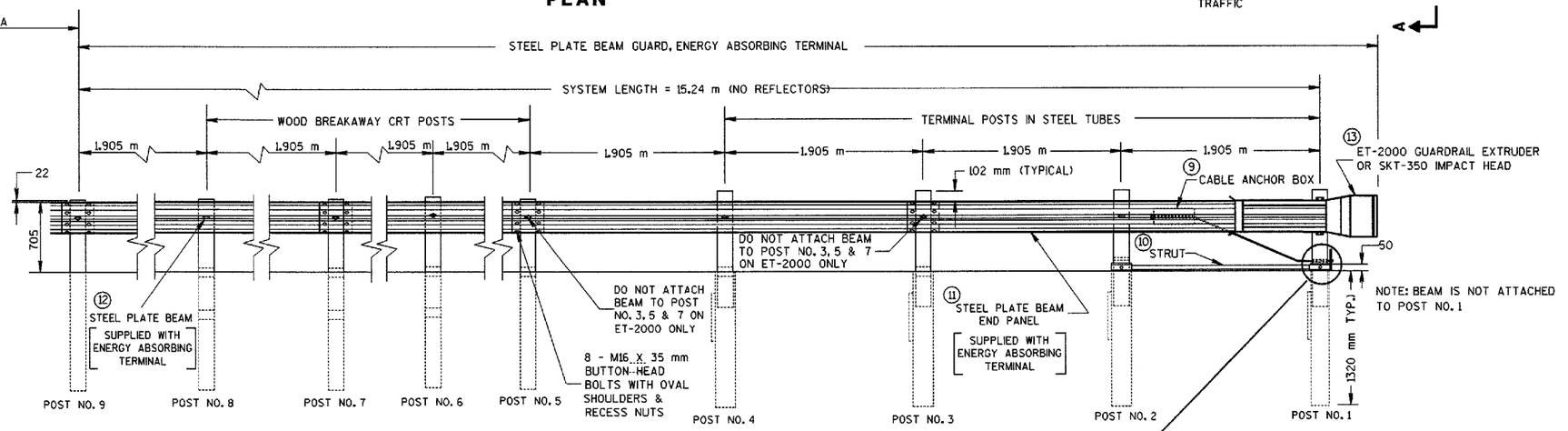
M

S.D.D. 14 B 22-3b

S.D.D. 14 B 22-3b



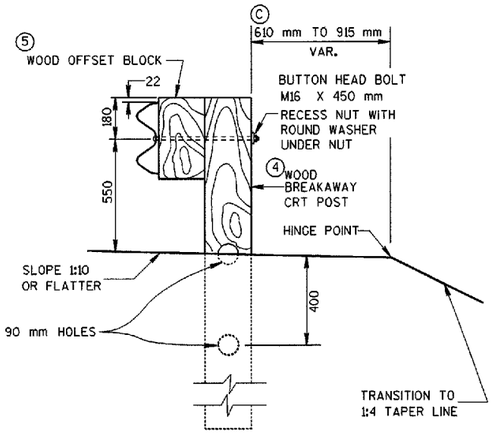
PLAN



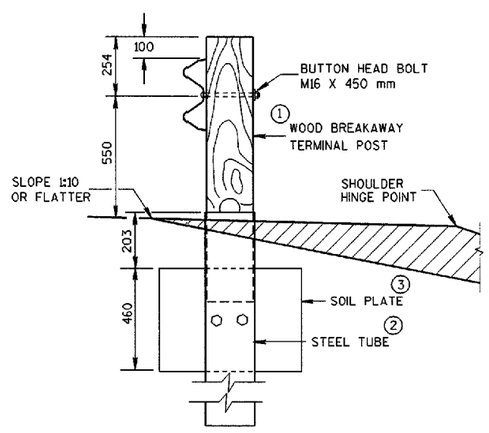
ELEVATION

BILL OF MATERIALS

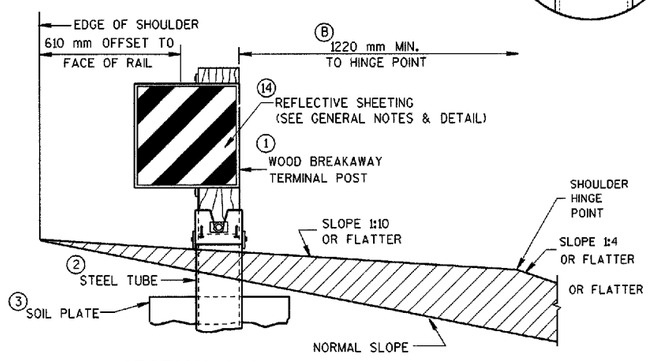
NOTE NO.	QTY.	DESCRIPTION
1	4	WOOD BREAKAWAY TERMINAL POST: 140 mm X 190 mm X 1.1 m
2	4	STEEL TUBE: TS 203 X 152 X 5 mm, 1.1 m LONG
3	4	SOIL PLATE: 610 X 460 X 6 mm
4	4	WOOD BREAKAWAY CRT POST: 150 X 200 X 1.8 m
5	6	WOOD OFFSET BLOCKS: 150 X 200 X 355 mm
6	1	PIPE SLEEVE: 50 X 140 mm STANDARD PIPE
7	1	BEARING PLATE
8	1	BCT CABLE ASSEMBLY
9	1	CABLE ANCHOR BOX
10	1	STRUT & YOKE
11	1	STEEL PLATE BEAM, END PANEL 12 GA. 4.1 m LONG FOR SKT-350 & ET-2000
12	3	STEEL PLATE BEAM: 12 GA. 4.1 m
13	1	ET-2000 GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
14	1	REFLECTIVE SHEETING: 460 X 460 mm



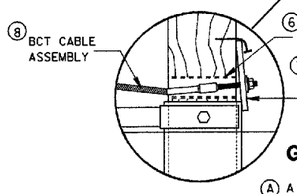
SECTION C-C
TYPICAL AT POST NOS. 5-8 INC.



SECTION B-B
TYPICAL AT POST NO. 2
(ADD WOOD OFFSET BLOCK AT POST 3 & 4)



SECTION A-A
TYPICAL AT POST NO. 1



GENERAL NOTES

(A) A 1:3 OR FLATTER SLOPE MAY BE USED FOR INSTALLATION ON EXISTING HIGHWAYS.

(B) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 1220 mm MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. SIMILIARLY THE 1:15 TAPER MAY BE REDUCED TO 1:4.

(C) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 610 mm MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

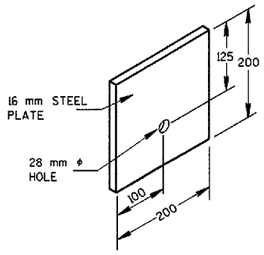
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

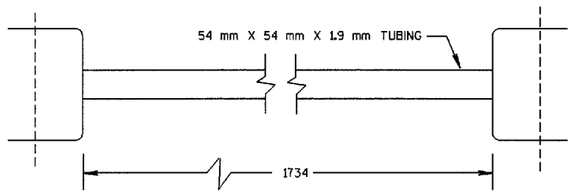
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 24-4a

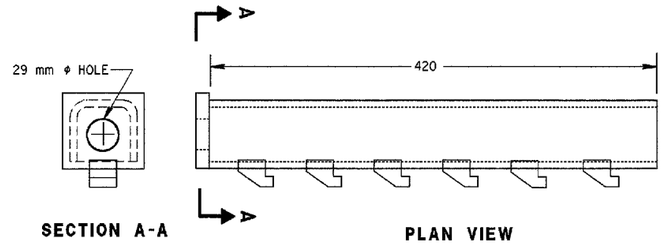
S.D.D. 14 B 24-4a



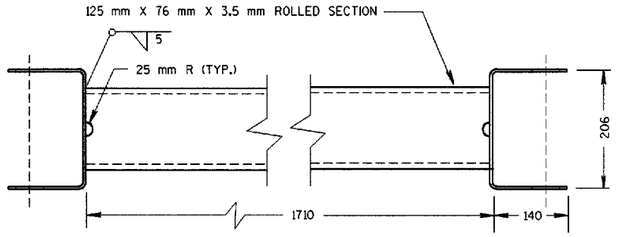
STEEL BEARING PLATE (SKT-350)



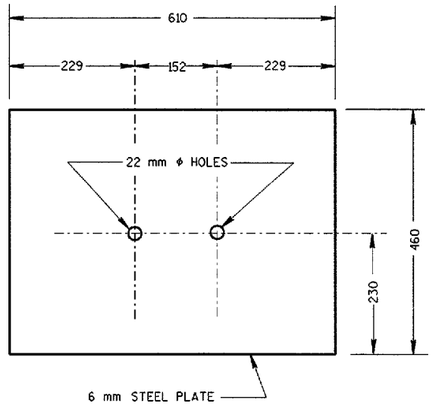
STRUT DETAIL (SKT-350)



CABLE ANCHOR BOX (ET-2000)



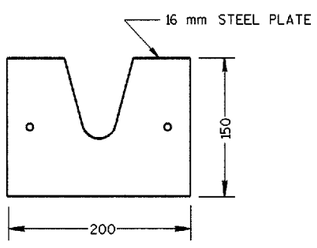
STRUT DETAIL (ET-2000)



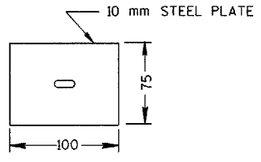
SOIL PLATE (SKT-350 & ET-2000)

CABLE ANCHOR BOX (SKT-350)

(SKT-350)



STEEL BEARING PLATE (ET-2000)



BEARING PLATE WASHER ET-2000)

(ET-2000)

NOTE

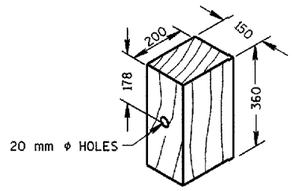
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

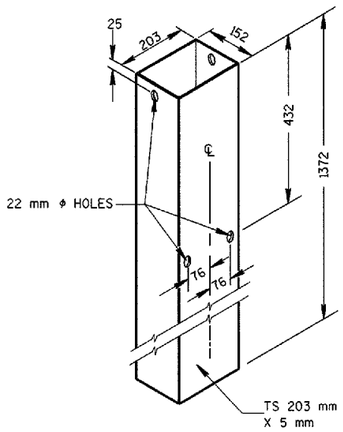
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION M

S.D.D. 14 B 24-4b

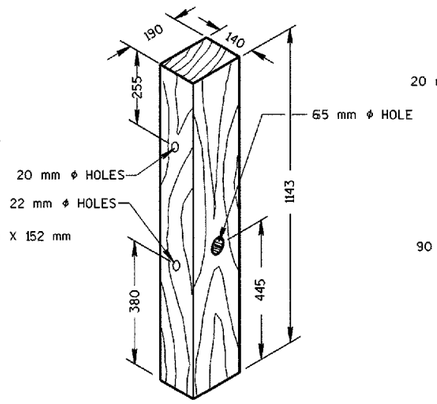
S.D.D. 14 B 24-4b



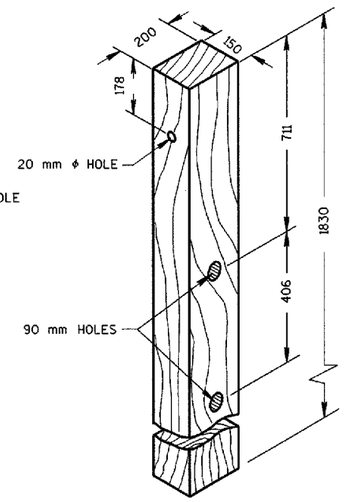
WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



STEEL TUBE
(POSTS NO. 1-4
THE STEEL TUBE SHALL CONFORM
TO REQUIREMENTS OF ASTM A500



TERMINAL POST
(POSTS NO. 1-4



CRT POST
(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS AND MANUFACTURERS INSTRUCTIONS.

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIATERY PRODUCT MATERIALS.

THE "ET-2000" IS AVAILABLE FROM SYRO, INC., 2524 N. STEMMONS FREEWAY, DALLAS TEXAS 75207. TELEPHONE 1-800-835-6086 OR 1-800-644-7976

THE "SKT-350" IS AVAILABLE FROM ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, ILLINOIS 60423. TELEPHONE (815) 464-5917

THE ET-2000, AND SKT-350 END TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

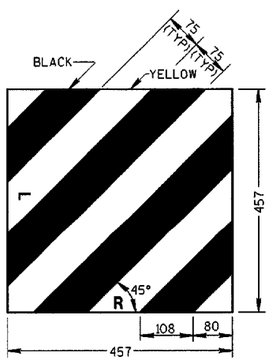
STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-93b, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 305 mm DIA. POST HOLE EXTENDING 510 mm DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 65 mm DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.



REFLECTIVE SHEETING DETAIL

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE

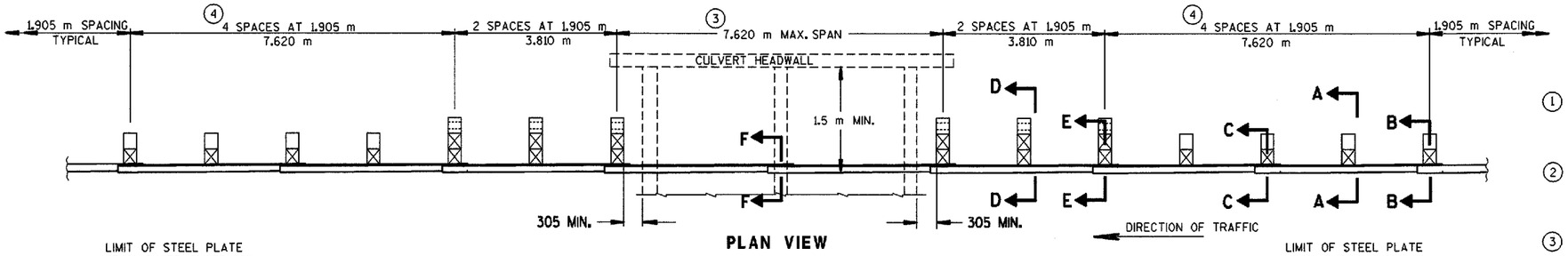
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

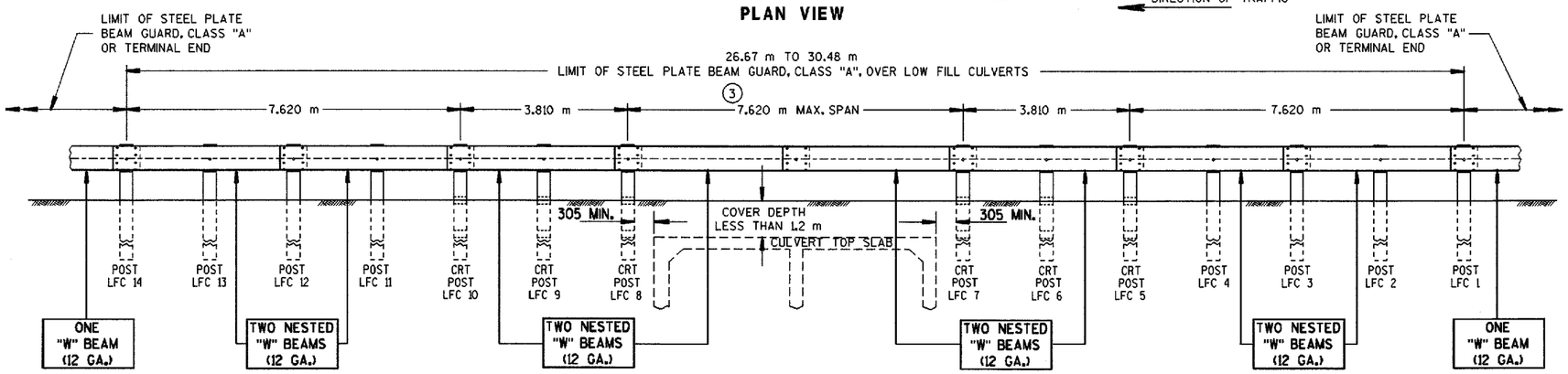
M

S.D.D. 14 B 24-4c

S.D.D. 14 B 24-4c



PLAN VIEW



FRONT VIEW

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD OVER LOW FILL CULVERTS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) MAINTAIN THE NESTING OF EACH NESTED PAIR OF "W" BEAM SECTIONS THROUGH SPLICES. ORIENTATE NESTED "W" BEAM SPLICES IN THE DIRECTION OF TRAFFIC AS THE PLAN VIEW SHOWS. SEE S.D.D. 14 B 15 FOR SPLICE INSTALLATION.

(2) THE CONTRACTOR MAY USE APPROVED PLASTIC BLOCKOUTS IN LIEU OF WOOD BLOCKOUTS. SEE S.D.D. 14 B 15 FOR TYPICAL BLOCKOUT, SPLICE AND REFLECTOR INSTALLATIONS. USE BOLT SIZES AND LENGTHS AS SHOWN ON THIS DETAIL.

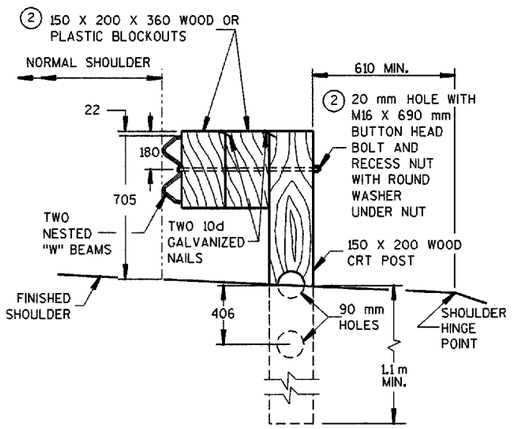
(3) PROVIDE 3.810 m, 5.715 m AND 7.620 m SPANS ONLY. USE A MAXIMUM OF ONE SPLICE LOCATED ANYWHERE WITHIN THE SPAN SECTION. LOCATE ALL OTHER SPLICES AT BEAM GUARD POSTS.

(4) IN THE FIRST AND LAST 7.620 m SECTIONS (POSTS LFC 1-4 & LFC 11-14), THE CONTRACTOR MAY USE W150 X 13.5 OR W150 X 12.6 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS OR 150 X 200 WOOD POSTS WITH EITHER WOOD OR PLASTIC BLOCKOUTS. DO NOT MIX STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS AND WOOD POSTS WITH EITHER WOOD OR PLASTIC BLOCKOUTS IN THE SAME INSTALLATION.

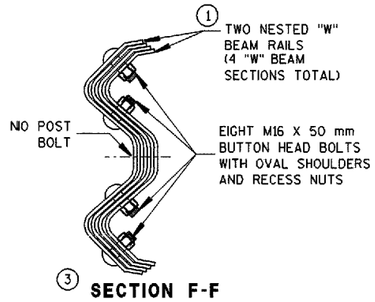
(5) WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK, THE PLAN TYPICAL SECTIONS OR DETAILS MAY SHOW, OR THE ENGINEER MAY ALLOW, THE REDUCTION OR ELIMINATION OF THE 610 mm DISTANCE TO THE HINGE POINT. BUILD AS THE PLAN SHOWS OR ENGINEER DIRECTS. IF THE 610 mm DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST SOIL DEPTH TO 1.37 m OR MORE.

NOTE

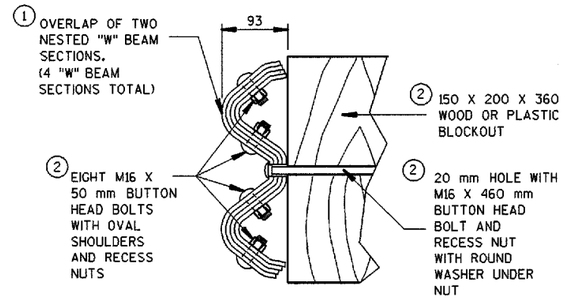
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN. SLOPE RATIOS ARE SHOWN WITH THE VERTICAL COMPONENT FIRST THEN THE HORIZONTAL (RISE:RUN).



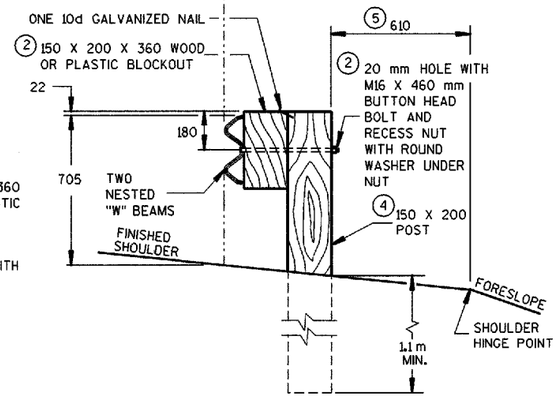
SECTION D-D
TYPICAL CRT POST LFC 6 AND 9



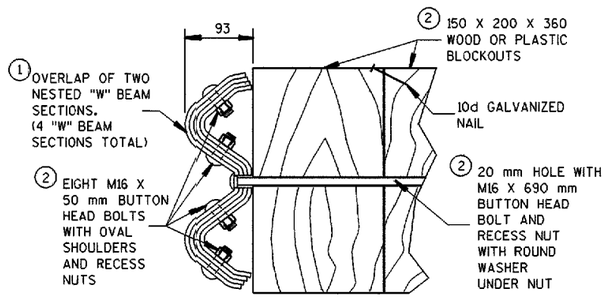
SECTION F-F
BEAM SPLICE IN SPAN OVER CULVERT



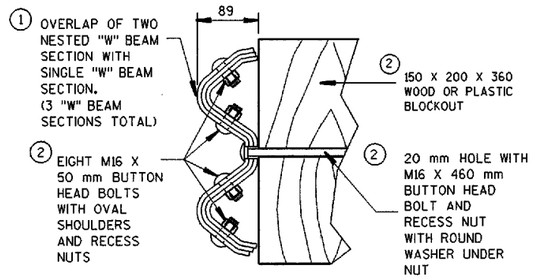
SECTION C-C
TYPICAL AT POSTS LFC 3 AND 12



SECTION A-A
TYPICAL AT POST LFC 2,4,11,13



SECTION E-E
TYPICAL CRT POST LFC 5, 7, 8 AND 10



SECTION B-B
TYPICAL AT POSTS LFC 1 AND 14

STEEL PLATE BEAM GUARD, CLASS "A", OVER LOW FILL CULVERTS

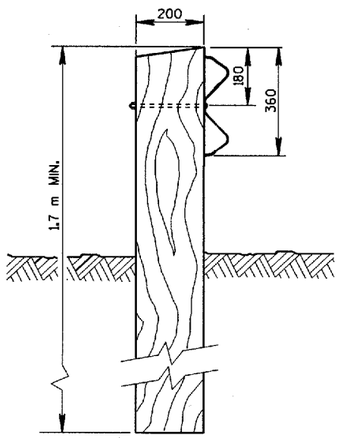
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 12/08/00 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

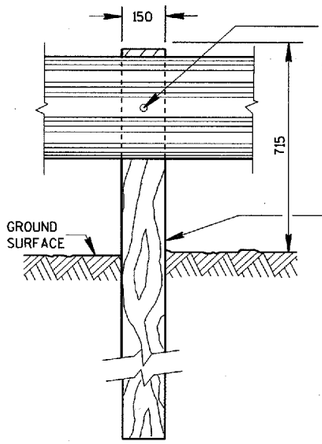
S.D.D. 14 B 25-1

S.D.D. 14 B 25-1

PLOT SCALE:
PLOT NAME:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
REV. DATE:
ORIGINATOR:



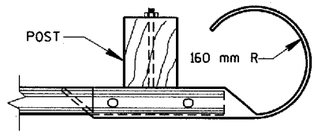
END VIEW



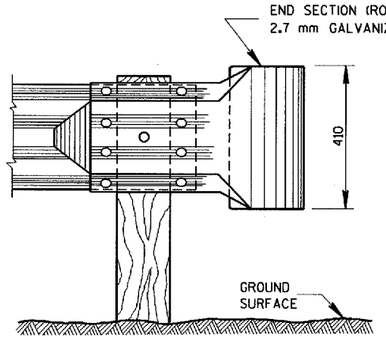
FRONT VIEW

BUTTONHEAD MOUNTING BOLT 15.875 mm X 255 mm SECURED WITH WASHER & NUT. THREAD END TO BE BURRED FOLLOWING MOUNTING.

SAWED TREATED TIMBER POSTS 150 mm X 200 mm X 1.8 m SHALL BE FURNISHED AND PLACED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.



PLAN



FRONT ELEVATION

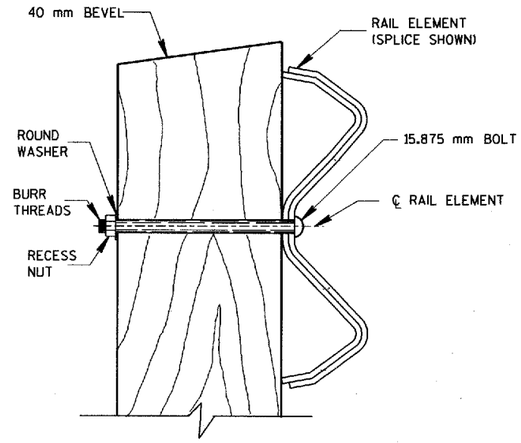
END SECTION (ROUNDED) DETAILS

GENERAL NOTES

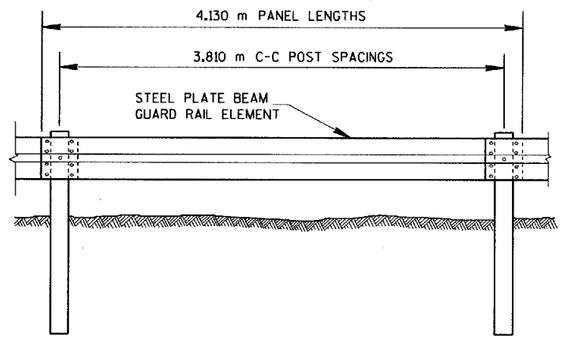
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

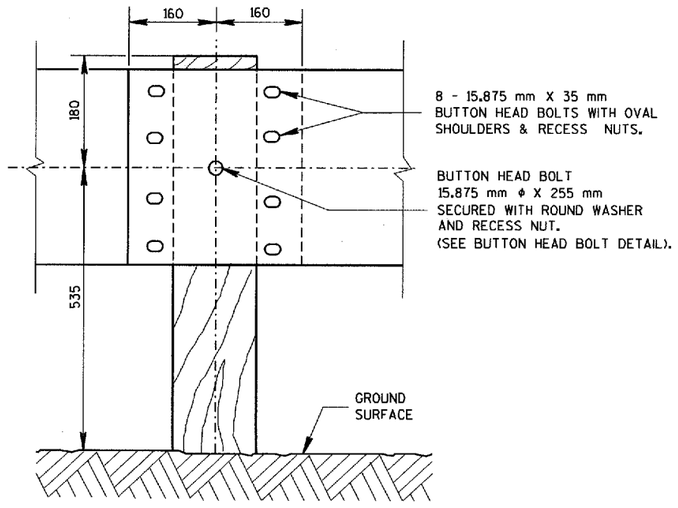


BUTTON HEAD BOLT DETAIL



FRONT VIEW

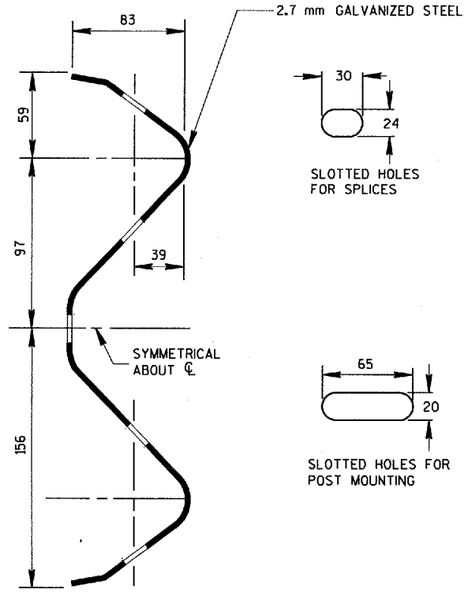
POST DETAIL



8 - 15.875 mm X 35 mm BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

BUTTON HEAD BOLT 15.875 mm ϕ X 255 mm SECURED WITH ROUND WASHER AND RECESS NUT. (SEE BUTTON HEAD BOLT DETAIL).

RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL



SECTION THRU RAIL ELEMENT

STEEL PLATE BEAM GUARD CLASS B

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 02/09/95 DATE
Roy L. Thiesse
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

M

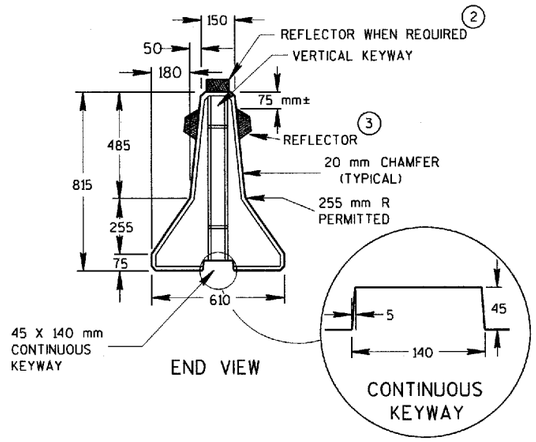
S.D.D. 14 B 3-2

FILE NAME:

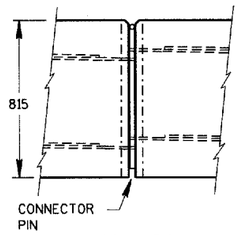
S.D.D. 14 B 3-2

DESCRIPTION	SIZE	NO. REQ'D	LENGTH (mm)
TOP CONNECTOR WIRE ROPE (1)	12.7 mm	2	1800
BOTTOM CONN. WIRE ROPE (1)	12.7 mm	2	1800
TOP CONNECTOR STEEL BAR	15M	1	2740
BOTTOM CONN. STEEL BAR	15M	1	2740
STEEL CONNECTING PIN	31.75 mm DIA.	1	760
BOTTOM TIE BARS	15M	5	560
VERTICAL STEEL BAR	15M	10	635
HORIZONTAL STEEL BAR	15M	4	2845

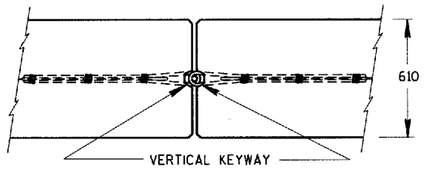
BILL OF MATERIALS



END VIEW



SIDE VIEW



PLAN VIEW

CONNECTION DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BARRIERS SHALL BE REINFORCED WITH EITHER BAR STEEL REINFORCEMENT AS DETAILED ON THIS DRAWING OR WELDED STEEL WIRE FABRIC ADEQUATE TO ASSURE SAFE HANDLING STRENGTH.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN.

GALVANIZED WIRE ROPE SHALL BE 6 X 19 CLASS 2 IWRC WITH A MINIMUM BREAKING STRENGTH OF 8900 N AND SHALL CONFORM TO FEDERAL SPECIFICATION RR-W-410. THE ZINC COATING SHALL CONFORM TO TABLE II OF THE FEDERAL SPECIFICATIONS.

REFLECTORS SHALL CONFORM TO SECTION 633 OF THE STANDARD SPECIFICATIONS EXCEPT THE SHAPE SHALL BE AS SHOWN ON THIS DRAWING. ALTERNATIVE SHAPES MAY BE USED WHEN APPROVED BY THE ENGINEER. CONCRETE SURFACE PREPARATION, ADHESIVE AND METHOD OF APPLICATION SHALL BE AS RECOMMENDED BY THE REFLECTOR MANUFACTURER. THE COLOR OF REFLECTORS SHALL BE YELLOW. MAXIMUM SPACING SHALL BE 6.0 m.

(1) CONNECTOR ASSEMBLIES MAY, AT THE CONTRACTORS OPTION, BE FORMED FROM A CONTINUOUS SECTION OF 12.7 mm GALV. WIRE ROPE (5 m MIN. LENGTH). THE 15M CONNECTOR STEEL BARS MAY THEN BE OMITTED.

(2) TOP MOUNTED REFLECTORS SHALL BE PROVIDED IN ADDITION TO THE SIDE MOUNTED REFLECTORS ON ALL BARRIER INSTALLATIONS LOCATED ON CURVED ALIGNMENT LONGER THAN 60 m.

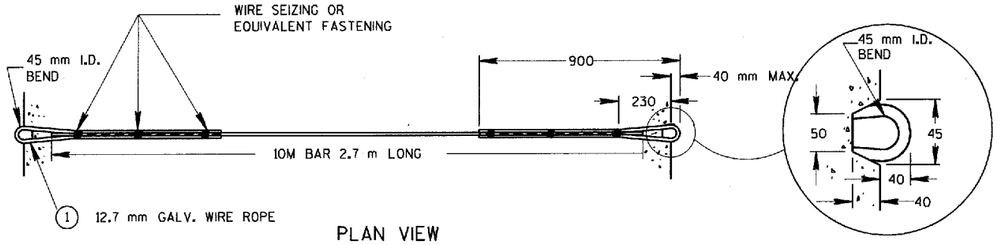
(3) BARRIERS USED TO SEPARATE OPPOSING TRAFFIC SHALL HAVE REFLECTORS ON BOTH SIDES. TOP MOUNTED REFLECTORS SHALL BE DOUBLE FACED FOR THIS CONDITION.

ALTERNATE DESIGN

J-J HOOKS PORTABLE CONCRETE BARRIER BY EASI-SET INDUSTRIES MAY BE FURNISHED INSTEAD OF THE BARRIER DETAILED ON THIS DRAWING. CONTACT INFORMATION: EASI-SET INDUSTRIES, P.O. BOX 300, MIDLAND, VIRGINIA 22728, TELEPHONE (703) 439-8911.

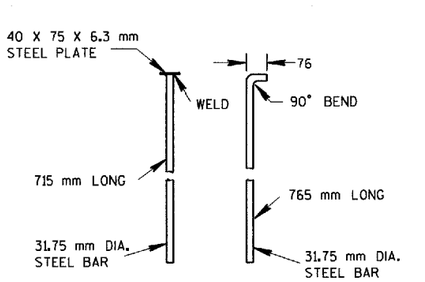
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

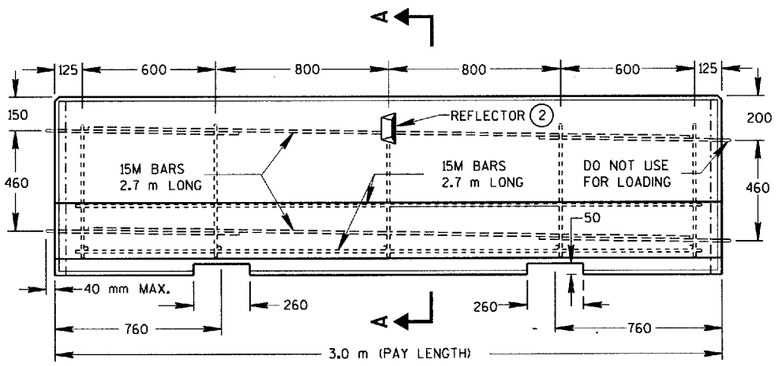


PLAN VIEW

TOP & BOTTOM CONNECTOR ASSEMBLY (1)

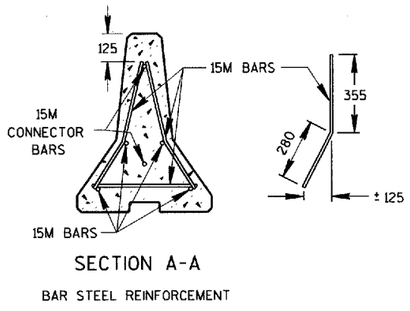


ALTERNATE CONNECTING PINS



SIDE VIEW

LOCATION OF REINFORCEMENT STEEL

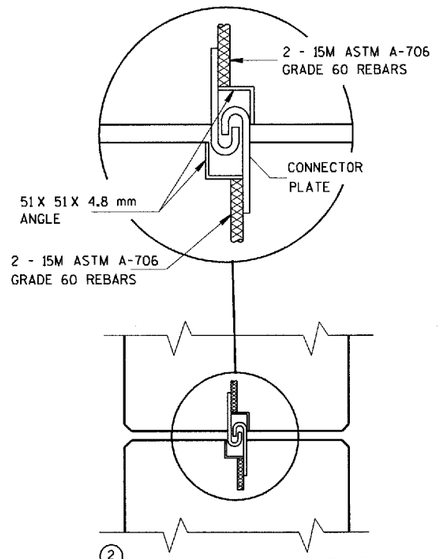


SECTION A-A

BAR STEEL REINFORCEMENT

ALTERNATE DESIGN

J-J HOOKS PORTABLE CONCRETE BARRIER BY EASI-SET INDUSTRIES MAY BE FURNISHED INSTEAD OF THE BARRIER DETAILED ON THIS DRAWING. CONTACT INFORMATION : EASISET INDUSTRIES, P.O. BOX 300, MIDLAND, VIRGINIA 22728, TELEPHONE (703) 439-8911.



(2) J-J HOOK CONNECTOR

(ALTERNATIVE TO PIN & LOOP CONNECTOR)

TEMPORARY PRECAST CONCRETE BARRIER

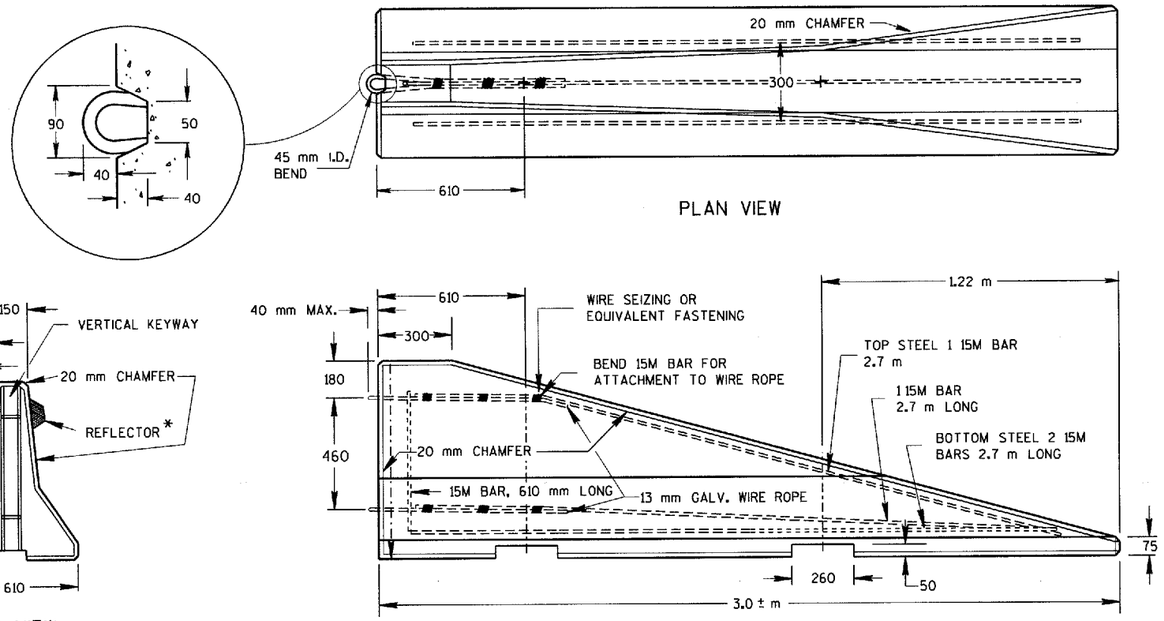
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 7-9c

S.D.D. 14 B 7-9a

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16,17,18,19, 20,21,22, 23,24, 25, 26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41, 42,43,44,45,46,47,48, 49,50,51, 52,53,54,55,56,57,58,59,60,61,62,63



PLAN VIEW

END VIEW

SIDE VIEW

END SECTION FOR TEMPORARY PRECAST CONCRETE BARRIER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

THE PORTABLE CRASH CUSHION SHALL BE THE G-R-E-A-T CZ IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC: ONE EAST WACKER DRIVE, CHICAGO, IL., 60601.

THE CRASH CUSHION SHALL BE MANUFACTURED, ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS DETAILED ELSEWHERE IN THE PLANS OR AS SHOWN ON THE APPROVED SHOP DRAWINGS. THE CRASH CUSHION PLATFORM SHALL BE ANCHORED TO EITHER 150 mm MINIMUM CONCRETE PAVEMENT OR 75 mm MINIMUM ASPHALTIC SURFACES THAT HAVE A PREPARED COMPACTED SUBBASE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

GALVANIZED WIRE ROPE SHALL BE 6 X 19 CLASS 2 IWRC WITH A MINIMUM BREAKING STRENGTH OF 9050 kg, AND SHALL CONFORM TO FEDERAL SPECIFICATION RR-W-410. THE ZINC COATING SHALL CONFORM TO TABLE II OF THE FEDERAL SPECIFICATIONS.

* WHEN BARRIERS ARE USED TO SEPARATE OPPOSING TRAFFIC, REFLECTORS ARE REQUIRED ON BOTH SIDES.

NOTE

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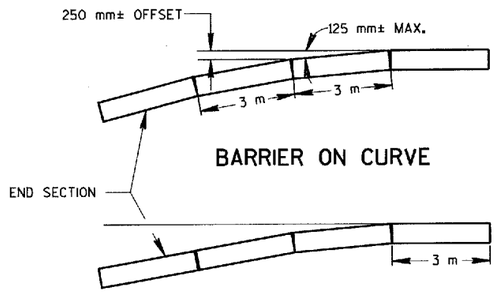
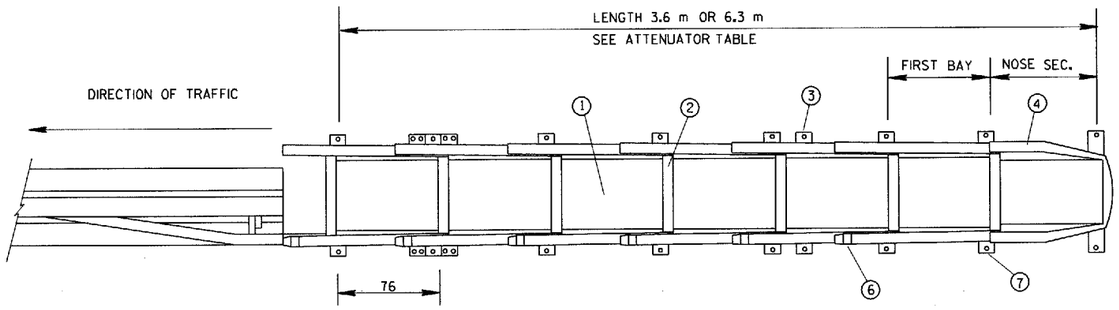


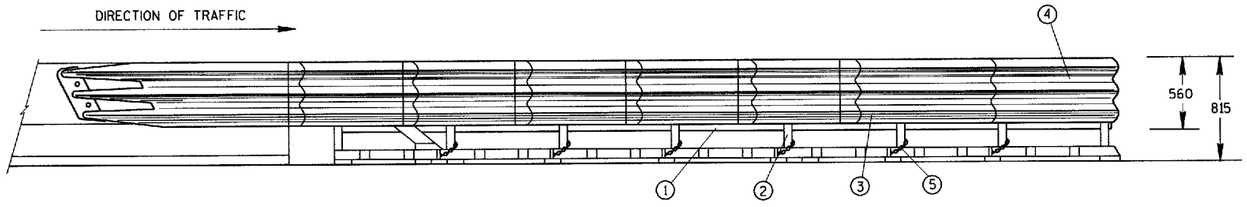
BARRIER ON CURVE

FLARE AT BARRIER END

OPERATING SPEED, Km/h	FLARE RATE
60 OR LESS	1:10
80 OR MORE	1:15



PLAN VIEW



NOTE: CROSS SLOPE OF UNIT NOT TO EXCEED 5%

SIDE VIEW

CONSTRUCTION ZONE PORTABLE CRASH CUSHION

ATTENUATOR TABLE

ATTENUATOR LENGTH (m)	NO. OF BAYS	DESIGN SPEED km/h
3.6	3	60 OR LESS
6.3	6	60 TO 90

1. HEX-FOAM CARTRIDGE
2. DIAPHRAGM
3. THRIE BEAM FENDER PANEL
4. NOSE COVER
5. STABILIZING CHAIN
6. DEFLECTOR PANEL
7. ANCHORAGE DEVICE (WHERE ONE-WAY TRAFFIC EXISTS)

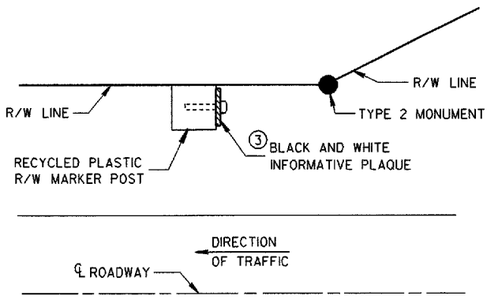
PRECAST CONCRETE BARRIER
END SECTION AND
PORTABLE CRASH CUSHION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/24/95 DATE
Roy L. Thimmesch
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

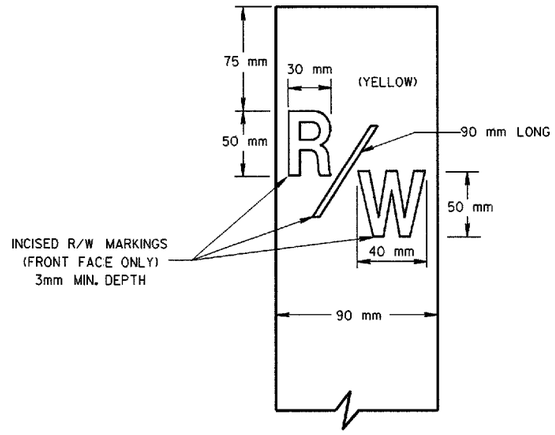
S.D.D. 14 B 7-9b

S.D.D. 14 B 7-9b

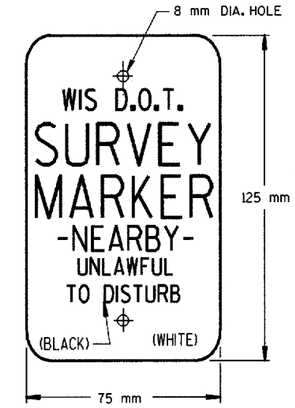


PLAN VIEW

TYPICAL LOCATION ④



RECYCLED PLASTIC RIGHT-OF-WAY MARKER POST FRONT FACE



INFORMATIVE PLAQUE ③

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

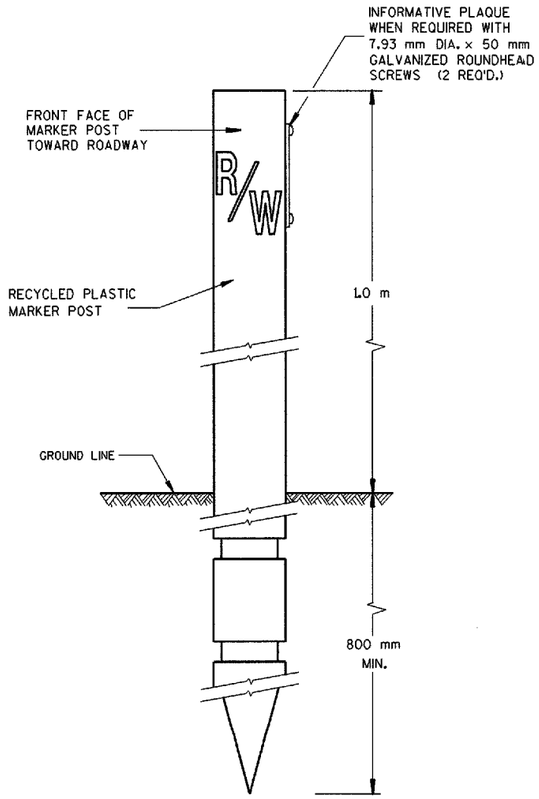
① POSTS SHOULD BE DRIVEN 800 mm INTO THE GROUND.

② IN HEAVY SOILS, IT IS RECOMMENDED A 75 mm PILOT HOLE BE DRILLED INTO THE GROUND BEFORE DRIVING THE POST.

③ INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION AND BE PLACED ON THE SIDE OF THE POST FACING THE TYPE 2 MONUMENT.

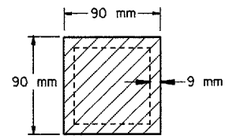
④ A MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED ADJACENT TO EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

MARKING & SIGNING DETAILS

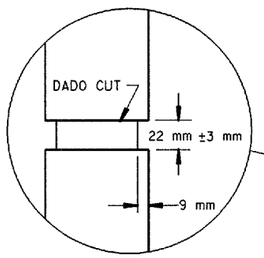


FRONT VIEW

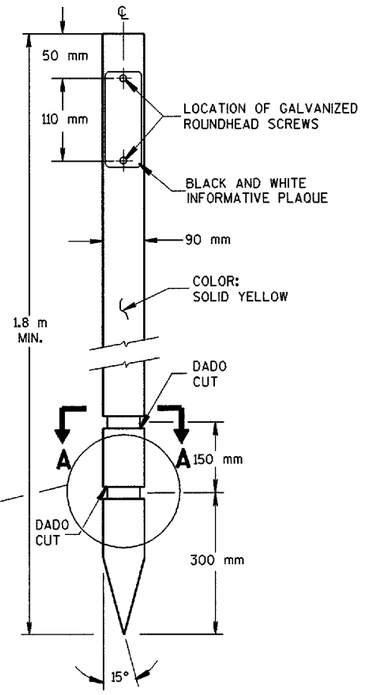
TYPICAL INSTALLATION ①②



SECTION A-A



DADO CUT DETAIL



SIDE VIEW

STANDARD RECYCLED PLASTIC MARKER POST

MARKER POSTS FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

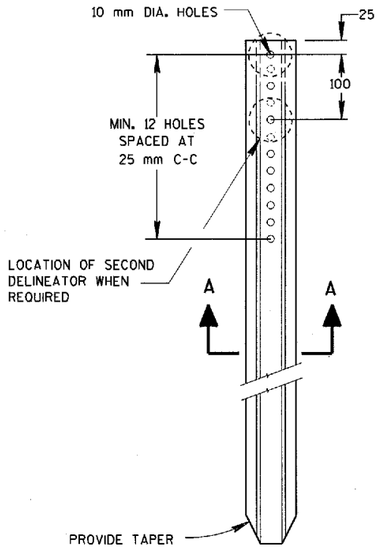
APPROVED 5/9/01 DATE

Kenneth B. Buck Jr.
CHIEF SURVEYING AND MAPPING ENGINEER

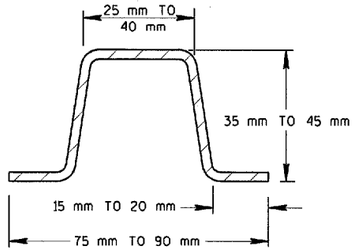
FHWA M

S.D.D. 15 A 1-7

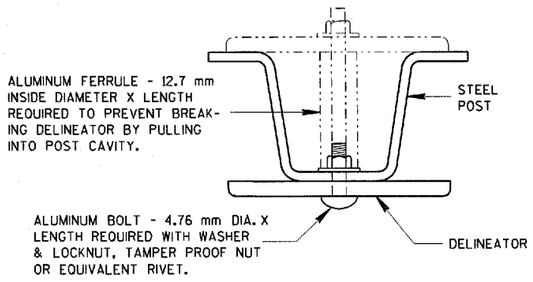
S.D.D. 15 A 1-7



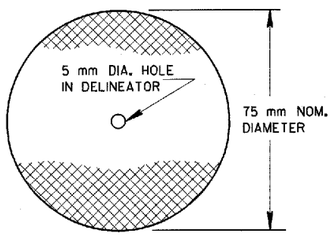
DELINEATOR POST

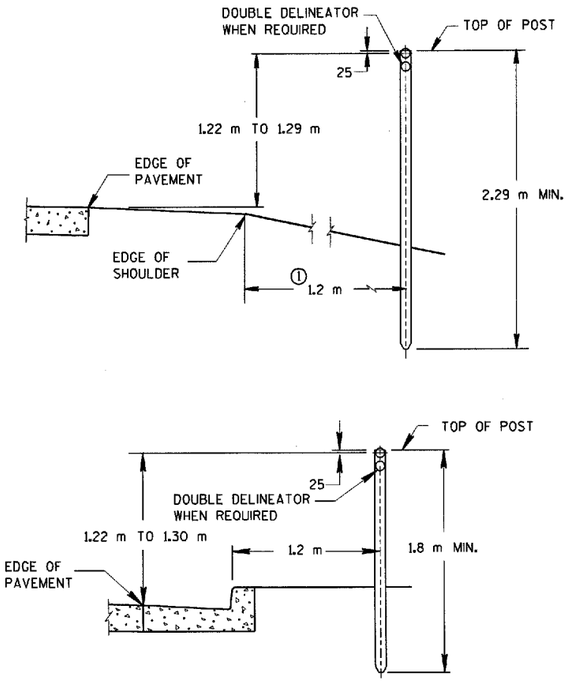


SECTION A-A
WEIGHT 1.68 kg PER METER

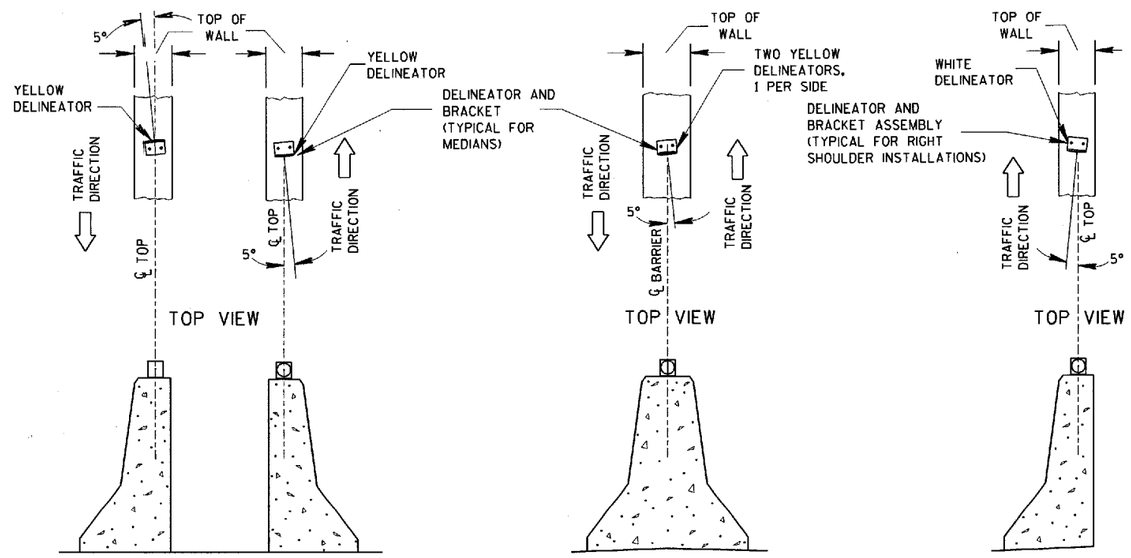


MOUNTING DETAIL FOR DELINEATOR





TYPICAL INSTALLATIONS OF DELINEATOR POSTS



DOUBLE BARRIERS IN MEDIAN | MEDIAN BARRIER | BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS

GENERAL NOTES

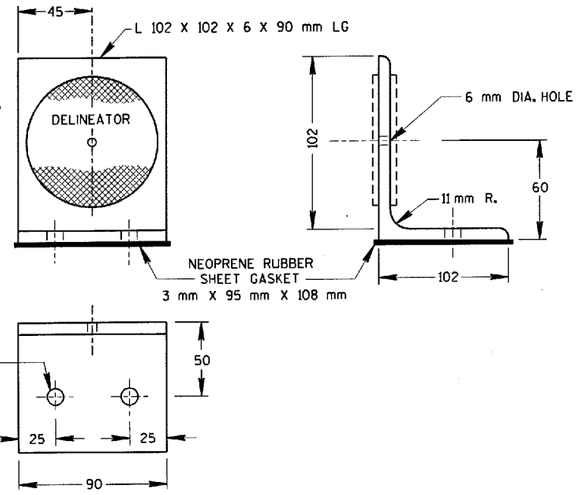
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

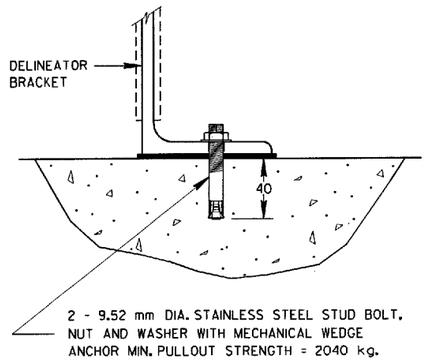
NOTE

ALL DIMENSIONS ARE IN MILLMETERS UNLESS OTHERWISE SHOWN.

NOTE:
FASTEN DELINEATOR TO BRACKET WITH BOLTS 4.76 mm DIA. X LENGTH REQ'D. WITH WASHER AND LOCKNUT OR EQUIVALENT RIVETS.



DELINEATOR BRACKET



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-19-00
DATE
Chester J. Sprang
CHIEF SIGNS AND MARKING ENGINEER
FHWA
M

S.D.D. 15 A 2-5

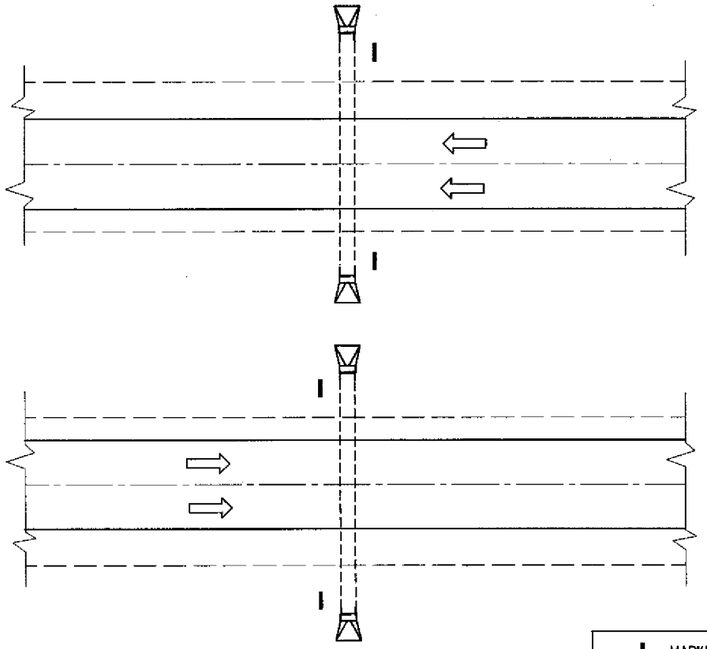
S.D.D. 15 A 2-5

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

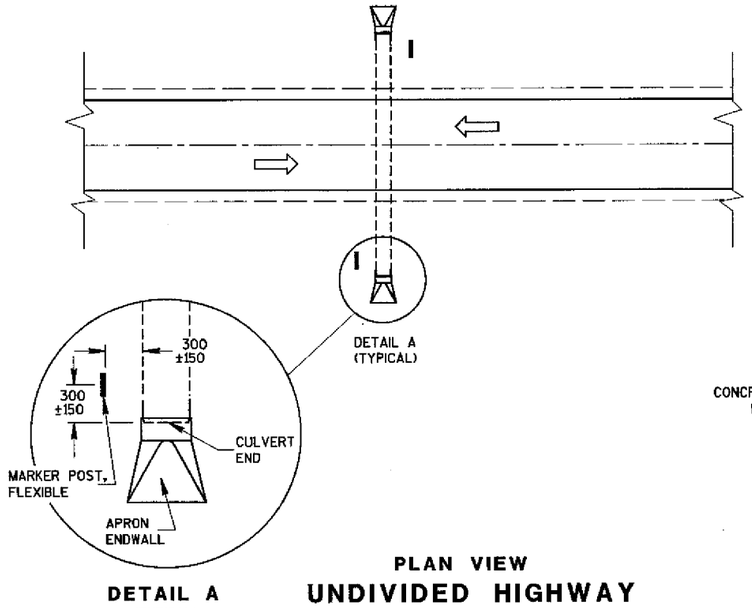
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

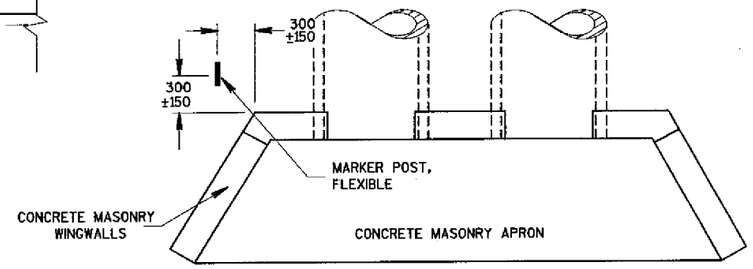
PLAN VIEW

UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

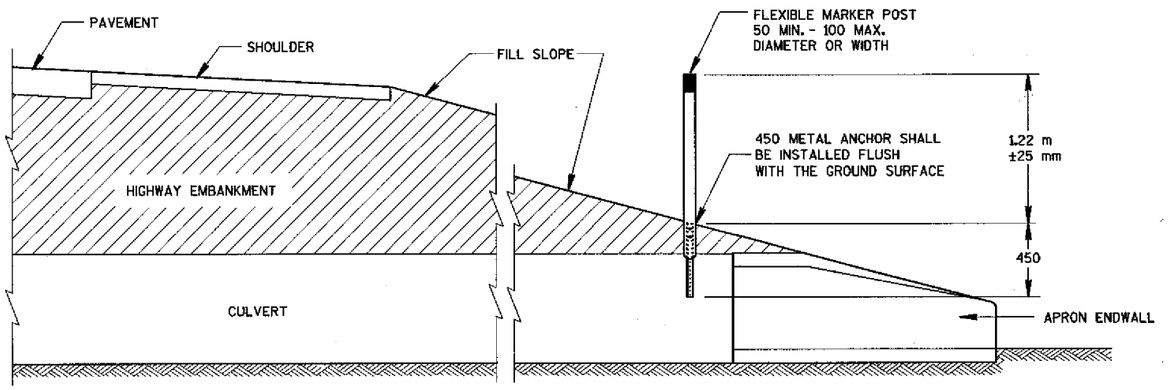
DIRECTION OF TRAFFIC FLOW

FLEXIBLE MARKER POST LOCATION



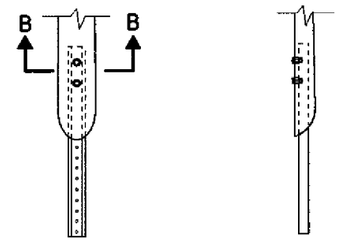
PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

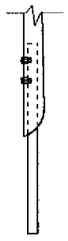


CROSS SECTION

FLEXIBLE MARKER POST

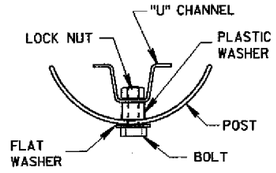


FRONT VIEW

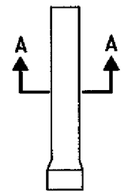


SIDE VIEW

CURVED MARKER



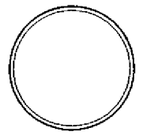
SECTION B-B



FRONT VIEW

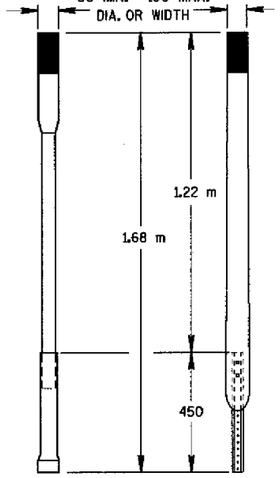
SIDE VIEW

ROUND MARKER



SECTION A-A

FLEXIBLE MARKER POST ANCHORS



ALTERNATE 1 ALTERNATE 2

FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE,
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/01/98
DATE

Tony L. Thiessen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

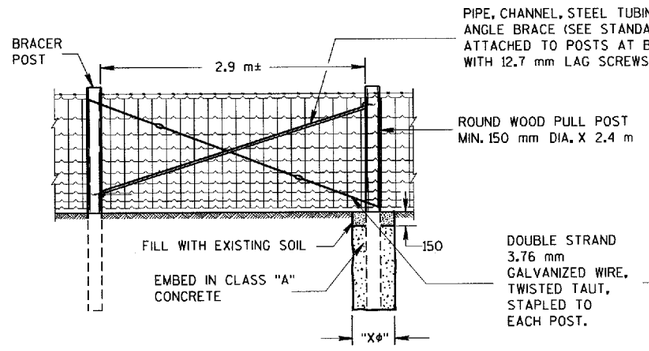
S.D.D. 15 A 3-1

S.D.D. 15 A 3-1

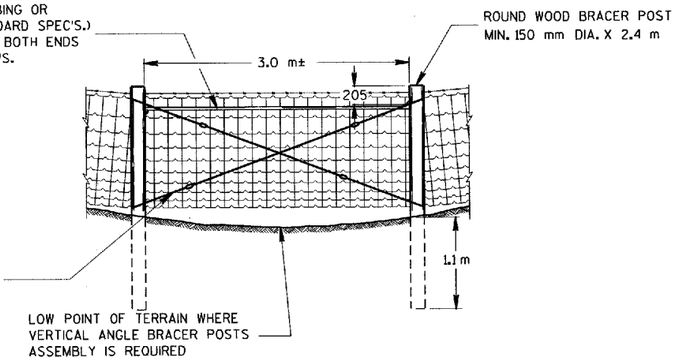
PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON • 2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63
S.D.D. 15 B 1-7a
FILE NAME:

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 200 m BUT IS LESS THAN 400 m FOR RUNS OF FENCE IN EXCESS OF 400 m MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 200 m± C-C.

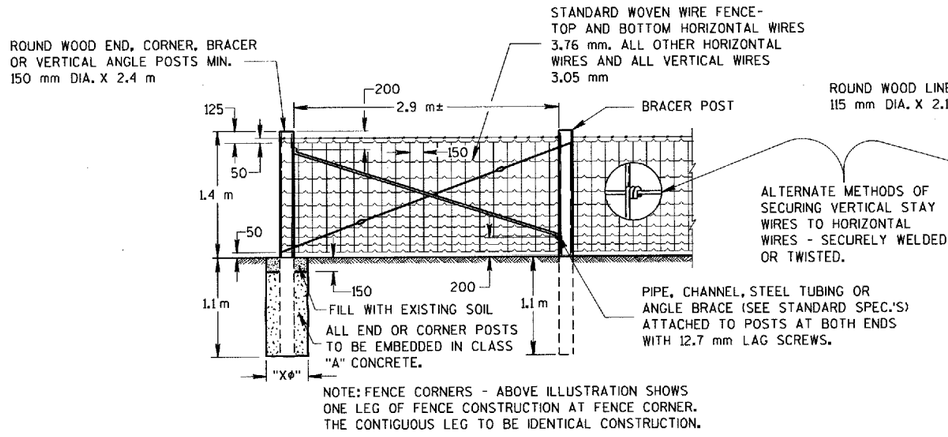
ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



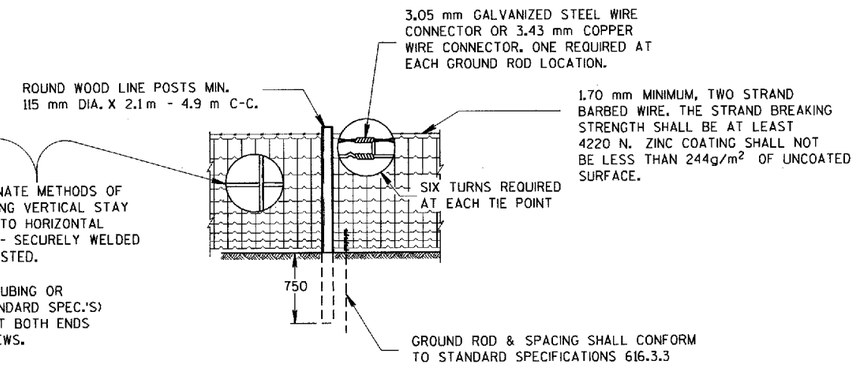
PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY



END OR CORNER POSTS ASSEMBLY



LINE FENCE CONSTRUCTION

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN HEREON SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

"XΦ" = DIAMETER OF THE POST PLUS 300 mm.

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

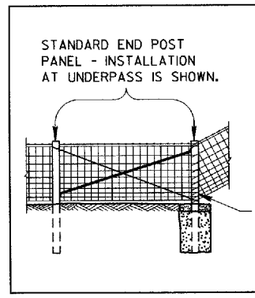
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 50 mm X 3.76 mm AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 900 mm INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.

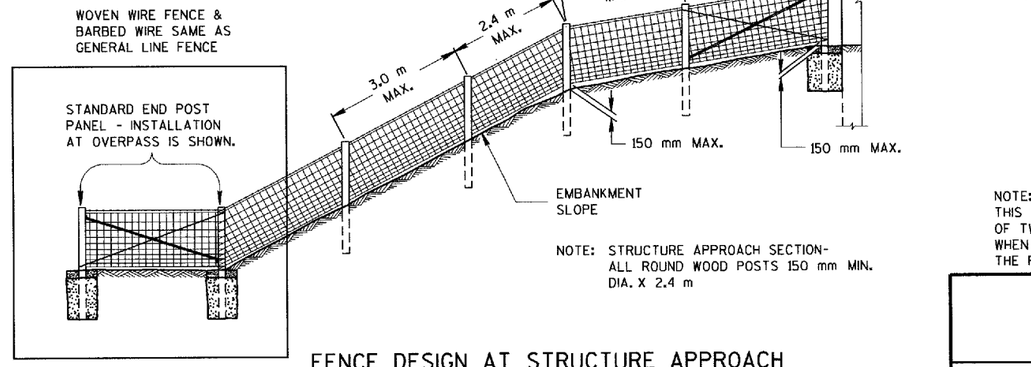
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 150 mm MIN. DIA. X 2.4 m

FENCE DESIGN AT STRUCTURE APPROACH

NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES AND BOTH ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.

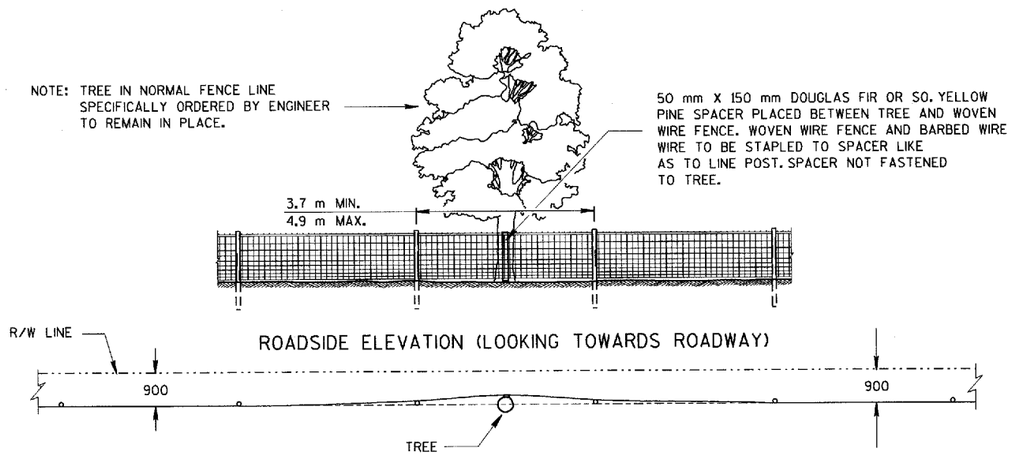
WOVEN WIRE FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

M

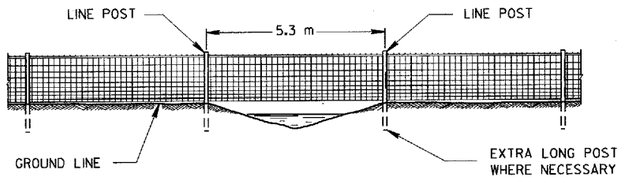
S.D.D. 15 B 1-7a

PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

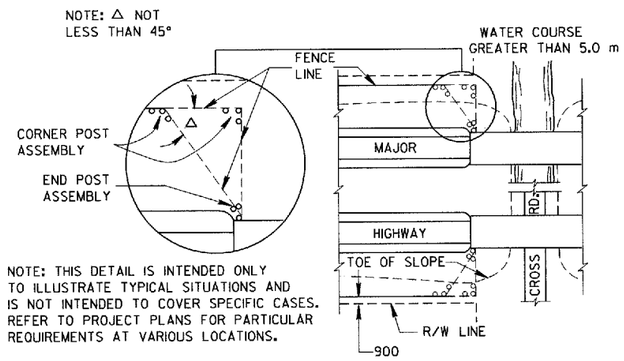


PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE

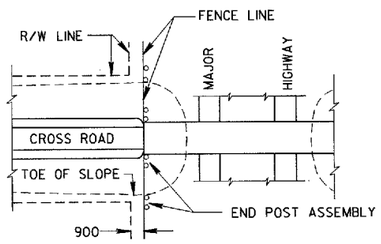


FENCE CONSTRUCTION OVER STREAM COURSES OF 5.0 m OR LESS IN WIDTH



PLAN VIEW

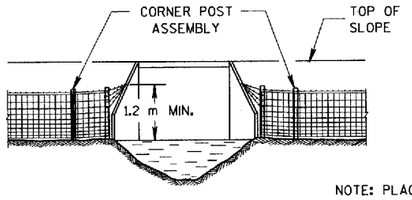
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 5.0 m IN WIDTH



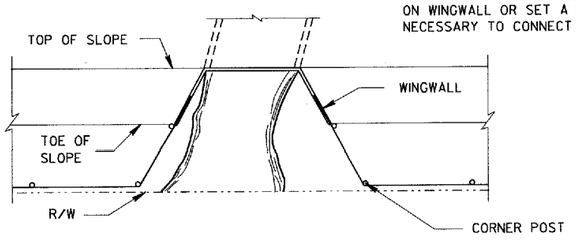
PLAN VIEW

MAJOR HIGHWAY UNDERPASS

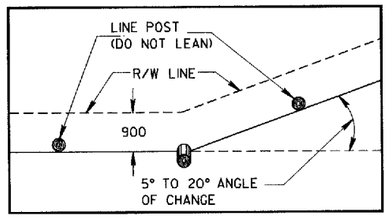
FENCE LOCATION AT STRUCTURES



NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 150 mm MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.

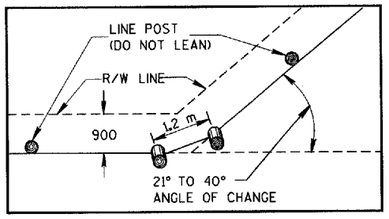


FENCE INSTALLATION TO WINGWALLS



PLAN VIEW

SINGLE POST CORNER



PLAN VIEW

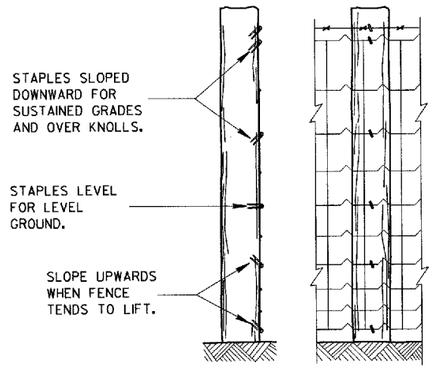
DOUBLE POST CORNER

RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 150 mm DIA. X 2.4 m WITH A LEAN OF 100 mm TOWARD THE OUTSIDE OF THE CURVE.

WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.

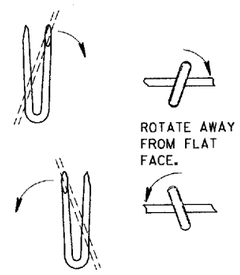
NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION

FARM SIDE ELEVATION

FENCE MOUNTING DETAIL



LINE POST

NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES AND BOTH ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.

WOVEN WIRE FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
02/07/95
DATE

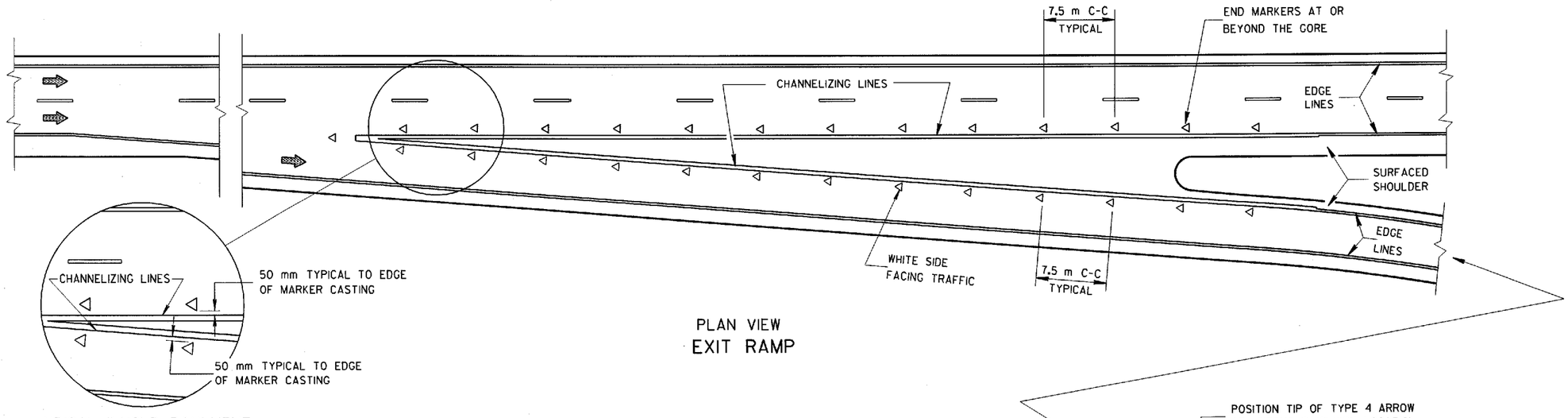
Roy L. Thimsen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

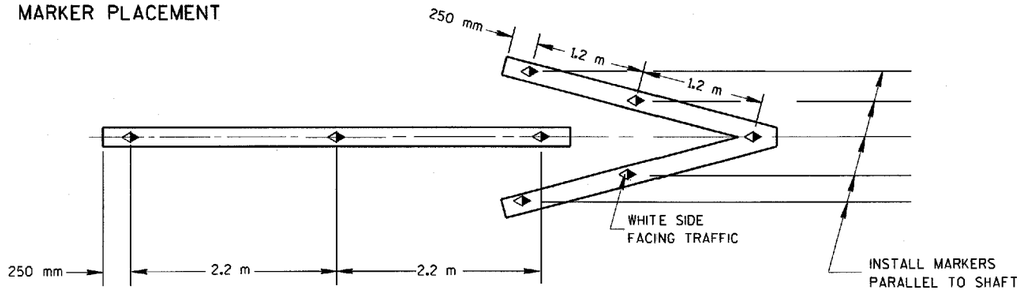
S.D.D. 15 B 1-7b

S.D.D. 15 B 1-7b

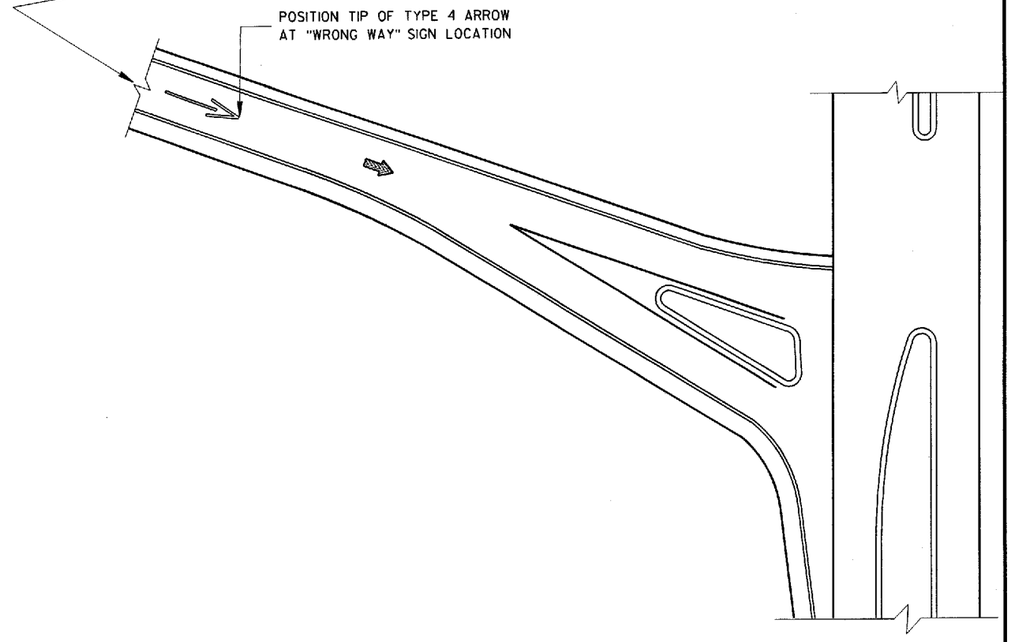


PLAN VIEW
EXIT RAMP

TYPICAL RAISED PAVEMENT
MARKER PLACEMENT



* TYPE 4 ARROW



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

MARKER REFLECTORS INSTALLED IN TYPE 4 ARROWS BEFORE APPLICATION OF THE ARROW MARKING MATERIAL SHALL BE MASKED TO PREVENT COATING.

LONGITUDINALLY RELOCATE A DISTANCE UP TO 10% OF THE TYPICAL SPACING TO AVOID DETERIORATED PAVEMENT OR TRANSVERSE JOINTS.

* WHEN SPECIFIED UNDER THE CONTRACT. REFER TO DESIGN NOTES.

LEGEND

- ◁ ONE WAY MARKER WITH REFLECTIVE WHITE
- ◁▷ TWO WAY MARKER OPAQUE WHITE/REFLECTIVE RED REFLECTOR
- DIRECTION OF TRAFFIC

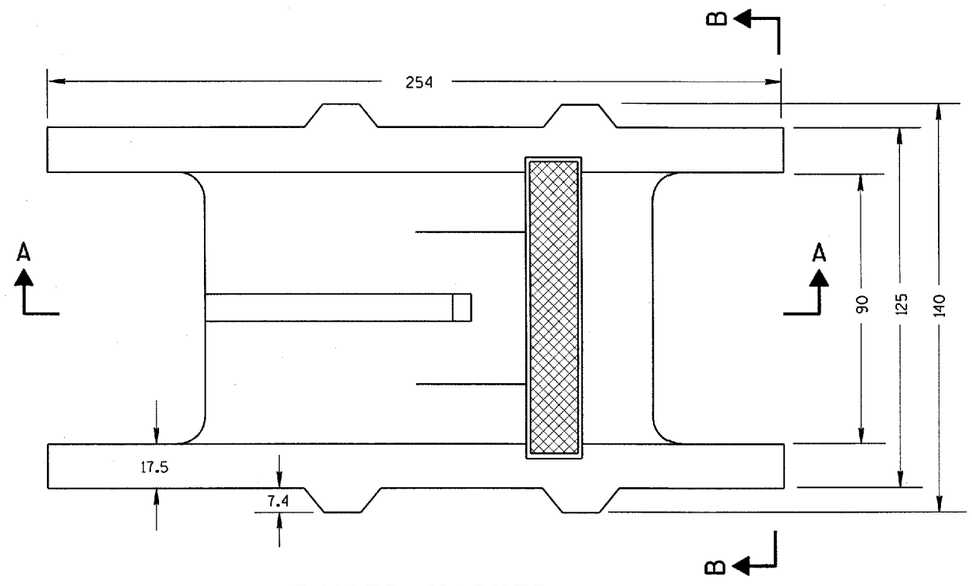
RAISED PAVEMENT MARKERS
(RAMPS & ARROWS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

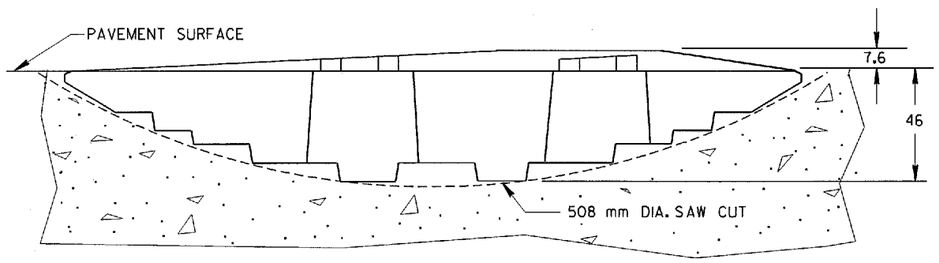
APPROVED
5-19-00
DATE
Chester J. Spacy
CHIEF SIGNS AND MARKING ENGINEER
FHWA
M

S.D.D. 15 C 10-6b

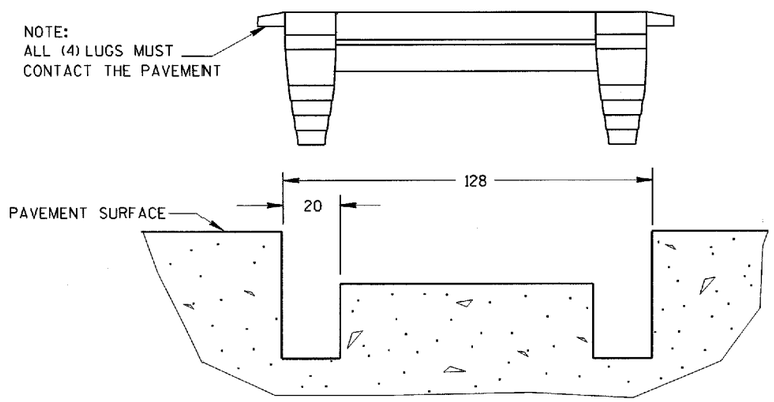
S.D.D. 15 C 10-6b



RAISED MARKER
INSTALLED IN PAVEMENT



SECTION A-A



SECTION B-B

GENERAL NOTES

THE PAVEMENT SHALL BE SAW CUT TO THE DIMENSIONS SHOWN ON THIS DRAWING.

THE CONCRETE SAW SHALL BE FITTED WITH A GANG OF 457 mm DIAMETER CONCRETE BLADES, BORDERED BY 508 mm DIAMETER BLADES AT EACH END.

FOR PROPER FIT OF THE MARKER THE CASTING SHOULD HAVE APPROXIMATELY 3 mm CLEARANCE (SIDE TO SIDE MOVEMENT) WHEN INSERTED AT EACH END, ALL FOUR LEVELING LUGS MUST CONTACT THE PAVEMENT, AND THE LEADING EDGES OF THE CASTING MUST LIE BELOW THE PAVEMENT SURFACE.

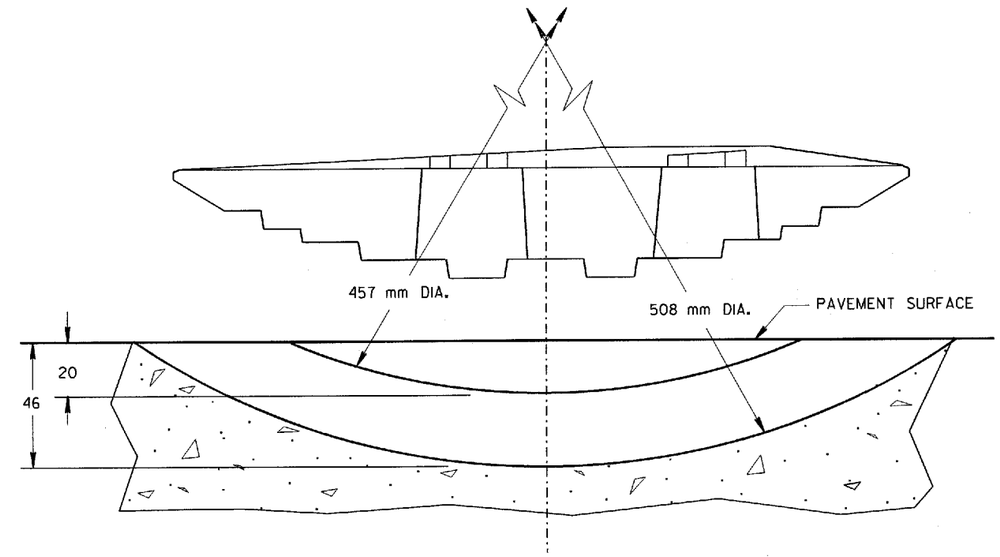
THE SAW CUT AREA MUST BE DRY AND FREE OF DUST, DIRT OR ANY MATERIAL WHICH WILL ADVERSELY AFFECT THE BOND OF THE ADHESIVE.

THE CASTING, WHERE IT WILL BE IN THE CONTRACT WITH THE EPOXY, SHALL BE FREE OF SCALE, RUST, DIRT, OIL, GREASE, OR OTHER CONTAMINANT THAT MAY REDUCE THE BOND.

INSTALL THE MARKER WITH AN APPROVED TWO COMPONENT EPOXY ADHESIVE, BY FIRST FILLING THE SAW CUT TO WITHIN APPROXIMATELY 10 mm OF PAVEMENT SURFACE AND THEN PLACING THE MARKER BY HAND INTO THE EPOXY FILLED SAW CUT. AFTER PLACEMENT OF MARKER, EPOXY SHOULD BE FLUSH WITH THE PAVEMENT SURFACE. EPOXY SHOULD NOT BE ALLOWED TO BUILD UP IN FRONT OF THE MARKER LENS. COVER THE MARKER LENS OR ADJACENT PAVEMENT MARKING. ANY DEBRIS OR RESIDUE CAUSED BY THE PAVEMENT SAWING, CUTTING AND MARKER INSTALLATION SHALL BE REMOVED FROM THE PAVEMENT MARKINGS.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS.



SAW CUT DETAIL

ONE WAY
RAISED PAVEMENT MARKERS
(CASTING & SAWCUT DETAILS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-19-00
DATE

Chester J. Sparge
CHIEF SIGNS AND MARKING ENGINEER

FHWA

M

S.D.D. 15 C 10-6c

PLOT SCALE:

PLOT NAME:

REV. DATE:

LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

ORIGINATOR:

S.D.D. 15 C 12-2

FILE NAME:

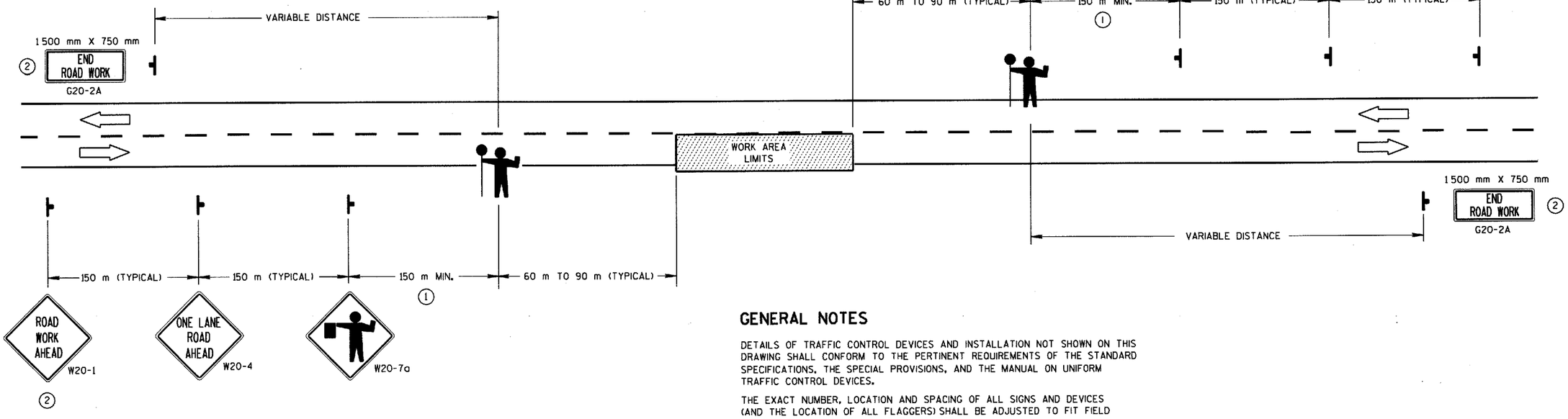
TWO-LANE ROADWAY

SYMBOLS

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT



BE PREPARED TO STOP
W20-7b

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 150 m TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.

(1) FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 10 km INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

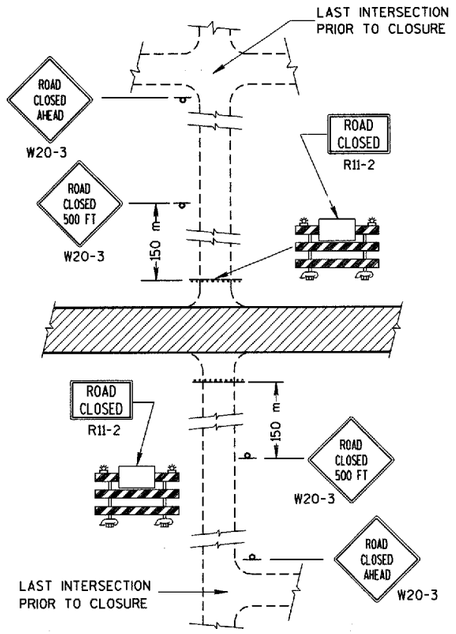
ALL SIGNS ARE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

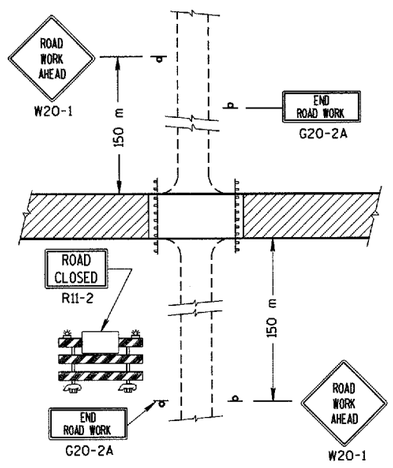
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE
Charles J. Seavy
for DIRECTOR, OFFICE OF TRAFFIC
FHWA
M

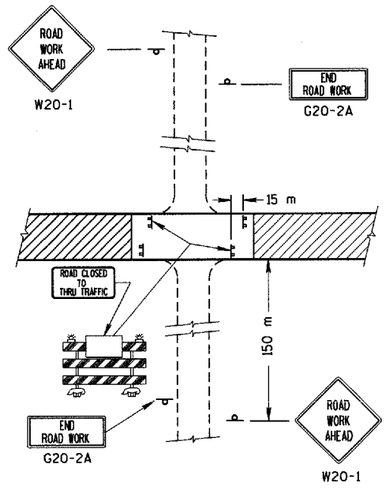
S.D.D. 15 C 12-2



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

SIDEROAD CLOSURES

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED ___ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-3 AND R11-4 SIGNS.

ALL SIGNS SHALL BE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED BELOW:
R11-2, "ROAD CLOSED" SIGNS SHALL BE 1200 mm X 750 mm.
R11-3, AND R11-4 SIGNS SHALL BE 1500 mm X 750 mm.
G20-2A SIGNS SHALL BE 1200 mm X 600 mm.

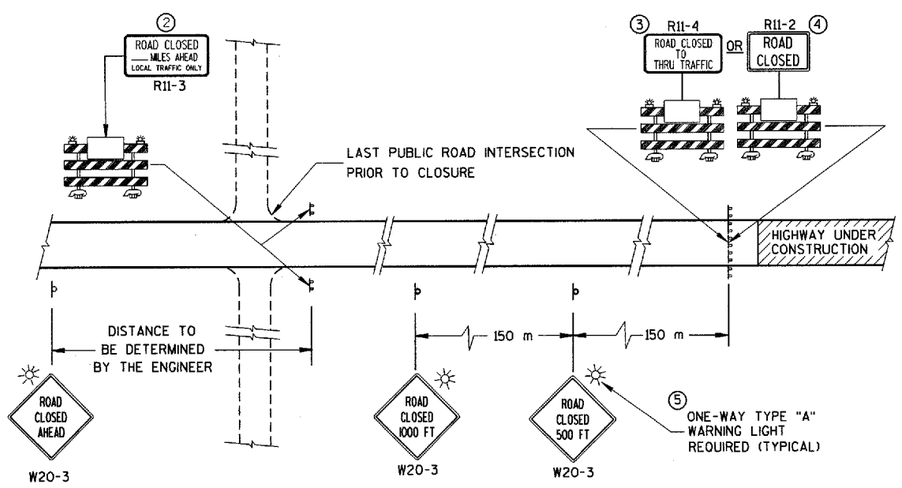
(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

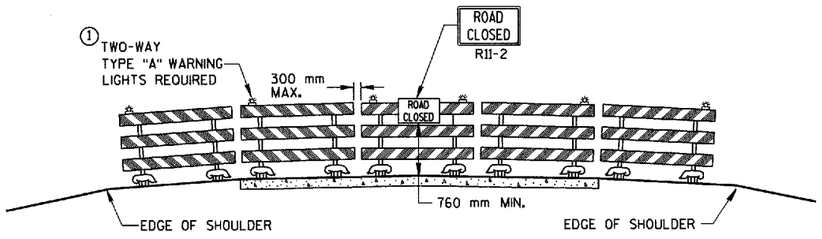
(3) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL.

(4) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL.

(5) ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

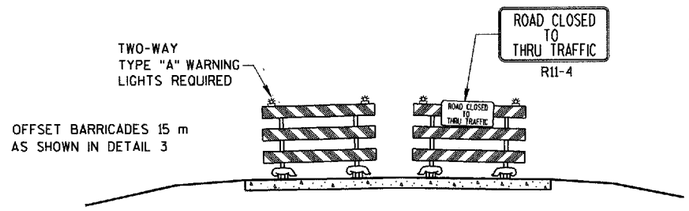


MAINLINE CLOSURE



APPROACH VIEW

ROAD CLOSURE BARRICADE DETAIL



APPROACH VIEW

LANE CLOSURE BARRICADE DETAIL

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR ROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-10-95
DATE
Chester J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

M

S.D.D. 15 C 2-3

PLOT SCALE:
PLOT NAME:
REV. DATE: 8-10-95
ORIGINATOR:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
S.D.D. 15 C 2-3
FILE NAME:

PLOT SCALE: 6-26-95
PLOT NAME:
REV. DATE:
ORIGINATOR:
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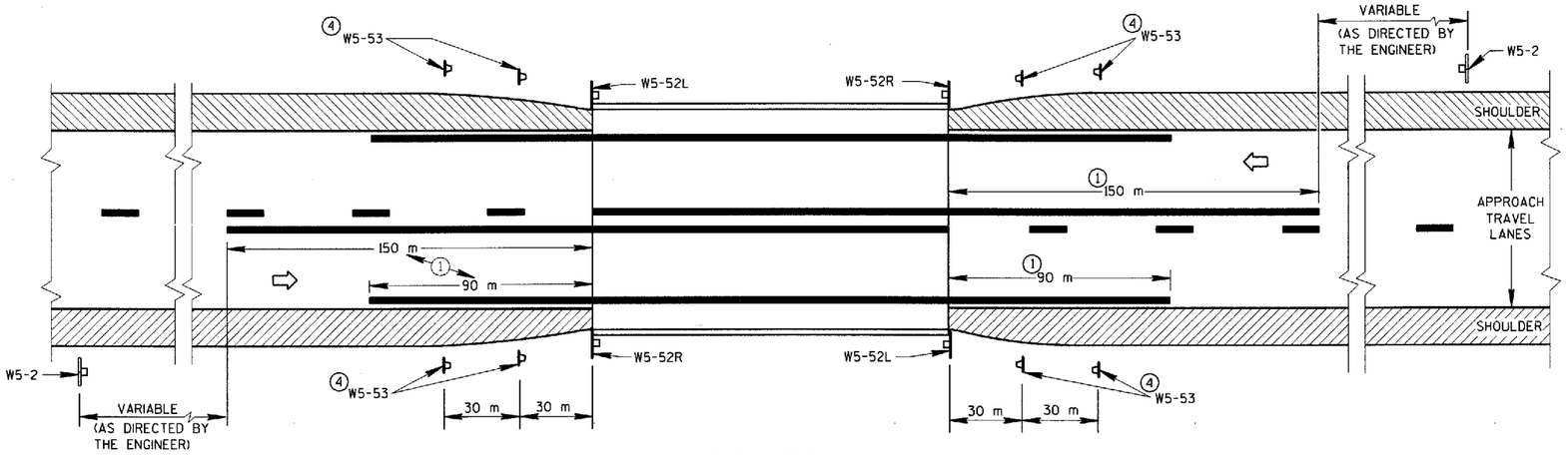


SITUATION 1

WARRANTING CRITERION:

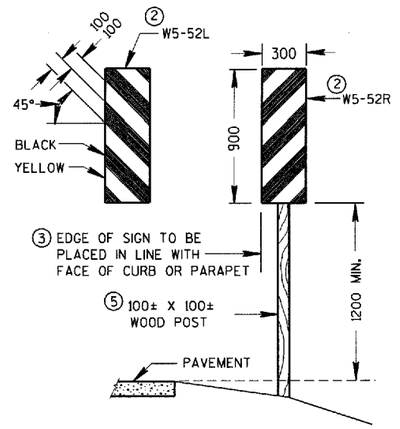
BRIDGE WIDTH IS AT LEAST 5.4 m BUT LESS THAN 7.2 m.

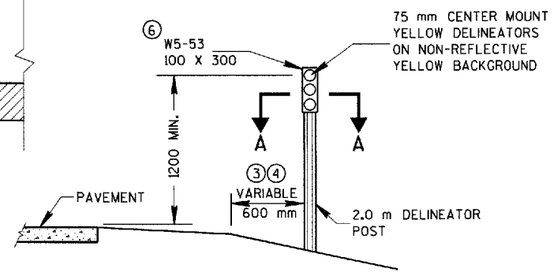
*NOT REQUIRED ON EXIT END OF BRIDGE WHERE TRAFFIC IS ONE-WAY.

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 7.2 m AND
2. BRIDGE IS LESS THAN 1.8 m WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.





OBJECT MARKER PLACEMENT

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

(1) MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

(2) FACE OF OBJECT MARKERS W5-52R AND W5-52L SHALL BE COVERED WITH TYPE H REFLECTIVE SHEETING.

(3) LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

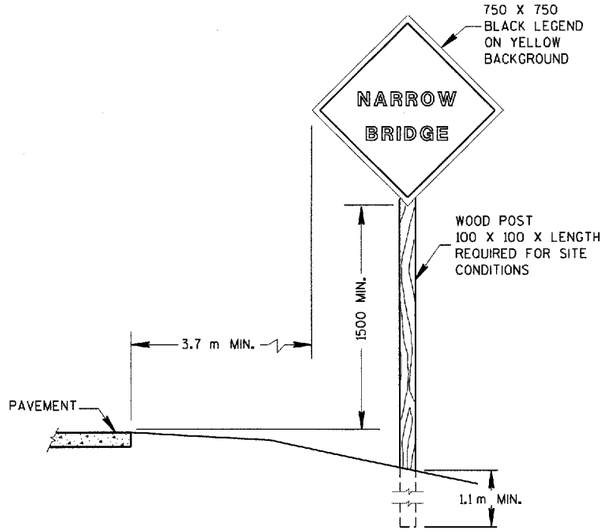
(4) OBJECT MARKERS (W5-53) SHALL BE LOCATED ALONG A LINE FLARED AWAY FROM THE BRIDGE CORNER TO DELINEATE THE NARROWING OF THE SHOULDER OR BERM.

(5) A 3.0 m DELINEATOR POST MAY BE USED INSTEAD OF A WOOD POST.

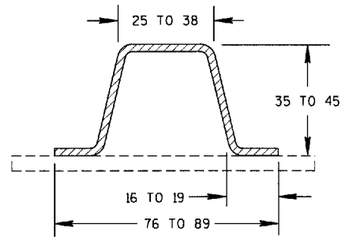
(6) NON-BID ITEM. INCIDENTAL TO OTHER ITEMS.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



SIGN PLACEMENT



SECTION A-A
(MINIMUM WEIGHT 2.8 kg/m AFTER GALVANIZING)

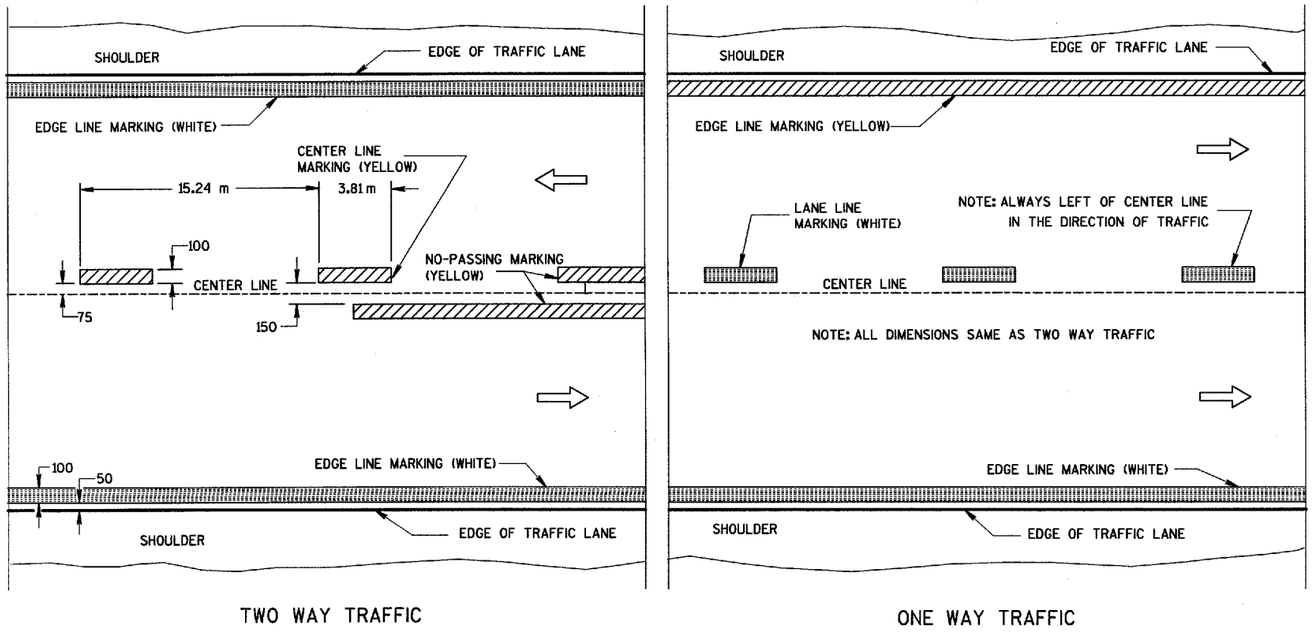
SIGNING & MARKING
FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE
Charles T. Sprange
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

M

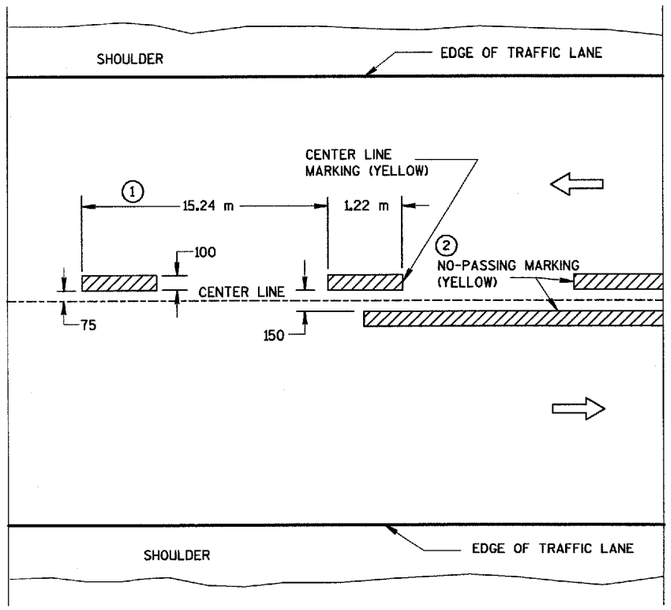
S.D.D. 15 C 6-4



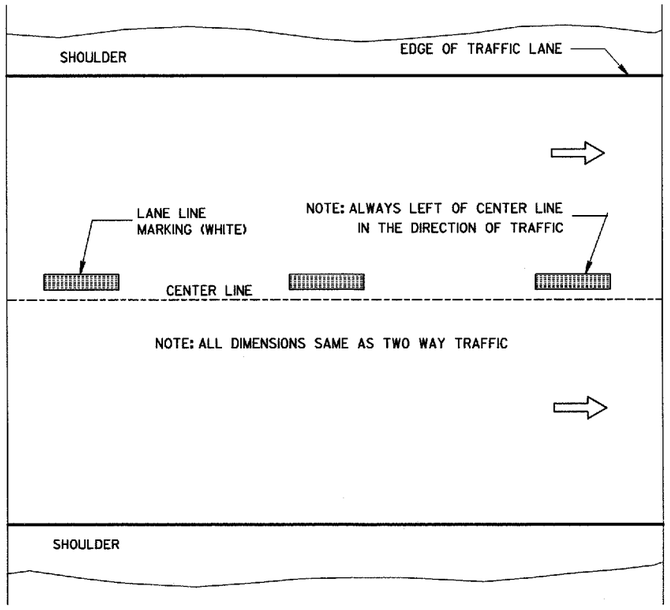
TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) HALF CYCLE LENGTHS (7.62 m±) WITH 600 mm MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

(2) NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-17-00
DATE

Christy J. Spang
CHIEF SIGNS AND MARKING ENGINEER

FHWA

M

S.D.D. 15 C 8-9a

PLOT SCALE: 6-28-95

PLOT NAME:

REV. DATE:

ORIGINATOR:

LEVELS ON * 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

S.D.D. 15 C 8-9a

FILE NAME:

S.D.D. 15 C 8-9a

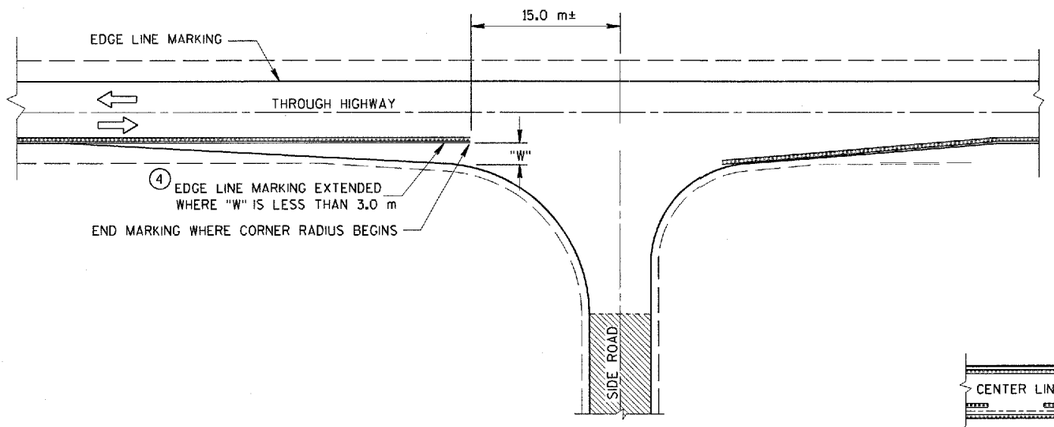
PLOT SCALE:
PLOT NAME:
REV. DATE: 3-15-00
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
ORIGINATOR:

NOTES

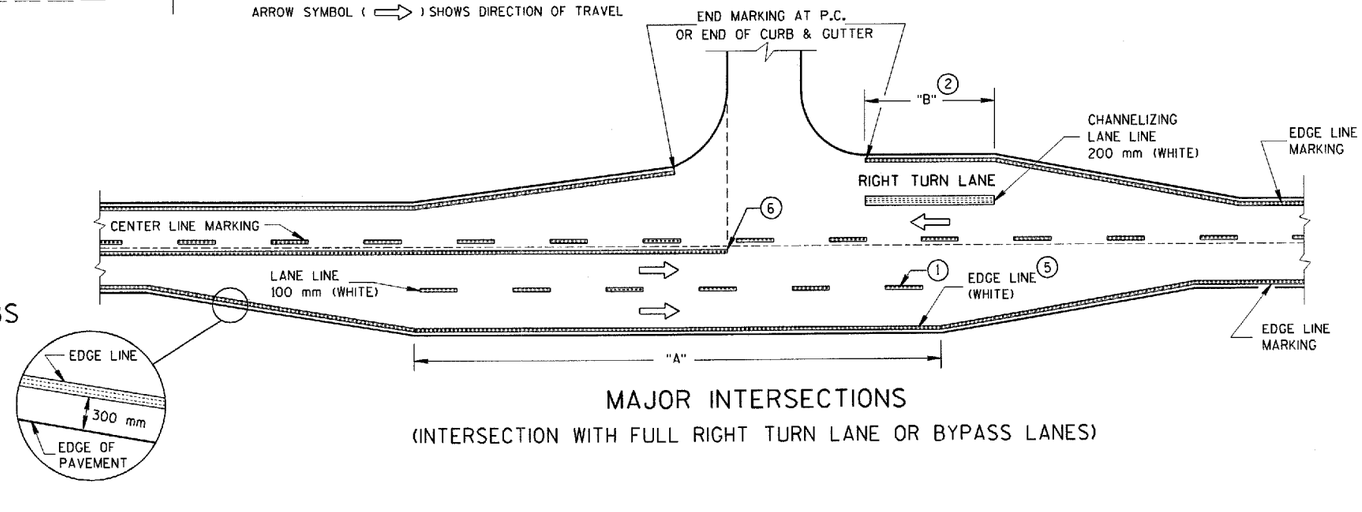
EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 76 m, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 30 m, OMIT CHANNELIZING LANE LINE.
3. ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
4. LOCATE THE EDGE LINE ALONG THE TAPER WHERE "W" IS 3.0 m OR MORE.
5. THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 300 mm FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
6. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION..

