SEL APR 2014

PROJECT ID 2545-03-71
WITH: N/A

COUNTY MILWAUKEE

ORDER OF SHEETS

SECTION NO.	1	TITLE
SECTION NO.	2	TYPICAL SECTIONS AND DETAILS
SECTION NO.	3	ESTIMATE OF QUANTITIES
SECTION NO.	3	MISCELLANEOUS QUANTITIES
~~SECTION NO.~~	~~4~~	~~RIGHT OF WAY PLAT~~
SECTION NO.	5	PLAN AND PROFILE
SECTION NO.	6	STANDARD DETAIL DRAWINGS
~~SECTION NO.~~	~~7~~	~~SIGN PLATES~~
~~SECTION NO.~~	~~8~~	~~STRUCTURE PLANS~~
SECTION NO.	9	COMPUTER EARTHWORK DATA
~~SECTION NO.~~	~~9~~	~~CROSS SECTIONS~~

TOTAL: 204



17

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WEST HAMPTON AVENUE

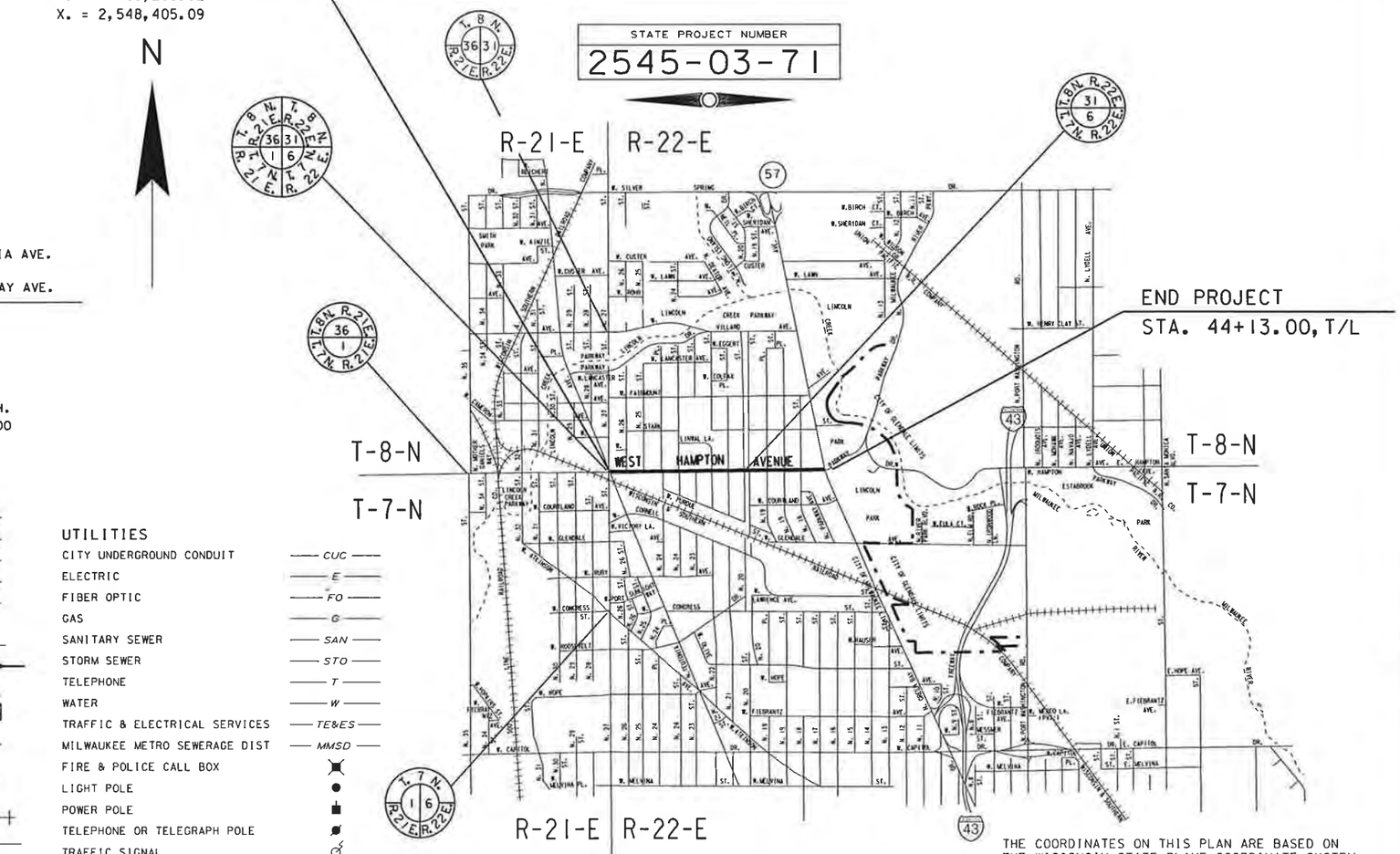
NORTH TEUTONIA AVENUE TO NORTH GREEN BAY AVENUE

LOCAL STREET
MILWAUKEE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2545-03-71	WISC 2014107	1

BEGIN PROJECT
STA. 04+16.00, T/L
Y. = 409,298.92
X. = 2,548,405.09

END PROJECT
STA. 44+13.00, T/L



DESIGN DESIGNATION	N. TEUTONIA AVE. TO N. GREEN BAY AVE.
A.D.T. (CURRENT) =	22,200
A.D.T. (=	25,500
D.H.V. =	2,400
D. =	54%
T. =	5.9%
DESIGN SPEED =	35 M.P.H.
ESALS =	2,153,500

CONVENTIONAL SYMBOLS

PLAN

COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
CORPORATE OR CITY LIMITS
PROPERTY LINE — P.L.
STANDARD BENCH MARK
EXISTING RIGHT OF WAY LINE — R/W
PROPOSED SEWER LATERAL — (SIZE)
REFERENCE LINE
CONCRETE WALK/DWY. REMOVAL
LIMITS OF CONCRETE PAVEMENT REMOVAL — X X X X X X
COMBUSTIBLE FLUIDS — CAUTION
RAILROADS
FENCE — (TYPE)
CATCH BASIN OR INLET — EXISTING — PROPOSED

PROFILE

GRADE LINE
ORIGINAL GROUND
GRADE ELEVATION — 95.36

UTILITIES

CITY UNDERGROUND CONDUIT	CUC
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	STO
TELEPHONE	T
WATER	W
TRAFFIC & ELECTRICAL SERVICES	TE&ES
MILWAUKEE METRO SEWERAGE DIST	MMSD
FIRE & POLICE CALL BOX	
LIGHT POLE	
POWER POLE	
TELEPHONE OR TELEGRAPH POLE	
TRAFFIC SIGNAL	
TRAFFIC SIGNAL CONTROL BOX	
HYDRANT	
GAS OR WATER GATE VALVE	
MANHOLES - SEWER / UTILITY (TYPE)	
TREES - EXISTING / TO BE REMOVED	

TOTAL NET LENGTH OF CENTERLINE = 0.757 MI. (URBAN)

THE COORDINATES ON THIS PLAN ARE BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM, MILWAUKEE COUNTY, NAD 27 SOUTH ZONE.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF MILWAUKEE DATUM.

TO CONVERT ELEVATIONS SHOWN ON THIS PLAN TO NATIONAL GEODEDIC VERTICAL DATUM OF 1929, ADD 580.603 TO ELEVATIONS SHOWN ON THIS PLAN.

Accepted For
City of Milwaukee

11/26/13 Ghassan Korban
(Date) Commissioner of Public Works

Original Plans Prepared By

WISCONSIN PROFESSIONAL ENGINEER
JEFFREY S. POLENSKE
E-33528
MILWAUKEE
WIS.

11/25/13
(Date) City Engineer

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor City of Milwaukee
Designer City of Milwaukee
Management Consultant
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 12/2/2013
(Signature)

E

FILE NAME=W: SPR\HAMPTON GB TEUT\TITLE.DGN

PLOT DATE:

GENERAL NOTES

1. ALL OPENINGS BELOW SUBGRADE, RESULTING FROM REMOVALS OR ABANDONMENTS, SHALL BE BACKFILLED WITH BASE AGGREGATE DENSE 1-1/4 INCH.

2. ALL DISTURBED AREAS, NOT SURFACED, ARE TO BE COVERED WITH 4"OF TOPSOIL, SODDED AND FERTILIZED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. TOPSOILED AREAS SHALL BE SODDED AND FERTILIZED WITHIN 5 CALENDAR DAYS.

3. NO TREES OR SHRUBS SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER.

4. TRANSVERSE JOINTS IN THE CONCRETE WALK SHALL BE CONSTRUCTED AT INTERVALS EQUAL TO THE WIDTH OF THE CONCRETE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

5. ALL LONGITUDINAL AND TRANSVERSE JOINTS REQUIRING SEALING SHALL BE SEALED IN ACCORDANCE WITH THE DETAIL.

6. 'PAVEMENT TIES' AS SHOWN ON STANDARD DETAIL DRAWING 'CONCRETE GUTTER,CURB AND GUTTER AND PAVEMENT TIES' ARE REQUIRED TO TIE EXISTING CONCRETE TO NEW CONCRETE CURB AND GUTTER.

7. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

8. CONSTRUCTION PERMITS FOR CONCRETE WALK &/ OR CONCRETE DRIVEWAY WORK HAVE BEEN OBTAINED, WHICH RIGHTS SHALL BE EXTENDED TO THE CONTRACTORS.

9. INLET SCREENS ARE TO BE PLACED BETWEEN THE FRAME AND GRATE OF CATCH BASINS / INLETS TO PREVENT SOIL FROM ENTERING THE SEWERS.

10. ALL CURB AND GUTTER SHOULD HAVE A FLANGE THICKNESS OF 8-INCH.

11. CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER AND SEWRPC AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

12. ALL STATION AND OFFSET OF CURB REFERENCED IN THE PLANS ARE TO THE FACE OF THE CURB.

STANDARD ABBREVIATIONS

ASPH.	- ASPHALT
B.M.	- BENCH MARK
CTR.	- CENTER
C/L	- CENTER LINE
COMB.	- COMBINED
CONC.	- CONCRETE
C.W.	- CONCRETE WALK
COR.	- CORNER
CUC	- CITY UNDERGROUND CONDUIT
C	- CURB
ELEV.	- ELEVATION
ENT.	- ENTRANCE
EXIST.	- EXISTING
F	- FLANGE
G	- GUTTER, OR GAS
HYD.	- HYDRANT
LT.	- LEFT
MMSD	- MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
P/L.	- PROPERTY LINE
R OR RAD.	- RADIUS
RET.	- RETAINING
RT.	- RIGHT
R/W	- RIGHT OF WAY
TEL	- AMERITECH
TES	- TRAFFIC ENGINEERING, AND ELECTRICAL SERVICES
T/L	- TRANSIT LINE
WEP	- WISCONSIN ELECTRIC POWER

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
UTILITY CONTACTS
CONSTUCTION PERMITS
PROJECT OVERVIEW
TYPICAL SECTION
CONSTRUCTION DETAILS
DRAINAGE DETAILS
LANDMARK REFERENCE MONUMENTS
ALIGNMENT PLAN
PLAN DETAILS
WALK AND DRIVEWAY REMOVAL
UTILITIES & DRAINAGE
TREE REMOVAL AND PLANTING
BIO-SWALES
BIO-SWALE LANDSCAPE PLAN
SREET LIGHTING & TRAFFIC SIGNAL CONDUIT
TRAFFIC CONTROL DETAIL
PAVEMENT MARKING

2

UTILITY CONTACTS

CITY OF MILWAUKEE, UTILITY COORDINATOR

MUSA ABU-KHADER
841 N. BROADWAY, RM 710
MILWAUKEE, WI 53202
PHONE: 414-286-2432
musa.abu-khader@milwaukee.gov

WE ENERGIES - GAS

TOM MINESAL
500 S. 116TH ST.
WEST ALLIS, WI 53214
PHONE: 414-944-5755
thomas.minesal@we-energies.gov

WE ENERGIES - ELECTRIC

KEN FRANECKI
500 S. 116TH ST.
WEST ALLIS, WI 53214
PHONE: 414-944-5531

TIME WARNER CABLE

LUKAS LACROSSE
1320 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
PHONE: 414-908-4766
LUKAS.LACROSSE@TWCABLE.COM
lukas.lacrosse@twcable.gov

AT & T WISCONSIN

MARK EDER
2005 PEWAUKEE RD.
WAUKESHA, WI 53188
PHONE: 262-896-7434

AMERICAN TRANSMISSION COMPANY

PATRICIA ELLIFSON
W234 N2000 RIDGEVIEW PARKWAY COURT
WAUKESHA, WI 53188-1022
PHONE: 262-506-6773

OTHER CONTACTS

WISCONSIN DEPT. OF NATURAL RESOURCES

KRISTINA BETZOLD
2300 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212-0436
PHONE: 414-263-8517
MICHAELC.THOMPSON@WISCONSIN.GOV
kristina.betzold@wisconsin.gov

MILWAUKEE COUNTY TRANSIT SYSTEM

DAVID ZIAREK
1942 N. 17TH ST.
MILWAUKEE, WI 53205
PHONE: 414-343-1764
DZIAREK@MCTS.ORG
dziarek@mcts.org

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

DEBRA JENSEN
260 W. SEEBOTH AVE.
MILWAUKEE, WI 53204
PHONE: 414-225-2143

CITY OF MILWAUKEE

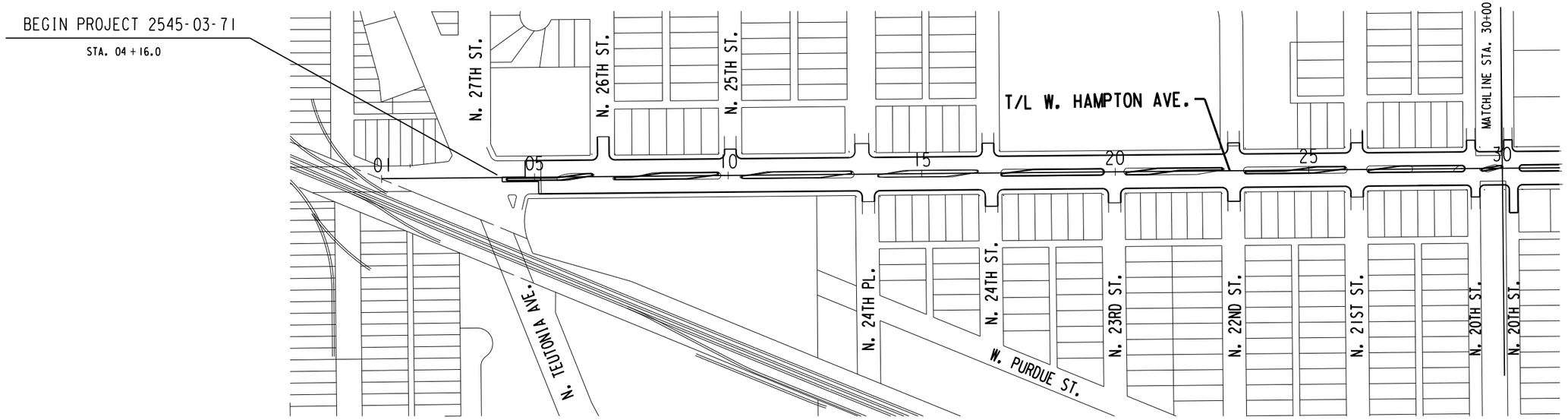
RATTAN MAHAY,P.E.
841 N. BROADWAY, RM 902
MILWAUKEE, WI 53202
PHONE: 414-286-0486
rattan.mahay@milwaukee.gov

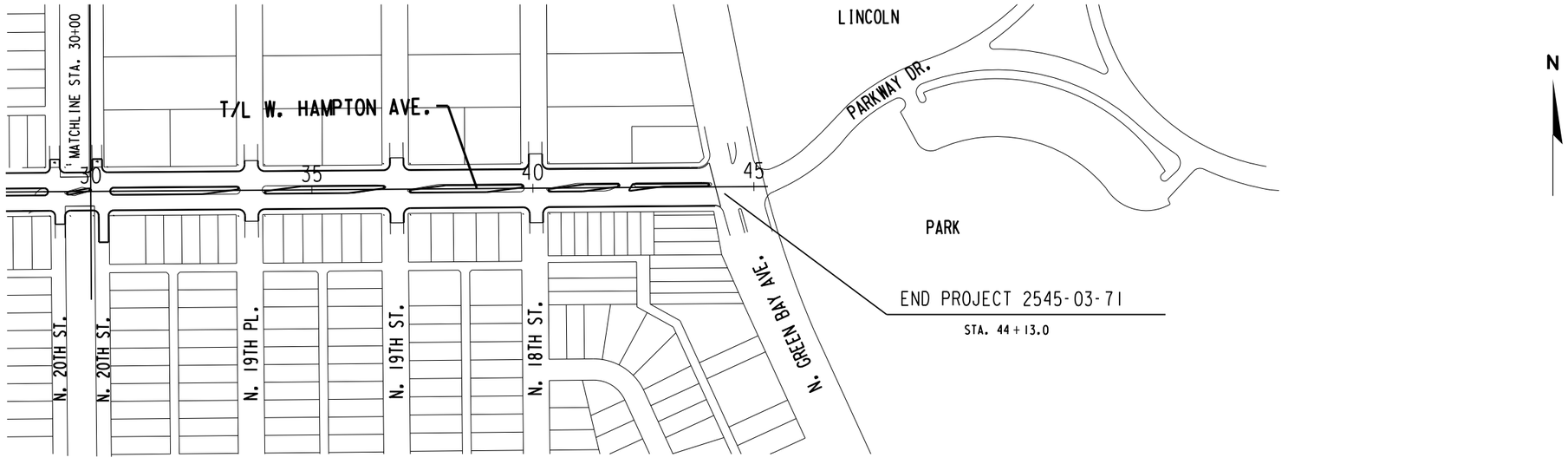
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

2

CONSTRUCTION PERMITS	
Number	Address
1	4806 N. 27th St.
2	2601 W. Hampton Ave.
3	2532 W. Hampton Ave.
4	2526 W. Hampton Ave.
5	2525 W. Hampton Ave.
7	2508 W. Hampton Ave.
8	2475 W. Hampton Ave.
9	2415 W. Hampton Ave.
10	2407 W. Hampton Ave.
15	2115 W. Hampton Ave.
16	2030 W. Hampton Ave.
18	1985 W. Hampton Ave.
19	1962 W. Hampton Ave.
20	1951 W. Hampton Ave.
21	1925 W. Hampton Ave.
23	1912 W. Hampton Ave.
24	1830 W. Hampton Ave.
25	1820 W. Hampton Ave.
26	1812 W. Hampton Ave.
27	1738 W. Hampton Ave.
28	1708 W. Hampton Ave.
29	4775 N. Green Bay Ave.

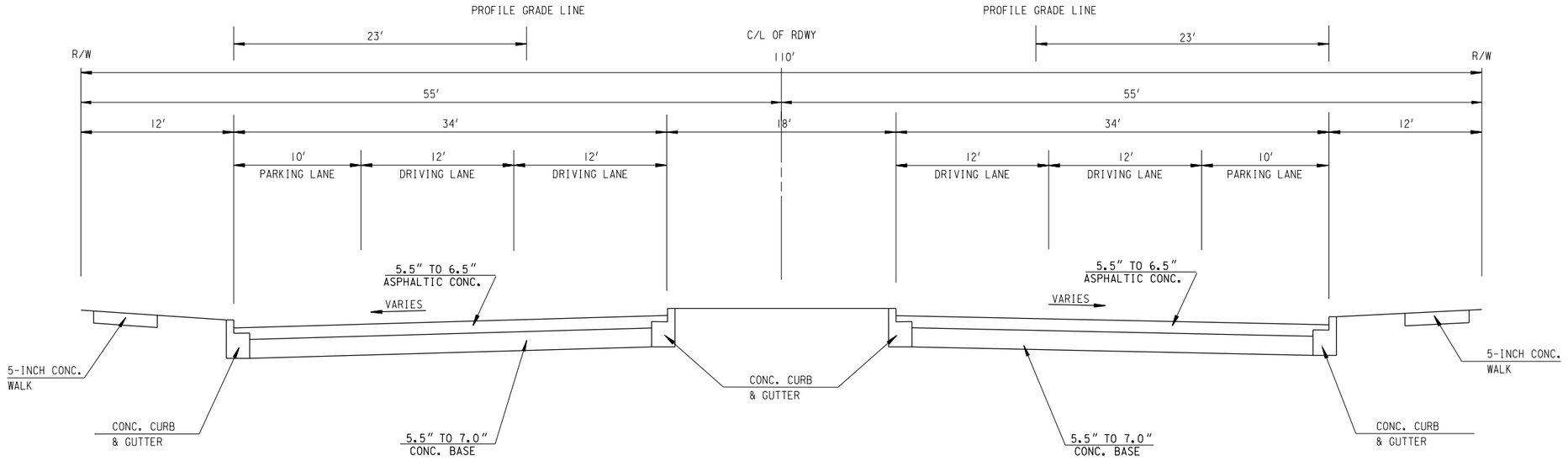
2





STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SCALE FEET 0' 300'	SHEET NO: 5	E

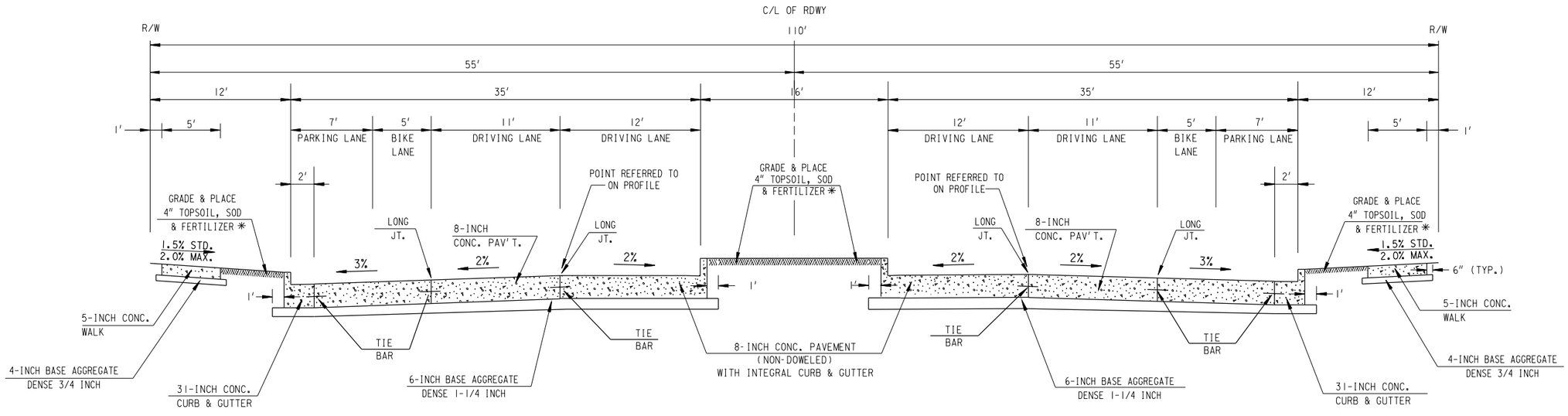
FILE NAME: W:\SPR\HAMPTON_GB_TEU \OVERVIEW.DGN



TYPICAL EXISTING SECTION

WEST HAMPTON AVENUE

STA 4 + 16.0 TO STA 44 + 13.0



TYPICAL FINISHED SECTION

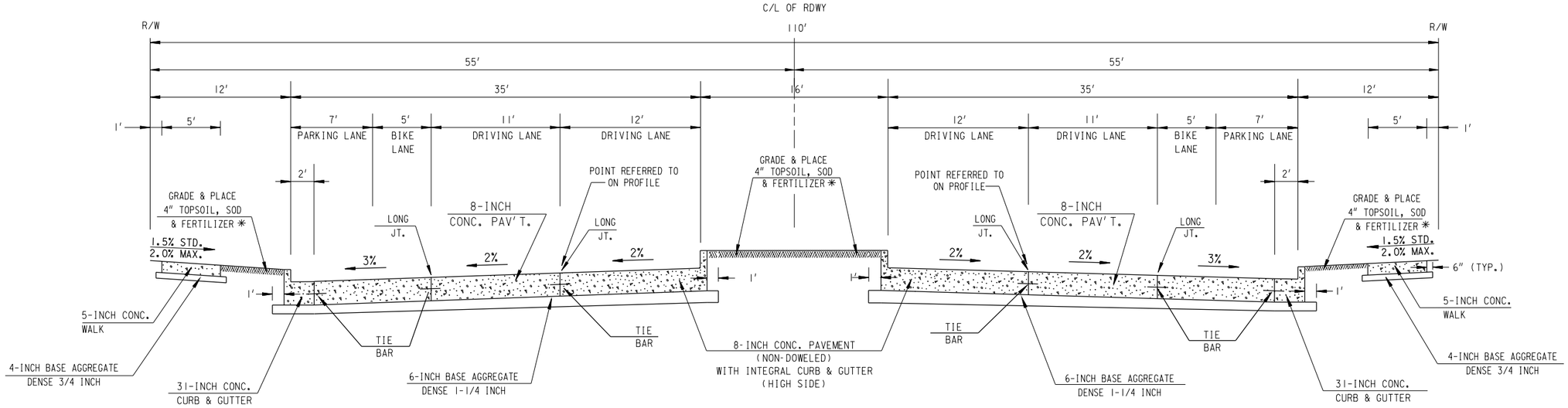
WEST HAMPTON AVENUE

STA 04 + 16.0 TO STA 18 + 75.0
STA 26 + 75.0 TO STA 29 + 00.0
STA 30 + 50.0 TO STA 44 + 13.0

✳ WHERE INDICATED ON PLAN

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TYPICAL SECTION	SCALE FEET	SHEET NO: 6	E

FILE NAME: W:\SPR\HAMPTON GB TEU \TYPSEC.DGN

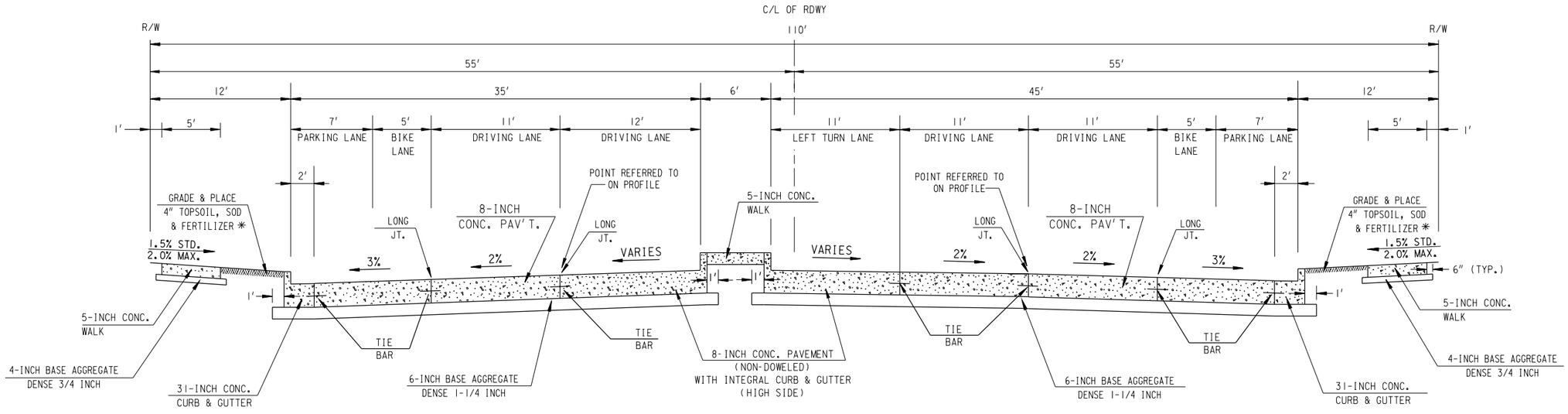


TYPICAL FINISHED SECTION

WEST HAMPTON AVENUE

STA 18+75.0 TO STA 26+75.0
STA 29+00.0 TO STA 30+50.0

* WHERE INDICATED ON PLAN



TYPICAL FINISHED SECTION

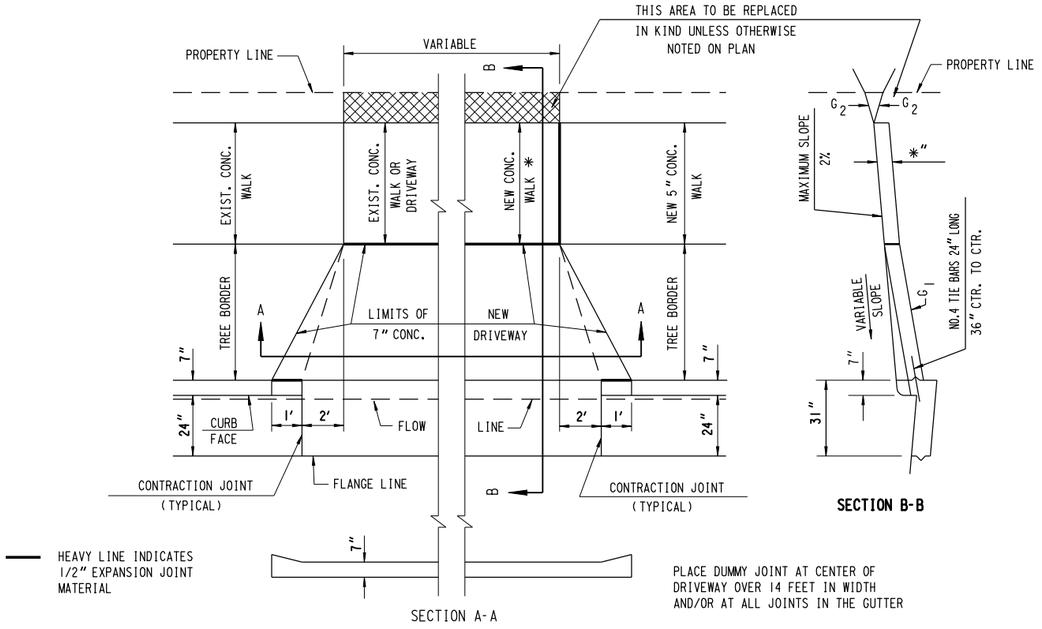
WEST HAMPTON AVENUE

LEFT TURN LANES (TYP.)

* WHERE INDICATED ON PLAN

STATE PROJECT NUMBER	HWY:	COUNTY: MILWAUKEE		SCALE FEET	SHEET NO: 7	E

FILE NAME=



— HEAVY LINE INDICATES 1/2" EXPANSION JOINT MATERIAL

PLACE DUMMY JOINT AT CENTER OF DRIVEWAY OVER 14 FEET IN WIDTH AND/OR AT ALL JOINTS IN THE GUTTER

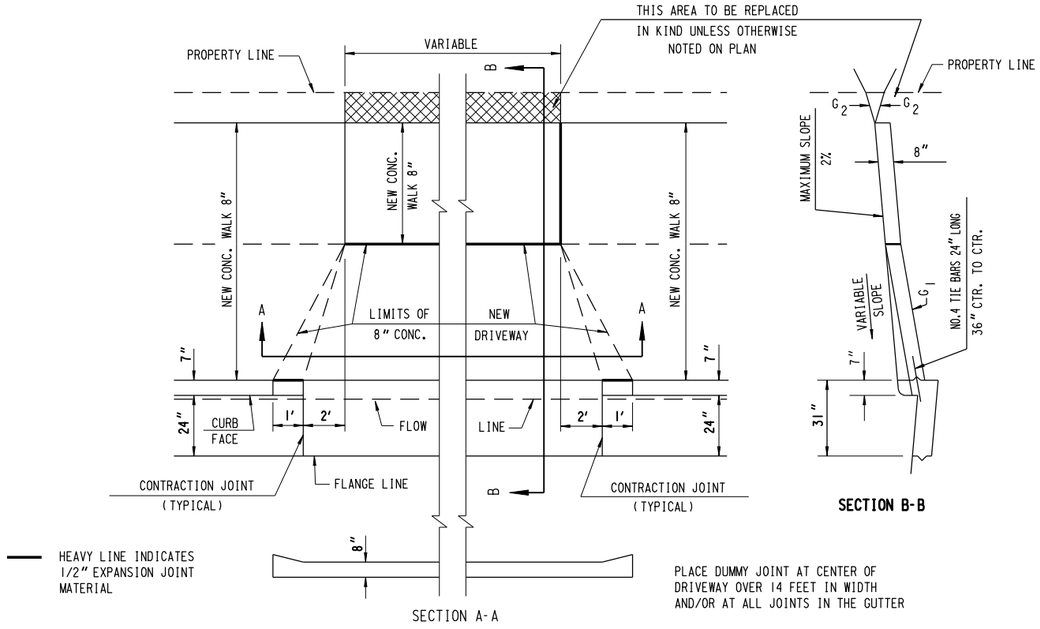
FLARED CONCRETE DRIVEWAY

(F)

MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 NOT TO EXCEED 15%
DESIRABLE MAXIMUM = 10%

MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 IN FILL = 14%

* LOCATIONS PER PLAN: USE 7" CONC. FOR BUSINESS PROPERTY AND 5" CONC. FOR RESIDENTIAL PROPERTY.



— HEAVY LINE INDICATES 1/2" EXPANSION JOINT MATERIAL

PLACE DUMMY JOINT AT CENTER OF DRIVEWAY OVER 14 FEET IN WIDTH AND/OR AT ALL JOINTS IN THE GUTTER

FLARED CONCRETE DRIVEWAY

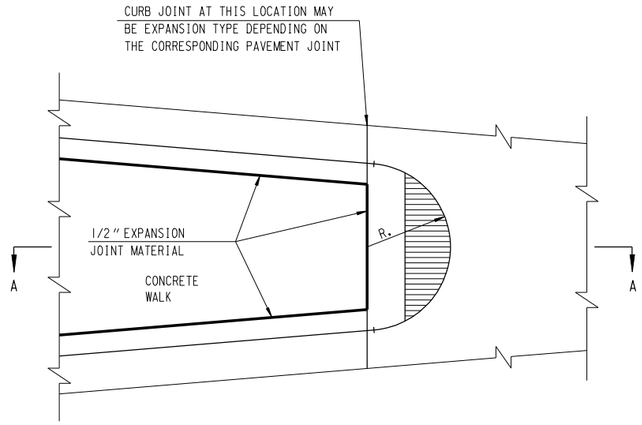
STA. 08+80 RT. TO STA. 10+21 RT.

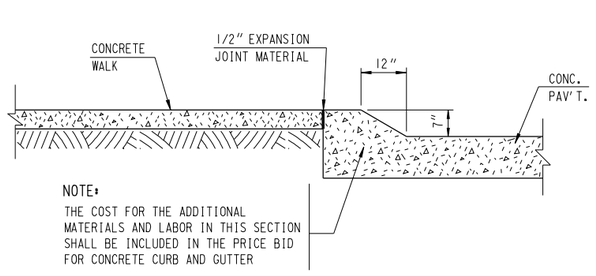
(F8) (M8)

MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 NOT TO EXCEED 15%
DESIRABLE MAXIMUM = 10%

MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 IN FILL = 14%

2



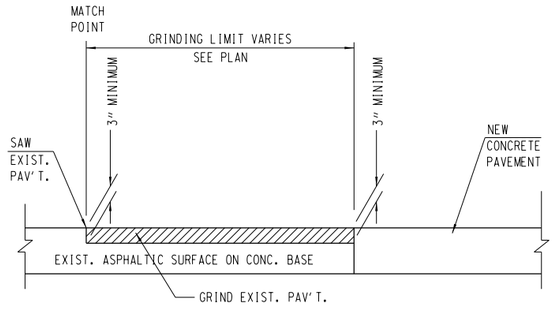


SECTION A-A

SNOWPLOWABLE MEDIAN ISLAND NOSE

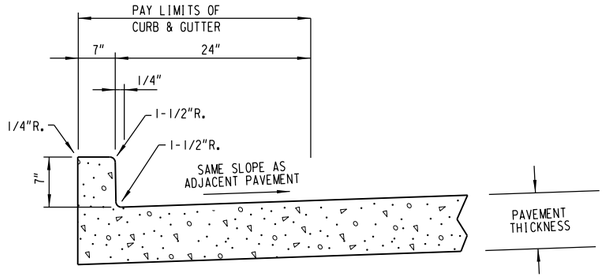
(TYPICAL SECTION OF CONCRETE CURB & GUTTER
TO BE CONSTRUCTED AT END OF MEDIAN ISLAND)

(Y)



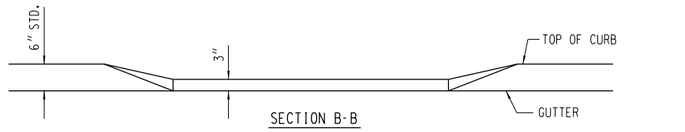
REMOVING ASPHALTIC SURFACE BUTT JOINTS

IN ROADWAY AT INTERSECTIONS AND ABUTTING PAVEMENT

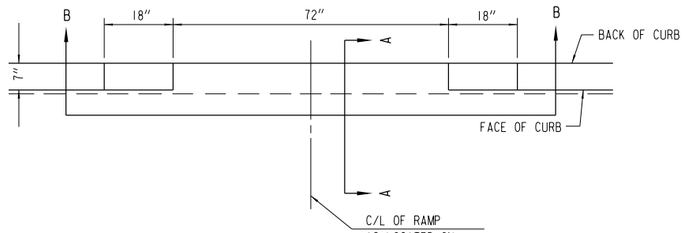


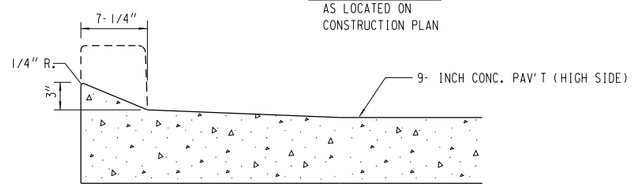
MEDIAN CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D (TYP.)

(REVISED)



SECTION B-B





SECTION A-A

MAINTENANCE RAMP

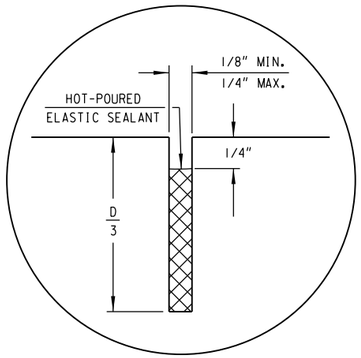
(X)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 10	E

FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN

2

TRANSVERSE NON-DOWELED, REINFORCED CONCRETE PAVEMENT JOINTS



DETAIL "A"

PAVEMENT DEPTH AND JOINT SPACING TABLE	
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6"	12'
7"	14'
8"	15'
9"	15'
10" & ABOVE	18'

GENERAL NOTES

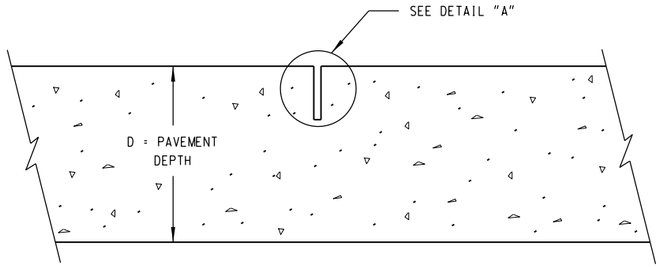
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

CONTRACTION JOINTS

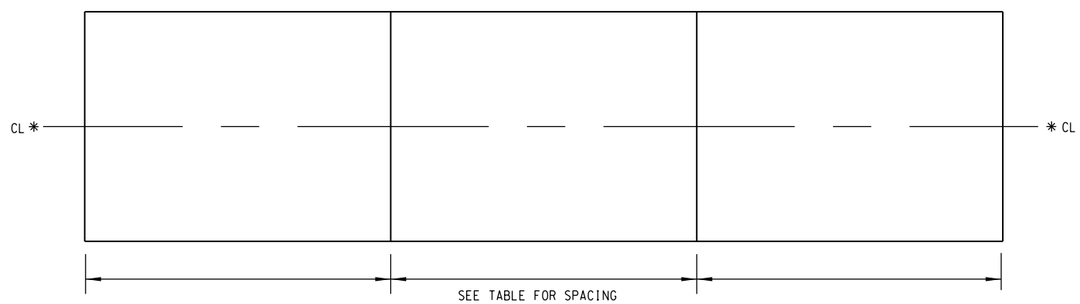
CONTRACTION JOINTS SHALL BE LOCATED AT A UNIFORM SPACING SHOWN IN TABLE.

EXCEPTIONS SHALL BE AS DIRECTED BY THE ENGINEER.

THE SAWCUT SHALL BE TO THE DEPTH OF D/3 AND THE WIDTH OF 1/8 INCH MIN. & 1/4 INCH MAX.



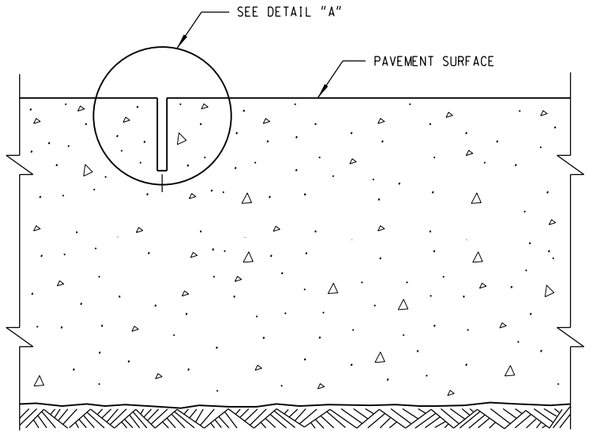
CONTRACTION JOINT



CONTRACTION JOINT LOCATIONS

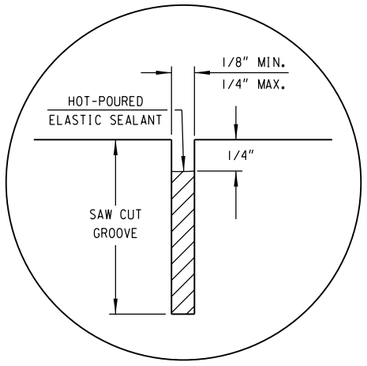
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 11	E

FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN



SAWED JOINT

NOTE: DETAIL 'A' SHOWN IN S.D.D. "CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES" HAS BEEN REVISED AND SHOWN AS 'JOINT DETAIL A'.



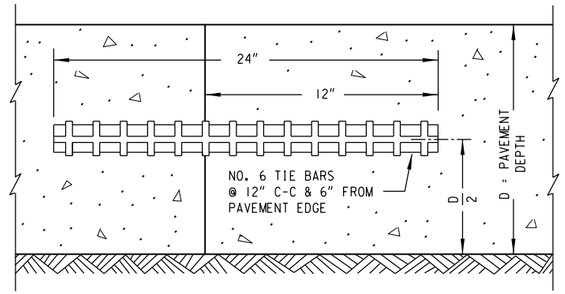
JOINT DETAIL "A"

CONSTRUCTION JOINTS

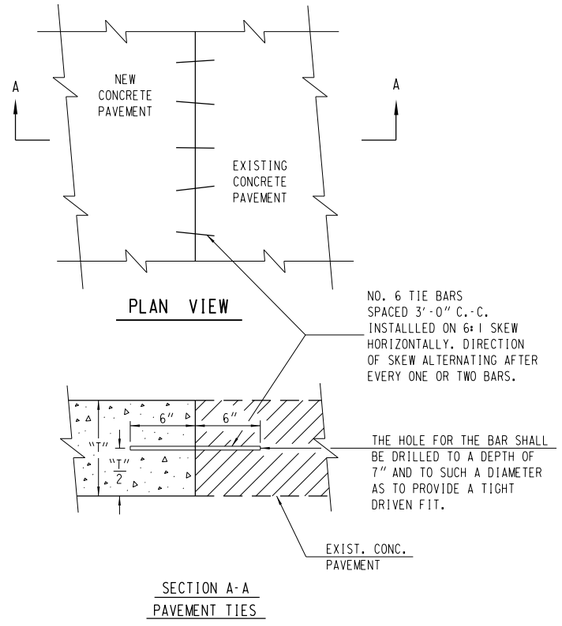
CONSTRUCTION JOINTS MAY BE LOCATED IN ANY PANEL AND BE A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT. CONSTRUCTION JOINTS MAY BE CONSTRUCTED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



CONSTRUCTION JOINT



PLAN VIEW

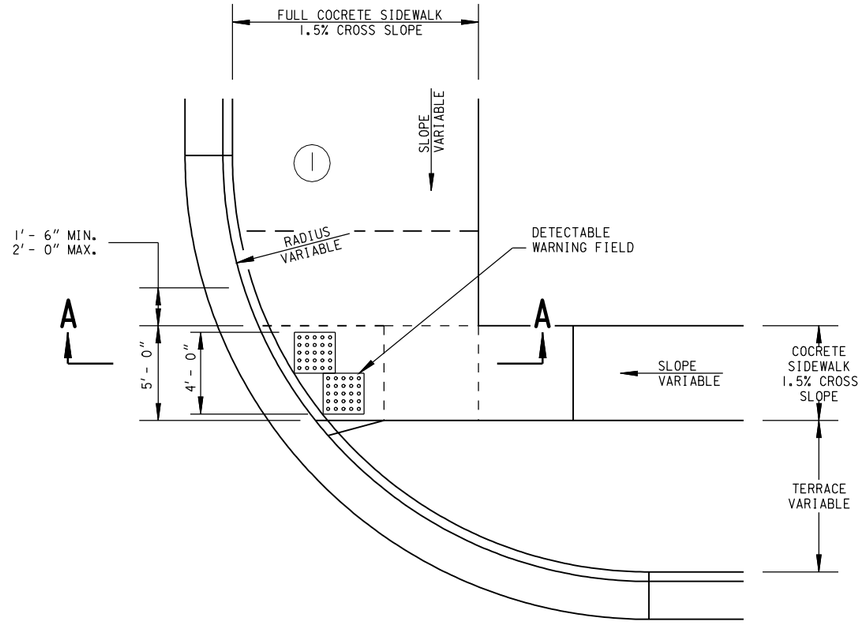
SECTION A-A
PAVEMENT TIES

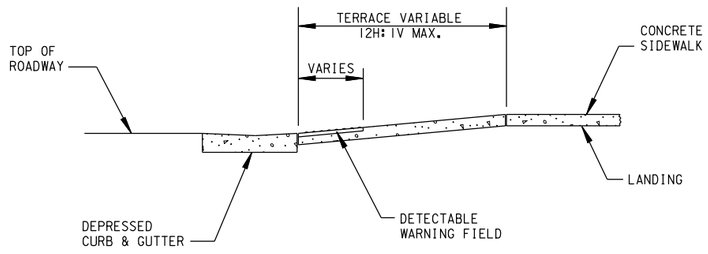
2

STATE PROJECT NUMBER 2265-09-70 2265-17-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 12	E

FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN

2





SECTION A - A

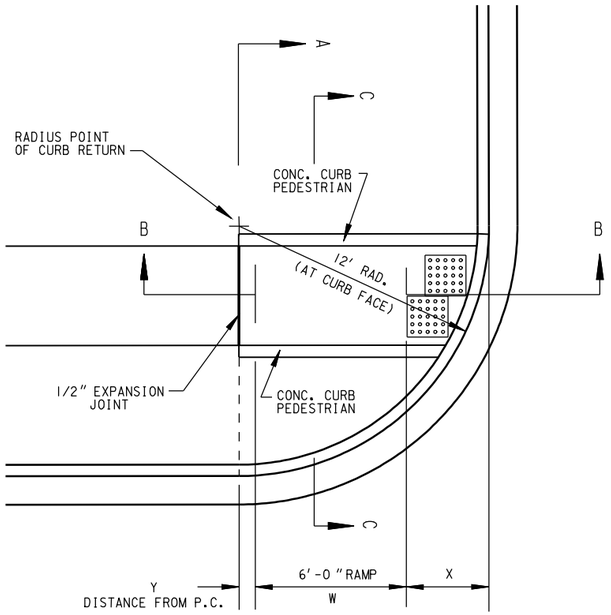
GENERAL NOTES

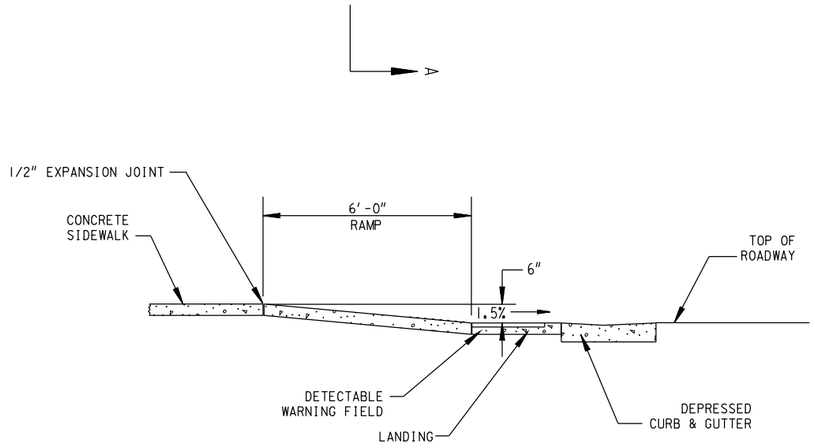
(1) WHEN TERRACE AREA IS CONCRETE, TOP OF CURB SLOPE IN FLARE SHALL NOT EXCEED 12:1

CURB RAMP TYPE 2 (MODIFIED)

PLAN VIEW (N.T.S.)

2





SECTION B - B

CURB RAMP TYPE 4B (MODIFIED)

PLAN VIEW (N.T.S.)

GENERAL NOTES

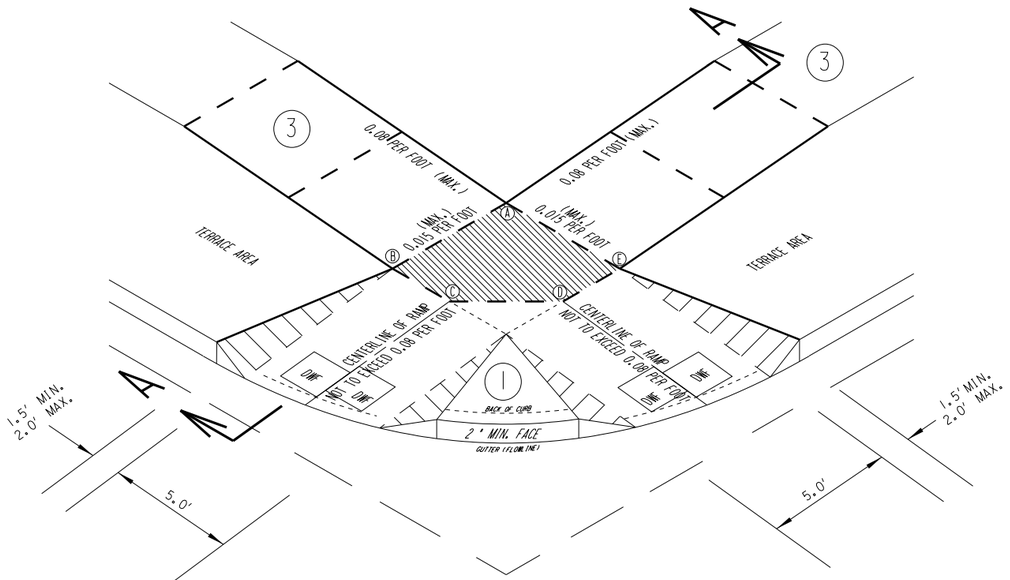
FOLLOW THE GUIDELINES OF THE S.D.D. FOR TYPE 4B RAMP WITH THE FOLLOWING REVISIONS:

RADIUS (AT CURB FACE) IS 12 FEET, W=6'-0", X= 5'-0",Y=1'-0".

BOTH DETECTABLE WARNING FIELDS LIE WITHIN THE LANDING AREA.

REFER TO SECTION B-B ON THIS DETAIL FOR CONSTRUCTION.

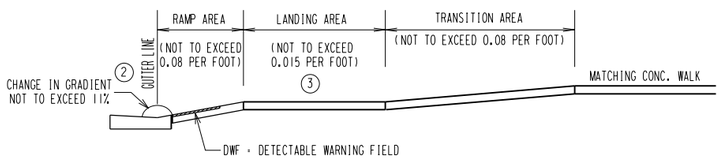
2



TYPE - 10 - RAMP

SECTION A - A

(NOT TO SCALE)



GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

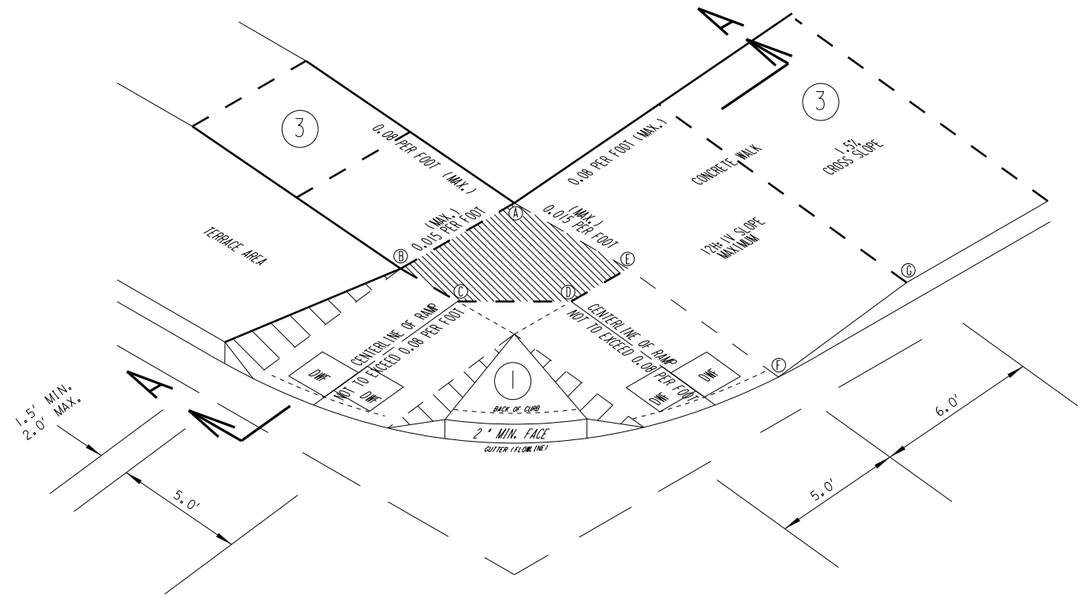
(1) WHEN THIS DISTANCE IS LESS THAN 6.0' IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE A 12H:1V: SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(2) GRADE CHANGES BETWEEN GUTTER FLANGE SLOPE AND THE CURB SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLANGE INTERFACE.

(3) +/-0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

2545-03-71 TYPE 10 RAMP GRADES

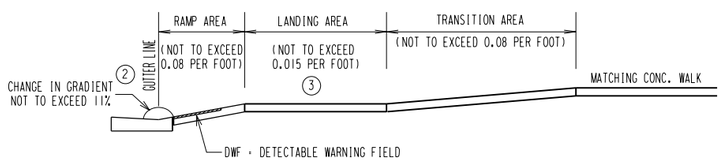
		GRADES				
LOCATION	STATION	A	B	C	D	E
NE CORNER AT N. 26TH ST.	7+05.9, 54' LT	64.54	64.45	64.41	64.42	64.46
SW CORNER AT N. 23RD ST.	19+70.0, 54' RT	61.69	61.60	61.56	61.57	61.61
SE CORNER AT N. 23RD ST.	20+25.5, 54' RT	61.59	61.51	61.47	61.46	61.50
NW CORNER AT N. 22ND ST.	22+78.3, 54' LT	58.34	58.26	58.22	58.21	58.25
NE CORNER AT N. 22ND ST.	23+34.4, 54' LT	57.84	57.75	57.71	57.72	57.76
SE CORNER AT N. 22ND ST.	23+34.3, 54' RT	58.36	58.28	58.24	58.23	58.27
NE CORNER AT N. 21ST ST.	26+52.4, 54' LT	54.82	54.73	54.69	54.70	54.74
SW CORNER AT N. 21ST ST.	25+96.0, 54' RT	55.44	55.35	55.31	55.32	55.36
SE CORNER AT N. 21ST ST.	26+52.3, 54' RT	55.54	55.46	55.42	55.41	55.45
NE CORNER AT N. 19TH PL.	33+91.3, 54' LT	50.37	50.28	50.24	50.25	50.29
NW CORNER AT N. 19TH ST.	36+64.4, 54' LT	50.03	49.95	49.91	49.90	49.94
NE CORNER AT N. 19TH ST.	37+20.2, 54' LT	50.28	50.19	50.15	50.16	50.20
SW CORNER AT N. 19TH ST.	36+64.3, 54' RT	50.87	50.78	50.74	50.75	50.79
SE CORNER AT N. 19TH ST.	37+20.1, 54' RT	50.76	50.68	50.64	50.63	50.67
NW CORNER AT N. 18H ST.	39+78.5, 54' LT	51.14	51.06	51.02	51.01	51.05
NE CORNER AT N. 18TH ST.	40+34.3, 54' LT	51.04	50.95	50.91	50.92	50.96
SW CORNER AT N. 18TH ST.	39+79.6, 54' RT	51.63	51.54	51.50	51.51	51.55
SE CORNER AT N. 18TH ST.	40+35.3, 54' RT	51.70	51.62	51.58	51.57	51.61



TYPE - 10A - RAMP

SECTION A - A

(NOT TO SCALE)



GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) WHEN THIS DISTANCE IS LESS THAN 6.0' IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE A 12H:1V: SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(2) GRADE CHANGES BETWEEN GUTTER FLANGE SLOPE AND THE CURB SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLANGE INTERFACE.

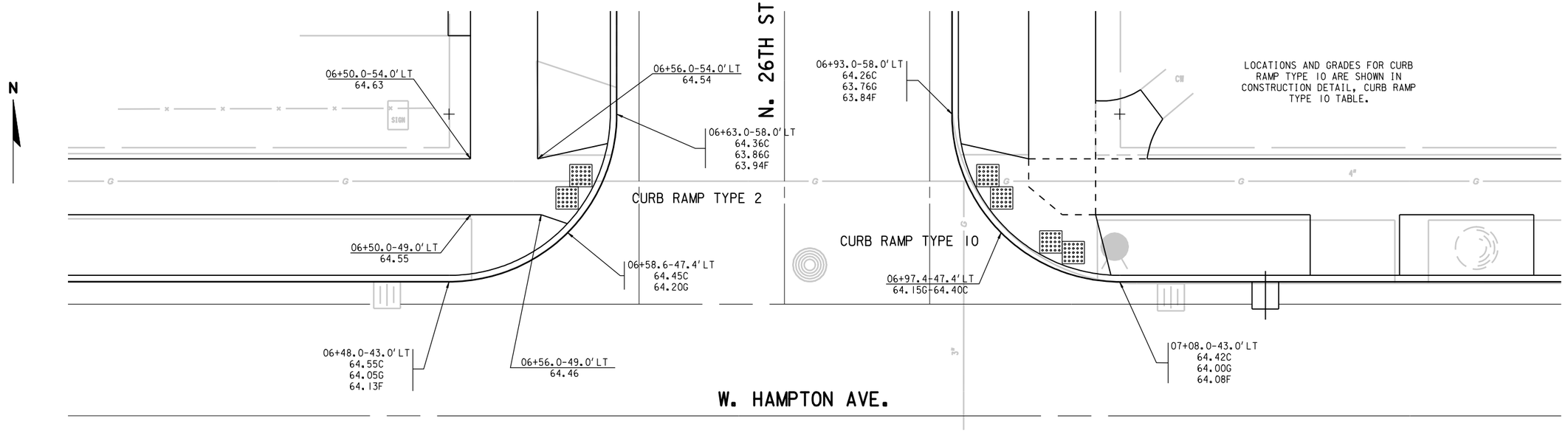
(3) +/-0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(4) Ⓕ & Ⓒ REFER TO THE TOP OF CURB GRADE ALONG THE STREET WITH A CONCRETE TERRACE AREA.

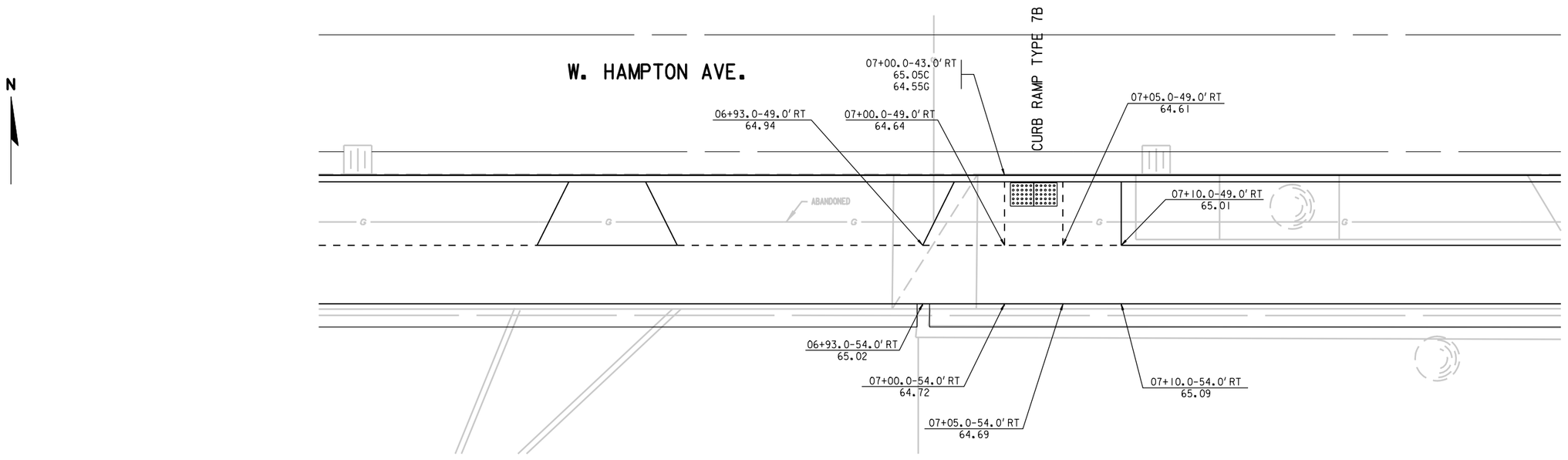
2545-03-71 TYPE 10A RAMP GRADES

		GRADES						
LOCATION	STATION	A	B	C	D	E	F (TOP OF CURB)	G (TOP OF CURB)
NE CORNER AT N. 25TH ST.	10+33.9, 54' LT	66.57	66.48	66.44	66.45	66.49	66.02	66.46
SW CORNER AT N. 22ND ST.	22+78.5, 54' RT	58.77	58.68	58.64	58.65	58.69	58.22	58.60
NW CORNER AT N. 21ST ST.	25+96.1, 54' LT	55.07	54.99	54.95	54.94	54.98	54.51	54.94
NW CORNER AT N. 19TH PL.	33+35.6, 53.4' LT	50.55	50.49	50.45	50.44	50.47	49.91	50.23
NW CORNER AT N. 19TH PL. (F&G on left side of detail)	33+35.6, 53.4' LT						50.19	50.50
SW CORNER AT N. 19TH PL.	33+35.8, 55' RT	51.13	51.03	50.97	50.97	51.01	50.54	50.93
SW CORNER AT N. 19TH PL. (F&G on left side of detail)	33+35.8, 55' RT						50.54	50.95
SE CORNER AT N. 19TH PL.	33+91.3, 54' RT	51.07	50.98	50.94	50.94	50.98	50.52	50.97

2



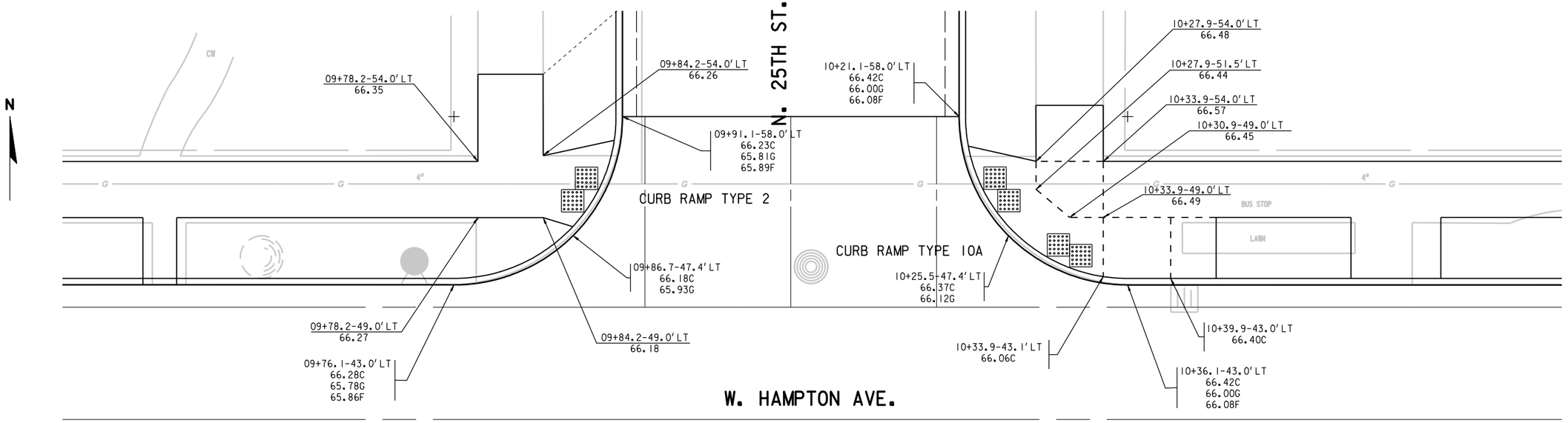
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 26TH ST. (N/S)



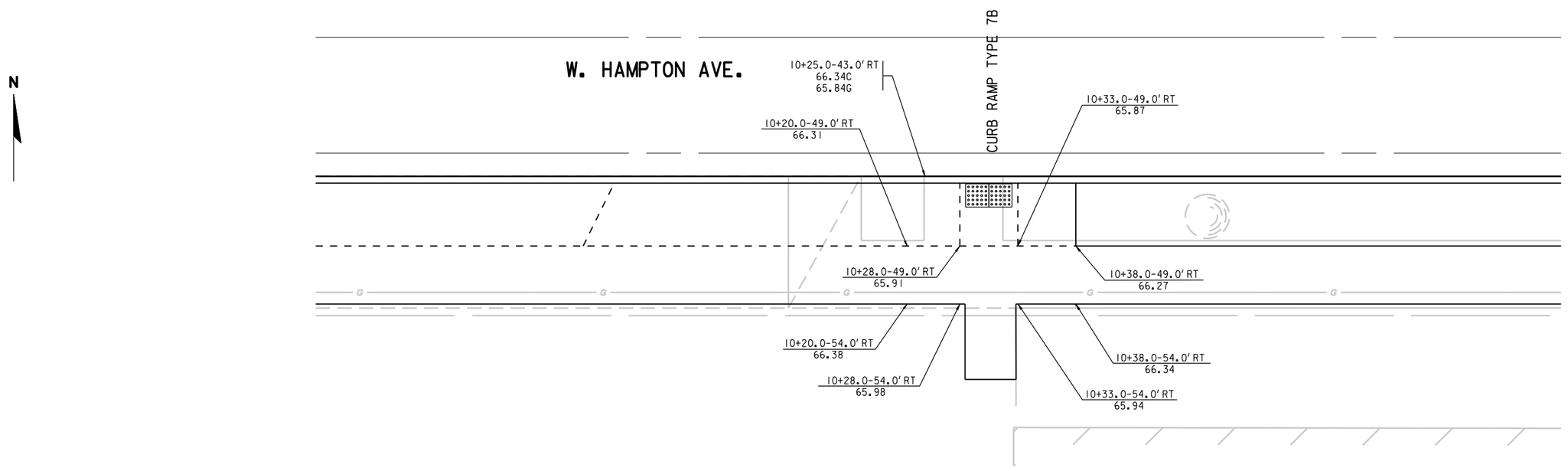
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 26TH ST. (S/S)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 17	E

FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN



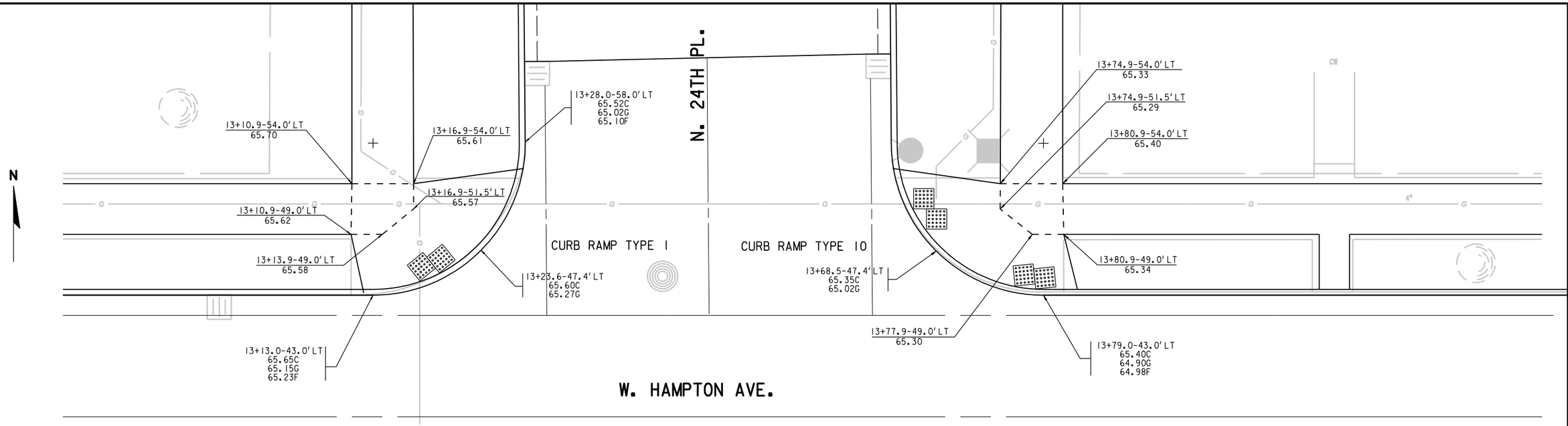
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 25TH ST. (N/S)



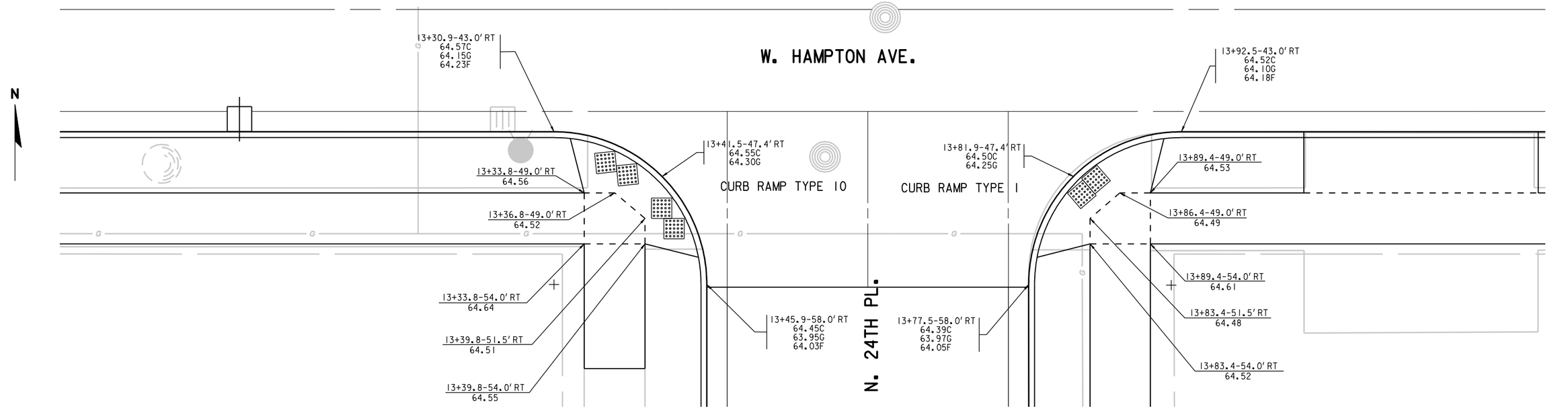
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 25TH ST. (S/S)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 40'	SHEET NO: 18	E

FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN



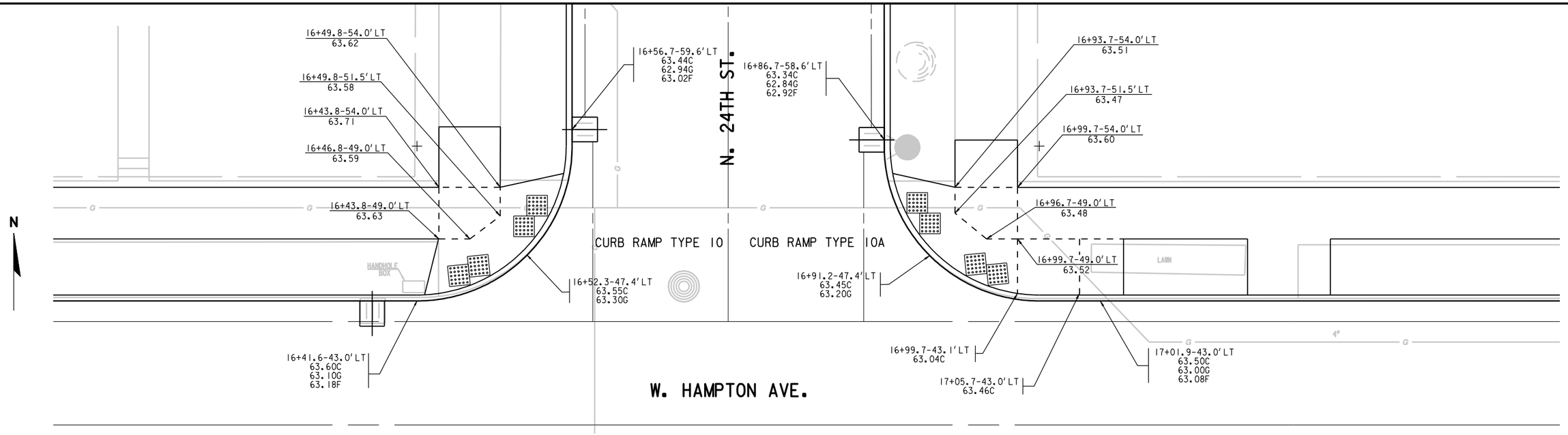
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 24TH PL. (N/S)



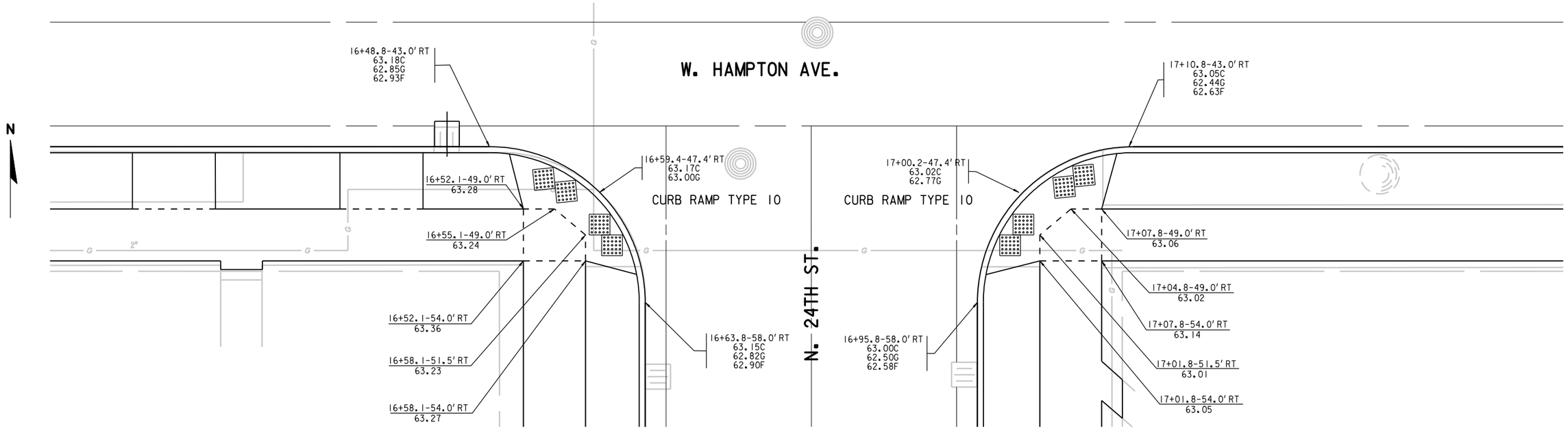
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 24TH PL. (S/S)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 10'	SHEET NO: 19	E

FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN



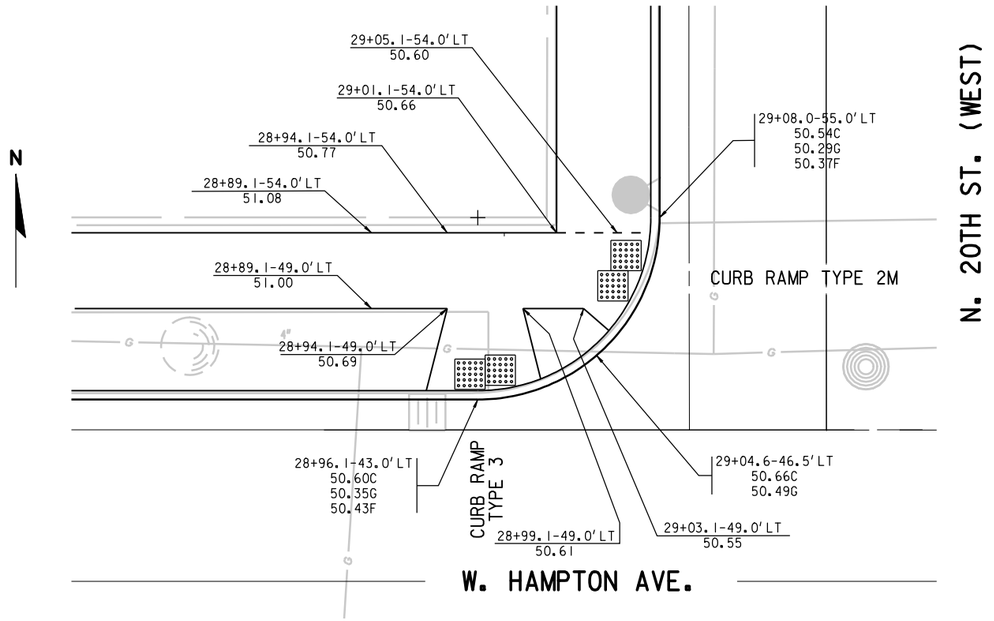
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 24TH ST. (N/S)



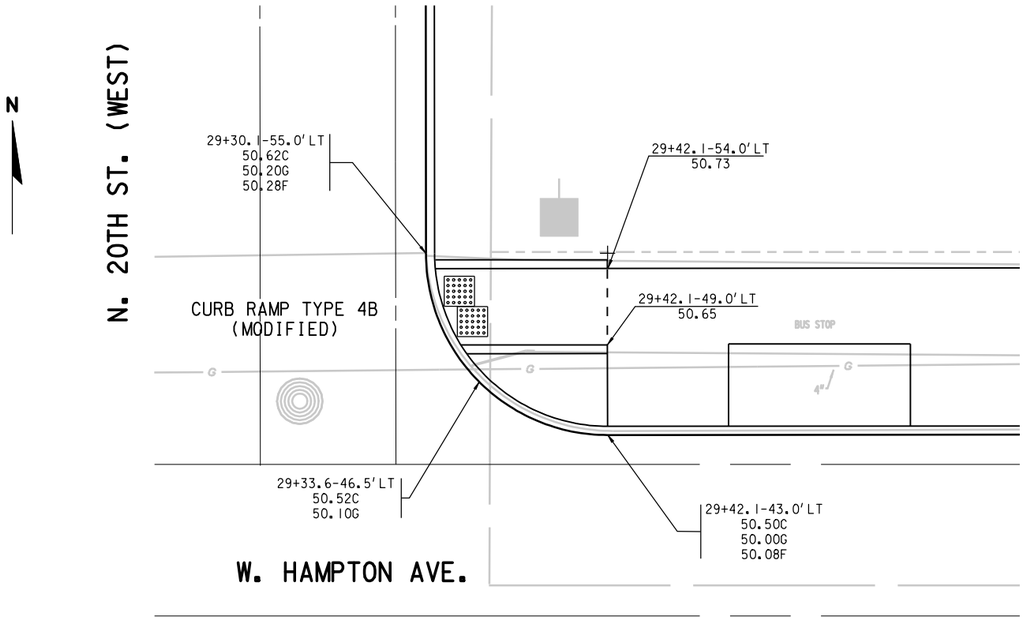
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 24TH ST. (S/S)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 40'	SHEET NO: 20	E

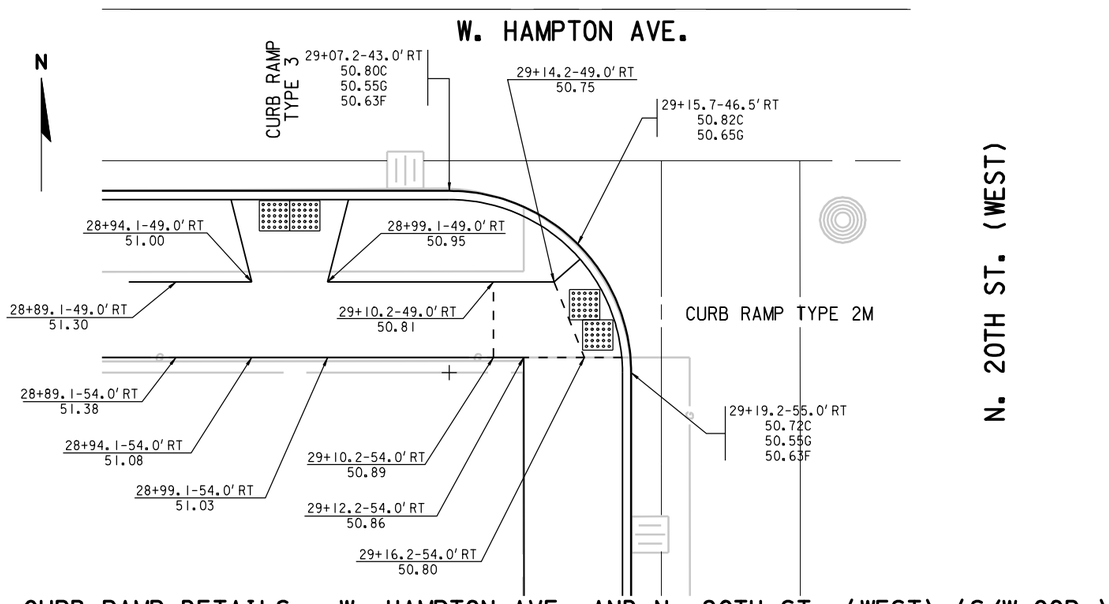
FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN



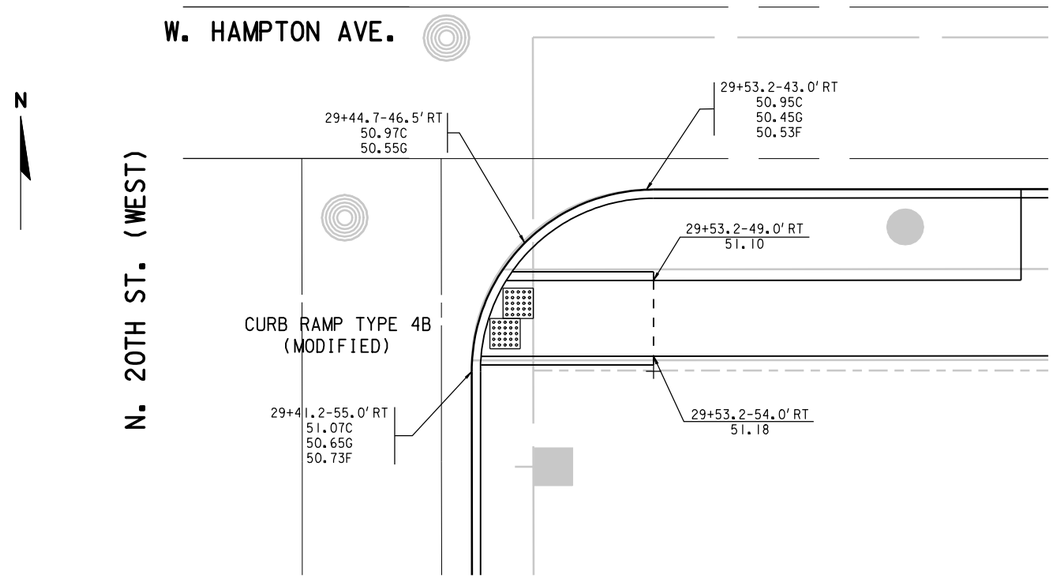
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (WEST) (N/W COR.)



CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (WEST) (N/E COR.)



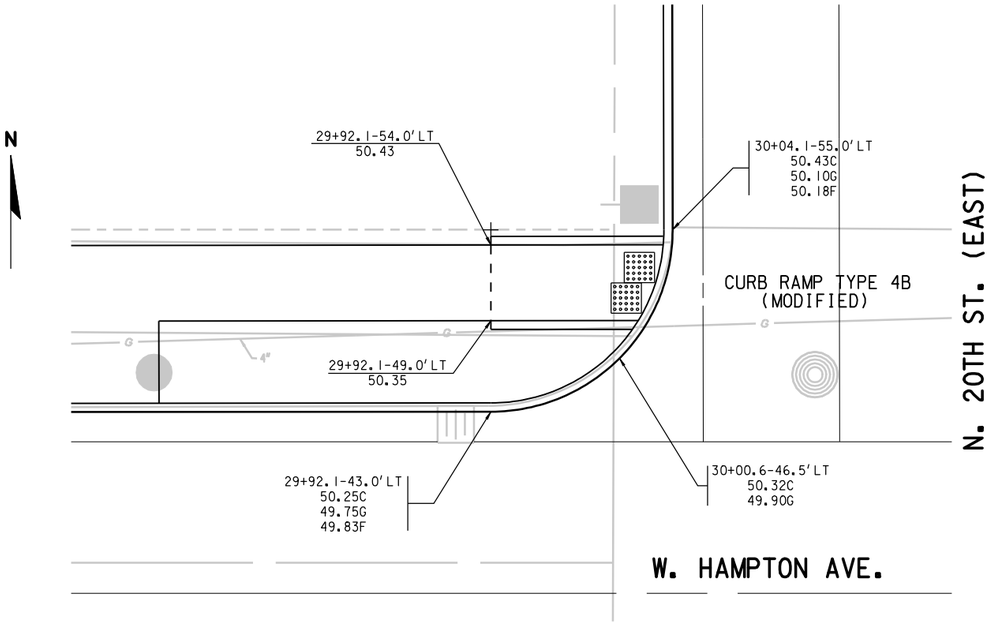
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (WEST) (S/W COR.)



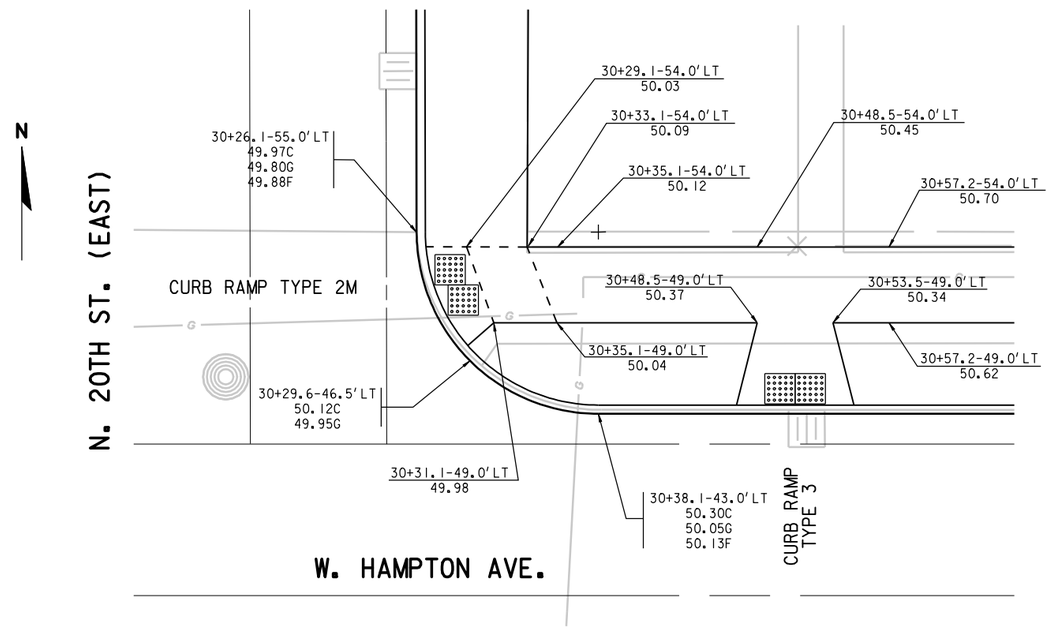
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (WEST) (S/E COR.)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 40'	SHEET NO: 21	E

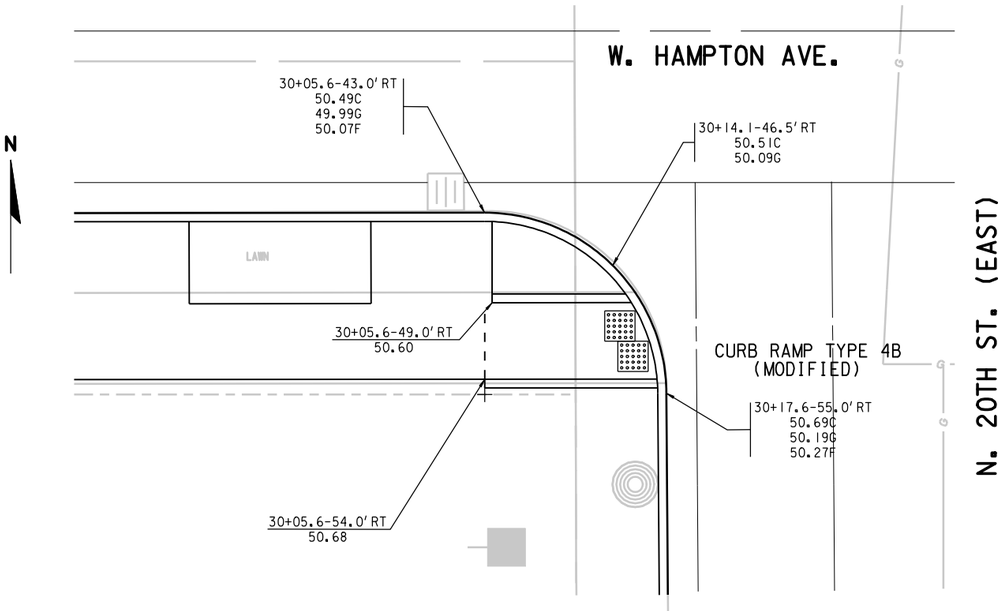
FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN



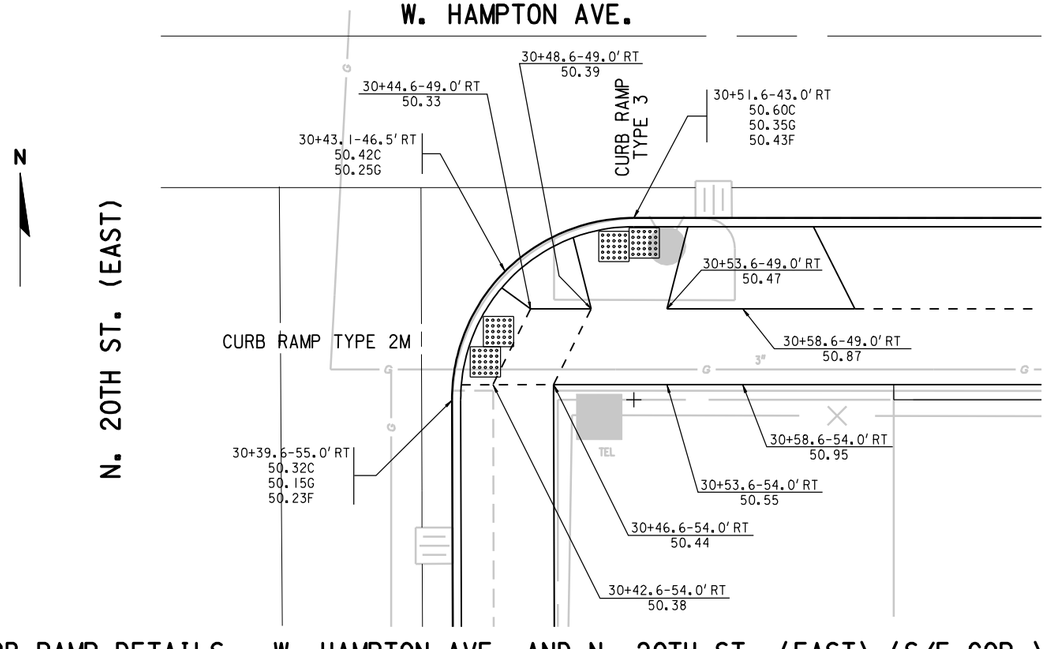
CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (EAST) (N/W COR.)



CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (EAST) (N/E COR.)



CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (EAST) (S/W COR.)

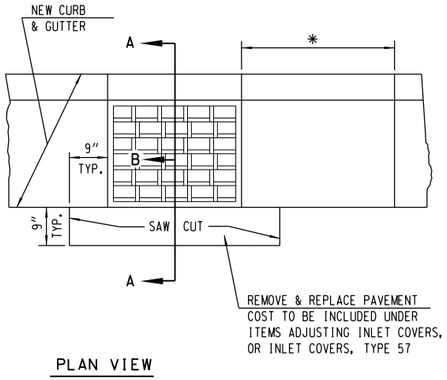


CURB RAMP DETAILS - W. HAMPTON AVE. AND N. 20TH ST. (EAST) (S/E COR.)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 4 10'	SHEET NO: 22	E

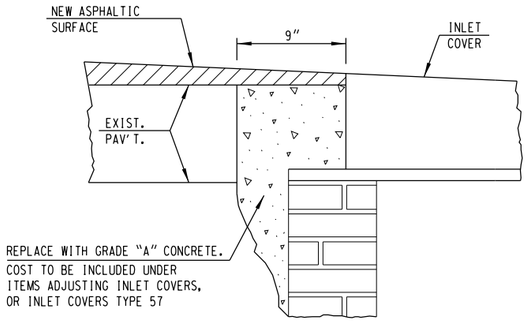
FILE NAME: W:\SPR\HAMPTON GB TEU\CONDET.DGN

* REMOVE 3'-0" CURB & GUTTER MIN. OR TO THE NEAREST JOINT, 6'-0" MAX. UNLESS OTHERWISE DIRECTED ON THE PLAN.

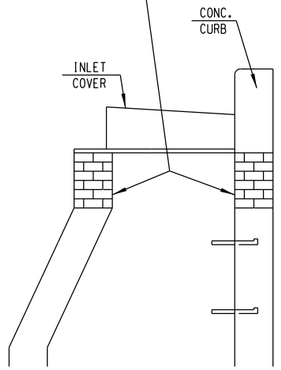


PLAN VIEW

REPAIR BY REMOVING & REPLACING DAMAGED OR LOOSE BRICK OR BLOCK TO DEPTH AS DIRECTED BY ENGINEER. WORK UNDER ADJUSTING CATCH BASIN COVERS SHALL BE CONFINED TO THE BRICK SHIMMING ABOVE THE STRUCTURE CORBEL. THIS SHIMMING SHALL NOT EXCEED I FOOT BETWEEN THE TOP OF THE CORBEL AND THE FRAME BOTTOM. ANY WORK MORE EXTENSIVE THAN DESCRIBED IMMEDIATELY ABOVE SHALL BE CONSTRUED AS WORK UNDER RECONSTRUCTING CATCH BASINS. DEPTHS OF BRICKWORK TO BE REPAIRED, AS INDICATED ON THE PLAN, ARE ESTIMATES ONLY AND MAY VARY AT TIME OF CONSTRUCTION.

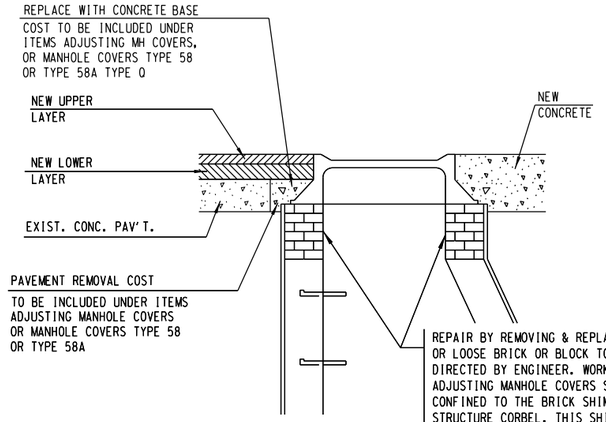


SECTION A-B

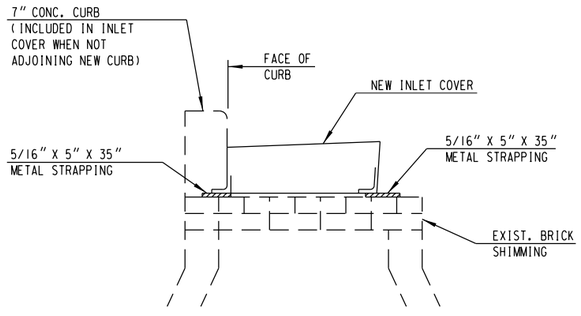


SECTION A-A

ADJUSTING INLET COVERS



ADJUSTING MANHOLE COVERS OR MANHOLE COVERS TYPE 58 OR TYPE 58A

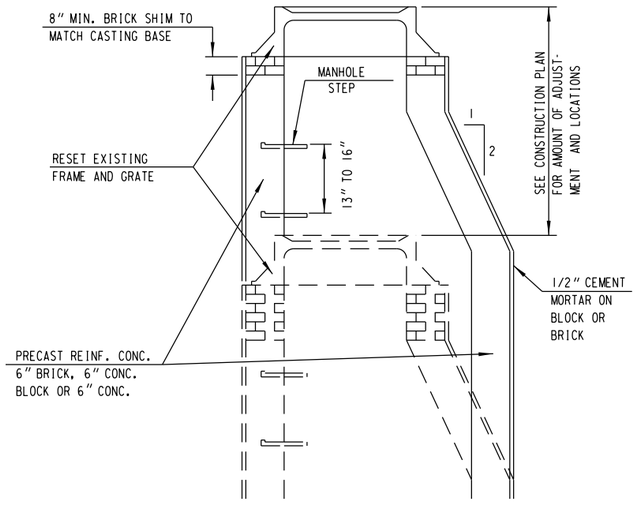


EXIST. DRAINAGE STRUCTURE

NOTES:

1. METAL STRAPPING TO BE 5/16" X 5" X 35" FLAT STEEL, HOT ROLLED (ASTM A36).
2. METAL STRAPPING TO BE PLACED ACROSS EXISTING DRAINAGE STRUCTURE TO SUPPORT NEW COVER. THE METAL STRAPPING SHALL BE SET ON A BED OF MORTAR.
3. PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURE. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.
4. COST OF MATERIALS AND LABOR TO BE INCLUDED IN PRICE BID FOR INLET COVER, TYPE 57.

DETAIL FOR PLACING NEW INLET COVER ON EXISTING INLET USING METAL STRAPPING MATERIALS



CORBEL MAY BE REVERSED STRAIGHT SIDE LEANED SLIGHTLY TO CLEAR CURB HEAD.

REPAIR BY REMOVING AND REPLACING DAMAGED OR LOOSE BRICK OR BLOCK TO THE DEPTH AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. DEPTHS AS INDICATED ON PLAN ARE ESTIMATES ONLY AND MAY VARY AT TIME OF CONSTRUCTION.

