WKE MAY 2019

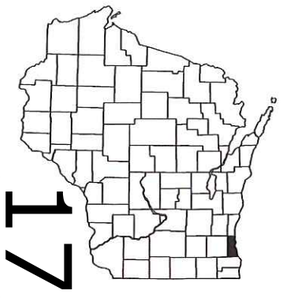
PROJECT ID 2070-03-71

WITH: N/A

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 Sheets: 386



COUNTY MILWAUKEE

17

DESIGN DESIGNATION

A.D.T. 2017	=	21,500
A.D.T. 2039	=	23,900
D.H.V.	=	2,700
D.	=	53%
T.	=	8.4%
DESIGN SPEED	=	40 M.P.H.
ESALS	=	1,900,000

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
DEPARTMENT OF TRANSPORTATION	WISDOT
TELEPHONE	T
WATER	W
TRAFFIC & ELECTRICAL SERVICES	TE&ES
MILWAUKEE METRO SEWERAGE DIST	MMSD
CABLE TELEVISION	TV

- 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

W. LAYTON AVENUE

S. 27TH STREET TO S. HOWELL AVE

LOCAL STREET

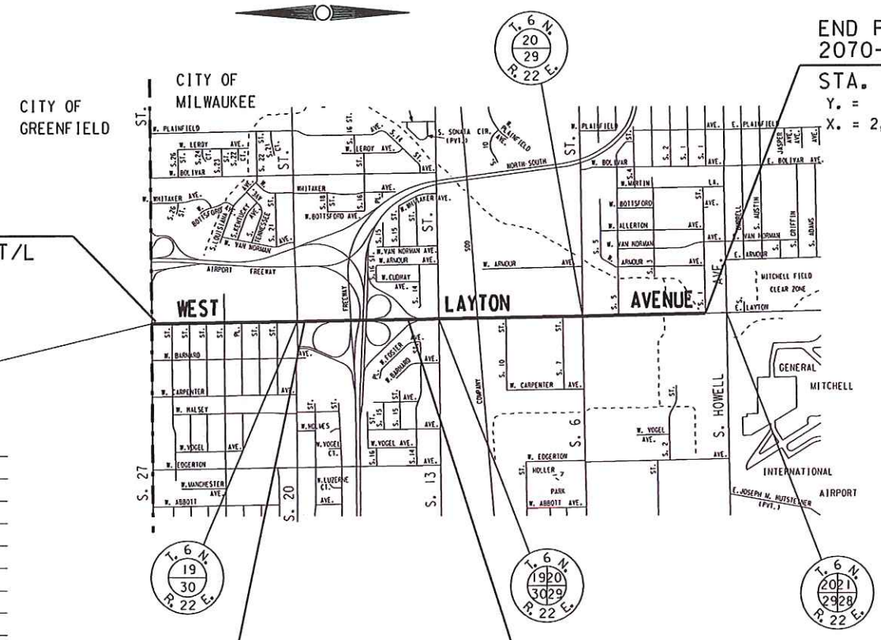
MILWAUKEE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2070-03-71	WISC 2019288	1

STATE PROJECT NUMBER

2070-03-71

N



BEGIN PROJECT
2070-03-71
STA. 10+73.2 T/L
Y. = 356,419.2777
X. = 2,549,158.6326

END PROJECT
2070-03-71
STA. 110+31.70, T/L
Y. = 356,586.2619
X. = 2,559,115.7112

EXCEPTION TO
NET CENTERLINE LENGTH
STA 38+85.8, T/L
STA 58+45.4, T/L

LAYOUT
SCALE 1/2 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.530 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

1/25/19 (Date)

Commissioner of Public Works

Original Plans Prepared By

WISCONSIN
SAMIR M A AMIN
E-29709
MILWAUKEE
WI
PROFESSIONAL ENGINEER

1/25/19 (Date)

City Engineer

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor CITY OF MILWAUKEE

Designer CITY OF MILWAUKEE

Region Examiner

Region Supervisor

APPROVED FOR THE DEPARTMENT

DATE: 1/29/19

K Kramer (Signature)

E

FILE NAME = W:\SPR\LAYTON_27TH TO HOWELL\MISC\TITLE.DGN

PLOT DATE: 16-OCT-2018

GENERAL NOTES

1. ALL OPENINGS BELOW SUBGRADE, RESULTING FROM REMOVALS OR ABANDONMENTS, SHALL BE BACKFILLED WITH BASE AGGREGATE DENSE, UNLESS OTHERWISE NOTED ON THE PLAN.
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. WHEN THE QUANTITY OF ITEMS OF BASE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIALS AS DIRECTED BY THE ENGINEER.
4. MATCH EXISTING SIDEROAD GEOMETRICS.
5. NO TREES OR SHRUBS SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER. ALL TREE REMOVALS SHOWN ON REMOVAL PLAN SHEETS. NO ADDITIONAL TREES SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER.
6. ALL ELEVATIONS ARE REFERENCED TO CITY OF MILWAUKEE DATUM.
7. ALL CURB AND GUTTER IS LOW SIDE UNLESS OTHERWISE INDICATED ON THE PLAN.
8. TRANSVERSE JOINTS IN THE CONCRETE WALK SHALL BE CONSTRUCTED AT INTERVALS EQUAL TO THE WIDTH OF THE CONCRETE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
9. ALL LONGITUDINAL AND TRANSVERSE JOINTS REQUIRING SEALING SHALL BE SEALED IN ACCORDANCE WITH THE DETAIL.
10. "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.
11. 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.
12. FOR ANY EXCAVATION OF SIX FEET OR MORE IN THE CITY OF MILWAUKEE, THE CONTRACTOR, WHEN REQUESTING A UTILITY LOCATE TICKET FROM DIGGER'S HOTLINE, SHALL SPECIFICALLY ASK FOR THE LOCATION TICKET TO INCLUDE THE MARKING OF ALL THE EXISTING SEWER FACILITIES WITHIN THE LIMITS REQUESTED.
13. REPLACE ALL CONCRETE CURB AND GUTTER INDICATED FOR REMOVAL AND REPLACEMENT IN EXISTING LOCATION UNLESS OTHERWISE NOTED ON PLAN.
14. CONSTRUCTION PERMITS FOR CONCRETE WALK OR CONCRETE DRIVEWAY WORK HAVE BEEN OBTAINED, WHICH RIGHTS SHALL BE EXTENDED TO THE CONTRACTORS.
15. EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS "ECIP" AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.
16. RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING AROUND SIGNATURE BEDS.
17. CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND SEWRPC (JOHN WASHBURN); AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY SECTION CORNER MONUMENT.
18. DASHED YELLOW CENTER LINES AND WHITE LANE LINES ARE 10 FEET LONG WITH A 30 FOOT GAP.
19. ALL DOUBLE YELLOW CENTER LINES HAVE A 4 INCH SPACE BETWEEN TWO 8 INCH LINES.
20. AT CONTROLLED INTERSECTION IF LANE LINE IS LESS THAN 10 FEET, THE PRECEDING 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.
21. ALL DIMENSIONS ARE FROM THE FACE OF CURB TO THE CENTER OF THE MARKING UNLESS OTHERWISE NOTED.
22. TEMPORARY PAVEMENT MARKINGS MUST BE PLACED ON THE PAVEMENT IF PERMANENT MARKINGS ARE NOT INSTALLED AFTER THE COMPLETION OF PAVING.
23. PERMANENT SIGNING SHEETS PROVIDED IN PLAN FOR SIGN DETAILS ONLY.

STANDARD ABBREVIATIONS

ASPH.	- ASPHALT
B.M.	- BENCH MARK
CTR.	- CENTER
C/L	- CENTER LINE
COMB.	- COMBINED
CONC.	- CONCRETE
C.W.	- CONCRETE WALK
COR.	- CORNER
C	- CURB
DOT	- DEPARTMENT OF TRANSPORTATION
ELEV.	- ELEVATION
ENT.	- ENTRANCE
EXIST.	- EXISTING
F	- FLANGE
FF	- FULL-FACE (CURB HEIGHT ON PLAN VIEW)
"0" F	- ZERO-FACE (NO CURB HEIGHT)
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

COORDINATE WITH SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC) FOR THE PERPETUATION OF SECTION CORNER (PUBLIC LAND SURVEY SYSTEM - PLSS) MONUMENTS. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH SEWRPC AND THE WISDOT PROJECT MANAGER THROUGHOUT THE PERPETUATION PROCESS.
THE CONTRACTOR WILL CONTACT SEWRPC AT (262) 953-4295 AT LEAST TWO WEEKS BEFORE STARTING CONSTRUCTION OPERATIONS OR THE PRECONSTRUCTION MEETING TO ALLOW FOR SECTION CORNER MONUMENT PERPETUATION COORDINATION.

CONTRACTOR SHALL PLACE RING(S) AT SECTION CORNER DURING HMA PAVING OPERATIONS TO PERPETUATE MONUMENT. RING WILL BE REUSED FROM EXISTING MONUMENT OR SUPPLIED BY SEWRPC. RING INSTALLATION SHALL BE INCIDENTAL TO HMA PAVING.

TOTAL LAYER PAVEMENT THICKNESS	LAYERS	NOMINAL MAXIMUM AGGREGATE GRADATIONS	TRAFFIC	ASPHALT BINDER	BINDER DESIGNATION LEVEL
4"	1¾" UPPER	4	MT	58-28	S
	2¼" LOWER	3	MT	58-28	S

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
UTILITY CONTACTS
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
DRAINAGE DETAILS
INTERSECTION DETAILS
LANDMARK REFERENCE PLAN
PLAN DETAILS
UTILITIES & DRAINAGE PLANS
EROSION CONTROL PLANS
HAZARDOUS MATERIALS DETAIL PLANS
PAVEMENT MARKING
PERMANENT SIGNING
REMOVAL PLAN
TRAFFIC CONTROL TYPICAL SECTIONS
TRAFFIC CONTROL
TRAFFIC SIGNAL PLAN
STREET LIGHTING PLAN
STREET LIGHTING AND TRAFFIC CONDUIT DETAILS
MONOTUBE POLE LUMINAIRE MOUNTING DETAILS
LANDSCAPE PLANS
CITY UC CONDUIT (CUC)
UC CONDUIT (CUC) DETAILS
ALIGNMENT PLAN

UTILITY CONTACTS

AMERICAN TRANSMISSION COMPANY FIELD CONTACT

CHRIS DAILEY
P.O. BOX 47
WAUKESHA, WI 53188
PHONE: 262-506-6814

AT&T WISCONSIN

MATTHEW DINNAUER
2005 PEWAUKEE RD
WAUKESHA, WI 53188
PHONE: 262-896-7690
md9542@att.com

CHARTER COMMUNICATIONS

STEVE CRAMER
1320 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
PHONE: 414-277-4045
wis.engineering@charter.com

CITY OF MILWAUKEE - FORESTRY

JAMES KRINGER
841 N. BROADWAY, RM. 801
MILWAUKEE, WI 53202
PHONE: 414-708-2428
james.kringer@milwaukee.gov

CITY OF MILWAUKEE, DPW/ COMMUNICATIONS

BRYAN PAWLAK
1440 W. CANAL ST.
MILWAUKEE, WI 53233
DISPATCH: 414-286-3686

CITY OF MILWAUKEE, UTILITY COORDINATOR

MOHAMMAD O. ABULUGHOD
841 N. BROADWAY, RM710
MILWAUKEE, WI 53202
PHONE: 414-286-2767
mabulu@milwaukee.gov

CITY OF MILWAUKEE, STREET LIGHTING

DENNIS MILLER
1540 W. CANAL ST.
MILWAUKEE, WI 53233
PHONE: 414-286-5942
MOBILE: 414-708-4251
dennis.miller@milwaukee.gov

TDS METROCOM, LLC

MATTHEW SCHULTE
16924 WEST VICTOR ROAD
NEW BERLIN, WI 53151
PHONE: 262-754-3063
matt.schulte@tdstelecom.com

WE ENERGIES - GAS, ELECTRIC

DAN SANDE
333 W. EVERETT ST. - A299
MILWAUKEE, WI 53203
PHONE: 414-221-4578
dan.sande@we-energies.gov

WE ENERGIES - ELECTRIC

KEN FRANECKI
500 S. 116TH ST
WEST ALLIS, WI 53214
PHONE: 414-944-5531
kenneth.franecki@we-energies.com

WE ENERGIES - GAS

ALEX DANTINNE
500 S. 116TH ST
WEST ALLIS, WI 53214
PHONE: 920-621-6903
alex.dantinne@we-energies.com

WISDOT SE REGION - COMMUNICATION LINE

JEFF MADSON
433 W. ST.PAUL AVE., STE 300
MILWAUKEE, WI 53203-3723
PHONE: 414-225-3723
jeffrey.madson@dot.wi.gov

WISDOT SE REGION - WISCONSIN SIGNAL

MR. PARWINDER VIRK
141 NW BARSTOW ST.
P.O. BOX 798
WAUKESHA, WI 53187-0798
PHONE: 414-852-0829
parwinder.virk@dot.wi.gov

WISDOT SE REGION - SIGNAL OPERATIONS

DERRIN WOLFORD
141 N.W. BARSTOW ST.
WAUKESHA, WI 53187
PHONE: 262-521-4409
derrin.wolford@dot.wi.gov

OTHER CONTACTS

CITY OF MILWAUKEE

NICK GOODWIN, P.E.
841 N. BROADWAY, RM 902
MILWAUKEE, WI 53202
PHONE: 414-286-0461
ngoodw@milwaukee.gov

MILWAUKEE COUNTY TRANSIT SYSTEM, BUS STOPS PLANNER

ANDY TILLMAN
1942 N. 17TH ST.
MILWAUKEE, WI 53205
PHONE: 414-343-1728
atillman@mcts.com

MILWAUKEE COUNTY TRANSIT SYSTEM, COORDINATOR OF STREET SUPERVISION

MELANIE FLYNN
1942 N. 17TH ST.
MILWAUKEE, WI 53205
PHONE: 414-343-1764
mflynn@mcts.com

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

MICKI KLAPPA-SULLIVAN
260 W. SEEBOTH ST.
MILWAUKEE, WI 53204
PHONE: 414-225-2178
mklappasullivan@mmsd.com

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT FIELD CONTACT

LARRY ANDERSON
260 W. SEEBOTH ST.
MILWAUKEE, WI 53204
PHONE: 414-225-2241

WISCONSIN DEPT. OF NATURAL RESOURCES

KRISTINA BETZOLD
2300 N. DR. MARTIN LUTHER KING, JR. DR.
MILWAUKEE, WI 53212
PHONE: 414-263-8157
kristina.betzold@wisconsin.gov

MILWAUKEE COUNTY DOT TRAFFIC ENGINEERING

10320 W. WATERTOWN PLANK RD.
2ND FLOOR
WAUWATOSA, WI 53226
ATTN: MR. DANIEL MURPHY
PHONE: 414-257-5942

LAND MONUMENTS

BOB VIKTORA
3850 N. 35TH ST.
MILWAUKEE, WI 53216
PHONE: 414-286-3986

SEWRPC-LAND MONUMENTS

JOHN WASHBURN
W239 N1812 ROCKWOOD DR.
WAUKESHA, WI 53187
PHONE: 262-547-6722 EXT. 295

CANADIAN PACIFIC RAILROAD

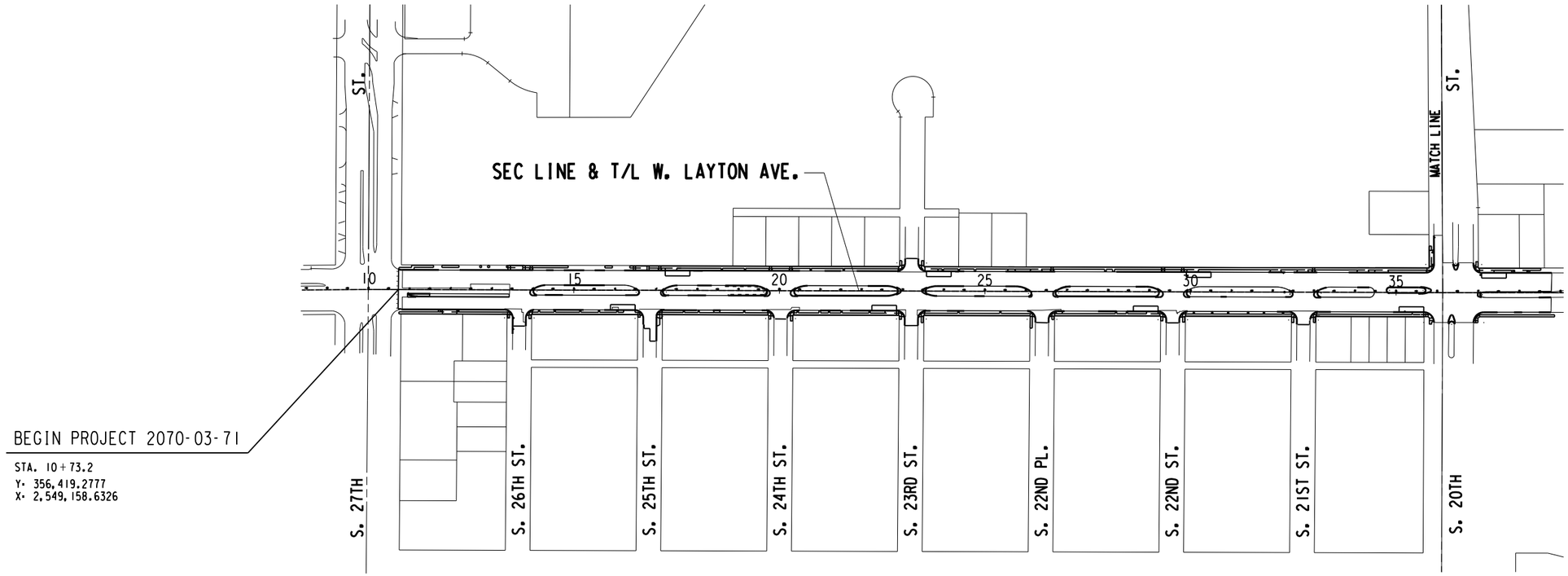
JIM KRIEGER
MANAGER PUBLIC WORKS
120 SOUTH 6TH STREET,SUITE 700
MINNEAPOLIS, MN 55402
PHONE: 612-330-4555
jim_krieger@cpr.ca

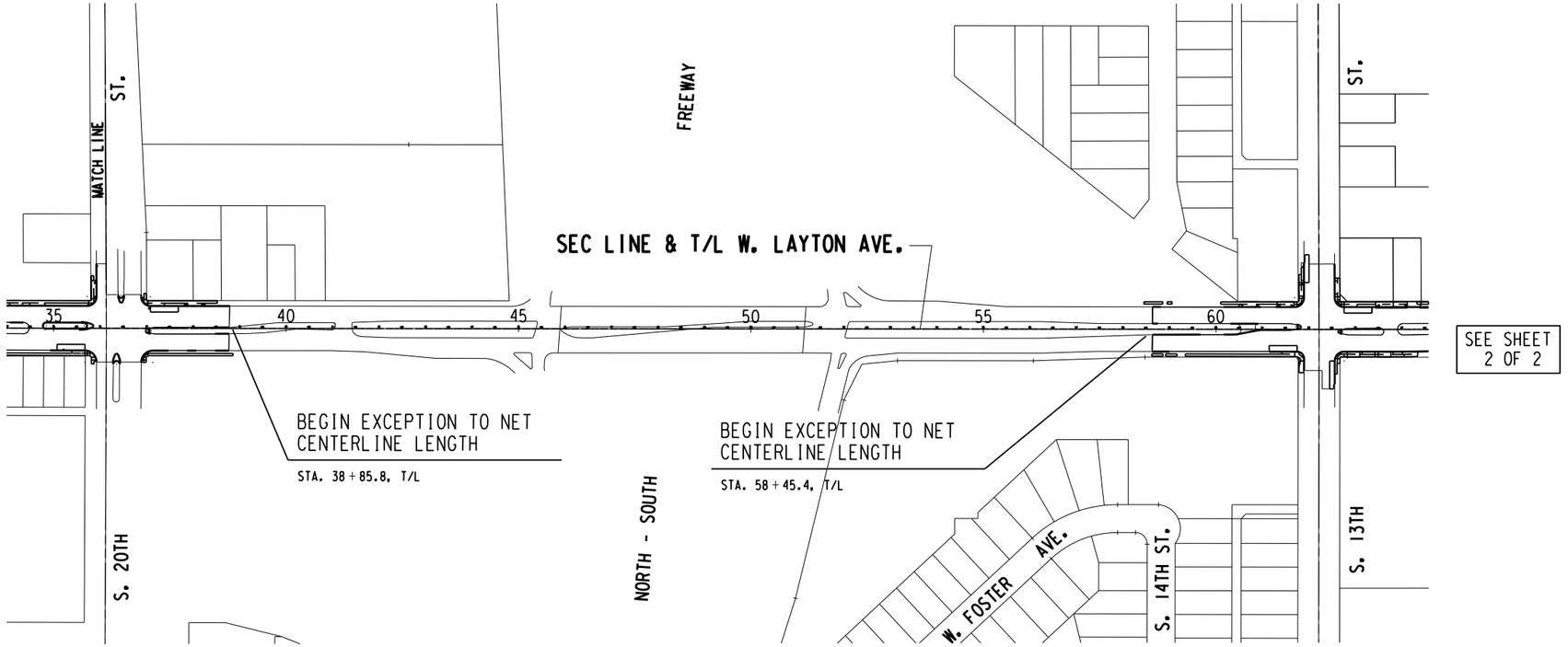
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITY CONTACTS	SCALE FEET	SHEET NO: 3	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\MISC\GEN NOTES.DGN

REVISED DATE: 03-21-2019 BY JC





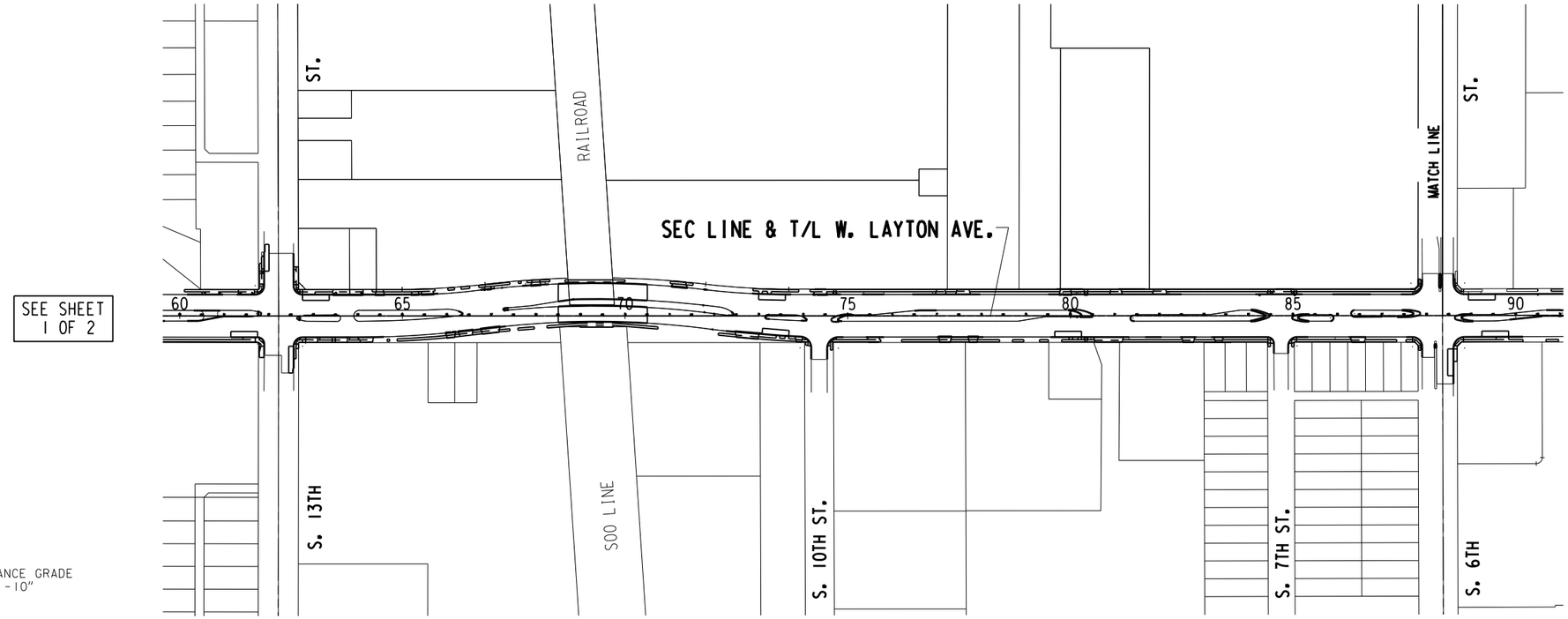
SHEET 1 OF 2

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SCALE FEET 0' 300'	SHEET NO: 4	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\MISC\OVERVIEW.DGN

REVISED DATE: 02-19-2018 SB

2

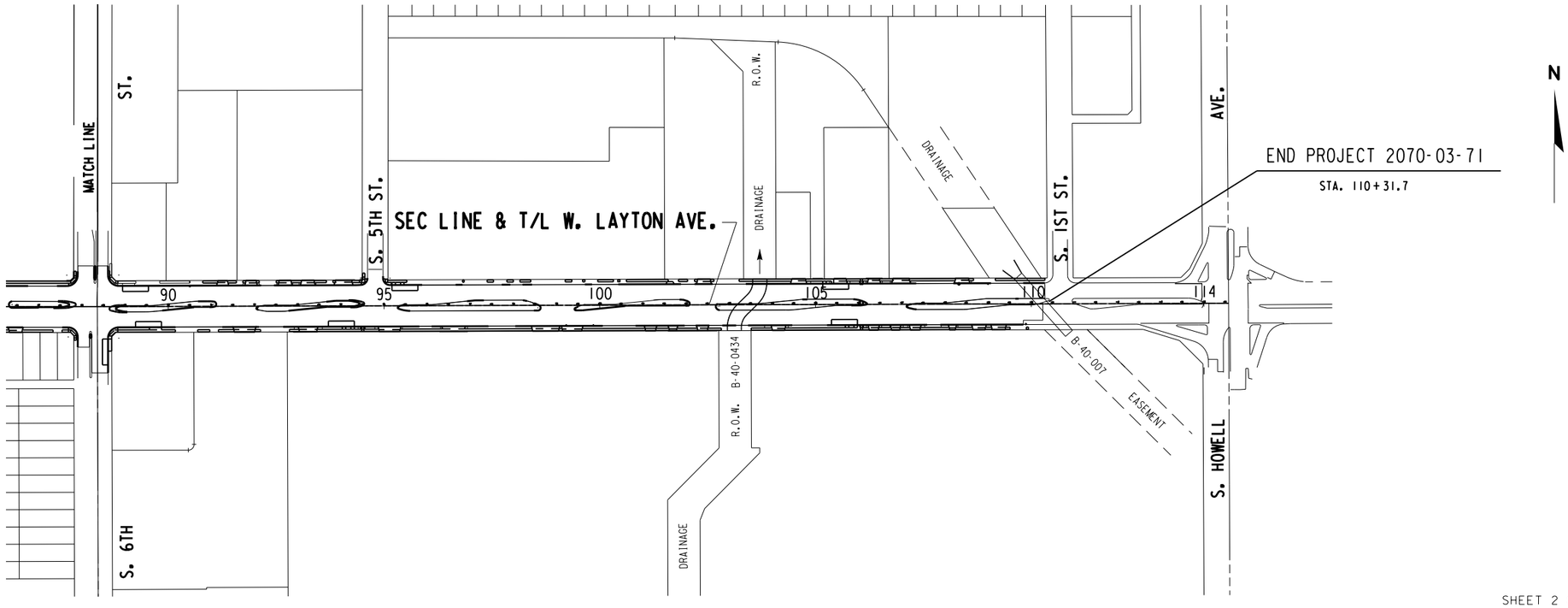


SEE SHEET
1 OF 2

N

NOTE:

1.) MINIMUM VERTICAL CLEARANCE GRADE SEPARATED BRIDGE IS 14'-10"



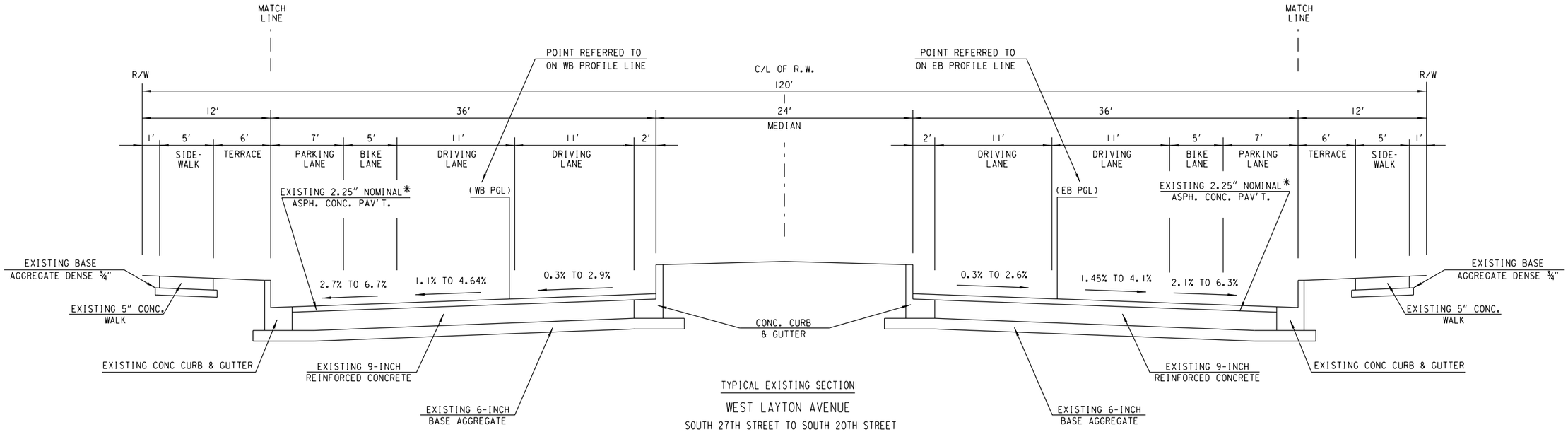
N

SHEET 2 OF 2

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SCALE FEET 0' 300'	SHEET NO: 5	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\MISC\OVERVIEW.DGN

REVISED DATE: 04-04-2018 BB

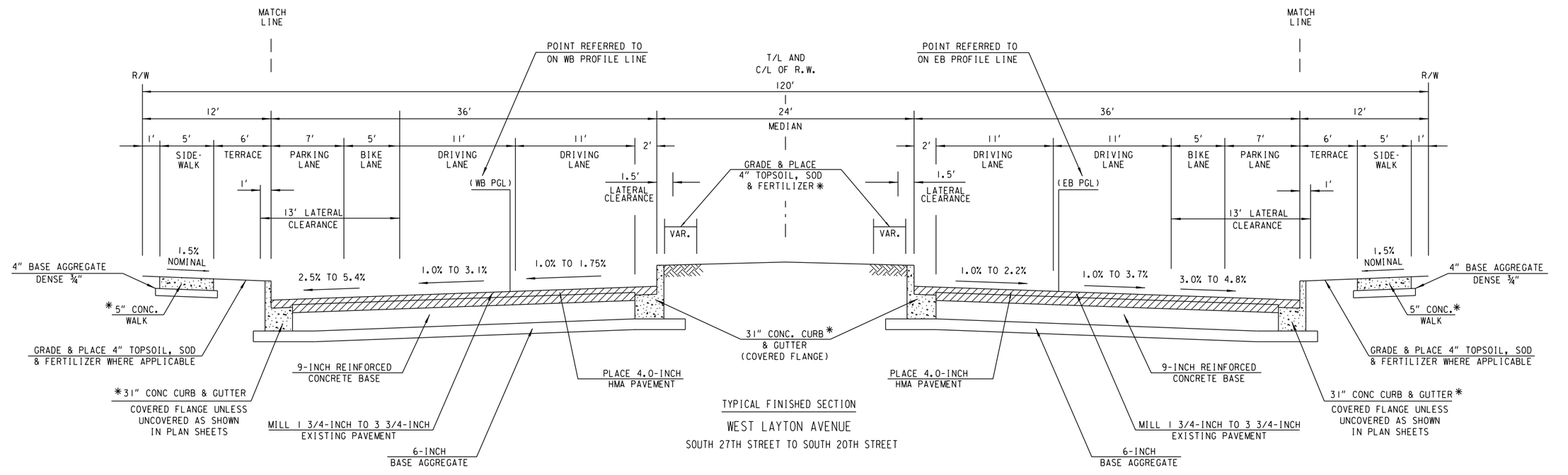


TYPICAL EXISTING SECTION

WEST LAYTON AVENUE

SOUTH 27TH STREET TO SOUTH 20TH STREET

* SEE PAVEMENT CORE LOG CONSTRUCTION DETAIL SHEETS FOR SPOT EXISTING ASPHALTIC CONCRETE PAVEMENT



TYPICAL FINISHED SECTION

WEST LAYTON AVENUE

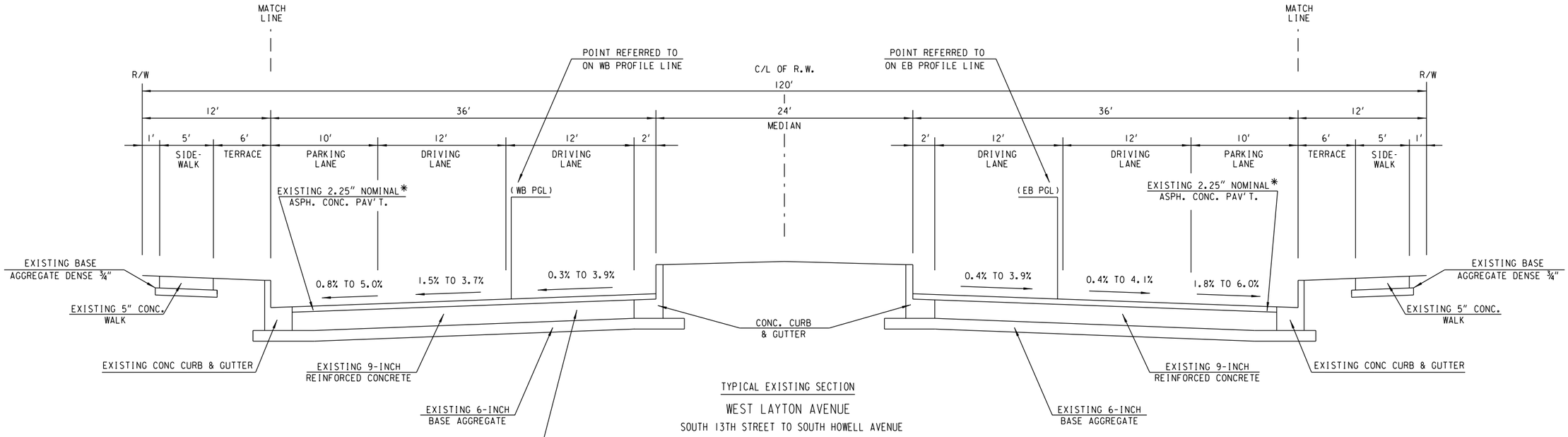
SOUTH 27TH STREET TO SOUTH 20TH STREET

* WHERE INDICATED ON PLAN; OTHERWISE EXISTING

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SCALE FEET	SHEET NO: 6	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TYPSEC.DGN

REVISED DATE: 03-19-2019 BY JC

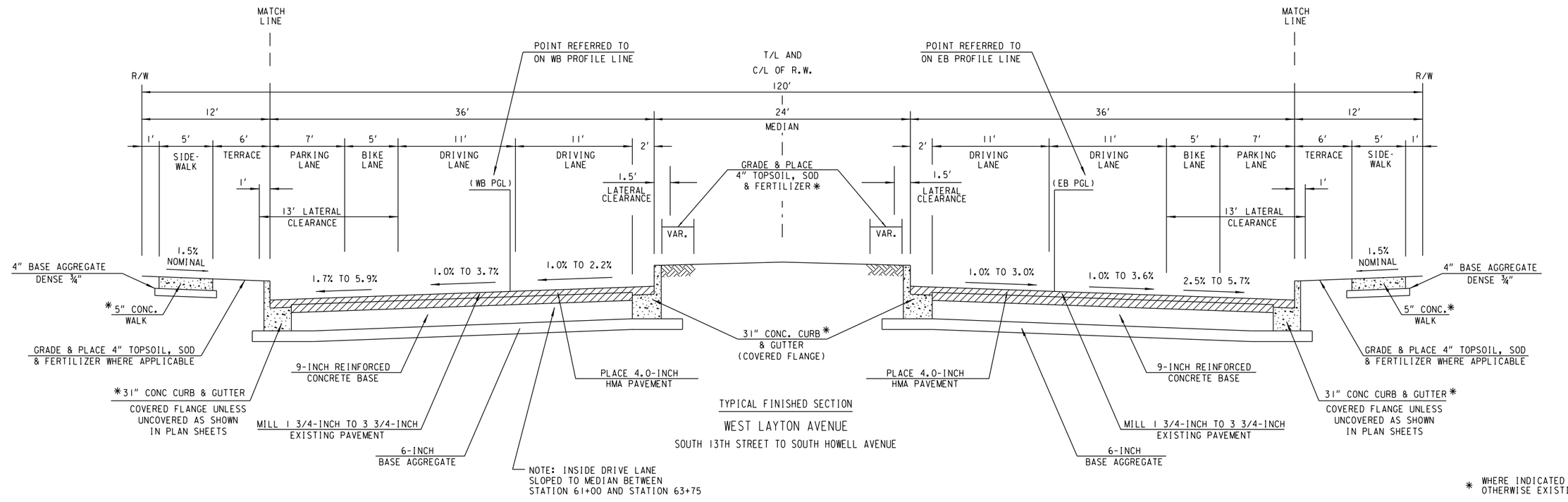


TYPICAL EXISTING SECTION

WEST LAYTON AVENUE

SOUTH 13TH STREET TO SOUTH HOWELL AVENUE

* SEE PAVEMENT CORE LOG CONSTRUCTION DETAIL SHEETS FOR SPOT EXISTING ASPHALTIC CONCRETE PAVEMENT



TYPICAL FINISHED SECTION

WEST LAYTON AVENUE

SOUTH 13TH STREET TO SOUTH HOWELL AVENUE

* WHERE INDICATED ON PLAN; OTHERWISE EXISTING

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SCALE FEET	SHEET NO: 7	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TYPSEC.DGN

REVISED DATE: 03-19-2019 BY JC

PAVEMENT CORE LOG

CORE NUMBER	STATION	OFFSET LEFT (FEET)	ASPHALT DEPTH (INCHES)	UNDERLAYING MATERIAL
33	11+95	38	1.25	PCC WITH REINFORCED STEEL
32	14+40	37	1.50	PCC WITH REINFORCED STEEL
31	20+00	19	2.25	PCC WITH REINFORCED STEEL
30	20+00	37	2.50	PCC WITH REINFORCED STEEL
29	22+00	19	2.25	PCC WITH REINFORCED STEEL
28	23+47	37	1.75	PCC WITH REINFORCED STEEL
27	24+95	18	2.50	PCC WITH REINFORCED STEEL
26	26+75	22	2.00	PCC WITH REINFORCED STEEL
25	28+25	36	1.75	PCC WITH REINFORCED STEEL
24	29+49	3	1.75	PCC WITH REINFORCED STEEL
23	31+25	18	1.75	PCC WITH REINFORCED STEEL
22	33+00	38	2.00	PCC WITH REINFORCED STEEL
21	35+52	37	2.25	PCC WITH REINFORCED STEEL
20	37+25	8	1.50	PCC WITH REINFORCED STEEL
19	38+49	43	1.50	PCC WITH REINFORCED STEEL

PAVEMENT CORE LOG

CORE NUMBER	STATION	OFFSET LEFT (FEET)	ASPHALT DEPTH (INCHES)	UNDERLAYING MATERIAL
68	58+75	20	1.75	PCC WITH REINFORCED STEEL
67	61+00	37	1.75	PCC WITH REINFORCED STEEL
66	64+00	17	2.25	PCC WITH REINFORCED STEEL
65	66+75	36	2.75	PCC WITH REINFORCED STEEL
64	71+00	42	2.00	PCC WITH REINFORCED STEEL
63	75+00	38	2.00	PCC WITH REINFORCED STEEL
62	79+00	20	2.25	PCC WITH REINFORCED STEEL
61	83+00	32	2.25	PCC WITH REINFORCED STEEL
60	87+00	37	2.00	PCC WITH REINFORCED STEEL
59	90+01	38	2.00	PCC WITH REINFORCED STEEL
58	93+50	23	1.75	PCC WITH REINFORCED STEEL
57	96+25	32	1.75	PCC WITH REINFORCED STEEL
56	99+03	19	1.50	PCC WITH REINFORCED STEEL
55	103+01	30	1.75	PCC WITH REINFORCED STEEL
54	107+05	26	1.75	PCC WITH REINFORCED STEEL
53	111+00	22	1.75	PCC WITH REINFORCED STEEL
52	113+00	35	1.75	PCC WITH REINFORCED STEEL

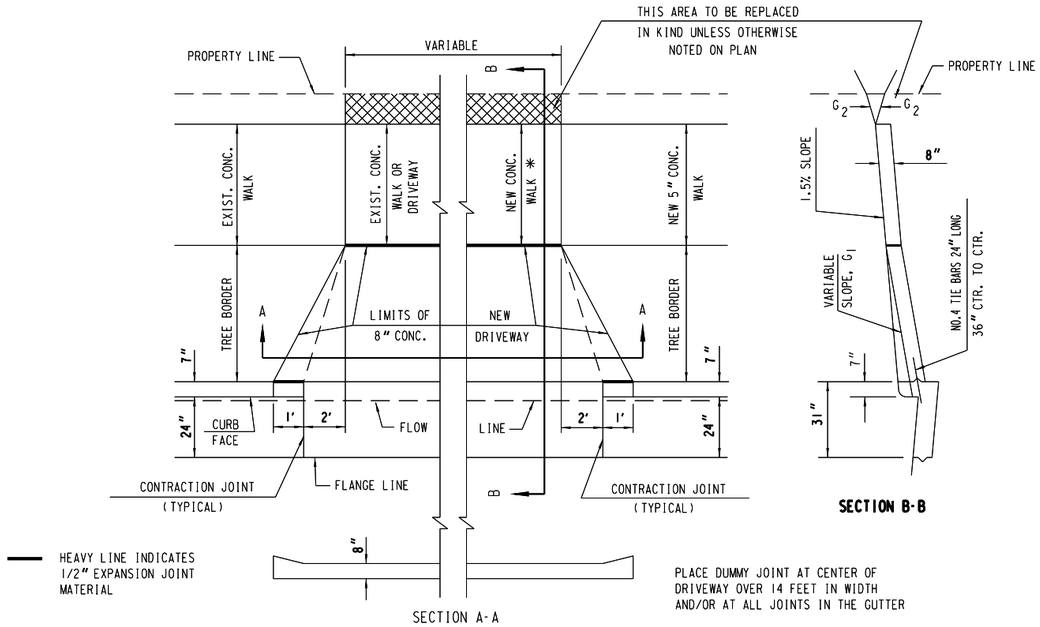
2

PAVEMENT CORE LOG

CORE NUMBER	STATION	OFFSET RIGHT (FEET)	ASPHALT DEPTH (INCHES)	UNDERLAYING MATERIAL
1	11+00	24	2.75	PCC WITH REINFORCED STEEL
2	13+05	35	3.00	PCC WITH REINFORCED STEEL
3	14+58	19	4.25	PCC WITH REINFORCED STEEL
4	16+07	39	3.00	PCC WITH REINFORCED STEEL
5	18+00	18	4.00	PCC WITH REINFORCED STEEL
6	20+00	2	2.75	PCC WITH REINFORCED STEEL
7	21+01	22	3.50	PCC WITH REINFORCED STEEL
8	22+50	38	3.25	PCC WITH REINFORCED STEEL
9	24+00	19	3.50	PCC WITH REINFORCED STEEL
10	26+00	36	3.00	PCC WITH REINFORCED STEEL
11	27+25	38	3.75	PCC WITH REINFORCED STEEL
12	29+08	37	3.00	PCC WITH REINFORCED STEEL
13	30+75	19	1.50	PCC WITH REINFORCED STEEL
14	32+25	37	2.25	PCC WITH REINFORCED STEEL
15	33+50	18	2.50	PCC WITH REINFORCED STEEL
16	35+47	8	2.50	PCC WITH REINFORCED STEEL
17	37+00	34	2.00	PCC WITH REINFORCED STEEL
18	38+50	37	1.50	PCC WITH REINFORCED STEEL

PAVEMENT CORE LOG

CORE NUMBER	STATION	OFFSET RIGHT (FEET)	ASPHALT DEPTH (INCHES)	UNDERLAYING MATERIAL
34	58+32	20	1.75	PCC WITH REINFORCED STEEL
35	61+25	28	2.00	PCC WITH REINFORCED STEEL
36	63+00	38	2.25	PCC WITH REINFORCED STEEL
37	66+00	18	1.75	PCC WITH REINFORCED STEEL
38	69+05	39	1.75	PCC WITH REINFORCED STEEL
39	72+00	19	2.00	PCC WITH REINFORCED STEEL
40	75+00	37	2.00	PCC WITH REINFORCED STEEL
41	78+50	19	2.50	PCC WITH REINFORCED STEEL
42	81+94	36	2.25	PCC WITH REINFORCED STEEL
43	85+00	37	2.50	PCC WITH REINFORCED STEEL
44	87+50	19	0.75	PCC WITH REINFORCED STEEL
45	90+00	32	1.50	PCC WITH REINFORCED STEEL
46	94+06	29	1.75	PCC WITH REINFORCED STEEL
47	98+00	20	1.75	PCC WITH REINFORCED STEEL
48	101+00	34	1.75	PCC WITH REINFORCED STEEL
49	105+00	34	1.75	PCC WITH REINFORCED STEEL
50	109+02	25	2.00	PCC WITH REINFORCED STEEL
51	113+50	38	1.50	PCC WITH REINFORCED STEEL



CONCRETE DRIVEWAY FLARED

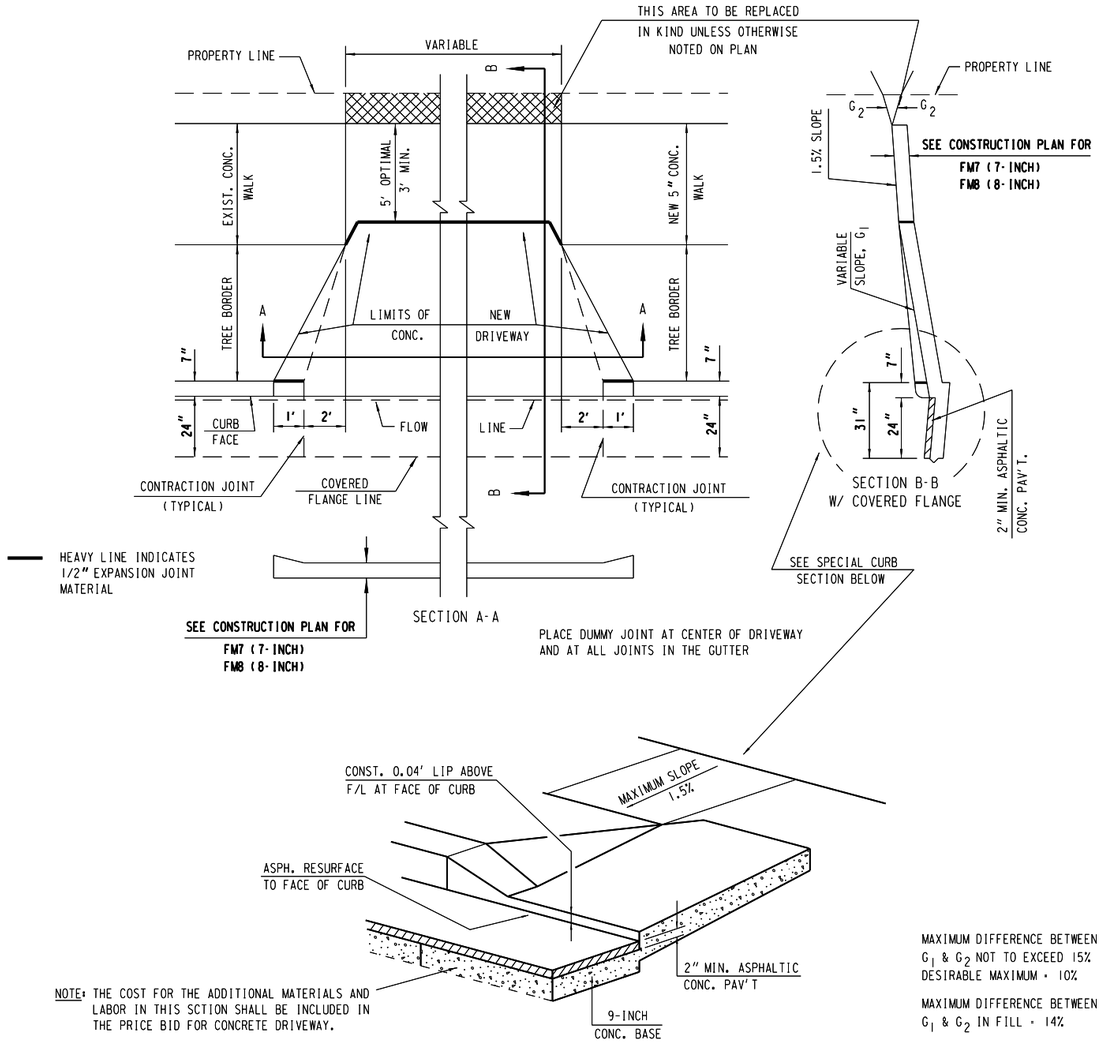
Ⓔ Ⓕ

CONSTRUCTION NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% FOR SIDEWALK CROSS SLOPE. SLOPE SHALL NOT EXCEED 2%
2. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
3. SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, FOR THICKNESS AS THE PLAN SHOWS.
4. CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, THICKNESS AS THE PLAN SHOWS.
5. SEE PLAN DETAIL SHEETS FOR 5-FOOT CONCRETE WALK; 4-FOOT CONCRETE WALK MINIMUM WHERE PROVIDED ACROSS DRIVEWAYS

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

MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 IN FILL - 14%



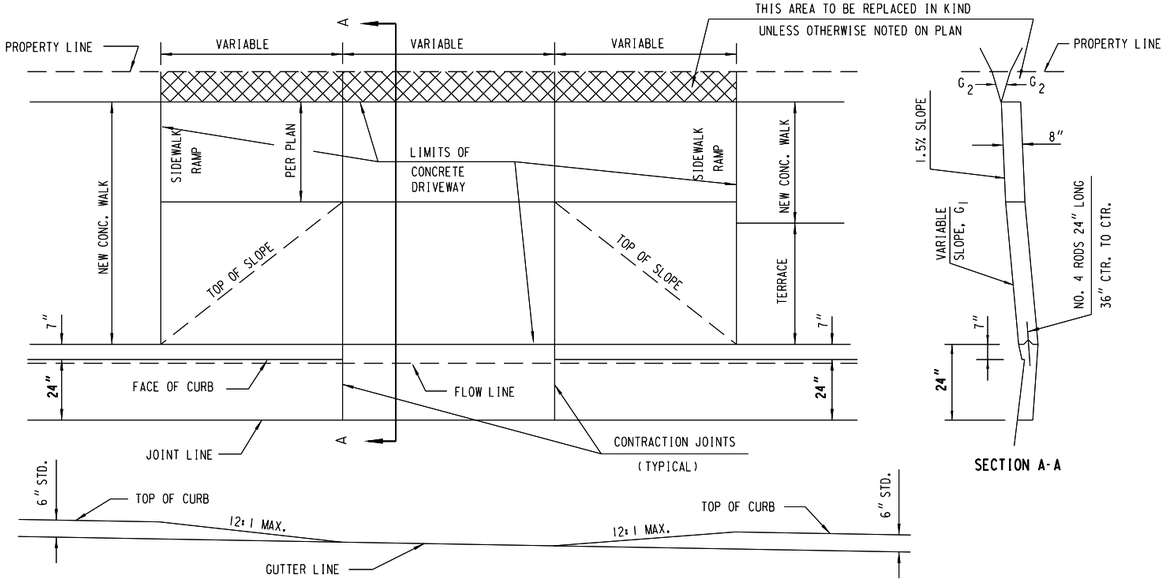
CURB SECTION DETAIL

FLARED CONCRETE DRIVEWAY (MODIFIED)

Ⓕⓜ

CONSTRUCTION NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% FOR SIDEWALK CROSS SLOPE. SLOPE SHALL NOT EXCEED 2%
2. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
3. SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, FOR THICKNESS AS THE PLAN SHOWS.
4. CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, THICKNESS AS THE PLAN SHOWS.
5. SEE PLAN DETAIL SHEETS FOR 5-FOOT CONCRETE WALK; 4-FOOT CONCRETE WALK MINIMUM WHERE PROVIDED ACROSS DRIVEWAYS



SECTION A-A

CONSTRUCTION NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% FOR SIDEWALK CROSS SLOPE. SLOPE SHALL NOT EXCEED 2%
2. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
3. SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, FOR THICKNESS AS THE PLAN SHOWS.
4. CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, THICKNESS AS THE PLAN SHOWS.
5. SEE PLAN DETAIL SHEETS FOR 5-FOOT CONCRETE WALK; 4-FOOT CONCRETE WALK MINIMUM WHERE PROVIDED ACROSS DRIVEWAYS

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

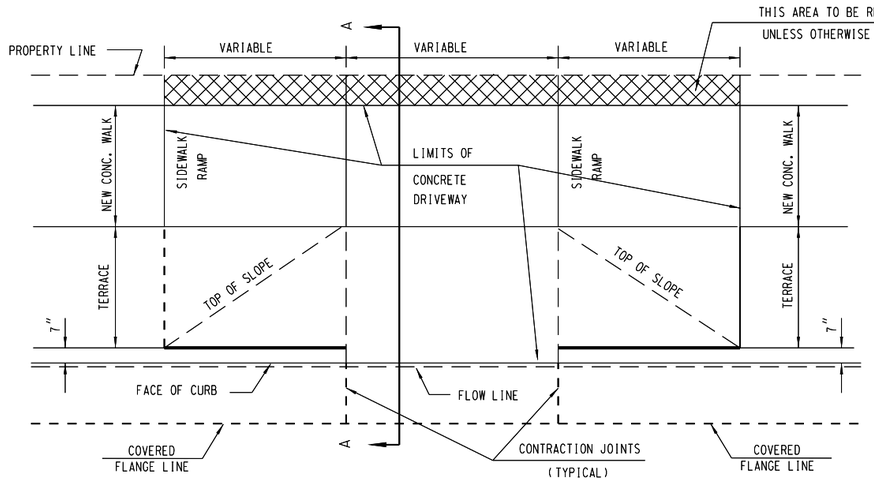
MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 IN FILL - 14%

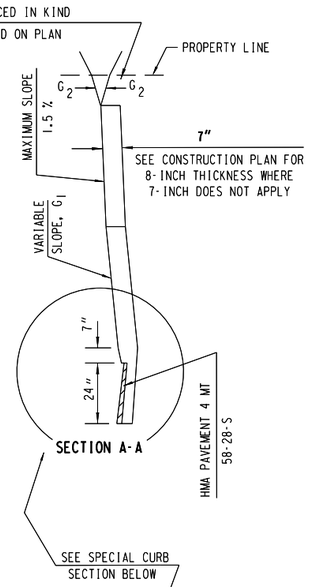
DRIVEWAY CONSTRUCTION NOTES

CONSTRUCT DRIVEWAY TO PROPERTY LINE ONLY WHEN MATCHING EXISTING DRIVEWAY AND INSTALL 1/2" EXPANSION JOINT MATERIAL BETWEEN NEW AND OLD DRIVEWAY, PLACE DUMMY JOINT AT CENTER OF DRIVEWAY AND AT ALL JOINTS IN THE GUTTER

DEPRESSED CONCRETE DRIVEWAY (MODIFIED)

Ⓖ





CONSTRUCTION NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% FOR SIDEWALK CROSS SLOPE. SLOPE SHALL NOT EXCEED 2%
2. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
3. SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, FOR THICKNESS AS THE PLAN SHOWS.
4. CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, THICKNESS AS THE PLAN SHOWS.
5. SEE PLAN DETAIL SHEETS FOR 5-FOOT CONCRETE WALK; 4-FOOT CONCRETE WALK MINIMUM WHERE PROVIDED ACROSS DRIVEWAYS

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

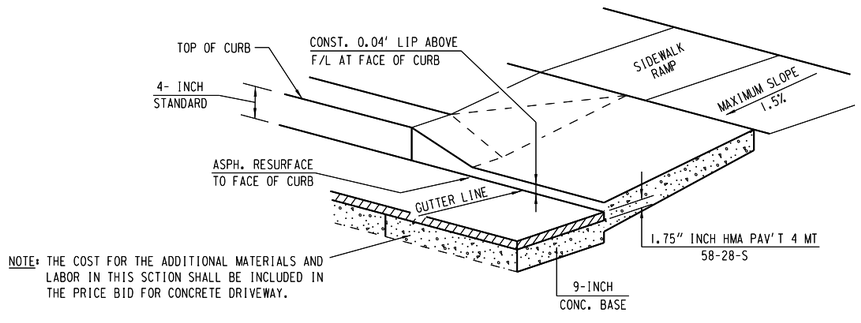
MAXIMUM DIFFERENCE BETWEEN
G_1 & G_2 IN FILL - 14%

HEAVY LINE INDICATES
1/2" EXPANSION JOINT
MATERIAL

DRIVEWAY CONSTRUCTION NOTES

CONSTRUCT DRIVEWAY TO PROPERTY LINE ONLY WHEN MATCHING EXISTING DRIVEWAY AND INSTALL 1/2" EXPANSION JOINT MATERIAL BETWEEN NEW AND OLD DRIVEWAY, PLACE DUMMY JOINT AT CENTER OF DRIVEWAY AND AT ALL JOINTS IN THE GUTTER

COMPLY WITH REQUIREMENT FOR 8.33% MAXIMUM SIDEWALK RAMP WHEN MATCHING DRIVEWAY INTO SIDEWALK



NOTE: THE COST FOR THE ADDITIONAL MATERIALS AND LABOR IN THIS SCTION SHALL BE INCLUDED IN THE PRICE BID FOR CONCRETE DRIVEWAY.

CURB SECTION DETAIL SECTION A-A

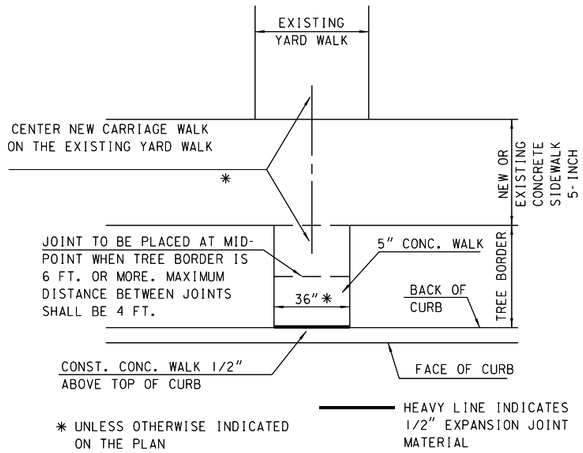
DEPRESSED CONCRETE DRIVEWAY (MODIFIED)

Ⓗ

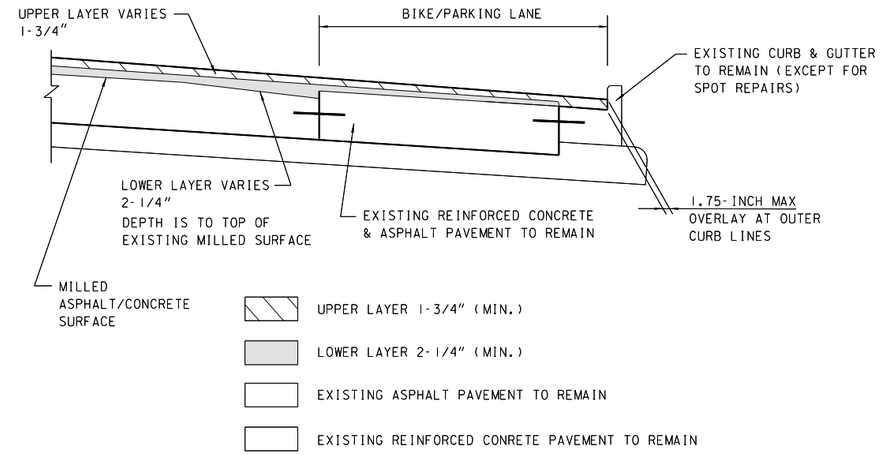
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 12	E

FILE NAME = W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

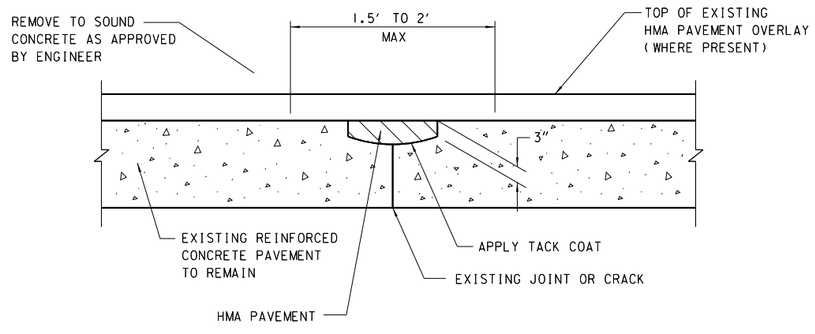
REVISED DATE: 01-18-2019 BY JC



CARRIAGE WALK



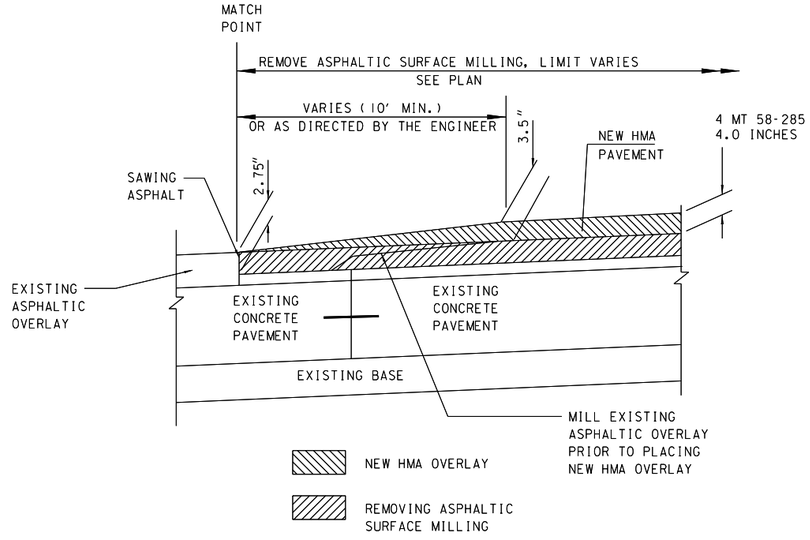
HMA LAYERS DETAIL



NOTES :

1. IN ALL AREAS OF JOINT REPAIR REMOVE ASPHALTIC MATERIAL AND/OR LOOSE & DETERIORATED CONCRETE. CLEAN & REPLACE WITH HMA PAVEMENT AS DIRECTED BY THE ENGINEER.
2. REMOVAL OF GREATER THAN 3" TO BE PAID AS BASE PATCHING CONCRETE.
3. LOCATIONS FOR JOINT REPAIR TO BE APPROVED BY THE ENGINEER PRIOR TO THE START OF REPAIR WORK.

JOINT AND CRACK REPAIR DETAIL

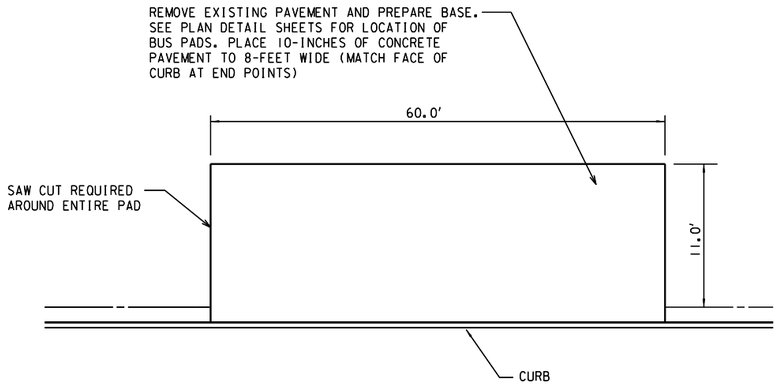


MILLING ASPHALTIC PAVEMENT DETAIL

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 13	E

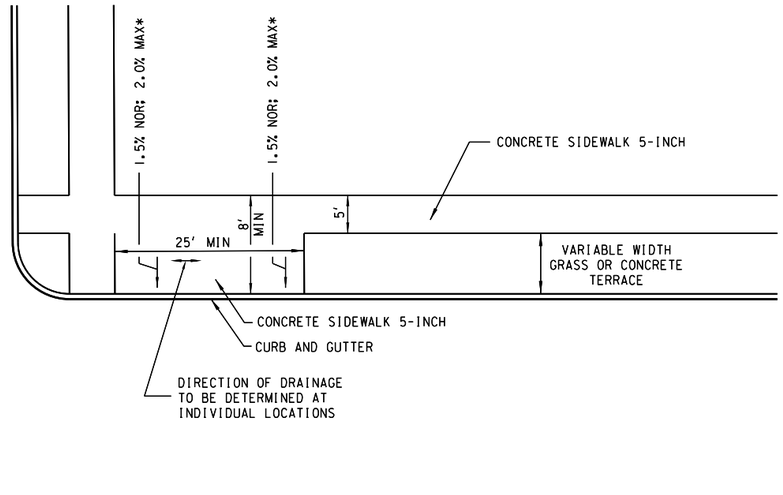
FILE NAME = W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

REVISED DATE: 06-01-2018 BY SB



CONCRETE BUS STOPPING ZONE PAD

Ⓓ



TYPICAL DETAIL OF CORNER BUS STOP

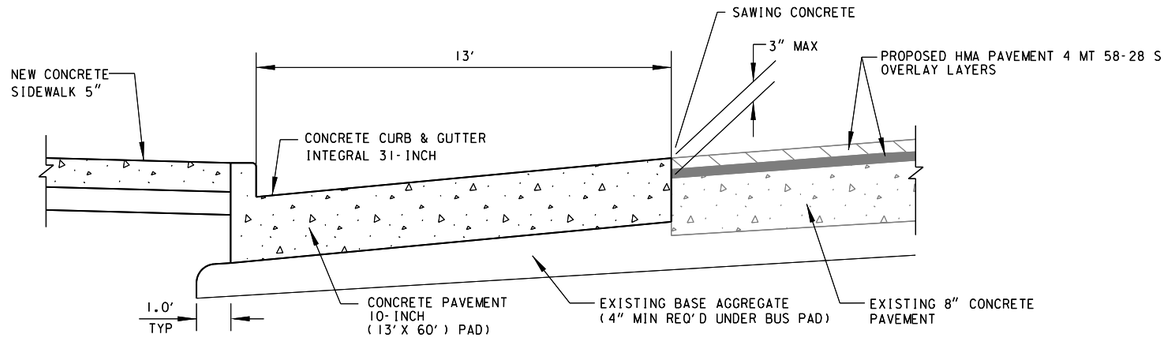
SW AT S. 25TH STREET
NE AT S. 23RD STREET
SW AT S. 23RD STREET
SW AT S. 22ND STREET
NE AT S. 20TH STREET
SW AT S. 20TH STREET
NE AT S. 13TH STREET
SW AT S. 13TH STREET
NE AT S. 6TH STREET
NE AT S. 5TH STREET

CONSTRUCTION NOTE:

SEE SECTION 5 PLAN VIEWS TO SEE WHERE CORNER BUS STOP TERRACE CONCRETE APPLIES.

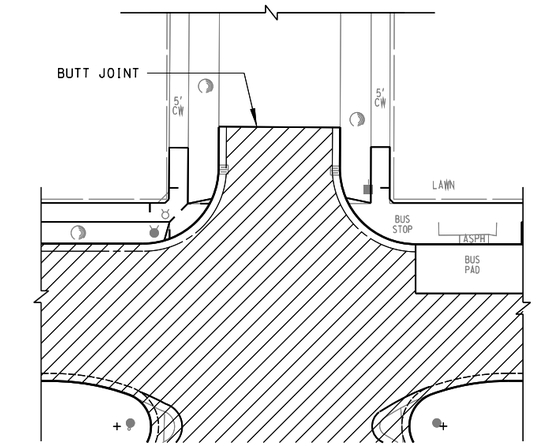
*IF A 2.0% MAXIMUM SLOPE CANNOT BE OBTAINED DUE TO EXISTING FIELD CONDITIONS ADJACENT SIDEWALK SHALL BE REMOVED AND DEPRESSED TO ALLOW A 1.5% SLOPE; 2.0% MAX.

2



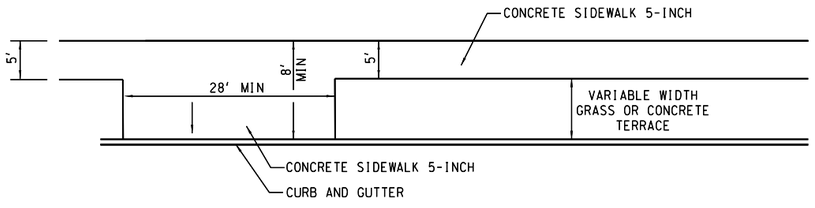
BUS PAD DETAIL

(WESTBOUND WEST LAYTON AVENUE SHOWN)



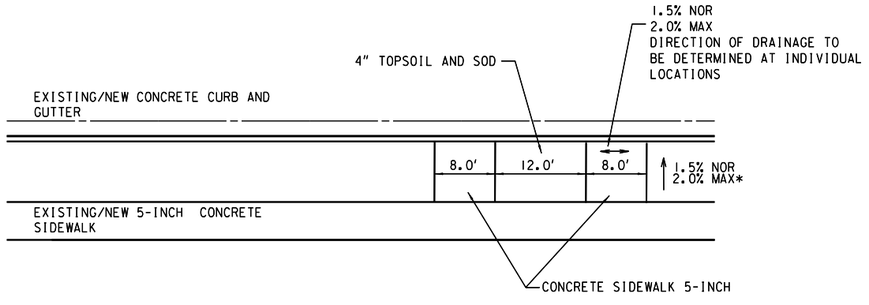
LIMITS OF HMA PAVEMENT 4 MT 58-28 S

PAVING LIMITS AT SIDE STREETS



TYPICAL DETAIL OF MID-BLOCK BUS STOP

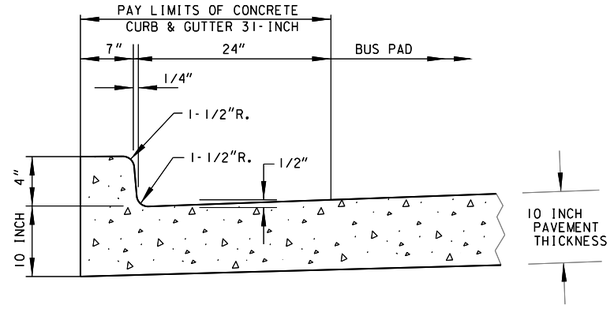
NE AT S. 25TH STREET
NE AT S. 22ND STREET
NW AT S. 13TH STREET
SW AT S. 13TH STREET
SW AT S. 10TH STREET
NW AT S. 10TH STREET
SW AT 835 W. LAYTON AVE.
SE AT S. 6TH STREET
NE AT S. 6TH STREET
SW AT S. 5TH STREET
204 W. LAYTON AVE.
191 W. LAYTON AVE.



CONSTRUCTION NOTE:

SEE SECTION 5 PLAN VIEWS TO SEE WHERE 12.0 FOOT TOPSOIL AND SOD APPLIES TO BUS STOP.

*IF A 2.0% MAXIMUM SLOPE CANNOT BE OBTAINED DUE TO EXISTING FIELD CONDITIONS ADJACENT SIDEWALK SHALL BE REMOVED AND DEPRESSED TO ALLOW A 1.5% SLOPE; 2.0% MAX.



CONCRETE CURB & GUTTER INTEGRAL 31-INCH

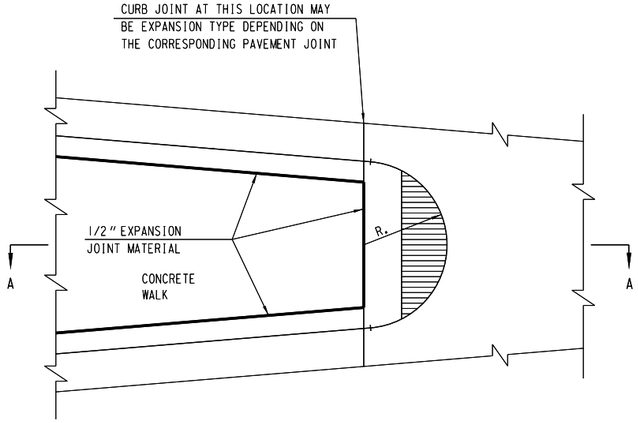
(AT BUS PADS)

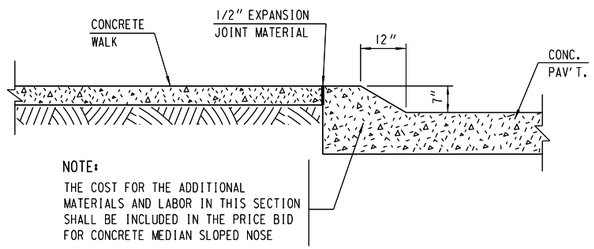
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: E

FILE NAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

REVISED DATE: 03-19-2019 BY JC

2

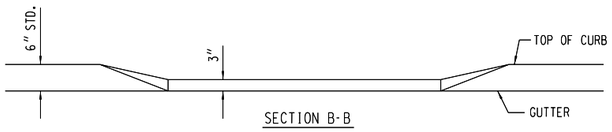




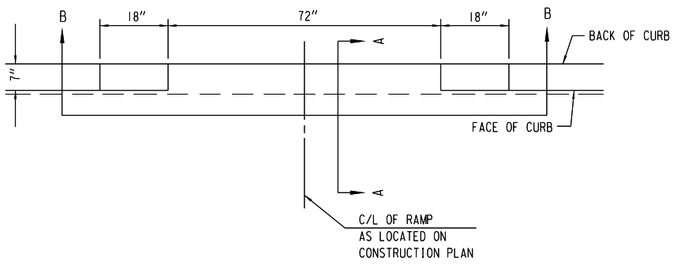
SECTION A-A

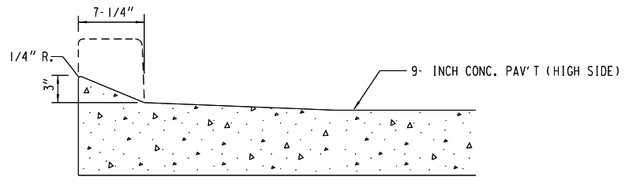
(SNOWPLOWABLE) CONCRETE MEDIAN SLOPED NOSE

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



SECTION B-B

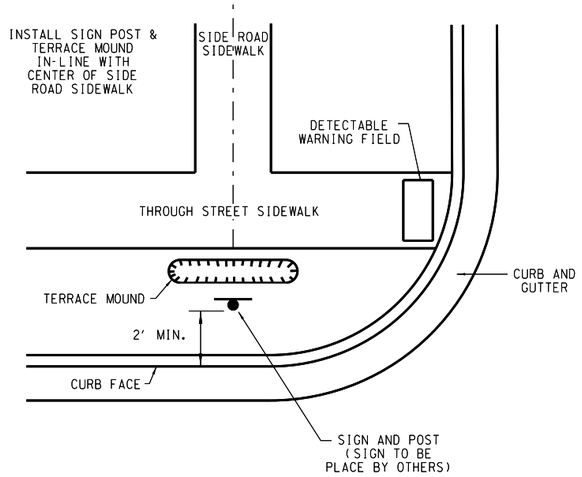




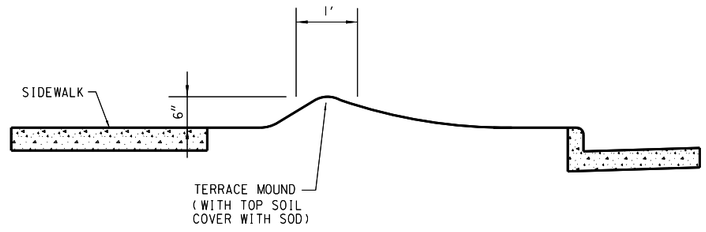
SECTION A-A

MAINTENANCE RAMP

Ⓡ



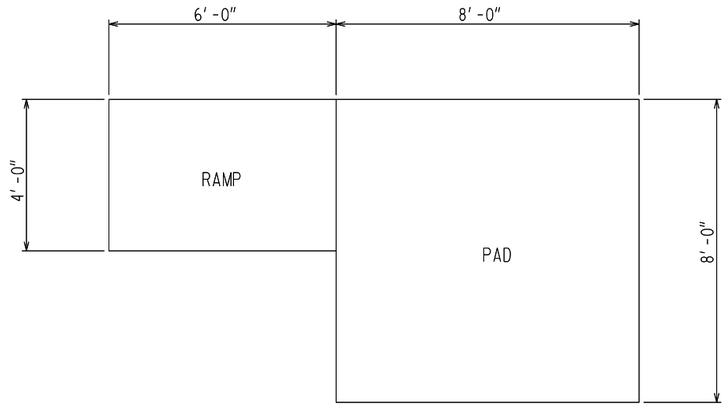
MOUND AND SIGN LOCATION DETAIL



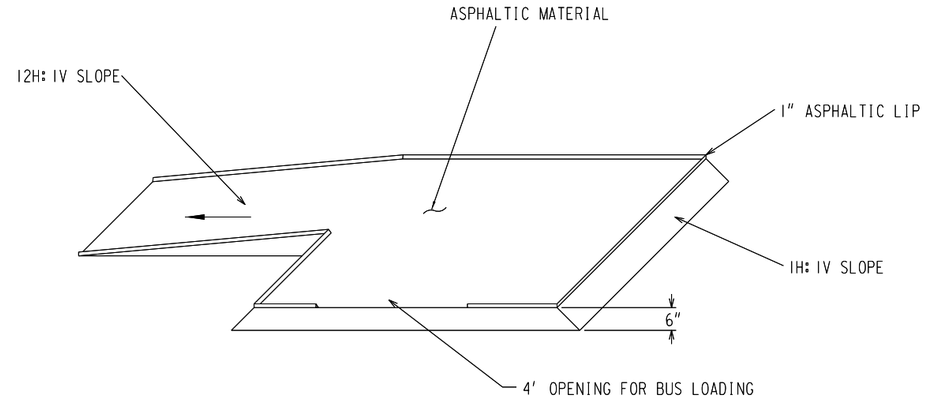
TERRACE MOUND DETAIL

Ⓣ

2



NOTE:
RAMP MAY BE LONGER
IF ROADWAY SLOPE REQUIRES



NOTE:
RAMP SHALL BE PLACED TO FACE
TOWARDS PEDESTRIAN CROSSING

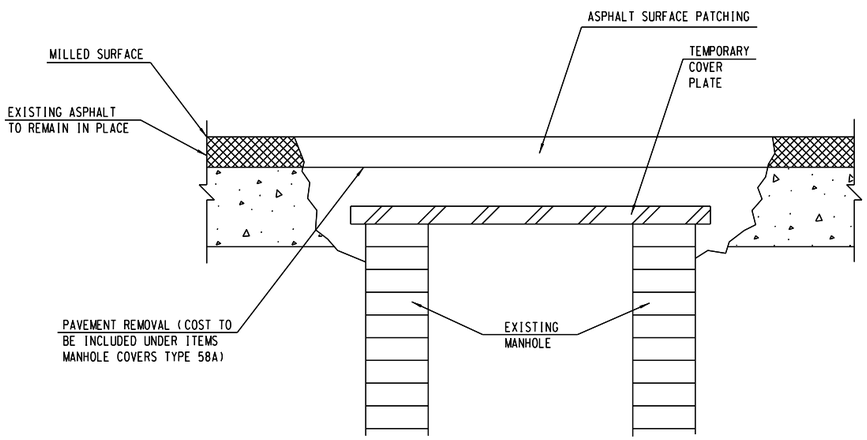
TEMPORARY BUS LOADING PLATFORM

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0′ 40′	SHEET NO: 18	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

REVISED DATE: 1-7-2019 BY SMB

TEMPORARY COVER PLATE DETAIL
FOR ALL TYPES OF MANHOLE ADJUSTMENT
(EXCEPT CUC)



STEP 1

PRIOR TO REMOVING ASPHALT

1A. REMOVE BY SAWING AROUND MANHOLE AND STORE MANHOLE COVER.

1B. FURNISH AND INSTALL TEMP. COVER PLATE. *

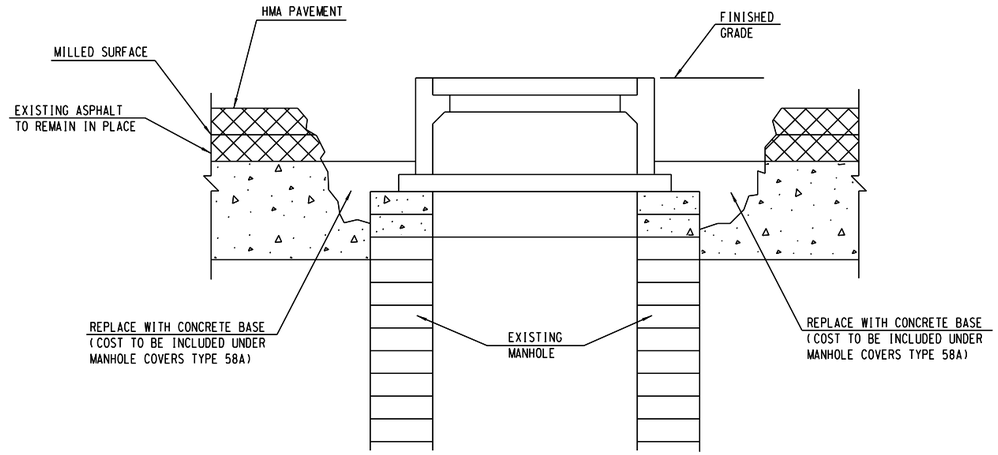
1C. BACKFILL USING ASPHALT SURFACE PATCHING *

* TO BE PAID FOR UNDER CONTR. ITEMS.

UTILITY CO. MANHOLES

STEP 1A BY UTILITY CO.

STEP 1B AND 1C IN COORDINATION WITH WORK BY UTILITY CO. (TO BE PAID FOR UNDER CONTR. ITEMS).



STEP 2

AFTER PAVING HMA PAVEMENT

2A. EXCAVATE AND REMOVE TEMPORARY COVER PLATE.

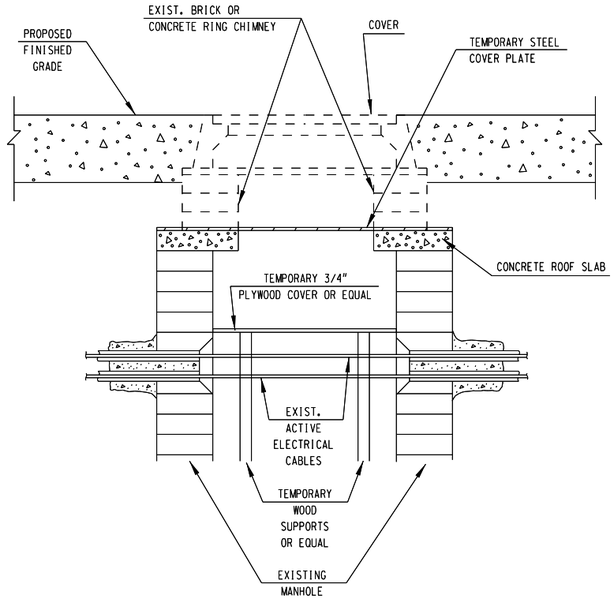
2B. ADJUST MANHOLE AND REINSTALL MANHOLE COVER TO FINISH GRADE. ADJUSTMENTS MAY VARY AT TIME OF CONSTRUCTION

(OTHER WORK TO BE DONE IN ACCORDANCE WITH ITEM - COVER PLATE TEMPORARY)

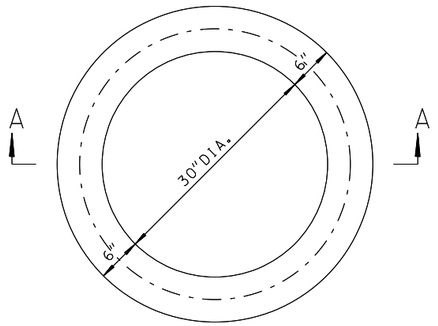
UTILITY CO. MANHOLES

ALL WORK DONE BY UTILITY CO.

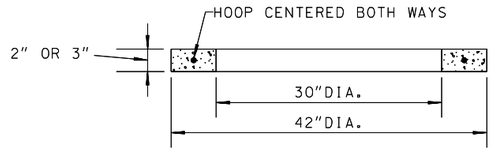
TEMPORARY COVER PLATES TO BE RETURNED TO CONTRACTOR.



BLOCK OR PRECAST MANHOLE



PLAN



SECTION A-A

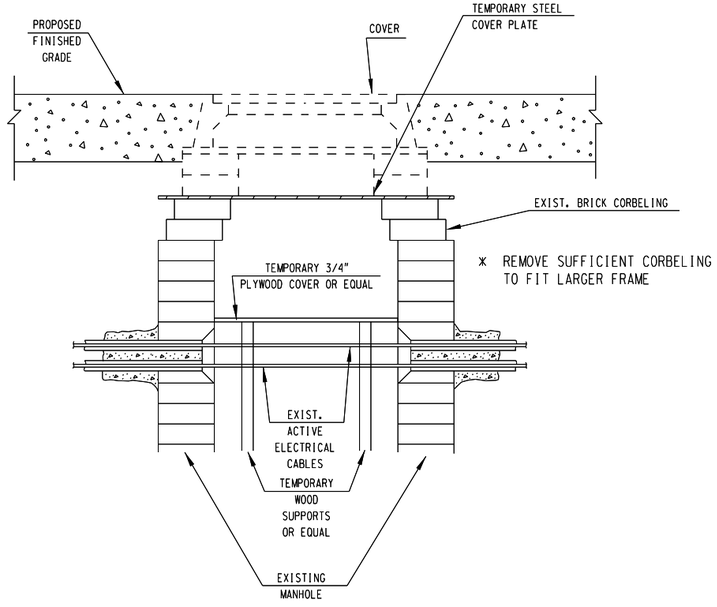
THE ADJUSTING RING SHALL BE 2" OR 3" IN HEIGHT.

THE CIRCUMFERENTIAL STEEL SHALL BE CENTERED WITHIN THE RING.

AREA OF CIRCUMFERENTIAL STEEL = 0.07 SQ. INCH PER VERTICAL FOOT WITH A MINIMUM OF .024 SQ. INCH IN ANY ONE RING.

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

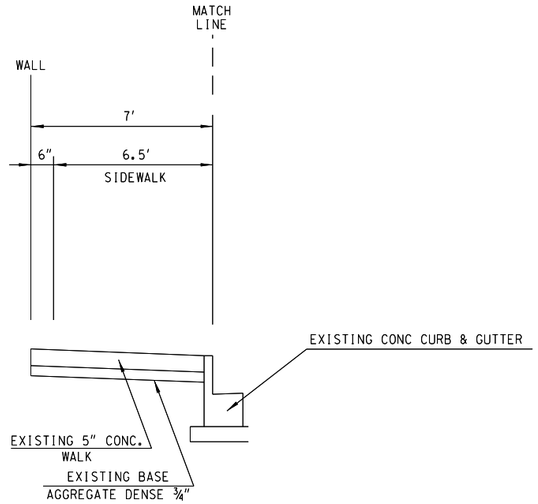
CONCRETE ADJUSTING RING



BRICK ROUND MANHOLE

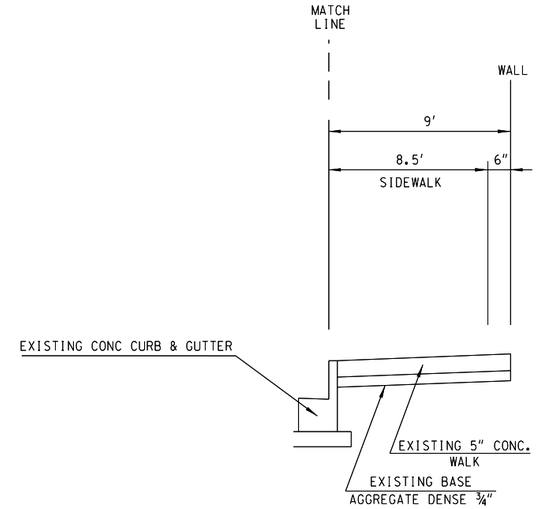
ADJUSTING CUC MANHOLES

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 20	E



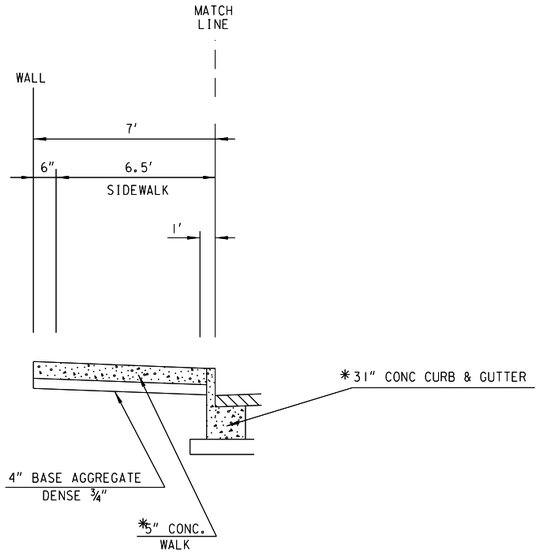
EXISTING FULL WALK TERRACE

STA 68+78.9 TO STA 69+81.5



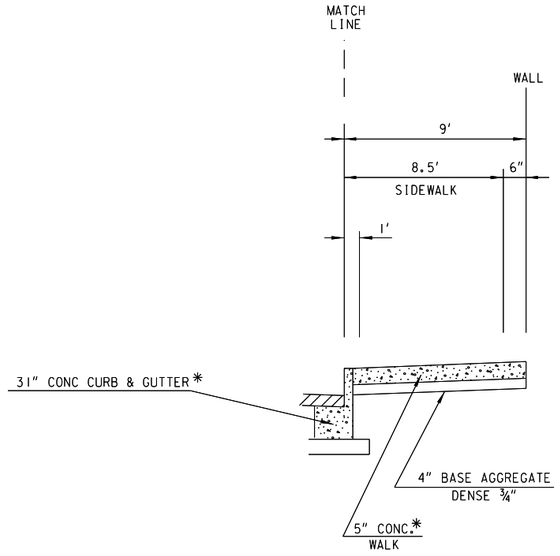
EXISTING FULL WALK TERRACE

STA 68+98.2 TO STA 69+73.8



PROPOSED FULL WALK TERRACE

STA 68+78.9 TO STA 69+81.5



PROPOSED FULL WALK TERRACE

STA 68+98.2 TO STA 69+73.8

2

WEST ASPH PARKING

LAYTON AVENUE

N

MAIL

ELEC BOX

SIGN

ST.

CAUTION

5' CW

R/W

MONOTUBE ON CONC BASE

SIGN

POST

POST

DOT

1"

3"

FO

TEL

G

COMM

MONOTUBE ON CONC BASE

STREET LIGHTING

SPRINKLER VALVES

+50

+50

+50

MONUMENT

CUC

CUC

CUC

LUMBER

3' CW

STD BM

S. 20TH

R/W

MONOTUBE ON CONC BASE

BUS STOP

BUS SHELTER

CHAIN LINK FENCE

DOT

35

36

37

14'

46'

36'

46'

36'

14'

22.2'

22'

21.8'

16.6'

19'

12'

15'

12'

12'

12'

10'

17.6'

26.7'

27.1'

11.4'

21'

130.86 131.27 131.48 131.68 131.79 131.87 131.90 131.89

130.58 130.95 131.20 131.49 131.66 131.84 131.96 132.06 132.14 132.19 132.28 132.46

130.79 131.06 131.43 131.66 131.80 131.97 132.09 132.20 132.31 132.39 132.58 132.76

131.03 131.28 131.62 131.81 131.93 132.09 132.21 132.33 132.45 132.55 132.80 132.97

131.61

131.78 131.73 G

131.86 131.94 132.05 132.20 132.32 132.44 132.55 132.65

133.05G

133.00G

131.68 131.76 131.88 132.03 132.15 132.30 132.41 132.51 132.61 132.69 132.72 132.85

131.67 131.72 131.84 132.10 132.24 132.39 132.49 132.57 132.63 132.67 132.47 132.59

131.49 131.55 131.80 132.13 132.29 132.45 132.54 132.59 132.61 132.60

131.69 132.14 132.35 132.52 132.59 132.60 132.54 132.45

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 22	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

REVISED DATE: 02-12-2018 BY JH

WEST LAYTON AVENUE

N

CURB 11" 9"

4' 5' CW

CONC SIGN BASE

IP BUSH

98.79 CUC 98.87 98.86 98.75

MONOTUBE ON CONC BASE

STREET LIGHTING VAULT

SIGN BUS SHELTER

ASPH.

LAWN

MMSD

BUS STOP

12"

25'

98.93 98.99 98.99 98.95 98.85 98.69

99.58 99.23 99.11 99.11 99.04 98.95 98.82 98.51

22' 13' 12' 12' 12' 13' 22'

11' 11' 12'

99.92 99.51 99.34 99.24 99.15 99.05 98.95 98.66

TEL

STREET LIGHTING VAULT

99.77 99.55 99.43 99.31 99.19 99.07 98.80

MONOTUBE ON CONC BASE

61 +50 62 +50 63 +50

14'

SEG LINE

100.05 99.80 99.65 99.50 99.35 99.18

MONUMENT

MONOTUBE ON CONC BASE

SPRINKLER VALVE

DOT

FO

12' 13' 11' 11' 11' 11' 11' 11' 11' 11' 11' 11' 11' 11' 12'

46'

100.70 100.30 100.00 99.86 99.68 99.50 99.30

100.90 100.50 100.25 100.05 99.84 99.64 99.41

CUC 99.15

CUC

100.99 100.67 100.43 100.21 99.98 99.76 99.52 99.20

17' 13' 12' 12' 12' 13' 22'

100.82 100.62 100.41 100.18 99.92 99.62

DOT

FO

DOT

100.89 100.69 100.45 100.16 99.82

BLOCK RET. WALL

101.23 101.03 100.78 100.46

MONOTUBE ON CONC BASE

STREET LIGHTING VAULT

15TH S.

6' CW

ASPH

MMSD

8" 6" 6"

BUSHES

CONC. MAILBOX CONC.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 23	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

REVISED DATE: 03-20-2018 BY DB

WEST LAYTON AVENUE

S. 6TH ST.

ASPH.

WALK SIGNAL BUTTON

WALK SIGNAL BUTTON

SIGN

COMM

BUSHES

WOOD CHIPS

BUSHES

BUSHES

MONUMENT

LANNON STONE

DOT

DOT

DOT

MMSD

CUC

CUC

WEP

TEL

WAT

WAT

WAT

14" ELEC BOX

SIGN

FIBER OPTIC

BUS SHELTER

GRAVEL PLANTER

GRAVEL PLANTER

FO

N

87 88 89

+50 +50 +50

88.96 89.06 89.11 89.05 88.95 88.83

9.5' 9.5' 9.5' 7' 7' 7'

88.36G 88.91 89.16 89.31 89.16 88.94

27' 17' 21' 15.9' 12' 27'

88.86 89.28 89.41 89.31 88.75

+64.7 89.21 +86 89.27 89.43 89.54 89.46 +75 89.27 89.06

89.60 89.66 89.59 89.35

+70.8 89.40 89.68 89.72 89.65 89.27

15.3' 22.2'

89.64 88+28

+81 89.31 89.35 89.57 89.66 89.56 89.10

33.3'

89.18 89.48 89.59 89.46 88.87

89.21 89.39 89.55 89.40 89.16

89.30 89.45 89.55 89.74 89.50 89.28

7' 7' 7' 9.5' 9.5' 6'

120' 14' 46' 36'

11' 11' 11' 11' 11' 11' 11' 11'

G 3" 4" 4" 3" 3" 4" 9"

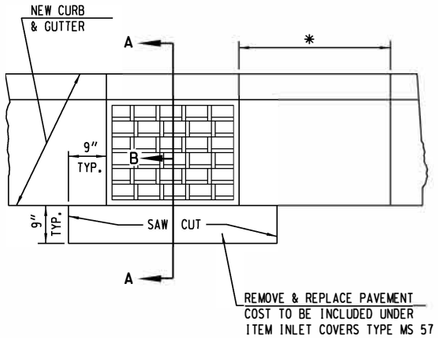
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 24	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

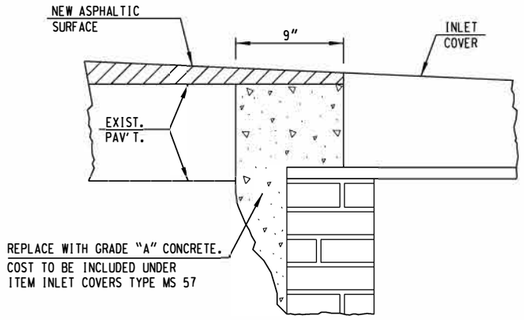
REVISED DATE: 07-17-2018 BY SB

2

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

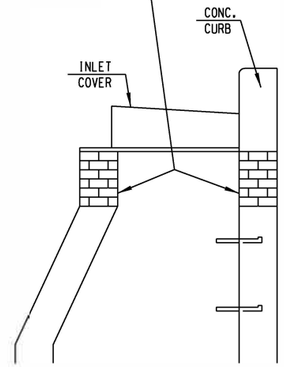


PLAN VIEW



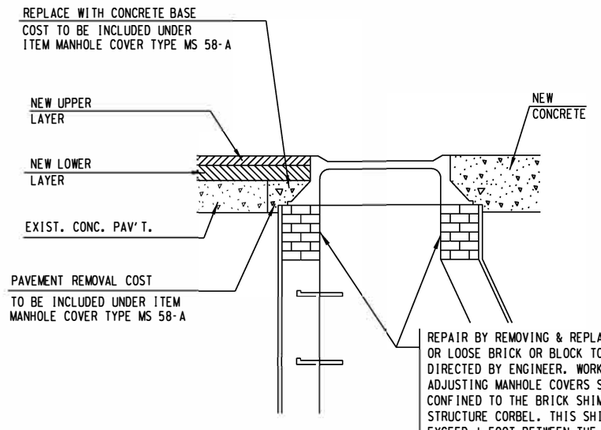
SECTION A-B

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 1 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 INLET COVERS TYPE MS 57. DEPTHS OF BRICKWORK TO BE REPAIRED, AS INDICATED ON THE PLAN, ARE ESTIMATES ONLY AND MAY VARY AT TIME OF CONSTRUCTION.



SECTION A-A

ADJUSTING INLET COVERS



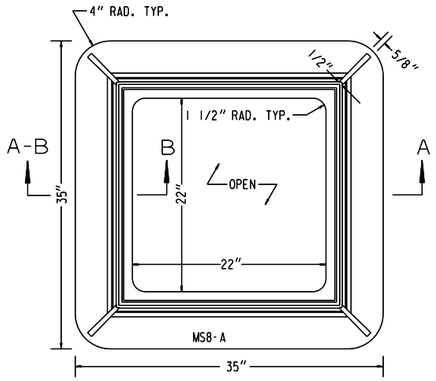
REPAIR BY REMOVING & REPLACING DAMAGED OR LOOSE BRICK OR BLOCK TO DEPTH AS DIRECTED BY ENGINEER. WORK UNDER ADJUSTING MANHOLE COVERS SHALL BE CONFINED TO THE BRICK SHIMMING ABOVE THE STRUCTURE CORBEL. THIS SHIMMING SHALL NOT EXCEED 1 FOOT BETWEEN THE TOP OF THE CORBEL AND THE FRAME BOTTOM. ANY WORK MORE EXTENSIVE THAN DESCRIBED IMMEDIATELY ABOVE SHALL BE CONSTRUED AS WORK UNDER MANHOLE COVER TYPE MS 58-A. DEPTHS OF BRICK-WORK TO BE REPAIRED, AS INDICATED ON THE PLAN, ARE ESTIMATES ONLY AND MAY VARY AT TIME OF CONSTRUCTION.

ADJUSTING MANHOLE COVERS

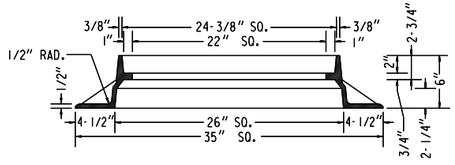
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SCALE FEET	SHEET NO: 25	E

FILE NAME= W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\CONDET.DGN

REVISED DATE: 03-20-2019 BY JC



TOP VIEW

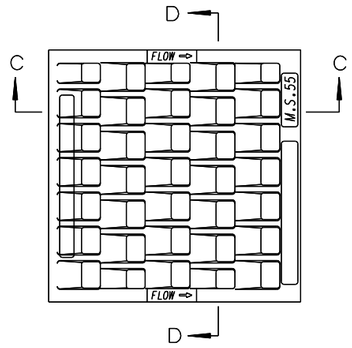


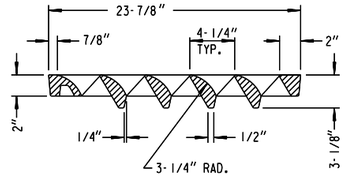
SECTION A-A

SECTION B-B

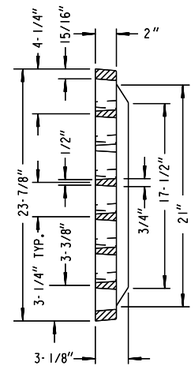
FRAME DETAIL

(TYPE MS-8A SHOWN)
SCALE N.T.S.





SECTION C-C



SECTION D-D

(TYPE MS-55 SHOWN)
SCALE N.T.S.

GRATE DETAIL

INLET COVER - TYPE 55

GRATE-159 LBS., FRAME-165 LBS.

GENERAL NOTES

ALL EDGES ARE TO BE GROUND.

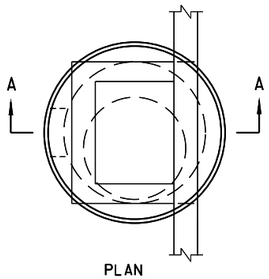
ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8 INCH

ON THE FRAME

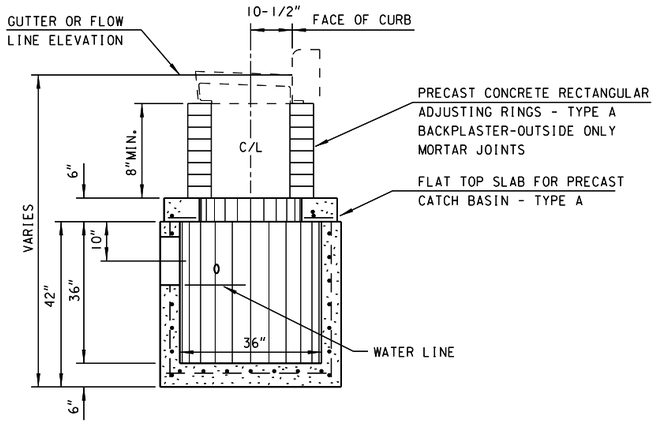
1. ON THE UPPER FACE OF THE FLANGE IN 1 INCH HIGH LETTERS THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE CASTING IDENTIFICATION NUMBER (MS-8A), THE YEAR MADE AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.
2. ON THE SEAT OF THE FRAME IN 3/4 INCH HIGH LETTERS, THE CASTING IDENTIFICATION NUMBER (8).

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 (MS-55) AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.



PLAN



SECTION A-A

INLET - TYPE 45A

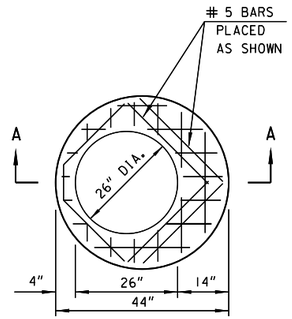
GENERAL NOTES

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.

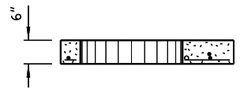
2. ALL REINFORCEMENT STEEL SHALL BE GRADE 60 OR GREATER AND EMBEDDED AT LEAST 1" CLEAR.

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.



PLAN



SECTION A-A

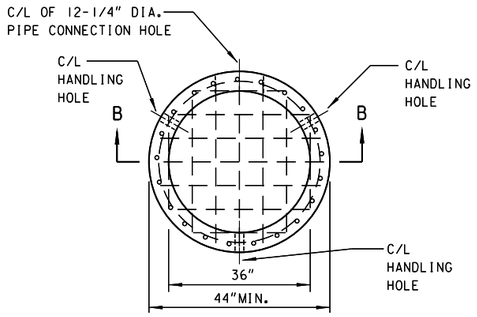
TOP SLAB - TYPE A

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.

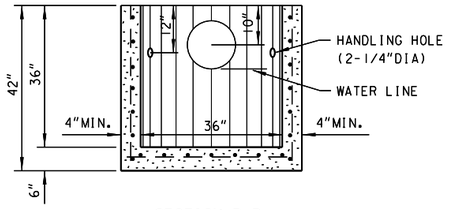
ADDITIONALLY, NO. 5 BARS SHALL BE PLACED AROUND TOP SLAB OPENING AS SHOWN.

REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

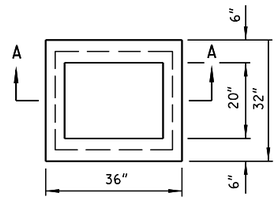
THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.



RISER SECTION WITH INTEGRAL BASE PLAN



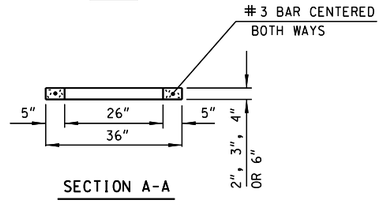
SECTION B-B



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.

PLAN



SECTION A-A

RECTANGULAR ADJUSTING RING - TYPE A

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.

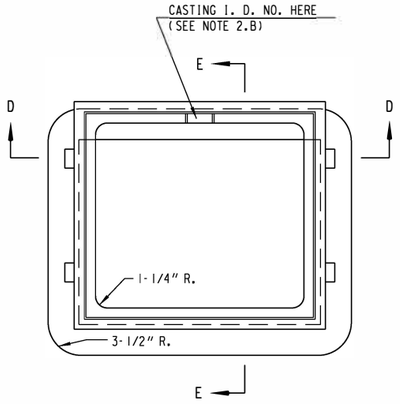
RISER SECTION AND BASE SLAB REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

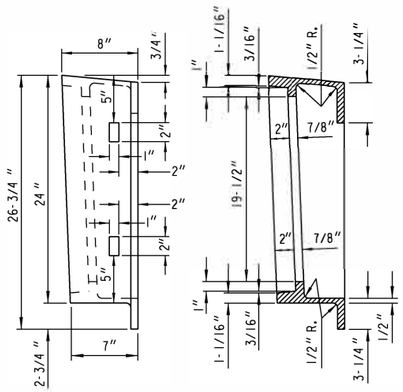
TWO TO THREE HANDLING HOLES 2-1/4" IN DIAMETER AND A PIPE CONNECTION HOLE 12-1/4" IN DIAMETER SHALL BE CAST OR CORED IN THE RISER SECTION AT THE LOCATIONS SHOWN. LIFTING DEVICES MAY BE SUBSTITUTED FOR HANDLING HOLES.

NO JOINTS OR HOLES SHALL BE BELOW THE WATERLINE.

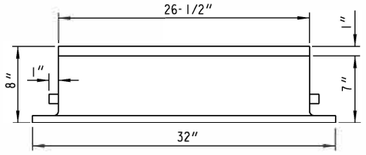
THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.

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

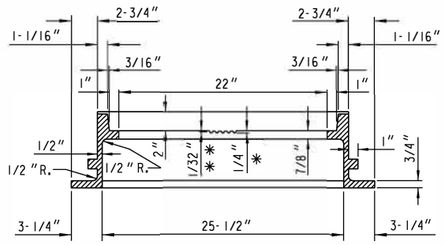




SECTION E-E



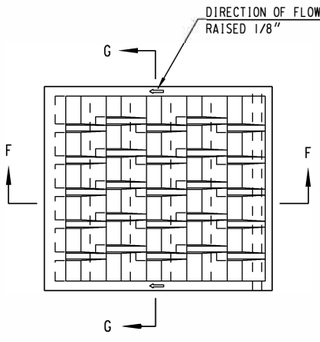
FRAME



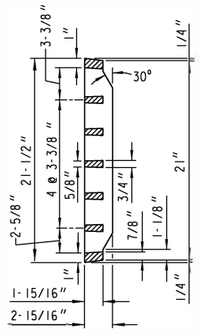
SECTION D-D

* DEPRESSION FOR LETTERS

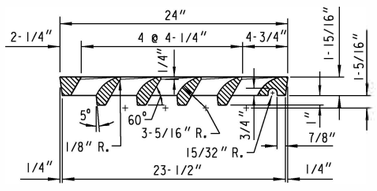
** CLEARANCE FROM TOP OF LETTERS TO FACE OF SEAT



GRATE



SECTION G-G



SECTION F-F

GENERAL NOTES

1. ALL EDGES ARE TO BE GROUND
2. ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED"1/8

ON THE FRAME

A) 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.

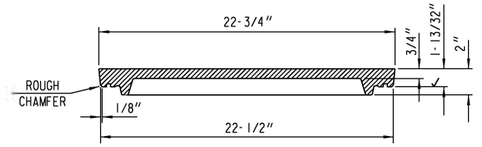
B) ON THE SEAT OF THE FRAME IN 1 INCH HIGH LETTERS, THE CASTING IDENTIFICATION NUMBER (51).

ON THE GRATE

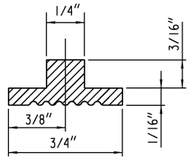
C) ON THE UPPER SIDE OF THE GRATE IN 1 INCH HIGH LETTERS, THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE, THE CASTING IDENTIFICATION NUMBER (57) AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

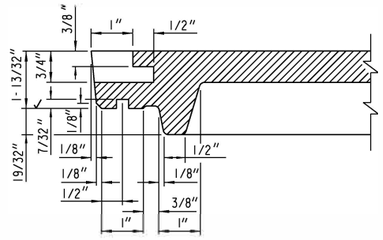
INLET COVER - TYPE MS 57

LID-145 LBS., FRAME-204 LBS.

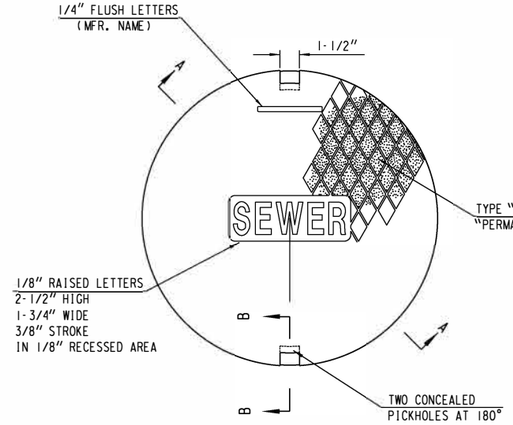


SECTION A-A

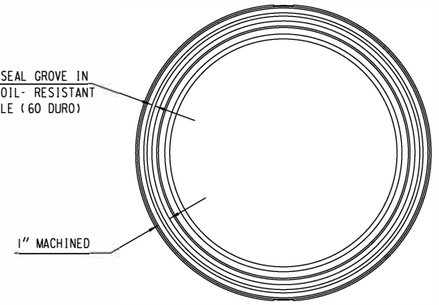




SECTION B-B



TOP VIEW



BOTTOM VIEW

MANHOLE COVER - TYPE 58-A

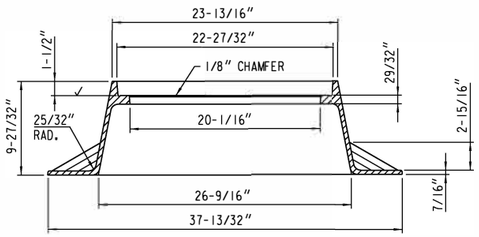
LID - 107 LBS.

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:

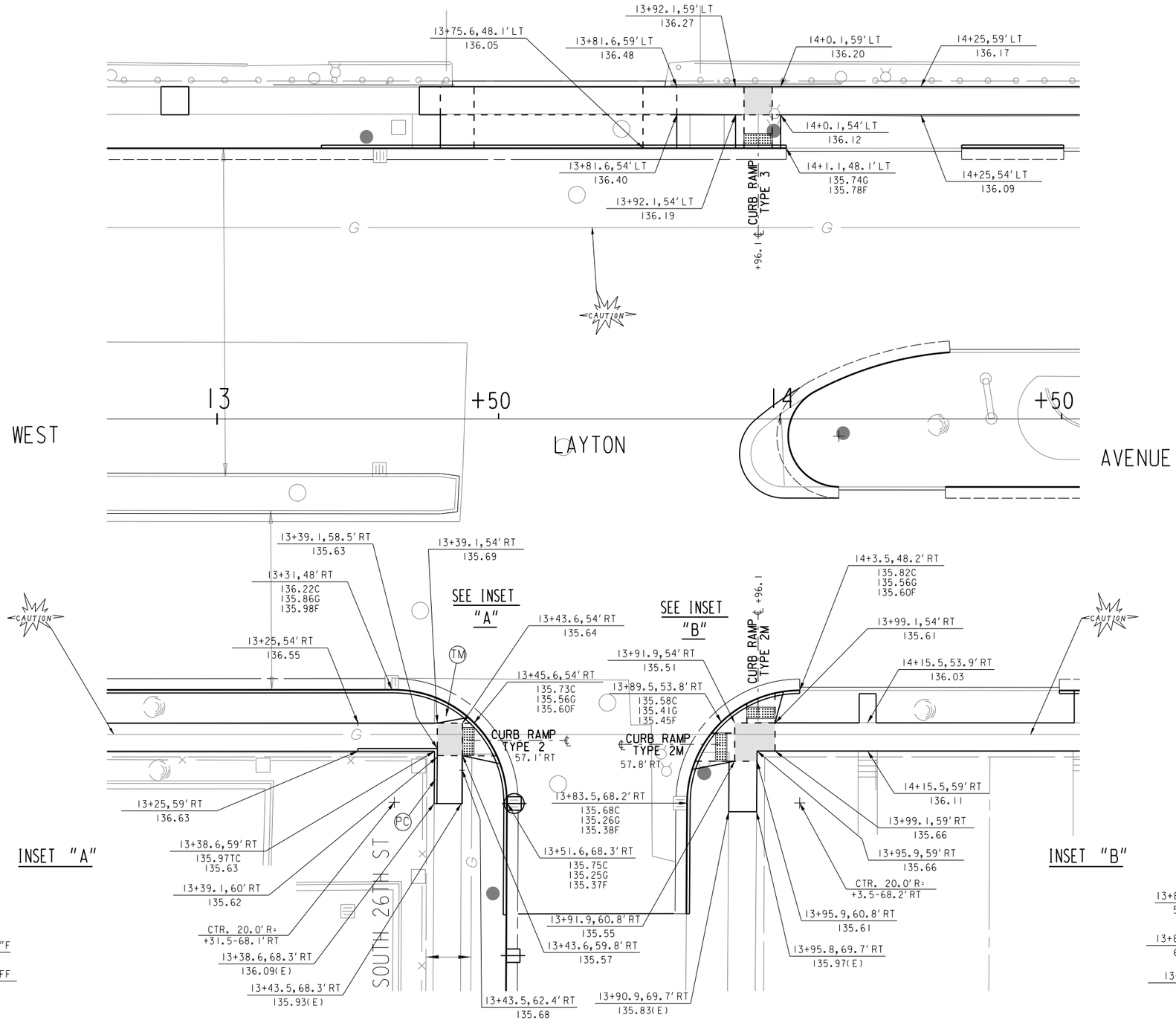
1. THE INITIALS OR MONOGRAM OF THE FOUNDRY.
2. THE CONTRACT NUMBER AND YEAR MADE.
3. THE CASTING IDENTIFICATION NUMBER.
4. THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

NOTE: ALL EXTERIOR EDGES SHALL BE GROUND.



MANHOLE FRAME

(FRAME - 182 LBS; TYPE MS 21 SHOWN)



CONSTRUCTION NOTE;
FULL-FACE AND ZERO-FACE TERMS ARE FACE OF CURB HEIGHTS AT INDICATED STATION AND OFFSET FROM TRANSIT LINE

(PC) CONST. CONC. PEDESTRIAN CURB

(TM) TERRACE MOUND

DETECTABLE WARNING FIELD

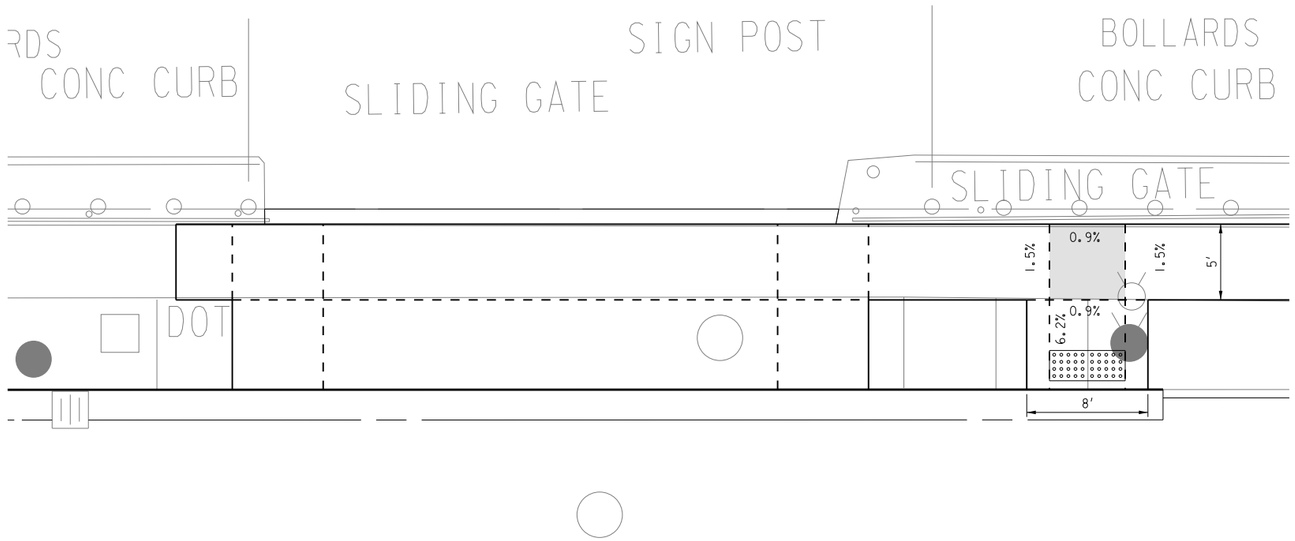
LANDING AREA

W. LAYTON AVE. AND S. 26TH ST.

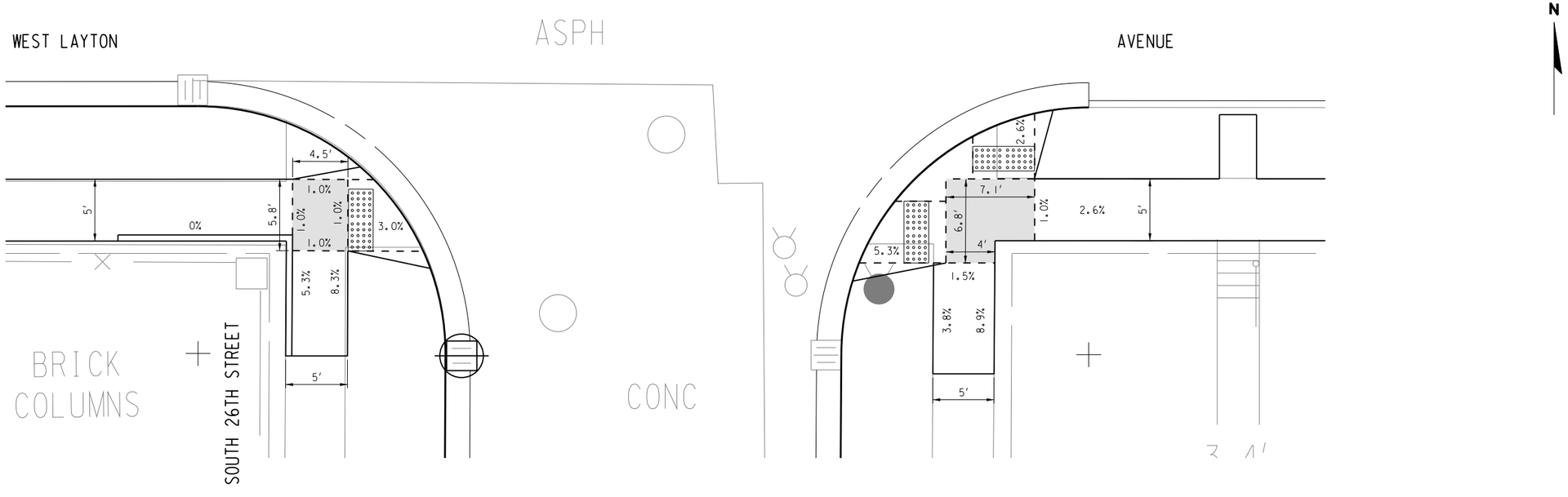
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 29	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_26TH.DGN

REVISED DATE: 01-17-2019 BY AL



W. LAYTON AVE. AND S. 26TH ST. (NORTH)



W. LAYTON AVE. AND S. 26TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 30	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_26TH - SLOPE.DGN

REVISED DATE: 01-22-2019 BY DB

2

N

16+82.8, 59' LT
134.87

17+13.2, 59' LT
134.73

17+22.2, 59' LT
134.96

17+5.2, 59' LT
134.65

17+5.2, 54' LT
134.60

16+82.8, 54' LT
134.79

17+5.2, 48.1' LT
134.72C
134.28G
134.32F

CURB RAMP TYPE 3
℄ +09.2

17+22.2, 54' LT
134.91

17+13.2, 54' LT
134.68

CAUTION

WEST LAYTON AVENUE

16 +50

SOUTH 25TH ST

17 +50

17+16.2, 48.2' RT
134.78C
134.53G
134.57F

16+56.4, 53.9' RT
135.14

16+49.2, 48.3' RT
135.24C
134.82G
134.90F

16+49.2, 53.9' RT
135.33

SEE INSET "A"

SEE INSET "B"

17+5.6, 52.6' RT
134.82C
134.65G
134.69F

℄ 17+11.7

CURB RAMP TYPE 2

17+21.8, 48.2' RT
134.85C
134.48G
134.60F

17+14.2, 53.8' RT
134.78

17+21.8, 53.8' RT
135.18

TM

16+59.2, 51' RT
135.18C
134.93G
135.97F

16+60.4, 53.9' RT
135.10

CURB RAMP TYPE 2
℄ 57.7' RT

CURB RAMP TYPE 2
℄ 56.2' RT

16+66.5, 58.3' RT
135.08C
134.83G
134.85F

16+49.2, 58.9' RT
135.41

16+56.4, 58.9' RT
135.18

17+1.2, 63.2' RT
134.77G
134.85F

17+21.8, 58.8' RT
135.26

17+14.2, 58.8' RT
134.86

CTR. 20.0' R=
+49.2-68.3' RT

16+69.2, 66.9' RT
135.05C
134.66G
134.78F

CTR. 15.0' R=
+16.2-63.2' RT

16+56.4, 60.1' RT
135.18

17+9.2, 58.8' RT
134.86

CAUTION

16+56.4, 65.6' RT
135.62

16+60.4, 53.9' RT
135.14

16+61.4, 65.6' RT
135.52

17+1.2, 68.4' RT
134.80G
134.88F

17+14.2, 68.1' RT
135.57

17+9.2, 68.1' RT
135.49

CAUTION

CAUTION

INSET "A"

16+63.1, FF
53.9' RT

16+64.2, "0"F
55.1' RT

16+67.4, "0"F
60.1' RT

16+68, FF
61.6' RT

INSET "B"

17+14.2, "0"F
48.3' RT

17+9.3, "0"F
49.9' RT

17+16, FF
48.2' RT

17+7.1, FF
51.3' RT

17+6, FF
52.3' RT

17+4.6, "0"F
53.8' RT

17+1.9, "0"F
58.7' RT

17+1.5, FF
60.2' RT

CONSTRUCTION NOTE:
FULL-FACE AND ZERO-FACE TERMS ARE FACE OF CURB HEIGHTS AT INDICATED STATION AND OFFSET FROM TRANSIT LINE

(PC) CONST. CONC. PEDESTRIAN CURB

(TM) TERRACE MOUND

DETECTABLE WARNING FIELD

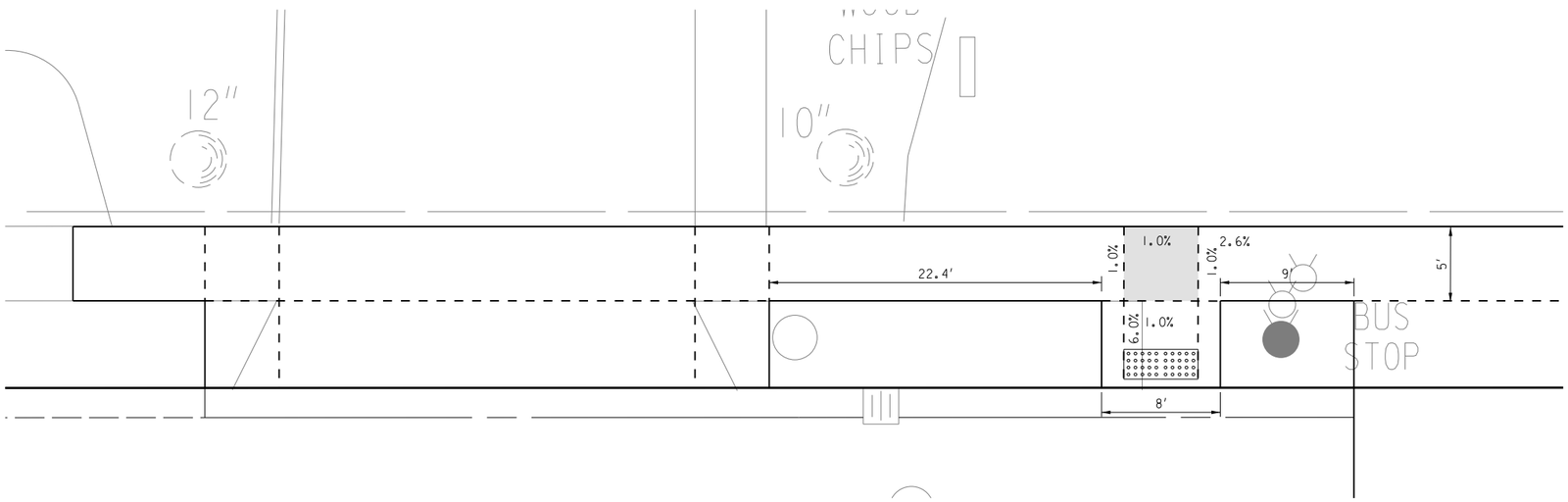
LANDING AREA

W. LAYTON AVE. AND S. 25TH ST.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 31	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_25TH.DGN

REVISED DATE: 01-24-2019 BY SB

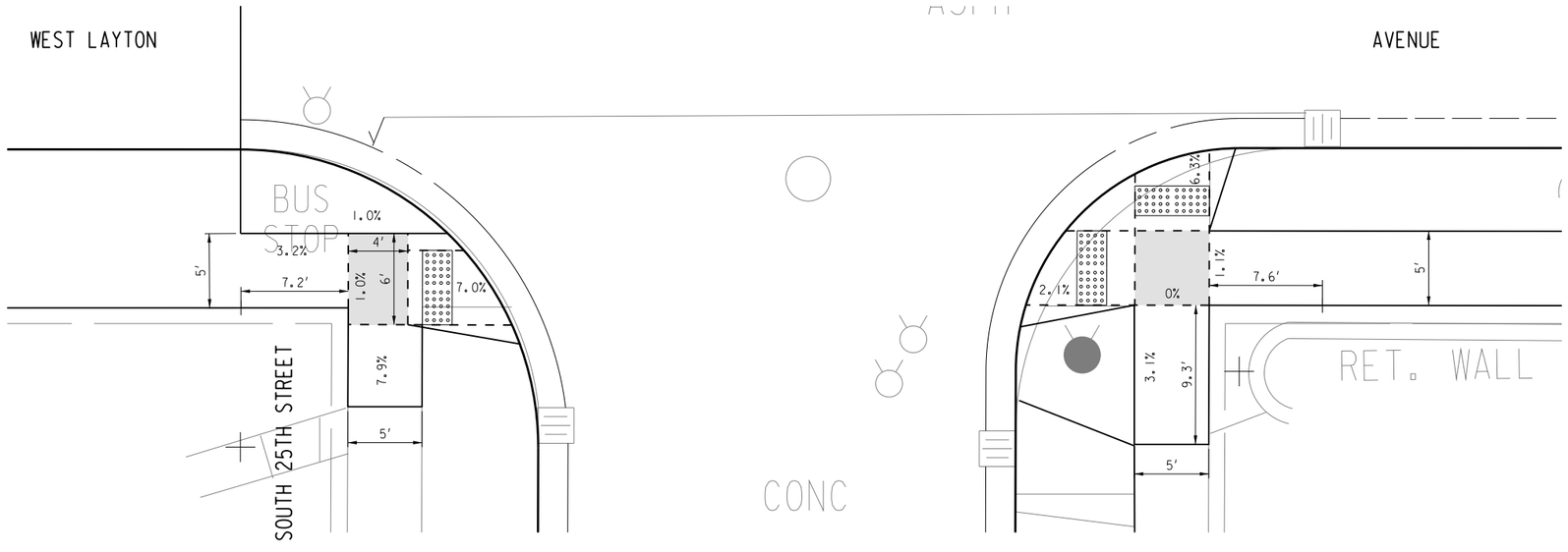


WEST LAYTON

AVENUE

N

W. LAYTON AVE. AND S. 25TH ST. (NORTH)



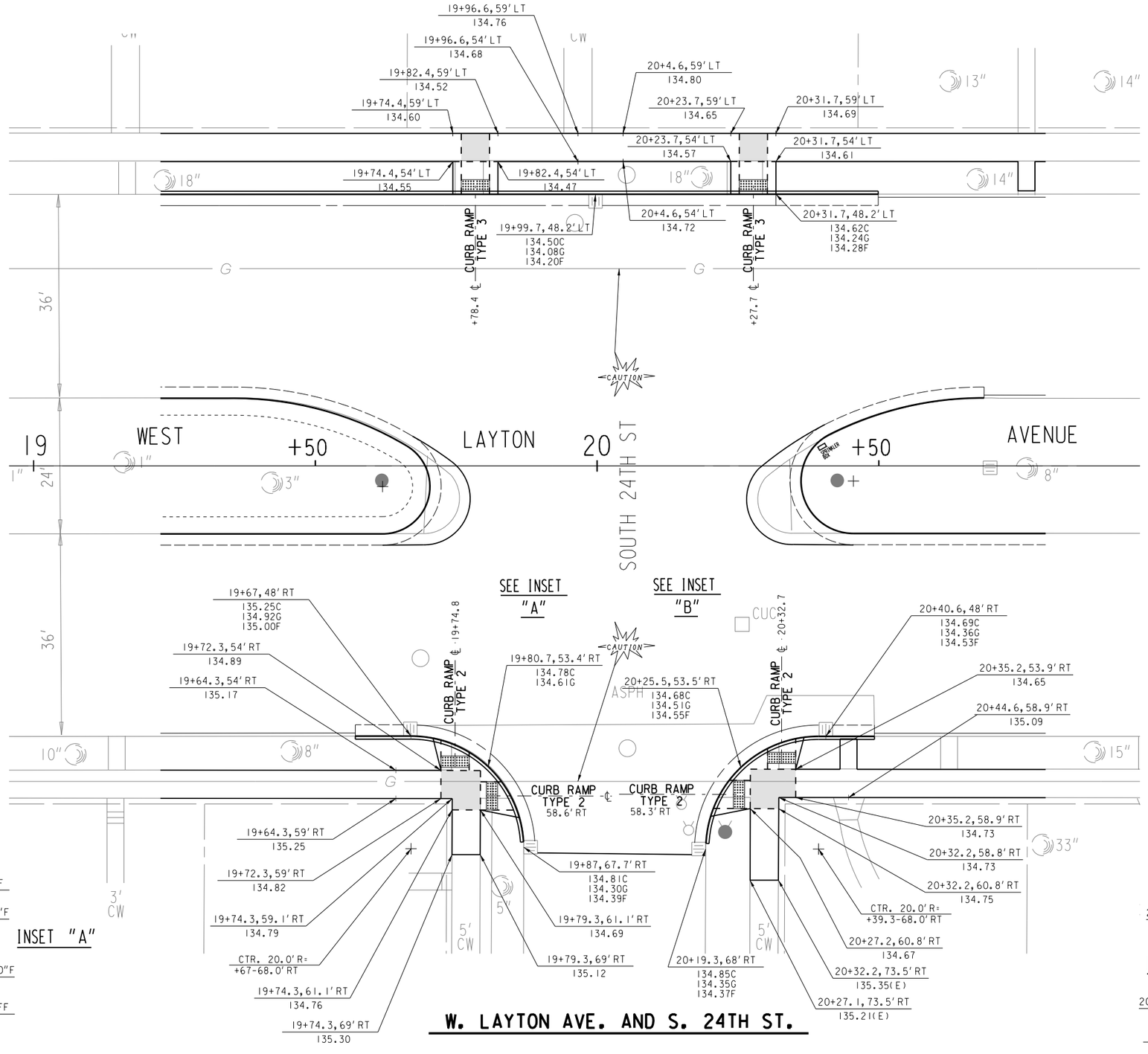
N

W. LAYTON AVE. AND S. 25TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 32	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_25TH - SLOPE.DGN

REVISED DATE: 01-23-2019 BY DB



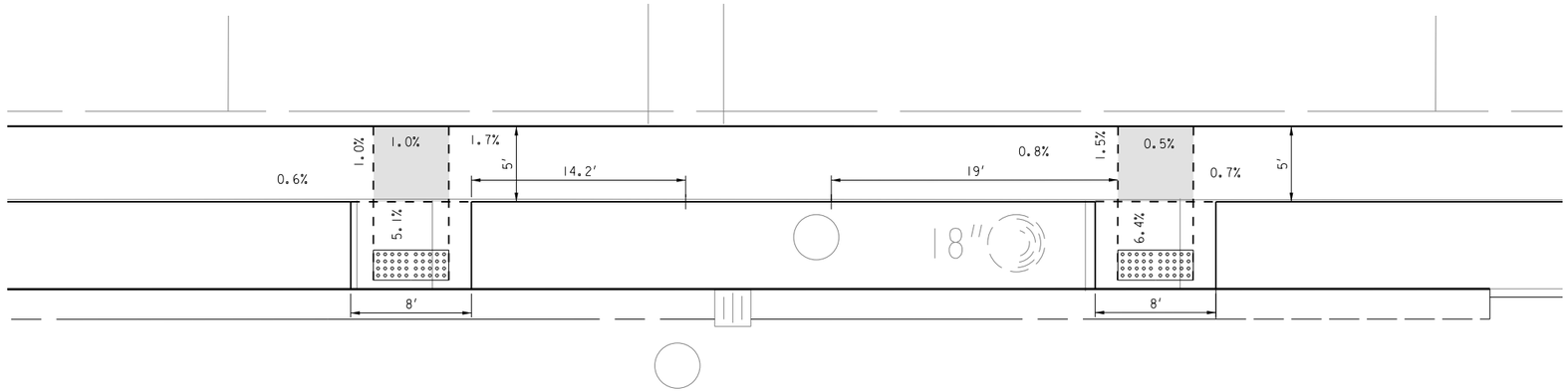
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 33	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_24TH.DGN

REVISED DATE: 01-17-2019 BY AL

2

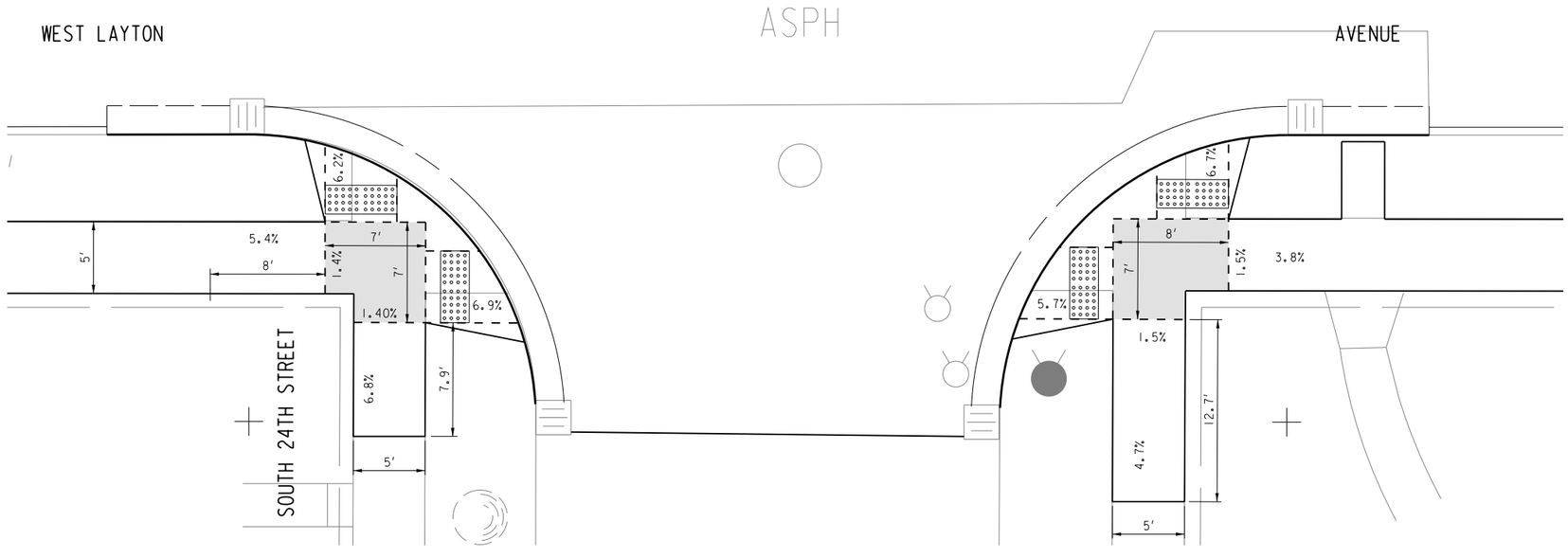
N



WEST LAYTON AVENUE

W. LAYTON AVE. AND S. 24TH ST. (NORTH)

N

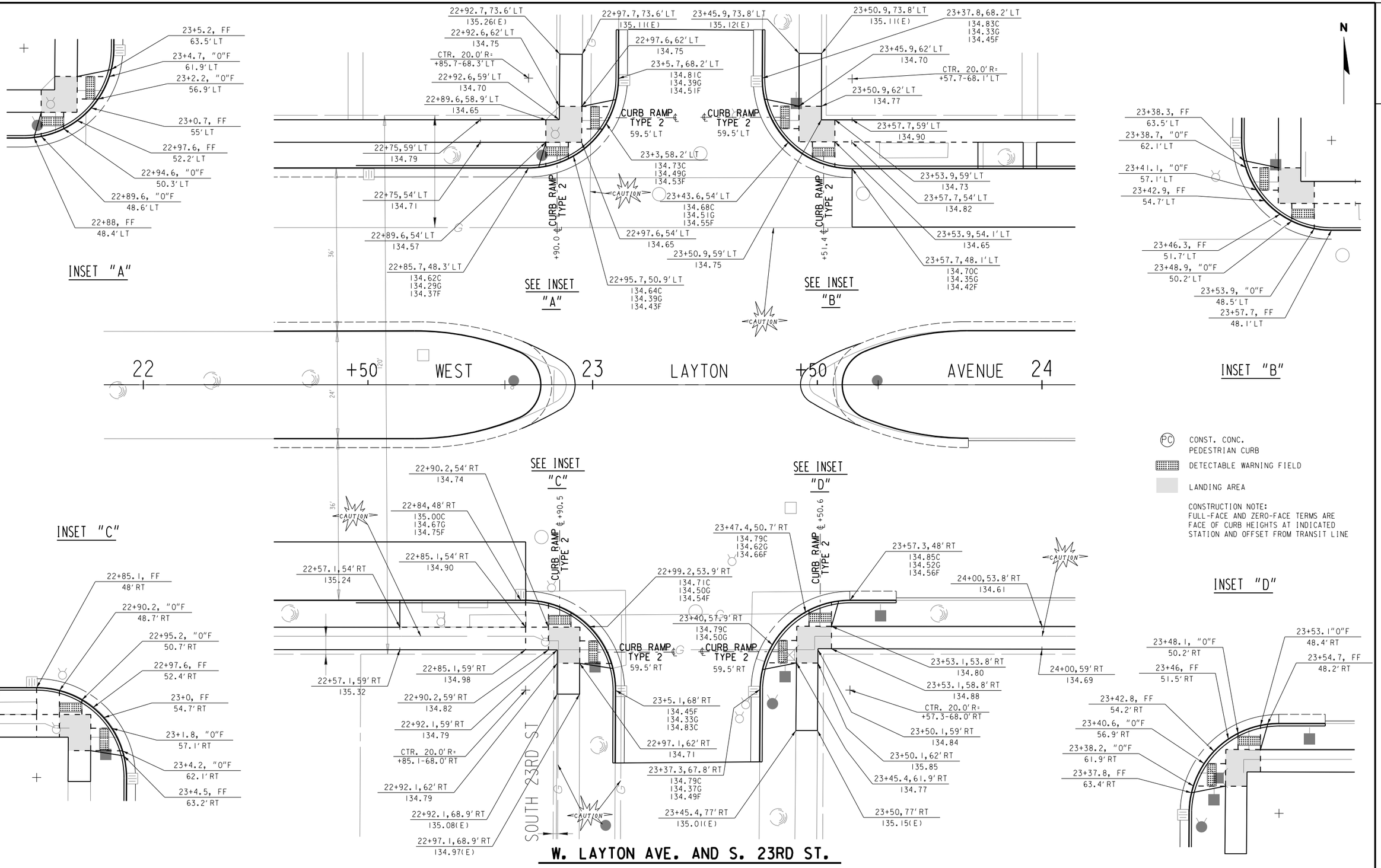


W. LAYTON AVE. AND S. 24TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 34	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_24TH - SLOPE.DGN

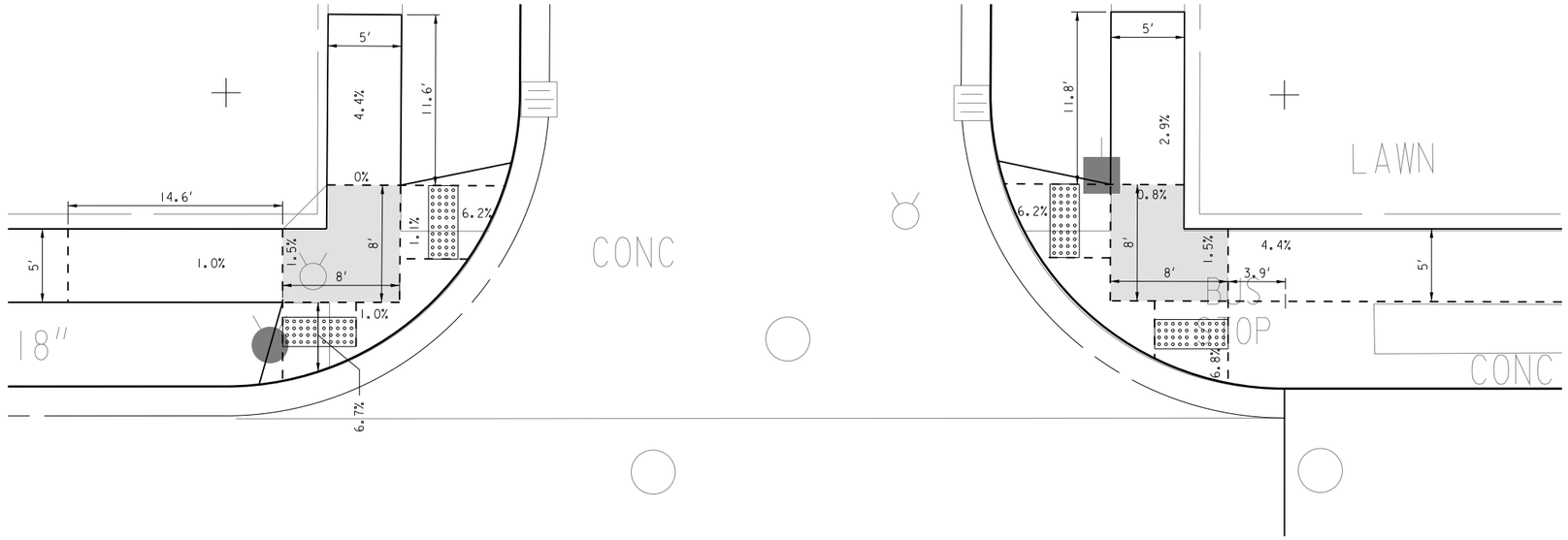
REVISED DATE: 01-22-2019 BY DB



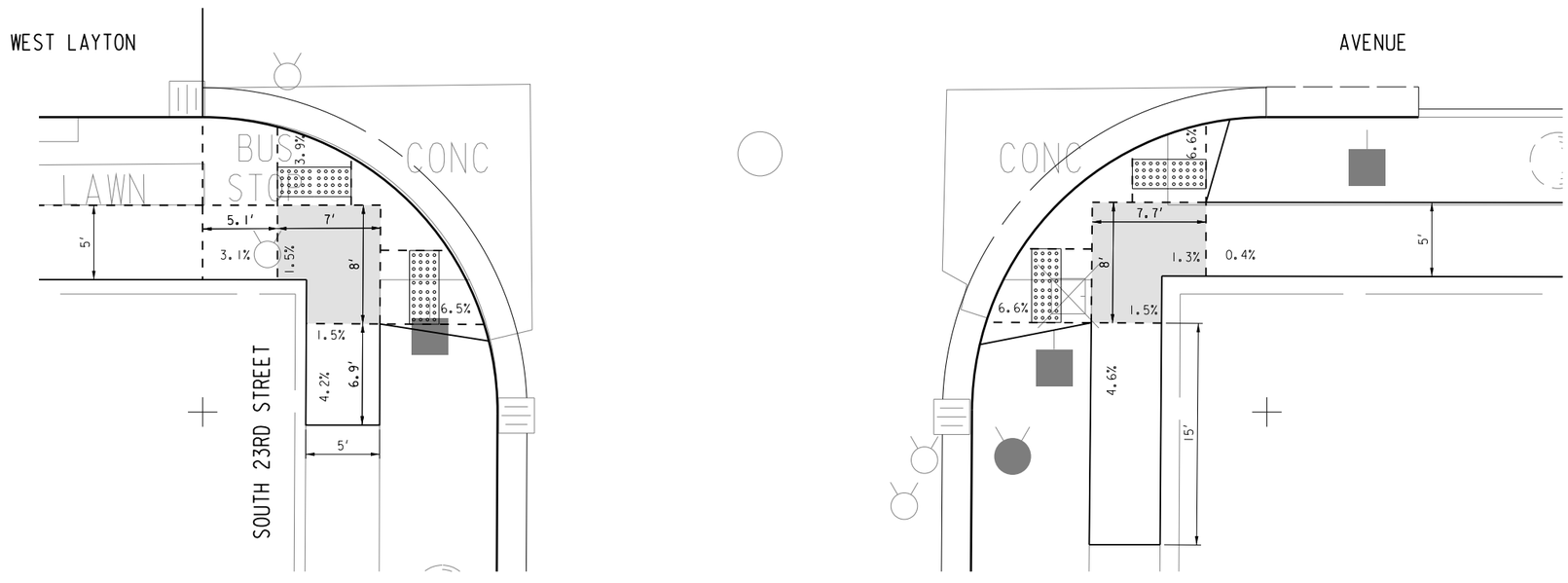
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 35	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_23RD.DGN

REVISED DATE: 01-16-2019 BY JC



W. LAYTON AVE. AND S. 23RD ST. (NORTH)



W. LAYTON AVE. AND S. 23RD ST. (SOUTH)

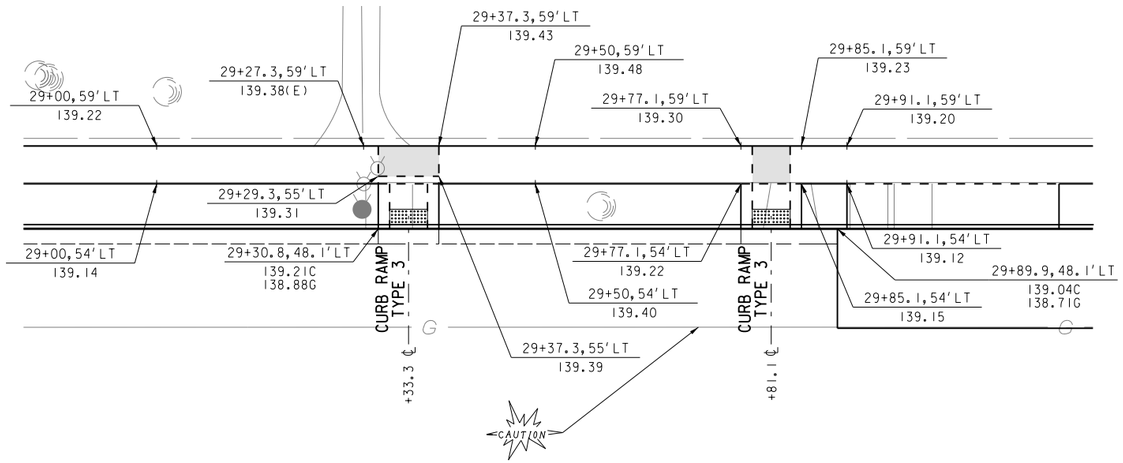
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 36	E

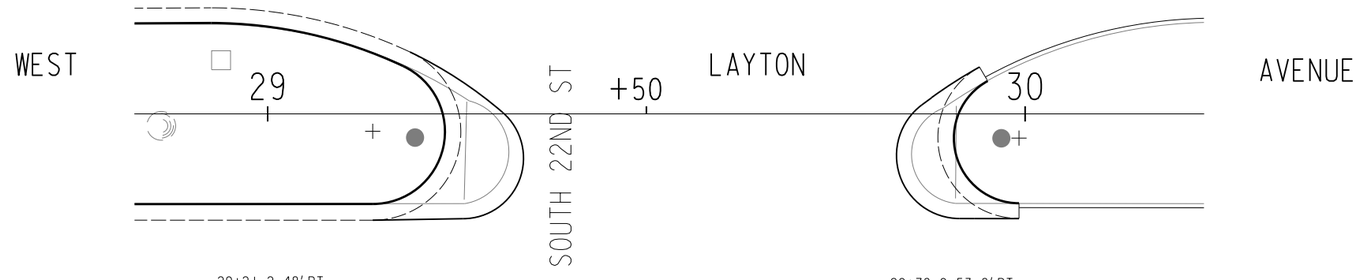
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_23RD - SLOPE.DGN

REVISED DATE: 01-22-2019 BY DB

2

N



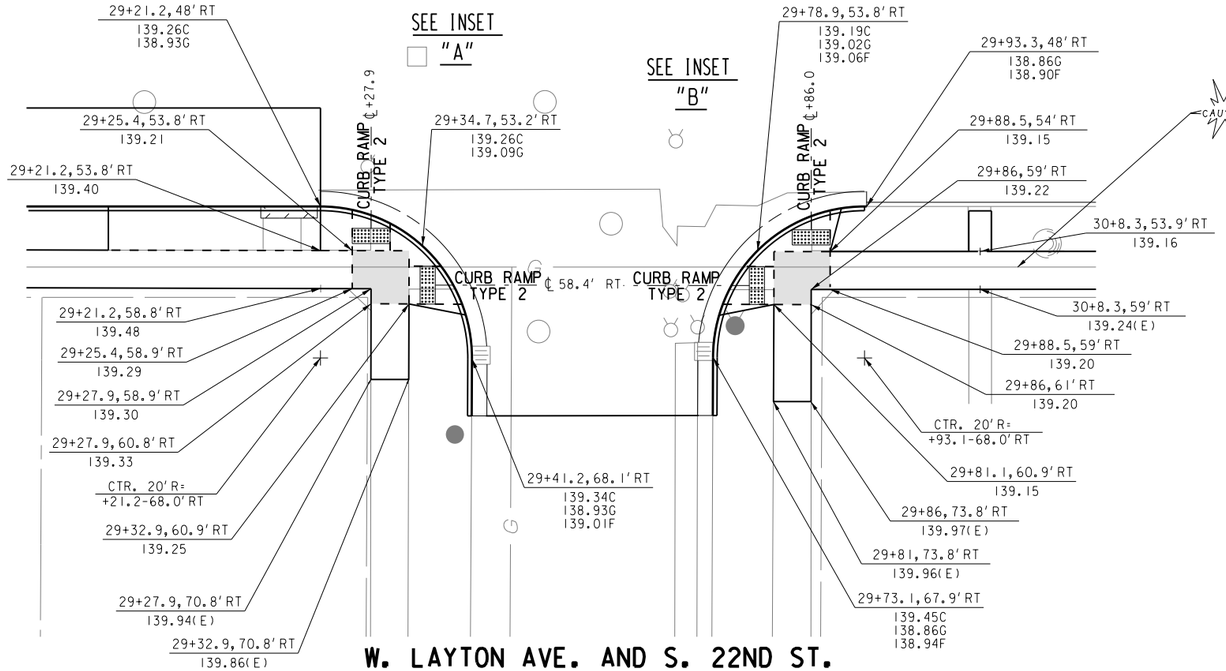


CONSTRUCTION NOTE:
FULL-FACE AND ZERO-FACE TERMS ARE FACE OF CURB HEIGHTS AT INDICAED STATION AND OFFSET FROM TRANSIT LINE

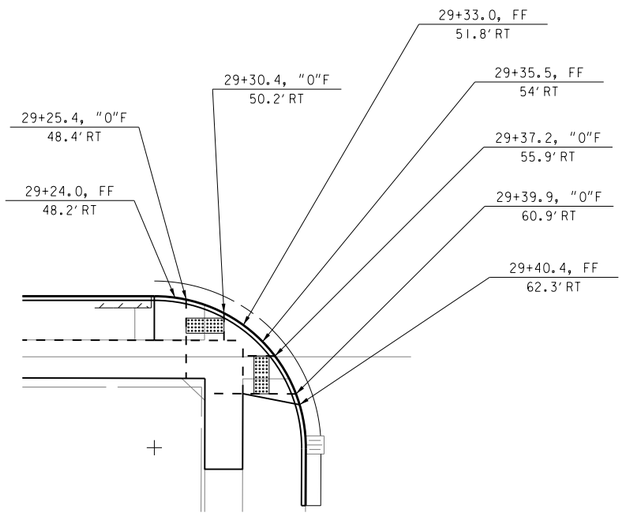
(PC) CONST. CONC. PEDESTRIAN CURB

DETECTABLE WARNING FIELD

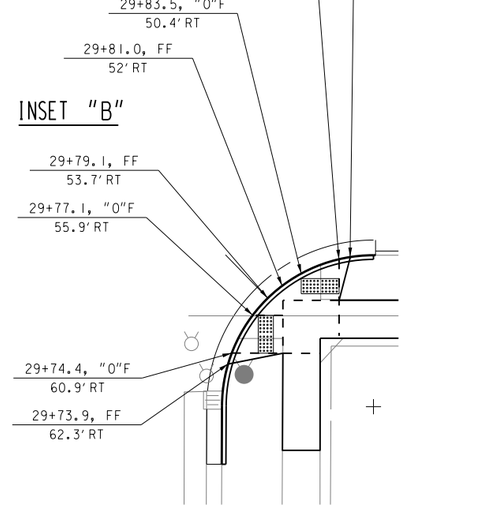
LANDING AREA



INSET "A"



INSET "B"



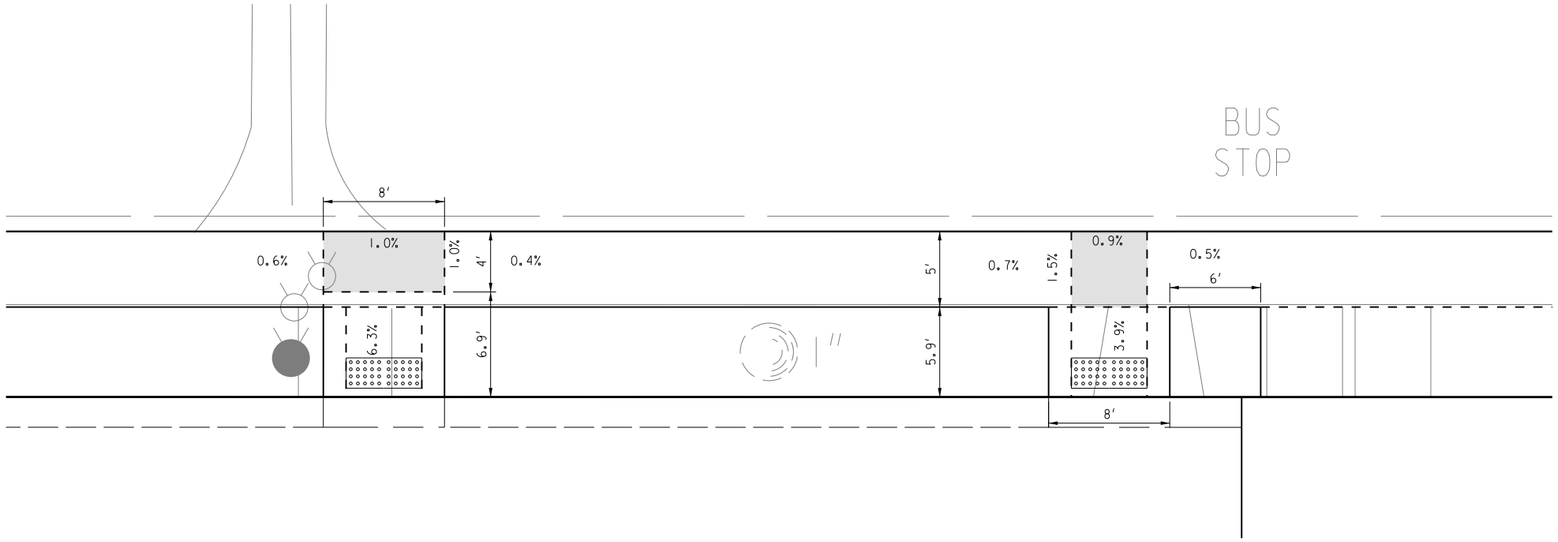
W. LAYTON AVE. AND S. 22ND ST.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 37	E

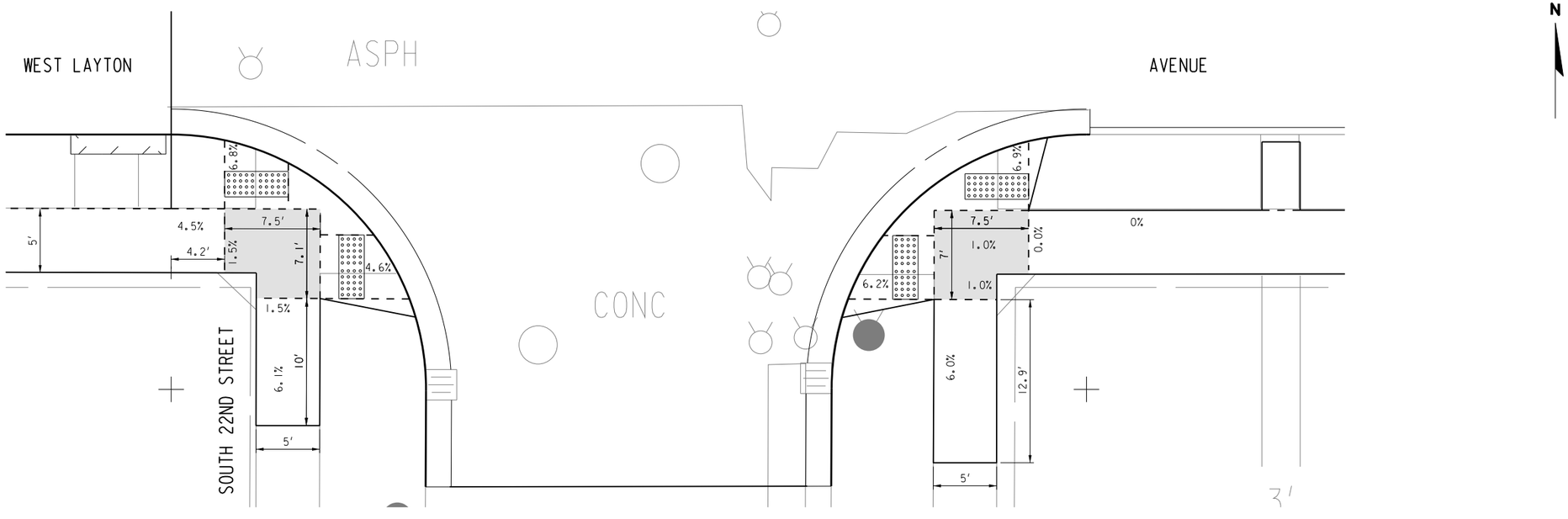
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_22ND ST.DGN

REVISED DATE: 01-15-2019 BY JC

2



W. LAYTON AVE. AND S. 22ND ST. (NORTH)

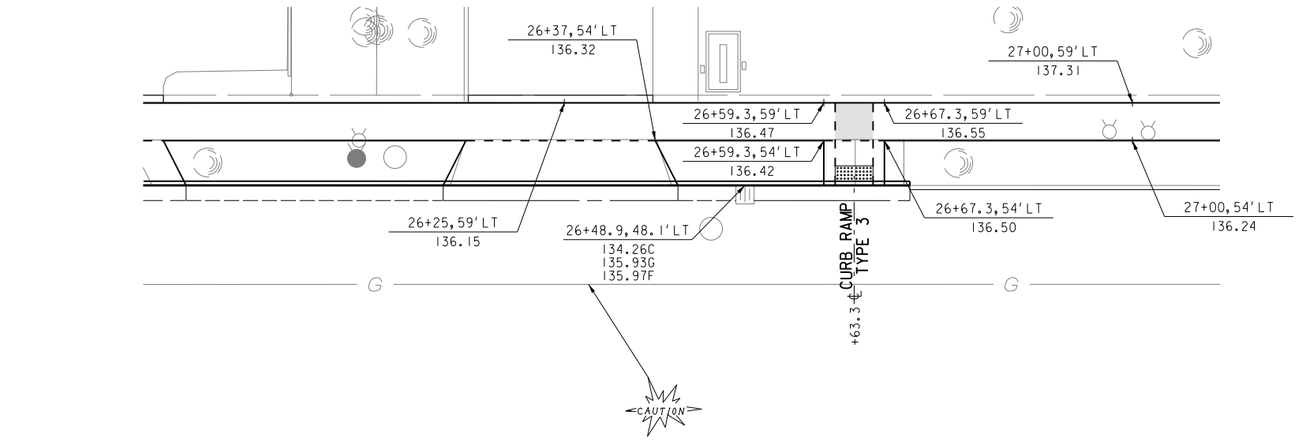


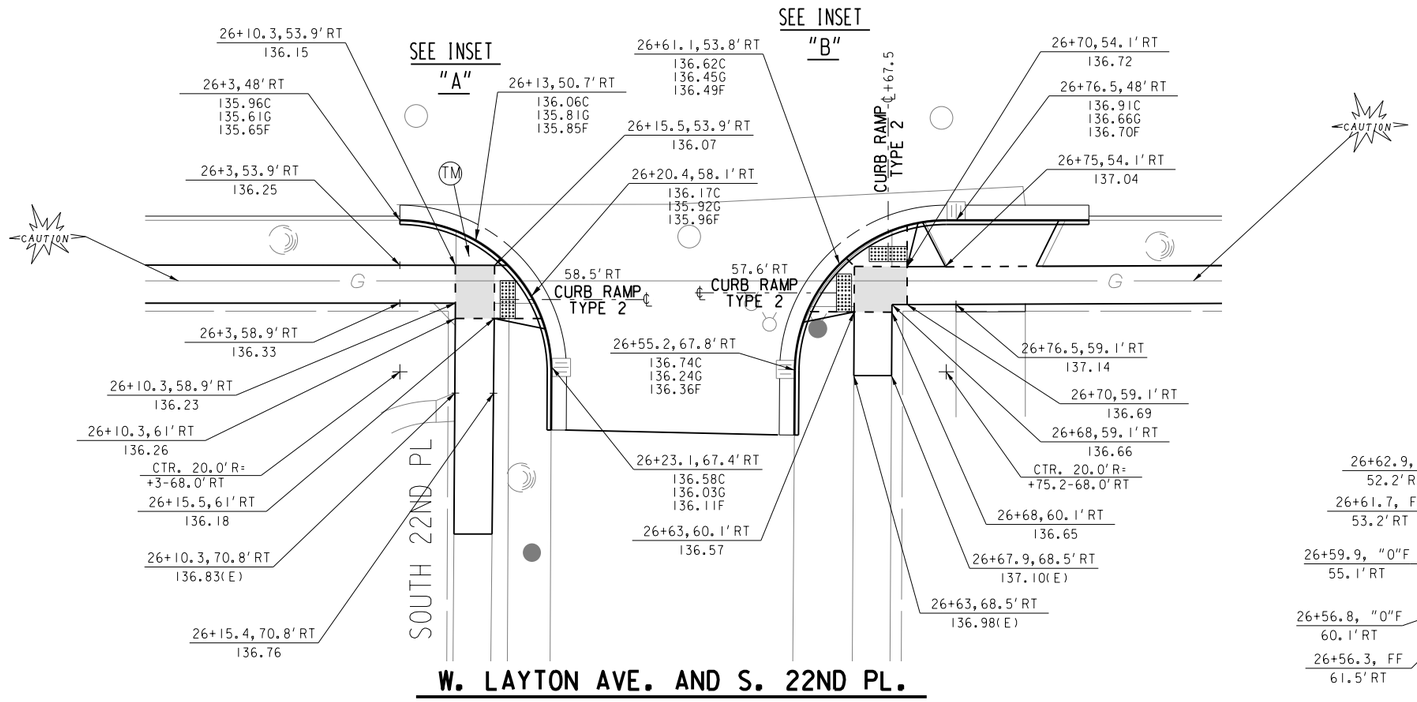
W. LAYTON AVE. AND S. 22ND ST. (SOUTH)

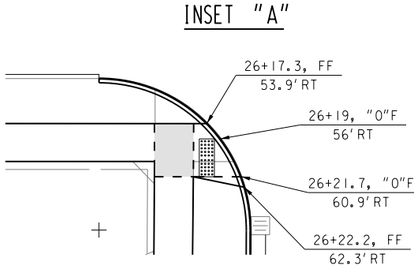
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 38	E

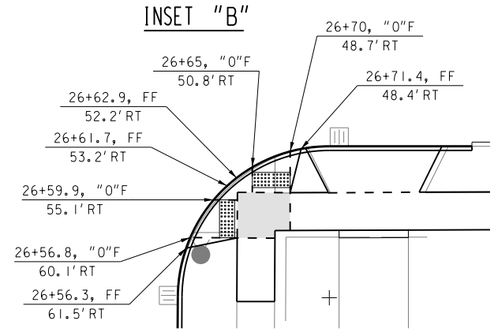
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_22ND ST - SLOPE.DGN

REVISED DATE: 01-24-2019 BY SB









CONSTRUCTION NOTE:
FULL-FACE AND ZERO-FACE TERMS ARE FACE OF CURB HEIGHTS AT INDICATED STATION AND OFFSET FROM TRANSIT LINE