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

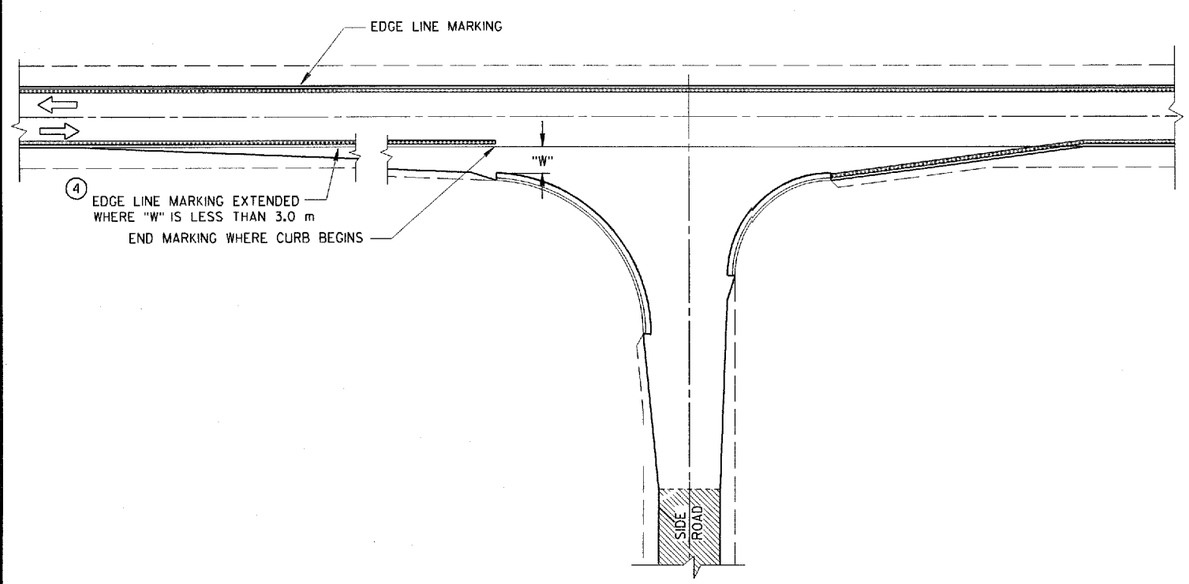


MINOR INTERSECTION WITHOUT CURBS



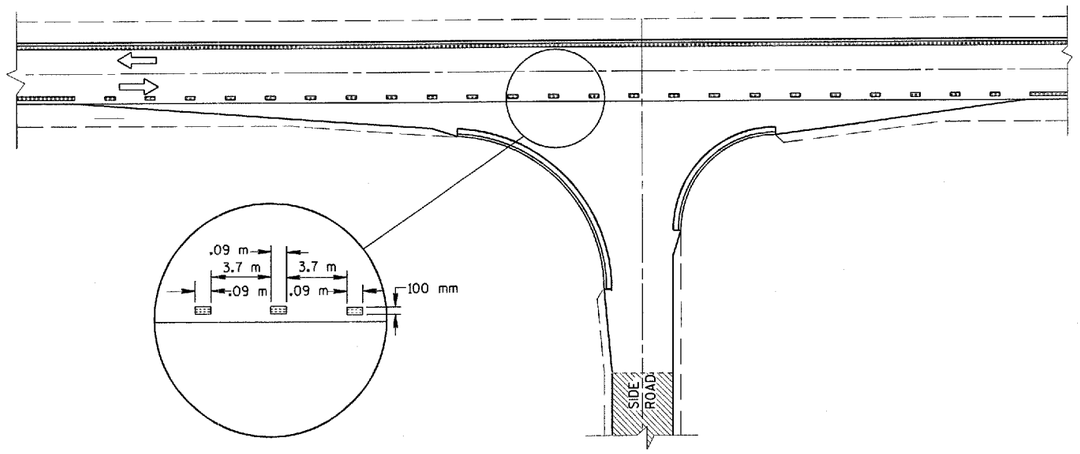
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

3 (FOR SPECIAL CONDITIONS AS SPECIFIED)

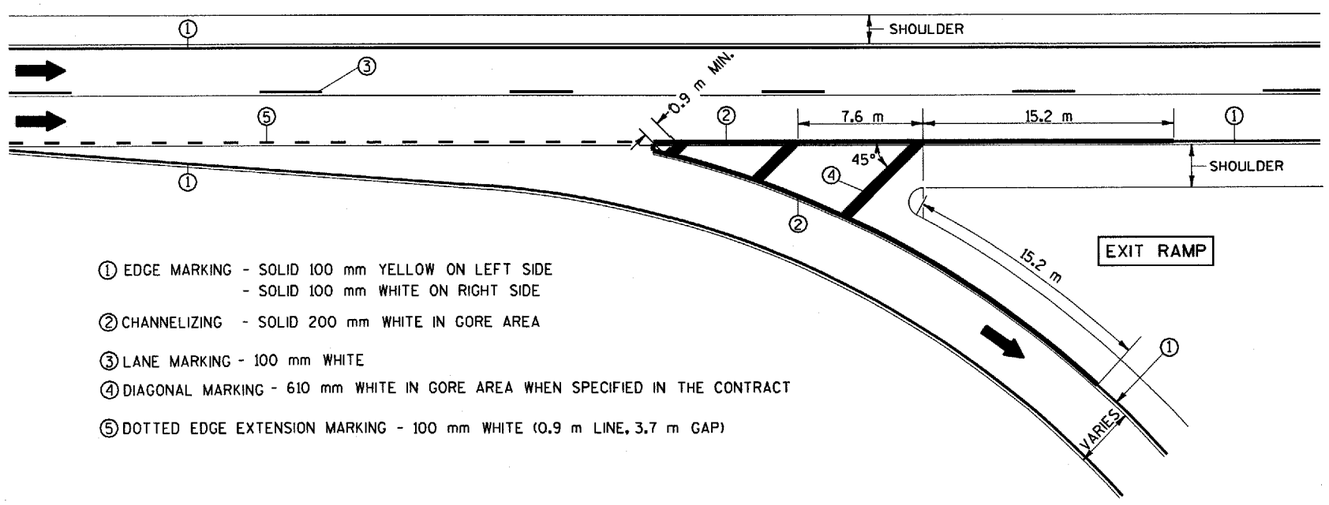
PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION M

S.D.D. 15 C 8-9b

FILE NAME:

S.D.D. 15 C 8-9b



① EDGE MARKING - SOLID 100 mm YELLOW ON LEFT SIDE
- SOLID 100 mm WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 200 mm WHITE IN GORE AREA

③ LANE MARKING - 100 mm WHITE

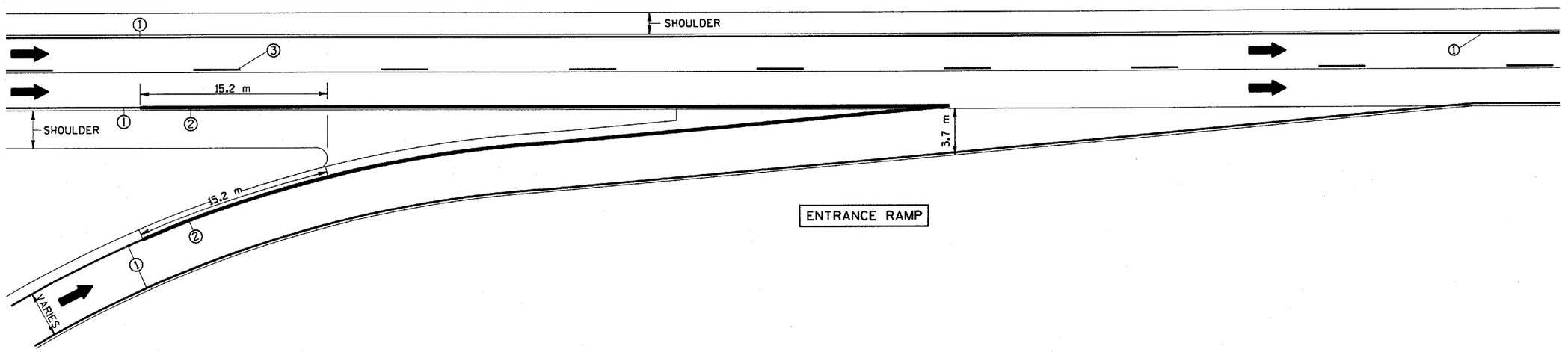
④ DIAGONAL MARKING - 610 mm WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT

⑤ DOTTED EDGE EXTENSION MARKING - 100 mm WHITE (0.9 m LINE, 3.7 m GAP)

NOTES:

1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. SEE STANDARD DETAIL DRAWING FOR RAISED PAVEMENT MARKERS IN GORE AND LINE WIDTH TOLERANCES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-9f

S.D.D. 15 C 8-9f

FILE NAME:

ORIGINATOR:

REV. DATE: 2-18-00

PLOT NAME:

PLOT SCALE:

LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

PLOT SCALE:

PLOT NAME:

REV. DATE: 7-12-95

LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

ORIGINATOR:

S.D.D. 15 D 12-2

FILE NAME:

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 2.4 m TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES :

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 60 m, (150 m DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

(1) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 500 m IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

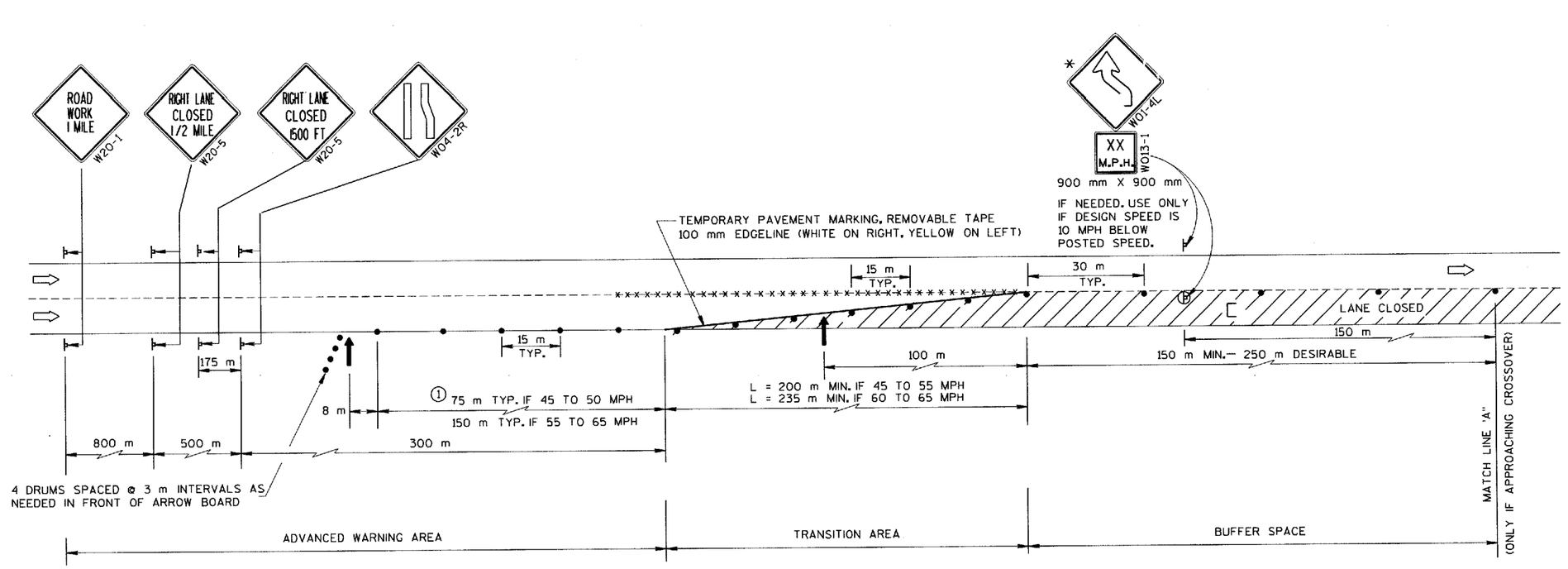
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 15 m.

IF LANE CLOSURE IS MORE THAN 1.6 km, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 400 m ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 250 m DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

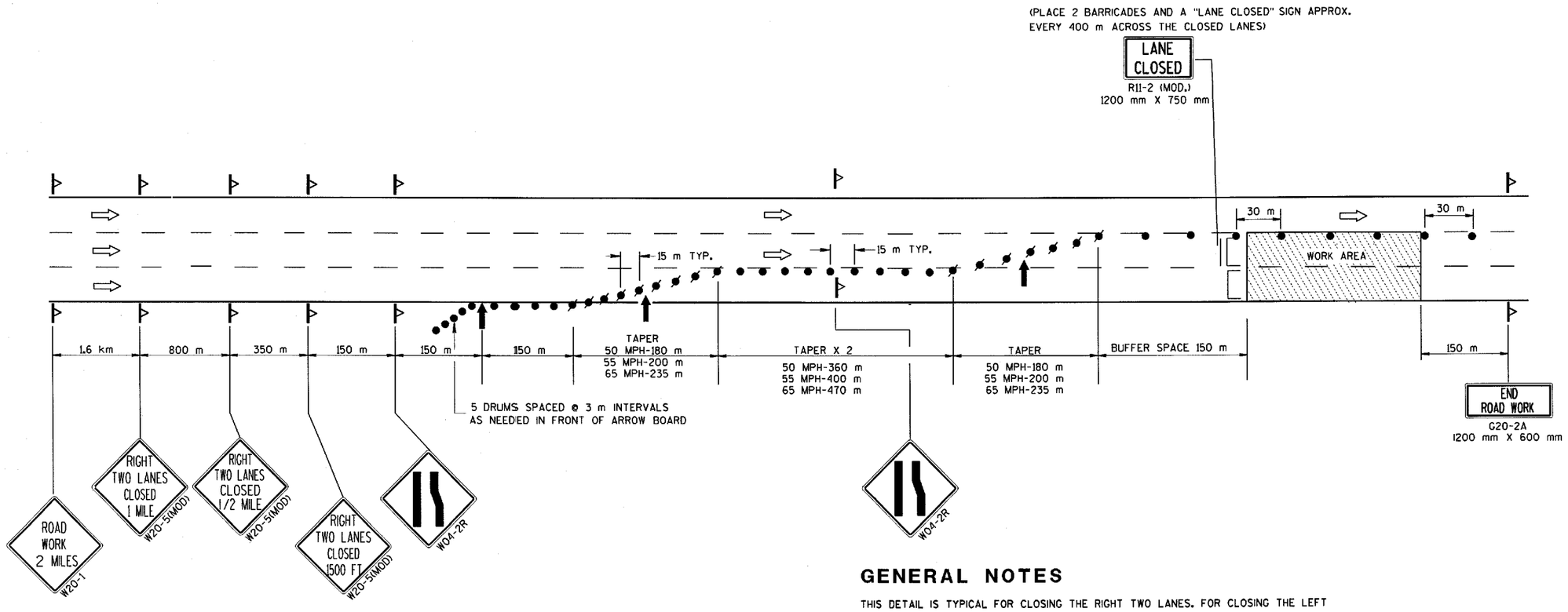
APPROVED
8-7-95
DATE

Charles J. Senger
for DIRECTOR, OFFICE OF TRAFFIC

FHWA

M

S.D.D. 15 D 12-2



LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (2.4 m EQUIVALENT) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 60 m (150 m DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 500 m IN FRONT OF DRUMS.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

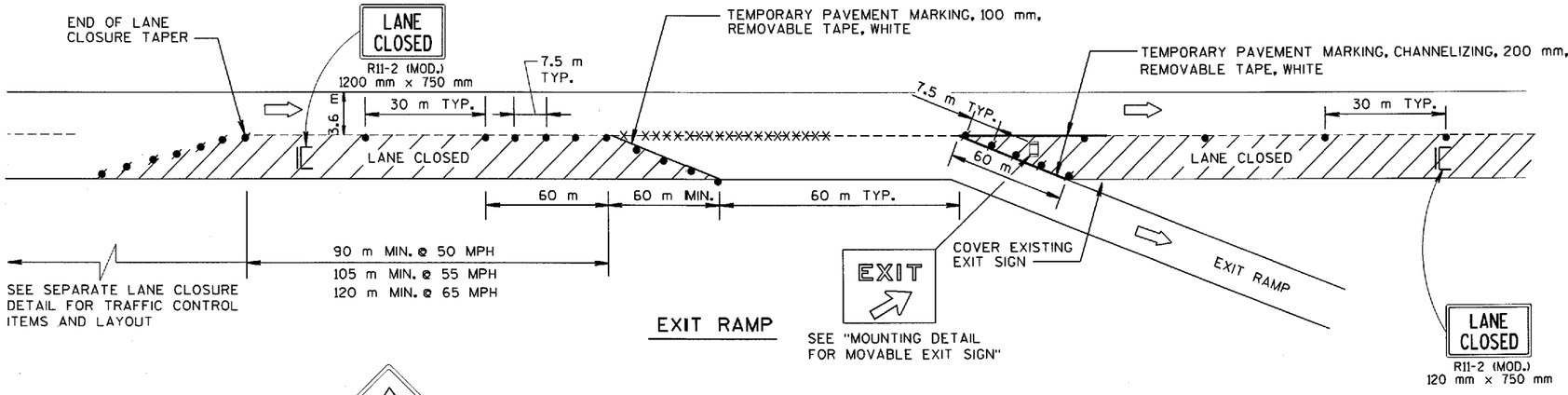
APPROVED
5/23/00 DATE
Christ J. Seraf
CHIEF SIGNS AND MARKING ENGINEER

FHWA

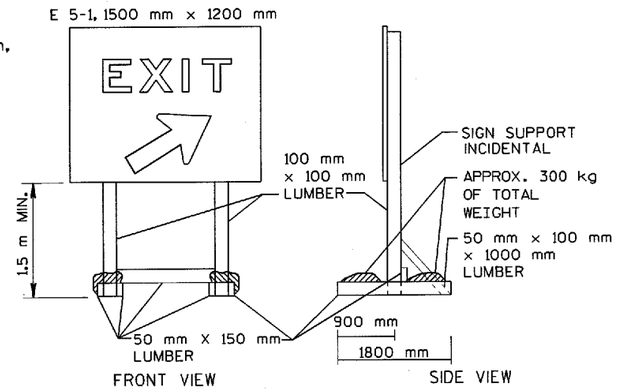
M

S.D.D. 15 D 14-1

S.D.D. 15 D 14-1

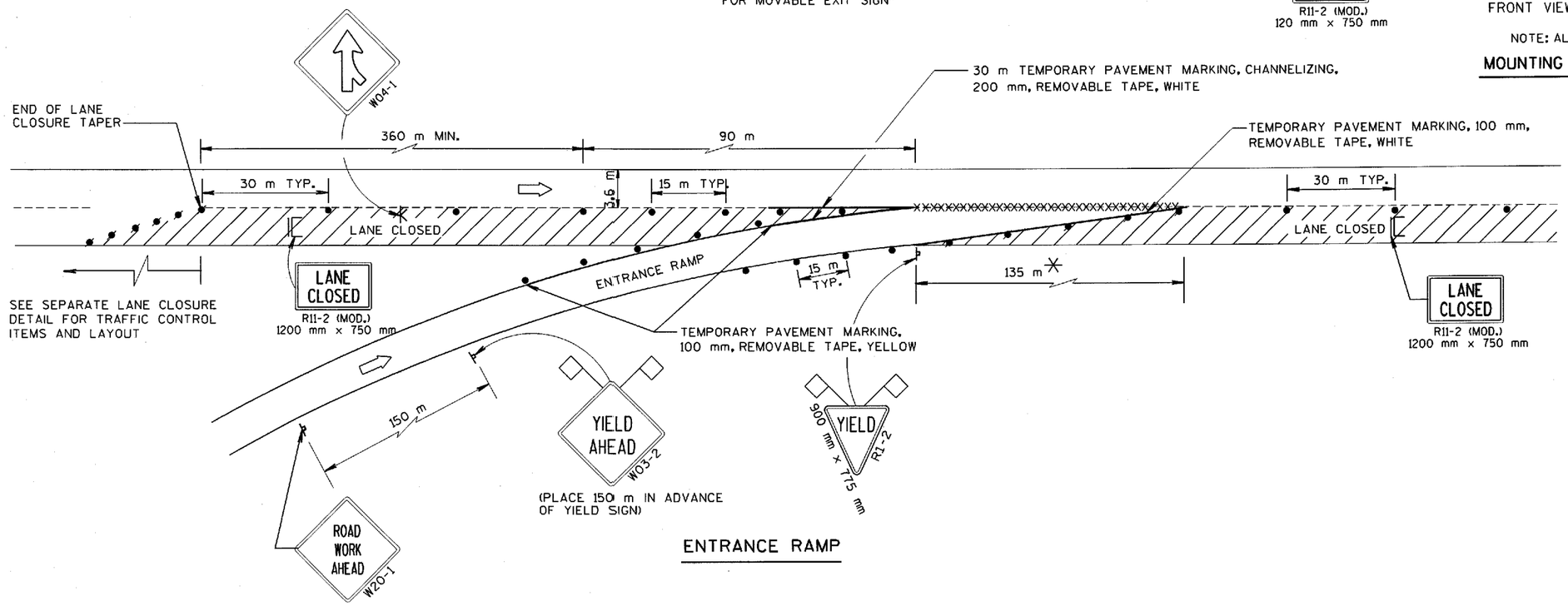


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 60 m, (150 m DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 1200 mm x 1200 mm UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

✳ LENGTH OF OPENING MAY BE REDUCED TO 45 m DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (2.4 m EQUIVALENT) WITH SIGN
- FLAGS, 400 mm x 400 mm MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 DATE
Chester I. Sprague CHIEF SIGNS AND MARKING ENGINEER
FHWA
M

S.D.D. 15 D 15-1

S.D.D. 15 D 15-1

SYMBOLS

- TRAFFIC CONTROL DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW
- ARROW BOARD IN CAUTION MODE

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

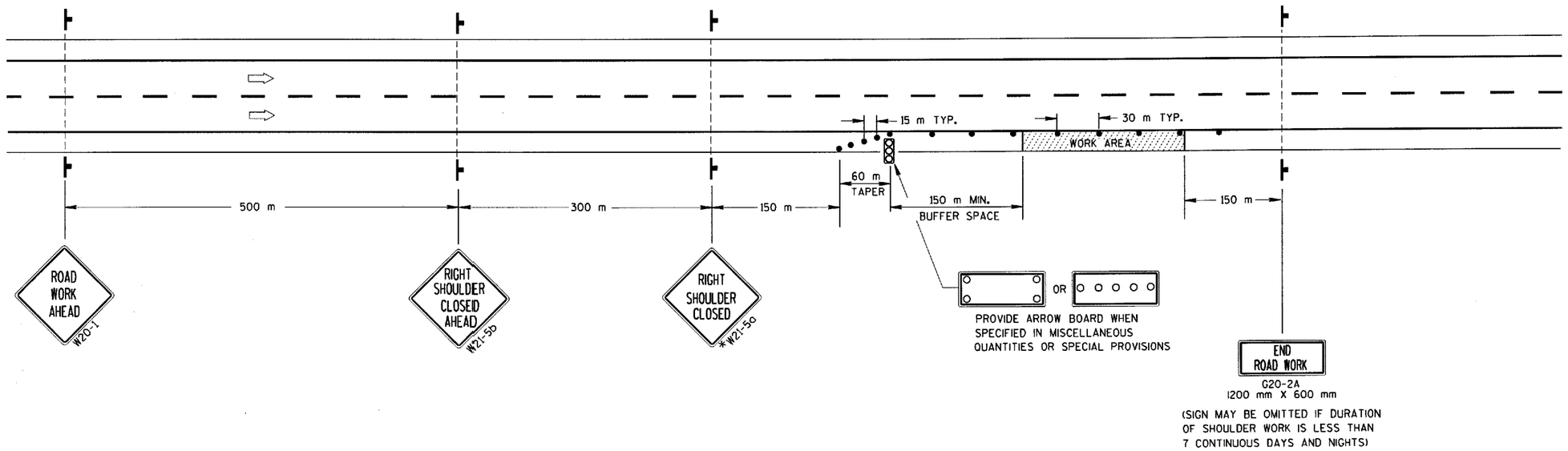
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE

Charles J. Sprang
CHIEF SIGNS AND MARKING ENGINEER

FHWA

M

S.D.D. 15 D 27-1

S.D.D. 15 D 27-1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 900 mm X 900 mm SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

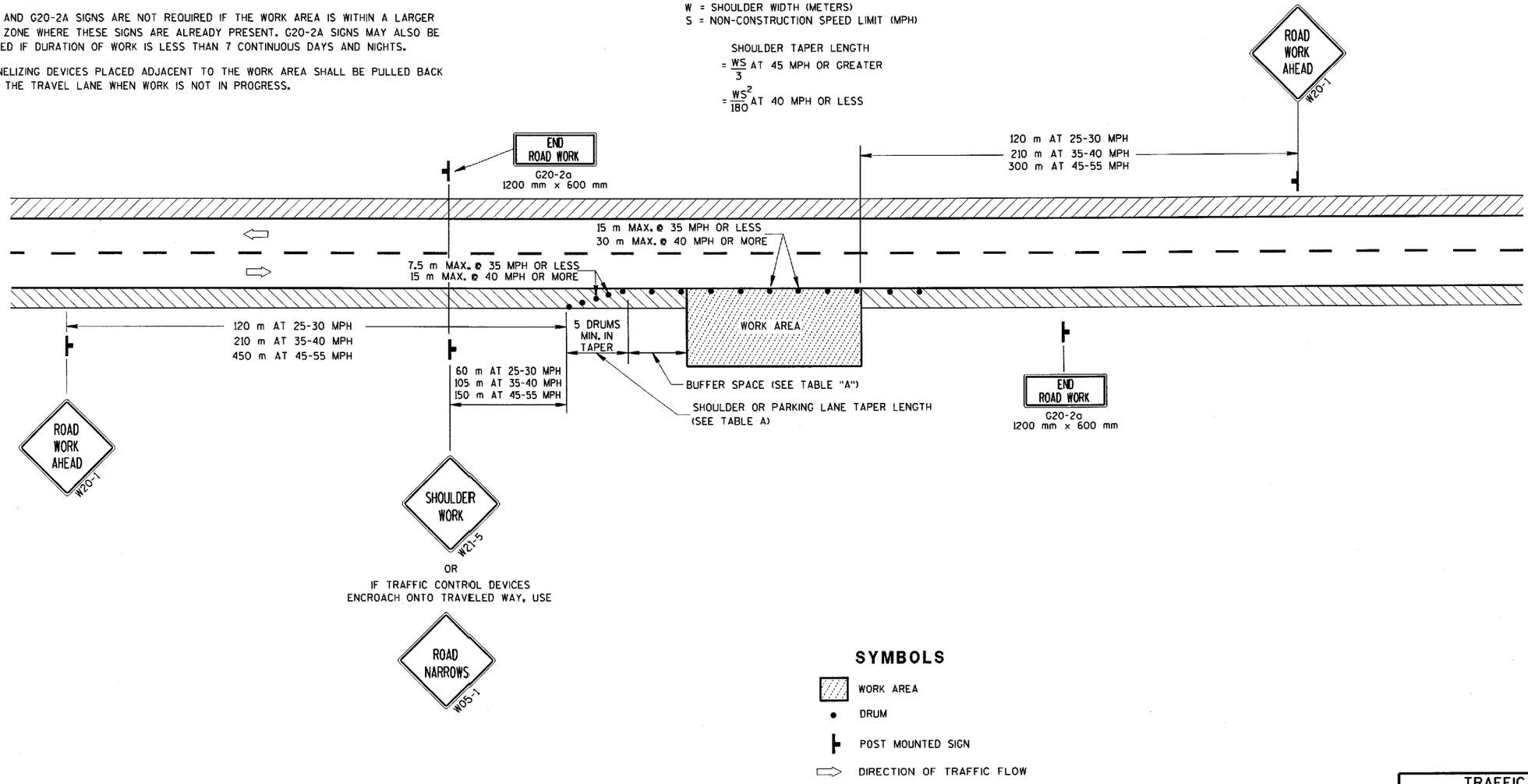
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (METERS) 1.2	1.8	2.4	3.0	BUFFER SPACE (METERS)
30	6	9	12	15	25
35	8	12.5	16.5	20.5	37
40	10.5	16	21.5	26.5	52
45	18	27	36	45	67
50	20	30	40	50	85
55	22	33	44	55	102

W = SHOULDER WIDTH (METERS)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
$= \frac{WS}{3}$ AT 45 MPH OR GREATER
$= \frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

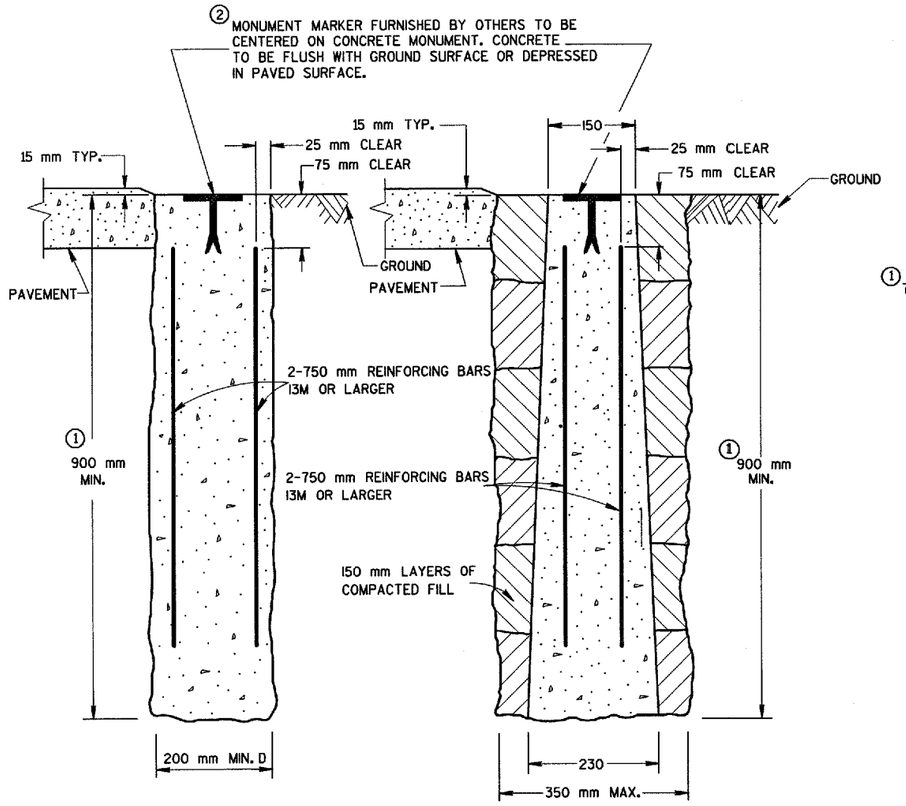
TRAFFIC CONTROL,
WORK ON SHOULDER OR
PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE
Charles J. Sparg
CHIEF SIGNS AND MARKING ENGINEER
FHWA
M

S.D.D. 15 D 28-1

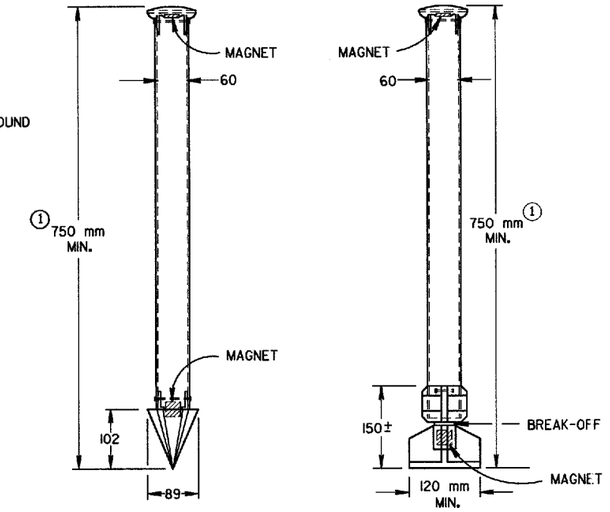
S.D.D. 15 D 28-1



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



ALUMINUM MONUMENTS

(INCLUDES MARKER)

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

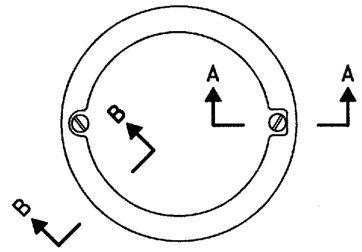
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

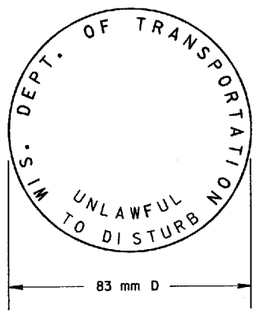
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 1.2 m FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

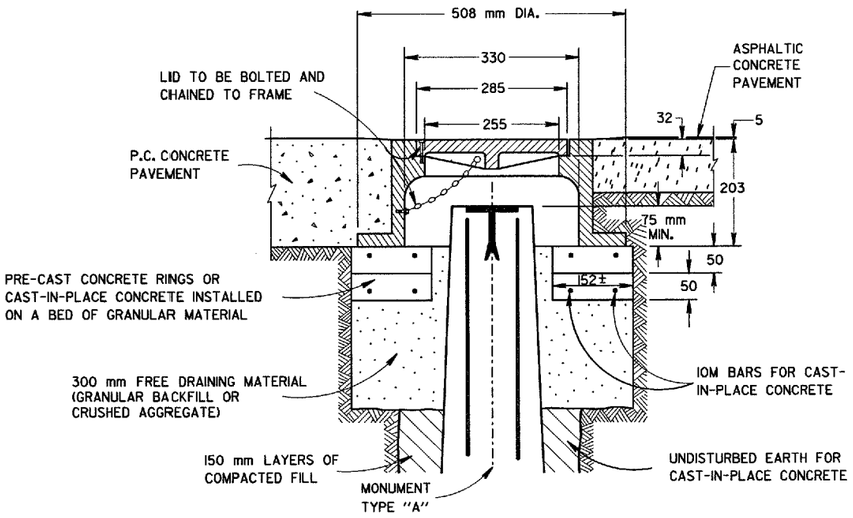


TOP VIEW



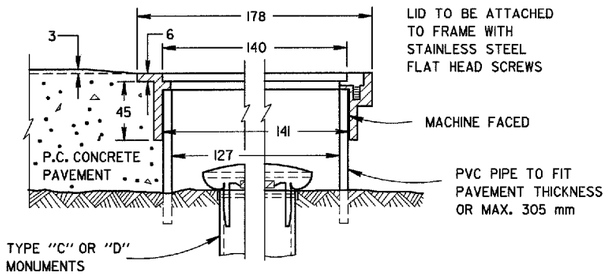
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 43 kg)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 0.9 kg)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 9/22/99 DATE

Roy L. Thiessen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

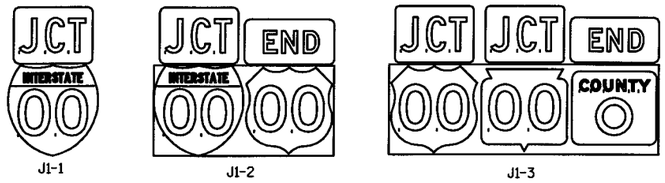
M

S.D.D. 16 A 1-6

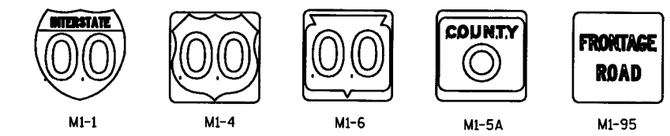
PLOT SCALE:
PLOT NAME:
REV. DATE:
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
ORIGINATOR:
FILE NAME:

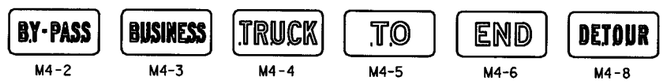
S.D.D. 16 A 1-6

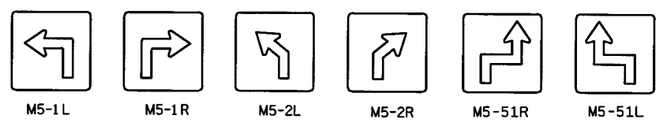
TYPICAL ASSEMBLIES

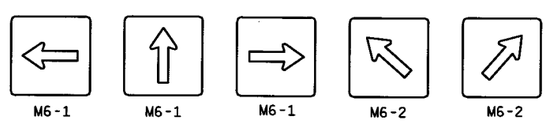


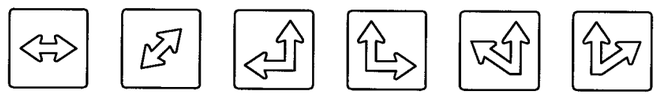
INDIVIDUAL COMPONENTS OF ASSEMBLIES

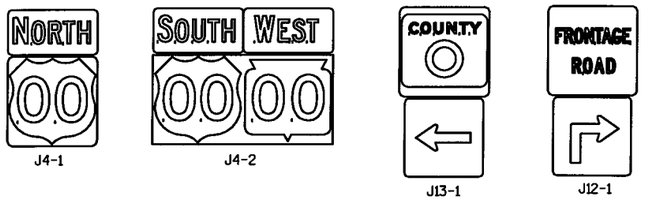


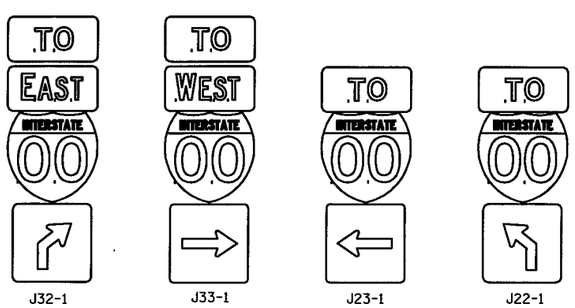




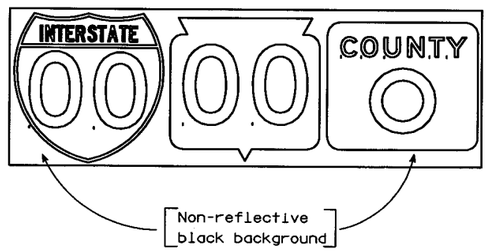








JV
(Typical Vertical
J- Assembly
See Note 5)



GENERAL NOTES

1. All components within any individual assembly shall be the same "size". The following table illustrates that situation:

SIZE	M1'S	M2	M3'S & M4'S	M5'S & M6'S
2	600 X 600	525 X 375	600 X 300	525 X 525
3,4-5	900 X 900	750 X 525	750 X 375	750 X 750

2. For any assembly containing two or more route markers, the route markers SHALL be placed on a single high density overlay PLYWOOD panel. All other materials within the assembly can be either plywood or aluminum.
3. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 marker shall be blue.
4. All dimensions in millimeters unless otherwise noted.
5. All vertical J assemblies are given a sign code of JV.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

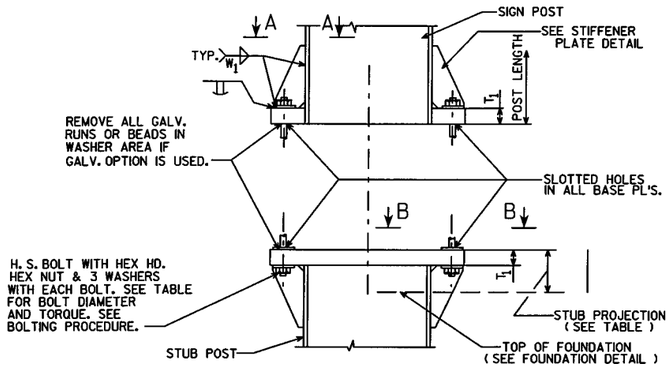
APPROVED Chester J Spay for State Traffic Engineer

DATE 3/02/00 PLATE NO. A2-1M.6

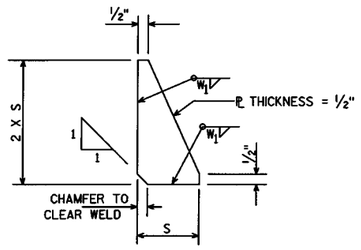
SHEET NO: 403 M

LEVELS ON • 1.2 5.6 10.
58, 59, 60, 63

FILE NAME: C:\Users\Projects\tr_stdplate\A2IM.DGN ORIGINATOR: Sandy Anderson REV. DATE: 3/01/00 PLOT SCALE : 1.597756:1.000000 PLOT DATE: 15-MAR-2002 14:22 WisDOT: MSHT20

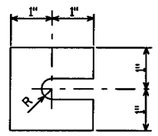


SIGN POST AND STUB POST ELEVATION



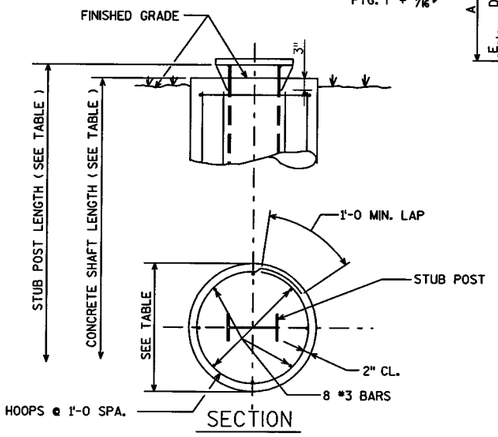
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

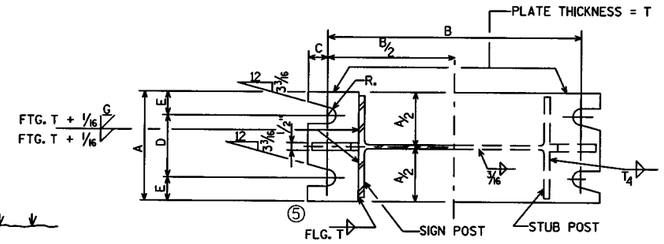


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

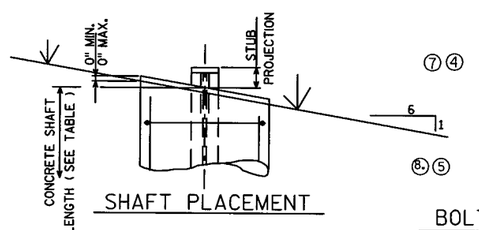
SHIM DETAIL



SECTION



SECTION A-A SECTION B-B



SHAFT PLACEMENT

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & 1/2 WIND△	140 △25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

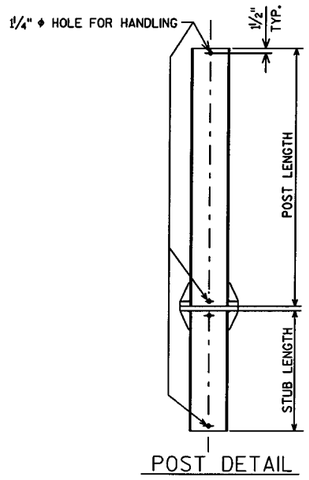
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50, EXCEPT WHERE CONTRACT REQUIRES A.S.T.M. A709 GRADE 50 W.
IF A709 GRADE 50 MATERIAL IS USED, THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.
H. S. BOLTS, WASHERS & NUTS SHALL BE A325 TYPE 3 NOT GALVANIZED WHEN CONTRACT REQUIRES A709 GRADE 50 W POSTS, POSTS STUBS AND ATTACHMENTS.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

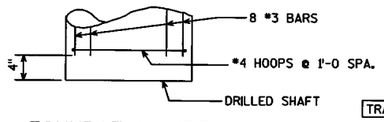
NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.



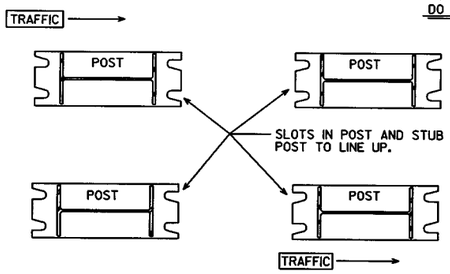
POST DETAIL

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
⑦ E	1.0	62

REINF. TYPE	*3	*4
A	8 @ 4'-5	5 @ 6'-3
B	8 @ 6'-5	7 @ 6'-3
C	8 @ 6'-11	7 @ 6'-3
D	8 @ 7'-5	8 @ 6'-3
⑦ E	8 @ 7'-11	9 @ 6'-3



FOUNDATION DETAIL



POST SLOT ORIENTATION ⑦

BASE CONNECTION DATA TABLE													FOUNDATION DATA				②
TYPE	DIMENSION / POST SIZE	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	K
④ A	W10"X12.0 #/FT.	3/4" ϕ @ 75#-FT.	5 1/4"	1'-0 3/8"	1/8"	3 1/2"	1/8'	1"	3/16"	5/16"	5/32 "	2 1/8"	3'-6	3"	2'-0 ϕ	5'-0	76.0# ④
④ B	W12"X16.0 #/FT.	7/8" ϕ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/4"	1/4"	5/16"	5/32 "	3"	5'-6	3"	2'-0 ϕ	7'-0	146.5# ④
C	W12"X19.0 #/FT.	7/8" ϕ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/2"	5/16	5/16"	5/32 "	3"	6'-0	3"	2'-0 ϕ	7'-6	182.1#
D	W12"X22.0 #/FT.	7/8" ϕ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/2"	3/8"	5/16"	5/32 "	3"	6'-6	3"	2'-0 ϕ	8'-0	210.5#
③ E	W12"X26.0 #/FT.	1" ϕ @ 90#-FT.	7"	1'-4 1/4	1 1/4"	4"	1/2"	1 1/2"	3/8"	5/16"	11/32 "	3"	7'-0	3"	2'-0 ϕ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Spey for State Traffic Engineer
DATE 8/26/97 PLATE NO. A3-1.12

NO.	DATE	REVISION
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE @ WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

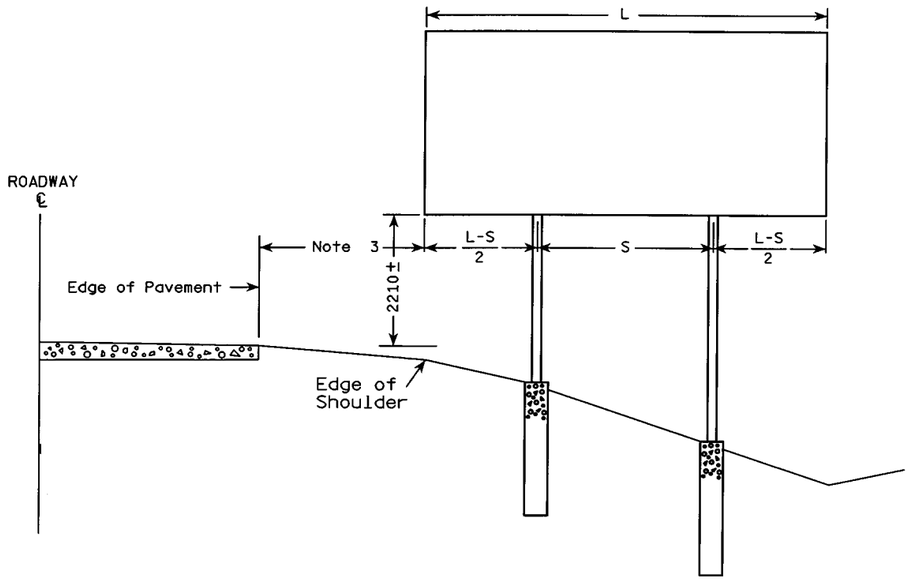
CONST. SPEC.	DRAWN BY	PLANS CK'D.
1989	LOY	

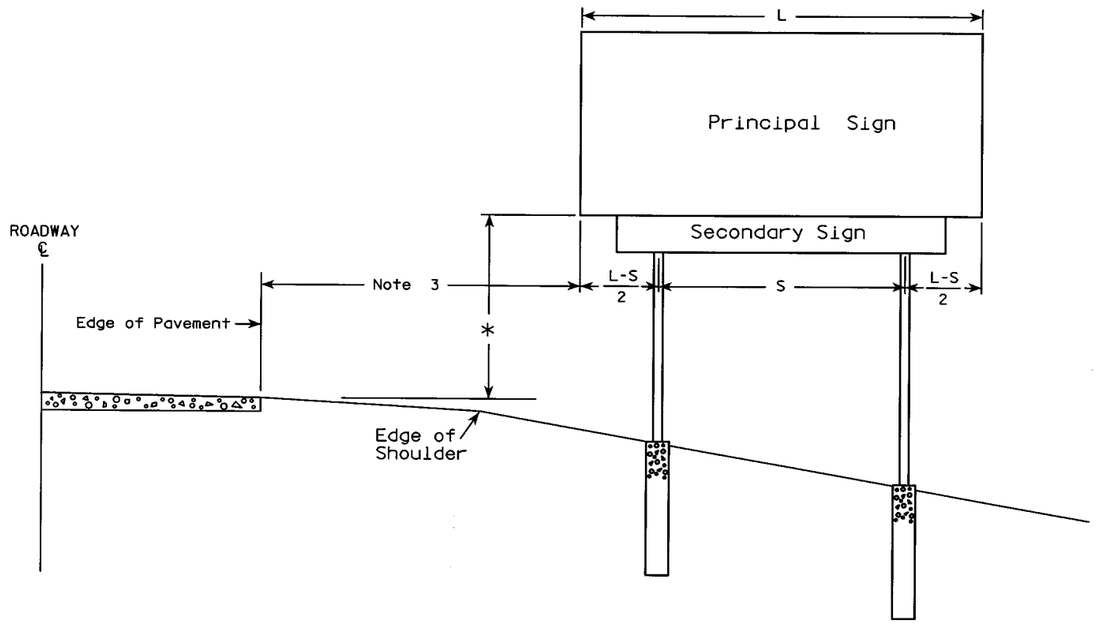
FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

SHEET

SHEET NO: 404 E

58.59.60 62.63
LEVELS ON - 2.3, 5.6, 10.11.





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 2745.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 5490, and the space between any two posts shall not be less than 2745.
3. The sign offset distance shall be as listed in the plan.
4. The (±) tolerance shown on this sheet is 75.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.
7. All dimensions in millimeters unless otherwise noted.

* Clearance is 2515 (±) when the secondary sign is 915 or less in height. For secondary signs larger than 915, the clearance to the bottom of the secondary sign shall be 1600 (±).

TYPICAL INSTALLATION OF TYPE I SIGNS

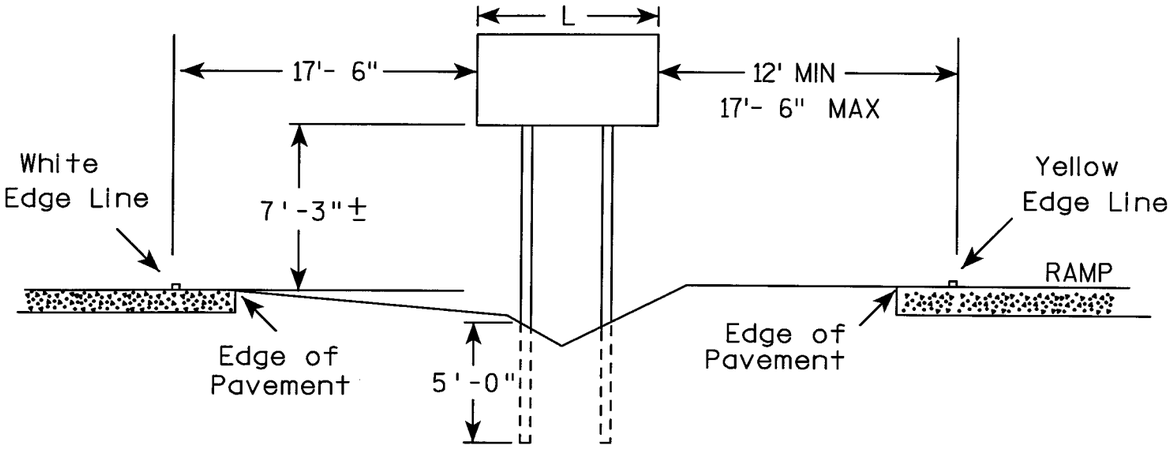
WISCONSIN DEPT OF TRANSPORTATION

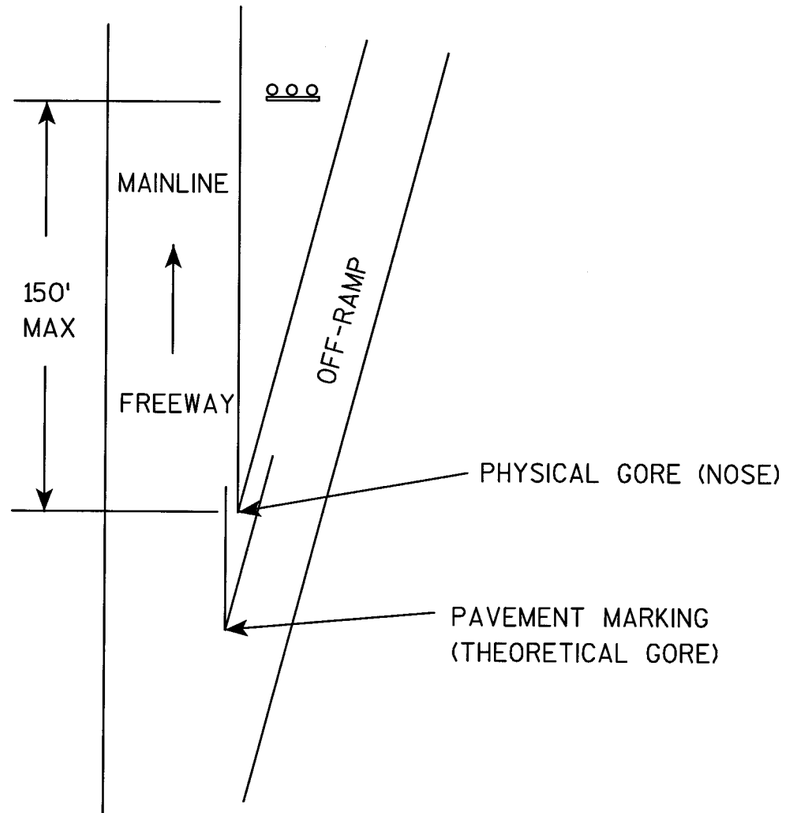
APPROVED Chesta J Spang for State Traffic Engineer

DATE 10/28/96 PLATE NO. A4-1M.7

WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE: 30 :1
PLOT NAME: 63 58.59.
REV. DATE: 10/23/96
ORIGINATOR: Sandy Anderson
FILE NAME: A41M.dgn
LEVELS ON - 1.23. 10.





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 9 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

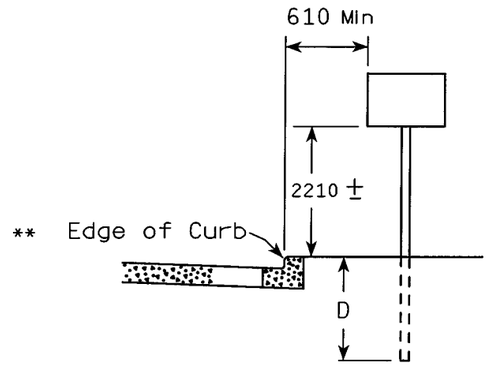
APPROVED Chester J Spange
for State Traffic Engineer

DATE 4/4/00 PLATE NO. A4-2.2

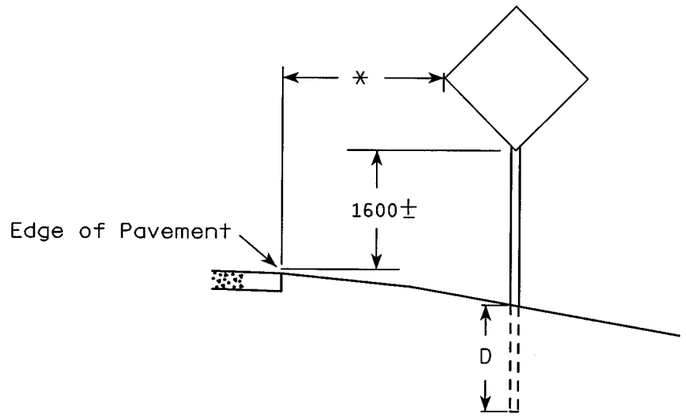
SHEET NO: 406 E

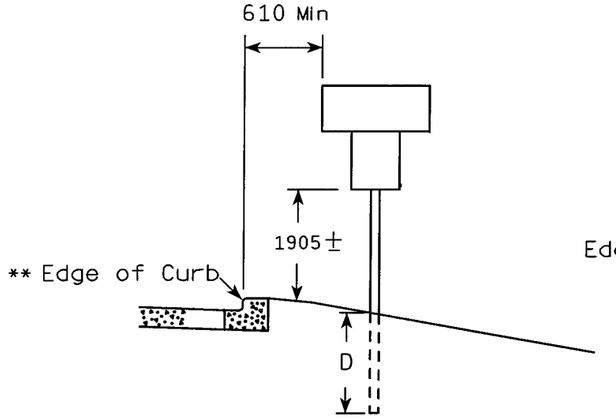
58,59,60, 63
LEVELS ON - 2,3, 5,6, 10,

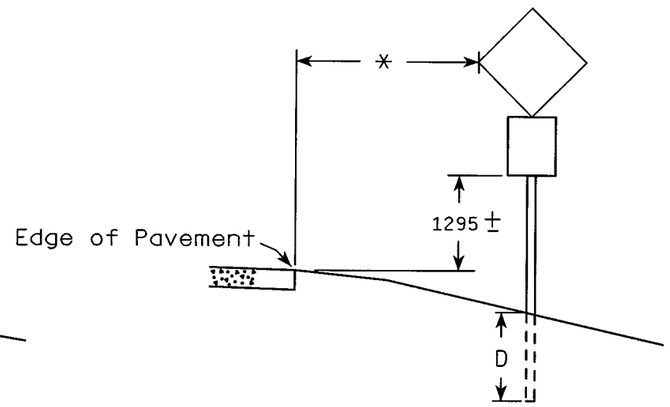
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 1200 or larger than 1.86 m2 shall be mounted on multiple posts. Refer to plate A4-4.
2. For expressways and freeways, mounting height is 2210 ± or 1905 ± depending upon existence of a sub-sign.
3. Minimum mounting height for J assemblies (A4-5) is 2210 ± or 1600 ± per urban or rural detail respectively.
4. Offset distance shall be consistent with existing signs or consistent throughout length of project.
5. The (±) tolerance for mounting height is 75.
6. All dimensions in millimeters unless otherwise noted.

POST EMBEDMENT DEPTH

Area of Sign Installation (m2)	D (Min)
1.86 or Less	1200
Greater than 1.86	1500

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted.

* 1830 from edge of a paved shoulder or 3660 from the edge of pavement (edge line location) or 610 from edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spange for State Traffic Engineer

DATE 10/4/01 PLATE NO. A4-3M.11

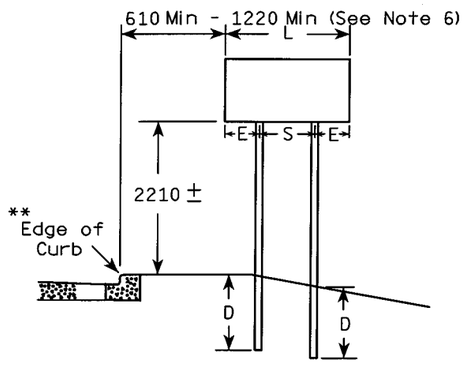
STATE PROJECT NO:	HWY:	COUNTY:		SHEET NO: 407	M

FILE NAME: C:\Users\Projects\tr_stdplate\A43M.DGN ORIGINATOR: Sandy Anderson REV. DATE: 7/23/01 PLOT SCALE : 4.299387:1.000000 PLOT DATE: 15-MAR-2002 14:29 WISDOT: MSHT20

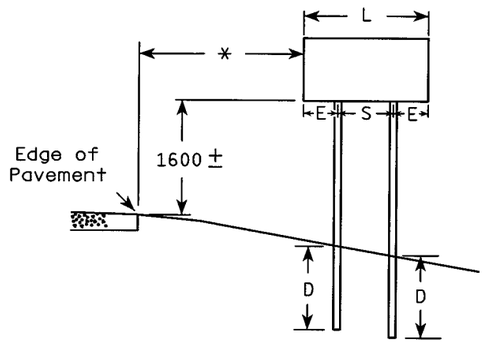
LEVELS ON - 2 5.6 10.

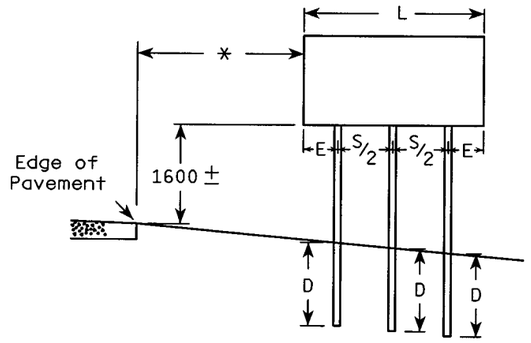
58,59,60 63

URBAN AREA



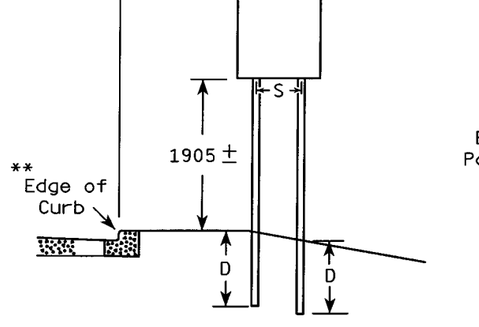
RURAL AREA (See Note 3)

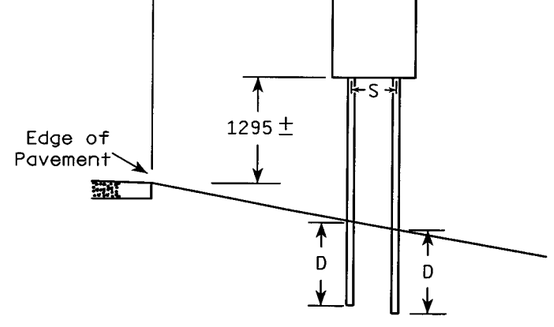




GENERAL NOTES

1. For 3 post installations, spacing is S/2 and S must be greater than 2130.
2. For 4 post installations, spacing is S/3 and S must be greater than 3200.
3. For expressways and freeways, mounting height is 2110 ± or 1905 ± depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 75.
5. Minimum mounting height for J assemblies (A4-5) is 2110 ± or 1905" ± per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. All dimensions in millimeters unless otherwise noted.





* 1830 from edge of a paved shoulder or 3660 from the edge of pavement (edge line location) or 610 from edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted.

DIAMOND SHAPED SIGNS		
L	S	E
Less than 1500	500	L/2 - 250
1500 -- 1800	800	L/2 - 400
Greater than 1800	3 L/5	L/5

SIGN SHAPE OTHER THAN DIAMOND (Two Post Installations)		
L	S	E
Less than 1500	L-600	300
1500 or more	3 L/5	L/5

POST EMBEDMENT DEPTH

Area of Sign Installation (m2)	D (Min)
1.86 or Less	1200
Greater than 1.86	1500

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

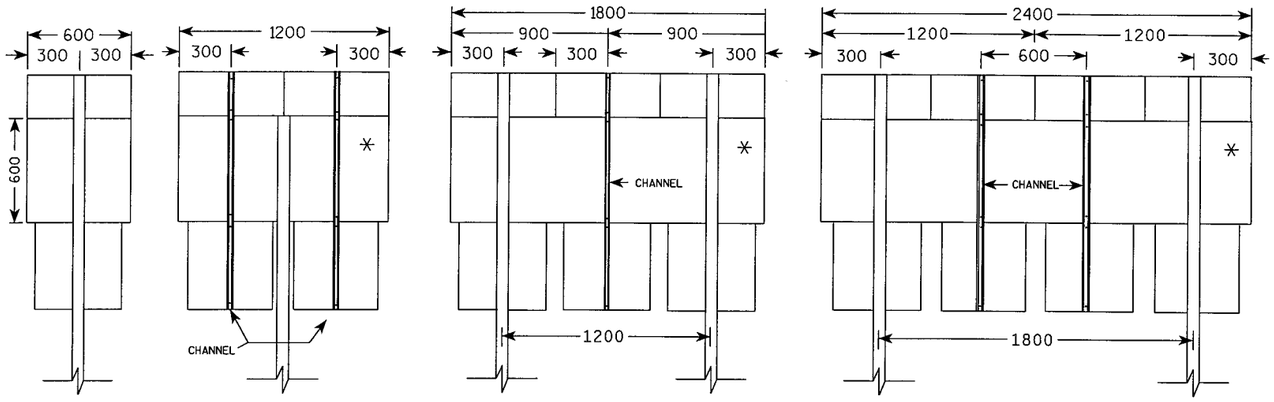
DATE 10/4/01 PLATE NO. A4-4M.6

STATE PROJECT NO: | HWY: | COUNTY: | SHEET NO: 408 M

FILE NAME: C:\Users\Projects\tr_stdplate\A44M.DGN ORIGINATOR: REV. DATE: PLOT SCALE : 4.367422:1.000000 PLOT DATE: 15-MAR-2002 14:30 WisDOT: MSHT20

LEVELS ON - 1,2,3, 5,6, 10,

58, 59, 60, 63



600 mm MARKER DETAIL

NOTES;

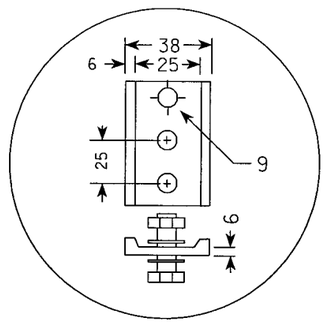
1. Post spacing shall be according to this detail but post embedment depth shall be in accordance with A4-4.
2. Channel material shall be as specified in Section 633 of Std. Specs. and weight shall be approx. 2.08 kg/m
3. Base material for a multiple marker head panel (*) shall be one piece high density overlay plywood. All other materials within the assembly can be either plywood or aluminum.
4. All dimensions in millimeters unless otherwise noted.

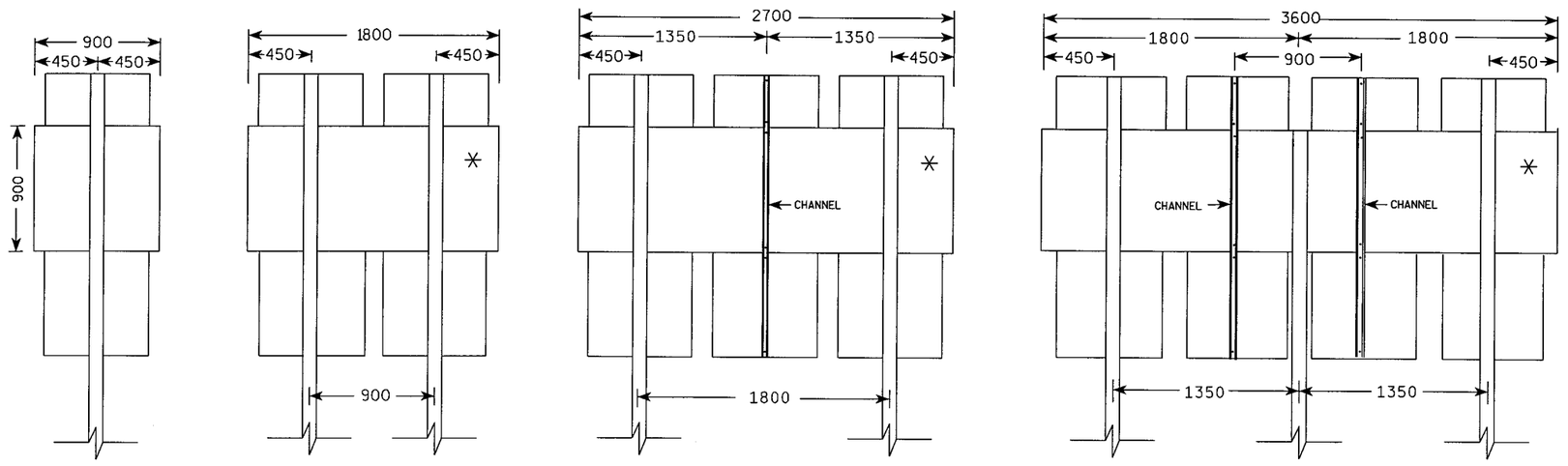
CHANNEL HARDWARE:

Aluminum Sign components: M6 x 20 bolt and 6 flat washers

Plywood Sign Components: M6 x 35 bolt and 6 flat washers

CHANNEL DETAIL





900 mm MARKER DETAIL

TYPICAL PANEL INSTALLATION FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J. Spay for State Traffic Engineer

DATE 10/28/96 PLATE NO. A4-5M.4

WISDOT/CADDS METRIC SHEET M

PLOT SCALE: 10 : 1

PLOT NAME: 58, 59, 60, 63

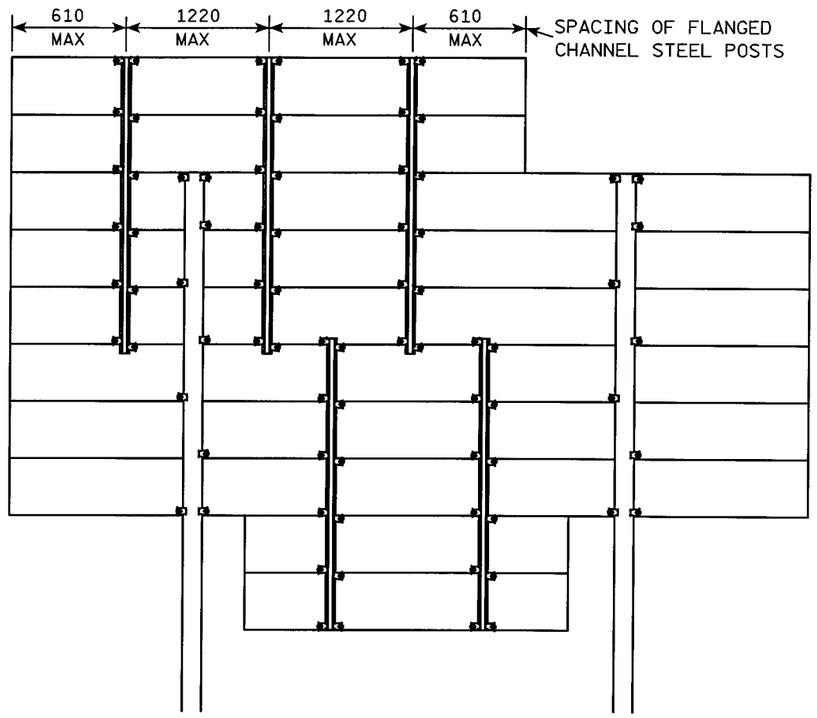
REV. DATE: 10/23/96

ORIGINATOR: Sandy Anderson

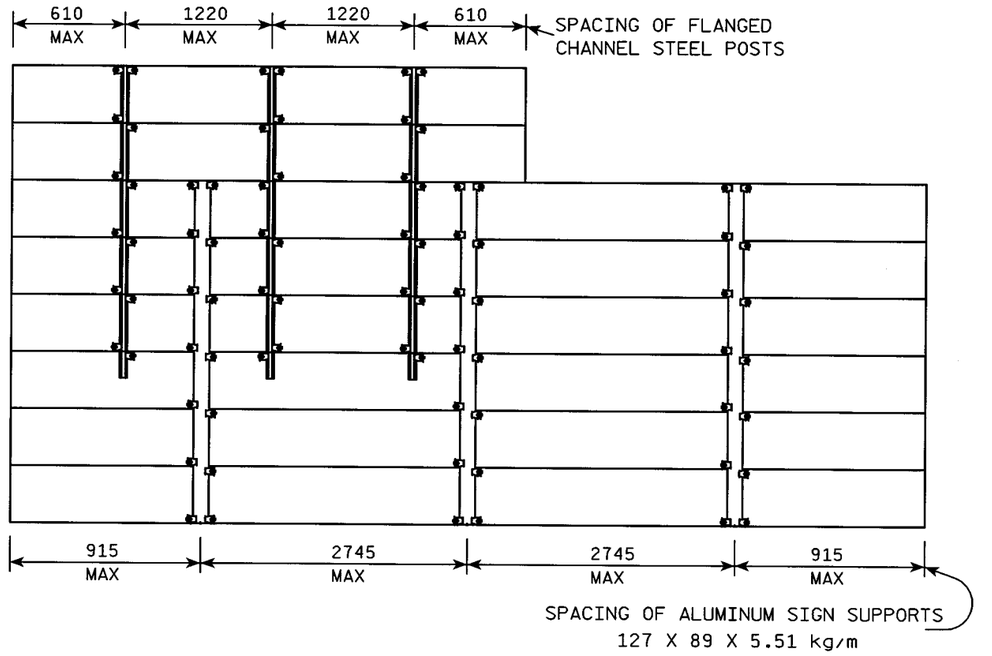
FILE NAME: A45M.dgn

LEVELS ON - 1, 2, 3, 5, 6, 10,

GROUND MOUNTED SIGN



SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to section 633 of STANDARD SPECIFICATIONS and shall be considered as incidental to other items in the contract.
2. Number of flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 2440 OR LESS = 2 CHANNELS
   PANEL LENGTH 2745 - 3660 = 3 CHANNELS
   PANEL LENGTH 3965 OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. All dimensions in millimeters unless otherwise noted.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

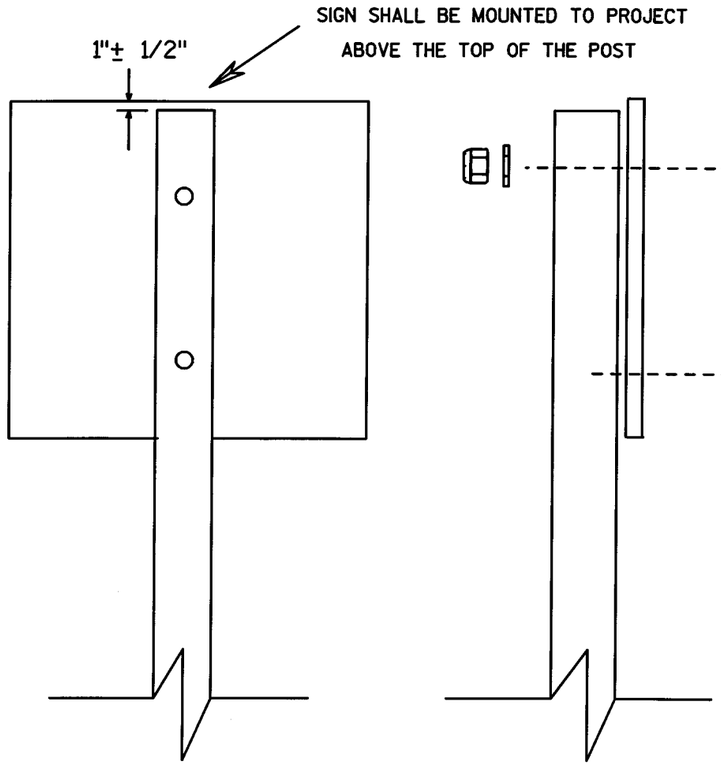
WISCONSIN DEPT OF TRANSPORTATION

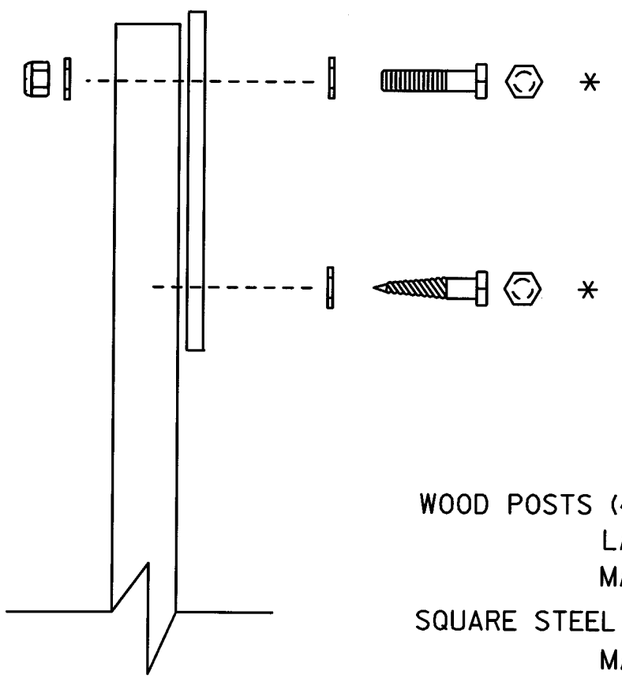
APPROVED Chester J Spang for State Traffic Engineer

DATE 10/15/99 PLATE NO. A4-6M.9

WISDOT/CADDS METRIC SHEET M

PLOT SCALE: 15 :1
REV. DATE: 04/15/98
ORIGINATOR: Don Kluever
FILE NAME: A46M.dgn
LEVELS ON - 2,3, 5, 10, 12,13,
58,59,60, 63





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

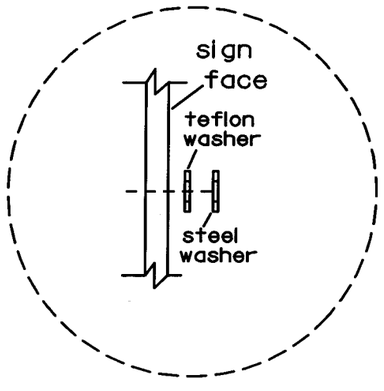
a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts

WASHERS (ALL POSTS) -
1" O.D. X 3/8" I.D. X 1/16" STEEL for signs 4 sq. ft. and smaller.
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL for signs >4 sq. ft. but <16 sq. ft.
1-1/2" O.D. X 7/16" I.D. X 1/16" STEEL for signs 16 sq. ft. and larger.
1-1/4" O.D. X 3/8" I.D. X .080 TEFLON for all Type H signs.



Washer Placement when Sign Has Type H Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fastners per sign varies with the sign area, but normally there are two. For a single post installation, all signs 9 sq. ft. or larger require the use of 3 fastners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

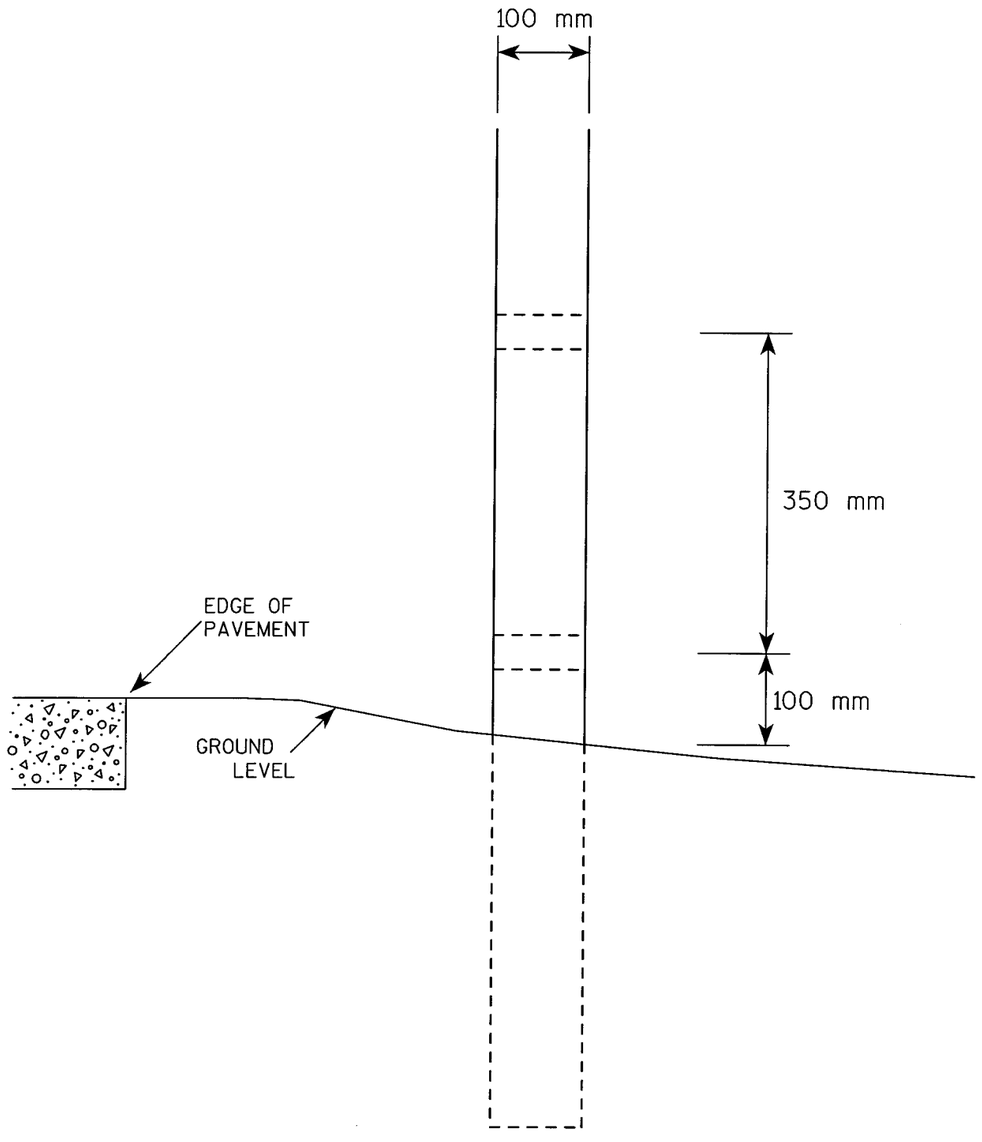
DATE 10/4/01 PLATE NO. A4-8.4

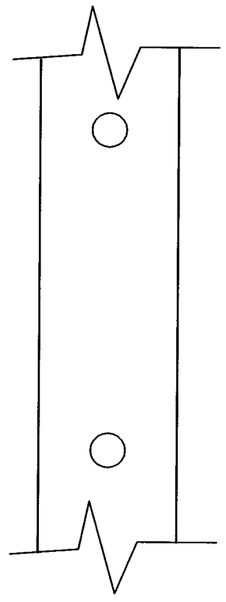
STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 411	E

FILE NAME : C:\Users\Projects\tr_stdplate\A48.DGN PLOT DATE : 15-MAR-2002 14:32 REV DATE : 9/06/01 PLOT NAME : Originator : Sandy Anderson PLOT SCALE : 0.166456:1.000000
WISDOT/CADDS SHEET 42
LEVELS ON - 2, 5, 10.
58,59,60, 63

STATE PROJECT NUMBER

SHEET NO. 412





SIDE VIEW

GENERAL NOTES

1. All 100 X 150 mm Wood Posts shall be modified by having two 38 mm diameter holes drilled perpendicular to the roadway centerline.

100 × 150 mm WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J. Spang
for State Traffic Engineer

DATE 10/28/96 PLATE NO. A4-11M.1

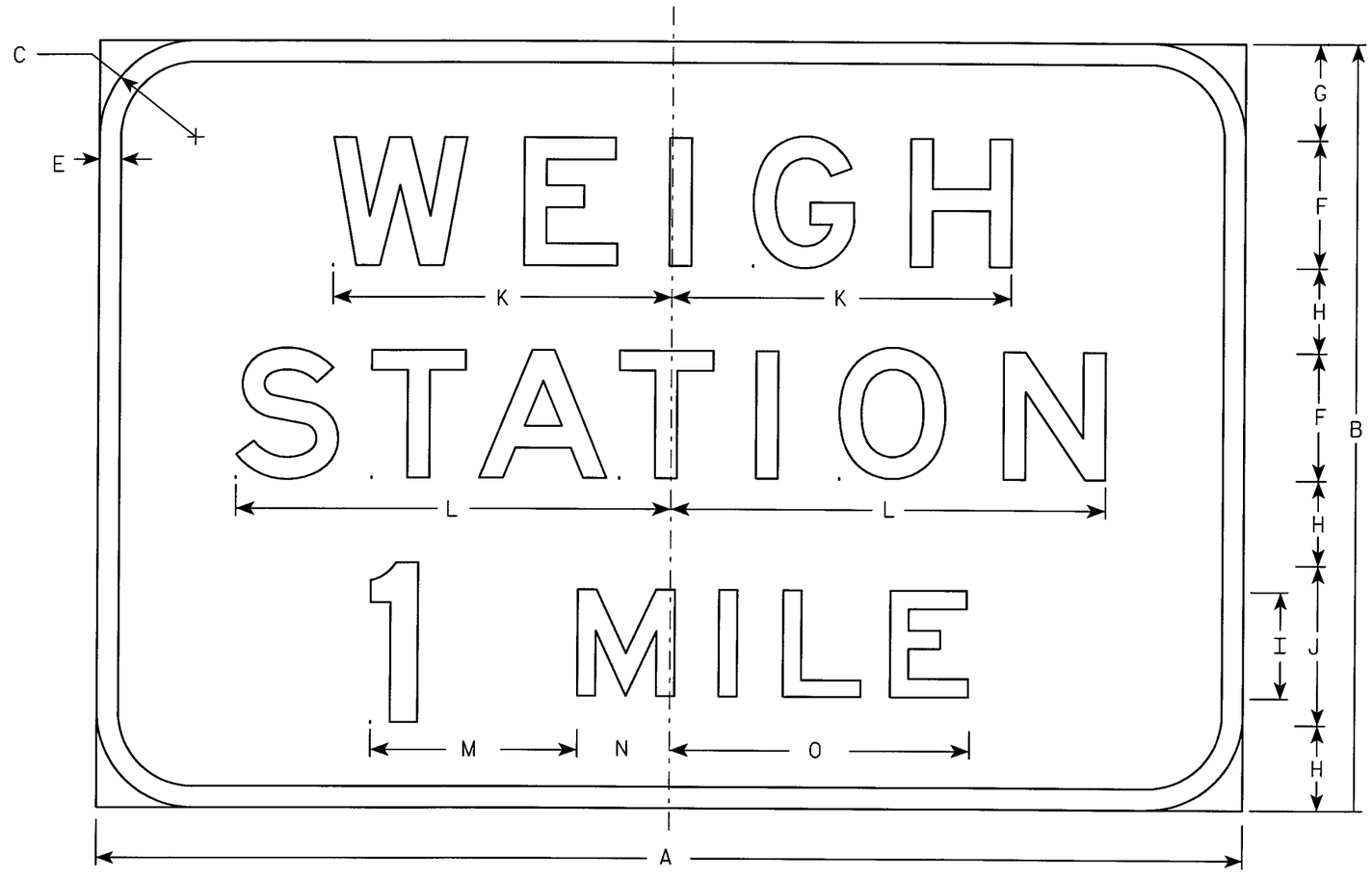
WISDOT/CADDS METRIC SHEET M

PLOT SCALE: 2 : 1
PLOT NAME: 63 58,59,
REV. DATE: 10/23/96
ORIGINATOR: Sandy Anderson
FILE NAME: A411M.dgn
LEVELS ON - 1, 2, 5, 10,

FILE NAME: e556a.dgn
PLOT SCALE: 6.5il
ORIGINATOR: Don Kluever
LEVELS ON - 2, 3, 5 & 7, 10.
58,59,60,61, 63
REVISED DATE : 2/17/99

STATE PROJECT NUMBER

SHEET NO. 413



E5-56A

NOTES

1. Sign is Type I- Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	2700 mm X 1800 mm
5	2700 mm X 1800 mm

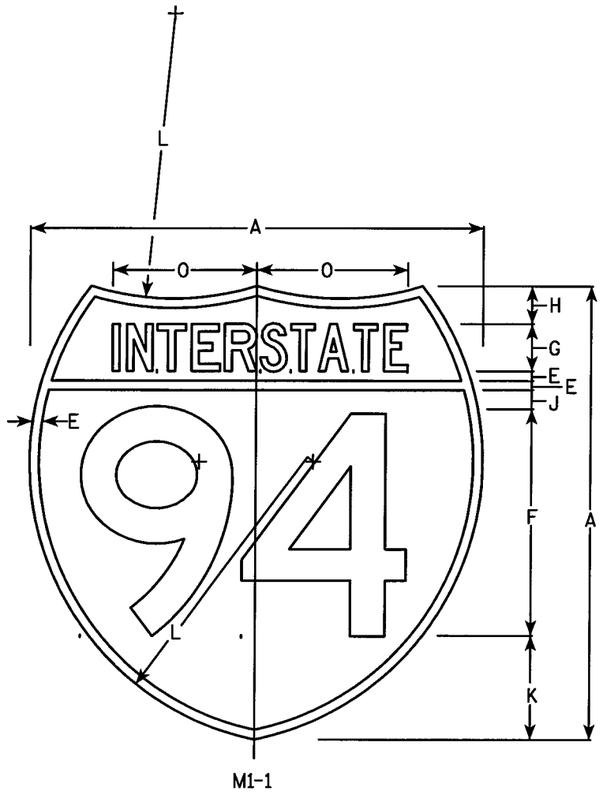
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2																												
3																												
4	108	72	9		2	12	9	8	10	15	32	41	19 ½	8 ¾	28 ¼												54.0	4.86
5	108	72	9		2	12	9	8	10	15	32	41	19 ½	8 ¾	28 ¼												54.0	4.86

STANDARD SIGN
E5-56A

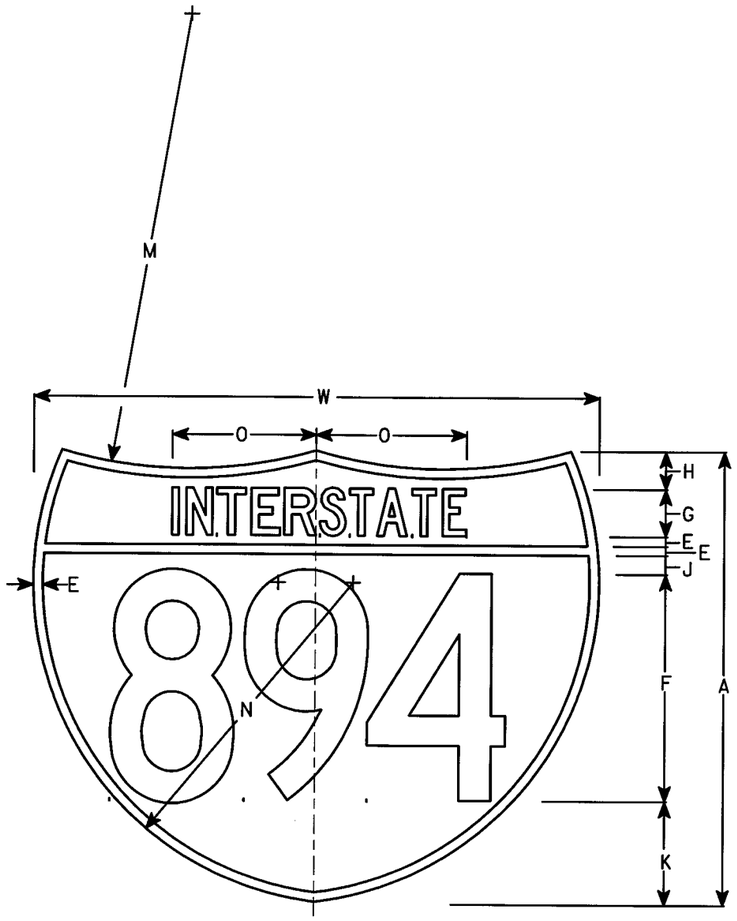
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg
for State Traffic Engineer

DATE 2/20/99 PLATE NO. E5-56A.4



M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue
   Message - White - Type H Reflective
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

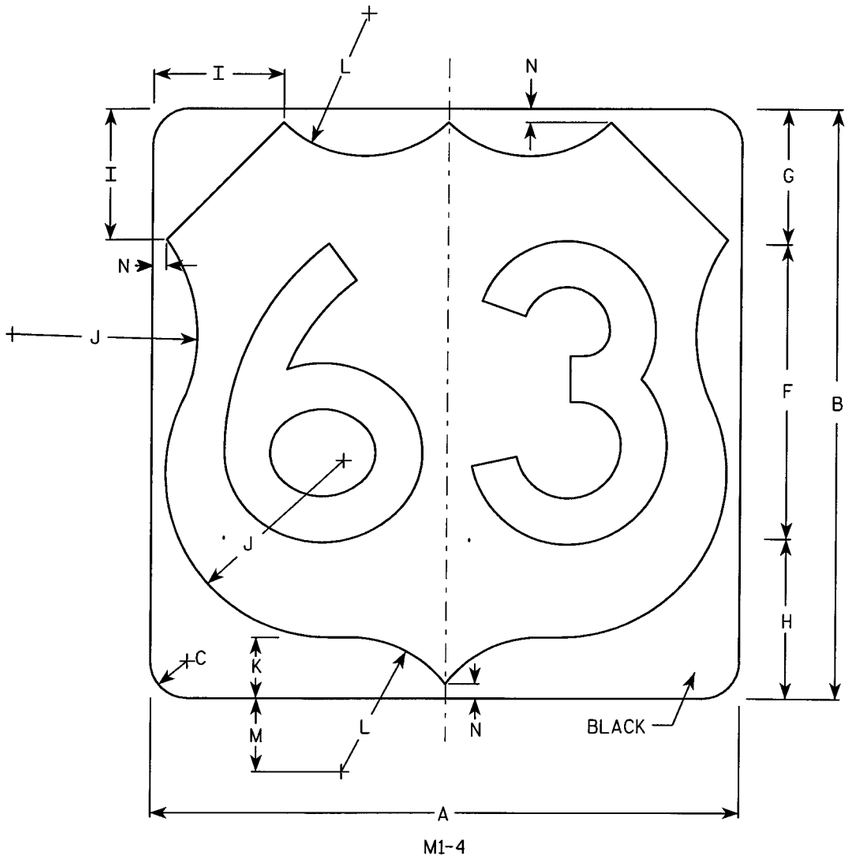
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/28/02 PLATE NO. M1-L7

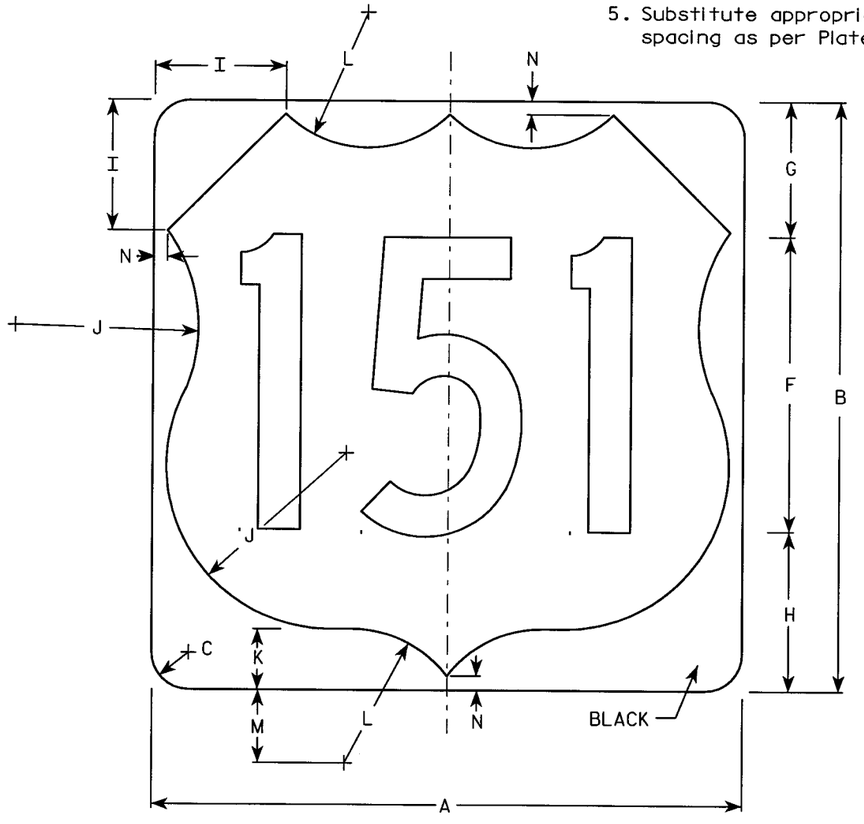
STATE PROJECT NUMBER:

SHEET NO: 414 E

58,59,60,61,62,63
LEVELS ON - 2,3, 5,6, 10,



M1-4



M1-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq. sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/28/02 PLATE NO. M1-4.8

STATE PROJECT NUMBER:

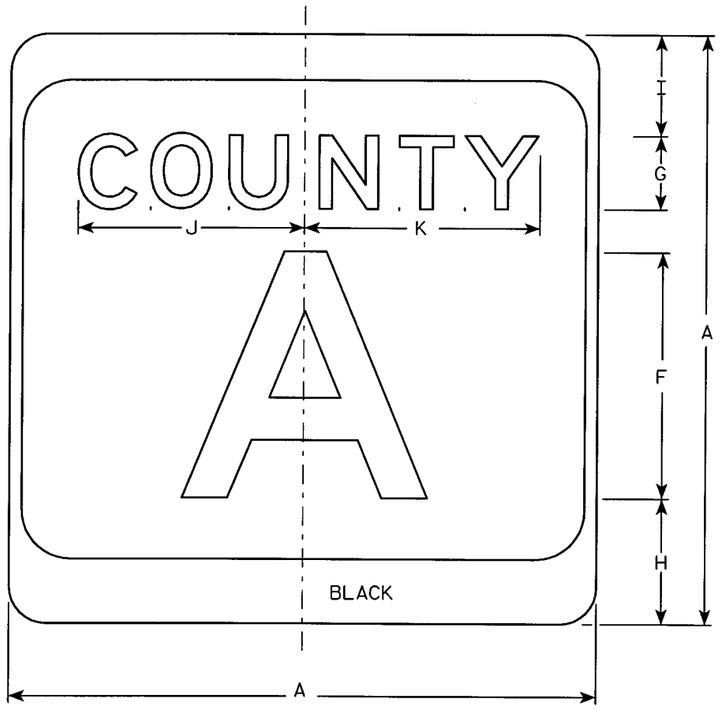
SHEET NO: 415 E

FILE NAME : C:\Users\Projects\tr_stdplate\M14.DGN PLOT DATE : 15-MAR-2002 14:40 ORG DATE : 2/02/98 Originator : Don Kluever

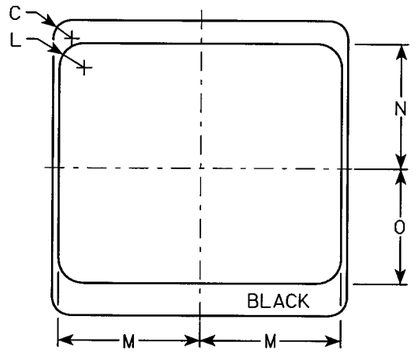
WISDOT/CADDS SHEET 42

58,59,60,61,62.

LEVELS ON - 2,3, 5,6



M1-5A



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropirate letters & optically adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8												4.0	.36
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong for State Traffic Engineer

DATE 1/28/02 PLATE NO. M1-5A.7

STATE PROJECT NUMBER:

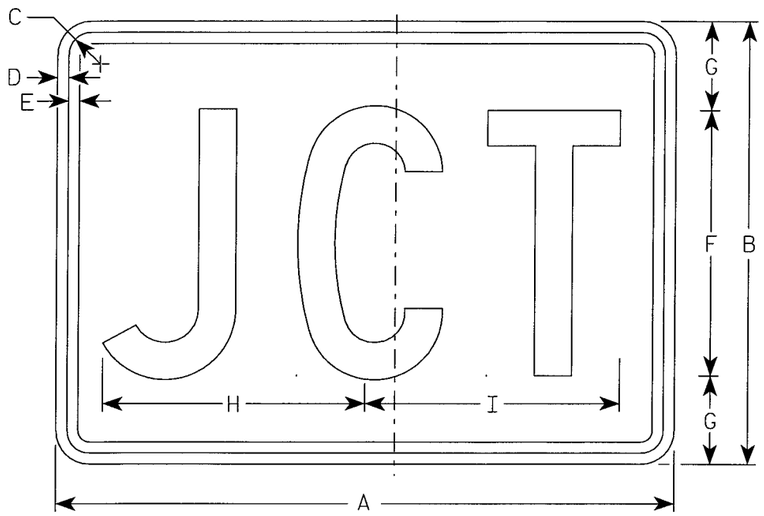
SHEET NO: 416 E

FILE NAME : C:\Users\Projects\tr_stdplate\M15A.DGN PLOT DATE : 15-MAR-2002 14:40 ORG DATE : 10/15/98 Originator : Don Kluever

WISDOT/CADDS SHEET 42

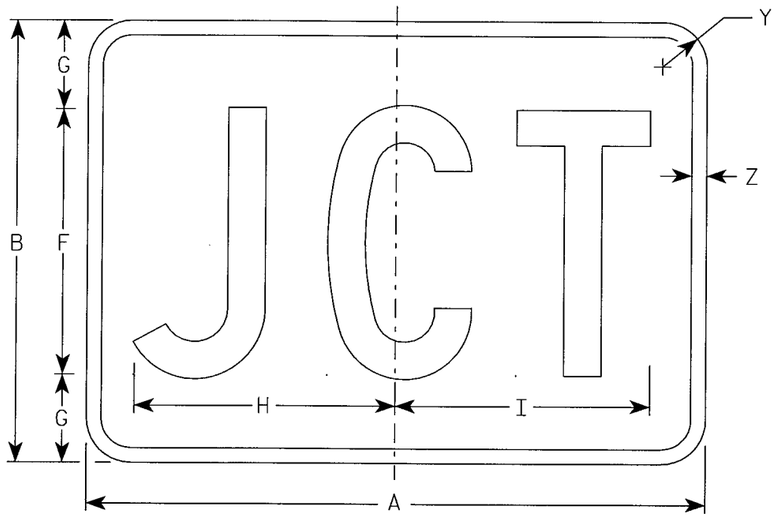
58,59,60,61,62,63

LEVELS ON - 2,3, 5,6, 10,



M2-1
MK2-1
MM2-1*
MR2-1

*See Note 6



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
   Message - Black
   MB2-1 Background - Blue - Type H Reflective
   Message - White - Type H Reflective
   MG2-1 Background - Green - Type H Reflective
   Message - White - Type H Reflective
   MK2-1 Background - Green -Type H Reflective
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green - Type H Reflective
   MN2-1 Background - Brown - Type H Reflective
   Message - White - Type H Reflective
   MR2-1 Background - Brown - Type H Reflective
   Message - Yellow Type H Reflective
6. Border shall be omitted on MM2-1.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spey for State Traffic Engineer

DATE 1/31/02 PLATE NO. M2-1.9

STATE PROJECT NUMBER:

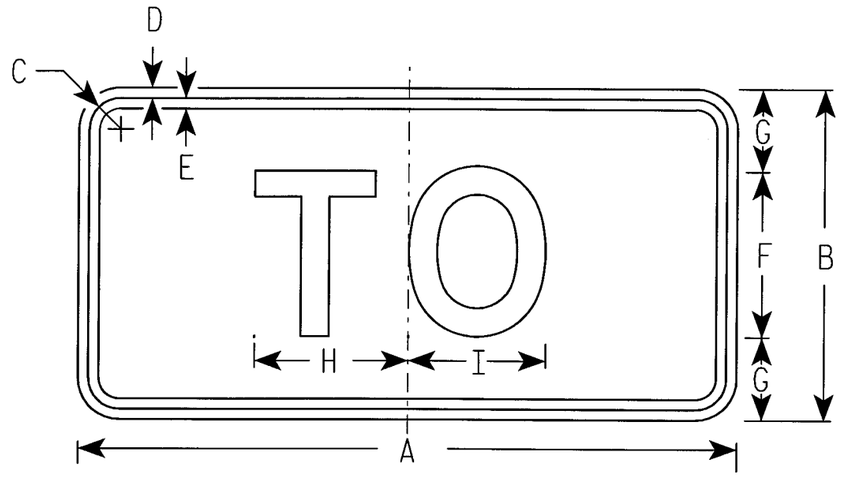
SHEET NO: 417 E

LEVELS ON • 2,3, 5,6, 10,

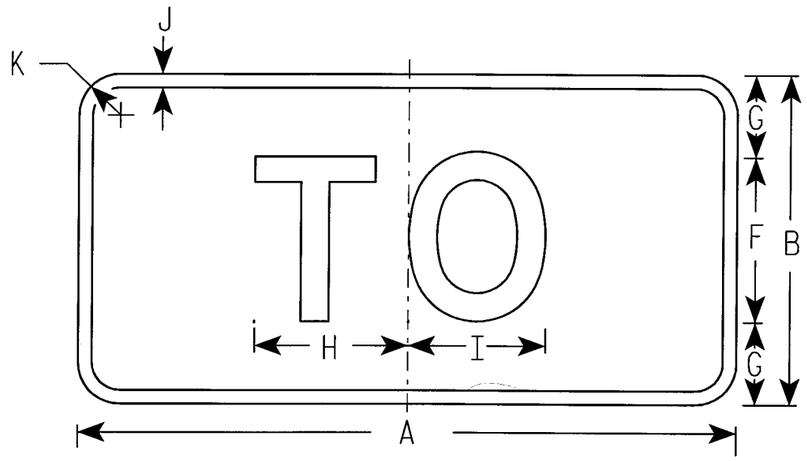
58,59,60,61,62,63

FILE NAME : C:\Users\Projects\tr_stdplate\M21.DGN PLOT DATE : 15-MAR-2002 14:41 ORG DATE : 10/19/00 Originator : Don Kluever

WISDOT/CADDS SHEET 42



M4-5
MK4-5
MM4-5 *See Note 6



MB4-5
MG4-5
MN4-5

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White - Type H Reflective
   Message - Black

   MB4-5 Background - Blue - Type H Reflective
   Message - White - Type H Reflective

   MG4-5 Background - Green - Type H Reflective
   Message - White - Type H Reflective

   MK4-5 Background - Green Type H Reflective
   Message - White - Type H Reflective

   MM4-5 Background - White - Type H Reflective
   Message - Green - Type H Reflective

   MN4-5 Background - Brown - Type H Reflective
   Message - White - Type H Reflective
6. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	750 mm X 375 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	12	1 1/8	3/8	3/8	6	3	5 5/8	5	1/2	1 1/2																2.00	0.18
3	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2																3.13	0.28
4	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2																3.13	0.28
5	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2																3.13	0.28

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/31/02 PLATE NO. M4-5.4

STATE PROJECT NUMBER:

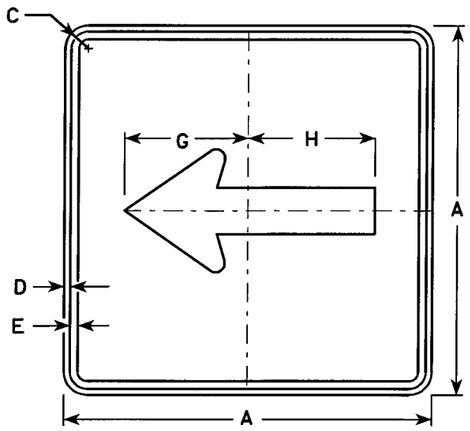
SHEET NO: 418 E

LEVELS ON - 2,3, 5,6, 10.