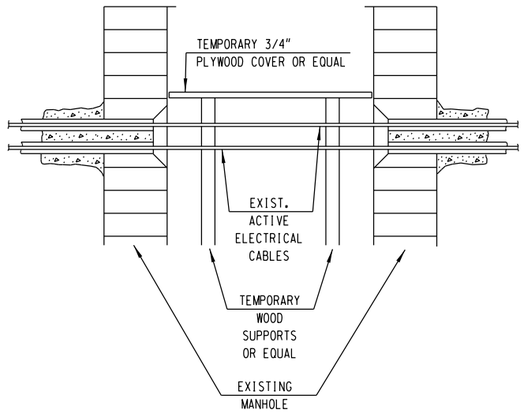
RECONSTRUCTING MANHOLES AND INLETS

CONSTRUCTION NOTES

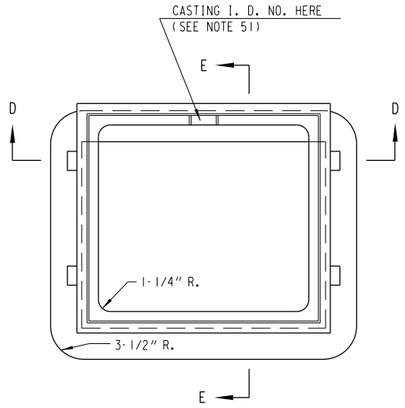
1. LOCATIONS OF STRUCTURES IN CURB & GUTTER SECTIONS REFER TO FACE OF CURB.
2. LOCATIONS OF STRUCTURES NOT IN CURB AND GUTTER SECTIONS REFER TO CENTERLINE OF STRUCTURE.
3. PIPE LENGTHS GIVEN ARE APPROXIMATE OUT TO OUT OF STRUCTURE.
4. GRATE & RIM ELEVATIONS ARE GIVEN AT FLOW LINE OF INLET COVER OR AT CENTER-LINE OF MANHOLE COVER.
5. WHEN NEW COVERS ARE PLACED, THE FIRST 12" OF ADJUSTMENT OR REPAIRING SHALL BE INCLUDED IN THE COST OF THE NEW COVER. ANY ADJUSTMENT OR REPAIR OF BRICKWORK 12" OR LESS WILL BE PAID AS ADJUSTING COVERS WHEN RESETTING EXISTING COVERS, ANY ADJUSTMENT OR REPAIR OF BRICKWORK MORE THAN 12" WILL BE PAID AS A RECONSTRUCT.
6. MANHOLE ADJUSTMENTS IN ASPHALTIC PAVEMENT WILL BE MADE AFTER THE LOWER LAYER IS PLACED.
7. WHEN CONSTRUCTING CONCRETE CURB ADJACENT TO INLET COVER TYPE 57, TWO (2) DEFORMED TIE BARS SHALL BE PLACED LONGITUDINALLY THROUGH THE CURB SECTION AND EXTENDED ONE (1) FOOT BEYOND EACH SIDE OF THE FRAME. A DUMMY JOINT SHALL BE CUT IN THE CURB AT EACH SIDE OF THE FRAME.

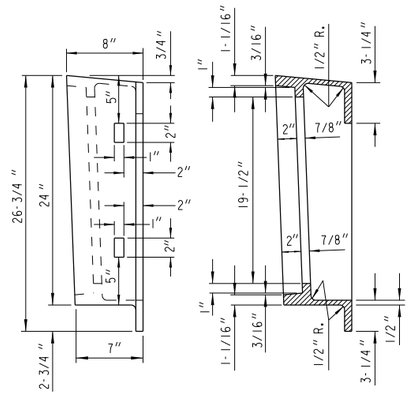
FILE NAME: W:\SPR\HAMPTON GB TEU\DRAINDET.DGN

ADJUSTING TES MANHOLE FRAMES AND LIDS

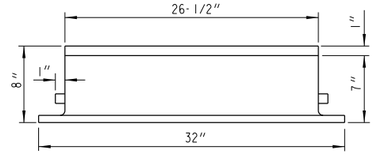


BLOCK OR BRICK ROUND MANHOLE

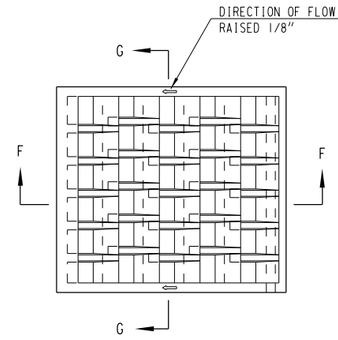


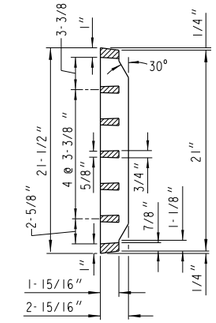


SECTION E-E

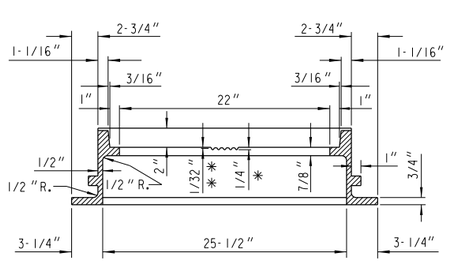


FRAME





SECTION G-G

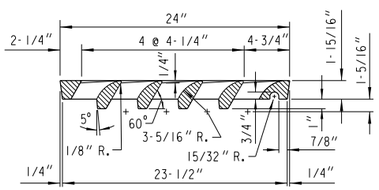


SECTION D-D

* DEPRESSION FOR LETTERS

* * CLEARANCE FROM TOP OF LETTERS TO FACE OF SEAT

GRATE



SECTION F-F

GENERAL NOTES

ALL EDGES ARE TO BE GROUND

ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8"

ON THE FRAME

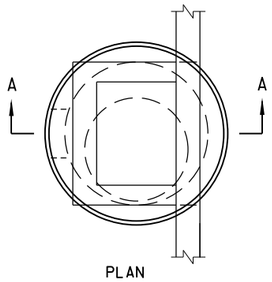
1. ON THE UPPER FACE OF THE FLANGE IN 1 INCH HIGH LETTERS THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.
2. ON THE SEAT OF THE FRAME IN 1 INCH HIGH LETTERS, THE CASTING IDENTIFICATION NUMBER (51).

ON THE GRATE

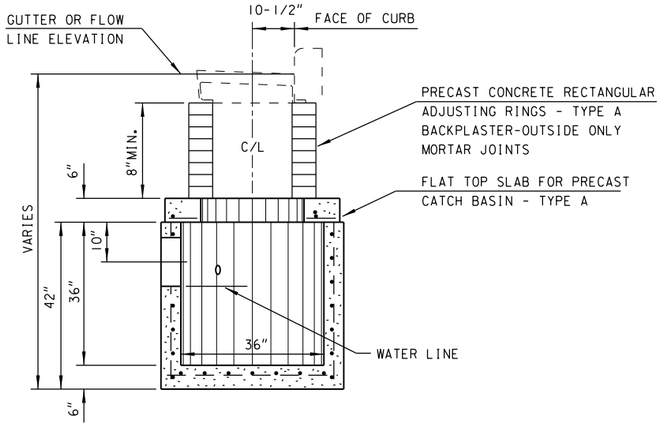
1. ON THE UPPER SIDE OF THE GRATE IN 1 INCH HIGH LETTERS, THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE, THE CASTING IDENTIFICATION NUMBER (57) AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

INLET COVER - TYPE 57

LID-145 LBS., FRAME-204 LBS.

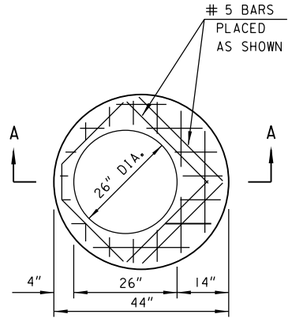


PLAN

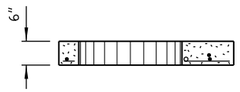


SECTION A-A

CATCH BASIN - TYPE 45A



PLAN



SECTION A-A

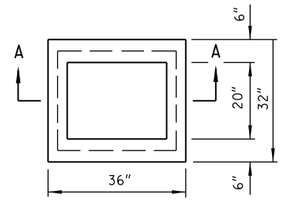
TOP SLAB - TYPE A

FLAT TOP SLAB SHALL BE 6" THICK REINFORCED WITH ONE LAYER OF STEEL WITH A MINIMUM AREA OF 0.32 SQ. IN. PER LINEAL FOOT IN BOTH DIRECTIONS, PLACED NEAR THE BOTTOM OF THE SLAB WITH 1" CLEAR COVER.

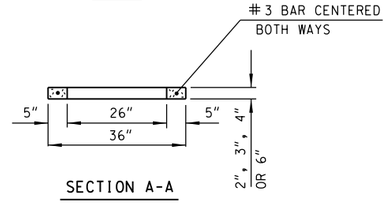
ADDITIONALLY, NO. 5 BARS SHALL BE PLACED AROUND TOP SLAB OPENING AS SHOWN.

REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.



PLAN

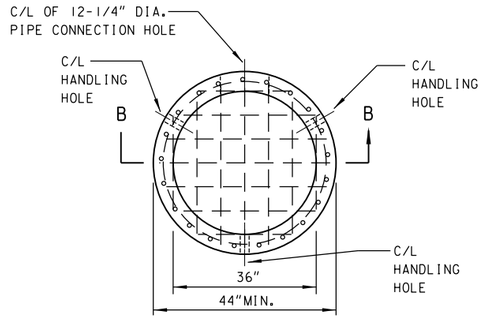


SECTION A-A

RECTANGULAR ADJUSTING RING - TYPE A

THE ADJUSTING RINGS SHALL BE 2", 3", 4" OR 6" IN HEIGHT.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 3300 P.S.I.



RISER SECTION WITH INTEGRAL BASE PLAN

CIRCUMFERENTIAL AND LONGITUDINAL REINFORCEMENT IN THE RISER SECTON SHALL EACH CONSIST OF ONE LAYER OF STEEL NOT LESS THAN 0.12 SQ. IN. PER FOOT AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.

THE BASE SLAB SHALL BE REINFORCED WITH ONE LAYER OF STEEL WITH A MINIMUM AREA OF 0.32 SQ. IN. PER FOOT IN BOTH DIRECTIONS, PLACED ABOVE THE MIDPOINT OF THE SLAB.

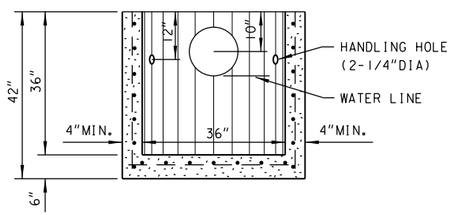
RISER SECTION AND BASE SLAB REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

TWO TO THREE HANDLING HOLES 2-1/4" IN DIAMETER AND A PIPE CONNECTION HOLE 12-1/4" IN DIAMETER SHALL BE CAST OR CORED IN THE RISER SECTION AT THE LOCATIONS SHOWN. LIFTING DEVICES MAY BE SUBSTITUTED FOR HANDLING HOLES.

NO JOINTS OR HOLES SHALL BE BELOW THE WATERLINE.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.

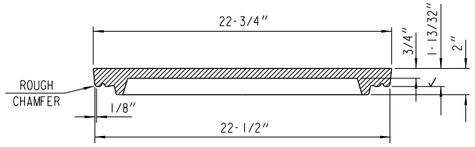
RISER SECTION MAY TAPER TO A 33" INTERNAL DIAMETER AT IT'S BOTTOM PROVIDED A 44" MINIMUM OUTSIDE DIAMETER IS MAINTAINED.



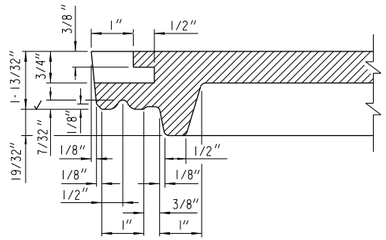
SECTION B-B

GENERAL NOTES

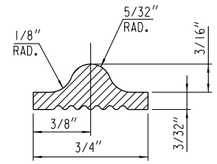
1. PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199 AND ASTM DESIGNATION C-478 AND THESE DETAILED REQUIREMENTS WHICH SHALL GOVERN WHERE THEY ALTER THE AASHTO AND ASTM STANDARDS.
2. ALL REINFORCEMENT STEEL SHALL BE GRADE 60 OR GREATER AND EMBEDDED AT LEAST 1" CLEAR.
3. PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 4 IN DEPTH WHICH MEETS REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
4. SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON PLAN.



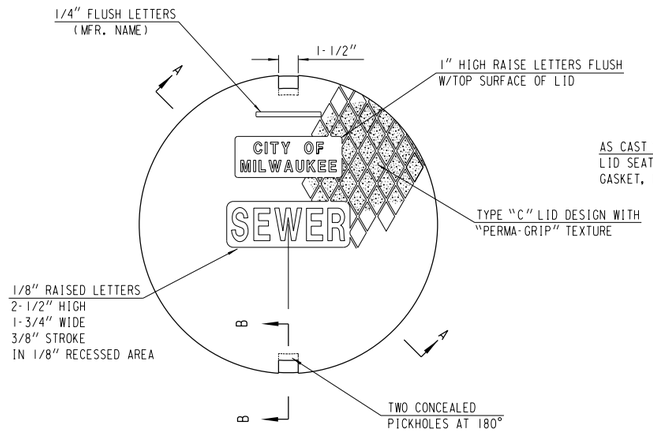
SECTION A-A



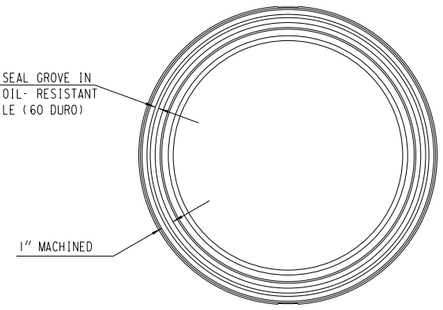
SECTION B-B



"T" GASKET DETAIL



TOP VIEW



BOTTOM VIEW

MANHOLE COVER - TYPE 58-A

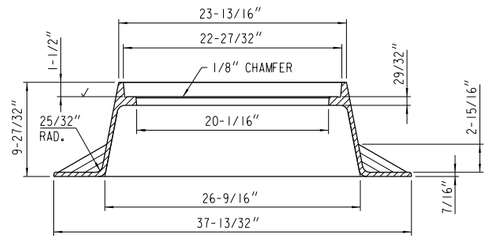
LID - 107 LBS.

NOTE:

ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8" HAVING A DIGIT OR LETTER HEIGHT OF ONE INCH ON LOWER FACE OF LID:

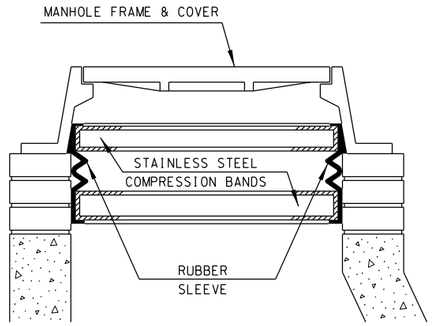
1. THE INITIALS OR MONOGRAM OF THE FOUNDRY.
2. THE CONTRACT NUMBER AND YEAR MADE.
3. THE CASTING IDENTIFICATION NUMBER.
4. THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

NOTE: ALL EXTERIOR EDGES SHALL BE GROUND.



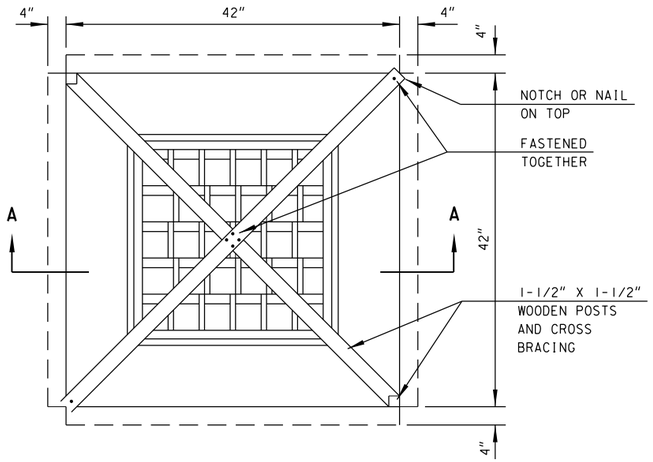
MANHOLE FRAME - TYPE MS21

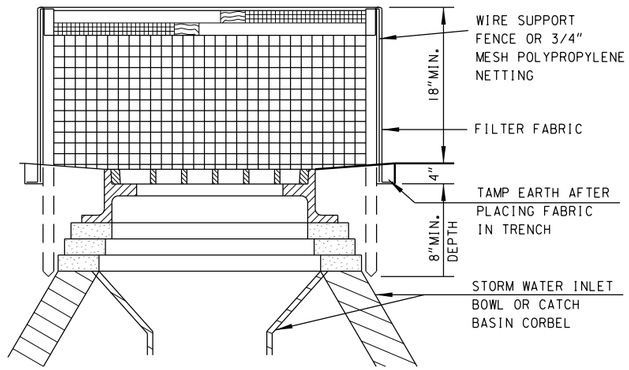
FRAME - 182 LBS.



INTERNAL SANITARY MANHOLE SEAL

2





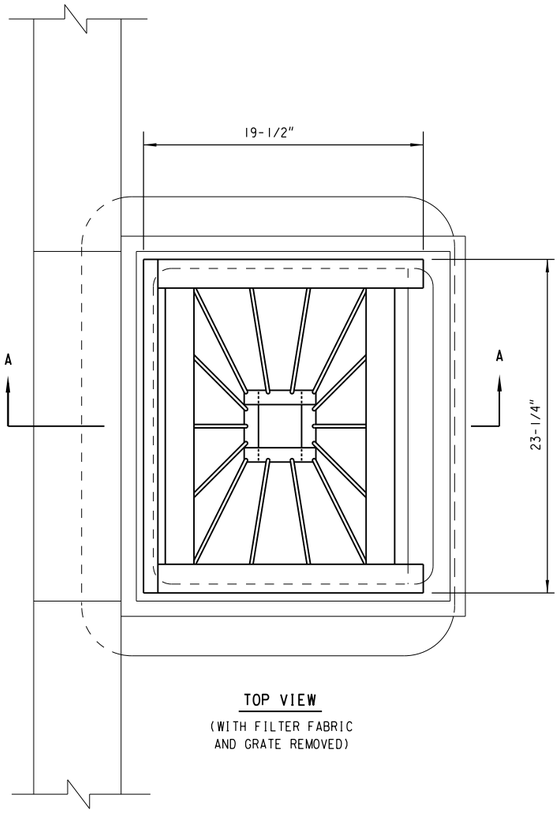
SECTION A-A

INLET SCREEN

(NOT PAVED) (TYPE R)

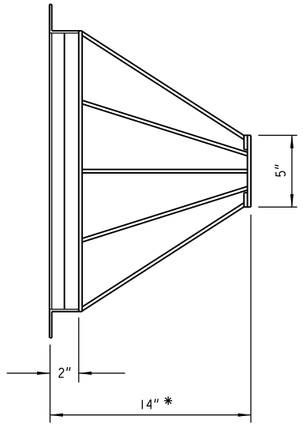
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	DRAINAGE DETAILS	SCALE FEET	SHEET NO: 27	E

FILE NAME: W:\SPR\HAMPTON GB TEU\DRAINDET.DGN



TOP VIEW

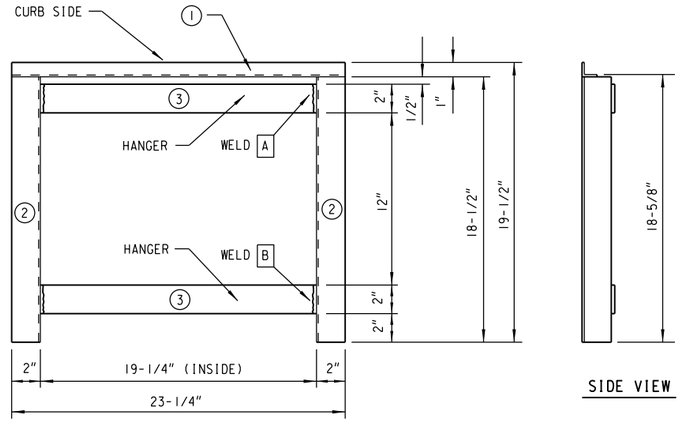
(WITH FILTER FABRIC AND GRATE REMOVED)



FRONT VIEW

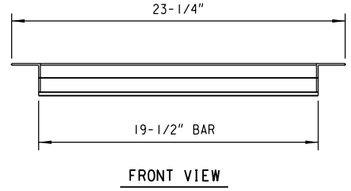
(BASKET ONLY)

* MAY BE DECREASED IF INLET IS OF INSUFFICIENT DEPTH



TOP VIEW

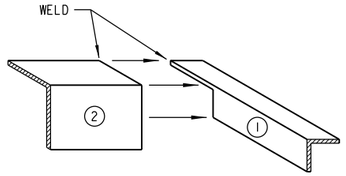
SIDE VIEW



FRONT VIEW

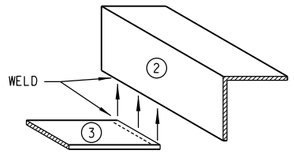
BAR SCHEDULE

NO.	SHAPE	SIZE	THICKNESS	LENGTH	QUANTITY
1	ANGLE	1" X 1"	1/8"	23-1/4"	1
2	ANGLE	2" X 2"	1/8"	18-1/2"	2
3	BAR	2"	1/4"	19-1/2"	2



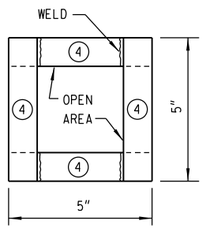
WELD CONNECTION - A

TOP FRAME



WELD CONNECTION - B

BASKET HANGER TO TOP FRAME



TOP VIEW

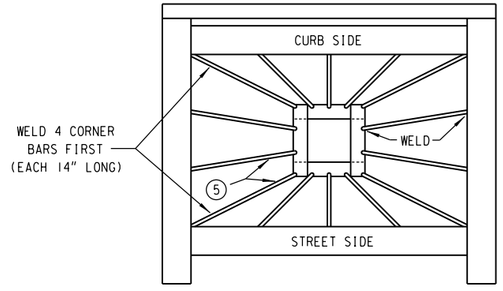


SIDE VIEW

BAR SCHEDULE

NO.	SHAPE	SIZE	THICKNESS	LENGTH	QUANTITY
4	BAR	1"	1/4"	5"	4

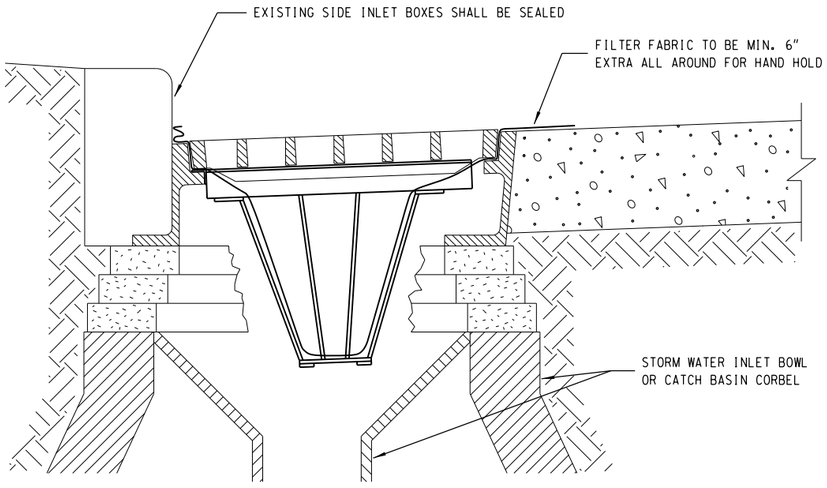
BASKET BOTTOM



ROD PLACEMENT

ROD SCHEDULE

NO.	SHAPE	SIZE	THICKNESS	LENGTH	QUANTITY
5	ROD	1/4" MIN.	1/8"	12" TO 14" (CUT TO FIT)	14



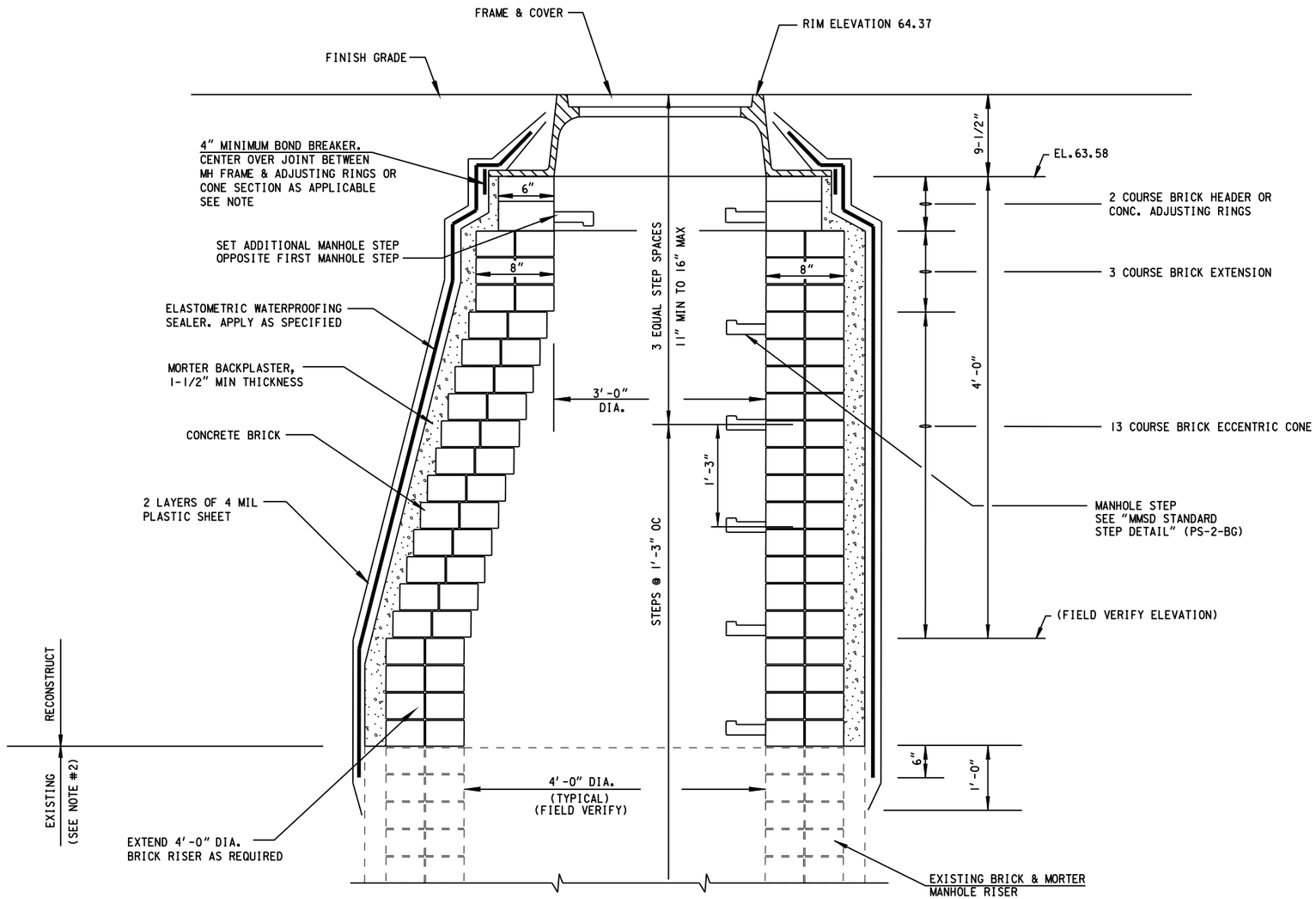
SECTION A-A

TYPE M
INLET / CATCH BASIN BASKET

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	DRAINAGE DETAILS	SCALE FEET	SHEET NO: 28	E

FILE NAME: W:\SPR\HAMPTON GB TEU\DRAINDET.DGN

2



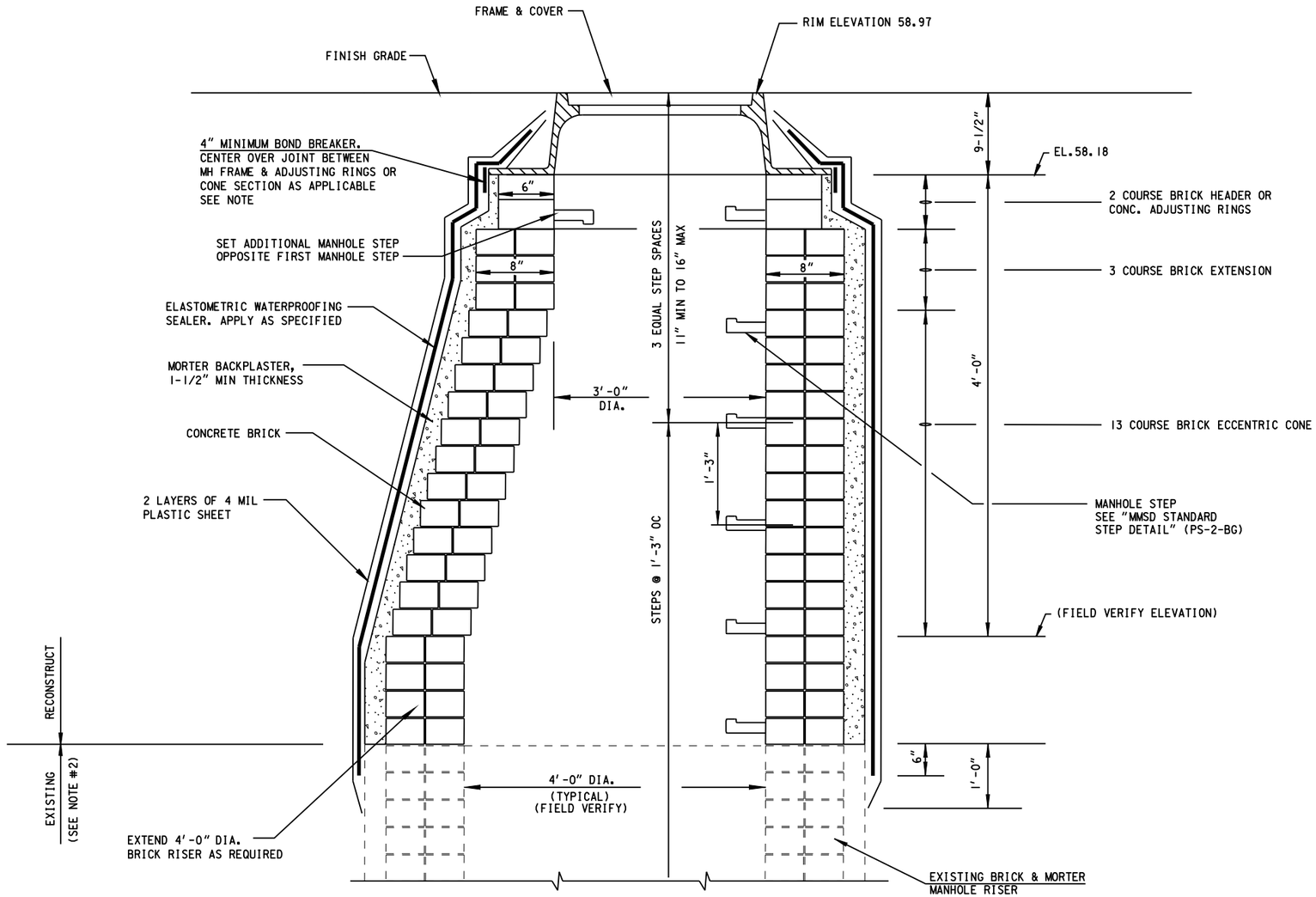
NOTE:

1. THE BOND BREAKER IS TO PREVENT SEALER FROM BONDING TO THE EDGE OF THE FLANGE OF THE MANHOLE FRAME AND THE UPPER 2" OF THE ADJUSTING RING OR CONE. APPLY ADDITIONAL BOND BREAKER AS REQUIRED TO PREVENT SUCH BONDING.
2. REMOVE EXISTING BRICK CHIMNEY AND RISER AS NECESSARY

DETAIL OF MIS MANHOLE RISER ADJUSTMENT

(700) (16+12.0 - 06.7'LT.)

2



NOTE:

1. THE BOND BREAKER IS TO PREVENT SEALER FROM BONDING TO THE EDGE OF THE FLANGE OF THE MANHOLE FRAME AND THE UPPER 2" OF THE ADJUSTING RING OR CONE. APPLY ADDITIONAL BOND BREAKER AS REQUIRED TO PREVENT SUCH BONDING.
2. REMOVE EXISTING BRICK CHIMNEY AND RISER AS NECESSARY

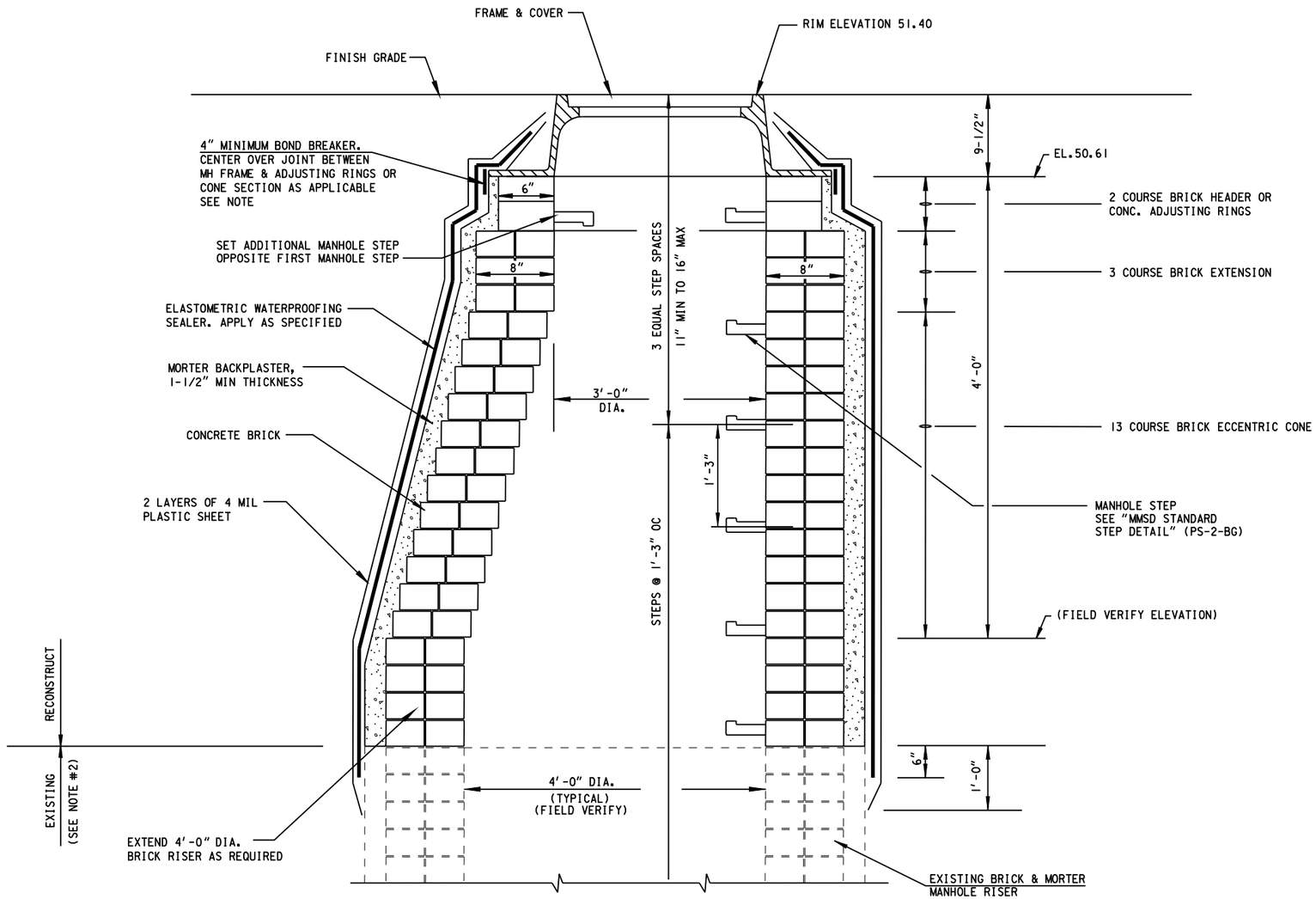
DETAIL OF MIS MANHOLE RISER ADJUSTMENT

(701) (22+47.0 - 06.6'LT.)

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	DRAINAGE DETAILS	SCALE FEET	SHEET NO: 30	E

FILE NAME: W:\SPR\HAMPTON GB TEU\DRAINDET.DGN

2



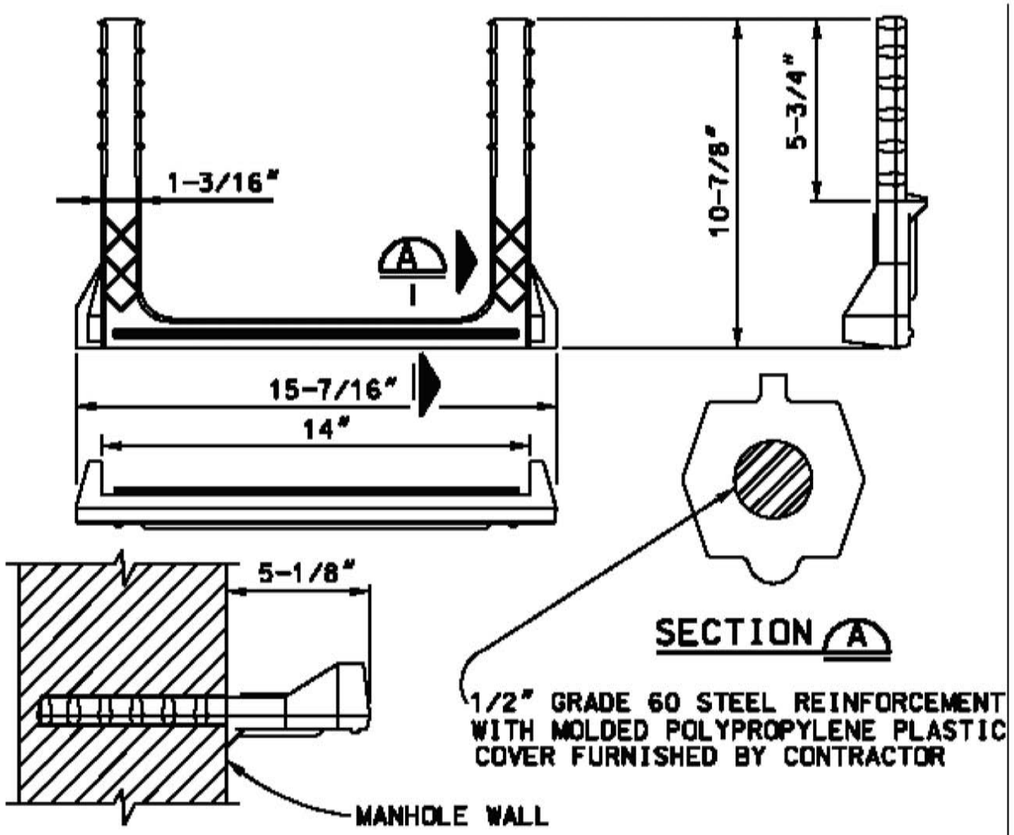
NOTE:

1. THE BOND BREAKER IS TO PREVENT SEALER FROM BONDING TO THE EDGE OF THE FLANGE OF THE MANHOLE FRAME AND THE UPPER 2" OF THE ADJUSTING RING OR CONE. APPLY ADDITIONAL BOND BREAKER AS REQUIRED TO PREVENT SUCH BONDING.
2. REMOVE EXISTING BRICK CHIMNEY AND RISER AS NECESSARY

DETAIL OF MIS MANHOLE RISER ADJUSTMENT

(702) (28+55.0 - 09.5'LT.)

2

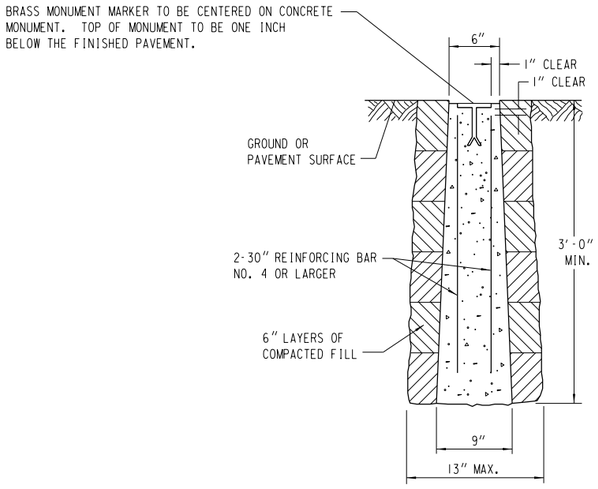


NOTES:

1. DESIGN LIVE LOADS – 800LB VERTICAL CONCENTRATED – 400LB HORIZONTAL PULLOUT.
2. FIRST MH STEP TO BE PLACED AT 1'-0" ABOVE BENCH OR INVERT, SUBSEQUENT STEPS TO BE AT 1'-3", EXCEPT AT MANHOLE CONE.

MMSD STANDARD MANHOLE STEP PS-2-BG

NTS



PRECAST

CONCRETE MONUMENT



MONUMENT MARKER LOGO

(TO BE FURNISHED BY OTHERS)

GENERAL NOTES

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

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE CITY OF MILWAUKEE, INFRASTRUCTURE SERVICES DIVISION, CONSTRUCTION SECTION.

INSTALLATION OF PRECAST MONUMENT TO BE SUPERVISED BY CITY OF MILWAUKEE, INFRASTRUCTURE SERVICES DIVISION, CONSTRUCTION SECTION FOR ACCURACY OF LOCATION.

LANDMARK REFERENCE MONUMENTS TO BE REPLACED

LOCATION	MONUMENTS	STATION	REMARKS
W. HAMPTON AVE.			
AT N. 20TH ST.	2	29+99.95 AND 30+10.95 ON T/L	SEE SPECIAL PROVISIONS FOR INFORMATION ON RESTORATION OF MONUMENTS

LANDMARK REFERENCE MONUMENT

2

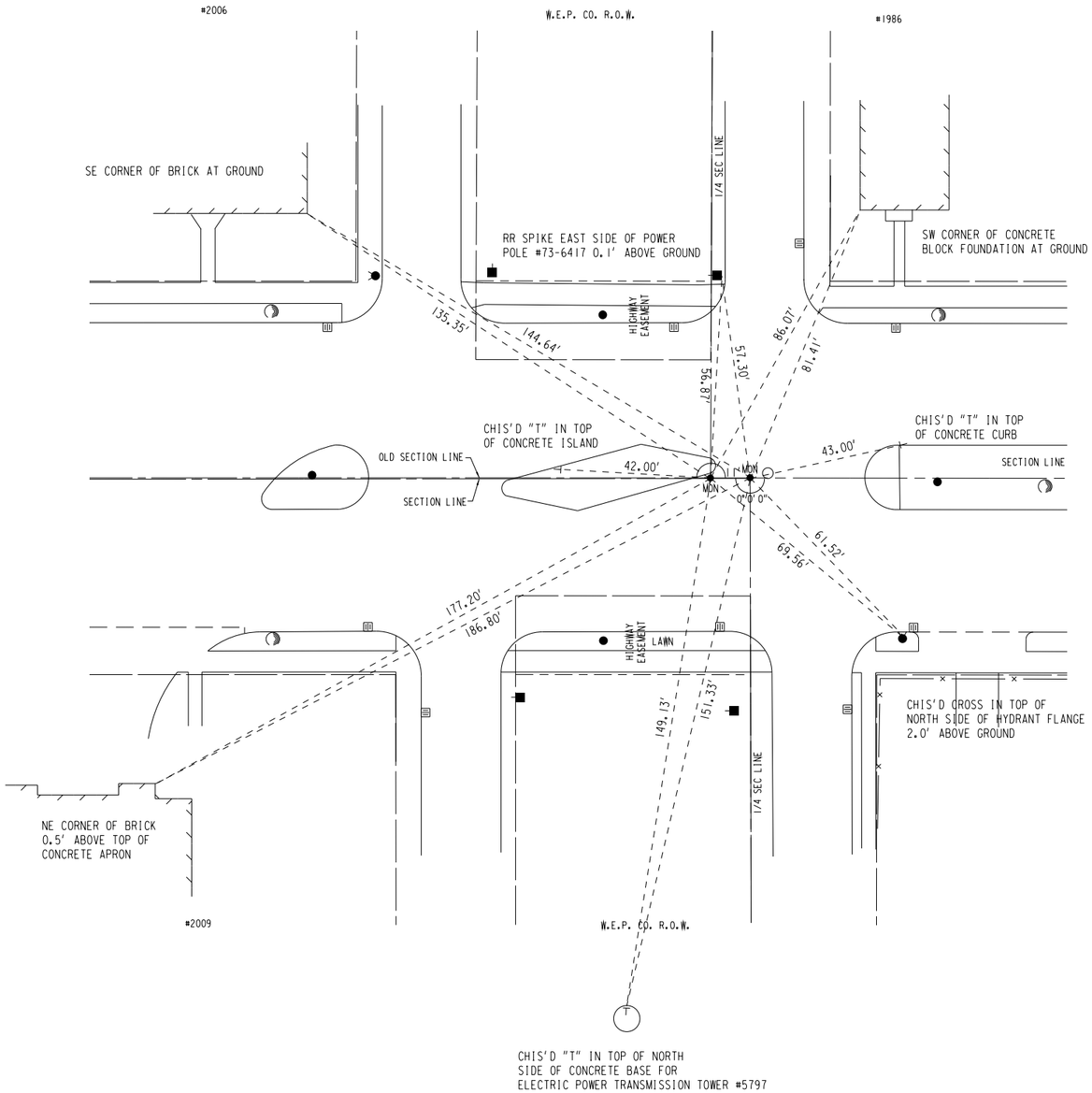


TOWNSHIP 8 NORTH, RANGE 22 EAST
TOWNSHIP 7 NORTH,
MILWAUKEE COUNTY
CONCRETE MONUMENT W/SEWRPC BRASS CAP

STATE PLANE COORDINATES OF WESTERLY QUARTER SECTION CORNER
NORTH: 409,320.26
EAST: 2,550,988.69

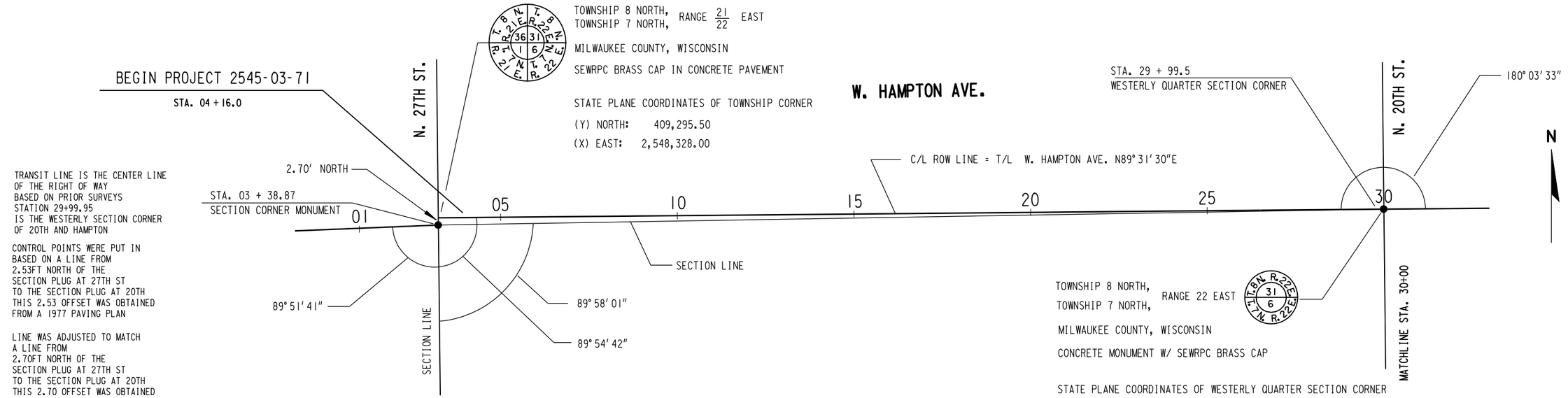
STATE PLANE COORDINATES OF EASTERLY QUARTER SECTION CORNER
NORTH: 409,320.34
EAST: 2,550,999.69

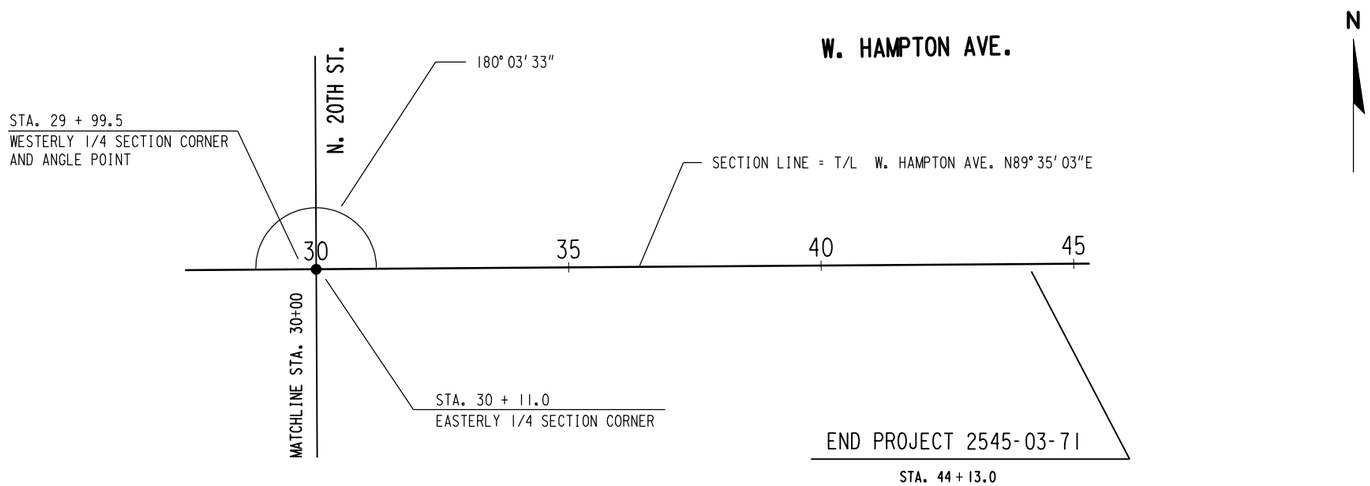
SURVEY DATE: NOVEMBER 1, 2005



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	LANDMARK REFERENCE PLAN	SCALE FEET 0' 40'	SHEET NO: 34	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\LANDMARK.DGN





STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	ALIGNMENT	SCALE FEET 0' 300'	SHEET NO: 35 E

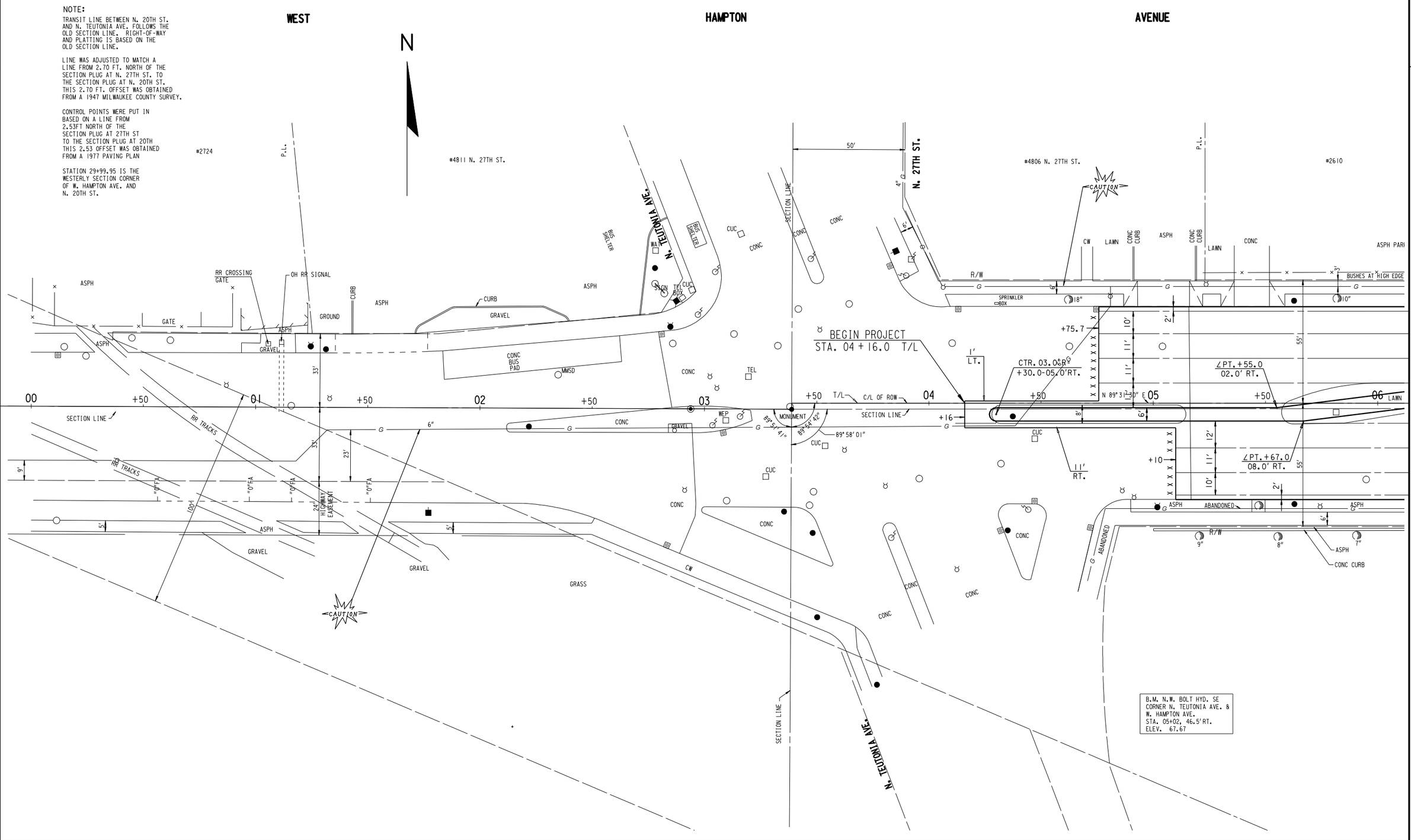
FILE NAME: W:\SPR\HAMPTON_GB_TEU \OVERVIEW.DGN

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

LINE WAS ADJUSTED TO MATCH A LINE FROM 2.70 FT. NORTH OF THE SECTION PLUG AT N. 27TH ST. TO THE SECTION PLUG AT N. 20TH ST. THIS 2.70 FT. OFFSET WAS OBTAINED FROM A 1947 MILWAUKEE COUNTY SURVEY.

CONTROL POINTS WERE PUT IN BASED ON A LINE FROM 2.53FT NORTH OF THE SECTION PLUG AT 27TH ST TO THE SECTION PLUG AT 20TH THIS 2.53 OFFSET WAS OBTAINED FROM A 1977 PAVING PLAN

STATION 29+99.95 IS THE WESTERLY SECTION CORNER OF W. HAMPTON AVE. AND N. 20TH ST.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 36	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU \00-06PDET.DGN

2

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NE CORNER
N. 26TH ST. & W. HAMPTON AVE.
STA. 07+07, 46' LT.
ELEV. 66.25

B.M. N.W. BOLT HYD. NW CORNER
N. 25TH ST. & W. HAMPTON AVE.
STA. 09+73, 45' LT.
ELEV. 68.00

N. 26TH ST.

N. 25TH ST.

#2532 #2526 #2520 #2514 #2508 #2504 #2482 #2476 #2470 #2464

CAUTION

60' 30' ASPH. 103' LT 93' LT XXXXXX 6' 20" LAWN 4' 3" GAS

CTR. 15.0' R= +48.0-58.0' LT.

ASPH PARKING

BUSHES AT HIGH EDGE

SIGN

R/W

CTR. 15.0' R= +08.0-58.0' LT.

CW LAWN CW LAWN CW LAWN CW LAWN GRAVEL LAWN CW

CTR. 15.0' R= +76.1-58.0' LT.

6' 30' ASPH. 80' LT 68' LT LAWN 58' LT XXXXX

CTR. 15.0' R= +36.1-58.0' LT.

LAWN CW 2CR LAWN CW 2CR LAWN CW ICR

12" 4" 3' R/W

BUS STOP LAWN

CTR. 03.0' R= +47.0-05.0' LT.

∠PT. +35.0 08.0' LT.

∠PT. +50.0 02.0' RT.

∠PT. +30.0 08.0' LT.

CTR. 03.0' R= +72.0-05.0' LT.

∠PT. +17.0 08.0' LT.

06 LAWN & PLANTS +50 T/L 07 +50 08 +50 C/L OF ROW 09 +50 10 +50 11 +50 C/L OF ROW T/L 12

N 89° 31' 30" E

SECTION LINE

TEL MMSD WEP CUC

CTR. 03.0' R= +09.0-05.0' RT.

CTR. 03.0' R= +37.0-05.0' RT.

EXIST. 15" STO.

∠PT. +92.0 08.0' RT.

LAWN ENT

ASPH ABN'D 3" ASPH 6" 8" 14" 8" 1" 10" 7" 7" CONC CURB ASPH CONC CURB ASPH

#2601 #2525

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 37	E

FILE NAME: W:\SPR\HAMPTON GB TEU\ 06-12PDET.DGN

2

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NE CORNER
N. 24TH PL. & W. HAMPTON AVE.
STA. 13+66, 57' LT.
ELEV. 67.01

B.M. N.W. BOLT HYD. NE CORNER
N. 24TH ST. & W. HAMPTON AVE.
STA. 16+89, 58' LT.
ELEV. 65.165

B.M. N.W. BOLT HYD. SW CORNER
N. 24TH PL. & W. HAMPTON AVE.
STA. 13+28, 45' RT.
ELEV. 67.16

#2458 #4805 N. 24TH PL. #2430-30A #2426 #2420 #2414 #2406 #2400 #2475 #2429 #2421 #2415 #2407 #2403 #2331 #2321 TO

N. 24TH PL. N. 24TH ST.

CAUTION

CTR. 15.0' R= +12.9-58.0'LT.
CTR. 15.0' R= +78.9-58.0'LT.
CTR. 15.0' R= +41.8-58.0'LT.
CTR. 15.0' R= +01.8-58.0'LT.
CTR. 03.0' R= +17.0-05.0'LT.
CTR. 03.0' R= +43.0-05.0'LT.
CTR. 03.0' R= +89.0-05.0'RT.
CTR. 03.0' R= +08.0-05.0'RT.
CTR. 15.0' R= +30.7-58.0'RT.
CTR. 15.0' R= +92.7-58.0'RT.
CTR. 15.0' R= +48.8-58.0'RT.
CTR. 15.0' R= +10.8-58.0'RT.

∠PT. +69.0 08.0' LT.
∠PT. +88.0 08.0' LT.
∠PT. +37.0 08.0' RT.
∠PT. +63.0 08.0' RT.

65.9' LT
66.6' LT
79' LT
77' LT
58' RT
71' RT
76' RT
86' RT

ASPH. 31.6
ASPH. 32'

EXIST. 18"x 54" STO.
EXIST. 21" STO.
14" EXIST. 15" STO.
21" HANDHOLE BOX
MMSD MANHOLE
BUS STOP
TEL
MAIL
WEP
CUC
C/L OF ROW
SECTION LINE
N 89°31'30" E

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 38	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 12-18PDET.DGN

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NW CORNER N. 22ND ST. & W. HAMPTON AVE. STA. 22+89, 58' LT. ELEV. 59.90

#4821 N. 22ND ST.

CAUTION

LAWN

CW

R/W

BUS SHELTER

60'

6' 9' 30' CONC 6'

CTR. 15.0' R= +76.3-58.0'LT.

CTR. 15.0' R= +36.3-58.0'LT.

72' LT

CONC

15" 8" EXIST. 15" STO. 8" 16" 10" 17" 6" 12" 6"

CTR. 08.0' R= +62.0-T/L

CTR. 03.0' R= +30.0-05.0'RT.

∠PT. +10.0 08.0' LT.

CTR. 03.0' R= +75.0-05.0'LT.

18 19 20 21 22 23 24

+50 T/L +50 +50 +50 N 89°31'30" E +50 +50 T/L

C/L OF ROW SECTION LINE MMSD

CUC

∠PT. +85.0 08.0' RT.

∠PT. +65.0 02.0' LT.

CTR. 03.0' R= +38.0-05.0'RT.

20" 7" 16" EXIST. 21" STO. 5" 5" 18" 12" 11" 19" EXIST. 24" STO. 12" 12"

CW 3CR CW 4CR 4 BRICK RISERS RR TIE WALL @ H.E. RR TIE WALL @ H.E. 70' RT 80' RT ASPH. 32' CW 3CR CW 2CR CW 5CR CW 3CR 68' RT 79' RT ASPH. 32' CW

CTR. 15.0' R= +66.7-58.0'RT.

CTR. 15.0' R= +28.7-58.0'RT.

CTR. 15.0' R= +75.2-58.0'RT.

CTR. 15.0' R= +37.2-58.0'RT.

#2321 TO 27 #2313 #2309 #2301-01A #2229-31 #2225 #2221 #2215-15A #2209 #2201 #4780 N.22ND ST. #2125-27

P.L.

60' N. 23RD ST. 60' N. 22ND ST.

STD.B.M. #133 SE CORNER N. 23RD ST. & W. HAMPTON AVE. 26'S & 2' E OF CURBS ELEV. 61.412

B.M. N.W. BOLT HYD. SE CORNER N. 23RD ST. & W. HAMPTON AVE. STA. 20+28, 45'RT. ELEV. 63.47

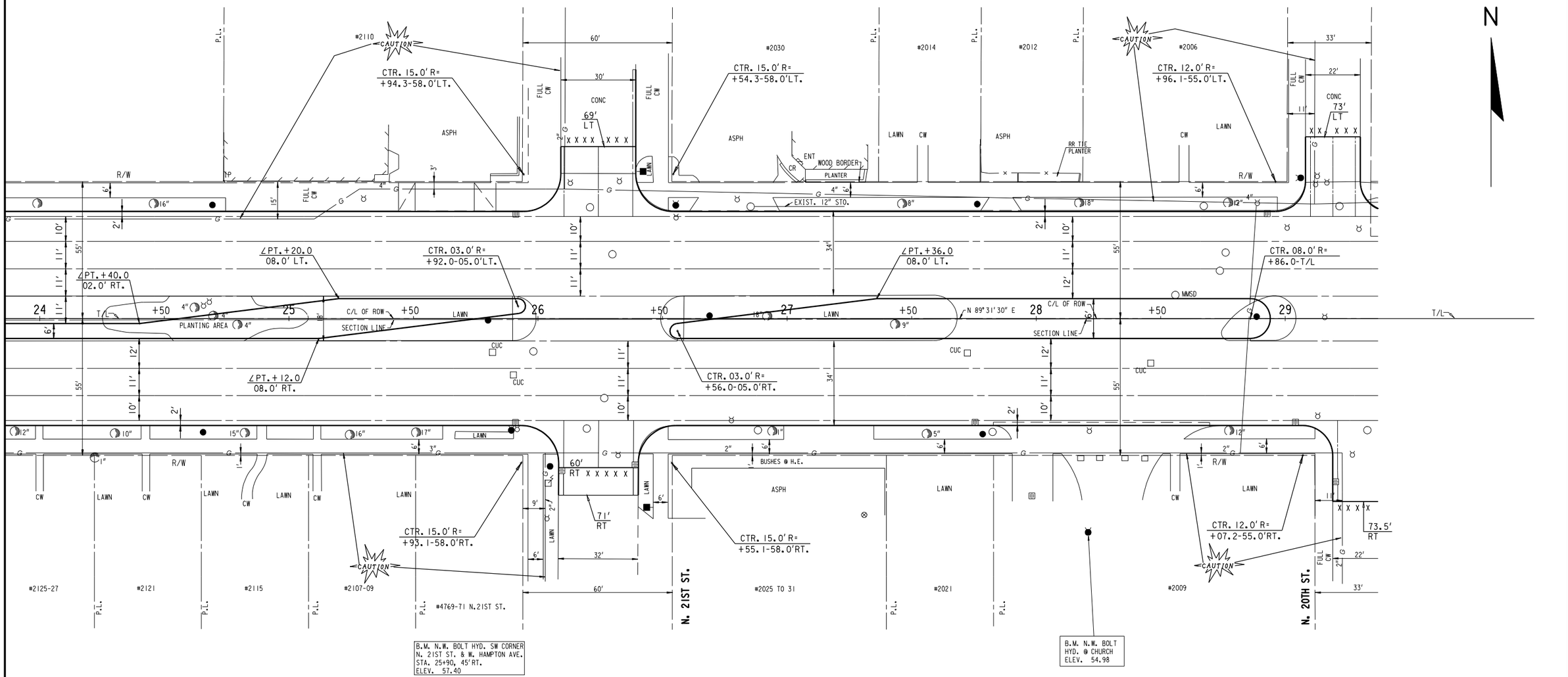
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 39	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 18-24PDET.DGN

2

WEST HAMPTON AVENUE

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 40	E

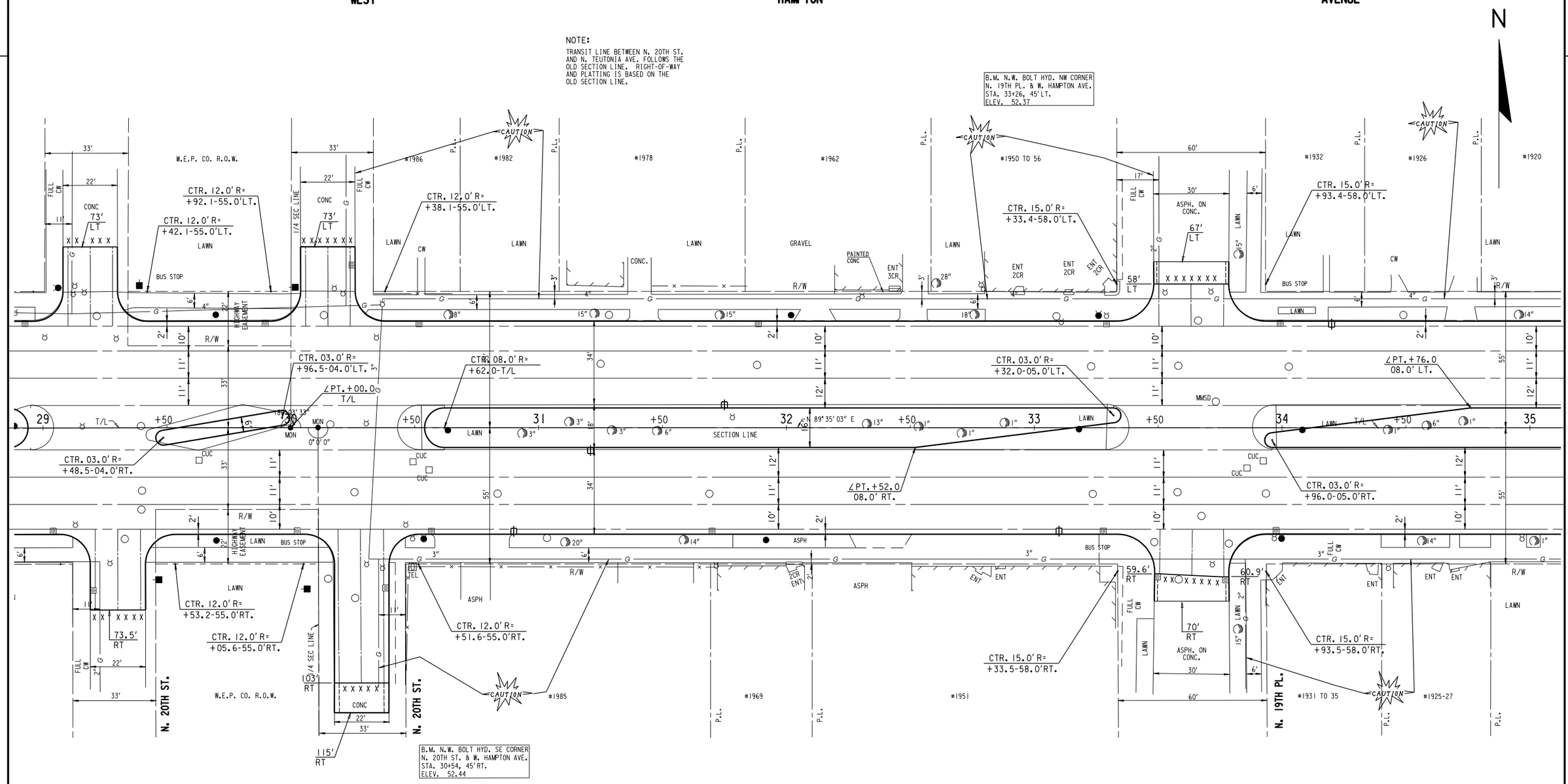
FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 24-29PDET.DGN

WEST HAMPTON AVENUE

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NW CORNER N. 19TH PL. & W. HAMPTON AVE. STA. 33+26, 45'LT. ELEV. 52.37

B.M. N.W. BOLT HYD. SE CORNER N. 20TH ST. & W. HAMPTON AVE. STA. 30+54, 45'RT. ELEV. 52.44



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 41	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 29-35PDET.DGN

WEST HAMPTON AVENUE

N

B.M. N.W. BOLT HYD. NW CORNER
N. 19TH ST. & W. HAMPTON AVE.
STA. 36+55, 45'LT.
ELEV. 52.27

B.M. N.W. BOLT HYD. NW CORNER
N. 18TH ST. & W. HAMPTON AVE.
STA. 39+68, 44'LT.
ELEV. 53.09

#1920 #1912 #1906 #1900 #1830 #1820 #1812 #1802 #4800 N. 18TH ST. #1738

CTR. 15.0' R= +62.4-58.0'LT.
CTR. 15.0' R= +22.4-58.0'LT.
CTR. 15.0' R= +76.4-58.0'LT.
CTR. 15.0' R= +36.4-58.0'LT.
71' LT
58' LT
77' LT
ASPH. ON CONC.
BUS STOP
GRAVEL
DECO GRAVEL

CTR. 03.0' R= +62.0-05.0'LT.
∠PT. +04.0 08.0' LT.
EXIST. 12" STM
CTR. 03.0' R= +75.0-05.0'LT.
MMSD
N 89°35'03" E
SECTION LINE
T/L

35 36 37 38 39 40

∠PT. +82.0 08.0' RT.
CTR. 03.0' R= +24.0-05.0'RT.
∠PT. +95.0 08.0' RT.
CTR. 03.0' R= +38.0-05.0'RT.
CUC

65' RT
76' RT ASPH. ON CONC.
63' RT
62.7' RT
79' RT ASPH. ON CONC.

#1901 #1915 #1815 #4770 N. 18TH ST.

CTR. 15.0' R= +62.4-58.0'RT.
CTR. 15.0' R= +22.4-58.0'RT.
CTR. 15.0' R= +77.6-58.0'RT.
CTR. 15.0' R= +37.6-58.0'RT.

N. 19TH ST.
N. 18TH ST.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 42	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 35-41PDET.DGN

2

WEST HAMPTON AVENUE

N

B.M. N.W. BOLT HYD. W/S
N. GREEN BAY AVE.&
150' N OF W. HAMPTON AVE.
ELEV. 49.84

CAUTION

#1738 #1730 #1708 #1735 #1727 #4775 N. GREEN BAY AVE.

P.L.

CW ASPH LAWN CW GRAVEL CONC ASPH ASPH CONC CURB

R/W

4" G 5" 17" 7" 6" TEL 8" 13" 4" G

2' 10' 11' 12' 34' 55'

∠PT. + 18.0
08.0' LT.

CTR. 03.0' R=
+93.0-05.0'LT.

CTR. 02.0' R=
+27.0-06.0'LT.

∠PT. + 13.0
08.0' RT.

CTR. 02.0' R=
+19.9-05.5'RT.

∠PT. + 95.0
02.0' LT.

CTR. 03.0' R=
+96.0-05.0'LT.

END PROJECT
STA. 44 · 13.0 T/L

DECO GRAVEL PLANTS 8" 1" 4" 4" 6" +50 42 +50 N 89° 35' 03" E 43 CONC 6' +50 44 +50 T/L 45 +50 SECTION LINE

BES VAULT LAWN 4" 4" 2' R/W 3" G 3.5' G LAWN 6' 8'

ASPH SIDE ENT ENT

I ST.

CAUTION

B.M. N.W. BOLT HYD. SW CORNER
N. GREEN BAY AVE. & W. HAMPTON AVE.
STA. 44+26, 61'RT.
ELEV. 53.61

1' 120' FULL CW 3.5' G

RR TIES @ M.E.

MMSD TES TEL CUC MMSD CUC MMSD CUC

LAWN LAWN LAWN ASPH LAWN

N. GREEN BAY AVE.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 43	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 41-47PDET.DGN

2

WEST HAMPTON AVENUE

N

#2724 P.L. #4811 N. 27TH ST. N. TEUTONIA AVE. #4806 N. 27TH ST. #2610

CAUTION BUS SHELTER WAT SIGN TEL BOX CUC CONC CURB GRAVEL ASPH GROUND RR CROSSING GATE OH RR SIGNAL CONC BUS PAD MMSD TEL SECTION LINE 50' 4" G 6' CW LAWN CONC CURB +80.4 SPRINKLER BOX 18" BUSHES AT HIGH EDGE 10" ASPH PARI

BEGIN PROJECT
STA. 04+16.0 T/L

00 +50 01 +50 02 +50 03 +50 C/L OF ROW 04 +50 N 89°31'30" E 05 +50 06 LAWN

SECTION LINE RR TRACKS 33' 23' 9' 10'FA 24' HIGHWAY EASEMENT 100' 5' GRAVEL ASPH GRASS CONC 6" G WEP MONUMENT 89°57'41" 89°54'42" 89°58'01" 8" 55' +30.5 9" 8" 7" ASPH CONC CURB ABANDONED

B.M. N.W. BOLT HYD. SE CORNER N. TEUTONIA AVE. & W. HAMPTON AVE.
STA. 05+02, 46.5' RT.
ELEV. 67.67

N. TEUTONIA AVE.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 44	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 02_06.DGN

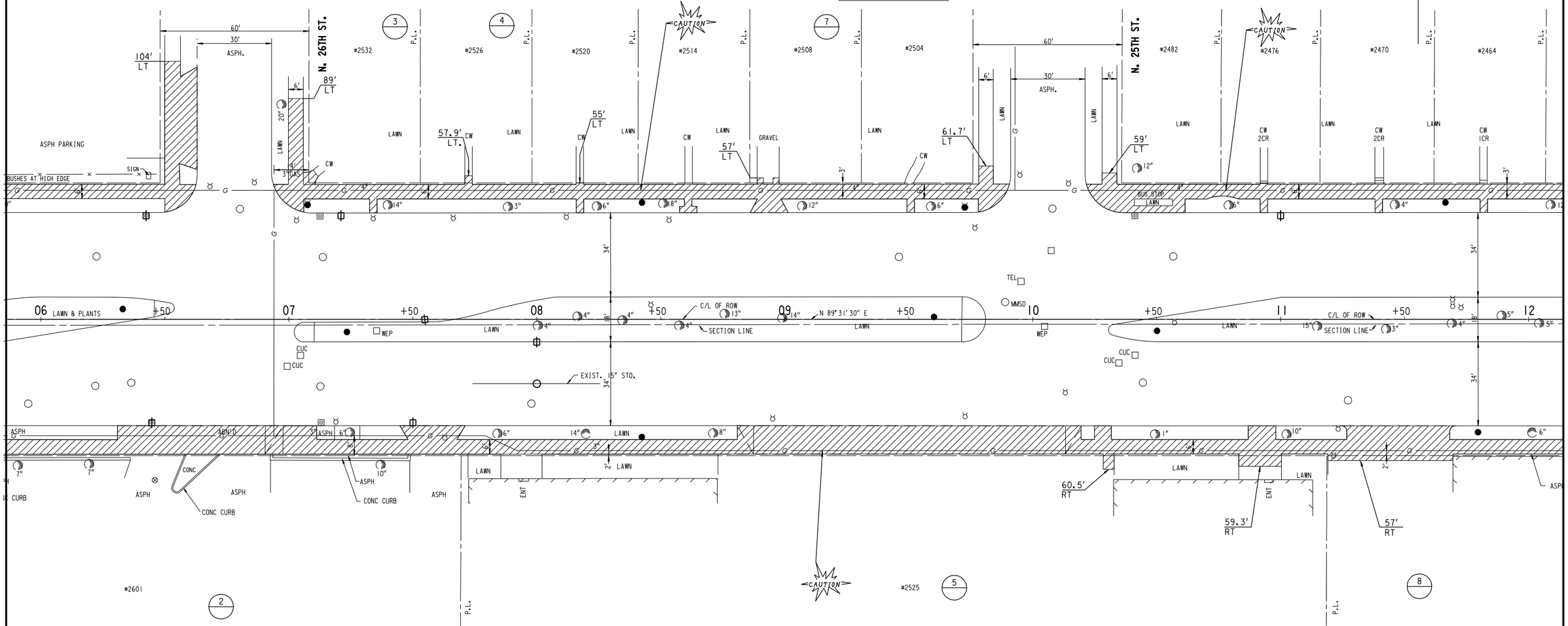
WEST HAMPTON AVENUE

N

B.M. N.W. BOLT HYD. NE CORNER
N. 26TH ST. & W. HAMPTON AVE.
STA. 07+07, 46' LT.
ELEV. 66.25

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NW CORNER
N. 25TH ST. & W. HAMPTON AVE.
STA. 09+73, 45' LT.
ELEV. 68.00



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 45 E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 06-12.DGN

WEST HAMPTON AVENUE

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NE CORNER
N. 24TH PL. & W. HAMPTON AVE.
STA. 13+66, 57' LT.
ELEV. 67.01

B.M. N.W. BOLT HYD. NE CORNER
N. 24TH ST. & W. HAMPTON AVE.
STA. 16+89, 58' LT.
ELEV. 65.165

N

#2458 #4805 N. 24TH PL. #2430-30A #2426 #2420 #2414 #2406 #2400

80' 36' ASPH. 60' 30' CONC

77.2' LT 73' LT 60' LT 58.5' LT

EXIST. 15" STO. 14" EXIST. 15" STO. EXIST. 21" STO.

12 13 LAWN 14 15 16 MMSD LAWN 17 18

N 89°31'30" E C/L OF ROW SECTION LINE

WEP MAIL TEL CUC GAS BUS STOP

#2475 #2429 #2421 #2415 #2407 #2403 #2331 #2321 TO

66.2' RT 72.5' RT 55.5' RT 55.4' RT 55.5' RT 54.8' RT 85' RT 83' RT 55' RT

ASPH. 31.6 ASPH. 32'

N. 24TH PL. N. 24TH ST.

B.M. N.W. BOLT HYD. SW CORNER
N. 24TH PL. & W. HAMPTON AVE.
STA. 13+28, 45' RT.
ELEV. 67.16

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 46	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 12-18.DGN

2

WEST HAMPTON AVENUE

N

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

#4821 N. 22ND ST.

B.M. N.W. BOLT HYD. NW CORNER N. 22ND ST. & W. HAMPTON AVE. STA. 22+89, 58' LT. ELEV. 59.90

CAUTION

LAWN

CW

55' LT

BUS SHELTER

60'

6'

30'

9'

CONC

59.7' LT

66.8' LT

EXIST. 15" STO.

EXIST. 21" STO.

EXIST. 24" STO.

N 89°31'30" E

C/L OF ROW

SECTION LINE

MMSD

CUC

55'

34'

RR TIE WALL @ H.E.

4 BRICK RISERS

55' RT

77.7' RT

71' RT

84.5' RT

60.8' RT

ASPH. 32'

60'

#2321 TO 27

#2313

#2309

#2301-01A

#2229-31

#2225

#2221

#2215-15A

#2209

#2201

#4780 N.22ND ST.

#2125-27

N. 23RD ST.

N. 22ND ST.

P.L.

STD.B.M. #133 SE CORNER N. 23RD ST. & W. HAMPTON AVE. 26'S & 2' E OF CURBS ELEV. 61.412

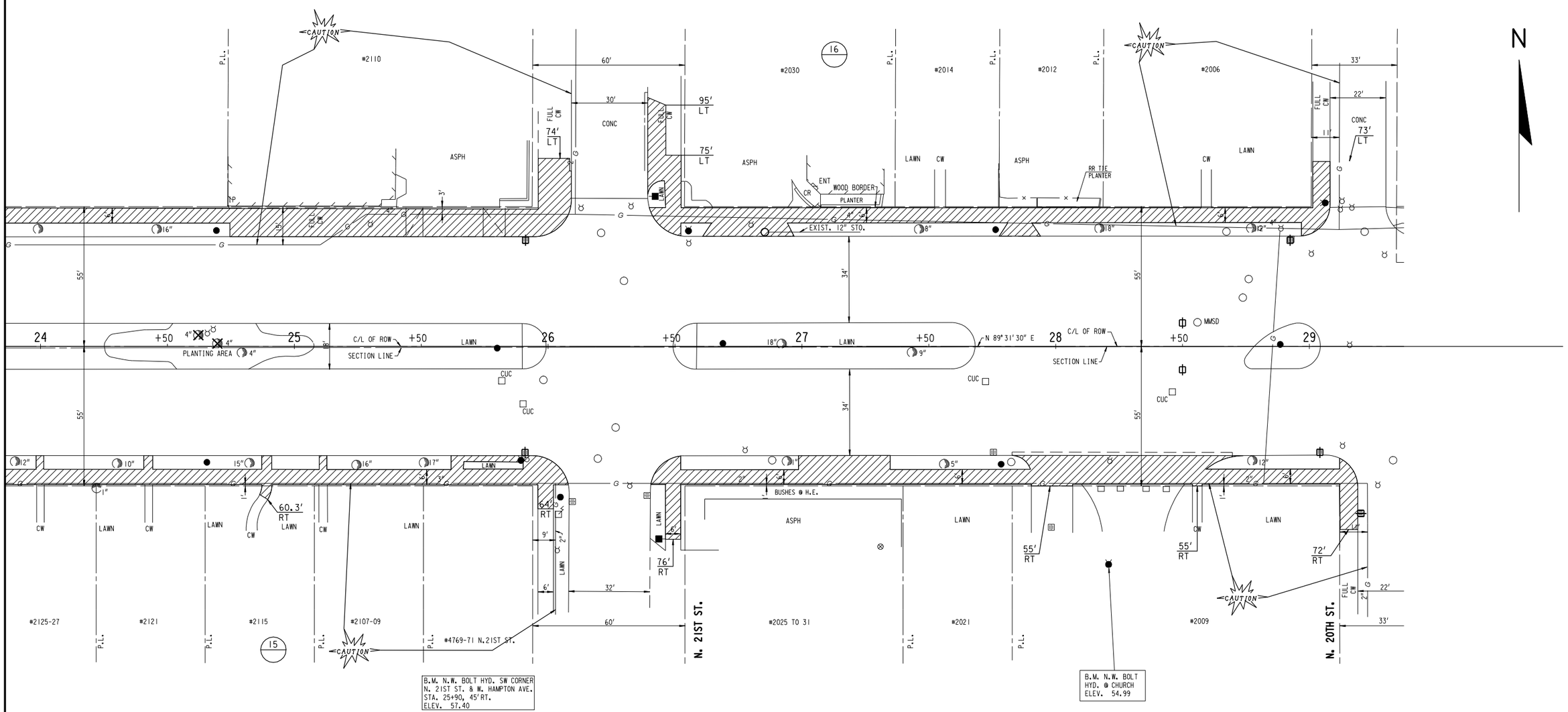
B.M. N.W. BOLT HYD. SE CORNER N. 23RD ST. & W. HAMPTON AVE. STA. 20+28, 45'RT. ELEV. 63.47

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 47	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 18-24.DGN

WEST HAMPTON AVENUE

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.



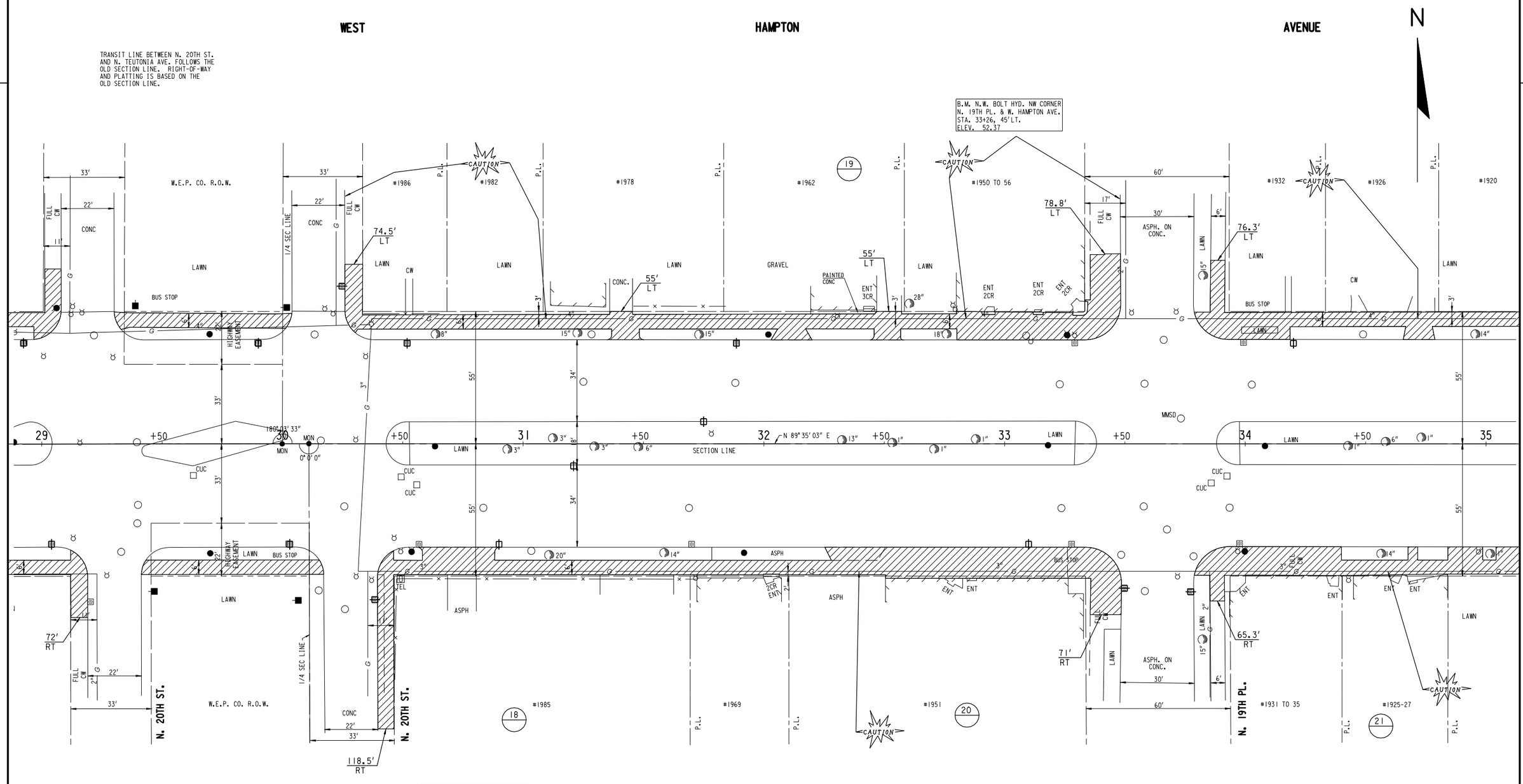
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 48	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 24-29.DGN

WEST HAMPTON AVENUE

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NW CORNER
N. 19TH PL. & W. HAMPTON AVE.
STA. 33+26, 45'LT.
ELEV. 52.37



B.M. N.W. BOLT HYD. SE CORNER
N. 20TH ST. & W. HAMPTON AVE.
STA. 30+54, 45'RT.
ELEV. 57.40

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 49	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 29-35.DGN

WEST HAMPTON AVENUE

N

B.M. N.W. BOLT HYD. NW CORNER
N. 19TH ST. & W. HAMPTON AVE.
STA. 36+55, 45' LT.
ELEV. 52.27

B.M. N.W. BOLT HYD. NW CORNER
N. 18TH ST. & W. HAMPTON AVE.
STA. 39+68, 44' LT.
ELEV. 53.09

#1920 #1912 #1906 #1900 #1830 #1820 #1812 #1802 #4800 N. 18TH ST. #1738

23 24 25 26

P.L.

CAUTION

55' LT
56' LT
60.4' LT
62.1' LT
56' LT
56' LT
60.7' LT
71.7' LT

60' 30' 6' 17' 20' ASPH. ON CONC.

CW LAWN GRAVEL ENT TEL BUS STOP DECO GRAVEL CONC ASPH

35 36 37 38 39 40 41

+50 SECTION LINE N 89° 35' 03" E MMSD CUC

55' 34' 3" 2' 6" 8" 5" 12" 33" 14" 17" 20"

58.7' RT
60.5' RT
55' RT
78.4' RT
70.1' RT

#1901 #1915 #1815 #4770 N. 18TH ST.

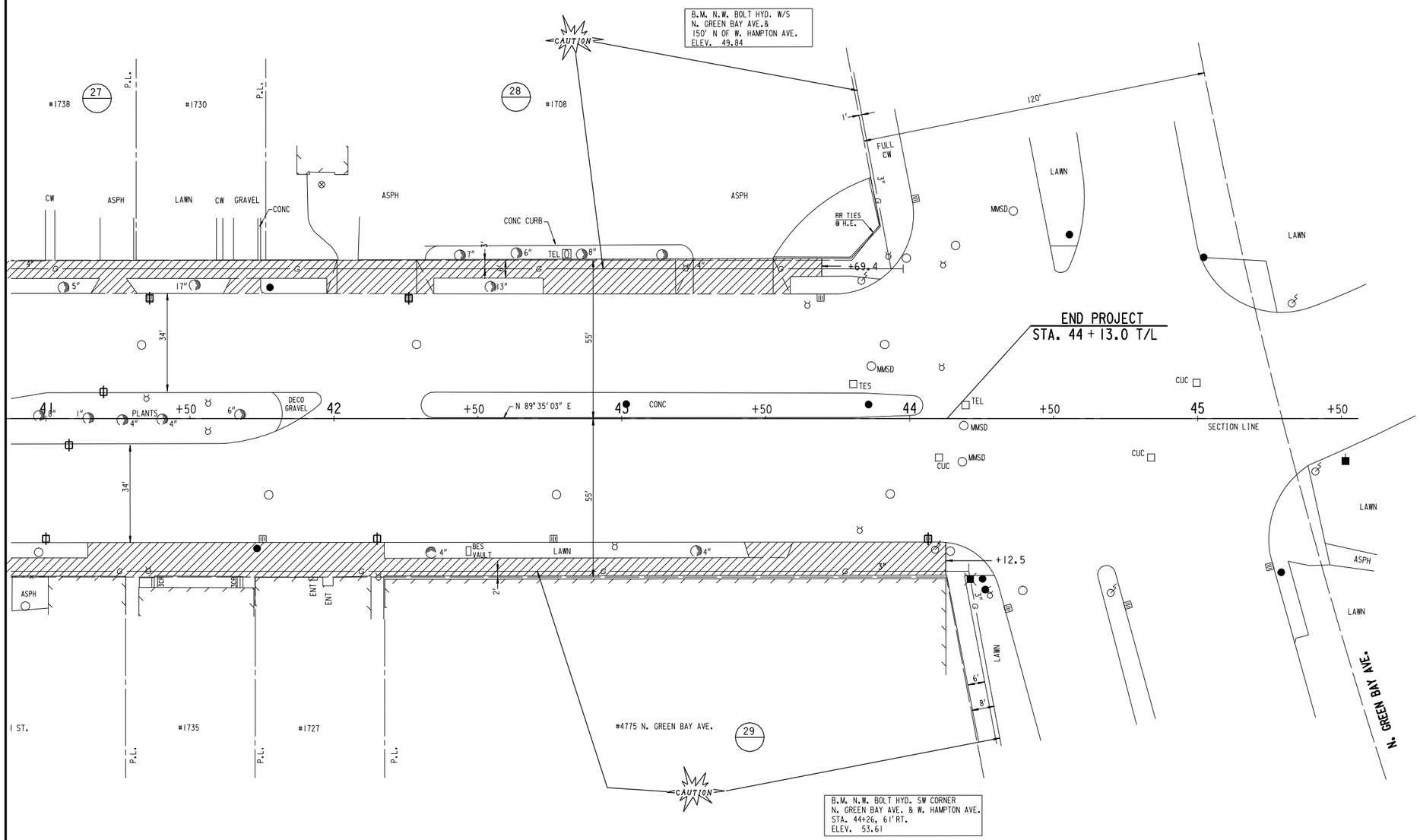
N. 19TH ST. N. 18TH ST.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 50	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 35-41.DGN

2

WEST HAMPTON AVENUE





STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	WALK AND DRIVEWAY REMOVAL	SCALE FEET 0' 40'	SHEET NO: 51	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\REM 41-47.DGN

WEST HAMPTON AVENUE

NOTE:

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

LINE WAS ADJUSTED TO MATCH A LINE FROM 2.70 FT. NORTH OF THE SECTION PLUG AT N. 27TH ST. TO THE SECTION PLUG AT N. 20TH ST. THIS 2.70 FT. OFFSET WAS OBTAINED FROM A 1947 MILWAUKEE COUNTY SURVEY.