(PC) CONST. CONC. PEDESTRIAN CURB

(TM) TERRACE MOUND

DETECTABLE WARNING FIELD

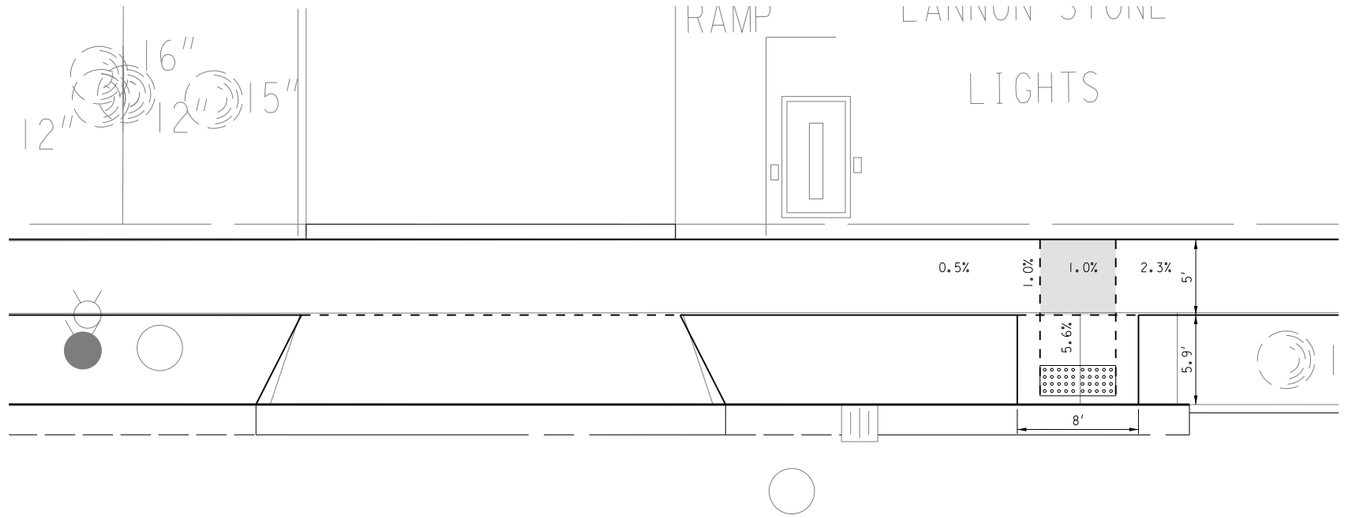
LANDING AREA

W. LAYTON AVE. AND S. 22ND PL.

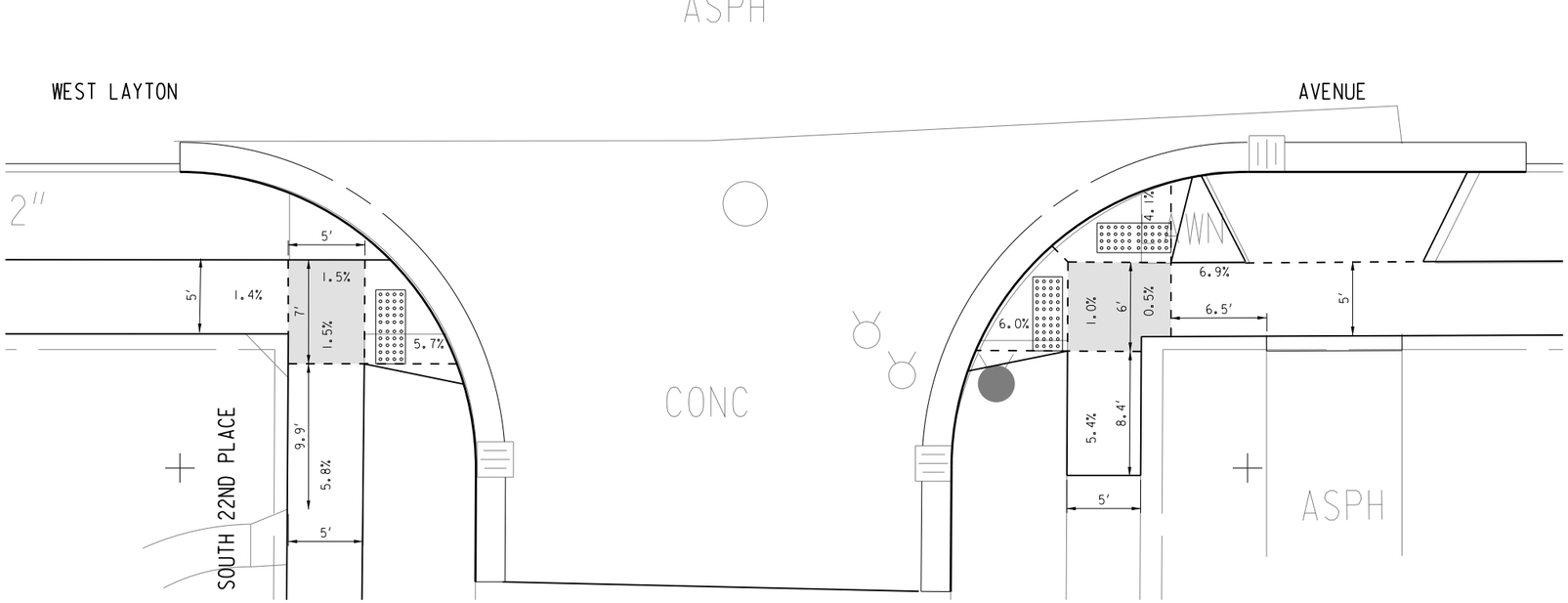
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 39	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_22ND PL .DGN

REVISED DATE: 01-15-2019 BY JC



W. LAYTON AVE. AND S. 22ND PL. (NORTH)



W. LAYTON AVE. AND S. 22ND PL. (SOUTH)

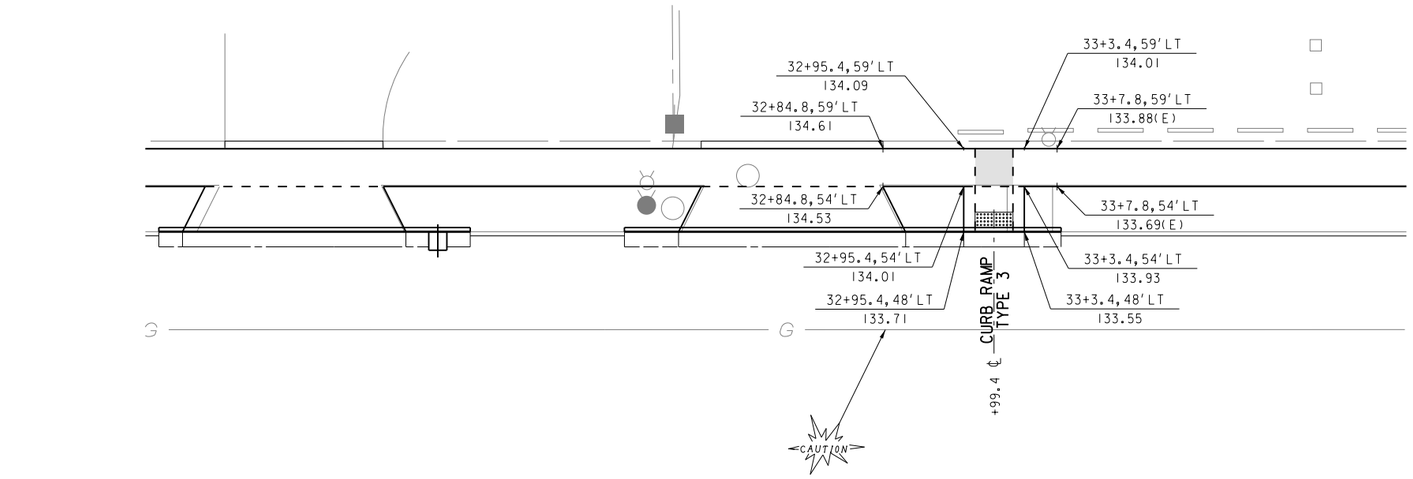
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 40	E

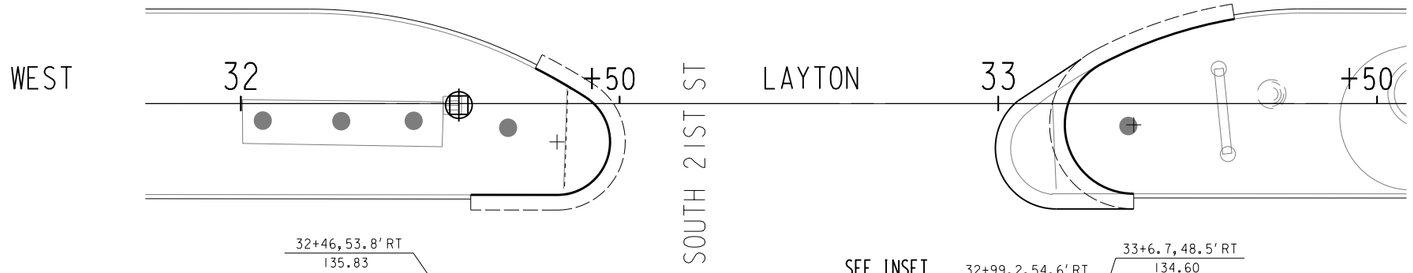
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_22ND PL - SLOPE.DGN

REVISED DATE: 01-24-2019 BY SB

2

N





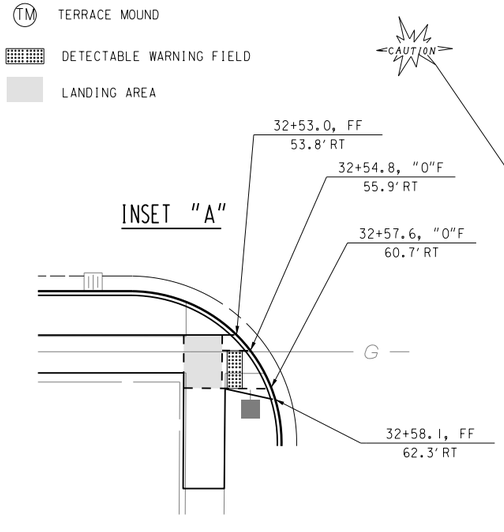
CONSTRUCTION NOTE:
FULL-FACE AND ZERO-FACE TERMS ARE FACE OF CURB HEIGHTS AT INDICATED STATION AND OFFSET FROM TRANSIT LINE

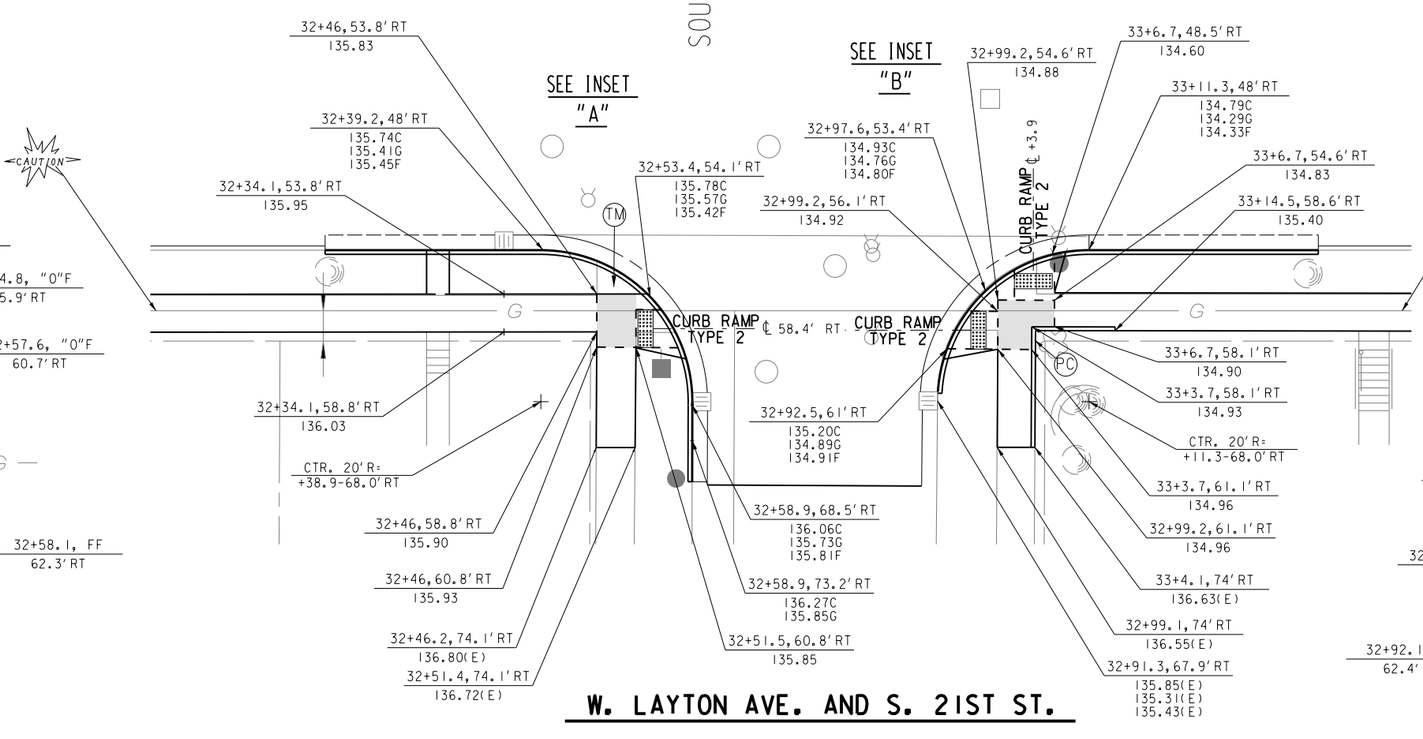
(PC) CONST. CONC. PEDESTRIAN CURB

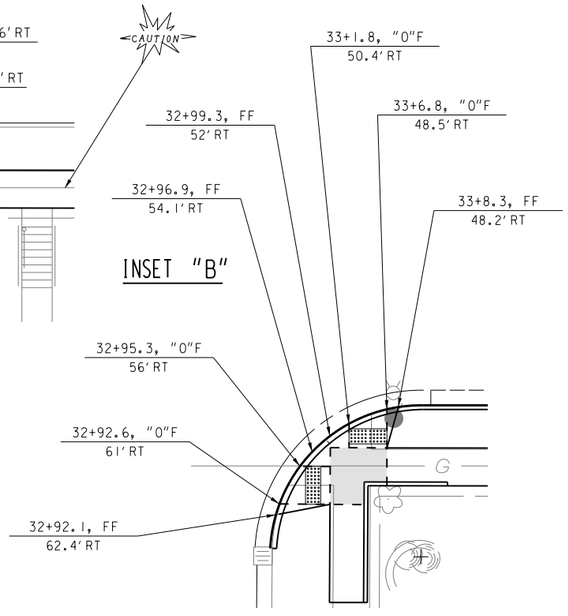
(TM) TERRACE MOUND

DETECTABLE WARNING FIELD

LANDING AREA







W. LAYTON AVE. AND S. 21ST ST.

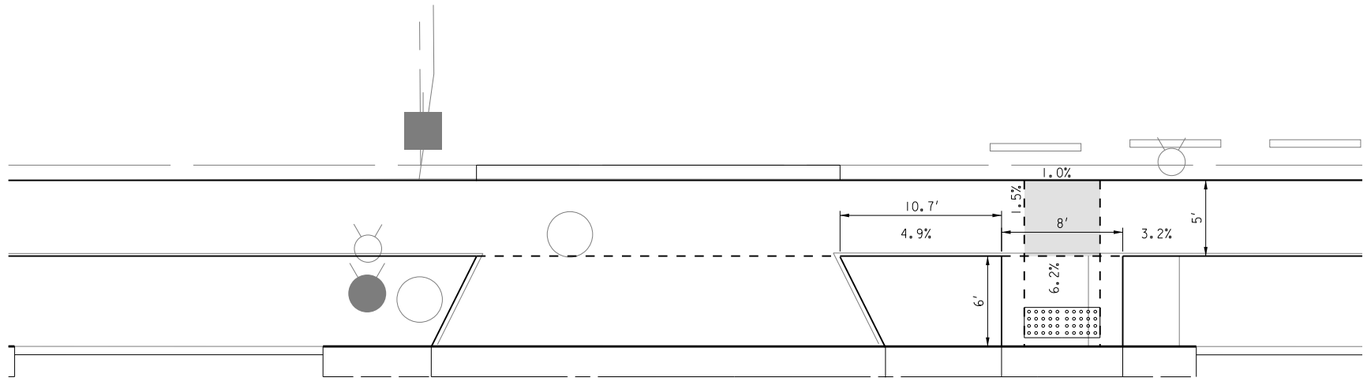
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 41	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_21ST.DGN

REVISED DATE: 01-15-2019 BY JC

2

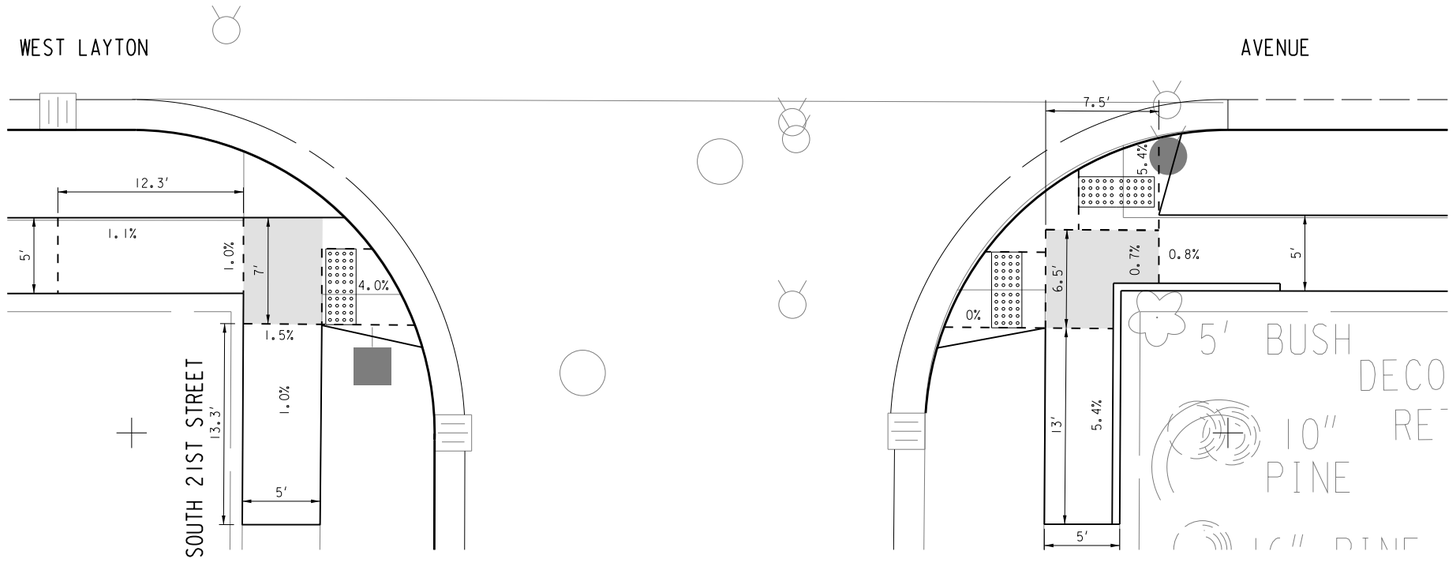
N



WEST LAYTON AVENUE

W. LAYTON AVE. AND S. 21ST ST. (NORTH)

N

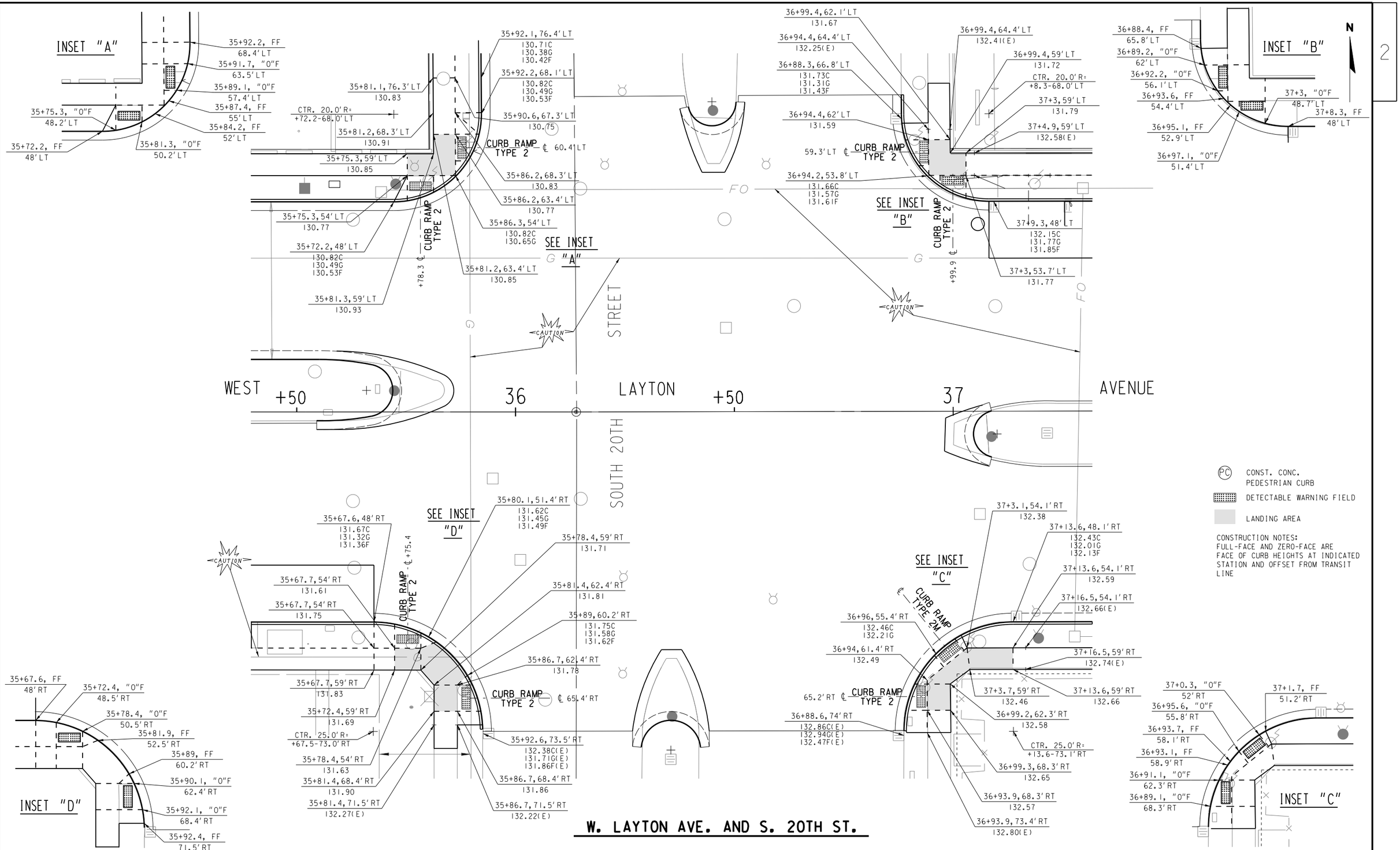


W. LAYTON AVE. AND S. 21ST ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 42	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_21ST - SLOPE.DGN

REVISED DATE: 01-23-2019 BY SB

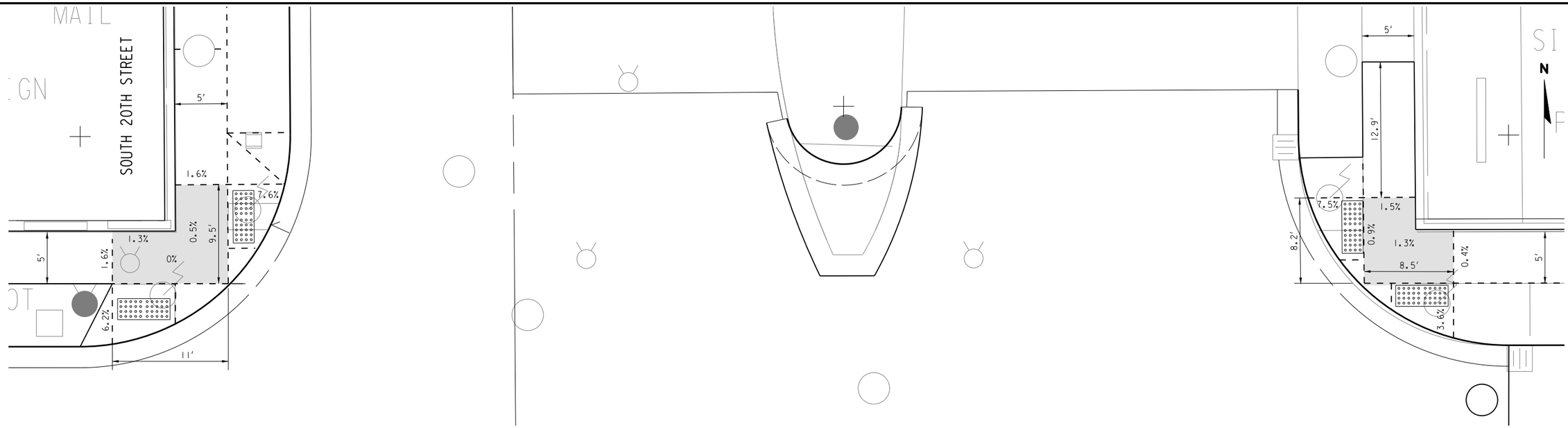


W. LAYTON AVE. AND S. 20TH ST.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 43	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_20TH.DGN

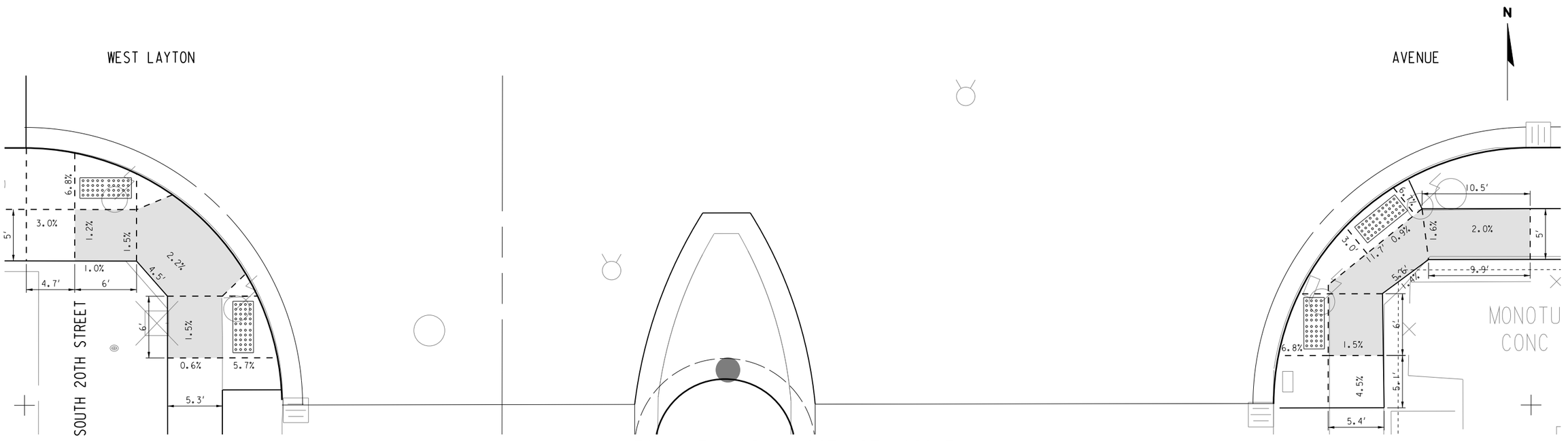
REVISED DATE: 01-17-2019 BY AL



WEST LAYTON

AVENUE

W. LAYTON AVE. AND S. 20TH ST. (NORTH)

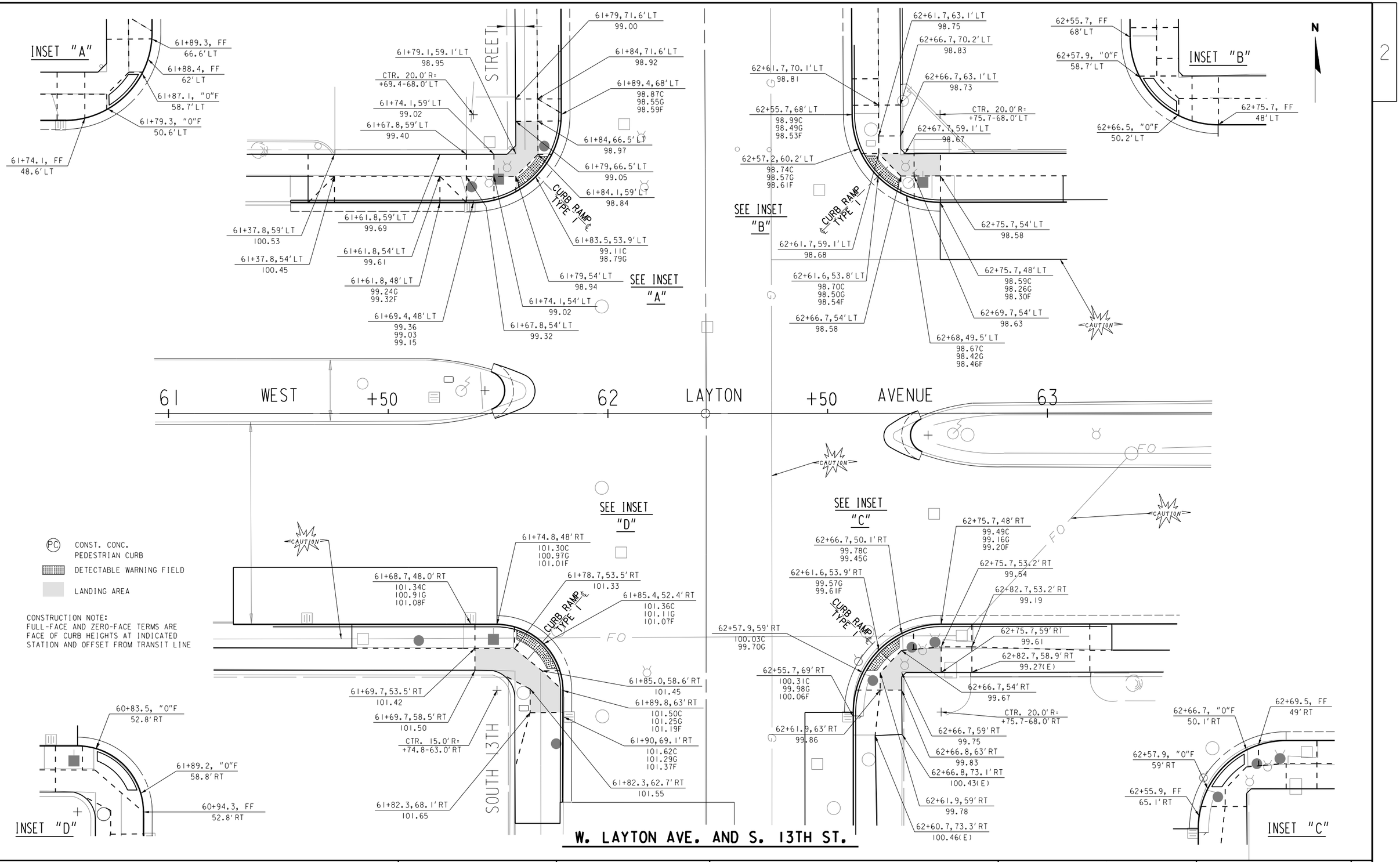


W. LAYTON AVE. AND S. 20TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 44	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_20TH - SLOPE.DGN

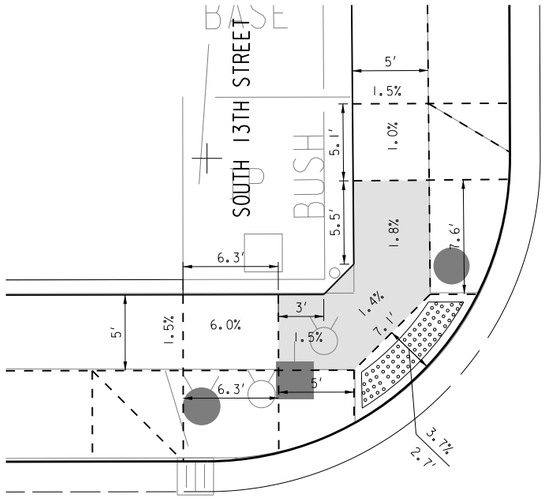
REVISED DATE: 01-23-2019 BY SB



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 45	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_13TH.DGN

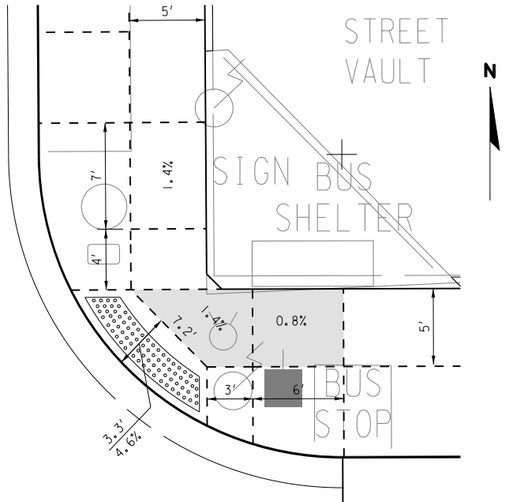
REVISED DATE: 01-17-2019 BY AL



WEST LAYTON



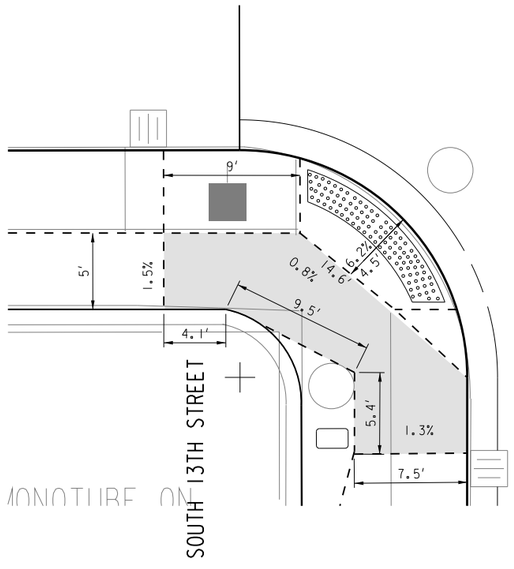


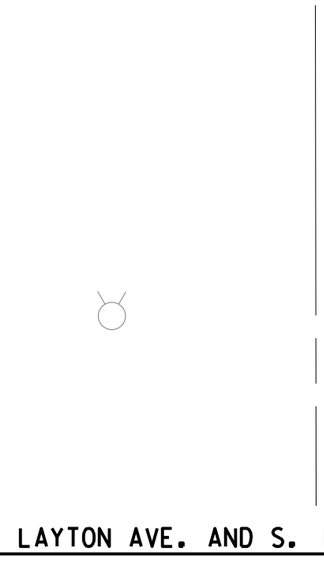


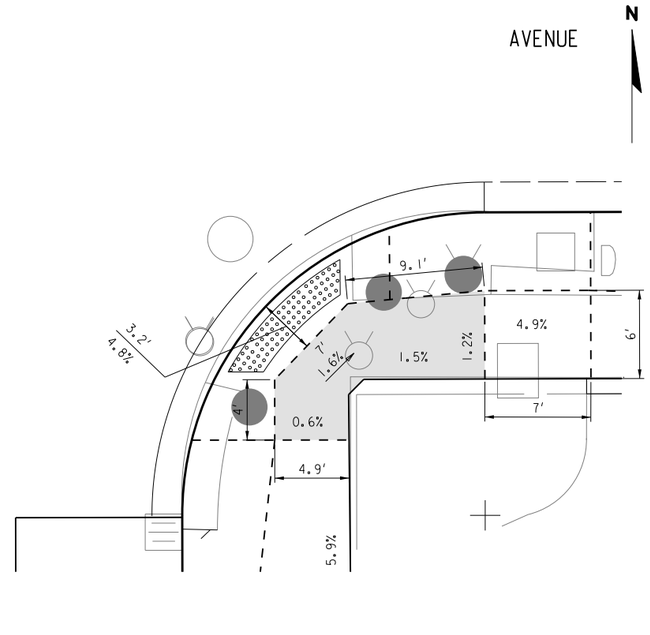
AVENUE

W. LAYTON AVE. AND S. 13TH ST. (NORTH)

WEST LAYTON







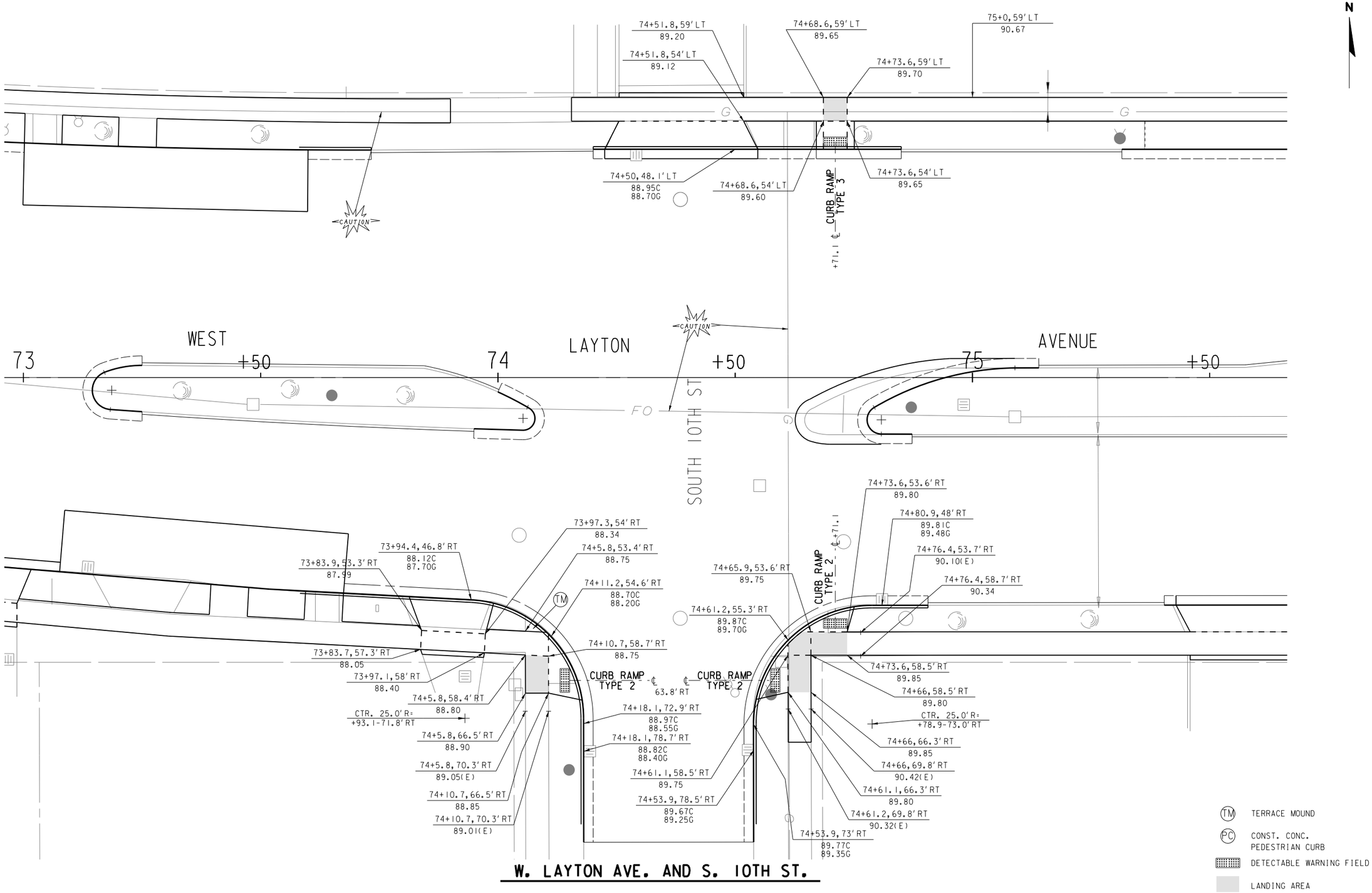
AVENUE

W. LAYTON AVE. AND S. 13TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 46	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_13TH - SLOPE.DGN

REVISED DATE: 01-23-2019 BY SB

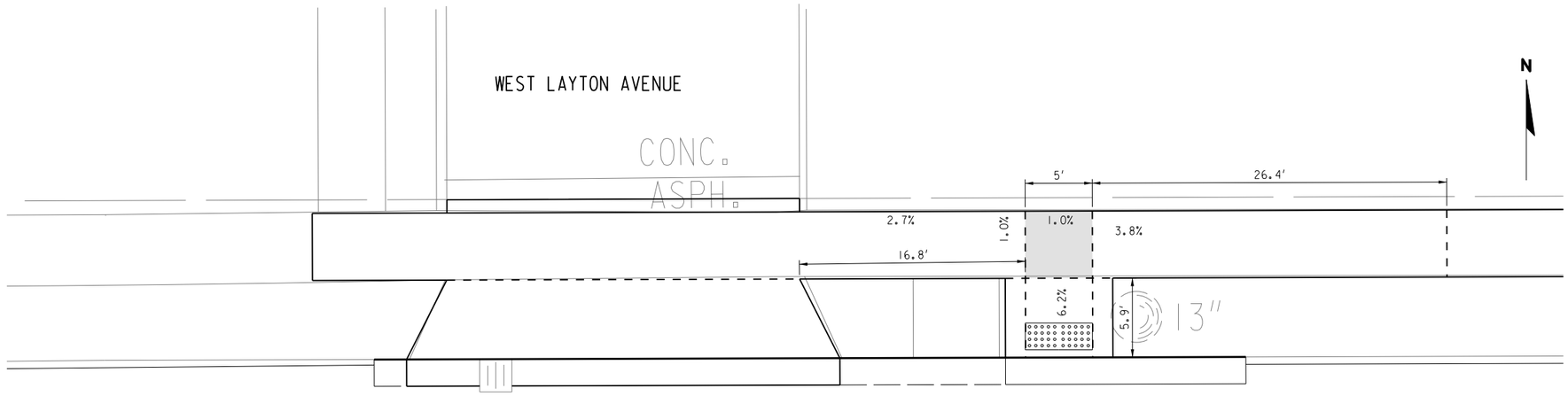


W. LAYTON AVE. AND S. 10TH ST.

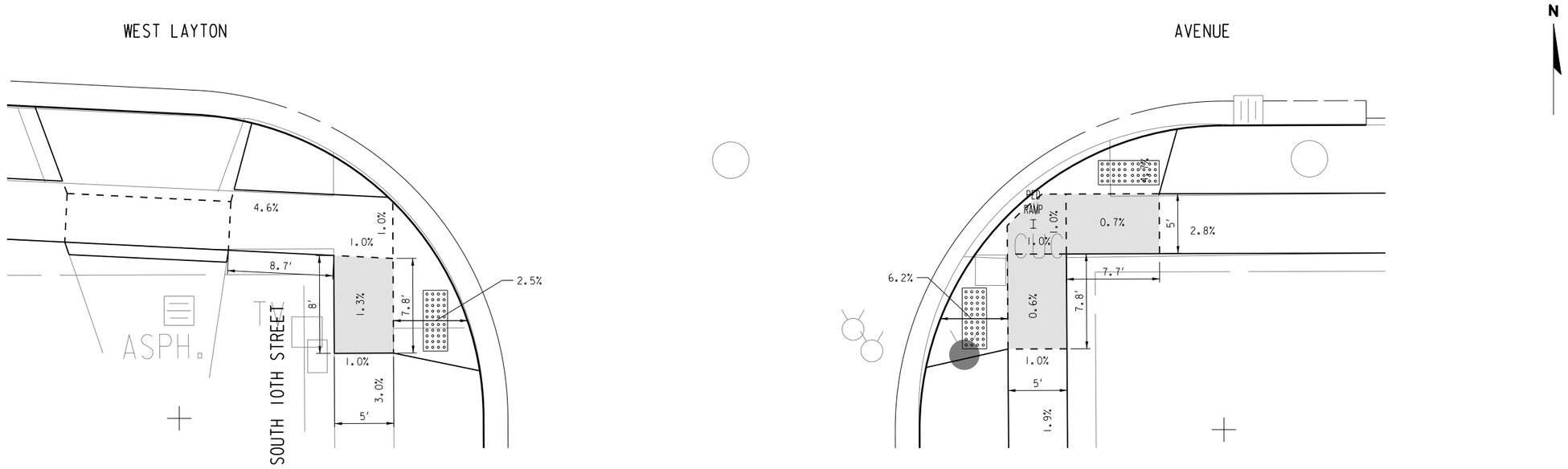
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 47	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_10TH.DGN

REVISED DATE: 12-20-2018 BY JC



W. LAYTON AVE. AND S. 10TH ST. (NORTH)

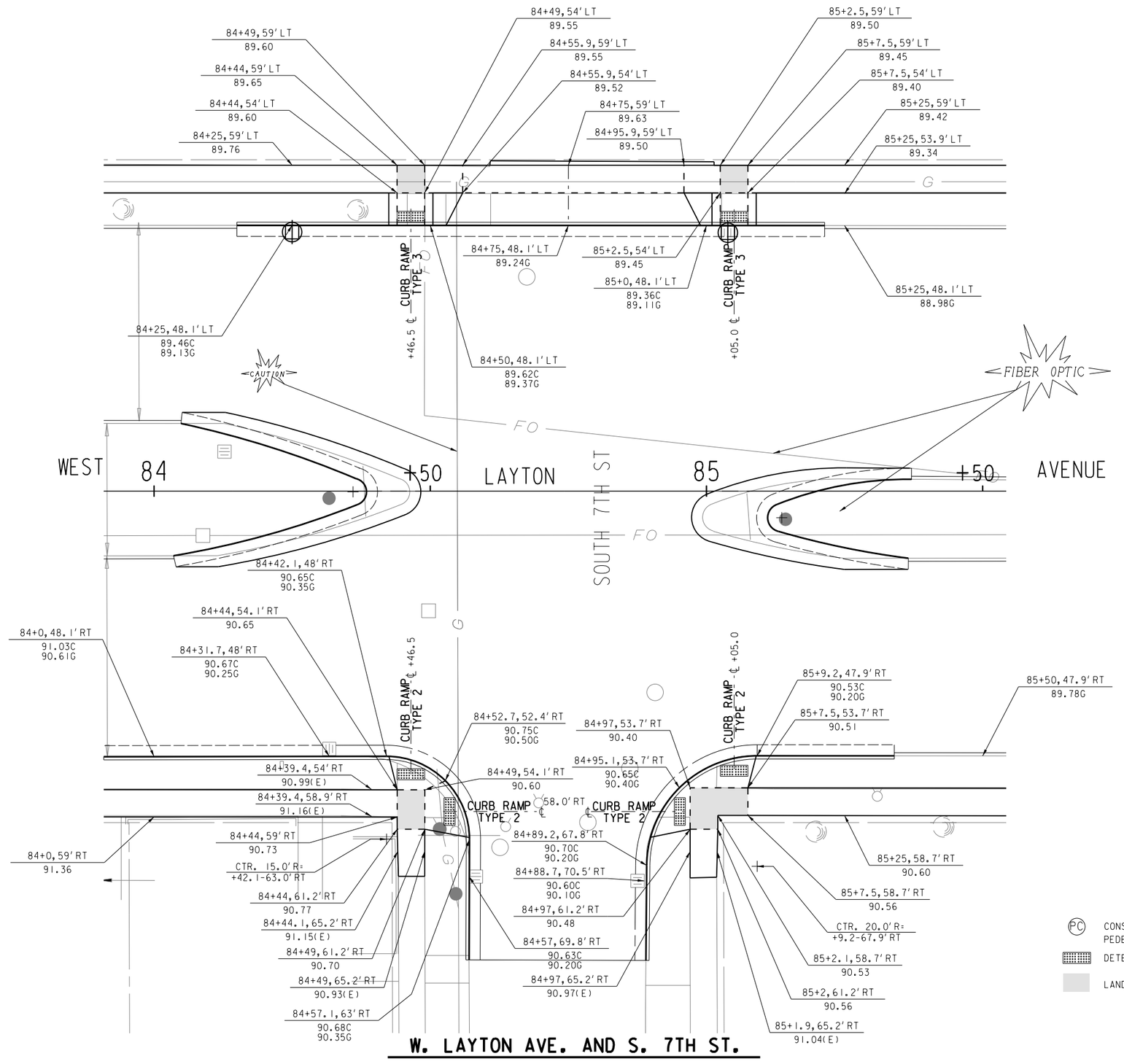


W. LAYTON AVE. AND S. 10TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 48	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_10TH - SLOPE.DGN

REVISED DATE: 01-23-2019 BY SB



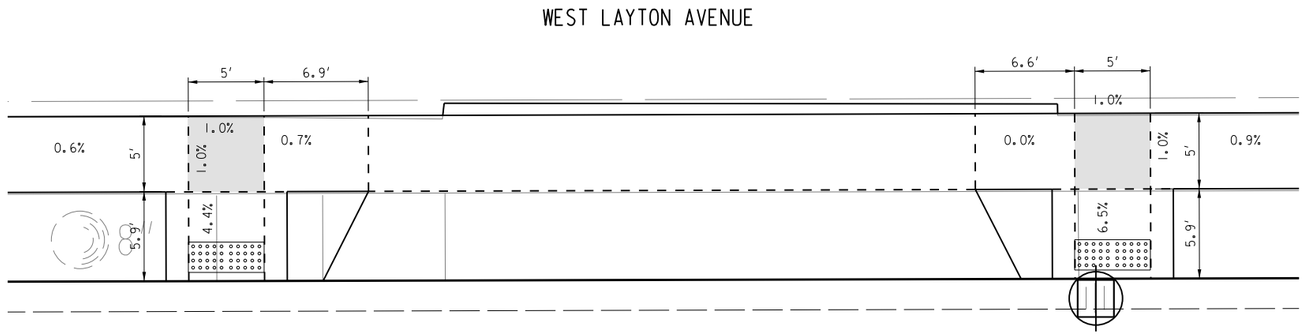
W. LAYTON AVE. AND S. 7TH ST.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 49	E

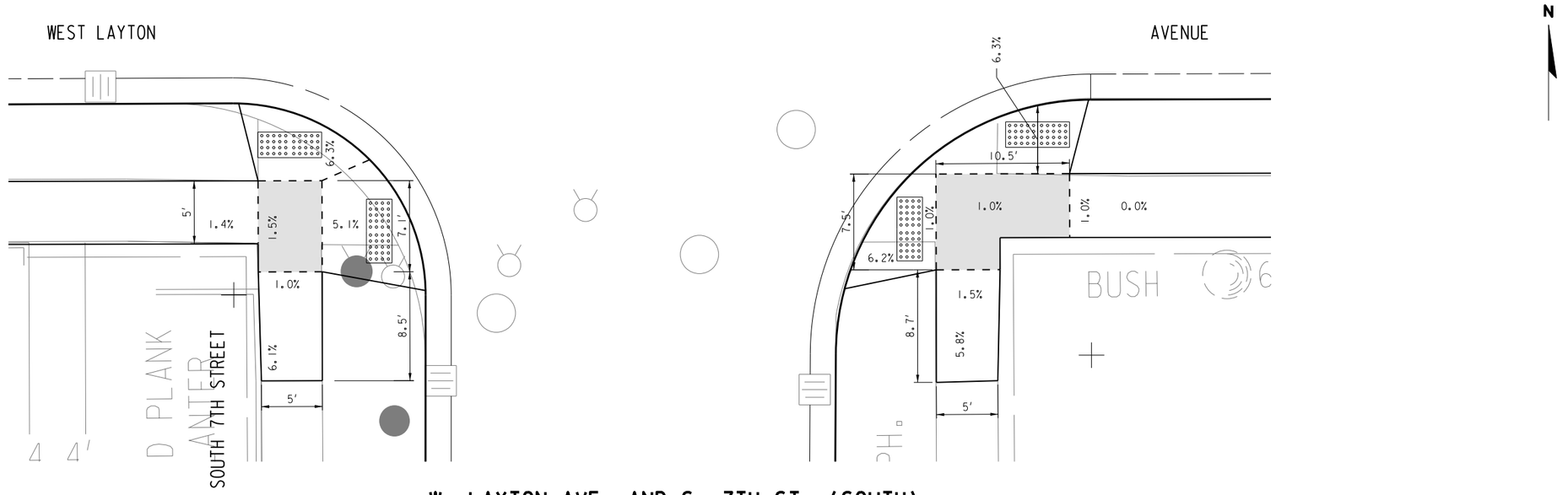
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_7TH.DGN

REVISED DATE: 01-15-2019 BY JC

2



W. LAYTON AVE. AND S. 7TH ST. (NORTH)

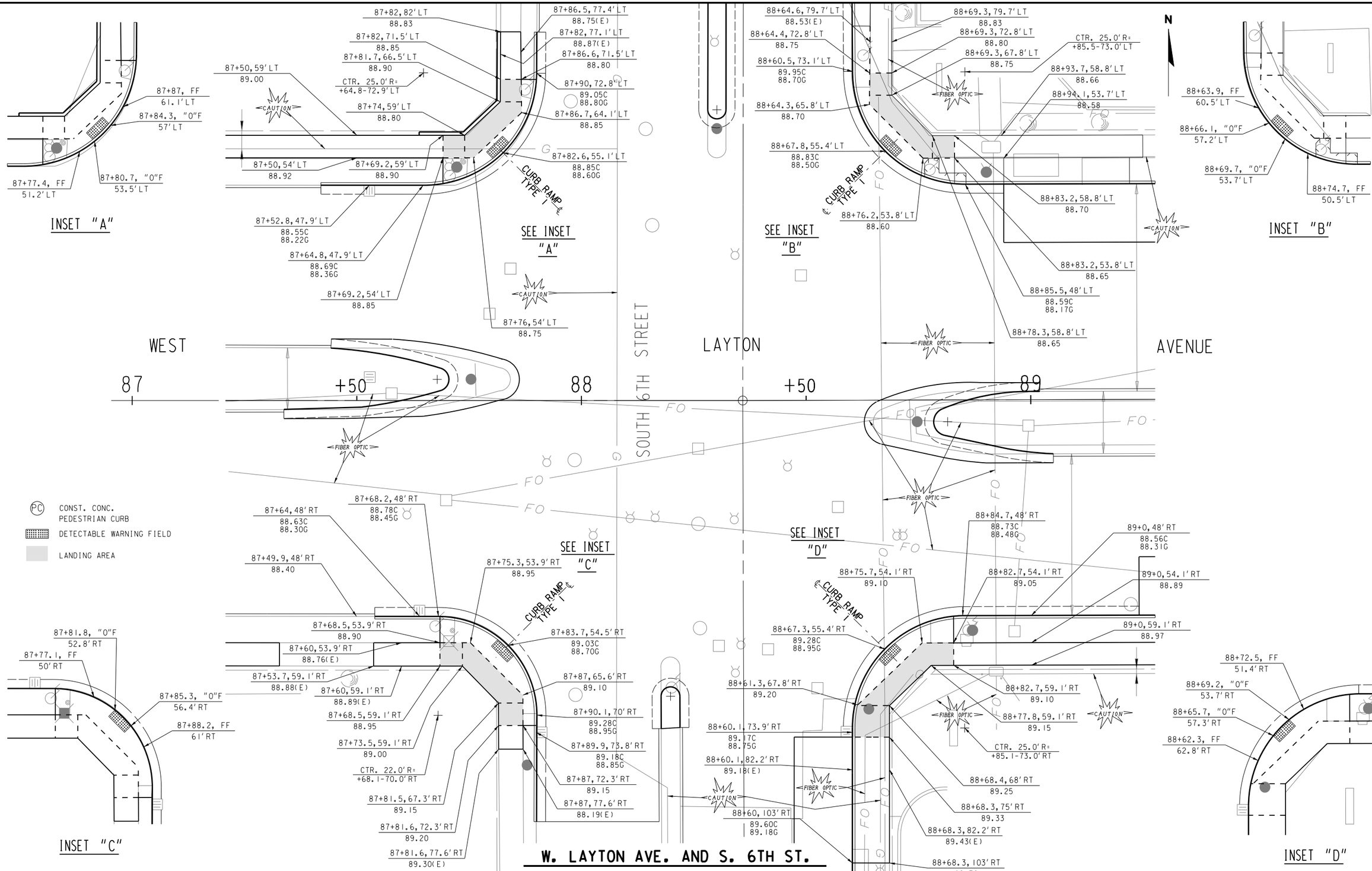


W. LAYTON AVE. AND S. 7TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 50	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_7TH - SLOPE.DGN

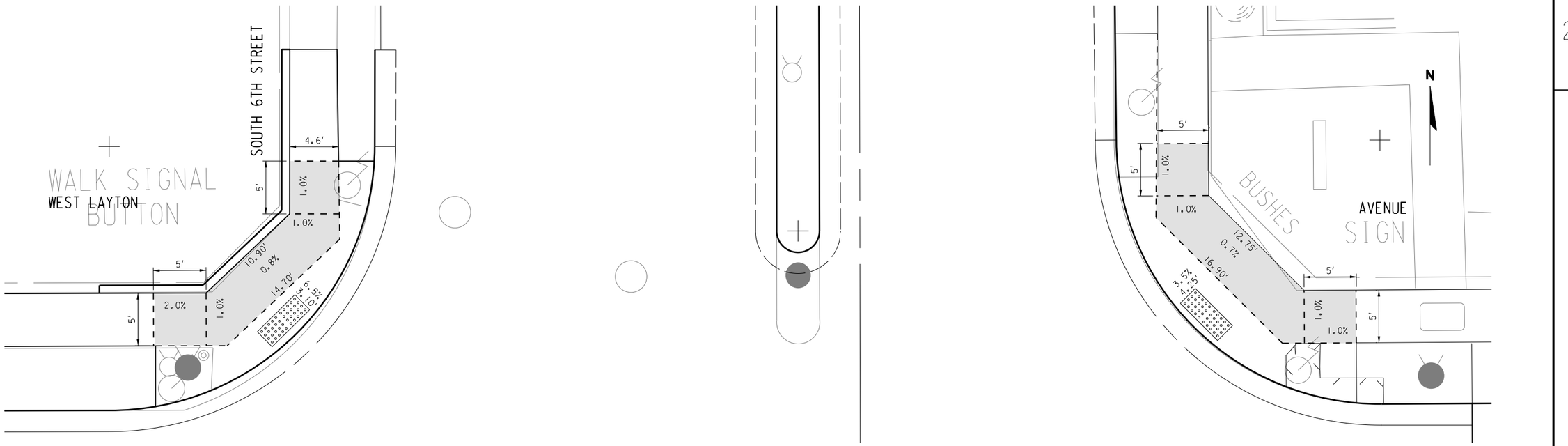
REVISED DATE: 01-23-2019 BY SB



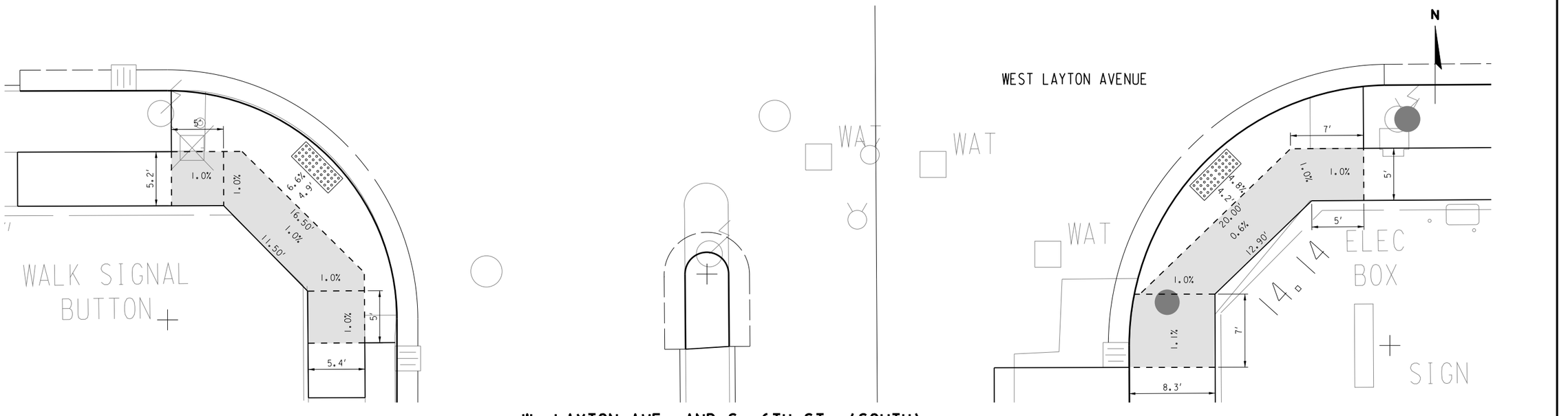
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 51	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_6TH.DGN

REVISED DATE: 12-20-2018 BY JC



W. LAYTON AVE. AND S. 6TH ST. (NORTH)



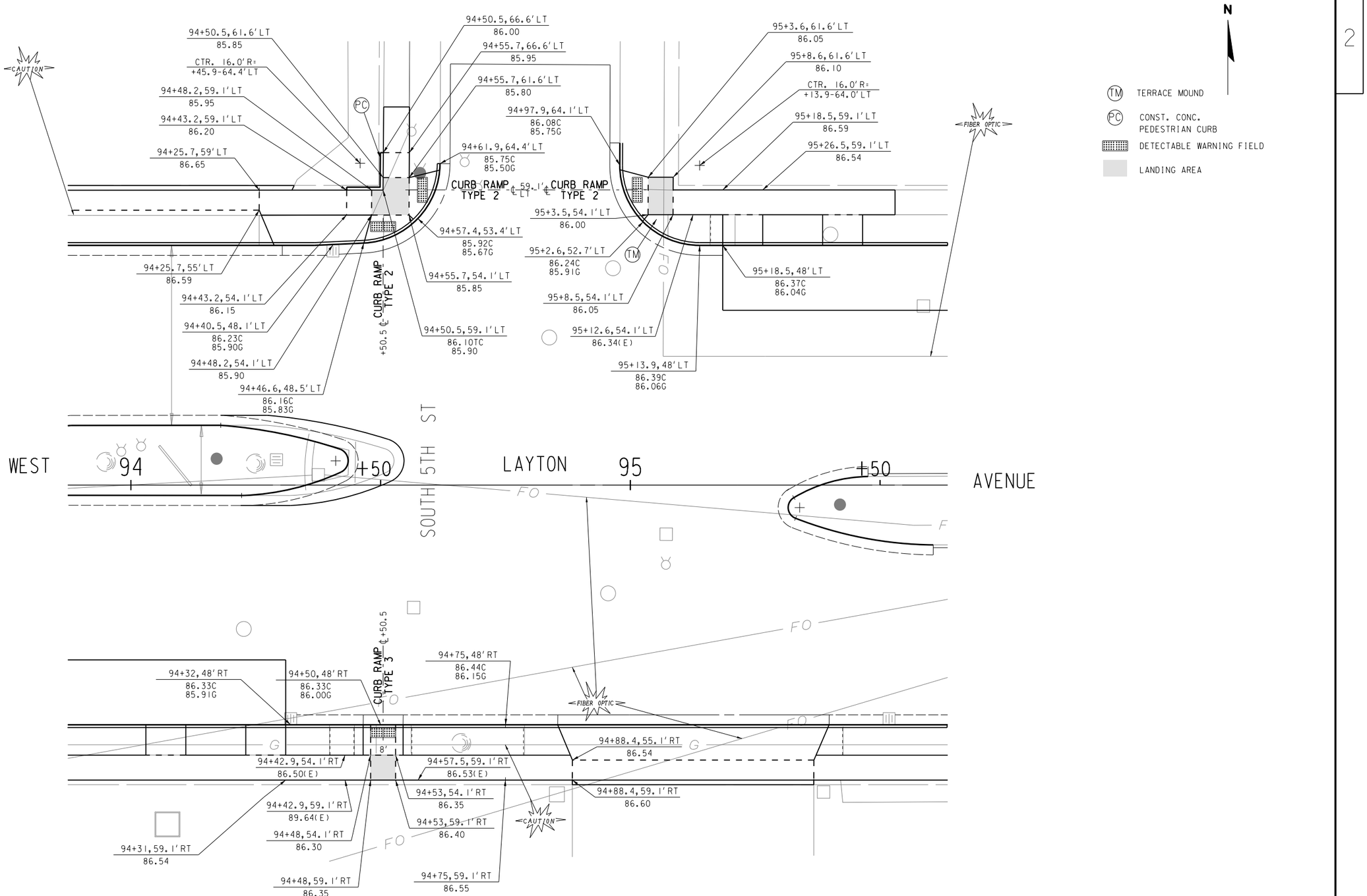
W. LAYTON AVE. AND S. 6TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 52	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_6TH - SLOPE.DGN

REVISED DATE: 01-23-2019 BY SB

2



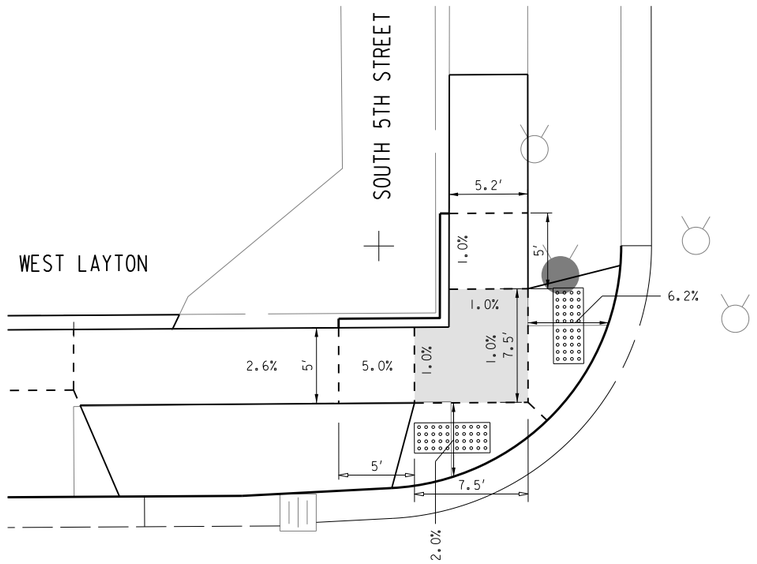
W. LAYTON AVE. AND S. 5TH ST.

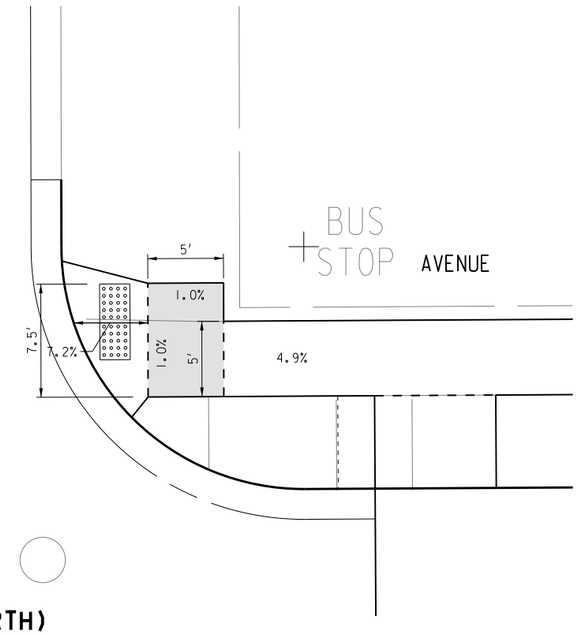
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 53	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_5TH.DGN

REVISED DATE: 12-19-2018 BY JC

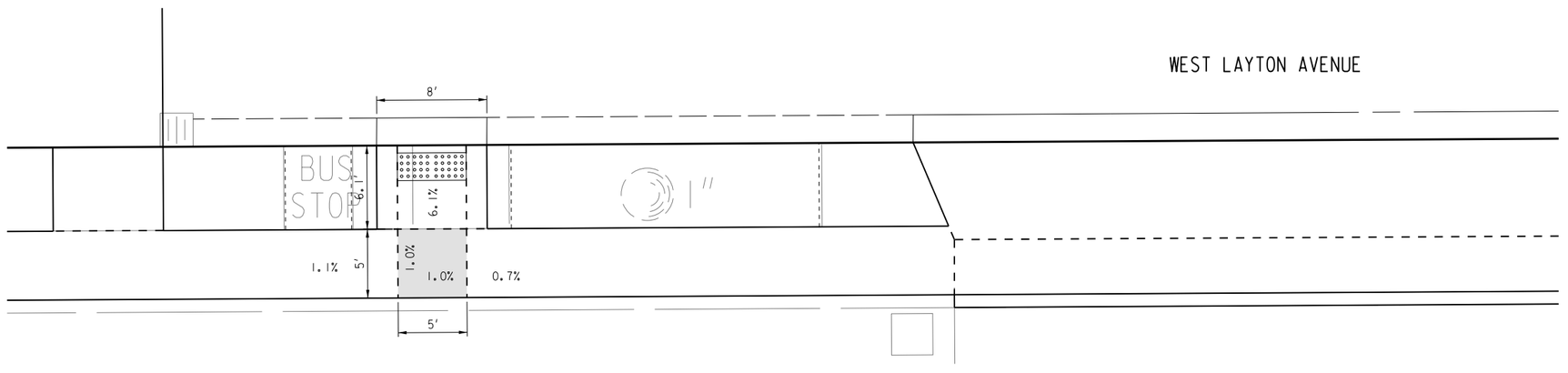
2





N

W. LAYTON AVE. AND S. 5TH ST. (NORTH)



N

W. LAYTON AVE. AND S. 5TH ST. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 54	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_5TH - SLOPE.DGN

REVISED DATE: 01-23-2019 BY SB

WEST LAYTON AVENUE

N

2 2

80+31.1, 59' LT
91.80

80+31.1, 54' LT
91.72

80+25, 59' LT
91.84

80+39.1, 59' LT
91.68

80+39.1, 54' LT
91.60

80+50, 59' LT
91.62

80+50, 54' LT
91.67

CAUTION

G G G G

80+15, 48.1' LT
91.67C
91.42G

80+25, 54' LT
91.79

CURB RAMP TYPE 3
℄ +35.1

80+50, 48.1' LT
91.44C
91.19G

FO

+50 80 +50 81 +50 82

FO FO FO FO

FIBER OPTIC

80+25, 47.9' RT
93.09C
92.67G

80+50, 47.9' RT
92.87C
92.54G

80+54.6, 54.9' RT
93.09

CURB RAMP TYPE 3
℄ +35.1

FO FO FO FO FO

80+25, 58.7' RT
93.29

80+32.6, 53.9' RT
92.90

80+54.6, 58.8' RT
93.15

80+37.6, 53.9' RT
92.85

80+32.6, 58.8' RT
92.95

80+37.6, 58.8' RT
92.90

PC CONST. CONC. PEDESTRIAN CURB

DETECTABLE WARNING FIELD

LANDING AREA

800 W. LAYTON AVE.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 55	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_STA 81.DGN

REVISED DATE: 12-04-2018 BY JC

WEST LAYTON AVENUE

N

106+4.1, 58.9' LT
86.86

106+4.1, 54' LT
86.81

105+85, 58.9' LT
87.00

105+85, 54' LT
86.92

106+9.1, 58.9' LT
86.80

106+9.1, 54' LT
86.75

106+22.4, 58.9' LT
86.79

106+22.4, 55' LT
86.71

106+49.9, 48' LT
86.49C
86.24G

105+77, 48' LT
86.74C
86.41G

106+0, 48' LT
86.79C
86.54G

CURB RAMP TYPE 3

℄ +6.6

CURB RAMP TYPE 5

106+6.6, 8.2' LT
87.10G

106+19.4, 1.3' LT
87.43C
87.18G

105 +50 106 +50 107 +50

FO

CURB RAMP TYPE 5

℄ +6.6

CURB RAMP TYPE 3

106+6.6, 2.3' RT
87.50C
87.25G

105+97, 48' RT
86.77C
86.44G

106+50, 48' RT
86.39C
86.14G

106+23.8, 54.1' RT
86.64

106+45.8, 54.1' RT
86.39

105+77, 59' RT
86.86

105+97, 59' RT
86.97

106+23.8, 59' RT
86.72

106+45.8, 59' RT
86.47

106+9.1, 54.1' RT
86.65

106+4.1, 54.1' RT
86.70

106+9.1, 59' RT
86.70

106+4.1, 59' RT
86.75

(PC) CONST. CONC. PEDESTRIAN CURB

DETECTABLE WARNING FIELD

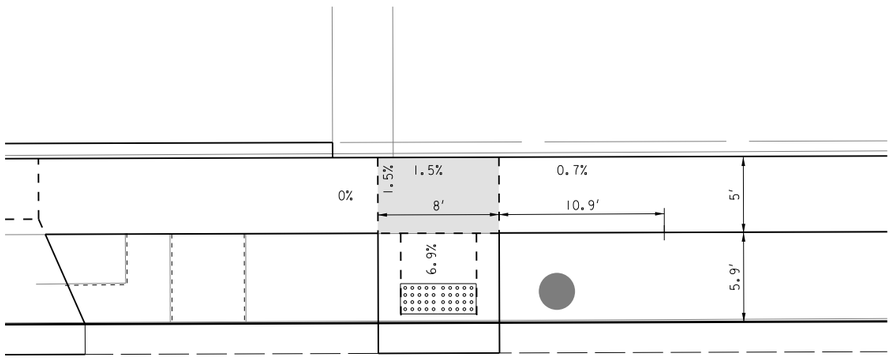
LANDING AREA

200 W. LAYTON AVE.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	INTERSECTION DETAILS	SCALE FEET 0' 20'	SHEET NO: 56	E

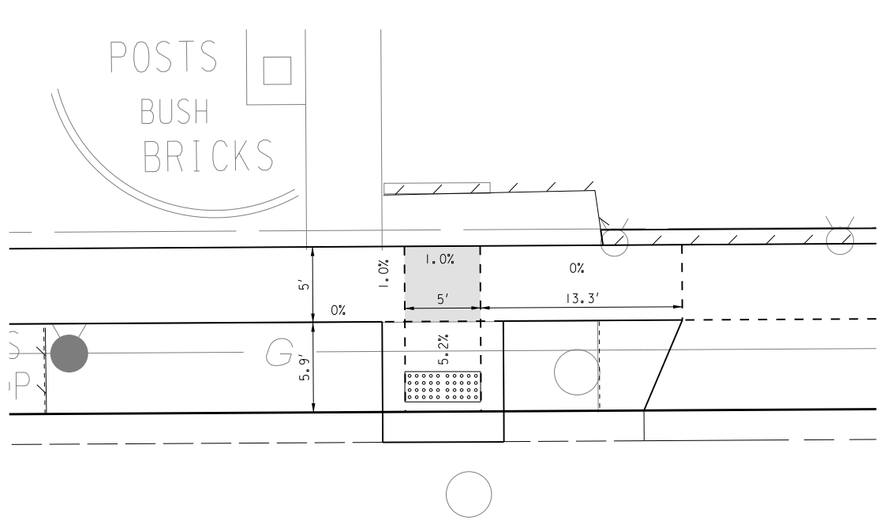
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_STA 106.DGN

REVISED DATE: 12-04-2018 BY JC



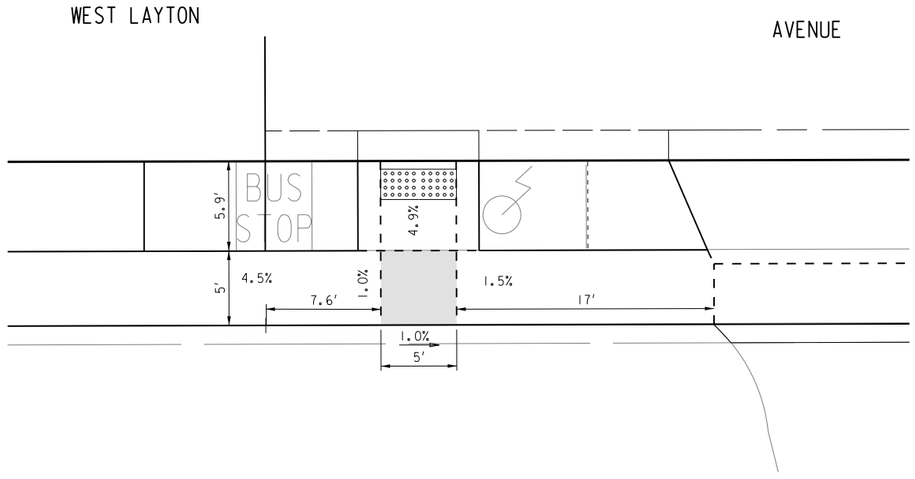
WEST LAYTON AVENUE

800 W. LAYTON AVE. (NORTH)

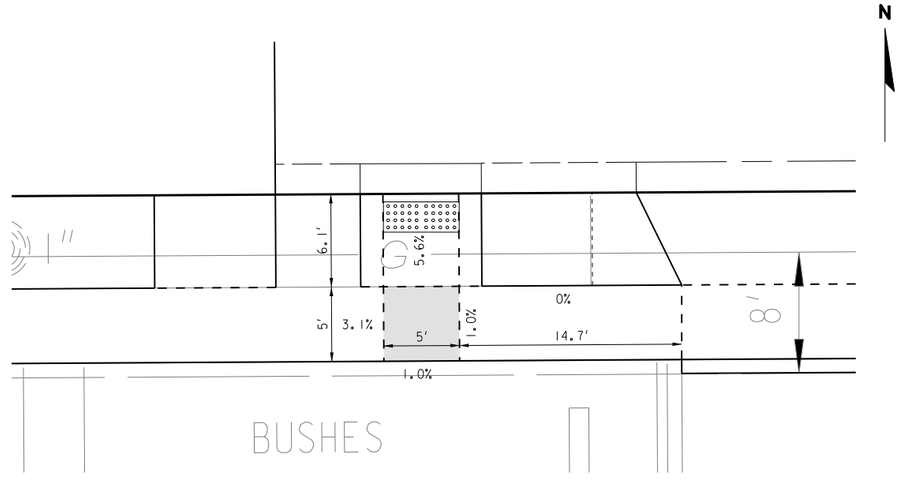


200 W. LAYTON AVE. (NORTH)

2



800 W. LAYTON AVE. (SOUTH)

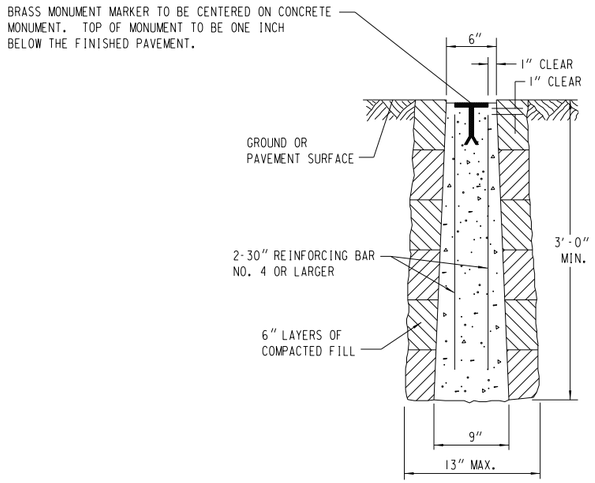


200 W. LAYTON AVE. (SOUTH)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SCALE FEET 0' 10'	SHEET NO: 57	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\RAMP DETAILS\RD_STA 81&106 - SLOPE.DGN

REVISED DATE: 01-23-2019 BY SB



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. LAYTON AVE.			
AT S. 20TH ST.	1	36+13.86 ON T/L	SEE SPECIAL PROVISIONS FOR INFORMATION ON RESTORATION OF MONUMENTS
AT S. 13TH ST.	1	62+22.20 ON T/L	SEE SPECIAL PROVISIONS FOR INFORMATION ON RESTORATION OF MONUMENTS
AT S. 6TH ST.	1	88+35.89 ON T/L	SEE SPECIAL PROVISIONS FOR INFORMATION ON RESTORATION OF MONUMENTS

LANDMARK REFERENCE MONUMENT

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	LANDMARK REFERENCE MONUMENT	SCALE FEET	SHEET NO: 58	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\LANDMARK.DGN

REVISED DATE: 02-28-2018 BY SB

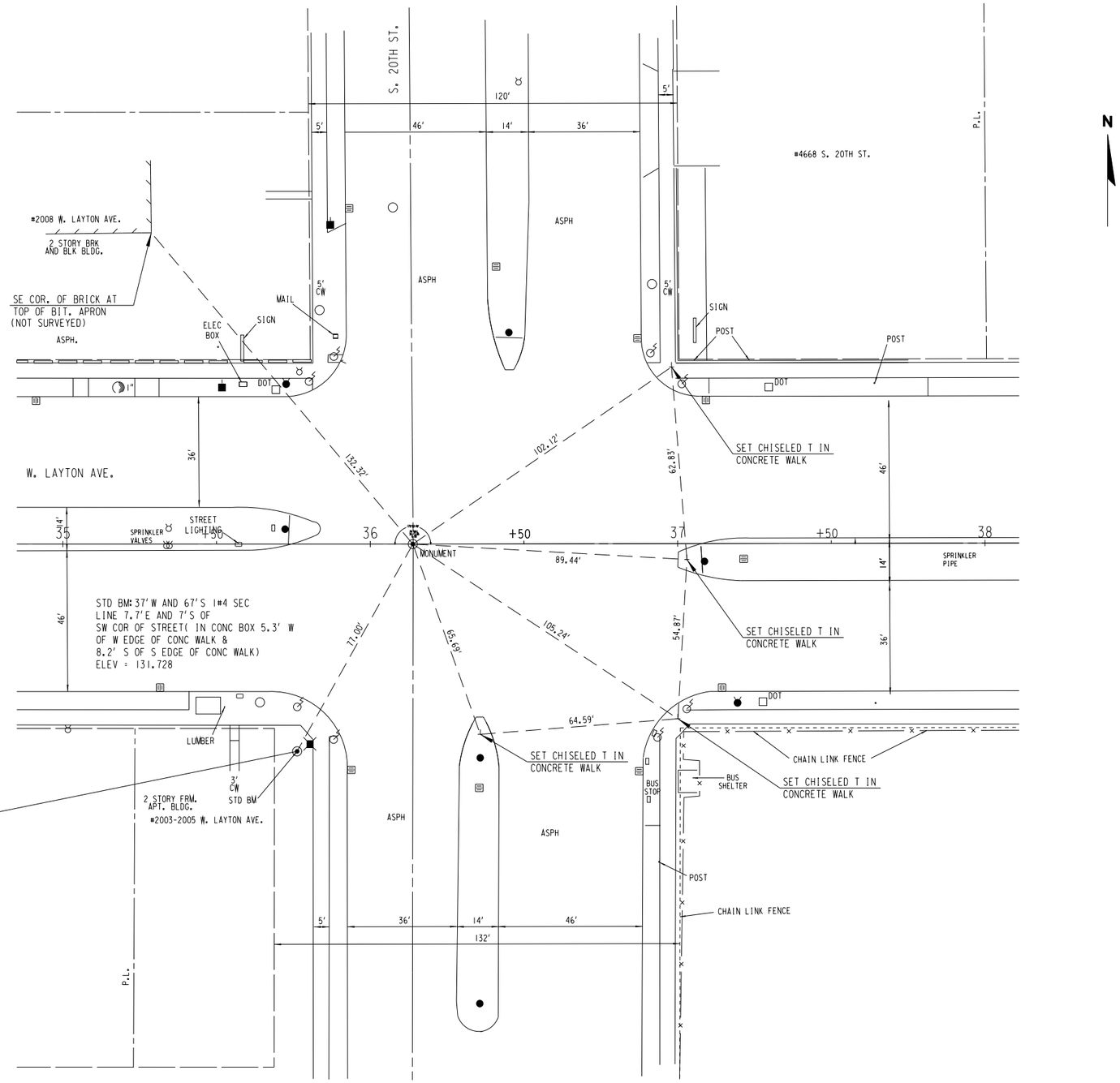
2

T. 6 N.
19
30
R. 22 E.

TOWNSHIP 6 NORTH, RANGE 21 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP

STATE PLANE COORDINATES OF SECTION CORNER
NORTH: 356,455.11
EAST: 2,551,698.79

SURVEY DATE: AUGUST 15, 2007



STD. BENCH MARK #60-01
CONC. MONUMENT WITH OVAL BRASS CAP IN CONC. BOX WITH PLASTIC COVER 1.3' BLG (IN CONC BOX 5.6' W OF W EDGE OF CONC WALK & 8.2' S OF S EDGE OF CONC WALK)
ELEV. 131.676 (CITY DATUM)
712.279 NGVD

STD BM: 37' W AND 67' S ¼ SEC LINE 7.7' E AND 7' S OF SW COR OF STREET(IN CONC BOX 5.3' W OF W EDGE OF CONC WALK & 8.2' S OF S EDGE OF CONC WALK)
ELEV = 131.728

U.S. PUBLIC LAND SURVEY CORNER
W. LAYTON AVE. & S. 20TH ST.

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	LANDMARK REFERENCE MONUMENT	SCALE FEET 0' 40'	SHEET NO: 59	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\LANDMARK.DGN

REVISED DATE: 02-28-2018 BY SB

2

T. 6 N.
1920
3029
R. 22 E.

TOWNSHIP 6 NORTH, RANGE 21 EAST

MILWAUKEE COUNTY, WISCONSIN

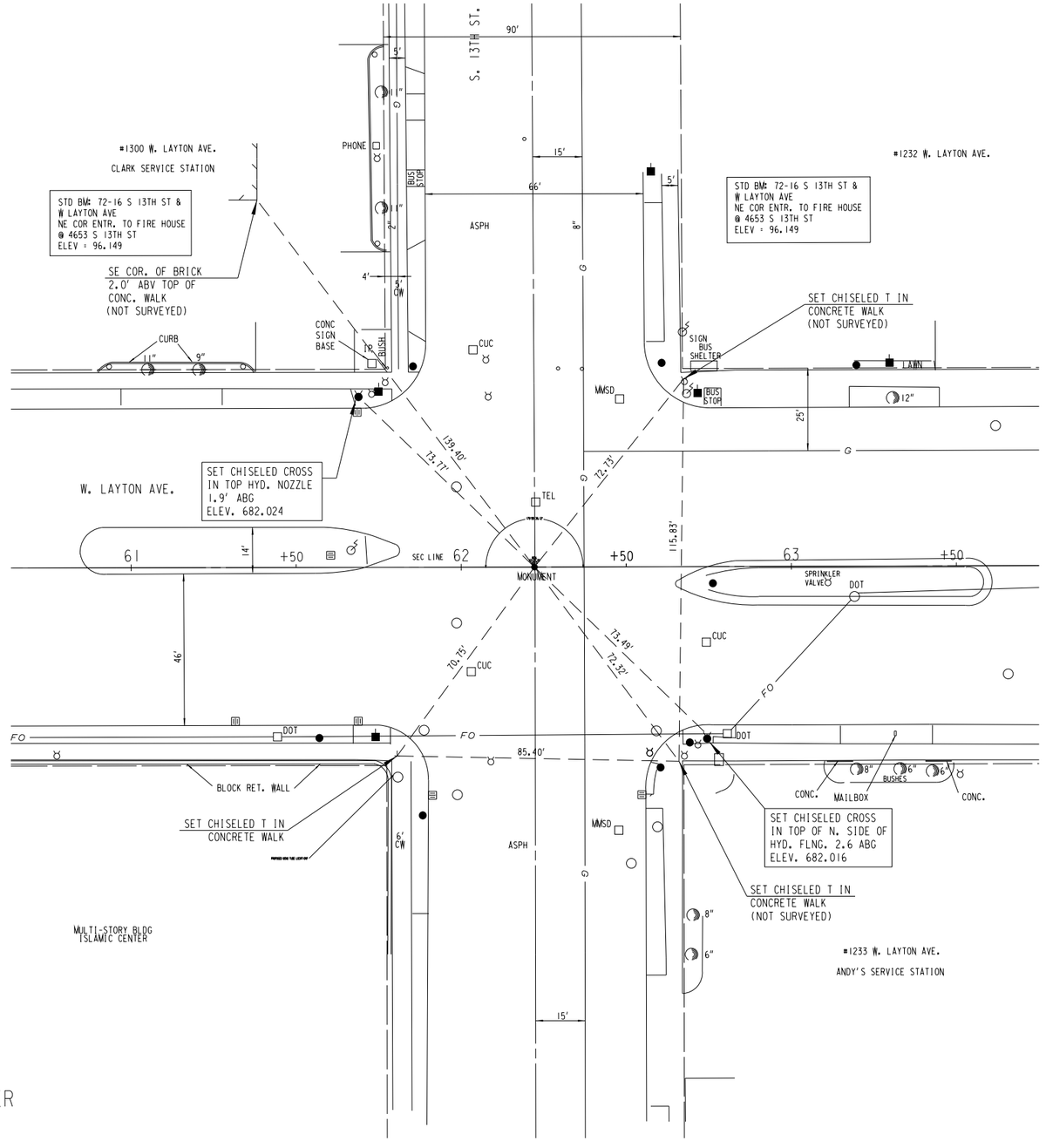
CONCRETE MONUMENT W/ BRASS CAP

STATE PLANE COORDINATES OF SECTION CORNER

NORTH: 356,497.26

EAST: 2,554,306.86

SURVEY DATE: OCTOBER 19, 2005



U.S. PUBLIC LAND SURVEY CORNER
W. LAYTON AVE. & S. 13TH ST.

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	LANDMARK REFERENCE MONUMENT	SCALE FEET 0' 40'	SHEET NO: 60	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\LANDMARK.DGN

REVISED DATE: 02-28-2018 BY SB

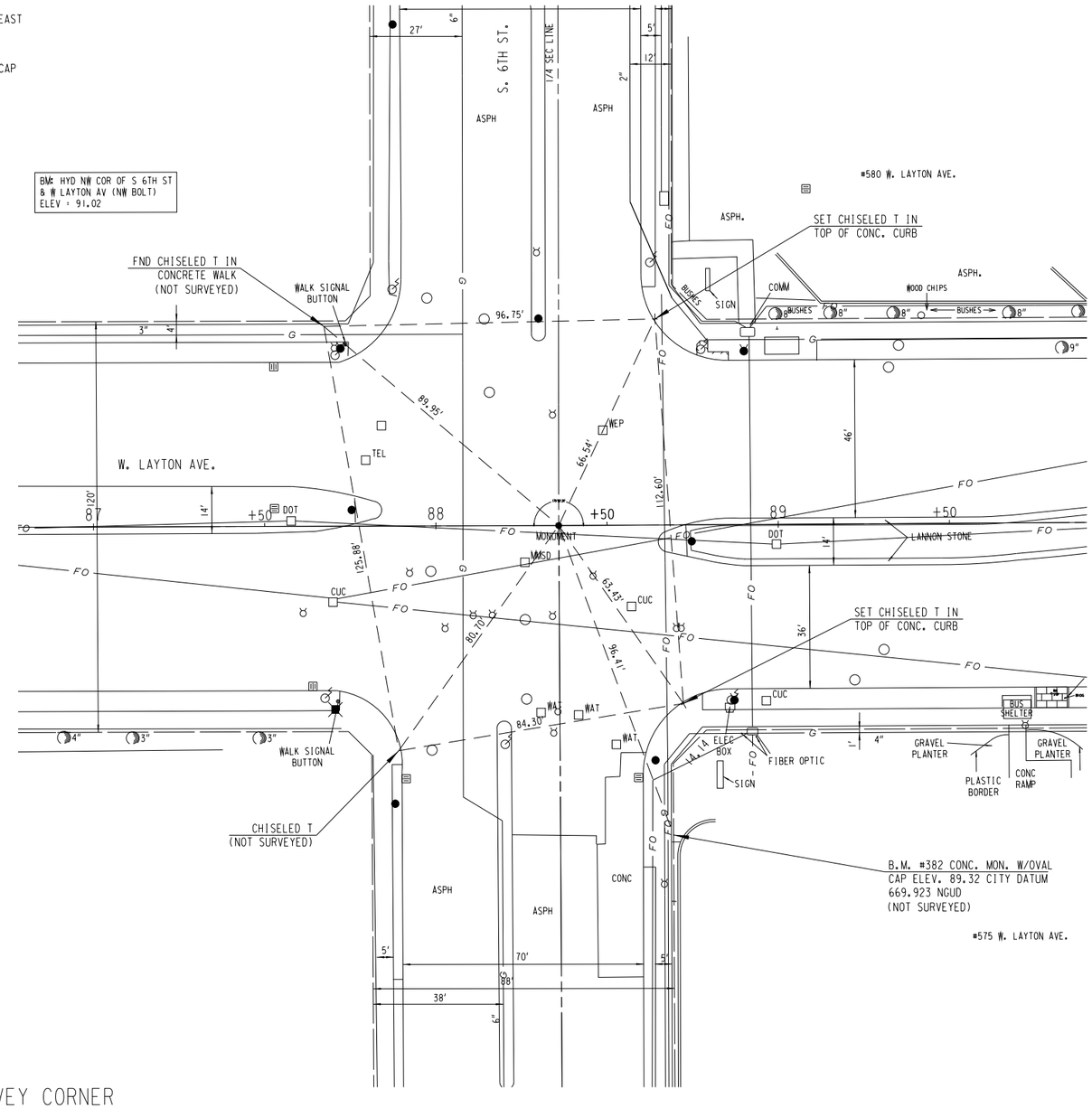
2

T. 6 N.
20
29
R. 22 E.

TOWNSHIP 6 NORTH, RANGE 21 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP

STATE PLANE COORDINATES OF SECTION CORNER
NORTH: 356,542.45
EAST: 2,556,920.01

SURVEY DATE: JULY, 1988



U.S. PUBLIC LAND SURVEY CORNER
W. LAYTON AVE. & S. 6TH ST.

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	LANDMARK REFERENCE MONUMENT	SCALE FEET 0' 40'	SHEET NO: 61	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\LANDMARK.DGN

REVISED DATE: 02-28-2018 BY SB

WEST LAYTON AVENUE

N

160'
112'
5'
6"
5' CW
2.4'
SEC LINE
CITY OF GREENFIELD LIMITS
CITY OF MILWAUKEE LIMITS
G
EDGE OF ASPHALT
END OF CURB
ASPH PARKING
CAUTION
BOLLARDS
CTR. 60.0' R=
+17.6-43.9' LT
59' LT
MONOTUBE
TES
BUS SHELTER
R/W
+74.8
+5.1
+58.6
+78.9
CONC LIGHT BASE
CONC
WOOD CHIP PLANTER
10+73.6
49.2' LT
DOT
12'
+11.1
26'
+71.6
CONC
TEL
WB PGL
25.5' LT ASPH
11'
CTR. 1.5' R=
+98.8-11.5' RT
08 +50 09 +50 10 +50 11 +50 12
MONUMENT
SEE LINE
+95.3
+51
BES
P.T. 60.0' R.
+20.4-16.0' RT
25.5' RT
+49.2
EB PGL
CUC
CONC
ASPH
+80.7
+70.4
8'
MONOTUBE
TES
10+72.7
46.9' RT
+74.5
8"
13"
59' RT
ASPH
CAUTION
#4730 S. 27TH ST.
BEGIN PROJECT
STA. 10+73.2 T/L
SOUTH 27TH STREET
END OF CURB
112'
160'
3'

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 62	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 08-12.DGN

REVISED DATE: 02-19-2019 BY SB

WEST LAYTON AVENUE

N

#4640-4670 S. 27TH ST.

#2500 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV @ S 25TH ST (STA +/- 17+17, 51 LT) ELEV = 136.29

#4730 S. 27TH ST.

#2531 W. LAYTON AVE.

#2527 W. LAYTON AVE.

#2521-2521A W. LAYTON AVE.

#2515 W. LAYTON AVE.

#2509 W. LAYTON AVE.

#2501 W. LAYTON AVE.

#2435 W. LAYTON AVE.

#2427 W. LAYTON AVE.

BM: HYD SEC OF S 26TH ST & W LAYTON AV (NW BOLT) ELEV = 138.07

SOUTH 26TH STREET

SOUTH 25TH STREET

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 63	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 12-18.DGN

REVISED DATE: 01-10-2019 BY SB

WEST LAYTON AVENUE

N

#2408 W. LAYTON AVE. #2400 W. LAYTON AVE. #2328 W. LAYTON AVE. #2320 W. LAYTON AVE. #2300 W. LAYTON AVE. #2274 W. LAYTON AVE.

P.L. P.L. P.L. P.L. P.L.

59' LT

CAUTION

5' CW 3' CW 3' CW 3' CW 3.3' CW 3.5' CW

IP

R/W

SPH 3" 18" 18" 18" 14" 16" 1" 1" 8" 6" LAWN CONC ASPH

+60.0 +16.3 +78.4 +27.1 +49.9 +76.2 +9.6 +49.6 +56.4 +87.9 +85.7 +97.3 +57.7

5' 8' 11' 12' 36'

WB PGL 25.5' LT

+-0.1 +35.6 +68.3 +14.8

P.C. 60.0' R. +35.5-12.0' LT

P.T. 60.0' R. +68.7-12.0' LT

P.C. 60.0' R. +60.4-12.0' LT

P.T. 60.0' R. +83.3-12.0' LT

18 +50 19 +50 20 +50 21 +50 22 +50 23 +50 24

SPRINKLER VALVE BANNERS SPRINKLER VALVE SEC LINE TEL

CTR. 8.4' R= +61.9-3.7' RT

CTR. 9.3' R= +40.7-4.0' RT

CTR. 8.0' R= +80.5-0.0' RT

CTR. 8.0' R= +63.6-0.0' LT

P.C. 60.0' R. +60.5-12.0' RT

P.T. 60.0' R. +83.6-12.0' RT

+21.6 +75.0 12' 36' 11' 8' 5' 12' 36' 25.5' RT EB PGL 12' 36' 11' 8' 5' 12' 36' 11' 8' 5' 36'

+3.7 +14.5 +57.1 +44.6 +49.2 +96.4 +99.3 +0.4 +21.1 +49.4 +51.4 +71.5 +25.1 +19.5 +85.1 +57.1 +67.6 +7.6

CUC ASPH ASPH

4" 1" 10" 8" 15" 23" 8" 7" 28" 4" 3" 5' 4' 5' 4' 5'

G R/W LAWN BLK STONE CONC ABANDONED CONC

58.9' RT 58.9' RT 58.8' RT

2.5' CW 3' CW 3.3' CW 2.5' CW 4' CW 2.5' CW 5' CW 22" 2" 1'

CONC

CAUTION CAUTION CAUTION

CTR. 20.0' R= +67-68.0' RT

19+74.3 69' RT

68.8' RT

CTR. 20.0' R= +39.3-68.0' RT

20+32.2 68.5' RT

CTR. 60.0' R= +68.4-48.0' RT

CTR. 20.0' R= +85.1-68.0' RT

22+92.1 68.9' RT

84.1' RT

CTR. 20.0' R= +57.3-68.0' RT

23+50.1 68.4' RT

22+92.7 73.6' LT

CTR. 20.0' R= +85.7-68.3' LT

79.1' LT

23+50.9 73.8' LT

CTR. 20.0' R= +57.7-68.1' LT

59' LT

60' 32' 5' 5' 7' 5" 3" CW 6" 5' CW 5' 5' 13'

AVE. #2421 W. LAYTON AVE. #2415 W. LAYTON AVE. #2409 W. LAYTON AVE. #2401 W. LAYTON AVE. #2331 W. LAYTON AVE. #2325 W. LAYTON AVE. #2317 W. LAYTON AVE. #2039-2309A W. LAYTON AVE. #4701 S. 23RD ST. #227

P.L. P.L. P.L. P.L. P.L. P.L. P.L. P.L. P.L. P.L.

CONC 2" 8" 5' G 32' 60' 5'

SOUTH 24TH STREET

BM: HYD SEC OF S 24TH ST & W LAYTON AV(NW BOLT) ELEV = 137.33

3" ABANDONED (LOCATION UNKNOWN) ASPH 5' 32' 60' 5'

SOUTH 23RD STREET

BM: HYD SEC OF S 23RD ST & W LAYTON AV(NW BOLT) ELEV = 136.25

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 64	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 18-24.DGN

REVISED DATE: 01-10-2018 BY SB

2

WEST LAYTON AVENUE

N

4 W. LAYTON AVE. | #2262 W. LAYTON AVE. | #2254 W. LAYTON AVE. | #2220 W. LAYTON AVE.

P.L.

BM: HYD N/S OF W LAYTON AV @ S 22ND PL (STA +/- 25+98, 52 LT) ELEV = 138.19

3.5' CW | 48" | 59' LT | 4' CW | PLANTERS | RR TIE | BUSHES | ASPH. | 16" | 12" | 15" | CAUTION | CONC RAMP | LANNON STONE | LIGHTS | 15" | 15" | R/W | 5' CW | IRON HAND RAIL | 15" | 15" | 3X15" | BUSH | 15" | 59' LT | BUS STOP | +91.1

LAWN | LAWN | BUSHES

13' | 5' | 36' | 5' | 13'

+36.4 | +49.7 | +73.7 | +77.7 | +63.3 | +70.6 | +91.0 | +95.0 | +10.2 | +15.2 | +19.8 | +33.3 | +81.1

+17.7 | +49.3 | 11' | 5' 8" | 12' | +49.7 | +49.9 | WB PGL 25.5'LT | +8.3 | +66.6 | +89.9

P.C. 60.0'R. +74.8-12.0'LT | P.C. 60.0'R. +92.5-12.0'LT | 29+95.1 4.4'LT

24 | +50 | 25 | +50 | 26 | +50 | 27 | +50 | 28 | +50 | 29 | +50 | 30

PINE | SPRINKLER VALVES | BANNERS | HARP LIGHT | SEC LINE | SPRINKLER VALVE | TEL

CTR. 7.0'R= +6.0-5.0'RT | CTR. 8.0'R= +79.6-4.0'RT | CTR. 9.5'R= +13.9-2.3'RT | CTR. 8.6'R= +99.2-3.2'RT

+73.9 | +99.1 | +6.5 | 25.5'RT EB PGL | +99.2

+7.6 | +35.7 | +49.9 | +37.7 | +3.0 | +94.0 | +75.4 | +19.1 | +24.1 | +44.8 | +45.6 | +61.2 | +21.2 | +8.3

ASPH | CONC | PLANTER | CUC

23" | 18" | 16" | 12" | 1" | 1" | 8" | 4' CW | 3' CW

R/W | 5' | 58.9' RT | 2.8' CW | CAUTION | CTR. 20.0'R= +3-68.0'RT | 26+10.2 89.4'RT | 75.7' RT | 5' CW | 15" | CTR. 20.0'R= +75.2-68.0'RT | 26+67.9 68.5'RT | 76.4' RT | 58.7' RT | CTR. 20.0'R= +21.2-68.0'RT | 29+27.9 70.8'RT | 75.6' RT | CTR. 20.0'R= +93.1-68.0'RT | 29+86 73.8'RT

#2271 W. LAYTON AVE. | #2255 W. LAYTON AVE. | #2243 W. LAYTON AVE. | #2227 W. LAYTON AVE. | #2221 W. LAYTON AVE. | #2215 W. LAYTON AVE. | #2209-2209A W. LAYTON AVE. | #4701 S. 22ND ST.

SOUTH 22ND PLACE | SOUTH 22ND STREET | #2131-2131A W.

8' | 5' | 32' | 5' | 60' | 19'

BM: HYD SEC OF S 22ND ST & W LAYTON AV (NW BOLT) ELEV = 141.56

P.L.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 65	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 24-30.DGN

REVISED DATE: 01-10-2019 BY SB

WEST LAYTON AVENUE

BM: HYD N/S OF W LAYTON AV @ S 21 ST (STA +/- 35+54, 51.5 LT) ELEV = 136.46

#2126 W. LAYTON AVE. #2022 W. LAYTON AVE. #2008 W. LAYTON AVE.

P.L. P.L. P.L. 1/4 SEC LINE N

ASPH DWY ASPH DWY ASPH DWY ASPH PARKING

BUS STOP +19.1 R/W 13' 30+49.9 34.9' LT 59' LT SIGN POST 5' +89.2 +30.3 +50.6 +8.3 +61.8 +84.7 +31.9 +49.6 +9.6 59' LT ELEC BOX SIGN MAIL DOT 35+81 112.7' LT 102.3' LT 68.3' LT 138.7' LT

29+95.1 4.4' LT CTR. 8.6' R= +99.2-3.2' RT SPRINKLER VALVE 30 +50 31 +50 32 BANNERS +50 SEC LINE 33 +50 34 +50 35 +50 36 MONU

+38.9 CTR. 7.0 ' R= +41.7-5.1' RT CTR. 9.1 ' R= +17.9-2.8' RT 60' R 33+31.2 11.2' LT WB PGL 25.5' LT +5.9 +35.3 SIGN SPRINKLER VALVE PLANTER 10" 24' 8" 96' 120' CTR. 7.0 ' R= +84-5.0' LT P.C. 60.0' R. +55.2-12.0' LT CTR. 6.0 ' R= +66-4.9' LT MINIATURE ON CONC BASE STREET LIGHTING SPRINKLER VALVES +84.2 +54.6 P.C. 60.0' R +56.1-2.0' RT CUC

+99.2 +73.2 +88.1 +30.4 +17.9 25.5' RT EB PGL +41.6 +7.6 +67.6 +92.8 13'

CTR. 60.0' R= +24.1-48.0' RT +93.3 36' ASPH +10.5 CUC 46'

4" 1" 20" 4" 3" 18" 18" 8" 14" 5' G R/W 5' BUSH DECOR. STONE RET. WALL 10" PINE 16" PINE IRON HAND RAIL 4' CW 12" R/W LUMBER STONE 3' CW 3.2' CW

CTR. 20.0' R= +38.9-68.0' RT 58.8' RT 32+46.2 74.1' RT 79.1' RT 33+4.2 74' RT CTR. 20.0' R= +11.3-68.1' RT 58.7' RT CTR. 60.0' R= +55.2-48.0' RT 59' RT STD BM CTR. 25.0' R= +67.5-73.0' RT 35+81.4 76.9' RT 72.9' RT

19' 5' 32' 5' 60' CONC SOUTH 21ST STREET SOUTH 20TH STREET ASPH 5' 36'

#2131-2131A W. LAYTON AVE. #2125-2125A W. LAYTON AVE. #2117-2119 W. LAYTON AVE. #2113 W. LAYTON AVE. #2109-2109A W. LAYTON AVE. #2103-2103A W. LAYTON AVE. #2057 W. LAYTON AVE. #2021-2023 W. LAYTON AVE. #2015-2017 W. LAYTON AVE. #2009-2011 W. LAYTON AVE. #2003-2005 W. LAYTON AVE.

P.L.

STD BM: 37' W AND 67' S ¼ SEC LINE 7.7' E AND 7' S OF SW COR OF STREET(IN CONC BOX 5.3' W OF W EDGE OF CONC WALK & 8.2' S OF S EDGE OF CONC WALK) ELEV = 131.728

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 66	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 30-35.DGN

REVISED DATE: 01-10-2019 BY SB

WEST LAYTON AVENUE

N

1/4 SEC LINE

120'

46' 14' 36'

ASPH ASPH

35+91.7
138.6'LT

36+12.7
138.7'LT

5' 5' 9'

35+81
112.7'LT

35+86.1
101.4'LT

#2008 W. LAYTON AVE.

CTR. 20.0'R=
+72-68.0'LT

ASPH PARKING

35+86.2
68.2'LT

MAIL

54'LT 59'LT

ELEC BOX

SIGN

DOT

36+13.4
72'LT

CTR. 5.5 'R=
+45.1-70.8'LT

+94.4 +99.3

5' CW

65.9'LT

74.9'LT

MONOTUBE ON CONC BASE

SIGN

POST

CTR. 20.0'R=
+8.4-68.0'LT

58.8'LT

53.9'LT

POST

+38.3

+52.1

#4668 S. 20TH ST.

P.L.

#1908 W. LAYTON AVE.

P.L.

#1826 W. LAYTON AVE.

P.L.

BM: HYD N/S OF W LAYTON AV
(STA +/- 40+80, 51 LT)
ELEV = 137.73

R/W

53.9'LT

+25.5

+81.4

+8.3

+68.2

WB PGL
25.5'LT

ASPH CONC

MONOTUBE ON CONC BASE

STREET LIGHTING

SPRINKLER VALVES

35 +50 36 +50 37 +50 38 +50 39 +50 40 +50 41

SEC LINE

MONUMENT

+54.6

CTR. 6.0 'R=
+65.9-4.9'LT

CUC

CTR. 5.4 'R=
+10-5.2'RT

96'

14'

SPRINKLER PIPE

13.8' 12.2' 11' 12.7'

25.5'RT

EB PGL

ASPH CONC

+7.8

35+67.6
35'RT

+39.7

13'

36'

19' 12' 15' 12' 12' 12' 10'

DOT

FO

R/W

53.9'RT

48'RT

LUMBER
59'RT

∠ PT.+78.4
59.0'RT

CTR. 25.0'R=
+67.5-73.0'RT

3' CW

STD BM

2'

71.5'RT

MONOTUBE ON CONC BASE

96'

∠ PT.+81.4
62.4'RT

35+81.4
76.9'RT

1/4 SEC LINE

MONOTUBE ON CONC BASE

BUS SHELTER

BUS STOP

CHAIN LINK FENCE

∠ PT.+3.7
59.0'RT

59'RT

54'RT

CTR. 25.0'R=
+13.5-73.1'RT

∠ PT.+99.2
62.3'RT

36+99.3
73.4'RT

POST

CHAIN LINK FENCE

ASPH 36' 14' ASPH 46'

5' 132'

009-2011 W. LAYTON AVE.

#2003-2005 W. LAYTON AVE.

P.L.

SOUTH 20TH STREET

STD BM: 37'W AND 67'S ¼ SEC
LINE 7.7'E AND 7'S OF
SW COR OF STREET(IN CONC BOX 5.3' W
OF W EDGE OF CONC WALK &
8.2' S OF S EDGE OF CONC WALK)
ELEV = 131.728

STD BM: 37'W AND 67'S ¼ SEC
LINE 7.7'E AND 7'S OF
SW COR OF STREET(IN CONC BOX 5.3' W
OF W EDGE OF CONC WALK &
8.2' S OF S EDGE OF CONC WALK)
ELEV = 131.728

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 67	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 35-41.DGN

REVISED DATE: 01-23-2019 BY SB

WEST LAYTON AVENUE

N

CHAIN LINK FENCE

+45.4 +85.4 +95.4 +5.4 +10.3

58+63.8
48' LT

+82.3

CONC ASPH WB PGL
25.5' LT

58+63.5
12' LT

+75.4

13' 11' 12' 36'

54 +50 55 +50 56 SEC LINE +50 57 +50 58 +50 59 +50 60

36' 24' 120'

58+63.5
11.8' RT

25.5' RT

CONC ASPH EB PGL

+66.9

12' 11' 13' 36'

58+63
48' RT

+0.2

FO FO FO DOT FO

IP

+62.2 +86.2 +92.1 RET. WALL +16.4 +34.5

TEMPORARY DRIVEWAY

FUTURE DRIVEWAY

BM: HYD S/S OF W LAYTON AV
(STA +/- 59+20, 50 RT)
ELEV = 109.43

=1425 W. LAYTON AVE.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 68	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 54-60.DGN

REVISED DATE: 03-14-2018 BY SB

WEST LAYTON AVENUE

N

#1300 W. LAYTON AVE. #1232 W. LAYTON AVE. #1218 W. LAYTON AVE. #1216 W. LAYTON AVE. #1204-1208 W.

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

160.6' LT
143.1' LT
140.6' LT
62+66.5 110.2' LT
61+78.7 118' LT
100.6' LT
∠ PT.+79.0 61.0' LT
CTR. 20.0' R= +69.4-68.0' LT
∠ PT.+77.0 59.0' LT
∠ PT.+66.7 60.1' LT
CTR. 20.0' R= +75.7-68.0' LT
∠ PT.+67.7 59.1' LT
2048' R
66+1.8 62.5' LT
65+72.9 60.7' LT
65+80.9 50.1' LT
35' LT
61+73.4 9.5' LT
60+49.7 9.7' LT
CTR. 4.0' R= +72.8-5.0' RT
62+71.3 1.3' RT
WB PGL 25.5' LT
61+73.5 1.0' LT
CTR. 4.5 ' R= +72.0-5.2' LT
62+71.5 8.7' RT
25.5' RT EB PGL
∠ PT.+91.5 2.0' RT
∠ PT.+42.8 11.3' RT
64+58.4 47.1' RT
68' RT
∠ PT.+67.7 59.0' RT
CTR. 20.0' R= +75.7-68.0' RT
∠ PT.+66.7 60.0' RT
62+66.7 73.1' RT
62+60.8 73.3' RT
62+61.2 96.1' RT
59' RT
∠ PT.+3.5 59.0' RT
64+33.6 58.4' RT
61+78.9 93.3' RT
88.5' RT
62+28.6 88.5' RT
62+28.6 128' RT
118' RT
62+53.7 128' RT
65+96 38.8' RT

CHAIN LINK FENCE, BUSHES, R/W, CURB, PHONE, BUS STOP, SIGN BASE, CAUTION, ASPH, CUC, WMSD, MONOTUBE ON CONC BASE, STREET LIGHTING VAULT, SIGN BASE, SHELTER, LAWN, MAILBOX, HAND RAIL, TEL, SEC LINE, MONUMENT, SPRINKLER VALVES, DOT, FO, BLOCK RET. WALL, DRAIN, CONC., 7.2' CW, 6' CW

#4707-4709 S. 13TH ST.

SOUTH 13TH STREET

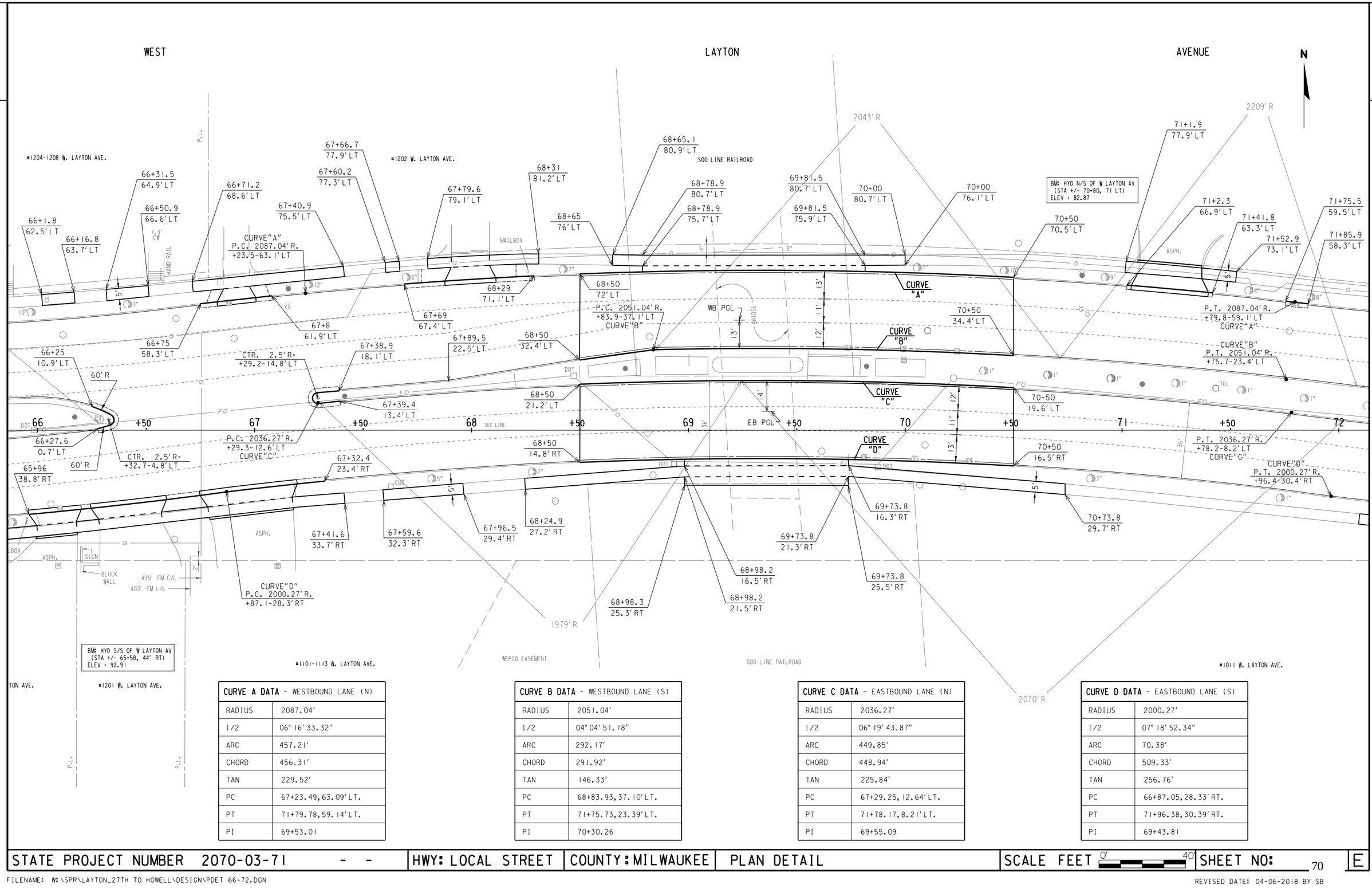
BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91

#1233 W. LAYTON AVE. #1215 W. LAYTON AVE. #1209 W. LAYTON AVE.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 69	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 60-66.DGN

REVISED DATE: 01-23-2019 BY SB



CURVE A DATA - WESTBOUND LANE (N)	
RADIUS	2087.04'
I/2	06° 16' 33.32"
ARC	457.21'
CHORD	456.31'
TAN	229.52'
PC	67+23.49, 63.09' LT.
PT	71+79.78, 59.14' LT.
PI	69+53.01

CURVE B DATA - WESTBOUND LANE (S)	
RADIUS	2051.04'
I/2	04° 04' 51.18"
ARC	292.17'
CHORD	291.92'
TAN	146.33'
PC	68+83.93, 37.10' LT.
PT	71+75.73, 23.39' LT.
PI	70+30.26

CURVE C DATA - EASTBOUND LANE (N)	
RADIUS	2036.27'
I/2	06° 19' 43.87"
ARC	449.85'
CHORD	448.94'
TAN	225.84'
PC	67+29.25, 12.64' LT.
PT	71+78.17, 8.21' LT.
PI	69+55.09

CURVE D DATA - EASTBOUND LANE (S)	
RADIUS	2000.27'
I/2	07° 18' 52.34"
ARC	70.38'
CHORD	509.33'
TAN	256.76'
PC	66+87.05, 28.33' RT.
PT	71+96.38, 30.39' RT.
PI	69+43.81

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 70	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 66-72.DGN

REVISED DATE: 04-06-2018 BY SB

WEST LAYTON AVENUE

N

2061'R

#938-1020 W. LAYTON AVE.

#900 W. LAY

#908 W. LAYTON AVE.

30' INGRESS/EGRESS EASEMENT

P.L.

BM: HYD N/S OF W LAYTON AV (STA +/- 75+31, 50' LT) ELEV = 92.77

72+85.2 / 50.1'LT

72+87.3 / 61.1'LT

73+90 / 58.9'LT

59' LT

72+99.9 / 36.3'LT

73+59.9 / 35'LT

CTR. 3.5'R= +39.8-3.9'LT

72+37.9 / 9.6'LT

72+31.9 / 1.5'LT

P.T. 22.0'R. +25-2.6'LT

74+00 / 3'RT

70'R

CTR. 2.5'R= +5.3-8.6'RT

CTR. 4.1'R= +18.6-2.7'RT

73+25 / 7.2'RT

73+95 / 10.8'RT

73+8.7 / 28'RT

72+26.2 / 34.2'RT

∠PT.+51.9 / 44.6'RT

73+68.5 / 32.9'RT

72+9.2 / 38.5'RT

∠PT.+30.8 / 49.5'RT

∠PT.+29.3 / 54.4'RT

72+9.1 / 43.3'RT

CTR. 25.0'R= +93.1-71.8'RT

74+5.8 / 58.4'RT

66.5' RT

97.9' RT

#1007 W. LAYTON AVE.

P.T. 60.0'R. +9-2.0'LT

WB PGL 25.5'LT

76+50 / 11.2'LT

∠PT.+60.5 / 12.1'LT

CTR. 3.0'R= +80.8-8.9'RT

25.5'RT EB PGL

74+66 / 58.5'RT

CTR. 25.0'R= +78.9-73.0'RT

76.8' RT

74+74.2

#909 W. LAYTON AVE.

SOUTH 10TH STREET

UTILITY EASEMENT

665' FM ROW

CONC.

ASPH.

MAILBOX

TV

CUC

DOT

FO

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 71	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 72-78.DGN

REVISED DATE: 03-13-2018 BY SB

WEST LAYTON AVENUE

N

8' WE ELECTRIC EASEMENT

8' WE ELECTRIC EASEMENT

P.L.

P.L.

P.L.

#900 W. LAYTON AVE.

#830 W. LAYTON AVE.

#800-800A W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV
(STA +/- 81+78, 51' LT)
ELEV = 92.92

59' LT

4' CW

4' CW

FO

G

16" 11" 14" 12" 11" 6" 9" 6" 1" 10"

+97.8 +50.0 +35.1 +50.0

P.C. 56.0' R.
+94.5-12.1' LT

CTR. 3.2' R=
+21.8-1.3' LT

AMER

WB PGL
25.5' LT

81+41
0.3' LT

WALK SIGNAL BUTTON

78 +50 79 +50 80 SEC LINE +50 81 +50 82 +50 83 +50 84

24' 36' 46' 36' 24'

+5.0 +0.0 +5.0

DOT

CTR. 6.0' R=
+41-5.6' RT

+44.0

+3.5

11' 11' 13' 11' 11' 13' 11' 11' 13'

CUC

+65.0 +55.0 34.9' RT +25.0 +35.1 25.5' RT EB PGL +32.0 +67.5 +5.0 +45.9 +83.5 +16.0

3/4"

3"

2"

13" 20" 16" 16" 1"

637' FM ROW

CONC.

ASPH

+41.0

+70.0 BLOCK RET. WALL

+95.3 GRAVEL

+30.6

+50.5 WALL

+80.4

+97.0 +5.0 +17.0

SIGN

CONC. ASPH

SLOTTED DRAIN

59' RT

SLOTTED DRAIN

ASPH DWY

167' FM ROW

TP

MAILBOX

CONC.

4.4' CW

81' FM C

WOOD PLAN PLANTER

665' FM ROW

BM: HYD S/S OF W LAYTON AV
(STA +/- 78+60, 51 RT)
ELEV = 95.25

#841-881 W. LAYTON AVE.

#835 W. LAYTON AVE.

#801-817 W. LAYTON AVE.

#789 W. LAYTON AVE.

#709 W. LAYTON AVE.
#711 W. LAYTON AVE.

#703 W.

BM: HYD SW COR OF S
& W LAYTON AV (NW
ELEV = 93.30

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 72	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 78-84.DGN

REVISED DATE: 04-24-2018 BY SB

WEST LAYTON AVENUE

N

#700 W. LAYTON AVE.

#580 W. LAYTON AVE.

#703 W. LAYTON AVE.

#639 W. LAYTON AVE.

#575 W. LAYTON AVE.

BM: HYD NW COR OF S 6TH ST & W LAYTON AV (NW BOLT) ELEV = 91.02

BM: HYD SW COR OF S 7TH ST & W LAYTON AV (NW BOLT) ELEV = 93.30

SOUTH 7TH STREET

SOUTH 6TH STREET

1/4 SEC LINE

SEC LINE

MONUMENT

LANNON STONE

WB PGL

EB PGL

R/W

184' LT

176' LT

164' LT

156' LT

99.7' LT

94.3' LT

83.3' LT

71.4' LT

59' LT

88+69.3 67.8' LT

CTR. 25.0' R= +85.5-73.0' LT

88+78.3 58.8' LT

CTR. 2.0' R= +30.1-64.7' LT

87+81.9 66.5' LT

82' LT

82' LT

CTR. 25.0' R= +64.8-73.0' LT

87+74 59' LT

84+4.9 12.3' LT

176' R

164' R

84+3.6 11.7' RT

CTR. 2.5' R= +36-0.1' RT

64' R

154' R

CTR. 2.5' R= +13.6-4.8' RT

P.T. 7.0' R. +37.1-2.1' LT

∠PT. +36.5 12.1' RT

CTR. 7.4' R= +38-4.8' LT

CTR. 7.0' R= +84.0-5.1' RT

87+44.2 11.7' LT

CTR. 2.6' R= +67.9-4.7' LT

CTR. 3.1' R= +81.5-4.8' RT

P.T. 50' R. +00-1.8' LT

P.T. 76.0' R. +5.0-12.0' RT

P.C. 76.0' R. +94.6-10.8' RT

89+86.1 9.4' RT

35' RT

84+44 59' RT

69.7' RT

CTR. 15.0' R= +42.1-63.0' RT

84.9' RT

69.9' RT

CTR. 20.0' R= +9.2-67.9' RT

85+2.1 58.7' RT

59' RT

87+53.7 59.1' RT

87+73.5 59.1' RT

CTR. 22.0' R= +68.1-70.0' RT

87+81.5 67.3' RT

77.6' RT

CTR. 2.0' R= +19.8-65.8' RT

93.7' RT

74.9' RT

134.9' RT

153.3' RT

88+77.5 59.1' RT

88+68.4 68' RT

CTR. 25.0' R= +85.1-73.0' RT

103' RT

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 73	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 84-90.DGN

REVISED DATE: 12-20-2018 BY SB

WEST LAYTON AVENUE

N

#552 W. LAYTON AVE.

#530 W. LAYTON AVE.

#512 W. LAYTON AVE.

SOUTH 5TH STREET

90+64
84.3'LT

94+96
84.1'LT

94+61.9
64.4'LT

94+97.9
68.5'LT

75.7'
LT

95+8.6
61.6'LT

CTR. 16.0'R=
+45.9-64.4'LT

CTR. 16.0'R=
+13.9-64.0'LT

59'
LT

59.1'
LT

90+68.7
11.7'LT

P.C. 120'R.
+90.8-11.7'LT

WB PGL
25.5'LT

92+9.7
0.8'RT

93+66
9.7'LT

∠PT.+88.1
12.0'LT

P.C. 100'R.
+18-12.0'LT

CTR. 2.5'R=
+41-4.9'LT

P.T. 30.0'R.
+47.6-1.7'LT

CTR. 2.3'R=
+33.9-4.5'RT

∠PT.+59.6
2.0'RT

CTR. 6.2'R=
+4.9-4.9'LT

CTR. 2.94'R=
+7-4.9'RT

92+8.6
8.3'RT

92+78.4
10.9'RT

∠PT.+68.3
2.0'RT

P.C. 52.0'R.
+22.2-2.1'RT

25.5'RT

EB PGL

P.C. 90'R.
+95.4-2.0'RT

P.T. 78.0'R.
+60.7-12.0'RT

59.1'
RT

10'
WEPCO
EASEMENT

#545 W. LAYTON AVE.

#517 W. LAYTON AVE.

#501 W. LAYTON

HYD: S/S ON W LAYTON AV
(+/- STA 92+82, 51 RT)
ELEV = 88.94

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 74	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 90-96.DGN

REVISED DATE: 04-06-2018 BY SB

WEST LAYTON AVENUE

N

P.L.

≈300 W. LAYTON AVE.

HYD: N/S ON W LAYTON AV
(+/- STA 99+75, 50 LT)
ELEV = 87.87

59' LT

+82.1 +85.9 +39.1 +53.8 +84.9 +99.9 +15.2 +40.3 +20.1 +35.5 +60.5 +65.7 +95.5 +31.7 +42.0 +46.9 +62.0 +58.7 +82.7 +3.6

SIGN ASPH. BUSHES LAWN CURB BUSH

7" 6" 12" 4" 10" 14" 6" 10" 12" 8"

+65.9 +82.1 +31.4 +73.0 +93.0 +21.2 +43.2 +65.6 +82.3 +43.0 +88.4

∠PT.+10.3
12' LT

96+92
10' LT

98+21.7
11.9' LT

98+31.4
9.9' LT

98+47.4
4.8' LT

99+49.9
3.3' RT

WB PGL
25.5' LT

P.C. 40.0' R.
+90.1-12.1' LT

96 +50 97 +50 98 +50 99 +50 100 +50 101 +50 102

LANNON STONE SPRINKLER VALVE DOT WMSD SEC LINE STONE SPRINKLER VALVE DOT STONE DOT STONE SPRINKLER VALVE STONE DOT

FO TEL G

CTR. 6.4' R=
+56.5-5.7' RT

CTR. 3.0' R=
+44.5-9.0' RT

∠PT.+59.5
12.0' RT

∠PT.+56.0
2.5' RT

25.5' RT

EB PGL

101+98.5
2.1' RT

CTR. 4.95' R=
+3.7-2.8' LT

+47.0 +58.9

+10.0 +42.0 +4.0 +6.9 +82.7 +96.7

ASPH. BUSH ASPH. PLANTER ASPH. T.O. CULVERT B.O. CULVERT ASPH. ASPH. CURB SIGN ASPH. ASPH CURB ASPH. SIGN POST

59' RT

≈501 W. LAYTON AVE. ≈401 W. LAYTON AVE. ≈307 W. LAYTON AVE. ≈233-235

P.L.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 75	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 96-102.DGN

REVISED DATE: 02-23-2018 BY SB

WEST LAYTON AVENUE

N

#230 W. LAYTON AVE.

DRAINAGE ROW

#220 ADJ W. LAYTON AVE.

#220 W. LAYTON AVE.

#206 W. LAYTON AVE.

#200-204 W. LAYTON AVE.

#160 W. LAYTON AVE.

HYD: N/S ON W LAYTON AV
(+/- STA 102+82, 50 LT)
ELEV = 88.64

58.9' LT

58.9' LT

CURB +3.6 +19.8 LAWN 5' CW BUSHES 16" GRAVEL ASPH. +64.7 BUSHES LAWN BOLLARDS WOOD CHIPS WOOD CHIP +23.2 LAWN GUARD RAIL BRIDGE WALL GUARD RAIL RR TIE SIGN ON POST BUSH ASPH. 12" LAWN 12" ASPH. SIGN POSTS BUSH BRICKS LUMBER CONC. CONC BASE BUSHES

7" 10" 8" 5' 8" 8" G G BUS STOP G 12" G 14" 10"

+19.8 +61.8 +38.5 13' 11' 11' WEP +69.4 +81.3 +17.0 36' 13' 11' 12' WB PGL 25.5' LT +77.0 +6.6 13' +33.5 13' 11' 11' 46'

P.C. 40.0' R. +90.1-12.1' LT

CTR. 5.0' R= +73.8-3.3' RT

CTR. 9.2' R= +78-3.2' RT

P.C. 72.0' R. +87.5-12.0' LT

107+22.2 0.2' LT

+73.8 102 +50 13' 13' 103 120' +50 104 +50 105 +50 106 +50 107 13' 11' 11' 108

FO LANNON STONE STONE 4" STONE 3" DOT CUC STONE 8" SEC LINE STONE 8" SPRINKLER VALVES STONE STONE STONE STONE DOT 4" LANNON STONE FO FO LANNON STONE DOT 6" WAT

+98.5 +78.0 36' 11' 12' 11' 11' 14' 36' 11' 11' +82.8 +97.0 13' 11' 11' 46'

CTR. 4.95' R= +3.7-2.8' LT

∠ PT. +5.6 2.4' RT

CTR. 2.0' R= +17.4-1.3' LT

107+34.3 12.2' RT

CTR. 2.6' R= +13.6-5.0' RT

CUC 25.5' RT EB PGL +37.0 13' 35' RT +6.6 +58.7 36' +89.0

+96.7 +22.0 +53.7 +84.0 +15.9 +43.5 +46.1 +94.0 +26.5

G 6" G 5' 5' 10" G BUS STOP 1" G G

ASPH. SIGN +81.5 GUARDRAIL +50.8 GUARDRAIL BRIDGE WALL WOOD CHIPS 6" BUSHES WOOD CHIPS SIGN ASPH. DWY. SIGN WOOD CHIPS BUSHES 14" 4" 12" BUSHES 6" WOOD CHIPS BUSHES PATIO BLOCKS 59' RT 4' CW STAMPED CONC BUSHES BRICK SIGN WALL CONC CURB ASPH. CONC CURB SIGN BUSHES WAT ASPH. LAWN LAWN 5' CW BUSHES 5' CW

#233-235 W. LAYTON AVE.

#203 ADJ W. LAYTON AVE.

DRAINAGE ROW

#191 W. LAYTON AVE.

HYD: S/S ON W LAYTON AV
(+/- STA 106+61, 50 RT)
ELEV = 88.50

#4747 S. HOWELL AVE.

(EASEMENT)

#175 W. LAYTON AVE.

P.L. P.L. P.L. P.L. P.L. P.L. P.L.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 76	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 102-108.DGN

REVISED DATE: 04-24-2018 BY SB

2

WEST LAYTON AVENUE

SOUTH IST STREET

SOUTH HOWELL AVENUE

#4669 S. IST ST.

#4601 S. IST ST.

#130 W. LAYTON AVE.

#108 W. LAYTON AVE.

#151 W. LAYTON AVE.

#131 W. LAYTON AVE.

#4709 S. HOWELL AVE.

DRAINAGE EASEMENT

SEWER EASEMENT

B.M. E BOLT HYD NW CORNER
W. LAYTON AV. & S. HOWELL AV.
STA. 67+05 - 60'LT.
ELEV. 89.66

B.M. HYD NE COR S IST ST
W LAYTON AV (NW BOLT)
ELEV = 88.28

N

59'LT

+66.3

+17.0

+31.8

CULVERT WALL

BRIDGE WALL

CONC. BASE

GUARD RAIL

CONC. BASE

SIGN

5'

CONC

110+31.7 ASPH
48'LT

+19.5

+7.0

+81.4

WB PGL
25.5'LT

+63.0

+71.0

SEE ROAD PLANS
STATE PROJECT NUMBER
2060-10-70

110+31.7
12.5'LT

108 +50 109 +50 110 +50 111 +50 112 +50 113 +50 114

LANNON STONE

SPRINKLER VALVES

LANNON STONE

WOOD CHIP

LAWN

STONE WALL

PLANTER

STONE WALL

WATER

WMSD

110+26.7
0.8'LT

CUC

25.5'RT

EB PGL

109+81.7
38'RT

END PROJECT
STA. 110+31.70 T/L

110+26.7
38'RT

∠ PT.+81.7
48.0'RT

59'RT

CONC LIGHT BASE

SIGN POSTS

SHRUBS

+88.5

+93.5

+50.8

LAWN

SIGN

ASPH. DWY.

DIRT

MULCH

BUSH

BUSHES

P.L.

N.88°51'21"E.

SEC LINE

ASPH

DOT

WMSD

2" ABN'D

EQUATION

STA. 110+31.7, W. LAYTON AVE. T/L =
STA. 105+74.0, S. HOWELL AVE. T/L - PROJECT 2060-10-70

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 77	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PDET 108-114.DGN

REVISED DATE: 05-22-2018 BY SB

2

WEST LAYTON AVENUE

N

BEGIN PROJECT
STA. 10+53.9 T/L
(Y) NORTH: 356,419.2777
(X) EAST: 2,549,158.6326

#4730 S. 27TH ST.

SOUTH 27TH STREET

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 78	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 08-12.DGN

REVISED DATE: 02-19-2019 BY SB

WEST LAYTON AVENUE

N

#4640-4670 S. 27TH ST.

#2500 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV @ S 25TH ST (STA +/- 17+17, 51 LT) ELEV = 136.29

ASPH PARKING

ASPH PARKING

ASPH DWY

CONC LIGHT BASE

CONC

CONC CURB

WOOD CHIP PLANTER

BOLLARDS

SLIDING GATE

SIGN POST

CAUTION

WOOD CHIPS

SIGN

ASPH

401 403 460 05 11 21 22

WISDOT SAN DOT FIBER DOT TRAFFIC LOOP STO G T TEL W SAN

12 +50 13 +50 14 +50 15 +50 16 +50 17 +50 18

STONE PLANTER SEC LINE

SPRINKLER VALVE SPRINKLER VALVES SPRINKLER VALVE

06 08 12 602

WISDOT MONOTUBE CUC STO

07 402 10 09 14 09A 17 16 24

ASPH BUSHES BRICK COLUMNS TV CONC TE&ES WQ

18 23 404

RET. WALL GRAVEL BUS STOP

#4730 S. 27TH ST.

#2531 W. LAYTON AVE.

#2527 W. LAYTON AVE.

#2521-2521A W. LAYTON AVE.

#2515 W. LAYTON AVE.

#2509 W. LAYTON AVE.

#2501 W. LAYTON AVE.

#2435 W. LAYTON AVE.

#2427 W. LAYTON AVE.

#242

BM: HYD SEC OF S 26TH ST & W LAYTON AV (NW BOLT) ELEV = 138.07

SOUTH 26TH STREET

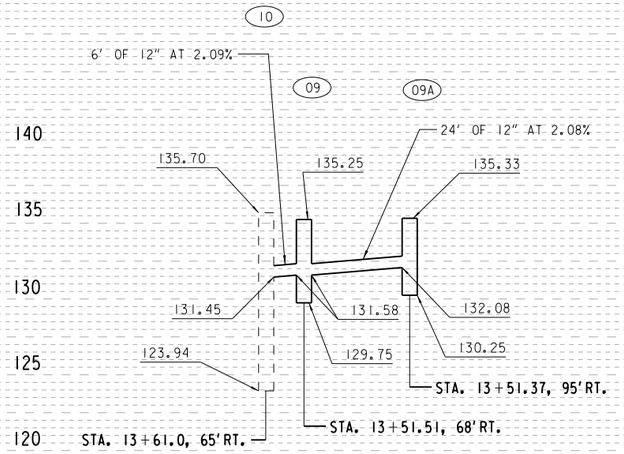
SOUTH 25TH STREET

P.L.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 79	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 12-18.DGN

REVISED DATE: 09-12-2018 BY SB



(LOOKING EASTERLY)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 80	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 12-18.DGN

REVISED DATE: 08-24-2018 BY SB

WEST LAYTON AVENUE

N

#2408 W. LAYTON AVE. | #2400 W. LAYTON AVE. | #2328 W. LAYTON AVE. | #2320 W. LAYTON AVE. | #2300 W. LAYTON AVE. | #2274 W. LAYTON AVE.

#2421 W. LAYTON AVE. | #2415 W. LAYTON AVE. | #2409 W. LAYTON AVE. | #2401 W. LAYTON AVE. | #2331 W. LAYTON AVE. | #2325 W. LAYTON AVE. | #2317 W. LAYTON AVE. | #2039-2309A W. LAYTON AVE. | #4701 S. 23RD ST.

SOUTH 24TH STREET

SOUTH 23RD STREET

BM: HYD SEC OF S 24TH ST & W LAYTON AV(NW BOLT) ELEV = 137.33

BM: HYD SEC OF S 23RD ST & W LAYTON AV(NW BOLT) ELEV = 136.25

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 81	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 18-24.DGN

REVISED DATE: 09-12-2018 BY SB

2

WEST LAYTON AVENUE

N

4 W. LAYTON AVE. | #2262 W. LAYTON AVE. | #2254 W. LAYTON AVE. | #2220 W. LAYTON AVE.

P.L.

BM: HYD N/S OF W LAYTON AV @ S 22ND PL
(STA +/- 25+98, 52 LT)
ELEV = 138.19

3.5' CW | 4' CW | PLANTERS | RR TIE | BUSHES | ASPH. | CONC RAMP | LANNON STONE | LIGHTS | CAUTION | 5' CW | IRON HAND RAIL | BUSH | BUS STOP

LAWN | BUSHES

SAN | STO | G | W | T | TE&ES | CUC | ASPH

24 +50 25 +50 26 +50 27 +50 28 +50 29 +50 30

PINE | SPRINKLER VALVES | BANNERS | HARP LIGHT | SEC LINE | TEL | SPRINKLER VALVE

46 47 48 49 50 51 53 54 55 56 57 58 59 60 61 62 409 411 605

#2255 W. LAYTON AVE. | #2243 W. LAYTON AVE. | #2227 W. LAYTON AVE. | #2221 W. LAYTON AVE. | #2215 W. LAYTON AVE. | #2209-2209A W. LAYTON AVE. | #4701 S. 22ND ST. | #2131-2131A W.

#2271 W. LAYTON AVE.

SOUTH 22ND PLACE | SOUTH 22ND STREET

BM: HYD SEC OF S 22ND ST & W LAYTON AV (NW BOLT)
ELEV = 141.56

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 82	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 24-30.DGN

REVISED DATE: 10-02-2018 BY AL

WEST LAYTON AVENUE

BM: HYD N/S OF W LAYTON AV @ S 21 ST (STA +/- 35+54, 51.5 LT) ELEV = 136.46

#2126 W. LAYTON AVE. #2022 W. LAYTON AVE. #2008 W. LAYTON AVE.

#2131-2131A W. LAYTON AVE. #2125-2125A W. LAYTON AVE. #2117-2119 W. LAYTON AVE. #2113 W. LAYTON AVE. #2109-2109A W. LAYTON AVE. #2103-2103A W. LAYTON AVE. #2057 W. LAYTON AVE. #2021-2023 W. LAYTON AVE. #2015-2017 W. LAYTON AVE. #2009-2011 W. LAYTON AVE. #2003-2005 W. LAYTON AVE.

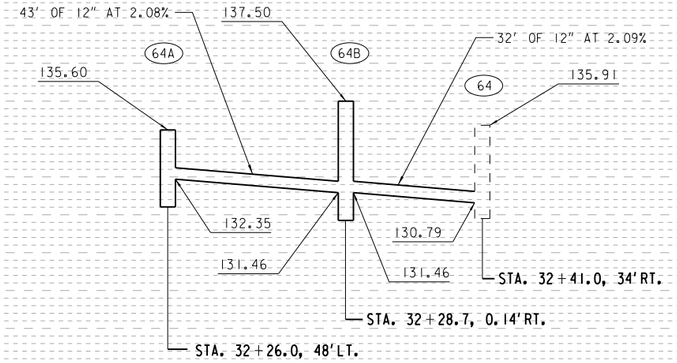
SOUTH 21ST STREET SOUTH 20TH STREET

STD BM: 37' W AND 67' S ¼ SEC LINE 7.7' E AND 7' S OF SW COR OF STREET(IN CONC BOX 5.3' W OF W EDGE OF CONC WALK & 8.2' S OF S EDGE OF CONC WALK) ELEV = 131.728

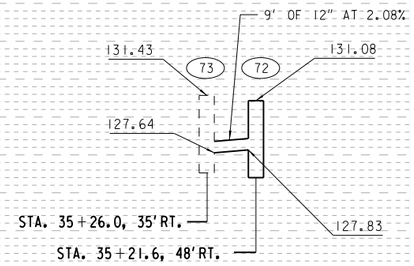
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 83	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 30-35.DGN

REVISED DATE: 10-02-2018 BY AL



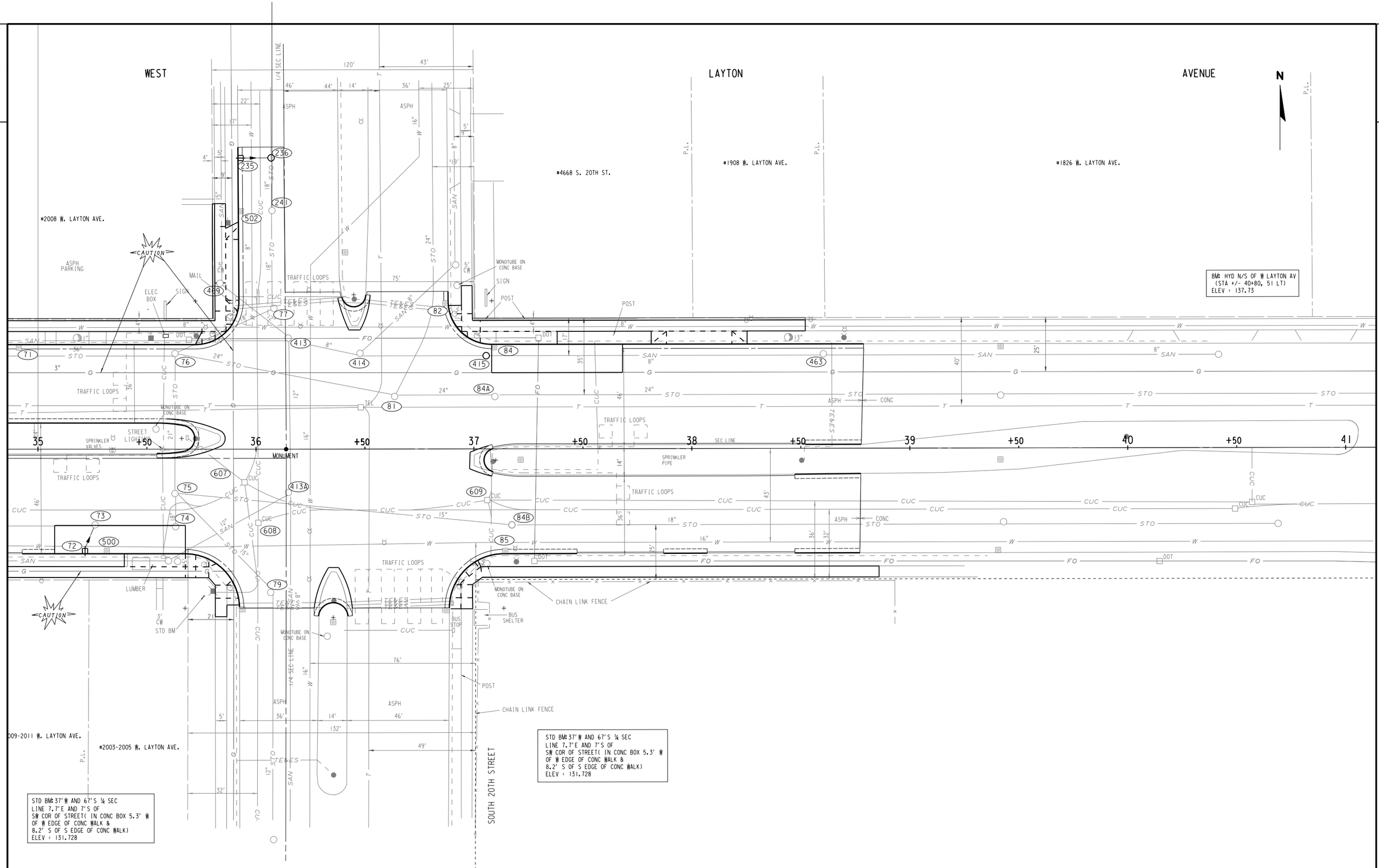
(LOOKING EASTERLY)



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 84	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 30-35.DGN

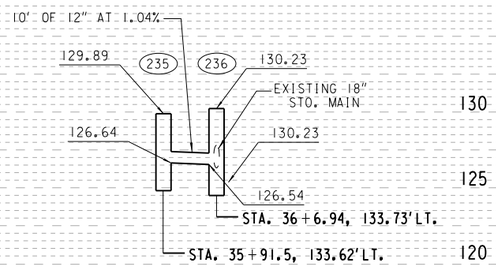
REVISED DATE: 08-24-2018 BY SB



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 85	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 35-41.DGN

REVISED DATE: 10-02-2018 BY AL



(LOOKING NORTHERLY)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 86	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 35-41.DGN

REVISED DATE: 08-24-2018 BY SB

2

WEST LAYTON AVENUE

N

NORTH-SOUTH FREEWAY

#1716 W. LAYTON AVE.

P.L.

CAUTION

BM: HYD N/S OF W LAYTON AV
(STA +/- 40+80, 51 LT)
ELEV = 137.73

8" W W W W W

4" ABANDDONED

G G G G G G G G G G

STO STO

T T T T T T T T

41 +50 42 +50 43 +50 44 SEC LINE +50 45 +50 46 +50 47

36'

CUC CUC CUC CUC CUC CUC CUC CUC CUC

43'

FO

W W W W W 16" W W

FO FO FO FO

DOT DOT DOT

WISDOT WISDOT

60'

BRIDGE DECK

#1701 W. LAYTON AVE.

NORTH-SOUTH FREEWAY

2

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 87	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 41-47.DGN

REVISED DATE: 04-03-2018 BY BB

WEST

NORTH-SOUTH FREEWAY

LAYTON

AVENUE

N

≈1560 W. LAYTON AVE.

CAUTION

ABANDDONED

G G

T T T T T T T T

48 +50 49 +50 50 SEC LINE +50 51 +50 52 +50 53 +50 54

STO STO STO STO STO STO STO

15" 16"

43'

W W W W W W W W W W W W

16"

FO FO FO FO FO FO FO FO FO FO FO

DOT DOT DOT DOT DOT

CUC CUC CUC

BRIDGE DECK ASPH CONC

NORTH-SOUTH FREEWAY

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 88	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 48-54.DGN

REVISED DATE: 04-03-2018 BY BB

2

WEST LAYTON AVENUE

N

CHAIN LINK FENCE

CHAIN LINK FENCE

CONC ASPH

54 +50 55 +50 56 SEC LINE +50 57 +50 58 +50 59 +50 60

36'

CUC CUC CUC CUC CUC CUC ABAND. CONC CUC ASPH CUC CUC CUC

16" W W W W W W W

FO FO FO FO

464

SAN FO

BLOCK RET. WALL

TEMPORARY DRIVEWAY

FUTURE DRIVEWAY

BM: HYD S/S OF W LAYTON AV
(STA +/- 59+20, 50 RT)
ELEV = 109.43

=1425 W. LAYTON AVE.

2

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 89	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 54-60.DGN

REVISED DATE: 04-03-2018 BY BB

WEST LAYTON AVENUE

N

#1300 W. LAYTON AVE.

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

#1232 W. LAYTON AVE.

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

#1218 W. LAYTON AVE.

#1216 W. LAYTON AVE.

#1204-1208 W.

2048' R

CAUTION

CAUTION

#4707-4709 S. 13TH ST.

SOUTH 13TH STREET

#1233 W. LAYTON AVE.

#1215 W. LAYTON AVE.

#1209 W. LAYTON AVE.

BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 90	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 60-66.DGN

REVISED DATE: 01-18-2019 BY JC

WEST LAYTON AVENUE

N

#1204-1208 W. LAYTON AVE.

#1202 W. LAYTON AVE.

SOO LINE RAILROAD

BM: HYD N/S OF W LAYTON AV
(STA +/- 70+80, 71 LT)
ELEV = 82.87

2043' R

2209' R

1979' R

2070' R

66 +50 67 +50 68 SEC LINE +50 69 +50 70 +50 71 +50 72

BM: HYD S/S OF W LAYTON AV
(STA +/- 65+58, 44' RT)
ELEV = 92.91

#1101-1113 W. LAYTON AVE.

WEPCO EASEMENT

SOO LINE RAILROAD

#1011 W. LAYTON AVE.

#1201 W. LAYTON AVE.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40	SHEET NO: 91	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 66-72.DGN

REVISED DATE: 09-12-2018 BY DM

WEST LAYTON AVENUE

N

2061'R

#938-1020 W. LAYTON AVE.

#900 W. LAY

#908 W. LAYTON AVE.

30' INGRESS/EGRESS EASEMENT

P.L.

BM: HYD N/S OF W LAYTON AV
(STA +/- 75+31, 50' LT)
ELEV = 92.77

CAUTION

CONC. ASSOC.

ABDN.

72 +50 73 +50 74 SEC LINE +50 75 +50 76 +50 77 +50 78

129 422 423A 137 425 622 126 127 133 135 136 424 421B 423 134 128 132

TE&ES

DOT

MAILBOX

ASPH.

TV

CONC.

665' FM ROW

#1007 W. LAYTON AVE.

#909 W. LAYTON AVE.

SOUTH 10TH STREET

UTILITY EASEMENT

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 92	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 72-78.DGN

REVISED DATE: 09-12-2018 BY DM

2

WEST LAYTON AVENUE

N

8' WE ELECTRIC EASEMENT

8' WE ELECTRIC EASEMENT

P.L.

P.L.

P.L.

#900 W. LAYTON AVE.

#830 W. LAYTON AVE.

#800-800A W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV
(STA +/- 81+78, 51' LT)
ELEV = 92.92

CAUTION

CAUTION

78 +50 79 +50 80 +50 81 +50 82 +50 83 +50 84

144 145 148 427 503 504 623 426 428 429 141 142 143 149 150

144A

LINE

TE&ES

AMER

DOT

WALK SIGNAL BUTTON

CUC

SAN

STO

FO

G

W

T

4' CW

637' FM ROW

665' FM ROW

665' FM ROW

167' FM ROW

81' FM ROW

ASPH

CONC.

BLOCK RET. WALL

GRAVEL

WALL

VEH DET LOOPS

SLOTTED DRAIN

ASPH DWY

MAILBOX

WOOD PLANTER

4.4' CW

BM: HYD S/S OF W LAYTON AV
(STA +/- 78+60, 51 RT)
ELEV = 95.25

BM: HYD SW COR OF S
8 W LAYTON AV (NW E
ELEV = 93.30

#841-881 W. LAYTON AVE.

#835 W. LAYTON AVE.

#801-817 W. LAYTON AVE.

#789 W. LAYTON AVE.

#709 W. LAYTON AVE.
#711 W. LAYTON AVE.

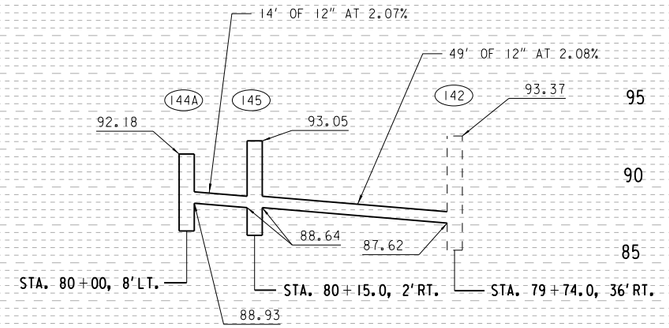
#703 W.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 93	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 78-84.DGN

REVISED DATE: 09-12-2018 BY DM

2



(LOOKING EASTERLY)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 94	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 78-84.DGN

REVISED DATE: 05-23-2018 BY SB

WEST LAYTON AVENUE

N

#700 W. LAYTON AVE.

#580 W. LAYTON AVE.

#703 W. LAYTON AVE.

#639 W. LAYTON AVE.

#575 W. LAYTON AVE.

SOUTH 7TH STREET

SOUTH 6TH STREET

SEE DRAINAGE TABLE FOR MANHOLE 502

BM: HYD NW COR OF S 6TH ST & W LAYTON AV (NW BOLT) ELEV = 91.02

BM: HYD SW COR OF S 7TH ST & W LAYTON AV (NW BOLT) ELEV = 93.30

CAUTION

WALK SIGNAL BUTTON

TRAFFIC LOOPS

MONUMENT

SEC LINE

174 SEC LINE

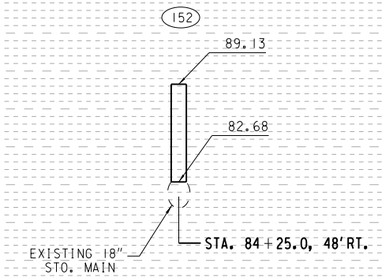
84 +50 85 +50 86 +50 87 +50 88 +50 89 +50 90

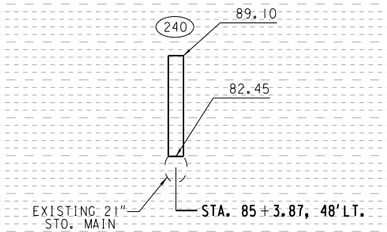
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 95	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 84-90.DGN

REVISED DATE: 09-12-2018 BY DM

2





90

85

80

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 96	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 84-90.DGN

REVISED DATE: 06-26-2018 BY SB

WEST LAYTON AVENUE

SOUTH 5TH STREET

N

#552 W. LAYTON AVE.

#530 W. LAYTON AVE.

#512 W. LAYTON AVE.

#545 W. LAYTON AVE.

#517 W. LAYTON AVE.

#501 W. LAYTON

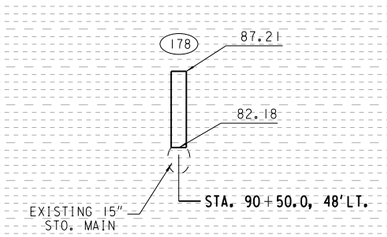
HYD: S/S ON W LAYTON AV
(+/- STA 92+82, 51 RT)
ELEV = 88.94

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40	SHEET NO: 97 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 90-96.DGN

REVISED DATE: 09-12-2018 BY DM

2



90

85

80

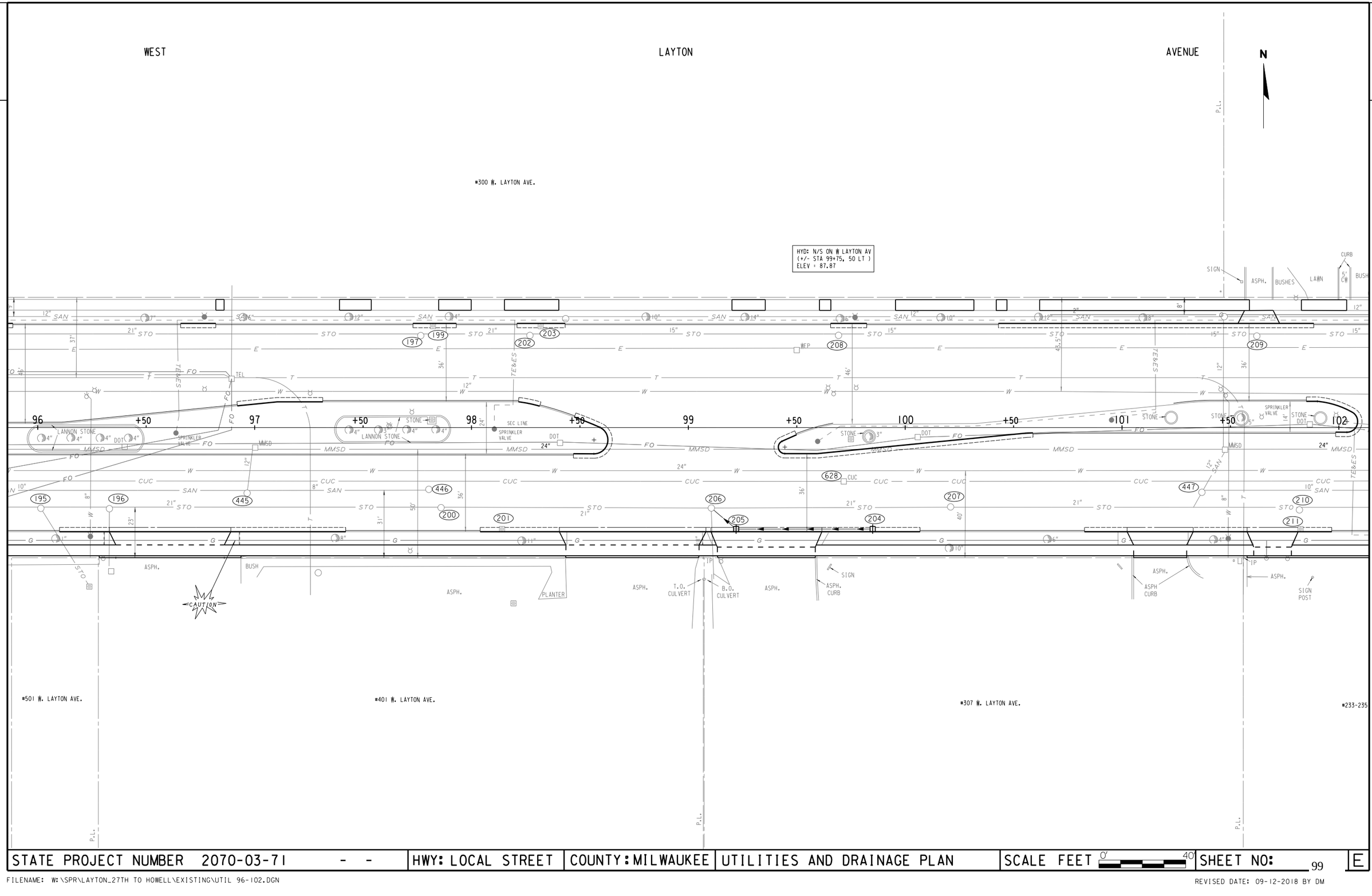
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 98	E

WEST LAYTON AVENUE

N

#300 W. LAYTON AVE.

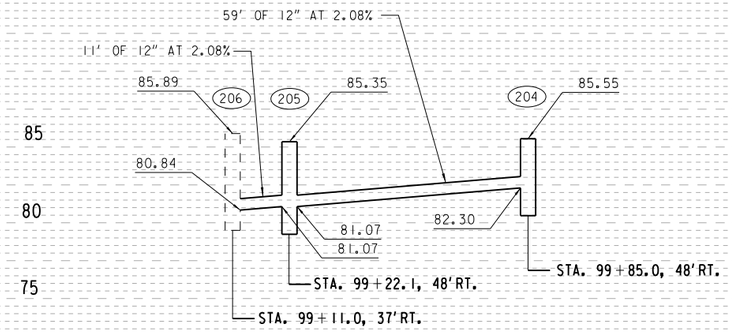
HYD: N/S ON W LAYTON AV
(+/- STA 99+75, 50 LT)
ELEV = 87.87



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 99	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 96-102.DGN

REVISED DATE: 09-12-2018 BY DM



(LOOKING NORTHERLY)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 100	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 96-102.DGN

REVISED DATE: 06-27-2018 BY SB

2

WEST LAYTON AVENUE

N

#230 W. LAYTON AVE.

DRAINAGE ROW

#220 ADJ W. LAYTON AVE.

#220 W. LAYTON AVE.

#206 W. LAYTON AVE.

#200-204 W. LAYTON AVE.

#160 W. LAYTON AVE.

HYD: N/S ON W LAYTON AV
(+/- STA 102+82, 50 LT)
ELEV = 88.64

#233-235 W. LAYTON AVE.

#203 ADJ W. LAYTON AVE.

DRAINAGE ROW

#191 W. LAYTON AVE.

#4747 S. HOWELL AVE.

(EASEMENT)

#175 W. LAYTON AVE.

HYD: S/S ON W LAYTON AV
(+/- STA 106+61, 50 RT)
ELEV = 88.50

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 101	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 102-108.DGN

REVISED DATE: 10-02-2018 BY AL

WEST LAYTON AVENUE

SOUTH HOWELL AVENUE

SOUTH IST STREET

#4669 S. IST ST.

#4601 S. IST ST.

#130 W. LAYTON AVE.

#108 W. LAYTON AVE.

#151 W. LAYTON AVE.

#131 W. LAYTON AVE.

#4709 S. HOWELL AVE.

DRAINAGE EASEMENT

SEWER EASEMENT

B.M. E BOLT HYD NW CORNER
W. LAYTON AV. & S. HOWELL AV.
STA. 67+05 - 60'LT.
ELEV. 89.66

B.M. HYD NE COR S IST ST
W LAYTON AV (NW BOLT)
ELEV = 88.28

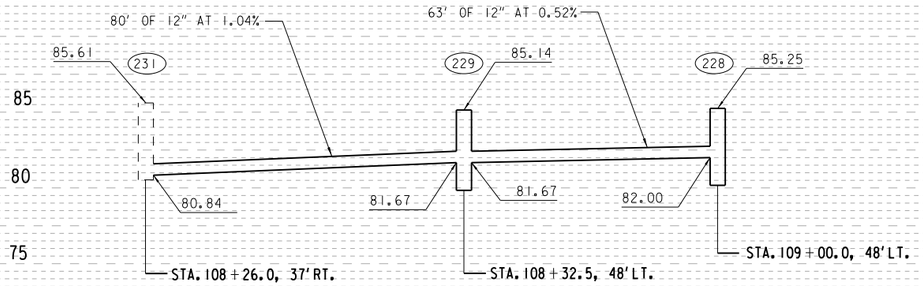
SEE PROJECT 2060-10-70

END PROJECT
STA. 110+31.70 T/L

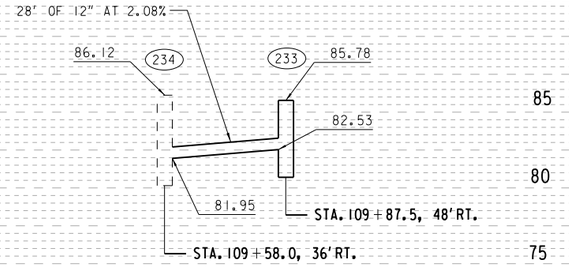
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET 0' 40'	SHEET NO: 102	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 108-114.DGN

REVISED DATE: 09-12-2018 BY DM



(LOOKING NORTHWESTERLY)

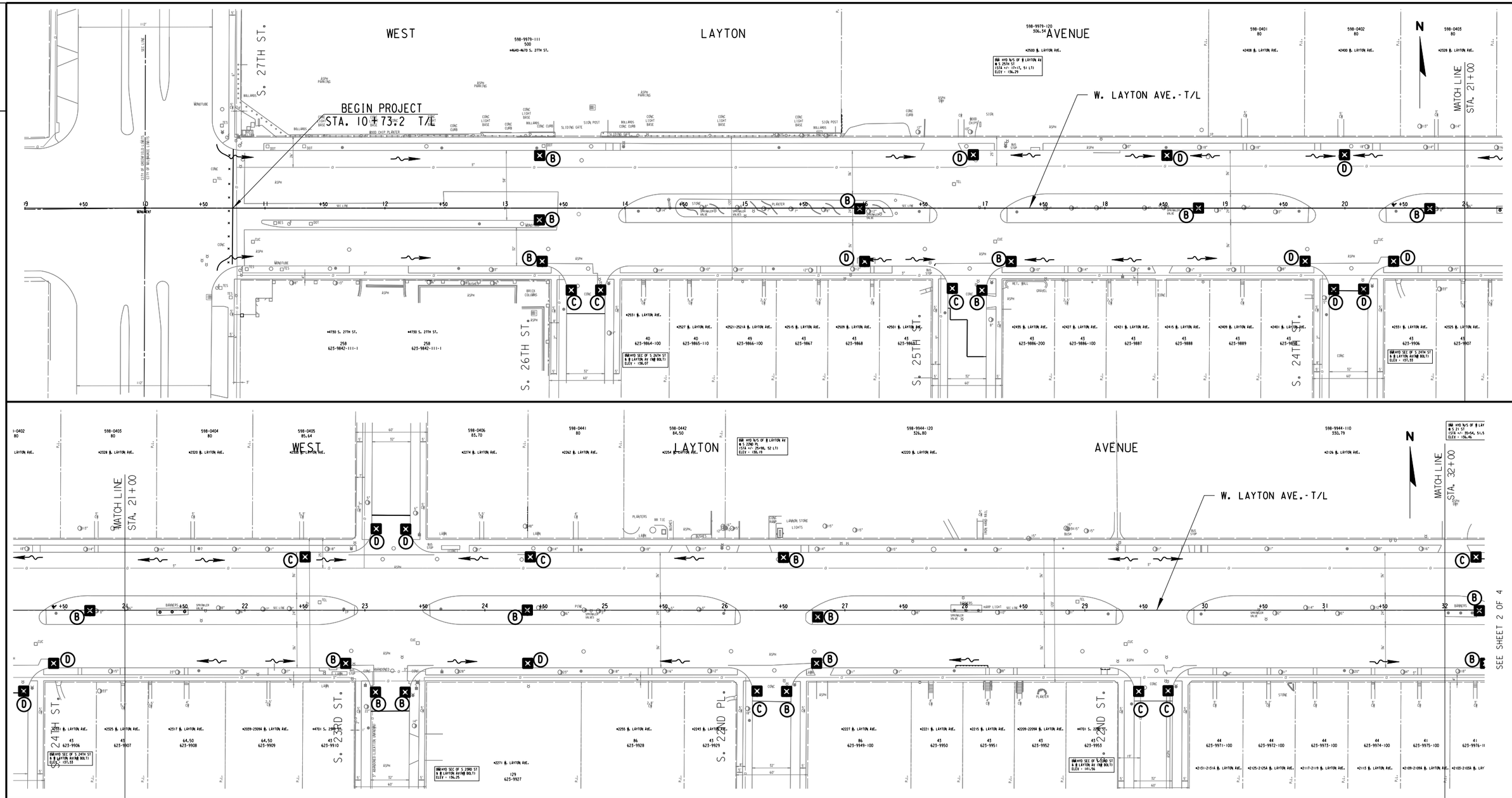


(LOOKING NORTHERLY)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE PLAN	SCALE FEET	SHEET NO: 103	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\UTIL 108-114.DGN

REVISED DATE: 06-26-2018 BY SB



LEGEND

- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- LIMIT

NOTE:

1) CONTRACTOR MUST TAKE PROPER MEASURES TO STAY WITHIN THE PUBLIC RIGHT OF WAY AT ALL TIMES.
2) ALL DISTURBED AREAS TO BE RESTORED WITH 4-INCH TOPSOIL, FERTILIZER, AND SOD LAWN, OR AS ENGINEER DIRECTS.
3) EROSION CONTROL FEATURES AS SHOWN ON THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4) SEE CONSTRUCTION DETAILS.

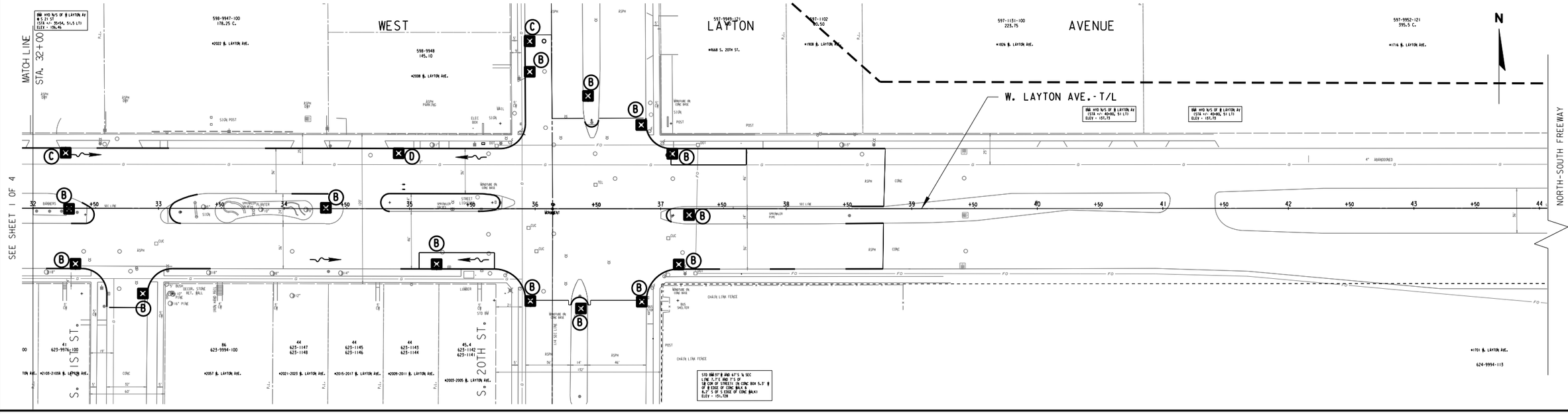
1 OF 4

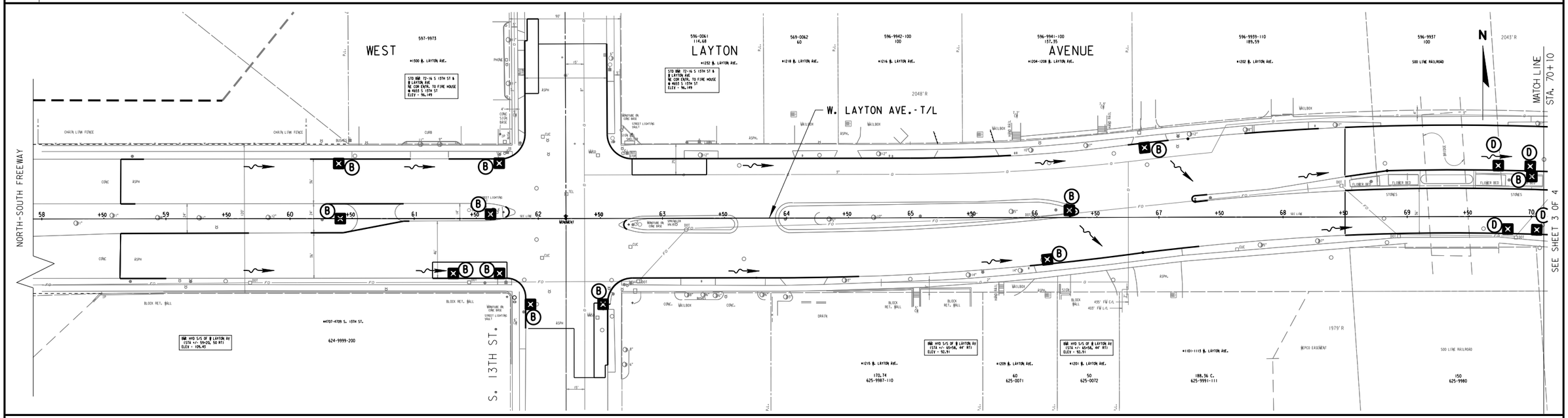
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	EROSION CONTROL PLAN	SCALE FEET 0' 80'	SHEET NO: 104	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\EROSION.DGN

REVISED DATE: 02-19-2019 BY SB

2





LEGEND

- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- LIMIT

NOTE:

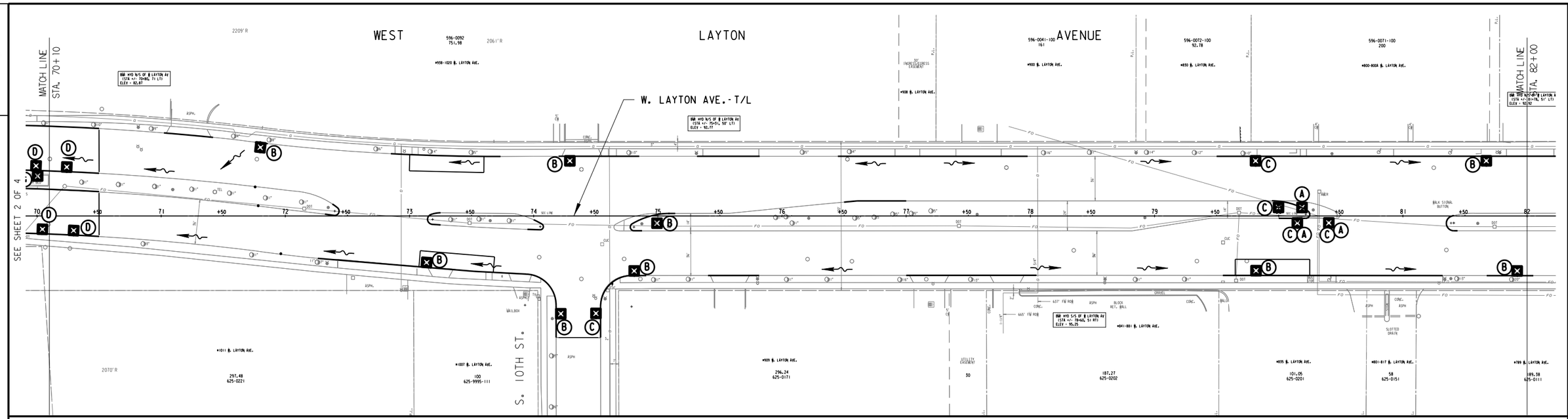
1) CONTRACTOR MUST TAKE PROPER MEASURES TO STAY WITHIN THE PUBLIC RIGHT OF WAY AT ALL TIMES.
2) ALL DISTURBED AREAS TO BE RESTORED WITH 4-INCH TOPSOIL, FERTILIZER, AND SOD LAWN, OR AS ENGINEER DIRECTS.
3) EROSION CONTROL FEATURES AS SHOWN ON THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4) SEE CONSTRUCTION DETAILS.

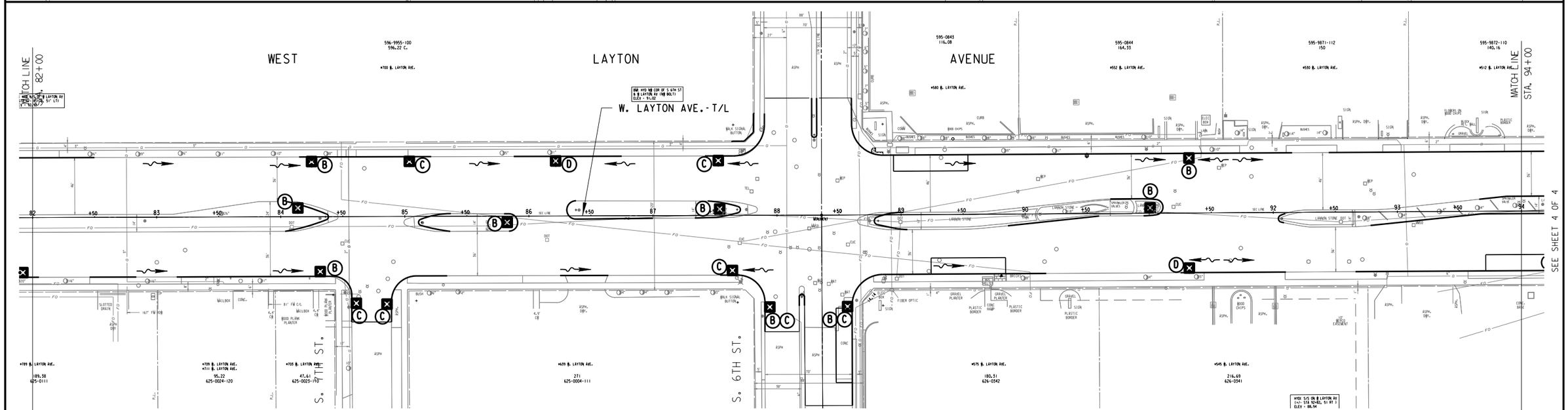
2 OF 4

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	EROSION CONTROL PLAN	SCALE FEET 0' 80'	SHEET NO: 105	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\EROSION.DGN

REVISED DATE: 01-07-2019 BY JC





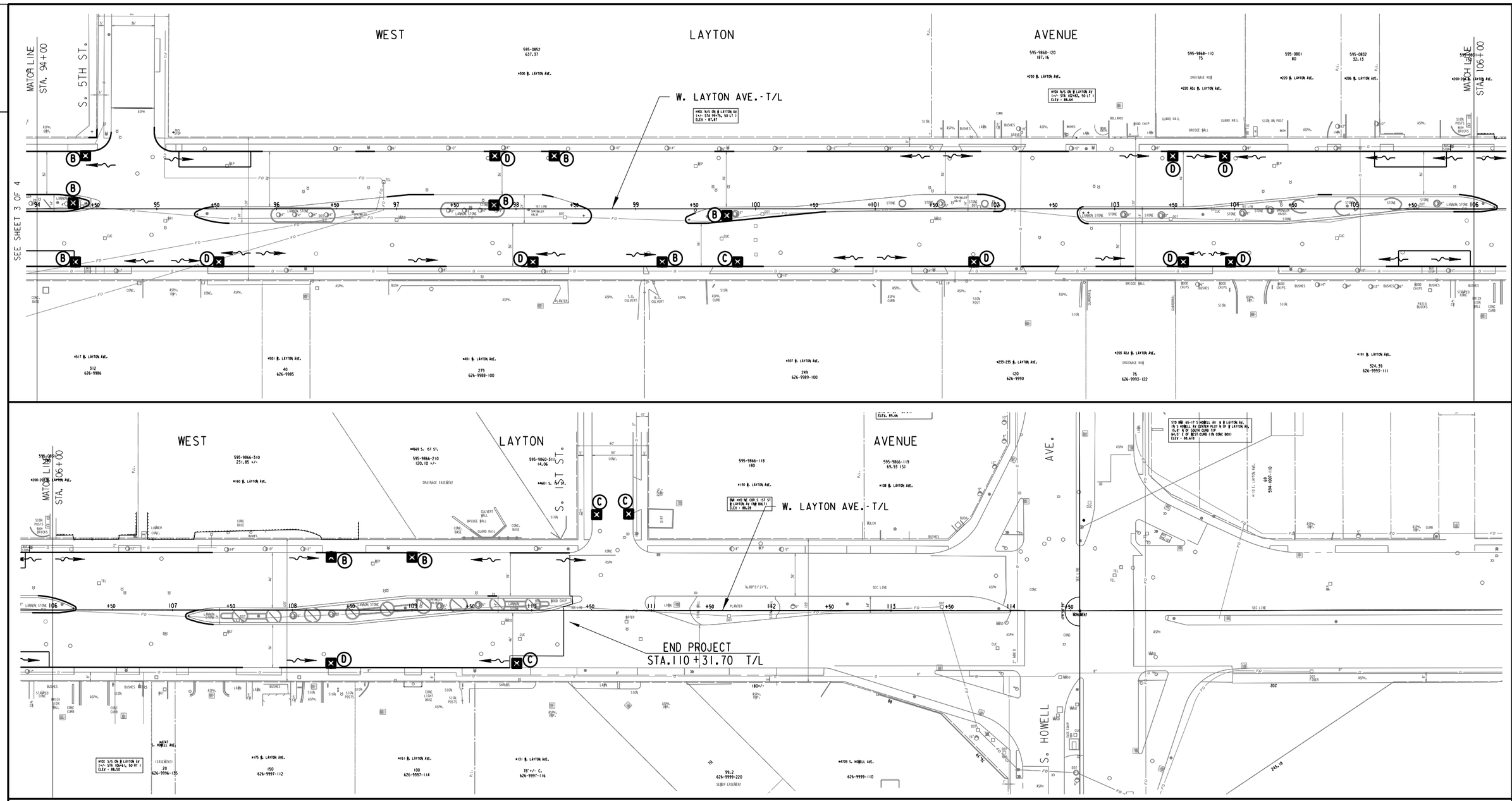
LEGEND

- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- SURFACE WATER FLOW
- LIMIT

NOTE:

1) CONTRACTOR MUST TAKE PROPER MEASURES TO STAY WITHIN THE PUBLIC RIGHT OF WAY AT ALL TIMES.
2) ALL DISTURBED AREAS TO BE RESTORED WITH 4-INCH TOPSOIL, FERTILIZER, AND SOD LAWN, OR AS ENGINEER DIRECTS.
3) EROSION CONTROL FEATURES AS SHOWN ON THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4) SEE CONSTRUCTION DETAILS.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	EROSION CONTROL PLAN	SCALE FEET 0' 80'	SHEET NO: 106	E


WEST
LAYTON
AVENUE
MATCH LINE STA. 94+00
S. 5TH ST.
MATCH LINE STA. 106+00
W. LAYTON AVE.- T/L
595-0852 637.37
595-9868-120 187.16
595-9868-110 75
595-0801 80
595-0852 52.15
595-9866-310 231.85 +/-
595-9866-210 120.10 +/-
595-9860-511 14.06
595-9866-118 180
595-9866-119 65.93 (S)
595-9866-111 324.59
595-9866-112 150
595-9866-114 100
595-9866-115 20
595-9866-116 78' +/- C.
595-9866-117 99.2
595-9866-120 252.18
595-9866-121 69
595-9866-122 75
595-9866-123 120
595-9866-124 249
595-9866-125 279
595-9866-126 40
595-9866-127 312
595-9866-128 324.59
595-9866-129 202
595-9866-130 180+/-
595-9866-131 202
595-9866-132 202
595-9866-133 202
595-9866-134 202
595-9866-135 202
595-9866-136 202
595-9866-137 202
595-9866-138 202
595-9866-139 202
595-9866-140 202
595-9866-141 202
595-9866-142 202
595-9866-143 202
595-9866-144 202
595-9866-145 202
595-9866-146 202
595-9866-147 202
595-9866-148 202
595-9866-149 202
595-9866-150 202

WEST LAYTON AVENUE

N

160'
112'
5'
6"
SEC LINE
CITY OF GREENFIELD LIMITS
CITY OF MILWAUKEE LIMITS
ASPH PARKING
CAUTION
BOLLARDS
MONOTUBE
54' LT
59' LT
5' CW
5'
TES
BUS SHELTER
+74.8
R/W
CONC LIGHT BASE
CONC
WOOD CHIP PLANTER
DOT
CONC
TEL
1'-6' ASPH
4'-6'
EDGE OF ASPHALT
END OF CURB
08 +50 09 +50 10 +50 11 +25 +50 SEC LINK +75 12
MONUMENT
BEGIN PROJECT
STA. 10+73.2 T/L
1'-4' ASPH
MONOTUBE
TES
R/W
8"
13"
59' RT
ASPH
CAUTION
5' CW
5'
3'
#4730 S. 27TH ST.
END OF CURB
SOUTH 27TH STREET
112'
160'

LEGEND

- APPROXIMATE EXTENT OF LEAD-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF PETROLEUM-CONTAMINATED SOIL AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF CHLORINATED SOLVENT-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

CONSTRUCTION NOTES:

LEAD-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

PETROLEUM-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

CHLORINATED-SOLVENT CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	HAZARDOUS MATERIALS DETAIL PLAN	SCALE FEET 0' 40'	SHEET NO: 108	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\HAZMAT 08-12.DGN

REVISED DATE: 02-19-2019 BY SB

WEST LAYTON AVENUE

N

#4640-4670 S. 27TH ST.

#2500 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV @ S 25TH ST (STA +/- 17+17, 51 LT) ELEV = 136.29

ASPH PARKING

CAUTION

59' LT

CONC LIGHT BASE

CONC

CONC CURB

WOOD CHIP PLANTER

BOLLARDS

SLIDING GATE

SIGN POST

P.L.

R/W

ASPH DWY

WOOD CHIPS

SIGN

ASPH

BUS STOP

TEL

1'-8'

58'

36'

32'

12 +50 13 +50 14 +50 15 +50 16 +50 17 +50 18

STONE

PLANTER

SEC LINE

SPRINKLER VALVE

SPRINKLER VALVES

MONOTUBE

CUC

BUSHES

BRICK COLUMNS

CONC

#4730 S. 27TH ST.

SOUTH 26TH STREET

#2531 W. LAYTON AVE.

#2527 W. LAYTON AVE.

#2521-2521A W. LAYTON AVE.

#2515 W. LAYTON AVE.

#2509 W. LAYTON AVE.

#2501 W. LAYTON AVE.

#2435 W. LAYTON AVE.

#2427 W. LAYTON AVE.

#242

59' RT

RET. WALL

GRAVEL

SOUTH 25TH STREET

BM: HYD SEC OF S 26TH ST & W LAYTON AV (NW BOLT) ELEV = 138.07

LEGEND

- APPROXIMATE EXTENT OF LEAD-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF PETROLEUM-CONTAMINATED SOIL AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF CHLORINATED SOLVENT-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

CONSTRUCTION NOTES:

LEAD-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

PETROLEUM-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

CHLORINATED-SOLVENT CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	HAZARDOUS MATERIAL DETAIL PLAN	SCALE FEET 0' 40'	SHEET NO: 109 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\HAZMAT 12-18.DGN

REVISED DATE: 01-24-2019 BY SB

WEST AVENUE

LAYTON

N

#1300 W. LAYTON AVE.

#1232 W. LAYTON AVE.

#1218 W. LAYTON AVE.

#1216 W. LAYTON AVE.

#1204-1208 W.

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

2048' R

59' LT

35' LT

1'-4'

CHAIN LINK FENCE

BUSHES

R/W

CURB

PHONE

BUS STOP

ASPH

CAUTION

SIGN BASE

MONOTUBE ON CONC BASE

STREET LIGHTING VAULT

SIGN BASE SHELTER

LAWN

MAILBOX

ASPH.

HAND RAIL

WMSD

TEL

CUC

DOT

FO

SEC LINE

MONUMENT

SPRINKLER VALVE

60 61 62 63 64 65 66

+50 +75

#4707-4709 S. 13TH ST.

BLOCK RET. WALL

DRAIN

CONC.

BUSHES

#1233 W. LAYTON AVE.

#1215 W. LAYTON AVE.

#1209 W. LAYTON AVE.

BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91

SOUTH 13TH STREET

LEGEND

- APPROXIMATE EXTENT OF LEAD-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF PETROLEUM-CONTAMINATED SOIL AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF CHLORINATED SOLVENT-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

CONSTRUCTION NOTES:

LEAD-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

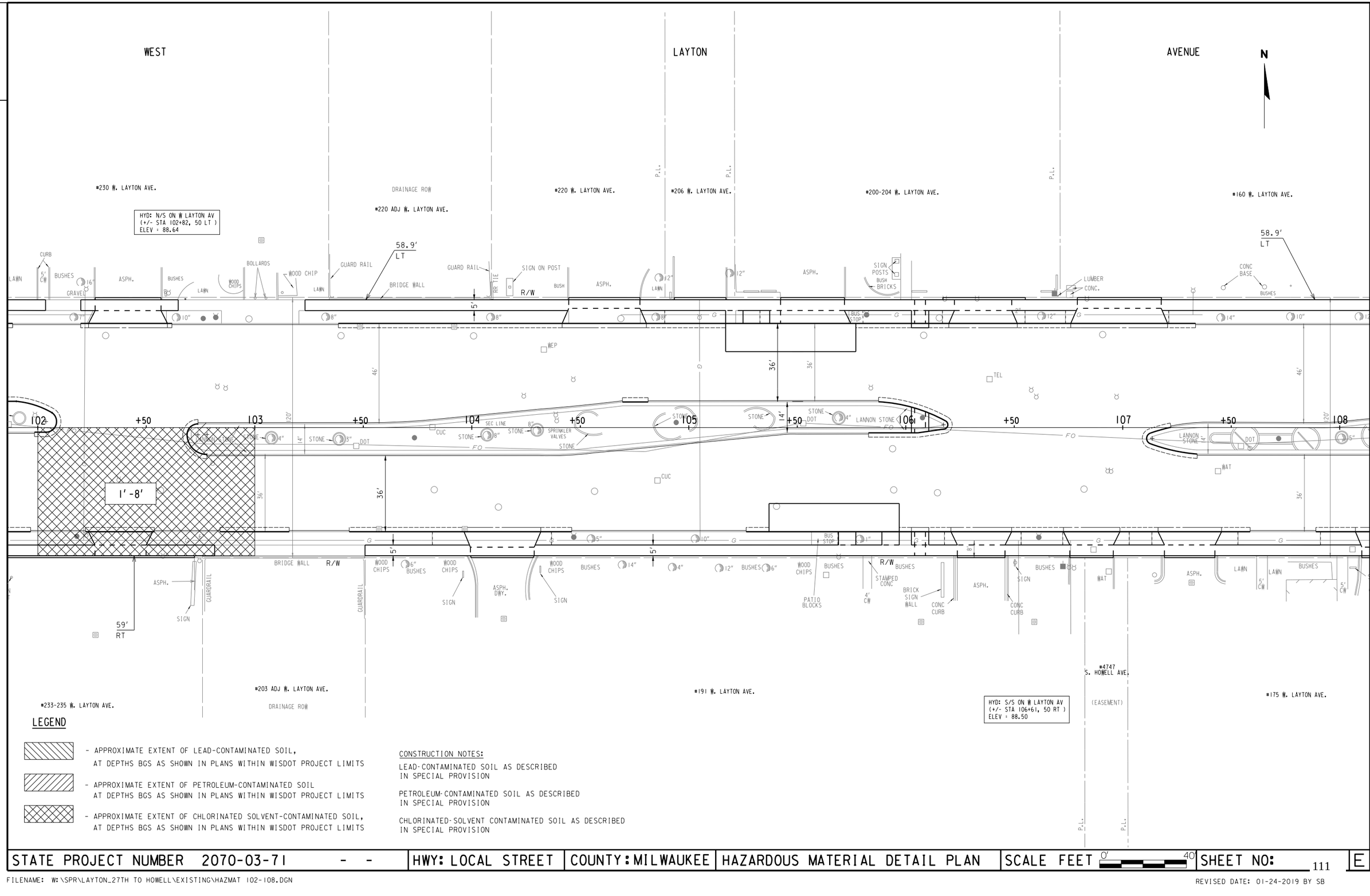
PETROLEUM-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

CHLORINATED-SOLVENT CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	HAZARDOUS MATERIAL DETAIL PLAN	SCALE FEET 0' 40'	SHEET NO: 110	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\HAZMAT 60-66.DGN

REVISED DATE: 01-24-2019 BY SB



LEGEND

- APPROXIMATE EXTENT OF LEAD-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF PETROLEUM-CONTAMINATED SOIL AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS
- APPROXIMATE EXTENT OF CHLORINATED SOLVENT-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

CONSTRUCTION NOTES:

LEAD-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

PETROLEUM-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

CHLORINATED-SOLVENT CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	HAZARDOUS MATERIAL DETAIL PLAN	SCALE FEET 0' 40'	SHEET NO: 111	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\HAZMAT 102-108.DGN

REVISED DATE: 01-24-2019 BY SB

WEST LAYTON AVENUE

SOUTH HOWELL AVENUE

SOUTH 1ST STREET

#4669 S. 1ST ST.

#4601 S. 1ST ST.

#130 W. LAYTON AVE.

#108 W. LAYTON AVE.

#151 W. LAYTON AVE.

#131 W. LAYTON AVE.

#4709 S. HOWELL AVE.

DRAINAGE EASEMENT

SEWER EASEMENT

B.M. E BOLT HYD NW CORNER
W. LAYTON AV. & S. HOWELL AV.
STA. 67+05 - 60'LT.
ELEV. 89.66

BM: HYD NE COR S 1ST ST
W LAYTON AV (NW BOLT)
ELEV = 88.28

N

59'LT

59'RT

R/W

P.L.

CULVERT WALL

BRIDGE WALL

GUARD RAIL

CONC. BASE

SIGN

SIGN POSTS

CONC LIGHT BASE

5' CW

60'

34' CONC.

10'

2"

ASPH. DWY.

DIRT

MULCH

BUSH

BUSHES

SHRUBS

LAWN

PLANTER

STONE WALL

CONC

ASPH

WEP

WATER

WMSD

CUC

DOT

NBS

FO

SEC LINE

N.88°51'21"E.

1'-6'

36'

46'

SEE ROAD PLANS
STATE PROJECT NUMBER
2060-10-70

END PROJECT
STA. 110+31.70 T/L

EQUATION
STA. 110+31.7, W. LAYTON AVE. T/L =
STA. 105+74.0, S. HOWELL AVE. T/L - PROJECT 2060-10-70

108 +50 109 +50 110 +50 111 +50 112 +50 113 +50 114

LANNON STONE

WOOD CHIP

SCATTERED TIMBERS

LEGEND

- APPROXIMATE EXTENT OF LEAD-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

- APPROXIMATE EXTENT OF PETROLEUM-CONTAMINATED SOIL AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

- APPROXIMATE EXTENT OF CHLORINATED SOLVENT-CONTAMINATED SOIL, AT DEPTHS BGS AS SHOWN IN PLANS WITHIN WISDOT PROJECT LIMITS

CONSTRUCTION NOTES:

LEAD-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

PETROLEUM-CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

CHLORINATED-SOLVENT CONTAMINATED SOIL AS DESCRIBED IN SPECIAL PROVISION

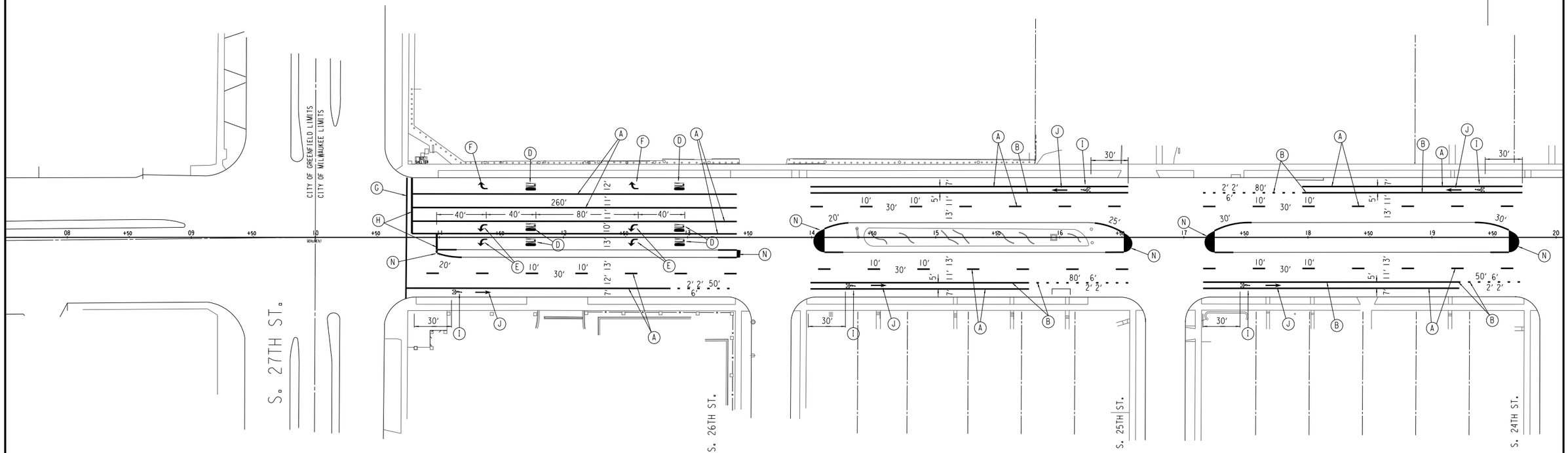
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	HAZARDOUS MATERIAL DETAIL PLAN	SCALE FEET 0' 40'	SHEET NO: 112	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\HAZMAT 108-114.DGN

REVISED DATE: 01-24-2019 BY SB

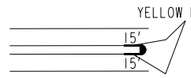
WEST LAYTON AVENUE

N



(A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
(B) PAVEMENT MARKING, 6-INCH WHITE EPOXY
(C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
(D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
(E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
(F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
(G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
(H) PAVEMENT MARKING STOPLINE, 24-INCH WHITE PLASTIC
(I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
(J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
(K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
(L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
(M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
(N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS

SHEET 1 OF 8

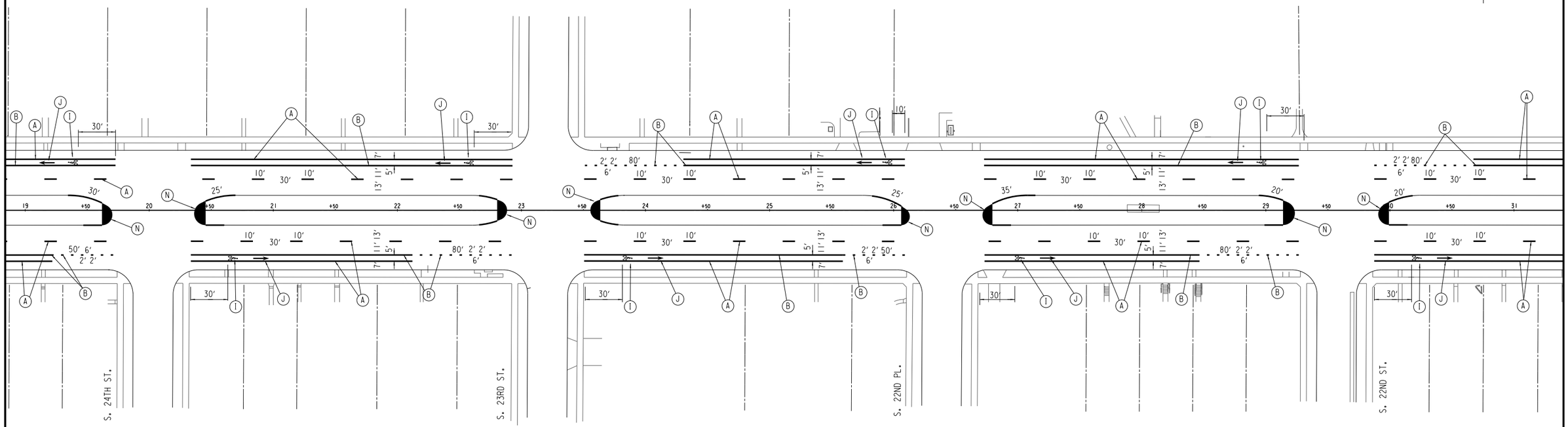
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 113	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 01-24-2019 BY SB

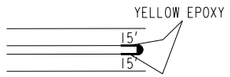
WEST LAYTON AVENUE

N



(A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
(B) PAVEMENT MARKING, 6-INCH WHITE EPOXY
(C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
(D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
(E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
(F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
(G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
(H) PAVEMENT MARKING STOPLINE, 24-INCH WHITE PLASTIC
(I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
(J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
(K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
(L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
(M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
(N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS

SHEET 2 OF 8

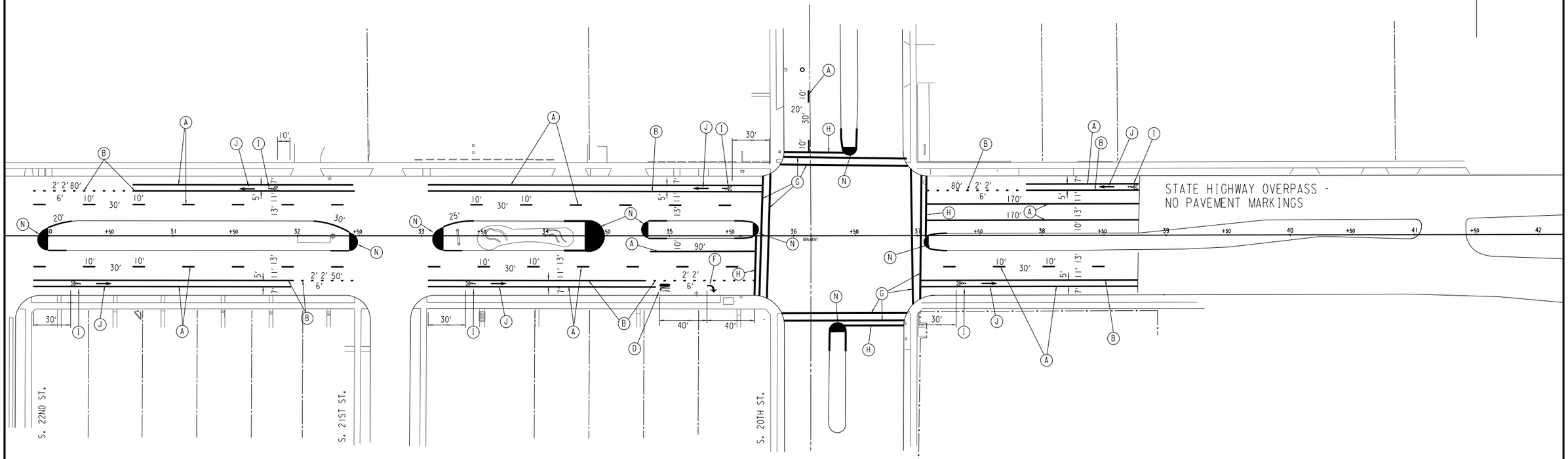
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 114	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 01-24-2019 BY SB

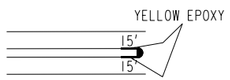
WEST LAYTON AVENUE

N



(A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
(B) PAVEMENT MARKING, 6-INCH WHITE EPOXY
(C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
(D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
(E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
(F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
(G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
(H) PAVEMENT MARKING STOPLINE, 24-INCH WHITE PLASTIC
(I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
(J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
(K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
(L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
(M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
(N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



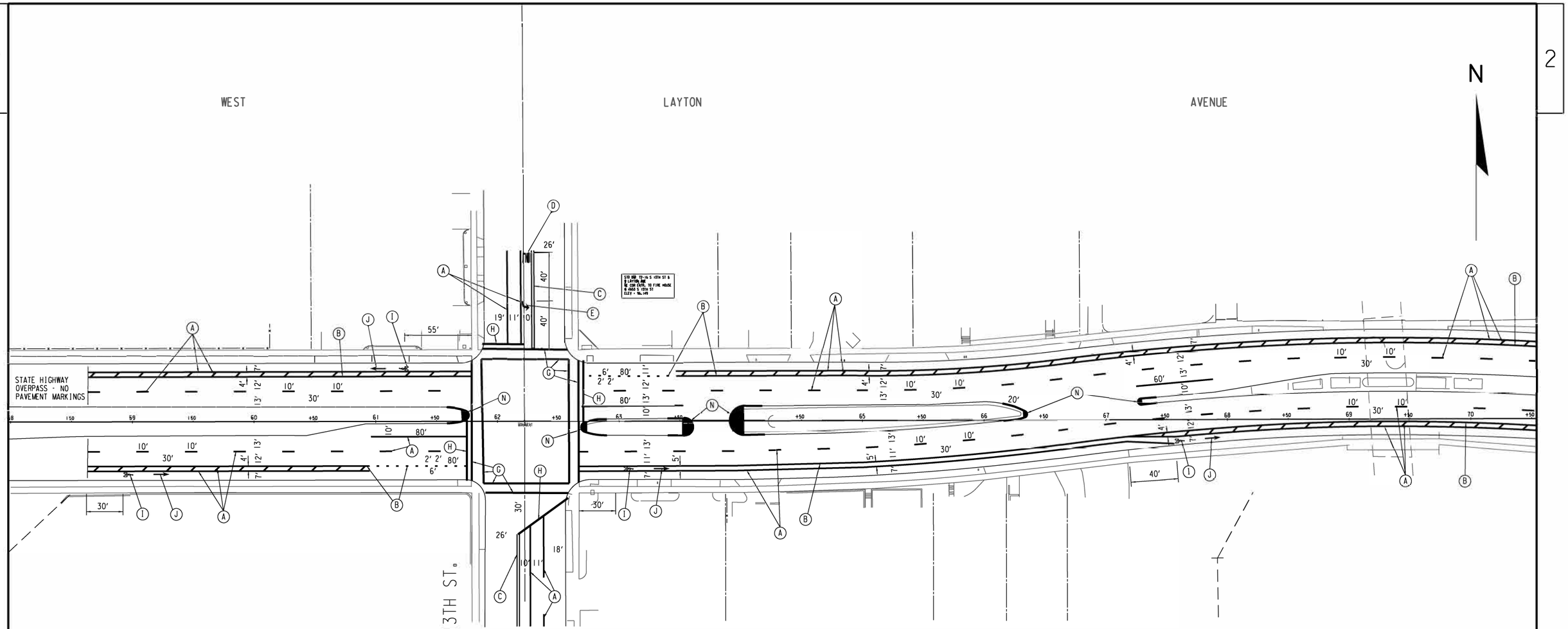
CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS

SHEET 3 OF 8

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 115	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 01-24-2019 BY SB



(A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY

(B) PAVEMENT MARKING, 6-INCH WHITE EPOXY

(C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY

(D) PAVEMENT MARKING WORDS "ONLY" PLASTIC

(E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC

(F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC

(G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC

(H) PAVEMENT MARKING LINE, 24-INCH WHITE PLASTIC

(I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC

(J) PAVEMENT MARKING, BIKE ARROWS PLASTIC

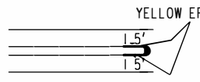
(K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE

(L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB

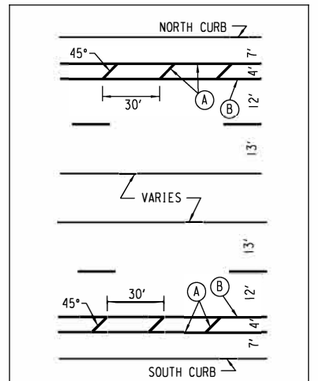
(M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW

(N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS



40:1
BUFFER DETAIL

SHEET 4 OF 8

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 116	E

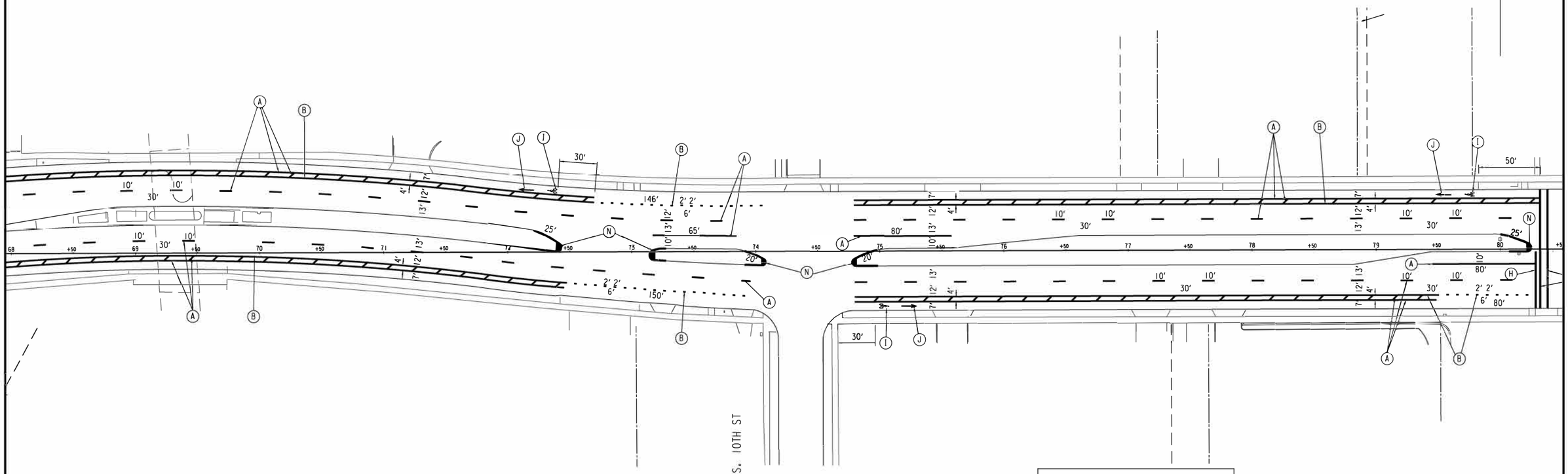
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 10-23-2018 BY AL

2

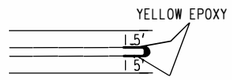
WEST LAYTON AVENUE

N

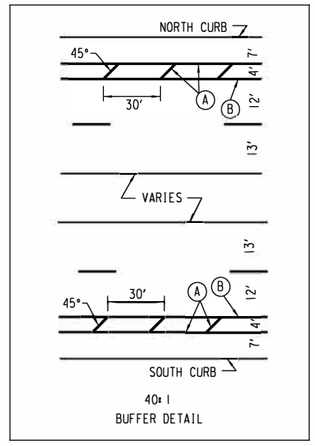


(A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
(B) PAVEMENT MARKING, 6-INCH WHITE EPOXY
(C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
(D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
(E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
(F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
(G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
(H) PAVEMENT MARKING LINE, 24-INCH WHITE PLASTIC
(I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
(J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
(K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
(L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
(M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
(N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15′ UNLESS OTHERWISE STATED ON PLANS



40:1
BUFFER DETAIL

SHEET 5 OF 8

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 117	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 10-23-2018 BY AL

WEST LAYTON AVENUE

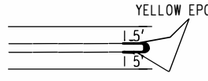
N

S. 7TH ST

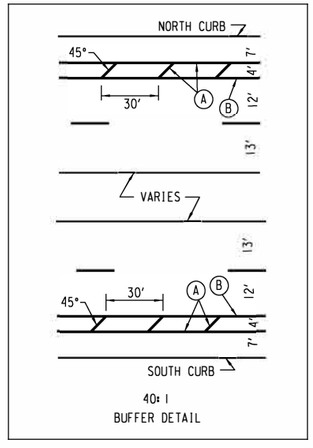
S. 6TH ST

- (A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
- (B) PAVEMENT MARKING, 6-INCH WHITE EPOXY
- (C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
- (D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
- (E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
- (F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
- (G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
- (H) PAVEMENT MARKING LINE, 24-INCH WHITE PLASTIC
- (I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
- (J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
- (K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
- (L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
- (M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
- (N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS



40:1
BUFFER DETAIL

SHEET 6 OF 8

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 118	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

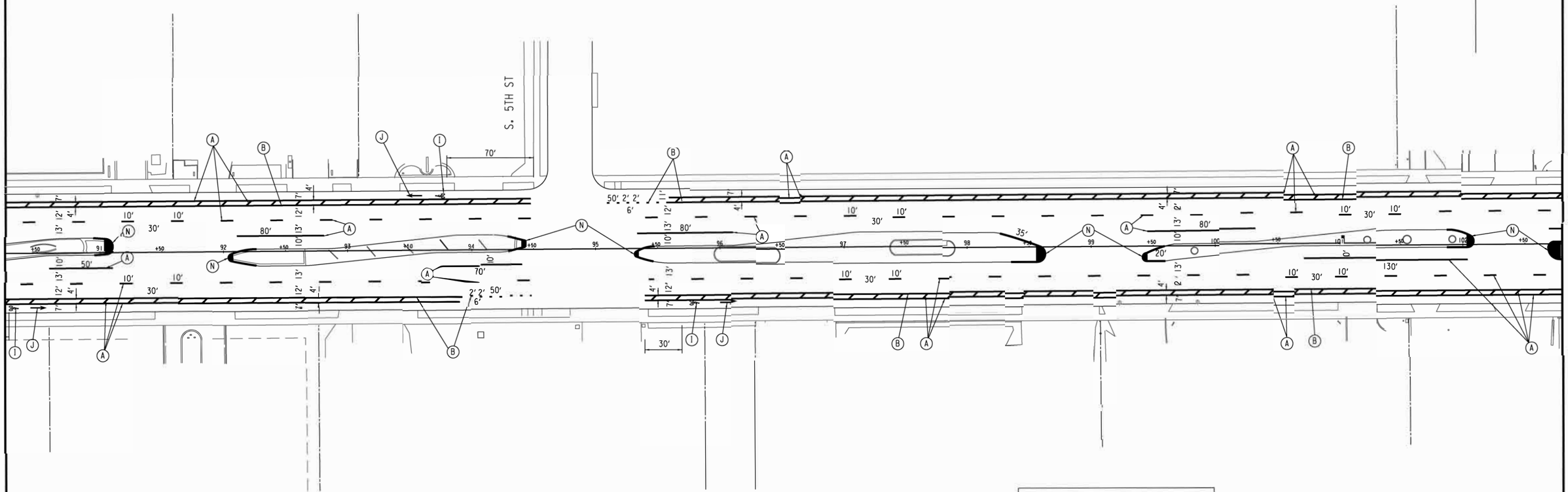
REVISED DATE: 10-23-2018 BY AL

2

WEST LAYTON AVENUE

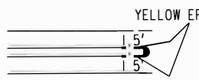
N

S. 5TH ST

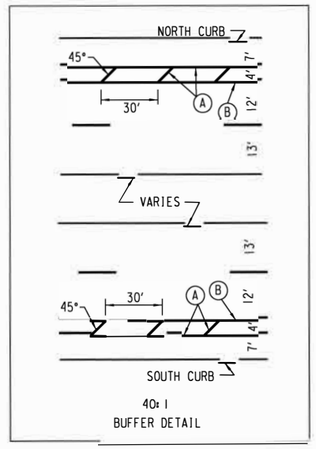


(A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
(B) PAVEMENT MARKING, 6-INCH WHITE EPOXY
(C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
(D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
(E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
(F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
(G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
(H) PAVEMENT MARKING LINE, 24-INCH WHITE PLASTIC
(I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
(J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
(K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
(L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
(M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
(N) PLOWABLE ISLAND NOSE (SEE DETAIL)

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS



40:1
BUFFER DETAIL

SHEET 7 OF 8

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 119	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 10-23-2018 BY AL

WEST LAYTON AVENUE

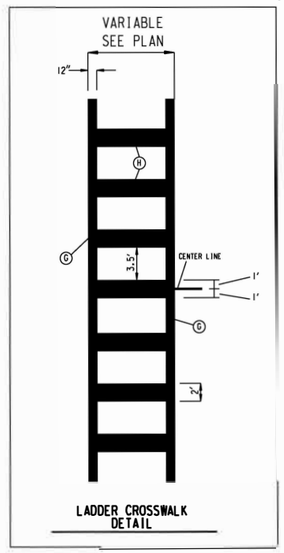
N

SEE LADDER CW DETAIL

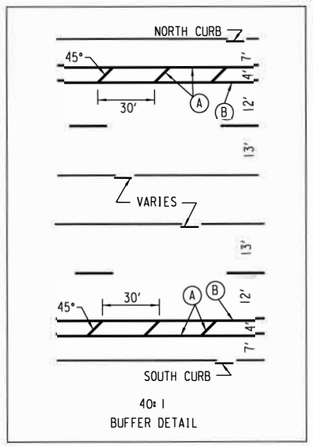
S. 1ST ST

S. HOWELL AVE.

- (A) PAVEMENT MARKING LINE, 4-INCH WHITE EPOXY
- (B) PAVEMENT MARK I NG, 6-I NCH WHITE EPOXY
- (C) PAVEMENT MARKING LINE, 4-INCH (DOUBLE YELLOW) EPOXY
- (D) PAVEMENT MARKING WORDS "ONLY" PLASTIC
- (E) PAVEMENT MARKING ARROWS TYPE 2 (LEFT TURN) PLASTIC
- (F) PAVEMENT MARKING ARROWS TYPE 2 (RIGHT TURN) PLASTIC
- (G) PAVEMENT MARKING CROSSWALK, 12-INCH WHITE PLASTIC
- (H) PAVEMENT MARKING LINE, 24-INCH WHITE PLASTIC
- (I) PAVEMENT MARKING, BIKE SYMBOLS PLASTIC
- (J) PAVEMENT MARKING, BIKE ARROWS PLASTIC
- (K) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE
- (L) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMB
- (M) SKID/SLIP RESISTANT, GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
- (N) PLOWABLE ISLAND NOSE (SEE DETAIL)

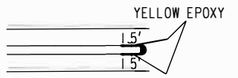


LADDER CROSSWALK DETAIL



40: 1
BUFFER DETAIL

PLOWABLE ISLAND NOSE DETAIL (TYPICAL)



CONTRACTOR TO PAINT PLOWABLE ISLAND NOSE YELLOW FOR THE RADIUS OF THE NOSE PLUS CURB & FACE OF CURB EXTENDED 15' UNLESS OTHERWISE STATED ON PLANS

SHEET 8 OF 8

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET	SHEET NO: 120 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\PAVEMENT MARKING.DGN

REVISED DATE: 6-23-2018 BY AL

2

LEGEND

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

N

WEST LAYTON AVENUE

BEGIN PROJECT
STA. 10 +53.9 T/L
(Y) NORTH: 356,419.2777
(X) EAST: 2,549,158.6326

SOUTH 27TH STREET

08 +50 09 +50 10 +50 11 +50 12

monument

sec line

city of greenfield limits

city of milwaukee limits

EDGE OF ASPHALT

END OF CURB

3 TO INTERSTATE 43 INTERSTATE 894 →

JV3-2
MOVE TO WOOD POST IN FRONT OF LIGHT POLE

ASPH parking

CAUTION

1 TO SOUTH INTERSTATE 41 TO EAST INTERSTATE 94 ↑ ↑

J3-2
MOVE

SHEET 1 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 121	E

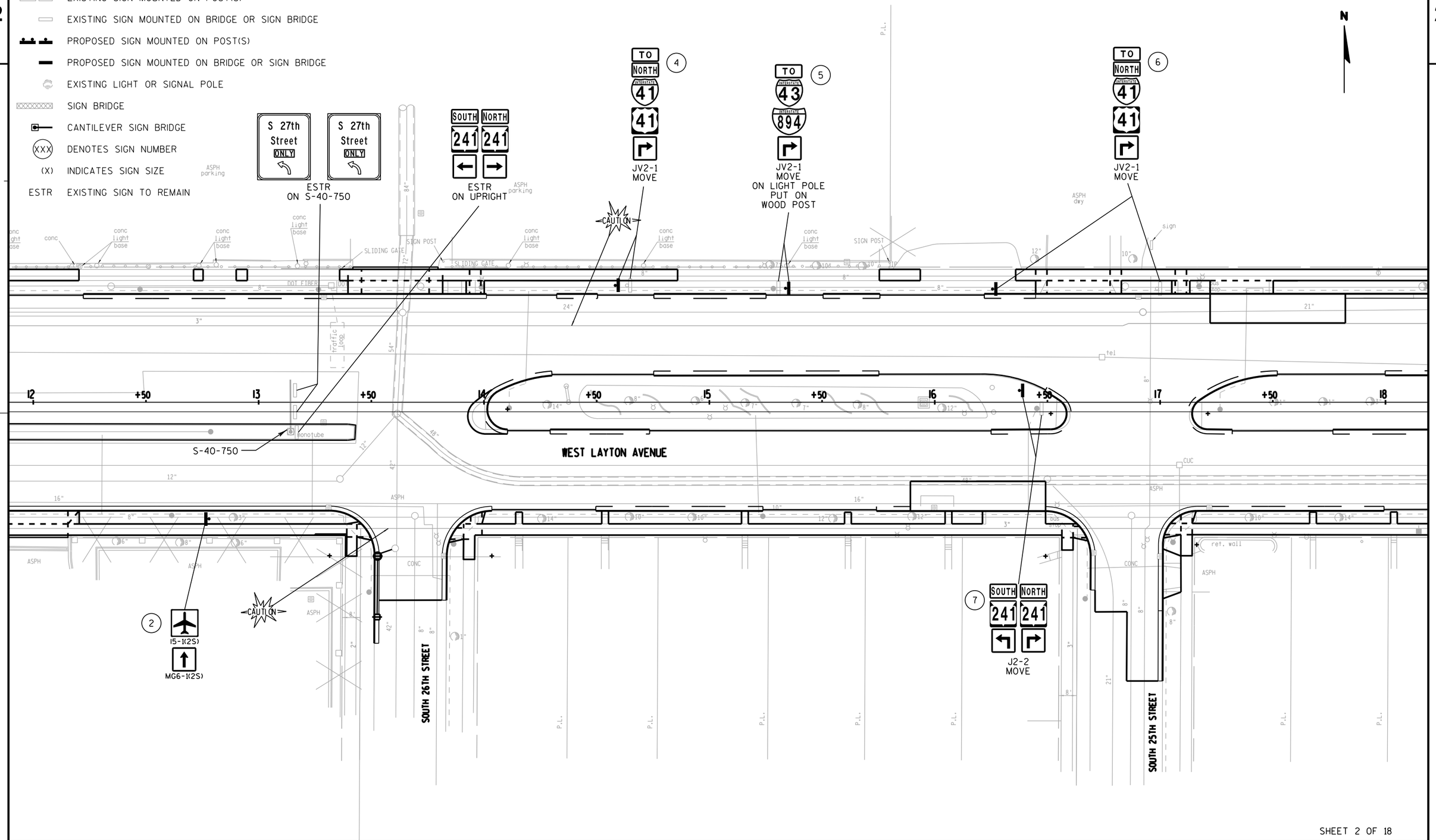
FILE NAME : J:\projects\d2_20700371\SIGN\023201_ps.dgn PLOT DATE : 11-FEB-2019 15:27 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

LEGEND

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

2



SHEET 2 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 122	E

LEGEND

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

(8) JCT 241 REMOVE

JCT M2-1
241 M1-6
J1-1(2S)
ON LIGHT POLE
PUT ON WOOD POST

CAUTION

CAUTION

CAUTION

CAUTION

N

18 +50 19 +50 20 +50 21 +50 22 +50 23 +50 24

WEST LAYTON AVENUE

SOUTH 24TH STREET

SOUTH 23RD STREET

3" ABANDONED (Location unknown)

SHEET 3 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 123 E

FILE NAME : J:\projects\d2_20700371\SIGN\023203_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

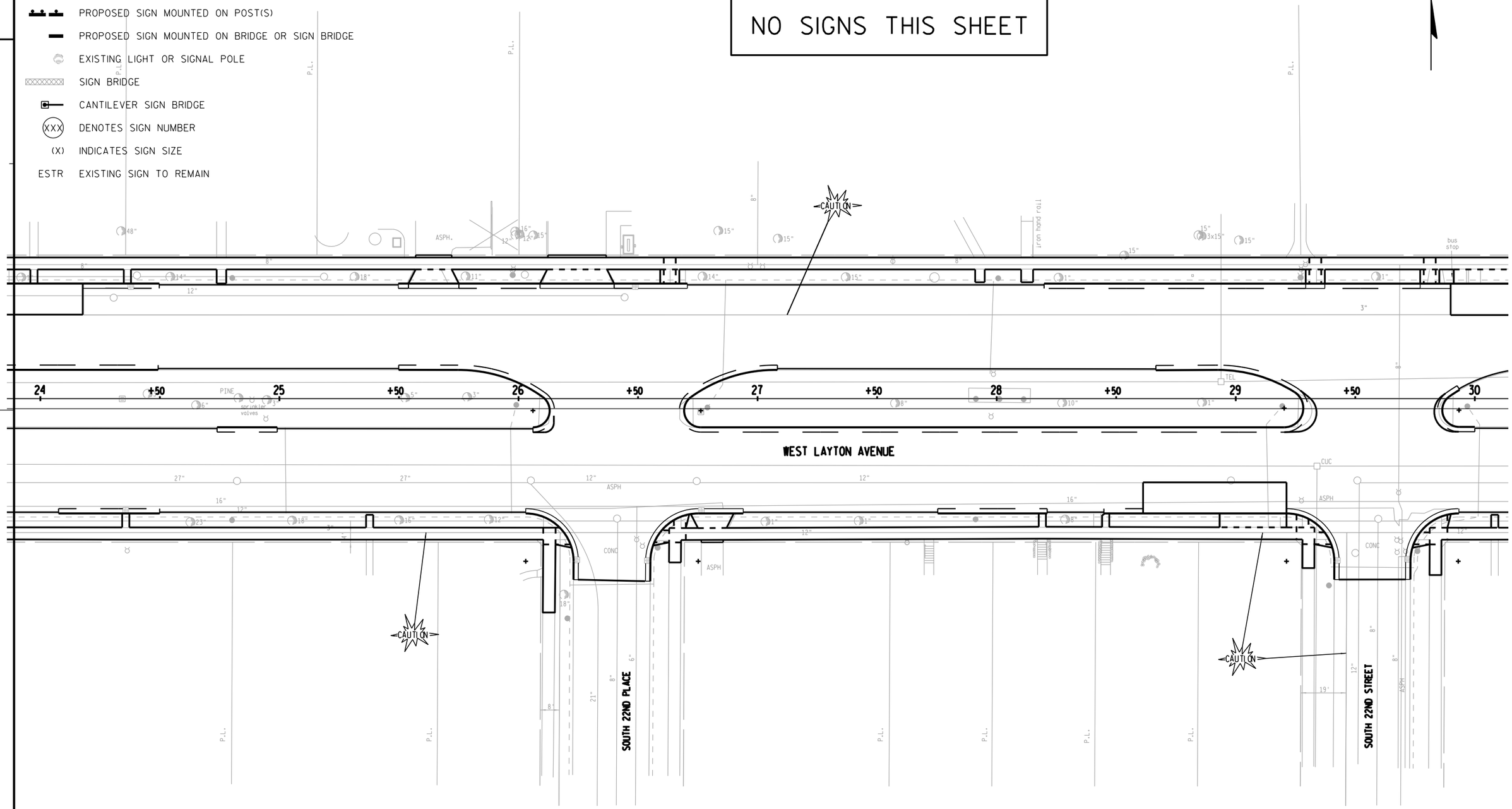
(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

NO SIGNS THIS SHEET

N

2



SHEET 4 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 124 E

FILE NAME : J:\projects\d2_20700371\SIGN\023204_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

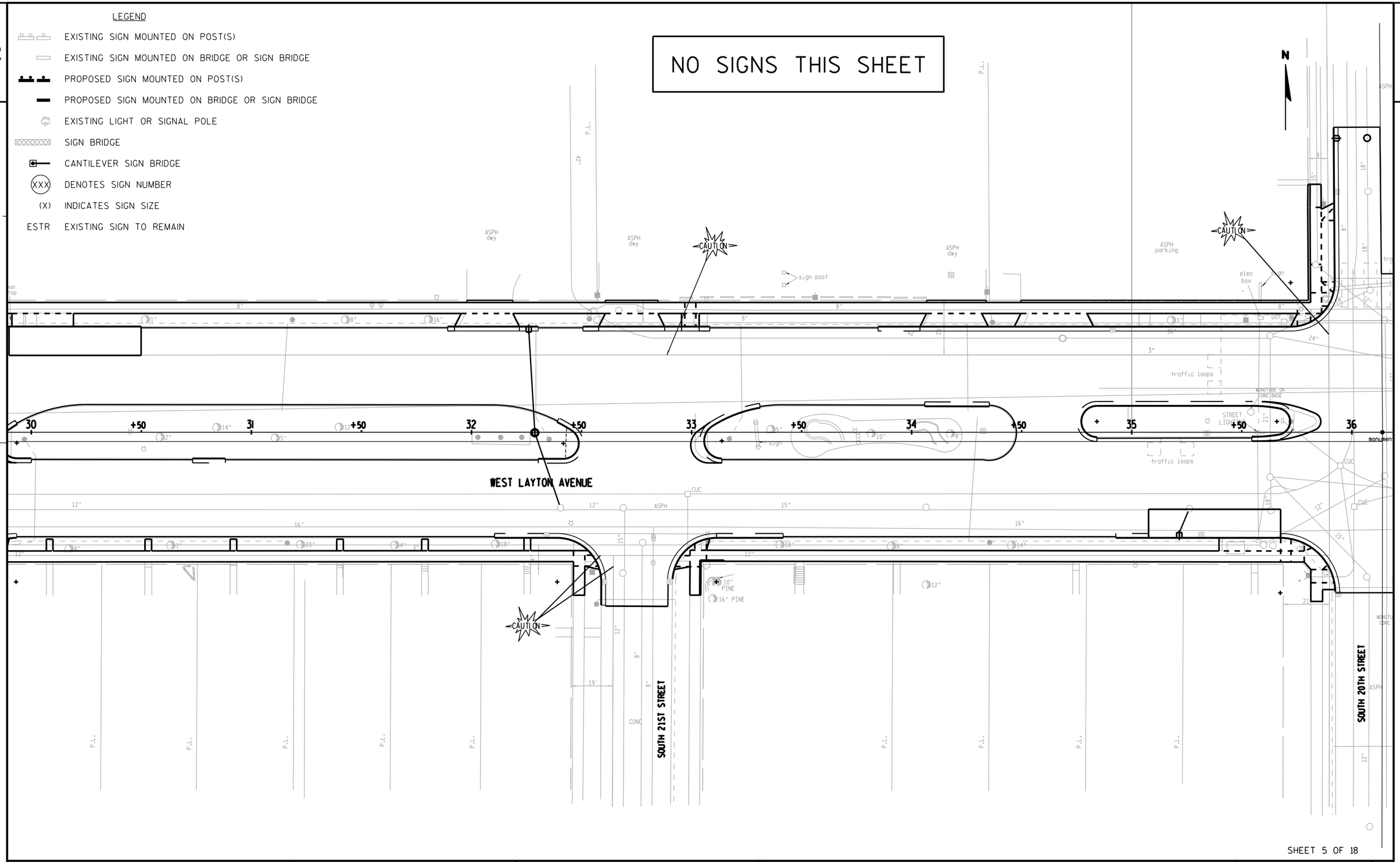
CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

NO SIGNS THIS SHEET

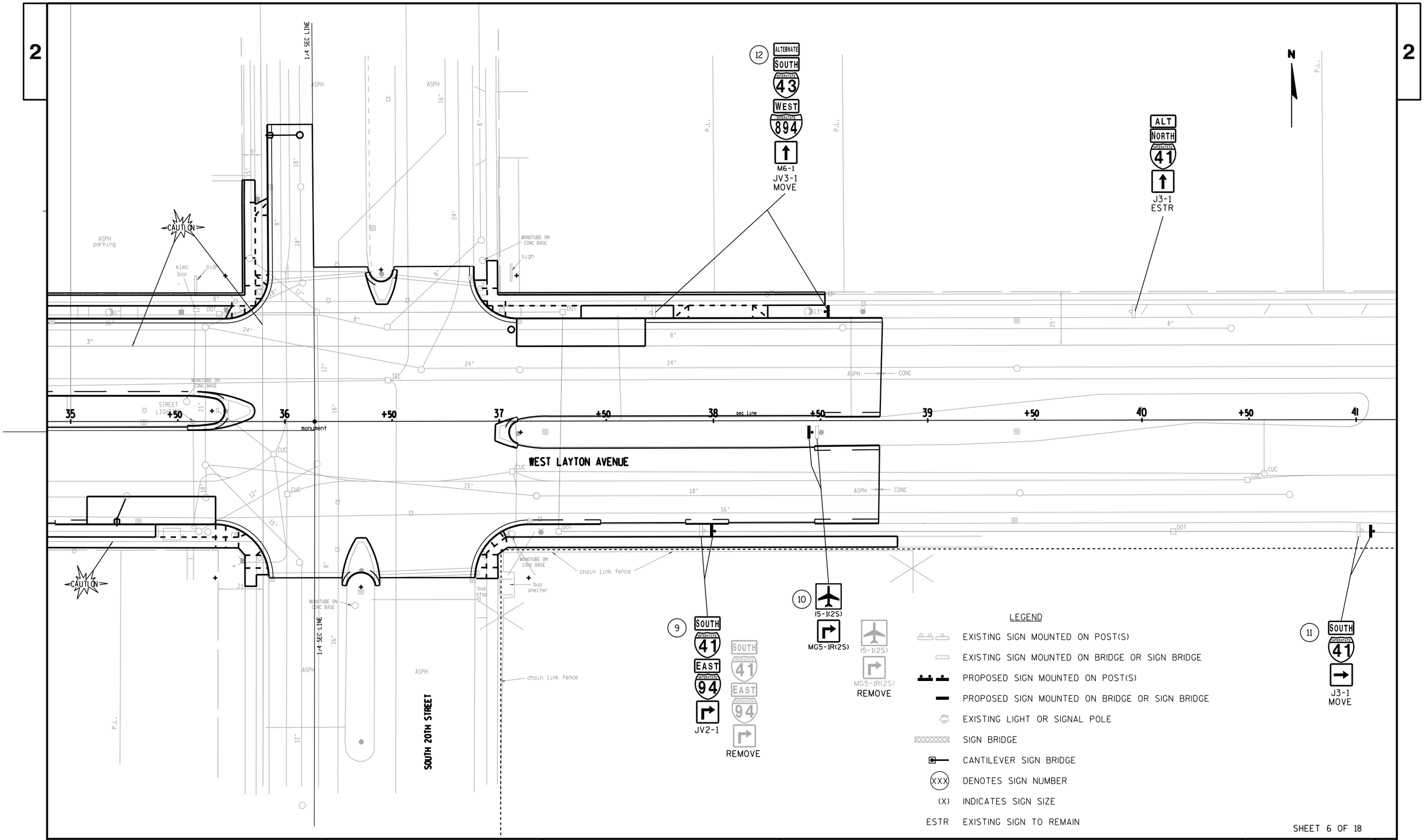


SHEET 5 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 125	E

FILE NAME : J:\projects\d2_20700371\SIGN\023205_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42



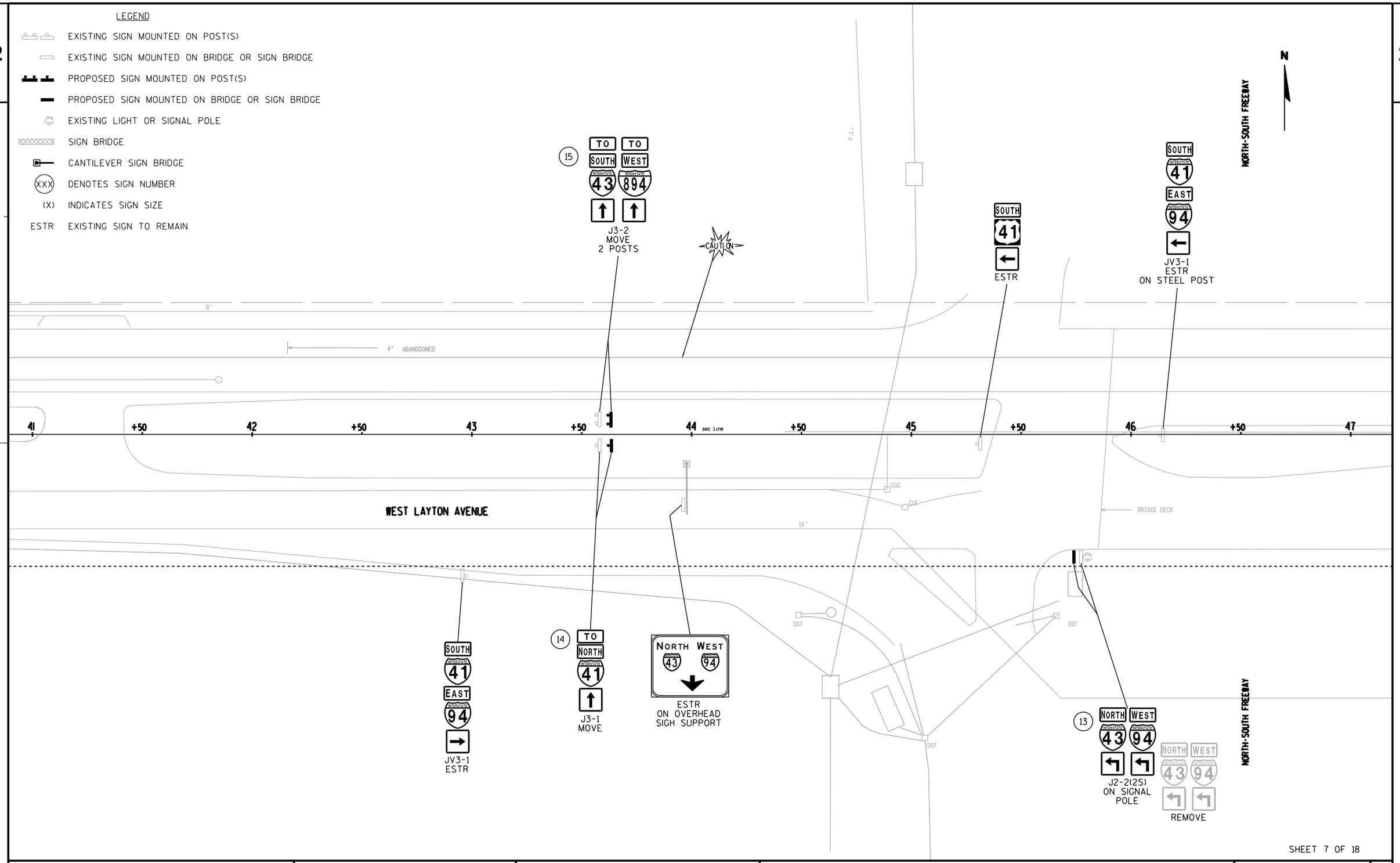
SHEET 6 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 126	E

2

LEGEND

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



SHEET 7 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 127	E

2

LEGEND

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

NORTH-SOUTH FREEWAY

CAUTION

ABANDDONED

16 SOUTH 41 USE LEFT LANE — J3-1 MOVE

17 SOUTH 41 EAST 94 USE LEFT LANE — JV3-1(2S)

SOUTH 41 EAST 94 USE LEFT LANE — REMOVE

N

WEST 94 — J3-1 ESTR

DOT

48 +50 49 +50 50 sec line +50 51 +50 52 +50 53 +50 54

15"

WEST LAYTON AVENUE

CUC CUC

BRIDGE DECK ASPH CONC

16"

NORTH 43 WEST 94 — J3-2 ESTR

18 NORTH 43 WEST 94 — J3-2(2S)

NORTH 43 WEST 94 — REMOVE

NORTH-SOUTH FREEWAY

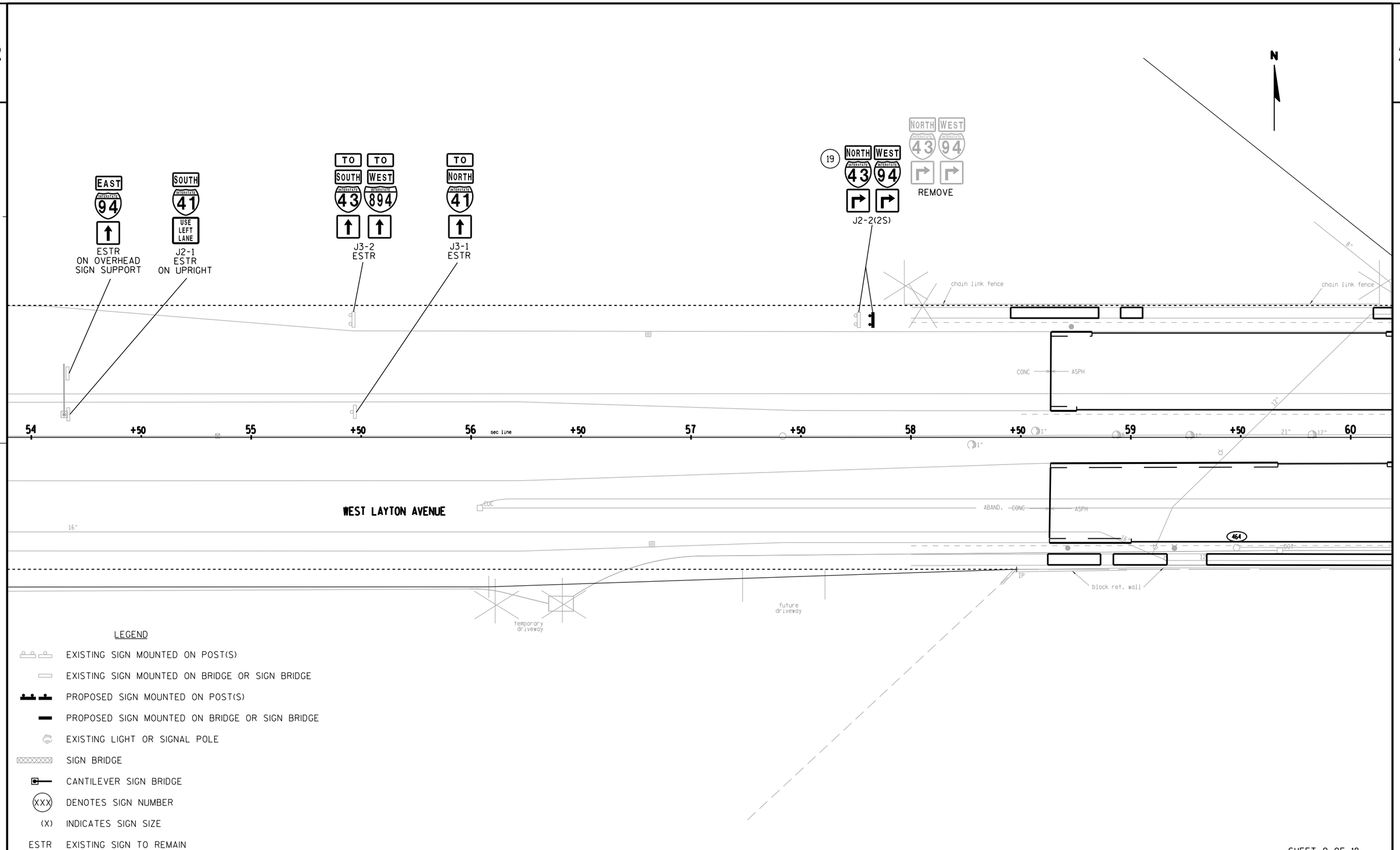
SHEET 8 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 128 E

FILE NAME : J:\projects\d2_20700371\SIGN\023208_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

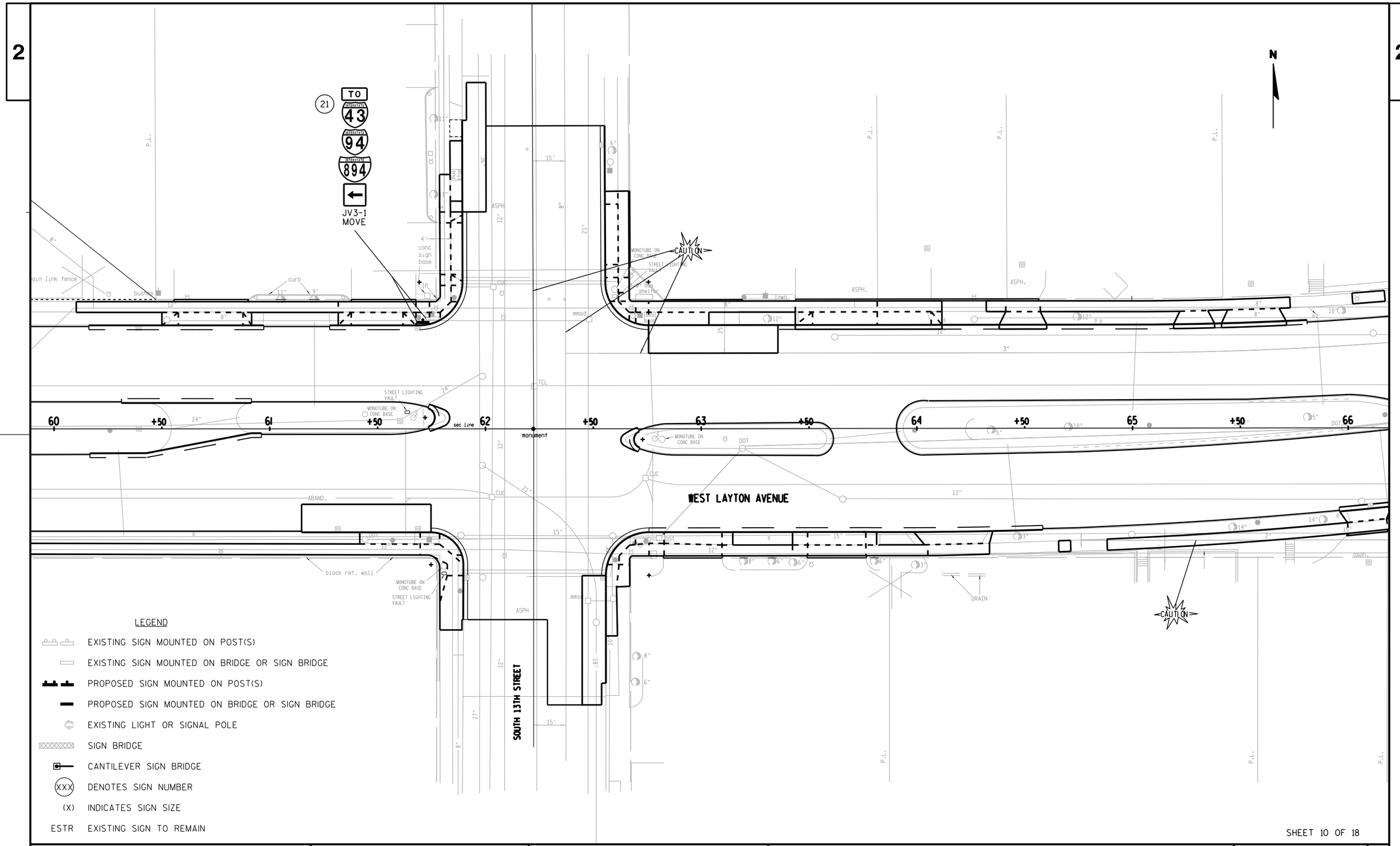


LEGEND

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

SHEET 9 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 129	E



SHEET 10 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 130 E

FILE NAME : J:\projects\d2_20700371\SIGN\023210_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

2

N

20 JCT 41
J1-1
MOVE

CAUTION

WEST LAYTON AVENUE

BRIDGE

66 +50 67 +50 68 sec line +50 69 +50 70 +50 71 +50 72

435' FM C/L
403' FM L/L

JCT 22 INTERSTATE 41 INTERSTATE 94
JV1-1(2S)
ON LIGHT POLE
MOVE TO
WOOD POST

JCT INTERSTATE 41 INTERSTATE 94
REMOVE

WEPCO easement

SOO LINE RAILROAD

LEGEND

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

SHEET 11 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 131 E

FILE NAME : J:\projects\d2_20700371\SIGN\023211_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

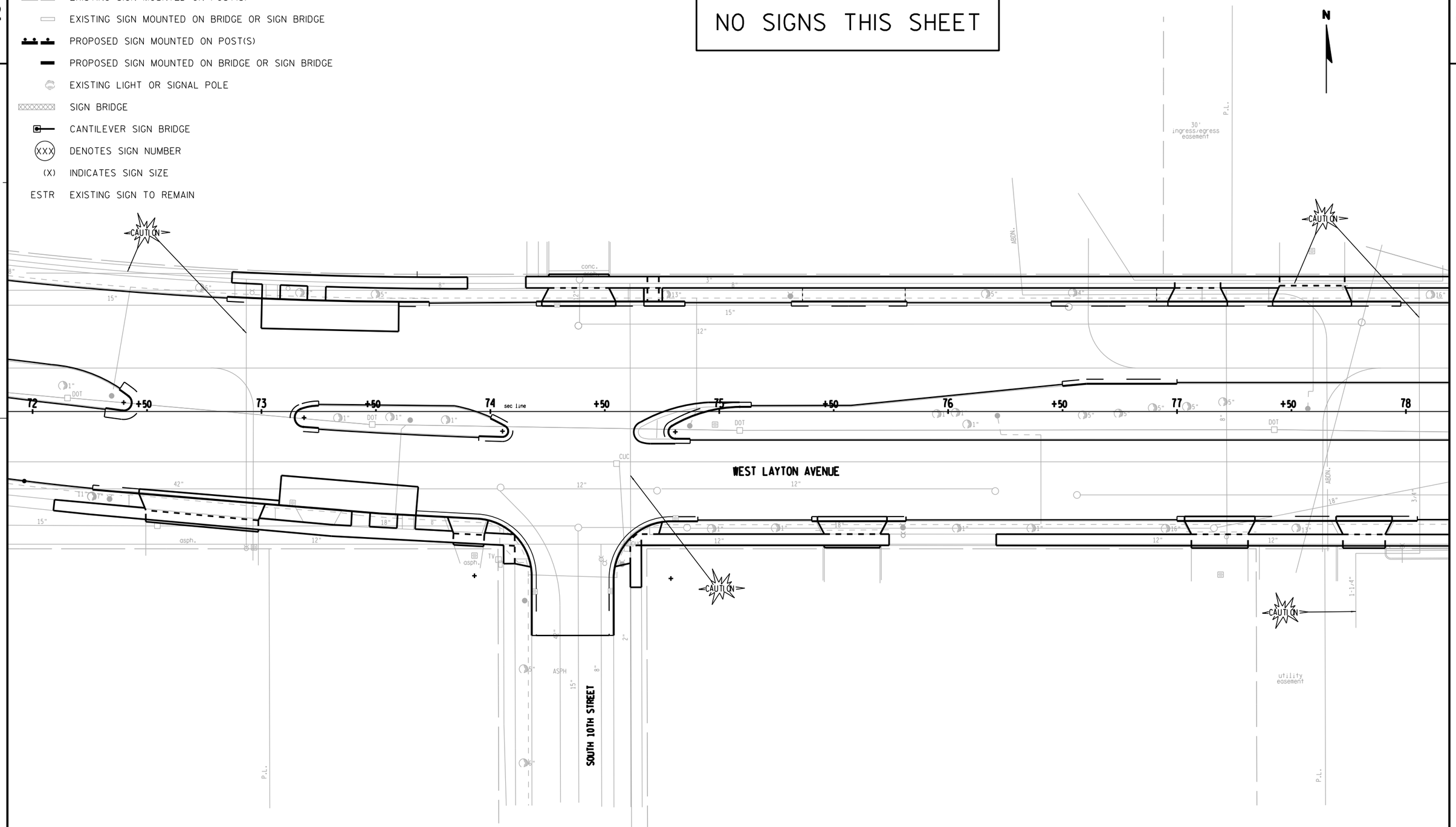
CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

NO SIGNS THIS SHEET



SHEET 12 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 132 E

FILE NAME : J:\projects\d2_20700371\SIGN\023212_ps.dgn PLOT DATE : 07-JAN-2019 14:17 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

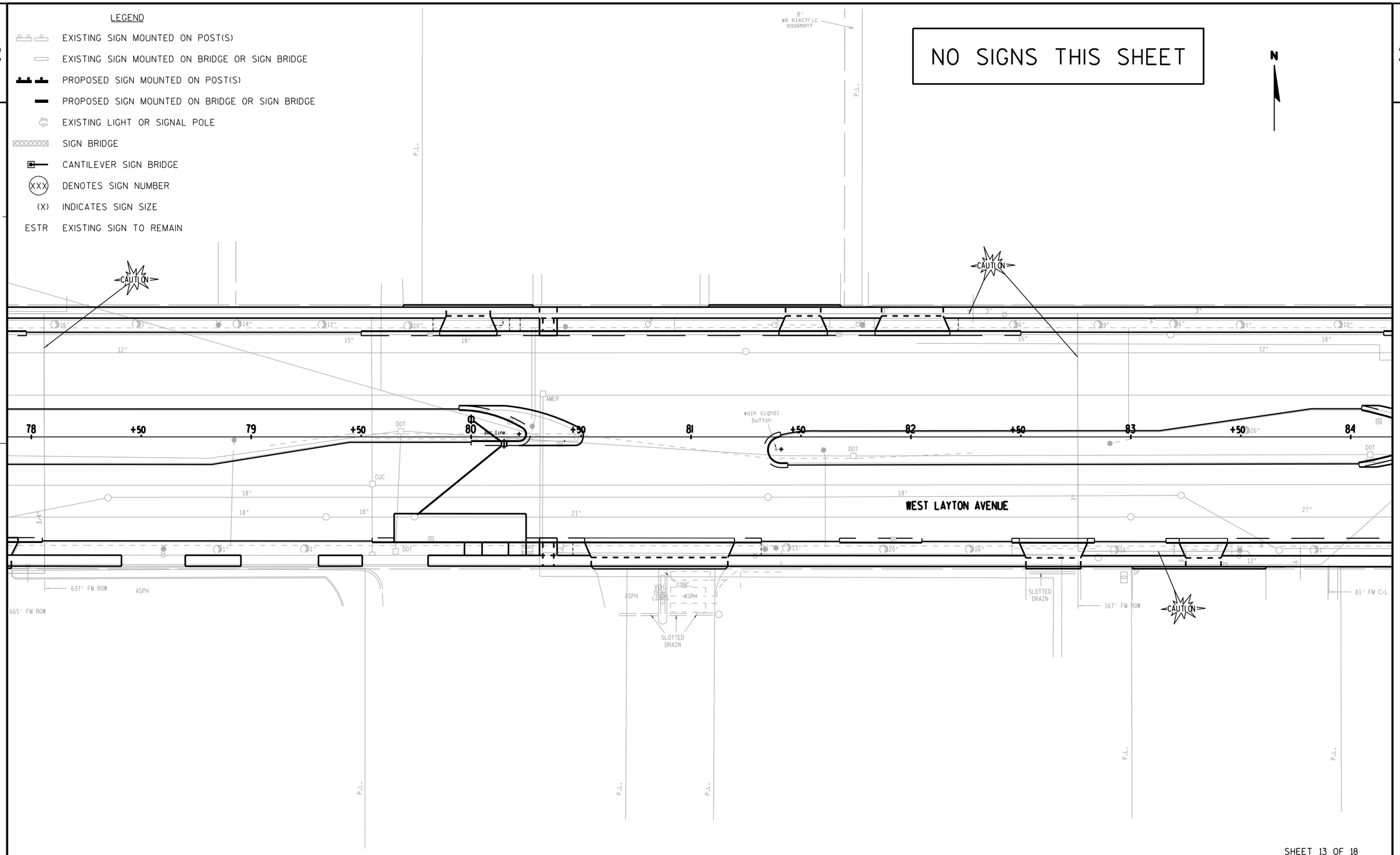
LEGEND

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

NO SIGNS THIS SHEET

N

2



SHEET 13 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 133	E

FILE NAME : J:\projects\d2_20700371\SIGN\023213_ps.dgn PLOT DATE : 07-JAN-2019 14:18 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

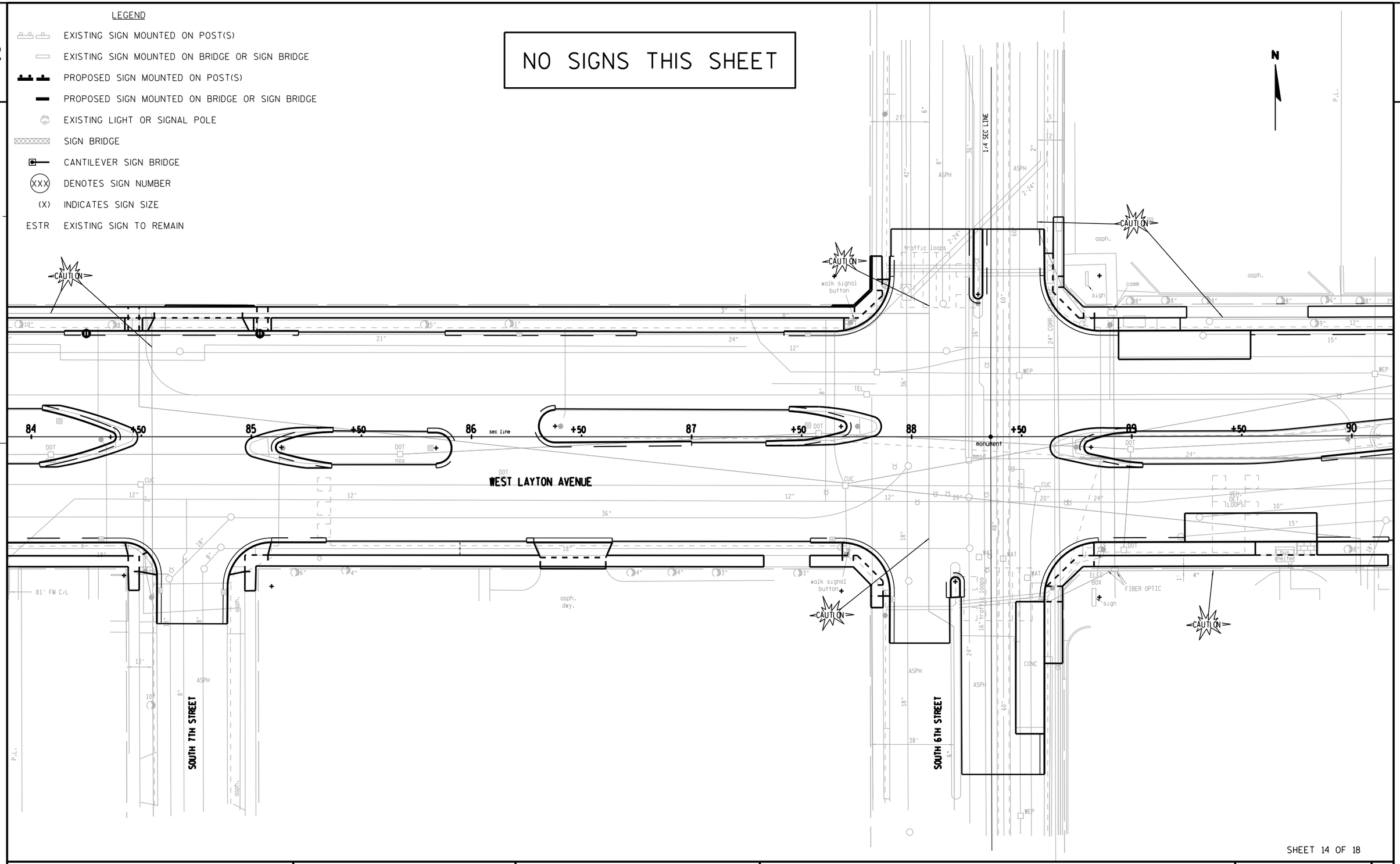
WISDOT/CADDS SHEET 42

2

LEGEND

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

NO SIGNS THIS SHEET



SHEET 14 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 134	E

FILE NAME : J:\projects\d2_20700371\SIGN\023214_ps.dgn PLOT DATE : 07-JAN-2019 14:18 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

NO SIGNS THIS SHEET

N

2

SOUTH 5TH STREET

WEST LAYTON AVENUE

CAUTION

CAUTION

CAUTION

sec line

42" steel casing

10' WEPCO EASEMENT

SHEET 15 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 135	E

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

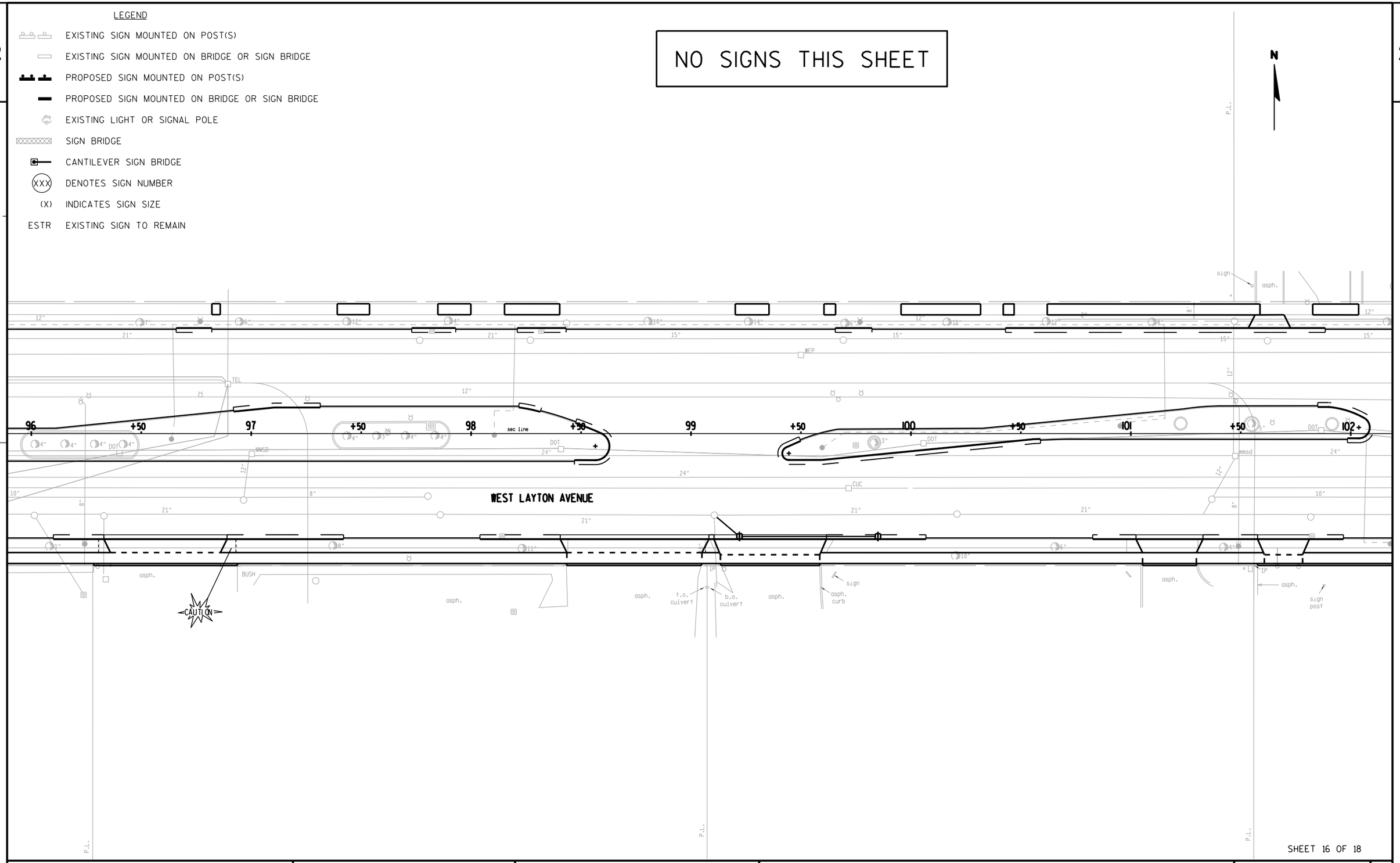
CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

NO SIGNS THIS SHEET



SHEET 16 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 136	E

FILE NAME : J:\projects\d2_20700371\SIGN\023216_ps.dgn PLOT DATE : 07-JAN-2019 14:18 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

LEGEND

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

N

WEST LAYTON AVENUE

CAUTION

CAUTION

CAUTION

CAUTION

(23) (24) JCT M2-1

38 M1-6

J1-1(2S)

SHEET 17 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 137 E

FILE NAME : J:\projects\d2_20700371\SIGN\023217_ps.dgn PLOT DATE : 07-JAN-2019 14:18 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

NO SIGNS THIS SHEET

N

SOUTH 1ST STREET

SOUTH HOWELL AVENUE

WEST LAYTON AVENUE

DRAINAGE EASEMENT

SEWER EASEMENT

CAUTION

CAUTION

CAUTION

108 +50 109 +50 110 +50 111 +50 112 +50 113 +50 114

sec line

N.88°51'21"e.

SEC LINE

P.L.

P.L.

P.L.

culvert wall

bridge wall

guard rail

conc. base

conc. base

conc light base

sign

sign posts

42" casing

19' wide X 11' high concrete conduit

water

CLP NOT SURVEYED

ASPH.

ASPH. dwy.

CONC

WEP

DOT

CUC

WMSD

2" ABN'D

SHEET 18 OF 18

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 138	E

FILE NAME : J:\projects\d2_20700371\SIGN\023218_ps.dgn PLOT DATE : 07-JAN-2019 14:18 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

WEST LAYTON AVENUE

PEDESTRIAN TRAFFIC CONTROL NOTES

GENERAL

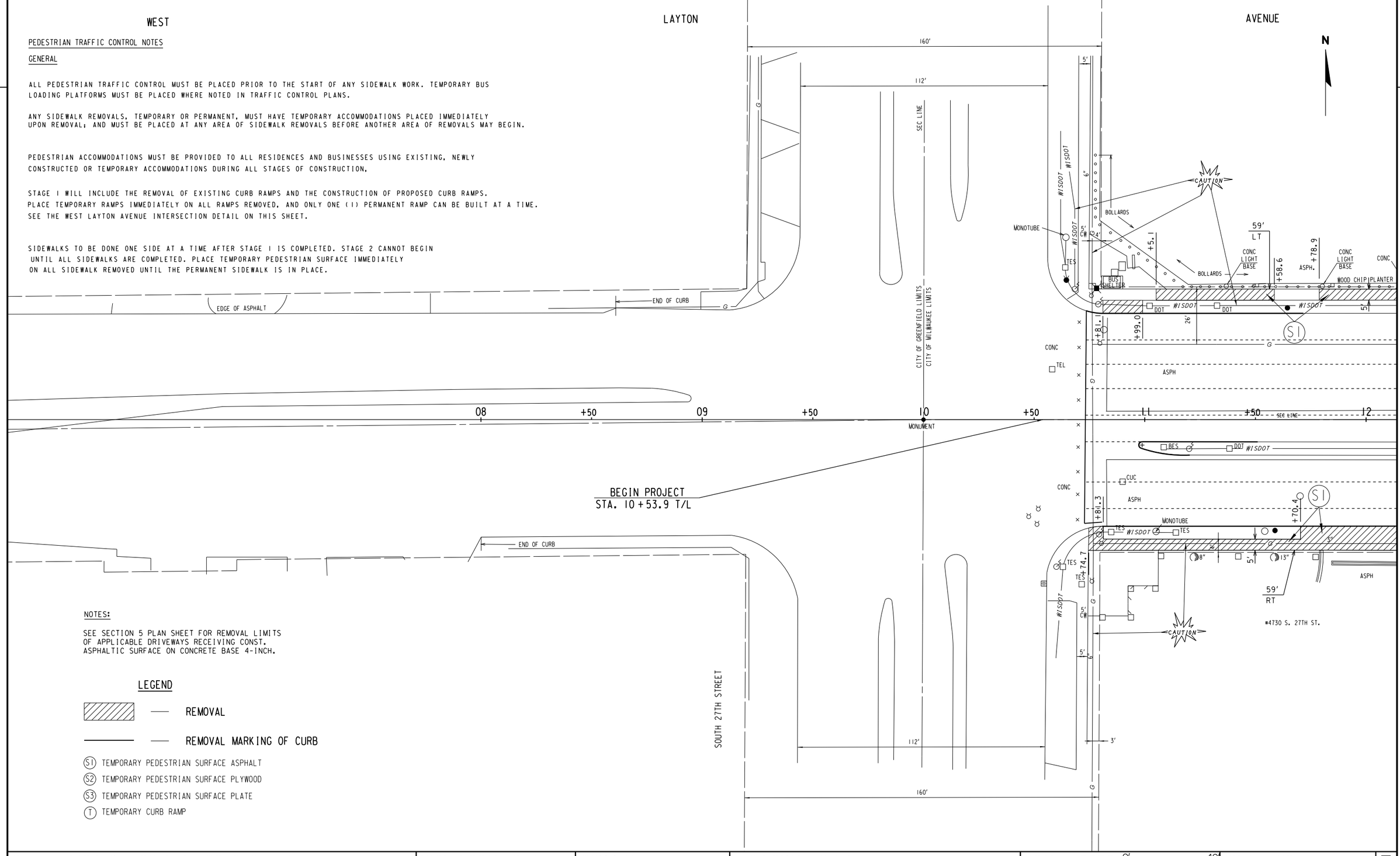
ALL PEDESTRIAN TRAFFIC CONTROL MUST BE PLACED PRIOR TO THE START OF ANY SIDEWALK WORK. TEMPORARY BUS LOADING PLATFORMS MUST BE PLACED WHERE NOTED IN TRAFFIC CONTROL PLANS.

ANY SIDEWALK REMOVALS, TEMPORARY OR PERMANENT, MUST HAVE TEMPORARY ACCOMMODATIONS PLACED IMMEDIATELY UPON REMOVAL; AND MUST BE PLACED AT ANY AREA OF SIDEWALK REMOVALS BEFORE ANOTHER AREA OF REMOVALS MAY BEGIN.

PEDESTRIAN ACCOMMODATIONS MUST BE PROVIDED TO ALL RESIDENCES AND BUSINESSES USING EXISTING, NEWLY CONSTRUCTED OR TEMPORARY ACCOMMODATIONS DURING ALL STAGES OF CONSTRUCTION.

STAGE 1 WILL INCLUDE THE REMOVAL OF EXISTING CURB RAMPS AND THE CONSTRUCTION OF PROPOSED CURB RAMPS. PLACE TEMPORARY RAMPS IMMEDIATELY ON ALL RAMPS REMOVED, AND ONLY ONE (1) PERMANENT RAMP CAN BE BUILT AT A TIME. SEE THE WEST LAYTON AVENUE INTERSECTION DETAIL ON THIS SHEET.

SIDEWALKS TO BE DONE ONE SIDE AT A TIME AFTER STAGE 1 IS COMPLETED. STAGE 2 CANNOT BEGIN UNTIL ALL SIDEWALKS ARE COMPLETED. PLACE TEMPORARY PEDESTRIAN SURFACE IMMEDIATELY ON ALL SIDEWALK REMOVED UNTIL THE PERMANENT SIDEWALK IS IN PLACE.



NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

- REMOVAL
- REMOVAL MARKING OF CURB
- (S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
- (S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
- (S3) TEMPORARY PEDESTRIAN SURFACE PLATE
- (T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 139	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

#4640-4670 S. 27TH ST.

#2500 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV @ S 25TH ST (STA +/- 17+17, 51 LT) ELEV = 136.29

#4730 S. 27TH ST.

#2531 W. LAYTON AVE.

#2527 W. LAYTON AVE.

#2521-2521A W. LAYTON AVE.

#2515 W. LAYTON AVE.

#2509 W. LAYTON AVE.

#2501 W. LAYTON AVE.

#2435 W. LAYTON AVE.

#2427 W. LAYTON AVE.

BM: HYD SEC OF S 26TH ST & W LAYTON AV (NW BOLT) ELEV = 138.07

SOUTH 26TH STREET

SOUTH 25TH STREET

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

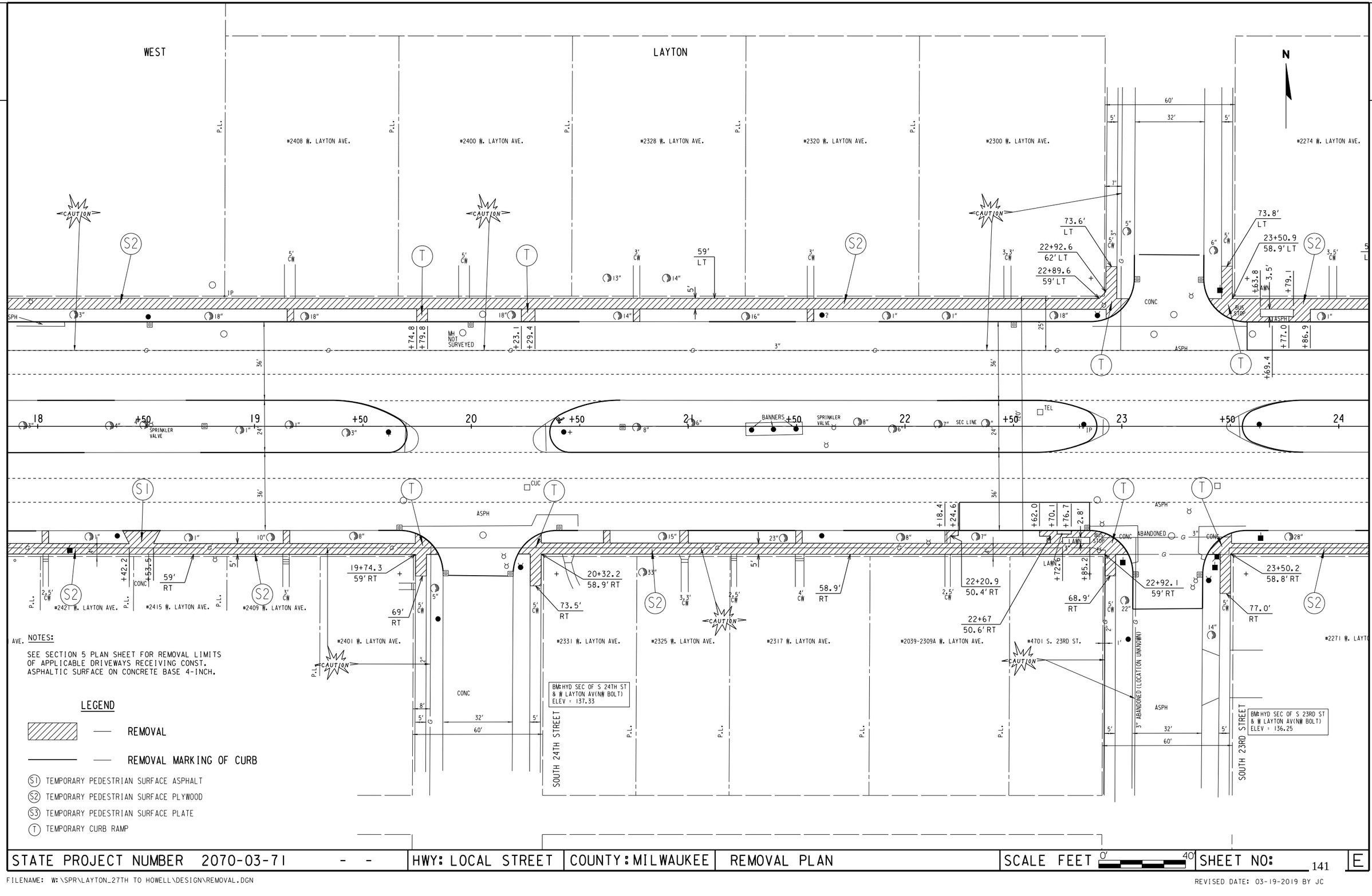
(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 140 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC



NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

- REMOVAL
- REMOVAL MARKING OF CURB
- (S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
- (S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
- (S3) TEMPORARY PEDESTRIAN SURFACE PLATE
- (T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 141	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

4 W. LAYTON AVE. | #2262 W. LAYTON AVE. | #2254 W. LAYTON AVE. | #2220 W. LAYTON AVE.

P.L.

BM: HYD N/S OF W LAYTON AV @ S 22ND PL (STA +/- 25+98, 52 LT) ELEV = 138.19

CAUTION

S1 S2 T

3.5' CW | 59' LT | 4' CW | PLANTERS | RR TIE | BUSHES | ASPH. | CONC RAMP | LANNON STONE | LIGHTS | 5' CW | IRON HAND RAIL | BUSH | BUS STOP

LAWN

+56.3 +67.6 +111.9 +137.1 +163.4 +169.8 +227.6 +233.8 +280.1 +287.4 +291.5 +296.5 +297.4 +2.4

24 +50 25 +50 26 +50 27 +50 28 +50 29 +50 30

PINE | SPRINKLER VALVES | BANNERS | HARP LIGHT | SEC LINE | SPRINKLER VALVE | TEL

36' | 24' | 120'

ASPH | CONC | CUC | LAWN | +175.3 | +187.8

26+7.5 58.9' RT | 58.9' RT | 26+10.4 61.9' RT | 89.4' RT | 59' RT | 68.5' RT | 26+68 59.1' RT | 29+24.8 58.8' RT | 29+27.9 61.8' RT | 70.8' RT | 73.8' RT

2.8' CW | 4' CW | PLANTER

#2271 W. LAYTON AVE. | #2255 W. LAYTON AVE. | #2243 W. LAYTON AVE. | #2227 W. LAYTON AVE. | #2221 W. LAYTON AVE. | #2215 W. LAYTON AVE. | #2209-2209A W. LAYTON AVE. | #4701 S. 22ND ST. | #2131-2131A W.

SOUTH 22ND PLACE | SOUTH 22ND STREET

8' 5' 32' 60' 5'

19'

BM: HYD SEC OF S 22ND ST & W LAYTON AV (NW BOLT) ELEV = 141.56

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

- REMOVAL
- REMOVAL MARKING OF CURB
- (S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
- (S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
- (S3) TEMPORARY PEDESTRIAN SURFACE PLATE
- (T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 142	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

#2126 W. LAYTON AVE. #2022 W. LAYTON AVE. #2008 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV @ S 21 ST (STA +/- 35+54, 51.5 LT) ELEV = 136.46

BUS STOP +97.4 +2.4 +91.5 +96.5 +97.3 +18.6 +61.2 +84.3 +1.2 +7.2 +7.9 +31.9 +53.1 +80.7 +3.3 +8.3 +23.4 +31.3 +41.0

59' LT 59' LT 59' LT 112.7' LT 35+81.3 58.9' LT

SIGN POST ELEC BOX SIGN MAIL DOT

ASPH. ASPH.

SPRINKLER VALVE BANNERS SEC LINE SIGN SPRINKLER VALVE PLANTER SPRINKLER VALVES STREET LIGHTING

30 31 32 33 34 35 36

CAUTION CAUTION CAUTION CAUTION CAUTION

CUC CUC CUC

CONC

5' BUSH DECOR. STONE 10" RET. WALL 10" PINE 16" PINE IRON HAND RAIL

LUMBER STD BM

29+89 59' RT 29+86 62.2' RT 73.8' RT #2131-2131A W. LAYTON AVE.

STONE #2125-2125A W. LAYTON AVE. #2117-2119 W. LAYTON AVE. 58.9' RT #2113 W. LAYTON AVE. #2109-2109A W. LAYTON AVE.

32+46.3 58.8' RT 74.1' RT #2103-2103A W. LAYTON AVE. 74' RT 33+4.3 58.6' RT #2057 W. LAYTON AVE. #2021-2023 W. LAYTON AVE. 58.8' RT #2015-2017 W. LAYTON AVE. #2009-2011 W. LAYTON AVE. #2003-2005 W. LAYTON AVE. 35+77.3 59' RT 35+81.4 63.6' RT 76.3' RT

SOUTH 21ST STREET SOUTH 20TH STREET

62.4' RT ASPH

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STD BM: 37' W AND 67' S ¼ SEC LINE 7.7' E AND 7' S OF SW COR OF STREET(IN CONC BOX 5.3' W OF W EDGE OF CONC WALK & 8.2' S OF S EDGE OF CONC WALK) ELEV = 131.728

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 143	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

#2008 W. LAYTON AVE.

#4668 S. 20TH ST.

#1908 W. LAYTON AVE.

#1826 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV
(STA +/- 40+80, 51 LT)
ELEV = 137.73

112.7' LT

104.3' LT

75' LT

58.9' LT

35+81.3
58.9' LT

36+99.4
58.8' LT

35+77.3
59' RT

35+81.4
63.6' RT

76.9' RT

37+0.9
51.4' RT

37+2.5
54.2' RT

37+3.8
58.7' RT

36+99.4
63.6' RT

62.4' RT

73.4' RT

59' RT

CAUTION

S1 S2 S3 T

ASPH. ASPH CONC

DOT FO G CUC P.L.

SIGN POST MAIL ELEC BOX

STREET LIGHTING SPRINKLER VALVES SPRINKLER PIPE

MONUMENT SEC LINE

LUMBER BUS SHELTER BUS STOP

CHAIN LINK FENCE

2009-2011 W. LAYTON AVE.

#2003-2005 W. LAYTON AVE.

SOUTH 20TH STREET

STD BM: 37' W AND 67' S ¼ SEC
LINE 7.7' E AND 7' S OF
SW COR OF STREET(IN CONC BOX 5.3' W
OF W EDGE OF CONC WALK &
8.2' S OF S EDGE OF CONC WALK)
ELEV = 131.728

STD BM: 37' W AND 67' S ¼ SEC
LINE 7.7' E AND 7' S OF
SW COR OF STREET(IN CONC BOX 5.3' W
OF W EDGE OF CONC WALK &
8.2' S OF S EDGE OF CONC WALK)
ELEV = 131.728

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
(S3) TEMPORARY PEDESTRIAN SURFACE PLATE
(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 144	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2018 BY JC

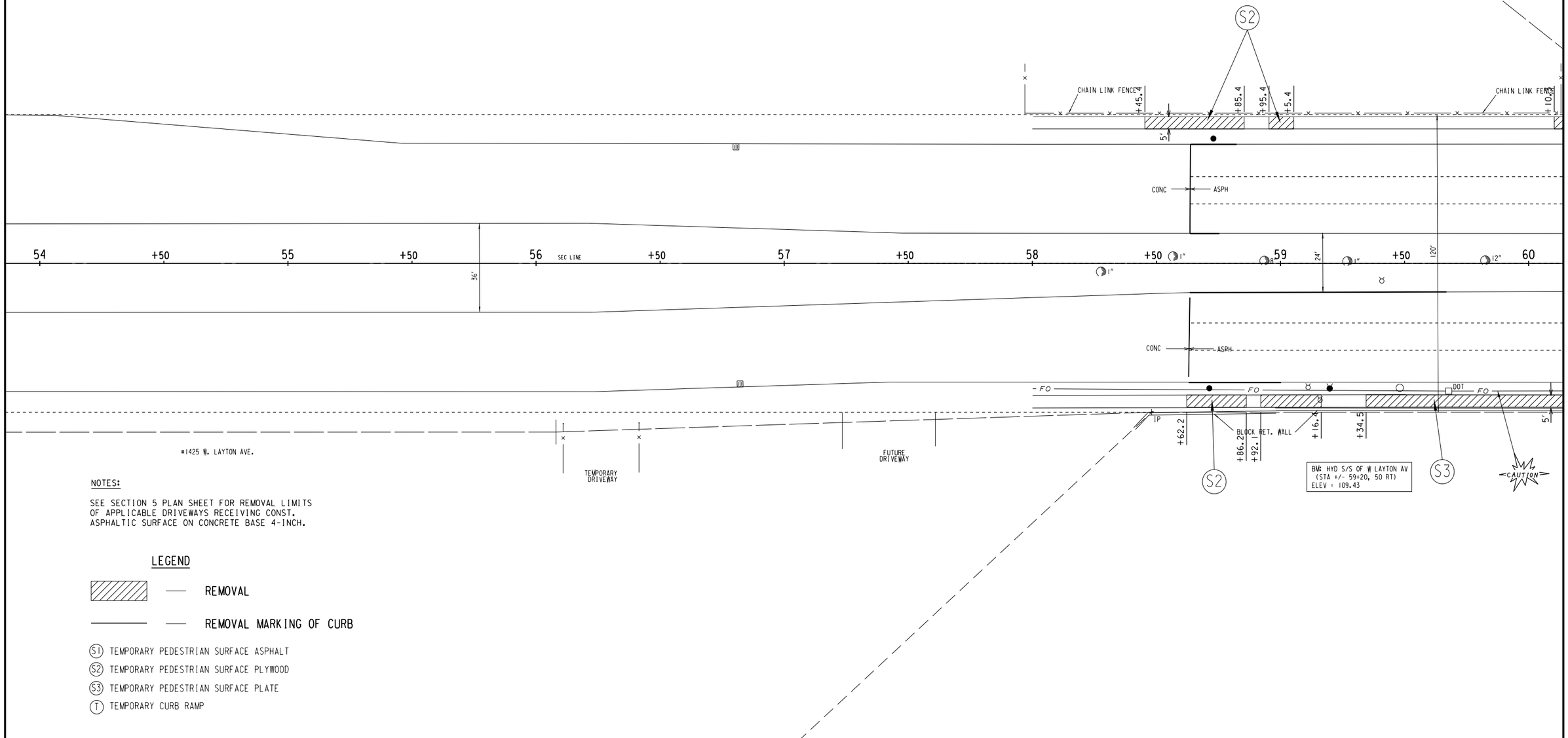
WEST

LAYTON

AVENUE

N

2



NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 145	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

#1300 W. LAYTON AVE. #1232 W. LAYTON AVE. #1218 W. LAYTON AVE. #1216 W. LAYTON AVE. #1204-1208 W.

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

143.4' LT
135.4' LT
118' LT
120.4' LT
115.4' LT
110.3' LT
96.2' LT
61+79 59.1' LT
59.1' LT
71.6' LT
68.2' LT 59' LT
62+66.7 59.1' LT
66+16.8 63.7' LT
66+1.8 62.5' LT
65+72.9 60.7' LT
2048' R

PHONE BUS STOP CHAIN LINK FENCE BUSHES CURB CONC SIGN BASE BRUSH CUC STONE BUS SHELTER LAWN MWSD MAILBOX ASPH. HAND RAIL

+10.2 +49.9 +97.0 +27.8 +66.6 +79.1 +66.7 +78.9 +17.7 +45.0 +4.9 +11.6 +32.2 +41.1 +57.4 +22.1 +68.2

SEC LINE MONUMENT TEL SPRINKLER VALVE DOT FO

62+76.2 53.4' RT
62+76.2 51.5' RT
+78.5 +67.0 +83.0 +14.7 +42.6 +82.8

#4707-4709 S. 13TH ST. #1233 W. LAYTON AVE. #1215 W. LAYTON AVE. #1209 W. LAYTON AVE.

58.5' RT
61+78.8 58.5' RT
93.3' RT
BLOCK RET. WALL
62+66.9 58.8' RT
62+60.7 68.8' RT
62+60.8 73.3' RT
SOUTH 13TH STREET
CONC. BUSHES DRAIN
+99.4 +99.9 +65.7 +71.3
64+33.6 58.4' RT
64+88.2 56.6' RT
64+88.1 51.4' RT
66+1.2 44.2' RT

BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91

CAUTION

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
(S3) TEMPORARY PEDESTRIAN SURFACE PLATE
(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 146 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

66+80 64.6'LT
66+71.2 68.6'LT
66+71.7 63.7'LT
66+16.8 63.7'LT
66+50.9 66.6'LT
66+31.5 64.9'LT
67+66.7 77.9'LT
67+60.2 77.3'LT
67+40.9 75.5'LT
67+41.4 70.8'LT
67+5.1 67.1'LT
68+31 81.2'LT
68+31 76.6'LT
67+79.6 79.1'LT
67+80 74.3'LT
68+65.1 80.9'LT
68+65 76'LT
68+78.9 75.6'LT
69+81.5 75.9'LT
70+00 80.7'LT
70+00 76.1'LT
71+7.2 72.3'LT
71+1.9 77.9'LT
71+1.4 72.7'LT
71+36.9 69.8'LT
71+52.9 73.1'LT
71+52.4 68.2'LT

2043'R
2209'R

#1204-1208 W. LAYTON AVE.
#1202 W. LAYTON AVE.
SOO LINE RAILROAD
BM: HYD N/S OF W LAYTON AV (STA +/- 70+80, 71 LT) ELEV = 82.87
P.L.
HAND RAIL
MAILBOX
CAUTION
BRIDGE
ASPH.
TEL
DOT
FO
SEC LINE

66 +50 67 +50 68 +50 69 +50 70 +50 71 +50 72

+75.4 +20.6 +94.7 +74.0

68+24.5 22.2'RT
68+24.9 27.2'RT
68+94.6 16.6'RT
68+98.2 21.5'RT
68+98.3 25.3'RT
69+73.8 25.5'RT
69+74 16.4'RT
69+73.8 21.3'RT
70+73.7 24.7'RT
72+9.6 38.5'RT
67+96.5 29.4'RT
67+59.6 32.3'RT
67+19 30.7'RT
66+1.2 44.2'RT
67+41.2 28.9'RT
67+41.6 33.7'RT
25.4' RT
70+73.8 29.7'RT
72+9.1 43.3'RT

1979'R
2070'R

#1011 W. LAYTON AVE.
#1201 W. LAYTON AVE.
#1101-1113 W. LAYTON AVE.
WEPCO EASEMENT
SOO LINE RAILROAD
BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91
SIGN
BLOCK WALL
435' FM C/L
403' FM L/L

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
(S3) TEMPORARY PEDESTRIAN SURFACE PLATE
(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 147	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 11-30-2019 BY AA

WEST LAYTON AVENUE

N

2061'R

72+87
56.3'LT

72+87.3
61'LT

CAUTION

#938-1020 W. LAYTON AVE.

#900 W. LAY

#908 W. LAYTON AVE.

30' INGRESS/EGRESS EASEMENT

P.L.

BM: HYD N/S OF W LAYTON AV
(STA +/- 75+31, 50' LT)
ELEV = 92.77

CONC. ASPH.

5' CW

+15.5 +25.4 +52.2 +90.0

+88.4 +93.4 +2.0 +7.0 +22.7 +54.9 +60.2 +66.6 +36.3 +81.3 +91.0 +11.0 +40.1 +76.5

72 +50 73 +50 74 SEC LINE +50 75 +50 76 +50 77 +50 78

FO

DOT

ASPH.

MAILBOX

TV

+64.0 +82.1 +96.3 +69.6

72+42.2
41.9'RT

74+5.8
57.9'RT

73+31.5
49.8'RT

73+18.6
48.7'RT

73+6
47.6'RT

66.5'
RT

74+66
58.8'RT

76.8'
RT

#1007 W. LAYTON AVE.

#909 W. LAYTON AVE.

SOUTH 10TH STREET

+44.8 +70.7 +74.2 +21.0 +5.8 +31.1 +70.6 +91.7

CONC.

1-1/4"

665' FM ROW

UTILITY EASEMENT

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 148	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

8' WE ELECTRIC EASEMENT

8' WE ELECTRIC EASEMENT

P.L.

P.L.

P.L.

#900 W. LAYTON AVE.

#830 W. LAYTON AVE.

#800-800A W. LAYTON AVE.

N

BM: HYD N/S OF W LAYTON AV
(STA +/- 81+78, 51' LT)
ELEV = 92.92

CAUTION

80+9
54' LT

4' CW

81+63
53.9' LT

4' CW

S1 S2

FO

16" 14" 12" 10" 6" 9" 6" 1" 10"

+82.6 +11.5 +19.9 +92.5 +63.1 +83.4 +27.2

36' 46' 36'

78 +50 79 +50 80 +50 81 +50 82 +50 83 +50 84

24' 14' 26" 24'

DOT

SEC LINE

AMER

WALK SIGNAL BUTTON

DOT

CUC

FO

3/4" 36' 3" 36'

+46.2 +32.0 +45.9 +83.5 +19.8 +46.0

1" 1" 13" 20" 6' 16" 16" 2" 1"

BUS STOP

+91.7 +41.0 +70.0 +95.3 +70.6 +50.5 +80.4

CONC. 637' FM ROW ASPH BLOCK RET. WALL GRAVEL CONC. WALL

665' FM ROW

#835 W. LAYTON AVE.

ASPH SIGN CONC. ASPH

SLOTTED DRAIN

58.7' RT

SLOTTED DRAIN

167' FM ROW

MAILBOX CONC.

81' FM C

4.4' CW

WOOD PLAN PLANTER

84+43.9
59' RT

BM: HYD S/S OF W LAYTON AV
(STA +/- 78+60, 51 RT)
ELEV = 95.25

#841-881 W. LAYTON AVE.

#801-817 W. LAYTON AVE.

#789 W. LAYTON AVE.

#709 W. LAYTON AVE.
#711 W. LAYTON AVE.

#703 W.

BM: HYD S & W LAYTO ELEV = 93

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 149 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

#700 W. LAYTON AVE.

#580 W. LAYTON AVE.

#703 W. LAYTON AVE.

#639 W. LAYTON AVE.

#575 W. LAYTON AVE.

BM: HYD NW COR OF S 6TH ST & W LAYTON AV (NW BOLT) ELEV = 91.02

BM: HYD SW COR OF S 7TH ST & W LAYTON AV (NW BOLT) ELEV = 93.30

SOUTH 7TH STREET

SOUTH 6TH STREET

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 150 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

#552 W. LAYTON AVE. #530 W. LAYTON AVE. #512 W. LAYTON AVE.

SOUTH 5TH STREET

#517 W. LAYTON AVE.

#545 W. LAYTON AVE.

#501 W. LAYTON

HYD: S/S ON W LAYTON AV
(+/- STA 92+82, 51 RT)
ELEV = 88.94

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 151	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

N

P.L.

#300 W. LAYTON AVE.

HYD: N/S ON W LAYTON AV
(+/- STA 99+75, 50 LT)
ELEV = 87.87

59' LT

59' RT

CAUTION

S1 S2 S3

+82.1 +85.9 +39.1 +53.8 +84.9 +99.9 +15.2 +39.8 +20.1 +35.5 +60.5 +65.7 +95.5 +31.7 +42.0 +46.9 +62.0 +58.7 +69.7 +82.7 +37.5

SIGN ASPH. BUSHES LAWN CURB BUSH

7" 6" 12" 4" 10" 14" 6" 5' 6' 10" 12" 8"

WEP FO TEL SPRINKLER VALVE SEC LINE

96 +50 97 +50 98 +50 99 +50 100 +50 101 +50 02

LANNON STONE 4" 4" 4" DOT 4" 4" 4" 4" 4" STONE 3" DOT 5" 14" DOT

CUC WMSD

36' 24' 46'

+30.7 +92.9 +44.0 +6.5 +98.1 +30.5

1" 8" 11" 10" 6" 4"

ASPH. BUSH PLANTER T.O. CULVERT B.O. CULVERT IP SIGN ASPH. CURB SIGN POST

#501 W. LAYTON AVE. #401 W. LAYTON AVE. #307 W. LAYTON AVE. #233-235

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT

(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD

(S3) TEMPORARY PEDESTRIAN SURFACE PLATE

(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 152	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST AVENUE LAYTON

N

#230 W. LAYTON AVE.

DRAINAGE ROW

#220 ADJ W. LAYTON AVE.

#220 W. LAYTON AVE.

#206 W. LAYTON AVE.

#200-204 W. LAYTON AVE.

#160 W. LAYTON AVE.

HYD: N/S ON W LAYTON AV
(+/- STA 102+82, 50 LT)
ELEV = 88.64

CAUTION

CURB · LAWN · BUSHES · GRAVEL · ASPH. · BOLLARDS · WOOD CHIPS · GUARD RAIL · BRIDGE WALL · RR TIE · SIGN ON POST · BUSH · 59' LT · SIGN POSTS · BUSH BRICKS · LUMBER · CONC. · CONC BASE

BUS STOP

102 103 104 105 106 107 108

LANNON STONE · STONE · DOT · CUC · SEC LINE · SPRINKLER VALVES · FO · WEP · TEL · WAT

ASPH. · GUARDRAIL · SIGN · BRIDGE WALL · WOOD CHIPS · BUSHES · ASPH. DWY. · PATIO BLOCKS · 59' RT · 4' CW · STAMPED CONC · BRICK SIGN WALL · CONC CURB · LAWN · 5' CW

#233-235 W. LAYTON AVE.

#203 ADJ W. LAYTON AVE.

DRAINAGE ROW

#191 W. LAYTON AVE.

HYD: S/S ON W LAYTON AV
(+/- STA 106+61, 50 RT)
ELEV = 88.50

#4747 S. HOWELL AVE.

(EASEMENT)

#175 W. LAYTON AVE.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
(S3) TEMPORARY PEDESTRIAN SURFACE PLATE
(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 153 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

WEST LAYTON AVENUE

B.M. E BOLT HYD NW CORNER
W. LAYTON AV. & S. HOWELL AV.
STA. 67+05 - 60'LT.
ELEV. 89.66

B.M. HYD NE COR S IST ST
W LAYTON AV (NW BOLT)
ELEV = 88.28

#4669 S. IST ST.
#4601 S. IST ST.
#130 W. LAYTON AVE.
#108 W. LAYTON AVE.
#131 W. LAYTON AVE.
#151 W. LAYTON AVE.
#4709 S. HOWELL AVE.

SOUTH IST STREET
60'
34' CONC.
5'
5'
2"
9"
ASPH. DWY.
DIRT
P.L.
DRAINAGE EASEMENT
SEWER EASEMENT

S1 S2
59' LT
59' RT
+66.3
+17.0
+31.8
+25.0
+61.4
+91.0
+30.0
+57.0
+93.8
+8.0
+41.9
+50.8
+88.5
+93.5
5' CW
6'
12"
6"
8"
5"
9"
10"
WEP
CONC
ASPH
36'
46'
120'
14'
+50
108
109
110
111
112
113
114
LANNON STONE
SPRINKLER VALVES
WOOD CHIP
SEC LINE
FO
LAWN
PLANTER
STONE WALL
DOT
WATER
WMSD
TES
CUC
2" ABN D
MULCH
BUSH
BUSHES
SHRUBS
SIGN
SIGN POSTS
CONC LIGHT BASE
CULVERT
BRIDGE WALL
GUARD RAIL
CONC. BASE
??
16"
CAUTION

SEE ROAD PLANS
STATE PROJECT NUMBER
2060-10-70

NOTES:

SEE SECTION 5 PLAN SHEET FOR REMOVAL LIMITS OF APPLICABLE DRIVEWAYS RECEIVING CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH.

LEGEND

REMOVAL

REMOVAL MARKING OF CURB

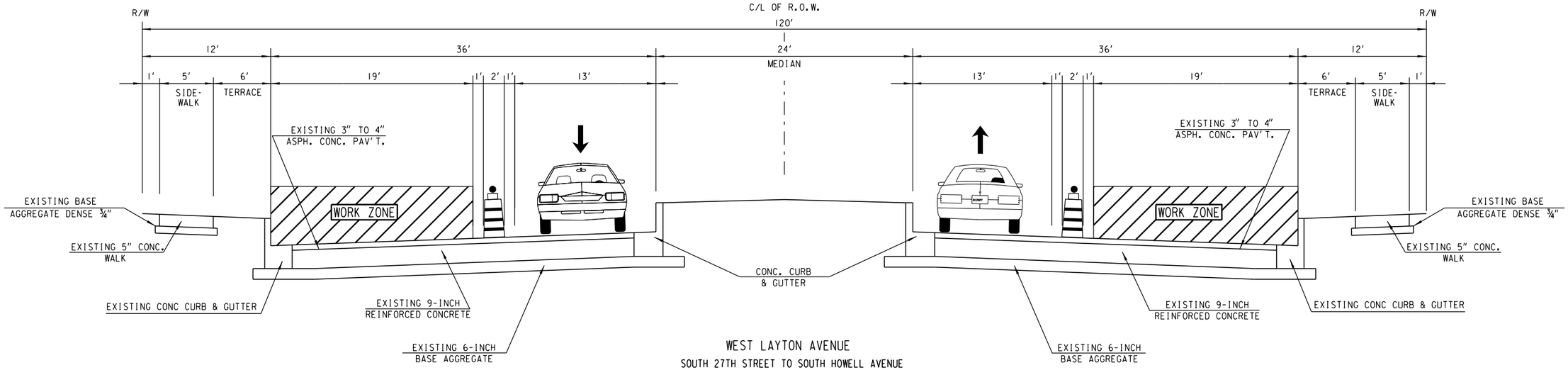
(S1) TEMPORARY PEDESTRIAN SURFACE ASPHALT
(S2) TEMPORARY PEDESTRIAN SURFACE PLYWOOD
(S3) TEMPORARY PEDESTRIAN SURFACE PLATE
(T) TEMPORARY CURB RAMP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 154	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\REMOVAL.DGN

REVISED DATE: 03-19-2019 BY JC

STAGE 1

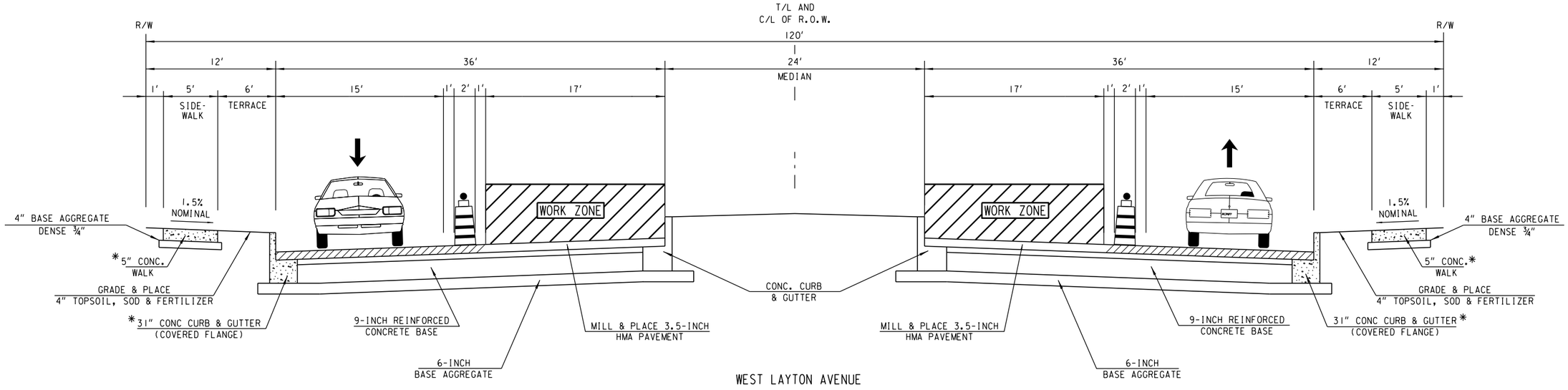


WEST LAYTON AVENUE

SOUTH 27TH STREET TO SOUTH HOWELL AVENUE

* WHERE INDICATED ON PLAN

STAGE 2



WEST LAYTON AVENUE

SOUTH 27TH STREET TO SOUTH HOWELL AVENUE

* WHERE INDICATED ON PLAN

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL TYPICAL SECTIONS	SCALE FEET	SHEET NO:

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC_TYPSEC.DGN

REVISED DATE: 03-15-2018 BY SB

2

PEDESTRIAN TRAFFIC CONTROL NOTES

GENERAL

ALL PEDESTRIAN TRAFFIC CONTROL MUST BE PLACED PRIOR TO THE START OF ANY SIDEWALK WORK. TEMPORARY BUS LOADING PLATFORMS MUST BE PLACED WHERE NOTED IN TRAFFIC CONTROL PLANS.

ANY SIDEWALK REMOVALS, TEMPORARY OR PERMANENT, MUST HAVE TEMPORARY ACCOMMODATIONS PLACED IMMEDIATELY UPON REMOVAL; AND MUST BE PLACE AT ANY AREA OF SIDEWALK REMOVALS BEFORE ANOTHER AREA OF REMOVALS MAY BEGIN.

PEDESTRIAN ACCOMMODATIONS MUST BE PROVIDED TO ALL RESIDENCES AND BUSINESSES USING EXISTING, NEWLY CONSTRUCTED OR TEMPORARY ACCOMMODATIONS DURING ALL STAGES OF CONSTRUCTION,

STAGE 1 WILL INCLUDE THE REMOVAL OF EXISTING CURB RAMPS AND THE CONSTRUCTION OF PROPOSED CURB RAMPS. PLACE TEMPORARY RAMPS IMMEDIATELY ON ALL RAMPS REMOVED, AND ONLY 1 PERMANENT RAMP CAN BE BUILT AT A TIME. SEE THE WEST LAYTON AVENUE INTERSECTION DETAIL ON THIS SHEET.

SIDEWALKS TO BE DONE ONE SIDE AT A TIME AFTER STAGE 1 IS COMPLETED. STAGE 2 CANNOT BEGIN UNTIL ALL SIDEWALKS ARE COMPLETED. PLACE TEMPORART PEDESTRIAN SURFACE IMMEDIATELY ON ALL SIDEWALK REMOVED UNTIL THE PERMANENT SIDEWALK IS IN PLACE.

NORTHSIDE OF W. LAYTON AVE. AT STATION 106
SOUTHSIDE OF W. LAYTON AVE. AT STATION 106

NORTHEAST CORNER OF W. LAYTON AVE. & S. 5TH ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 5TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 5TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 6TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 6TH ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 6TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 6TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 7TH ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 7TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 7TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 7TH ST.

NORTHWEST CORNER OF W. LAYTON AVE. AT STATION 80+35
SOUTHWEST CORNER OF W. LAYTON AVE. AT STATION 80+35

NORTHEAST CORNER OF W. LAYTON AVE. & S. 10TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 10TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 10TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 13TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 13TH ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 13TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 13TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 20TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 20TH ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 20TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 20TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 21ST ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 21ST ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 21ST ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 22ND ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 22ND ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 22ND ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 22ND ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 22ND PL.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 22ND PL.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 22ND PL.

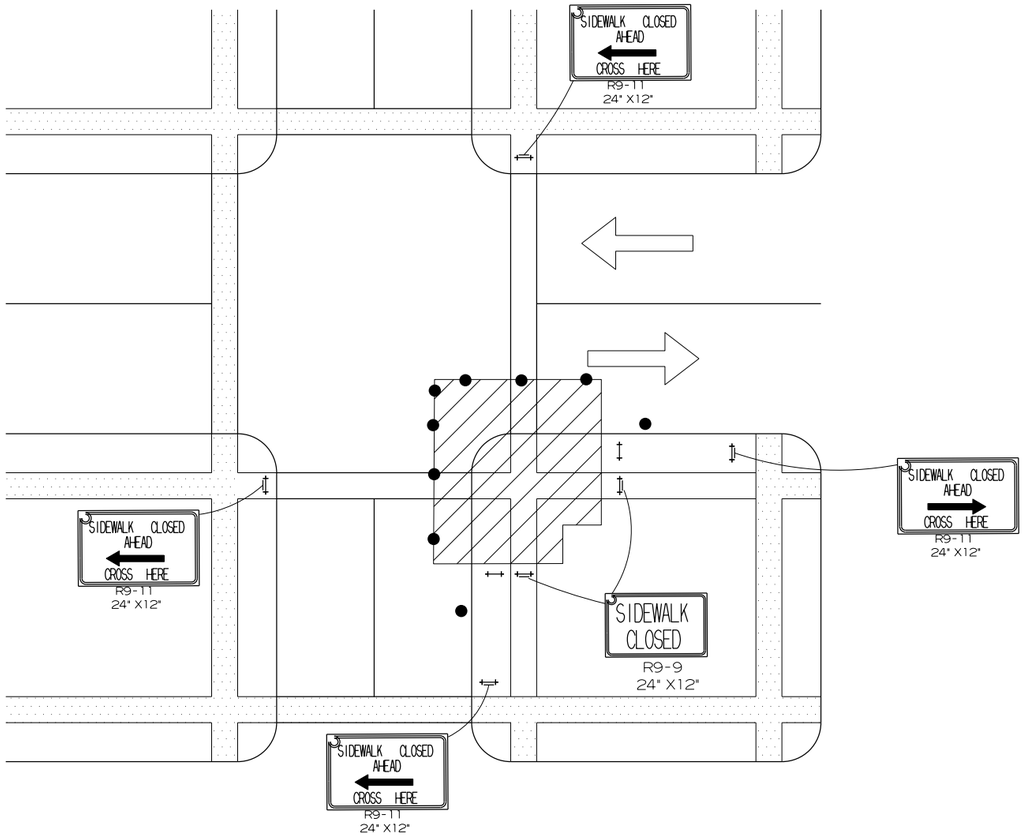
NORTHEAST CORNER OF W. LAYTON AVE. & S. 23RD ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 23RD ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 23RD ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 23RD ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 24TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 24TH ST.
NORTHWEST CORNER OF W. LAYTON AVE. & S. 24TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 24TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 25TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 25TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 25TH ST.

NORTHEAST CORNER OF W. LAYTON AVE. & S. 26TH ST.
SOUTHEAST CORNER OF W. LAYTON AVE. & S. 26TH ST.
SOUTHWEST CORNER OF W. LAYTON AVE. & S. 26TH ST.

WEST LAYTON AVE INTERSECTION DETAIL



WORK AREA

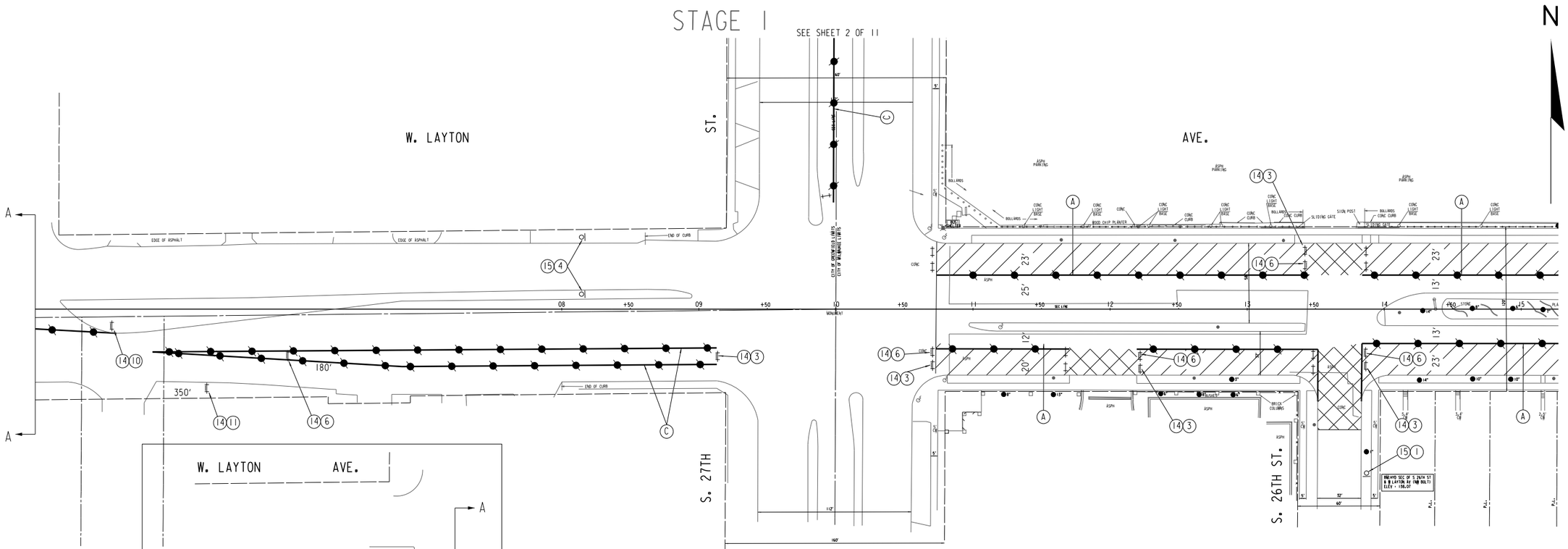
UNDER PEDESTRIAN TRAFFIC

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)

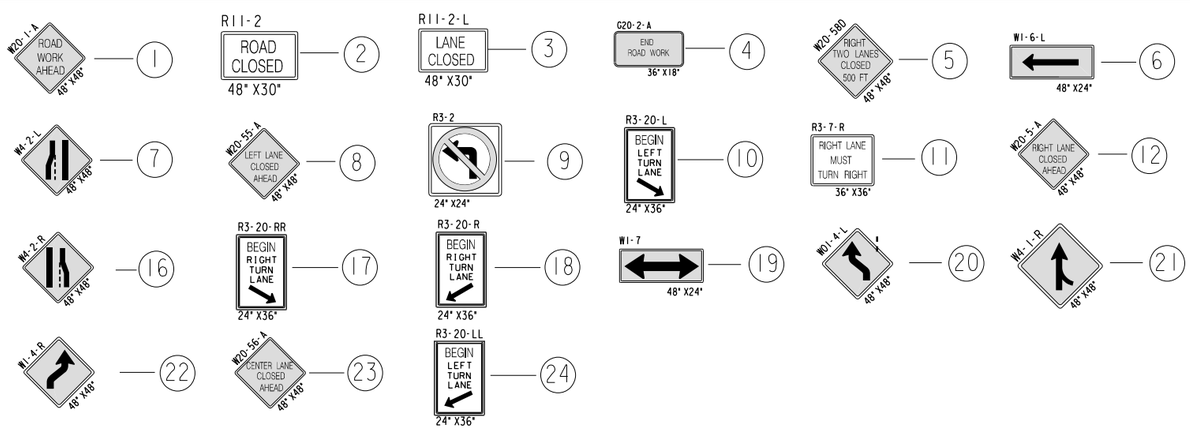
DIRECTION OF TRAFFIC

TRAFFIC CONTROL DRUM

STAGE 1



SHEET 1 OF 11



LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

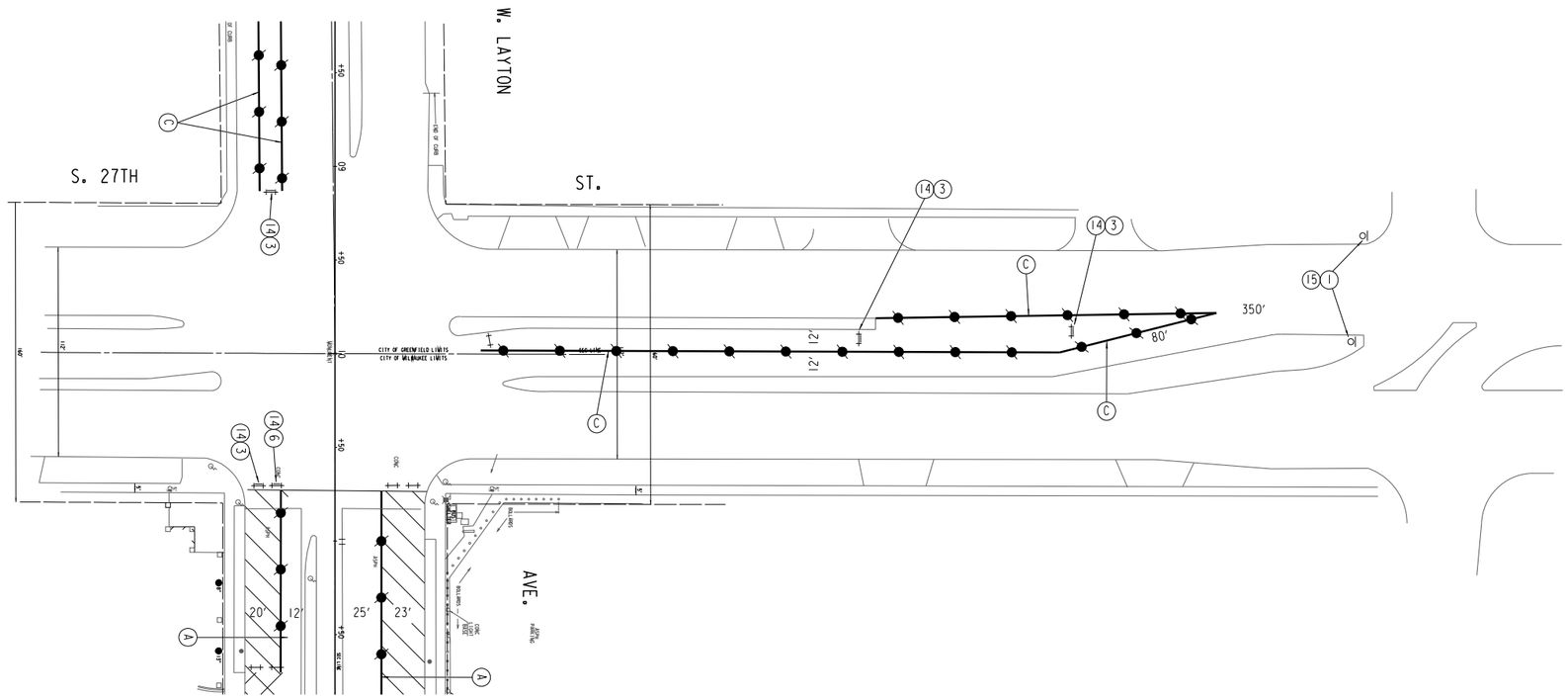
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 157	E

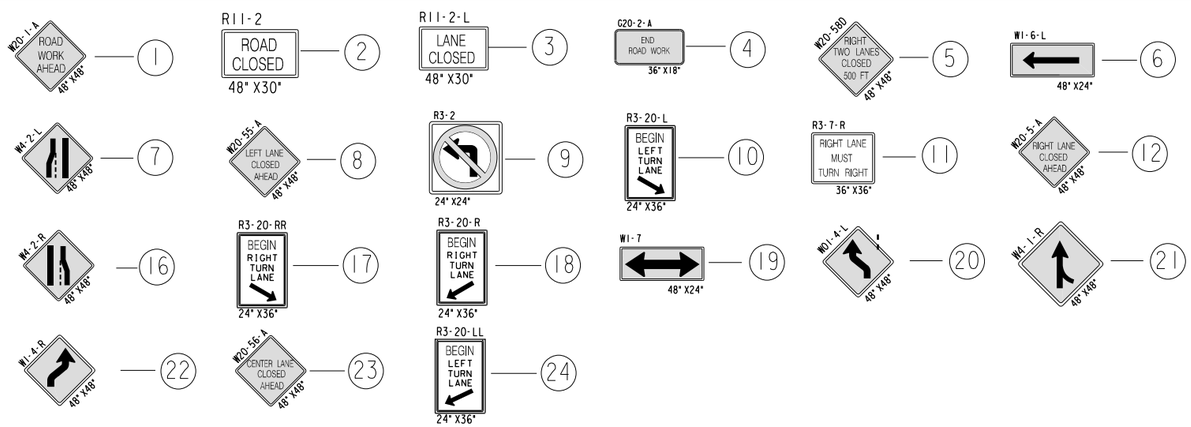
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

STAGE I



SHEET 2 OF 11



LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

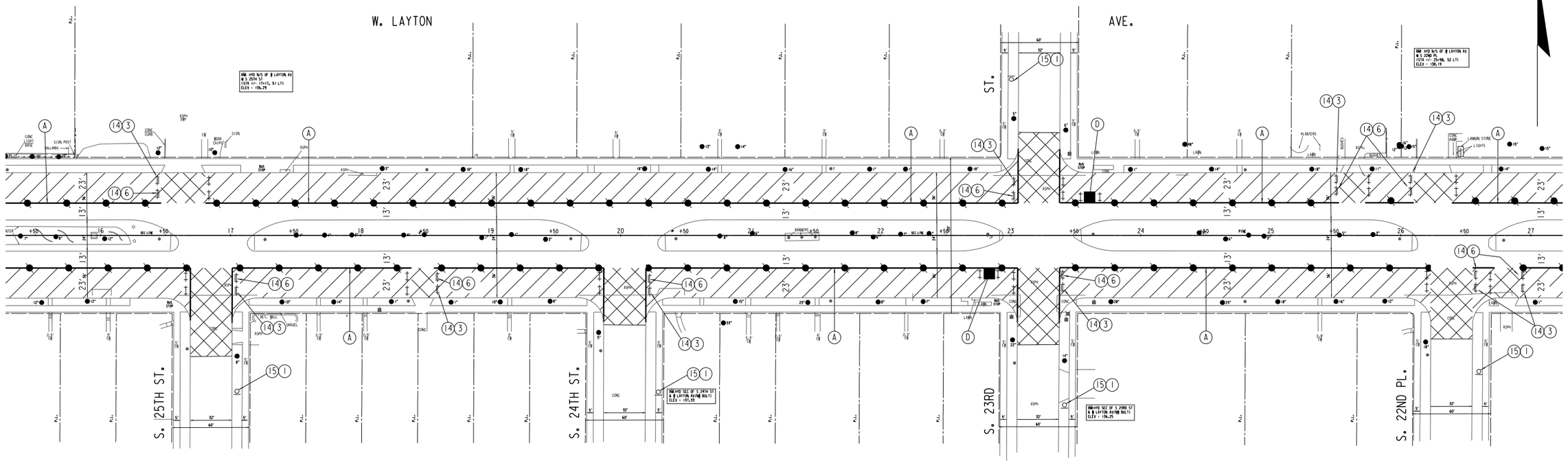
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

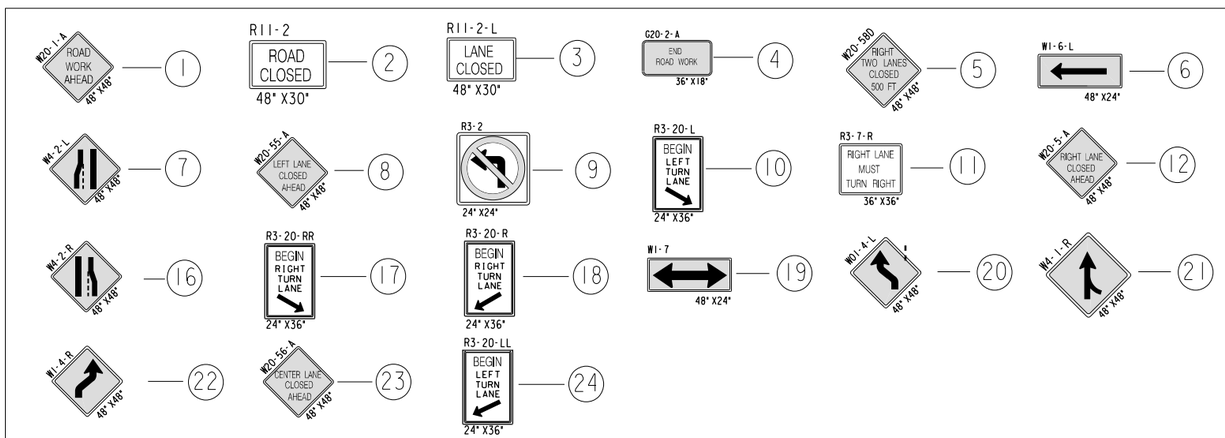
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 158 E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

STAGE 1





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 159	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

NOTE:

ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

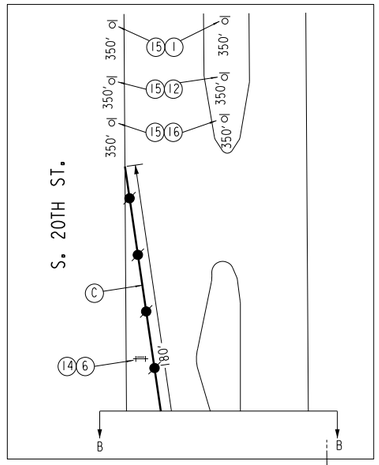
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

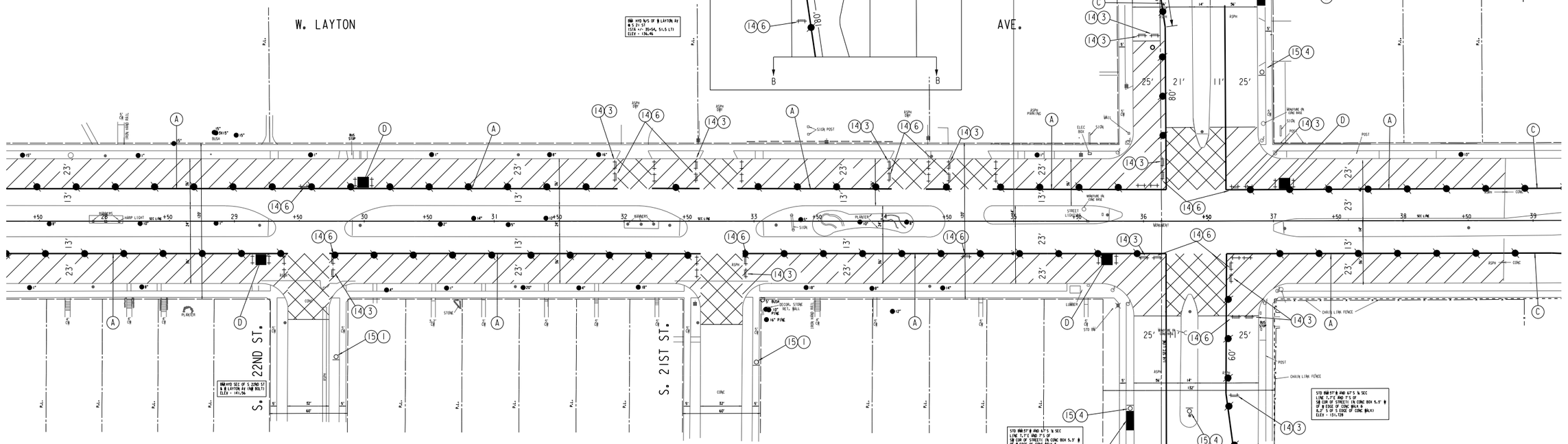
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

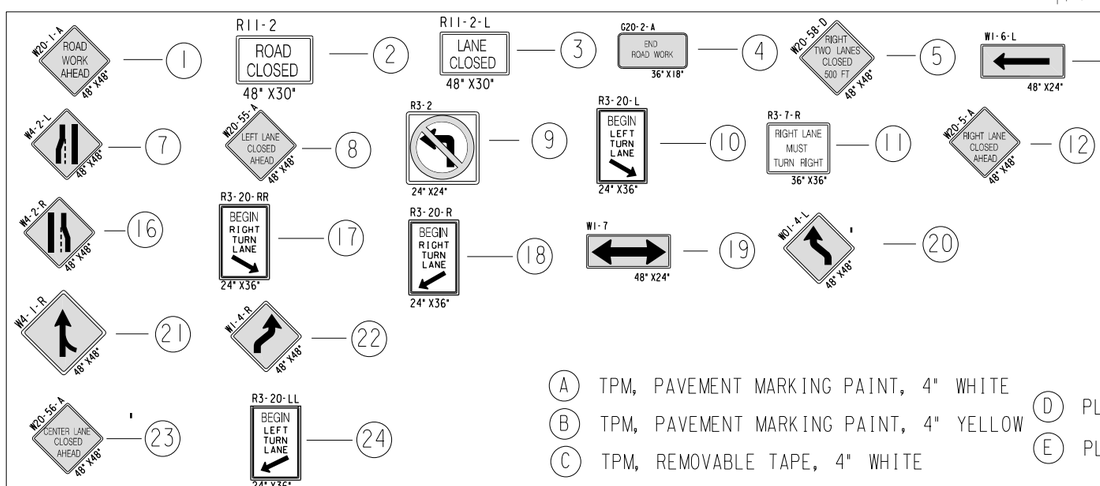
CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STAGE 1







LEGEND

DRUMS W/LIGHTS 30' SPACING	13
TYPE III BARRICADES	14
TYPE III BARRICADES W/ SIGN	14 + X
SIGNS BANDED TO POLE	15
WORK AREA	
WORK AREA UNDER TRAFFIC	
DIRECTION OF TRAFFIC	

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

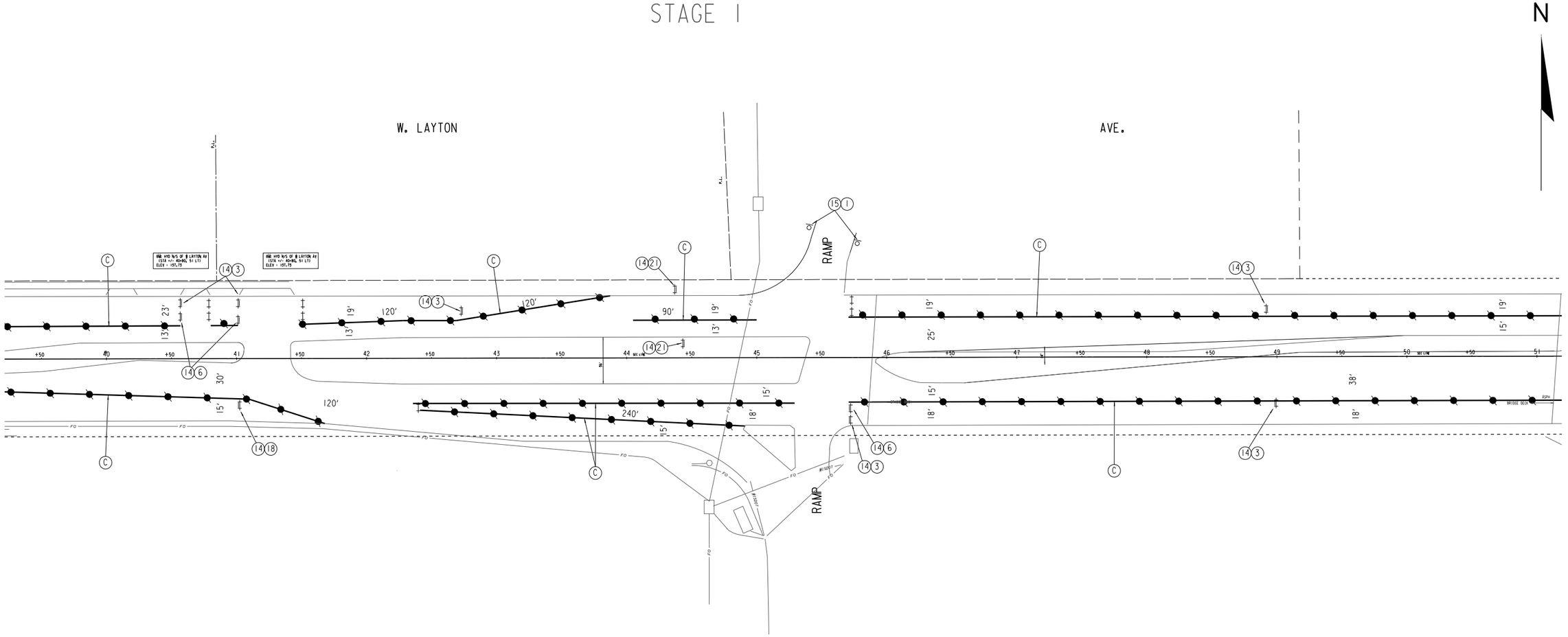
SHEET 4 OF 11

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 160	E

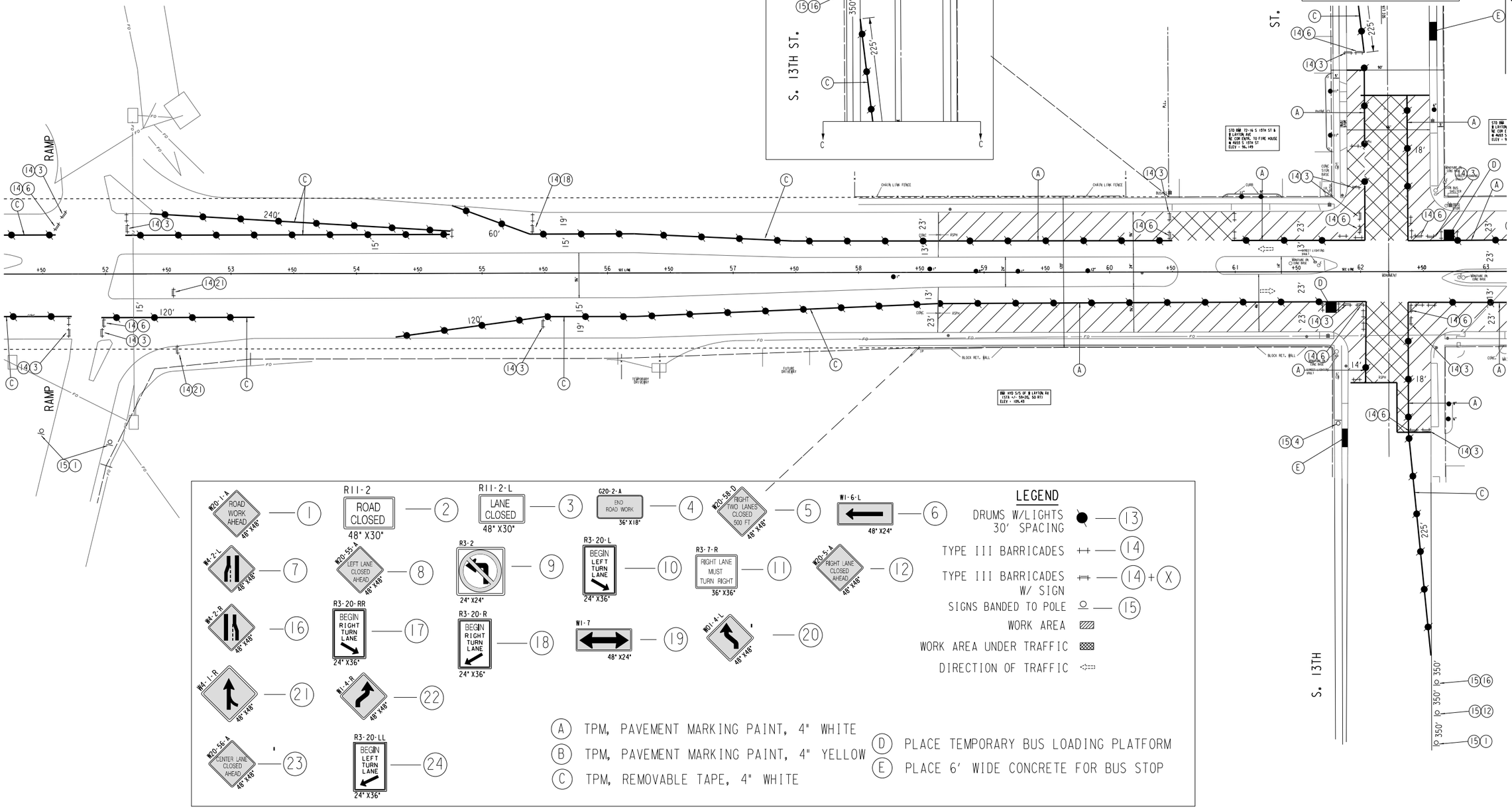
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

STAGE 1


W. LAYTON
AVE.
N
RAMP
RAMP
RAMP
W. LAYTON
AVE.
RAMP
RAMP
RAMP

STAGE 1



LEGEND

- DRUMS W/LIGHTS 30' SPACING — 13
- TYPE III BARRICADES — 14
- TYPE III BARRICADES W/ SIGN — 14 + X
- SIGNS BANDED TO POLE — 15
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

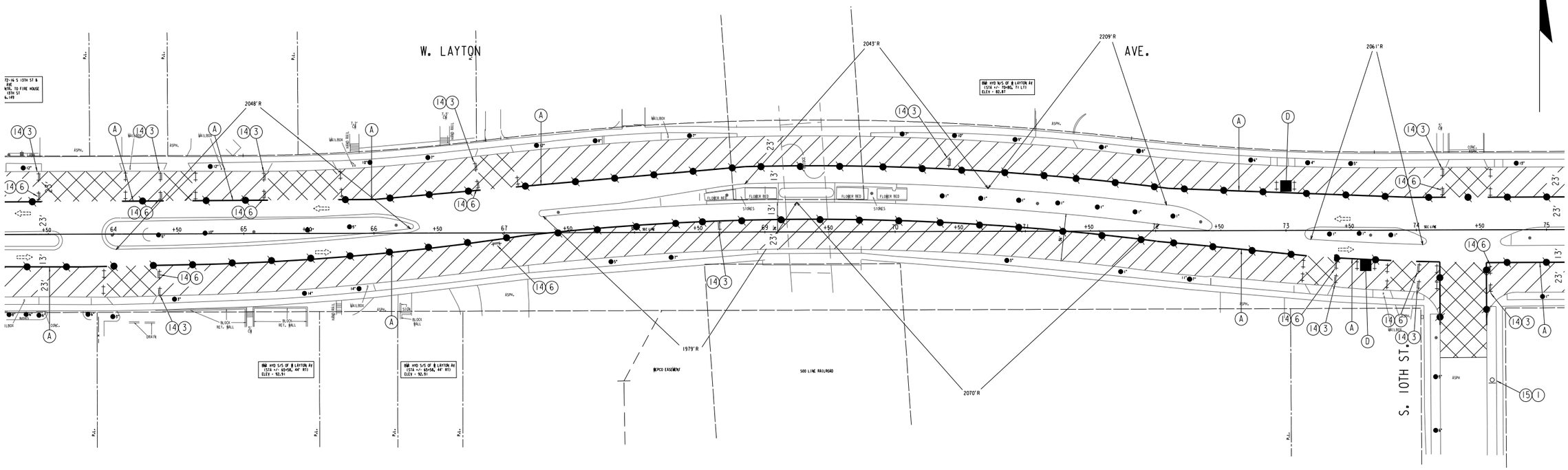
(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE
(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW
(C) TPM, REMOVABLE TAPE, 4" WHITE
(D) PLACE TEMPORARY BUS LOADING PLATFORM
(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 162	E

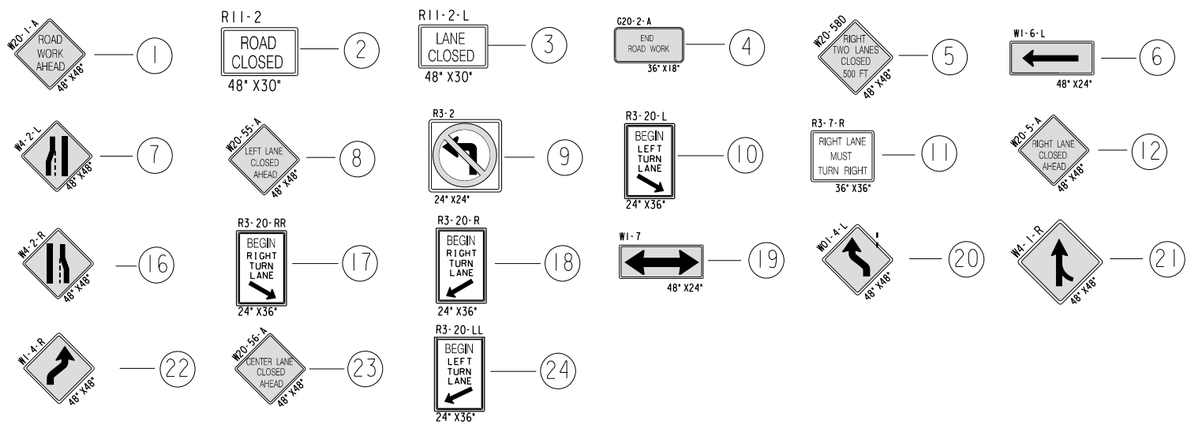
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY SB

STAGE I



SHEET 7 OF 11



LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

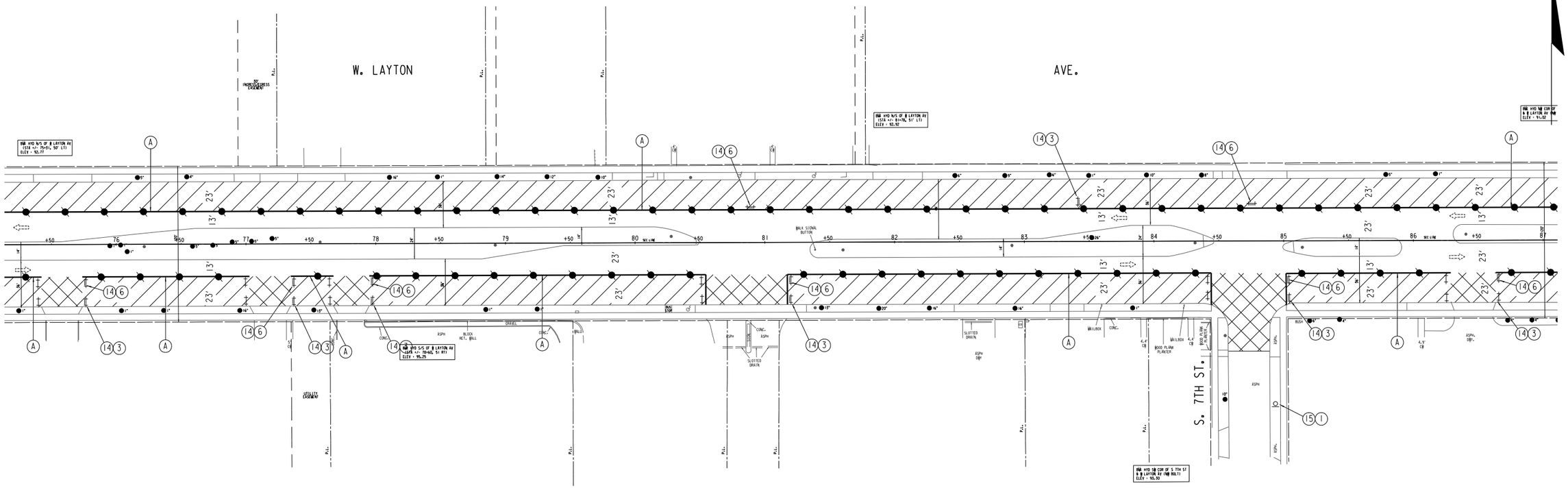
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

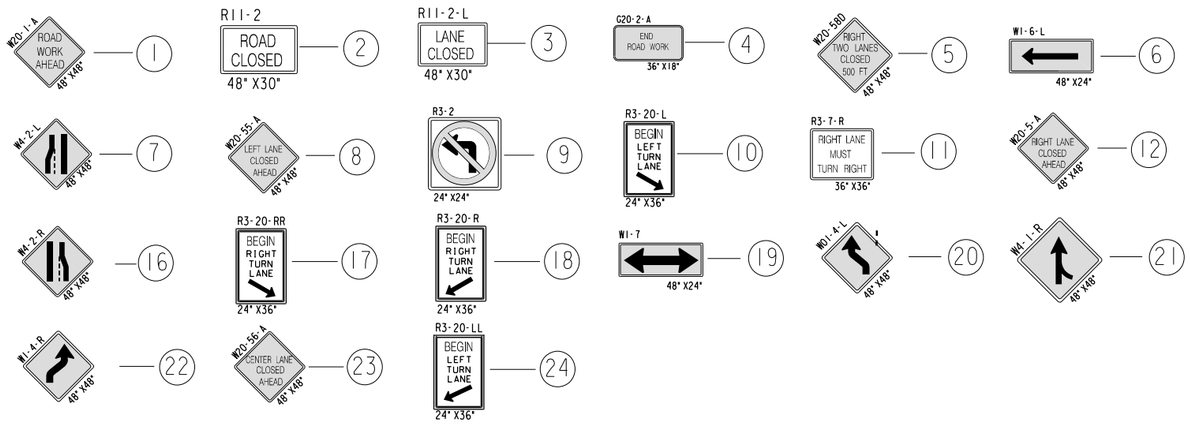
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 163	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

STAGE 1





LEGEND

DRUMS W/LIGHTS 30' SPACING — (13)

TYPE III BARRICADES — (14)

TYPE III BARRICADES W/ SIGN — (14)+(X)

SIGNS BANDED TO POLE — (15)

WORK AREA

WORK AREA UNDER TRAFFIC

DIRECTION OF TRAFFIC

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

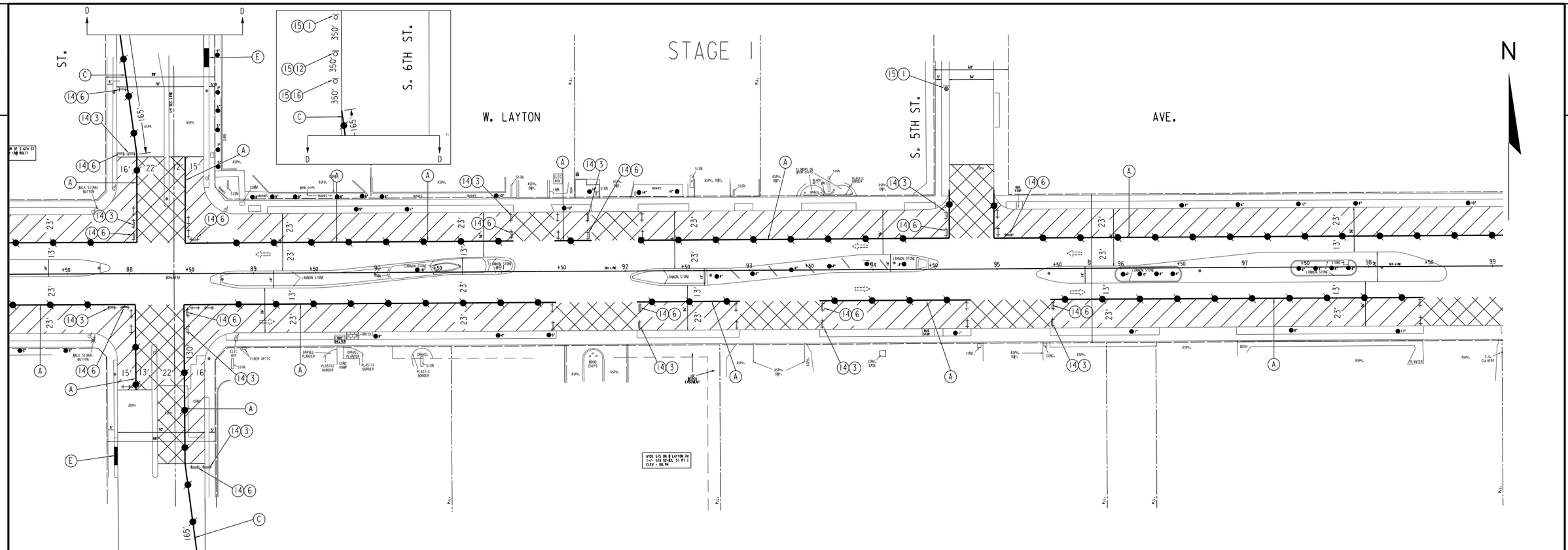
NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

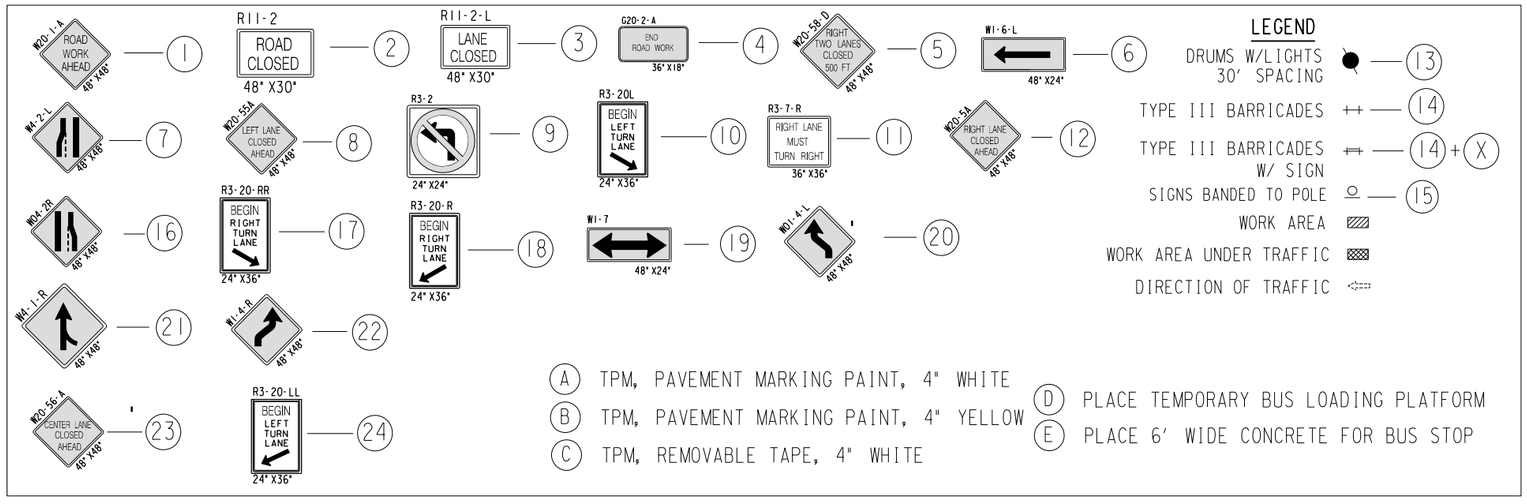
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

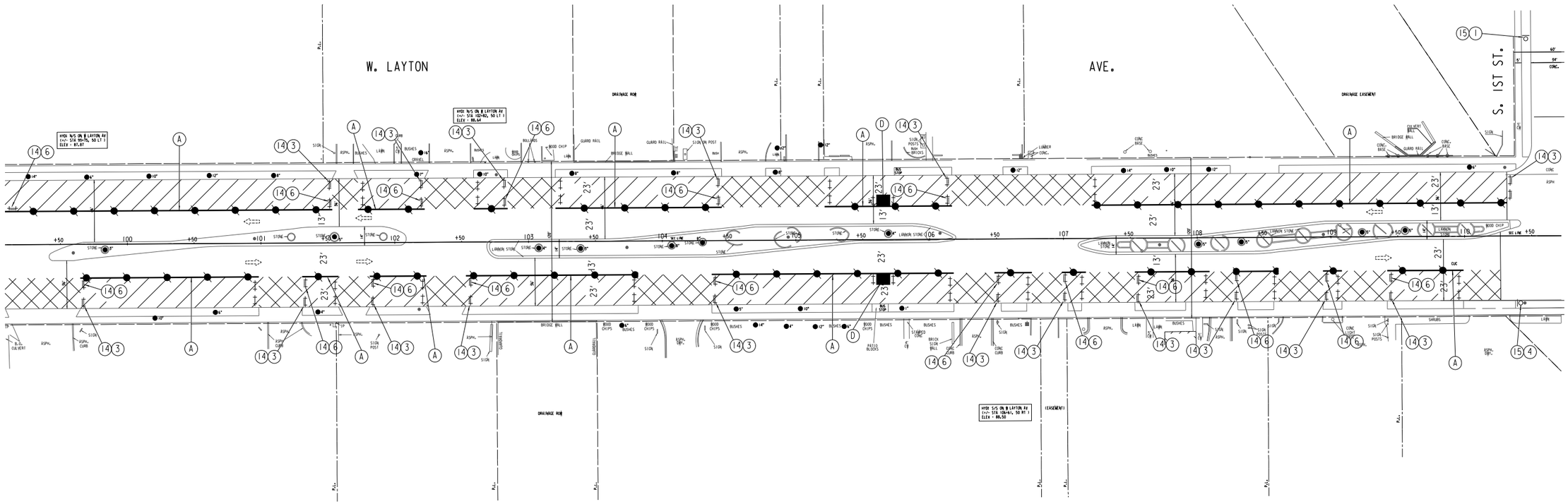
(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE
(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW
(C) TPM, REMOVABLE TAPE, 4" WHITE
(D) PLACE TEMPORARY BUS LOADING PLATFORM
(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

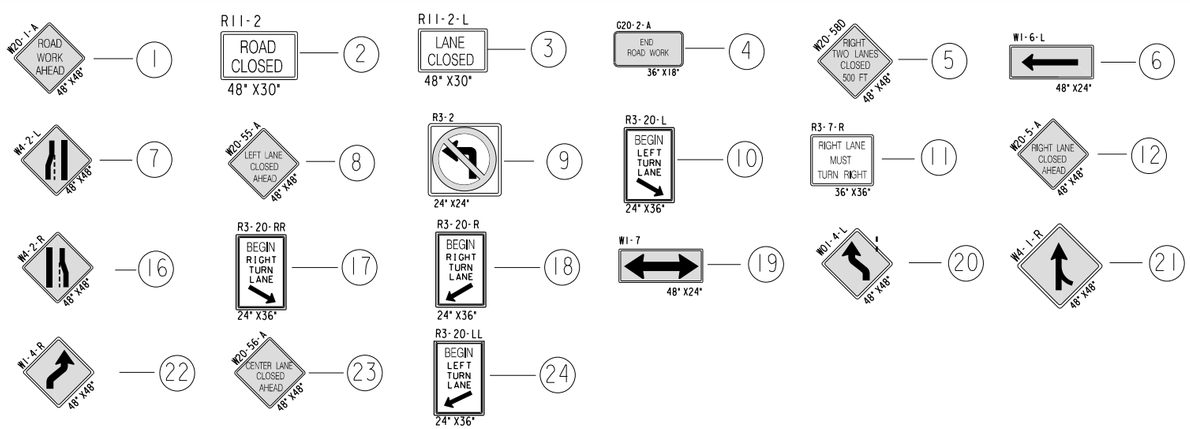
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 165	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

STAGE I





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, PAVEMENT MARKING PAINT, 4" WHITE

(B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW

(C) TPM, REMOVABLE TAPE, 4" WHITE

(D) PLACE TEMPORARY BUS LOADING PLATFORM

(E) PLACE 6' WIDE CONCRETE FOR BUS STOP

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

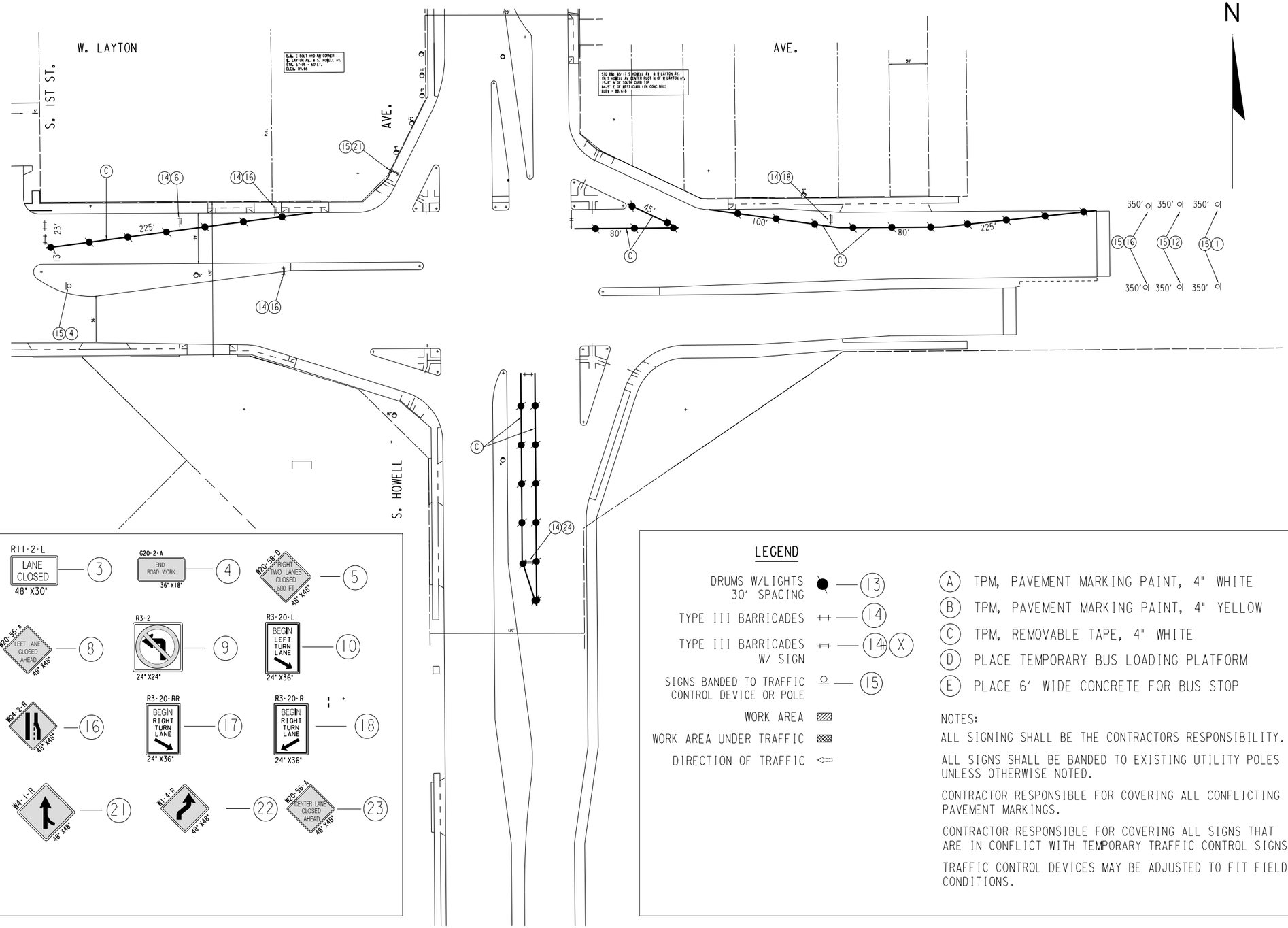
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

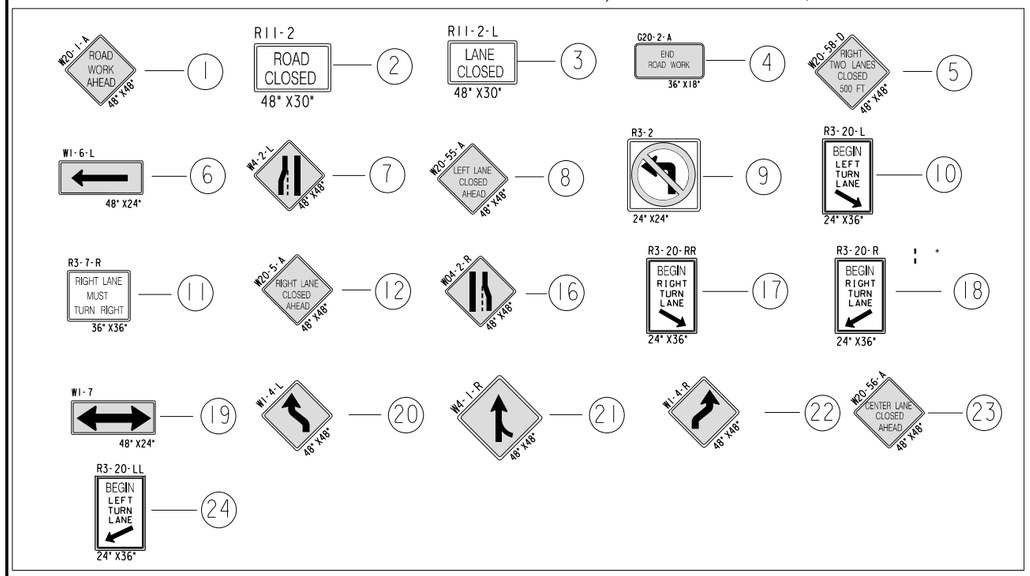
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STAGE 1





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)(X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

- (A) TPM, PAVEMENT MARKING PAINT, 4" WHITE
- (B) TPM, PAVEMENT MARKING PAINT, 4" YELLOW
- (C) TPM, REMOVABLE TAPE, 4" WHITE
- (D) PLACE TEMPORARY BUS LOADING PLATFORM
- (E) PLACE 6' WIDE CONCRETE FOR BUS STOP

NOTES:

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

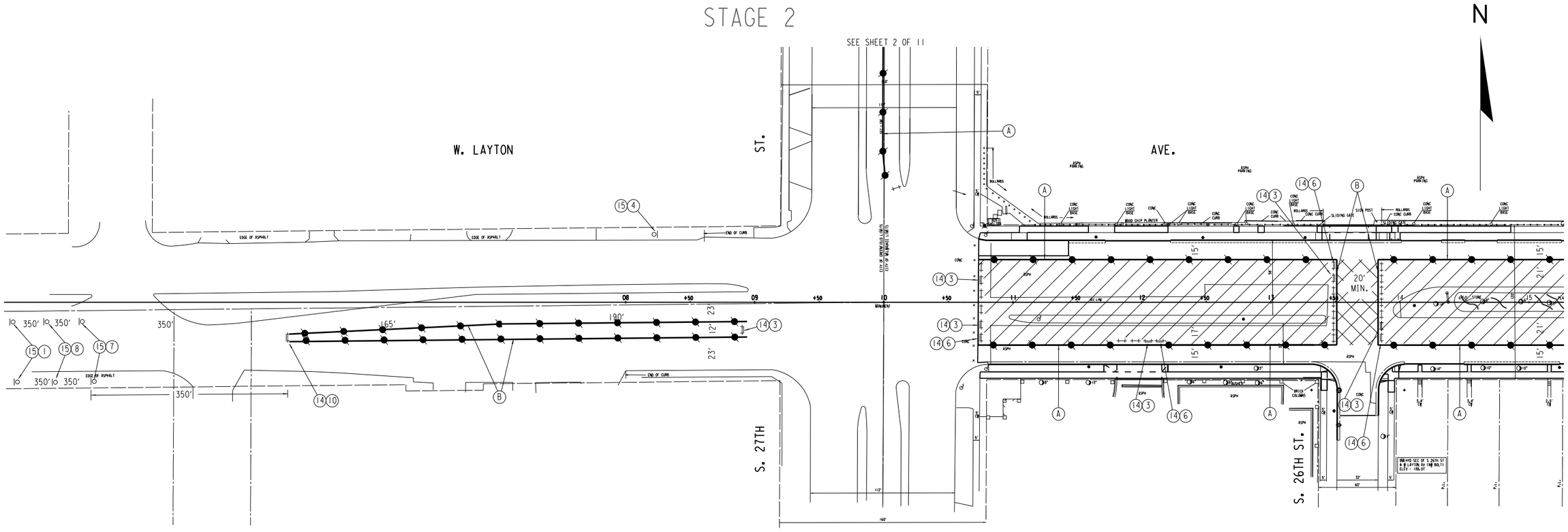
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

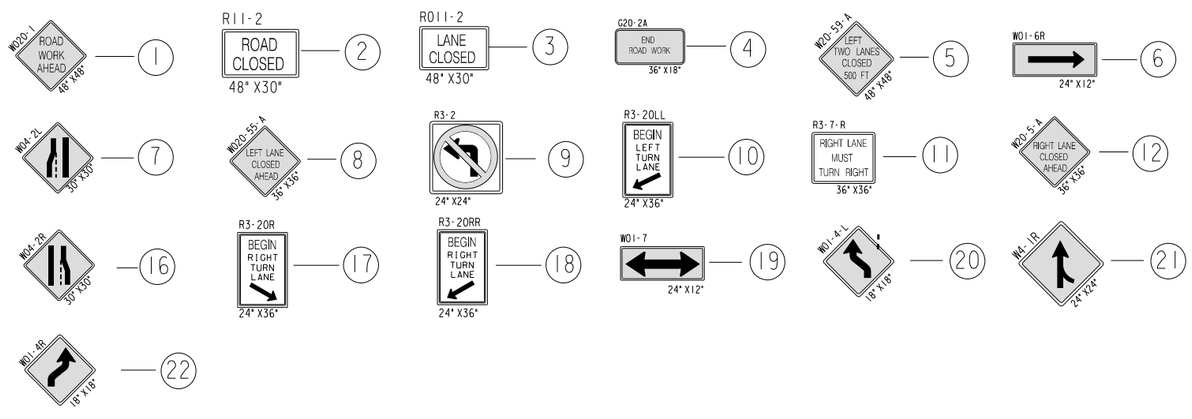
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 167	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-23-2018 BY DB

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

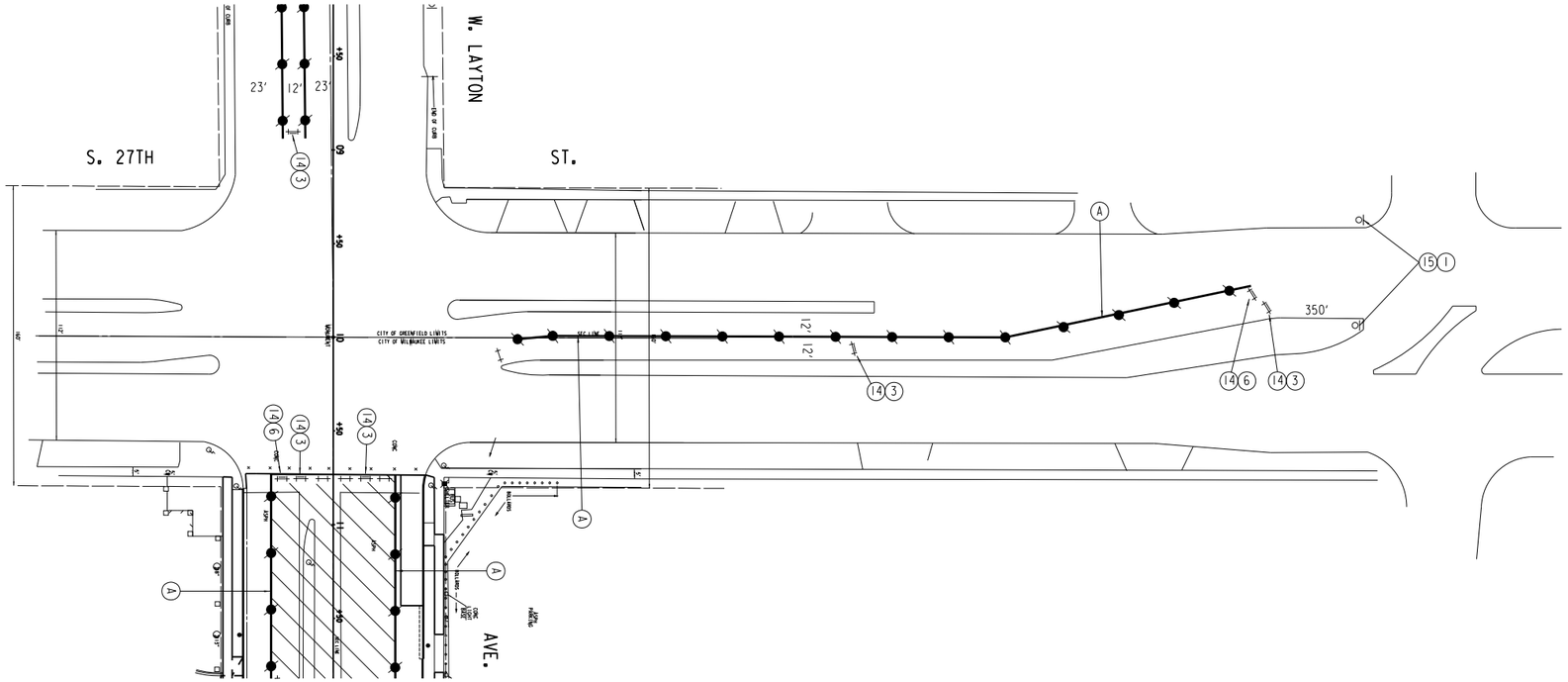
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

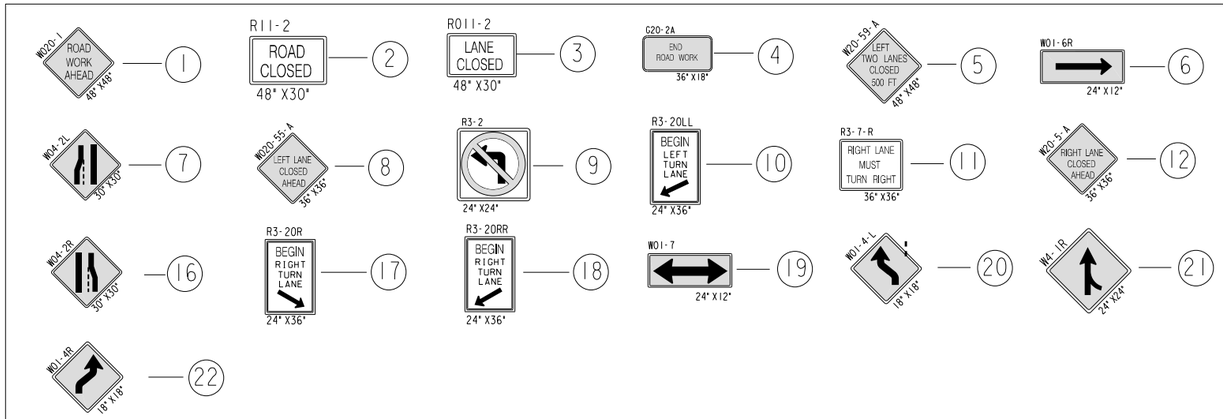
CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STAGE 2

N





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

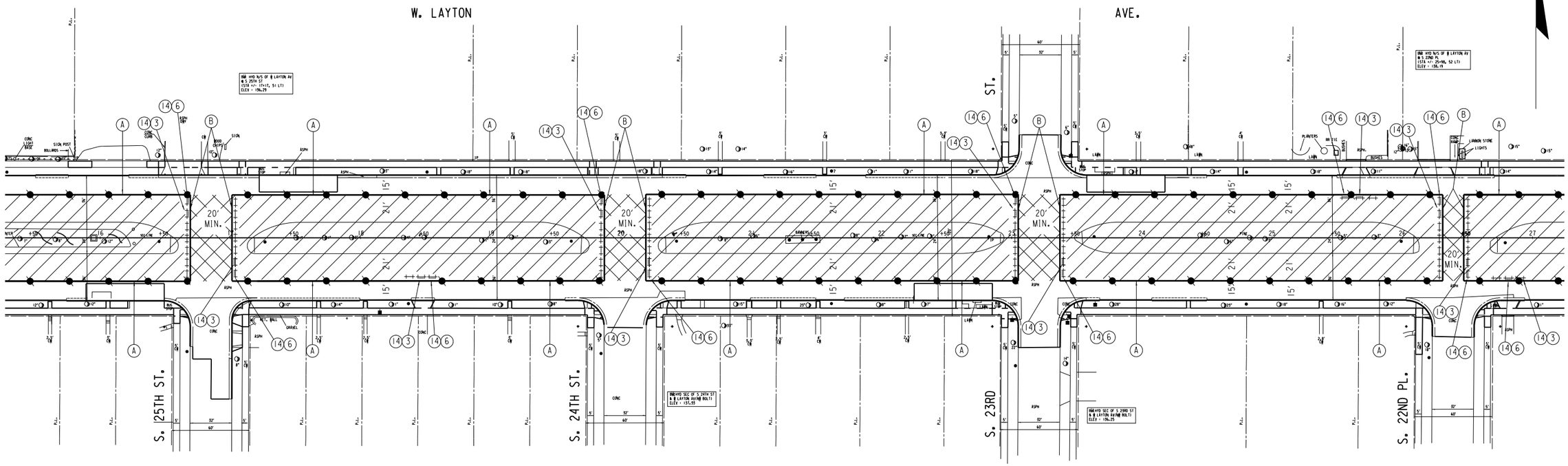
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

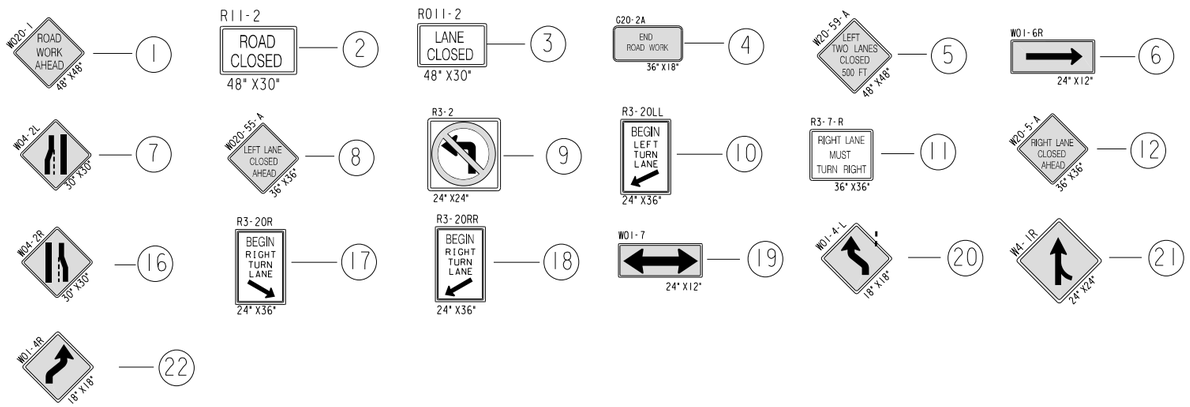
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 169	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-21-2018 BY DB

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

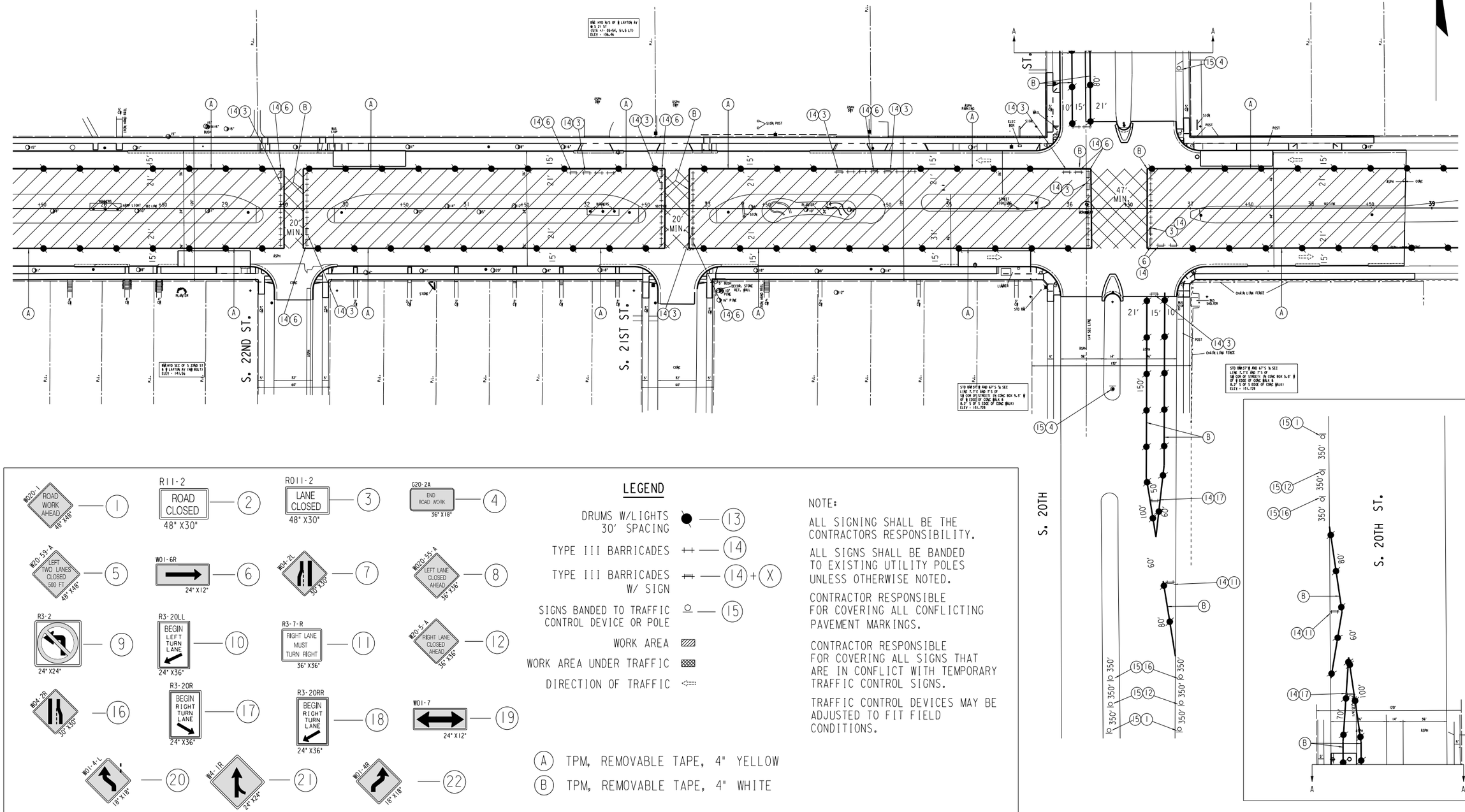
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STAGE 2



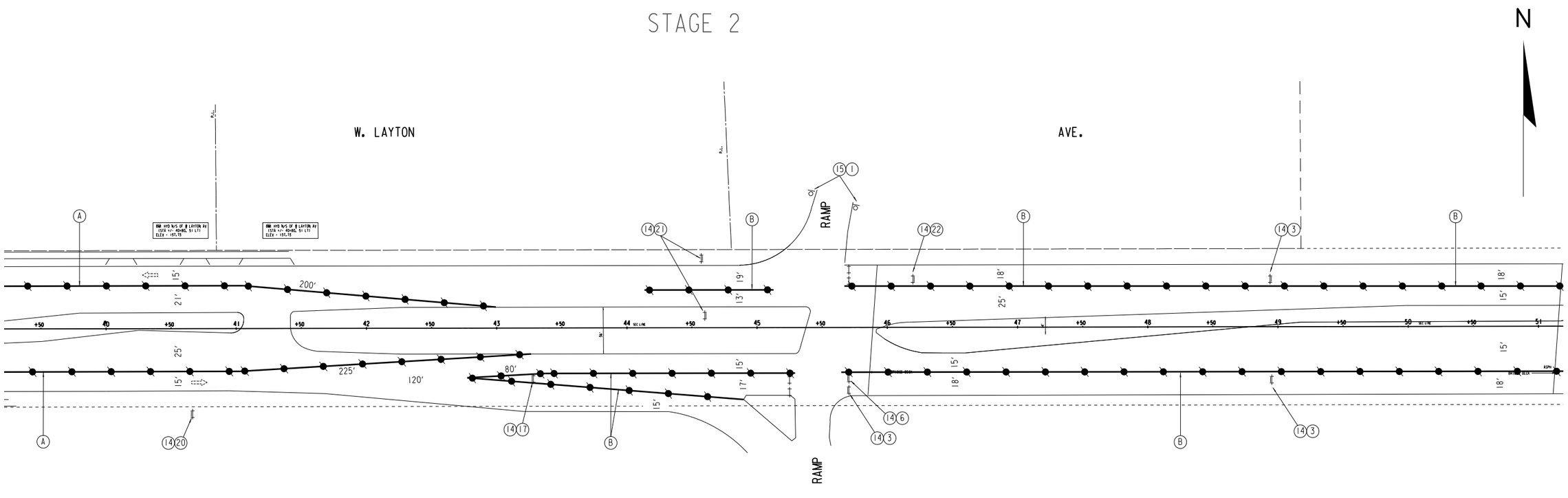
SHEET 4 OF 11

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 171	E

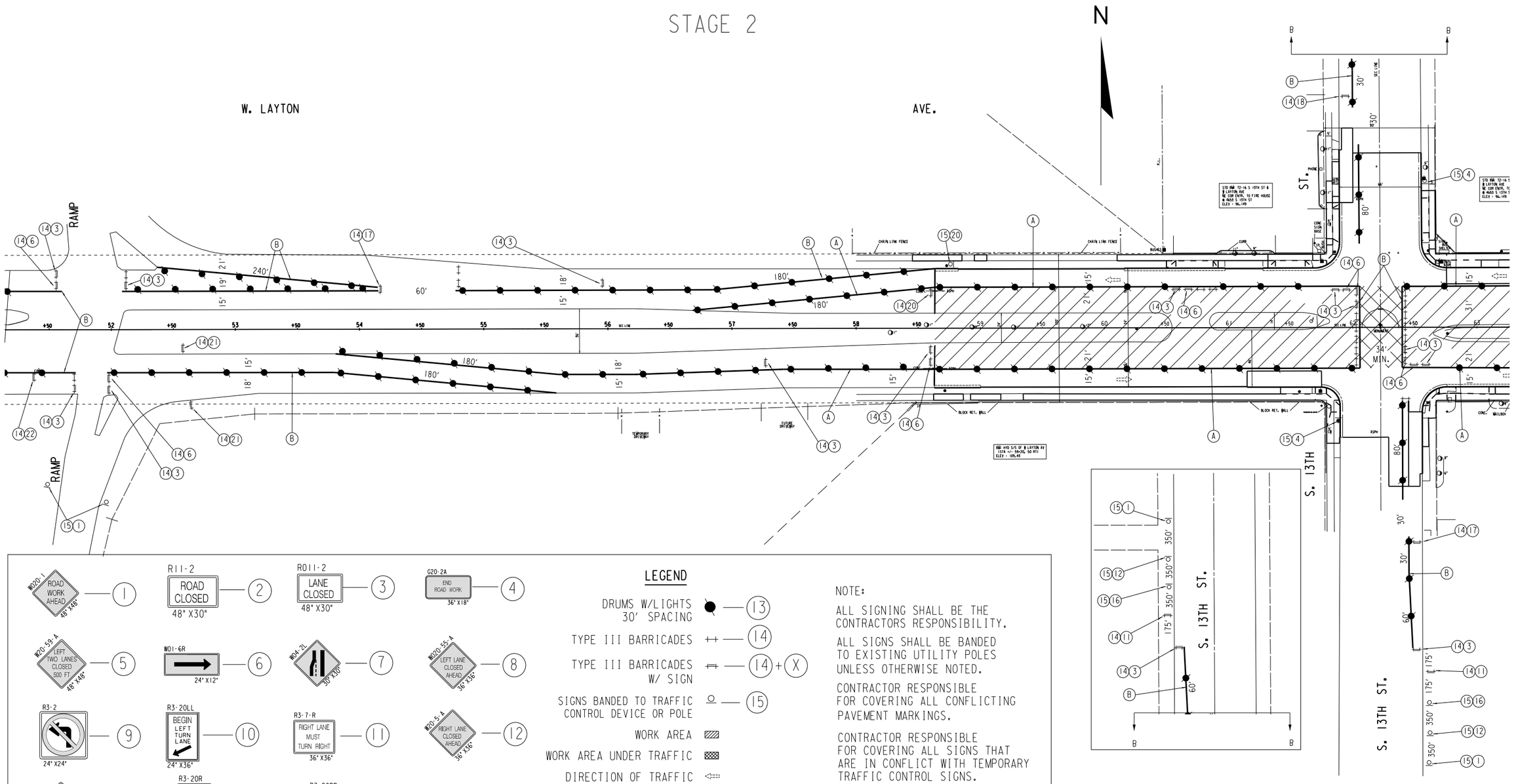
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

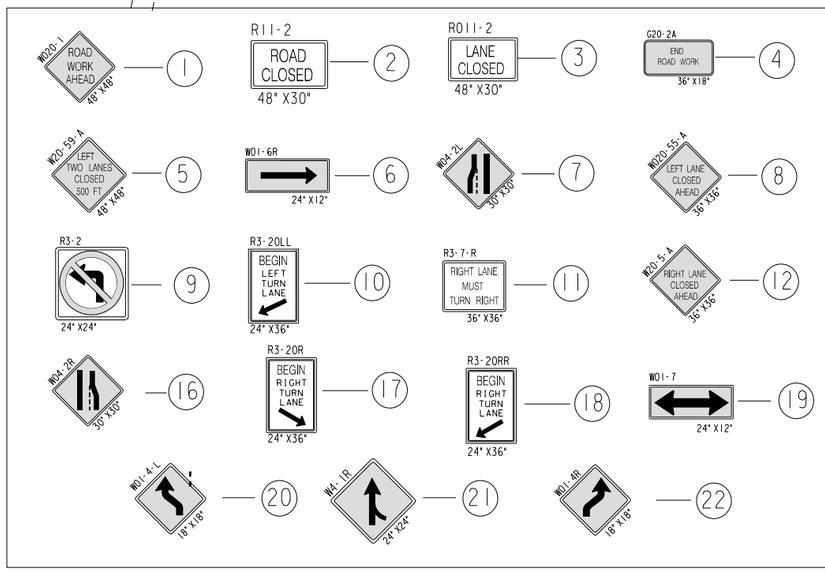
REVISED DATE: 04-21-2018 BY SB

STAGE 2


N
W. LAYTON
AVE.
RAMP
RAMP
200'
225'
120'
80'
21'
25'
19'
13'
17'
18'
25'
15'
18'
15'
18'
15'
15'
15

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

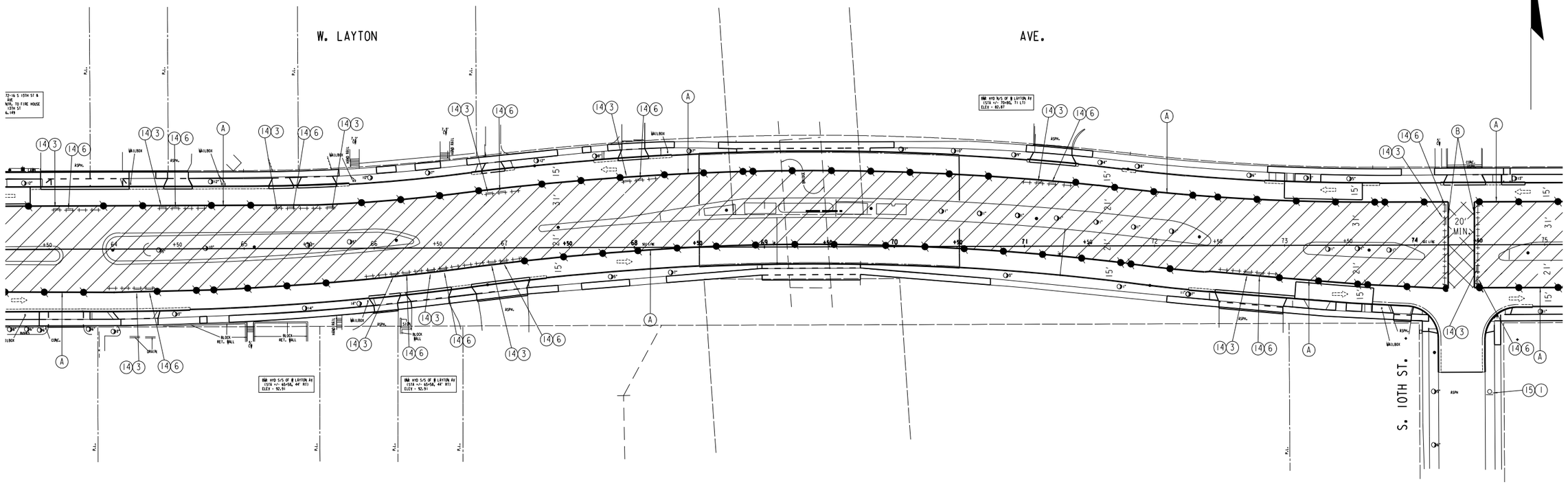
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

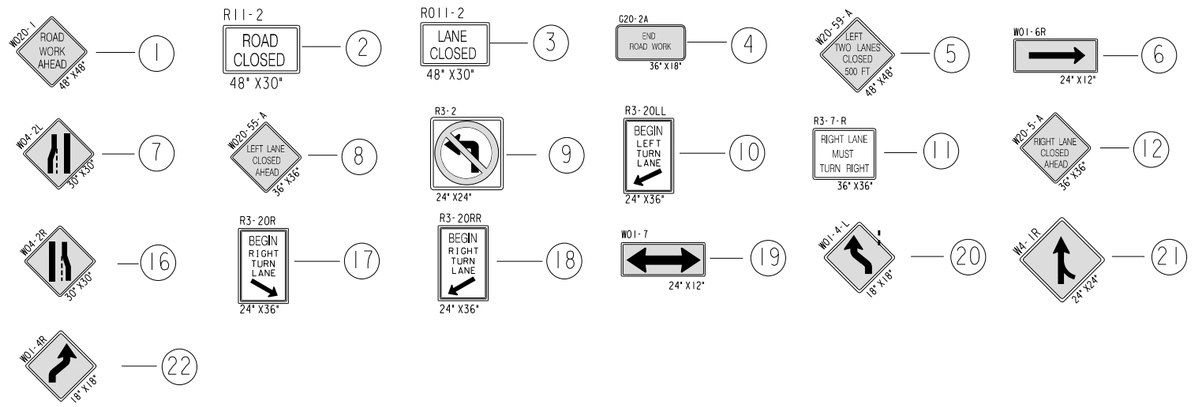
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 173	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-21-2018 BY SB

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

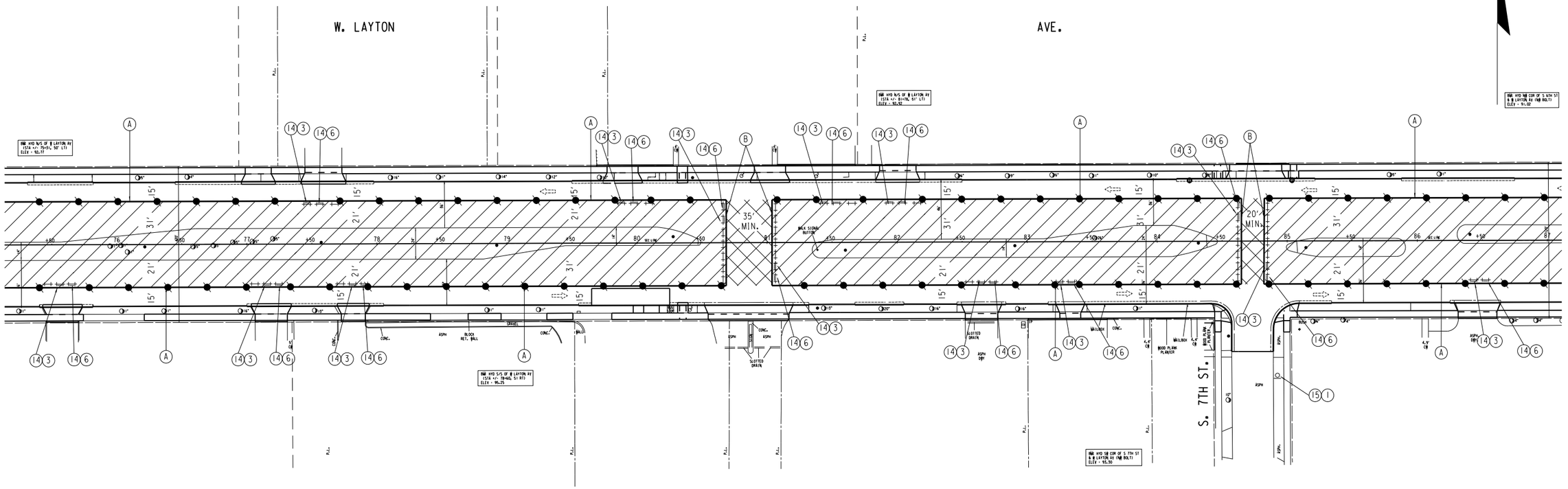
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

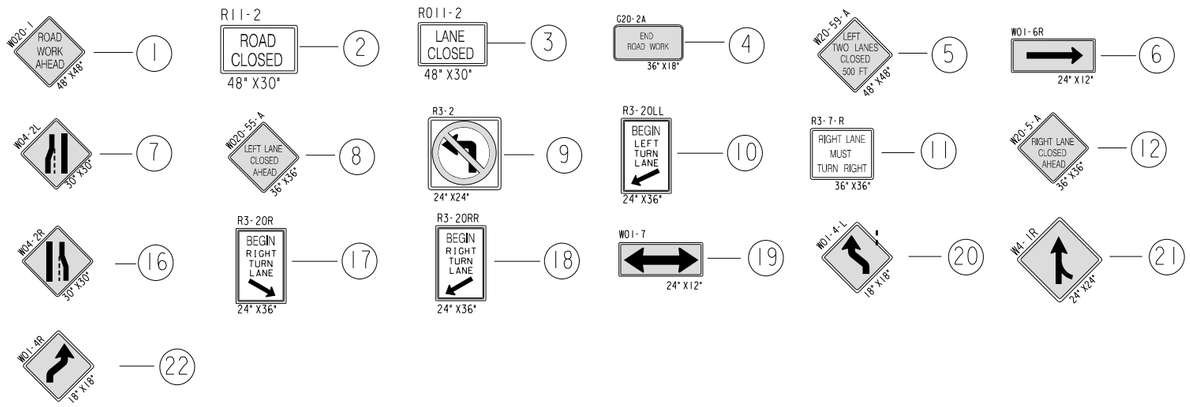
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

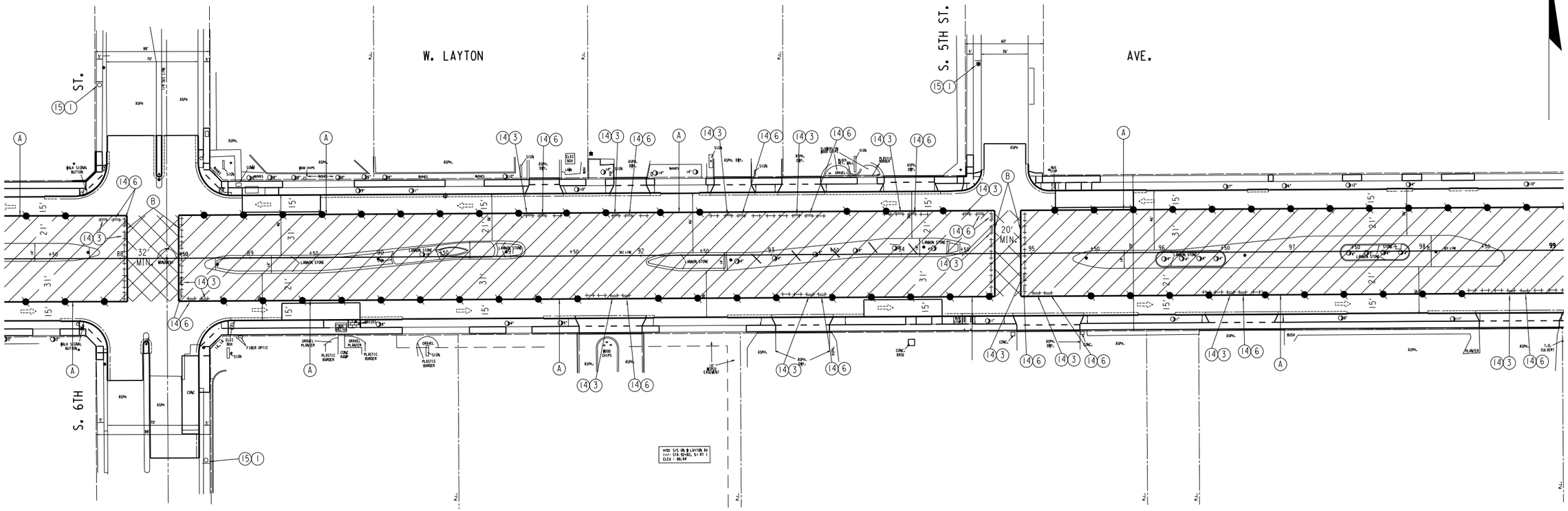
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

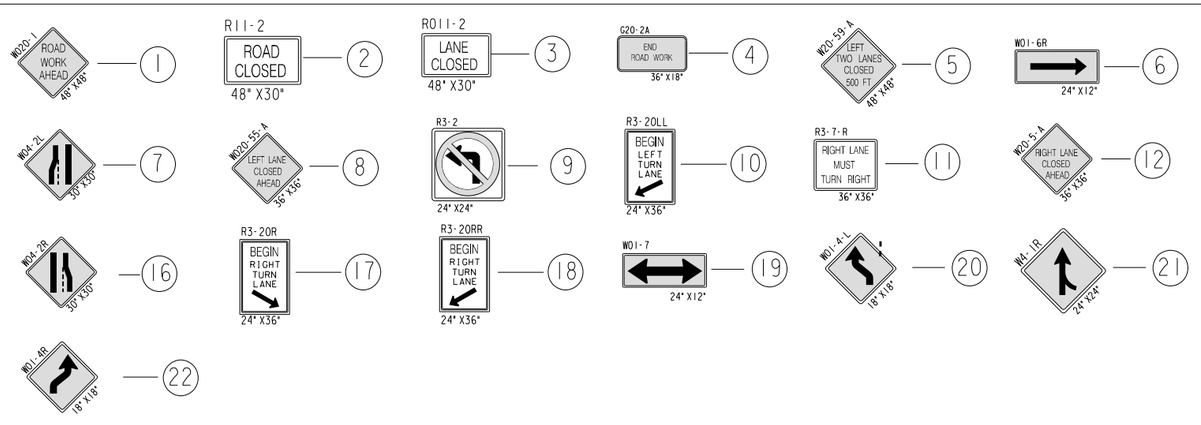
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 175	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-21-2018 BY DB

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.

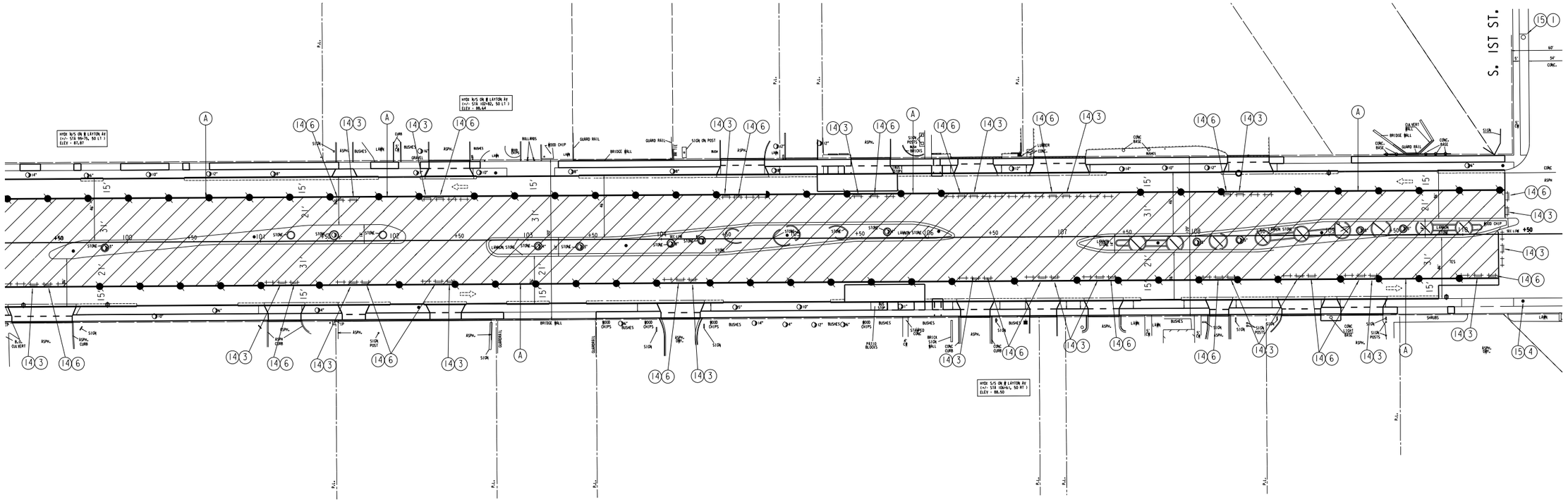
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

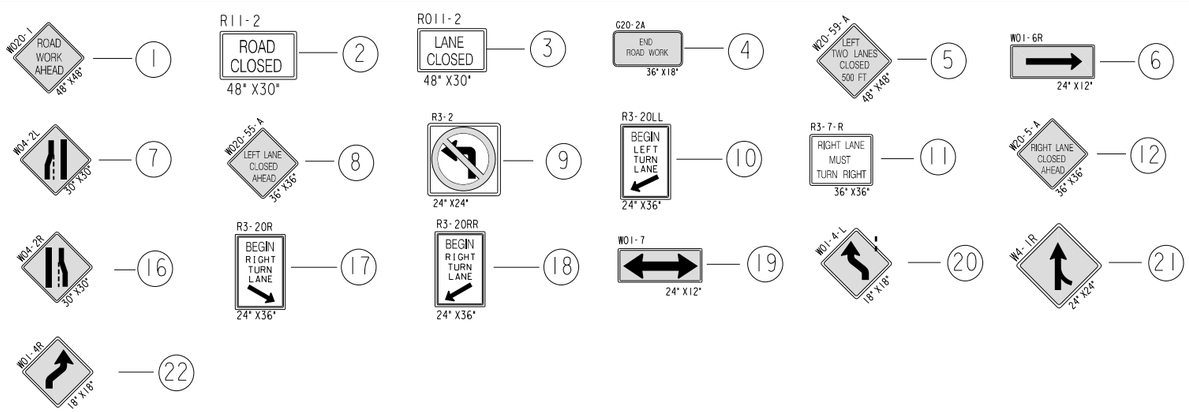
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING PAVEMENT MARKINGS.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14)+(X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

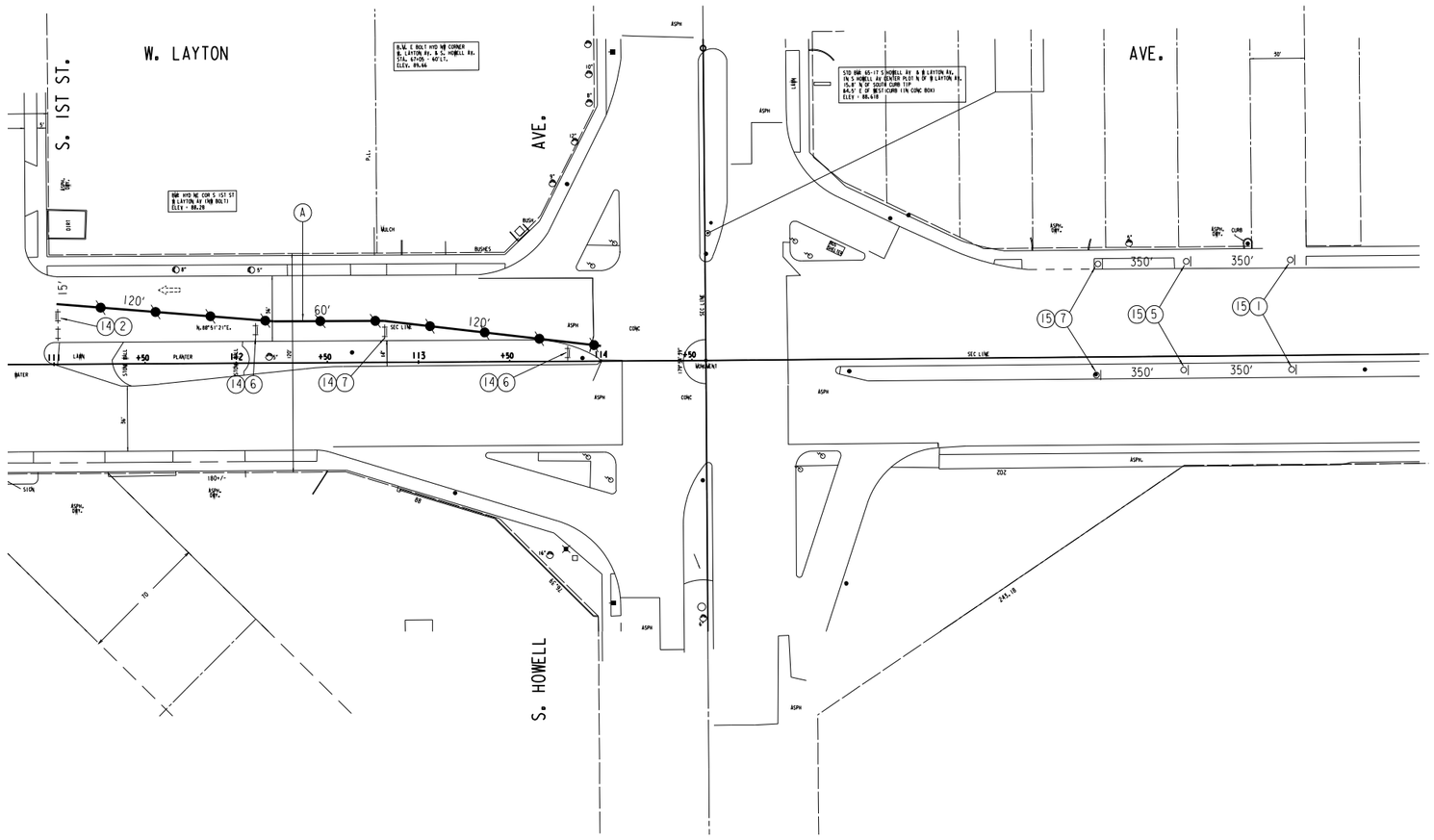
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

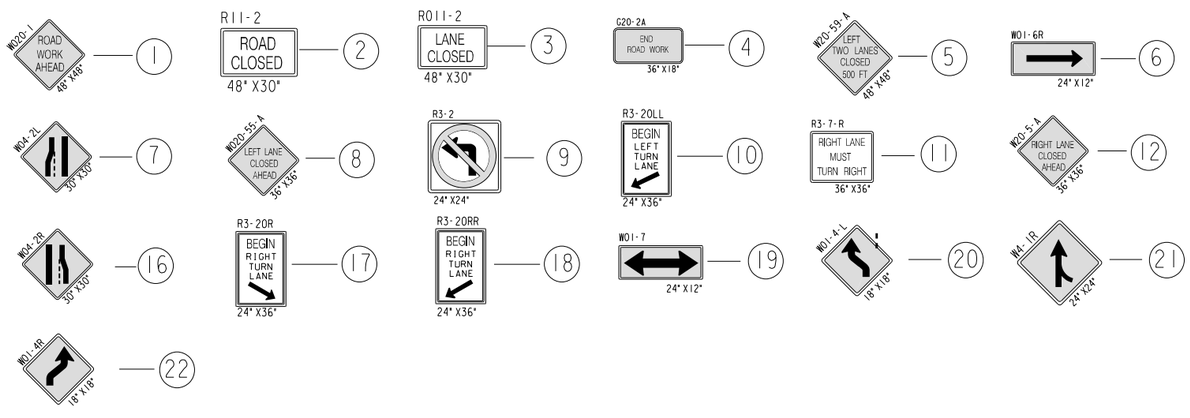
STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 80'	SHEET NO: 177	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\TRAFFIC CONTROL.DGN

REVISED DATE: 04-21-2018 BY DB

STAGE 2





LEGEND

- DRUMS W/LIGHTS 30' SPACING — (13)
- TYPE III BARRICADES — (14)
- TYPE III BARRICADES W/ SIGN — (14) + (X)
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE — (15)
- WORK AREA
- WORK AREA UNDER TRAFFIC
- DIRECTION OF TRAFFIC

(A) TPM, REMOVABLE TAPE, 4" YELLOW

(B) TPM, REMOVABLE TAPE, 4" WHITE

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.

CONTRACTOR RESPONSIBLE FOR COVERING ALL SIGNS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS.

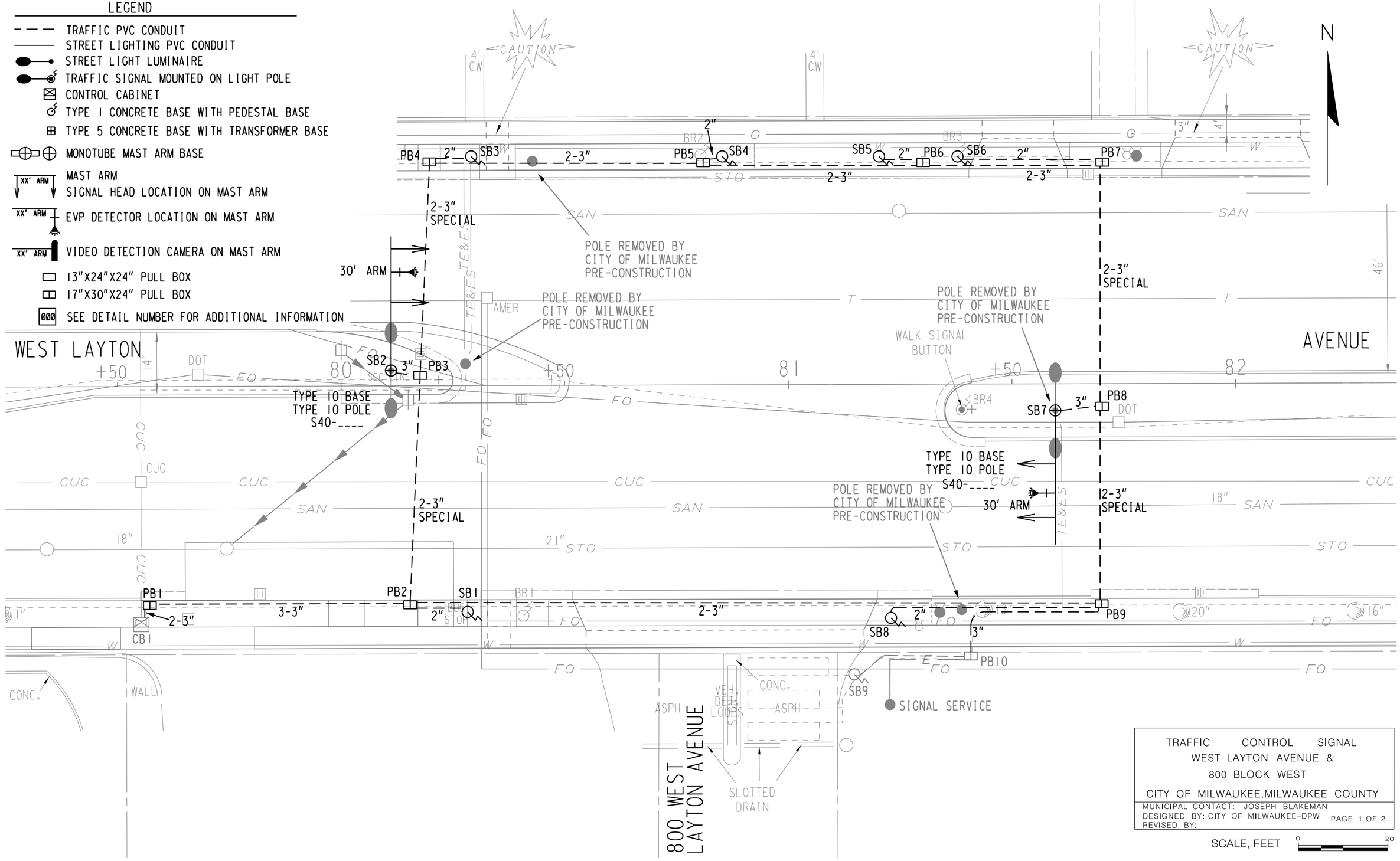
TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

2

2

LEGEND

- TRAFFIC PVC CONDUIT
- STREET LIGHTING PVC CONDUIT
- STREET LIGHT LUMINAIRE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- CONTROL CABINET
- TYPE I CONCRETE BASE WITH PEDESTAL BASE
- TYPE 5 CONCRETE BASE WITH TRANSFORMER BASE
- MONOTUBE MAST ARM BASE
- MAST ARM
- SIGNAL HEAD LOCATION ON MAST ARM
- EVP DETECTOR LOCATION ON MAST ARM
- VIDEO DETECTION CAMERA ON MAST ARM
- 13"X24"X24" PULL BOX
- 17"X30"X24" PULL BOX
- SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION



TRAFFIC CONTROL SIGNAL
WEST LAYTON AVENUE &
800 BLOCK WEST
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: JOSEPH BLAKEMAN
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

PAGE 1 OF 2

SCALE, FEET 0 20

PROJECT NO: 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 179	E

2

N

WEST LAYTON AVENUE

SOUTH 6TH STREET

S40-____
TYPE 10 SPECIAL BASE
TYPE 13 SPECIAL POLE
35' ARM

SB7 PB7 3" 2-3" SPECIAL

SB8 PB8 3" 2-3" SPECIAL

SB6 PB6 2" 2-3" SPECIAL

SB9 PB9 2" 2-3" SPECIAL

30' ARM 2-3" SPECIAL

30' ARM 2-3" SPECIAL

SB5 PB5 3" TYPE 10 BASE TYPE 10 POLE S40-____

S40-____
TYPE 10 BASE
TYPE 10 POLE
SB10 PB10 3"

SB4 PB4 2" 2-3"

SB3 PB3 3" 2-3" SPECIAL

SB2 PB2 3"

SB1 PB1 2" 4-3"

35' ARM
TYPE 10 SPECIAL BASE
TYPE 13 SPECIAL POLE
S40-____

POLE REMOVED BY CITY OF MILWAUKEE PRE-CONSTRUCTION

POLE REMOVED BY CITY OF MILWAUKEE PRE-CONSTRUCTION

POLE REMOVED BY CITY OF MILWAUKEE PRE-CONSTRUCTION

POLE REMOVED BY CITY OF MILWAUKEE PRE-CONSTRUCTION

POLE REMOVED BY CITY OF MILWAUKEE PRE-CONSTRUCTION

WALK SIGNAL BUTTON

TRAFFIC LOOPS

ASPH.

CAUTION

COMM

SIGN

BUSHES

WOOD CHIPS

FIBER OPTIC

ELEC BOX

VEH. DET. LOOPS

BUS SHELTER

GRAVEL PLANTER

LANNON STONE

MONUMENT

CUC

FO

SAN

STO

WAT

WEP

TEL

DOT

MMSD

BR1 BR2 BR3 BR4 BR5 BR6 BR7

LEGEND

- TRAFFIC PVC CONDUIT
- STREET LIGHTING PVC CONDUIT
- STREET LIGHT LUMINAIRE
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- CONTROL CABINET
- TYPE 1 CONCRETE BASE WITH PEDESTAL BASE
- TYPE 5 CONCRETE BASE WITH TRANSFORMER BASE
- MONOTUBE MAST ARM BASE
- XX' ARM — MAST ARM
- SIGNAL HEAD LOCATION ON MAST ARM
- XX' ARM — EVP DETECTOR LOCATION ON MAST ARM
- XX' ARM — VIDEO DETECTION CAMERA ON MAST ARM
- 13"X24"X24" PULL BOX
- 17"X30"X24" PULL BOX
- 000 — SEE DETAIL NUMBER FOR ADDITIONAL INFORMATION

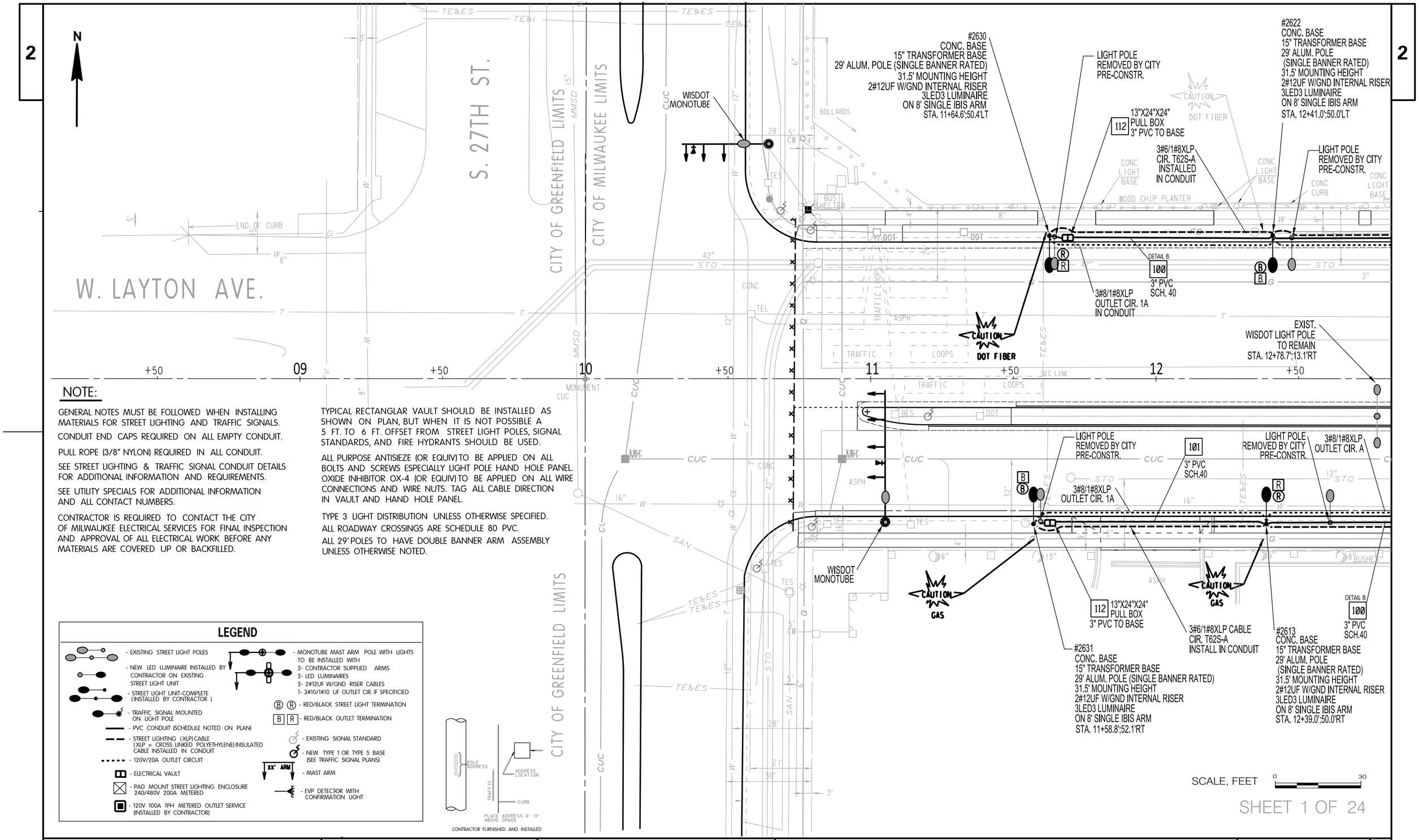
TRAFFIC CONTROL SIGNAL
WEST LAYTON AVENUE &
SOUTH 6TH STREET
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: JOSEPH BLAKEMAN
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

SCALE, FEET 0 20

PROJECT NO: 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 180	E

FILE NAME : W:\bte\signals\PAVING AND DESIGN\State Projects-LFA\Preliminary Engineering\2070-03-71 Layton 27 to Howell\90%\2070-03-71 90% Signals.dgn
PLOT DATE : 21-JUL-2018 18:07
PLOT BY : jbondo
PLOT NAME :
PLOT SCALE : 20.000000:1.000000
WISDOTCADDS SHEET 42



NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- xx' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

CONTRACTOR FURNISHED AND INSTALLED

SHEET 1 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 181	E

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED. ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC. ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

W. LAYTON AVE.

#2604
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE
(SINGLE BANNER RATED)
31.5' MOUNTING HEIGHT
2#12UF W/GND INTERNAL RISER
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
STA. 13+26.0';50.5LT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#6/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

#2603
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE
(SINGLE BANNER RATED)
31.5' MOUNTING HEIGHT
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
2#12UF W/GND INTERNAL RISER
STA. 13+19.0';50.6'RT

#2532
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 14+11.5';3.2'RT

#2516
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 15+26.0';0.9'RT

#2502
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISER
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 16+45.4';3.0'RT

#2434
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 17+28.8';3.0'RT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
13+20.0';13.0'LT

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

3#6/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
14+09.0';09.0'LT

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

3#2/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
16+47.0';050.0'RT

3#2/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

EXIST. WISDOT SIGNAGE STRUCTURE STA. 13+14.0 14.0'RT

DETAIL 1 102 3" PVC SPECIAL

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL 1 102 3" PVC SPECIAL

3#4/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

101 3" PVC SCH.40

DETAIL 1 102 3" PVC SPECIAL

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

DETAIL 1 102 3" PVC SPECIAL

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#8/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

101 3" PVC SCH.40

101 3" PVC SCH.40

DETAIL 1 102 3" PVC SPECIAL

3#6/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

3#6/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

3#4/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

112 13"X24"X24" PULL BOX
13+85.0';95.0'RT

3#4/1#8XLP CABLE CIR. T62S-A INSTALL IN CONDUIT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
13+20.0';50.0'RT

13"X24"X24" PULL BOX 112 108A
1.5",2.5" PVC TO BASE

CAP END
13+50.0';95.5'RT

112 13"X24"X24" PULL BOX

10' PVC EXTENSION & END CAP
13+85.0';95.0'RT

#4703
EXIST. 21' CONC. POLE TO REMAIN
1LED2 UPGRADE
4"X4"X36" WIRING PED.
BY CONTRACTOR
STA. 13+50.0';84.0'RT

13"X24"X24" PULL BOX 112
16+45.0';50.0'RT

13"X24"X24" PULL BOX 112 108A
1.5",2.5" PVC TO BASE

#4703
EXIST. 21' CONC. POLE TO REMAIN
1LED2 UPGRADE
4"X4"X36" WIRING PED.
BY CONTRACTOR
STA. 16+67.0';82.0'RT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

DETAIL 1 102 3" PVC SPECIAL

101 3" PVC SCH.40

112 13"X24"X24" PULL BOX
17+25.0';50.0'RT

112 13"X24"X24" PULL BOX
17+4.0';90.0'RT

10' PVC EXTENSION & END CAP
17+4.0';100.0'RT

S. 26TH ST.

S. 25TH ST.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- #12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) RED/BLACK STREET LIGHT TERMINATION
- [B] [R] RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS · ADDRESS LOCATION · TRAFFIC · CURB · PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 2 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 182	E

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

N

CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS

#2418
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARM
2-2#12UF W/GND INTERNAL RISERS
STA. 18+25.5';0.0'RT

#2402
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 19+61.8;3.0'RT

#2332
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 20+46.3';3.0'RT

#2318
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 21+61.8';0.9'RT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#2/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

3#8/1#8XLP OUTLET CIR. 1A IN CONDUIT

3#2/1#8XLP CIR. T62S-B INSTALLED IN CONDUIT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
STA. 19+63.0;9.0'RT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
STA. 20+52.0';10.0'RT

3#8/1#8XLP OUTLET CIR. 1A

3#2/1#8XLP CIR. T62S-A INSTALL IN CONDUIT

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

DETAIL 1 102 3" PVC SPECIAL

DETAIL 1 101 3" PVC SCH.40

13"X24"X24" PULL BOX 112
STA. 19+61.8;51.0'RT

13"X24"X24" PULL BOX 112 108A
1.5",2.5" PVC TO BASE

CAUTION GAS

#4703
EXIST. 21' CONC. POLE TO REMAIN
1LED2 UPGRADE
4"X4"X36" WIRING PED. BY CONTRACTOR

13"X24"X24" PULL BOX 112
STA. 20+52.0';50.0'RT

10' PVC EXTENSION & END CAP
STA. 20+21.0';50.0'RT

13"X24"X24" PULL BOX 112
STA. 20+21.0';85.0'RT

CIR. T62S-A

CIR. T62S-B

W. LAYTON AVE.

S. 24TH ST.

BANNERS

SPRINKLER VALVE

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE
CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 3 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 183	E

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

(FUTURE)
100A/120V 1PH
OUTLET SERVICE 1
METER PEDESTAL (DO NOT INSTALL)

15'-3" SPECIAL PVC EXTENSION & END CAP
16+45.0';90.0'LT

112 13"X24"X24" PULL BOX
16+45.0';75.0'LT

101 3" PVC SCH.40

112 13"X24"X24" PULL BOX

#2302
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 22+82.5';0.9'RT

112 13"X24"X24" PULL BOX
2-3" PVC TO BASE

3#2/1#8XLP
CIR. T62S-B
INSTALLED IN CONDUIT

3#8/1#8XLP
OUTLET CIR. 1A
IN CONDUIT

3#2/1#8XLP
CIR. T62S-A
INSTALLED
IN CONDUIT

3#2/1#8XLP
CIR. T62S-B
INSTALLED IN CONDUIT

DETAIL 1 102 3" PVC SPECIAL

DETAIL B 100 3" PVC SCH. 40
2' BACK OF CURB

3#8/1#8XLP CABLE
CIR. T62S-A
INSTALL IN
CONDUIT

101 3" PVC SCH.40

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

#2272
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 23+71.0';0.9'RT

#2262
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 25+01.0';3.0'RT

3#8/1#8XLP
OUTLET CIR. 1B
IN CONDUIT

2242
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 25+99.1';3.0'RT

#2238
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 26+84.1';3.0'RT

112 13"X24"X24" PULL BOX
2-3" PVC TO BASE
STA. 26+00.0';11.0'RT

112 13"X24"X24" PULL BOX
2-3" PVC TO BASE
STA. 26+95.0';11.0'RT

CIR. T62S-A

CIR. T62S-B

23

24

25

+50

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

3#8/1#8XLP CABLE
CIR. T62S-A
INSTALL IN
CONDUIT

3#8/1#8XLP
OUTLET CIR. 1B
IN CONDUIT

W. LAYTON AVE.

112 13"X24"X24" PULL BOX
STA. 23+72.0;50.0'RT

112 13"X24"X24" PULL BOX
STA. 23+38.0;75.0'RT

10' PVC EXTENSION & END CAP
STA. 23+38.0;90.0'RT

112 13"X24"X24" PULL BOX
STA. 22+74.0;50.0'RT

112 108A 13"X24"X24" PULL BOX
1.5",2.5" PVC TO BASE

#4701
EXIST. 21' CONC.
POLE TO REMAIN
1LED2 UPGRADE
4"X4"X36" WIRING PED.
BY CONTRACTOR

CAUTION GAS

3" ABANDONED (LOCATION UNKNOWN)

S. 23RD ST.

112 13"X24"X24" PULL BOX
STA. 26+00.0';50.0'RT

108A 112 13"X24"X24" PULL BOX
1.5",2.5" PVC TO BASE
26+19.0';73.0'RT

#4703
EXIST. 21' CONC.
POLE TO REMAIN
1LED2 UPGRADE
4"X4"X36" WIRING PED.
BY CONTRACTOR

112 13"X24"X24" PULL BOX
26+60.0';73.0'RT

10' PVC EXTENSION & END CAP

S. 22ND PL.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- xx' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 4 OF 24

PROJECT NO:2070–03–71	HWY:W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 184	E

2

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

N

2

W. LAYTON AVE.

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 — 3" PVC SCH. 40 2' BACK OF CURB

3#2/1#8XLP CIR. T62S-B INSTALLED IN CONDUIT

3#8/1#8XLP OUTLET CIR. 1B IN CONDUIT

3#2/1#8XLP CIR. T62S-B INSTALLED IN CONDUIT

CIR. T62S-A

CIR. T62S-B

#2202 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS 2-2#12UF W/GND INTERNAL RISERS STA. 29+15.4';3.0'RT

13"X24"X24" PULL BOX 112 2-3" PVC TO BASE STA. 29+17.0';5.0'RT

#2132 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS 2-2#12UF W/GND INTERNAL RISERS STA. 30+01.0';3.0'RT

#2116 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS 2-2#12UF W/GND INTERNAL RISERS STA. 31+06.3';3.0'RT

3#2/1#8XLP CIR. T62S-B INSTALLED IN CONDUIT

3#2/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

#2218 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-2#12UF W/GND INTERNAL RISERS 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS STA. 27+80.5';0.9'RT

3#8/1#8XLP CIR. T62S-B INSTALLED IN CONDUIT

3#81#8XLP OUTLET CIR. 1B IN CONDUIT

DETAIL 1 102 — 3" PVC SPECIAL

3#2/1#8XLP CIR. T62S-A INSTALLED IN CONDUIT

3#4/1#8XLP CIR. T62S-A

101 — 3" PVC SCH.40

13"X24"X24" PULL BOX 112 2-3" PVC TO BASE STA. 29+98.0';5.0'RT

13"X24"X24" PULL BOX 112 STA. 29+98.0';50.0'RT

13"X24"X24" PULL BOX 112 STA. 29+17.0';50.0'RT

108A 13"X24"X24" PULL BOX 112 1.5",2.5" PVC TO BASE 29+38.0';73.0'RT

#4703 EXIST. 21' CONC. POLE TO REMAIN 1LED2 UPGRADE 4"X4"X36" WIRING PED. BY CONTRACTOR STA. 29+39.0';78.0'RT

13"X24"X24" PULL BOX 112 29+73.0';73.0'RT

10' PVC EXTENSION & END CAP

S. 22ND ST.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS · ADDRESS LOCATION · TRAFFIC · CURB · PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 5 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 185	E

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

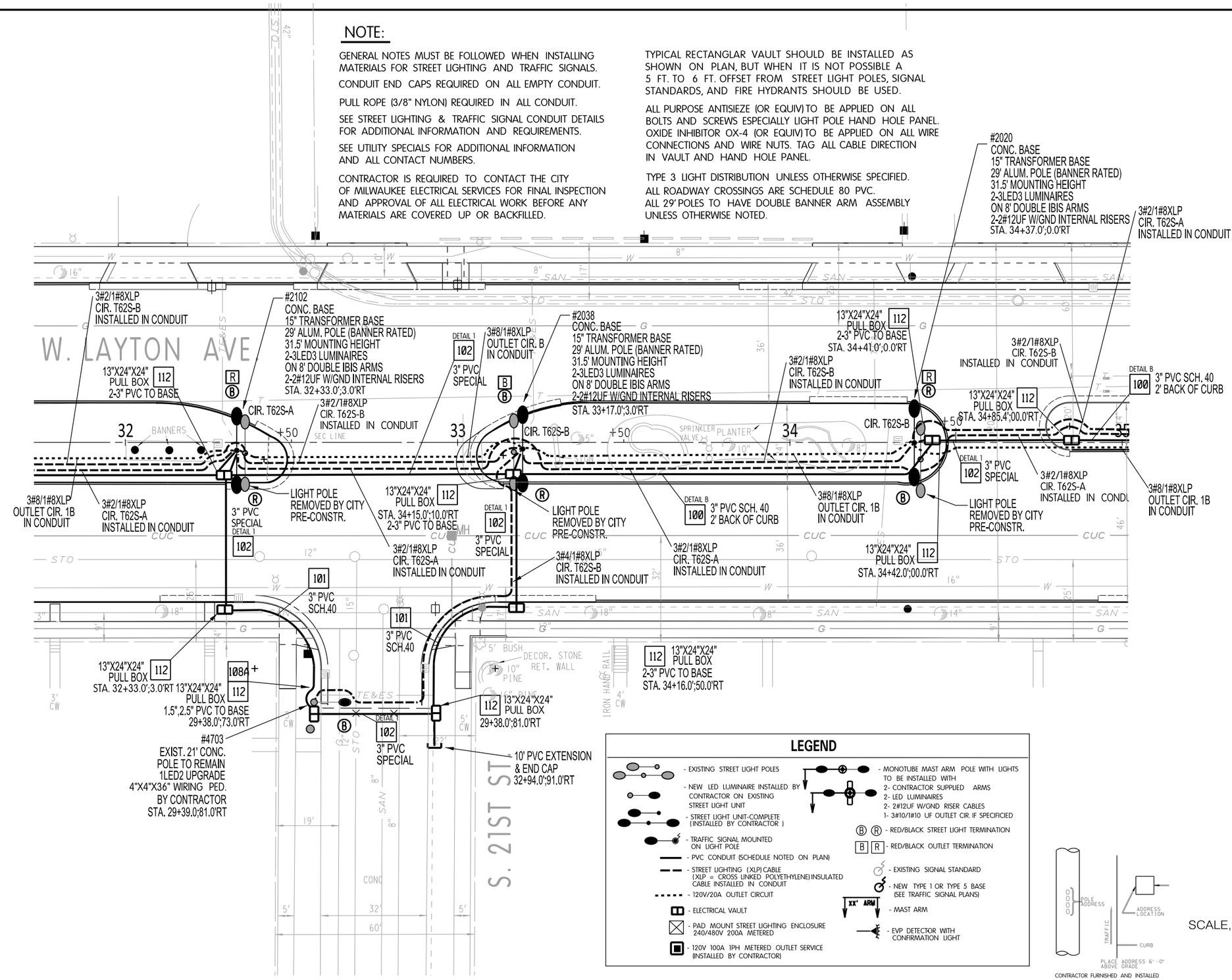
TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 6 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 186	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 06:52 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS · ADDRESS LOCATION · TRAFFIC · CURB · PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

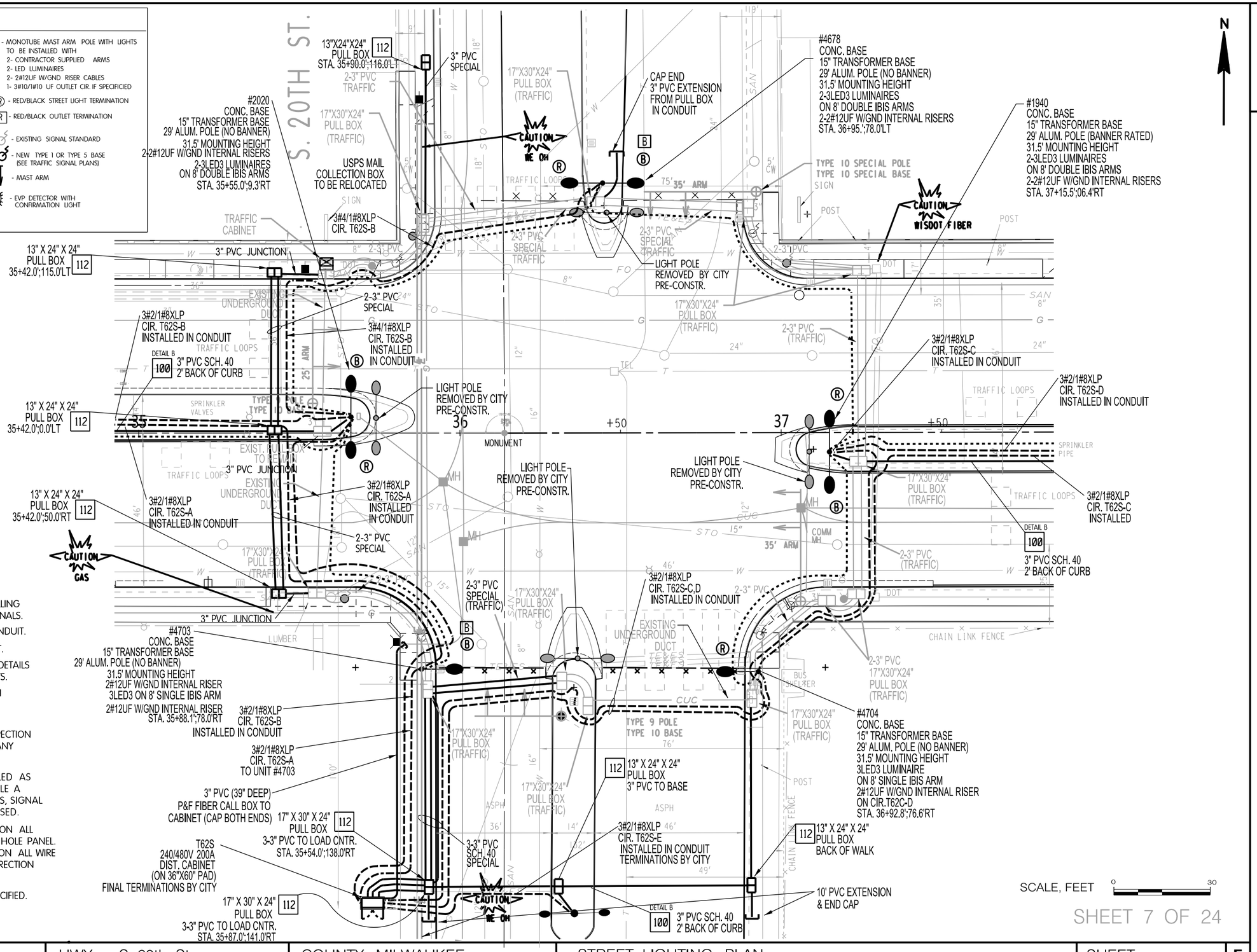
CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.



SHEET 7 OF 24

PROJECT NO:2070–03–71	HWY: S. 60th St.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 187	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 07:51 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

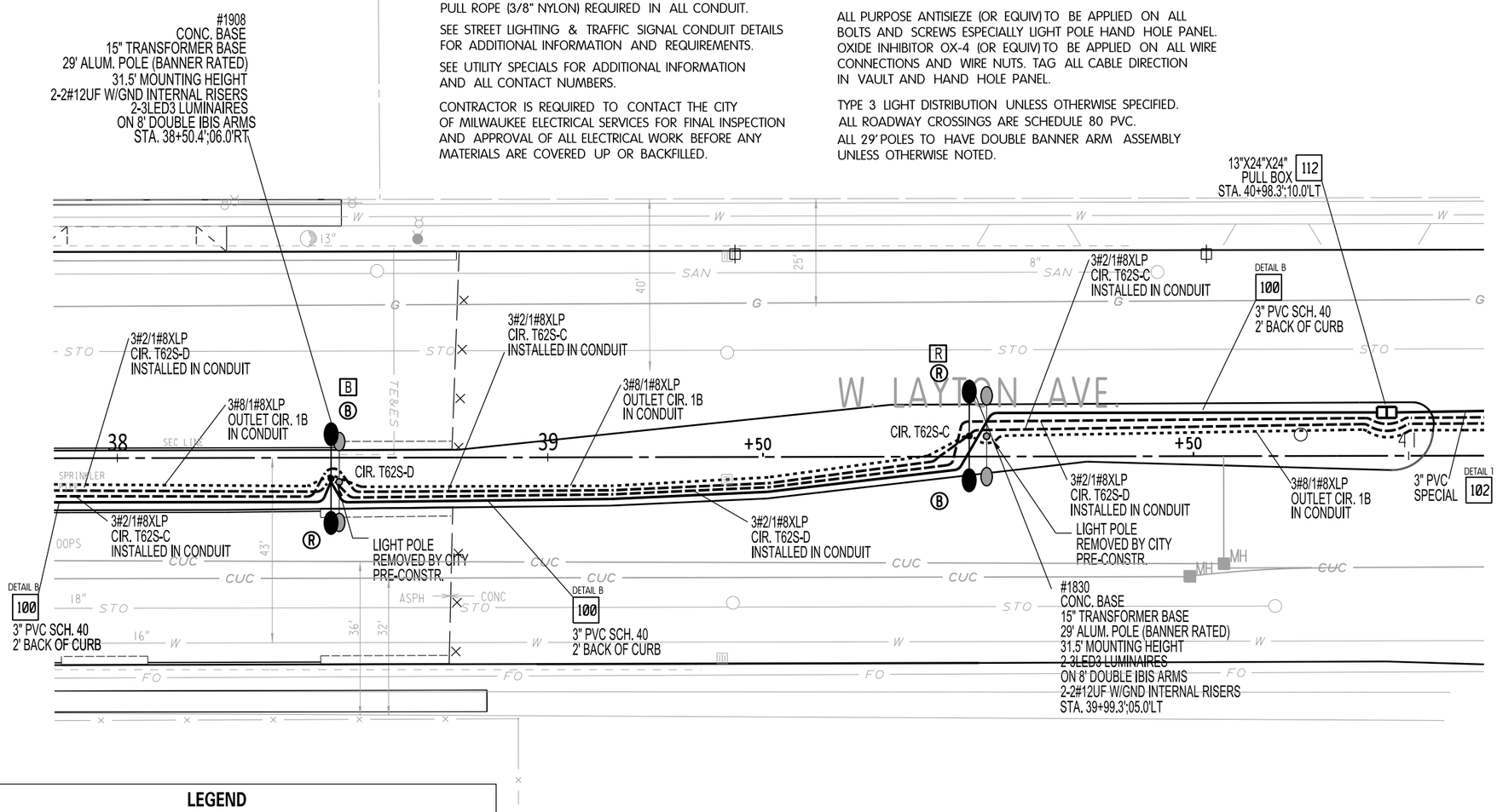
SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

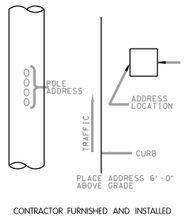
ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH
  2- CONTRACTOR SUPPLIED ARMS
  2- LED LUMINAIRES
  2- 2#12UF W/GND RISER CABLES
  1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 8 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 188	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 06:59 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

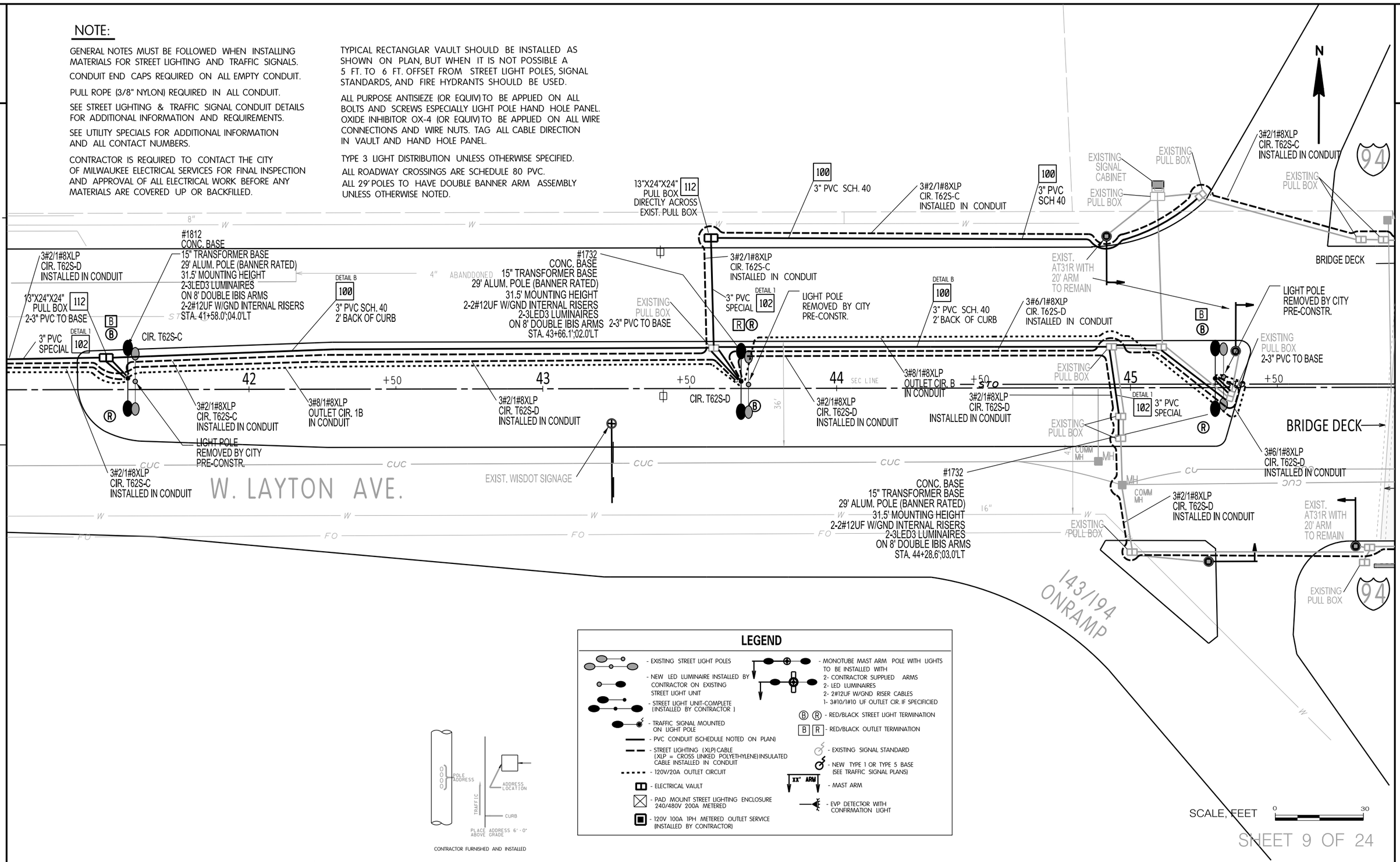
TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



CONTRACTOR FURNISHED AND INSTALLED

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- xx' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

SCALE, FEET 0 30

SHEET 9 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 189	E

2

2

N

94

#1650
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE UNIT
STA. 46+80.6';49.0'LT

EXISTING 2.5"
PARAPET DUCT

EXISTING 2.5"
PARAPET DUCT

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN EXISTING
PARAPET WALL DUCT

EXISTING 2.5"
PARAPET DUCT

#1628
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE UNIT
STA. 48+28.1';50.0'LT

EXISTING 2.5"
PARAPET DUCT

EXISTING 2.5"
PARAPET DUCT

#1602
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE UNIT
STA. 49+89.0';50.0'LT

EXISTING 2.5"
PARAPET DUCT

94

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN EXISTING
PARAPET WALL DUCT

W. LAYTON AVE.

BRIDGE DECK

BRIDGE DECK

BRIDGE DECK

46 STO +50 47 STO +50 48 STO +50 49 STO +50 50 SEC LINE STO +50

WISDOT
MONOTUBE

BRIDGE DECK

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN EXISTING
PARAPET WALL DUCT

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN EXISTING
PARAPET WALL DUCT

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN EXISTING
PARAPET WALL DUCT

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN EXISTING
PARAPET WALL DUCT

94

EXISTING 2.5"
PARAPET DUCT

#1651
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE UNIT
STA. 46+70.0';55.0'RT

EXISTING 2.5"
PARAPET DUCT

#1627
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE UNIT
STA. 48+28.1';54.0'RT

EXISTING 2.5"
PARAPET DUCT

#1603
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE UNIT
STA. 49+89.0';55.0'RT

94

60'

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

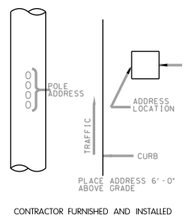
TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 10 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 190	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave – 27th to Howell (2070–03–01)\SL Underground\inset.dgn PLOT DATE : 16–JAN–2019 15:25 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

2

N

W. LAYTON AVE.

94

EXISTING 2.5" PARAPET DUCT

EXISTING PULL BOX

#1550
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE APPROACH
UNIT (AT31-R)
STA. 51+35.8';50.3'LT

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN CONDUIT

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN CONDUIT

EXISTING PULL BOX

EXISTING PULL BOX

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN CONDUIT

EXISTING PULL BOX
2-3" PVC TO BASE

#1534
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2#12UF W/GND INTERNAL RISER
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
2#12UF W/GND INTERNAL RISER
STA. 53+91.0';3.0'RT

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN CONDUIT

13"X24"X24"
PULL BOX 112
53+9.0';12.0'LT

DETAIL B
100
3" PVC SCH. 40
2' BACK OF CURB

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN CONDUIT

DETAIL B
100
3" PVC SCH. 40
2' BACK OF CURB

CIR. T62S-D

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

EXIST.
AT31R WITH
20' ARM
TO REMAIN

51 +50 52 +50 CIR. T62S-C 53 +50 54 55

BRIDGE DECK

#1550
3LED3 LUMINAIRE
UPGRADE ON
BRIDGE APPROACH
UNIT (26' ALUM.)
STA. 51+35.8';54.5'RT

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN CONDUIT

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN CONDUIT

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN CONDUIT

#1468
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 54+45.0';3.0'RT

3#2/1#8XLP
CIR. T62S-C
INSTALLED IN CONDUIT

3#8/1#8XLP
OUTLET CIR. 68-A

BRIDGE DECK

ASPH

CONC

EXISTING 2.5" PARAPET DUCT

EXISTING PULL BOX

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN CONDUIT

EXIST.
AT31R WITH
20' ARM
TO REMAIN

3#2/1#8XLP
CIR. T62S-D
INSTALLED IN CONDUIT

EXISTING PULL BOX
2-3" PVC TO BASE

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

#1535
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2#12UF W/GND INTERNAL RISER
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
2#12UF W/GND INTERNAL RISER
STA. 53+14.3';55.3'RT

94

I43/I94
OFFRAMP

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

SCALE, FEET 0 30

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 191	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17-JAN-2019 07:06 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED. ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

#1438
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2#12UF W/GND INTERNAL RISER
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
STA. 55+73.0';03.0'rT

#1338
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 58+71.4';3.0'RT

#1422
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 57+08.0';3.0'RT

W. LAYTON AVE.

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

CIR. T62S-D

DETAIL 1 102 3" PVC SPECIAL

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

3#8/1#8XLP OUTLET CIR. 68-A

3#2/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

3#8/1#8XLP OUTLET CIR. 68-A

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

3#2/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

3#8/1#8XLP OUTLET CIR. 68-A

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

CHAIN LINK FENCE

CHAIN LINK

#1338

STA 56 SEC LINE STA 57 STA 58 STA 59 STA 60

CAUTION STORM

MH

CUC W FO SAN DOT ABAND. CONC ASPH

TEMPORARY DRIVEWAY

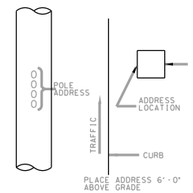
BLOCK RET. WALL

IP

N

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH
  - 2- CONTRACTOR SUPPLIED ARMS
  - 2- LED LUMINAIRES
  - 2- 2#12UF W/GND RISER CABLES
  - 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 12 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 192	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 07:09 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH
  - 2- CONTRACTOR SUPPLIED ARMS
  - 2- LED LUMINAIRES
  - 2- 2#12UF W/GND RISER CABLES
  - 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

13"X24"X24" PULL BOX 112 COILED & TAGGED 20'-3#4/1#8XLP 61+90.0';140'LT

#4677
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (NO BANNER)
31.5' MOUNTING HEIGHT
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
2#12UF W/GND .INT RISERS
STA. 61+87.0';66.2'LT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#4/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

3" PVC SPECIAL

13"X24"X24" PULL BOX 112

#4678
3LED3 LUMINAIRE
6' SINGLE (MONOTUBE) MEMBER ARM
2#12UF W/GND INTERNAL RISER ON EXITING MONOTUBE
STA. 62+60.0';65.09'LT

3#8/1#8XLP OUTLET CIR. 68-A

3#6/1#8XLP CIR.T62S-C

17"X30"X24" PULL BOX (TRAFFIC)

100 2.5"PVC SCH. 40 SERIES CIR. AT NEW WALK

EXISTING TYPE 10 SPECIAL BASE POLE TYPE 13 SPECIAL

13"X24"X24" PULL BOX 112 SERIES CIR. GRASS TERR.

#1258
2-3LED3 LUMINAIRE UPGRADE
2-8' SINGLE (MONOTUBE) MEMBER ARM
2-2#12UF W/GND INTERNAL RISERS
STA. 62+82.0';5.0'RT

#1238
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 64+06.0';0.9'RT

100 2.5"PVC SCH. 40 SERIES CIR. (SR-15)

3#8/1#8XLP OUTLET CIR. 68-A

3#2/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

W. LAYTON AVE.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

CIR. T62S-D

3#2/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

CIR. T62S-C

3#4/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

EXISTING TYPE 10 BASE TYPE 9 POLE

3#8/1#8XLP OUTLET CIR. 68-A INSTALL IN 4PK DUCT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

3#8/1#8XLP OUTLET CIR. 68-A

DETAIL J 102 3" PVC SPECIAL

13"X24"X24" PULL BOX 112 2-3" PVC TO BASE 64+03.0';01.5'RT

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

3#8/1#8XLP OUTLET CIR. 68-A

3#2/1#8XLP CIR. T62S-D IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

3#8/1#8XLP OUTLET CIR. 68-A

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3" PVC TO BASE

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

17"X30"X24" PULL BOX (TRAFFIC)

13"X24"X24" PULL BOX 112 63+51.0';01.5'RT

3#2/1#8XLP CIR. T62S-D INSTALLED IN CONDUIT

#1302
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (NO BANNER)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 61+68.0';5.0'LT

#1322
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 60+27.0';1.8'RT

EXISTING TYPE 10 SPECIAL BASE TYPE 12 POLE

EXIST. CONC. UNIT TO REMAIN
COORDINATE LUMINAIRE UPGRADE WITH STREET LIGHT DEPT.

#4700
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (NO BANNER)
31.5' MOUNTING HEIGHT
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
2#12UF W/GND INTERNAL RISERS
STA. 27+80.5';0.9'RT

3" PVC SPECIAL

CAP END AT PAVING LIMIT

S. 13TH ST.

POLE ADDRESS · ADDRESS LOCATION · TRAFFIC · CURB · PLACE ADDRESS 6'-0" ABOVE GRADE
CONTRACTOR FURNISHED AND INSTALLED

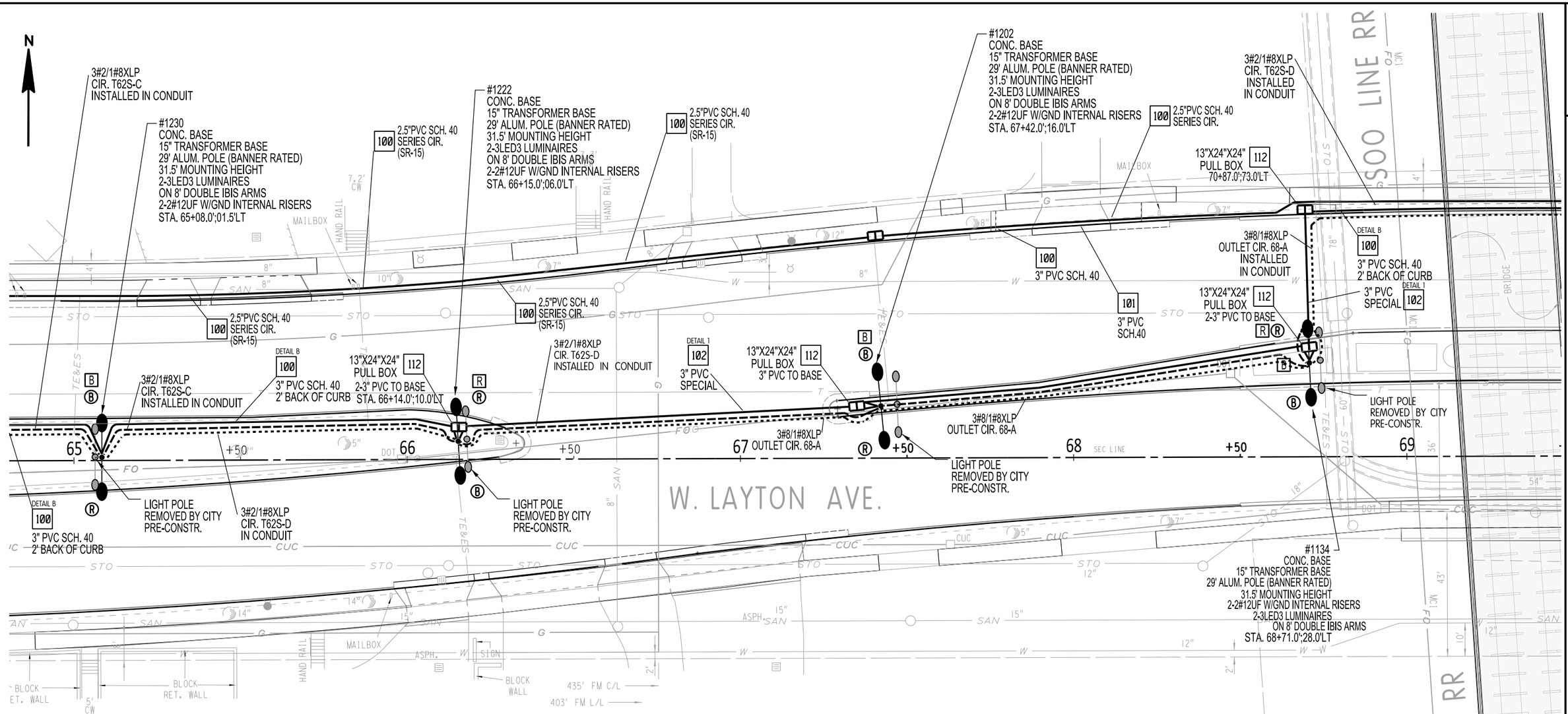
SCALE, FEET 0 30

SHEET 13 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 193	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 07:10 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42



NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

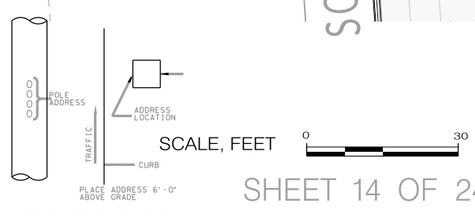
ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



CONTRACTOR FURNISHED AND INSTALLED

SHEET 14 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 194	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave – 27th to Howell (2070–03–01)\SL Underground\inset.dgn PLOT DATE : 16–JAN–2019 15:38 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

N

SOO LINE RR

100 2.5"PVC SCH. 40 SERIES CIR. AT NEW WALK (SR-15)

3#2/1#8XLP CIR. T62S-C INSTALLED IN CONDUIT

#1122 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS 2-2#12UF W/GND INTERNAL RISERS STA. 69+83.0';29.0'LT

112 13"X24"X24" PULL BOX 70+87.0';73.0'LT

100 2.5"PVC SCH. 40 SERIES CIR. (SR-15)

13"X24"X24" PULL BOX 67+40.0';69.0'LT 112

101 2.5"PVC SCH. 40 SERIES CIR. (SR-15)

100 2.5"PVC SCH. 40 SERIES CIR. (SR-15)

100 3" PVC SCH. 40

DETAIL 1 102 3" PVC SPECIAL

3#6/1#8XLP OUTLET CIR. 68-A

3#6/1#8XLP OUTLET CIR. 68-A

112 13"X24"X24" PULL BOX 2-3" PVC TO BASE

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

#1100 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS 2-2#12UF W/GND INTERNAL RISERS STA. 71+09.0';21.0LT

3#4/1#8XLP CIR. T30S-A IN CONDUIT

3#6/1#8XLP OUTLET CIR. 68-A

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3#4/1#8XLP CIR. T30S-A IN CONDUIT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100 3" PVC SCH. 40 2' BACK OF CURB

#1022 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS 2-2#12UF W/GND INTERNAL RISERS STA. 72+29.0';07.0LT

13"X24"X24" PULL BOX 112 STA. 72+38.0';04.0LT

3" PVC SPECIAL DETAIL 1 102

3#8/1#8XLP OUTLET CIR. 68-A

#1008 CONC. BASE 15" TRANSFORMER BASE 29' ALUM. POLE (BANNER RATED) 31.5' MOUNTING HEIGHT 2-2#12UF W/GND INTERNAL RISERS 2-3LED3 LUMINAIRES ON 8' DOUBLE IBIS ARMS STA. 73+67.0';04.0RT

13"X24"X24" PULL BOX 112 STA. 73+76.0';00.0LT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

3" PVC SPECIAL DETAIL 1 102

3#8/1#8XLP OUTLET CIR. 68-A

3#4/1#8XLP CIR. T30S-A IN CONDUIT

13"X24"X24" PULL BOX 112 IN GRASS TERR.

MAILBOX

W. LAYTON AVE.

70 +50 71 +50 72 +50 73 +50

SOO LINE RR

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 15 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 195	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave – 27th to Howell (2070–03–01)\SL Underground\inset.dgn PLOT DATE : 16–JAN–2019 15:43 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

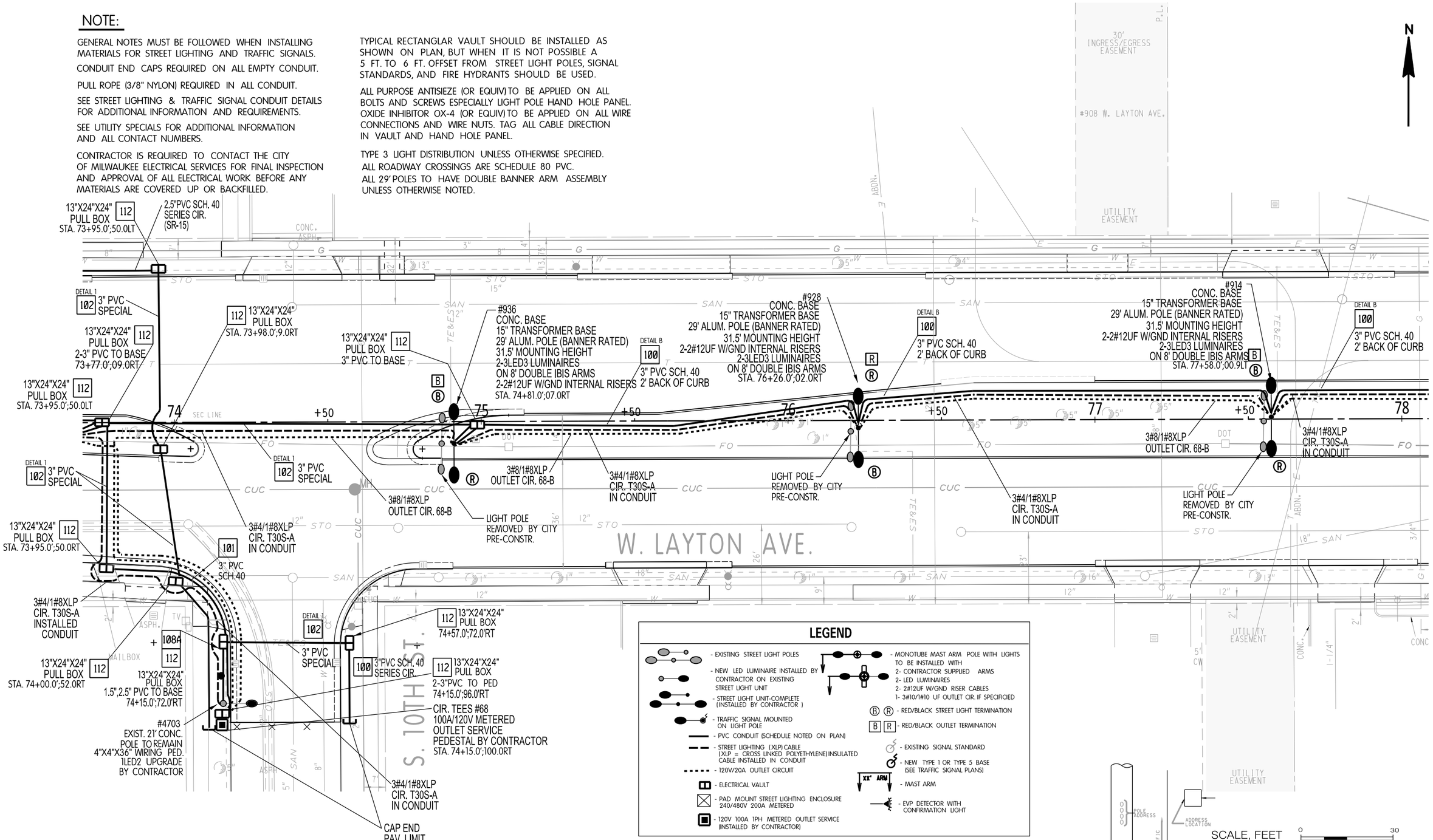
SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

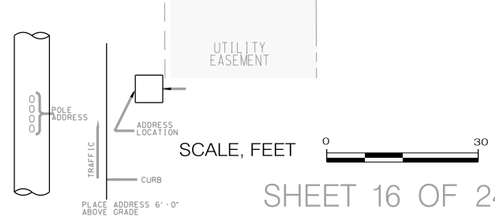
ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) RED/BLACK STREET LIGHT TERMINATION
- [B] [R] RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



SCALE, FEET 0 30

SHEET 16 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 196	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave – 27th to Howell (2070–03–01)\SL Underground\inset.dgn PLOT DATE : 16–JAN–2019 15:44 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH
  2- CONTRACTOR SUPPLIED ARMS
  2- LED LUMINAIRES
  2- 2#12UF W/GND RISER CABLES
  1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

CONTRACTOR FURNISHED AND INSTALLED

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

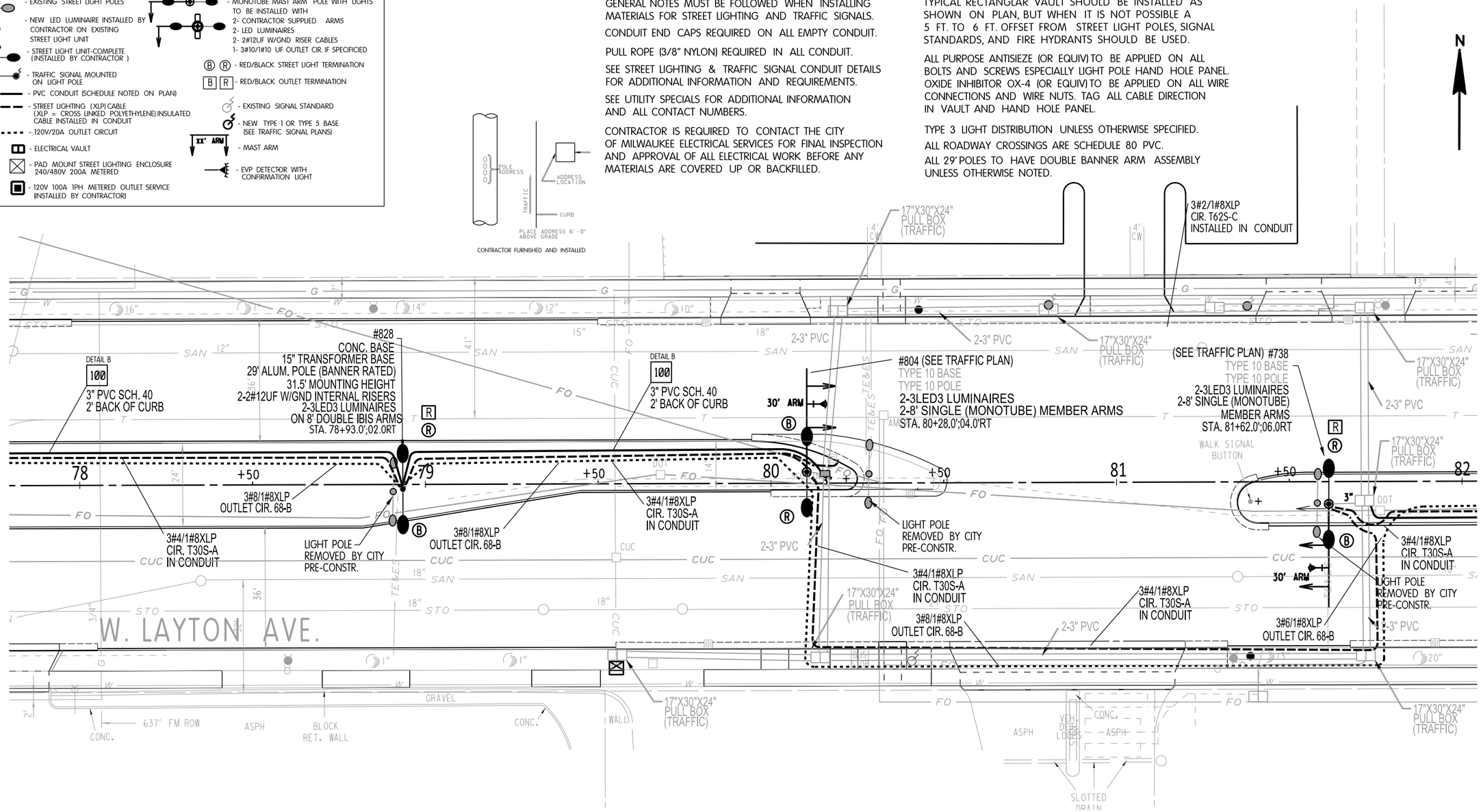
TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



SCALE, FEET 0 30

SHEET 17 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 197	E

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- xx' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

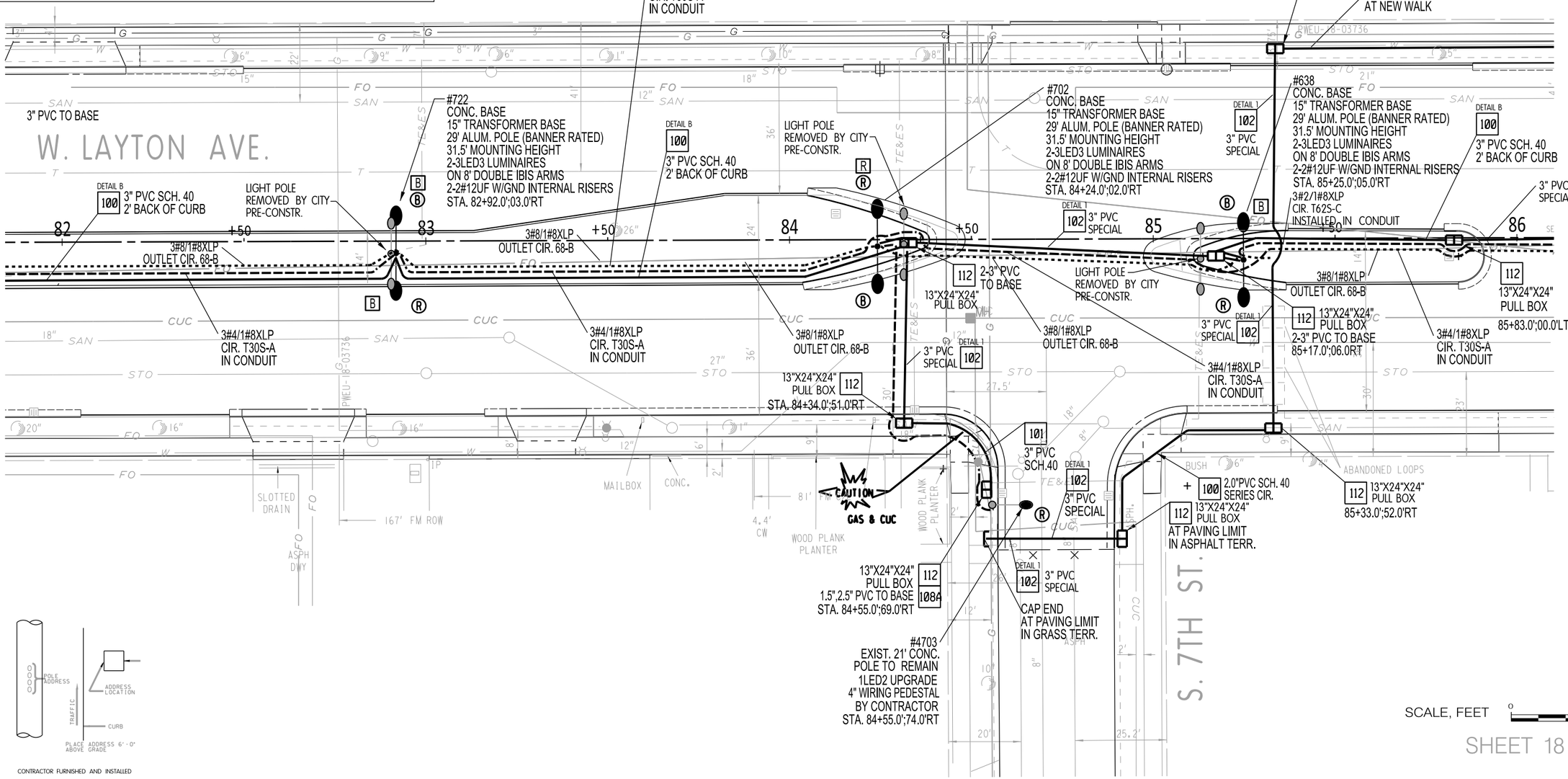
CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



CONTRACTOR FURNISHED AND INSTALLED

SHEET 18 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 198	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave – 27th to Howell (2070–03–01)\SL Underground\inset.dgn PLOT DATE : 16–JAN–2019 15:49 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

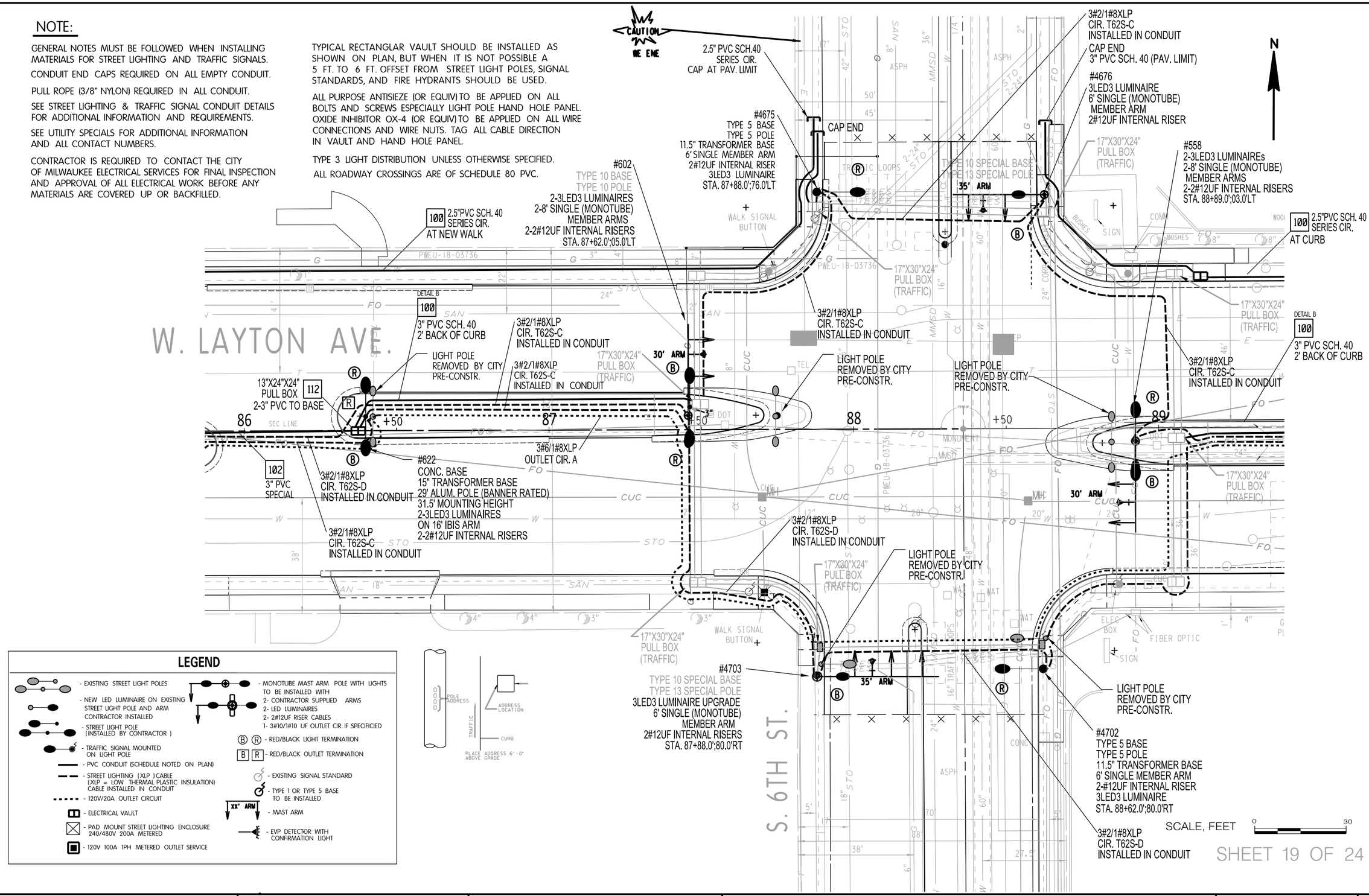
CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE OF SCHEDULE 80 PVC.



LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE ON EXISTING STREET LIGHT POLE AND ARM CONTRACTOR INSTALLED
- STREET LIGHT POLE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = LOW THERMAL PLASTIC INSULATION) CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ RED/BLACK LIGHT TERMINATION
- B R RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- TYPE 1 OR TYPE 5 BASE TO BE INSTALLED
- xx' ARM MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 199	E

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

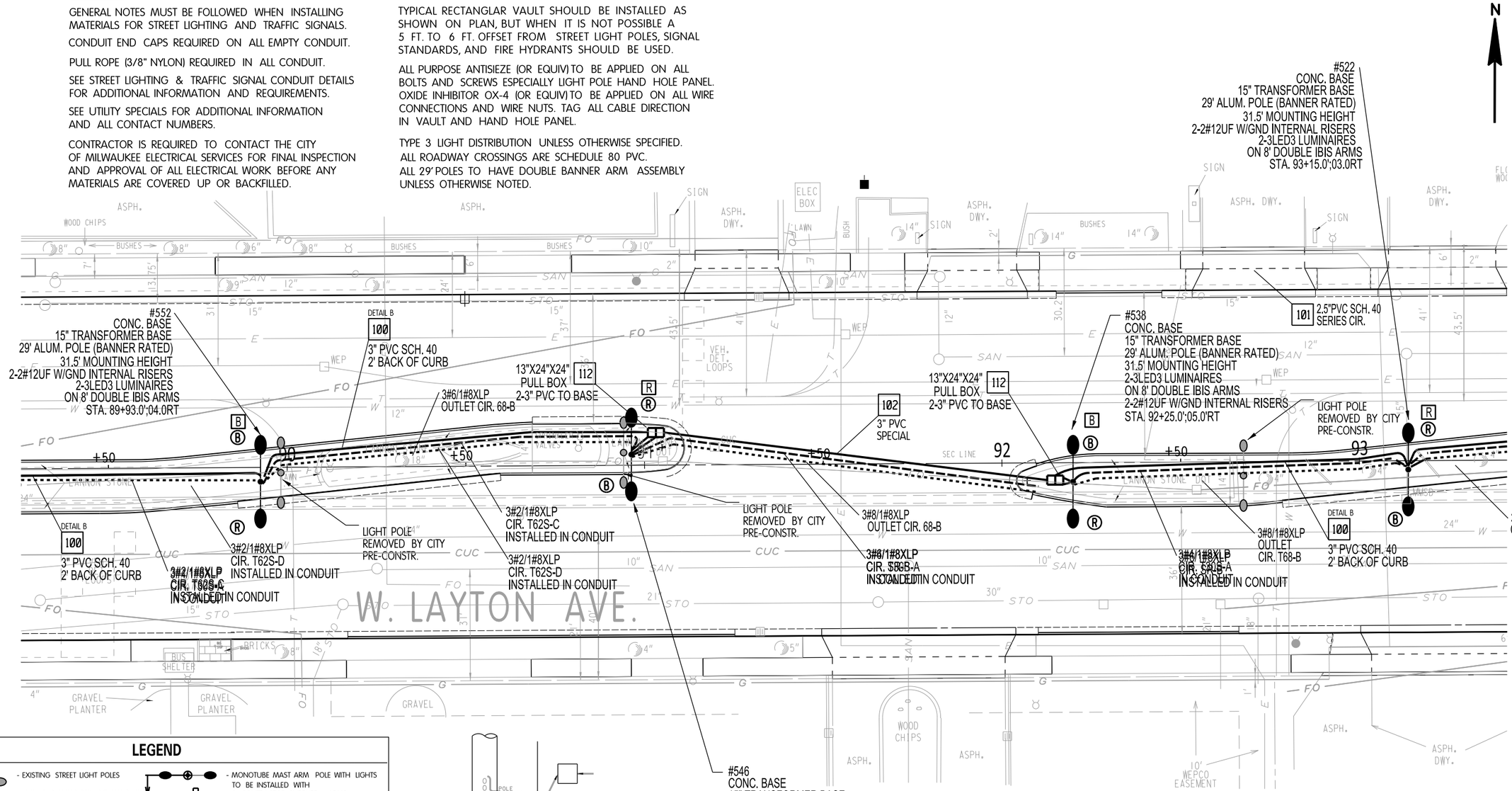
SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

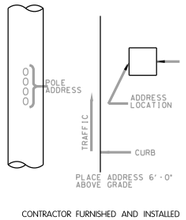
ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 20 OF 24

PROJECT NO:2070–03–71	HWY:W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 200	E

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

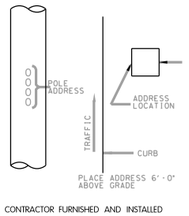
ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

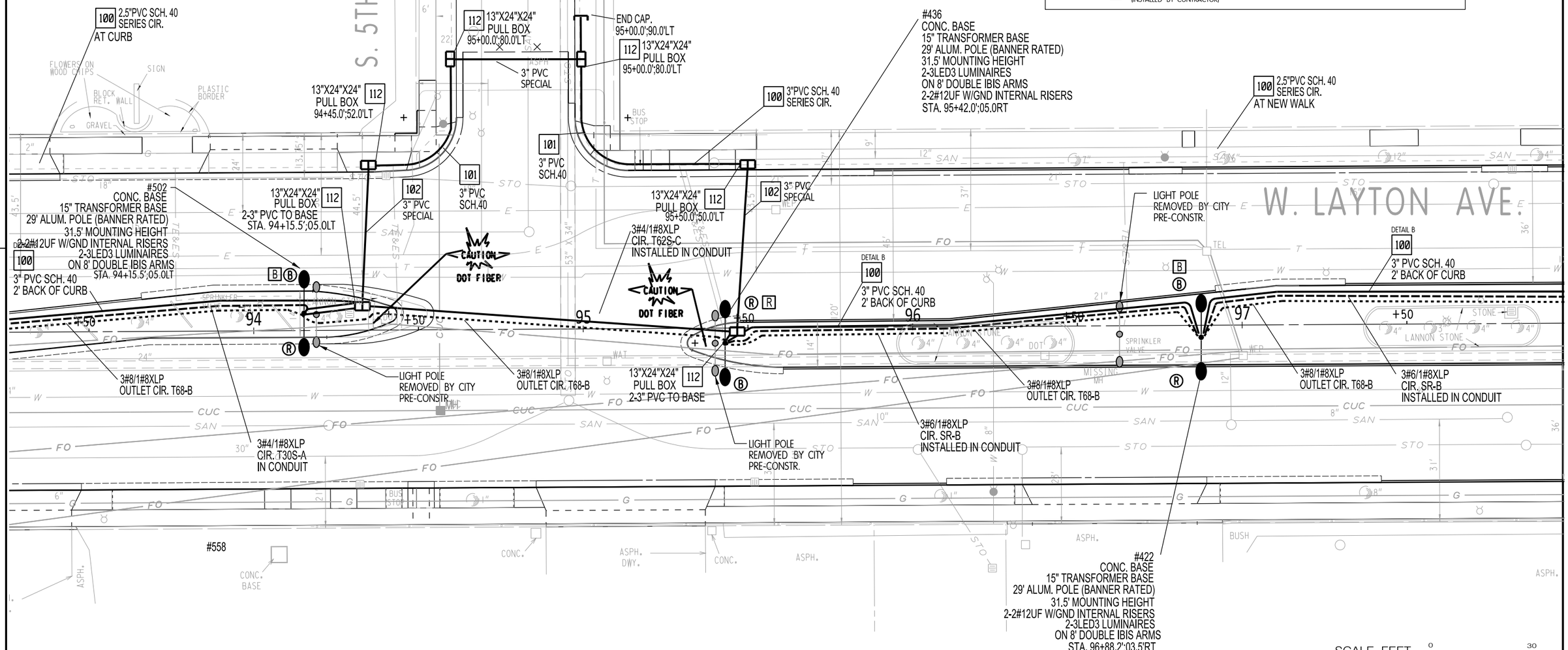
ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.



CONTRACTOR FURNISHED AND INSTALLED

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



SHEET 21 OF 24

PROJECT NO:2070–03–71	HWY:W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 201	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 07:15 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

#400
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 98+31.5';03.5RT

#322
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 99+61.0';06.5RT

#304
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 100+69.5';03.5LT

#240
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-2#12UF W/GND INTERNAL RISERS
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
STA. 101+78.5';05.0LT

N

W. LAYTON AVE.

DETAIL B
100
3" PVC SCH. 40
2' BACK OF CURB

13"X24"X24" PULL BOX
112
2-3" PVC TO BASE
STA. 98+55.0';04.0RT

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

102
3" PVC
SPECIAL

3#8/1#8XLP
OUTLET CIR. T68-B

13"X24"X24" PULL BOX
112
2-3" PVC TO BASE

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

CAUTION
DOT FIBER

DETAIL B
100
3" PVC SCH. 40
2' BACK OF CURB

3#8/1#8XLP
OUTLET CIR. T68-B

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

LIGHT POLE
REMOVED BY CITY
PRE-CONSTR.

DETAIL B
100
3" PVC SCH. 40
2' BACK OF CURB

3#8/1#8XLP
OUTLET CIR. T68-B

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

112
13"X24"X24" PULL BOX
2-3" PVC TO BASE
STA. 101+88.0';12.0LT

CAUTION
DOT FIBER

102
3" PVC
SPECIAL

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

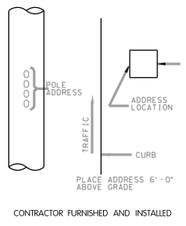
3#8/1#8XLP
OUTLET CIR. T68-B

98 99 100 101 102 +50

SEC LINE
SPRINKLER VALVE
PLANTER
ASPH.
T.O. CULVERT
B.O. CULVERT
SIGN
ASPH. CURB
ASPH
SIGN POST
CURB
GRAVEL
LAWN
BUSHES
VALVE VAULT
MH
MSD
STONE
SAN
STO
CUC
W
G
E
T
TE&ES

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- Ⓑ Ⓡ - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT



CONTRACTOR FURNISHED AND INSTALLED

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

SCALE, FEET 0 30

SHEET 22 OF 24

PROJECT NO:2070–03–71	HWY:W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 202	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 07:14 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

#234
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 102+87.0';06.0'RT

#222
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 103+75.0';05.0'RT

#212
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 104+80.0';01.5'LT

#204
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 105+98.0';04.2'LT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
102+76.0';04.0'RT

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

DETAIL B 100
3" PVC SCH. 40
2' BACK OF CURB

3#6/1#8XLP CIR. SR-B INSTALLED IN CONDUIT

3#8/1#8XLP OUTLET CIR. T67-A

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE
STA. 106+00.0';04.0'LT

3" PVC SPECIAL 102

13"X24"X24" PULL BOX 112
STA. 107+21.0';05.0'RT

CAUTION DOT FIBER

103 104 105 107 +50

W. LAYTON AVE.

BRIDGE WALL, GUARD RAIL, WOOD CHIP, BOLLARDS, LAWN, WOOD CHIPS, SIGN ON POST, RR TIE, BUSH, ASPH., SIGN POSTS, BRICKS, LUMBER CONC., TRIPLE BOX CULVERT, SPRINKLER VALVES, LANNON STONE, BUS STOP, STAMPED CONC, BRICK SIGN WALL, CONC CURB, PATIO BLOCKS, BUSHES, WOOD CHIPS, GUARDRAIL, SIGN, ASPH. DWY., #203 ADJ W. LAYTON AVE., DRAINAGE ROW, WAT

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH 2- CONTRACTOR SUPPLIED ARMS 2- LED LUMINAIRES 2- 2#12UF W/GND RISER CABLES 1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- [B] [R] - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- XX' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

POLE ADDRESS, ADDRESS LOCATION, TRAFFIC, CURB, PLACE ADDRESS 6'-0" ABOVE GRADE

CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 23 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 203	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17–JAN–2019 07:13 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

#170
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 107+64.6';05.1'RT

13"X24"X24" PULL BOX 112
108+95.0';50.0'LT

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

100 3" PVC SCH 40

100 2.5"PVC SCH. 40 SERIES CIR. AT NEW WALK

13"X24"X24" PULL BOX 112
110+73.0';50.0'LT

#140
EXISTING
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2#12UF W/GND INTERNAL RISER
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM

S. 1ST ST.

EXISTING PULL BOX

EXISTING
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS

#160
CONC. BASE
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2-3LED3 LUMINAIRES
ON 8' DOUBLE IBIS ARMS
2-2#12UF W/GND INTERNAL RISERS
STA. 108+94.5';02.0'LT

3#8/1#8XLP
OUTLET CIR. T67-A

2.5" PVC SCH 40

112 13"X24"X24" PULL BOX SERIES CIR. AT NEW WALK

3#8/1#8XLP
OUTLET CIR. 67-A

3#6/1#8XLP
CIR. SR-B
INSTALLED IN CONDUIT

13"X24"X24" PULL BOX 112
2-3" PVC TO BASE

DETAIL B
100 3" PVC SCH. 40
2' BACK OF CURB

DETAIL B
100 3" PVC SCH. 40
2' BACK OF CURB

108 109 110 111

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

CAUTION
DOT FIBER

LIGHT POLE REMOVED BY CITY PRE-CONSTR.

W. LAYTON AVE.

EXISTING PULL BOX

#141

EXISTING
15" TRANSFORMER BASE
29' ALUM. POLE (BANNER RATED)
31.5' MOUNTING HEIGHT
2#12UF W/GND INTERNAL RISER
3LED3 LUMINAIRE
ON 8' SINGLE IBIS ARM
2#12UF W/GND INTERNAL RISER

2.5" PVC SCH 40

N. 88°51'21"E.

N

LEGEND

- EXISTING STREET LIGHT POLES
- NEW LED LUMINAIRE INSTALLED BY CONTRACTOR ON EXISTING STREET LIGHT UNIT
- STREET LIGHT UNIT-COMPLETE (INSTALLED BY CONTRACTOR)
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- PVC CONDUIT (SCHEDULE NOTED ON PLAN)
- STREET LIGHTING (XLP) CABLE (XLP = CROSS LINKED POLYETHYLENE) INSULATED CABLE INSTALLED IN CONDUIT
- 120V/20A OUTLET CIRCUIT
- ELECTRICAL VAULT
- PAD MOUNT STREET LIGHTING ENCLOSURE 240/480V 200A METERED
- 120V 100A 1PH METERED OUTLET SERVICE (INSTALLED BY CONTRACTOR)
- MONOTUBE MAST ARM POLE WITH LIGHTS TO BE INSTALLED WITH
  2- CONTRACTOR SUPPLIED ARMS
  2- LED LUMINAIRES
  2- 2#12UF W/GND RISER CABLES
  1- 3#10/1#10 UF OUTLET CIR. IF SPECIFICIED
- (B) (R) - RED/BLACK STREET LIGHT TERMINATION
- B R - RED/BLACK OUTLET TERMINATION
- EXISTING SIGNAL STANDARD
- NEW TYPE 1 OR TYPE 5 BASE (SEE TRAFFIC SIGNAL PLANS)
- xx' ARM - MAST ARM
- EVP DETECTOR WITH CONFIRMATION LIGHT

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

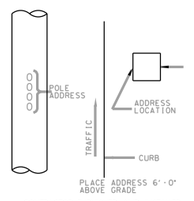
TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL PURPOSE ANTISIEZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTIONS AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.

ALL ROADWAY CROSSINGS ARE SCHEDULE 80 PVC.

ALL 29' POLES TO HAVE DOUBLE BANNER ARM ASSEMBLY UNLESS OTHERWISE NOTED.



CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 24 OF 24

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING PLAN	SHEET 204	E

FILE NAME : C:\Users\lhickm\Desktop\inset.dgn PLOT DATE : 17-JAN-2019 07:11 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

2

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 OR TRAFFIC ENGINEER'S 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 WITHIN 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.

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

STREET LIGHTING GENERAL NOTES:

21 CONTRACTOR MUST WORK IN CONCERT WITH THE TEMPORARY STREET LIGHTING AND/OR TRAFFIC SIGNAL OVERHEAD FACILITIES AND TEMPORARY POLES. CONTRACTOR IS RESPONSIBLE TO TAKE ALL NECESSARY ACTION TO ENSURE THE CONSTRUCTION PROCESS IS NOT IMPEDED BY TEMPORARY FACILITIES. LATERAL AND VERTICAL CONSTRAINTS MUST BE IDENTIFIED IN WRITING TO THE CITY'S UTILITY COORDINATOR TWO WEEKS PRIOR TO THE SCHEDULED CONSTRUCTION START DATE IN ORDER TO OBTAIN THE DESIGNER'S APPROVAL FOR OVERHEAD FACILITIES ADJUSTMENT. AFTER THE CONSTRUCTION START DATE, CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY SERVICE FEE FOR TEMPORARY FACILITY ADJUSTMENT AND ASSUME FULL RESPONSIBILITY FOR ANY PROJECT DELAY.

22 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 - MARK MACRAE (OFFICE) 414-286-5928 (CELL) 414-708-0434
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 @ 414-286-3015
TRAFFIC SIGNALS - AL NICHOLS (OFFICE) 414-286-3687 (CELL) 414-708-5148

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

24 CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

25 CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

26 ALL PURPOSE ANTISEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS ESPECIALLY THE LIGHT POLE HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS. TAG ALL CABLE DIRECTION IN VAULT AND HAND HOLE PANEL.

27 Provide three sets as-built drawings detailing the final placement of conduit, cabling, equipment, and geometric modifications under the contract. Provide PDF copy conforming to CMM 1-65.14, or record all changes in Red ink Only on the As-Let (Design) paper drawings. The City will reject as-builts with incomplete or incorrect content or not conforming to CMM standards.

As-Built Guidelines:

< Locate and clearly label all conduit runs, fittings, splice vaults, pull boxes, meter pedestals, concrete bases, transformers, poles and other appurtenances in two directions. Swing ties should be made from objects that are permanent in nature and visible on the finished surface.
< Street names shall be on all sheets.
< Show all sizes and material types of pipes and conduits, if changed or modified from original design.
< All horizontal distances shall be shown to the nearest tenth of a foot (i.e., 205.3'). All vertical distances shall be shown to the nearest inch (i.e., 24").
< Show location and elevations on pipes and fittings where changes or deflections in direction occur.
< Special detail drawings may be required where installations are not shown on approved construction drawings for whatever reason or where required for clarity.
< Typical service installation details with deviations from original plans or standard details shall be noted on as-built drawings.
< No arbitrary mark-ups will be permitted.

If there are no corrections or additions to the As-Let plan(s) put "NO CHANGE" on the sheet with other required As-Built information.

Send to:
City of Milwaukee
Infrastructure Services Division
Transportation Section
Street Lighting & CUC Manager
841 N. Broadway (Room 920)
Milwaukee, WI. 53202

28 RETURN ALL REMOVED STREET LIGHTING FIXTURES TO STREET LIGHTING FIELD OFFICE
(ATTN: JILL KRAMER)
1540 W. CANAL ST. MILWAUKEE WI 53233

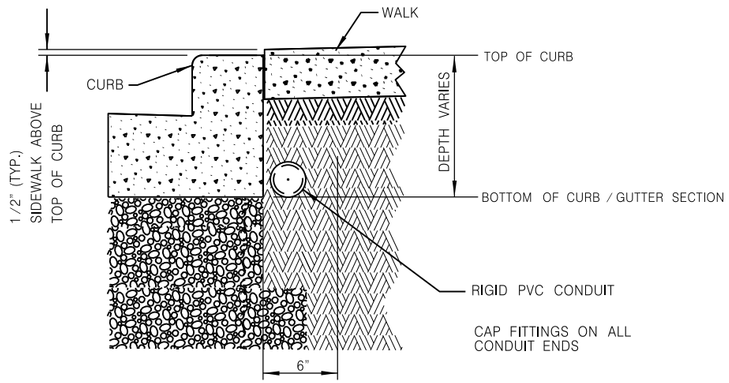
UTILITY LINE CODE

SAN	SANITARY SEWER
STO	STORM SEWER
W	WATER
G	GAS
G	PROPOSED GAS
E	ELECTRIC
TE&ES	TRAFFIC & STREET LIGHTING
	OLD CITY UNDERGROUND CONDUIT
CUC	PROPOSED CITY UNDERGROUND CONDUIT
T	TELEPHONE
TV	CABLE

SHEET 1 OF 13

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET 205	E

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

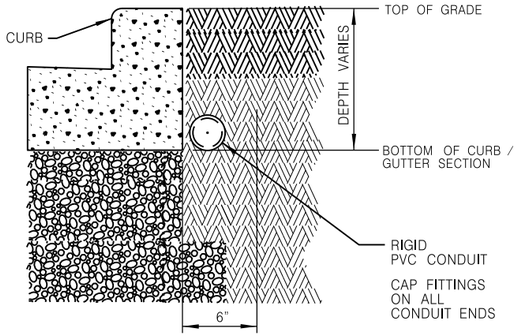
NOT TO SCALE

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

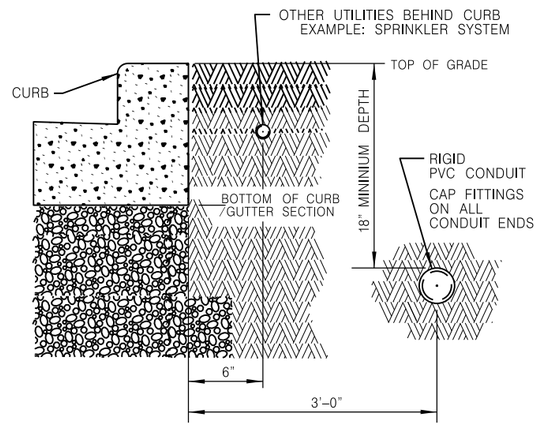
NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

DETAIL "B"

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



DETAIL "C"

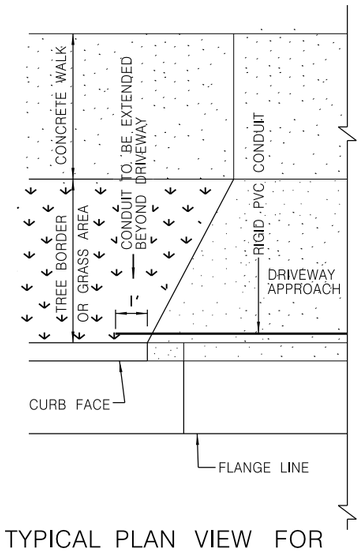


100 DETAIL "B" & "C"

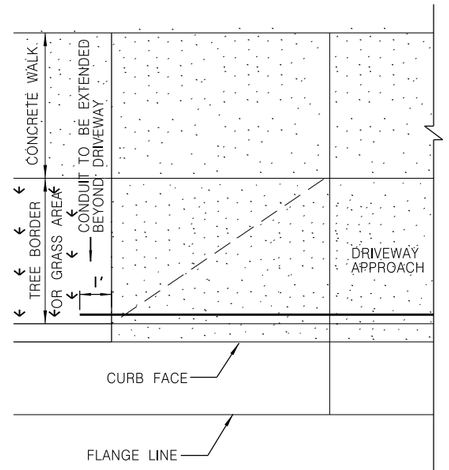
TYPICAL CONDUIT INSTALLATION
BEHIND CURB

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.

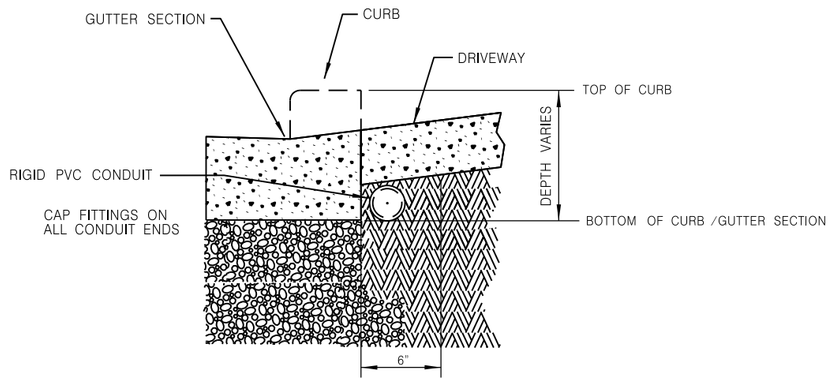


TYPICAL PLAN VIEW FOR
FLARED DRIVEWAY



TYPICAL PLAN VIEW FOR
DEPRESSED DRIVEWAY

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

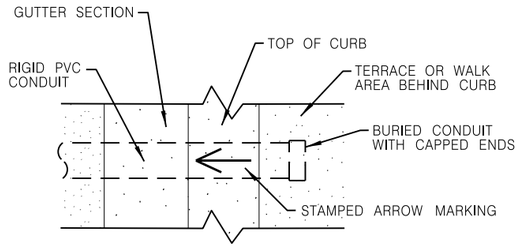
TYPICAL CONDUIT INSTALLATION
UNDER DRIVEWAYS OR PEDESTRIAN RAMPS

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 13

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET 206	E

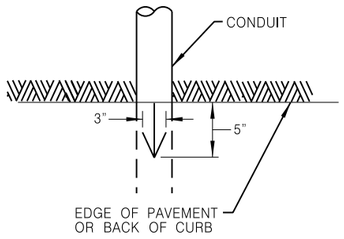


TOP VIEW OF CURB STAMPING

NOT TO SCALE

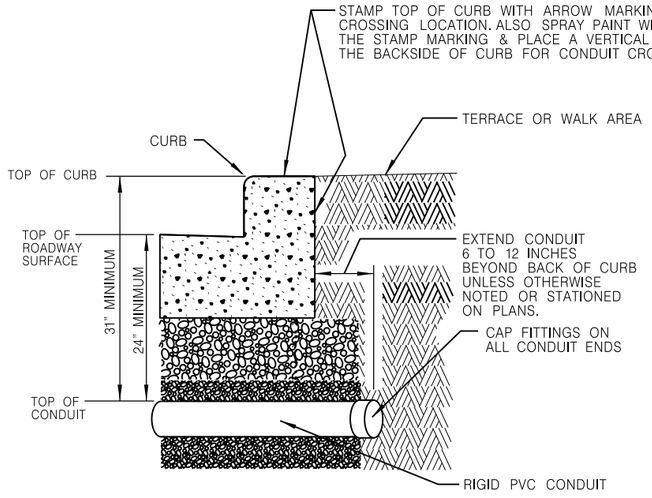
NOTE:

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



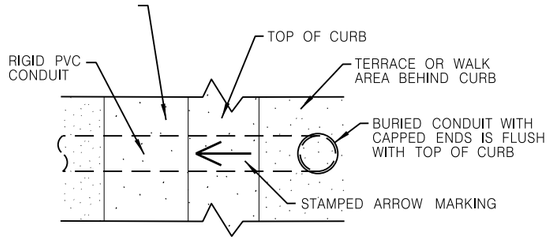
102

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.

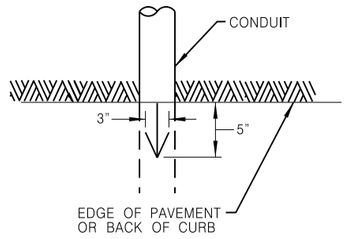


TOP VIEW OF CURB STAMPING

NOT TO SCALE

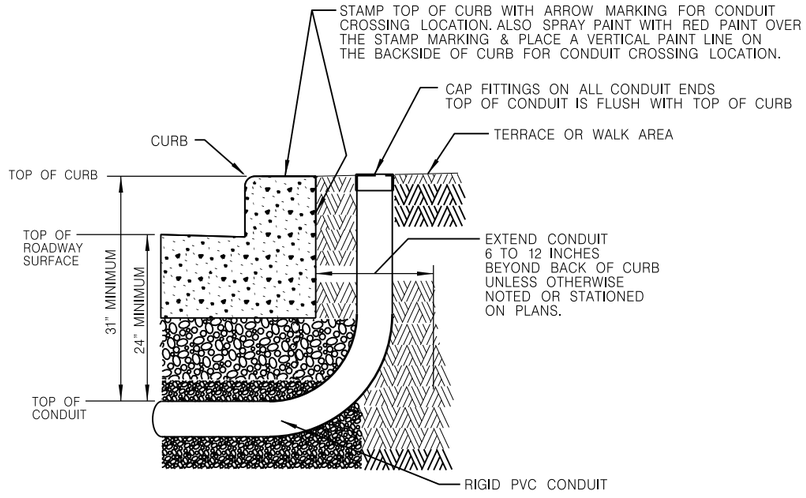
NOTE:

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



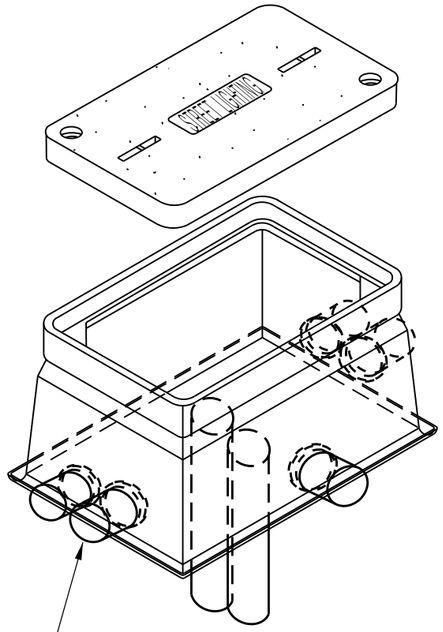
102

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.



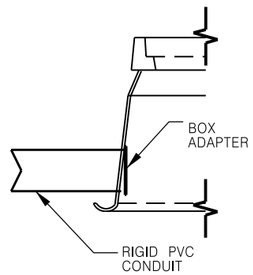
HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 BOLTS
COLOR: GRAY

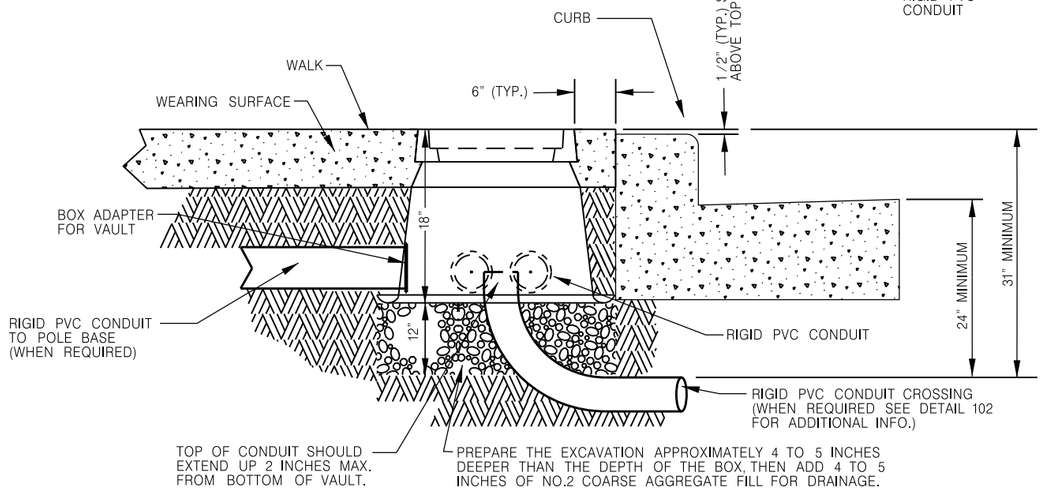
ELECTRICAL VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY

(VARIOUS SIZES)

PLUG OR CAP FITTINGS ON ALL
UNUSED CONDUITS IN THE ENCLOSURE

BOX ADAPTERS, COUPLINGS
TO ALL PVC CONDUITS

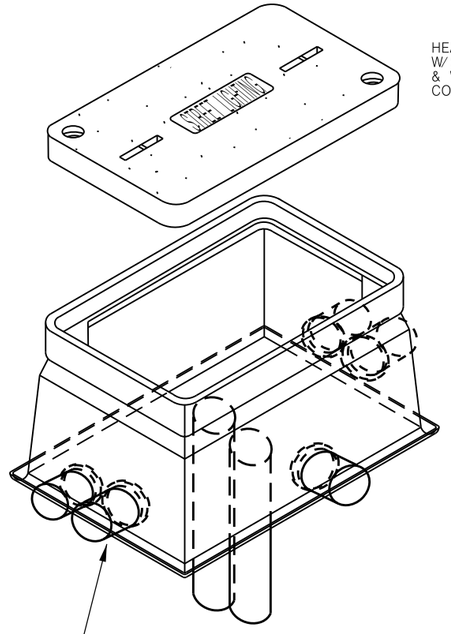




112 DETAIL – TYPICAL VAULT INSTALLATION IN FULL WALK AREA

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.



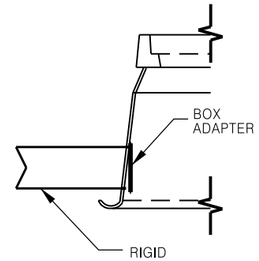
HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 BOLTS
COLOR: GRAY

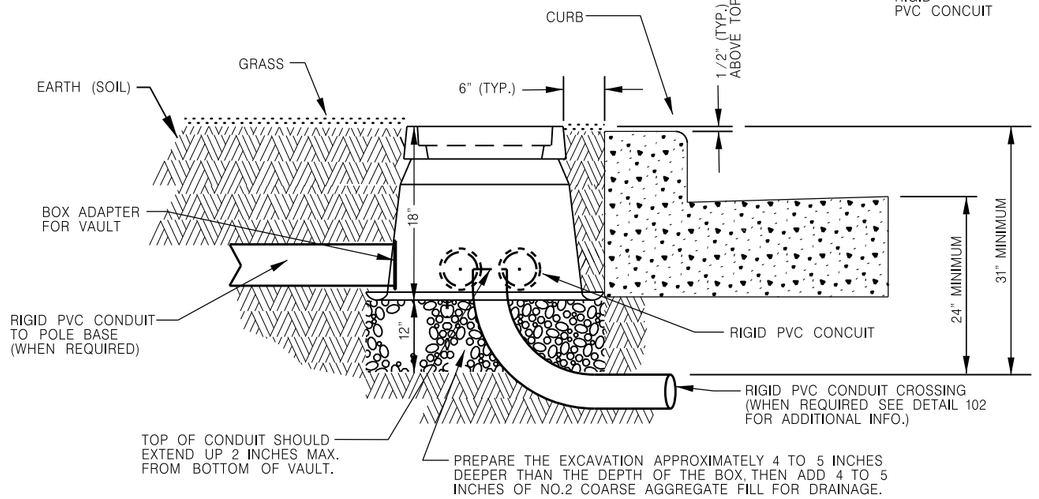
ELECTRICAL VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY

(VARIOUS SIZES)

PLUG OR CAP FITTINGS ON ALL
UNUSED CONDUITS IN THE ENCLOSURE

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





112 DETAIL – TYPICAL VAULT INSTALLATION IN GRASS AREA

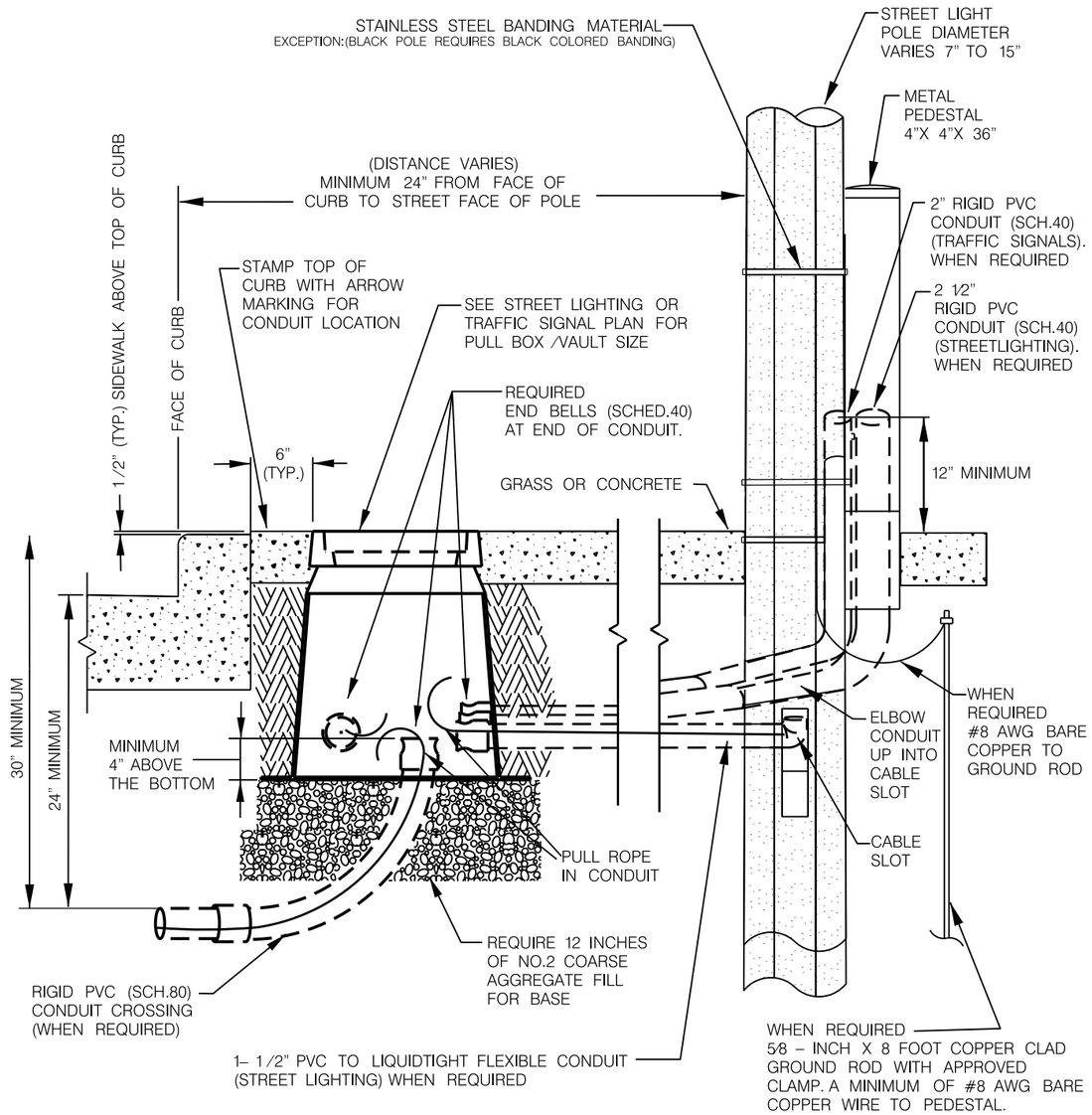
NOT TO SCALE

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

2

SHEET 4 OF 13

2



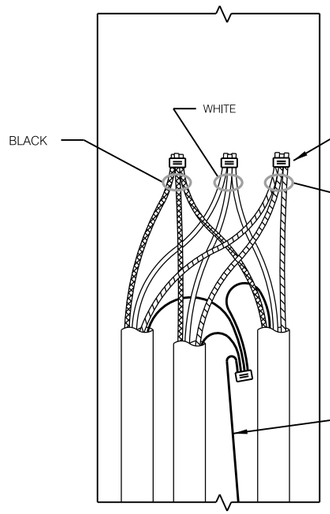
108A

DETAIL VERSION

TYPICAL CONDUIT INSTALLATION FROM PULL BOX TO POLE & 4"X4" WIRING PEDESTAL

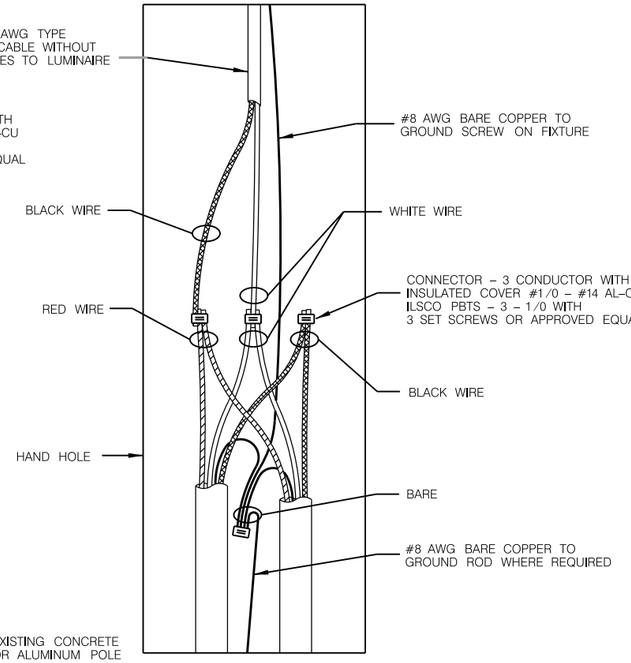
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

NOT TO SCALE



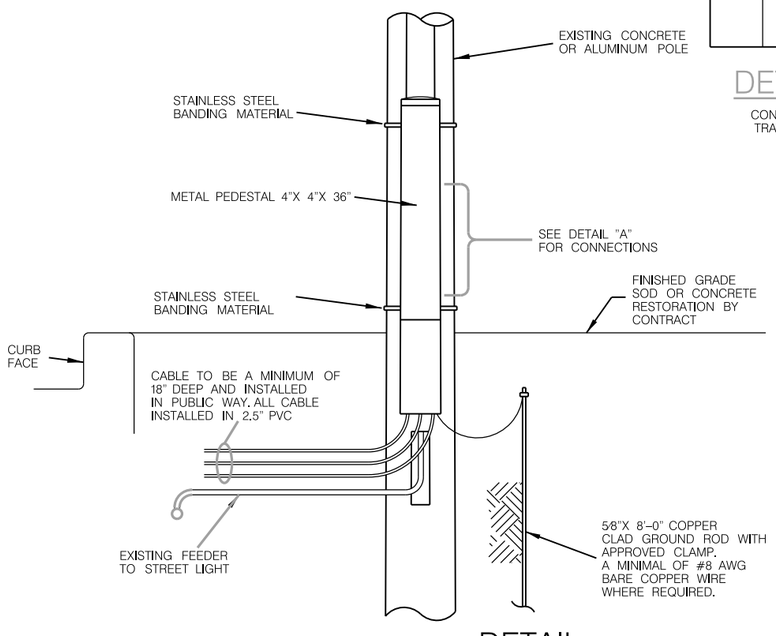
DETAIL "A"

CONNECTIONS WITHIN PEDESTAL CABINET



DETAIL "B"

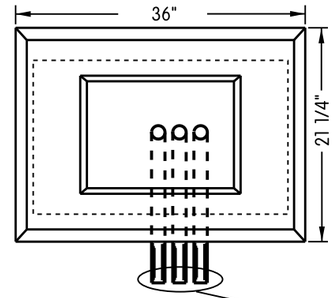
CONNECTIONS WITHIN TRANSFORMER BASE



DETAIL

TYPICAL WIRING CONNECTIONS IN TRANSFORMER BASE & PEDESTAL HOUSING ON POLE

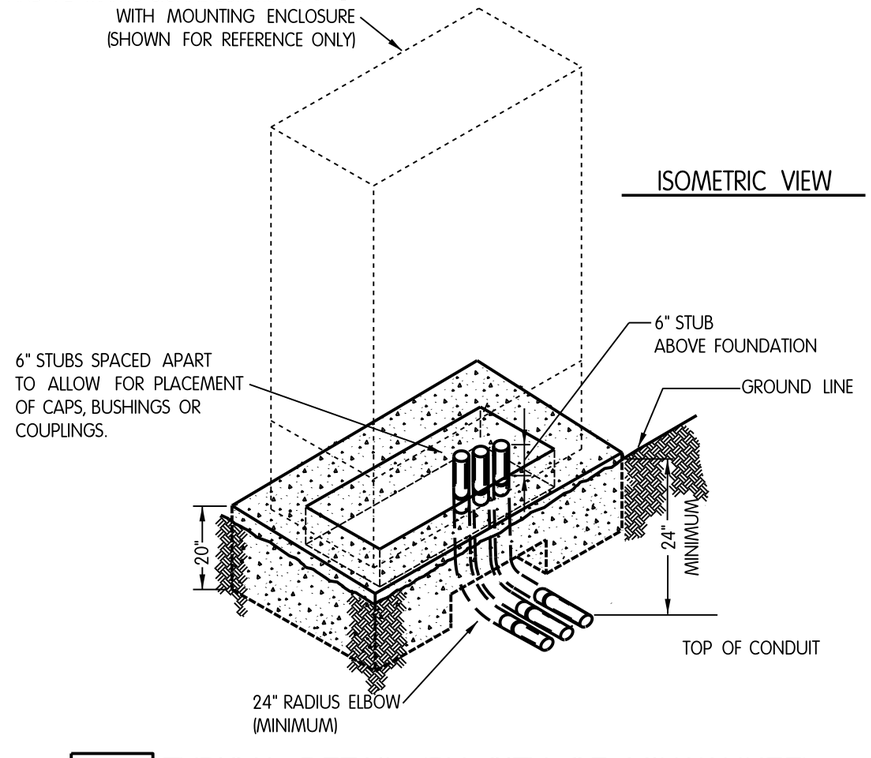
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.



PLAN VIEW

NOTE:
CONDUIT SHOWN ON PLAN INCIDENTAL. REFER TO STREET LIGHTING AND TRAFFIC SIGNAL CONDUIT PLAN FOR THE QUANTITY & SIZE OF CONDUIT REQUIRED IN THE CONCRETE CONTROL CABINET BASE

STYLE P1 AND P2 TRAFFIC SIGNAL CONTROL CABINET WITH MOUNTING ENCLOSURE (SHOWN FOR REFERENCE ONLY)



ISOMETRIC VIEW

125B TYPICAL DETAIL (BY CITY OF MILWAUKEE)

NOT TO SCALE

CONDUIT INSTALLATION TO TRAFFIC CONTROL CABINET CONCRETE FOUNDATION

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

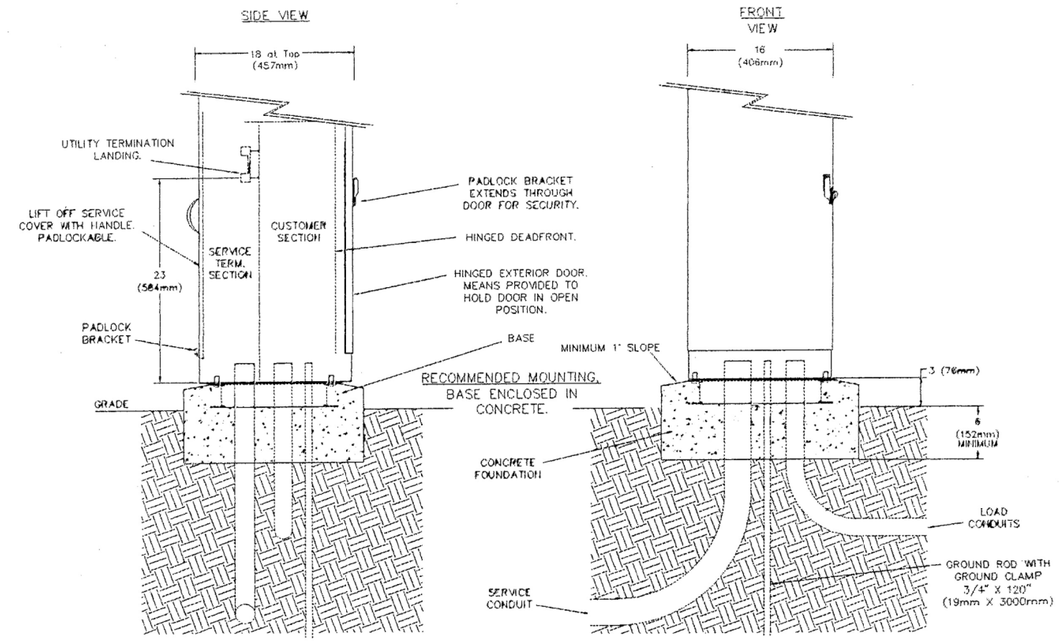
SHEET 6 OF 13

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET OF 210	E

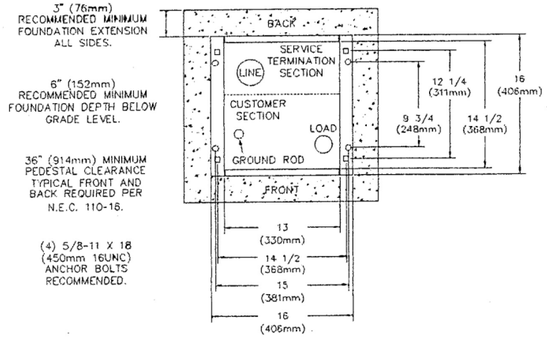
CP3B51119ASP_

Metered Outlet Service Pedestal V100A–120/240

TYPICAL CONSTRUCTION &
INSTALLATION DETAILS

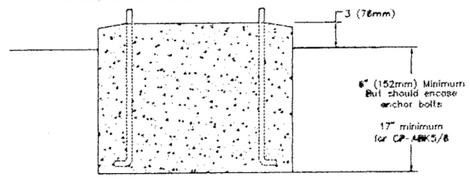


MOUNTING BASE DETAIL
(TOP VIEW)



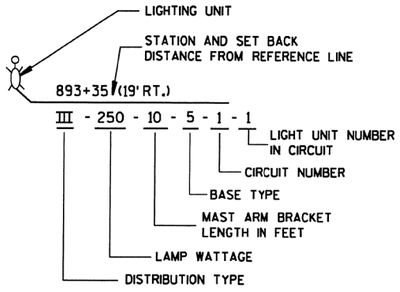
○ PEDESTAL MOUNTING HOLES
□ ANCHOR BOLT MOUNTING HOLES

OPTIONAL MOUNTING
NO BASE. MOUNT DIRECTLY ON FOUNDATION.

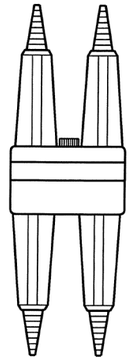


SHEET 07 OF 13

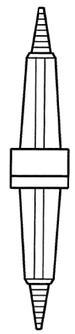
PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET OF 211	E



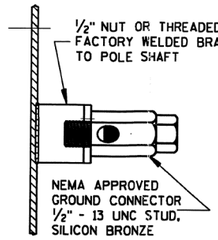
LIGHTING UNIT CODE
(TYPICAL)

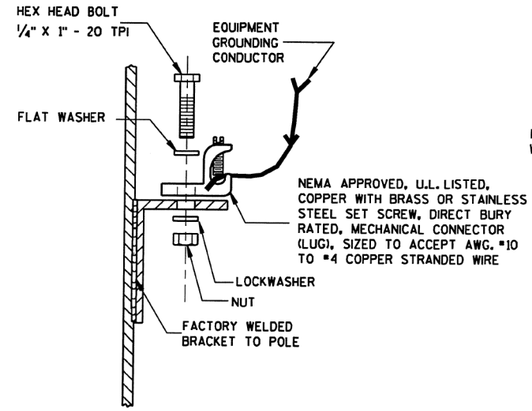


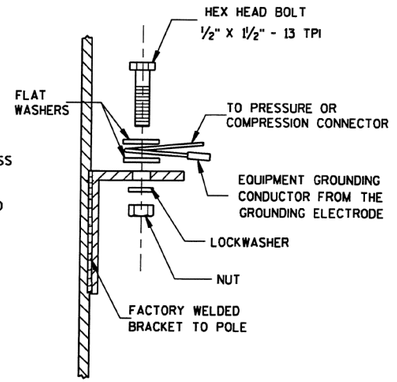
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



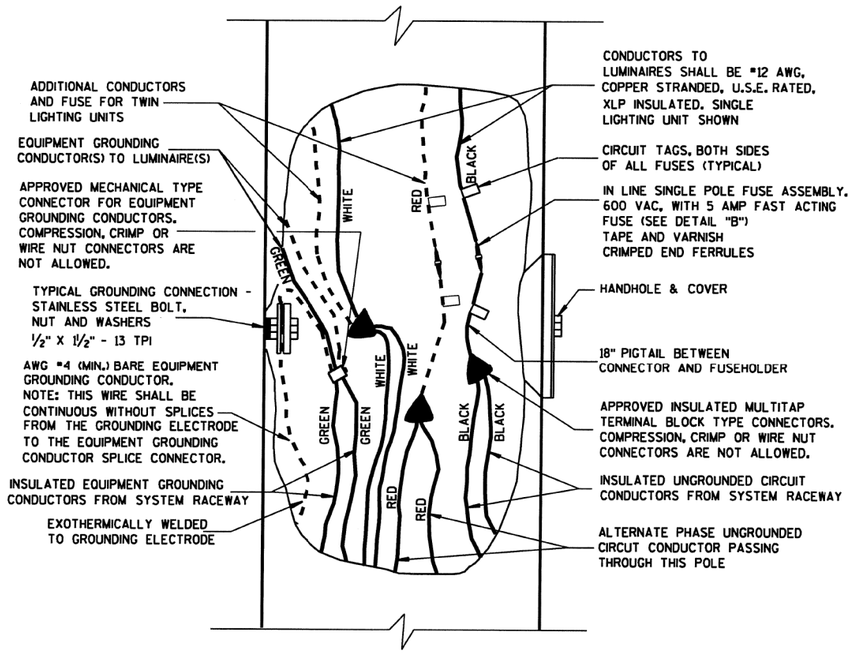
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



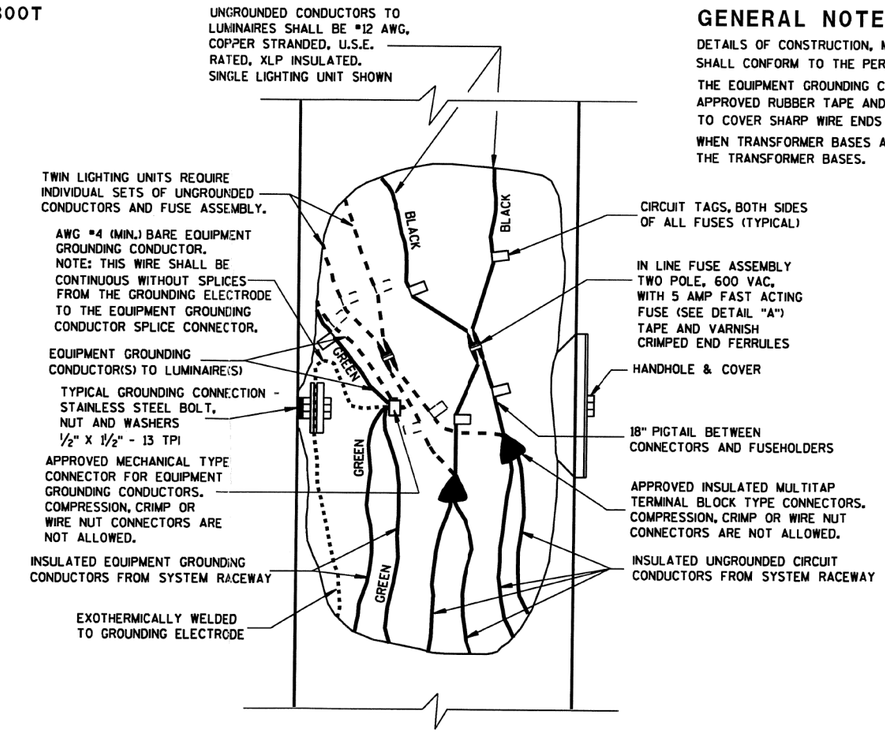




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



**3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR**



**2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR**

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

PROJECT NO: 2070-03-71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET 212	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave - 27th to Howell (2070-03-01)\ARCH LAMP.dgn
PLOT DATE : 18-JAN-2019 11:50
PLOT BY : lhickm
PLOT NAME :
PLOT SCALE : 20.000000:1.000000
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 SMOOTH 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 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 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.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

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

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

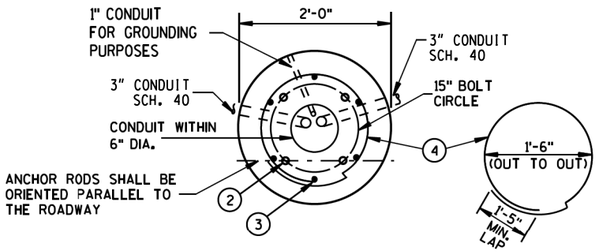
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

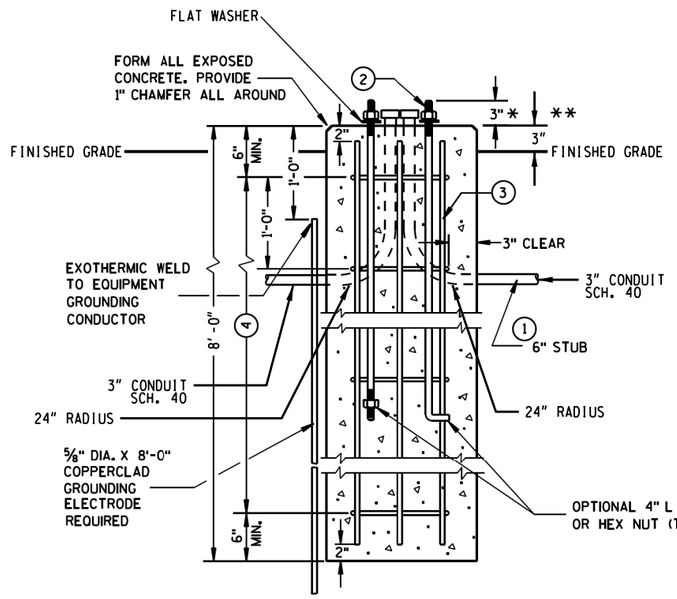
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN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

(2) (4) 1" DIA. X 6'-0" GRADE M314 ASHTO GRADE 55 STEEL ANCHOR RODS.

(3) (6) NO. 6 X 7'-8" BAR STEEL REINFORCEMENT.

(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



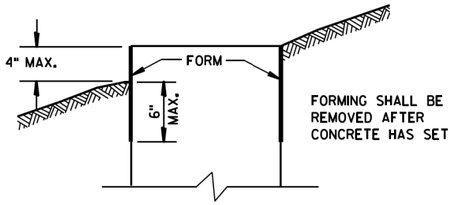


CONCRETE LIGHT BASES TYPE 21

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

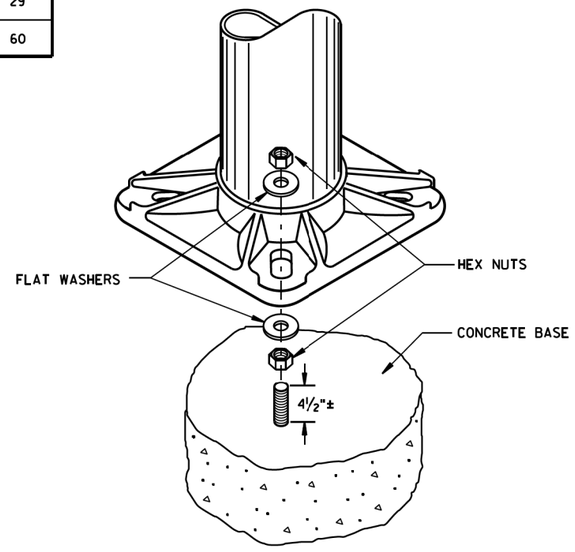
** FOR NONBREAKAWY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

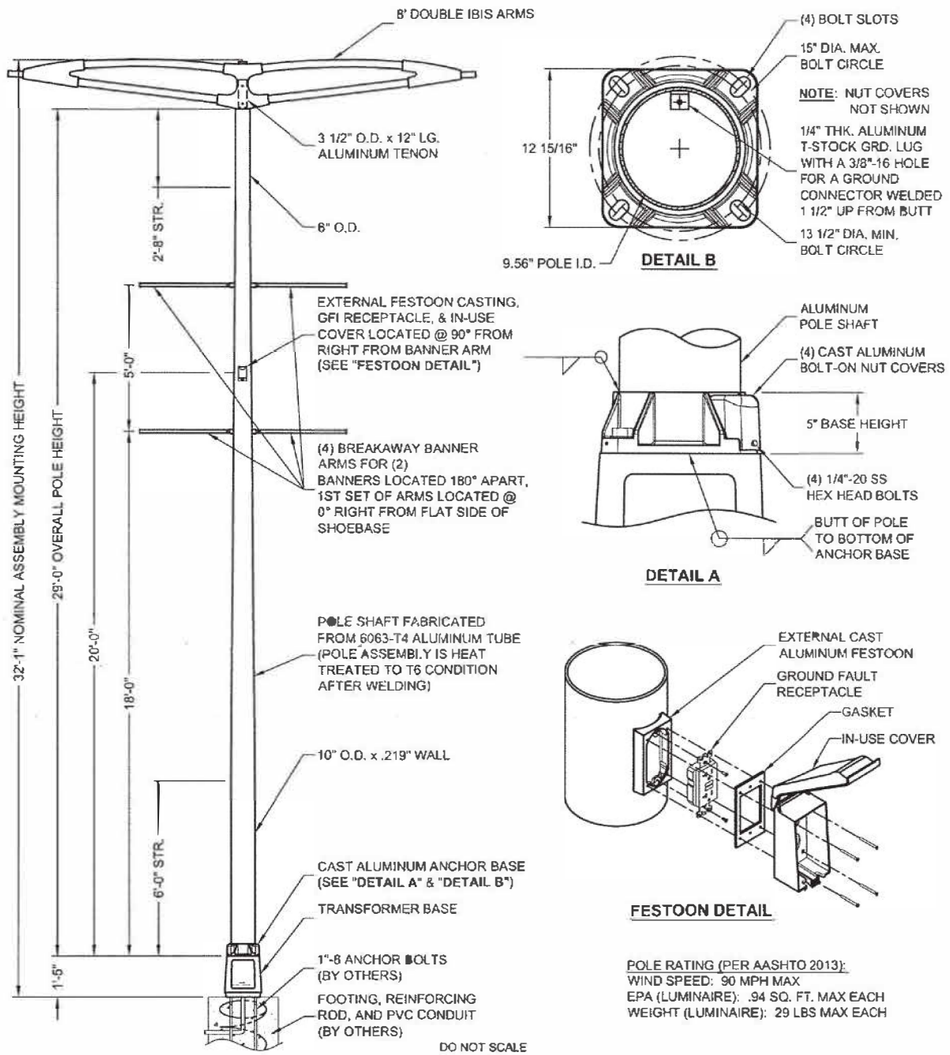
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	0.8
LBS. OF HOOP BAR STEEL	29
LBS. OF VERTICAL BAR STEEL	60



NON-BREAKAWAY INSTALLATION
(LEVELING NUT)

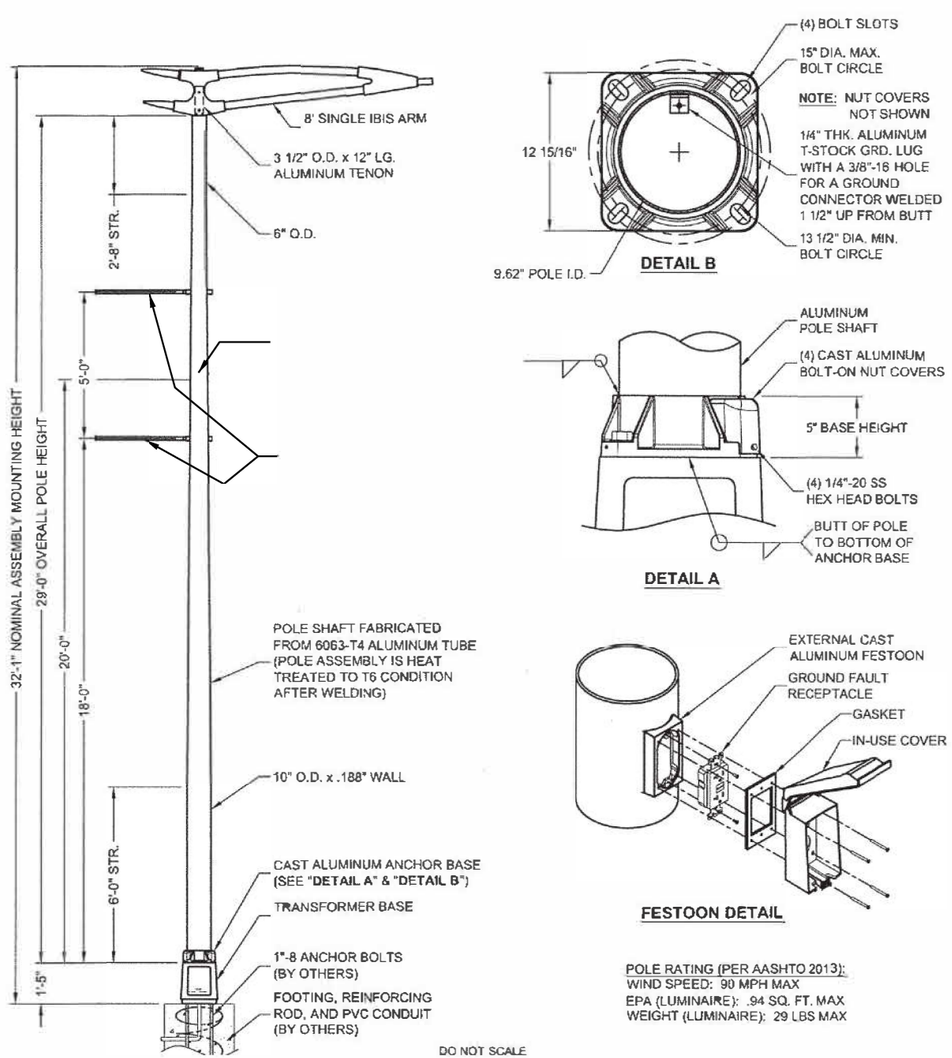
PROJECT NO: 2070-03-71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC CONDUIT DETAILS	SHEET OF 213	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave - 27th to Howell (2070-03-01)\ARCH LAMP.dgn PLOT DATE : 18-JAN-2019 11:52 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42



POLE RATING (PER AASHTO 2013):
WIND SPEED: 90 MPH MAX
EPA (LUMINAIRE): .94 SQ. FT. MAX EACH
WEIGHT (LUMINAIRE): 29 LBS MAX EACH

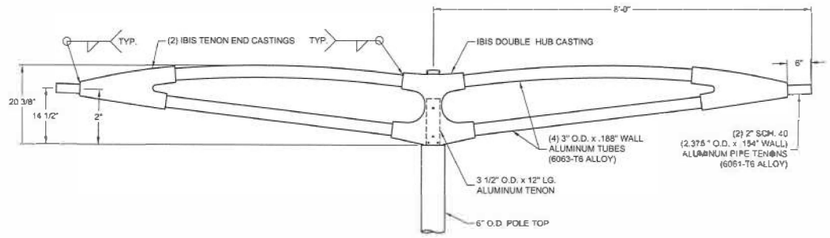
POLES TYPE 21
32 FT. TRANSFORMER BASE BANNER RATED POLE
WITH LUMINAIRE ARM DECORATIVE IBIS DOUBLE 8-FT. TENON MOUNT
ALUMINUM ALLOY FINISH
100 GRIT SATIN POLISH



POLE RATING (PER AASHTO 2013):
WIND SPEED: 90 MPH MAX
EPA (LUMINAIRE): .94 SQ. FT. MAX
WEIGHT (LUMINAIRE): 29 LBS MAX

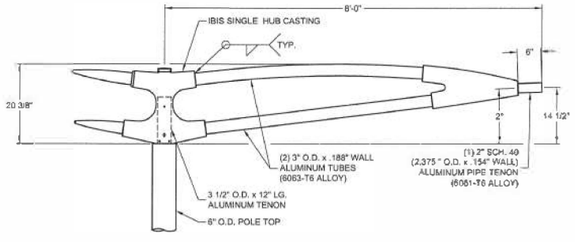
POLES TYPE 21
32 FT. TRANSFORMER BASE BANNER RATED POLE
WITH LUMINAIRE ARM DECORATIVE IBIS SINGLE 8-FT. TENON MOUNT
ALUMINUM ALLOY FINISH
100 GRIT SATIN POLISH

2



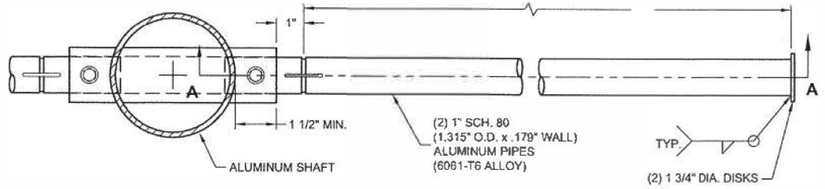
LUMINAIRE ARMS DECORATIVE IBIS DOUBLE 8-FT. TENON MOUNT
FOR POLES TYPE -21
ALUMINUM ALLOY FINISH
100 GRIT SATIN POLISH

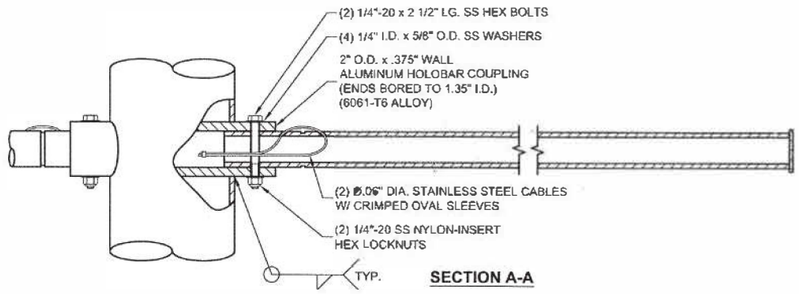
LUMINAIRE ARMS DECORATIVE IBIS SINGLE 8-F
FOR POLES TYPE -21
ALUMINUM ALLOY FINISH
100 GRIT SATIN POLISH



PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET 215	E

FILE NAME : W:\bes\pavings\2019work\wLayton Ave – 27th to Howell (2070–03–01)\ARCH LAMP.dgn PLOT DATE : 18–JAN–2019 15:01 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

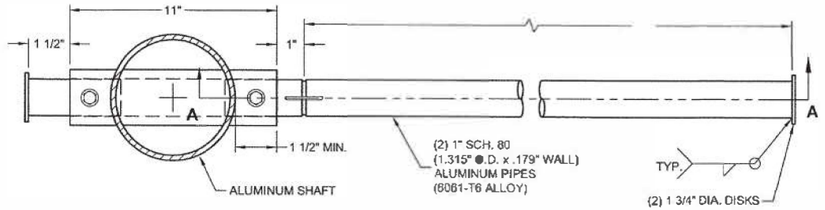


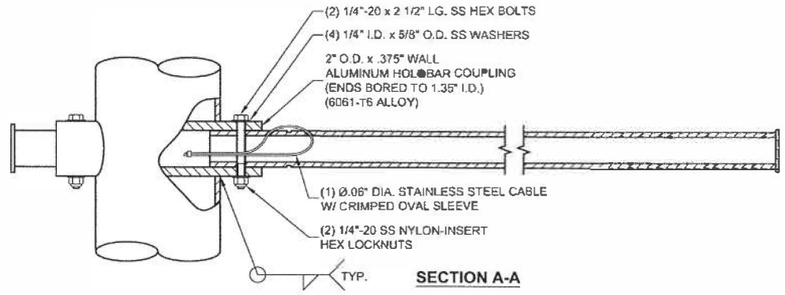


SECTION A-A

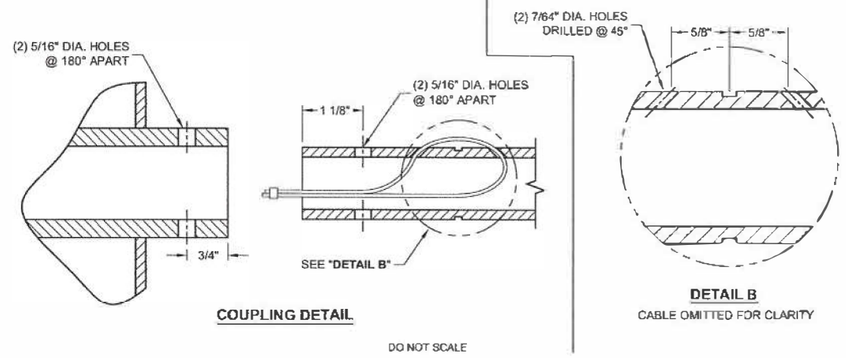
DO NOT SCALE

BREAKAWAY BANNER ARM DOUBLE- TYPE B
ALUMINUM ALLOY
100 GRIT SATIN POLISH
FOR POLES TYPE 21





SECTION A-A



COUPLING DETAIL

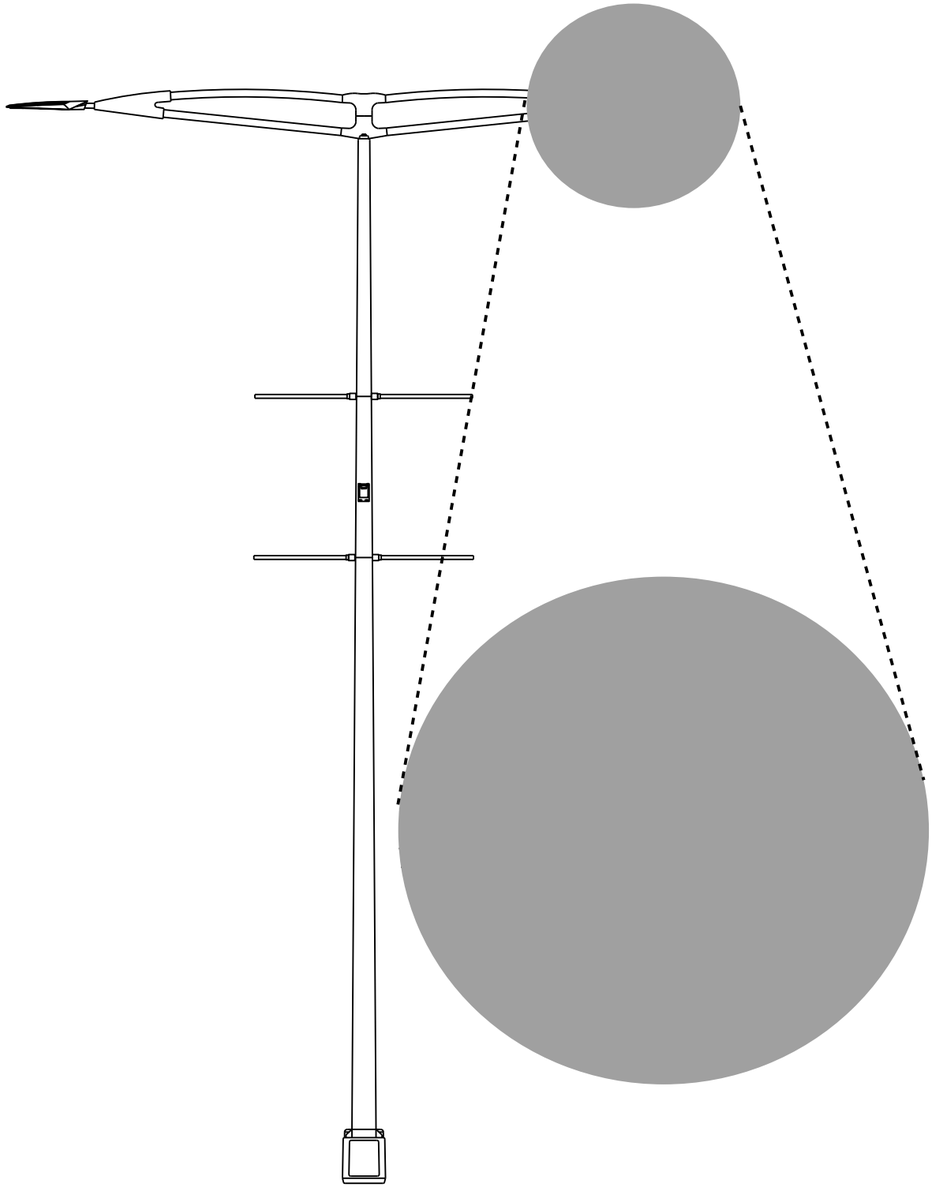
DETAIL B
CABLE OMITTED FOR CLARITY

DO NOT SCALE

BREAKAWAY BANNER ARM SINGLE- TYPE B
ALUMINUM ALLOY
100 GRIT SATIN POLISH
FOR POLES TYPE 21

SHEET 12 OF 13

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET OF 216	E



TYPE 21 POLE PROFILE WITH LUMINAIRES

NOTES:

1. STAINLESS 1/4 X 20 X 1" CARRIAGE BOLT FOR GROUNDING IN BACK PANEL 1/2" DIA. AREA FREE OF PAINT AROUND BOLT.

2. EXTERNAL DIMPLES TO PROVIDE BACK PANEL CLEARANCE TO POLE FOR OPENING AND CLOSING UPPER PANEL.

3. RECESSED CUP PREMITS RECESSING 5/16 HEX HEAD LOCKING BOLT. THIS BOLT FITS PRESENT CITY OF MILWAUKEE TOOLING, LOCKING BOLT IS HELD IN PLACE WITH RETAING RING. THIS BOLT MAY BE REPLACED BY A SECURITY BOLT IF DESIRED.

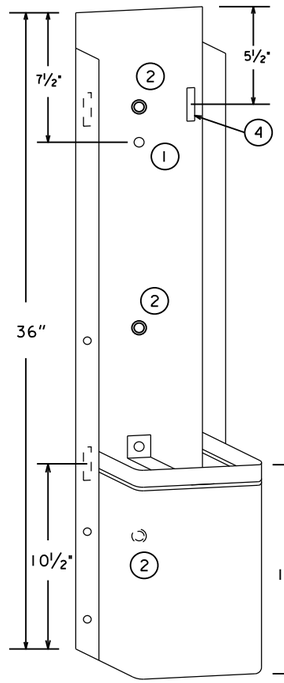
4. 1/4 X 1-1/4" SLOT (4) FOR BANDING ACCESS.

5. DOGLEG SLOT PREVENTS PULLING COVER OUTWARD WHILE LOCKED.

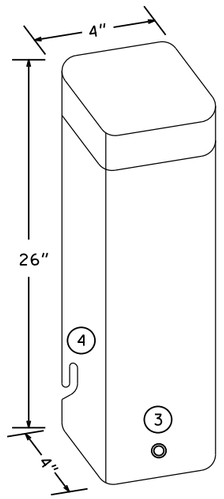
6. HORIZONITAL SLOT PREVENTS PULLING COVER UPWARD WHILE LOCKED.

7. SHOULDER RIVETS PROVIDE FOR SECURITY IN UNIT WHEN USED IN CONJUNCTION WITH ITEMS 5 & 6.

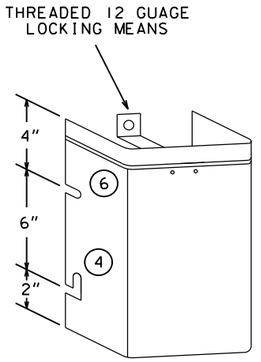
NOT TO SCALE



BACK PANEL WITH LOWER INSTALLED



UPPER FRONT REMOVED



LOWER REMOVED

METAL WIRING PEDESTAL 4" X 4" X 36"

SHEET 13 OF 13

PROJECT NO: 2070–03–71	HWY: W. LAYTON AVE.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET OF 217	E

2

PULLBOX LOCATIONS

PB#	LOCATION
PB1	89+06.0;49.9'RT
PB2	88+62.4;71.9'RT
PB3	87+88.0;70.8'RT
PB4	87+45.8;49.0'RT
PB5	87+45.7;09.2'LT
PB6	87+45.9;49.5'LT
PB7	87+88.1;72.7'LT
PB8	88+62.4;71.9'LT
PB9	89+07.7;50.3'LT
PB10	89+05.6;03.0'RT

BASE LOCATIONS

BASE#	LOCATION
SB1	88+80.2;53.1'RT
SB2	88+64.0;68.8'RT
SB3	87+87.6;81.0'RT
SB4	87+64.0;52.2'RT
SB5	87+42.9;05.3'LT
SB6	87+73.0;52.8'LT
SB7	87+87.4;75.1'LT
SB8	88+63.0;76.6'LT
SB9	88+85.4;51.1'LT
SB10	88+94.9;03.3'RT

BASE REMOVAL LOCATIONS

BASE#	LOCATION
BR1	88+86.2;51.3'RT
BR2	88+20.0;63.9'RT
BR3	87+67.6;50.0'RT
BR4	87+70.8;50.1'LT
BR5	87+87.5;69.3'LT
BR6	88+62.9;76.8'LT
BR7	88+77.6;51.3'LT

TRAFFIC CONTROL SIGNAL
WEST LAYTON AVENUE &
SOUTH 6TH STREET
CITY OF MILWAUKEE,MILWAUKEE COUNTY
MUNICIPAL CONTACT: JOSEPH BLAKEMAN
DESIGNED BY: CITY OF MILWAUKEE–DPW
REVISED BY:
PAGE 2 OF 2

SCALE, FEET 0 20

PROJECT NO: 2070–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 218	E

FILE NAME : W:\bte\signals\PAVING AND DESIGN\State Projects–LFA\Preliminary Engineering\2070–03–71 Layton 27 to Howell\90%\2070–03–71 90% Signals.dgn PLOT DATE : 17–SEP–2018 09:57 PLOT BY : jbondo PLOT NAME : PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

2

PULLBOX LOCATIONS

PB#	LOCATION
PB1	62+57.6;74.0'RT
PB2	61+88.6;72.0'RT
PB4	61+64.0;49.0'RT
PB6	61+72.2;50.2'LT
PB7	61+86.0;65.1'LT
PB11	62+77.4;49.0'RT

BASE LOCATIONS

BASE#	LOCATION
SB6	61+85.3;68.0'LT
SB8	62+71.8;52.8'LT
SB10	62+70.9;52.0'RT
SB11	62+60.2;64.1'RT

BASE REMOVAL LOCATIONS

BASE#	LOCATION
BR1	61+66.7;05.2'LT
BR2	62+68.4;52.6'LT
BR3	62+67.2;05.0'RT
BR4	62+69.1;53.2'RT

TRAFFIC CONTROL SIGNAL
WEST LAYTON AVENUE &
SOUTH 13TH STREET
CITY OF MILWAUKEE,MILWAUKEE COUNTY

MUNICIPAL CONTACT: JOSEPH BLAKEMAN
DESIGNED BY: CITY OF MILWAUKEE–DPW
REVISED BY:

SCALE, FEET 0 20

PROJECT NO: 2070–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 219	E

FILE NAME : W:\bte\signals\PAVING AND DESIGN\State Projects–LFA\Preliminary Engineering\2070–03–71 Layton 27 to Howell\90%\2070–03–71 90% Signals.dgn PLOT DATE : 17–SEP–2018 09:54 PLOT BY : jbondo PLOT NAME : PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

2

PULLBOX LOCATIONS

PB#	LOCATION
PB1	35+58.7;49.3'LT
PB2	35+89.7;67.4'LT
PB3	36+42.0;70.4'LT
PB4	36+89.9;69.6'LT
PB5	37+24.0;49.3'LT
PB6	37+24.0;10.6'RT
PB7	37+23.0;49.1'RT
PB12	35+91.6;77.5'RT

BASE LOCATIONS

BASE#	LOCATION
SB1	35+65.0;52.3'LT
SB2	35+87.5;65.0'LT
SB4	36+44.8;77.6'LT
SB5	37+04.3;52.8'LT
SB8	36+92.8;76.6'RT
SB10	35+88.1;78.0'RT
SB11	35+69.0;52.6'RT

BASE REMOVAL LOCATIONS

BASE#	LOCATION
BR1	35+80.1;53.0'LT
BR2	35+88.1;61.0'LT
BR3	36+91.2;62.2'LT
BR4	37+01.4;52.2'LT
BR5	37+93.5;63.0'RT
BR6	35+88.1;63.7'RT
BR7	35+76.3;53.0'RT

TRAFFIC CONTROL SIGNAL
WEST LAYTON AVENUE &
SOUTH 20TH STREET
CITY OF MILWAUKEE,MILWAUKEE COUNTY

MUNICIPAL CONTACT: JOSEPH BLAKEMAN
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

SCALE, FEET 0 20

PROJECT NO: 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 220	E

FILE NAME : W:\bte\signals\PAVING AND DESIGN\State Projects-LFA\Preliminary Engineering\2070-03-71 Layton 27 to Howell\90%\2070-03-71 90% Signals.dgn
PLOT DATE : 17-SEP-2018 09:53
PLOT BY : jbondo
PLOT NAME :
PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

2

PULLBOX LOCATIONS

PB#	LOCATION
PB1	79+57.1;49.0'RT
PB2	80+15.4;49.0'RT
PB3	80+17.8;02.4'LT
PB4	80+20.0;50.0'LT
PB5	80+81.1;50.0'LT
PB6	81+30.3;50.0'LT
PB7	81+70.4;50.0'LT
PB8	81+70.2;05.1'RT
PB9	81+70.1;49.0'RT

BASE LOCATIONS

BASE#	LOCATION
SB1	80+28.2;50.7'RT
SB2	80+11.2;03.5'LT
SB3	80+29.3;51.3'LT
SB4	80+85.4;51.3'LT
SB5	81+20.5;51.3'LT
SB6	81+38.0;51.3'LT
SB7	81+59.8;06.0'RT
SB8	81+23.0;52.3'RT

BASE REMOVAL LOCATIONS

BASE#	LOCATION
BR1	80+40.7;51.6'RT
BR2	80+80.6;51.4'LT
BR3	81+38.0;50.0'LT
BR4	81+38.9;05.9'RT

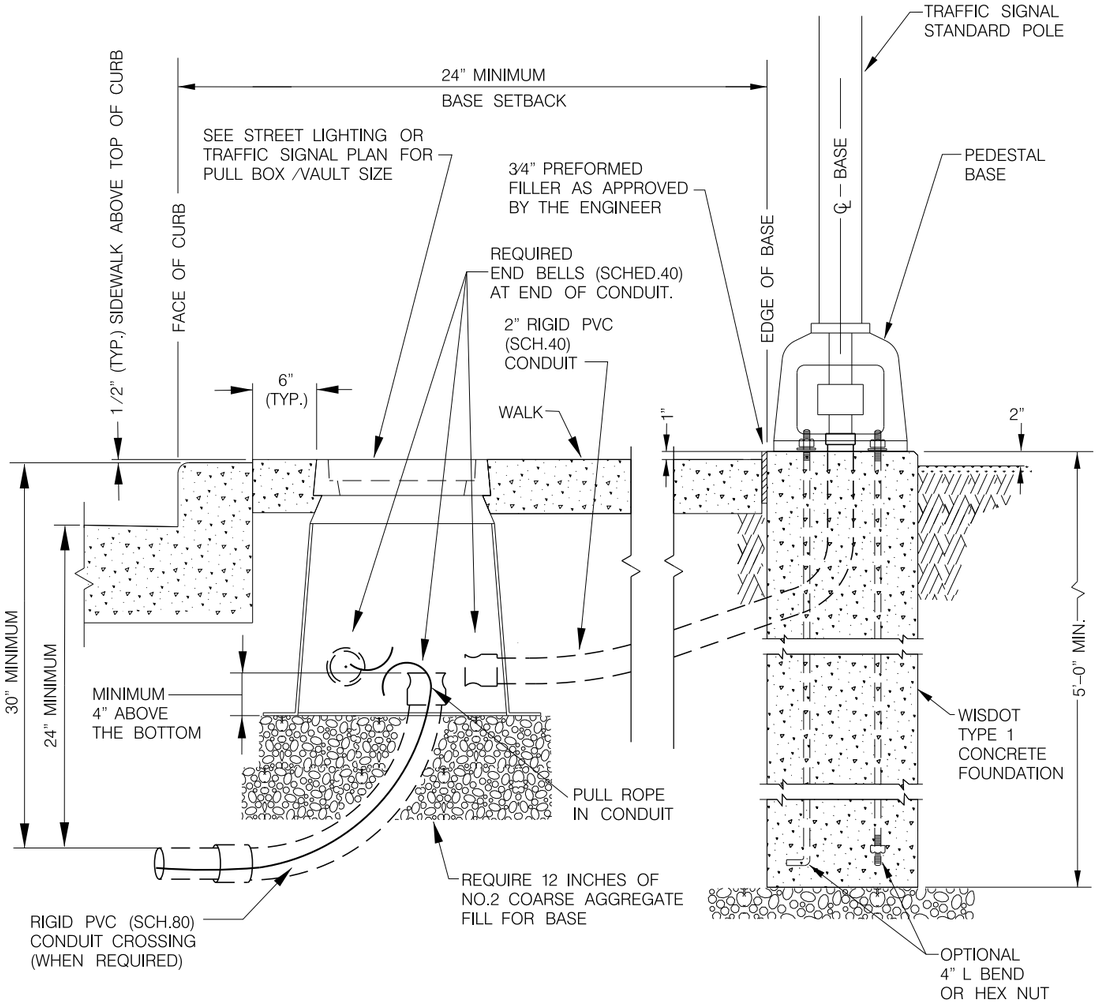
TRAFFIC CONTROL SIGNAL
WEST LAYTON AVENUE &
800 BLOCK WEST
CITY OF MILWAUKEE,MILWAUKEE COUNTY

MUNICIPAL CONTACT: JOSEPH BLAKEMAN
DESIGNED BY: CITY OF MILWAUKEE–DPW
REVISED BY:

SCALE, FEET 0 20

PROJECT NO: 2070–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 221	E

FILE NAME : W:\bte\signals\PAVING AND DESIGN\State Projects–LFA\Preliminary Engineering\2070–03–71 Layton 27 to Howell\90%\2070–03–71 90% Signals.dgn PLOT DATE : 17–SEP–2018 09:56 PLOT BY : jbondo PLOT NAME : PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

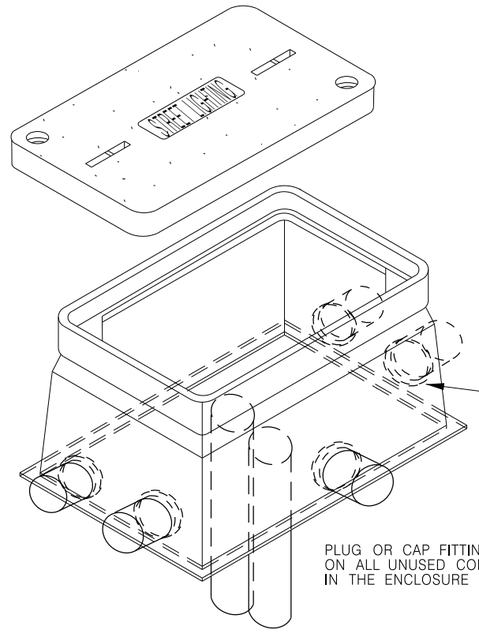


109 DETAIL

TYPICAL CONDUIT INSTALLATION FROM PULL BOX /VAULT TO SIGNAL STANDARD AND TYPICAL BASE INSTALLATION

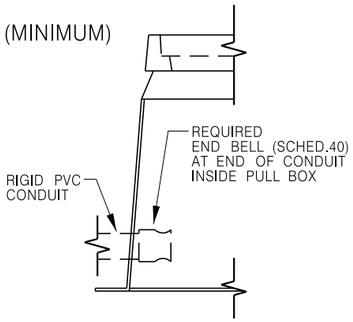
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

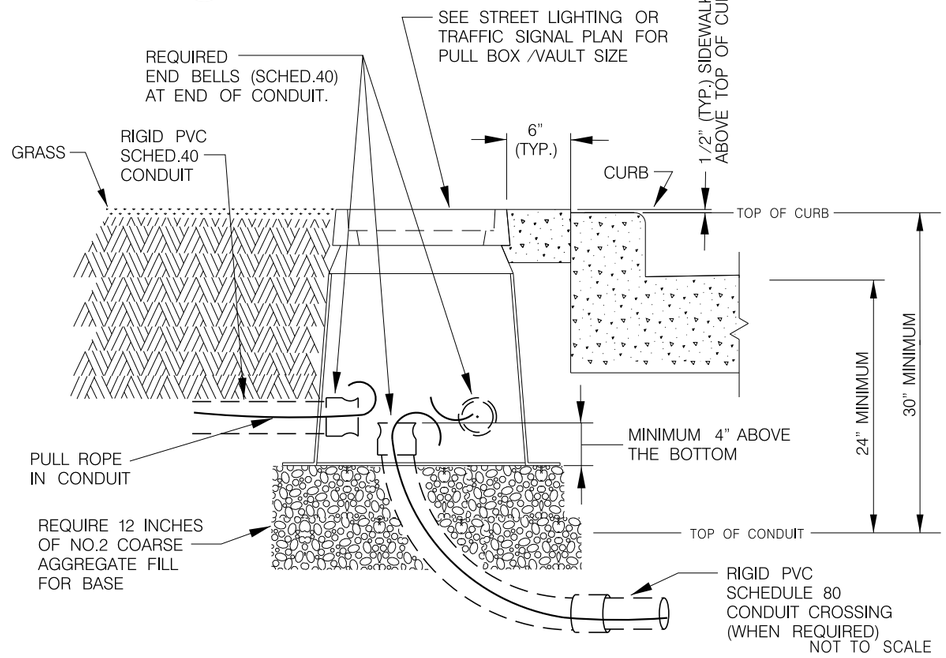
NOT TO SCALE



HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W /2 BOLTS
COLOR: GRAY
TIER 15 RATING (MINIMUM)

PULL BOX /VAULT
FLARED WALL
BOX W /NO BASE
COLOR: GRAY
TIER 15 RATING (MINIMUM)
(VARIOUS SIZES)





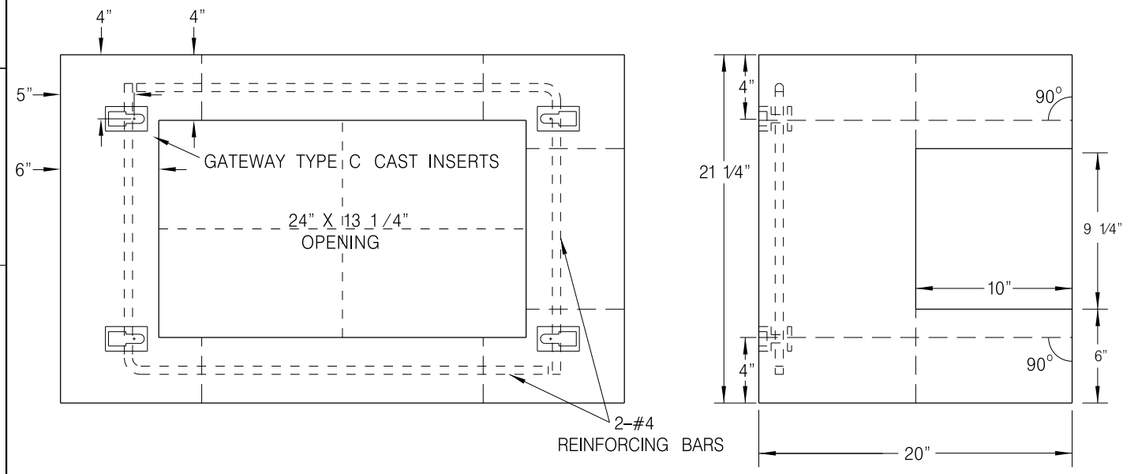
NOT TO SCALE

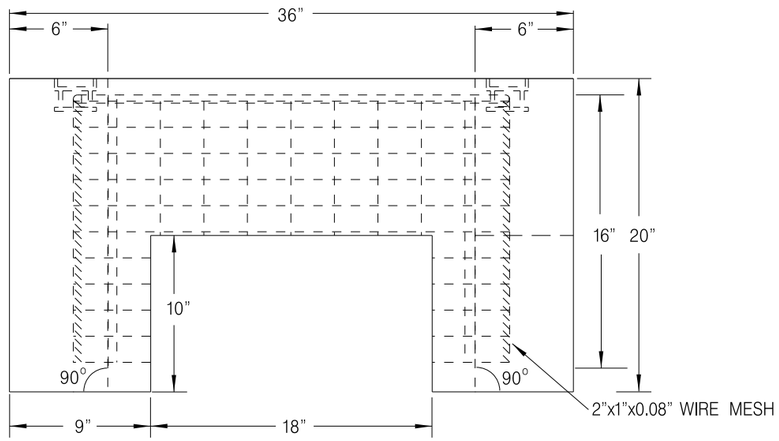
112 DETAIL

TYPICAL PULL BOX /VAULT INSTALLATION IN EITHER PAVEMENT OR GRASS AREAS

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





NOT TO SCALE

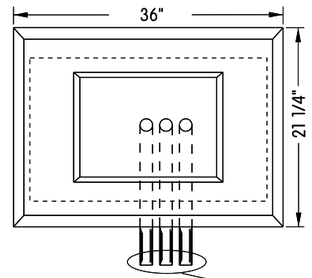
6 BAG MIX #1 STONE

COMM. CODE XXXX-XXX PRE-CAST CONCRETE FOUNDATION TRAFFIC SIGNAL CABINETS P1 AND P2				
TRAFFIC ENGINEERING AND ELECTRICAL SERVICES D.P.W. CITY OF MILWAUKEE				
TRAFFIC CONTROL MATERIAL				
DATE 8-30-16	SCALE N.T.S.	DRAWN JAB/JO	CHECKED SCR	APPROVED JCB
SUPERSEDES	REVISED DATE	DRG.		
SUPERSEDED BY	NEW DRG.	C-16-500-T		

125 DETAIL

TYPICAL TRAFFIC CONTROL CABINET CONCRETE FOUNDATION

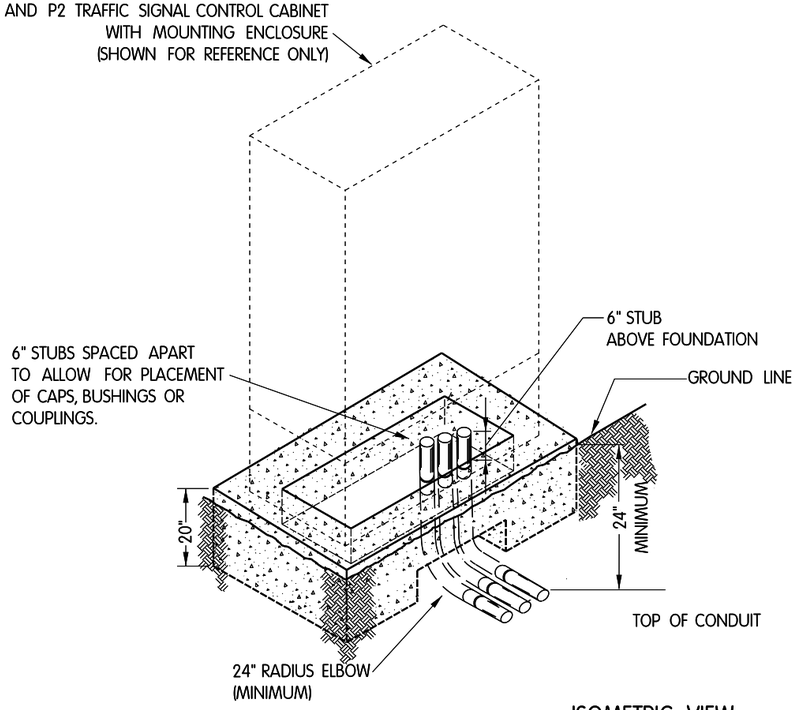
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM TRAFFIC SIGNAL FORCES.
CONTACT DISPATCHER AT (414) 286-3687 FOR SHOP SUPERVISOR.



NOTE:
CONDUIT SHOWN ON PLAN INCIDENTAL. REFER TO STREET LIGHTING AND TRAFFIC SIGNAL CONDUIT PLAN FOR THE QUANTITY & SIZE OF CONDUIT REQUIRED IN THE CONCRETE CONTROL CABINET BASE

PLAN VIEW

STYLE P1 AND P2 TRAFFIC SIGNAL CONTROL CABINET WITH MOUNTING ENCLOSURE (SHOWN FOR REFERENCE ONLY)



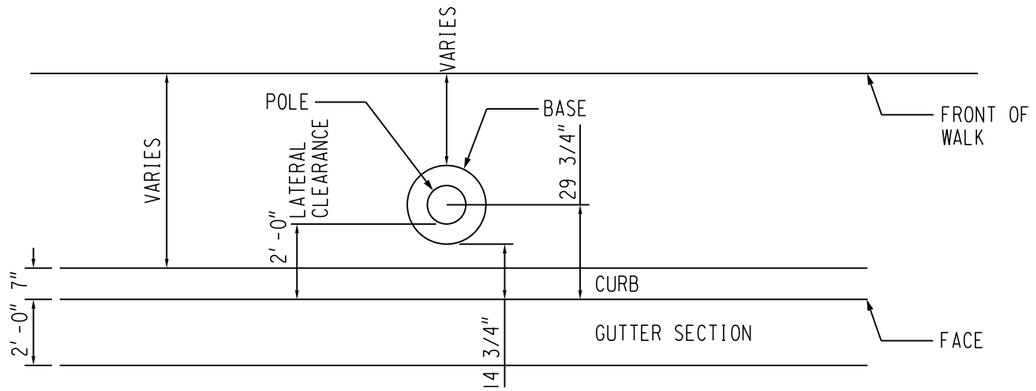
ISOMETRIC VIEW

125B TYPICAL DETAIL

CONDUIT INSTALLATION TO TRAFFIC CONTROL CABINET CONCRETE FOUNDATION

NOT TO SCALE

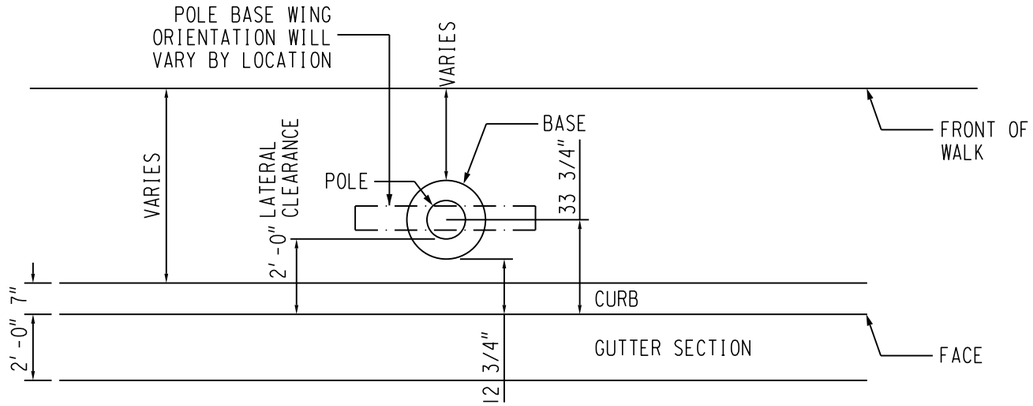
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM CITY OF MILWAUKEE D.P.W.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.



MAST ARM POLE BASE INSTALLATION DETAIL

30" DIAMETER BASE
TYPE 10 BASE

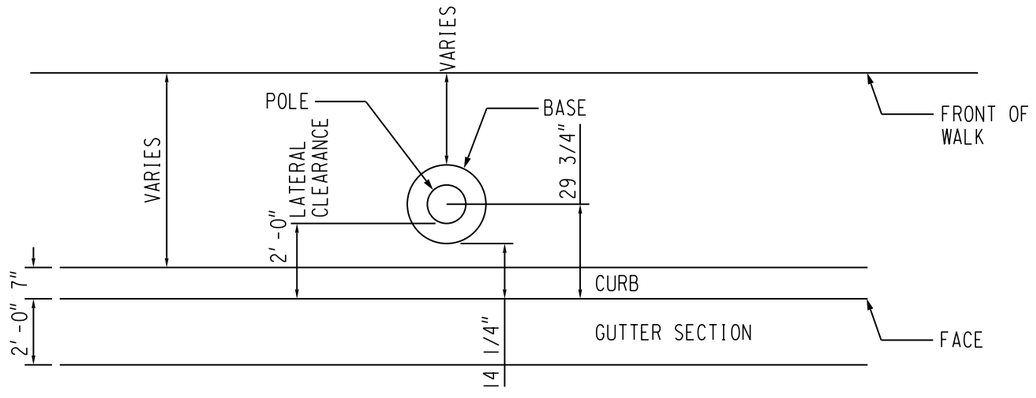
11.50" DIAMETER POLE
TYPE 9 POLE
TYPE 10 POLE
TYPE 10 SPECIAL POLE



MAST ARM POLE BASE INSTALLATION DETAIL

42" DIAMETER BASE
TYPE 13 BASE

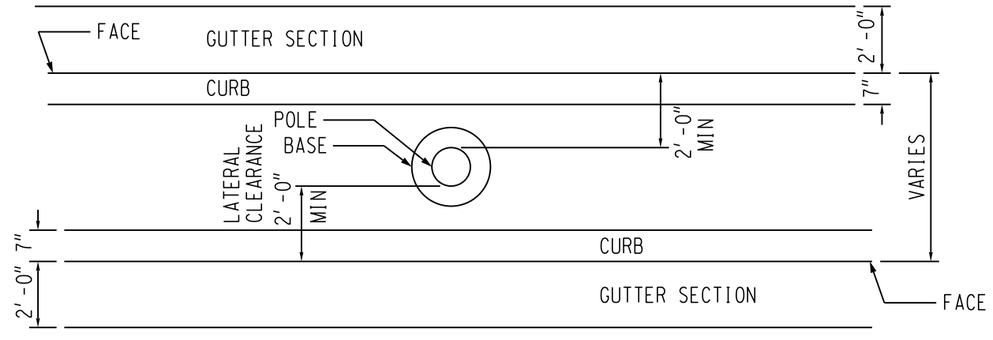
19.50" DIAMETER POLE
TYPE 12 POLE
TYPE 13 POLE



MAST ARM POLE BASE INSTALLATION DETAIL

36" DIAMETER BASE
TYPE 10 SPECIAL BASE

16.50" DIAMETER POLE
TYPE 12 SPECIAL POLE
TYPE 13 SPECIAL POLE



MAST ARM POLE BASE INSTALLATION DETAIL FOR MEDIAN

30" DIAMETER BASE
TYPE 10 BASE

11.50" DIAMETER POLE
TYPE 9 POLE
TYPE 10 POLE

PROJECT NO: 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL MONOTUBE BASE INSTALLATION DETAILS	SHEET 224	E

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).

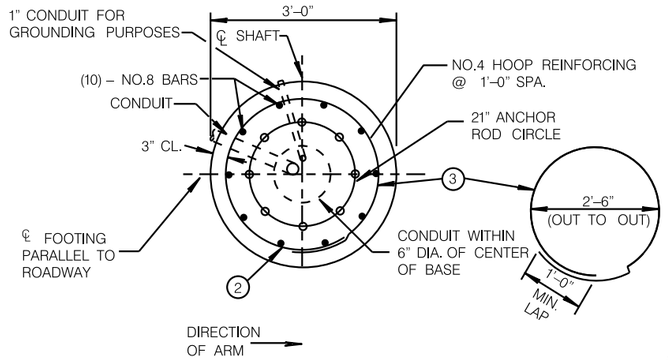
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

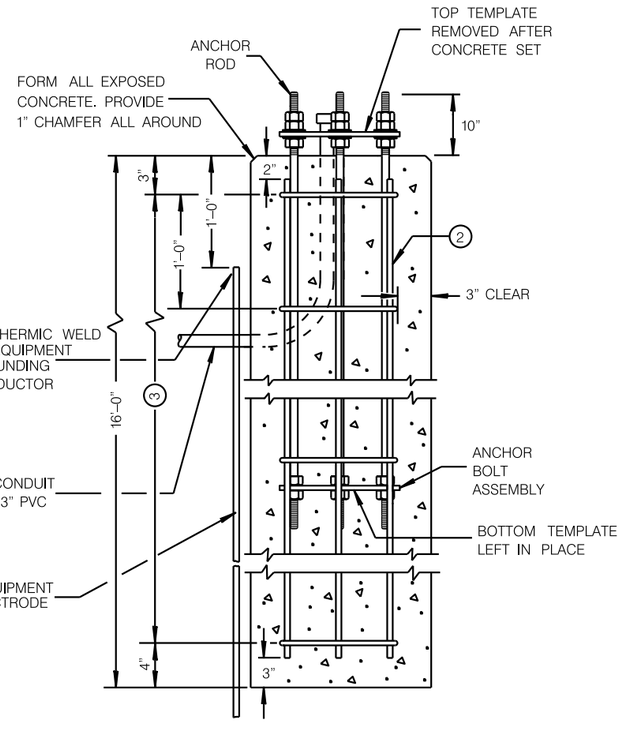
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN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

(2) (10) NO. 8 X 15'–7" BAR STEEL REINFORCEMENT.

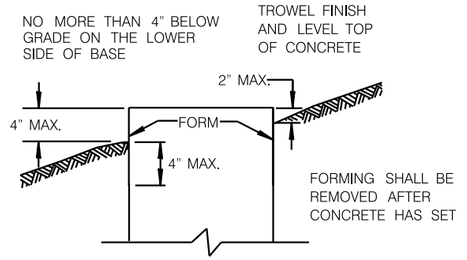
(3) (17) NO. 4 X 9'–0" BAR STEEL REINFORCEMENT @ 1'–0" C–C.

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.

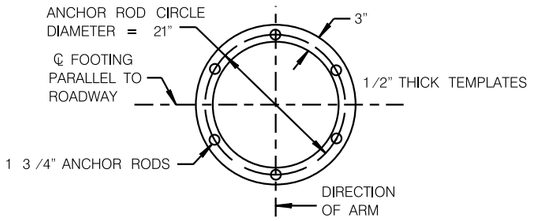




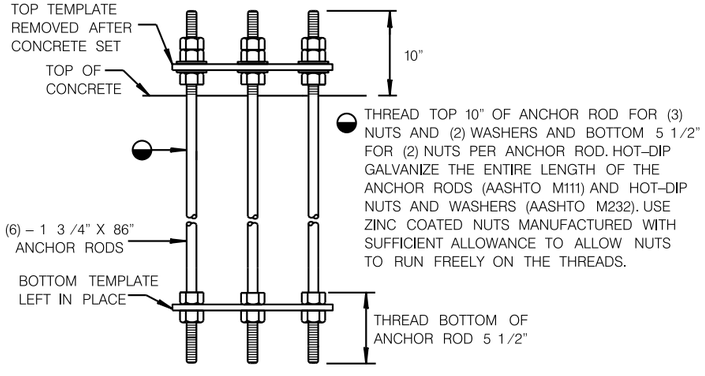
CONCRETE BASE TYPE 10 SPECIAL



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 SPECIAL

ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	4.19
LBS. OF HOOP BAR STEEL	103
LBS. OF VERTICAL BAR STEEL	417

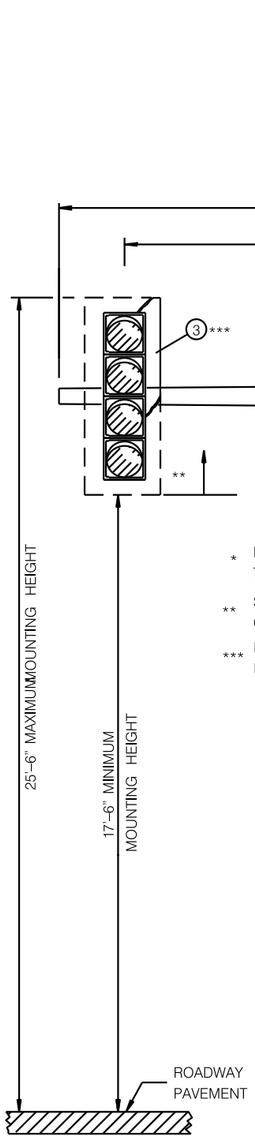
CONCRETE BASE TYPE 10 SPECIAL

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS

REVISED:	DECEMBER 2014 (DATE)	2013 AASHTO (REVISION)
REVISED:	JULY 2015 (DATE)	2015 DESIGN UPDATE (REVISION)
REVISED:	NOVEMBER 2015 (DATE)	ANCHOR ROD PROJECTION UPDATE (REVISION)

FILE NAME : W:\bte\signals\PAVING AND DESIGN\State Projects–LFA\Preliminary Engineering\2070–03–71 Layton 27 to Howell\2070–03–71 Signals.dgn
PLOT DATE : 10–APR–2018 11:44
PLOT BY : jbondo
PLOT NAME :
PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

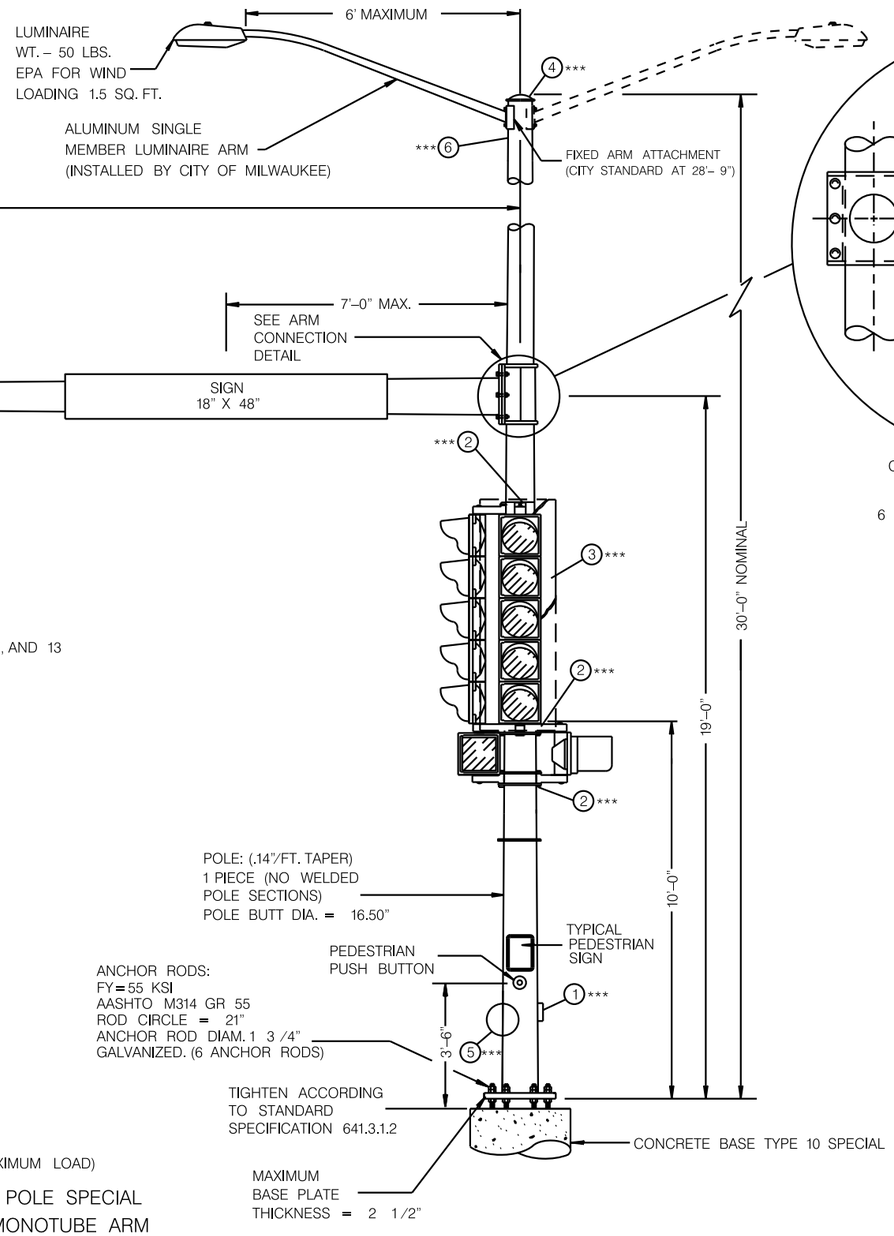
2



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

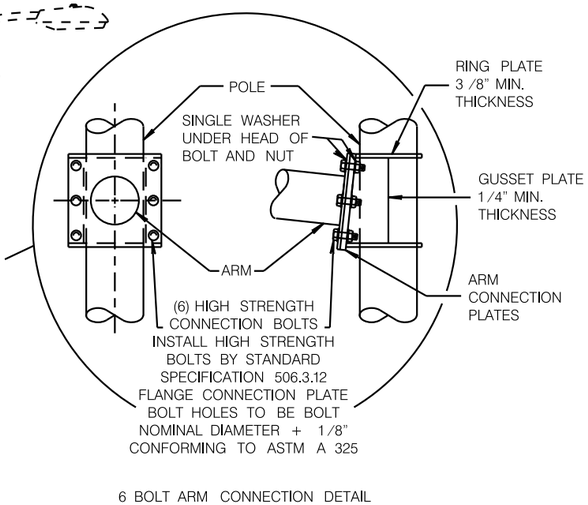
** SIGNALS MAY BE ADJUSTED ± 1'–0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

*** REFER TO WISDOT S.D.D. GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12, AND 13 POLES WITH MONOTUBE ARMS.

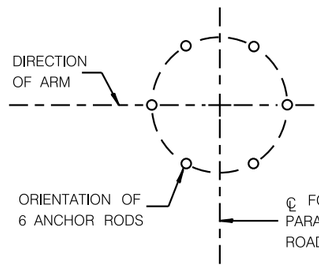


(MAXIMUM LOAD)

TYPE 13 POLE SPECIAL
35'– 40' MONOTUBE ARM



6 BOLT ARM CONNECTION DETAIL



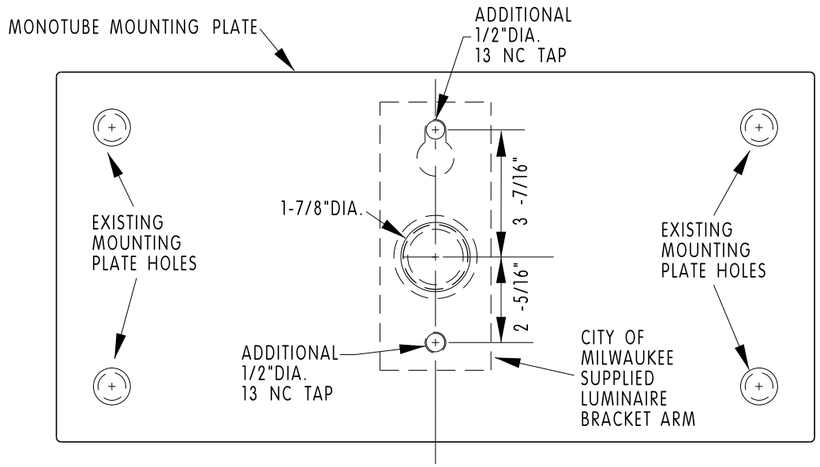
ANCHOR ROD LOCATION

TYPE 13 POLE SPECIAL
35'– 40' MONOTUBE ARM

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS

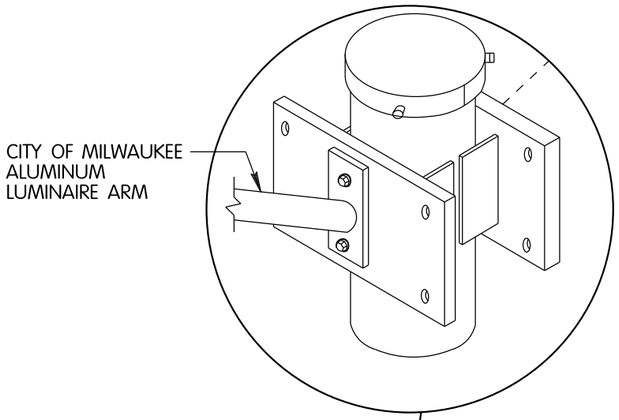
REVISED: DECEMBER 2014 (DATE) — 2013 AASHTO (REVISION)
REVISED: JULY 2015 (DATE) — 2015 DESIGN UPDATE (REVISION)

PROJECT NO: 2070–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC SIGNAL MONOTUBE POLE AND ARM DETAILS	SHEET 226	E

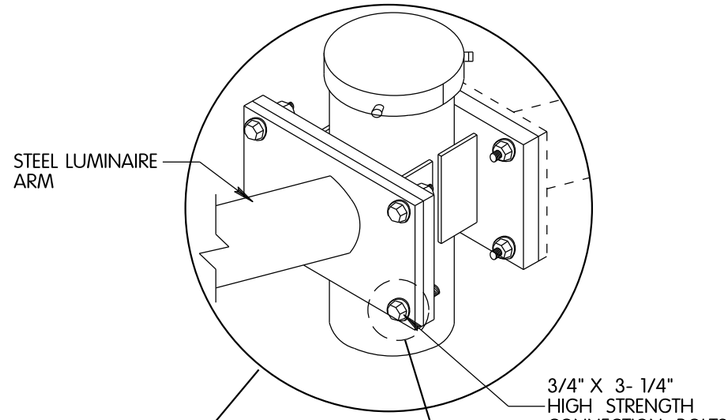


ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE

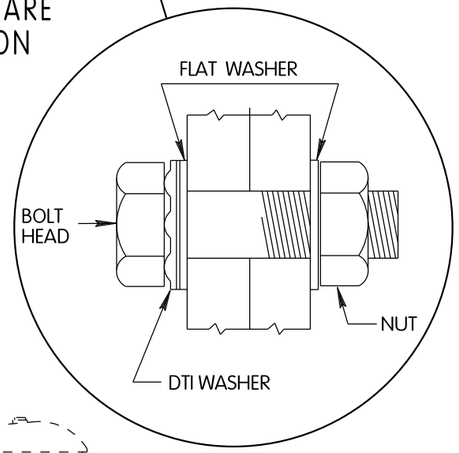
NOT TO SCALE



ALUMINUM LUMINIARE ARM OPTION



STEEL LUMINIARE ARM OPTION



RECOMMENDED BOLT ASSEMBLY DETAIL

LUMINAIRE
WT. – 50 LBS.
EPA FOR WIND
LOADING 1.5 SQ. FT.

15' MAXIMUM

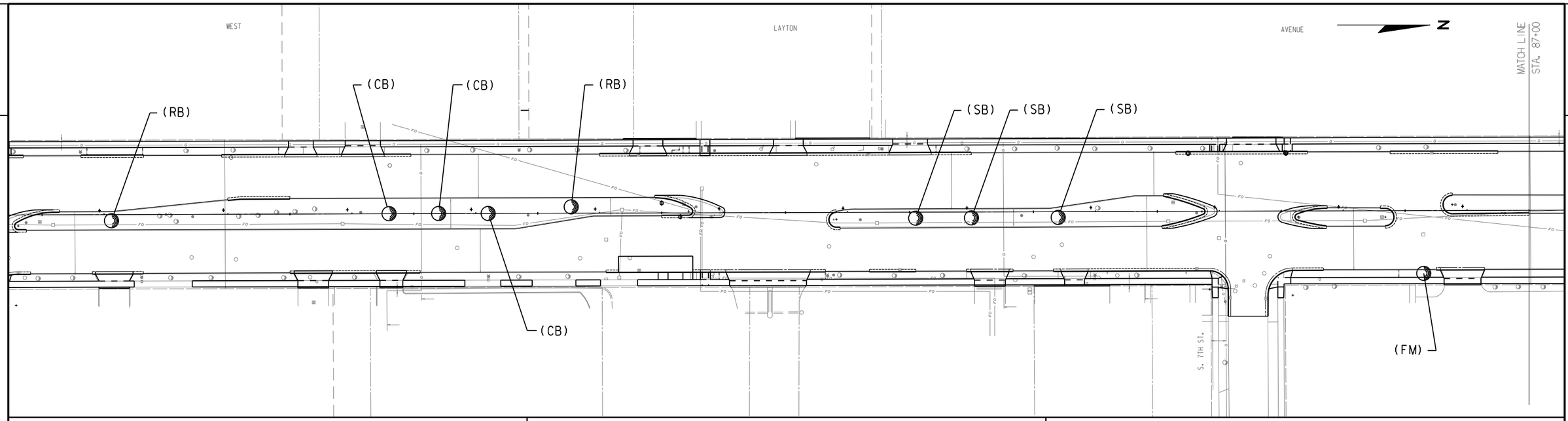
EITHER AN ALUMINUM SINGLE
OR STEEL SINGLE
MEMBER LUMINAIRE ARM

FIXED ARM ATTACHMENT
(CITY STANDARD AT 28'– 9")

ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE FOR POLES: TYPE 10 TYPE 13 SPECIAL

NOT TO SCALE

PROJECT NO: 2070–03–71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	MONOTUBE POLE LUMINAIRE MOUNTING DETAILS	SHEET 227	E



LEGEND:

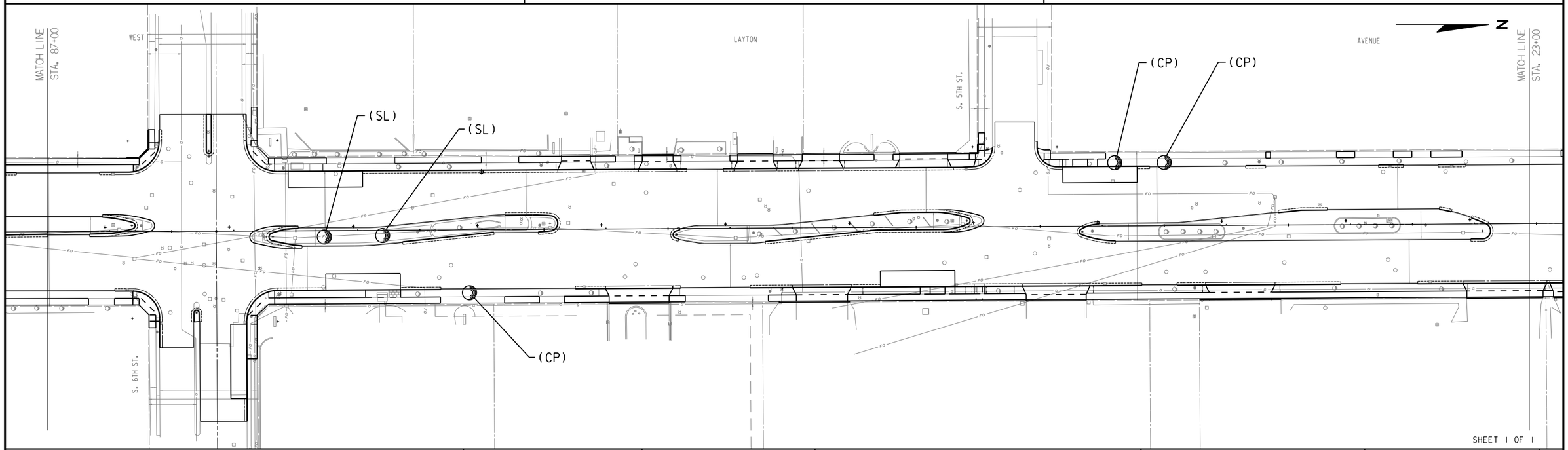
- PLANT NEW TREE (TYPE) SEE KEY
( )

PLANT KEY:

CALLERY PEAR (CP)
COMMON BALDCYPRESS (CB)
FREEMAN MAPLE (FM)
RED BUD (RB)
SERVICE BERRY (SB)
SUNBURST LOCUST (SL)

NOTES:

1. ADJUST PLANTING LOCATION MIN. 2'-0" LATERAL CLEARANCE FROM ALL MARKED UTILITY LINES AND FACE OF CURB.
2. CONTRACTOR SHALL MARK TREE LOCATIONS. PLANTING SHALL NOT PROCEED WITHOUT APPROVAL OF THE ENGINEER.
3. MULCH IS INCIDENTAL TO TREE PLANTING, SEE PLANT DATA CHART.



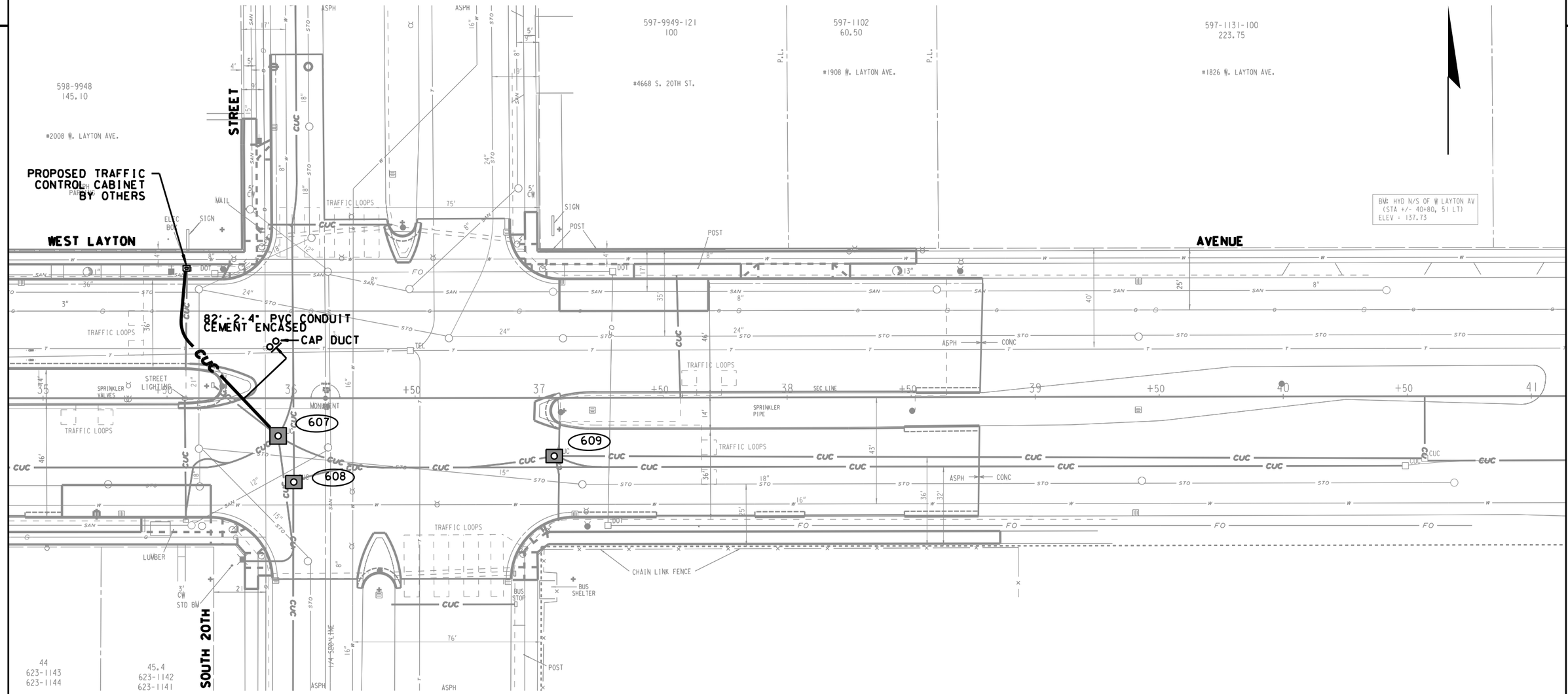
SHEET 1 OF 1

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	LANDSCAPE PLANS	SCALE FEET 0' 80'	SHEET NO: 228	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\LANDSCAPE.DGN

REVISED DATE: 10-19-2018 BY SB

2



NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.

LEGEND

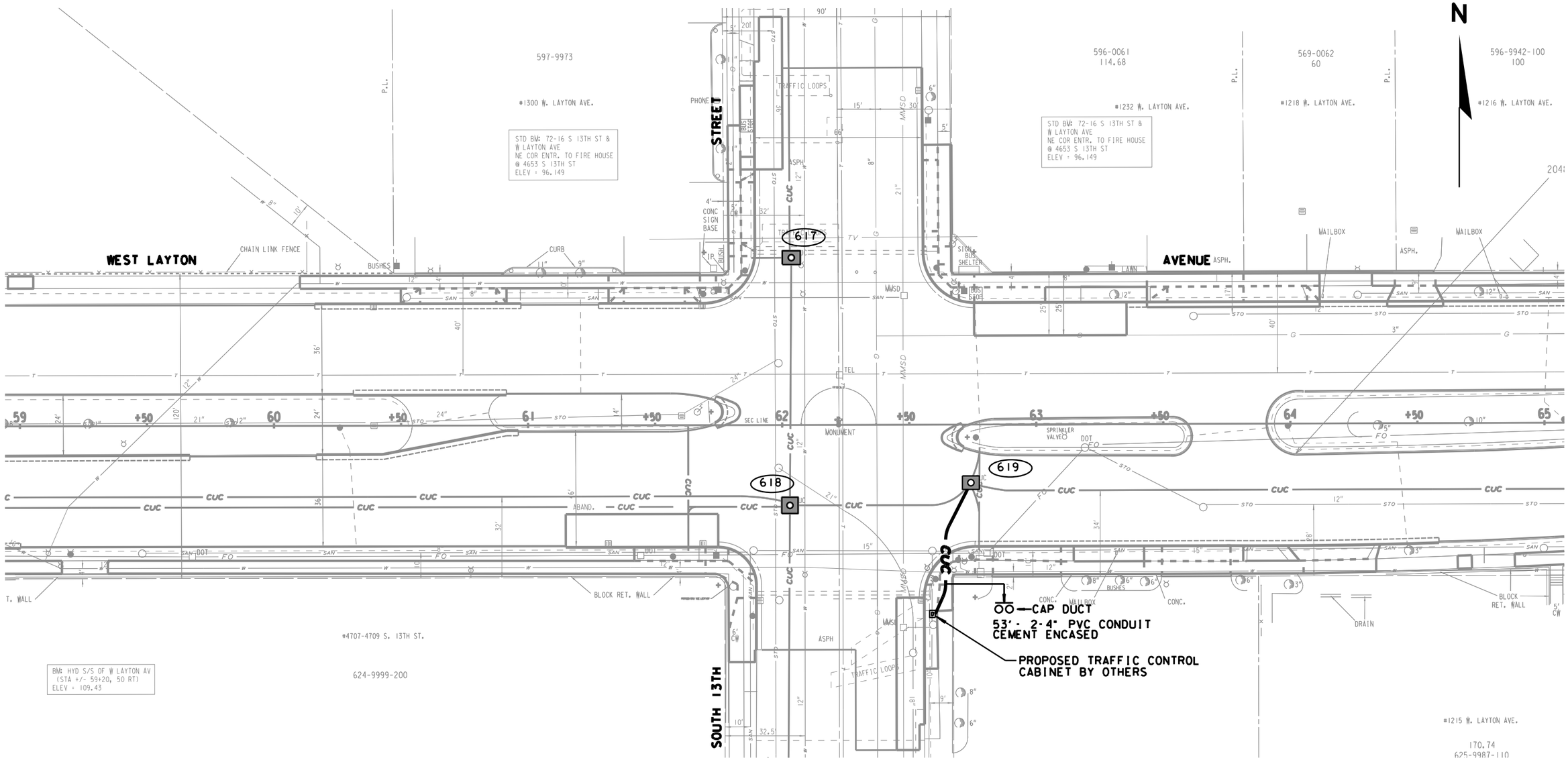
— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
⊡	EXISTING TES MANHOLE
— CUC —	EXISTING CONDUIT
- - - -	ABANDONED CONDUIT

SHEET 1 OF 4

STATE PROJECT NUMBER 2070-03-01 - -	HWY:	COUNTY: MILWAUKEE	CITY UG CONDUIT (CUC)	SCALE FEET 0' 40'	SHEET NO: 229	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2018\W LAYTON AVENUE-S 27TH ST TO W HOWELL\DGN\STA 35-41.DGN

2



NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.

LEGEND

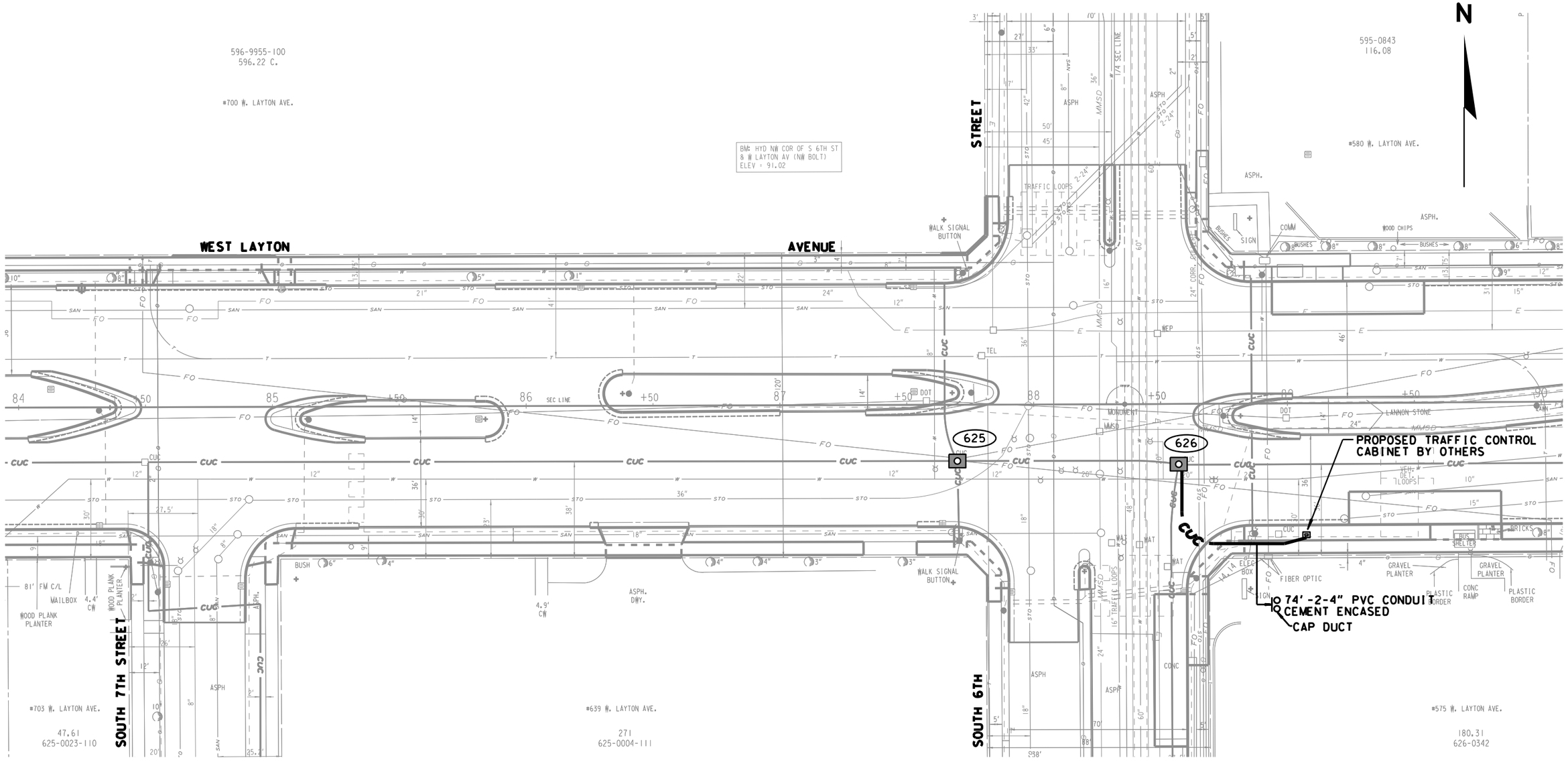
— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
▣	EXISTING TES MANHOLE
— CUC —	EXISTING CONDUIT
- - - -	ABANDONED CONDUIT

SHEET 2 OF 4

STATE PROJECT NUMBER 2070-03-01 - -	HWY:	COUNTY: MILWAUKEE	CITY UG CONDUIT (CUC)	SCALE FEET 0' 40'	SHEET NO: 230	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2018\W LAYTON AVENUE-S 27TH ST TO W HOWELL\DGN\STA 59-65.DGN

2



NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.

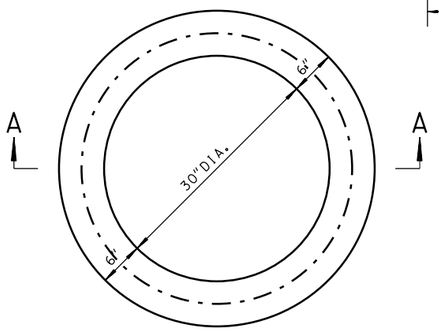
LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
◘	EXISTING TES MANHOLE
— CUC —	EXISTING CONDUIT
- - - -	ABANDONED CONDUIT

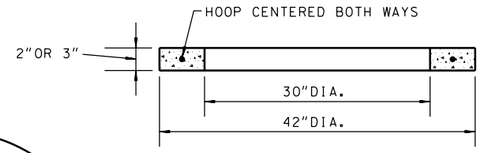
SHEET 3 OF 4

STATE PROJECT NUMBER 2070-03-01 - -	HWY:	COUNTY: MILWAUKEE	CITY UG CONDUIT (CUC)	SCALE FEET 0 40	SHEET NO: 231	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2018\W LAYTON AVENUE-S 27TH ST TO W HOWELL\DGN\STA 84-90.DGN



PLAN



SECTION A-A

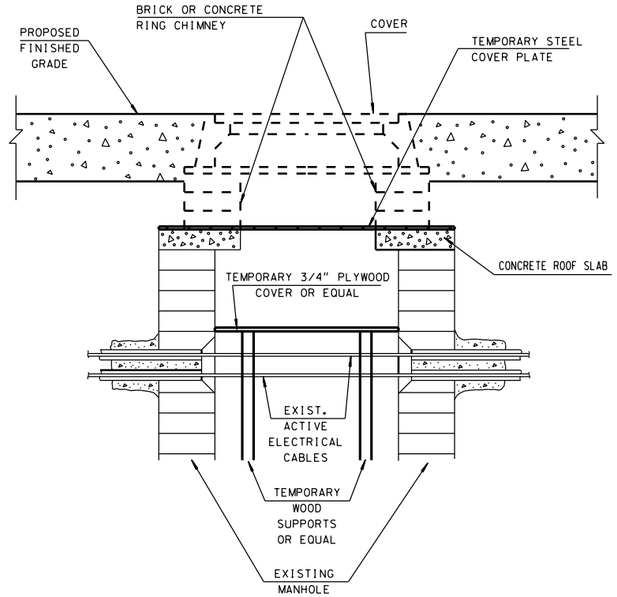
THE ADJUSTING RING SHALL BE 2" OR 3" IN HEIGHT.

THE CIRCUMFERENTIAL STEEL SHALL BE CENTERED WITHIN THE RING.

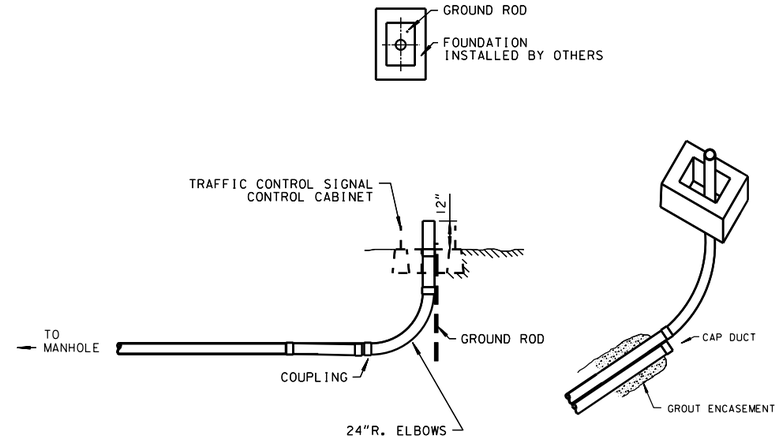
AREA OF CIRCUMFERENTIAL STEEL = 0.07 SQ. INCH PER VERTICAL FOOT WITH A MINIMUM OF .024 SQ. INCH IN ANY ONE RING.

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

CONCRETE ADJUSTING RING

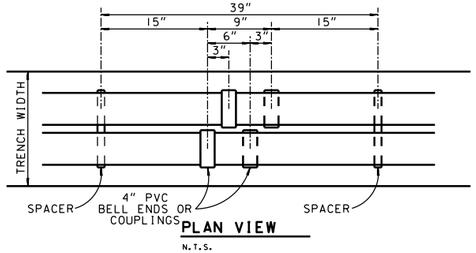


BLOCK OR PRECAST MANHOLE



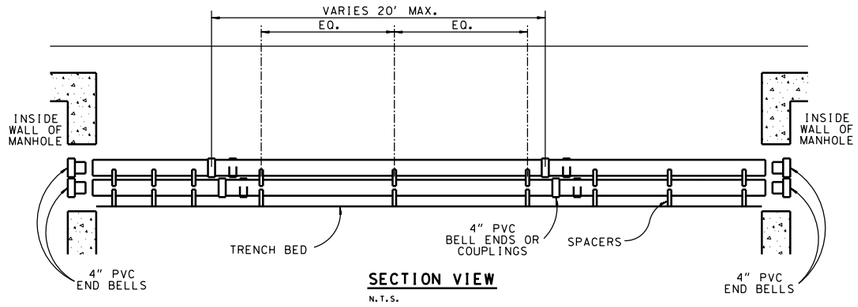
TRAFFIC CONTROL CABINET

FOR REFERENCE ONLY



PLAN VIEW

N.T.S.

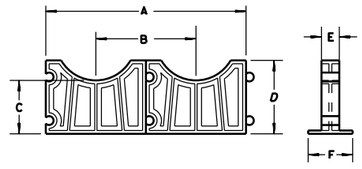


SECTION VIEW

N.T.S.

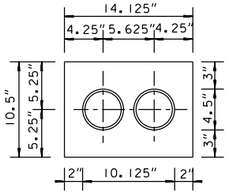
DUCT INSTALLATION DETAIL

COND.	3"	4"
A	10"	11 ¼"
B	5"	5 ⅝"
C	3"	3"
D	3 ⅞"	4 ⅛"
E	1"	1"
F	2 ½"	2 ½"



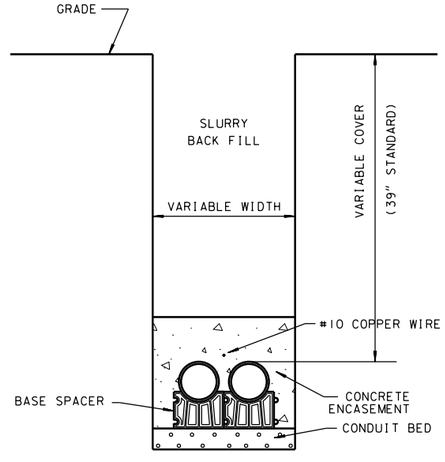
BASE SPACER

INTERMEDIATE AND BASE SPACER DETAIL



CROSS SECTION VIEW

N.T.S.



CROSS SECTION VIEW, TYP.

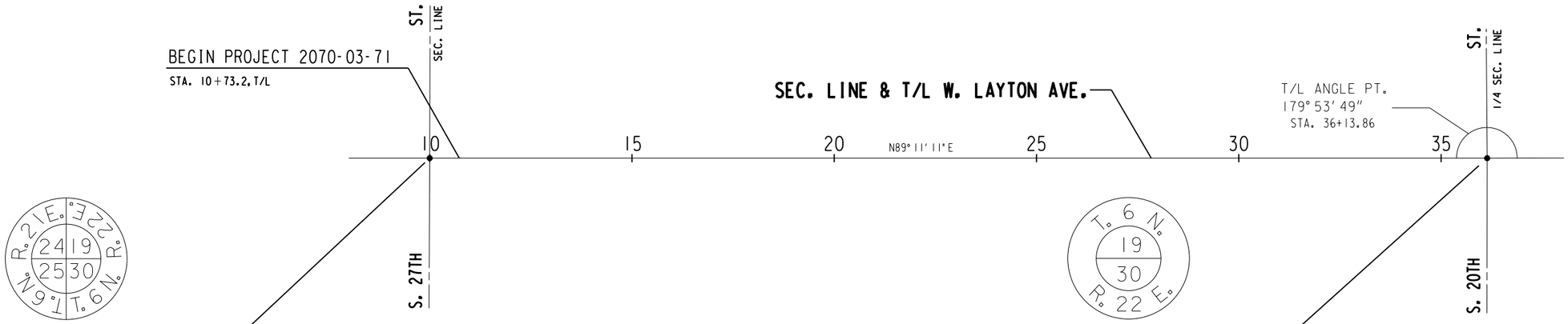
N.T.S.

SHEET 4 OF 4

STATE PROJECT NUMBER 2070-03-01 - -	HWY:	COUNTY: MILWAUKEE	CITY UG CONDUIT (CUC)	SCALE FEET	SHEET NO: 232	E

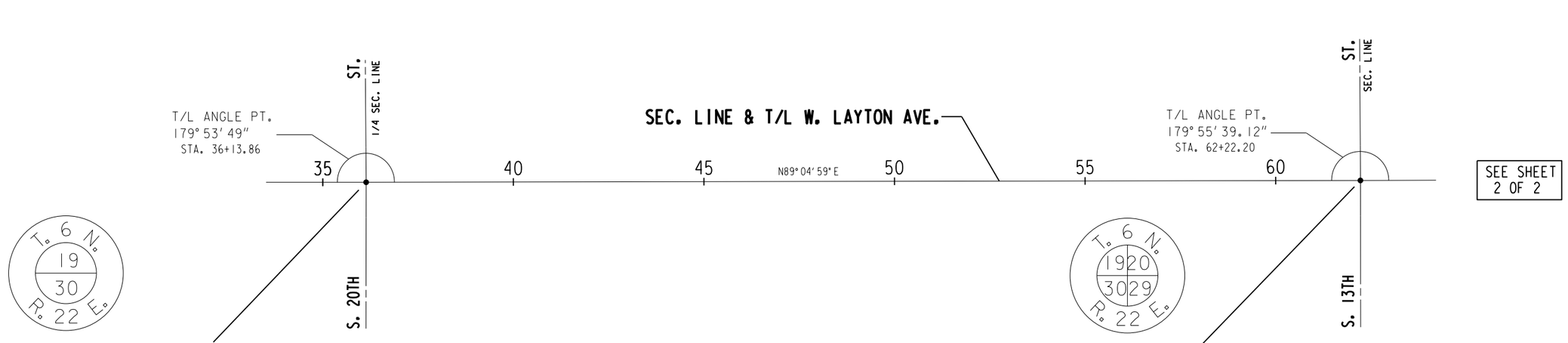
FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2018\W LAYTON AVENUE-S 27TH ST TO W HOWELL\DGN\DETAILS.DGN

2



TOWNSHIP 6 NORTH, RANGE 21-22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF SECTION CORNER
(Y) NORTH: 356,418.24
(X) EAST: 2,549,085.44

TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF QUARTER SECTION CORNER
(Y) NORTH: 356,455.11
(X) EAST: 2,551,698.79



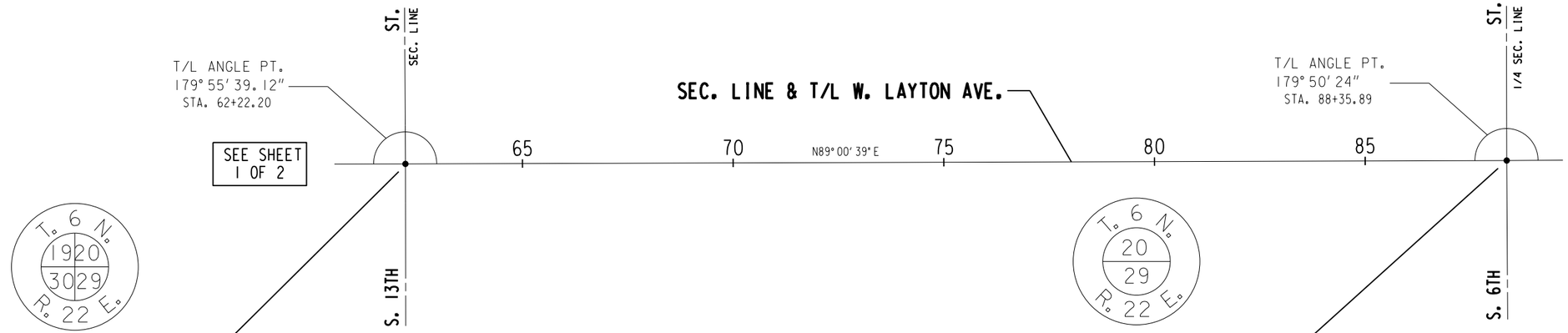
TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF QUARTER SECTION CORNER
(Y) NORTH: 356,455.11
(X) EAST: 2,551,698.79

TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF SECTION CORNER
(Y) NORTH: 356,497.26
(X) EAST: 2,554,306.86

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	ALIGNMENT	SCALE FEET 0' 300'	SHEET NO: 233	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\ALIGNMENT.DGN

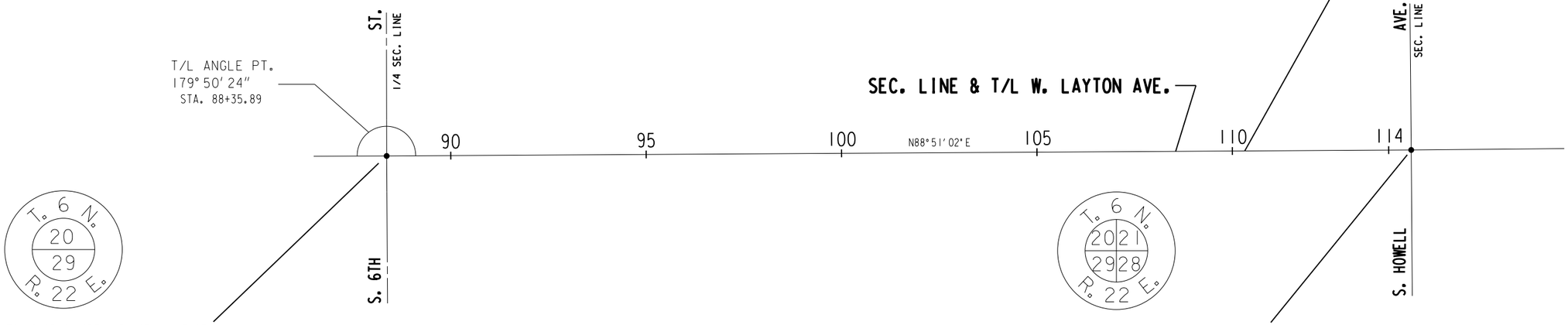
REVISED DATE: 01-22-2018 BY BB



TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF SECTION CORNER
(Y) NORTH: 356,497.26
(X) EAST: 2,554,306.86

TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF QUARTER SECTION CORNER
(Y) NORTH: 356,542.45
(X) EAST: 2,556,920.01

END PROJECT 2070-03-71
STA. 110+31.70, T/L



TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF QUARTER SECTION CORNER
(Y) NORTH: 356,542.45
(X) EAST: 2,556,920.01

TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ BRASS CAP
STATE PLANE COORDINATES OF SECTION CORNER
(Y) NORTH: 356,594.80
(X) EAST: 2,559,541.30

STATE PROJECT NUMBER 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	ALIGNMENT	SCALE FEET 0' 300'	SHEET NO: 234	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\EXISTING\ALIGNMENT.DGN

REVISED DATE: 11-15-2017 BY SB

Estimate Of Quantities

2070-03-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	52.000	52.000
0004	201.0220	Grubbing	ID	52.000	52.000
0006	204.0100	Removing Pavement	SY	3,690.000	3,690.000
0008	204.0105	Removing Pavement Butt Joints	SY	910.000	910.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,620.000	1,620.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	67,410.000	67,410.000
0014	204.0150	Removing Curb & Gutter	LF	13,020.000	13,020.000
0016	204.0155	Removing Concrete Sidewalk	SY	9,950.000	9,950.000
0018	204.0195	Removing Concrete Bases	EACH	22.000	22.000
0020	204.0215	Removing Catch Basins	EACH	5.000	5.000
0022	204.0291.S	Abandoning Sewer	CY	4.000	4.000
0024	205.0100	Excavation Common	CY	2,191.000	2,191.000
0026	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	248.000	248.000
0028	211.0100	Prepare Foundation for Asphaltic Paving (project) 001. 2070-03-71	LS	1.000	1.000
0030	213.0100	Finishing Roadway (project) 001. 2070-03-71	EACH	1.000	1.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,900.000	2,900.000
0034	320.0105	Concrete Base 4-Inch	SY	93.000	93.000
0036	320.0155	Concrete Base 9-Inch	SY	1,175.000	1,175.000
0038	390.0303	Base Patching Concrete	SY	12,000.000	12,000.000
0040	415.0100	Concrete Pavement 10-Inch	SY	3,060.000	3,060.000
0042	416.0180	Concrete Driveway 8-Inch	SY	90.000	90.000
0044	416.0270	Concrete Driveway HES 7-Inch	SY	80.000	80.000
0046	416.0280	Concrete Driveway HES 8-Inch	SY	2,590.000	2,590.000
0048	455.0605	Tack Coat	GAL	1,970.000	1,970.000
0050	460.2000	Incentive Density HMA Pavement	DOL	10,250.000	10,250.000
0052	460.6223	HMA Pavement 3 MT 58-28 S	TON	9,445.000	9,445.000
0054	460.6224	HMA Pavement 4 MT 58-28 S	TON	7,005.000	7,005.000
0056	465.0105	Asphaltic Surface	TON	25.000	25.000
0058	465.0110	Asphaltic Surface Patching	TON	150.000	150.000
0060	509.1500	Concrete Surface Repair	SF	15.000	15.000
0062	509.9025.S	Epoxy Injection Crack Repair	LF	280.000	280.000
0064	509.9026.S	Cored Holes 2-Inch Diameter	EACH	8.000	8.000
0066	517.1010.S	Concrete Staining (structure) 001. B-40-434	SF	1,120.000	1,120.000
0068	601.0150	Concrete Curb Integral Type D	LF	1,360.000	1,360.000
0070	601.0319	Concrete Curb & Gutter 19-Inch	LF	800.000	800.000
0072	601.0331	Concrete Curb & Gutter 31-Inch	LF	10,550.000	10,550.000
0074	601.0600	Concrete Curb Pedestrian	LF	101.000	101.000
0076	602.0410	Concrete Sidewalk 5-Inch	SF	65,580.000	65,580.000

2070-03-71

Line	Item	Item Description	Unit	Total	Qty
0078	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	680.000	680.000
0080	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	82.000	82.000
0082	608.0512	Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	LF	479.000	479.000
0084	611.2004	Manholes 4-FT Diameter	EACH	8.000	8.000
0086	611.8120.S	Cover Plates Temporary	EACH	199.000	199.000
0088	619.1000	Mobilization	EACH	1.000	1.000
0090	620.0300	Concrete Median Sloped Nose	SF	2,000.000	2,000.000
0092	623.0200	Dust Control Surface Treatment	SY	73,590.000	73,590.000
0094	625.0100	Topsoil	SY	5,770.000	5,770.000
0096	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0098	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0100	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0102	628.7010	Inlet Protection Type B	EACH	69.000	69.000
0104	628.7015	Inlet Protection Type C	EACH	25.000	25.000
0106	628.7020	Inlet Protection Type D	EACH	29.000	29.000
0108	629.0210	Fertilizer Type B	CWT	4.000	4.000
0110	631.1000	Sod Lawn	SY	5,770.000	5,770.000
0112	632.0101	Trees (species) (size) (root) 001. Cleveland Select Pear 3" B&B	EACH	3.000	3.000
0114	632.0101	Trees (species) (size) (root) 002. Common Bald Cypress 3" B&B	EACH	3.000	3.000
0116	632.0101	Trees (species) (size) (root) 003. Freeman Maple 3" B&B	EACH	1.000	1.000
0118	632.0101	Trees (species) (size) (root) 004. Red Bud 2.5" B&B	EACH	2.000	2.000
0120	632.0101	Trees (species) (size) (root) 005. Sunburst Honey Locust 3" B&B	EACH	2.000	2.000
0122	632.0101	Trees (species) (size) (root) 006. Serviceberry 3" B&B	EACH	3.000	3.000
0124	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	10.000	10.000
0126	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	26.000	26.000
0128	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	4.000	4.000
0130	637.2210	Signs Type II Reflective H	SF	133.500	133.500
0132	638.2102	Moving Signs Type II	EACH	13.000	13.000
0134	638.2602	Removing Signs Type II	EACH	2.000	2.000
0136	638.3000	Removing Small Sign Supports	EACH	19.000	19.000
0138	642.5001	Field Office Type B	EACH	1.000	1.000
0140	643.0300	Traffic Control Drums	DAY	62,700.000	62,700.000
0142	643.0410	Traffic Control Barricades Type II	DAY	25,040.000	25,040.000
0144	643.0420	Traffic Control Barricades Type III	DAY	28,800.000	28,800.000
0146	643.0705	Traffic Control Warning Lights Type A	DAY	57,600.000	57,600.000
0148	643.0715	Traffic Control Warning Lights Type C	DAY	62,700.000	62,700.000

2070-03-71

Line	Item	Item Description	Unit	Total	Qty
0150	643.0900	Traffic Control Signs	DAY	43,130.000	43,130.000
0152	643.0920	Traffic Control Covering Signs Type II	EACH	76.000	76.000
0154	643.5000	Traffic Control	EACH	1.000	1.000
0156	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	17,615.000	17,615.000
0158	644.1420.S	Temporary Pedestrian Surface Plywood	SF	33,750.000	33,750.000
0160	644.1430.S	Temporary Pedestrian Surface Plate	SF	11,650.000	11,650.000
0162	644.1601.S	Temporary Curb Ramp	EACH	76.000	76.000
0164	646.1020	Marking Line Epoxy 4-Inch	LF	20,290.000	20,290.000
0166	646.8120	Marking Curb Epoxy	LF	1,680.000	1,680.000
0168	646.8220	Marking Island Nose Epoxy	EACH	52.000	52.000
0170	649.0105	Temporary Marking Line Paint 4-Inch	LF	16,895.000	16,895.000
0172	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	31,870.000	31,870.000
0174	650.4000	Construction Staking Storm Sewer	EACH	24.000	24.000
0176	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	11,910.000	11,910.000
0178	650.7000	Construction Staking Concrete Pavement	LF	600.000	600.000
0180	650.8500	Construction Staking Electrical Installations (project) 001. 2070-03-71	LS	1.000	1.000
0182	650.9000	Construction Staking Curb Ramps	EACH	58.000	58.000
0184	650.9910	Construction Staking Supplemental Control (project) 001. 2070-03-71	LS	1.000	1.000
0186	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	405.000	405.000
0188	652.0230	Conduit Rigid Nonmetallic Schedule 40 2 1/2-Inch	LF	2,080.000	2,080.000
0190	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	12,940.000	12,940.000
0192	652.0615	Conduit Special 3-Inch	LF	6,134.000	6,134.000
0194	653.0900	Adjusting Pull Boxes	EACH	11.000	11.000
0196	654.0101	Concrete Bases Type 1	EACH	16.000	16.000
0198	654.0105	Concrete Bases Type 5	EACH	7.000	7.000
0200	654.0110	Concrete Bases Type 10	EACH	4.000	4.000
0202	655.0305	Cable Type UF 2-12 AWG Grounded	LF	5,740.000	5,740.000
0204	657.0100	Pedestal Bases	EACH	16.000	16.000
0206	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	7.000	7.000
0208	657.0350	Poles Type 10	EACH	4.000	4.000
0210	657.0530	Monotube Arms 30-FT	EACH	4.000	4.000
0212	657.0535	Monotube Arms 35-FT	EACH	2.000	2.000
0214	657.0808	Luminaire Arms Steel 8-FT	EACH	13.000	13.000
0216	690.0150	Sawing Asphalt	LF	2,100.000	2,100.000
0218	690.0250	Sawing Concrete	LF	2,130.000	2,130.000
0220	715.0415	Incentive Strength Concrete Pavement	DOL	948.000	948.000
0222	715.0710	Optimized Aggregate Gradation Incentive	DOL	4,592.250	4,592.250
0224	740.0440	Incentive IRI Ride	DOL	12,240.000	12,240.000

2070-03-71

Line	Item	Item Description	Unit	Total	Qty
0226	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,800.000	1,800.000
0228	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,000.000	3,000.000
0230	SPV.0025	Special 001. Deep Concrete Surface Repair	CF	1.000	1.000
0232	SPV.0060	Special 001. Inlet Cover Type MS 55	EACH	1.000	1.000
0234	SPV.0060	Special 002. Inlet Cover Type MS 57	EACH	94.000	94.000
0236	SPV.0060	Special 003. Manhole Cover Type MS 58-A	EACH	166.000	166.000
0238	SPV.0060	Special 004. Storm Inlet Type 45A	EACH	9.000	9.000
0240	SPV.0060	Special 005. Utility Line Opening	EACH	16.000	16.000
0242	SPV.0060	Special 006. Internal Sanitary Manhole Seals	EACH	67.000	67.000
0244	SPV.0060	Special 007. Marking Words Preformed Plastic	EACH	9.000	9.000
0246	SPV.0060	Special 008. Marking Arrows Type 2 Preformed Plastic	EACH	10.000	10.000
0248	SPV.0060	Special 009. Marking Bike Lane Symbol Preformed Plastic	EACH	35.000	35.000
0250	SPV.0060	Special 010. Marking Bike Lane Arrow Preformed Plastic	EACH	35.000	35.000
0252	SPV.0060	Special 011.Skid/Slip Resistant Green Thermoplastic Integrated Bike Lane Symbol	EACH	1.000	1.000
0254	SPV.0060	Special 012. Skid/Slip Resistant Green Thermoplastic Integrated Bike Lane Arrow	EACH	2.000	2.000
0256	SPV.0060	Special 013. Adjusting Water Boxes	EACH	110.000	110.000
0258	SPV.0060	Special 014. Adjusting Water Manholes	EACH	6.000	6.000
0260	SPV.0060	Special 015. Water Main Protection	EACH	2.000	2.000
0262	SPV.0060	Special 016. Section Corner Monuments	EACH	3.000	3.000
0264	SPV.0060	Special 201. Concrete Base Type 10 Special	EACH	2.000	2.000
0266	SPV.0060	Special 202. Poles Type 13 Special	EACH	2.000	2.000
0268	SPV.0060	Special 301. Pull Boxes 17-Inch x 30-Inch x 24-Inch	EACH	34.000	34.000
0270	SPV.0060	Special 302. Pull Boxes 13-Inch x 24-Inch x 24-Inch	EACH	106.000	106.000
0272	SPV.0060	Special 303. Remove Luminaire	EACH	17.000	17.000
0274	SPV.0060	Special 304. Luminaire Architectural LED 3	EACH	173.000	173.000
0276	SPV.0060	Special 305. Street Lighting Single Bracket Arm 8'	EACH	12.000	12.000
0278	SPV.0060	Special 306. Street Lighting Double Bracket Arm 8'	EACH	70.000	70.000
0280	SPV.0060	Special 307. Concrete Light Bases Type 21	EACH	82.000	82.000
0282	SPV.0060	Special 308. Pole Type 21 with Transformer Base	EACH	82.000	82.000
0284	SPV.0060	Special 309. Luminaire Utility LED 1	EACH	9.000	9.000
0286	SPV.0060	Special 310. Metal Wiring Pedestal 4-Inch x 4-Inch x 36-Inch	EACH	8.000	8.000
0288	SPV.0060	Special 311. Metered Outlet Service Pedestal 100A-120/240V	EACH	1.000	1.000
0290	SPV.0060	Special 312. Luminaire Architectural LED 3 Spare	EACH	18.000	18.000
0292	SPV.0060	Special 313. Pole Type 21 with Transformer Base Spare	EACH	10.000	10.000
0294	SPV.0060	Special 314. Street Lighting Single Bracket Arm 8'	EACH	31.000	31.000

2070-03-71

Line	Item	Item Description	Unit	Total	Qty
		Spare			
0296	SPV.0060	Special 315. Street Lighting Double Bracket Arm 8' Spare	EACH	7.000	7.000
0298	SPV.0060	Special 401. Adjusting CUC Manhole Covers	EACH	23.000	23.000
0300	SPV.0060	Special 402. Installing Conduit Into Existing Manhole	EACH	3.000	3.000
0302	SPV.0090	Special 001. Construction Staking Concrete Sidewalk	LF	13,100.000	13,100.000
0304	SPV.0090	Special 002. Construction Staking Upper Layer	LF	15,770.000	15,770.000
0306	SPV.0090	Special 003. Construction Staking Lower Layer	LF	15,770.000	15,770.000
0308	SPV.0090	Special 004. Marking Line Epoxy 6-Inch	LF	12,400.000	12,400.000
0310	SPV.0090	Special 005. Marking Crosswalk Preformed Plastic 12-Inch	LF	2,200.000	2,200.000
0312	SPV.0090	Special 006. Culvert Overhead Joint Repair	LF	90.000	90.000
0314	SPV.0090	Special 007. Marking Line Preformed Plastic 24-Inch	LF	855.000	855.000
0316	SPV.0090	Special 008. Joint & Crack Repair	LF	1,000.000	1,000.000
0318	SPV.0090	Special 301. Electrical Cable Type 3#8/1#8 XLP	LF	15,330.000	15,330.000
0320	SPV.0090	Special 302. Electrical Cable Type 3#6/1#8 XLP	LF	3,090.000	3,090.000
0322	SPV.0090	Special 303. Electrical Cable Type 3#4/1#8 XLP	LF	4,700.000	4,700.000
0324	SPV.0090	Special 304. Electrical Cable Type 3#2/1#8 XLP	LF	12,850.000	12,850.000
0326	SPV.0090	Special 305. 1 1/2" Liquid Tight Flexible Nonmetallic Conduit Type-B	LF	200.000	200.000
0328	SPV.0090	Special 401. 2-Duct Conduit, Cement Encased, 4-inch rigid Nonmetallic Conduit DB-60	LF	209.000	209.000
0330	SPV.0165	Special 001.Skid/Slip Resistant Green Thermoplastic Integrated Bike Lane Panel	SF	115.000	115.000
0332	SPV.0180	Special 001. Concrete Driveway SHES 7-Inch	SY	10.000	10.000
0334	SPV.0180	Special 002. Concrete Driveway SHES 8-Inch	SY	50.000	50.000
0336	SPV.0195	Special 001. Excavation, Hauling, and Disposal of Lead Contaminated Soil	TON	152.000	152.000
0338	SPV.0195	Special 002. Excavation, Hauling, and Disposal of CVOC Contaminated Soil	TON	237.000	237.000

3

3

CATCH BASIN REMOVALS

STRUCTURE NUMBER	STATION	OFFSET	204.0215 REMOVING CATCH BASINS EACH
500	35+32	48'RT	1
501	85+03	48'LT	1
502	35+92	109'LT	1
503	80+18	7'LT	1
504	80+40	3'RT	1
TOTAL			5

ABANDONING SEWER

STATION	TO	STATION	OFFSET	PIPE ID (INCH)^	LF	204.0291.S ABANDONING SEWER CY
35+32		35+26	RT	8	14	1
35+92		36+07	LT	8	15	1
80+18		80+40	RT	8	25	1
80+40		80+41	RT	8	33	1
TOTAL						4

PROPOSED SEWER STRUCTURES								SEWER PIPES								
STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	DEPTH$_A$ (FT)	FRAME & LID	STRUCTURE REMARKS	FROM STRUCTURE	TO STRUCTURE	INVERTS INLET	INVERTS OUTLET	SLOPE$_B$ (FT/FT)	PIPE LENGTH$_C$ (FT)	PLAN LENGTH$_D$ (FT)	PIPE SIZE (IN)	PIPE REMARKS
9A	STORM INLET-45A	13+51.37	95'RT	135.33	5.08	MS-57	---	9A	9	132.08	131.58	0.0208	24	27	12	
9	4FT MANHOLE	13+51.51	68'RT	135.25	5.50	MS-57	---	9	10	131.58	131.45	0.0209	6	9	12	CONNECT TO EXISTING MANHOLE
10	MANHOLE	13+61.00	65'RT	135.7	11.76	---	EXISTING STRUCTURE	10	---	123.94	---	---	---	---	42	EXISTING PIPE
64A	STORM INLET-45A	32+26.01	48'LT	135.60	5.08	MS-57	---	64A	64B	132.35	131.46	0.0208	43	47	12	
64B	4FT MANHOLE	32+28.68	0.14'RT	137.50	7.87	MS-55	---	64B	64	131.46	130.79	0.0209	32	36	12	CONNECT TO EXISTING MANHOLE
64	MANHOLE	32+41	34'RT	135.91	6.16	---	EXISTING STRUCTURE	64	---	129.75	---	---	---	---	12	EXISTING PIPE
72	STORM INLET-45A	35+21.61	48'RT	131.08	5.08	MS-57	---	72	73	127.83	127.64	0.0208	9	13	12	CONNECT TO EXISTING MANHOLE
73	MANHOLE	35+26	35'RT	131.43	5.12	---	EXISTING STRUCTURE	73	---	126.31	---	---	---	---	15	EXISTING PIPE
144A	STORM INLET-45A	80+00.03	8'LT	92.18	5.08	MS-57	---	144A	145	88.93	88.64	0.0207	14	18	12	
145	STORM INLET-45A	80+15	2'RT	93.05	6.24	MS-57	---	145	142	88.64	87.62	0.0208	49	53	12	CONNECT TO EXISTING MANHOLE
142	MANHOLE	79+74	36'RT	93.37	7.54	---	EXISTING STRUCTURE	142	---	85.83		---	---	---	21	EXISTING PIPE
152	4FT MANHOLE	84+25.00	48'RT	89.13	6.45	MS-57	NO SUMP	---	---	82.68	---	---	---	---	18	CONNECT TO EXISTING PIPE
240	4FT MANHOLE	85+03.87	48'LT	89.10	6.65	MS-58A	---	---	---	82.45	---	---	---	---	18	CONNECT TO EXISTING PIPE
178	4FT MANHOLE	90+50.00	48'LT	87.21	5.03	MS-57	NO SUMP	---	---	82.18	---	---	---	---	15	CONNECT TO EXISTING PIPE
204	STORM INLET-45A	99+85.00	48'RT	85.55	5.08	MS-57	---	204	205	82.30	81.07	0.0208	59	63	12	---
205	4FT MANHOLE	99+22.08	48'RT	85.35	6.11	MS-57	---	205	206	81.07	80.84	0.0208	11	15	12	CONNECT TO EXISTING MANHOLE
206	MANHOLE	99+11	37'RT	85.89	6.39	---	EXISTING STRUCTURE	206	---	79.50	---	---	---	---	21	EXISTING PIPE
228	STORM INLET-45A	109+00.00	48'LT	85.25	5.08	MS-57	---	228	229	82.00	81.67	0.0052	63	67	12	
229	4FT MANHOLE	108+32.50	48'LT	85.14	5.30	MS-57	---	229	231	81.67	80.84	0.0104	80	84	12	CONNECT TO EXISTING MANHOLE
231	MANHOLE	108+26	37'RT	85.61	5.08	---	EXISTING STRUCTURE	231	---	80.53	---	---	---	---	15	EXISTING PIPE
233	STORM INLET-45A	109+87.51	48'RT	85.78	5.08	MS-57	---	233	234	82.53	81.95	0.0208	28	32	12	CONNECT TO EXISTING MANHOLE
234	MANHOLE	109+58	36'RT	86.12	5.97	---	EXISTING STRUCTURE	234	---	80.15	---	---	---	---	15	EXISTING PIPE
235	STORM INLET-45A	35+91.75	133.62'LT	129.89	5.08	MS-57	---	235	236	126.64	126.54	0.0104	10	15	12	
236	4FT MANHOLE	36+06.94	133.73'LT	130.23	5.74	MS-58A	---	---	---	126.32	---	---	---	---	18	CONNECT TO EXISTING PIPE

SPV.0060.001 INLET COVERS TYPE MS 55	SPV.0060.002* INLET COVERS TYPE MS 57	SPV.0060.003* MANHOLE COVERS TYPE MS 58-A	SPV.0060.004 STORM INLET TYPE 45A	611.2004 MANHOLES 4-FT DIAMETER	608.0512 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 12-INCH
EACH	EACH	EACH	EACH	EACH	LF
1	14	2	9	8	479

A DEPTH = COVER ELEVATION - LOWEST PIPE INVERT ELEVATION + SUMP(FOR STORM INLET)

B SLOPE CALCULATED BASED ON PIPE LENGTH. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF S PIPE

C LENGTH SHOWN FOR SLOPE CALCULATION ONLY. NOT TO BE USED FOR PAY QUNATITY.

D PLAN LENGTH OF PIPE SHOWN FOR PAY QUANTITY.

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

STORM SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
1	MANHOLE	10+82	41'LT	143.10	MS-58A	NEW FRAME AND GRATE ONLY
3	MANHOLE	11+70	35'RT	141.02	MS-58A	NEW FRAME AND GRATE ONLY
5	STORM INLET	13+29	48'LT	136.57	MS-57	NEW FRAME AND GRATE ONLY
6	STORM INLET	13+29	11'RT	137.16	MS-57	NEW FRAME AND GRATE ONLY
7	STORM INLET	13+30	46'RT	135.86	MS-57	NEW FRAME AND GRATE ONLY
8	MANHOLE	13+36	34'RT	136.50	MS-58A	NEW FRAME AND GRATE ONLY
10	MANHOLE	13+61	65'RT	135.70	MS-58A	NEW FRAME AND GRATE ONLY
11	MANHOLE	13+64	40'LT	136.50	MS-58A	NEW FRAME AND GRATE ONLY
12	MANHOLE	13+62	5'RT	133.61	MS-58A	NEW FRAME AND GRATE ONLY
14	STORM INLET	13+82	68'RT	135.26	MS-57	NEW FRAME AND GRATE ONLY
16	STORM INLET	16+00	48'RT	134.54	MS-57	NEW FRAME AND GRATE ONLY
17	MANHOLE	16+50	34'RT	135.31	MS-58A	NEW FRAME AND GRATE ONLY
18	STORM INLET	16+69	67'RT	134.63	MS-57	NEW FRAME AND GRATE ONLY
21	STORM INLET	16+90	47'LT	134.20	MS-57	NEW FRAME AND GRATE ONLY
22	MANHOLE	16+93	39'LT	134.46	MS-58A	NEW FRAME AND GRATE ONLY
23	STORM INLET	17+01	68'RT	134.80	MS-57	NEW FRAME AND GRATE ONLY
24	STORM INLET	17+22	47'RT	134.48	MS-57	NEW FRAME AND GRATE ONLY
25	STORM INLET	18+52	48'LT	134.13	MS-57	NEW FRAME AND GRATE ONLY
26	MANHOLE	18+86	43'LT	134.52	MS-58A	NEW FRAME AND GRATE ONLY
27	STORM INLET	19+67	48'RT	134.92	MS-57	NEW FRAME AND GRATE ONLY
28	MANHOLE	19+69	34'RT	135.42	MS-58A	NEW FRAME AND GRATE ONLY
29	STORM INLET	19+87	68'RT	134.30	MS-57	NEW FRAME AND GRATE ONLY
30	MANHOLE	19+96	43'LT	134.67	MS-58A	NEW FRAME AND GRATE ONLY
31	STORM INLET	20+00	48'LT	134.08	MS-57	NEW FRAME AND GRATE ONLY
34	STORM INLET	20+19	68'RT	134.35	MS-57	NEW FRAME AND GRATE ONLY
34A	STORM INLET	20+41	48'RT	134.36	MS-57	NEW FRAME AND GRATE ONLY
35	STORM INLET	22+50	48'LT	134.10	MS-57	NEW FRAME AND GRATE ONLY
36	STORM INLET	22+84	48'RT	134.67	MS-57	NEW FRAME AND GRATE ONLY
37	MANHOLE	22+89	34'RT	135.27	MS-58A	NEW FRAME AND GRATE ONLY
38	STORM INLET	23+06	68'LT	134.39	MS-57	NEW FRAME AND GRATE ONLY
39	STORM INLET	23+05	68'RT	134.33	MS-57	NEW FRAME AND GRATE ONLY
40	MANHOLE	23+15	42'LT	134.82	MS-58A	NEW FRAME AND GRATE ONLY
43	MANHOLE	23+38	68'LT	134.33	MS-58A	NEW FRAME AND GRATE ONLY
44	STORM INLET	23+37	68'RT	134.37	MS-57	NEW FRAME AND GRATE ONLY
45	MANHOLE	23+60	42'LT	134.54	MS-58A	NEW FRAME AND GRATE ONLY
46	MANHOLE	24+31	42'LT	134.30	MS-58A	NEW FRAME AND GRATE ONLY
47	STORM INLET	24+38	48'LT	134.01	MS-57	NEW FRAME AND GRATE ONLY
48	STORM INLET	24+36	48'RT	133.77	MS-57	NEW FRAME AND GRATE ONLY

STORM SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
49	MANHOLE	24+83	35'RT	134.62	MS-58A	NEW FRAME AND GRATE ONLY
50	MANHOLE	26+05	34'RT	136.18	MS-58A	NEW FRAME AND GRATE ONLY
51	STORM INLET	26+23	67'RT	136.03	MS-57	NEW FRAME AND GRATE ONLY
53	MANHOLE	26+44	42'LT	136.06	MS-58A	NEW FRAME AND GRATE ONLY
54	STORM INLET	26+49	48'LT	135.93	MS-57	NEW FRAME AND GRATE ONLY
55	STORM INLET	26+55	68'RT	136.24	MS-57	NEW FRAME AND GRATE ONLY
56	MANHOLE	26+74	34'RT	137.06	MS-58A	NEW FRAME AND GRATE ONLY
57	STORM INLET	26+77	48'RT	136.66	MS-57	NEW FRAME AND GRATE ONLY
58	MANHOLE	28+98	34'RT	139.19	MS-58A	NEW FRAME AND GRATE ONLY
59	STORM INLET	29+41	68'RT	138.93	MS-57	NEW FRAME AND GRATE ONLY
60	MANHOLE	29+50	65'RT	138.93	MS-58A	NEW FRAME AND GRATE ONLY
61	MANHOLE	29+51	34'RT	139.42	MS-58A	NEW FRAME AND GRATE ONLY
62	STORM INLET	29+73	67'RT	138.86	MS-57	NEW FRAME AND GRATE ONLY
63	STORM INLET	32+34	48'RT	135.35	MS-57	NEW FRAME AND GRATE ONLY
64	MANHOLE	32+41	34'RT	135.91	MS-58A	NEW FRAME AND GRATE ONLY
65	STORM INLET	32+59	68'RT	135.73	MS-57	NEW FRAME AND GRATE ONLY
66	MANHOLE	32+69	64'RT	135.81	MS-58A	NEW FRAME AND GRATE ONLY
67	MANHOLE	32+69	35'RT	135.54	MS-58A	NEW FRAME AND GRATE ONLY
69	STORM INLET	32+91	68'RT	135.51	MS-57	NEW FRAME AND GRATE ONLY
70	MANHOLE	34+69	43'LT	130.01	MS-58A	NEW FRAME AND GRATE ONLY
71	STORM INLET	34+91	48'LT	129.65	MS-57	NEW FRAME AND GRATE ONLY
73	MANHOLE	35+26	35'RT	131.43	MS-58A	NEW FRAME AND GRATE ONLY
74	MANHOLE	35+63	36'RT	131.52	MS-58A	NEW FRAME AND GRATE ONLY
75	MANHOLE	35+63	20'RT	131.73	MS-58A	NEW FRAME AND GRATE ONLY
76	MANHOLE	35+63	44'LT	131.43	MS-58A	NEW FRAME AND GRATE ONLY
77	MANHOLE	36+08	65'LT	130.91	MS-58A	NEW FRAME AND GRATE ONLY
79	MANHOLE	36+07	66'RT	132.24	MS-58A	NEW FRAME AND GRATE ONLY
81	MANHOLE	36+64	24'LT	132.20	MS-58A	NEW FRAME AND GRATE ONLY
82	STORM INLET	36+88	67'LT	131.31	MS-57	NEW FRAME AND GRATE ONLY
84	STORM INLET	37+09	48'LT	131.77	MS-57	NEW FRAME AND GRATE ONLY
84A	MANHOLE	37+09	24'LT	132.60	MS-58A	NEW FRAME AND GRATE ONLY
84B	MANHOLE	37+17	35'RT	132.51	MS-58A	NEW FRAME AND GRATE ONLY
85	STORM INLET	37+14	48'RT	132.01	MS-57	NEW FRAME AND GRATE ONLY
88	STORM INLET	60+39	48'LT	103.11	MS-57	NEW FRAME AND GRATE ONLY
91	STORM INLET	61+32	48'RT	101.67	MS-57	NEW FRAME AND GRATE ONLY
93	STORM INLET	61+69	48'LT	99.03	MS-57	NEW FRAME AND GRATE ONLY
94	STORM INLET	61+69	48'RT	100.91	MS-57	NEW FRAME AND GRATE ONLY
96	MANHOLE	61+90	69'RT	101.29	MS-58A	NEW FRAME AND GRATE ONLY
97	MANHOLE	61+99	24'LT	99.38	MS-58A	NEW FRAME AND GRATE ONLY

3

STORM SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
98	MANHOLE	61+99	17'RT	100.09	MS-58A	NEW FRAME AND GRATE ONLY
99	MANHOLE	61+99	69'RT	101.15	MS-58A	NEW FRAME AND GRATE ONLY
101	STORM INLET	62+56	69'RT	99.98	MS-57	NEW FRAME AND GRATE ONLY
103	MANHOLE	63+62	42'LT	96.47	MS-58A	NEW FRAME AND GRATE ONLY
104	MANHOLE	63+66	33'RT	96.90	MS-58A	NEW FRAME AND GRATE ONLY
106	MANHOLE	66+06	34'RT	88.98	MS-58A	NEW FRAME AND GRATE ONLY
107	MANHOLE	66+12	44'LT	88.46	MS-58A	NEW FRAME AND GRATE ONLY
108	STORM INLET	66+10	37'RT	88.66	MS-57	NEW FRAME AND GRATE ONLY
110	STORM INLET	66+88	60'LT	86.04	MS-57	NEW FRAME AND GRATE ONLY
111	MANHOLE	66+90	42'LT	86.40	MS-58A	NEW FRAME AND GRATE ONLY
112	MANHOLE	68+81	1'RT	81.46	MS-58A	NEW FRAME AND GRATE ONLY
113	MANHOLE	68+82	43'LT	80.93	MS-58A	NEW FRAME AND GRATE ONLY
114	MANHOLE	69+61	10'RT	80.31	MS-58A	NEW FRAME AND GRATE ONLY
115	STORM INLET	69+74	37'LT	79.80	MS-57	NEW FRAME AND GRATE ONLY
116	STORM INLET	69+81	14'RT	80.00	MS-57	NEW FRAME AND GRATE ONLY
118	STORM INLET	69+99	36'LT	79.65	MS-57	NEW FRAME AND GRATE ONLY
120	MANHOLE	70+04	14'RT	79.87	MS-58A	NEW FRAME AND GRATE ONLY
121	MANHOLE	70+10	46'LT	80.07	MS-58A	NEW FRAME AND GRATE ONLY
121A	MANHOLE	70+09	7'RT	80.44	MS-58A	NEW FRAME AND GRATE ONLY
122	MANHOLE	70+26	26'RT	80.92	MS-58A	NEW FRAME AND GRATE ONLY
123	STORM INLET	70+24	35'LT	79.85	MS-57	NEW FRAME AND GRATE ONLY
124	STORM INLET	70+29	15'RT	80.07	MS-57	NEW FRAME AND GRATE ONLY
124A	MANHOLE	71+77	46'LT	82.45	MS-58A	NEW FRAME AND GRATE ONLY
125	STORM INLET	71+80	59'LT	82.20	MS-57	NEW FRAME AND GRATE ONLY
126	STORM INLET	73+14	41'RT	85.75	MS-57	NEW FRAME AND GRATE ONLY
127	MANHOLE	74+04	33'RT	88.40	MS-58A	NEW FRAME AND GRATE ONLY
128	STORM INLET	74+18	79'RT	88.40	MS-57	NEW FRAME AND GRATE ONLY
129	STORM INLET	74+29	48'LT	88.12	MS-57	NEW FRAME AND GRATE ONLY
132	STORM INLET	74+54	78'RT	89.25	MS-57	NEW FRAME AND GRATE ONLY
133	MANHOLE	74+73	35'RT	90.00	MS-58A	NEW FRAME AND GRATE ONLY
134	STORM INLET	74+81	48'RT	89.45	MS-57	NEW FRAME AND GRATE ONLY
135	MANHOLE	76+21	35'RT	93.05	MS-58A	NEW FRAME AND GRATE ONLY
136	MANHOLE	76+56	36'RT	93.37	MS-58A	NEW FRAME AND GRATE ONLY
137	MANHOLE	76+53	46'LT	92.67	MS-58A	NEW FRAME AND GRATE ONLY
141	MANHOLE	79+34	36'RT	96.61	MS-58A	NEW FRAME AND GRATE ONLY
142	MANHOLE	79+74	36'RT	93.37	MS-58A	NEW FRAME AND GRATE ONLY
143	STORM INLET	79+82	48'RT	92.90	MS-57	NEW FRAME AND GRATE ONLY
144	STORM INLET	79+81	48'LT	91.22	MS-57	NEW FRAME AND GRATE ONLY

STORM SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
148	STORM INLET	81+67	48'LT	90.38	MS-57	NEW FRAME AND GRATE ONLY
149	STORM INLET	81+92	48'RT	91.55	MS-57	NEW FRAME AND GRATE ONLY
150	MANHOLE	83+00	36'RT	91.78	MS-58A	NEW FRAME AND GRATE ONLY
153	STORM INLET	84+32	48'RT	90.25	MS-57	NEW FRAME AND GRATE ONLY
154	STORM INLET	84+57	70'RT	90.20	MS-57	NEW FRAME AND GRATE ONLY
156	MANHOLE	84+63	64'RT	90.45	MS-58A	NEW FRAME AND GRATE ONLY
159	STORM INLET	84+89	71'RT	90.10	MS-57	NEW FRAME AND GRATE ONLY
160	MANHOLE	84+91	36'RT	90.73	MS-58A	NEW FRAME AND GRATE ONLY
161	STORM INLET	86+22	48'LT	88.48	MS-57	NEW FRAME AND GRATE ONLY
162	STORM INLET	87+53	48'LT	88.22	MS-57	NEW FRAME AND GRATE ONLY
163	STORM INLET	87+64	48'RT	88.30	MS-57	NEW FRAME AND GRATE ONLY
164	STORM INLET	87+90	74'RT	88.85	MS-57	NEW FRAME AND GRATE ONLY
165	MANHOLE	87+98	67'LT	88.94	MS-58A	NEW FRAME AND GRATE ONLY
166	MANHOLE	87+98	13'RT	89.63	MS-58A	NEW FRAME AND GRATE ONLY
167	MANHOLE	87+99	65'RT	89.33	MS-58A	NEW FRAME AND GRATE ONLY
172	STORM INLET	88+60	74'RT	88.75	MS-57	NEW FRAME AND GRATE ONLY
173	MANHOLE	89+22	45'RT	88.23	MS-58A	NEW FRAME AND GRATE ONLY
175	MANHOLE	89+33	46'LT	88.02	MS-58A	NEW FRAME AND GRATE ONLY
176	MANHOLE	90+15	39'RT	88.01	MS-58A	NEW FRAME AND GRATE ONLY
179	STORM INLET	91+32	48'LT	87.15	MS-57	NEW FRAME AND GRATE ONLY
180	STORM INLET	91+32	48'RT	87.10	MS-57	NEW FRAME AND GRATE ONLY
181	MANHOLE	91+65	39'RT	87.68	MS-58A	NEW FRAME AND GRATE ONLY
182	MANHOLE	92+28	40'RT	87.39	MS-58A	NEW FRAME AND GRATE ONLY
183	MANHOLE	92+60	40'RT	87.26	MS-58A	NEW FRAME AND GRATE ONLY
185	MANHOLE	92+71	38'RT	87.27	MS-58A	NEW FRAME AND GRATE ONLY
188	STORM INLET	94+32	48'RT	85.91	MS-57	NEW FRAME AND GRATE ONLY
189	STORM INLET	94+41	48'LT	85.90	MS-57	NEW FRAME AND GRATE ONLY
191	MANHOLE	94+97	43'LT	86.42	MS-58A	NEW FRAME AND GRATE ONLY
192	MANHOLE	94+96	22'RT	87.11	MS-58A	NEW FRAME AND GRATE ONLY
194	STORM INLET	95+52	48'RT	85.86	MS-57	NEW FRAME AND GRATE ONLY
195	MANHOLE	96+01	37'RT	86.61	MS-58A	NEW FRAME AND GRATE ONLY
196	MANHOLE	96+33	37'RT	86.56	MS-58A	NEW FRAME AND GRATE ONLY
197	MANHOLE	97+77	42'LT	84.99	MS-58A	NEW FRAME AND GRATE ONLY
199	STORM INLET	97+82	48'LT	84.65	MS-57	NEW FRAME AND GRATE ONLY
200	MANHOLE	97+86	37'RT	85.92	MS-58A	NEW FRAME AND GRATE ONLY
201	STORM INLET	98+14	48'RT	85.15	MS-57	NEW FRAME AND GRATE ONLY
202	MANHOLE	98+27	42'LT	85.22	MS-58A	NEW FRAME AND GRATE ONLY
203	STORM INLET	98+32	48'LT	85.00	MS-57	NEW FRAME AND GRATE ONLY
206	MANHOLE	99+11	37'RT	85.89	MS-58A	NEW FRAME AND GRATE ONLY

STORM SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
207	MANHOLE	100+21	37'RT	86.30	MS-58A	NEW FRAME AND GRATE ONLY
208	MANHOLE	99+69	42'LT	85.95	MS-58A	NEW FRAME AND GRATE ONLY
209	MANHOLE	101+62	42'LT	86.58	MS-58A	NEW FRAME AND GRATE ONLY
210	MANHOLE	101+82	38'RT	86.34	MS-58A	NEW FRAME AND GRATE ONLY
211	STORM INLET	101+82	48'RT	85.70	MS-57	NEW FRAME AND GRATE ONLY
212	MANHOLE	102+31	43'LT	86.26	MS-58A	NEW FRAME AND GRATE ONLY
214	MANHOLE	103+40	42'LT	85.70	MS-58A	NEW FRAME AND GRATE ONLY
215	STORM INLET	103+48	48'LT	85.42	MS-57	NEW FRAME AND GRATE ONLY
216	STORM INLET	103+57	48'RT	85.37	MS-57	NEW FRAME AND GRATE ONLY
218	STORM INLET	103+97	48'RT	85.40	MS-57	NEW FRAME AND GRATE ONLY
219	STORM INLET	103+92	48'LT	85.19	MS-57	NEW FRAME AND GRATE ONLY
220	MANHOLE	104+01	42'LT	85.60	MS-58A	NEW FRAME AND GRATE ONLY
221	MANHOLE	104+12	37'RT	86.03	MS-58A	NEW FRAME AND GRATE ONLY
224	MANHOLE	106+08	43'LT	86.49	MS-58A	NEW FRAME AND GRATE ONLY
230	STORM INLET	108+32	48'RT	85.15	MS-57	NEW FRAME AND GRATE ONLY
231	MANHOLE	108+26	37'RT	85.61	MS-58A	NEW FRAME AND GRATE ONLY
234	MANHOLE	109+58	36'RT	86.12	MS-58A	NEW FRAME AND GRATE ONLY
237	MANHOLE	62+51	90'RT	100.30	MS-58A	NEW FRAME AND GRATE ONLY
238	MANHOLE	62+55	132'LT	96.17	MS-57	NEW FRAME AND GRATE ONLY
239	MANHOLE	68+84	21'RT	81.75	MS-58A	NEW FRAME AND GRATE ONLY
241	MANHOLE	36+07	110'LT	130.48	MS-58A	NEW FRAME AND GRATE ONLY
243	MANHOLE	32+67	55'LT	135.12	MS-58A	NEW FRAME AND GRATE ONLY
244	MANHOLE	34+07	34'RT	132.75	MS-58A	NEW FRAME AND GRATE ONLY

SPV.0060.002* INLET COVERS TYPE MS 57	SPV.0060.003* MANHOLE COVERS TYPE MS 58-A
EACH	EACH
80	97

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

SANITARY SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
400	MANHOLE	11+54	50'RT	141.46	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
402	MANHOLE	13+69	51'RT	135.73	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
403	MANHOLE	16+84	51'LT	134.76	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
404	MANHOLE	16+87	50'RT	135.03	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
405	MANHOLE	20+05	50'RT	134.83	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
406	MANHOLE	20+06	52'LT	134.74	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
407	MANHOLE	23+23	51'RT	134.79	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
408	MANHOLE	23+24	51'LT	134.73	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
409	MANHOLE	26+41	51'RT	136.46	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
411	MANHOLE	29+60	50'RT	139.16	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
412	MANHOLE	32+78	50'RT	135.28	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
413	MANHOLE	36+15	51'LT	131.26	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
413A	MANHOLE	36+15	20'RT	132.11	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
414	MANHOLE	36+48	44'LT	131.82	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
415	MANHOLE	37+06	43'LT	132.60	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
416	MANHOLE	60+52	51'LT	103.10	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
417	MANHOLE	61+89	49'RT	100.50	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
418	MANHOLE	62+59	79'RT	100.62	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
419	MANHOLE	62+59	50'RT	99.28	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
420	MANHOLE	64+100	49'RT	92.14	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
421	MANHOLE	66+64	51'LT	86.89	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
421A	MANHOLE	66+84	70'LT	86.70	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
421B	MANHOLE	72+55	50'RT	85.07	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
422	MANHOLE	74+39	38'LT	88.81	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
423	MANHOLE	74+39	51'RT	89.08	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
423A	MANHOLE	74+40	58'LT	88.72	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
424	MANHOLE	77+16	51'RT	95.45	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
425	MANHOLE	77+81	39'LT	92.74	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
426	MANHOLE	78+35	28'RT	94.22	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
427	MANHOLE	81+25	39'LT	91.12	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
428	MANHOLE	81+35	27'RT	92.84	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
429	MANHOLE	83+23	27'RT	91.90	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
430	MANHOLE	84+68	39'LT	89.54	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
431	MANHOLE	84+79	60'RT	90.60	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
432	MANHOLE	84+86	50'RT	90.48	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
433	MANHOLE	88+14	60'LT	89.15	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
434	MANHOLE	88+16	39'LT	89.28	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
435	MANHOLE	88+26	27'RT	89.60	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
436	MANHOLE	88+26	51'RT	89.52	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
437	MANHOLE	89+31	37'RT	88.20	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
438	MANHOLE	90+25	28'RT	88.23	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
439	MANHOLE	91+74	29'RT	87.95	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
440	MANHOLE	91+82	29'LT	88.00	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
441	MANHOLE	93+13	30'LT	87.26	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY

SANITARY SEWER STRUCTURES

STRUCTURE NUMBER	STRUCTURE TYPE	STATION	CENTERLINE OFFSET	COVER ELEV.	FRAME & LID	STRUCTURE REMARKS
442	MANHOLE	94+23	29'RT	86.96	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
443	MANHOLE	94+84	30'LT	86.82	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
444	MANHOLE	95+40	50'LT	86.34	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
445	MANHOLE	96+97	30'RT	86.51	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
446	MANHOLE	97+80	29'RT	86.19	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
447	MANHOLE	101+37	30'RT	86.73	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
448	MANHOLE	102+57	29'RT	86.56	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
449	MANHOLE	103+83	29'RT	86.22	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
450	MANHOLE	104+57	29'RT	86.40	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
451	MANHOLE	105+94	29'RT	86.89	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
452	MANHOLE	106+15	30'RT	86.81	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
453	MANHOLE	106+82	28'RT	86.57	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
454	MANHOLE	106+91	43'LT	86.06	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
455	MANHOLE	109+67	28'RT	86.36	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
456	MANHOLE	110+21	28'RT	86.55	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
460	MANHOLE	13+72	51'LT	136.18	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
461	MANHOLE	24+40	52'LT	134.50	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
462	MANHOLE	32+57	51'LT	135.04	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
463	MANHOLE	38+60	43'LT	133.47	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
464	MANHOLE	59+48	50'RT	107.37	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
465	MANHOLE	91+83	52'LT	87.56	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
468	MANHOLE	106+15	51'LT	86.65	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY
469	MANHOLE	35+84	76'LT	130.80	MS-58A	NEW FRAME AND GRATE AND INTERNAL SEAL ONLY

SPV.0060.003* MANHOLE COVERS TYPE MS 58-A	SPV.0060.006 INTERNAL SANITARY MANHOLE SEALS
EACH	EACH
67	67

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

ALL ITEMS CATEGORY 0020

TYPE II PERMANENT SIGNING

2070-03-71 Layton Ave Route marker plan

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLECTIVE H [SF]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.2602** REMOVING SIGNS TYPE II (EA)	**634.0618** POSTS WOOD 4" X 6" X 18' [EA]	**634.0816** POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	J3-2						1.000	1		1			
2	J3-1(2S)		24	X	45	7.500					1		
	I5-1(2S)		24	X	24								
	MG6-1		21	X	21								
3	JV3-1							1		1			ON LIGHT POLE . MOVE TO WOOD POST IN FRONT OF LIGHT POLE
4	JV2-1						1.000	1		1			
5	JV2-1							1		1			ON LIGHT POLE. MOVE TO WOOD POST IN FRONT OF LIGHT POLE
6	JV2-1						1.000	1		1			
7	J2-2							1		1			
8	J1-1(2S)		24	X	39	6.500				1			
	M2-1		21	X	15								DO NOT PLACE BEHIND THE LIGHT POLE WHERE IT WOULD BE BLOCKED BY THE LIGHT POLE. PUT NEW WOOD POST IN FRONT OF LIGHT POLE
	M1-6	STH 241	24	X	24								
9	JV2-1		24	X	93	15.500	2.000		1	2			
	MB3-3		24	X	12								
	M1-1	IH 41	24	X	24								
	MB3-2		24	X	12								
	M1-1	IH 94	24	X	24								
	MB5-R		21	X	21								
10	J2-1(2S)		24	X	45	7.500	1.000		1		1		
	I5-1		24	X	24								
	MG5-1R		21	X	21								
11	J3-1						1.000	1		1			

TYPE II PERMANENT SIGNING

2070-03-71 Layton Ave Route marker plan

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II (EA)	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
12	JV3-1						1.000	1		1			
13	J2-2(2S)		48	x	57	19.000							
	MB3-1		24	x	12								ON SIGNAL POLE
	M1-1	IH 43	24	x	24								
	MB5-1L		21	x	21								
	MB3-4		24	x	12								
	M1-1	IH 94	24	x	24								
	MB5-1L		21	x	21								
14	J3-1						1.000	1		1			
15	J3-2						2.000	1		2			
16	J3-1						1.000	1		1			
17	JV3-1(2S)		24	x	96	16.000	2.000			2			
	MB3-3		24	x	12								
	M1-1	IH 41	24	x	24								
	MB3-2		24	x	12								
	M1-1	IH 94	24	x	24								
	MB4-20L		24	x	24								
18	J3-1(2S)		48	x	57	19.000	2.000			2			
	MB3-1		24	x	12								
	M1-1	IH 43	24	x	24								
	MB6-1		21	x	21								
	MB3-4		24	x	12								
	M1-1	IH 94	24	x	24								
	MB6-1		21	x	21								
19	J2-2(2S)		48	x	57	19.000	2.000			2			
	MB3-1		24	x	12								
	M1-1	IH 43	24	x	24								
	MB5-1L		21	x	21								
	MB3-4		24	x	12								
	M1-1	IH 94	24	x	24								
	MB5-1L		21	x	21								
20	J1-1						1.000	1		1			
21	JV3-1							1		1			FACING SOUTH
22	JV1-1(2S)		24	x	63	10.500				1			ON LIGHT POLE - PUT NEW SIGN ON WOOD POST IN FRONT OF LIGHT POLE
	MB2-1		21	x	15								
	M1-1	IH 41	24	x	24								
	M1-1	IH 94	24	x	24								
23	J1-1(2S)		24	x	39	6.500				1			
	M2-1		21	x	15								
	M1-6	STH 38	24	x	24								
24	J1-1(2S)		24	x	39	6.500				1			
	M2-1		21	x	15								
	M1-6	STH 38	24	x	24								
UNDISTRIBUTED						--					2	--	--
TOTALS						133.500	19.000	13	2	26	4	--	--

SHEET: 2 OF 2

PROJECT NO: 2070-03-71	HWY: LAYTON AVE	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES PERMANENT SIGNING	SHEET:	E

FILE NAME : N:SPO\OPERATIONS\SIGNING\MISCELLANEOUS QUANTITIES\2070-03-71\030501_MQ.PPTX PLOT DATE : _1/7/2019_____ PLOT BY : ___DOTTAH PLOT NAME : 030501_mq.pdf PLOT SCALE : 1:1

3

SIGNALS ITEMS

2070-03-71

CATEGORY	BID ITEM NUMBER	BID ITEM DESCRIPTION	UNIT	QUANTITY
0010	204.0195	REMOVING CONCRETE BASES	EACH	22
0010	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	405
0010	652.0235*	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	2,170
0010	652.0615*	CONDUIT SPECIAL 3-INCH	LF	1,884
0010	653.0900	ADJUSTING PULL BOXES	EACH	11
0010	654.0101	CONCRETE BASES TYPE 1	EACH	16
0010	654.0105	CONCRETE BASES TYPE 5	EACH	7
0010	654.0110	CONCRETE BASES TYPE 10	EACH	4
0010	657.0100	PEDESTAL BASES	EACH	16
0010	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	7
0010	657.0350	POLES TYPE 10	EACH	4
0010	657.0530	MONOTUBE ARM 30-FT	EACH	4
0010	657.0535	MONOTUBE ARM 35-FT	EACH	2
0010	SPV.0060.005	UTILITY LINE OPENING	EACH	16
0010	SPV.0060.201	CONCRETE BASE TYPE 10 SPECIAL	EACH	2
0010	SPV.0060.202	POLES TYPE 13 SPECIAL	EACH	2
0010	SPV.0060.301*	PULLBOXES 17-INCH x 30-INCH x 24-INCH	EACH	33

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

All CATEGORY 0010 ITEMS ARE PARTICIPATING

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

STREET LIGHTING ITEMS

CATEGORY 0010

	652.0230 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2 1/2-INCH	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	652.0615* CONDUIT SPECIAL 3-INCH	655.0305 CABLE TYPE UF 2#12 AWG GROUNDED	657.0808 LUMINAIRE ARMS STEEL 8-FOOT
W. LAYTON AVE.	LF	LF	LF	LF	EACH
PROJECT TOTAL	2,080	10,770	4,250	5,740	13

	SPV.0060.304 LUMINAIRE ARCHITECTURAL LED 3	SPV.0060.305 LUMINAIRE ARM DECORATIVE IBIS SINGLE 8-FT TENON MOUNT	SPV.0060.306 LUMINAIRE ARM DECORATIVE IBIS DOUBLE 8-FT TENON MOUNT	SPV.0060.307 CONCRETE LIGHT BASES TYPE 21	SPV.0060.308 POLE TYPE 21	SPV.0060.309 LUMINAIRE UTILITY LED 1	SPV.0060.310 METAL WIRING PEDESTAL 4-INCH x 4-INCH x 36-INCH	SPV.0060.311 METERED OUTLET SERVICE PEDESTAL 100A - 120/240V
W. LAYTON AVE.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
PROJECT TOTAL	173	12	70	82	82	9	8	1

	SPV.0060.301* PULL BOXES 17-INCH x 30-INCH x 24-INCH	SPV.0060.302 PULL BOXES 13-INCH x 24-INCH x 24-INCH	SPV.0060.303 REMOVE LUMINAIRE
W. LAYTON AVE.	EACH	EACH	EACH
PROJECT TOTAL	1	106	17

	SPV.0090.301 ELECTRICAL CABLE TYPE 3#8/1#8 LTP	SPV.0090.302 ELECTRICAL CABLE TYPE 3#6/1#8 LTP	SPV.0090.303 ELECTRICAL CABLE TYPE 3#4/1#8 LTP	SPV.0090.304 ELECTRICAL CABLE TYPE 3#2/1#8 LTP	SPV.0090.305 LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
W. LAYTON AVE.	LF	LF	LF	LF	LF
PROJECT TOTAL	15,330	3,090	4,700	12,850	200

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

STREET LIGHTING SPARES ITEMS

CATEGORY 0020

	SPV.0060.312 LUMINAIRE ARCHITECTURAL LED 3 SPARE EACH	SPV.0060.313 POLE TYPE 21 ALUMINUM SPARE EACH	SPV.0060.314 LUMINAIRE ARM DECORATIVE IBIS SINGLE 8-FT TENON MOUNT SPARE EACH	SPV.0060.315 LUMINAIRE ARM DECORATIVE IBIS DOUBLE 8-FT TENON MOUNT SPARE EACH
W. LAYTON AVE.				
PROJECT TOTAL	18	10	31	7

CUC MANHOLES

SPV.0060.401

ADJUSTING
CUC
MANHOLE COVERS

MH	STATION	OFFSET	EACH	COVER	REMARKS
601	10+90.8	28.0'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
602	17+8.5	27.8'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
603	20+25.7	28.1'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
604	23+44.0	27.4'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
605	29+33.9	28.2'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
606	32+98.2	28.0'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
607	35+94.7	15.2'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
608	36+1.1	33.7'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
609	37+6.0	23.4'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
610	40+49.1	28.0'RT	–		OUTSIDE OF PAVING LIMITS
611	40+57.0	25.0'RT	–		OUTSIDE OF PAVING LIMITS
612	44+89.0	25.0'RT	–		OUTSIDE OF PAVING LIMITS
613	44+97.1	33.0'RT	–		OUTSIDE OF PAVING LIMITS
614	50+0.0	28.7'RT	–		OUTSIDE OF PAVING LIMITS
615	50+8.0	25.7'RT	–		OUTSIDE OF PAVING LIMITS
616	56+3.9	32.1'RT	–		OUTSIDE OF PAVING LIMITS
617	62+3.5	65.8'LT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
618	62+3.0	31.6'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
619	62+74.2	22.8'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
620	67+64.6	25.8'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
621	70+64.9	22.0'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
622	74+58.7	22.0'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
623	79+55.1	21.3'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
624	84+49.7	21.6'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
625	87+69.8	22.1'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
626	88+57.0	23.7'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
627	94+56.6	24.5'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
628	99+71.6	24.8'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
629	104+85.5	24.3'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
630	109+90.0	23.8'RT	1	NEW COVER	REMOVE CHIMNEY TO ROOF DECK
		Total	23		

CITY UNDERGROUND CONDUIT

LOCATION			SPV.0060.402 INSTALLING CONDUIT INTO EXISTING MANHOLE EACH	SPV.0090.401 2-DUCT CONDUIT CEMENT ENCASED DB-60 LF
MANHOLE #607	-	STA. 35 + 94.7, 15.2' RT	1	–
MANHOLE #607	TO	TRAFFIC CONTROL CABINET	–	82
MANHOLE #619	-	STA. 62+ 74.2, 22.8' RT	1	–
MANHOLE #619	TO	TRAFFIC CONTROL CABINET	–	53
MANHOLE #626	-	STA. 88 + 57.0, 23.7' RT	1	–
MANHOLE #626	TO	TRAFFIC CONTROL CABINET	–	74
TOTAL			3	209

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010, UNLESS OTHERWISE NOTED.

3

WATER SERVICE ITEMS

2070-03-71

ITEM NO.	SPV.0060.013 ADJUSTING WATER BOXES	SPV.0060.014 ADJUSTING WATER MANHOLES	SPV.0060.015 WATER MAIN PROTECTION
UNIT PAY	EACH	EACH	EACH
CATEGORY	0020	0020	0020
LOCATION			
UNDISTRIBUTED	110	6	2
TOTAL	**110**	**6**	**2**

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

TREE REMOVALS CONSTRUCTION ITEMS

2070-03-71

CATEGORY	BID ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
0010	201.0120	CLEARING	ID	52
0010	201.0220	GRUBBING	ID	52

REMOVALS CONSTRUCTION ITEMS

2070-03-71

		REMOVING PAVEMENT		REMOVING PAVEMENT BUTT JOINTS		REMOVING ASPHALTIC SURFACE BUTT JOINTS		REMOVING ASPHALTIC SURFACE MILLING		REMOVING CURB AND GUTTER		REMOVING CONCRETE SIDEWALK	
	ITEM NO.	204.0100		204.0105		204.0115		204.0120		204.0150		204.0155	
	UNIT PAY	SY		SY		SY		SY		LF		SY	
CATEGORY		0010		0010		0010		0010		0010		0010	
LOCATION (STA TO STA)		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00		–	–	–	–	–	–	710	560	90	200	60	120
12+00 TO 18+00		90	90	–	320	–	–	2590	2390	480	600	240	370
18+00 TO 24+00		70	90	130	100	–	140	2340	2240	800	770	360	370
24+00 TO 30+00		40	90	–	230	–	–	2360	2400	550	390	380	370
30+00 TO 35+00		80	–	–	130	–	–	1890	1900	310	220	350	290
35+00 TO 41+00		90	90	–	–	150	–	1930	1830	450	270	240	220
54+00 TO 60+00		–	–	–	–	–	–	490	490	30	200	30	60
60+00 TO 66+00		230	160	–	–	460	190	2700	2750	620	340	520	420
66+00 TO 72+00		840	830	–	–	–	–	2400	1080	180	160	280	330
72+00 TO 78+00		90	90	–	–	–	90	2760	2390	400	490	360	410
78+00 TO 84+00		–	90	–	–	–	–	2700	2510	310	280	430	370
84+00 TO 90+00		90	180	–	–	140	380	3190	3010	620	680	360	430
90+00 TO 96+00		90	90	–	–	70	–	2780	2660	740	650	370	400
96+00 TO 102+00		–	–	–	–	–	–	2670	2610	310	620	140	490
102+00 TO 108+00		90	90	–	–	–	–	2720	2540	400	480	440	420
108+00 TO 114+00		–	–	–	–	–	–	880	940	140	240	120	200
SUBTOTALS		**1,800**	**1,890**	**130**	**780**	**820**	**800**	**35,110**	**32,300**	**6,430**	**6,590**	**4,680**	**5,270**
GRAND TOTALS		**3,690**		**910**		**1,620**		**67,410**		**13,020**		**9,950**	

3

3

EARTH WORK SUMMARY

From/To Station	Location	Excavation Common (1) (item #205.0100)		Salvaged/Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate +/- (6)	Waste	Borrow
		Cut (2)	Excavation				Factor			
		CY	CY	CY	CY	CY	CY	CY	CY	CY
10+00	114+00	2,191	0	1,184	1,007	0	0	1,007	2,191	0

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Category 0010 item number 205.0100
2) Salvaged/Unusable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material
4) Available Material = Cut - Salvaged/Unusable Pavement Material
5) Expanded Fill. Factor = 1.20
6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material.

SECTION CORNER ITEMS

2070-03-71

	SECTION CORNER MONUMENTS
ITEM NO.	SPV.0060.016
UNIT PAY	EACH
CATEGORY	0010
LOCATION (STA TO STA)	
10+00 TO 12+00	1
30+00 TO 36+00	1
60+00 TO 66+00	1
GRAND TOTALS	**3**

BASE REPAIR CONCRETE ITEMS

2070-03-71

	BASE PATCHING CONCRETE	JOINT & CRACK REPAIR
ITEM NO.	390.0303	SPV.0090.008
UNIT PAY	SY	LF
CATEGORY	0010	0010
LOCATION		
UNDISTRIBUTED	12,000	1,000
TOTALS	**12,000**	**1,000**

ASPHALTIC SURFACE ITEMS

2070-03-71

	ASPHALTIC SURFACE		ASPHALTIC SURFACE PATCHING	
ITEM NO.	465.0105		465.0110	
UNIT PAY	TON		TON	
CATEGORY	0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00	–	–	–	–
12+00 TO 18+00	1	1	–	–
18+00 TO 24+00	–	–	–	–
24+00 TO 30+00	1	–	–	–
30+00 TO 35+00	3	–	–	–
35+00 TO 41+00	4	–	–	–
54+00 TO 60+00	–	–	–	–
60+00 TO 66+00	1	2	–	–
66+00 TO 72+00	2	1	–	–
72+00 TO 78+00	–	–	–	–
78+00 TO 84+00	3	2	–	–
84+00 TO 90+00	–	–	–	–
90+00 TO 96+00	–	–	–	–
96+00 TO 102+00	–	–	–	–
102+00 TO 108+00	3	1	–	–
108+00 TO 114+00	–	–	–	–
UNDISTRIBUTED	–	–	60	90
SUBTOTALS	**18**	**7**	**60**	**90**
GRAND TOTALS	**25**		**150**	

3

CONCRETE BASE RELATED CONSTRUCTION ITEMS

2070-03-71

		BASE AGGREGATE DENSE 1-1/4 INCH		CONCRETE BASE 4-INCH		CONCRETE BASE 9-INCH	
	ITEM NO.	305.0120		320.0105		320.0155	
	UNIT PAY	TON		SY		SY	
CATEGORY		0010		0010		0010	
LOCATION (STA TO STA)		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00		40	30	–	–	5	10
12+00 TO 18+00		100	130	3	4	40	30
18+00 TO 24+00		150	160	–	–	90	190
24+00 TO 30+00		100	90	4	–	10	10
30+00 TO 35+00		60	40	13	–	30	10
35+00 TO 41+00		90	70	17	–	30	10
54+00 TO 60+00		10	30	–	–	–	–
60+00 TO 66+00		70	60	4	5	40	20
66+00 TO 72+00		510	120	6	3	–	10
72+00 TO 78+00		70	70	–	–	20	50
78+00 TO 84+00		60	80	12	6	30	40
84+00 TO 90+00		90	110	–	–	70	70
90+00 TO 96+00		100	110	–	–	60	50
96+00 TO 102+00		50	70	–	–	–	80
102+00 TO 108+00		60	80	15	2	60	60
108+00 TO 114+00		40	50	–	–	10	40
SUBTOTALS		**1,600**	**1,300**	**73**	**21**	**495**	**680**
GRAND TOTALS		**2,900**		**93**		**1,175**	

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

PAVEMENT RELATED CONSTRUCTION ITEMS

2070-03-71

		CONCRETE PAVEMENT 10-INCH		CONCRETE DRIVEWAY 8-INCH		CONCRETE DRIVEWAY 7-INCH HES		CONCRETE DRIVEWAY 8-INCH HES				HMA PAVEMENT 3 MT 58-28 S		HMA PAVEMENT 4 MT 58-28 S	
	ITEM NO.	415.0100		416.0180		416.0270		416.0280		455.0605		460.6223		460.6224	
	UNIT PAY	SY		SY		SY		SY		GAL		TON		TON	
CATEGORY		0010		0010		0010		0010		0010		0010		0010	
LOCATION (STA TO STA)		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00		–	–	–	–	–	–	–	30	20	20	245	280	160	185
12+00 TO 18+00		70	70	–	–	–	10	100	30	70	70	362	380	268	281
18+00 TO 24+00		50	70	–	–	–	10	–	–	70	70	345	345	255	255
24+00 TO 30+00		40	70	–	–	10	10	20	–	60	70	334	339	247	251
30+00 TO 35+00		60	–	–	–	40	–	30	–	50	60	270	288	200	213
35+00 TO 41+00		70	70	–	–	–	–	70	–	60	50	293	259	217	191
54+00 TO 60+00		–	–	–	–	–	–	–	–	120	120	69	69	51	51
60+00 TO 66+00		130	130	–	–	–	–	340	130	70	70	368	368	271	272
66+00 TO 72+00		1,250	270	–	–	–	–	70	100	40	30	213	144	162	106
72+00 TO 78+00		70	70	20	–	–	–	60	190	40	60	362	311	268	230
78+00 TO 84+00		–	70	20	–	–	–	60	130	70	60	351	322	259	238
84+00 TO 90+00		70	150	50	–	–	–	–	40	80	90	431	437	328	323
90+00 TO 96+00		70	70	–	–	–	–	210	170	70	70	355	343	271	255
96+00 TO 102+00		–	–	–	–	–	–	–	250	70	70	338	332	263	251
102+00 TO 108+00		70	70	–	–	–	–	240	160	70	60	343	321	267	242
108+00 TO 114+00		–	–	–	–	–	–	40	120	20	20	113	118	88	89
SUBTOTALS		**1,950**	**1,110**	**90**	**0**	**50**	**30**	**1,240**	**1,350**	**980**	**990**	**4,791**	**4,654**	**3,573**	**3,432**
GRAND TOTALS		**3,060**		**90**		**80**		**2,590**		**1,970**		**9,445**		**7,005**	

PAVEMENT RELATED SPECIAL CONSTRUCTION ITEMS

2070-03-71

		CONCRETE DRIVEWAY 7-INCH SHES		CONCRETE DRIVEWAY 8-INCH SHES	
	ITEM NO.	SPV.0180.001		SPV.0180.002	
	UNIT PAY	SY		SY	
CATEGORY		0010		0010	
LOCATION (STA TO STA)		LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00		–	–	–	–
12+00 TO 18+00		–	–	–	–
18+00 TO 24+00		–	–	–	–
24+00 TO 30+00		–	–	–	–
30+00 TO 35+00		–	–	–	–
35+00 TO 41+00		–	–	–	–
54+00 TO 60+00		–	–	–	–
60+00 TO 66+00		–	–	–	–
66+00 TO 72+00		–	10	–	20
72+00 TO 78+00		–	–	–	–
78+00 TO 84+00		–	–	–	–
84+00 TO 90+00		–	–	–	–
90+00 TO 96+00		–	–	–	–
96+00 TO 102+00		–	–	10	–
102+00 TO 108+00		–	–	–	–
108+00 TO 114+00		–	–	–	20
SUBTOTALS		**0**	**10**	**10**	**40**
GRAND TOTALS		**10**		**50**	

CONCRETE CURB AND GUTTER RELATED CONSTRUCTION ITEMS

2070-03-71

	CONCRETE CURB INTEGRAL TYPE D		CONCRETE CURB & GUTTER 19-INCH		CONCRETE CURB & GUTTER 31-INCH		CONCRETE MEDIAN SLOPED NOSE	
ITEM NO.	601.0150		601.0319		601.0331*		620.0300	
UNIT PAY	LF		LF		LF		SF	
CATEGORY	0010		0010		0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00	70	–	–	–	30	200	–	–
12+00 TO 18+00	60	60	–	–	400	590	–	140
18+00 TO 24+00	40	60	–	–	750	750	50	140
24+00 TO 30+00	30	60	–	–	520	390	–	190
30+00 TO 35+00	50	–	–	–	230	220	50	100
35+00 TO 41+00	60	60	–	–	360	260	50	50
54+00 TO 60+00	–	–	–	–	30	200	–	–
60+00 TO 66+00	100	110	–	–	450	280	60	50
66+00 TO 72+00	–	–	600	200	110	30	60	–
72+00 TO 78+00	60	60	–	–	340	330	50	140
78+00 TO 84+00	–	60	–	–	220	160	40	50
84+00 TO 90+00	60	120	–	–	580	640	160	160
90+00 TO 96+00	60	60	–	–	530	500	90	80
96+00 TO 102+00	–	–	–	–	290	390	50	100
102+00 TO 108+00	60	60	–	–	220	330	40	100
108+00 TO 114+00	–	–	–	–	110	110	–	–
SUBTOTALS	**650**	**710**	**600**	**200**	**5,170**	**5,380**	**700**	**1,300**
GRAND TOTALS	**1,360**		**800**		**10,550**		**2,000**	

*ITEM 601.0331 MODIFIED WHERE HIGH SIDE SECTION PROVIDED IN CONSTRUCTION PLAN

BEHIND-THE-CURB RELATED CONSTRUCTION ITEMS

2070-03-71

	CONCRETE CURB PEDESTRIAN		CONCRETE SIDEWALK 5-INCH		CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA		CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA	
ITEM NO.	601.0600		602.0410		602.0515		602.0615	
UNIT PAY	LF		SF					
CATEGORY	0010		0010					
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00	–	–	560	810	–	–	–	–
12+00 TO 18+00	–	23	1,670	3,050	20	60	–	–
18+00 TO 24+00	0	–	3,630	3,210	60	80	–	–
24+00 TO 30+00	0	–	3,090	3,520	30	70	–	–
30+00 TO 35+00	0	27	2,390	2,590	10	30	–	–
35+00 TO 41+00	0	–	1,570	1,830	40	40	–	–
54+00 TO 60+00	–	–	240	560	–	–	–	–
60+00 TO 66+00	–	–	1,770	2,850	–	–	38	44
66+00 TO 72+00	–	–	1,650	1,890	–	–	–	–
72+00 TO 78+00	–	–	2,650	2,010	10	30	–	–
78+00 TO 84+00	–	–	2,730	2,120	10	10	–	–
84+00 TO 90+00	36	–	2,860	3,660	40	60	–	–
90+00 TO 96+00	15	–	1,630	1,870	30	10	–	–
96+00 TO 102+00	–	–	1,150	2,120	–	–	–	–
102+00 TO 108+00	–	–	2,170	2,500	20	20	–	–
108+00 TO 114+00	–	–	740	490	–	–	–	–
SUBTOTALS	**51**	**50**	**30,500**	**35,080**	**270**	**410**	**38**	**44**
GRAND TOTALS	**101**		**65,580**		**680**		**82**	

3

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

COVER PLATE TEMPORARY CONSTRUCTION ITEMS

2070-03-71

	COVER PLATE TEMPORARY
ITEM NO.	611.8120.S
UNIT PAY	EACH
CATEGORY	0010
LOCATION (STA TO STA)	
10+00 TO 12+00	3
12+00 TO 18+00	10
18+00 TO 24+00	10
24+00 TO 30+00	11
30+00 TO 35+00	7
35+00 TO 41+00	19
54+00 TO 60+00	–
60+00 TO 66+00	14
66+00 TO 72+00	10
72+00 TO 78+00	9
78+00 TO 84+00	12
84+00 TO 90+00	28
90+00 TO 96+00	22
96+00 TO 102+00	18
102+00 TO 108+00	18
108+00 TO 114+00	8
GRAND TOTALS	**199**

INLET PROTECTION CONSTRUCTION ITEMS

2070-03-71

	INLET PROTECTION TYPE A		INLET PROTECTION TYPE B		INLET PROTECTION TYPE C		INLET PROTECTION TYPE D	
ITEM NO.	628.7005		628.7010		628.7015		628.7020	
UNIT PAY	EACH		EACH		EACH		EACH	
CATEGORY	0010		0010		0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00	–	–	–	–	–	–	–	–
12+00 TO 18+00	–	–	1	5	–	3	1	1
18+00 TO 24+00	–	–	–	5	1	–	4	4
24+00 TO 30+00	–	–	1	4	1	3	–	1
30+00 TO 35+00	–	–	0	4	1	–	1	–
35+00 TO 41+00	–	–	5	6	1	–	–	–
54+00 TO 60+00	–	–	–	–	–	–	–	–
60+00 TO 66+00	–	–	3	5	–	–	–	–
66+00 TO 72+00	–	–	4	1	–	–	3	3
72+00 TO 78+00	–	–	1	4	–	1	–	–
78+00 TO 84+00	1	2	1	2	1	2	–	–
84+00 TO 90+00	–	–	3	4	2	5	1	–
90+00 TO 96+00	–	–	3	1	–	–	–	2
96+00 TO 102+00	–	–	2	2	–	1	1	2
102+00 TO 108+00	–	–	–	–	–	–	2	2
108+00 TO 114+00	–	–	2	–	2	1	–	1
SUBTOTALS	**1**	**2**	**26**	**43**	**9**	**16**	**13**	**16**
GRAND TOTALS	**3**		**69**		**25**		**29**	

3

3

SURFACE APPLICATION CONSTRUCTION ITEMS

2070-03-71

CATEGORY	ITEM NO. / UNIT PAY	DUST CONTROL SURFACE TREATMENT 623.0100 SY 0010		TOPSOIL 625.0100 SY 0010		FERTILIZER TYPE B 629.0210 CWT 0010		SOD LAWN 631.1000 SY 0010	
				LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
STA 10+00 TO 12+00		615	615	30	50	–	–	30	50
STA 12+00 TO 18+00		2740	2740	120	260	–	–	120	260
STA 18+00 TO 24+00		2555	2555	330	320	–	–	330	320
STA 24+00 TO 30+00		2560	2560	330	250	–	–	330	250
STA 30+00 TO 35+00		2000	2000	150	210	–	–	150	210
STA 35+00 TO 41+00		2045	2045	130	110	–	–	130	110
		0	0						
STA 54+00 TO 60+00		490	490	20	70	–	–	20	70
STA 60+00 TO 66+00		3245	3245	120	150	–	–	120	150
STA 66+00 TO 72+00		2575	2575	120	150	–	–	120	150
STA 72+00 TO 78+00		2710	2710	270	200	–	–	270	200
STA 78+00 TO 84+00		2650	2650	190	200	–	–	190	200
STA 84+00 TO 90+00		3495	3495	230	310	–	–	230	310
STA 90+00 TO 96+00		2845	2845	200	240	–	–	200	240
STA 96+00 TO 102+00		2640	2640	180	240	–	–	180	240
STA 102+00 TO 108+00		2720	2720	170	280	–	–	170	280
STA 108+00 TO 114+00		910	910	60	80	–	–	60	80
UNDISTRIBUTED		–	–	–	–	2	2	–	–
SUBTOTALS		**36,795**	**36,795**	**2,650**	**3,120**	**2**	**2**	**2,650**	**3,120**
TOTALS		**73,590**		**5,770**		**4**		**5,770**	

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

FURNISHING AND PLANTING PLANT MATERIALS CONSTRUCTION ITEMS

2070-03-71

	632.0101.001 CLEVELAND SELECT PEAR 3.0-INCH CAL	632.0101.002 COMMON BALD CYPRESS 3.0 -INCH CAL	632.0101.003 FREEMAN MAPLE 3.0-INCH CAL	632.0101.004 RED BUD 2.5-INCH CAL	632.0101.005 SUNBURST HONEY LOCUST 3.0-INCH CAL	632.0101.006 SERVICEBERRY 3.0-INCH CAL
ITEM NO.	B&B	B&B	B&B	B&B	B&B	B&B
UNIT PAY	EACH	EACH	EACH	EACH	EACH	EACH
CATEGORY	0010	0010	0010	0010	0010	0010
LOCATION						
	3	**3**	**1**	**2**	**2**	**3**
Totals	**3**	**3**	**1**	**2**	**2**	**3**

PLANT DATA CHART - LANDSCAPING

LOCATION	COMMON NAME	SCIENTIFIC NAME	SIZE CAL (INCHES) WHEN PLANTED	ROOT ZONE MODE	BALL (MINIMUM SIZE) DIAMETER (INCHES)	BALL (MINIMUM SIZE) DEPTH (INCHES)	HOLE (MINIMUM SIZE) DIAMETER (INCHES)	HOLE (MINIMUM SIZE) DEPTH (INCHES	BRACE OR GUY	FERTILIZER UNITS REQUIRED	RODENT PROTECTION REQUIRED	MULCH RING DIAMETER (INCHES)
STA 75+56 MEDIAN	RED BUD	CERCIS CANADENSIS	2.5	B & B	28	17	40	17	GUY	4 EACH	NONE	36
STA 77+80 MEDIAN	BALD CYPRESS	TAXODIUM DISTICHUM	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 78+20 MEDIAN	BALD CYPRESS	TAXODIUM DISTICHUM	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 78+60 MEDIAN	BALD CYPRESS	TAXODIUM DISTICHUM	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 79+27 MEDIAN	RED BUD	CERCIS CANADENSIS	2.5	B & B	28	17	40	17	GUY	4 EACH	NONE	36
STA 82+05 MEDIAN	SERVICEBERRY	AMELANCHIER ARBOREA	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 82+50 MEDIAN	SERVICEBERRY	AMELANCHIER ARBOREA	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 83+20 MEDIAN	SERVICEBERRY	AMELANCHIER ARBOREA	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 86+15 SOUTHSIDE	FREEMAN MAPLE	ACER FREEMANII	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 89+23 MEDIAN	SUNBURST HONEY LOCUST	GLEDITSIA TRIACANTHOS 'INERMIS' "SUNBURST"	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 89+70 MEDIAN	SUNBURST HONEY LOCUST	GLEDITSIA TRIACANTHOS 'INERMIS' "SUNBURST"	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 90+40 SOUTHSIDE	PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 95+60 NORTHSIDE	PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36
STA 96+00 NORTHSIDE	PEAR	PYRUS CALLERYANA "CLEVELAND SELECT"	3.0	B & B	32	19	44	19	GUY	4 EACH	NONE	36

TRAFFIC CONTROL

2070-03-71

Traffic Control Items		Stage 1			Stage 2			UNDISTRIBUTED		
Item #	Description	(Cycles) x	(Each) x	(Days)	(Cycles) x	(Each) x	(Days)	Total		Units
643.0300	TRAFFIC CONTROL DRUMS	-	820	67	-	802	9	542	62,700	DAY
643.0410	TRAFFIC CONTROL BARRICADES TYPE II	-	370	67	-	-	-	250	25,040	DAY
643.0420	TRAFFIC CONTROL BARRICADES TYPE III	-	362	67	-	478	9	244	28,800	DAY
643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	-	724	67	-	956	9	488	57,600	DAY
643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	-	820	67	-	802	9	542	62,700	DAY
643.0900	TRAFFIC CONTROL SIGNS	-	603	67	-	256	9	425	43,130	DAY
643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	1	25	-	1	25	-	76	76	EACH
643.5000	TRAFFIC CONTROL	-	-	-	-	-	-	1	1	EACH

All ITEMS ARE CATEGORY 0010 AND PARTICIPATING

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-INCH X 48-INCH 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.

ALL TYPE III BARRICADES HAVE TWO (2) TYPE A FLASHING YELLOW WARNING LIGHTS

ALL DRUMS HAVE ONE (1) TYPE C FLASHING YELLOW WARNING LIGHT EACH

Items	Stage 1	Stage 2	Size (Inch X Inch)
WO20-1A	30	18	48 X 48
WO20-58A	0	2	48 X 48
RO11-2L	91	101	48 X 30
R11-2	0	2	48 X 30
WO20-56A	2	0	36 X 36
WO20-5A	9	4	36 X 36
WO20-55A	1	2	36 X 36
R3-7R	1	4	36 X 36
R3-20L	0	1	24 X 36
R3-20R	0	1	24 X 36
R3-20RR	1	4	24 X 36
GO20-2A	3	5	36 X 18
WO4-2L	0	5	30 X 30
WO4-2R	12	8	30 X 30
R3-2	0	0	24 X 24
WO4-1R	4	4	24 X 24
WO1-4L	0	3	18 X 18
WO1-4R	3	2	18 X 18
WO1-6R	77	89	24 X 12
WO1-7	1	1	24 X 12
R9-9	168	0	24 X 12
R9-11	200	0	24 X 12
Totals	603	256	

3

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

TEMPORARY PEDESTRIAN ACCOMMODATIONS CONSTRUCTION ITEMS

2070-03-71

	TEMPORARY PEDESTRIAN SURFACE ASPHALT		TEMPORARY PEDESTRIAN SURFACE PLYWOOD		TEMPORARY PEDESTRIAN SURFACE PLATE		TEMPORARY CURB RAMP	
ITEM NO.	644.1410.S		644.1420.S		644.1430.S		644.1601.S	
UNIT PAY	SF		SF		SF		EACH	
CATEGORY	0010		0010		0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00	373	627	–	–	–	–	–	–
12+00 TO 18+00	1,461	738	349	1,883	–	–	2	6
18+00 TO 24+00	–	56	2,856	2,593	–	–	6	8
24+00 TO 30+00	182	110	2,818	3,803	–	–	3	7
30+00 TO 35+00	586	–	1,200	2,364	715	–	1	3
35+00 TO 41+00	–	–	–	1,442	1,440	–	4	4
54+00 TO 60+00	–	–	250	241	–	328	–	–
60+00 TO 66+00	1,190	883	513	–	40	1,731	4	4
66+00 TO 72+00	893	702	674	1,245	–	184	–	–
72+00 TO 78+00	690	808	812	466	934	1,246	1	3
78+00 TO 84+00	818	748	2,140	1,781	–	–	1	1
84+00 TO 90+00	209	–	1,664	274	582	1,509	5	7
90+00 TO 96+00	1,275	1,127	226	898	251	294	3	1
96+00 TO 102+00	–	785	–	909	1,169	1,118	–	–
102+00 TO 108+00	1,300	902	1,327	–	–	–	1	1
108+00 TO 114+00	206	779	699	–	–	–	–	–
UNDISTRIBUTED	87	80	153	173	50	61	–	–
	9,270	**8,345**	**15,680**	**18,070**	**5,180**	**6,470**	**31**	**45**
GRAND TOTALS	**17,615**		**33,750**		**11,650**		**76**	

PAVEMENT MARKING ITEMS

2070-03-71

CATEGORY / LOCATION (STA TO STA)	ITEM NO. / UNIT / PAY	MARKING LINE EPOXY 4-INCH 646.1020 LF	MARKING CURB EPOXY 646.8120 LF	MARKING ISLAND NOSE EPOXY 646.8220 EACH	REMARKS
8+00 TO 20+00		2,447	180	6	
20+00 TO 31+00		1,995	240	8	
31+00 TO 42+00		1,195	240	8	
58+00 TO 68+00		3,543	180	6	
68+00 TO 79+00		2,406	120	4	
79+00 TO 90+00		2,689	300	10	
90+00 TO 101+00		3,175	180	6	
101+00 TO 110+50		2,840	120	4	
UNDISTRIBUTED		-	120	-	
GRAND TOTALS		**20,290**	**1,680**	**52**	

All CATEGORY 0010 ITEMS ARE PARTICIPATING

TEMPORARY PAVEMENT MARKING ITEMS

2070-03-71

CATEGORY / LOCATION (STA TO STA)	ITEM NO. / PAY	TEMPORARY MARKING LINE PAINT 4-INCH 649.0105 LF 0010	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH 649.0150 LF 0010	REMARKS
8+00 TO 15+00		725	3,460	
15+00 TO 27+00		2,150	2,840	
27+00 TO 39+00		2,140	4,500	
39+00 TO 51+00		-	4,850	
51+00 TO 63+00		1,255	5,350	
63+00 TO 75+00		2,175	2,510	
75+00 TO 87+00		2,250	2,620	
87+00 TO 99+00		2,500	2,860	
99+00 TO 111+00		1,850	2,400	
111+00 TO 123+00		1,850	480	
GRAND TOTALS		**16,895**	**31,870**	

3

CONSTRUCTION STAKING CONSTRUCTION ITEMS

2070-03-71

	CONSTRUCTION STAKING STORM SEWER		CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER		CONSTRUCTION STAKING CONCRETE PAVEMENT		CONSTRUCTION STAKING CURB RAMPS	
ITEM NO.	650.4000		650.5500		650.7000		650.9000	
UNIT PAY	EACH		LF		LF		EACH	
CATEGORY	0010		0010		0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+70 TO 12+00	–	–	100	200	–	–	–	–
12+00 TO 18+00	–	–	460	650	–	–	4	4
18+00 TO 24+00	–	–	790	810	–	–	4	4
24+00 TO 30+00	–	–	550	450	–	–	4	4
30+00 TO 35+00	1	2	280	220	–	–	2	3
35+00 TO 38+80	4	2	420	320	–	–	2	2
58+60 TO 60+00	–	–	30	200	–	–	–	–
60+00 TO 66+00	–	–	550	390	–	–	4	4
66+00 TO 72+00	–	–	110	30	200	200	–	–
72+00 TO 78+00	–	–	400	390	100	100	1	2
78+00 TO 84+00	2	3	220	220	–	–	1	1
84+00 TO 90+00	3	–	640	760	–	–	3	4
90+00 TO 96+00	–	–	590	560	–	–	2	1
96+00 TO 102+00	–	2	290	390	–	–	–	–
102+00 TO 108+00	–	–	280	390	–	–	1	1
108+00 TO 110+35	2	3	110	110	–	–	–	–
SUBTOTALS	**12**	**12**	**5,820**	**6,090**	**300**	**300**	**28**	**30**
GRAND TOTALS	**24**		**11,910**		**600**		**58**	

SAWING CONSTRUCTION ITEMS

2070-03-71

	SAWING ASPHALT		SAWING ASPHALT	
ITEM NO.	690.0150		690.0250	
UNIT PAY	LF		LF	
CATEGORY	0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT
STA 10+00 TO 12+00	–	20	50	50
STA 12+00 TO 18+00	70	20	90	150
STA 18+00 TO 24+00	–	30	60	110
STA 24+00 TO 30+00	40	10	60	150
STA 30+00 TO 35+00	120	–	60	30
STA 35+00 TO 41+00	–	–	90	90
STA 54+00 TO 60+00	–	–	–	–
STA 60+00 TO 66+00	–	–	170	170
STA 66+00 TO 72+00	40	60	100	30
STA 72+00 TO 78+00	30	170	–	–
STA 78+00 TO 84+00	120	150	10	90
STA 84+00 TO 90+00	100	90	90	90
STA 90+00 TO 96+00	140	150	90	90
STA 96+00 TO 102+00	–	240	20	–
STA 102+00 TO 108+00	190	170	90	90
STA 108+00 TO 114+00	30	110	10	–
SUBTOTALS	**880**	**1,220**	**990**	**1,140**
GRAND TOTALS	**2,100**		**2,130**	

3

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

CONSTRUCTION STAKING SPECIAL CONSTRUCTION ITEMS

2070-03-71

	CONSTRUCTION STAKING CONCRETE SIDEWALK		CONSTRUCTION STAKING UPPER LAYER		CONSTRUCTION STAKING LOWER LAYER	
ITEM NO.	SPV.0090.001		SPV.0090.002		SPV.0090.003	
UNIT PAY	LF		LF		LF	
CATEGORY	0010		0010		0010	
LOCATION (STA TO STA)	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
10+00 TO 12+00	112	162	130	130	130	130
12+00 TO 18+00	334	610	600	600	600	600
18+00 TO 24+00	726	642	600	600	600	600
24+00 TO 30+00	618	704	600	600	600	600
30+00 TO 35+00	478	518	500	500	500	500
35+00 TO 41+00	314	366	380	380	380	380
54+00 TO 60+00	48	112	340	340	340	340
60+00 TO 66+00	354	570	600	600	600	600
66+00 TO 72+00	330	378	400	400	400	400
72+00 TO 78+00	530	402	500	500	500	500
78+00 TO 84+00	546	424	600	600	600	600
84+00 TO 90+00	556	732	600	600	600	600
90+00 TO 96+00	326	374	600	600	600	600
96+00 TO 102+00	230	424	600	600	600	600
102+00 TO 108+00	434	500	600	600	600	600
108+00 TO 114+00	148	98	235	235	235	235
SUBTOTALS	**6,084**	**7,016**	**7,885**	**7,885**	**7,885**	**7,885**
GRAND TOTALS	**13,100**		**15,770**		**15,770**	

3

PAVEMENT MARKING SPECIAL EACH ITEMS

2070-03-71

CATEGORY	0040	0040	0040	0040	0010	0010
	MARKING WORDS PREFORMED PLASTIC	MARKING ARROWS TYPE 2 PREFORMED PLASTIC	MARKING BIKE LANE SYMBOL PREFORMED PLASTIC	MARKING BIKE LANE ARROW PREFORMED PLASTIC	SKID / SLIP RESISTANT GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE SYMBOL	SKID / SLIP RESISTANT GREEN PREFORMED THERMOPLASTIC INTEGRATED BIKE LANE ARROW
ITEM NO.	SPV.0060.007	SPV.0060.008	SPV.0060.009	SPV.0060.010	SPV.0060.011	SPV.0060.012
UNIT PAY	EACH	EACH	EACH	EACH	EACH	EACH
LOCATION (STA TO STA)						REMARKS
8+00 TO 20+00	6	6	5	5	–	–
20+00 TO 31+30	–	–	7	7	–	–
31+30 TO 39+00	1	1	5	5	–	–
58+00 TO 70+35	1	1	5	5	–	–
70+35 TO 79+40	–	–	2	2	–	–
79+40 TO 91+25	1	2	6	6	1	2
91+25 TO 101+95	–	–	2	2	–	–
101+95TO 110+50	–	–	3	3	–	–
TOTALS	**9**	**10**	**35**	**35**	**1**	**2**

ALL CATEGORY 0010 AND CATEGORY 0040 ITEMS ARE PARTICIPATING

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

PAVEMENT MARKING SPECIAL LINEAL FEET ITEMS

2070-03-71

	CATEGORY	0010	0040	0040	0010
		MARKING LINE EPOXY 6-INCH	MARKING CROSSWALK PREFORMED PLASTIC 12-INCH	MARKING LINE PREFORMED PLASTIC 24-INCH	SKID/SLIP RESISTANT GREEN THERMOPLASTIC INTEGRATED BIKE LANE PANEL
	ITEM NO.	SPV.0090.004	SPV.0090.005	SPV.0090.007	SPV.0165.001
	UNIT PAY	LF	LF	LF	SF
LOCATION (STA TO STA)					REMARKS
8+00 TO 20+00		1,557	160	57	–
20+00 TO 31+30		887	–	–	–
31+30 TO 39+00		989	320	150	–
58+00 TO 70+35		2,088	662	172	–
70+35 TO 79+40		1,517	–	–	–
79+40 TO 91+25		1,730	888	328	115
91+25 TO 101+95		2,005	–	–	–
101+95 TO 110+50		1,627	170	148	–
TOTALS		**12,400**	**2,200**	**855**	**115**

ALL CATEGORY 0010 AND CATEGORY 0040 ITEMS ARE PARTICIPATING

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

EXCAVATION, HAULING AND DISPOSAL SPECIAL CONSTRUCTION ITEMS

2070-03-71

		EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	EXCAVATION, HAULING, AND DISPOSAL OF LEAD CONTAMINATED SOIL	EXCAVATION, HAULING, AND DISPOSAL OF CHLORINATED VOLATILE ORGANIC COMPOUND (CVOC) CONTAMINATED SOIL
	ITEM NO.	205.0501.S	SPV.0195.001	SPV.0195.002
	UNIT PAY	TON	TON	TON
CATEGORY		0010	0010	0010
LOCATION (STA TO STA)				
8+00 TO 15+00		1	152	–
15+00 TO 27+00		–	–	–
27+00 TO 39+00		–	–	–
39+00 TO 51+00		–	–	–
51+00 TO 62+00		–	–	–
62+00 TO 75+00		–	–	122
75+00 TO 87+00		–	–	–
87+00 TO 99+00		–	–	–
99+00 TO 111+00		247	–	115
111+00 TO 123+00		–	–	–
GRAND TOTALS		**248**	**152**	**237**

All CATEGORY 0010 ITEMS ARE PARTICIPATING

PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

WEST LAYTON AVENUE

N

160'
112'
SEC LINE
CITY OF GREENFIELD LIMITS
CITY OF MILWAUKEE LIMITS
EDGE OF ASPHALT
END OF CURB
SOUTH 27TH STREET
08 +50 09 +50 10 +50 11 +50 12
MONUMENT

BEGIN PROJECT
STA. 10+73.2 T/L
(Y) NORTH: 356,419.2777
(X) EAST: 2,549,158.6326

10+73.6
49.2' LT

#4730 S. 27TH ST.

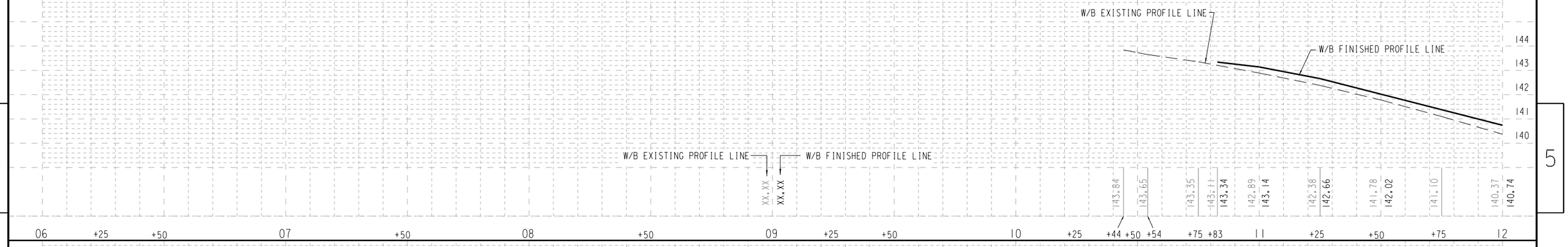
- (A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
- (D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
- (68) CONST. 8" MODIFIED, DEPRESSED CONC. DRIVEWAY
- (J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH
- (K) CONST. 5" CONC. WALK
- (L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
- (T) SAW ASPHALT
- (U) SAW CONCRETE
- (31) CONST. CURB 31-INCH
- (31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 269 E

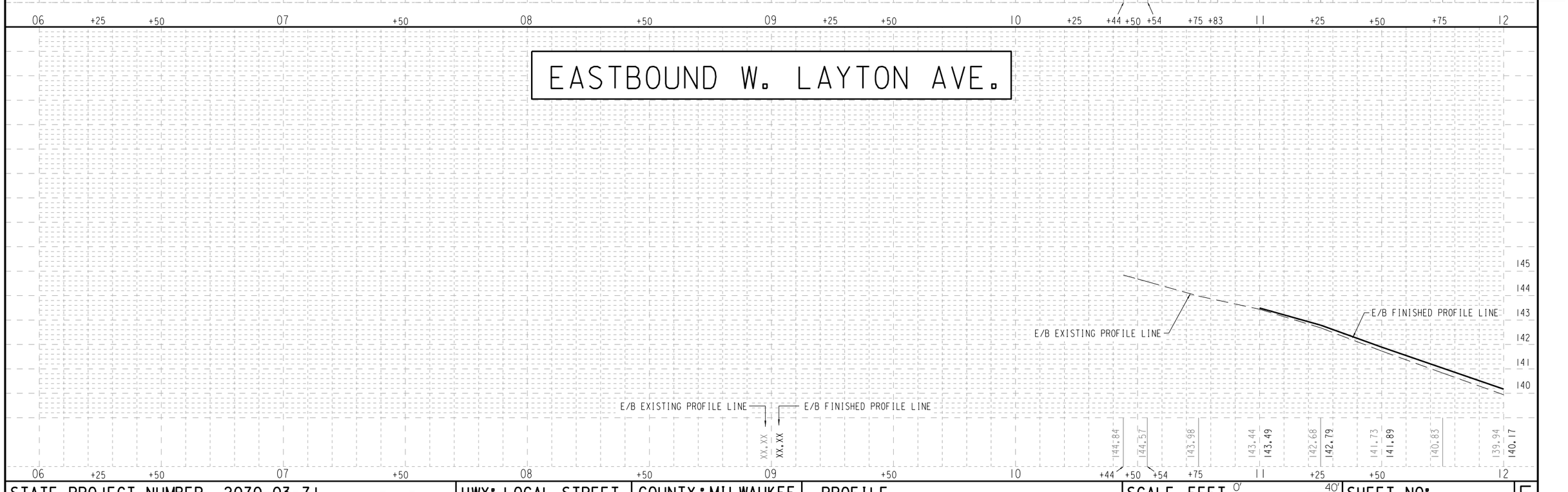
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\08-12.DGN

REVISED DATE: 02-19-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.

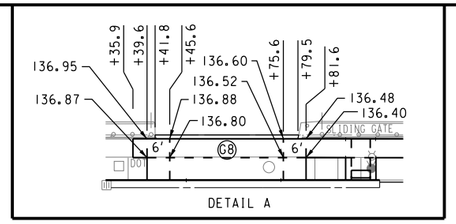


STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 270	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\08-12.DGN

REVISED DATE: 03-21-2018 BY DLF

WEST LAYTON AVENUE



#4640-4670 S. 27TH ST.

#2500 W. LAYTON AVE.

BM: HYD N/S OF W LAYTON AV @ S 25TH ST (STA +/- 17+17, 51 LT) ELEV = 136.29

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE DETAIL "A"

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

BM: HYD SEC OF S 26TH ST & W LAYTON AV (NW BOLT) ELEV = 138.07

#4730 S. 27TH ST. | #2531 W. LAYTON AVE. | #2527 W. LAYTON AVE. | #2521-2521A W. LAYTON AVE. | #2515 W. LAYTON AVE. | #2509 W. LAYTON AVE. | #2501 W. LAYTON AVE. | #2435 W. LAYTON AVE. | #2427 W. LAYTON AVE.

SOUTH 26TH STREET | SOUTH 25TH STREET

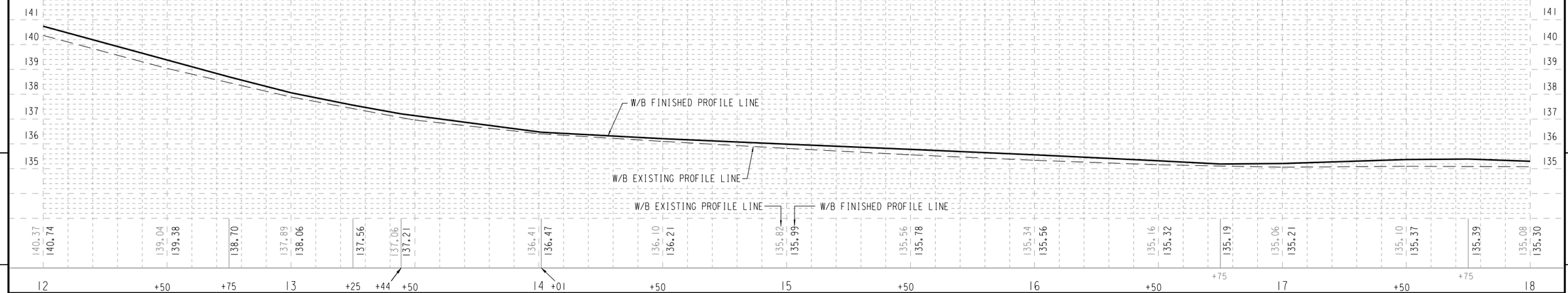
- (2) CONST. TYPE 2 CURB RAMP
- (2M) CONST. TYPE 2 CURB RAMP (MODIFIED)
- (3) CONST. TYPE 3 CURB RAMP
- (A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
- (B) GRIND TO 3" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
- (D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
- (E) CONST 7' FLARED CONC. DRIVEWAY
- (G8) CONST. 8" MODIFIED, DEPRESSED CONC. DRIVEWAY
- (J) CONST. ASPHALTIC SURFACE ON CONC. BASE 4-INCH
- (K) CONST. 5" CONC. WALK
- (L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
- (N) CONST. MAINTENANCE RAMP
- (PC) PEDESTRIAN CURB SEE RAMP DETAILS
- (T) SAW ASPHALT
- (TM) CONST. TERRACE MOUND (SEE CONSTRUCTION DETAIL)
- (Z) CONST. 9" CONC. BASE
- (31) CONST. CURB 31-INCH
- (31C) CONST. CURB 31-INCH (COVERED FLANGE)
- (31H) CONST. CURB 31-INCH (HIGH SIDE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 271	E

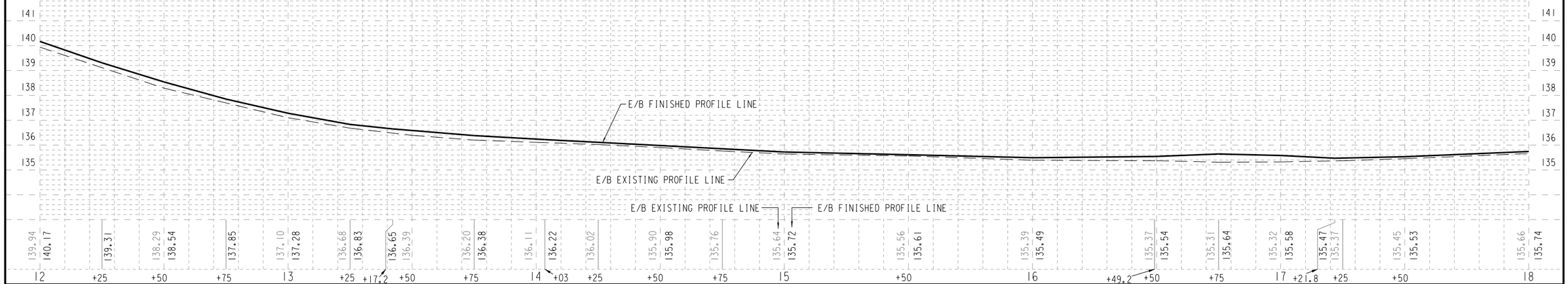
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\12-18.DGN

REVISED DATE: 03-22-2019 BY JC

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 272	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\12-18.DGN

REVISED DATE: 03-22-2018 BY DLF

WEST LAYTON AVENUE

N

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

#2408 W. LAYTON AVE. #2400 W. LAYTON AVE. #2328 W. LAYTON AVE. #2320 W. LAYTON AVE. #2300 W. LAYTON AVE. #2274 W. LAYTON AVE.

#2421 W. LAYTON AVE. #2415 W. LAYTON AVE. #2409 W. LAYTON AVE. #2401 W. LAYTON AVE. #2331 W. LAYTON AVE. #2325 W. LAYTON AVE. #2317 W. LAYTON AVE. #2039-2309A W. LAYTON AVE. #4701 S. 23RD ST.

SOUTH 24TH STREET

SOUTH 23RD STREET

BM: HYD SEC OF S 24TH ST & W LAYTON AV(NW BOLT) ELEV = 137.33

BM: HYD SEC OF S 23RD ST & W LAYTON AV(NW BOLT) ELEV = 136.25

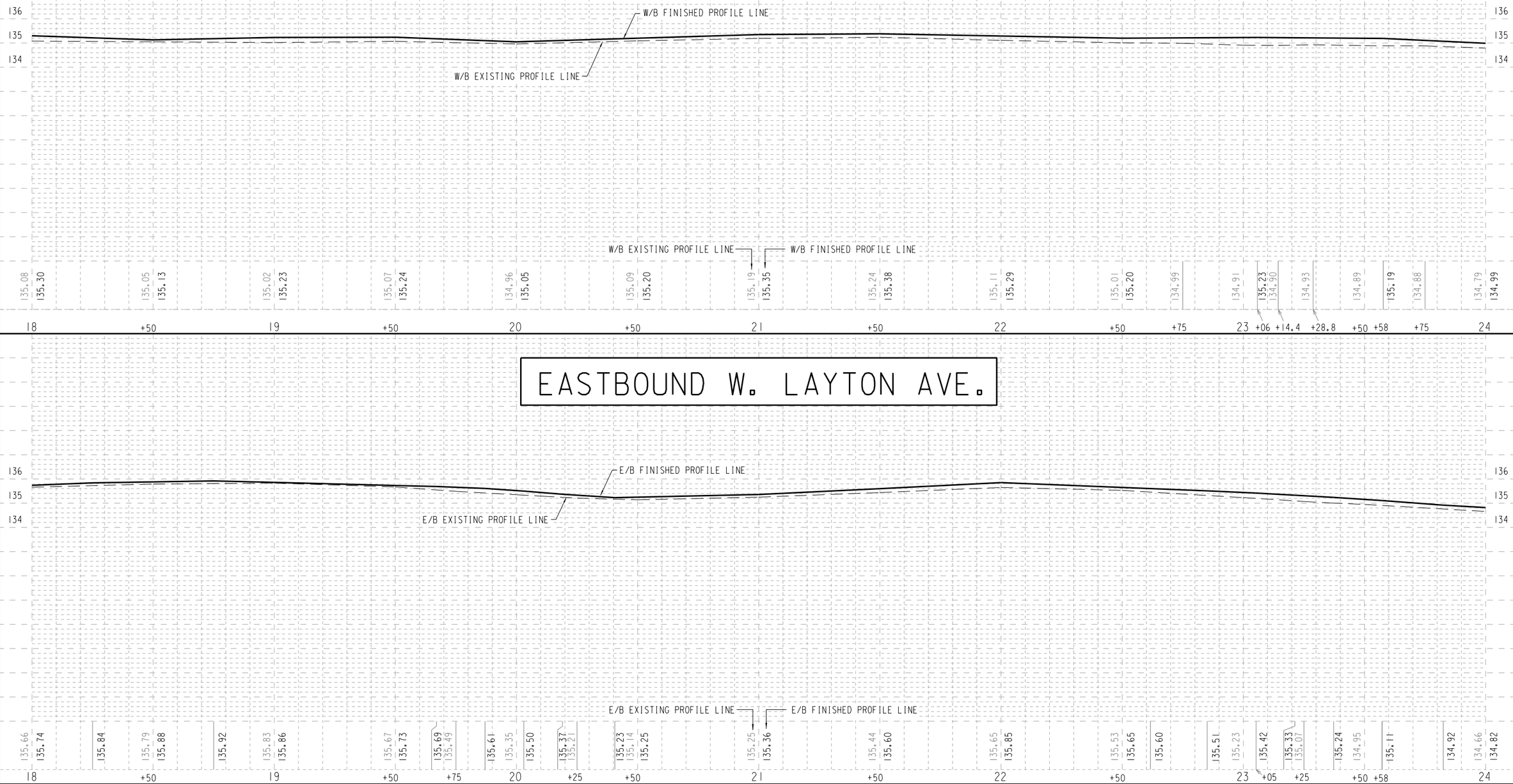
(2) CONST. TYPE 2 CURB RAMP
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(BS) BUS STOP
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(H) CONST. 7" MODIFIED, DEPRESSED CONC. DRIVEWAY TO FACE OF CURB
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(N) CONST. MAINTENANCE RAMP
(P) SAW BUTT JOINT
(Q) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(Z) CONST. 9" CONC. BASE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)
(31H) CONST. CURB 31-INCH (HIGH SIDE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 273	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\18-24.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 274	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\18-24.DGN

REVISED DATE: 03-23-2018 BY DLF

WEST LAYTON AVENUE

N

BM: HYD N/S OF W LAYTON AV @ S 22ND PL (STA +/- 25+98, 52 LT) ELEV = 138.19

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

4 W. LAYTON AVE. ▪2262 W. LAYTON AVE. ▪2254 W. LAYTON AVE. ▪2220 W. LAYTON AVE.

▪2271 W. LAYTON AVE. ▪2255 W. LAYTON AVE. ▪2243 W. LAYTON AVE. ▪2227 W. LAYTON AVE. ▪2221 W. LAYTON AVE. ▪2215 W. LAYTON AVE. ▪2209-2209A W. LAYTON AVE. ▪4701 S. 22ND ST.

SOUTH 22ND PLACE SOUTH 22ND STREET ▪2131-2131A W.

BM: HYD SEC OF S 22ND ST & W LAYTON AV (NW BOLT) ELEV = 141.56

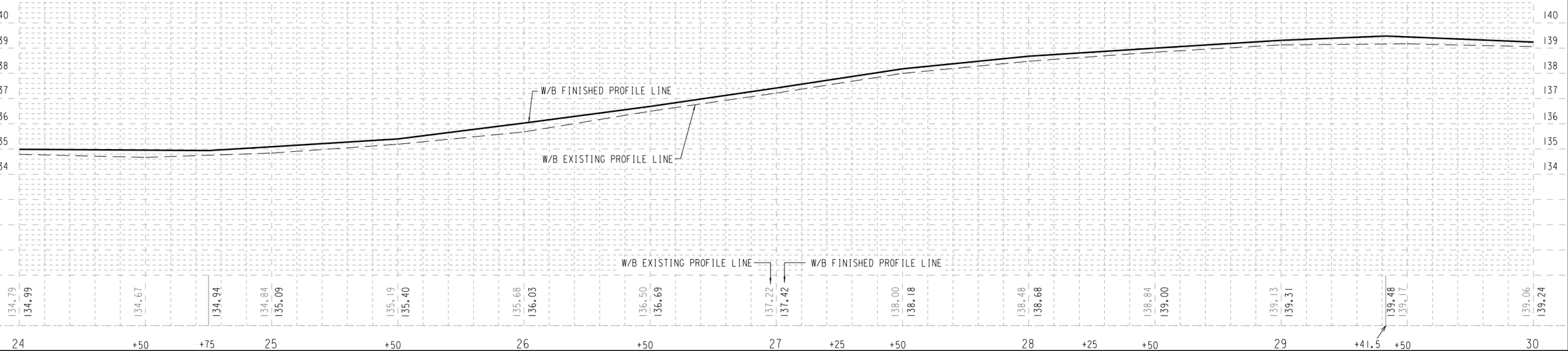
(2) CONST. TYPE 2 CURB RAMP
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(B) GRIND TO 3" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(E) CONST. 7" FLARED CONC. DRIVEWAY
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(J) CONST. ASPHALTIC SURFACE ON CONC. BASE 4-INCH
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(N) CONST. MAINTENANCE RAMP
(Q) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(TM) CONST. TERRACE MOUND (SEE CONSTRUCTION DETAIL)
(U) SAW CONCRETE
(Z) CONST. 9" CONC. BASE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)
(31H) CONST. CURB 31-INCH (HIGH SIDE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 275	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\24-30.DGN

REVISED DATE: 01-24-2019 BY SB

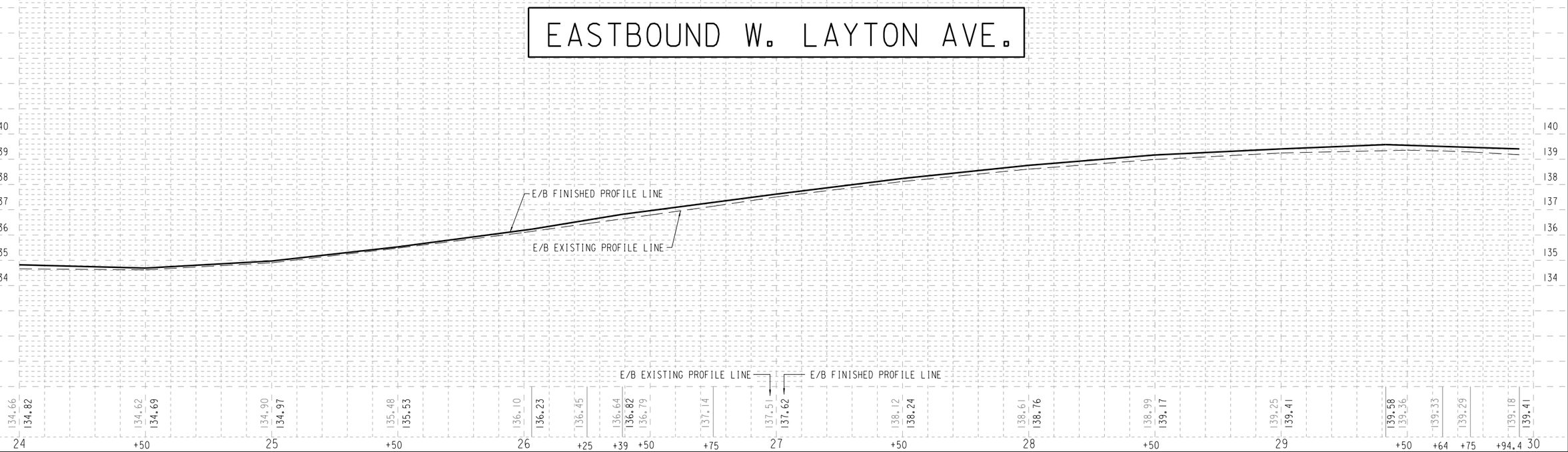
WESTBOUND W. LAYTON AVE.



5

5

EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 276	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\24-30.DGN

REVISED DATE: 03-01-2018 BY BB

WEST LAYTON AVENUE

N

BM: HYD N/S OF W LAYTON AV @ S 21 ST (STA +/- 35+54, 51.5 LT) ELEV = 136.46

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

#2126 W. LAYTON AVE. #2022 W. LAYTON AVE. #2008 W. LAYTON AVE.

CAUTION

BUS STOP

SIGN POST

ELEC BOX

SIGN

MAIL

ASPH DWY

ASPH PARKING

60' LT

R/W

1/4 SEC LINE

WB PGL

EB PGL

25.5' LT

25.5' RT

SPRINKLER VALVE

PLANTER

BANNERS

STREET LIGHTING

MONUMENT ON CONC BASE

SEC LINE

T/L

SIGN

BRUSH

DECOR. STONE RET. WALL

10" PINE

16" PINE

IRON HAND RAIL

LUMBER

STONE

STD BM

74' RT

79.1' RT

67.9' RT

+49-59' RT

59' RT

SOUTH 21ST STREET

SOUTH 20TH STREET

#2131-2131A W. LAYTON AVE. #2125-2125A W. LAYTON AVE. #2117-2119 W. LAYTON AVE. #2113 W. LAYTON AVE. #2109-2109A W. LAYTON AVE. #2103-2103A W. LAYTON AVE. #2057 W. LAYTON AVE. #2021-2023 W. LAYTON AVE. #2015-2017 W. LAYTON AVE. #2009-2011 W. LAYTON AVE. #2003-2005 W. LAYTON AVE.

(2) CONST. TYPE 2 CURB RAMP
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(B) GRIND TO 3" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(F7) CONST. 7" FLARED CONC. DRIVEWAY TO FACE OF CURB
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(PC) PEDESTRIAN CURB SEE RAMP DETAILS
(T) SAW ASPHALT
(TM) CONST. TERRACE MOUND (SEE CONSTRUCTION DETAIL)
(U) SAW CONCRETE
(X) CONST. 2' X 2' 5" CONC. SIDEWALK CUT OFF
(Z) CONST. 9" CONC. BASE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)

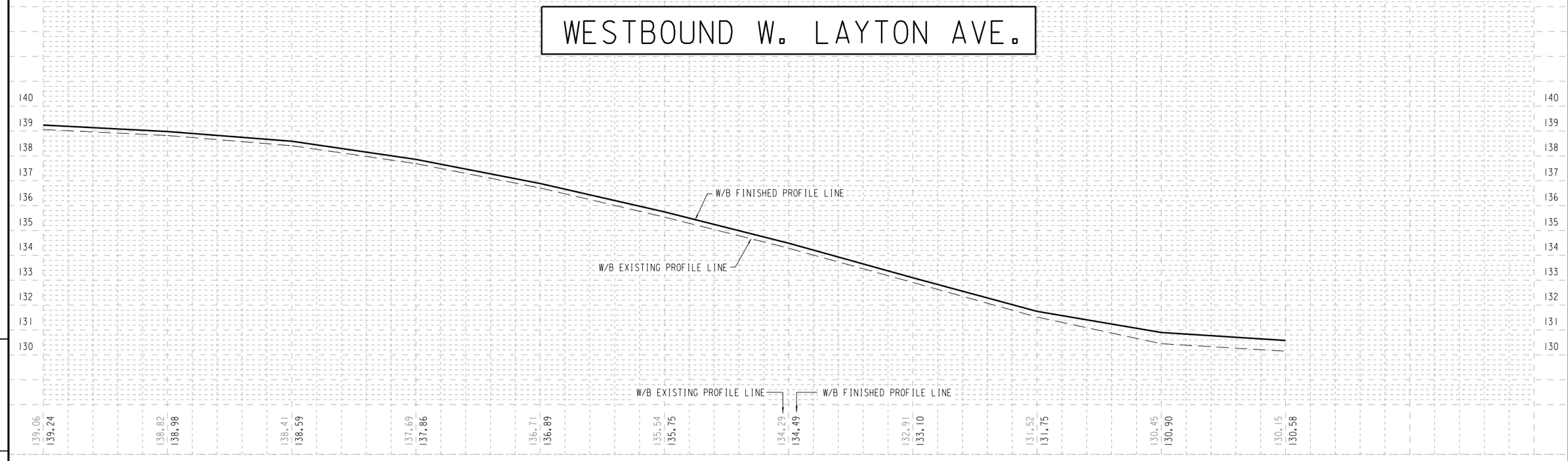
STD BM: 37' W AND 67' S ¼ SEC LINE 7.7' E AND 7' S OF SW COR OF STREET(IN CONC BOX 5.3' W OF W EDGE OF CONC WALK & 8.2' S OF S EDGE OF CONC WALK) ELEV = 131.728

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 277	E

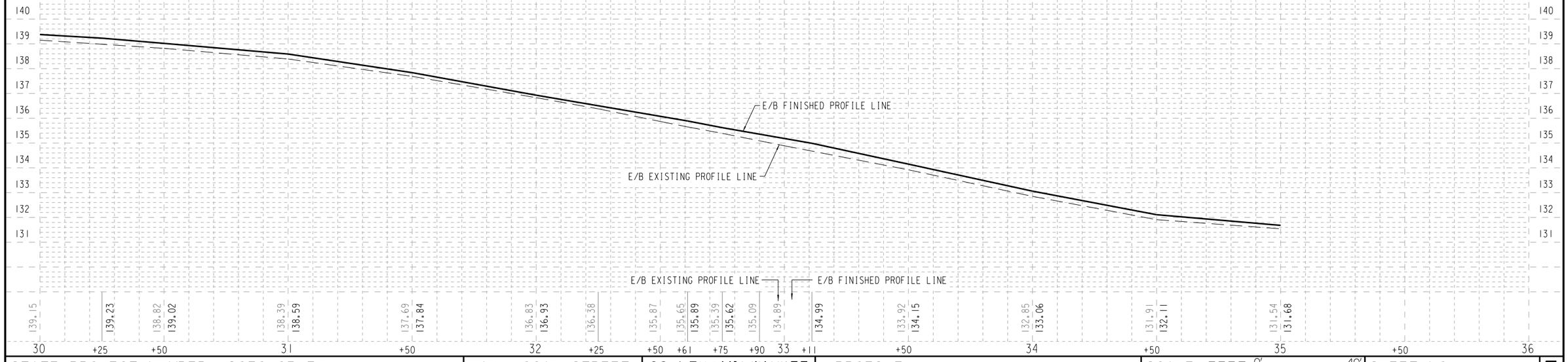
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\30-35.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



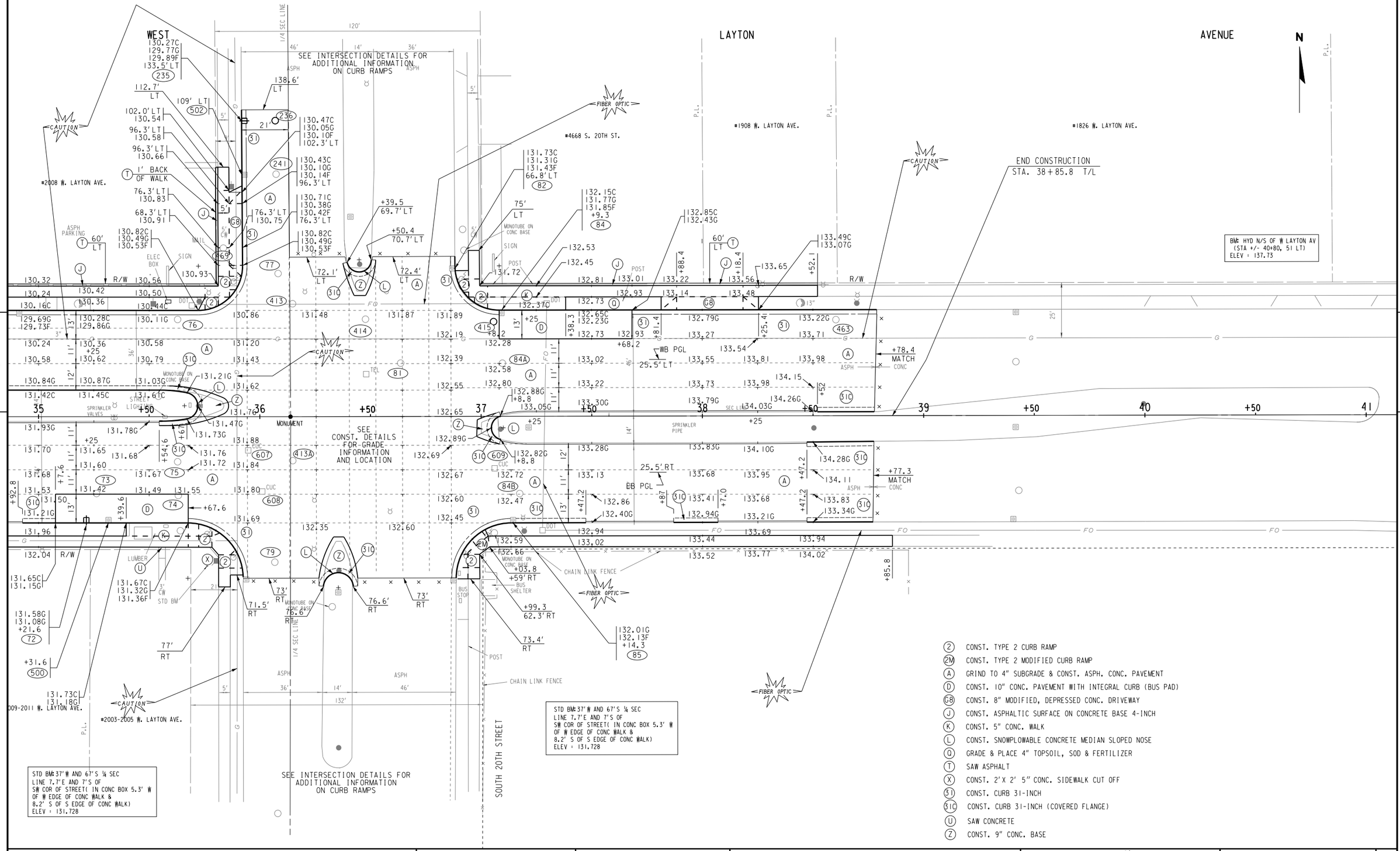
EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 278	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\30-35.DGN

REVISED DATE: 03-01-2018 BY BB



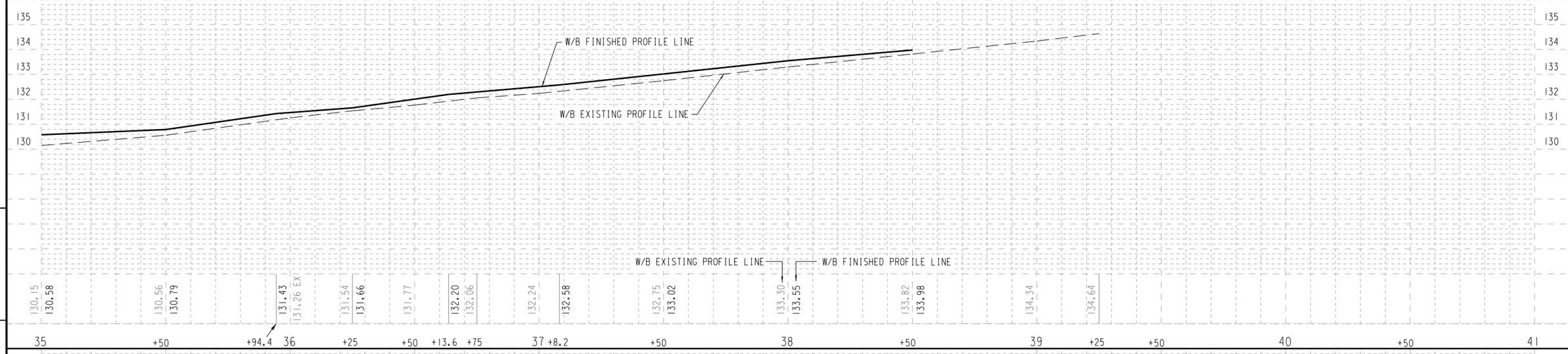
(2) CONST. TYPE 2 CURB RAMP
(2M) CONST. TYPE 2 MODIFIED CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(68) CONST. 8" MODIFIED, DEPRESSED CONC. DRIVEWAY
(J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(Q) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(T) SAW ASPHALT
(X) CONST. 2'X 2' 5" CONC. SIDEWALK CUT OFF
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)
(U) SAW CONCRETE
(Z) CONST. 9" CONC. BASE

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 279	E

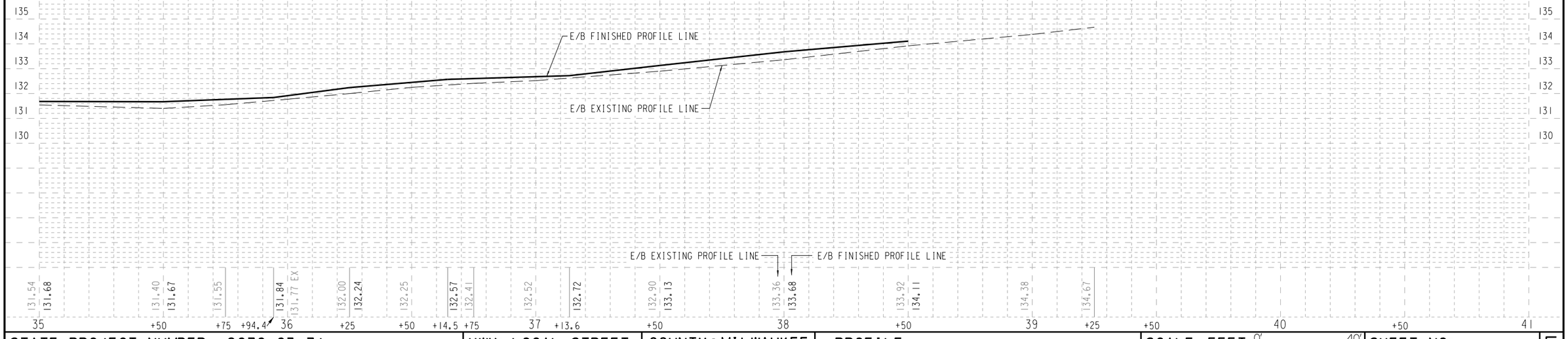
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\35-41.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 280	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\35-41.DGN

REVISED DATE: 03-02-2018 BY BB

WEST LAYTON AVENUE

N

59' LT

+45.4 +85.4 +95.0 +5.0 +10.0

CHAIN LINK FENCE CHAIN LINK FENCE

(K) 5' (K)

58+63.7
48' LT

(31C) +82.3

107.13G 105.69G 104.25G
107.56 106.21 104.79

CONC ASPH (A) WB PGL

107.87 106.51 105.07
25.5' LT

BEGIN CONSTRUCTION
STA. 58+85.4 T/L

58+63.5
12.1' LT

(31H) +75.4

108.13G 106.69G 105.24G

13' 11' 12'

(A)

5 5

54 +50 55 +50 56 SEC LINE +50 57 +50 58 +50 59 +50 60

1" 1" 1" 12"

36' 24' 120'

108.78C 107.89C

58+63.5
11.8' RT

(31H) 108.45G (31H) 107.51G 106.56G

108.30 25.5' RT 107.41 +66.9 106.96 106.47

CONC ASPH (A) 108.10 EB PGL 107.23 106.80 106.26

58+63
48' RT

(31C) +0.2 107.78G 106.92G 106.49G 105.86G

12' 11' 13'

(A)

464 DOT

FO FO FO FO

(K) 5' (K) 107.40 (K) 106.39

107.05

R/W IP

BLOCK RET. WALL

+62.0 +86.0 +92.0 +16.0 +34.0

58' RT

TEMPORARY DRIVEWAY

FUTURE DRIVEWAY

BM: HYD S/S OF W LAYTON AV
(STA +/- 59+20, 50 RT)
ELEV = 109.43

FIBER OPTIC

=1425 W. LAYTON AVE.

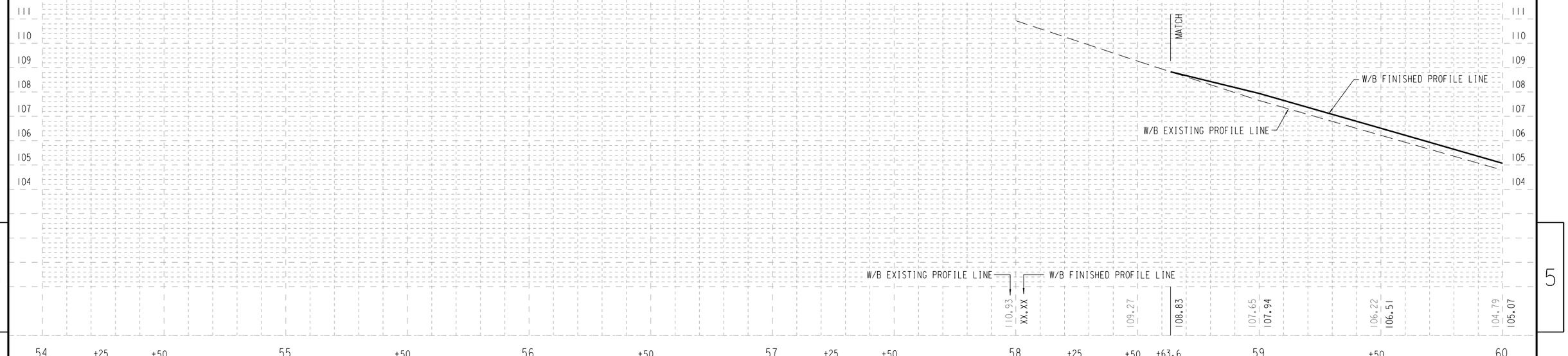
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(K) CONST. 5" CONC. WALK
(31C) CONST. CURB 31-INCH (COVERED FLANGE)
(31H) CONST. CURB 31-INCH (HIGH SIDE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 281	E

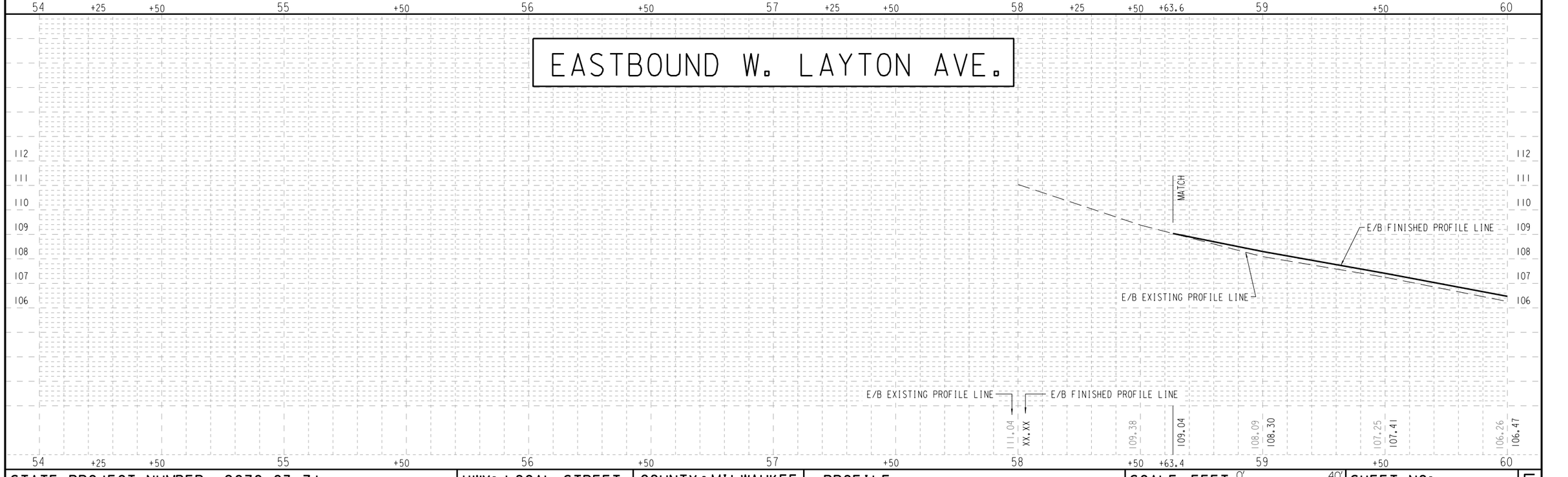
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\54-60.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 282	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\54-60.DGN

REVISED DATE: 03-28-2018 BY SB

WEST LAYTON AVENUE

N

SEE PLAN DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

STD BM: 72-16 S 13TH ST & W LAYTON AVE NE COR ENTR. TO FIRE HOUSE @ 4653 S 13TH ST ELEV = 96.149

#1300 W. LAYTON AVE. #1232 W. LAYTON AVE. #1218 W. LAYTON AVE. #1216 W. LAYTON AVE. #1204-1208 W.

#4707-4709 S. 13TH ST. #1233 W. LAYTON AVE. #1215 W. LAYTON AVE. #1209 W. LAYTON AVE.

SEE PLAN DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

MONUMENT SEE CONST. DETAILS FOR GRADE INFORMATION AND LOCATION

BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91

SOUTH 13TH STREET

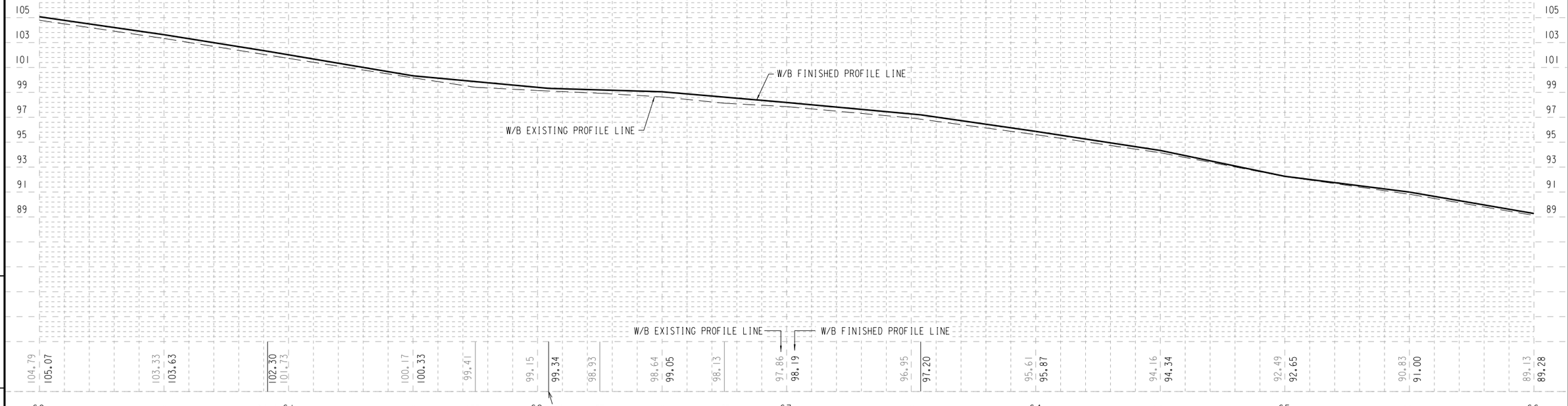
- (I) CONST. TYPE I CURB RAMP
- (A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
- (B) GRIND TO 3" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
- (D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
- (F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
- (G8) CONST. 8" MODIFIED, DEPRESSED CONC. DRIVEWAY
- (H8) CONST. 8" MODIFIED, DEPRESSED CONC. DRIVEWAY TO FACE OF CURB
- (J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH
- (K) CONST. 5" CONC. WALK
- (L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
- (P) SAW BUTT JOINT
- (Q) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
- (R) REMOVE, GRADE & SOD
- (T) SAW ASPHALT
- (W) CONST. 1'X 1' 5" CONC. SIDEWALK CUT OFF
- (X) CONST. 2'X 2' 5" CONC. SIDEWALK CUT OFF
- (Z) CONST. 9" CONC. BASE
- (31) CONST. CURB 31-INCH
- (31C) CONST. CURB 31-INCH (COVERED FLANGE)
- (31H) CONST. CURB 31-INCH (HIGH SIDE)
- (BS) BUS STOP

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 283	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\60-66.DGN

REVISED DATE: 01-23-2019 BY SB

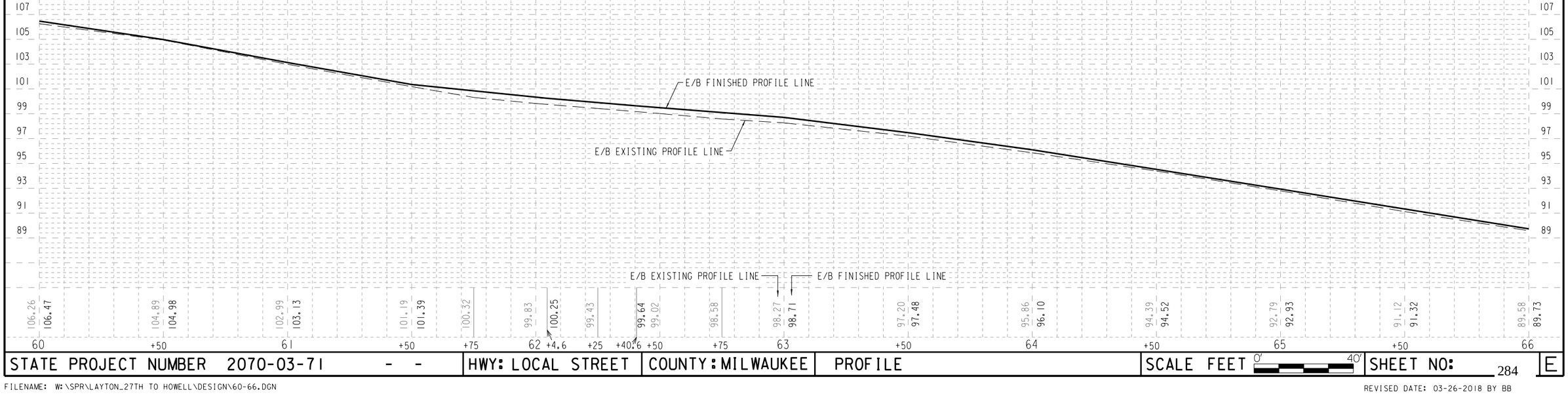
WESTBOUND W. LAYTON AVE.



5

5

EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 284	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\60-66.DGN

REVISED DATE: 03-26-2018 BY BB

WEST LAYTON AVENUE

N

CAUTION

#1204-1208 W. LAYTON AVE.

#1202 W. LAYTON AVE.

SOO LINE RAILROAD

BM: HYD N/S OF W LAYTON AV (STA +/- 70+80, 71 LT) ELEV = 82.87

BM: HYD S/S OF W LAYTON AV (STA +/- 65+58, 44' RT) ELEV = 92.91

#1201 W. LAYTON AVE.

#1101-1113 W. LAYTON AVE.

#1011 W. LAYTON AVE.

WEPCO EASEMENT

FIBER OPTIC

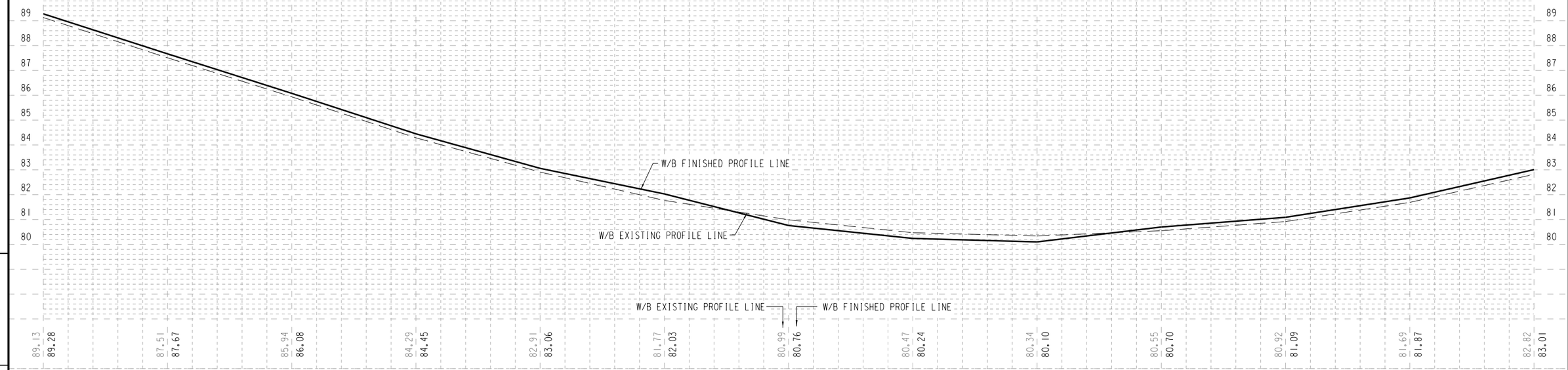
- (A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
- (F7) CONST. 7" FLARED CONC. DRIVEWAY TO FACE OF CURB
- (F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
- (J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH
- (K) CONST. 5" CONC. WALK
- (L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
- (R) REMOVE, GRADE & SOD
- (T) SAW ASPHALT
- (U) SAW CONCRETE
- (Y) REMOVE & CONST. 9-INCH CONC. PAVEMENT
- (19) CONST. CURB 19-INCH
- (31) CONST. CURB 31-INCH
- (31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 285	E

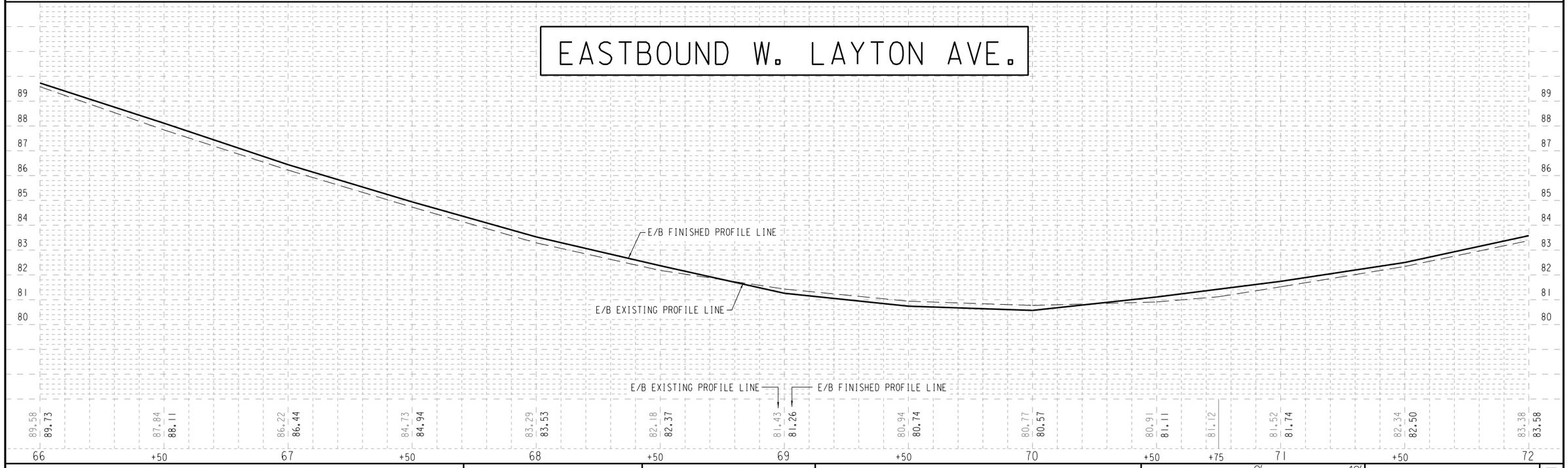
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\66-72.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



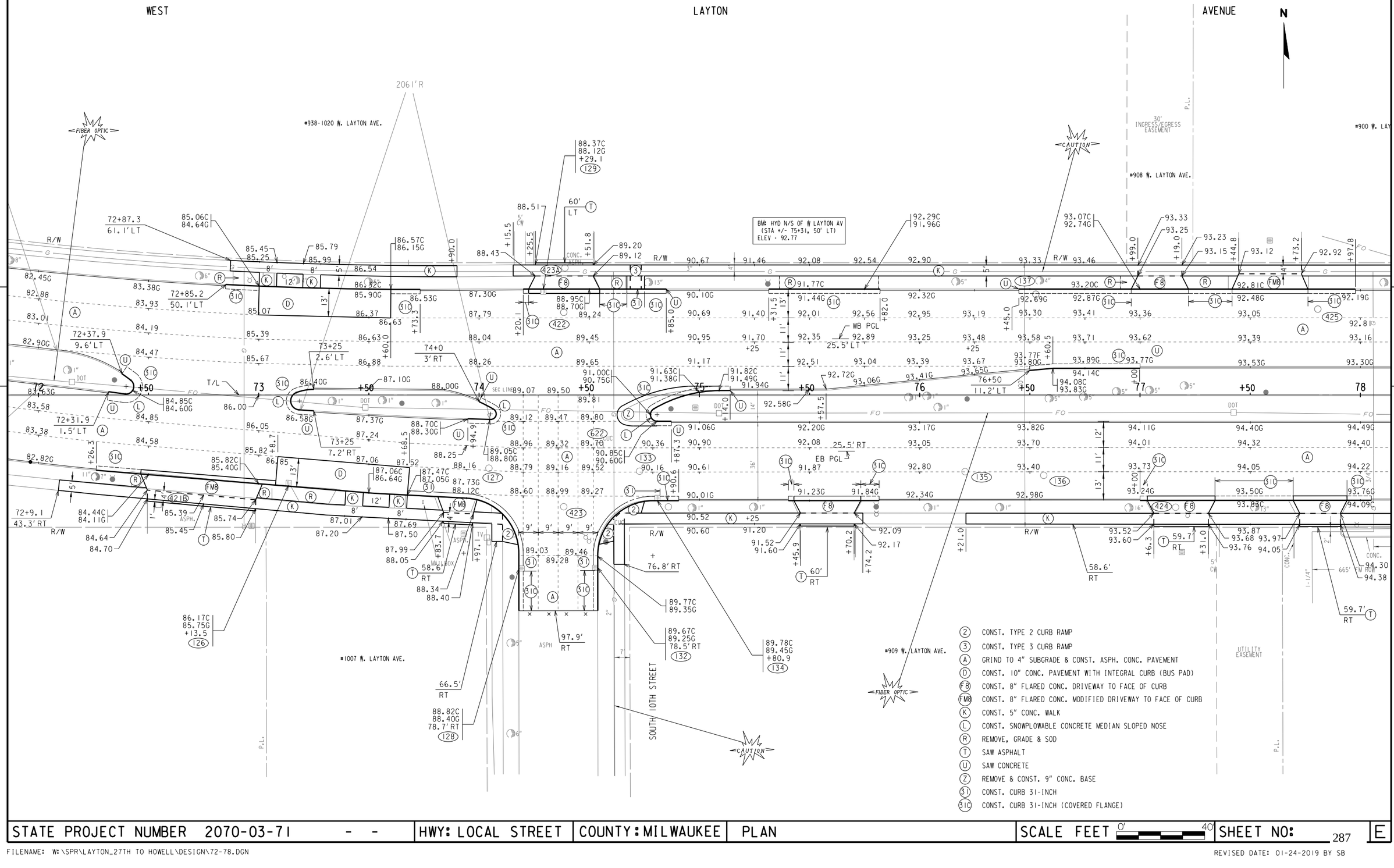
STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 286	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\66-72.DGN

REVISED DATE: 03-09-2018 BY BB

WEST LAYTON AVENUE

N



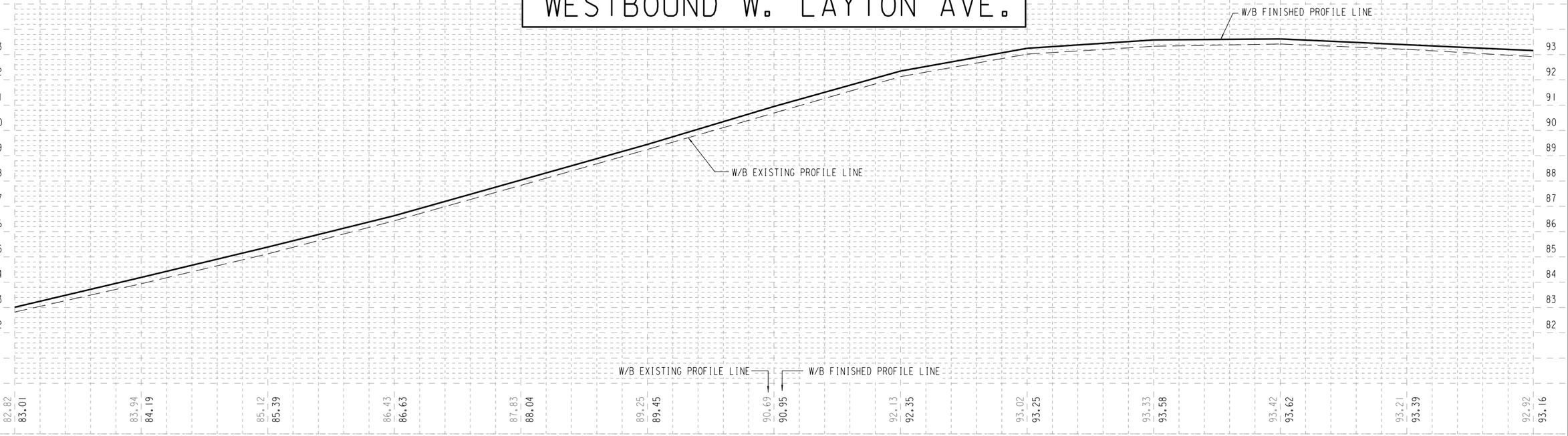
(2) CONST. TYPE 2 CURB RAMP
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(FM8) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(R) REMOVE, GRADE & SOD
(T) SAW ASPHALT
(U) SAW CONCRETE
(Z) REMOVE & CONST. 9" CONC. BASE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 287	E

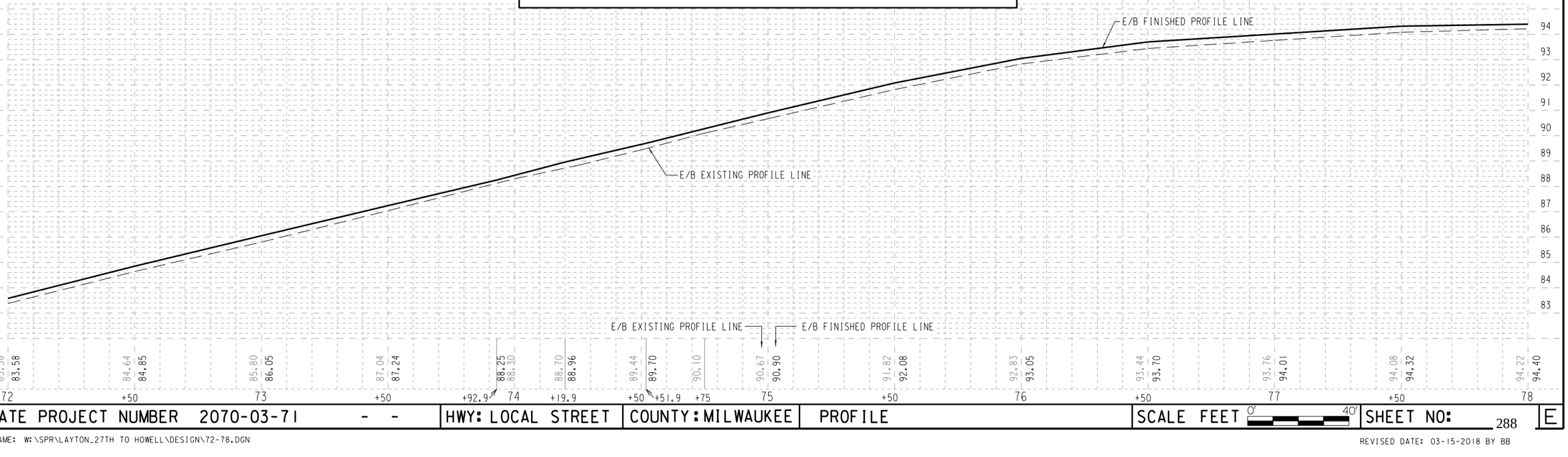
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\72-78.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 288	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\72-78.DGN

REVISED DATE: 03-15-2018 BY BB

WEST LAYTON AVENUE

N

DETAIL A

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE DETAIL "A"

BM: HYD N/S OF W LAYTON AV (STA +/- 81+78, 51' LT) ELEV = 92.92

BM: HYD S/S OF W LAYTON AV (STA +/- 78+60, 51 RT) ELEV = 95.25

BM: HYD SW COR OF S & W LAYTON AV (NW E ELEV = 93.30

#900 W. LAYTON AVE.
#830 W. LAYTON AVE.
#800-800A W. LAYTON AVE.
#841-881 W. LAYTON AVE.
#835 W. LAYTON AVE.
#801-817 W. LAYTON AVE.
#789 W. LAYTON AVE.
#709 W. LAYTON AVE.
#711 W. LAYTON AVE.
#703 W.

8' WE ELECTRIC EASEMENT

FIBER OPTIC

CAUTION

P.L.

R/W

637' FM ROW

665' FM ROW

167' FM ROW

81' FM C

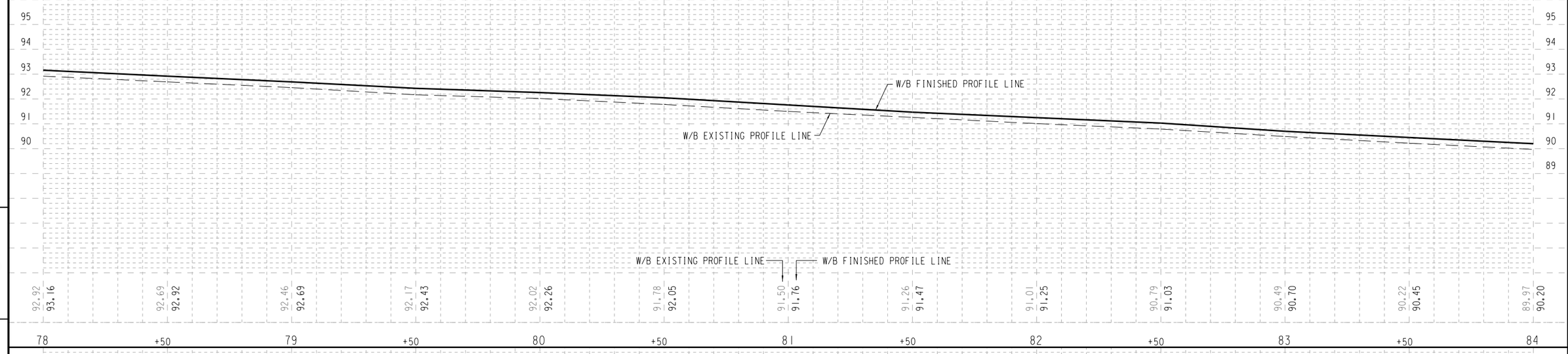
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(FB) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(FMB) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB
(J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(Q) GRADE & PLACE 4" TOPSOIL, SOD & FERTILIZER
(R) REMOVE, GRADE & SOD
(T) SAW ASPHALT
(U) SAW CONCRETE
(Z) CONST. 9" CONC. BASE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)
(31H) CONST. CURB 31-INCH (HIGH SIDE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 289	E

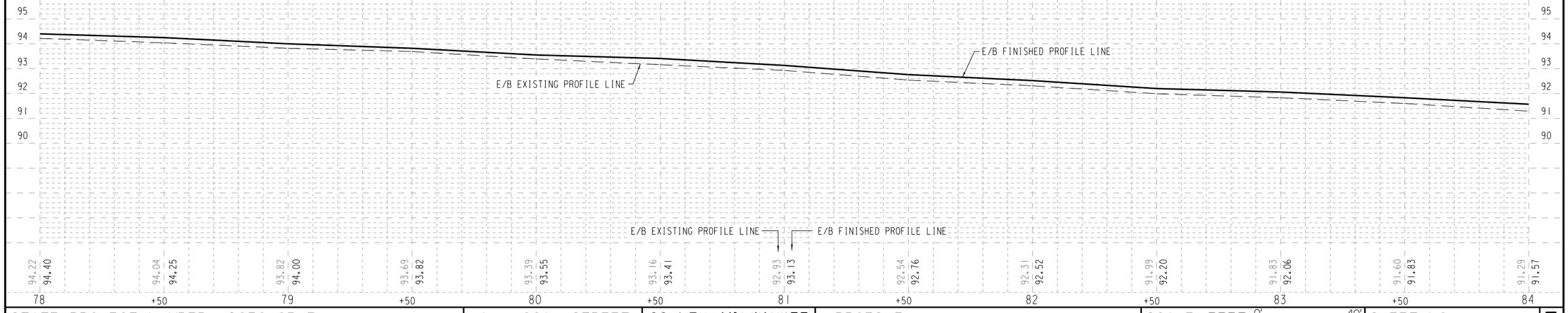
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\78-84.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 290	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\78-84.DGN

REVISED DATE: 03-15-2018 BY BB

WEST LAYTON AVENUE

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAILS FOR GRADE INFORMATION AND LOCATION

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

#700 W. LAYTON AVE.

#703 W. LAYTON AVE.

#639 W. LAYTON AVE.

#580 W. LAYTON AVE.

#575 W. LAYTON AVE.

SOUTH 7TH STREET

SOUTH 6TH STREET

BM: HYD NW COR OF S 6TH ST & W LAYTON AV (NW BOLT) ELEV = 91.02

BM: HYD SW COR OF S 7TH ST & W LAYTON AV (NW BOLT) ELEV = 93.30

CAUTION

FIBER OPTIC

WB PGL

EB PGL

1/4 SEC LINE

SEC LINE

MONUMENT

LANNON STONE

WALK SIGNAL BUTTON

ASPH.

CONC.

CURB

GRAVEL PLANTER

PLASTIC BORDER

CONC RAMP

BUS SHELTER

WOOD CHIPS

BUSHES

SIGN

MAILBOX

WOOD PLANK PLANTER

ELEC. BOX

FIBER OPTIC

P.I.

R/W

N

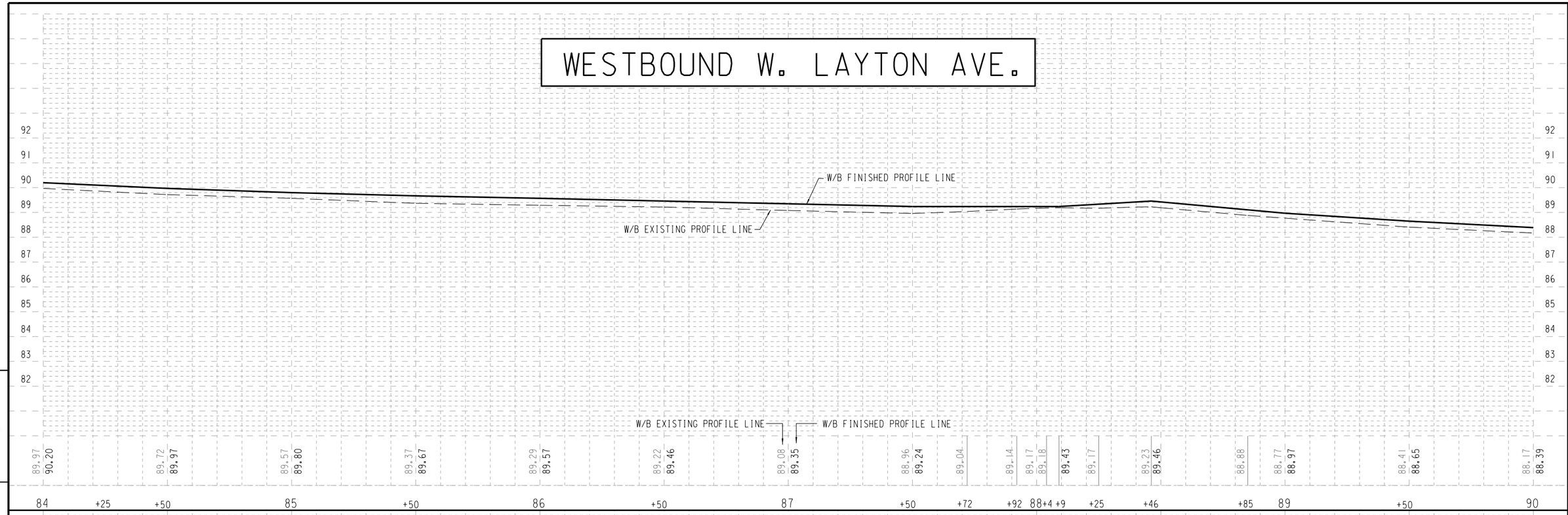
(1) CONST. TYPE 1 CURB RAMP
(2) CONST. TYPE 2 CURB RAMP
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(FM8) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB
(K) CONST. 5" CONC. WALK
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(R) REMOVE, GRADE & SOD
(U) SAW CONCRETE
(Z) REMOVE & CONST. 9" CONC. BASE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 291	E

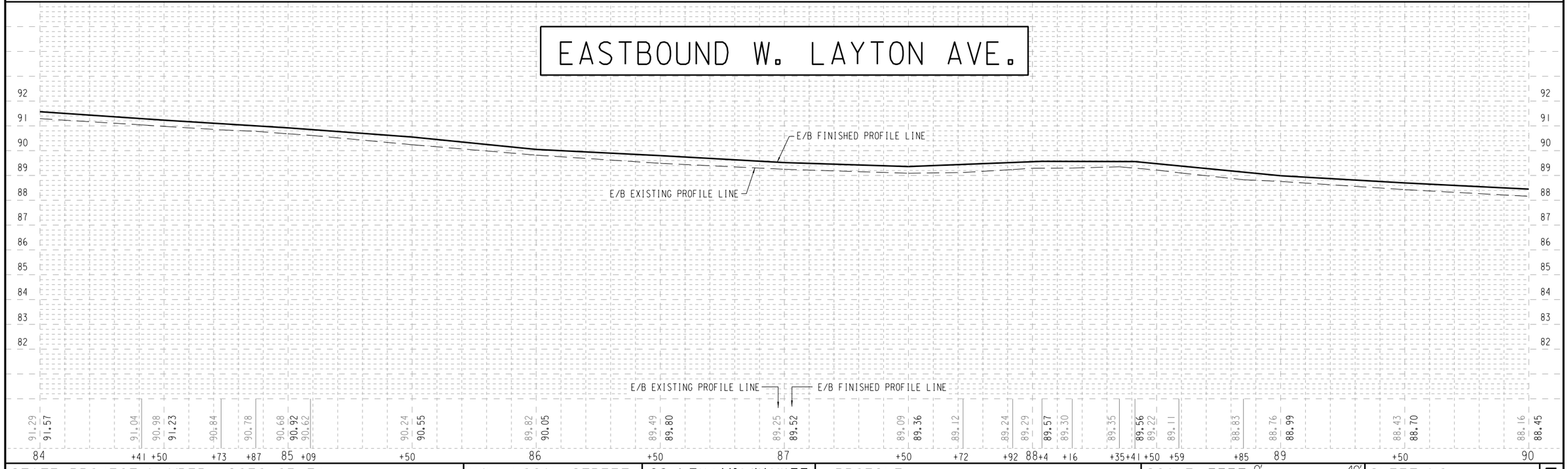
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\84-90.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 292

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\84-90.DGN

REVISED DATE: 02-28-2018 BY BB

WEST LAYTON AVENUE

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SOUTH 5TH STREET

#552 W. LAYTON AVE. #530 W. LAYTON AVE. #512 W. LAYTON AVE. #545 W. LAYTON AVE. #517 W. LAYTON AVE. #501 W. LAYTON

FIBER OPTIC CAUTION

HYD: S/S ON W LAYTON AV (+/- STA 92+82, 51 RT) ELEV = 88.94

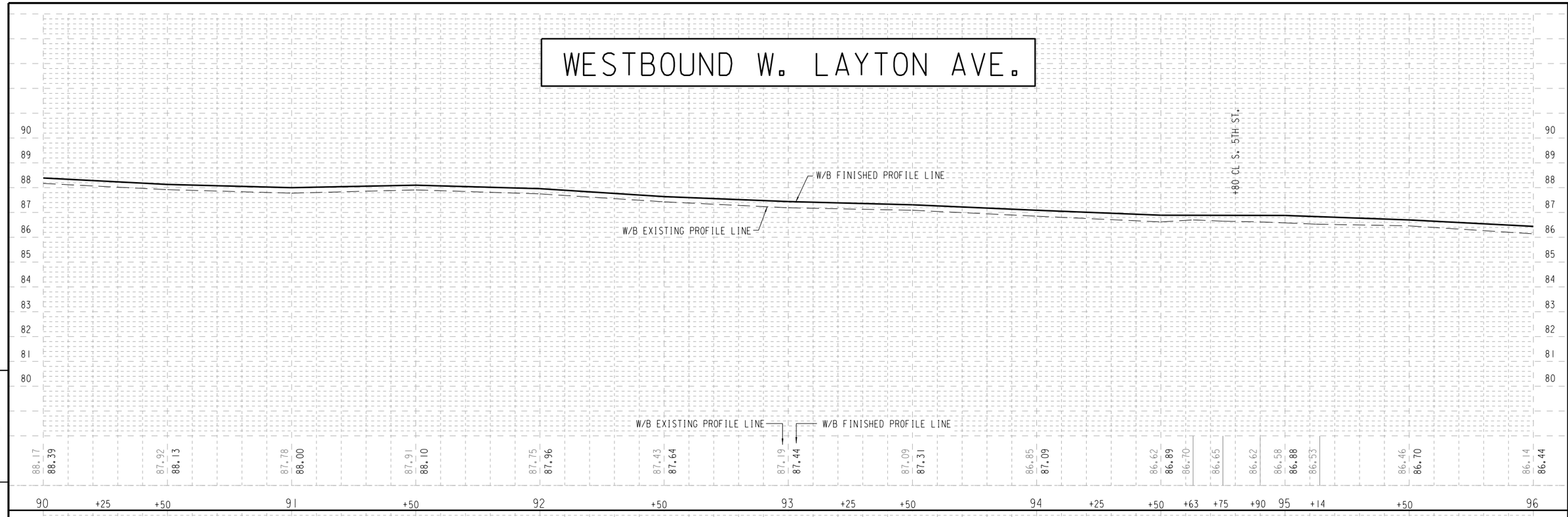
(2) CONST. TYPE 2 CURB RAMP
(3) CONST. TYPE 3 CURB RAMP
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(FM8) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB
(K) CONST. 5" CONC. WALK
(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE
(R) REMOVE, GRADE & SOD
(T) SAW ASPHALT
(U) SAW CONCRETE
(31) CONST. CURB 31-INCH
(31C) CONST. CURB 31-INCH (COVERED FLANGE)
(PC) PEDESTRIAN CURB SEE RAMP DETAILS

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 293 E

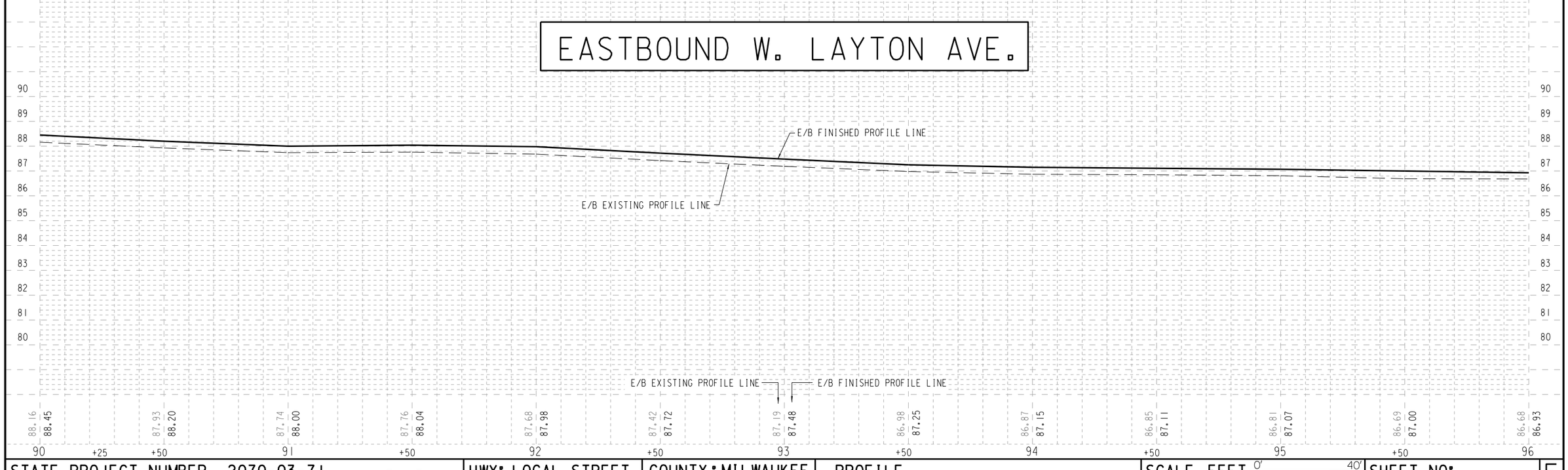
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\90-96.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 294	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\90-96.DGN

REVISED DATE: 07-17-2018 BY SB

WEST LAYTON AVENUE

N

P.L.

FIBER OPTIC

CAUTION

#300 W. LAYTON AVE.

84.98C
84.65G
+82.3
199

85.25C
85.00G
+31.9
203

HYD: N/S ON W LAYTON AV
(+/- STA 99+75, 50 LT)
ELEV = 87.87

R/W

96+92
10' LT

98+31.5
9.8' LT

98+47.4
4.8' LT

99+49.9
3.3' RT

100+58.9
2.4' RT

WB PGL
25.5' LT

EB PGL
25.5' RT

96 97 98 99 100 101 102

LANNON STONE

SPRINKLER VALVE

SEC LINE

STONE

WMSD

DOT

CURB

ASPH.

BUSHES

LAWN

BUSH

SIGN

CUC

T.O. CULVERT

B.O. CULVERT

ASPH. CURB

PLANTER

SIGN POST

60' RT

59' RT

#501 W. LAYTON AVE.

#401 W. LAYTON AVE.

#307 W. LAYTON AVE.

#233-235

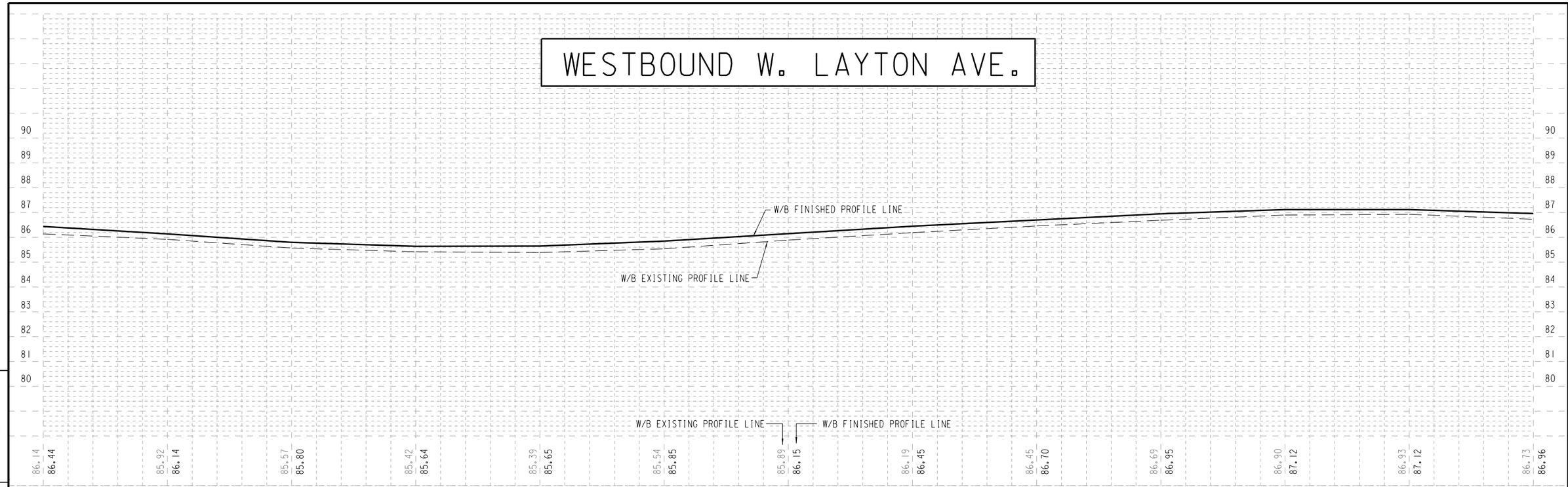
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(FM8) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB
(K) CONST. 5" CONC. WALK
(R) REMOVE, GRADE & SOD
(T) SAW ASPHALT
(U) SAW CONCRETE
(31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 295	E

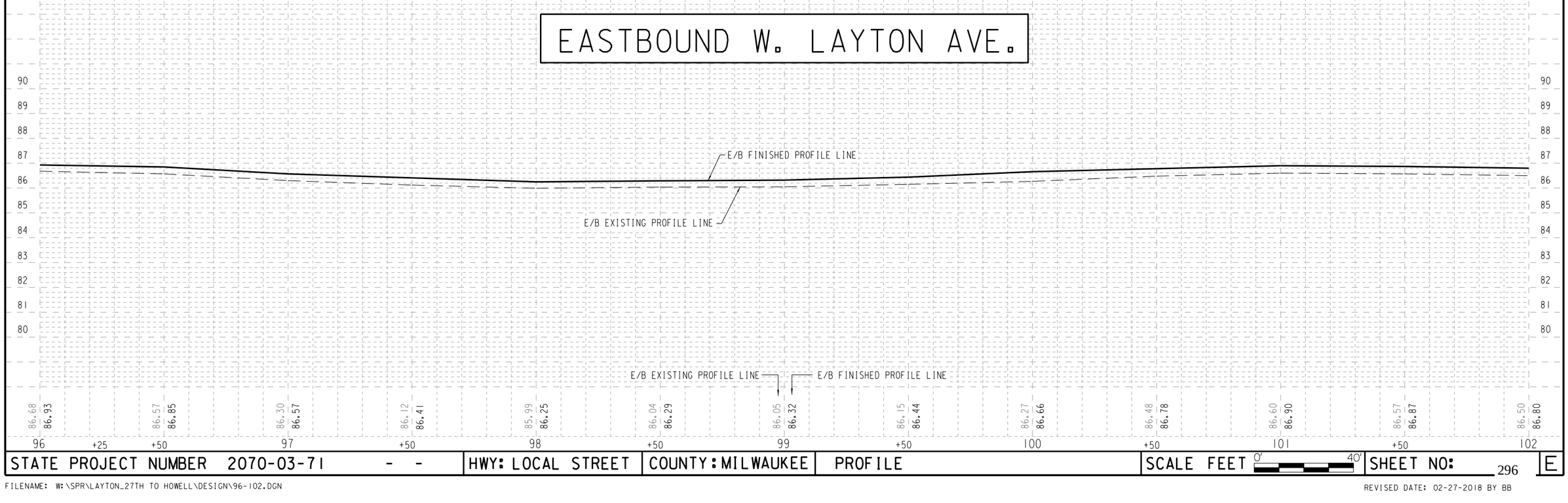
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\96-102.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 296	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\96-102.DGN

REVISED DATE: 02-27-2018 BY BB

WEST LAYTON AVENUE

N

#230 W. LAYTON AVE.

#220 ADJ W. LAYTON AVE.

#220 W. LAYTON AVE.

#206 W. LAYTON AVE.

#200-204 W. LAYTON AVE.

#160 W. LAYTON AVE.

#233-235 W. LAYTON AVE.

#203 ADJ W. LAYTON AVE.

#191 W. LAYTON AVE.

#4747 S. HOWELL AVE.

#175 W. LAYTON AVE.

HYD: N/S ON W LAYTON AV (+/- STA 102+82, 50 LT) ELEV = 88.64

HYD: S/S ON W LAYTON AV (+/- STA 106+61, 50 RT) ELEV = 88.50

(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT

(D) CONST. 10" CONC. PAVEMENT WITH INTEGRAL CURB (BUS PAD)

(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB

(FM8) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB

(G8) CONST. 8" MODIFIED, DEPRESSED CONC. DRIVEWAY

(J) CONST. ASPHALTIC SURFACE ON CONCRETE BASE 4-INCH

(K) CONST. 5" CONC. WALK

(L) CONST. SNOWPLOWABLE CONCRETE MEDIAN SLOPED NOSE

(R) REMOVE, GRADE & SOD

(T) SAW ASPHALT

(U) SAW CONCRETE

(31) CONST. CURB 31-INCH

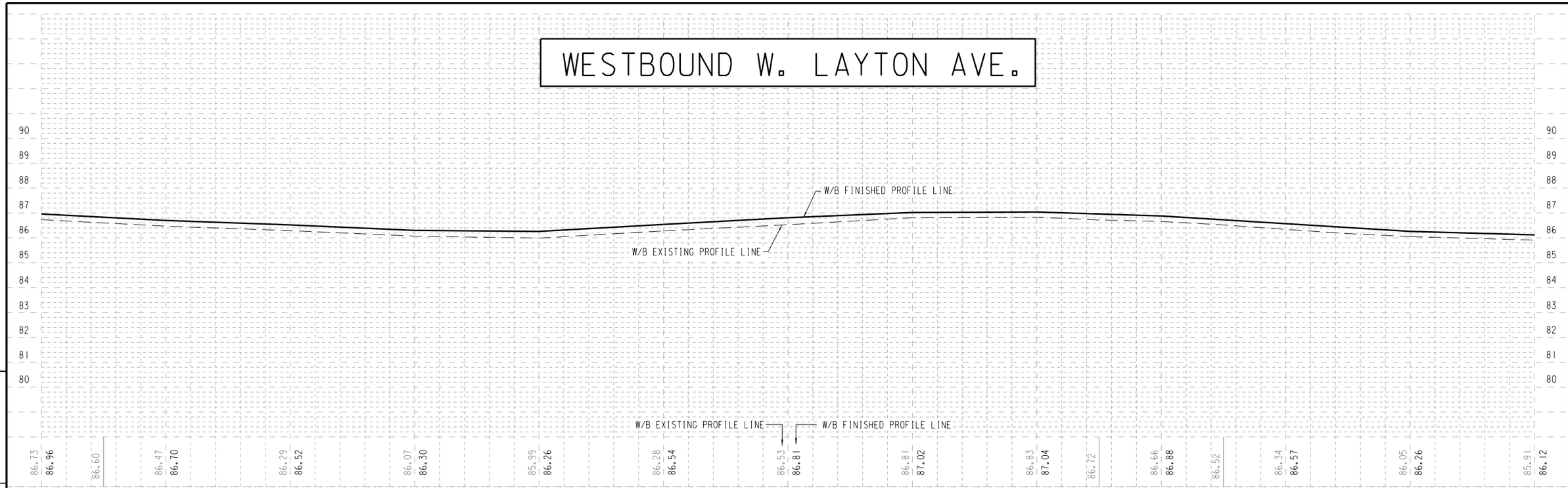
(31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 297	E

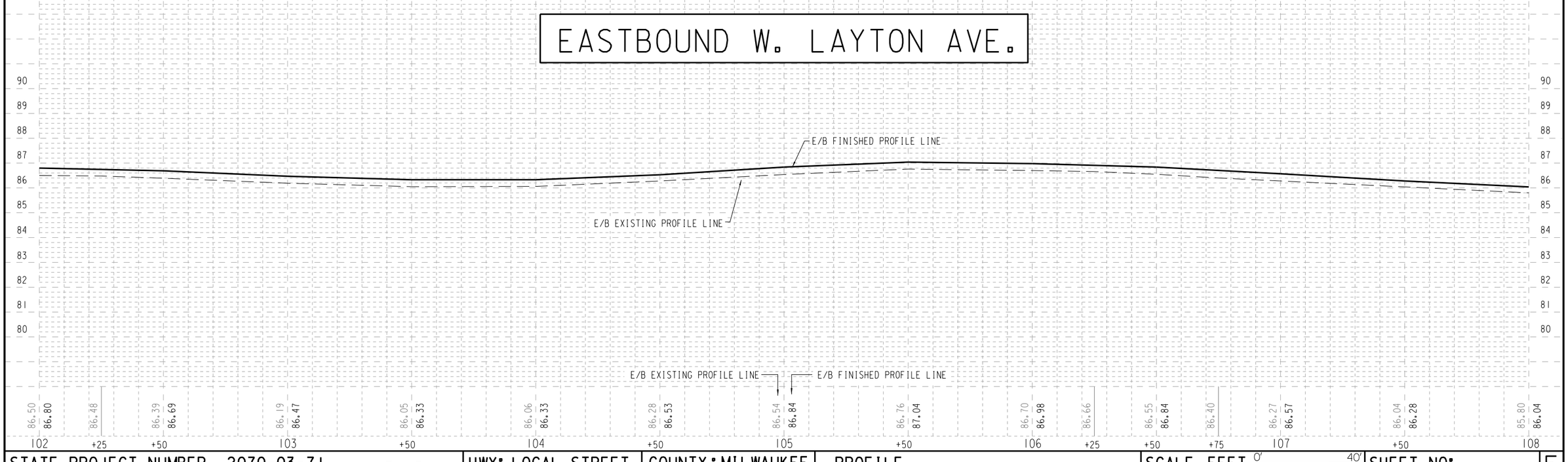
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\102-108.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 298	E

FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\102-108.DGN

REVISED DATE: 02-27-2018 BY BB

WEST LAYTON AVENUE

SOUTH IST STREET

SOUTH HOWELL AVENUE

#4669 S. IST ST.

#4601 S. IST ST.

#130 W. LAYTON AVE.

#108 W. LAYTON AVE.

#151 W. LAYTON AVE.

#131 W. LAYTON AVE.

#4709 S. HOWELL AVE.

B.M. E BOLT HYD NW CORNER
W. LAYTON AV. & S. HOWELL AV.
STA. 67+05 - 60'LT.
ELEV. 89.66

B.M. HYD NE COR S IST ST
W LAYTON AV (NW BOLT)
ELEV = 88.28

DRAINAGE EASEMENT

SEE ROAD PLANS
STATE PROJECT NUMBER
2060-10-70

END PROJECT
STA. 110+31.70 T/L

EQUATION
STA. 110+31.7, W. LAYTON AVE. T/L =
STA. 105+74.0, S. HOWELL AVE. T/L - PROJECT 2060-10-70

SEWER EASEMENT

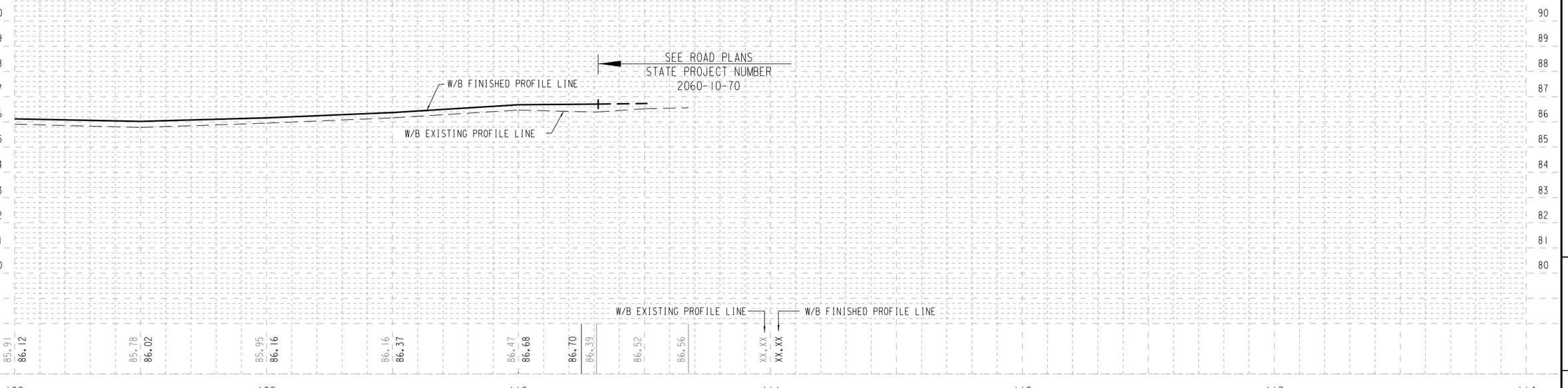
(A) GRIND TO 4" SUBGRADE & CONST. ASPH. CONC. PAVEMENT
(F8) CONST. 8" FLARED CONC. DRIVEWAY TO FACE OF CURB
(FM8) CONST. 8" FLARED CONC. MODIFIED DRIVEWAY TO FACE OF CURB
(K) CONST. 5" CONC. WALK
(R) REMOVE, GRADE & SOD
(T) SAW ASPHALT
(U) SAW CONCRETE
(31C) CONST. CURB 31-INCH (COVERED FLANGE)

STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 299 E

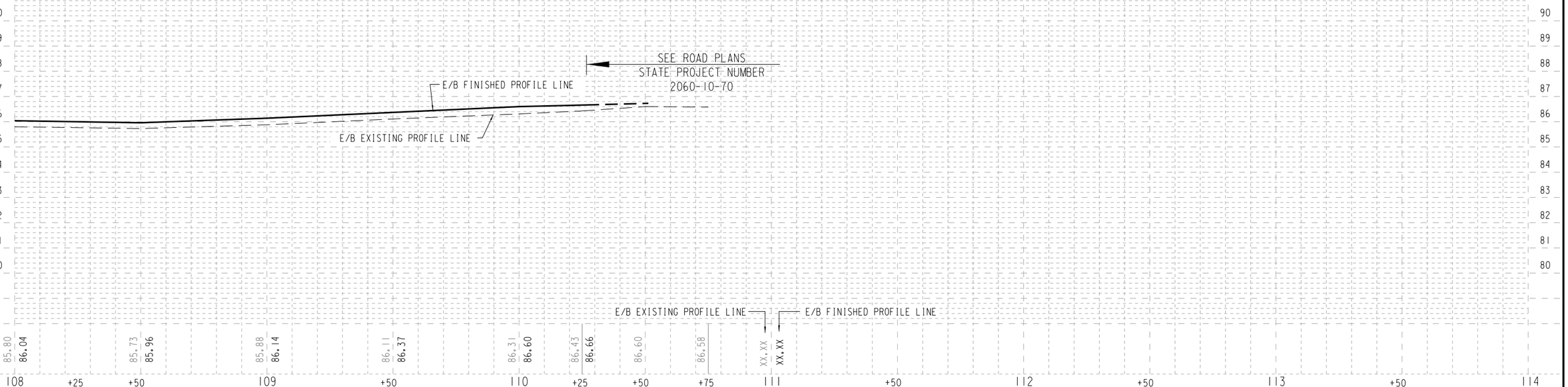
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\108-114.DGN

REVISED DATE: 01-24-2019 BY SB

WESTBOUND W. LAYTON AVE.



EASTBOUND W. LAYTON AVE.



STATE PROJECT NUMBER 2070-03-71 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 300 E

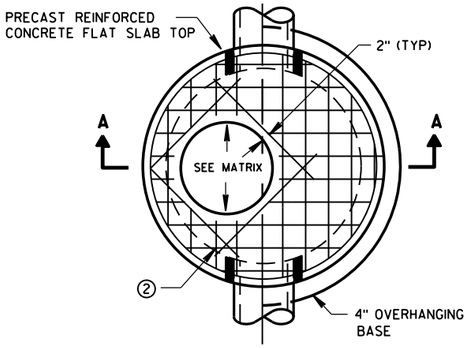
FILENAME: W:\SPR\LAYTON_27TH TO HOWELL\DESIGN\108-114.DGN

REVISED DATE: 03-08-2018 BY SB

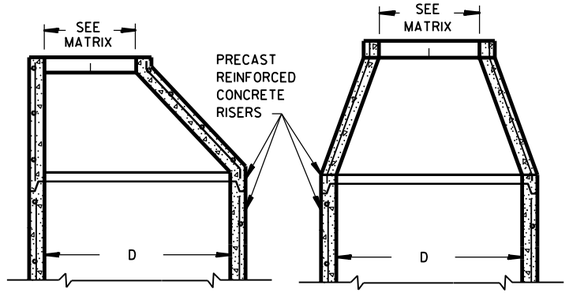
Standard Detail Drawing List

08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09C02-08	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C11-10	CONCRETE BASE TYPE 10
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C15-06A	CONCRETE BASE
13C15-06B	CONCRETE BASE
14A02-01	TREE PLANTING DETAIL
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-06	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D41-01	TRAFFIC CONTROL, MULTIPLE LANE SHIFT, MULTILANE DIVIDED ROAD
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

6

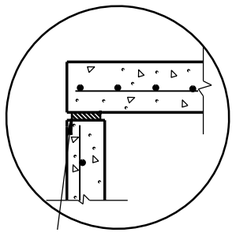


PLAN VIEW CIRCULAR OPENING

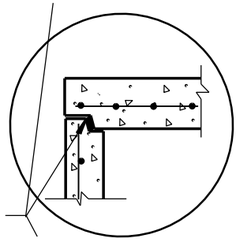


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

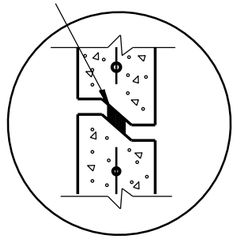


TOP WITH PLAIN END JOINT



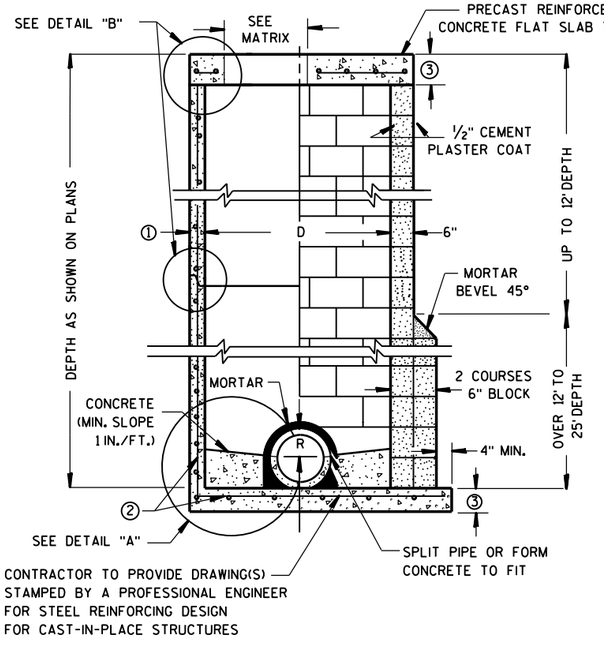
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



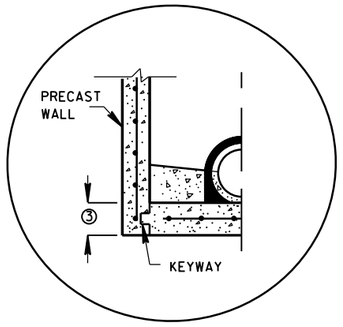
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

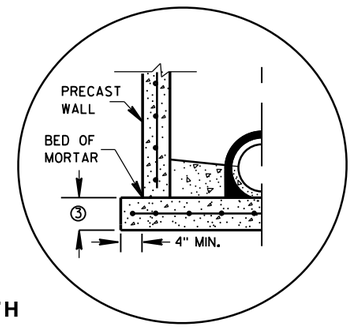


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

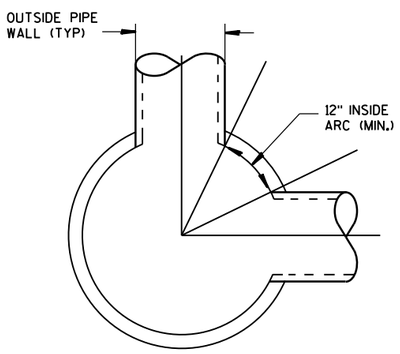


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 FOUNDATION 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.

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

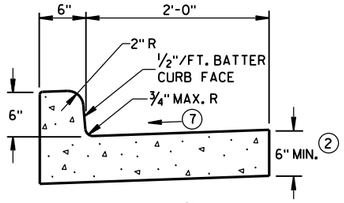
APPROVED

Sept., 2016
DATE

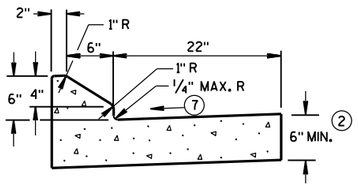
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

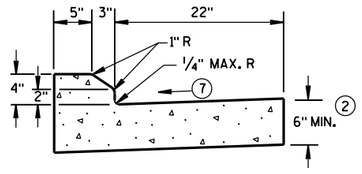
6
S.D.D. 8 B 9-2



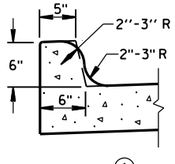
TYPES A (1) & D



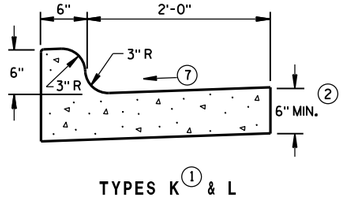
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

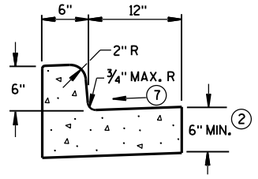


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



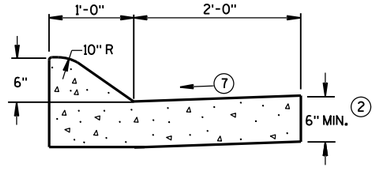
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

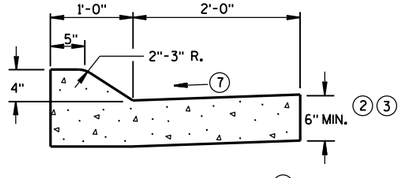


TYPES A (1) & D

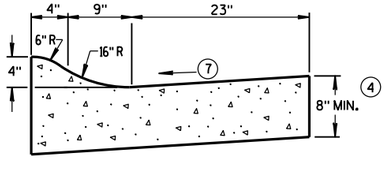
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

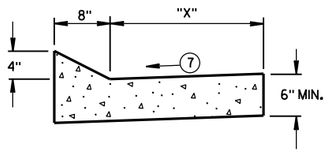


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

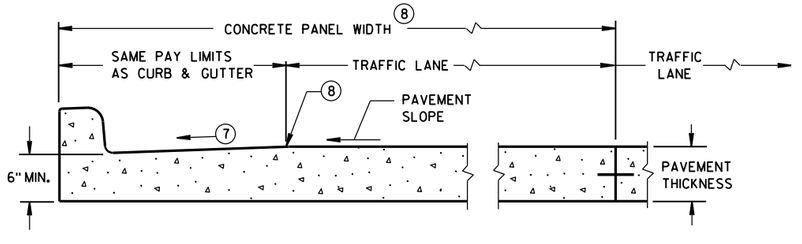
CONCRETE CURB & GUTTER 36"



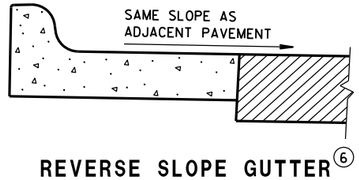
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER (6)
(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.

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, R AND TBTT.

(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) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) 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.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

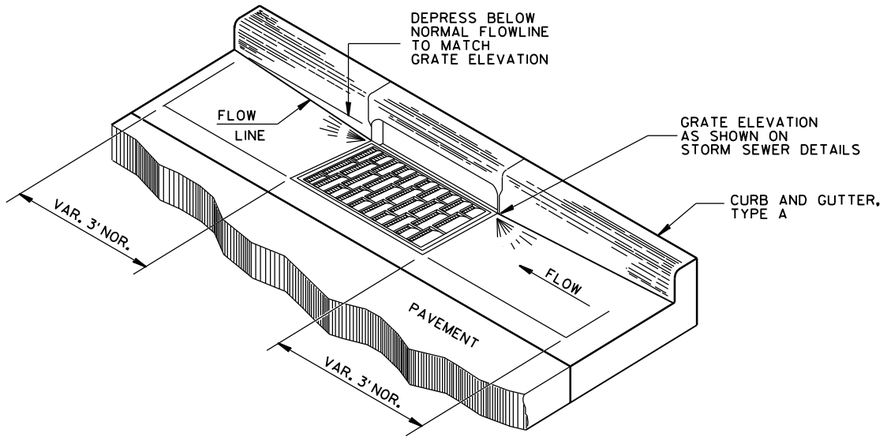
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

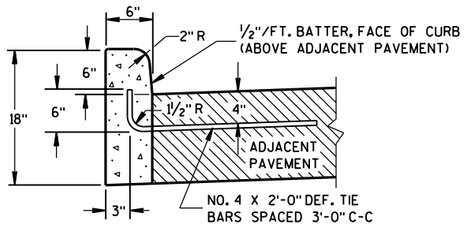
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

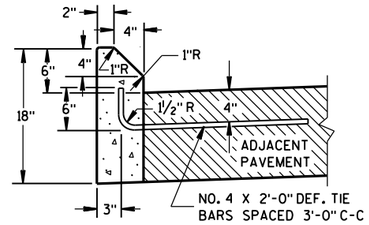
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(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.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

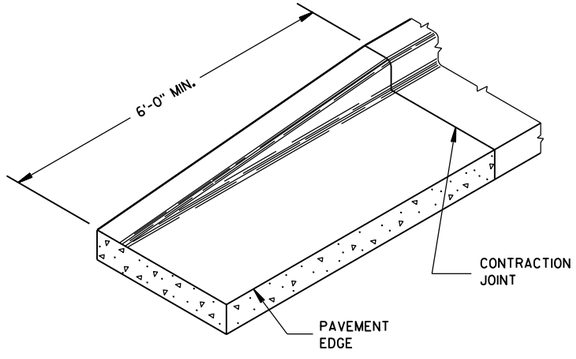


TYPES A(1) & D

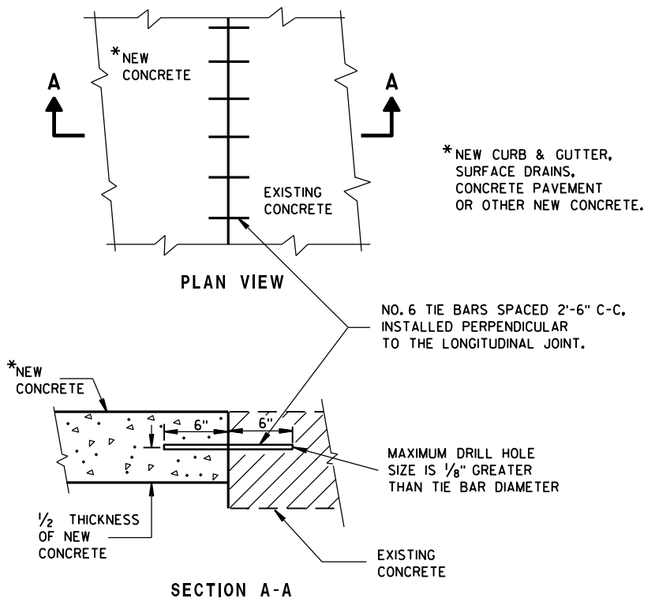


TYPES G(1) & J

CONCRETE CURB



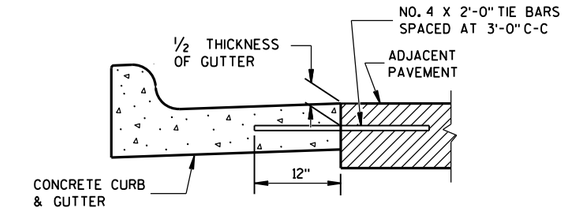
END SECTION CURB & GUTTER



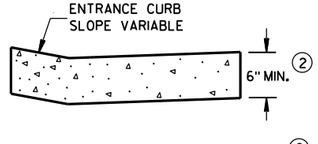
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

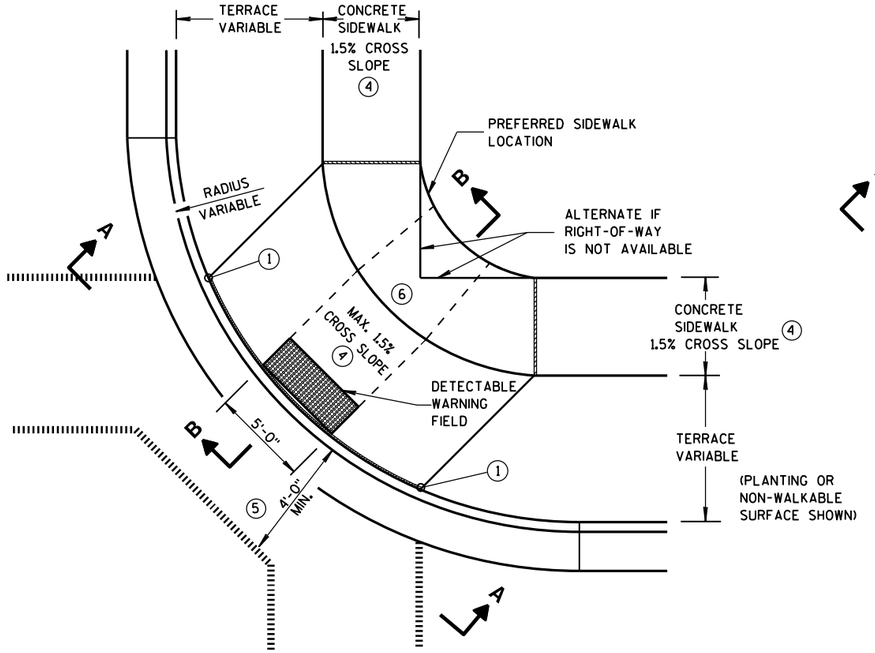
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 304 ENT
UNIT SUPERVISOR
FHWA

6

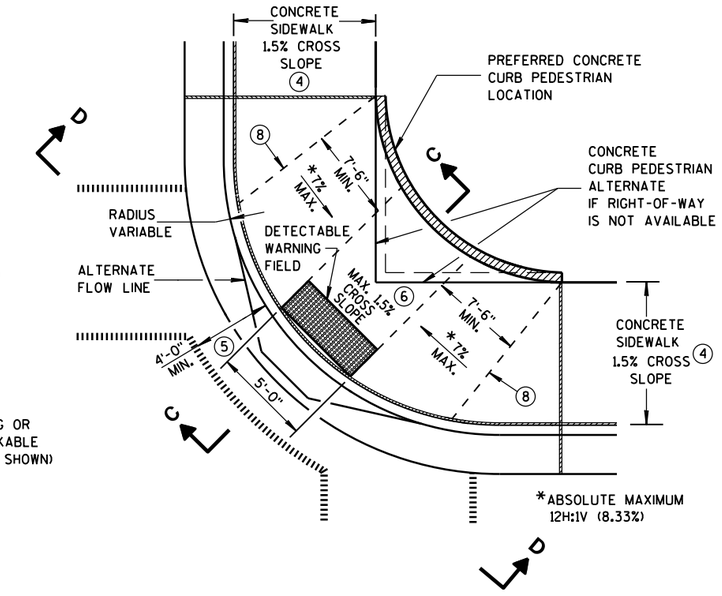
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

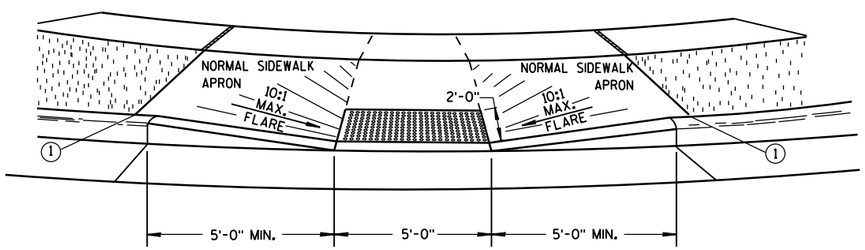
(CENTER OF CORNER RADIUS)



PLAN VIEW

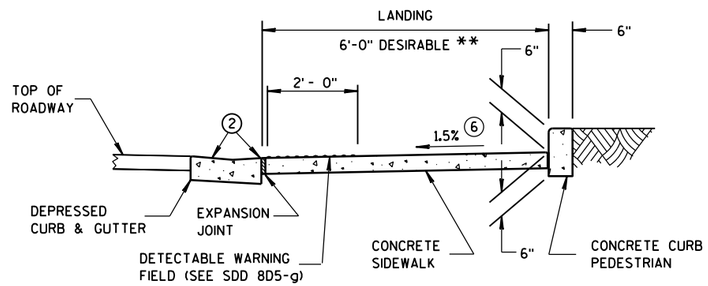
TYPE 1-A RAMP

(NO TERRACE)

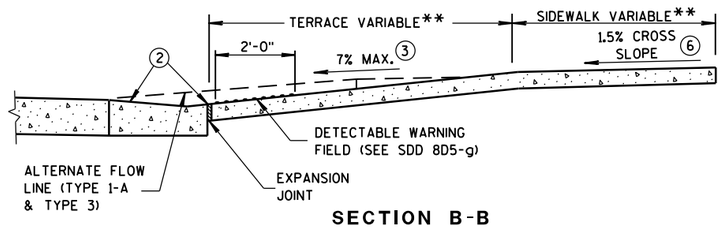


VIEW A-A

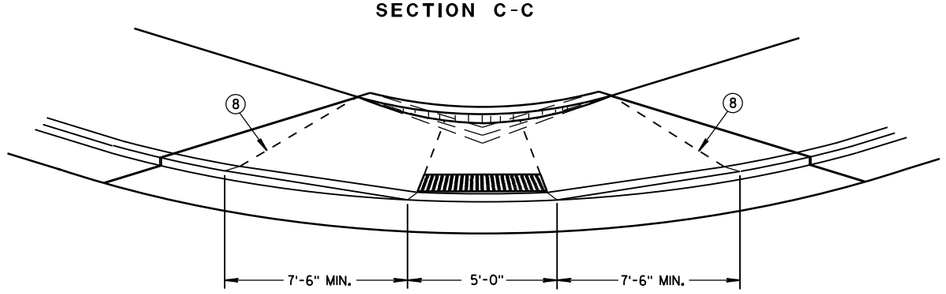
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION C-C



SECTION B-B



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN 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. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

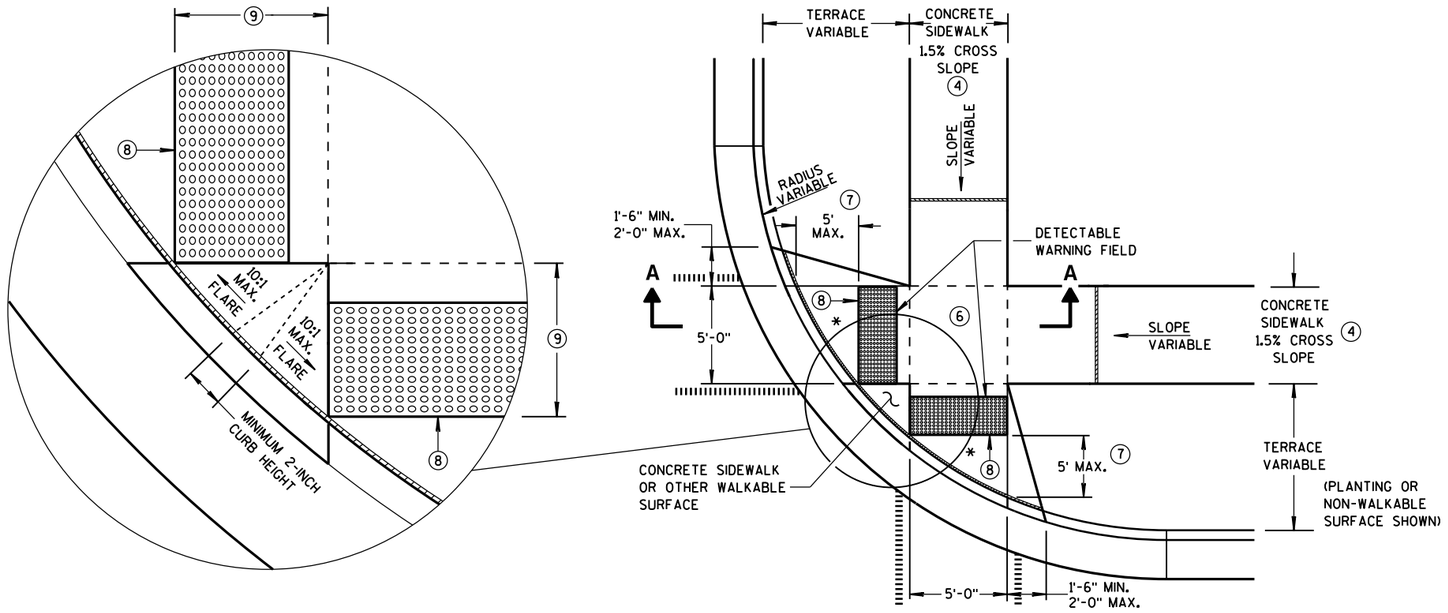
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

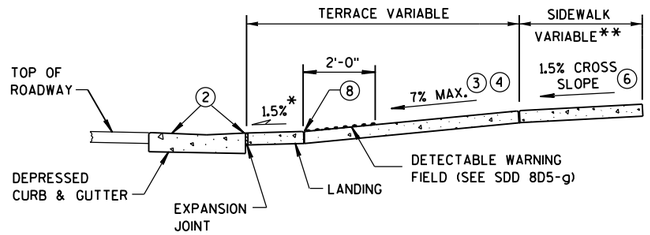
6

S.D.D. 8 D 5-19a
S.D.D. 8 D 5-19a



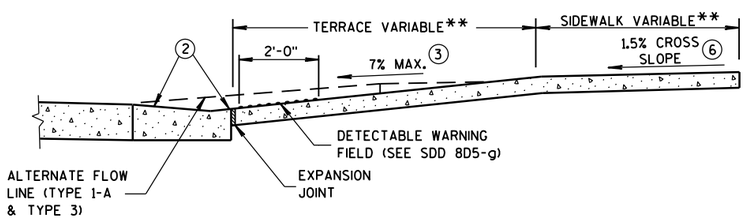
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

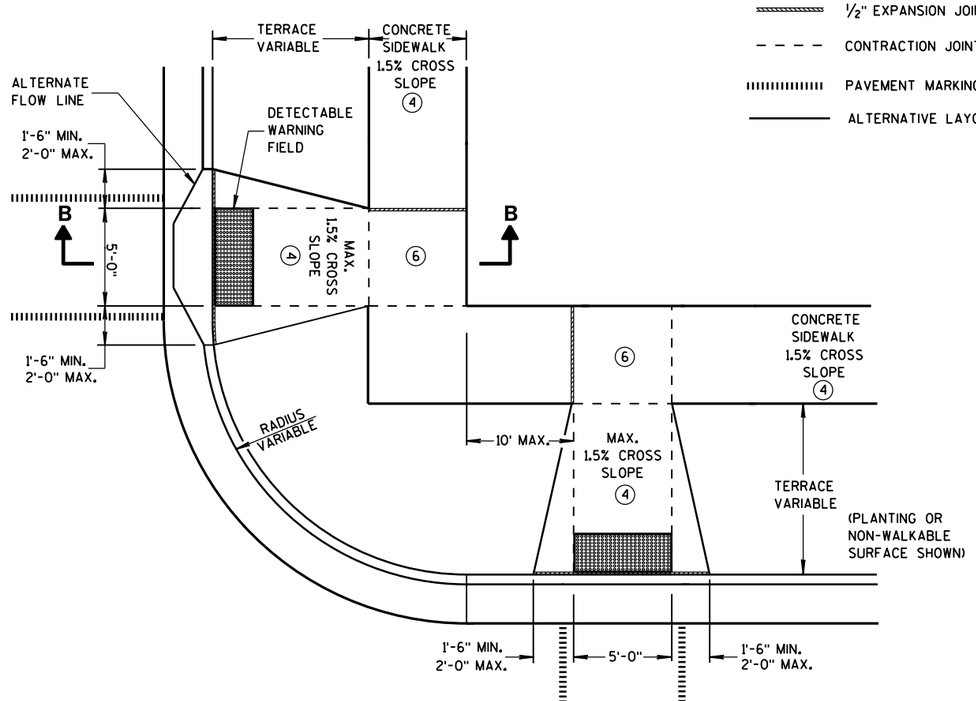


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

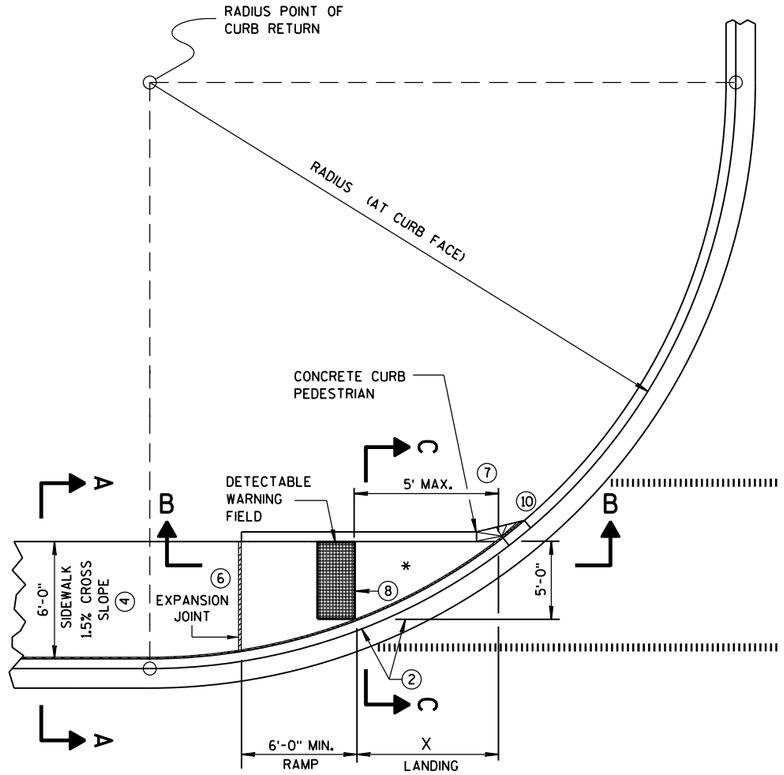
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

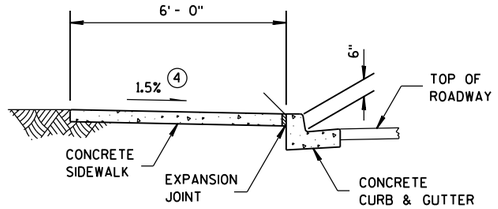
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

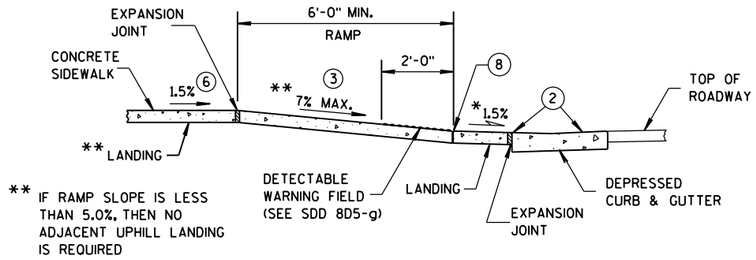
RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

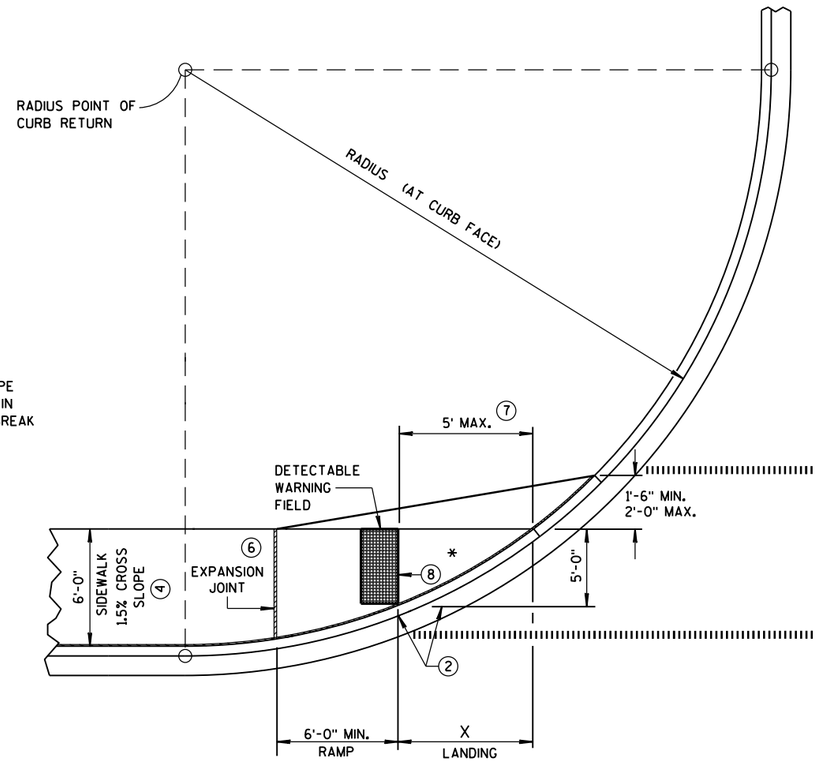
SECTION C-C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

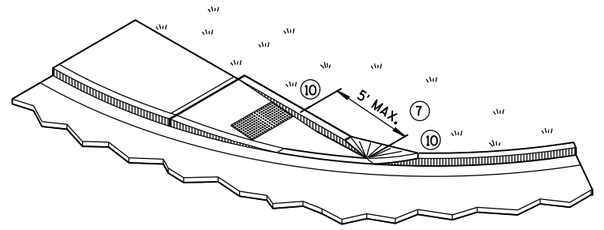
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

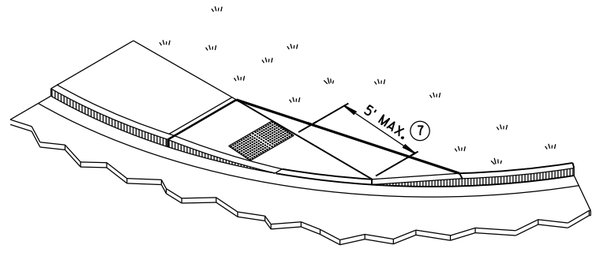
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

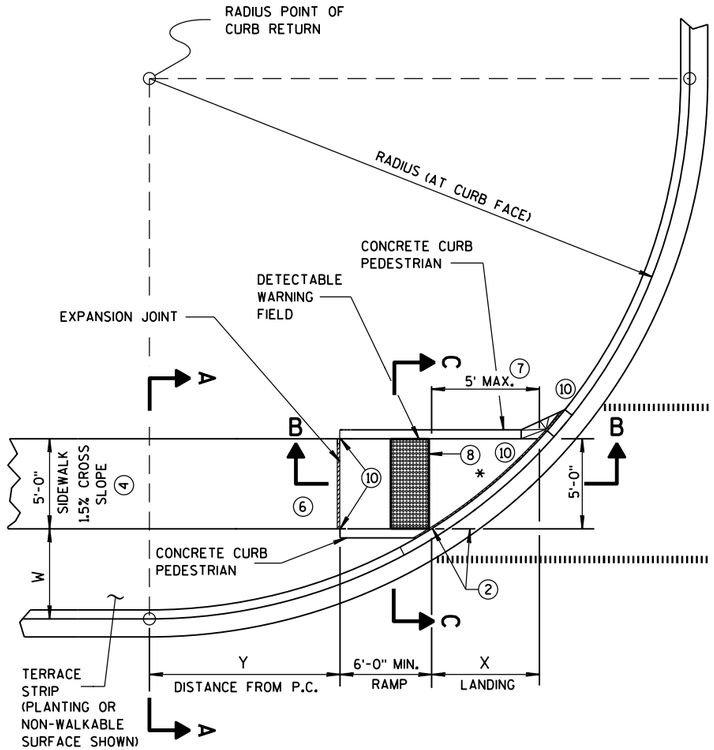
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

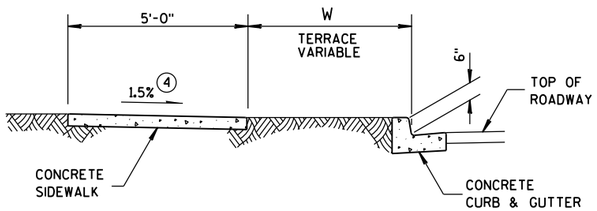
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

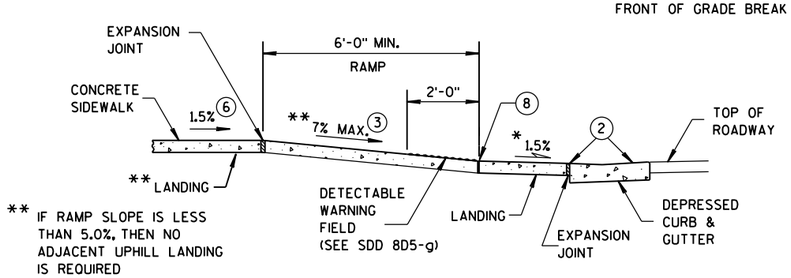
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



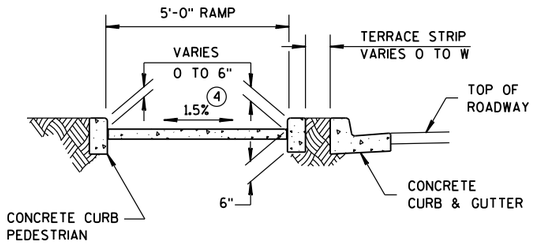
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C-C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

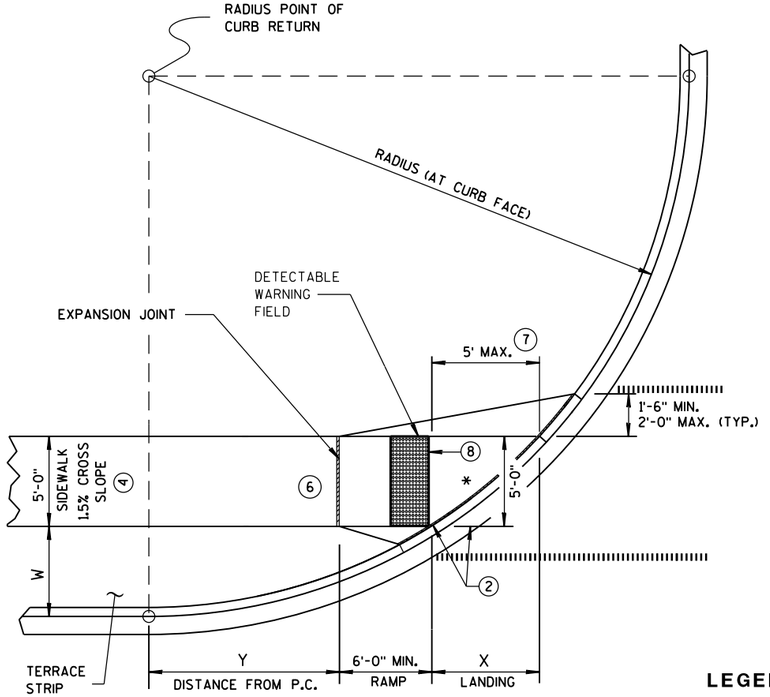
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

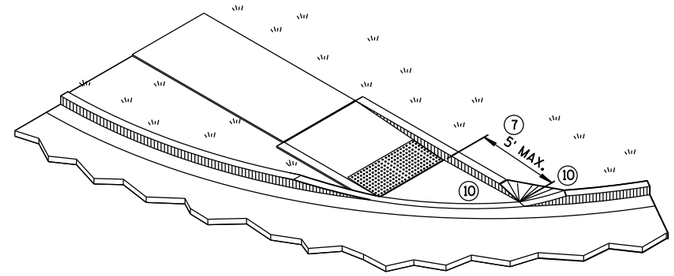
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

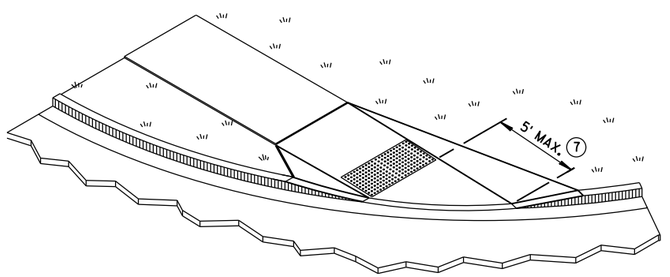
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

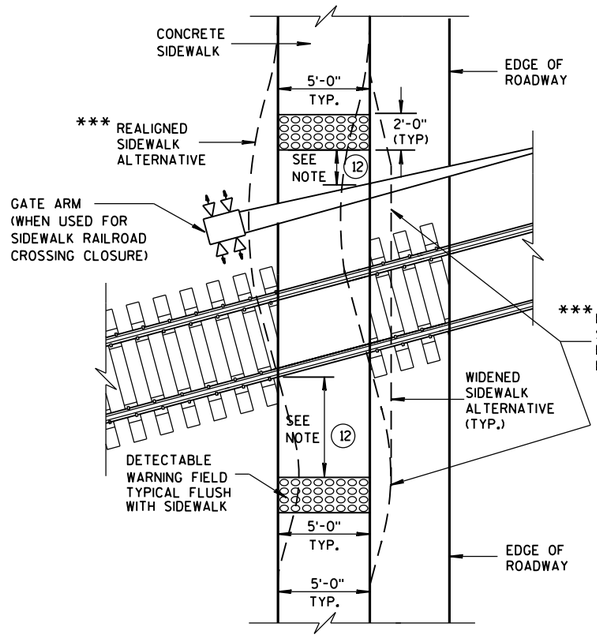
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

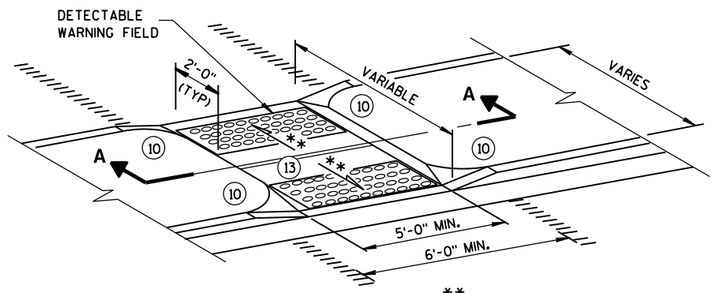
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-19d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

*** DETAILS TO BE DETERMINED BY DESIGNER

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

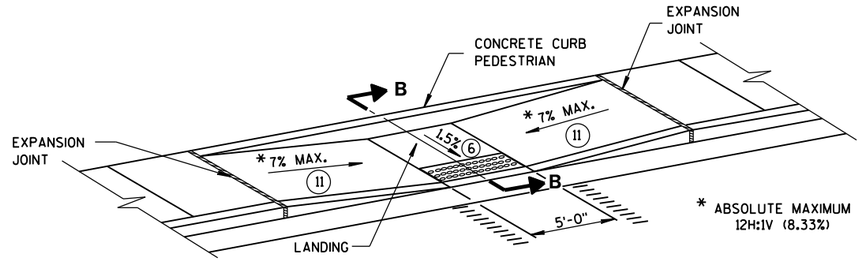
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

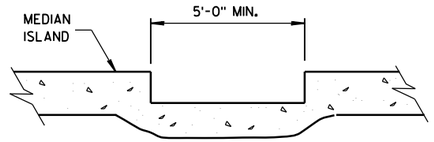
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) 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.

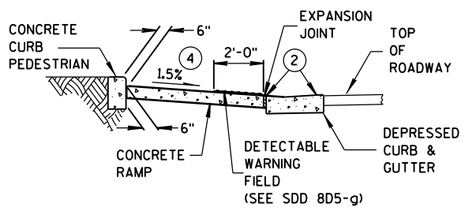
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

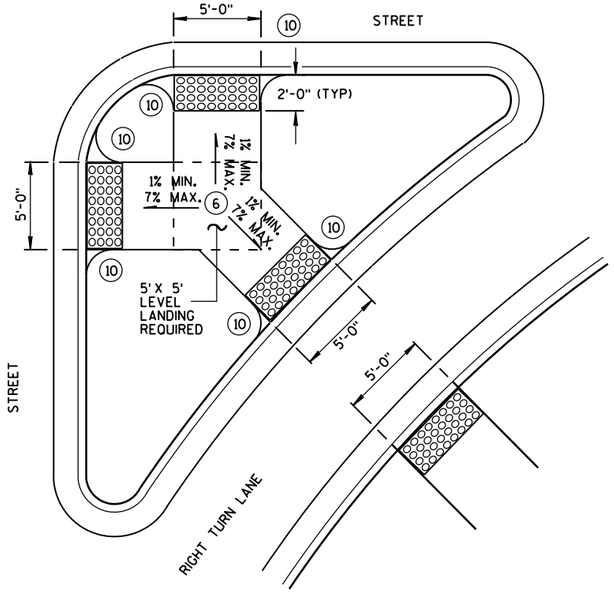


SECTION A-A

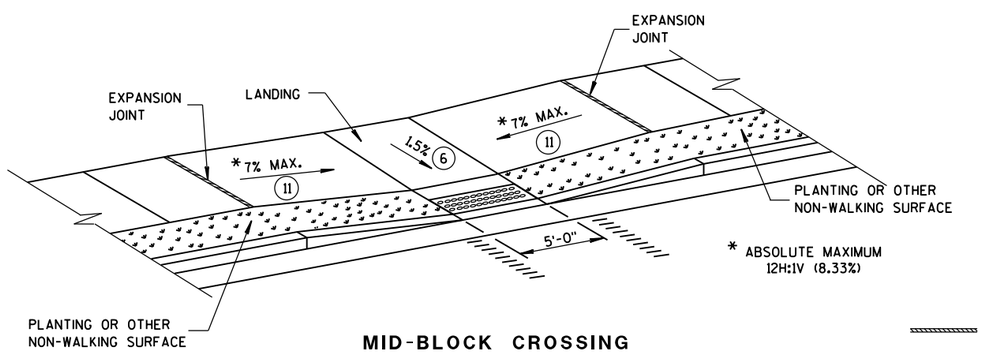


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



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

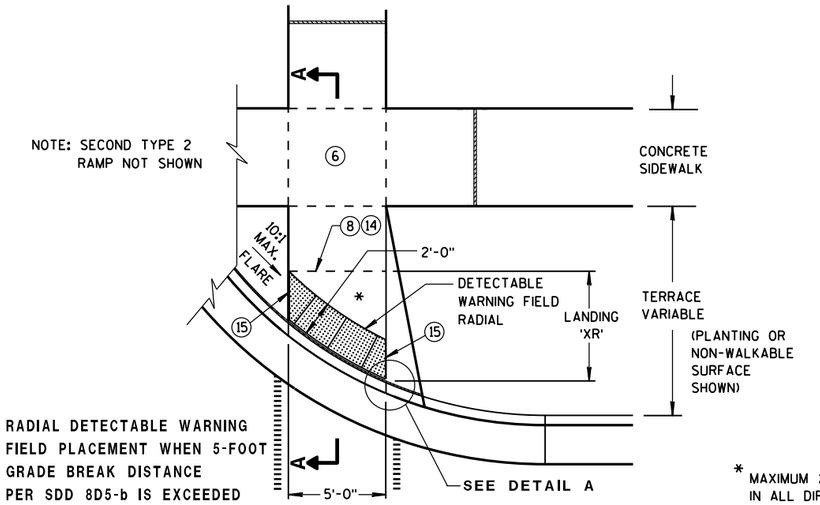
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

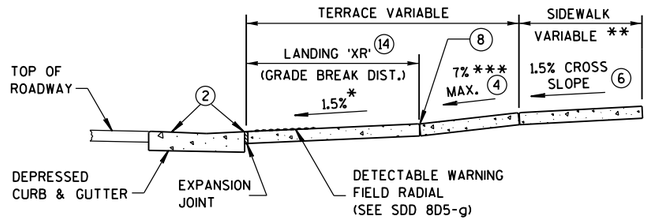
6

S.D.D. 8 D 5-19e



TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

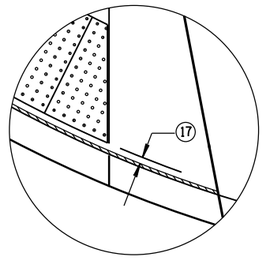
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

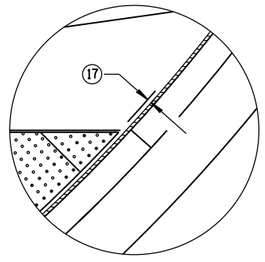
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

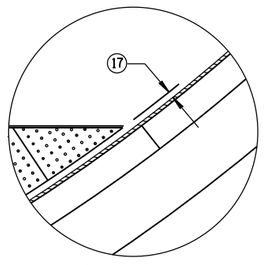
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



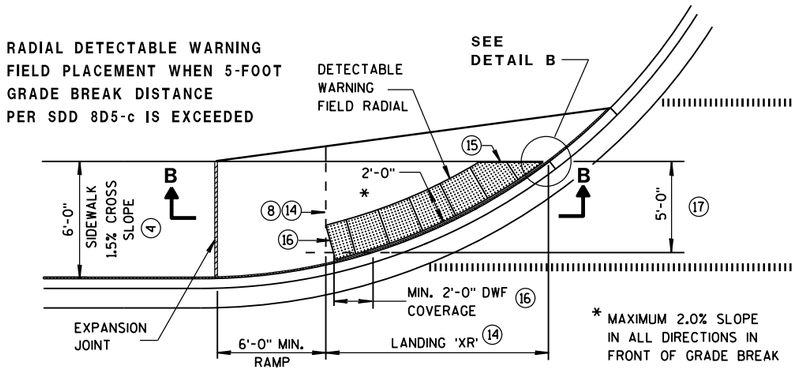
DETAIL A



DETAIL C

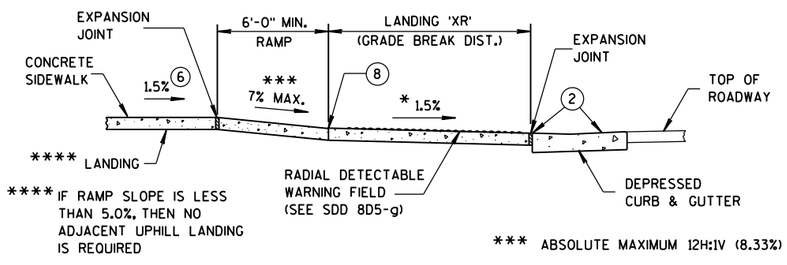


DETAIL B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

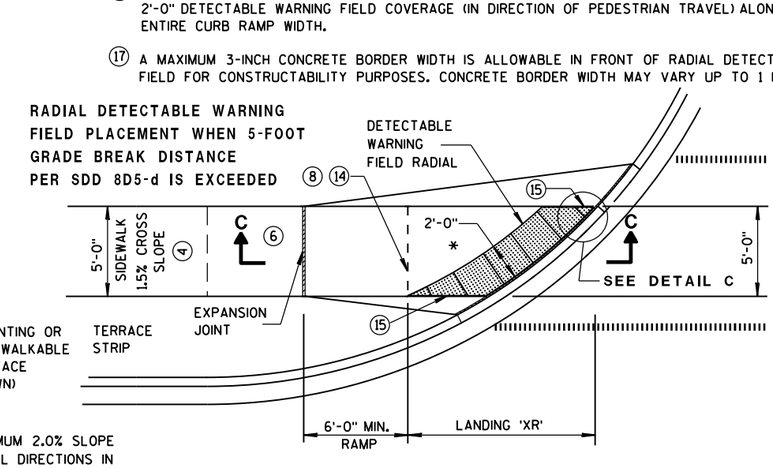
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

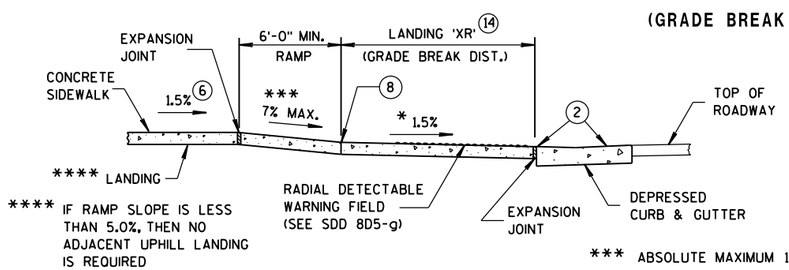
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

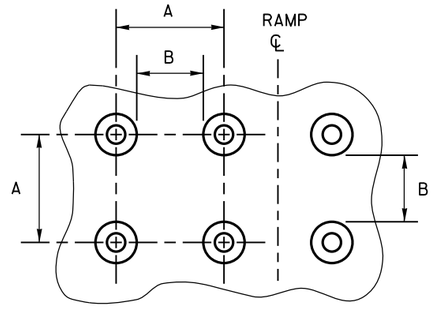
S.D.D. 8 D 5-19f

6

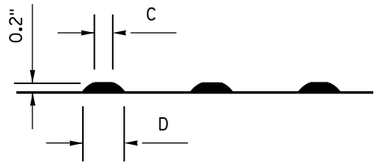
S.D.D. 8 D 5-19f

	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.



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

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

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

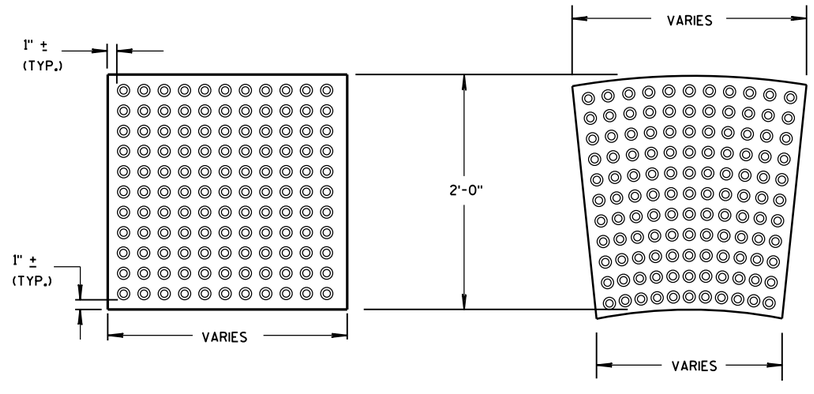
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

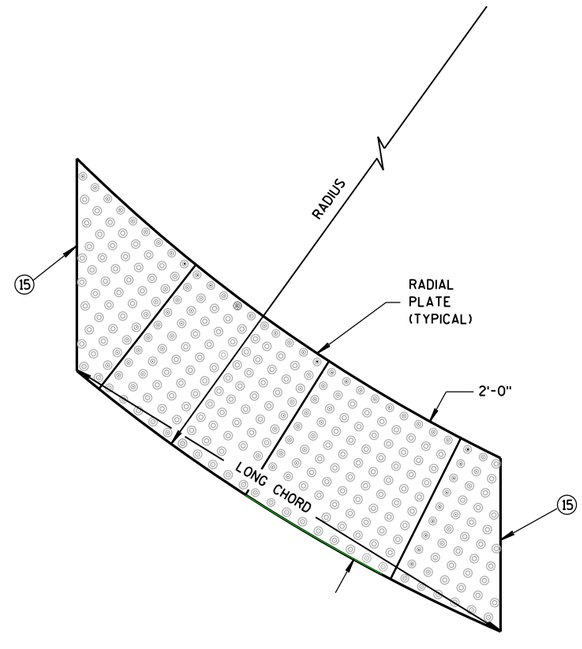


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

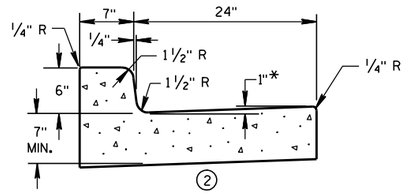
APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

6

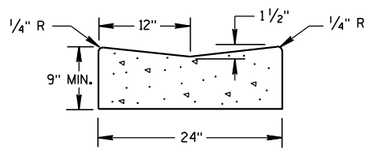
S.D.D. 8 D 5-19g

6

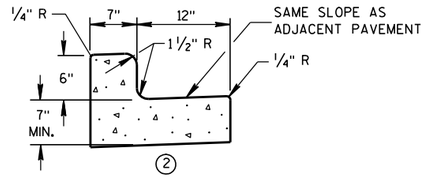
S.D.D. 8 D 5-19g



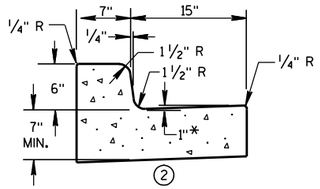
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

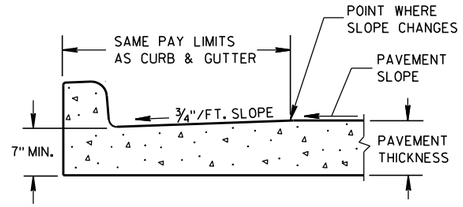


① CONCRETE CURB & GUTTER 19"



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.

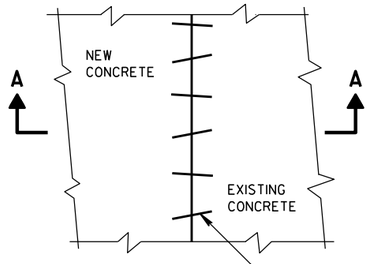
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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".

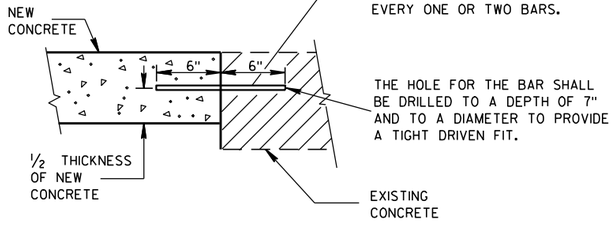
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.



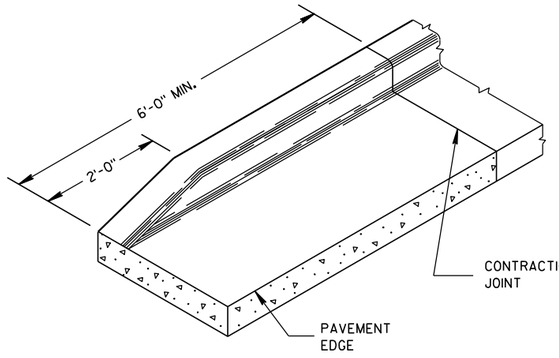
PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

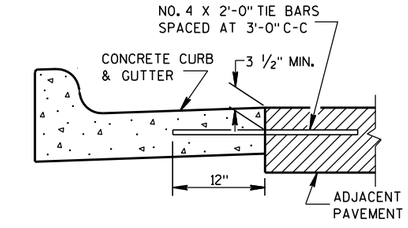


SECTION A-A

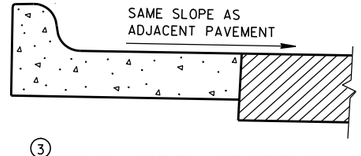
PAVEMENT TIES



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

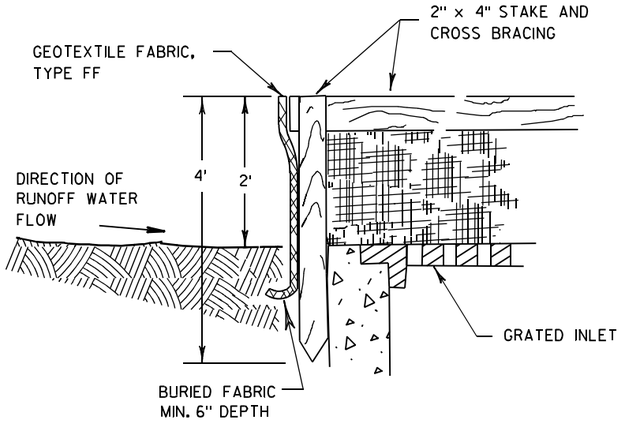
312

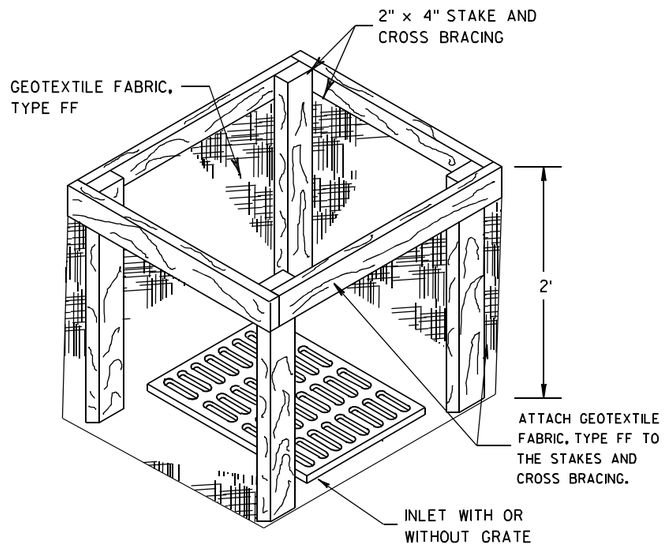
ENT

FHWA

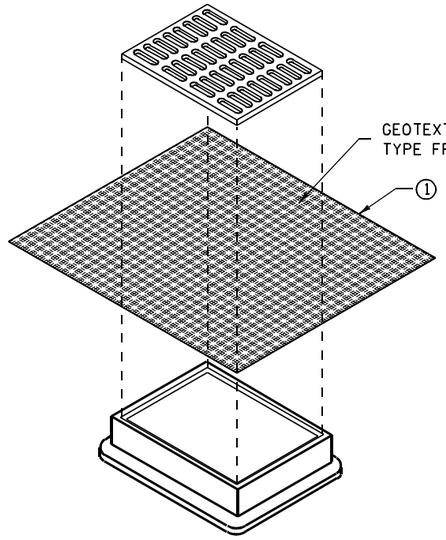
6

S.D.D. 8 D 16-10



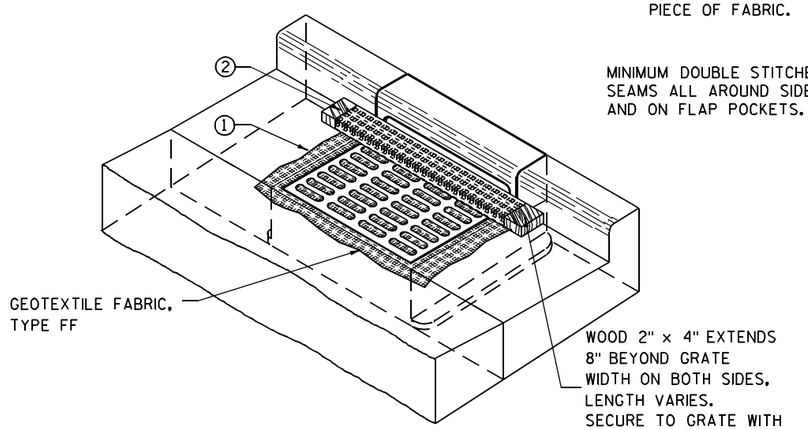


INLET PROTECTION, TYPE A

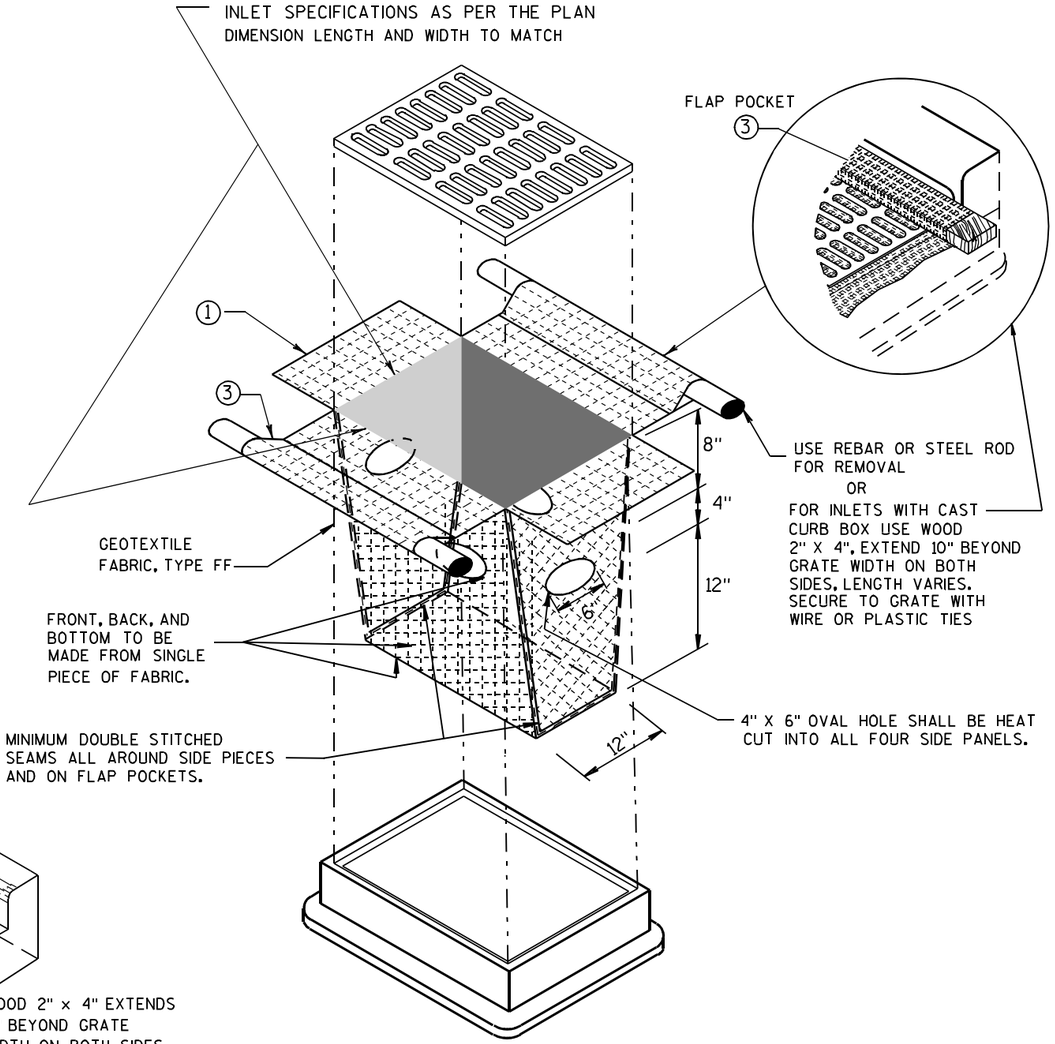


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

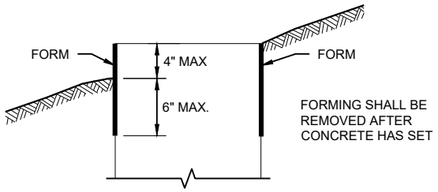
6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL 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 SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE 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 A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

BELL BENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC 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) FOR TYPE 1, TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES 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.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

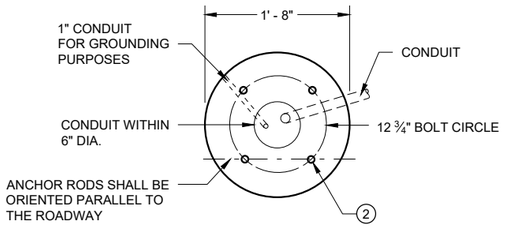
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

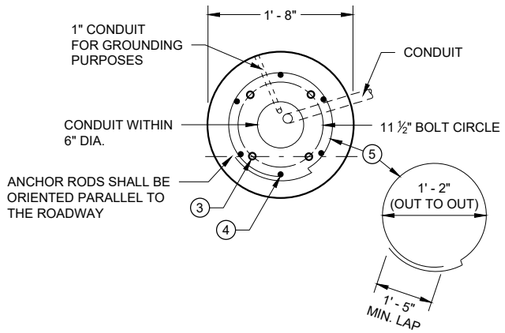
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

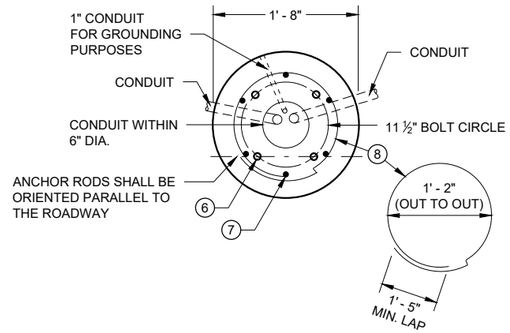
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

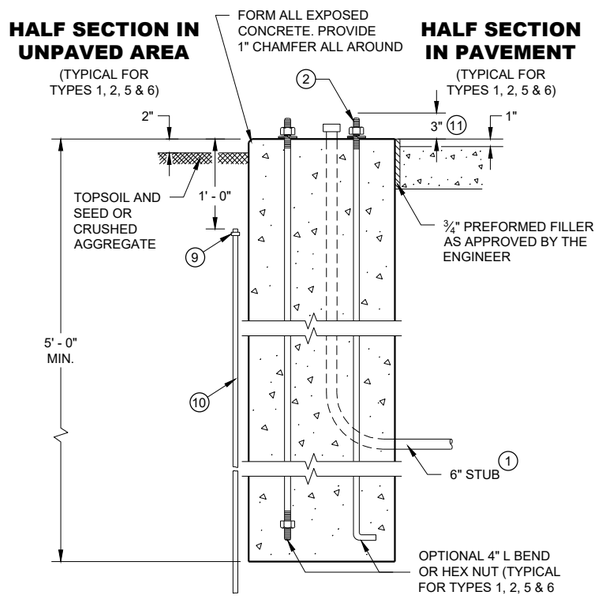
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

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

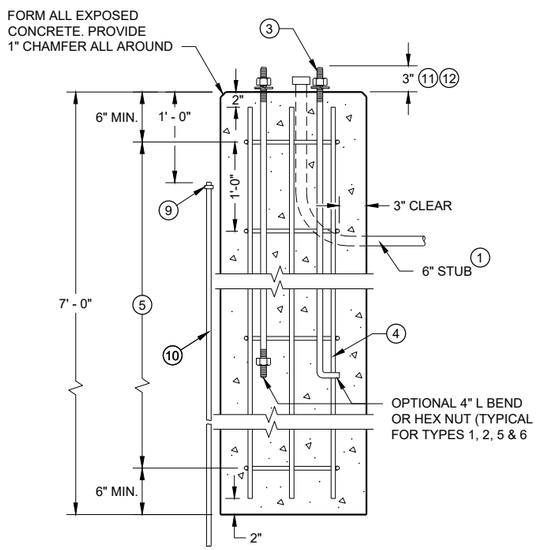




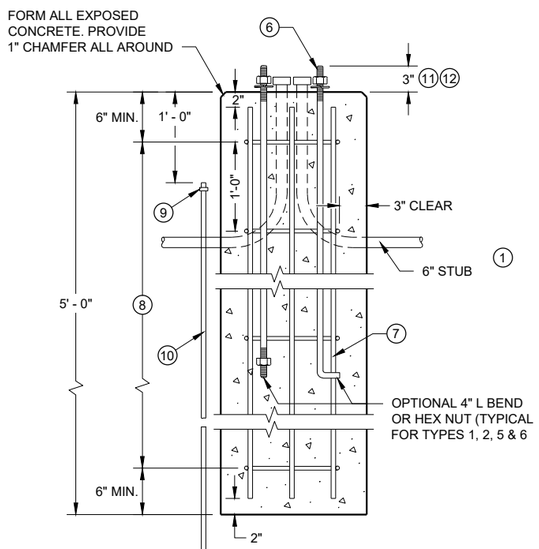




TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

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 EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6
SDD 09C02 - 08

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

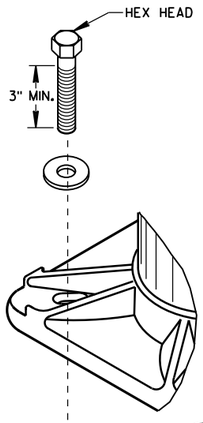
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

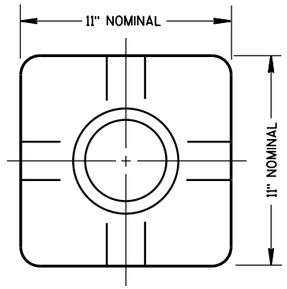
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

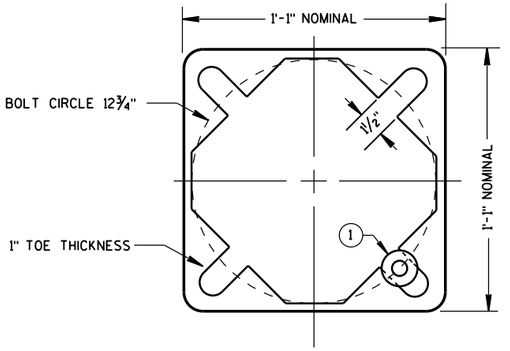
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

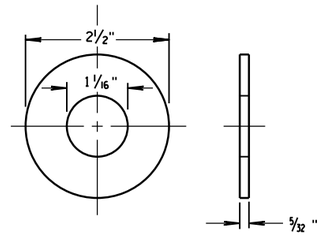




TOP VIEW
(PEDESTAL BASE)

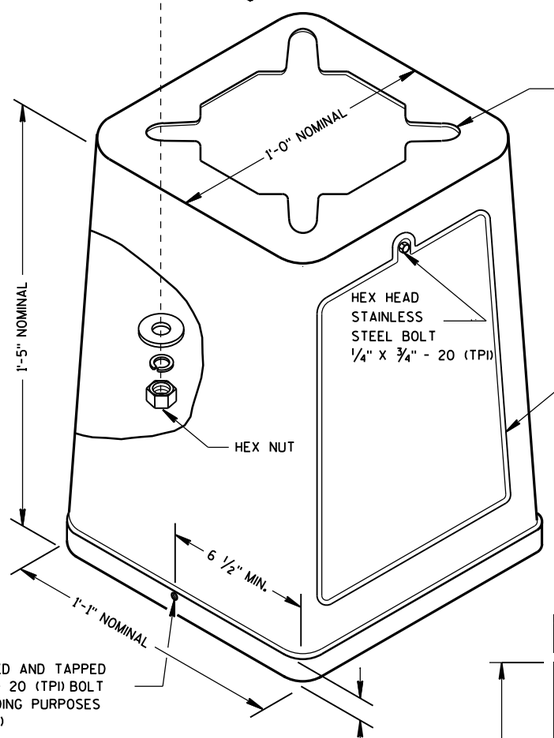


BOTTOM VIEW
(PEDESTAL BASE)

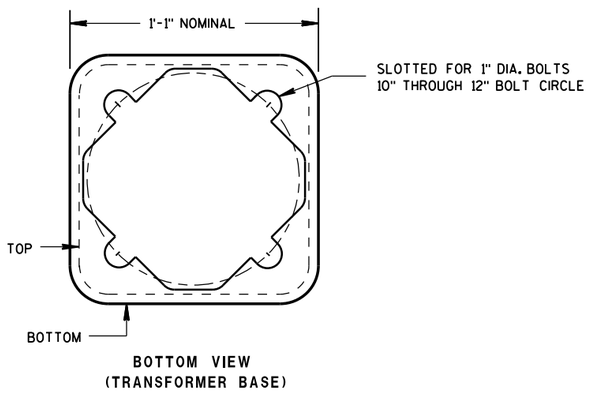


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

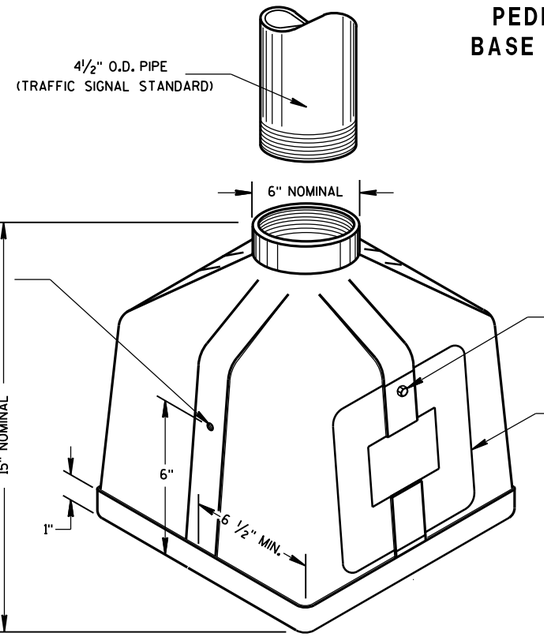
PEDESTAL BASE WASHER (1)



ISOMETRIC VIEW

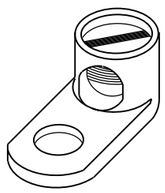


BOTTOM VIEW
(TRANSFORMER BASE)



ISOMETRIC VIEW

PEDESTAL BASE

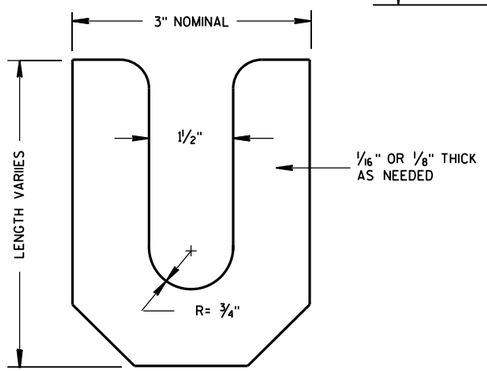


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 3-4

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).

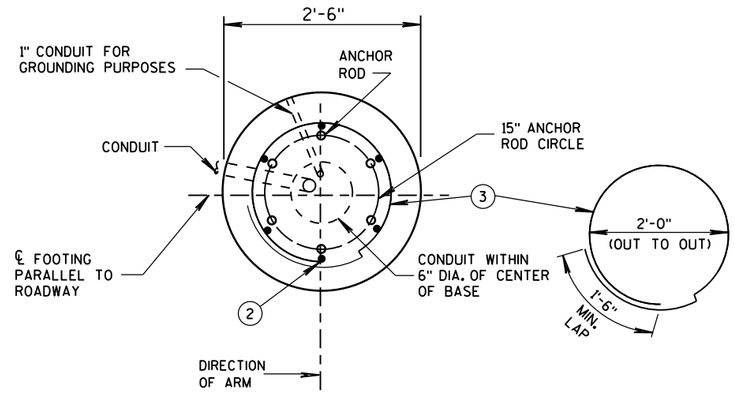
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

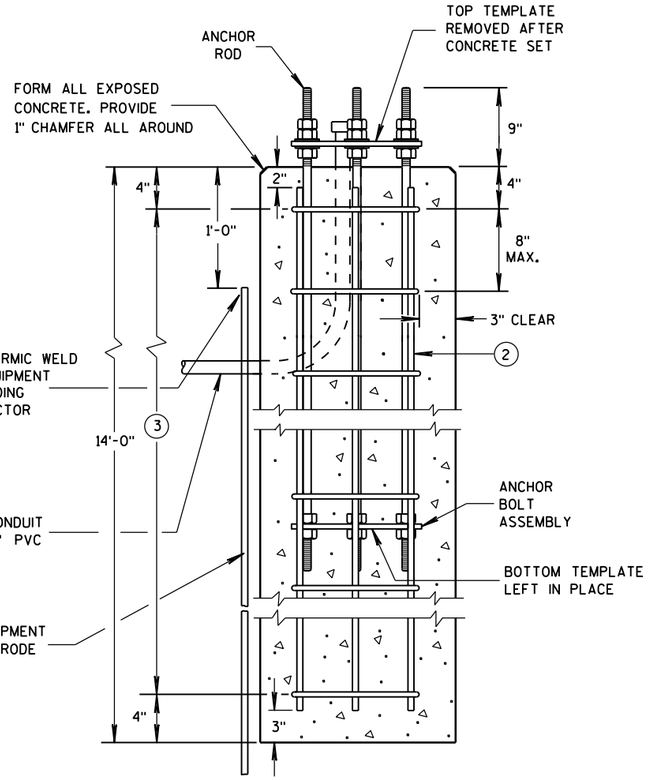
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES. (GREATER THAN 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) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. 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, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

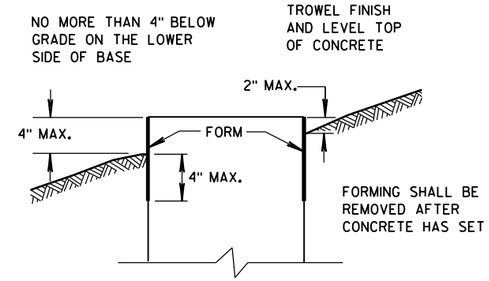




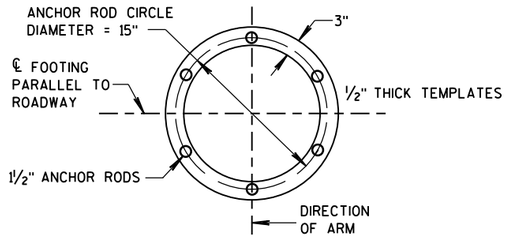
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

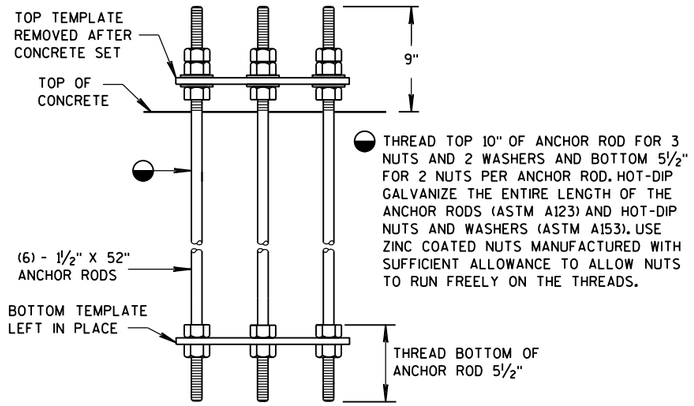
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



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	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

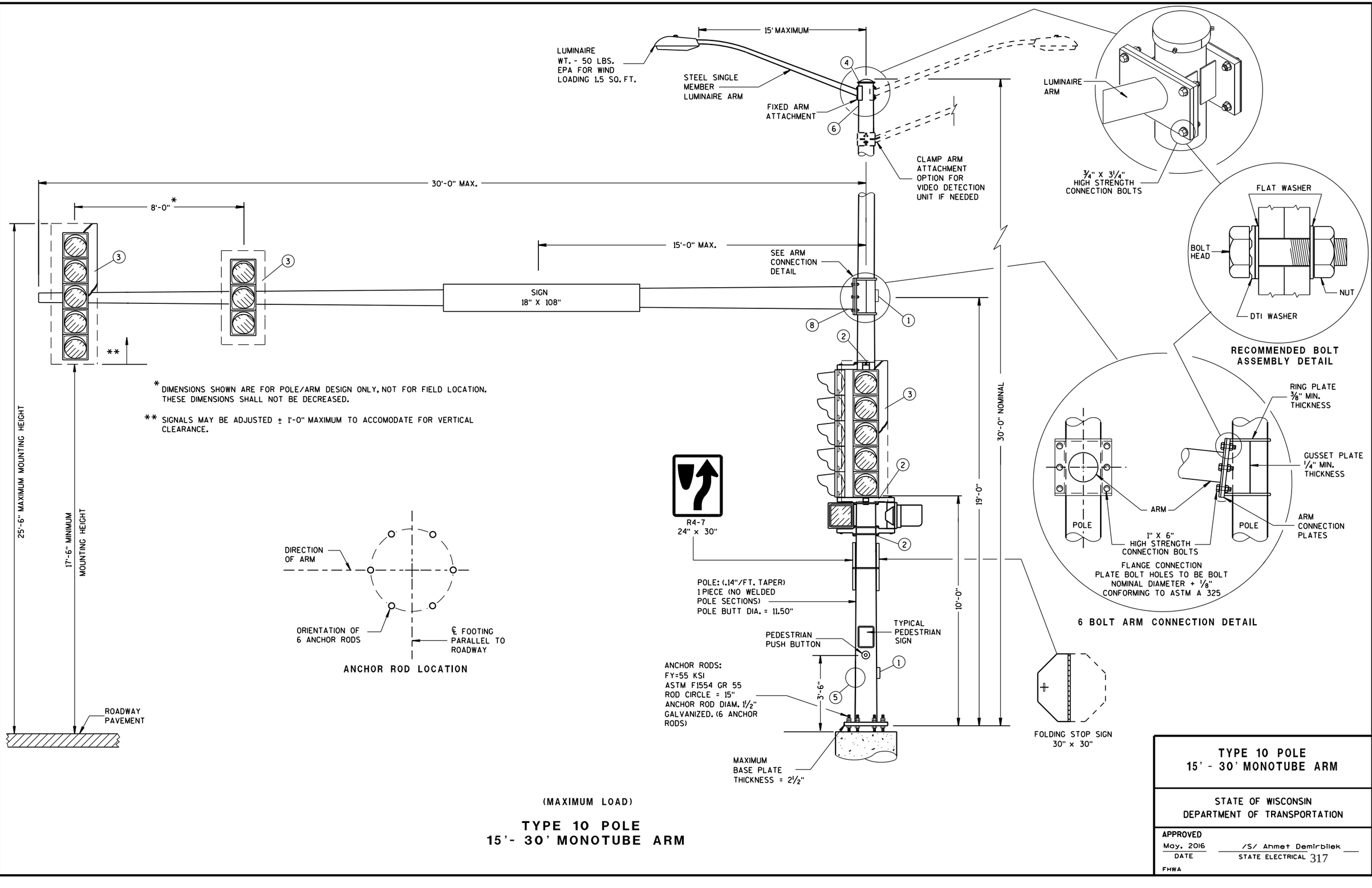
FHWA

6

S.D.D. 9 C 11-10

6

S.D.D. 9 C 11-10



* 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.

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

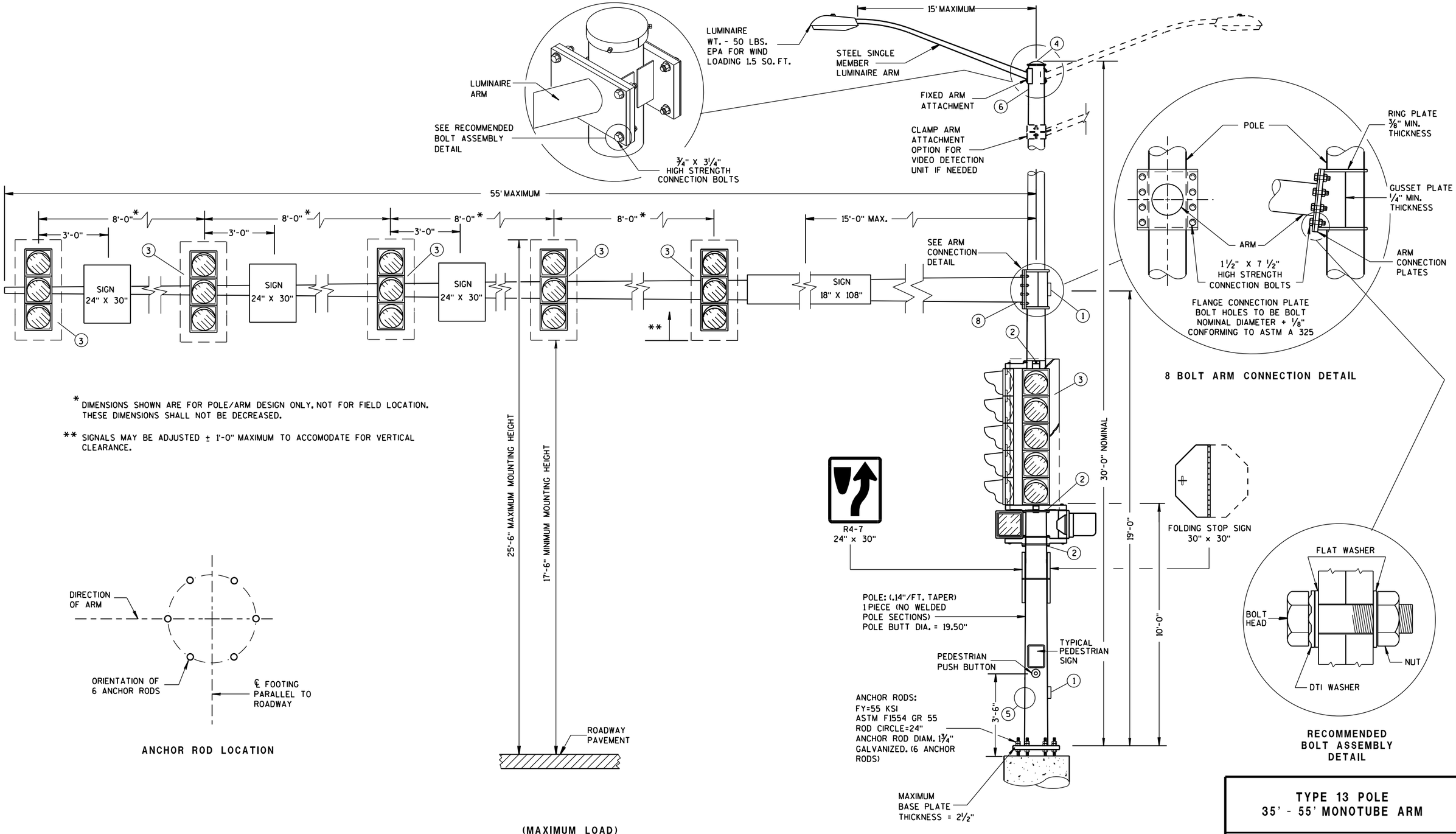
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

317

6

S.D.D. 9 E 8-8b



* 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.

8 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 318
FHWA

6

S.D.D. 9 E 8-8d

6

S.D.D. 9 E 8-8d

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 AASHTO 2013 6TH EDITION 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.

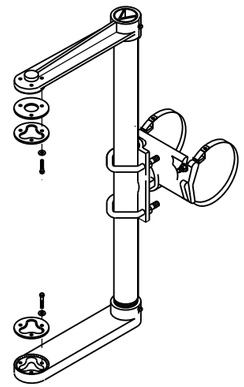
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

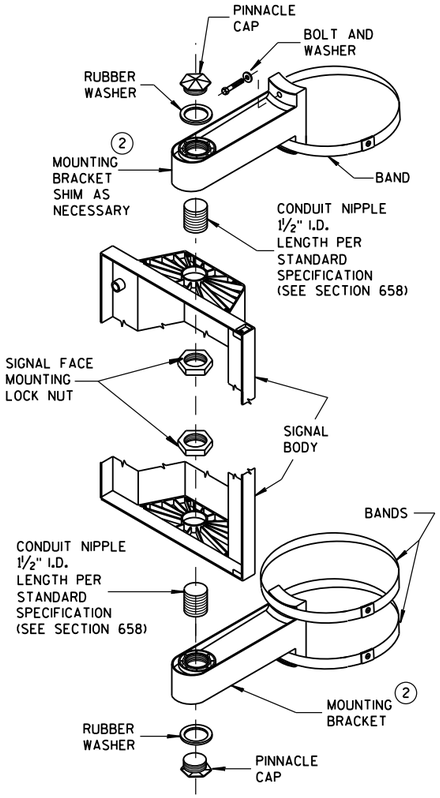
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

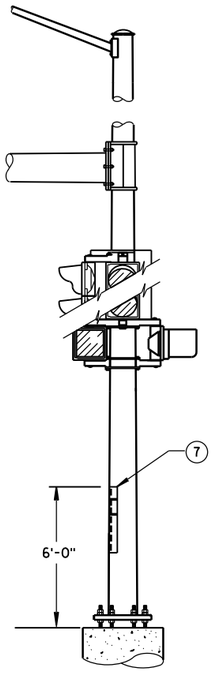


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

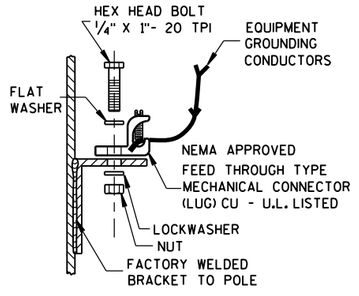
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

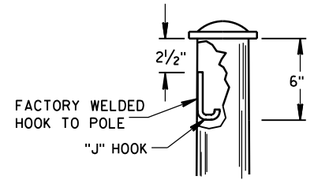


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"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

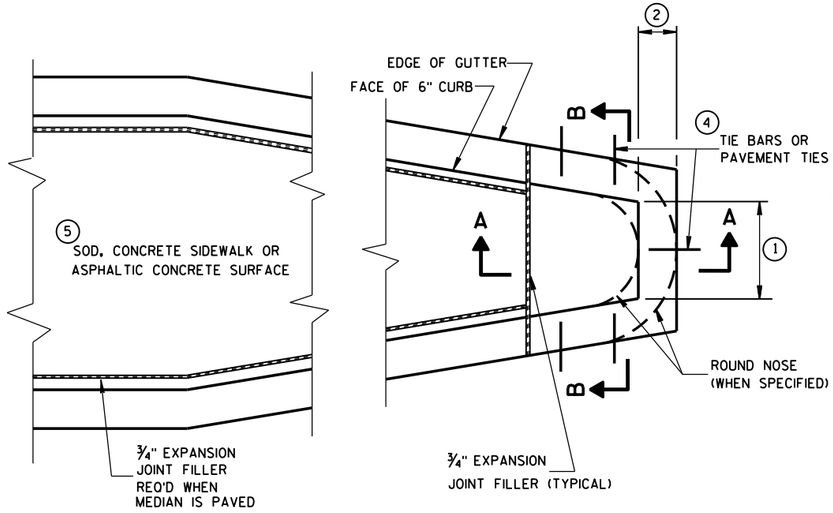
APPROVED
May 2016
DATE

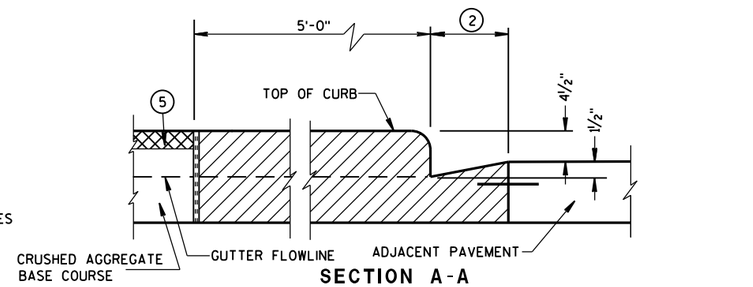
/S/ Ahmet Demirbilek
STATE ELECTRICAL

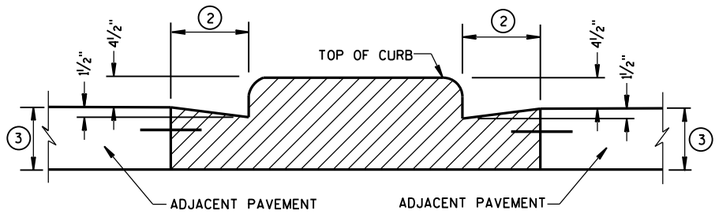
FHWA

6

S.D.D. 9 E 8-8e







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

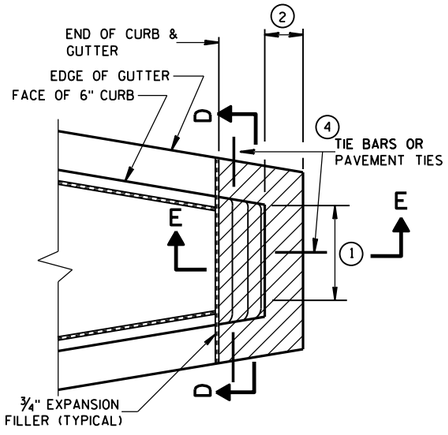
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

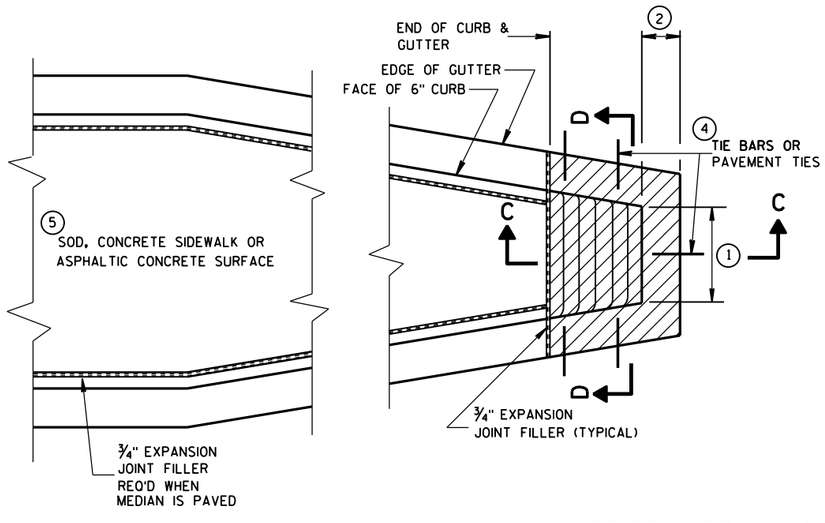
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

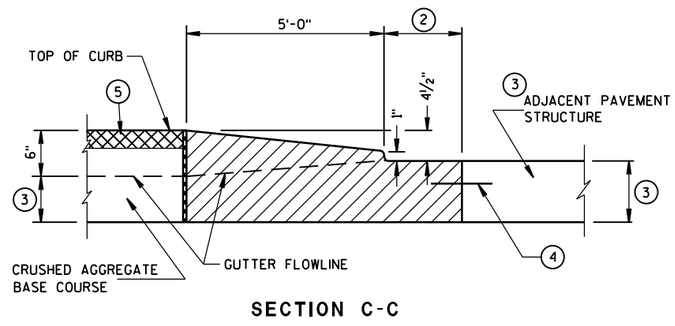
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

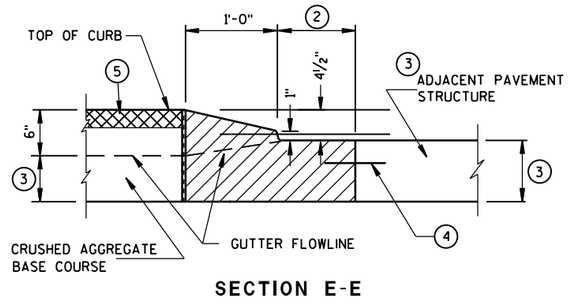
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



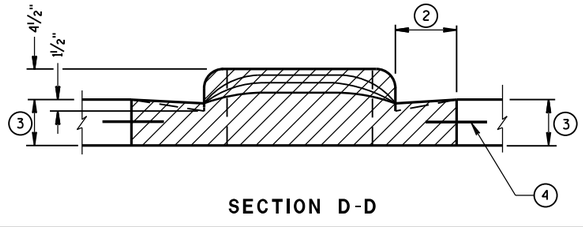






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

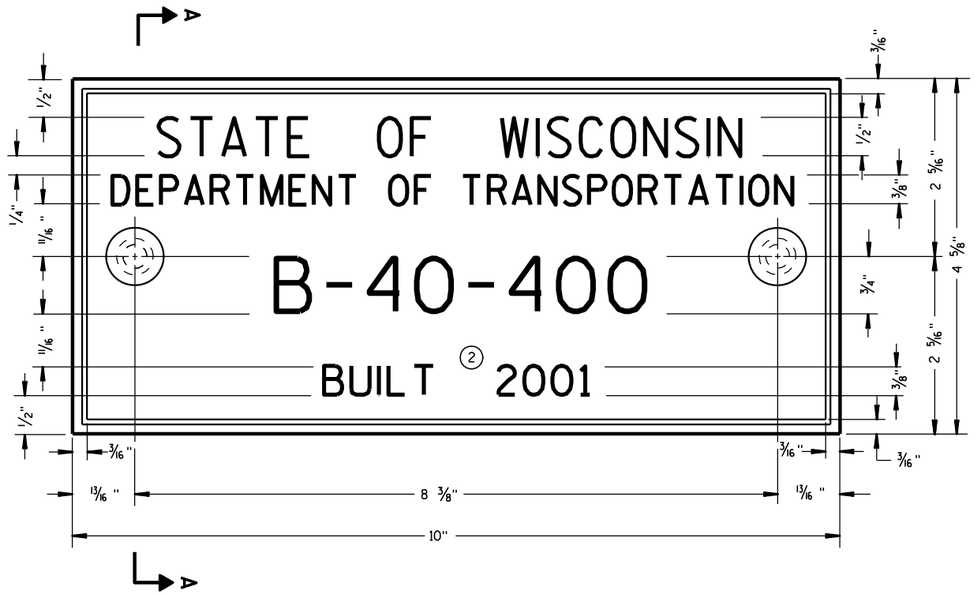
FHWA

6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

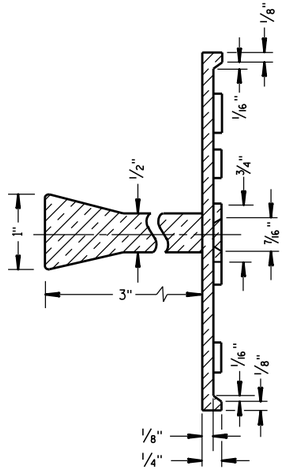
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

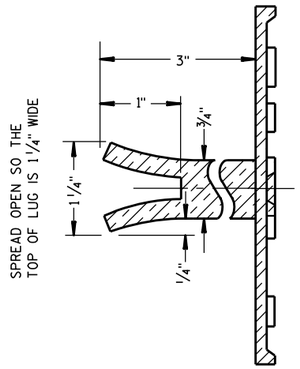
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

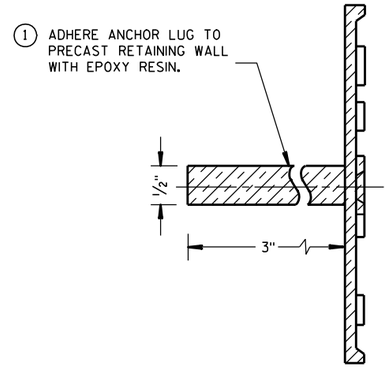
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

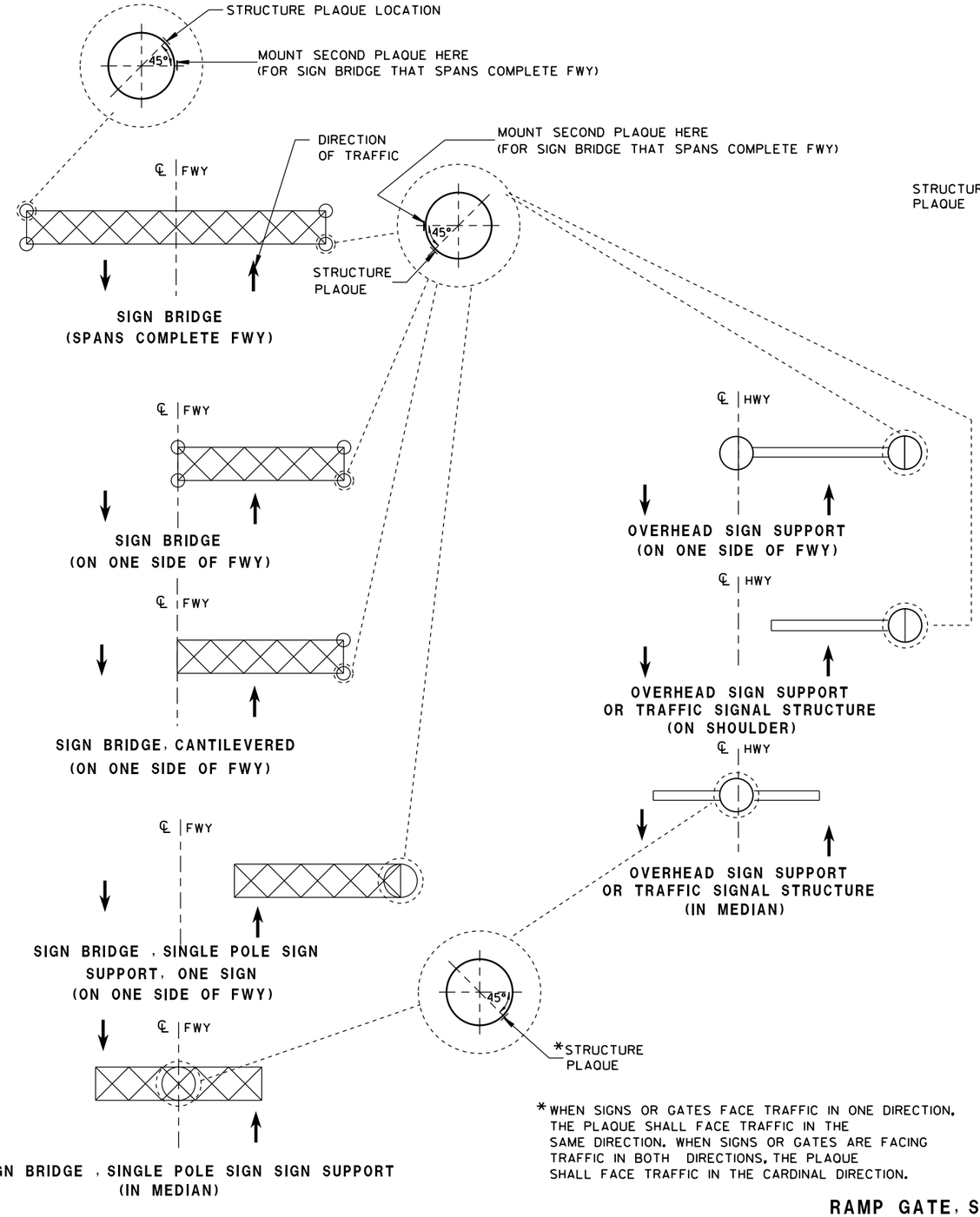
FHWA

6

S.D.D. 12 A 3-10

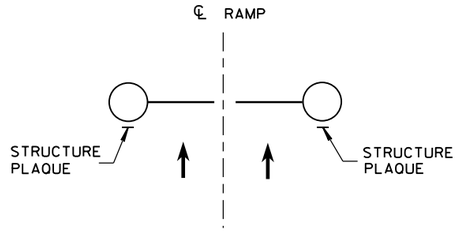
6

S.D.D. 12 A 3-10

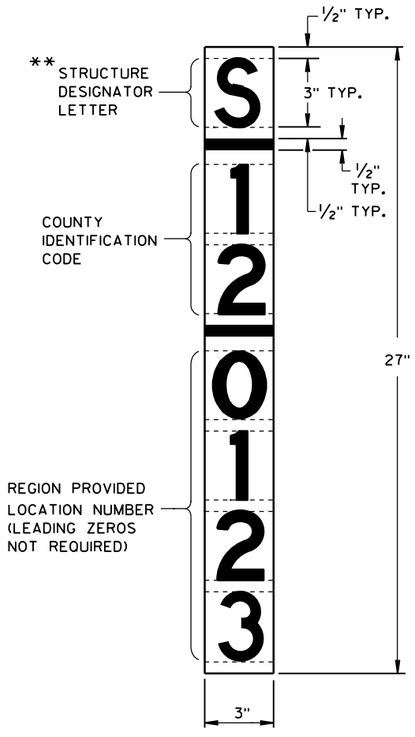


* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

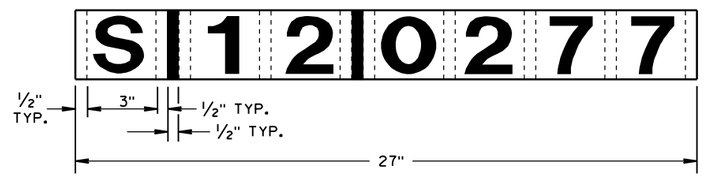
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

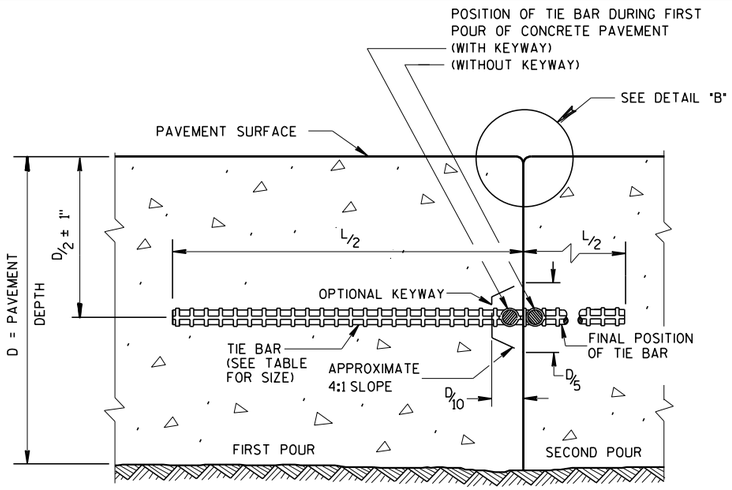
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

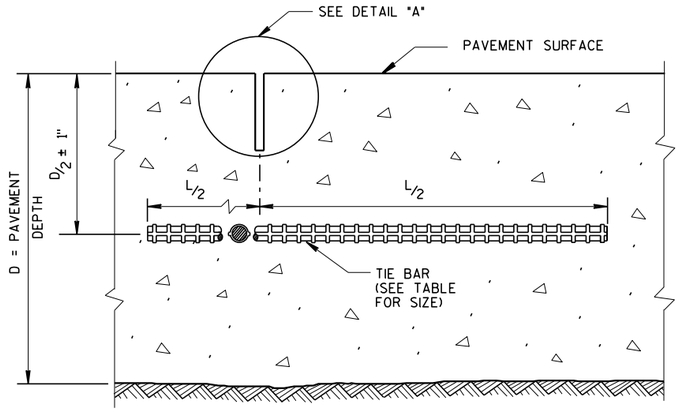
S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

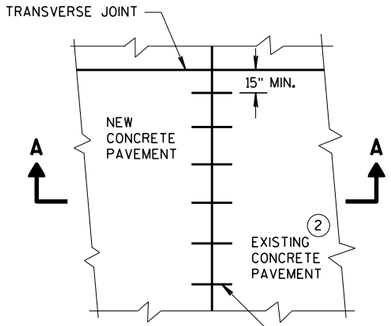
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

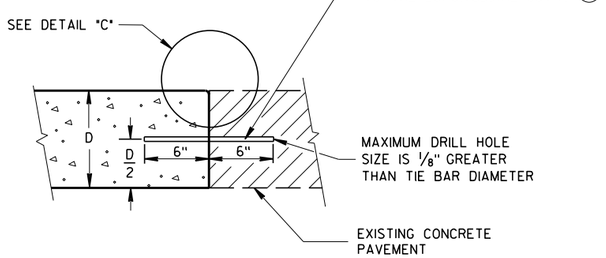
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

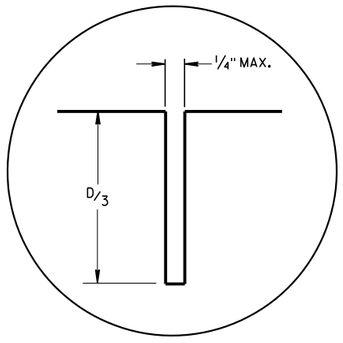


PLAN VIEW

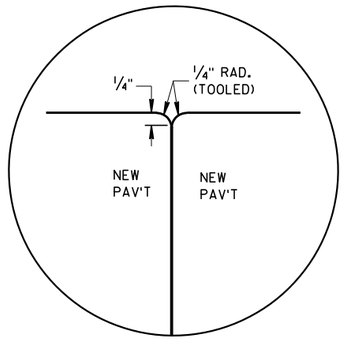


SECTION A-A

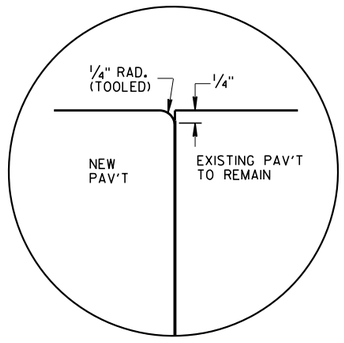
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



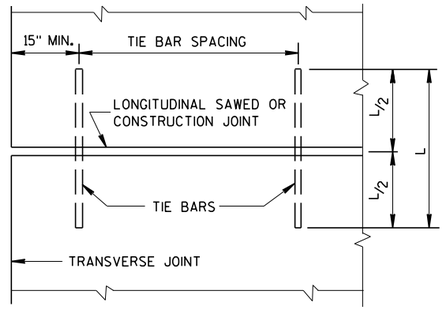
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

6

S.D.D. 13 C 1-19

6

S.D.D. 13 C 1-19

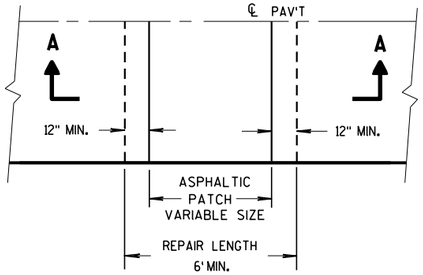
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

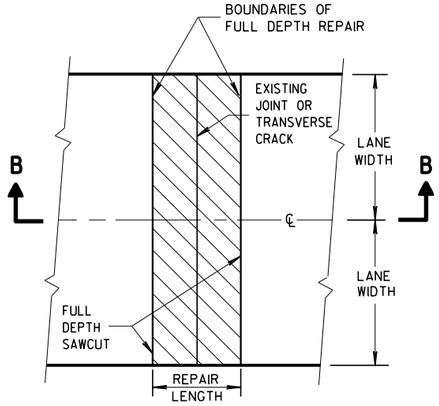
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

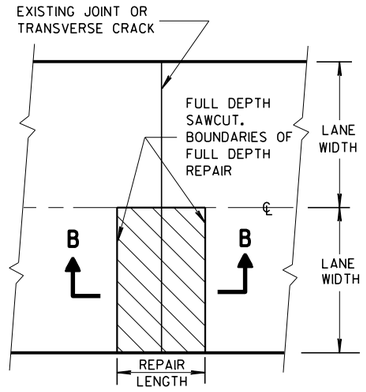
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

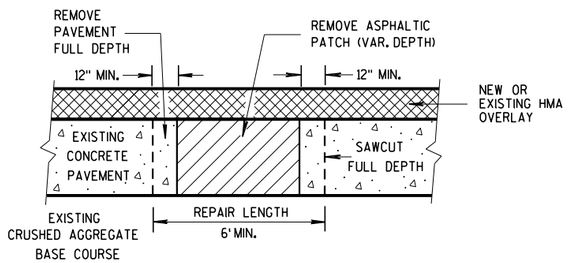


PLAN VIEW
(DOUBLE LANE REPAIR)



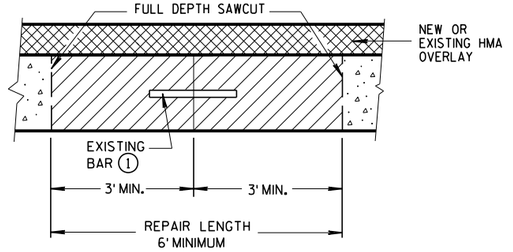
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

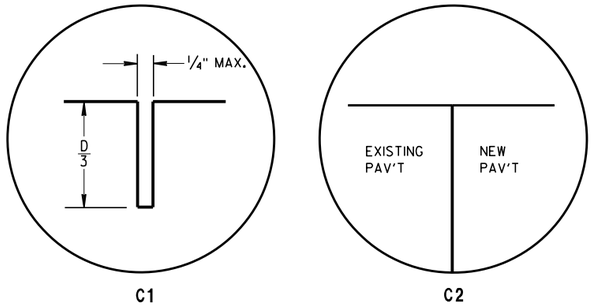
6

6

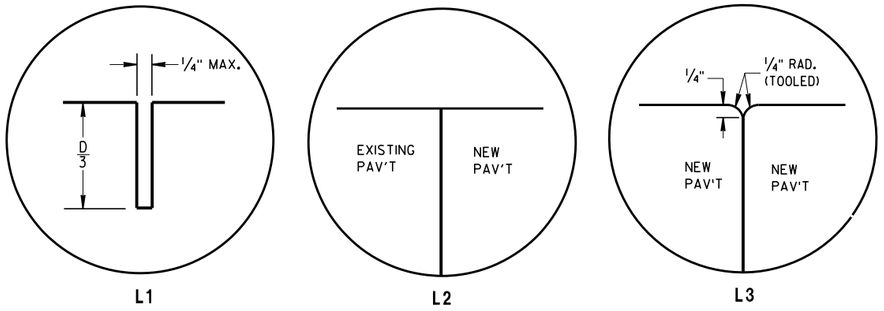
S.D.D. 13 C 14-7a

S.D.D. 13 C 14-7a

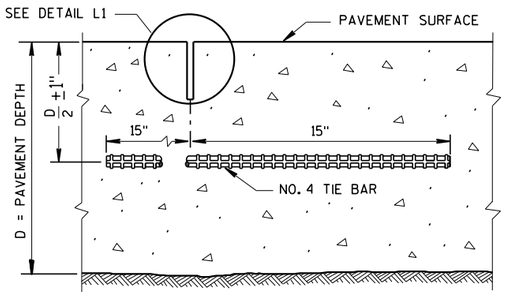
BASE PATCHING CONCRETE



TRANSVERSE JOINTS

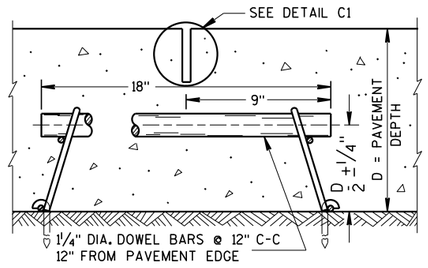


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

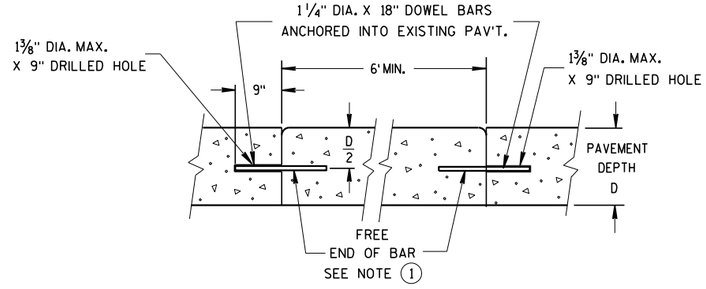
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

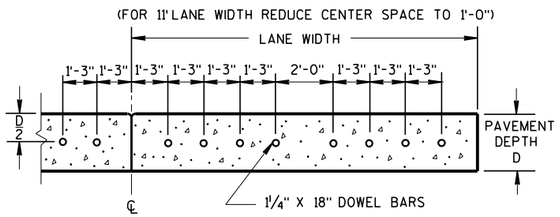
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

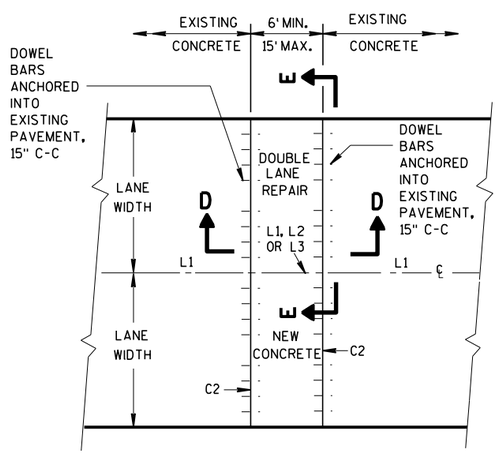


SECTION D-D



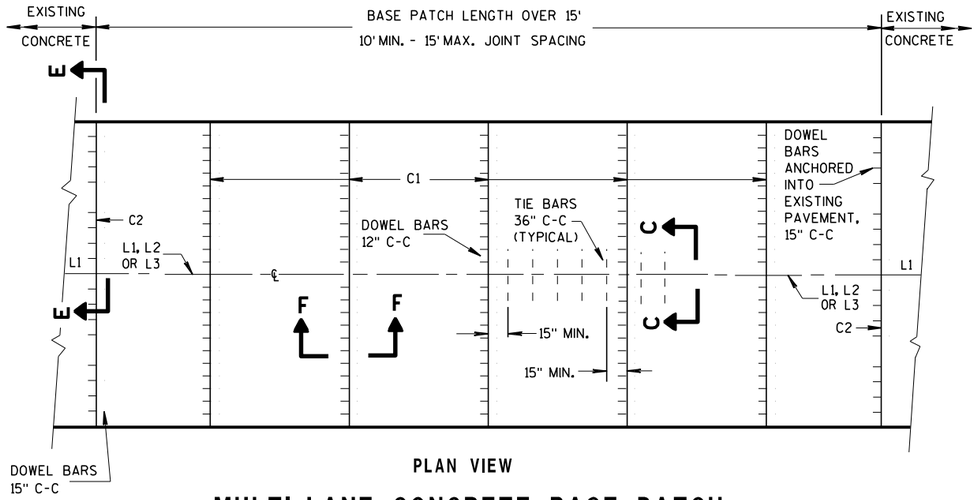
SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

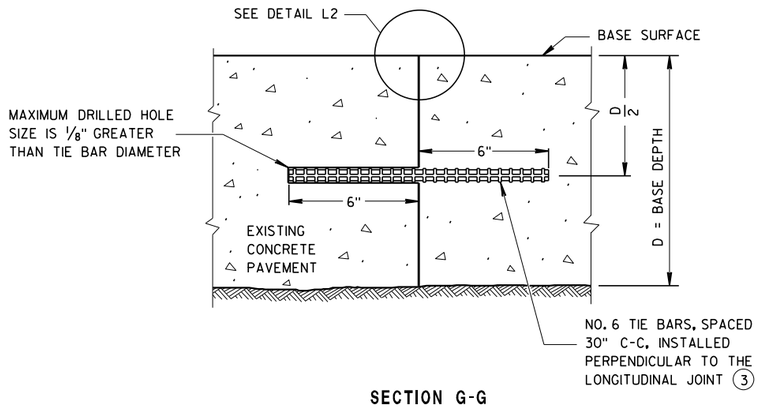
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 14-7b

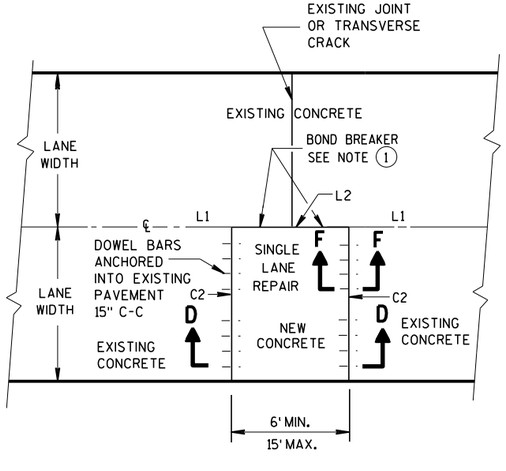
6

S.D.D. 13 C 14-7b



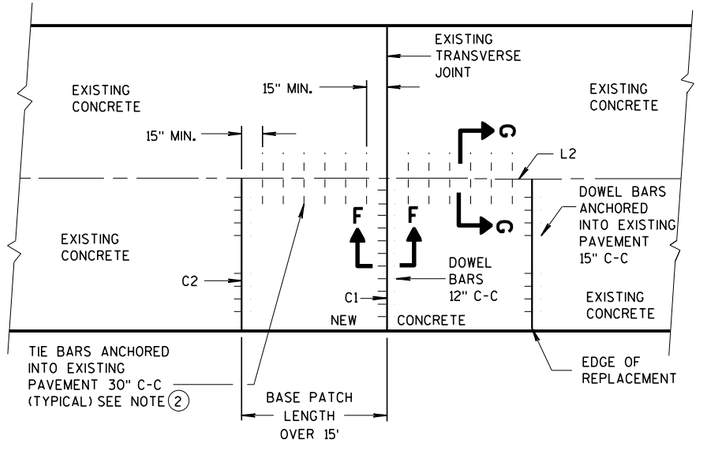
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

6

S.D.D. 13 C 14-7c

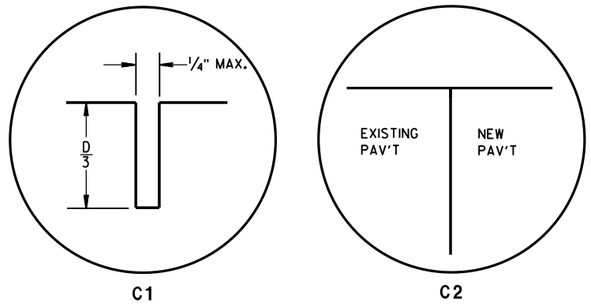
BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

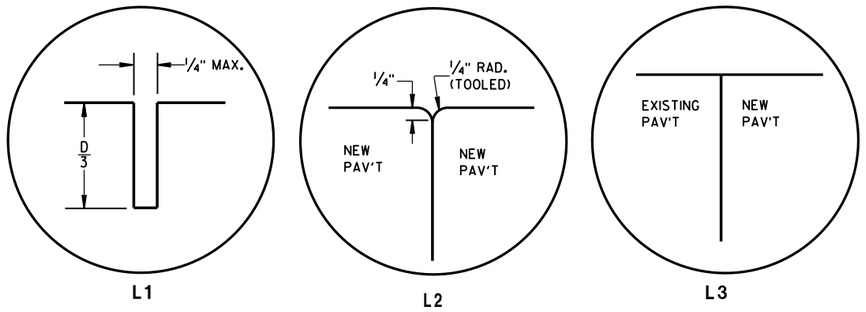
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR
FHWA

6

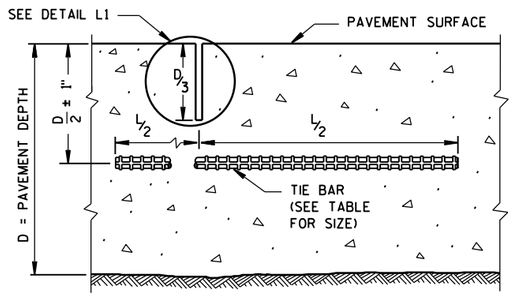
S.D.D. 13 C 14-7c



TRANSVERSE JOINTS

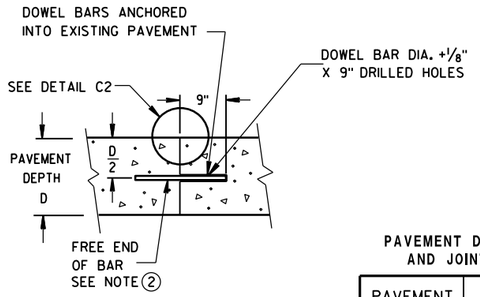


LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

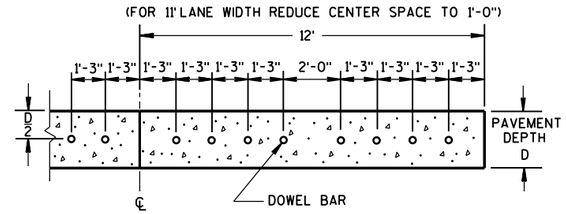
GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 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

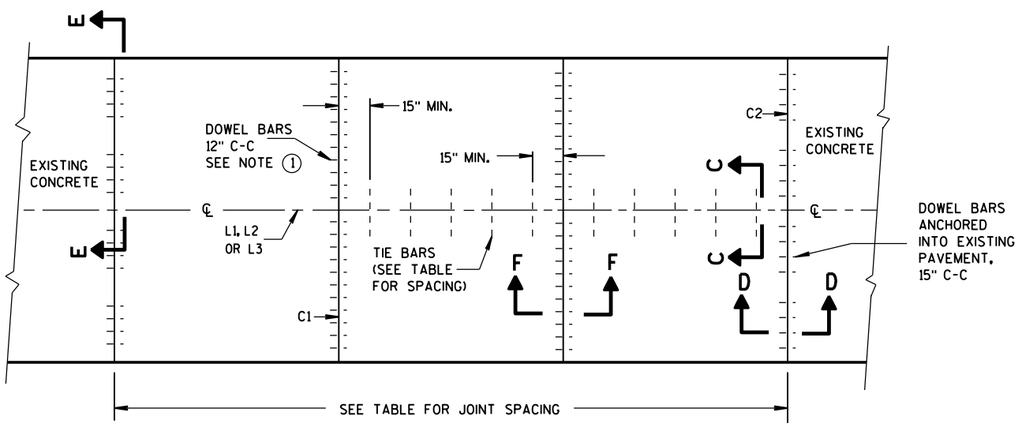
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6, 6 ½"	NONE	12'
7, 7 ½"	1"	14'
8, 8 ½"	1 ¼"	15'
9, 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

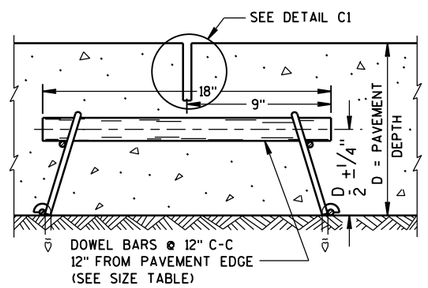
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW

CONCRETE BASE CONTRACTION JOINT LOCATIONS



SECTION F-F

CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

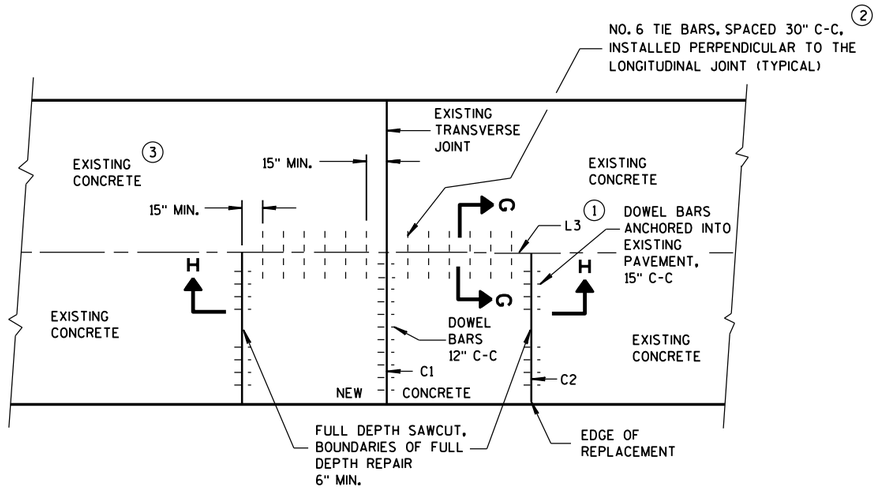
S.D.D. 13 C 15-6a

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.

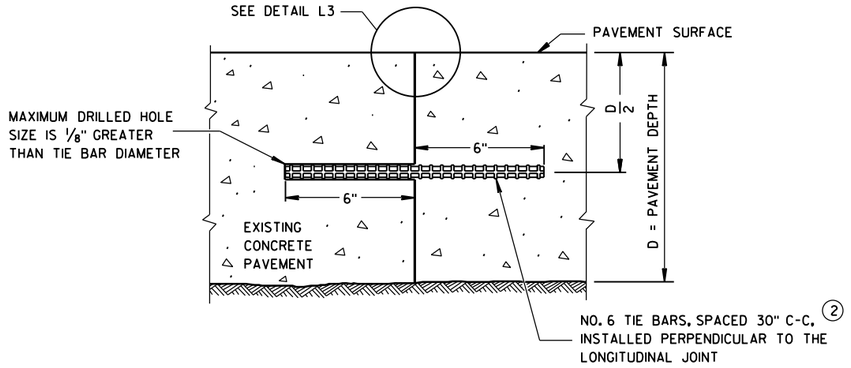
(2) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(3) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



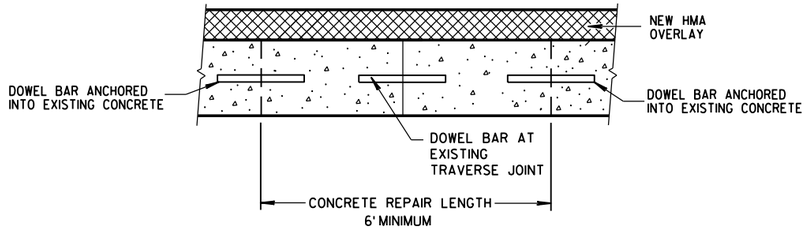
PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR



SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H-H

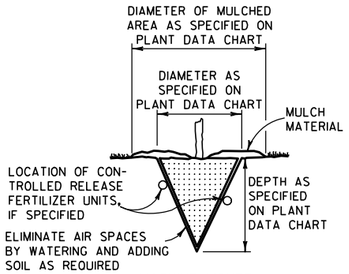
CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

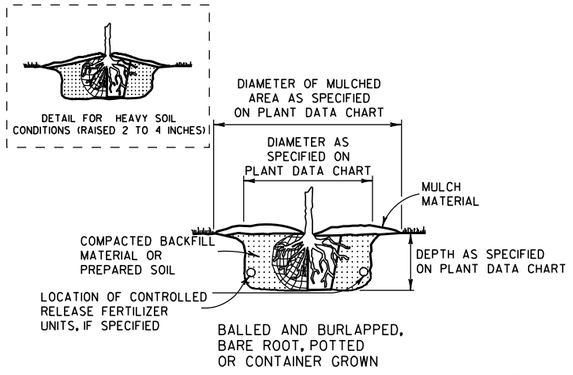
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEI
FHWA

6

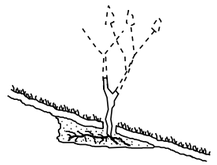
S.D.D. 13 C 15-6b



MACHINE MOVED

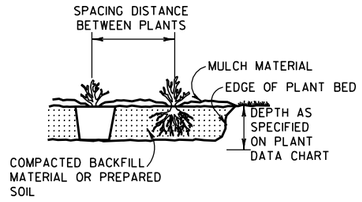


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



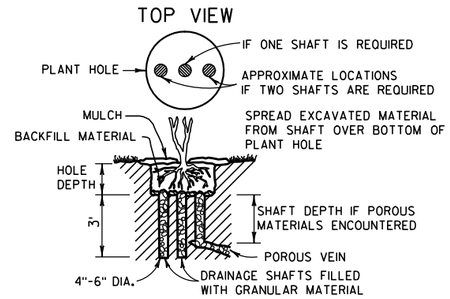
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



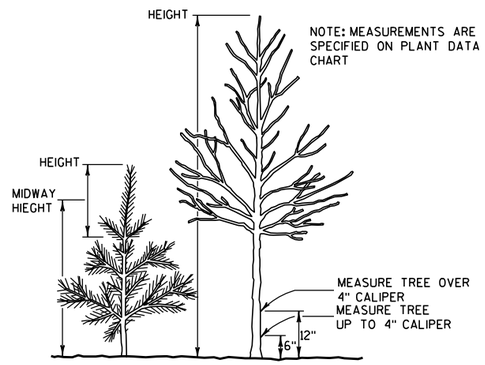
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

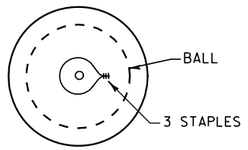


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

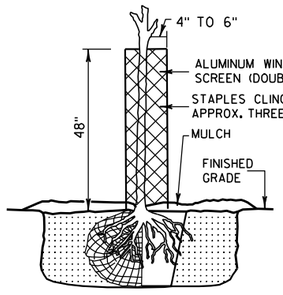
DRAINING



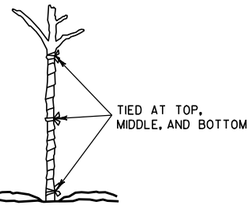
MEASURING



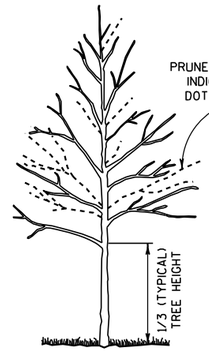
TOP VIEW



RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

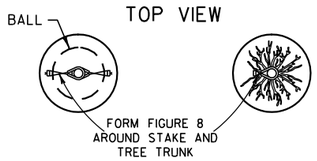


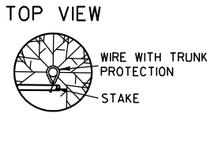
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

SUMAC

TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

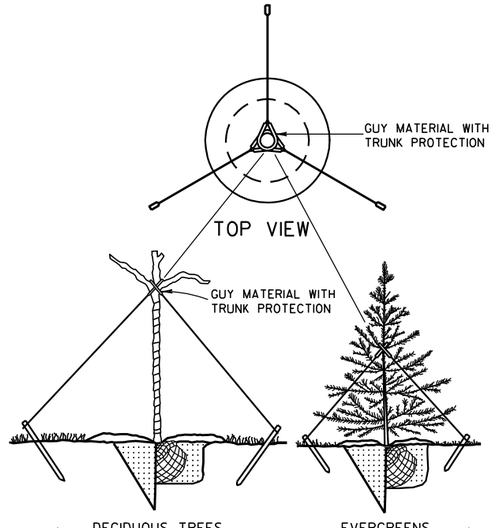
PRUNING



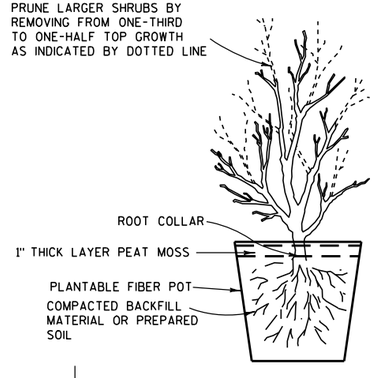


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

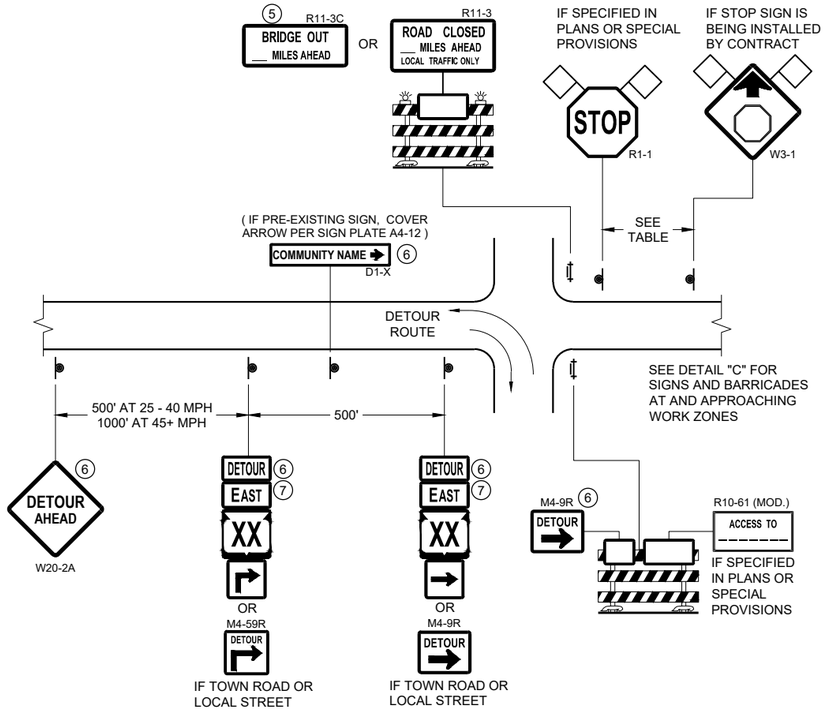
TREE PLANTING DETAIL

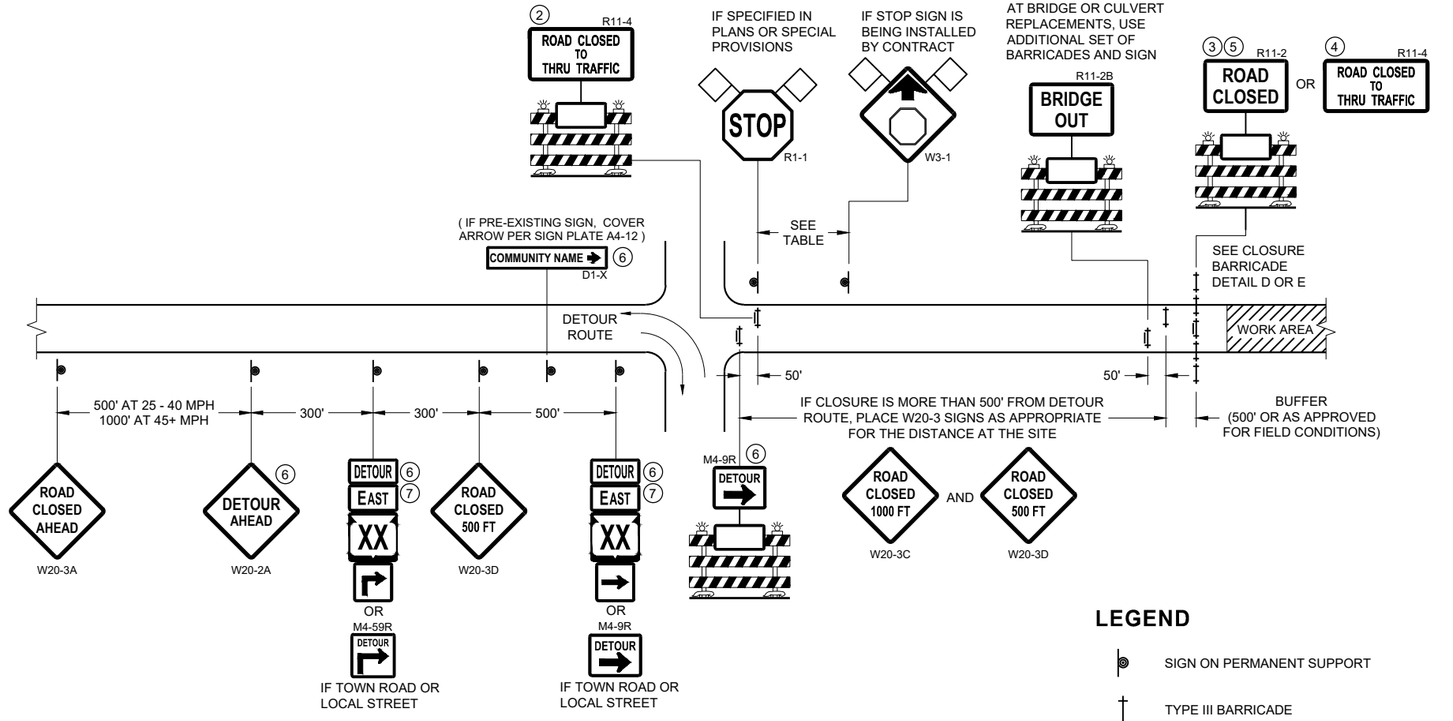
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

6

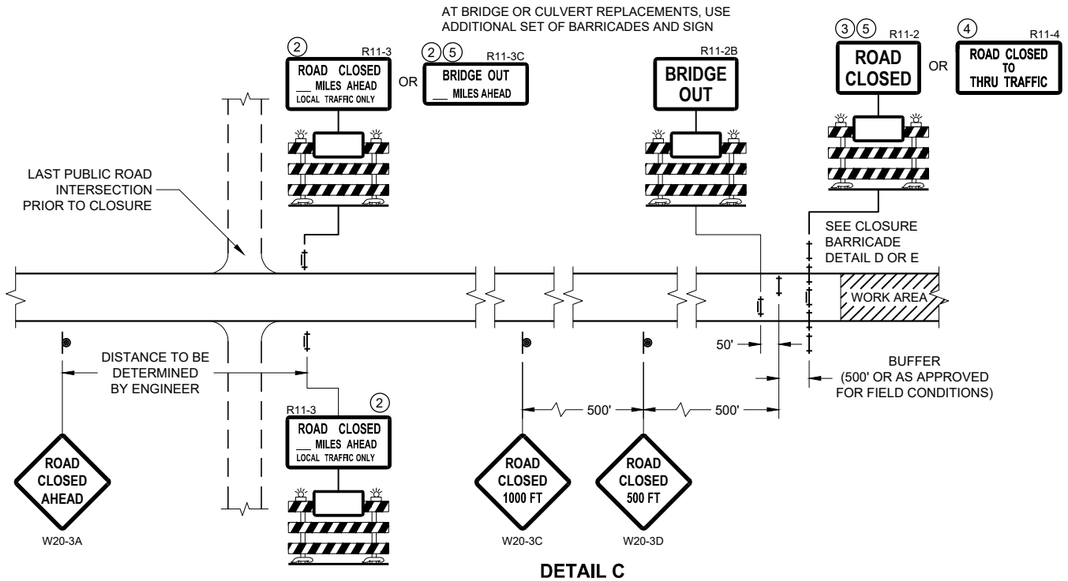
S.D.D. 14 A 2-1





DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

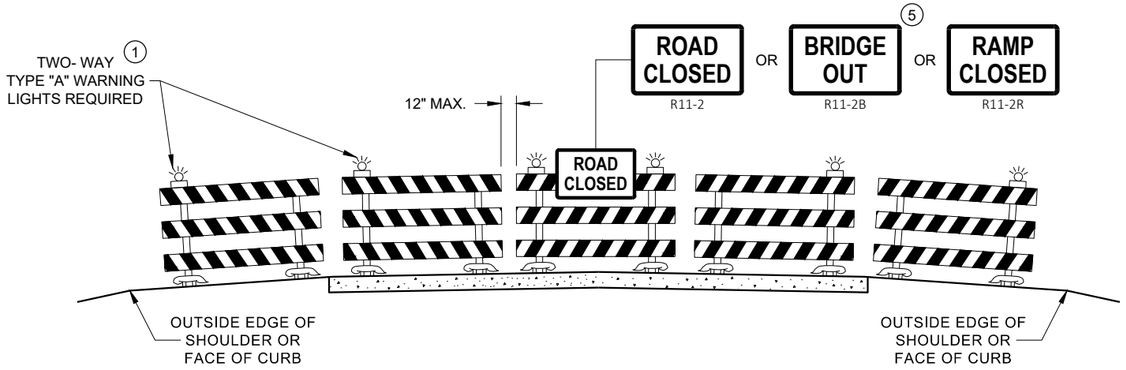
APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

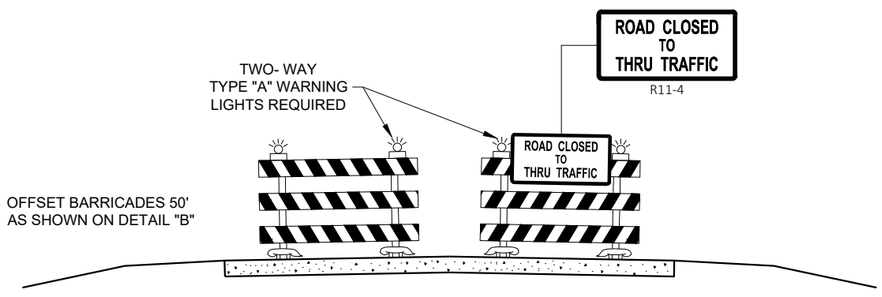
6

SDD 15C02 - 07a

SDD 15C02 - 07a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

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.

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 PORTABLBLE 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, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 15" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDIANAL DIRECTIONS AND ARROWS AS APPROPRIATE.

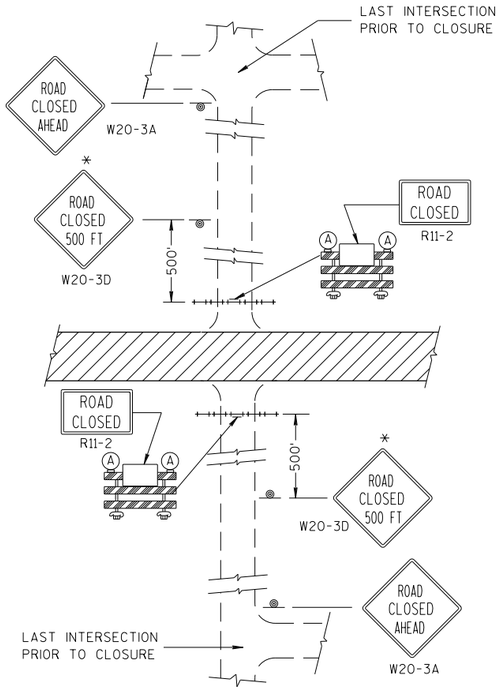
BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

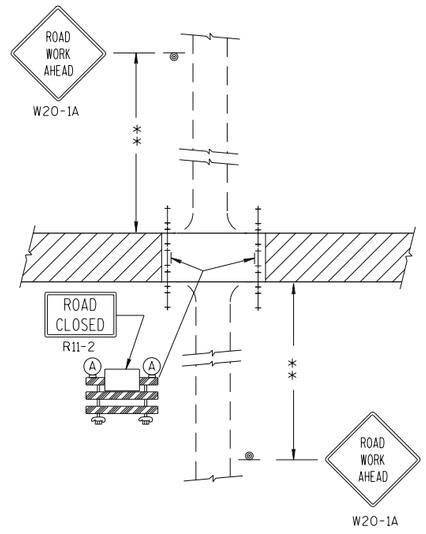
6

SDD 15C02 - 07b



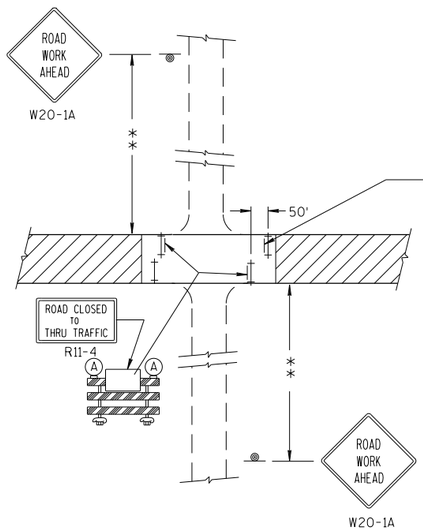
DETAIL 1

(NO ACCESS TO PROJECT)



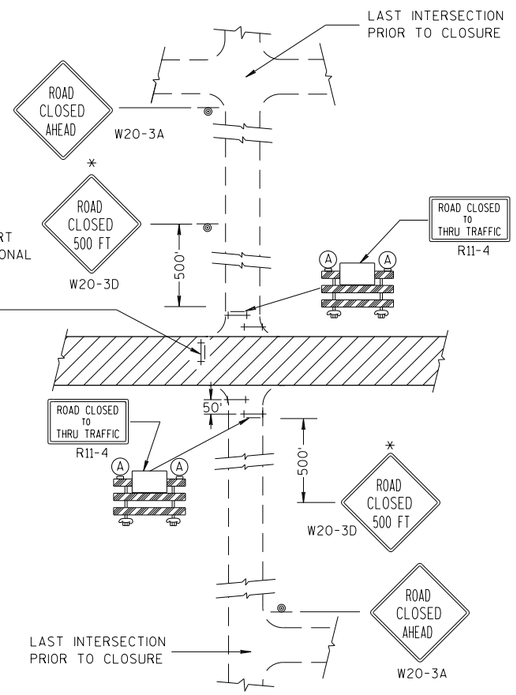
DETAIL 2

(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

7/2018
DATE

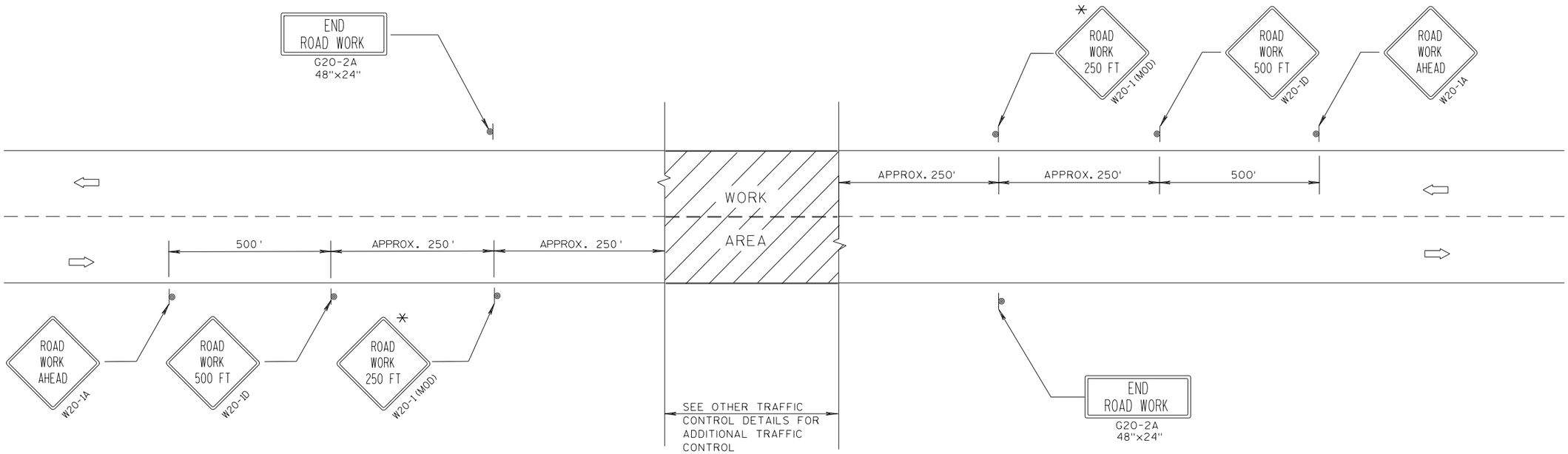
/S/ Andrew Heidtke
WORK ZONE ENGI

FHWA

6

S.D.D. 15 C 3-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

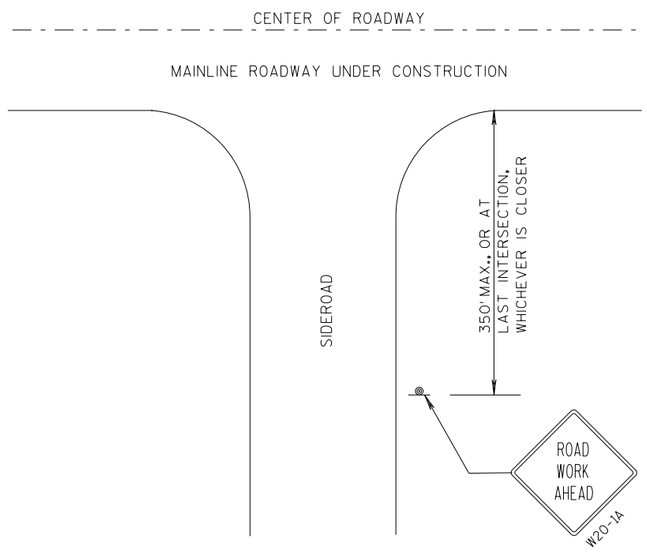
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

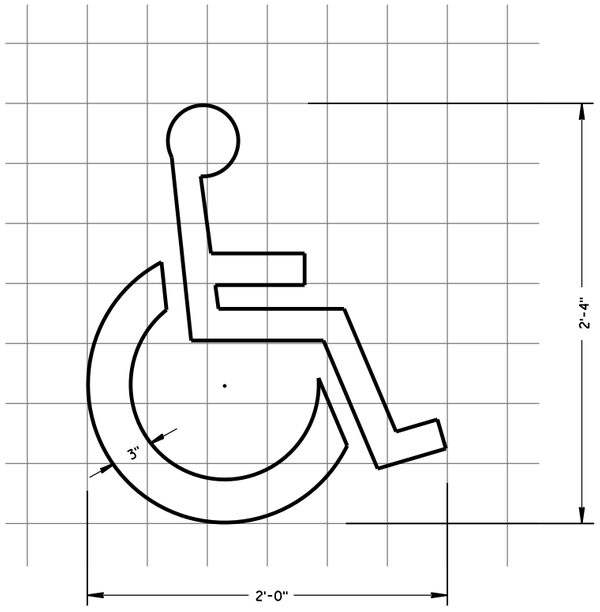
APPROVED
7/2018 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

6

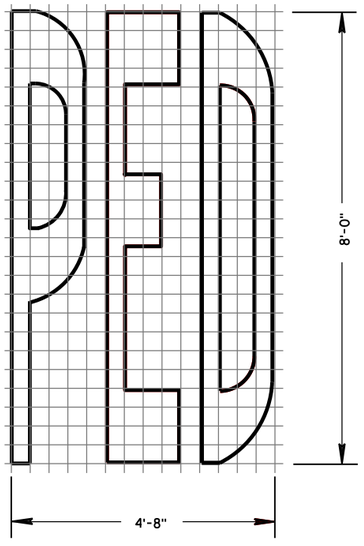
S.D.D. 15 C 5-5

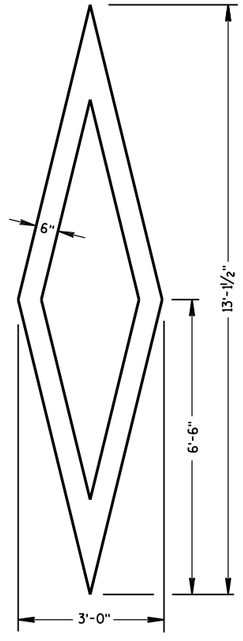
GENERAL NOTES

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.



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

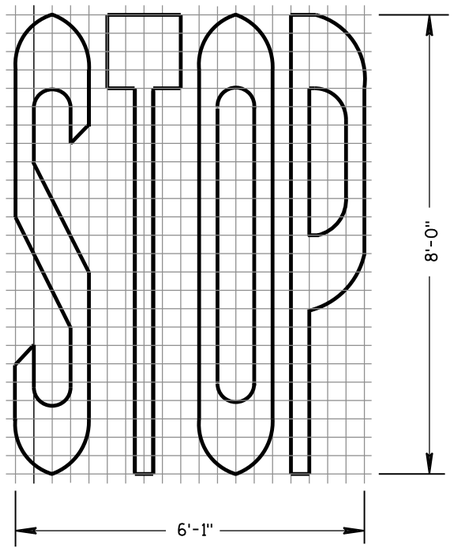
June 2017 — DATE

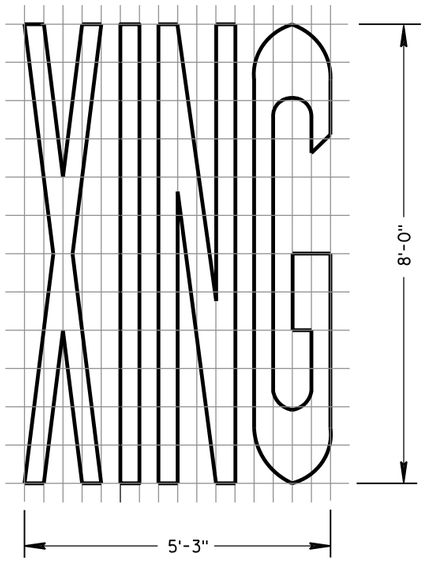
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

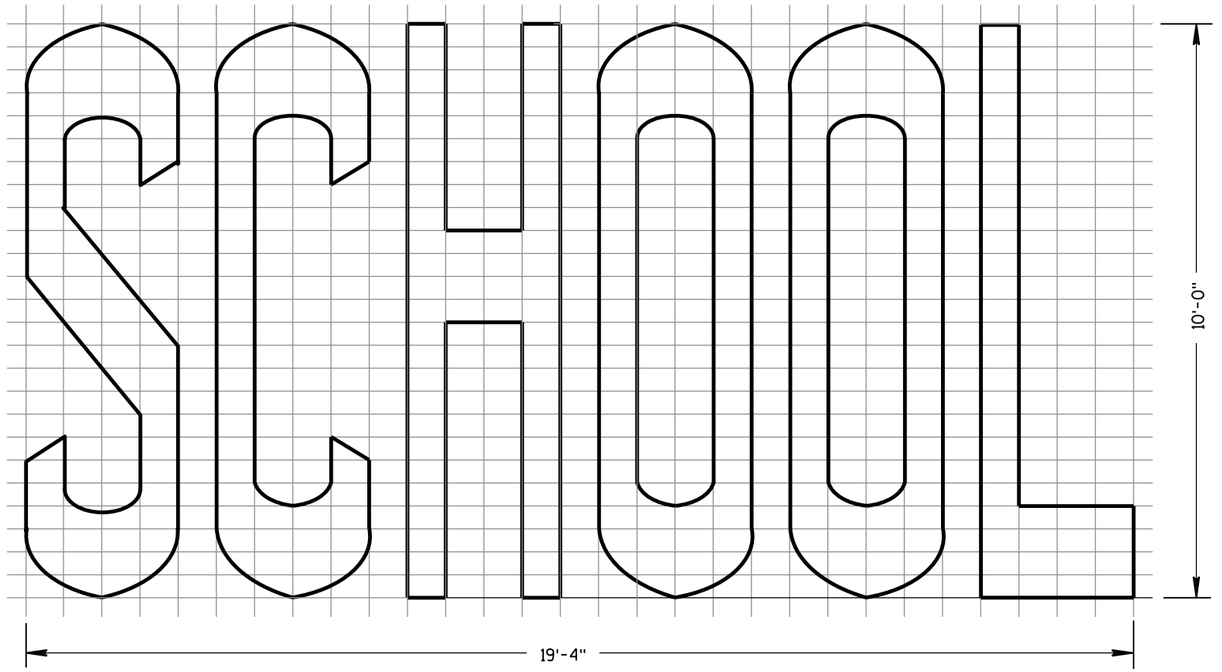
FHWA

GENERAL NOTES

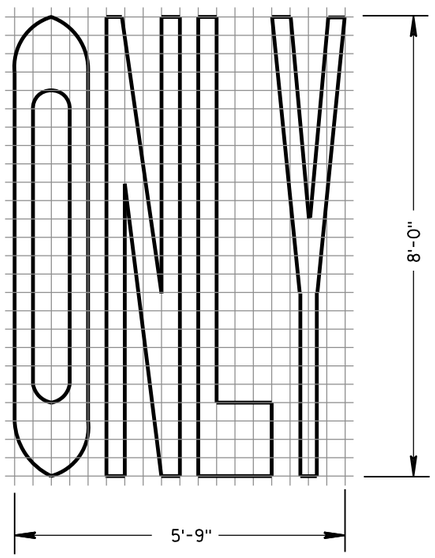
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

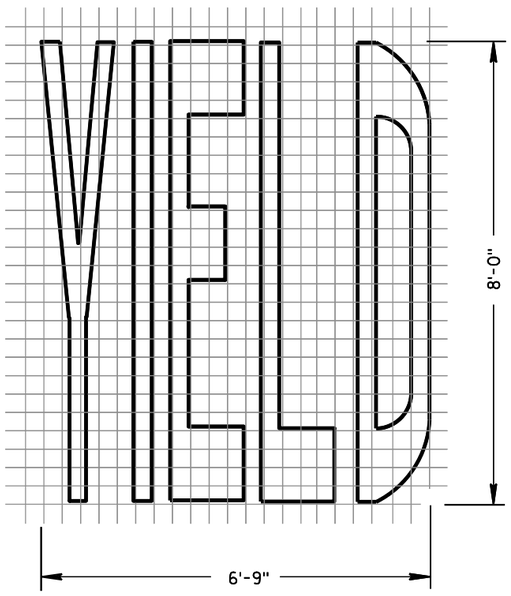


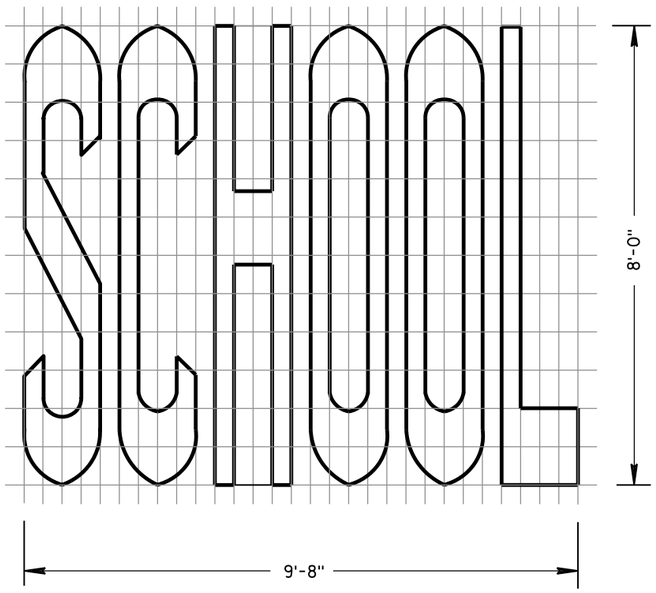




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

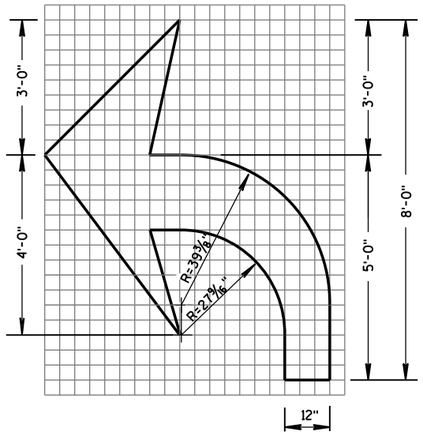
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
335
EER
FHWA

6

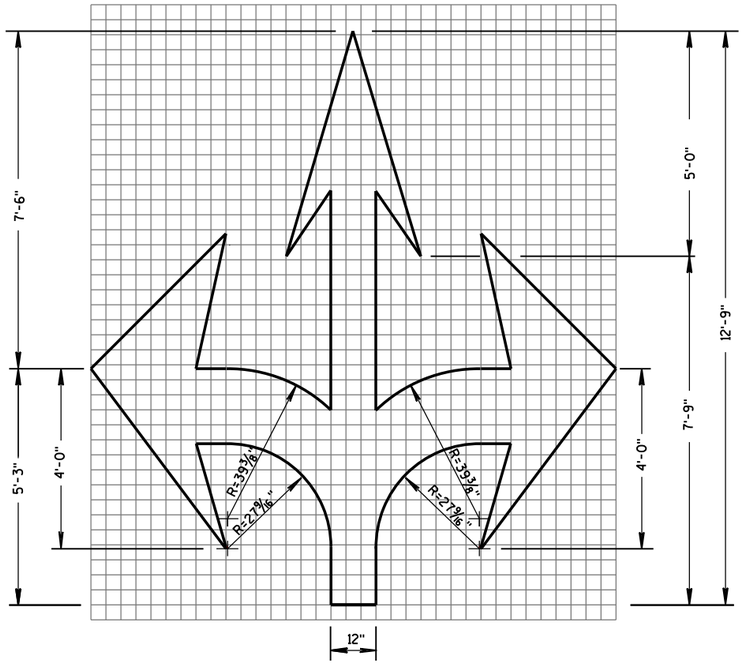
S.D.D. 15 C 7-14b

6

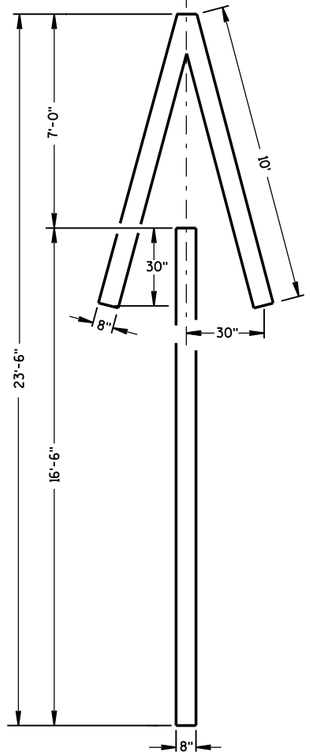
S.D.D. 15 C 7-14b



TYPE 2



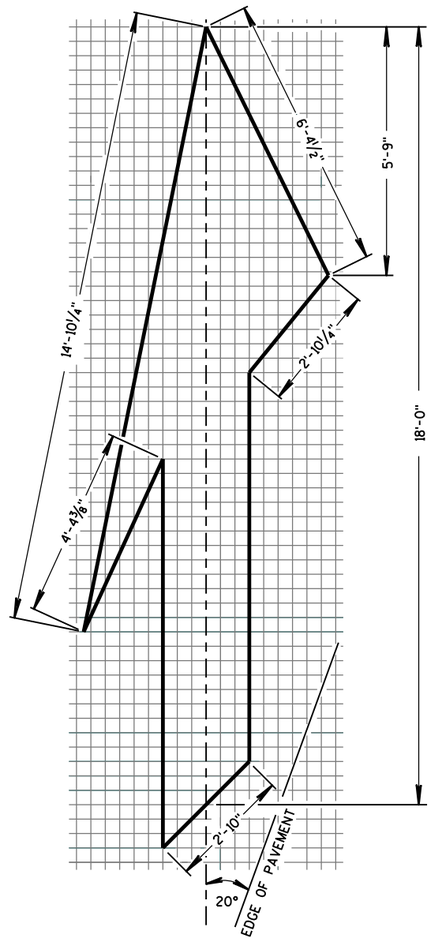
TYPE 6



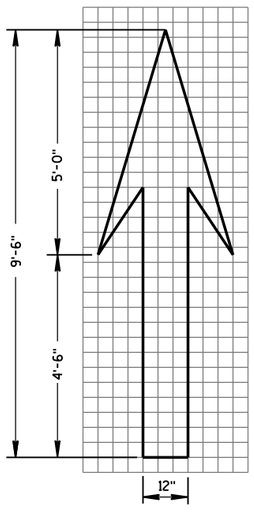
TYPE 4

GENERAL NOTES

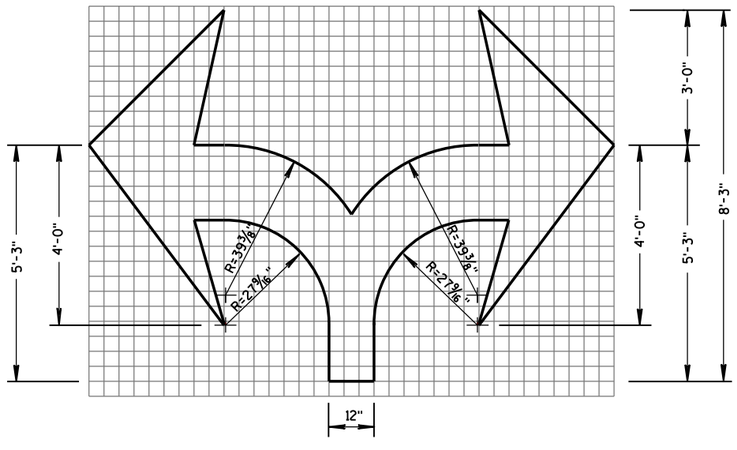
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



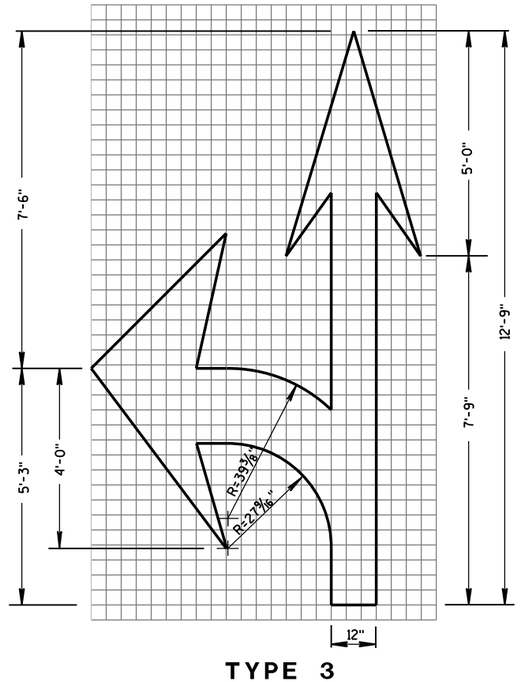
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

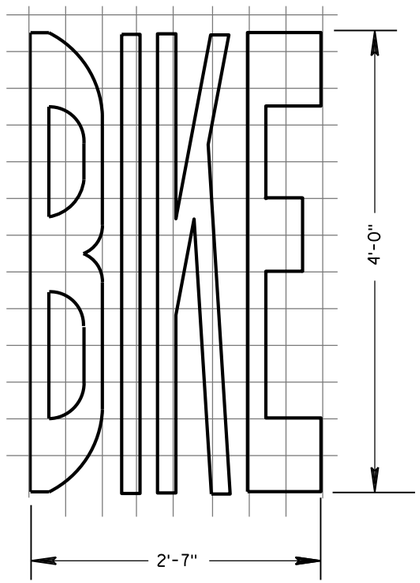
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

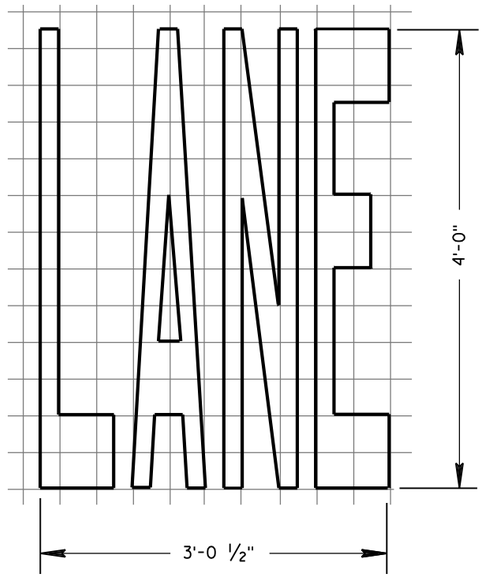
6

S.D.D. 15 C 7-14c

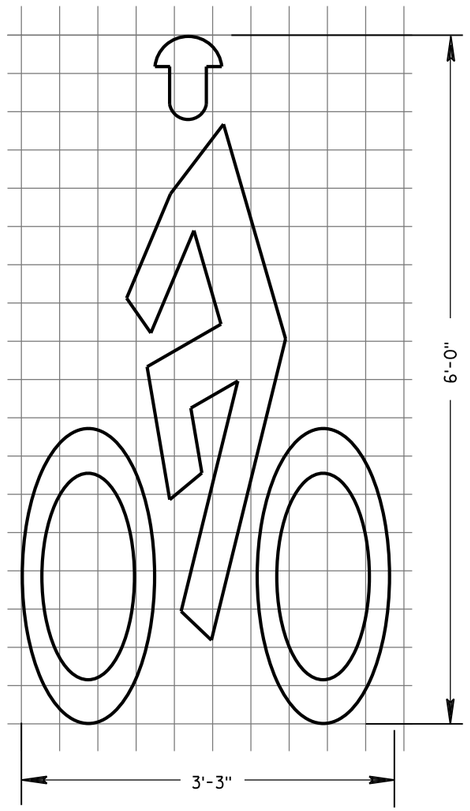
6

S.D.D. 15 C 7-14c

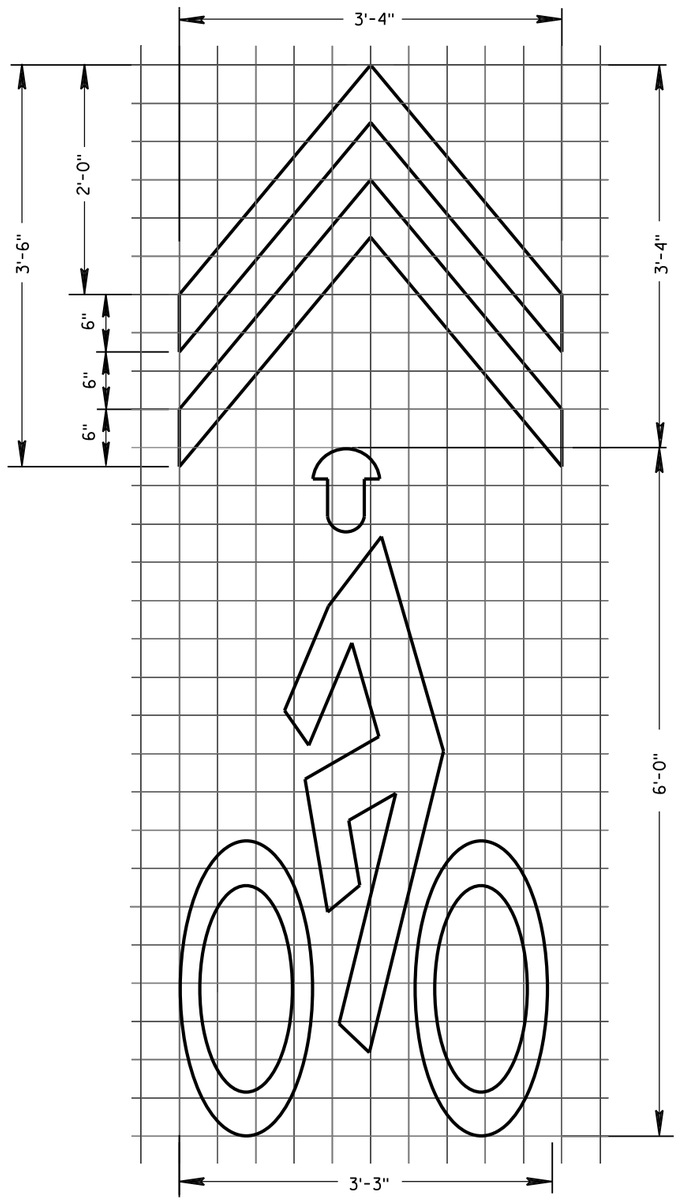




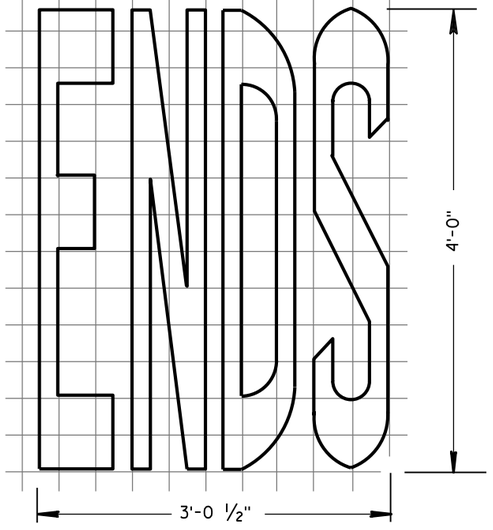
BIKE LANE WORDS



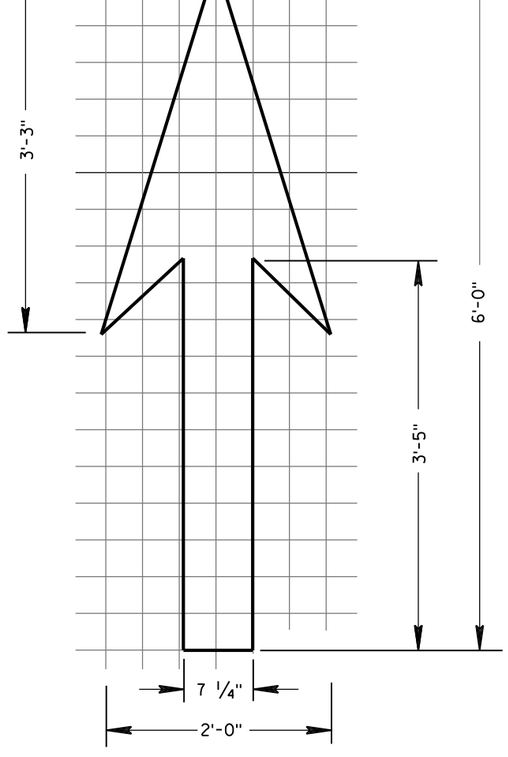
BIKE LANE SYMBOL



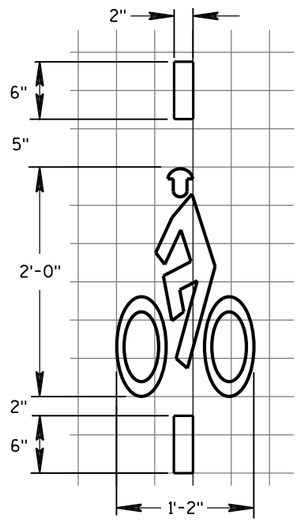
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

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.

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

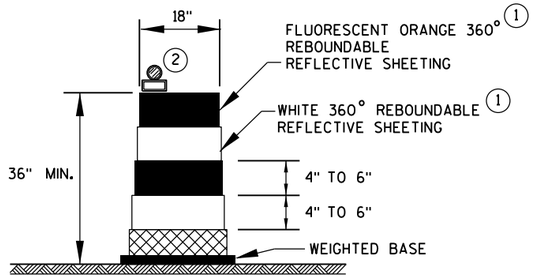
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

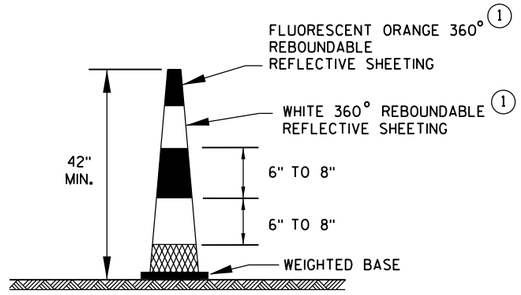
S.D.D. 15 C 7-14e

6

S.D.D. 15 C 7-14e



DRUM

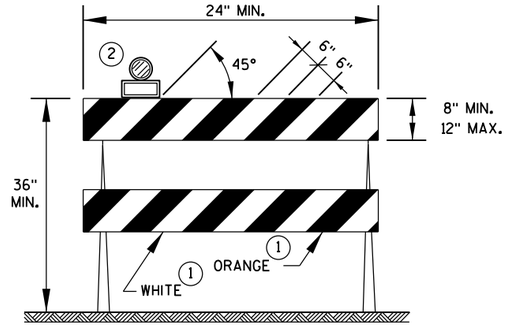


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

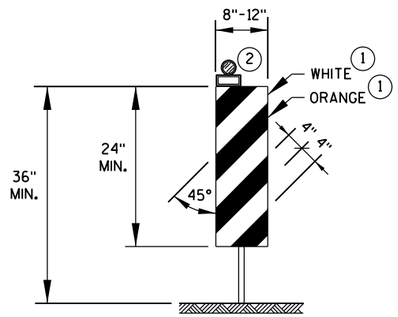
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



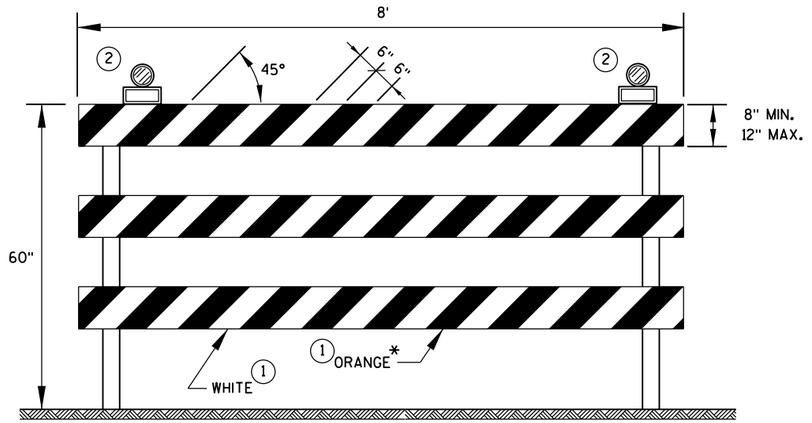
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

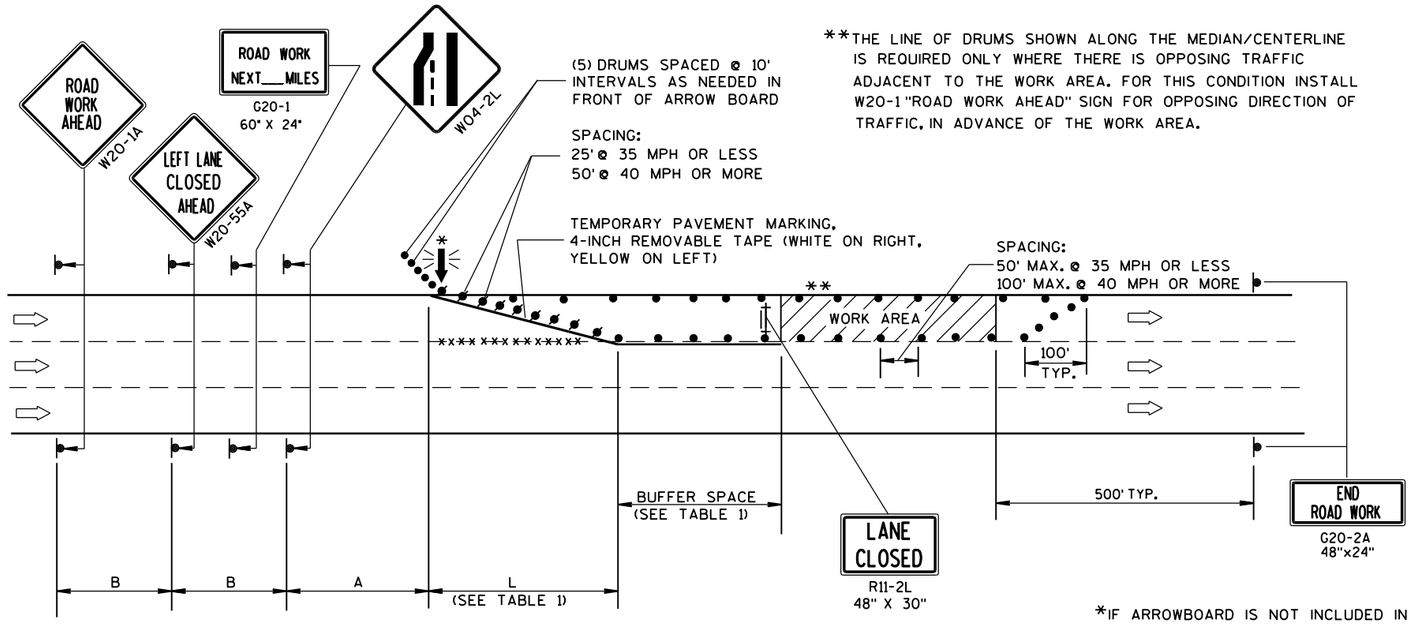
June 2017 — DATE

/S/ Andrew Heidtke — WORK ZONE ENG

FHWA

6

S.D.D. 15 C 11-7b



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

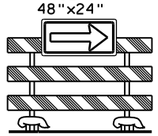


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
FHWA

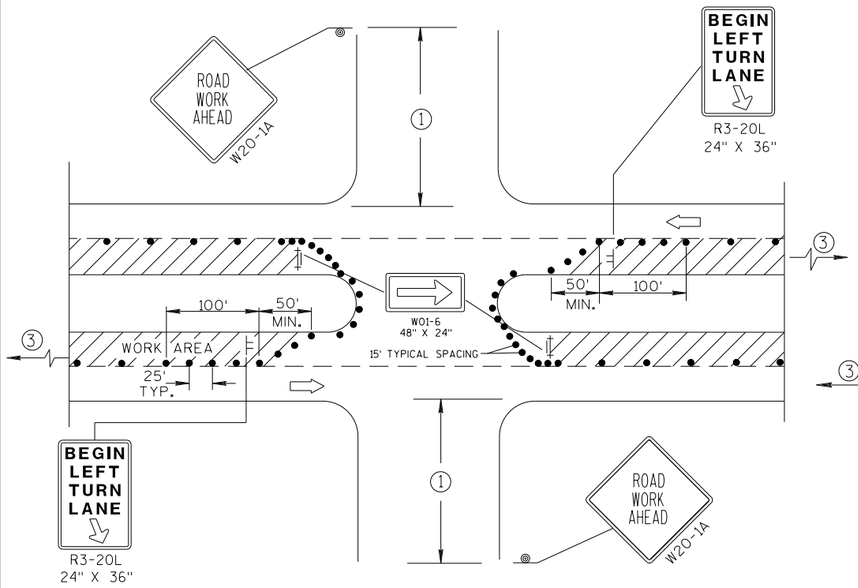
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER

6

S.D.D. 15 D 20-4

6

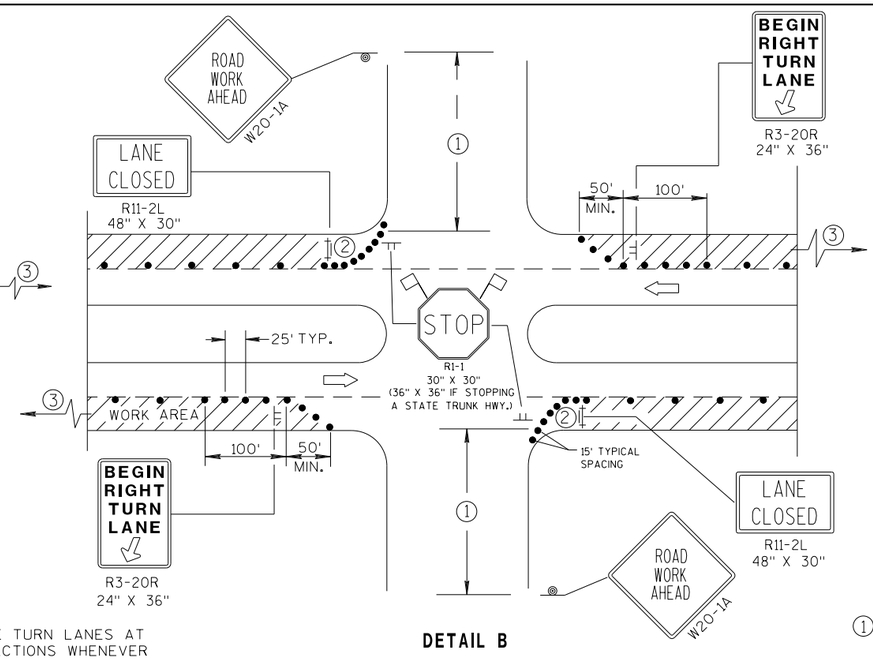
S.D.D. 15 D 20-4



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" 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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

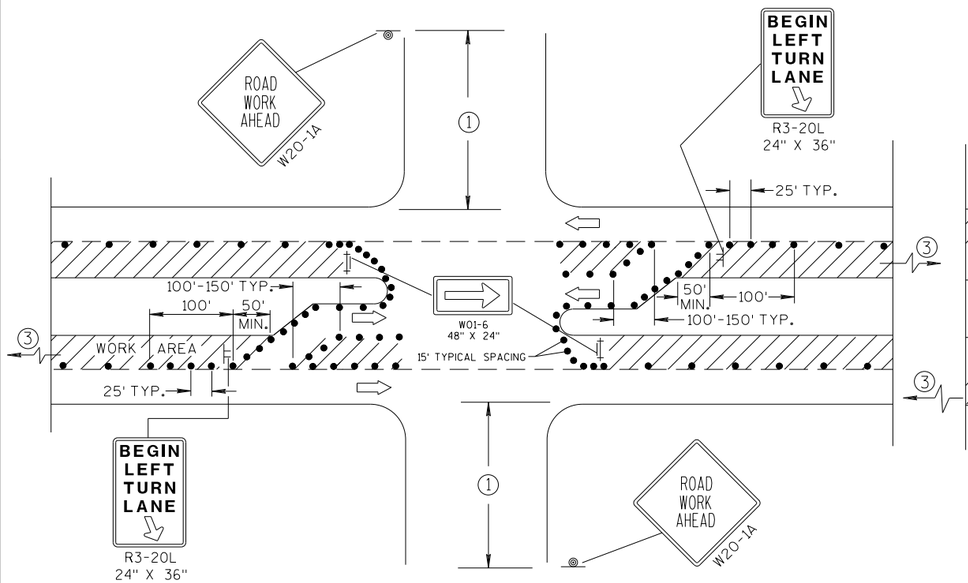
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

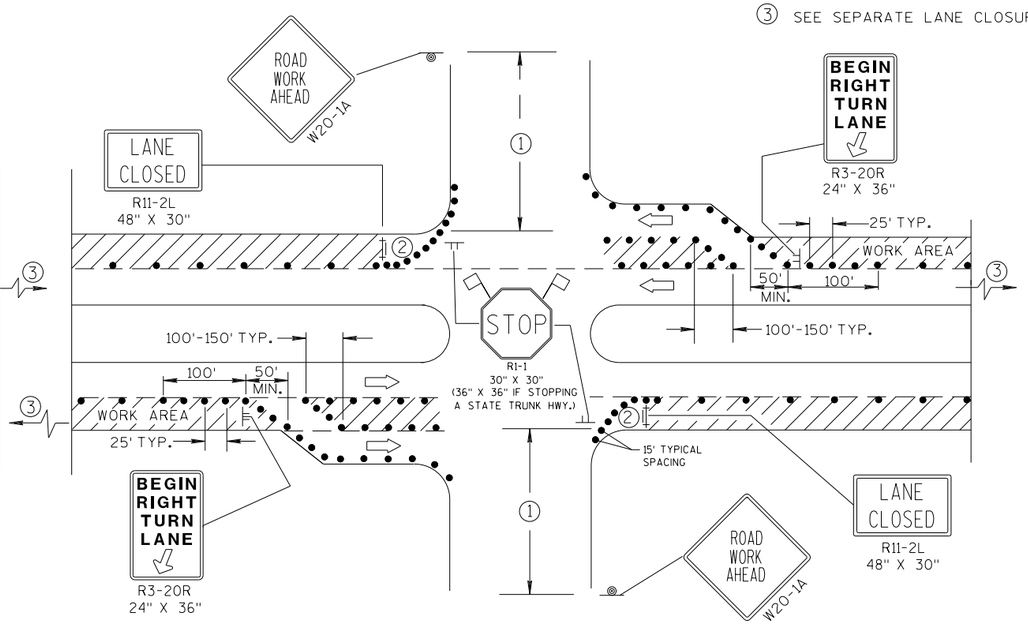
(2) ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

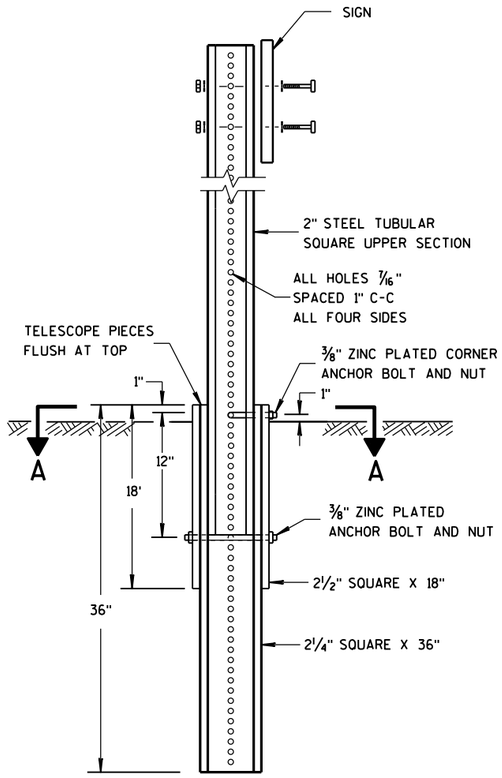
7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

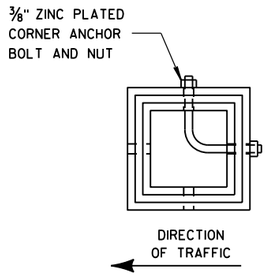
FHWA

6

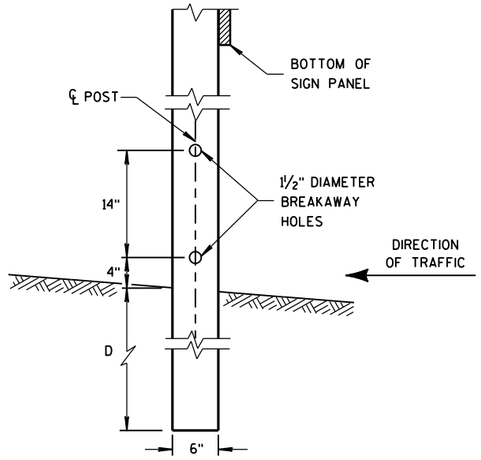
S.D.D. 15 D 21-6



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



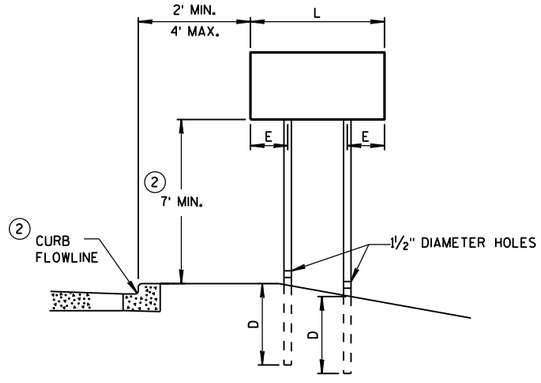
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

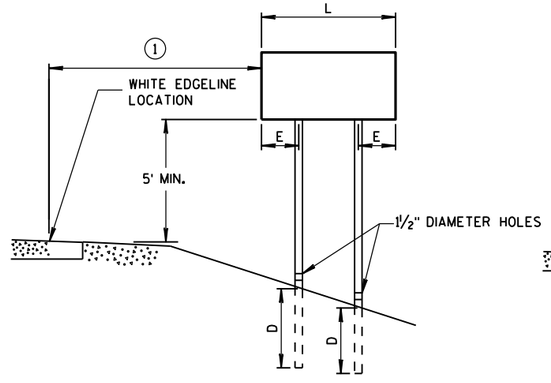
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

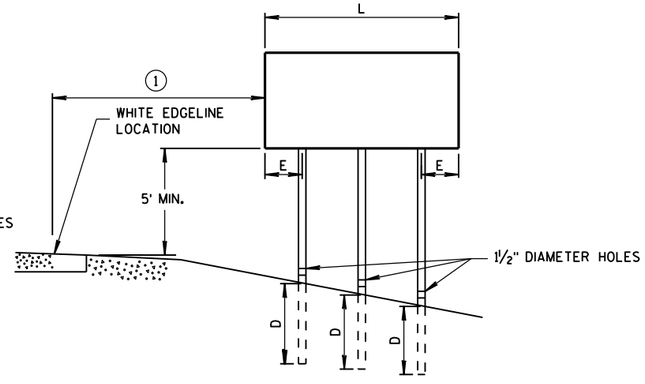
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

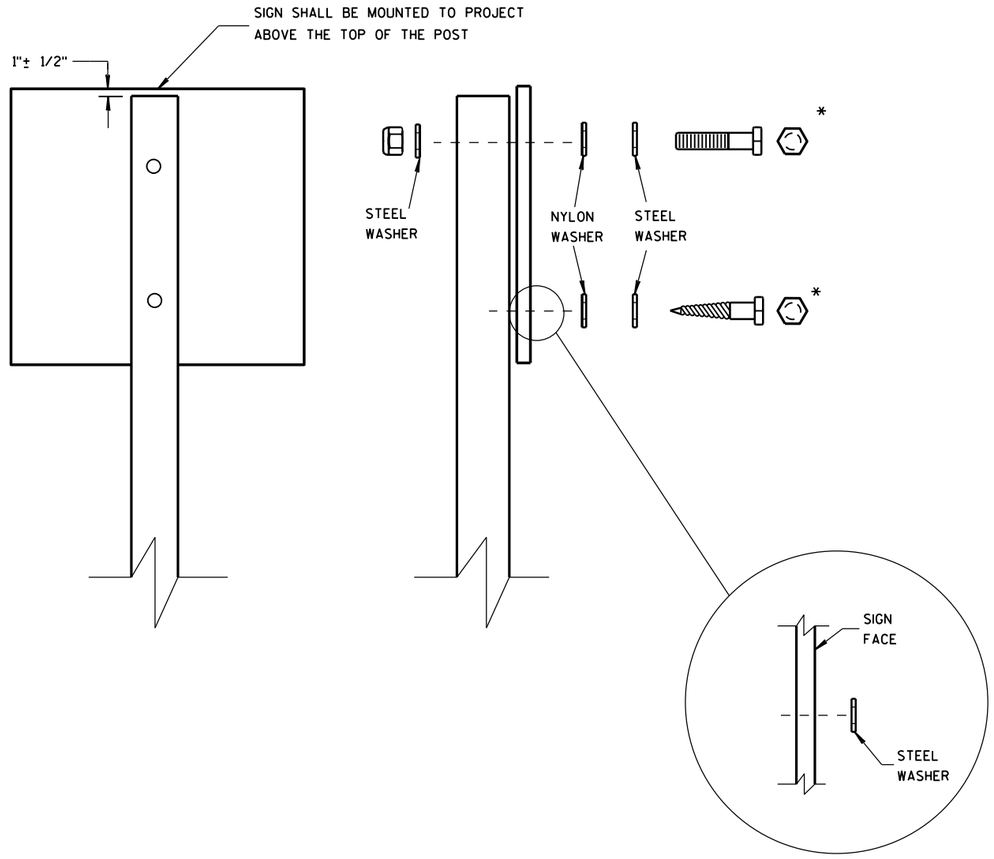
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120

OR

LOCATED 3000 FEET BEYOND THE "ROAD WORK 1 MILE" (W20-1F) SIGN

R2-1
48"X60"

OR

R2-1
48"X60"

(BLACK AND WHITE) LOCATED 700 FEET BEYOND THE W03-5 SIGN

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 3 MILES.

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

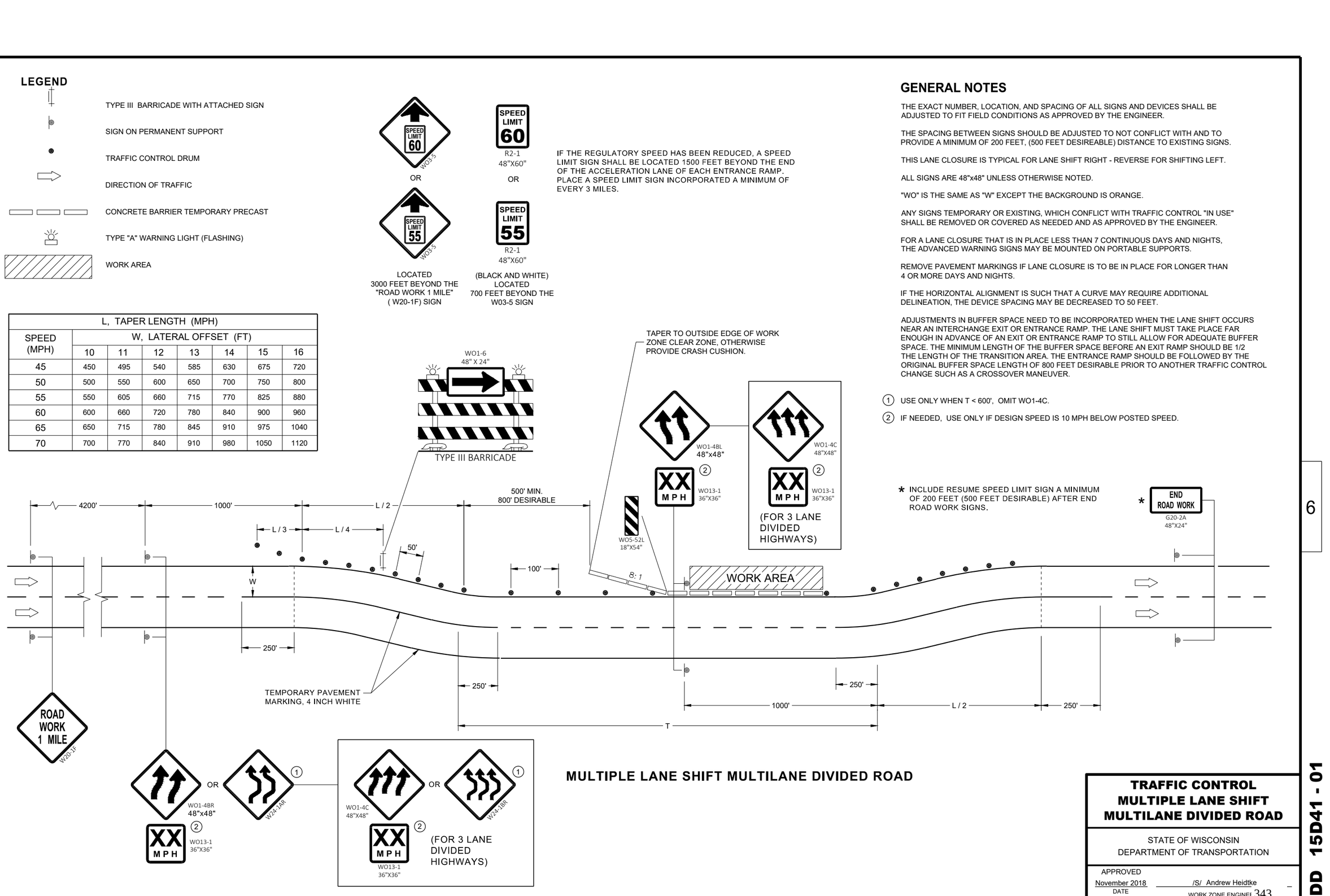
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T < 600', OMIT WO1-4C.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.



MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD

TRAFFIC CONTROL
MULTIPLE LANE SHIFT
MULTILANE DIVIDED ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

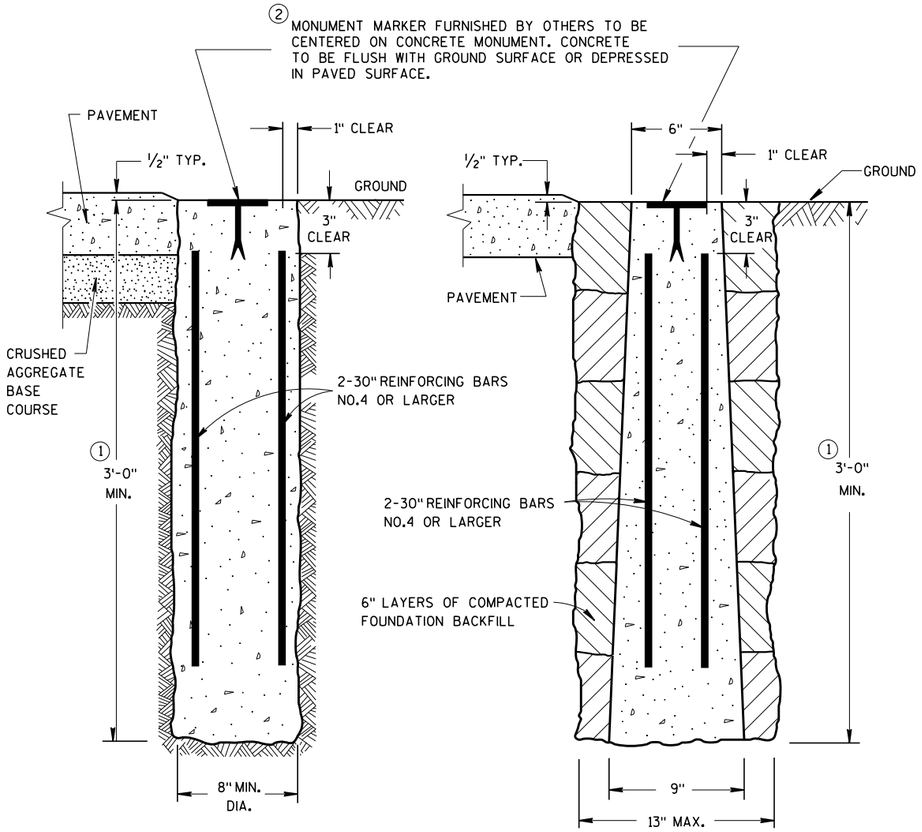
APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D41 - 01

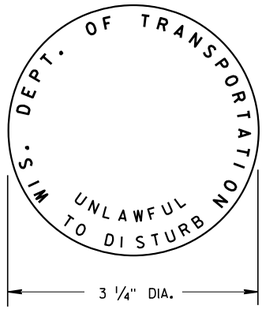


CAST-IN-PLACE

PRECAST

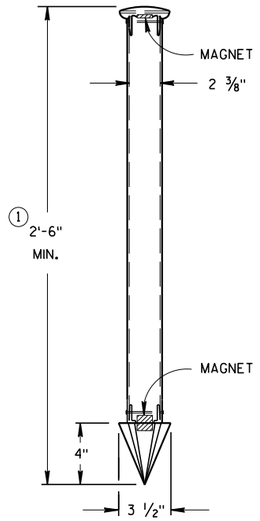
CONCRETE MONUMENTS

TYPE A



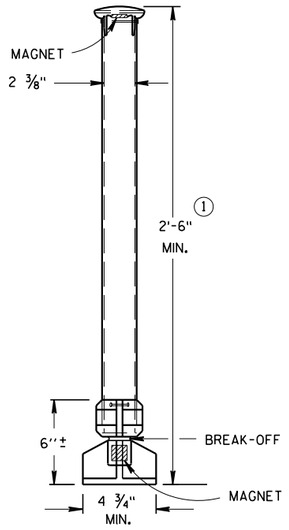
② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C", & "D"



TYPE C

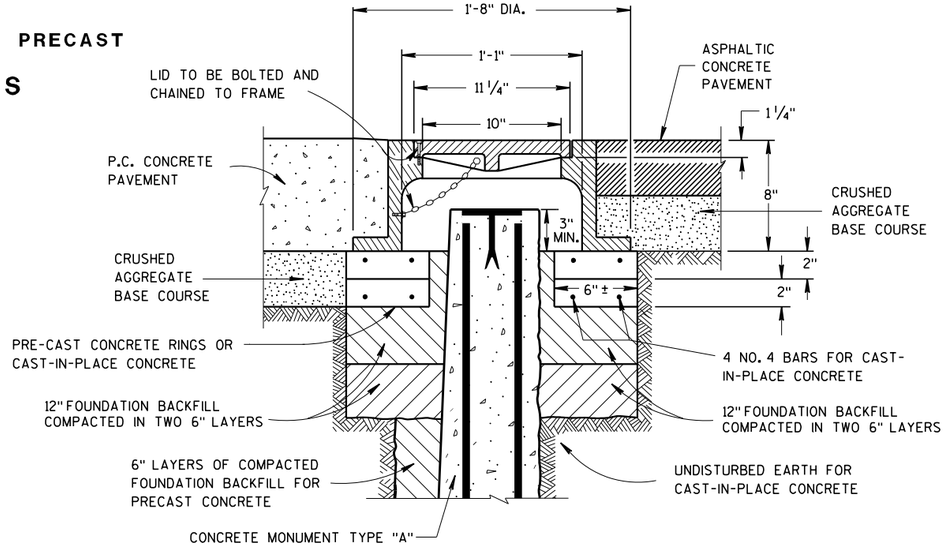
DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)

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.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

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.

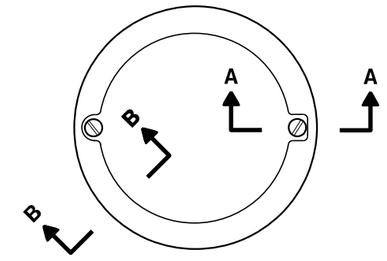
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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.

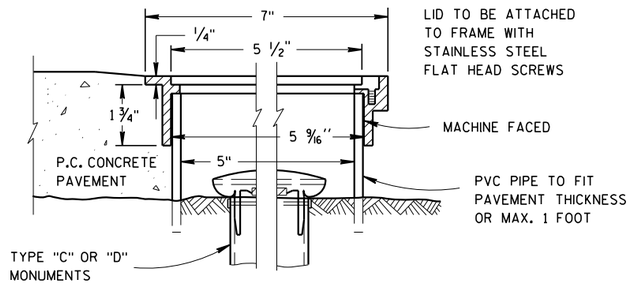
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

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



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

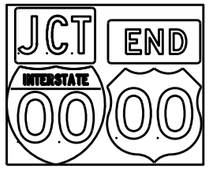
6

S.D.D. 16 A 1-7

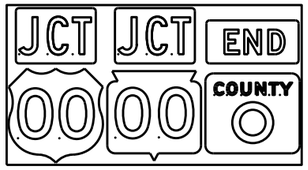
TYPICAL ASSEMBLIES



J1-1



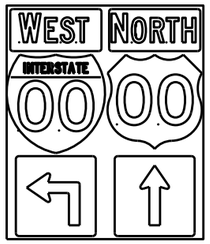
J1-2



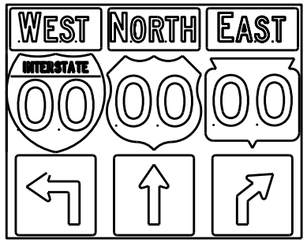
J1-3



J2-1



J2-2

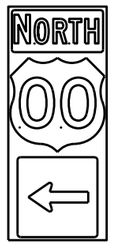


J2-3

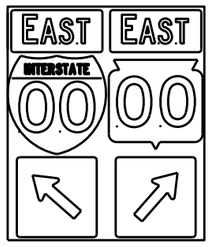


JV

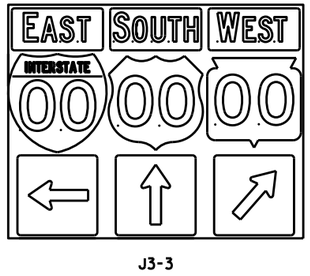
(Typical Vertical J-Assembly
See Note 10 and 11)



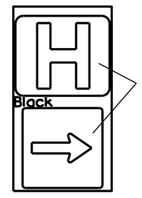
J3-1



J3-2



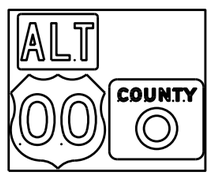
J3-3



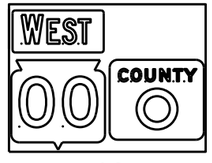
JH-1



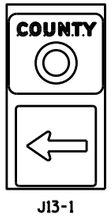
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

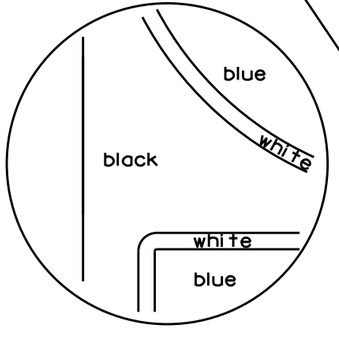


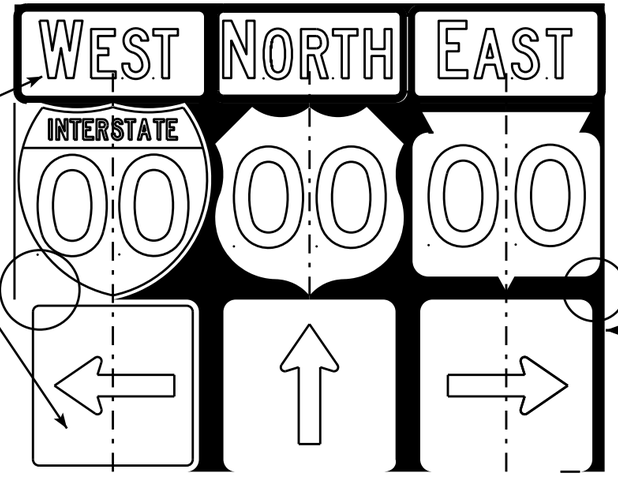
J23-1

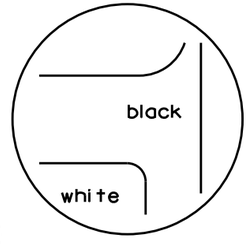


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

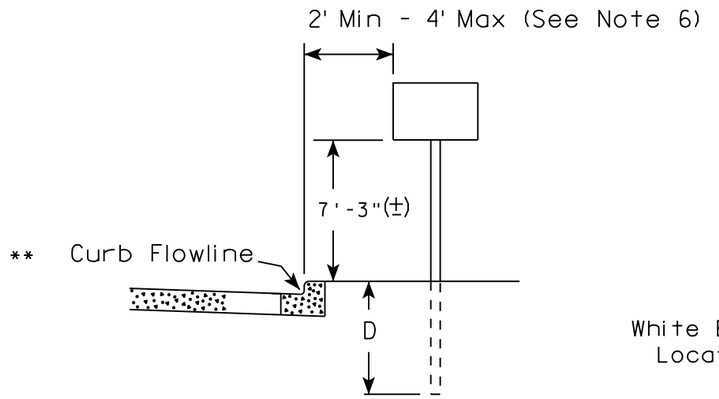
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

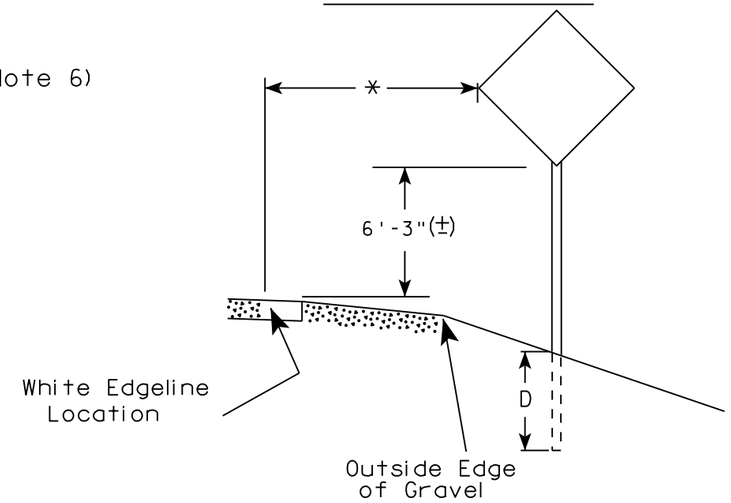
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

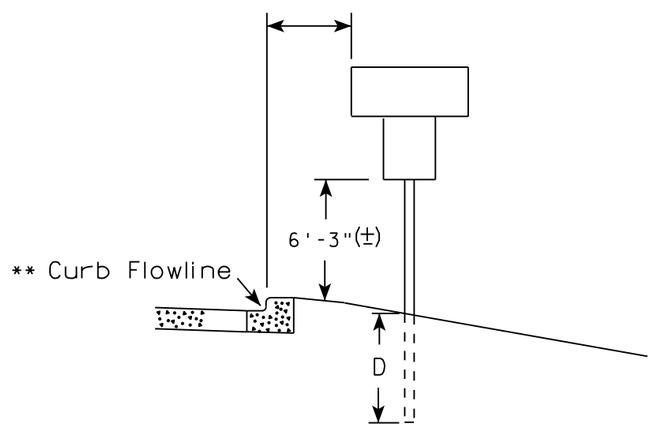
WISDOT/CADDS SHEET 42

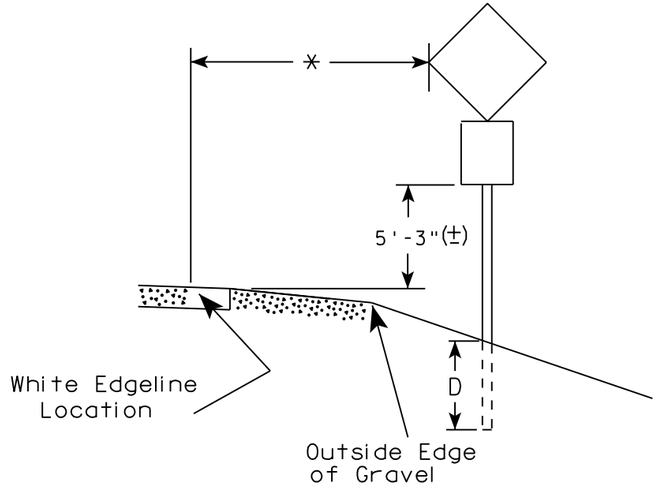
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

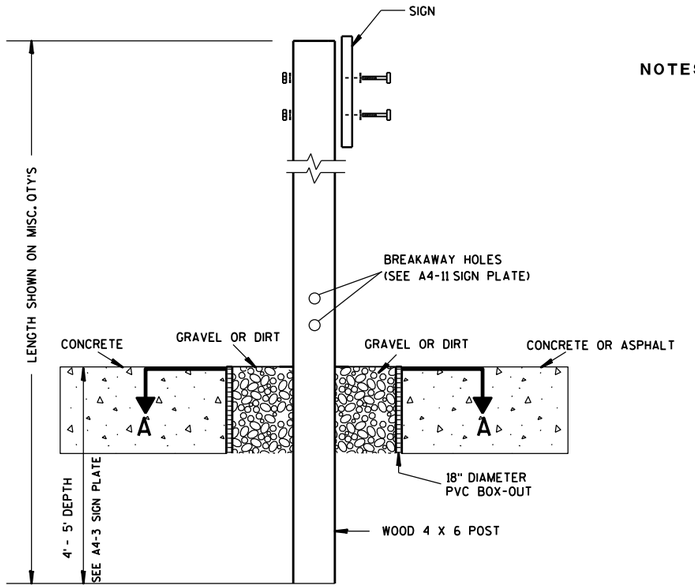
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

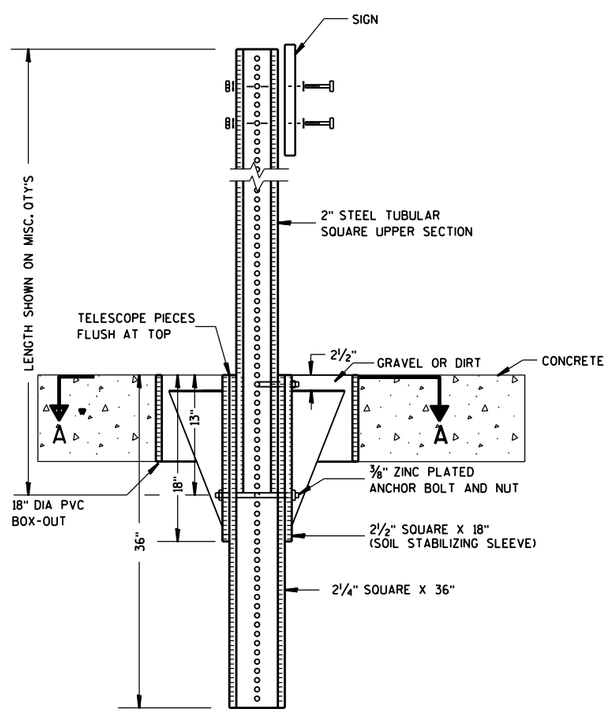
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

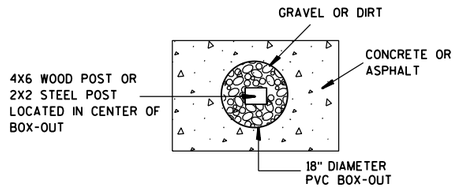
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

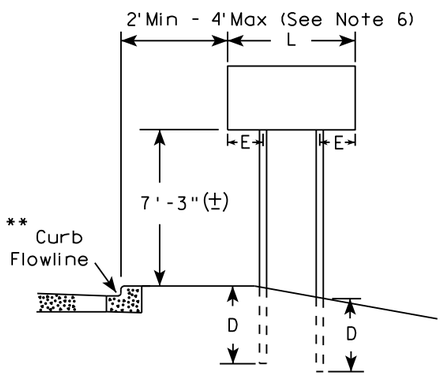
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

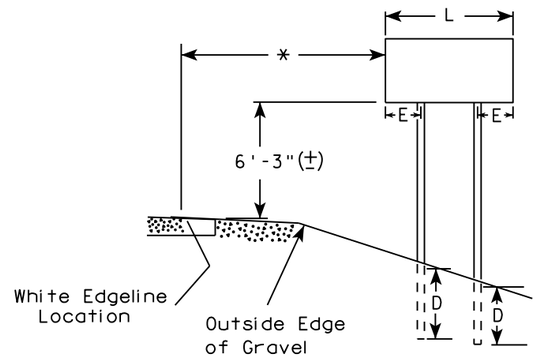
DATE 1/27/14 PLATE NO. A4-3B.1

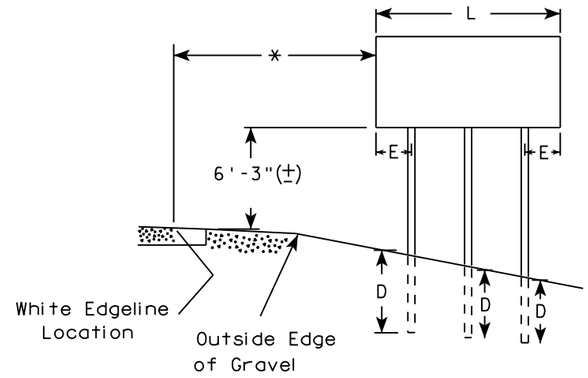
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

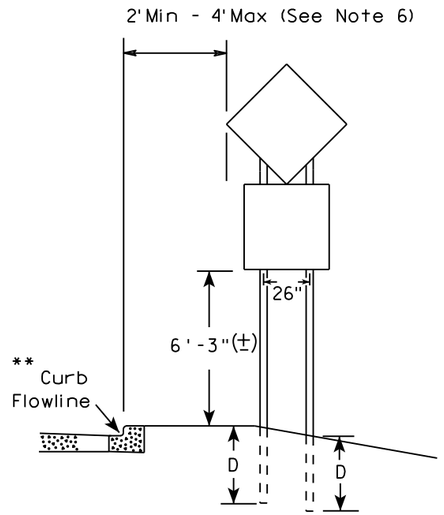
URBAN AREA



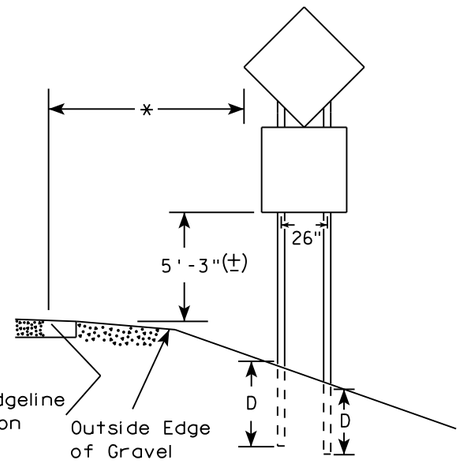
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

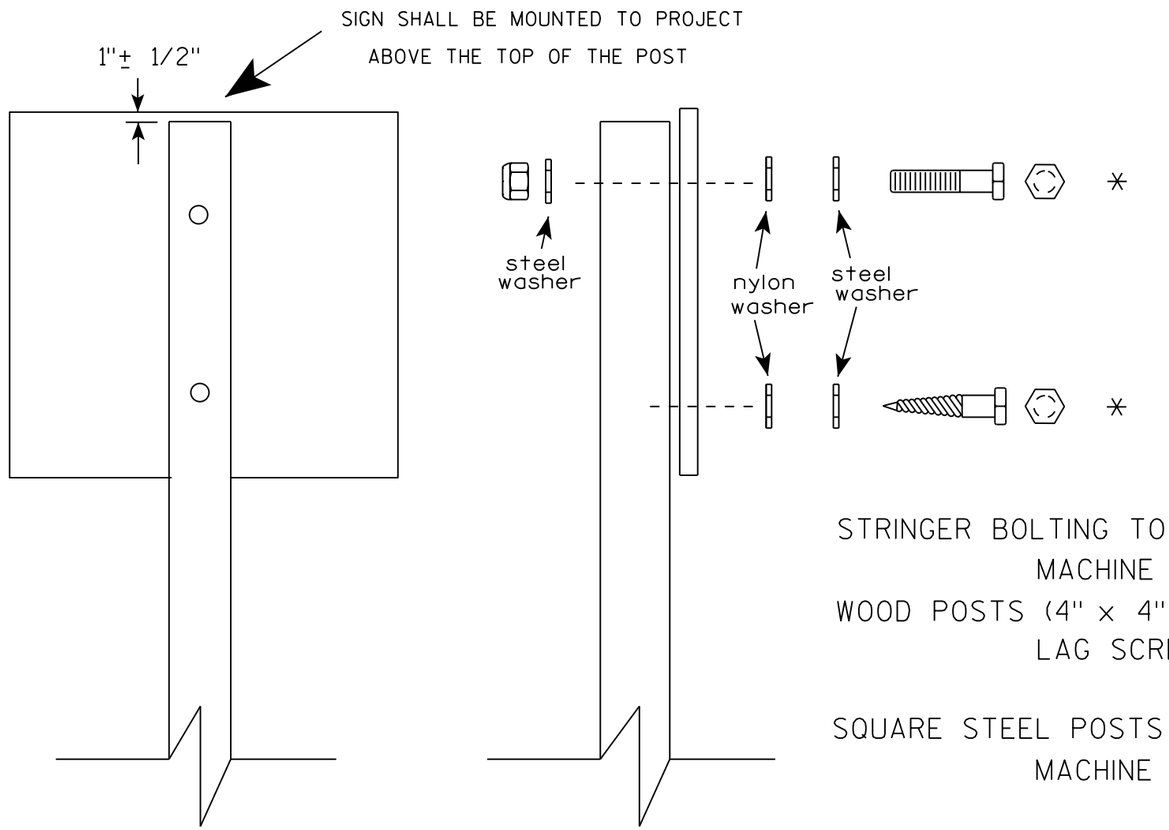
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 348	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

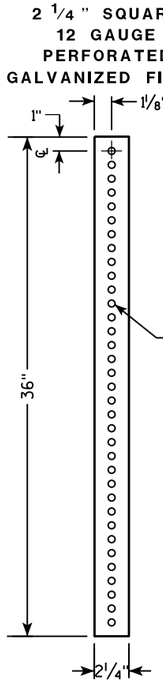
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

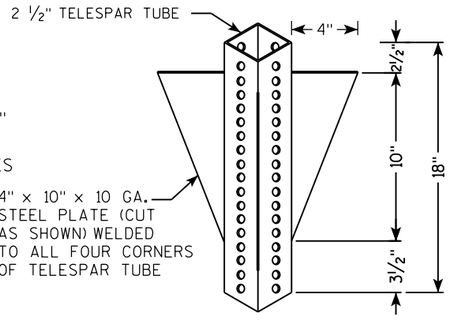
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

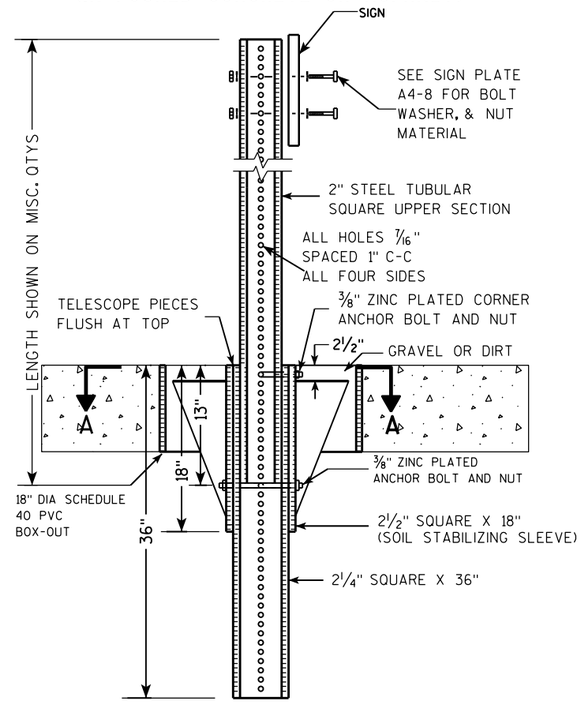
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



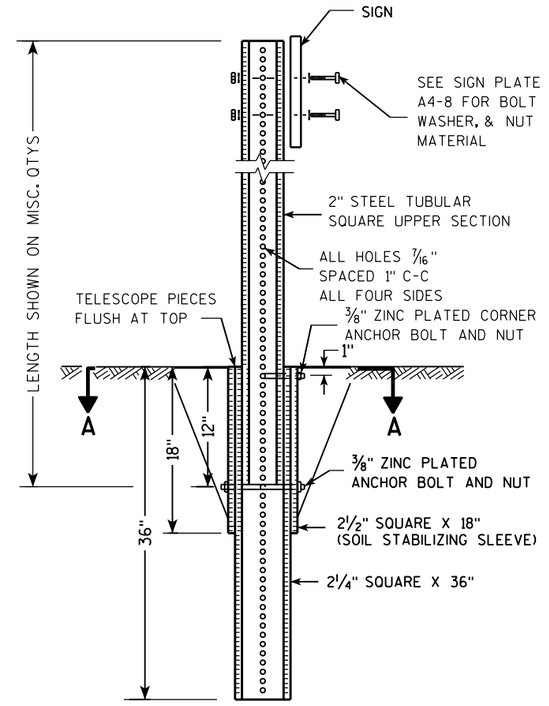
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

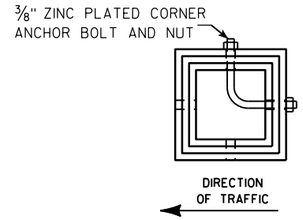


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

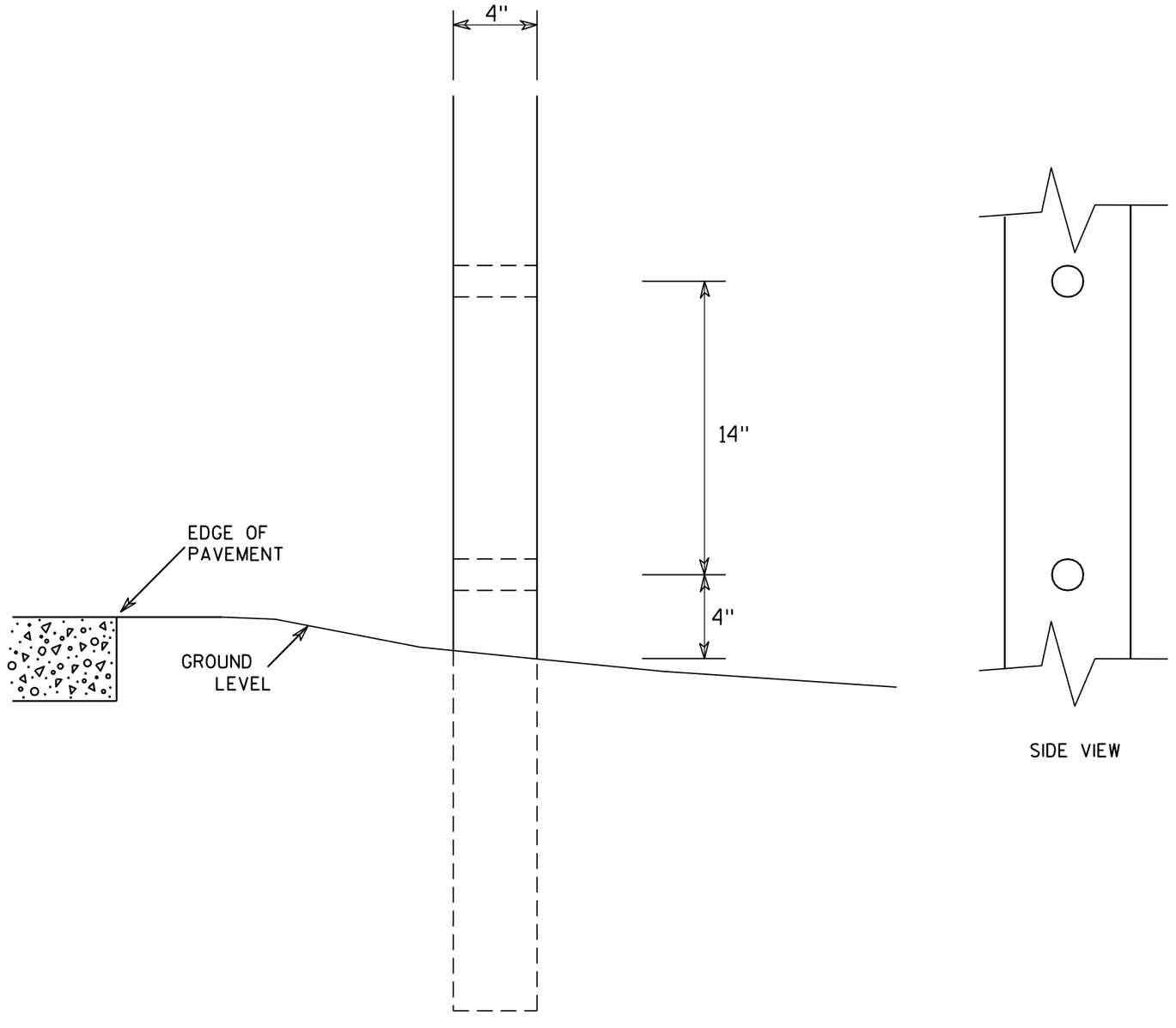
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 350 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

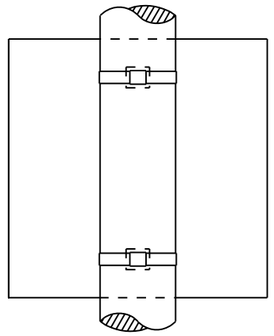
APPROVED Chester J Spang for State Traffic Engineer

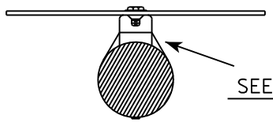
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 351	E

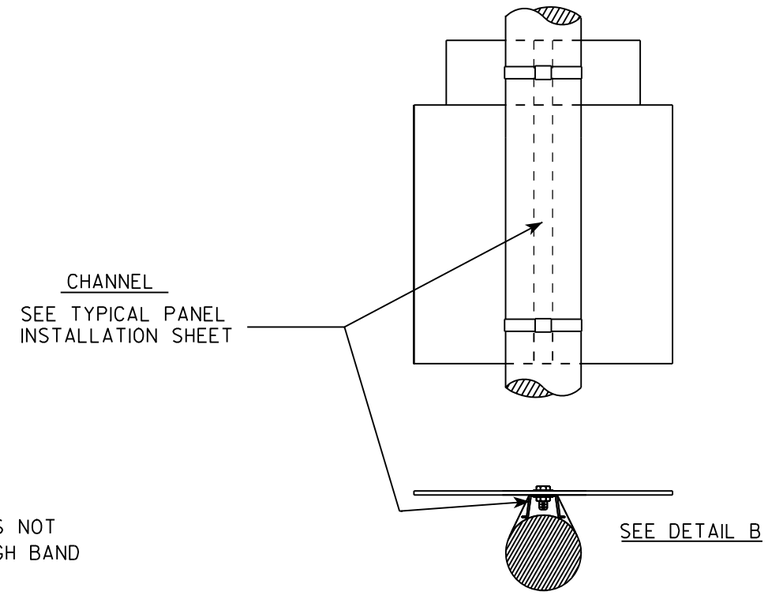
BANDING

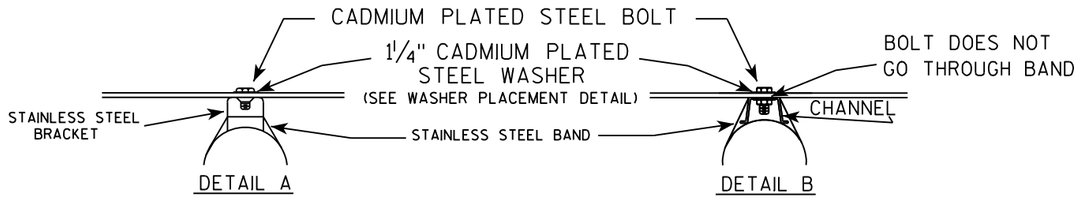
SINGLE SIGN



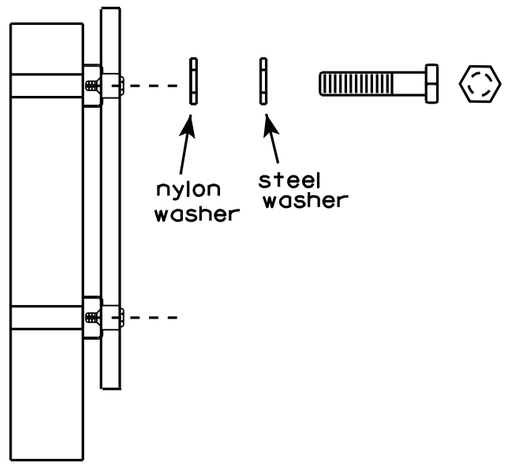


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

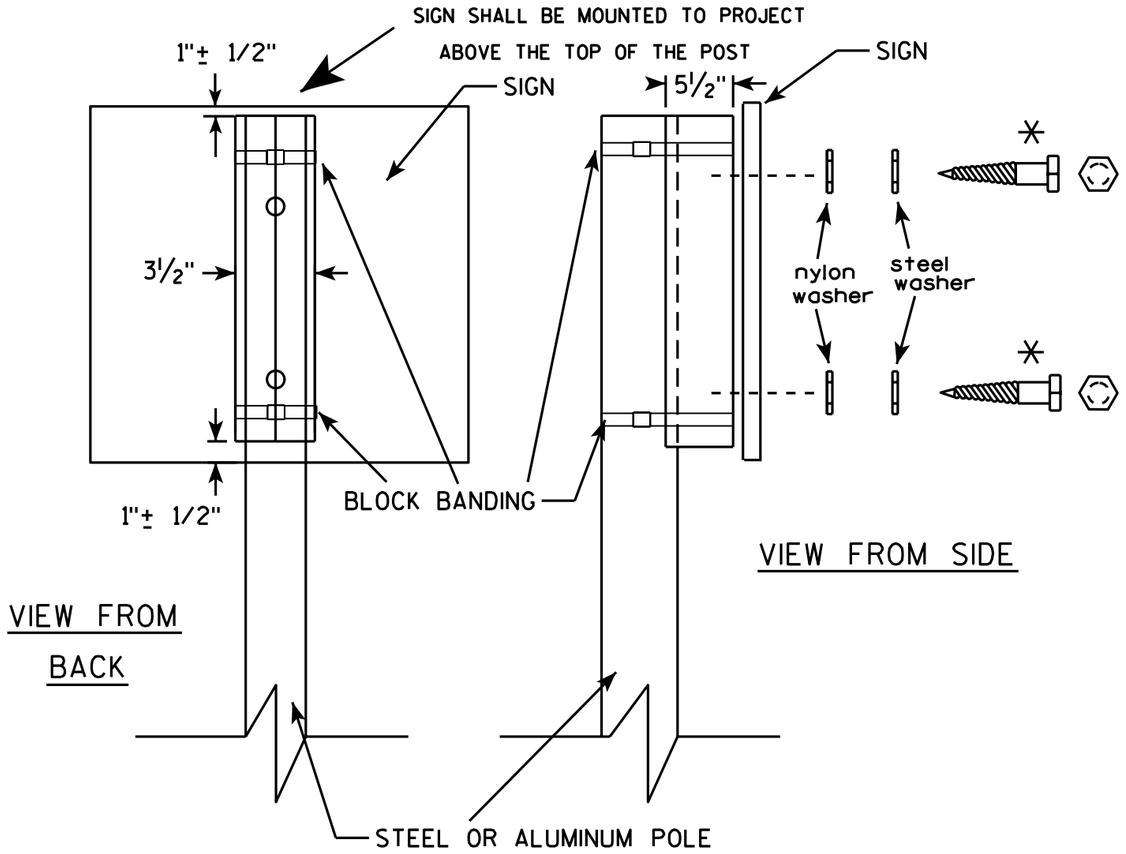
STANDARD SIGN
SIGN BANDING DETAILS

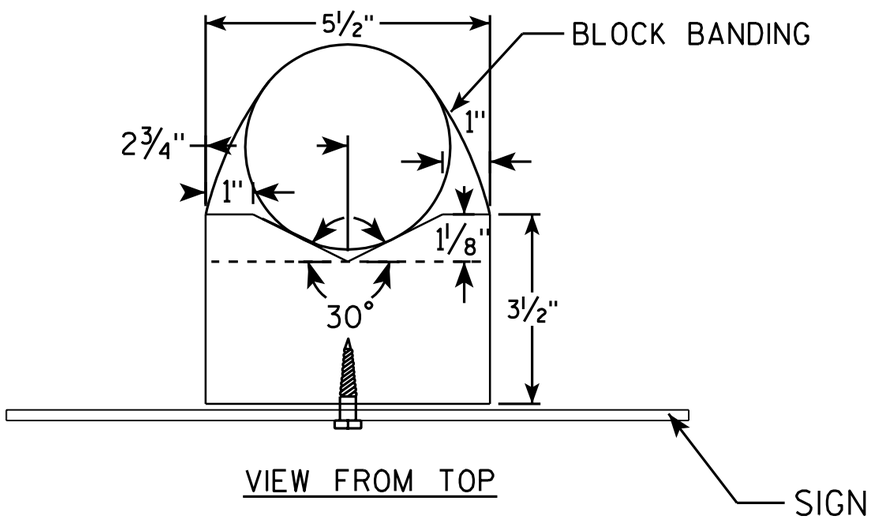
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 352	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

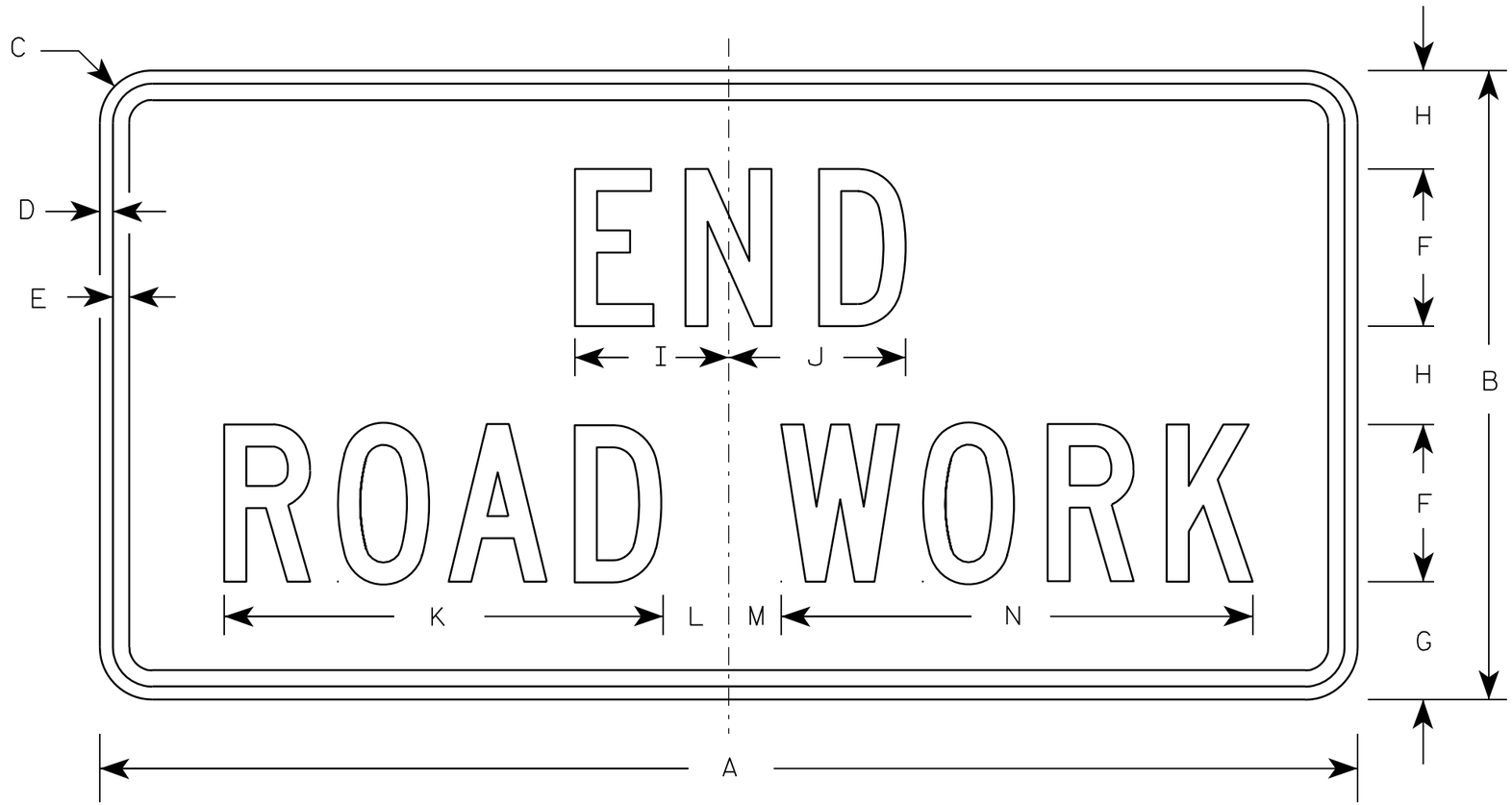
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 353 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

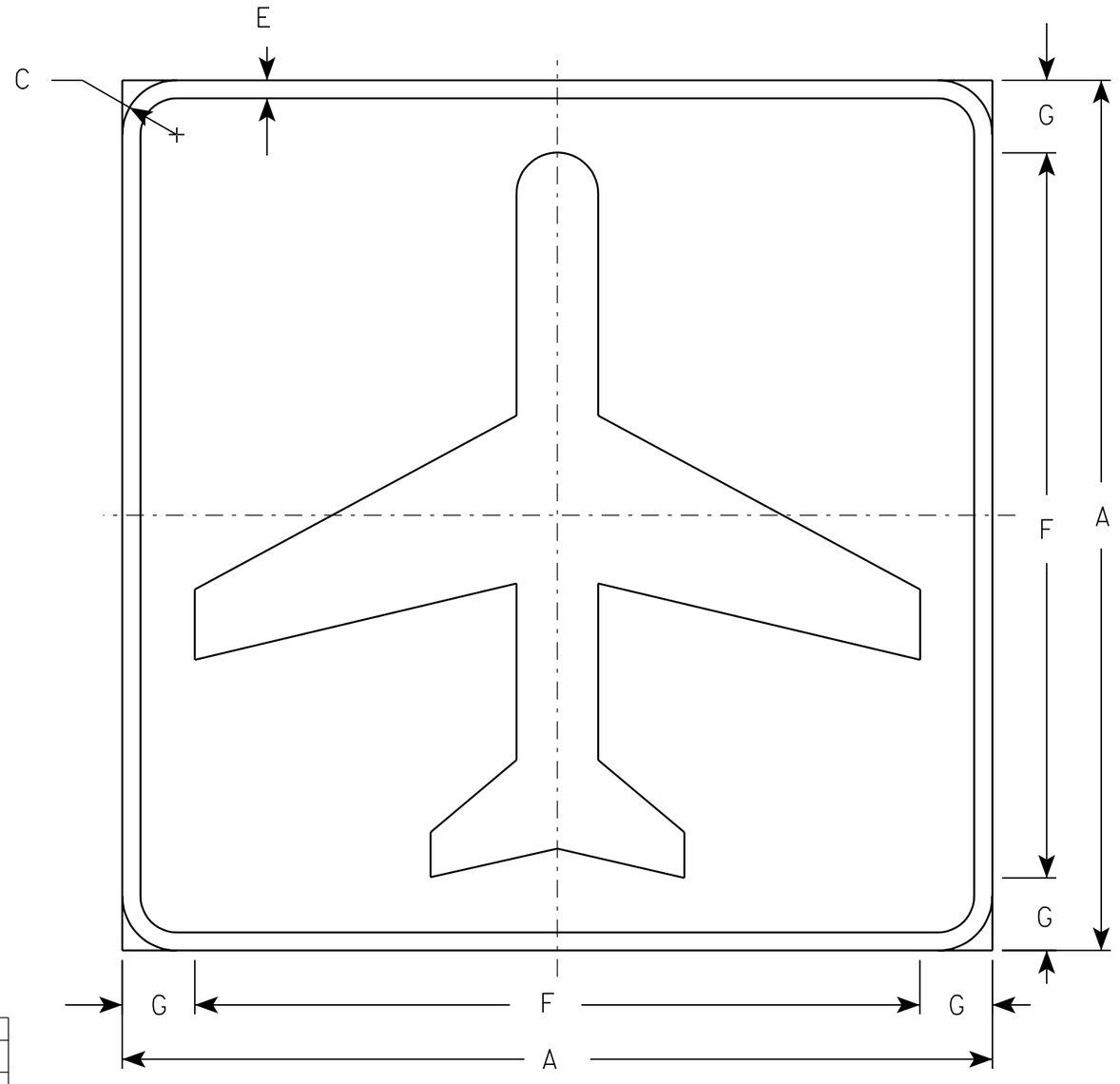
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 354	E



I5 - 1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Type H Reflective
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 450 mm
2	600 mm X 600 mm
3	750 mm X 750 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	18		1 1/8		3/8	15	1 1/2																				2.25	0.20
2	24		1 1/2		1/2	20	2																				4.0	0.37
3	30		2 1/4		3/4	25	2 1/2																				6.25	0.58
4																												
5																												

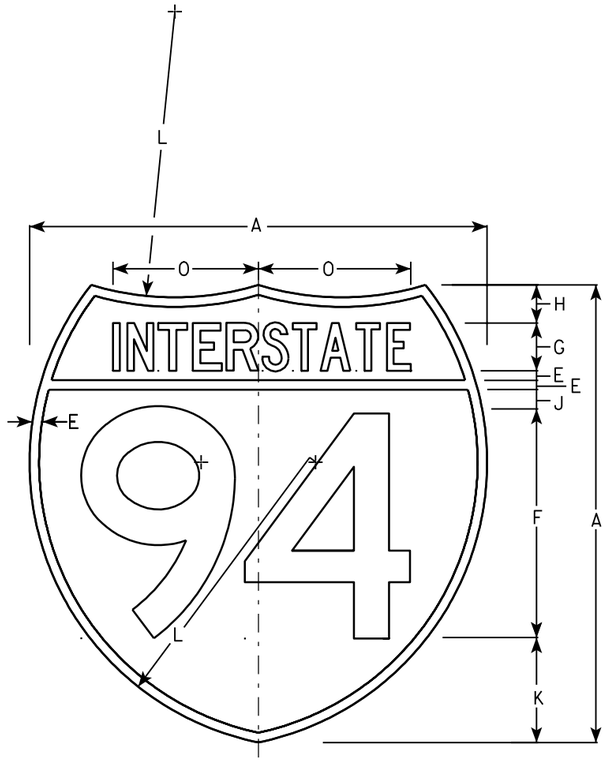
STANDARD SIGN
I5-1

WISCONSIN DEPT OF TRANSPORTATION

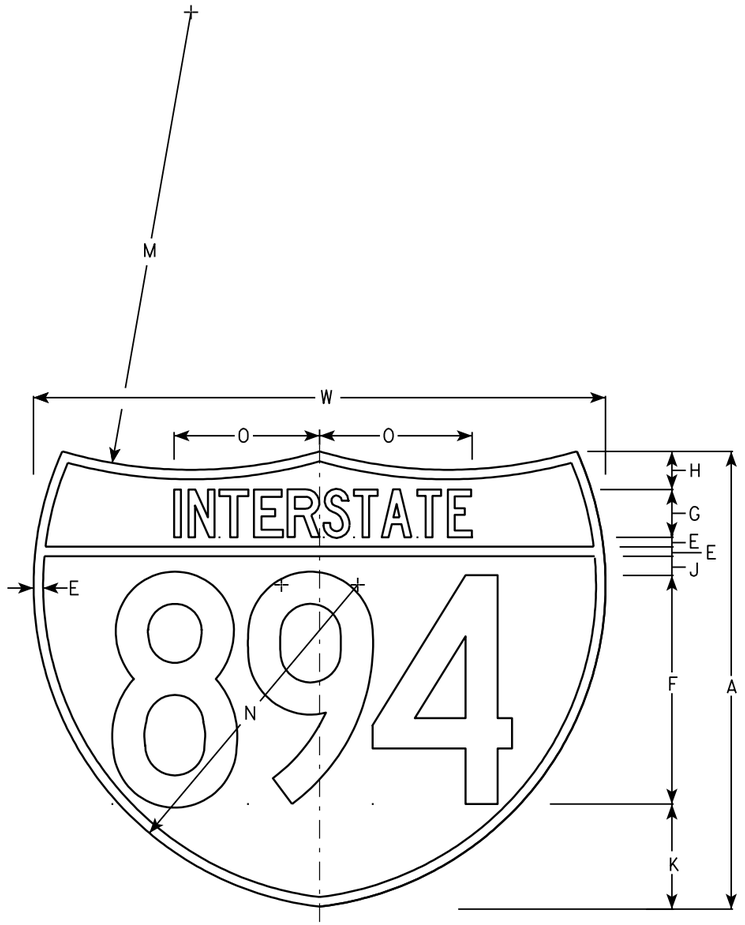
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/25/02 PLATE NO. I5-1.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 355	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

7

7

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

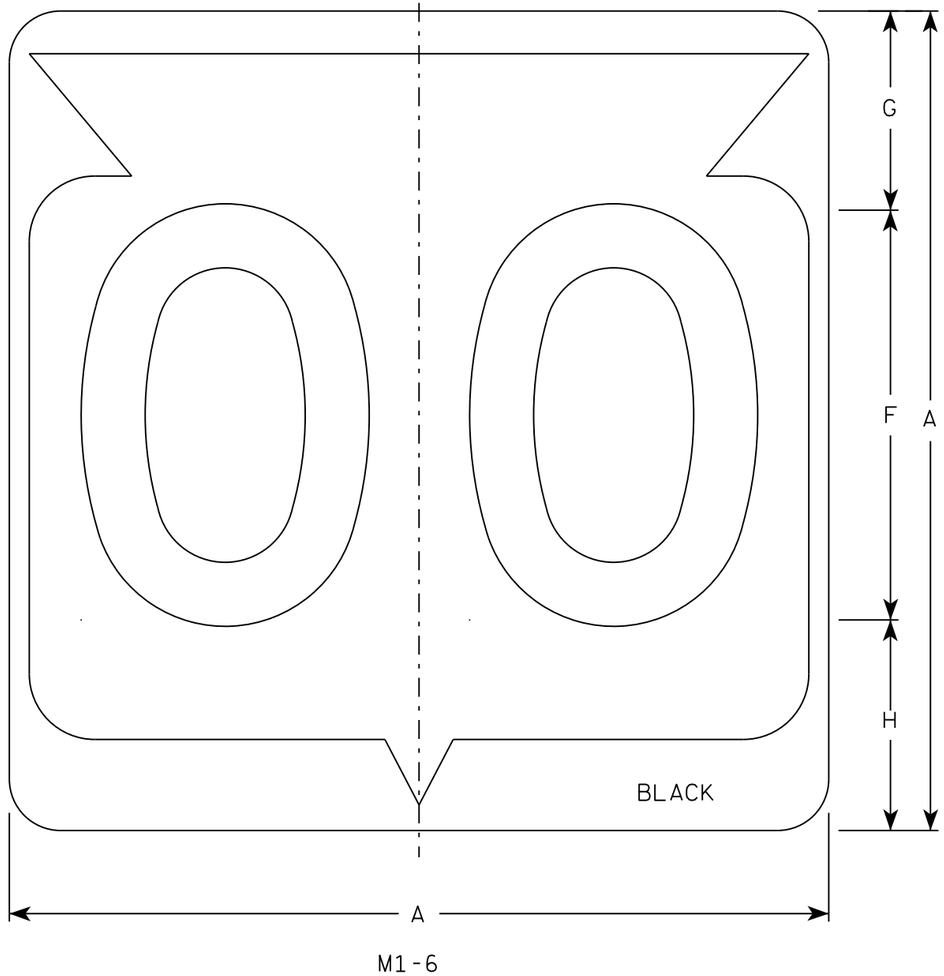
INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

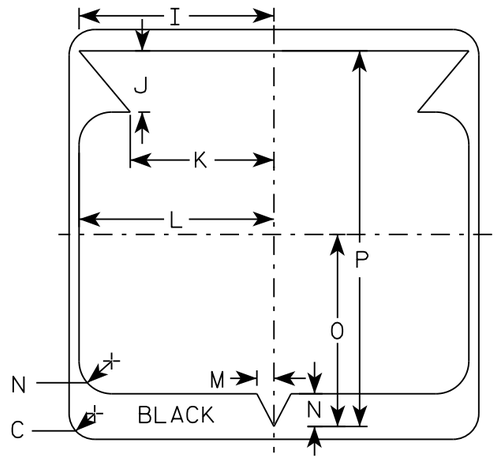
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 356	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

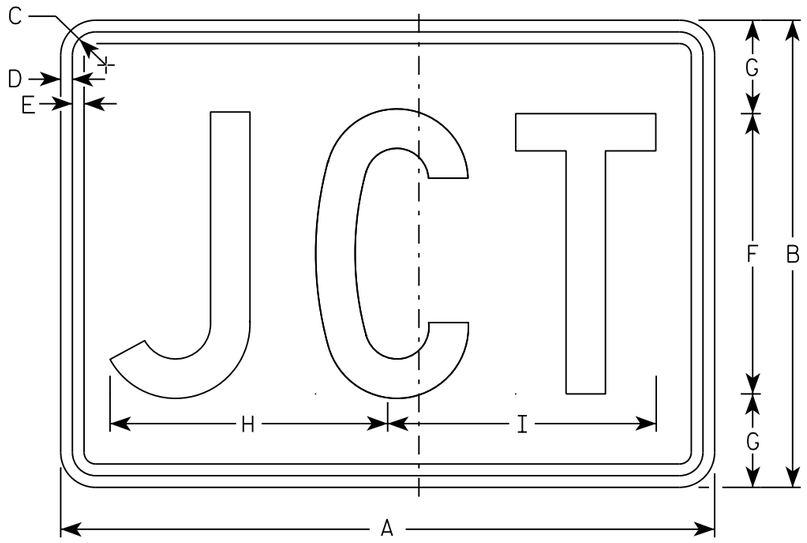
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

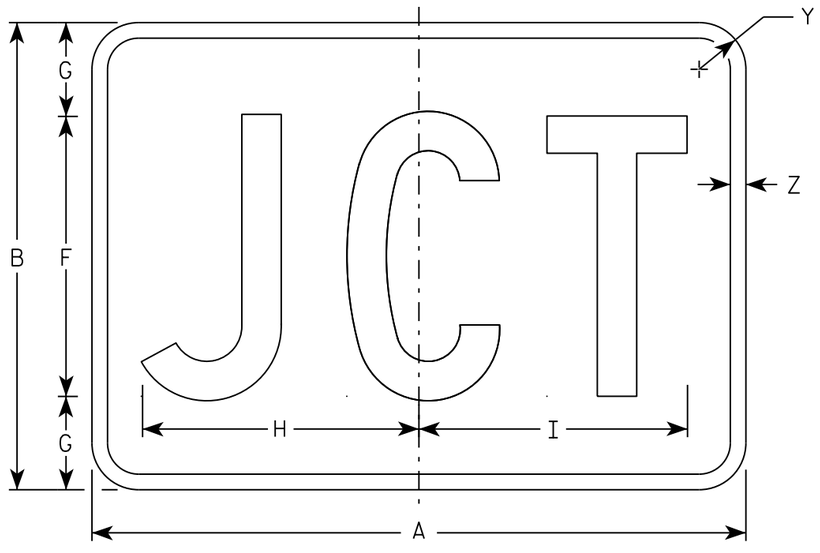
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 357	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

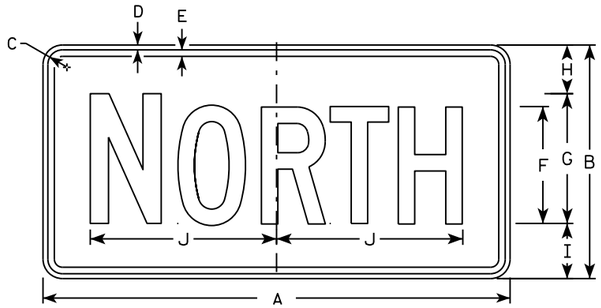
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

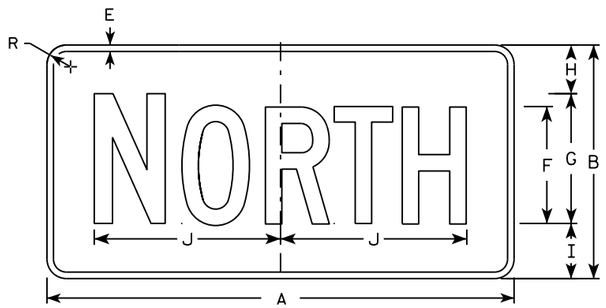
DATE 10/15/15 PLATE 358 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



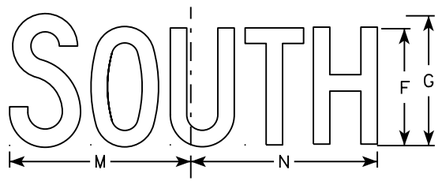
MB3-1
MK3-1
MN3-1



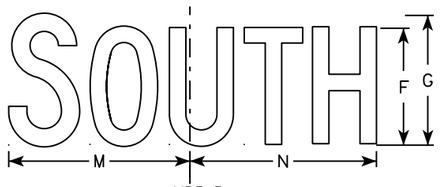
M3-2
MM3-2
MP3-2



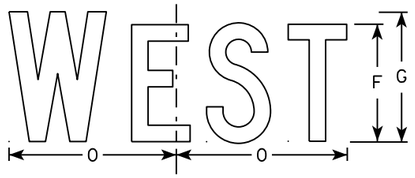
MB3-2
MK3-2
MN3-2



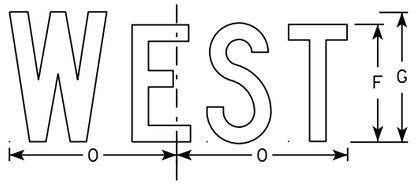
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

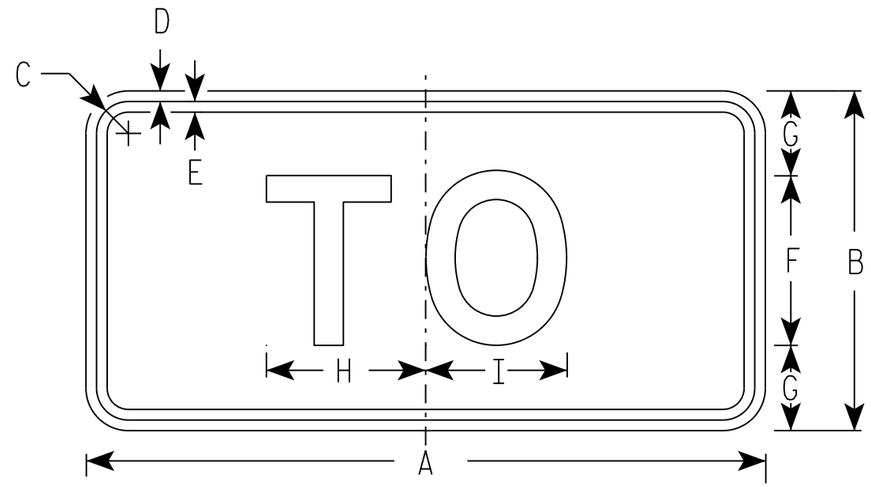
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

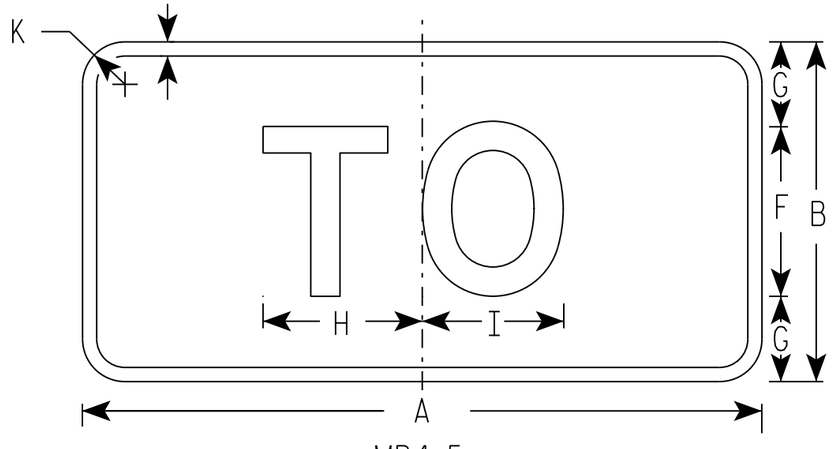
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-5
MM4-5
MP4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

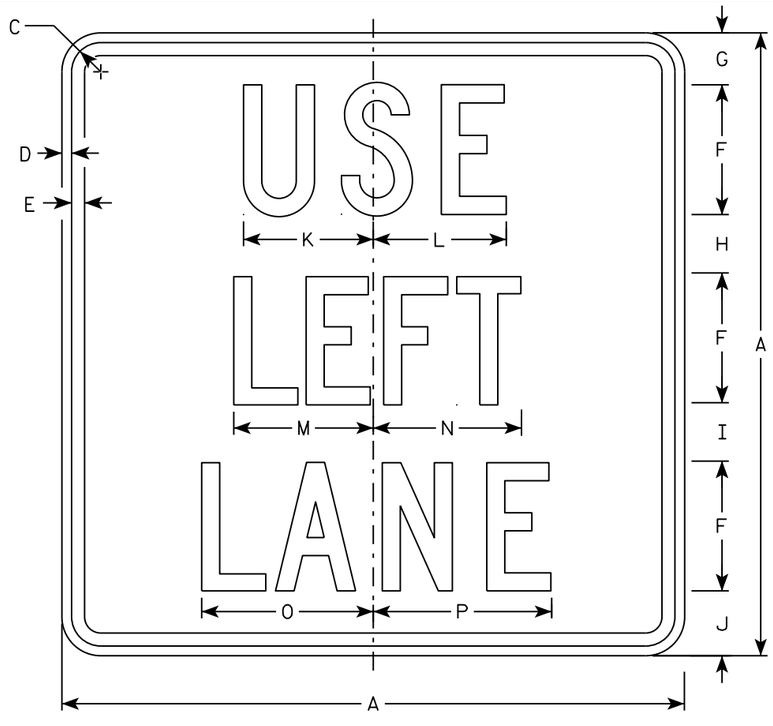
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 360 M4-5.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

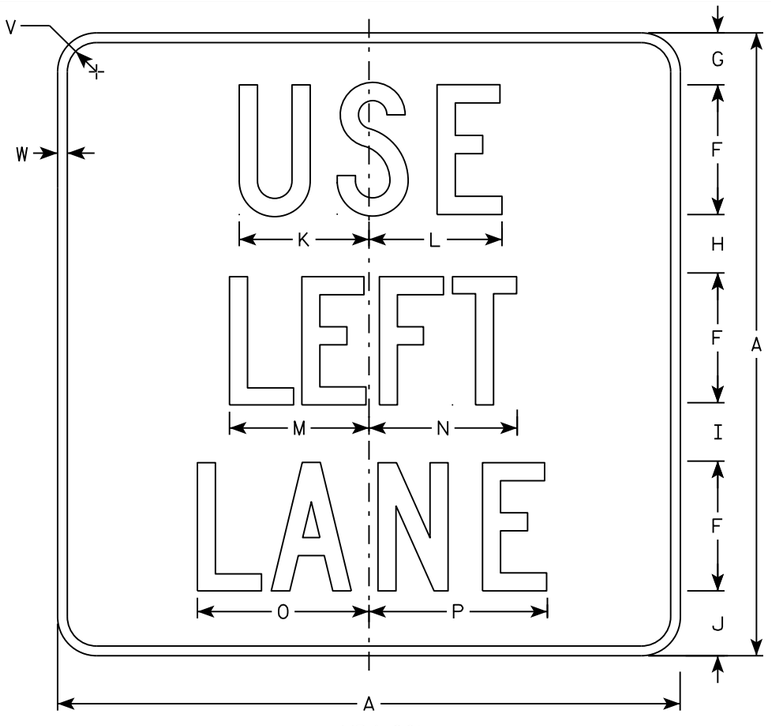
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



M4-20L

A

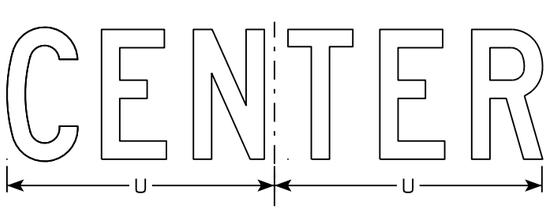
M4-20L
MM4-20L
M04-20L
MP4-20L



MB4-20L

A

MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
M04-20C
MP4-20C
MR4-20C



M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
M04-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   M04-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	5 3/8	5 3/4	6 5/8	6 7/8			7	7 5/8	10 1/4	1 1/2	1/2				4.0
3	36		1 5/8	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0
4																											
5																											

STANDARD SIGN
M4-20

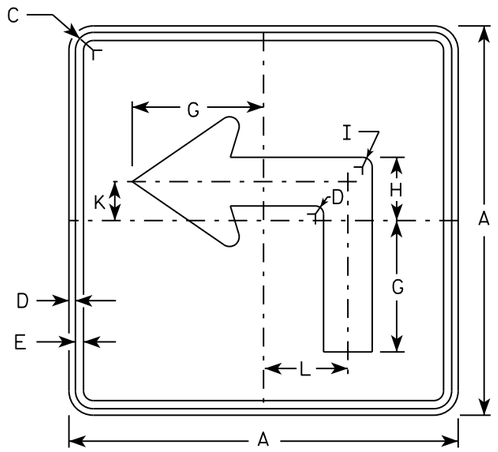
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

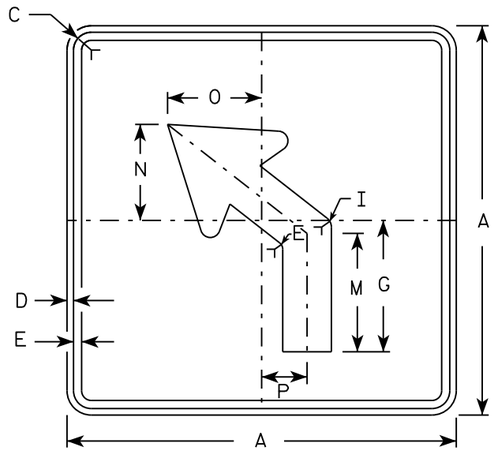
DATE 10/15/15 PLATE NO M4-20.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

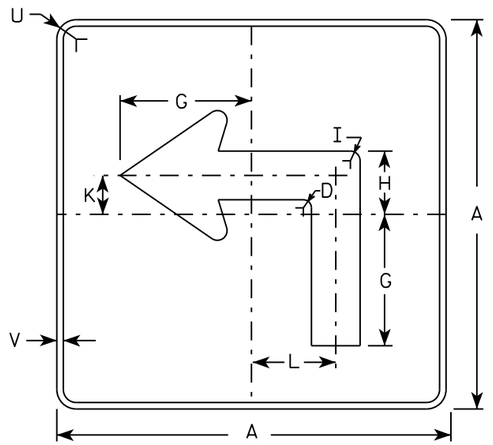
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M420.DGN PLOT DATE : 01-DEC-2015 18:03 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



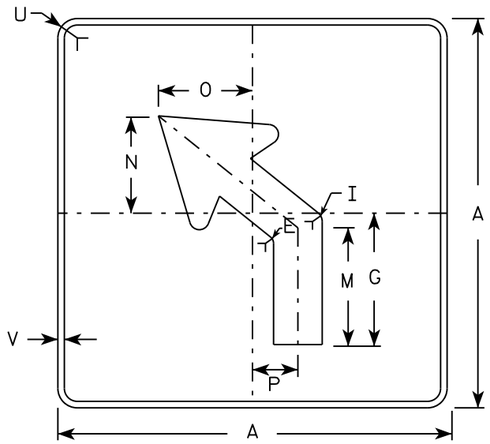
M5-1L
MM5-1L
MO5-1L
MP5-1L



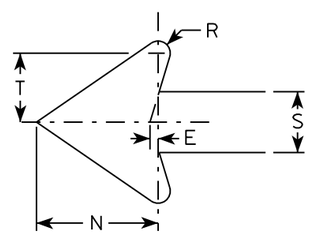
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

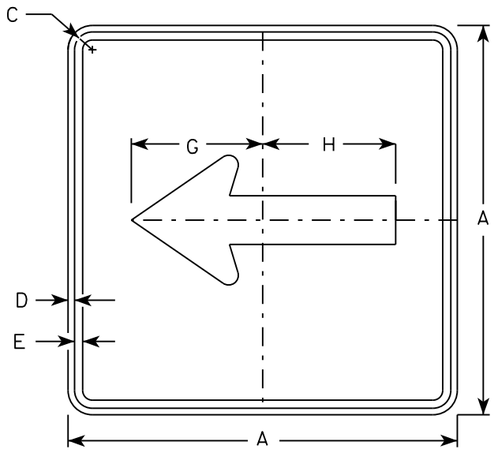
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

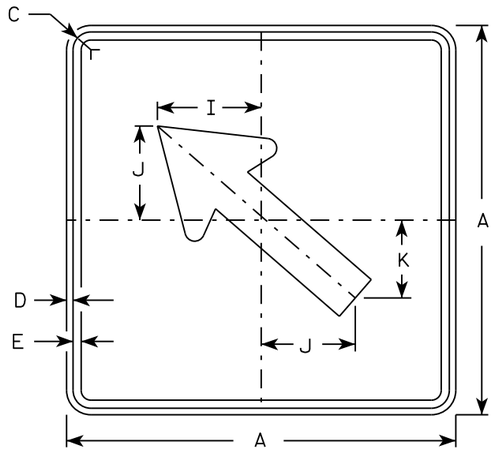
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



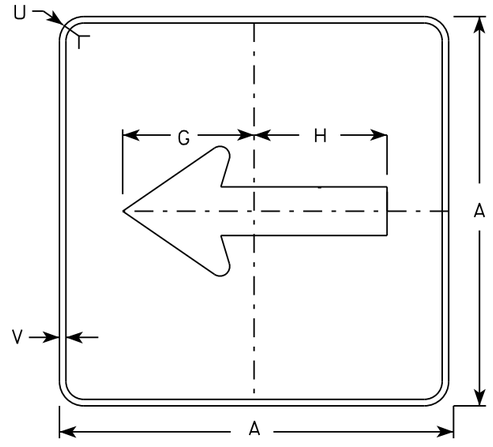
M6-1
MM6-1
MO6-1
MP6-1



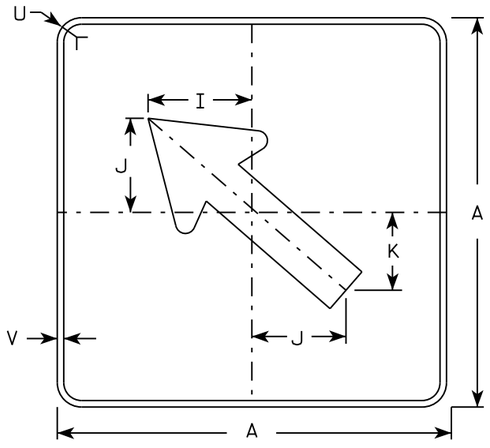
M6-2
MM6-2
MO6-2
MP6-2

NOTES

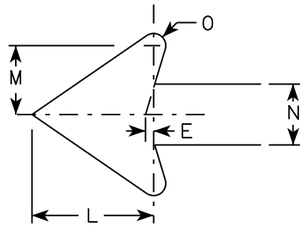
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

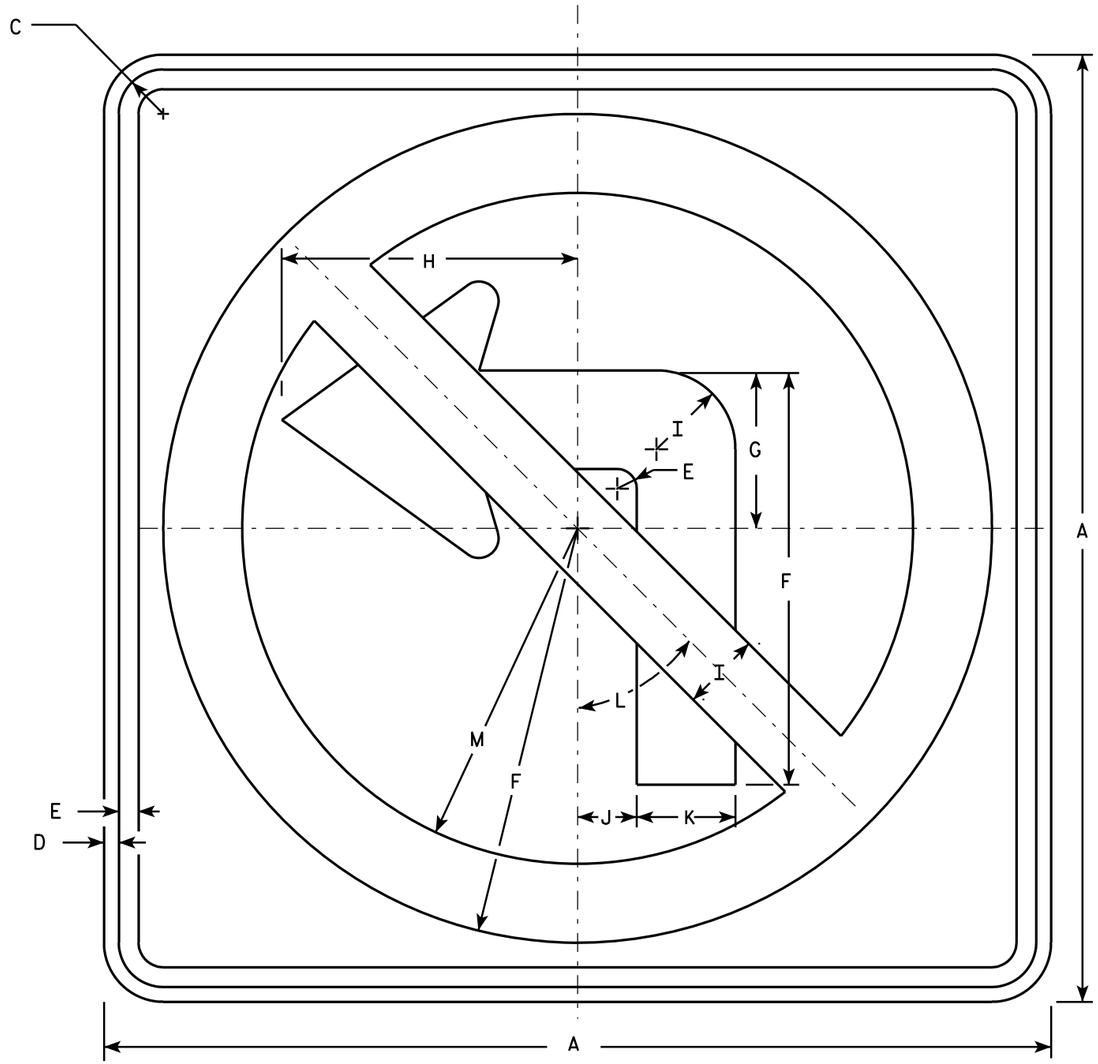
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 363 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

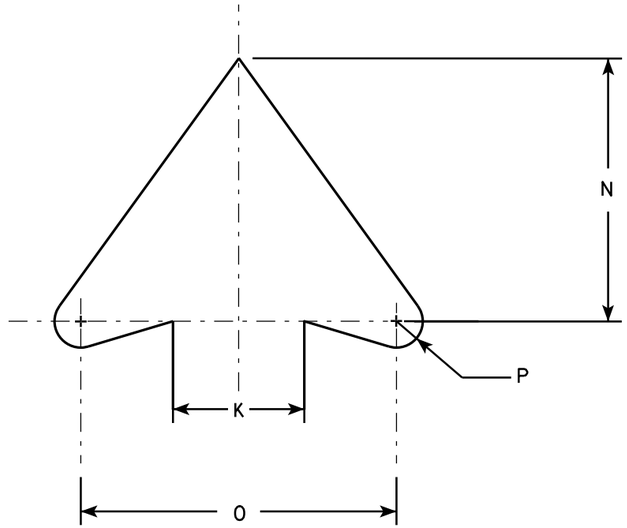
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

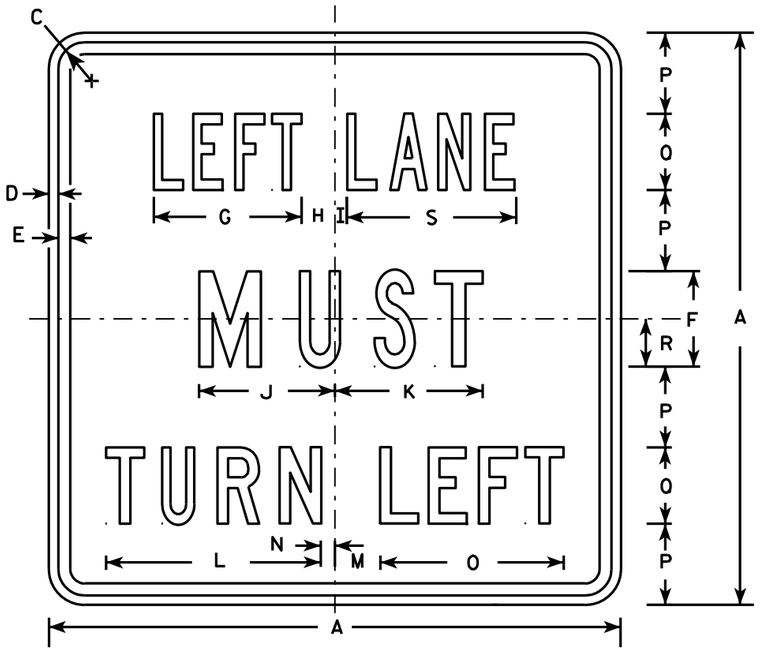
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

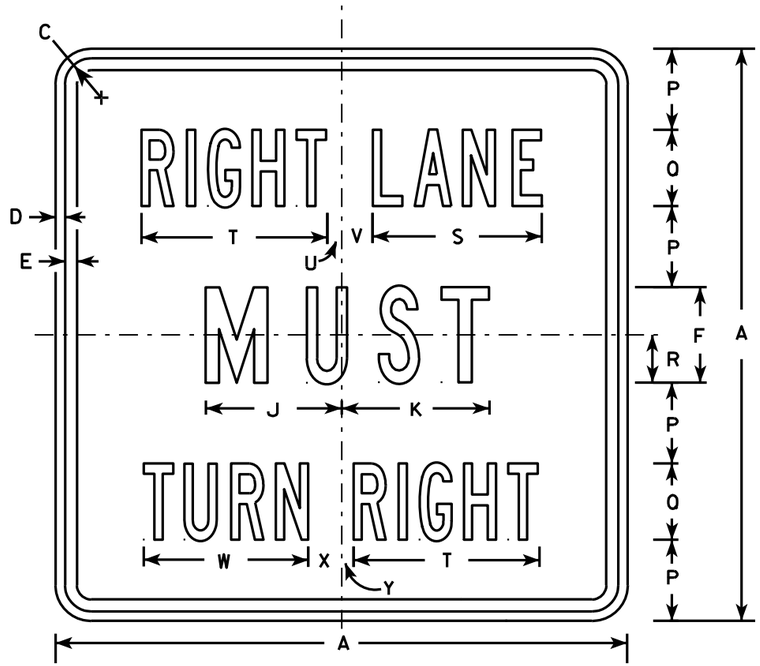
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 364	E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

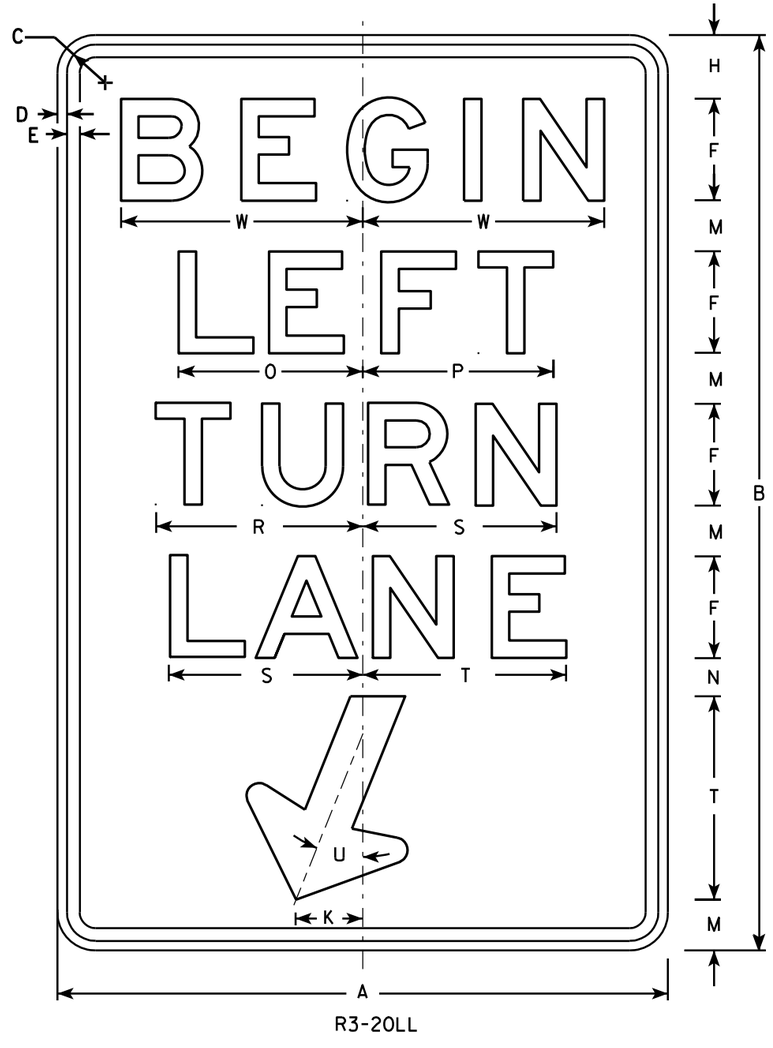
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

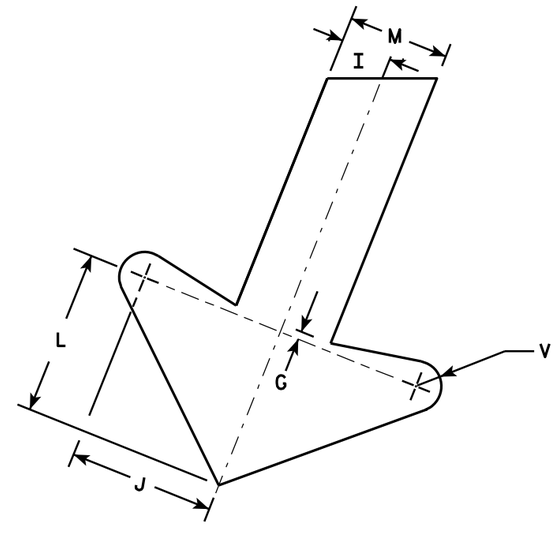
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 365 | E



R3-20LL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

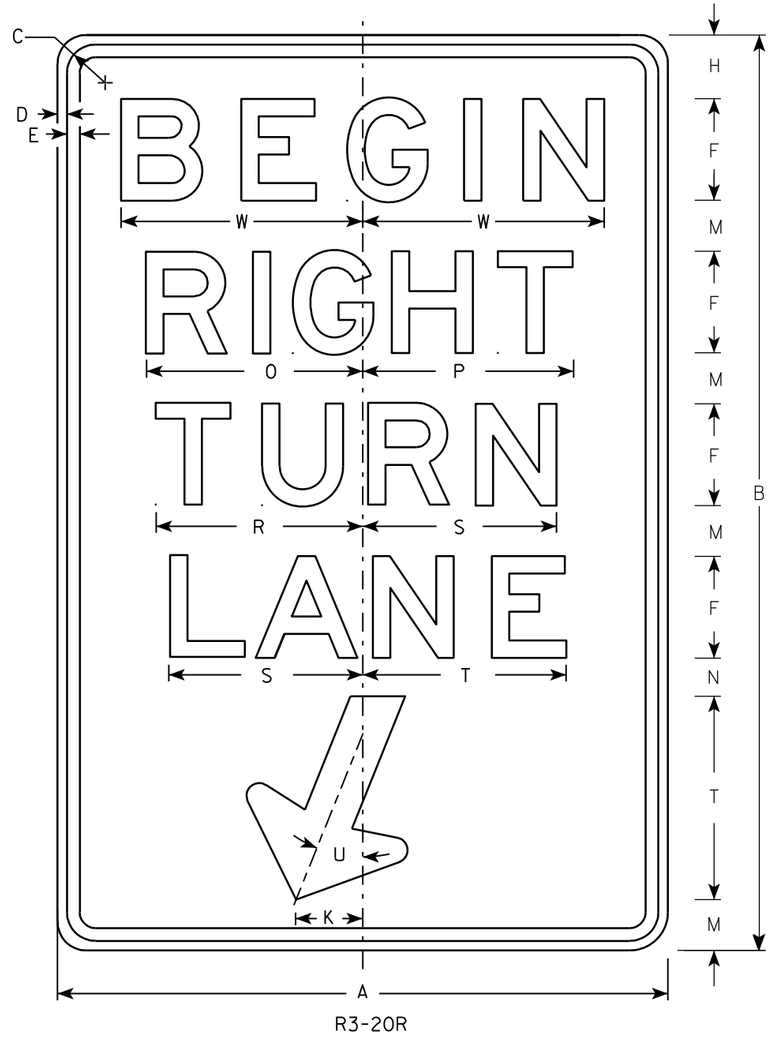
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20LL.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 366	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN PLOT DATE : 15-OCT-2010 14:38 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

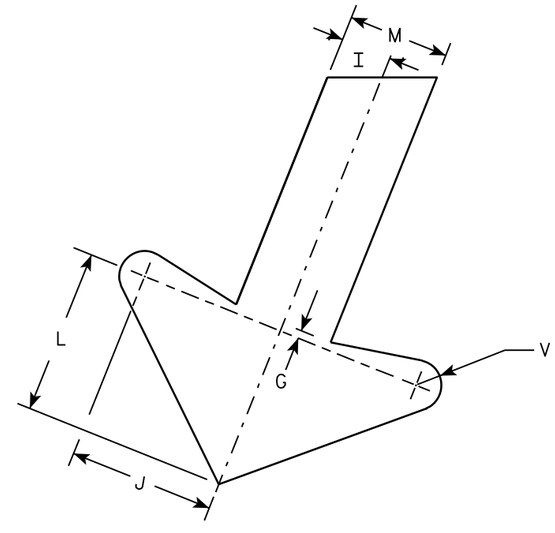
WISDOT/CADDS SHEET 42



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

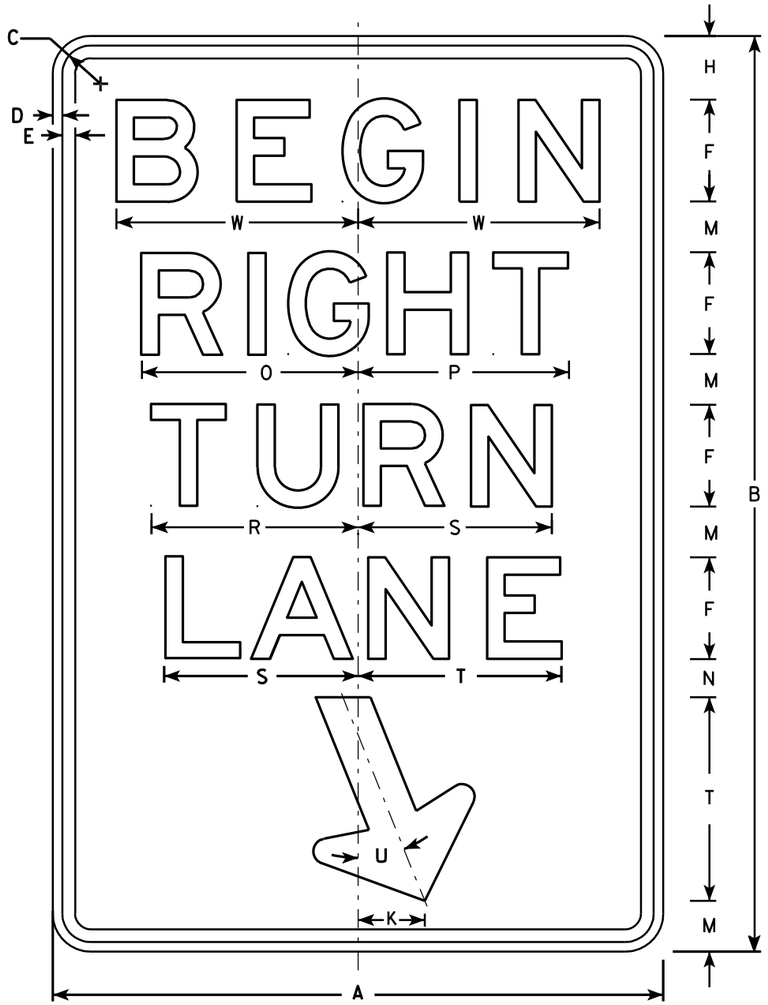
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

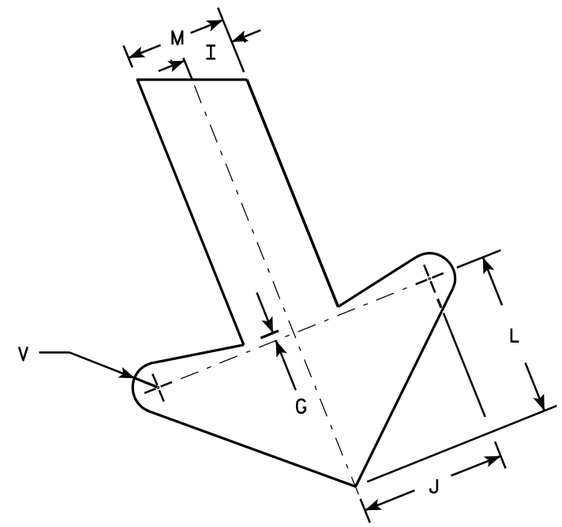
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 367 | E



R3-20RR

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

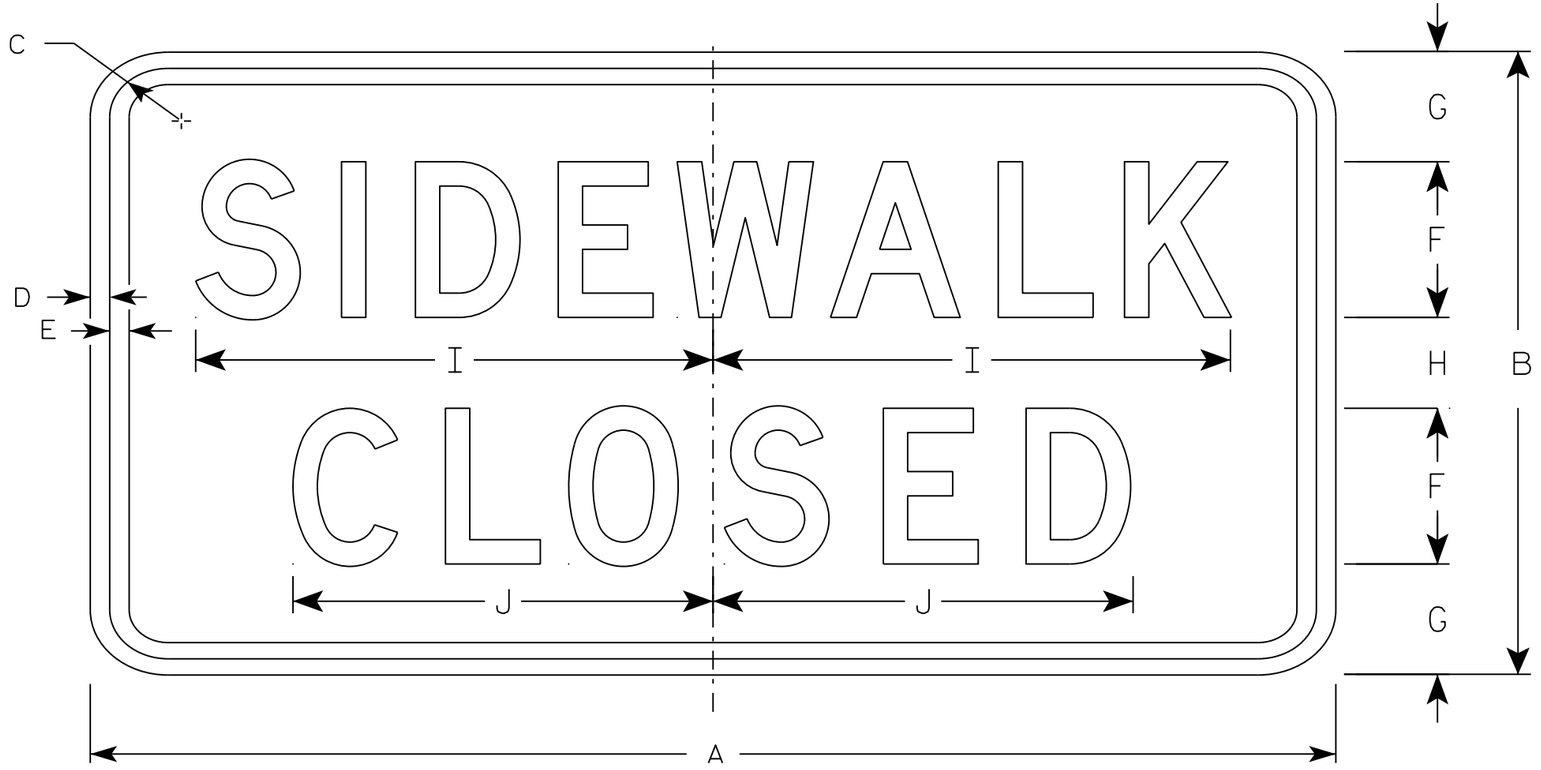
STANDARD SIGN
R3-20RR

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20RR.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 368 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

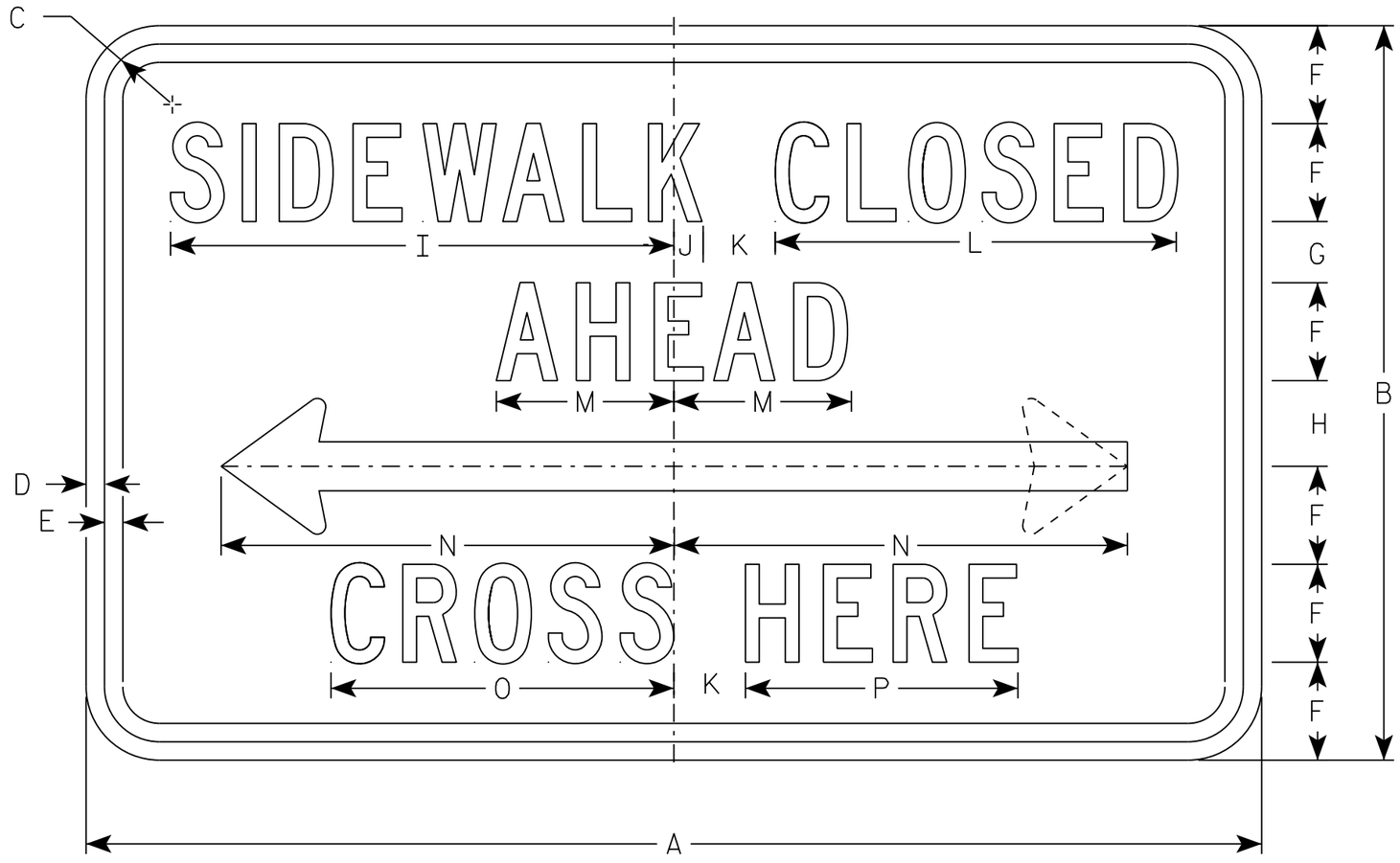
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

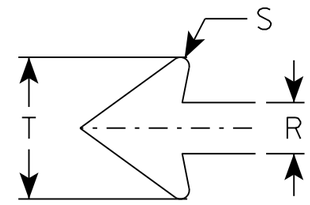
DATE 8/11/16 PLATE 369 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

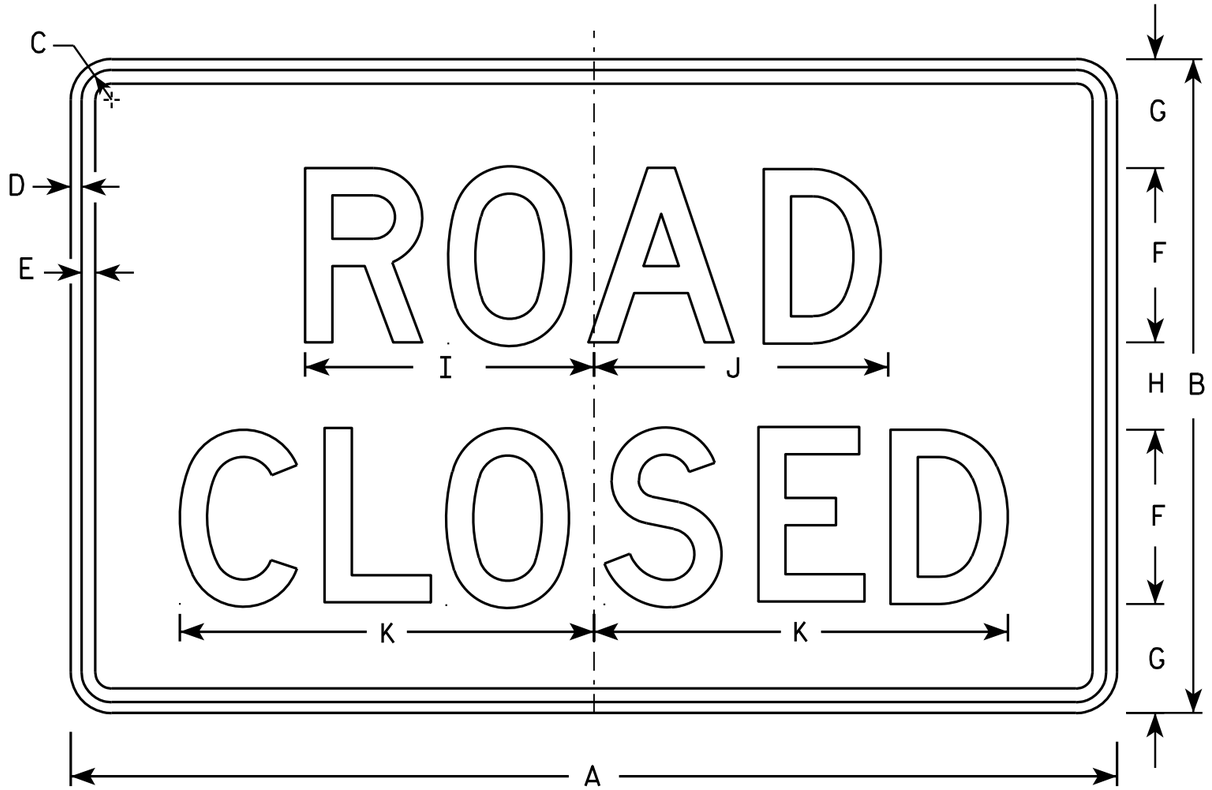
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11.3

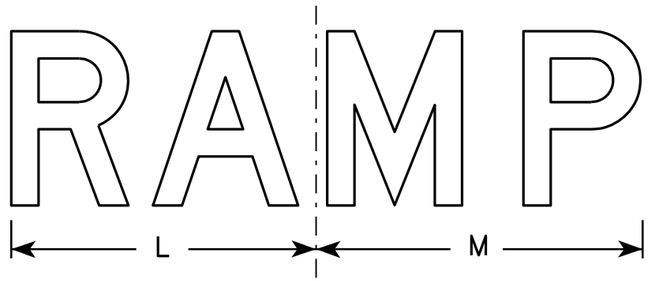
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 370	E



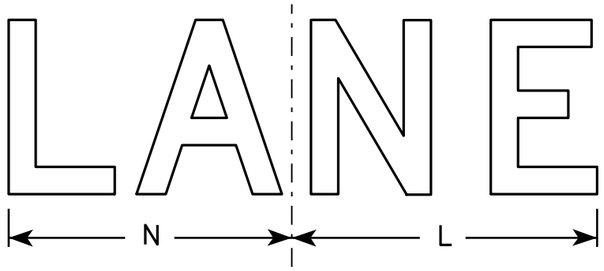
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

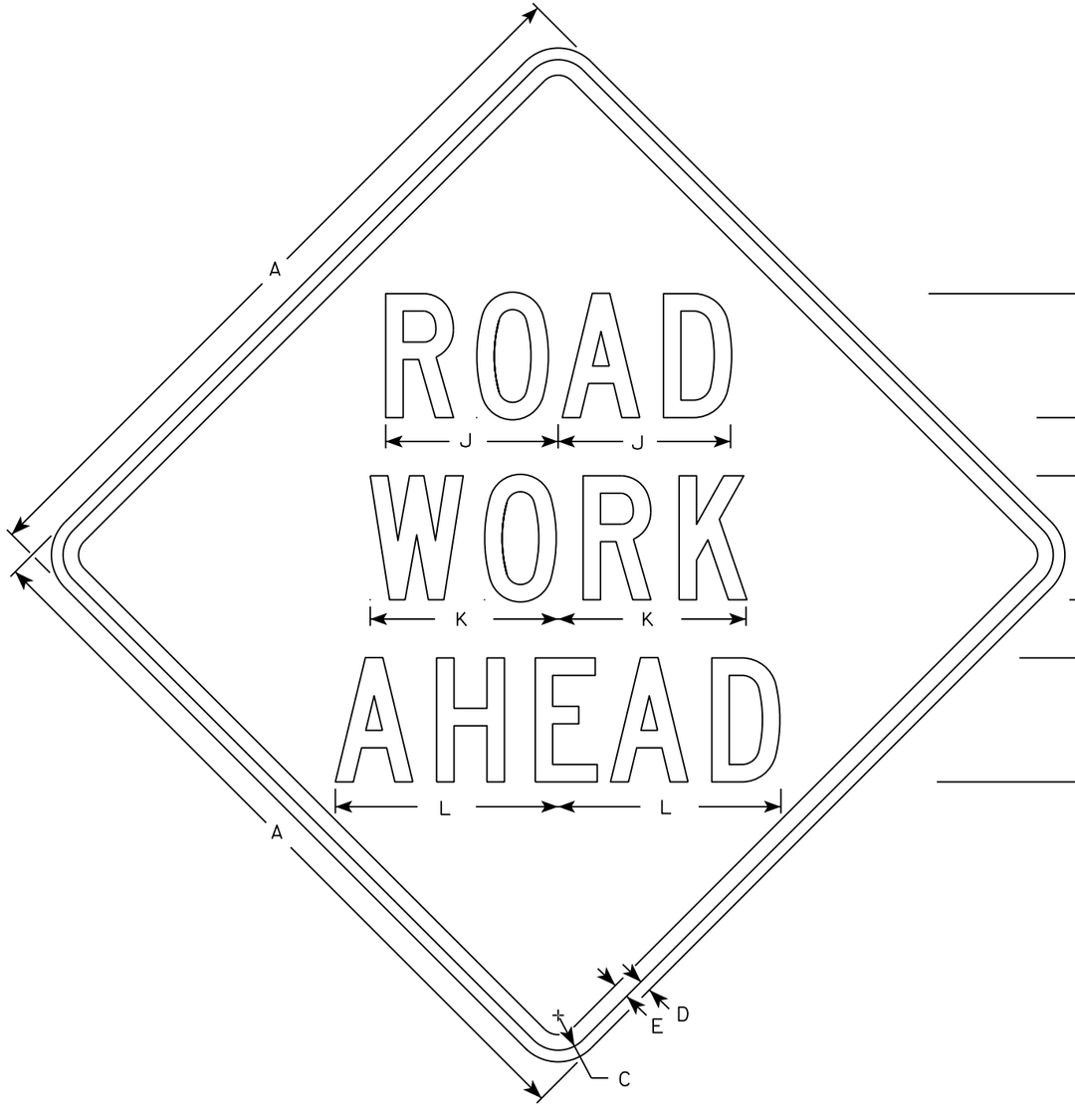
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

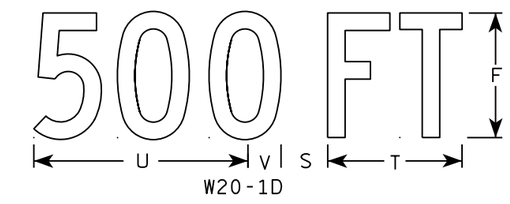
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

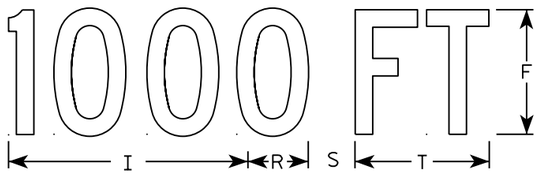
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 371 | E



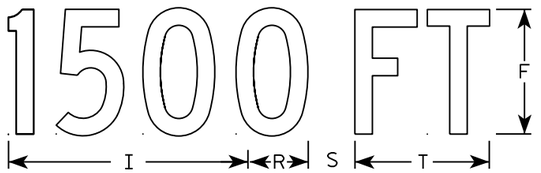
W20-1A



W20-1D



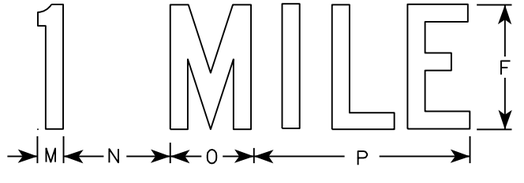
W20-1C



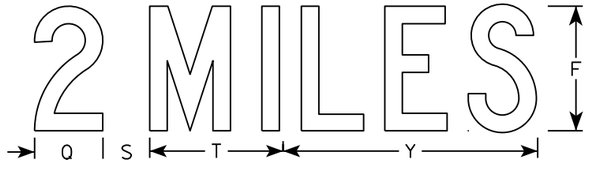
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

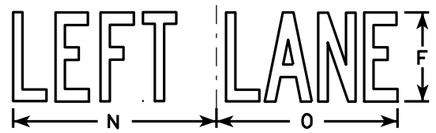
PROJECT NO:

SHEET NO: E

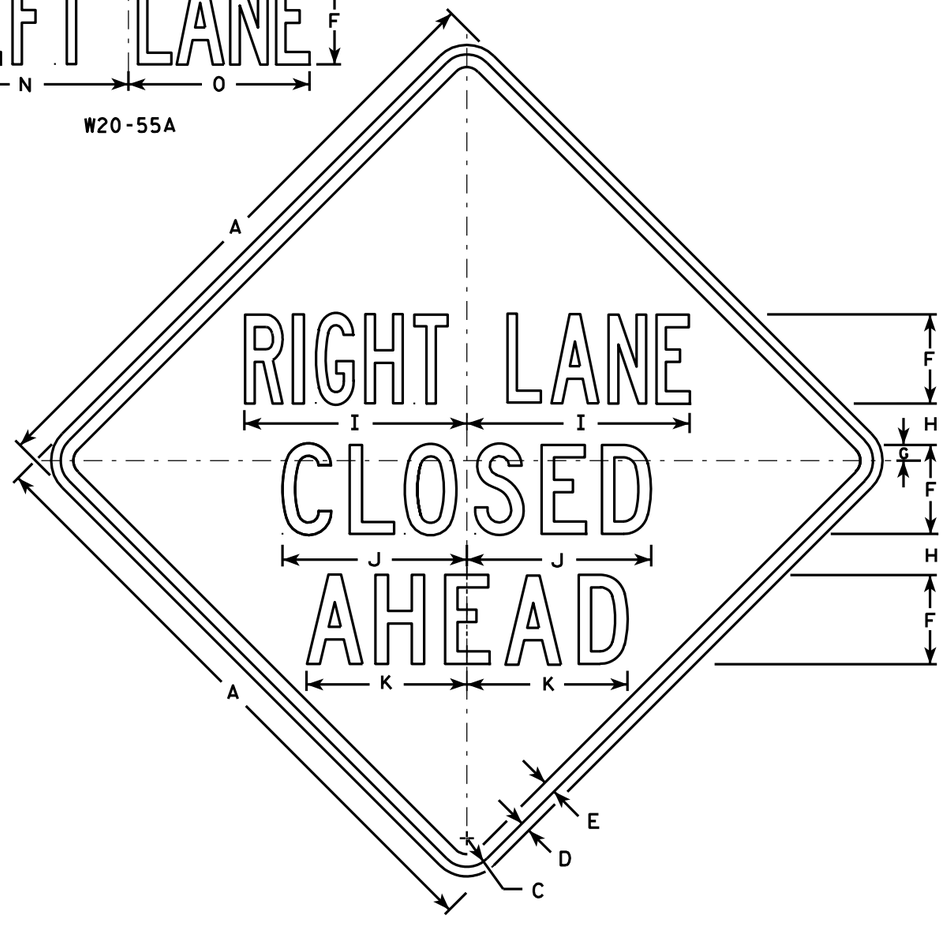
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



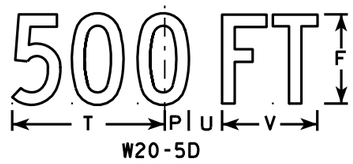
W20-56A



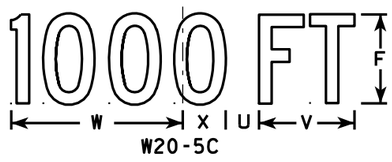
W20-55A



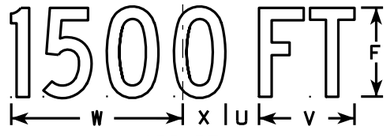
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

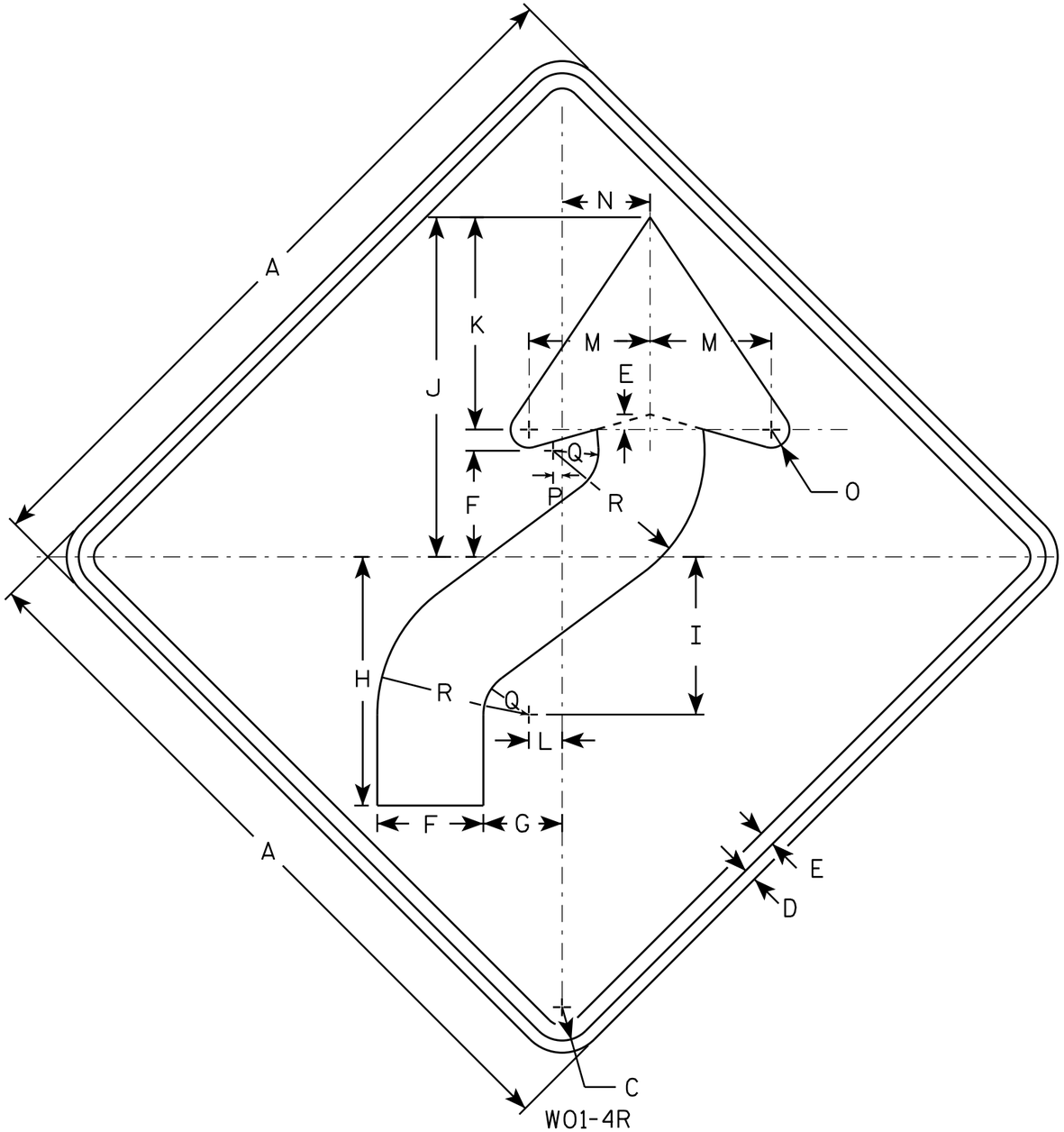
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 373 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

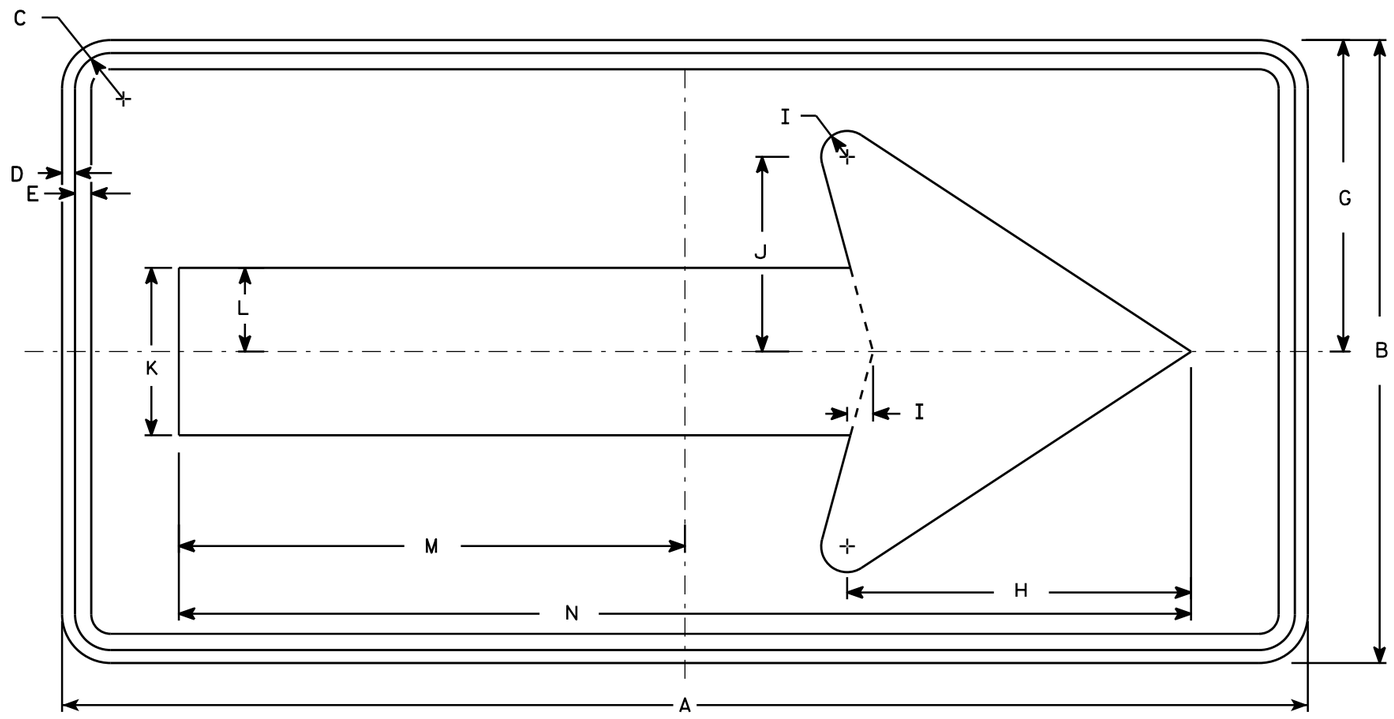
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

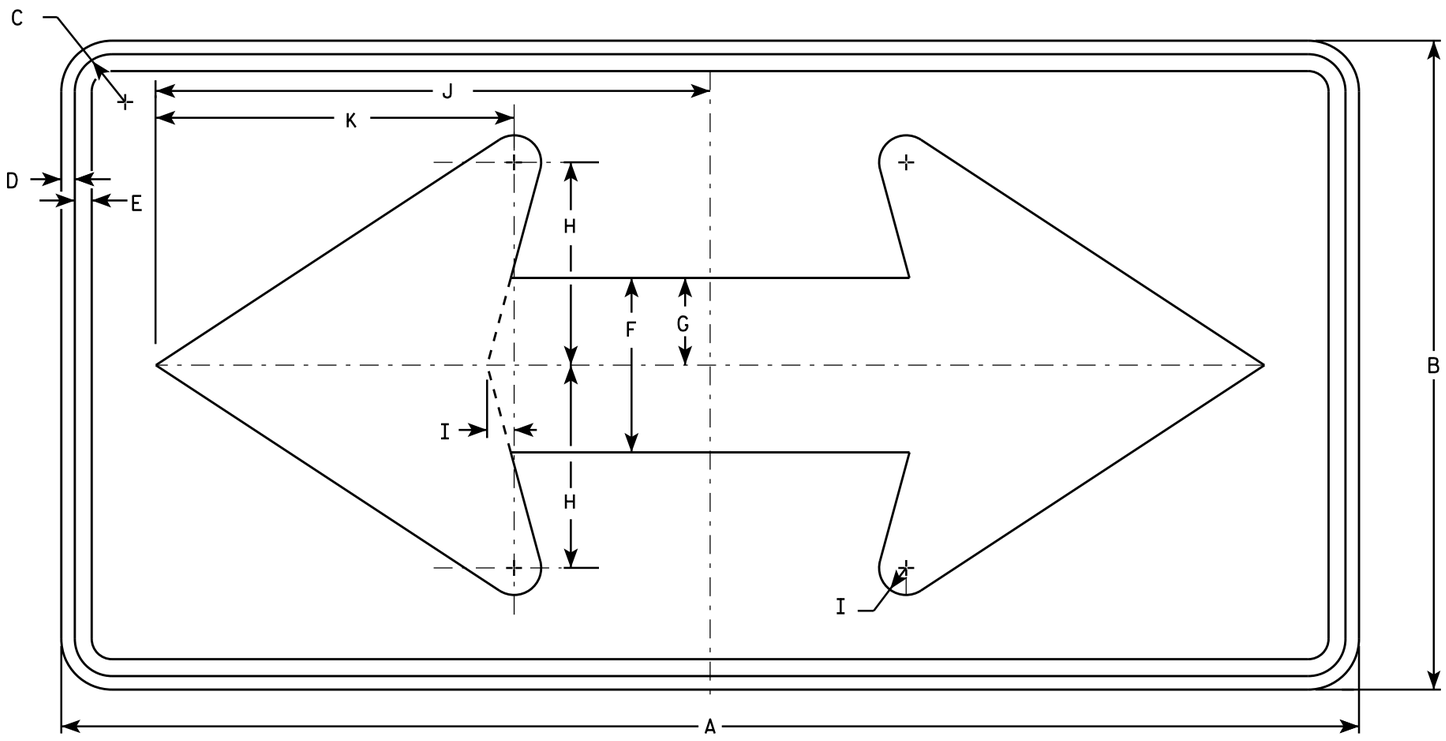
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W01-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5

STANDARD SIGN
W01-7

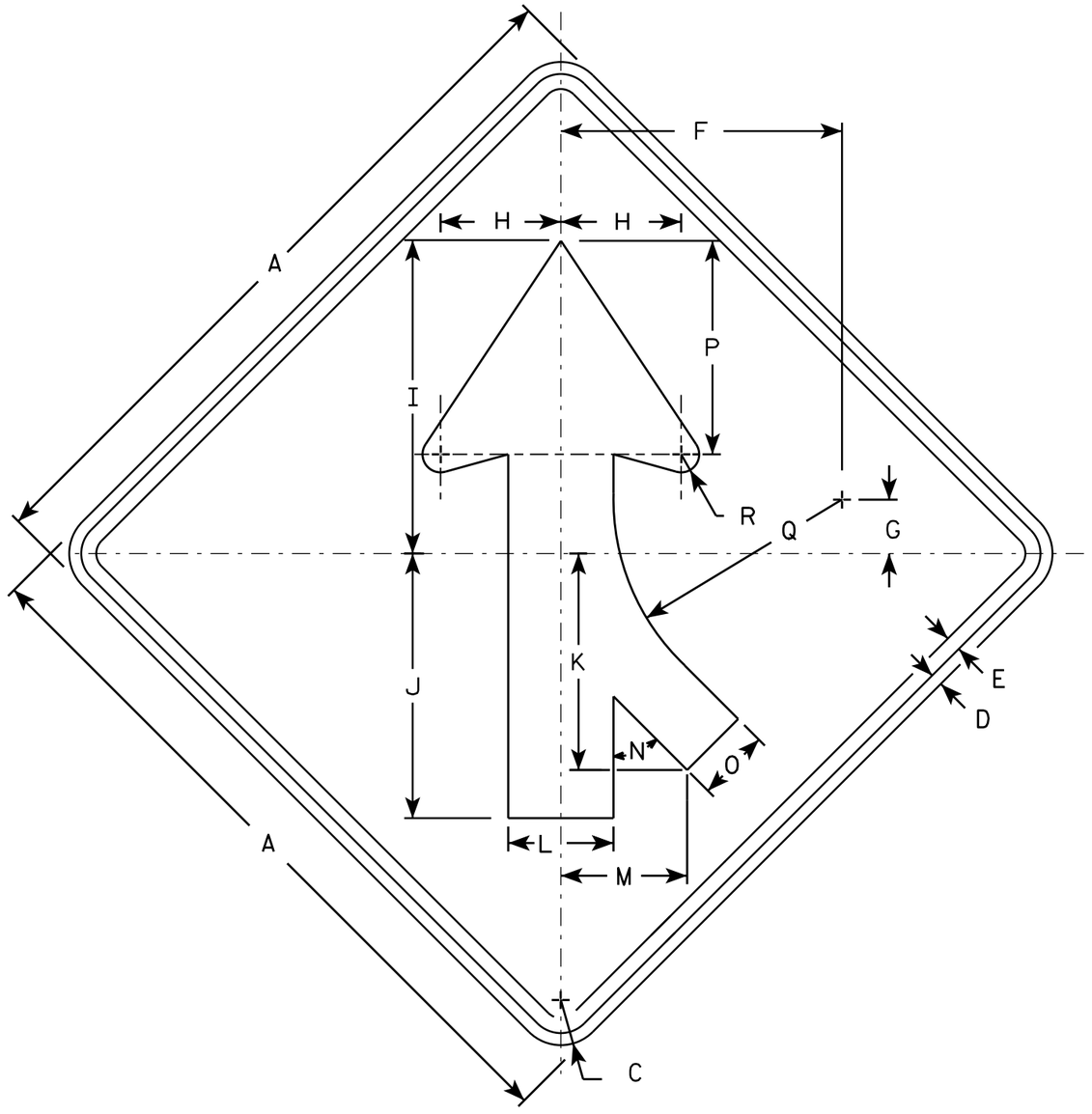
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 1376 W01-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W017.DGN PLOT DATE : 20-NOV-2013 10:35 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.604022:1.000000
WISDOT/CADDS SHEET 42



W04-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

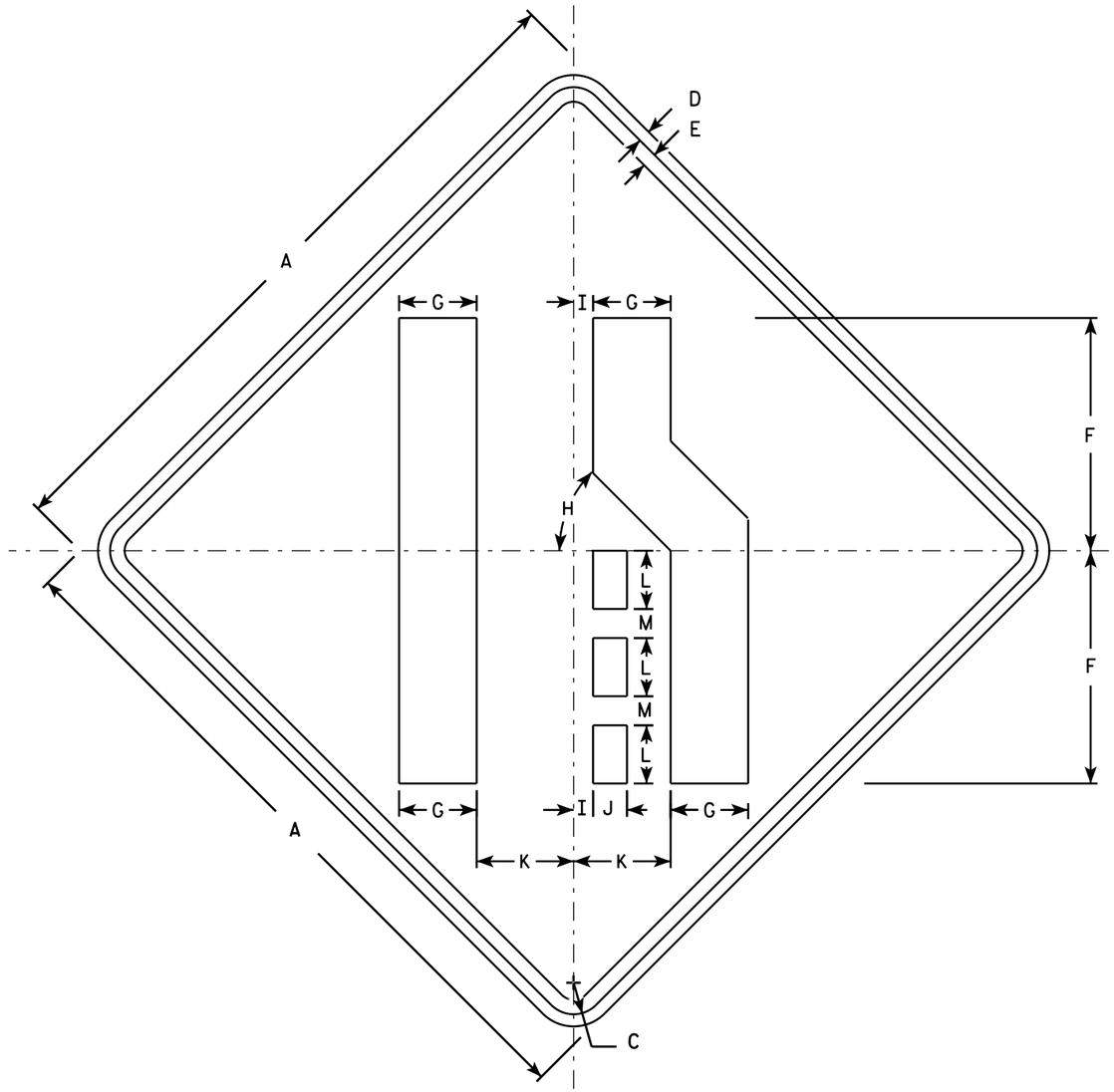
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W041.DGN PLOT DATE : 20-NOV-2013 11:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 378 W04-2.1

PROJECT NO: | SHEET NO: E

W:\str\60242\BRIDGE PLANS\01_SITE PLAN.dgn

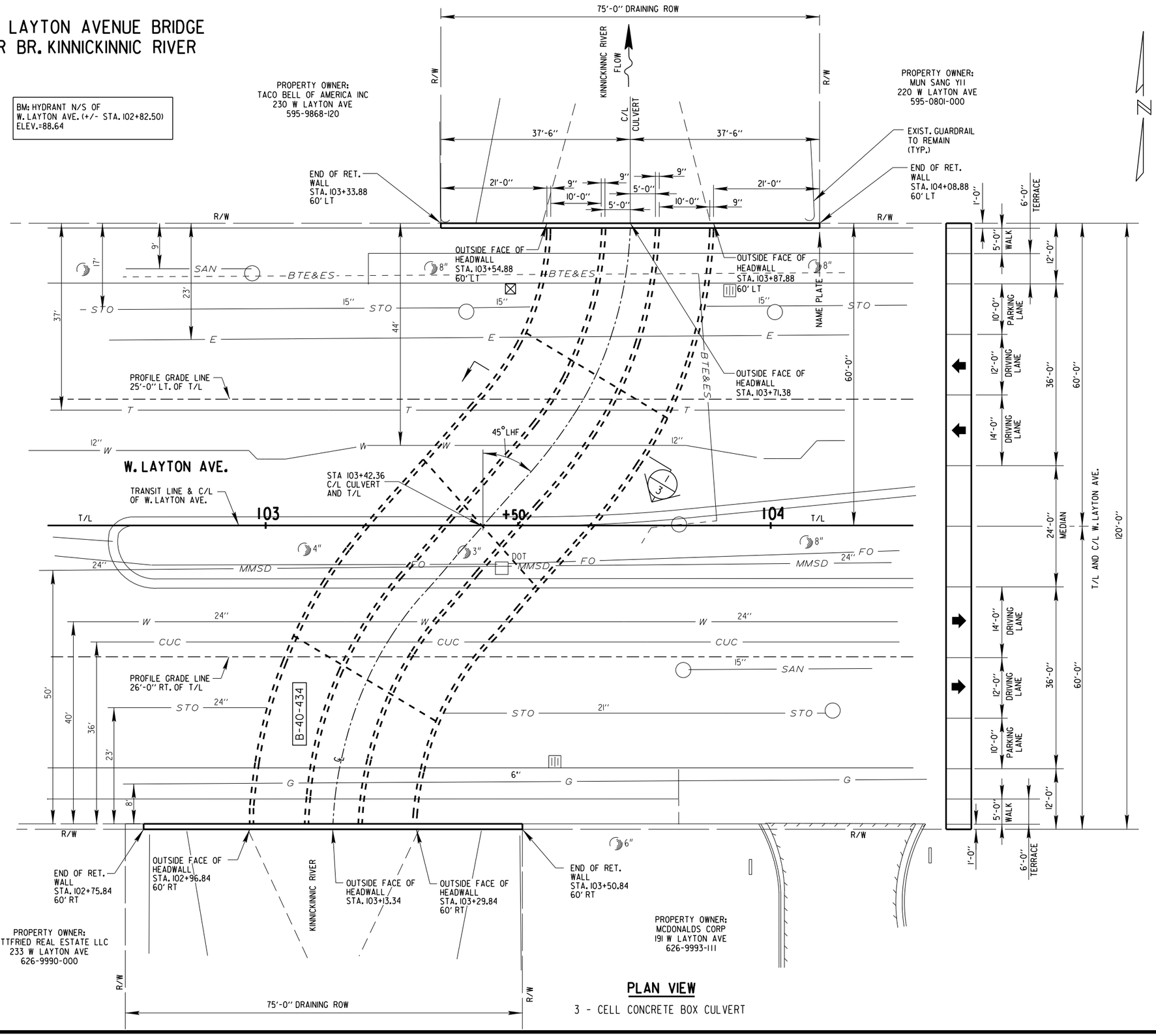
REVISED DATE: 01-31-2019 BY GJR

8

WEST LAYTON AVENUE BRIDGE OVER BR. KINNICKINNIC RIVER

STATE PROJECT NUMBER

2070 - 03 - 71



PLAN VIEW

3 - CELL CONCRETE BOX CULVERT

LIST OF DRAWINGS

1. SITE PLAN
2. SUPERSTRUCTURE CROSS SECTION AND ELEVATION
3. ESTIMATE OF QUANTITIES & GENERAL NOTES
4. EXTERIOR OF CULVERT REPAIR PLAN
5. INTERIOR OF CULVERT REPAIR PLAN

WISDOT CONTACT:
WILLIAM DREHER 608-266-8489

CONSULTANT CONTACT:
JONATHAN THOMAS 414-286-0463
CITY OF MILWAUKEE

NOTE: BRIDGE B-40-434
LENGTH = 139'-0¾" MEASURED ALONG C/L OF BOX CULVERT

WISCONSIN
JONATHAN D. THOMAS E-42372 MILWAUKEE, WI
PROFESSIONAL ENGINEER
2/1/2019

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
INFRASTRUCTURE SERVICES DIVISION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-434

W. LAYTON AVE. BRIDGE OVER BR. KINNICKINNIC RIVER

COUNTY MILWAUKEE	~~TOWN~~/CITY/ ~~VILLAGE~~ MILWAUKEE
DESIGN SPEC. REHABILITATION N/A	

DESIGNED BY J.P.H.	DESIGN CK'D. A.R.	DRAWN BY M.L.	PLANS CK'D. J.P.H. A.R.

SITE PLAN

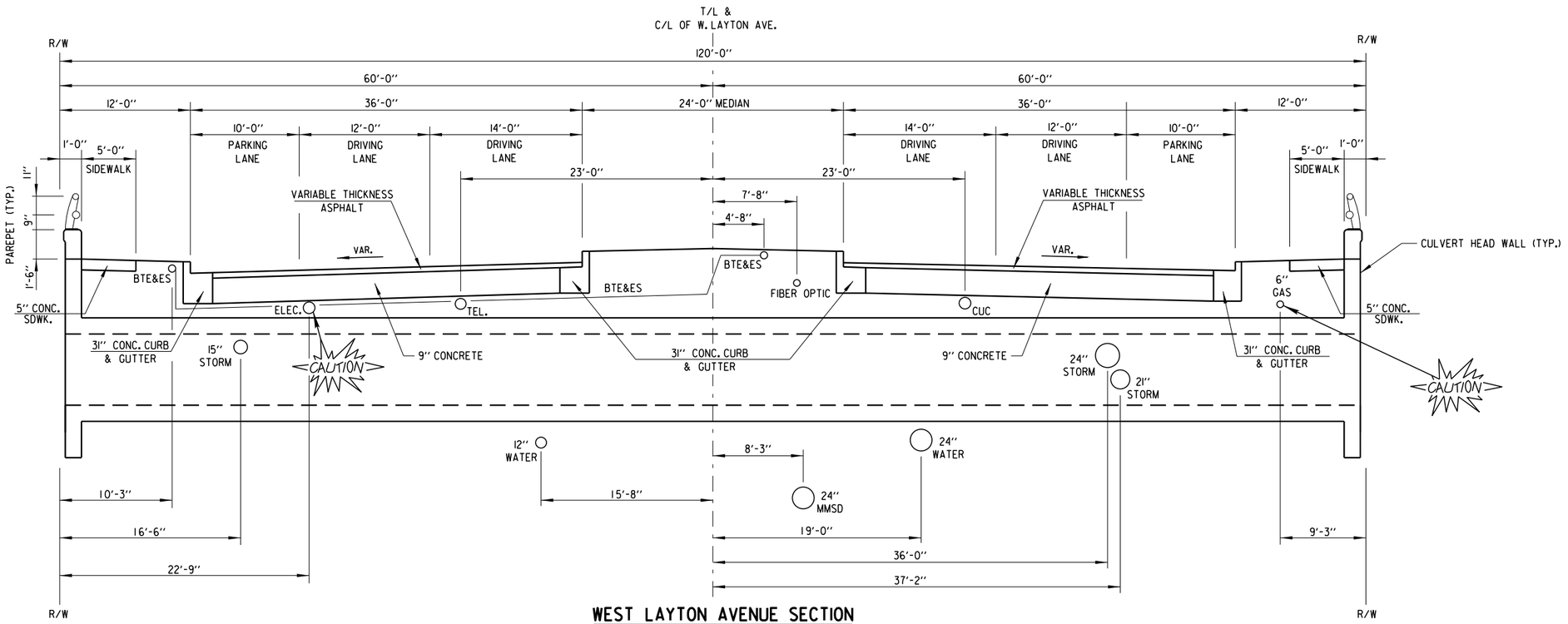
SHEET 1 OF 5
379

8

W:\STR\B0242\BRIDGE PLANS\02_SUPERSTRUCTURE CROSS SECTION AND ELEV.DGN

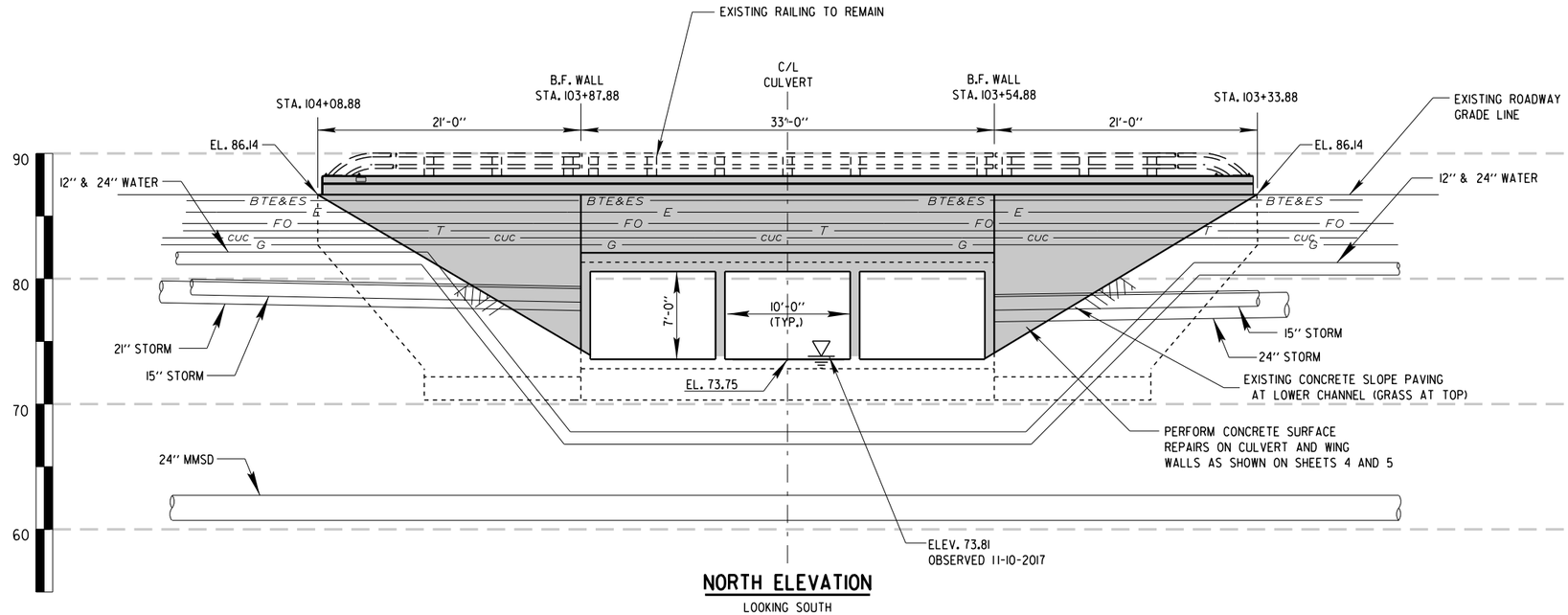
REVISED DATE: 11-29-2018 BY AL

STATE PROJECT NUMBER
2070 - 03 - 71



WEST LAYTON AVENUE SECTION

PERDENDICULAR TO C/L OF W. LAYTON AVE. AND T/L
LOOKING EAST



NORTH ELEVATION

LOOKING SOUTH

KEY:

-CONCRETE STAIN LIMITS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-434

DRAWN BY	DLF	PLANS CK'D.	J.P.H. A.R.

SUPERSTRUCTURE CROSS SECTION AND ELEVATION

SHEET 2 OF 5
380

8

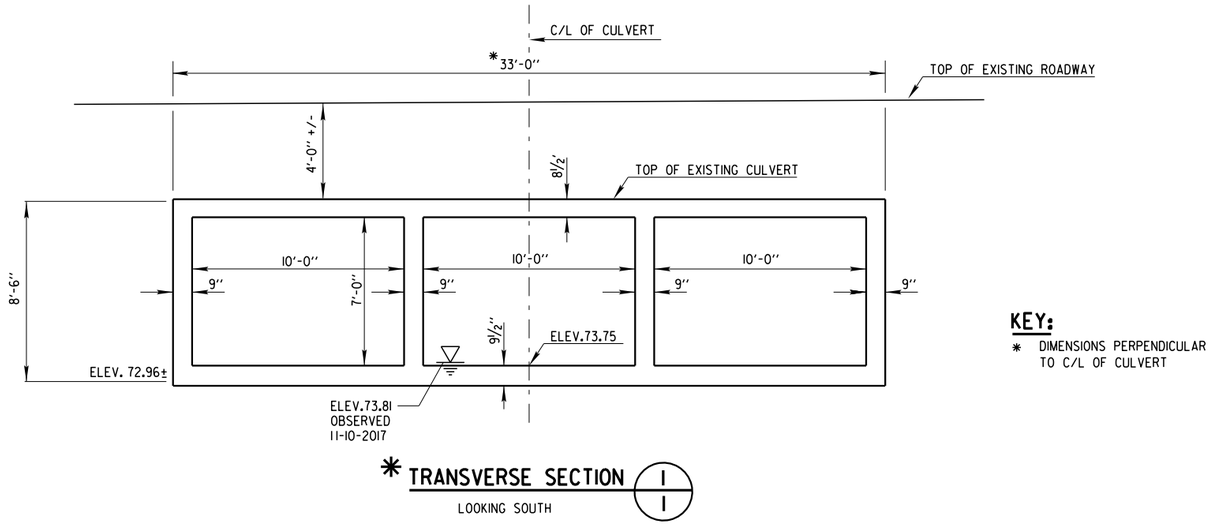
8

W:\STRVB0242\BRIDGE PLANS\03_ESTIMATE OF QUANTITIES AND SECTION.DGN

REVISED DATE: 1-28-2019 BY DB

STATE PROJECT NUMBER

2070 - 03 - 71



KEY:
* DIMENSIONS PERPENDICULAR TO C/L OF CULVERT

* TRANSVERSE SECTION 1/1

LOOKING SOUTH

ESTIMATE OF QUANTITIES

CATEGORY 0060

	ITEM NO.	BID ITEM	UNIT	CULVERT	TOTAL
◑	509.1500	CONCRETE SURFACE REPAIR	SF	15	15
◑	509.9025.S	EPOXY INJECTION CRACK REPAIR	LF	280	280
	509.9026.S	CORED HOLES 2-INCH DIAMETER	EACH	8	8
	517.1010.S	CONCRETE STAINING B-40-434	SF	1120	1120
	SPV.0025.001	DEEP CONCRETE SURFACE REPAIR	CF	1	1
◑	SPV.0090.006	CULVERT OVERHEAD CONSTRUCTION JOINT REPAIR	LF	90	90

◑ AS DETERMINED BY ENGINEER IN THE FIELD.
SEE CONCRETE SURFACE REPAIR PLAN SHEETS 4 & 5 FOR LOCATIONS AND EXTENT OF WORK.

DESIGN DATA

DEAD LOAD

CONC. = 150 LB/CF
OVERBURDEN = 4'-0"

LIVE LOAD

DESIGN LOADING : HS20 (TAKEN FROM HSI, 10/16/2018)
INVENTORY RATING : HS20 (TAKEN FROM HSI, 10/16/2018)
OPERATING RATING : HS33 (TAKEN FROM HSI, 10/16/2018)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)= 190 KIPS (TAKEN FROM HSI, 10/16/2018)

MATERIAL PROPERTIES

CONCRETE MASONRY	f'c = 3,500 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	Fy = 60,000 PSI

TRAFFIC VOLUME

ADT (2018) = 21,519
ADT (2038) = 23,886
R.D.S. = 35 MPH

HYDRAULIC DATA

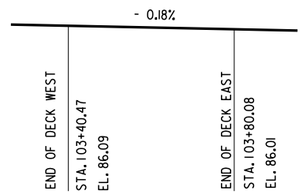
INSTANTANEOUS PEAK DISCHARGE, 100 YEAR: NOT AVAILABLE
VELOCITY THRU BRIDGE : NOT AVAILABLE
TOTAL WATERWAY AREA THRU BRIDGE: NOT AVAILABLE
AT 100-YEAR FLOOD LEVEL DRAINAGE AREA: 1.7 SQ.MI.
100-YEAR FLOOD STAGE: NOT AVAILABLE
10-YEAR FLOOD STAGE: NOT AVAILABLE

PROJECT IMPROVEMENTS

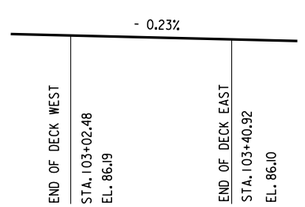
THE BRIDGE REHABILITATION PROJECT, AS PROPOSED, CONSISTS OF: SURFACE REPAIRS AND EPOXY INJECTION TO THE CULVERT UNDERSIDE OF DECK, CELL WALLS & WING WALLS; REPAIRING AND SEALING ALL OVERHEAD CONSTRUCTION JOINTS; STAINING OUTSIDE FACES OF HEADWALLS, WINGWALLS & PARAPETS.

THE STREET PROJECT AS PROPOSED, CONSISTS OF: REPLACEMENT OF THE SIDEWALK & MILL & OVERLAY OF THE ROADWAY.

SEE ROADWAY PLAN FOR DETAILS.



PROFILE GRADE LINE 25 FEET LEFT OF TRANSIT LINE OF WEST LAYTON AVENUE



PROFILE GRADE LINE 26 FEET RIGHT OF TRANSIT LINE OF EAST LAYTON AVENUE

GENERAL NOTES

ALL DETAILS, MATERIALS & FABRICATION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION OF THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION EDITION 2019, EXCEPT AS OTHERWISE NOTED.

ALL STATIONS & ELEVATIONS ARE IN FEET.

ALL ELEVATIONS ARE REFERRED TO CITY OF MILWAUKEE DATUM. CITY OF MILWAUKEE DATUM = 580.60 NGVD.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

CHAMFER EXPOSED CONCRETE EDGES 1" UNLESS OTHERWISE NOTED.

CONCRETE STAINING LIMITS ARE SHOWN ON SHEET 2 AND INCLUDE HEADWALL, WING WALLS, OUTSIDE OF PARAPET AND CELL WALL ELEVATIONS.

CONCRETE STAINING COLOR:
FEDERAL STANDARD COLOR NO. 30372

UTILITIES

EXISTING UTILITIES ARE TO BE KEPT IN SERVICE AND PROTECTED DURING THE REHABILITATION PROJECT. SEE PROJECT SPECIAL PROVISION FOR DETAILS ON UTILITY WORK.

SEE ROADWAY PLANS FOR EXISTING UTILITY LOCATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-434

DRAWN BY D.L.F. | PLANS CK'D. J.P.H. A.R.

ESTIMATE OF QUANTITIES & GENERAL NOTES

SHEET 3 OF 5

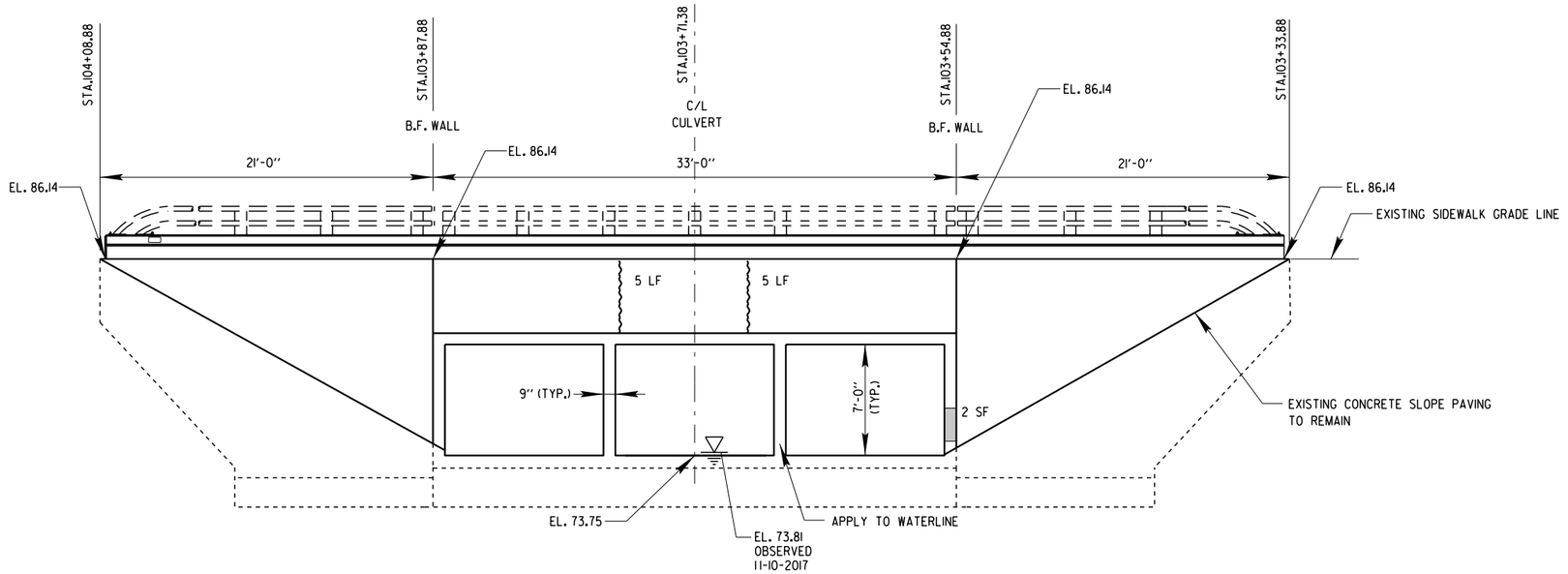
8

8

W:\STR\B0242\BRIDGE PLANS\04_EXTERIOR OF CULVERT REPAIR PLAN.DGN

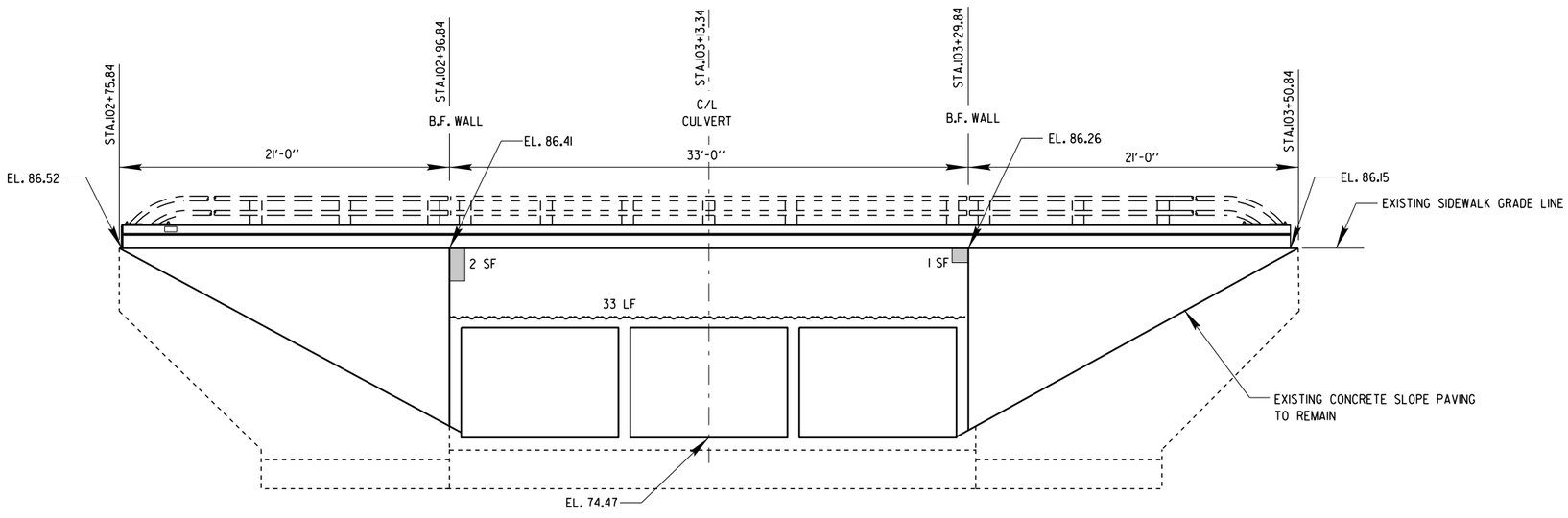
REVISED DATE: 01-28-2019 BY DB

STATE PROJECT NUMBER
2070 - 03 - 71



NORTH ELEVATION

LOOKING SOUTH



SOUTH ELEVATION

LOOKING NORTH

KEY:

EPOXY CRACK REPAIR (LF)

CONCRETE SURFACE REPAIR (SF)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-434

DRAWN BY DLF | PLANS CK'D. J.P.H. A.R.

EXTERIOR OF CULVERT REPAIR PLAN

SHEET 4 OF 5

8

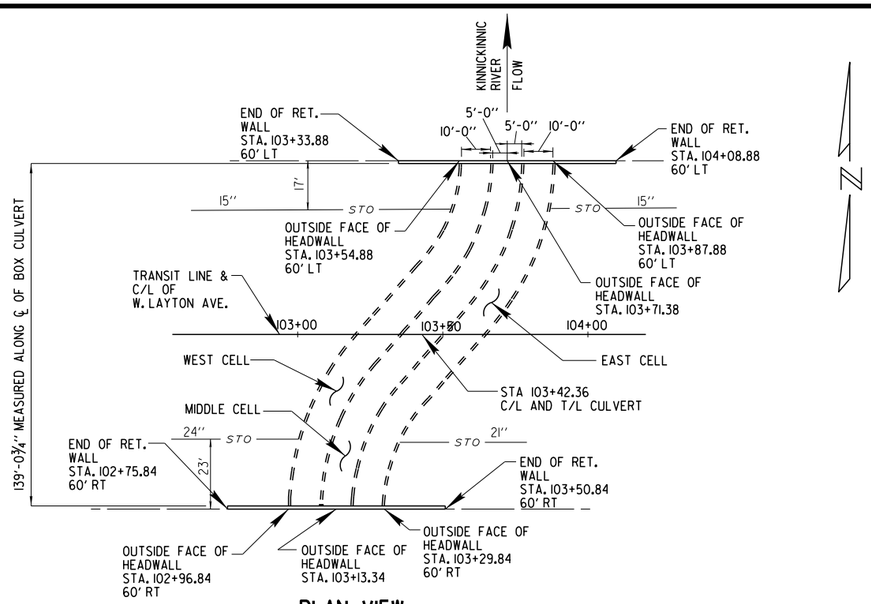
8

W:\STR\B0242\BRIDGE PLANS\05_INTERIOR OF CULVERT REPAIR PLAN.DGN

REVISED DATE: 11-12-2018 BY AL

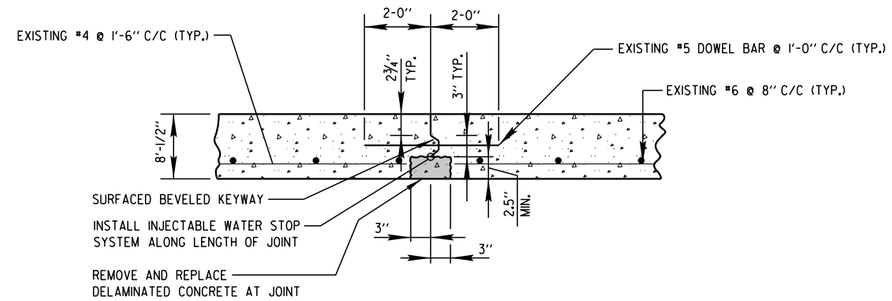
STATE PROJECT NUMBER

2070 - 03 - 71

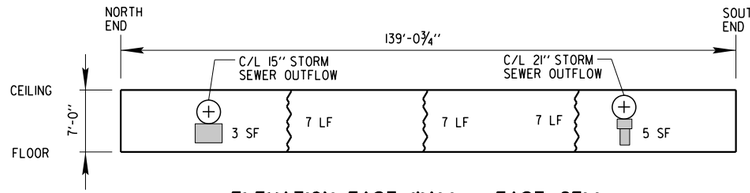


PLAN VIEW

3 - CELL CONCRETE BOX CULVERT

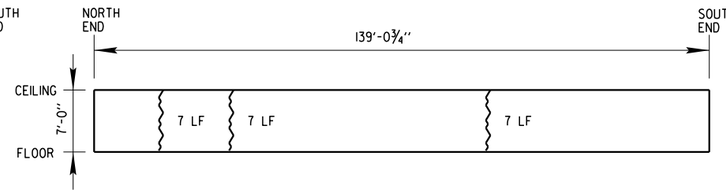


OVERHEAD CONSTRUCTION JOINT REPAIR DETAIL



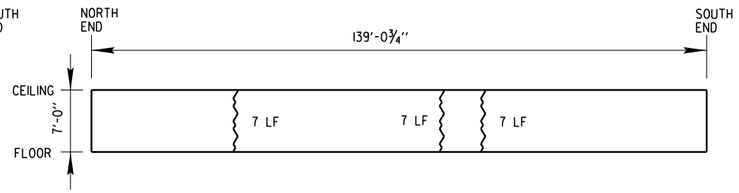
ELEVATION EAST WALL - EAST CELL

(LOOKING EAST)



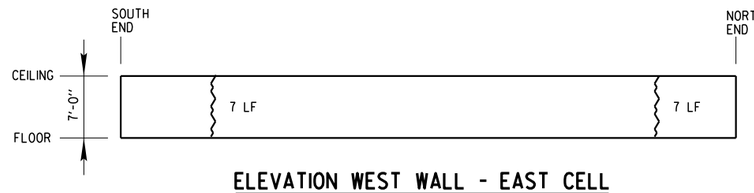
ELEVATION EAST WALL - MIDDLE CELL

(LOOKING EAST)



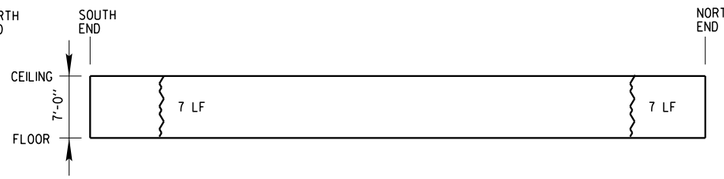
ELEVATION EAST WALL - WEST CELL

(LOOKING EAST)



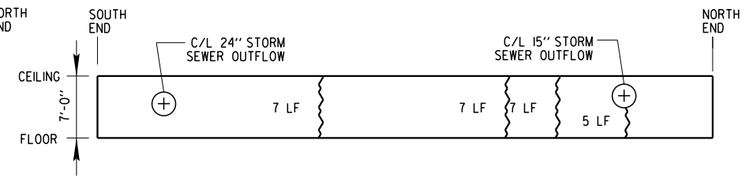
ELEVATION WEST WALL - EAST CELL

(LOOKING WEST)



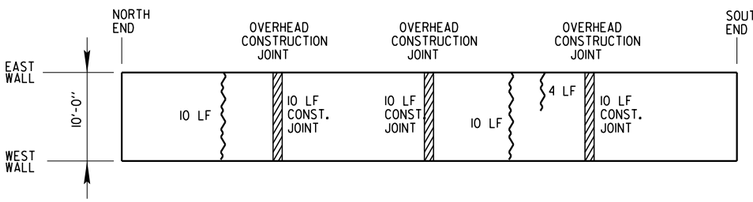
ELEVATION WEST WALL - MIDDLE CELL

(LOOKING WEST)



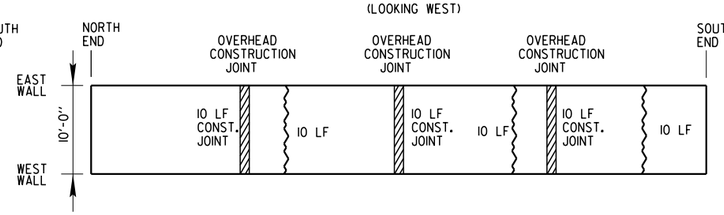
ELEVATION WEST WALL - WEST CELL

(LOOKING WEST)



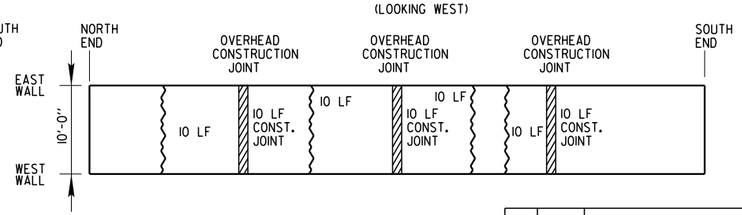
PLAN VIEW CEILING - EAST CELL

(LOOKING UP)



PLAN VIEW CEILING - MIDDLE CELL

(LOOKING UP)



PLAN VIEW CEILING - WEST CELL

(LOOKING UP)

KEY:

EPOXY INJECTION CRACK REPAIR (LF)

CONCRETE SURFACE REPAIR (SF)

CULVERT OVERHEAD JOINT REPAIR (LF)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-434

DRAWN BY DLF | PLANS CK'D. J.P.H. A.R

INTERIOR OF CULVERT REPAIR PLAN

SHEET 5 OF 5

8

8

CUT AND FILL

STATION LEFT	CUT C.Y.	FILL (-) C.Y.	LARGEST CUT IN FEET	LARGEST FILL (-) IN FEET
68+50	0	0	0.26	0.00
69+00	20	0	0.51	0.00
69+50	29	0	0.46	0.00
70+00	29	0	0.50	0.00
70+50	18	0	0.26	0.00
SUB-TOTAL	96	0		

STATION RIGHT	CUT C.Y.	FILL (-) C.Y.	LARGEST CUT IN FEET	LARGEST FILL (-) IN FEET
68+50	0	0	0.20	0.00
69+00	17	0	0.44	0.00
69+50	25	0	0.44	0.00
70+00	26	0	0.49	0.00
70+50	15	0	0.10	0.00
SUB-TOTAL	83	0		

STATION	CUT C.Y.	FILL (-) C.Y.	LARGEST CUT IN FEET	LARGEST FILL (-) IN FEET
SOD	640	0		
RAMPS	188	0		
SUB-TOTAL	828	0		
GRAND TOTAL	1,007	0		

SEE SECTION 3 OF PLAN FOR EARTHWORK SUMMARY

EARTHWORK SUMMARY

EXCAVATION COMMON (205.0100)	2,191 CY
FILL (INCLUDES 20% SHRINKAGE)	0 CY
WASTE	2,191 CY

9

9

PROJECT NO: 2070-03-71	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CUT AND FILL QUANTITIES	SHEET: 384 E

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