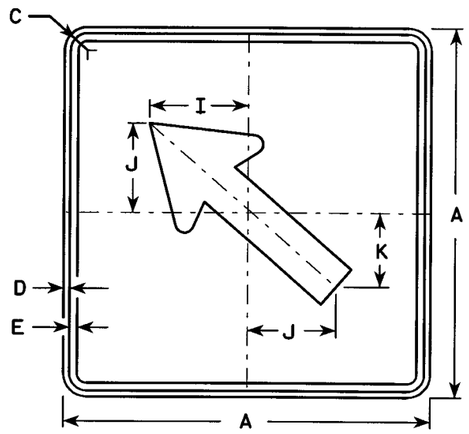
58,59,60,61,62,63

FILE NAME : C:\Users\Projects\tr_stdplate\M45.DGN PLOT DATE : 15-MAR-2002 14:43 ORG DATE : 10/19/00 Originator : Don Kluever

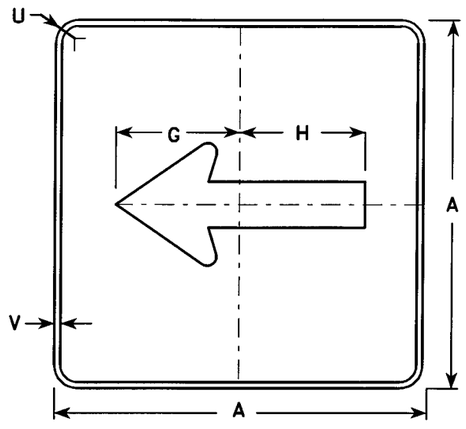
WISDOT/CADDS SHEET 42



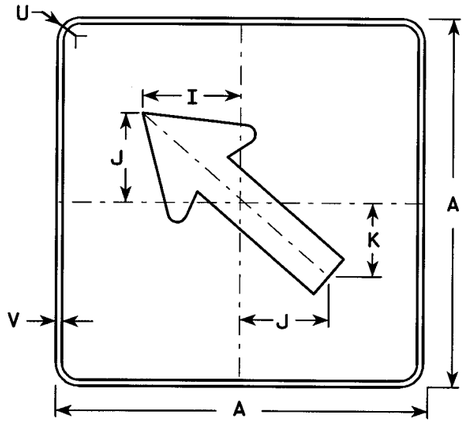
M6-1
MK6-1
MM6-1 (See Note 5)
MO6-1
MR6-1



M6-2
MK6-2
MM6-2 (See Note 5)
MO6-2
MR6-2



MB6-1
MG6-1
MN6-1



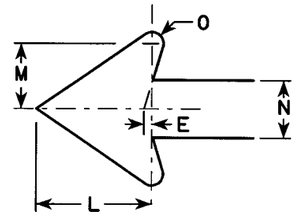
MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective
   Message - Black
   MB6-1 and MB6-2 Background - Blue - Type H Reflective
   Message - White - Type H Reflective
   MG6-1 and MG6-2 Background - Green - Type H Reflective
   Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green - Type H Reflective
   Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective
   Message - Green - Type H Reflective
   MN6-1 and MN6-2 Background - Brown - Type H Reflective
   Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective
   Message - Black
   MR6-1 and MR6-2 Background - Brown - Type H Reflective
   Message - Yellow - Type H Reflective
5. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25	0.56

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/31/02 PLATE NO. M6-1.11

STATE PROJECT NUMBER:

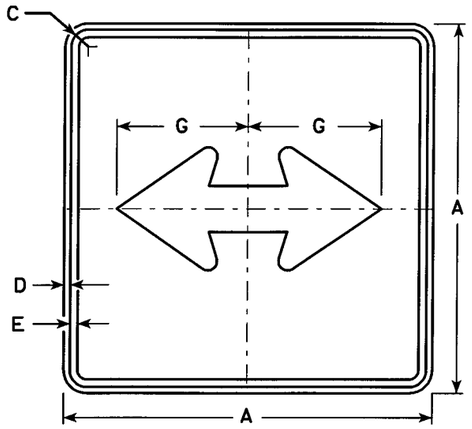
SHEET NO: 419 E

58,59,60,61,62,63

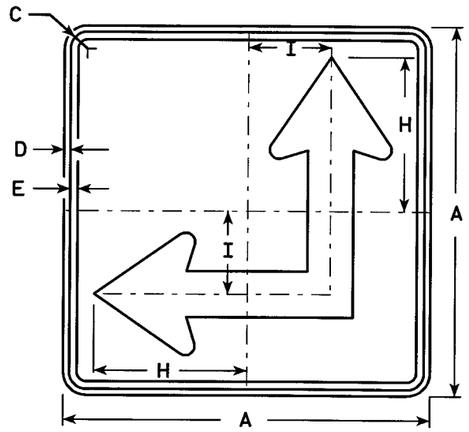
LEVELS ON - 2,3, 5,6, 10,

FILE NAME : C:\Users\Projects\tr_stdplate\M61.DGN PLOT DATE : 15-MAR-2002 14:44 ORG DATE : 10/19/00 Originator : Don Kluever

WISDOT/CADDS SHEET 42



M6-4
MK6-4
MM6-4 (See Note 5)
MO6-4
MR6-4



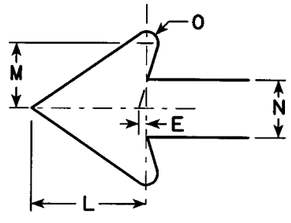
M6-6
MK6-6
MM6-6 (See Note 5)
MO6-6
MR6-6

MB6-4
MG6-4
MN6-4

MB6-6
MG6-6
MN6-6

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White - Type H Reflective
   Message - Black
   MB6-4 and MB6-6 Background - Blue - Type H Reflective
   Message - White - Type H Reflective
   MG6-4 and MG6-6 Background - Green - Type H Reflective
   Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green - Type H Reflective
   Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective
   Message - Green - Type H Reflective
   MN6-4 and MN6-6 Background - Brown - Type H Reflective
   Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Reflective
   Message - Black
   MR6-4 and MR6-6 Background - Brown - Type H Reflective
   Message - Yellow - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.
6. Border shall be omitted on MM series.



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/31/02 PLATE NO. M6-4.6

STATE PROJECT NUMBER:

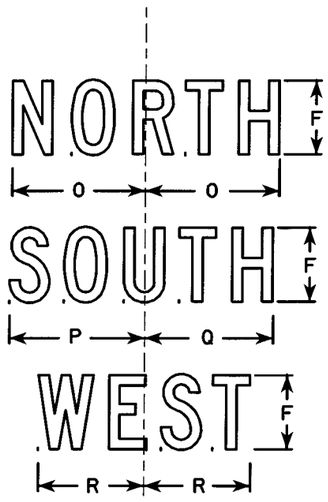
SHEET NO: 420 E

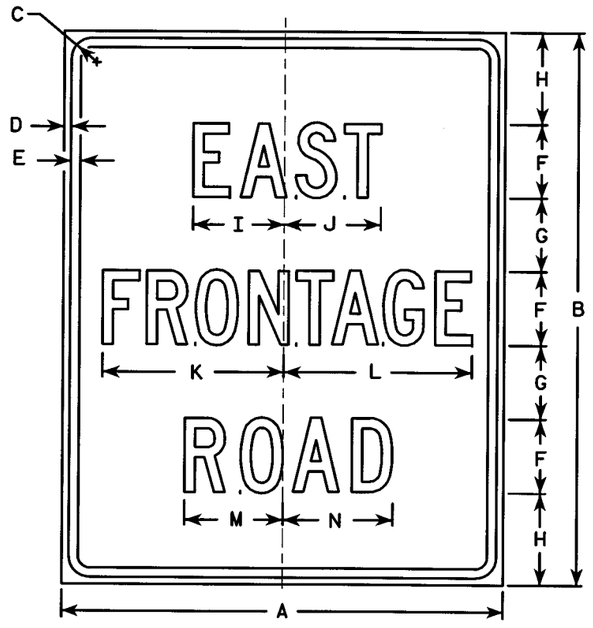
58,59,60,61,62,63

LEVELS ON • 2,3, 5,6, 10,

FILE NAME : C:\Users\Projects\tr_stdplate\M64.DGN PLOT DATE : 15-MAR-2002 14:42 ORG DATE : 10/19/00 Originator : Don Kluever

WISDOT/CADDS SHEET 42





NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate message as required.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 750 mm
3	
4	900 mm X 1050 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	30	1 1/8	3/8	1/2	4	4	5	5	5 1/4	9 7/8	10 1/4	5 3/8	6	7 1/4	7 3/8	7	5 3/4									5.0	.45
3																												
4	36	42	1 3/8	5/8	5/8	6	5	7	7 1/2	7 7/8	14 3/4	15 3/8	8	9	10 7/8	11	10 1/2	8 5/8									10.5	.95
5																												

STANDARD SIGN
M1-95A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J. Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-95A.3

STATE PROJECT NUMBER:

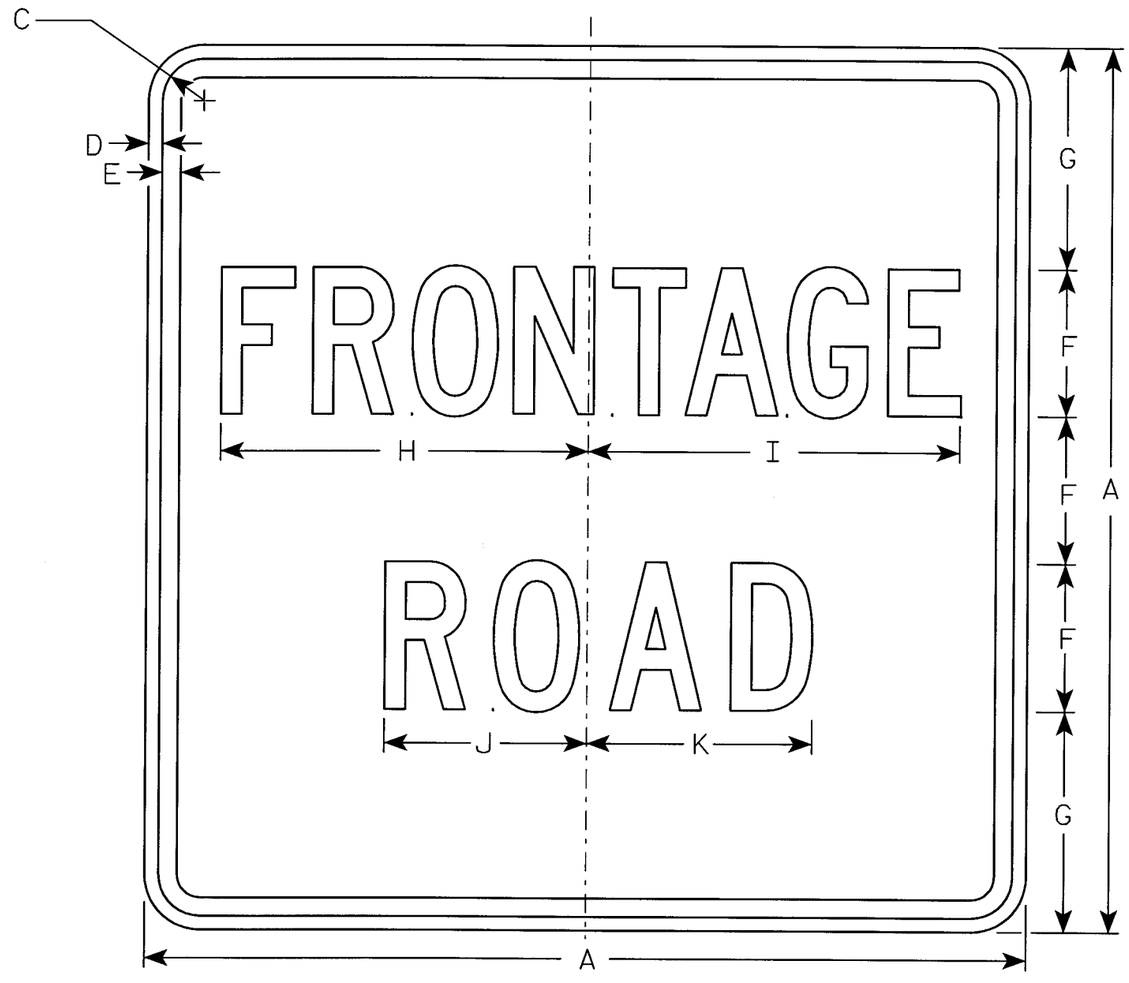
SHEET NO: 42.1 E

FILE NAME : C:\Users\Projects\tr_stdplate\M195A.DGN PLOT DATE : 15-MAR-2002 14:38 ORG DATE : 5/2/96 Originator : Don Kluever

WISDOT/CADDS SHEET 42

58,59,60,61,

LEVELS ON - 1,2,3, 5,6, 10,



M1-95

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	600 mm X 600 mm
3	
4	900 mm X 900 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	24		1 1/8	3/8	1/2	4	6	10	10 1/8	5 1/2	6 1/8																4.0	0.36
2	24		1 1/8	3/8	1/2	4	6	10	10 1/8	5 1/2	6 1/8																4.0	0.36
3																												
4	36		1 3/8	1/2	5/8	6	9	15	15 1/4	8 1/4	9 1/8																9.0	0.81
5																												

STANDARD SIGN
M1-95

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J. Spanje for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-95.6

STATE PROJECT NUMBER:

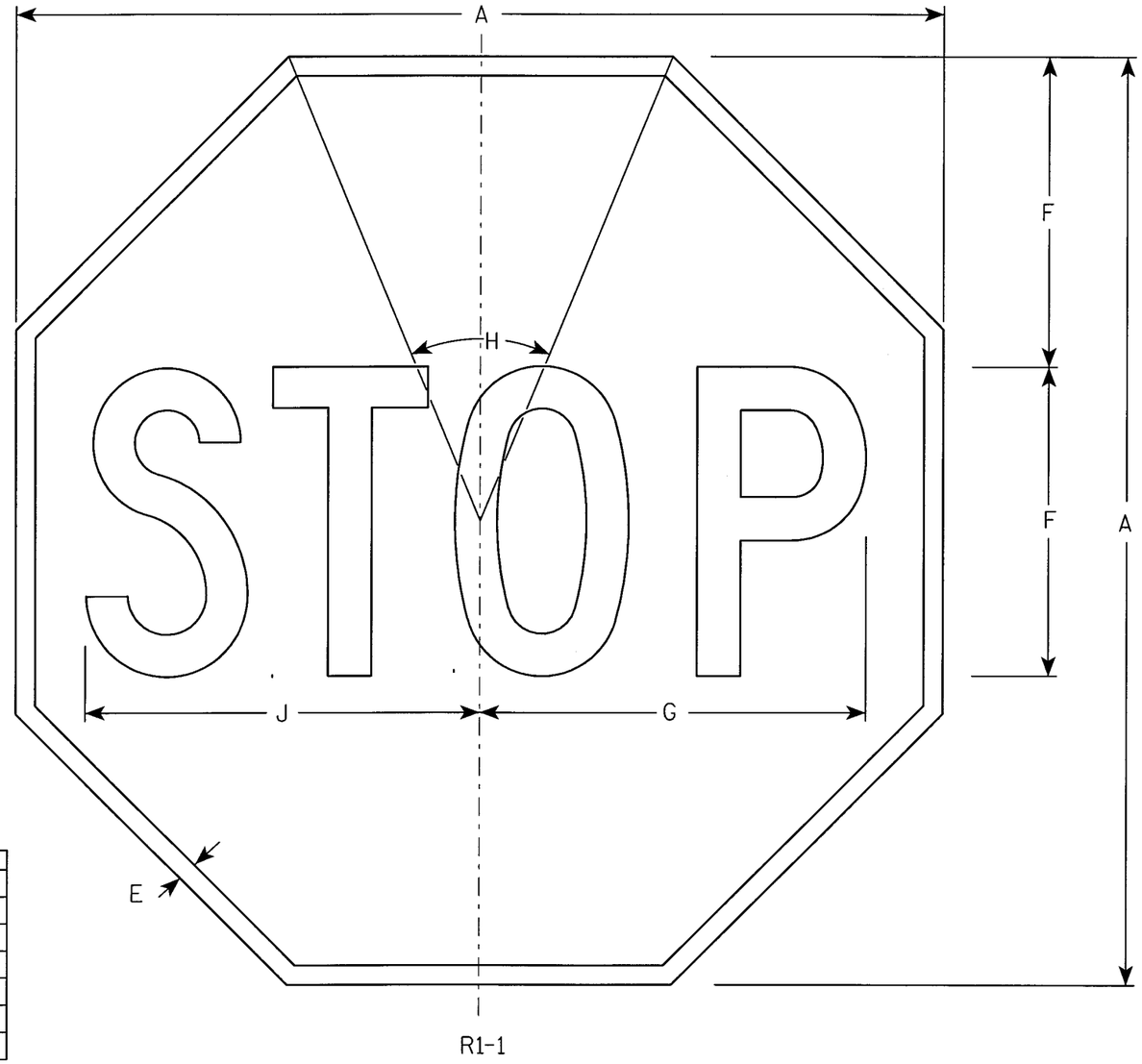
SHEET NO: 422 E

FILE NAME : C:\Users\Projects\tr_stdplate\M195.DGN PLOT DATE : 15-MAR-2002 14:46 ORG DATE : 8/16/99 Originator : Don Kluever

WISDOT/CADDS SHEET 42

LEVELS ON - 2.3. 5.6. 10.

56.59.60.61.62.63



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 mm
6	450 mm X 450 mm
7	300 mm X 300 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	24				3/8	8	10	45°		10 1/4																	3.31	0.31
2	30				5/8	10	12 1/2	45°		12 3/4																	5.18	0.48
3	36				3/4	12	15	45°		15 3/8																	7.46	0.69
4	48				1	16	20	45°		20 1/2																	13.25	1.23
5	48				1	16	20	45°		20 1/2																	13.25	1.23
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86	0.17
7	12				1/4	4	5	45°		5 1/8																	0.78	0.07

STANDARD SIGN
R1-1

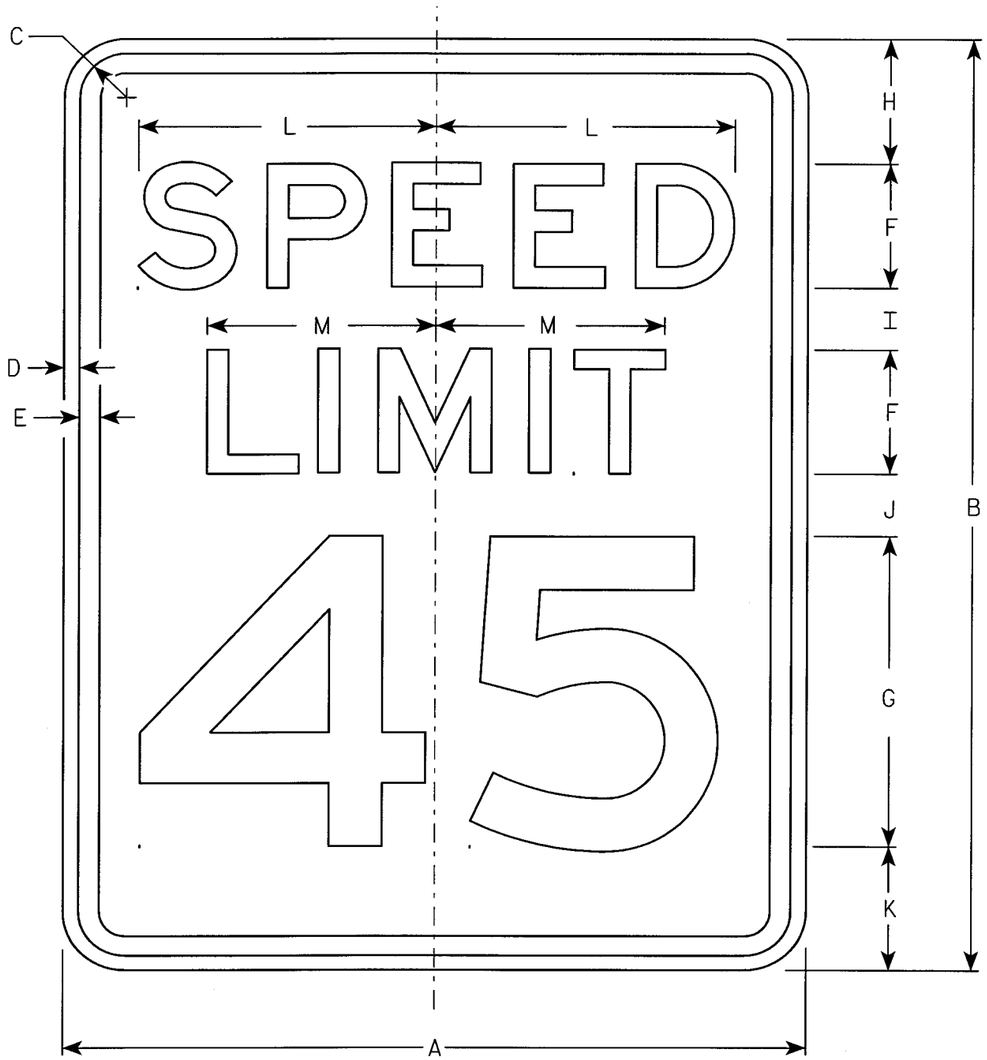
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 10/15/98 PLATE NO. R1-1.11

SHEET NO: 423 E

LEVELS ON · 2.3. 5.6. 10.
56.59.60. 63



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0	.28
2	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0	.46
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0	1.86

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

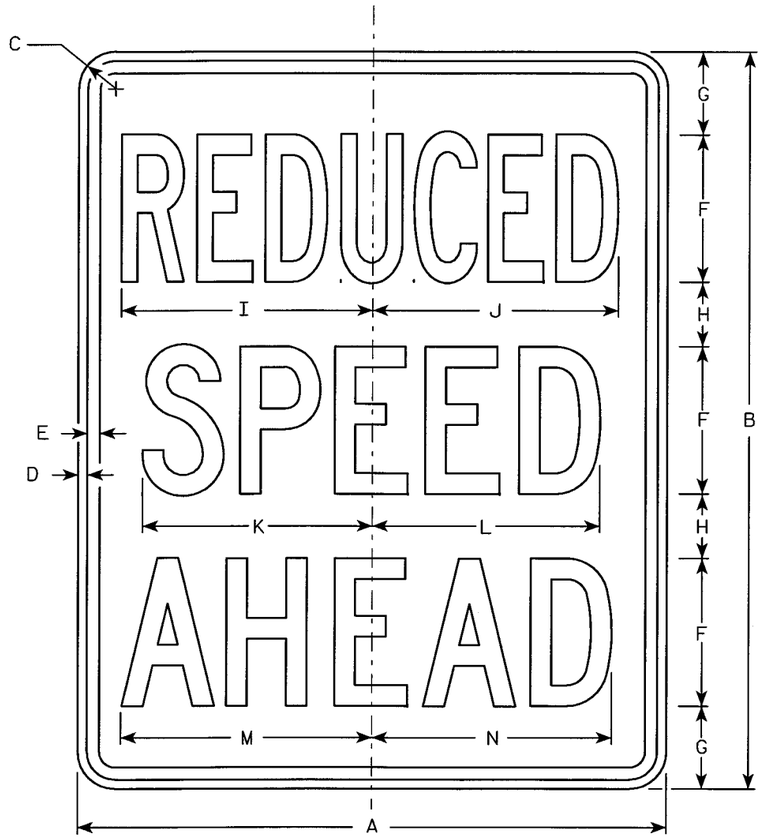
APPROVED Chester J Spagg for State Traffic Engineer

DATE 2/01/02 PLATE NO. R2-1.11

STATE PROJECT NUMBER:

SHEET NO: 424 E

58,59,60,61,62,63
LEVELS ON - 2,3, 5,6, 10,
FILE NAME : C:\Users\Projects\tr_stdplate\R21.DGN
PLOT DATE : 18-MAR-2002 10:31
ORG DATE : 6/4/97
Originator : Don Kluever
WISDOT/CADDS SHEET 42



R2-5A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is B, Lines 2 & 3 are C.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	18	24	1 1/2	3/8	1/2	4	3 1/2	2 1/2	6 7/8	7	6 1/4	6 1/4	6 3/4	6 1/2													3.0	0.27
2	24	30	1 1/2	3/8	1/2	6	3 3/8	2 5/8	10 1/4	10 1/2	9 3/8	9 1/4	10 1/8	9 3/4													5.0	0.45
3	36	48	1 7/8	1/2	5/8	8	7 1/4	4 3/4	14 1/4	14 3/4	12 3/8	10 5/8	12 5/8	12 1/4													12.0	1.08
4	36	48	1 7/8	1/2	5/8	8	7 1/4	4 3/4	14 1/4	14 3/4	12 3/8	10 5/8	12 5/8	12 1/4													12.0	1.08
5	48	60	3	3/4	1	10	8 1/2	6 1/2	17 3/4	18 1/2	15 3/8	13 1/4	15 3/4	15 1/4													20.0	1.80

STANDARD SIGN
R2-5A

WISCONSIN DEPT OF TRANSPORTATION

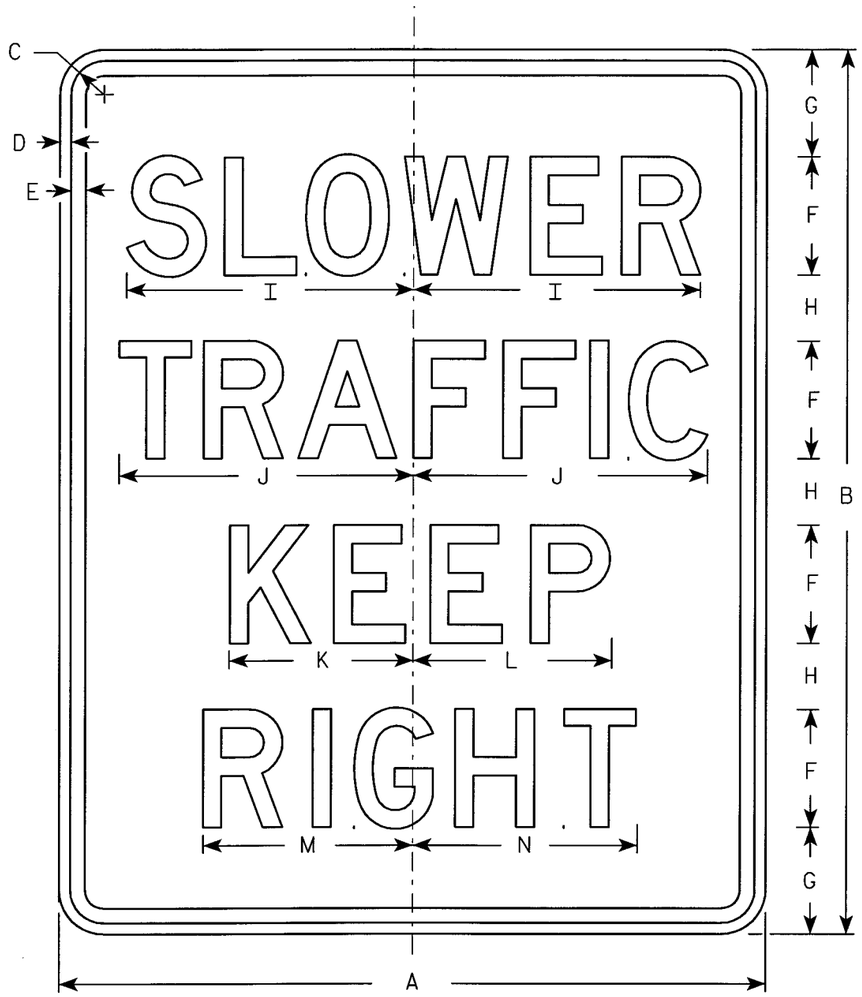
APPROVED Chester J Spang for State Traffic Engineer

DATE 2/01/02 PLATE NO. R2-5A.5

STATE PROJECT NUMBER:

SHEET NO: 425 E

58,59,60,61,62,63 LEVELS ON - 2,3, 5&6 ID.



R4-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0	0.45
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0	1.08
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0	1.08
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0	1.80

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

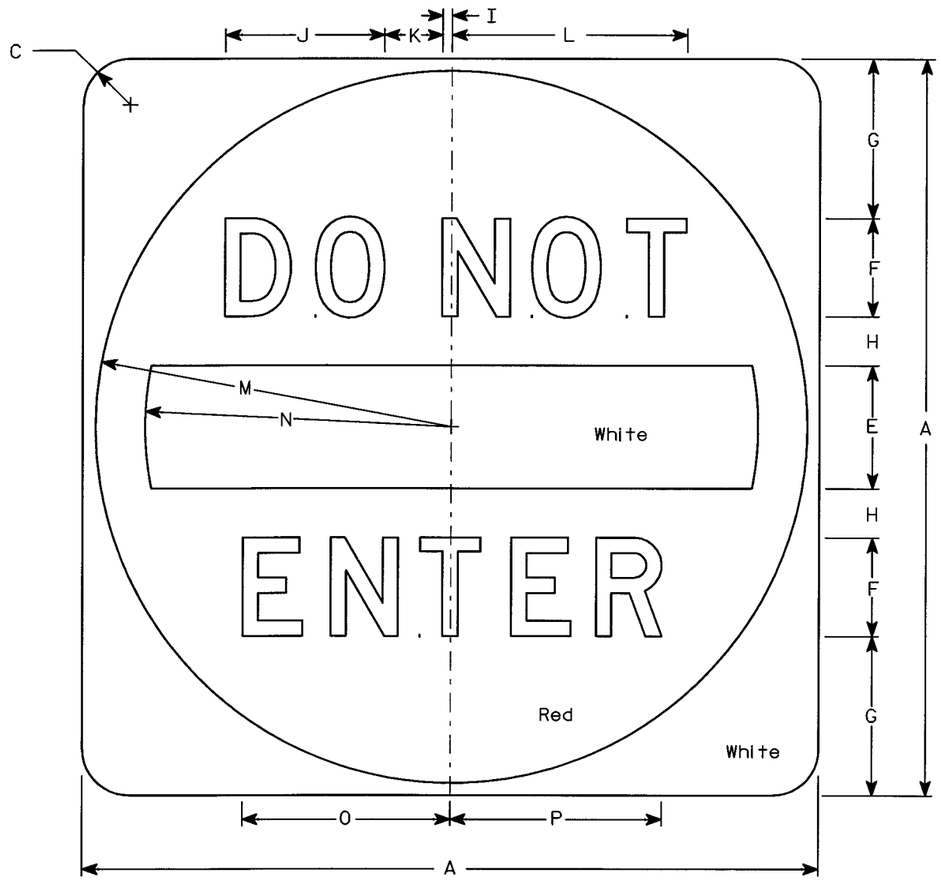
APPROVED Chester J Spagg for State Traffic Engineer

DATE 2/6/02 PLATE NO. R4-3.6

STATE PROJECT NUMBER:

SHEET NO: 426 E

58,59,60,61,62,63 LEVELS ON - 1,2,3, 5,6, 10,



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26	0.56
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0	0.81
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0	0.81
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0	1.44

STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

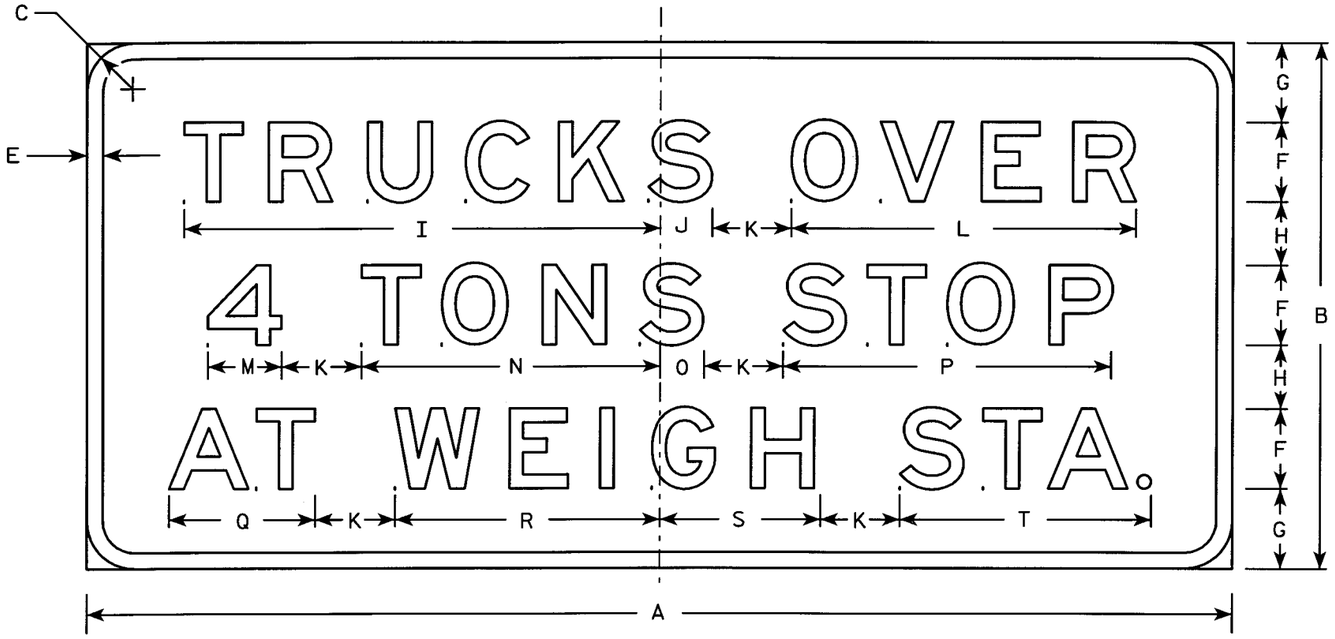
APPROVED Chester J Spay for State Traffic Engineer

DATE 2/6/02 PLATE NO. R5-1.13

STATE PROJECT NUMBER:

SHEET NO: 427 E

58,59,60,61,62,63 10. 5.6. 2.3. LEVELS ON -



R13-1

NOTES

1. Sign is Type I or Type II - Non-Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black (Non-reflective)
   Message - White Type H Reflective
3. Message Series - E
4. Corners may be square or rounded but borders shall be rounded as shown.
5. Code sizes 2 & 4 are Type II, Code size 5 is Type I. All code sizes have a non-reflective background.
6. Base material for Type II signs shall be plywood.

Metric equivalent for this sign is:

SIZE	
1	
2	2250 mm X 900 mm
3	
4	3000 mm X 1200 mm
5	3600 mm X 1650 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	90	36	3		1	6	5	4	36	3 7/8	6	26 1/8	5 5/8	22 3/4	3 1/4	25	11 1/8	19 7/8	12 1/4	19 1/2							22.5	2.03
3																												
4	120	48	6		1	8	7	5	47 7/8	5 1/8	8	34 3/4	7 3/8	30 1/8	4 3/8	33 1/8	14 7/8	26 3/8	17 1/8	26 1/8							40.0	3.60
5	144	66	6		2	10	10	8	59 3/4	6 1/2	10	43 1/4	9 1/4	37 1/2	5 1/2	36 7/8	17 3/4	33 1/4	20 1/4	31 1/2							66.0	5.94

STANDARD SIGN
R13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spray
for State Traffic Engineer

DATE 2/13/02 PLATE NO. R13-1.5

STATE PROJECT NUMBER:

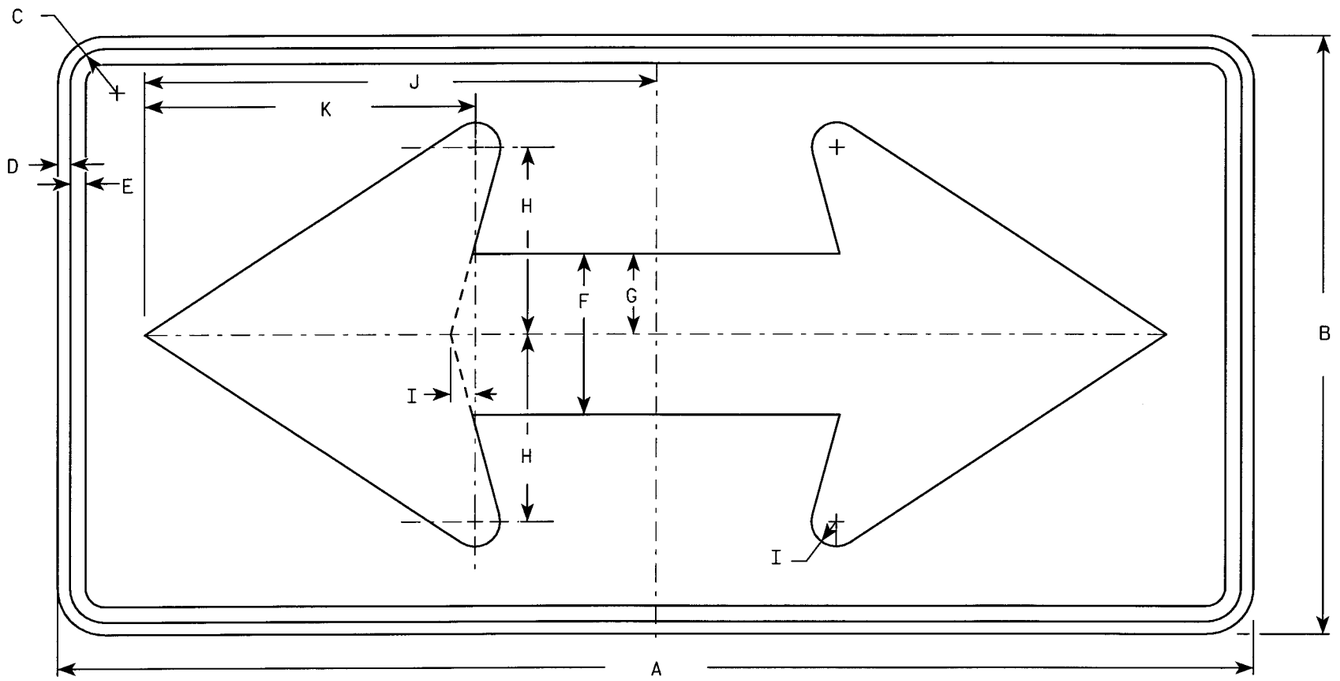
SHEET NO: 428 E

LEVELS ON - 2, 3, 5, 6, 10.

58,59,60,61,62,63

FILE NAME : C:\Users\Projects\tr_stdplate\R131.DGN PLOT DATE : 18-MAR-2002 10:28 ORG DATE : 2/7/97 Originator : Don Kluever

WISDOT/CADDS SHEET 42



W1-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1500 mm X 750 mm
4	1500 mm X 750 mm
5	2400 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5	0.41
2	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0	0.72
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5	1.13
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5	1.13
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0	2.88

STANDARD SIGN
W1-7

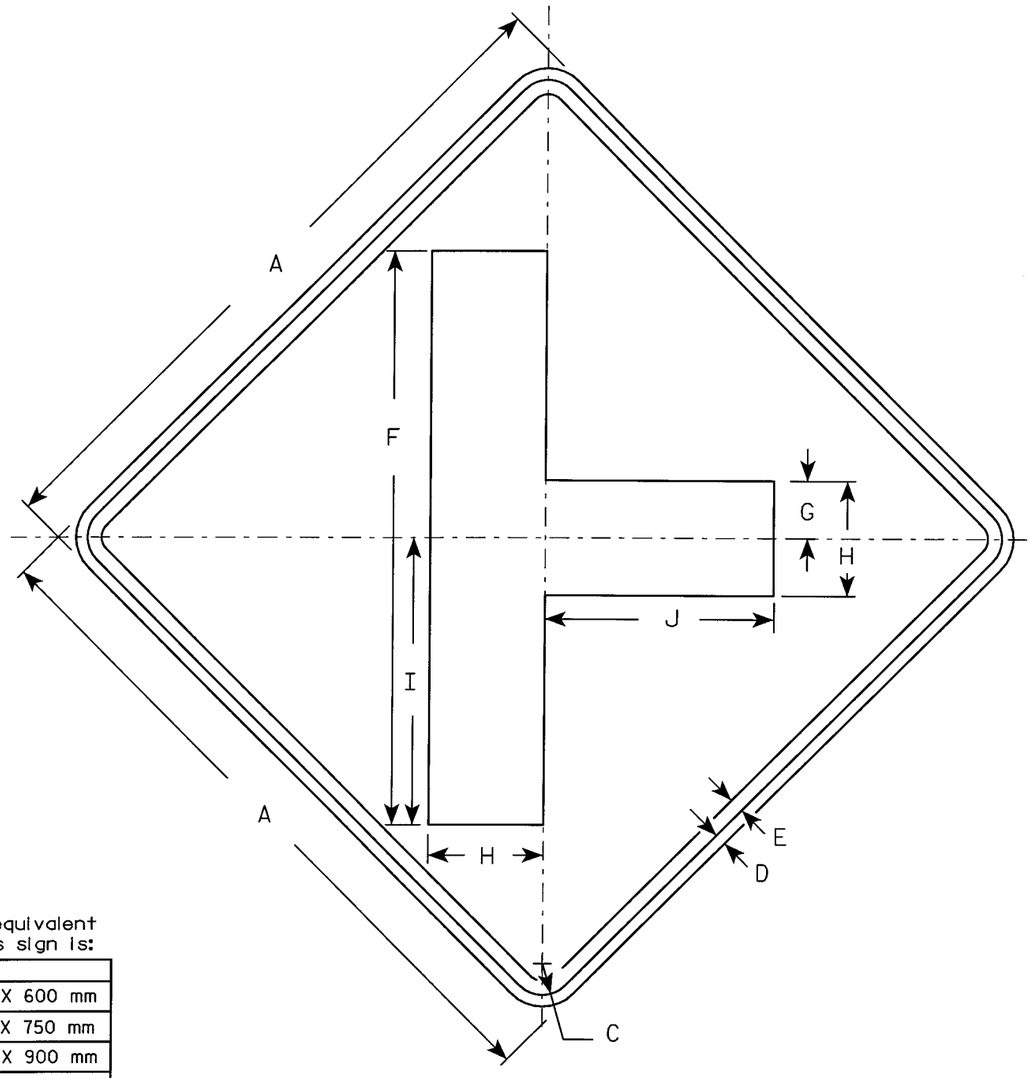
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spange
for State Traffic Engineer

DATE 8/20/97 PLATE NO. W1-7.6

SHEET NO: 429 E

LEVELS ON - 2,3,5,6,10,
56,59,63
FILE NAME : C:±Users±Projects±tr_stdplate±W17.DGN
PLOT DATE: 18-MAR-2002 11:46
ORG DATE : 8/20/97
Originator : Don Kluever
WISDOT/CADDS SHEET 42



W2-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0	0.36
2	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25	0.56
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0	0.81
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0	1.44
5																												

STANDARD SIGN
W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong for State Traffic Engineer

DATE 01/14/02 PLATE NO. W2-2.4

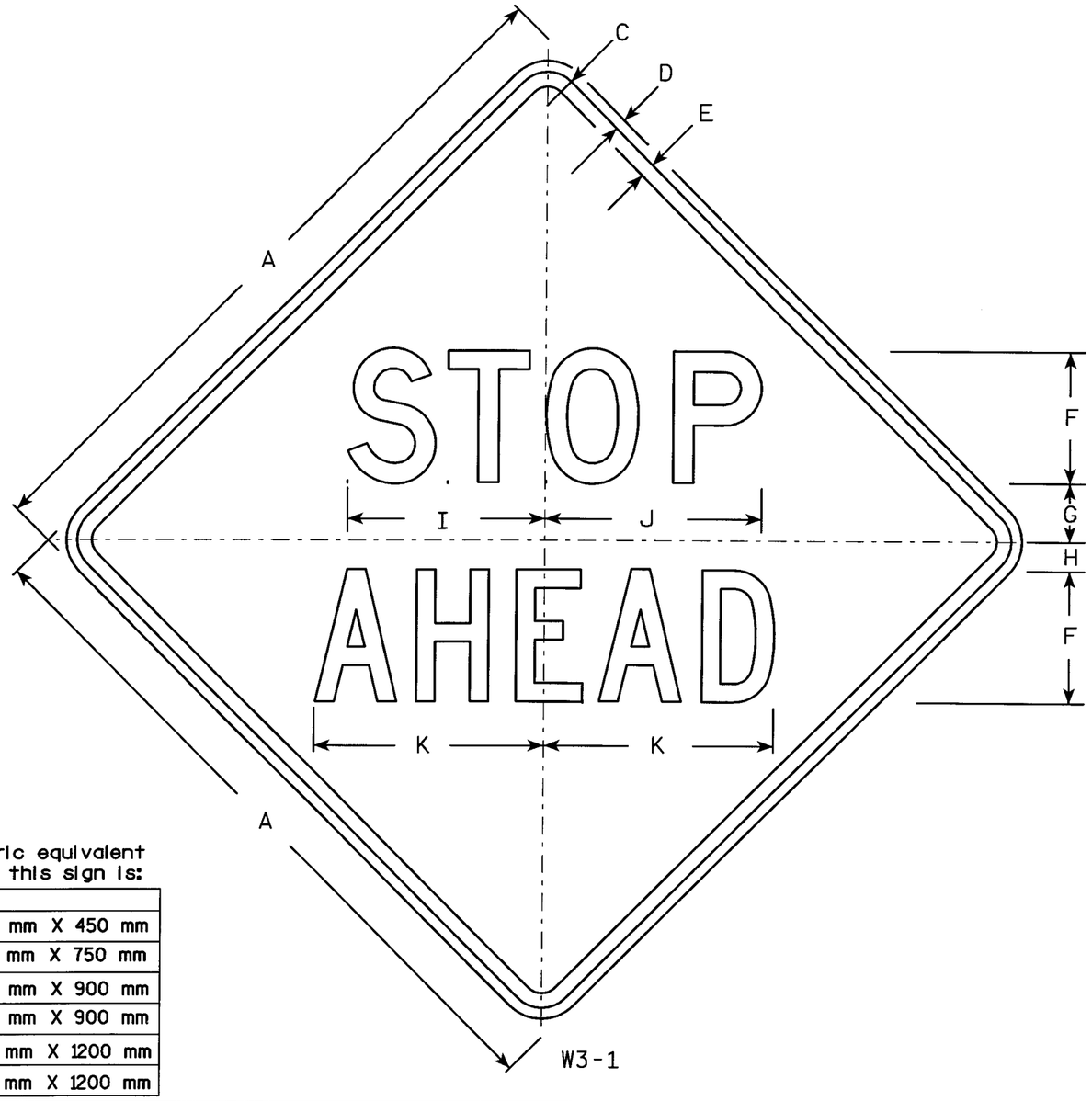
STATE PROJECT NUMBER: | HWY: | COUNTY: | SHEET NO: 430 | E

FILE NAME : C:\Users\Projects\tr_stdplate\W22.DGN PLOT DATE : 18-MAR-2002 11:47 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 0.260087:1.000000

WISDOT/CADDS SHEET 42

LEVELS ON - 2,3, 5&6 10.

56,59,62, 63



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. STOP is Series D and AHEAD is Series C.

Metric equivalent for this sign is:

SIZE	
BIKE	450 mm X 450 mm
1	750 mm X 750 mm
2	900 mm X 900 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
BIKE	18		1 1/8	3/8	3/8	3	1 3/4	3/4	4 3/4	5 1/4	5 3/8																2.25	0.20
1	30		1 3/8	1/2	5/8	6	2 1/2	1 1/4	9	9 7/8	10 1/2																6.25	0.56
2	36		1 5/8	5/8	3/4	7	3	1 1/2	10 1/2	11 5/8	12 1/4																9.0	0.81
3	36		1 5/8	5/8	3/4	7	3	1 1/2	10 1/2	11 5/8	12 1/4																9.0	0.81
4	48		2 1/4	3/4	1	9	4	2	13 1/2	14 7/8	15 3/4																16.0	1.44
5	48		2 1/4	3/4	1	9	4	2	13 1/2	14 7/8	15 3/4																16.0	1.44

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/25/02 PLATE NO. W3-1.10

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 431	E

58,59,60,61, 63

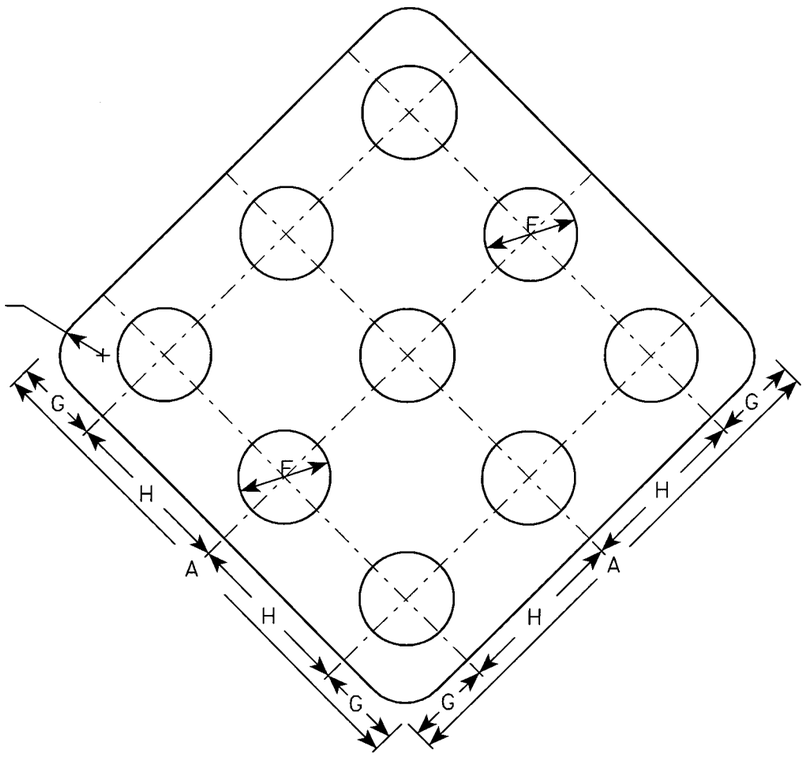
LEVELS ON - 1,2,3, 5,6, 10,

FILE NAME : C:\Users\Projects\tr_stdplate\W31.DGN PLOT DATE : 18-MAR-2002 11:48 ORG DATE : 1/21/94 PLOT NAME : Originator : Sandy Anderson PLOT SCALE : 0.374740:1.000000

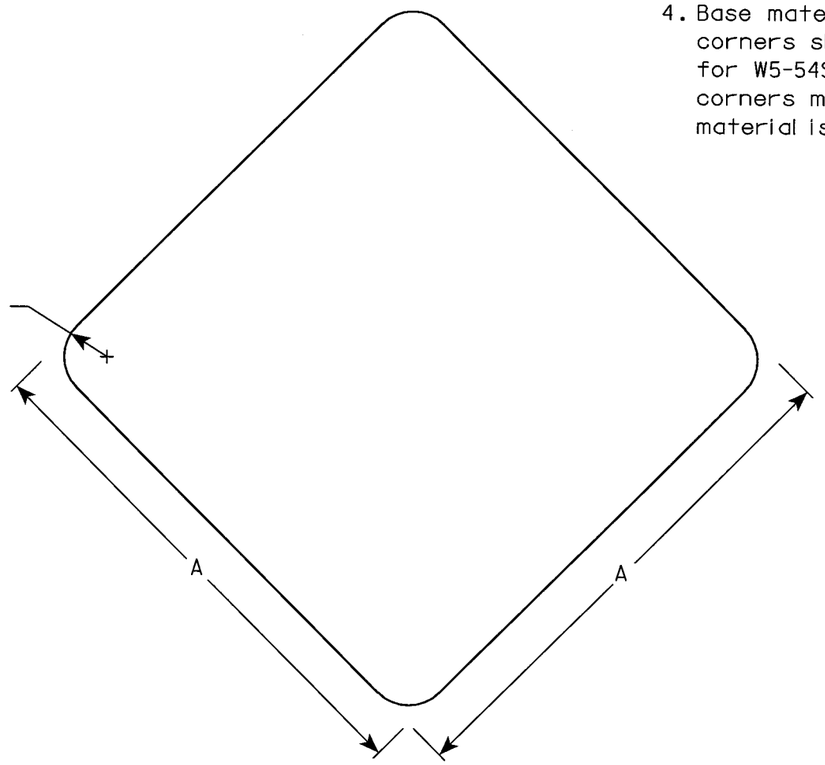
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 3
3. W5-54D Message Units are 3" center mount Yellow delineators as per 633.2.3
4. Base material for W5-54D shall be metal and corners shall be rounded. Base material for W5-54S may be plywood or metal and corners may be square or rounded when material is plywood but rounded when metal.



W5-54D



W5-54S

Metric equivalent for this sign is:

SIZE	
1	300 mm X 300 mm
2	450 mm X 450 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	12					3 1/4	2	4	1																		1.0	0.09
2	18					3 1/4	3	6	1 1/2																		2.25	0.20
3																												
4																												
5																												

STANDARD SIGN
W5-54D & W5-54S

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 01/15/02 PLATE NO. W5-54.7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 432	E

FILE NAME : C:\Users\Projects\tr_stdplate\W554.DGN PLOT DATE : 26-APR-2002 09:01 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 0.208070:1.000000

WISDOT/CADDS SHEET 42

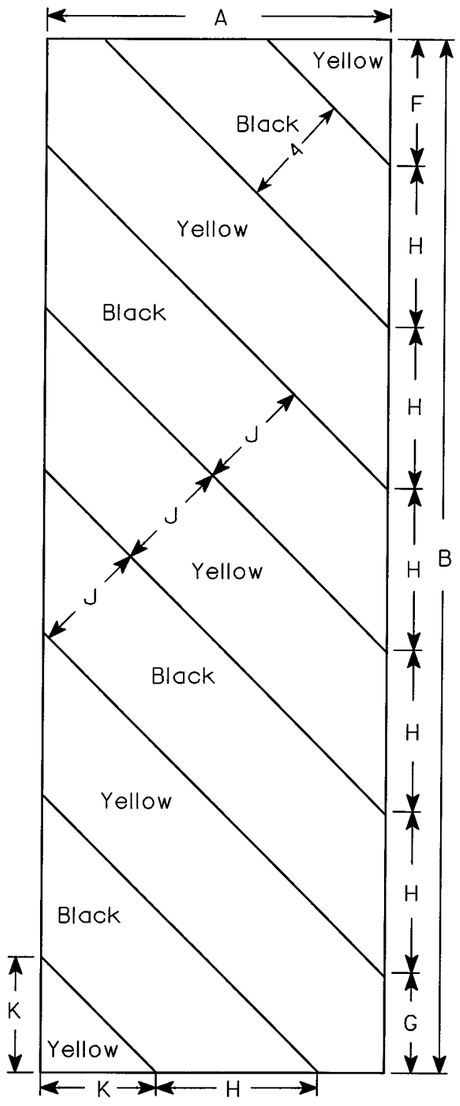
LEVELS ON - 1,2,3, 5,6, 10,

58,59,60, 63

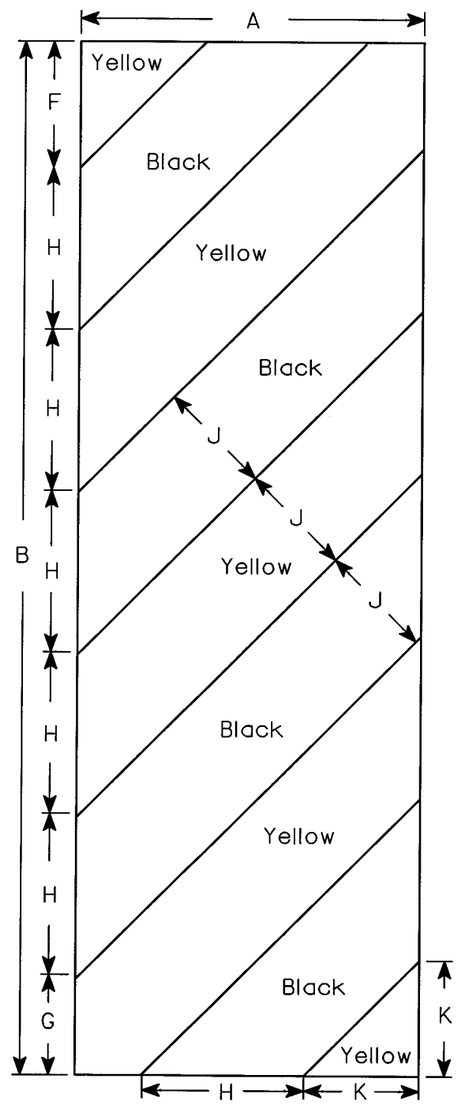
FILE NAME: tr_stdplate w552.dgn PLOT SCALE: 2½ :1
ORIGINATOR: Sandy Anderson
REV. DATE: 8/12/97
LEVELS ON - 2, 5, 63, 58, 59, 60

STATE PROJECT NUMBER

SHEET NO. 433



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

Metric equivalent for this sign is:

SIZE	
1	
2	300 mm X 900 mm
3	450 mm X 1350 mm
4	
5	

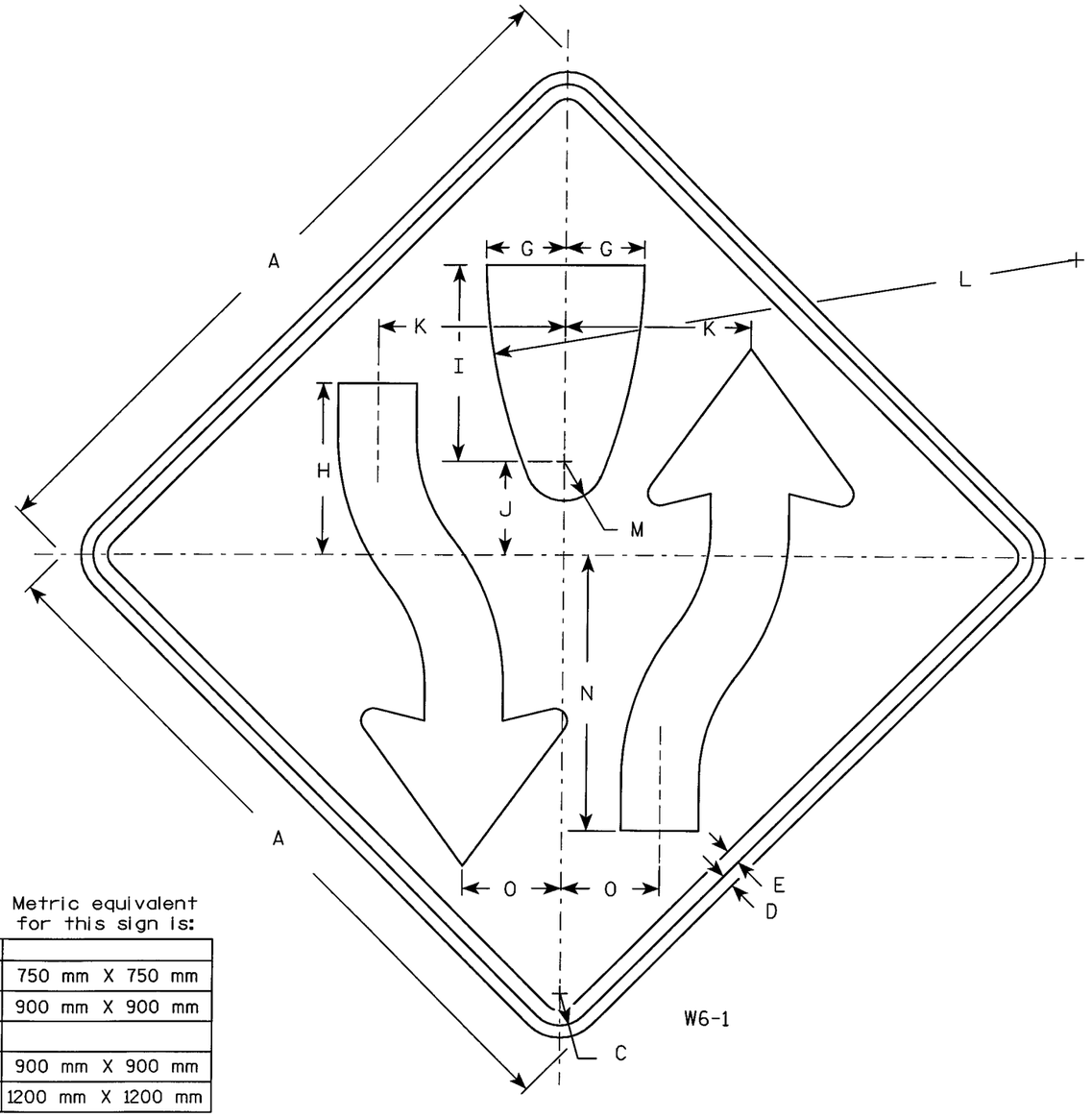
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0	0.27
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75	0.61
4																												
5																												

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 8/13/97 PLATE NO. W5-52.7



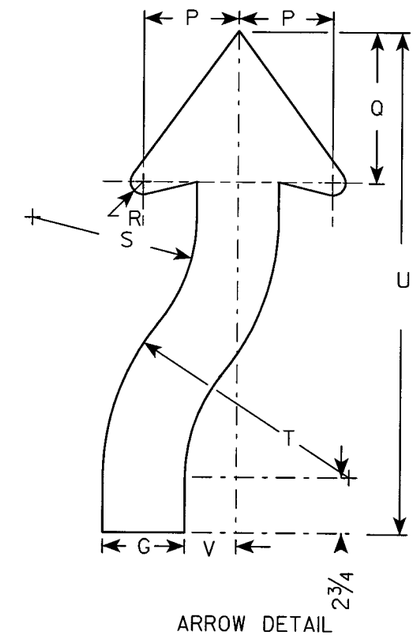
W6-1

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 mm

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25	0.56
2	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0	0.81
3																												
4	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0	0.81
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0	1.44

STANDARD SIGN
W6-1 & W6-2

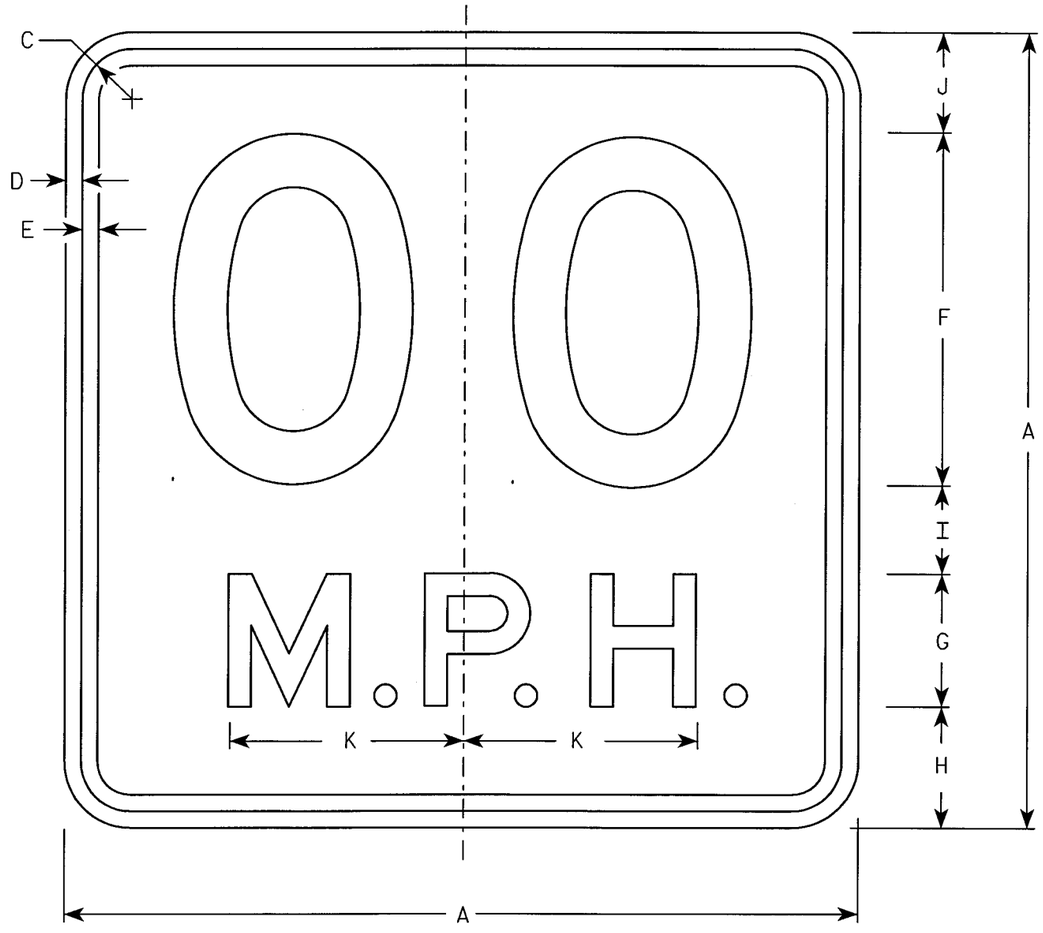
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

DATE 01/15/02 PLATE NO. W6-1.11

STATE PROJECT NUMBER: | HWY: | COUNTY: | SHEET NO: 434 E

LEVELS ON - 1.2.3. 5.6. 10.
58.59.60. 63
FILE NAME : C:\Users\Projects\tr_stdplate\W61.DGN PLOT DATE : 18-MAR-2002 11:50 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 0.291298:1.000000
WISDOT/CADDS SHEET 42



W13-1 & W13-1W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 7
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E
7. W13-1 has a yellow background while W13-1W has a white background.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 450 mm
2	450 mm X 450 mm
3	600 mm X 600 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
2	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00	0.36
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81

STANDARD SIGN
W13-1 & W13-1W

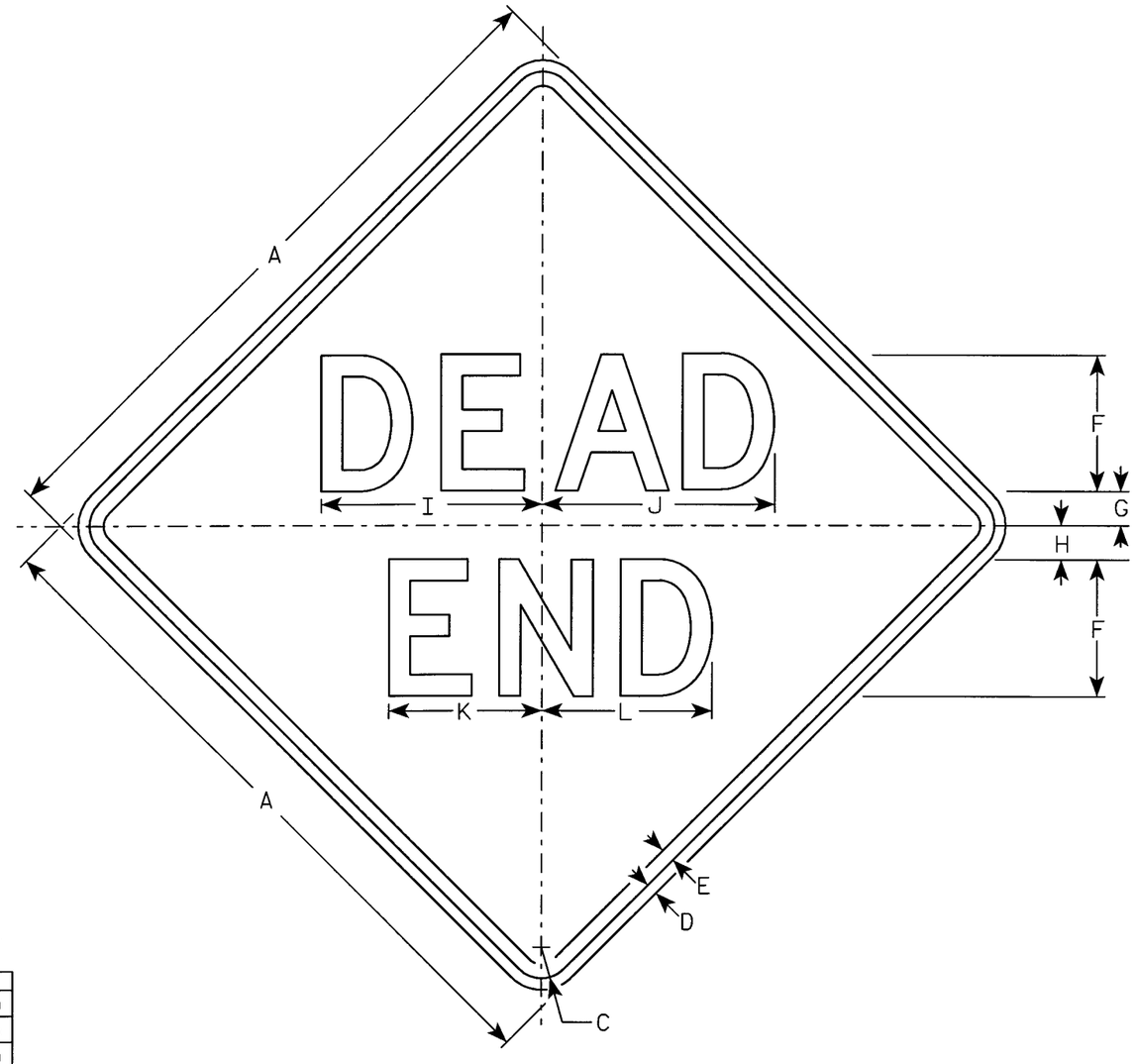
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Spang for State Traffic Engineer

DATE 01/22/02 PLATE NO. W13-1.11

STATE PROJECT NUMBER: | HWY: | COUNTY: | SHEET NO: 435 E

LEVELS ON - 2,3, 5,6, 10,
50,59,62, 63



W14-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0	0.36
2	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25	0.56
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0	0.81
4																												
5																												

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Christa J Spagg for State Traffic Engineer

DATE 01/23/02 PLATE NO. W14-1.5

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 436	E

FILE NAME : C:\Users\Projects\tr_stdplate\W141.DGN PLOT DATE : 18-MAR-2002 11:45 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 0.260087:1.000000

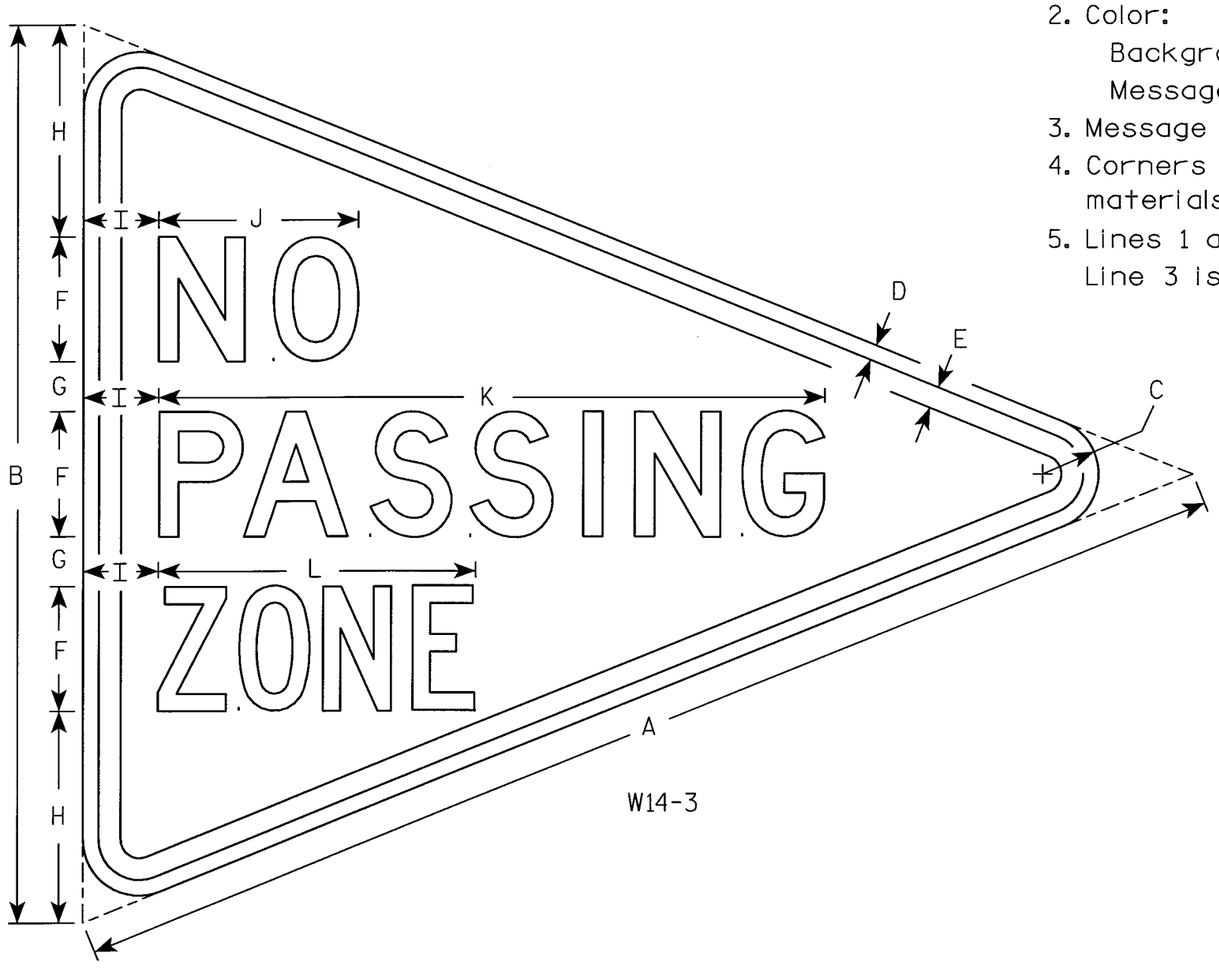
WISDOT/CADDS SHEET 42

LEVELS ON • I.R.S. 56 10.

56.59 63

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 900 mm
3	1600 mm X 1200 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0	.54
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7	.96
4																												
5																												

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Spay for State Traffic Engineer

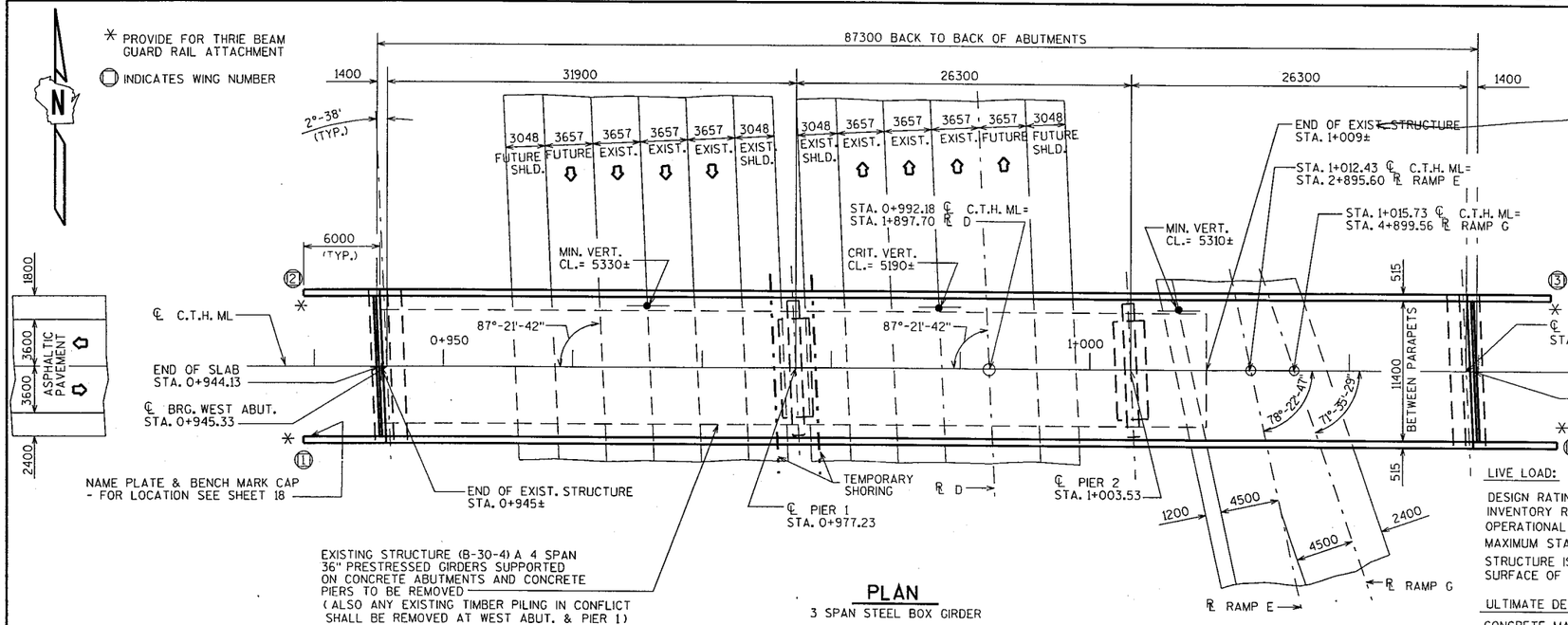
DATE 1/21/98 PLATE NO. W14-3.8

SHEET NO: 437 E

DISTRICT CONTACT: BETH BLUM

TYPE CODE = X231

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	438



PLAN
3 SPAN STEEL BOX GIRDER

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 250 x 62 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 490 kN PER PILE. ESTIMATED 12 m LONG @ W. ABUT. & 13 m LONG @ E. ABUT.

PIERS TO BE SUPPORTED ON HP 250 x 62 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 490 kN PER PILE. ESTIMATED 10 m LONG.

TRAFFIC VOLUME

C.T.H. ML	IH. 94
A.D.T.=6,000 (2019)	A.D.T.=60,000 (2019)
R.D.S.=60 km/h	R.D.S.=110 km/h

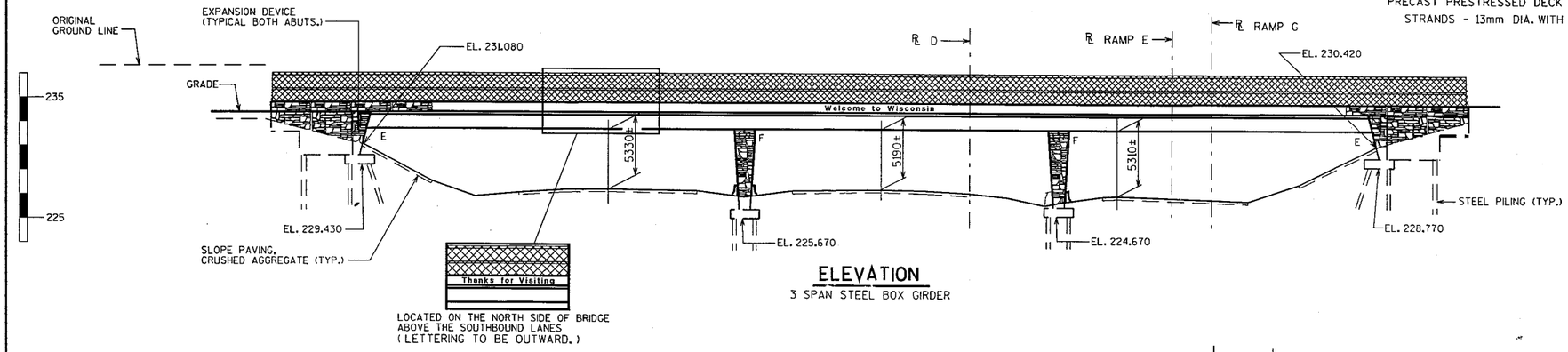
DESIGN DATA

LIVE LOAD:

DESIGN RATING; MS-18
INVENTORY RATING; MS-30
OPERATIONAL RATING; MS-50
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 1110 kN.
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 1.0 kN/m².

ULTIMATE DESIGN STRESSES:

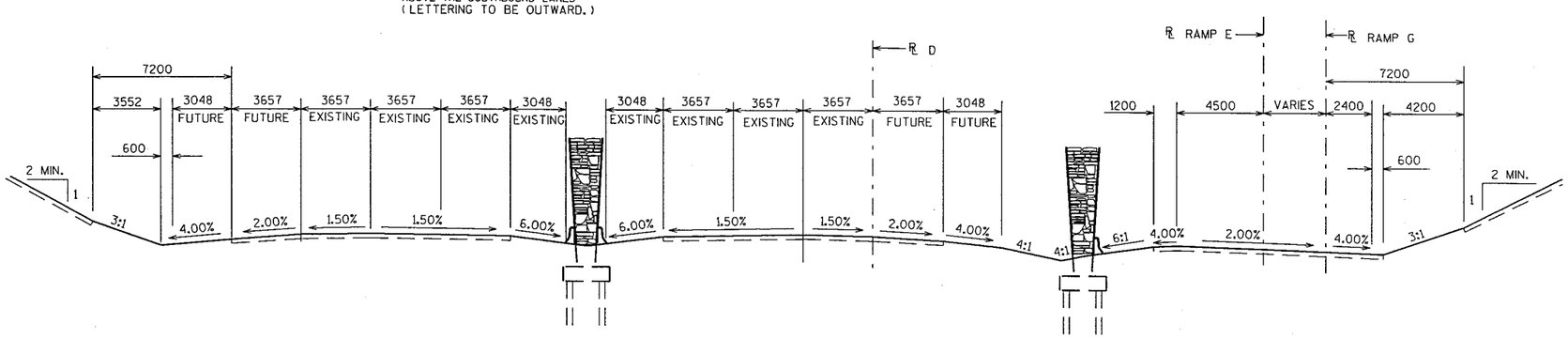
CONCRETE MASONRY SLAB — f'c = 28 MPa ALL OTHER — f'c = 24 MPa
BAR STEEL REINFORCEMENT, AASHTO M-31, GRADE 420 — fy = 420 MPa
HIGH-STRENGTH STRUCTURAL STEEL (A.S.T.M. A709M, GRADE 345) — Fy = 345 MPa
STRUCTURAL CARBON STEEL (A.S.T.M. A709M, GRADE 250) — Fy = 250 MPa
PRECAST PRESTRESSED DECK PANELS — f'c = 34 MPa
STRANDS - 13mm DIA. WITH ULTIMATE TENSILE STRENGTH OF 1860 MPa.



ELEVATION
3 SPAN STEEL BOX GIRDER

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. W. ABUT. DETAILS
6. EAST ABUTMENT
7. E. ABUT. DETAILS
8. PIER 1
9. PIER 2
10. GIRDER DETAILS
11. GIRDER DETAILS
12. FRAMING PLAN
13. GIRDER DETAILS
14. PIER BEARINGS
15. ABUTMENT BEARINGS
16. DECK PANEL DETAILS
17. SUPERSTRUCTURE
18. SLOPED FACE PARAPET "LF" MODIFIED
19. TUBULAR RAILING, SPECIAL
20. EXPANSION DEVICE



TYPICAL SECTION THRU IH. 94

BRIDGE OFFICE CONTACTS :
FINN HUBBARD (608) 266-8489
KEITH NELSON (608) 266-5083

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

C.T.H. ML OVER IH. 94

COUNTY KENOSHA		TOWN ~~CITY / VILLAGE~~ BRISTOL	
DESIGN SPEC. AASHTO STD SPEC 1998		LOAD MS-18	CONST. SPEC. 1996
DESIGNED BY KTN	DESIGN CK'D. DJK	DRAWN BY BUDD	PLANS CK'D. J.C.K.

APPROVED *H.H. Anderson* 05-07-02
CHIEF STRUCTURAL DESIGN ENGINEER DATE

GENERAL PLAN

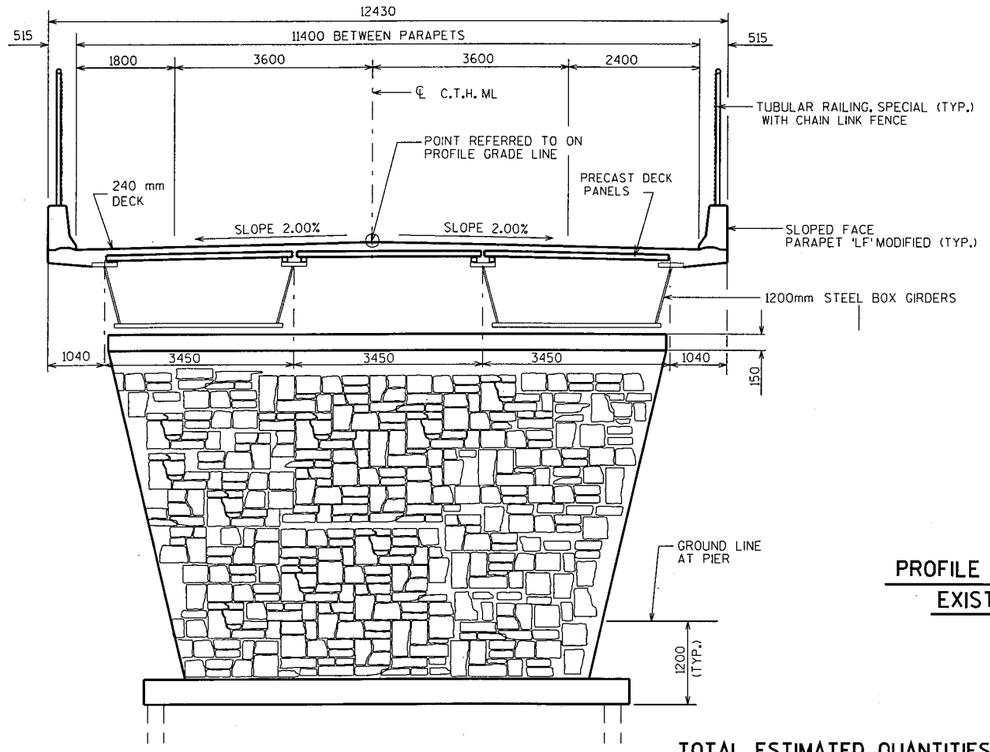
SHEET 1 OF 20

DATE: 05-01

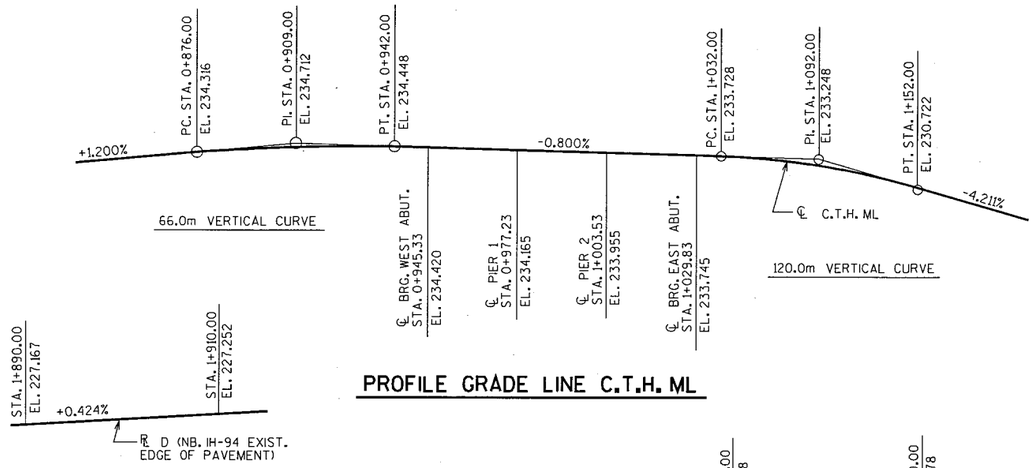
FILE= 30GP1.DGN
SCALE= 200

I.D. 1032-02-01

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	439

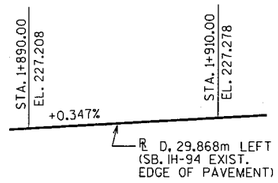


CROSS SECTION THRU ROADWAY LOOKING EAST



PROFILE GRADE LINE C.T.H. ML

PROFILE GRADE LINE REF. LINE 'D' NB. IH-94
EXIST. EDGE OF PAVEMENT



PROFILE GRADE LINE SB. IH-94
EXIST. EDGE OF PAVEMENT

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL REINFORCING BARS ARE METRIC AND THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE IN METERS (m).

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE IN PLACE BEFORE ABUTMENT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

AT ABUTMENTS, THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

ALL FIELD CONNECTIONS SHALL BE MADE WITH M 20mm DIAMETER (OR ¾"Φ)A325M HIGH-TENSILE STRENGTH BOLTS UNLESS OTHERWISE SHOWN OR NOTED.

THE EXTERIOR OF THE BOX GIRDER FINISH TOP COAT SHALL BE REDDISH-BROWN, (FEDERAL STANDARD COLOR NO. 20152) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

THE INTERIOR OF THE BOX GIRDER TOP COAT SHALL BE WHITE, (FEDERAL STANDARD COLOR NO. 27925).

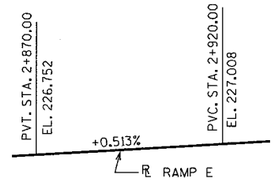
FORMLINER ON WINGWALLS, ABUTMENT BODY, PIER AND BACKS OF PARAPETS TO BE A RUSTIC ASHLAR STONE FINISH STAINED TO RESEMBLE WEATHERED LIMESTONE (SEE THE SPECIAL PROVISIONS FOR "ARCHITECTURAL SURFACE TREATMENT").

PARAPET LETTERING STAIN TO BE REDDISH-BROWN.

TUBULAR RAILING AND VINYL COATED CHAIN LINK FENCE TO BE REDDISH-BROWN.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	WEST ABUT.	EAST ABUT.	PIER 1	PIER 2	TOTALS
REMOVING OLD BRIDGE, STA. 0+988.54	L.S.	—	—	—	—	—	1
EXCAVATION FOR STRUCTURES, BRIDGES, B-30-30	L.S.	—	—	—	—	—	1
STRUCTURE BACKFILL	m³	—	312	315	—	—	627
CONCRETE MASONRY, BRIDGES	m³	236	122	122	91	96	667
PROTECTIVE SURFACE TREATMENT	m²	1190	—	—	—	—	1190
EXPANSION DEVICE, STRUCTURE B-30-30	L.S.	—	—	—	—	—	1
HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	kg	—	2785	2780	540	540	6645
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	kg	26100	930	930	3640	5190	36790
HIGH-STRENGTH STRUCTURAL STEEL	kg	148100	—	—	—	—	148100
STRUCTURAL CARBON STEEL	kg	9850	—	—	—	—	9850
STEEL PILING, DELIVERED AND DRIVEN, HP 250 mm x 62 kg/m	m	—	192	208	220	220	840
RUBBERIZED MEMBRANE WATERPROOFING	m²	—	8	8	—	—	16
PAINTING, EPOXY SYSTEM, STRUCTURE B-30-30	L.S.	—	—	—	—	—	1
SLOPE PAVING, CRUSHED AGGREGATE	m²	—	82	85	—	—	167
ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	—	—	—	—	4
ARCHITECTURAL SURFACE TREATMENT	m²	114	62	62	125	138	501
PRECAST PRESTRESSED DECK PANELS	m²	817	—	—	—	—	817
WELDED STUD SHEAR CONNECTORS, 22 mm x 150 mm	EACH	1328	—	—	—	—	1328
WELDED STUD SHEAR CONNECTORS, 22 mm x 200 mm	EACH	1328	—	—	—	—	1328
NON-LAMINATED ELASTOMERIC BEARING PADS, SPECIAL	EACH	8	—	—	—	—	8
LAMINATED ELASTOMERIC BEARING PADS	EACH	8	—	—	—	—	8
TUBULAR RAILING WITH FENCING, SPECIAL, STRUCTURE B-30-30	L.S.	—	—	—	—	—	1
PIPE UNDERDRAIN, 150 mm	m	—	16	16	—	—	32
PIPE UNDERDRAIN, UNPERFORATED, 150 mm	m	—	6	6	—	—	12
GEOTEXTILE FABRIC, TYPE DF	m²	—	37	37	—	—	74
ACCESS DOORS	EACH	4	—	—	—	—	4
TEMPORARY SHORING, B-30-30	m²	—	—	—	40	—	40
GROUT	m³	7	—	—	—	—	7
QMP, READY MIXED CONCRETE MASONRY FOR BRIDGES	m³	236	122	122	91	96	667
QMP, MASONRY STRENGTH INCENTIVE, READY MIXED CONCRETE	DOL.	2832	1464	1464	1092	1152	8004
NON-BID ITEMS							
BRIDGE SEAT PROTECTION	L.S.	—	—	—	—	—	1



PROFILE GRADE LINE RAMP E

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	1996	DRAWN BY	BUDD	PLANS CK'D.	JCK

CROSS SECTION & QUANTITIES

SHEET 2

FILE= 30GP2.DGN
SCALE = 50

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	440

ABBREVIATIONS

F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS

Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING

95/152=95 Blows for 152mm Penetration
Probing taken with a 159.1Kg Wt. Falling 457mm on a 51mm O.D. Point.

Probing No.
Sta.
Elevation
7 Average Blows Per 305mm
Refusal 95/152

LEGEND OF BORING

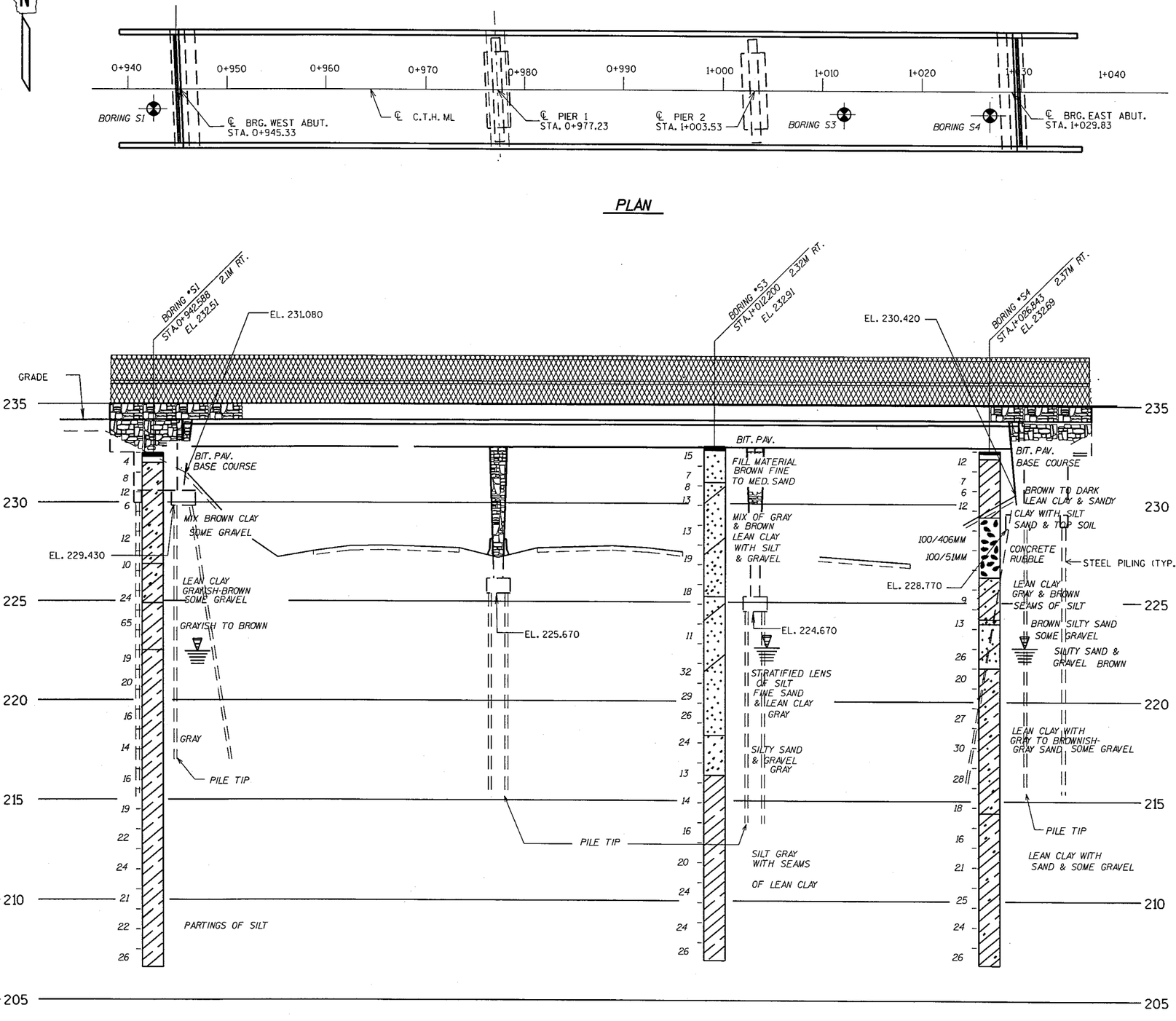
Unconfined Strength Kg/cm² → 7.7 7
Blows Per 305mm Using 63.6 Kg Wt. Falling 762mm
Wash Sample
Shelby Tube — S.T.
Ground Water Elevation
No Ground Water Observed Above This Elevation

Boring No.
Sta.
Elev.
Sandy Gravel
F
Boulders or Cobbles
Sand
Silty Clay
So
Limestone

Unless otherwise specified, the blows per 305mm at the locations indicated are based on driving a 51mm O.D. x 35mm I.D. split spoon sampler with a 63.6Kg hammer having a free fall of 762mm. The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	Budd	J.C.K.

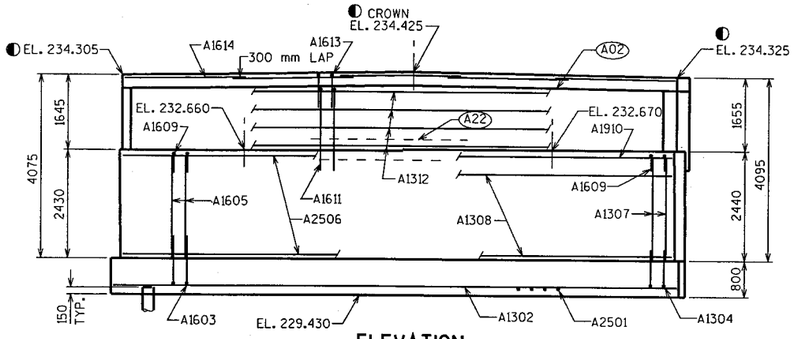
SUBSURFACE EXPLORATION

SHEET 3

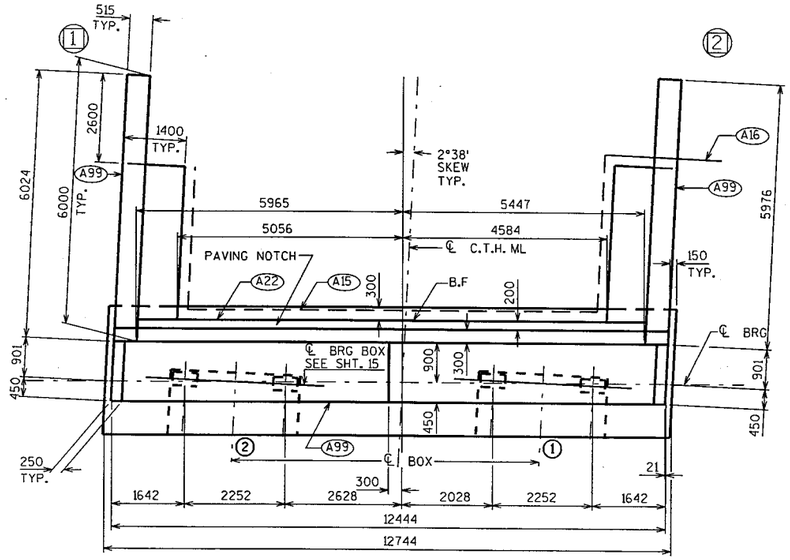
FILE= 30SUBSUR.DGN
SCALE= 200 ▪

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	441

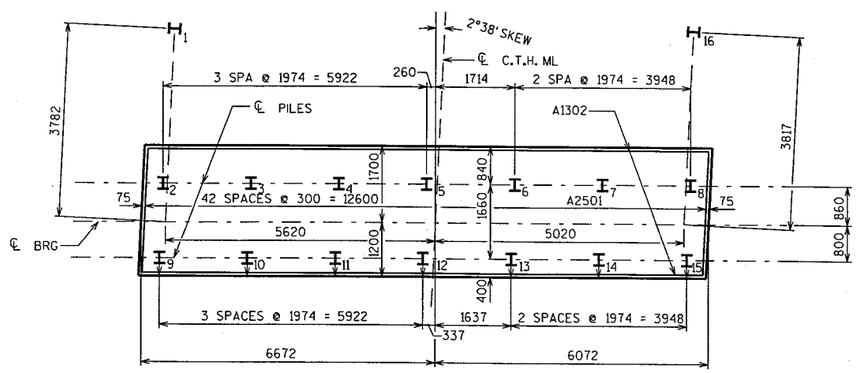
◐ ELEV. @ F.F. BACKWALL



ELEVATION
(LOOKING WEST)

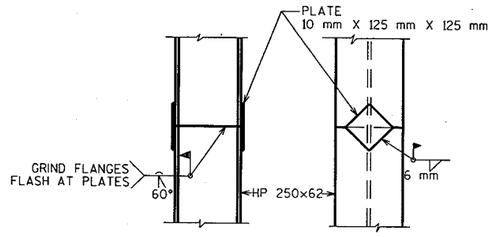


PLAN

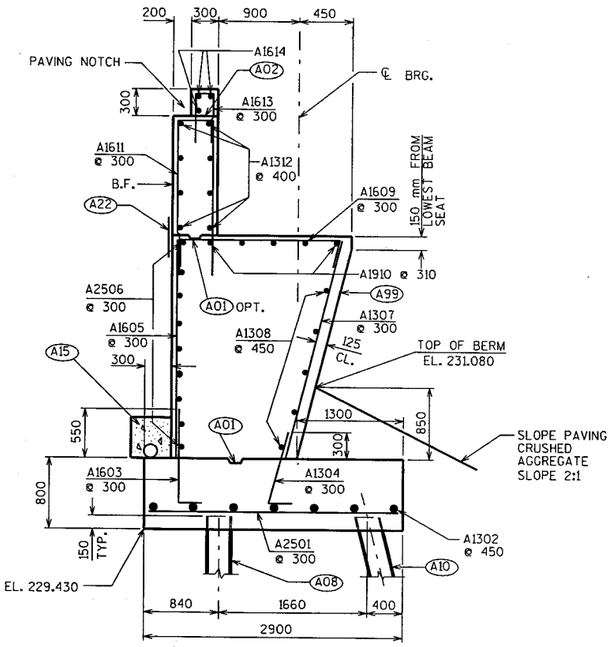


I INDICATES PILE BATTERED 4:1 IN DIRECTION SHOWN

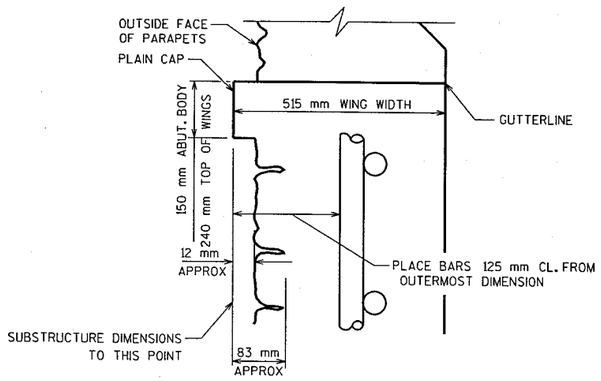
PILE PLAN



PILE SPLICE DETAIL



SECTION THRU ABUTMENT



FORM LINER DETAIL

(A01) KEYWAY FORMED BY A BEVELED 38 mm x 140 mm

(A02) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

(A08) SUPPORT ABUTMENT ON HP 250 x 62 STEEL PILING, ESTIMATED 12 m LONG. & DRIVEN TO A MIN. BRG. VALUE OF 490 kN PER PILE.

(A10) INDICATES PILE BATTERED 4:1 IN DIRECTION OF ARROW.

(A15) PIPE UNDERDRAINS, 150 mm, SLOPE TO DRAIN. ENCLOSED IN 460 mm x 460 mm AREA OF SIZE 1 COARSE AGGREGATE (INCLUDED IN UNDERDRAIN BID ITEM) WRAPPED IN GEOTEXTILE FABRIC, TYPE 'DF'.

(A16) PIPE UNDERDRAIN, 150 mm, UNPERFORATED. TO SUITABLE DRAINAGE.

(A22) 457 mm (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A99) ARCHITECTURAL TREATMENT ON THESE SURFACES. SEE FORM LINER DETAIL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC. 1996	DRAWN BY JPH	PLANS CK'D. J.C.K.

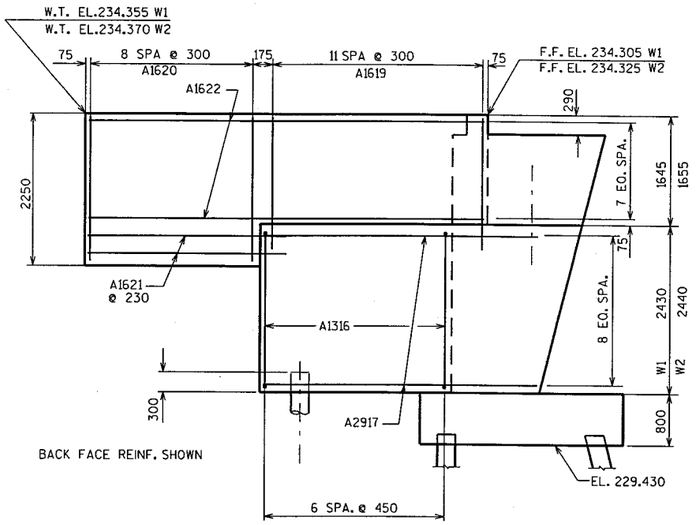
WEST ABUTMENT

SHEET 4

SCALE = 60

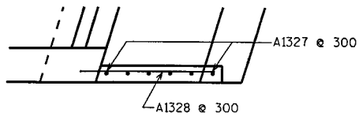
FILE= 30WABUT.DGN

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	442

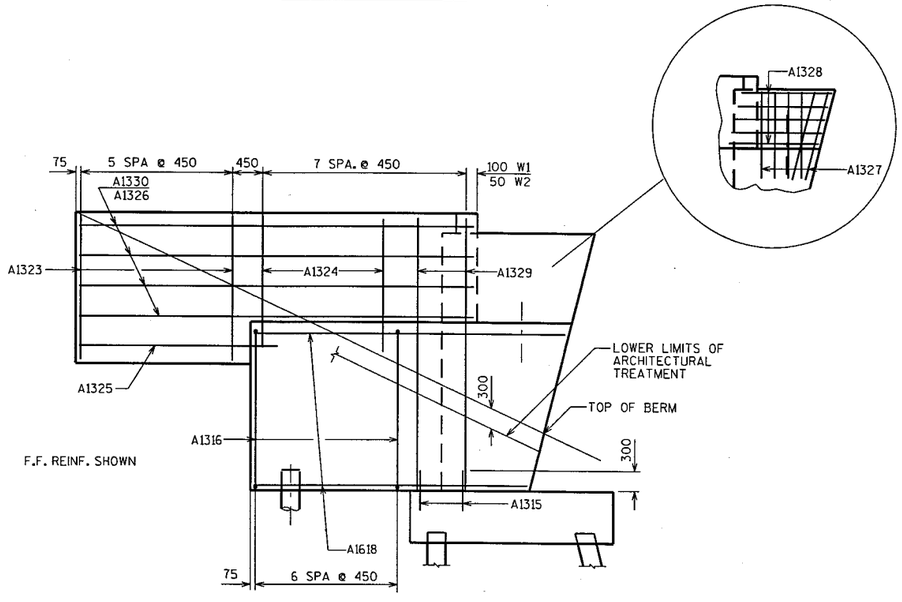


WINGS 1 ELEVATION

WING 2 SIMILAR



PLAN @ SIDEWALL



WING 1 ELEVATION

WING 2 SIMILAR

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 38 mm x 140 mm. (457 mm R.M.W. @ B.F. & 19 mm "V" GROOVE @ F.F. IF JOINT IS USED).

(A25) SEE PARAPET SHEET FOR BARS AND DETAILS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
A1618	2 SERIES OF 9	3950 TO 4500
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

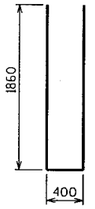
BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

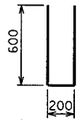
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
A2501		43	2800				ABUT - FTG.
A1302		7	12645				ABUT - FTG.
A1603		42	1380	X			FTG - BODY - B.F.
A1304		42	1120	X			FTG - BODY - F.F.
A1605		42	2380				BODY - B.F. - VERT
A2506		9	12190				BODY - B.F. - HORIZ
A1307		42	2380				BODY - F.F. - VERT
A1308		5	12190				BODY - F.F. - HORIZ
A1609		42	2200	X			BODY - TOP - HORIZ.
A1910		5	12190				BODY - TOP - HORIZ.
A1611	X	39	4040	X			BODY - BACKWALL - VERT
A1312	X	8	12190				BACKWALL - HORIZ
A1613	X	39	1320	X			BACKWALL & PAVING BLOCK
A1614	X	15	2550				PAVING BLOCK - HORIZ
A1315		4	@ 600				WINGS - FTG. - DOWELS
A1316		14	7240	X			WINGS - VERT - FILLET
A2917		18	4010				WINGS - HORIZ - FILLET
⚠ A1618		18	4225		X		WINGS - HORIZ - F.F.
A1619		24	2055				WINGS - VERT - B.F.
A1620		18	2150				WINGS - VERT - B.F.
A1621		4	3000				WINGS - HORIZ - B.F.
A1622		16	5900				WINGS - HORIZ - B.F.
A1323		12	2150				WINGS - VERT - F.F.
A1324		12	2055				WINGS - VERT - F.F.
A1325		2	3000				WINGS - HORIZ - F.F.
A1326		4	5900				WING 1 - HORIZ - F.F.
A1327		12	1700				WINGS - VERT - SIDEWALL
A1328		10	2060				WINGS - HORIZ - SIDEWALL
A1329		4	4025				WINGS - VERT - F.F.
A1330		4	5850				WING 2 - HORIZ - F.F.

A1304

A1603



A1611



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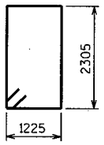

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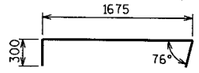

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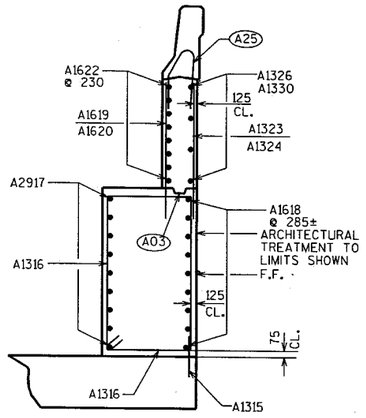


SECTION THRU WING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	1996	DRAWN BY	JPH	PLANS CK'D.	J.C.K.

W. ABUT DETAILS

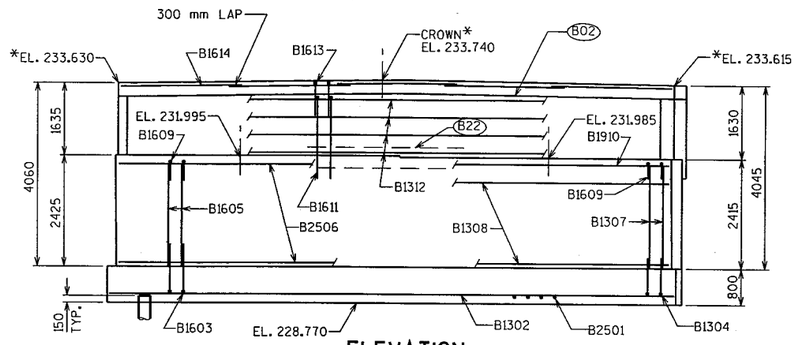
SHEET 5

SCALE = 60

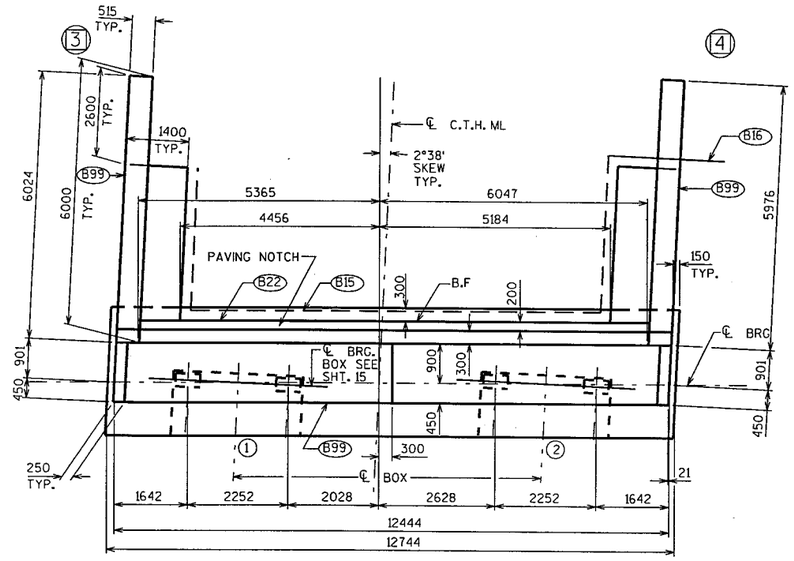
FILE= 30WABUTDET.DGN

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	443

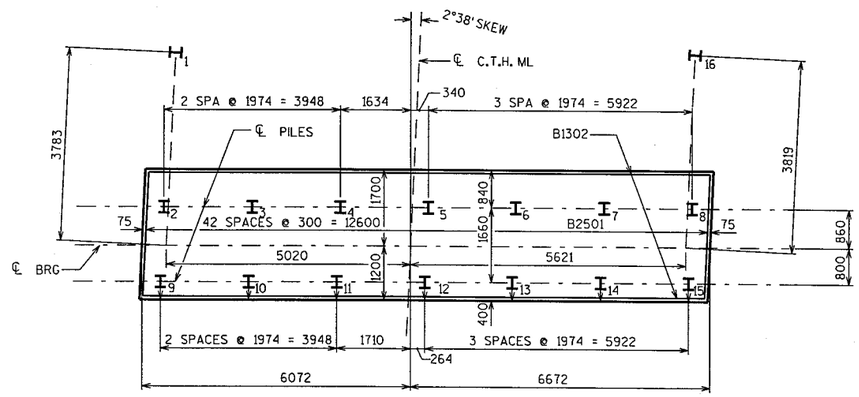
*ELEVATION @ F.F. BACKWALL



ELEVATION
(LOOKING EAST)

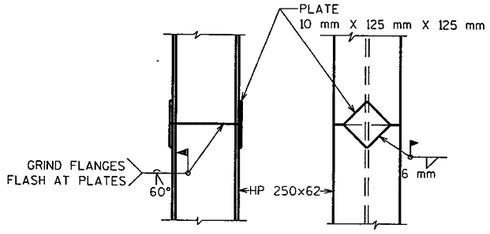


PLAN

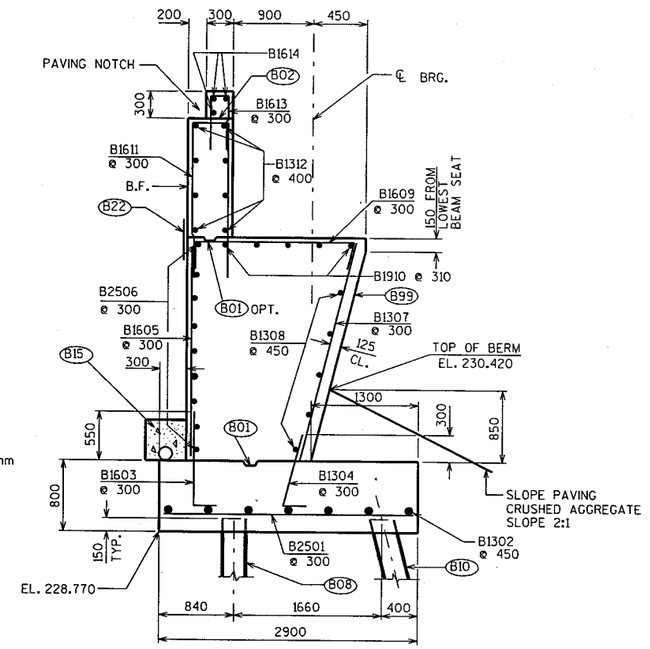


PILE PLAN

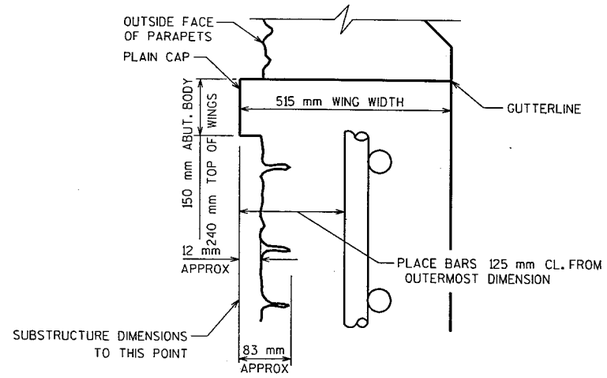
I INDICATES PILE BATTERED 4:1 IN DIRECTION SHOWN



PILE SPLICE DETAIL



SECTION THRU ABUTMENT



FORM LINER DETAIL

(B01) KEYWAY FORMED BY A BEVELED 38 mm x 140 mm

(B02) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

(B08) SUPPORT ABUTMENT ON HP 250 x 62 STEEL PILING. ESTIMATED 13 m LONG. & DRIVEN TO A MIN. BRG. VALUE OF 490 kN PER PILE.