CONTROL POINTS WERE PUT IN BASED ON A LINE FROM 2.53FT NORTH OF THE SECTION PLUG AT 27TH ST TO THE SECTION PLUG AT 20TH THIS 2.53 OFFSET WAS OBTAINED FROM A 1977 PAVING PLAN

N

N. TEUTONIA AVE.

N. 27TH ST.

TYPE 10 BASE (30")
+90, 37' LT

TYPE 10 BASE (30")
+85, 69' LT

TYPE 10 SPECIAL BASE (36")
+36, 53' RT

TYPE 10 SPECIAL BASE (36")
+40, 53' RT

BEGIN PROJECT
STA. 04 + 16.0 T/L

BASE FOR MAST ARM POLE

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 52	E

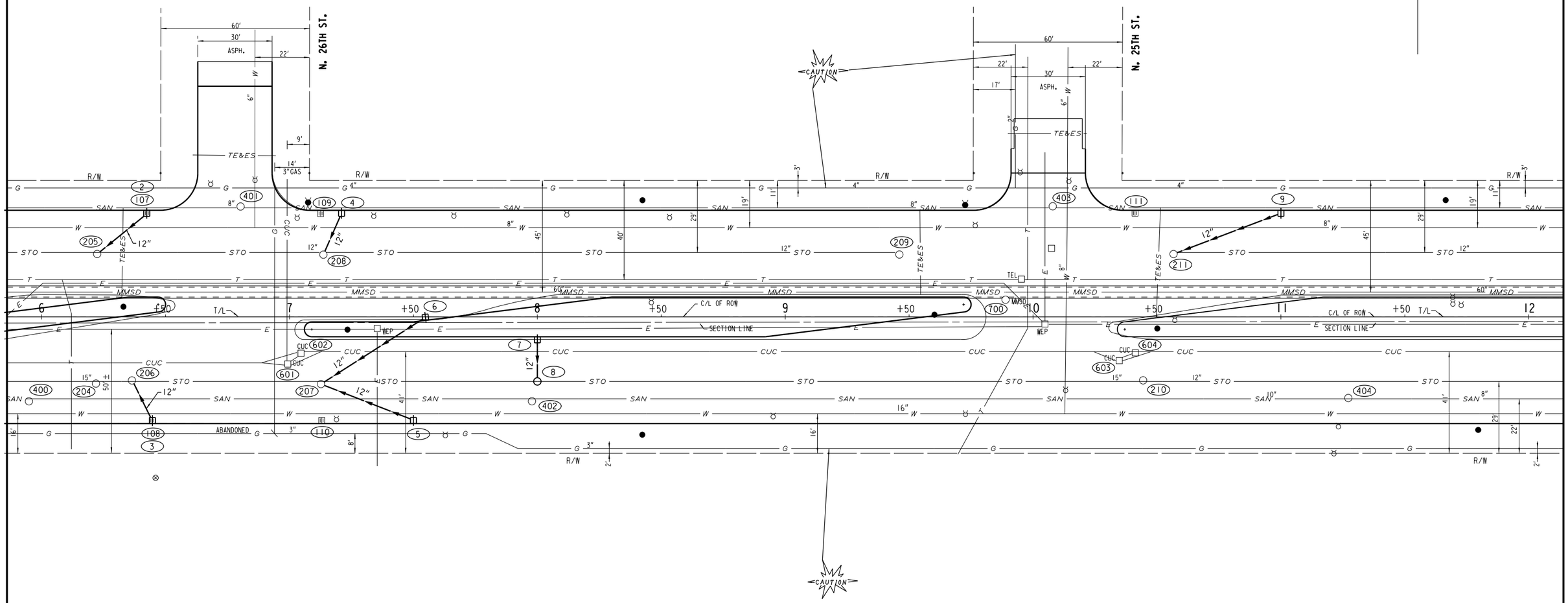
FILE NAME: W:\SPR\HAMPTON_GB_TEU \UTIL 00-06.DGN

WEST HAMPTON AVENUE

N

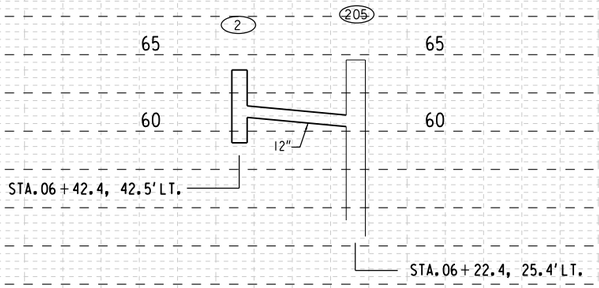
NOTE:

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

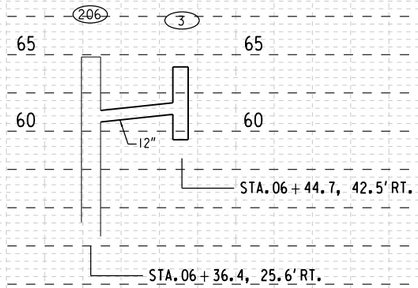


STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 53	E

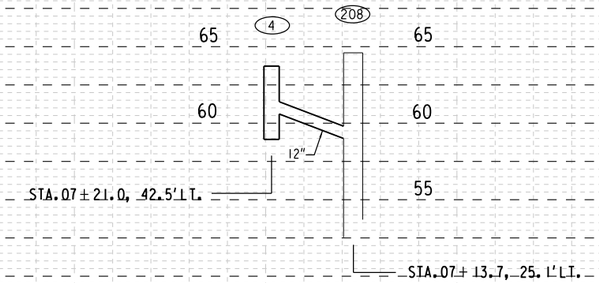
FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 06-12.DGN



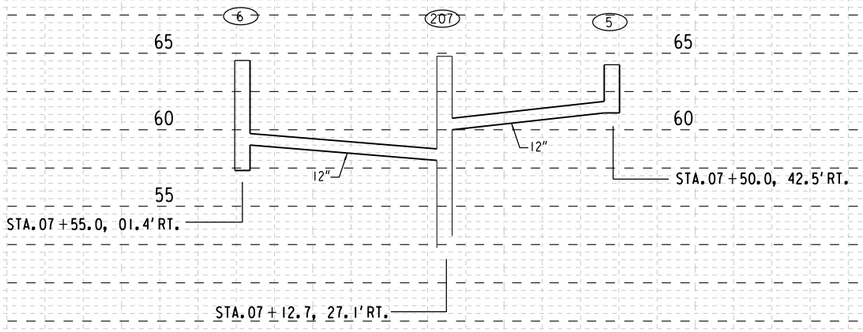
(LOOKING EASTERLY)



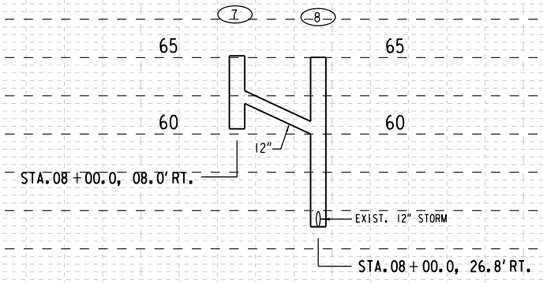
(LOOKING EASTERLY)



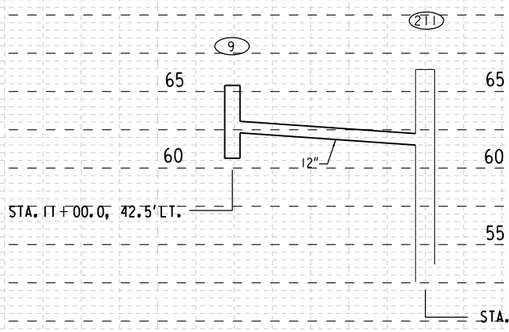
(LOOKING EASTERLY)



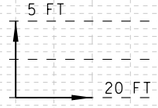
(LOOKING EASTERLY)



(LOOKING EASTERLY)



(LOOKING EASTERLY)



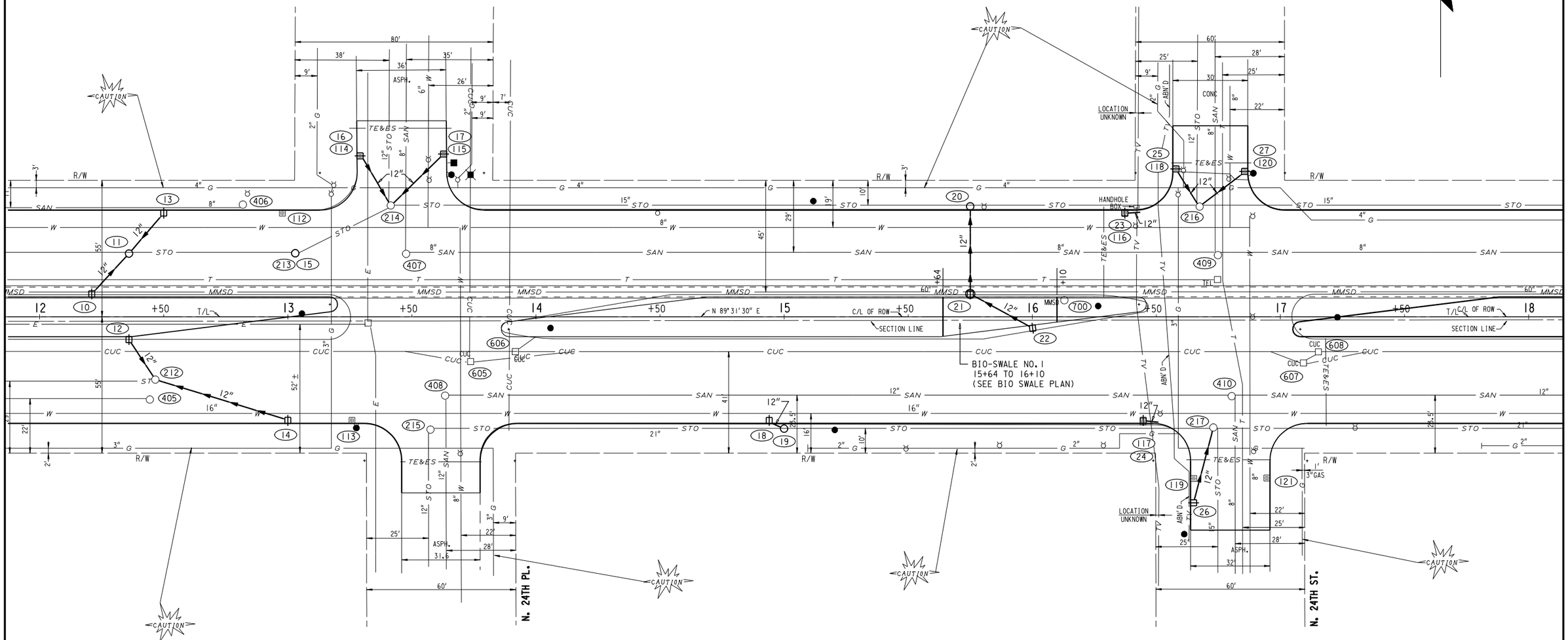
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 54	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 06-12.DGN

WEST HAMPTON AVENUE

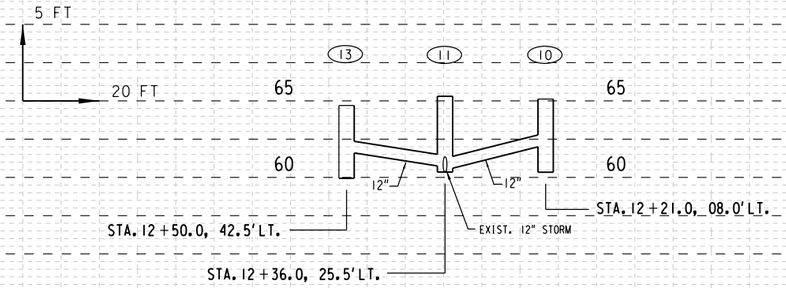
NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

N

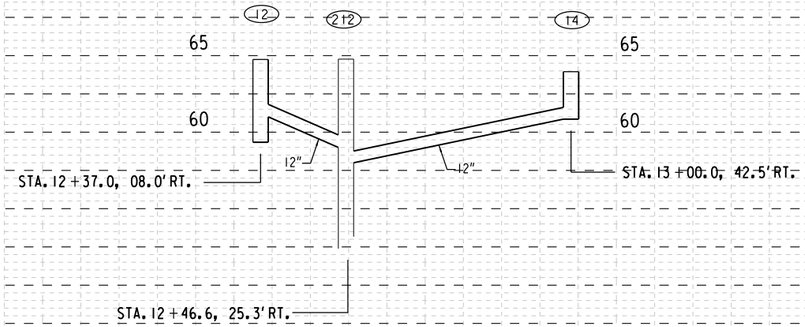


STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 55 E

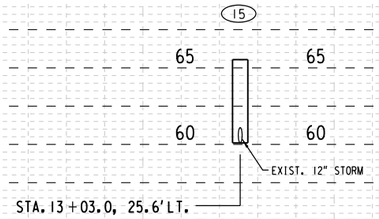
FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 12-18.DGN



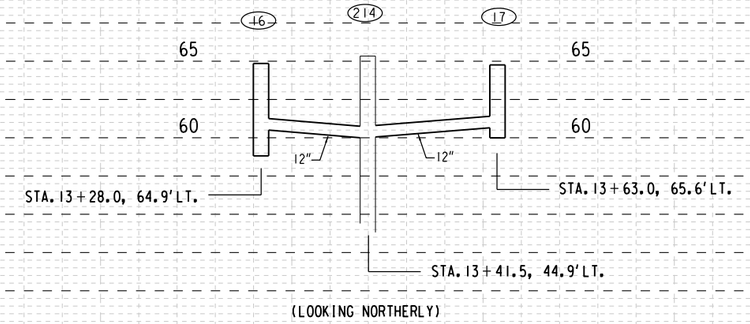
(LOOKING EASTERLY)



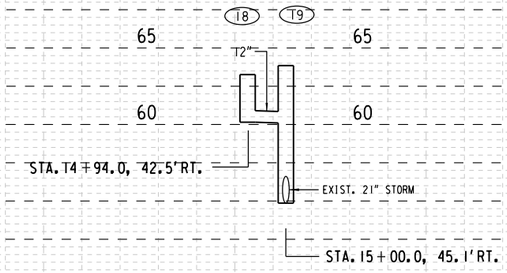
(LOOKING EASTERLY)



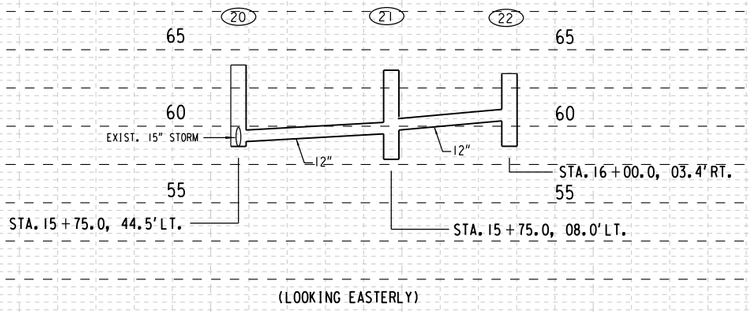
(LOOKING EASTERLY)



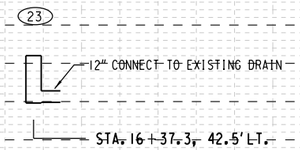
(LOOKING NORTHERLY)



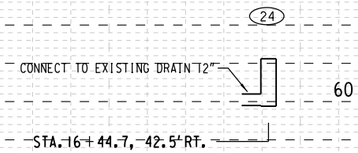
(LOOKING EASTERLY)



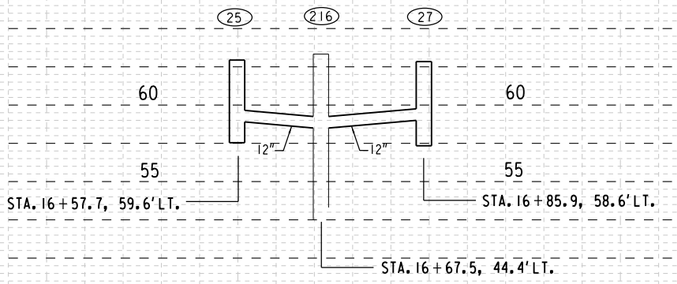
(LOOKING EASTERLY)



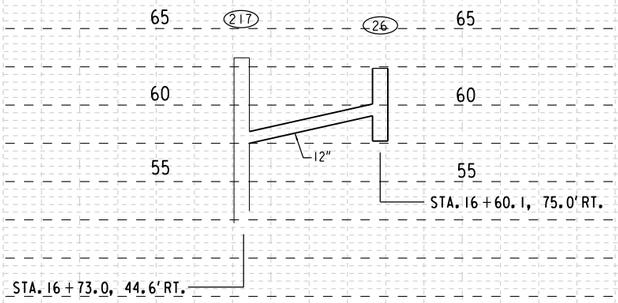
(LOOKING NORTHERLY)



(LOOKING SOUTHERLY)



(LOOKING NORTHERLY)



(LOOKING EASTERLY)

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

CAUTION

BIO-SWALE NO.2
18+87 TO 19+37
(SEE BIO SWALE PLAN)

TYPE 10 BASE (30")
+69.5, 5' LT

TYPE 10 BASE (30")
+43.5, 5' RT

C/L OF ROW
SECTION LINE
N 89°31'30" E

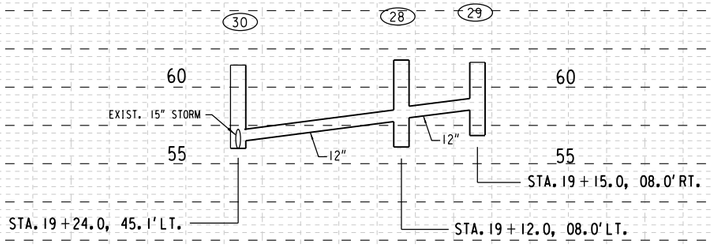
N. 23RD ST.

N. 22ND ST.

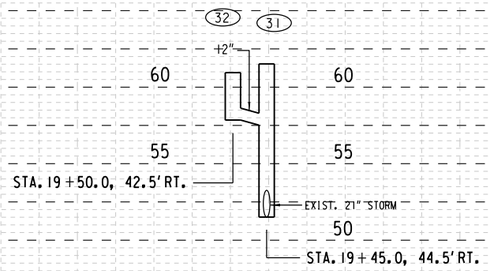
BASE FOR MAST ARM POLE

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 57	E

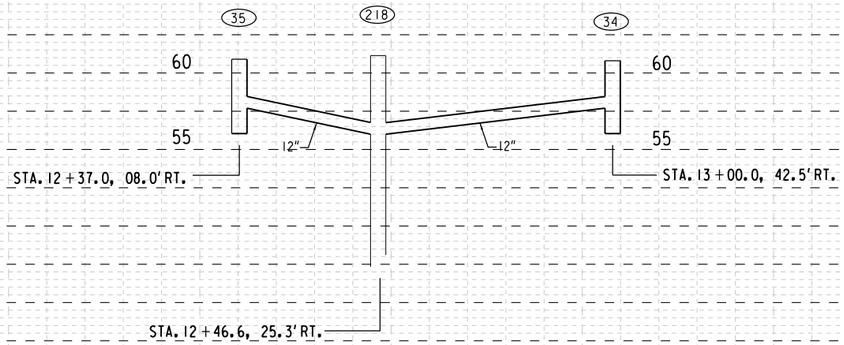
FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 18-24.DGN



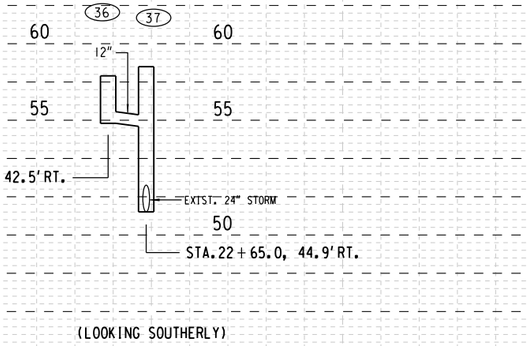
(LOOKING EASTERLY)



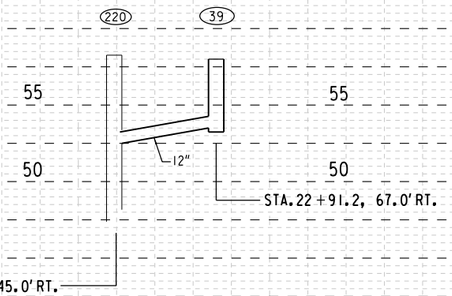
(LOOKING EASTERLY)



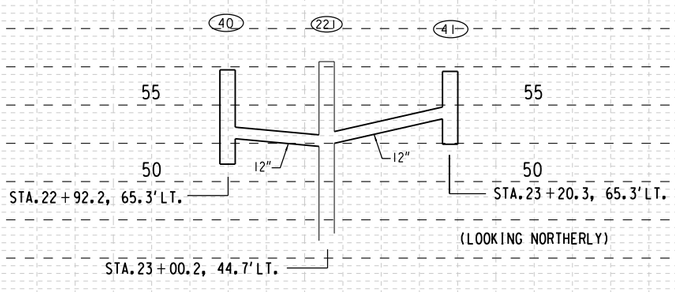
(LOOKING SOUTHERLY)



(LOOKING SOUTHERLY)



(LOOKING EASTERLY)



(LOOKING NORTHERLY)

(LOOKING NORTHERLY)

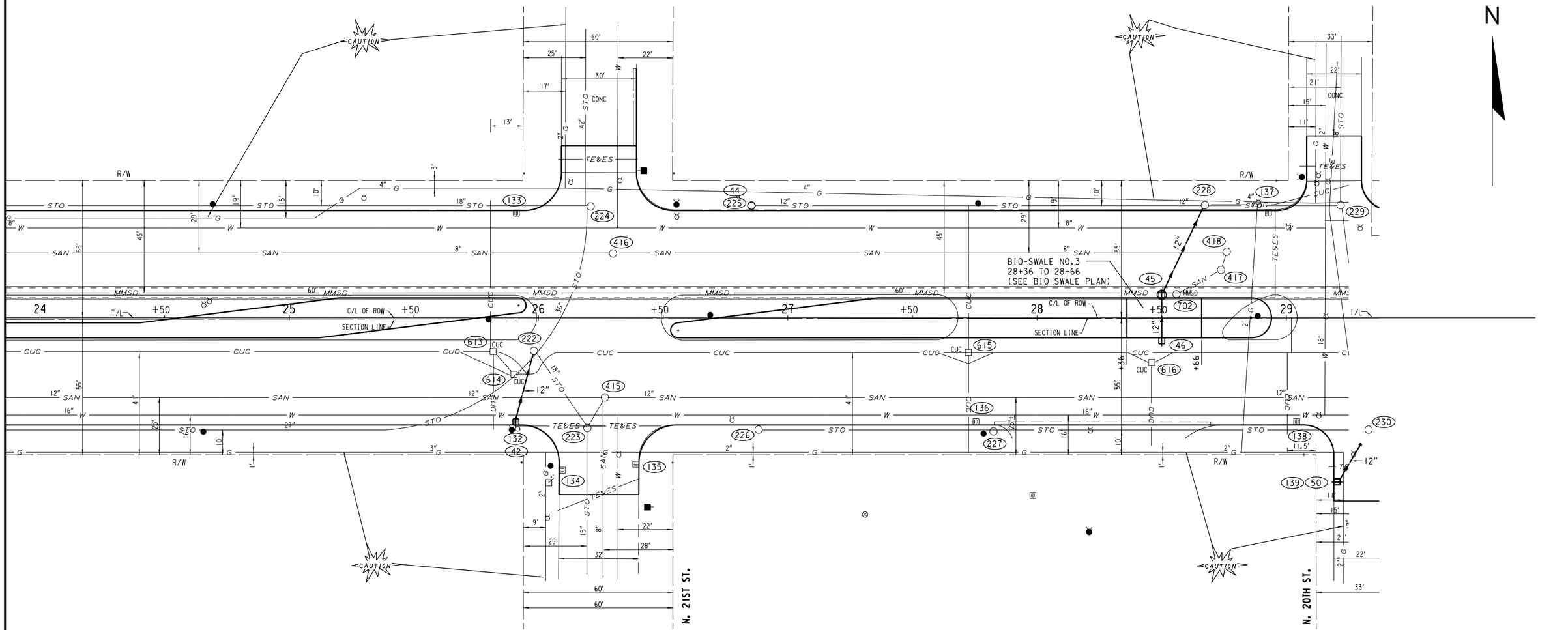
5 FT

20 FT

WEST HAMPTON AVENUE

NOTE:

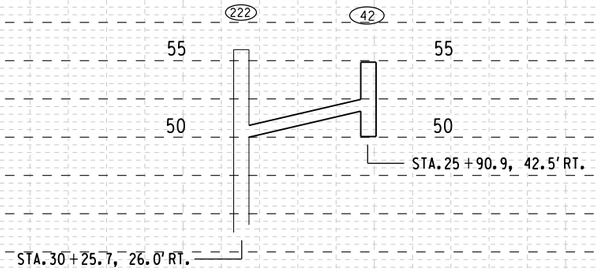
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.



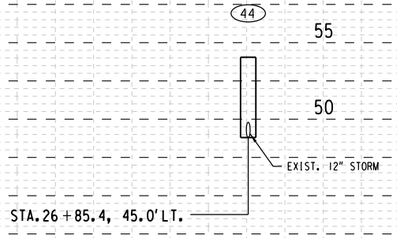
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 59	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 24-29.DGN

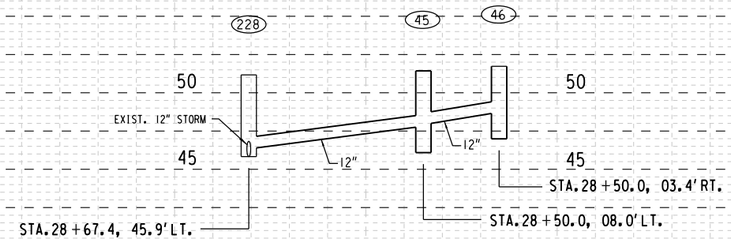
2



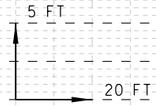
(LOOKING SOUTHERLY)



(LOOKING EASTERLY)



(LOOKING EASTERLY)



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 60	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 24-29.DGN

WEST HAMPTON AVENUE

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

BIO-SWALE NO.4
30+90 TO 31+40
(SEE BIO SWALE PLAN)

N

N. 20TH ST.

N. 20TH ST.

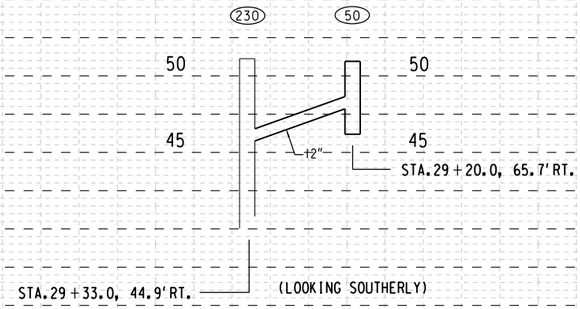
N. 19TH PL.

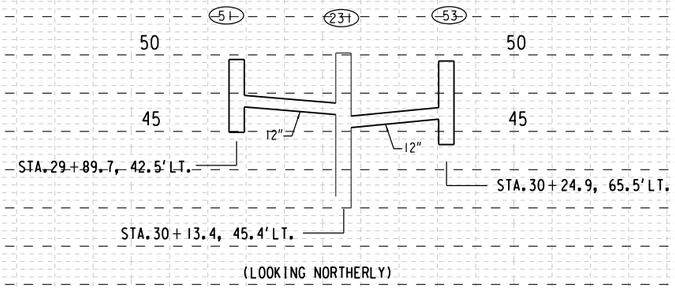
SECTION LINE

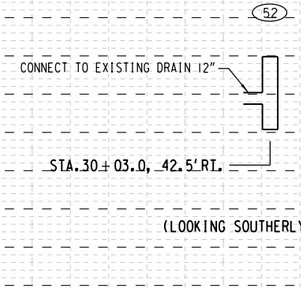
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 61	E

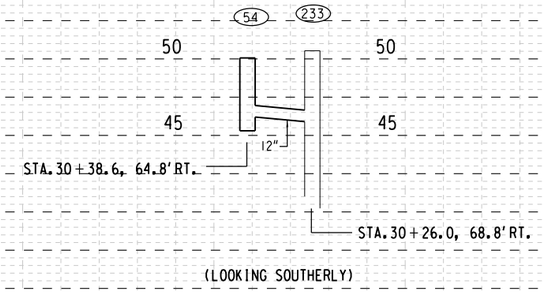
FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 29-35.DGN

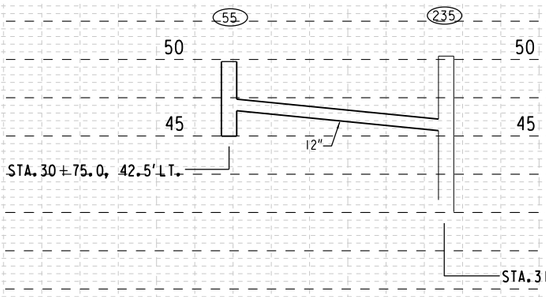
2

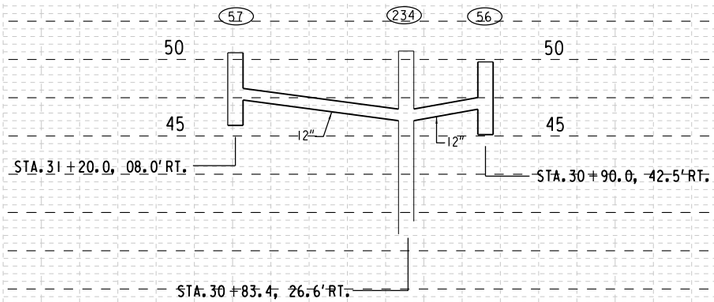


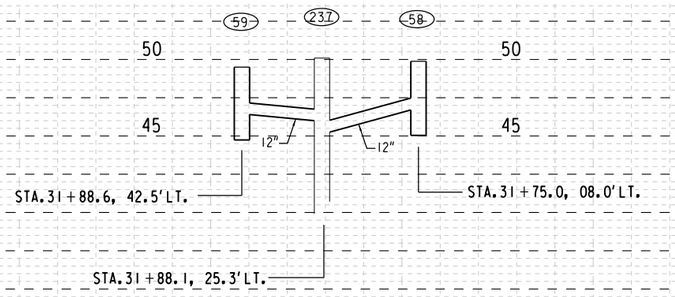


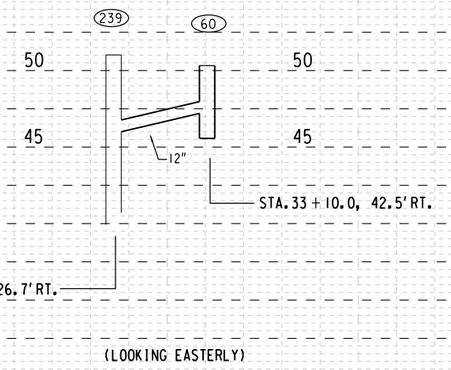


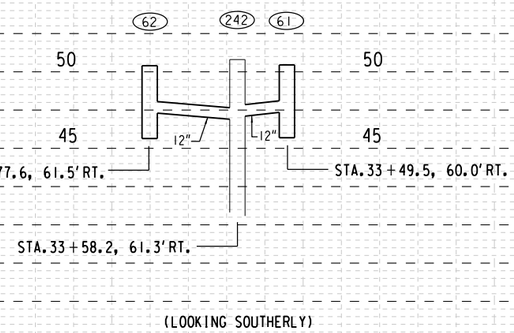


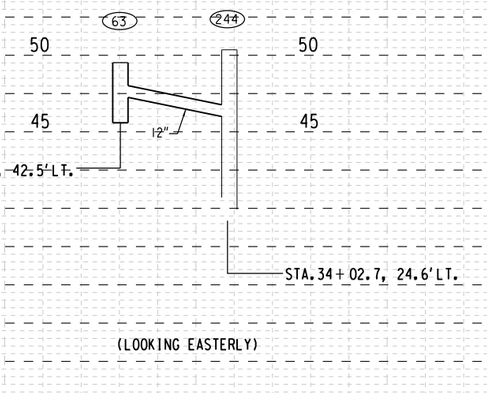


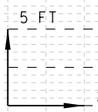












STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 62	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 29-35.DGN

2

WEST HAMPTON AVENUE

N

CAUTION

BIO-SWALE NO.6
37+60 TO 38+15
(SEE BIO SWALE PLAN)

BIO-SWALE NO.7
41+00 TO 41+33
(SEE BIO SWALE PLAN)

BIO-SWALE NO.5
35+40 TO 36+00
(SEE BIO SWALE PLAN)

N. 19TH ST.

N. 18TH ST.

EXIST. 12" STO.

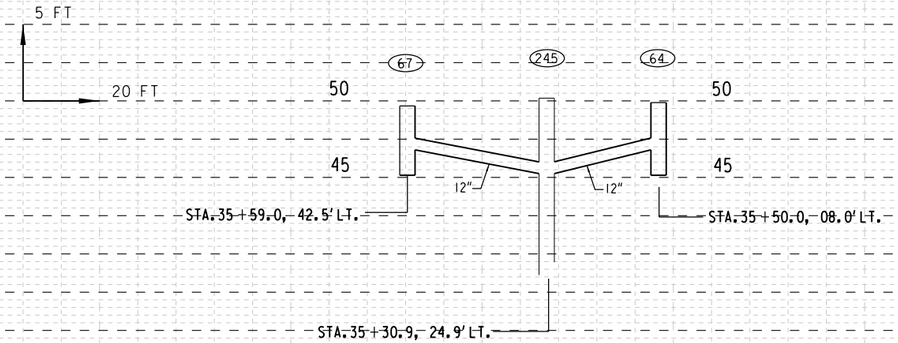
ASPH. ON CONC.

SECTION LINE

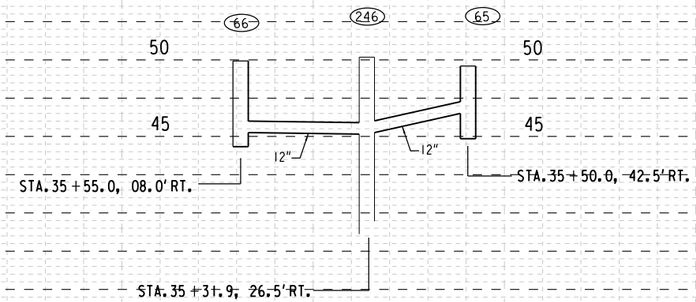
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 63	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 35-41.DGN

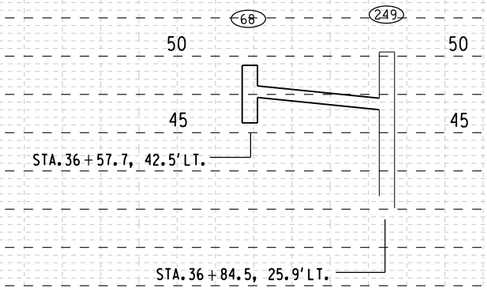
2



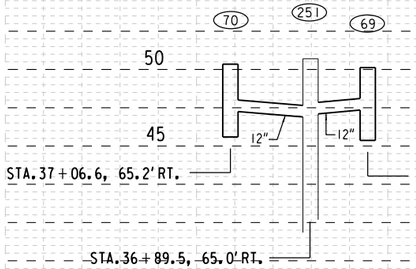
(LOOKING EASTERLY)



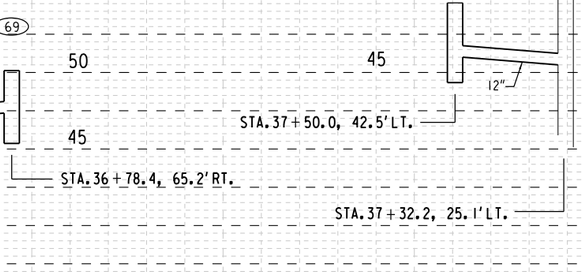
(LOOKING EASTERLY)



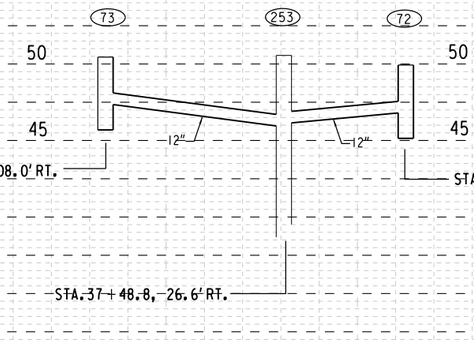
(LOOKING EASTERLY)



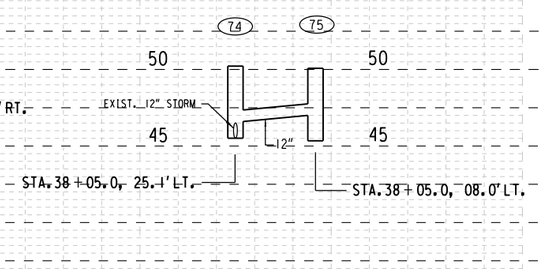
(LOOKING SOUTHERLY)



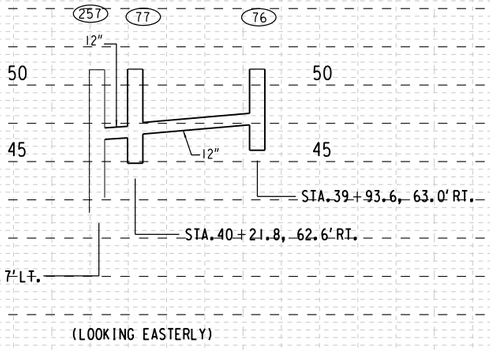
(LOOKING EASTERLY)



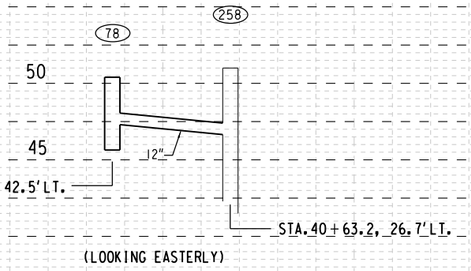
(LOOKING EASTERLY)



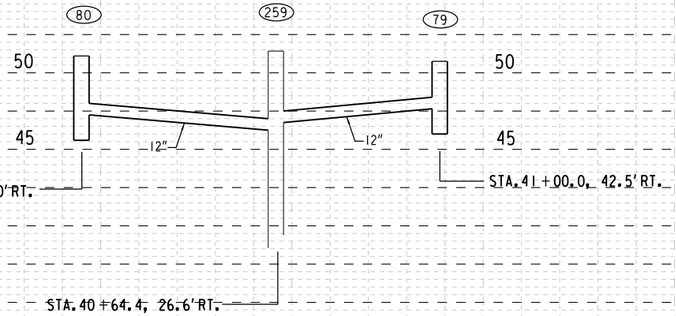
(LOOKING EASTERLY)



(LOOKING EASTERLY)



(LOOKING EASTERLY)



(LOOKING EASTERLY)

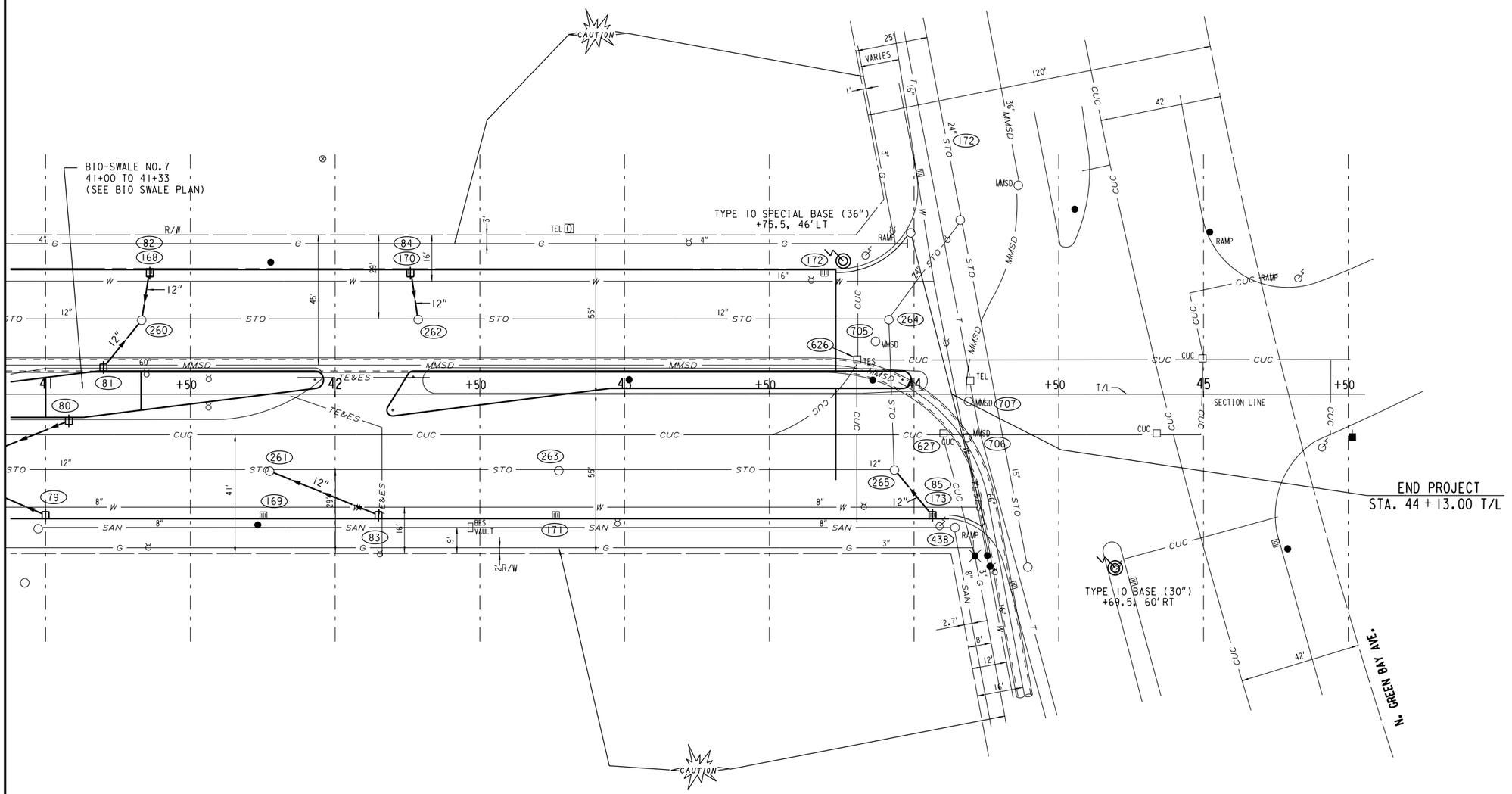
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 64	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 35-41.DGN

2

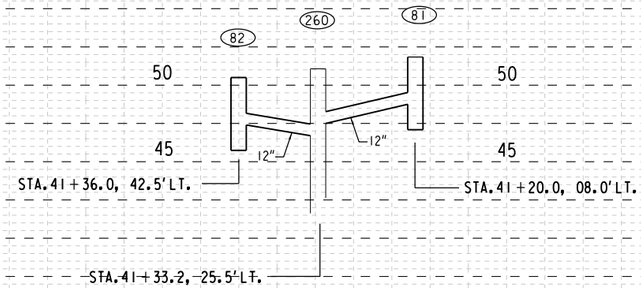
WEST HAMPTON AVENUE

N

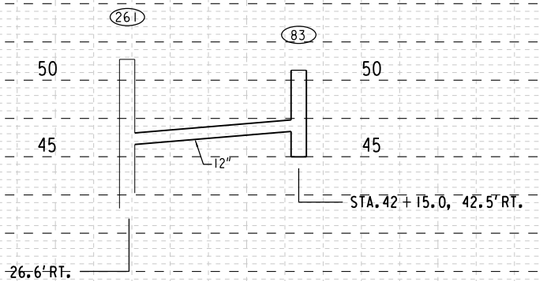


STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 65	E

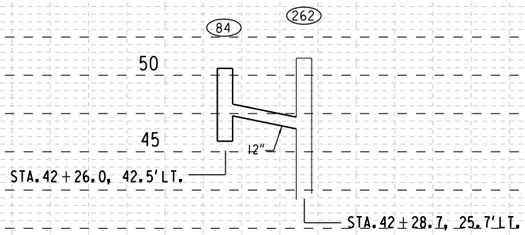
FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 41-47.DGN



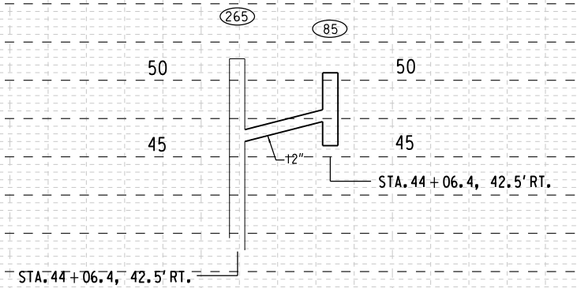
(LOOKING EASTERLY)



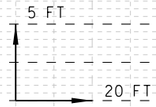
(LOOKING EASTERLY)



(LOOKING NORTHERLY)



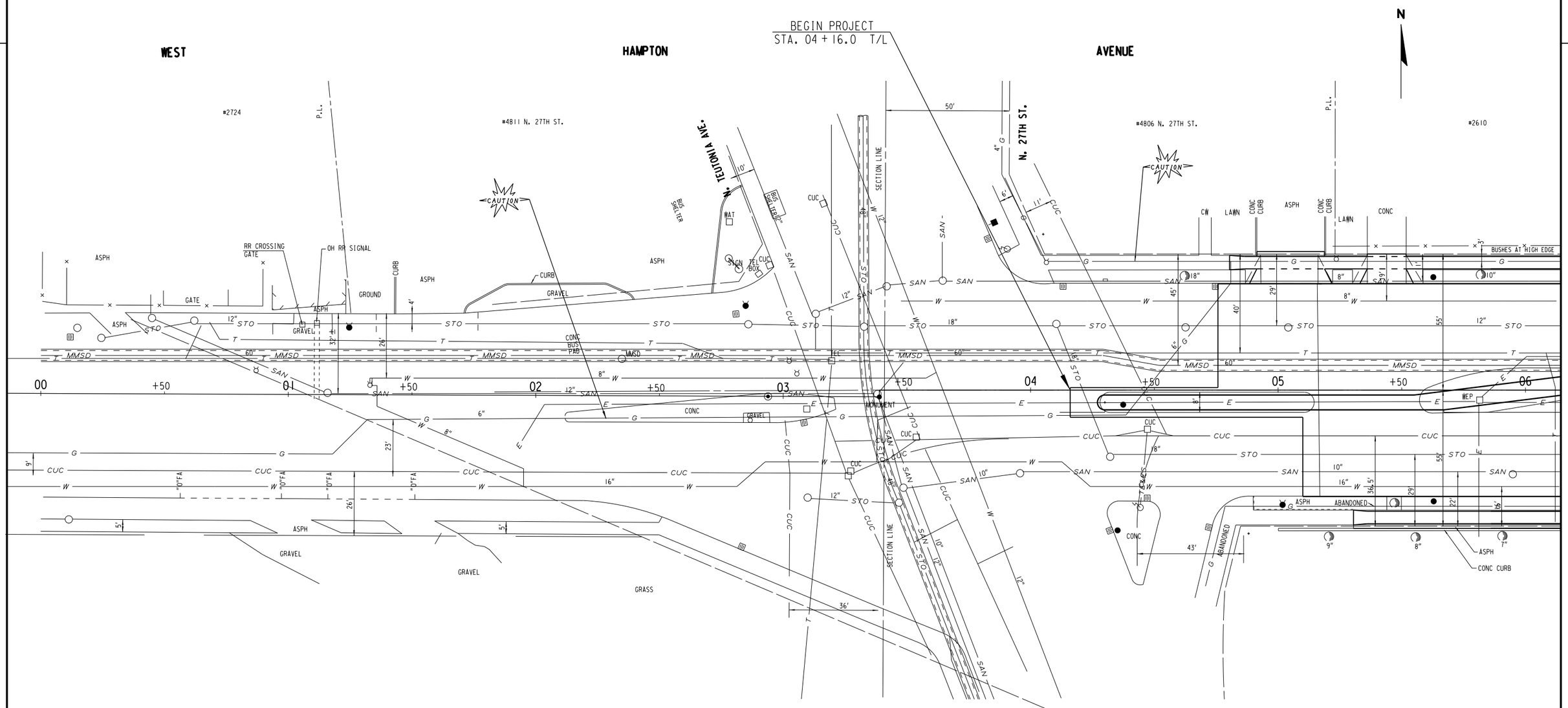
(LOOKING SOUTHERLY)



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 66	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ UTIL 41-47.DGN

2



PLANTING DATA CHART													
				MINIMUM SIZE									
				BALL / POT		ROOT	PLANT HOLE		BRACE	FERT.	RODENT	MULCH	
COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	DIA.	DEPTH	SPREAD *	DIA.	DEPTH	OR GUY	UNITS REQ'D	PROTECT REQ'D	RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

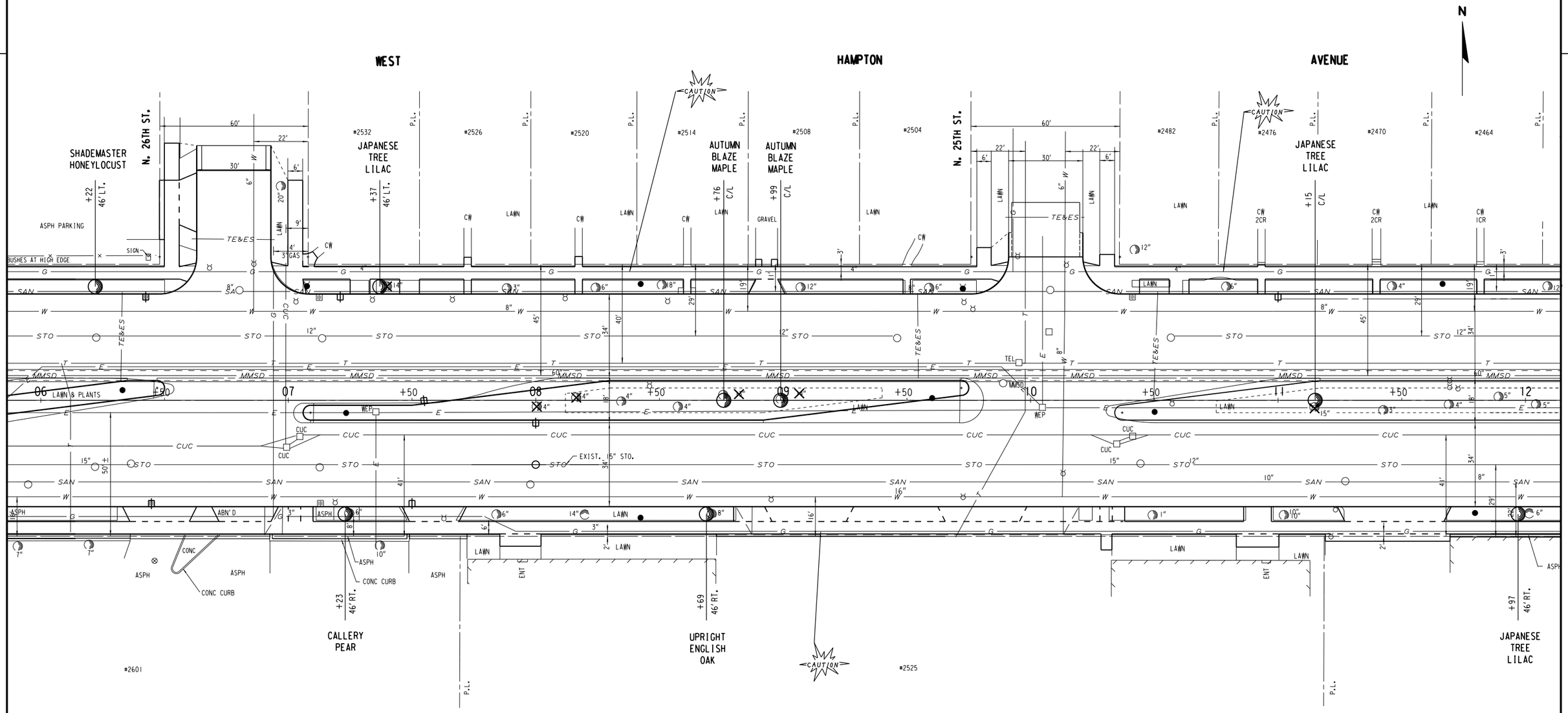
- PLANT NEW TREE (TYPE)
- CLEAR & GRUB TREE

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 67	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2



PLANTING DATA CHART

COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE BALL / POT DIA.	MINIMUM SIZE BALL / POT DEPTH	MINIMUM SIZE ROOT SPREAD *	MINIMUM SIZE PLANT HOLE DIA.	MINIMUM SIZE PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

- PLANT NEW TREE (TYPE)

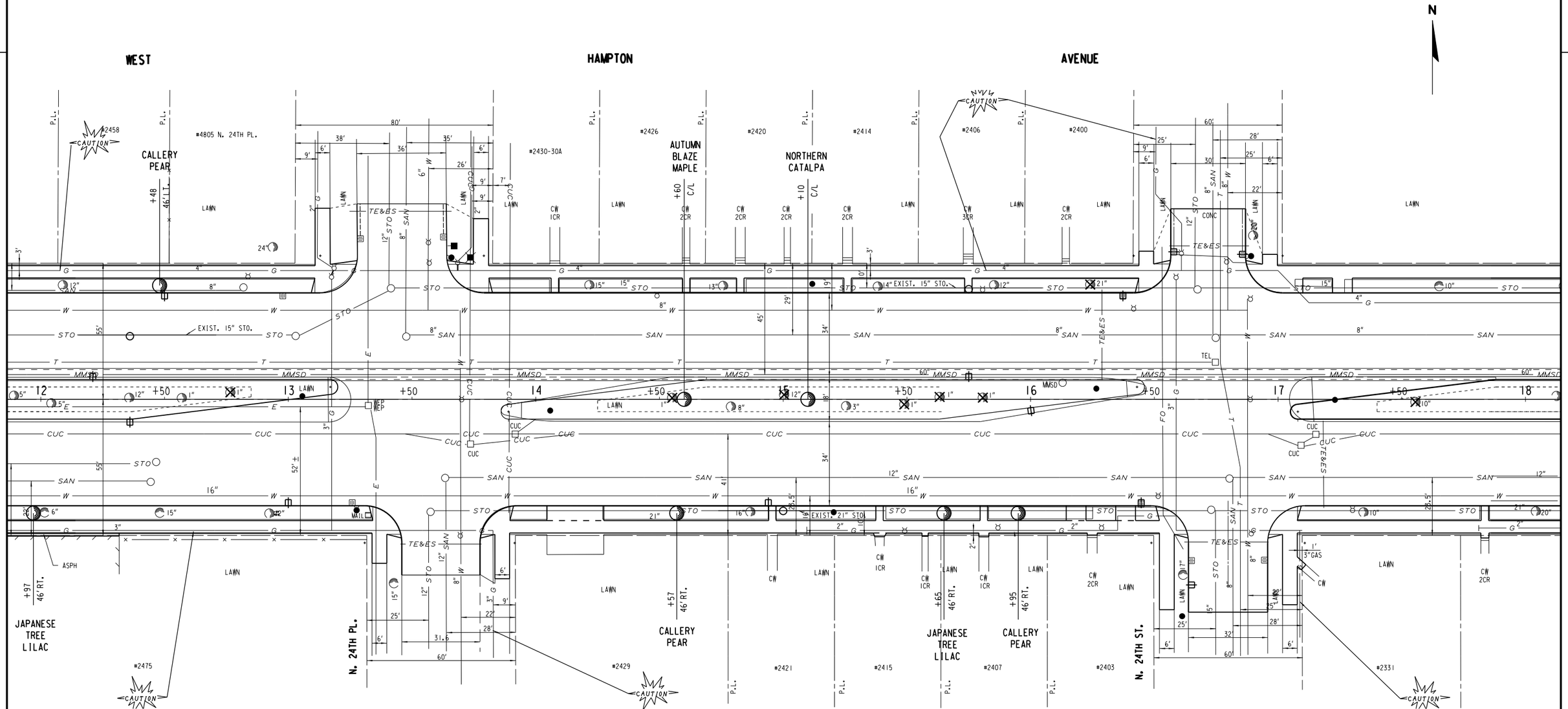
- CLEAR & GRUB TREE

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 68	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2



PLANTING DATA CHART													
				MINIMUM SIZE									
				BALL / POT			PLANT HOLE		BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	
COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	DIA.	DEPTH	ROOT SPREAD *	DIA.	DEPTH					REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

- PLANT NEW TREE (TYPE)

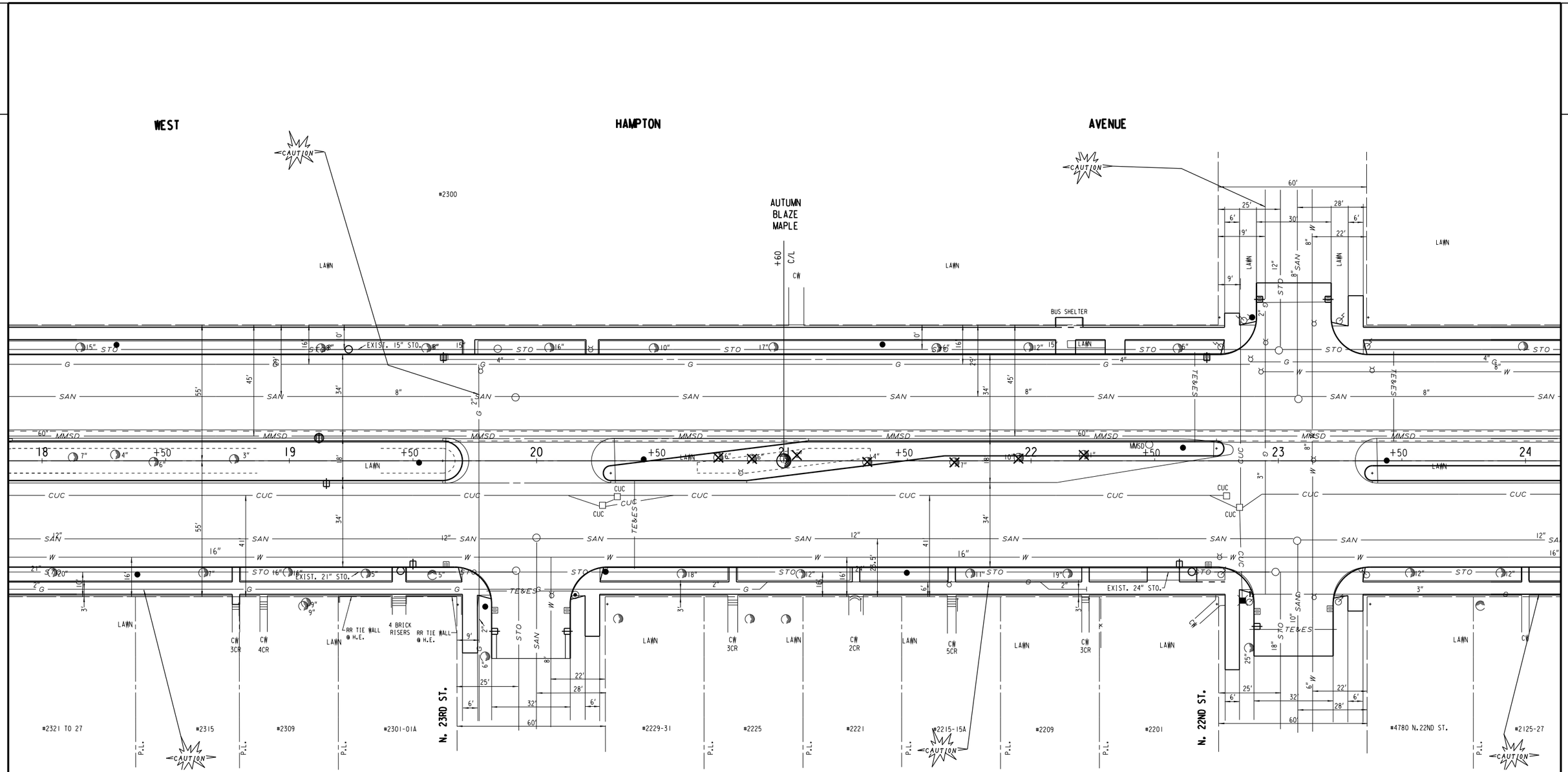
- CLEAR & GRUB TREE

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 69	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2



PLANTING DATA CHART

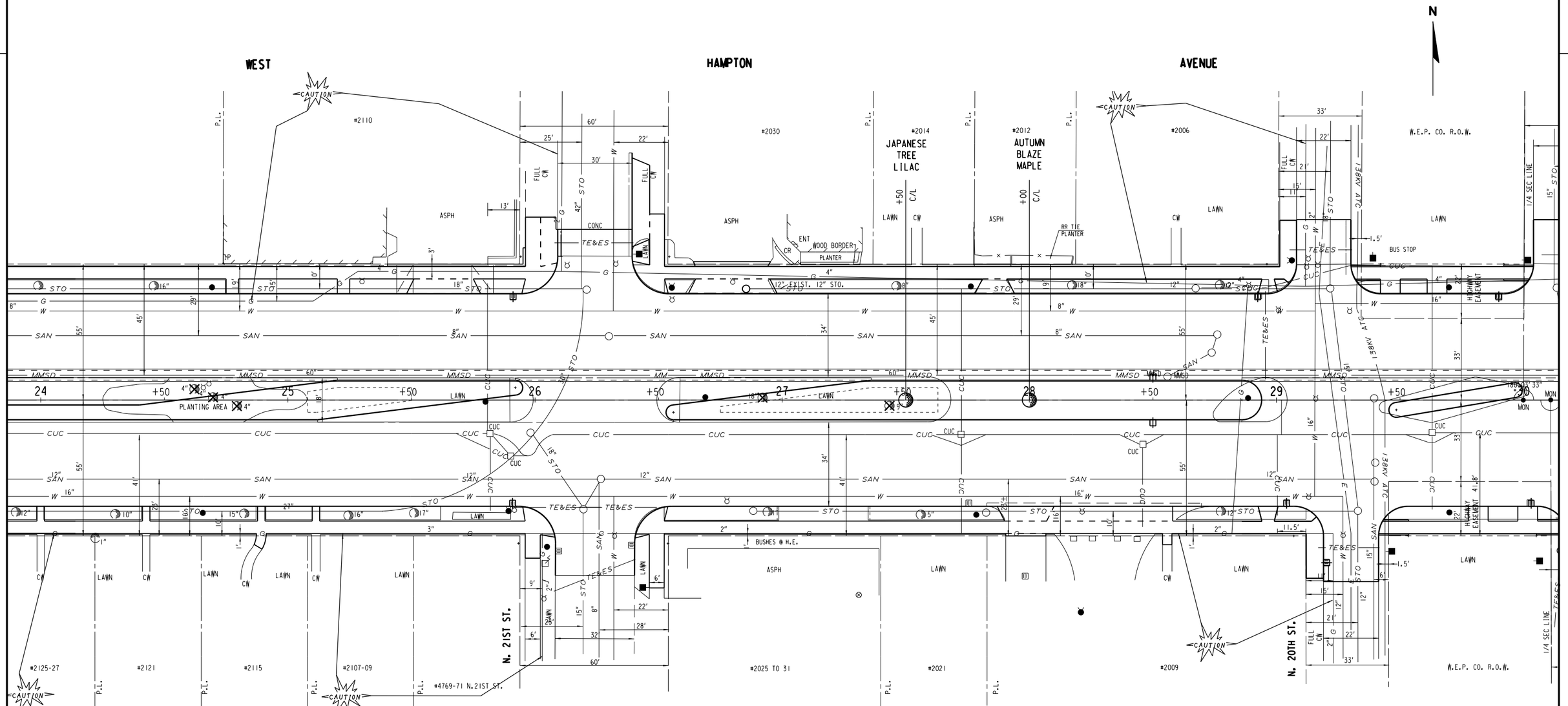
COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE BALL / POT DIA.	MINIMUM SIZE BALL / POT DEPTH	MINIMUM SIZE ROOT SPREAD *	MINIMUM SIZE PLANT HOLE DIA.	MINIMUM SIZE PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40	SHEET NO: 70	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2



PLANTING DATA CHART

COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE BALL / POT DIA.	BALL / POT DEPTH	ROOT SPREAD *	PLANT HOLE DIA.	PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

- PLANT NEW TREE (TYPE)

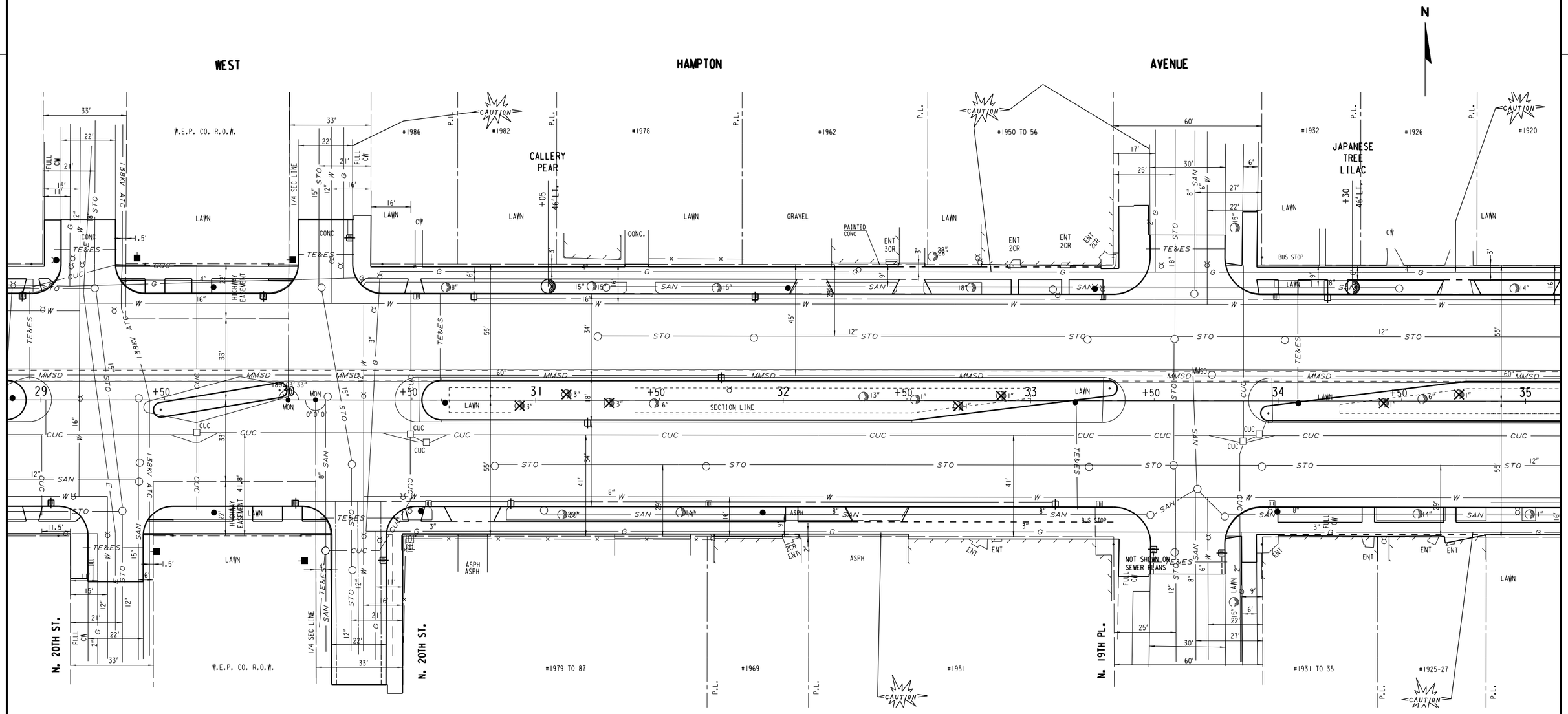
- CLEAR & GRUB TREE

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 71	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2



PLANTING DATA CHART													
COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE BALL / POT DIA.	BALL / POT DEPTH	ROOT SPREAD *	PLANT HOLE DIA.	PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

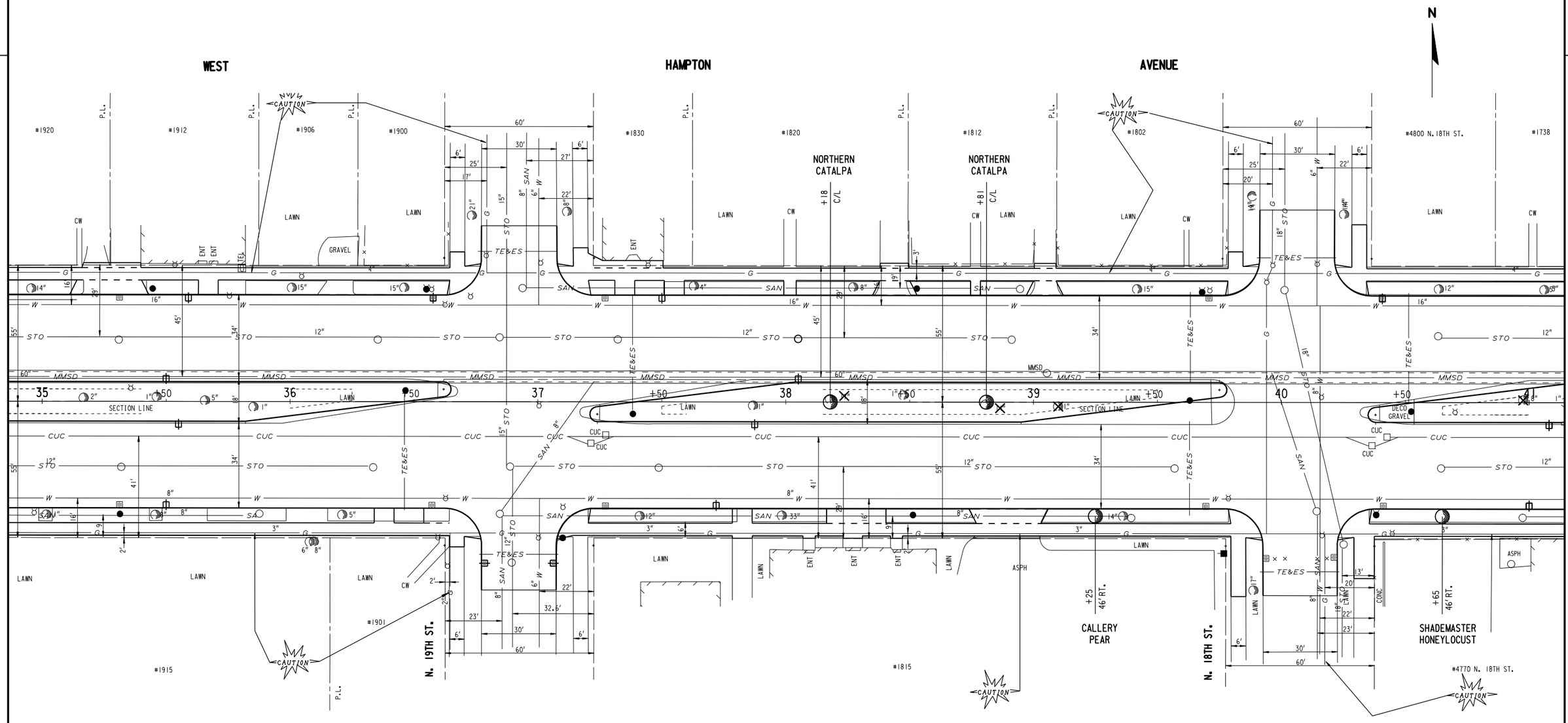
- PLANT NEW TREE (TYPE)
- CLEAR & GRUB TREE

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 72	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2



PLANTING DATA CHART													
COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE BALL / POT DIA.	MINIMUM SIZE BALL / POT DEPTH	MINIMUM SIZE ROOT SPREAD *	MINIMUM SIZE PLANT HOLE DIA.	MINIMUM SIZE PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

- PLANT NEW TREE (TYPE)

- CLEAR & GRUB TREE

BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

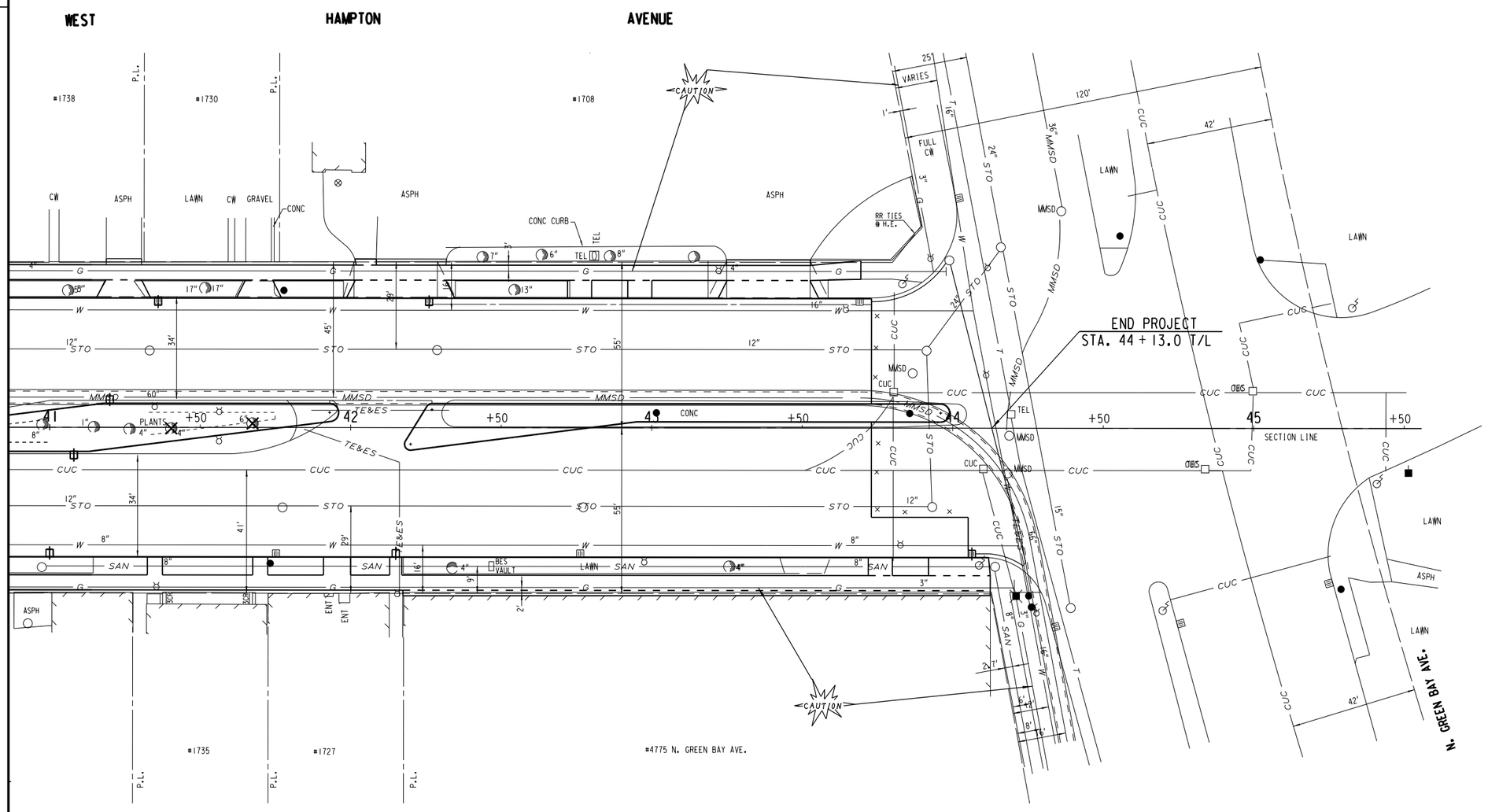
7 OF 8

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 73	E

FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

2

N



PLANTING DATA CHART													
				MINIMUM SIZE									
				BALL / POT			PLANT HOLE						
COMMON NAME	SCIENTIFIC NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	DIA.	DEPTH	ROOT SPREAD *	DIA.	DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT REQ'D	MULCH RING DIA.	REMARKS
AUTUMN BLAZE MAPLE	ACER FREEMANII "AUTUMN BLAZE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	3-EACH	NONE	48"	SPECIMEN QUALITY
SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS "INERMIS"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
JAPANESE TREE LILAC	SYRINGA RETICULATA "IVORY SILK"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
UPRIGHT ENGLISH OAK	QUECUS ROBUR "CRIMSON SPIRE"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
CALLERY PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY
NORTHERN CATALPA	CATALPA SPECIOSA	4.0" CAL.	B & B	39" MIN	24" MIN	INDEFINITE	54" MIN	24" MIN	GUY	4-EACH	NONE	48"	SPECIMEN QUALITY

- PLANT NEW TREE (TYPE)

- CLEAR & GRUB TREE

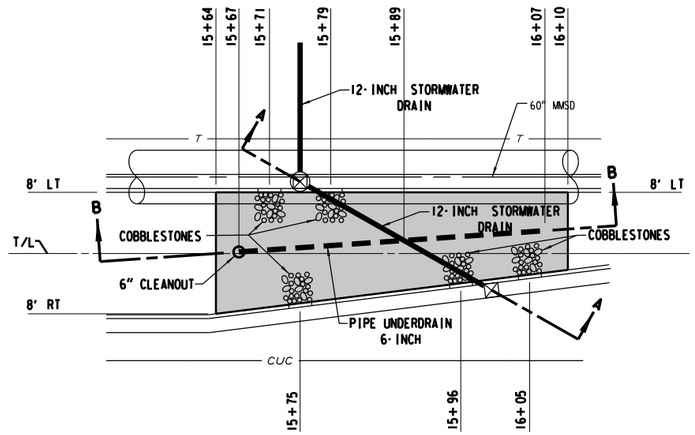
BR BARE ROOT
B&B BALLED AND BURLAPPED
CAL CALIPER
CG CONTAINER GROWTH
(*) FOR BARE ROOT PLANTS

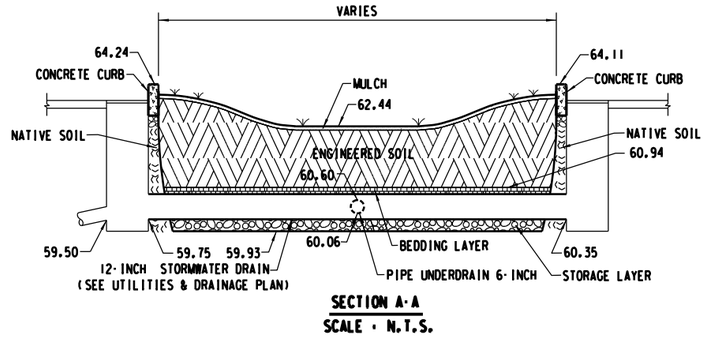
8 OF 8

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TREE REMOVAL & PLANTING	SCALE FEET 0' 40'	SHEET NO: 74	E

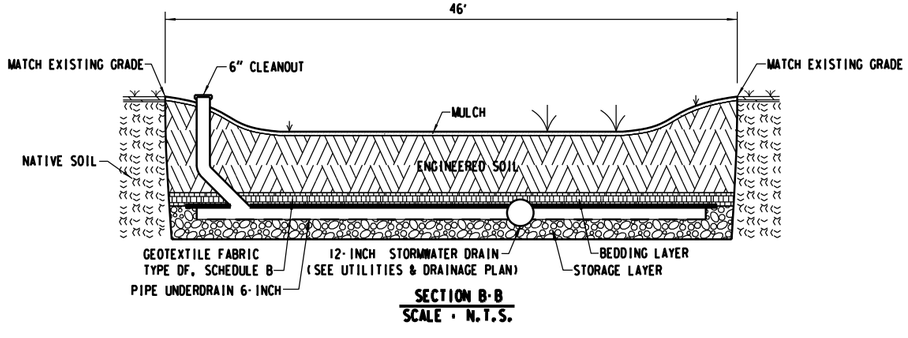
FILE NAME: W:\SPR\HAMPTON GB TEU\TREES.DGN

BIO-SWALE NO. 1



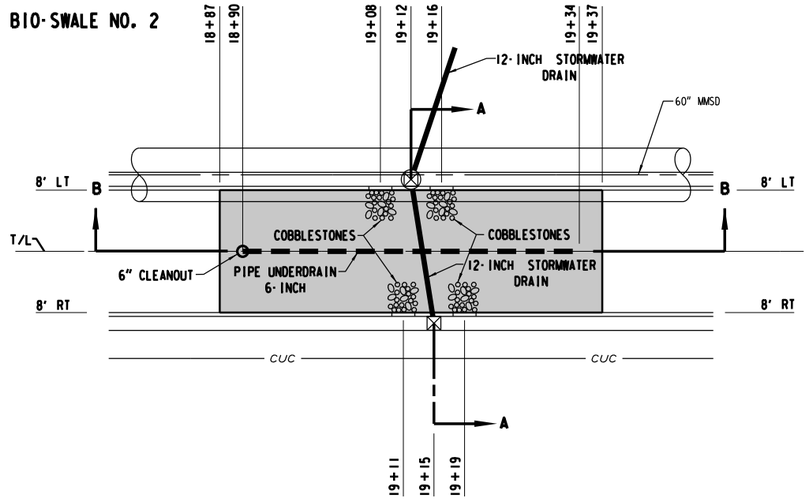


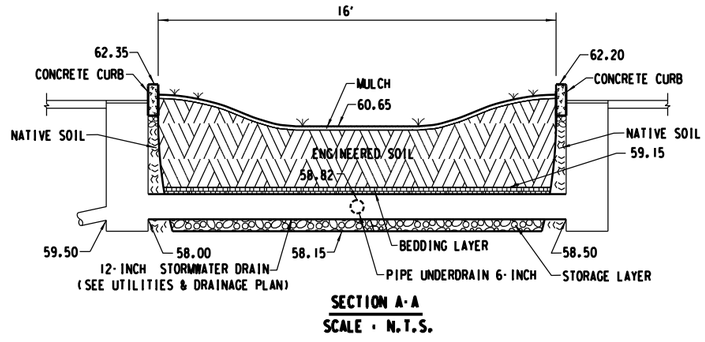
SECTION A-A
SCALE - N.T.S.



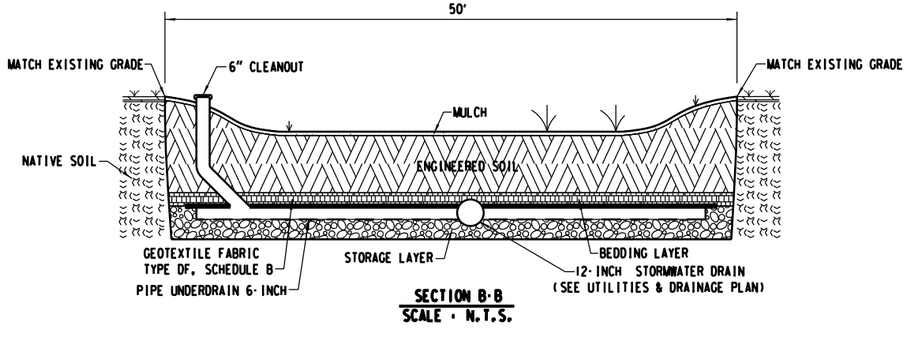
SECTION B-B
SCALE - N.T.S.

BIO-SWALE NO. 2





SECTION A-A
SCALE - N.T.S.

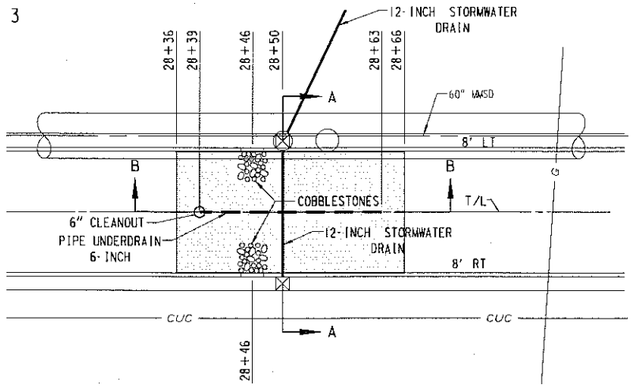


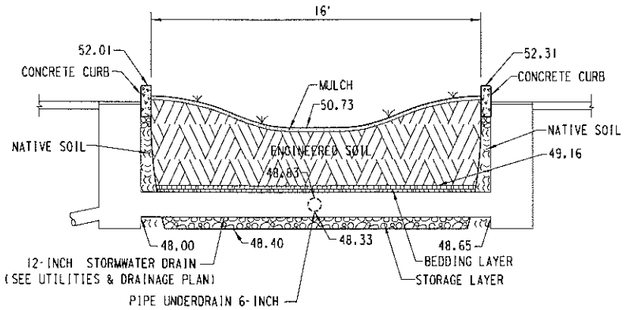
SECTION B-B
SCALE - N.T.S.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE PLAN	SCALE FEET 0' 20'	SHEET NO: 75	E

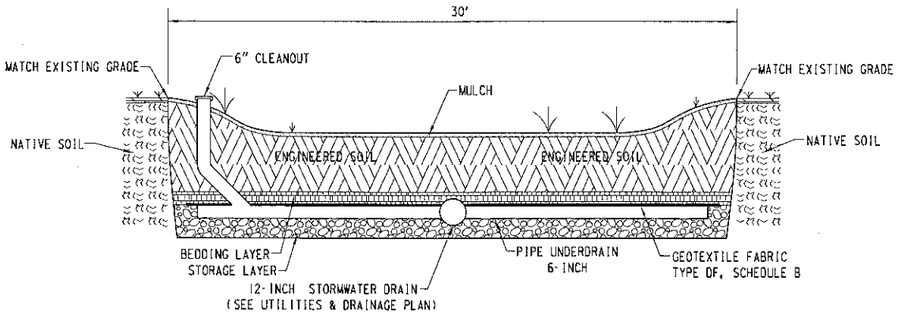
FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

BIO-SWALE NO. 3



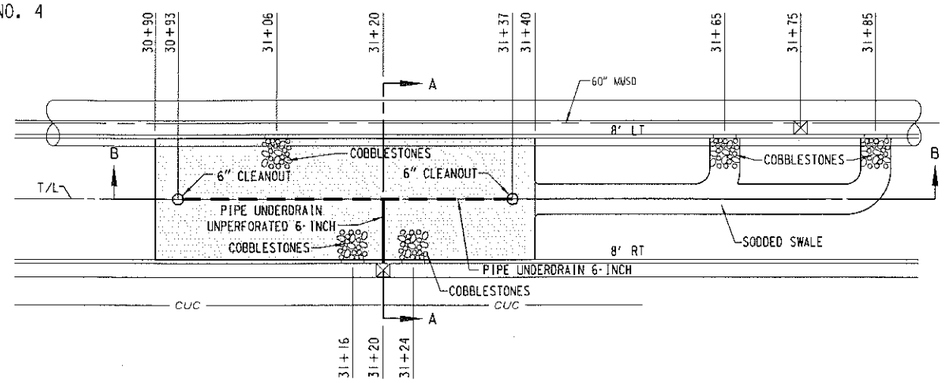


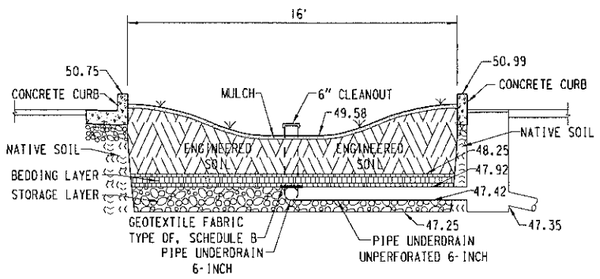
SECTION A-A
SCALE - N.T.S.



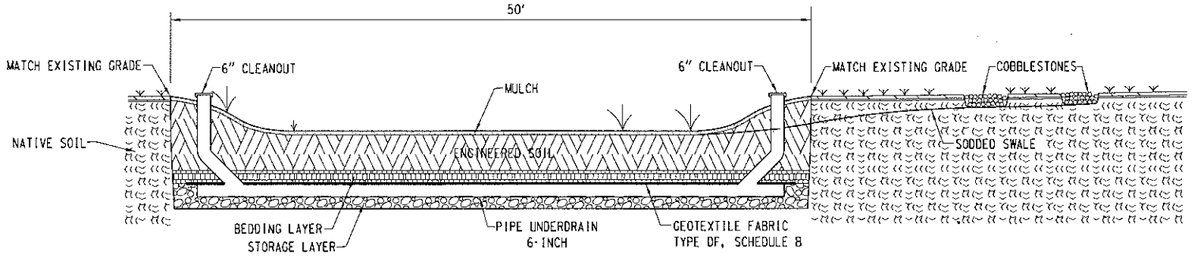
SECTION B-B
SCALE - N.T.S.

BIO-SWALE NO. 4





SECTION A-A
SCALE - N.T.S.

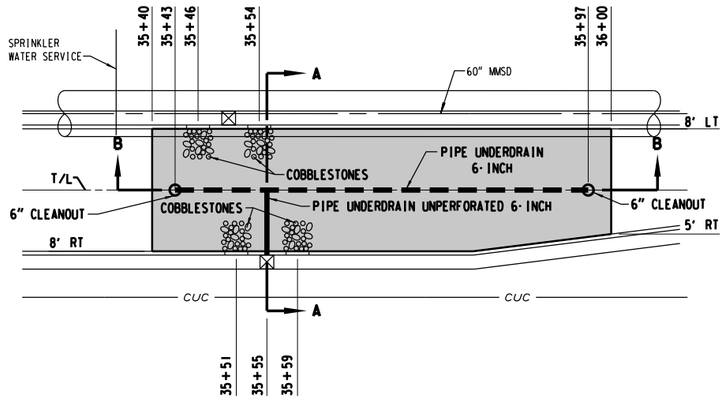


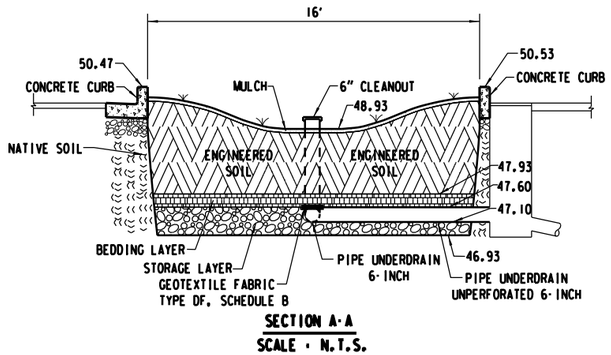
SECTION B-B
SCALE - N.T.S.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE PLAN	SCALE FEET 0' 20	SHEET NO: E

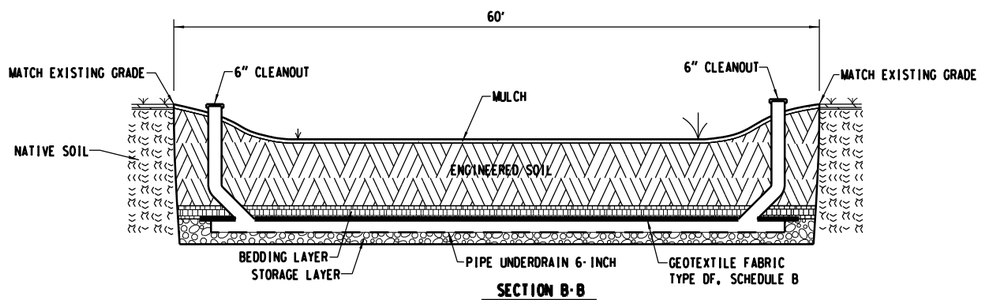
FILE NAME: W:\SPR\HAMPTON 08 TEU\ HAMPTON BIO SWALES.SMP

BIO-SWALE NO. 5



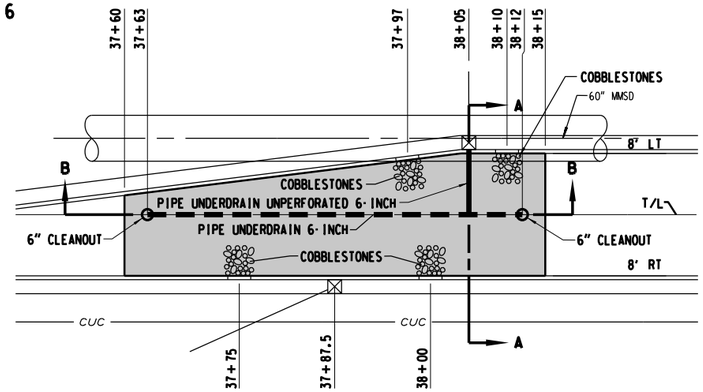


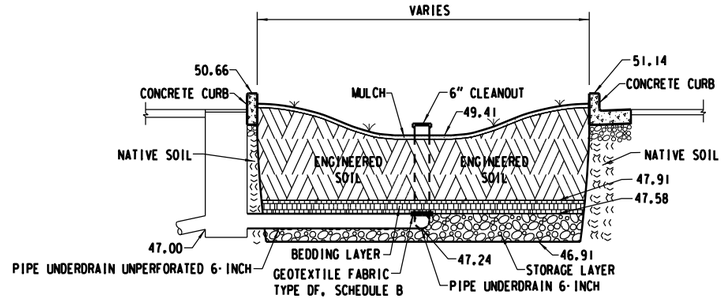
SECTION A-A
SCALE - N.T.S.



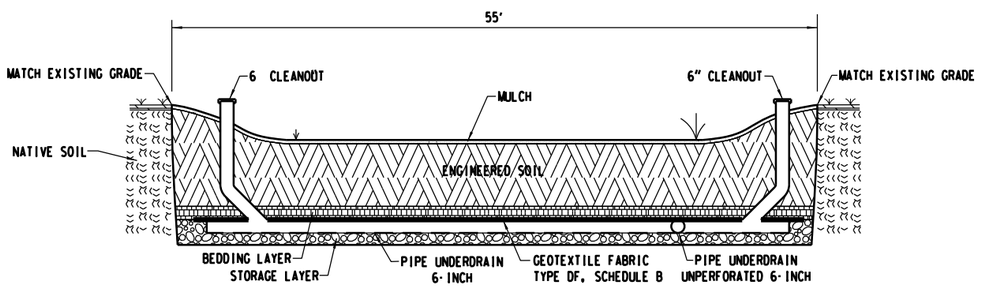
SECTION B-B
SCALE - N.T.S.

BIO-SWALE NO. 6





SECTION A-A
SCALE - N.T.S.



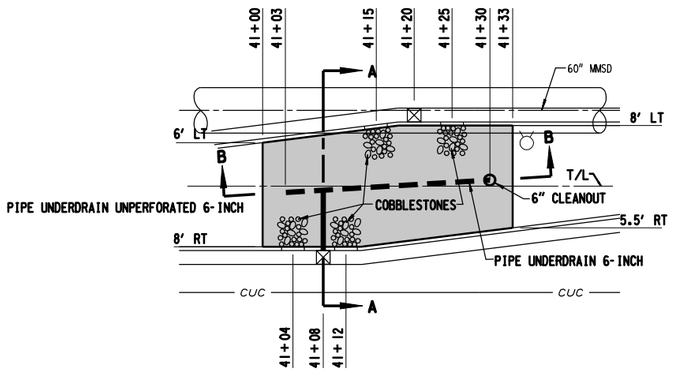
SECTION B-B
SCALE - N.T.S.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE PLAN	SCALE FEET 0' 20'	SHEET NO: 77	E

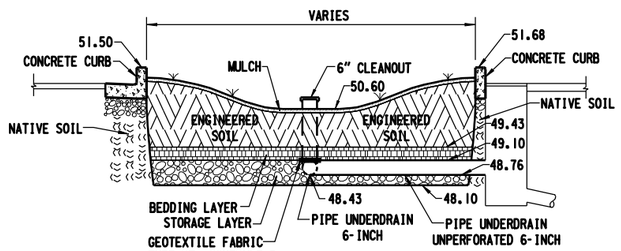
FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

BIO-SWALE DETAILS

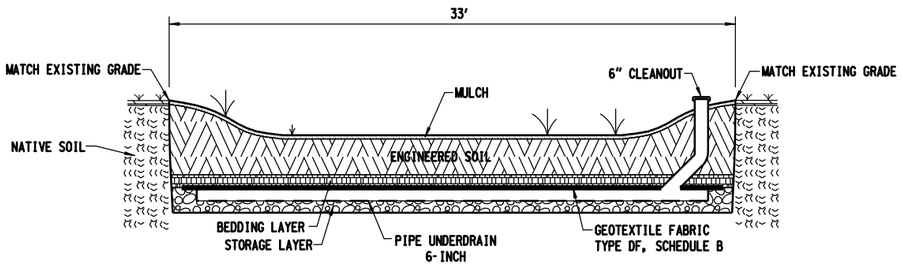
BIO-SWALE NO. 7



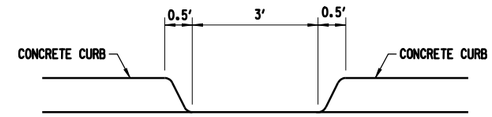
TS&D/9 TS&D/9A



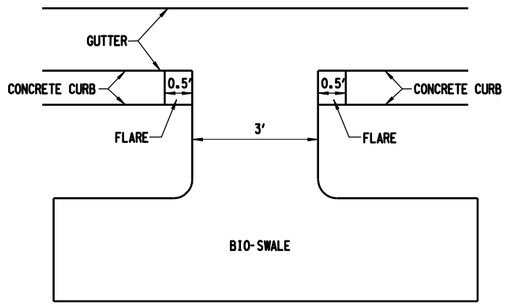
SECTION A-A
SCALE - N.T.S.



SECTION B-B
SCALE - N.T.S.

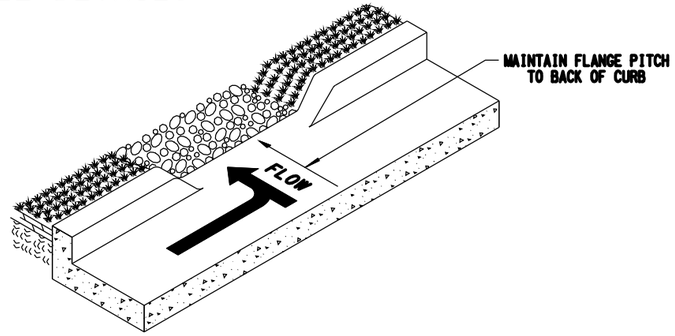


(FRONT VIEW)



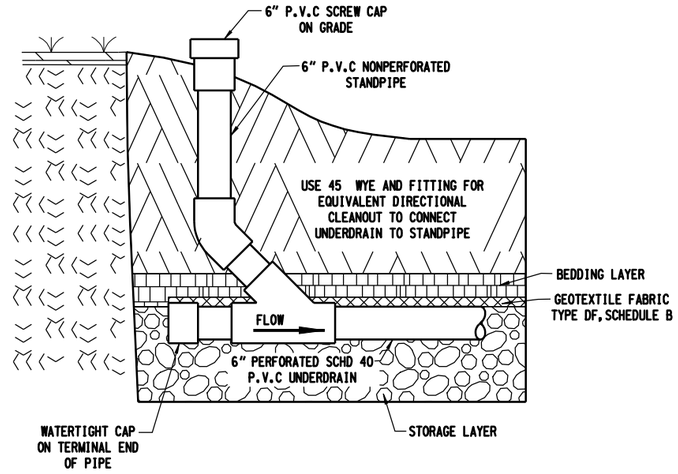
(TOP VIEW)

DETAIL OF CURB CUT
SCALE - N.T.S.

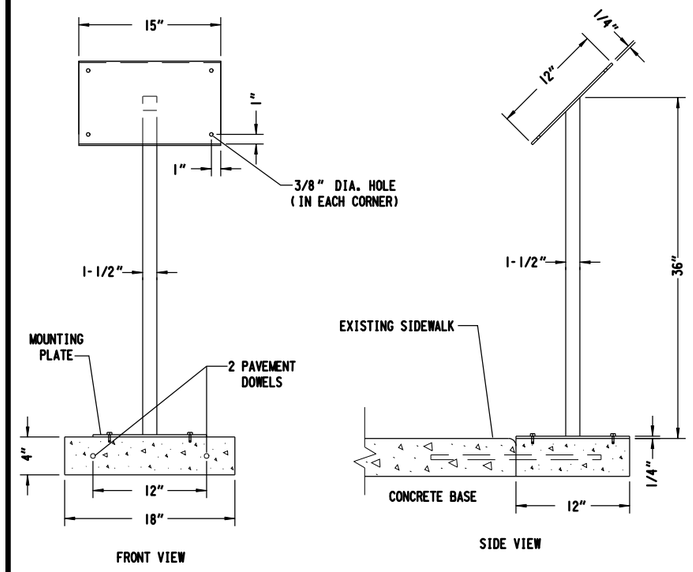


(ISOMETRIC VIEW)

DETAIL OF CURB CUT
SCALE - N.T.S.



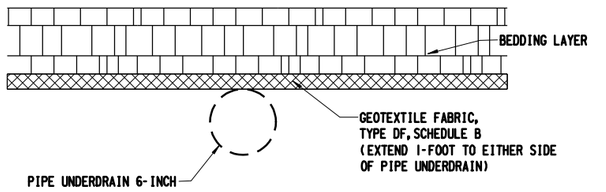
DETAIL OF CLEANOUT
SCALE - N.T.S.



FRONT VIEW

SIDE VIEW

DETAIL OF INFORMATIONAL SIGN
SCALE - N.T.S.



DETAIL OF GEOTEXTILE FABRIC
SCALE - N.T.S.