(B10) INDICATES PILE BATTERED 4:1 IN DIRECTION OF ARROW.

(B15) PIPE UNDERDRAINS, 150 mm. SLOPE TO DRAIN. ENCLOSED IN 460 mm x 460 mm AREA OF SIZE 1 COARSE AGGREGATE (INCLUDED IN UNDERDRAIN BID ITEM) WRAPPED IN GEOTEXTILE FABRIC, TYPE 'DF'.

(B16) PIPE UNDERDRAIN, 150 mm, UNPERFORATED. TO SUITABLE DRAINAGE.

(B22) 457 mm (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(B99) ARCHITECTURAL TREATMENT ON THESE SURFACES. SEE FORM LINER DETAIL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC. 1996	DRAWN BY JPH	PLANS CK'D. J.C.K.

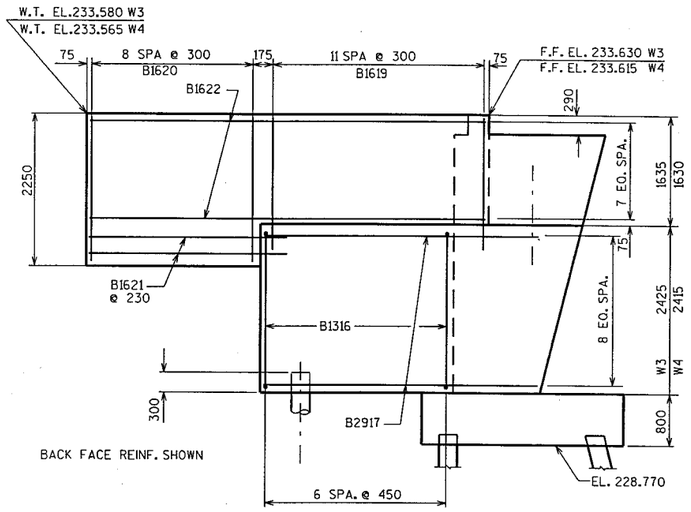
EAST ABUTMENT

SHEET 6

SCALE = 60

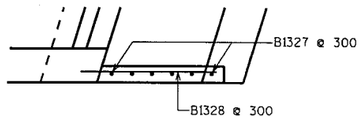
FILE= 30EABUT.DGN

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	44

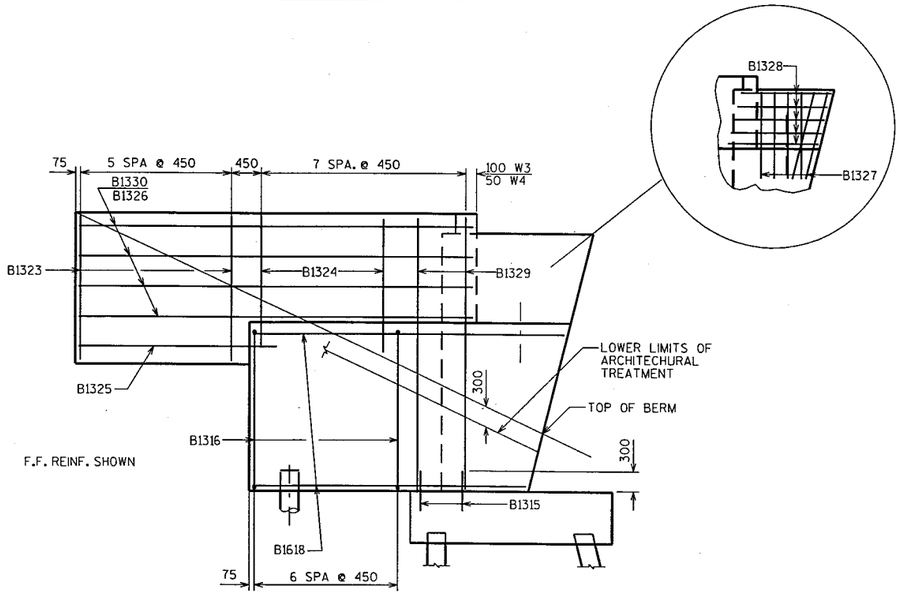


WING 3 ELEVATION

WING 4 SIMILAR

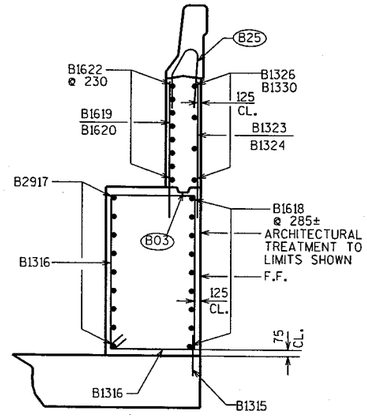


PLAN @ SIDEWALL



WING 3 ELEVATION

WING 4 SIMILAR



SECTION THRU WING

B803
OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 38 mm x 140 mm. (457 mm R.M.W. @ B.F. & 19 mm "V" GROOVE @ F.F. IF JOINT IS USED).

B25 SEE PARAPET SHEET FOR BARS AND DETAILS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

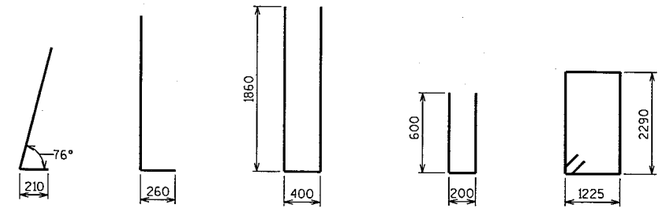
MARK	NO. REQD.	LENGTH
B1618	2 SERIES OF 9	3950 TO 4500
	SERIES OF	TO

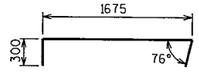
BUNDLE AND TAG EACH SERIES SEPARATELY.

BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
B2501		43	2800				ABUT - FTG.
B1302		7	12645				ABUT - FTG.
B1603		42	1380	X			FTG - BODY - B.F.
B1304		42	1120	X			FTG - BODY - F.F.
B1605		42	2365				BODY - B.F. - VERT
B2506		9	12190				BODY - B.F. - HORIZ
B1307		42	2365				BODY - F.F. - VERT
B1308		5	12190				BODY - F.F. - HORIZ
B1609		42	2200	X			BODY - TOP - HORIZ.
B1910		5	12190				BODY - TOP - HORIZ.
B1611	X	39	4040	X			BODY - BACKWALL - VERT
B1312	X	8	12190				BACKWALL - HORIZ
B1613	X	39	1320	X			BACKWALL & PAVING BLOCK
B1614	X	15	2550				PAVING BLOCK - HORIZ
B1315		4	600				WINGS - FTG. - DOWELS
B1316		14	7240	X			WINGS - VERT - FILLET
B2917		18	4010				WINGS - HORIZ - FILLET
⚠ B1618		18	4225		X		WINGS - HORIZ - F.F.
B1619		24	2055				WINGS - VERT - B.F.
B1620		18	2150				WINGS - VERT - B.F.
B1621		4	3000				WINGS - HORIZ - B.F.
B1622		16	5900				WINGS - HORIZ - B.F.
B1323		12	2150				WINGS - VERT - F.F.
B1324		12	2055				WINGS - VERT - F.F.
B1325		2	3000				WINGS - HORIZ - F.F.
B1326		4	5900				WING 3 - HORIZ - F.F.
B1327		12	1700				WINGS - VERT - SIDEWALL
B1328		10	2060				WINGS - HORIZ - SIDEWALL
B1329		4	4000				WINGS - VERT - F.F.
B1330		4	5850				WING 4 - HORIZ - F.F.





B1609

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC. 1996	DRAWN BY JPH	PLANS CK'D. J.C.K.

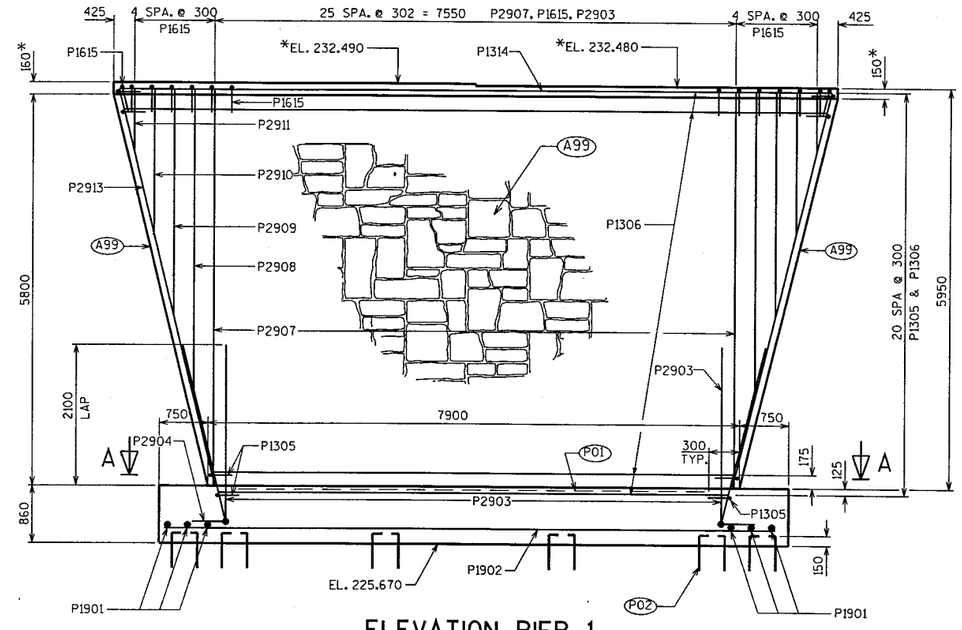
E. ABUT DETAILS

SHEET 7

SCALE = 60

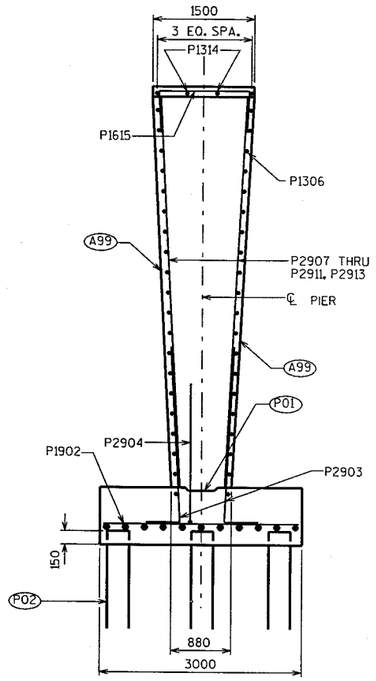
FILE= 30EABUTDET.DGN

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	445



ELEVATION PIER 1

(LOOKING EAST)



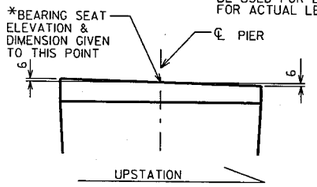
SECTION THRU PIER

BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
P1901		48	2900				FTG.
P1902		11	9300				FTG.
P2903	X	52	3185	X			FTG. & SHAFT
P2904	X	10	3250	X			FTG. & SHAFT - ENDS
⚠ P1305	X	42	1475	X	X		SHAFT - ENDS - HORIZ
⚠ P1306	X	42	9015		X		SHAFT - SIDES - HORIZ
P2907	X	52	5870				SHAFT - SIDES - VERT
P2908	X	4	4750				SHAFT - SIDES - VERT
P2909	X	4	3530				SHAFT - SIDES - VERT
P2910	X	4	2310				SHAFT - SIDES - VERT
P2911	X	4	1100				SHAFT - SIDES - VERT
P2912		NOT	USED				
P2913	X	10	6050				SHAFT - ENDS - VERT
P1314	X	2	10500				SHAFT - TOP - HORIZ
P1615	X	34	1740	X			SHAFT - TOP - VERT

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

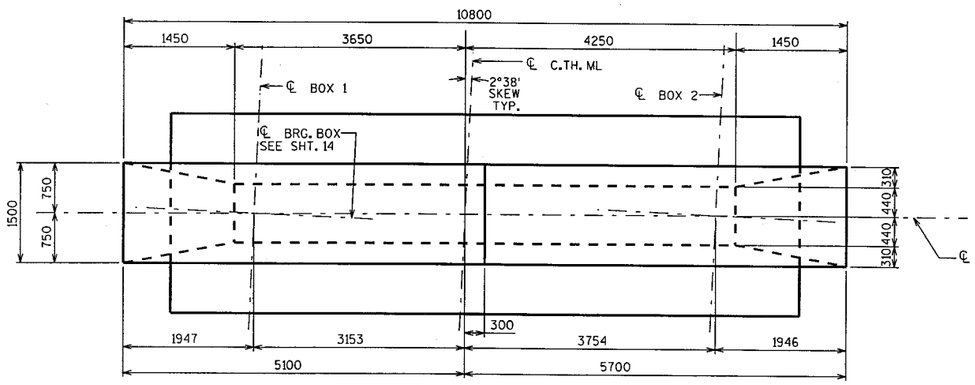


SLOPE BEAM SEAT DETAIL

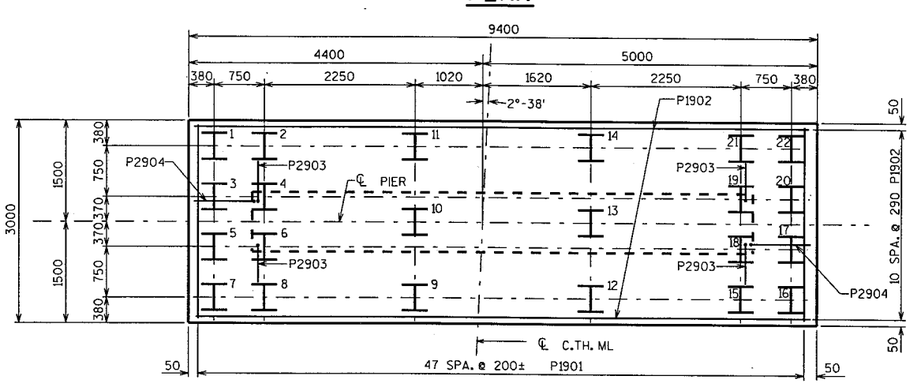
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
P1305	2 SERIES OF 21	1160 TO 1790
P1306	2 SERIES OF 21	7530 TO 10500

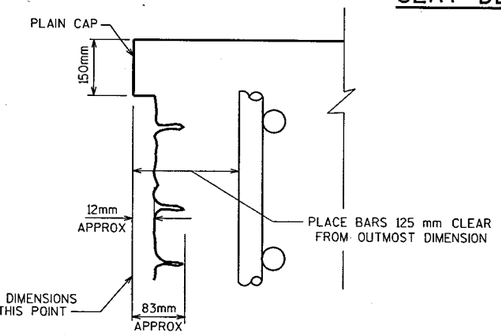
BUNDLE AND TAG EACH SERIES SEPARATELY.



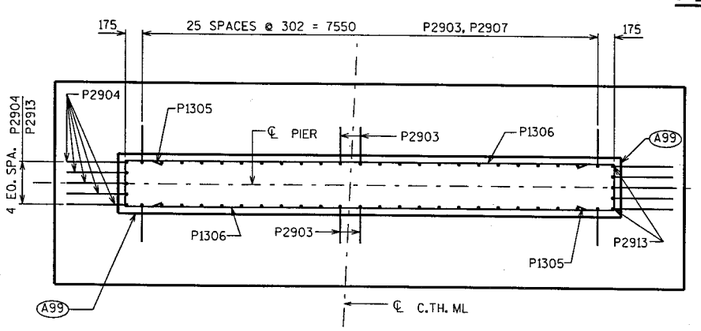
PLAN



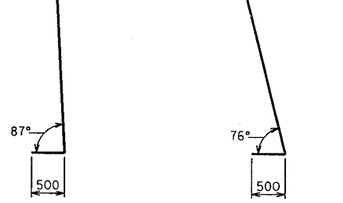
PILE LAYOUT



FORM LINER DETAIL

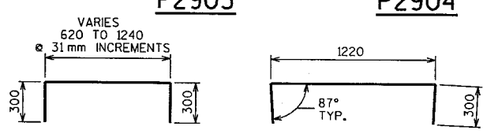


SECTION A-A



P2903

P2904



P1305

P1615

(P02) SUPPORT PIER ON HP 250 x 62 STEEL PILING. ESTIMATED 10 m LONG. & DRIVEN TO A MIN. BRG. VALUE OF 490 kN PER PILE.

(P01) 300 mm X 300 mm X 100 mm CONST. JOINT FORMED BY BEVELED KEYWAY.

(A99) ARCHITECTURAL TREATMENT ON THESE SURFACES. SEE FORM LINER DETAIL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

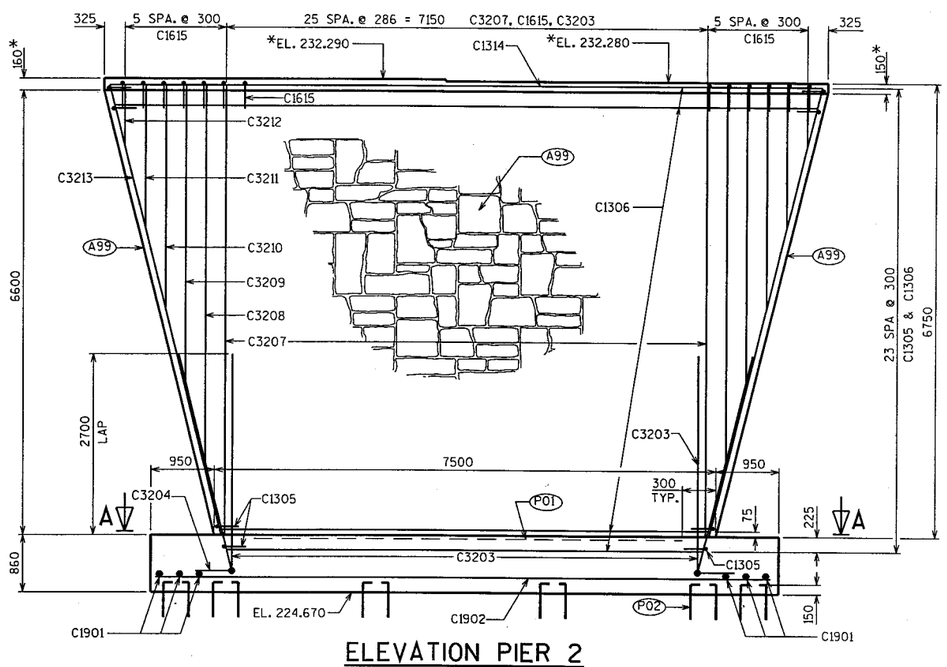
CONST. SPEC.	1996	DRAWN BY	JPH	PLANS CK'D.	J.C.K.

PIER 1

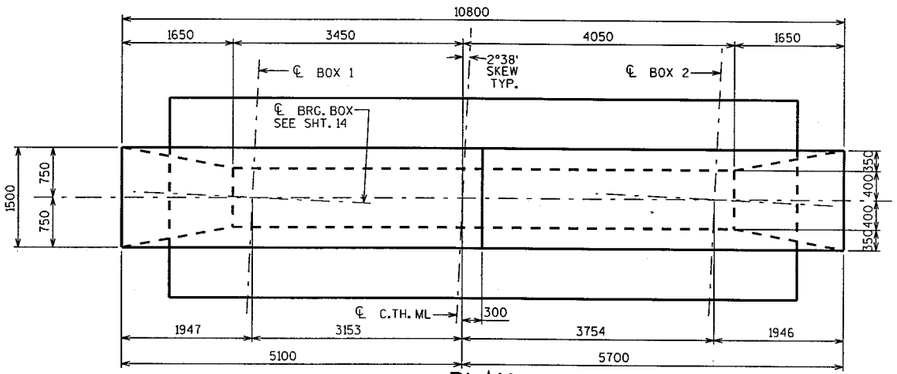
SHEET 8

FILE= 30PIER1.DGN
SCALE = 40'

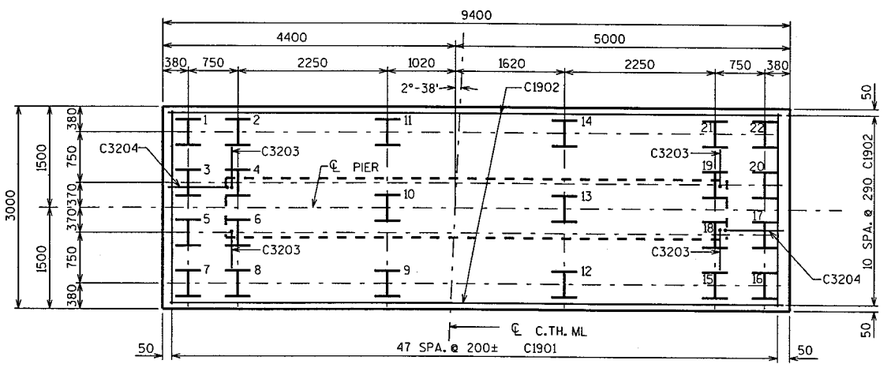
STATE PROJECT NUMBER	SHEET NO.
1032-05-76	446



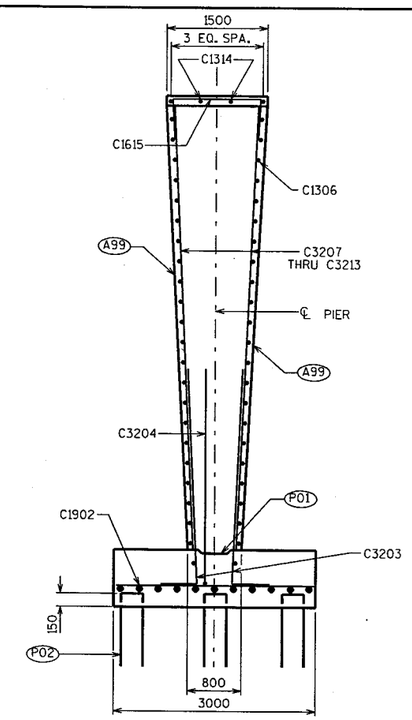
ELEVATION PIER 2
(LOOKING EAST)



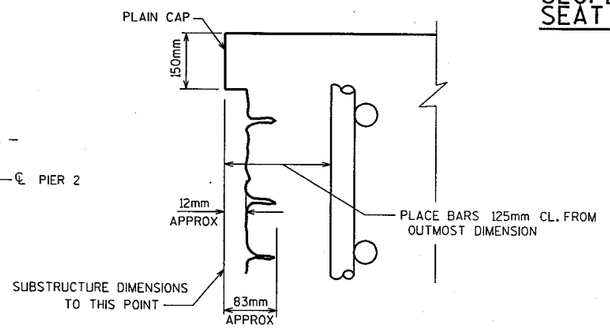
PLAN



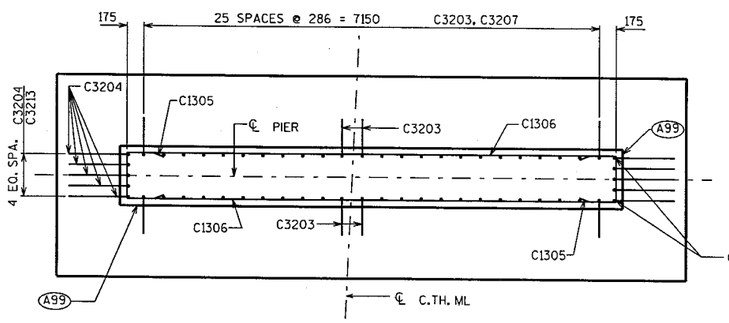
PILE LAYOUT



SECTION THRU PIER



FORM LINER DETAIL



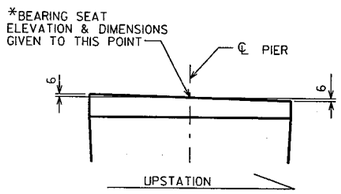
SECTION A-A

BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
C1901		48	2900				FTG.
C1902		11	9300				FTG.
C3203	X	52	3840	X			FTG. & SHAFT
C3204	X	10	3920	X			FTG. & SHAFT
⚠ C1305	X	48	1430	X	X		SHAFT - ENDS - HORIZ
⚠ C1306	X	48	8765		X		SHAFT - SIDES - HORIZ
C3207	X	52	6670				SHAFT - SIDES - VERT
C3208	X	4	5470				SHAFT - SIDES - VERT
C3209	X	4	4270				SHAFT - SIDES - VERT
C3210	X	4	3070				SHAFT - SIDES - VERT
C3211	X	4	1870				SHAFT - SIDES - VERT
C3212	X	4	670				SHAFT - SIDES - VERT
C3213	X	10	6850				SHAFT - ENDS - VERT
C1314	X	2	10490				SHAFT - TOP - HORIZ
C1615	X	36	1740	X			SHAFT - TOP - VERT

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

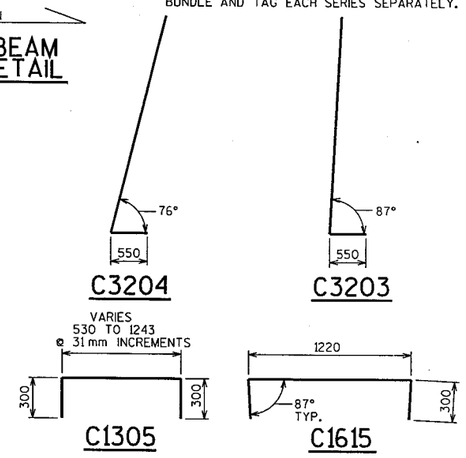


SLOPE BEAM SEAT DETAIL

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
C1305	2 SERIES OF 24	1070 TO 1790
C1306	2 SERIES OF 24	7040 TO 10490

BUNDLE AND TAG EACH SERIES SEPARATELY.



(P02) SUPPORT PIER ON HP 250 x 62 STEEL PILING. ESTIMATED 10 m LONG. & DRIVEN TO A MIN. BRG. VALUE OF 490 kN PER PILE.

(P01) 300 mm X 300 mm X 100 mm CONST. JOINT FORMED BY BEVELED KEYWAY.

(A99) ARCHITECTURAL TREATMENT ON THESE SURFACES. SEE FORM LINER DETAIL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

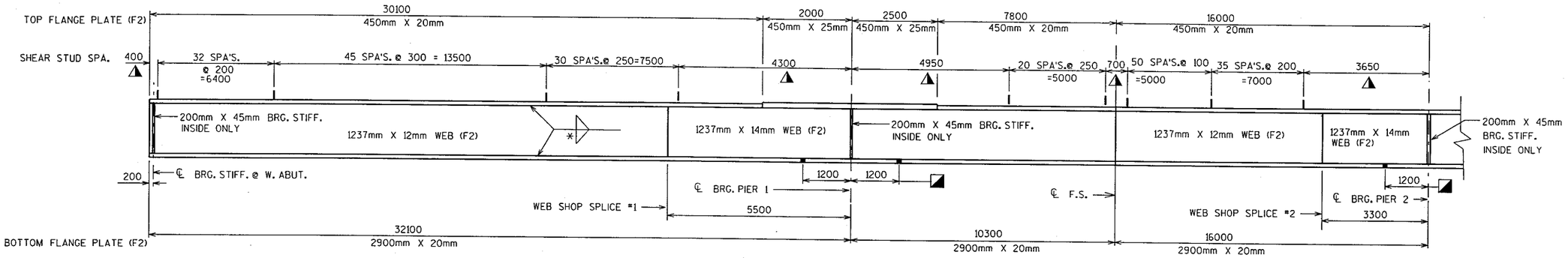
CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	JPH	SCK

PIER 2

SHEET 9

FILE= 30PIER2.DGN
SCALE = 40"

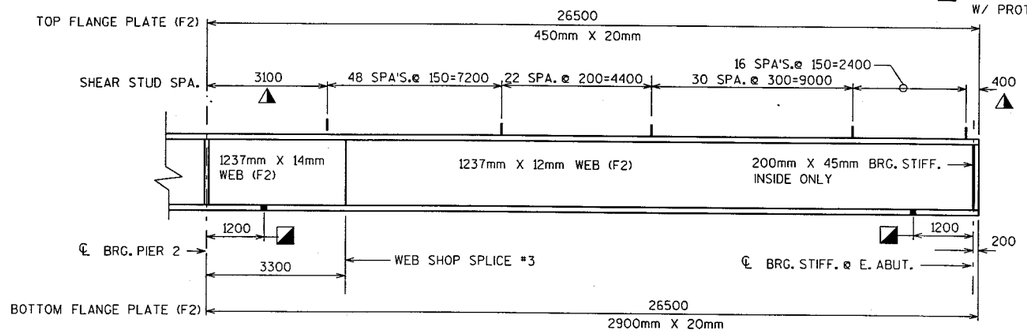
STATE PROJECT NUMBER	SHEET NO.
1032-05-76	447



GIRDER ELEVATION

△ NO SHEAR STUDS

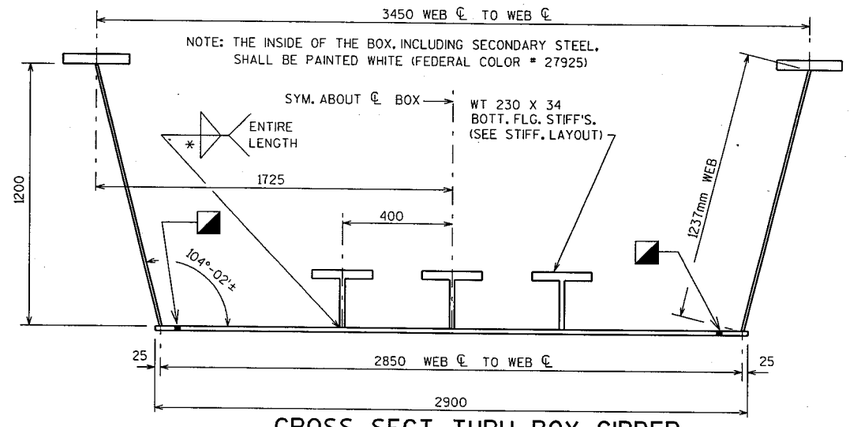
◪ 25mm DIA. DRAIN HOLE W/ PROTECTIVE SCREENING



GIRDER ELEVATION

△ NO SHEAR STUDS

◪ 25mm DIA. DRAIN HOLE W/ PROTECTIVE SCREENING



CROSS SECT. THRU BOX GIRDER

FIELD WELDING TO THE GIRDER, EXCEPT FOR THE SHEAR STUDS AS SHOWN, IS PROHIBITED.

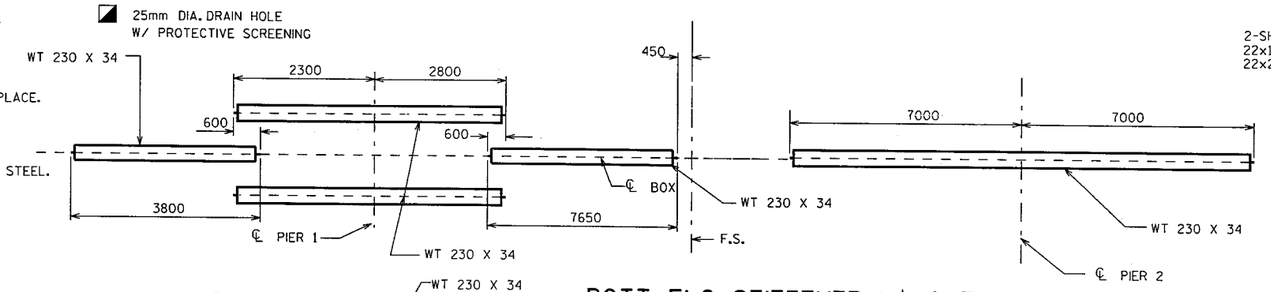
ALL FLANGES, WEBS, BEARING STIFF'S, LONGIT. STIFF'S. & FIELD SPLICES ARE ASTM A709M GRADE 345. ALL OTHER MATERIAL IS ASTM A709M GRADE 250 OR 345 BUT WILL BE PAID FOR AS ASTM A709M GRADE 250.

ALL FLG'S. & WEBS ARE FRACTURE CRITICAL (F2).

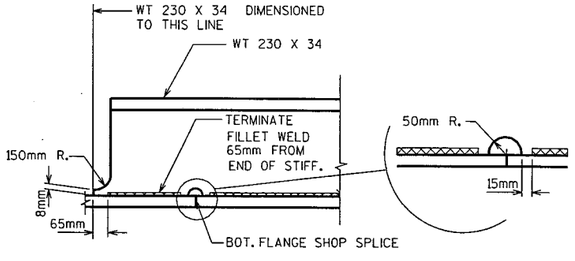
STUDS TO BE FIELD WELDED AFTER THE DECK PANELS ARE IN PLACE.

ALL BOLTS ARE M20 ASTM A325M H.S. BOLTS.

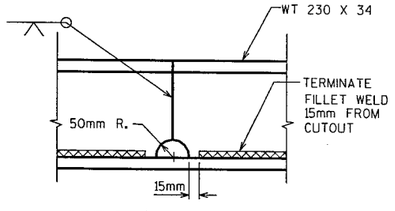
DURING GIRDER ERECTION, PROVIDE TEMPORARY SUPPORT TO THE GIRDER OVERHANGING WEST OF PIER 2 UNTIL FIELD SPLICE IS IN PLACE. COST INCIDENTAL TO HIGH-STRENGTH STRUCTURAL STEEL.



BOTT. FLG. STIFFENER LAYOUT



BOTTOM FLANGE STIFFENER TERMINATION DETAIL



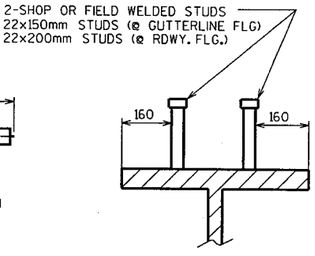
OPTIONAL BOTT. FLG. STIFFENER SPLICE

ONE SPLICE PER STIFF. PERMITTED. MIN. DISTANCE FROM PIER TO BE 2000mm.

*TABLE OF FILLET WELD SIZES

THICKNESS OF THICKER PART JOINED	WELD SIZE ◓
TO 12 mm INCL.	5
OVER 12mm TO 18mm	6
OVER 18mm TO 38mm	8
OVER 38mm TO 55mm	10
OVER 55mm TO 150mm	13

◓ EXCEPT THE WELD SIZE SHALL NOT EXCEED THICKNESS OF THINNER PLATE JOINED.



SHEAR CONNECTION DETAIL

IF STUDS ARE FIELD WELDED, GRIND WELD AREAS PRIOR TO PLACING PANELS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	1996	DRAWN BY	KTN	PLANS CK'D.	DJK

GIRDER DETAILS

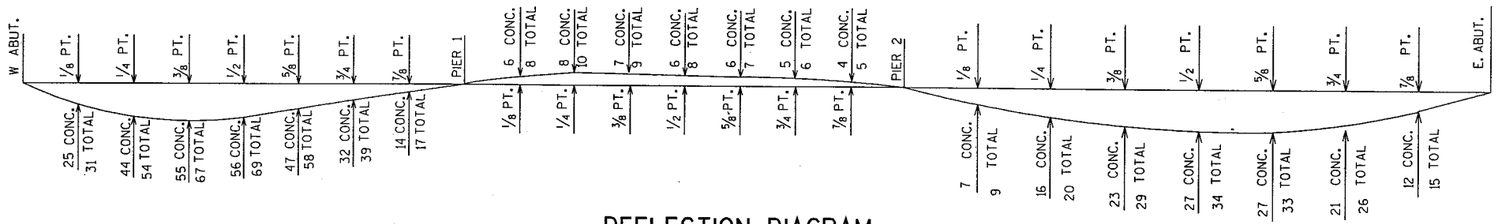
SHEET 10

FILE= 30GIRDET1.DGN
SCALE = 20

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	448

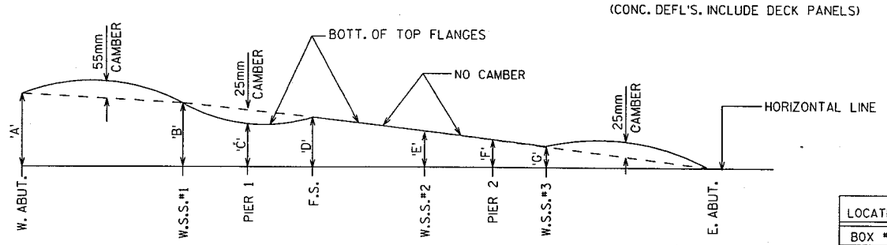
TOP OF DECK ELEVATIONS

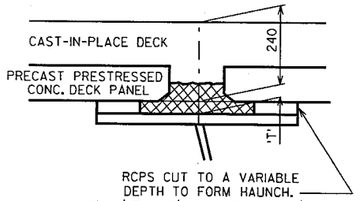
	W. ABUT.	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 1	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 2	1/8	2/8	3/8	4/8	5/8	6/8	7/8	E. ABUT.
FLNG. 1	234.325	234.295	234.260	234.230	234.200	234.165	234.135	234.100	234.070	234.045	234.015	233.990	233.965	233.940	233.910	233.885	233.860	233.835	233.805	233.780	233.755	233.730	233.700	233.675	233.650
FLNG. 2	234.395	234.360	234.330	234.295	234.265	234.235	234.200	234.170	234.140	234.110	234.085	234.060	234.030	234.005	233.980	233.955	233.925	233.900	233.875	233.850	233.820	233.795	233.770	233.745	233.715
FLNG. 3	234.380	234.350	234.315	234.285	234.250	234.220	234.190	234.155	234.125	234.100	234.070	234.045	234.020	233.995	233.965	233.940	233.915	233.890	233.860	233.835	233.810	233.785	233.755	233.730	233.705
FLNG. 4	234.310	234.275	234.245	234.215	234.180	234.150	234.120	234.085	234.055	234.030	234.000	233.975	233.950	233.925	233.895	233.870	233.845	233.815	233.790	233.765	233.740	233.710	233.685	233.660	233.635



DEFLECTION DIAGRAM

DEFLECTIONS ARE IN MILLIMETERS (mm)
(CONC. DEFL'S. INCLUDE DECK PANELS)





SLAB HAUNCH DETAIL

TO DETERMINE 'T': ELEVATIONS OF THE TOP FLANGES, TOP OF SPLICE PLATES, OR TOP OF COVER PLATES, WHICHEVER APPLIES, SHALL BE TAKEN AT C/L OF BRGS. AND AT QUARTER POINTS OF EACH SPAN. THEN FOLLOW THIS PROCESS :

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF STEEL ELEV.
+ DEFLECTION (CONCRETE ONLY)
- SLAB THICKNESS (240mm)
= CONCRETE HAUNCH THICKNESS "T"

CAMBER & BLOCKING DIAGRAM

LOCATION	'A'	'B'	'C'	'D'	'E'	'F'	'G'
BOX * 1	676mm	490mm	412mm	329mm	232mm	212mm	193mm
BOX * 2	676mm	490mm	412mm	329mm	232mm	212mm	193mm

TOP OF STEEL ELEVATIONS

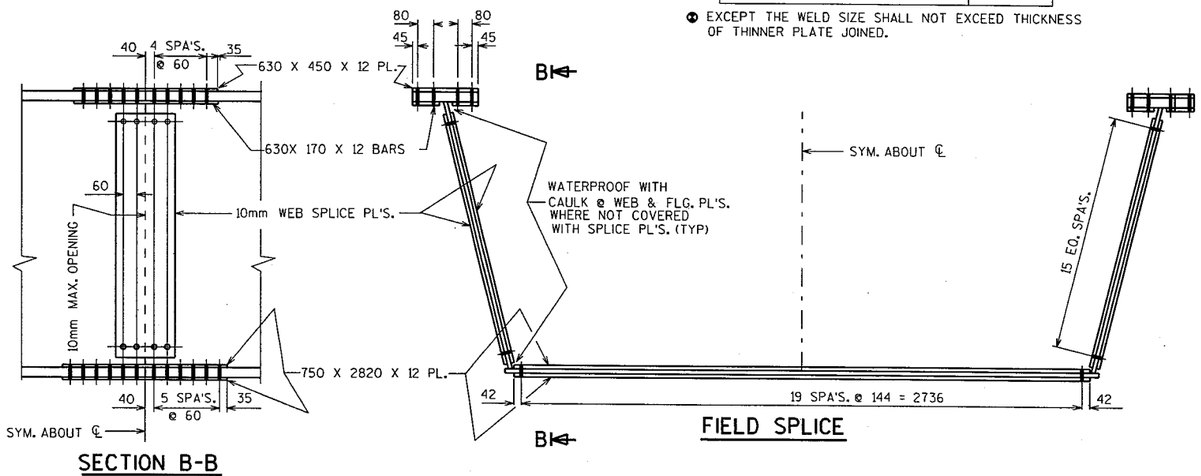
LOCATION	W. ABUT	W.S.S.*1	PIER 1	F.S.	W.S.S.*2	PIER 2	W.S.S.*3	E. ABUT
BOX * 1	234.060	233.870	233.800	233.725	233.615	233.595	233.575	233.390
BOX * 2	234.050	233.860	233.790	233.715	233.605	233.585	233.565	233.380

THESE ELEV'S. ARE TO THE TOP OF STEEL (SPLICE PL. THICKNESSES ARE ACCOUNTED FOR) AND THEY ARE FOR THE MATERIAL AS ERECTED. THE ELEV. AT THE F.S. POINTS SHALL BE CHECKED & CORRECTED, IF POSSIBLE, AFTER ERECTION AND BEFORE PERMANENTLY BOLTING THE DIAPHRAGMS BETWEEN BOXES IN PLACE.

*TABLE OF FILLET WELD SIZES

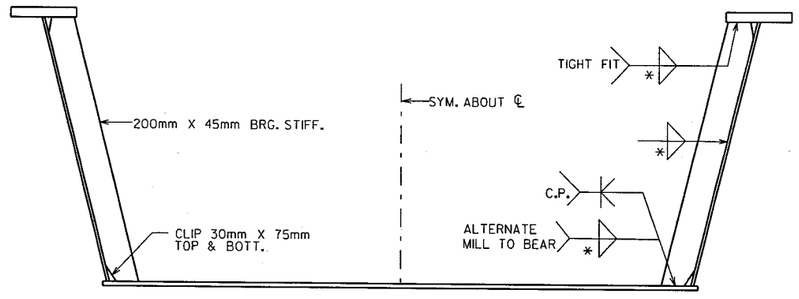
THICKNESS OF THICKER PART JOINED	WELD SIZE ⓞ
TO 12 mm INCL.	5
OVER 12mm TO 18mm	6
OVER 18mm TO 38mm	8
OVER 38mm TO 55mm	10
OVER 55mm TO 150mm	13

ⓞ EXCEPT THE WELD SIZE SHALL NOT EXCEED THICKNESS OF THINNER PLATE JOINED.

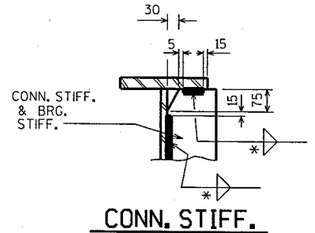


SECTION B-B

FIELD SPLICE



BEARING STIFFENER DETAIL



CONN. STIFF. TO WEB/FLANGE CONN. WELDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

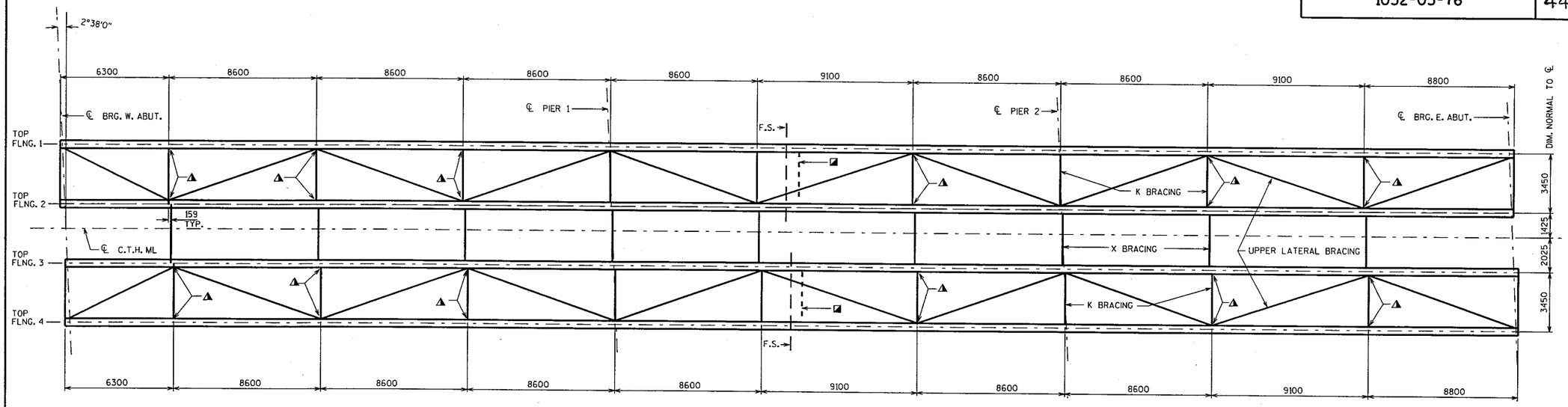
CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	KTN	DJK

GIRDER DETAILS

SHEET 11

FILE= 30GIRDET2.DGN
SCALE = —

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	449

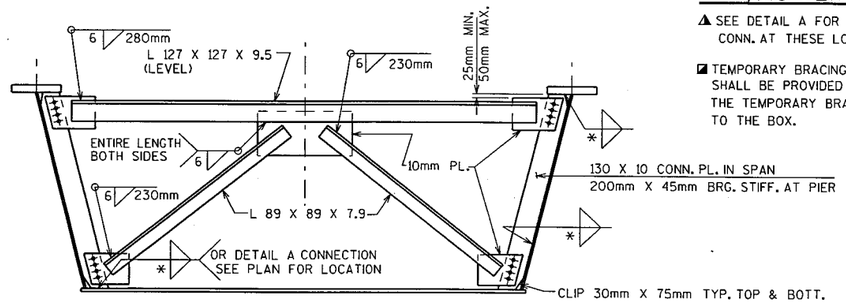


FRAMING PLAN

▲ SEE DETAIL A FOR BOTT. FLG. CONN. AT THESE LOCATIONS

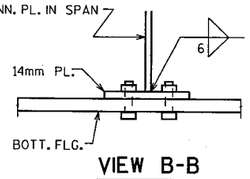
◪ TEMPORARY BRACING DURING SHIPMENT AND ERECTION SHALL BE PROVIDED BETWEEN THE TOP FLANGES. THE TEMPORARY BRACING SHALL NOT BE WELDED TO THE BOX.

NOTE: ALL K-BRACING & UPPER LATERALS WITHIN THE BOXES (EXCEPT THE UPPER LATERAL AT THE FIELD SPLICES) SHALL BE IN PLACE PRIOR TO SHIPMENT.

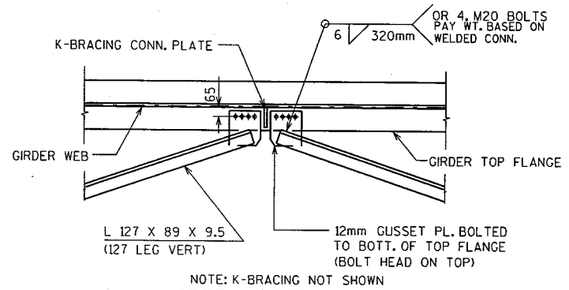


K-BRACING WITHIN BOX
(IN SPAN & AT PIER)

DETAIL A

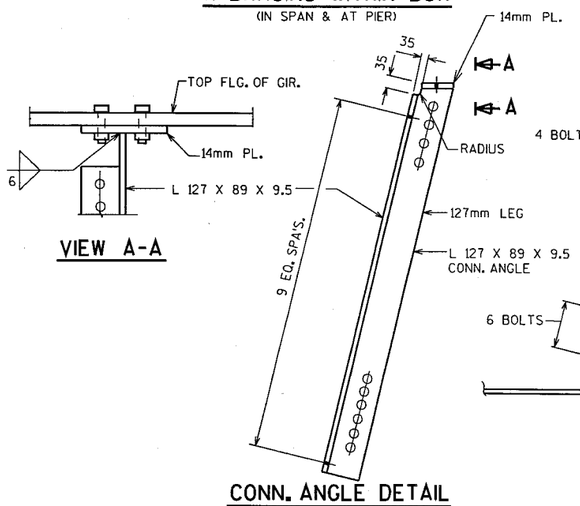


VIEW B-B



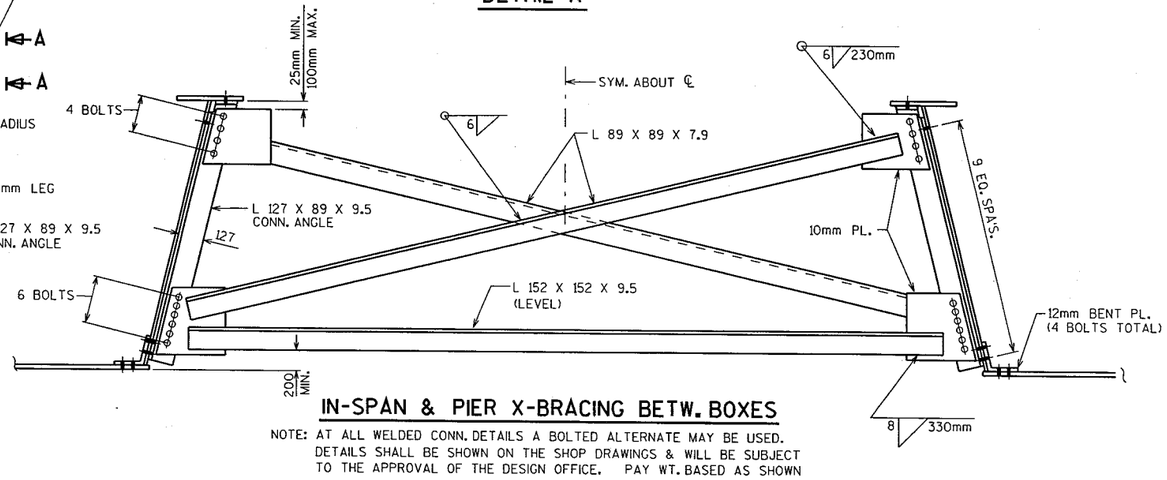
NOTE: K-BRACING NOT SHOWN

UPPER LATERAL DETAIL
(LOOKING UP)



VIEW A-A

CONN. ANGLE DETAIL
(BETW. BOXES)



IN-SPAN & PIER X-BRACING BETW. BOXES

NOTE: AT ALL WELDED CONN. DETAILS A BOLTED ALTERNATE MAY BE USED. DETAILS SHALL BE SHOWN ON THE SHOP DRAWINGS & WILL BE SUBJECT TO THE APPROVAL OF THE DESIGN OFFICE. PAY WT. BASED AS SHOWN

*TABLE OF FILLET WELD SIZES

THICKNESS OF THICKER PART JOINED	WELD SIZE ●
TO 12 mm INCL.	5
OVER 12mm TO 18mm	6
OVER 18mm TO 38mm	8
OVER 38mm TO 55mm	10
OVER 55mm TO 150mm	13

● EXCEPT THE WELD SIZE SHALL NOT EXCEED THICKNESS OF THINNER PLATE JOINED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

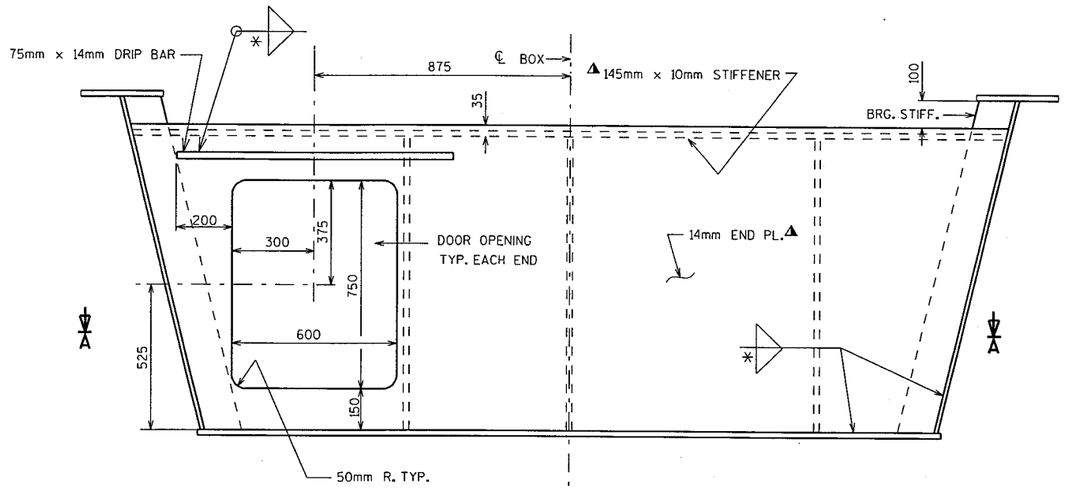
STRUCTURE B-30-30

CONST. SPEC. 1996	DRAWN BY KTN	PLANS CK'D. DJK

FRAMING PLAN — SHEET 12

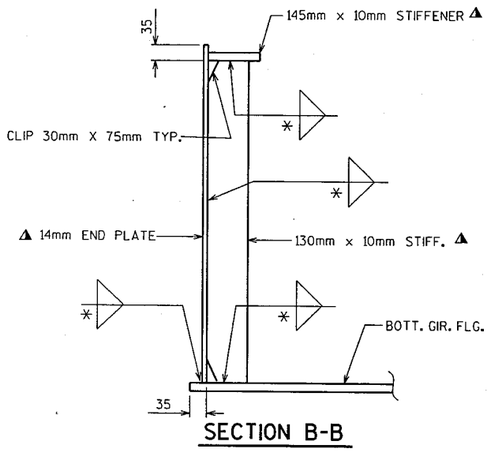
FILE= 30FP.DGN
SCALE = 120

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	450



BOX END PLATE ELEVATION

LOOKING EAST AT W. ABUT
LOOKING WEST AT E. ABUT

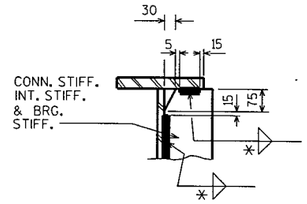


SECTION B-B

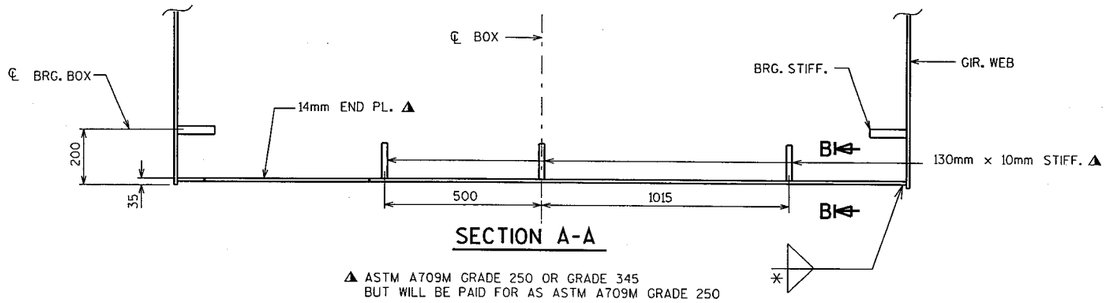
*TABLE OF FILLET WELD SIZES

THICKNESS OF THICKER PART JOINED	WELD SIZE ❶
TO 12 mm INCL.	5
OVER 12mm TO 18mm	6
OVER 18mm TO 38mm	8
OVER 38mm TO 55mm	10
OVER 55mm TO 150mm	13

❶ EXCEPT THE WELL SIZE SHALL NOT EXCEED THICKNESS OF THINNER PLATE JOINED.



CONN. STIFF. TO WEB/FLANGE CONN. WELDS



SECTION A-A

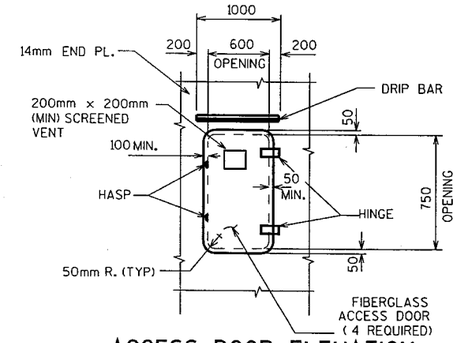
▲ ASTM A709M GRADE 250 OR GRADE 345 BUT WILL BE PAID FOR AS ASTM A709M GRADE 250

FIBERGLASS ACCESS DOOR NOTES

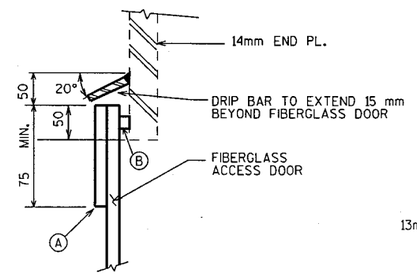
ORIENTATION OF HASPS & HINGES SHALL BE AS SHOWN.

DOORS SHALL HAVE A WATERTIGHT FIT ALL AROUND.

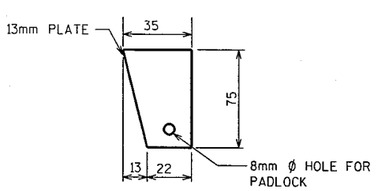
FIBERGLASS ACCESS DOOR INCLUDING STAINLESS STEEL HARDWARE & NEOPRENE SEAL SHALL BE PAID FOR AS "ACCESS DOORS", EACH.



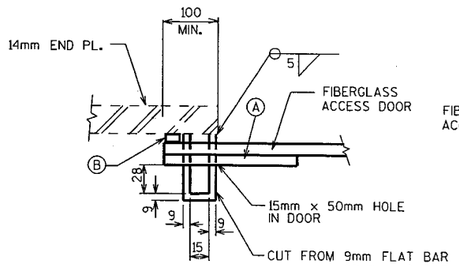
ACCESS DOOR ELEVATION



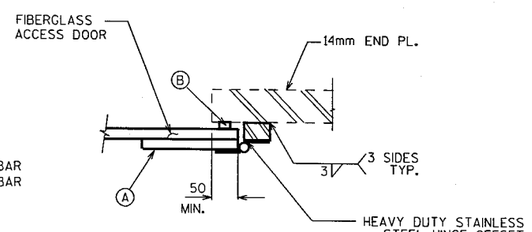
SECTION THRU ACCESS DOOR AT DRIP BAR



WEDGE PIN DETAILS



HASP DETAILS



HINGE DETAILS

Ⓐ REINF. FULL PERIMETER OF DOOR WITH FIBERGLASS MATERIAL SAME AS DOOR THICKNESS

Ⓑ 19mm X 3mm NEOPRENE SEAL ATTACHED AROUND PERIMETER OF FIBERGLASS DOOR TO ATTAIN A WATERTIGHT FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

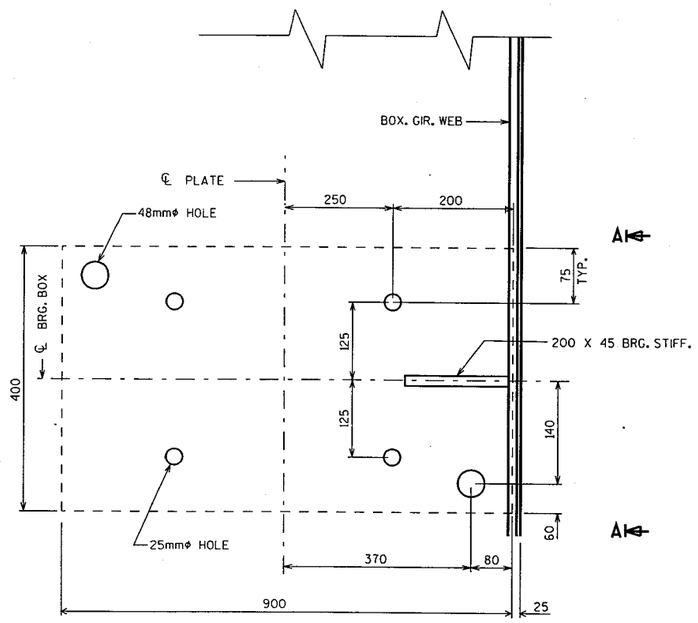
CONST. SPEC.	1996	DRAWN BY	KTN	PLANS CK'D.	DJK

GIRDER DETAILS

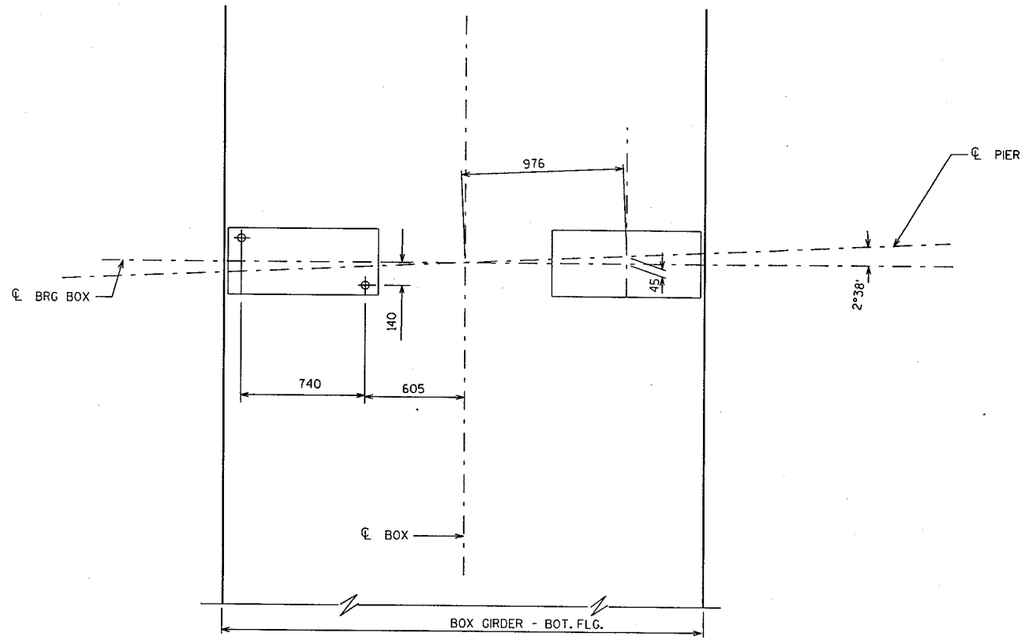
SHEET 13

FILE= 30GIRDET3.DGN
SCALE = AS=20

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	451

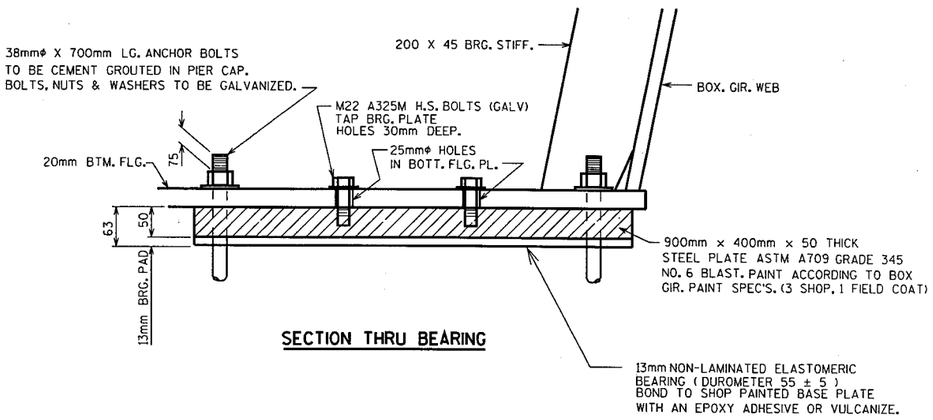


PLAN VIEW

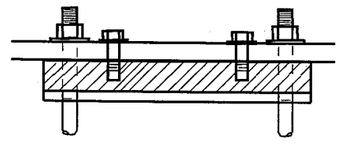


BEARING LAYOUT

2 REQ'D. PER GIR. PER PIER (8 TOTAL REQ'D)



SECTION THRU BEARING



VIEW A-A

BEARING NOTES

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID AT THE UNIT PRICE BID FOR "NON-LAMINATED ELASTOMERIC BEARING PAD, SPECIAL".

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL DIMENSIONS ARE IN MILLIMETERS.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ANCHOR BOLTS, NUTS & WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C.

ANCHOR BOLTS, NUTS & WASHERS SHALL CONFORM TO ASTM A709M GRADE 250 OR MATERIAL OF EQUIVALENT YIELD STRENGTH & ELONGATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	KTN	DJK

PIER BEARINGS

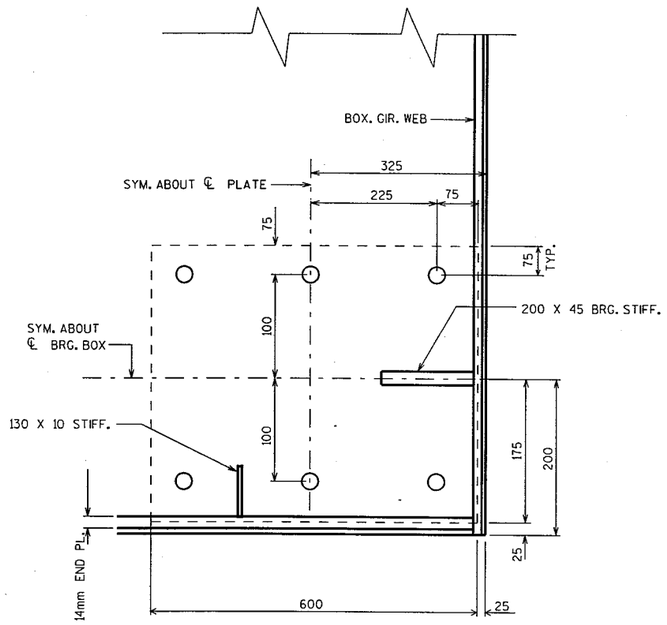
SHEET 14

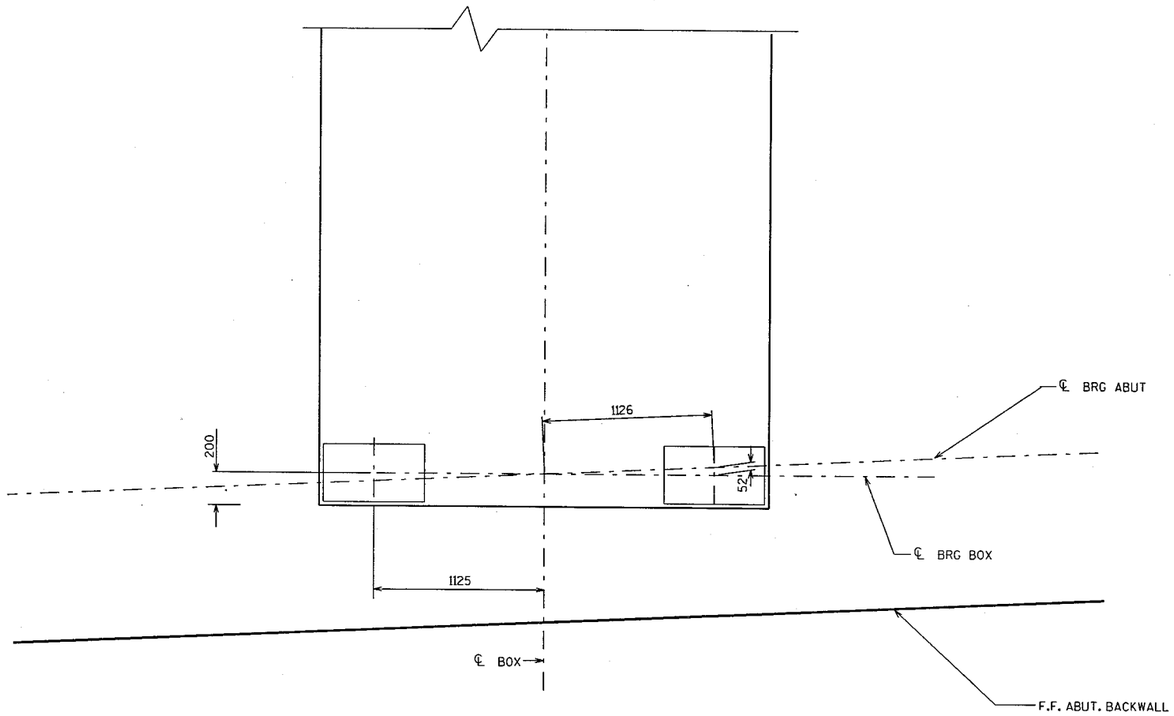
FILE= 30BRGPIER.DGN
SCALE = 16.15

3-13-95

11
3
2
1

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	452

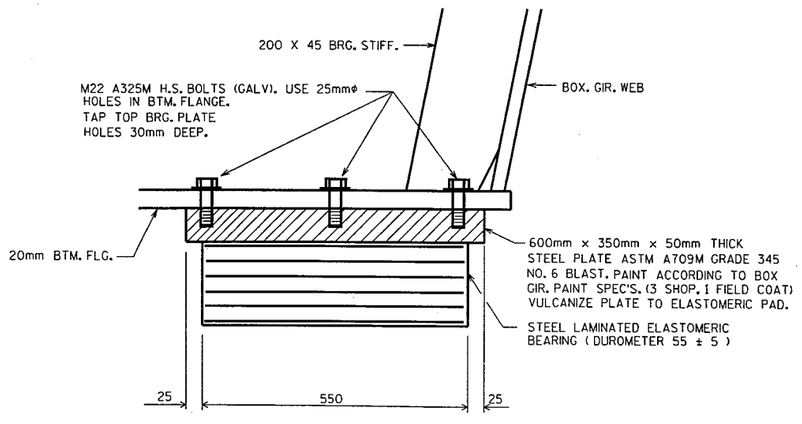




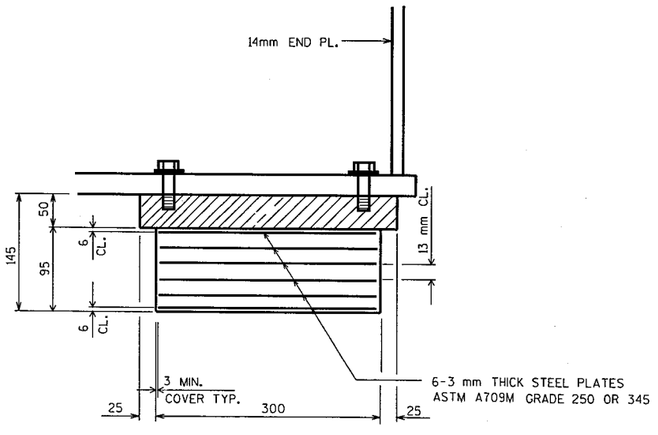
BEARING LAYOUT

2 REQ'D. PER GIR. END (8 TOTAL REQ'D)

PLAN VIEW



END VIEW



SECTION THRU ELASTOMERIC BEARING

BEARING NOTES

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID AT THE UNIT PRICE BID FOR "LAMINATED ELASTOMERIC BEARING PAD."

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL DIMENSIONS ARE IN MILLIMETERS.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

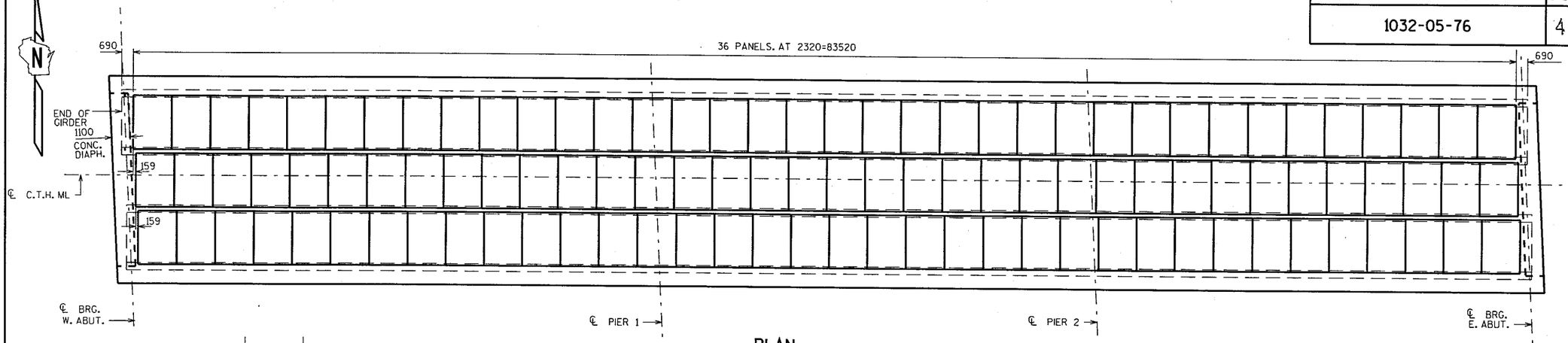
CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	KTN	DJK

ABUTMENT BEARINGS

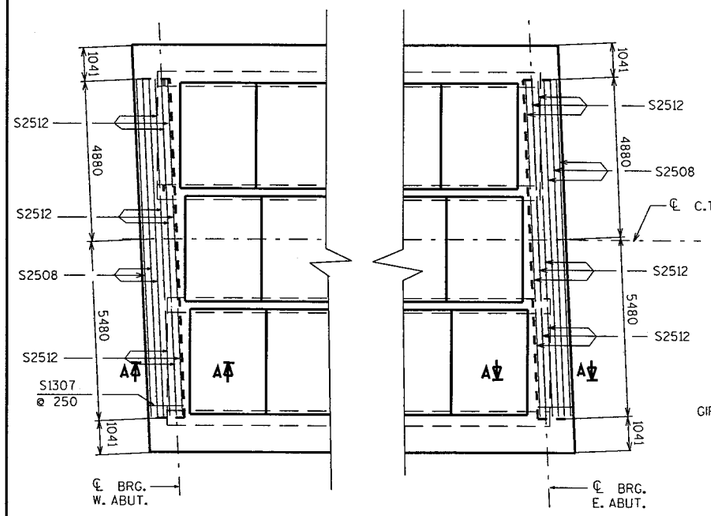
SHEET 15

FILE= 30BRGABUT.DGN
SCALE =

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	453

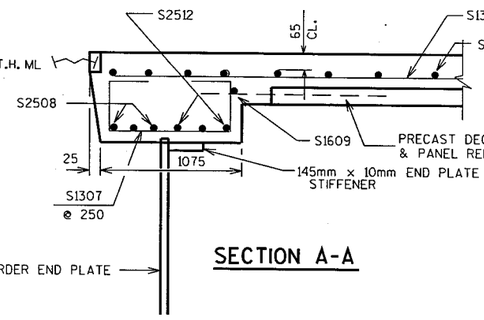


PLAN



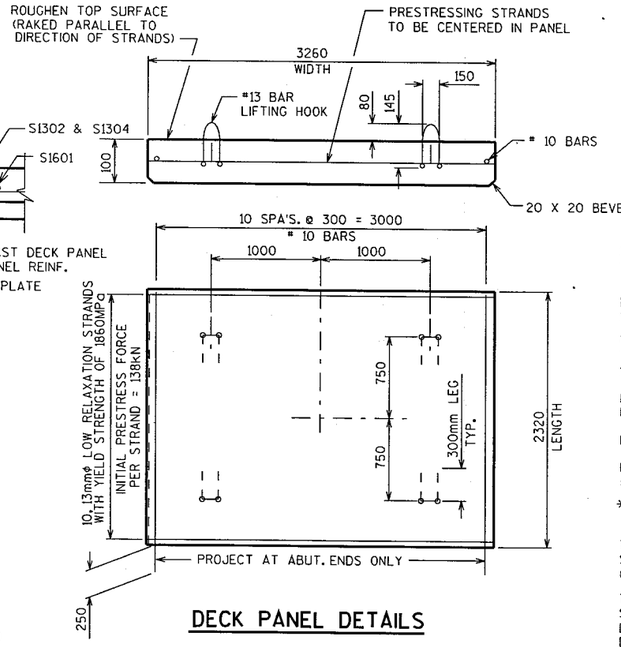
W. ABUT. E. ABUT.

END OF DECK REINF.

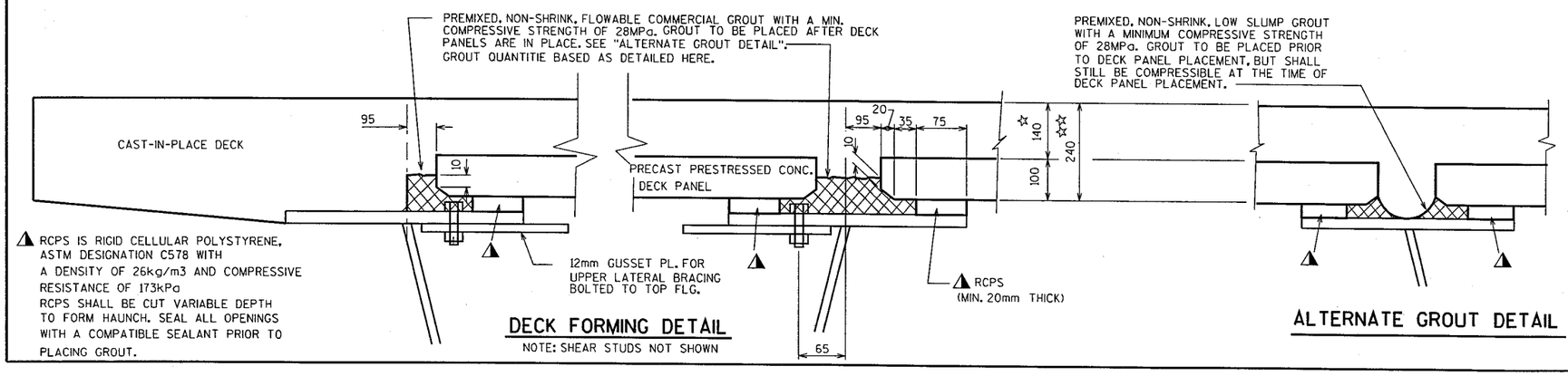


SECTION A-A

☆ 175mm @ ℄ C.T.H. ML
☆☆ 275mm @ ℄ C.T.H. ML
(SEE SUPERSTRUCTURE SHT. 17)



DECK PANEL DETAILS



⚠ RCPS IS RIGID CELLULAR POLYSTYRENE, ASTM DESIGNATION C578 WITH A DENSITY OF 26kg/m3 AND COMPRESSIVE RESISTANCE OF 173kPa
RCPS SHALL BE CUT VARIABLE DEPTH TO FORM HAUNCH. SEAL ALL OPENINGS WITH A COMPATIBLE SEALANT PRIOR TO PLACING GROUT.

DECK FORMING DETAIL

NOTE: SHEAR STUDS NOT SHOWN

ALTERNATE GROUT DETAIL

NOTES

CONCRETE MASONRY FOR DECK PANELS IS f'c = 34 MPa, f'ci = 27MPa

EPOXY COAT ALL REINF. EXCEPT PRESTRESSING STRANDS.

WELDED WIRE FABRIC MAY BE SUBSTITUTED FOR THE * 10 LONGIT. BARS WITH APPROVAL OF THE STRUCTURAL DESIGN SECTION.

PRECAST PRESTRESSED CONCRETE PANELS SHALL BE PRODUCED WITHIN THE FOLLOWING TOLERANCES.

DEPTH (THICKNESS OF PANELS) +6mm * TO -3mm. *

POSITION OF STRANDS ± 3mm * VERTICALLY, ± 13mm HORIZONTALLY

*MEASURED FROM BOTTOM OF PANEL.

THE TOP SURFACE OF PRECAST PANELS SHALL BE KEPT FREE OF ANY CONTAMINANTS OR BOND BREAKING SUBSTANCES SUCH AS OIL.

THE TOP OF PANELS SHALL HAVE A ROUGHENED SURFACE WITH APPROXIMATELY 6mm DEEP DEPRESSIONS. CARE SHALL BE TAKEN NOT TO DISPLACE THE COARSE AGGREGATES.

MEMBRANE CURING COMPOUND SHALL NOT BE USED ON THE TOP OF THE PRECAST PANELS.

MATING SURFACE OF THE PRECAST PANELS SHALL NOT DEVIATE FROM A STRAIGHT LINE BY MORE THAN 3mm IN 3m.

IMMEDIATELY PRIOR TO PLACING CAST IN PLACE PORTION OF THE DECK SLAB THE PRECAST PANELS SHALL BE WETTED UNTIL FREE MOISTURE APPEARS AND REMAINS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

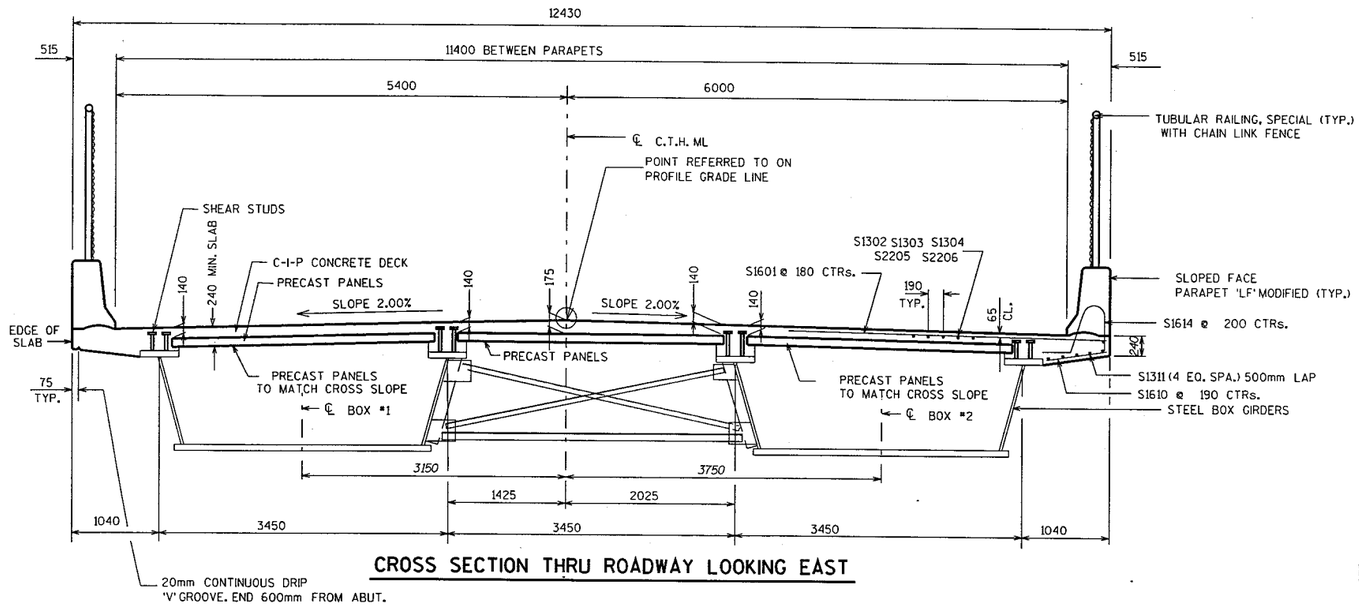
CONST. SPEC.	DRAWN BY	BUDD	PLANS CK'D.
1996	KTN/		DJK/JCF

DECK PANEL DETAILS

SHEET 16

FILE= 30PANELPLAN.DGN
SCALE = 125

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	454

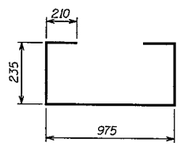


CROSS SECTION THRU ROADWAY LOOKING EAST

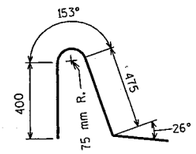
BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

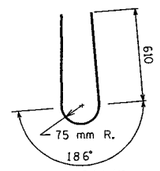
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BUNDLE	LOCATION
S1601	X	480	12340			SLAB TOP TRANS.
S1302	X	198	9670			SLAB SPAN 1 LONGIT.
S1303	X	132	8550			SLAB SPAN 2 LONGIT.
S1304	X	132	12050			SLAB SPAN 3 LONGIT.
S2205	X	66	11300			SLAB @ PIER 1 LONGIT.
S2206	X	66	8800			SLAB @ PIER 2 LONGIT.
S1307	X	84	1750	X		DIAPH. @ ABUT. VERT.
S2508	X	6	10260			DIAPH. @ ABUT. HORIZ.
S1609	X	2	10360			DIAPH. @ ABUT. TRANS.
S1610	X	910	700			EDGE OF SLAB BOTTOM. TRANS.
S1311	X	80	11230			EDGE OF SLAB BOTTOM. LONGIT.
S2512	X	18	3350			DIAPH. @ ABUT. TRANS.
S1313	X	12	2700			EXPANSION DEVICE TRANS.
S1614	X	864	1530	X		SLAB PARAPET VERT.
S1615	X	864	1470	X		PARAPET VERT.
S1616	X	70	12950			PARAPET HORIZ.
S1917	X	116	1000			PARAPET SYM @ RAIL POST ANCHORAGE HORIZ



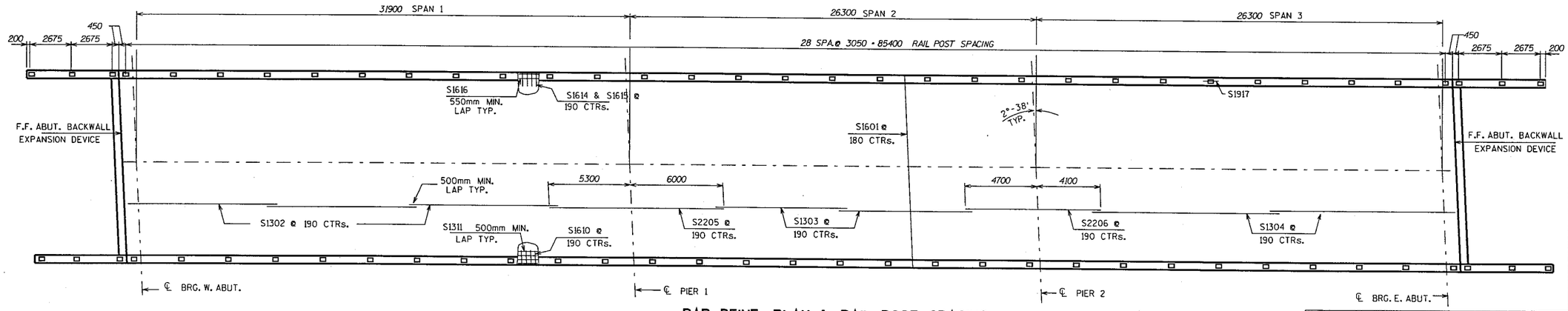
S1307



S1614



S1615



BAR REINF. PLAN & RAIL POST SPACING

NO.	DATE	REVISION	BY

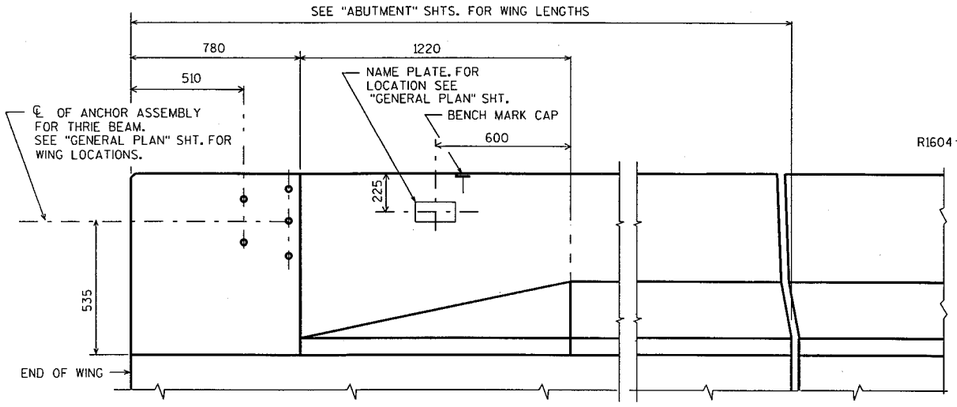
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

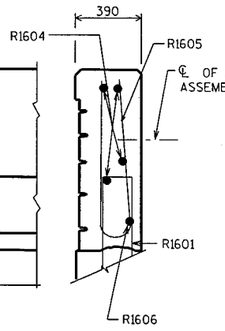
CONST. SPEC. 1996	DRAWN BY BUDD	PLANS CK'D. J.C.K.
SUPERSTRUCTURE	SHEET 17	

FILE= 30SLAB.DGN
SCALE = 120"

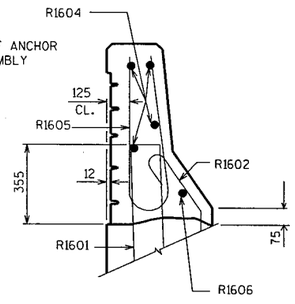
STATE PROJECT NUMBER	SHEET NO.
1032-05-76	455



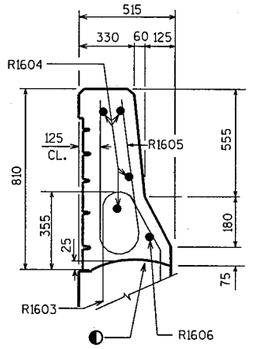
INSIDE ELEVATION



SECTION A



SECTION B

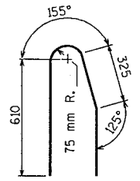


SECTION C

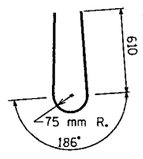
BILL OF BARS

FOR ABUTMENT PARAPETS

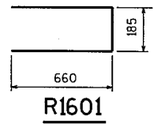
BAR MARK	COAT	W. ABUT.	E. ABUT.	LENGTH	BENT	LOCATION
R1601	X	28	28	1425	X	PARAPET VERT.
R1602	X	16	16	960	X	PARAPET VERT.
R1603	X	40	40	1470	X	PARAPET VERT.
R1604	X	8	8	5875		PARAPET HORIZ.
R1605	X	68	68	1470	X	PARAPET VERT.
R1606	X	2	2	5875	X	PARAPET HORIZ.
R1907	X	12	12	1000		RAIL POST ANCHORAGE



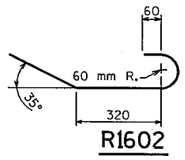
R1603



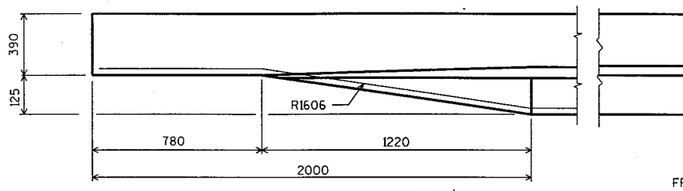
R1605



R1601



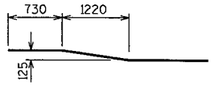
R1602



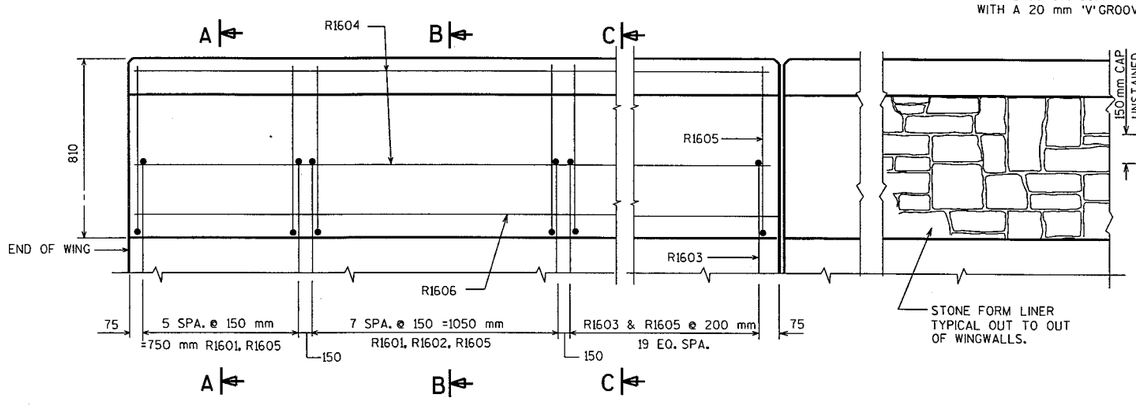
PLAN

FRONT FACE OF BACKWALL

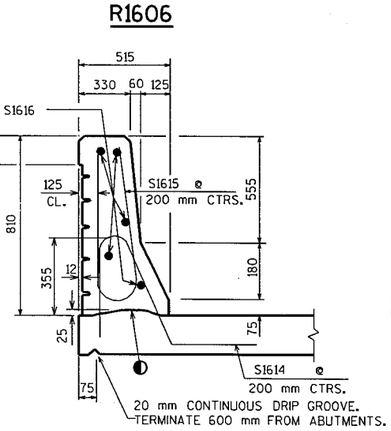
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 550 mm. MIN. JOINT SPACING OF 25000 mm. DEFINE CONST. JOINT WITH A 20 mm 'V' GROOVE.



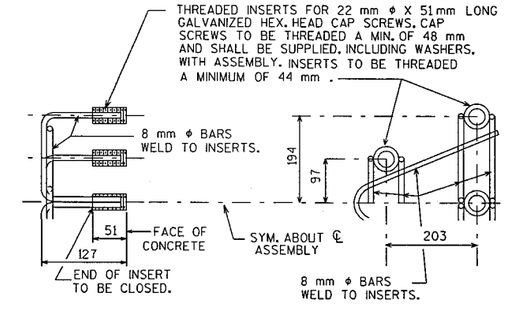
R1606



OUTSIDE ELEVATION

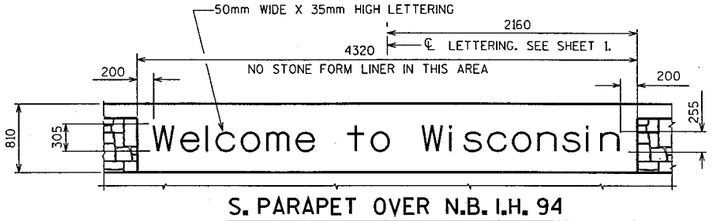


SECTION THRU PARAPET ON BRIDGE

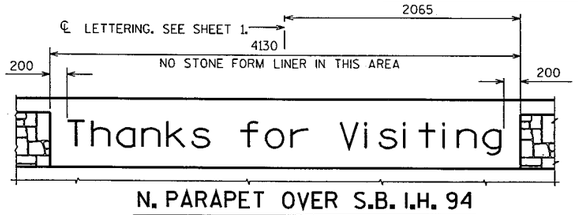


DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.



S. PARAPET OVER N.B. I.H. 94



N. PARAPET OVER S.B. I.H. 94

NOTE: RAILING NOT SHOWN. SEE "TUBULAR RAILING, SPECIAL" FOR RAILING DETAILS.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	1996	DRAWN BY	BUDD	PLANS CK'D.	J.R.K.

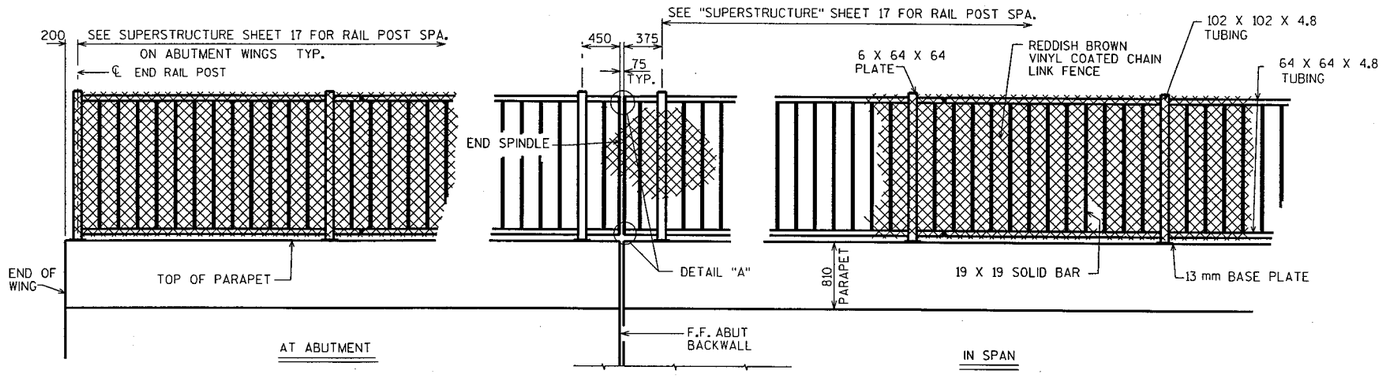
SLOPED FACE PARAPET "LF" MODIFIED

SHEET 18

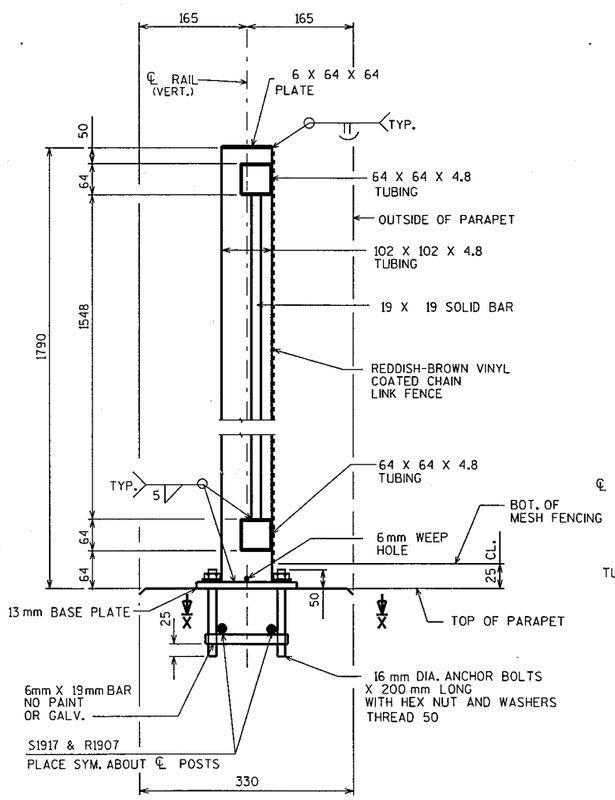
12 5 78 7

FILE= 30PPT.DGN
SCALE = 5.0

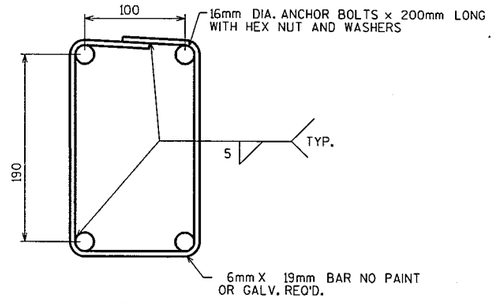
STATE PROJECT NUMBER	SHEET NO.
1032-05-76	456



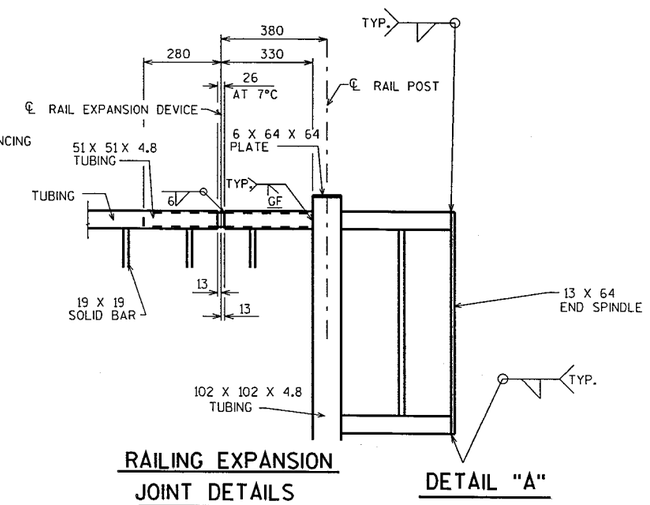
RAILING ELEVATION



TYP SECTION THRU RAIL POST

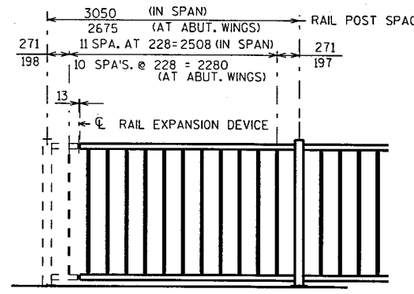


SECTION X-X

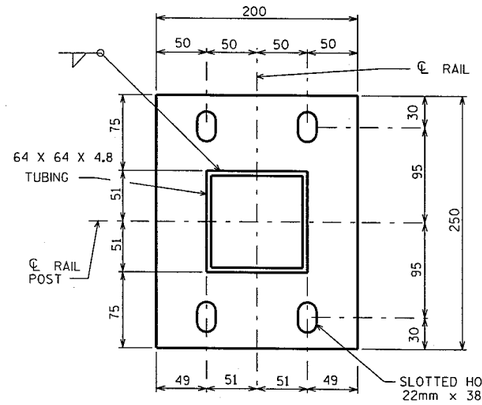


RAILING EXPANSION JOINT DETAILS

DETAIL "A"



RAILING SPINDLE SPACING



BASE PLATE

NOTES

RAIL, POSTS , BASE PLATES AND SHIMS TO BE A.S.TM. A709 GRADE 250. ALL GALVANIZED AFTER FABRICATION.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT. CHALK EXPOSED OPENINGS BETWEEN SHIMS.

FILL ANCHOR BOLT HOLES WITH NOT-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

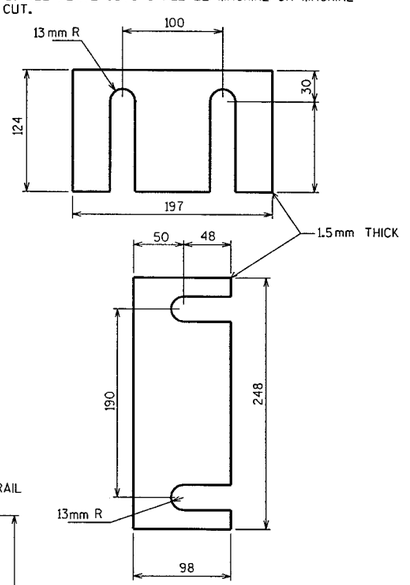
CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR A.S.T.M. 307M. IF 307M IS USED, NUTS WASHERS AND TOP 75mm OF ANCHOR BOLTS SHALL BE GALVANIZED.

TUBULAR RAILING AND VINYL COATED CHAIN LINK FENCE & TIES TO BE REDDISH-BROWN (FEDERAL COLOR NO.20152).

THE BID ITEM SHALL BE "TUBULAR RAILING WITH FENCING, SPECIAL" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH & FREE FROM WARP & ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE PER POST REQ'D.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-30-30

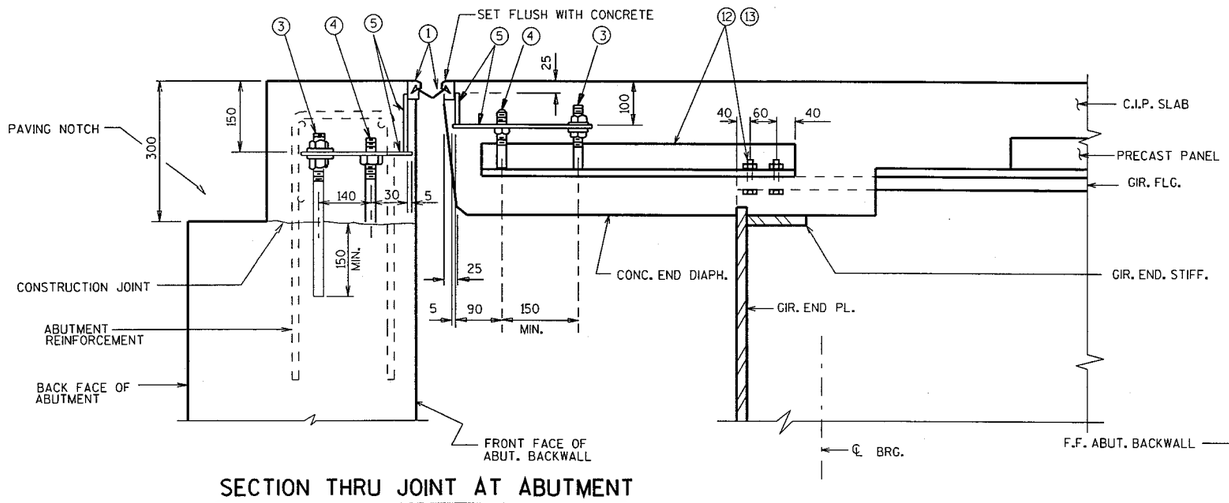
CONST. SPEC.	1996	DRAWN BY	BUDD	PLANS CK'D.	J.C.K.

TUBULAR RAILING, SPECIAL

SHEET 19

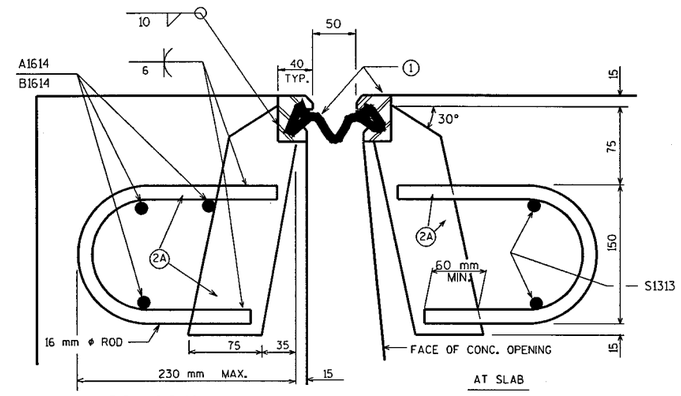
30FENCE.DGN

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	457



SECTION THRU JOINT AT ABUTMENT

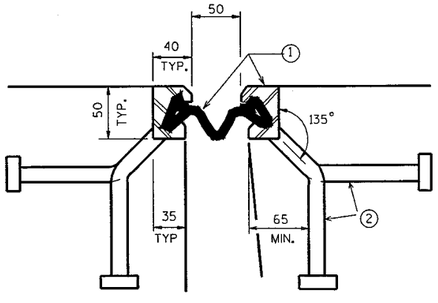
NORMAL TO ℄ SUBSTRUCTURE



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS TOP FLANGES.

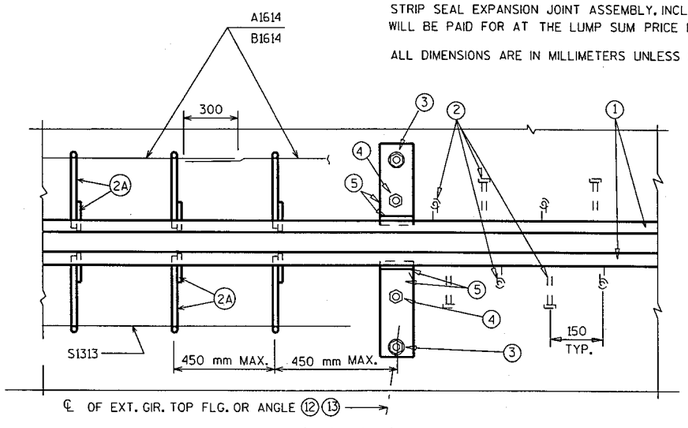
SYM. ABOUT ℄ JOINT UNLESS OTHERWISE SHOWN OR NOTED



BEND STUD TO CLEAR BOTTOM OF SLAB BY 40 mm ON OVERHANGS

SECTION THRU JOINT

FROM EXT. GIR. TOP FLG. TO EDGE OF SLAB

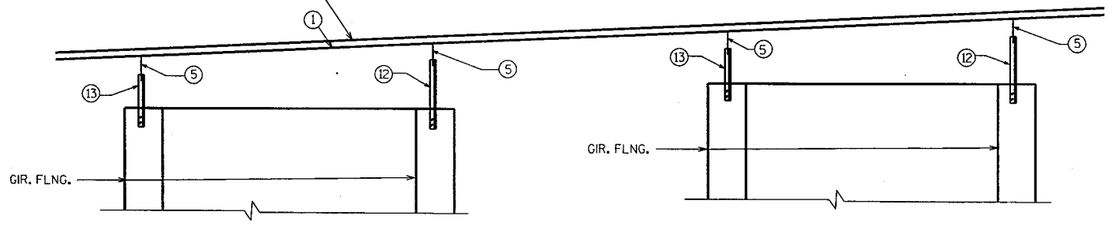


℄ OF EXT. GIR. TOP FLG. OR ANGLE (12)(13)

PART PLAN

LEGEND

1. NEOPRENE STRIP SEAL (100 mm) & STEEL EXTRUSIONS
2. STUDS 16 mm ϕ X 160 mm LONG AT 150 mm ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
2A. 14 mm. ANCHOR PLATE WITH 16 mm ϕ ROD. WELD ROD TO ANCHOR PLATE. WELD ANCHOR PL. TO #1 AT 450 mm CTRS. BETWEEN GIRDERS.
3. 19 mm ϕ THREADED ROD WITH 2 NUTS AND WASHERS. WELD THREADED ROD TO NO.12 OR ATTACH BY BOLTING THRU NO. 12. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. 19 mm ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 75 mm X 14 mm BAR AS SHOWN OR EQUIVALENT. ONE PER GIR. TOP FLG. PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 40 mm ϕ HOLE FOR NO. 3 & 25 mm ϕ HOLE FOR NO. 4.
12. L 89 X 89 X 7.9 X 800mm LG. BOLT TO GIR. FLG. FARTHEST FROM BACKWALL WITH 2, 13mm ϕ BOLTS AS SHOWN.
13. L 89 X 89 X 7.9 X 640mm LG. BOLT TO GIR. FLG. CLOSEST FROM BACKWALL WITH 2, 13mm ϕ BOLTS AS SHOWN.



EXTRUSION SUPPORT PLAN

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

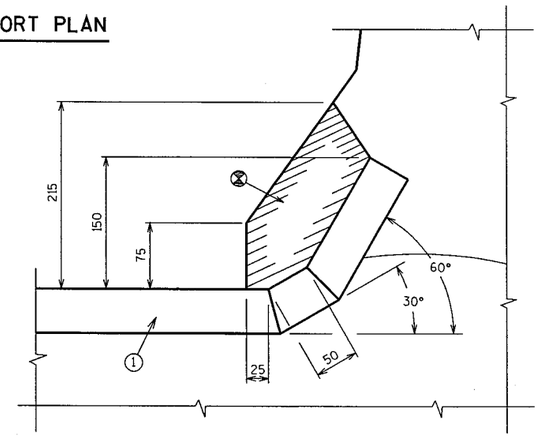
AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE"

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



SECTION THRU JOINT

(AT PARAPET)

⊠ BLOCK OUT CONCRETE 50 mm EACH SIDE OF JOINT OPENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-30-30

CONST. SPEC.	1996	DRAWN BY	BUDD	PLANS CK'D.	J.C.K.

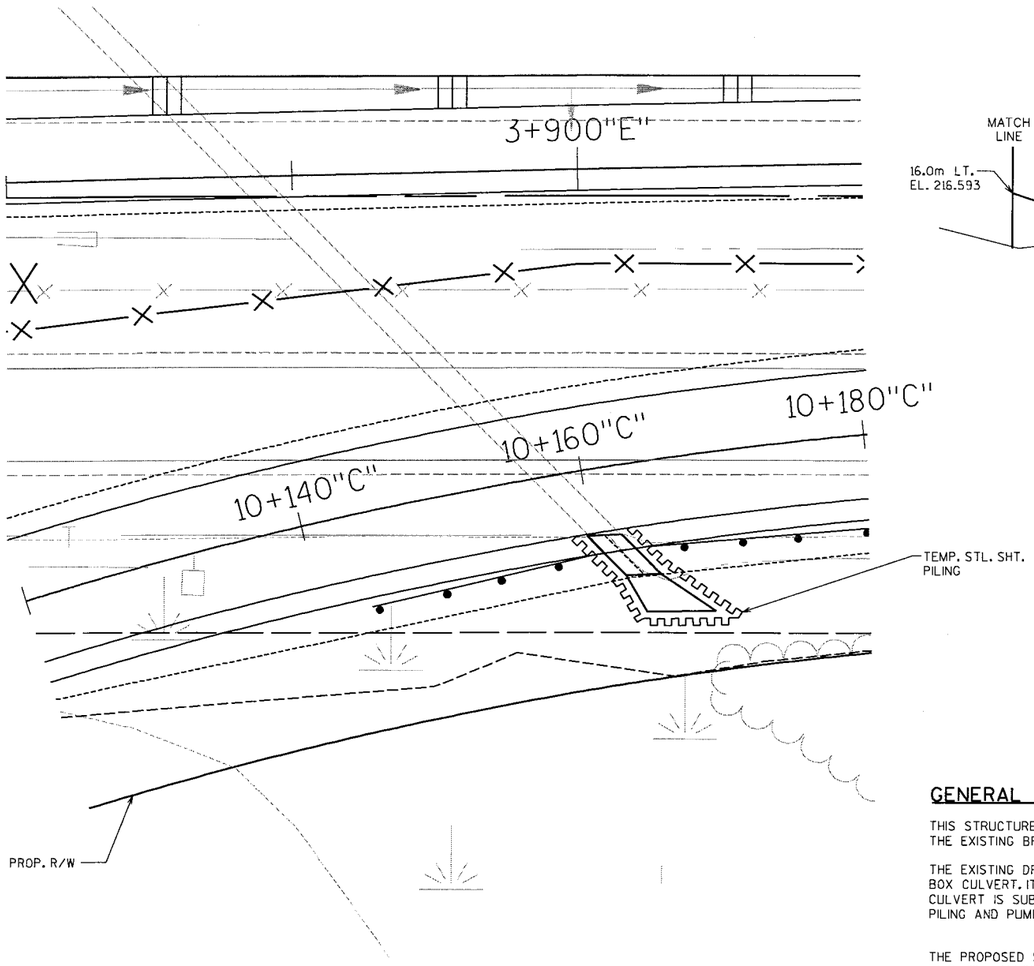
EXPANSION DEVICE

SHEET 20

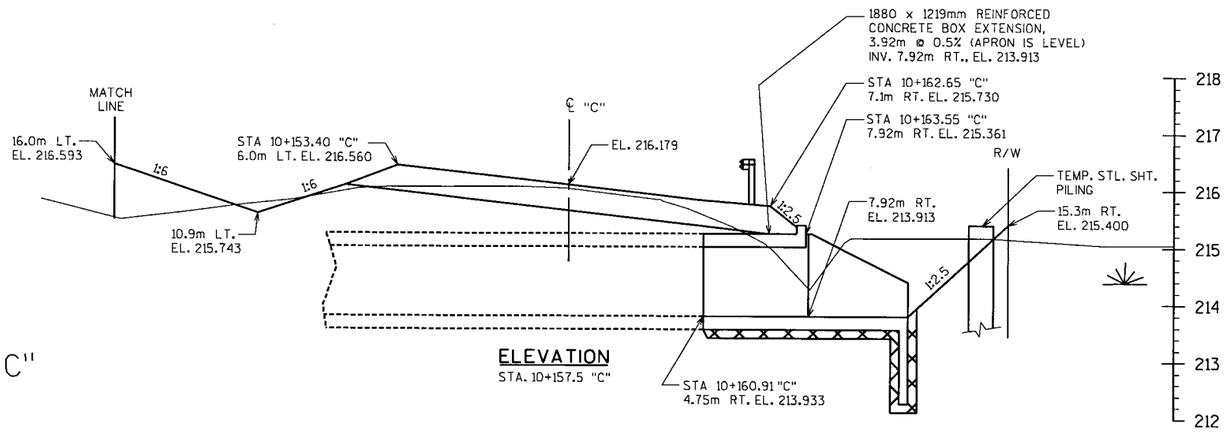
FILE= 30JOINT.DGN
SCALE = 48.5

2-98

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	458



PLAN



ELEVATION
STA. 10+157.5 "C"

GENERAL NOTES

THIS STRUCTURE WILL EXTEND FROM THE EXISTING BRIDGE STRUCTURE. THE EXISTING BRIDGE IS BELOW THE CTH ML FRONTAGE ROAD.

THE EXISTING DRAINAGE FLOWS THROUGH A 1880 mm X 1219 mm BOX CULVERT. IT EMPTIES INTO A DITCH ALONG THE ROAD. THE BOX CULVERT IS SUBMERGED IN SOIL AND WATER. TEMPORARY STEEL SHEET PILING AND PUMPING IS EXPECTED IN ORDER TO COMPLETE CONSTRUCTION.

THE PROPOSED STRUCTURE IS AN EXTENSION TO THE BOX CULVERT. THIS WILL ALLOW THE PROPOSED ROADWAY TO PASS OVER THE EXISTING DRAINAGE.

THE NAMEPLATE LOCATION IS SHOWN ON SHEET 2.

THIS STRUCTURE IS DESIGNED AS CAST-IN-PLACE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST, OR FIRST 2, DIGITS OF THE BAR MARK INDICATE THE BAR SIZE.

LIMITS OF BRIDGE REMOVAL SHALL INCLUDE CULVERT WING REMOVAL, CULVERT APRON REMOVAL, AND PORTIONS OF SUBSTRUCTURE REMOVAL AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

LIST OF DRAWINGS

1. GENERAL PLAN
2. LIMIT OF REMOVAL & PROPOSED CONSTRUCTION
3. DETAILS

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	QUANTITY
20301	REMOVING OLD CULVERT, STA. 10+157.5*	LS	1
50251	CONCRETE MASONRY ANCHORS, TYPE L, NO. 20M BARS	Ea.	18
50401	CONCRETE MASONRY, CULVERTS	m3	11
50505	HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	Kg	772
51210	TEMPORARY STEEL SHEET PILING	m2	180
51605	RUBBERIZED MEMBRANE WATERPROOFING	m2	21**
90345	SPECIAL GRANULAR BACKFILL	Mg	12**

* ESTABLISHED TO BE APPROXIMATELY 10 m2 OF CONCRETE MASONRY REMOVAL

** PARTIAL QUANTITY LISTED. SEE STR. B-30-30 AND MISC. QUANTITY TABLES FOR ADDITIONAL QUANTITIES

DESIGN DATA

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY ---------- fc = 24 MPa
HIGH STRENGTH BAR
STEEL REINFORCEMENT, GRADE 60 -----fy = 420 MPa

SHEET PILING NOTES

1. USE PZ27 SHEET PILING.
2. REQUIRED DEPTH OF PENETRATION FOR TYPICAL SHEET PILING = EL. 207.79.
3. THE CONTRACTOR SHALL FURNISH WORKING DRAWINGS AND MATERIAL CERTIFICATIONS TO THE ENGINEER FOR APPROVAL. THESE PLANS SHALL SHOW THE METHOD OF INSTALLING, MAINTAINING, AND REMOVING ALL TEMP. SHEET PILING.

WISCONSIN
RICHARD A. HILL
E-31586
KENOSHA, WIS.
PROFESSIONAL ENGINEER
5/6/02

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-30-17

EAST FRONTAGE RD., STA. 10+157.5 "C"

COUNTY: KENOSHA		TOWN/CITY/VILLAGE: KENOSHA	
DESIGN SPEC.: AASHTO 1998		LOAD: HS-20	CONST. SPEC.: 1996
DESIGNED BY: JWC	DESIGN CK'D.: SWS	DRAWN BY: BLM	PLANS CK'D.: SWS

APPROVED: R H Anderson 05-07-02
CHIEF STRUCTURAL DESIGN ENGINEER — DATE

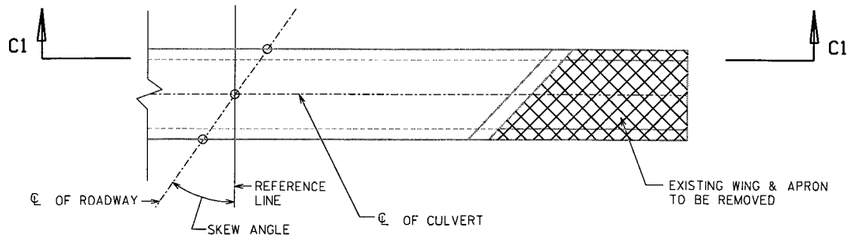
GENERAL PLAN

SHEET 1 OF 3

DATE:

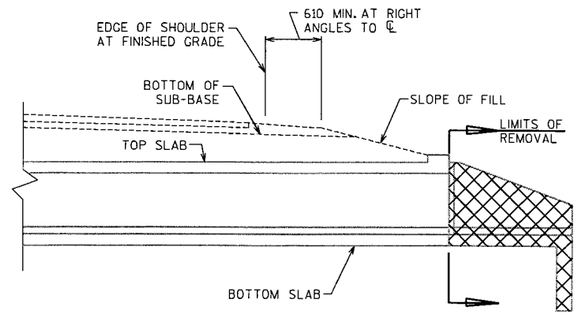
FILE - K:\PROJECTS\5116\PLANS\CULVERT\5116culvDET1
SCALE =

STATE PROJECT NUMBER	SHEET NO.
1032-05-76	459

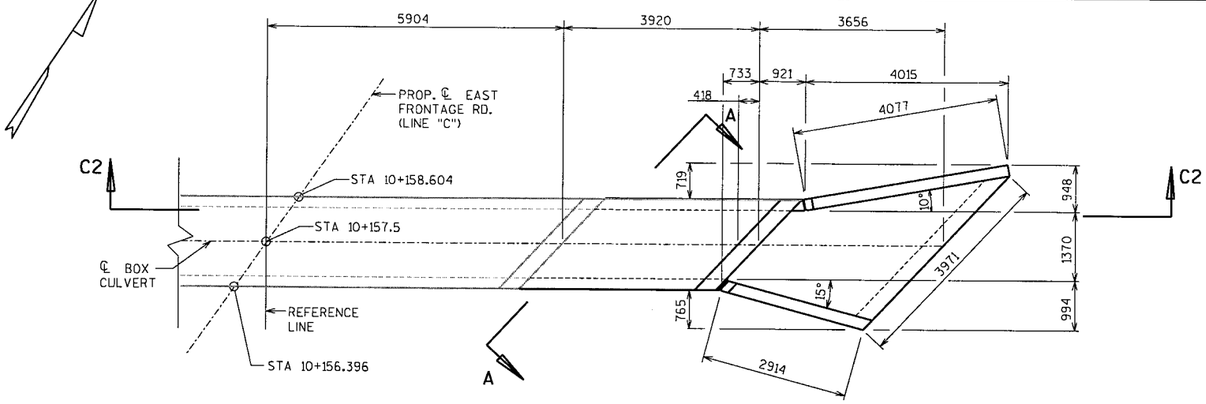


EXIST. PLAN

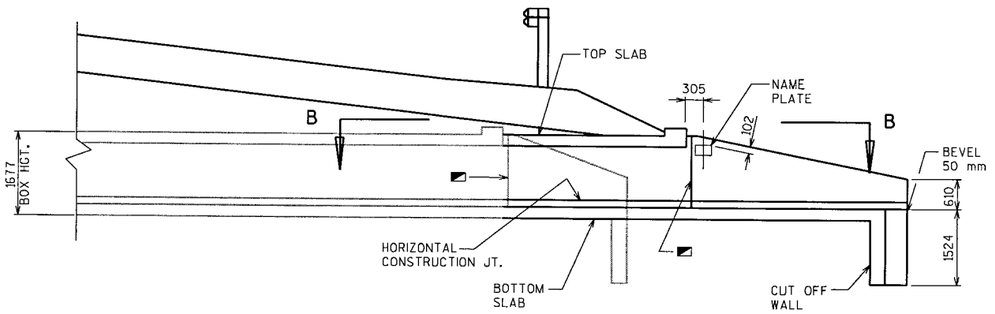
LOOKING UP STATION



— REMOVAL



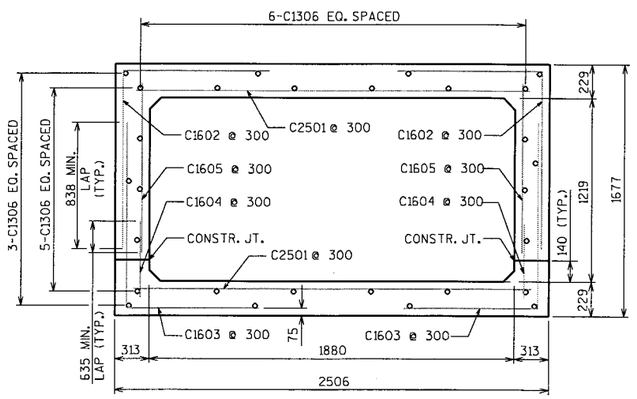
PROPOSED PLAN



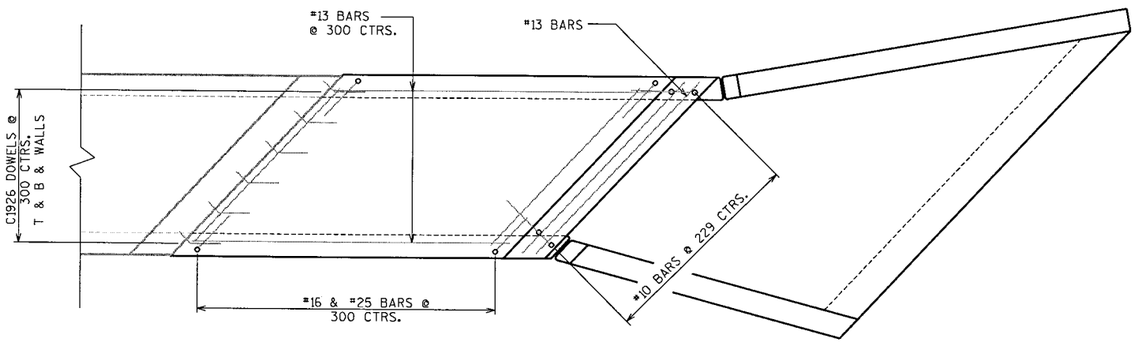
457 MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB

SECTION C1

SECTION C2



SECTION A-A



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-30-17

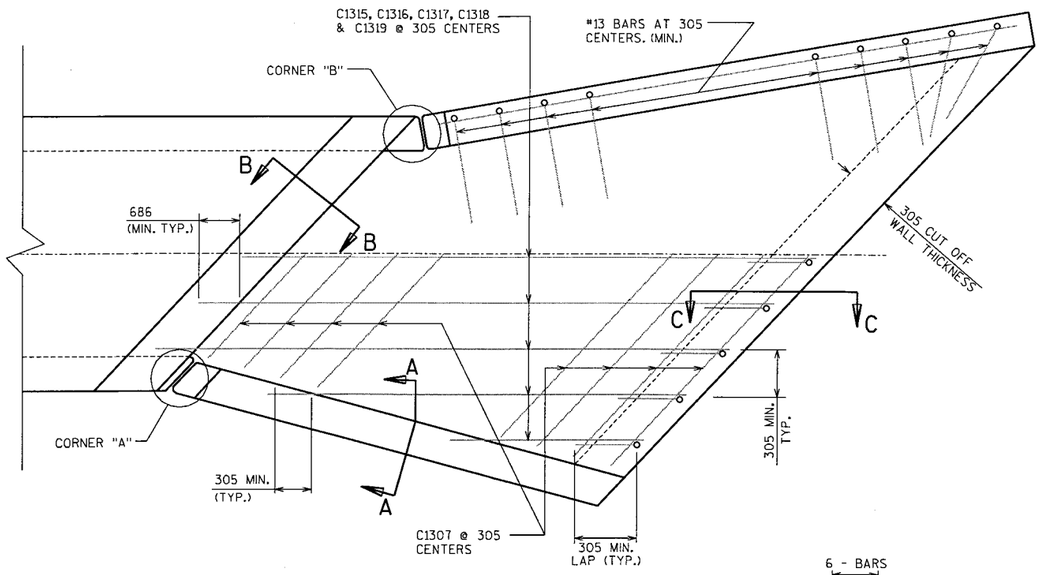
CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. SWS

LIMIT OF REMOVAL & PROPOSED CONSTRUCTION

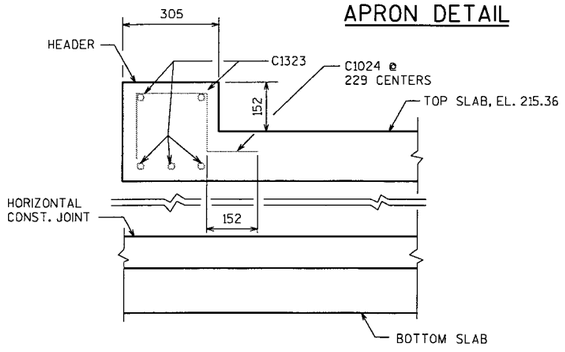
SHEET 2 OF 3

FILE= K:\PROJECTS\5116\PLANS\CULVERT\5116culvDET2
SCALE =

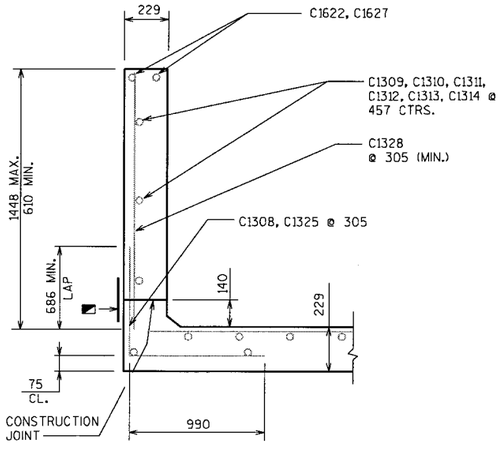
STATE PROJECT NUMBER	SHEET NO.
1032-05-76	460



APRON DETAIL

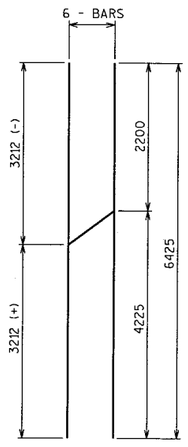


SECTION B-B

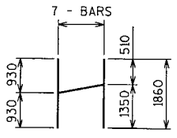


SECTION A-A

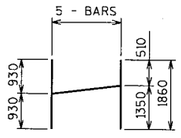
◩ 457 MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONSTR. JT. IN WING.



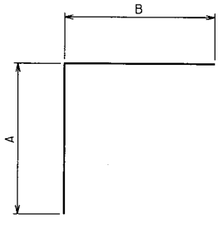
C1307



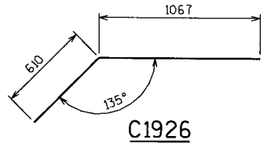
C1309



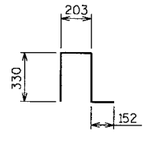
C1328



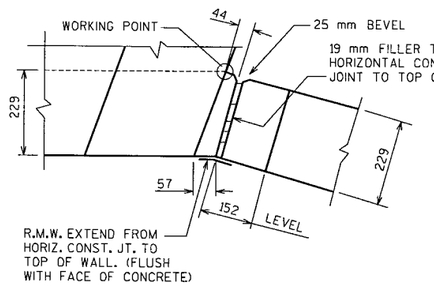
BAR	A	B
C1602	1185	615
C1603	1210	440
C1308	990	1040
C1320	1375	310
C1325	990	700



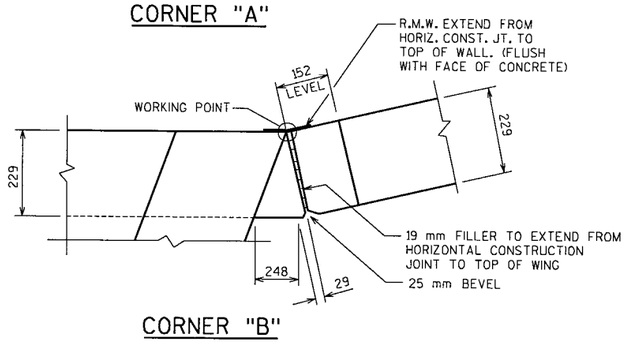
C1926



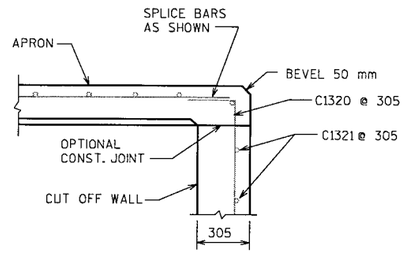
C1024



CORNER "A"



CORNER "B"



SECTION C-C

BILL OF BARS

MARK	COATED	NO. REQ'D	LENGTH	BENT	CUT	LOCATION
C2501		22	1980			TOP & BOTT. BOX SLABS, TRANS.
C1602		22	1800	*		TOP BOX CORNERS, TRANS.
C1603		22	1650	*		BOTT. BOX CORNERS, TRANS.
C1604		22	915			BARREL WALLS, VERT.
C1605		22	1125			BARREL WALLS, VERT.
C1306		28	3750			TOP & BOTT. BOX SLABS, LONG.
C1307		6	6425		*	APRON, TRANS.
C1308		14	2030	*		WING WALL CORNERS, TRANS.
C1309		1	2700		*	WING WALL, VERT.
C1310		2	1800			WING WALL, LONG.
C1311		1	2400			WING WALL, LONG.
C1312		3	2700			WING WALL, LONG.
C1313		1	3360			WING WALL, LONG.
C1314		3	3870			WING WALL, LONG.
C1315		5	4250			APRON, LONG.
C1316		1	1300			APRON, LONG.
C1317		1	2800			APRON, LONG.
C1318		1	1425			APRON, LONG.
C1319		1	2875			APRON, LONG.
C1320		9	1685	*		CUTOFF WALL, VERT.
C1321		5	4200			CUTOFF WALL, TRANS.
C1622		2	2830			WING WALL TOP, LONG.
C1323		5	2330			HEADER, TRANS.
C1024		11	1015	*		HEADER, VERT.
C1325		10	1690	*		WING WALL CORNERS, TRANS.
C1926		18	1676	*		NEW TO EXIST. BARREL DOWELS
C1627		2	3960			WING WALL TOP, LONG.
C1328		12	1860		*	WING WALL, VERT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-30-17

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. SWS

DETAILS

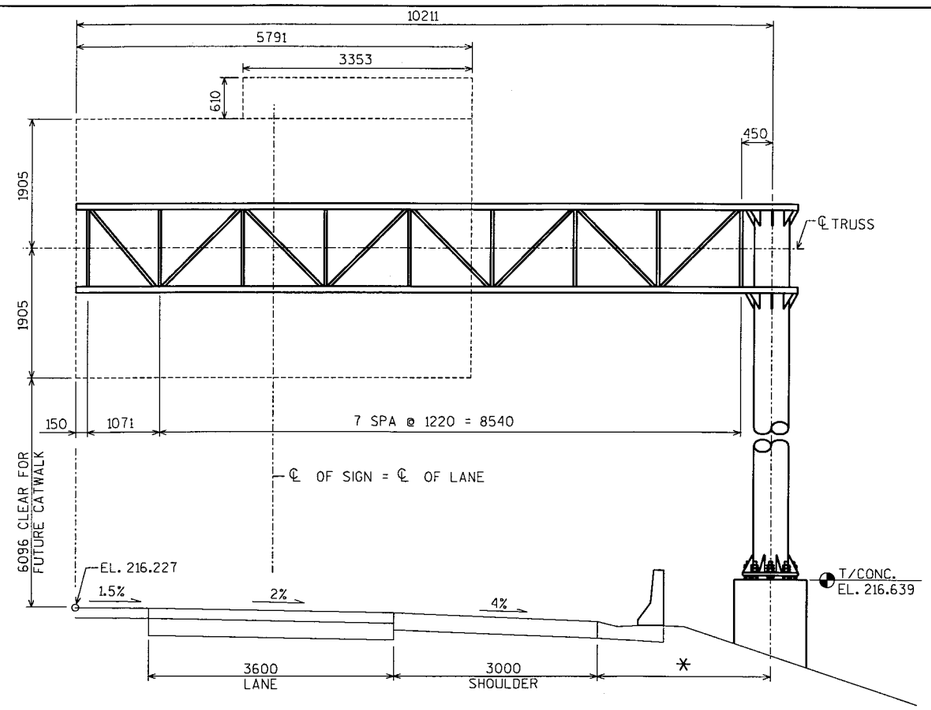
SHEET 3 OF 3

FILE = K:\PROJECTS\5116\PLANS\CULVERT\5116culvDET3
SCALE =

DISTRICT CONTACT: BETH BLUM

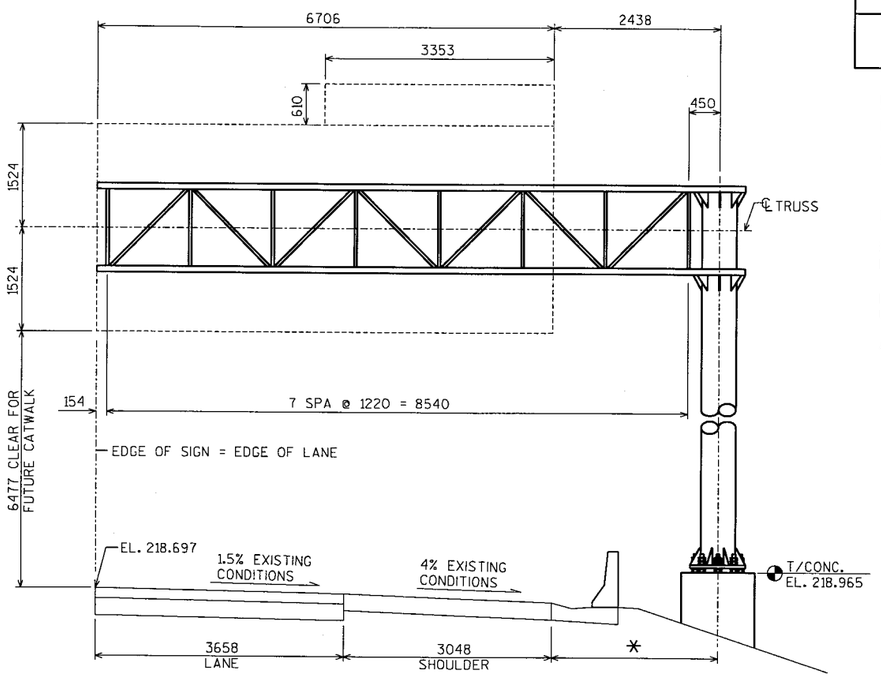
TYPE CODE = X

STATE PROJECT NUMBER	SHEET NO.
1032-08-70	461



S-30-14

(LOOKING NORTH)
STA. 4+120 "E"
W.B. I.H. 94



S-30-15

(LOOKING NORTH)
STA. 4+807.5"E"
W.B. I.H. 94

TOTAL ESTIMATED QUANTITIES

ITEM NUMBERS	BID ITEMS	UNIT	S-30-13	S-30-14	S-30-15	TOTAL
63601	CONCRETE MASONRY, SIGN SUPPORTS	m3	16.5	6.1	6.1	28.7
63610	HIGH STRENGTH BAR STEEL REINFORCEMENT, SIGN SUPPORTS	kg	545	447	447	1439
64112	SIGN BRIDGE, CANTILEVERED, STRUCTURE S-30-14	LS		1		1
64113	SIGN BRIDGE, CANTILEVERED, STRUCTURE S-30-15	LS			1	1
64166	SIGN BRIDGE, STRUCTURE S-30-13	LS	1			1
90004M	REMOVING SIGN BRIDGE, STRUCTURE S-30-5	LS	1			1
90004W	REMOVING MEDIAN SINGLE POLE SIGN BRIDGE, STRUCTURE S-30-200	LS	1			1

DESIGN DATA

OVERHEAD TRUSS:
DESIGN SIGN AREA = 49.0 m^2
+ 10.5 m^2 MEDIAN SIGN
(ACTUAL SIGN AREA = 27.5 m^2
+ 10.5 m^2 MEDIAN SIGN)
PLUS CATWALK & LIGHTING
MAXIMUM SIGN DEPTH = 3.658 m

CANTILEVER TRUSSES:
S-30-14
ACTUAL SIGN AREA = 24.1 m^2
MAXINMUM SIGN DEPTH = 3.810 m
S-30-15
ACTUAL SIGN AREA = 22.5 m^2
MAXINMUM SIGN DEPTH = 3.658 m

GENERAL NOTES

WIND VELOCITY=137 km/h
ALL DIMENSIONS, THICKNESSES, & WELD SIZES IN MILLIMETERS.

DRAWINGS SHALL NOT BE SCALED.

EXACT LOCATION OF SIGN BRIDGE SHALL BE DETERMINED BY THE DISTRICT TRAFFIC ENGINEER.

HANDHOLES ARE REQUIRED ON ALL TOWER COLUMNS FORWARD AGAINST DIRECTION OF TRAFFIC.

ALTERNATE DESIGNS ARE NOT ALLOWED.

◯ INDICATES SIGN NUMBER.

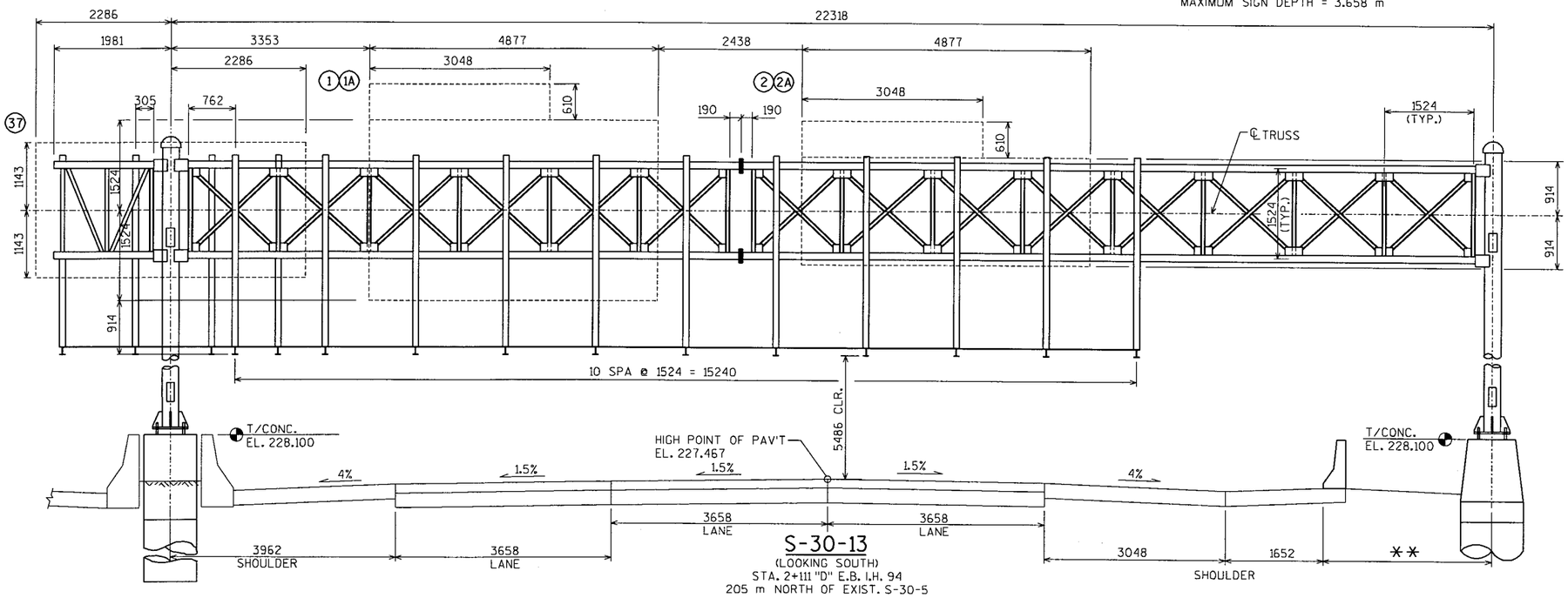
LIST OF DRAWINGS

1. GENERAL PLAN
2. GALVANIZED STEEL CANTILEVER SIGN TRUSS
3. CANTILEVER TRUSS FOOTING
4. 4-CHORD GALVANIZED STEEL SIGN BRIDGE
5. SIGN BRIDGE DETAILS
6. 4-CHORD SIGN BRIDGE DETAILS
7. HANDHOLE DETAILS
8. SIGN BRIDGE CATWALK
9. SIGN BRIDGE FOOTING TYPE 'F1-MOD'
10. SIGN BRIDGE FOOTING TYPE 'A-MOD'

SIGN BRIDGE NOTES

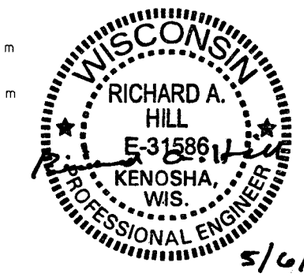
* 2438± FROM FACE/SHOULDER TO CENTER OF TOWER COLUMNS. ADJUST TO ALIGN SIGNS.

** 2682± FROM FACE/SHOULDER TO CENTER OF TOWER COLUMNS. ADJUST TO ALIGN SIGNS.



S-30-13

(LOOKING SOUTH)
STA. 2+111 "D" E.B. I.H. 94
205 m NORTH OF EXIST. S-30-5



BRIDGE OFFICE CONTACT :
G. ANDERSON (608) 266-8488

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13 THRU S-30-15

E - W FREEWAY, IH - 94

COUNTY	TOWN/CITY/VILLAGE	
KENOSHA	KENOSHA	
DESIGN SPEC. AASHTO 1998	LOAD 137 km/h	CONST. SPEC. 1996
DESIGNED BY JWC / DESIGN CK'D. SWS	DRAWN BY BLM	PLANS CK'D. JWC

APPROVED G.H. Anderson 05-07-02
CHIEF STRUCTURAL DESIGN ENGINEER DATE

GENERAL PLAN

SHEET 1 OF 10

DATE:

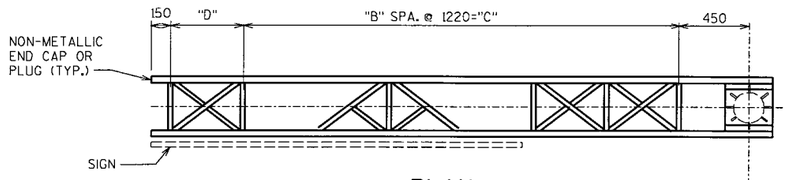
FILE = K:\PROJECTS\5116\PLANS\SIGNSTRUCT\5116SGNDET.DGN

SCALE=

I.D.

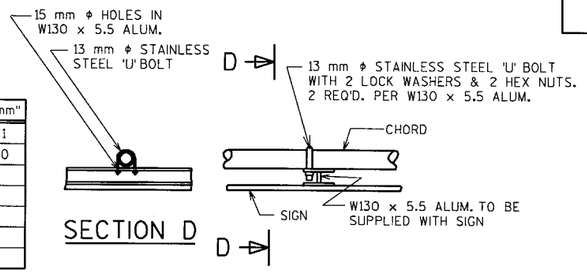
STATE PROJECT NUMBER	SHEET NO.
1032-08-70	462

END PANEL "D" = 610 mm MINIMUM
= 1830 MAXIMUM



PLAN

STRUCTURE	"A mm"	"L mm"	"B"	"C mm"	"T1 mm"	"D mm"
S-30-14	10211	8135	7	8540	15.9	1071
S-30-15	9144	8279	6	7320	15.9	1220



SECTION D

TYPICAL SIGN CONNECTION

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

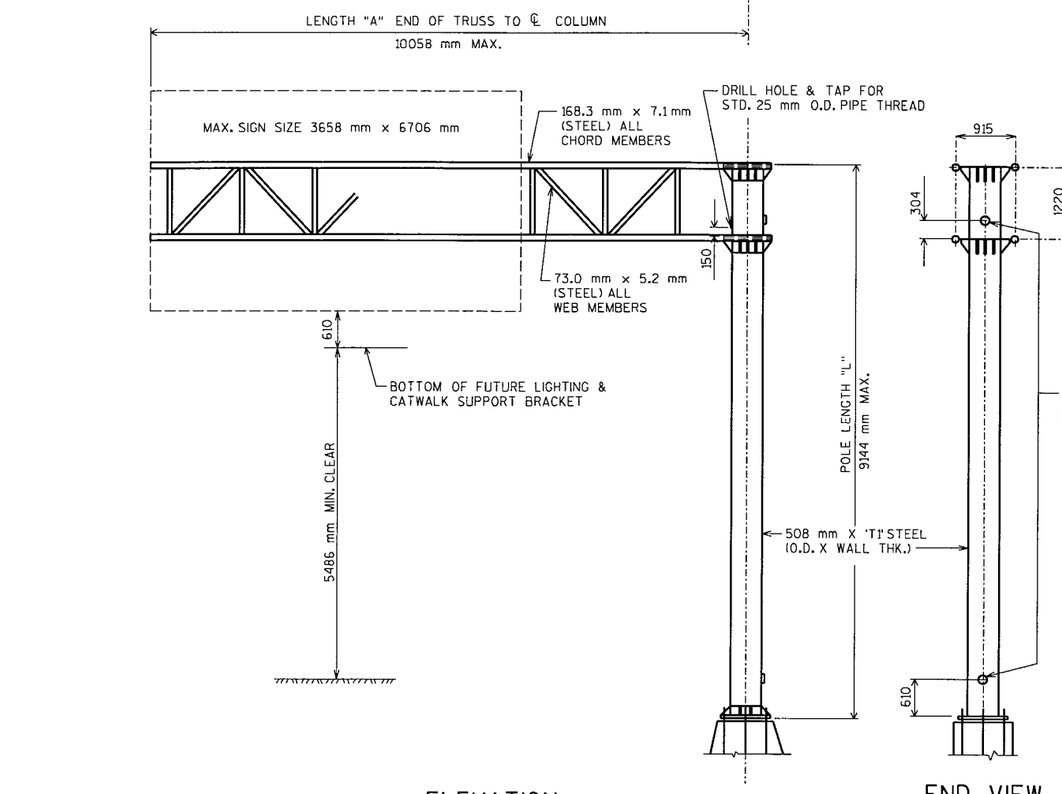
DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC "SIGNALS"

WIND VELOCITY = 137 km/h

ALL DIMENSIONS, THICKNESSES, & WELD SIZES IN MILLIMETERS

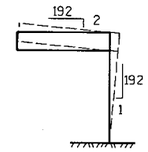
ALLOWABLE DESIGN STRESSES

CHORDS & COLUMN
(INCLD. HANDHOLE) — API-5L-X42 — fy=289 MPa
ALL OTHER PIPE — A53, GRADE B — fy=241 MPa
PLATES & BARS — A709M — fy=248 MPa
ANCHOR BOLTS — A.A.S.H.T.O. M314 — fy=380 MPa
HIGH STRENGTH BOLTS — A325M — fy=635 MPa
STRUCTURAL MEMBERS GALVANIZED A123
HARDWARE GALVANIZED — A153 CLASS C

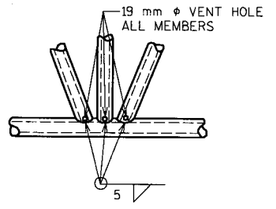


ELEVATION

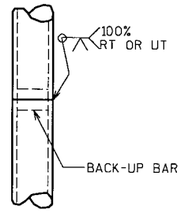
END VIEW



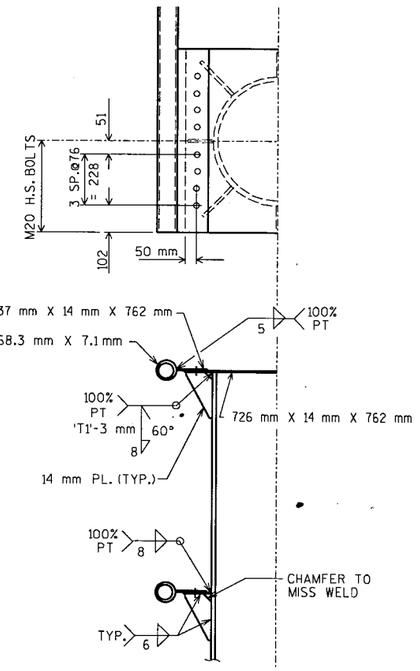
CAMBER DIAGRAM



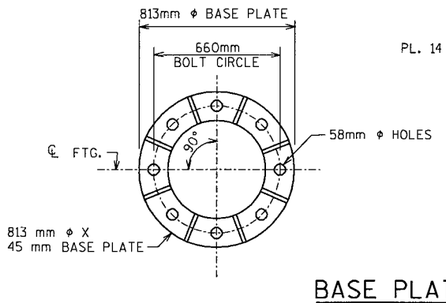
TRUSS JOINT DETAILS



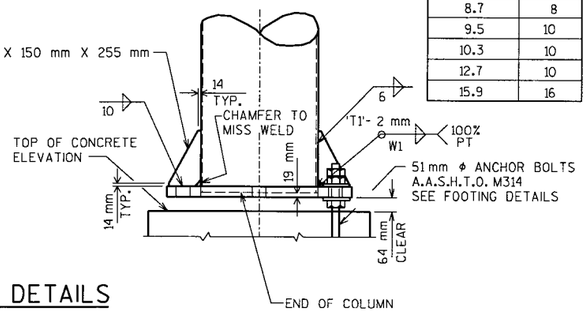
OPTIONAL COLUMN OR CHORD SPLICE DETAIL



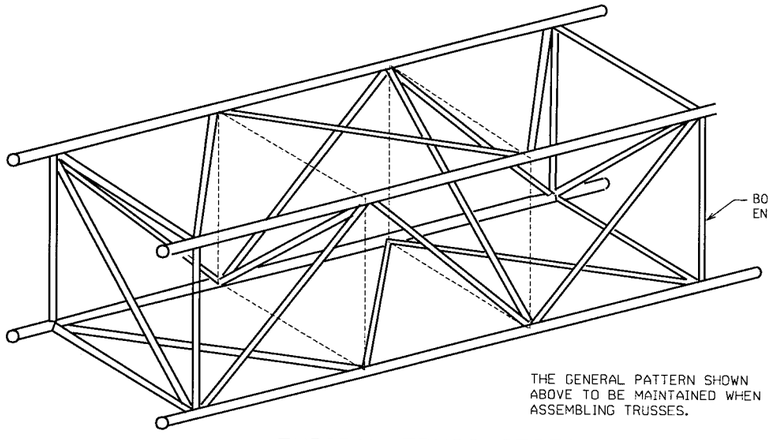
TRUSS TO COLUMN CONNECTION DETAILS



BASE PLATE DETAILS



WELD SIZE 'W1'	
POLE 'T1'	'W1'
7.1	6
7.9	6
8.7	8
9.5	10
10.3	10
12.7	10
15.9	16



THE GENERAL PATTERN SHOWN ABOVE TO BE MAINTAINED WHEN ASSEMBLING TRUSSES.

TYPICAL TRUSS SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURES S-30-14 THRU S-30-15

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

GALV'D STL. CANTILEVER SIGN TRUSS

SHEET 2 OF 10

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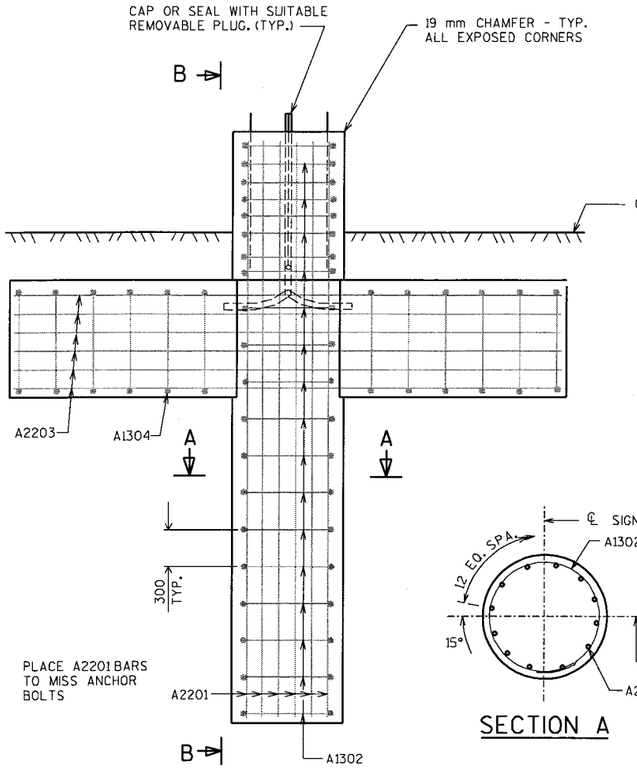
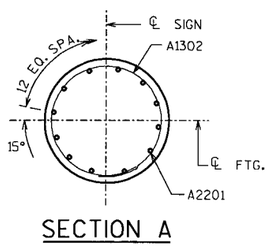
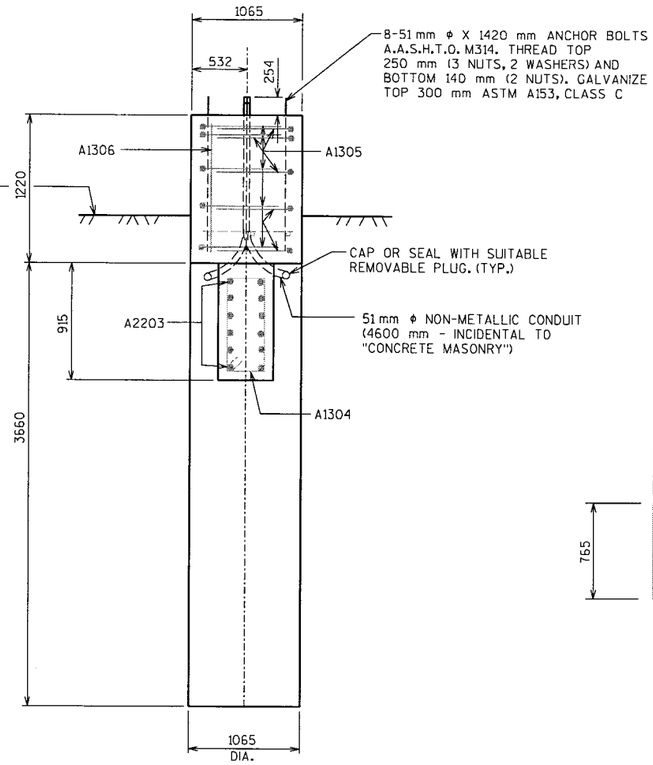
STATE PROJECT NUMBER	SHEET NO.
1032-08-70	463



ELEVATION
(6.1 m^3/ftg.)



SECTION A



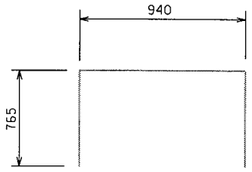
SECTION B

NOTE:
THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

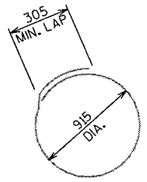
BILL OF BARS

447 kg

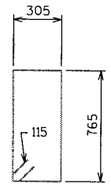
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUNDLE	LOCATION
A2201		12	4725				FOOTING - COLUMN/TOP
A1302		16	3200	X			FOOTING - COLUMN/TOP
A2203		12	4570				FOOTING - WINGS
A1304		12	2370	X			FOOTING - WINGS
A1305		10	2470	X			FOOTING - TOP
A1306		4	1070				FOOTING - TOP - COLUMNS



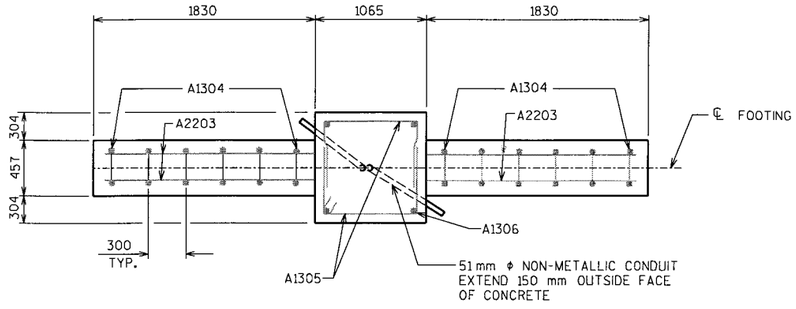
A1305



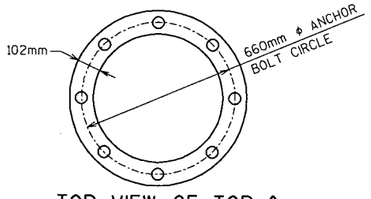
A1302



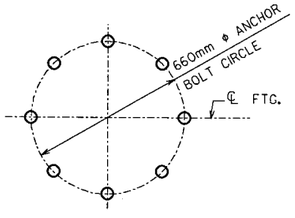
A1304
(STIRRUP)

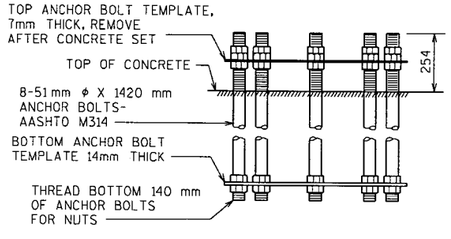


PLAN



TOP VIEW OF TOP & BOTTOM TEMPLATES





ANCHOR BOLT DETAILS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 75 mm CLEAR UNLESS DETAILED OTHERWISE.

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY — f'c=24 MPa
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 420 — fy=420 MPa
ANCHOR BOLTS A.A.S.H.T.O. M314 — fy=380 MPa

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE = 192 kPa

TOTAL ESTIMATED QUANTITIES (1 FTG.)

CONCRETE MASONRY, SIGN SUPPORTS — 6.1 m^3
HIGH STRENGTH BAR STEEL REINFORCEMENT, SIGN SUPPORTS — 445 kg

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURES S-30-14 THRU S-30-15

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

CANTILEVER TRUSS FOOTING

SHEET 3 OF 10

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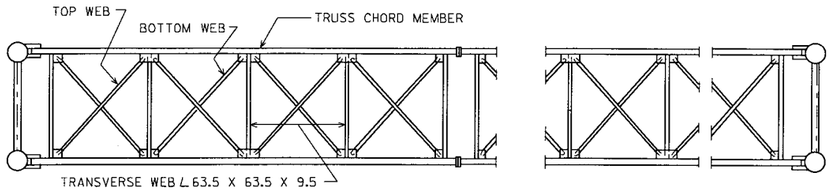
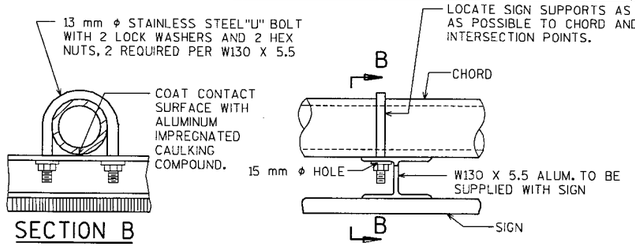
SCALE =

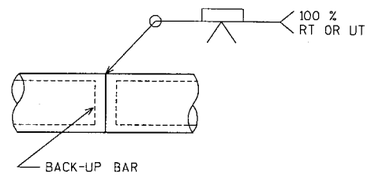
STATE PROJECT NUMBER	SHEET NO.
1032-08-70	464



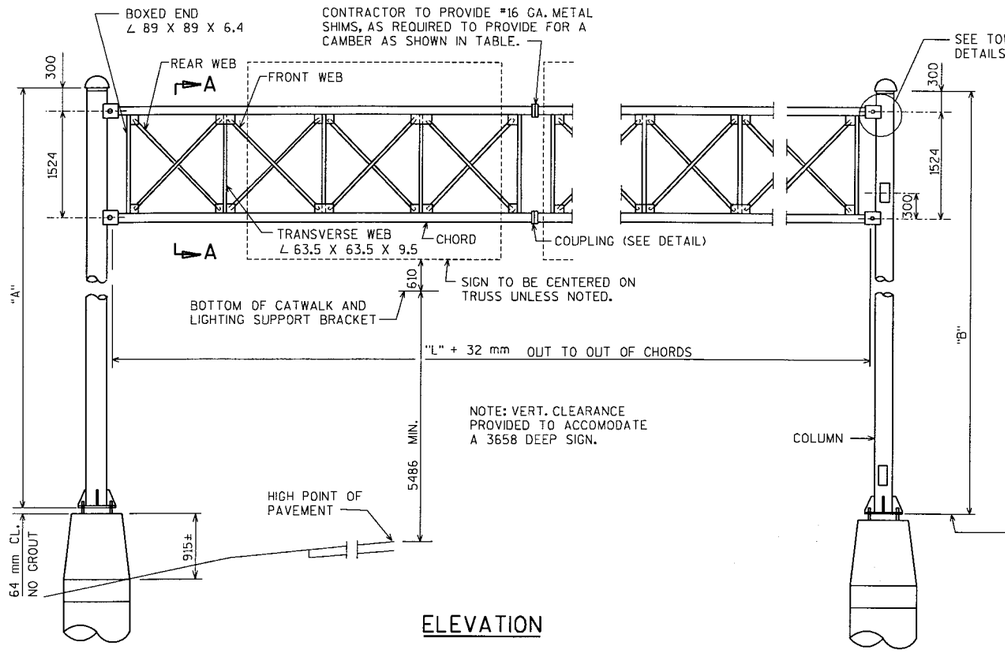
PLAN



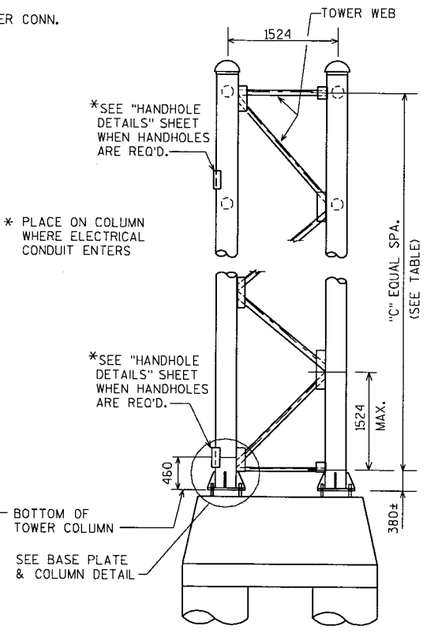
TYPICAL SIGN CONNECTION



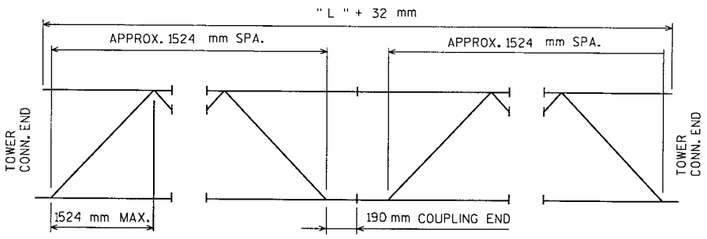
CHORD SPLICE



ELEVATION

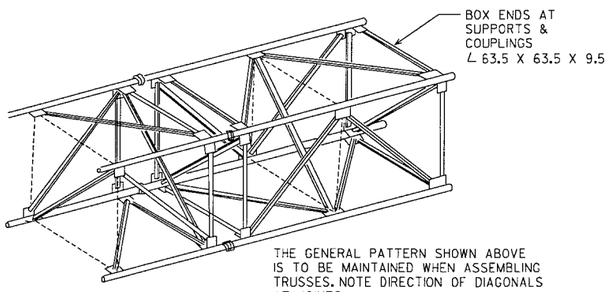


END VIEW

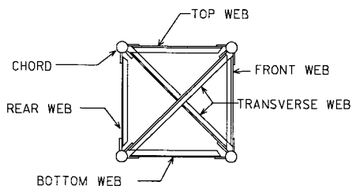


TRUSS ARRANGEMENT

FABRICATOR MAY MAKE TRUSSES ANY LENGTH KEEPING A SECTION A MINIMUM OF 6096 mm & A MULTPLE OF 1524 mm. CHORD FIELD SPLICES SHALL BE MADE WITH COUPLINGS. CHORD SHOP SPLICE SHALL BE THE WELDED SPLICE SHOWN ABOVE.



TYPICAL TRUSS SECTION



SECTION A

NOTES

DRAWINGS SHALL NOT BE SCALED.
STEEL COLUMN PIPE SHALL BE A.P.I. SPEC. 5L GRADE X42 FY = 289 MPa
ALL STEEL PIPE MEMBERS OF TRUSS SHALL BE A.P.I. SPEC. 5L GRADE X42 FY = 289 MPa
PLATES, BARS, STRUCTURAL ANGLES SHALL BE A.S.T.M. A709 GRADE 36 FY = 248 MPa
ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.
ALL BOLTED CONNECTIONS SHALL BE MADE WITH M20 A325M BOLTS, GALVANIZED A.S.T.M. A153, CLASS C.
WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF UNIT CAN BE GALVANIZED IN ONE PIECE.
STEEL ANCHOR BOLTS SHALL BE A.A.S.H.T.O. M314-90 GRADE 380. FY = 380 MPa
SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION.
BLANKS SHALL BE 1/4 THE LENGTH OF THE BRIDGE, 610 mm DEEPER THAN C TO C OF CHORDS & SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS.
THE UPPER 300 mm OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE A.A.S.H.T.O. SPECIFICATION AS STATED IN SECTION 641. OF THE WIS. D.O.T. STANDARD SPECIFICATIONS.
WELD TEST AS PER AWS D1.1.

DESIGN DATA

DEAD LOAD - WT. OF SIGN, SUPPORTING STRUCTURE, CATWALK, LIGHTS AND RAILINGS.
LIVE LOAD - SINGLE LINE LOAD OF 2.3 kN DISTRIBUTED OVER 610 mm OF CATWALK.
ICE LOAD - 144 Pa TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 137 km/h TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3
group loads	% OF ALLOWABLE STRESS	
1. DEAD	100	
2. DEAD + WIND	140	
3. DEAD + ICE + 1.2 kPa WIND	140	

TABLE

STRUCTURE	A	B	C	CHORDS O.D. X THK.	TOP & BOTTOM WEB	FRONT & REAR WEB	COUPLING PLATE "D1" & "T"	BOLT CIRCLE DIA. "D2"	NO. OF BOLTS IN COUPLING	CAMBER	COLUMN O.D. X THK.	TOWER WEB	"L"
S-30-13	8290	8290	5	141 X 6.6	∠63.5 X 63.5 X 9.5	∠63.5 X 63.5 X 9.5	286 X 32	210	8	32 mm	273 X 9.3	∠76 X 76 X 9.5	21937

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

4-CHORD GALV'D STL. SIGN BRIDGE

SHEET 4 OF 10

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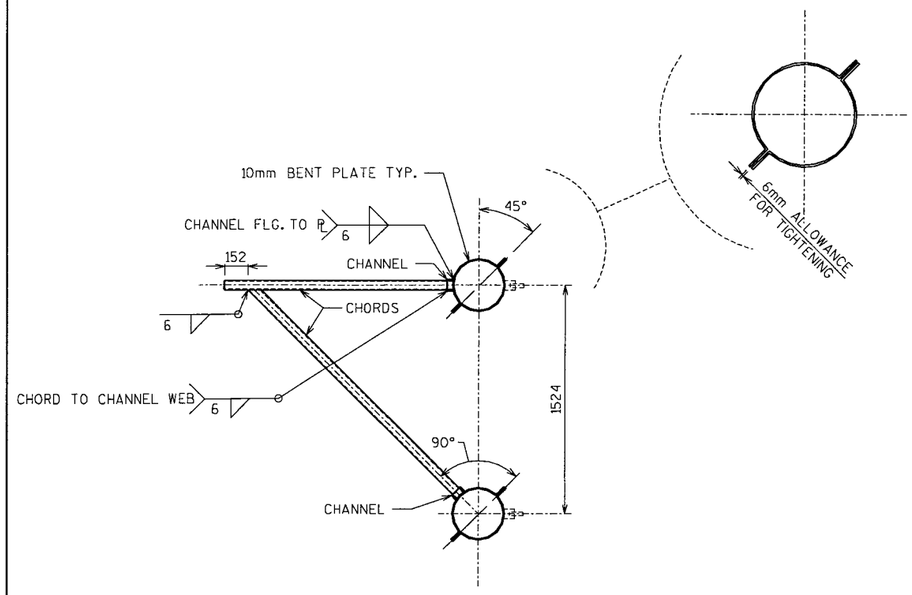
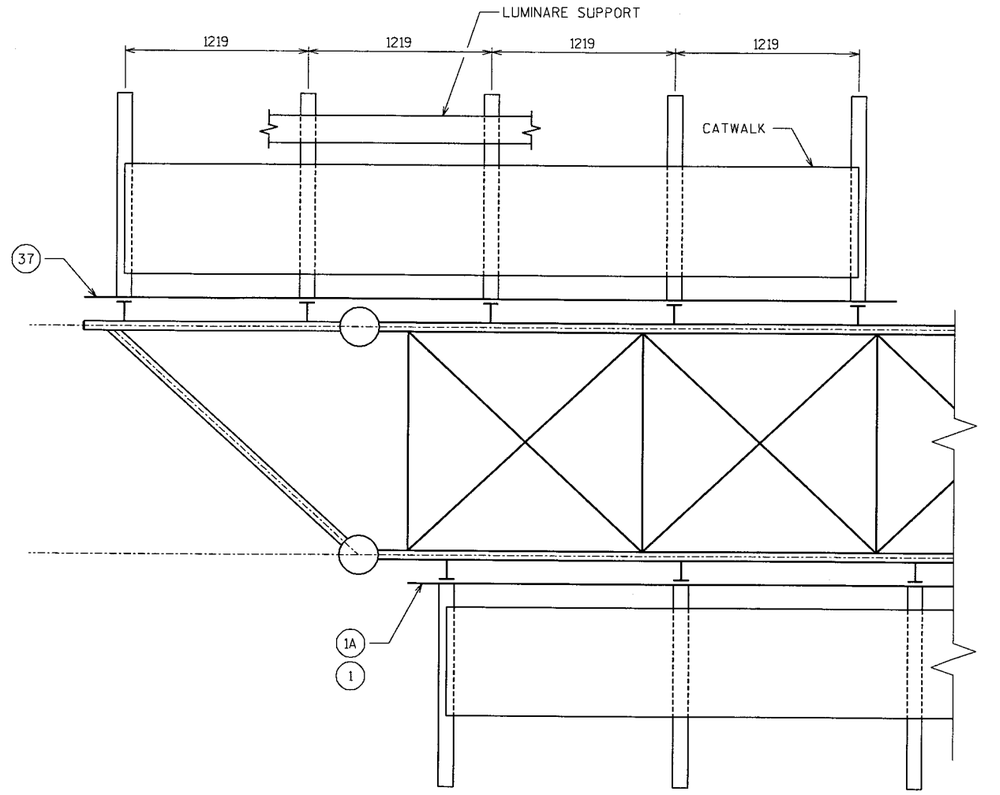


PLAN

CHANNELS	CHORDS O.D. X THK.	WEBS O.D. X THK.
C102 X 2.44	73 mm X 5 mm	42 mm X 3.5 mm



PLAN
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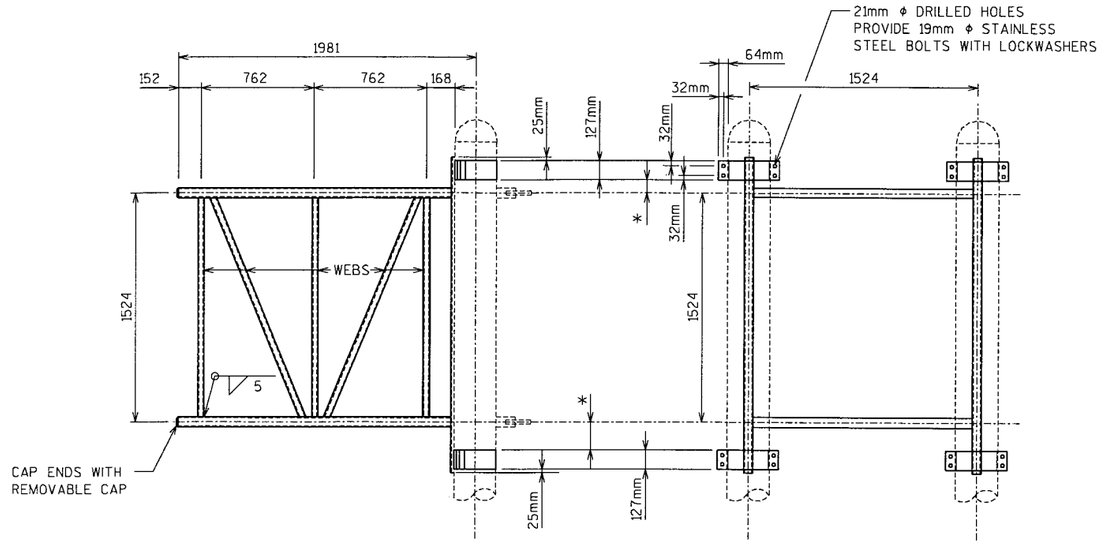

ELEVATION

END VIEW

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13

CONST. SPEC. 1996	DRAWN BY SET	PLANS CK'D. SWS

SIGN BRIDGE DETAILS

SHEET 5 OF 10

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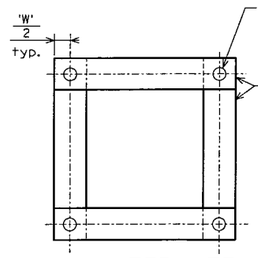
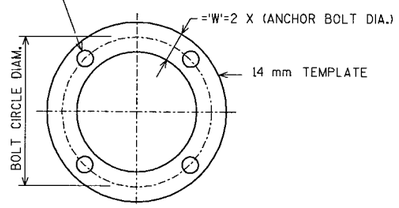
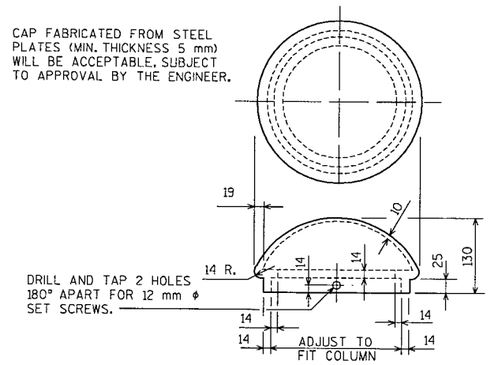


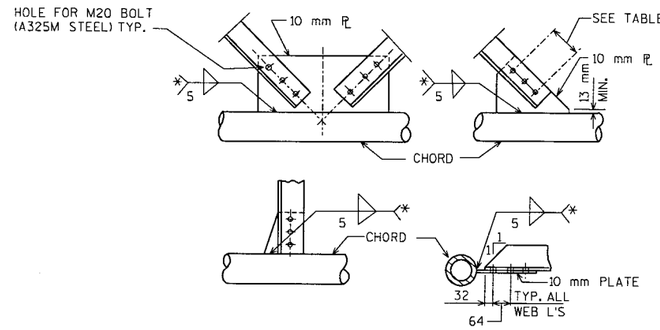
ALTERNATE
ANCHOR PLATE/TEMPLATE PLAN



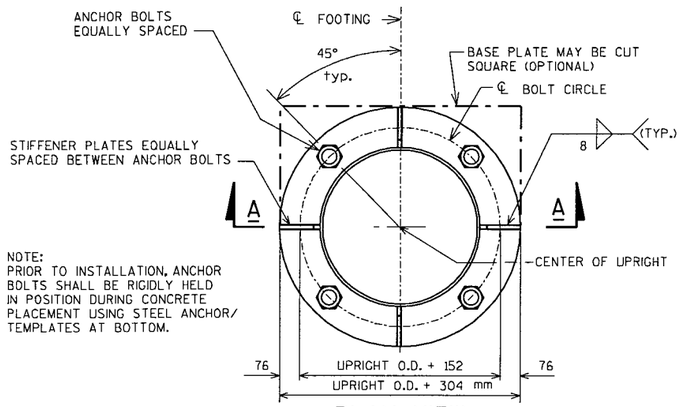
ANCHOR PLATE/TEMPLATE PLAN



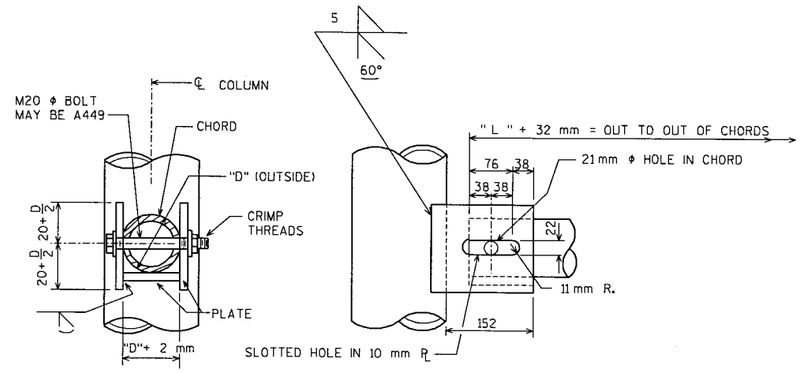
TOWER CAP DETAIL



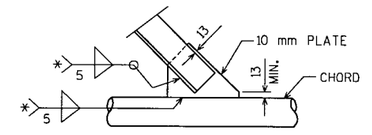
TYPICAL TRUSS CONNECTION DETAILS



PLAN VIEW
(BASE PLATE)

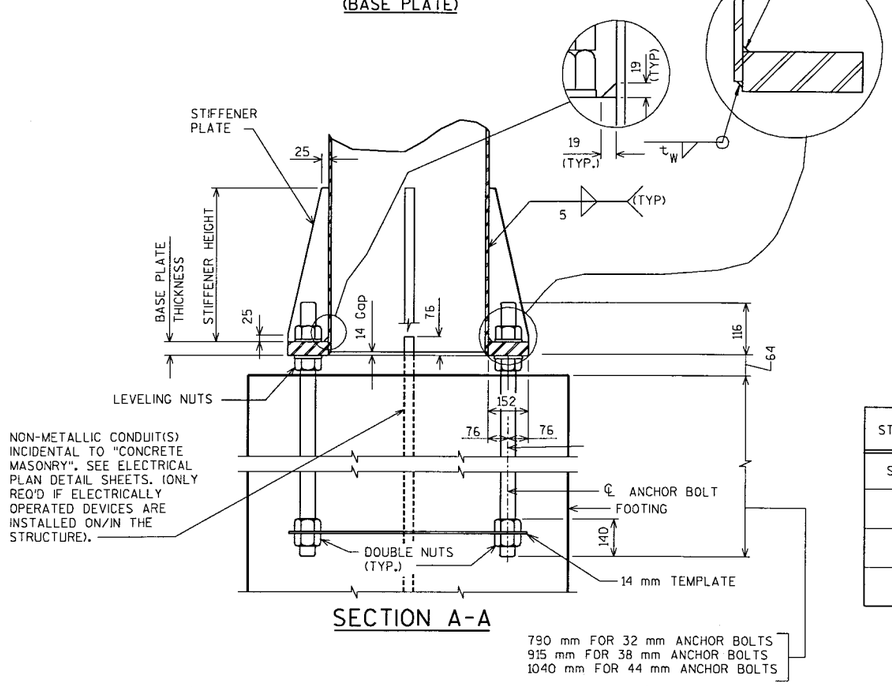


TOWER CONNECTION DETAIL

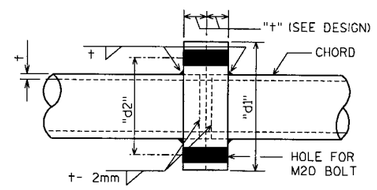


TYPICAL WELDED ALTERNATE

*ANGLE	WELD LENGTH	NO. OF BOLTS
64x64x6.4	280 mm	3
76x76x4.8	255 mm	3
76x76x6.4	330 mm	4
76x76x7.9	420 mm	5
76x76x9.5	495 mm	6
102x102x6.4	460 mm	5
102x102x7.9	560 mm	6
102x102x9.5	660 mm	8
102x102x11.1	765 mm	9
102x102x12.7	865 mm	10



SECTION A-A



COUPLING DETAIL

BASE PLATE & UPRIGHT COLUMN DETAILS

STRUCTURE	COLUMN O.D. X THK.	ANCHOR BOLTS	BASE PLATE THICKNESS (mm)	STIFFENER PLATE THICKNESS (mm)	STIFFENER PLATE HEIGHT (mm)	t_W (mm)
S-30-13	273 X 9.3	32 mm	38	13	203	8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

4-CHORD SIGN BRIDGE DETAILS

SHEET 6 OF 10

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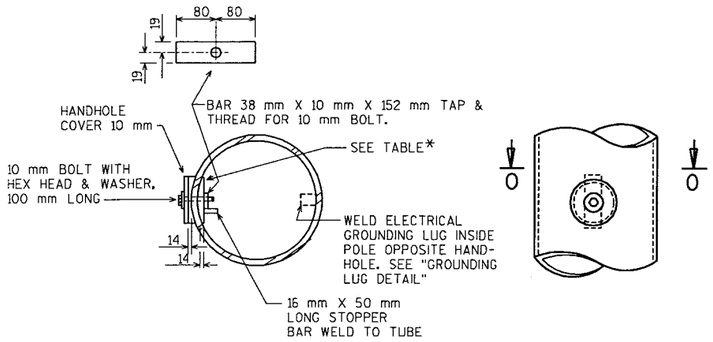
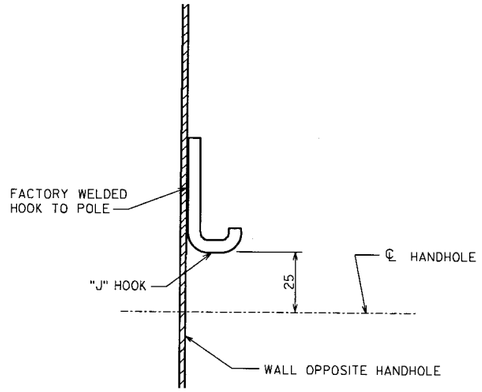
1032-08-70	467



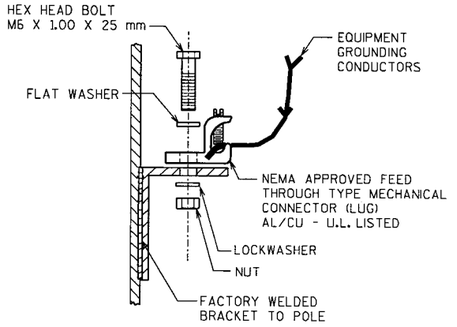
SECTION '0'

HANDHOLE DETAILS



TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HANDHOLE NOTES

HANDHOLES SHALL BE LOCATED IN ONE COLUMNS OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE DISTRICT TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL DETAIL PLAN SHEETS.

*

UPRIGHT DIAM. SIZE	HANDHOLE PIPE O.D. X MIN. THK.
UP TO AND INCLD. 406.4 mm X 9.5 mm	141.3mm X 12.7mm
GREATER THAN 406.4 mm X 9.5 mm TO AND INCLD. 610.0 mm X 14.3 mm	168.3 mm X 14.3mm

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURES S-30-13 THRU S-30-15

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

HANDHOLE DETAILS

SHEET 7 OF 10

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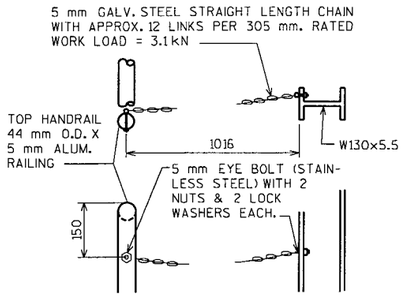
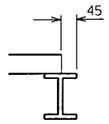
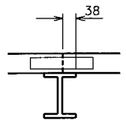
1032-08-70	468



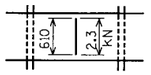
SAFETY CHAIN DETAIL



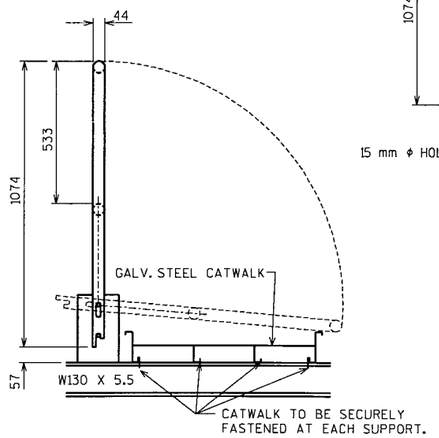
CATWALK TERMINATION DETAIL



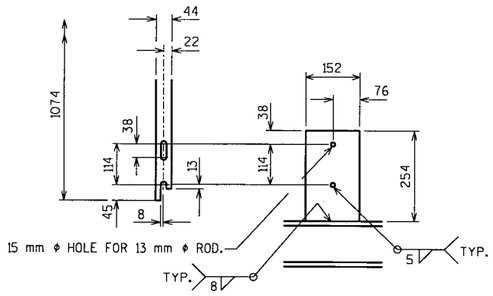
CATWALK SPLICE LOCATION DETAIL



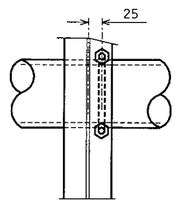
NOTE:
CATWALK SHALL MEET A.A.S.H.T.O. "SPECIFICATIONS FOR THE DESIGN & CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS" 1985. (2.3 kN DISTRIBUTED OVER 610 mm TRANSVERSELY WITH THE BASIC ALLOWABLE UNIT STRESS - A.A.S.H.T.O. HIGHWAY BRIDGES 1985 (INCREASED 25%). MAX. SPAN IS 2438 mm. CATWALK SHALL ALSO MEET O.S.H.A. 1970 STD'S. FOR WALKING-WORKING SURFACES.



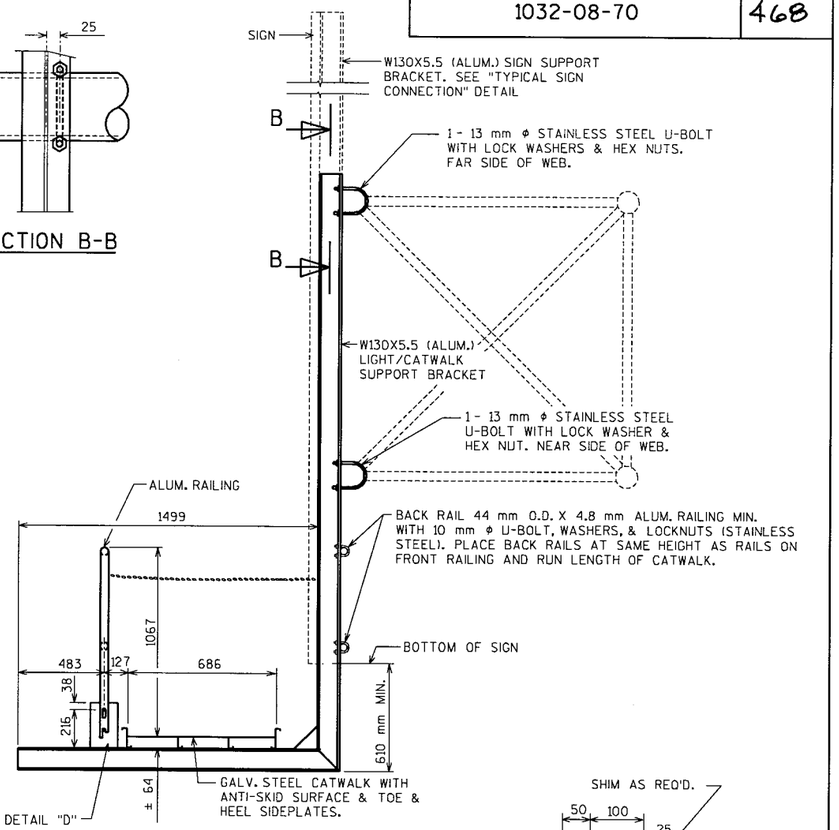
RAIL POST DETAIL



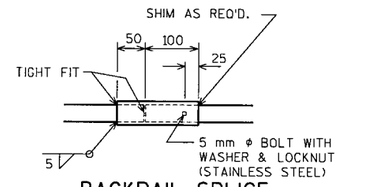
DETAIL "D"



SECTION B-B

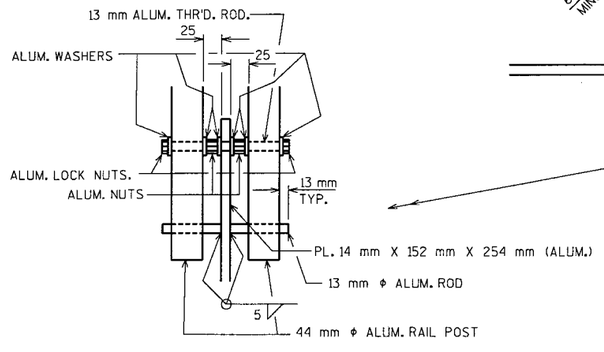


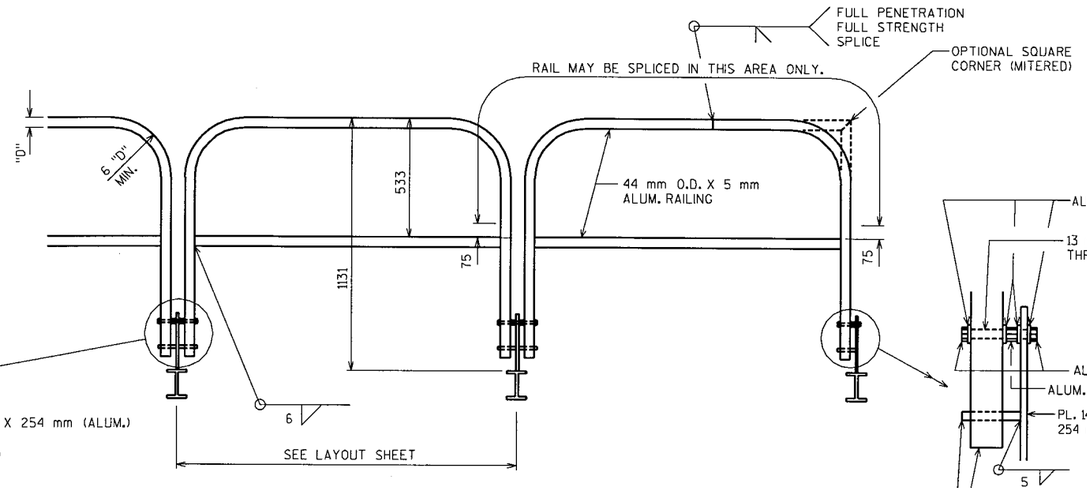
SECTION THRU WALKWAY

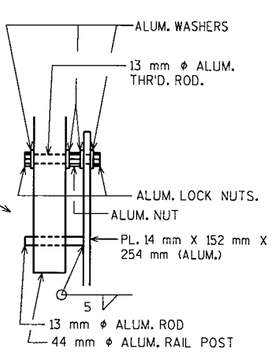


BACKRAIL SPLICE

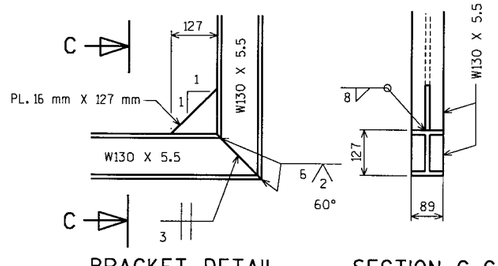
ONE SPLICE ALLOWED FOR LENGTHS OVER 9144 mm







TYPICAL RAILING DETAILS



BRACKET DETAIL

SECTION C-C

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

SIGN BRIDGE CATWALK

SHEET 8 OF 10

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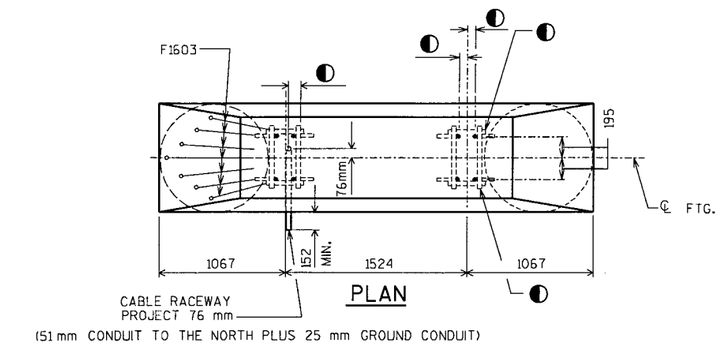
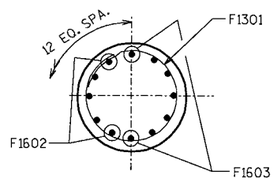
1032-08-70	469



PLAN



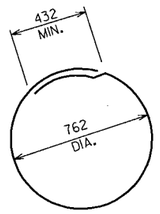
SECTION F

◐ SEE SHEET 6 FOR ANCHOR BOLT DETAILS

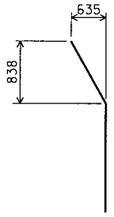
BILL OF BARS
ONE FTG.=260 Kg

NOTE: THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

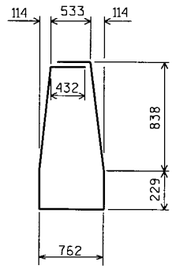
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
F1301		18	2850	X			FOOTING-HOOPS
F1602		10	3120				FOOTING-VERT.
F1603		14	4010	X			FOOTING-VERT.
F1304		11	3660	X			FOOTING-STIRRUPS
F1305		2	3250				FOOTING-HORIZ.
F1306		2	3710				FOOTING-HORIZ.
F1307		2	4160				FOOTING-HORIZ.
F1308		2	4410				FOOTING-HORIZ.



F1301



F1603



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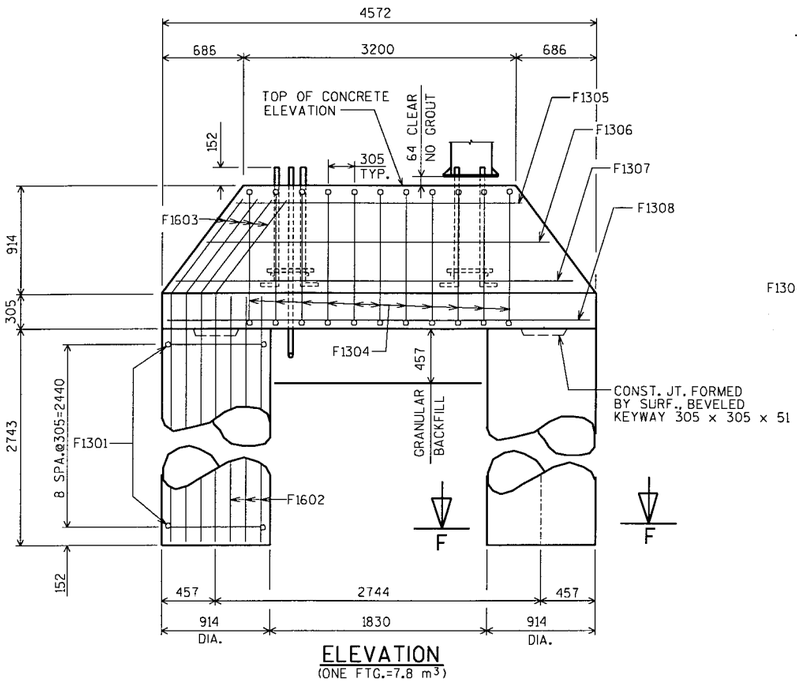
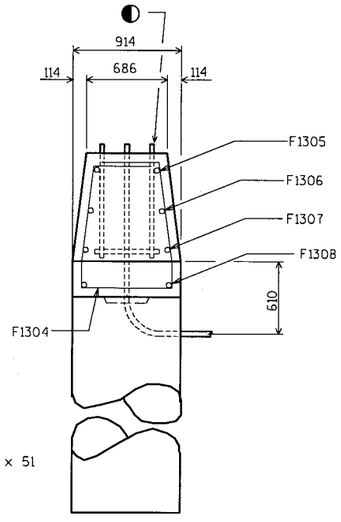


ELEVATION
(ONE FTG.=7.8 m^3)



END VIEW

FOOTING TYPE 'F1'

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 75mm CLR.
CONCRETE MASONRY ---- fc' = 24 MPa
BAR STEEL REINF. ---- GRADE 420 fy = 420 MPa
ALLOWABLE SOIL PRESSURE ---- Pallow = 144 kPa
SOIL DENSITY ---- GAMMA = 19 kN/m^3
COORDINATE CONDUIT WITH CIVIL PLANS.

SUMMARY OF QUANTITIES (1 FTG.)

ITEM	UNIT	FTG. TYPE 'F1'
CONCRETE MASONRY, SIGN SUPPORTS	m3	7.8
HIGH STRENGTH BAR STEEL REINFORCEMENT, SIGN SUPPORTS	Kg	260

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	BLM	JWC

SIGN BRIDGE FOOTING TYPE "F1-MOD"

SHEET 9 OF 10

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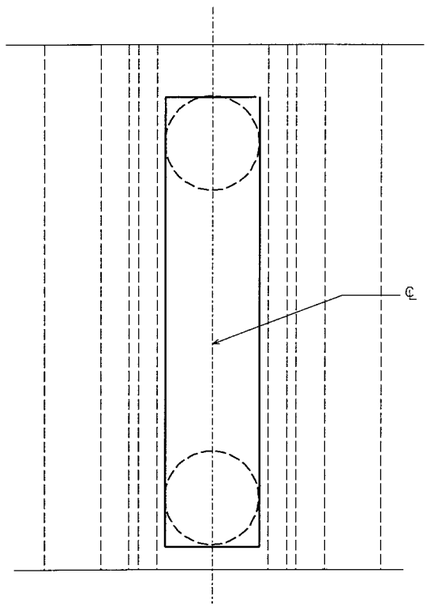
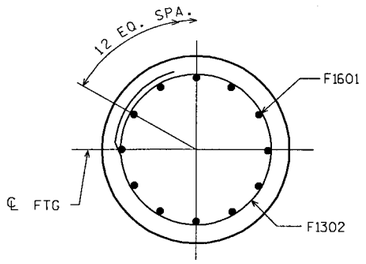
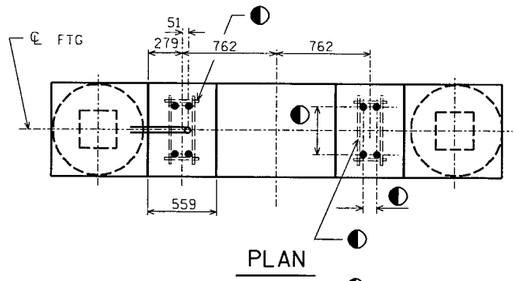
1032-08-70	470



PLAN



SECTION FF



PLAN

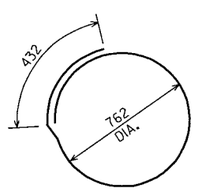
◐ DIMENSIONS TO FIT THE PARTICULAR SIGN BRIDGE USED

BILL OF BARS (1 FOOTING) 285 Kg

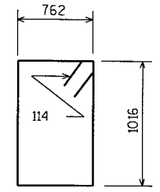
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
F1601		24	3810				FTG - VERT
F1302		18	2850	x			FTG - HOOPS
F1303		15	3790	x			FTG - STIRRUPS
F1304		8	4420				FTG - HORIZ

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

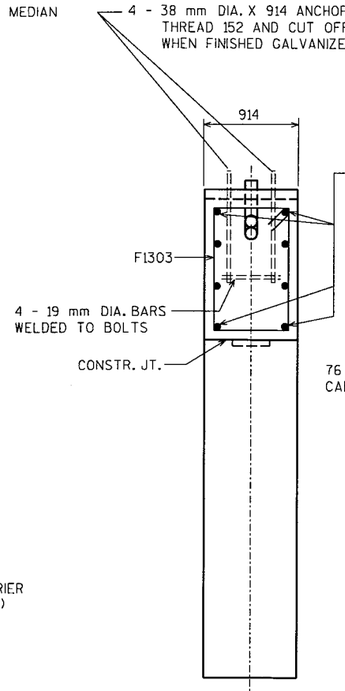
ALL DIMENSIONS ARE TO OUT OF BAR



F1302

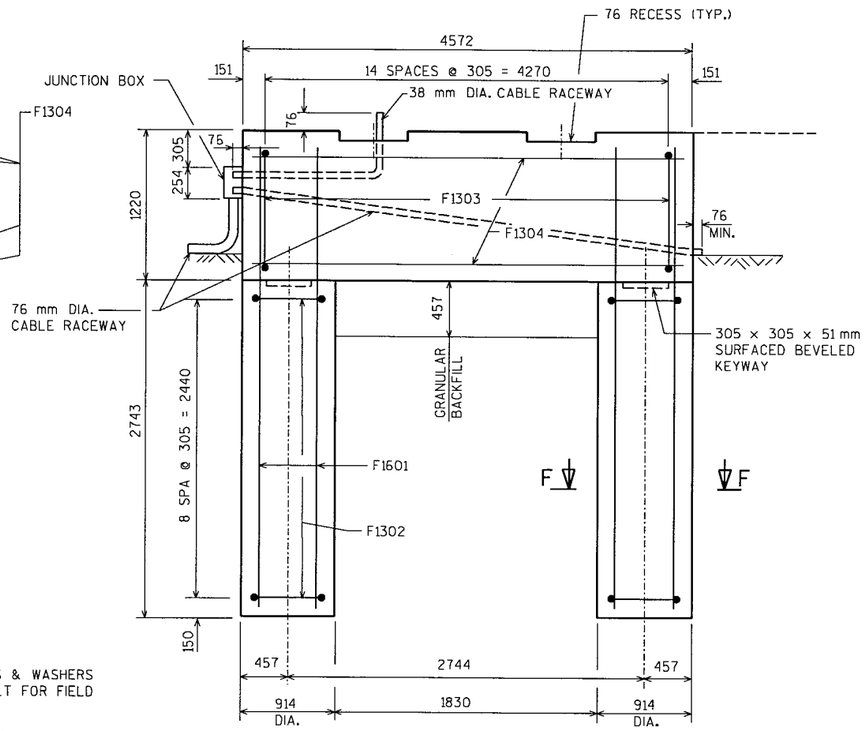


F1303



NOTE:
PROVIDE (2) NUTS & WASHERS PER ANCHOR BOLT FOR FIELD ADJUSTMENT.

END SECTION



ELEVATION

NOTE:
8.7 m^3 OF CONCRETE REQ'D FOR ONE FOOTING

DESIGN DATA

CONCRETE MASONRY _____ f'c = 24 MPa

HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 420 _____ fy = 420 MPa

ALLOWABLE SOIL PRESSURE _____ Pallow = 144 kPa

SOIL DENSITY _____ GAMMA = 19 kN/m^3

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

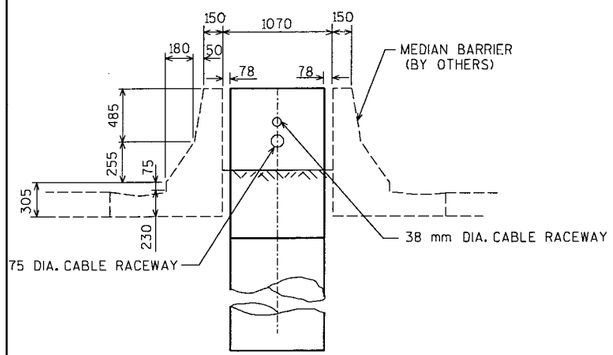
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 75 mm CLEAR.

THE USE OF STRUCTURAL GRADE BAR STEEL REINFORCEMENT IS PROHIBITED.

CABLE RACEWAY TO ENTER SIGN BRIDGE COLUMN CLOSEST TO SIGNS.

CONDUIT TO BE PLACED IN MEDIAN FOOTING ONLY.

COORDINATE CONDUIT & JUNCTION BOXES WITH CIVIL PLANS.



ELEVATION
(SHOWN IN MEDIAN)

NOTE:
TYPE "A" FOOTING SHALL BE USED FOR MEDIAN SIGN BRIDGE FOOTINGS WHERE SPACE PERMITS.