4 OF 12

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE PLAN AND DETAILS	SCALE FEET 0' 20'	SHEET NO:	E

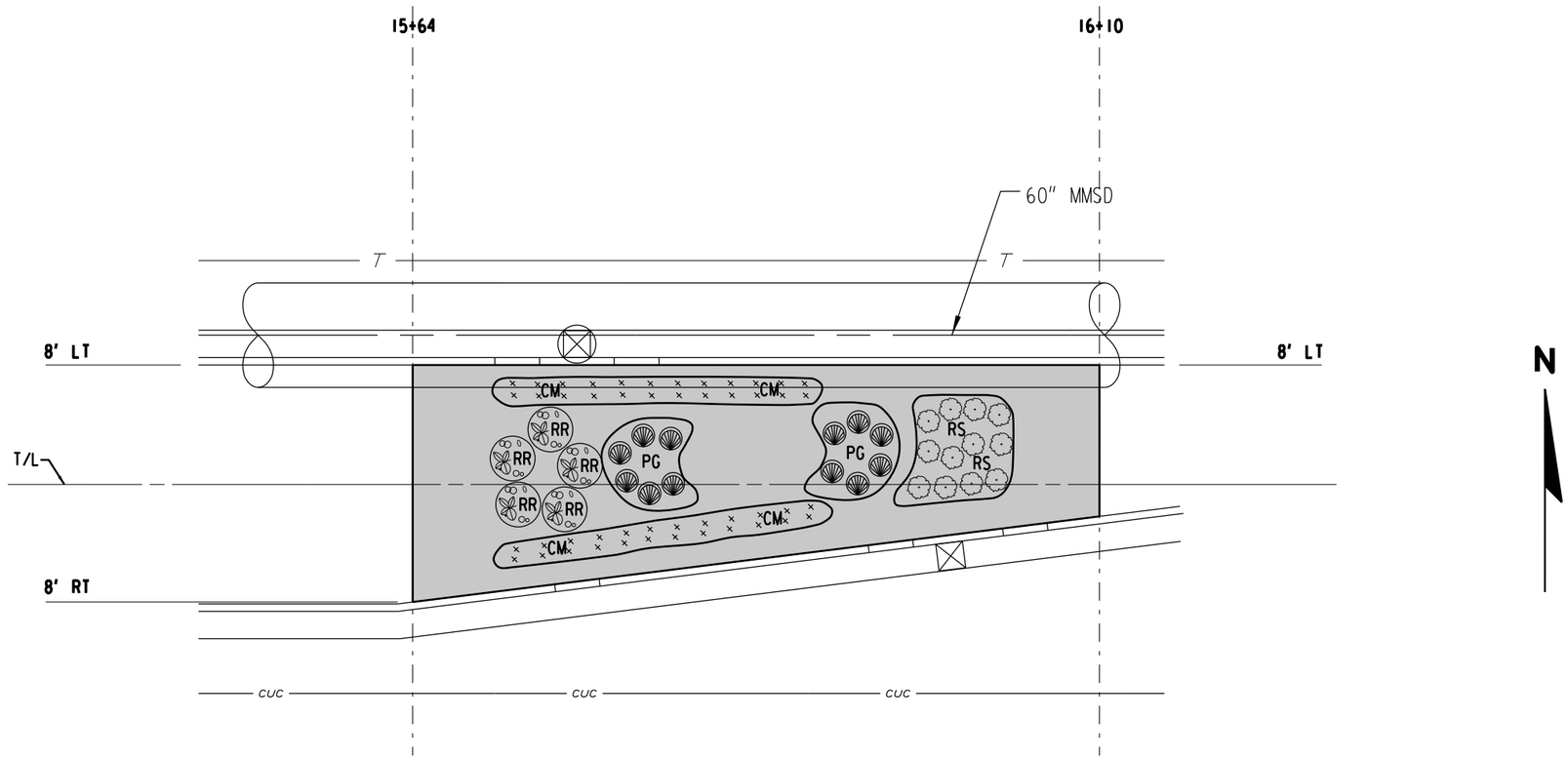
FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

2

2

BIO-SWALE NO. 1

WEST HAMPTON AVENUE



N

SHRUBS

(05)	RR	RUGOSA SHRUB ROSE

PERENNIALS, GRASS, AND BULBS

(48)	CM	CATMINT
(12)	PG	NORTHWIND SWITCH GRASS
(12)	RS	RUSSIAN SAGE

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0' 10'	SHEET NO: 79	E

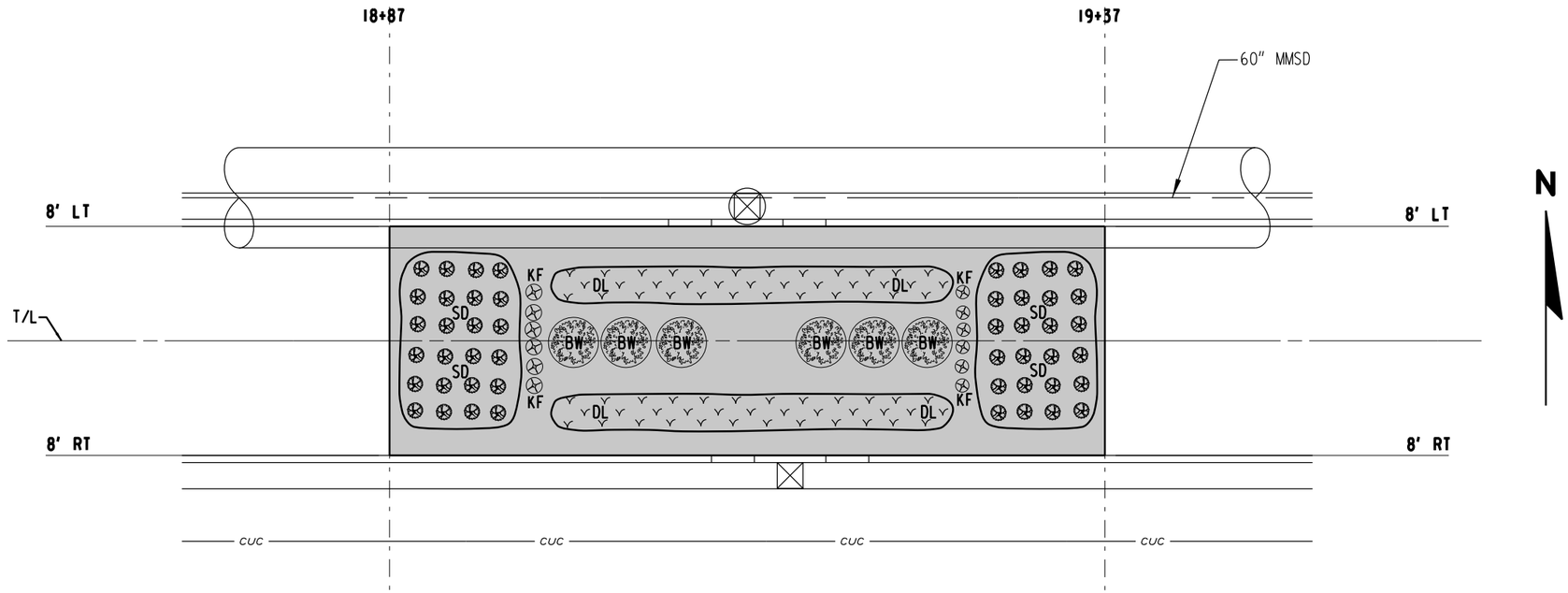
FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

2

2

BIO-SWALE NO. 2

WEST HAMPTON AVENUE



SHRUBS

(06)	BW	ARCTIC BLUE WILLOW

PERENNIALS, GRASS, AND BULBS

(48)	SD	SHASTA DAISY
(12)	KF	KARL FOERSTER GRASS
(72)	DL	DWARF DAYLILIES

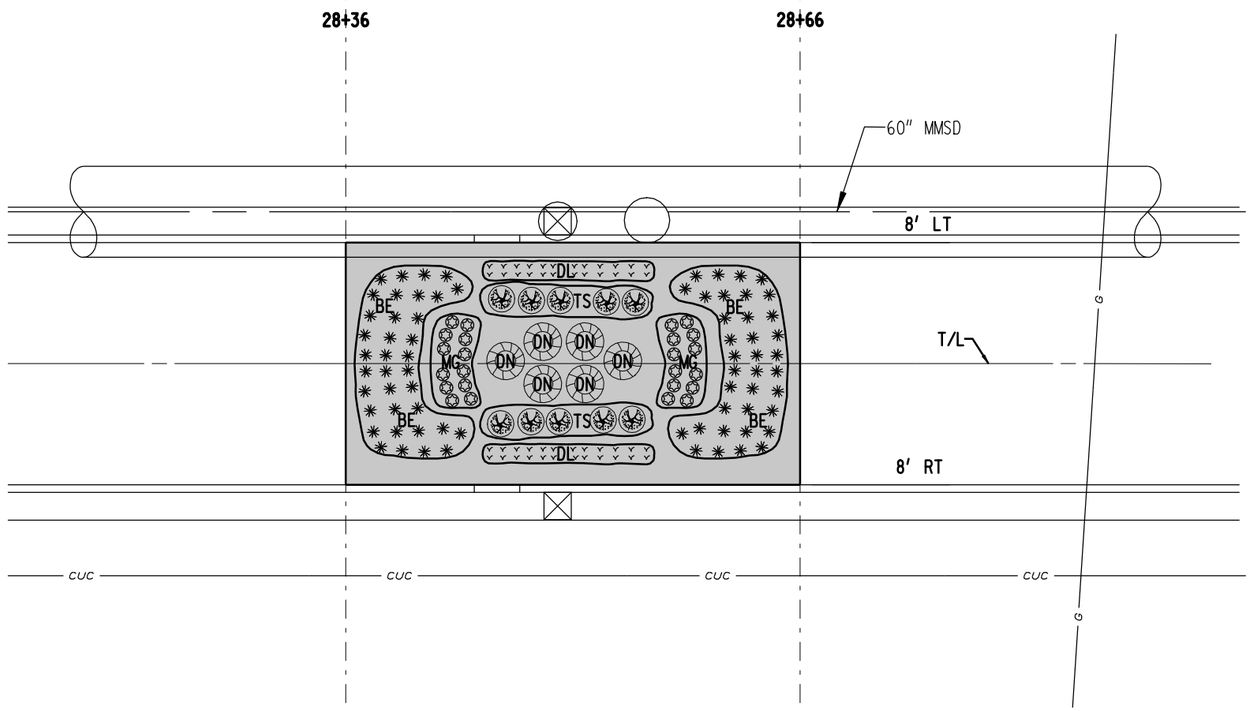
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0 10	SHEET NO: 80	E

FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

2

BIO-SWALE NO. 3

WEST HAMPTON AVENUE





SHRUBS

(06)	DN	SUMMER WINE NINEBARK
(10)	TS	TIGERS EYE SUMAC

PERENNIALS, GRASS, AND BULBS

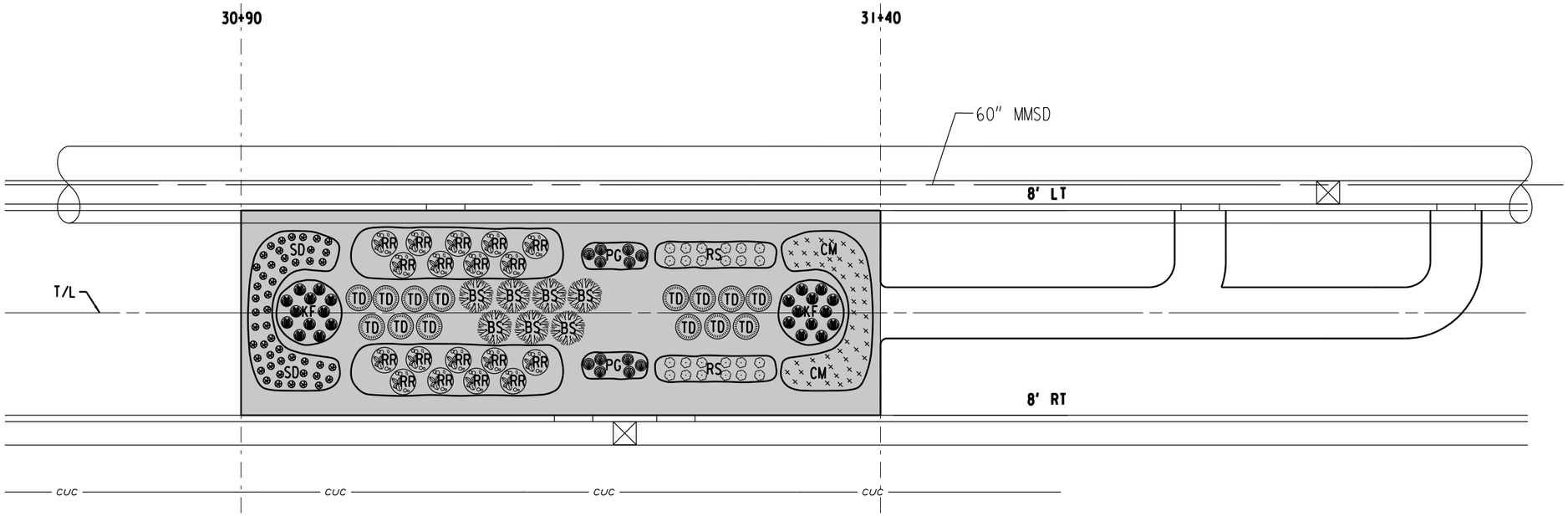
(72)	BE	BLACK EYED SUSAN
(24)	MG	RED FLAME GRASS
(48)	DL	DWARF DAYLILIES

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0' 10'	SHEET NO: 81	E

FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

BIO-SWALE NO. 4

WEST HAMPTON AVENUE



SHRUBS

(14)	TD	RED TWIG DOGWOOD
(07)	BS	BLACK LACE ELDERBERRY
(18)	RR	RUGOSA SHRUB ROSE

PERENNIALS, GRASS, AND BULBS

(48)	CM	CATMINT
(24)	RS	RUSSIAN SAGE
(24)	KF	KARL FORESTER GRASS
(08)	PG	NORTHWIND SWITCH GRASS

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0' 10'	SHEET NO: 82	E

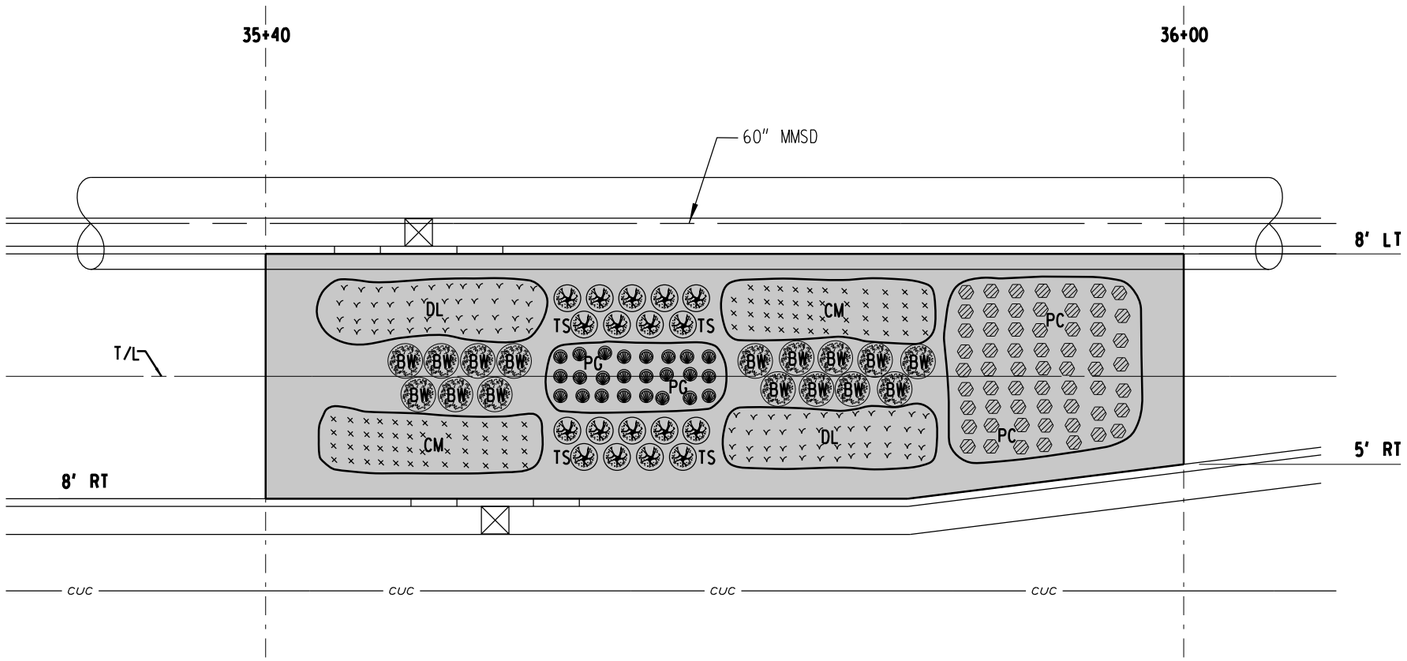
FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

2

2

BIO-SWALE NO. 5

WEST HAMPTON AVENUE



SHRUBS

(16)	BW	ARCTIC BLUE WILLOW
(18)	TS	TIGERS EYE SUMAC

PERENNIALS, GRASS, AND BULBS

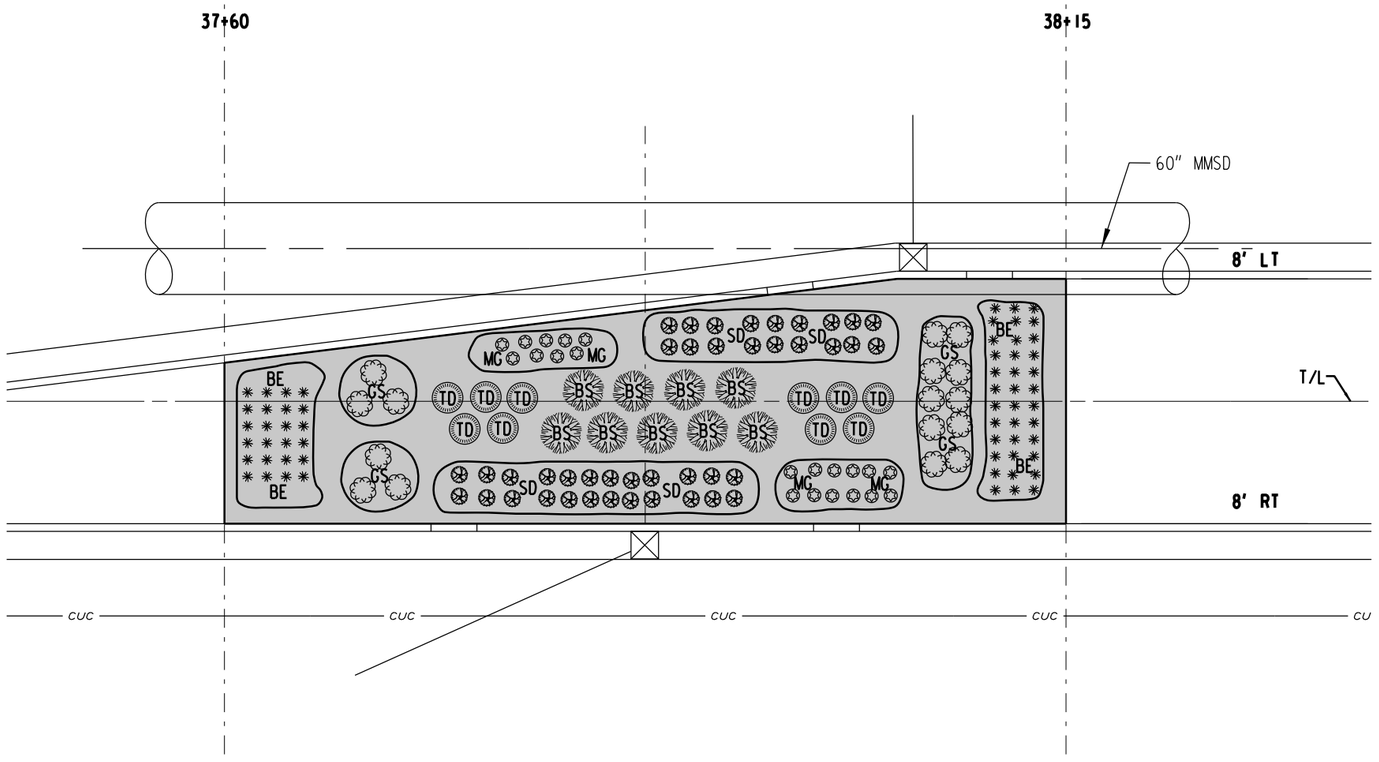
(24)	PG	NORTHWIND SWITCH GRASS
(96)	CM	CATMINT
(96)	DL	DWARF DAYLILIES
(60)	PC	PURPLE CONEFLOWER

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0 10	SHEET NO: 83	E

FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

BIO-SWALE NO. 6

WEST HAMPTON AVENUE



SHRUBS

(10)	TD	RED TWIG DOGWOOD
(09)	BS	BLACK LACE ELDERBERRY
(16)	GS	GROW LOW SUMAC

PERENNIALS, GRASS, AND BULBS

(60)	BE	BLACK EYED SUSAN
(42)	SD	SHASTA DAISY
(21)	MG	RED FLAME GRASS

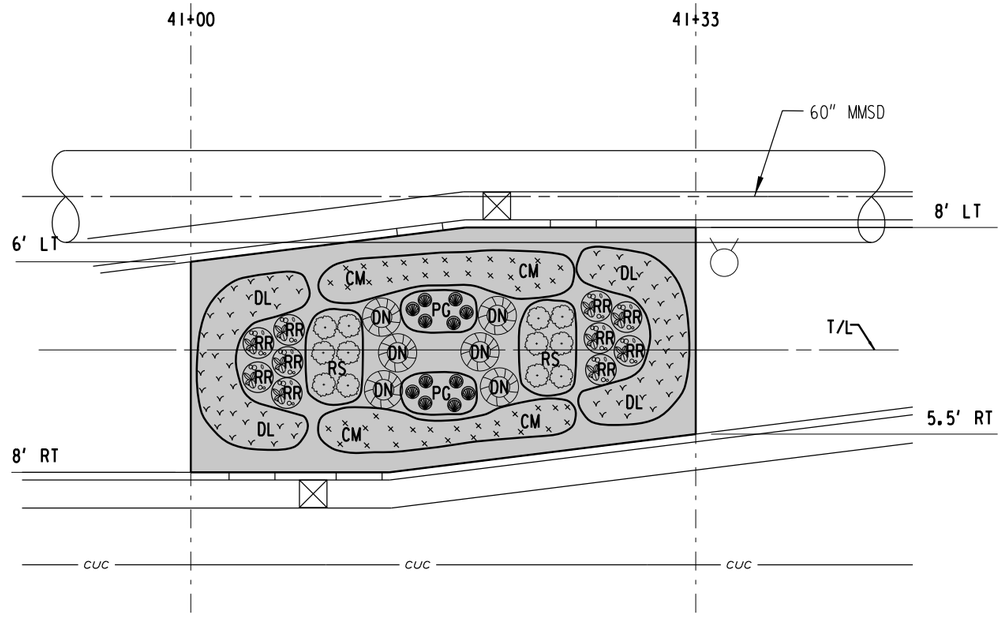
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0' 10'	SHEET NO: 84	E

FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

2

BIO-SWALE NO. 7

WEST HAMPTON AVENUE





SHRUBS

(06)	DN	SUMMER WINE NINEBARK

PERENNIALS, GRASS, AND BULBS

(48)	CM	CATMINT
(12)	PG	NORTHWIND SWITCH GRASS
(72)	DL	DWARF DAYLILIES
(12)	RS	RUSSIAN SAGE

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	BIO SWALE LANDSCAPE PLAN	SCALE FEET 0' 10'	SHEET NO: 85	E

FILE NAME: W:\SPR\HAMPTON GB TEU\ HAMPTON BIO SWALES.SMP

2

BIOSWALE PLANTING DATA CHART

BID ITEM	SYMBOL	COMMON NAME	SCIENTIFIC NAME	UNIT	SIZE @ PLANTING	BALL/POT ROOT ZONE MODE	BALL/POT DIA.	BALL/POT DEPTH	ROOT SPREAD	PLANT HOLE DIA.	PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ	RODENT PROT.	MULCH RING DIA.	REMARKS
		SHRUBS														
632.0201.01	BW	ARCTIC BLUE WILLOW	SALIX PURPUREA	EACH	**18" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
632.0201.02	DN	SUMMER WINE NINEBARK	PHYSOCARPUS 'DIABLO	EACH	**24" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
632.0201.03	TS	TIGERS EYE SUMAC	RHUS SPECIES	EACH	**18" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
632.0201.04	GS	GROW LOW SUMAC	RHUS AROMATICA "GROW LOW"	EACH	**18" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
632.0201.05	TD	RED TWIG DOGWOOD	CORNUS SPECIES	EACH	**24" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
632.0201.06	BS	BLACK LACE ELDERBERRY	SAMBUCUS CANADENSIS	EACH	**24" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
632.0201.07	RR	RUGOSA SHRUB ROSE	ROSA SPECIES	EACH	**18" POT**	CG	12"	12"	36"	36"	9"	N/A	1 EACH	NONE	48"	SPECIMEN QUALITY
		PERENNIALS/GRASSES														
632.0301.01	BE	BLACK EYED SUSAN	GOLDTURM RUDBECKIA	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.02	CM	CATMINT	NEPETA "BLUE WONDER"	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.03	DL	DWARF DAYLILIES	HEMEROCALLIS "STELLA DORO"	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.04	PC	PURPLE CONEFLOWER	ECHINACEA PURPUREA	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.05	RS	RUSSIAN SAGE	PEROVSKIA SPECIES	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.06	SD	SHASTA DAISY	LEUCANTHEMUM"ALASKA"	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.07	KF	KARL FOERSTER GRASS	CALAMAGROSTIS ACUTIFOLIA	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.08	PG	NORTHWIND SWITCH GRASS	PANICUM VIRGATUM	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY
632.0301.09	MG	RED FLAME GRASS	MISCANTHUS PURPURESCENS	EACH	**1 GALLON**	CG	9"	6"	24"	30"	9"	N/A	1 EACH	NONE	36"	SPECIMEN QUALITY

TRAFFIC & STREET LIGHTING GENERAL NOTES:

PRIOR TO CONSTRUCTION, THE LOCATION OF UNDERGROUND UTILITIES SHALL BE DETERMINED IN THE FIELD BY CONTACTING "DIGGERS HOTLINE."

STREET LIGHTING & TRAFFIC SIGNALS SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 652 EXCEPT:

THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INCLUDING REPAIRS, REPLACEMENT OR RELOCATION ETC. OF STREET LIGHTING OR TRAFFIC SIGNAL FACILITIES IF THE CONTRACTOR DOES ANY DEVIATION FROM THE STREET LIGHTING OR TRAFFIC SIGNAL DESIGN WITHOUT THE STREET LIGHTING ENGINEERS SIGNED PERMISSION.

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

2 LOCATIONS OF THE PVC CONDUITS WHERE THEY ARE REQUIRED ARE IDENTIFIED IN THE PRINTS. HOWEVER, INSTALLATION MAY REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. ANY RELOCATIONS MUST BE APPROVED BY THE ENGINEER. FIELD MARK EACH CONDUIT LOCATION BY STAMPING AND PAINTING WITH RED PAINT ON TOP AND BACKSIDE OF CURB.

3 TYPICAL CONDUIT INSTALLED UP TO DIRECT BURIED STREET LIGHT POLES IS AS FOLLOWS 3-INCH OR 2.5-INCH (AS NOTED) SCHEDULE 40 RIGID PVC TO STREET LIGHTING METAL HOUSING (PEDESTAL), THE 1.5-INCH SCHEDULE 40 RIGID PVC TO STREET LIGHT POLE CABLE SLOT, AND THE 2-INCH SCHEDULE 40 RIGID PVC TO SIGNAL STANDARD BASE AND RISER FOR TRAFFIC SIGNAL ON STREET LIGHT POLE.

4 DEPTH OF CONDUIT INSTALLED BELOW THE STREETS, HIGHWAYS, ROADS, AND ALLEYS SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM. (MEASURED FROM FINISHED FLANGE LINE)

5 CONDUIT INSTALLED BEHIND CURB, AND UNDER DRIVEWAYS SHALL BE INSTALLED AT THE BASE OF THE BACKSIDE OF THE CURB/GUTTER SECTION.

6 WHEN THERE IS MORE THAN ONE CONDUIT TO BE LAID BEHIND THE CURB, PLACE ALL CONDUITS IN THE SAME TRENCH.

7 ANY EXCEPTION TO THE MINIMUM OR MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

8 THE CONTRACTOR OR HIS SUBCONTRACTOR MUST MAKE SURE THE AREA BEHIND CURB AND/OR TRENCH SHALL BE FREE OF DEBRIS AND OVERPOUR AND SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

9 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.

10 ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS. (SEE NEC 352.28 2008 CODE)

11 PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED IMMEDIATELY AFTER INSTALLATION WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

12 ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

13 CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX OR JUNCTION BOX OR BASE TO BASE, ETC.).

14 PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUIT.

15 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 STREET LIGHTING ENGINEER.

16 WHEN ENDS OF CONDUIT DO NOT CONNECT TO A VAULT AND WILL END UP UNDER CONCRETE WALK. THE CONTRACTOR IS REQUIRED TO LEAVE A 24" X 24" BOX FORM CENTERED OVER THE END OF CONDUIT AND FILL THE BOXFORM WITH CRUSHED GRAVEL. (PER WISDOT SPEC 209.2.1(1) GRANULAR BACKFILL)

17 ALL PIPE CROSSINGS AND VAULTS SHALL BE AT LEAST SIX (6) FEET AWAY FROM FIRE HYDRANTS, UNLESS NOTED OTHERWISE, OR APPROVED BY THE STREET LIGHTING ENGINEER.

18 ALL POLES AND TRAFFIC STANDARDS IN CONCRETE ARE REQUIRED TO HAVE A 30"X30" BOX SHAPED JOINT PLACED AROUND THEM USING AN EXPANSION JOINT FILLER. UNLESS NOTED OTHERWISE (SEE DETAIL 122)

19 TYPICAL RECTANGULAR VAULTS SHOULD BE INSTALLED AS SHOWN ON PLANS, BUT WHEN IT IS NOT POSSIBLE, A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS AND FIRE HYDRANTS SHOULD BE USED, OTHERWISE APPROVED BY THE STREET LIGHTING ENGINEER.

TRAFFIC & STREET LIGHTING GENERAL NOTES:

2

20 COORDINATE NEW CONDUIT CONNECTIONS WITH EXISTING CONDUIT, DUCT PACKAGES, AND VAULTS/ MANHOLES WITH CITY OF MILWAUKEE STREET LIGHTING. THE CITY REQUIRES THREE WORKING DAYS ADVANCED NOTICE. CONTACT ELECTRICAL SUPERVISOR
STREET LIGHTING - DENNIS MILLER (OFFICE) 414-286-5942 (CELL) 414-708-4251 OR DISPATCHER @ 414-286-5944
TRAFFIC SIGNALS - AL NICHOLS (OFFICE) 414-286-3687 (CELL) 414-708-5148 OR DISPATCHER @ 414-286-3687

21 IMMEDIATELY AFTER THE CONTRACTOR HAS COMPLETED ALL THE ELECTRICAL VAULT, CONDUIT AND CONDUIT CONNECTIONS, AND JUST BEFORE ELECTRICAL WORK IS COVERED UP WITH CONRETE, SOIL, OR ETC. THE CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SHOP SUPERVISORS FOR FINAL INSPECTION AND APPROVAL OF ALL WORK.
STREET LIGHTING - DENNIS MILLER (OFFICE) 414-286-5942 (CELL) 414-708-4251
STREET LIGHTING - GEORGE BERDINE (OFFICE) 414-286-5943 (CELL) 414-708-4245
STREET LIGHTING - THOMAS HUGHES (OFFICE) 414-286-3457 (CELL) 414-708-3175
STREET LIGHTING - DISPATCHER @ 414-286-5944
TRAFFIC SIGNALS - AL NICHOLS (OFFICE) 414-286-5941 (CELL) 414-708-5148
TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687

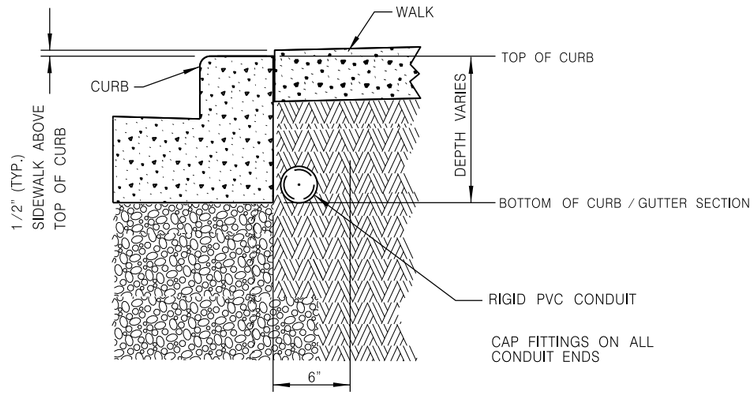
22 CONDUIT WILL ONLY BE INSTALLED AFTER THE CURB IS POURED, UNLESS APPROVED BY BOTH THE ENGINEER & STREET LIGHTING SHOP SUPERVISOR.

SHEET 1 OF 20

PROJECT NO: 2545–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 87	E

2

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.
2.) CONDUIT TO BE PLACED WITHIN A 6" AREA DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.

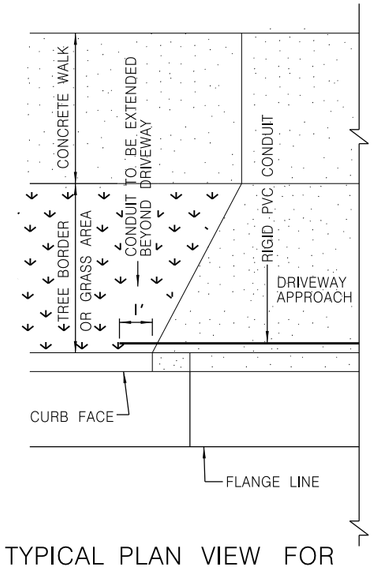


100 DETAIL "A"

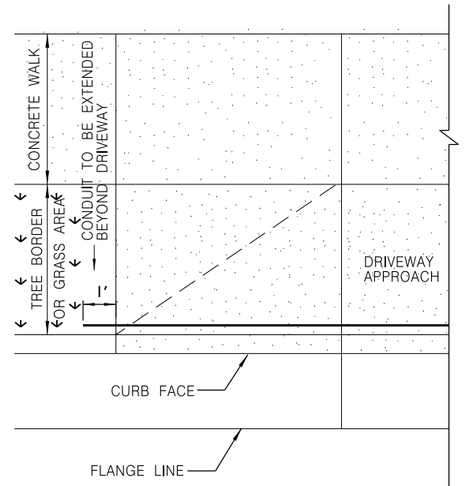
TYPICAL CONDUIT INSTALLATION
BEHIND CURB

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.



TYPICAL PLAN VIEW FOR
FLARED DRIVEWAY



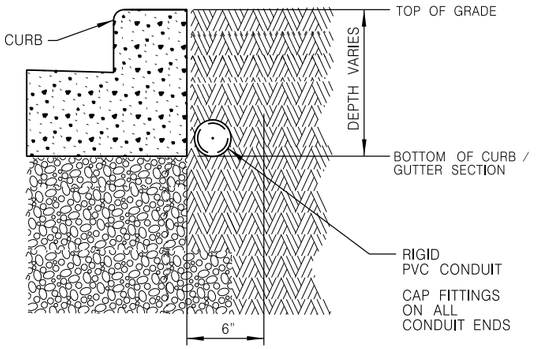
TYPICAL PLAN VIEW FOR
DEPRESSED DRIVEWAY

2

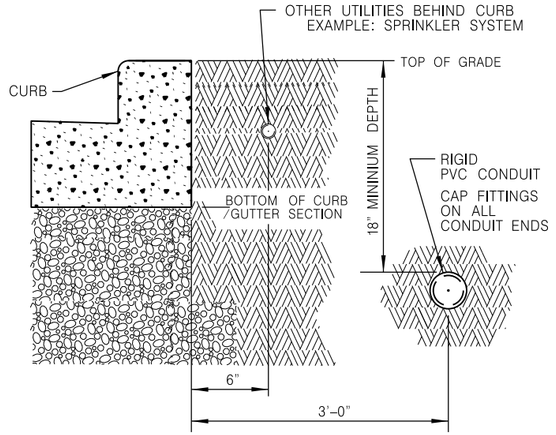
NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

DETAIL "B"

CONDUIT TO BE PLACED WITHIN A 6" AREA DIRECTLY BEHIND CURB,
UNLESS NOTED OR APPROVED BY ENGINEER.



DETAIL "C"



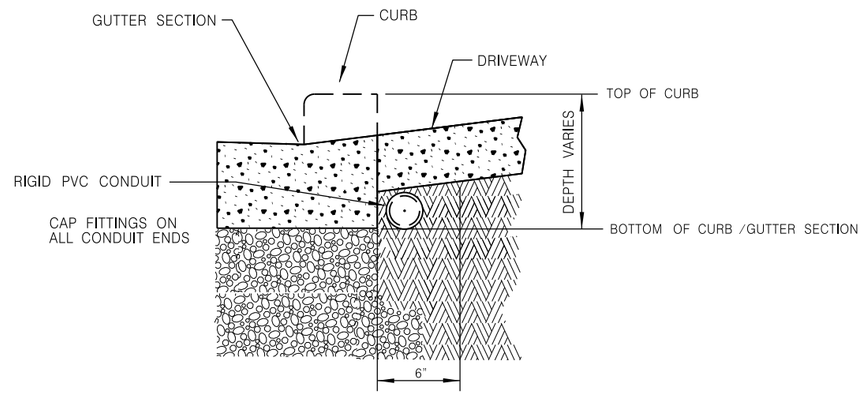
100 DETAIL "B" & "C"

TYPICAL CONDUIT INSTALLATION
BEHIND CURB

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.
2.) CONDUIT TO BE PLACED WITHIN A 6" AREA DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.



101 DETAIL

TYPICAL CONDUIT INSTALLATION
UNDER DRIVEWAYS OR PEDESTRIAN RAMPS

NOT TO SCALE

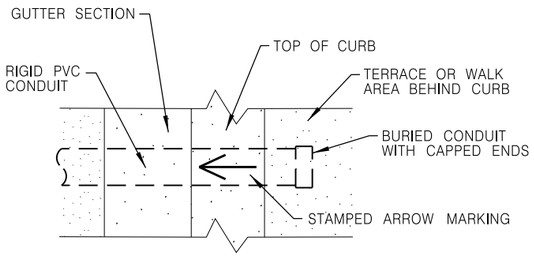
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

SHEET 2 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 88	E

FILE NAME : W:\bes\pavlngs\2013work\wHamptonTeutonla-GreenBay\Street LIghtIng Condult\HamptonTeutonla-GreenBay Condult.dgn
PLOT DATE : 02-DEC-2013 13:10
PLOT BY : dkozel
PLOT NAME :
PLOT SCALE : 40.000000:1.000000
WISDOT/CADDS SHEET 42

2



TOP VIEW OF CURB STAMPING

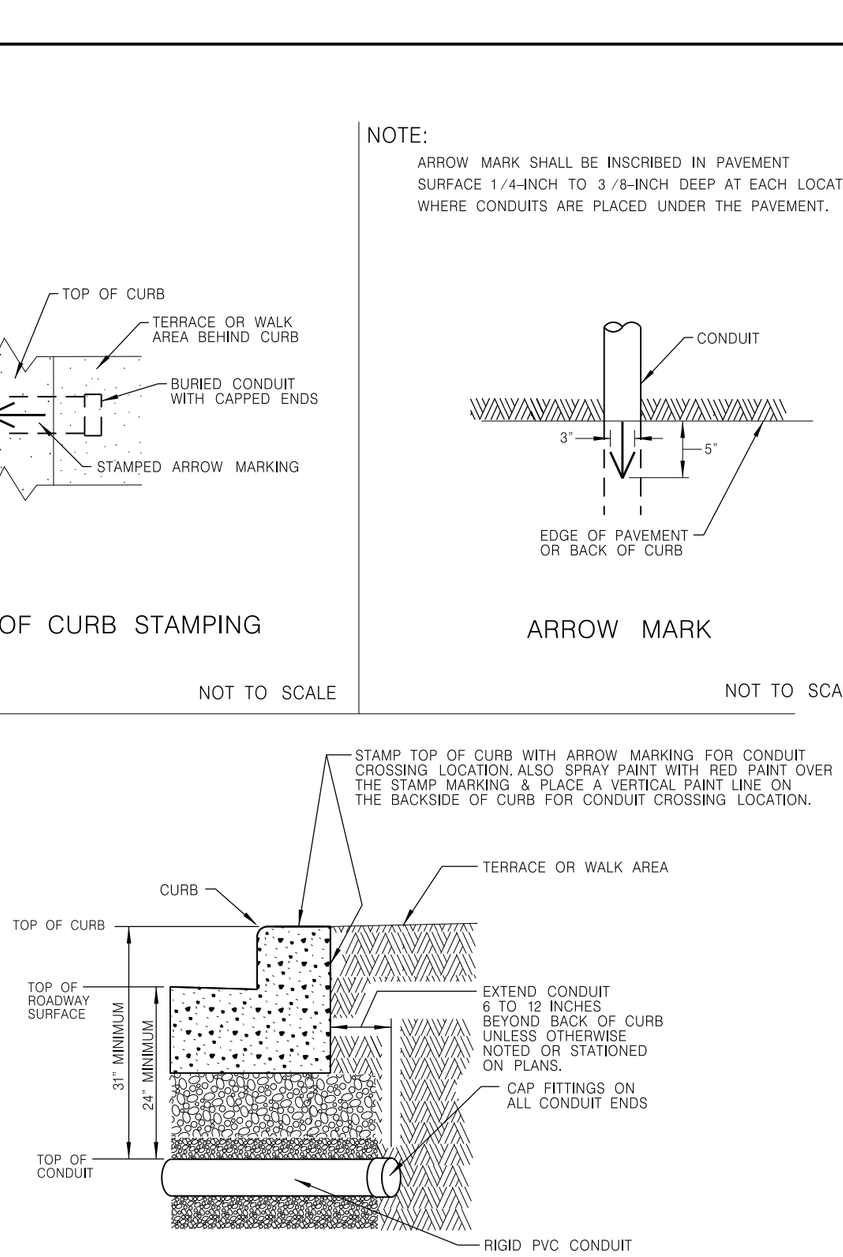
NOT TO SCALE

NOTE:

ARROW MARK SHALL BE INSCRIBED IN PAVEMENT SURFACE 1/4–INCH TO 3/8–INCH DEEP AT EACH LOCATION WHERE CONDUITS ARE PLACED UNDER THE PAVEMENT.

ARROW MARK

NOT TO SCALE



102

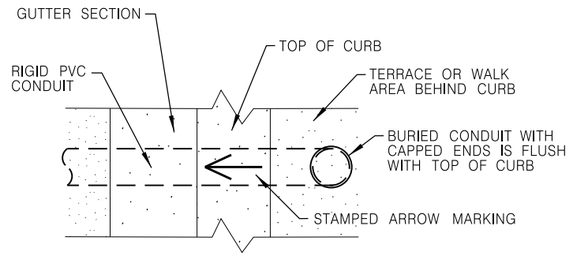
DETAIL VERSION #1

TYPICAL CONDUIT INSTALLATION FOR CROSSING ROADWAYS

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

2



TOP VIEW OF CURB STAMPING

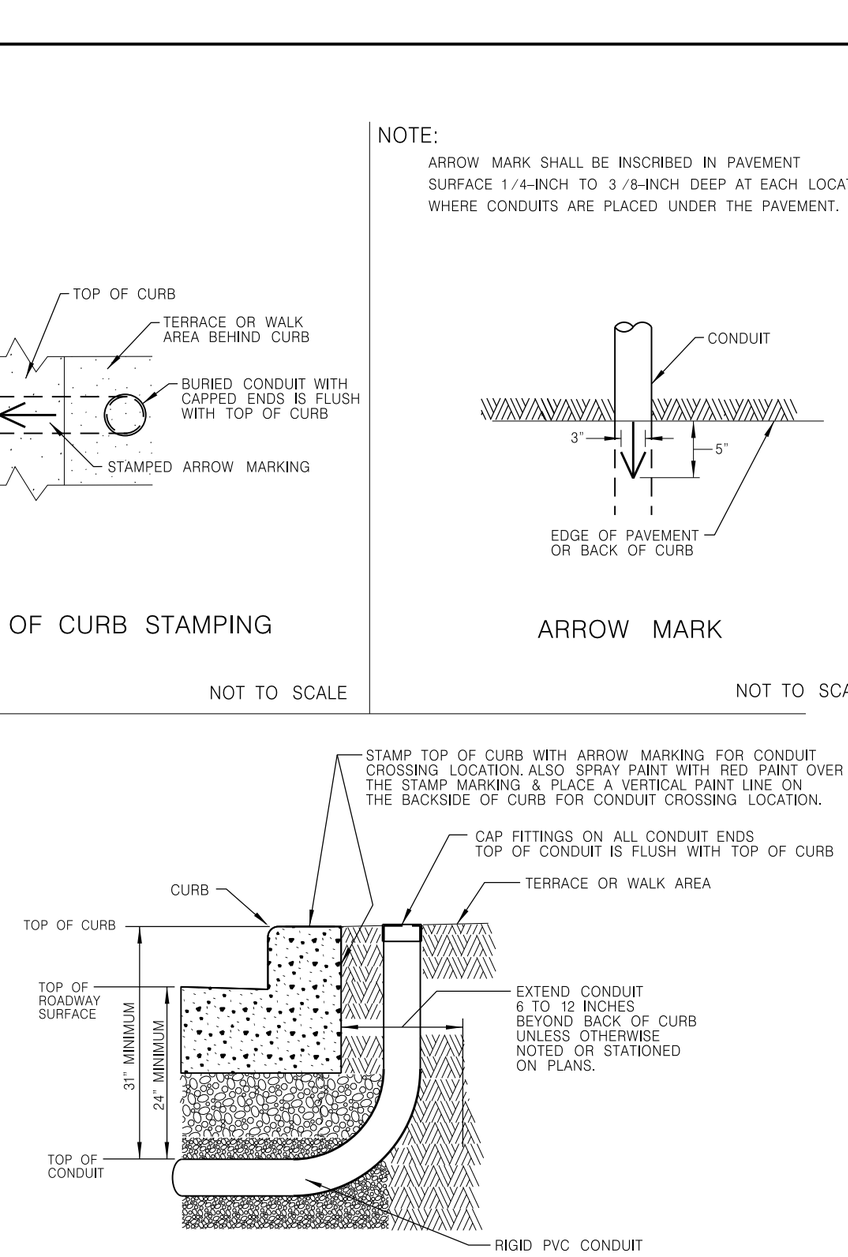
NOT TO SCALE

NOTE:

ARROW MARK SHALL BE INSCRIBED IN PAVEMENT SURFACE 1/4–INCH TO 3/8–INCH DEEP AT EACH LOCATION WHERE CONDUITS ARE PLACED UNDER THE PAVEMENT.

ARROW MARK

NOT TO SCALE



102

DETAIL VERSION #2

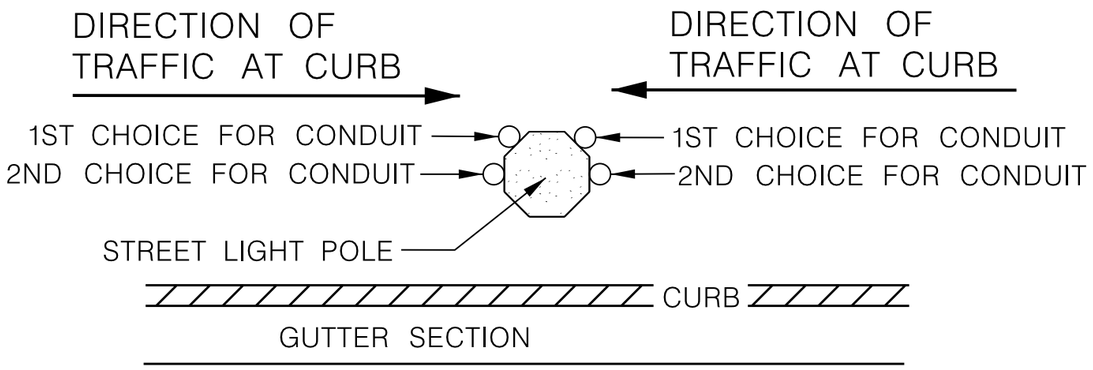
TYPICAL CONDUIT INSTALLATION FOR CROSSING ROADWAYS

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

SHEET 3 OF 20

NOTE: CAP FITTINGS ON CONDUIT ENDS



104 DETAIL

TYPICAL TRAFFIC SIGNAL RISER CONDUIT LOCATIONS ON STREET LIGHT POLE DEPENDING ON DIRECTION OF TRAFFIC AT CURB

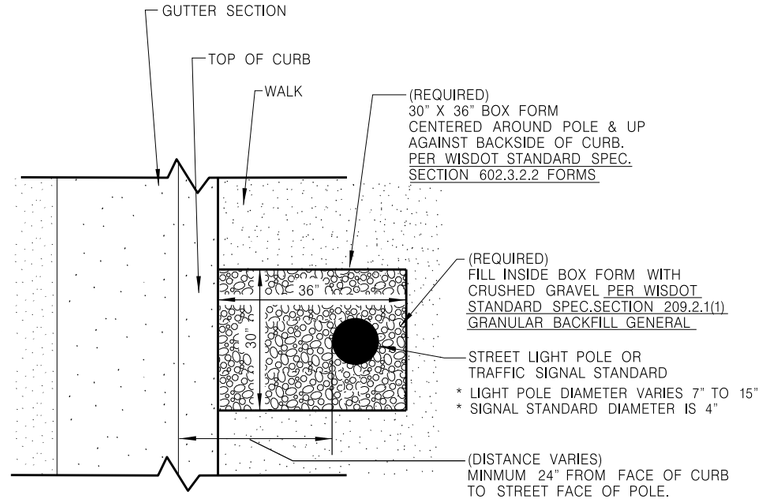
NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM TRAFFIC / STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

2

THE CONTRACTOR IS REQUIRED TO FORM OUT A OPENING IN THE CONCRETE WALK BEFORE POURING THE CONCRETE WALK AROUND TRAFFIC AND STREET LIGHTING FACILITIES.
(AS SHOWN IN ADJACENT DETAIL)

THE CONTRACTOR IS REQUIRED TO FILL IN THE FORMED OUT AREA OPENING IN THE CONCRETE WALK WITH CRUSHED GRAVEL, AFTER POURING THE CONCRETE WALK AROUND TRAFFIC AND STREET LIGHTING FACILITIES.
(AS SHOWN IN ADJACENT DETAIL)



105 DETAIL

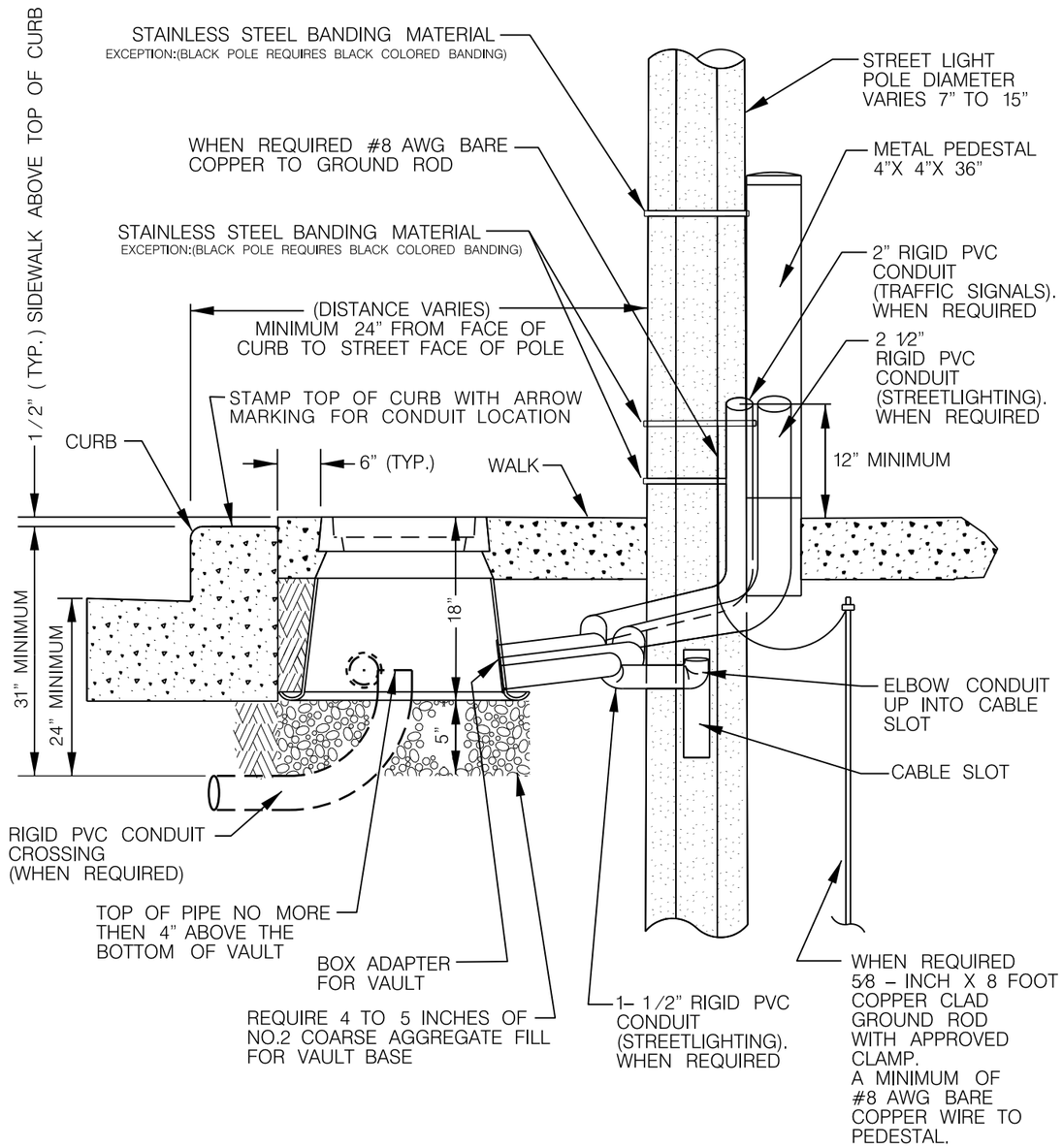
TYPICAL 30" X 36" BOX FORM AROUND STREET LIGHTING POLE OR TRAFFIC SIGNAL STANDARD

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

NOT TO SCALE

SHEET 4 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 90	E

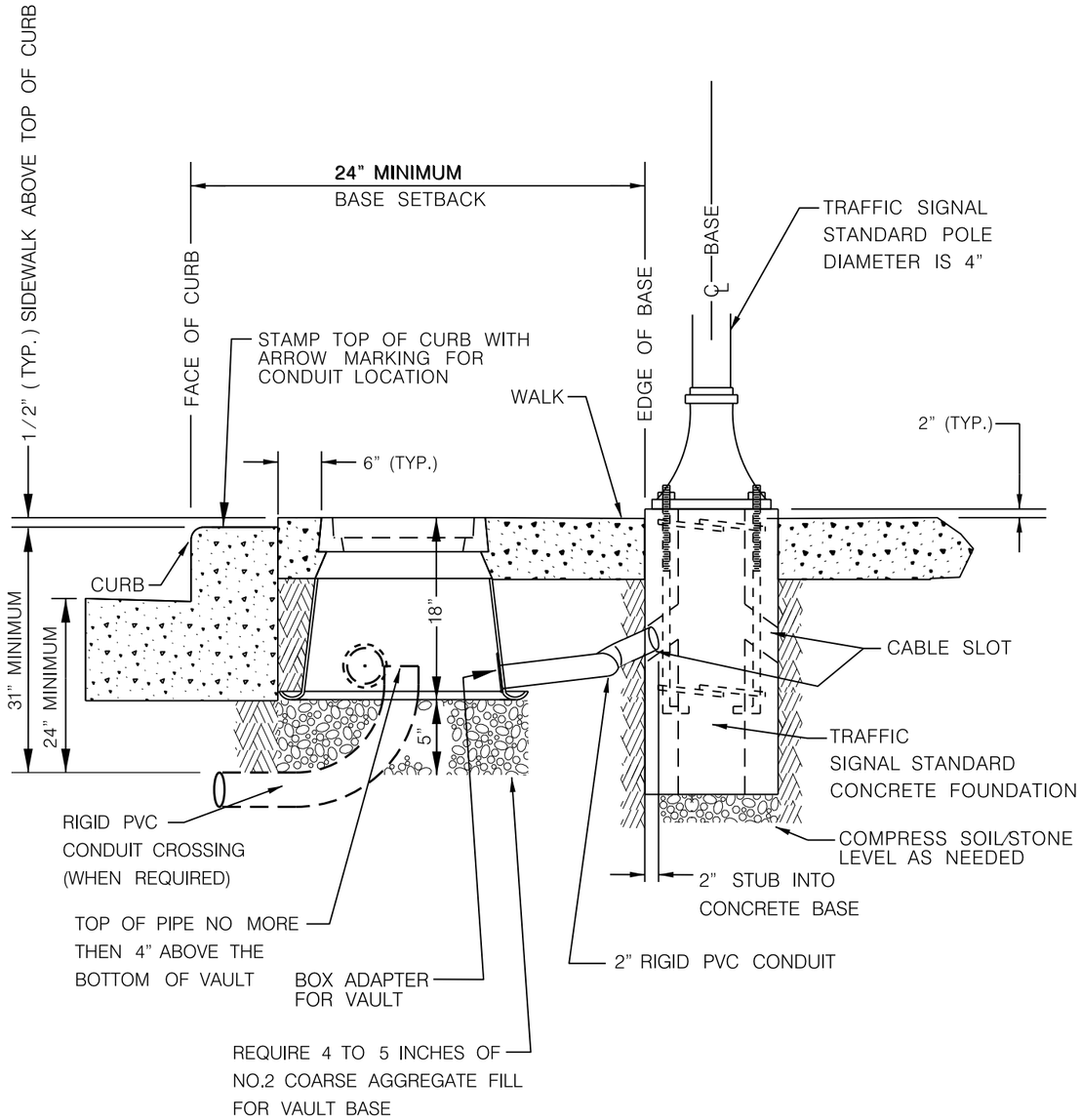


108 DETAIL

TYPICAL CONDUIT INSTALLATION FROM VAULT TO POLE

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.



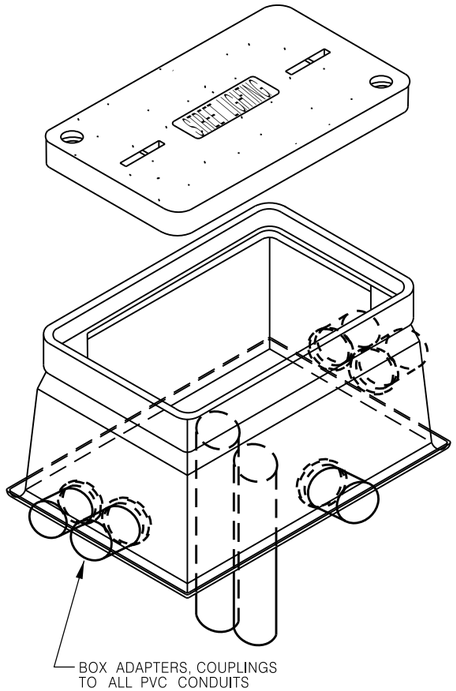
109 DETAIL

TYPICAL CONDUIT INSTALLATION FROM VAULT TO SIGNAL STANDARD AND TYPICAL BASE INSTALLATION

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM TRAFFIC & LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

SHEET 5 OF 20



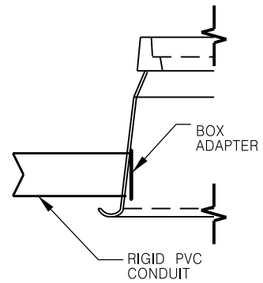
HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 BOLTS
COLOR: GRAY

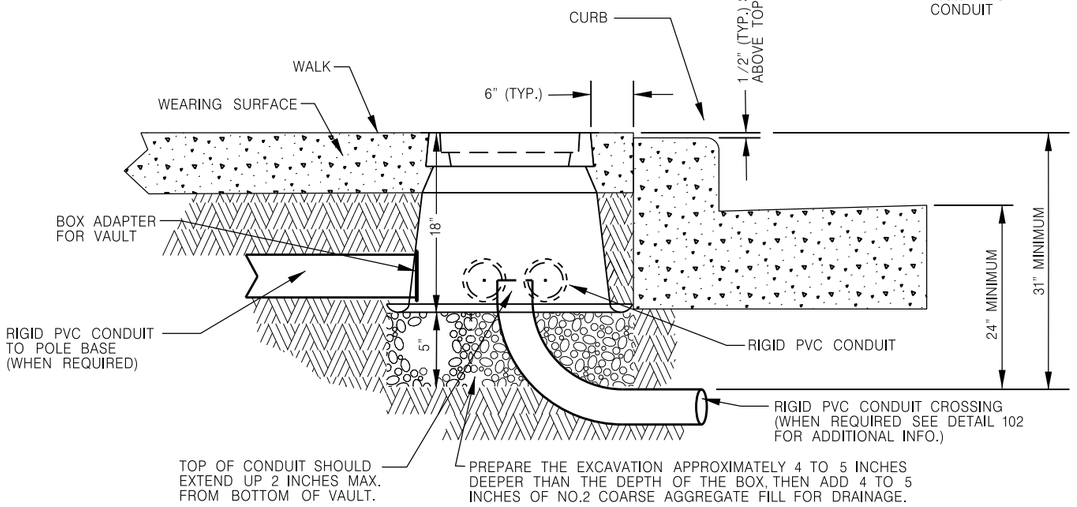
ELECTRICAL VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY

(VARIOUS SIZES)

PLUG OR CAP FITTINGS ON ALL
UNUSED CONDUITS IN THE ENCLOSURE

BOX ADAPTERS, COUPLINGS
TO ALL PVC CONDUITS



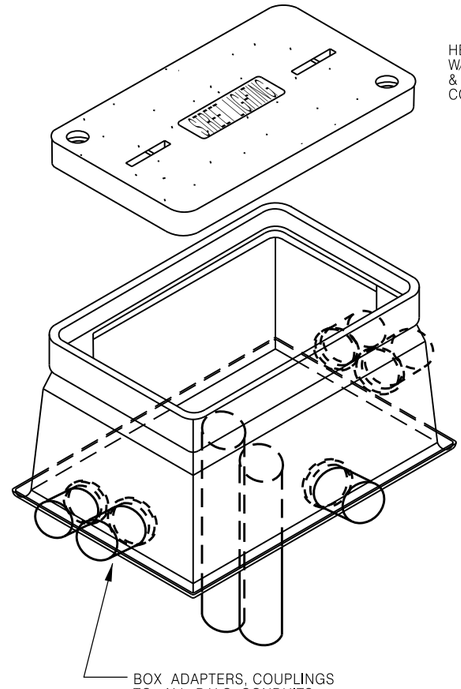


112 DETAIL

TYPICAL VAULT INSTALLATION IN WALK

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.



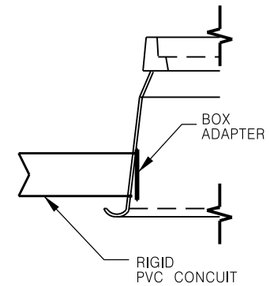
HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 BOLTS
COLOR: GRAY

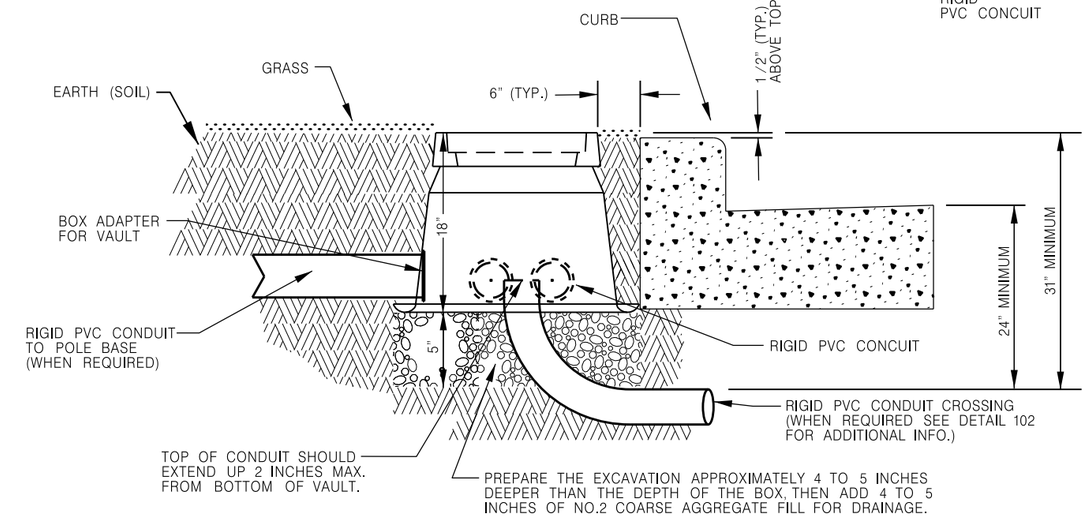
ELECTRICAL VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY

(VARIOUS SIZES)

PLUG OR CAP FITTINGS ON ALL
UNUSED CONDUITS IN THE ENCLOSURE

BOX ADAPTERS, COUPLINGS
TO ALL P.V.C. CONDUITS





121 DETAIL

TYPICAL VAULT INSTALLATION IN GRASS AREA

NOT TO SCALE

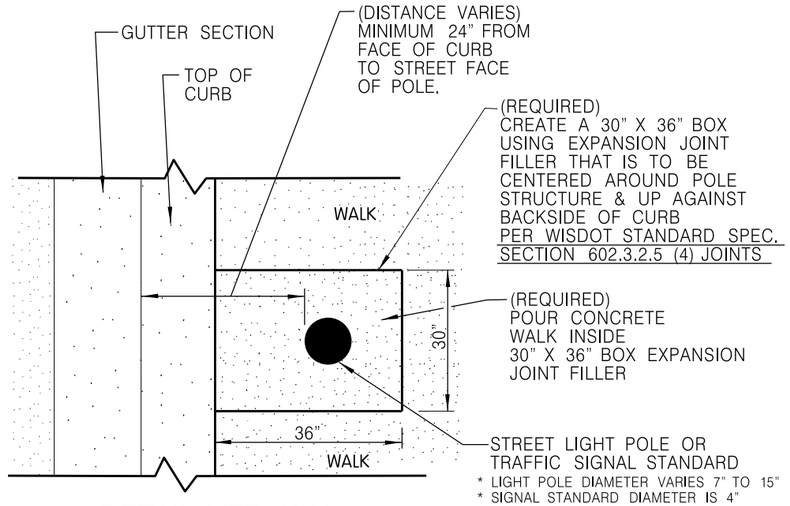
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

SHEET 6 OF 20

2

THE CONTRACTOR IS REQUIRED TO INSTALL EXPANSION JOINT FILLER INTO THE CONCRETE WALK, WHICH SHALL BE 1/2" WIDE MINIMUM TO BE USED TO CREATE A SEPARATION BETWEEN A SMALL CONCRETE AREA AROUND THE TRAFFIC & STREET LIGHTING FACILITIES AND THE REST OF THE CONCRETE WALK.

THE BOX SIZE OF THE AREA CREATED USING THE EXPANSION JOINT FILLER IS STANDARD AROUND LIGHT POLES AND TRAFFIC SIGNALS, BUT WILL VARY WHEN PLACED AROUND TRAFFIC & LIGHTING CONTROL CABINETS.



122

DETAIL VERSION #1

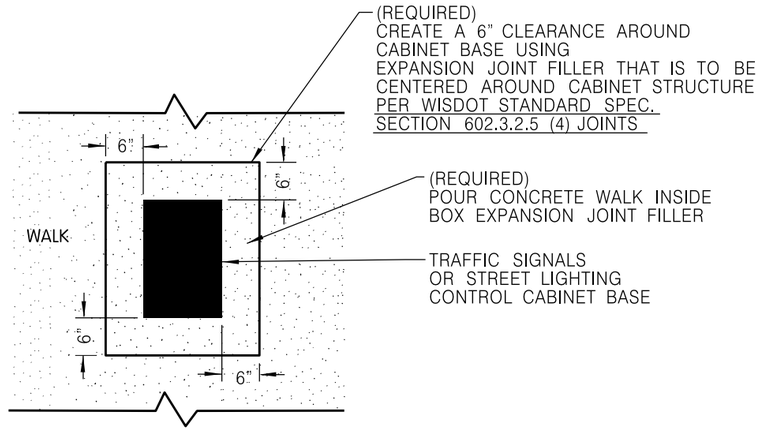
NOT TO SCALE

TYPICAL 30" X 36" BOX EXPANSION JOINT FILLER AROUND STREET LIGHTING AND TRAFFIC SIGNAL FACILITIES

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

THE CONTRACTOR IS REQUIRED TO INSTALL EXPANSION JOINT FILLER INTO THE CONCRETE WALK, WHICH SHALL BE 1/2" WIDE MINIMUM TO BE USED TO CREATE A SEPARATION BETWEEN A SMALL CONCRETE AREA AROUND THE TRAFFIC & STREET LIGHTING FACILITIES AND THE REST OF THE CONCRETE WALK.

THE BOX SIZE OF THE AREA CREATED USING THE EXPANSION JOINT FILLER IS STANDARD AROUND LIGHT POLES AND TRAFFIC SIGNALS, BUT WILL VARY WHEN PLACED AROUND TRAFFIC & LIGHTING CONTROL CABINETS.



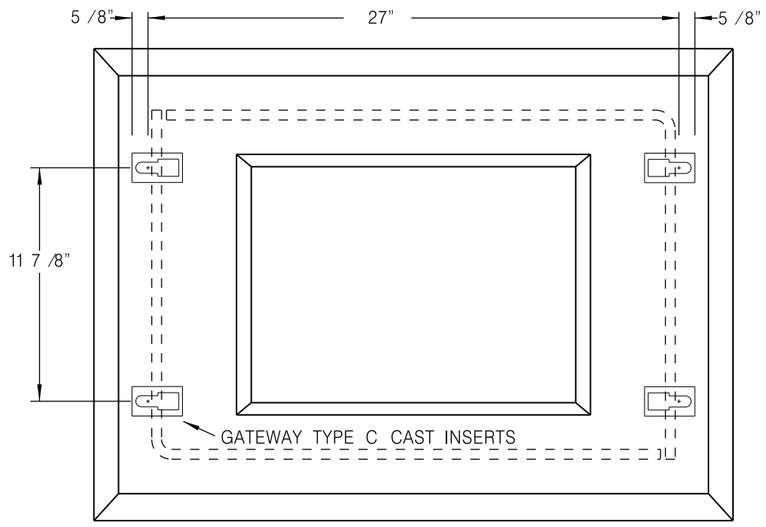
122

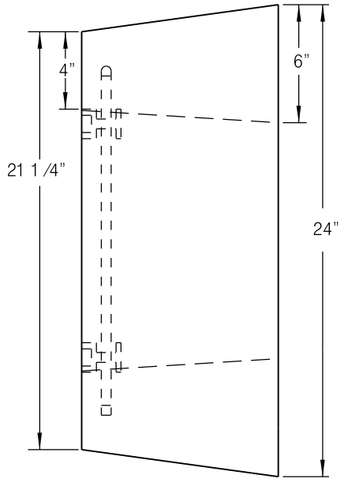
DETAIL VERSION #2

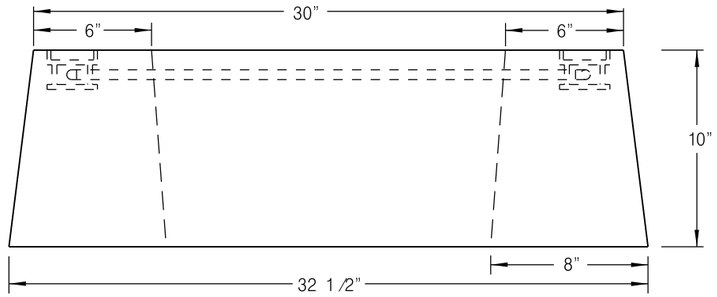
NOT TO SCALE

TYPICAL BOX EXPANSION JOINT FILLER AROUND TRAFFIC SIGNAL OR STREET LIGHTING CONTROL CABINET

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.







NOT TO SCALE

6 BAG MIX #1 STONE

COMM. CODE 1238-927

CONCRETE FOUNDATION

TRAFFIC SIGNAL CONTROL CABINET

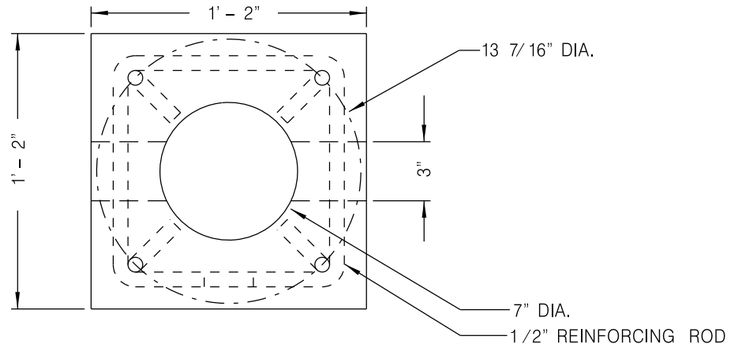
BUREAU OF TRAFFIC ENGINEERING AND ELECTRICAL SERVICES
D.P.W. CITY OF MILWAUKEE

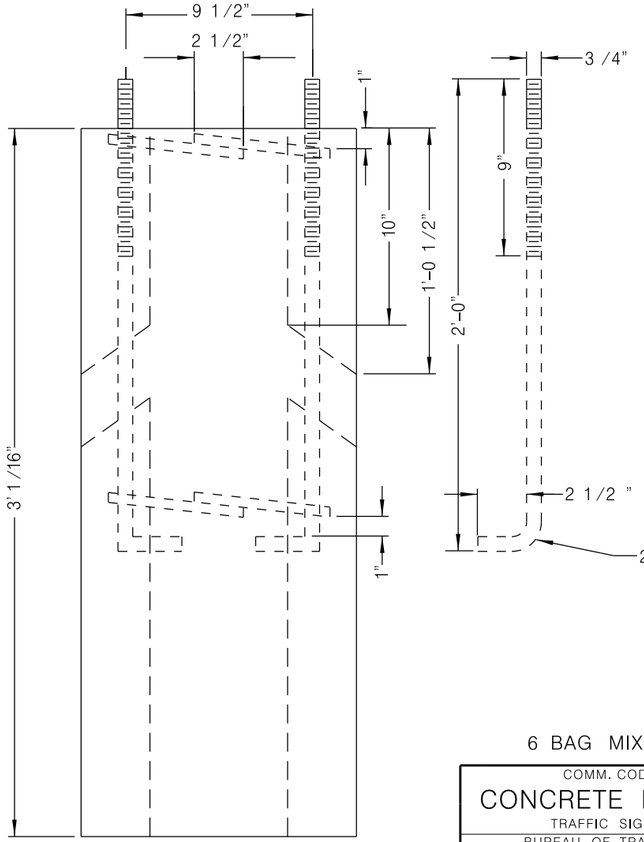
TRAFFIC CONTROL MATERIAL

DATE	SCALE	DRAWN	CHECKED	APPROVED
4-22-75	1/4"=1"	J.H.S.	B.J.T.	R.J.B.
SUPERSEDES C-65-546-T	REVISED DATE 01-30-02	DRG. C-75-564-T		
SUPERSEDED BY	NEW DRG. F-82-536-T			

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM TRAFFIC SIGNAL FORCES.
CONTACT DISPATCHER AT (414) 286-3687 FOR SHOP SUPERVISOR.

2





NOT TO SCALE

6 BAG MIX #1 STONE

COMM. CODE 1238-936

CONCRETE FOUNDATION

TRAFFIC SIGNAL STANDARD

BUREAU OF TRAFFIC ENGINEERING AND ELECTRICAL SERVICES
D.P.W. CITY OF MILWAUKEE

TRAFFIC CONTROL MATERIAL

DATE	SCALE	DRAWN	CHECKED	APPROVED
4-18-75	Not To Scale	J.H.S.	B.J.T.	R.J.B.
SUPERSEDES	REVISED DATE 07-29-03	DRG. C-75-563-T		
SUPERSEDED BY	NEW DRG. F-82-535-T			

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM TRAFFIC SIGNAL FORCES.
CONTACT DISPATCHER AT (414) 286-3687 FOR SHOP SUPERVISOR.

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 94	E

FILE NAME : W:\bes\pavings\2013work\wHamptonTeutonla-GreenBay\Street LIghtIng Condult\HamptonTeutonla-GreenBay Condult.dgn
PLOT DATE : 02-DEC-2013 13:31
PLOT BY : dkozel
PLOT NAME :
PLOT SCALE : 40.000000:1.000000
WISDOT/CADDS SHEET 42

GENERAL NOTES

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

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 6" 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 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

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. CONDUIT 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 1 FOOT 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 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

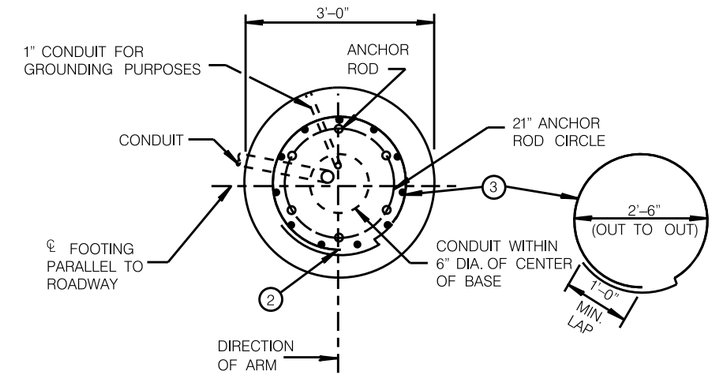
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

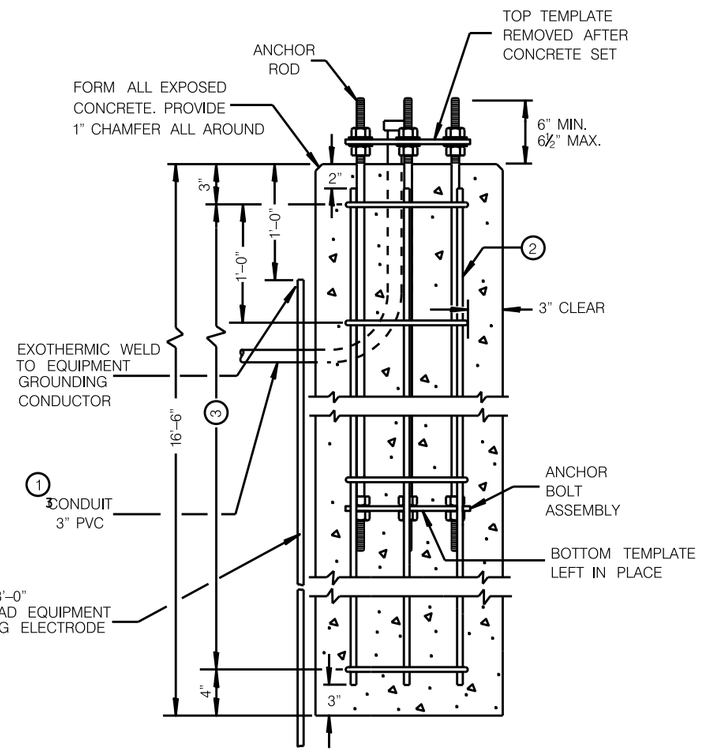
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER–RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (11) NO. 8 X 16'–1" BAR STEEL REINFORCEMENT.

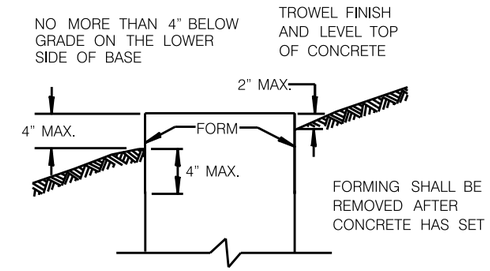
(3) (17) NO. 4 X 9'–0" BAR STEEL REINFORCEMENT @ 1'–0" C–C.

CONCRETE MASONRY	fc = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy = 60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy = 55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy = 36,000 p.s.i.

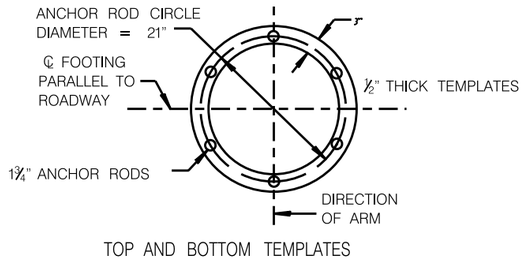




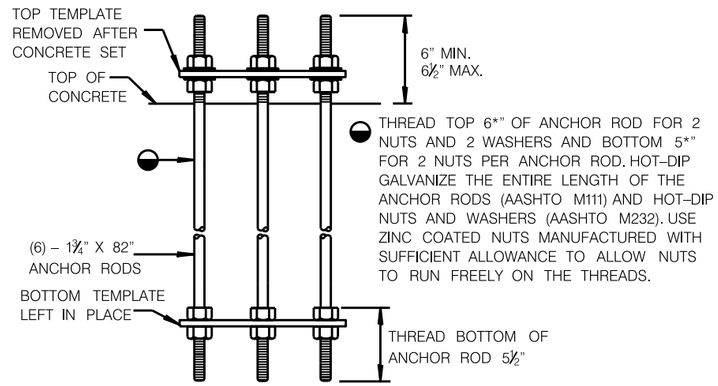
CONCRETE BASE TYPE 10 SPECIAL



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 SPECIAL

ANCHOR ASSEMBLY

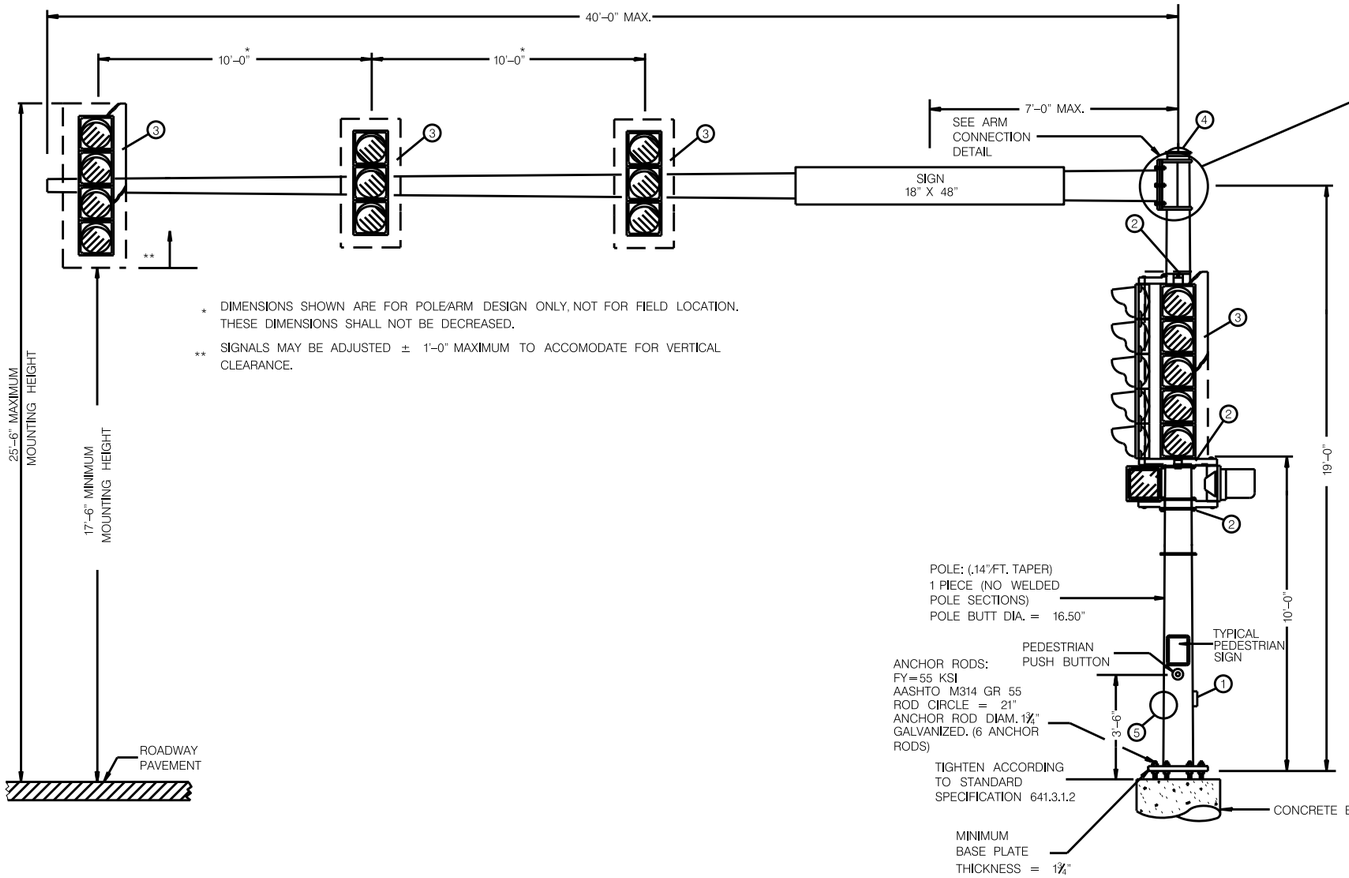
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	4.32
LBS. OF HOOP BAR STEEL	103
LBS. OF VERTICAL BAR STEEL	473

CONCRETE BASE TYPE 10 SPECIAL

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS

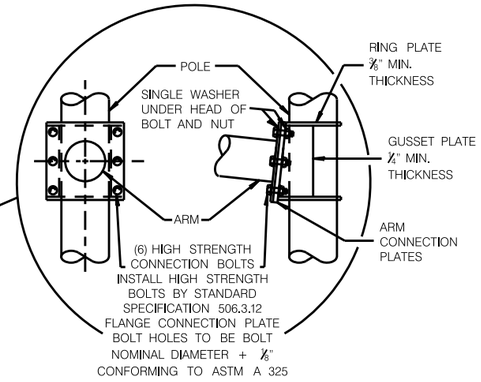
SHEET 9 OF 20

2

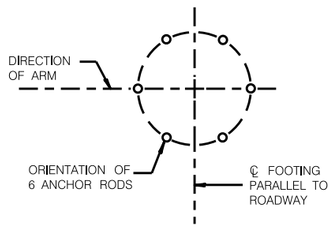


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'–0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE SPECIAL
35'– 40' MONOTUBE ARM

TYPE 12 POLE SPECIAL
35'– 40' MONOTUBE ARM

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS

SHEET 10 OF 20

PROJECT NO: 2545–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 96	E

FILE NAME : W:\bes\pavlngs\2013work\wHamptonTeutonla–GreenBay\Street LIghtIng Condult\HamptonTeutonla–GreenBay Condult.dgn PLOT DATE : 02–DEC–2013 13:39 PLOT BY : dkozel PLOT NAME : PLOT SCALE : 40.000000:1.000000
WISDOT/CADDS SHEET 42

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

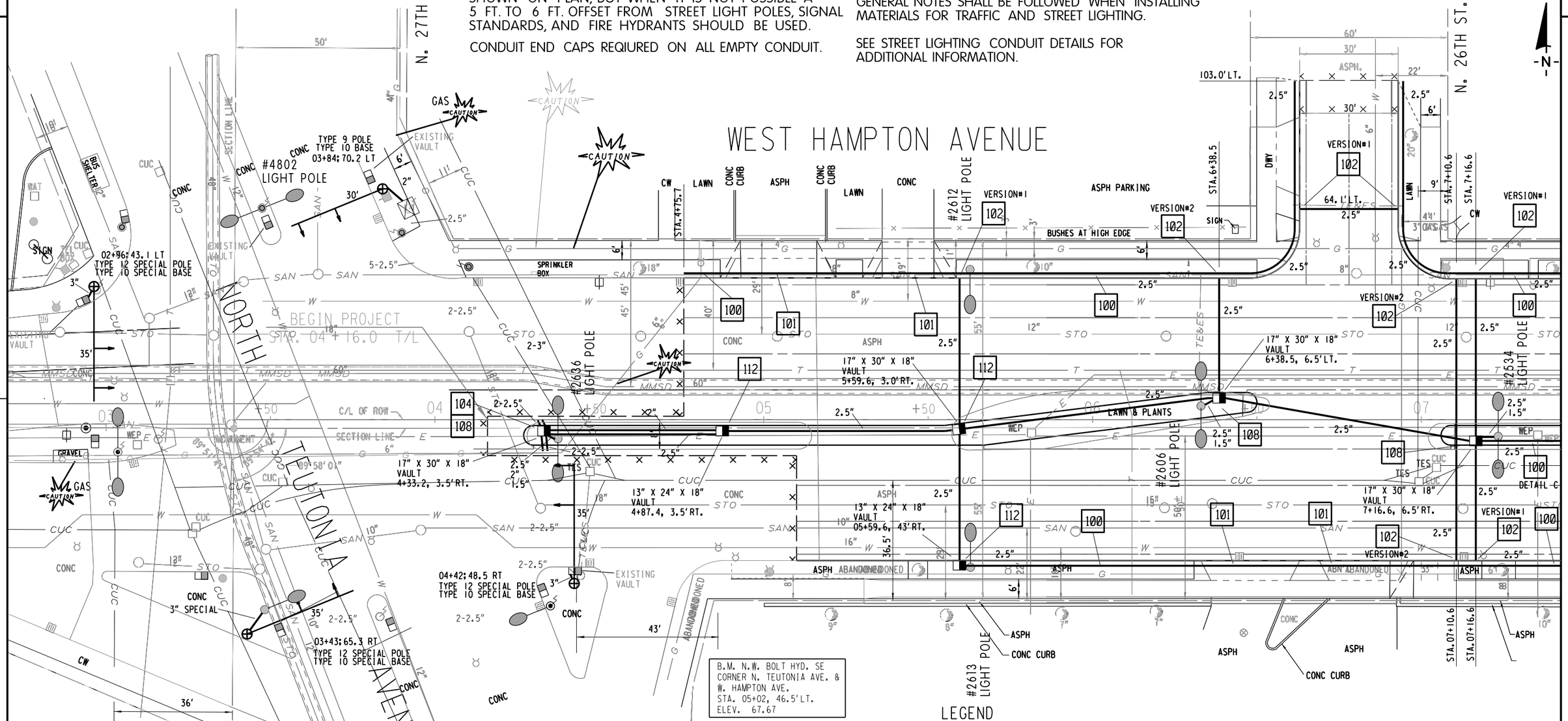
PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.

B.M. N.W. BOLT HYD. NE CORNER N. 26TH ST. & W. HAMPTON AVE. STA. 07+07, 46'LT. ELEV. 66.25



SHEET 11 OF 20

PROJECT NO: 2545–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 97	E

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

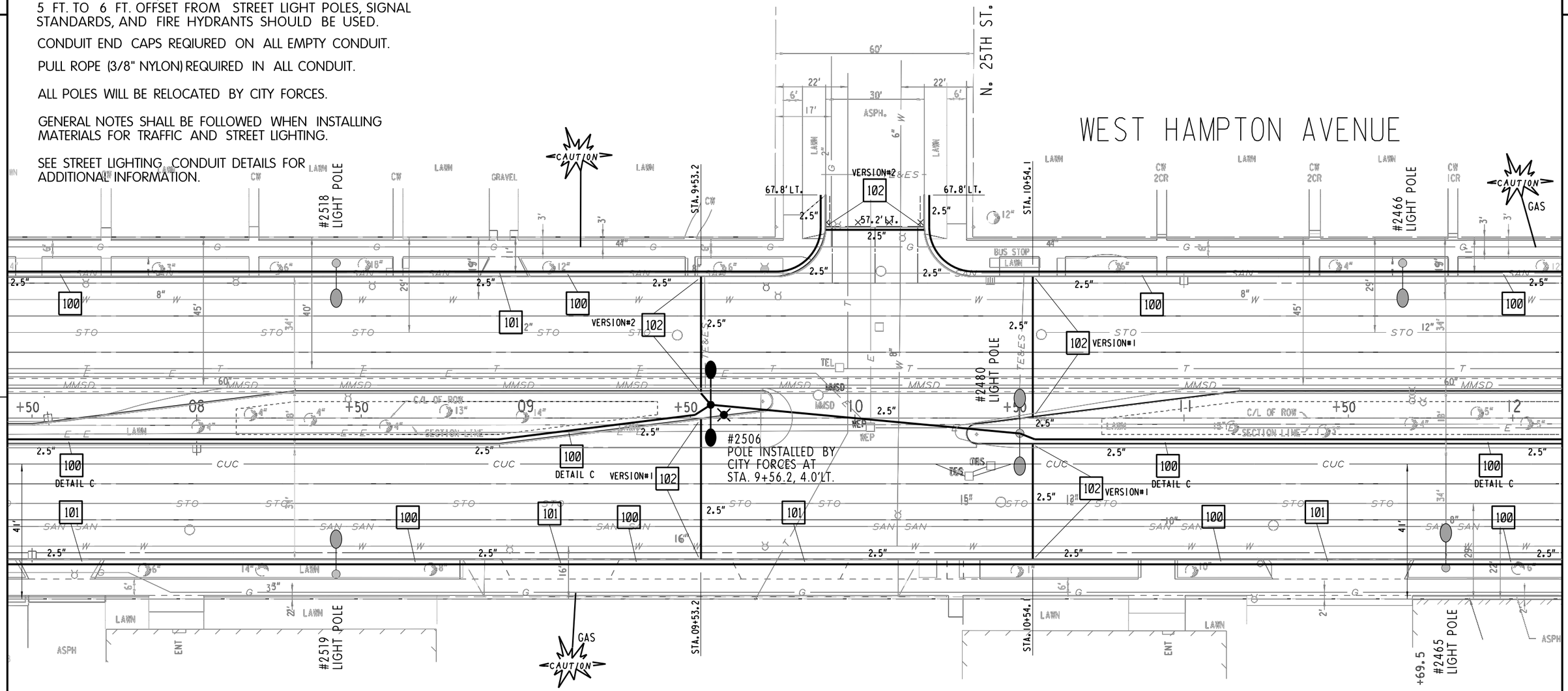
PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.

B.M. N.W. BOLT HYD. NW CORNER
N. 25TH ST. & W. HAMPTON AVE.
STA. 09+73, 45' LT.
ELEV. 68.00



LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- BIO-SWALE LOCATIONS
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM — MAST ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION

SCALE, FEET 0 30

SHEET 12 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 98	E

W:\bes\pavlngs\2013work\wHamptonTeutonla-GreenBay\Street LIghtIng Condult\HamptonTeutonla-GreenBay Condult.dgn PLOT DATE : 02-DEC-2013 13:42 PLOT BY : dkozel PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

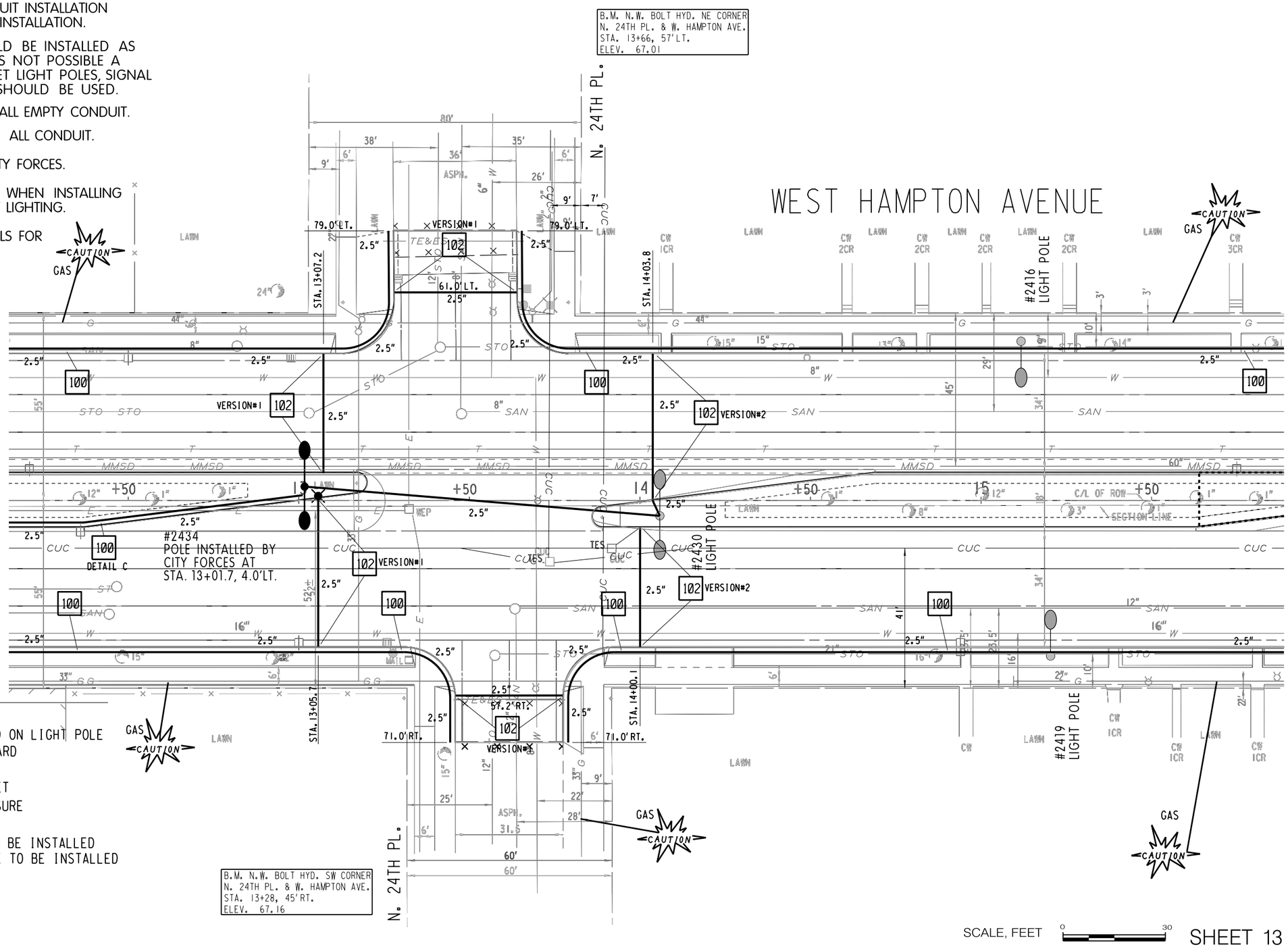
CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.



LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- MAST ARM (XX' ARM)
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION
- BIO-SWALE LOCATIONS

SCALE, FEET 0 30

SHEET 13 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 99	E

2

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

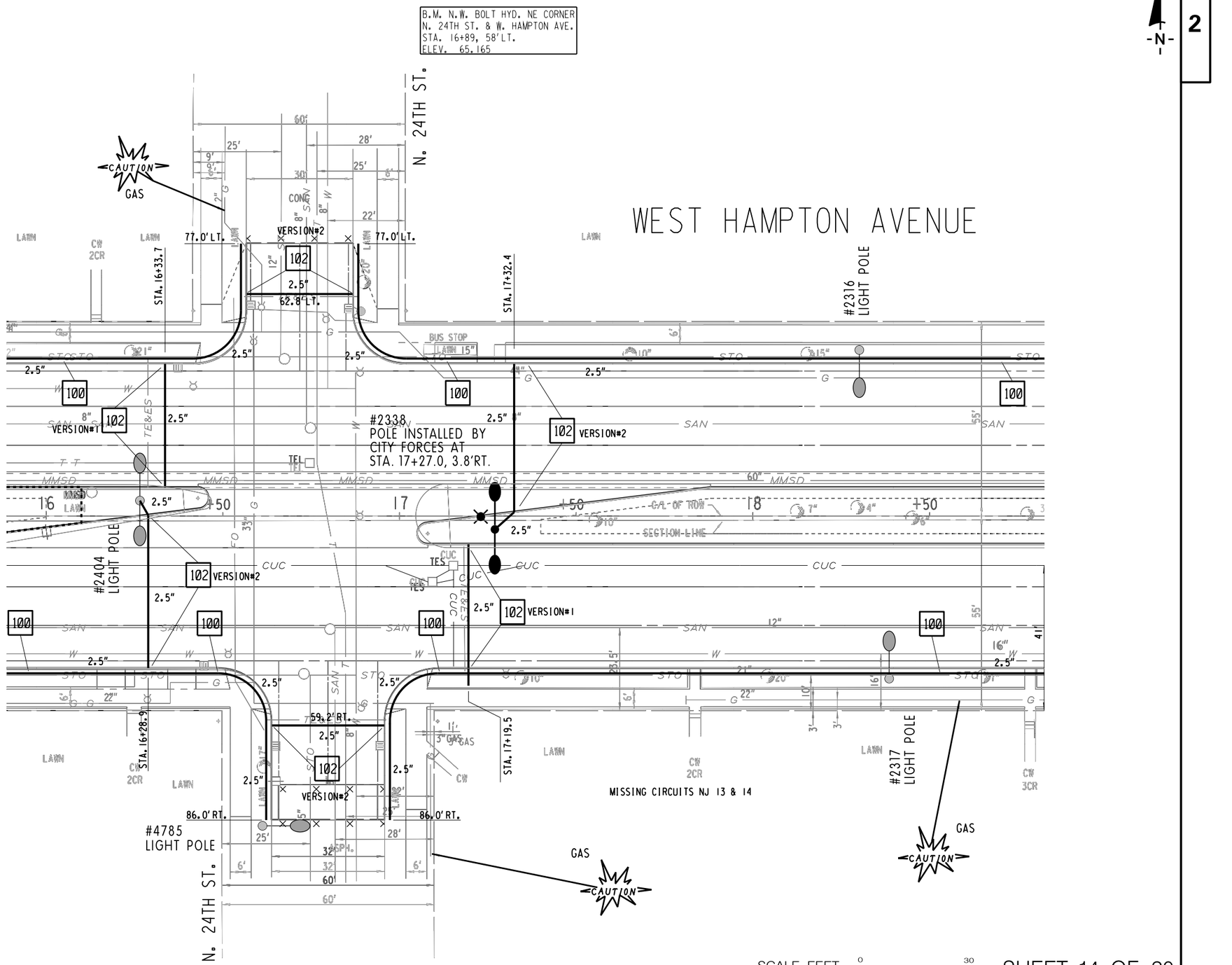
CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.



LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM — MAST ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION
- BIO-SWALE LOCATIONS

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 100	E

W:\bes\pavlngs\2013work\wHamptonTeutonla-GreenBay\Street Lightlng Condult\HamptonTeutonla-GreenBay Condult.dgn PLOT DATE : 02-DEC-2013 13:44 PLOT BY : dkozel PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

2

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

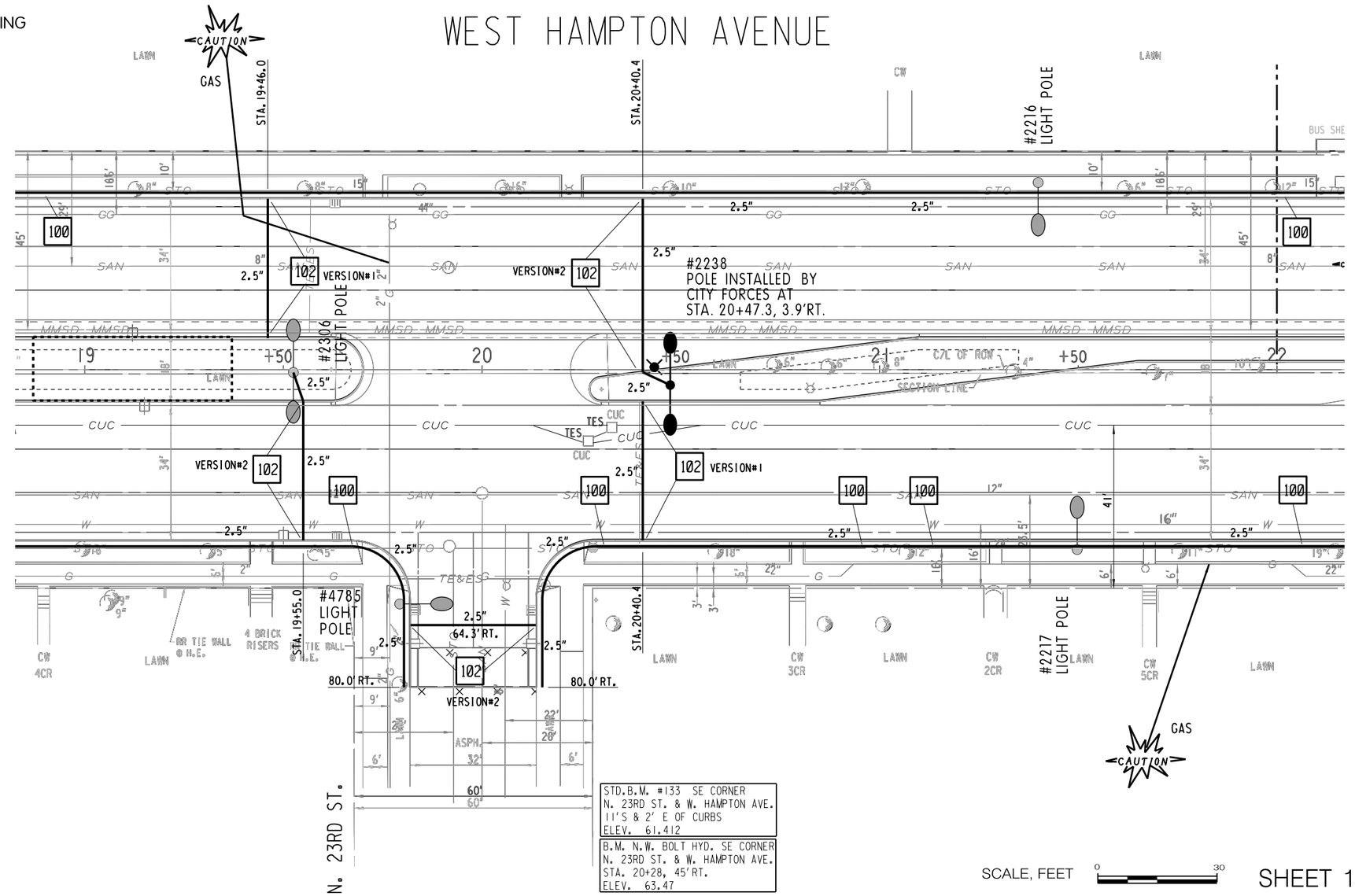
CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.



LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM — MAST ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION
- BIO-SWALE LOCATIONS

SCALE, FEET 0 30

SHEET 15 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 101	E

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.

B.M. N.W. BOLT HYD. NW CORNER
N. 22ND ST. & W. HAMPTON AVE.
STA. 22+89, 58'LT.
ELEV. 59.90

WEST HAMPTON AVENUE

N. 22ND ST.

N. 21ST ST.

#2120 LIGHT POLE

#2204 LIGHT POLE

#2117 LIGHT POLE

#4781 LIGHT POLE

#4777 LIGHT POLE

#2104 POLE INSTALLED BY CITY FORCES AT STA. 25+75.9, 4.0'LT.

#2138 POLE INSTALLED BY CITY FORCES AT STA. 23+47.5, 5.0'RT.

#2038 POLE IN CITY FO STA. 26

17" X 30" X 18" VAULT 22+89.5, 67.8'LT.
17" X 30" X 18" VAULT 22+64.9, 44.9'LT.
17" X 30" X 18" VAULT 22+64.9, 6.0'LT.
17" X 30" X 18" VAULT 22+64.9, 44.6'RT.
17" X 30" X 18" VAULT 22+88.6, 63.8'RT.
17" X 30" X 18" VAULT 23+23.0, 67.8'LT.
17" X 30" X 18" VAULT 23+46.6, 44.6'LT.
17" X 30" X 18" VAULT 23+53.2, 6.4'RT.
17" X 30" X 18" VAULT 23+42.8, 44.7'RT.
17" X 30" X 18" VAULT 23+24.3, 63.9'RT.
17" X 30" X 18" VAULT 25+81.8, 45.0'LT.