SUMMARY OF QUANTITIES (1 FTG)

BID ITEMS	UNIT	TYPE "A-MOD"
CONCRETE MASONRY, SIGN SUPPORTS	m3	8.7
HIGH STRENGTH BAR STEEL REINFORCEMENT, SIGN SUPPORTS	Kg	285

BRIDGE OFFICE CONTACT:
G. Anderson (608) 266-8488

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-30-13

CONST. SPEC. 1996	DRAWN BY BLM	PLANS CK'D. JWC

SIGN BRIDGE FTG. TYPE "A-MOD"

SHEET 10 OF 10

FILE= K:\PROJECTS\5116\PLANS\SIGNSTRUCT\5116sgnDET8
SCALE =

EXPANSION RATIO(%) 25.0

LINE A

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 4A, 4B										
847.7	0.00	168.10								
			0.0	296.4	0.0	4787.6	5984.5	0	5985	-5985
880.0	0.00	128.30								
			0.0	231.5	0.0	4630.0	5787.5	0	11772	-11772
920.0	0.00	103.20								
			28.1	122.7	336.2	1468.1	1835.1	336	13607	-13271
943.9	28.10	19.50								
Bridge Gap			64.4	28.0	2811.1	1222.2	1527.8	3147	15135	-11988
						Sub-Total Stage 4A, 4B		3147	15135	-11988

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 2										
1031.2	36.30	8.50								
			45.2	39.9	198.2	175.0	218.7	198	219	-20
1040.0	8.90	31.40								
			92.8	51.9	835.2	467.1	583.9	1033	803	231
1058.0	83.90	20.50								
			290.0	56.8	3190.0	624.8	781.0	4223	1584	2640
1080.0	206.10	36.30								
			448.9	104.7	4489.0	1047.0	1308.8	8712	2892	5820
1100.0	242.80	68.40								
			265.3	172.0	2653.0	1720.0	2150.0	11365	5042	6323
1120.0	22.50	103.60								
			22.5	198.1	225.0	1981.0	2476.3	11590	7519	4072
1140.0	0.00	94.50								
			0.0	156.1	0.0	1561.0	1951.3	11590	9470	2121
1160.0	0.00	61.60								
			0.0	104.6	0.0	2092.0	2615.0	11590	12085	-494
1200.0	0.00	43.00								
			0.0	78.3	0.0	587.3	734.1	11590	12819	-1228
1215.0	0.00	35.30								
			0.1	49.3	1.3	616.3	770.3	11592	13589	-1998
1240.0	0.10	14.00								
			7.5	14.0	150.0	280.0	350.0	11742	13939	-2198
1280.0	7.40	0.00								
			7.4	0.0	0.0	0.0	0.0	11742	13939	-2198
1280.0	0.00	0.00								
						Sub-Total Stage 2		11742	13939	-2198

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 1B										
1280.0	7.40	0.00								
			9.4	0.9	188.0	18.0	22.5	188	23	166
1320.0	2.00	0.90								
			3.6	15.0	72.0	300.0	375.0	260	398	-138
1360.0	1.60	14.10								
			17.3	14.9	346.0	298.0	372.5	606	770	-164
1400.0	15.70	0.80								
			28.8	2.7	576.0	54.0	67.5	1182	838	345
1440.0	13.10	1.90								
			24.4	2.1	488.0	42.0	52.5	1670	890	780
1480.0	11.30	0.20								
			13.8	0.2	276.0	4.0	5.0	1946	895	1051
1520.0	2.50	0.00								
			2.5	0.0	0.0	0.0	0.0	1946	895	1051
1520.0	0.00	0.00								
						Sub-Total Stage 1B		1946	895	1051

	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL
Sub-Total Stage 1B	1946	895	1051
Sub-Total Stage 2	11742	13939	-2198
Sub-Total Stage 4A, 4B	3147	15135	-11988
Total	16835	29969	-13134

Excavation Below Subgrade

1+080 to 1+100, RT.	175.0
1+080 TO 1+220, LT.	1046.0
1+140, RT.	420.0
1+160 TO 1+200, RT.	120.0

LINE "A" (CTH ML) EARTHWORK

CUT TOTAL	16834.9	C.M.
FILL TOTAL	29969.1	C.M.
MARSH	1761.0	C.M.
BORROW	-13134.2	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940OT10.DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	EARTHWORK SUMMARY - LINE "A" (CTH ML)	SHEET NO: 471	M

EXPANSION RATIO(%) 25.0

LINE B

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 4A										
680.2	2.60	0.00								
			4.7	0.3	93.5	6.0	7.5	93	7	86
720.0	2.10	0.30								
			2.8	10.0	56.0	200.0	250.0	149	257	-108
760.0	0.70	9.70								
			1.3	46.1	26.0	922.0	1152.5	175	1410	-1234
800.0	0.60	36.40								
			2.5	111.8	50.0	2236.0	2795.0	225	4205	-3979
840.0	1.90	75.40								
			3.4	185.8	42.5	2322.5	2903.1	268	7108	-6840
865.0	1.50	110.40								
			1.9	240.6	14.3	1804.5	2255.6	282	9364	-9081
880.0	0.40	130.20								
			1.4	285.6	28.0	5712.0	7140.0	310	16504	-16193
920.0	1.00	155.40								
			1.8	341.5	36.0	6830.0	8537.5	346	25041	-24695
960.0	0.80	186.10								
			2.5	300.3	50.0	6006.0	7507.5	396	32549	-32152
1000.0	1.70	114.20								
			3.6	275.4	72.0	5508.0	6885.0	468	39434	-38965
1040.0	1.90	161.20								
			1.9	325.9	14.3	2444.3	3055.3	482	42489	-42007
1055.0	0.00	164.70								
			0.0	309.8	0.0	3872.5	4840.6	482	47330	-46847
1080.0	0.00	145.10								
			0.6	285.0	12.0	5700.0	7125.0	494	54455	-53960
1120.0	0.60	139.90								
			1.9	228.3	38.0	4566.0	5707.5	532	60162	-59630
1160.0	1.30	88.40								
			1.3	137.7	26.0	2754.0	3442.5	558	63605	-63046
1200.0	0.00	49.30								
			1.1	64.9	22.0	1298.0	1622.5	580	65227	-64647
1240.0	1.10	15.60								
			3.5	16.8	70.0	336.0	420.0	650	65647	-64997
1280.0	2.40	1.20								
			5.1	1.2	102.0	24.0	30.0	752	65677	-64925
1320.0	2.70	0.00								
			2.7	0.0	0.0	0.0	0.0	752	65677	-64925
1320.0	0.00	0.00								
							Total Stage 4	752	66689	-65937

Excavation Below Subgrade 0+738 RT. 30.0
EXTRA AREAS AT INTERSECTION W/ CTH ML
NOT ACCOUNTED FOR IN END AREAS 1012.0

LINE "B" (WEST FRONTAGE ROAD) EARTHWORK

CUT TOTAL	752	C.M.
FILL TOTAL	66689	C.M.
MARSH	30	C.M.
BORROW	-65937	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GT(2).DGN 09-18-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	EARTHWORK SUMMARY - LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 472 M

EXPANSION RATIO(%) 25.0

LINE C

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 1A, 1B										
9000.0	6.50	0.50								
			6.5	10.9	130.0	218.0	272.5	130	273	-143
9040.0	0.00	10.40								
			0.0	22.8	0.0	456.0	570.0	130	843	-713
9080.0	0.00	12.40								
			22.4	12.4	448.0	248.0	310.0	578	1153	-575
9120.0	22.40	0.00								
			46.6	0.0	932.0	0.0	0.0	1510	1153	358
9160.0	24.20	0.00								
			51.5	0.0	1030.0	0.0	0.0	2540	1153	1388
9200.0	27.30	0.00								
			74.3	0.0	1486.0	0.0	0.0	4026	1153	2874
9240.0	47.00	0.00								
			91.1	0.0	1822.0	0.0	0.0	5848	1153	4696
9280.0	44.10	0.00								
			65.9	0.0	1318.0	0.0	0.0	7166	1153	6014
9320.0	21.80	0.00								
			36.4	0.0	728.0	0.0	0.0	7894	1153	6742
9360.0	14.60	0.00								
			29.3	0.0	586.0	0.0	0.0	8480	1153	7328
9400.0	14.70	0.00								
			61.7	0.0	1234.0	0.0	0.0	9714	1153	8562
9440.0	47.00	0.00								
			73.2	0.0	1464.0	0.0	0.0	11178	1153	10026
9480.0	26.20	0.00								
			40.6	0.4	812.0	8.0	10.0	11990	1163	10828
9520.0	14.40	0.40								
			26.4	0.0	528.0	0.0	0.0	12518	1163	11356
9560.0	12.00	0.70								
			15.1	6.6	302.0	132.0	165.0	12820	1328	11493
9600.0	3.10	5.90								
			9.6	10.0	192.0	200.0	250.0	13012	1578	11435
9640.0	6.50	4.10								
			10.4	12.7	208.0	254.0	317.5	13220	1895	11325
9680.0	3.90	8.60								
			5.5	19.3	110.0	386.0	482.5	13330	2378	10953
9720.0	1.60	10.70								
			7.6	14.5	152.0	290.0	362.5	13482	2740	10742
9760.0	6.00	3.80								
			13.2	5.5	264.0	110.0	137.5	13746	2878	10869
9800.0	7.20	1.70								
			7.2	24.2	108.0	363.0	453.8	13854	3331	10523
9830.0	0.00	22.50								
			1.6	33.8	8.0	169.0	211.3	13862	3543	10320
9840.0	1.60	11.30								
			21.1	11.3	422.0	226.0	282.5	14284	3825	10459
9880.0	19.50	0.00								
			35.1	0.0	702.0	0.0	0.0	14986	3825	11161
9920.0	15.60	0.00								
			32.7	0.0	654.0	0.0	0.0	15640	3825	11815
9960.0	17.10	0.00								
			48.5	0.0	970.0	0.0	0.0	16610	3825	12785
10000.0	31.4	0								
			57.9	0.0	1158.0	0.0	0.0	17768	3825	13943
10040.0	26.50	0.00								
			31.9	2.9	638.0	58.0	72.5	18406	3898	14509
10080.0	5.40	2.90								
			9.3	9.7	186.0	194.0	242.5	18592	4140	14452
10120.0	3.90	6.80								
			7.5	9.3	101.3	125.6	156.9	18693	4297	14396
10147.0	3.60	2.50								
			6.0	4.9	39.0	31.9	39.8	18732	4337	14396
10160.0	2.40	2.40								
			5.6	2.4	308.0	132.0	165.0	19040	4502	14539
10270.0	3.20	0.00								
			3.2	0.0	0.0	0.0	0.0	19040	4502	14539
10270.0	0.00	0.00								
						Total STAGE 1A, 1B		19040	4502	14539

Excavation Below Subgrade

9+820, RT.&LT. 500.0
10+120, RT. 770.0

LINE "C" (EAST FRONTAGE ROAD) EARTHWORK

CUT TOTAL	19040	C.M.
FILL TOTAL	4502	C.M.
MARSH	1270	C.M.
SURPLUS	14539	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GT(3).DGN 09-18-01
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

EXPANSION RATIO(%) 25.0

LINE E-1

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 1A										
2000.0	2.60	0.00								
			16.4	0.3	328.0	6.0	7.5	328	8	321
2040.0	13.80	0.30								
			25.5	9.0	510.0	180.0	225.0	838	233	606
2080.0	11.70	8.70								
			19.0	8.7	380.0	174.0	217.5	1218	450	768
2120.0	7.30	0.00								
			15.0	0.8	300.0	16.0	20.0	1518	470	1048
2160.0	7.70	0.80								
			11.3	3.9	226.0	78.0	97.5	1744	568	1177
2200.0	3.60	3.10								
			7.5	7.4	150.0	148.0	185.0	1894	753	1142
2240.0	3.90	4.30								
			7.0	10.0	140.0	200.0	250.0	2034	1003	1032
2280.0	3.10	5.70								
			7.6	0.0	76.0	0.0	0.0	2110	1003	1108
2300.0	4.50	6.40								
			8.9	0.0	89.0	0.0	0.0	2199	1003	1197
2320.0	4.40	4.10								
			9.9	0.0	99.0	0.0	0.0	2298	1003	1296
2340.0	5.50	2.40								
			10.5	3.2	105.0	32.0	40.0	2403	1043	1361
2360.0	5.00	0.80								
			12.0	1.0	78.0	6.5	8.1	2481	1051	1430
2373.0	7.00	0.20								
			13.8	0.2	48.3	0.7	0.9	2529	1052	1478
2380.0	6.80	0.00								
			15.1	0.0	151.0	0.0	0.0	2680	1052	1629
2400.0	8.30	0.00								
			20.2	5.6	202.0	56.0	70.0	2882	1122	1761
2420.0	11.90	5.60								
			19.6	6.6	196.0	66.0	82.5	3078	1204	1874
2440.0	7.70	1.00								
			13.2	1.1	132.0	11.0	13.8	3210	1218	1993
2460.0	5.50	0.10								
			7.3	1.0	73.0	10.0	12.5	3283	1230	2053
2480.0	1.80	0.90								
			2.5	4.8	25.0	48.0	60.0	3308	1290	2018
2500.0	0.70	3.90								
			0.7	12.8	7.0	128.0	160.0	3315	1450	1865
2520.0	0.00	8.90								
			0.0	18.6	0.0	186.0	232.5	3315	1683	1633
2540.0	0.00	9.70								
			0.0	21.7	0.0	217.0	271.3	3315	1954	1361
2560.0	0.00	12.00								
			0.0	25.6	0.0	256.0	320.0	3315	2274	1041
2580.0	0.00	13.60								
			5.3	19.2	53.0	192.0	240.0	3368	2514	854
2600.0	5.30	5.60								
			5.3	24.0	53.0	240.0	300.0	3421	2814	607
2620.0	0.00	18.40								
			0.0	33.4	0.0	334.0	417.5	3421	3232	190
2640.0	0.00	15.00								
			0.0	26.6	0.0	266.0	332.5	3421	3564	-143
2660.0	0.00	11.60								
			0.0	21.7	0.0	217.0	271.3	3421	3835	-414
2680.0	0.00	10.10								
			0.0	16.7	0.0	167.0	208.8	3421	4044	-623
2700.0	0.00	6.60								
			0.0	16.6	0.0	166.0	207.5	3421	4252	-830
2720.0	0.00	10.00								
			0.0	17.1	0.0	171.0	213.8	3421	4465	-1044
2740.0	0.00	7.10								
			2.2	9.3	22.0	93.0	116.3	3443	4582	-1138
2760.0	2.20	2.20								
			4.5	5.3	18.0	21.2	26.5	3461	4608	-1147
2768.0	2.30	3.10								
			6.0	4.3	36.0	25.8	32.3	3497	4640	-1143
2780.0	3.70	1.20								
			16.9	7.7	169.0	77.0	96.3	3666	4737	-1070
2800.0	13.20	6.50								
			13.2	6.5	0.0	0.0	0.0	3666	4737	-1070
2800.0	0.00	0.00								
							SUBTOTALS	3666	4737	-1070

EXPANSION RATIO(%) 25.0

LINE E-1

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
STAGE 2										
2800.0	13.20	6.50								
			35.2	13.1	352.0	131.0	163.8	352	164	188
2820.0	22.00	6.60								
			48.1	8.3	481.0	83.0	103.8	833	268	566
2840.0	26.10	1.70								
			42.8	2.1	428.0	21.0	26.3	1261	294	967
2860.0	16.70	0.40								
			77.3	0.4	773.0	4.0	5.0	2034	299	1735
2880.0	60.60	0.00								
			197.8	0.0	1978.0	0.0	0.0	4012	299	3713
2900.0	137.20	0.00								
			142.7	3.9	1427.0	39.0	48.8	5439	348	5092
2920.0	5.50	3.90								
			10.5	7.1	210.0	142.0	177.5	5649	525	5124
2960.0	5.00	3.20								
			12.0	3.5	240.0	70.0	87.5	5889	613	5277
3000.0	7.00	0.30								
			14.1	1.0	282.0	20.0	25.0	6171	638	5534
3040.0	7.10	0.70								
			8.8	1.1	176.0	22.0	27.5	6347	665	5682
3080.0	1.70	0.40								
			7.0	3.3	140.0	66.0	82.5	6487	748	5740
3120.0	5.30	2.90								
			11.0	5.4	220.0	108.0	135.0	6707	883	5825
3160.0	5.70	2.50								
			10.6	6.0	212.0	120.0	150.0	6919	1033	5887
3200.0	4.90	3.50								
			10.0	6.8	200.0	136.0	170.0	7119	1203	5917
3240.0	5.10	3.30								
			10.1	8.5	111.1	93.5	116.9	7230	1319	5911
3262.0	5.00	5.20								
			10.0	9.3	90.0	83.7	104.6	7320	1424	5896
3280.0	5.00	4.10								
			7.9	8.2	158.0	164.0	205.0	7478	1629	5849
3320.0	2.90	4.10								
			5.4	8.8	108.0	176.0	220.0	7586	1849	5737
3360.0	2.50	4.70								
			5.4	8.2	108.0	164.0	205.0	7694	2054	5640
3400.0	2.90	3.50								
			5.6	8.1	112.0	162.0	202.5	7806	2257	5550
3440.0	2.70	4.60								
			4.8	9.7	81.6	164.9	206.1	7888	2463	5425
3474.0	2.10	5.10								
			5.7	8.3	17.1	24.9	31.1	7905	2494	5411
3480.0	3.60	3.20								
			6.8	5.4	136.0	108.0	135.0	8041	2629	5412
3520.0	3.20	2.20								
			6.9	4.5	138.0	90.0	112.5	8179	2741	5438
3560.0	3.70	2.30								
			9.4	4.9	188.0	98.0	122.5	8367	2864	5503
3600.0	5.70	2.60								
			11.1	4.0	222.0	80.0	100.0	8589	2964	5625
3640.0	5.40	1.40								
			20.7	1.4	414.0	28.0	35.0	9003	2999	6004
3680.0	15.30	0.00								
			31.8	1.3	636.0	26.0	32.5	9639	3031	6608
3720.0	16.50	1.30								
			26.9	3.1	538.0	62.0	77.5	10177	3109	7068
3760.0	10.40	1.80								
			18.4	6.8	368.0	136.0	170.0	10545	3279	7266
3800.0	8.00	5.00								
			12.3	12.3	246.0	246.0	307.5	10791	3586	7205
3840.0	4.30	7.30								
			10.4	10.2	208.0	204.0	255.0	10999	3841	7158
3880.0	6.10	2.90								
			12.3	9.5	12.3	9.5	11.9	11011	3853	7158
3882.0	6.20	6.60								
			12.9	10.9	245.1	207.1	258.9	11256	4112	7144
3920.0	6.70	4.30								
			15.1	7.4	302.0	148.0	185.0	11558	4297	7261
3960.0	8.40	3.10								
			8.4	3.1	0.0	0.0	0.0	11558	4297	7261
3960.0	0.00	0.00								
							SUBTOTALS	11558	4297	7261

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GT(4).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

EXPANSION RATIO(%) 25.0

LINE E-1

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 1A, 1B										
3960.0	8.40	3.10								
			17.4	5.8	348.0	116.0	145.0	348	145	203
4000.0	9.00	2.70								
			13.2	3.9	264.0	78.0	97.5	612	243	370
4040.0	4.20	1.20								
			7.6	3.2	152.0	64.0	80.0	764	323	442
4080.0	3.40	2.00								
			7.0	5.9	140.0	118.0	147.5	904	470	434
4120.0	3.60	3.90								
			7.3	6.5	146.0	130.0	162.5	1050	633	418
4160.0	3.70	2.60								
			7.3	4.2	146.0	84.0	105.0	1196	738	459
4200.0	3.60	1.60								
			7.5	2.6	150.0	52.0	65.0	1346	803	544
4240.0	3.90	1.00								
			7.3	2.2	146.0	44.0	55.0	1492	858	635
4280.0	3.40	1.20								
			7.0	2.3	140.0	46.0	57.5	1632	915	717
4320.0	3.60	1.10								
			7.9	1.1	158.0	22.0	27.5	1790	943	848
4360.0	4.30	0.00								
			14.1	0.0	282.0	0.0	0.0	2072	943	1130
4400.0	9.80	0.00								
			17.6	0.7	352.0	14.0	17.5	2424	960	1464
4440.0	7.80	0.70								
			15.7	0.9	314.0	18.0	22.5	2738	983	1756
4480.0	7.90	0.20								
			15.9	1.4	318.0	28.0	35.0	3056	1018	2039
4520.0	8.00	1.20								
			14.5	1.7	290.0	34.0	42.5	3346	1060	2286
4560.0	6.50	0.50								
			12.5	1.0	250.0	20.0	25.0	3596	1085	2511
4600.0	6.00	0.50								
			9.9	0.5	69.3	3.5	4.4	3665	1089	2576
4614.0	3.90	0.00								
			3.9	0.0	0.0	0.0	0.0	3665	1089	2576
4614.0	0.00	0.00								
							Sub-Total Stage 1A,1B	3665	1089	2576

	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL
Sub-Total Stage 1A,1B	3665	1089	2576
Sub-Total Stage 2	11558	4297	7261
Sub-Total Stage 1A	3666	4737	-1070
Total	18890	10123	8767

Excavation Below Subgrade

NONE

LINE "E" (BYPASS LANE) EARTHWORK

CUT TOTAL	18890	C.M.
FILL TOTAL	10123	C.M.
MARSH	0	C.M.
SURPLUS	8767	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940OT15I.DGN 09-18-01
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	EARTHWORK SUMMARY - LINE "E" (BYPASS LANE)	SHEET NO: 475	M

EXPANSION RATIO(%) 25.0

LINE E 2-4

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 2-4										
2320.0	0.00	1.80								
			0.0	4.8	0.0	48.0	60.0	0	60	-60
2340.0	0.00	3.00								
			0.0	3.6	0.0	36.0	45.0	0	105	-105
2360.0	0.00	0.60								
			0.4	2.5	2.6	16.3	20.3	3	125	-123
2373.0	0.40	1.90								
			1.2	4.2	4.2	14.7	18.4	7	144	-137
2380.0	0.80	2.30								
			0.8	5.8	8.0	58.0	72.5	15	216	-201
2400.0	0.00	3.50								
			0.0	3.7	0.0	37.0	46.3	15	262	-248
2420.0	0.00	0.20								
			0.0	12.6	0.0	126.0	157.5	15	420	-405
2440.0	0.00	12.40								
			0.2	0.0	2.0	0.0	0.0	17	420	-403
2460.0	0.20	21.60								
			0.2	0.0	2.0	0.0	0.0	19	420	-401
2480.0	0.00	28.50								
			0.0	0.0	0.0	0.0	0.0	19	420	-401
2500.0	0.00	24.50								
			0.0	52.1	0.0	521.0	651.3	19	1071	-1052
2520.0	0.00	27.60								
			0.0	59.4	0.0	594.0	742.5	19	1814	-1795
2540.0	0.00	31.80								
			0.0	68.9	0.0	689.0	861.3	19	2675	-2656
2560.0	0.00	37.10								
			0.0	0.0	0.0	0.0	0.0	19	2675	-2656
2580.0	0.00	43.00								
			5.3	48.6	53.0	486.0	607.5	72	3282	-3211
2600.0	5.30	5.60								
			5.3	35.9	53.0	359.0	448.8	125	3731	-3606
2620.0	0.00	30.30								
			0.0	70.1	0.0	701.0	876.3	125	4607	-4483
2640.0	0.00	39.80								
			0.0	52.5	0.0	525.0	656.3	125	5264	-5139
2660.0	0.00	12.70								
			0.0	31.9	0.0	319.0	398.8	125	5662	-5538
2680.0	0.00	19.20								
			0.0	44.5	0.0	445.0	556.3	125	6219	-6094
2700.0	0.00	25.30								
			0.0	40.2	0.0	402.0	502.5	125	6721	-6596
2720.0	0.00	14.90								
			0.0	18.3	0.0	183.0	228.8	125	6950	-6825
2740.0	0.00	3.40								
			0.0	5.4	0.0	54.0	67.5	125	7017	-6893
2760.0	0.00	2.00								
			0.0	6.2	0.0	24.8	31.0	125	7048	-6924
2768.0	0.00	4.20								
			7.9	6.7	47.4	40.2	50.3	172	7099	-6926
2780.0	7.90	2.50								
			7.9	2.5	0.0	0.0	0.0	172	7099	-6926
2780.0	0.00	0.00								
						Total Stage 2-4		172	7099	-6926

Excavation Below Subgrade

NONE

LINE "E" (BYPASS LANE) EARTHWORK

CUT TOTAL	172	C.M.
FILL TOTAL	7099	C.M.
MARSH	0	C.M.
BORROW	-6926	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GT16I.DGN 09-18-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

EXPANSION RATIO(%) 25.0

LINE I

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 2-4										
6800.0	90.60	2.60								
			208.4	27.3	2084.0	273.0	341.3	2084	341	1743
6820.0	117.80	24.70								
			244.9	24.7	2449.0	247.0	308.8	4533	650	3883
6840.0	127.10	0.00								
			218.7	0.0	2187.0	0.0	0.0	6720	650	6070
6860.0	91.60	0.00								
			194.1	2.6	1941.0	26.0	32.5	8661	683	7979
6880.0	102.50	2.60								
			137.1	13.4	1371.0	134.0	167.5	10032	850	9182
6900.0	34.60	10.80								
			38.1	15.3	381.0	153.0	191.3	10413	1041	9372
6920.0	3.50	4.50								
			3.5	305.5	35.0	3055.0	3818.8	10448	4860	5588
6940.0	0.00	301.00								
			0.0	356.5	0.0	3565.0	4456.3	10448	9316	1132
6960.0	0.00	55.50								
			0.0	125.2	0.0	1252.0	1565.0	10448	10881	-433
6980.0	0.00	69.70								
			0.0	154.7	0.0	1547.0	1933.8	10448	12815	-2367
7000.0	0.00	85.00								
			0.0	170.0	0.0	1105.0	1381.3	10448	14196	-3748
7013.0	0.00	85.00								
			0.0	178.7	0.0	625.5	781.8	10448	14978	-4530
7020.0	0.00	93.70								
			0.0	201.1	0.0	2011.0	2513.8	10448	17492	-7044
7040.0	0.00	107.40								
			0.0	0.0	0.0	0.0	0.0	10448	17492	-7044
7060.0	0.00	104.80								
			0.0	210.8	0.0	2108.0	2635.0	10448	20127	-9679
7080.0	0.00	106.00								
			0.0	211.5	0.0	2115.0	2643.8	10448	22771	-12323
7100.0	0.00	105.50								
			0.0	197.1	0.0	1971.0	2463.8	10448	25234	-14786
7120.0	0.00	91.60								
			0.0	165.9	0.0	1659.0	2073.8	10448	27308	-16860
7140.0	0.00	74.30								
			0.0	135.4	0.0	1354.0	1692.5	10448	29001	-18553
7160.0	0.00	61.10								
			1.1	104.2	11.0	1042.0	1302.5	10459	30303	-19844
7180.0	1.10	43.10								
			11.5	62.6	115.0	626.0	782.5	10574	31086	-20512
7200.0	10.40	19.50								
			24.9	52.1	249.0	521.0	651.3	10823	31737	-20914
7220.0	14.50	32.60								
			33.2	61.0	332.0	610.0	762.5	11155	32499	-21344
7240.0	18.70	28.40								
			35.2	47.3	352.0	473.0	591.3	11507	33091	-21584
7260.0	16.50	18.90								
			48.8	46.8	488.0	468.0	585.0	11995	33676	-21681
7280.0	32.30	27.90								
			58.7	62.6	587.0	626.0	782.5	12582	34458	-21876
7300.0	26.40	34.70								
			35.9	47.5	239.1	475.0	593.8	12821	35052	-22231
7320.0	9.50	12.80								
			19.6	18.2	130.5	182.0	227.5	12952	35279	-22328
7340.0	10.10	5.40								
			19.1	22.4	127.2	224.0	280.0	13079	35559	-22480
7360.0	9.00	17.00								
			9.0	17.0	59.9	170.0	212.5	13139	35772	-22633
7380.0	0.00	0.00								
							Total Stage 2-4	13139	35772	-22633

Excavation Below Subgrade

INCLUDES L-LINE	6+825	175.0
	6+880 TO 7+000, LT.	2160.0
	7+120 TO 7+160	915.0
	7+560 TO 7+620, RT.	610.0

LINE "I" (RING ROAD) EARTHWORK

CUT TOTAL	13139	C.M.
FILL TOTAL	35772	C.M.
MARSH	3860	C.M.
BORROW	-22633	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GT171.DGN 09-18-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-08-70	SCALE: NTS	HWY: CTH ML	COUNTY: KENOSHA	EARTHWORK SUMMARY - LINE "I" (RING ROAD)	SHEET NO: 477	M

EXPANSION RATIO(%) 25.0

LINE J

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 4										
100.0	5.40	0.00								
			5.4	17.6	54.0	176.0	220.0	54	220	-166
120.0	0.00	17.60								
			0.0	29.0	0.0	290.0	362.5	54	583	-529
140.0	0.00	11.40								
			0.5	19.4	15.0	582.0	727.5	69	1310	-1241
200.0	0.50	8.00								
			11.2	8.0	123.2	88.0	110.0	192	1420	-1228
222.0	10.70	0.00								
			45.7	0.0	365.6	0.0	0.0	558	1420	-862
238.0	35.00	0.00								
			69.3	0.0	69.3	0.0	0.0	627	1420	-793
240.0	34.30	0.00								
			78.4	0.0	784.0	0.0	0.0	1411	1420	-9
260.0	44.10	0.00								
			91.9	0.0	367.6	0.0	0.0	1779	1420	359
268.0	47.80	0.00								
			96.8	0.0	580.8	0.0	0.0	2360	1420	940
280.0	49.00	0.00								
			129.0	0.0	2580.0	0.0	0.0	4940	1420	3520
320.0	80.00	0.00								
			162.3	0.0	3246.0	0.0	0.0	8186	1420	6766
360.0	82.30	0.00								
			123.1	0.0	2462.0	0.0	0.0	10648	1420	9228
400.0	40.80	0.00								
			51.7	6.1	930.6	109.8	137.3	11578	1557	10021
436.0	10.90	6.10								
			20.1	13.8	40.2	27.6	34.5	11618	1592	10027
440.0	9.20	7.70								
			11.5	11.4	38.5	38.1	47.7	11657	1639	10017
446.7	2.30	3.70								
			2.3	3.7	0.0	0.0	0.0	11657	1639	10017
446.7	0.00	0.00								
							Total Stage 4	11657	1639	10017

Excavation Below Subgrade

0+120, RT.&LT.	870.0
0+180, RT.	200.0

LINE "J" (ACCESS ROAD) EARTHWORK

CUT TOTAL	11657	C.M.
FILL TOTAL	1639	C.M.
MARSH	1070	C.M.
SURPLUS	10017	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/294001(B).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

EXPANSION RATIO(%) 25.0

LINE K

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 2										
12140.0	142.00	0.00								
			309.7	2.1	1548.5	10.5	13.1	1549	13	1535
12150.0	167.70	2.10								
			319.3	2.9	1596.5	14.5	18.1	3145	31	3114
12160.0	151.60	0.80								
			255.5	0.8	1277.5	4.0	5.0	4423	36	4386
12170.0	103.90	0.00								
			177.1	0.1	885.5	0.5	0.6	5308	37	5271
12180.0	73.20	0.10								
			119.1	0.1	893.3	0.8	0.9	6201	38	6163
12195.0	45.90	0.00								
			87.9	0.0	219.8	0.0	0.0	6421	38	6383
12200.0	42.00	0.00								
			68.1	0.0	681.0	0.0	0.0	7102	38	7064
12220.0	26.10	0.00								
			38.1	0.0	381.0	0.0	0.0	7483	38	7445
12240.0	12.00	0.00								
			18.6	0.0	186.0	0.0	0.0	7669	38	7631
12260.0	6.60	0.00								
			11.4	0.0	114.0	0.0	0.0	7783	38	7745
12280.0	4.80	0.00								
			7.0	0.0	70.0	0.0	0.0	7853	38	7815
12300.0	2.20	0.00								
			2.2	0.0	0.0	0.0	0.0	7853	38	7815
12300.0	0.00	0.00								
							sub-total	7853	38	7815

	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL
Sub-Total Stage 1A, 1B	2309	0	2309
Sub-Total Stage 2	7853	38	7815
Total	10162	38	10124

LINE "K" (120th AVENUE) EARTHWORK

CUT TOTAL	10162	C.M.
FILL TOTAL	38	C.M.
MARSH	0	C.M.
SURPLUS	10124	C.M.

EXPANSION RATIO(%) 25.0

LINE K

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 1A, 1B										
12800.0	2.50	0.00								
			10.0	0.0	200.0	0.0	0.0	200	0	200
12840.0	7.50	0.00								
			15.8	0.0	316.0	0.0	0.0	516	0	516
12880.0	8.30	0.00								
			28.8	0.0	576.0	0.0	0.0	1092	0	1092
12920.0	20.50	0.00								
			37.4	0.0	748.0	0.0	0.0	1840	0	1840
12960.0	16.90	0.00								
			27.6	0.0	469.2	0.0	0.0	2309	0	2309
12994.0	10.70	0.00								
			10.7	0.0	0.0	0.0	0.0	2309	0	2309
12994.0	0.00	0.00								
							Sub-Total Stage 1A, 1B	2309	0	2309

Excavation Below Subgrade

NONE

FILE NAME: PROJECTS/2940/PLANS/GEN/2940GT19).DGN 09-18-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

EXPANSION RATIO(%) 25.0

LINE L

STATION	AREA CUT SQ. M	AREA FILL SQ. M	CUT SUM END AREAS SQ. M.	FILL SUM END AREAS SQ. M.	VOL CUT CU.M.	VOL FILL UNEXPANDED CU.M.	VOL FILL EXPANDED CU.M.	ACCUM. CUT CU.M.	ACCUM. FILL EXPANDED CU.M.	TOTAL CU.M.
Stage 4										
980.0	0.00	6.30								
			3.6	12.5	36.0	125.0	156.3	36	156	-120
1000.0	3.60	6.20								
			6.2	17.3	62.0	173.0	216.3	98	373	-275
1020.0	2.60	11.10								
			3.3	45.7	33.0	457.0	571.3	131	944	-813
1040.0	0.70	34.60								
			0.7	84.7	7.0	847.0	1058.8	138	2003	-1865
1060.0	0.00	50.10								
			0.0	96.7	0.0	967.0	1208.8	138	3211	-3073
1080.0	0.00	46.60								
			0.0	108.3	0.0	1083.0	1353.8	138	4565	-4427
1100.0	0.00	61.70								
			0.0	103.0	0.0	1030.0	1287.5	138	5853	-5715
1120.0	0.00	41.30								
			0.2	60.9	2.0	609.0	761.3	140	6614	-6474
1140.0	0.20	19.60								
			7.7	23.7	77.0	237.0	296.3	217	6910	-6693
1160.0	7.50	4.10								
			16.4	7.7	164.0	77.0	96.3	381	7006	-6625
1180.0	8.90	3.60								
			8.9	16.0	89.0	160.0	200.0	470	7206	-6736
1200.0	0.00	12.40								
			0.0	51.3	0.0	513.0	641.3	470	7848	-7378
1220.0	0.00	38.90								
			0.1	83.3	1.0	833.0	1041.3	471	8889	-8418
1240.0	0.10	44.40								
			0.9	77.8	9.0	778.0	972.5	480	9861	-9381
1260.0	0.80	33.40								
			1.5	60.7	15.0	607.0	758.8	495	10620	-10125
1280.0	0.70	27.30								
			1.4	47.0	14.0	470.0	587.5	509	11208	-10699
1300.0	0.70	19.70								
			0.8	46.1	8.0	461.0	576.3	517	11784	-11267
1320.0	0.10	26.40								
			2.6	84.7	26.0	847.0	1058.8	543	12843	-12300
1340.0	2.50	58.30								
			2.5	58.3	0.0	0.0	0.0	543	12843	-12300
1340.0	0.00	0.00								
						Total Stage 4		543	12843	-12300

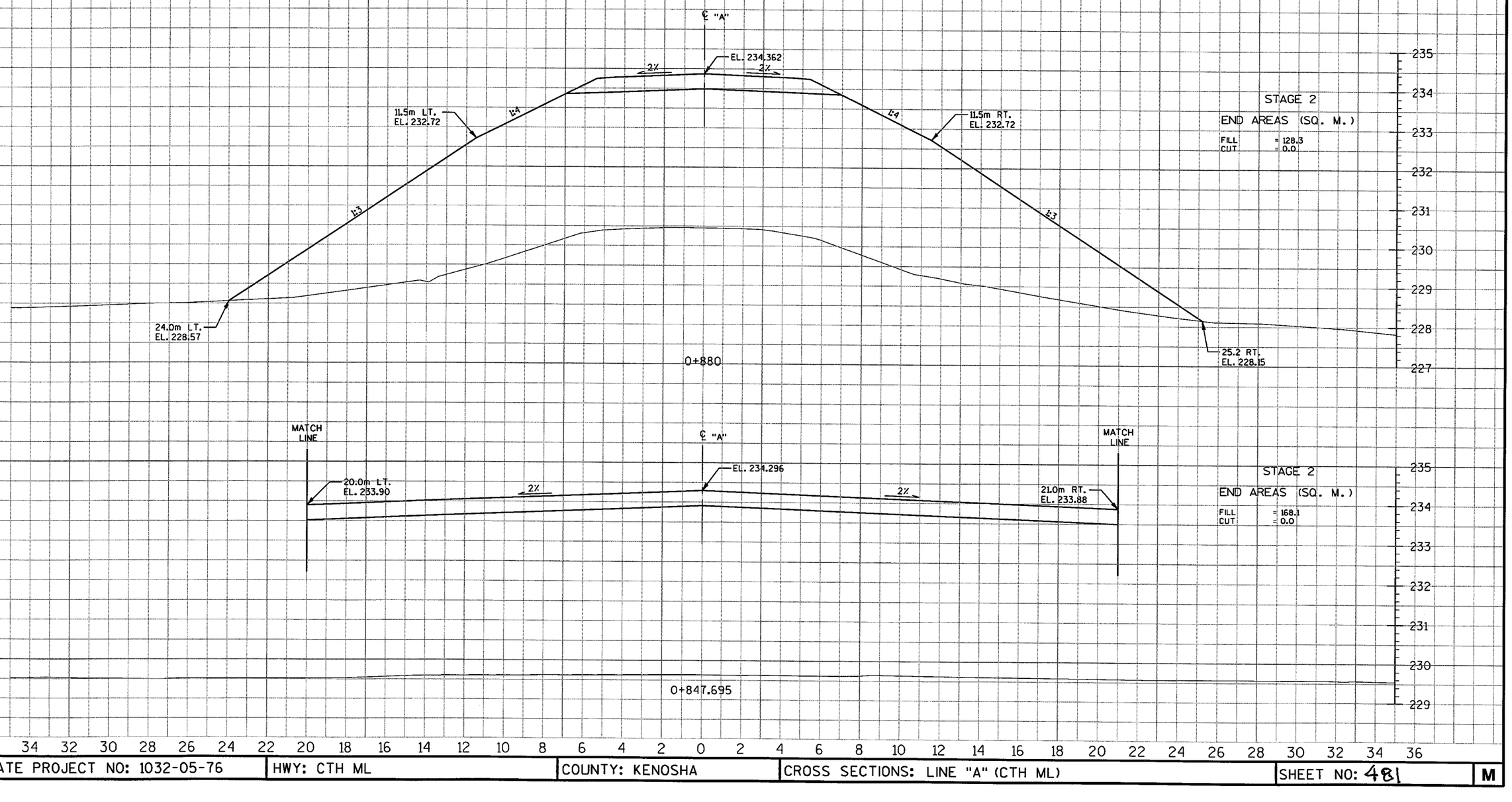
Excavation Below Subgrade

ALL MARSH COVERED UNDER LINE I

LINE "L" (FOSSLAND ACCESS) EARTHWORK

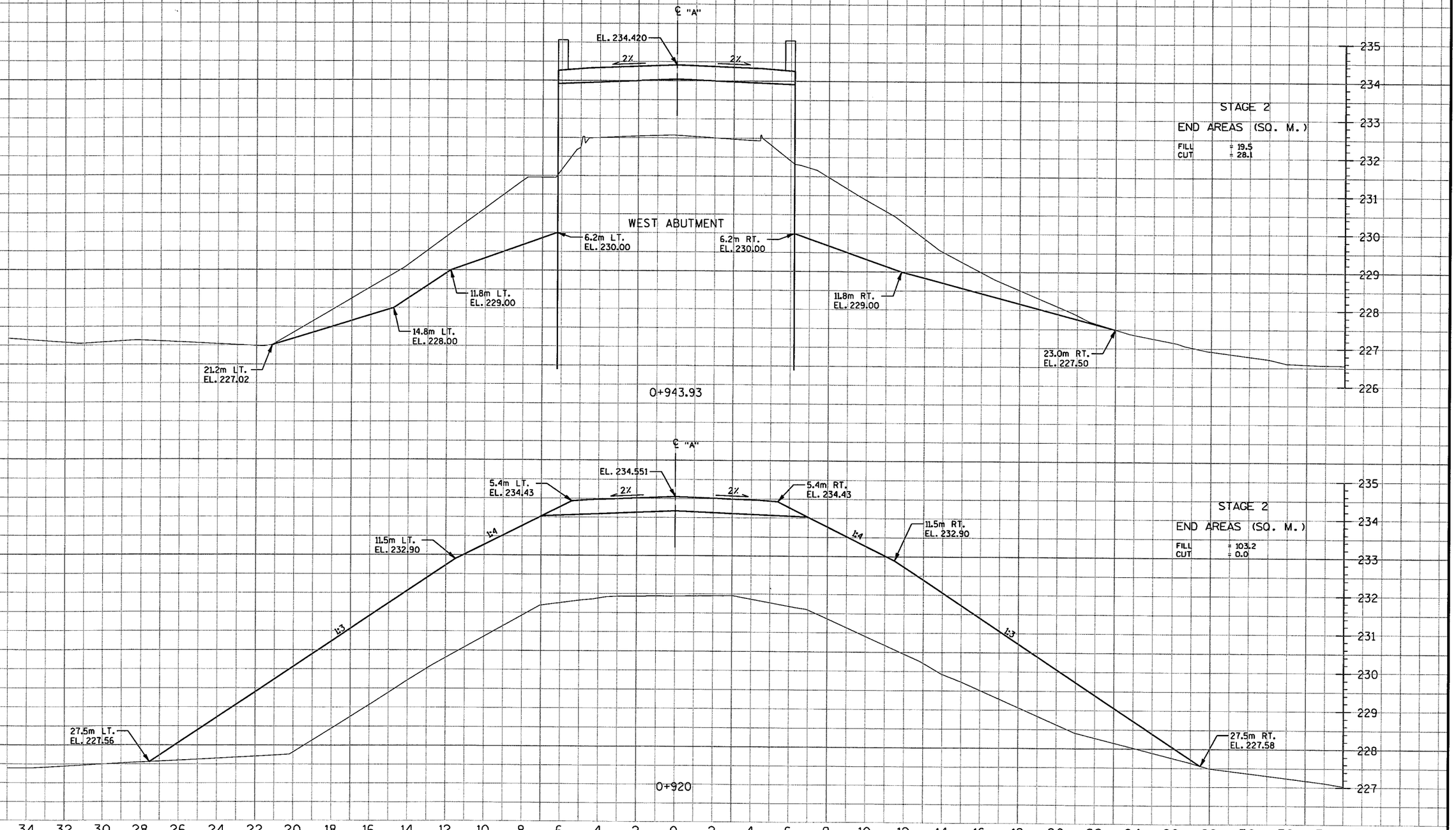
CUT TOTAL	543	C.M.
FILL TOTAL	12843	C.M.
MARSH	0	C.M.
BORROW	-12300	C.M.

FILE NAME: PROJECTS/2940/PLANS/GEN/29400T(10).DGN 09-18-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



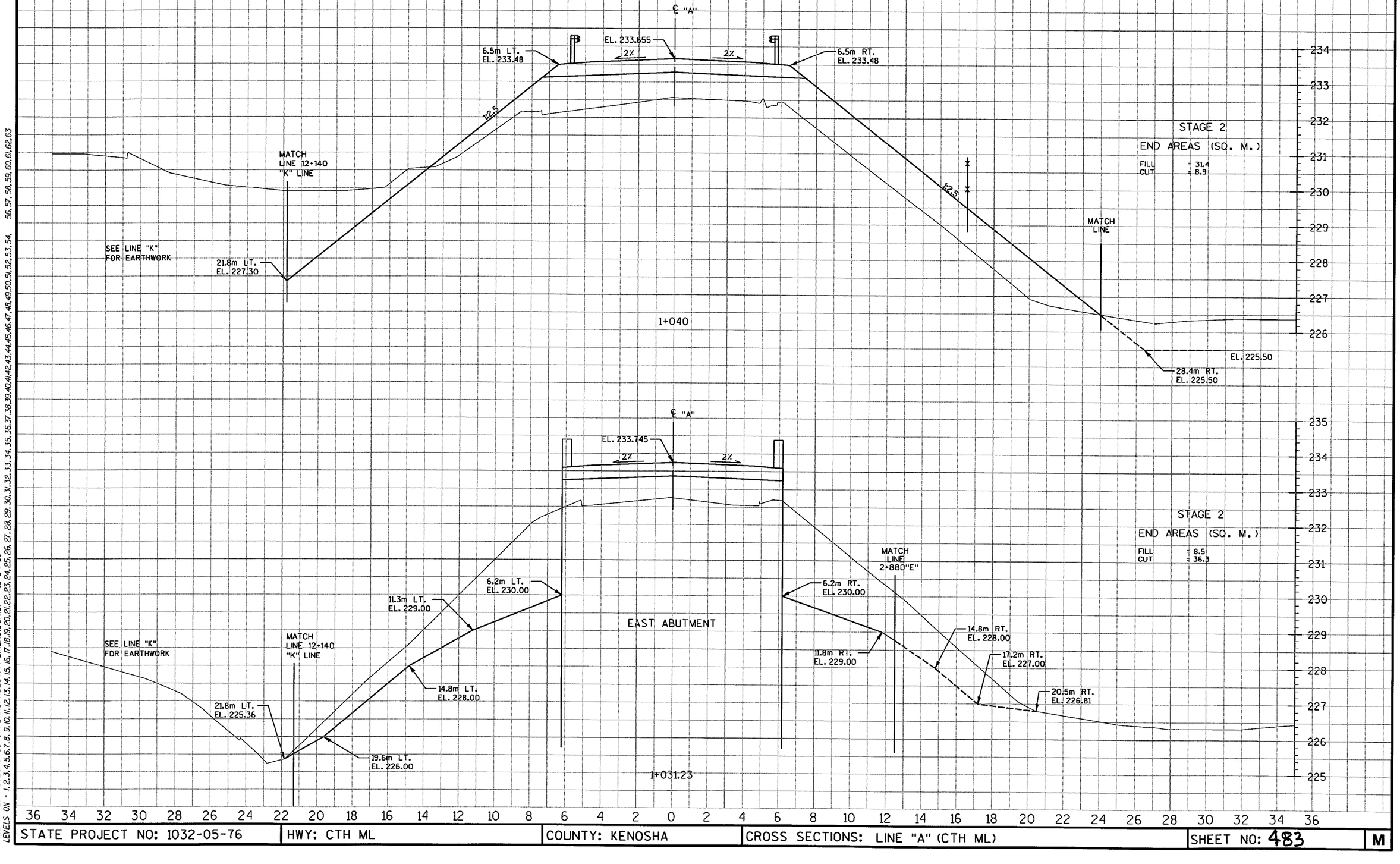
FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(1) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 481	M



STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 482	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(2) 12-04-01
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63



FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(3) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 483	M

TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)

T.L.E. R/W

3.3m 50.9m

℄ "A"

EL. 233.424

2% 2%

MATCH LINE 12+140 "K" LINE

1:2.5

1:2.5

SEE LINE "K" FOR EARTHWORK

22.7m LT. EL. 227.30

21.8m LT. EL. 227.30

1+058

CULVERT EXTENTION

1A

1B

EXISTING 750mm CMP

224.78

1:1½ 1:1½

31.0m RT. EL. 225.15

STAGE 2

END AREAS (SQ. M.)

FILL	= 20.5
CUT	= 83.9

234 233 232 231 230 229 228 227 226

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

MATCH LINE

31.0m LT. EL. 225.15

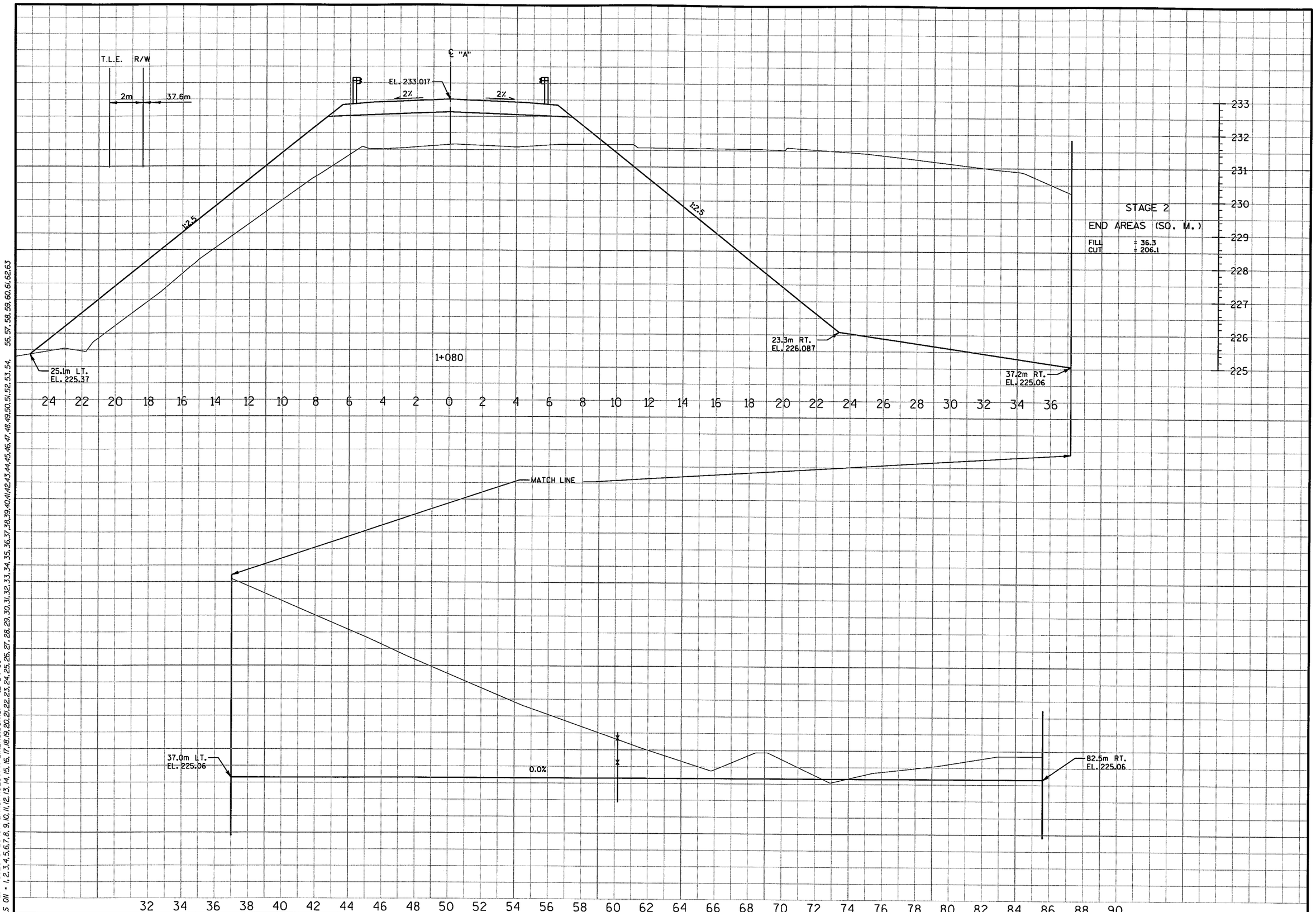
0.0%

85.6m RT. EL. 225.15

32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90

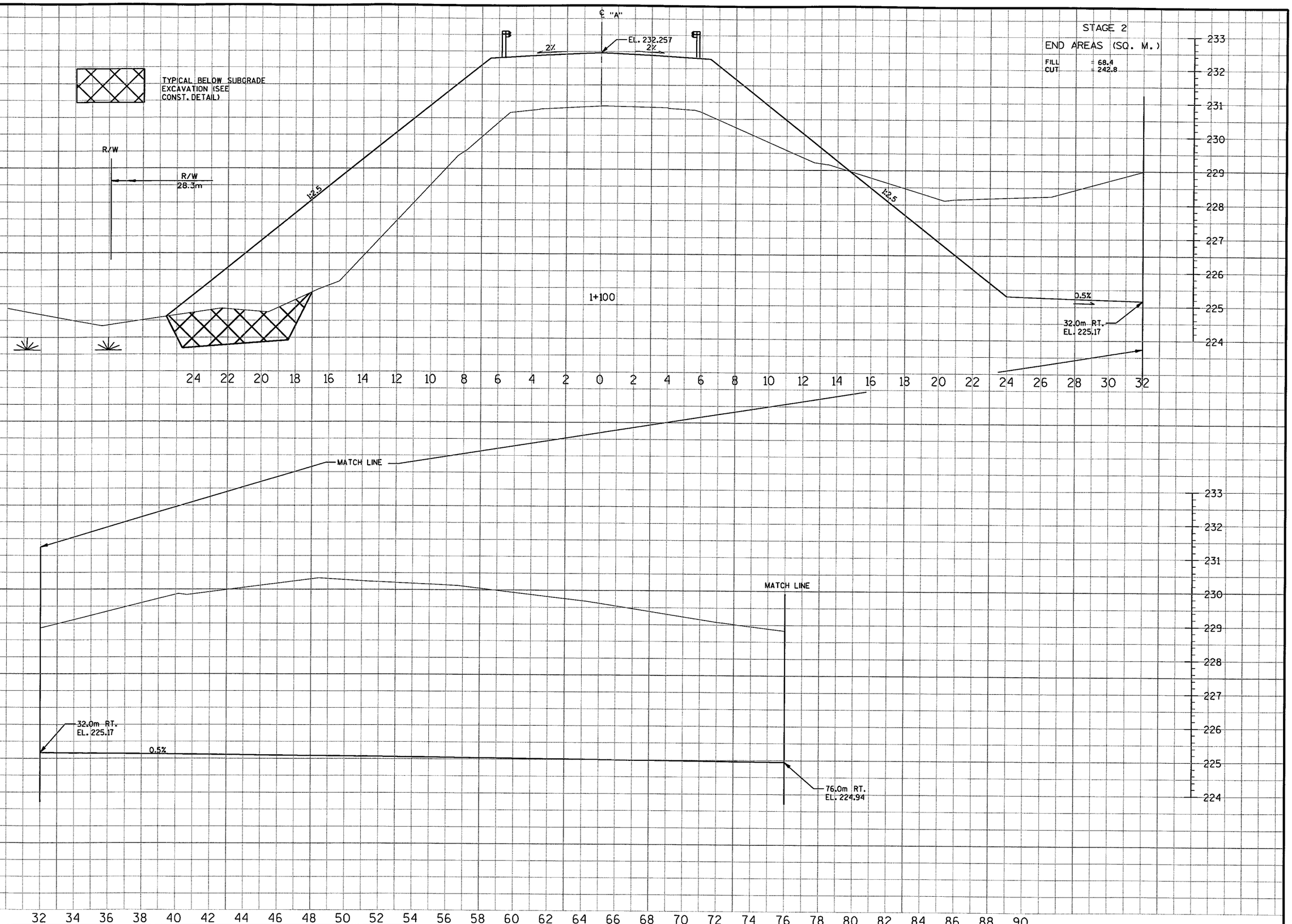
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 484 M

FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(4) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(5) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

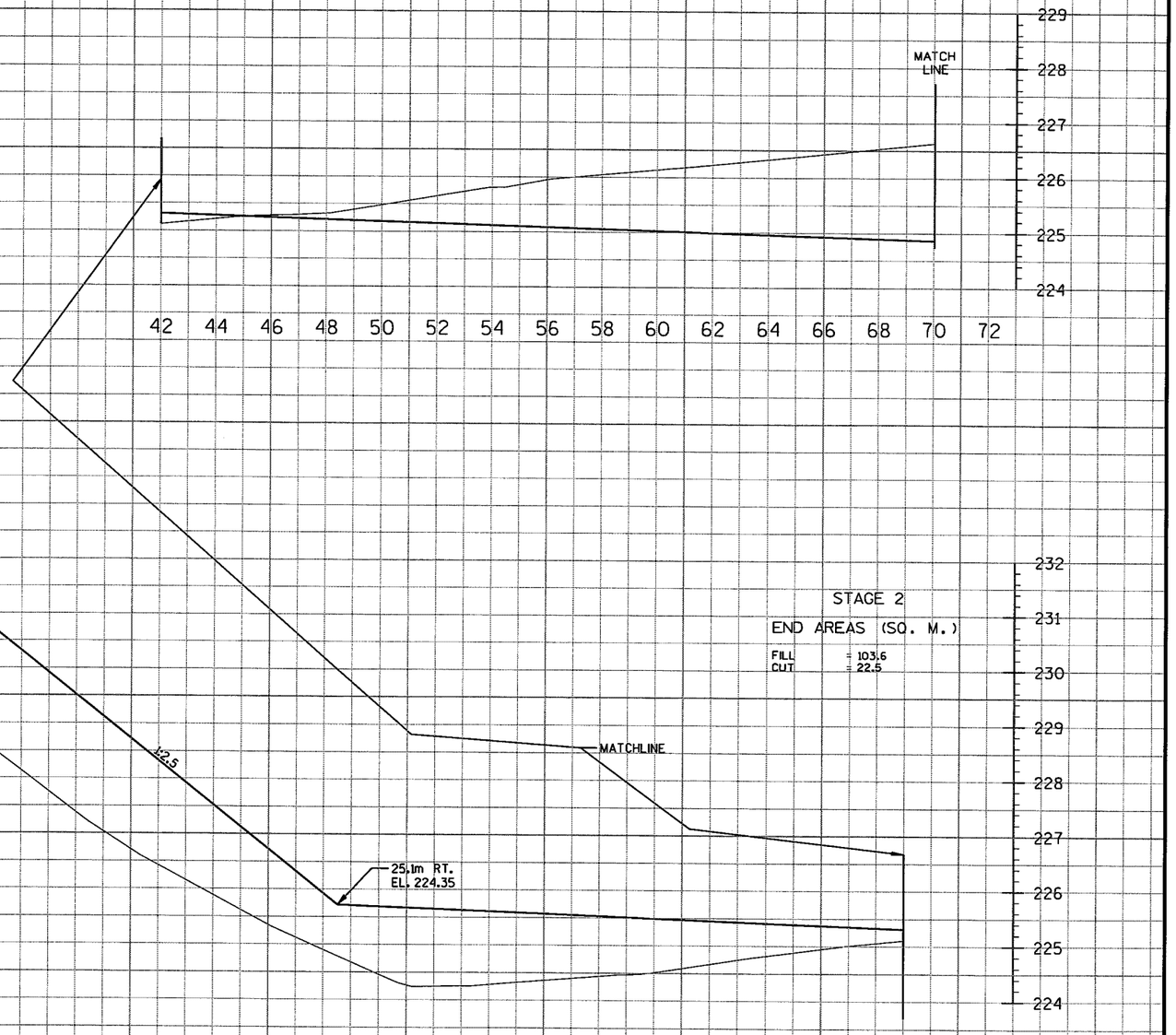
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 485 M



FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(6) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 486	M

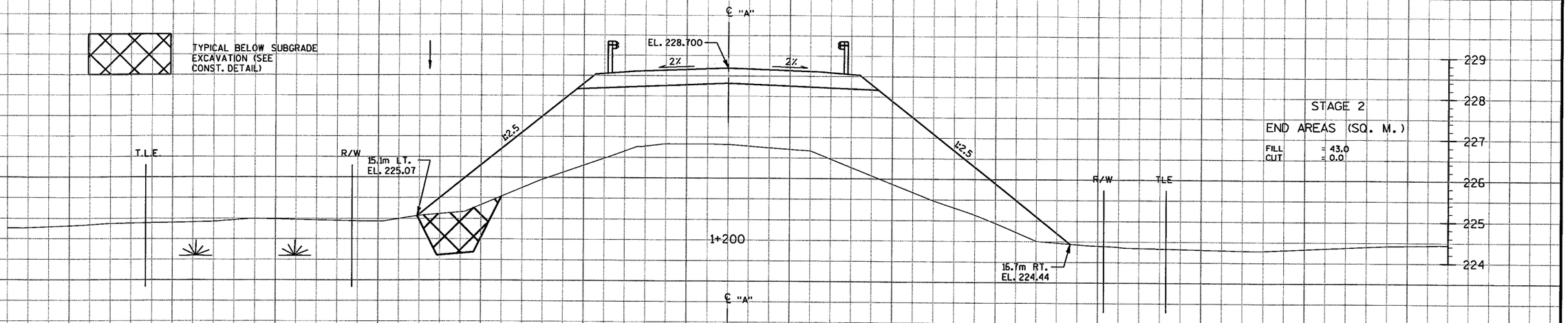
TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)



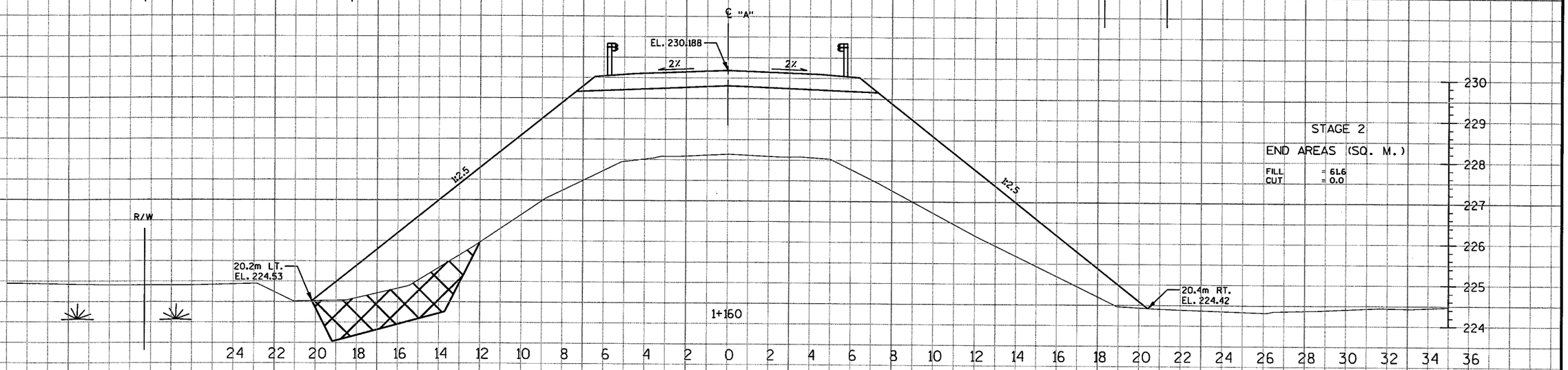
FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(T) 12-04-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 487	M

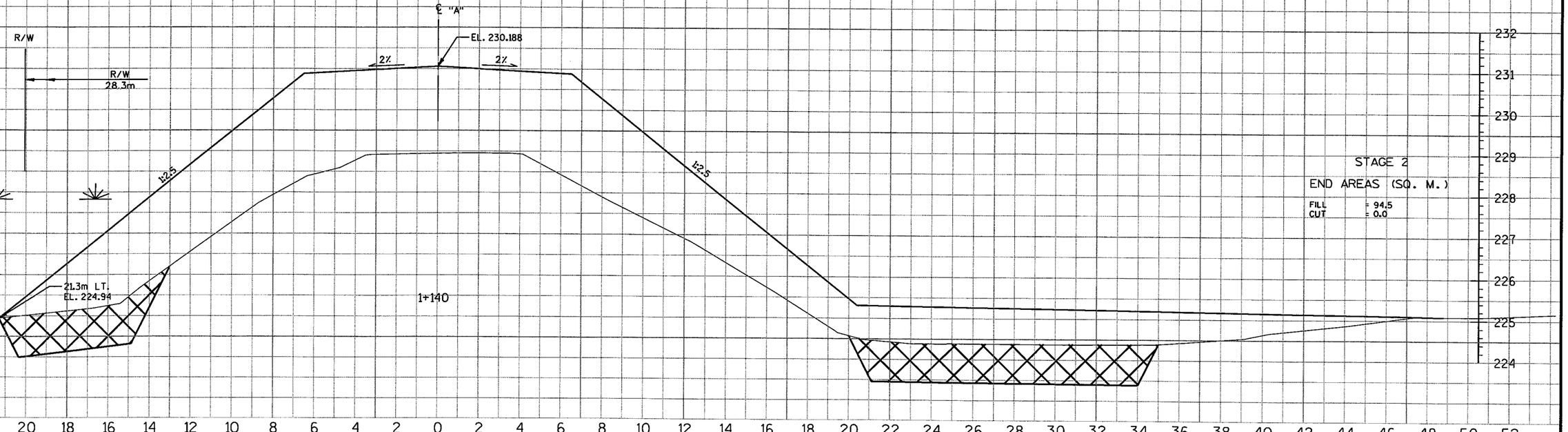
TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)



STAGE 2
END AREAS (SQ. M.)
FILL = 43.0
CUT = 0.0



STAGE 2
END AREAS (SQ. M.)
FILL = 61.6
CUT = 0.0

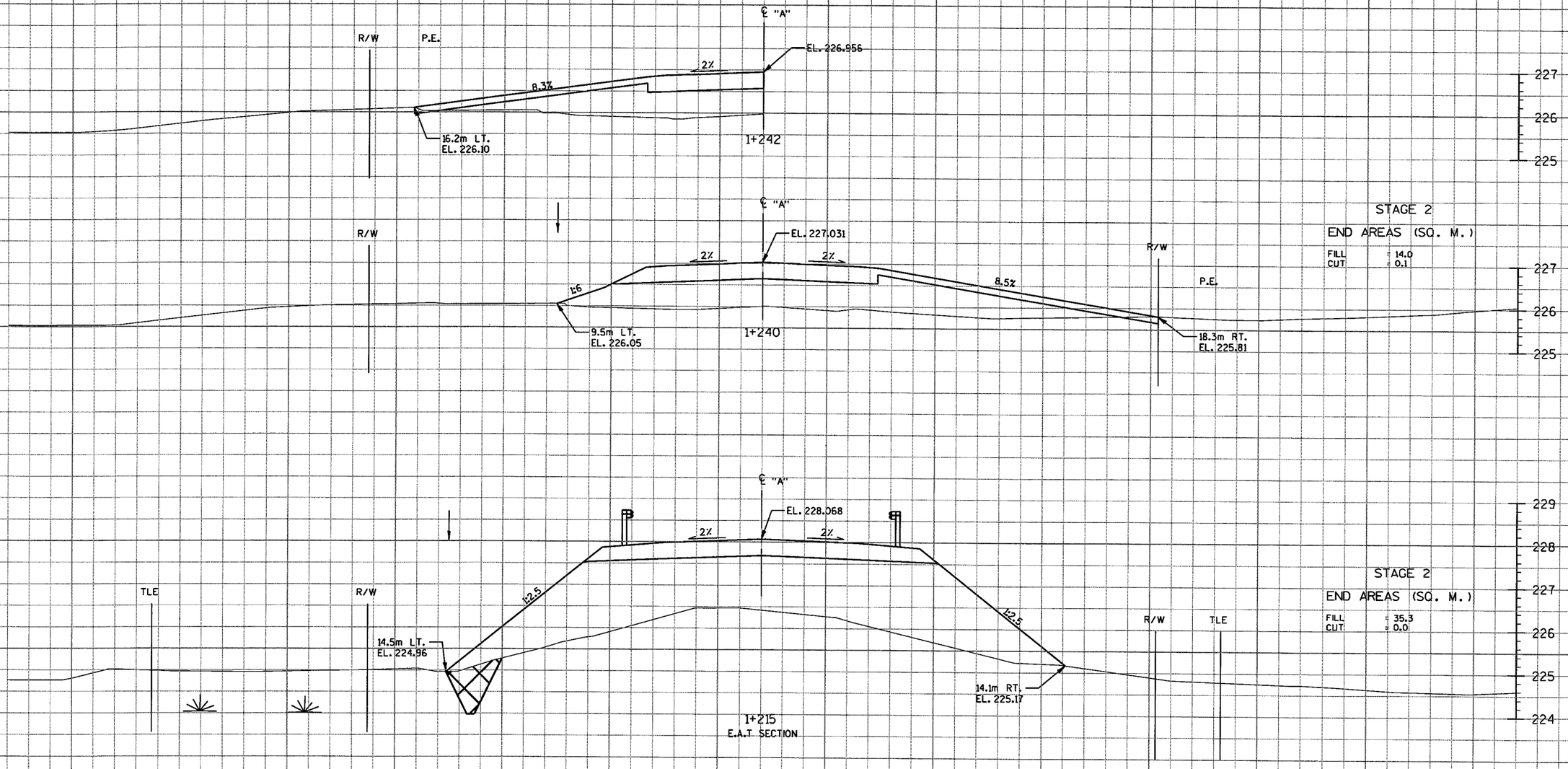


STAGE 2
END AREAS (SQ. M.)
FILL = 94.5
CUT = 0.0

FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(8) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 488	M

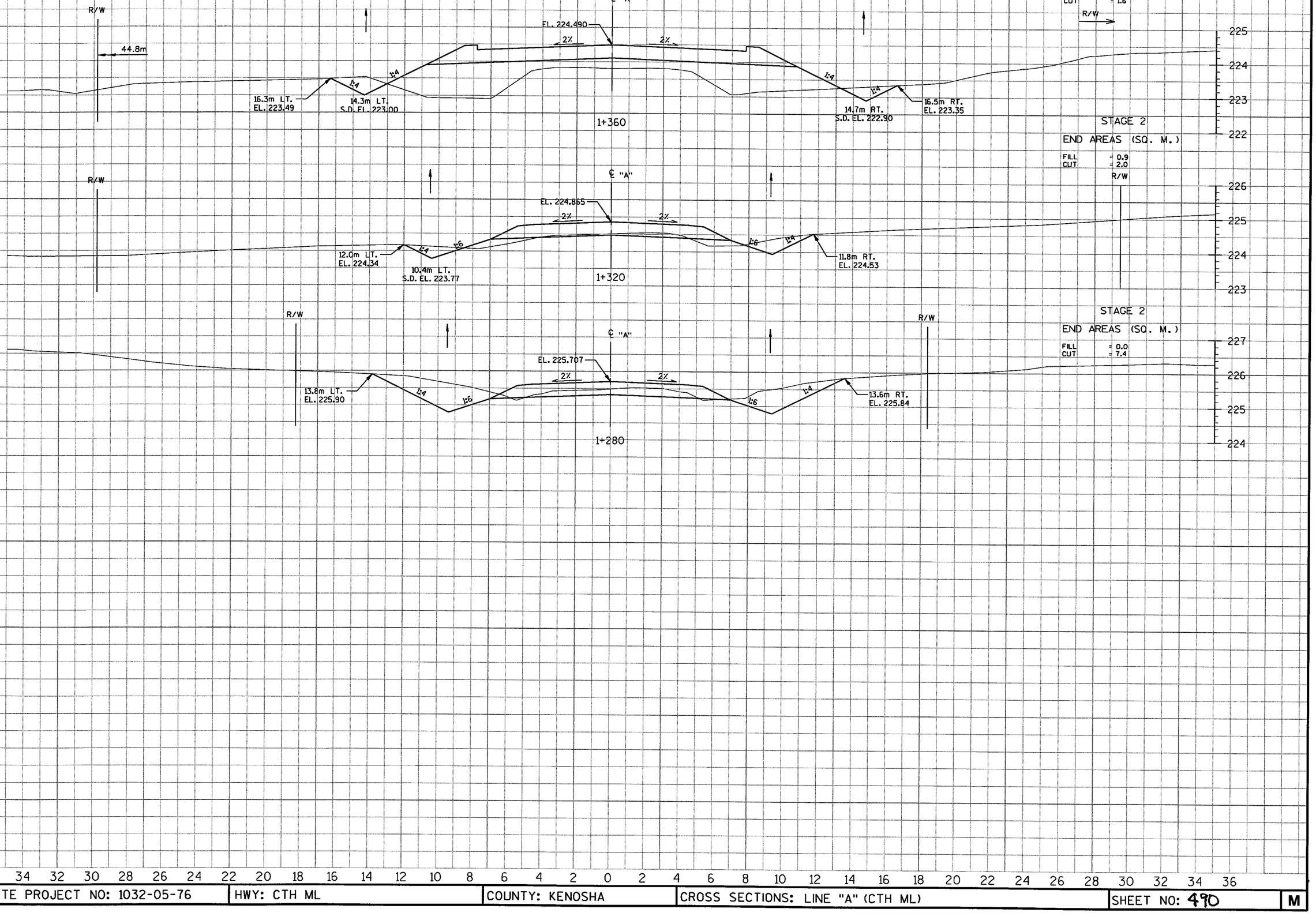
TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)



36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 489	M

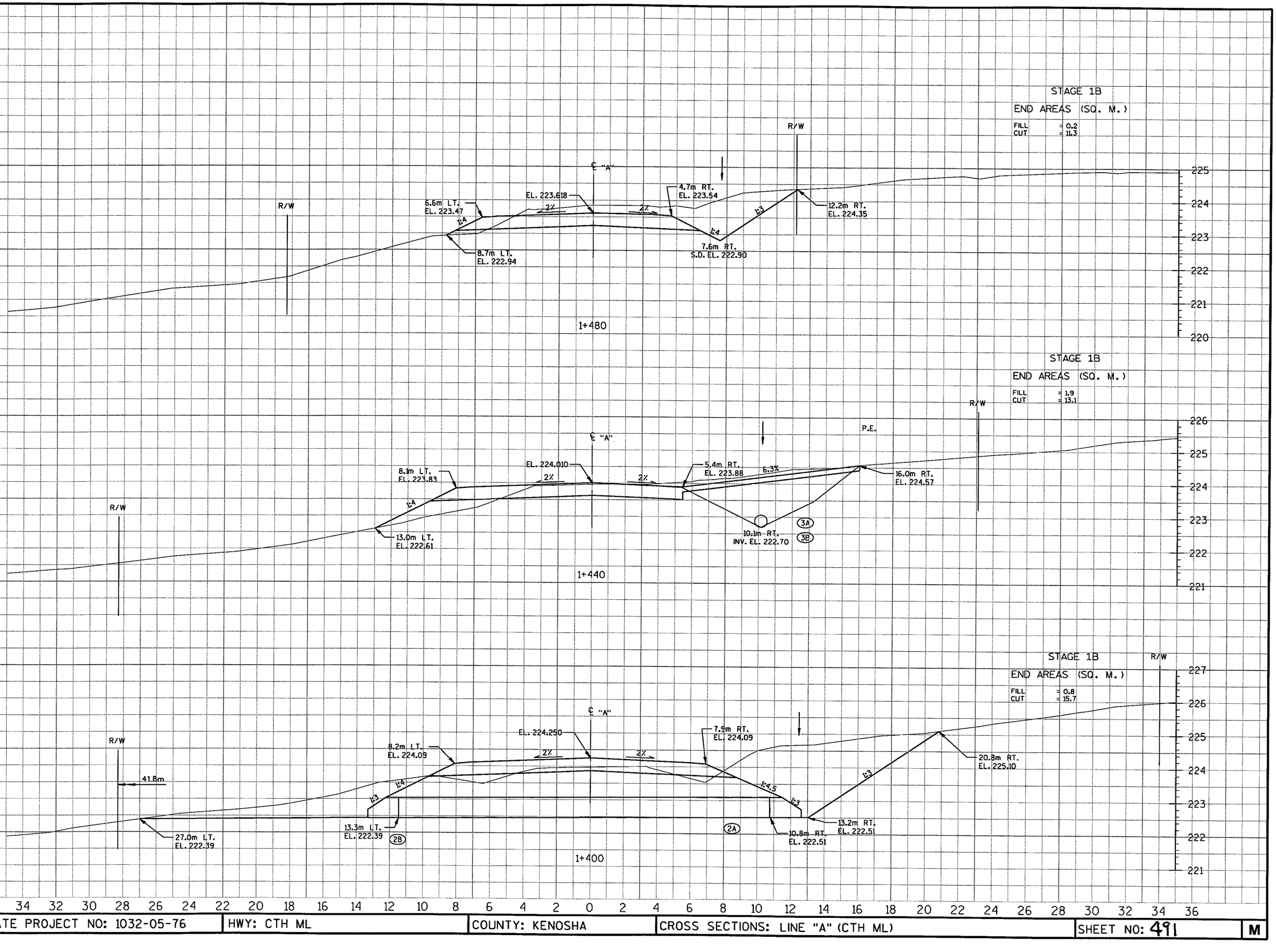
FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(9) 12-04-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63



36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 490	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(10) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63



FILE NAME: PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(11) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63

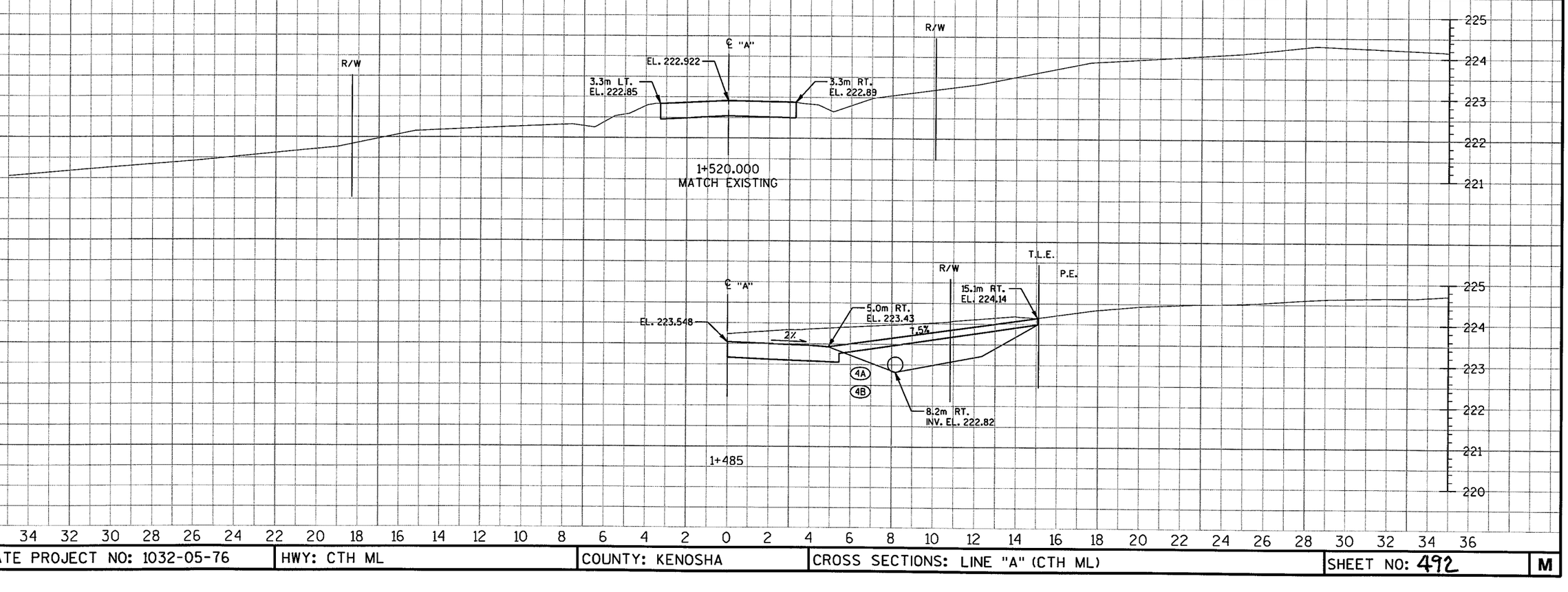
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 491	M

FILE NAME= PROJECTS/2940/PLANS/XSECT/A-LINEXS.DGN(12) 12-04-01
LEVELS ON = 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

STAGE 1B

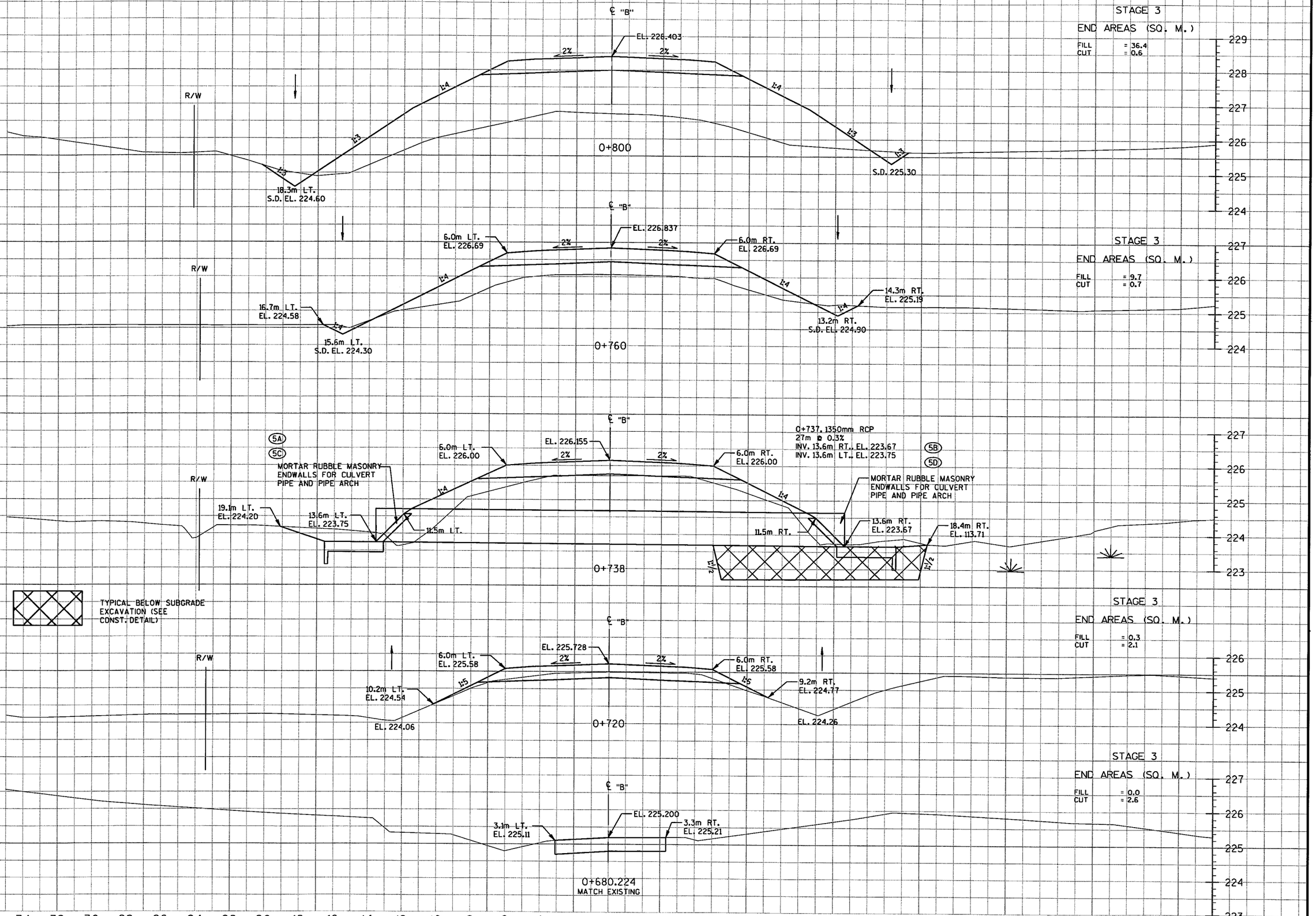
END AREAS (SQ. M.)

FILL = 0.0
CUT = 2.5

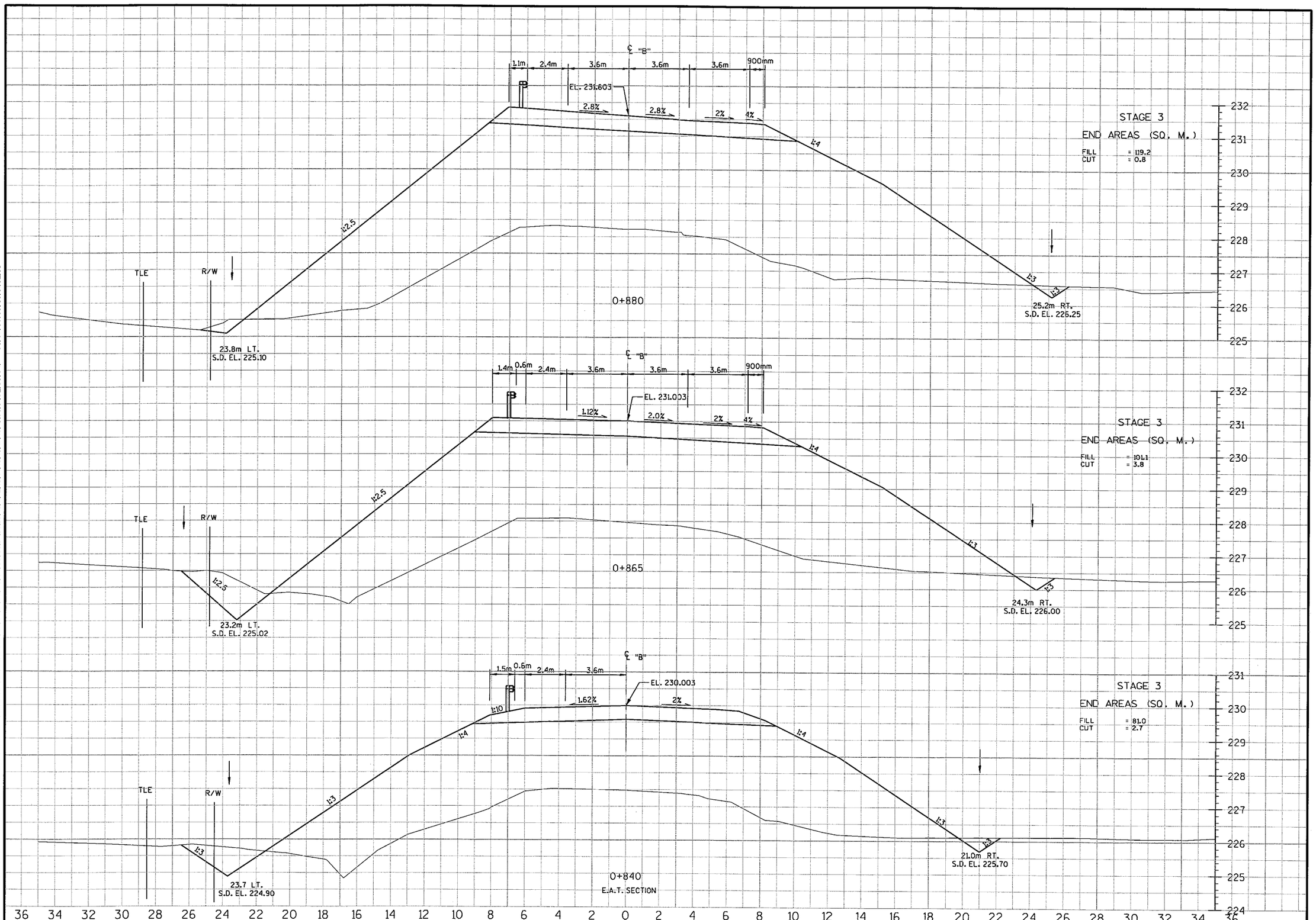


STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "A" (CTH ML)	SHEET NO: 492	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN:1) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14, 15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 493	M

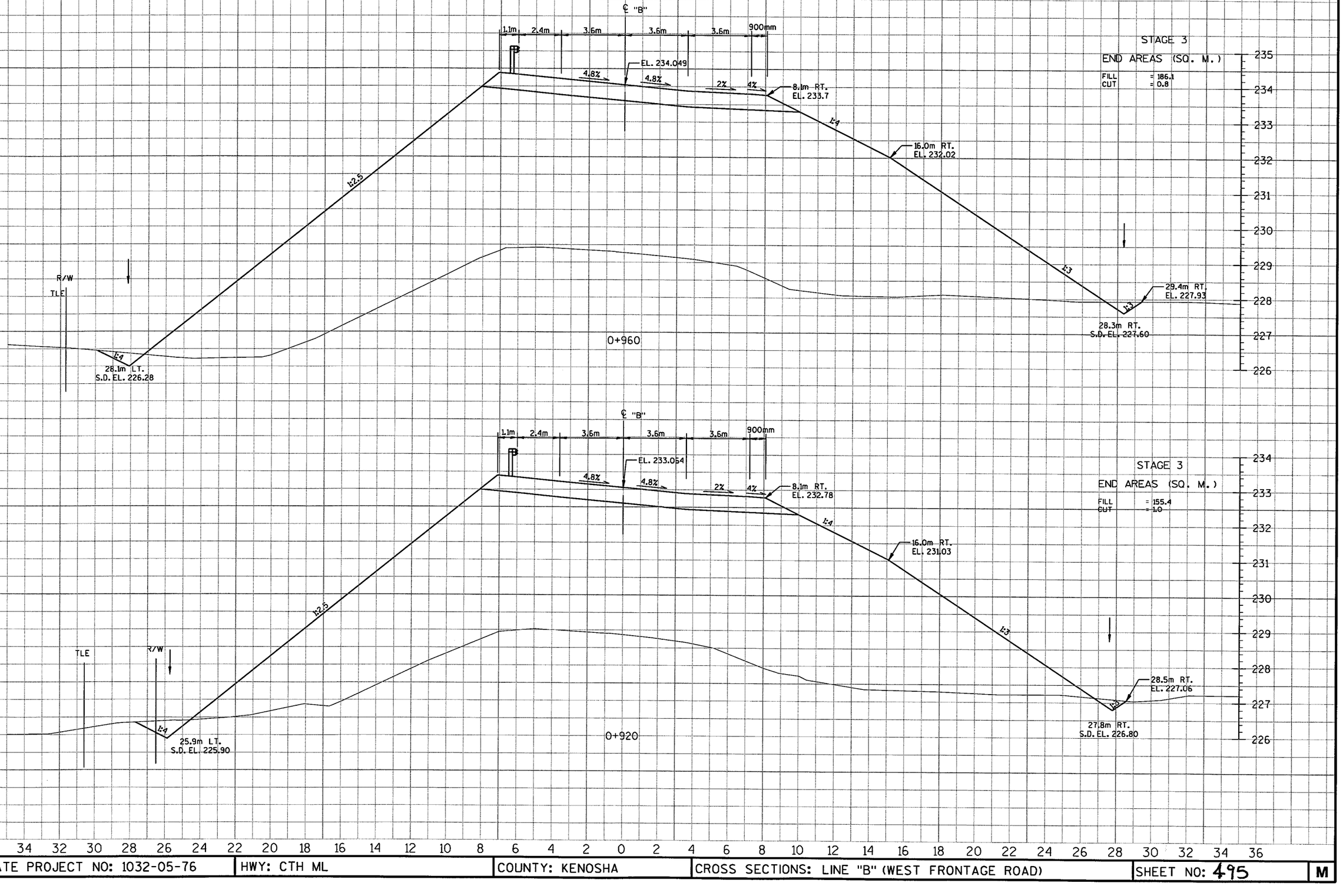


FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(2) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 494	M

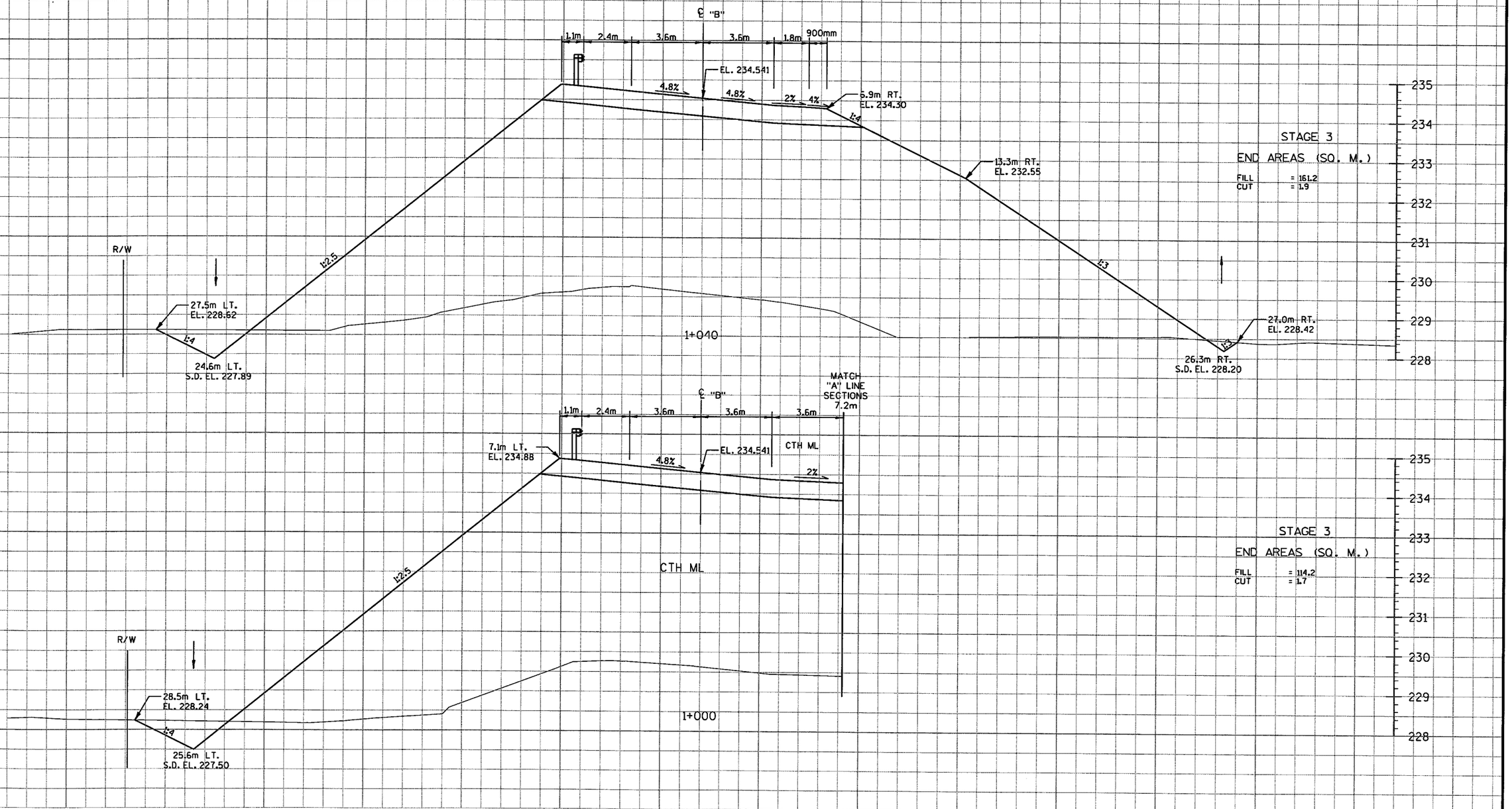
FILE NAME: $$....designfile....$$ ORIGINATOR: REV. DATE: PLOT SCALE : $$.....plotscale.....$$ PLOT DATE: $$...plottingdate...$$ WISDOT: MSHT21

12-7-02



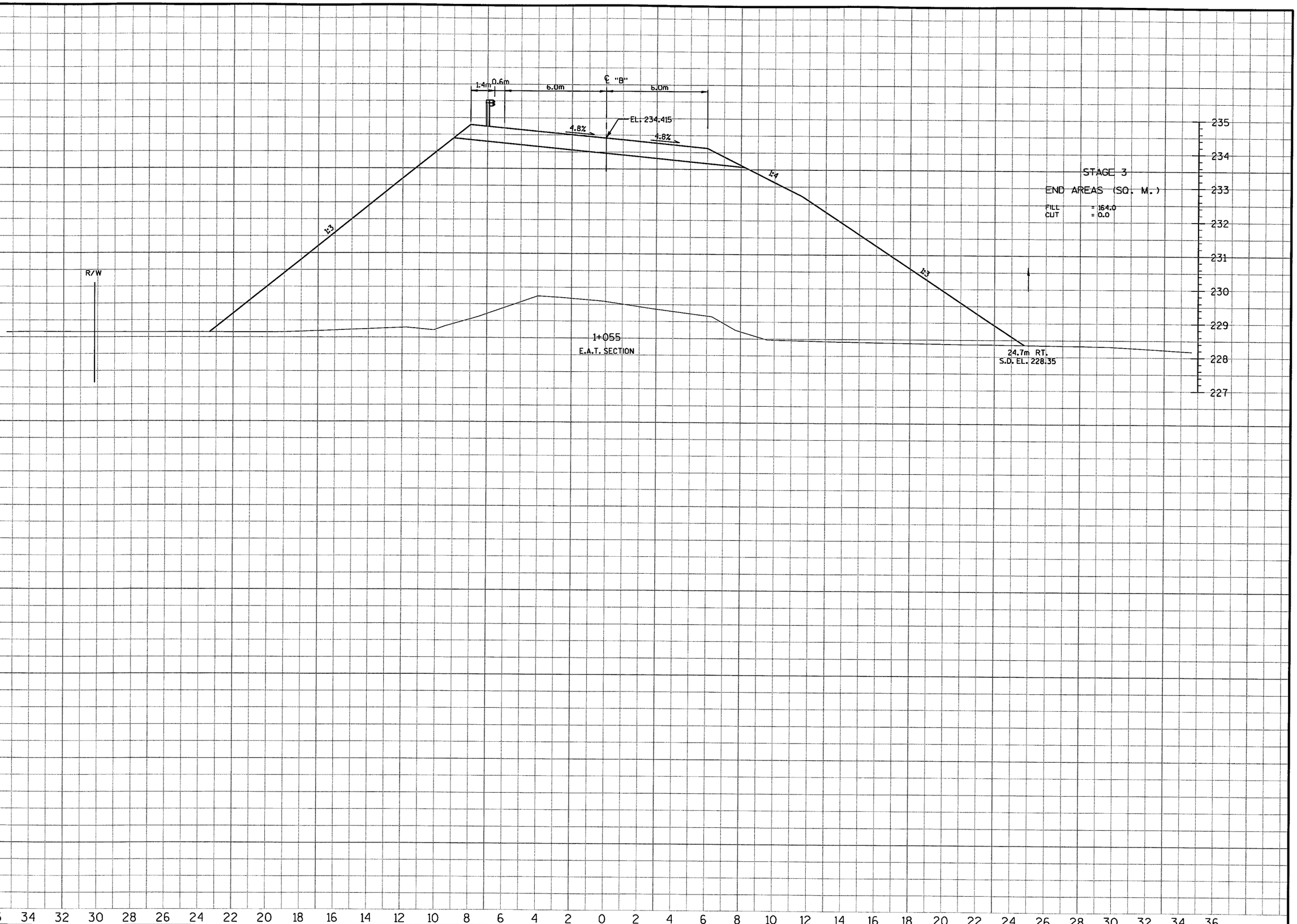
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 495	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(3) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63



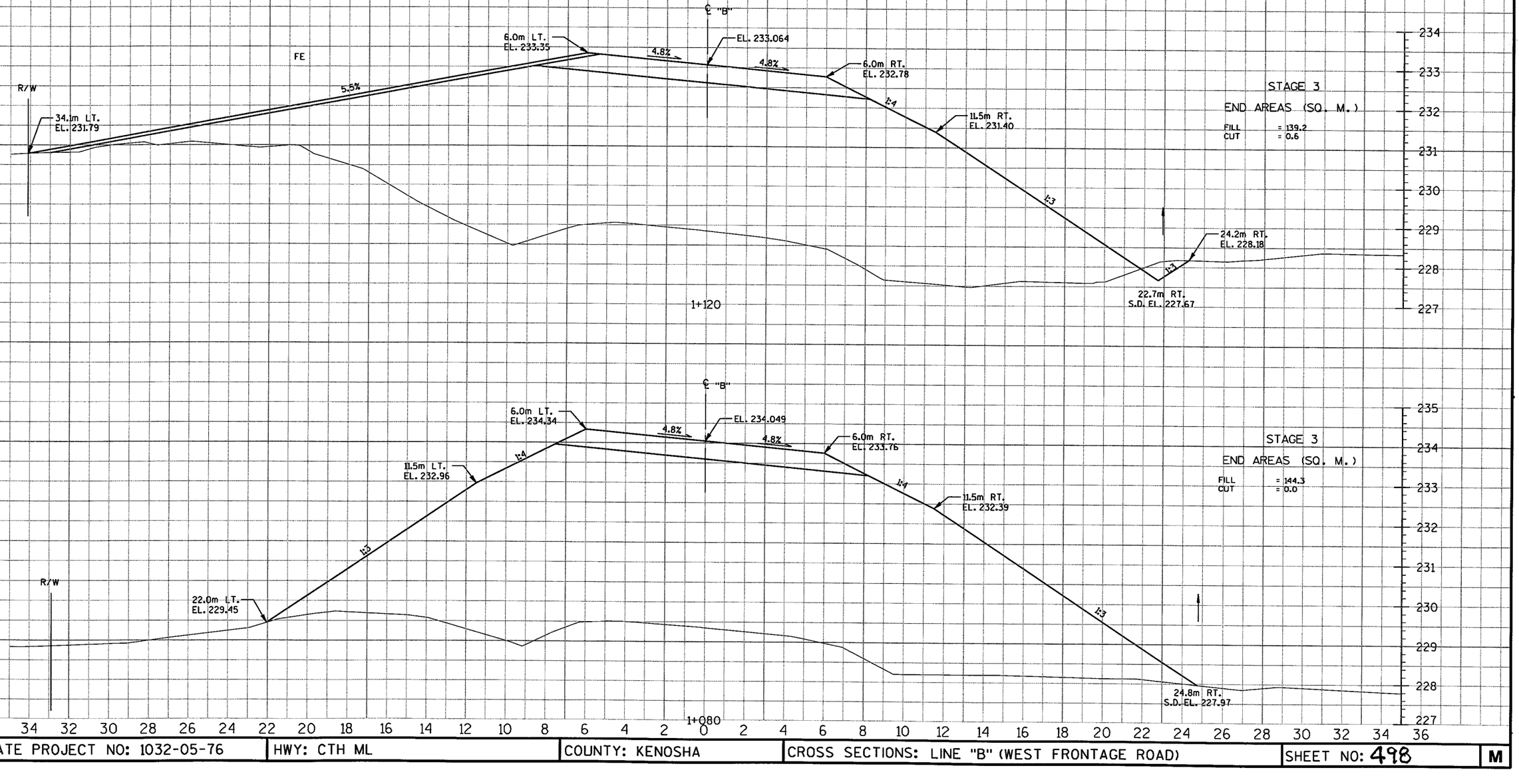
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 496	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(4) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



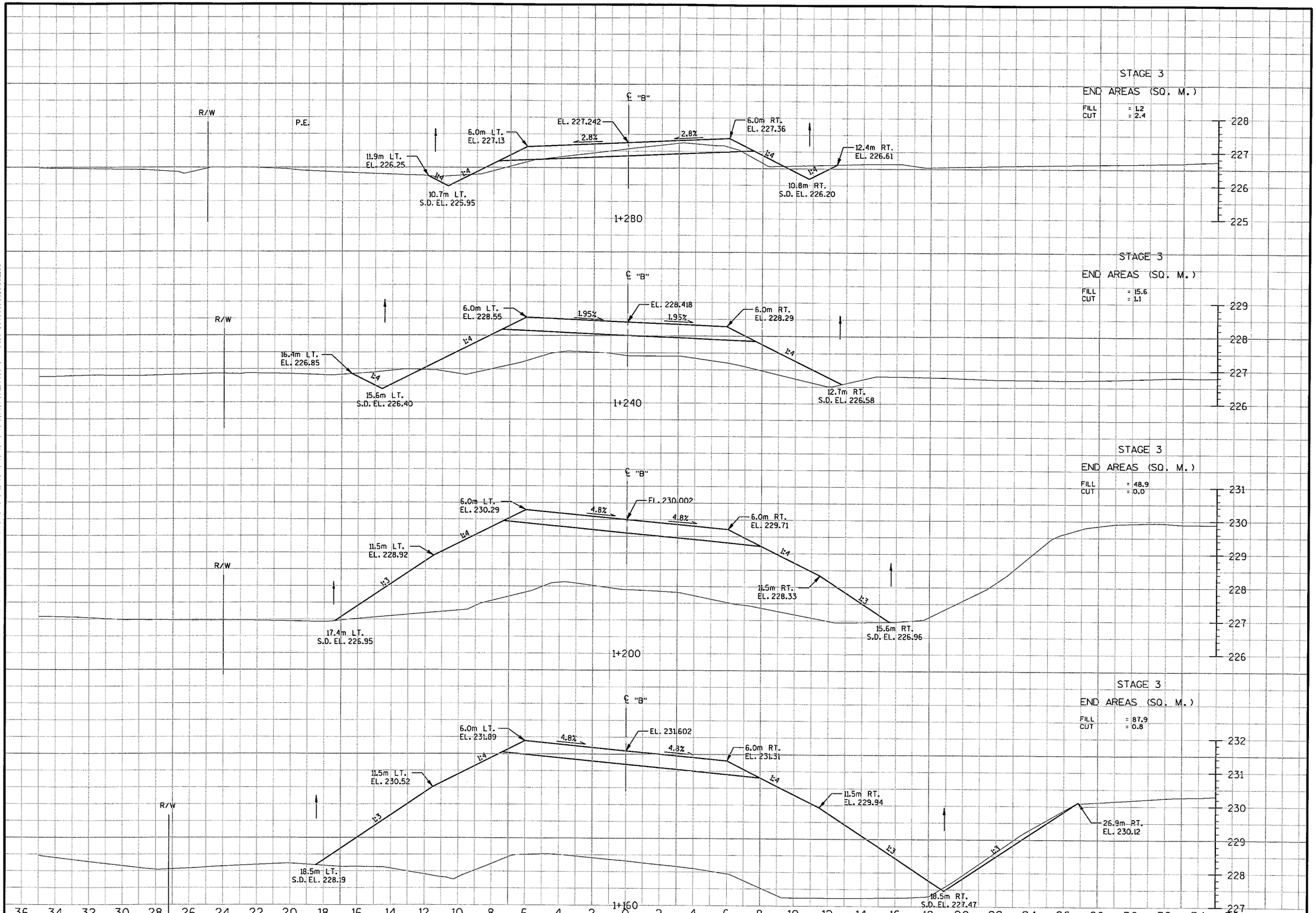
FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(5) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26, 27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 497	M



STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 498	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(6) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63



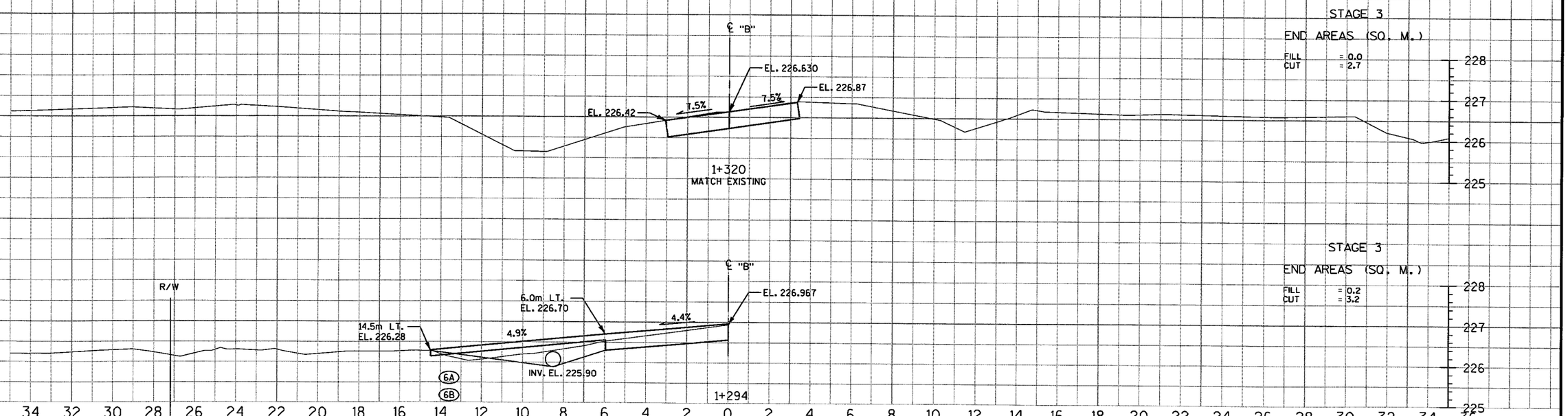
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 499	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(7) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

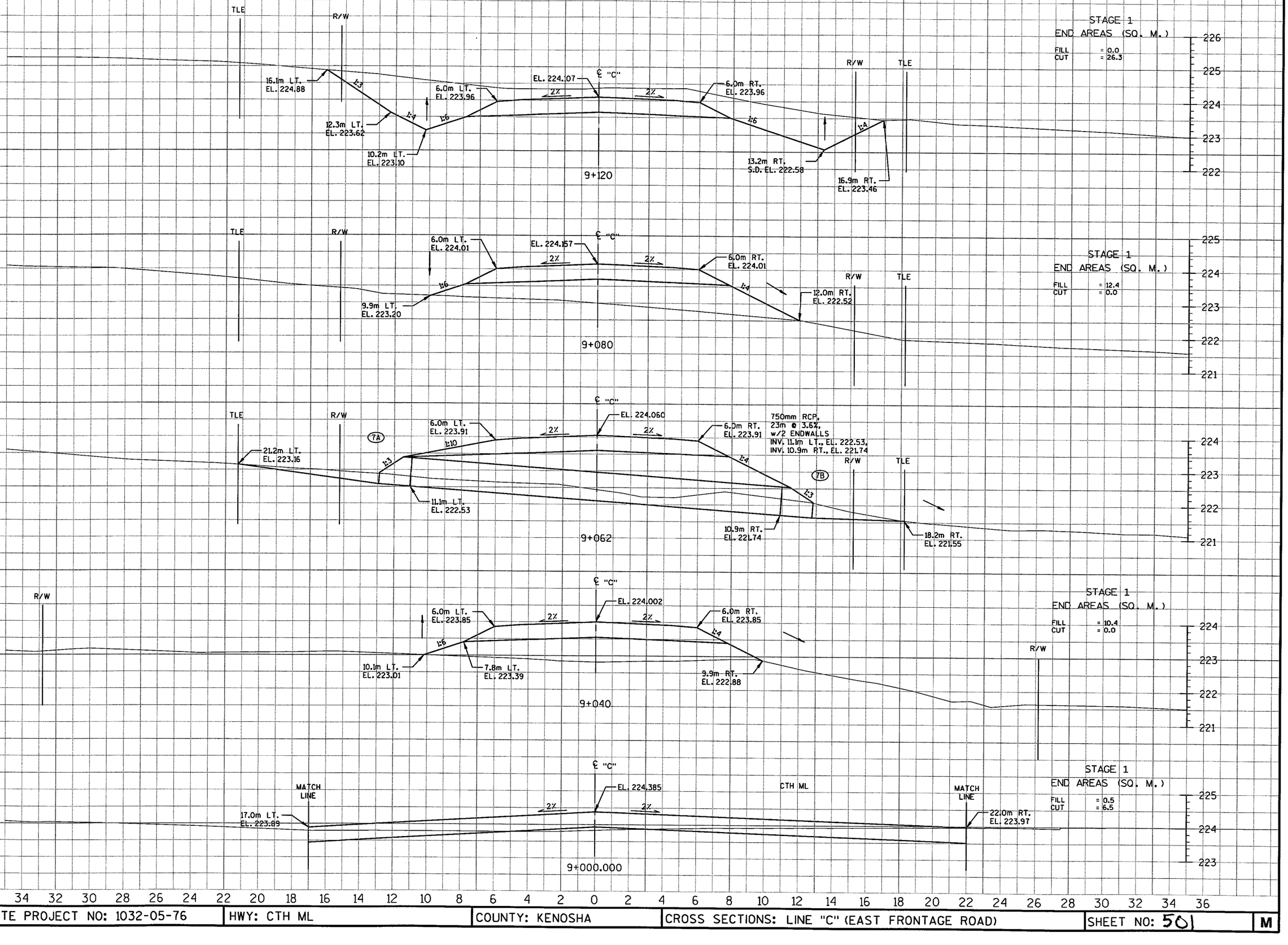
FILE NAME: $$....designfile....$$ ORIGINATOR: REV. DATE: PLOT SCALE : $$.....plotscale.....$$ PLOT DATE: $$...plottingdate...$$ WisDOT: MSHT21

R 5-7-02

FILE NAME: PROJECTS/2940/PLANS/XSECT/B-LINEXS.DGN(B) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14, 15, 16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

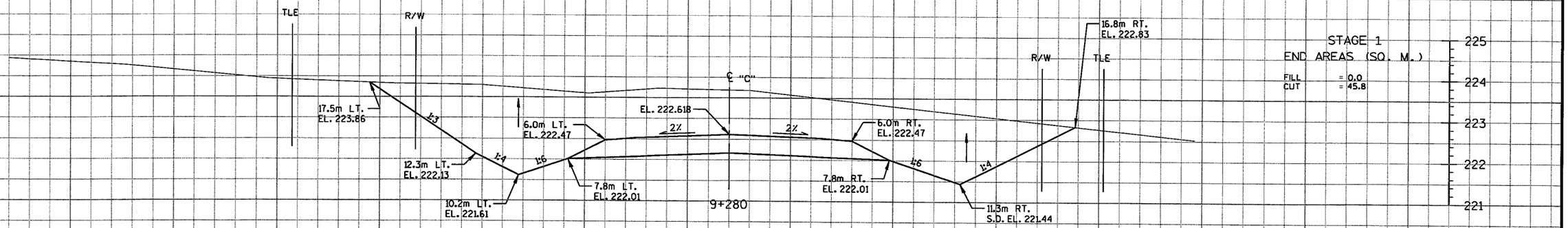


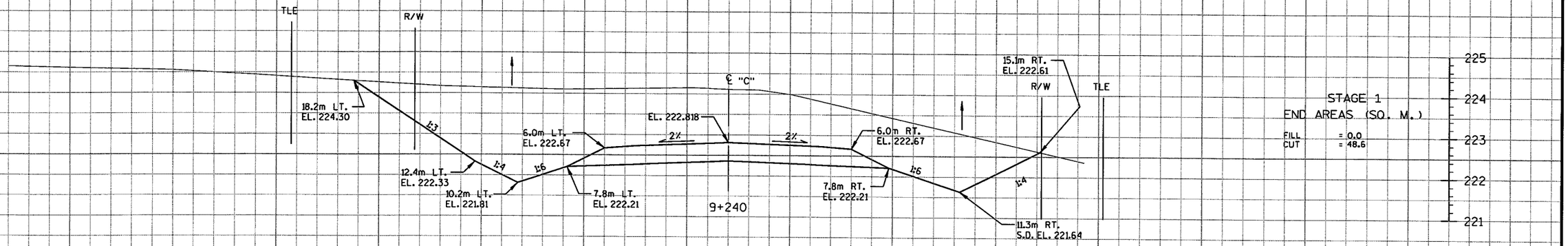
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "B" (WEST FRONTAGE ROAD)	SHEET NO: 500	M

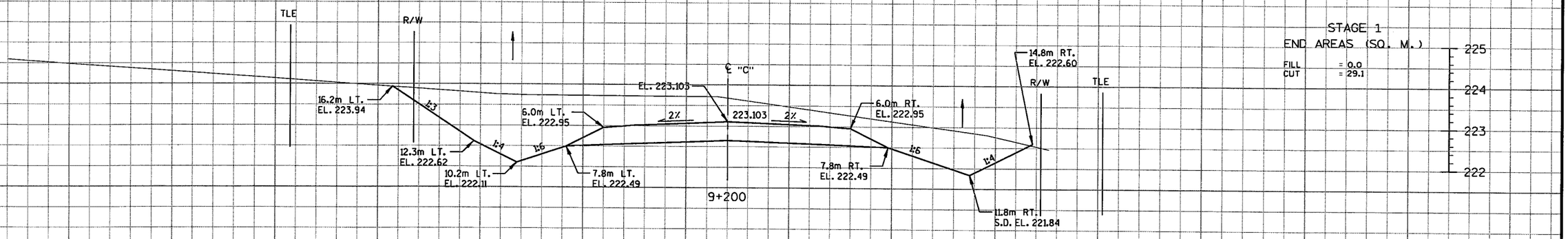


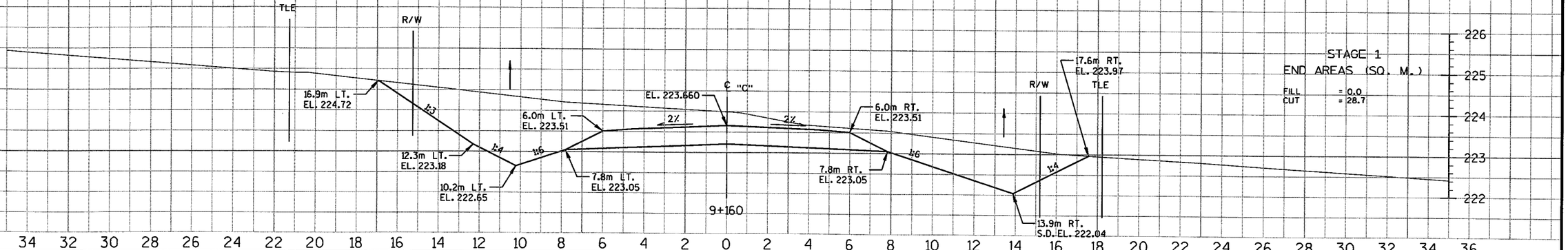
FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(1) 09-14-01
LEVELS ON * 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 50	M





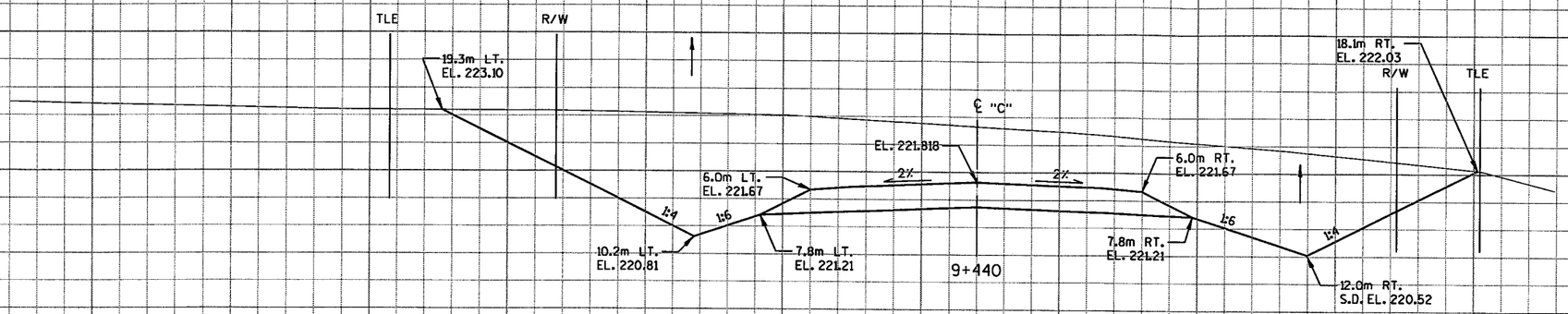




36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

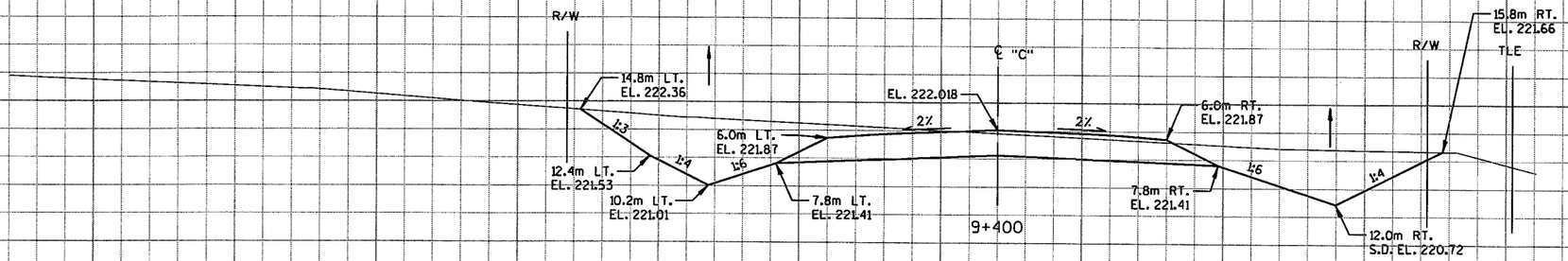
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 502	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(2) 09-14-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



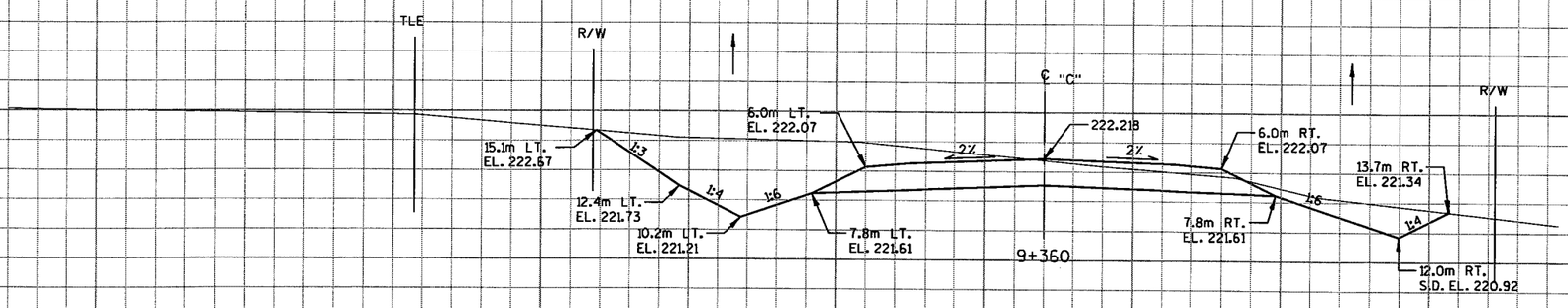
STAGE 1
END AREAS (SQ. M.)

FILL = 0.0
CUT = 51.2



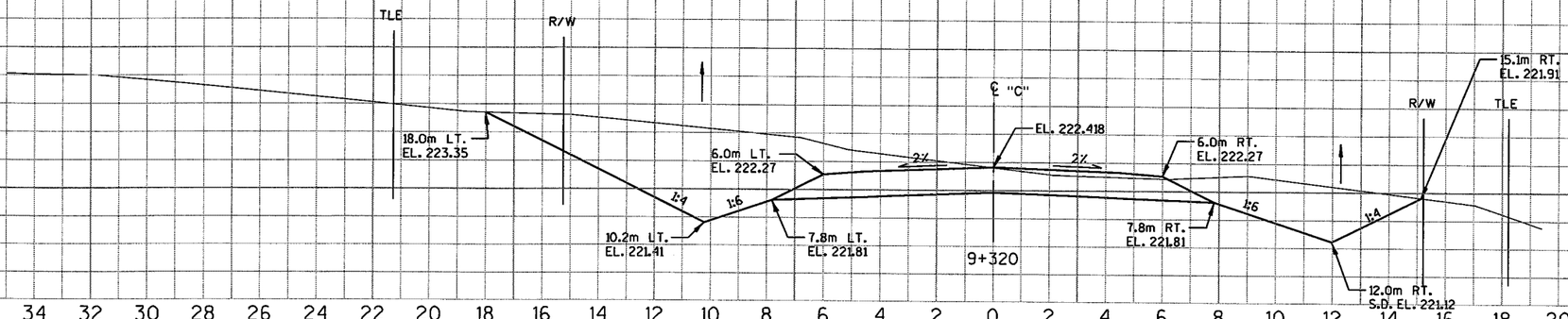
STAGE 1
END AREAS (SQ. M.)

FILL = 0.0
CUT = 17.1



STAGE 1
END AREAS (SQ. M.)

FILL = 0
CUT = 15.6



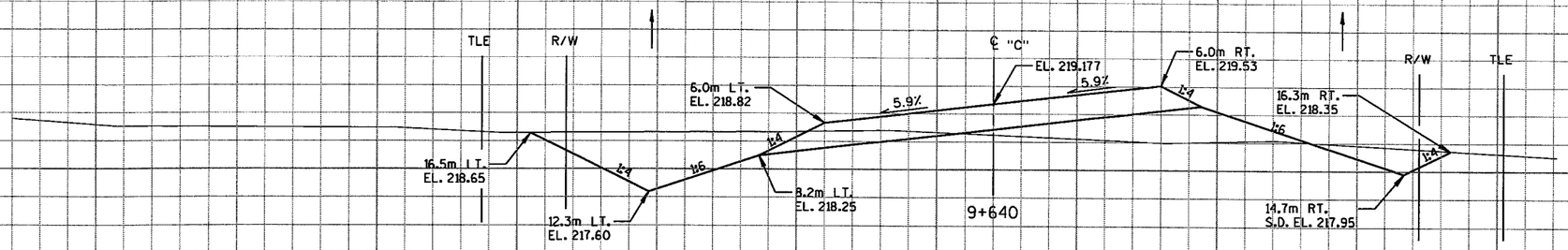
STAGE 1
END AREAS (SQ. M.)

FILL = 0.0
CUT = 24.0

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

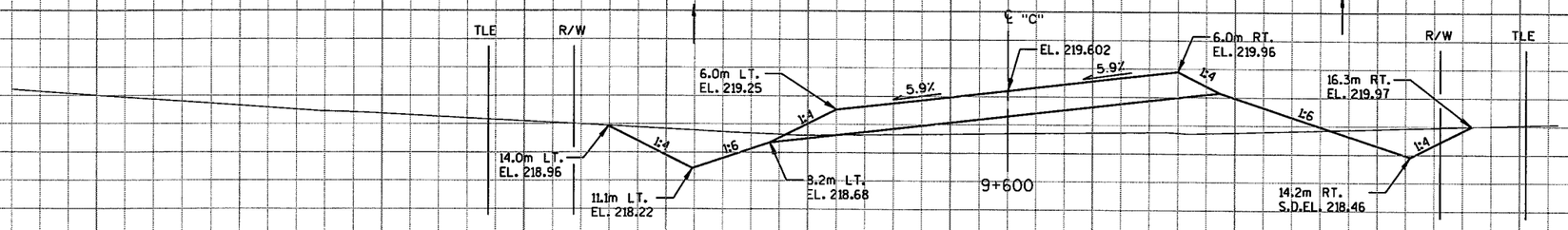
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 503	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(3) 09-14-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63



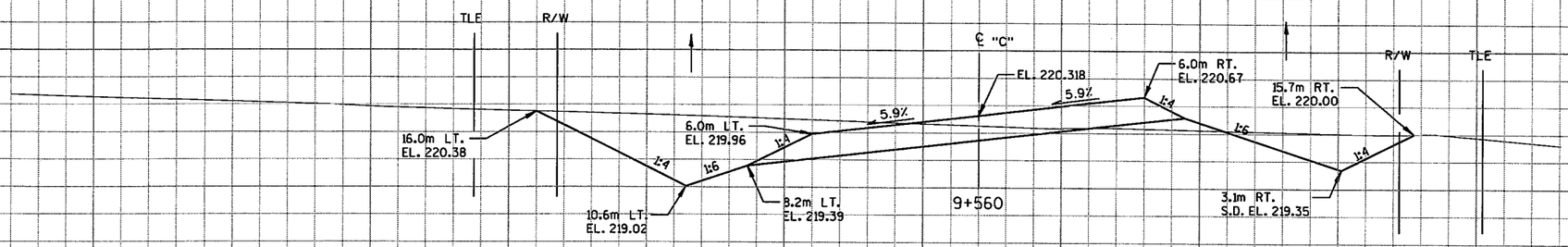
STAGE 1
END AREAS (SQ. M.)
FILL = 4.1
CUT = 6.8

220
219
218
217



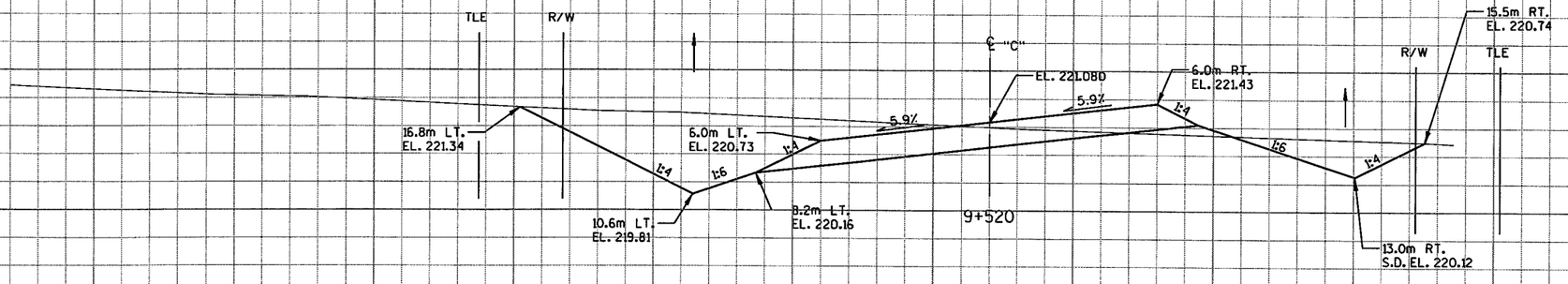
STAGE 1
END AREAS (SQ. M.)
FILL = 5.9
CUT = 3.6

220
219
218



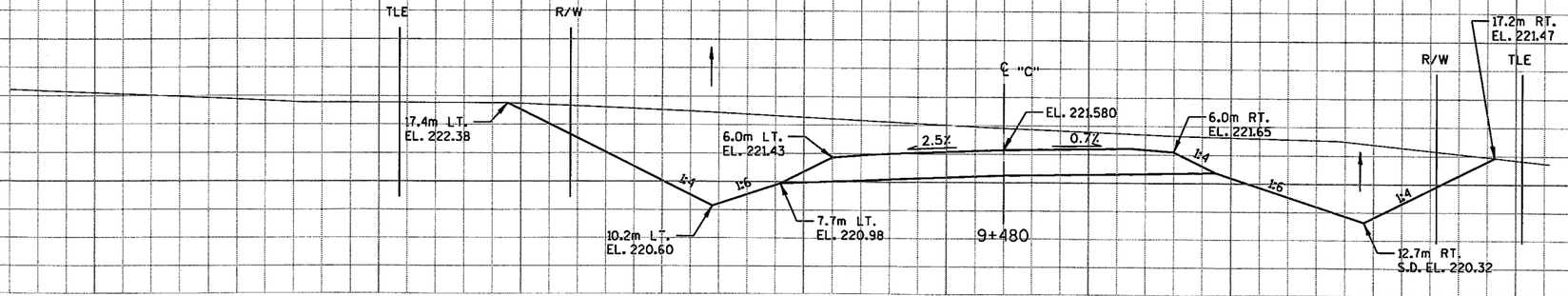
STAGE 1
END AREAS (SQ. M.)
FILL = 0.7
CUT = 13.0

221
220
219



STAGE 1
END AREAS (SQ. M.)
FILL = 0.4
CUT = 16.2

222
221
220
219



STAGE 1
END AREAS (SQ. M.)
FILL = 0.0
CUT = 31.3

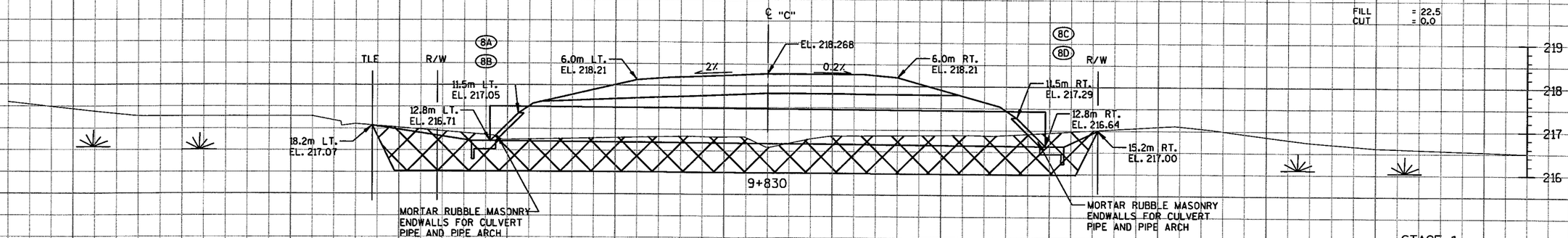
223
222
221
220

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

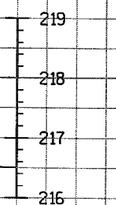
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 504	M

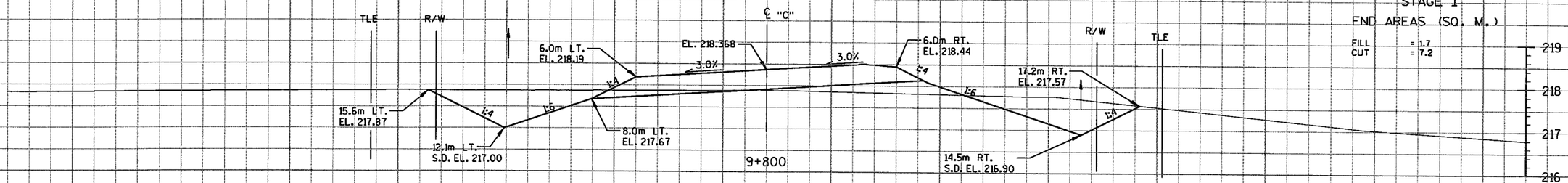
FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(4) 09-14-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13, 14,15, 16, 17,18,19,20,21,22,23,24,25,26, 27, 28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)

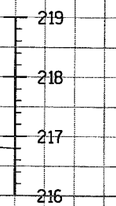


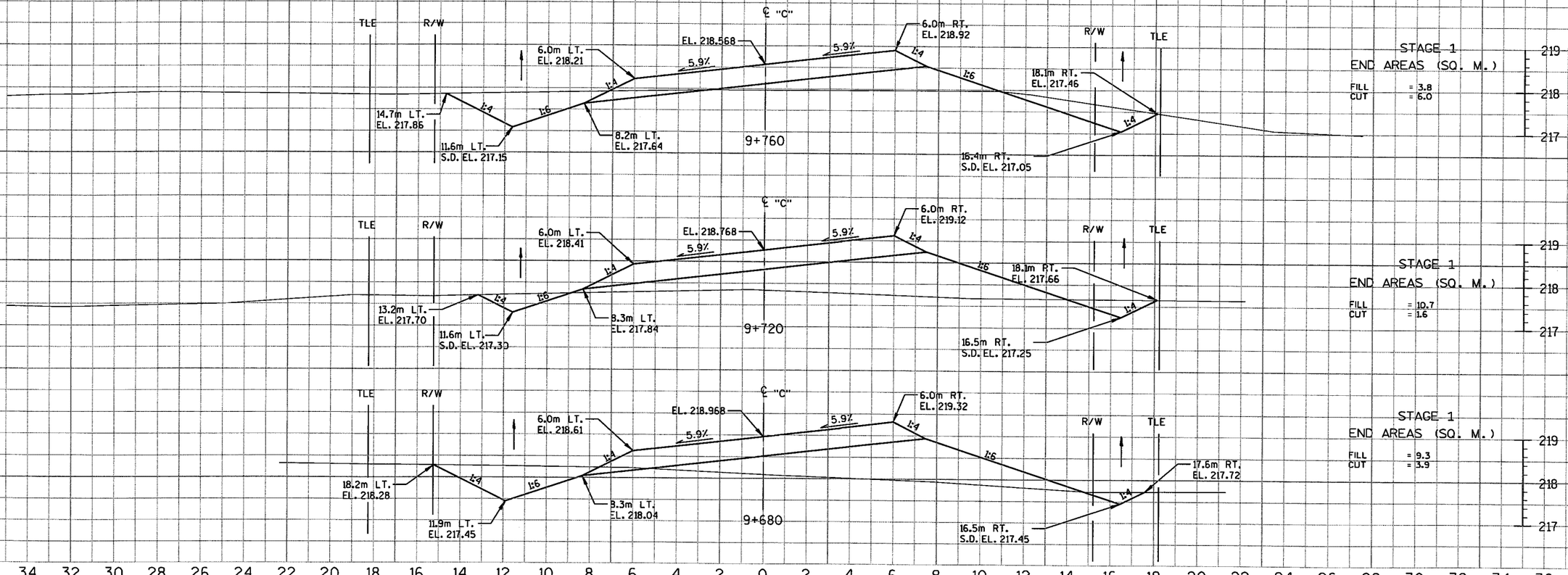
STAGE 1
END AREAS (SQ. M.)
FILL = 22.5
CUT = 0.0





STAGE 1
END AREAS (SQ. M.)
FILL = 1.7
CUT = 7.2

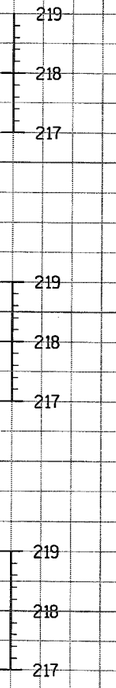




STAGE 1
END AREAS (SQ. M.)
FILL = 3.8
CUT = 6.0

STAGE 1
END AREAS (SQ. M.)
FILL = 10.7
CUT = 1.6

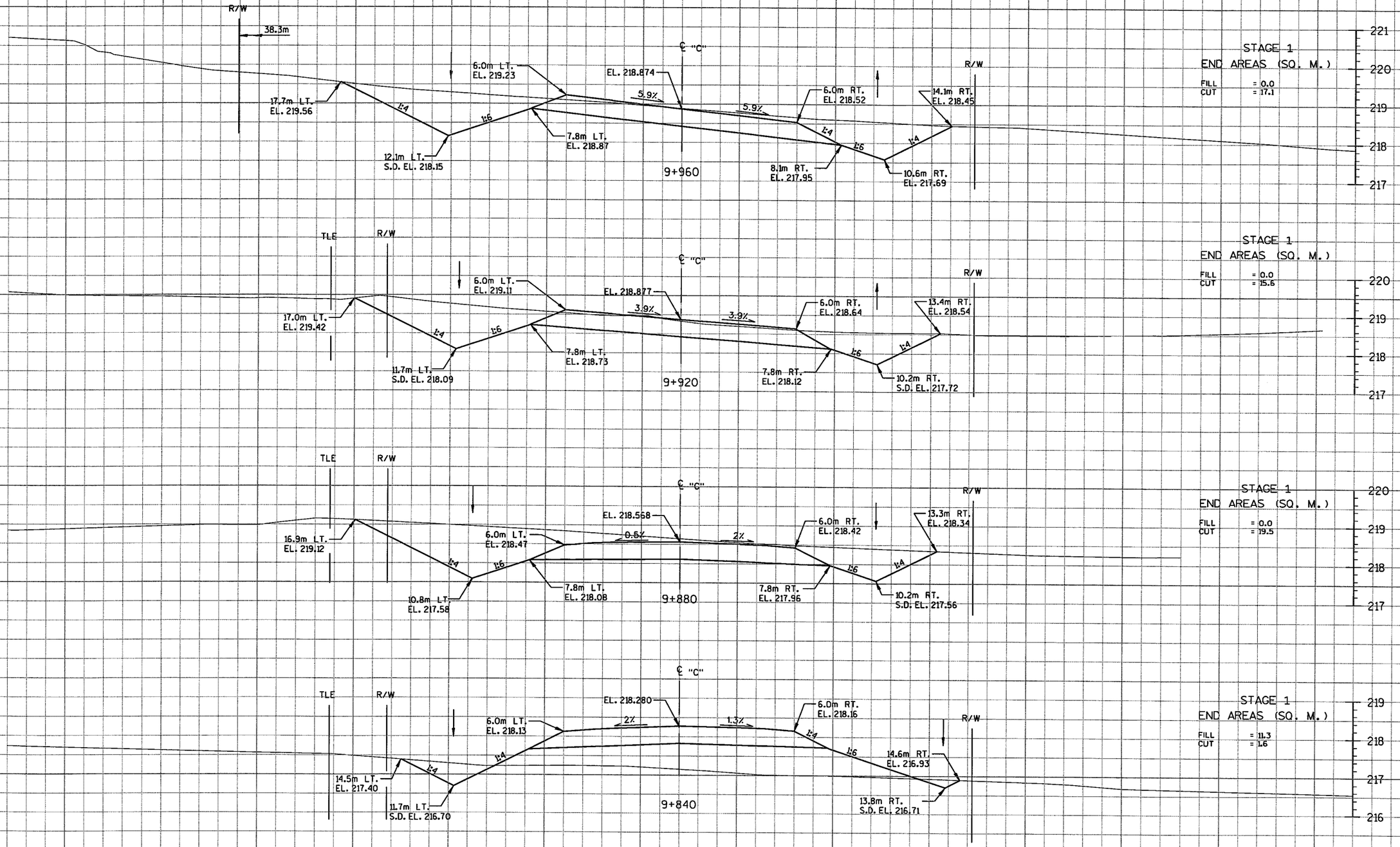
STAGE 1
END AREAS (SQ. M.)
FILL = 9.3
CUT = 3.9



36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

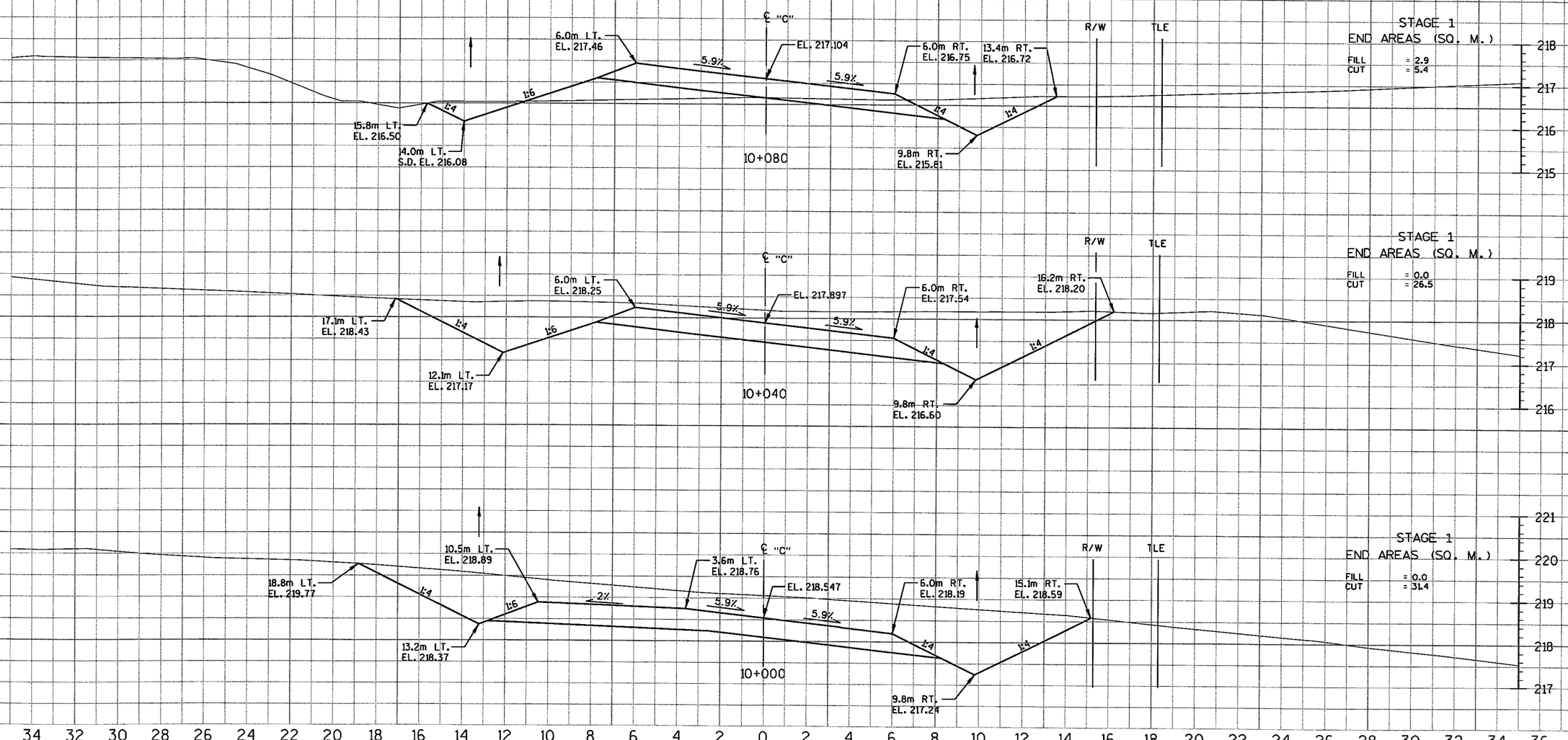
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 505	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(S) 09-14-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63



STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 506 M

FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(6) 09-14-01
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

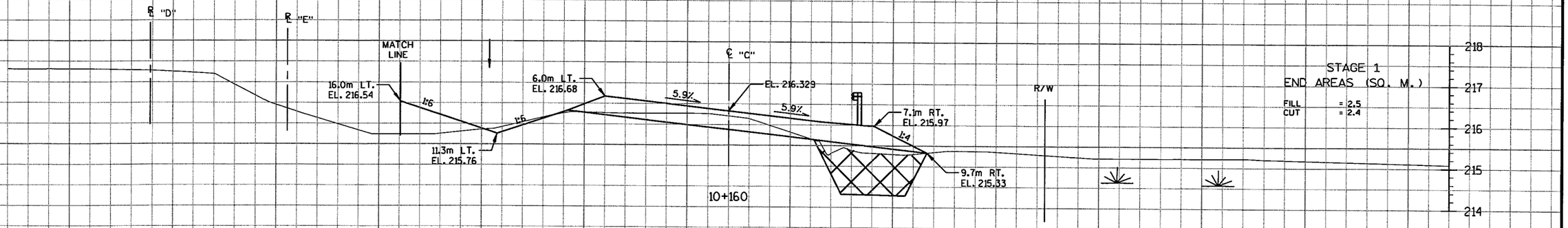


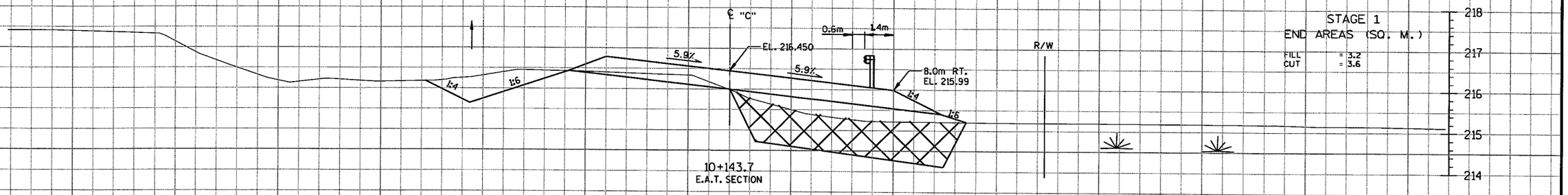
36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

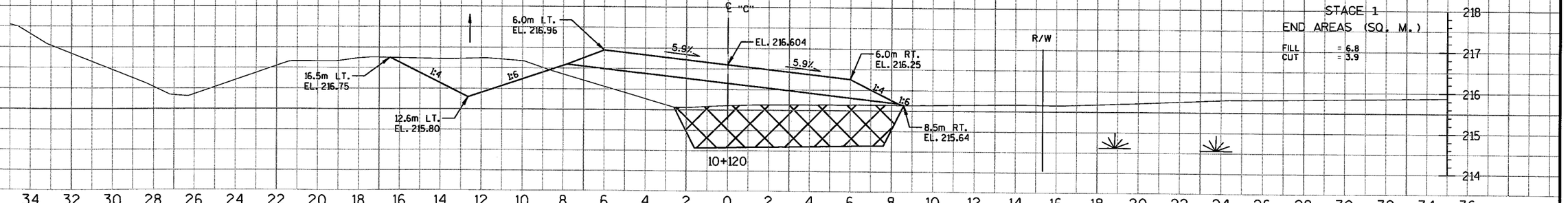
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 507	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(T) 09-14-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)





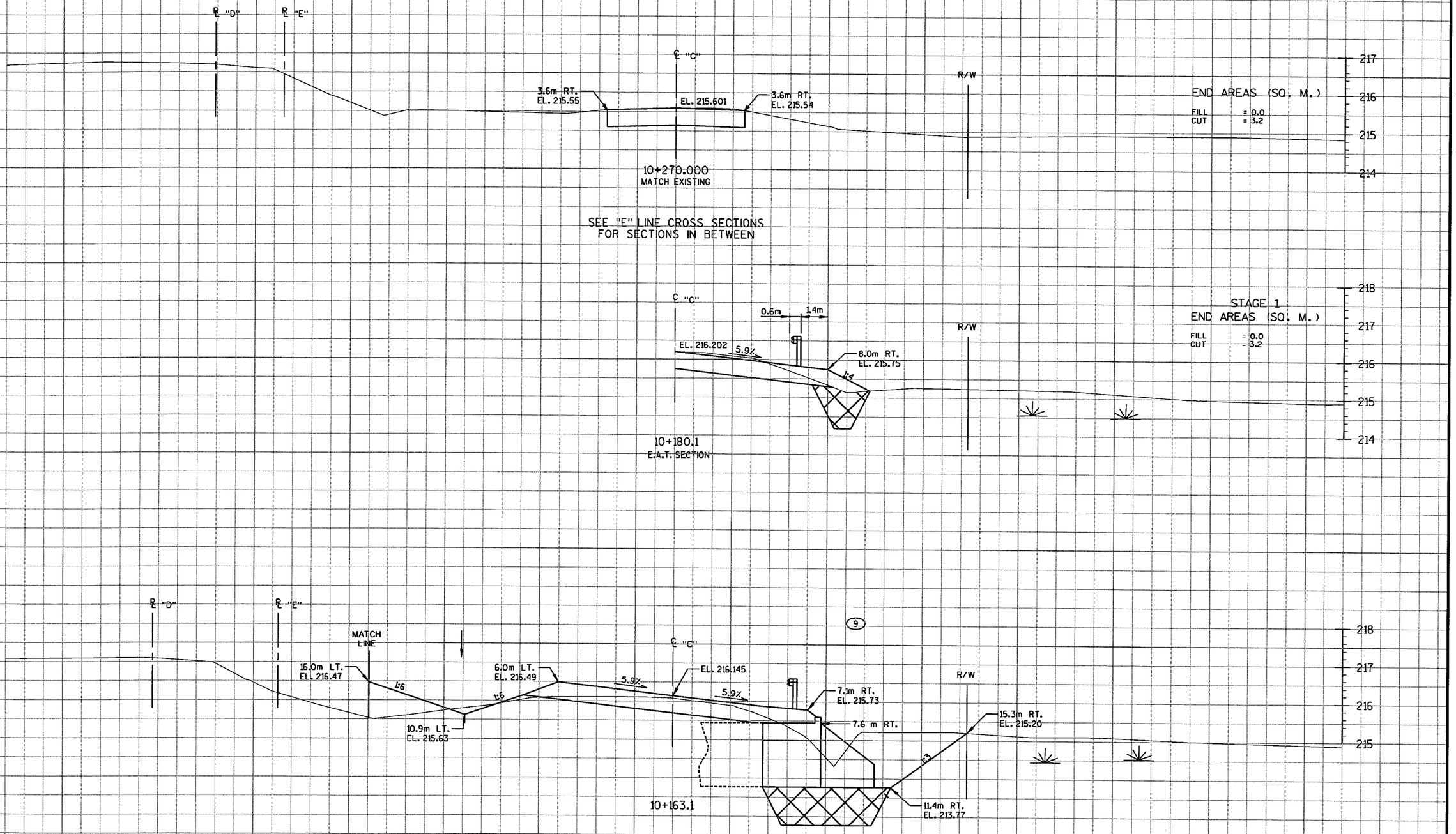


36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 508 M

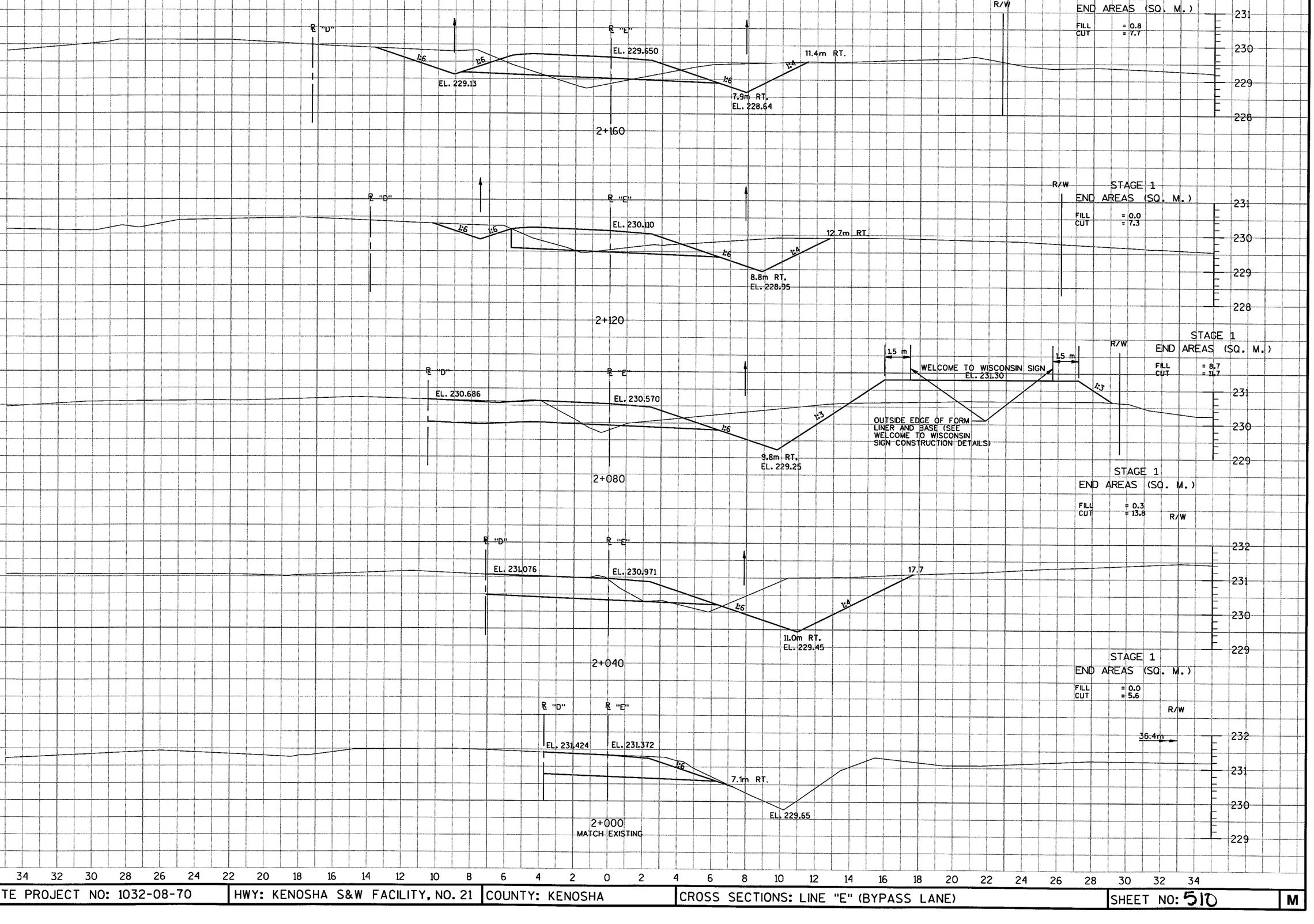
FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(8) 09-14-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63

TYPICAL BELOW SUBGRADE EXCAVATION (SEE CONST. DETAIL)



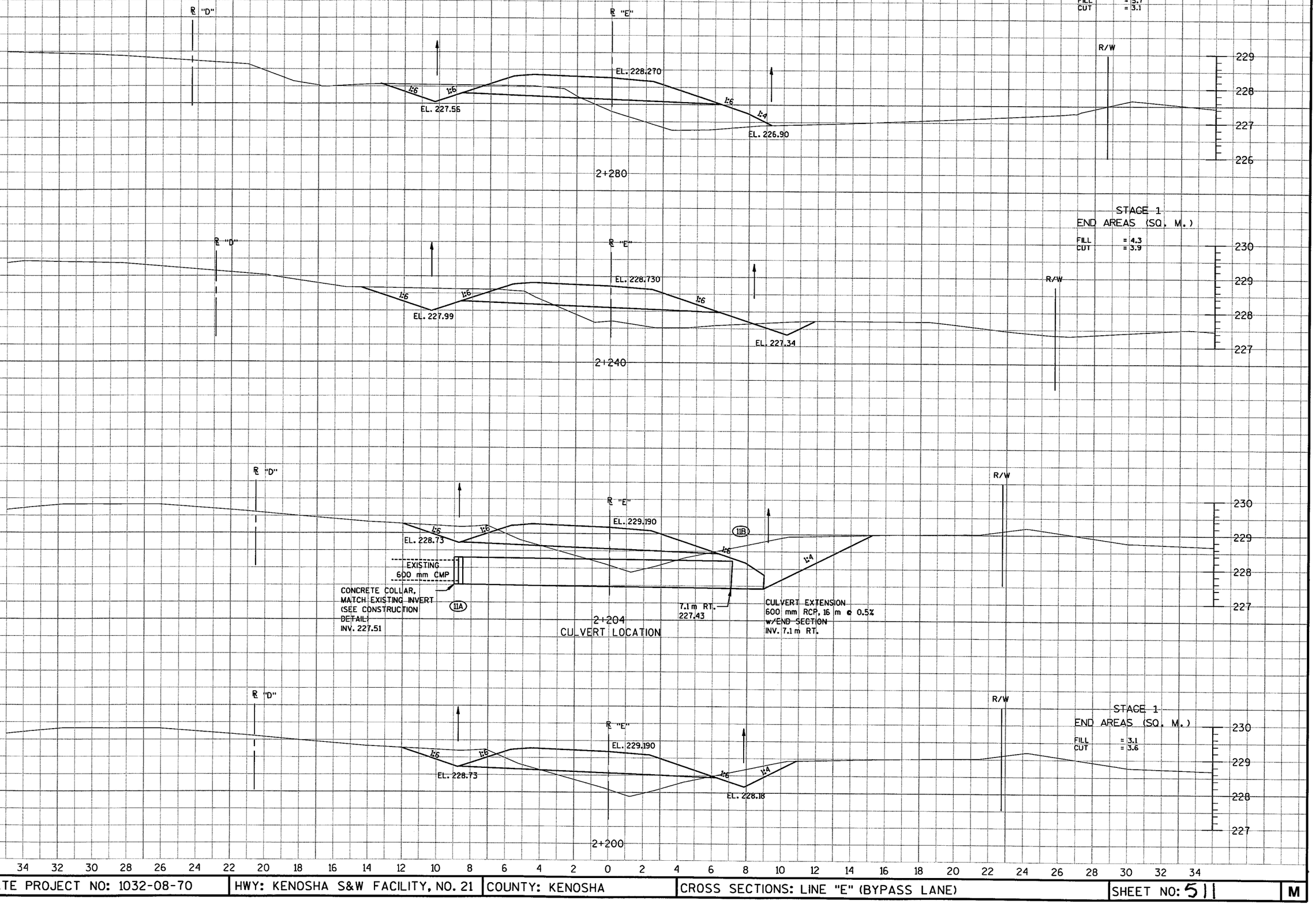
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "C" (EAST FRONTAGE ROAD)	SHEET NO: 509	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/C-LINEXS.DGN(9) 09-14-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(1) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26, 27,28,29,30,31,32,33,34,35, 36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 510	M

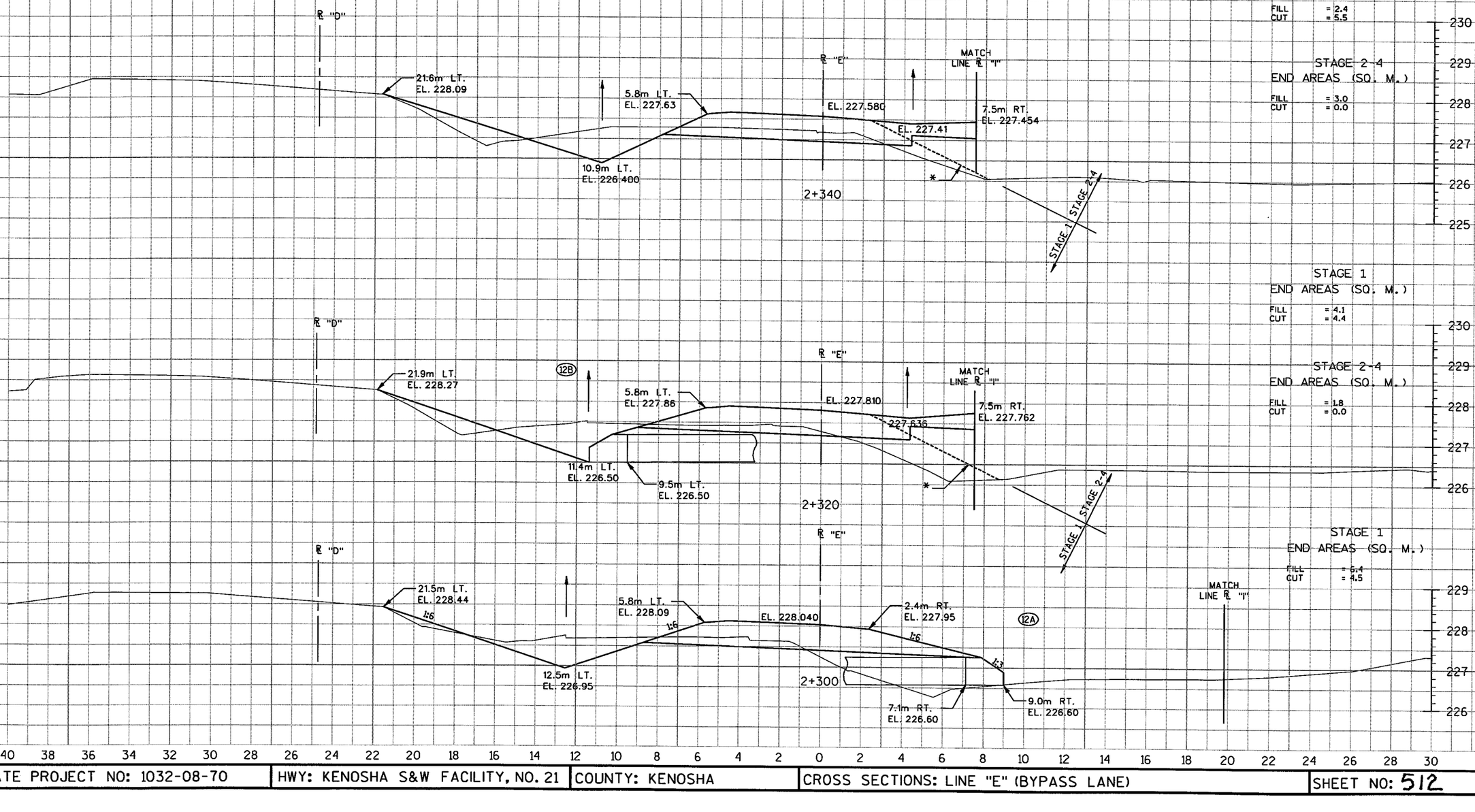


FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(2) 12-04-01
LEVELS ON = 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 511	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(3) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

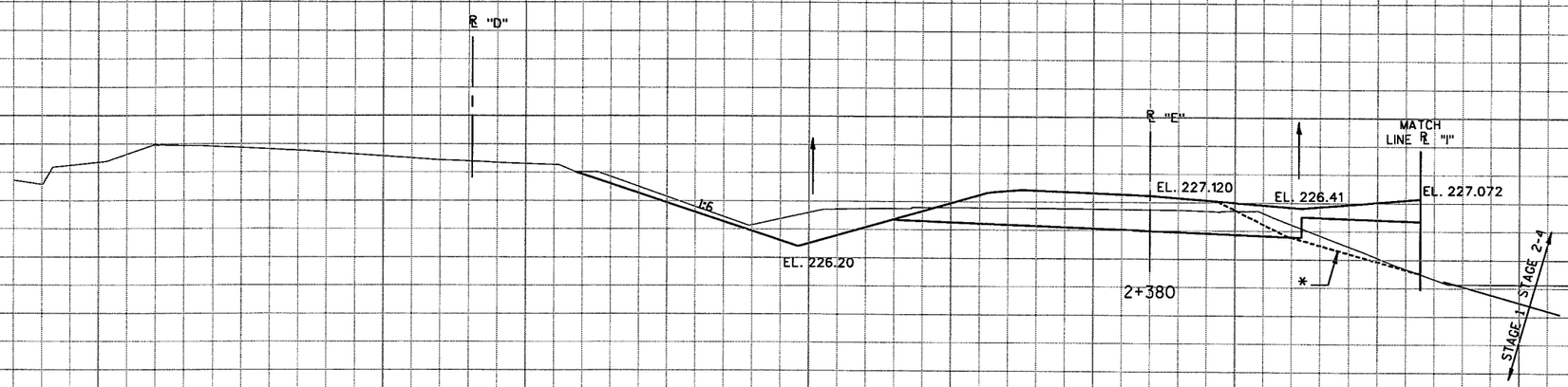
✳ TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 512	M

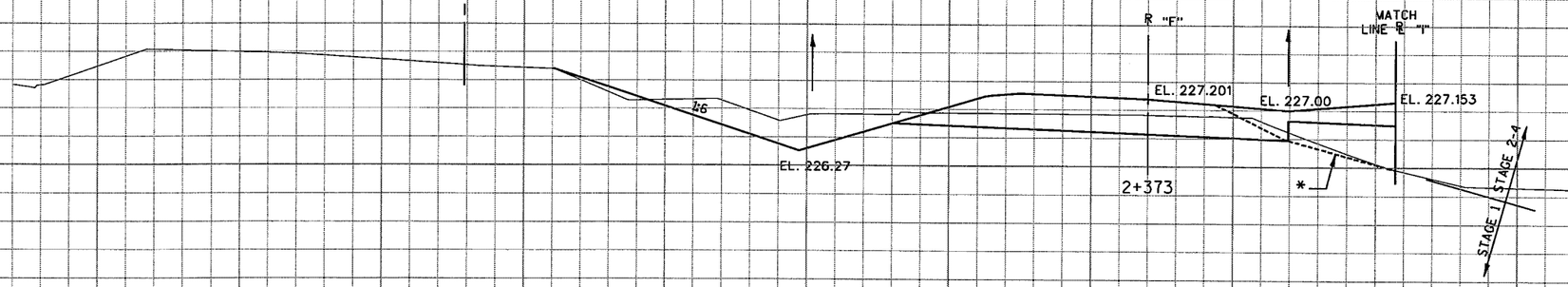
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(4) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

✳ TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



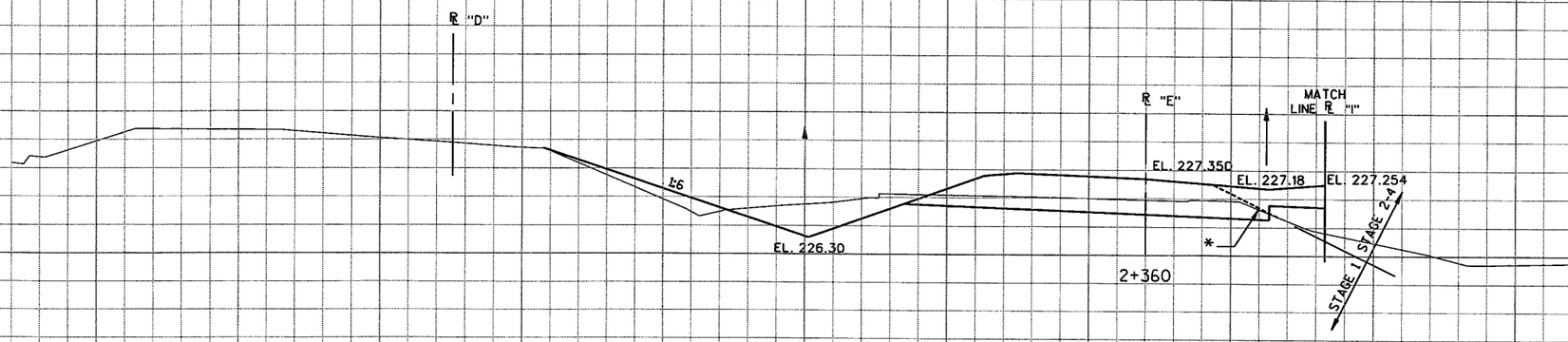
STAGE 1
END AREAS (SQ. M.)
FILL = 0.0
CUT = 6.8

STAGE 2-4
END AREAS (SQ. M.)
FILL = 2.3
CUT = 0.8



STAGE 1
END AREAS (SQ. M.)
FILL = 0.2
CUT = 7.0

STAGE 2-4
END AREAS (SQ. M.)
FILL = 1.9
CUT = 0.4



STAGE 1
END AREAS (SQ. M.)
FILL = 0.8
CUT = 5.0

STAGE 2-4
END AREAS (SQ. M.)
FILL = 0.6
CUT = 0.0

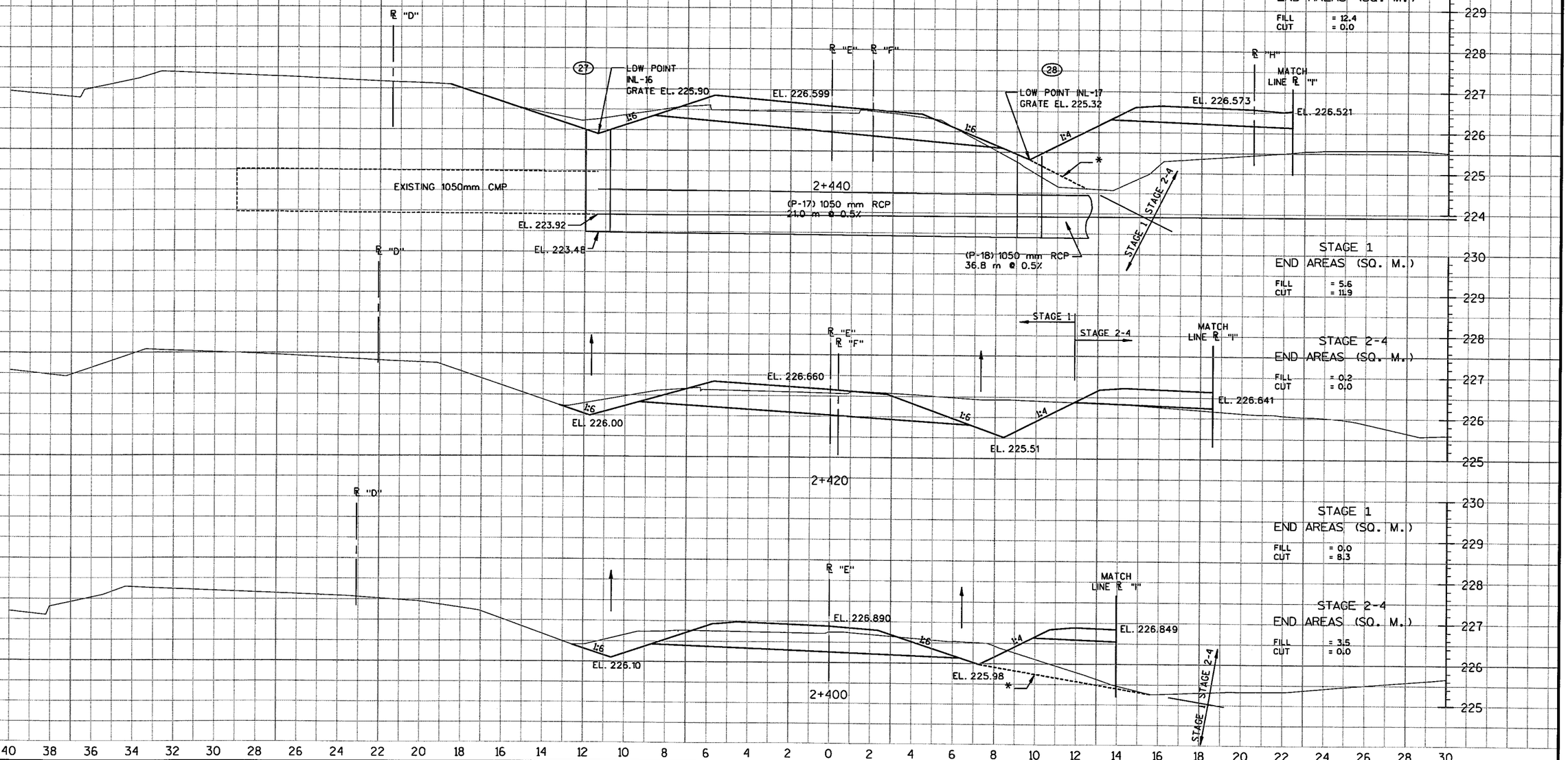
230
229
228
227
226
225

40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 513	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(5) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16, 17,18,19,20,21,22,23,24,25,26, 27, 28,29, 30,31,32,33, 34, 35, 36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

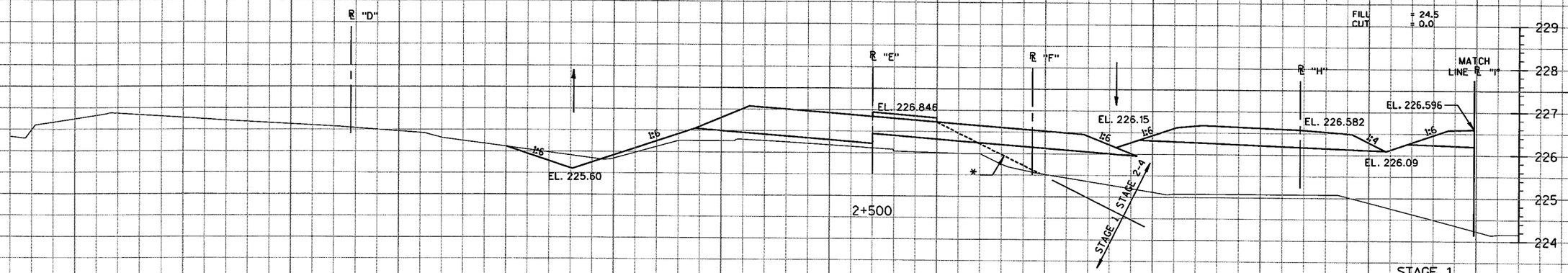
* TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 514	M

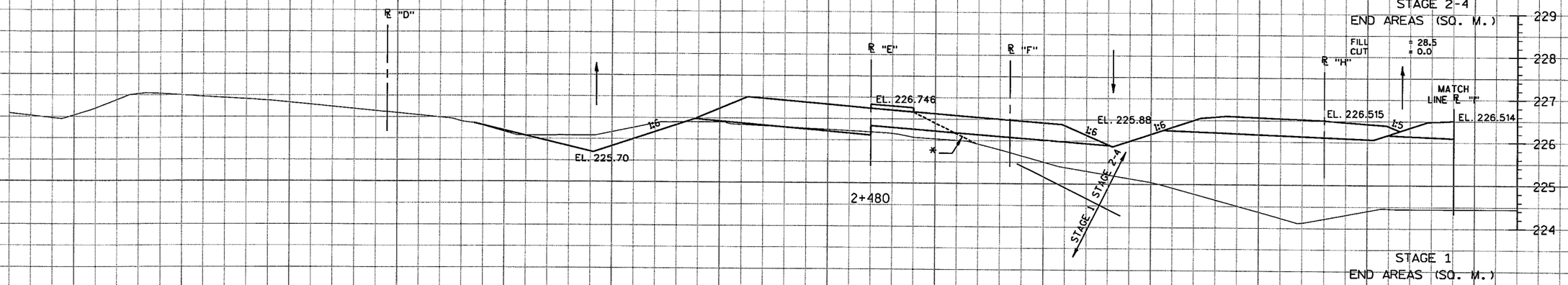
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(6) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

✳ TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



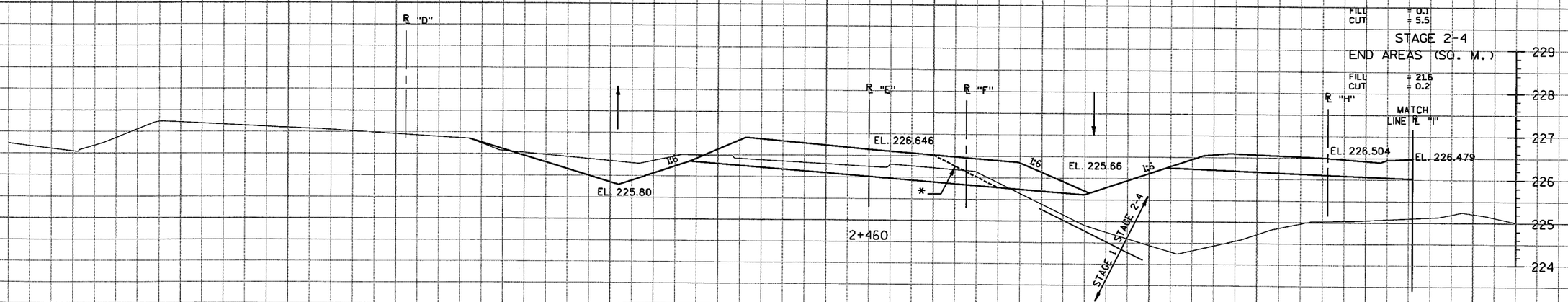
STAGE 1
END AREAS (SQ. M.)
FILL = 3.9
CUT = 0.7

STAGE 2-4
END AREAS (SQ. M.)
FILL = 24.5
CUT = 0.0



STAGE 1
END AREAS (SQ. M.)
FILL = 0.9
CUT = 1.8

STAGE 2-4
END AREAS (SQ. M.)
FILL = 28.5
CUT = 0.0



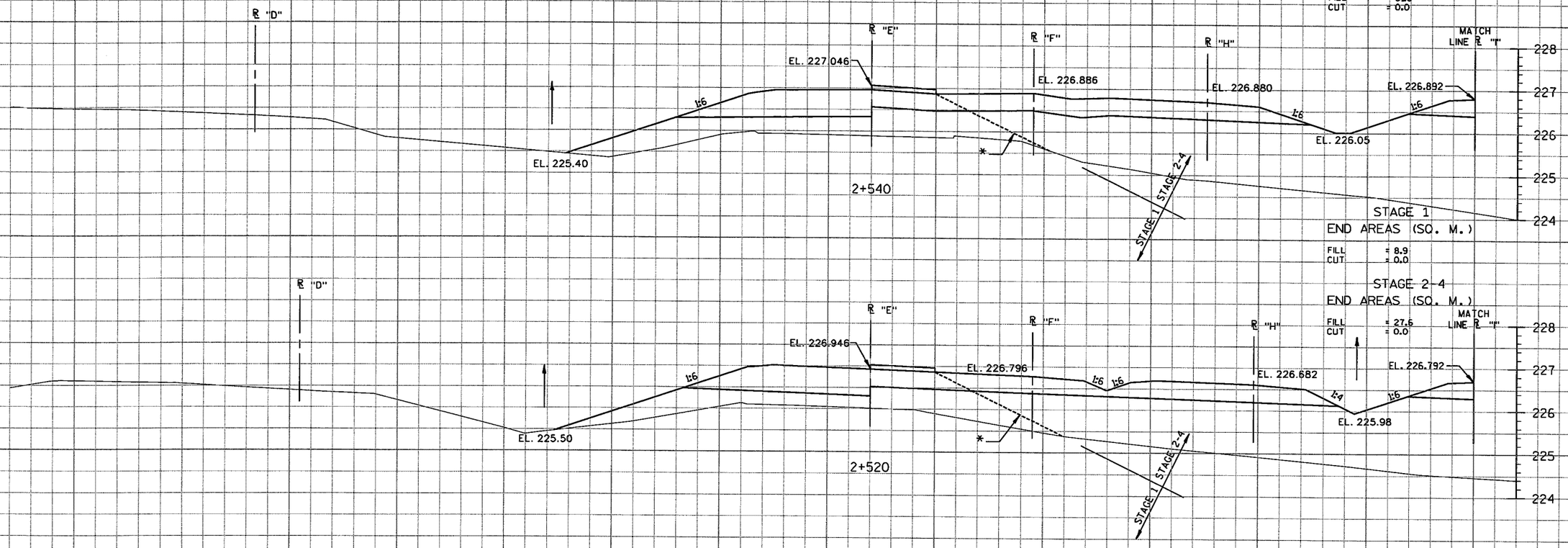
STAGE 1
END AREAS (SQ. M.)
FILL = 0.1
CUT = 5.5

STAGE 2-4
END AREAS (SQ. M.)
FILL = 21.6
CUT = 0.2

40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 515	M

✳ TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



STAGE 1
END AREAS (SQ. M.)

FILL = 9.7
CUT = 0.0

STAGE 2-4
END AREAS (SQ. M.)

FILL = 31.8
CUT = 0.0

STAGE 1
END AREAS (SQ. M.)

FILL = 8.9
CUT = 0.0

STAGE 2-4
END AREAS (SQ. M.)

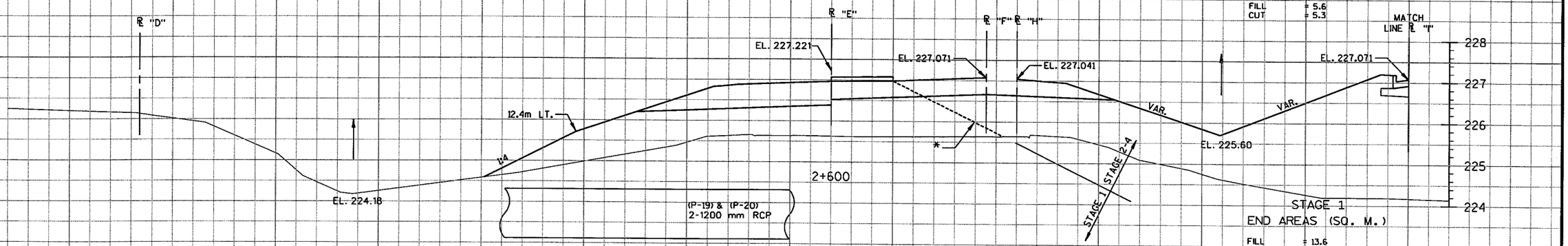
FILL = 27.6
CUT = 0.0

40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 516	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(T) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

X TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.

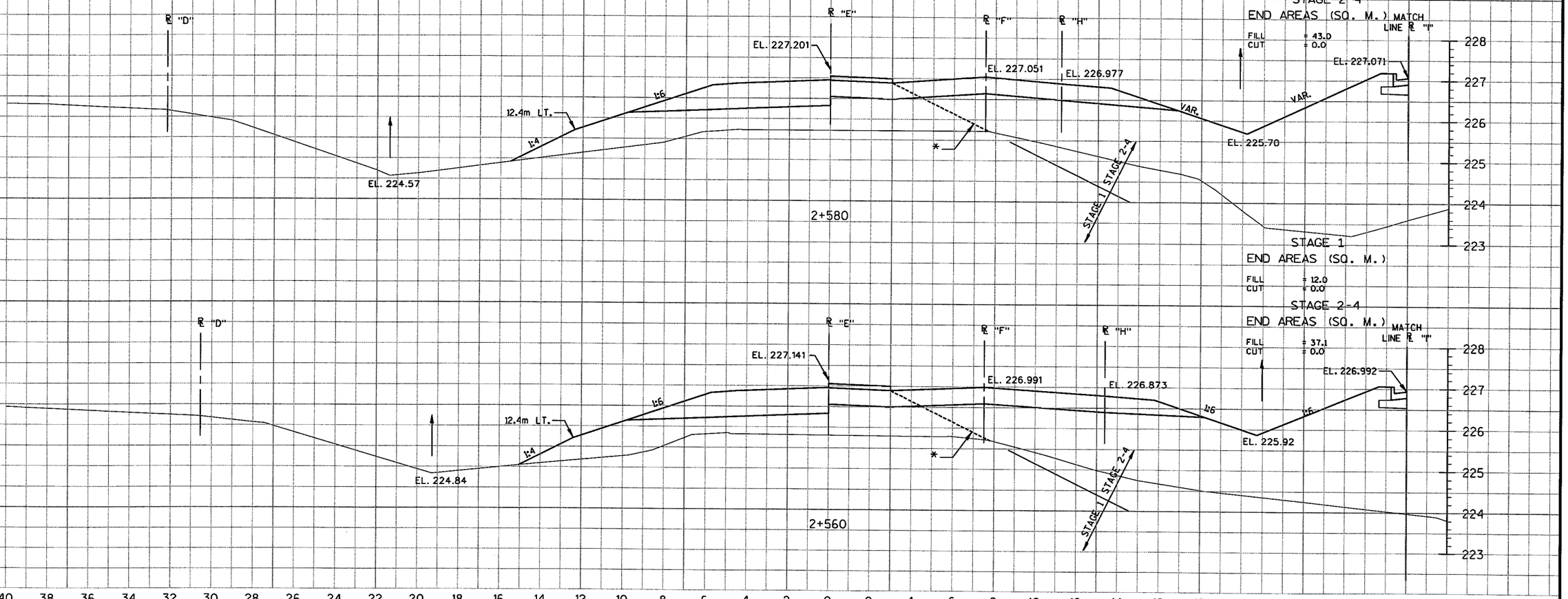


STAGE 1
END AREAS (SQ. M.)

FILL = 5.6
CUT = 5.3

STAGE 2-4
END AREAS (SQ. M.)

FILL = 5.6
CUT = 5.3

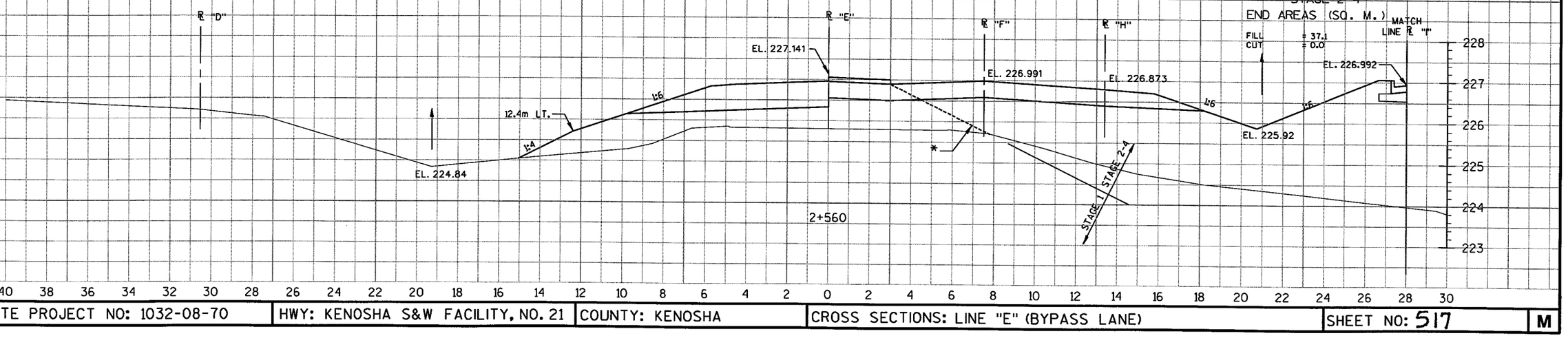


STAGE 1
END AREAS (SQ. M.)

FILL = 43.0
CUT = 0.0

STAGE 2-4
END AREAS (SQ. M.)

FILL = 43.0
CUT = 0.0



STAGE 1
END AREAS (SQ. M.)

FILL = 12.0
CUT = 0.0

STAGE 2-4
END AREAS (SQ. M.)

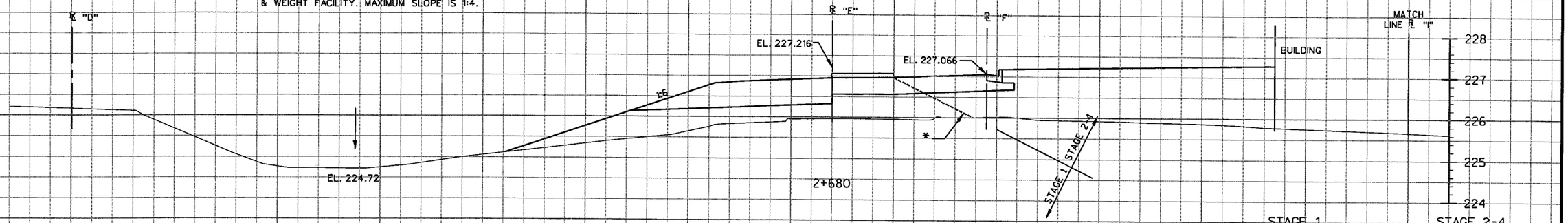
FILL = 37.1
CUT = 0.0

40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 517	M

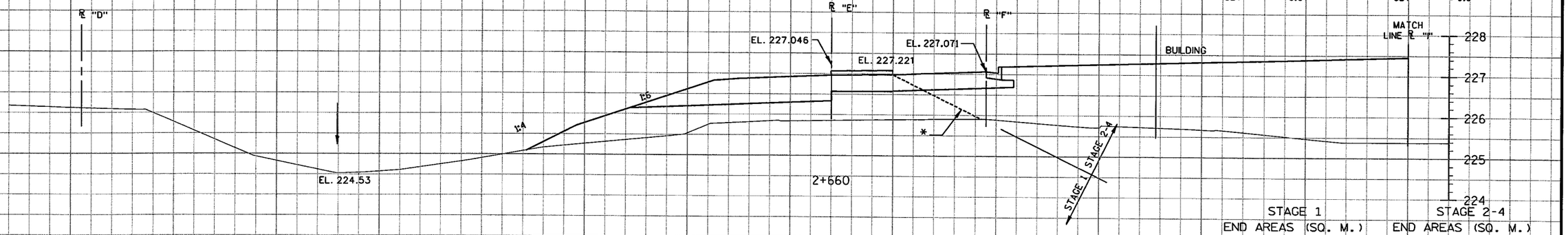
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(8) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

✳ TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



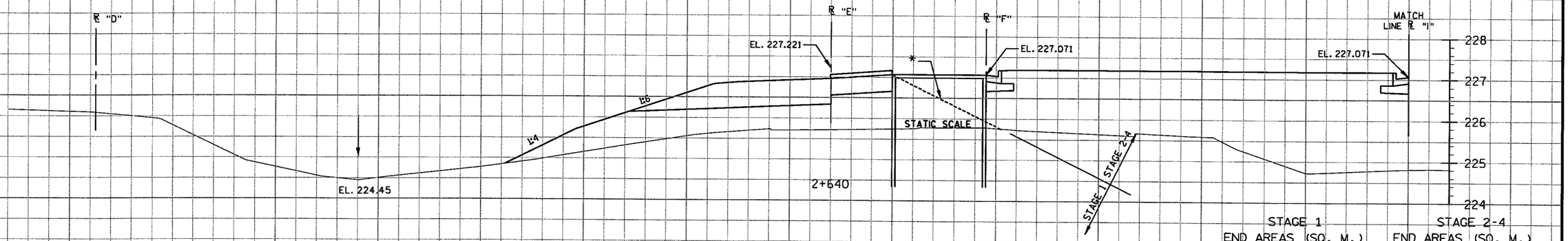
STAGE 1 END AREAS (SQ. M.): FILL = 10.1, CUT = 0.0

STAGE 2-4 END AREAS (SQ. M.): FILL = 19.2, CUT = 0.0



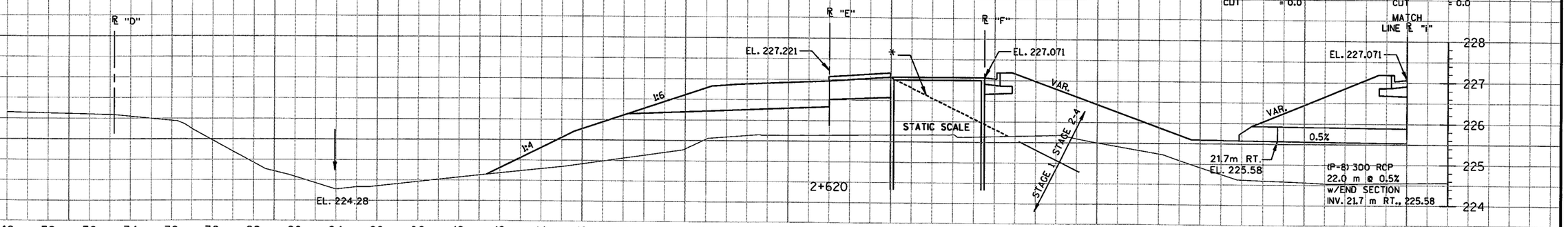
STAGE 1 END AREAS (SQ. M.): FILL = 11.6, CUT = 0.0

STAGE 2-4 END AREAS (SQ. M.): FILL = 35.2, CUT = 0.0



STAGE 1 END AREAS (SQ. M.): FILL = 15.0, CUT = 0.0

STAGE 2-4 END AREAS (SQ. M.): FILL = 39.8, CUT = 0.0



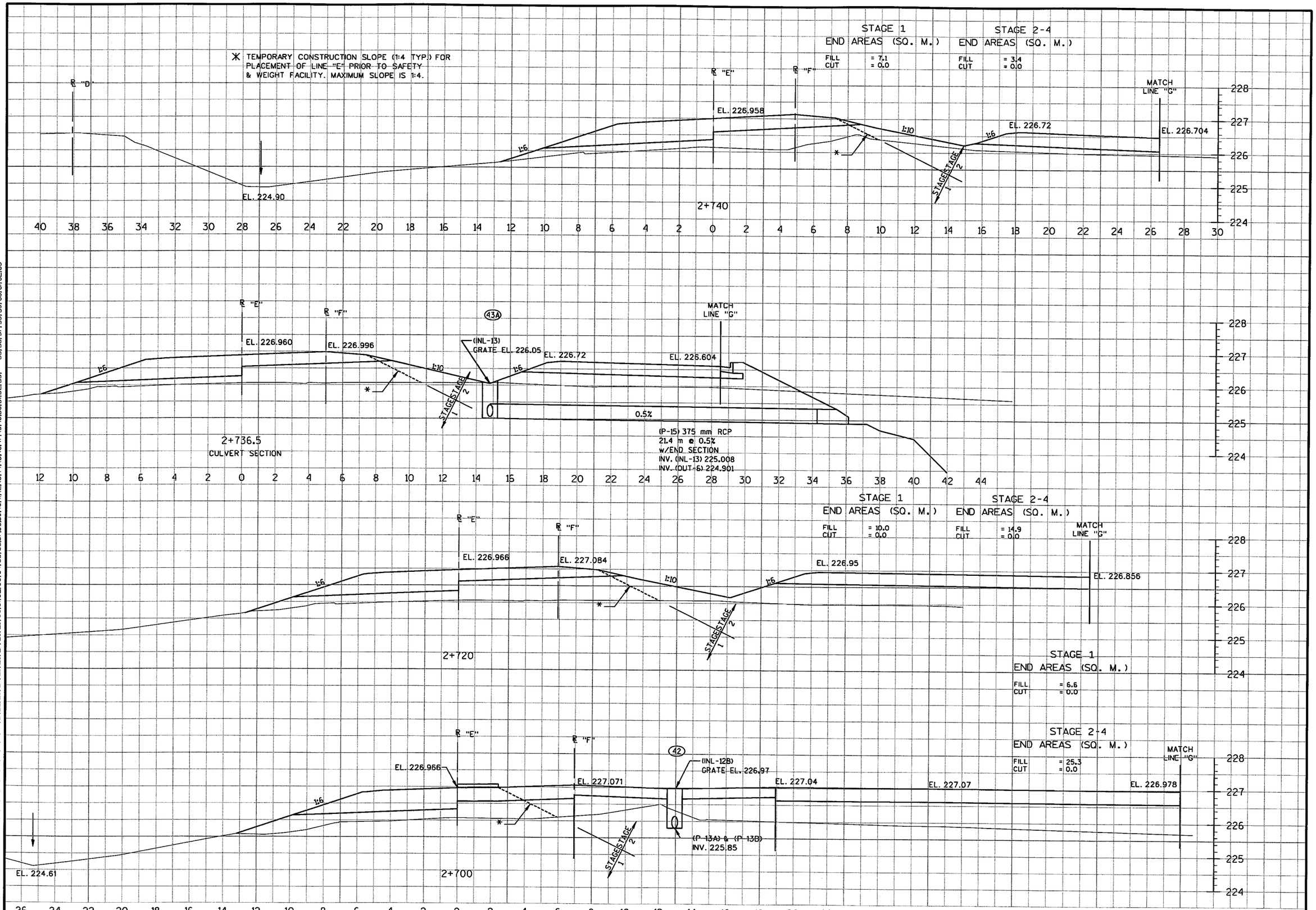
STAGE 1 END AREAS (SQ. M.): FILL = 18.4, CUT = 0.0

STAGE 2-4 END AREAS (SQ. M.): FILL = 30.3, CUT = 0.0

40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

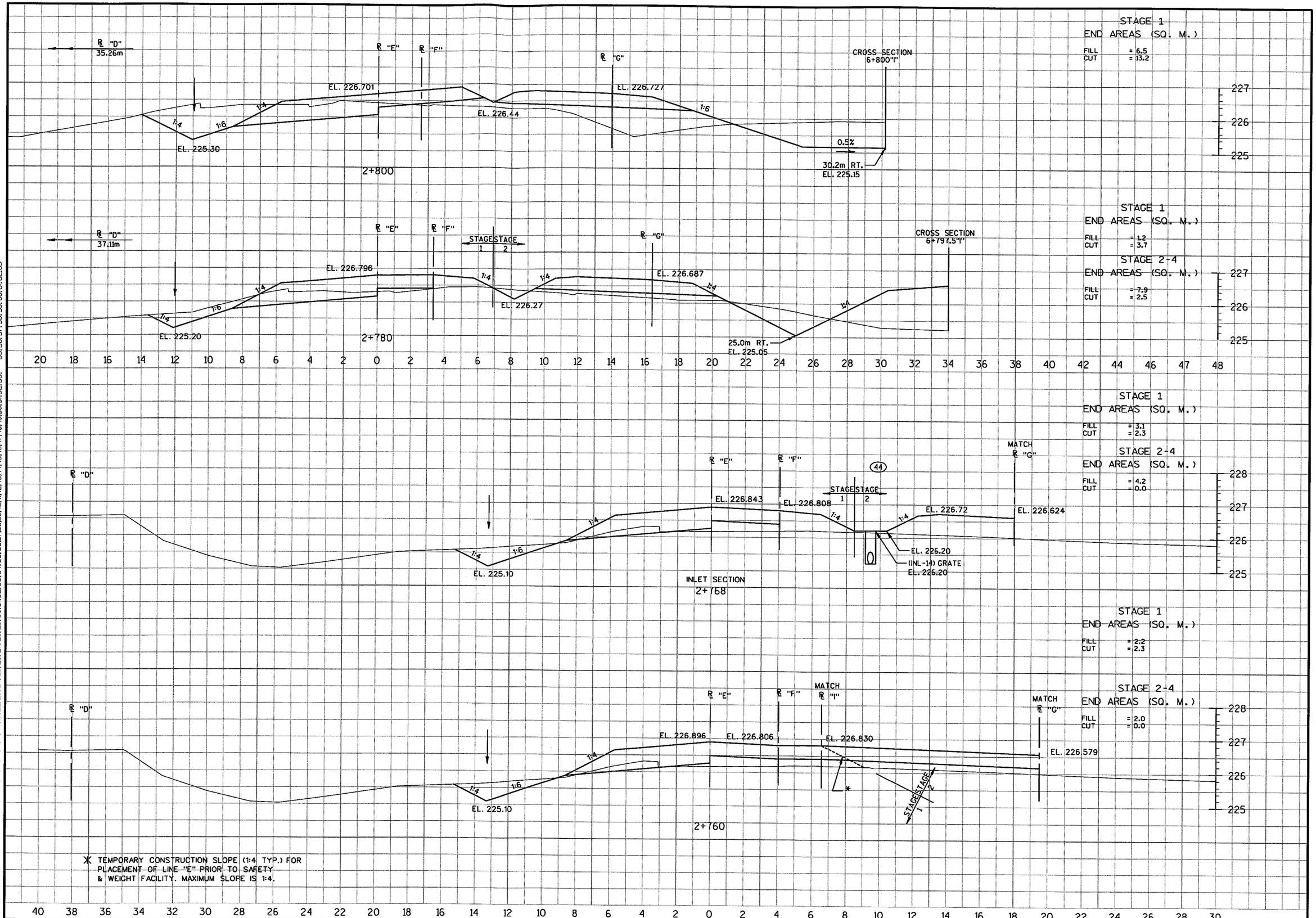
STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 518	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(9) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10, 11,12,13, 14, 15, 16, 17,18,19,20,21,22,23, 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63



FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(10) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

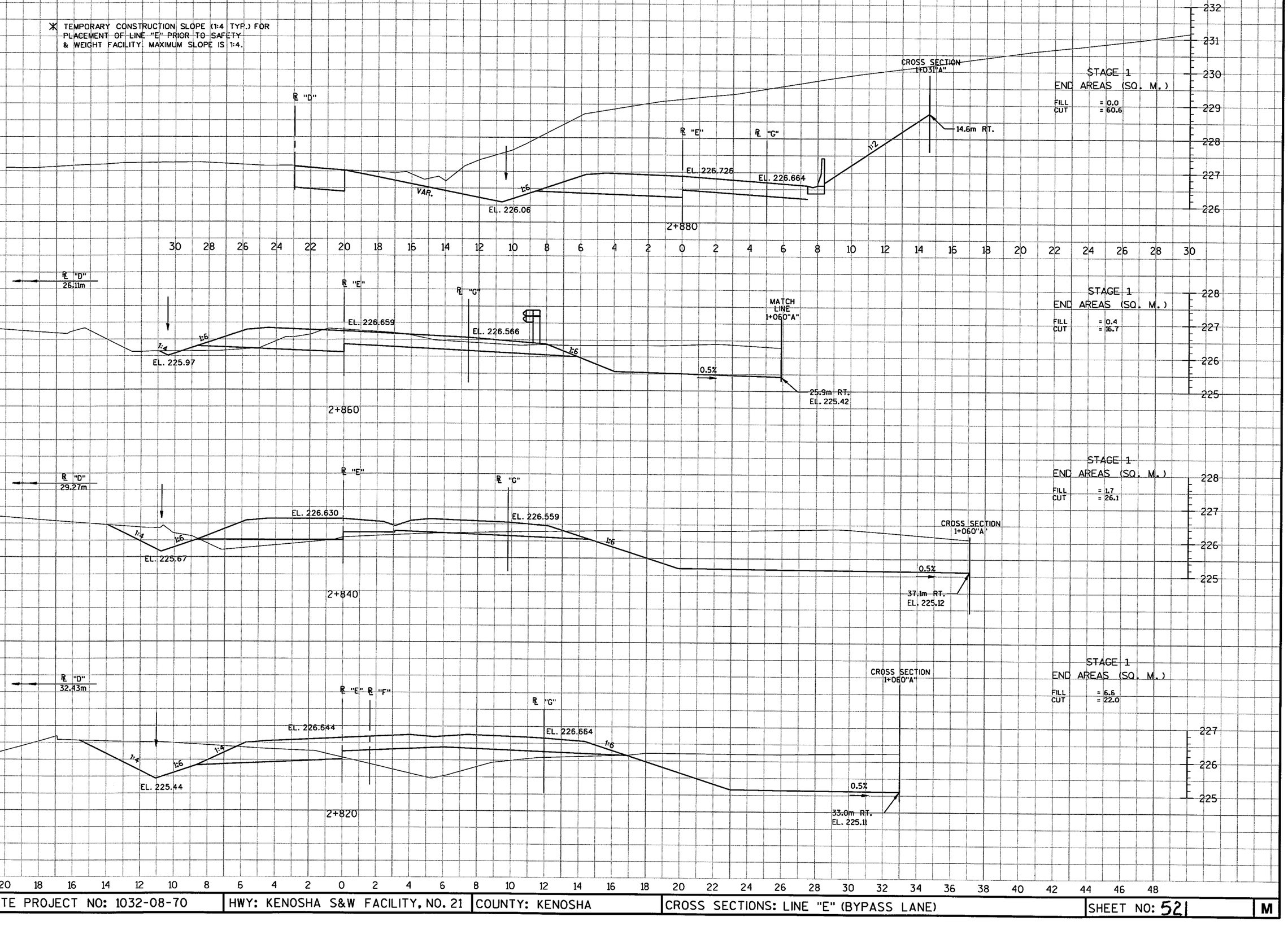
STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 519	M



FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(11) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63

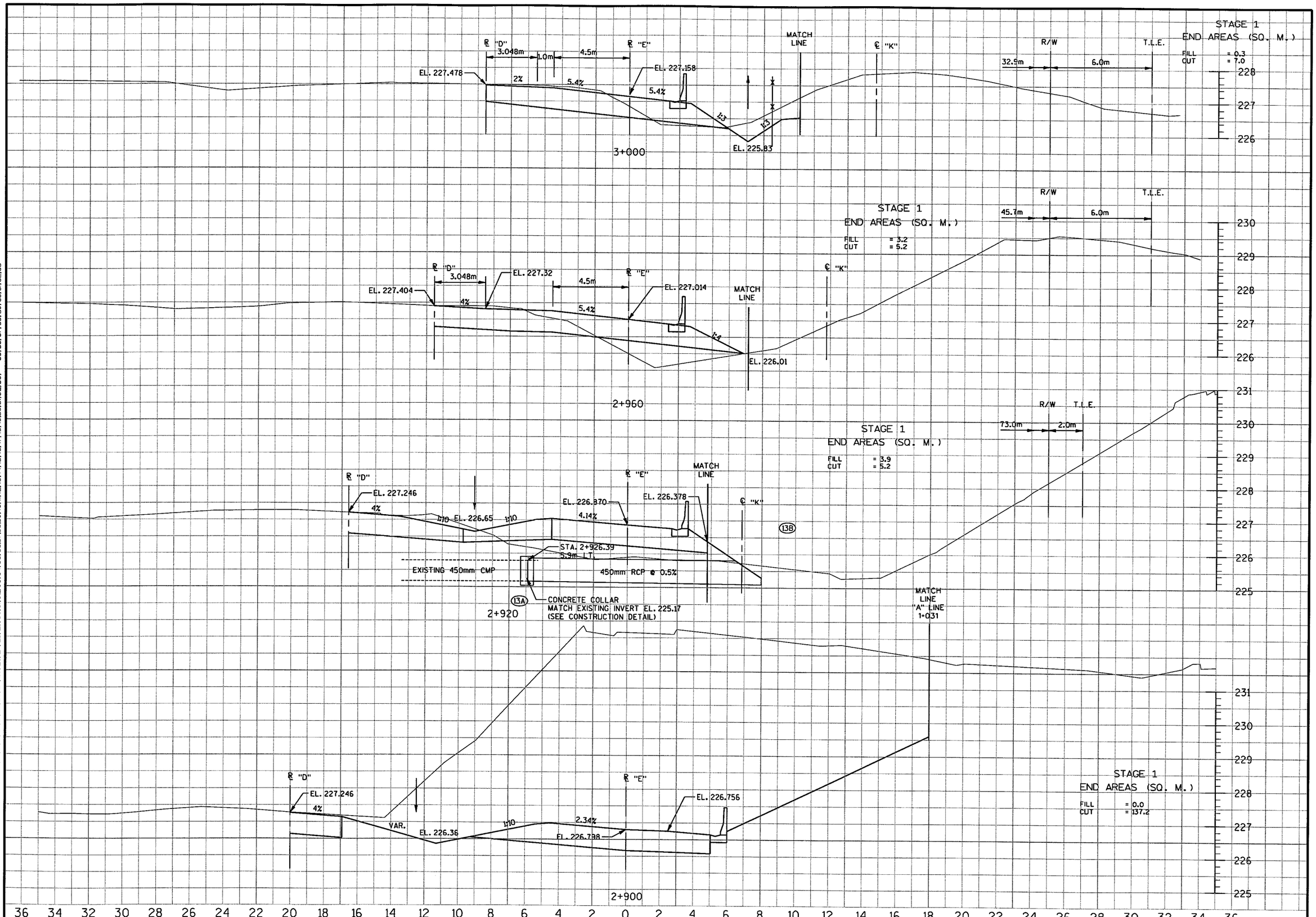
STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 520	M

✳ TEMPORARY CONSTRUCTION SLOPE (1:4 TYP.) FOR PLACEMENT OF LINE "E" PRIOR TO SAFETY & WEIGHT FACILITY. MAXIMUM SLOPE IS 1:4.



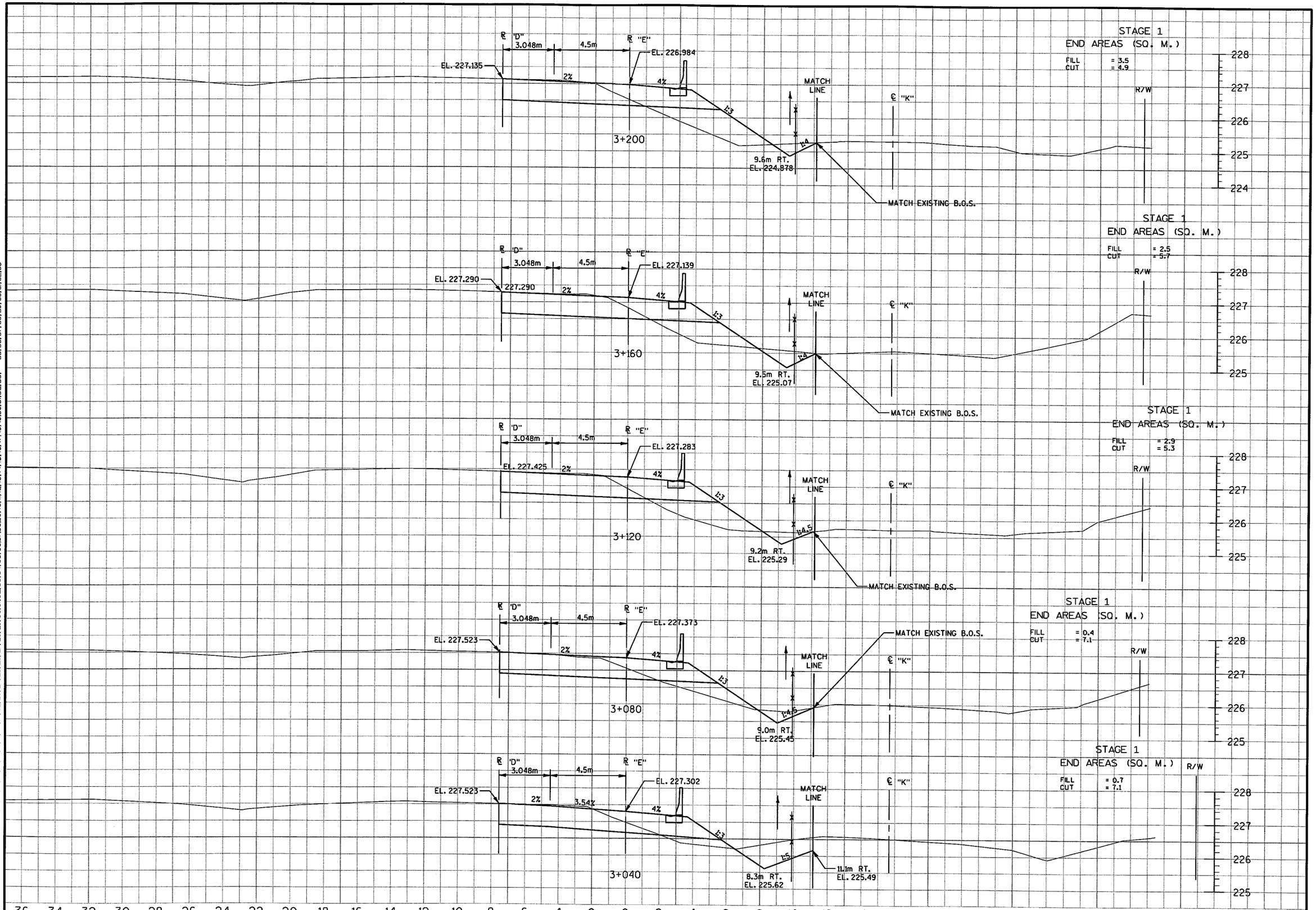
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(12) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 521	M



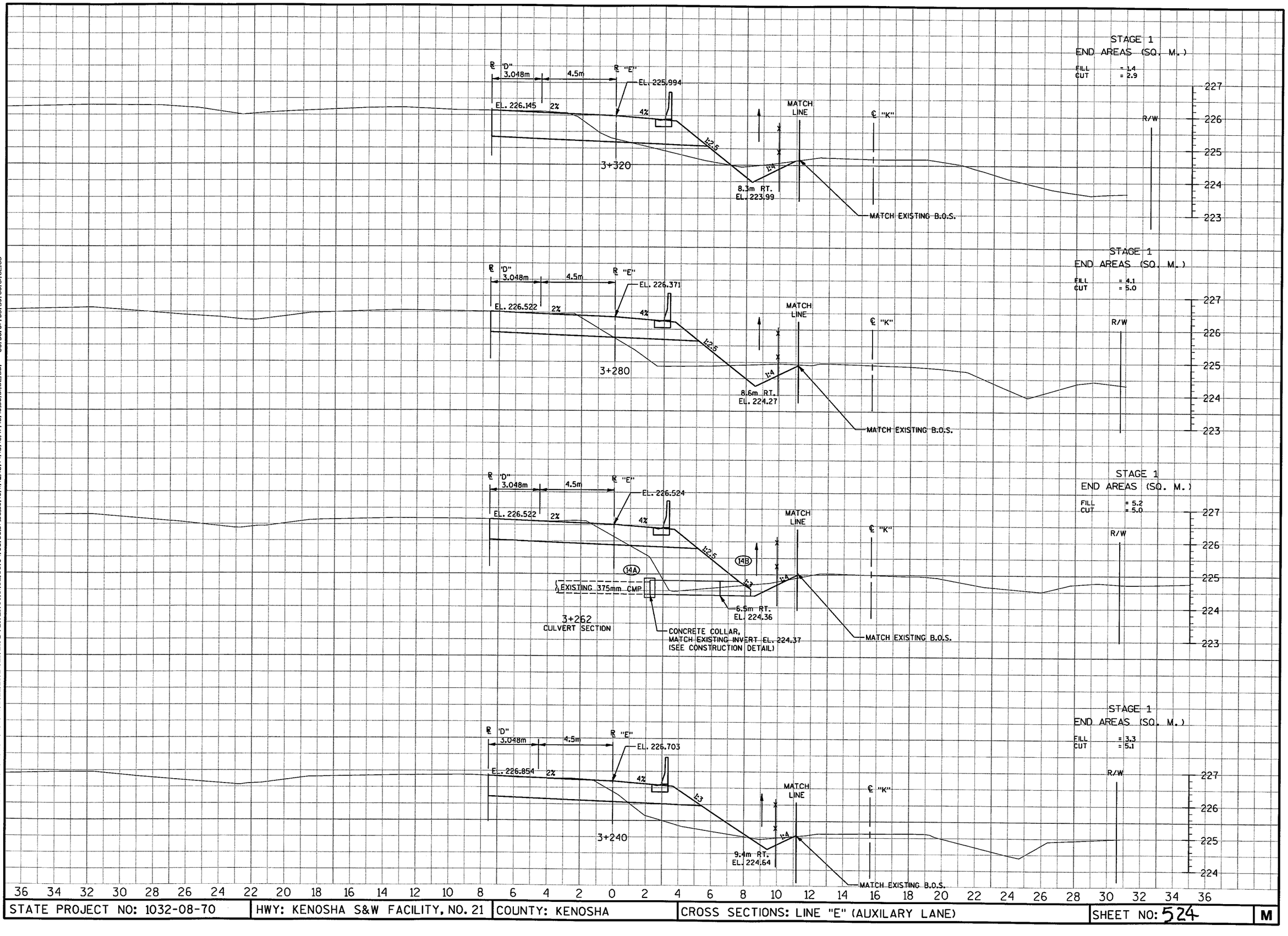
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(1) 12-04-01
LEVELS ON = 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (BYPASS LANE)	SHEET NO: 522	M



STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 523	M

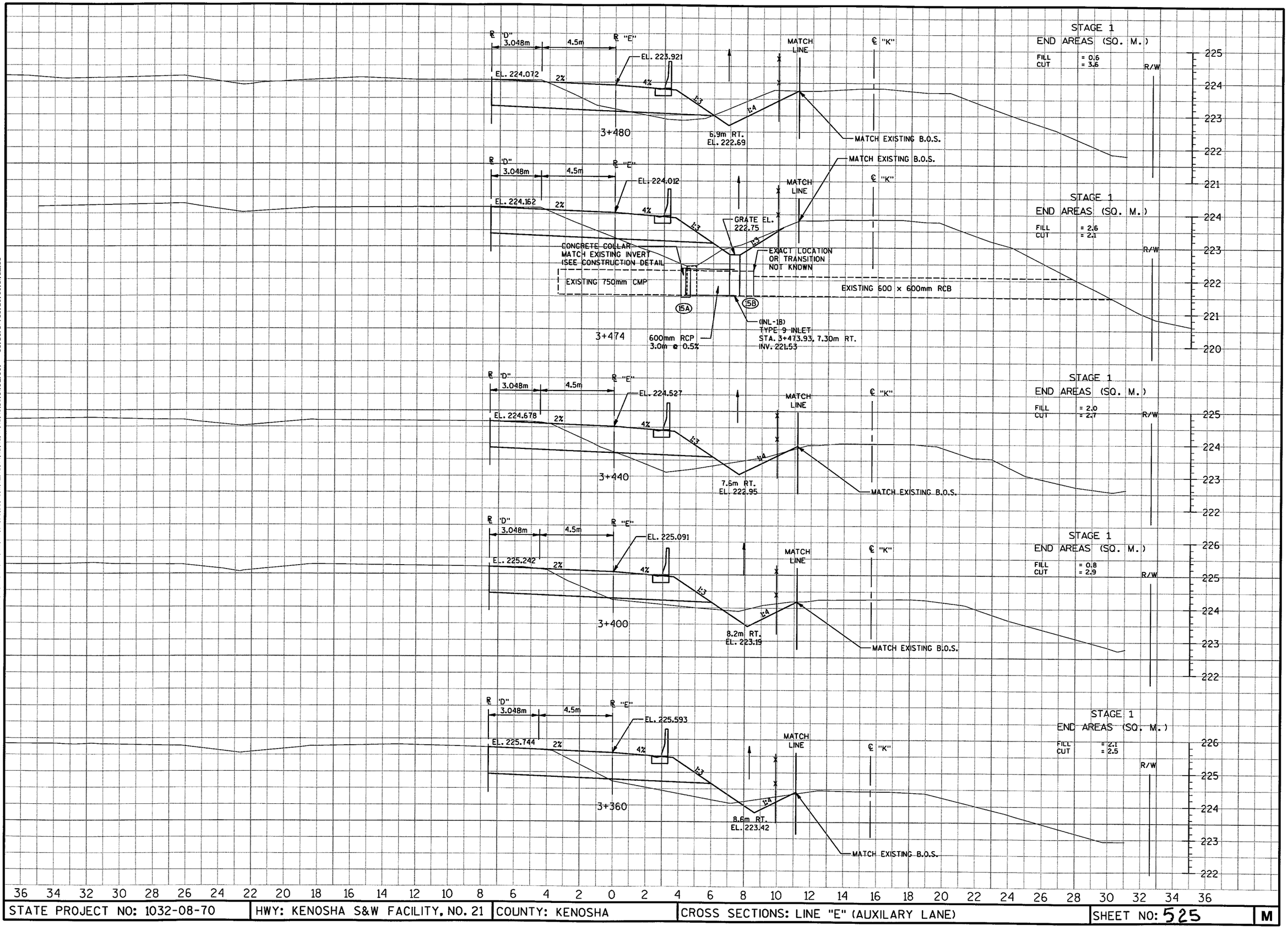
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(2) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63



FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(3) 12-04-01
LEVELS ON • 2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53. 55.56.57.58.59.60.61.62.63

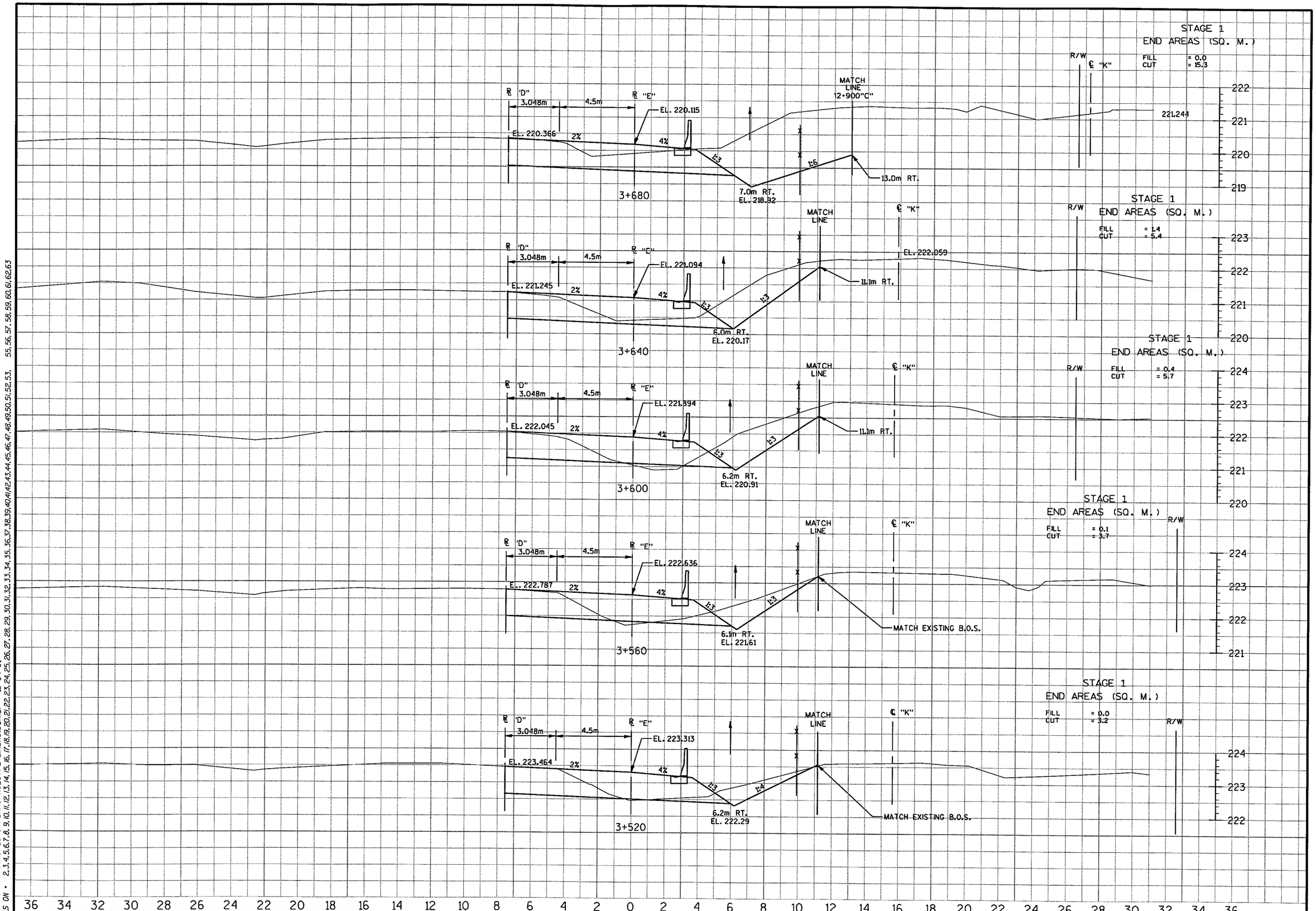
36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 524	M



STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 525	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(4) 12-04-01
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

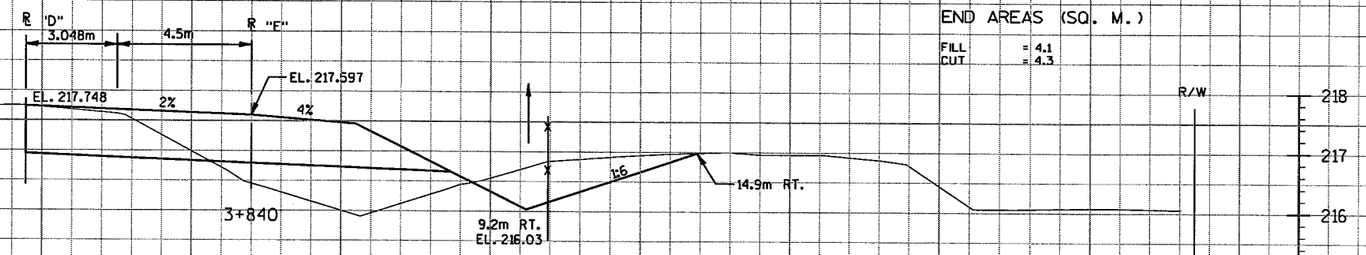


FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(5) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

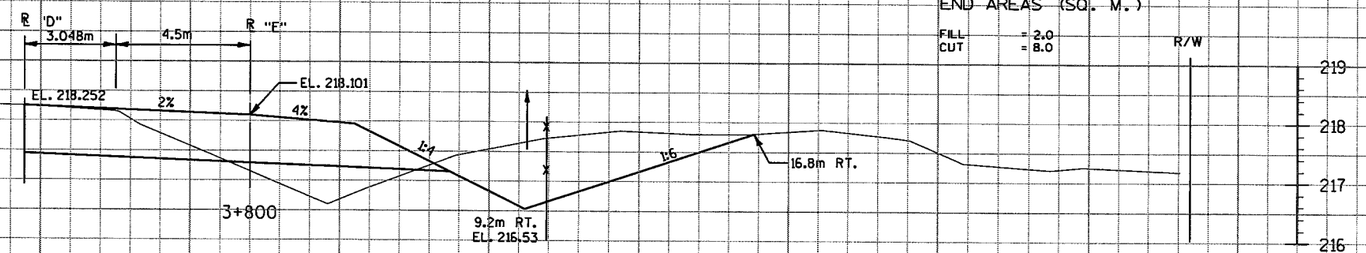
STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 526	M

BEGIN TAPER AT 3+850
TO FORM AUXILARY LANE
SEE TYPICAL SECTION



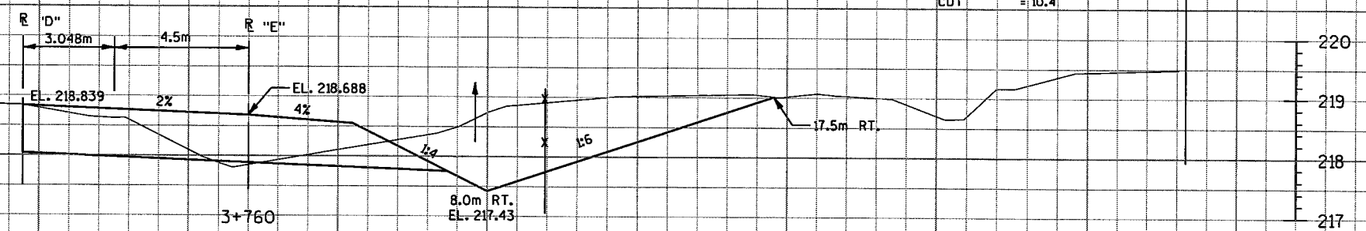
STAGE 1
END AREAS (SQ. M.)

FILL = 4.1
CUT = 4.3



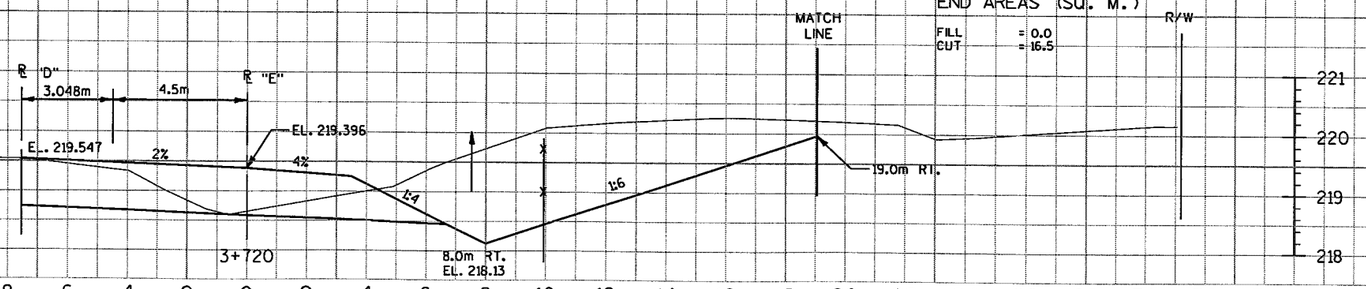
STAGE 1
END AREAS (SQ. M.)

FILL = 2.0
CUT = 8.0



STAGE 1
END AREAS (SQ. M.)

FILL = 0.1
CUT = 10.4



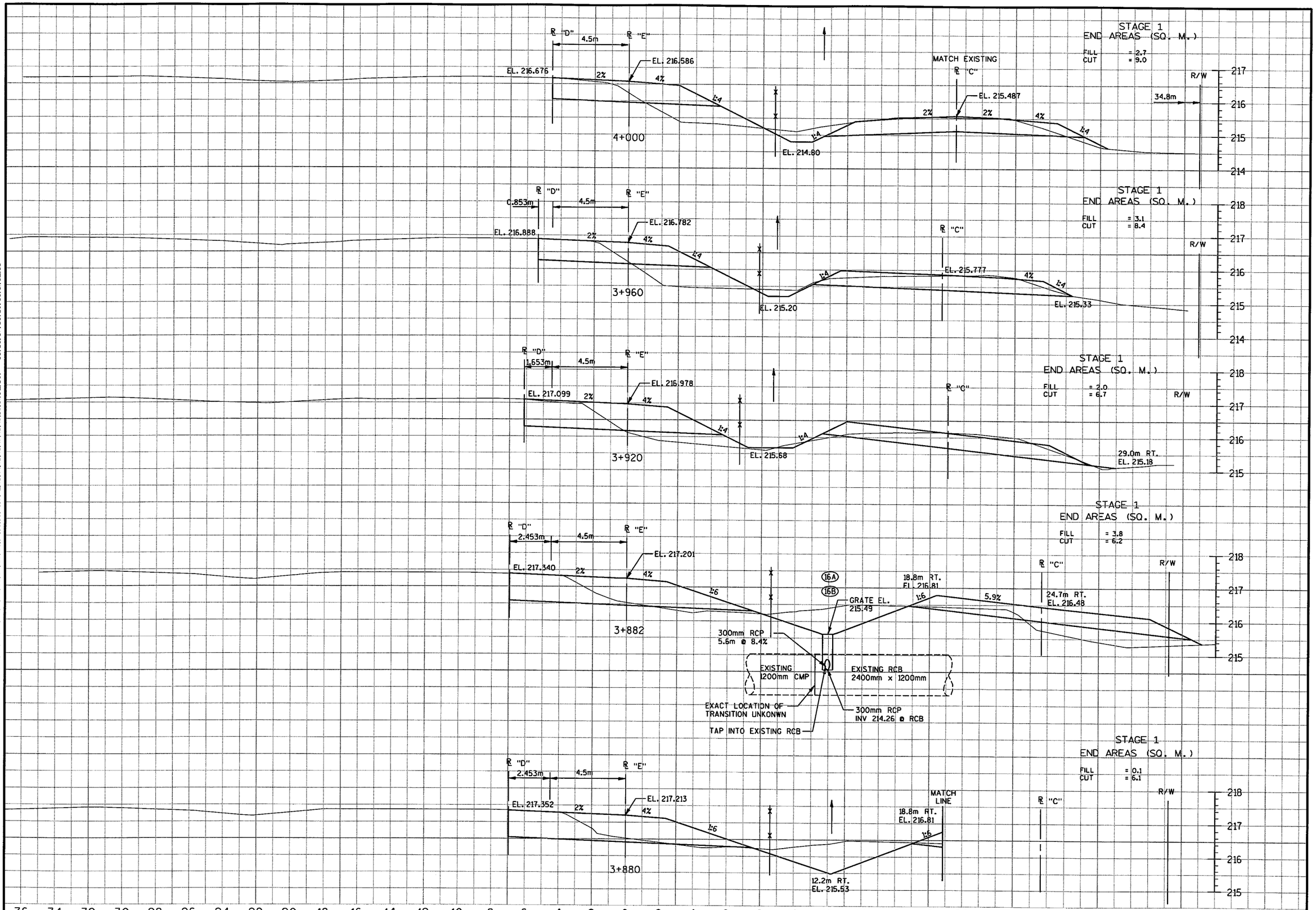
STAGE 1
END AREAS (SQ. M.)

FILL = 0.0
CUT = 16.5

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

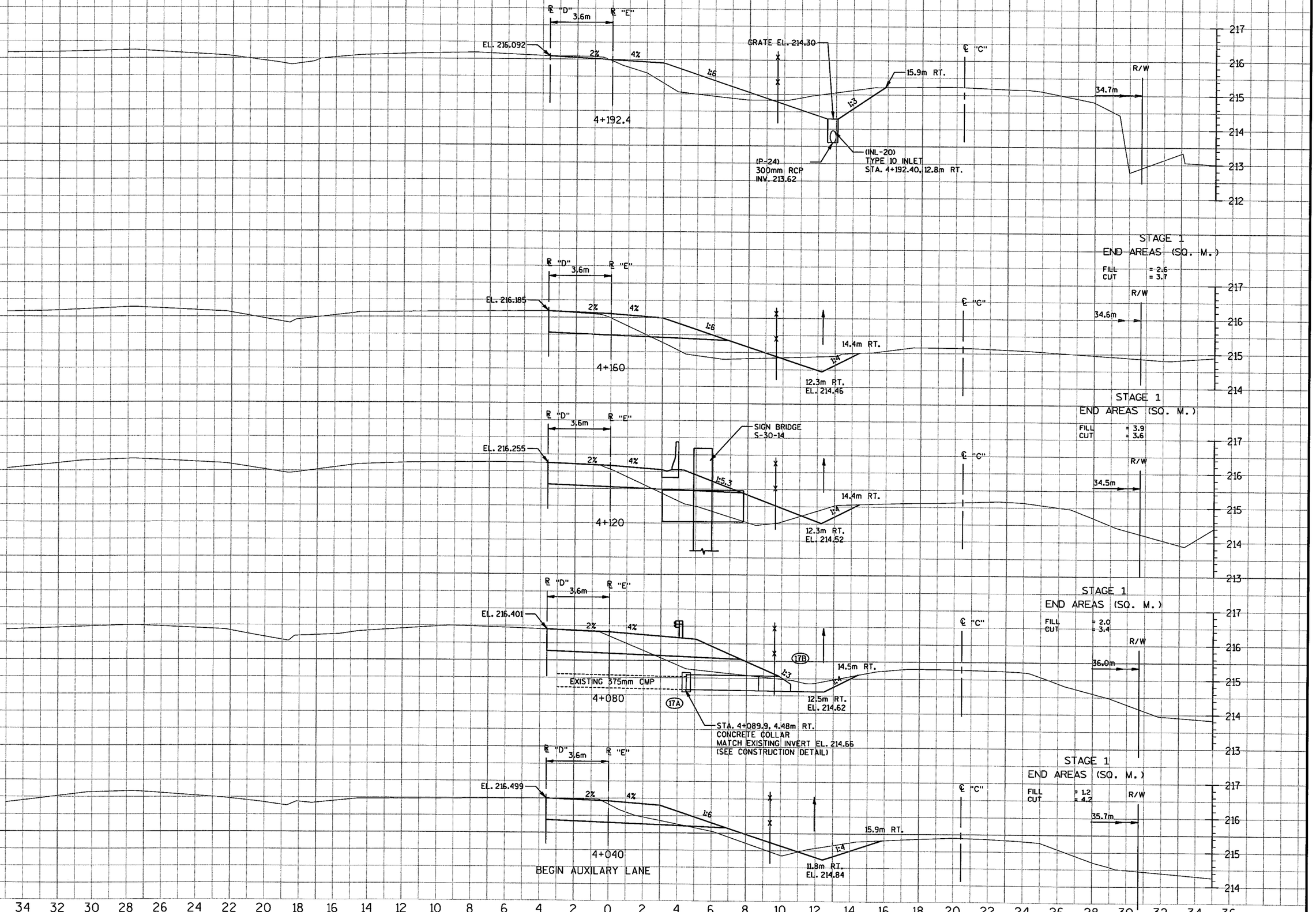
STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 527	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(6) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14, 15, 16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63



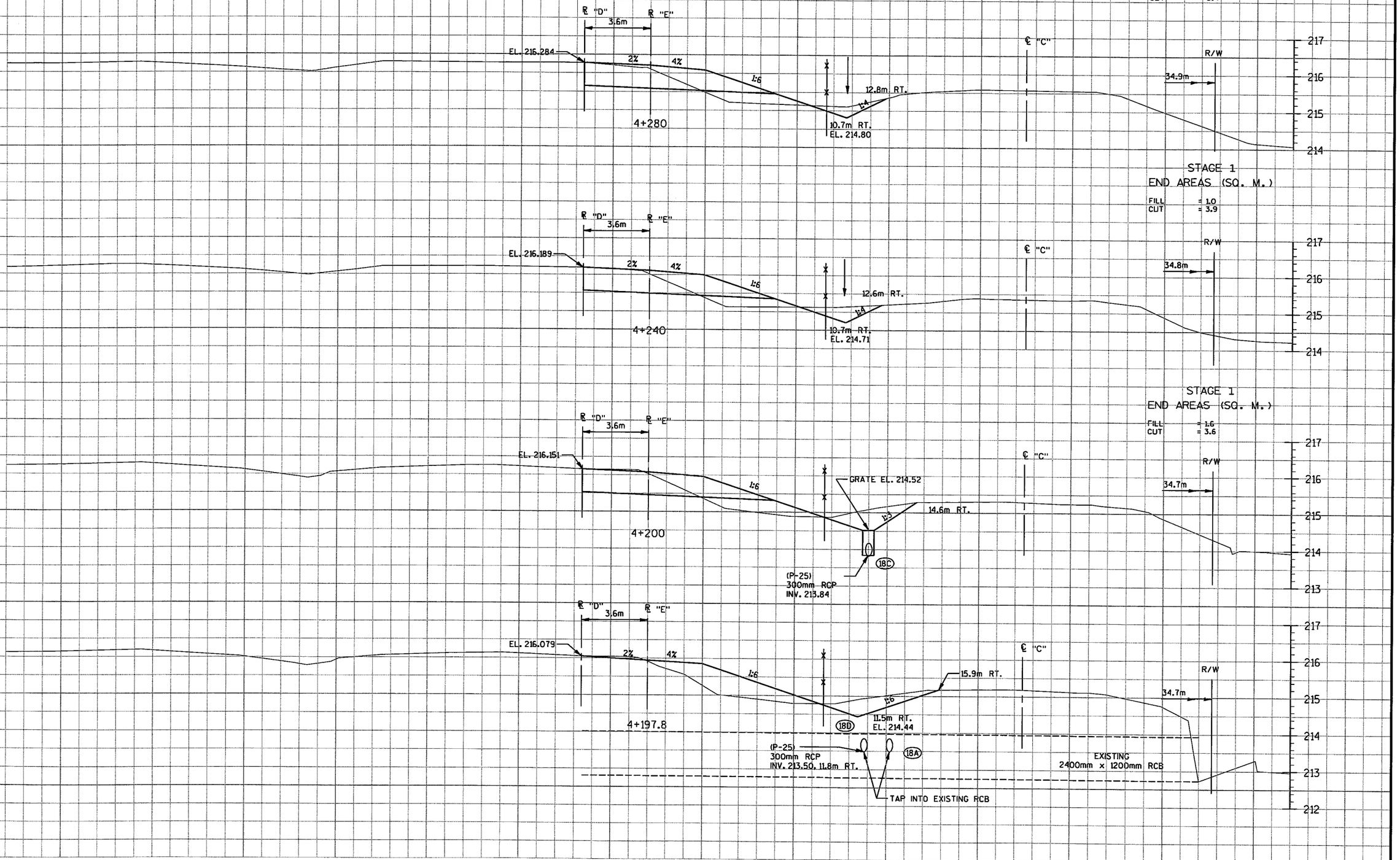
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(T) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 528 M



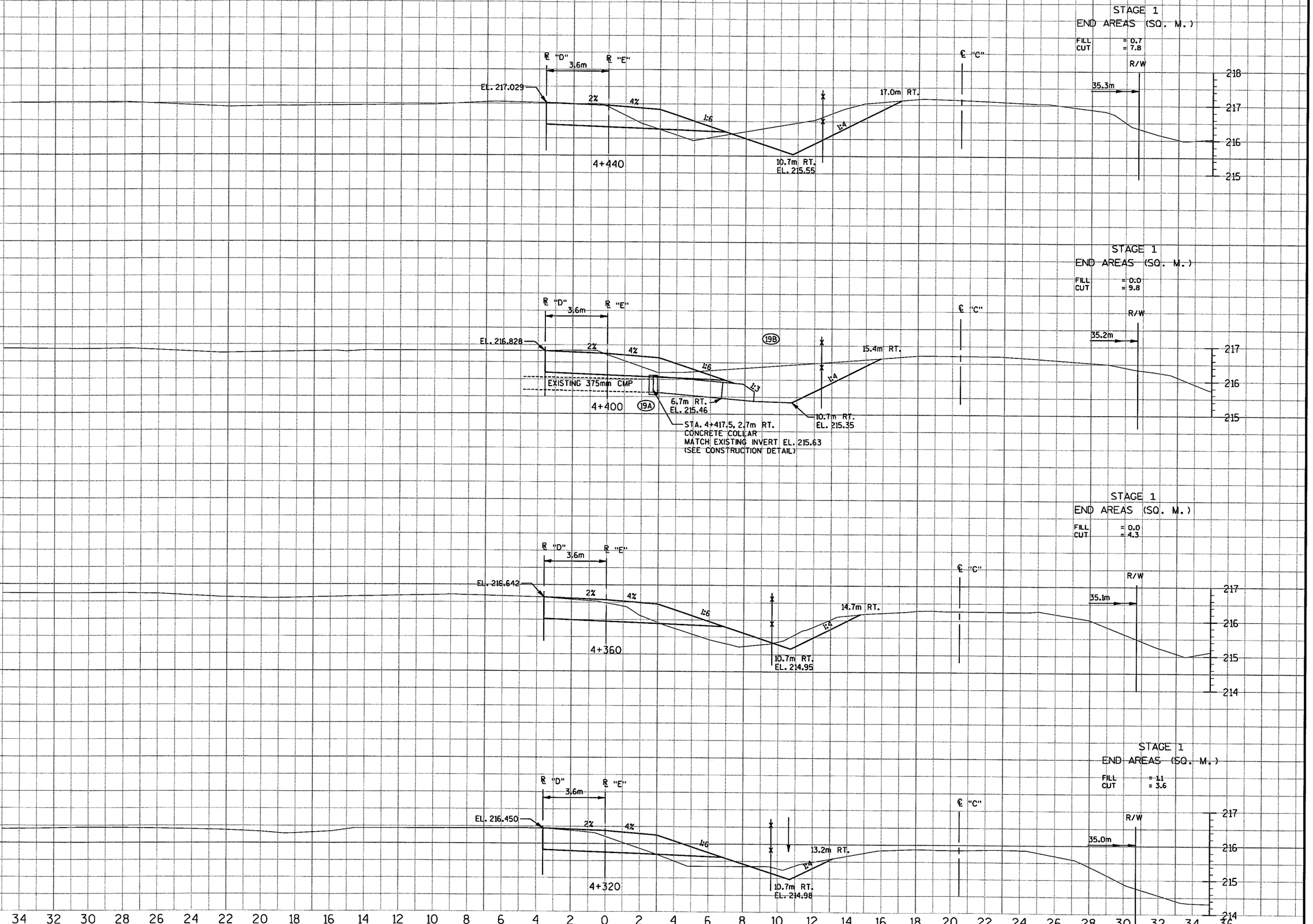
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(8) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 529	M



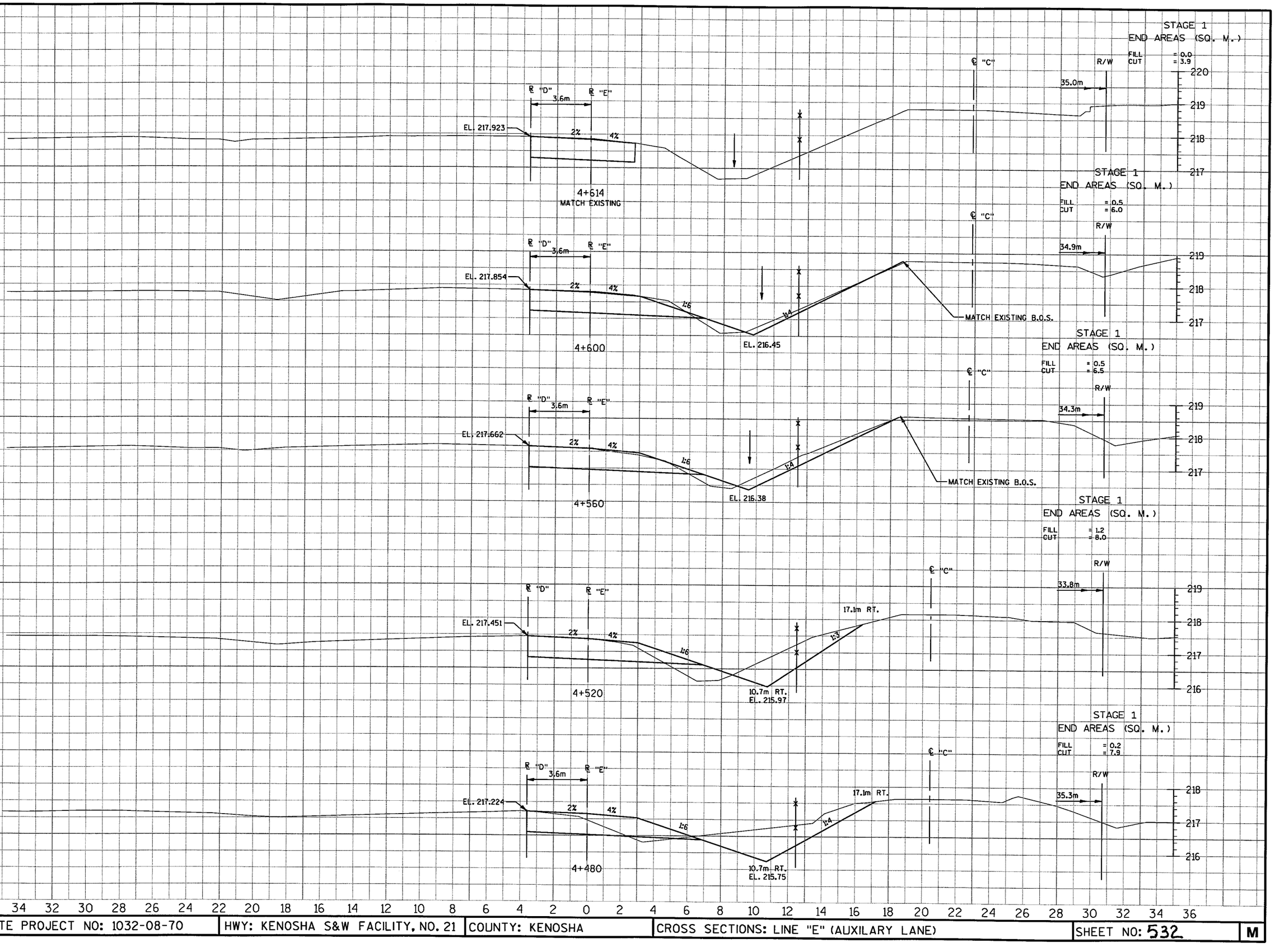
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(9) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 530	M



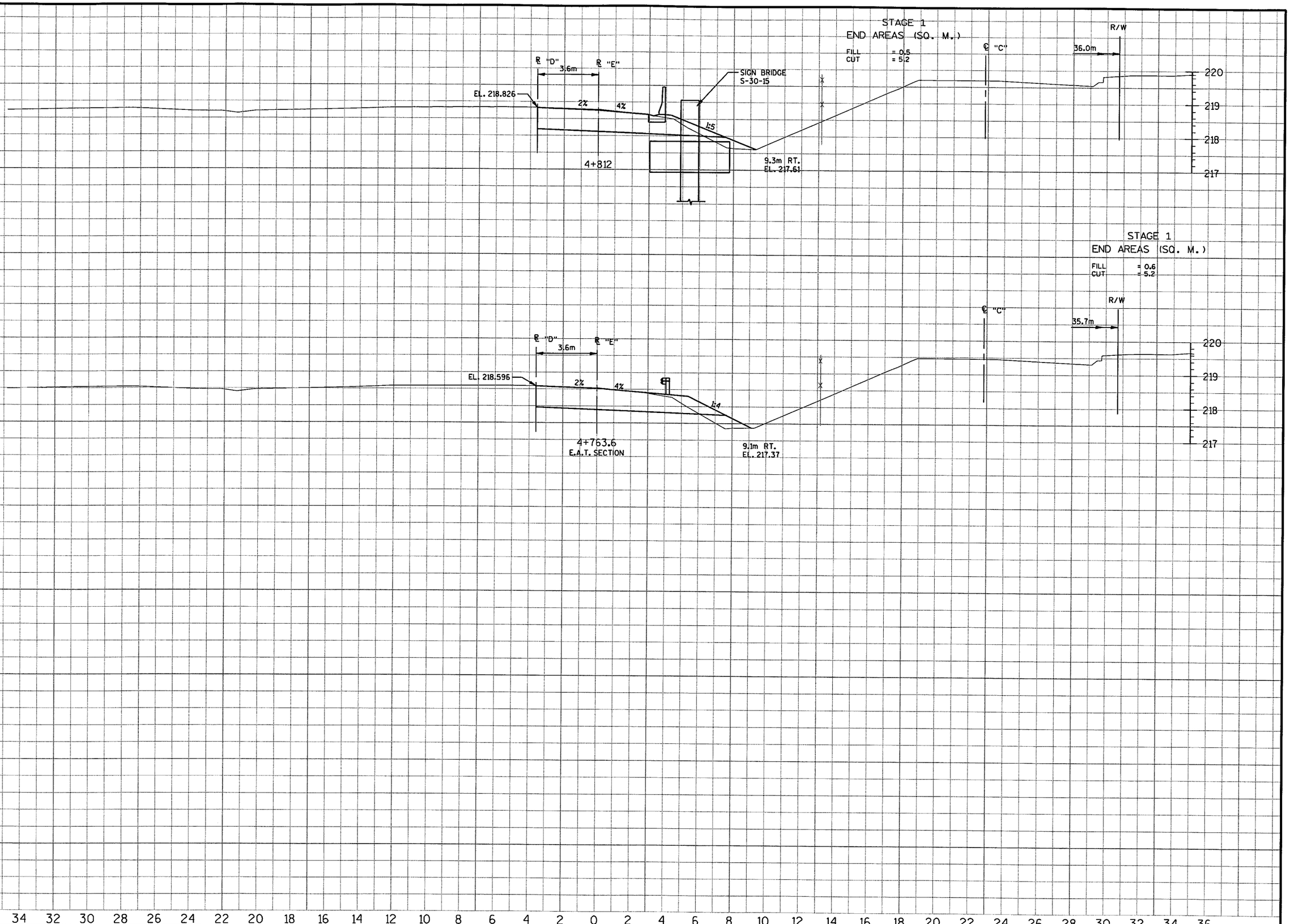
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(10) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 531	M



FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(11) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

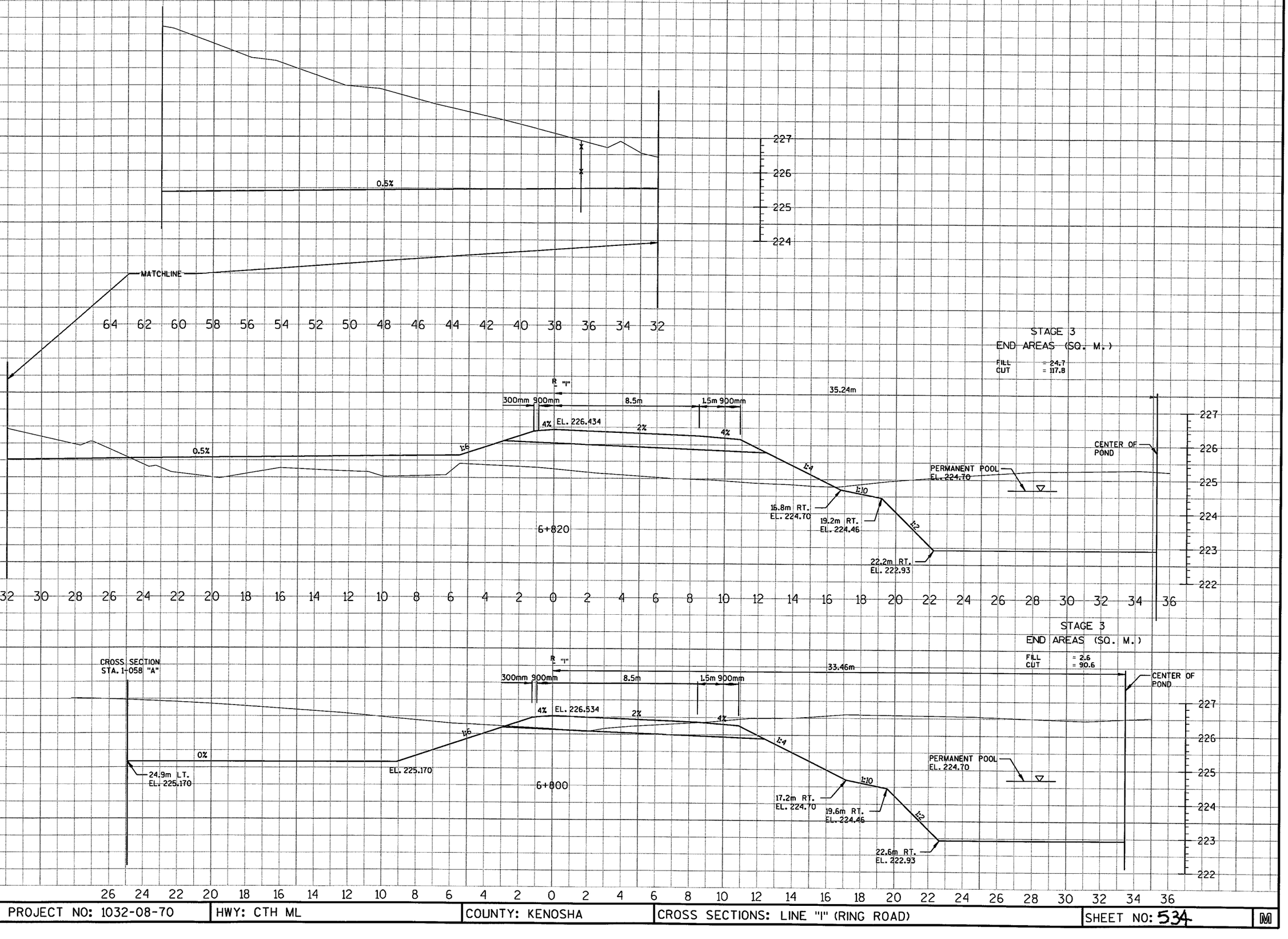
STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 532	M



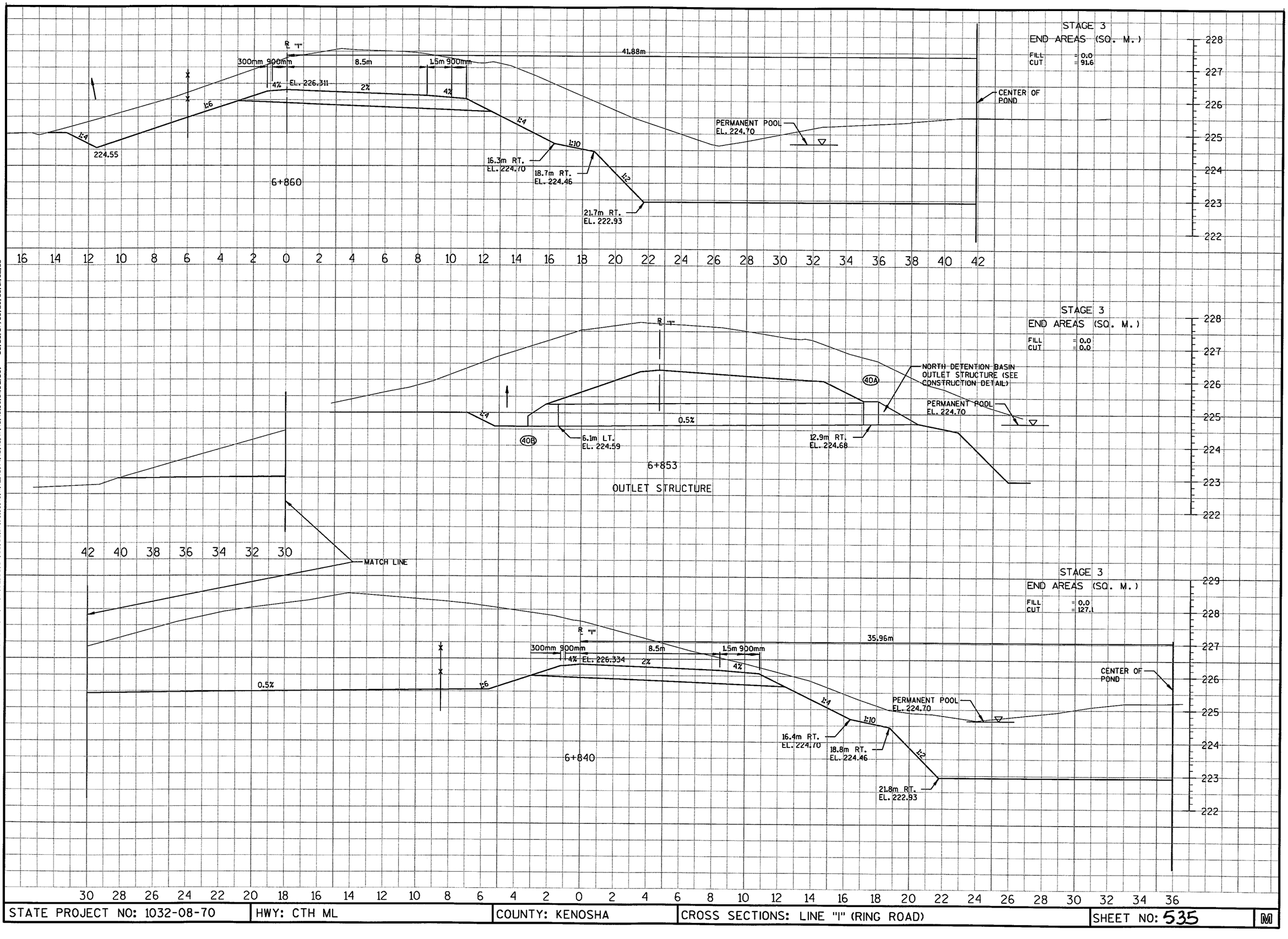
FILE NAME: PROJECTS/2940/PLANS/XSECT/E-LINEXS.DGN(12) 12-04-01
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: KENOSHA S&W FACILITY, NO. 21	COUNTY: KENOSHA	CROSS SECTIONS: LINE "E" (AUXILARY LANE)	SHEET NO: 533	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(I) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12 14,15,16, 17,18,19,20,21,22,23,24,25,26, 27,28,29,30,31,32,33,34,35, 36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

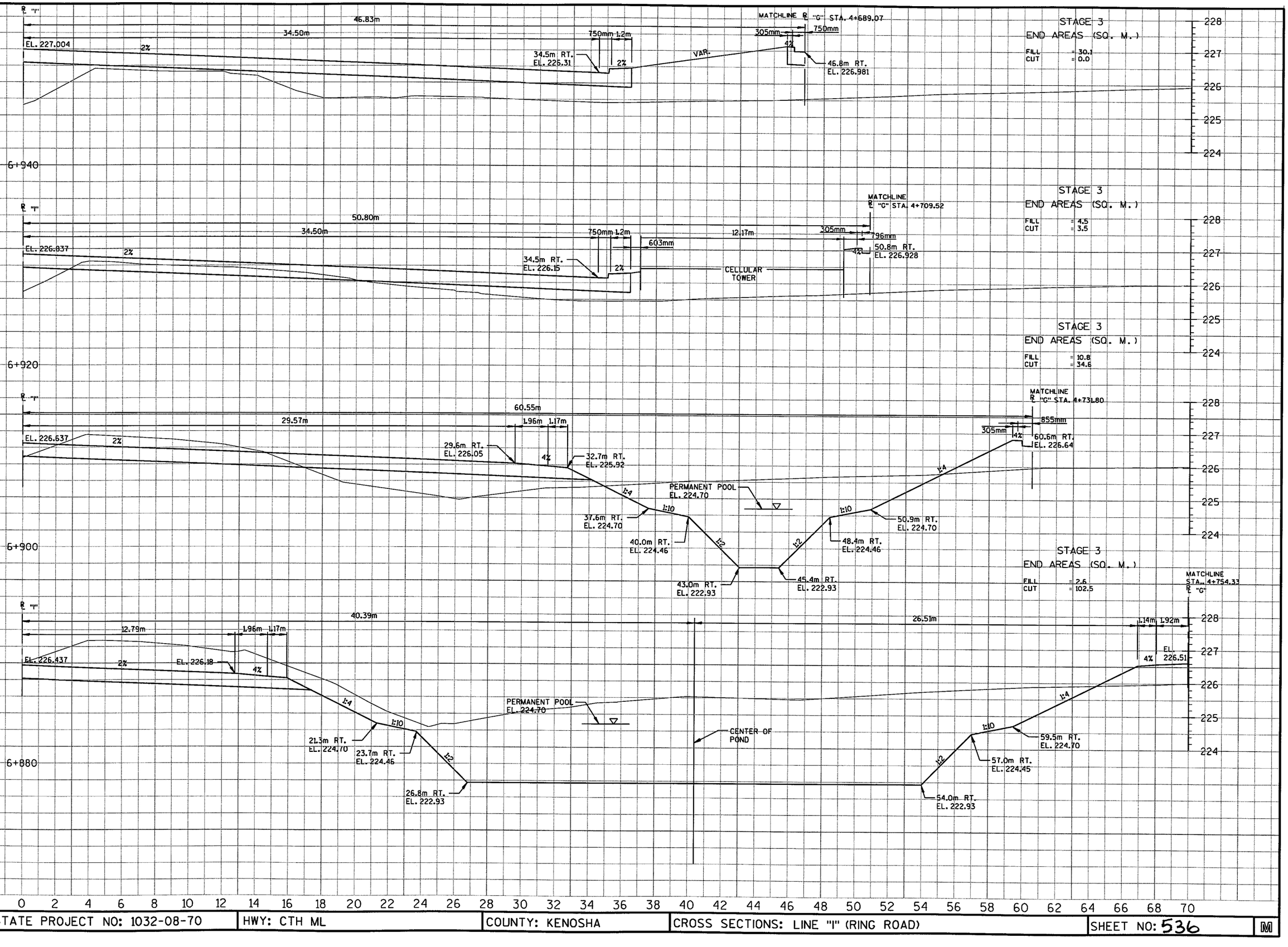


STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 534	M



FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(2) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12, 14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 535 M



FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(3) 12-04-01
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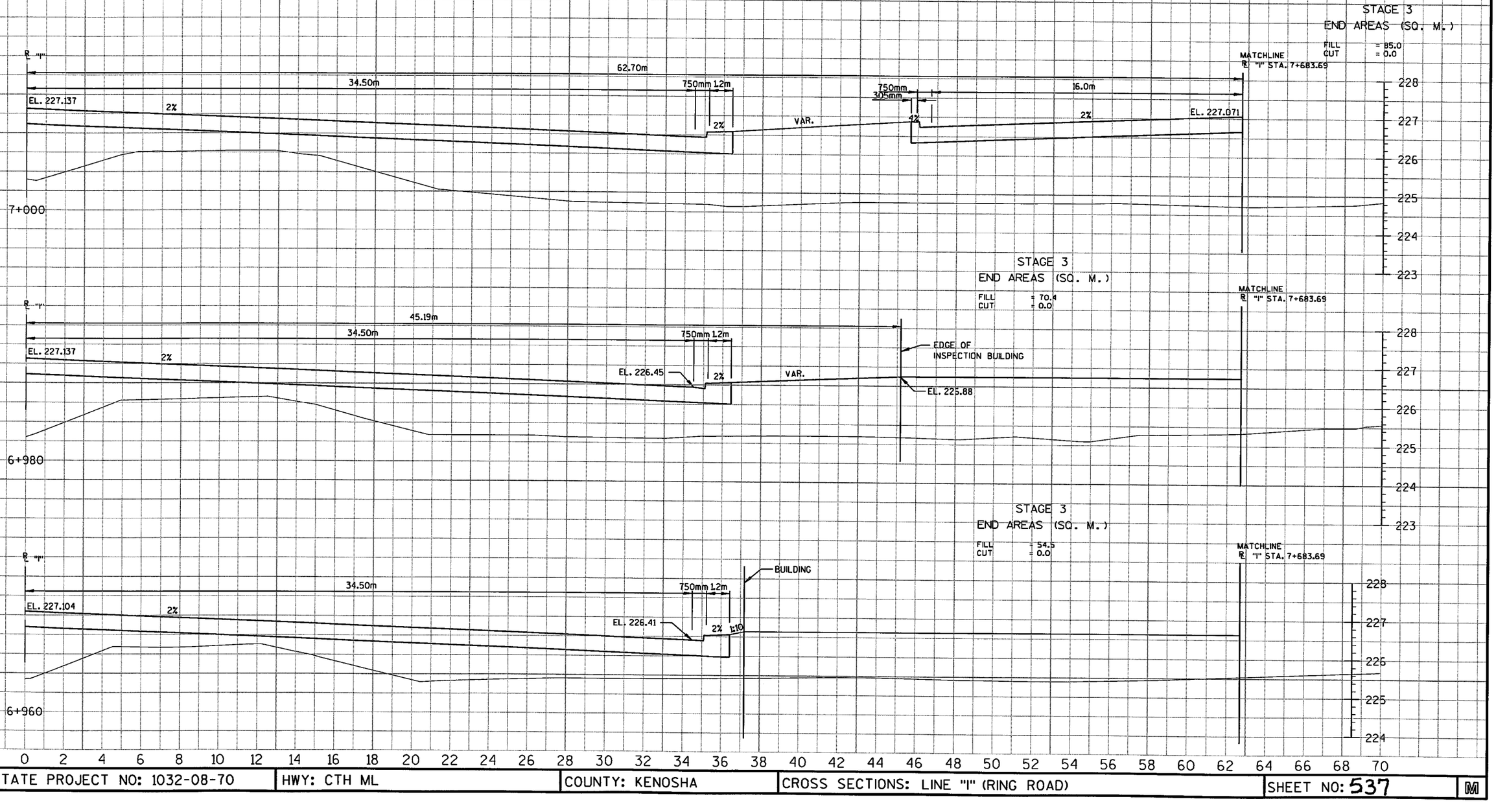
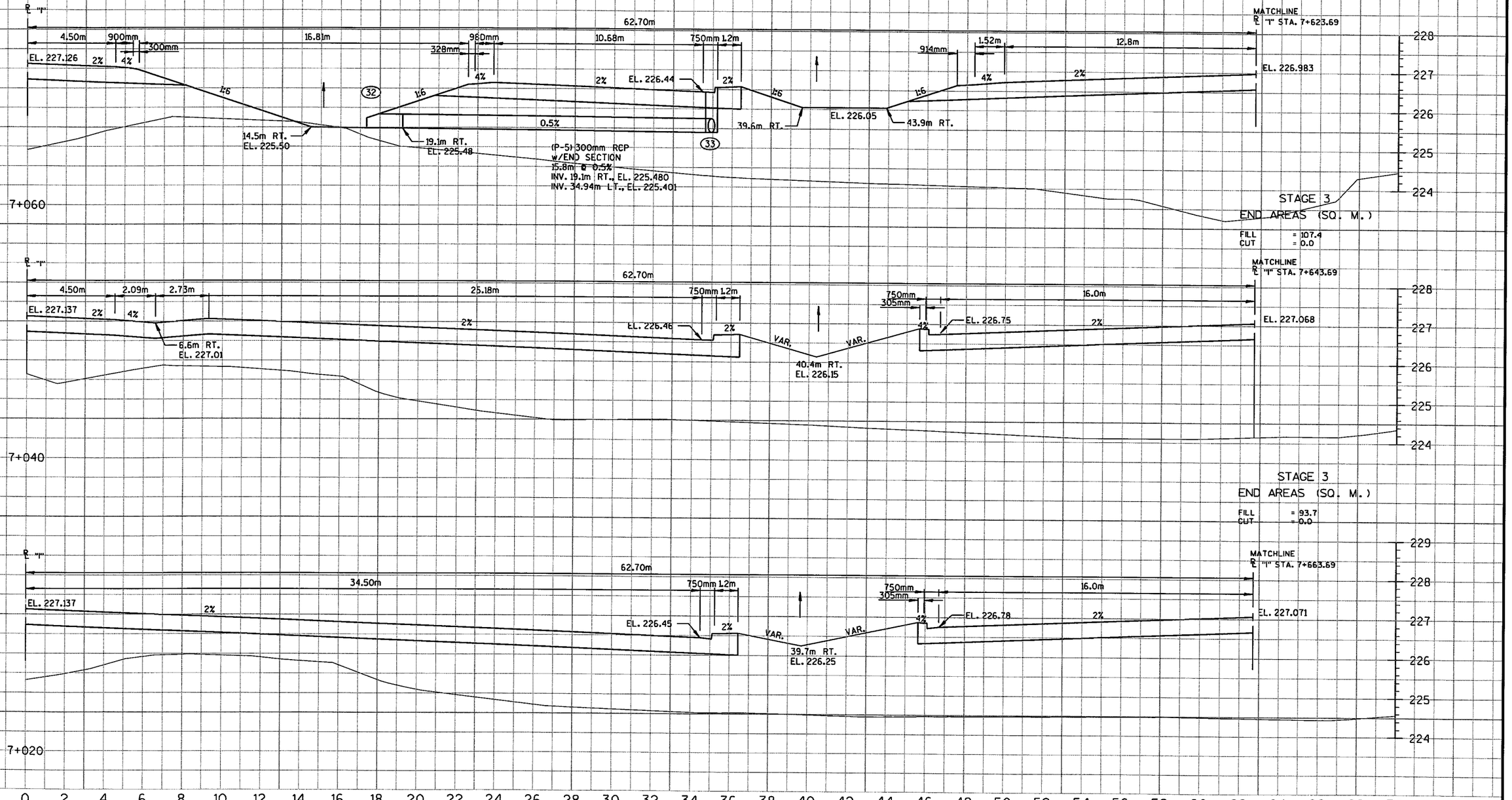
STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 536	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/1-LINENEWXSECTIONS.DGN(4) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12, 14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63



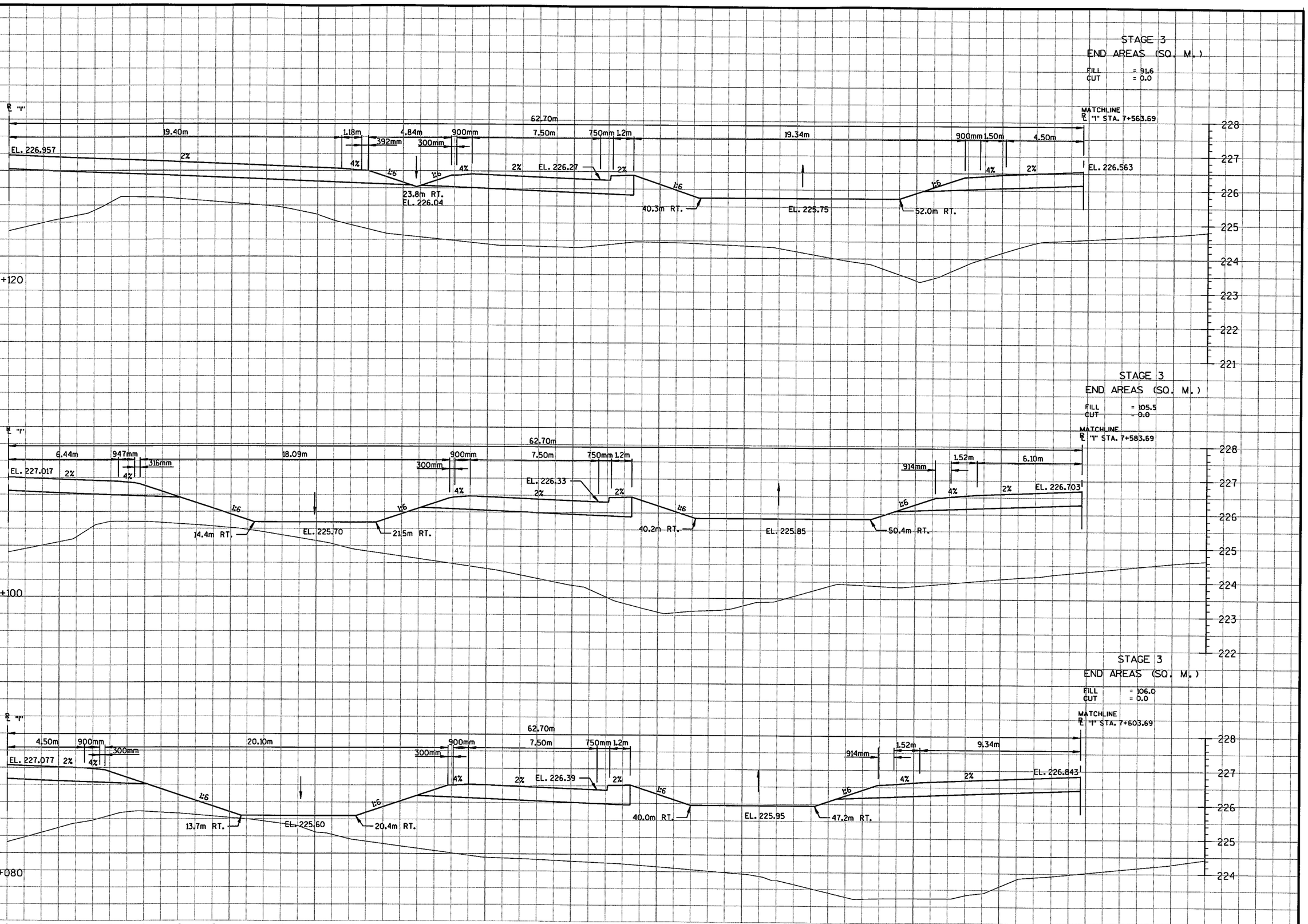
STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 537 M



0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70

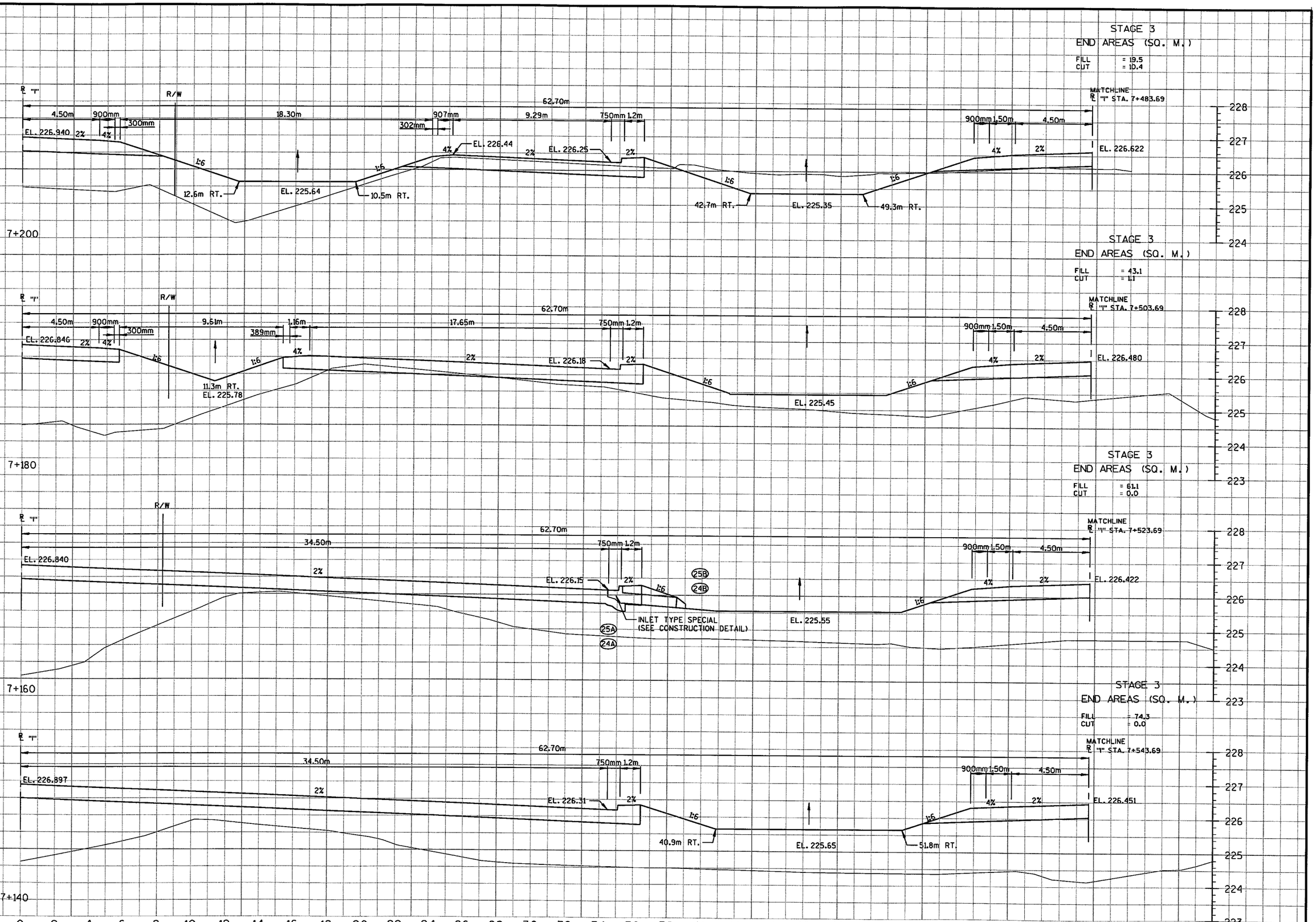
STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 538	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(5) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 61, 62, 63



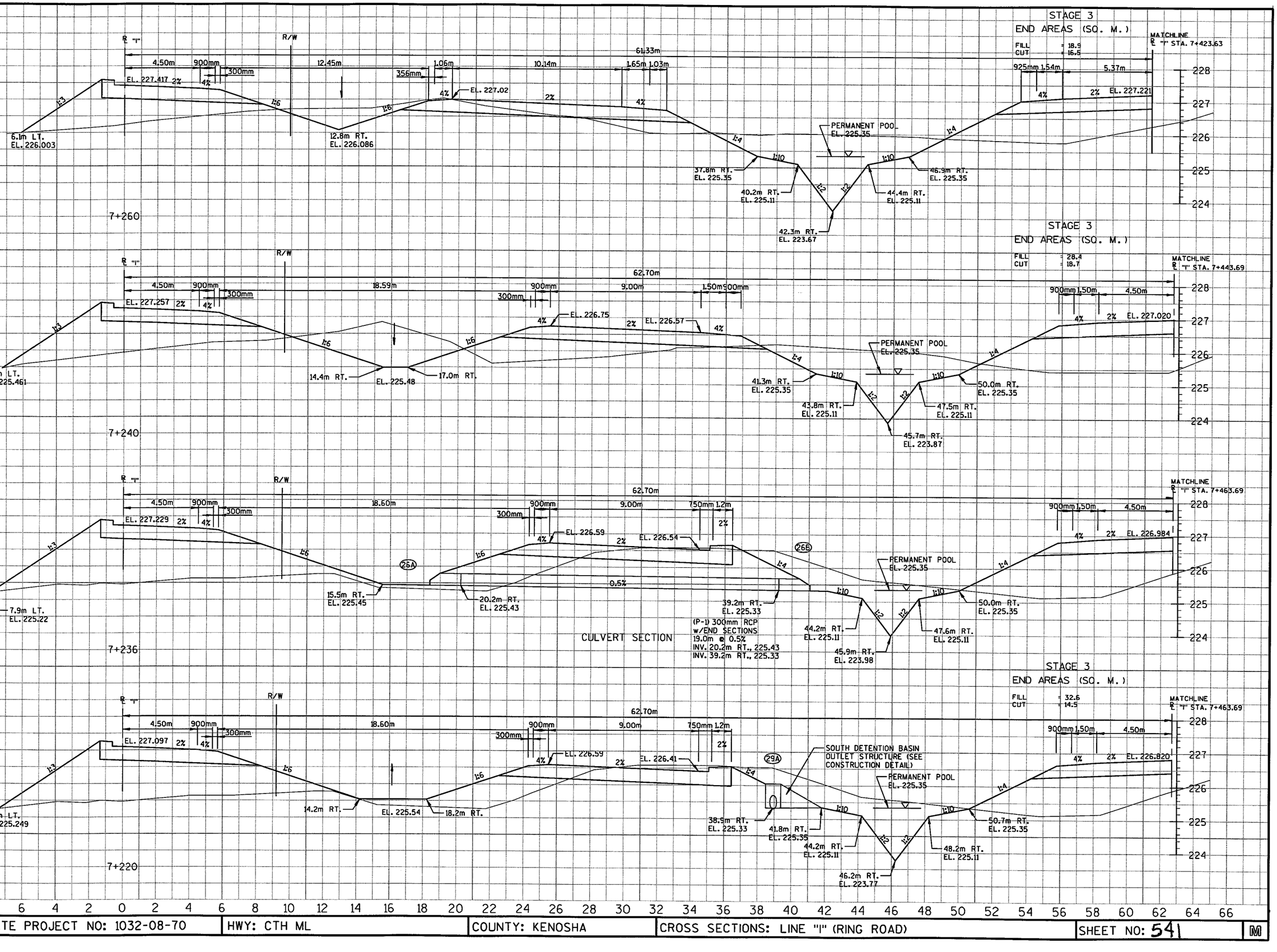
FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(6) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 539 M



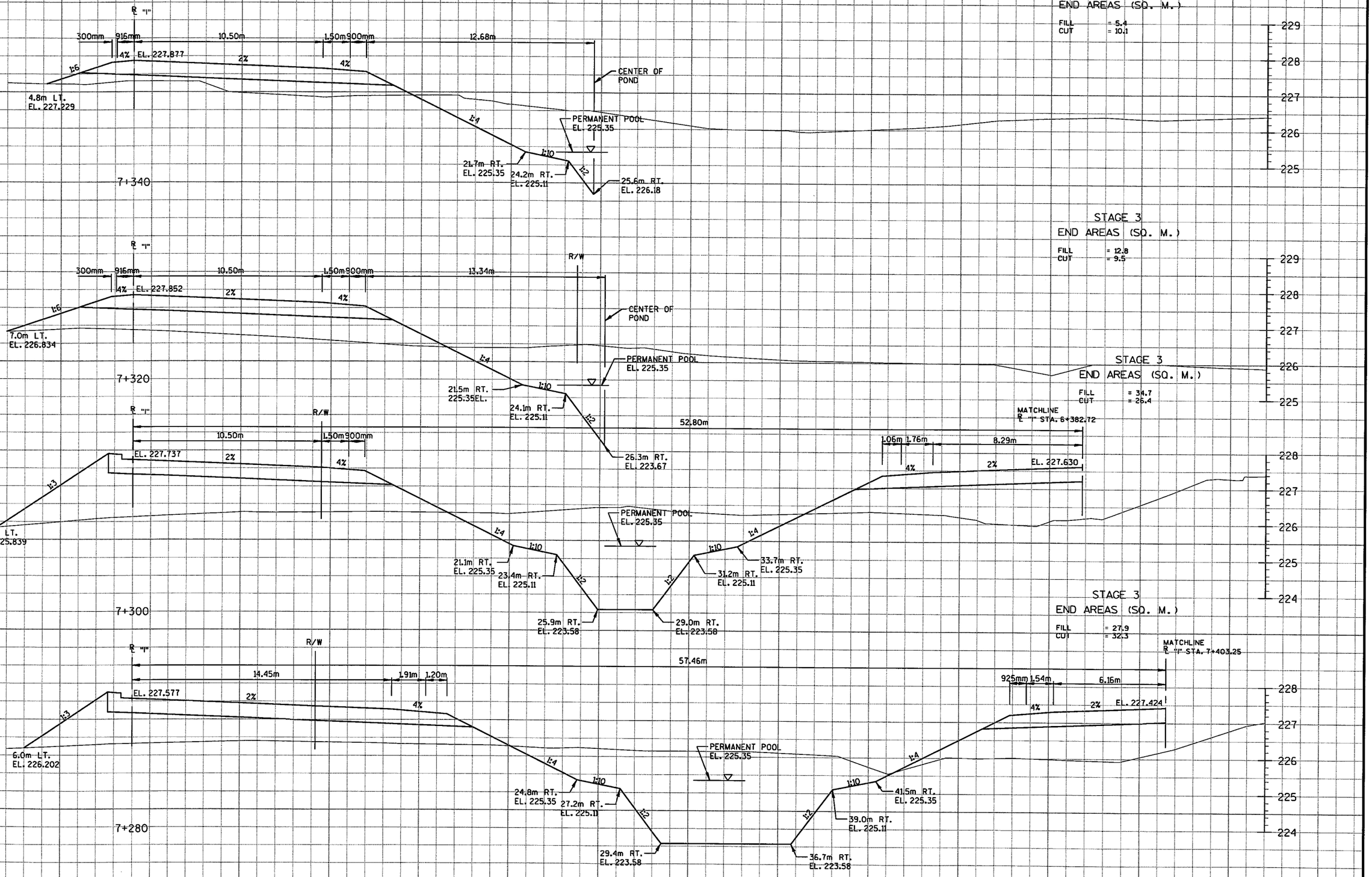
FILE NAME: PROJECTS/2940/PLANS/XSECT/1-LINENEWXSECTIONS.DGN(7) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12, 14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 540	M



FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(8) 12-04-01
LEVELS ON - 1.2.3.4.5.6.7.8.9.10.11.12. 14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53. 55.56.57.58.59.60.61.62.63

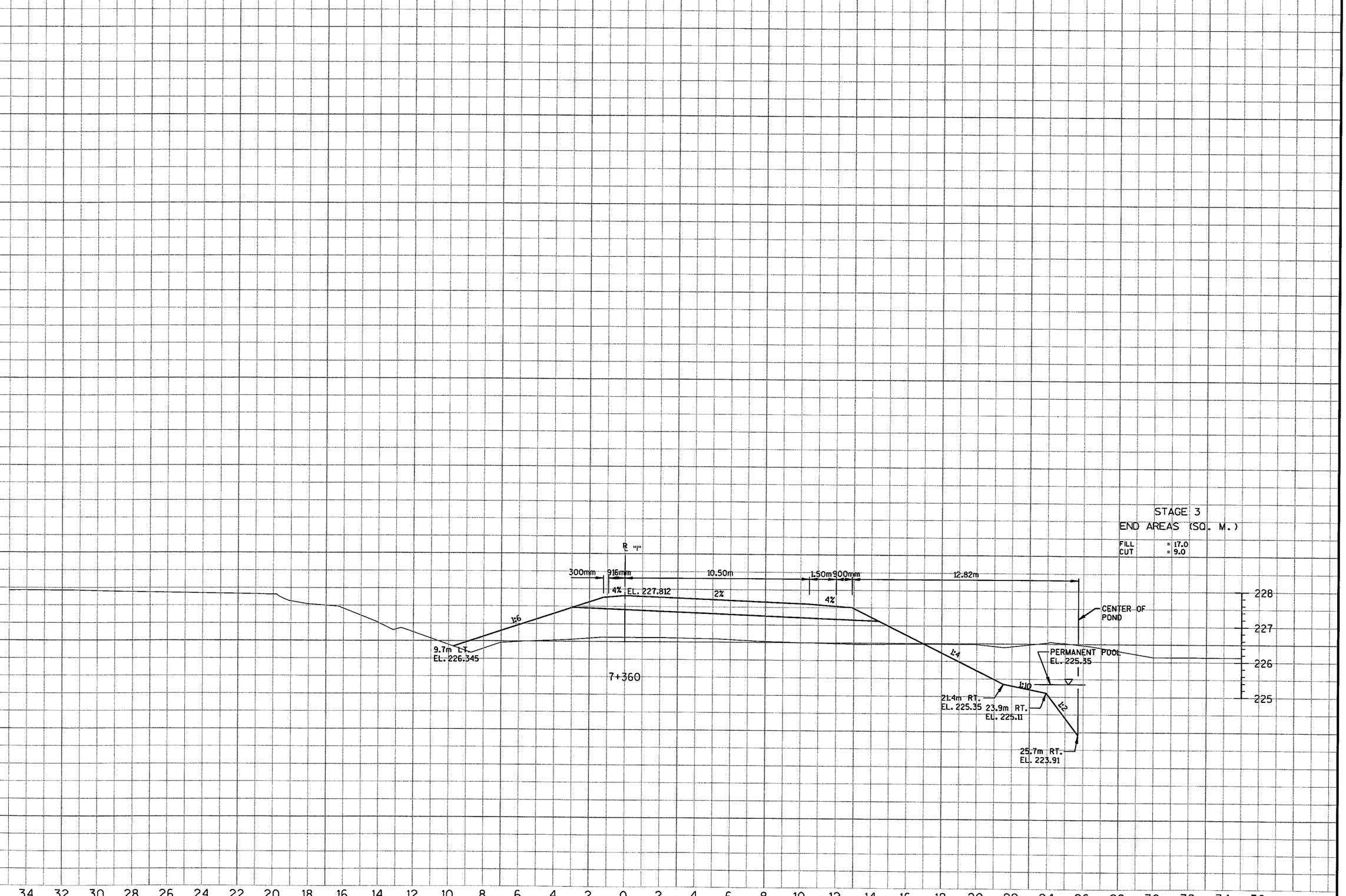
STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 54	M



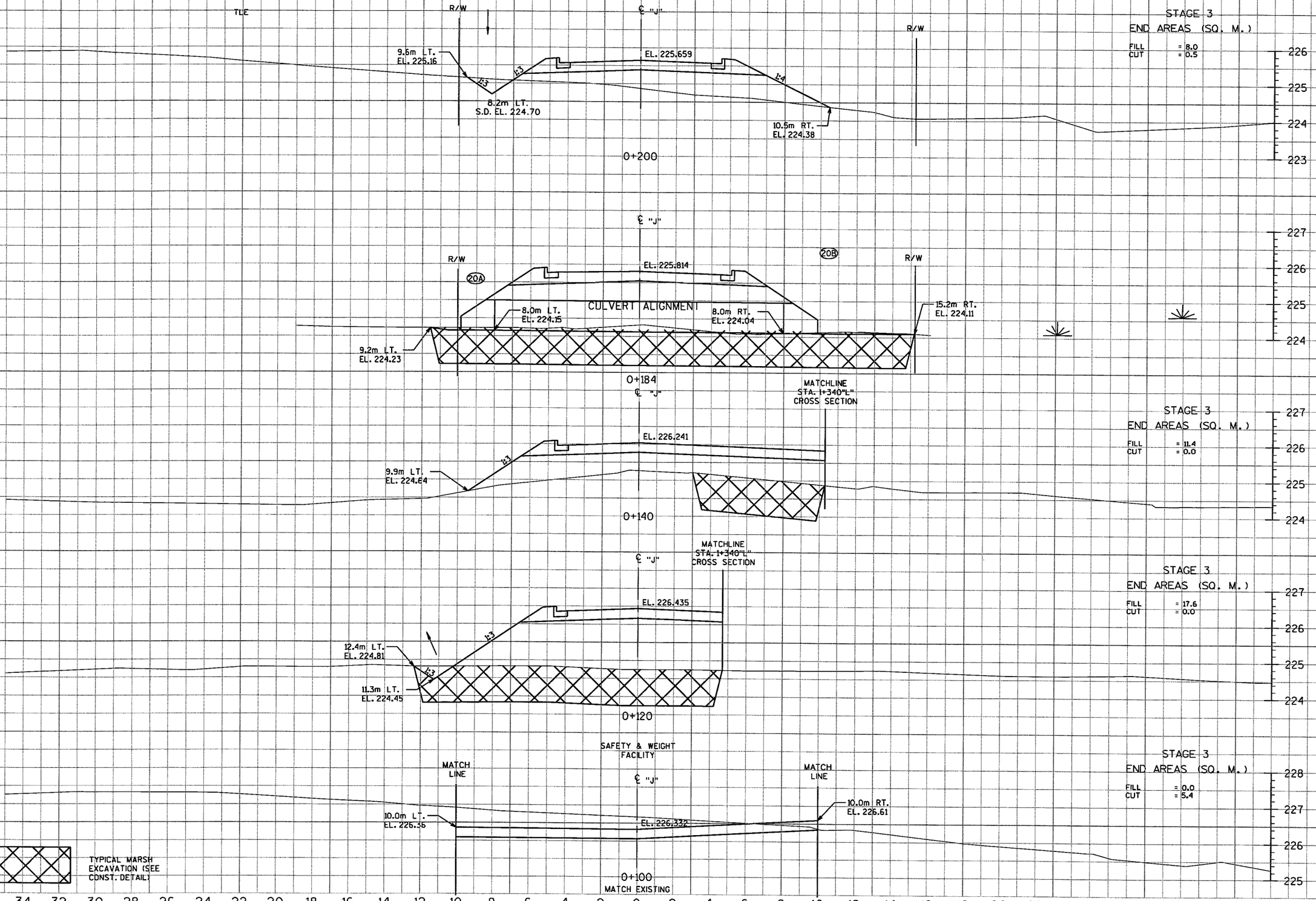
STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 542	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(9) 12-04-01
LEVELS ON • 1.2.3.4.5.6.7.8.9.10.11.12. 14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53. 55.56.57.58.59.60.61.62.63

FILE NAME: PROJECTS/2940/PLANS/XSECT/I-LINENEWXSECTIONS.DGN(10) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53, 55,56,57,58,59,60,61,62,63

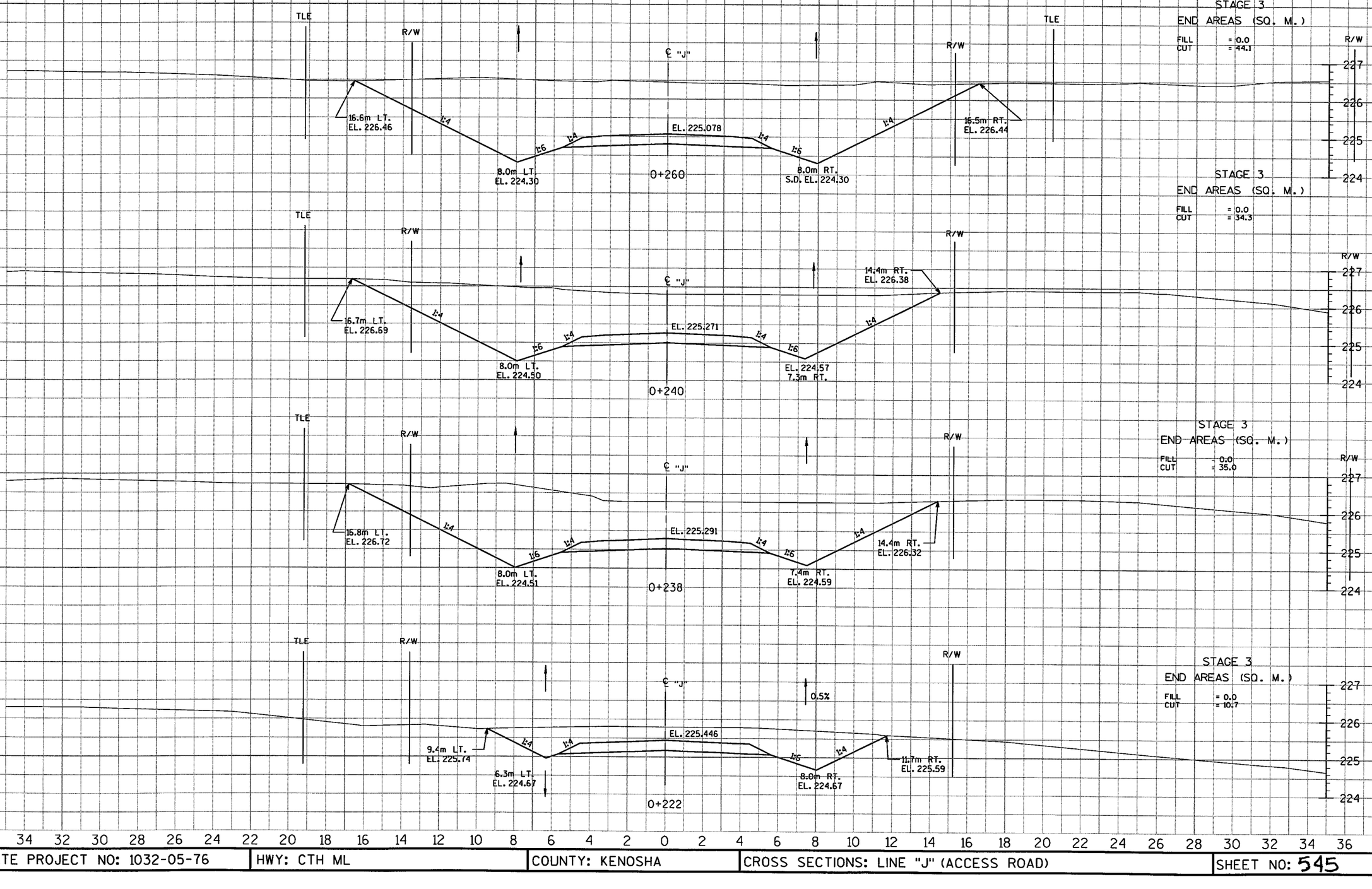


STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "I" (RING ROAD)	SHEET NO: 543 M



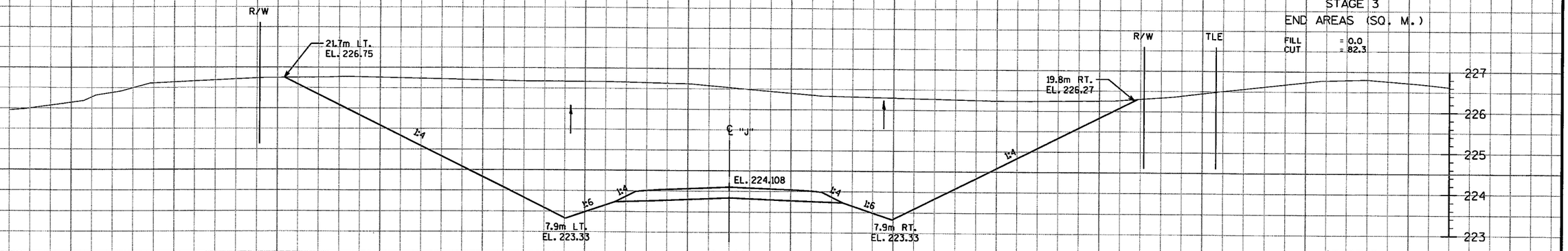
FILE NAME: PROJECTS/2940/PLANS/XSECT/J-LINEXS.DGN(1) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

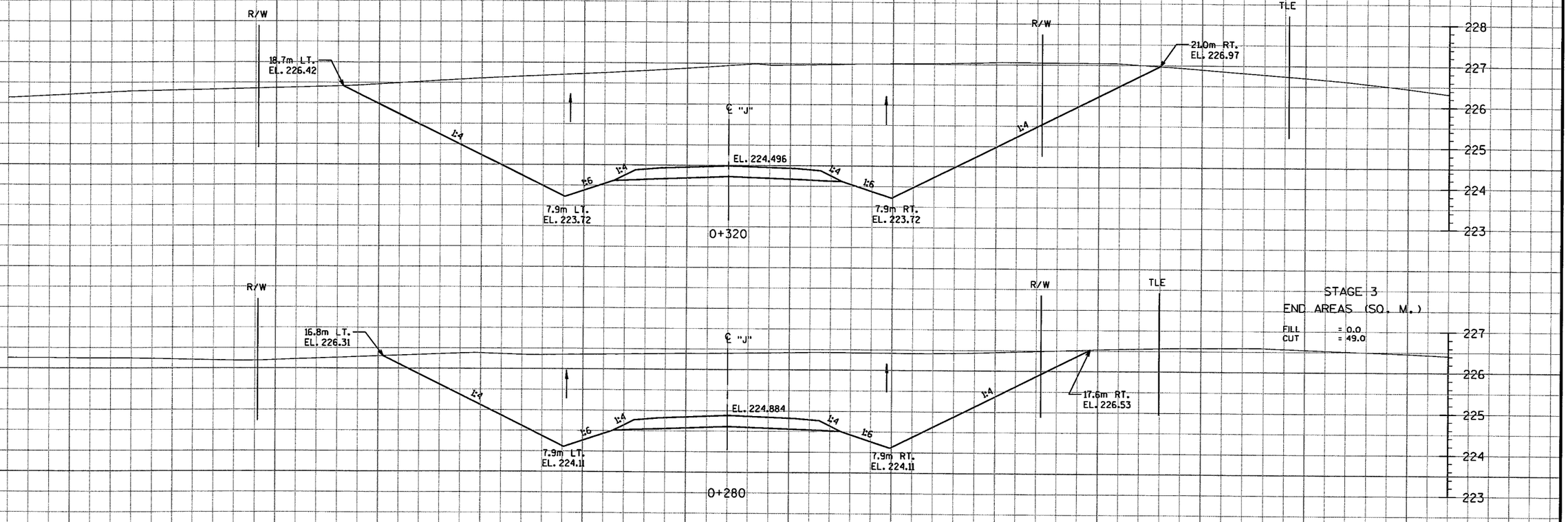
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "J" (ACCESS ROAD)	SHEET NO: 544	M

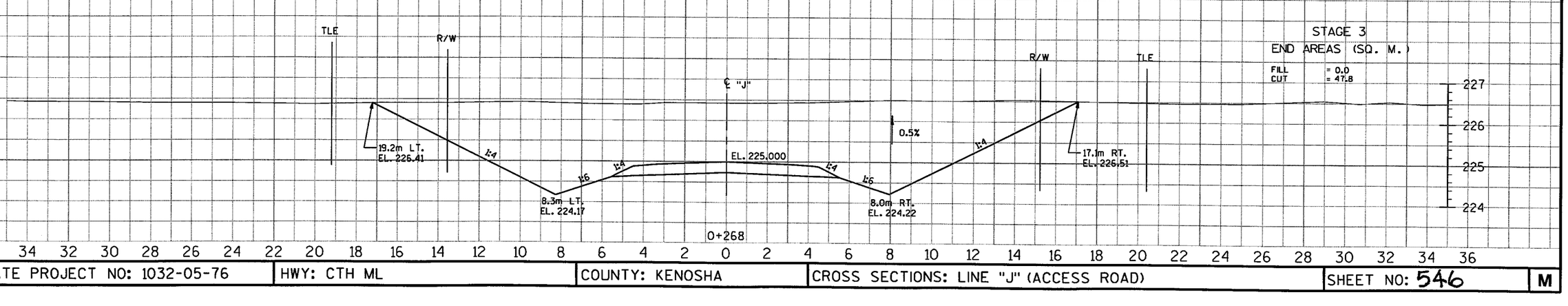


STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "J" (ACCESS ROAD)	SHEET NO: 545	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/J-LINEXS.DGN(2) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63



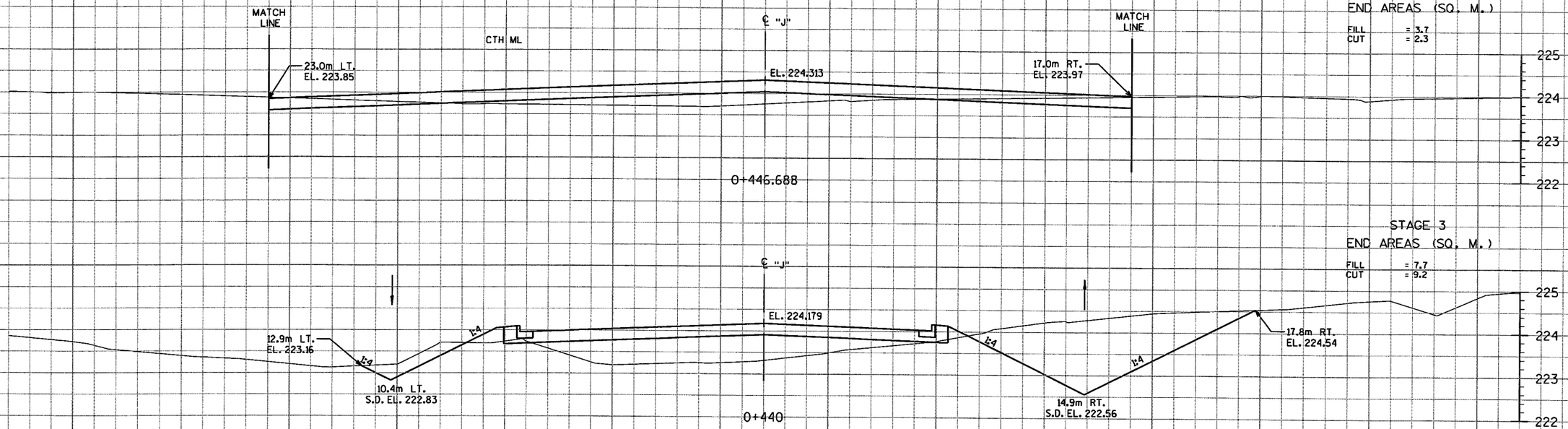




36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "J" (ACCESS ROAD)	SHEET NO: 546	M

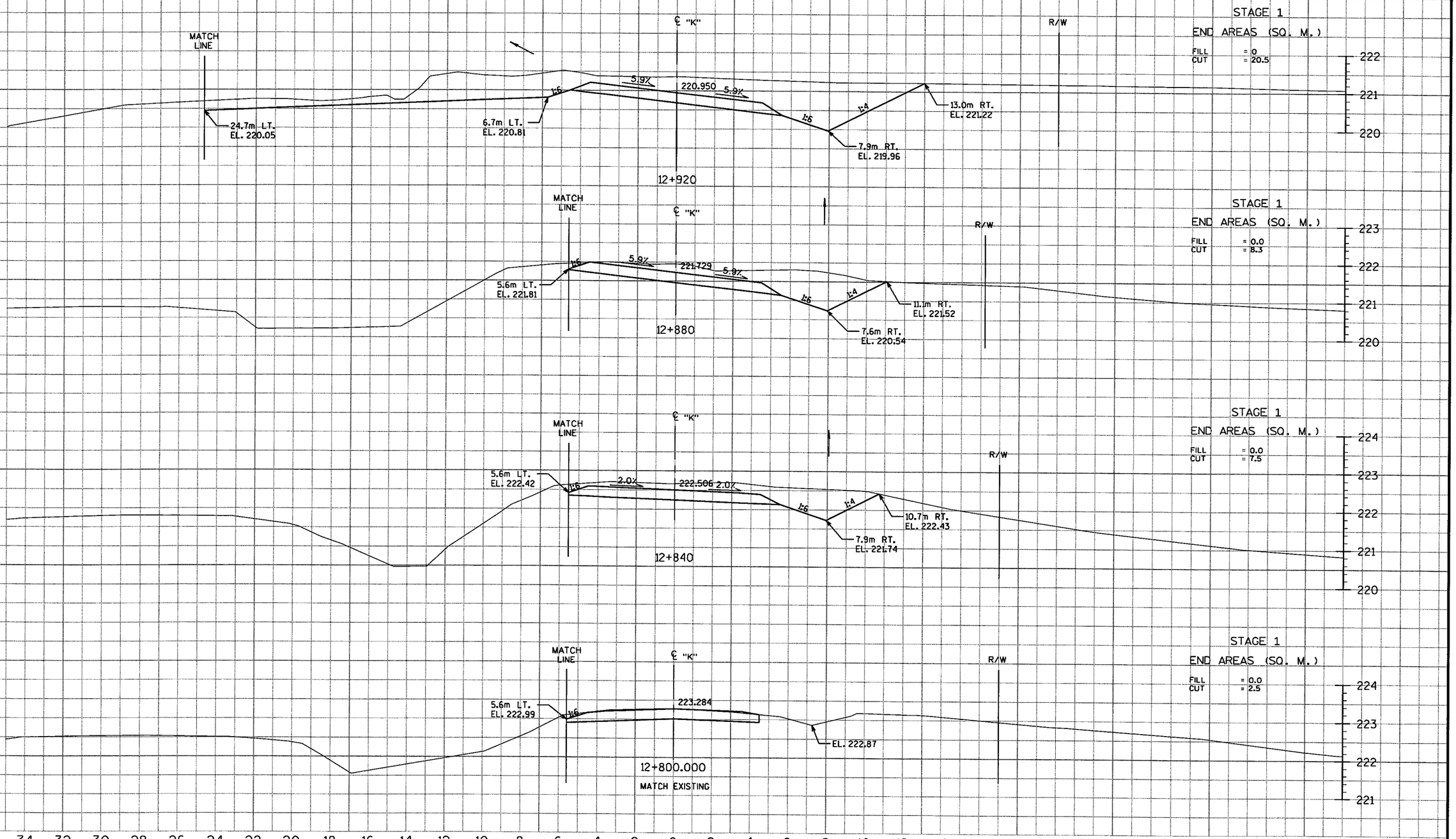
FILE NAME: PROJECTS/2940/PLANS/XSECT/J-LINEXS.DGN(3) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "J" (ACCESS ROAD)	SHEET NO: 547	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/J-LINEXS.DGN(4) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



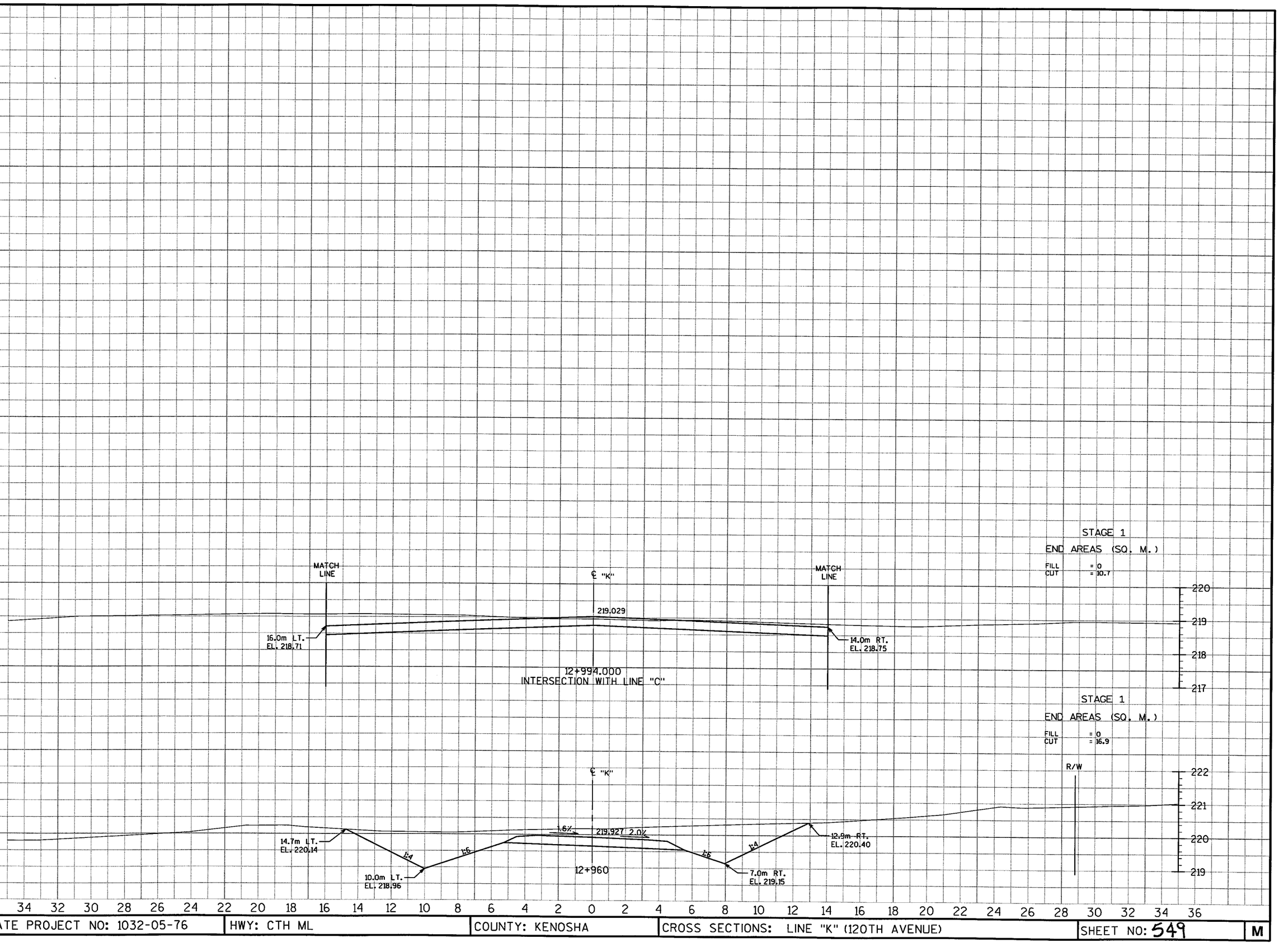
FILE NAME: PROJECTS/2940/PLANS/XSECT/K-LINEXS.DGN(1)
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

12-04-01

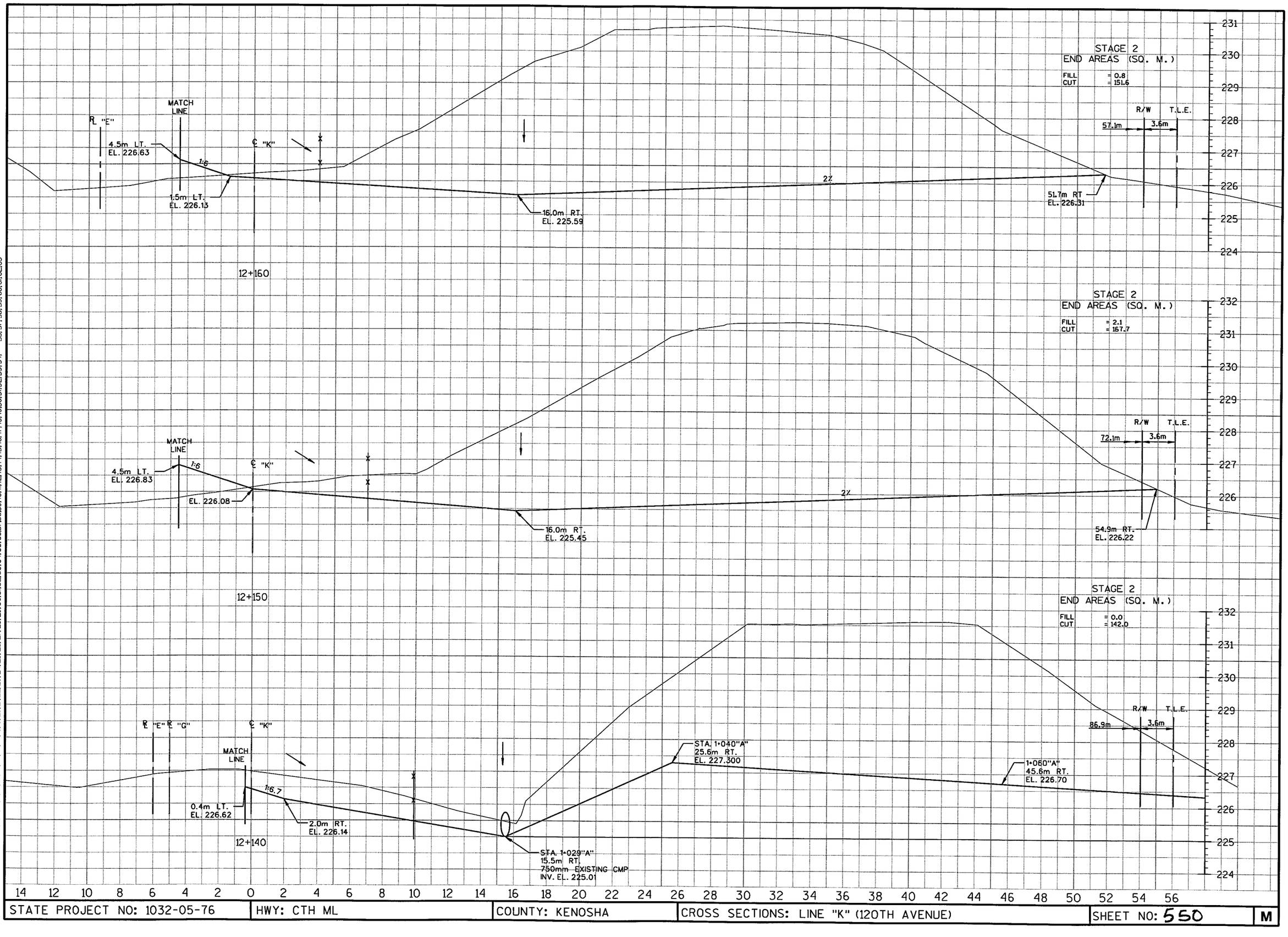
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "K" (120TH AVENUE)	SHEET NO: 548	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/K-LINEXS.DGN(2)
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,56,57,58,59,60,61,62,63

12-04-01

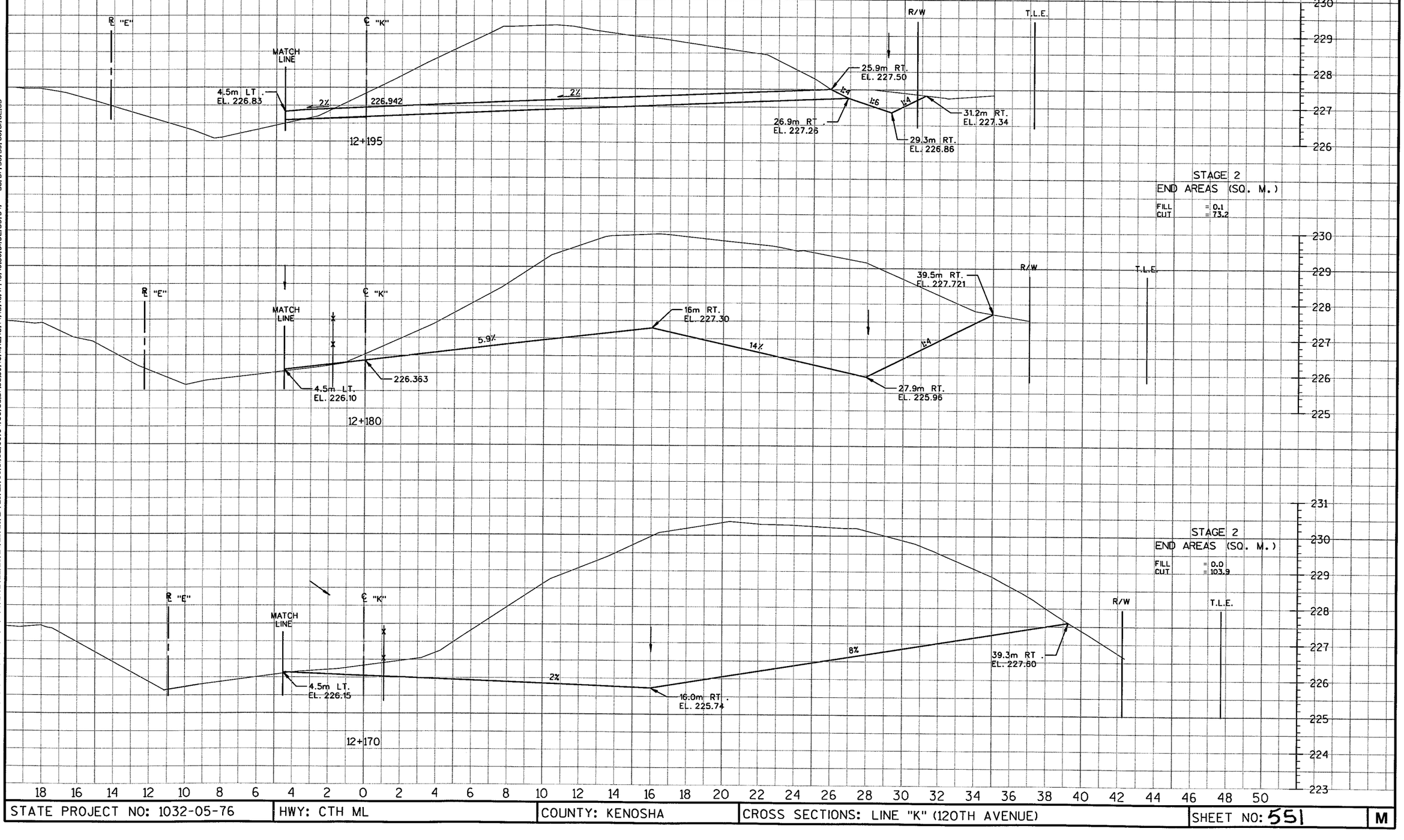


STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "K" (120TH AVENUE)	SHEET NO: 549	M



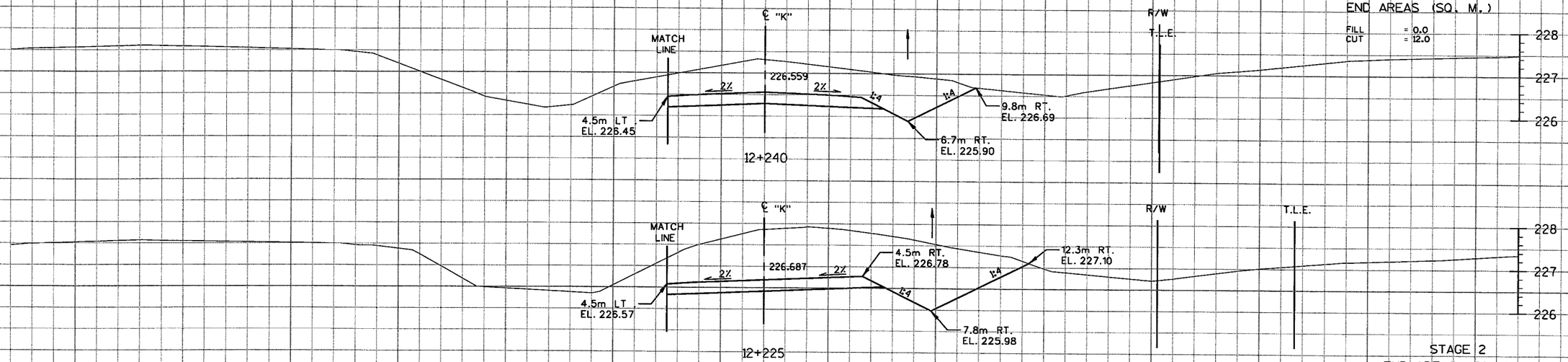
FILE NAME: PROJECTS/2940/PLANS/XSECT/CULSACXS.DGN(1) 12-04-01
LEVELS ON • 1,2,3,4,5,6,7,8, 9,10,11,12,13, 14,15, 16, 17,18,19,20,21,22,23,24,25,26,27, 28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63

STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "K" (120TH AVENUE)	SHEET NO: 550	M



FILE NAME: PROJECTS/2940/PLANS/XSECT/CULSACXS.DGN(2) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63

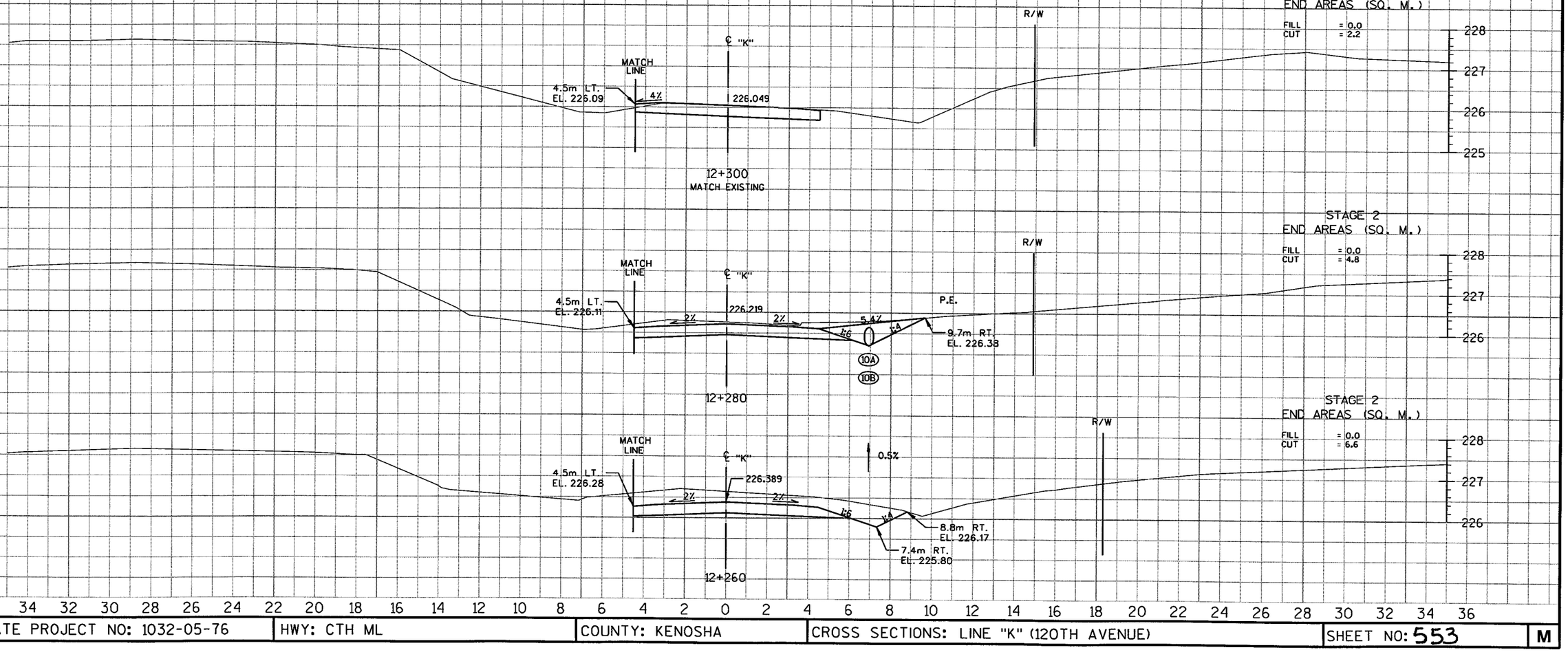
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "K" (120TH AVENUE)	SHEET NO: 551	M



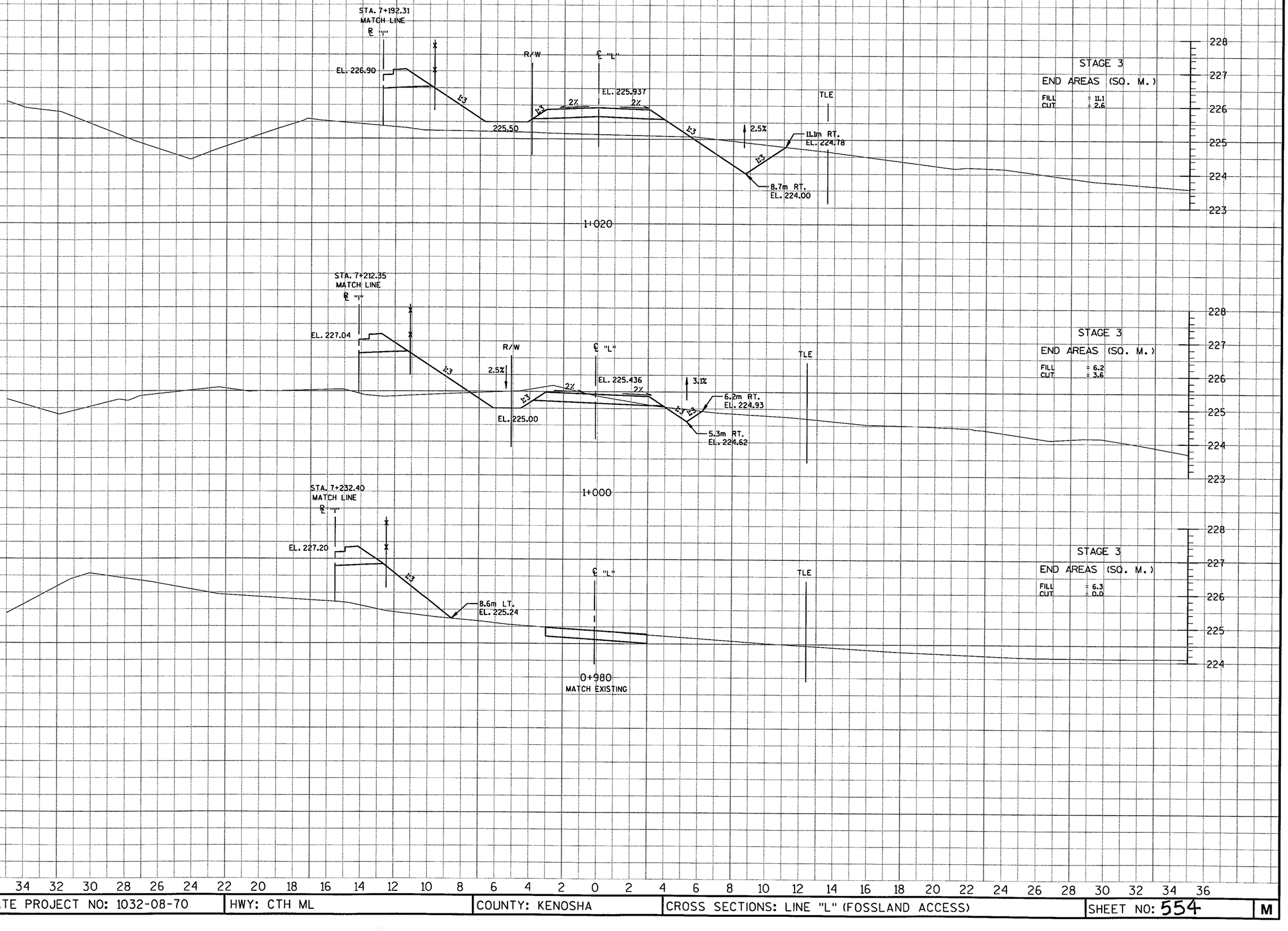
STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "K" (120TH AVENUE)	SHEET NO: 552 M

FILE NAME: PROJECTS/2940/PLANS/XSECT/CULSACXS.DGN(3) 12-04-01
LEVELS ON • 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63

FILE NAME: PROJECTS/2940/PLANS/XSECT/CULSACXS.DGN(4) 12-04-01
LEVELS ON - 1,2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54, 56,57,58,59,60,61,62,63



STATE PROJECT NO: 1032-05-76	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "K" (120TH AVENUE)	SHEET NO: 553	M



STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 554	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(1)
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01

FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(2)
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01

STA. 7+151.52
MATCH LINE
℄ "L"

EL. 225.87
0.65%
1:3
℄ "L"
EL. 226.350
2%
2%
1:3
1:3
4.7m LT.
EL. 225.73
290
TLE
1:3
STA. 1+063.61"L"
8.3m RT.
EL. 223.10
0.5%
17.5m RT.
EL. 222.98

1+063.6

STAGE 3
END AREAS (SQ. M.)
FILL = 49.8
CUT = 0.0

TYPICAL MARSH EXCAVATION (SEE CONST. DETAIL)

STA. 7+151.52
MATCH LINE
℄ "L"

EL. 226.86
1.5%
1:3
℄ "L"
EL. 226.315
2%
2%
1:3
1:3
4.7m LT.
EL. 225.70
TLE
1:3
12.9m RT.
EL. 223.02

1+060

STAGE 3
END AREAS (SQ. M.)
FILL = 50.1
CUT = 0.0

STA. 7+172.26
MATCH LINE
℄ "L"

R/W
EL. 226.84
22A
1:3
2%
EL. 226.155
2%
22B
TLE
1:3
5%
5.2m LT.
EL. 225.40
4.1m LT.
EL. 225.34
5.3m RT.
EL. 224.87
2.4%
11.2m RT.
EL. 223.93
1:3
10.9m RT.
EL. 223.50

1+040

WETLANDS BEGIN AT
STA. 1+050 RT.

STAGE 3
END AREAS (SQ. M.)
FILL = 34.6
CUT = 0.7

228
227
226
225
224
223
222

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 555	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(3)
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01

STA. 7+091.52
MATCH LINE
℞ "L"

EL. 227.04 — 0.55% — ℄ "L" — EL. 226.795

1:3 — 2% — 2% — 1:3 — 1:3

5.1m LT.
EL. 226.05

1:3

12.2m RT.
EL. 223.72

STAGE 3
END AREAS (SQ. M.)
FILL = 41.3
CUT = 0.0

R/W
53.0m

228 227 226 225 224 223

1+120

STA. 7+111.52
MATCH LINE
℞ "L"

EL. 226.98 — 0.55% — ℄ "L" — EL. 226.635

1:3 — 2% — 2% — 1:3 — 1:3

5.0m LT.
EL. 225.94

1:3

MORTAR RUBBLE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
(30C)
(31C)

14.9m RT.
EL. 222.26

0.5%

21.2m RT.
EL. 222.09

STAGE 3
END AREAS (SQ. M.)
FILL = 61.7
CUT = 0.0

R/W
53.3m

228 227 226 225 224 223 222 221

1+100

TYPICAL MARSH EXCAVATION (SEE CONST. DETAIL)

STA. 7+131.52
MATCH LINE
℞ "L"

EL. 226.92 — 0.65% — ℄ "L" — EL. 226.475

1:3 — 2% — 2% — 1:3 — 1:3

4.8m LT.
EL. 225.83

1:3

14.1m RT.
EL. 222.75

STAGE 3
END AREAS (SQ. M.)
FILL = 46.6
CUT = 0.0

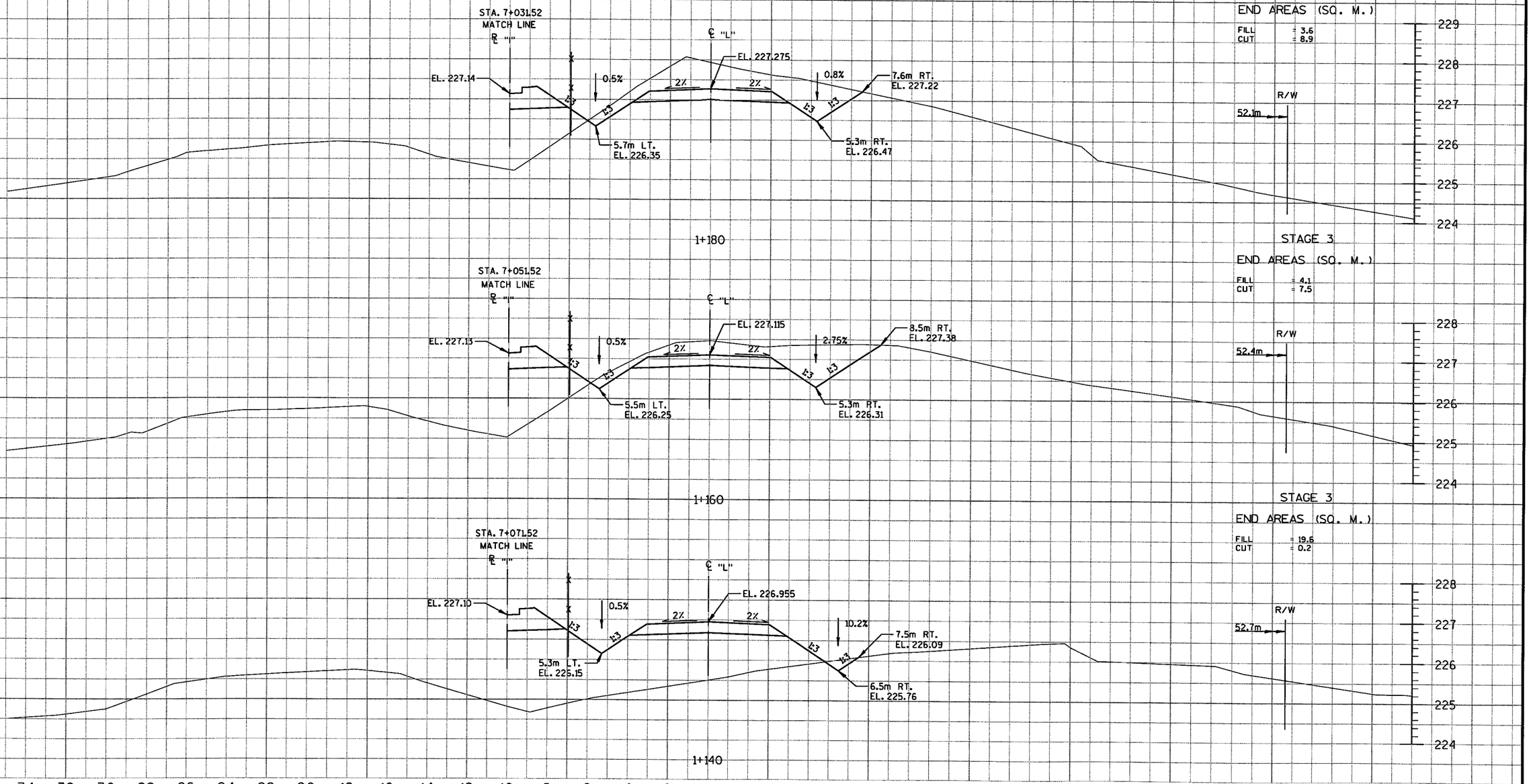
R/W
53.3m

228 227 226 225 224 223 222

1+080

36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 556	M



STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 557	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(4)
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01

FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(5)
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01

STA. 6+971.52
MATCH LINE
℄ "L"

EL. 227.13
0.75%
2%
2%
℄ "L"
EL. 227.065
1:3
1:3
5.4m LT.
EL. 226.22
1:3
0.5%
13.4m RT.
EL. 223.83
13.1m RT.
EL. 223.70
1+240

STAGE 3
END AREAS (SQ. M.)
FILL = 44.4
CUT = 0.1
R/W
51.1m
228
227
226
225
224
223

TYPICAL MARSH EXCAVATION (SEE CONST. DETAIL)

STA. 6+991.52
MATCH LINE
℄ "L"

EL. 227.14
0.65%
2%
2%
℄ "L"
EL. 227.304
1:3
1:3
5.8m LT.
EL. 226.35
1:3
0.5%
14.0m RT.
EL. 223.62
1+220

STAGE 3
END AREAS (SQ. M.)
FILL = 38.9
CUT = 0.0
R/W
51.5m
228
227
226
225
224
223

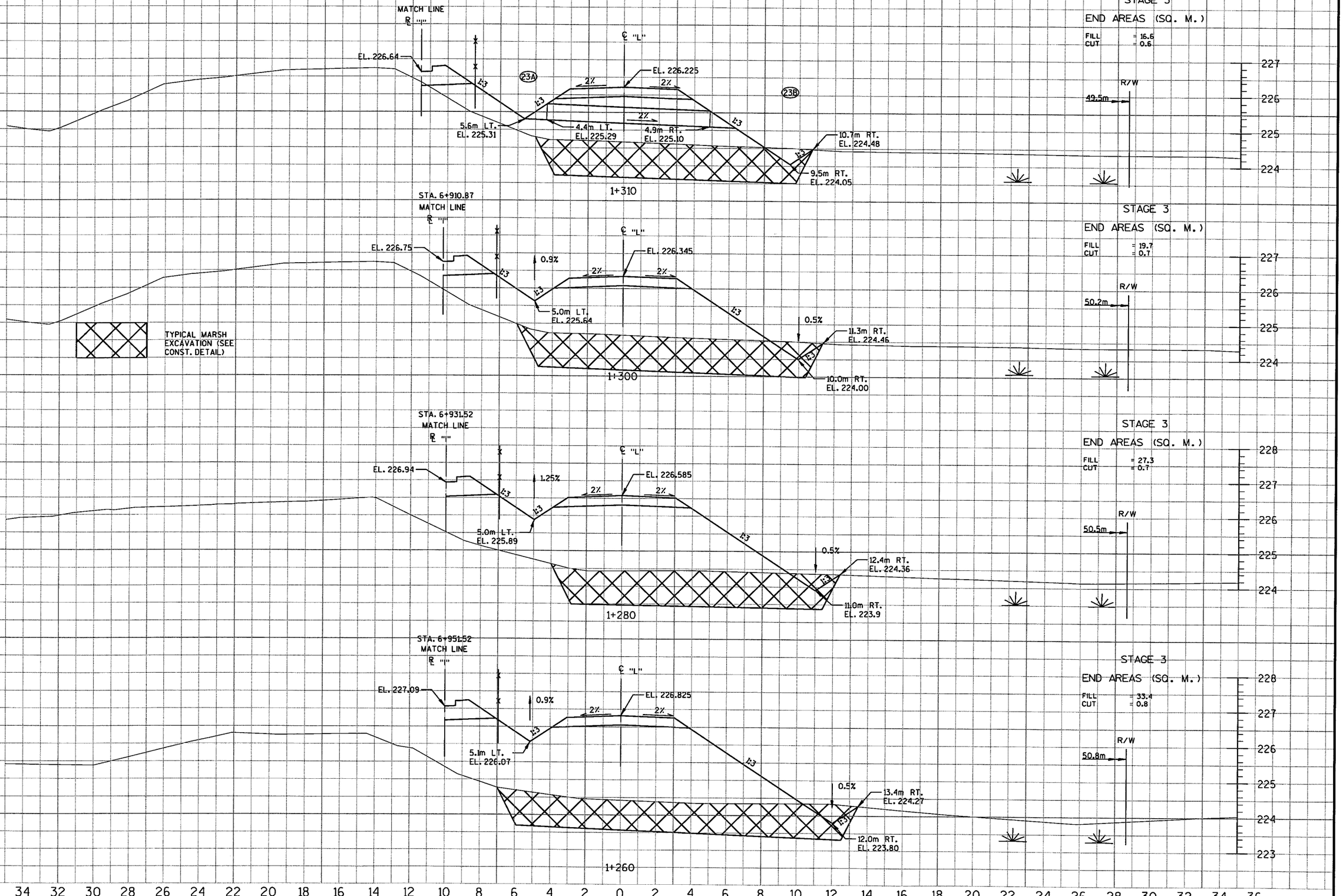
STA. 7+011.52
MATCH LINE
℄ "L"

EL. 227.14
0.75%
2%
2%
℄ "L"
EL. 227.40
1:3
1:3
EL. 226.50
1:3
8.6m RT.
EL. 225.50
1+200

STAGE 3
END AREAS (SQ. M.)
FILL = 12.4
CUT = 0.0
R/W
51.8m
228
227
226
225
224
223

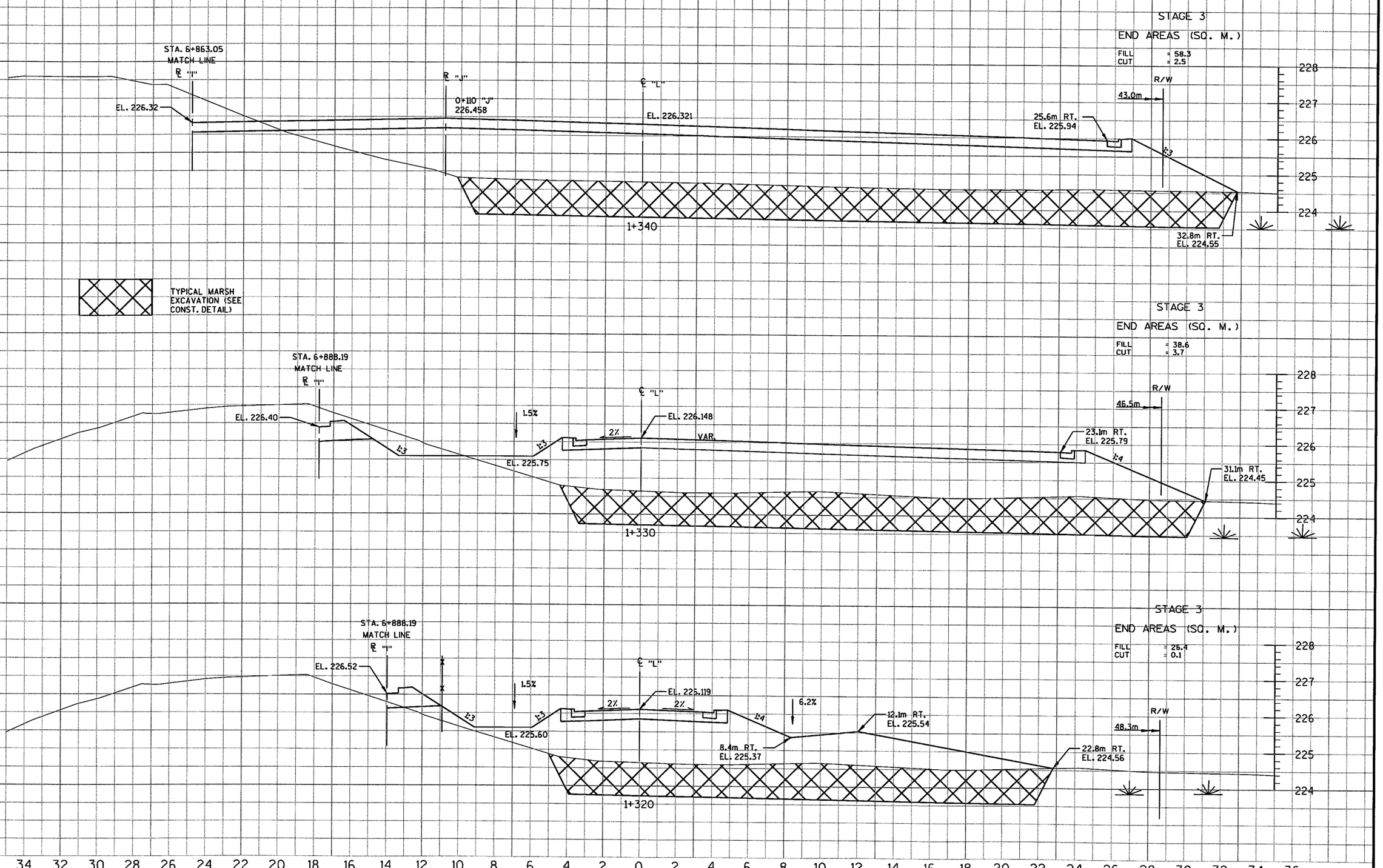
36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 558	M



STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 559	M

FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(6)
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01



FILE NAME: PROJECTS/2940/PLANS/XSECT/L-LINESXS.DGN(7)
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,55,56,57,58,59,60,61,62,63
12-04-01

STATE PROJECT NO: 1032-08-70	HWY: CTH ML	COUNTY: KENOSHA	CROSS SECTIONS: LINE "L" (FOSSLAND ACCESS)	SHEET NO: 560	M