TYPE 12 SPECIAL POLE
TYPE 10 SPECIAL BASE
22+77.0; 54.0 LT

23+40; 5.0 RT
TYPE 9 POLE
TYPE 10 BASE

22+88; 62.0 LT
22+88; 60.2 RT
22+76; 46.7RT
23+37; 46.7 RT
23+25; 58.1 LT
23+25; 58.0 RT

STA. 25+42.1
STA. 25+85.7
STA. 25+32.4
STA. 26+61.1
STA. 26+75.0

72.0' LT.
74.0' LT.
61.2' LT.
56.1'RT.
71.0'RT.

STUB-UP 2 DUCTS FROM PACKAGE INTO VAULT

CAP END

VERSION#1
VERSION#2

GAS LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- BIO-SWALE LOCATIONS
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- MAST ARM
- XX' ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION

B.M. N.W. BOLT HYD. SW CORNER
N. 21ST ST. & W. HAMPTON AVE.
STA. 25+90, 45'RT.
ELEV. 57.40

SCALE, FEET 0 30

SHEET 16 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 102	E

W:\bes\pavings\2013work\wHamptonTeutonia-GreenBay\Street Lighting Conduit\HamptonTeutonia-GreenBay Conduit.dgn PLOT DATE : 02-DEC-2013 13:46 PLOT BY : dkozel PLOT NAME : PLOT SCALE : 30.000000:1.000000 WISDOT/CADDS SHEET 42

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

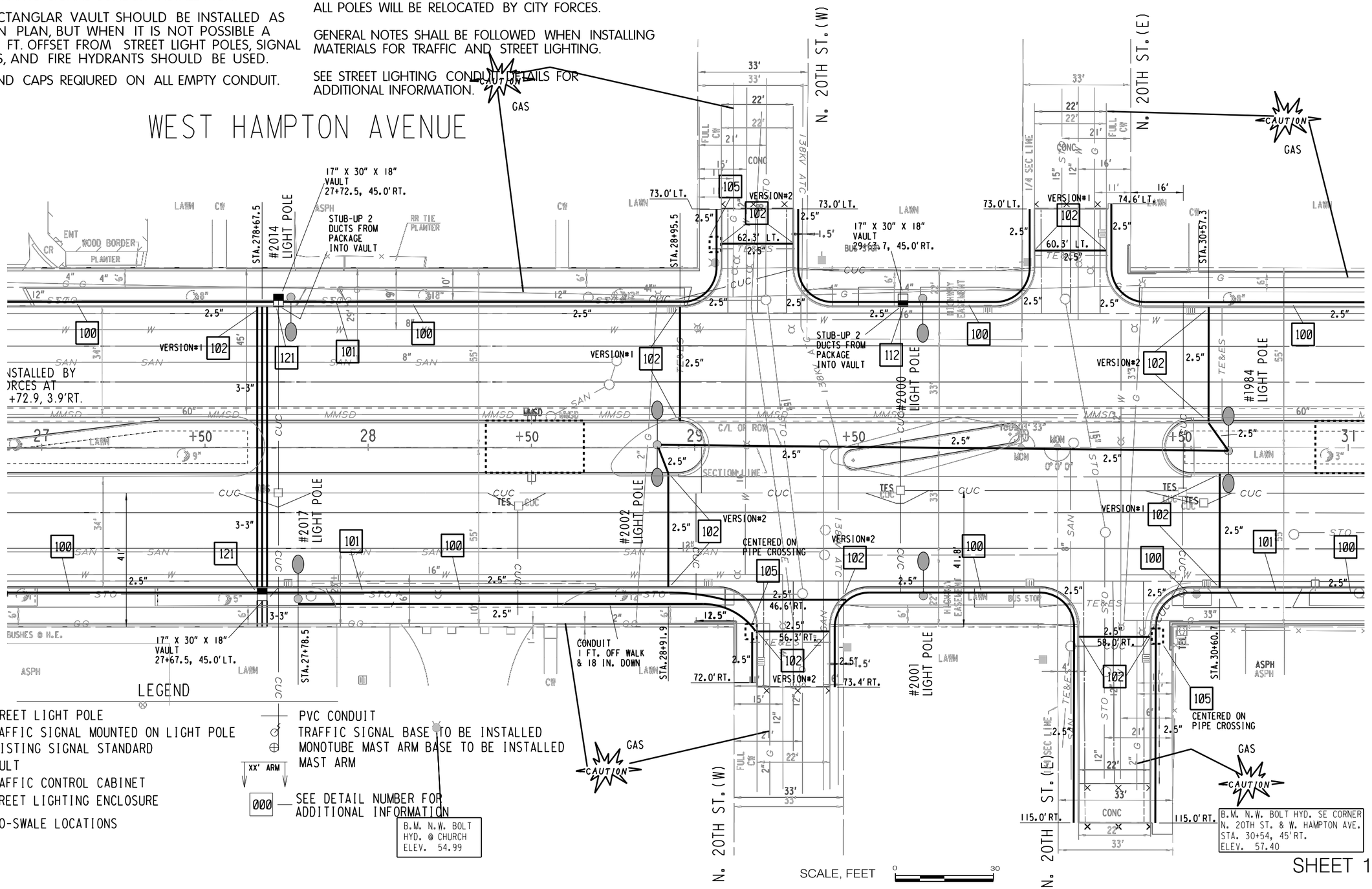
CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.



LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- BIO-SWALE LOCATIONS
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM MAST ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION

SHEET 17 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 103	E

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

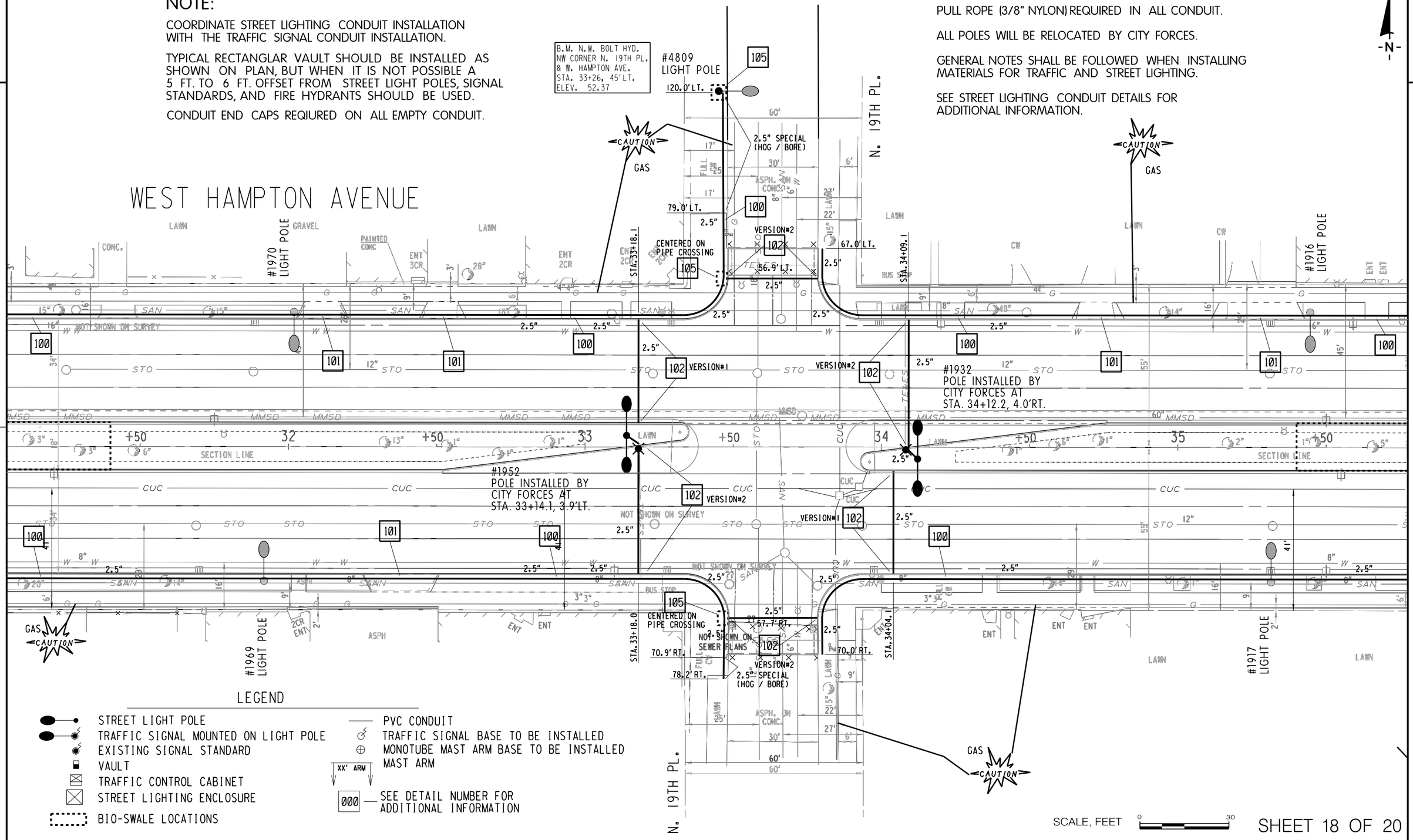
CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.



SHEET 18 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 104	E

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.

WEST HAMPTON AVENUE

B.M. N.W. BOLT HYD. NW CORNER
N. 19TH ST. & W. HAMPTON AVE.
STA. 36+55, 45'LT.
ELEV. 52.27

B.M. N.W. BOLT HYD. NW CORNER
N. 18TH ST. & W. HAMPTON AVE.
STA. 39+68, 44'LT.
ELEV. 53.09

N. 19TH ST.

N. 18TH ST.

#1902 LIGHT POLE

#1830 LIGHT POLE

#1816 LIGHT POLE

#1815 LIGHT POLE

#1802 POLE INSTALLED BY CITY FORCES AT STA. 39+59.1, 4.0'LT.

CONDUIT I FT. OFF WALK & 18 IN. DOWN

CONDUIT FOR SERVICE FEED TO BE INSTALLED I FT. OFF WALK & 3 FT. DOWN

13" X 24" X 18" VAULT 40+38.6, 48.0' RT.

LEGEND

- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- BIO-SWALE LOCATIONS
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED MAST ARM
- XX' ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION

SCALE, FEET 0 30

SHEET 19 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 105	E

NOTE:

COORDINATE STREET LIGHTING CONDUIT INSTALLATION WITH THE TRAFFIC SIGNAL CONDUIT INSTALLATION.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

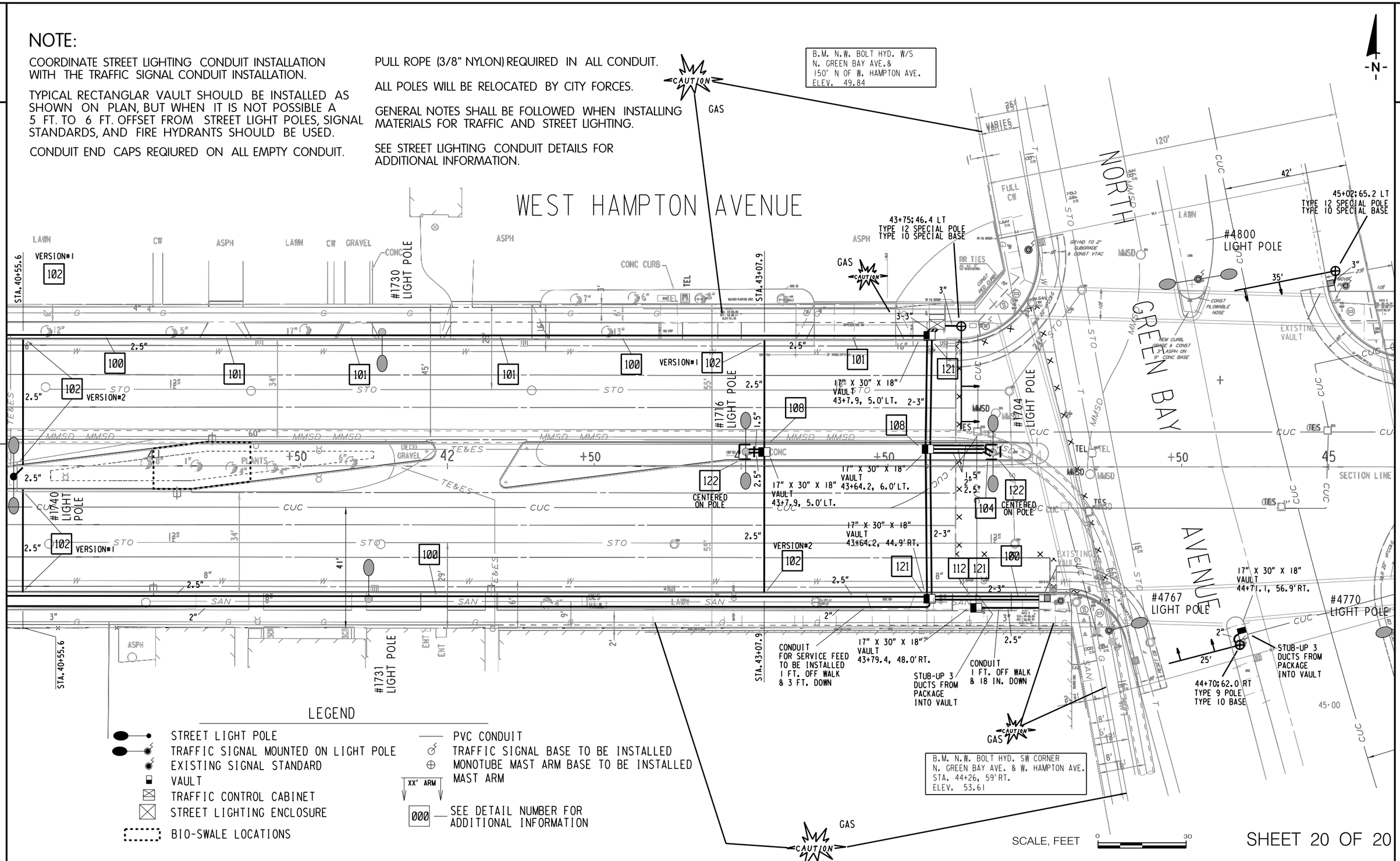
CONDUIT END CAPS REQIURED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

ALL POLES WILL BE RELOCATED BY CITY FORCES.

GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC AND STREET LIGHTING.

SEE STREET LIGHTING CONDUIT DETAILS FOR ADDITIONAL INFORMATION.



LEGEND

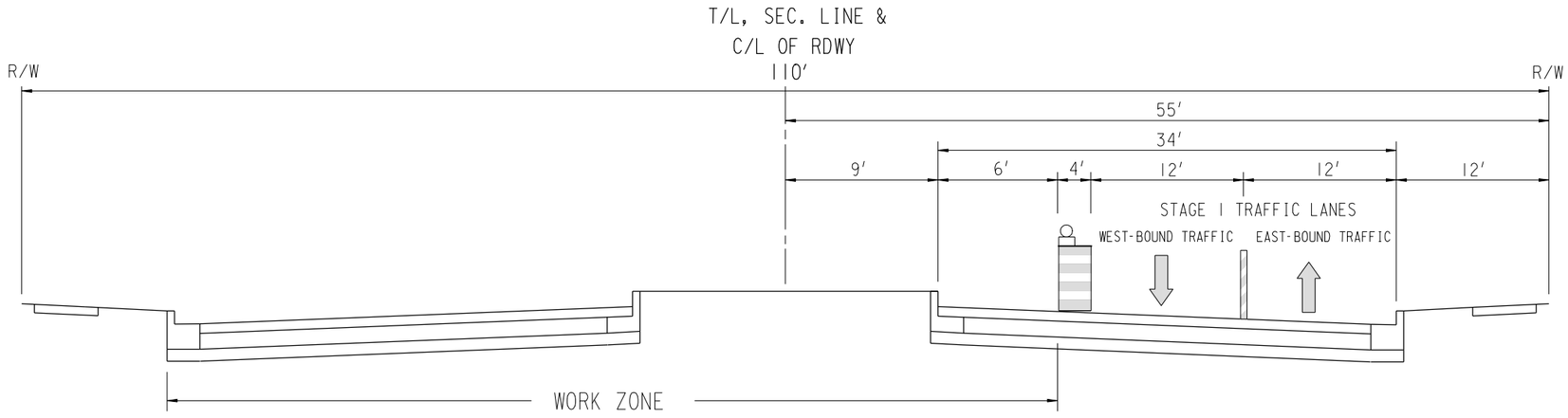
- STREET LIGHT POLE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- VAULT
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- BIO-SWALE LOCATIONS
- PVC CONDUIT
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM MAST ARM
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION

SHEET 20 OF 20

PROJECT NO: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS & PLAN	SHEET 106	E

2

STAGE I

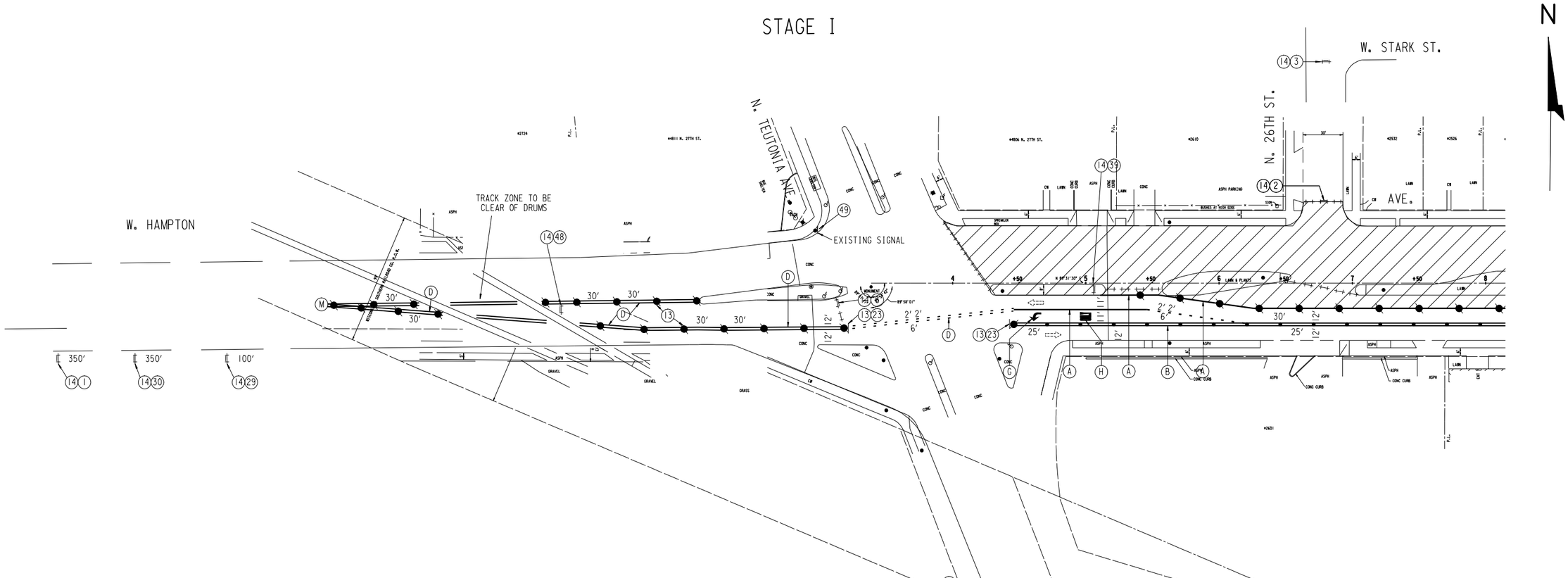


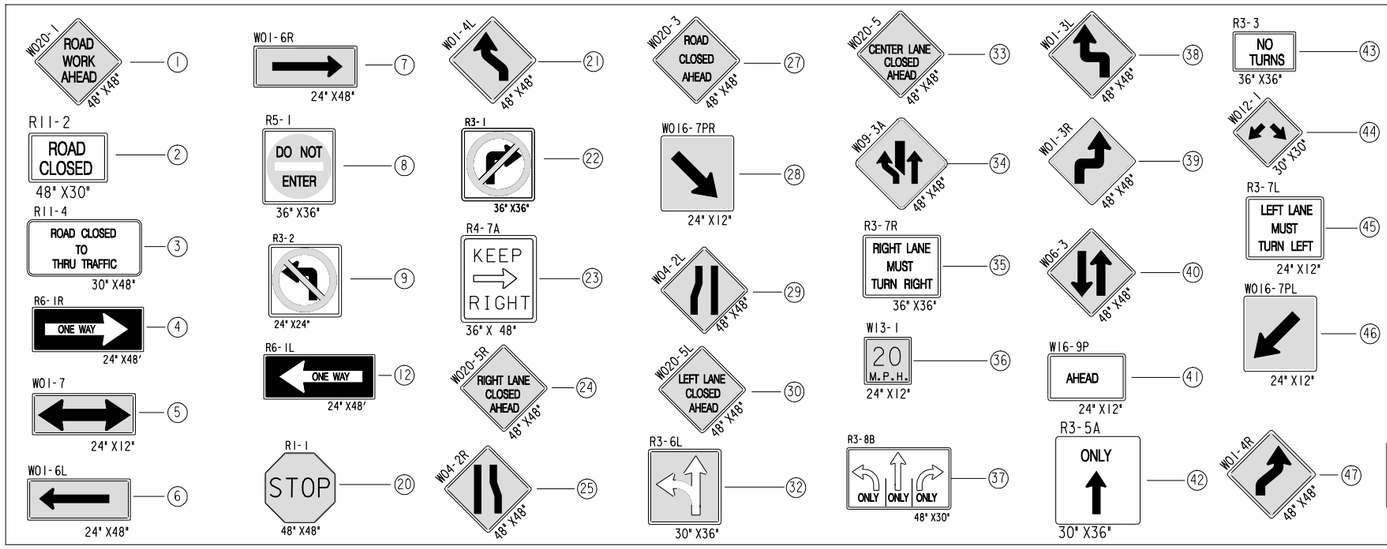
TRAFFIC CONTROL - STAGE I
W. HAMPTON AVE. -
N. GREEN BAY AVE. TO N. TEUTONIA AVE.

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL TYPICAL	SCALE FEET 0' 80'	SHEET NO: 107

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE I





LEGEND

- DRUMS W/LIGHTS 30' SPACING — 13
- TYPE III BARRICADES — 14
- TYPE III BARRICADES W/ SIGNS — 14X
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

(A) TPM, REFLECTIVE PAINT, 4" WHITE
(B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
(C) TPM, REMOVABLE TAPE 4" WHITE
(D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
(E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
(I) TPM, ARROWS, REMOVABLE TAPE
(J) TPM, WORDS, REMOVABLE TAPE
(F) TPM, REFLECTIVE PAINT, 8' WHITE
(G) TPM, ARROWS, REFLECTIVE PAINT
(H) TPM, WORDS, REFLECTIVE PAINT
(K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
(L) TPM, REMOVABLE TAPE, 8" WHITE
(M) MATCH EXISTING

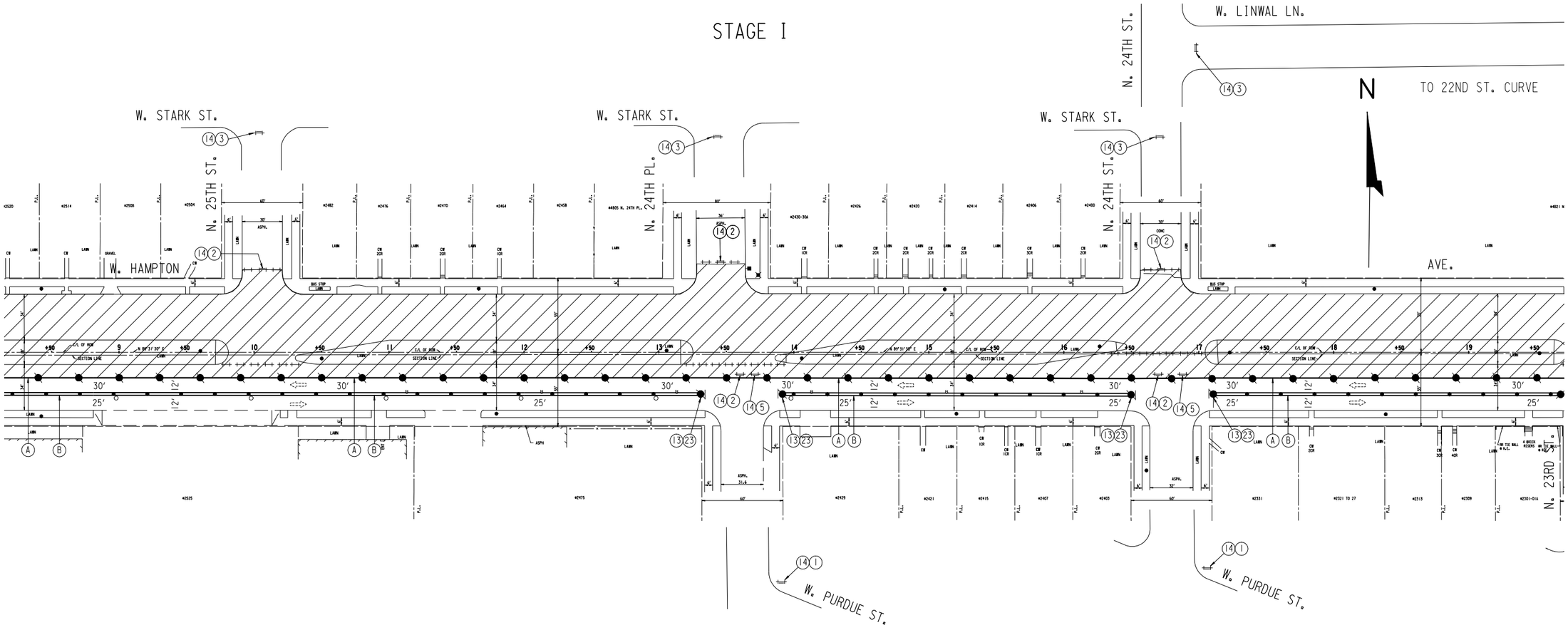
NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

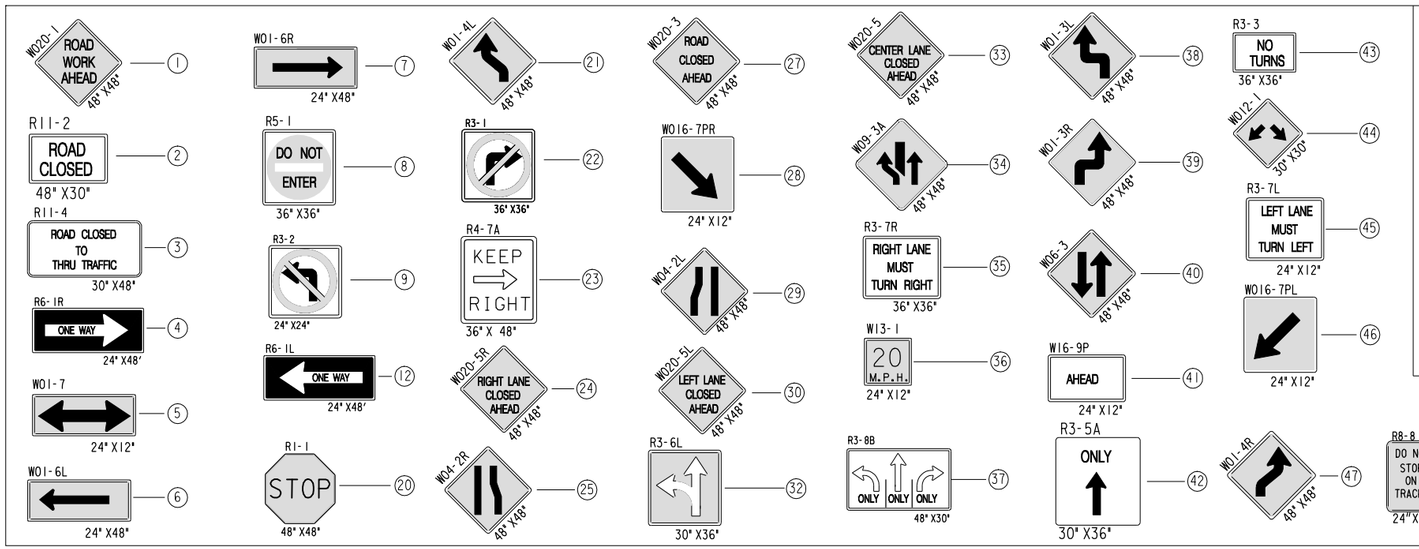
SHEET 2 OF 14

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 108

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE I





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGNS — (14X)
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

(A) TPM, REFLECTIVE PAINT, 4" WHITE
(B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
(C) TPM, REMOVABLE TAPE 4" WHITE
(D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
(E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
(I) TPM, ARROWS, REMOVABLE TAPE
(J) TPM, WORDS, REMOVABLE TAPE
(F) TPM, REFLECTIVE PAINT, 8' WHITE
(G) TPM, ARROWS, REFLECTIVE PAINT
(H) TPM, WORDS, REFLECTIVE PAINT
(K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
(L) TPM, REMOVABLE TAPE, 8" WHITE
(M) MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 109

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE I

TO 24TH ST.

W. STARK ST.

N. 22ND ST.

N. 21ST ST.

N. 20TH ST.

N. 20TH ST.

W. HAMPTON AVE.

SEE SHEET 5 OF 14

SEE SHEET 6 OF 14

N

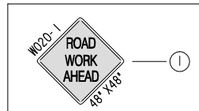
W. PURDUE ST.

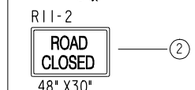
W. PURDUE ST.

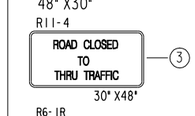
W. PURDUE ST.

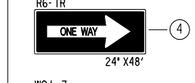
W. PURDUE ST.

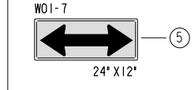
W. COURTLAND

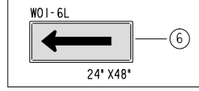


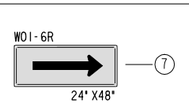


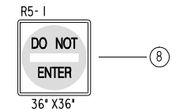


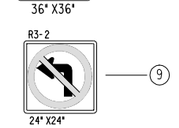




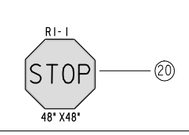


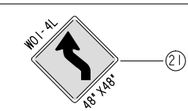


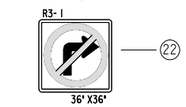


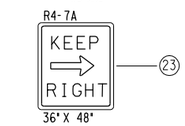




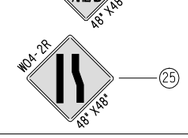


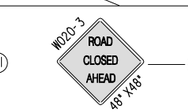








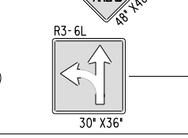


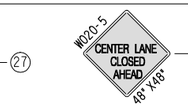




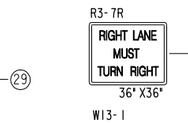


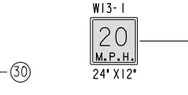


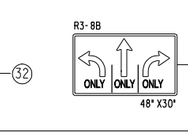


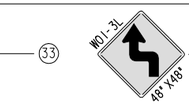


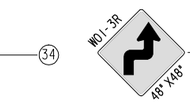


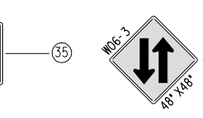


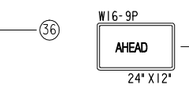


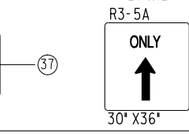


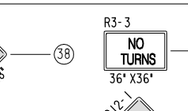


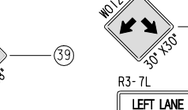


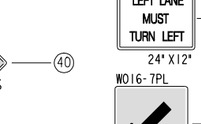




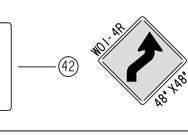


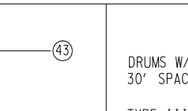


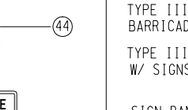












LEGEND

DRUMS W/LIGHTS 30' SPACING	13
TYPE III BARRICADES	14
TYPE III BARRICADES W/ SIGNS	14X
SIGN BANDED TO UTILITY POLE	
TUBULAR MARKERS 25' SPACING	
WORK AREA	
DIRECTION OF TRAFFIC	

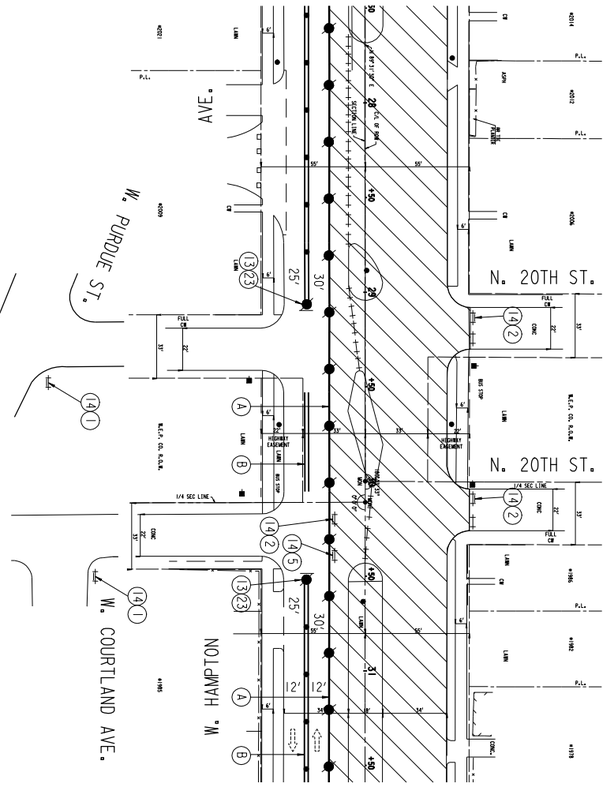
- (A) TPM, REFLECTIVE PAINT, 4" WHITE
- (B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- (C) TPM, REMOVABLE TAPE 4" WHITE
- (D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- (E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- (I) TPM, ARROWS, REMOVABLE TAPE
- (J) TPM, WORDS, REMOVABLE TAPE
- (F) TPM, REFLECTIVE PAINT, 8' WHITE
- (G) TPM, ARROWS, REFLECTIVE PAINT
- (H) TPM, WORDS, REFLECTIVE PAINT
- (K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- (L) TPM, REMOVABLE TAPE, 8" WHITE
- (M) MATCH EXISTING

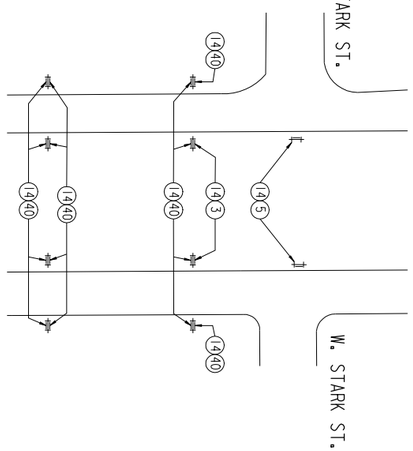
NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

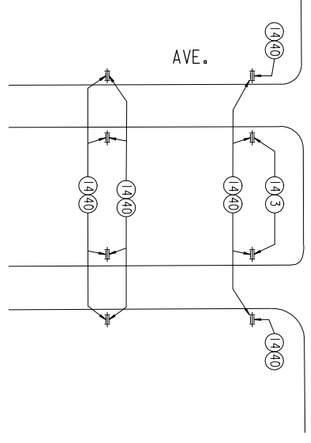
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 110

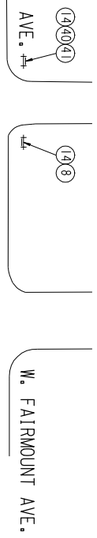
FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

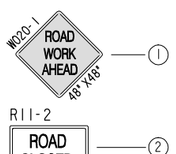
STAGE I

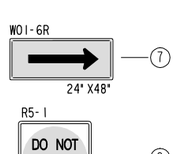


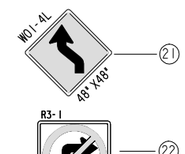


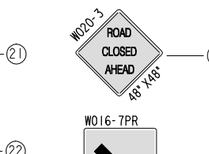


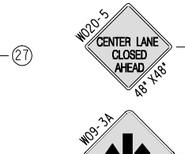


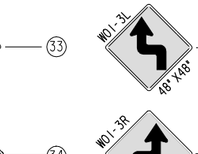


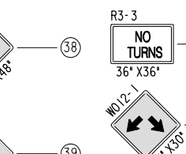














LEGEND

DRUMS W/LIGHTS 30' SPACING — 13
TYPE III BARRICADES — 14
TYPE III BARRICADES W/ SIGNS — 14X
SIGN BANDED TO UTILITY POLE
TUBULAR MARKERS 25' SPACING
WORK AREA
DIRECTION OF TRAFFIC

- A TPM, REFLECTIVE PAINT, 4" WHITE
- B TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- C TPM, REMOVABLE TAPE 4" WHITE
- D TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- E TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- I TPM, ARROWS, REMOVABLE TAPE
- J TPM, WORDS, REMOVABLE TAPE
- F TPM, REFLECTIVE PAINT, 8' WHITE
- G TPM, ARROWS, REFLECTIVE PAINT
- H TPM, WORDS, REFLECTIVE PAINT
- K TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- L TPM, REMOVABLE TAPE, 8" WHITE
- M MATCH EXISTING

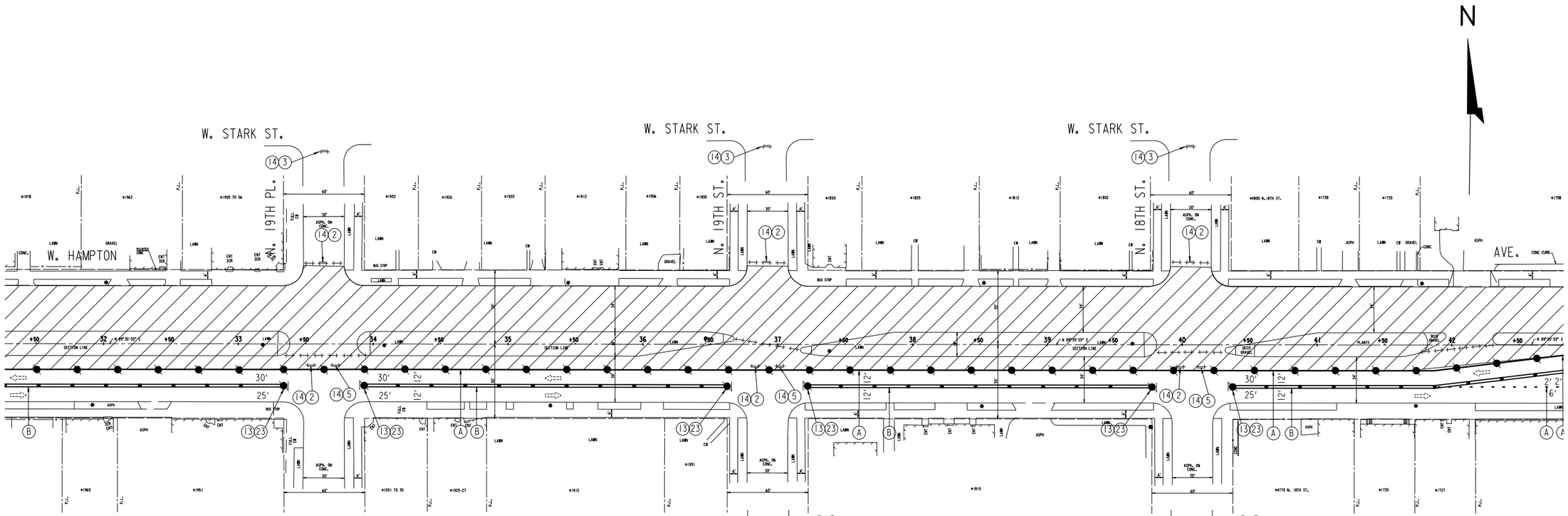
NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

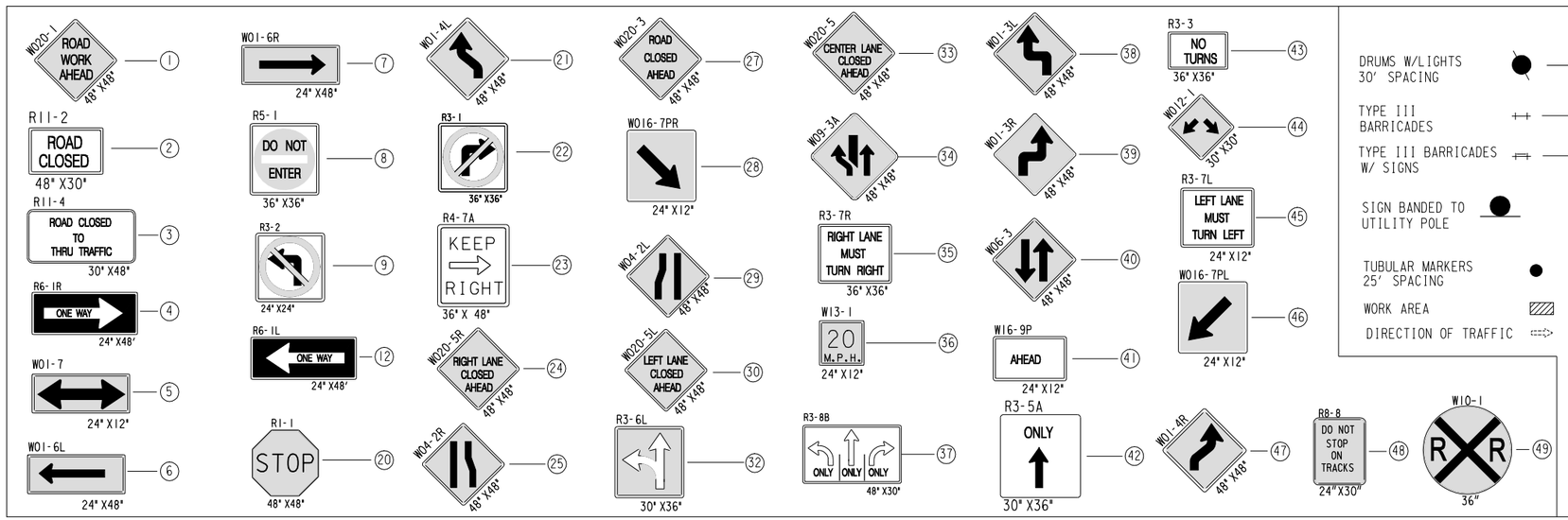
SHEET 5 OF 14

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 111

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE I





LEGEND

- DRUMS W/LIGHTS 30' SPACING — ⑬
- TYPE III BARRICADES — ⑭
- TYPE III BARRICADES W/ SIGNS — ⑭X
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

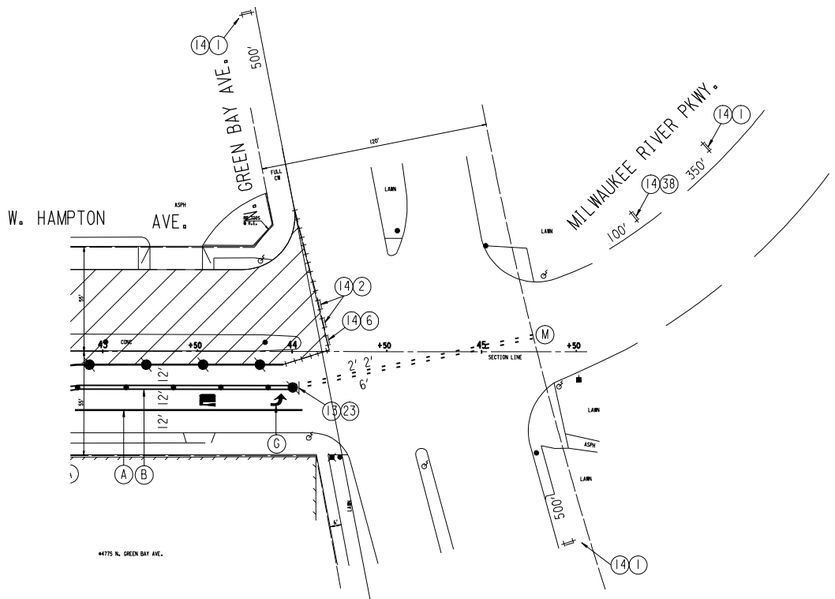
- Ⓐ TPM, REFLECTIVE PAINT, 4" WHITE
- Ⓑ TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- Ⓒ TPM, REMOVABLE TAPE 4" WHITE
- Ⓓ TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- Ⓔ TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- Ⓘ TPM, ARROWS, REMOVABLE TAPE
- Ⓙ TPM, WORDS, REMOVABLE TAPE
- Ⓕ TPM, REFLECTIVE PAINT, 8' WHITE
- Ⓖ TPM, ARROWS, REFLECTIVE PAINT
- Ⓗ TPM, WORDS, REFLECTIVE PAINT
- Ⓚ TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- Ⓛ TPM, REMOVABLE TAPE, 8" WHITE
- Ⓜ MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

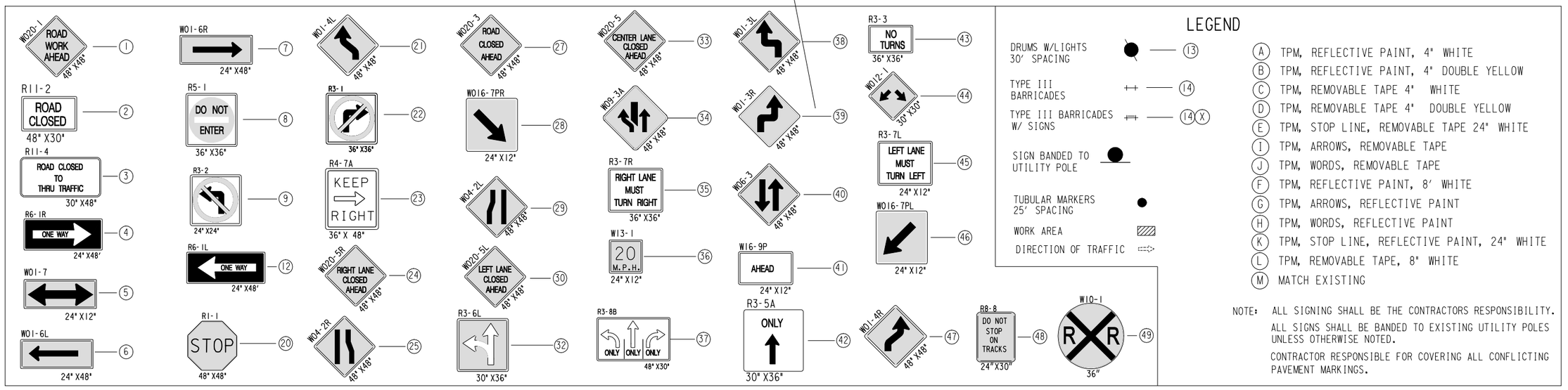
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 112

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE I



N



LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGNS — (14X)
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

(A) TPM, REFLECTIVE PAINT, 4" WHITE
(B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
(C) TPM, REMOVABLE TAPE 4" WHITE
(D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
(E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
(I) TPM, ARROWS, REMOVABLE TAPE
(J) TPM, WORDS, REMOVABLE TAPE
(F) TPM, REFLECTIVE PAINT, 8' WHITE
(G) TPM, ARROWS, REFLECTIVE PAINT
(H) TPM, WORDS, REFLECTIVE PAINT
(K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
(L) TPM, REMOVABLE TAPE, 8" WHITE
(M) MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

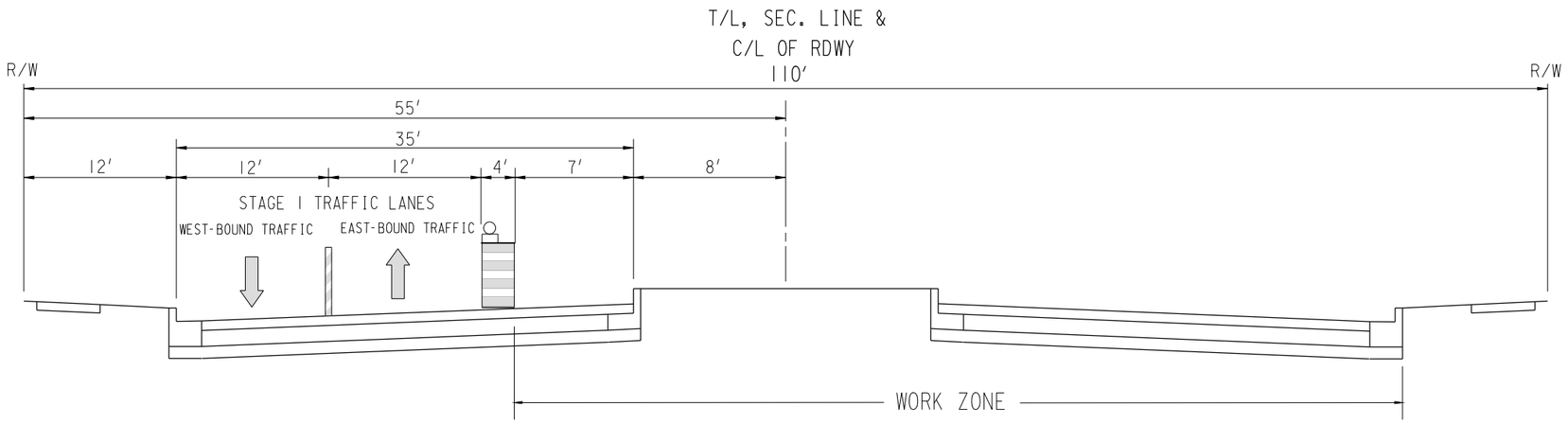
SHEET 7 OF 14

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 113

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

2

STAGE II

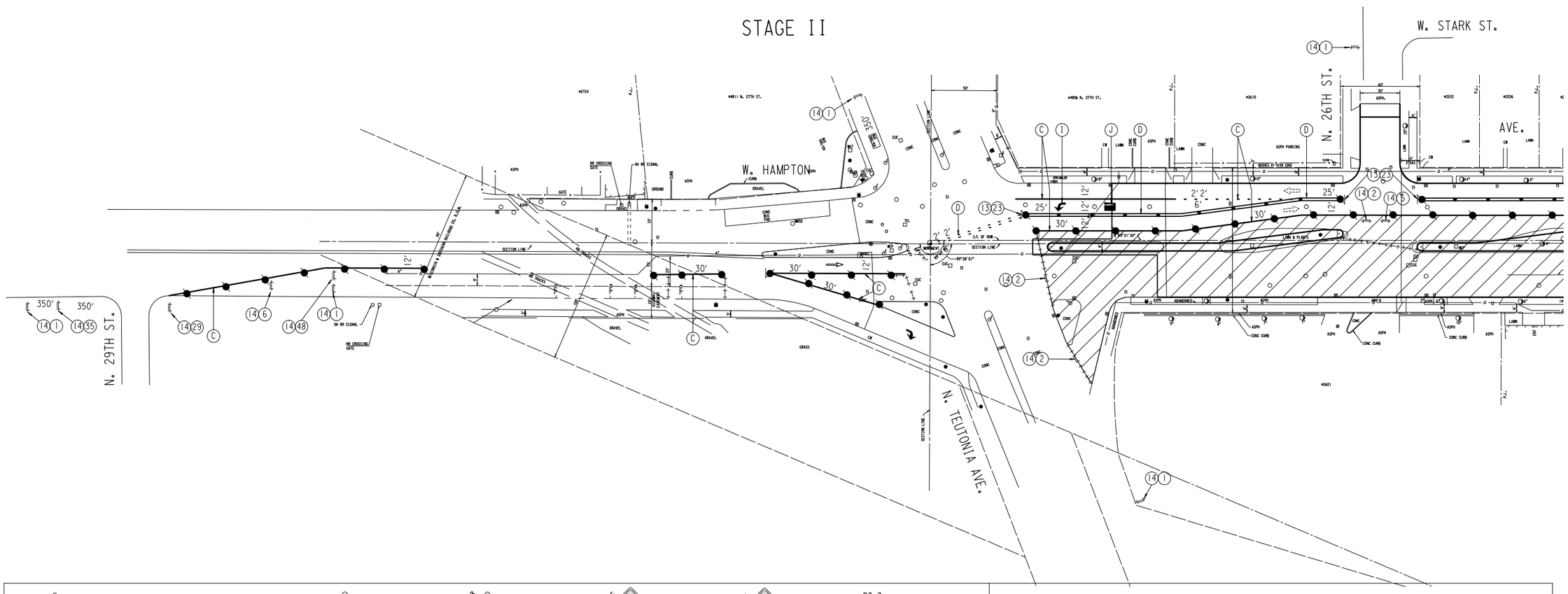


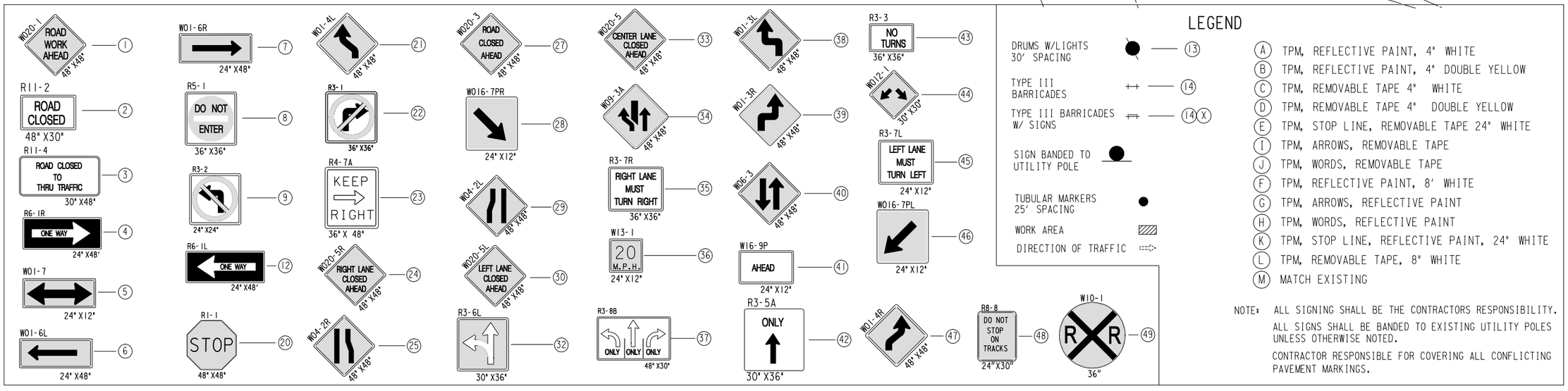
TRAFFIC CONTROL - STAGE II
W. HAMPTON AVE. -
N. GREEN BAY AVE. TO N. TEUTONIA AVE.

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL TYPICAL	SCALE FEET 0' 80'	SHEET NO: 114

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE II





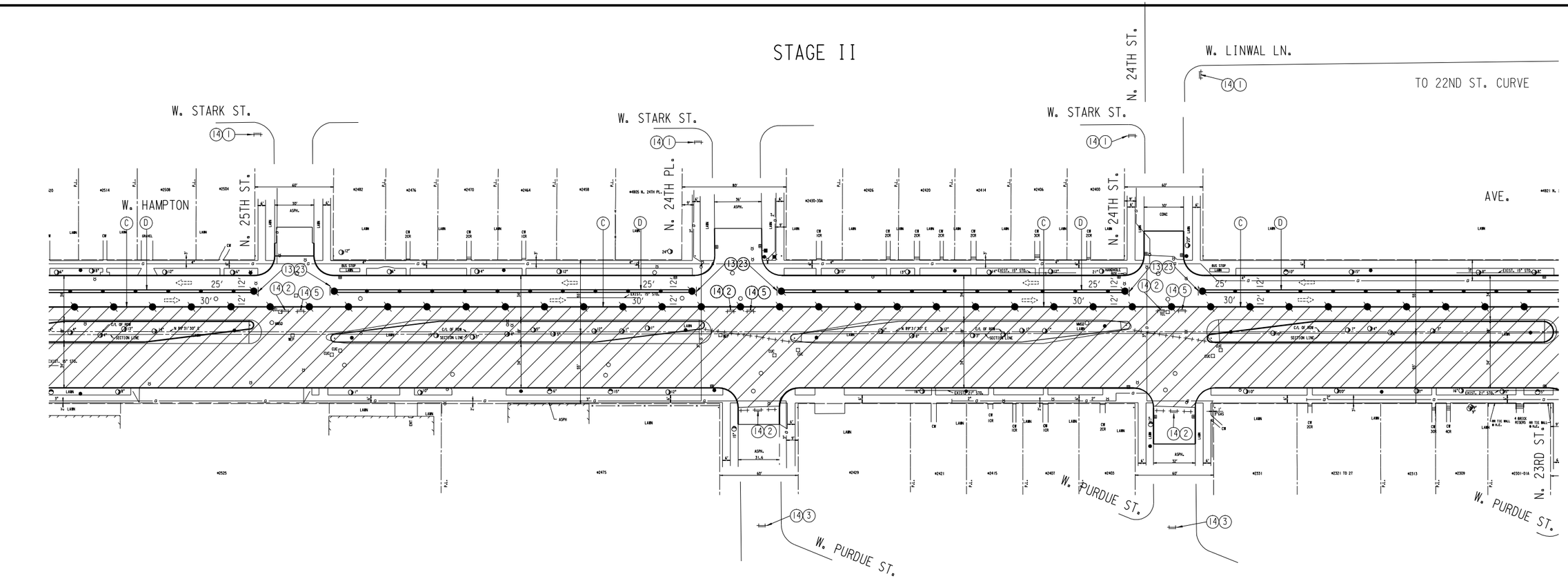
LEGEND

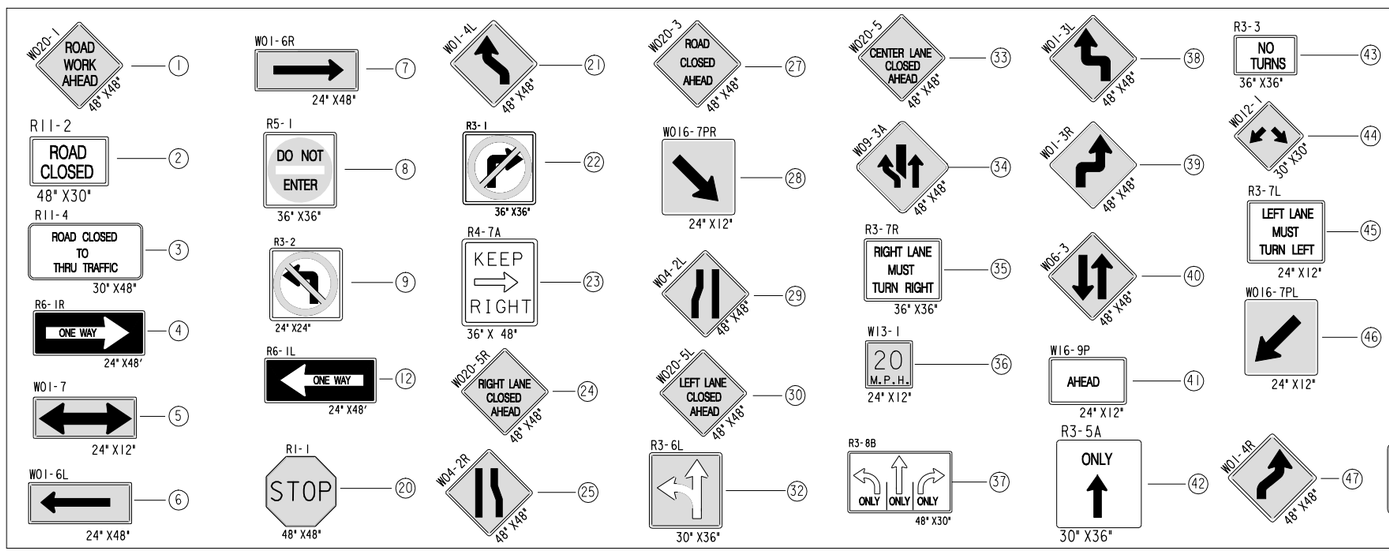
- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGNS — (14X)
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

(A) TPM, REFLECTIVE PAINT, 4" WHITE
(B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
(C) TPM, REMOVABLE TAPE 4" WHITE
(D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
(E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
(I) TPM, ARROWS, REMOVABLE TAPE
(J) TPM, WORDS, REMOVABLE TAPE
(F) TPM, REFLECTIVE PAINT, 8' WHITE
(G) TPM, ARROWS, REFLECTIVE PAINT
(H) TPM, WORDS, REFLECTIVE PAINT
(K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
(L) TPM, REMOVABLE TAPE, 8" WHITE
(M) MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

STAGE II





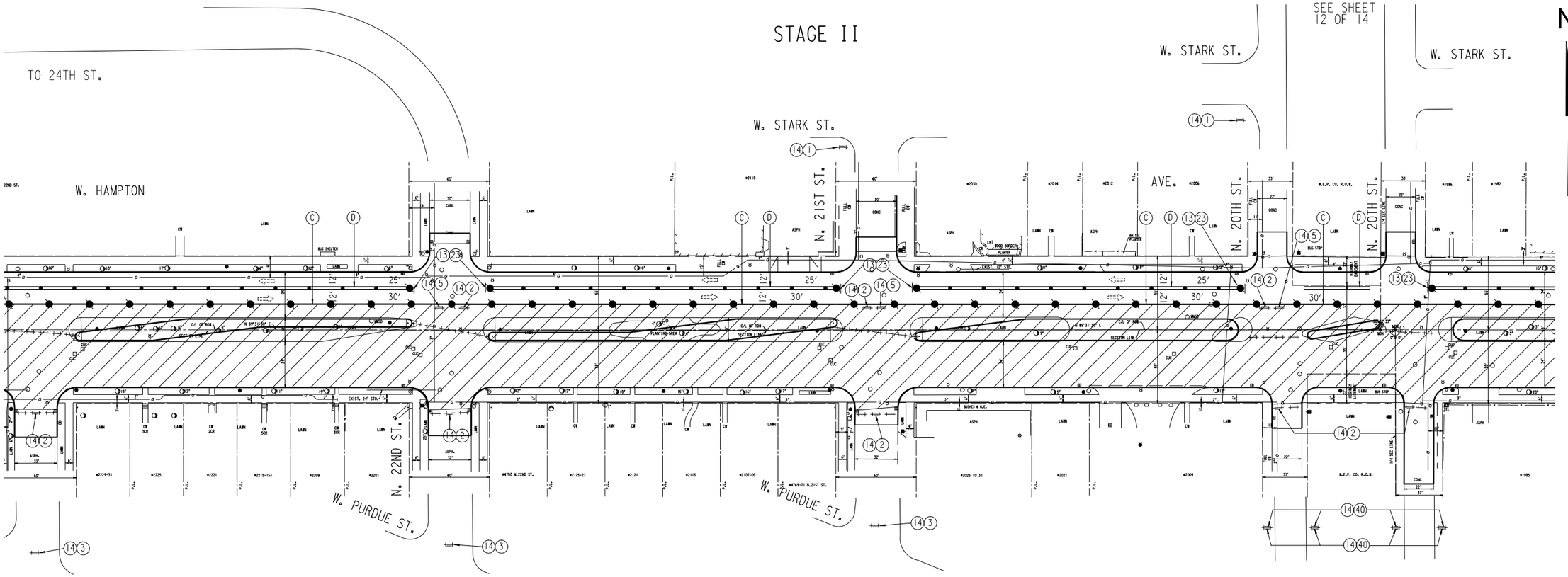
LEGEND

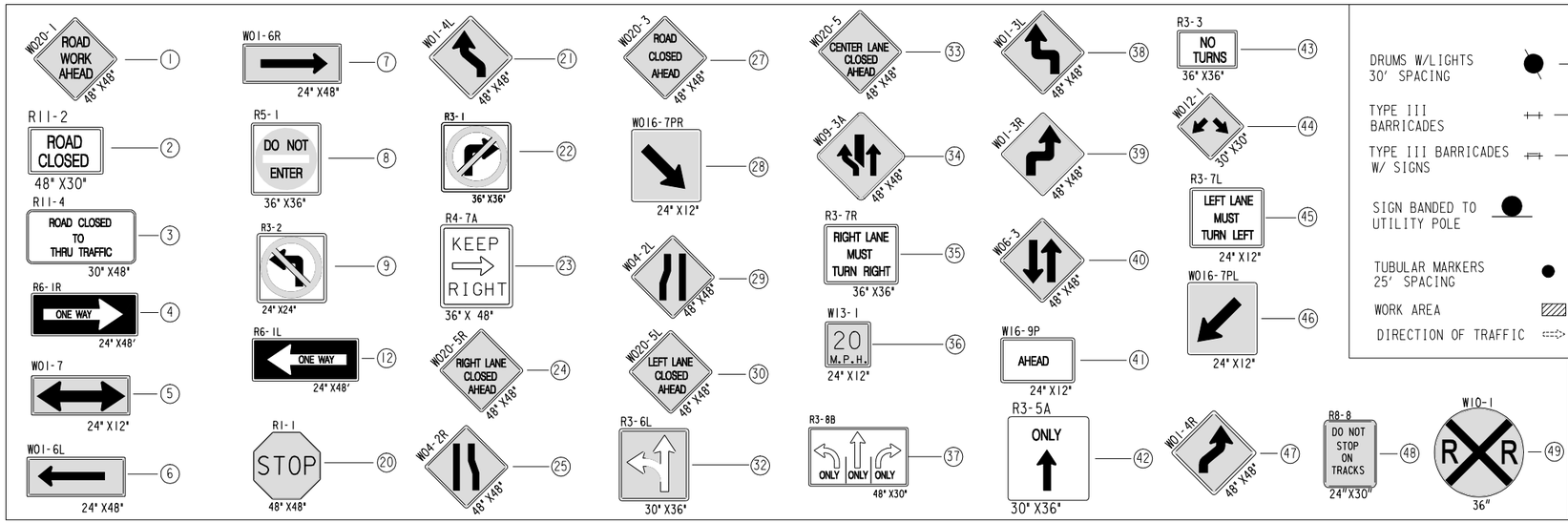
- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGNS — (14X)
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

(A) TPM, REFLECTIVE PAINT, 4" WHITE
(B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
(C) TPM, REMOVABLE TAPE 4" WHITE
(D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
(E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
(I) TPM, ARROWS, REMOVABLE TAPE
(J) TPM, WORDS, REMOVABLE TAPE
(F) TPM, REFLECTIVE PAINT, 8' WHITE
(G) TPM, ARROWS, REFLECTIVE PAINT
(H) TPM, WORDS, REFLECTIVE PAINT
(K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
(L) TPM, REMOVABLE TAPE, 8" WHITE
(M) MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

STAGE II





LEGEND

DRUMS W/LIGHTS 30' SPACING — 13

TYPE III BARRICADES — 14

TYPE III BARRICADES W/ SIGNS — 14X

SIGN BANDED TO UTILITY POLE

TUBULAR MARKERS 25' SPACING

WORK AREA

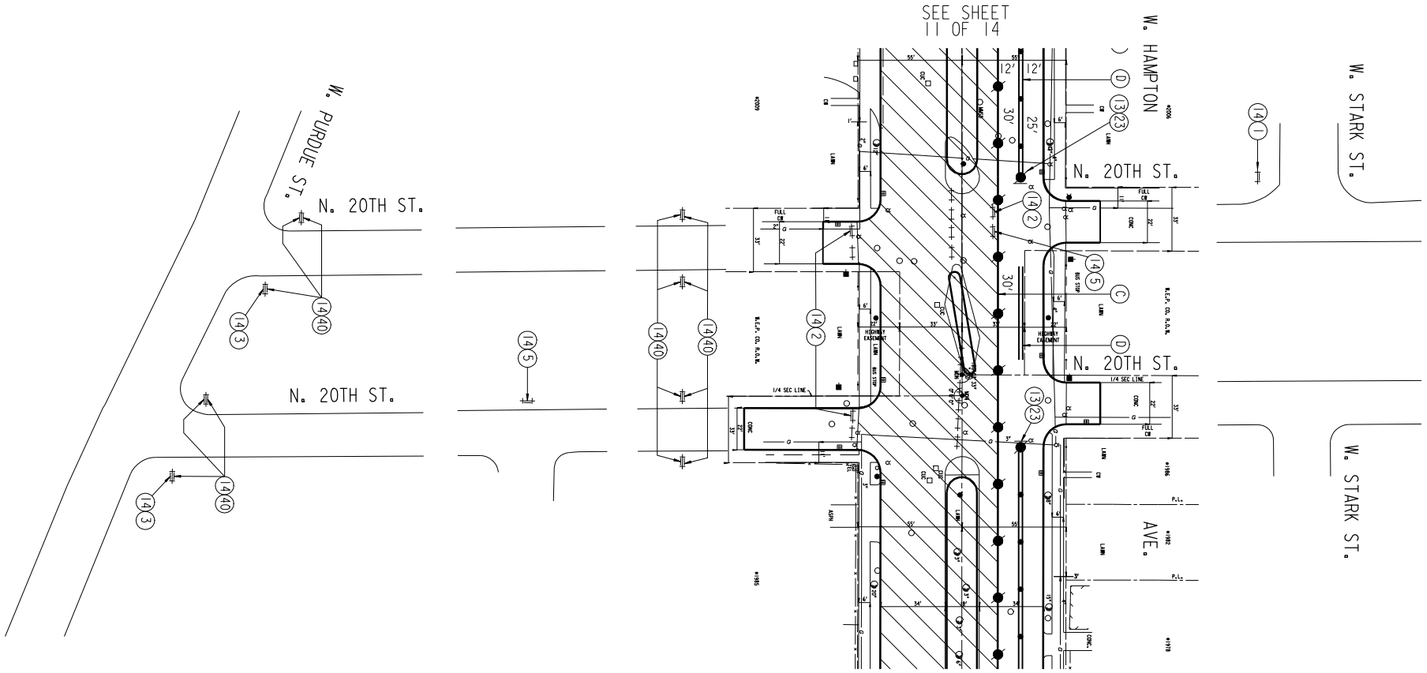
DIRECTION OF TRAFFIC

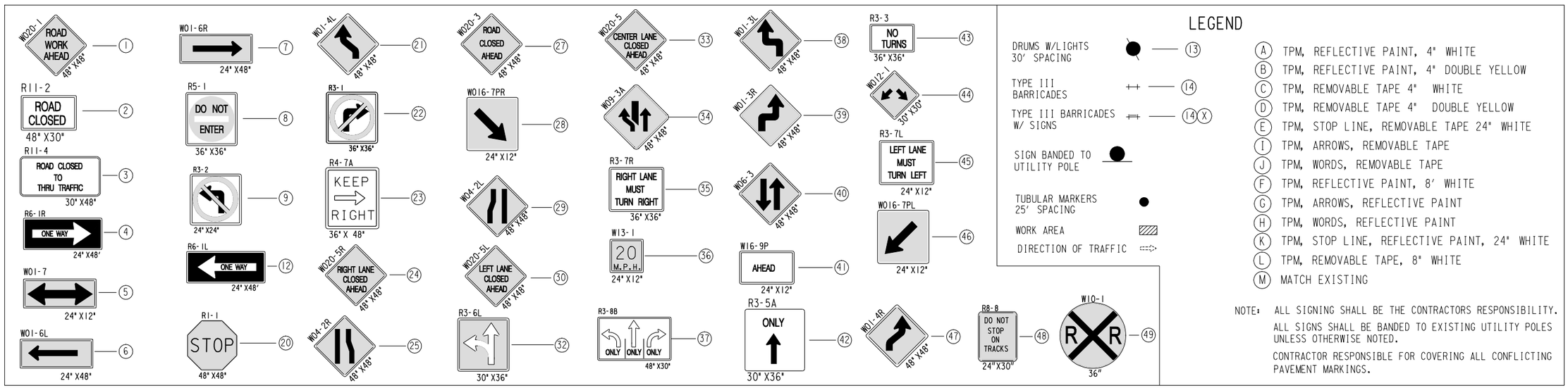
- (A) TPM, REFLECTIVE PAINT, 4" WHITE
- (B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- (C) TPM, REMOVABLE TAPE 4" WHITE
- (D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- (E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- (I) TPM, ARROWS, REMOVABLE TAPE
- (J) TPM, WORDS, REMOVABLE TAPE
- (F) TPM, REFLECTIVE PAINT, 8' WHITE
- (G) TPM, ARROWS, REFLECTIVE PAINT
- (H) TPM, WORDS, REFLECTIVE PAINT
- (K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- (L) TPM, REMOVABLE TAPE, 8" WHITE
- (M) MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

2

STAGE II





LEGEND

DRUMS W/LIGHTS 30' SPACING — (13)

TYPE III BARRICADES — (14)

TYPE III BARRICADES W/ SIGNS — (14X)

SIGN BANDED TO UTILITY POLE

TUBULAR MARKERS 25' SPACING

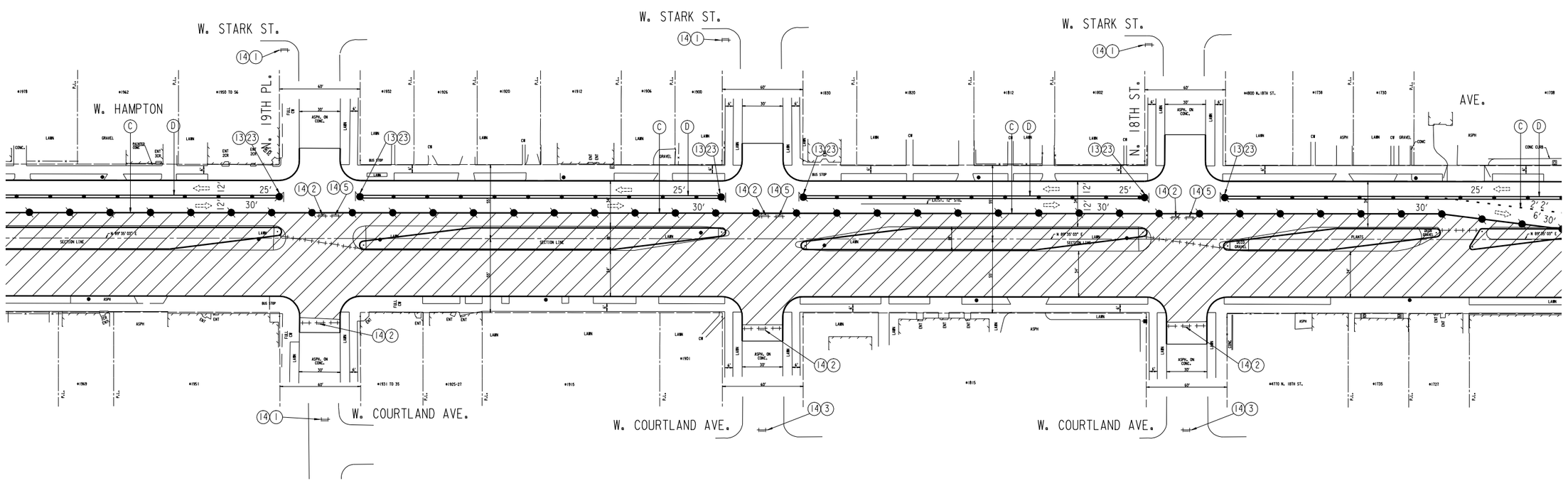
WORK AREA

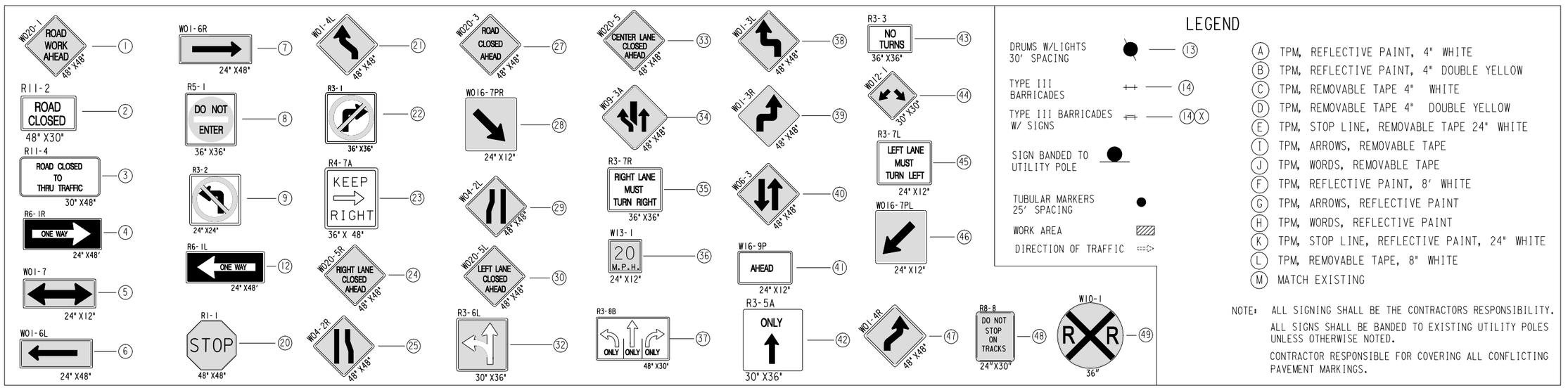
DIRECTION OF TRAFFIC

- (A) TPM, REFLECTIVE PAINT, 4" WHITE
- (B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- (C) TPM, REMOVABLE TAPE 4" WHITE
- (D) TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- (E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- (I) TPM, ARROWS, REMOVABLE TAPE
- (J) TPM, WORDS, REMOVABLE TAPE
- (F) TPM, REFLECTIVE PAINT, 8' WHITE
- (G) TPM, ARROWS, REFLECTIVE PAINT
- (H) TPM, WORDS, REFLECTIVE PAINT
- (K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- (L) TPM, REMOVABLE TAPE, 8" WHITE
- (M) MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

STAGE II





LEGEND

DRUMS W/LIGHTS 30' SPACING — 13
TYPE III BARRICADES — 14
TYPE III BARRICADES W/ SIGNS — 14X
SIGN BANDED TO UTILITY POLE
TUBULAR MARKERS 25' SPACING
WORK AREA
DIRECTION OF TRAFFIC

- A TPM, REFLECTIVE PAINT, 4" WHITE
- B TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- C TPM, REMOVABLE TAPE 4" WHITE
- D TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- E TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- I TPM, ARROWS, REMOVABLE TAPE
- J TPM, WORDS, REMOVABLE TAPE
- F TPM, REFLECTIVE PAINT, 8' WHITE
- G TPM, ARROWS, REFLECTIVE PAINT
- H TPM, WORDS, REFLECTIVE PAINT
- K TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- L TPM, REMOVABLE TAPE, 8" WHITE
- M MATCH EXISTING

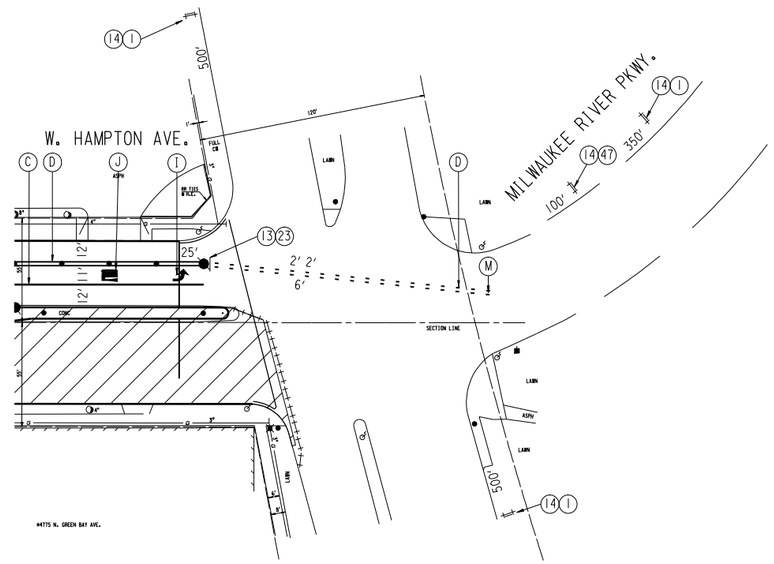
NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

SHEET 13 OF 14

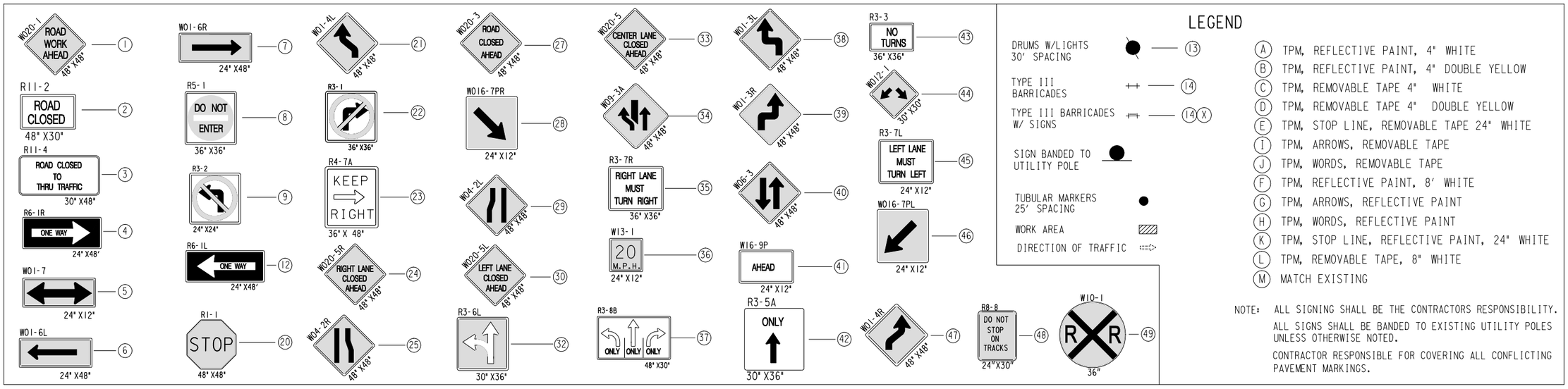
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 119

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE II



N



LEGEND

- DRUMS W/LIGHTS 30' SPACING — 13
- TYPE III BARRICADES — 14
- TYPE III BARRICADES W/ SIGNS — 14X
- SIGN BANDED TO UTILITY POLE
- TUBULAR MARKERS 25' SPACING
- WORK AREA
- DIRECTION OF TRAFFIC

- A TPM, REFLECTIVE PAINT, 4" WHITE
- B TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- C TPM, REMOVABLE TAPE 4" WHITE
- D TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- E TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- I TPM, ARROWS, REMOVABLE TAPE
- J TPM, WORDS, REMOVABLE TAPE
- F TPM, REFLECTIVE PAINT, 8' WHITE
- G TPM, ARROWS, REFLECTIVE PAINT
- H TPM, WORDS, REFLECTIVE PAINT
- K TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- L TPM, REMOVABLE TAPE, 8" WHITE
- M MATCH EXISTING

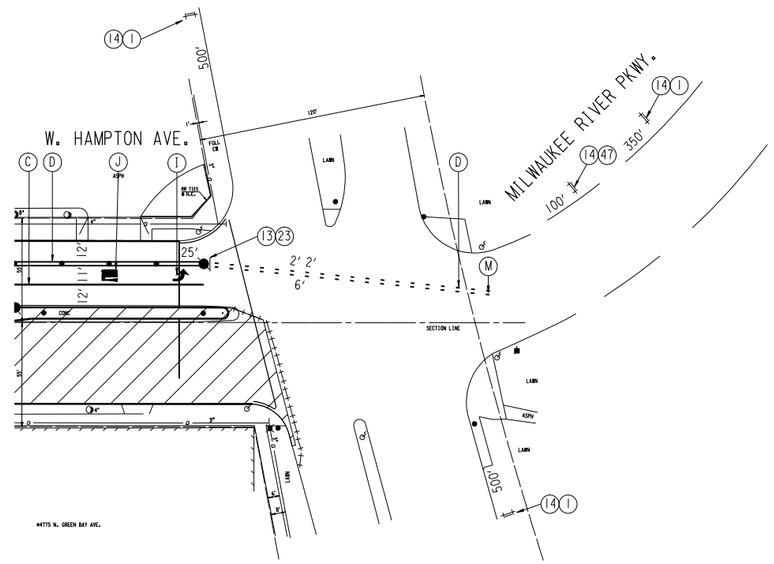
NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

SHEET 14 OF 14

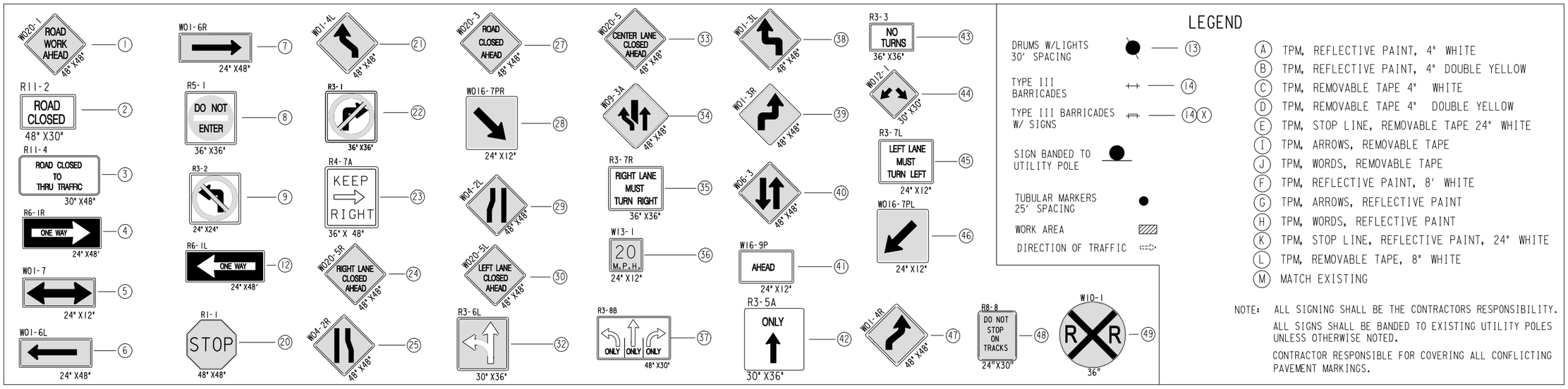
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 120

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

STAGE II



N



LEGEND

DRUMS W/LIGHTS 30' SPACING — 13
TYPE III BARRICADES — 14
TYPE III BARRICADES W/ SIGNS — 14X
SIGN BANDED TO UTILITY POLE
TUBULAR MARKERS 25' SPACING
WORK AREA
DIRECTION OF TRAFFIC

- A TPM, REFLECTIVE PAINT, 4" WHITE
- B TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- C TPM, REMOVABLE TAPE 4" WHITE
- D TPM, REMOVABLE TAPE 4" DOUBLE YELLOW
- E TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- I TPM, ARROWS, REMOVABLE TAPE
- J TPM, WORDS, REMOVABLE TAPE
- F TPM, REFLECTIVE PAINT, 8' WHITE
- G TPM, ARROWS, REFLECTIVE PAINT
- H TPM, WORDS, REFLECTIVE PAINT
- K TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- L TPM, REMOVABLE TAPE, 8" WHITE
- M MATCH EXISTING

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

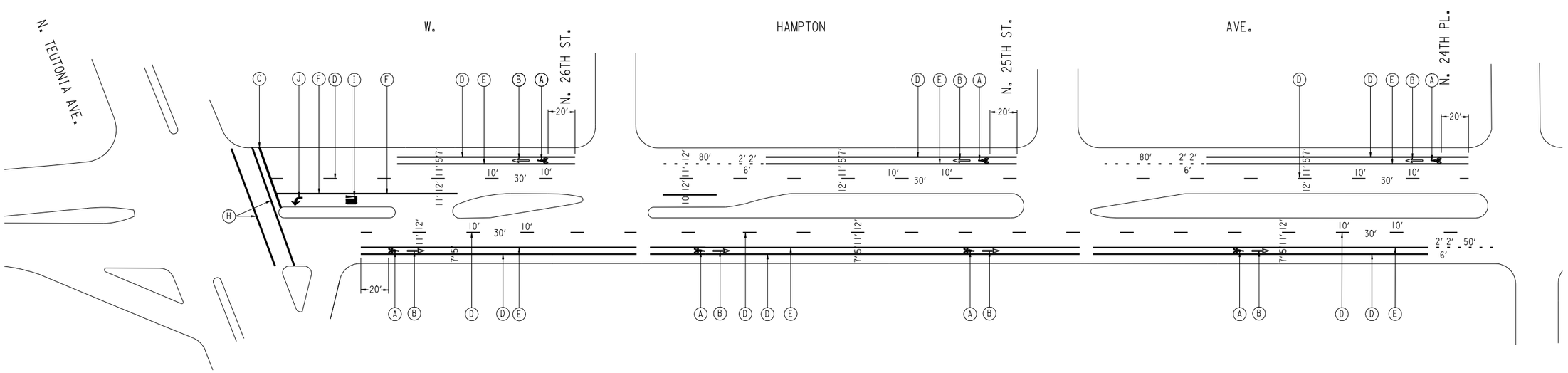
SHEET 14 OF 14

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 121

FILE NAME: W:\SPR\HAMPTON GB TEU\TRAFFIC.DGN

2

N



(A) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY

(B) PAVEMENT MARKING ARROWS BIKE LANE EPOXY

(C) PAVEMENT MARKING EPOXY, 24-INCH WHITE

(D) PAVEMENT MARKING EPOXY, 4-INCH WHITE

(E) PAVEMENT MARKING EPOXY, 6-INCH WHITE

(F) PAVEMENT MARKING EPOXY, 8-INCH WHITE

(H) PAVEMENT MARKING CROSS WALK EPOXY, 12-INCH WHITE

(I) PAVEMENT MARKING WORDS EPOXY

(J) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (LEFT TURN)

(K) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (THROUGH))

(L) PAVEMENT MARKING ARROWS EPOXY TYPE 2L (THROUGH, RIGHT TURN)

(M) MATCH

SHEET 1 OF 6

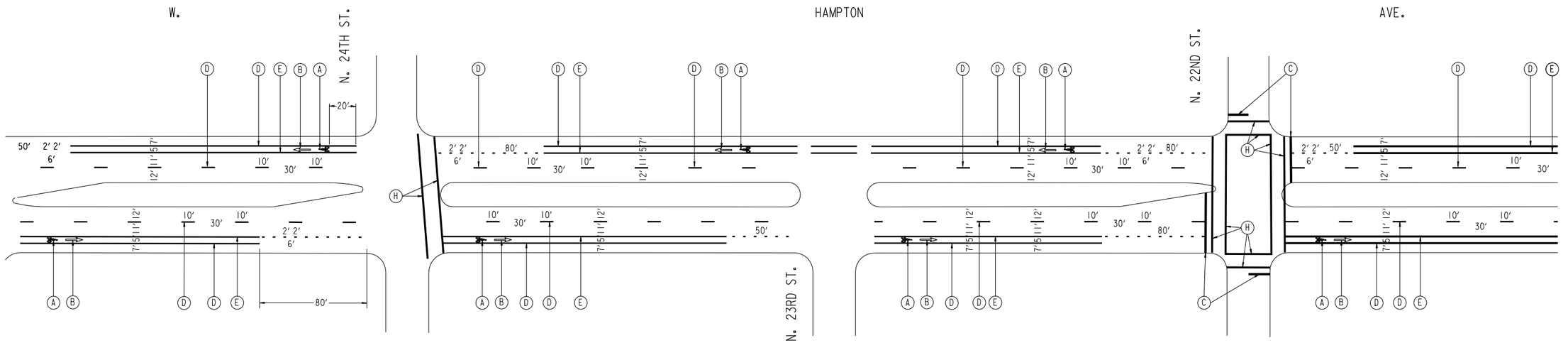
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 80'	SHEET NO: 122

FILE NAME: W:\SPR\HAMPTON GB TEU\PAVEMARK.DGN

REVISED: 1-7-2014

2

N



(A) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY

(B) PAVEMENT MARKING ARROWS BIKE LANE EPOXY

(C) PAVEMENT MARKING EPOXY, 24-INCH WHITE

(D) PAVEMENT MARKING EPOXY, 4-INCH WHITE

(E) PAVEMENT MARKING EPOXY, 6-INCH WHITE

(F) PAVEMENT MARKING EPOXY, 8-INCH WHITE

(H) PAVEMENT MARKING CROSS WALK EPOXY, 12-INCH WHITE

(I) PAVEMENT MARKING WORDS EPOXY

(J) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (LEFT TURN)

(K) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (THROUGH))

(L) PAVEMENT MARKING ARROWS EPOXY TYPE 2L (THROUGH, RIGHT TURN)

(M) MATCH

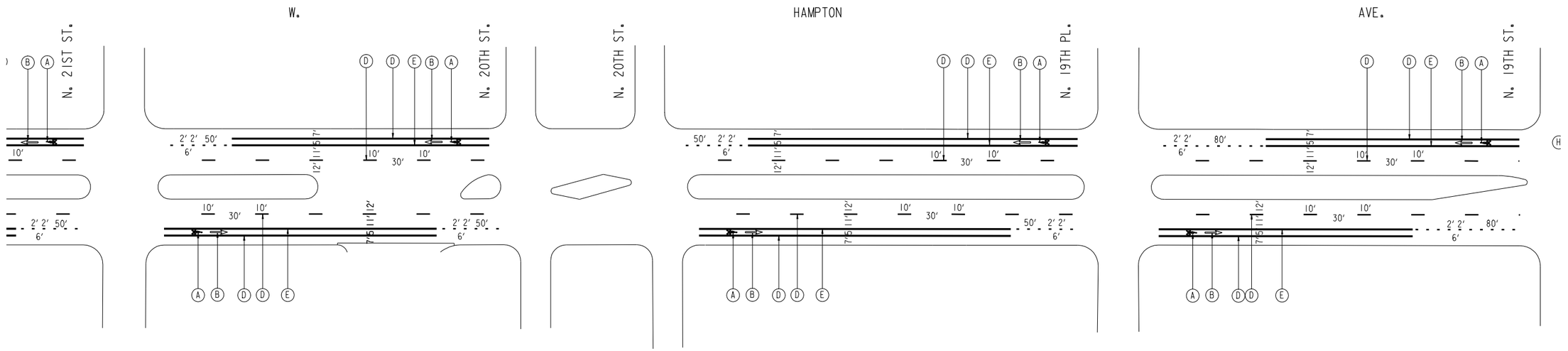
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 80'	SHEET NO: 123

FILE NAME: W:\SPR\HAMPTON GB TEU\PAVEMARK.DGN

REVISED: 1-7-2014

2

N



(A) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
(B) PAVEMENT MARKING ARROWS BIKE LANE EPOXY
(C) PAVEMENT MARKING EPOXY, 24-INCH WHITE
(D) PAVEMENT MARKING EPOXY, 4-INCH WHITE
(E) PAVEMENT MARKING EPOXY, 6-INCH WHITE
(F) PAVEMENT MARKING EPOXY, 8-INCH WHITE
(H) PAVEMENT MARKING CROSS WALK EPOXY, 12-INCH WHITE
(I) PAVEMENT MARKING WORDS EPOXY
(J) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (LEFT TURN)
(K) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (THROUGH))
(L) PAVEMENT MARKING ARROWS EPOXY TYPE 2L (THROUGH, RIGHT TURN)
(M) MATCH

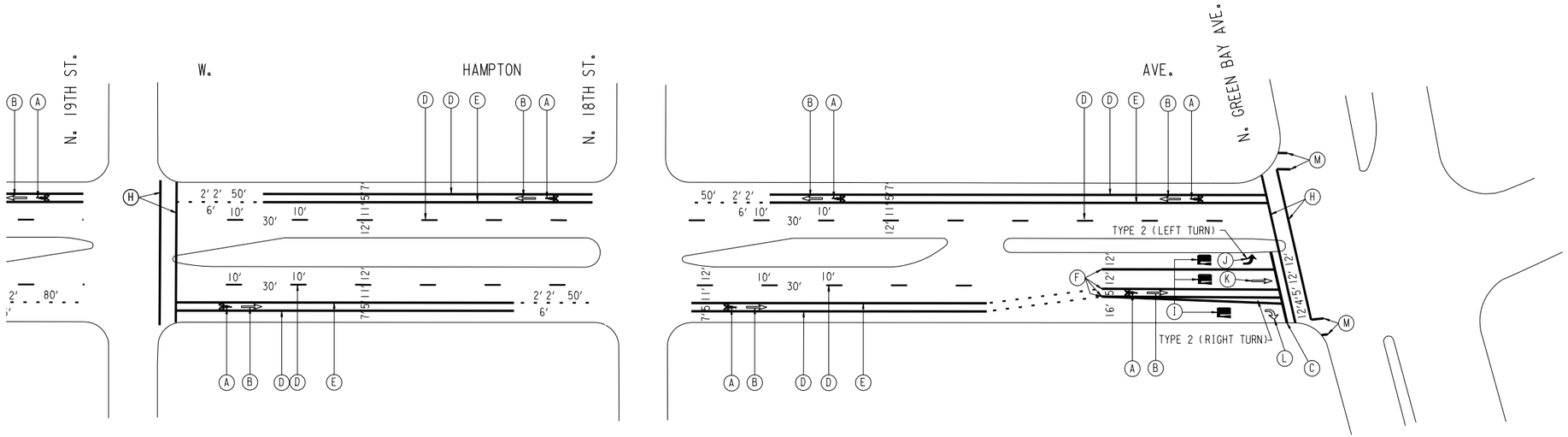
STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 80'	SHEET NO: 124

FILE NAME: W:\SPR\HAMPTON GB TEU\PAVEMARK.DGN

REVISED: 1-7-2014

2

N



(A) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
(B) PAVEMENT MARKING ARROWS BIKE LANE EPOXY
(C) PAVEMENT MARKING EPOXY, 24-INCH WHITE
(D) PAVEMENT MARKING EPOXY, 4-INCH WHITE
(E) PAVEMENT MARKING EPOXY, 6-INCH WHITE
(F) PAVEMENT MARKING EPOXY, 8-INCH WHITE
(H) PAVEMENT MARKING CROSS WALK EPOXY, 12-INCH WHITE
(I) PAVEMENT MARKING WORDS EPOXY
(J) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (LEFT TURN)
(K) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (THROUGH))
(L) PAVEMENT MARKING ARROWS EPOXY TYPE 2L (THROUGH, RIGHT TURN)
(M) MATCH

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 80'	SHEET NO: 125

FILE NAME: W:\SPR\HAMPTON GB TEU\PAVEMARK.DGN

REVISED: 1-7-2014

2

GENERAL PAVEMENT MARKING NOTES

ALL DOUBLE YELLOW CENTERLINES SHALL HAVE A 4 INCH (+/- 1 INCH) SPACE BETWEEN TWO (2) 4 INCH WIDE LINES. THE DIMENSIONS SHOWN IN THE PLAN ARE FROM FACE OF CURB TO THE CENTER OF THE 4 INCH SPACE, UNLESS OTHERWISE NOTED.

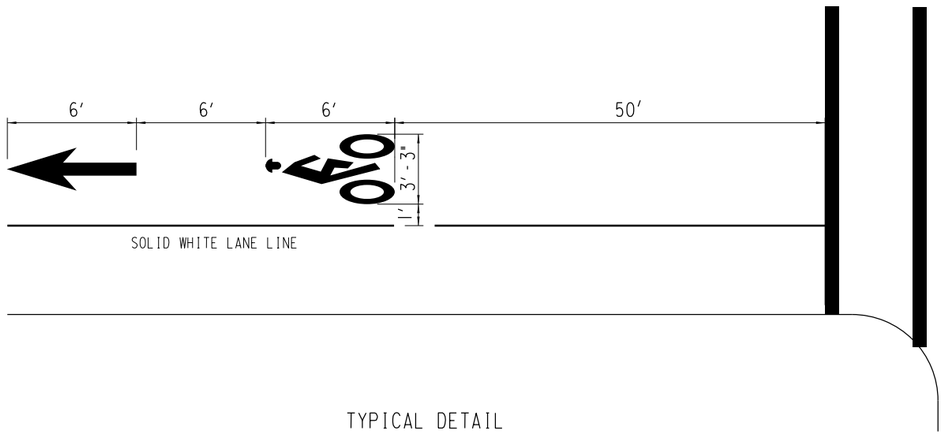
ALL WHITE LANE LINES SHALL BE 4 INCHES WIDE, 10 FEET LONG WITH A 30 FOOT SPACING. THE DIMENSIONS SHOWN IN THE PLAN ARE FROM THE FACE OF CURB TO CENTER OF PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

ALL WHITE CROSSWALK LINES ARE 12 INCHES WIDE.

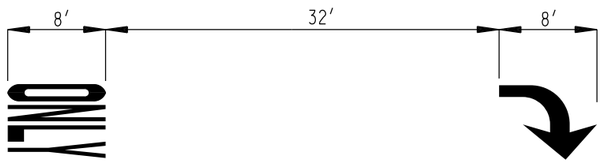
ALL WHITE STOP LINES ARE 24 INCHES WIDE.

ALL PAVEMENT MARKINGS ARE TO BE EPOXY.

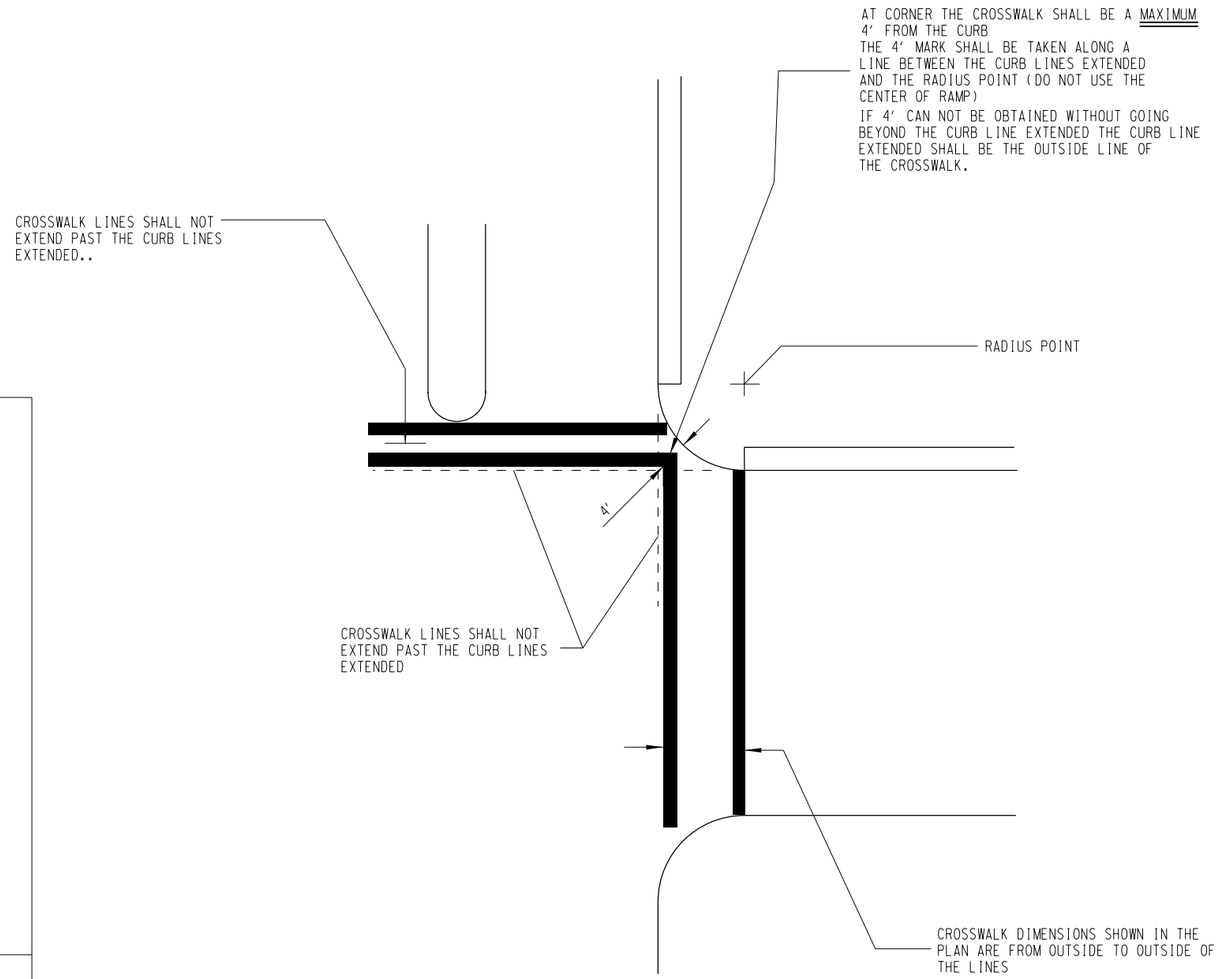
INCLUDE SANDBLASTING PRIOR TO INSTALLATION OF PAVEMENT MARKINGS.



TYPICAL DETAIL
BIKE LANE



TYPICAL DETAIL
ARROW AND ONLY



4' TYPICAL
CROSSWALK INSTALLATION
(PLASTIC, EPOXY, PAINT)

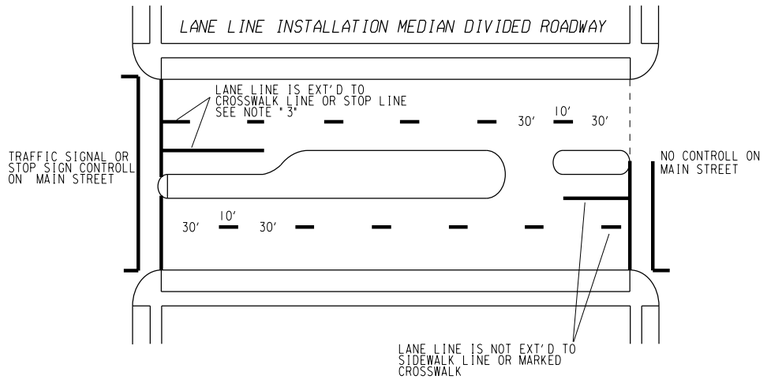
2

SHEET 5 OF 6

STATE PROJECT NUMBER: 2545-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 80'	SHEET NO: 126	E

FILE NAME: W:\SPR\HAMPTON GB TEU\PAVEMARK.DGN

2



PAVEMENT MARKING NOTES

1. DASHED YELLOW CENTER LINES AND WHITE LANE LINES ARE 10 FEET LONG WITH A 30 FOOT GAP.
2. ALL DASHED CENTER LINES AND LANE LINES ARE 4 INCHES WIDE. ALL DOUBLE YELLOW CENTER LINES HAVE A 4 INCH SPACE BETWEEN TWO 4 INCH LINES.
3. AT CONTROLLED INTERSECTION IF LANE LINE IS LESS THAN 10 FEET, THE PRECEEDING LINE IS EXTENDED TO THE STOP LINE OR CROSSWALK LINE. THIS BALANCE LINE SHOULD NOT EXCEED 49 FEET. THIS POLICY APPLIES TO LANE LINES ONLY AT TRAFFIC SIGNALIZED OR STOP SIGN CONTROLLED INTERSECTIONS AND CENTER LINES AT ALL LOCATIONS.
4. ALL DIMENSIONS ARE FROM THE FACE OF THE CURB TO THE CENTER OF THE MARKING UNLESS OTHERWISE NOTED.
5. TEMPORARY PAVEMENT MARKINGS MUST BE PLACED ON THE PAVEMENT IF PERMANENT MARKINGS ARE NOT INSTALLED AFTER THE COMPLETION OF PAVING.

DATE 05FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2545-03-71 QUANTITY
0010	201.0120	CLEARING	ID	262.000	262.000
0020	201.0220	GRUBBING	ID	262.000	262.000
0030	204.0100	REMOVING PAVEMENT	SY	35,400.000	35,400.000
0040	204.0105	REMOVING PAVEMENT BUTT JOINTS	SY	24.000	24.000
0050	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	850.000	850.000
0060	204.0150	REMOVING CURB & GUTTER	LF	400.000	400.000
0070	204.0155	REMOVING CONCRETE SIDEWALK	SY	7,100.000	7,100.000
0080	204.0210	REMOVING MANHOLES	EACH	2.000	2.000
0090	204.0220	REMOVING INLETS	EACH	34.000	34.000
0100	204.0260	ABANDONING INLETS	EACH	28.000	28.000
0110	205.0100	EXCAVATION COMMON	CY	15,730.000	15,730.000
0120	213.0100	FINISHING ROADWAY (PROJECT) 01. 2545-03-71	EACH	1.000	1.000
0130	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	1,050.000	1,050.000
0140	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	12,800.000	12,800.000
0150	320.0125	CONCRETE BASE 6-INCH	SY	105.000	105.000
0160	415.0080	CONCRETE PAVEMENT 8-INCH	SY	32,600.000	32,600.000
0170	415.0210	CONCRETE PAVEMENT GAPS	EACH	5.000	5.000
0180	416.0170	CONCRETE DRIVEWAY 7-INCH	SY	620.000	620.000
0190	416.0180	CONCRETE DRIVEWAY 8-INCH	SY	170.000	170.000
0200	416.0270	CONCRETE DRIVEWAY HES 7-INCH	SY	30.000	30.000
0210	416.0610	DRILLED TIE BARS	EACH	177.000	177.000
0220	440.4410.S	INCENTIVE IRI RIDE	DOL	9,084.000	9,084.000
0230	455.0605	TACK COAT	GAL	40.000	40.000
0240	465.0105	ASPHALTIC SURFACE	TON	115.000	115.000
0250	601.0322	CONCRETE CURB & GUTTER 22-INCH	LF	320.000	320.000
0260	601.0331	CONCRETE CURB & GUTTER 31-INCH	LF	8,280.000	8,280.000
0270	601.0452	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	LF	6,620.000	6,620.000
0280	602.0410	CONCRETE SIDEWALK 5-INCH	SF	47,600.000	47,600.000
0290	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	380.000	380.000
0300	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	1,718.000	1,718.000
0310	611.0420	RECONSTRUCTING MANHOLES	EACH	1.000	1.000
0320	611.2004	MANHOLES 4-FT DIAMETER	EACH	13.000	13.000
0330	611.3003	INLETS 3-FT DIAMETER	EACH	6.000	6.000
0340	611.8115	ADJUSTING INLET COVERS	EACH	5.000	5.000
0350	611.9705	SALVAGED MANHOLE COVERS	EACH	96.000	96.000
0360	611.9710	SALVAGED INLET COVERS	EACH	27.000	27.000
0370	612.0106	PIPE UNDERDRAIN 6-INCH	LF	282.000	282.000
0380	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	61.000	61.000
0390	619.1000	MOBILIZATION	EACH	1.000	1.000
0400	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	2.000	2.000
0410	623.0200	DUST CONTROL SURFACE TREATMENT	SY	16,720.000	16,720.000
0420	625.0100	TOPSOIL	SY	6,450.000	6,450.000
0430	627.0200	MULCHING	SY	100.000	100.000
0440	629.0210	FERTILIZER TYPE B	CWT	2.000	2.000
0450	631.1000	SOD LAWN	SY	6,450.000	6,450.000
0460	632.0101	TREES (SPECIES, ROOT, SIZE) 01 SHADEMASTER HONEYLOCUST, B&B, 4"	EACH	2.000	2.000
0470	632.0101	TREES (SPECIES, ROOT, SIZE) 02 CALLERY PEAR, B&B, 4"	EACH	6.000	6.000
0480	632.0101	TREES (SPECIES, ROOT, SIZE) 03 AUTUMN BLAZE MAPLE, B&B, 4"	EACH	5.000	5.000

3

DATE 05FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2545-03-71 QUANTITY
0490	632.0101	TREES (SPECIES, ROOT, SIZE) 04 JAPANESE TREE LILAC, B&B, 4"	EACH	6.000	6.000
0500	632.0101	TREES (SPECIES, ROOT, SIZE) 05 UPRIGHT ENGLISH OAK, B&B, 4"	EACH	1.000	1.000
0510	632.0101	TREES (SPECIES, ROOT, SIZE) 06 NORTHERN CATALPA, B&B, 4"	EACH	3.000	3.000
0520	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 01 ARCTIC BLUE WILLOW, CG, 18" POT	EACH	22.000	22.000
0530	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 02 SUMMER WINE NINEBARK, CG, 24" POT	EACH	12.000	12.000
0540	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 03 TIGERS EYE SUMAC, CG, 18" POT	EACH	28.000	28.000
0550	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 04 GROW LOW SUMAC, CG, 18" POT	EACH	16.000	16.000
0560	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 05 RED TWIG DOGWOOD, CG, 24" POT	EACH	24.000	24.000
0570	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 06 BLACK LACE ELDERBERRY, CG, 24" POT	EACH	16.000	16.000
0580	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 07 RUGOSA SHRUB ROSE, CG, 18" POT	EACH	33.000	33.000
0590	632.0301	VINES (SPECIES, ROOT, SIZE) 01 BLACK EYED SUSAN, CG, 1 GALLON	EACH	132.000	132.000
0600	632.0301	VINES (SPECIES, ROOT, SIZE) 02 CATMINT, CG, 1 GALLON	EACH	240.000	240.000
0610	632.0301	VINES (SPECIES, ROOT, SIZE) 03 DWARF DAYLILLIES, CG, 1 GALLON	EACH	288.000	288.000
0620	632.0301	VINES (SPECIES, ROOT, SIZE) 04 PURPLE CONEFLOWER, CG, 1 GALLON	EACH	60.000	60.000
0630	632.0301	VINES (SPECIES, ROOT, SIZE) 05, RUSSIAN SAGE, CG, 1 GALLON	EACH	48.000	48.000
0640	632.0301	VINES (SPECIES, ROOT, SIZE) 06 SHASTA DAISY, CG, 1GALLON	EACH	136.000	136.000
0650	632.0301	VINES (SPECIES, ROOT, SIZE) 07 KARL FORESTER, CG, 1 GALLON	EACH	36.000	36.000
0660	632.0301	VINES (SPECIES, ROOT, SIZE) 08 NORTHWIND SWITCH GRASS, CG, 1 GALLON	EACH	60.000	60.000
0670	632.0301	VINES (SPECIES, ROOT, SIZE) 09 RED FLAME GRASS, CG, 1 GALLON	EACH	45.000	45.000
0680	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	EACH	26.000	26.000
0690	642.5401	FIELD OFFICE TYPE D	EACH	1.000	1.000
0700	643.0100	TRAFFIC CONTROL (PROJECT) 01. 2545-03-71	EACH	1.000	1.000
0710	643.0300	TRAFFIC CONTROL DRUMS	DAY	26,035.000	26,035.000
0720	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	28,045.000	28,045.000
0730	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	265.000	265.000
0740	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	265.000	265.000
0750	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	56,090.000	56,090.000
0760	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	26,035.000	26,035.000
0770	643.0900	TRAFFIC CONTROL SIGNS	DAY	16,950.000	16,950.000
0780	645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	64.000	64.000
0790	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	6,654.000	6,654.000
0800	646.0116	PAVEMENT MARKING EPOXY 6-INCH	LF	5,326.000	5,326.000
0810	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	892.000	892.000
0820	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	6.000	6.000
0830	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	27.000	27.000

3

DATE 05FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2545-03-71 QUANTITY
0840	647.0306	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY	EACH	27.000	27.000
0850	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	6.000	6.000
0860	647.0576	PAVEMENT MARKING STOP LINE EPOXY 24-INCH	LF	202.000	202.000
0870	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	884.000	884.000
0880	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	10,857.000	10,857.000
0890	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	12,378.000	12,378.000
0900	649.1700	TEMPORARY PAVEMENT MARKING ARROWS	EACH	2.000	2.000
0910	649.1800	TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE	EACH	2.000	2.000
0920	649.1900	TEMPORARY PAVEMENT MARKING WORDS	EACH	1.000	1.000
0930	649.2000	TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE	EACH	2.000	2.000
0940	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	227.000	227.000
0950	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	8,000.000	8,000.000
0960	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	1,100.000	1,100.000
0970	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	8,000.000	8,000.000
0980	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 2545-03-71	LS	1.000	1.000
0990	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 2545-03-71	LS	1.000	1.000
1000	652.0220	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1 1/2-INCH	LF	75.000	75.000
1010	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	650.000	650.000
1020	652.0230	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2 1/2-INCH	LF	12,900.000	12,900.000
1030	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	1,790.000	1,790.000
1040	652.0240	CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH	LF	75.000	75.000
1050	652.0610	CONDUIT SPECIAL 2 1/2-INCH	LF	50.000	50.000
1060	652.0615	CONDUIT SPECIAL 3-INCH	LF	10.000	10.000
1070	654.0110	CONCRETE BASES TYPE 10	EACH	3.000	3.000
1080	690.0150	SAWING ASPHALT	LF	885.000	885.000
1090	690.0250	SAWING CONCRETE	LF	375.000	375.000
1100	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	6,520.000	6,520.000
1110	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	900.000	900.000
1120	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,800.000	1,800.000
1130	SPV.0035	SPECIAL 01. ENGINEERED SOIL	CY	354.000	354.000
1140	SPV.0035	SPECIAL 02. BEDDING LAYER	CY	57.000	57.000
1150	SPV.0060	SPECIAL 01. INLET COVERS TYPE 57	EACH	46.000	46.000
1160	SPV.0060	SPECIAL 02. MANHOLE COVERS TYPE 58A	EACH	11.000	11.000
1170	SPV.0060	SPECIAL 03. INLET TYPE 45A	EACH	59.000	59.000
1180	SPV.0060	SPECIAL 04. INLET SCREEN TYPE M	EACH	106.000	106.000
1190	SPV.0060	SPECIAL 05. INLET SCREEN TYPE R	EACH	121.000	121.000
1200	SPV.0060	SPECIAL 06. INTERNAL SANITARY MANHOLE SEAL	EACH	38.000	38.000
1210	SPV.0060	SPECIAL 07. ADJUSTING TES MANHOLE COVER	EACH	27.000	27.000
1220	SPV.0060	SPECIAL 08. ADJUSTING WATER BOX	EACH	96.000	96.000
1230	SPV.0060	SPECIAL 09. RECTANGULAR POLYMER CONCRETE VAULT 13-INCH X 24-INCH X 18-INCH	EACH	3.000	3.000

3

DATE 05FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE 2545-03-71

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1240	SPV.0060	SPECIAL 10. RECTANGULAR POLYMER CONCRETE VAULT 17-INCH X 30-INCH X 18-INCH	EACH	26.000	26.000
1250	SPV.0060	SPECIAL 11. CONCRETE BASE TYPE 10 SPECIAL	EACH	6.000	6.000
1260	SPV.0060	SPECIAL 12. POLE TYPE 9	EACH	3.000	3.000
1270	SPV.0060	SPECIAL 13. POLE TYPE 12 SPECIAL	EACH	6.000	6.000
1280	SPV.0060	SPECIAL 14.TRAFFIC SIGNAL BASE	EACH	8.000	8.000
1290	SPV.0060	SPECIAL 15. MONOTUBE ARMS 25-FT	EACH	2.000	2.000
1300	SPV.0060	SPECIAL 16. MONOTUBE ARMS 30-FT	EACH	1.000	1.000
1310	SPV.0060	SPECIAL 17. MONOTUBE ARMS 35-FT SPECIAL	EACH	5.000	5.000
1320	SPV.0060	SPECIAL 18. MONOTUBE ARMS 40-FT SPECIAL	EACH	1.000	1.000
1330	SPV.0060	SPECIAL 19. INFORMATIONAL SIGNS	EACH	14.000	14.000
1340	SPV.0060	SPECIAL 20. 6-INCH CLEANOUTS	EACH	10.000	10.000
1350	SPV.0060	SPECIAL 21. MIS MANHOLE RISER ADJUSTMENT	EACH	3.000	3.000
1360	SPV.0090	SPECIAL 01. CONSTRUCTION STAKING CONCRETE SIDEWALK	LF	6,720.000	6,720.000
1370	SPV.0170	SPECIAL 01 TEST ROLLING	STA	80.000	80.000
1380	SPV.0180	SPECIAL 01. JOINT SEALING	SY	32,600.000	32,600.000
1390	SPV.0195	SPECIAL 01. COBBLESTONES	TON	14.000	14.000
1400	SPV.0195	SPECIAL 02. MANAGEMENT OF SOLID WASTE	TON	85.000	85.000
1410	SPV.0195	SPECIAL 03. STORAGE LAYER	TON	168.000	168.000

3

REMOVALS

LOCATION		CLEARING 201.0120 ID	GRUBBING 201.0220 ID	REMOVING PAVEMENT 204.0100 SY	REMOVING PAVEMENT BUTT JOINTS 204.0105 SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115 SY	REMOVING CURB & GUTTER 204.0150 LF	REMOVING CONCRETE SIDEWALK 204.0155 SY	SAWING ASPHALT 690.0150 LF	SAWING CONCRETE 690.0250 LF
STA 4+04 TO 6+00	LT	0	0	950	0	0	0	210	50	0
STA 6+00 TO 12+00	LT	45	45	2790	0	120	50	490	32	0
STA 12+00 TO 18+00	LT	49	49	2750	0	50	20	430	40	0
STA 18+00 TO 24+00	LT	34	34	2550	0	0	0	410	0	30
STA 24+00 TO 29+00	LT	18	18	2230	0	0	30	440	80	30
STA 29+00 TO 35+00	LT	8	8	2760	0	30	20	530	30	60
STA 35+00 TO 41+00	LT	40	40	2630	0	100	70	500	30	112
STA 41+00 TO 44+13	LT	10	10	1130	0	140	0	420	120	10
SUBTOTALS (LEFT)		**204**	**204**	**17790**	**0**	**440**	**190**	**3430**	**382**	**242**
STA 4+04 TO 6+00	RT	0	0	770	0	0	0	150	100	0
STA 6+00 TO 12+00	RT	19	19	2520	0	0	0	610	80	70
STA 12+00 TO 18+00	RT	0	0	2690	0	70	50	480	60	20
STA 18+00 TO 24+00	RT	8	8	2690	0	60	40	430	30	0
STA 24+00 TO 29+00	RT	13	13	2190	0	30	20	440	30	0
STA 29+00 TO 35+00	RT	3	3	2850	24	30	40	590	73	10
STA 35+00 TO 41+00	RT	15	15	2620	0	90	60	480	80	30
STA 41+00 TO 44+13	RT	0	0	1280	0	130	0	490	50	3
SUBTOTALS (RIGHT)		**58**	**58**	**17610**	**24**	**410**	**210**	**3670**	**503**	**133**
GRAND TOTAL		**262**	**262**	**35400**	**24**	**850**	**400**	**7100**	**885**	**375**

ALL ITEMS ARE CATEGORY 0010

CONCRETE CONSTRUCTION ITEMS

LOCATION		BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	BASE AGGREGATE DENSE 1 1/4 INCH 305.0120 TON	CONCRETE BASE 6-INCH 320.0125 SY	CONCRETE PAVEMENT 8-INCH 415.0080 SY	CONCRETE PAVEMENT GAPS 415.0210 EACH	CONCRETE DRIVEWAY 7-INCH 416.0170 SY	CONCRETE DRIVEWAY 8-INCH 416.0180 SY	CONCRETE DRIVEWAY (HES) 7-INCH 416.0270 SY	CONCRETE CURB & GUTTER 22-INCH 601.0322 LF	CONCRETE CURB & GUTTER 31-INCH 601.0331 LF	CONCRETE CURB & GUTTER INTERGAL 30-INCH TYPE D 601.0452 LF	CONCRETE SIDEWALK 5-INCH 602.0410 SF	CURB RAMP DETECTABLE WARNING FIELD YELLOW 602.0505 SF
STA 4+04 TO 6+00	LT	20	330	6	890	0	60	0	0	0	310	30	960	20
STA 6+00 TO 12+00	LT	80	980	0	2540	0	90	0	0	40	650	450	3700	30
STA 12+00 TO 18+00	LT	80	980	0	2550	0	0	0	0	60	590	490	3350	30
STA 18+00 TO 24+00	LT	80	1090	0	2500	0	0	0	0	0	660	540	3680	30
STA 24+00 TO 29+00	LT	60	780	13	2030	0	100	0	0	50	490	400	2540	20
STA 29+00 TO 35+00	LT	80	960	0	2490	1	30	0	0	20	640	460	3910	50
STA 35+00 TO 41+00	LT	80	930	0	2420	0	10	0	30	70	590	490	3440	30
STA 41+00 TO 44+13	LT	30	400	13	1000	1	100	0		0	270	420	2100	0
SUBTOTALS (LEFT)		**510**	**6450**	**32**	**16420**	**2**	**390**	**0**	**30**	**240**	**4200**	**3280**	**23680**	**210**
STA 4+04 TO 6+00	RT	40	280	22	680	0	0	0	0	0	40	320	1510	10
STA 6+00 TO 12+00	RT	60	890	41	2280	3	150	170	0	0	600	530	2140	0
STA 12+00 TO 18+00	RT	80	950	0	2470	0	0	0	0	0	660	480	3710	30
STA 18+00 TO 24+00	RT	80	1120	0	2640	0	0	0	0	0	660	450	3490	30
STA 24+00 TO 29+00	RT	70	740	0	1910	0	20	0	0	0	510	450	2940	20
STA 29+00 TO 35+00	RT	80	980	10	2550	0	40	0	0	20	700	470	4530	50
STA 35+00 TO 41+00	RT	80	940	0	2450	0	20	0	0	60	600	490	3480	30
STA 41+00 TO 44+13	RT	50	450	0	1200	0	0	0	0	0	310	150	2120	0
SUBTOTALS (RIGHT)		**540**	**6350**	**73**	**16180**	**3**	**230**	**170**	**0**	**80**	**4080**	**3340**	**23920**	**170**
GRAND TOTALS		**1050**	**12800**	**105**	**32600**	**5**	**620**	**170**	**30**	**320**	**8280**	**6620**	**47600**	**380**

ALL ITEMS ARE CATEGORY 0010

MISCELLANEOUS ITEMS

ITEM NAME		FINISHING ROADWAY (PROJECT)	DRILLED TIE BARS	INCENTIVE "IRI" RIDE	MOBILIZATION	LANDMARK REFERENCE MONUMENTS	DUST CONTROL TREATMENT	FIELD OFFICE TYPE D (PROJECT)	TRAFFIC CONTROL (PROJECT)	INCENTIVE STRENGTH CONCRETE PAVEMENT
UNIT		EACH	EACH	DOL	EACH	EACH	SY	EACH	EACH	DOL
ITEM NUMBER		213.0100	416.0610	440.4410.S	619.1000	621.0100	623.0200	642.5401	643.0100	715.0415
CATEGORY		0010	0010	0010	0010	0010	0010	0010	0010	0010
LOCATION										
STA 4+04 TO 6+00	LT		33				900			
STA 6+00 TO 12+00	LT		0				2590			
STA 12+00 TO 18+00	LT		9				2600			
STA 18+00 TO 24+00	LT		9				2560			
STA 24+00 TO 29+00	LT		11				2060			
STA 29+00 TO 35+00	LT		12				2540			
STA 35+00 TO 41+00	LT		0				2470			
STA 41+00 TO 44+13	LT		26				1000			
SUBTOTALS (LEFT)			**100**				**16720**			
STA 4+04 TO 6+00	RT		45				0			
STA 6+00 TO 12+00	RT		0				0			
STA 12+00 TO 18+00	RT		0				0			
STA 18+00 TO 24+00	RT		0				0			
STA 24+00 TO 29+00	RT		0				0			
STA 29+00 TO 35+00	RT		12				0			
STA 35+00 TO 41+00	RT		0				0			
STA 41+00 TO 44+13	RT		20				0			
SUBTOTALS (RIGHT)			**77**				**0**			
GRAND TOTAL		**1**	**177**	**9,084**	**1**	**2**	**16720**	**1**	**1**	**6,520**

MISCELLANEOUS ITEMS (continued)

ITEM NAME	INLET SCREEN TYPE M	INLET SCREEN TYPE R	ADJUSTING WATER BOX	TEST ROLLING	JOINT SEALING	MANAGEMENT OF SOLID WASTE
UNIT	EACH	EACH	EACH	STA	SY	TON
ITEM NUMBER	SPV.0060.04	SPV.0060.05	SPV.0060.08	SPV.0170.01	SPV.0180.01	SPV.0195.02
CATEGORY	0010	0010	0020	0010	0020	0010
LOCATION						
STA 4+04 TO 6+00			4	2	890	0
STA 6+00 TO 12+00			7	6	2540	0
STA 12+00 TO 18+00			7	6	2550	0
STA 18+00 TO 24+00			8	6	2500	0
STA 24+00 TO 29+00			5	6	2030	0
STA 29+00 TO 35+00			4	6	2490	0
STA 35+00 TO 41+00			5	6	2420	0
STA 41+00 TO 44+13			6	2	1000	85
SUBTOTALS (LEFT)			**46**	**40**	**16420**	**85**
STA 4+04 TO 6+00			4	2	680	0
STA 6+00 TO 12+00			8	6	2280	0
STA 12+00 TO 18+00			6	6	2470	0
STA 18+00 TO 24+00			7	6	2640	0
STA 24+00 TO 29+00			7	6	1910	0
STA 29+00 TO 35+00			7	6	2550	0
STA 35+00 TO 41+00			5	6	2450	0
STA 41+00 TO 44+13			6	2	1200	0
SUBTOTALS (RIGHT)			**50**	**40**	**16180**	**0**
GRAND TOTAL	**106**	**121**	**96**	**80**	**32600**	**85**

3

CONSTRUCTION STAKING ROADWAY ITEMS

LOCATION		CONSTRUCTION STAKING STORM SEWER 650.4000 EACH	CONST. STAKING SUBGRADE 650.4500 LF	CONST. STAKING CURB & GUTTER 650.5500 LF	CONST. STAKING CONCRETE PAVEMENT 650.7000 LF	CONST. STAKING ELECTRICAL INSTALLATIONS (PROJECT) 650.8500 LUMP SUM	CONST. STAKING SUPPLEMENTAL CONTROL (PROJECT) 650.9910 LUMP SUM	CONST. STAKING CONCRETE SIDEWALK SPV.0090.01 LF
STA 4+04 TO 6+00	LT		200	25	200			190
STA 6+00 TO 12+00	LT		600	100	600			480
STA 12+00 TO 18+00	LT		600	100	600			460
STA 18+00 TO 24+00	LT		600	50	600			540
STA 24+00 TO 29+00	LT		500	75	500			440
STA 29+00 TO 35+00	LT		600	125	600			470
STA 35+00 TO 41+00	LT		600	100	600			480
STA 41+00 TO 44+13	LT		310	0	310			270
SUBTOTALS (LEFT)			**4010**	**575**	**4010**			**3330**
STA 4+04 TO 6+00	RT		180	25	180			120
STA 6+00 TO 12+00	RT		600	0	600			600
STA 12+00 TO 18+00	RT		600	100	600			480
STA 18+00 TO 24+00	RT		600	100	600			480
STA 24+00 TO 29+00	RT		500	75	500			440
STA 29+00 TO 35+00	RT		600	125	600			480
STA 35+00 TO 41+00	RT		600	100	600			480
STA 41+00 TO 44+13	RT		310	0	310			310
TOTAL			**3990**	**525**	**3990**			**3390**
GRAND TOTAL		**227**	**8000**	**1100**	**8000**	**1**	**1**	**6720**

ALL ITEMS ARE CATEGORY 0010

3

ASPHALT CONSTRUCTION ITEMS

LOCATION		TACK COAT 455.0605 GAL	ASPHALTIC SURFACE 465.0105 TON
STA 4+04 TO 6+00	LT	0	0
STA 6+00 TO 12+00	LT	10	10
STA 12+00 TO 18+00	LT	0	0
STA 18+00 TO 24+00	LT	0	0
STA 24+00 TO 29+00	LT	0	0
STA 29+00 TO 35+00	LT	0	0
STA 35+00 TO 41+00	LT	0	20
STA 41+00 TO 44+13	LT	10	10
SUBTOTALS (LEFT)		**20**	**40**
STA 4+04 TO 6+00	RT	0	0
STA 6+00 TO 12+00	RT	0	10
STA 12+00 TO 18+00	RT	0	10
STA 18+00 TO 24+00	RT	0	10
STA 24+00 TO 29+00	RT	0	10
STA 29+00 TO 35+00	RT	0	10
STA 35+00 TO 41+00	RT	10	15
STA 41+00 TO 44+13	RT	10	10
SUBTOTALS (RIGHT)		**20**	**75**
GRAND TOTALS		**40**	**115**

ALL ITEMS IN CATEGORY 0010

MISCELLANEOUS LANDSCAPING ITEMS

LOCATION		TOPSOIL 625.0100 SY	SOD LAWN 631.1000 SY	FERTILIZER TYPE B 629.0210 CWT
STA 4+04 TO 6+00	LT	110	110	
STA 6+00 TO 12+00	LT	520	520	
STA 12+00 TO 18+00	LT	580	580	
STA 18+00 TO 24+00	LT	580	580	
STA 24+00 TO 29+00	LT	490	490	
STA 29+00 TO 35+00	LT	430	430	
STA 35+00 TO 41+00	LT	450	450	
STA 41+00 TO 44+13	LT	140	140	
SUBTOTALS (LEFT)		3300	3300	
STA 4+04 TO 6+00	RT	60	60	
STA 6+00 TO 12+00	RT	410	410	
STA 12+00 TO 18+00	RT	550	550	
STA 18+00 TO 24+00	RT	520	520	
STA 24+00 TO 29+00	RT	570	570	
STA 29+00 TO 35+00	RT	380	380	
STA 35+00 TO 41+00	RT	480	480	
STA 41+00 TO 44+13	RT	180	180	
SUBTOTALS (RIGHT)		3150	3150	2
GRAND TOTAL		**6450**	**6450**	**2**

ALL ITEMS CATEGORY 0010

3

3

Estimate of Traffic Control Items Required (0010 Participating)

Items		Stage 1 (Each) * (Days)	Stage 2 (Each) * (Days)		Total
(1)643.0300	Traffic Control Drums	158 * 12,008	169 * 14,027		26,035
(2)643.0420	Traffic Control Barricades Type III	191 * 14,516	163 * 13,529		28,045
643.0705	Traffic Control Warning Lights Type A	382 * 29,032	326 * 27,058		56,090
643.0715	Traffic Control Warning Lights Type C	158 * 12,008	169 * 14,027		26,035
643.0900	Traffic Control Signs	116 * 8,816	98 * 8,134		16,950
643.0500	Traffic Control Flexible Tubular Marker Posts	143	122		265
643.0600	Traffic Control Flexible Tubular Marker Bases	143	122		265
649.0200	Temporary Pavement Marking Reflective Paint 4-Inch	10857	0		10857
(3) 649.0400	Temporary Pavement Marking Removable Tape 4-Inch	856	11522		12378
649.1700	Temporary Pavement Marking Arrows	2	0		2
649.1800	Temporary Pavement Marking Arrows Removable Tape	0	2		2
649.1900	Temporary Pavement Marking Words	1	0		1
649.2000	Temporary Pavement Marking Words Removable Tape	0	2		2

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" X 48" 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" WILL BE COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THIS WORK WILL BE INCIDENTAL TO THE ITEM OF TRAFFIC CONTROL.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVELLED LANE WHEN WORK IS NOT IN PROGRESS.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

(1) All Drums have one steady burning yellow light

(2) All Type III Barricades have 2 flashing yellow lights

(3) When placing temporary pavement marking removable tape, the tape shall be sliced or cut across its width every 25 feet. This will limit ravelling.

Items	Stage 1	Stage 2	Size (")
WO20-1	12	13	48x48
R11-2	21	22	48x30
R11-4	11	9	30x48
WO1-7	10	11	24x12
WO1-6L	2	2	24x48
WO1-6R	0		24x48
R5-1	1		30x30
WO1-3L	1		48x48
W01-3R	1		48x48
R4-7A	23	22	36x48
WO20-5R		1	38x48
WO4-2R		1	30x30
WO4-2L	1		48x48
WO20-5L	1		48x48
R3-7R		1	30x30
WO6-3	29	14	48x48
W16-9P	1	1	24x12
WO12-1		1	30x30
R8-8	1		24x30
W10-1	1		36 DIA
Total	116	98	

3

3

PAVEMENT MARKING QUANTITIES									
STATION	PAVEMENT MARKING EPOXY 4-INCH ITEM 646.0106	PAVEMENT MARKING EPOXY 6-INCH ITEM 646.0116	PAVEMENT MARKING EPOXY 8-INCH ITEM 646.0126	PAVEMENT MARKING ARROWS EPOXY TYPE 2 ITEM 647.0166	PAVEMENT MARKING ARROWS BIKE LANE EPOXY ITEM 647.0206	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY ITEM 647.0306	PAVEMENT MARKING WORDS EPOXY ITEM 647.0356	PAVEMENT MARKING STOP LINE EPOXY 24-INCH ITEM 647.0576	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH ITEM 647.0776
	LF	LF	LF	EACH	EACH	EACH	EACH	LF	LF
Sheet 1	1712	1364	130	1	7	7	1	50	
Sheet 2	2034	1660	298	2	7	7	2	108	484
Sheet 3	1728	1420			7	7	0	0	0
Sheet 4	1180	882	464	3	6	6	3	44	400
TOTAL	**6654**	**5326**	**892**	**6**	**27**	**27**	**6**	**202**	**884**

ALL ITEMS ARE CATEGORY 0010

TRAFFIC & LIGHTING MISCELLANEOUS QUANTITIES

Category	Item No.	Description	Unit	Quantity
0010	652.0220	Conduit Rigid Nonmetallic Schedule 40 1 1/2-Inch	LF	75
0010	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	650
0010	652.0230	Conduit Rigid Nonmetallic Schedule 40 2 1/2-Inch	LF	12,900
0010	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,790
0010	652.0240	Conduit Rigid Nonmetallic Schedule 40 4-Inch	LF	75
0010	652.0610	Conduit Special 2 1/2-Inch	LF	50
0010	652.0615	Conduit Special 3-Inch	LF	10
0010	654.0110	Concrete Bases Type 10	Each	3
0010	SPV.0060.09	Rectangular Polymer Concrete Vault 13-Inchx24-Inchx18-Inch	Each	3
0010	SPV.0060.10	Rectangular Polymer Concrete Vault 17-Inchx30-Inchx18-Inch	Each	26
0010	SPV.0060.11	Concrete Base Type 10 Special	Each	6
0010	SPV.0060.12	Pole Type 9	Each	3
0010	SPV.0060.13	Pole Type 12 Special	Each	6
0010	SPV.0060.14	Traffic Signal Base	Each	8
0010	SPV.0060.15	Monotube Arms 25-FT	Each	2
0010	SPV.0060.16	Monotube Arms 30-FT	Each	1
0010	SPV.0060.17	Monotube Arms 35-FT Special	Each	5
0010	SPV.0060.18	Monotube Arms 40-FT Special	Each	1

ALL ITEMS ON THIS PAGE ARE CATEGORY 0020

3

BIO-SWALE ITEMS

	LOCATION	STORAGE LAYER SPV.0195.03 TON	PIPE UNDERDRAIN 6-INCH 612.0106 LF	PIPE UNDERDRAIN UN-PERFORATED 6-INCH 612.0206 LF	MULCHING 627.0200 SY	LANDSCAPE PLANTING & SURVEILLANCE AND CARE CYCLES 632.9101 EA	GEOTEXTILE FABRIC TYPE DF SCHEDULE B 645.0112 SY	ENGINEERED SOIL SPV.0035.01 CY	BEDDING LAYER SPV.0035.02 CY	INFORMATIONAL SIGNS SPV.0060.19 EACH	6-INCH CLEANOUTS SPV.0060.20 EACH	COBBLESTONES SPV.0195.01 TON
BIO-SWALE # 1	STA 15+64 to 16+10	21	40	8	26		9	47	6	2	1	3
BIO-SWALE # 2	STA 18+87 TO 19+37	28	44	9	8		10	70	10	2	1	2
BIO-SWALE # 3	STA 28+36 TO 28+66	12	24	9	17		6	38	6	2	1	1
BIO-SWALE # 4	STA 30+90 TO 31+40	28	44	9	21		10	55	10	2	2	2
BIO-SWALE # 5	STA 35+40 TO 36+00	30	54	9	9		11	55	10	2	2	2
BIO-SWALE # 6	STA 37+60 TO 38+15	25	49	9	10		11	62	9	2	2	2
BIO-SWALE # 7	STA 41+00 TO 41+33	24	27	8	9		7	27	6	2	1	2
TOTALS		168	282	61	100	26	64	354	57	14	10	14

BIO SWALE SHRUBS

	LOCATION	ARCTIC BLUE WILLOW CG 18" POT 632.0201.01 EACH	SUMMER WINE NINEBARK CG 24" POT 632.0201.02 EACH	TIGERS EYE SUMAC CG 18" POT 632.0201.03 EACH	GROW LOW SUMAC CG 18" POT 632.0201.04 EACH	RED TWIG DOGWOOD CG 24" POT 632.0201.05 EACH	BLACK LACE ELDERBERRY CG 24" POT 632.0201.06 EACH	RUGOSA SHRUB ROSE CG 18" POT 632.0201.07 EACH
BIO-SWALE # 1	STA 15+64 to 16+10							5
BIO-SWALE # 2	STA 18+87 TO 19+37	6						
BIO-SWALE # 3	STA 28+36 TO 28+66		6	10				
BIO-SWALE # 4	STA 30+90 TO 31+40					14	7	18
BIO-SWALE # 5	STA 35+40 TO 36+00	16		18				
BIO-SWALE # 6	STA 37+60 TO 38+15				16	10	9	
BIO-SWALE # 7	STA 41+00 TO 41+33		6					10
		22	12	28	16	24	16	33

BIO-SWALE VINES

	LOCATION	BLACK EYED SUSAN CG 1 GALLON 632.0301.01 EACH	CATMINT CG 1 GALLON 632.0301.02 EACH	DWARF DAYLILLIES CG 1 GALLON 632.0301.03 EACH	PURPLE CONEFLOWER CG 1 GALLON 632.0301.04 EACH	RUSSIAN SAGE CG 1 GALLON 632.0301.05 EACH	SHASTA DAISY CG 1 GALLON 632.0301.06 EACH	KARL FORESTER CG 1 GALLON 632.0301.07 EACH	NORTHWIND SWITCH GRASS CG 1 GALLON 632.0301.08 EACH	RED FLAME GRASS CG 1 GALLON 632.0301.09 EACH
BIO-SWALE # 1	STA 15+64 to 16+10		48			12			12	
BIO-SWALE # 2	STA 18+87 TO 19+37			72			48	12		
BIO-SWALE # 3	STA 28+36 TO 28+66	72		48						24
BIO-SWALE # 4	STA 30+90 TO 31+40		48			24	46	24	12	
BIO-SWALE # 5	STA 35+40 TO 36+00		96	96	60				24	
BIO-SWALE # 6	STA 37+60 TO 38+15	60					42			21
BIO-SWALE # 7	STA 41+00 TO 41+33		48	72		12			12	
		132	240	288	60	48	136	36	60	45

3

3

TREE PLANTING

CATEGORY			0010					
ITEM NUMBER			632.0101.01	632.0101.02	632.0101.03	632.0101.04	632.0101.05	632.0101.06
DESCRIPTION		LOCATION	SHADEMASTER HONEYLOCUST, B&B, 4" CAL	CALLERY PEAR, B&B, 4" CAL	AUTUMN BLAZE MAPLE, B&B, 4" CAL	JAPANESE TREE LILAC, B&B, 4" CAL	UPRIGHT ENGLISH OAK, B&B, 4" CAL	NORTHERN CATALPA, B&B, 4" CAL
UNIT PAY			EACH	EACH	EACH	EACH	EACH	EACH
STATION TO STATION	STA 4+04 TO 6+00	LT						
	STA 6+00 TO 12+00		1			1		
	STA 12+00 TO 18+00			1				
	STA 18+00 TO 24+00							
	STA 24+00 TO 29+00							
	STA 29+00 TO 35+00			1		1		
	STA 35+00 TO 41+00							
	STA 41+00 TO 44+13							
	STA 4+04 TO 6+00	RT						
	STA 6+00 TO 12+00			1		1	1	
	STA 12+00 TO 18+00			2		1		
	STA 18+00 TO 24+00							
	STA 24+00 TO 29+00							
	STA 29+00 TO 35+00							
	STA 35+00 TO 41+00		1	1				
	STA 41+00 TO 44+13							
	STA 4+04 TO 6+00	MEDIAN						
	STA 6+00 TO 12+00				2	1		
	STA 12+00 TO 18+00				1			1
	STA 18+00 TO 24+00				1			
	STA 24+00 TO 29+00				1	1		
	STA 29+00 TO 35+00							
	STA 35+00 TO 41+00							2
	STA 41+00 TO 44+13							
TOTALS			2	6	5	6	1	3

ADJUSTING TES MANHOLE COVER

Category	Number	Station	Offset	Prop. Elev.	Cover Type
0020	601	6+99.3	19.0 RT	64.96	To be provided by City
0020	602	7+04.7	14.6 RT	64.96	To be provided by City
0020	603	10+34.8	17.6 RT	66.34	To be provided by City
0020	604	10+41.3	14.5 RT	66.32	To be provided by City
0020	605	13+73.6	18.1 RT	65.12	To be provided by City
0020	606	13+91.6	14.0 RT	65.01	To be provided by City
0020	607	17+09.3	18.7 RT	63.39	To be provided by City
0020	608	17+15.3	14.2 RT	63.34	To be provided by City
0020	609	20+26.6	18.1 RT	61.51	To be provided by City
0020	610	20+32.7	14.5 RT	61.46	To be provided by City
0020	611	22+79.0	14.2 RT	58.74	To be provided by City
0020	612	22+84.3	18.9 RT	58.67	To be provided by City
0020	613	25+81.8	13.6 RT	55.82	To be provided by City
0020	614	25+90.1	22.7 RT	55.6	To be provided by City
0020	615	27+72.4	13.9 RT	53.13	To be provided by City
0020	616	28+46.0	18.0 RT	51.9	To be provided by City
0020	617	29+63.0	13.1 RT	50.84	To be provided by City
0020	618	30+49.3	13.8 RT	50.73	To be provided by City
0020	619	30+55.8	17.1 RT	50.7	To be provided by City
0020	620	33+85.3	16.7 RT	51.07	To be provided by City
0020	621	33+92.4	13.7 RT	51.01	To be provided by City
0020	622	37+21.3	17.5 RT	50.84	To be provided by City
0020	623	37+27.4	14.1 RT	50.79	To be provided by City
0020	624	40+36.5	18.5 RT	51.59	To be provided by City
0020	625	40+42.6	15.1 RT	51.53	To be provided by City
0020	626	43+80.5	11.9 LT	51.38	To be provided by City
0020	627	44+10.2	15.1 RT	51.36	To be provided by City

0020 ADJUSTING TES MANHOLE COVER (SPV.0060.07) **27 EACH**

MIS Manhole Riser Adjustment

GROUP CODE	NUMBER	STATION	OFFSET	EXISTING ELEVATION	PROPOSED GRADE
0020	700	16+12.9	6.7' LT	64.76	**64.37**
0020	701	22+47.0	6.6' LT	59.57	**58.97**
0020	702	28+55.9	9.5' LT	52.05	**51.40**

0020 MIS Manhole Riser Adjustment (SPV.0060.21) 3 EA

3

SALVAGED MANHOLE COVERS

GROUP CODE	NUMBER	STATION	OFFSET	PROPOSED ELEV.	REMARKS
0010	203	5+04.1	25.3' LT	65.20	
0020	400	5+94.8	34.0' RT	64.78	
0010	204	6+21.9	27.0' RT	64.87	
0010	205	6+22.4	25.4' LT	64.65	
0010	206	6+36.4	25.6' RT	64.85	Repair 6" of brickwork
0020	401	6+80.3	44.5' LT	64.28	
0010	207	7+12.7	27.1' RT	64.80	Repair 6" of brickwork
0010	208	7+13.7	25.1' LT	64.60	
0020	402	7+97.8	34.0' RT	64.84	
0010	209	9+46.1	25.2' LT	65.87	
0020	403	10+07.9	44.6' LT	66.20	
0010	210	10+44.4	25.6' RT	66.21	Repair 8" of brickwork
0010	211	10+56.7	25.3' LT	66.44	
0020	404	11+27.2	32.7' RT	65.50	
0020	405	12+44.4	33.4' RT	64.61	
0010	212	12+46.6	25.3' RT	64.77	Repair 8" of brickwork
0010	214	13+41.5	44.9' LT	65.34	
0020	407	13+47.7	25.4' LT	65.59	
0010	215	13+57.5	45.5' RT	64.44	
0020	408	13+63.4	31.8' RT	64.85	
0010	216	16+67.5	44.4' LT	63.33	
0010	217	16+73.0	44.6' RT	63.09	
0020	409	16+74.8	24.8' LT	63.91	
0020	410	16+80.4	32.0' RT	63.40	
0010	218	19+84.3	45.3' LT	61.13	
0010	219	19+91.7	44.5' RT	61.37	
0020	411	19+91.5	25.7' LT	61.19	
0020	412	20+00.0	31.1' RT	61.62	
0010	220	22+98.9	45.0' RT	58.26	
0010	221	23+00.2	44.7' LT	57.81	
0020	413	23+07.6	32.3' RT	58.45	
0020	414	23+08.1	25.0' LT	58.18	
0010	222	25+98.2	13.2' RT	55.72	
0010	223	26+19.6	44.2' RT	55.23	
0010	224	26+20.9	44.7' LT	54.75	
0020	415	26+26.6	32.0' RT	55.47	
0020	416	26+29.9	25.8' LT	55.17	

SALVAGED MANHOLE COVERS (continued)

GROUP CODE	NUMBER	STATION	OFFSET	PROPOSED ELEV.	REMARKS
0010	226	26+88.3	44.9' RT	54.77	
0010	227	27+82.5	45.6' RT	53.01	
0010	228	28+67.4	45.9' LT	51.17	
0020	417	28+73.8	19.2' LT	51.29	
0010	230	29+33.0	44.9' RT	50.79	Repair 9" of brickwork
0020	419	29+39.5	0.6' LT	51.01	
0020	420	29+39.7	33.1' RT	50.88	
0020	421	29+40.0	25.4' RT	50.97	
0010	231	30+13.4	45.4' LT	50.12	Repair 9" of brickwork
0020	422	30+15.9	1.3' LT	50.86	
0010	232	30+25.7	26.0' RT	50.64	
0010	234	30+83.4	26.6' RT	50.55	Repair 3" of brickwork
0020	423	31+03.4	44.5' RT	50.47	
0010	235	31+25.0	25.8' LT	50.22	Repair 6" of brickwork
0020	424	31+28.4	45.5' LT	50.42	
0010	236	31+68.9	26.7' RT	50.74	
0010	237	31+88.1	25.3' LT	50.09	
0020	425	33+08.9	45.0' LT	50.77	
0010	238	33+22.9	24.7' LT	50.79	
0010	239	33+23.6	26.7' RT	51.02	
0020	426	33+48.5	46.1' RT	50.71	
0010	240	33+57.8	26.1' RT	51.15	
0010	241	33+58.1	25.0' LT	50.76	Repair 3" of brickwork
0010	242	33+58.2	61.3' RT	50.80	Repair 6" of brickwork
0020	427	33+66.1	43.2' LT	50.19	
0020	428	33+67.4	35.6' RT	50.99	
0020	429	33+78.5	46.8' RT	50.65	
0010	243	33+93.5	26.6' RT	50.93	Repair 3" of brickwork
0010	244	34+02.7	24.6' LT	50.36	
0020	430	34+48.9	45.5' LT	50.76	
0010	245	35+30.9	24.9' LT	50.18	Repair 8" of brickwork
0010	246	35+31.9	26.5' RT	50.20	Repair 9" of brickwork
0020	431	35+87.7	45.3' RT	50.39	
0010	233	30+26.0	68.8' RT	50.53	Repair 3" of brickwork
0010	247	36+33.5	26.6' RT	50.53	Repair 8" of brickwork
0010	248	36+35.4	25.0' LT	50.12	
0010	249	36+84.5	25.9' LT	50.28	
0020	432	36+84.7	45.3' RT	50.63	
0010	250	36+88.8	26.2' RT	50.83	Repair 3" of brickwork
0010	251	36+89.5	65.0' RT	50.70	
0020	433	36+93.8	45.8' LT	49.93	

3

SALVAGED MANHOLE COVERS (continued)

GROUP CODE	NUMBER	STATION	OFFSET	PROPOSED ELEV.	REMARKS
0010	252	37+32.2	25.1' LT	50.32	
0010	253	37+48.8	26.6' RT	50.56	
0010	254	38+91.1	25.2' LT	50.71	
0020	434	38+94.5	45.6' LT	50.93	
0020	435	39+39.4	46.7' RT	51.41	
0010	255	39+56.9	26.7' RT	51.27	
0010	256	40+01.2	45.3' LT	50.81	Repair 6" of brickwork
0020	436	40+14.3	43.9' RT	51.37	
0010	257	40+25.2	57.3' RT	51.66	
0010	258	40+63.2	26.7' LT	51.00	Repair 3" of brickwork
0010	259	40+64.4	26.6' rt	51.42	Repair 6" of brickwork
0020	437	40+97.4	46.5' RT	51.48	
0010	260	41+33.2	25.5' LT	51.07	
0010	261	41+77.3	26.6' RT	51.36	
0010	262	42+28.7	25.7' LT	51.12	
0010	263	42+77.3	26.4' RT	51.45	Repair 9" of brickwork
0010	264	43+91.3	25.7' LT	51.07	
0010	265	43+93.2	26.2' RT	51.23	Repair 6" of brickwork

0010 SALVAGED MANHOLE COVERS (611.9705) **60 EACH**

0020 SALVAGED MANHOLE COVERS (611.9705) **36 EACH**

INTERNAL SANITARY MANHOLE SEAL

CODE	NUMBER	STATION	OFFSET
0020	400	5+94.8	34.0' RT
0020	401	6+80.3	44.5' LT
0020	402	7+97.8	34.0' RT
0020	403	10+07.9	44.6' LT
0020	404	11+27.2	32.7' RT
0020	405	12+44.4	33.4' RT
0020	406	12+81.9	45.2' LT
0020	407	13+47.7	25.4' LT
0020	408	13+63.4	31.8' RT
0020	409	16+74.8	24.8' LT
0020	410	16+80.4	32.0' RT
0020	411	19+91.5	25.7' LT
0020	412	20+00.0	31.1' RT
0020	413	23+07.6	32.3' RT
0020	414	23+08.1	25.0' LT
0020	415	26+26.6	32.0' RT
0020	416	26+29.9	25.8' LT
0020	417	28+73.8	19.2' LT
0020	418	28+76.1	26.5' LT
0020	419	29+39.5	0.6' LT
0020	420	29+39.7	33.1' RT
0020	421	29+40.0	25.4' RT
0020	422	30+15.9	1.3' LT
0020	423	31+03.4	44.5' RT
0020	424	31+28.4	45.5' LT
0020	425	33+08.9	45.0' LT
0020	426	33+48.5	46.1' RT
0020	427	33+66.1	43.2' LT
0020	428	33+67.4	35.6' RT
0020	429	33+78.5	46.8' RT
0020	430	34+48.9	45.5' LT
0020	431	35+87.7	45.3' RT
0020	432	36+84.7	45.3' RT
0020	433	36+93.8	45.8' LT
0020	434	38+94.5	45.6' LT
0020	435	39+39.4	46.7' RT
0020	436	40+14.3	43.9' RT
0020	437	40+97.4	46.5' RT

0020 INTERNAL SANITARY MANHOLE SEAL (SPV.0060.06) **38 EACH**

ABANDONING INLETS

GROUP CODE	NUMBER	STATION	OFFSET	SALVAGE FRAME & LID?
0010	109	7+12.5	43.0' LT	
0010	110	7+13.0	43.0' RT	YES, re-use at different location
0010	111	10+41.2	43.0' LT	
0010	112	12+97.8	43.0' LT	
0010	113	13+25.9	43.0' RT	
0010	119	16+63.9	65.2' RT	YES, re-use at different location
0010	123	19+63.4	43.0' RT	
0010	124	19+82.0	60.5' RT	YES, re-use at different location
0010	125	20+13.6	60.6' RT	YES, re-use at different location
0010	127	22+71.7	43.0' RT	
0010	128	22+90.1	61.0' RT	YES, re-use at different location
0010	136	27+75.5	43.0' RT	
0010	145	30+56.8	43.0' RT	
0010	146	31+70.0	43.0' RT	YES, re-use at different location
0010	148	33+27.8	43.0' RT	YES, re-use at different location
0010	149	33+29.2	43.0' LT	YES, re-use at different location
0010	152	33+97.5	43.0'RT	
0010	153	33+99.3	43.0' LT	
0010	154	35+31.2	43.0' LT	
0010	155	35+31.3	43.0' RT	
0010	156	36+57.3	43.0' RT	
0010	160	37+27.1	43.0' LT	
0010	161	37+27.3	43.0' RT	
0010	162	39+69.6	43.0' RT	
0010	163	39+70.8	43.0' LT	
0010	167	40+41.2	43.0' RT	
0010	169	41+75.3	43.0' RT	
0010	171	42+76.3	43.0' RT	YES, re-use at different location

0010 ABANDONING INLETS (204.0260) **28 EACH**

0010 SALVAGED INLET COVERS (611.9710) **9 EACH (to be used on new structures in drainage table)**

REMOVING INLETS

GROUP CODE	NUMBER	STATION	OFFSET
0010	107	6+42.4	43.0' LT
0010	108	6+44.7	43.0' RT
0010	114	13+27.8	68.9' LT
0010	115	13+64.0	65.6' LT
0010	116	16+37.3	43.0' LT
0010	117	16+44.7	43.0' RT
0010	118	16+56.9	59.6' LT
0010	120	16+87.0	58.6' LT
0010	122	19+62.9	43.0' LT
0010	126	22+71.1	43.0' LT
0010	129	22+91.2	65.3' LT
0010	130	23+21.2	65.3' LT
0010	132	25+90.9	43.0' RT
0010	133	25+91.1	43.0' LT
0010	137	28+92.8	43.0' LT
0010	138	29+04.1	43.0' RT
0010	139	29+19.0	65.7' RT
0010	140	29+89.7	43.0' LT
0010	141	30+02.6	43.0' RT
0010	142	30+26.0	65.5' LT
0010	143	30+39.5	64.8' RT
0010	144	30+51.8	43.0' LT
0010	147	31+88.7	43.0' LT
0010	150	33+48.5	60.3' RT
0010	151	33+78.7	61.5' RT
0010	157	36+57.7	43.0' LT
0010	158	36+77.4	65.3' RT
0010	159	37+07.5	65.3' RT
0010	164	39+92.7	63.0' RT
0010	165	40+23.0	62.6' RT
0010	166	40+40.7	43.0' LT
0010	168	41+36.0	43.0' LT
0010	170	42+26.0	43.0' LT
0010	173	44+06.4	43.0' RT

0010 REMOVING INLETS (204.0220) **34 EACH**

3

LOCATION: W. Hampton Av. from N. Teutonia Av. to N. Green Bay Rd.

	DRAINAGE STRUCTURES							STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH						Depth	REMARKS
Category	Number	TYPE OF STRUCTURE	STATION	CENTERLINE OFFSET	COVER ELEV.	STRUCT.	FRAME & LID	CONNECT TO STRUCTURE	SIZE (IN)	LENGTH (FT)	INVERT ELEV. INLET	INVERT ELEV. OUTLET	PIPE SLOPE	FEET	
0010	2	Inlet	6+42.4	42.5' LT	64.00	45A		205	12	26	60.90	60.30	0.02308	4.76	Reuse Type 57 Frame & Lid from different location
0010	3	Inlet	6+44.7	42.5' RT	64.20	3' Inlet		206	12	19	61.10	60.60	0.02632	3.10	Reuse Type 57 Frame & Grate
0010	4	Inlet	7+21.0	42.5' LT	63.73	45A		208	12	18	60.60	59.00	0.08889	4.79	Reuse Type 57 Frame & Lid from different location
0010	5	Inlet	7+50.0	42.5' RT	64.25	3' Inlet	57	207	12	40	61.10	60.00	0.02750	3.15	Protect 16" Dia. Water Main
0010	6	Inlet	7+55.0	1.4' RT	64.53	45A	57	207	12	49	59.00	58.00	0.02041	7.19	Protect & Support Electrical Conduits & Manhole
0010	7	Inlet	8+00.0	8.0' RT	65.11	45A	57	8	12	19	62.00	60.00	0.10526	4.77	Protect & Support TE&ES
0010	8	Storm MH	8+00.0	26.8' RT	65.01	4-FT MH	58A				53.94	53.94		11.07	Offset Calculated
0010	9	Inlet	11+00.0	42.5' LT	65.40	45A		211	12	46	62.30	61.50	0.01739	4.76	Reuse Type 57 Frame & Lid from different location
0010	10	Inlet	12+21.0	8.0' LT	65.12	45A		11	12	23	62.00	60.60	0.06087	4.78	Reuse Type 57 Frame & Lid from different location
0010	11	Storm MH	12+36.0	25.5' LT	65.30	4-FT MH	58A				60.35	60.35		4.95	
0010	12	Inlet	12+37.0	8.0' RT	64.75	45A		212	12	20	61.00	59.00	0.10000	5.41	Reuse Type 57 Frame & Lid from different location
0010	13	Inlet	12+50.0	42.5' LT	64.70	45A		11	12	22	61.60	60.75	0.03864	4.76	Reuse Type 57 Frame & Lid from different location
0010	14	Inlet	13+00.0	42.5' RT	63.95	3' Inlet	57	212	12	56	60.85	58.00	0.05089	3.10	Protect 16" Dia. Water Main
0010	15	Storm MH	13+03.0	25.6' LT	65.54	4-FT MH	58A								
0010	16	Inlet	13+28	64.9' LT	64.88	45A		214	12	24	60.50	60.00	0.02083	6.04	Reuse Type 57 Frame & Lid from different location
0010	17	Inlet	13+63.0	65.6' LT	64.76	45A		214	12	30	61.65	61.05	0.02000	4.77	Reuse Type 57 Frame & Lid from different location
0010	18	Inlet	14+94.0	42.5' RT	63.26	3' Inlet		19	12	6	60.15	60.10	0.00833	3.11	Reuse Type 57 Frame & Lid from different location
0010	19	Storm MH	15+00.0	45.1 RT	63.85	4-FT MH	58A				54.86	54.86		8.99	
0010	20	Storm MH	15+75.0	44.5' LT	64.00	4-FT MH	58A				58.68	58.68		5.32	
0010	21	Storm MH	15+75.0	8.0' LT	63.66	4-FT MH	57	20	12	36	59.50	59.00		5.82	Storm MH with Inlet Cover & Sump
0010	22	Inlet	16+00.0	3.4' RT	63.44	45A	57	21	12	27	60.35	59.75	0.02222	4.75	
0010	23	Inlet	16+37.3	42.5' LT	63.05	45A	57	Existing Drains	12	5	59.95			3.10	
0010	24	Inlet	16+44.7	42.5' RT	62.80	45A	57	Existing Drains	12	5	59.70			3.10	
0010	25	Inlet	16+57.7	59.6' LT	62.94	45A	57	216	12	18	58.90	58.50	0.02222	4.04	
0010	26	Inlet	16+60.1	75.0' RT	62.40	45A	57	217	12	33	59.30	57.50	0.05455	4.76	Protect & Support TE&ES, 3" Gas Main
0010	27	Inlet	16+85.9	58.6' LT	62.84	45A	57	216	12	23	59.00	58.50	0.02174	5.50	
0010	28	Storm MH	19+12.0	8.0' LT	61.77	4-FT MH	57	30	12	39	57.75	56.50	0.03205	5.68	Storm MH with inlet frame & grate, Protect 4" Gas Main
0010	29	Inlet	19+15.0	8.0' RT	61.62	45A	57	28	12	16	58.50	58.00	0.03125	4.78	
0010	30	Storm MH	19+24.0	45.1' LT	61.44	4-FT MH	58A				56.00	56.00		5.44	
0010	31	Storm MH	19+45.0	44.5' RT	61.52	4-FT MH	58A				51.51	51.51		10.01	
0010	32	Inlet	19+50.0	42.5' RT	60.95	3' Inlet	57	31	12	5	57.85	57.70	0.03000	3.10	
0010	34	Inlet	19+82.1	69.0' RT	60.80	45A	57	218	12	26	57.70	56.00	0.06538	4.76	Protect & Support TE&ES, 2" Gas
0010	35	Inlet	20+12.6	69.0' RT	60.90	45A	57	218	12	33	57.70	56.00	0.05152	4.86	Protect & Support TE&ES, 2" Gas
0010	36	Inlet	22+60.0	42.5' RT	57.90	3' Inlet	57	37	12	6	54.80	54.60	0.03333	3.10	
0010	37	Storm MH	22+65.0	44.9' RT	58.50	4-FT MH	58A				48.90	48.90		9.60	
0010	39	Inlet	22+91.2	67.0' RT	58.00	45A	57	220	12	23	53.50	52.50	0.04348	6.16	
0010	40	Inlet	22+92.2	65.3' LT	57.30	45A	57	221	12	22	52.80	52.30	0.0227273	6.16	
0010	41	Inlet	23+20.3	65.3' LT	57.20	45A	57	221	12	29	54.10	52.50	0.05517	4.76	
0010	42	Inlet	25+90.9	42.5' RT	54.90	45A	57	222	12	30	51.70	50.00	5667	4.86	
0010	44	Storm MH	26+85.4	45.0' LT	54.40	4-FT MH	58A				48.80	48.80		5.60	
0010	45	Storm MH	28+50.0	8.0' LT	51.43	4-FT MH	57	228	12	42	47.75	46.40	0.03214	5.34	Storm MH With Inlet Cover
0010	46	Inlet	28+50.0	8.0' RT	51.73	45A	57	45	12	16	48.65	48.00	0.04062	4.74	

DRAINAGE STRUCTURES (continued)								STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH						Depth	REMARKS
Category	Number	TYPE OF STRUCTURE	STATION	CENTERLINE OFFSET	COVER ELEV.	STRUCT.	FRAME & LID	CONNECT TO STRUCTURE	SIZE (IN)	LENGTH (FT)	INVERT ELEV. INLET	INVERT ELEV. OUTLET	PIPE SLOPE	FEET	
0010	50	Inlet	29+20.0	65.7' RT	50.95	45A	57	230	12	25	47.85	45.75	0.08400	4.76	
0010	51	Inlet	29+90.0	42.5' LT	49.70	45A		231	12	24	46.60	46.10	0.02083	4.76	Reuse Existing Type 57 Frame & Grate
0010	52	Inlet	30+03.0	42.5' RT	49.95	45A	57	232	12	28	46.85	46.00	0.03036	4.76	
0010	53	Inlet	30+24.9	65.5' LT	49.60	45A	57	231	12	23	45.80	45.25	0.02391	5.46	
0010	54	Inlet	30+38.6	64.8' RT	50.07	45A		233	12	13	46.20	45.90	0.02308	5.53	Reuse Existing Type 57 Frame & Grate
0010	55	Inlet	30+75.0	42.5' LT	49.75	45A		235	12	53	46.65	43.35	0.04145	4.76	Reuse Existing Type 57 Frame & Grate
0010	56	Inlet	30+90.0	42.5' RT	49.84	45A	57	234	12	17	46.75	46.00	0.04412	4.75	
0010	57	Inlet	31+20.0	8.0' RT	50.44	45A	57	234	12	41	47.35	46.00	0.03293	4.75	
0010	58	Inlet	31+75.0	8.0' LT	49.88	45A	57	237	12	22	46.70	45.25	0.06591	4.84	
0010	59	Inlet	31+88.6	42.5' LT	49.50	45A		237	12	17	46.40	46.00	0.02353	4.76	Reuse Existing Type 57 Frame & Grate
0010	60	Inlet	33+10.0	42.5' RT	50.32	45A	57	239	12	21	47.20	46.00	0.05714	4.78	Protect & Support TE&ES
0010	61	Inlet	33+49.5	60.0' RT	50.45	45A		242	12	9	47.35	47.10	0.02778	4.76	Reuse Existing Type 57 Frame & Grate
0010	62	Inlet	33+77.6	61.5' RT	50.40	45A		242	12	19	47.30	46.90	0.02105	4.76	Reuse Existing Type 57 Frame & Grate
0010	63	Inlet	34+20.0	42.5' LT	49.52	45A	57	244	12	25	47.25	46.00	0.05000	3.93	
0010	64	Inlet	35+50.0	8.0' LT	49.89	45A	57	245	12	26	46.80	45.25	0.05962	4.75	
0010	65	Inlet	35+50.0	42.5' RT	49.59	45A	57	246	12	23	46.50	46.00	0.02174	4.75	
0010	66	Inlet	35+55.0	8.0' RT	49.93	45A	57	246	12	29	46.00	45.15	0.02931	5.59	
0010	67	Inlet	35+59.0	42.5' LT	49.67	45A	57	245	12	33	46.80	45.25	0.04697	4.53	
0010	68	Inlet	36+57.7	42.5' LT	49.40	45A	57	249	12	32	47.30	46.50	0.02500	3.76	
0010	69	Inlet	36+78.4	65.2' RT	50.47	45A		251	12	11	47.35	47.10	0.02273	4.78	Reuse Existing Type 57 Frame & Grate
0010	70	Inlet	37+06.6	65.2' RT	50.37	45A		251	12	17	47.25	46.90	0.02059	4.78	Reuse Existing Type 57 Frame & Grate
0010	71	Inlet	37+50.0	42.5' LT	49.55	45A	57	252	12	25	46.00	45.50	0.02000	5.21	Protect & Support TE&ES
0010	72	Inlet	37+72.0	42.5' RT	49.93	45A	57	253	12	28	46.80	46.15	0.02321	4.79	
0010	73	Inlet	37+87.5	8.0' RT	50.45	45A	57	253	12	43	47.35	45.95	0.03256	4.76	Protect & Support TE&ES
0010	74	Storm MH	38+05.0	25.1' LT	50.22	4-FT MH	58A				45.51	45.51		4.71	
0010	75	Inlet	38+05.0	8.0' LT	50.08	45A	57	74	12	17	47.00	46.60	0.02353	4.74	
0010	76	Inlet	39+93.6	63.0' RT	51.04	45A		77	12	28	47.40	46.80	0.0214286	5.30	Reuse Existing Type 57 Frame & Grate
0010	77	Inlet	40+21.8	62.6' RT	51.04	45A		257	12	6	46.55	46.45	0.01667	6.15	Reuse Existing Type 57 Frame & Grate
0010	78	Inlet	40+40.7	42.5' LT	50.42	45A		258	12	27	47.30	46.65	0.02400	4.78	Reuse Existing Type 57 Frame & Grate
0010	79	Inlet	41+00.0	42.5' RT	50.74	45A	57	259	12	39	47.65	46.75	0.02308	4.75	
0010	80	Inlet	41+08.0	8.0' RT	51.10	45A	57	259	12	47	47.25	46.25	0.02128	5.51	Protect & Support TE&ES
0010	81	Inlet	41+20.0	8.0' LT	51.84	45A	57	260	12	22	48.75	47.50	0.05682	4.75	
0010	82	Inlet	41+36.0	42.5' LT	50.50	45A	57	260	12	17	47.40	46.70	0.04118	4.76	
0010	83	Inlet	42+15.0	42.5' RT	50.65	45A	57	261	12	41	46.65	45.80	0.02073	5.66	Protect & Support TE&ES
0010	84	Inlet	42+26.0	42.5' LT	50.45	45A	57	262	12	17	47.35	46.50	0.05000	4.76	
0010	85	Inlet	44+06.4	42.5' RT	50.40	45A		265	12	21	47.30	46.00	0.06190	4.76	Reuse Existing Type 57 Frame & Grate

0010	INLET COVERS, TYPE 57 (SPV.0060.01)	**46**
0010	MANHOLE COVERS, TYPE 58A (SPV.0060.02)	**10**
0010	INLET TYPE 45A (SPV.0060.03)	**59**
0010	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (608.0312)	**1718**
0010	INLETS 3-FT DIAMETER (611.3003)	**6**
0010	MANHOLES 4-FT DIAMETER (611.2004)	**13**
0010	SALVAGED INLET COVERS (611.9710)	**13**

SALVAGED INLET COVERS

GROUP CODE	NUMBER	STATION	OFFSET	COVER ELEV.	REMARKS
0010	121	16+95.8	65.0' RT	62.22	
0010	131	23+22.2	59.9' RT	57.71	
0010	134	26+08.2	61.2' RT	54.80	
0010	135	26+40.0	58.6' RT	55.03	
0010	172	43+69.1	43.0' LT	50.30	

0010 SALVAGED INLET COVERS (611.9710) **5** EACH

ADJUSTING INLET COVERS

GROUP CODE	NUMBER	STATION	OFFSET	EXISTING COVER ELEV.	PROPOSED COVER ELEV.	COVER TYPE	REMARKS
0010	122	19+62.9	43.0' LT	60.83	**60.78**	57	
0010	126	22+71.1	43.0' LT	57.75	**57.70**	57	
0010	133	25+91.1	43.0' LT	54.50	**54.73**	57	
0010	137	28+92.8	43.0' LT	49.94	**50.30**	57	
0010	138	29+04.1	43.0' RT	50.11	**50.52**	57	

0010 ADJUSTING INLET COVERS (611.8115) **5 EACH**

MANHOLE COVERS TYPE 58A

GROUP CODE	NUMBER	STATION	OFFSET	COVER ELEV.	COVER TYPE	REMARKS
0020	418	28+76.1	26.5 LT	51.08	58A	

0020 MANHOLE COVERS TYPE 58A (SPV.0060.02) **1 EACH**

REMOVING MANHOLES

GROUP CODE	NUMBER	STATION	OFFSET
0010	213	13+03.0	25.6' LT
0010	225	26+85.4	45.0' LT

0010 REMOVING MANHOLES (204.0210) **2 EACH**

RECONSTRUCTING MANHOLES

GROUP CODE	NUMBER	STATION	OFFSET	COVER ELEV.	REMARKS
0010	229	29+21.7	45.1' LT	50.42	repair 3", adjust 15"

0010 RECONSTRUCT MANHOLES (611.0420) **1 EACH**

3

EARTHWORK

Location	Excavation Common 205.0100	Unusable Pavement Material	Available Material	Unexpanded Fill	Expanded Fill (1.20 Factor)	Mass Ordinate +/-	Waste	Borrow
	CY	CY	CY	CY	CY	CY	CY	CY
STA 4+08 TO 44+13, LT & RT	15,730	13,767	1,963	298	357	+1606	15,373	0

Unusable Pavement Material is included in Excavation Common

Available Material = Excavation Common - Unusable Pavement Material

The Mass Ordinate + or - Qty calculated for the Project. Plus quantity indicates an excess of material within the Project. Minus indicates a shortage of material.

See Section 9 of Plan for Cut & Fill Quantities

3

NOTE:

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

LINE WAS ADJUSTED TO MATCH A LINE FROM 2.70 FT. NORTH OF THE SECTION PLUG AT N. 27TH ST. TO THE SECTION PLUG AT N. 20TH ST. THIS 2.70 FT. OFFSET WAS OBTAINED FROM A 1947 MILWAUKEE COUNTY SURVEY.

CONTROL POINTS WERE PUT IN BASED ON A LINE FROM 2.53FT NORTH OF THE SECTION PLUG AT 27TH ST TO THE SECTION PLUG AT 20TH THIS 2.53 OFFSET WAS OBTAINED FROM A 1977 PAVING PLAN

STATION 29+99.95 IS THE WESTERLY SECTION CORNER OF W. HAMPTON AVE. AND N. 20TH ST.

WEST HAMPTON AVENUE

N

#2724 #4811 N. 27TH ST. #4806 N. 27TH ST. #2610

N. TEUTONIA AVE.

N. 27TH ST.

CAUTION

ASPH GATE RR CROSSING GATE OH RR SIGNAL GROUND CURB GRAVEL CONC BUS PAD MMSD BUS SHELTER WAT SIGN TEL BOX CUC CONC R/W 33' 50' 4" G 6" SECTION LINE

BEGIN PROJECT STA. 04+16.0 T/L

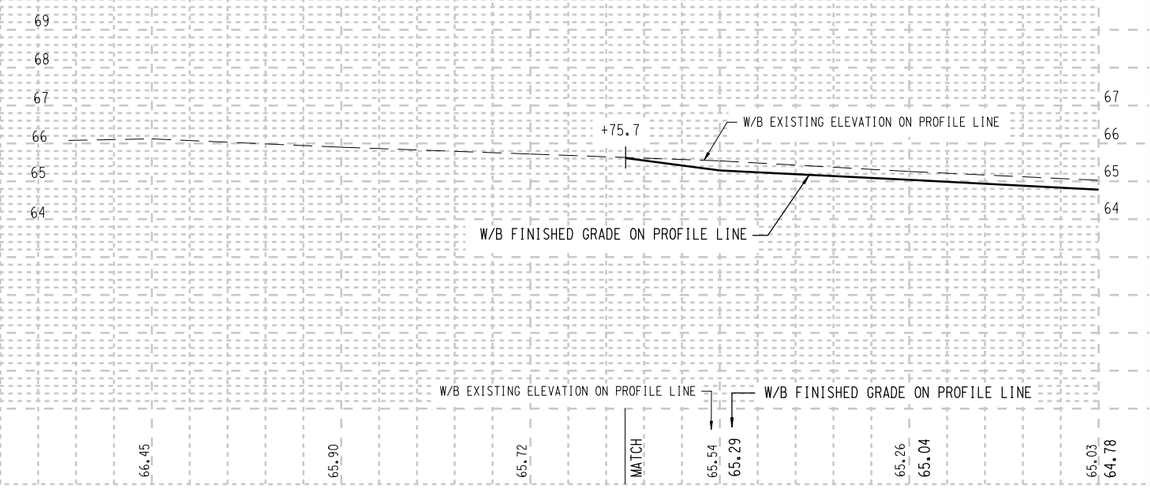
WALK ∠PT.+86.0 54.0'LT.-65.50 CW

LAWN CONC CURB ASPH 56' LT CONC CURB LAWN 55' LT ASPH PARI BUSHES AT HIGH EDGE SPRINKLER BOX

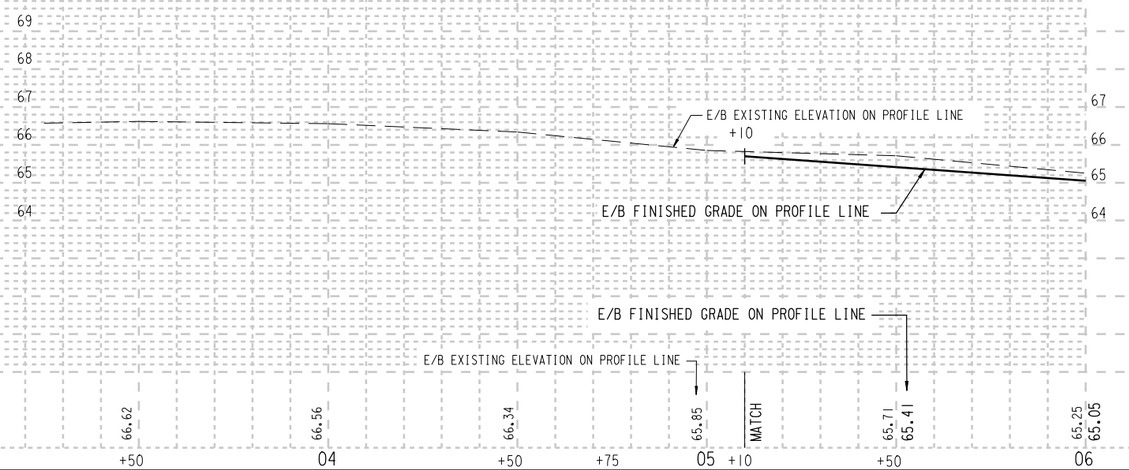
00 +50 01 +50 02 +50 03 +50 T/L C/L OF ROW 04 +16 05 +10 06

SECTION LINE RR TRACKS 9' 5' 100' "0" FA 24' HIGHWAY EASEMENT 23' 33' GRAVEL GRASS CW R/W MONUMENT WEP 89° 54' 42" 89° 58' 01" 89° 54' 41" N 89° 31' 30" E +30.5 +75.7 +80.4 +91.4 +36.1 +18.8 +51.8 +5.1 +0.0 +0.4 +0.5 +0.6 +0.7 +0.8 +0.9 +1.0 +1.1 +1.2 +1.3 +1.4 +1.5 +1.6 +1.7 +1.8 +1.9 +2.0 +2.1 +2.2 +2.3 +2.4 +2.5 +2.6 +2.7 +2.8 +2.9 +3.0 +3.1 +3.2 +3.3 +3.4 +3.5 +3.6 +3.7 +3.8 +3.9 +4.0 +4.1 +4.2 +4.3

WESTBOUND W. HAMPTON AVE.



EASTBOUND W. HAMPTON AVE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 152	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 02-06.DGN

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NE CORNER
N. 26TH ST. & W. HAMPTON AVE.
STA. 07+07, 46'LT.
ELEV. 66.25

B.M. N.W. BOLT HYD. NW CORNER
N. 25TH ST. & W. HAMPTON AVE.
STA. 09+73, 45'LT.
ELEV. 68.00

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

N. 26TH ST.

N. 25TH ST.

REMOVE & PLACE GRAVEL TO GRADE

CAUTION

ASPH PARKING

BUSHES AT HIGH EDGE

BUS STOP

LAWN & PLANTS

C/L OF ROW

SECTION LINE

N 89°31'30" E

WEP

CUC

CONC CURB

ASPH

EXIST. 15" STO.

#2601 #2525

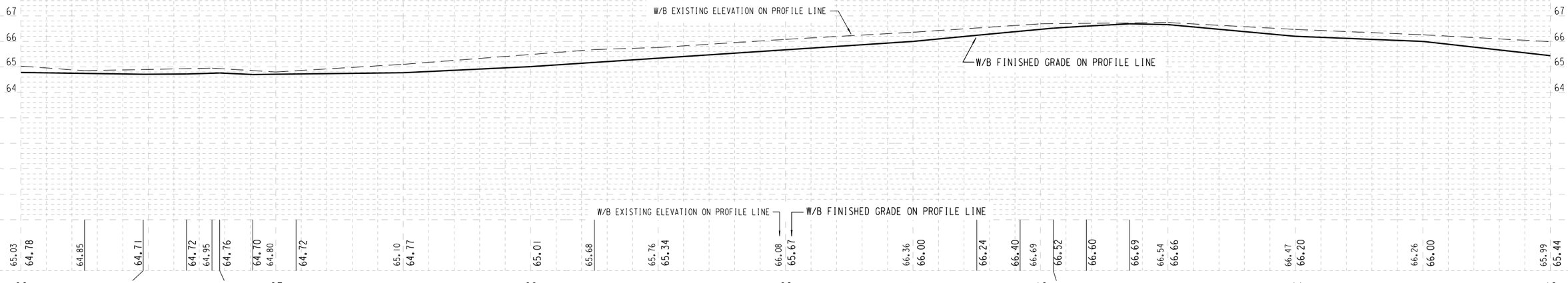
SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

(2) CONST. CURB RAMP TYPE 2 WITH DETECTABLE WARNING FIELD
(3) CONST. CURB RAMP TYPE 3 WITH DETECTABLE WARNING FIELD
(7B) CONST. CURB RAMP TYPE 7B WITH DETECTABLE WARNING FIELD
(10) CONST. CURB RAMP TYPE 10 WITH DETECTABLE WARNING FIELD
(10A) CONST. CURB RAMP TYPE 10A WITH DETECTABLE WARNING FIELD
(A) CONST. CONC. CURB & GUTTER 31-INCH
(CC) CONST. CONC. CURB & GUTTER 22-INCH (COVERED FLANGE)
(E) REMOVE & CONST. 3-INCH ASPH. ON V.T. CONC. BASE
(EE) REMOVE & CONST. 2-INCH ASPH. ON V.T. CONC. BASE
(F) CONST. CONC. DRIVEWAY FLARED (7-INCH)
(F8) CONST. CONC. DRIVEWAY FLARED (8-INCH)
(G) REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
(J) SAWING CONCRETE
(K) SAWING ASPHALT
(L) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(M) CONST. 5" CONC. SIDEWALK
(M7) CONST. 7" CONC. SIDEWALK
(M8) CONST. 8" CONC. SIDEWALK
(V) CONST. 8-INCH CONC. PAVEMENT
(W) CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
(Y) CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

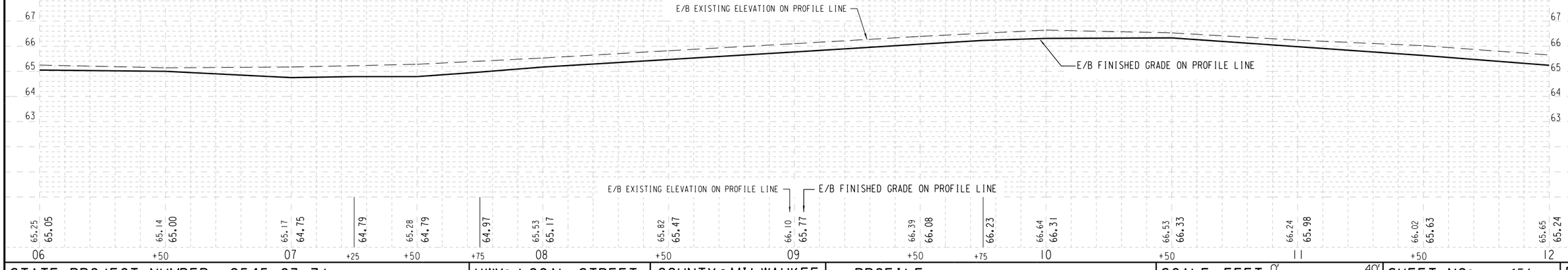
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 153 E

FILE NAME: W:\SPR\HAMPTON GB TEU\ 06-12.DGN

WESTBOUND W. HAMPTON AVE.



EASTBOUND W. HAMPTON AVE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 154	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 06-12.DGN

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

B.M. N.W. BOLT HYD. NE CORNER N. 24TH PL. & W. HAMPTON AVE. STA. 13+66, 57' LT. ELEV. 67.01

B.M. N.W. BOLT HYD. NE CORNER N. 24TH ST. & W. HAMPTON AVE. STA. 16+89, 58' LT. ELEV. 65.165

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

BIO-SWALE NO. 1 15+64 TO 16+10 (SEE BIO SWALE PLAN)

#4805 N. 24TH PL. #2458 #2430-30A #2426 #2420 #2414 #2406 #2400

#2475 #2429 #2421 #2415 #2407 #2403 #2331 #2321 TO

N. 24TH PL. N. 24TH ST.

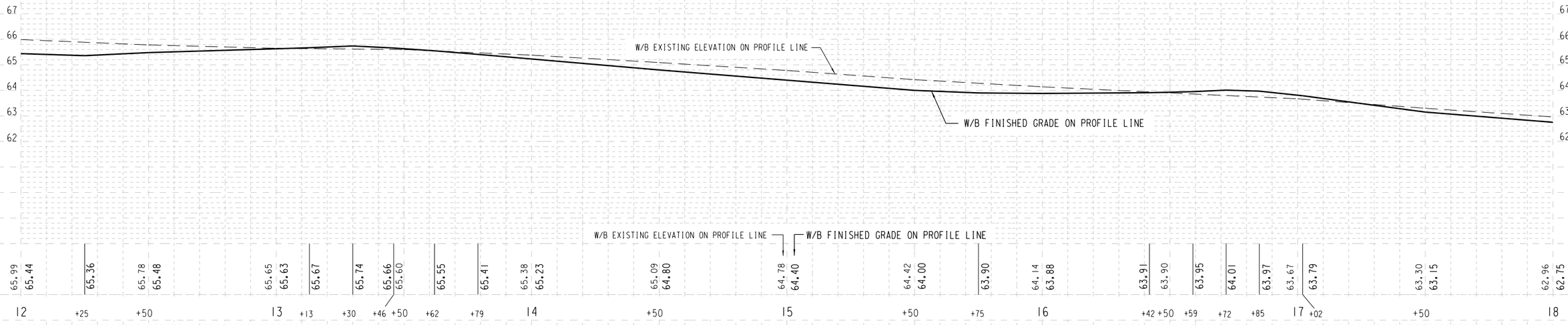
B.M. N.W. BOLT HYD. SW CORNER N. 24TH PL. & W. HAMPTON AVE. STA. 13+28, 45' RT. ELEV. 67.16

(I) CONST. CURB RAMP TYPE I WITH DETECTABLE WARNING FIELD
(IO) CONST. CURB RAMP TYPE IO WITH DETECTABLE WARNING FIELD
(IOA) CONST. CURB RAMP TYPE IOA WITH DETECTABLE WARNING FIELD
(A) CONST. CONC. CURB & GUTTER 31-INCH
(C) CONST. CONC. CURB & GUTTER 22-INCH
(CC) CONST. CONC. CURB & GUTTER 22-INCH (COVERED FLANGE)
(G) REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
(K) SAWING ASPHALT
(L) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(R) SAWING CONCRETE AT BASE OF CONC. STEP
(V) CONST. 8-INCH CONC. PAVEMENT
(W) CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
(X) CONST. MAINTENANCE RAMP
(Y) CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

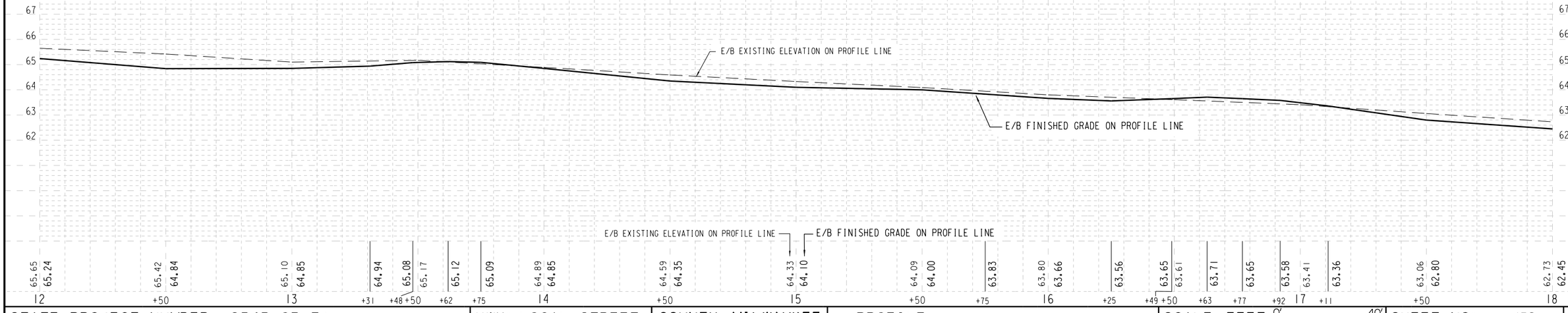
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 155 E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 12-18.DGN

WESTBOUND W. HAMPTON AVE.



EASTBOUND W. HAMPTON AVE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 156	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 12-18.DGN

WEST HAMPTON AVENUE

N

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

BIO-SWALE NO.2
18+87 TO 19+37
(SEE BIO SWALE PLAN)

#4821 N. 22ND ST.

B.M. N.W. BOLT HYD. NW CORNER N. 22ND ST. & W. HAMPTON AVE. STA. 22+89, 58' LT. ELEV. 59.90

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

N. 23RD ST.

N. 22ND ST.

#2321 TO 27 #2313 #2309 #2301-01A #2229-31 #2225 #2221 #2215-15A #2209 #2201 #4780 N.22ND ST. #2125-27

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

STD.B.M. #133 SE CORNER N. 23RD ST. & W. HAMPTON AVE. 26'S & 2' E OF CURBS ELEV. 61.412

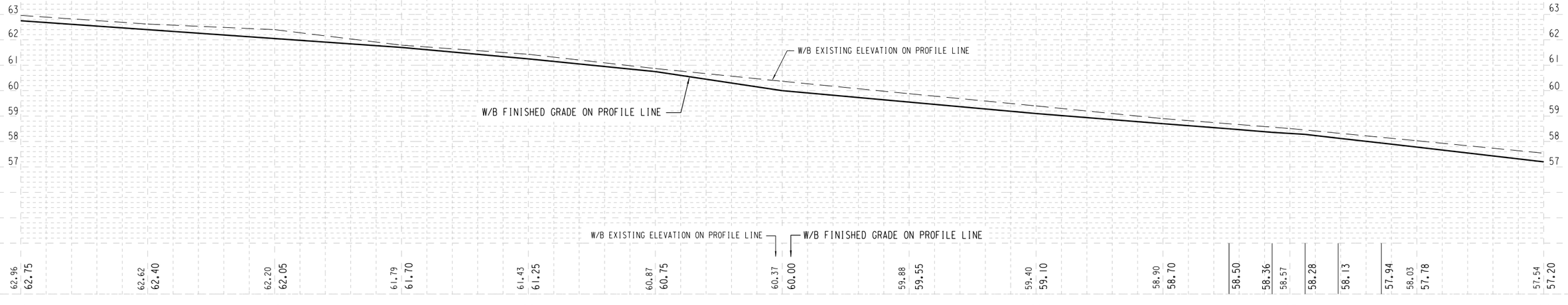
B.M. N.W. BOLT HYD. SE CORNER N. 23RD ST. & W. HAMPTON AVE. STA. 20+28, 45'RT. ELEV. 63.47

(7B) CONST. CURB RAMP TYPE 7B WITH DETECTABLE WARNING FIELD
(10) CONST. CURB RAMP TYPE 10 WITH DETECTABLE WARNING FIELD
(A) CONST. CONC. CURB & GUTTER 31-INCH
(G) REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
(J) SAWING CONCRETE
(10A) CONST. CURB RAMP TYPE 10A WITH DETECTABLE WARNING FIELD
(K) SAWING ASPHALT
(L) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(R) SAWING CONCRETE AT BASE OF CONC. STEP
(W) CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
(X) CONST. MAINTENANCE RAMP
(Y) CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

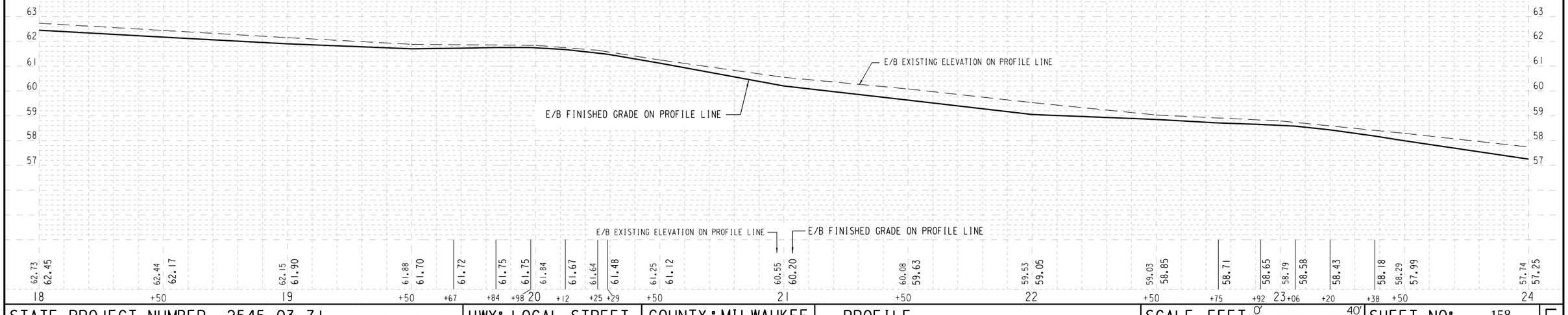
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 157	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 18-24.DGN

WESTBOUND W. HAMPTON AVE.



EASTBOUND W. HAMPTON AVE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 158	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 18-24.DGN

WEST HAMPTON AVENUE

NOTE:
TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

BIO-SWALE NO.3
28+36 TO 28+66
(SEE BIO SWALE PLAN)

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. N.W. BOLT HYD. SW CORNER N. 21ST ST. & W. HAMPTON AVE. STA. 25+90, 45'RT. ELEV. 57.40

B.M. N.W. BOLT HYD. @ CHURCH ELEV. 54.98

N. 21ST ST.

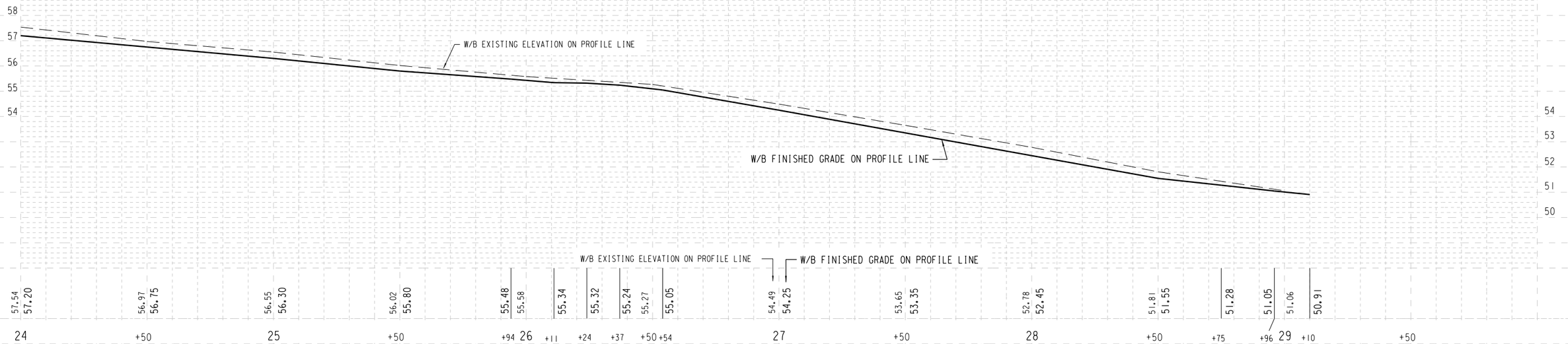
N. 20TH ST.

(2M) CONST. CURB RAMP TYPE 2 WITH DETECTABLE WARNING FIELD (MODIFIED)
(3) CONST. CURB RAMP TYPE 3 WITH DETECTABLE WARNING FIELD
(10) CONST. CURB RAMP TYPE 10 WITH DETECTABLE WARNING FIELD
(10A) CONST. CURB RAMP TYPE 10A WITH DETECTABLE WARNING FIELD
(A) CONST. CONC. CURB & GUTTER 31-INCH
(C) CONST. CONC. CURB & GUTTER 22-INCH
(E) REMOVE & CONST. 3-INCH ASPH. ON V.T. CONC. BASE
(F) CONST. CONC. DRIVEWAY FLARED (7-INCH)
(G) REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
(J) SAWING CONCRETE
(K) SAWING ASPHALT
(L) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(M) CONST. 5" CONC. SIDEWALK
(MC) CONST. CONC. SIDEWALK WITH INTEGRAL CURB
(V) CONST. 8-INCH CONC. PAVEMENT
(W) CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
(X) CONST. MAINTENANCE RAMP
(Y) CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

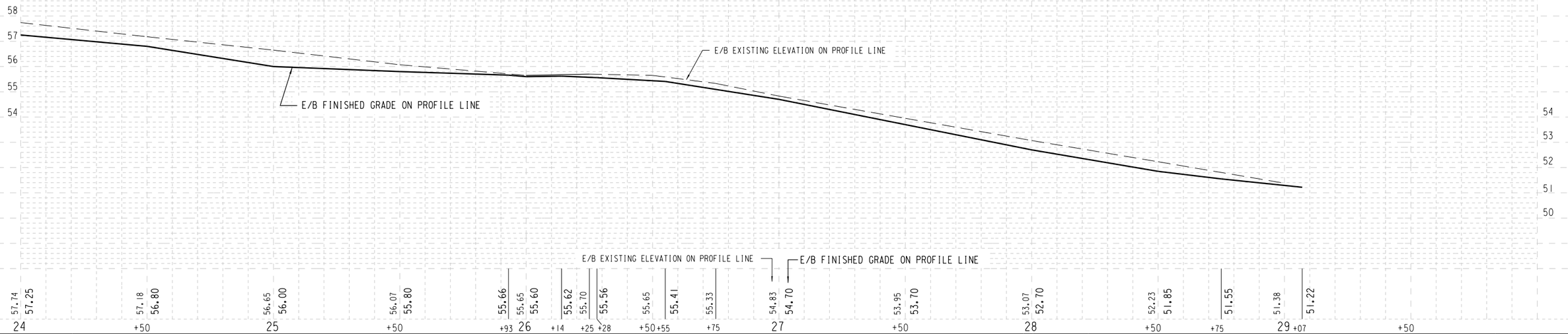
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 159	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 24-29.DGN

WESTBOUND W. HAMPTON AVE.



EASTBOUND W. HAMPTON AVE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 160	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 24-29.DGN

NOTE:

TRANSIT LINE BETWEEN N. 20TH ST. AND N. TEUTONIA AVE. FOLLOWS THE OLD SECTION LINE. RIGHT-OF-WAY AND PLATTING IS BASED ON THE OLD SECTION LINE.

WEST HAMPTON AVENUE

N

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

BIO-SWALE NO.4
30+90 TO 31+40
(SEE BIO SWALE PLAN)

B.M. N.W. BOLT HYD. NW CORNER N. 19TH PL. & W. HAMPTON AVE. STA. 33+26, 45'LT. ELEV. 52.37

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

W.E.P. CO. R.O.W.

#1986 #1982 #1978 #1962 #1950 TO 36 #1932 #1926 #1920

N. 20TH ST.

N. 19TH PL.

#1985 #1969 #1951 #1931 TO 35 #1925-27

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAIL FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. N.W. BOLT HYD. SE CORNER N. 20TH ST. & W. HAMPTON AVE. STA. 30+54, 45'RT. ELEV. 52.44

(2M) CONST. CURB RAMP TYPE 2 WITH DETECTABLE WARNING FIELD (MODIFIED)
(3) CONST. CURB RAMP TYPE 3 WITH DETECTABLE WARNING FIELD
(4B) CONST. CURB RAMP TYPE 4B WITH DETECTABLE WARNING FIELD (MODIFIED, SEE CONST. DETAIL)
(10) CONST. CURB RAMP TYPE 10 WITH DETECTABLE WARNING FIELD

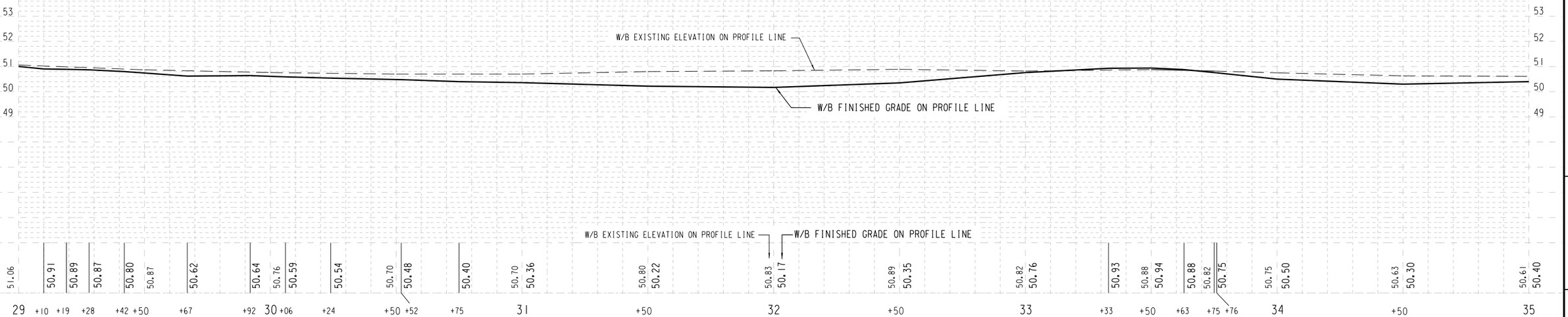
(10A) CONST. CURB RAMP TYPE 10A WITH DETECTABLE WARNING FIELD
(A) CONST. CONC. CURB & GUTTER 31-INCH
(AC) CONST. CONC. CURB & GUTTER 31-INCH (COVERED FLANGE)
(CC) CONST. CONC. CURB & GUTTER 22-INCH (COVERED FLANGE)
(E) REMOVE & CONST. 3-INCH ASPH. ON V.T. CONC. BASE
(EE) REMOVE & CONST. 2-INCH ASPH. ON V.T. CONC. BASE
(F) CONST. CONC. DRIVEWAY FLARED (7-INCH)
(G) REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
(K) SAWING ASPHALT

(L) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(M) CONST. 5" CONC. SIDEWALK
(MC) CONST. CONC. SIDEWALK WITH INTEGRAL CURB
(Q) SAWING CONCRETE AT OR NEAR BUILDING, OR WALL
(R) SAWING CONCRETE AT BASE OF CONC. STEP
(V) CONST. 8-INCH CONC. PAVEMENT
(W) CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
(X) CONST. MAINTENANCE RAMP
(Y) CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

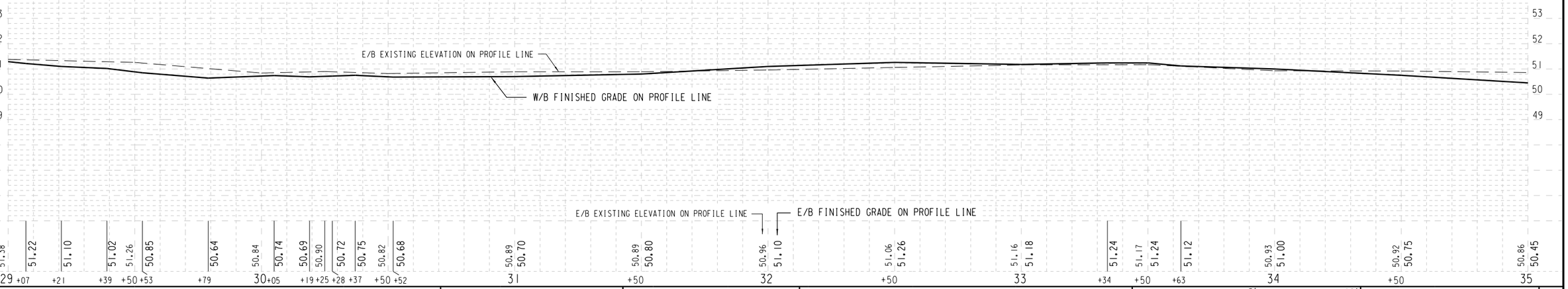
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 161	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 29-35.DGN

WESTBOUND W. HAMPTON AVE.

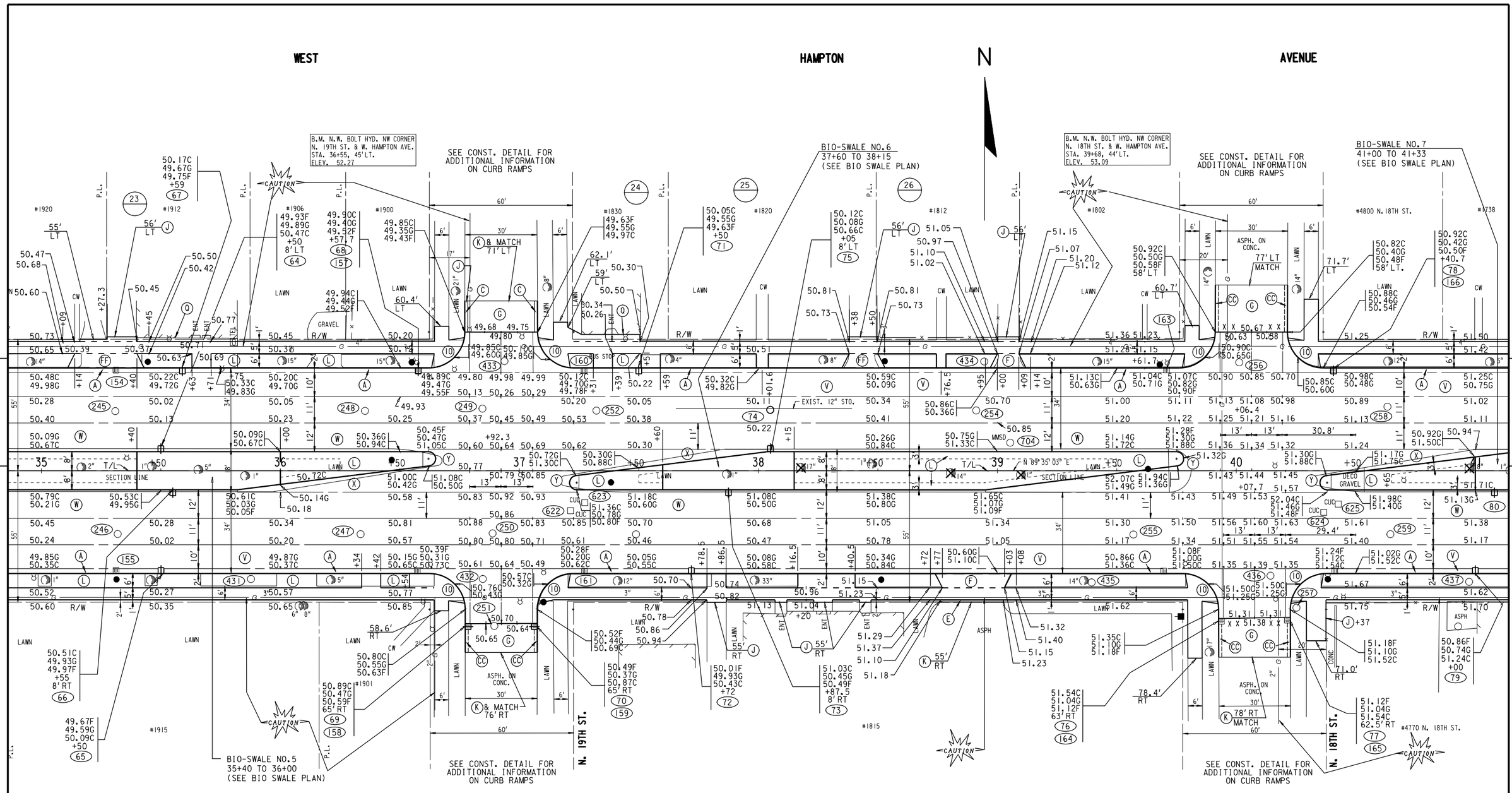


EASTBOUND W. HAMPTON AVE.



STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 162	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 29-35.DGN

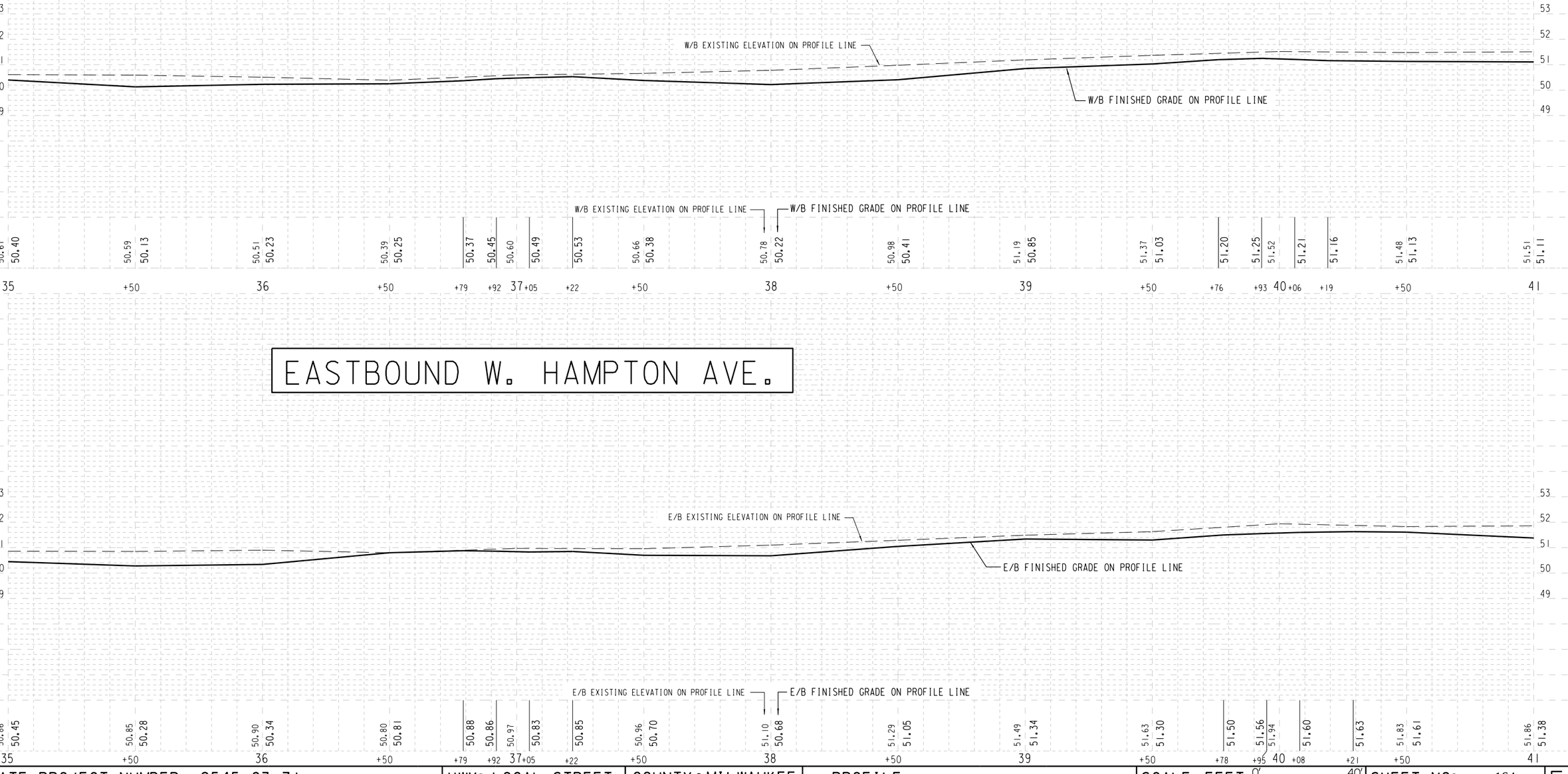


- (10) CONST. CURB RAMP TYPE 10 WITH DETECTABLE WARNING FIELD
- (A) CONST. CONC. CURB & GUTTER 31-INCH
- (C) CONST. CONC. CURB & GUTTER 22-INCH
- (CC) CONST. CONC. CURB & GUTTER 22-INCH (COVERED FLANGE)
- (E) REMOVE & CONST. 3-INCH ASPH. ON V.T. CONC. BASE
- (F) CONST. CONC. DRIVEWAY FLARED (7-INCH)
- (FF) CONST. CONC. DRIVEWAY FLARED (7-INCH) (H.E.S.)
- (G) REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
- (J) SAWING CONCRETE
- (K) SAWING ASPHALT
- (L) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
- (Q) SAWING CONCRETE AT OR NEAR BUILDING, OR WALL
- (V) CONST. 8-INCH CONC. PAVEMENT
- (W) CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
- (X) CONST. MAINTENANCE RAMP
- (Y) CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 163 E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 35-41.DGN

WESTBOUND W. HAMPTON AVE.

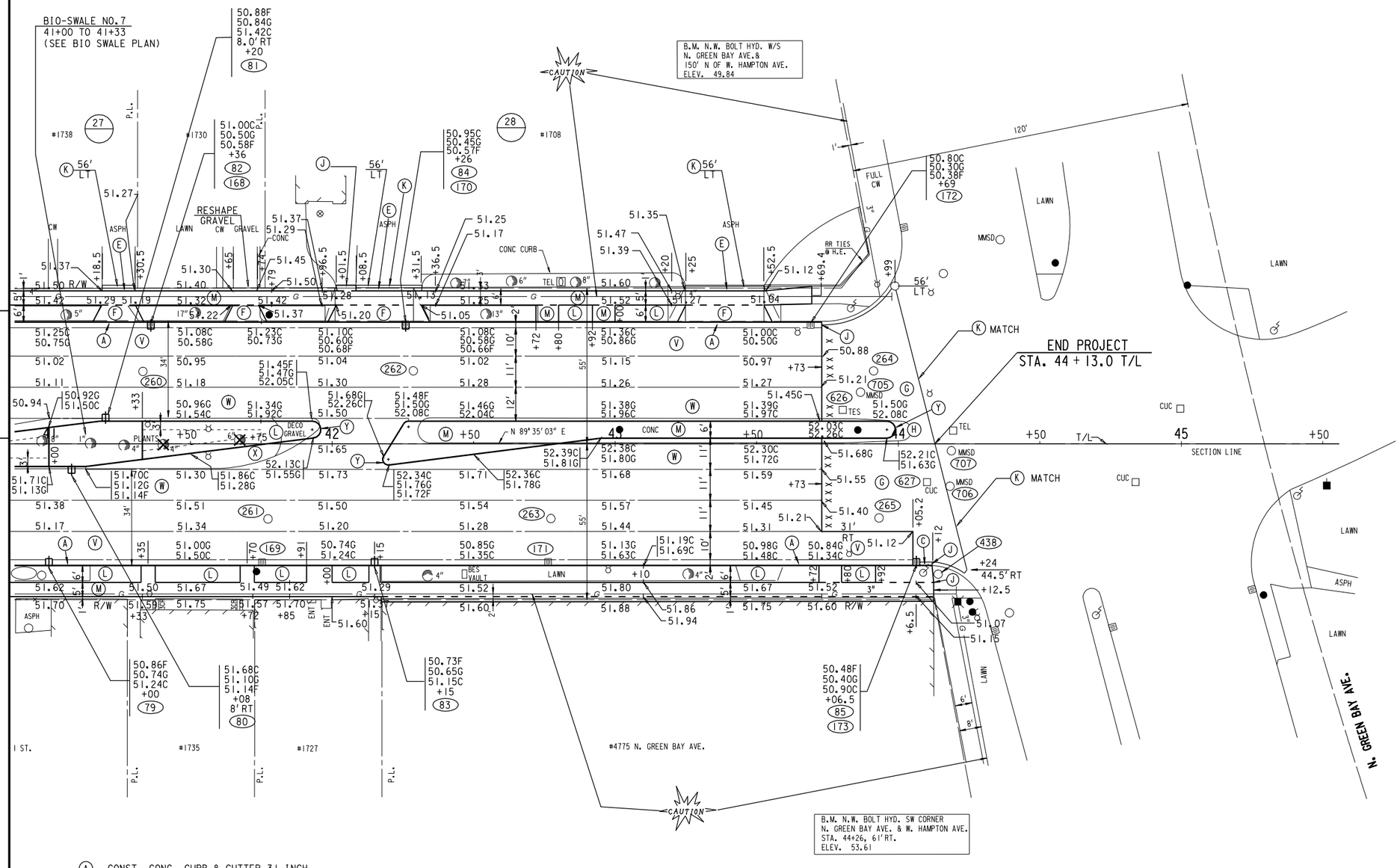


EASTBOUND W. HAMPTON AVE.

STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 164	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 35-41.DGN

WEST HAMPTON AVENUE



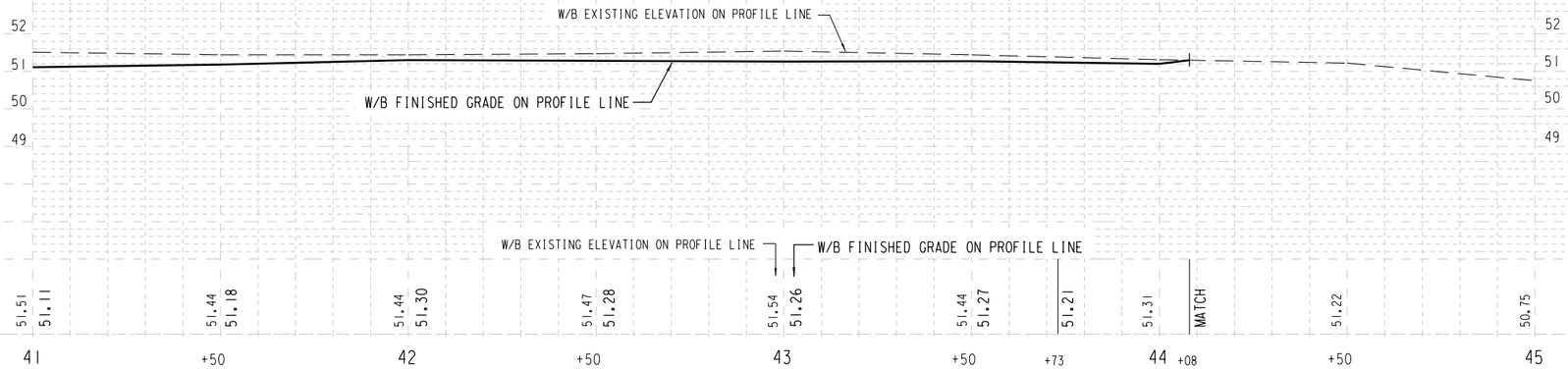
N

Ⓐ CONST. CONC. CURB & GUTTER 31-INCH
Ⓒ CONST. CONC. CURB & GUTTER 22-INCH
Ⓔ REMOVE & CONST. 3-INCH ASPH. ON V.T. CONC. BASE
Ⓕ CONST. CONC. DRIVEWAY FLARED (7-INCH)
Ⓖ REMOVE ASPHALT PARTIAL DEPTH TO OBTAIN 1-1/2" MIN. ASPH. OVERLAY
Ⓙ SAWING CONCRETE
Ⓚ SAWING ASPHALT
Ⓛ GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
Ⓜ CONST. 5" CONC. SIDEWALK
Ⓥ CONST. 8-INCH CONC. PAVEMENT
Ⓦ CONST. 8-INCH CONC. PAVEMENT WITH INTEGRAL CURB
Ⓧ CONST. MAINTENANCE RAMP
Ⓨ CONST. SNOWPLOWABLE MEDIAN ISLAND NOSE

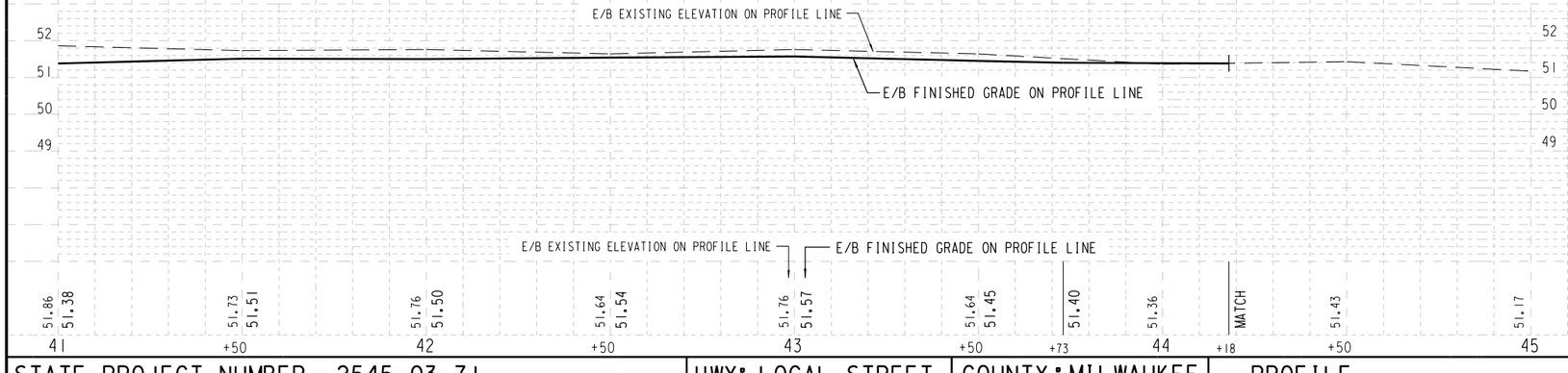
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 165 E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 41-47.DGN 9-21-2011

WESTBOUND W. HAMPTON AVE.



EASTBOUND W. HAMPTON AVE.



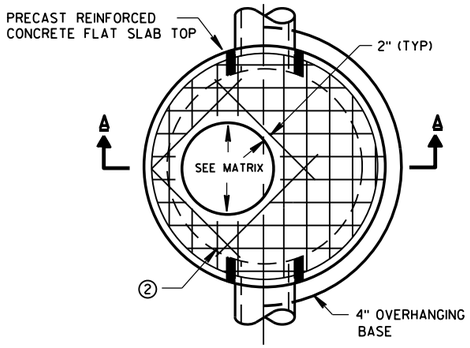
STATE PROJECT NUMBER 2545-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 166	E

FILE NAME: W:\SPR\HAMPTON_GB_TEU\ 41-47.DGN

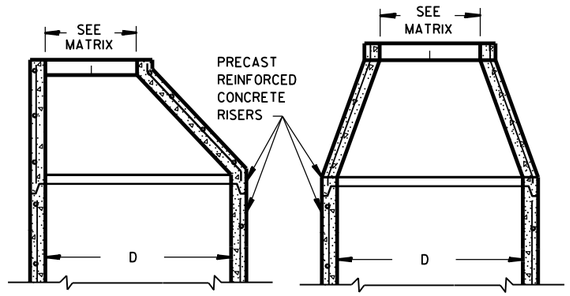
Standard Detail Drawing List

08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
09C11-03	CONCRETE BASE TYPE 10
09E08-04A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-04E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-16	URBAN NON-DOWELED CONCRETE PAVEMENT
13C15-05A	CONCRETE BASE
13C15-05B	CONCRETE BASE
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14A02-01	TREE PLANTING DETAIL
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C29-03C	URBAN BICYCLE LANE MARKING
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

6

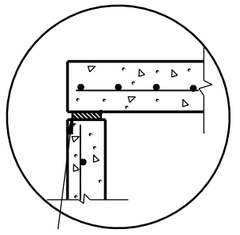


PLAN VIEW CIRCULAR OPENING

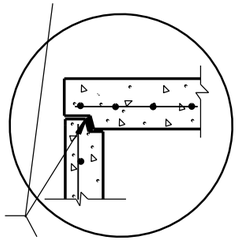


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

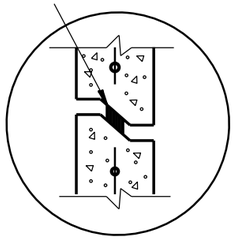


TOP WITH PLAIN END JOINT



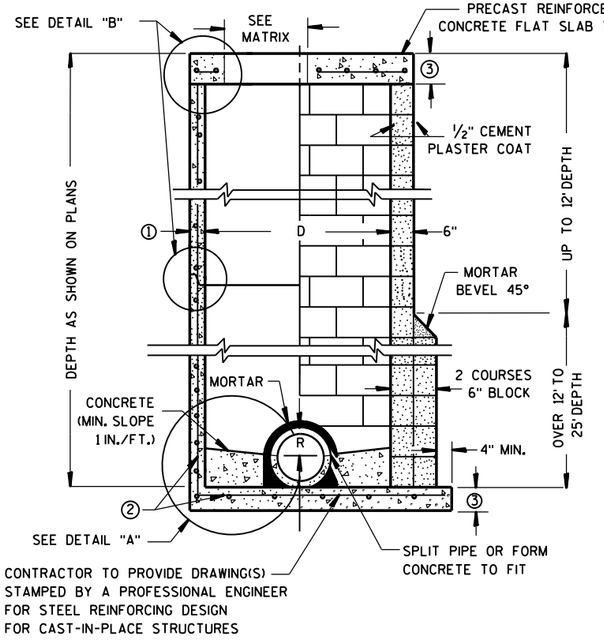
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



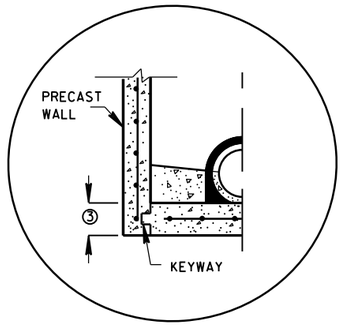
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

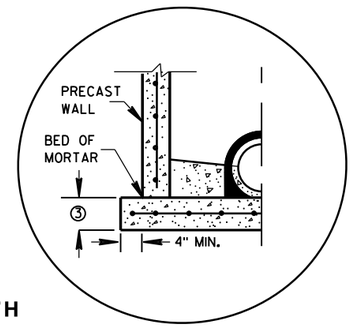


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

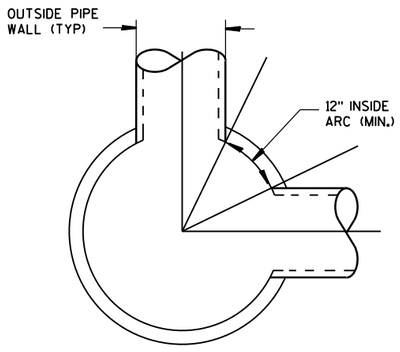


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES 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) OR PRECAST REINFORCED 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 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

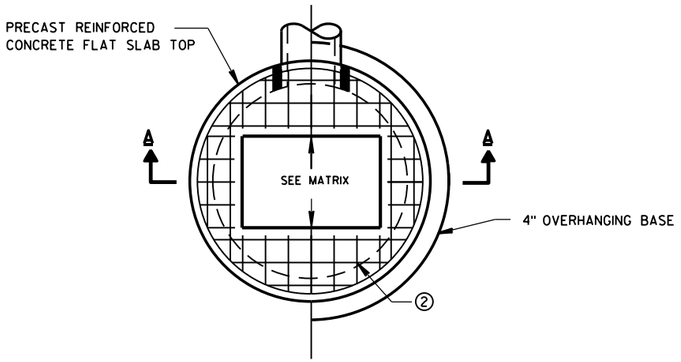
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

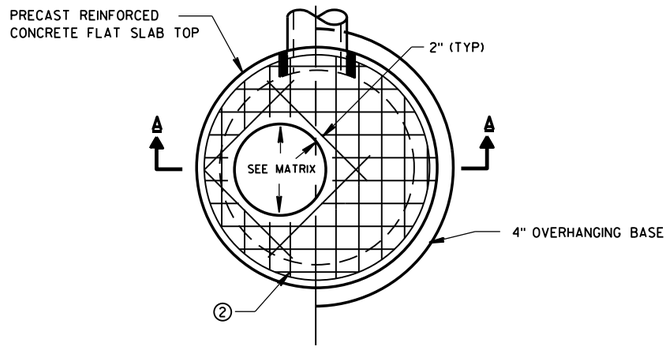
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

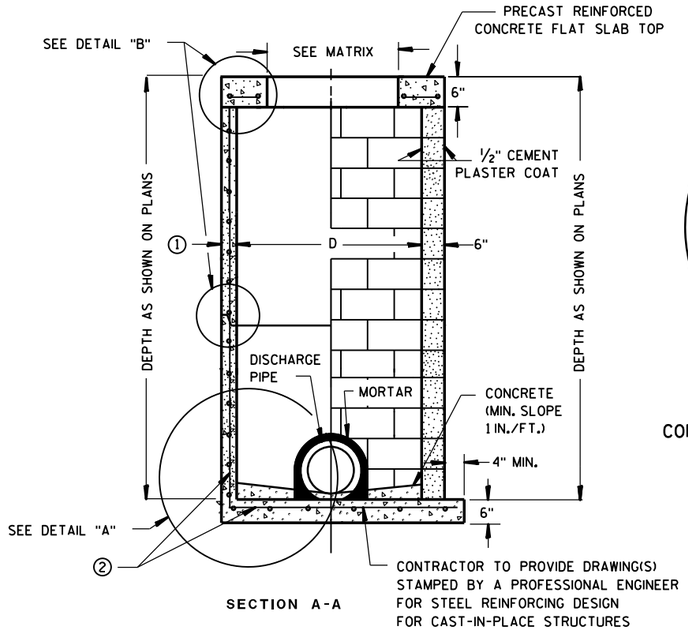
6
S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

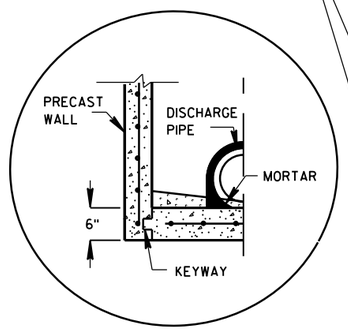


SECTION A-A

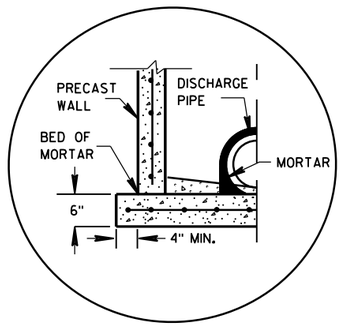
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

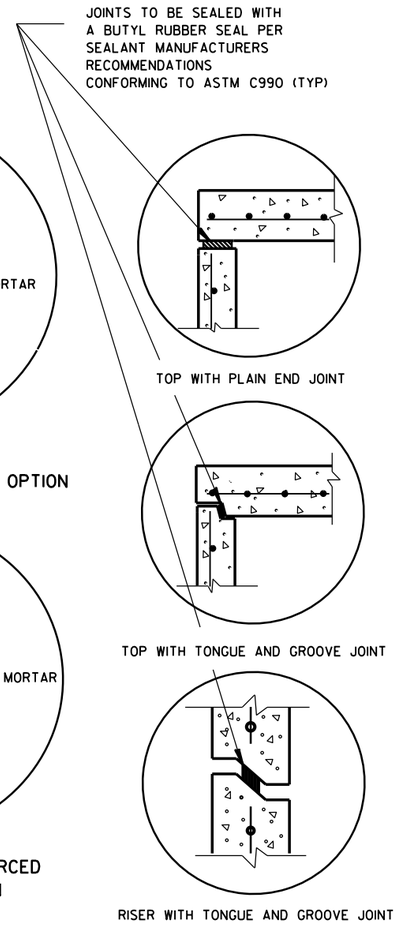


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES 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.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

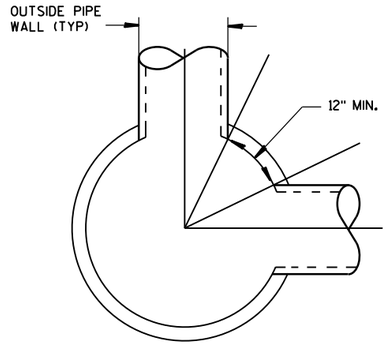
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

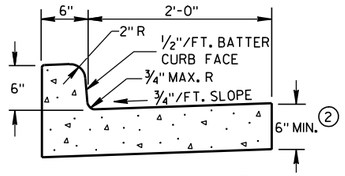
6

S.D.D. 8 C 6-1

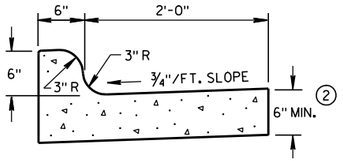
6

S.D.D. 8 C 6-1

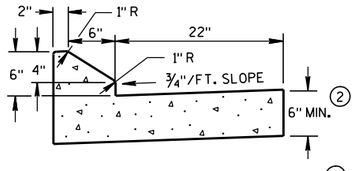
INLETS 3-FT AND 4-FT DIAMETER



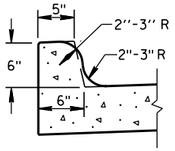
TYPES A & D (1)



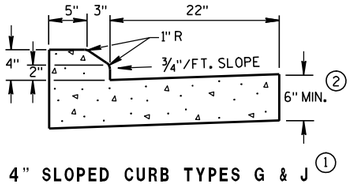
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

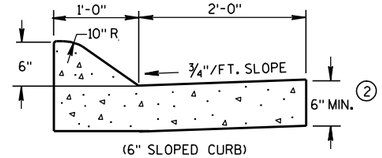


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

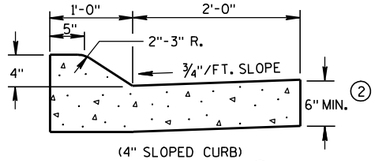


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

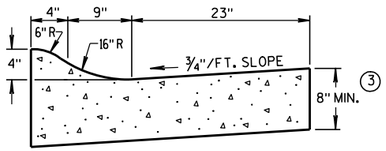


(6" SLOPED CURB)



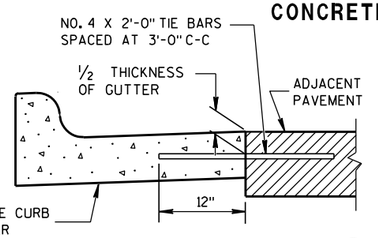
(4" SLOPED CURB)

TYPES A & D (1)

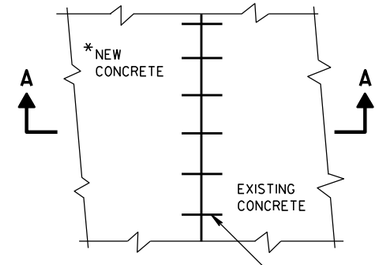


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

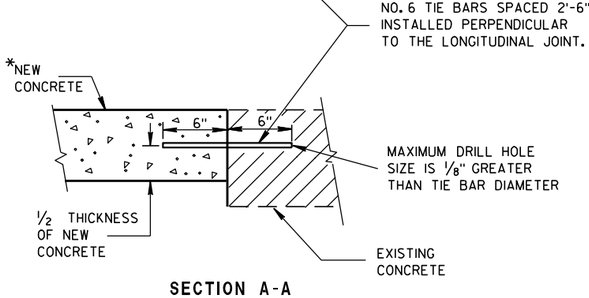


TYPICAL TIE BAR LOCATION (1)



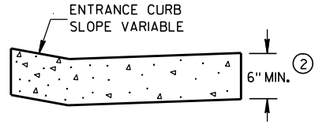
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



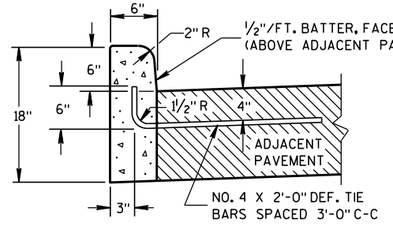
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



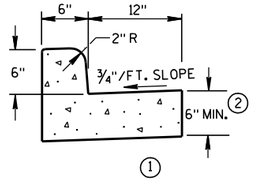
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



(1)

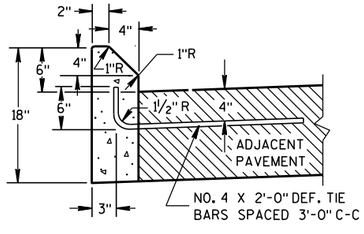
TYPES A & D



(1)

TYPES A & D

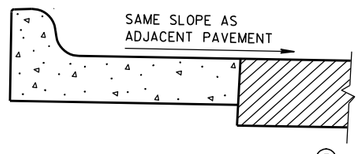
CONCRETE CURB & GUTTER 18"



(1)

TYPES G & J

CONCRETE CURB



(5)

REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)

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 AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

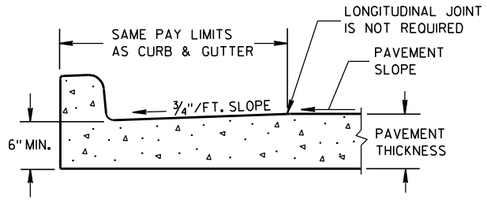
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

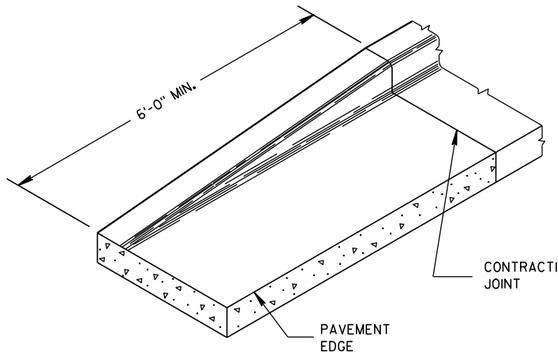
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08 DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

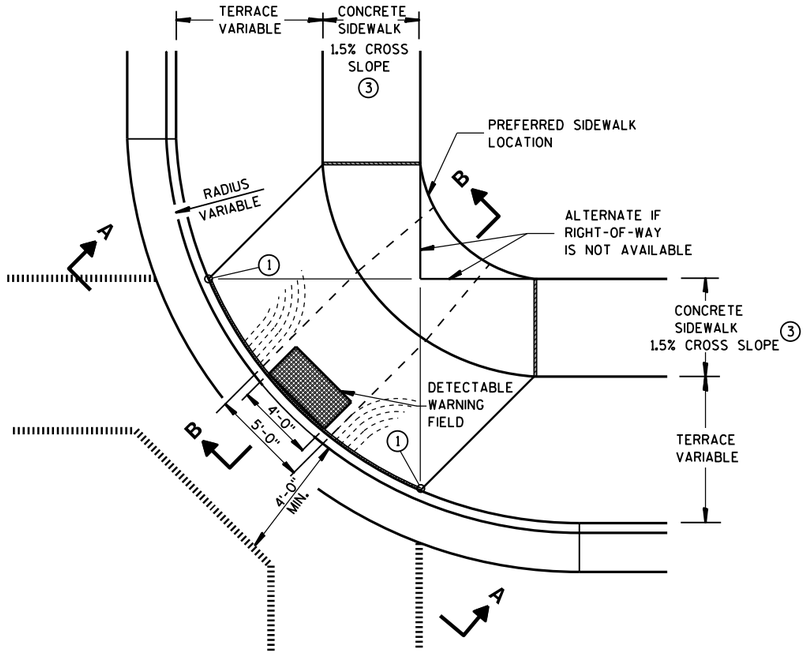
ENT

6

S.D.D. 8 D 1-17

6

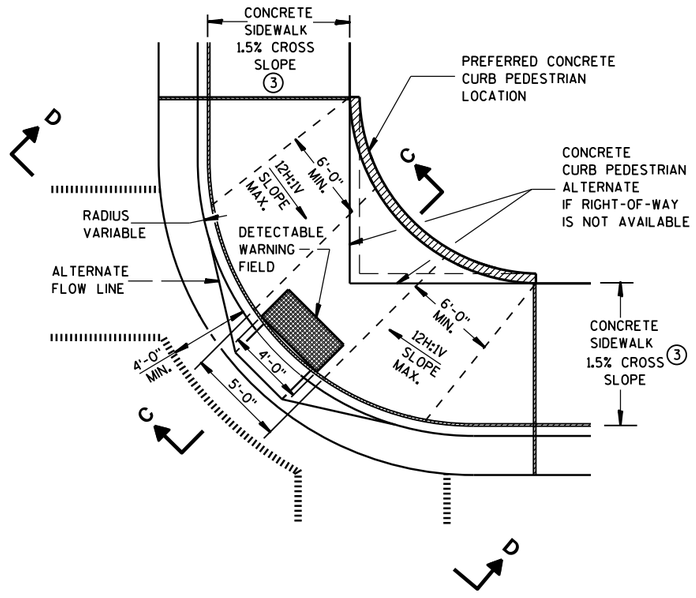
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

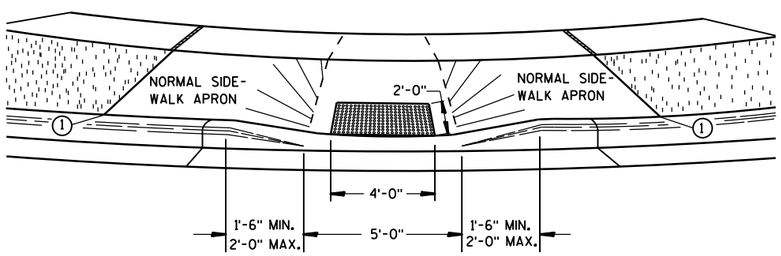
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

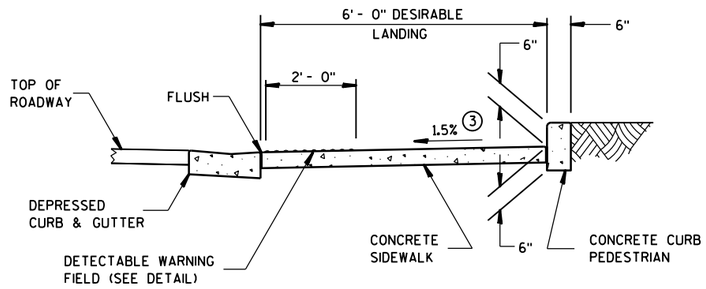
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

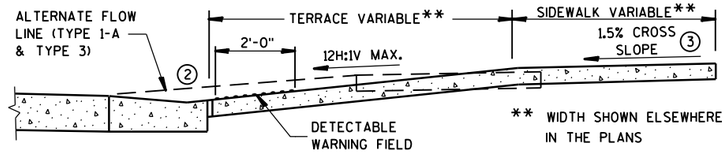
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



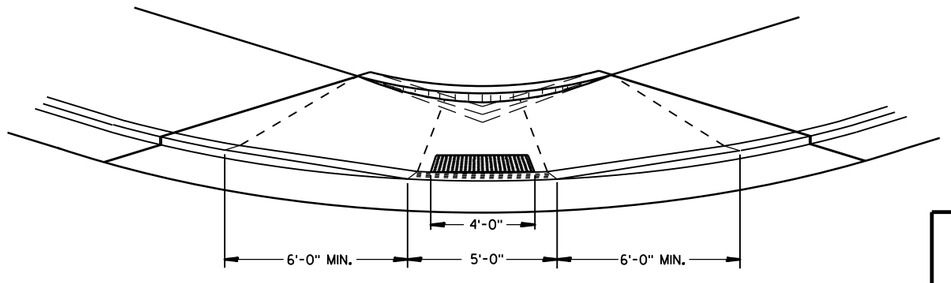
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

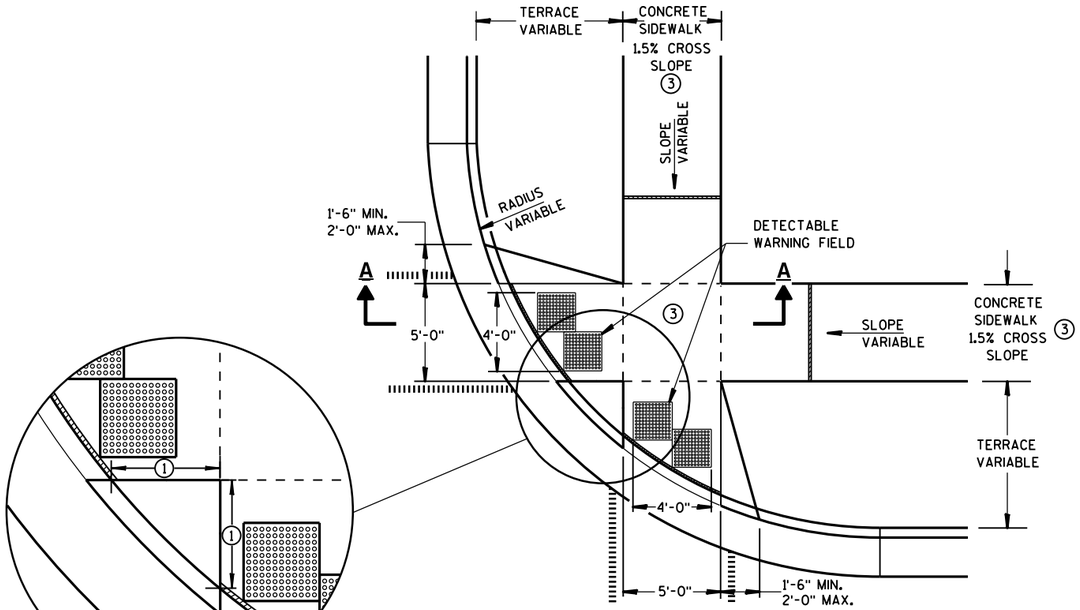
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

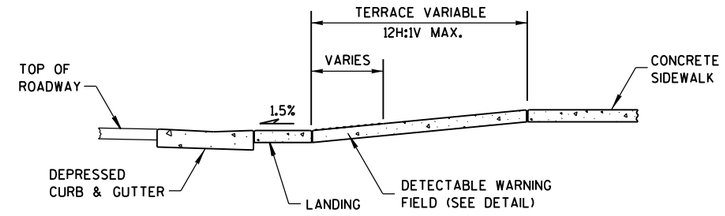
S.D.D. 8 D 5-15a

6

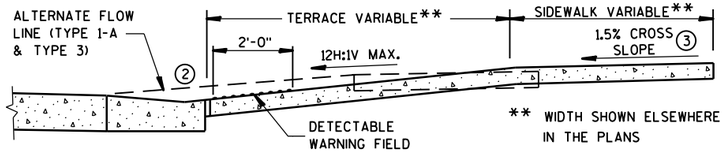
S.D.D. 8 D 5-15a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

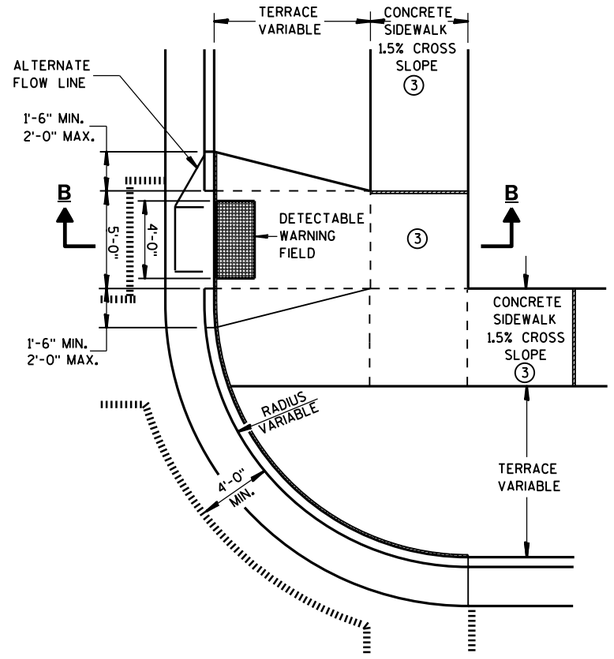
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



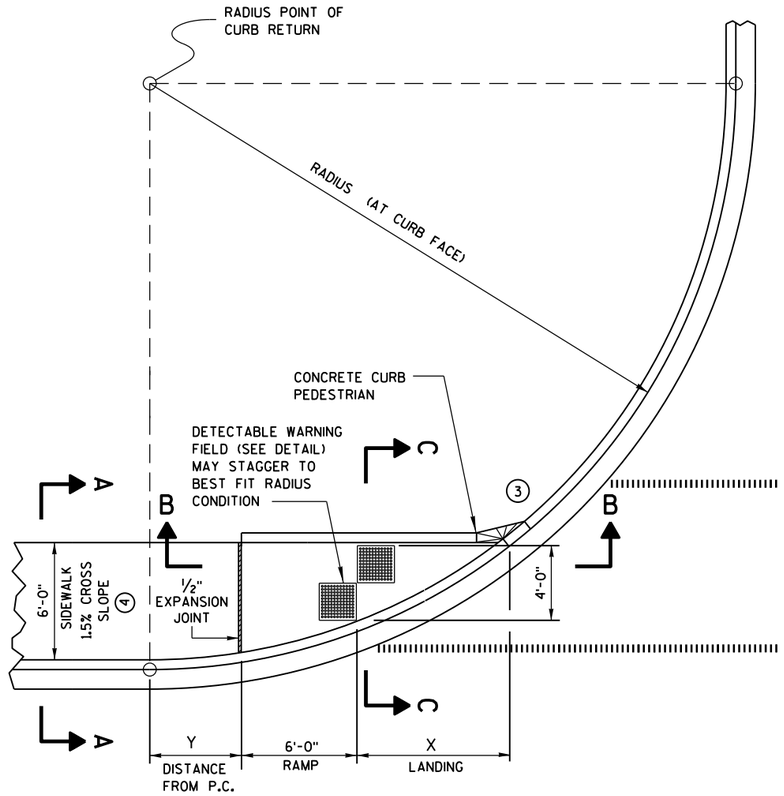
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

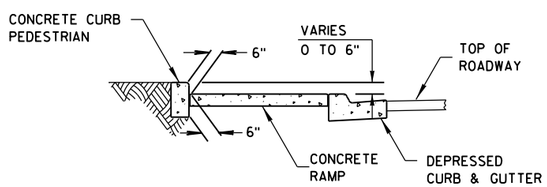
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

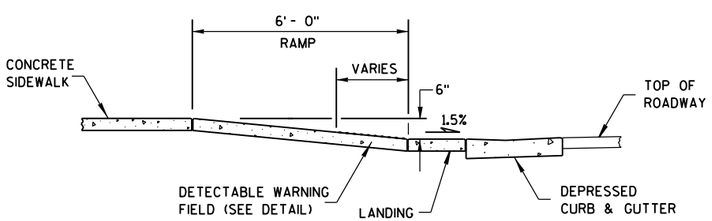
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



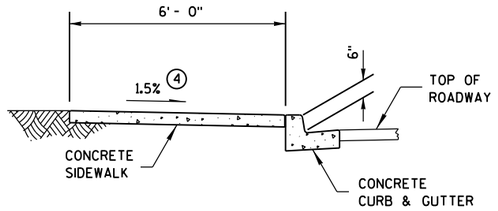
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

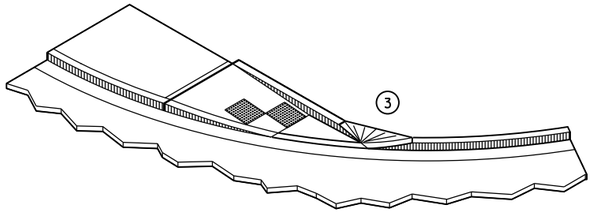
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

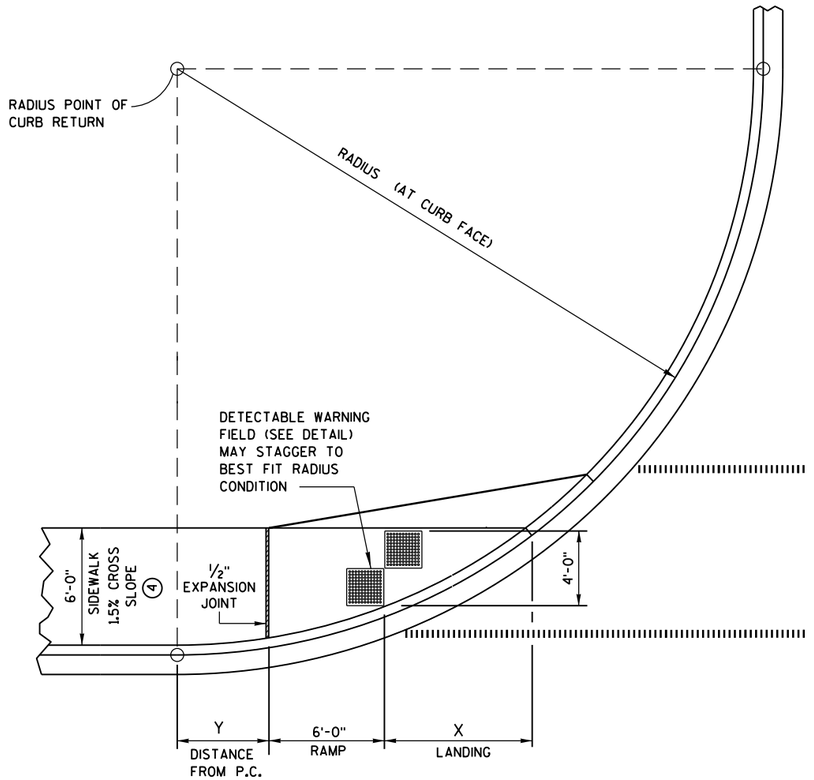
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

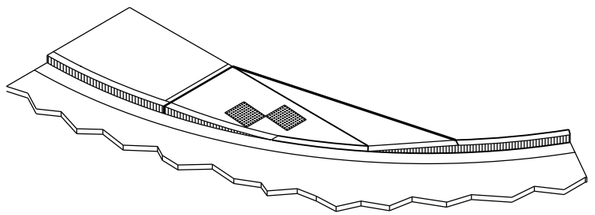
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

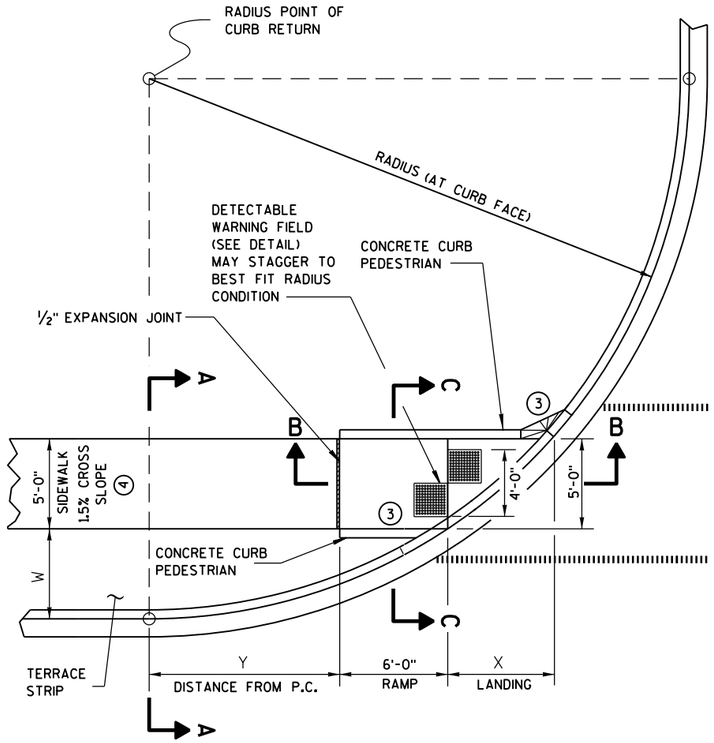
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW

LEGEND

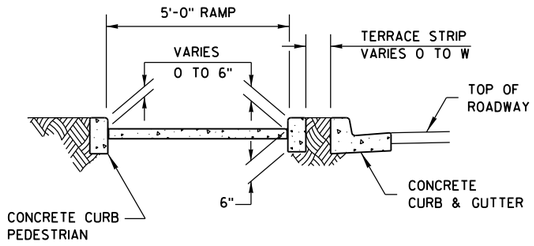
½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

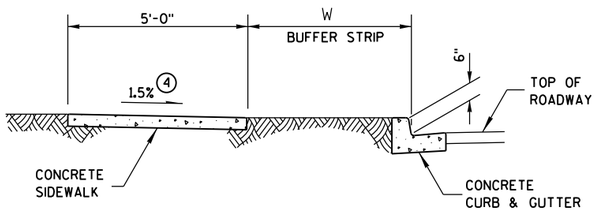
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

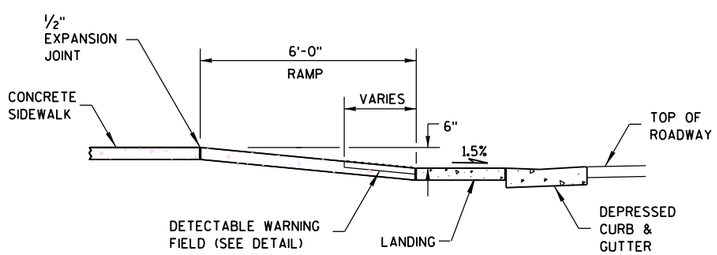
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

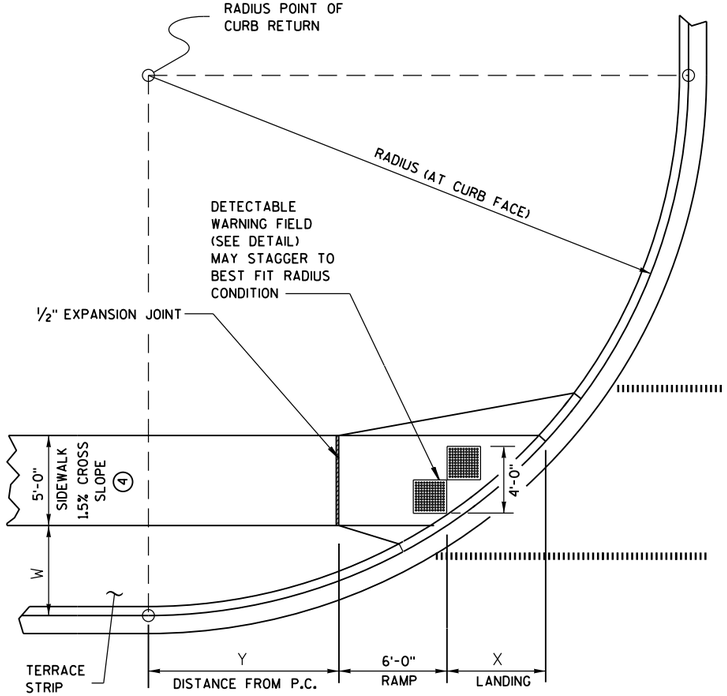
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



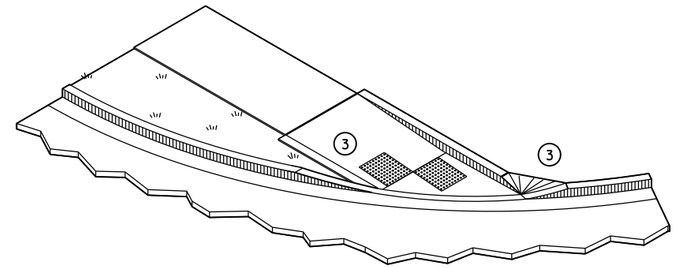
SECTION A-A FOR TYPE 4B



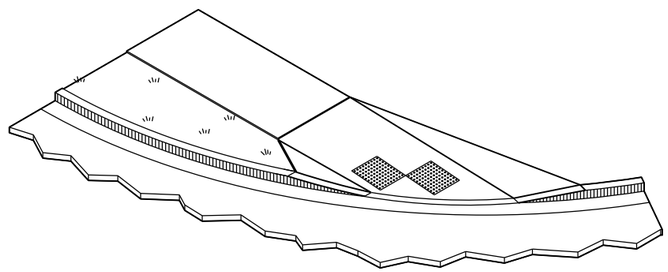
SECTION B-B FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



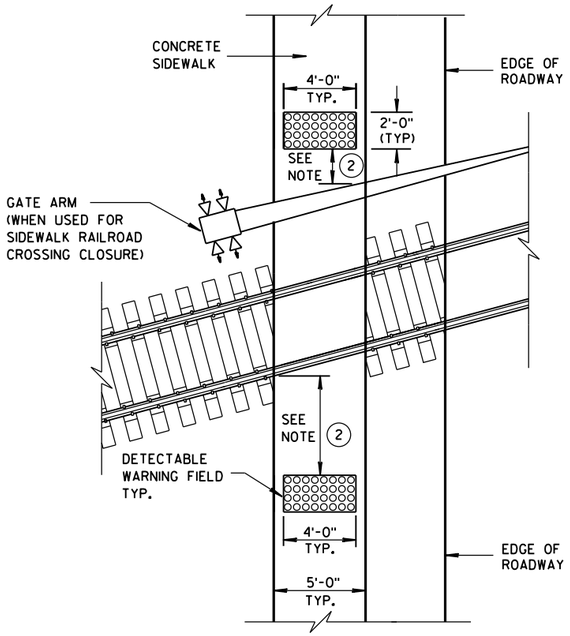
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

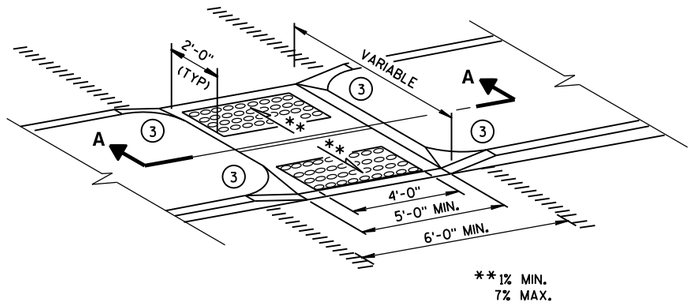
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

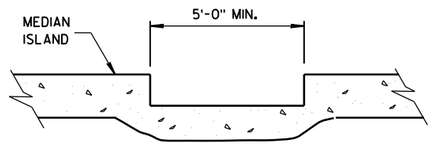
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

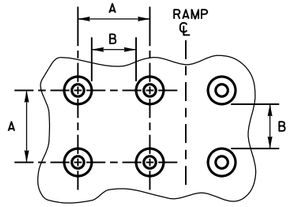
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



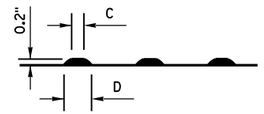
SECTION A-A



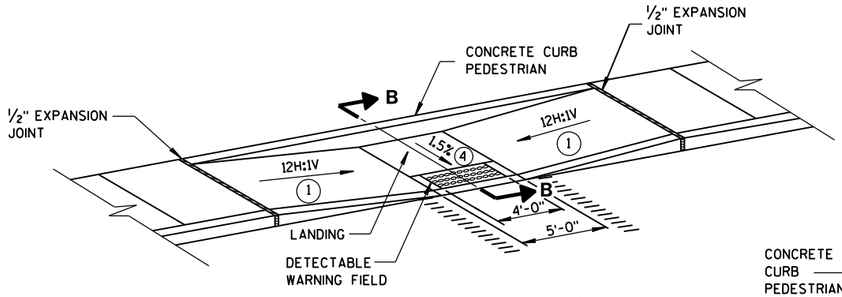
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

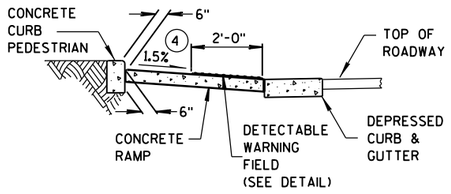
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

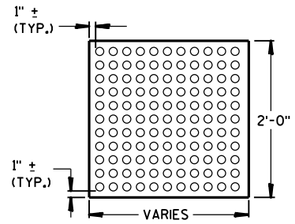


MID-BLOCK CROSSING
TYPE 7A



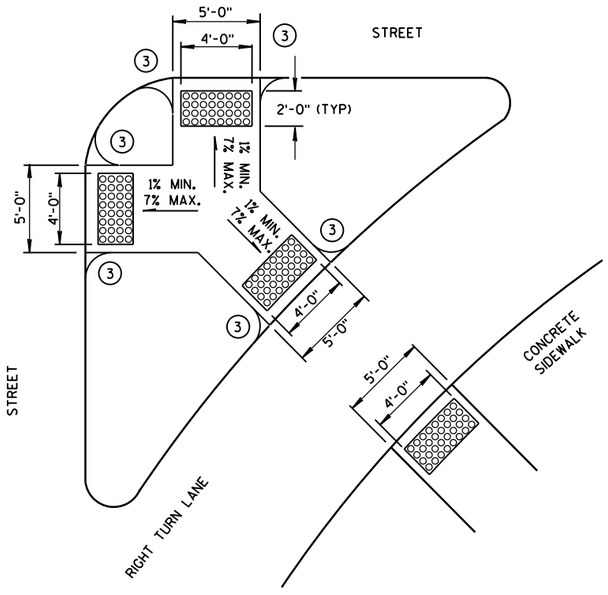
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

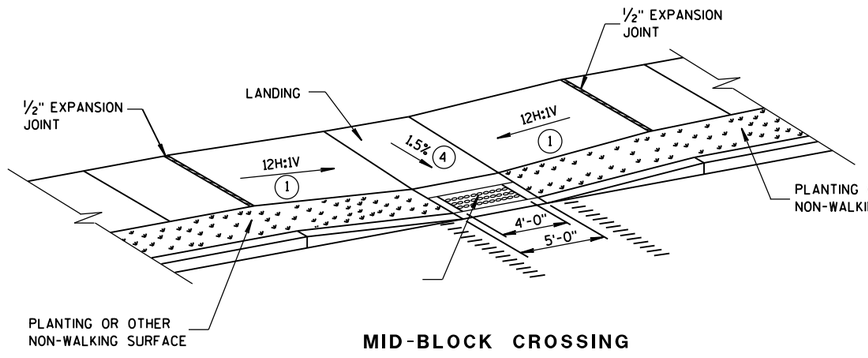


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

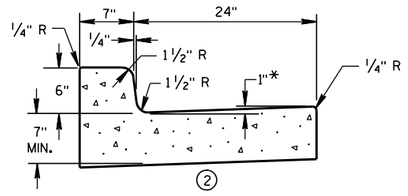
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

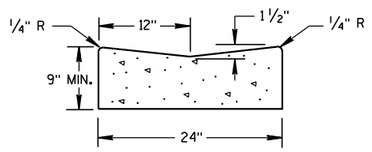
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

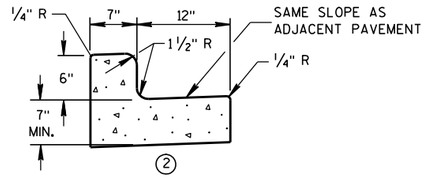
S.D.D. 8 D 5-15e



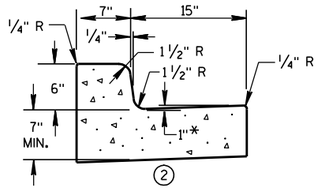
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

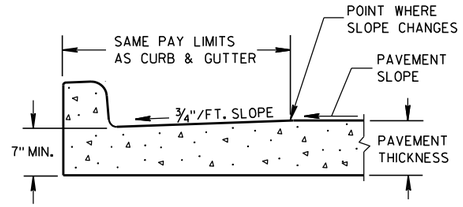


① CONCRETE CURB & GUTTER 19"



① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

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.

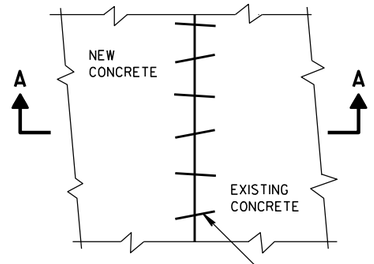
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

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 7" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

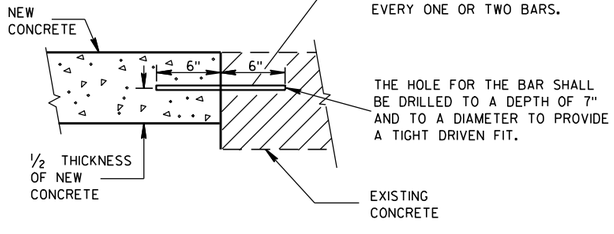
③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.



PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

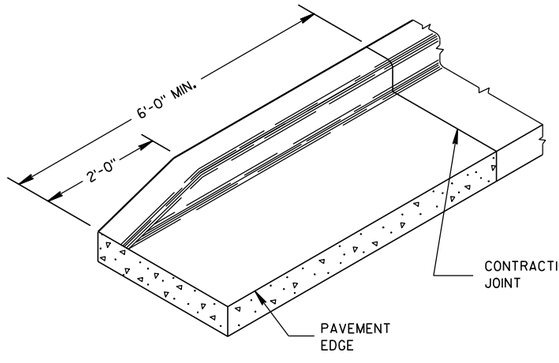
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



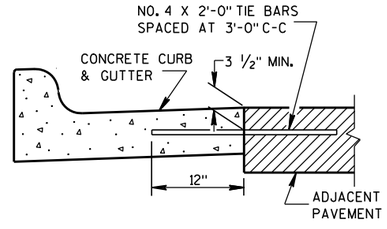
THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

SECTION A-A

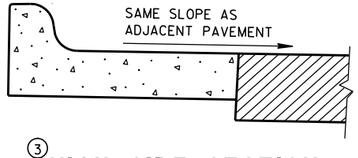
PAVEMENT TIES



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION

(TYPICAL FOR ALL CURB & GUTTER)

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010 — DATE

/S/ Jerry Zogg — ROADWAY STANDARDS ENGINEER

ENT

FHWA

6

S.D.D.® 8 D 16-10

GENERAL NOTES

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

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 6" 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 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

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. CONDUIT 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 1 FOOT 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 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

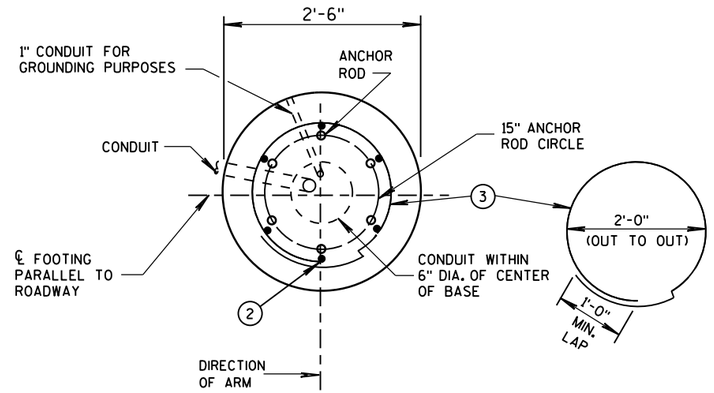
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

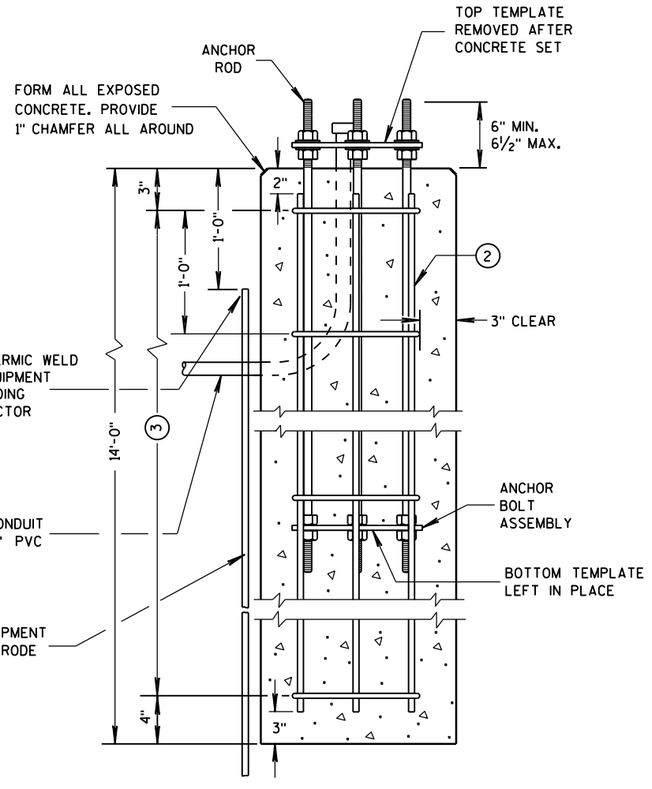
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

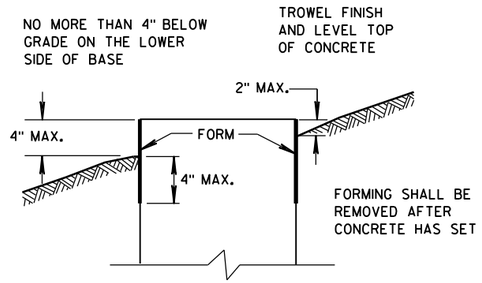
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



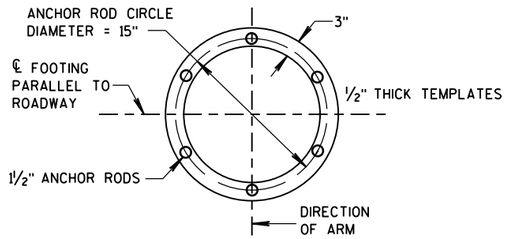


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

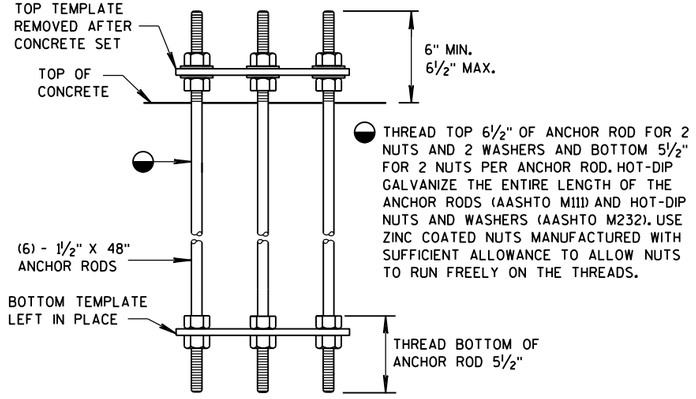
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-1 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

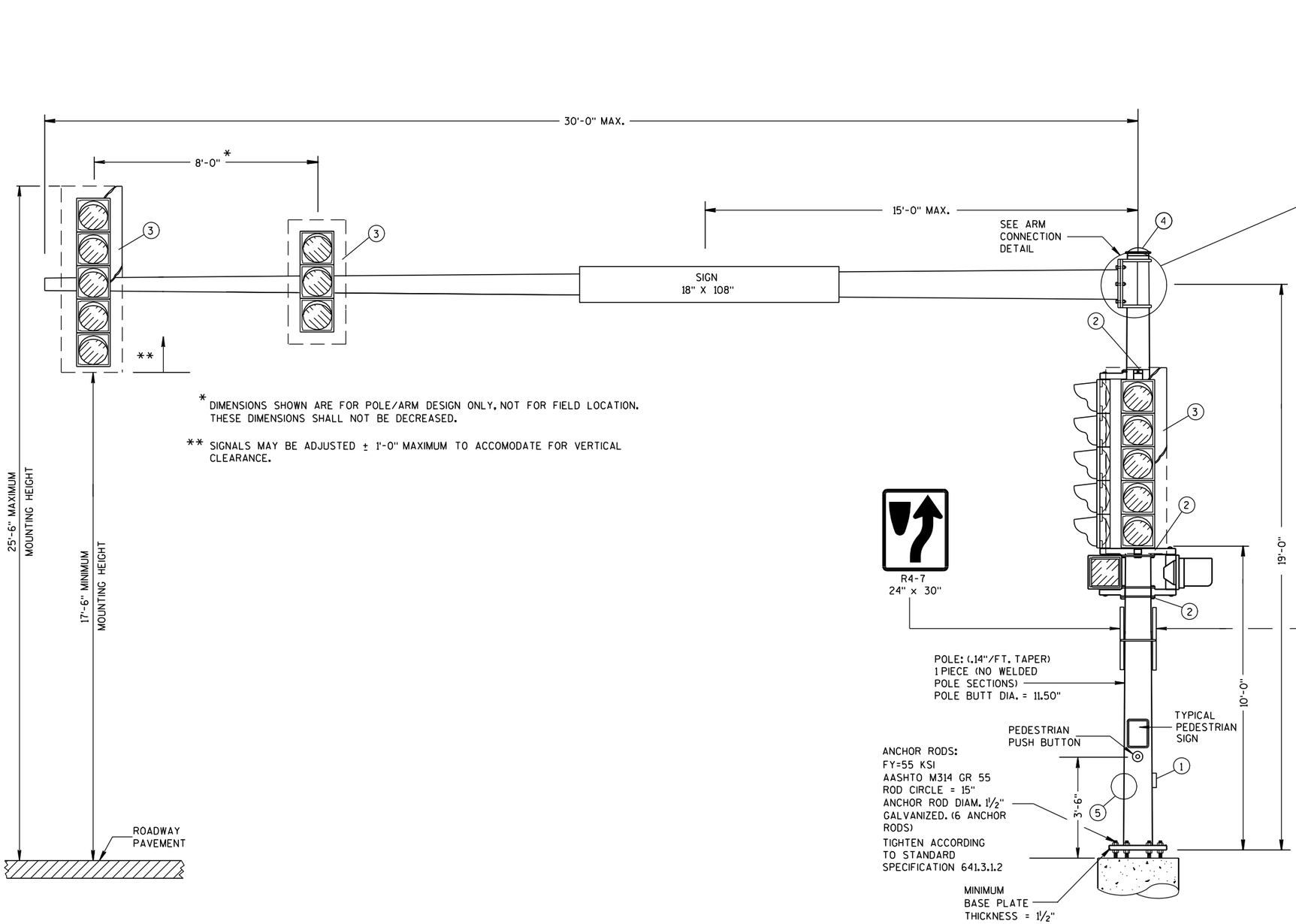
1-16-2013 DATE

/S/ Ahmet Demirbilek STATE ELECTRICAL

FHWA

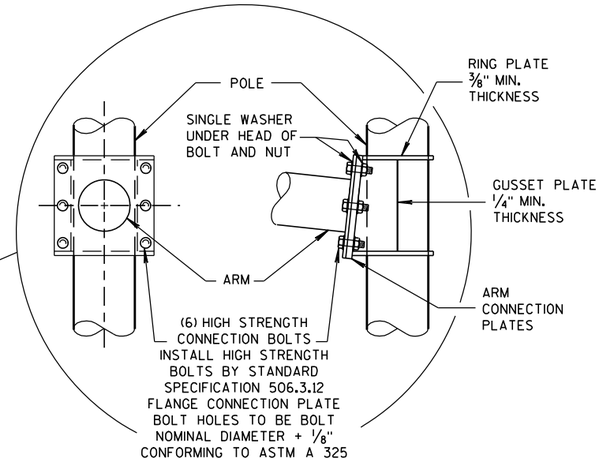
6

S.D.D. 9 C 11-3



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY. NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/2/2011 DATE	/S/ Thomas J. Corrigan STATE ELECTRICAL ENGI 178 HWYS
FHWA	

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE LATEST AASHTO AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

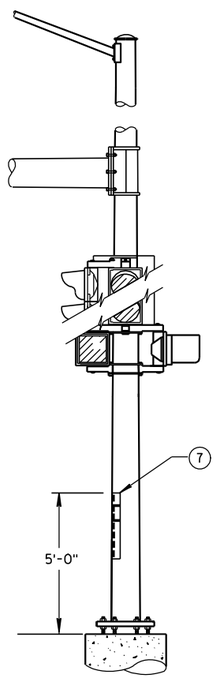
(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

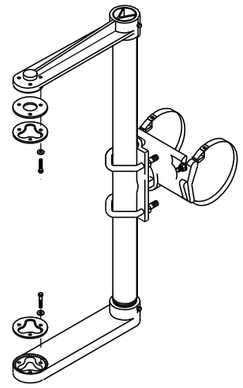
(7) INSTALL DEPARTMENT PROVIDED STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 5'-0" ABOVE THE CURB OR SHOULDER . ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

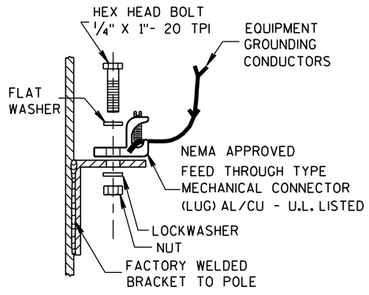


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



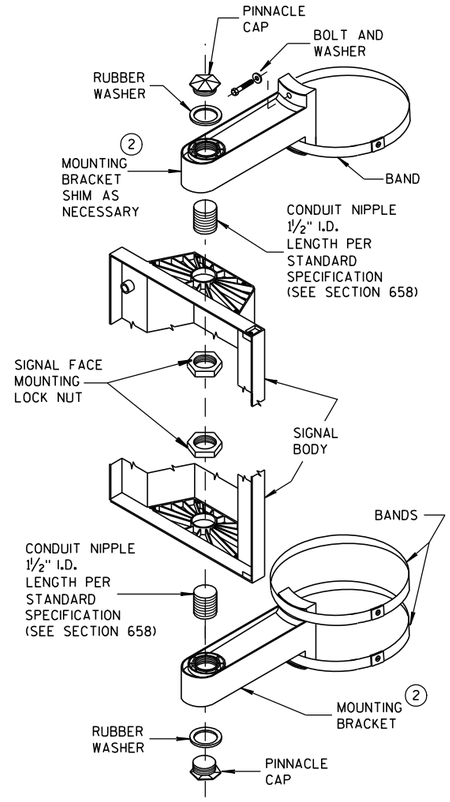
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

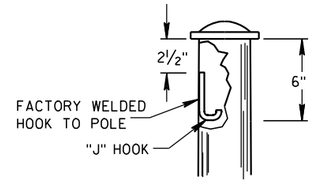


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE

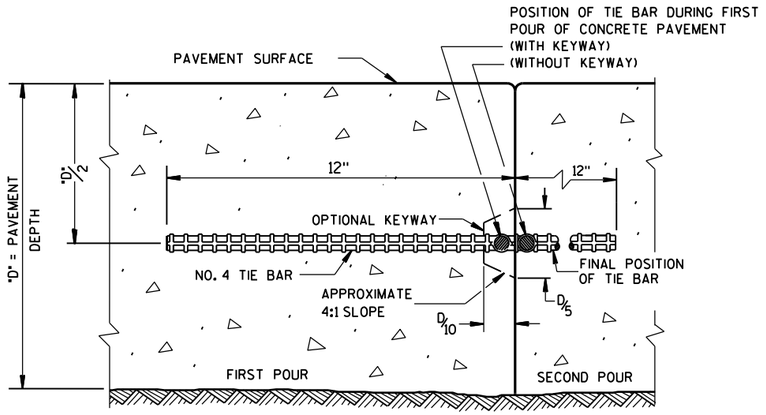
/S/ Thomas J. Corrigan
STATE ELECTRICAL ENGI

HWYS

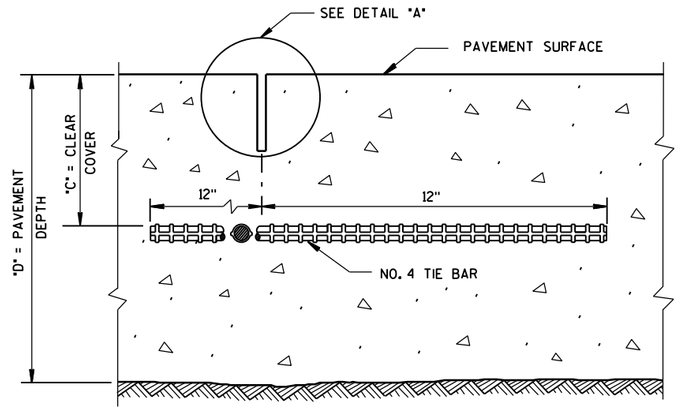
FHWA

6

S.D.D. 9 E 8-4e



CONSTRUCTION JOINT



SAWED JOINT

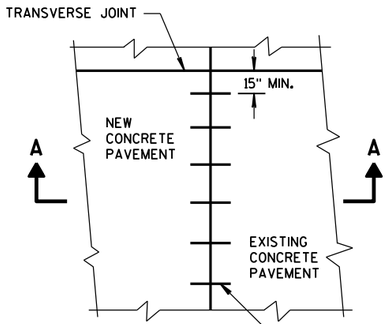
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

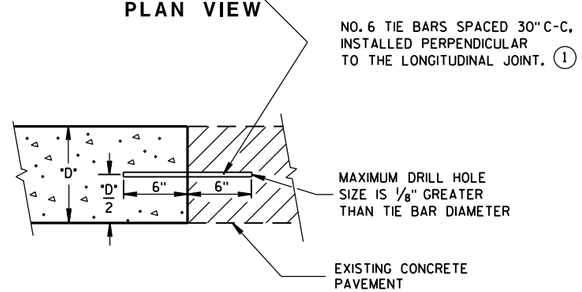
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

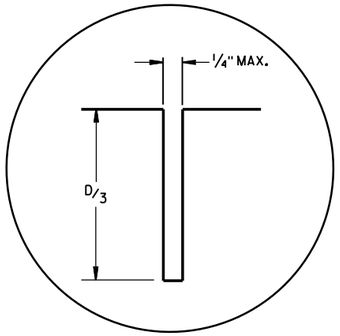


PLAN VIEW



SECTION A-A

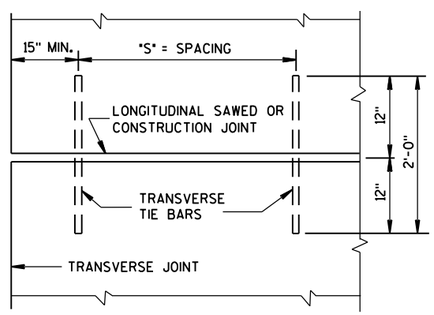
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ...NEER

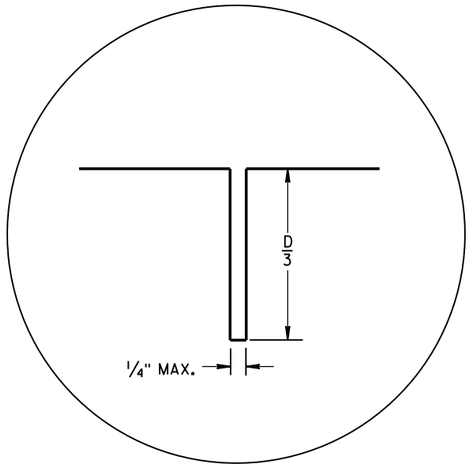
FHWA

6

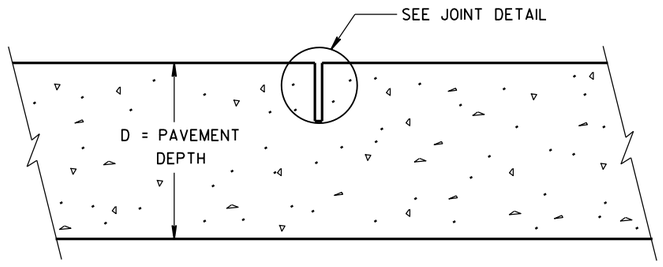
S.D.D. 13 C 1-16

6

S.D.D. 13 C 1-16



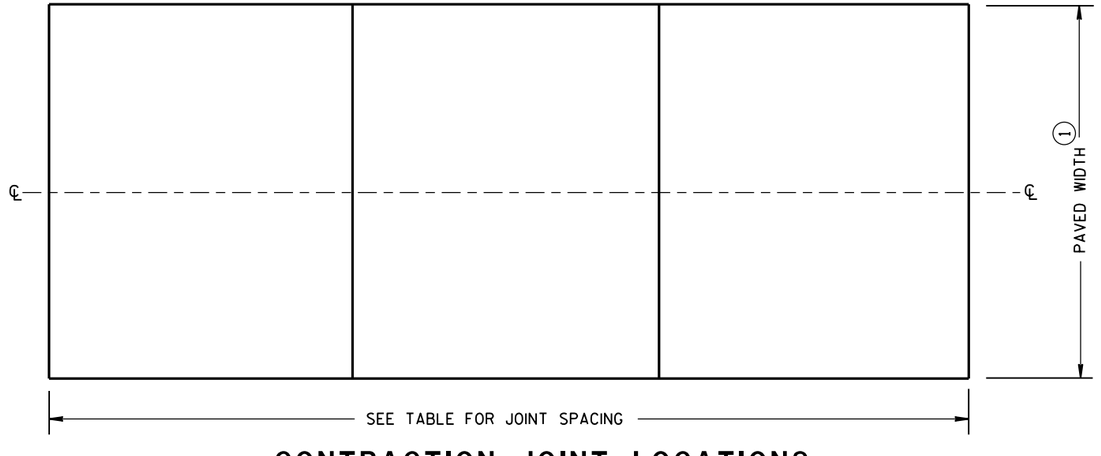
JOINT DETAIL



CONTRACTION JOINT

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

CONSTRUCTION JOINTS

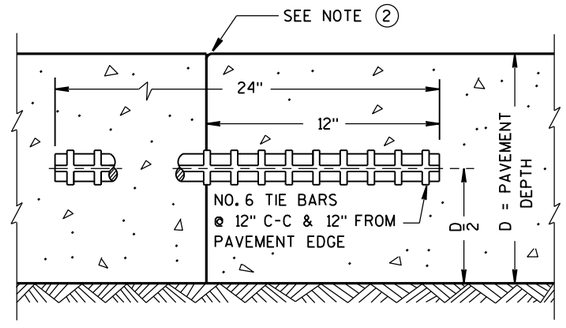
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

(2) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.



TIED TRANSVERSE CONSTRUCTION JOINT

6

6

S.D.D. 13 C 4-16

S.D.D. 13 C 4-16

URBAN NON-DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

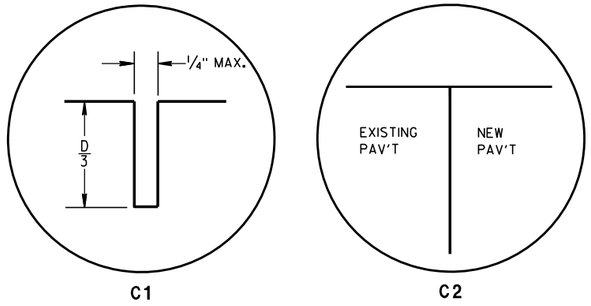
APPROVED

5/3/2013 DATE

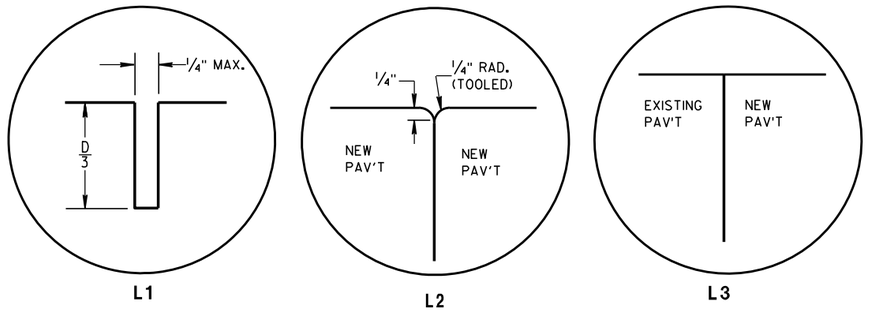
/S/ Deb Bischoff
PAVEMENT POLICY & DE

FHWA

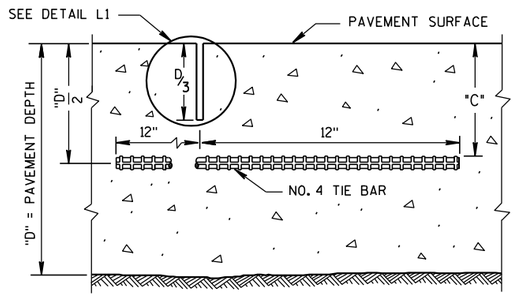
IEER



TRANSVERSE JOINTS

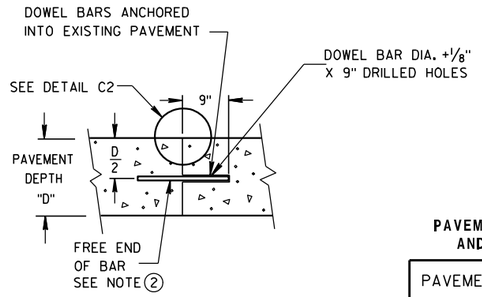


LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

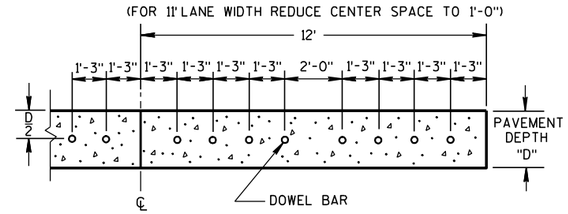
GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 24 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



SECTION E-E

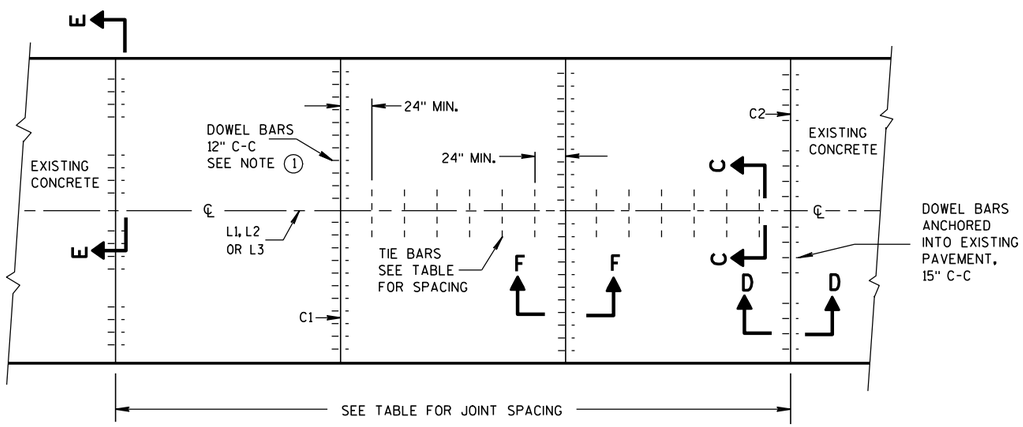
SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH "D"	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6, 6 ½"	NONE	12'
7, 7 ½"	1"	14'
8, 8 ½"	1 ¼"	15'
9, 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

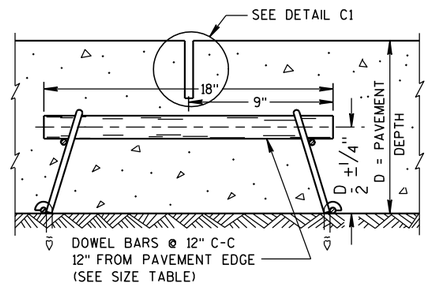
TIE BAR LOCATION TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING C-C	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 ½"	3"±½"	48"	42"
7, 7 ½"	3 ¼"±1"	45"	36"
8, 8 ½"	3 ¾"±1"	39"	30"
9, 9 ½"	4 ¼"±1"	33"	27"
10, 10 ½"	4 ¾"±1"	30"	24"
11, 11 ½"	5 ¼"±1"	27"	21"
12"	5 ¾"±1"	24"	21"



PLAN VIEW

CONCRETE BASE CONTRACTION JOINT LOCATIONS



SECTION F-F

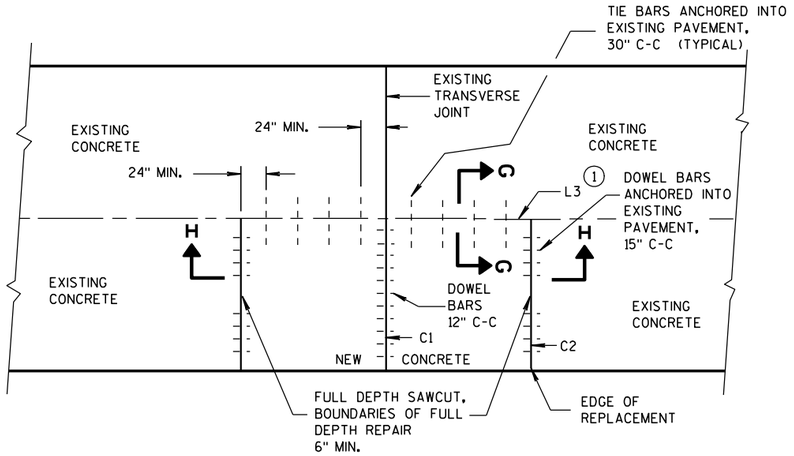
CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 15-5a

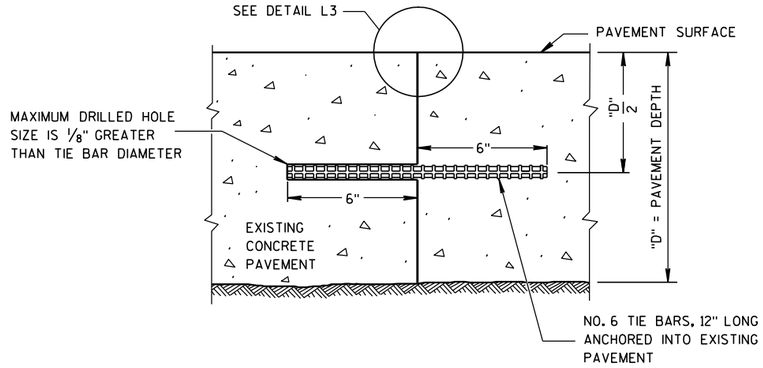


PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR

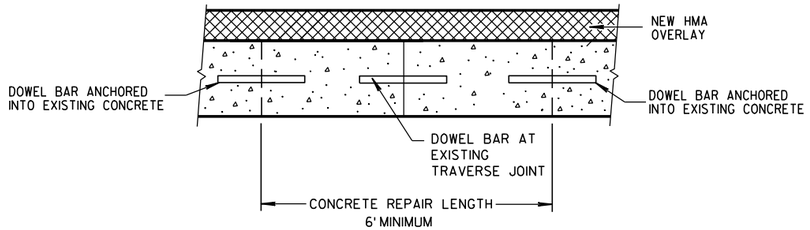
GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.



SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H-H

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

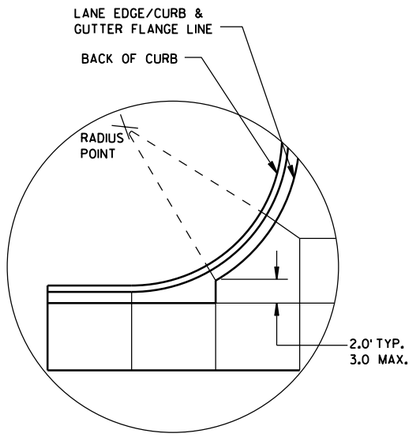
12-11-2009
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & D ENGINEER

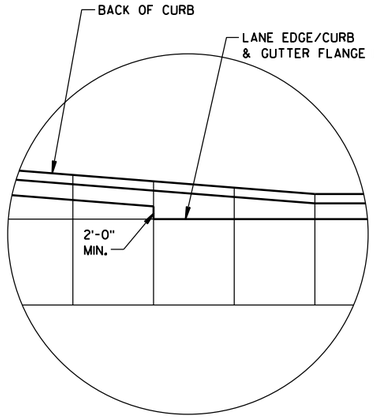
FHWA

6

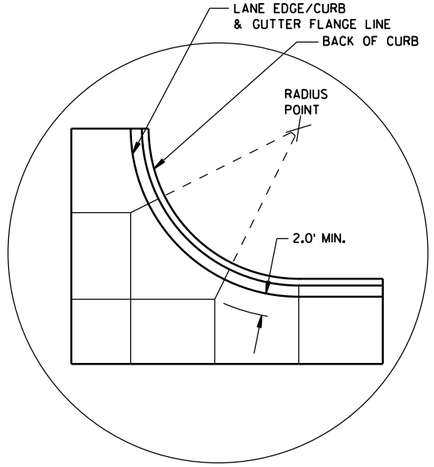
S.D.D. 13 C 15-5b



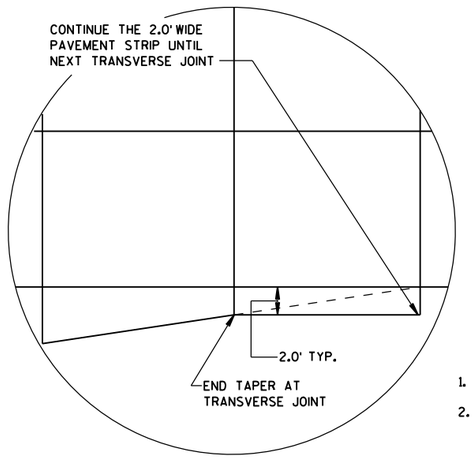
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

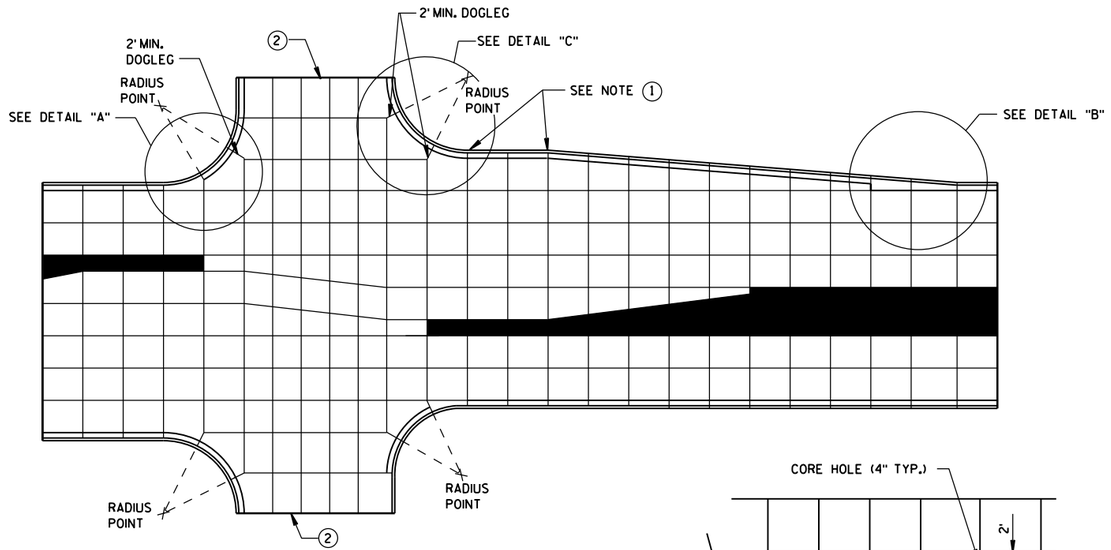
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.

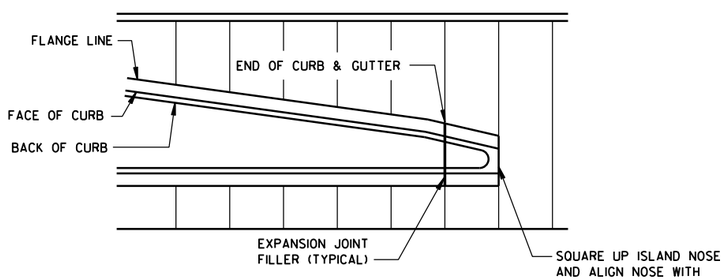


STANDARD INTERSECTION

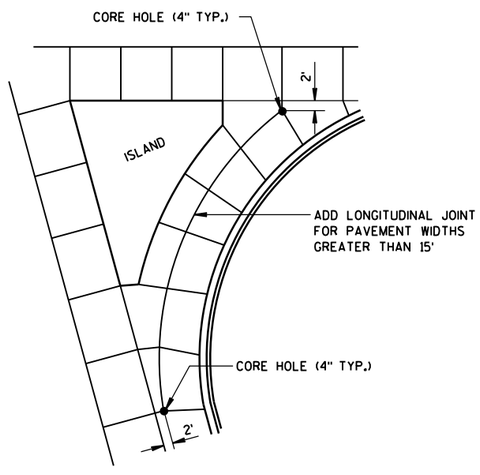
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

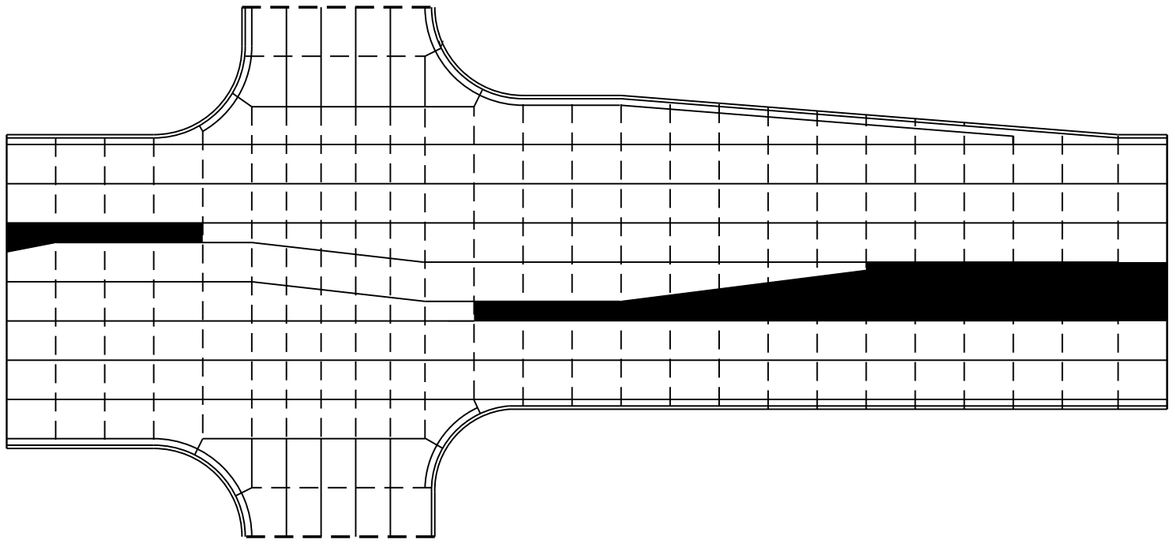
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

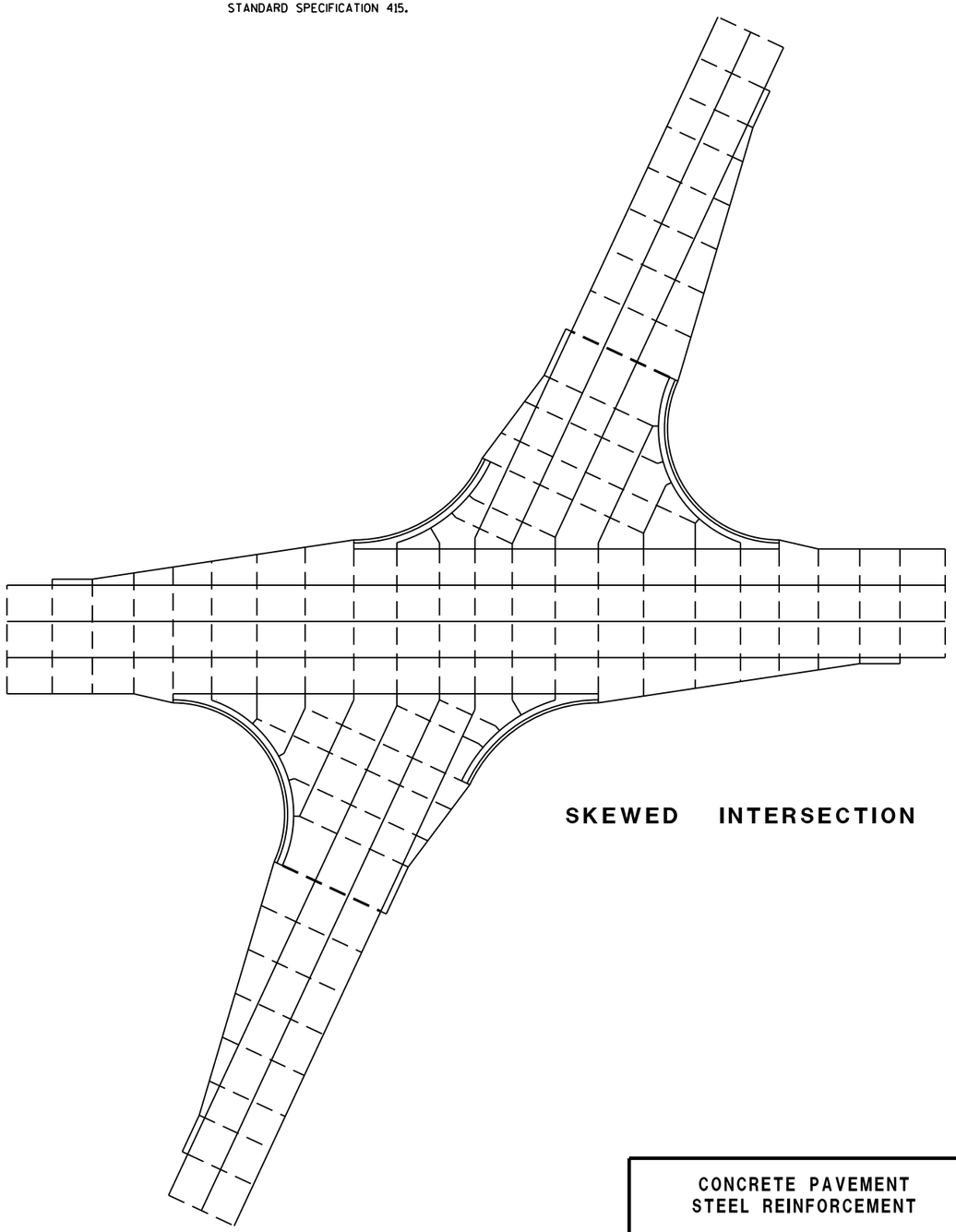
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

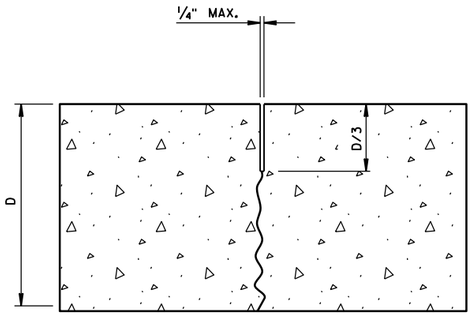
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

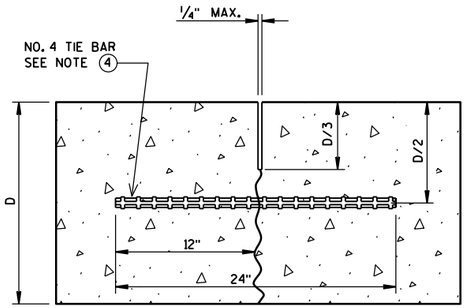
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



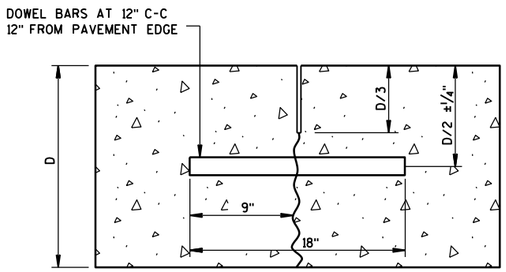
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

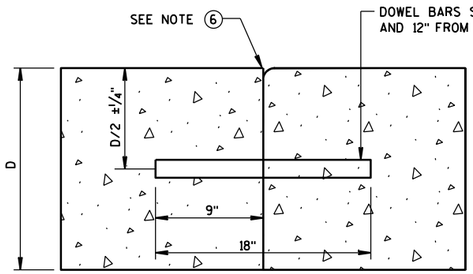
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



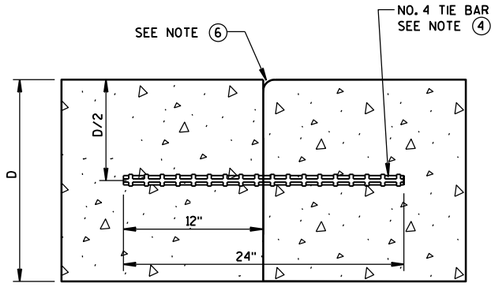
DOWELED-TRANSVERSE

CONTRACTION JOINTS

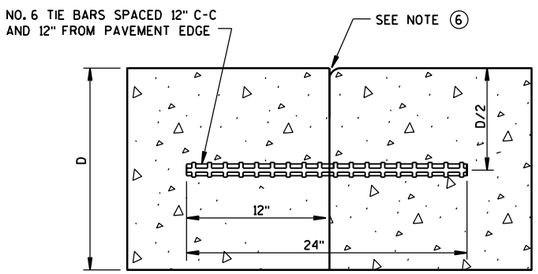
SEE NOTE (2)



DOWELED TRANSVERSE

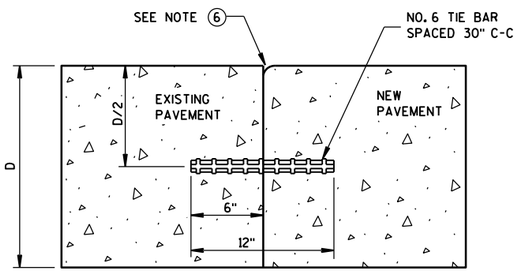


TIED LONGITUDINAL



TIED TRANSVERSE

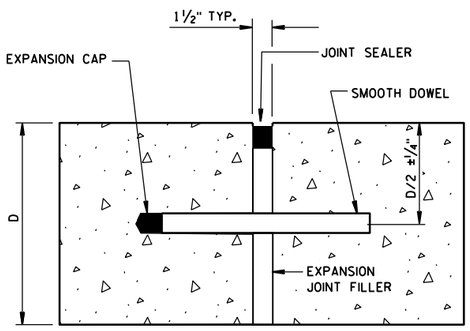
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

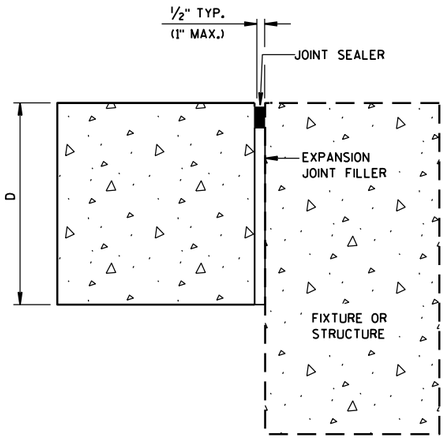
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

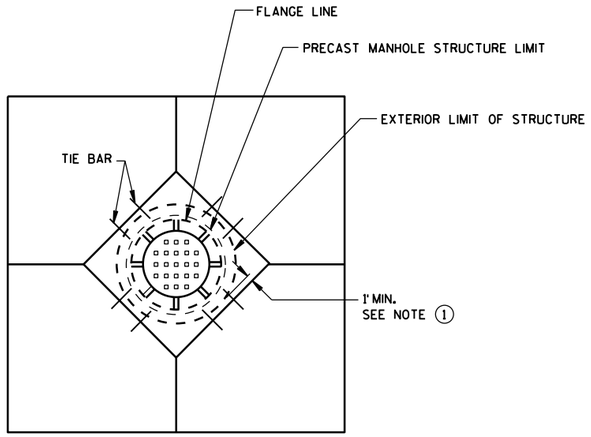
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

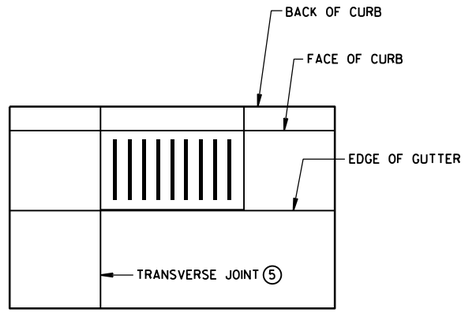
S.D.D. 13 C 18-2c

6

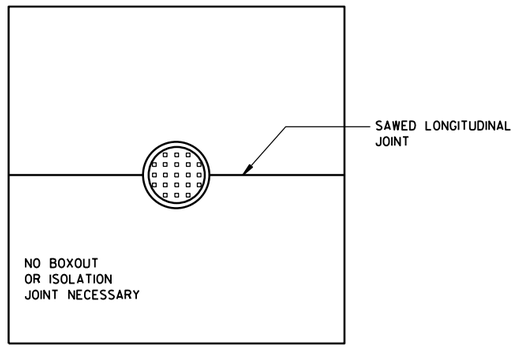
S.D.D. 13 C 18-2c



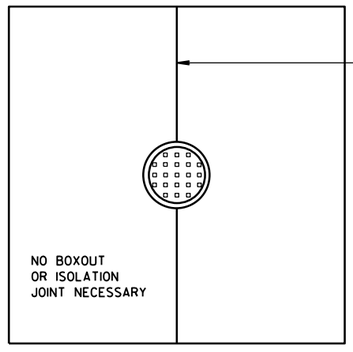
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



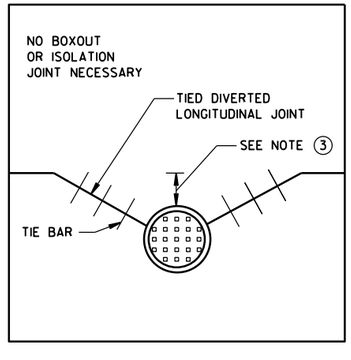
INLET WITH TRANSVERSE JOINT



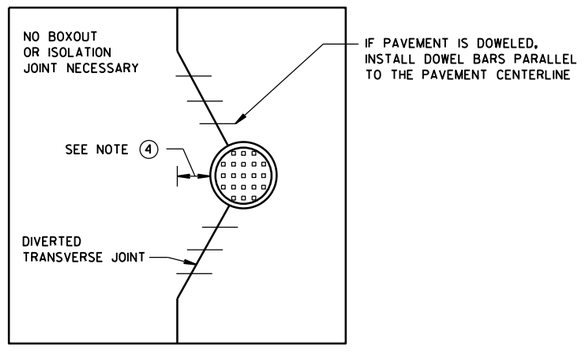
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

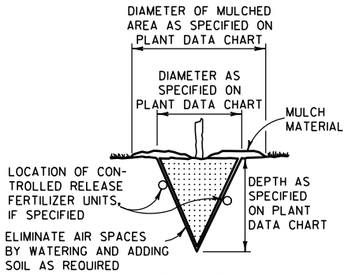
APPROVED

5-3-2013	/S/ Deb Bischoff	
DATE	PAVEMENT POLICY & DE	NEER

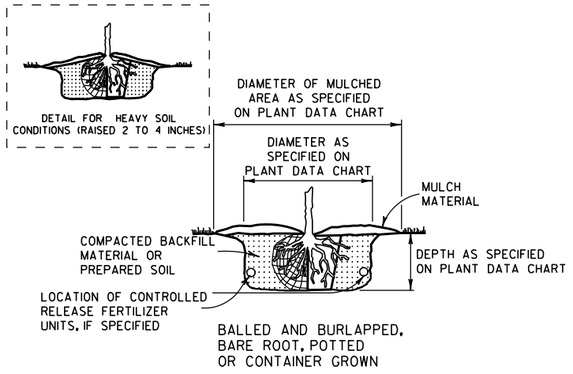
FHWA

6

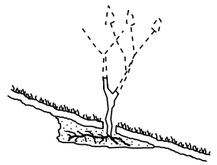
S.D.D. 13 C 18-2d



MACHINE MOVED

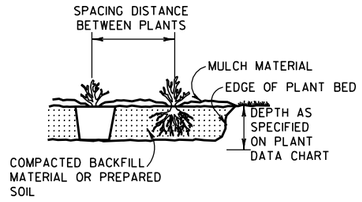


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



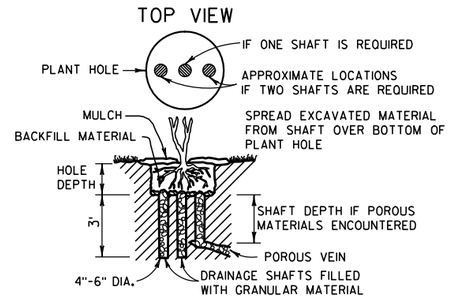
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

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



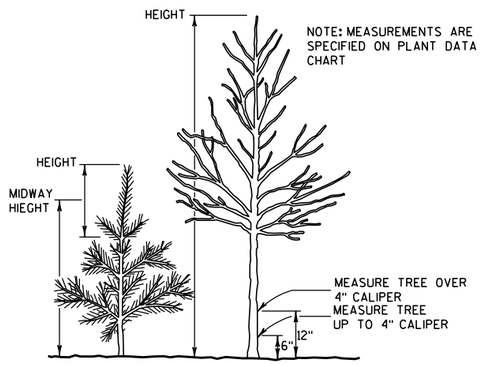
PREPARED BED (BARE ROOT AND POTTED)

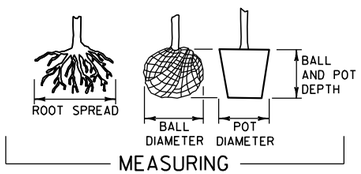
PLANTING



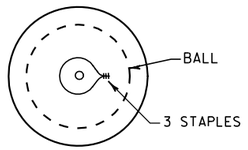
NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

DRAINING

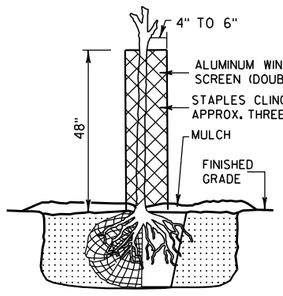




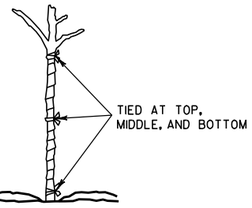
MEASURING



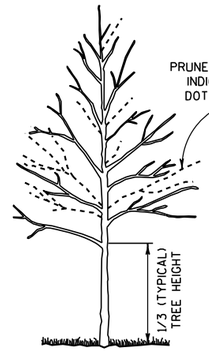
TOP VIEW



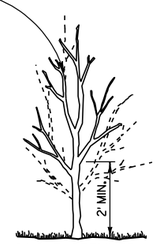
RODENT PROTECTION



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)

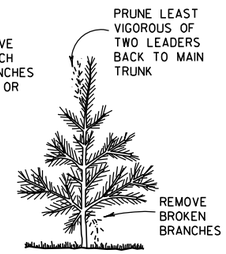
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES



SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

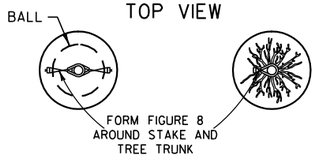


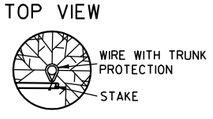
SUMAC

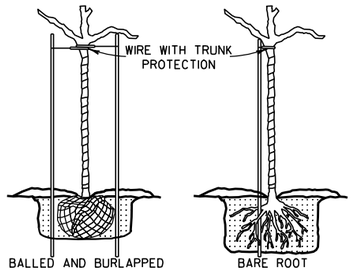


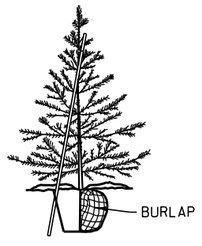
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



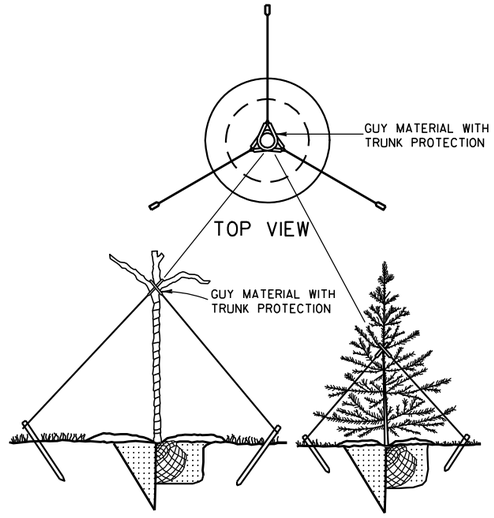






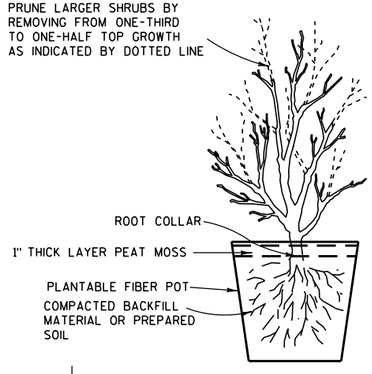
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



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.

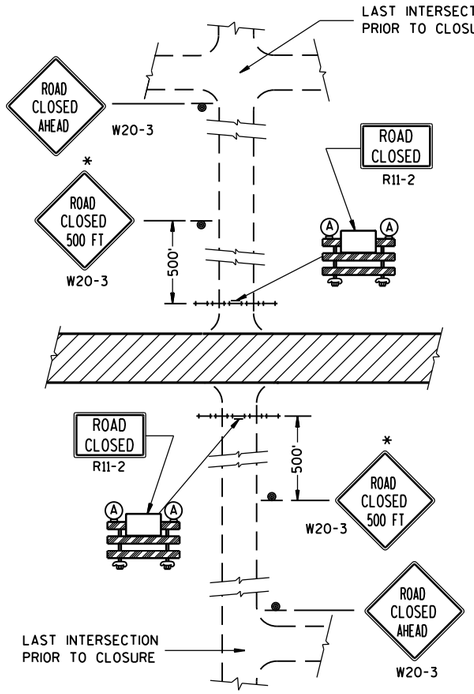
TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

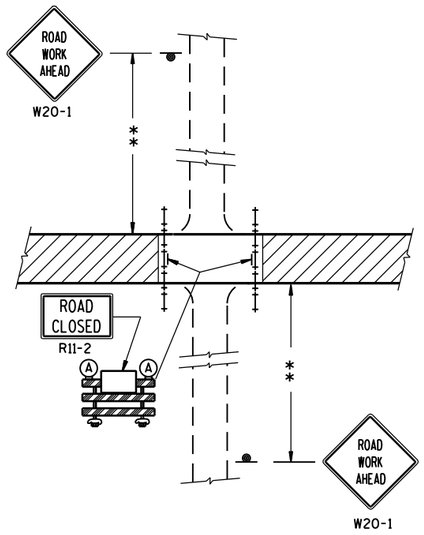
6

S.D.D. 14 A 2-1



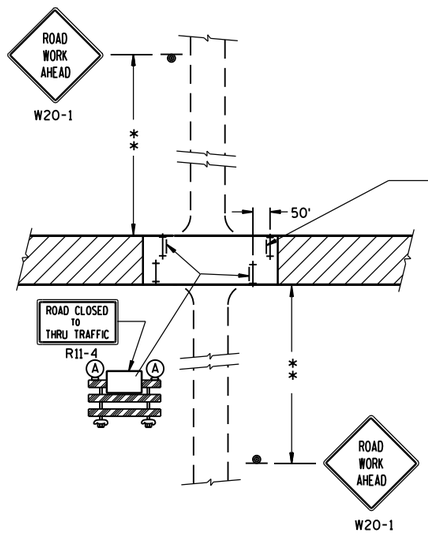
DETAIL 1

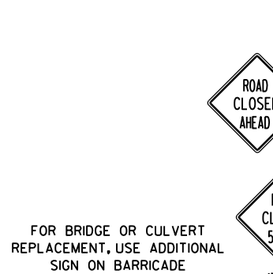
(NO ACCESS TO PROJECT)



DETAIL 2

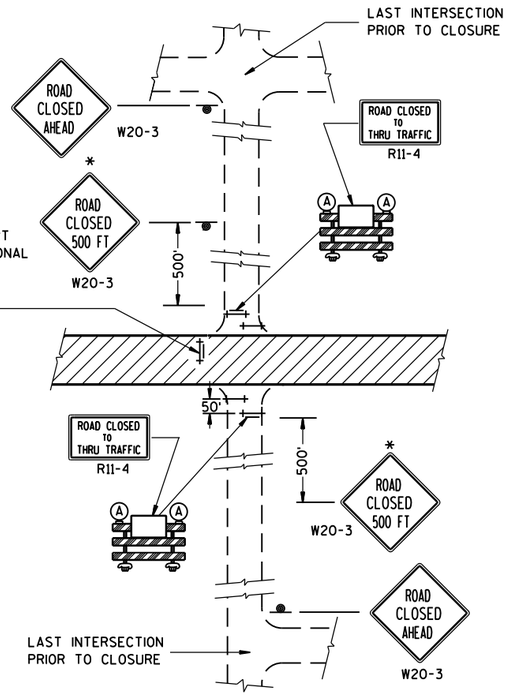
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES 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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 3-2

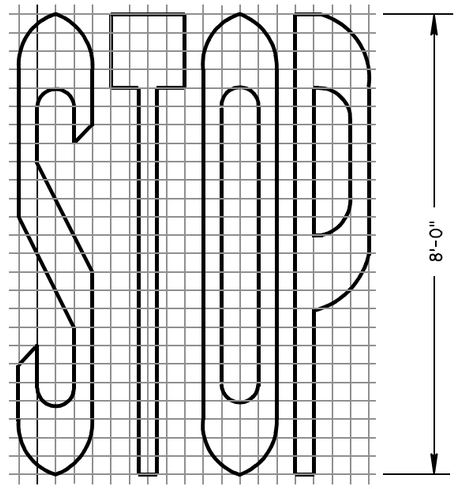
6

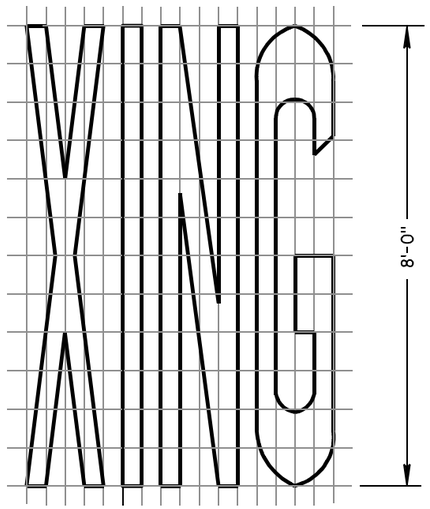
S.D.D. 15 C 3-2

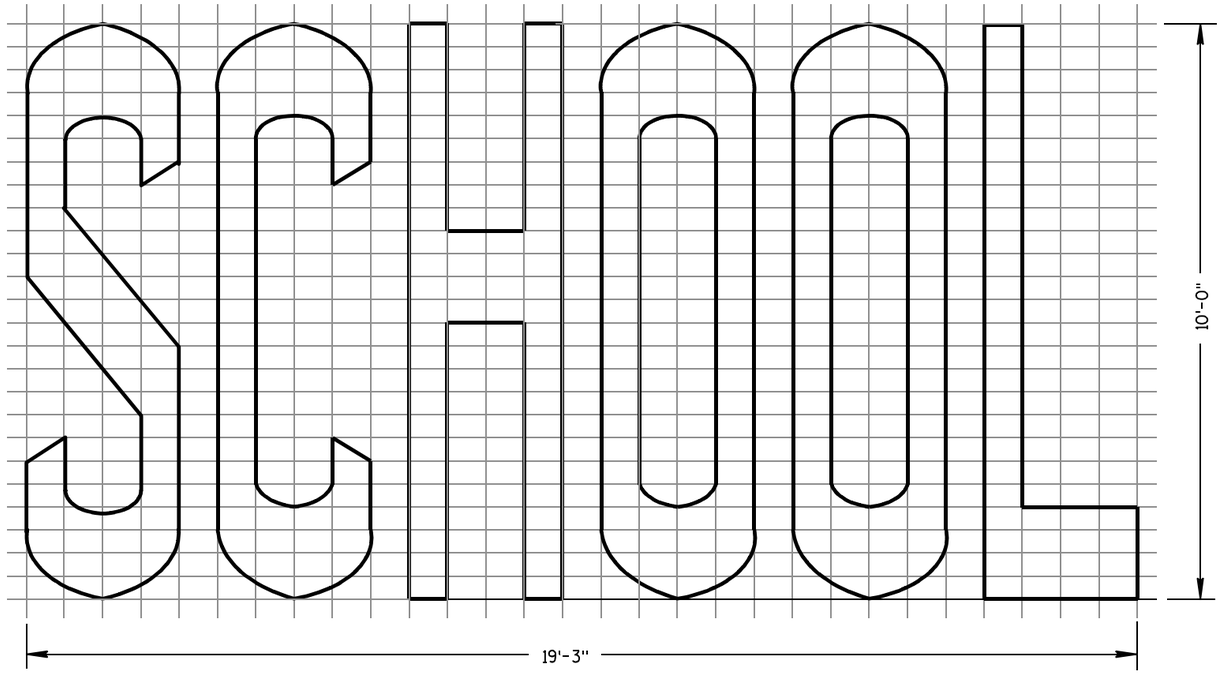
GENERAL NOTES

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

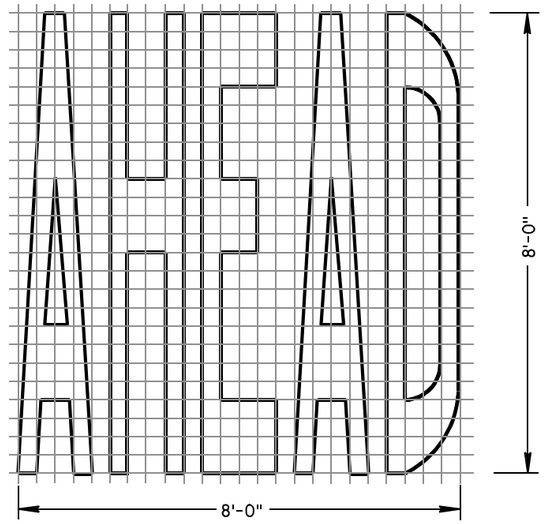
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

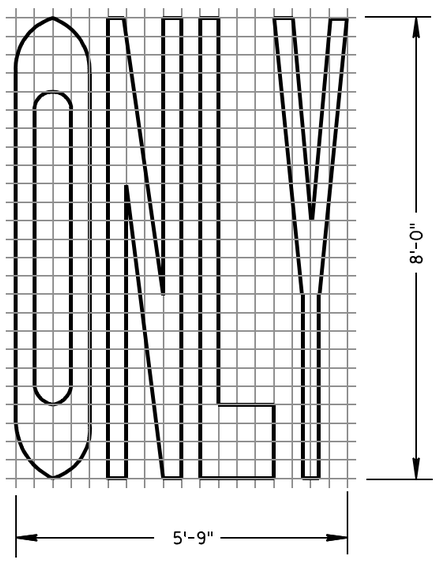


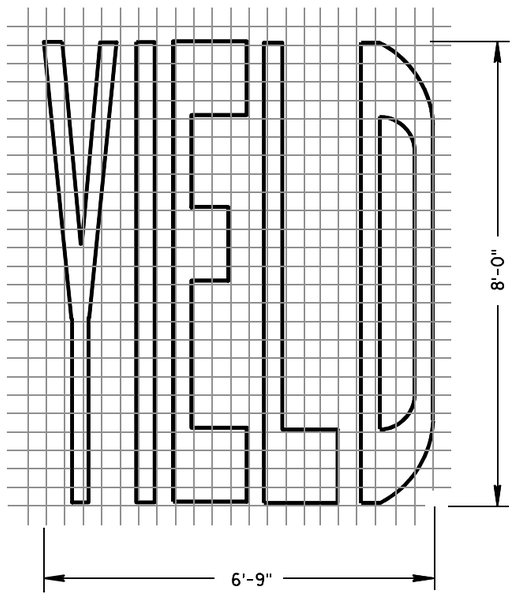


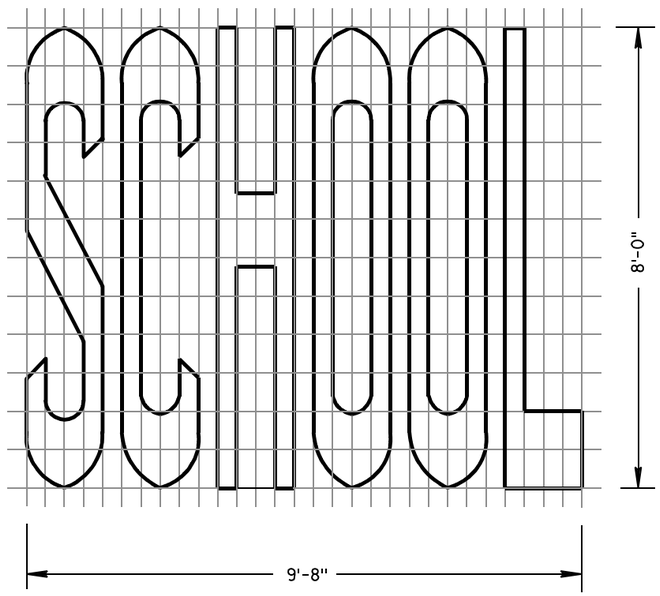


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

FHWA

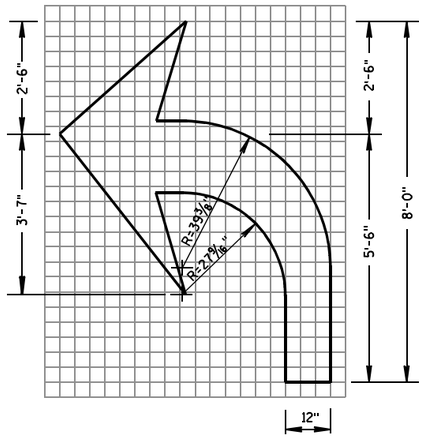
IGN

6

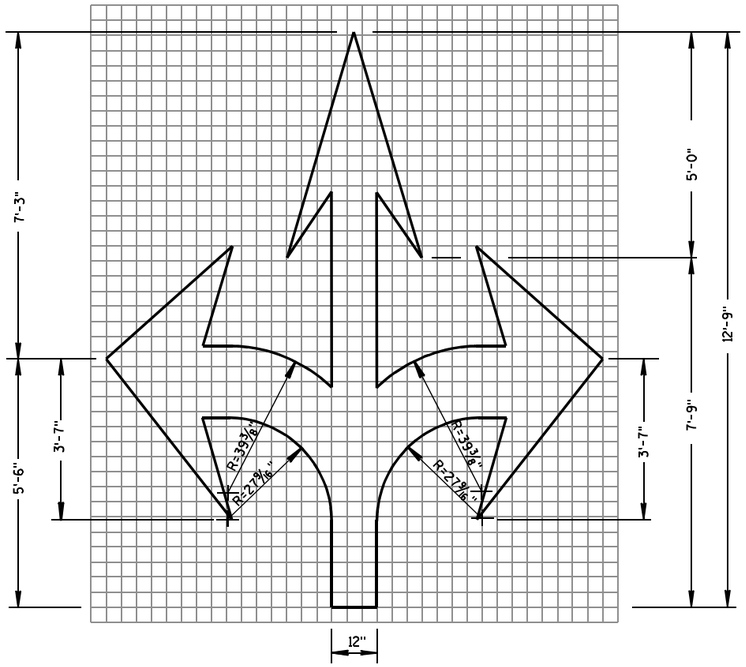
S.D.D. 15 C 7-12b

6

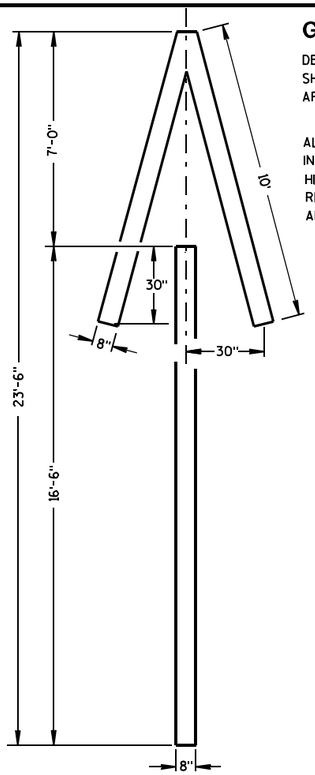
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6

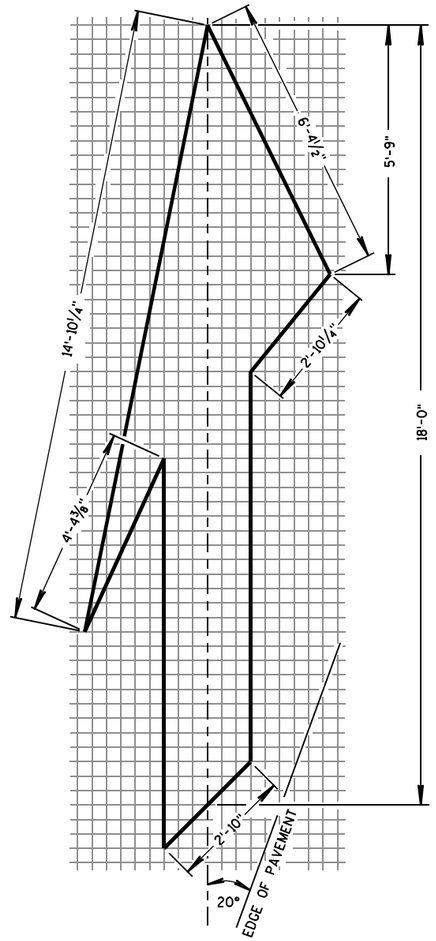


TYPE 4

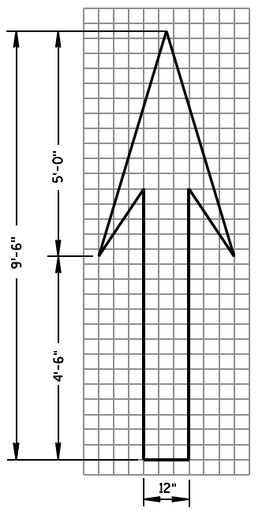
GENERAL NOTES

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

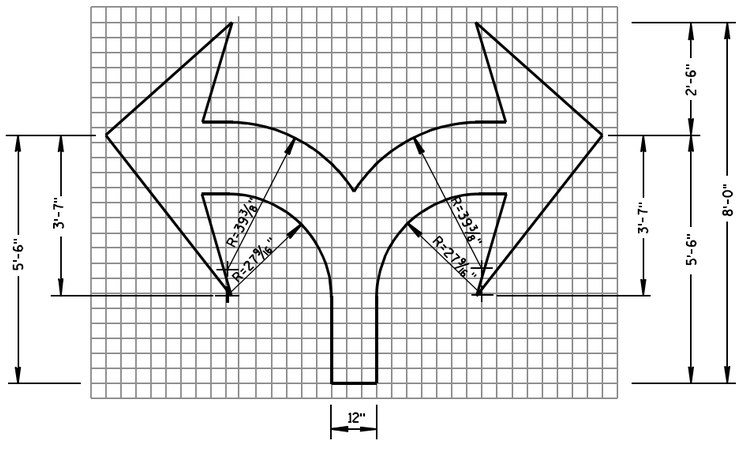
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



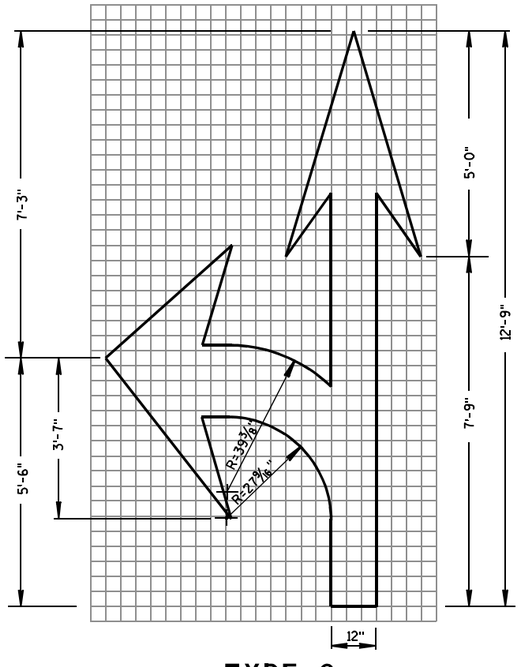
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

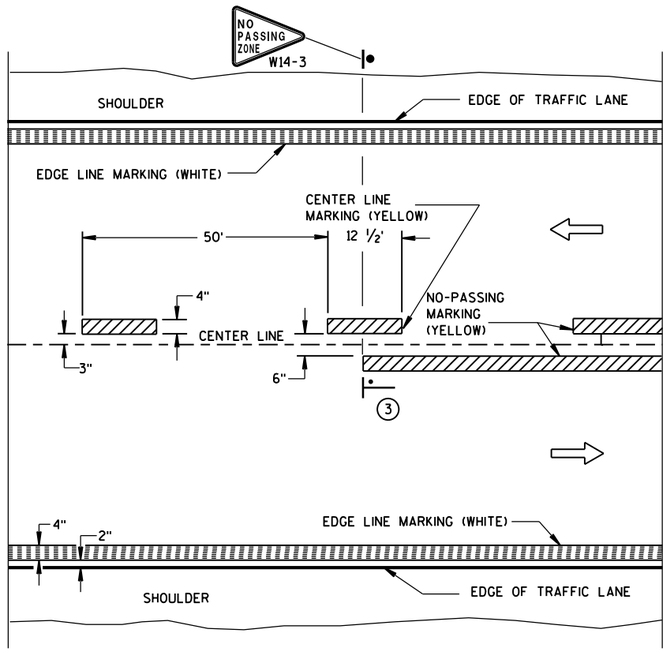
FHWA

6

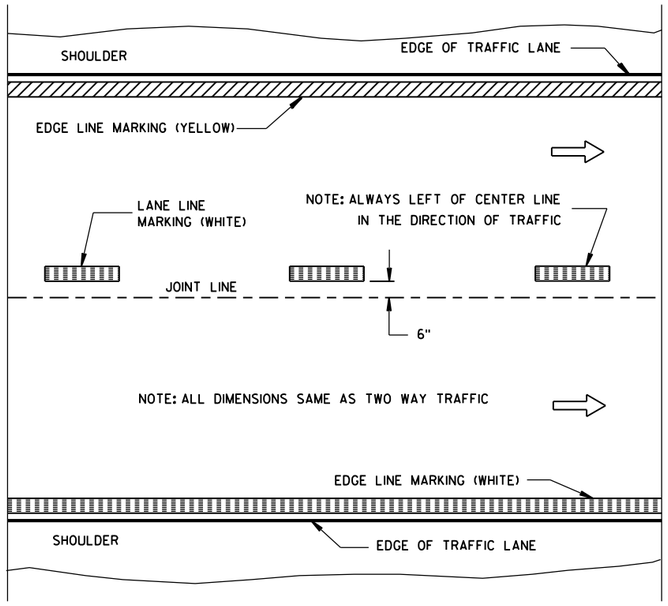
S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c

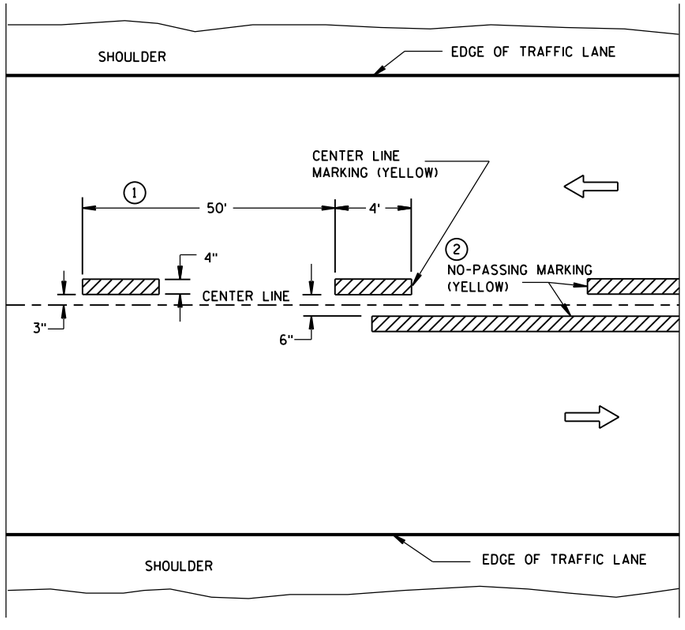


TWO WAY TRAFFIC

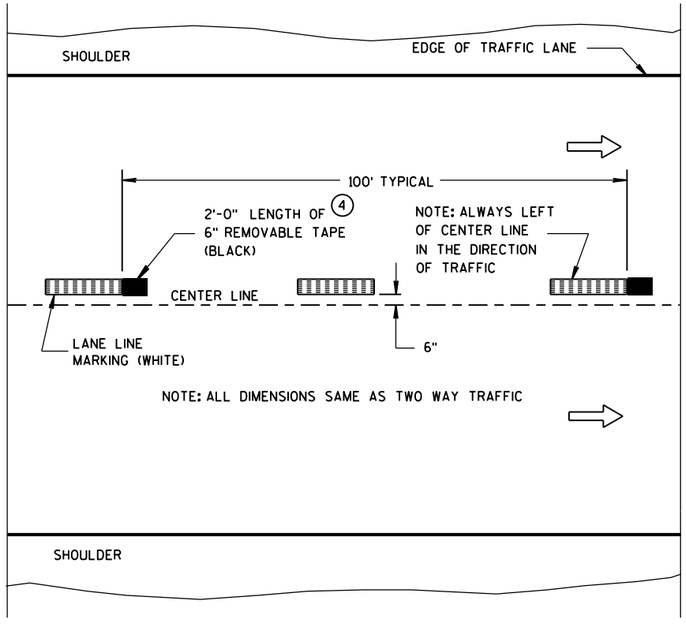


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

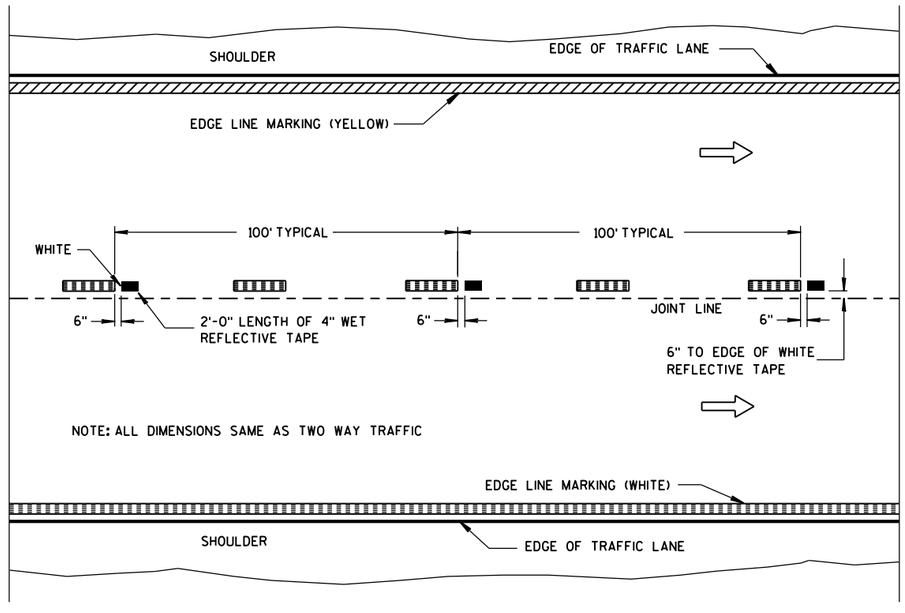
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' 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.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

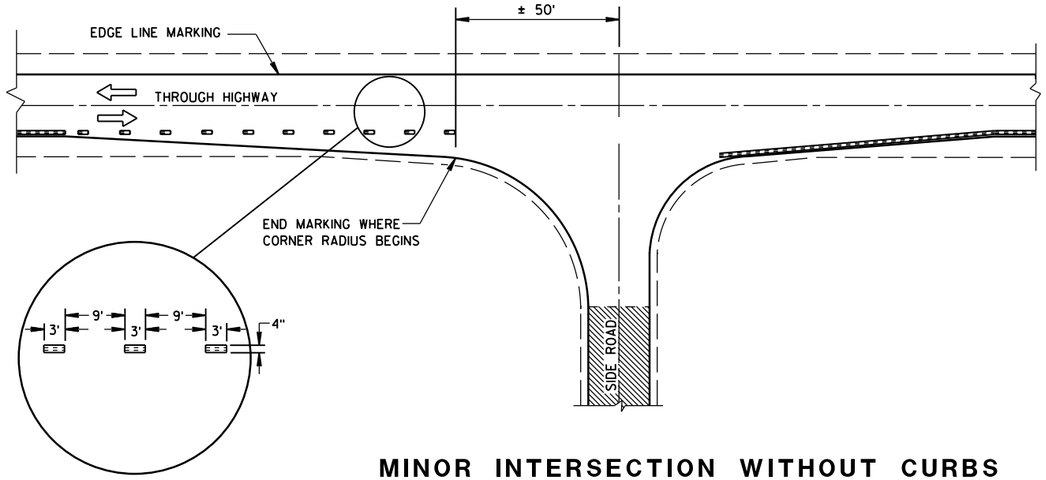
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, 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) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

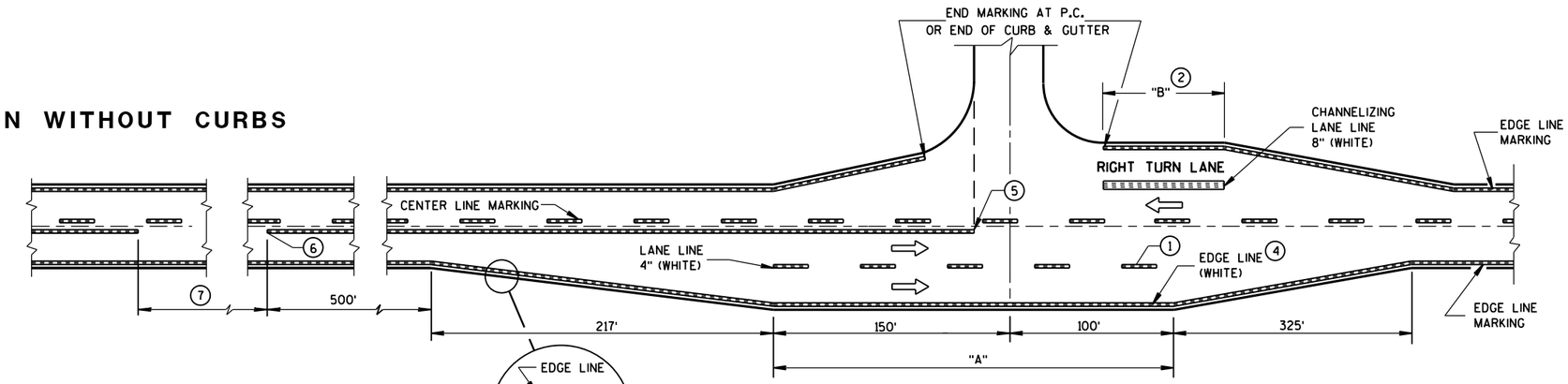
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

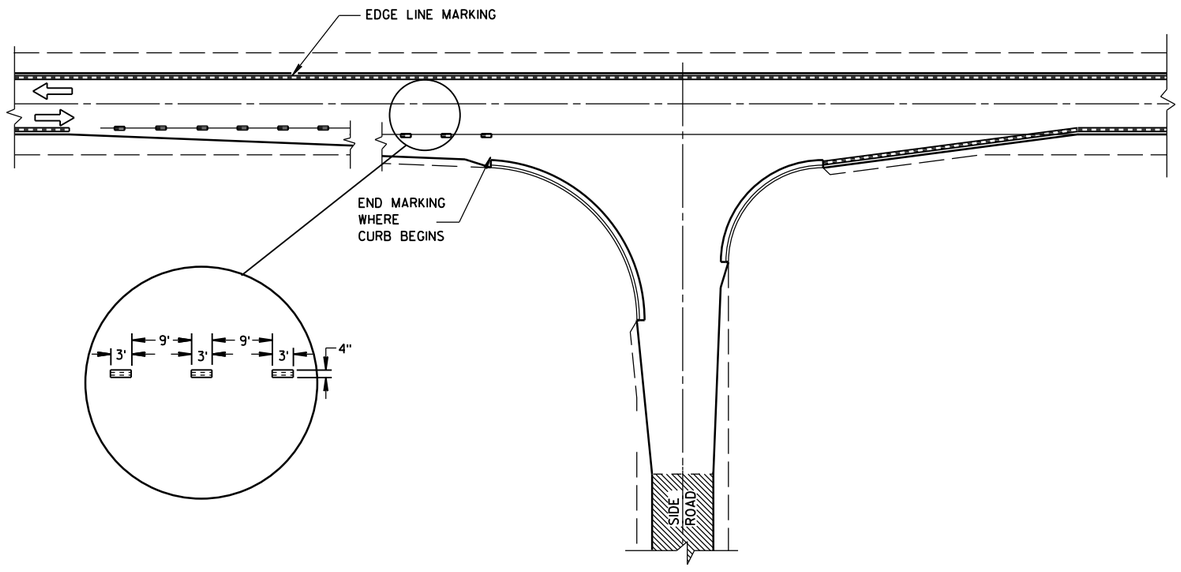
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



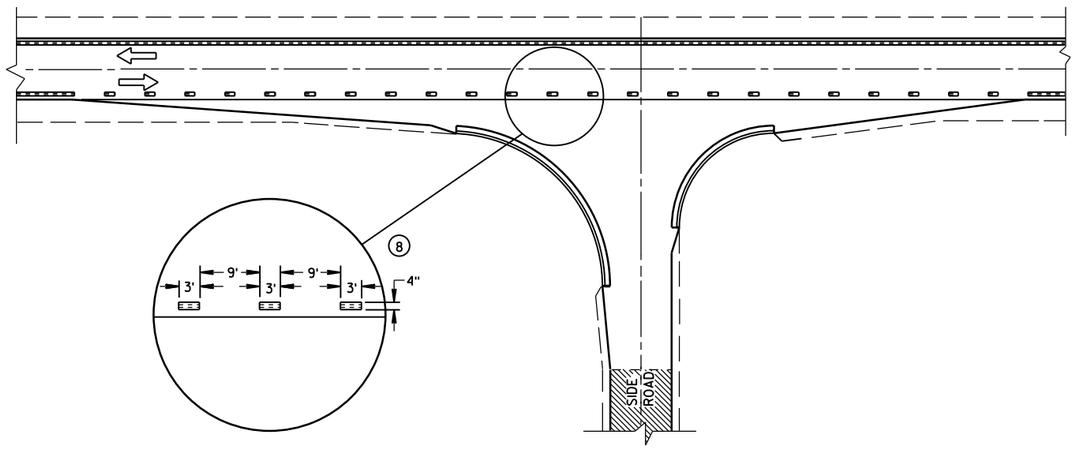
MAJOR INTERSECTIONS

(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)

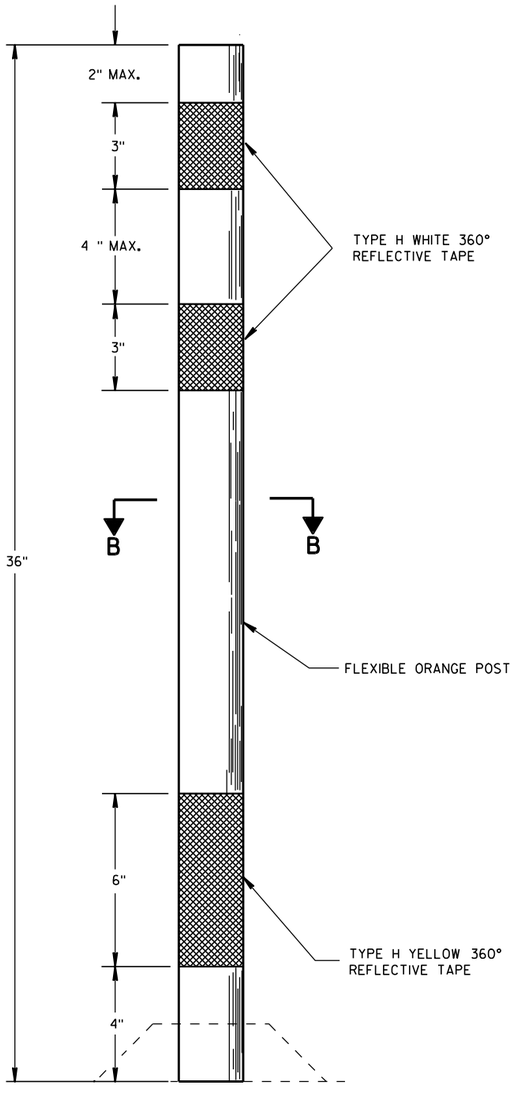
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

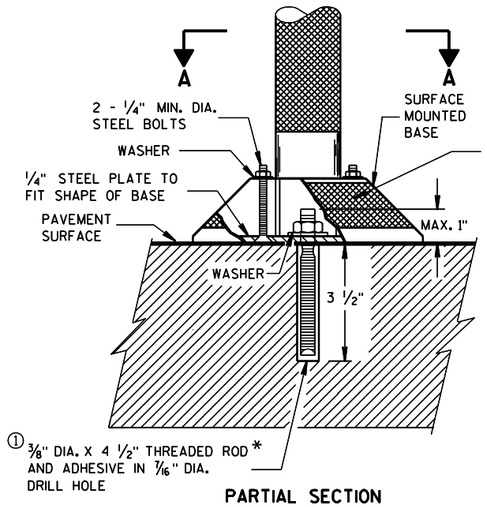
S.D.D. 15 C 8-16b

6

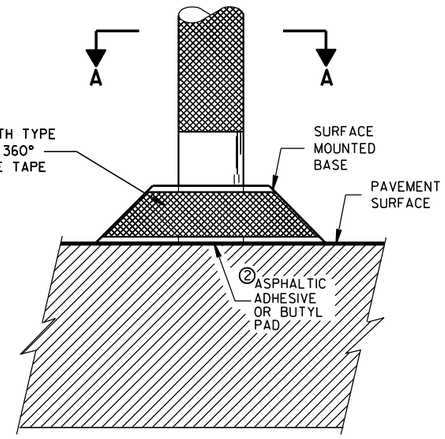
S.D.D. 15 C 8-16b



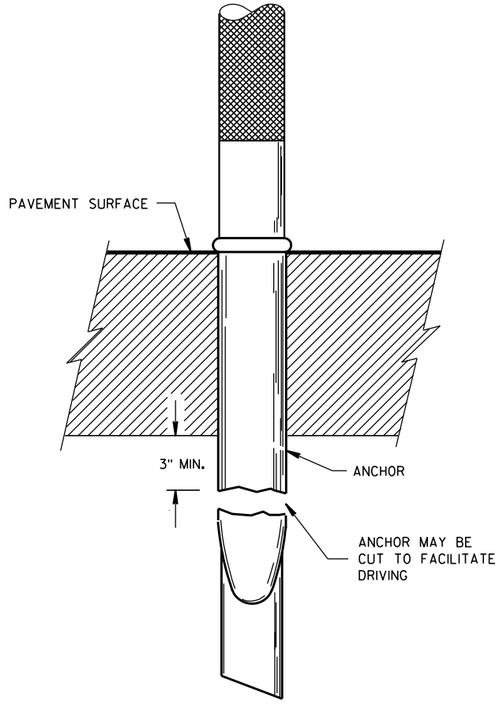
FLEXIBLE TUBULAR MARKER POST

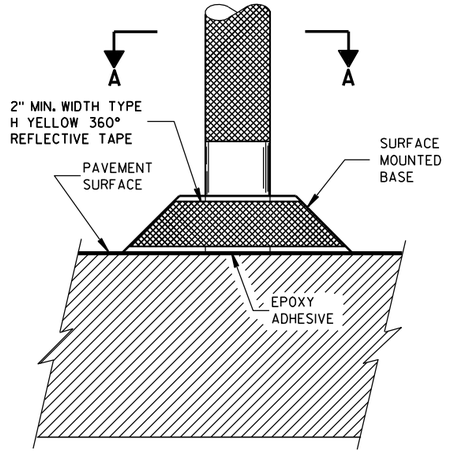


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

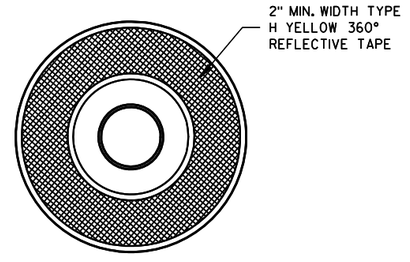
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

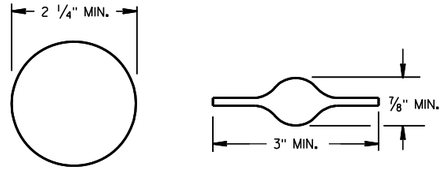
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

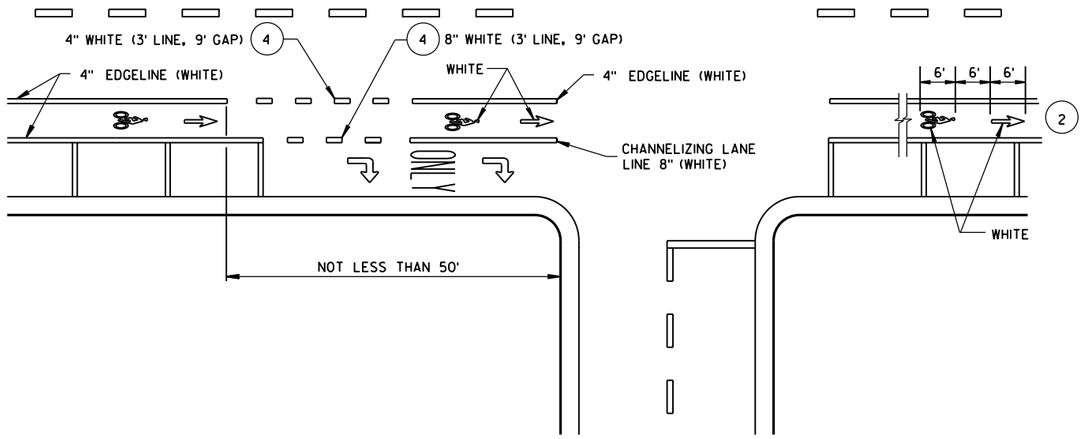
FHWA

6

S.D.D. 15 C 11-5

6

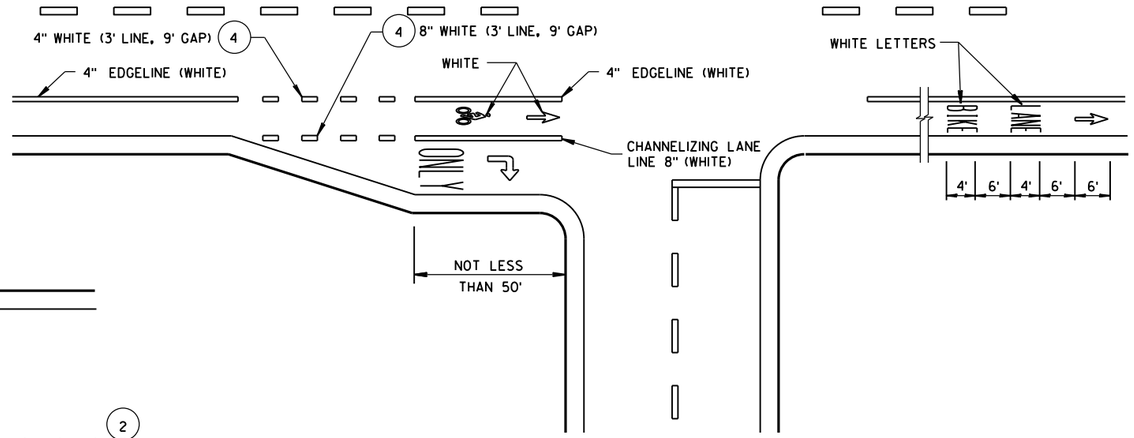
S.D.D. 15 C 11-5



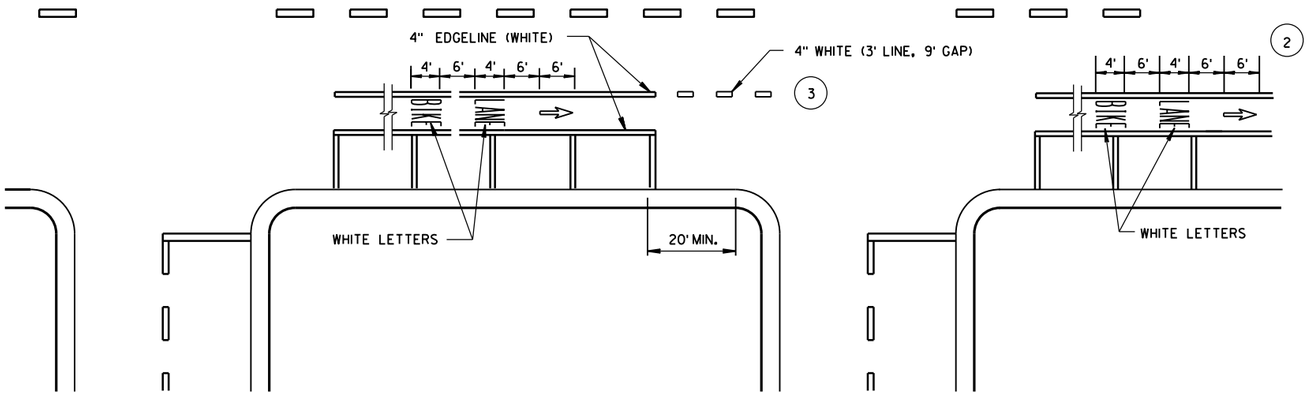
DESIGNATED BICYCLE LANE

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
3. DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. WHEN SPECIFIED IN THE CONTRACT.



DESIGNATED BICYCLE LANE
NO PARKING, RIGHT TURN LANE



DESIGNATED BICYCLE LANE
WITH PARKING, NO RIGHT TURN LANE

URBAN BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE
/S/ Travis Feltes
STATE TRAFFIC E
FHWA

6

S.D.D. 15 C 29-3c

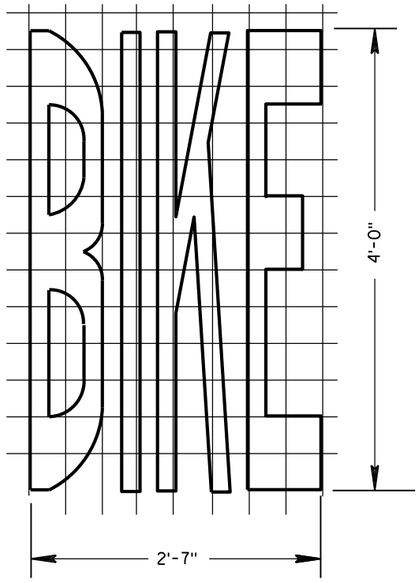
6

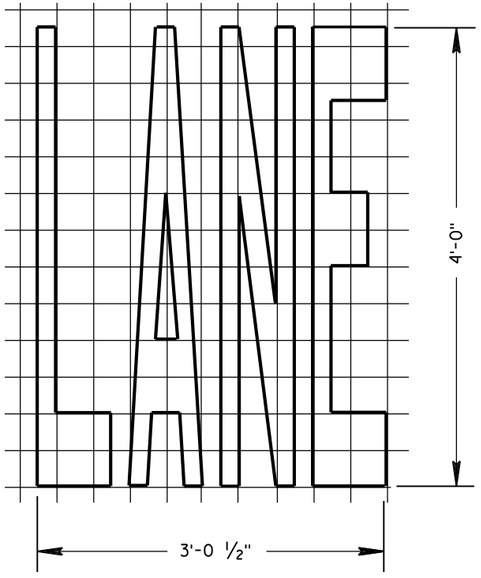
S.D.D. 15 C 29-3c

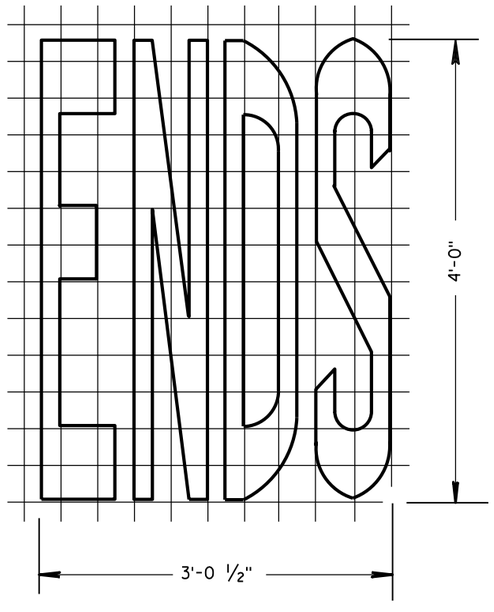
GENERAL NOTES

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

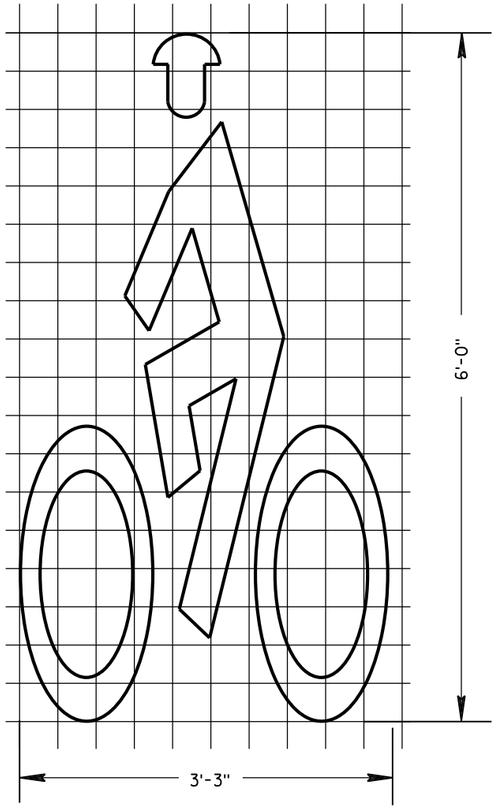
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



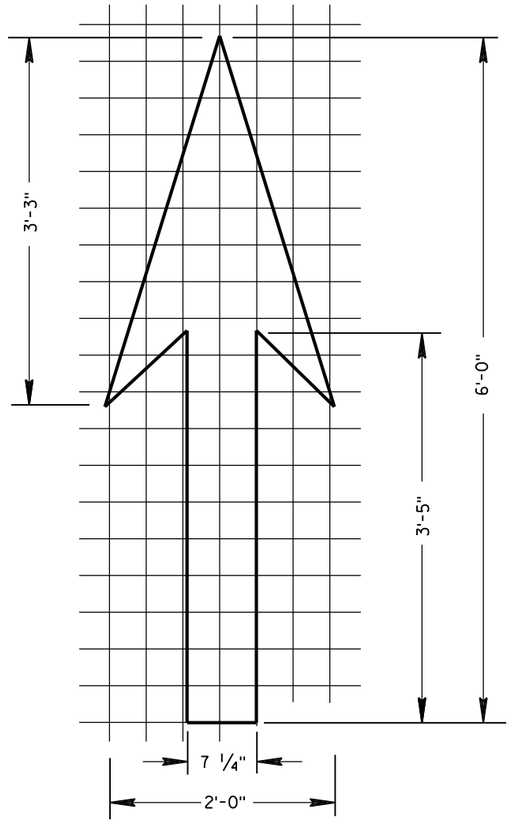




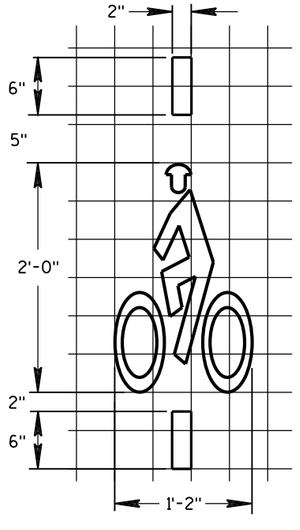
BIKE LANE WORDS



BIKE LANE SYMBOL



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-30-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC EN

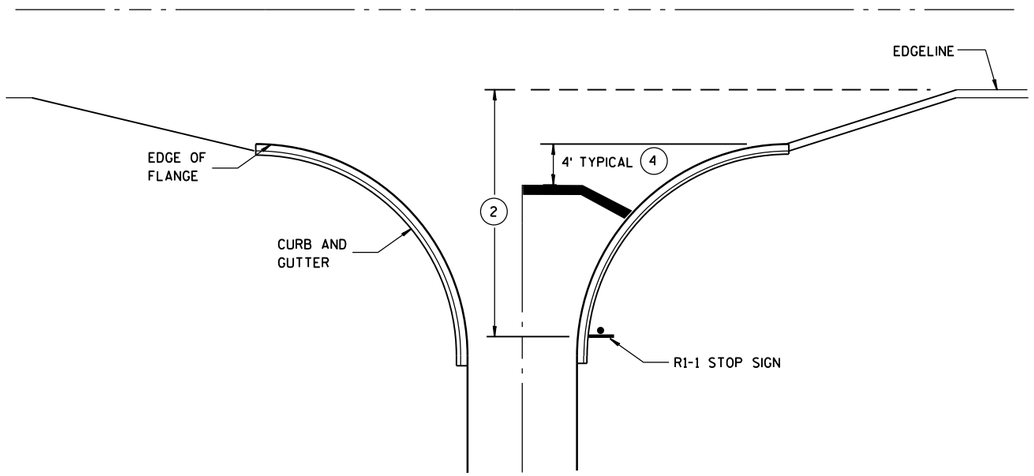
FHWA

6

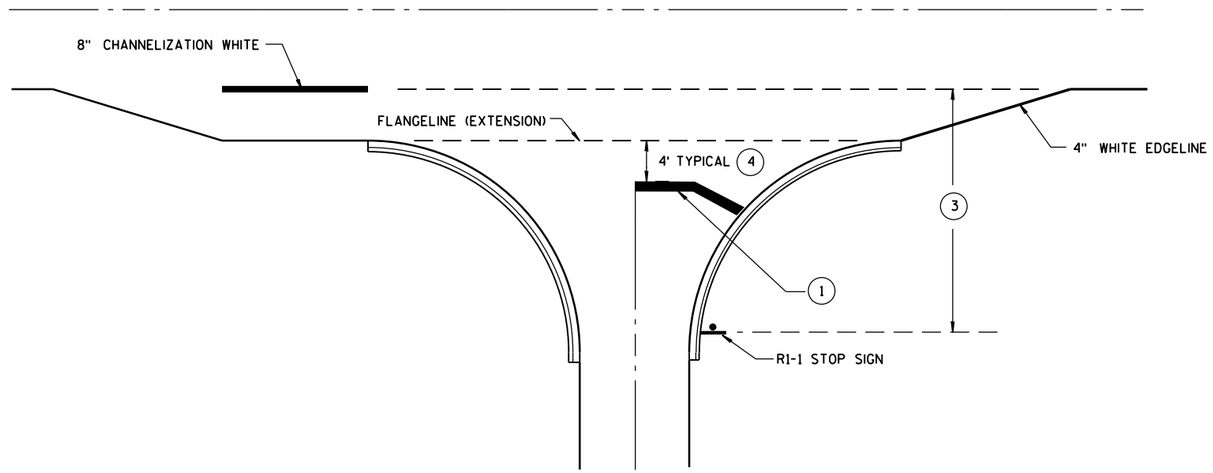
S.D.D. 15 C 29-3e

6

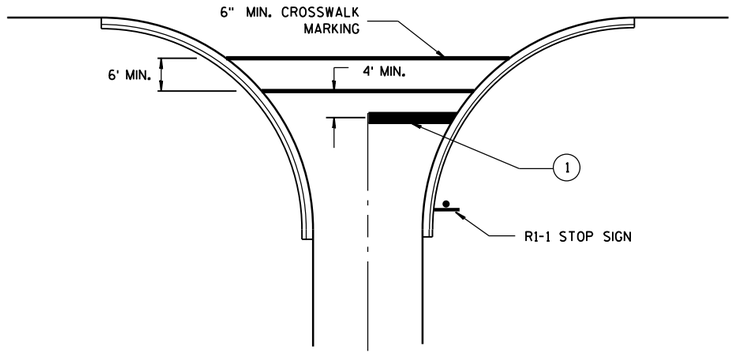
S.D.D. 15 C 29-3e



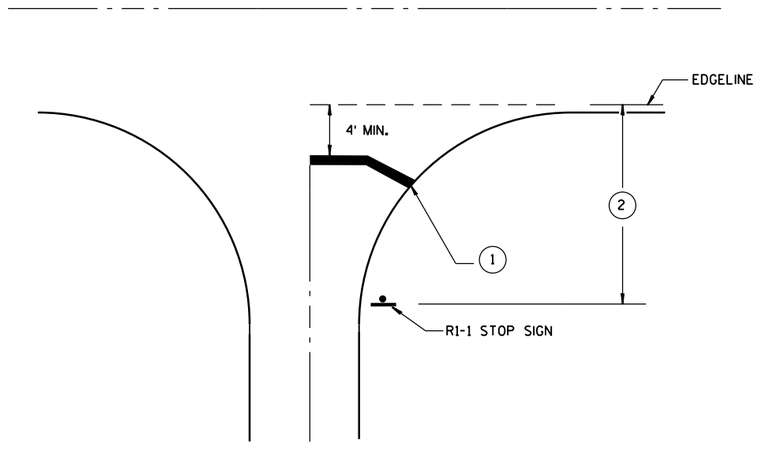
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

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 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" 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.

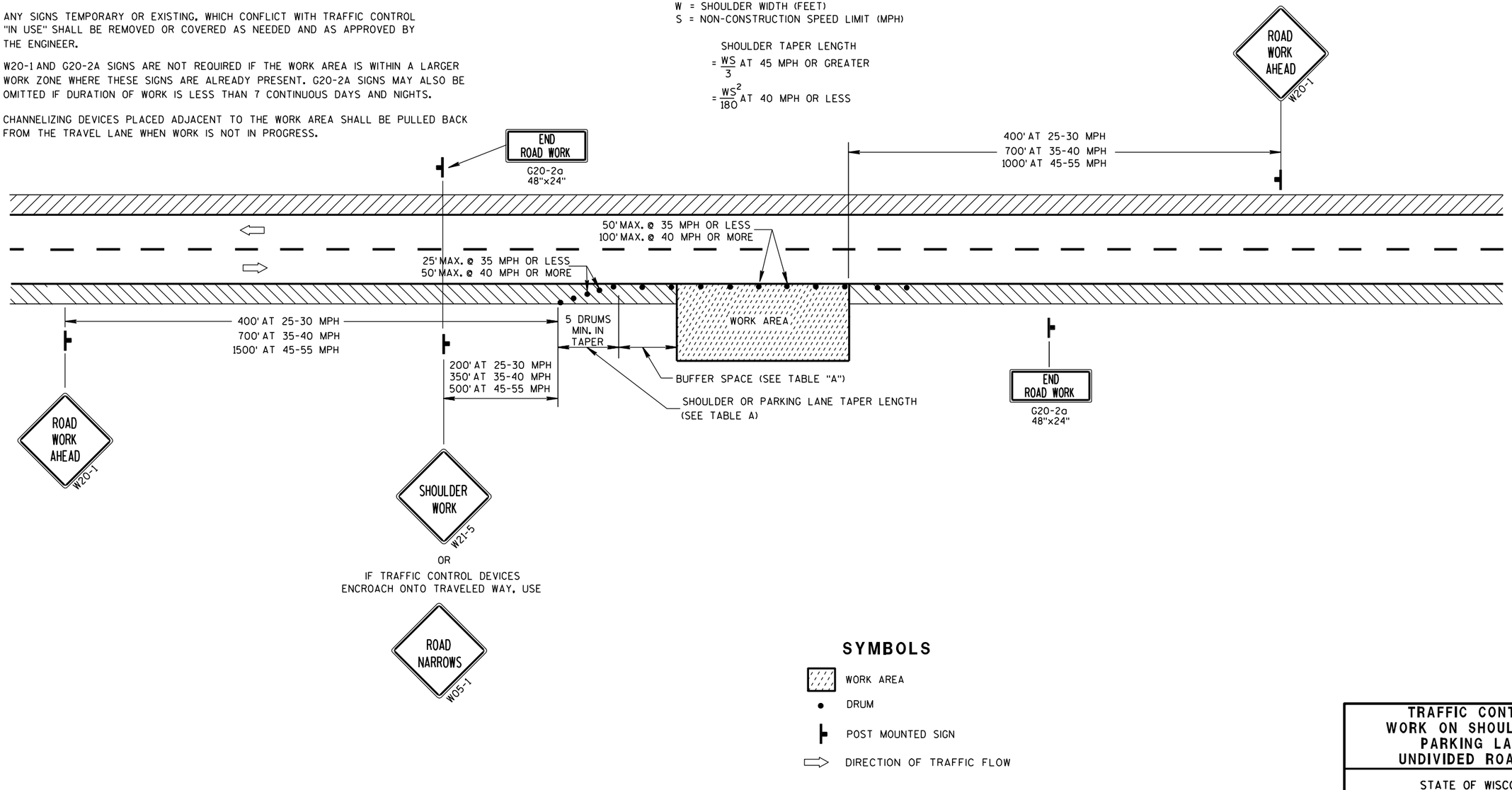
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
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
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible]NNEER
FHWA

6
S.D.D. 15 D 28-1

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 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" 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.

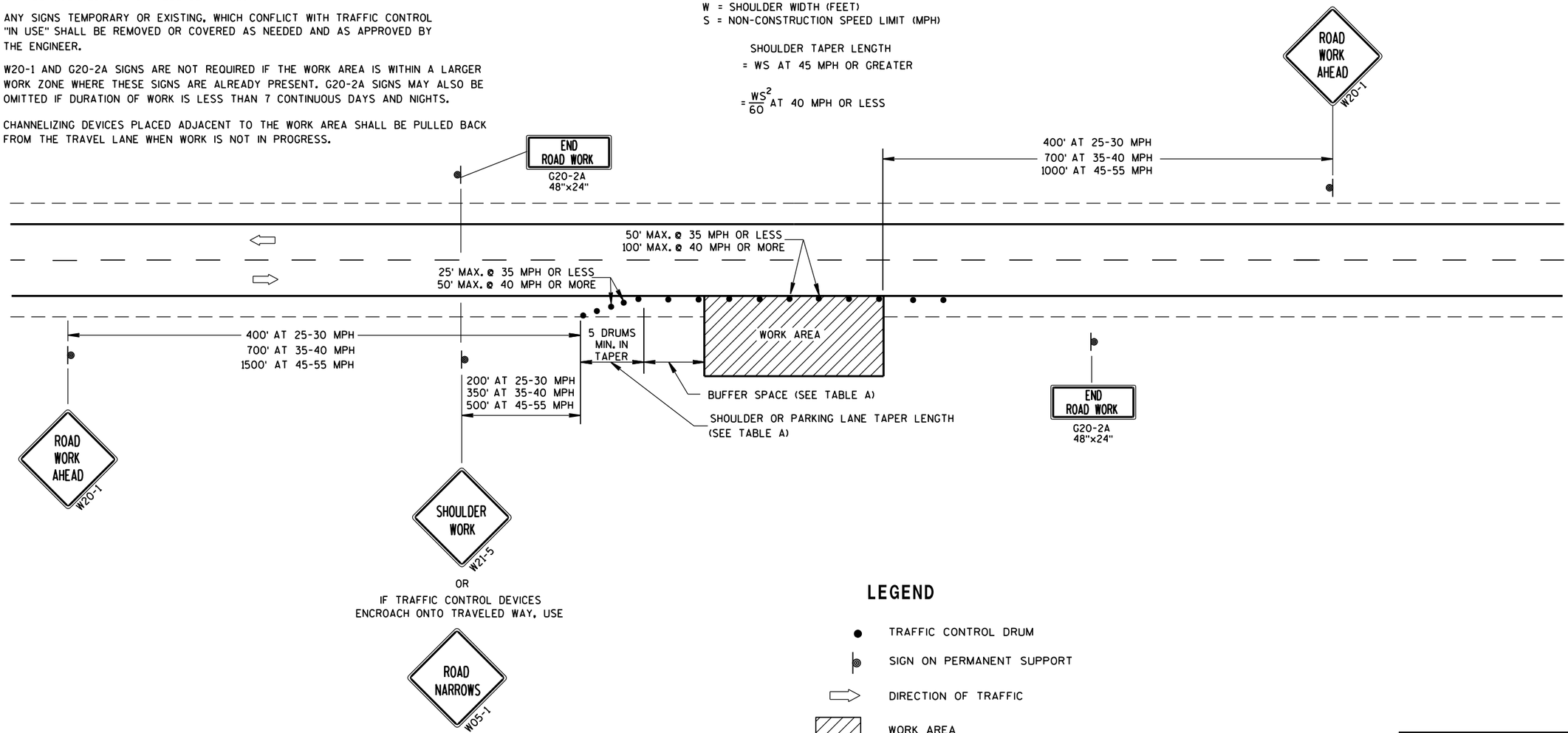
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

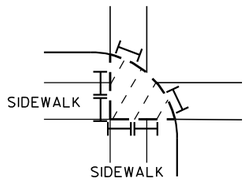
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

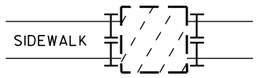
FHWA

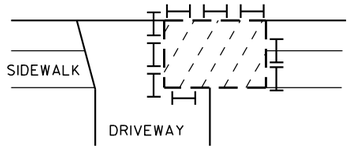
6

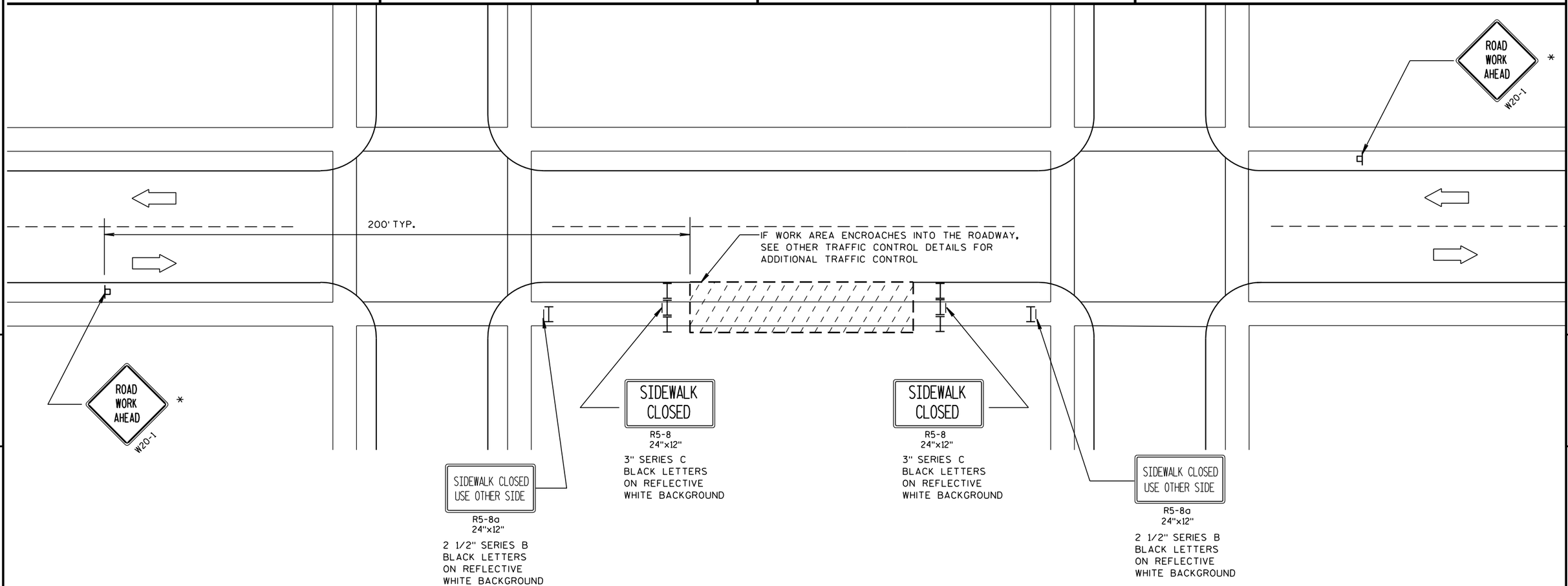
S.D.D. 15 D 28-2

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

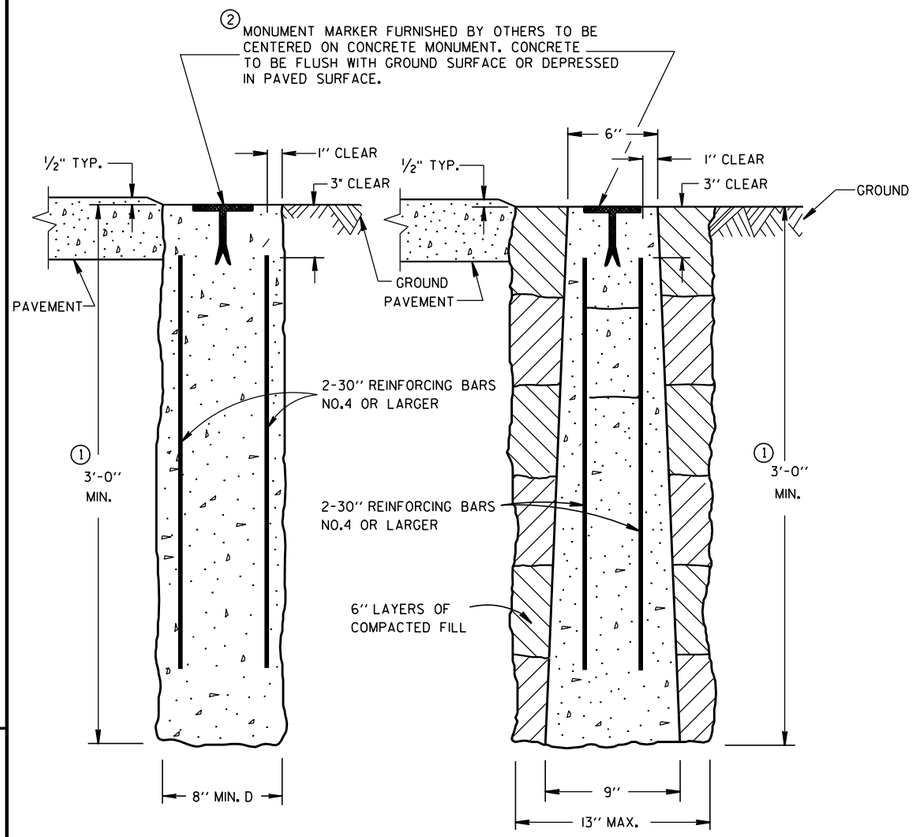
APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK 200 NEER
FHWA

6

S.D.D. 15 D 30-1

6

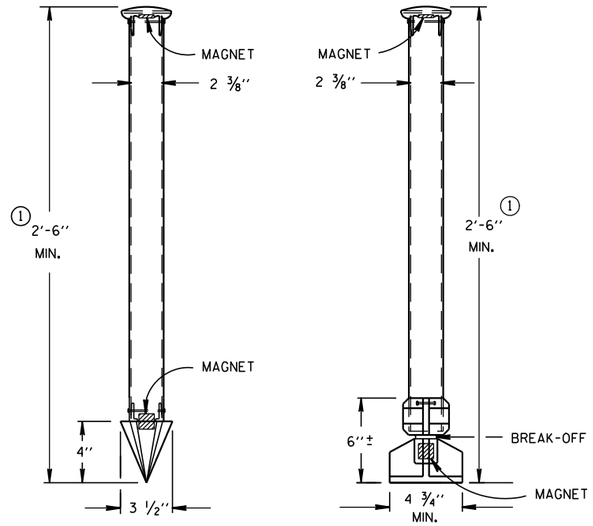
S.D.D. 15 D 30-1



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

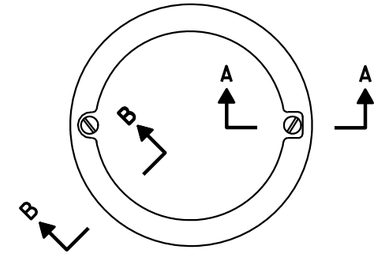
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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.

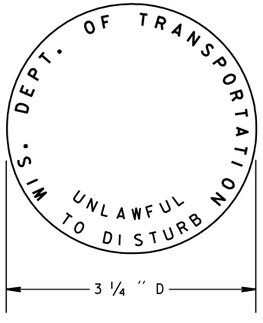
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

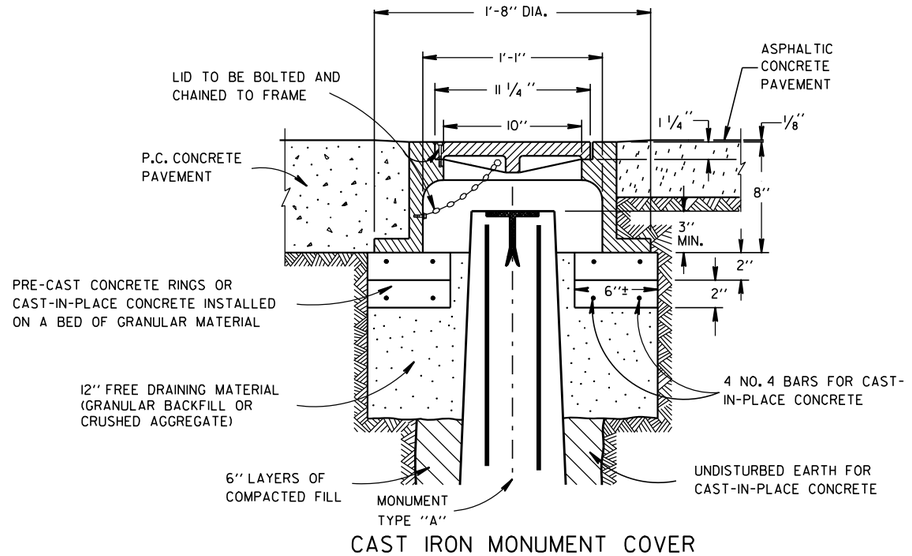
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

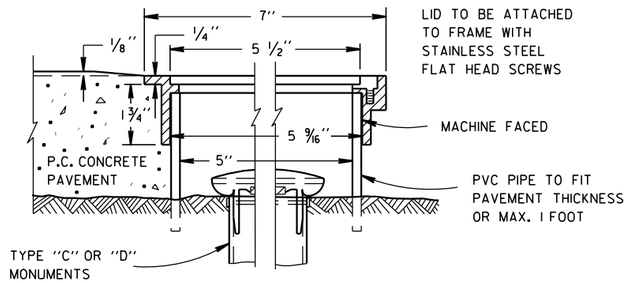


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 16 A 1-6

STATION	CUT C.Y.	FILL (-) C.Y.	LARGEST CUT IN FEET	LARGEST FILL (-) IN FEET
4+00	0	0		
4+25	0	0		
4+50	1	0	0.75	
5+00	6	1	0.46	1.14
5+50	15	4	0.44	0.92
6+00	17	5	0.59	0.94
6+50	16	4	0.55	0.95
7+00	20	5	0.49	1.20
7+50	27	6	0.67	0.89
8+00	47	1	0.91	0.79
8+50	49	1	0.83	0.83
9+00	41	3	0.84	1.50
9+50	39	2	0.64	0.94
10+00	26	3	0.35	1.16
10+50	14	3	0.44	0.93
11+00	26	4	0.72	0.93
11+50	42	1	0.78	0.98
12+00	50	1	0.95	1.26
12+50	65	4	0.77	1.17
13+00	65	9	0.43	1.75
13+50	39	14	0.57	1.07
14+00	20	33	0.64	1.30
14+50	33	8	0.73	1.42
15+00	36	8	0.59	1.30
15+50	42	9	0.95	1.21
16+00	133	17	0.59	1.76
16+50	47	20	1.93	1.75
17+00	14	28	0.27	1.78
17+50	38	23	0.56	1.43
18+00	27	11	0.28	1.40
18+50	21	8	0.78	1.44
19+00	63	9	0.75	1.39
19+50	111	12	0.41	2.20
20+00	28	11	0.39	0.96
20+50	41	11	2.20	1.30
21+00	53	15	0.48	2.30
21+50	68	9	2.13	1.43
22+00	77	5	0.49	1.51
22+50	48	6	0.39	1.39
23+00	35	5	0.66	0.96
23+50	54	5	0.34	1.45
24+00	70	5	0.82	1.33
24+50	79	4	0.69	1.36

STATION	CUT C.Y.	FILL (-) C.Y.	LARGEST CUT IN FEET	LARGEST FILL (-) IN FEET
25+00	56	4	0.43	1.36
25+50	38	5	0.28	1.48
26+00	46	6	0.48	1.39
26+50	27	5	0.52	1.27
27+00	53	4	0.45	1.29
27+50	41	5	0.75	1.33
28+00	40	45	1.14	1.33
28+50	61	260	0.73	1.36
29+00	53	44	0.38	3.85
29+50	23	25	0.42	1.41
30+00	42	6	0.30	1.49
30+50	23	15	0.48	1.98
31+00	49	13	0.56	1.33
31+50	146	6	1.11	1.54
32+00	120	22	1.09	1.72
32+50	41	29	1.00	1.61
33+00	35	16	0.45	1.39
33+50	32	21	0.42	1.00
34+00	20	20	0.00	1.87
34+50	43	21	0.45	1.88
35+00	36	13	0.00	1.60
35+50	73	8	0.81	1.38
36+00	172	4	0.87	1.41
36+50	36	11	0.39	1.74
37+00	27	11	0.42	0.96
37+50	34	7	0.59	1.50
38+00	130	7	0.81	1.25
38+50	53	12	0.85	2.21
39+00	42	12	0.85	1.21
39+50	55	5	0.55	1.47
40+00	73	4	0.65	0.72
40+50	83	4	0.62	1.11
41+00	61	5	0.88	1.51
41+50	119	7	0.61	1.47
42+00	40	9	0.30	1.62
42+50	23	25	0.39	1.52
43+00	29	18	0.44	1.80
43+50	35	14	0.42	1.51
44+00	27	8	0.51	1.32
TOTAL	1963	357		

EARTHWORK SUMMARY

EXCAVATION COMMON (205.0100)	15,730 C.Y.
(INCLUDES 13,767 C.Y. PAV'T REMOVAL)	
FILL (INCLUDING 20% SHRINKAGE)	357 C.Y.
WASTE	15,373 C.Y.

PROJECT NO: 2545-03-71 | HWY: LOCAL | COUNTY: MILWAUKEE | COMPUTER EARTHWORK DATA | SHEET: 202 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov