WKE NOVEMBER 2023

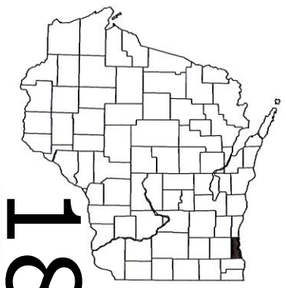
PROJECT ID WITH: N/A

2275-05-70

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 = 382



18

COUNTY MILWAUKEE

DESIGN DESIGNATION

A.D.T. (CURRENT)	=	9,500
A.D.T. (2043)	=	9,500
D.H.V.	=	N/A
D.	=	59/41
T.	=	5.29%
DESIGN SPEED	=	35 M.P.H.
ESALS	=	1,100,000

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
- RAILROADS
- FENCE — (TYPE)
- CATCH BASIN OR INLET — EXISTING — PROPOSED

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- GRADE ELEVATION — 95.36

UTILITIES

CITY UNDERGROUND CONDUIT	CUC
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	STO
TELEPHONE	T
WATER	W
TRAFFIC & ELECTRICAL SERVICES	TE&ES
MILWAUKEE METRO SEWERAGE DIST	MMSD
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	

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TITLE.DGN

PLOT DATE:

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C MILWAUKEE, N 20TH ST

NORTH AVE TO HOPKINS ST

STH 57

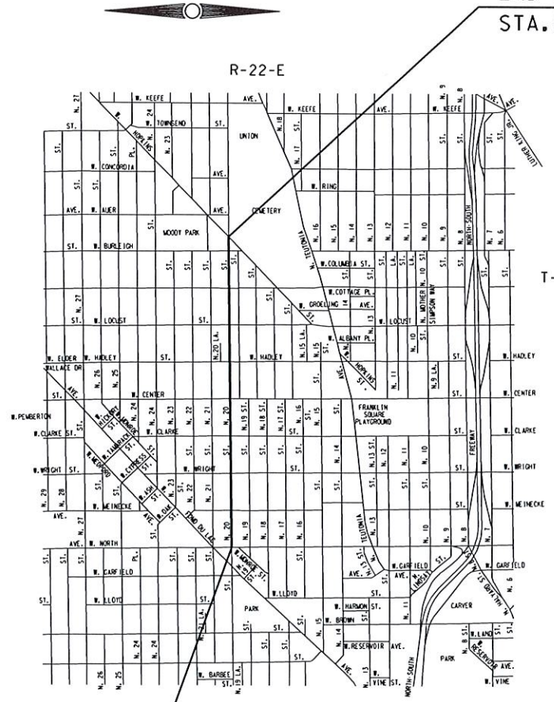
MILWAUKEE COUNTY

STATE PROJECT NUMBER

2275-05-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2275-05-70	WISC 2024005	1

N



END PROJECT

STA. 56+46.80, T/L

BEGIN PROJECT

STA. 01+39.30, T/L

Y. = 366,361.00

X. = 2,551,151.37

LAYOUT

SCALE 1/2 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.043 (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

7/21/2023 (Date)

Commissioner of Public Works

Original Plans Prepared By

WISCONSIN
KEVIN J. MUHS
46391-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

7/21/2023 (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: 8/1/23

Mark Wilfert
(Signature)

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 UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
TOPSOILED AREAS SHALL BE SODDED 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. '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.

10. 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.

11. 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.

12. REPLACE ALL CONCRETE CURB AND GUTTER INDICATED FOR REMOVAL AND REPLACEMENT IN EXISTING LOCATION UNLESS OTHERWISE NOTED ON PLAN.

13. 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.

14. RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING AROUND SIGNATURE BEDS.

15. CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND SEWRPC; AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY SECTION CORNER MONUMENT.

16. DASHED YELLOW CENTER LINES AND WHITE LANE LINES ARE 10 FEET LONG WITH A 30 FOOT GAP.

17. ALL DOUBLE YELLOW CENTER LINES HAVE A 4 INCH SPACE BETWEEN TWO 8 INCH LINES.

18. 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.

19. ALL DIMENSIONS ARE FROM THE FACE OF CURB TO THE CENTER OF THE MARKING UNLESS OTHERWISE NOTED.

20. TEMPORARY PAVEMENT MARKINGS MUST BE PLACED ON THE PAVEMENT IF PERMANENT MARKINGS ARE NOT INSTALLED AFTER THE COMPLETION OF PAVING.

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
ELEV.	- ELEVATION
ENT.	- ENTRANCE
EXIST.	- EXISTING
F	- FLANGE
G	- GUTTER, OR GAS
HYD.	- HYDRANT
LT.	- LEFT
MMSD	- MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
P/L.	- PROPERTY LINE
R OR RAD.	- RADIUS
RET.	- RETAINING
RT.	- RIGHT
R/W	- RIGHT OF WAY
TEL	- AMERITECH
TES	- TRAFFIC ENGINEERING, AND ELECTRICAL SERVICES
T/L	- TRANSIT LINE
WEP	- WISCONSIN ELECTRIC POWER

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
CONTAMINATED SOIL LIMITS
PLAN DETAILS
CURB RAMP DETAIL
REMOVAL PLANS
EROSION CONTROL
STORM SEWER AND UTILITIES
SIGNING
CUC
LIGHTING
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL AND CONSTRUCTION STAGING
ALIGNMENT PLANS

2

UTILITY CONTACTS

AMERICAN TRANSMISSION COMPANY (ATC)
JEFF VANDERWERFF
W234N2000 RIDGEVIEW PKWY
WAUKESHA, WI 53188
PHONE: 262-206-4966
EMAIL: jvanderwerff@atcllc.com

AT&T WISCONSIN
JAY C. BULANEK
2005 PEWAUKEE RD
WAUKESHA, WI 54188
PHONE: 262-896-7669
CELL: 414-491-2855
EMAIL: jb5175@att.com

CHARTER / SPECTRUM
CHARLES BRASILE
1320 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
PHONE: 414-908-4822
CELL: 414-430-5812
EMAIL: Charles.Brasile@charter.com

CITY OF MILWAUKEE, COMMUNICATIONS
DPW COMMUNICATIONS DISPATCH
BRYAN M. PAWLAK
1440 WEST CANAL STREET
MILWAUKEE, WI 53233
PHONE: 414-286-5970

CITY OF MILWAUKEE, CUC
KAREN ROGNEY
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-3243
EMAIL: krogne@milwaukee.gov

CITY OF MILWAUKEE, SEWERS
ZAFAR YOUSUF
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-2467
EMAIL: zyousu@milwaukee.gov

CITY OF MILWAUKEE, STREET LIGHTING
NEAL KARWEIK
1540 WEST CANAL STREET
MILWAUKEE, WI 53233
PHONE: 414-286-5943
CELL: 414-708-4245
EMAIL: nkarwe@milwaukee.gov

CITY OF MILWAUKEE, TRAFFIC SIGNALS
SCOTT REINBACHER
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-3232
EMAIL: sreinb@milwaukee.gov

CITY OF MILWAUKEE, WATER WORKS
JOSHUA IWEN
841 N. BROADWAY, ROOM 409
MILWAUKEE, WI 53202
PHONE: 414-286-3640
EMAIL: jiwen@milwaukee.com

EVERSTREAM SOLUTIONS
SHAD GARCIA
324 E. WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
PHONE: 414-522-6685
EMAIL: sgarcia@everstream.net

MIDWEST FIBER NETWORKS (MWFN)
CORY SCHMUKI
6070 N. FLINT RD
GLENDALE, WI 53209
PHONE: 414-459-3561
EMAIL: cschmuki@midwestfibernetworks.com

WE ENERGIES - ELECTRIC
NICHOLAS WELCH
500 S. 116TH ST.
WEST ALLIS, WI 53214
PHONE: 414-944-5765
CELL: 414-791-0406
EMAIL: Nicholas.welch@we-energies.com
ELECTRIC DISPATCH # 1-800-662-4797

WE ENERGIES - GAS
ALEX DANTINNE
500 S. 116TH ST.
WEST ALLIS, WI 53214
PHONE: 920-621-6903
EMAIL: alex.dantinne@we-energies.com
GAS DISPATCH # 1-800-261-5325

OTHER CONTACTS

CITY OF MILWAUKEE, FORESTRY
JAMES KRINGER
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-708-2428
EMAIL: jkring@milwaukee.gov

CITY OF MILWAUKEE, UTILITY COORDINATOR
ELLIOT SMYTH
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-704-0468
EMAIL: esmyth@milwaukee.gov

WISCONSIN DEPT. OF NATURAL RESOURCES
RYAN PAPPAS
141 NW BARSTOW ROOM 180
WAUKESHA, WI 53188
PHONE: 414-750-7495
EMAIL: ryan.pappas@wisconsin.gov

MILWAUKEE COUNTY TRANSIT SYSTEM
1942 N. 17TH STREET
MILWAUKEE, WI 53205

ARMON SENSABAUGH
TRANSPORTATION COORDINATOR (DETOURS)
PHONE: 414-343-1728
EMAIL: asensabaugh@mcts.org

DAVID LOCHER
TRANSPORTATION MANAGER (BUS STOPS)
PHONE: 414-343-1727
EMAIL: dlocher@mcts.org

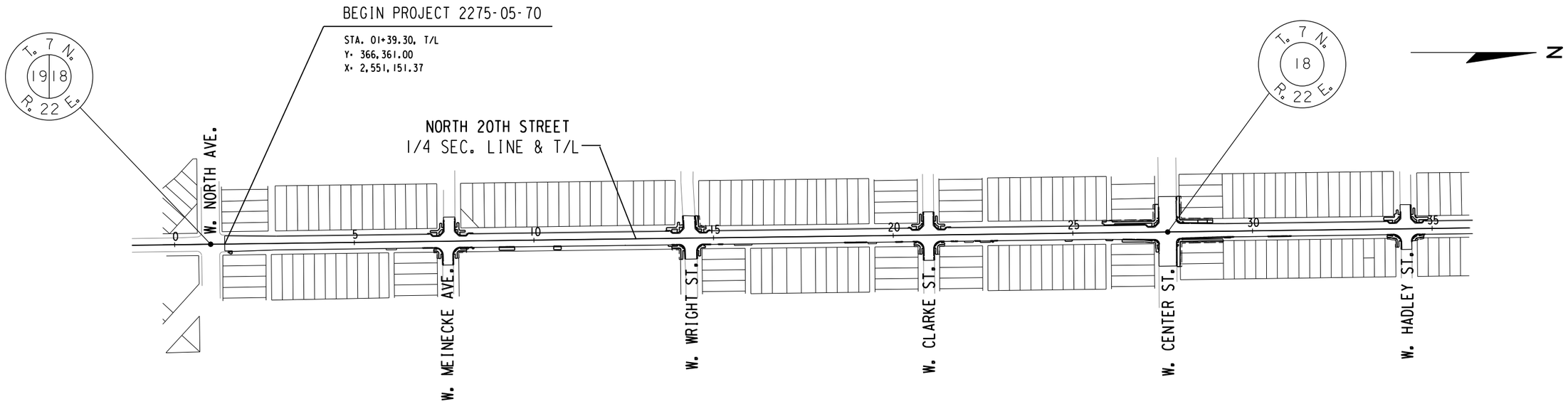
JESUS OCHOA
PLANNING MANAGER
PHONE: 414-344-4550 ext. 3591
EMAIL: jochoa@mcts.org

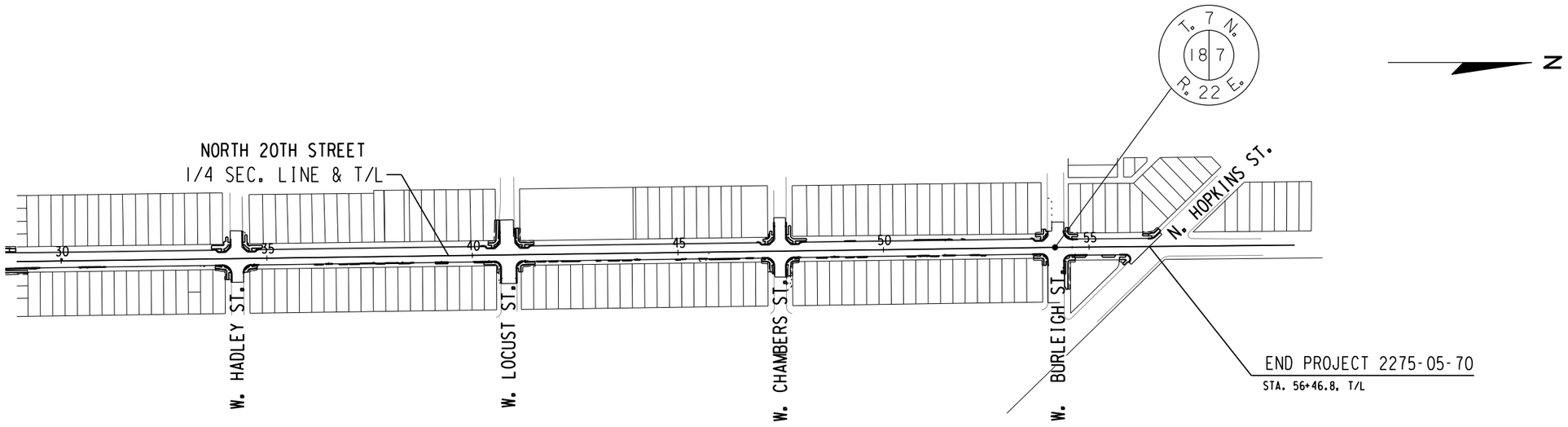
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
LARRY ANDERSON
260 W. SEEBOTH AVE.
MILWAUKEE, WI 53204-1446
PHONE: 414-225-2241
CELL: 414-617-1429

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
ROB MERRY
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: 262-953-4289
CELL: 920-912-1036
EMAIL: rmerry@sewrpc.org

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

2



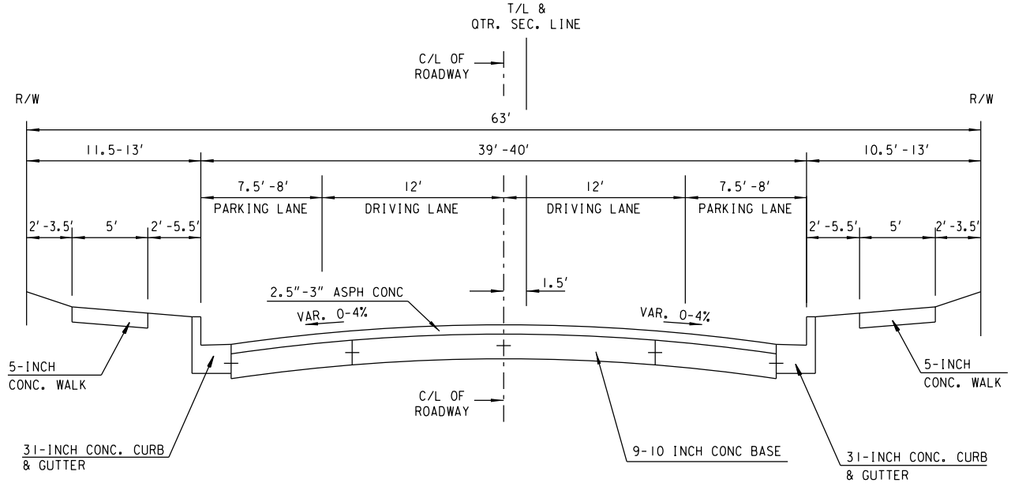


STATE PROJECT NUMBER 2275-05-70 - -	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SCALE FEET 0' 40'	SHEET NO: 4	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\OVERVIEW.DGN

REVISED DATE: 02-22-2022 BY JC

2



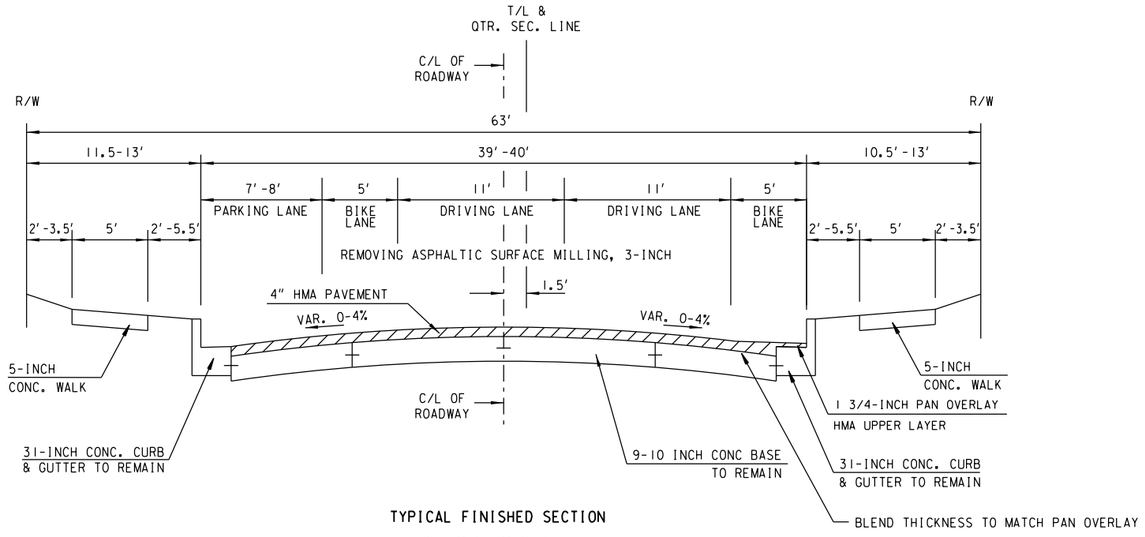
TYPICAL EXISTING SECTION

NORTH 20TH STREET

WEST NORTH AVENUE TO WEST HOPKINS STREET

(LOOKING NORTH)

STA 1+39.30 TO 56+46.80



TYPICAL FINISHED SECTION

NORTH 20TH STREET

WEST NORTH AVENUE TO WEST HOPKINS STREET

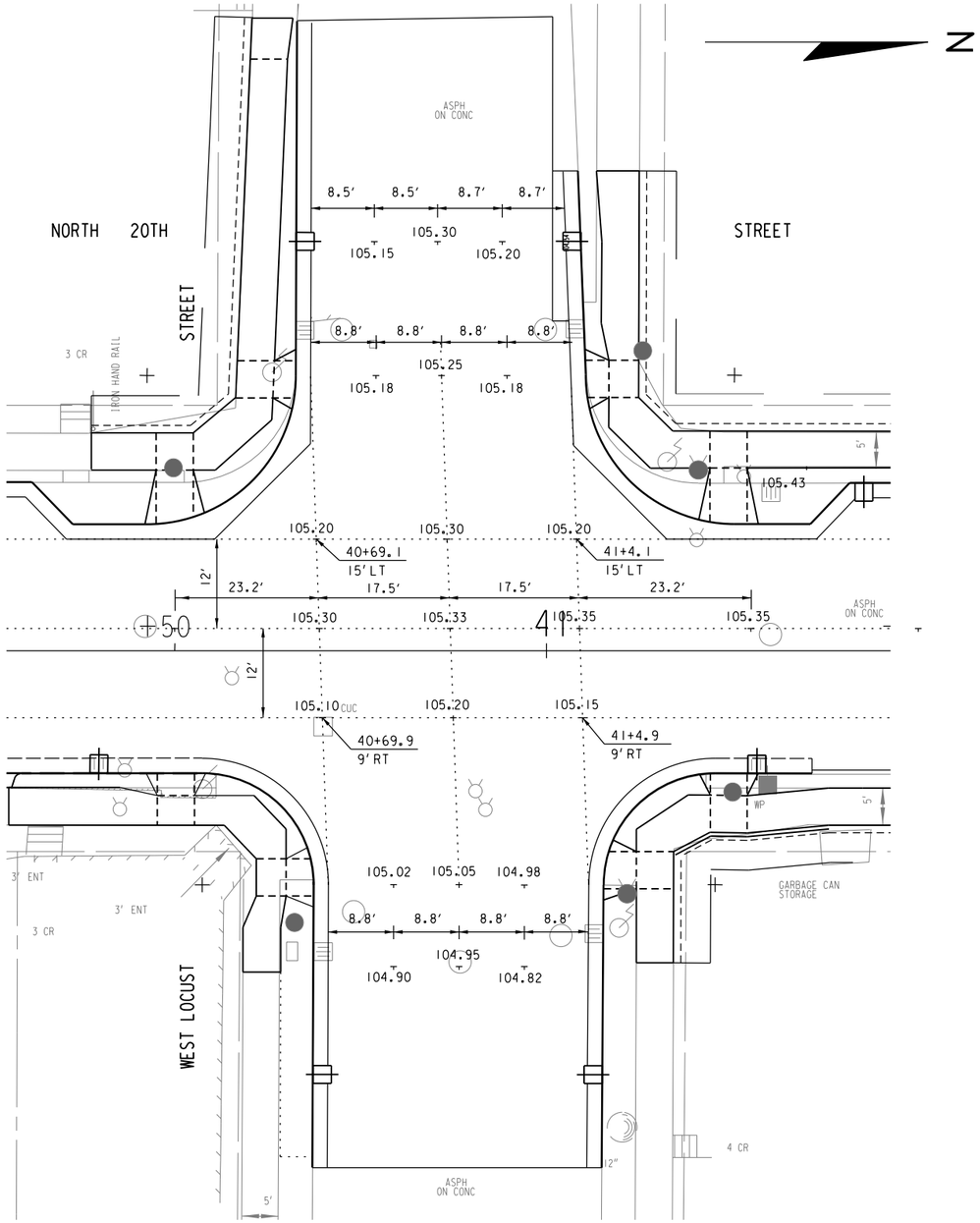
(LOOKING NORTH)

STA 1+39.30 TO 56+46.80

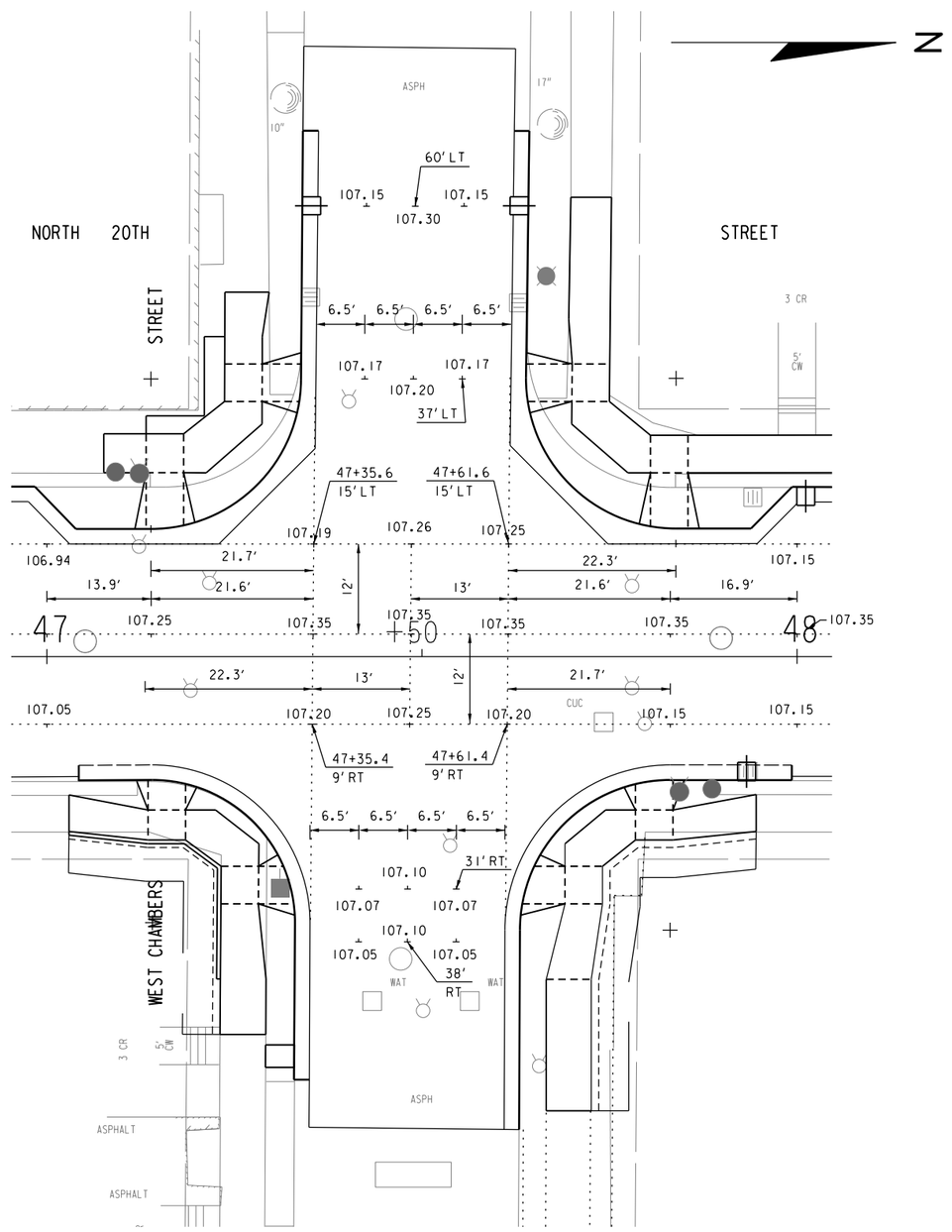
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TYPICAL SECTION	SCALE FEET	SHEET NO: 5	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\TYPSEC.DGN

REVISED DATE: 07-14-2023 BY JC



N. 20TH ST. AND W. LOCUST ST.



N. 20TH ST. AND W. CHAMBERS ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	INTERSECTION DETAIL	SCALE FEET 0′ 20′	SHEET NO: 6	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\CONSTDET_INTERSECTIONGRADES.DGN

REVISED DATE: 07-14-2023 BY JC

2

NORTH

20TH

STREET

N

#2000-2040 W. FOND DU LAC AVE.

AVENUE

#2000 W. NORTH AVE.

#2325 #2329 #2333 #2339 #2341 #2345 #2349

BM - NE COR
DOOR THESHOLD
#2000 N. 20TH ST
ELEV: 92.32

B.M. SE C
@ 2349 N
ELEV. 97.

PROPOSED SIGNAL INSTALLATION
AND CURB RAMPS

COLOMBIA
SAVINGS & LOAN

STA 0+00 TO 1+00
AREA #1 CONTAMINATED SOILS
8' - 10'± BELOW GROUND SURFACE
12.46 TONS ESTIMATED TO BE
EXCAVATED, HAULED, AND DISPOSED

EXISTING
R.O.W.

BEGIN PROJECT 2275-05-70

STA. 01+39.30, T/L
Y= 366,361.00
X= 2,551,151.37

NORTH

WEST

BUSPAD

BUS-PAD

CONC ALLEY

20' CONC ALLEY

RETAINING WALL

WOOD HAND RAIL

FENCE

CHAINLINK FENCE

WOOD FENCE

LAWN

ASPHALT

ASPH

CONC ASPH

VAULT

CLP

WEP

CUC

TEL

MONUMENT

RAMP

00 +50 01 +50 02 +50 03 +50 04 +50 05

N00°43'57"W

#1919-1935 W. NORTH AVE.

#2308 #2320 #2322-2324 #2330 #2338 #2344 #2346

B.M. HYD AT SE CORNER OF
W. NORTH AVE. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 93.65

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	CONTAMINATED SOIL LIMITS	SCALE FEET 0' 40'	SHEET NO: 7	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\HAZMAT 00-05.DGN

REVISED DATE: 12-12-2022 BY JC

NORTH

20TH ST.

CENTER STREET

WEST

STA 27+60 TO 28+20
AREA #2 CONTAMINATED SOILS
8' - 10' BELOW GROUND SURFACE
12.46 TONS ESTIMATED TO BE
EXCAVATED, HAULED, AND DISPOSED

PROPOSED SIGNAL INSTALLATION
AND CURB RAMPS

STA 28+00 TO 29+00
NOTICE TO CONTRACTOR
POSSIBLE CONTAMINATION
BEYOND CONSTRUCTION LIMITS

PROPOSED SIGNAL INSTALLATION
AND CURB RAMPS

B.M. HYD AT SW CORNER OF
W. CENTER ST. & N. 20TH ST.
NW BOLT, YEAR 2003
ELEV. 99.46

B.M. NE CORNER OF CONC
RETAINING WALL @
2690 N. 20TH ST.
ELEV. 97.09

EXISTING R.O.W.

#2619 | #2629-2631 | #2633-2635 | #2639-2641 | #2645 | #2649-2651 | #2655 | #2659-2661 | #2001-2007 W. CENTER ST. | #2008

#2622 | #2630 | #2634 | #2640-2638 | #2642-2644 | #2648 | #2650 | #2654-2658 | #1935 W. CENTER ST. | #2704

23 +50 24 +50 25 +50 26 27 +50 28 +50 29

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	CONTAMINATED SOIL LIMITS	SCALE FEET 0' 40'	SHEET NO: 8	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\HAZMAT 23-29.DGN

REVISED DATE: 12-12-2022 BY JC

2

N

NORTH 20TH STREET

ST.

B.M. HYD AT NW CORNER OF W. BURLEIGH ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 113.66

B.M. HYD AT NW CORNER OF W. HOPKINS ST. & N. 20TH ST. NW BOLT, YEAR 2009 ELEV. 119.15

#3055 #3063 #3067 #3075 #3101 #3103 #3111 #3117 #2001

CHAIN LINK FENCE

BUS PAD

CONC ASPH

RR-TIE

PATIO-PAVERS

TIRE SHOP ASPHALT LOT

CONC DWY

VAULT

AMU 3N03

STREET

52 +50 53 +50 54 +50 55 +50 56 +50 57 +50 58

SECTION CORNER MONUMENT

EXISTING R.C.W.

PROPOSED SIGNAL INSTALLATION AND CURB RAMPS

STA 54+25 TO 55+00
AREA •3 CONTAMINATED SOILS
1'-10' BELOW GROUND SURFACE
56.93 TONS ESTIMATED TO BE EXCAVATED, HAULED, AND DISPOSED

BURLEIGH

NORTH HOPKINS

WEST

#3056 #3064 #3068-70 #3075 N. 19TH ST.

GAS STATION #1909 W. HOPKINS ST.

WROUGHT IRON FENCE

PILLAR

PILLAR SIGN

CONC DWY

ASPH CONC

CLP

HOLY LAWN

CEMETERY

END PROJECT 2275-05-70
STA. 56+46.8, T/L

PROPOSED SIGNAL INSTALLATION AND CURB RAMPS

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	CONTAMINATED SOIL LIMITS	SCALE FEET 0' 40'	SHEET NO: 9	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\HAZMAT 52-58.DGN

REVISED DATE: 12-12-2022 BY JC

NORTH

#2000-2040 W. FOND DU LAC AVE.

AVENUE

20TH

#2000 W. NORTH AVE.

STREET

#2325 #2329 #2333 #2339 #2341 #2345 #2349

N

SECTION LINE

BM - NE COR
DOOR THESHOLD
#2000 N. 20TH ST
ELEV: 92.32

B.M. SE C
@ 2349 N
ELEV. 97.

BEGIN PROJECT
STA. 01+39.32 T/L
Y= 366,361.00
X= 2,551,151.37

∠ PT.+83.0
19.7' LT

∠ PT.+76.0
18.0' RT

27.4' RT

24.4' RT

QTR. SEC. LINE

R/W

CAUTION

ASPHALT

CONC. ALLEY

WOOD HAND RAIL

FENCE

RETAINING WALL

LAWN

WOOD FENCE

CHAINLINK FENCE

ASPH

BUS-PAD

3' ENT

ENT. 10.4

ENT. 6 CR

5' ENT

VAULT

CONC. ASPH.

CLP

WEP

T/L

00 01 02 03 04 05

+50

NORTH

WEST

#1919-1935 W. NORTH AVE.

#2308 #2320 #2322-2324 #2330 #2338 #2344 #2346

B.M. HYD AT SE CORNER OF
W. NORTH AVE. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 93.65

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 10	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 00-05.DGN

REVISED DATE: 06-20-2022 BY DB

N

NORTH AVENUE

20TH STREET

B.M. SE CORNER OF 5TH CONC RISER
@ 2349 N 20TH ST
ELEV. 97.51

CAUTION

CTR. 20.0' R=
+28.7 - 35.5' LT

50.1' LT

59' LT

67' LT

63' LT

51.1' LT

CTR. 20.0' R=
+0.7 - 35.5' LT

∠ PT. +12.7
21.7' LT

∠ PT. +16.7
21.6' LT

∠ PT. +18.7
15.5' LT

∠ PT. +10.7
15.5' LT

7+30.9
21.9' RT

CTR. 20.0' R=
+25.4 - 38.5' RT

CTR. 20.0' R=
+95.4 - 38.5' RT

22.1' RT

66.3' RT

47.7' RT

47.7' RT

16.6' RT

16.6' RT

MEINECKE WEST

PHILLIS WHEATLY ELEMENTARY SCHOOL

B.M. HYD AT NE CORNER OF
W. MEINECKE AVE. & N. 20TH ST.
NW BOLT, YEAR 2014
ELEV. 94.25

B.M. FLAG OL
PHILLIS WHEAT
E/S OF N. 20
ELEV. 97.56

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 11	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 05-11.DGN

REVISED DATE: 12-13-2021 BY JC

N

NORTH 20TH STREET

WEST WRIGHT ST.

#2443 #2447 #2451-2451A #2459 #2463 #2467 #2479 #2501 #2505 #2509 #2513 #2521 #2527 #2529-2531

#2442 #1932-1934 W. WRIGHT ST. #2520 #2524 #2528

CAUTION

CTR. 20.0' R=
+96.1 - 35.5' LT

44.4' LT

14+51.9
50.6' LT

13+83.9
25.3' LT

14+14.9
62.8' LT

14+49.5
61.7' LT

∠ PT.+80.1
21.6' LT

29.9'
LT

CTR. 20.0' R=
+70.1 - 35.5' LT

∠ PT.+86.1
21.4' LT

∠ PT.+86.1
15.5' LT

∠ PT.+80.1
15.5' LT

16.6'
RT

CTR. 15.0' R=
+3.9 - 33.5' RT

59'
RT

49.9' RT

CTR. 18.0' R=
+72.1 - 36.5' RT

59'
RT

+66.6 +69.2 +79.3 +91.4 +83.8 +77.0 +92.6 +12.6 +26.0 +57.6 +6.9 +73.5

11 +50 12 T/L +50 13 +50 14 +50 15 RT +50 16 60' T/L +50 17

R/W LAWN RETAINING WALL 2 CR 3 CR 1 CR WHEEL CHAIR ACCESS 5' CW 4' CW 3.5' CW 12" LAWN 22" 24" 18" 20" 8" 4" 16" 6" 12' 8' 1.5' 38' 23.5' 11.5' 66' 33' 30" 6" 29.4' 23.5' 15.5' 14' 12' 19.5' 5' 4' 7' 8' 10' 6' 4.5' 22' 18' 60' 15.5' 13' 32' 15' 25' 23' 10.8' 24" 5' 3' CW 12" CW 3.5' CW 4' CW 4.4' CW 3 CR 4 CR

(OVERHEAD) WP TEL CATV CABLE CAB FIBER OPTIC ON CONC. ACSC SPECTRUM CENTURY LINK (UNKNOWN LOCATION) SANIT. SEWER STORM SEWER WATER MAIN GAS MAIN TS-BOX 8" PLANT GATE WOOD HAND RAIL IRON HAND RAIL NON-BEND RAIL FENCE CONCRETE RET-WALL PAVER BLOCK RETAINING WALL WEEP HOLE FLAG POLE 8 CR IRON HAND RAIL CONC DWY 8' ENT CONC ALLEY

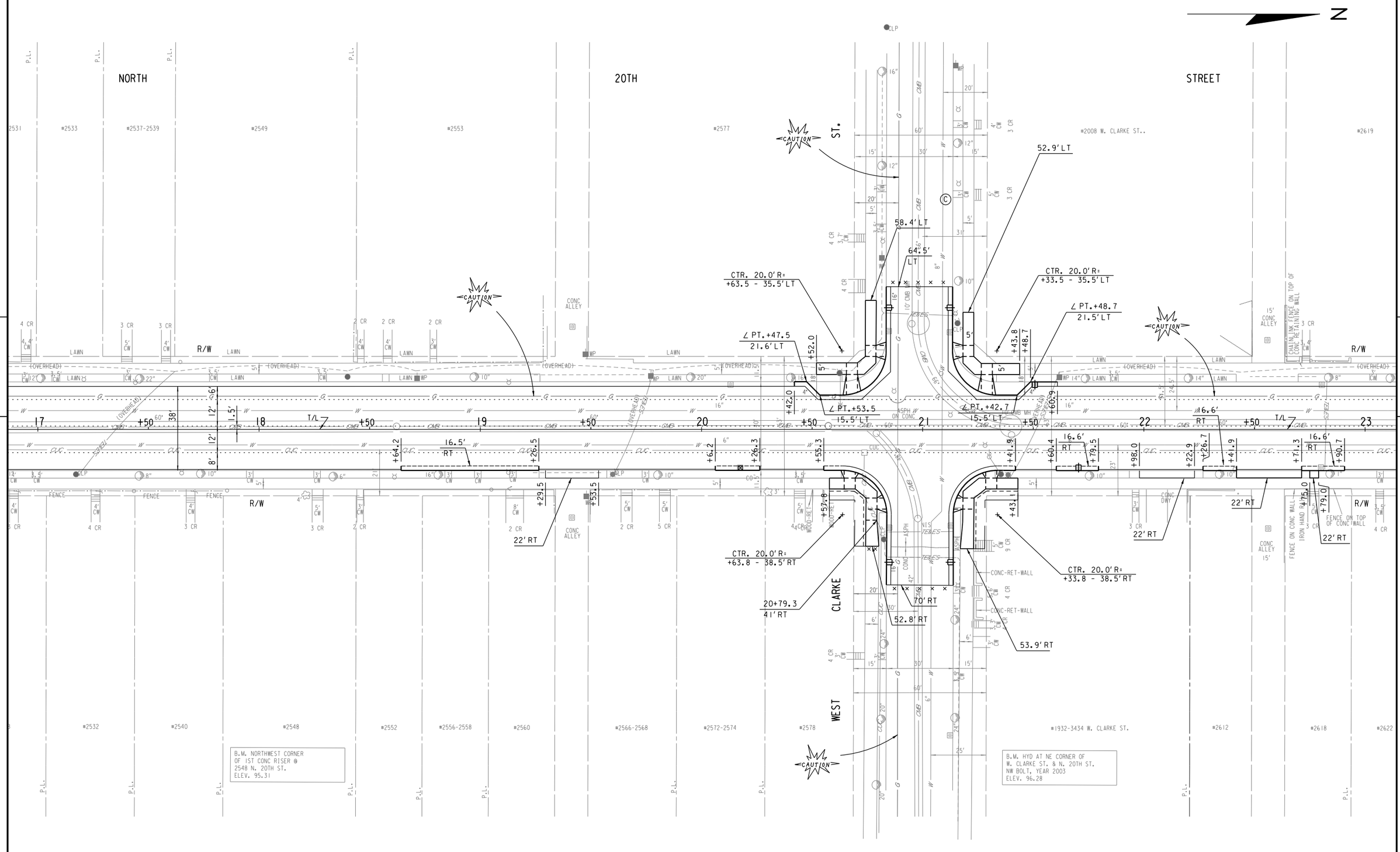
B.M. FLAG OLE BASE@
PHILLIS WHEATLEY SCHOOL
E/S OF N. 20TH ST.
ELEV. 97.56

B.M. HYD AT NE CORNER OF
W. WRIGHT ST. & N. 20TH ST.
NW BOLT, YEAR 1997
ELEV. 95.79

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 12	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 11-17.DGN

REVISED DATE: 06-20-2022 BY DB



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40	SHEET NO: 13	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 17-23.DGN

REVISED DATE: 06-20-2022 BY DB

NORTH

20TH

ST.

STREET

WEST

CENTER

N

#2619 | #2629-2631 | #2633-2635 | #2639-2641 | #2645 | #2649-2651 | #2655 | #2659-2661 | #2001-2007 W. CENTER ST. | #2008

#2622 | #2630 | #2634 | #2640-2638 | #2642-2644 | #2648 | #2650 | #2654-2658 | #1935 W. CENTER ST. | #2704

B.M. HYD AT SW CORNER OF W. CENTER ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 99.46

B.M. NE CORNER OF RETAINING WALL @ 2690 N. 20TH ST. ELEV. 97.09

CAUTION

25+87.3
21.5'LT

+82.0

30'LT

CTR. 20.0'R=
+19.2 - 35.5'LT

∠ PT. +3.2
21.5'LT

∠ PT. +9.2
15.5'LT

98.6'LT

77'LT

27+90.4
87.9'LT

99.1'LT

27+92.4
78.5'LT

CTR. 12.0'R=
+1.2 - 36.9'LT

29+00

∠ PT. +87.2
18.6'RT

26+99.8
24.9'RT

27+34
25'RT

27+35
40'RT

27+35.8
47.9'RT

27+38.2
52.8'RT

55'RT

∠ PT. +99.8
26.9'RT

27+16.2
29'RT

CTR. 12.0'R=
+27 - 33.9'RT

27+30
40'RT

27+30.8
47.9'RT

∠ PT. +8.0
21.5'RT

26.5'RT

26'RT

CTR. 10.0'R=
+99.1 - 29.0'RT

96.6'RT

95'RT

23 | 24 | 25 | 26 | 27 | 28 | 29

+50

+87.3 | +94.3 | +09.1 | +16.1 | +78.2 | +98.3 | +91.8 | +10.9 | +39.0 | +37.0 | +48.5 | +74.5 | +87.5 | +89.7

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 14	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 23-29.DGN

REVISED DATE: 07-17-2022 BY JC

N

NORTH 20TH STREET

ST.

HADLEY

WEST

B.M. SE CORNER OF 1ST CONC RISER @
2745 N. 20TH ST.
ELEV. 102.51

B.M. HYD AT SW CORNER OF
W. HADLEY ST. & N. 20TH ST.
NW BOLT, YEAR 1965
ELEV. 103.85

#2717-19 #2721-23 #2725-27 #2729-31 #2737 #2743 #2745 #2749 #2753 #2757 #2763 #2769 #2773 #2777-79 #2801

#2717 N. 19TH ST. #2723 N. 19TH ST. #2725 N. 19TH ST. #2737-2737A N. 19TH ST. #2745 N. 19TH ST. #2748 #2752 #2763 N. 19TH ST. #2765 N. 19TH ST. #2770 #1911-1913 W. HADLEY ST. #2810

P.L.

FENCE TIMBER R/W 3 CR 2 CR 4' CW 5' CW 3' CW 2' CW CW 1 CR 3' ENT 8' ENT 16' ENT TIMBER CONC DWY LAWN WOOD FENCE

CAUTION

52.5' LT
67.1' LT
67.6' LT
57.5' LT
41.7' LT
33+96
41.7' LT
CTR. 20.0' R=
+91.8 - 37.0' LT
47.6' LT
CTR. 20.0' R=
+61.8 - 37.0' LT
33+81.8
17' LT
34+71.8
17' LT
33+81
18.3' RT
34+76.7
19' RT
CTR. 19.0' R=
+62.5 - 35.5' RT
36.4' RT
33' RT
33+81
23.3' RT
CTR. 22.0' R=
+91.4 - 38.5' RT
51' RT
57.7' RT
∠ PT. +17.5
16.5' RT
26.1' RT
18.4' RT

29 +50 30 +50 31 +50 32 +50 33 +50 34 +50 35

T/L

+66.0 +76.3 +77.3 +86.2 +89.7 +74.7 +80.4 +74.4 +76.6 +17.9 +21.0 +40.0 +48.2 +85.2 +8.6 +17.3 +39.0 +75.3 +97.4 +14.1 +50.5 +86.8 +7.3

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 15	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 29-35.DGN

REVISED DATE: 06-20-2022 BY DB

N

NORTH 20TH STREET

#2807 #2815 #2817 #2823 #2831 #2835 #2845 #2845 #2853 #2857 #2861-63 #2865 #2869-71 #2873-75

B.M. SE CORNER OF 5TH CONC
RISER @
2835 N. 20TH ST.
ELEV. 107.57

CAUTION

4 CR 3 CR 5 CR 6 CR 5 CR 3 CR 3 CR 4 CR 3 CR 3 CR 1 CR 3 CR

R/W R/W

5SPH CONC

35 +50 36 +50 37 T/L +50 38 +50 39 +50 T/L 40

+15.8 +37.8 +42.4 +60.4 +28.0 +64.7 +89.2 +19.2 +49.3 +57.8 +9.9 +41.0 +21.5 +41.5 +18.9

18.3' RT 18.3' RT 18.3' RT 18.3' RT 18.3' RT 19.5' RT 18.3' RT

AT&T (LOCATION UNK)IN CITY CONDUIT?

IRON HAND RAIL FENCE IRON HAND RAIL WOOD HAND RAIL

CONC DWY 16' ENT 8' ENT 16' ENT 8' ENT CONC DWY

LAWN

#2810 #2813 N. 19TH ST. #2818 #2825 N. 19TH ST. #2833-2835 N. 19TH ST. #2837 N. 19TH ST. #2841 N. 19TH ST. #2849 N. 19TH ST. #2858 #2866-2866A #2873 N. 19TH ST

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 16	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 35-40.DGN

REVISED DATE: 01-14-2022 BY JC

N

NORTH

CAUTION

ST.

20TH

STREET

B.M. HYD AT NW CORNER OF
W. LOCUST ST. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 107.31

B.M. TOP OF CONC WINDOW SILL
EAST SIDE
NORTHSIDE CHURCH ENTRANCE
ELEV. 107.79

#2873-75 | #2877-79 | #2917 | #2939 | #2941-43 | #2947 | #2955 | #2959-61 | #2963

64.5' LT
84.9' LT
85' LT
∠ PT. +7.5
55.0' LT
∠ PT.+65.2
79.5' LT
CTR. 20.0' R=
+46.3 - 37.0' LT
41+0.9
64.5' LT
CTR. 20.0' R=
+25.3 - 37.0' LT
∠ PT.+40.8
22.6' LT
41+0.8
44.3' LT
∠ PT.+30.8
22.7' LT
∠ PT.+36.3
17.0' LT
∠ PT.+35.5
17.0' LT

R/W | 5 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | T/L | +50 | 5

CAUTION

CTR. 15.0' R=
+53.7 - 31.5' RT
43.2'
RT
41+12.1
32' RT
69.5' RT
41+22
24.4' RT
CTR. 15.0' R=
+22.7 - 31.5' RT
42' RT

LOCUST

WEST

GARBAGE CAN STORAGE

RETAINING WALL

18.4' RT

B.M. TOP OF NW CORNER OF NORTHERNLY
GARAGE CONC WALL
(APPROXIMATELY 32' ABOVE GROUND @
2938 N. 19TH ST.
ELEV. 109.80

#2873 N. 19TH ST. | #2878 | #2901-2903 N. 19TH ST. | #2911-2913 N. 19TH ST. | #2917 N. 19TH ST. | #2920 | #2921 N. 19TH ST. | #2931 N. 19TH ST. | #2935 N. 19TH ST. | #2940 | #2944 | #2949 N. 19TH ST. | #2954 | #2957 N. 19TH ST. | #2961-2963 N. 19TH ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 17	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 40-46.DGN

REVISED DATE: 01-20-2022 BY SDB

N

NORTH 20TH STREET

B.M. HYD AT SW CORNER OF W. CHAMBERS ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 108.57

B.M. CENTER OF CONC RISER @ 2979 N. 20TH ST. ELEV. 108.42

#2963 #2967 #2969 #2975 #2003 W. CHAMBERS ST. #3000 #3007 #3015-17 #3019 #3023 #3029 #3039 #3043 #3051 #3055

ST.

48.6'LT

47+21 42.6'LT

47+21 32.1'LT

CTR. 20.0'R= +13.9 - 37.0'LT

47+13.3 32.1'LT

∠ PT.+98.4 22.5'LT

70'LT

81'LT

47+28.7 39'LT

70'LT

61'LT

CTR. 20.0'R= +83.9 - 37.0'LT

∠ PT.+99.4 22.5'LT

CAUTION

R/W

∠ PT. +3.9 17.0'LT

∠ PT.+93.9 17.0'LT

20.5'LT

20.5'LT

46 47 48 49 50 51 52

T/L

+64.5 +84.3 +4.3 +99.3 +92.0 +7.6 +13.0 +5.0 +33.0 +75.0 +68.0 +92.3 +98.8

FENCE

PIPE HAND RAIL

CHAMBERS

WEST

CTR. 19.0'R= +14.1 - 35.4'RT

50.3' RT

56'RT

63'RT

60.5'RT

CTR. 20.0'R= +83.1 - 36.4'RT

+3.0 +94.6 +71.3 +92.4 +83.5 +11.5 +43.8 +75.0

WOOD RETAINING WALL

BLOCK RET WALL

CONC DWY

DWY

AT&T (LOCATION LINK)IN CITY CONDUIT2

#1911-1913 W. CHAMBERS ST.

#1900-02 W. CHAMBERS ST.

#3019 N. 19TH ST. #3024 #3028 #3035 N. 19TH ST. #3041 N. 19TH ST. #3045 N. 19TH ST. #3048 #3053 N. 19TH ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 18	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 46-52.DGN

REVISED DATE: 06-20-2022 BY DB

2

N

NORTH 20TH STREET

STREET

B.M. HYD AT NW CORNER OF W. BURLEIGH ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 113.66

B.M. HYD AT NW CORNER OF W. HOPKINS ST. & N. 20TH ST. NW BOLT, YEAR 2009 ELEV. 119.15

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS AND LANDING AREAS

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS AND LANDING AREAS

CTR. 20.0' R= +79.1 - 37.0' LT

CTR. 20.0' R= +58.9 - 40.1' LT

CTR. 20.0' R= +48.1 - 40.0' LT

CTR. 15.0' R= +83.8 - 31.5' RT

CTR. 16.0' R= +54.8 36.0' RT

CTR. 10.0' R= +89.5 - 30.0' RT

44.5' LT

39.6' LT

47.8' LT

61.5' LT

40.1' LT

∠ PT.+69.1 17.0' LT

∠ PT.+63.6 22.5' LT

54+1 15' LT

54+0.9 3' LT

54+0.9 9' RT

42.5' RT

43.6' RT

53+77 25.8' RT

65.1' RT

54+48 38' RT

54+43 38' RT

54+42.7 65.4' RT

54+42.1 96.7' RT

102' RT

134.5' RT

56+74.3 38.5' LT

56+69.6 43.2' LT

56+71.8 35' LT

56+77.4 29.3' LT

56+47.2 9.8' LT

56+35 2' RT

55+83 25.9' RT

56+22.8 13.7' RT

56+2 42.9' RT

55+96.4 37.2' RT

55+84.9 44.8' RT

END PROJECT STA. 56+46.8 T/L

BURLEIGH

NORTH HOPKINS

WEST

GAS STATION #1909 W. HOPKINS ST.

TIRE SHOP ASPHALT LOT

CEMETERY

HOLY LAWN

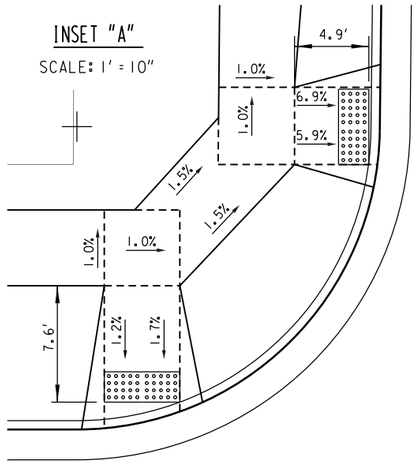
R/W

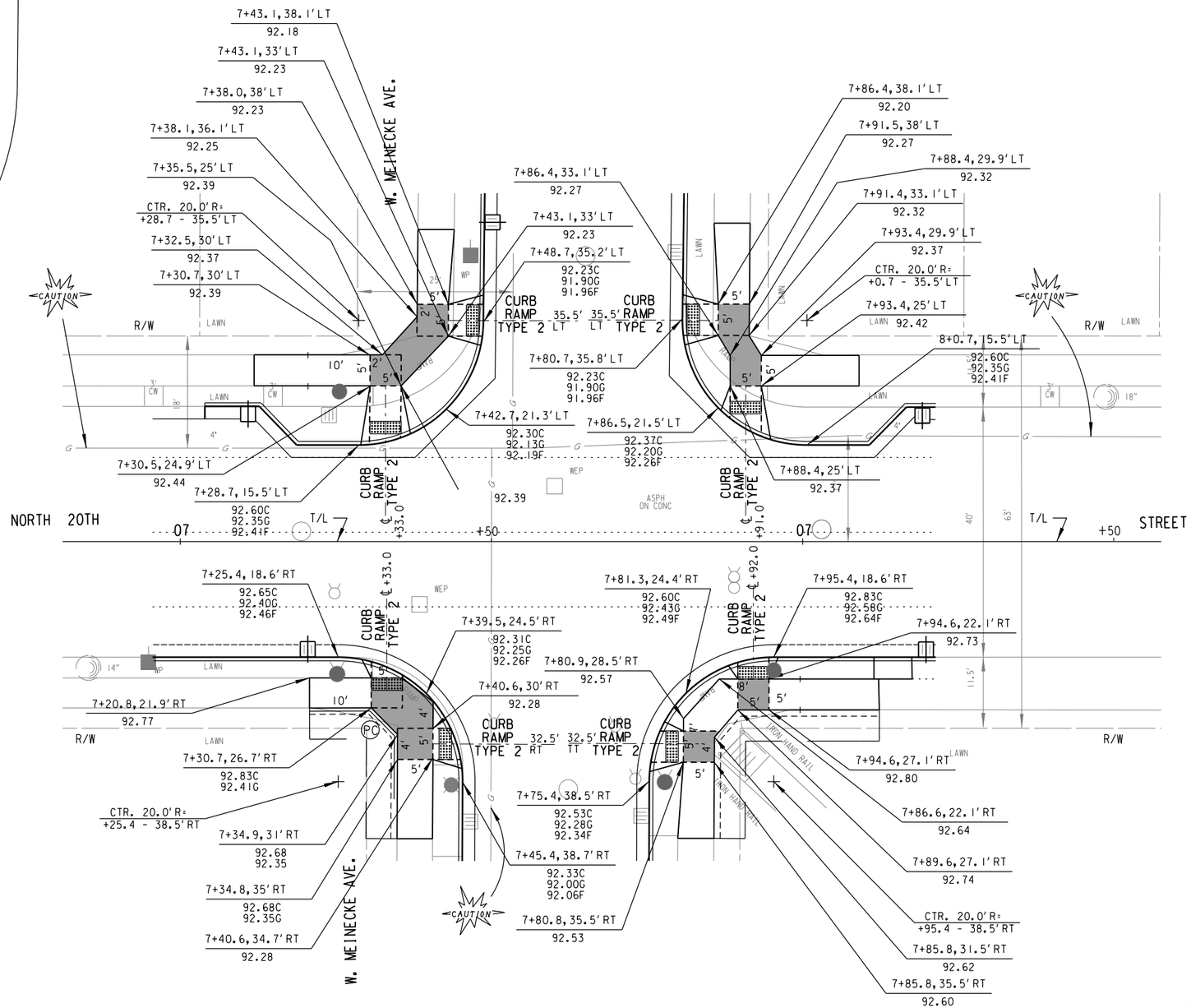
CAUTION

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN DETAIL	SCALE FEET 0' 40'	SHEET NO: 19	E

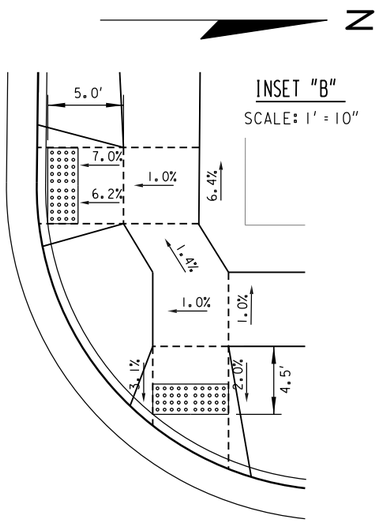
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\PDET 52-58.DGN

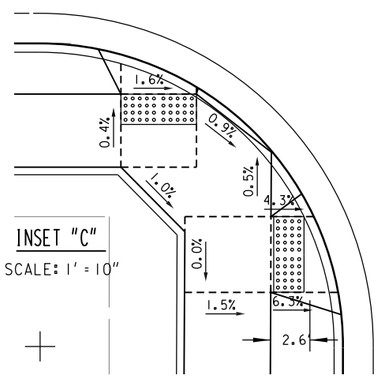
REVISED DATE: 07-17-2023 BY JC

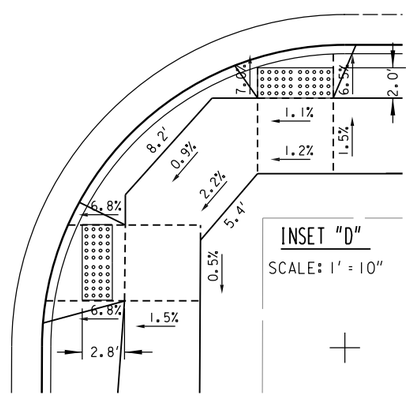




N. 20TH ST. AND W. MEINECKE AVE.







LANDING AREA

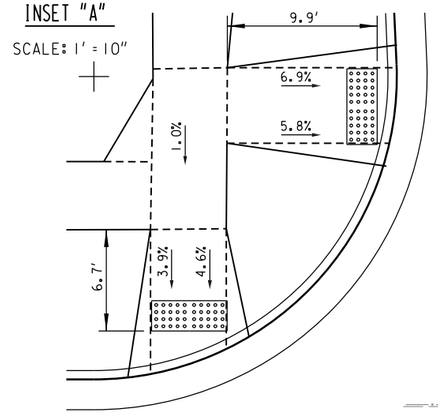
(PC) CONST. CONC. PEDESTRIAN CURB

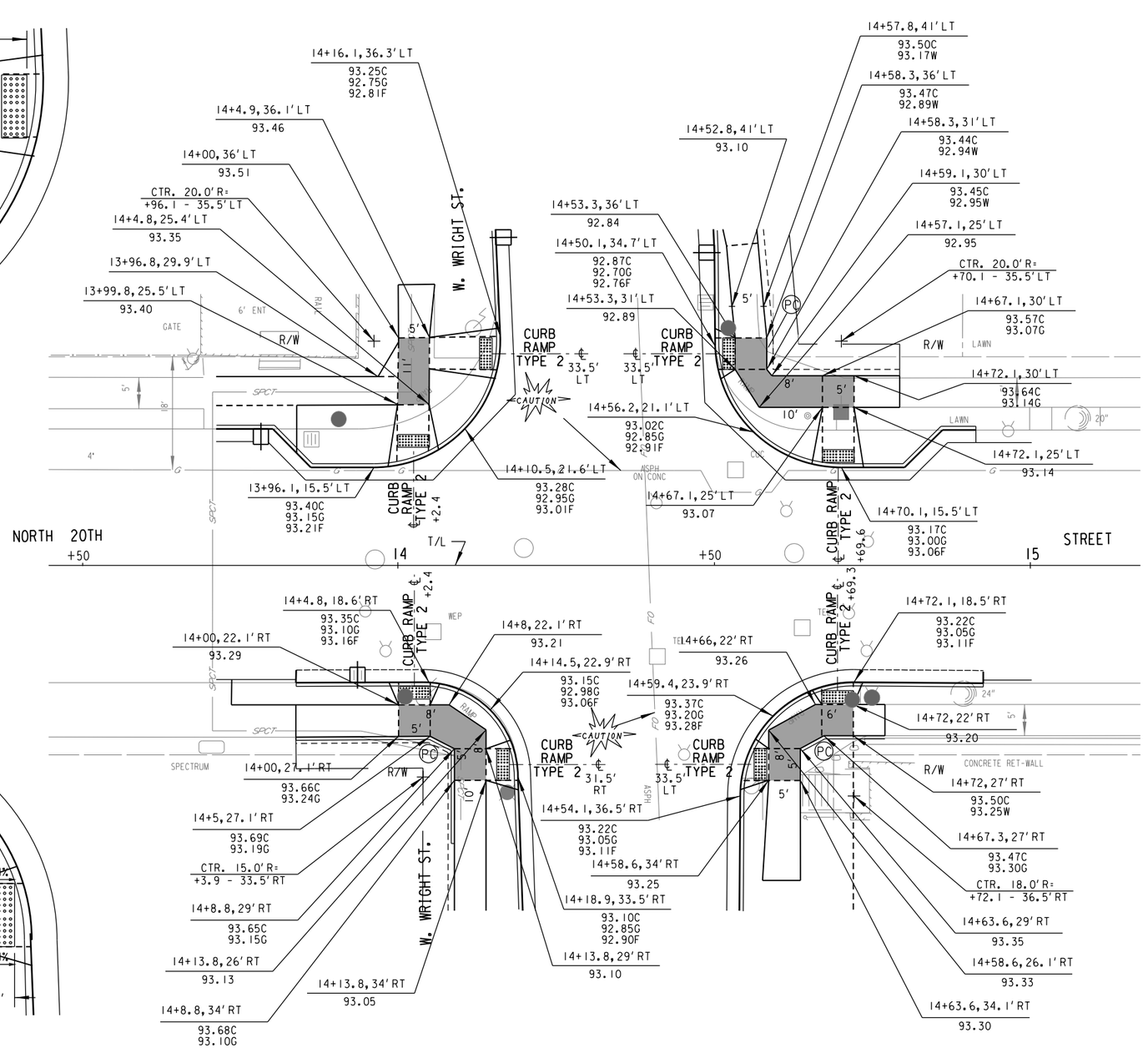
DETECTABLE WARNING FIELD

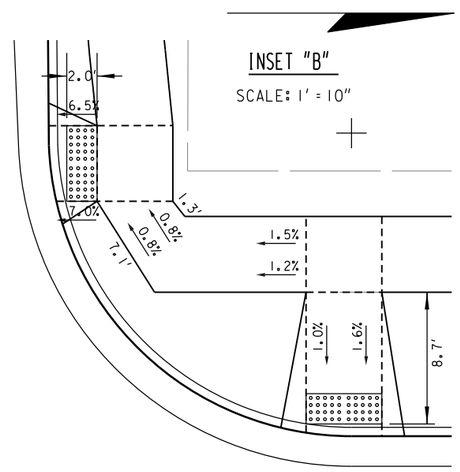
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 20	E

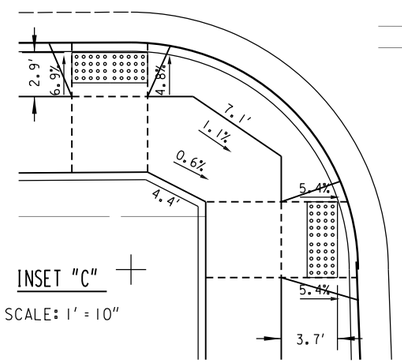
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. MEINECKE AVE.DGN

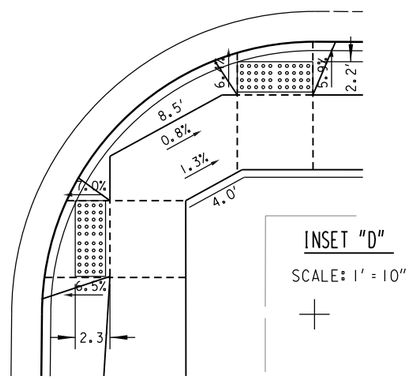
REVISED DATE: 07-18-2023 BY JC











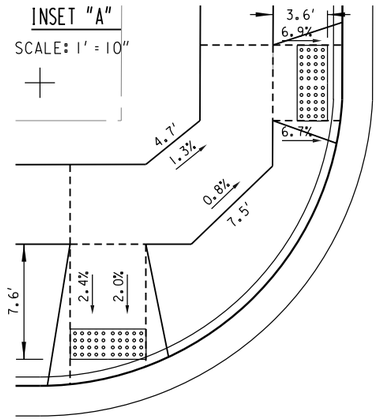
N. 20TH ST. AND W. WRIGHT ST.

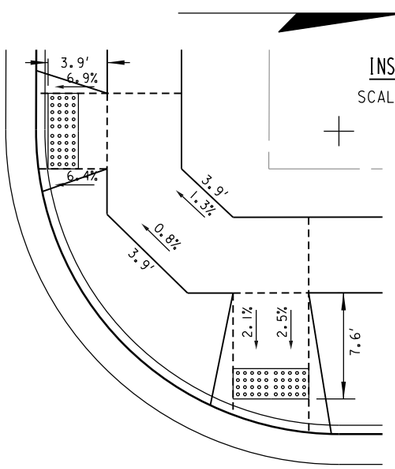
LANDING AREA
(PC) CONST. CONC. PEDESTRIAN CURB
DETECTABLE WARNING FIELD

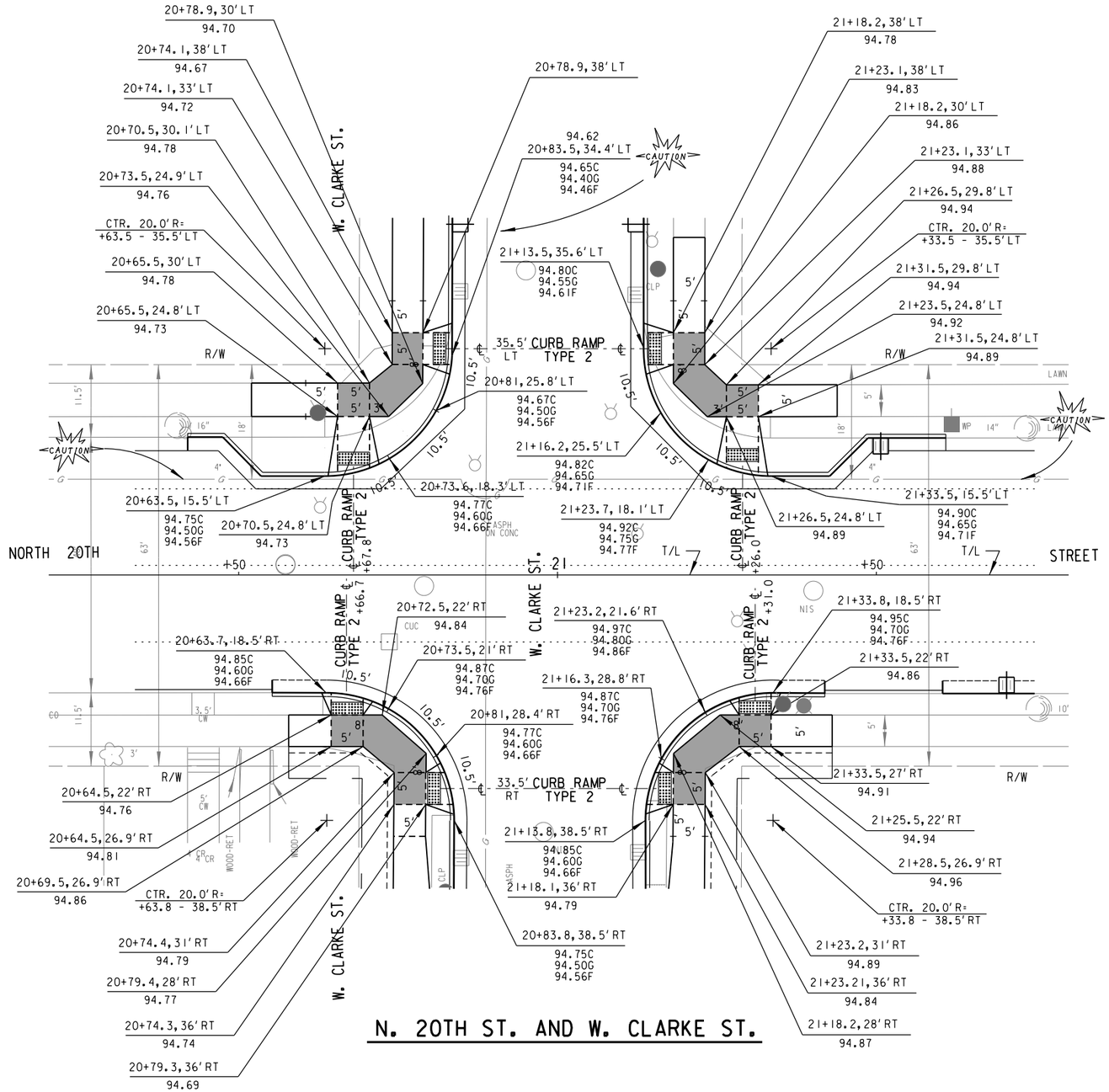
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 21	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. WRIGHT ST.DGN

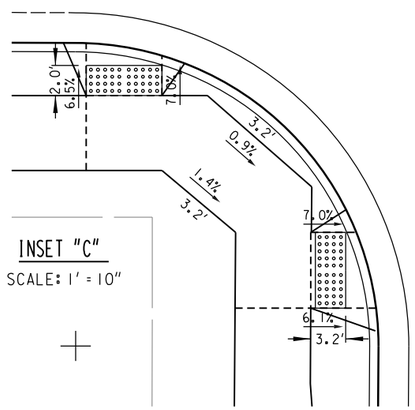
REVISED DATE: 07-18-2023 BY JC

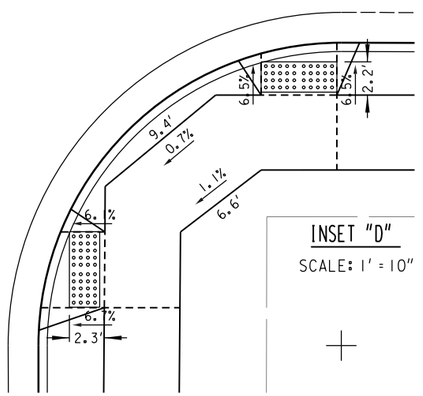






N. 20TH ST. AND W. CLARKE ST.



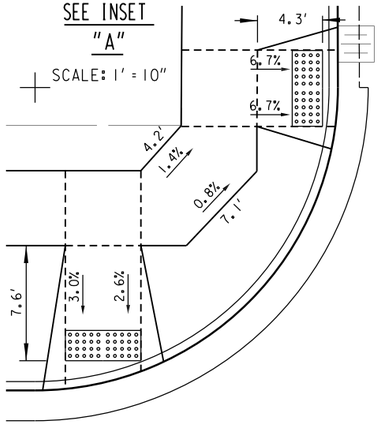


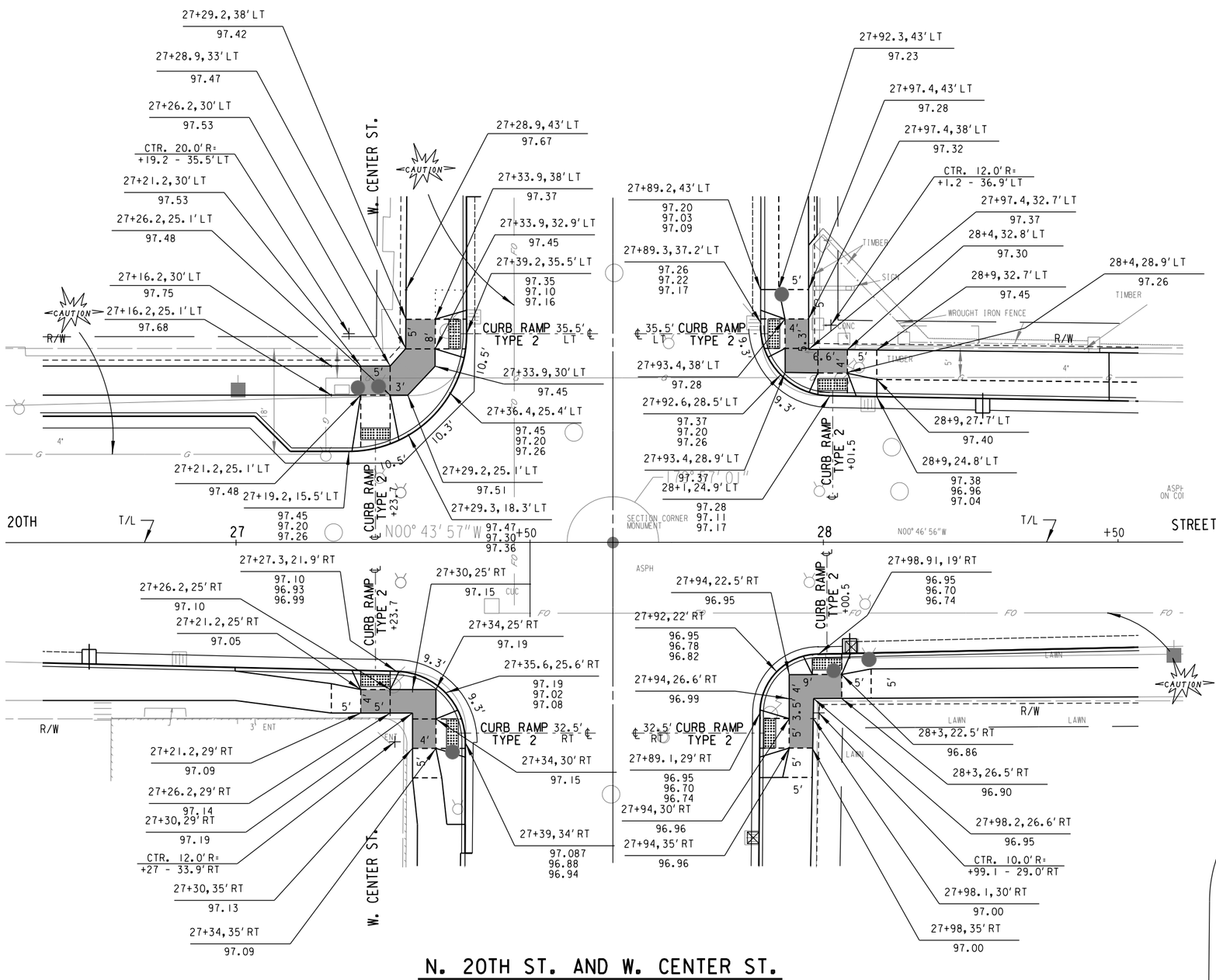
LANDING AREA
(PC) CONST. CONC. PEDESTRIAN CURB
DETECTABLE WARNING FIELD

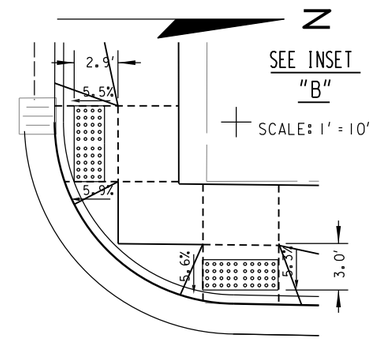
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 22	E

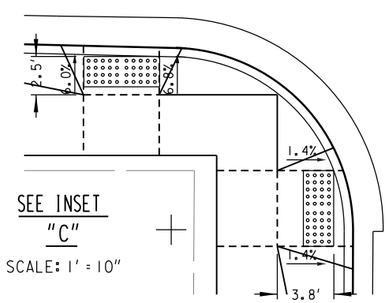
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. CLARKE ST.DGN

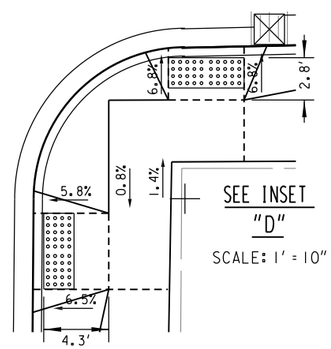
REVISED DATE: 07-18-2023 BY JC











N. 20TH ST. AND W. CENTER ST.

LANDING AREA

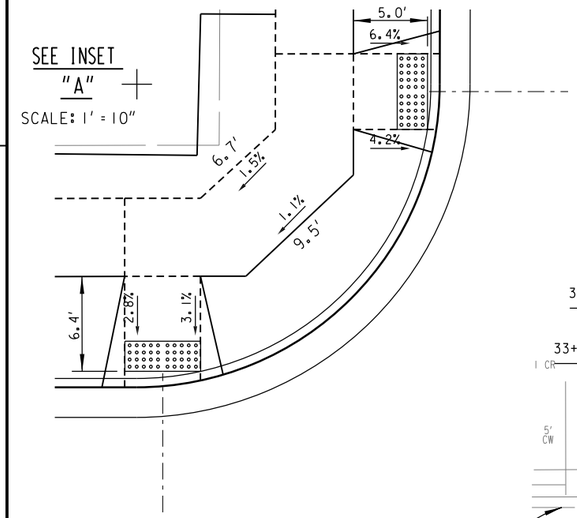
(PC) CONST. CONC. PEDESTRIAN CURB

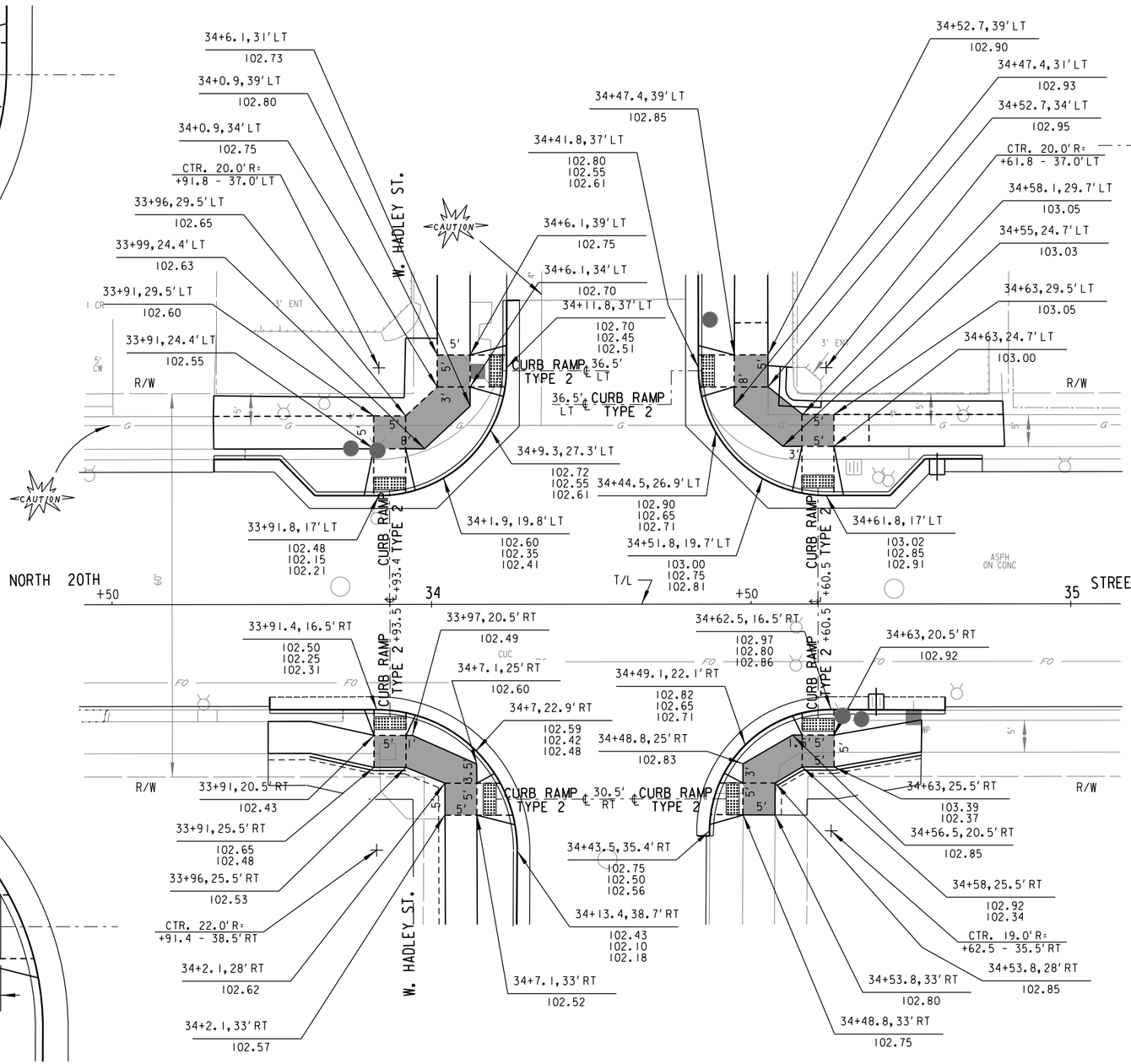
DETECTABLE WARNING FIELD

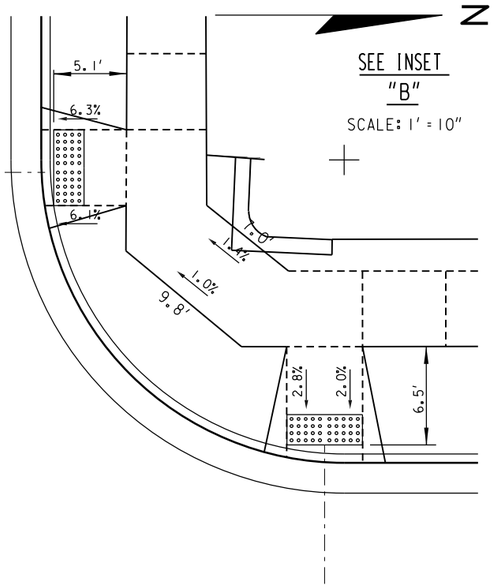
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 23	E

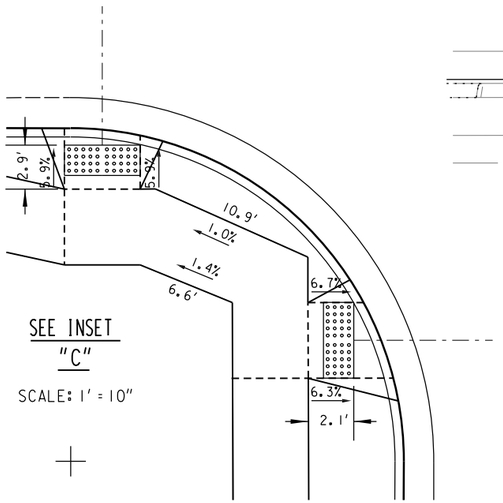
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. CENTER ST.DGN

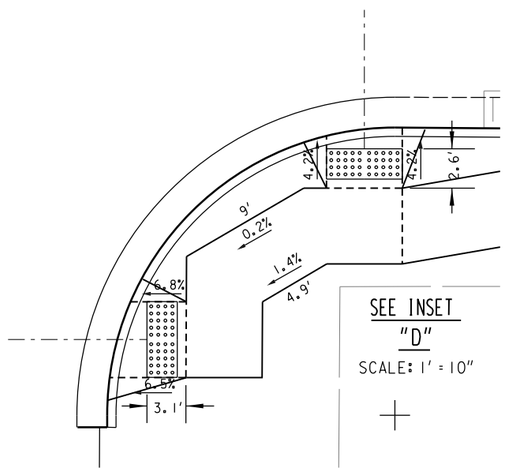
REVISED DATE: 07-18-2023 BY JC











N. 20TH ST. AND W. HADLEY ST.

LANDING AREA

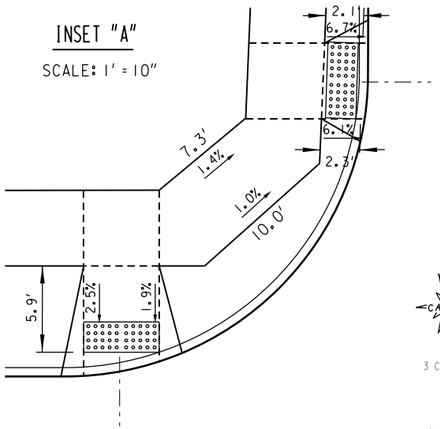
(PC) CONST. CONC. PEDESTRIAN CURB

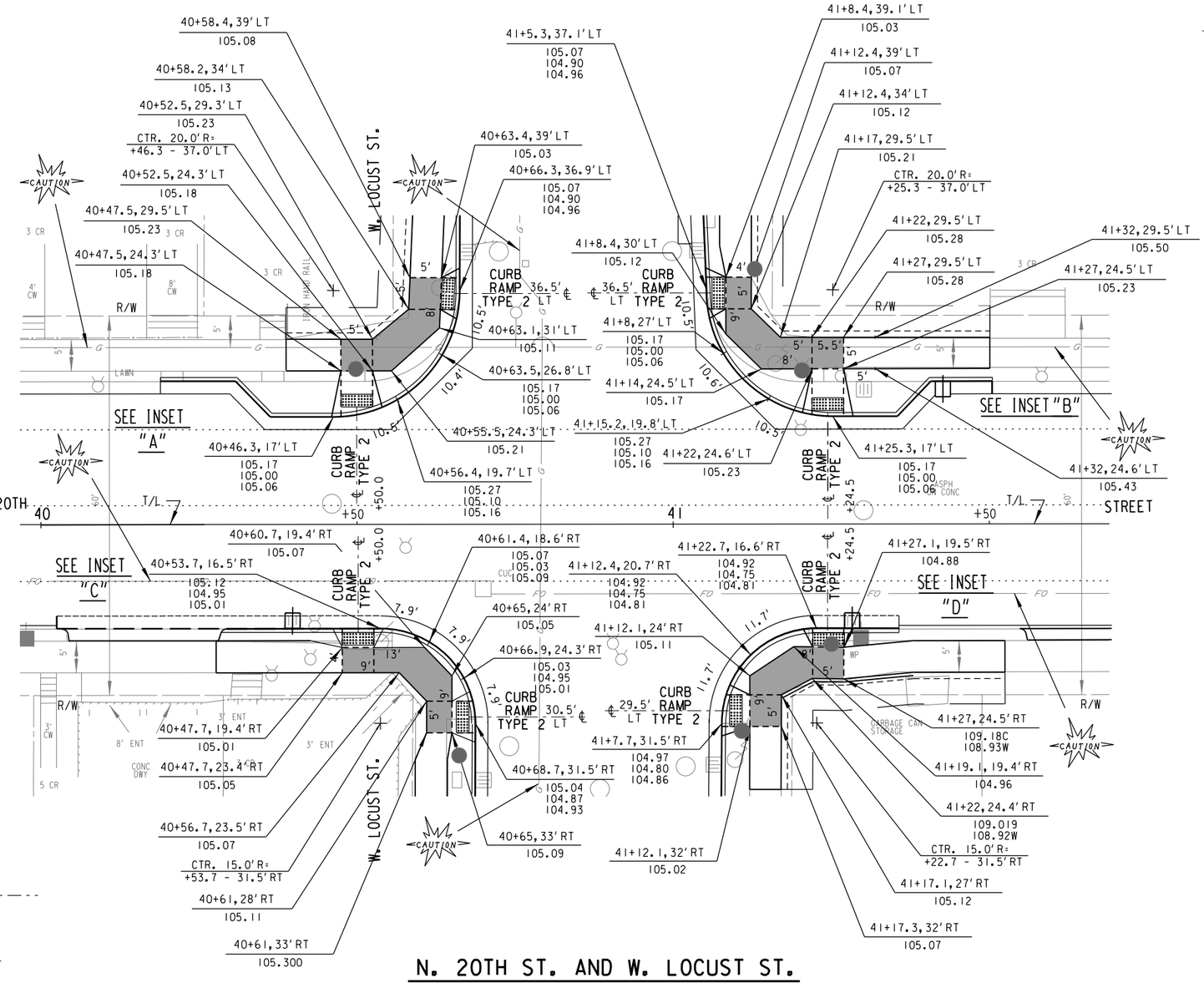
DETECTABLE WARNING FIELD

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 24	E

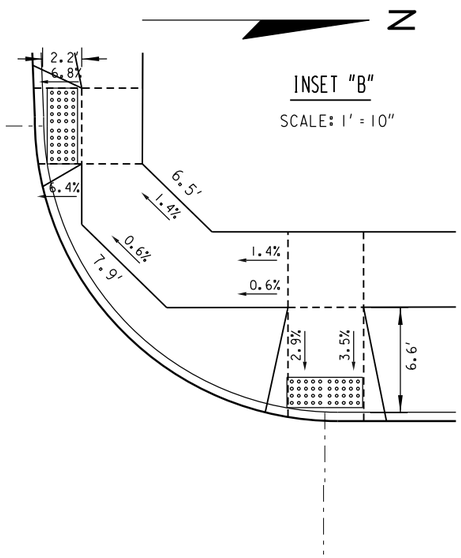
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. HADLEY ST.DGN

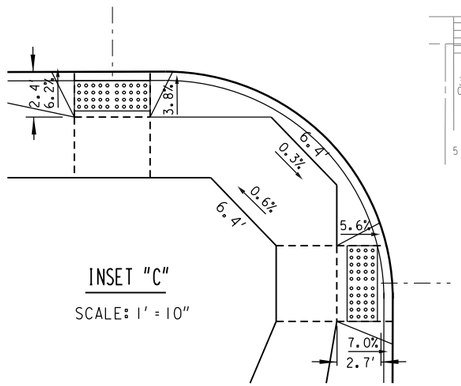
REVISED DATE: 07-18-2023 BY JC

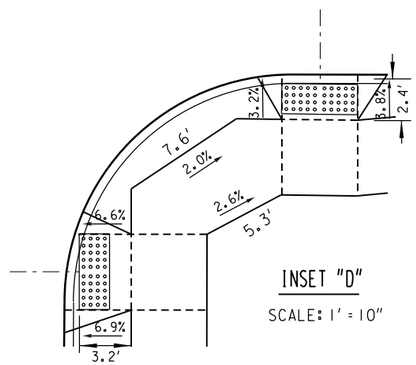




N. 20TH ST. AND W. LOCUST ST.







LANDING AREA

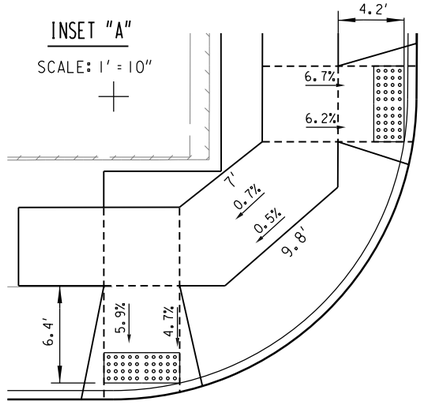
(PC) CONST. CONC. PEDESTRIAN CURB

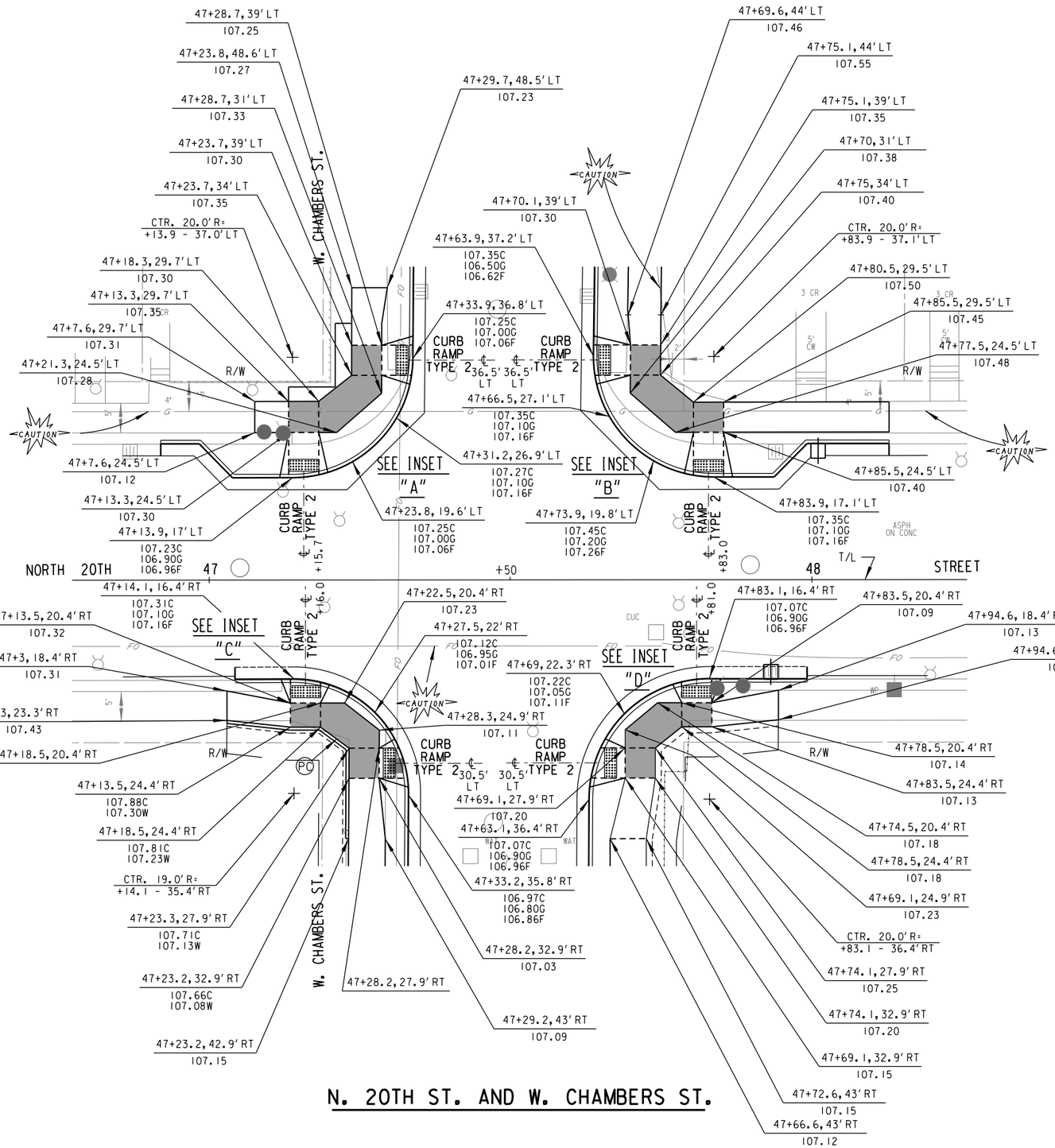
DETECTABLE WARNING FIELD

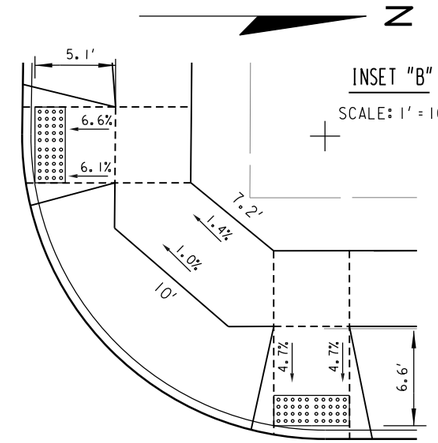
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 25	E

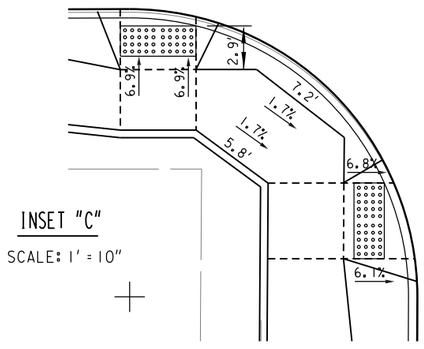
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. LOCUST ST.DGN

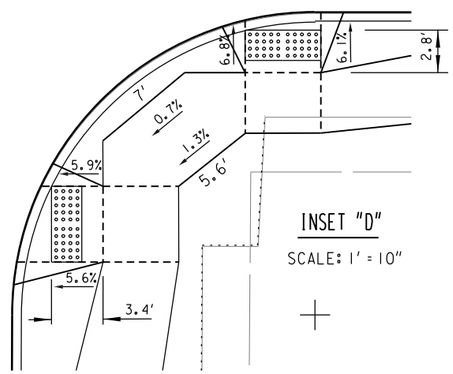
REVISED DATE: 07-18-2025 BY JC











LANDING AREA

(PC) CONST. CONC. PEDESTRIAN CURB

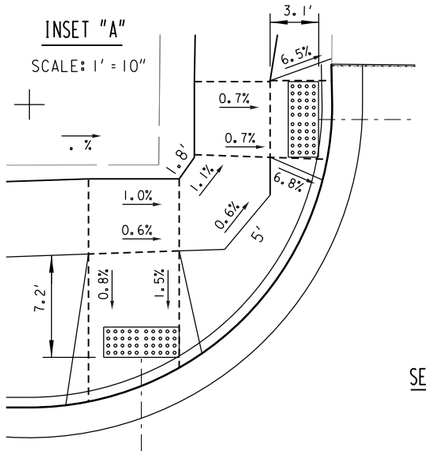
DETECTABLE WARNING FIELD

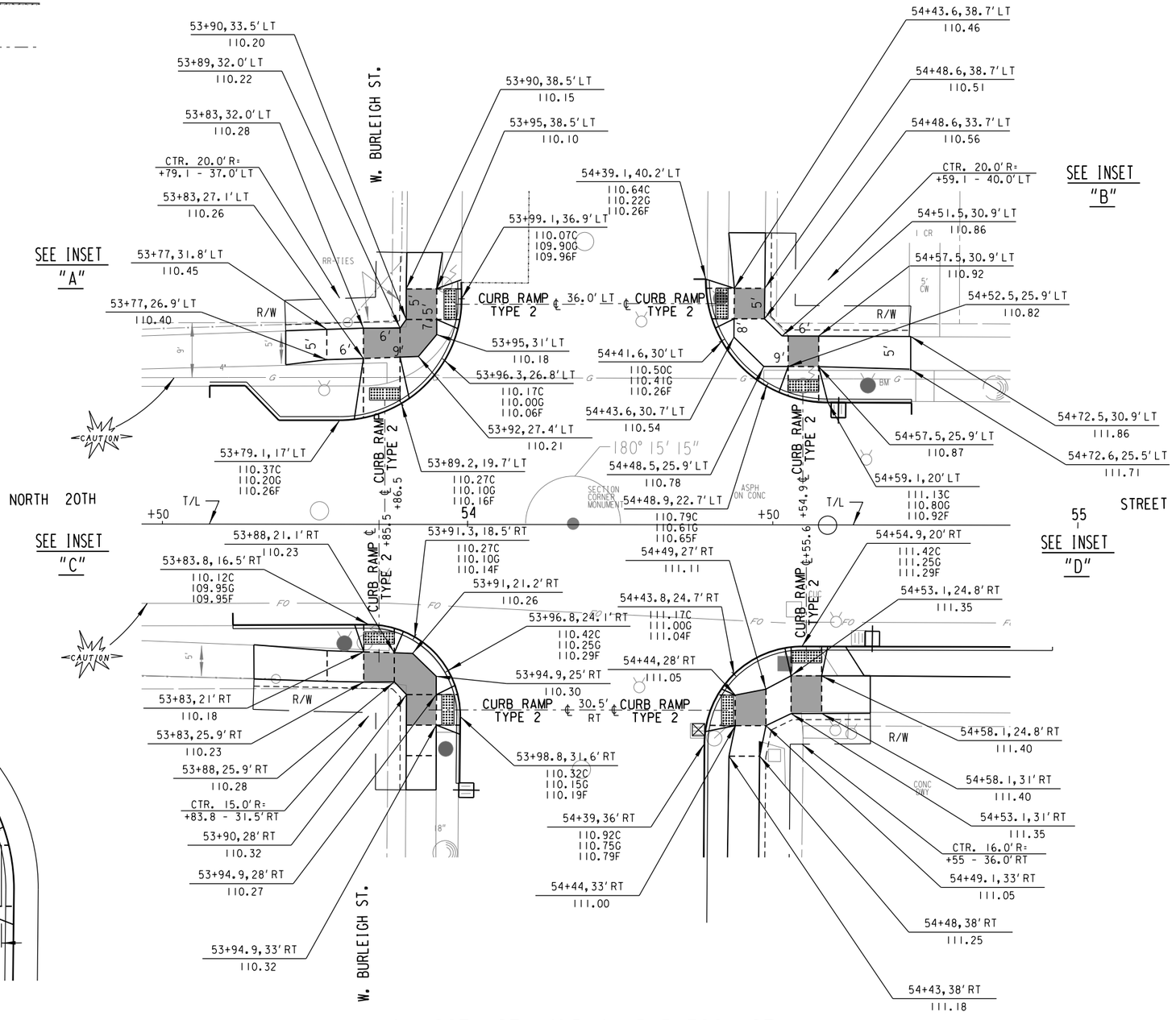
N. 20TH ST. AND W. CHAMBERS ST.

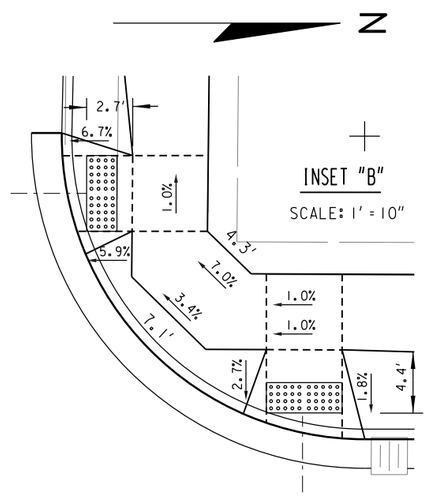
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 26	E

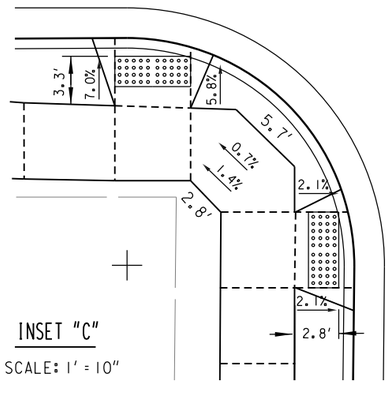
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. CHAMBERS ST.DGN

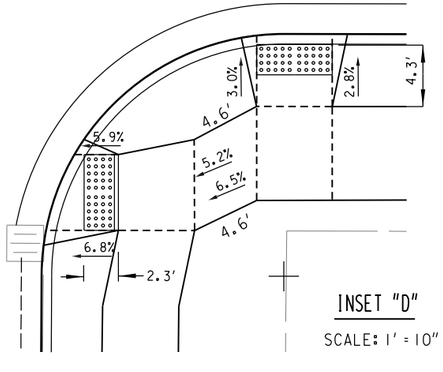
REVISED DATE: 07-18-2023 BY JC











LANDING AREA

(PC) CONST. CONC. PEDESTRIAN CURB

DETECTABLE WARNING FIELD

N. 20TH ST. AND W. BURLEIGH ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 27	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. BURLEIGH ST.DGN

REVISED DATE: 07-18-2023 BY JC

2

2

N

56+62.7, 29.1' LT
117.17

56+59.1, 32.6' LT
117.20

56+53.1, 32.6' LT
117.13

CTR. 20.0' R=
+48.1 - 40.0' LT

56+69.6, 43.2' LT
117.55

56+48.2, 30.8' LT
117.35

56+48.2, 25.8' LT
117.28

CAUTION

1 CR

5' CW

4.5' CW

5' CW

R/W

27" STORM

20"

9"

56+74.3, 38.5' LT
117.48

SEE INSET "A"

56+62.6, 26.2' LT
117.17C
117.00G
117.04F

56+48.2, 20' LT
117.09C
116.67G
116.71F

CURB RAMP TYPE 1

56+60.1
24' LT

56+53.2, 25.6' LT
117.06

55+89.5, 20' RT
115.75C
115.42G
115.46F

NORTH 20TH T/L +50 56 +50 57 T/L STREET

55+89, 25' RT
115.79

55+95, 25' RT
115.82

55+98.8, 26.2' RT
115.92C
115.75G
115.79F

56+55.6, 21.5' LT
117.02C
116.85G
116.89F

TES

CUC

55+83, 25.9' RT
115.63

FO

CURB RAMP TYPE 1

W. HOPKINS ST.

CAUTION

SEE INSET "B"

R/W

PILLAR

CONC DWY

SIGN

PILLAR

VAULT

R/W

22"

55+98.9
26.9' RT

55+83, 30.9' RT
115.70

55+97.5, 32.7' RT
115.90

HOLY LAWN

55+93.9, 36.1' RT
115.93

CTR. 10.0' R=
+89.5 - 30.0' RT

55+89, 31' RT
115.85

55+86.8, 35.9' RT
116.05

55+90.4, 32.5' RT
115.87

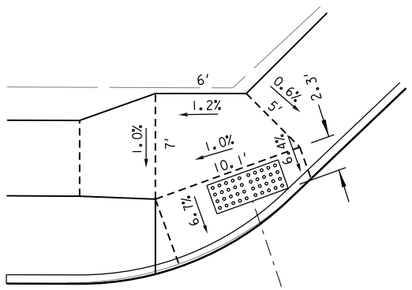
55+90.3, 39.6' RT
116.00

N. 20TH ST. AND W. HOPKINS ST.

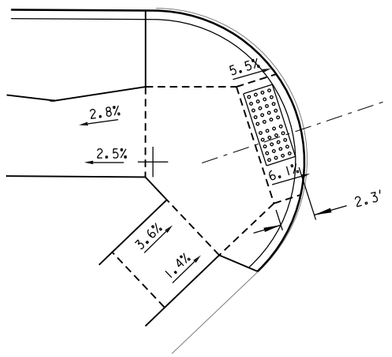
LANDING AREA

(PC) CONST. CONC. PEDESTRIAN CURB

DETECTABLE WARNING FIELD



INSET "A"
SCALE: 1' = 10"



INSET "B"
SCALE: 1' = 10"

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	RAMP DETAIL	SCALE FEET 0' 20'	SHEET NO: 28	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\RAMP DETAIL\W. HOPKINS ST.DGN

REVISED DATE: 07-18-2023 BY JC

2

NORTH

#2000-2040 W. FOND DU LAC AVE.

AVENUE

20TH

#2000 W. NORTH AVE.

STREET

#2325 #2329 #2333 #2339 #2341 #2345 #2349

N

BEGIN PROJECT
STA. 01+39.32 T/L
Y= 366,361.00
X= 2,551,151.37

BM - NE COR
DOOR THESHOLD
#2000 N.20TH ST
ELEV: 92.32

B.M. SE C
@ 2349 N
ELEV. 97.

CAUTION

R/W

ASPHALT

3' ENT

ENT. 10.4

20' CONC. ALLEY

WOOD HAND RAIL

FENCE

RETAINING WALL

LAWN

WOOD FENCE

CHA FE

CLP

VAULT

CONC. ASPH

CUC

TEL

00 +50 01 +50 02 +50 03 +50 04 +50 05

T/L

N00°43'57"W

VAR. 12'

OTR. SEC. LINE

+50.5

+48.2

+52.7

+59.7

27.4' RT

24.4' RT

RAMP

ENT. 6 CR

ASPH

RETAINING WALL

2 CR

CHAINLINK FENCE

BUS-PAD

NORTH

WEST

#1919-1935 W. NORTH AVE.

#2308 #2320 #2322-2324 #2330 #2338 #2344 #2346

B.M. HYD AT SE CORNER OF
W. NORTH AVE. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 93.65

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

(RA) REMOVING ASPHALTIC SURFACE MILLING

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL	SCALE FEET 0' 40'	SHEET NO: 29	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 00-05.DGN

REVISED DATE: 07-17-2023 BY JC

2

N

NORTH 20TH AVENUE STREET

B.M. SE CORNER OF 5TH CONC RISER
@ 2349 N 20TH ST
ELEV. 97.51

CONC ALLEY

#2349 #2355 #2337 #2361 #2365 #2369 #2373-2375 #2377 #2403 #2407 #2411-2411A #2415 #2423 #2427-2427A #2431 #2435 #2439

66'
32'

CAUTION

50.1' LT

51.1' LT

CTR. 20.0' R=
+28.7 - 35.5' LT

CTR. 20.0' R=
+0.7 - 35.5' LT

63' LT
59' LT
41.8' LT
41.5' LT

+3.9 +11.9 +8.8 +18 +31

R/W

CHAIN LINK FENCE
RR-TIES
WOOD HAND RAIL
FENCE
LAWN
ASPH ON CONC
WEP
T/L

05 06 07 08 09 10 11

+50 40' 12' 8' 1.5' 17'

+89.4 +11.5 +17.5 +28.0 +33.0 +3.1 +32.0 +46.1 +55.2 +75.6

16.6' RT.

+21.0 +12.3

22.1' RT

CTR. 20.0' R=
+25.4 - 38.6' RT

CTR. 20.0' R=
+95.4 - 38.6' RT

47.7' RT

66.3' RT

47.7' RT

MEINECKE

WEST

IRON HAND RAIL
ASPH
WEEP HOLE
PAVER BLOCK RETAINING WALL
8 CR

PHILLIS WHEATLY ELEMENTARY SCHOOL

B.M. FLAG OL
PHILLIS WHEAT
E/S OF N. 20
ELEV. 97.56

#2442

#2346 #2354-2356 #2358-2360 #2364-2366

B.M. HYD AT NE CORNER OF
W. MEINECKE AVE. & N. 20TH ST.
NW BOLT, YEAR 2014
ELEV. 94.25

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 30	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 05-11.DGN

REVISED DATE: 07-17-2023 BY JC

2

N

NORTH 20TH ST. STREET

#2443 #2447 #2451-2451A #2459 #2463 #2467 #2479 #2501 #2505 #2509 #2513 #2521 #2527 #2529-2531

CAUTION

14+14.9
62.8' LT

44.4' LT

CTR. 20.0' R=
+96.1 - 35.5' LT

14+49.5
61.7' LT

61.7' LT

CTR. 20.0' R=
+70.1 - 35.5' LT

44.5' LT

34.7' LT

CENTURY LINK (LOCATION UNK)

TS-BOX

WAT

GATE

6' ENT

IRON HAND RAIL

WHEEL CHAIR ACCESS

RETAINING WALL

LAWN

R/W

FENCE

ASPH ON CONC

+69.2 +66.6 +80.1 +83.8 +79.3 +86.1 +91.4

11 +50 12 T/L +50 13 +50 14 +50 15 +50 16 +50 17

WEP

SPECTRUM

+73.5

+77.0 +92.6

CONCRETE RET-WALL

WOOD HAND RAIL

CTR. 18.0' R=
+72.1 - 36.5' RT

CONC DWY

8' ENT 8' ENT

CONC ALLEY

PAVER BLOCK RETAINING WALL

WEEP HOLE

FLAG POLE

8 CR

B.M. FLAG OLE BASE@
PHILLIS WHEATLEY SCHOOL
E/S OF N. 20TH ST.
ELEV. 97.56

CTR. 15.0' R=
+3.9 - 33.5' RT

WRIGHT

59' RT

49.9' RT

14+53.9
58.2' RT

14+19.8
58.5' RT

WEST

#1932-1934 W. WRIGHT ST.

#2520 #2524 #2528

B.M. HYD AT NE CORNER OF
W. WRIGHT ST. & N. 20TH ST.
NW BOLT, YEAR 1997
ELEV. 95.79

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 31	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 11-17.DGN

REVISED DATE: 07-17-2023 BY JC

2

N

NORTH 20TH STREET

2531 #2533 #2537-2539 #2549 #2553 #2577 #2008 W. CLARKE ST.. #2619

CLP

CAUTION ST.

52.9'LT

58.4'LT

64.5' LT

52.9'LT

CTR. 20.0'R= +63.5 - 35.5'LT

CTR. 20.0'R= +33.5 - 35.5'LT

41.5'LT

CAUTION

CONC ALLEY

15' CONC ALLEY

CHAIN LINK FENCE ON TOP OF CONC RETAINING WALL

R/W LAWN

17 +50 18 T/L +50 19 +50 20 +50 21 +50 22 +50 23

+64.2 +26.5 +6.2 +26.3 +55.3 +41.9 +60.4 +79.5 +26.7 +41.9 +71.3 +90.7

+42.0 +46.8 +52.0 +60.9 +43.8 +49.3

ASPH ON CONC

CUC

+57.8 WOOD-RET

+43.1

+175.0 IRON HAND RAIL

+79.0

22' RT

FENCE ON TOP OF CONC WALL

CTR. 20.0'R= +63.8 - 38.5'RT

CTR. 20.0'R= +33.8 - 38.5'RT

52.8'RT

70.4' RT

53.9'RT

CLARKE

WEST

CONC-RET-WALL

#2532 #2540 #2548 #2552 #2556-2558 #2560 #2566-2568 #2572-2574 #2578 #1932-3434 W. CLARKE ST. #2612 #2618 #2622

B.M. NORTHWEST CORNER OF 1ST CONC RISER @ 2548 N. 20TH ST. ELEV. 95.31

B.M. HYD AT NE CORNER OF W. CLARKE ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 96.28

CAUTION

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 32	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 17-23.DGN

REVISED DATE: 07-17-2023 BY JC

NORTH

20TH ST.

STREET

WEST CENTER ST.

B.M. HYD AT SW CORNER OF W. CENTER ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 99.46

B.M. NE CORNER OF CONC RETAINING WALL @ 2690 N. 20TH ST. ELEV. 97.09

SECTION CORNER MONUMENT

N00°43'57"W

N00°46'56"W

179°57'01"

ALLEY

15' CONC. ALLEY

CONC ALLEY 15'

CONC DWY

ASPH

ASPH ON CONC

TIMBER

PILLAR

SIGN

WROUGHT IRON FENCE

FENCE

IRON HAND RAIL

LAWN

CE ON TOP CONC WALL

R/W

#2619 | #2629-2631 | #2633-2635 | #2639-2641 | #2645 | #2649-2651 | #2655 | #2659-2661 | #2001-2007 W. CENTER ST. | #2008

#2622 | #2630 | #2634 | #2640-2638 | #2642-2644 | #2648 | #2650 | #2654-2658 | #1935 W. CENTER ST. | #2704

23 | 24 | 25 | 26 | 27 | 28 | 29

T/L

+50

+82.0 | +94.1 | +87.3 | +16.1 | +9.2 | +39.0 | +37.0 | +87.5 | +89.7

ANG. PT.

32.9' LT

30' LT

CTR. 20.0' R= +19.2 - 35.5' LT

77' LT

70' LT

35.5' LT

98.6' LT

99.1' LT

CTR. 12.0' R= +1.2 - 36.9' LT

29+00

26.5' RT

26' RT

55' RT

CTR. 12.0' R= +27 - 33.9' RT

CTR. 10.0' R= +99.1 - 29.0' RT

95' RT

96.6' RT

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40	SHEET NO: 33	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 23-29.DGN

REVISED DATE: 07-17-2023 BY JC

NORTH 20TH STREET

B.M. SE CORNER OF 1ST CONC RISER @ 2745 N. 20TH ST. ELEV. 102.51

B.M. HYD AT SW CORNER OF W. HADLEY ST. & N. 20TH ST. NW BOLT, YEAR 1965 ELEV. 103.85

#2717-19 #2721-23 #2725-27 #2729-31 #2737 #2743 #2745 #2749 #2753 #2757 #2763 #2769 #2773 #2777-79 #2801

P.L.

FENCE TIMBER R/W 3 CR 2 CR 4' CW 5' CW 3' CW 2' CW

CAUTION

CTR. 20.0' R= +91.8 - 37.0' LT

CTR. 20.0' R= +61.8 - 37.0' LT

52.5' LT 67.1' LT 57.5' LT 47.6' LT 37' LT

20' R 15' R 3' ENT

29 +50 30 +50 31 +50 32 T/L +50 33 +50 34 +50 35

+48.1 +42.5 +8.3 +66.0 +75.4 +74.7 +78 +86.2 +89.7 +80.4 +76.6 +74.4 +76.7 19' RT

3' 12' 5.5' 37' 7.5' 12' 3' 5' 10.5' 6' 3.5'

FO CUC WP LAWN CONC DWY 8' ENT WOOD FENCE 16' ENT

26.1' RT 36.3' RT 33' RT 51' RT 57.7' RT

CTR. 22.0' R= +91.4 - 38.5' RT

CTR. 19.0' R= +62.5 - 35.5' RT

HADLEY ST. WEST

#2717 N. 19TH ST. #2723 N. 19TH ST. #2725 N. 19TH ST. #2737-2737A N. 19TH ST. #2745 N. 19TH ST. #2748 #2752 #2763 N. 19TH ST. #2765 N. 19TH ST. #2770 #1911-1913 W. HADLEY ST. #2810

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 34	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 29-35.DGN

REVISED DATE: 07-18-2023 BY JC

2

N

NORTH 20TH STREET

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

#2807 #2815 #2817 #2823 #2831 #2835 #2845 #2845 #2853 #2857 #2861-63 #2865 #2869-71 #2873-75

B.M. SE CORNER OF 5TH CONC
RISER @
2835 N. 20TH ST.
ELEV. 107.57

CAUTION

4 CR 3 CR 5 CR 6 CR 5 CR 3 CR 3 CR 4 CR 3 CR 3 CR 1 CR 3 CR

4' CW 5' CW 4' CW R/W 4' CW 4' CW 5' CW 4' CW 4' CW 4' CW 3' CW 3' CW 3' CW 6' CW R/W 4' CW 3 (
8' CW

12" 10.5' 5' LAWN

SSPH CONC

35 +50 36 +50 37 T/L +50 38 +50 39 +50 40

37' 12' 3.5' 12' 7.5' 3'

AT&T (LOCATION UNKLIN CITY CONDUIT?

+42.4 +60.4 +28.0 +64.7 +89.2 +19.2 +49.3 +57.8 +9.9 +41.0 +2.5

FO FO FO FO FO FO FO FO FO FO FO FO

WM WM WM WM WM WM WM WM WM WM WM WM

5' 5' 5' 10.5' 5'

5 CR R/W 3' CW 4 CR CONC DWY 5 CR IRON HAND RAIL FENCE CONC DWY 5 CR DWY DWY 3 CR 16' ENT DWY 8' ENT 16' ENT CONC DWY IRON HAND RAIL 3' CW 4 CR 5' CW 3 CR WOOD HAND RAIL 4 CR R/W 3' CW 5 CR 8' ENT CONC DWY

CAUTION

#2810 #2813 N. 19TH ST. #2818 #2825 N. 19TH ST. #2833-2835 N. 19TH ST. #2837 N. 19TH ST. #2841 N. 19TH ST. #2849 N. 19TH ST. #2858 #2866-2866A #2873 N. 19TH

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

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 35	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 35-40.DGN

REVISED DATE: 02-28-2022 BY SDB

2

N

NORTH

CAUTION

#2873-75

#2877-79

ST.

20TH

STREET

#2917

#2939

#2941-43

#2947

#2955

#2959-61

#2963

B.M. HYD AT NW CORNER OF
W. LOCUST ST. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 107.31

B.M. TOP OF CONC WINDOW SILL
EAST SIDE
NORTHSIDE CHURCH ENTRANCE
ELEV. 107.79

40+66.5
84.7' LT

41+4.3
64.5' LT

64.5' LT

85'
LT

CTR. 20.0' R=
+46.3 - 37.0' LT

CTR. 20.0' R=
+25.3 - 37.0' LT

ASPH
ON CONC

IRON HANDRAIL

15' R

R/W

CAUTION

LAWN

+18.9

+29.9

+38.8

+41.3

+50.5

+12.5

+35.7

+93.7

+8.7

+9.0

+20.2

+50.0

+72.5

T/L

T&T (LOCATION UNKTN) CITY CONDUIT

+27.6

+52.5

GARBAGE CAN
STORAGE

CTR. 15.0' R=
+53.7 - 31.5' RT

43.2'
RT

42'
RT

CTR. 15.0' R=
+22.7 - 31.5' RT

69.5' RT

LOCUST

WEST

RETAINING
WALL

B.M. TOP OF NW CORNER OF NORTHERNLY
GARAGE CONC WALL
(APPROXIMATELY 32" ABOVE GROUND @
2938 N. 19TH ST.
ELEV. 109.80

#2873 N. 19TH ST.

#2878

#2901-2903
N. 19TH ST.

#2911-2913 N. 19TH ST.

#2917 N. 19TH ST.

#2920

#2921 N. 19TH ST.

#2931 N. 19TH ST.

#2935 N. 19TH ST.

#2940

#2944

#2949 N. 19TH ST.

#2954

#2957 N. 19TH ST.

#2961-2963
N. 19TH ST.

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 36	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 40-46.DGN

REVISED DATE: 07-18-2023 BY JC

2

N

NORTH

20TH

STREET

ST.

WEST

CHAMBERS

B.M. HYD AT SW CORNER OF W. CHAMBERS ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 108.57

B.M. CENTER OF CONC RISER @ 2979 N. 20TH ST. ELEV. 108.42

#2963 #2967 #2969 #2975 #2003 W. CHAMBERS ST. #3000 #3007 #3015-17 #3019 #3023 #3029 #3039 #3043 #3051 #3055

#1911-1913 W. CHAMBERS ST. #1900-02 W. CHAMBERS ST. #3019 N. 19TH ST. #3024 #3028 #3035 N. 19TH ST. #3041 N. 19TH ST. #3045 N. 19TH ST. #3048 #3053 N. 19TH ST.

CTR. 20.0' R= +13.9 - 37.0' LT

CTR. 20.0' R= +83.9 - 37.0' LT

CTR. 19.0' R= +14.1 - 35.4' RT

CTR. 20.0' R= +83.1 - 36.4' RT

48.6' LT

70.1' LT

61' LT

40.4' LT

50.3' RT

56.4' RT

63' RT

60.5' RT

CAUTION

R/W

ASPH

ASPH ON CONC

CONC DWY

FENCE

PIPE HAND RAIL

WOOD RETAINING WALL

BLOCK RET WALL

DWY

CUC

WP

WAT

FO

(LOCATION UNK)

(LOCATION UNK)IN CITY CONDUIT?

46 47 48 49 50 51 52

+50

+92.0 +97.6 +0.6 +13.0 +5.0 +33.0 +75.0 +68.0 +58.7 +61.7 +89.3 +92.3 +98.8

+64.5 +84.3 +4.3 +99.3 +3.0 +9.9 +71.3 +92.4 +83.5 +11.5 +43.8 +75.0

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 37	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 46-52.DGN

REVISED DATE: 07-18-2023 BY JC

2

N

NORTH 20TH STREET

STREET

#3055 #3063 #3067 #3075 #3101 #3103 #3111 #3117 #2001

B.M. HYD AT NW CORNER OF W. BURLEIGH ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 113.66

B.M. HYD AT NW CORNER OF W. HOPKINS ST. & N. 20TH ST. NW BOLT, YEAR 2009 ELEV. 119.15

CHAIN LINK FENCE

BUS PAD

CONC ASPH

PATIO PAVERS

TIRE SHOP ASPHALT LOT

CONC DWY

VAULT

AMD 3/2023

CAUTION

R/W

P.I.

CTR. 20.0' R= +79.1 - 37.0' LT

44.5' LT

39.6' LT

40.1' LT

47.8' LT

CTR. 20.0' R= +58.9 - 40.1' LT

CTR. 20.0' R= +48.1 - 40.0' LT

56+74.3 38.5' LT

56+69.6 43.2' LT

56+71.8 35' LT

+92.3 +98.8 +57.8 +62.8 +70.3 +72.5 +72.8 +30.7 +43.3

52 53 54 55 56 57 58

T/L

SECTION CORNER MONUMENT

ASPH ON CONC

CITY CONDUIT?

DWY

+10.0 +34.0 +61.6 +65.0 +66.1 +95.8 +73.9

CUC FO WP TES

AT&T (LOCATION UNK)

VAULT

HOLY LAWN

CEMETERY

CONC DWY

PILLAR

WROUGHT IRON FENCE

SIGN

CLP

CTR. 15.0' R= +83.8 - 31.5' RT

43.6' RT

42.5' RT

65.3' RT

CTR. 10.0' R= +89.5 - 30.0' RT

55+96.4 37.2' RT

55+84.9 44.8' RT

54+42.7 65.4' RT

54+42.1 96.7' RT

102' RT

BURLEIGH

NORTH HOPKINS

WEST

GAS STATION #1909 W. HOPKINS ST.

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS AND LANDING AREAS

#3056 #3064 #3068-70 #3075 N. 19TH ST.

TH ST.

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE PAVEMENT

REMOVING CURB & GUTTER

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	REMOVAL PLAN	SCALE FEET 0' 40'	SHEET NO: 38	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\REMOVAL 52-58.DGN

REVISED DATE: 07-18-2023 BY JC

2

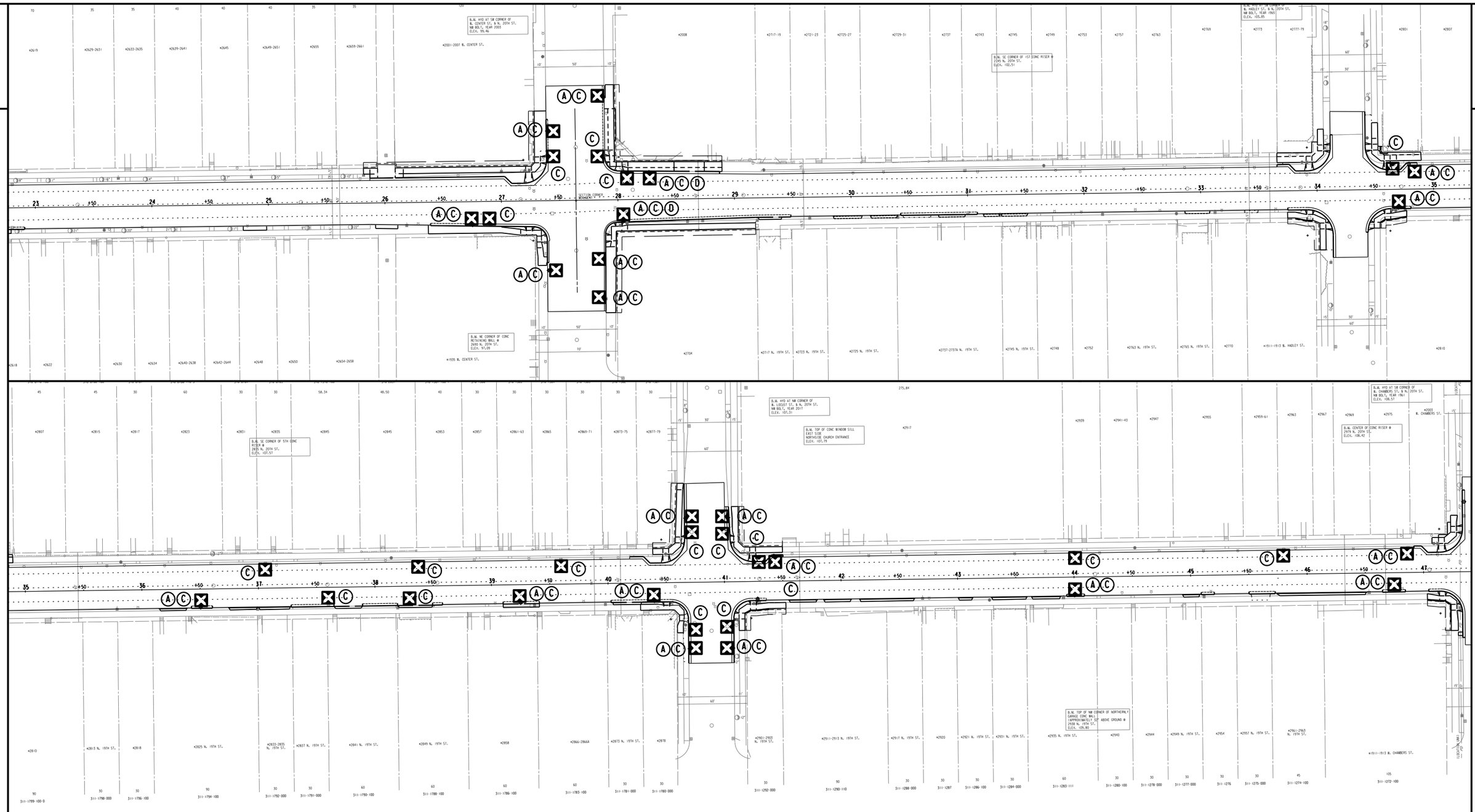
LEGEND

- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	EROSION CONTROL	SCALE FEET 0' 80'	SHEET NO: 39	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\EROSION.DGN

REVISED DATE: 07-27-2023 BY JC



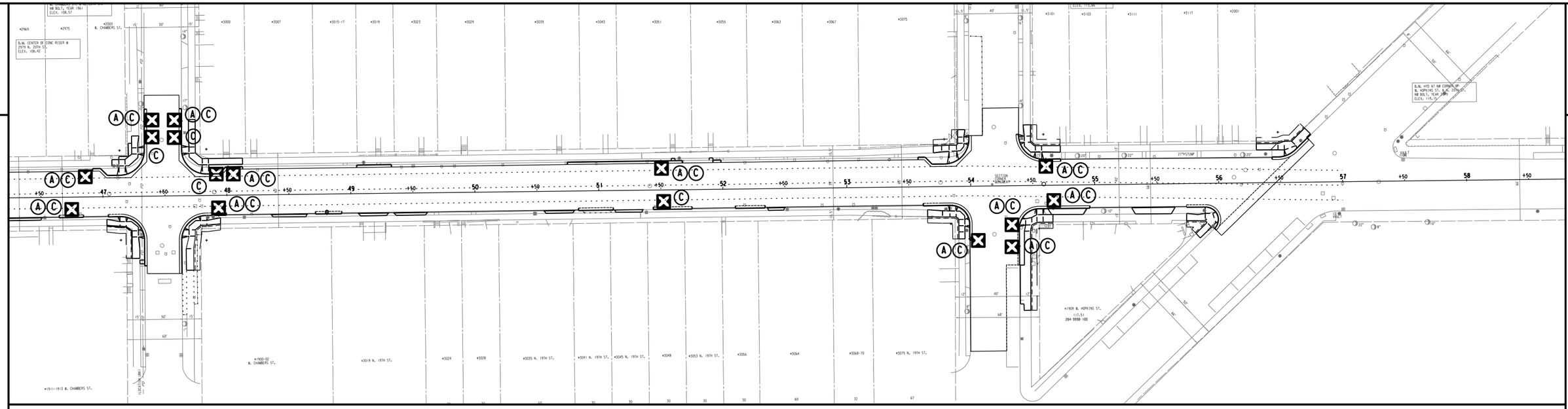
LEGEND

- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	EROSION CONTROL	SCALE FEET 0' 80'	SHEET NO: 40	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\EROSION.DGN

REVISED DATE: 07-27-2023 BY JC



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	EROSION CONTROL	SCALE FEET 0' 80'	SHEET NO: 41	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\EROSION.DGN

REVISED DATE: 07-27-2023 BY JC

2

NORTH 20TH STREET

AVENUE

#2000-2040 W. FOND DU LAC AVE. #2000 W. NORTH AVE. #2325 #2329 #2333 #2339 #2341 #2345 #2349

N

BM - NE COR
DOOR THESHOLD
#2000 N.20TH ST
ELEV: 92.32

B.M. SE C
@ 2349 N
ELEV. 97.

CAUTION

R/W

ASPHALT

3' ENT

ENT. 10.4

20' CONC ALLEY

WOOD HAND RAIL

FENCE

RETAINING WALL

LAWN

WOOD FENCE

CHA FE

CONC. ASPH.

00 T/L +50 01 +50 02 +50 03 +50 04 +50 05 T/L

100 101

N00°43'57"W

CLP

VAULT

BUS-PAD

5' ENT

ENT. 6 CR

ASPH

RETAINING WALL

2 CR

CHAINLINK FENCE

NORTH

BEGIN PROJECT 2275-05-70

STA. 01+39.30, T/L
Y= 366,361.00
X= 2,551,151.37

#1919-1935 W. NORTH AVE. #2308 #2320 #2322-2324 #2330 #2338 #2344 #2346

B.M. HYD AT SE CORNER OF
W. NORTH AVE. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 93.65

WEST

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 42	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_00_05.DGN

REVISED DATE: 11-03-2022 BY JC

NO NEW DRAINAGE STRUCTURES
STA. 00-05

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 43	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_00_05.DGN

REVISED DATE: 11-03-2022 BY JC

2

N

NORTH 20TH AVENUE STREET

B.M. SE CORNER OF 5TH CONC RISER
@ 2349 N 20TH ST
ELEV. 97.51

B.M. HYD AT NE CORNER OF
W. MEINECKE AVE. & N. 20TH ST.
NW BOLT, YEAR 2014
ELEV. 94.25

B.M. FLAG OL
PHILLIS WHEAT
E/S OF N. 20
ELEV. 97.56

MEINECKE WEST

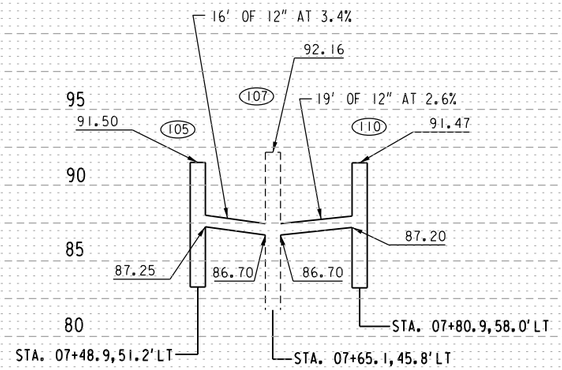
PHILLIS WHEATLY ELEMENTARY SCHOOL

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 44	E

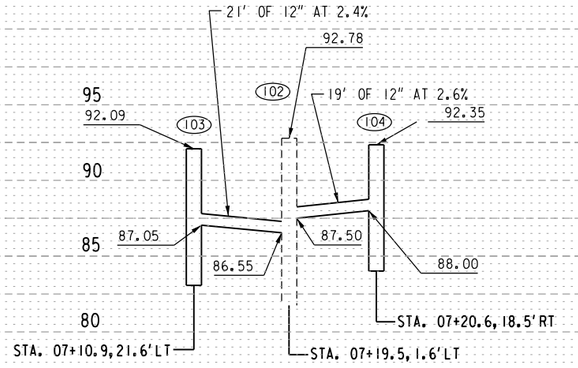
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_05-11.DGN

REVISED DATE: 03-06-2023 BY JC

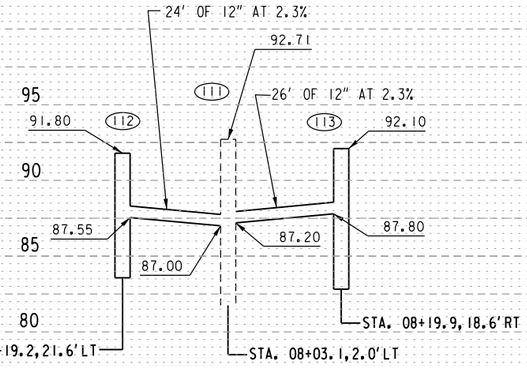
2



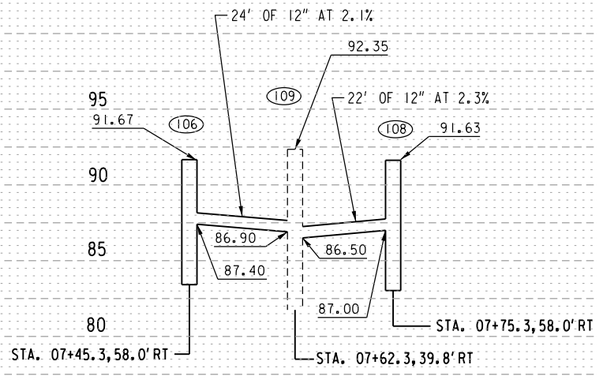
(LOOKING WEST)



(LOOKING NORTH)



(LOOKING NORTH)



(LOOKING WEST)

N

NORTH 20TH ST. STREET

WEST WRIGHT

#2443 #2447 #2451-2451A #2459 #2463 #2467 #2479 #2501 #2505 #2509 #2513 #2521 #2527 #2529-2531

#2442 #1932-1934 W. WRIGHT ST. #2520 #2524 #2528

P.L.

CAUTION

CAUTION

CENTURY LINK (LOCATION UNK)

CENTURY LINK (LOCATION UNK)

SPECTRUM

TS-BOX

WATER

GATE

6' ENT

WOOD HAND RAIL

IRON HAND RAIL

WHEEL CHAIR ACCESS

RETAINING WALL

PAVER BLOCK RETAINING WALL

WEEP HOLE

FLAG POLE

CONCRETE RET-WALL

CONC DWY

8' ENT 8' ENT

CONC ALLEY

FENCE

LAWN R/W

(OVERHEAD)

WP

TEL

CABLE

SANITARY SEWER

STORM SEWER

WATER MAIN

GAS

T/L

+50

11 12 13 14 15 16 17

114A 117 118 119 120 120A 121 122 123 123A 124 508 509 510 511

B.M. FLAG OLE BASE@
PHILLIS WHEATLEY SCHOOL
E/S OF N. 20TH ST.
ELEV. 97.56

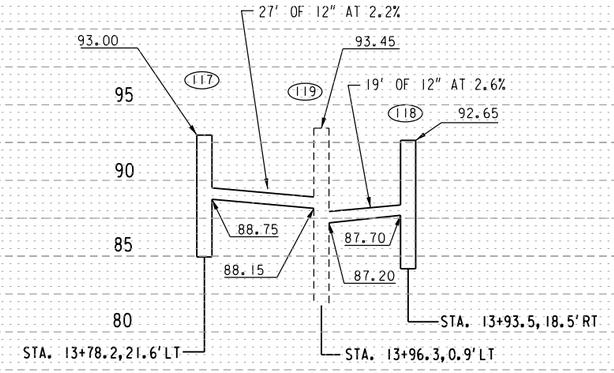
B.M. HYD AT NE CORNER OF
W. WRIGHT ST. & N. 20TH ST.
NW BOLT, YEAR 1997
ELEV. 95.79

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40	SHEET NO: 46	E

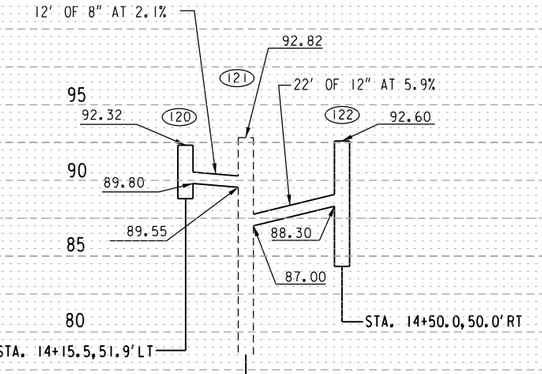
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_11-17.DGN

REVISED DATE: 03-08-2023 BY JC

2



(LOOKING NORTH)

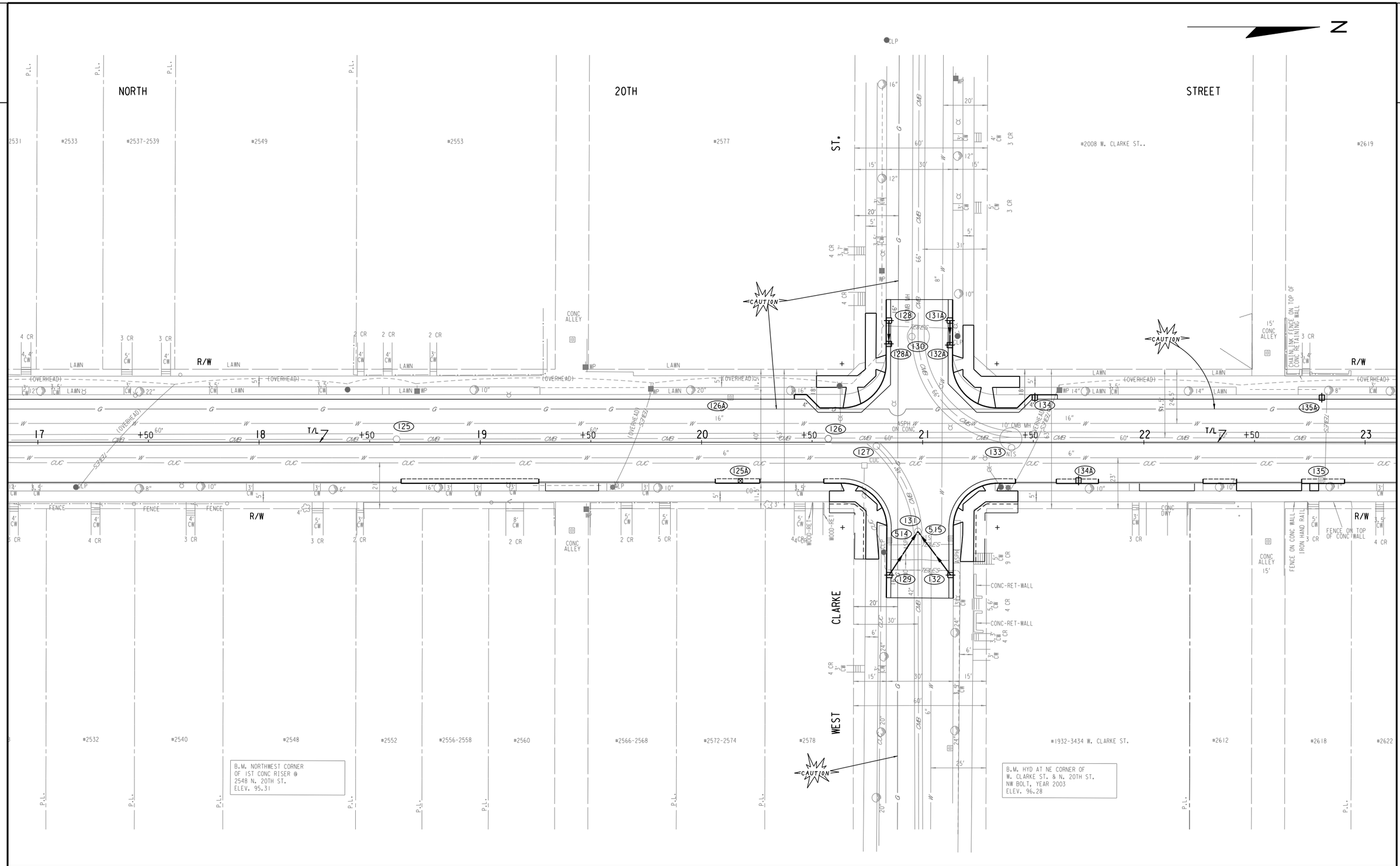


(LOOKING WEST)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 47	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_11-17.DGN

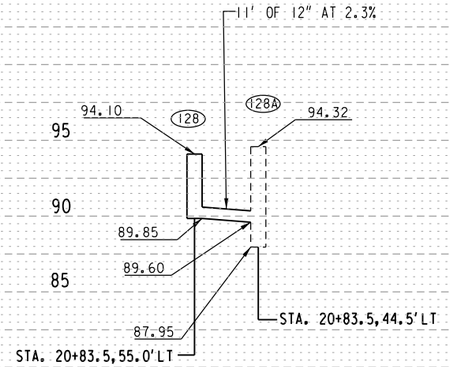
REVISED DATE: 08-15-2023 BY SLB



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40	SHEET NO: 48	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_17-23.DGN

REVISED DATE: 03-10-2023 BY JC



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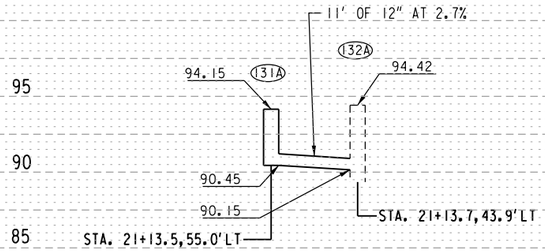
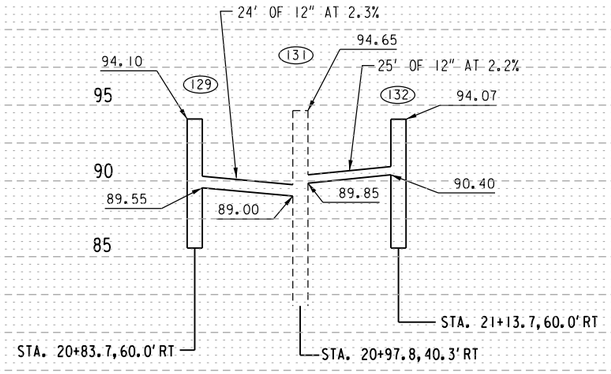


(LOOKING EAST)



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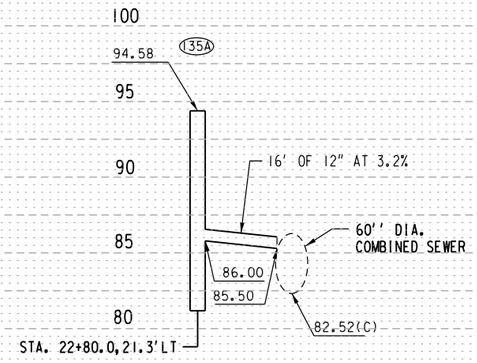


(LOOKING NORTH)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 49	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_17-23.DGN

REVISED DATE: 06-28-2023 BY EM

2

NORTH

20TH

ST.

STREET

CENTER

WEST

ALLEY

#2619 | #2629-2631 | #2633-2635 | #2639-2641 | #2645 | #2649-2651 | #2655 | #2659-2661 | #2001-2007 W. CENTER ST. | #2008

#2622 | #2630 | #2634 | #2640-2638 | #2642-2644 | #2648 | #2650 | #2654-2658 | #1935 W. CENTER ST. | #2704

B.M. HYD AT SW CORNER OF W. CENTER ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 99.46

B.M. NE CORNER OF CONC RETAINING WALL @ 2690 N. 20TH ST. ELEV. 97.09

R/W

P.L.

15' CONC. ALLEY

CONC. ALLEY 15'

CONC DWY

(LOCATION UNK)

AT&T (LOCATION IN CITY CONDUIT)

TIMBER

PILLAR

SIGN

WROUGHT IRON FENCE

FENCE

CE ON TOP CONC WALL

IRON HAND RAIL

ASPH

ASPH ON CONC

CONC

LAWN

TEBES

(OVERHEAD)

ANG. PT.

SECTION CORNER MONUMENT

N00°43'57"W

N00°46'56"W

179°57'01"

CAUTION

23 | 24 | 25 | 26 | 27 | 28 | 29

136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 144A | 144B | 145 | 146 | 147 | 148

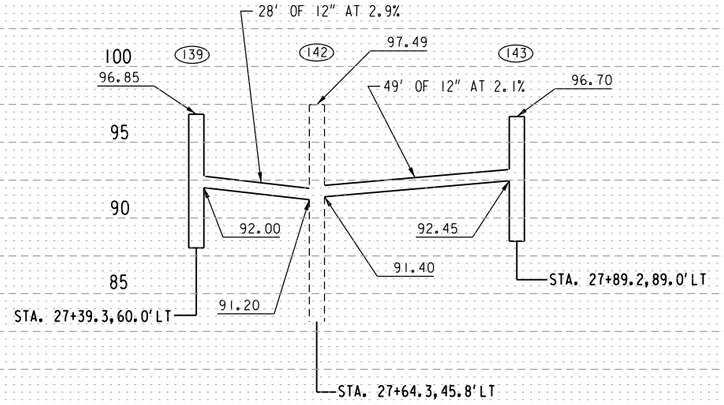
137A | 518 | 522 | 523 | 524 | 525

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 50	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_23-29.DGN

REVISED DATE: 03-13-2023 BY JC

2



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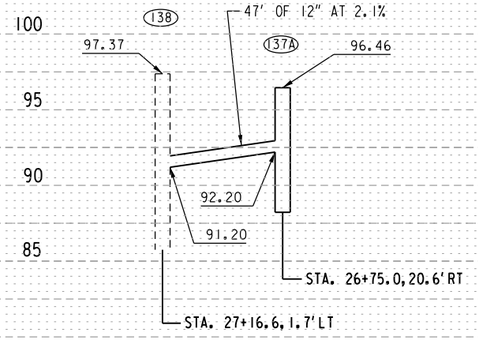

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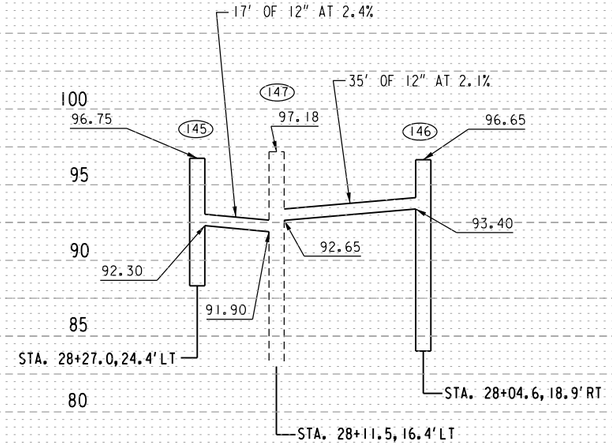


(LOOKING NORTH)

N

NORTH 20TH STREET

ST.

HADLEY

WEST

B.M. SE CORNER OF 1ST CONC RISER @
2745 N. 20TH ST.
ELEV. 102.51

B.M. HYD AT SW CORNER OF
W. HADLEY ST. & N. 20TH ST.
NW BOLT, YEAR 1965
ELEV. 103.85

#2717-19 #2721-23 #2725-27 #2729-31 #2737 #2743 #2745 #2749 #2753 #2757 #2763 #2769 #2773 #2777-79 #2801

#2717 N. 19TH ST. #2723 N. 19TH ST. #2725 N. 19TH ST. #2737-2737A N. 19TH ST. #2745 N. 19TH ST. #2748 #2752 #2763 N. 19TH ST. #2765 N. 19TH ST. #2770 #1911-1913 W. HADLEY ST. #2810

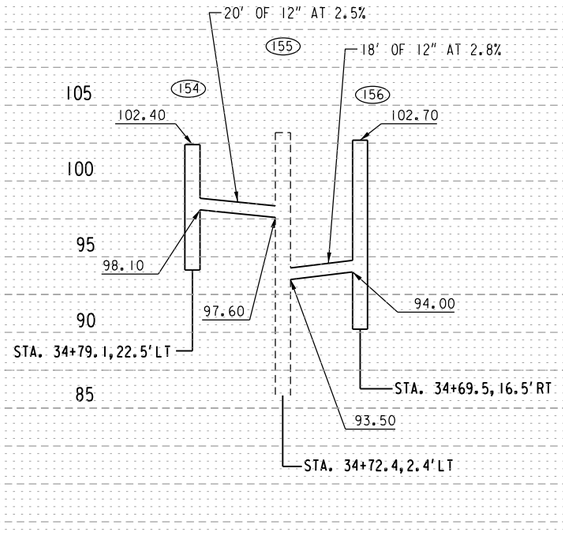
R/W

CAUTION

29 30 31 32 T/L 33 34 35

148 149 149A 150 151 152 153 154 155 156 526 527

2



(LOOKING NORTH)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 53	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_29-35.DGN

REVISED DATE: 03-06-2023 BY JC

2

N

NORTH 20TH STREET

#2807 #2815 #2817 #2823 #2831 #2835 #2845 #2845 #2853 #2857 #2861-63 #2865 #2869-71 #2873-75

B.M. SE CORNER OF 5TH CONC
RISER @
2835 N. 20TH ST.
ELEV. 107.57

CAUTION

R/W R/W

AT&T (LOCATION UNKNOWN) CITY CONDUIT?

IRON HAND RAIL FENCE IRON HAND RAIL WOOD HAND RAIL

CAUTION

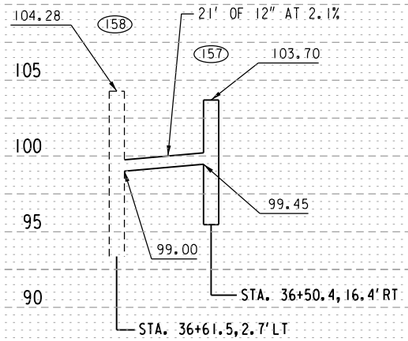
#2810 #2813 N. 19TH ST. #2818 #2825 N. 19TH ST. #2833-2835 N. 19TH ST. #2837 N. 19TH ST. #2841 N. 19TH ST. #2849 N. 19TH ST. #2858 #2866-2866A #2873 N. 19TH ST

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 54	E

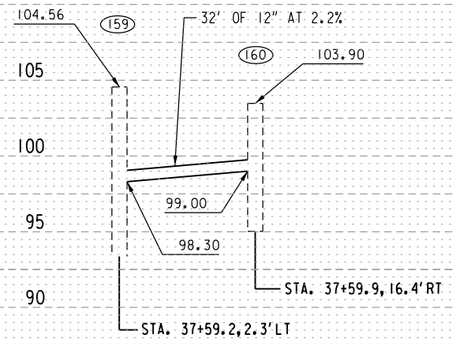
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_35-40.DGN

REVISED DATE: 03-13-2023 BY JC

2



(LOOKING NORTH)



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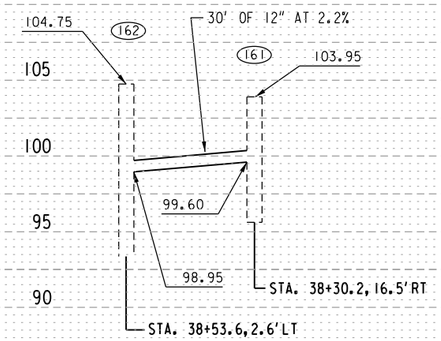

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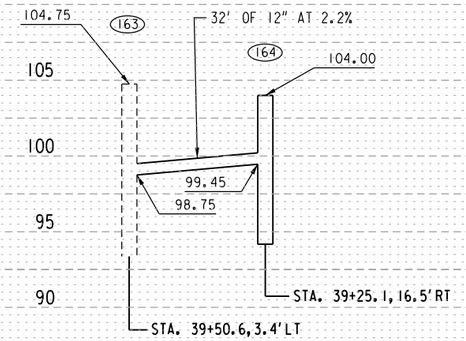


(LOOKING NORTH)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 55	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_35-40.DGN

REVISED DATE: 06-28-2023 BY EMC

N

NORTH 20TH STREET

ST.

B.M. HYD AT NW CORNER OF W. LOCUST ST. & N. 20TH ST. NW BOLT, YEAR 2017 ELEV. 107.31

B.M. TOP OF CONC WINDOW SILL EAST SIDE NORTHSIDE CHURCH ENTRANCE ELEV. 107.79

#2873-75 #2877-79 #2917 #2939 #2941-43 #2947 #2955 #2959-61 #2963

CAUTION

ASPH ON CONC

IRON HAND RAIL

R/W

LAWN

CONC DWY

GARBAGE CAN STORAGE

RETAINING WALL

AT&T (LOCATION UNK)IN CITY CONDUIT?

LOCUST

WEST

B.M. TOP OF NW CORNER OF NORTHERNLY GARAGE CONC WALL (APPROXIMATELY 32" ABOVE GROUND @ 2938 N. 19TH ST. ELEV. 109.80

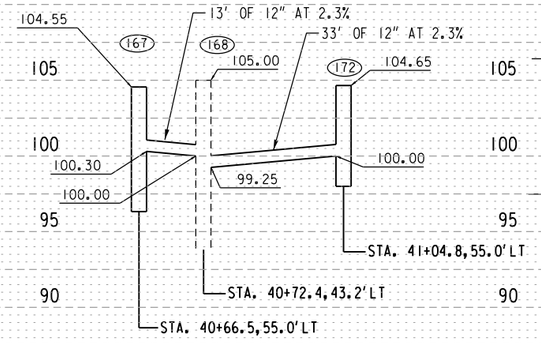
#2873 N. 19TH ST. #2878 #2901-2903 N. 19TH ST. #2911-2913 N. 19TH ST. #2917 N. 19TH ST. #2920 #2921 N. 19TH ST. #2931 N. 19TH ST. #2935 N. 19TH ST. #2940 #2944 #2949 N. 19TH ST. #2954 #2957 N. 19TH ST. #2961-2963 N. 19TH ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40	SHEET NO: 56	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_40-46.DGN

REVISED DATE: 03-13-2023 BY JC

2



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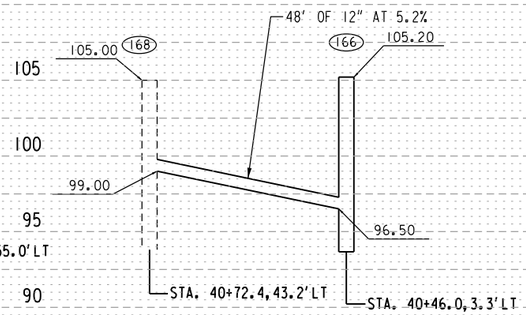

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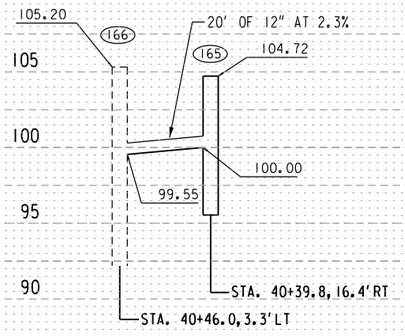

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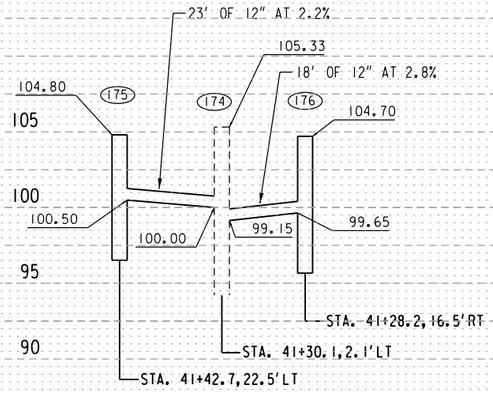
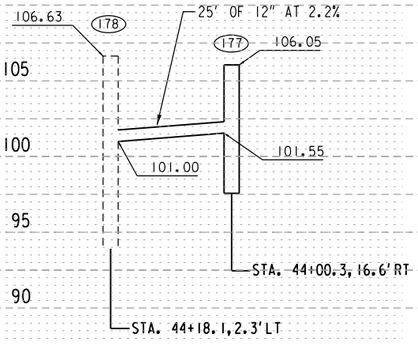


(LOOKING NORTH)



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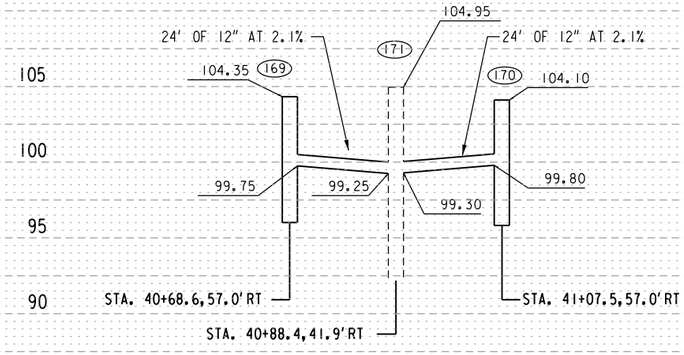


(LOOKING WEST)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 57	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_40-46.DGN

REVISED DATE: 07-18-2023 BY SLB

2

N

NORTH

20TH

STREET

ST.

B.M. HYD AT SW CORNER OF W. CHAMBERS ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 108.57

B.M. CENTER OF CONC RISER @ 2979 N. 20TH ST. ELEV. 108.42

#2963 #2967 #2969 #2975 #2003 W. CHAMBERS ST. #3000 #3007 #3015-17 #3019 #3023 #3029 #3039 #3043 #3051 #3055

CAUTION

R/W

FENCE

PIPE HAND RAIL

46 T/L +50 47 +50 48 T/L +50 49 +50 50 +50 51 T/L +50 52

530 179A 179 178A 541 542 180 181 183 543 544 184 185 186 545 182 187A 186A 546 187 188 188A

ASPH ON CONC

CHAMBERS

WEST

#1911-1913 W. CHAMBERS ST.

#1900-02 W. CHAMBERS ST.

#3019 N. 19TH ST.

#3024

#3028

#3035 N. 19TH ST.

#3041 N. 19TH ST.

#3045 N. 19TH ST.

#3048

#3053 N. 19TH ST.

BLOCK RET WALL

WOOD RETAINING WALL

CONC DWY

DWY

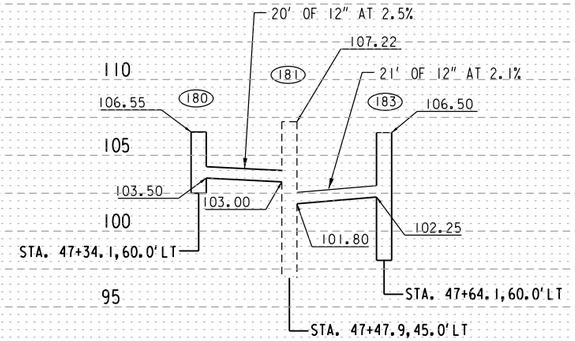
AT&T (LOCATION UNK) IN CITY CONDUIT?

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 58	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_46-52.DGN

REVISED DATE: 03-13-2023 BY JC

2



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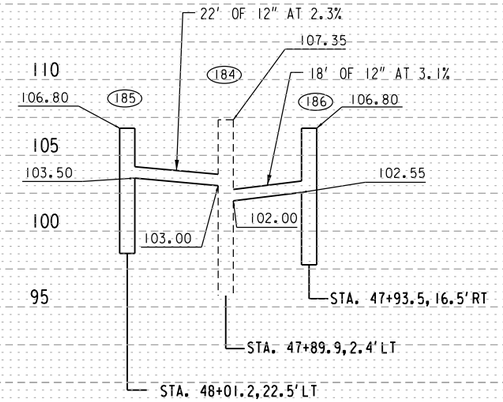
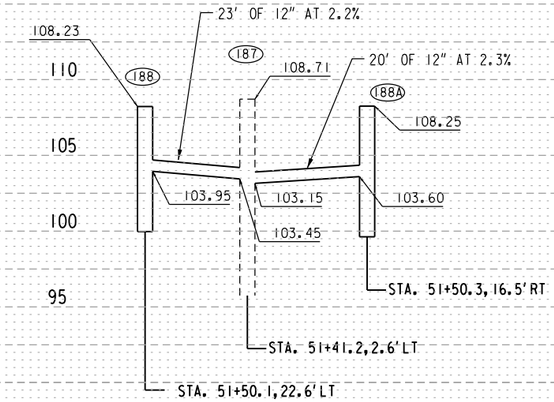


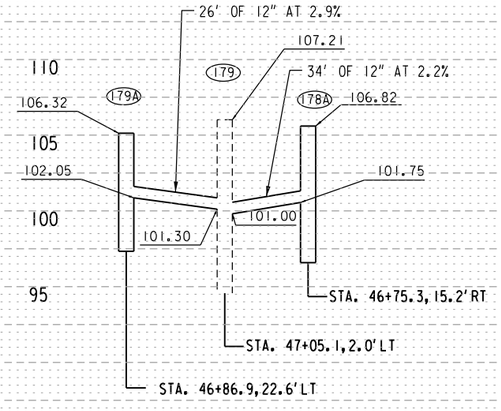
(LOOKING NORTH)



(LOOKING NORTH)

(LOOKING WEST)

(LOOKING NORTH)



(LOOKING NORTH)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 59	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_46-52.DGN

REVISED DATE: 06-28-2023 BY EM

2

N

NORTH 20TH STREET

ST.

#3055 #3063 #3067 #3075 #3101 #3103 #3111 #3117 #2001

B.M. HYD AT NW CORNER OF W. BURLEIGH ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 113.66

B.M. HYD AT NW CORNER OF W. HOPKINS ST. & N. 20TH ST. NW BOLT, YEAR 2009 ELEV. 119.15

CAUTION

R/W

RR-TIES

CHAIN LINK FENCE

CONC ASPH BUS PAD

191A 549 195 194 191 550 551 192 190 547 193

52 53 54 55 56 57 58

T/L

SECTION CORNER MONUMENT

BM

STREET

PATIO-PAVERS

TIRE SHOP ASPHALT LOT

CONC DWY

VAULT

ASPH ON CONC

AT&T (LOCATION UNK)

CITY CONDUIT?

DWY

HOLY LAWN

CEMETERY

PILLAR

WROUGHT IRON FENCE

SIGN

CLP

BURLEIGH

NORTH HOPKINS

GAS STATION #1909 W. HOPKINS ST.

WEST

#3056 #3064 #3068-70 #3075 N. 19TH ST.

P.L.

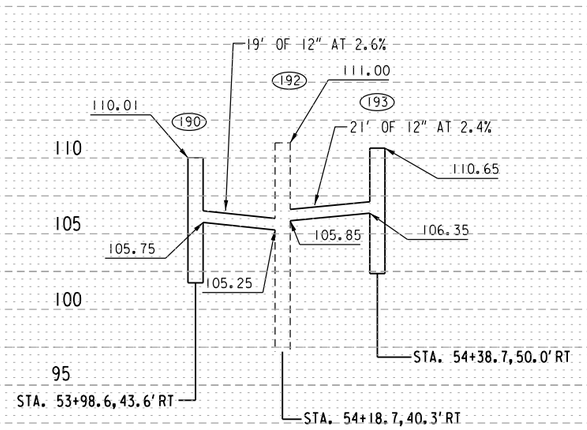
END PROJECT 2275-05-70

STA. 56+46.8, T/L

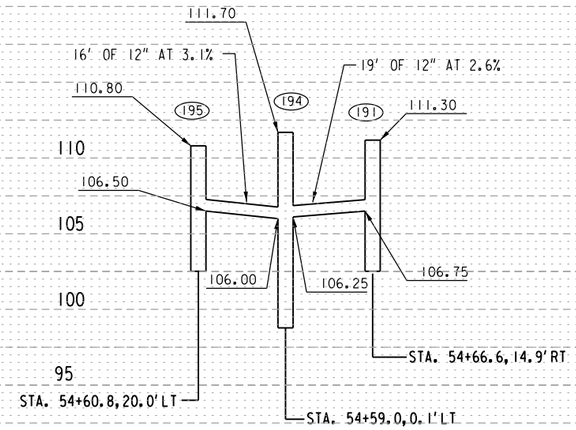
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET 0' 40'	SHEET NO: 60	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_52-58.DGN

REVISED DATE: 07-20-2023 BY SLB



(LOOKING WEST)



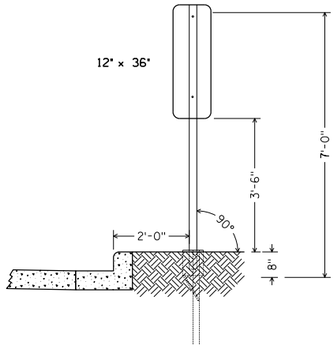
(LOOKING NORTH)

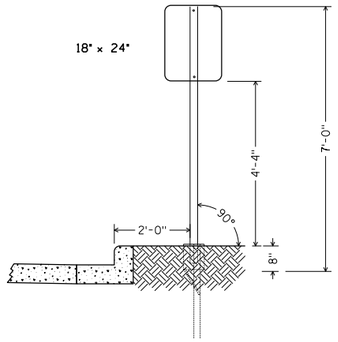
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	UTILITIES AND DRAINAGE	SCALE FEET	SHEET NO: 61	E

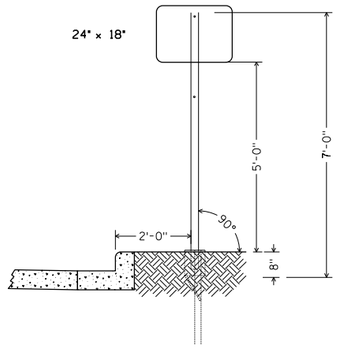
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\UTIL_52-58.DGN

REVISED DATE: 07-20-2023 BY SLB

2



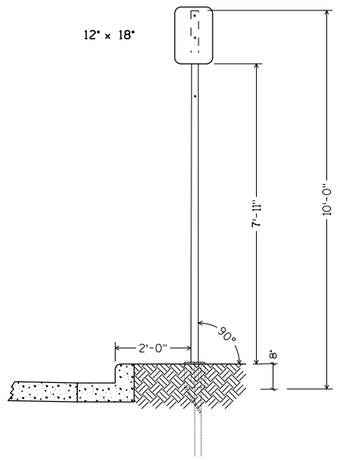




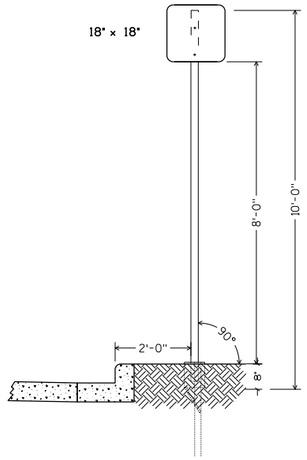
PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	7'–0" PIPE ASSEMBLIES	SHEET 62	E

2

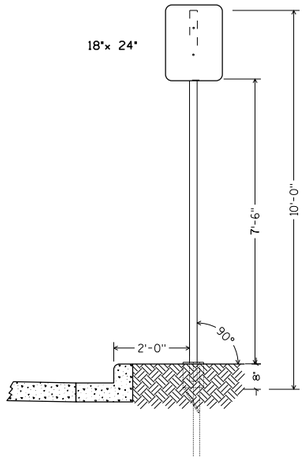
12" × 18"



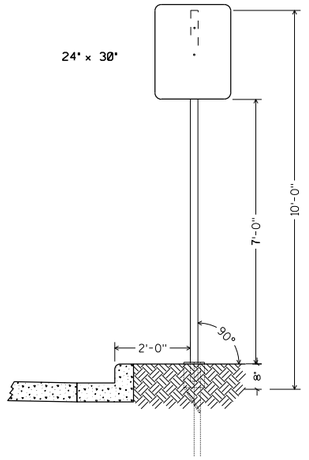
18" × 18"



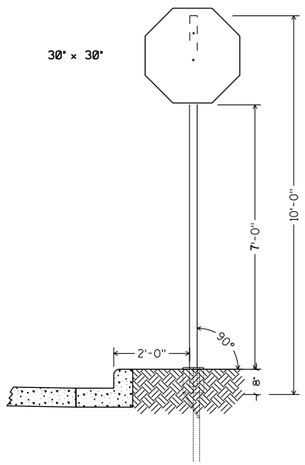
18"× 24"



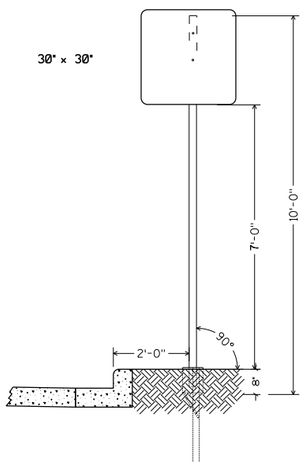
24" × 30"



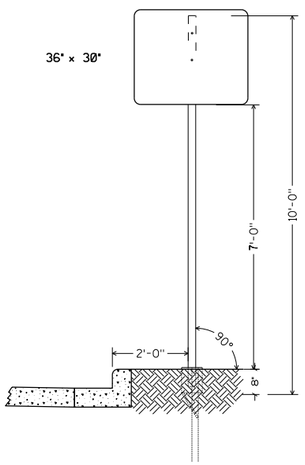
30" × 30"



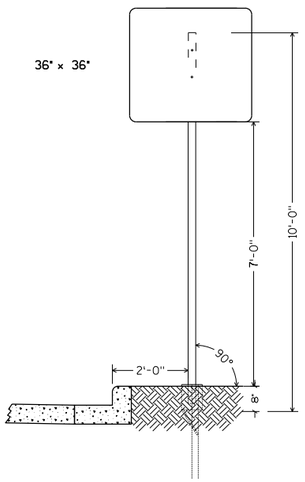
30" × 30"



36" × 30"

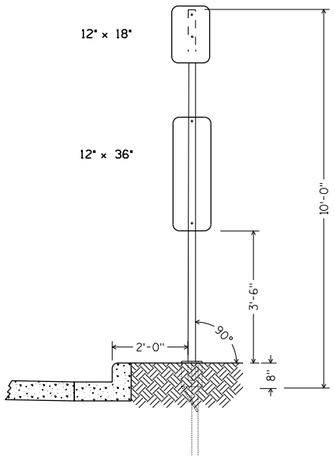


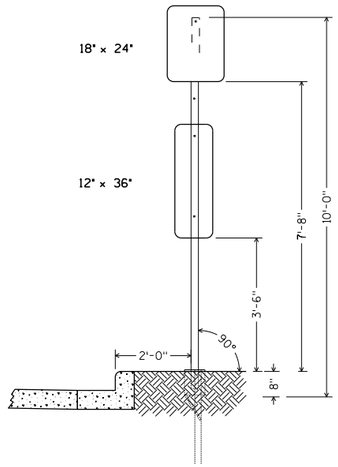
36" × 36"

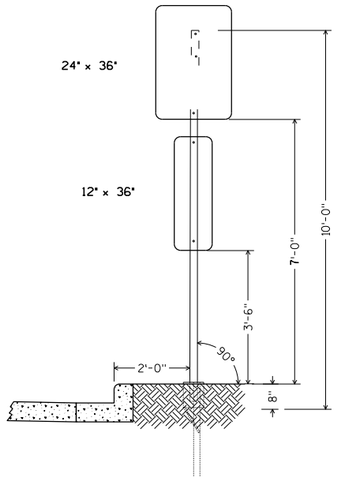


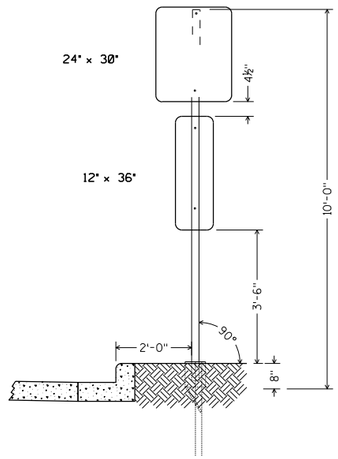
PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	10'–0" PIPE ASSEMBLIES	SHEET 63	E

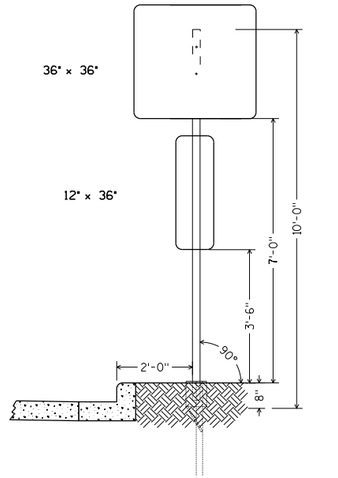
2

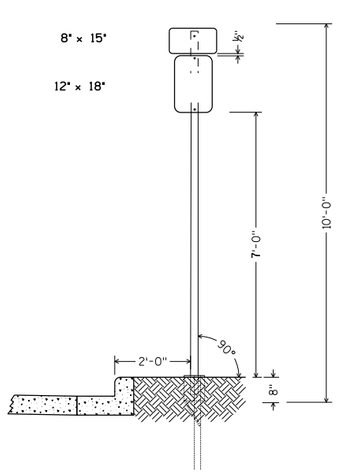


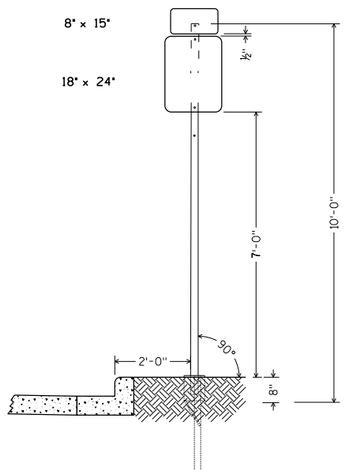


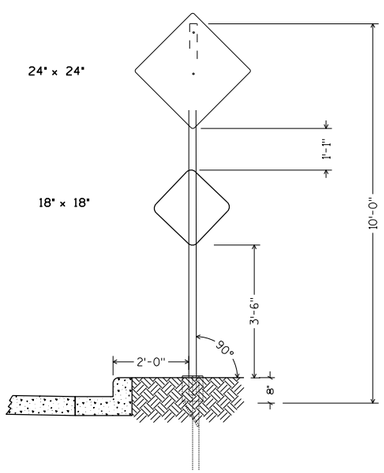


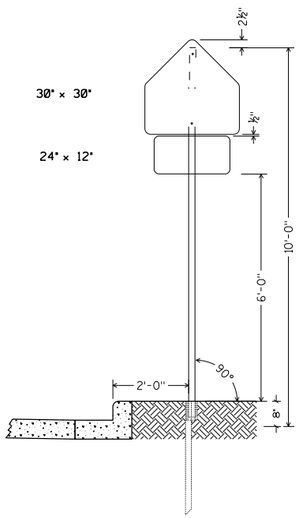






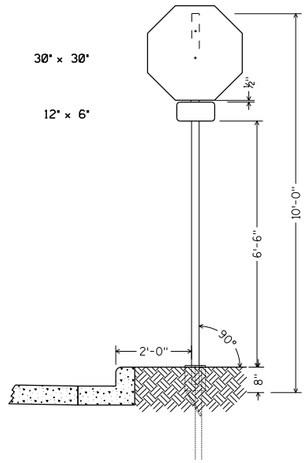


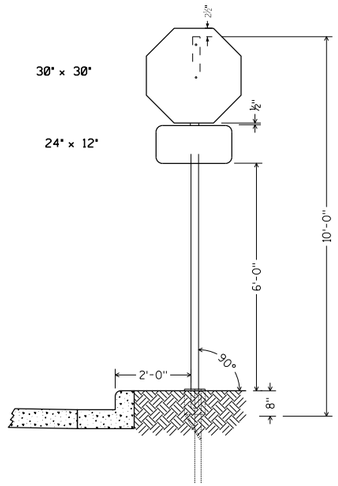


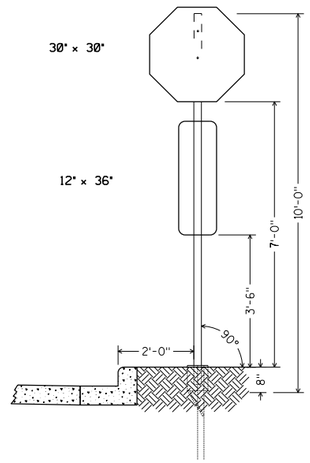


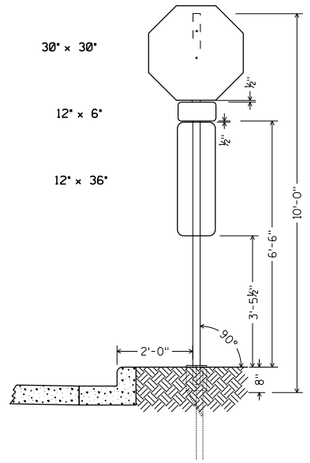
PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	10'–0" PIPE ASSEMBLIES	SHEET 64	E

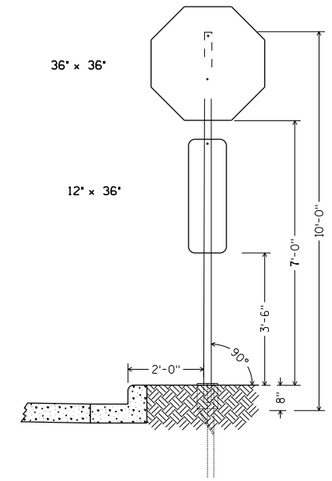
2





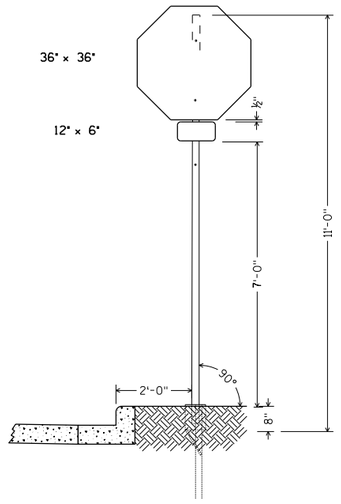


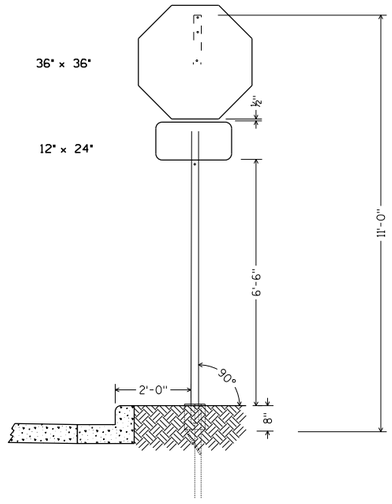


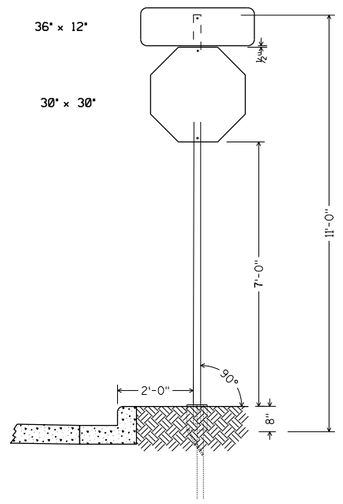


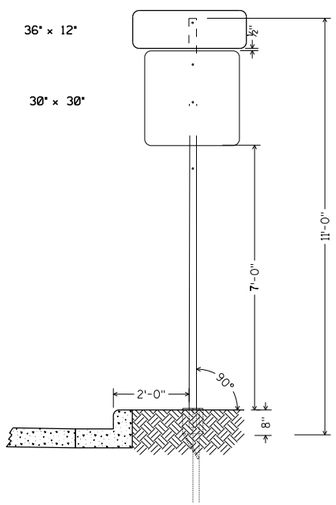
PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	10'–0" PIPE ASSEMBLIES	SHEET 65	E

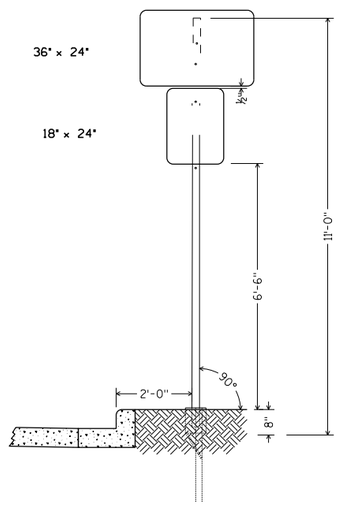
2

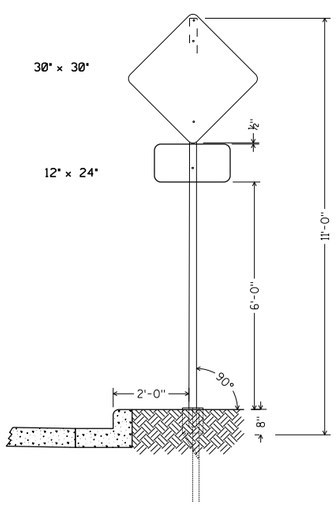


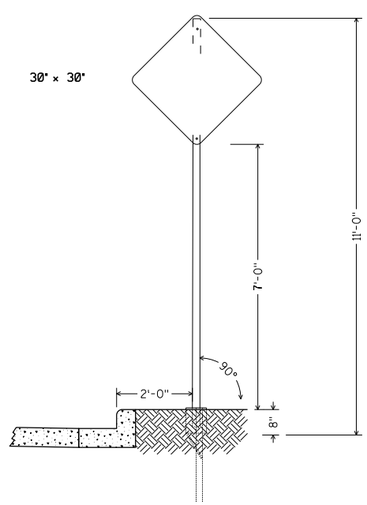


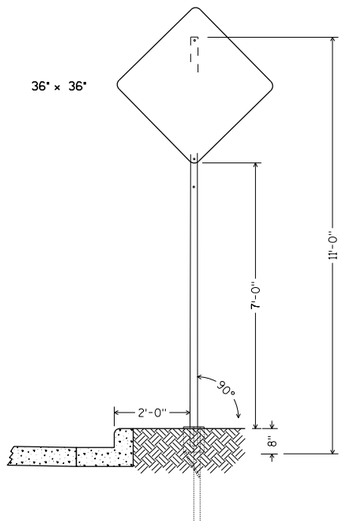






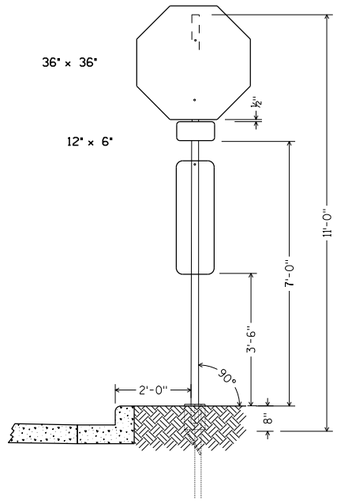


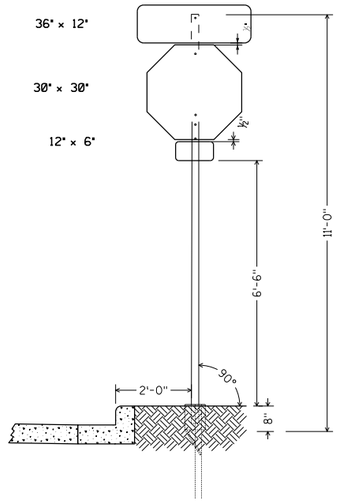


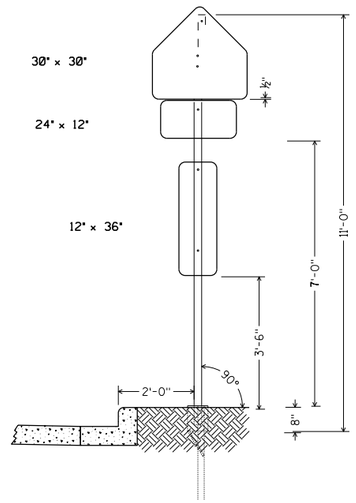


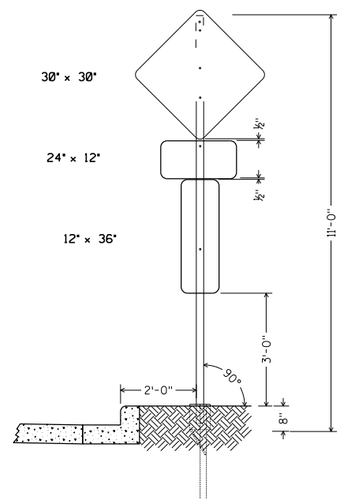
PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	11'–0" PIPE ASSEMBLIES	SHEET 66	E

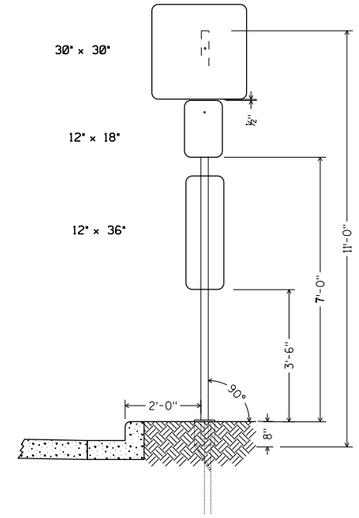
2







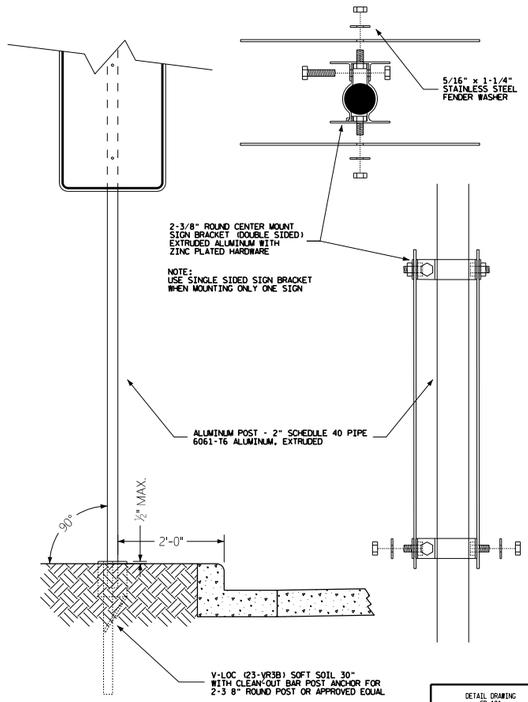




PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	11'–0" PIPE ASSEMBLIES	SHEET 67	E

2

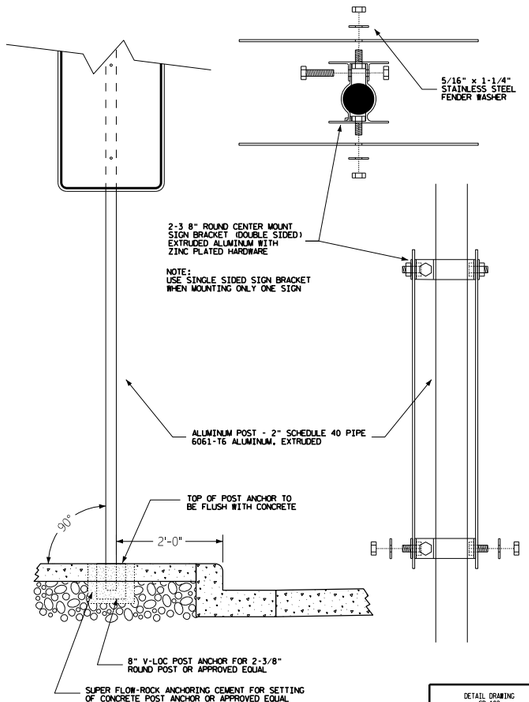
ROUND ALUMINUM SIGN POST SYSTEM FOR SOFT SURFACE INSTALLATION



DETAIL DRAWING
SD-101

CITY OF MILWAUKEE
DPW-INFRASTRUCTURE SERVICES
TRANSPORTATION OPERATIONS

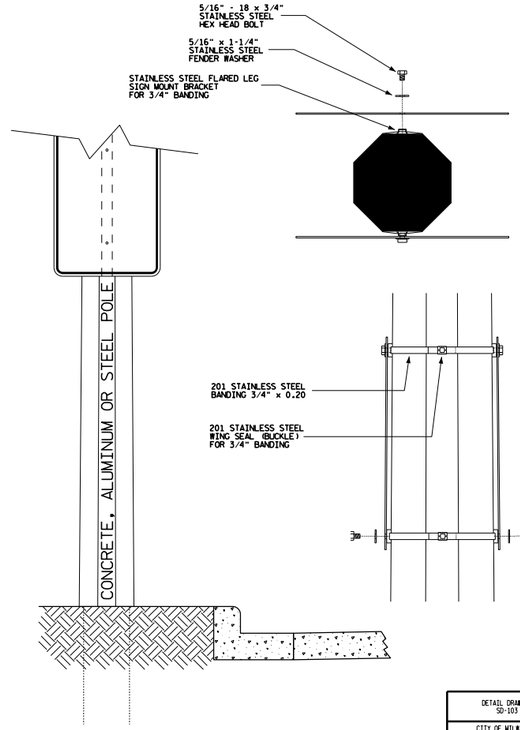
ROUND ALUMINUM SIGN POST SYSTEM FOR CONCRETE INSTALLATION



DETAIL DRAWING
SD-102

CITY OF MILWAUKEE
DPW-INFRASTRUCTURE SERVICES
TRANSPORTATION OPERATIONS

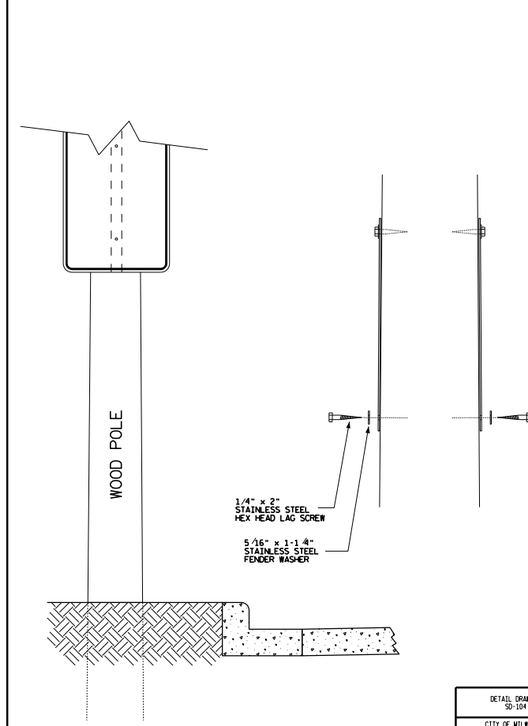
EXISTING CONCRETE, ALUMINUM OR STEEL POLE SIGN SYSTEM INSTALLATION



DETAIL DRAWING
SD-103

CITY OF MILWAUKEE
DPW-INFRASTRUCTURE SERVICES
TRANSPORTATION OPERATIONS

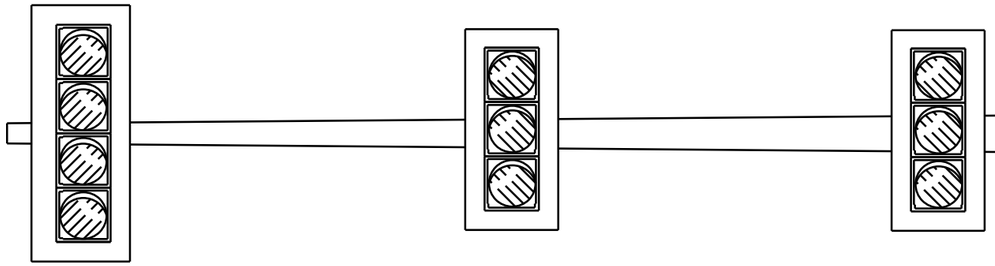
EXISTING WOOD POLE SIGN SYSTEM INSTALLATION



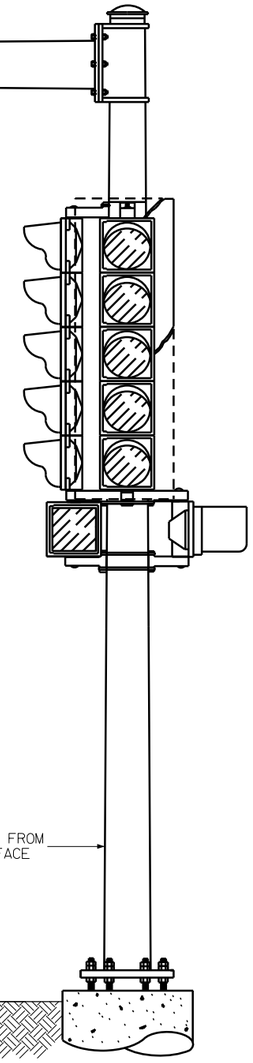
DETAIL DRAWING
SD-104

CITY OF MILWAUKEE
DPW-INFRASTRUCTURE SERVICES
TRANSPORTATION OPERATIONS

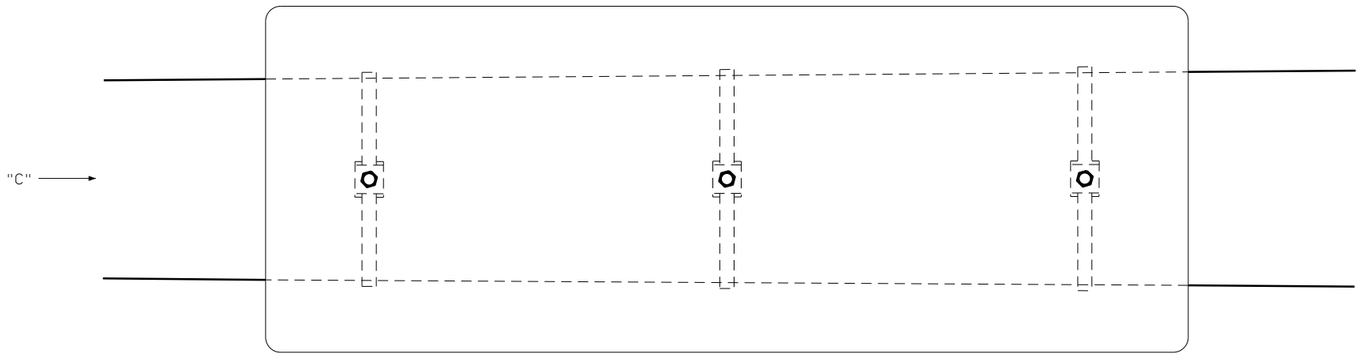
2



STREET NAME SIGN (VARIABLE LENGTH)



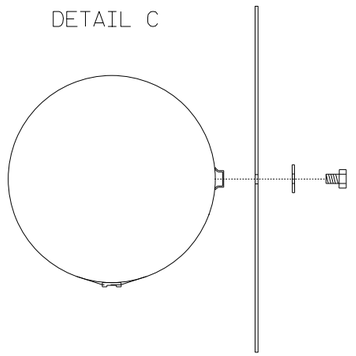
DETAIL A



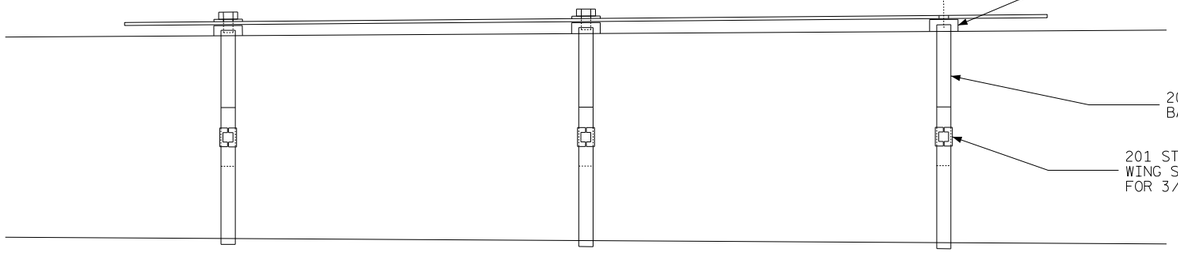
"C"

"B"

DETAIL C



DETAIL B



5/16" - 18 x 3/4"
STAINLESS STEEL
HEX HEAD BOLT

5/16" x 1-1/4"
STAINLESS STEEL
FENDER WASHER

STAINLESS STEEL FLARED LEG
SIGN MOUNT BRACKET
FOR 3/4" BANDING

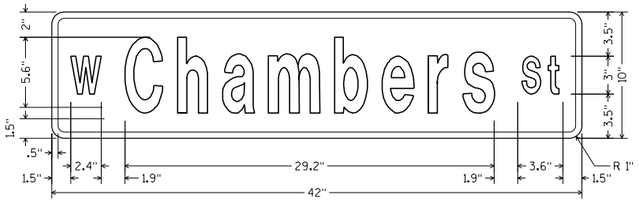
201 STAINLESS STEEL
BANDING 3/4" x 0.20

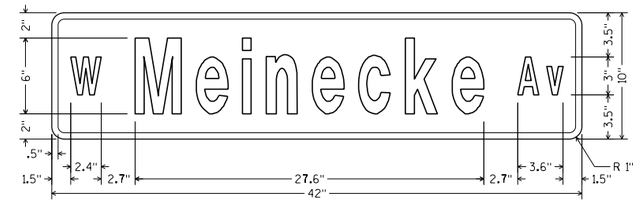
201 STAINLESS STEEL
WING SEAL (BUCKLE)
FOR 3/4" BANDING

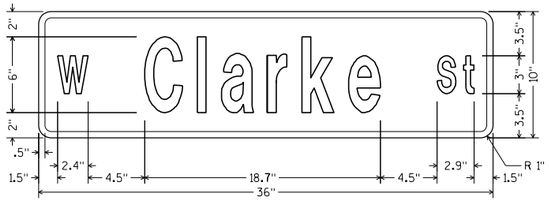
SETBACK FROM
CURB FACE

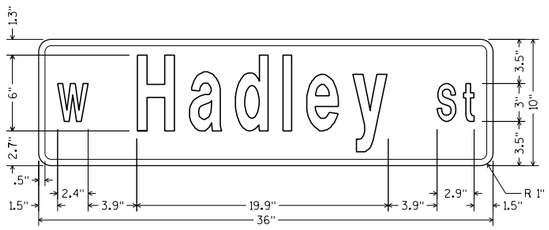
90°

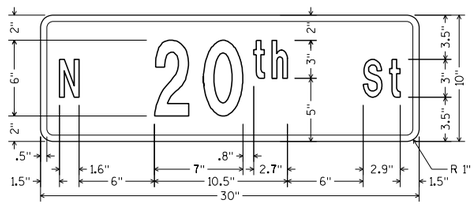
PROJECT NO: 2275–05–70	HWY: N 20TH ST	COUNTY: MILWAUKEE	STREET NAME SIGN INSTALLATION ON MAST ARM	SHEET 69	E



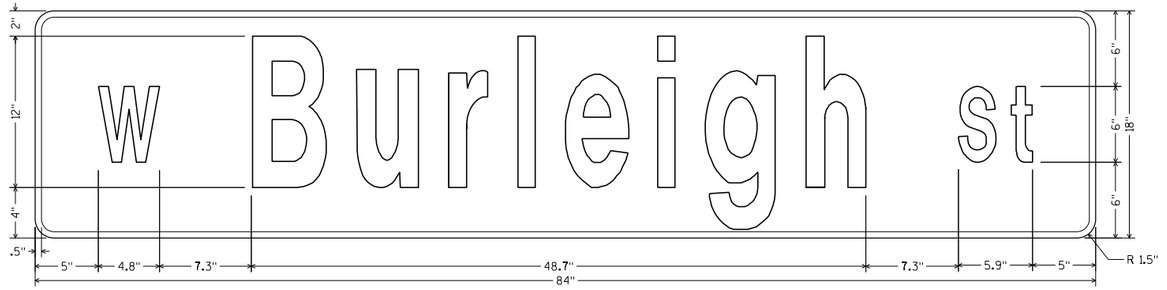


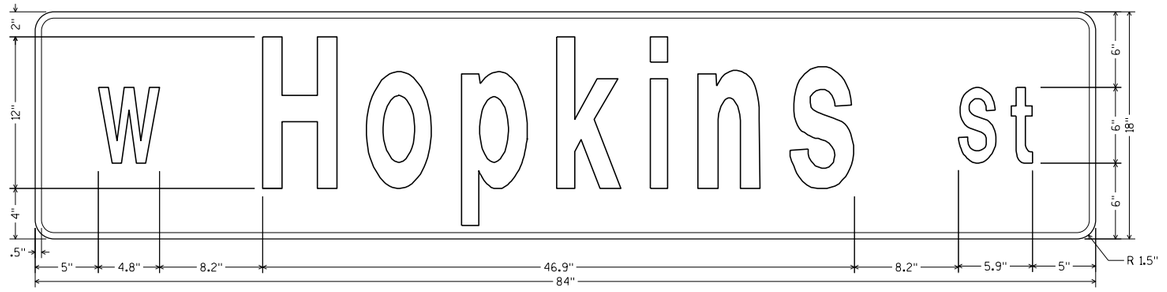






Message Series - B





Message Series - C

NOTES

1. All Signs Type II
   - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. All Signs 1/2 Inch White Border
4. All Signs 1 Inch Radius

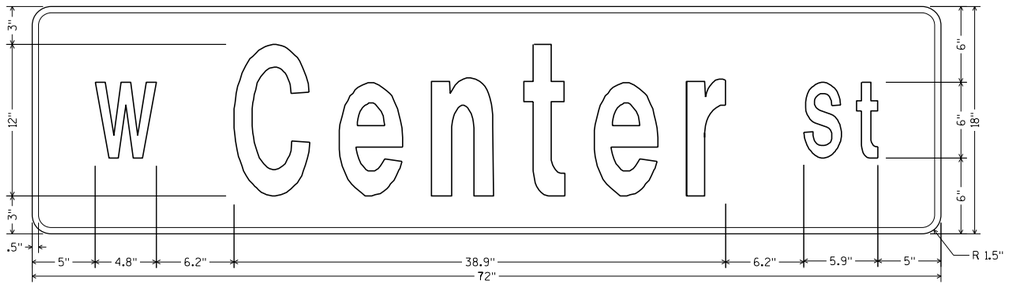
7

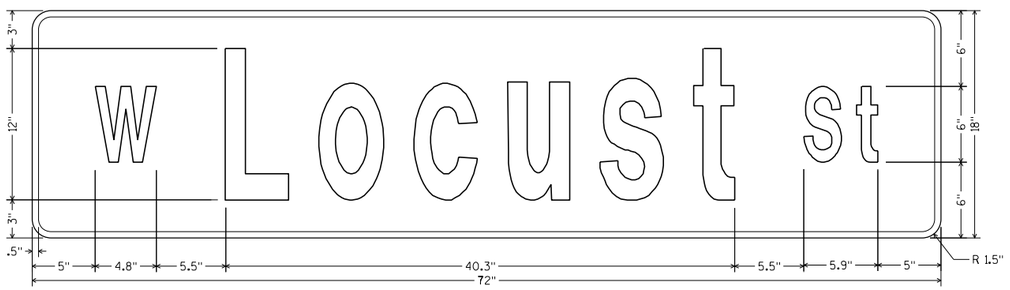
7

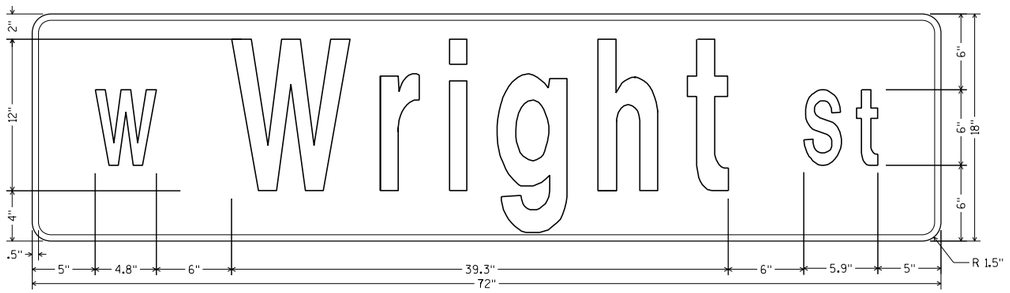
PROJECT NO: 2275-05-70	HWY: N 20TH ST	COUNTY: MILWAUKEE	SIGN DETAILS	SHEET 70	E

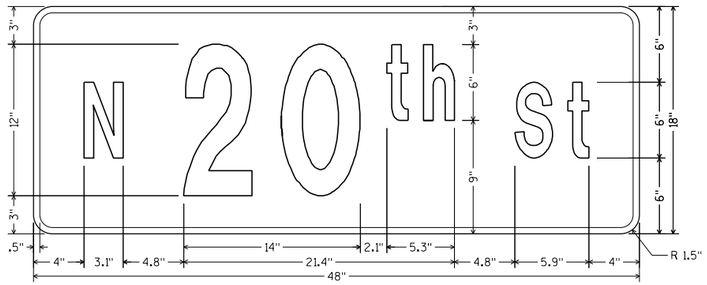
FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42









Message Series - C

NOTES

1. All Signs Type II
   - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. All Signs 1/2 Inch White Border
4. All Signs 1 Inch Radius

7

7

PROJECT NO: 2275-05-70	HWY: N 20TH ST	COUNTY: MILWAUKEE	SIGN DETAILS	SHEET 71	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

1-1
ONE WAY
R6-2L
18" X 24"

1-2
ONE WAY
R6-2R
18" X 24"

EXISTING SIGN TO REMAIN

SPEED LIMIT 30
R2-1
24" X 30"
1-3

FINES HIGHER
R2-6P
24" X 18"
1-4

2 HOUR PARKING 7AM TO 7PM
R7-5 MOD
12" X 18"
1-5

W. AVE.

N. 20TH ST.

W. NORTH

26"
ASPHALT
3' ENT
ENT. 10.4
4' cw WOOD HAND RAIL
fence
RETaining WALL
LAWN
lawn
WOOD FENCE
CHAINLINK FENCE
RR-TIES
WOOD HAND RAIL
6"
1"
9"
1"
1"
1"
WP
WEP
CUC
CMB
ATT
W
WEE
WEG
02
03
04
05
5' ENT
ENT.
asph
RETAINING WALL
3' cw
6'
2.5' cw
5' cw
3-4" cw
22"
18"
3.5
fence
4' cw
CHAINLINK FENCE
4.3' cw
16"
4" cw
1" cw
3-4" cw
CHAINLINK FENCE
BUS-PAD
20'

N 20th St
EXISTING SIGN TO REMAIN

SPEED LIMIT 30
R2-1
24" X 30"
1-9

S1-1
30" X 30"
1-7

AHEAD
S16-9P
24" X 12"
1-8

2 HOUR PARKING 7AM TO 7PM
R7-5 MOD
12" X 18"
1-6

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 1 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 72	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

2-1
W Meinecke Av
M1-94H
42" X 10"

2-2
STOP
R1-1
30" X 30"

2-3
STOP
R1-1
30" X 30"

2-4
PEACE
TO BE REMOVED BY OTHERS

N. 20TH ST.

W. MEINECKE AVE.

06 07 08 09 10

LAWN
CONC
ASPH
CMB
WEE
WEG
WEP
W
OHL
TREES
overhead
CHAIN LINK FENCE
IRON HAND RAIL
1"
8"
14"
16"
18"
20"
22"
24"

2-5
STOP
R1-1
30" X 30"

2-6
STOP
R1-1
30" X 30"

2-7
N 20th St
M1-94H
30" X 10"

2-8
R7-1/R7-5 MOD
24" X 18"

2-9
SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT
S4-51
24" X 48"

IGR_FONT_I

LEGEND
XXX SIGN NUMBER
SIGN

SCALE, FEET 0 30

SHEET 2 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 73	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

3-1

W Wright St

M1-94H
36" X 10"

3-2

N 20th St

M1-94H
30" X 10"

SPECTRUM TO
RELOCATE FIBER VAULT

GATE

6' ENT

WOOD HAND RAIL

TS-BOX

LAWN

RETAINING WALL

12"

11"

1"

22"

4"

WAT

CUC

WEG

WEE

CMB

W

WEP

N. 20TH ST.

W. WRIGHT ST.

11

12

13

14

15

16"

6"

24"

CONCRETE RE

WOOD HAND RAIL

(overhead)

WEEP
HOLE

PAVER BLOCK
RETAINING WALL

IRON HAND RAIL

Weep
Hole

FLAG
POLE

.LIS WHEATLY ELEMENTARY SCHOOL

SPECTRUM

R7-5 MOD
12" X 18"

3-6

R7-5 MOD
12" X 18"

3-5

N 20th St

M1-94H
30" X 10"

3-4

W Wright St

M1-94H
36" X 10"

3-3

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 3 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 74	E

2

N

4-1

SCHOOL
SPEED LIMIT
20
WHEN CHILDREN ARE PRESENT

S4-51
24" X 48"

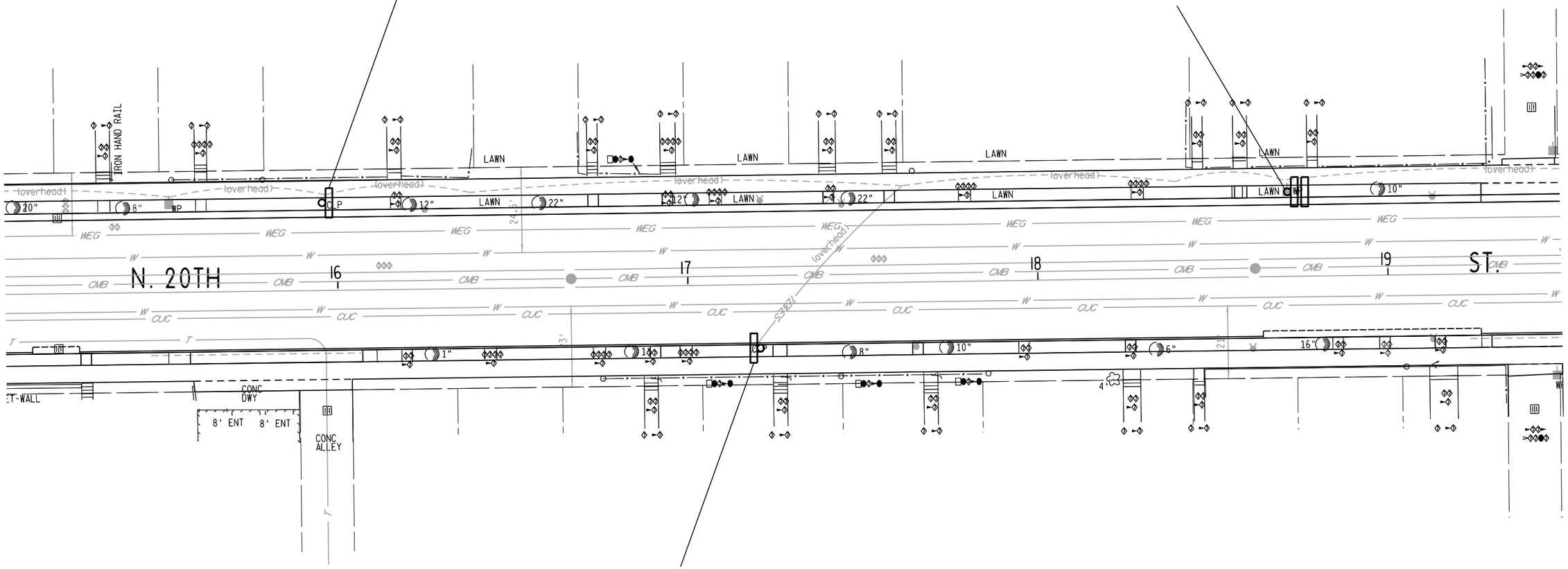
4-2

S1-1
30" X 30"

4-3

AHEAD

S16-9P
24" X 12"



SPEED LIMIT
30

R2-1
24" X 30"

4-4

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 4 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 75	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

5-1
W Clarke St
M1-94H
36" X 10"

5-2
STOP
R1-1
30" X 30"

5-3
R7-1L
12" X 18"

5-4
PEACE
TO BE REMOVED BY OTHERS

CHAINLINK FENCE ON TOP OF CONC RETAINING WALL

N. 20TH ST.

W. CLARKE ST.

20 21 22 23 24

LAWN
WP
(overhead)
STZZL
WEG
W
CMB
GV
WAT
ALP
CO
WOOD-RET
CLP
ASPH
CONC
TEBES
WES
CONC-RET-WALL
CONC DWY
FENCE ON CONC WALL
IRON HAND RAIL
FENCE ON TOP OF CONC WALL
7'

5-8
R7-1L
12" X 18"

5-7
STOP
R1-1
30" X 30"

5-6
W Clarke St
M1-94H
36" X 10"

5-5
N 20th St
M1-94H
30" X 10"

LEGEND
XXX SIGN NUMBER
SIGN

SCALE, FEET 0 30

SHEET 5 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 76	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

6-1

SPEED LIMIT 30

R2-1
24" X 30"

6-2

W Center St
M1-94H
36" X 10"

6-3

N 20th St
M1-94H
30" X 10"

N. 20TH

ST.

W. CENTER

PILLAR

TIMBER

SIGN

WROUGHT IRON FENCE

CONC

MONUMENT

CUC

LAWN

WP

3' ENT

6-5

N 20th St
M1-94H
30" X 10"

6-4

W Center St
M1-94H
36" X 10"

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 6 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 77	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

7-1
END SCHOOL ZONE
S5-2
24" X 30"

FENCE TIMBER TIMBER FENCE FENCE FENCE FENCE FENCE

29 N. 20TH 30 31 32 ST. 33

25 16" 6"

WP LAWN 8' ENT WOOD FENCE LAWN LAWN LAWN LAWN 8' ENT LAWN LAWN TIMBER 16' ENT

7-6
S1-1
30" X 30"
7-7
AHEAD
S16-9P
24" X 12"

R7-5 MOD
12" X 18"
7-5

SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT
7-3
S4-51
24" X 48"
FINES HIGHER
7-4
R2-6P
24" X 18"

R7-5 MOD
12" X 18"
7-2

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 7 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 78	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

8-1
W Hadley St
EXISTING SIGN TO REMAIN
STOP
R1-1
30" X 30"

8-2
ONE WAY
R6-2L
18" X 24"

8-3
ONE WAY
R6-2R
18" X 24"

8-4
R7-1L
12" X 18"

ST.
14"
15"
54"
3' ENT
3' ENT
3' ENT
FENCE
TELES
CUC
FO
CMB
WP
16"
6"
12"
AT&T (location unk)in City CONDUIT?
IRON HAND RAIL
FENCE

N. 20TH
34
35
36
37
ST.

W. HADLEY

8-14
S1-1
30" X 30"

8-15
S16-7
24" X 12"

8-12
S1-1
30" X 30"

8-13
S16-7
24" X 12"

N 20th St
EXISTING SIGN TO REMAIN

8-11
ONE WAY
R6-2R
18" X 24"

8-10
ONE WAY
R6-2L
18" X 24"

8-8
STOP
R1-1
30" X 30"

8-9
STOP
R1-1
30" X 30"

8-7
W Hadley St
M1-94H
36" X 10"

8-6
END SCHOOL ZONE
S5-2
24" X 30"

8-5
R7-5 MOD
12" X 18"

LEGEND
(XXX) SIGN NUMBER
SIGN

SCALE, FEET 0 30

SHEET 8 OF 13

STATE PROJECT NO: 2275-05-70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 79	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

9-1

R7-8A
12" X 18"

9-2

R5-2/R5-2A MOD
24" X 36"

9-3

M1-94H
30" X 10"

N. 20TH ST.

W. LOCUST ST.

38 39 40 41

IRON HAND RAIL

WOOD HAND RAIL

LAWN

GARBAGE CAN STORAGE

16' ENT 8' ENT 16' ENT 8' ENT 3' ENT 3' ENT

R7-5 MOD
12" X 18"
9-7

N 20th St
M1-94H
30" X 10"
9-6

W Locust St
M1-94H
36" X 10"
9-5

R7-5 MOD
12" X 18"
9-4

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

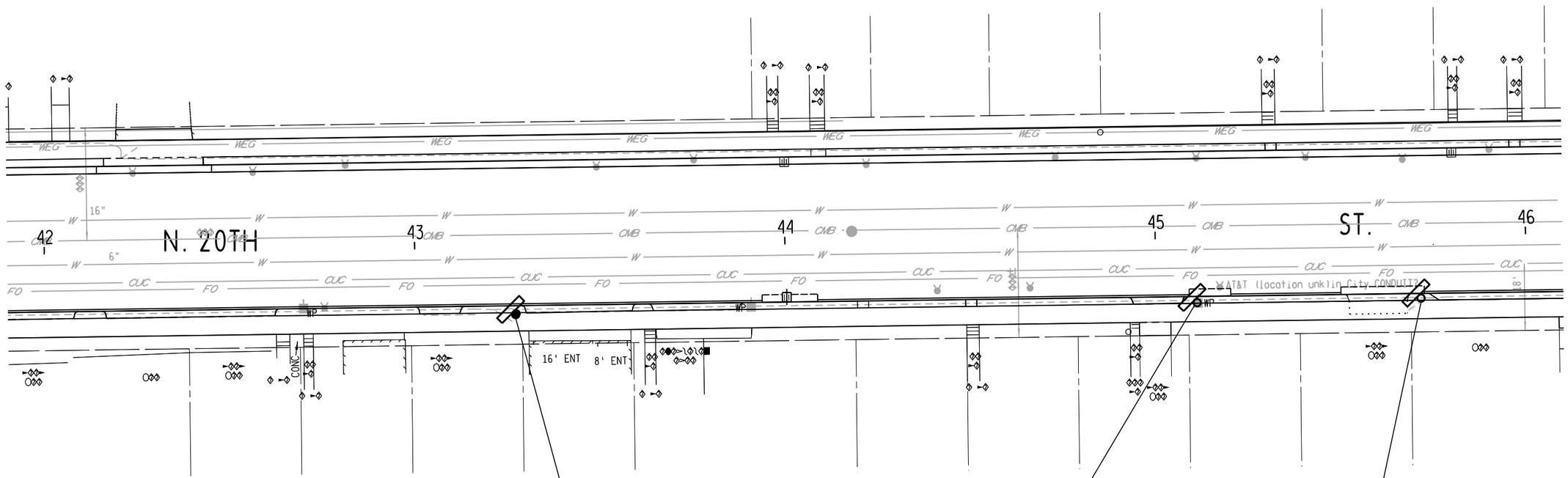
SHEET 9 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 80	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 10 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 81	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

11-1
W Chambers ST
M1-94H
42" X 10"

STOP 11-2
R1-1
30" X 30"

STOP 11-3
R1-1
30" X 30"

11-4
PEACE
TO BE REMOVED BY OTHERS

ST.

N. 20TH

W. CHAMBERS

47 48 49 50

WP
10"
17"
3.5'
3'
25'
23'
16"
6"
54"
CMB
CUC
FO
WEG
W
TEBES
NAMEN
ASPHALT
WAT
PIPE HAND RAIL
WOOD RETAINING WALL
BLOCK RET WALL

STOP 11-7
R1-1
30" X 30"

STOP 11-8
R1-1
30" X 30"

N 20th ST
M1-94H
30" X 10"
11-9

W Chambers ST
M1-94H
42" X 10"
11-6

R7-5 MOD
12" X 18"
11-5

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 11 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 82	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

12-1

SPEED LIMIT 30

R2-1
24" X 30"

ST.

RR-TIES

TE&ES

BM

N. 20TH ST.

51

52

53

54

MONUMENT

ST.

W. BURLEIGH

AT&T (Ameritech) Underground Facility CONDUITS

GAS STAT

*1909 W.

R7-5 MOD
12" X 18"

12-3

N 20th St

M1-94H
30" X 10"

12-2

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 12 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 83	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

13-1
W Hopkins ST
M1-94H
36" X 10"

13-2
S1-1
30" X 30"

13-3
AHEAD
S16-9P
24" X 12"

13-4
N 20th ST
M1-94H
30" X 10"

PATIO-PAVERS

ST.

TIRE SHOP
ASPHALT LOT

55 N. 20TH 56 57 58 ST.

TES
CUC
AT&T (location unk)in City CONDUIT?

VAULT

22" 8" 10"

PILLAR
WROUGHT IRON FENCE
PILLAR
PILLAR
SIGN
PILLAR

HOLY LAWN
CEMETERY

ION
HOPKINS ST.

R7-7D
12" X 18"
13-8

R7-1D
12" X 18"
13-7

ASPH
CONC
CLP

CEMETERY

W. HOPKINS

HOLY LAWN

N 20th ST
M1-94H
30" X 10"
13-6

W Hopkins ST
M1-94H
36" X 10"
13-5

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 13 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	REMOVAL SIGN PLAN	SHEET 84	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

1-1
ONE WAY
R6-2L
18" X 24"

1-2
ONE WAY
R6-2R
18" X 24"

W. NORTH AVE.

N. 20TH ST.

26" ASPHALT

3' ENT

ENT. 10.4

4' cw WOOD HAND RAIL

fence

RETaining WALL

LAWN

lawn

WOOD FENCE

CHAINLINK FENCE

RR-TIES

WOOD HAND RAIL

6" 1" 9" LAWN 1" lawn 1" CLP 1"

02 03 04 05

5' ENT

ENT.

asph

RETAINING WALL

3' cw 6' 2.5' cw 5' cw 3' cw 22" 18" 3.5 fence 4' cw CHAINLINK FENCE 4.3' cw CHAINLINK FENCE 16" 4' cw 1" 3' cw

BUS-PAD

R7-1D
12" X 18"
1-5

SPEED LIMIT 30
R2-1
24" X 30"
1-4

R7-1D
12" X 18"
1-3

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 1 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 85	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

STOP 2-1
R1-1
30" X 30"

STOP 2-2
R1-1
30" X 30"

2-3
W5-52R
12" X 36"

N. 20TH

W. MEINECKE AVE.

ST.

06 07 08 09 10

LAWN

CHAIN LINK FENCE

(overhead)

IRON HAND RAIL

ASPH

PHIL

STOP 2-5
R1-1
30" X 30"

STOP 2-6
R1-1
30" X 30"

R7-1D
12" X 18"
2-9

W Meinecke Av
M1-94H
42" X 10"
2-8

N 20th St
M1-94H
30" X 10"
2-7

R7-1D
12" X 18"
2-4

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 2 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 86	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

3-1
W Wright St
M1-94H
72" X 18"

3-2
R10-4BL
6" X 8"

3-3
R5-2
24" X 24"

3-4
3 TONS OR OVER
R5-2A
24" X 12"

3-5
N 20th St
M1-94H
30" X 10"

3-6
R10-4BR
6" X 8"

3-7
W5-52R
12" X 36"

N. 20TH ST.

W. WRIGHT ST.

LAWN
RETAINING WALL
PAVER BLOCK RETAINING WALL
IRON HAND RAIL
Weep Hole
WEEP HOLE
FLAG POLE
(overhead)
LIS WHEATLY ELEMENTARY SCHOOL
SPECTRUM TO RELOCATE FIBER VAULT
GATE
6' ENT
WOOD HAND RAIL
TS-BOX
WAT
CONCRETE
SPECTRUM
WEP
WP
TEL
CUC
CMB
WEE
SCOT
CONC
19.5'
14'
10.8'
4.5'
22"
24"
16"
12"
11"
1"
4"
6"
235'

3-10
N 20th St
M1-94H
30" X 10"

3-11
R5-2
24" X 24"

3-12
3 TONS OR OVER
R5-2A
24" X 12"

3-13
R10-4BR
6" X 8"

3-14
R7-1D
12" X 18"

3-15
R7-1D
12" X 18"

3-8
W Wright St
M1-94H
72" X 18"

3-9
R10-4BL
6" X 8"

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 3 OF 13

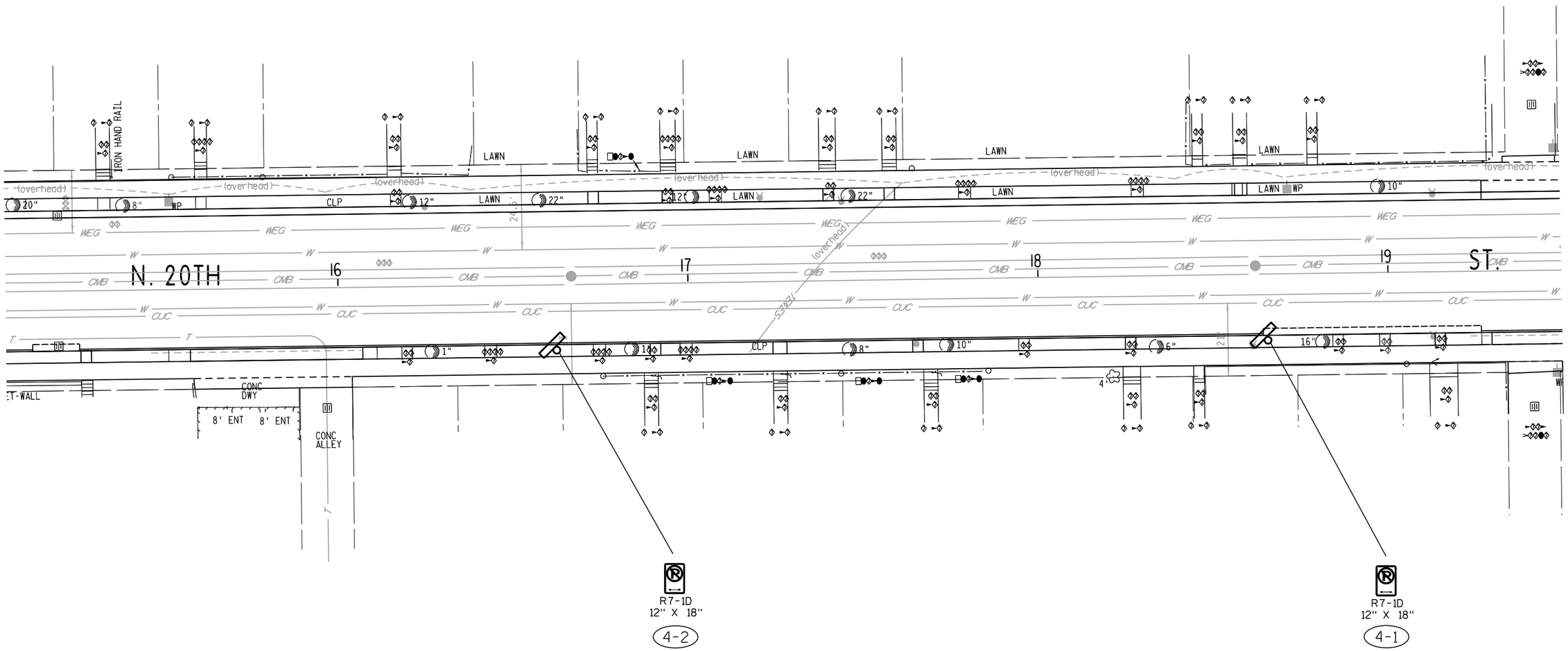
STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 87	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 4 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 88	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

STOP 5-1
R1-1
30" X 30"

STOP 2-2
R1-1
30" X 30"

5-3
W5-52R
12" X 36"

N. 20TH ST.

W. CLARKE

ST.

CHAIN LINK FENCE ON TOP OF CONC RETAINING WALL

FENCE ON CONC WALL

IRON HAND RAIL

FENCE ON TOP OF CONC WALL

CONC DWY

CONC-RET-WALL

CONC-RET-WALL

STOP 5-7
R1-1
30" X 30"

STOP 5-8
R1-1
30" X 30"

W Clarke St
M1-94H
36" X 10"
5-6

N 20th St
M1-94H
30" X 10"
5-5

R7-1D
12" X 18"
5-4

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 5 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 89	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

6-1
SPEED LIMIT 30
R2-1
24" X 30"

6-2
W Center St
M1-94H
72" X 18"

6-3
W5-52R
12" X 36"

6-4
N 20th St
M1-94H
48" X 18"

N. 20TH

ST.

W. CENTER

R7-1D
12" X 18"
6-8

R7-1D
12" X 18"
6-7

N 20th St
M1-94H
48" X 18"
6-6

W Center St
M1-94H
72" X 18"
6-5

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 6 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 90	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

SPEED LIMIT 30
R2-1
24" X 30"
7-1

END SCHOOL ZONE
S5-2
24" X 30"
7-2

FENCE TIMBER TIMBER FENCE FENCE FENCE FENCE FENCE FENCE

WEG

29 N. 20TH 30 31 32 ST. 33

CMB W CUC FO WP LAWN 8' ENT WOOD FENCE TIMBER 16' ENT 25 16" 6"

SPEED LIMIT 30
R2-1
24" X 30"
7-9

R7-1D
12" X 18"
7-10

S1-1
30" X 30"
7-6

AHEAD
S16-9P
24" X 12"
7-7

FINES HIGHER
R2-6P
24" X 18"
7-8

R7-1D
12" X 18"
7-5

SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT
S4-51
24" X 48"
7-4

R7-1D
12" X 18"
7-3

LEGEND

(XXX) SIGN NUMBER

SIGN

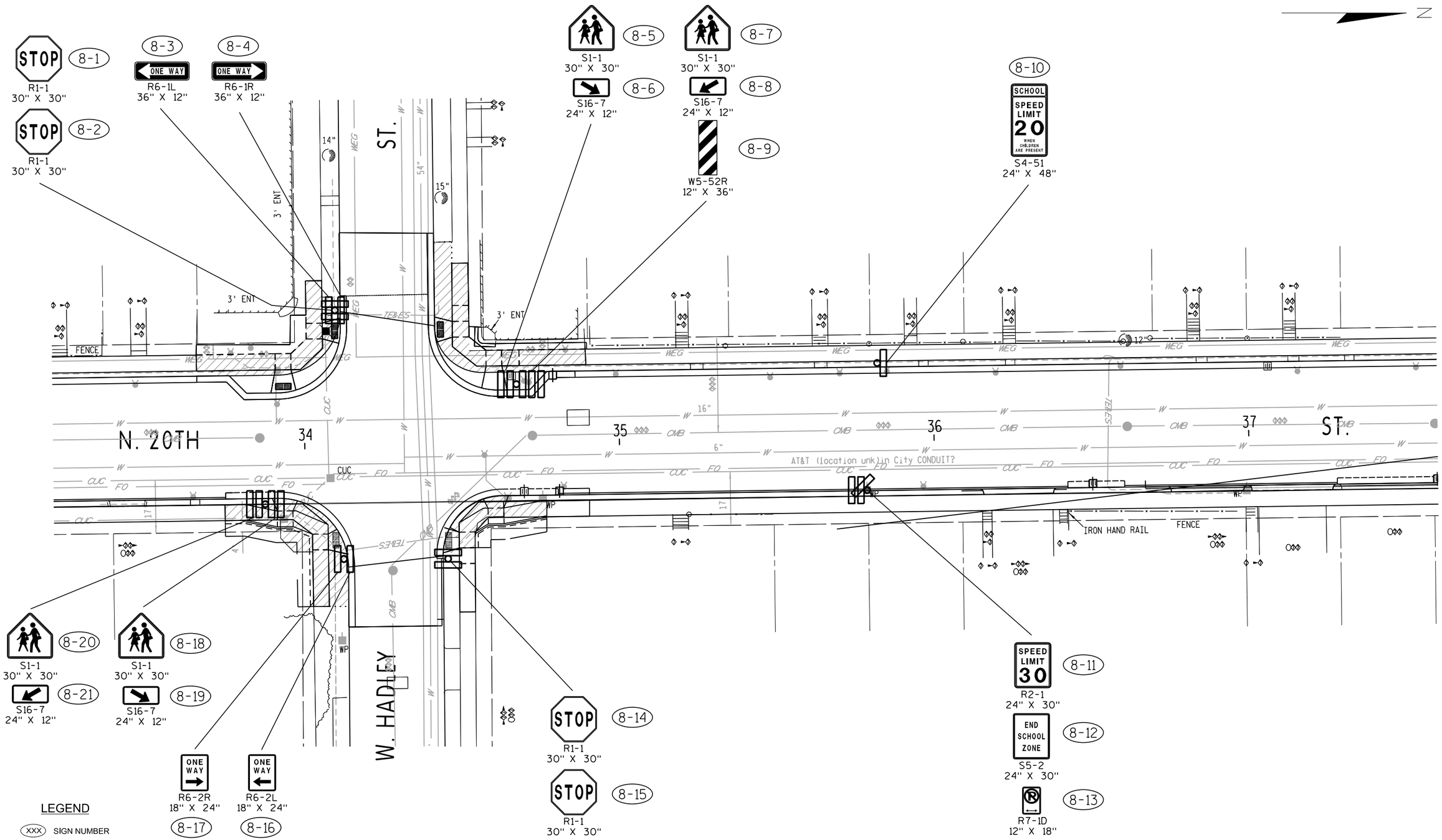
SCALE, FEET 0 30

SHEET 7 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 91	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42



SHEET 8 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 92	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

9-1
S1-1
30" X 30"

9-2
AHEAD
S16-9P
24" X 12"

9-3
FINES HIGHER
R2-6P
24" X 18"

9-4
W Locust St
M1-94H
72" X 18"

9-5
N 20th St
M1-94H
48" X 18"

9-6
R5-2
24" X 24"

9-7
3 TONS OR OVER
R5-2A
24" X 12"

9-8
W5-52R
12" X 36"

9-9
W Locust St
M1-94H
72" X 18"

9-10
N 20th St
M1-94H
48" X 18"

9-11
R5-2
24" X 24"

9-12
3 TONS OR OVER
R5-2A
24" X 12"

9-13
R7-1D
12" X 18"

N. 20TH ST.

W. LOCUST ST.

IRON HAND RAIL

WOOD HAND RAIL

GARBAGE CAN STORAGE

16' ENT

8' ENT

3' ENT

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

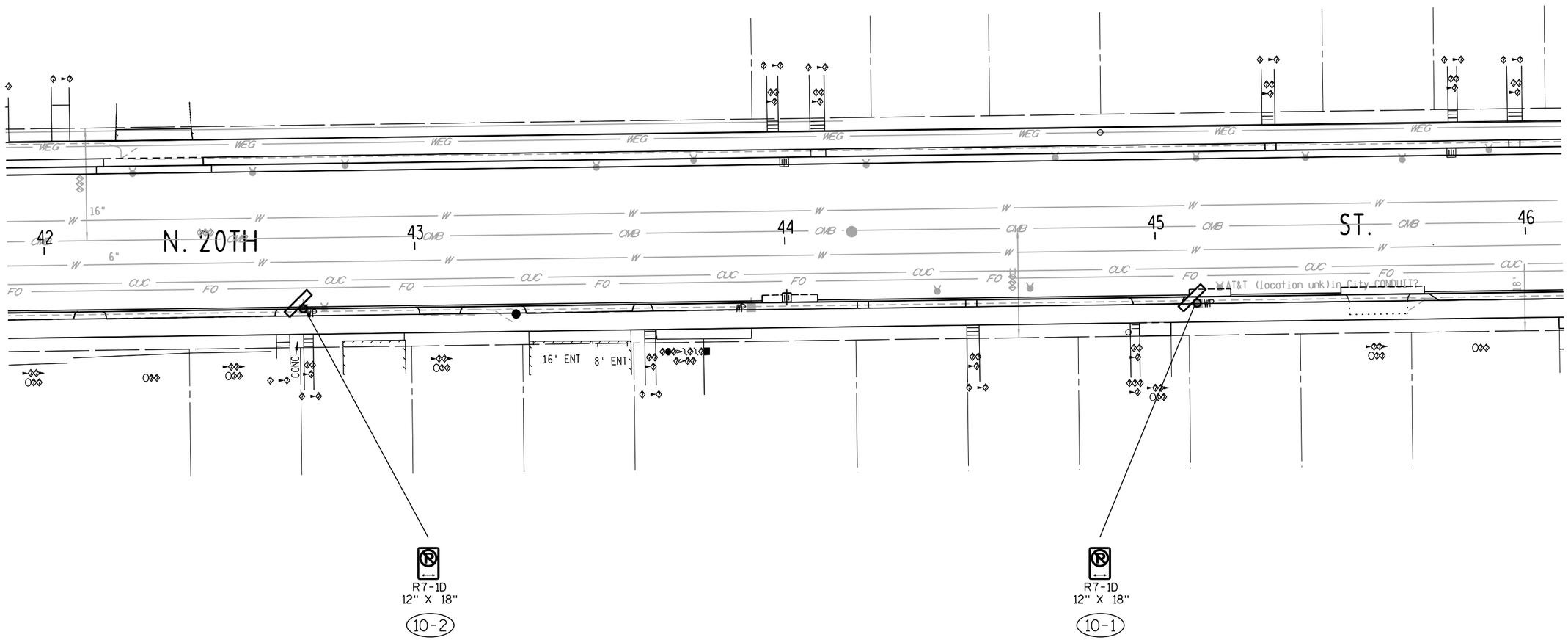
SHEET 9 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 93	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 10 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 94	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

11-1
W Chambers ST
M1-94H
42" X 10"

STOP 11-2
R1-1
30" X 30"

STOP 11-3
R1-1
30" X 30"

11-4
R5-2
24" X 24"

3 TONS OR OVER 11-5
R5-2A
24" X 12"

11-6
W5-52R
12" X 36"

N. 20TH ST.

W. CHAMBERS ST.

47 48 49 50

WP WAT CUC FO CMB W WEG TEBES NAMEN

17" 10" 16" 6" 54"

3.5' 25' 23' 24' 3'

ASPHALT

PIPE HAND RAIL

WOOD RETAINING WALL

WOOD RETAINING WALL

BLOCK RET WALL

BLOCK RET WALL

N 20th ST 11-8
M1-94H
30" X 10"

STOP 11-9
R1-1
30" X 30"

STOP 11-10
R1-1
30" X 30"

R7-1D 11-7
12" X 18"

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 11 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 95	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

12-1
SPEED LIMIT 30
R2-1
24" X 30"

12-2
W Burleigh St
M1-94H
84" X 18"

12-3
W5-52R
12" X 36"

12-4
N 20th St
M1-94H
48" X 18"

ST.

FR-TIES

TE&ES

WEG

CMB

FO

CUC

W

WP

BM

MONUMENT

N. 20TH ST.

51

52

53

54

16"

6"

8"

24"

18"

AT&T Hoodfrig Locktinicity CONDUITS

W. BURLEIGH ST.

GAS STAT
*1909 W.

12-8
R7-1D
12" X 18"

12-7
R7-1D
12" X 18"

12-6
N 20th St
M1-94H
48" X 18"

12-5
W Burleigh St
M1-94H
84" X 18"

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 12 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 96	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

13-1
W Hopkins St
M1-94H
84" X 18"

13-2
N 20th St
M1-94H
48" X 18"

13-3
S1-1
30" X 30"

13-4
AHEAD
S16-9P
24" X 12"

13-5
FINES HIGHER
R2-6P
24" X 18"

PATIO-PAVERS

TIRE SHOP
ASPHALT LOT

ST.

N. 20TH

ST.

55 56 57 58

TES
CUC

AT&T (location unk)in City CONDUIT?

VAULT

22" 8" 10"

PILLAR
PILLAR
WROUGHT IRON FENCE
PILLAR
SIGN
PILLAR

HOLY LAWN

CEMETERY

ASPH
CONC
CLP

HOPKINS ST.

R7-7D
12" X 18"
13-9

R7-1D
12" X 18"
13-8

PILLAR
WROUGHT IRON FENCE
CONC
ASPH

W. HOPKINS

HOLY LAWN

CEMETERY

13-7
N 20th St
M1-94H
48" X 18"

13-6
W Hopkins St
M1-94H
84" X 18"

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 13 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	PERMANENT SIGN PLAN	SHEET 97	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

JCT 145

TO BE RELOCATED BY OTHERS

W. WALNUT AVE.

26"
ASPHALT
WEP
WEE
3' ENT
ENT. 10.4
WP
4' cw WOOD HAND RAIL
fence
RETaining WALL
LAWN
lawn
WOOD FENCE
CHAINLINK FENCE
RR-TIES
WOOD HAND RAIL
6"
1"
9"
1"
lawn
1"
CLP
1"
WEG
CUC
CMB
ATT
W
6"
24"
CUC
WEP
N. 20TH ST.
02
03
04
05
ST.
3" cw
22"
18"
3.5
16"
4" cw
1" 3" cw
fence
4' cw CHAINLINK FENCE
4.3' cw
CHAINLINK FENCE
5' ENT
ENT.
asph
RETAINING WALL
WP
3' cw
6'
2.5' cw
5' cw
W. NORTH
BUS-PAD
20'

1-2

NORTH 57

REMOVE

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 1 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 98	E

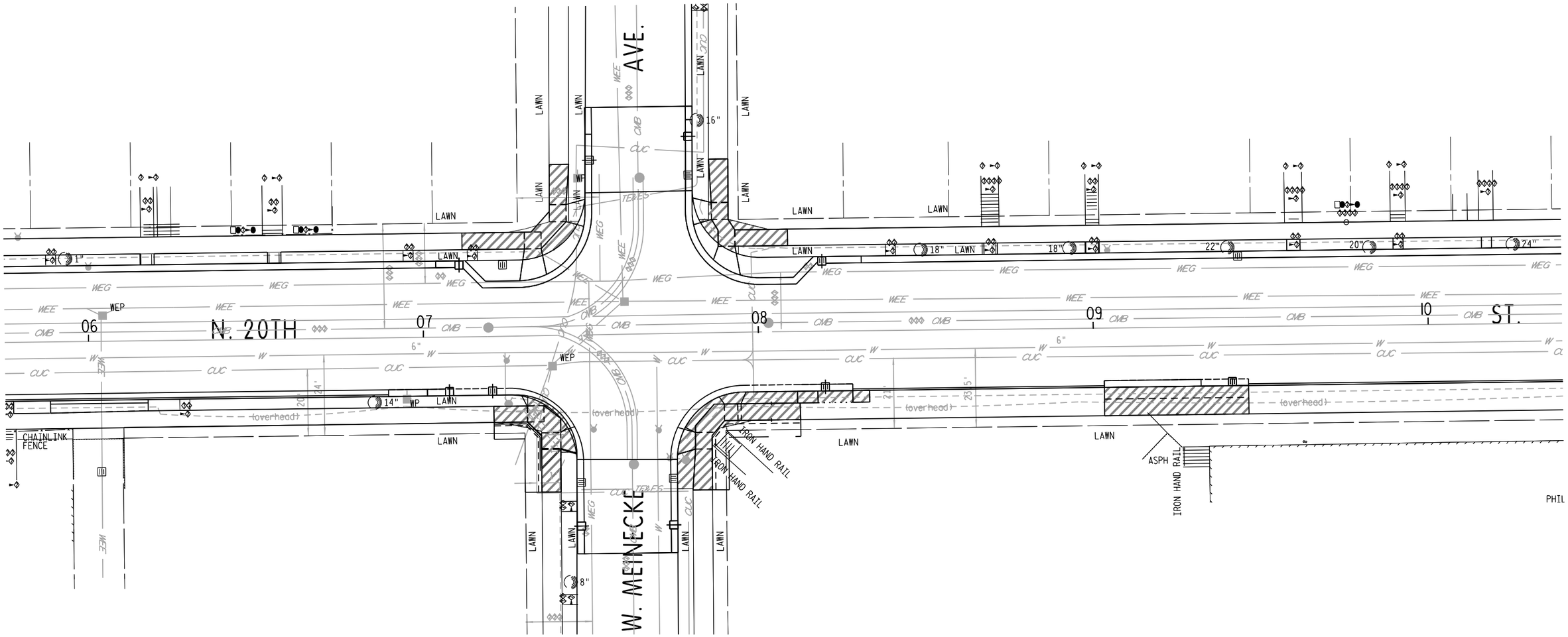
FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

NO SIGNING THIS SHEET

N



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 2 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 99	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

3-1

SOUTH 57

REMOVE

N

N. 20TH ST.

W. WRIGHT ST.

LAWN

RETAINING WALL

12"

1"

11"

22"

4"

GATE

6' ENT

TS-BOX

HAND RAIL

COOP

14

12"

5'8"

19.5'

WAT

CUC

16"

15

WEP

TEL

6"

24"

CONCRETE RE

4'

28'

WOOD HAND RAIL

10.8'

4.5'

19.5'

CONC

SPECTRUM

(overhead)

WEP

WP

23.5'

WEE

CMB

W

CUC

T

SPCT

WEG

WEE

CMB

W

CUC

WEP

WEE

CMB

W

CUC

WEE

CMB

W

CUC

WEE

CMB

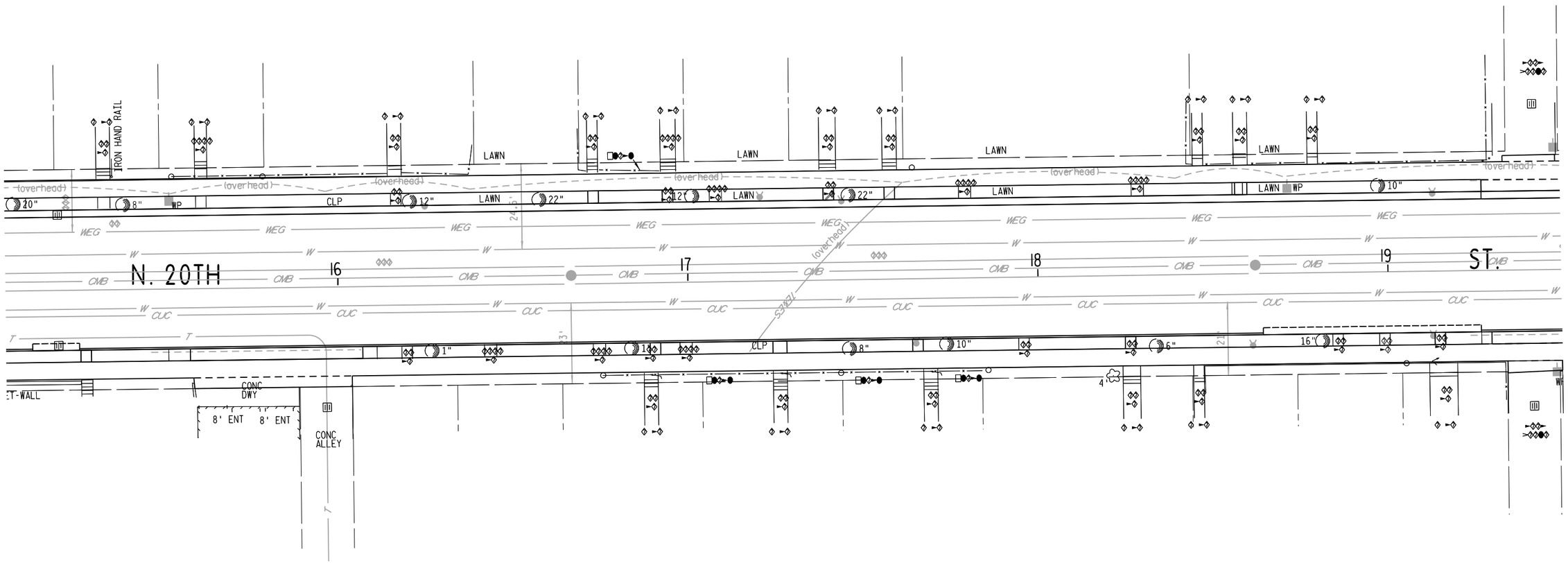
W

CUC

2

N

NO SIGNING
THIS SHEET



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 4 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 101	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

NO SIGNING THIS SHEET

N

N. 20TH ST.

W. CLARKE ST.

20 21 22 23 24

LAWN

WP

CHAIN LINK FENCE ON TOP OF CONC RETAINING WALL

(overhead)

WEG

W

CMB

CUC

GV

WAT

ALP

CO

WOOD-RET

CLP

CONC

ASPH

TEBES

CONC-RET-WALL

CONC DWY

FENCE ON CONC WALL

IRON HAND RAIL

FENCE ON TOP OF CONC WALL

7'

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 5 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 102	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

6-1

SOUTH 57

REMOVE

N. 20TH ST.

W. CENTER ST.

25 26 27 28

(overhead) (overhead) (overhead) (overhead) (location unk)

7" WP 5" 10" WP 21" 8" 22" WP

PILLAR

TIMBER

SIGN

TIMBER

WROUGHT IRON FENCE

CONC

TIMBER

CUC

MONUMENT

CUC

LAWN LAWN LAWN LAWN LAWN

3' ENT

EN

TE&ES TE&ES TE&ES TE&ES

WEG W CMB CUC FO T

11' 15' 17' 16' 7' 15' 12' 1' 1' 24.5' 3.67' 16" 6"

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 6 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 103	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

FENCE TIMBER TIMBER FENCE FENCE FENCE FENCE FENCE FENCE

WEG

CMB W 29 N. 20TH 30 31 32 ST. 33

CUC FO WP LAWN

8' ENT WOOD FENCE 8' ENT 16' ENT TIMBER

7-1

NORTH 57

REMOVE

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 7 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 104	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

ST.

14"

15"

54"

3' ENT

3' ENT

3' ENT

FENCE

12"

16"

6"

N. 20TH

34

35

36

37

ST.

CUC

AT&T (location unk)in City CONDUIT?

IRON HAND RAIL

FENCE

W. HADLEY

8-1

TO

INTERSTATE

43

TO REMAIN

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 8 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 105	E

2

N

9-1

TO INTERSTATE 43

MOVING SIGNS

IRON HAND RAIL

ST.

N. 20TH

38

39

40

41

ST.

W. LOCUST ST

16' ENT

8' ENT

16' ENT

IRON HAND RAIL

WOOD HAND RAIL

8' ENT

3' ENT

3' ENT

GARBAGE CAN STORAGE

9-2

TO INTERSTATE 43

MOVING SIGNS

LAWN

CUC

ATT

TEL/ES

WEG

CMB

FO

WP

12"

6"

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 9 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 106	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

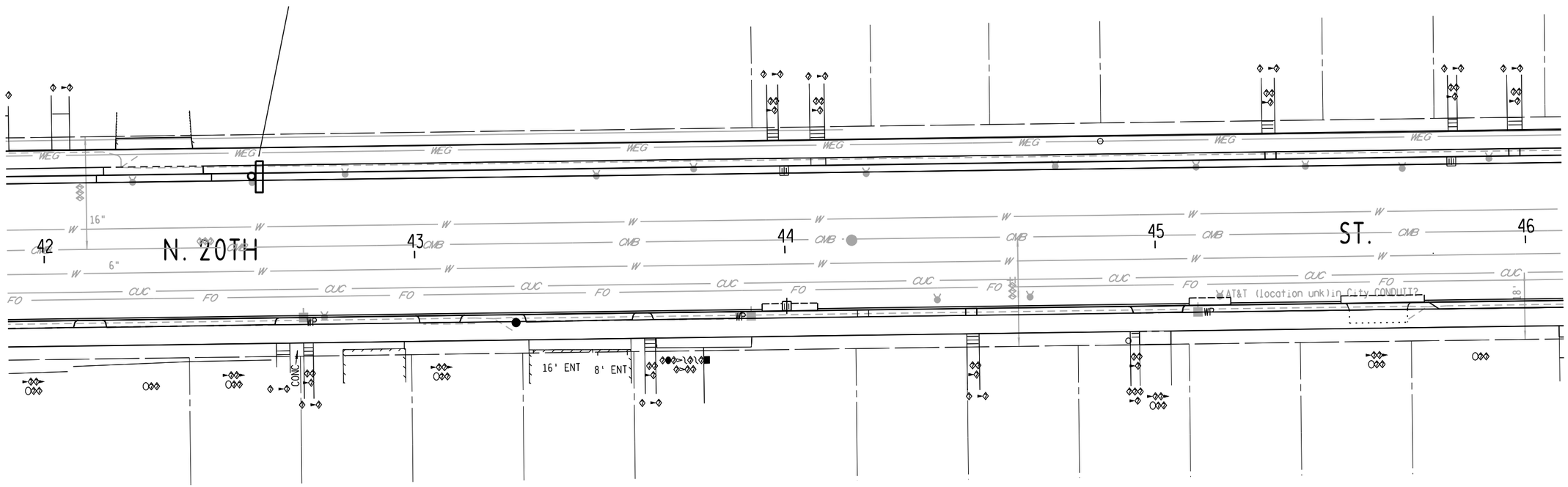
WISDOT/CADDS SHEET 42

2

N

10-1

MOVING SIGNS



LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 10 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 107	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

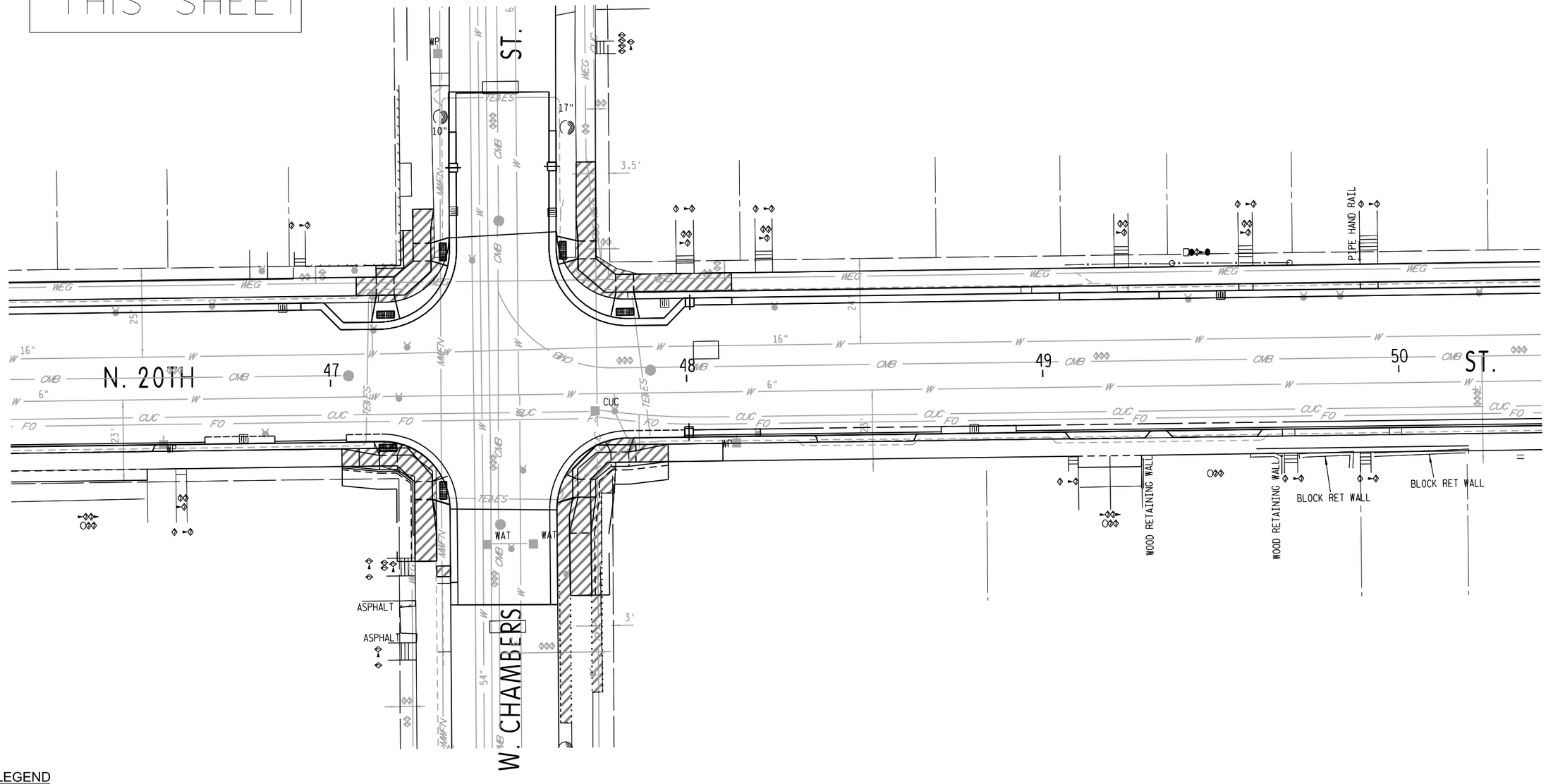
WISDOT/CADDS SHEET 42

2

2

N

NO SIGNING THIS SHEET



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 11 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 108	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

12-1

SOUTH 57

REMOVE

N

ST.

RR-TIES

TE&ES

8"

14"

BM

N. 20TH

51

52

53

54

16"

6"

18"

MONUMENT

ST.

W. BURLEIGH

CUC

FO

WP

W

CMB

T

AT&T (Occupies Duct/Innerduct) CONDUITS

GAS STAT

*1909 W.

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 12 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 109	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

NO SIGNING THIS SHEET

N

N. 20TH ST.

W. HOPKINS

55 56 57 58

PATIO-PAVERS

TIRE SHOP ASPHALT LOT

AT&T (location unk)in City CONDUIT?

VAULT

HOLY LAWN

CEMETERY

WROUGHT IRON FENCE

PILLAR

SIGN

HOPKINS ST.

ASPH

CONC

CLP

22"

27"

16"

10"

8"

6"

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 13 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER REMOVAL PLAN	SHEET 110	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

W. NORTH AVE.

N. 20TH ST.

26"
ASPHALT
WEP
3' ENT
ENT. 10.4
WP
4' cw WOOD HAND RAIL
fence
RETaining WALL
LAWN
lawn
WOOD FENCE
CHAINLINK FENCE
RR-TIES
WOOD HAND RAIL
6"
1"
9"
1"
lawn
1"
CLP
1"
WEE
WEG
CUC
CMB
ATT
W
02
03
04
05
22"
18"
3.5
16"
4" cw
1" 3" cw
5' ENT
ENT.
asph
RETAINING WALL
3' cw
6'
2.5' cw
5' cw
fence
4' cw CHAINLINK FENCE
4.3' cw
CHAINLINK FENCE
W. NORTH
BUS-PAD
20'

1-1

NORTH
57

J4-1
24" X 36"

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 1 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 111	E

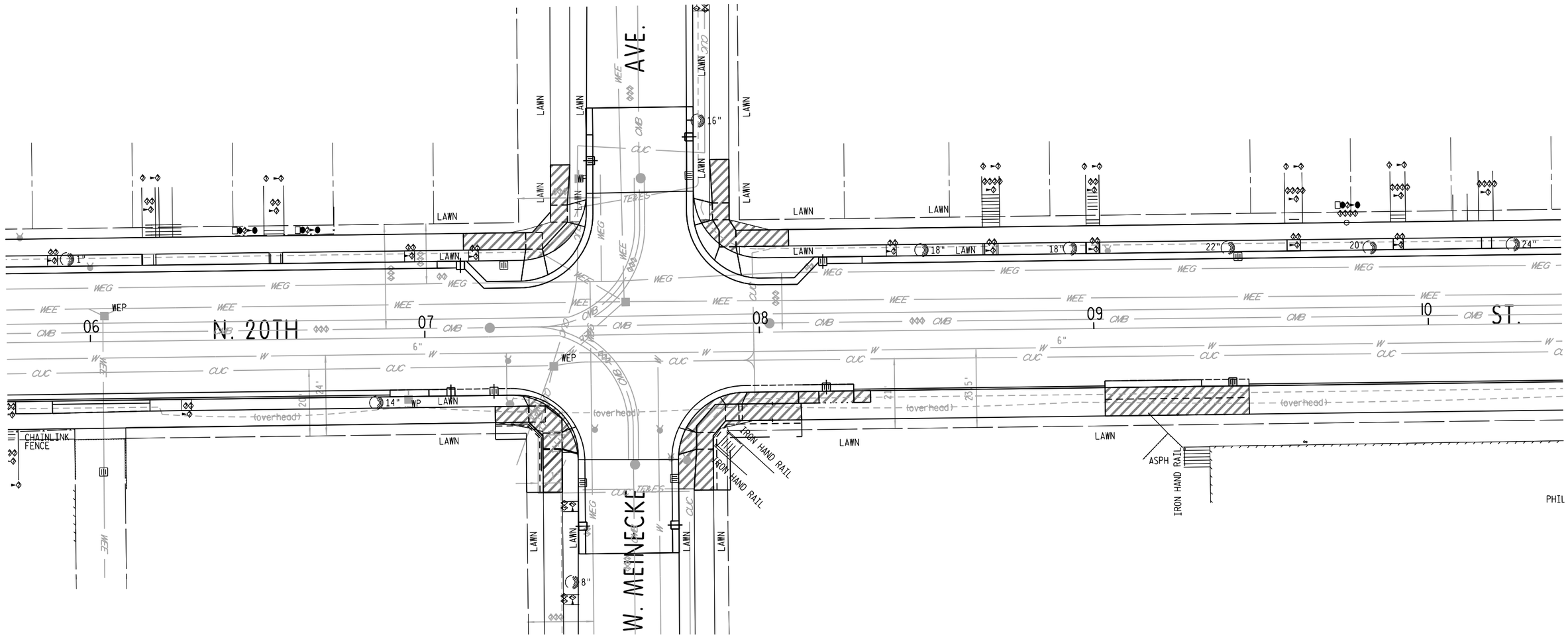
FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

2

NO SIGNING THIS SHEET



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 2 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 112	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

3-1
SOUTH
57
J4-1
24" X 36"

N. 20TH ST.

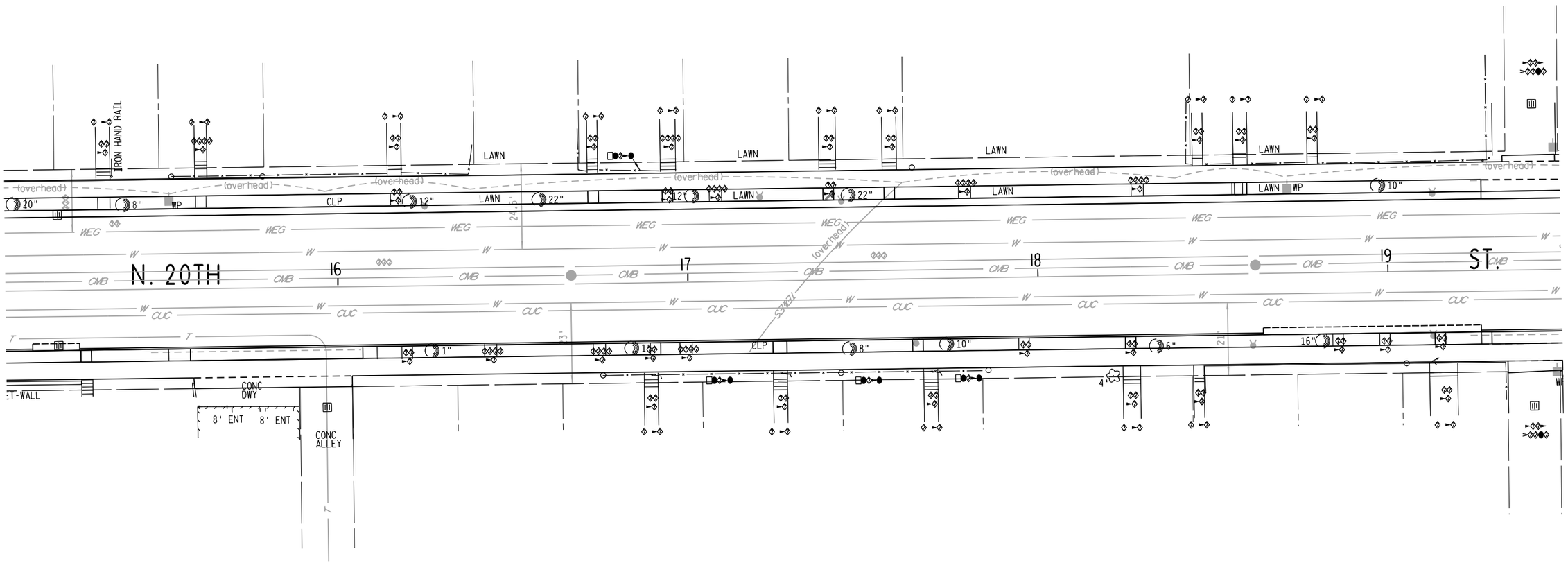
W. WRIGHT ST.

LAWN
RETAINING WALL
12"
1"
11"
22"
4"
GATE
6' ENT
HAND RAIL
TS-BOX
WAT
19.5'
14
12"
5'8"
CUC
CONCRETE RE
WOOD HAND RAIL
24"
16"
6"
WEP
TEL
SPECTRUM
WP
(overhead)
WEE
CMB
W
CUC
T
SPCT
FOC
23.5'
WEG
WEP
WEE
WEE
WEE

2

N

NO SIGNING
THIS SHEET



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 4 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 114	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

NO SIGNING THIS SHEET

N

N. 20TH ST.

W. CLARKE ST.

20 21 22 23 24

LAWN

WP

CHAIN LINK FENCE ON TOP OF CONC RETAINING WALL

(overhead)

WEG

W

CMB

CUC

WAT

ALP

CO

WOOD-RET

CONC DWY

FENCE ON CONC WALL

IRON HAND RAIL

FENCE ON TOP OF CONC WALL

CLP

ASPH

CONC-RET-WALL

GV

LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 5 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 115	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

6-1

SOUTH 57

J4-1
24" X 36"

N. 20TH

ST.

W. CENTER

ST.

25 26 27 28

(overhead)

7" WP 5" 10" WP

21" 8" 22" WP

PILLAR

TIMBER

SIGN

WROUGHT IRON FENCE

TIMBER

CONC

TIMBER

CUC

MONUMENT

CUC

LAWN

LAWN

LAWN

LAWN

3' ENT

EN

TEBES

TEBES

(location unk)

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

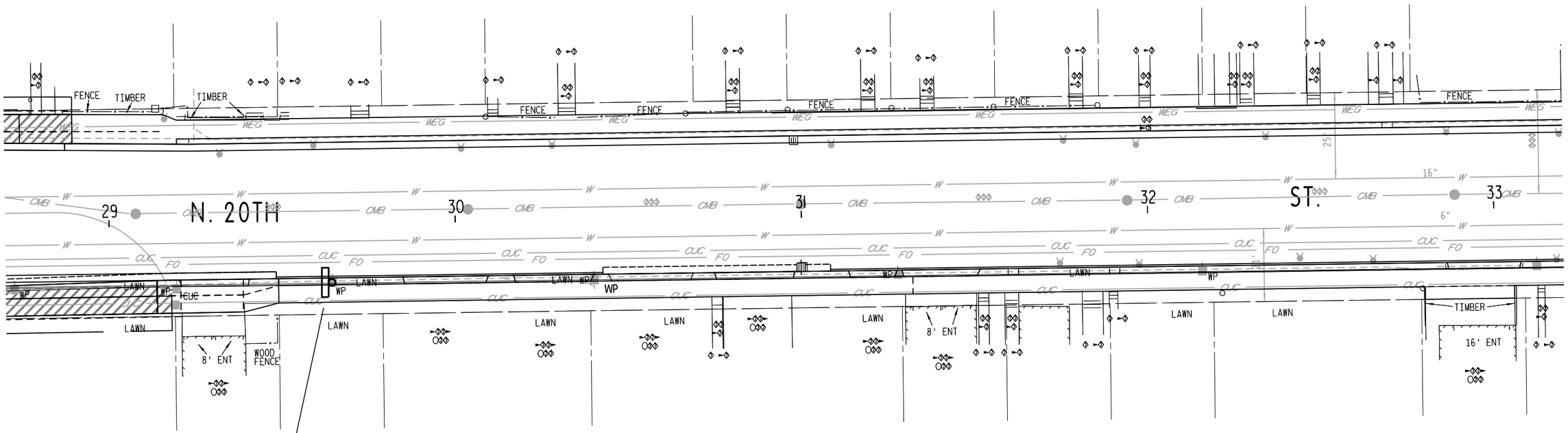
SHEET 6 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 116	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 7 OF 13

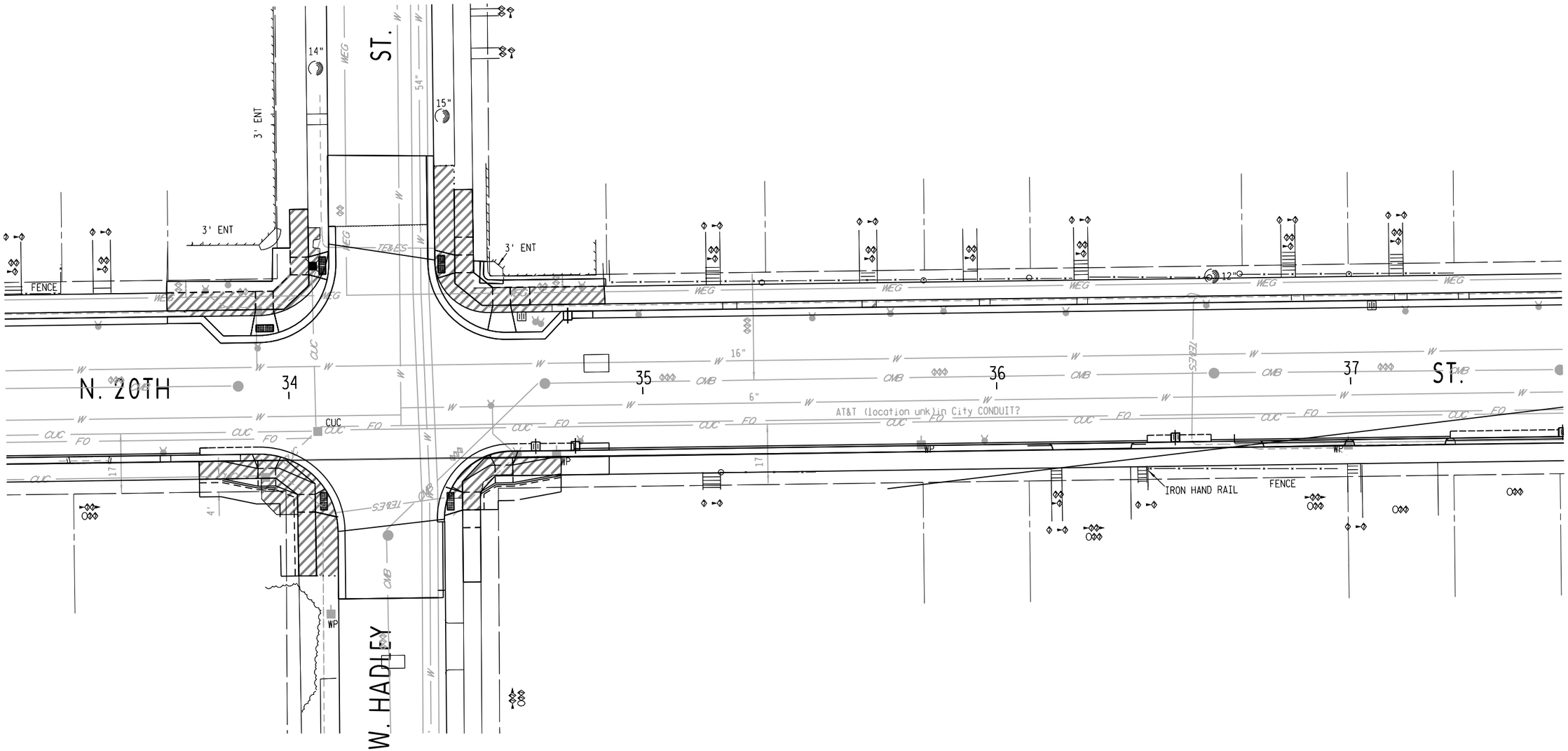
STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 117	E

2

2

NO SIGNING THIS SHEET

N



LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 8 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 118	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

9-1

TO INTERSTATE 43

MOVING SIGNS

IRON HAND RAIL

ST.

N. 20TH

38

39

40

41

ST.

W. LOCUST

16' ENT

8' ENT

16' ENT

IRON HAND RAIL

WOOD HAND RAIL

8' ENT

3' ENT

3' ENT

GARBAGE CAN STORAGE

9-2

TO INTERSTATE 43

MOVING SIGNS

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 9 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 119	E

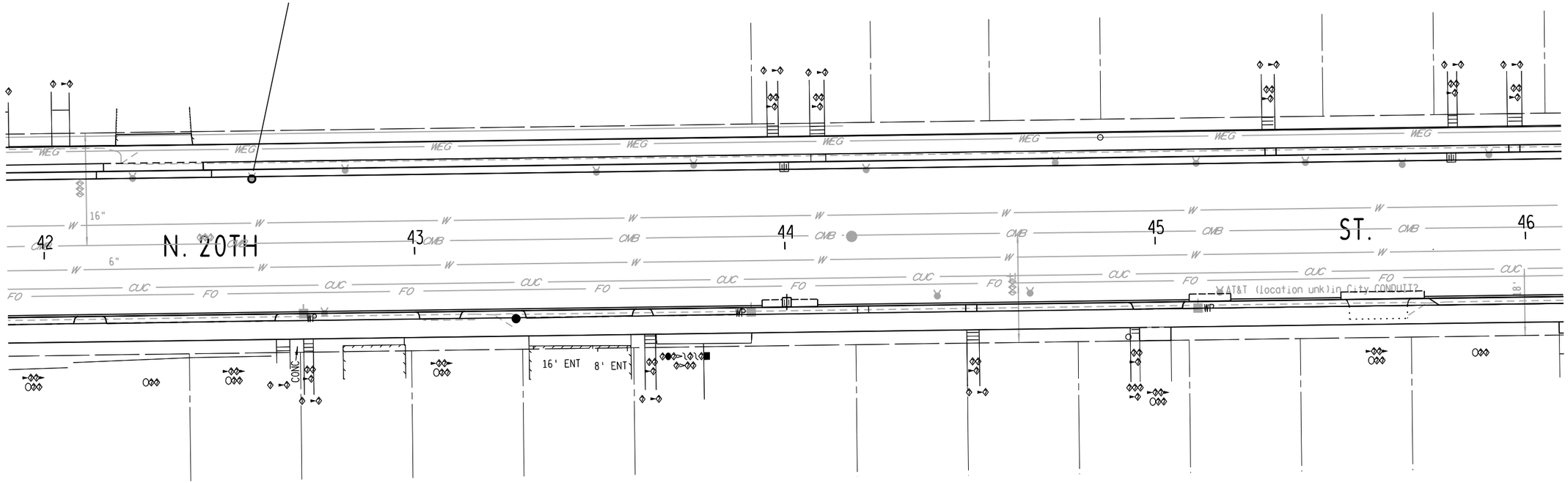
FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

10-1

MOVING SIGNS



LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 10 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 120	E

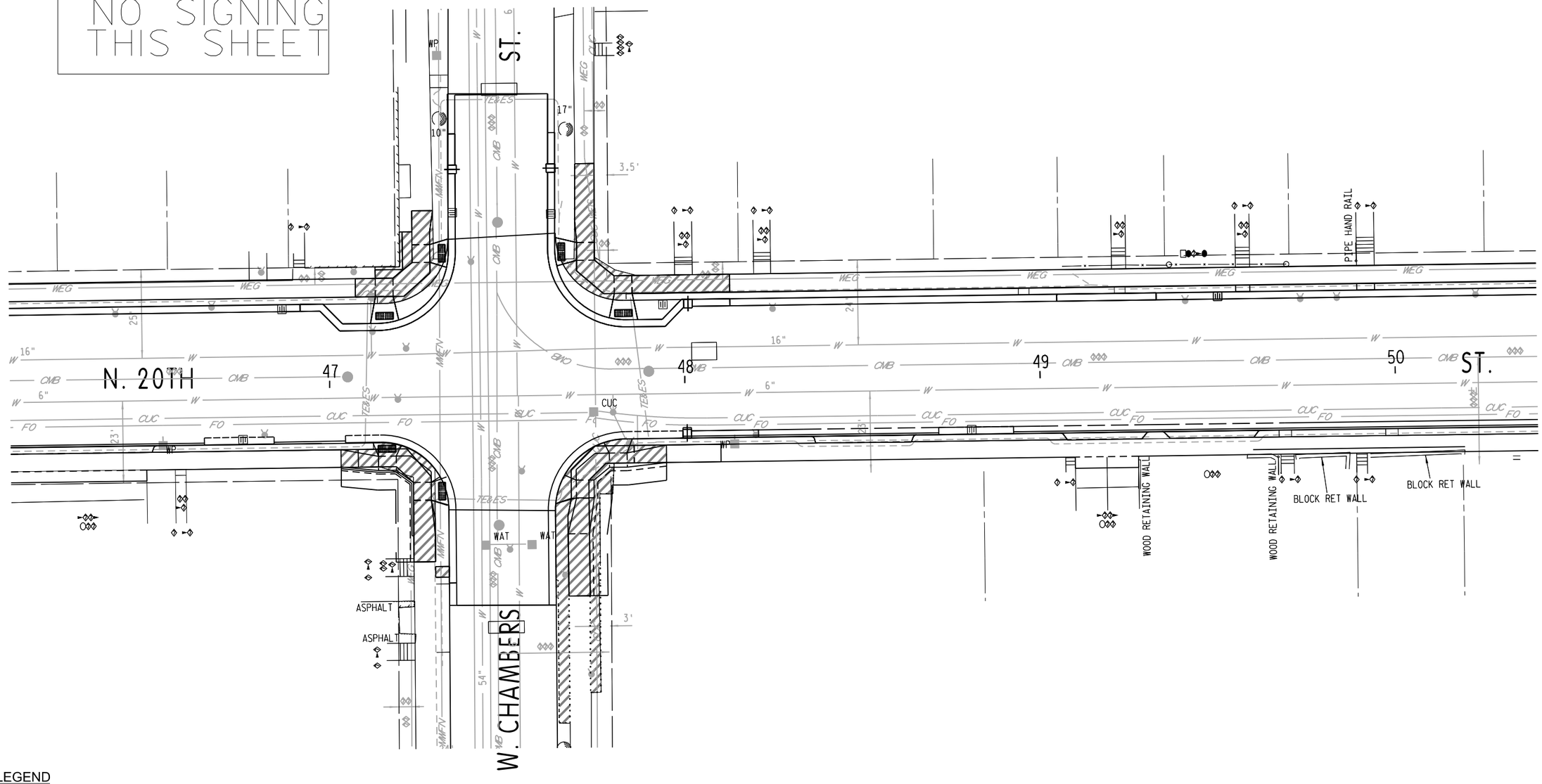
FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

NO SIGNING THIS SHEET



LEGEND

(XXX) SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 11 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 121	E

2

N

12-1

SOUTH
57

J4-1
24" X 36"

ST.

RR-TIES

TE&ES

BM

N. 20TH

51

52

53

54

MONUMENT

ST.

W. BURLEIGH

AT&T (locally locatable) CONDUITS

GAS STAT

*1909 W.

LEGEND

XXX SIGN NUMBER

SIGN

SCALE, FEET 0 30

SHEET 12 OF 13

STATE PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 122	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

NO SIGNING THIS SHEET

N

N. 20TH ST.

W. HOPKINS

55 56 57 58

PATIO-PAVERS

TIRE SHOP ASPHALT LOT

AT&T (location unk)in City CONDUIT?

VAULT

HOLY LAWN

CEMETERY

HOPKINS ST.

PILLAR

WROUGHT IRON FENCE

SIGN

CONC

ASPH

CLP

TES

CUC

FO

WEE

W

CMB

WEG

TEL/ES

10"

22"

27"

16"

8"

6"

LEGEND

XXX SIGN NUMBER

SIGN

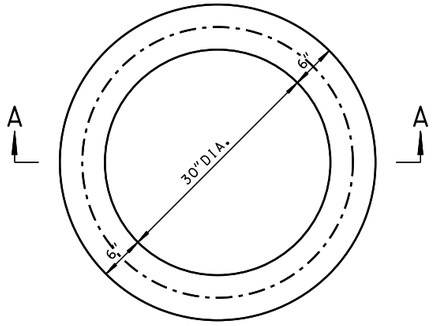
SCALE, FEET 0 30

SHEET 13 OF 13

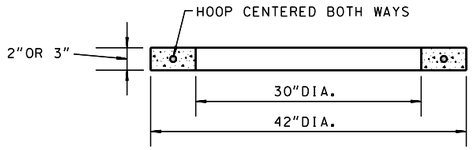
STATE PROJECT NO: 2275-05-70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	ROUTE MARKER INSTALLATION PLAN	SHEET 123	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42



PLAN



SECTION A-A

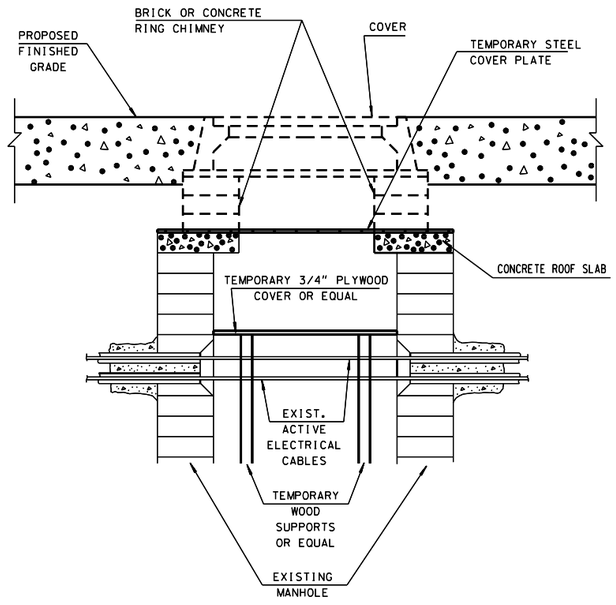
THE ADJUSTING RING SHALL BE 2" OR 3" IN HEIGHT.

THE CIRCUMFERENTIAL STEEL SHALL BE CENTERED WITHIN THE RING.

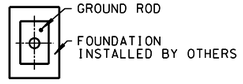
AREA OF CIRCUMFERENTIAL STEEL = 0.07 SQ. INCH PER VERTICAL FOOT WITH A MINIMUM OF .024 SQ. INCH IN ANY ONE RING.

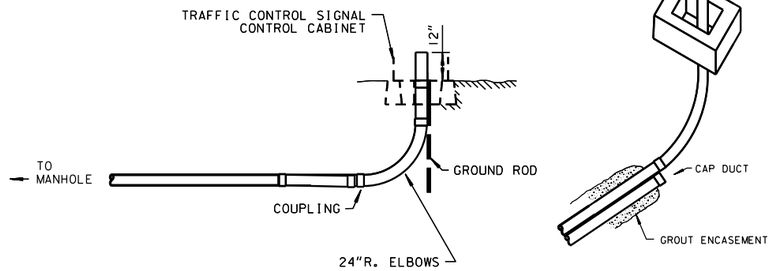
THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE CORE SHALL BE 4000 P.S.I.

CONCRETE ADJUSTING RING



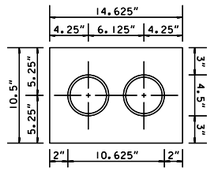
ADJUSTING CUC MANHOLES

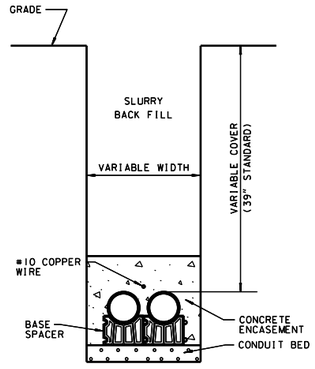




TRAFFIC CONTROL CABINET DETAIL

N.T.S.

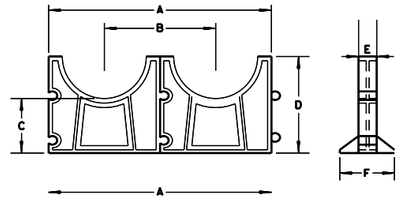




CROSS SECTION VIEW

N.T.S.

COND.	4"
A	12 ¼"
B	6 ⅛"
C	3"
D	6 ⅛"
E	1"
F	3"

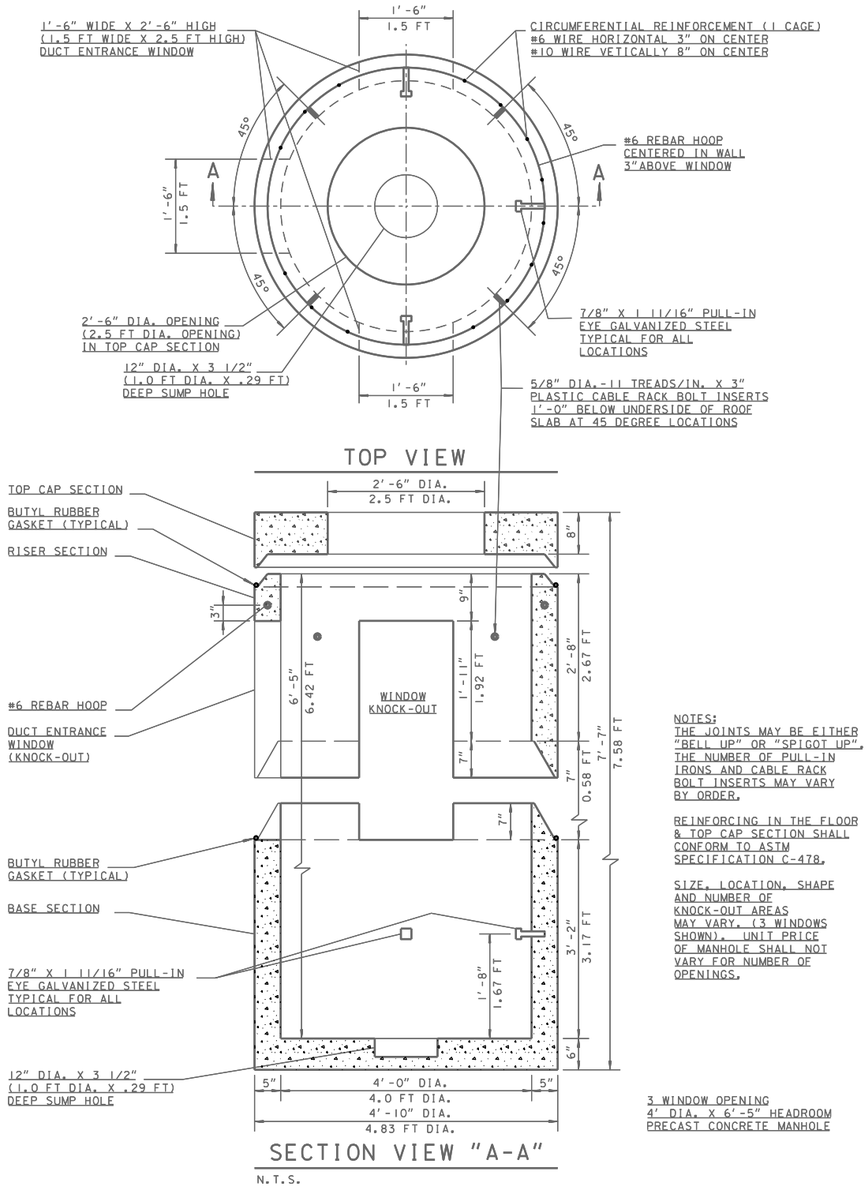


BASE SPACER DETAIL

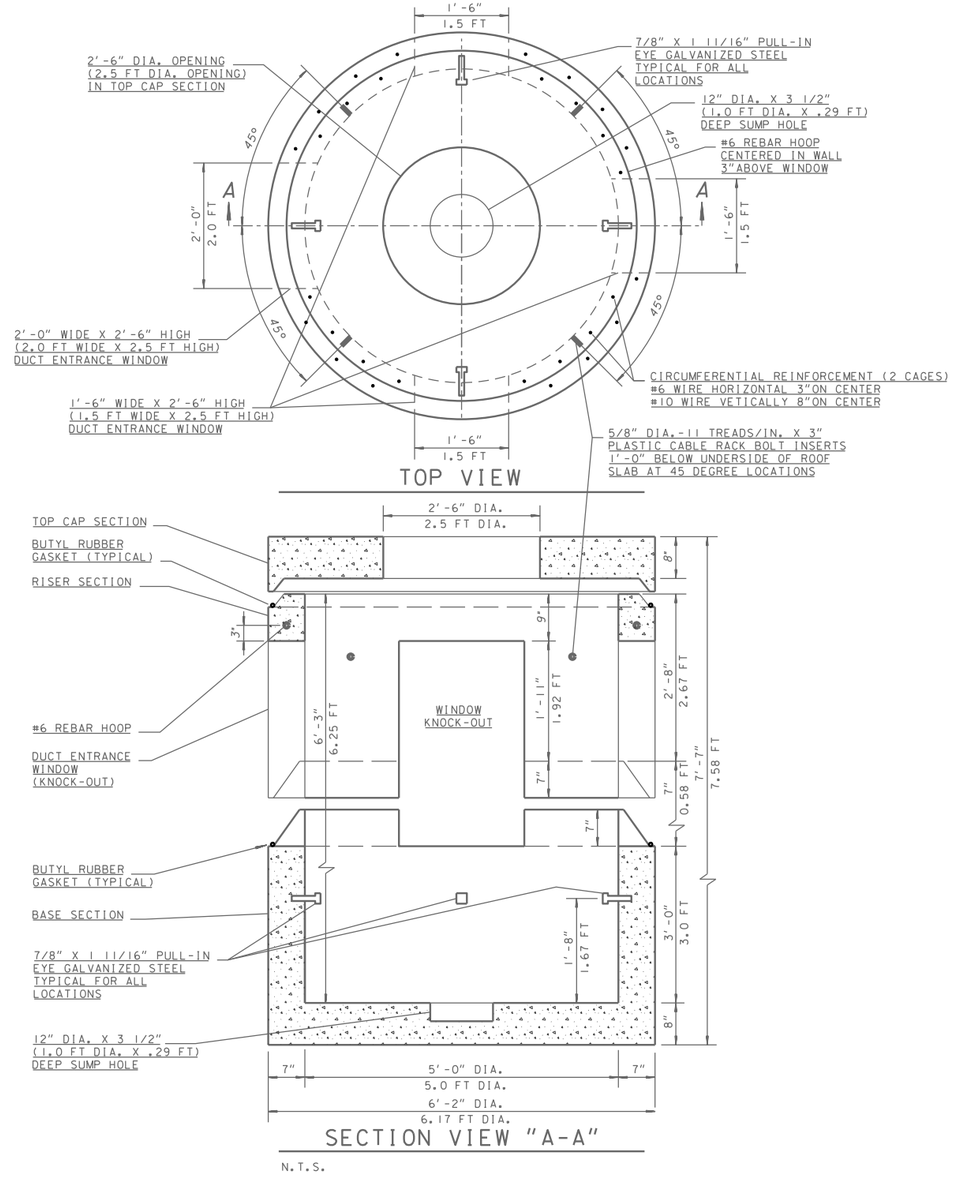
N.T.S.

SHEET 2 OF 2

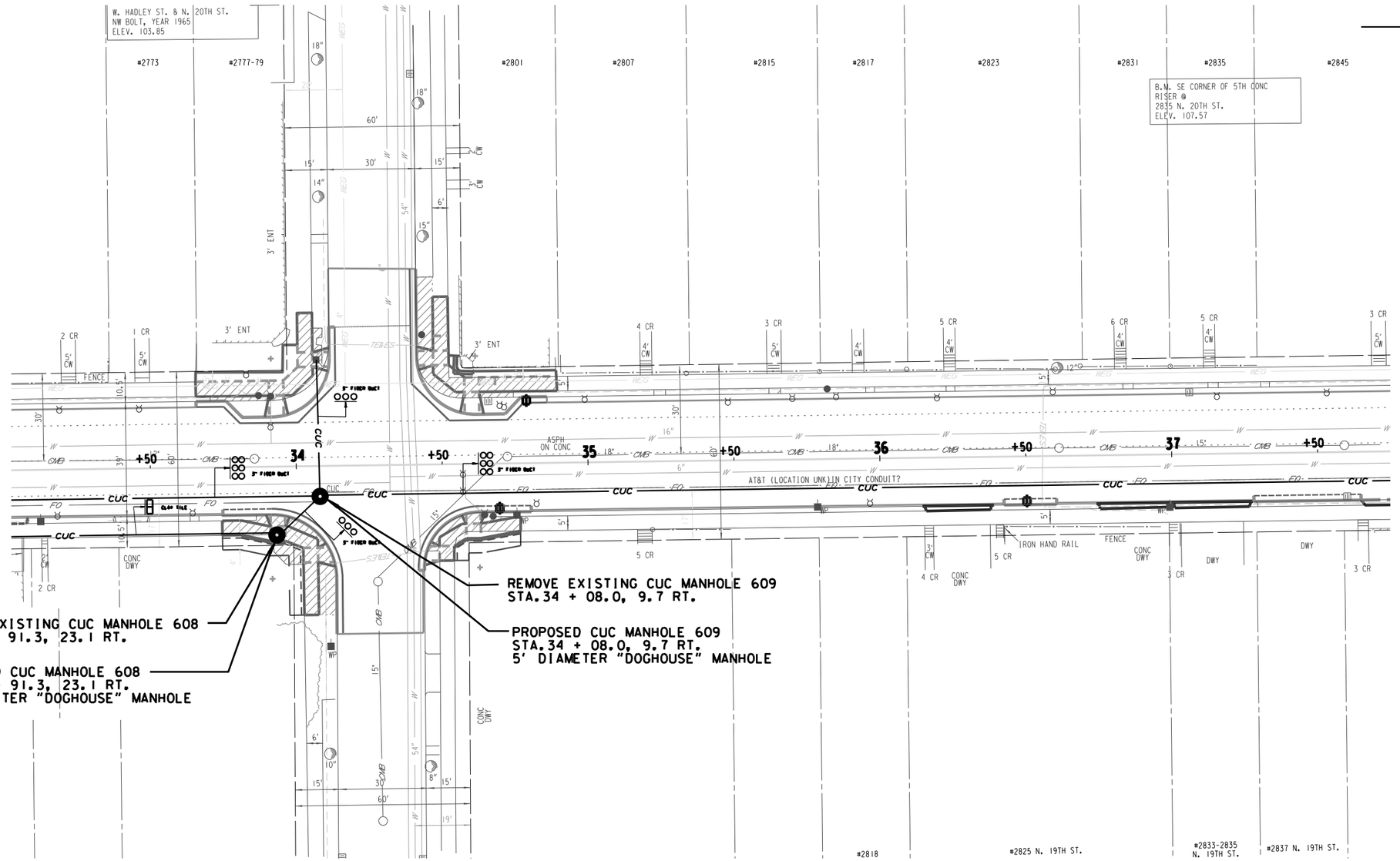
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT DETAILS	SCALE, FEET 0 40	SHEET 124	E



4' DIAMETER "DOGHOUSE" TYPE CUC MANHOLE



5' DIAMETER "DOGHOUSE" TYPE CUC MANHOLE

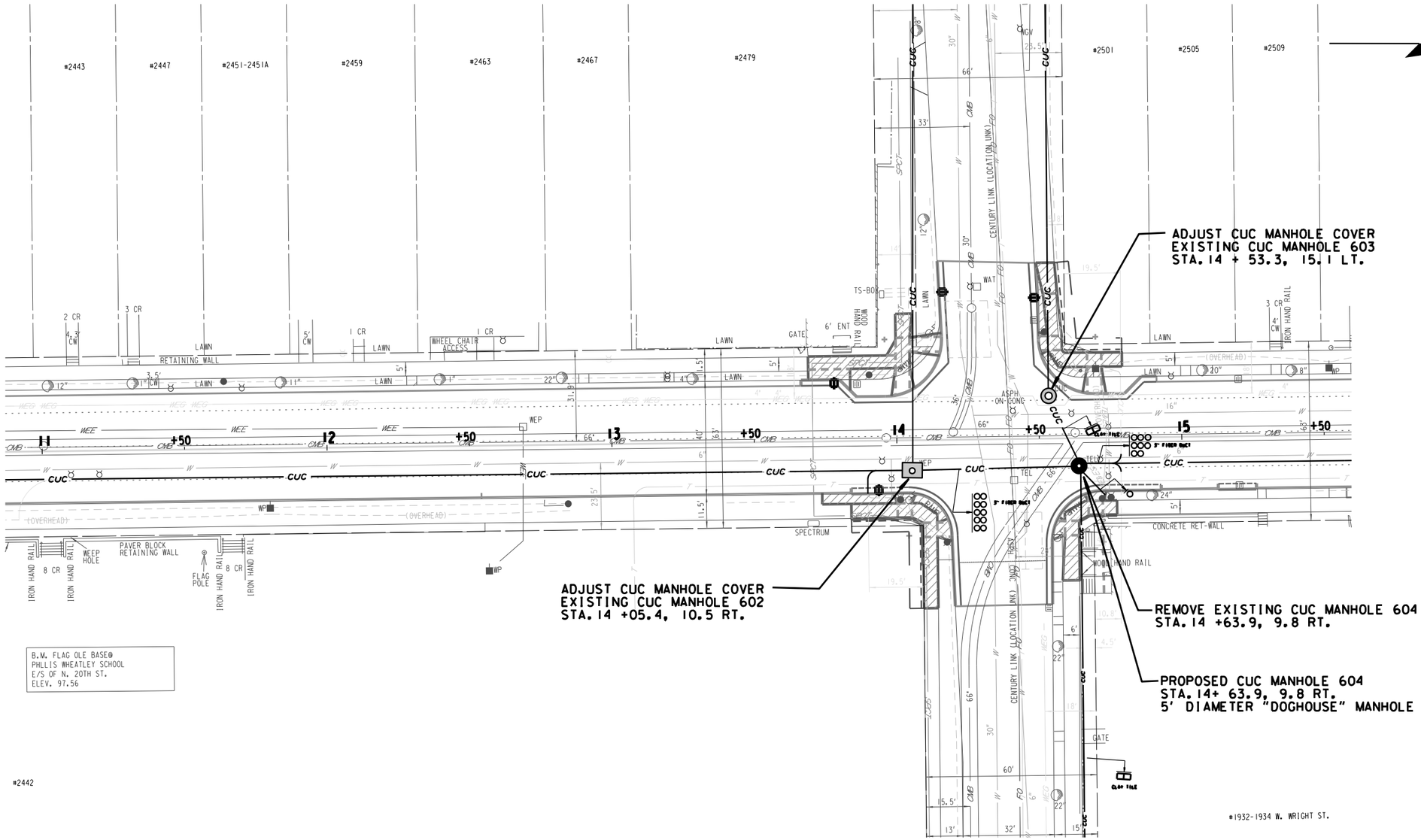


NOTES:

1) CONSTRUCTION STAKING FOR THE CITY UNDERGROUND CONDUIT (CUC) FACILITIES IS TO BE INCLUDED IN AND PAID FOR UNDER THE BID ITEM 650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS
2) 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.
3) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
4) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
5) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
6) REMOVE ABANDONED CONDUIT AS NEEDED FOR PROPOSED INSTALLATION.
7) ATTACH PROPOSED 4" PVC TO EXISTING DUCTS USING APPROPRIATE ADAPTORS.

LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED CUC MANHOLE
▣	EXISTING CUC MANHOLE
— CUC —	EXISTING CONDUIT
— — — ·	CONDUIT TO BE ABANDONED



NOTES:

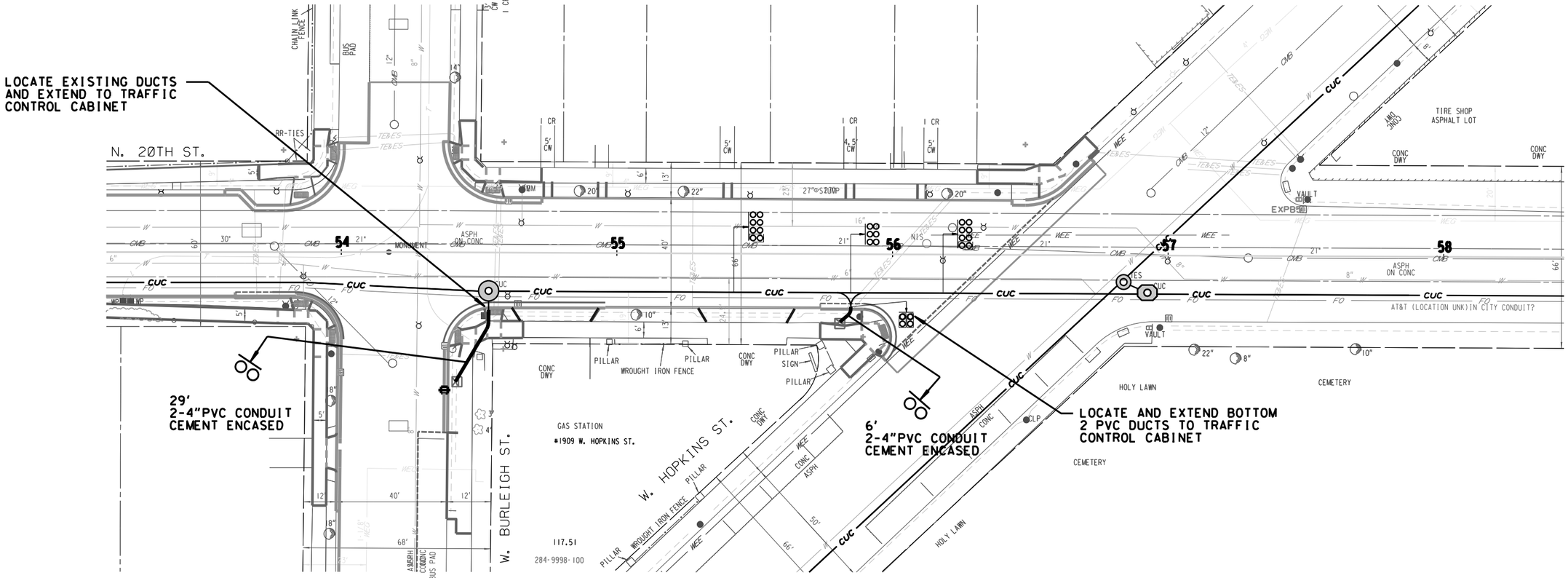
1) CONSTRUCTION STAKING FOR THE CITY UNDERGROUND CONDUIT (CUC) FACILITIES IS TO BE INCLUDED IN AND PAID FOR UNDER THE BID ITEM 650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS
2) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
4) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
5) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
6) REMOVE ABANDONED CONDUIT AS NEEDED FOR PROPOSED INSTALLATION.
7) ATTACH PROPOSED 4" PVC TO EXISTING DUCTS USING APPROPRIATE ADAPTORS.

LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED CUC MANHOLE
▣	EXISTING CUC MANHOLE
— cuc —	EXISTING CONDUIT
— — — ·	CONDUIT TO BE ABANDONED

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT	SCALE, FEET 0 40	SHEET 127	E

2



NOTES:

1) CONSTRUCTION STAKING FOR THE CITY UNDERGROUND CONDUIT (CUC) FACILITIES IS TO BE INCLUDED IN AND PAID FOR UNDER THE BID ITEM 650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS
2) 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.
3) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
4) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
5) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
6) REMOVE ABANDONED CONDUIT AS NEEDED FOR PROPOSED INSTALLATION.
7) ATTACH PROPOSED 4" PVC TO EXISTING DUCTS USING APPROPRIATE ADAPTORS.

LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED CUC MANHOLE
◘	EXISTING CUC MANHOLE
— cuc —	EXISTING CONDUIT
— — — ·	CONDUIT TO BE ABANDONED

STREET LIGHTING GENERAL NOTES:

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

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

STREET LIGHTING SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTIONS 652 TO 657 AND 659 EXCEPT:

ALL CHANGES OR ANY DEVIATIONS FROM PLANS MUST BE APPROVED BY STREET LIGHTING ENGINEERING.

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

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

3 LOCATIONS OF THE HDPE AND NONMETALLIC PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, INSTALLATION MAY REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. UNDER THE APPROVAL OF THE CITY OF MILWAUKEE DPW STREET LIGHTING, APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED TO ILLUSTRATE AS BUILT CONDITIONS.

4 CONDUIT INSTALLED BEHIND CURB AND UNDER DRIVEWAYS SHALL BE INSTALLED AT A DISTANCE OF MINIMUM OF 6 INCHES AWAY FROM THE BACK OF CURB TO THE CENTER LINE OF CONDUIT, AND MINIMUM 24 INCHES DOWN MEASURED FROM THE TOP OF CURB OR FINISHED GRADE TO THE TOP OF CONDUIT.

5 DEPTH OF CONDUIT INSTALLED BELOW STREETS, HIGHWAYS, AND ALLEYS SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM. (MEASURED FROM FINISHED FLANGE LINE) IF THE CONTRACTOR DOES ANY DEVIATION FROM THE STREET LIGHTING DESIGN WITHOUT THE STREET LIGHTING ENGINEERS SIGNED APPROVAL.

6 CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION.

7 WHEN THERE IS MORE THAN ONE CONDUIT TO BE INSTALLED, PLACE ALL CONDUITS IN THE SAME TRENCH, OR BORE MULTIPLE CONDUITS TOGETHER AT THE SAME TIME.

8 CONDUIT INSTALLATION THAT REQUIRE TRENCHING SHALL NOT BE BACKFILLED PRIOR TO INSPECTION ON THE CONDUIT.

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

10 BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

11 ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

12 PRIOR TO CONDUIT ACCEPTANCE, ALL OPEN CONDUIT ENDS, AND UN-TERMINATED CONDUITS 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. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

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

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

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

16 UNLESS THE CONDUIT IS DESIGNED AND SHOWN WITH BENDS ON THE PLANS, ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO CONCRETE BASE, AND PULL BOX TO ENCLOSURE. OTHERWISE IT MUST BE APPROVED BY THE STREET LIGHTING ENGINEER.

STREET LIGHTING GENERAL NOTES:

17 MINIMUM CONDUIT CLEARANCES FOR CONDUIT CROSSINGS AND PULL BOXES FROM THE FOLLOWING:
FIRE HYDRANTS: 6-FT TREE TRUNKS: 10-FT END OF DRIVEWAY FLARES: 6-FT
UNLESS NOTED OTHERWISE, OR APPROVED BY THE STREET LIGHTING ENGINEER.

18 HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED AND WILL BE CONSIDERED INCIDENTAL TO THE BID ITEM BEING INSTALLED. COORDINATE ALL WORK NEAR GAS LINES WITH WE ENERGIES.

19 TYPICAL RECTANGULAR PULL BOXES / 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 TYPICAL CONDUIT INSTALLATION FROM THE PULL BOX TO A DIRECT BURIED STREET LIGHT POLE IS AS FOLLOWS: USE A NYLON LIQUIDTIGHT CONNECTOR (UL APPROVED) TO CONNECT THE 1 1/2-INCH LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT LFNC-B (UL APPROVED) TO THE PULL BOX AND CONNECT TO STREET LIGHT POLE BY STUBBING UP A MINIMUM OF 6 INCHES OF THE LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (LFNC-B) INTO THE CABLE SLOT.

21 ALL CONDUITS AND JUNCTION BOXES EMBEDDED IN STRUCTURE SHALL BE PAID UNDER STRUCTURE PAY ITEMS. CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EMBEDDED CONDUITS.

22 AT EVERY BRIDGE JOINT, EXPANSION/DEFLECTION FITTINGS MUST BE USED TO PREVENT DAMAGE TO CONDUIT AND LIGHTING CIRCUITS. THIS ITEM IS INCIDENTAL TO THE CONDUIT BID ITEM, AND SHALL BE PAID UNDER STRUCTURE PAY ITEMS.

23 THE SUPPORT CHANNELS FOR INSTALLATION OF CONDUITS, LUMINAIRES, JUNCTION BOXES AND ENCLOSURES SHALL BE STAINLESS STEEL UNISTRUT P1000 SERIES OR APPROVED EQUAL, CHANNELS SHALL BE SLOTTED OR PERFORATED.

24 ALL HDPE OR NONMETALLIC PVC CONDUITS THAT CONNECT TO PULL BOXES REQUIRE A PVC END BELL CONNECTOR INSIDE THE PULL BOX

25 PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINETS, PULL BOXES AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO ASSOCIATED CONDUIT PAY ITEM.

26 PROVIDE 3 INCH PVC SCHEDULE 40 CONDUIT ELBOWS IN ALL GROUND MOUNTED CONCRETE LIGHT BASES FOR CABLE IN DUCT TYPE INSTALLATION. THIS WORK IS INCIDENTAL TO CONCRETE BASES PAY ITEMS.

27 AT EACH SIGNAL STANDARD BASE PROVIDE 2 INCH PVC SCHEDULE 40 CONDUIT FROM PULL BOX TO SIGNAL STANDARD BASE. INSTALLATION OF PULL BOX AND CONDUIT ARE INCIDENTAL TO SIGNAL STANDARD BASE INSTALLATION WORK.

28 CONDUCTOR COLORS: 240/480, 1 PHASE - BLACK (HOT) /WHITE (NEUTRAL) // RED (HOT) /GRAY (NEUTRAL) / GREEN (GROUND)

29 INSTALL COMMON GROUND CONDUCTOR IN CONDUIT WHERE MULTIPLE BRANCH CIRCUITS CONDUCTORS ARE INSTALLED IN SAME CONDUIT AND SPLICE THE GROUND CONDUCTOR WITH TAP CONNECTOR IN PULLBOX.

30 PROVIDE MINIMUM WIRES / CONDUCTOR(S) SLACK AS NOTED BELOW:
PULL BOXES: SEE DETAIL 142
- CONNECTED WIRES TO LIGHT POLE IN PULL BOX MUST BE EXTENDED MINIMUM 3 FT. BEYOND TOP OF PULL BOX
- UNCONNECTED WIRES THAT BY PASS THROUGH PULL BOX MUST HAVE A MINIMUM OF 6 FT. SLACK COIL LEFT INSIDE PULL BOX

EMBEDDED JUNCTION BOXES IN PARAPIT WALL :
- CONNECTED WIRES IN JUNCTION BOX EXTEND MINIMUM 2 FT. BEYOND TOP OF JUNCTION BOX
- UNCONNECTED WIRES IN JUNCTION BOX LEAVE MINIMUM OF 4 FT. SLACK COIL IN JUNCTION BOX

DISTRIBUTION CENTER/LOAD CENTER: EXTEND 10-FT.
BREAK AWAY TRANSFORMER BASE: EXTEND 2-FT.

31 UNDERGROUND WIRE & CONDUIT SHOWN ON PLANS TO BE ABANDONED IN PLACE UNLESS DIRECTED BY THE ENGINEER. CONTRACTOR MAY CHOOSE TO REMOVE CONDUCTOR AT THEIR OWN EXPENSE.

32 LIGHT POLES INSTALLED BEHIND THE CURB NEED TO BE SET 30 INCHES BACK FROM FACE OF CURB TO CENTER OF POLE, SO TO MEET THE MINIMUM DISTANCE OF 24 INCHES FROM THE CURB FACE TO THE CURB SIDE FACE OF THE POLE.

33 ON ALL NEW STREET LIGHT POLES A PLAQUE WITH THE POLE NUMBER AS SHOWN ON THE PLANS SHALL BE AFFIXED ONTO THE POLE SHAFT AS PART OF POLE INSTALLATION.

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 12-DEC-2022 09:08
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC.12-2022

STREET LIGHTING GENERAL NOTES:

34 ALL WIRE CONNECTIONS REQUIRE ANTI-OXIDANT TO BE APPLIED TO THE CONNECTIONS

35 ALL HARDWARE NUT AND BOLT CONNECTIONS REQUIRE ANTI SEIZE TO BE APPLIED TO THEM

36 COORDINATE NEW CONDUIT CONNECTIONS WITH EXISTING CONDUIT, DUCT PACKAGES, AND PULL BOXES/ VAULTS/ MANHOLES WITH CITY OF MILWAUKEE STREET LIGHTING. THE CITY REQUIRES THREE WORKING DAYS ADVANCED NOTICE. CONTACT ELECTRICAL SUPERVISOR
STREET LIGHTING - NEAL KARWEIK (OFFICE 414-286-5943 (CELL) 414-708-4245
STREET LIGHTING - WILLIE COTTON (OFFICE) 414-286-5997 (CELL) 414-708-1629
STREET LIGHTING - DISPATCHER @ 414-286-5944
TRAFFIC SIGNALS - RUDY GUTIERREZ (OFFICE) 414-286-5941 (CELL) 414-708-5148
TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687

37 IMMEDIATELY AFTER THE CONTRACTOR HAS COMPLETED ALL THE ELECTRICAL PULL BOXES / VAULTS, CONDUIT AND CONDUIT CONNECTIONS, AND JUST BEFORE ELECTRICAL WORK IS COVERED UP WITH CONCRETE, 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 - NEAL KARWEIK (OFFICE) 414-286-5943 (CELL) 414-708-4245
STREET LIGHTING - WILLIE COTTON (OFFICE) 414-286-5997 (CELL) 414-708-1629
STREET LIGHTING - STEVEN RHODA (OFFICE) 414-286-5942 (CELL) 414-708-4251
STREET LIGHTING - DISPATCHER @ 414-286-5944
TRAFFIC SIGNALS - RUDY GUTIERREZ (OFFICE) 414-286-5941 (CELL) 414-708-5148
TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687

38 CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS FOR ALL WORK BEING DONE DETAILING THE FINAL PLACEMENT OF CONDUIT, CABLING, EQUIPMENT, AND GEOMETRIC MODIFICATIONS UNDER THE CONTRACT. PROVIDE (.PDF FORMAT) COPY CONFORMING TO CMM 1-65.14, OR RECORD ALL CHANGES IN RED INK ONLY ON THE AS-LET (DESIGN) PAPER DRAWINGS. THE CITY OF MILWAUKEE DPW ENGINEER WILL REJECT AS-BUILTS WITH INCOMPLETE OR INCORRECT CONTENT OR NOT CONFORMING TO CMM STANDARDS.

39 CONTRACTOR TO DELIVER THE FOLLOWING REMOVED STREET LIGHTING MATERIALS:
-ALUMINUM AND WOOD POLES
-LUMINAIRE BRACKET ARMS
-LUMINAIRES
-BREAKAWAY TRANSFORMER PEDESTALS
-WIRING PEDESTALS (GREEN IN COLOR)
TO CITY OF MILWAUKEE STREET LIGHTING YARD AT 1540 W. CANAL ST.
CALL RICO LOPEZ AT 414-286-5983 (CANAL OFFICE) OR 414-286-6123 (DPW FIELD OFFICE) OR DISPATCHER AT 414-286-5944
THREE (3) WORKING DAYS BEFORE TO COORDINATE DELIVERY OF MATERIALS

40 CONTRACTOR WILL BE RESPONSIBLE FOR THE DISPOSAL OF CONCRETE POLES, CONCRETE BASES, AND WIRING.

41 CONTRACTOR SHALL DISPOSE OF REMOVED EXISTING LAMPS IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

42 ONLY WHEN THE CITY OF MILWAUKE IS FURNISHING MATERIALS FOR A PROJECT THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE STREET LIGHTING SHOP YARD CONTACT PERSON FOUR (4) WORKING DAYS BEFORE, AND WILL NEED TO PROVIDE THE EXACT QUANTITY OF MATERIALS NEEDED. THE ADVANCE NOTICE WILL ALLOW THE SHOP TO GATHER THE REQUEST ITEMS FOR THE CONTRACTOR TO PICK UP AND SIGN FOR TAKING POSSESSION OF THE MATERIALS.

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MATERIALS THAT THEY TAKE POSSESSION OF AND FOR THE ANY RETURNING OF ANY UNSED MATERIALS BACK TO THE SHOP IN GOOD CONDITION. IF ANY MATERIALS COME BACK DAMAGED OR BROKEN THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING THE BROKEN OR DAMAGED ITEMS.

STREET LIGHTING SHOP YARD CONTACT PERSON:
NEAL KARWEIK 414-286-5943 (OFFICE) 414-708-4245 (CELL)
ALL THE MATERIALS MUST BE EITHER PICKED OR DROPPED OFF ALL AT ONE TIME.
THE STREET LIGHTING SHOP YARD HOURS FOR PICKING UP MATERIALS IS FROM 8AM TO 2PM: MONDAY THROUGH FRIDAY.

CONTRACTOR MUST BE OUT OF THE SHOP YARD BY 2PM NO LATER.

STREET LIGHTING GENERAL NOTES:

AS-BUILT GUIDELINES:

PROVIDE 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 ENGINEER WILL REJECT AS-BUILTS WITH INCOMPLETE OR INCORRECT CONTENT OR NOT CONFORMING TO CMM STANDARDS.

UPON PROJECT COMPLETION, FOLLOW THE WISDOT REQUIREMENTS PER CMM 165.12 AS-BUILT PLANS, THE PROJECT ENGINEER AND/OR ELECTRICAL CONTRACTOR SHALL SUBMIT AN ELECTRONIC AS-BUILT PLAN. ANY CHANGES FROM THE AS-LET PLAN THAT WERE BUILT INTO THE PROJECT SHOULD BE RECORDED IN RED USING ADOBE ACROBAT PROFESSIONAL OR EQUIVALENT SOFTWARE. DO NOT SCAN FIELD NOTES TO CREATE THE DIGITAL AS-BUILT PLAN.

IF THERE IS A STRUCTURE DRAWING, INCLUDE ALL STRUCTURES DRAWING SHEETS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSERT ANY ADDENDUM OR REPLACEMENT DRAWING SHEETS. TO DO THIS, RENUMBER THEM SIMILARLY TO THE ORIGINAL DRAWING SHEET.
FOR EXAMPLE:
REVISED SHEET 5 WOULD REPLACE SHEET 5. HOWEVER, ALL THE ORIGINAL SHEETS SHALL REMAIN IN THE AS-BUILT. IF THE SHEET HAS BEEN REPLACED CROSS IT OUT WITH AN X AND INDICATE THE NUMBER OF ITS REPLACEMENT SHEET. IF ADDITIONAL SHEETS WERE ADDED, INSERT THEM IN THE ORIGINAL LOCATION AND LABEL THEM WITH THE PREVIOUS SHEET NUMBER FOLLOWED BY AN "A", "B", "C", ETC.

NOTE THE SHEET CHANGES ON THE TITLE SHEET UNDER THE ORDER OF SHEETS.

THE TITLE SHEET OF THE AS-BUILT DRAWING SHOULD INCLUDE THE FOLLOWING INFORMATION:
AS-BUILT DRAWING
SUPERVISOR:
PROJECT MANAGER:
CONTRACTOR LEADER:
CONTRACTOR COMAPNY:
WORK STARTED:
WORK COMPLETED:

LINE OUT OR CROSS OUT ALL CHANGED INFORMATION AND WRITE-IN THE CORRECTED INFORMATION ABOVE THE ORIGINAL OR CLOSE TO IT WHEREVER POSSIBLE. USE BLANK SPACES ON THE DRAWING SO NOTES ARE NOT SUPERIMPOSED. DRAWINGS WITH EXCESSIVE DETAIL MAY REQUIRE AN ALTERNATE APPROACH. NUMBERED CHANGES OR ADDITIONS MAY BE SHOWN ON SUPPLEMENTAL NON-DRAWING SHEETS.

- 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 THE 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 TO THE NEAREST INCH (I.E., 24")
- SHOW LOCATION AND ELEVATIONS ON CONDUIT 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 ALL OTHER REQUIRED AS-BUILT INFORMATION.

BY MAIL SEND TO:
CITY OF MILWAUKEE
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION - CONSTRUCTION
CHIEF CONSTRUCTION ENGINEER
TONY KOTECKI
841 NORTH BROADWAY, ROOM 701
MILWAUKEE, WISCONSIN 53202

BY EMAIL SEND TO:
CITY OF MILWAUKEE
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION - CONSTRUCTION
CHIEF CONSTRUCTION ENGINEER
TONY KOTECKI
AKOTEC@MILWAUKEE.GOV

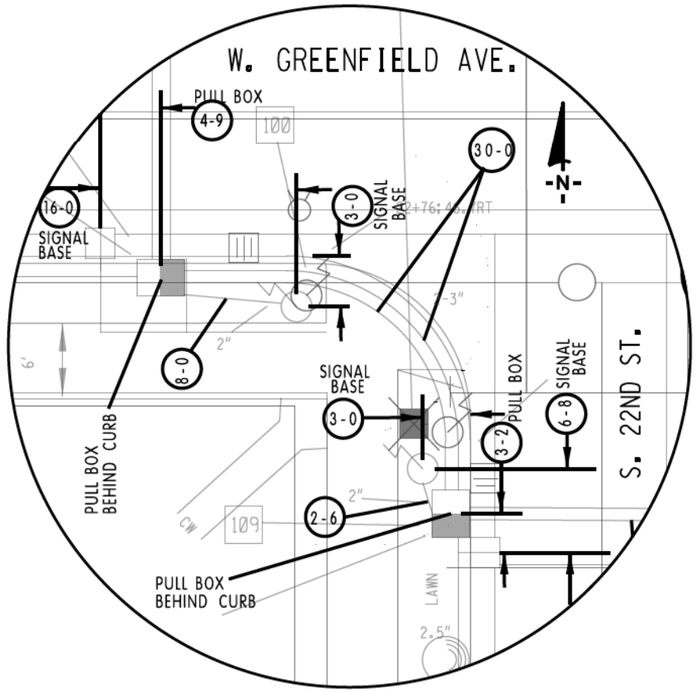
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 12-DEC-2022 09:18
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC.12-2022

USE RED INK TO DO AS-BUILTS

RECORD RETENTION GUIDELINES:

- CONTRACTOR TO LOCATE AND CLEARLY DIMENSION ALL OF THERE NEWLY INSTALLED CONDUIT RUNS, FITTINGS, SPLICE VAULTS, PULL BOXES, METER PEDESTALS, CONCRETE BASES, TRANSFORMERS, POLES AND OTHER APPURTENANCES IN TWO (2) 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 ORGINAL 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 OF PIPES AND FITTINGS WHERE CHANGES OR DEFLECTIONS IN DIRECTION OCCUR.
- SPECIAL DETAIL DRAWINGS WILL BE SUPPLIED WHERE REQUIRED FOR CLARITY.
- DEVIATIONS FROM ORIGINAL PLANS OR STANDARD DETAILS SHALL BE NOTED ON AS-BUILT DRAWINGS.
- IF THERE ARE NO CORRECTIONS OR ADDITIONS TO THE AS-LET PLAN(S) PUT "NO CHANGE" ON THE SHEET.

SUPERVISOR: _____
PROJECT MANAGER: _____
CONTRACTOR LEADER: _____
CONTRACTOR COMPANY: _____
WORK STARTED: _____
WORK COMPLETED: _____



FIELD RECORD EXAMPLE DETAIL NOT TO SCALE

TYPICAL DIMENSIONING OF CONDUIT, PULL BOXES, AND CONCRETE BASES

MEASURING GUIDE LINES

IF CONDUIT IS NOT PLACED DIRECTLY BEHIND THE CURB IN THE ISLANDS & SIDE TERRACE AREAS, A MEASURED DISTANCE FROM THE FACE OF CURB TO THE CONDUIT WILL NEED TO BE PROVIDED.

PROVIDE A MEASURED DISTANCE OF UNINTERRUPTED CONDUIT RUNS

USE PERMANENT OBJECTS LIKE HYDRANTS, CATCH BASINS, OR EVEN CURB FACE LINES EXTENED TO MEASURE OFF WHEN LOCATING CONDUIT, PULL BOXES AND CONCRETE BASES.

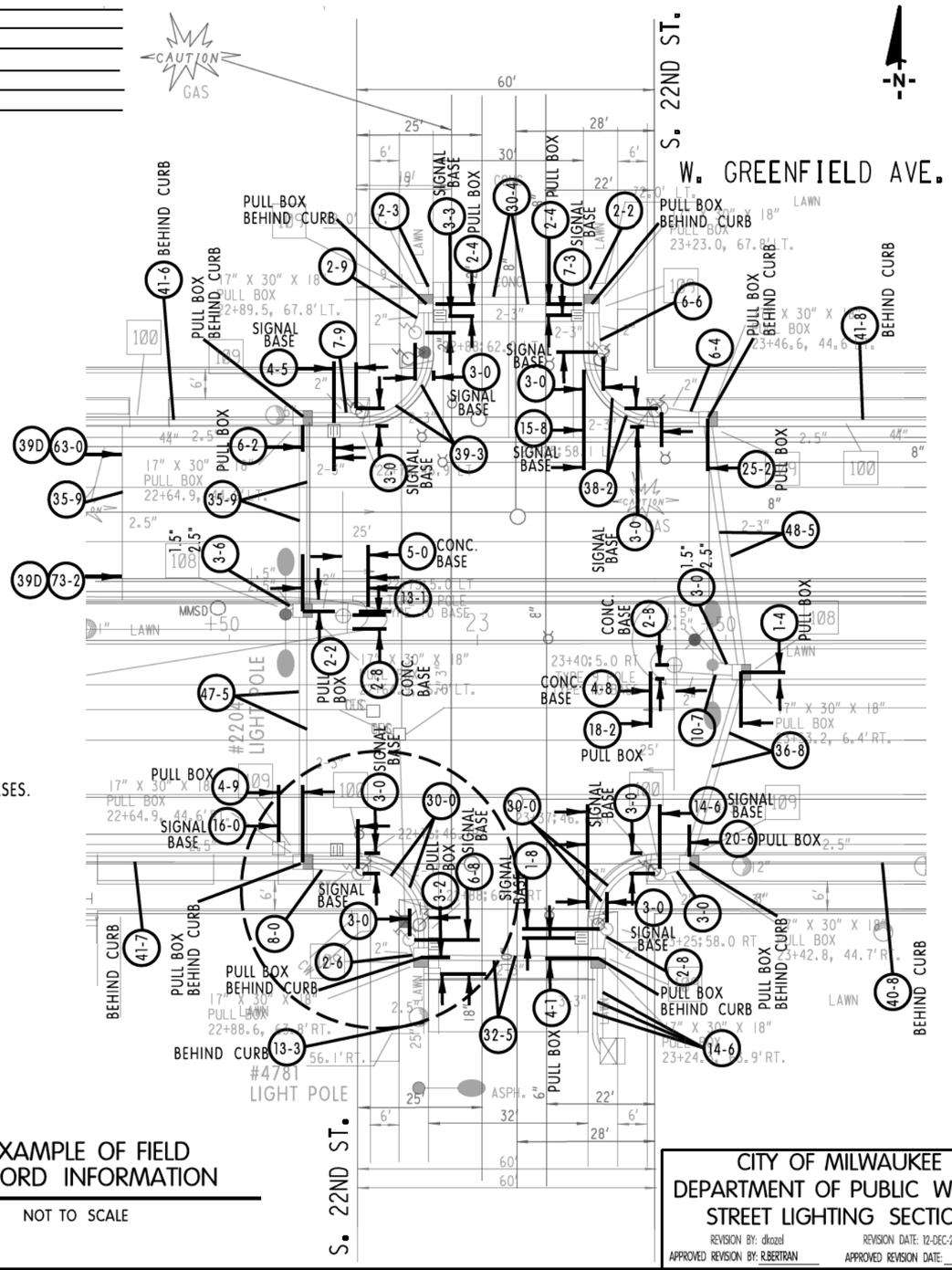
MEASURE TO OR FROM THE CENTERS OF OBJECTS FOR DISTANCE TAKING.

(39D) MEANS = CONDUIT IS 39" DEEP

(48-5) MEANS = LENGTH OF CONDUIT IS 48.5 FT. LONG (MEASURED TO NEAREST TENTH OF A FOOT)

OR

(25-6) MEANS = DISTANCE OF 25.6 FT. BETWEEN PERMANENT OBJECT OR CURB FACE TO CONDUIT, PULL BOX, AND CONCRETE BASE (MEASURED TO NEAREST TENTH OF A FOOT)



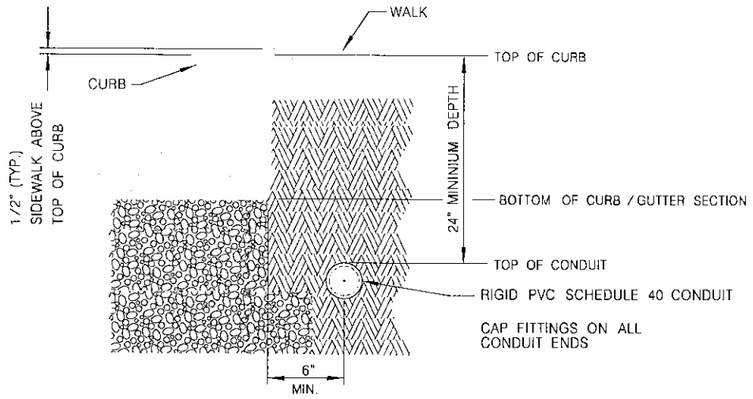
EXAMPLE OF FIELD RECORD INFORMATION

NOT TO SCALE

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 12-DEC-2022 09:26
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC.12-2022

PROJECT NO. 2275-05-70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET 131	E

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



100 NOT TO SCALE

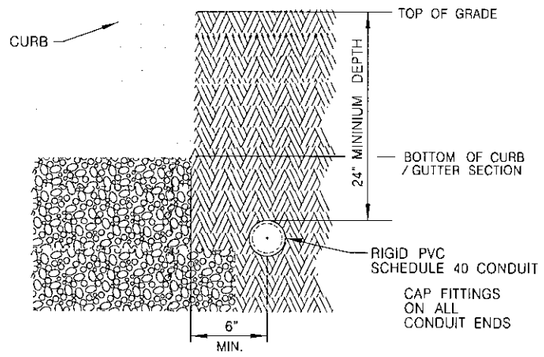
TYPICAL CONDUIT INSTALLATION BEHIND CURB

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

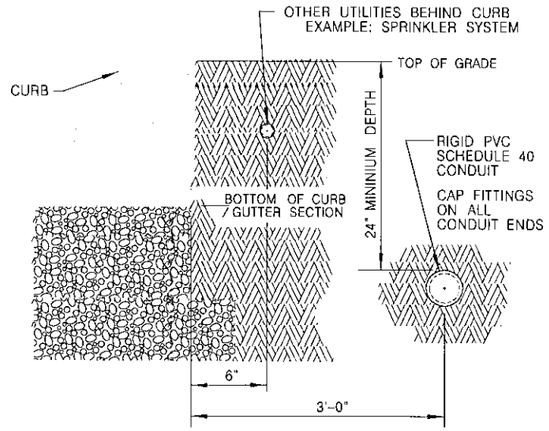
NOTE: 1) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

DETAIL "B"

CONDUIT TO BE PLACED 6" ON CENTER DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.



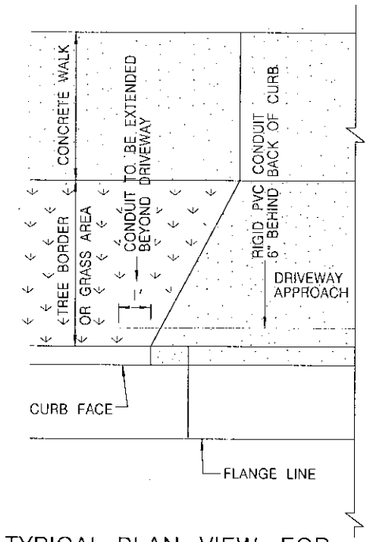
DETAIL "C"



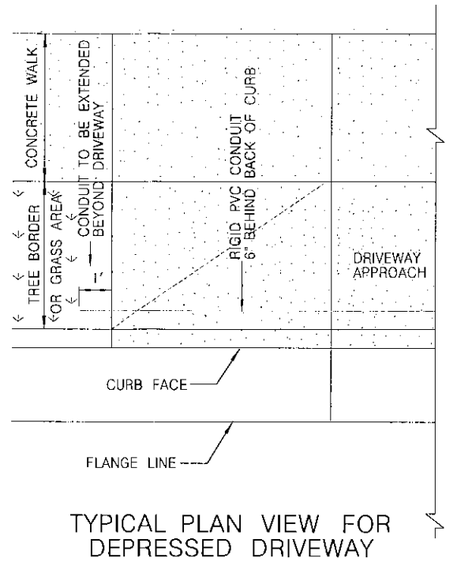
100 DETAIL "B" & "C" NOT TO SCALE

TYPICAL CONDUIT INSTALLATION BEHIND CURB

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

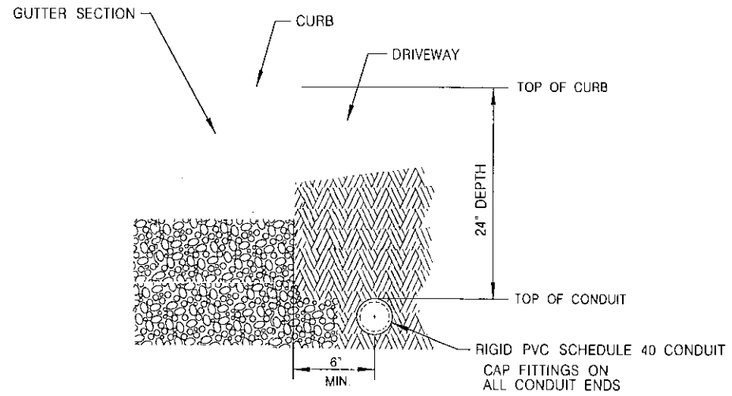


TYPICAL PLAN VIEW FOR FLARED DRIVEWAY



TYPICAL PLAN VIEW FOR DEPRESSED DRIVEWAY

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

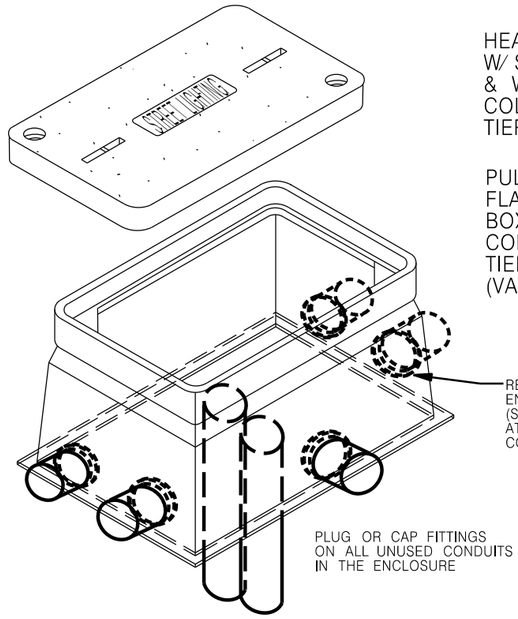


101 DETAIL NOT TO SCALE

TYPICAL CONDUIT INSTALLATION UNDER DRIVEWAYS OR PEDESTRIAN RAMPS

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

2

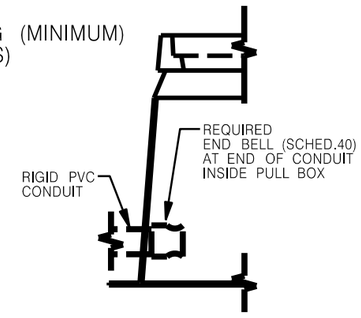


HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 BOLTS
COLOR: GRAY
TIER 15 RATING (MINIMUM)

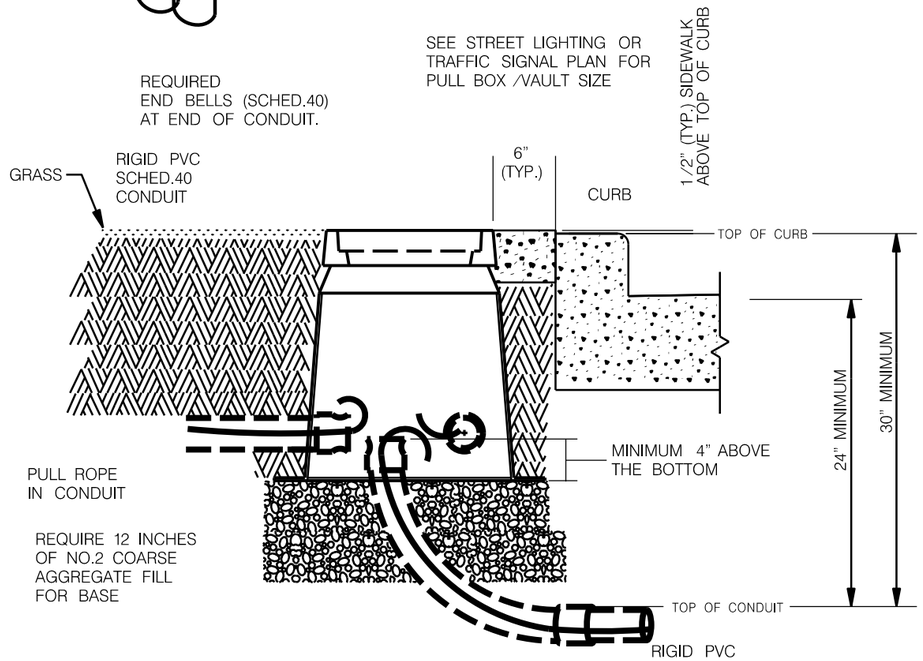
PULL BOX /VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY
TIER 15 RATING (MINIMUM)
(VARIOUS SIZES)

REQUIRED
END BELLS
(SCHED.40)
AT END OF
CONDUIT.

PLUG OR CAP FITTINGS
ON ALL UNUSED CONDUITS
IN THE ENCLOSURE



SEE STREET LIGHTING OR
TRAFFIC SIGNAL PLAN FOR
PULL BOX /VAULT SIZE

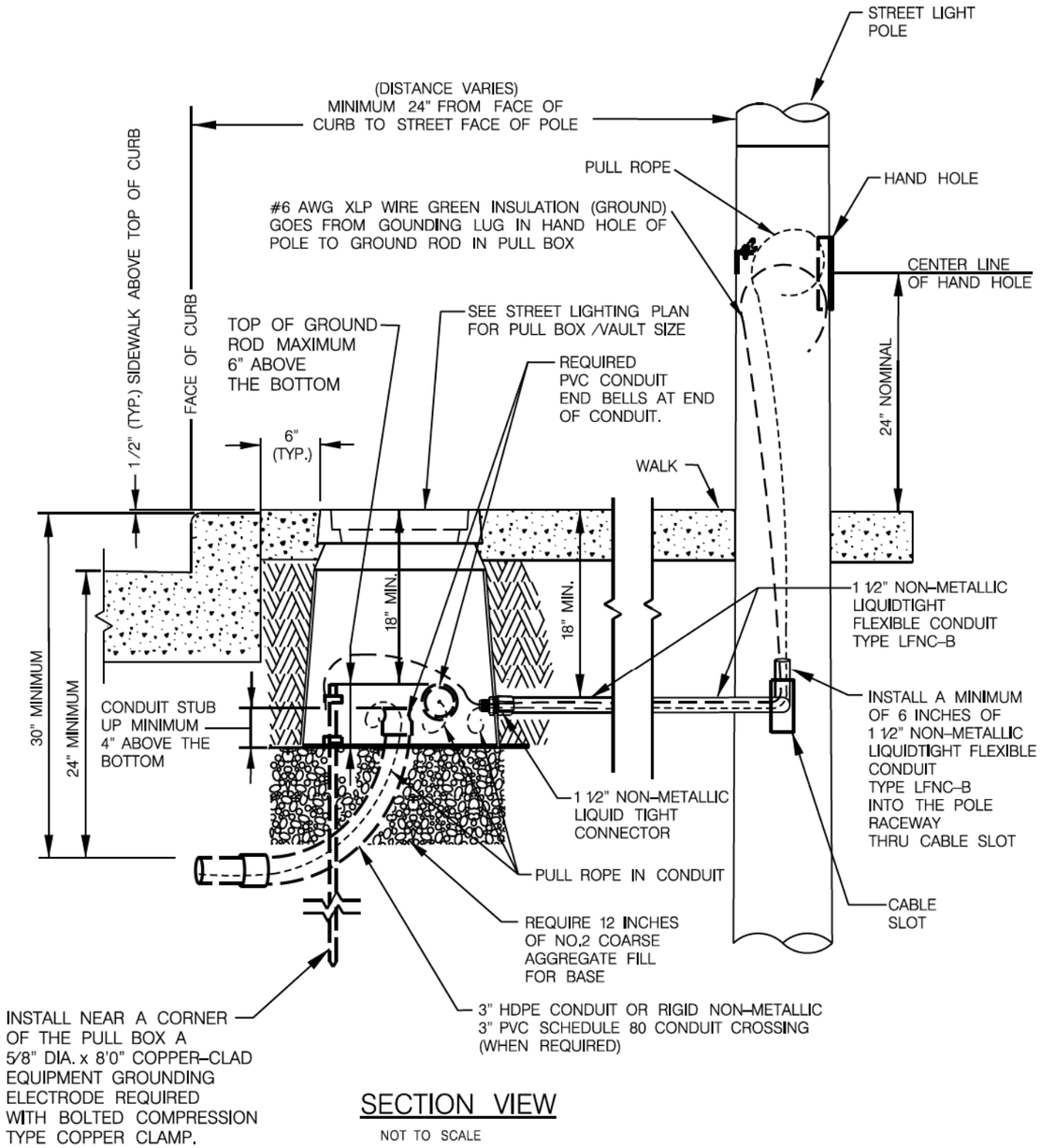


112 DETAIL 1

TYPICAL PULL BOX /VAULT INSTALLATION
IN EITHER PAVEMENT OR GRASS AREAS

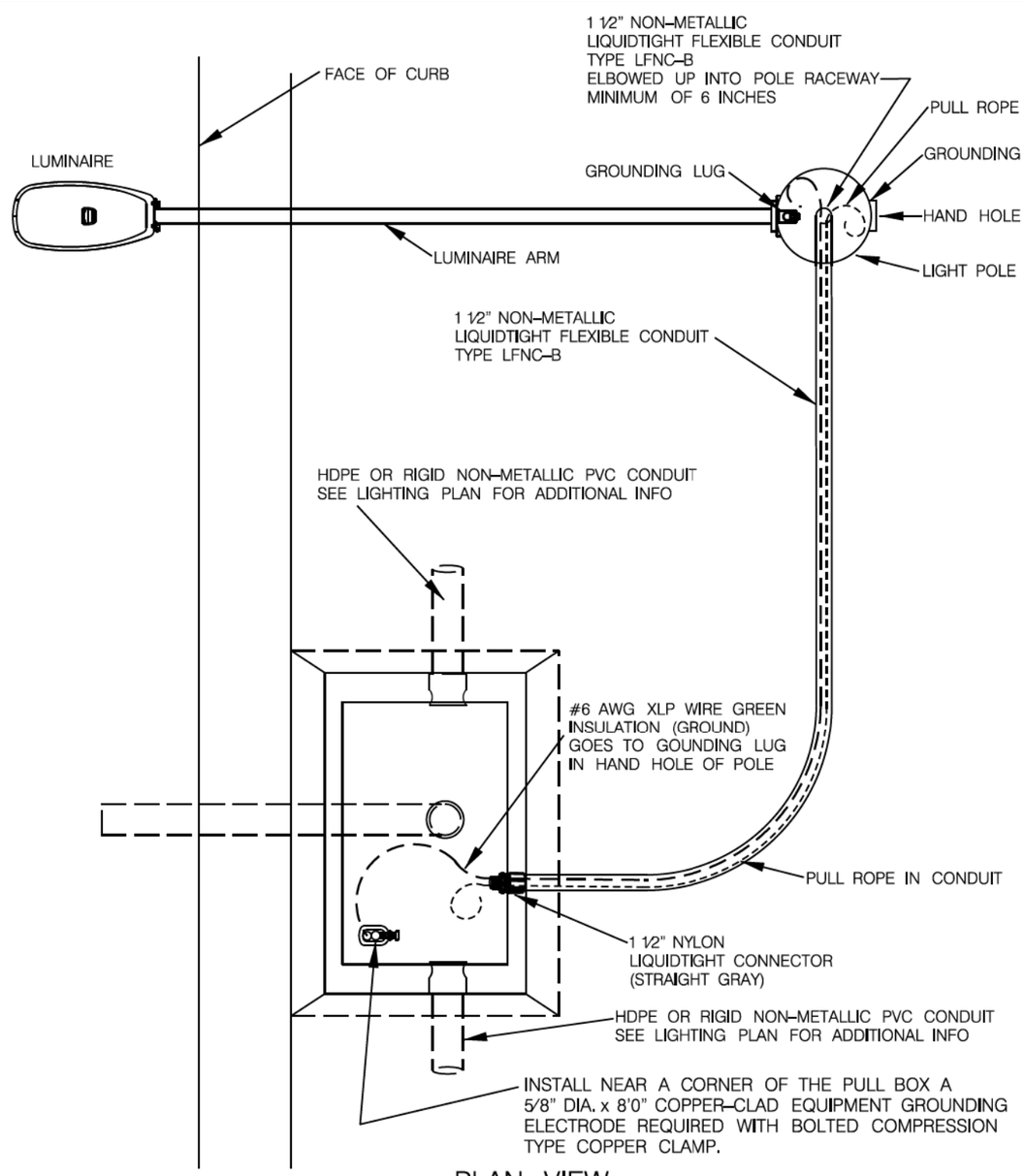
NOT TO SCALE

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



SECTION VIEW

NOT TO SCALE



PLAN VIEW

NOT TO SCALE

108

DETAIL VERSION

TYPICAL CONDUIT INSTALLATION FROM PULL BOX /VAULT TO DIRECT BURIED POLE

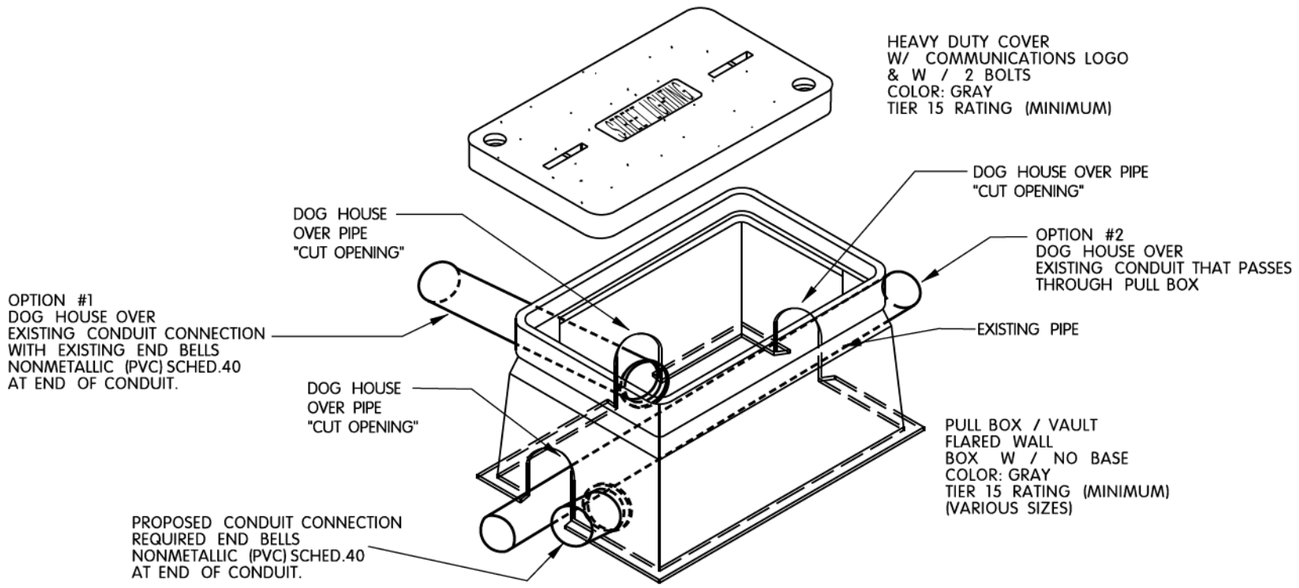
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

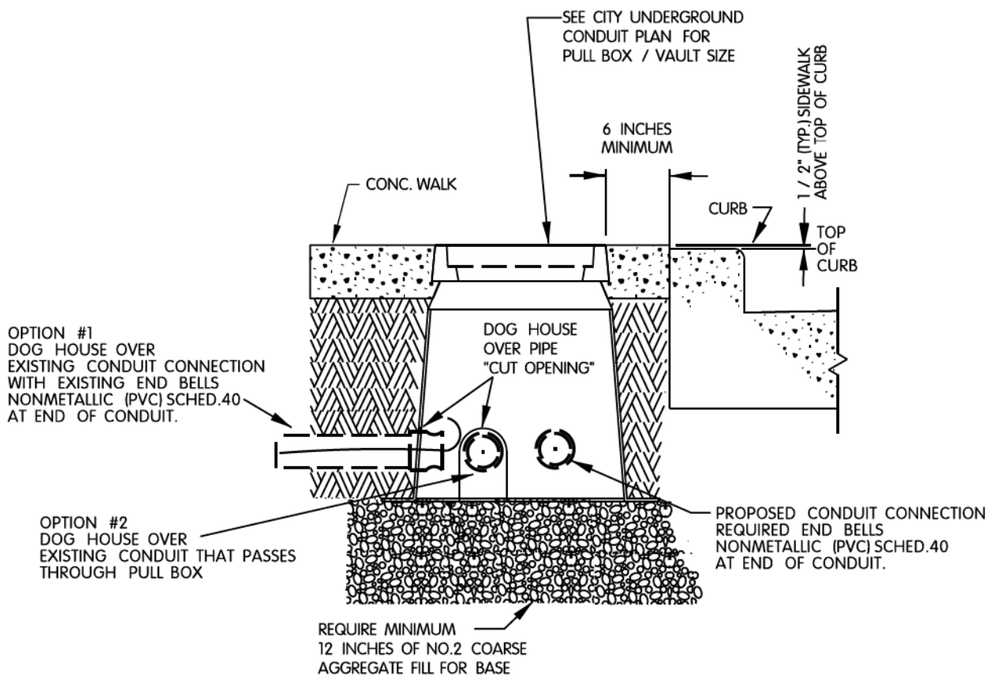
SHEET X OF X

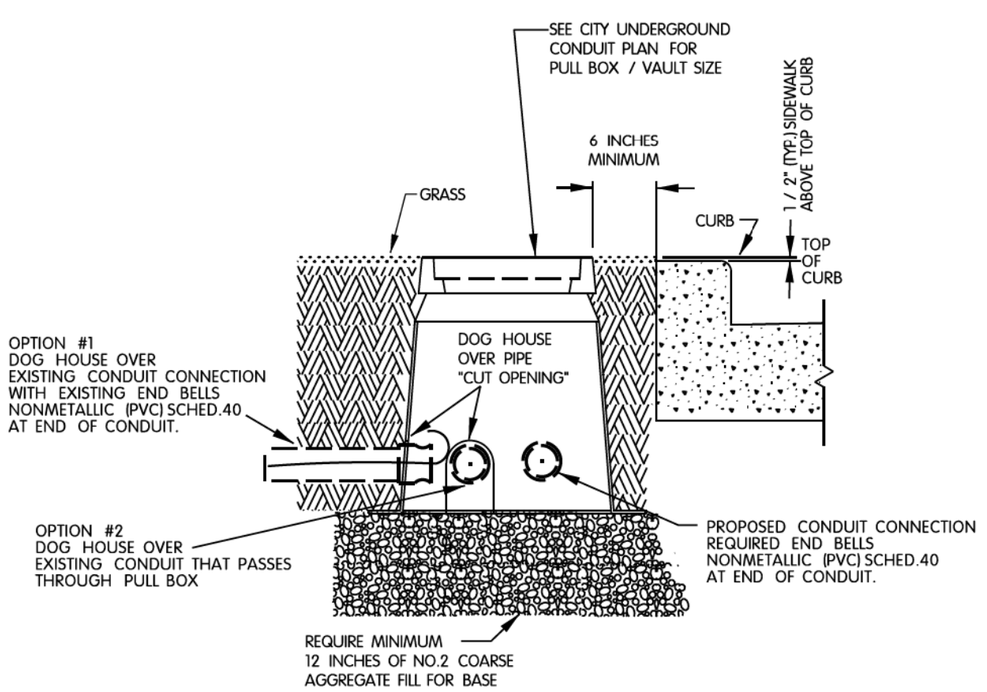
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

REVISION BY: dkozel REVISION DATE: 17-MAR-2023 06:25
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: MAR.17-2023

2







113 DETAIL FOR TYPES OF DOG HOUSING OVER EXISTING CONDUIT — NOT TO SCALE

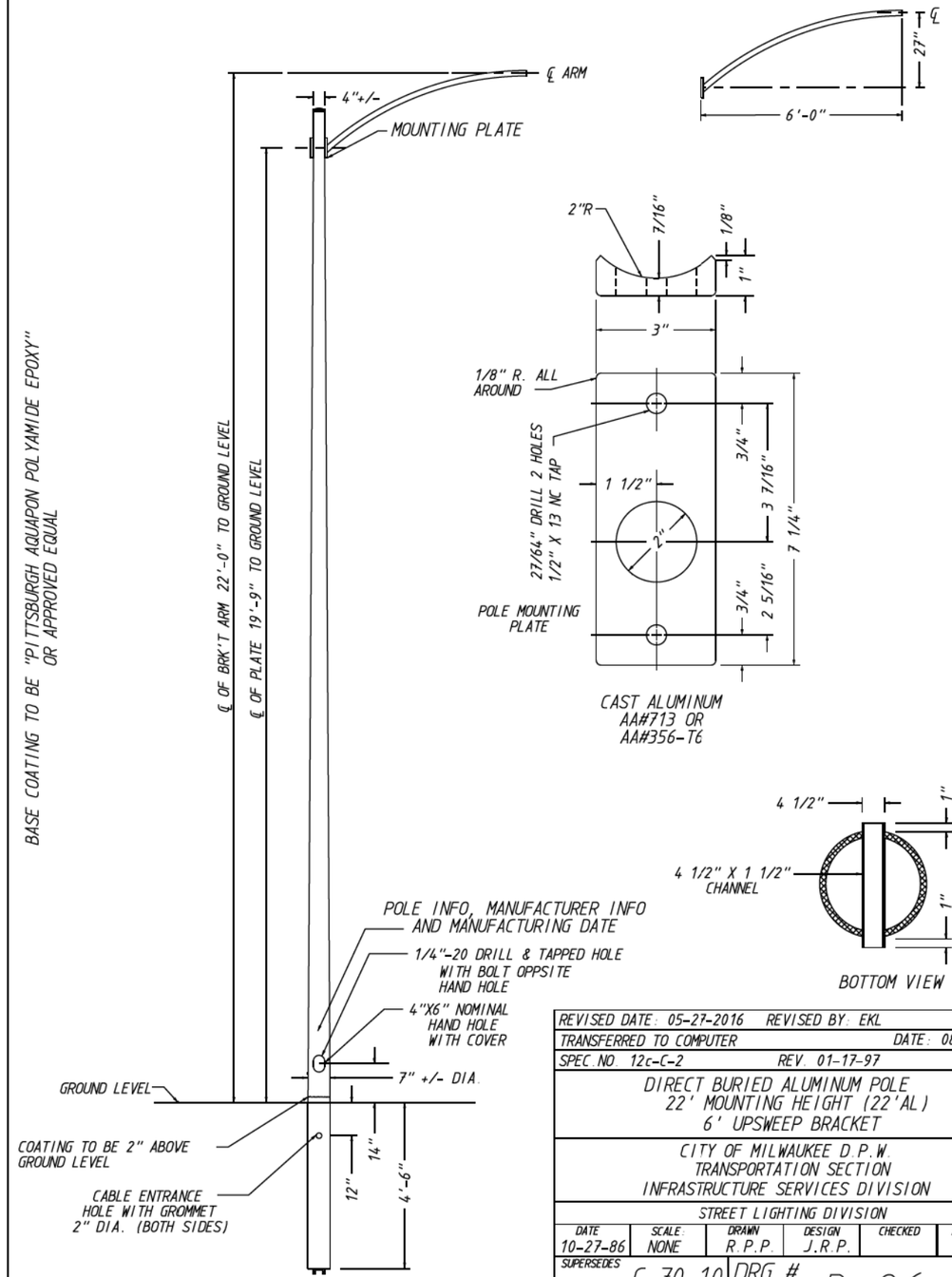
TYPICAL PULL BOX / VAULT INSTALLATION IN EITHER PAVEMENT OR GRASS AREAS

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

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

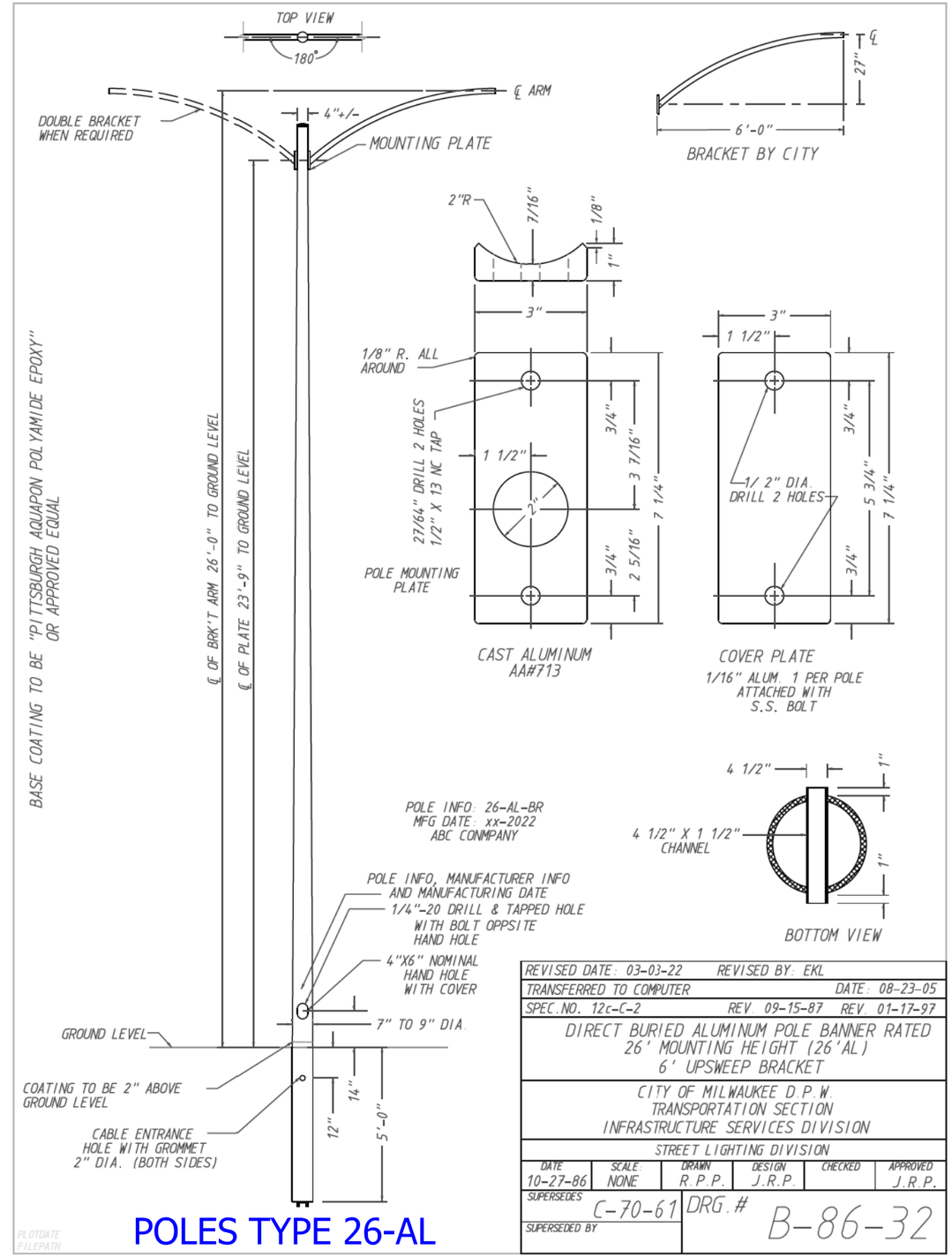
REVISION BY: dkozel — REVISION DATE: 3-MAR-2023 11:43
APPROVED REVISION BY: R.BERTRAN — APPROVED REVISION DATE: MAR.01-2023



REVISED DATE: 05-27-2016	REVISED BY: EKL				
TRANSFERRED TO COMPUTER			DATE: 08-23-05		
SPEC. NO. 12c-C-2		REV. 01-17-97			
DIRECT BURIED ALUMINUM POLE 22' MOUNTING HEIGHT (22'AL) 6' UPSWEEP BRACKET					
CITY OF MILWAUKEE D.P.W. TRANSPORTATION SECTION INFRASTRUCTURE SERVICES DIVISION					
STREET LIGHTING DIVISION					
DATE: 10-27-86	SCALE: NONE	DRAWN: R.P.P.	DESIGN: J.R.P.	CHECKED:	APPROVED: J.R.P.
SUPERSEDES: C-70-10		DRG. # B-86-31			
SUPERSEDED BY:					

PLOTDATE
FILEPATH

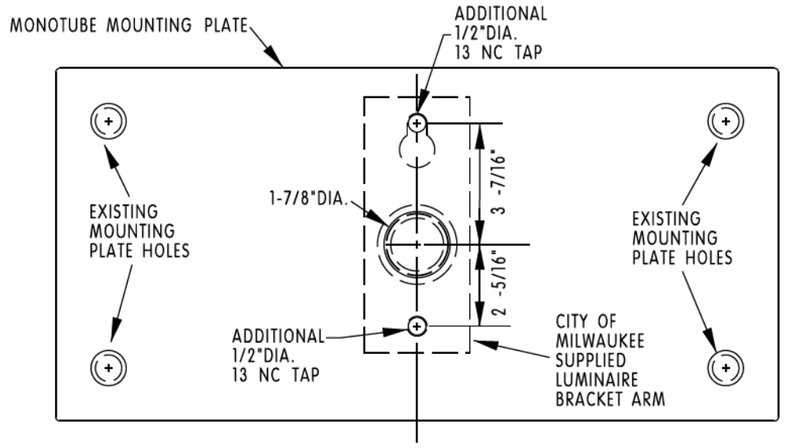
POLES TYPE 22-AL



REVISED DATE: 03-03-22	REVISED BY: EKL				
TRANSFERRED TO COMPUTER			DATE: 08-23-05		
SPEC. NO. 12c-C-2		REV. 09-15-87	REV. 01-17-97		
DIRECT BURIED ALUMINUM POLE BANNER RATED 26' MOUNTING HEIGHT (26'AL) 6' UPSWEEP BRACKET					
CITY OF MILWAUKEE D.P.W. TRANSPORTATION SECTION INFRASTRUCTURE SERVICES DIVISION					
STREET LIGHTING DIVISION					
DATE: 10-27-86	SCALE: NONE	DRAWN: R.P.P.	DESIGN: J.R.P.	CHECKED:	APPROVED: J.R.P.
SUPERSEDES: C-70-61		DRG. # B-86-32			
SUPERSEDED BY:					

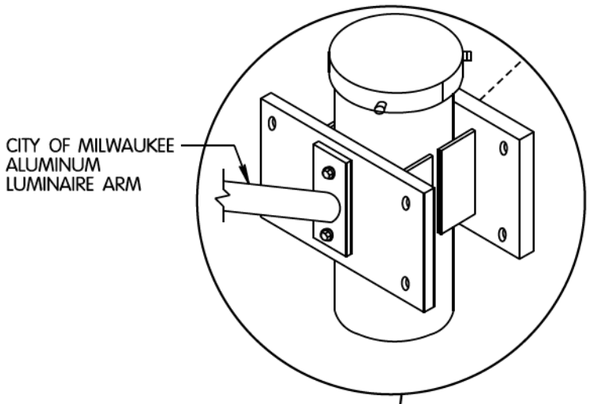
PLOTDATE
FILEPATH

POLES TYPE 26-AL

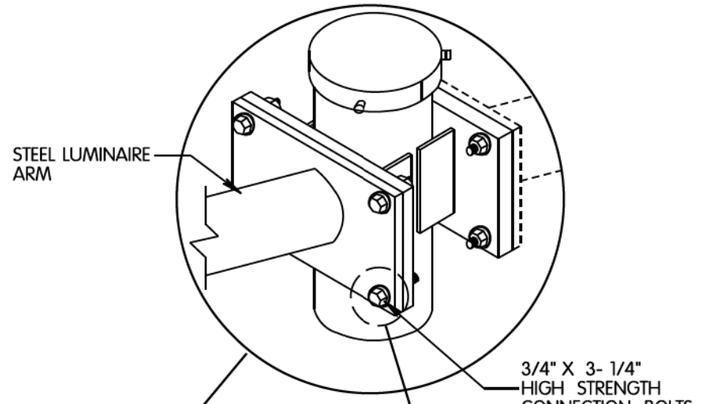


ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE

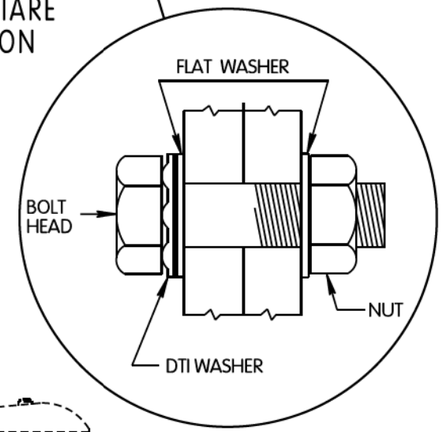
NOT TO SCALE



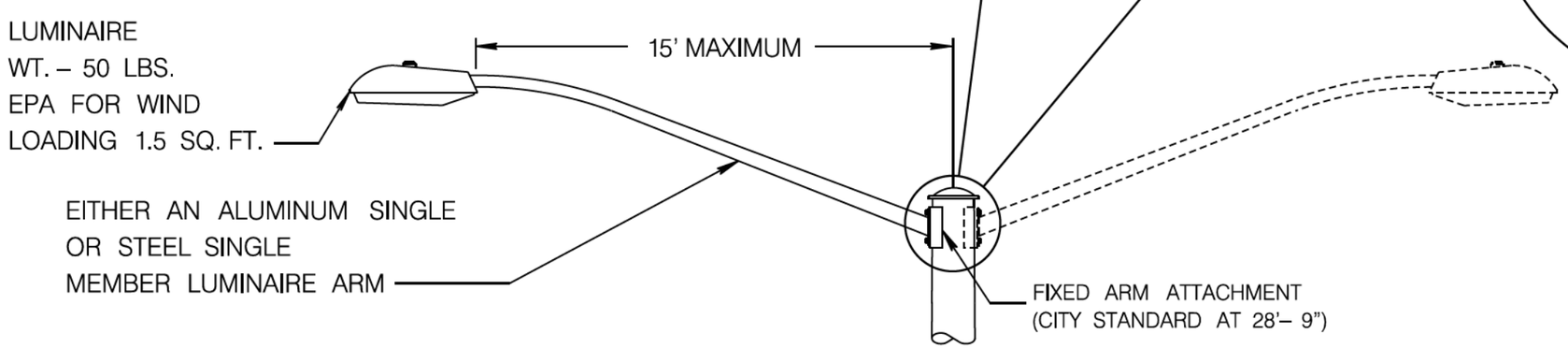
ALUMINUM LUMINIARE ARM OPTION



STEEL LUMINIARE ARM OPTION



RECOMMENDED BOLT ASSEMBLY DETAIL

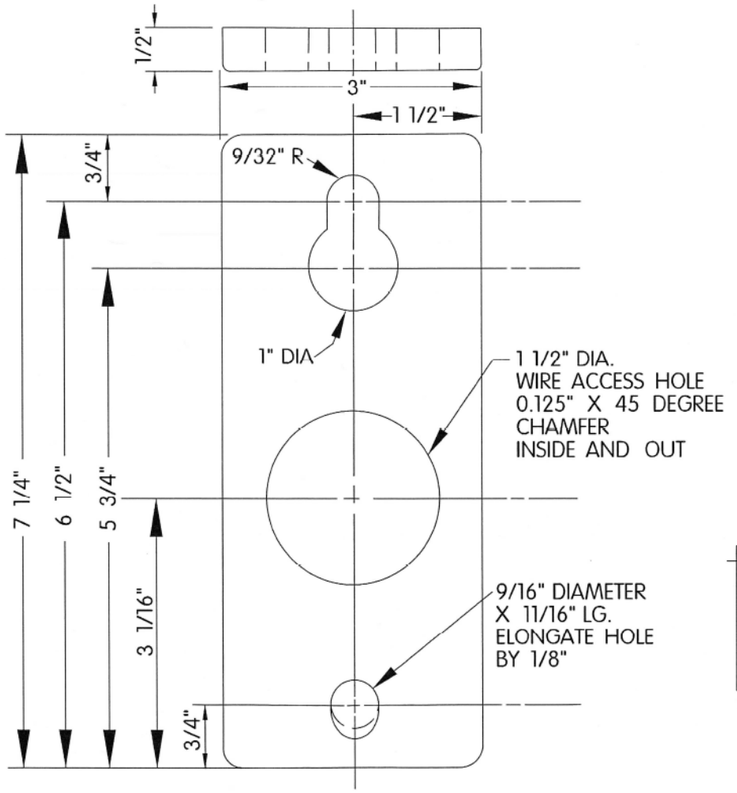


140 DETAIL — NOT TO SCALE

ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE FOR POLES: TYPE 10

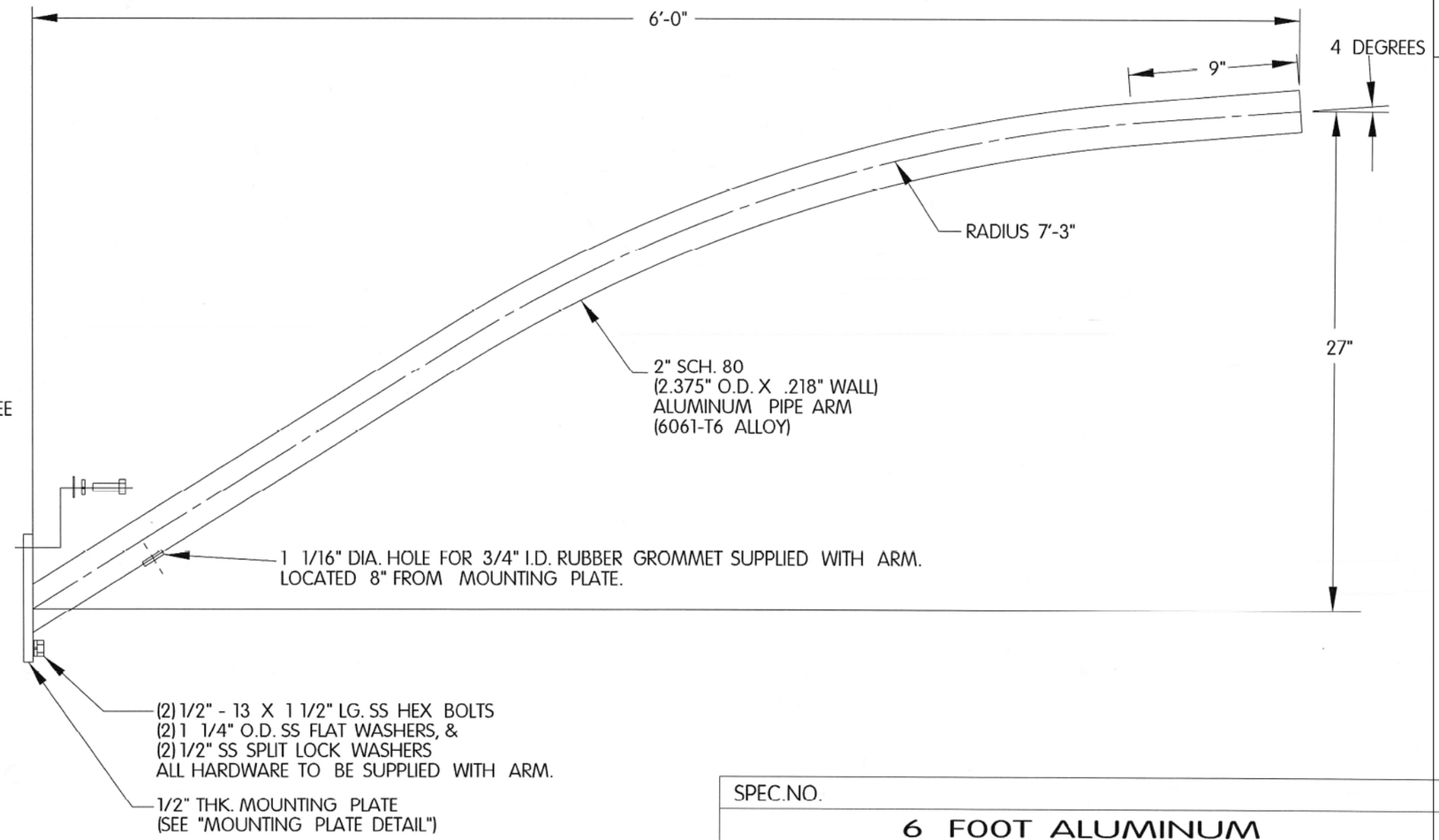
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

REVISION BY: dkozel — REVISION DATE: 23-MAR-2023 07:53
APPROVED REVISION BY: R.BERTRAN — APPROVED REVISION DATE: MAR.03-2023



MOUNTING PLATE DETAIL "ES #436"
1/2" THK. ALUMINUM
(6061-T6 ALLOY)

NOTE:
1" I.D. RUBBER GROMMET PROVIDED
FOR USE IN POLE SHAFT



SPEC.NO.

6 FOOT ALUMINUM UPSWEEP BRACKET

6'-0" X 27" X 2.4 SGL PIPE 3" X 7.25" PLMT
MATERIAL: ALUMINUM ALLOY, FINISH: SATIN

CITY OF MILWAUKEE D.P.W.
TRANSPORTATION SECTION
INFRASTRUCTURE SERVICES DIVISION

STREET LIGHTING DIVISION

DATE	SCALE:	DRAWN	DESIGN	CHECKED	APPROVED
8/1/2022	NONE	DK			RMB

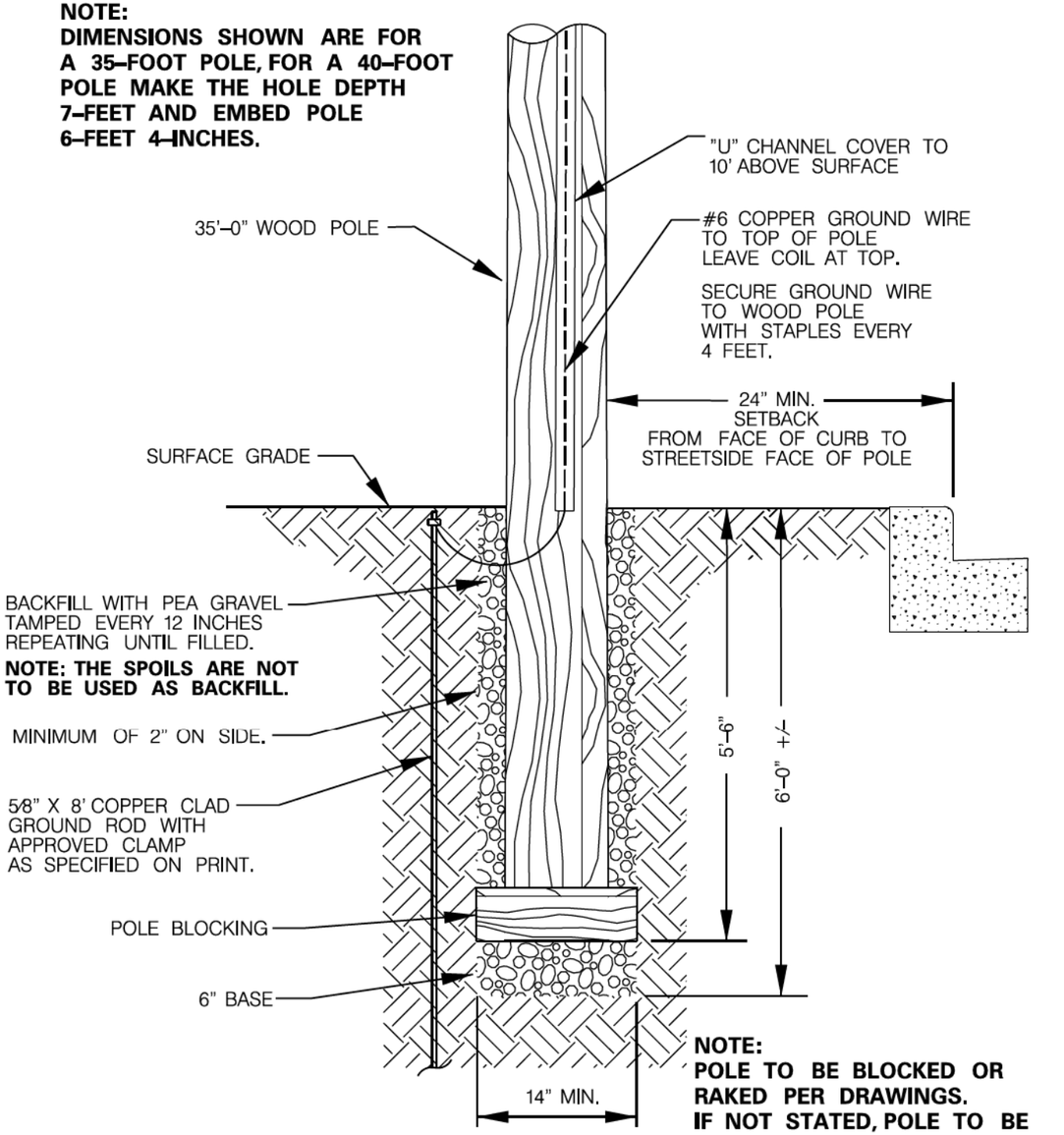
SUPERSEDES C-80-2

SUPERSEDED BY

DRG.# C-87-76

PROJECT NO. 2275-05-70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING DETAILS	SHEET 138	E

NOTE:
DIMENSIONS SHOWN ARE FOR A 35–FOOT POLE, FOR A 40–FOOT POLE MAKE THE HOLE DEPTH 7–FEET AND EMBED POLE 6–FEET 4–INCHES.



NOTE:
POLE TO BE BLOCKED OR RAKED PER DRAWINGS.
IF NOT STATED, POLE TO BE PERPENDICULAR WITH GROUND

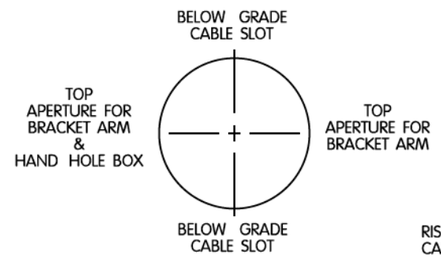
130A DETAIL NOT TO SCALE

TYPICAL 35 FT.WOOD POLE INSTALLATION

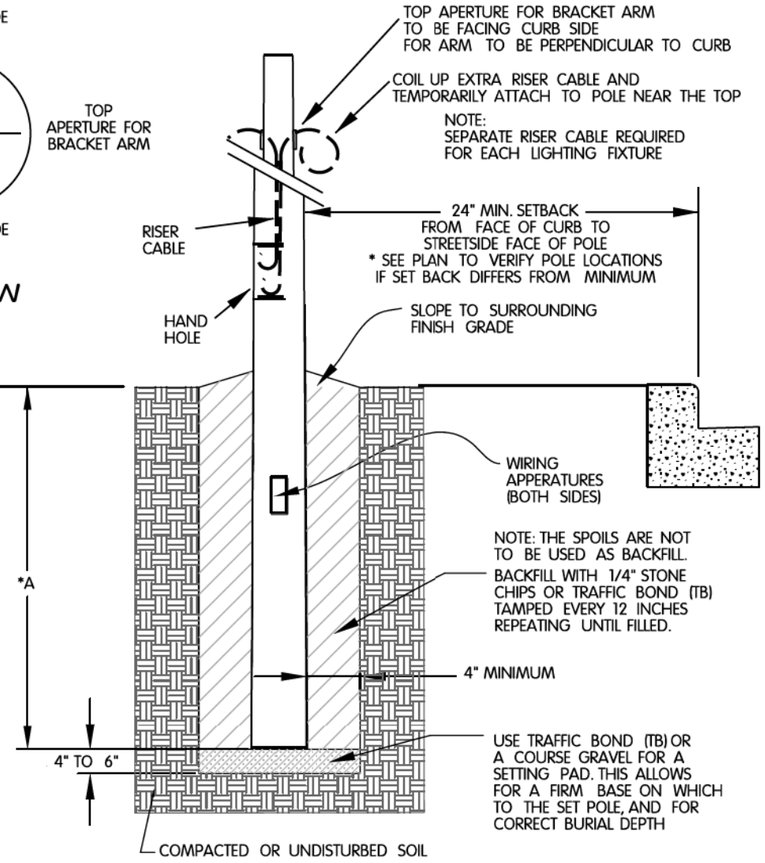
SEE NOTE FOR 40 FOOT POLE

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

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 18-MAY-2023 13:53
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC.12-2022



TOP VIEW



Aluminum Pole Burial Depth Chart
FOR DIMENSION *A USE THE FOLLOWING BURIAL DEPTHS DEPENDING ON THE LENGTH OF THE POLE.
21 FT. AL. = 26 FT. POLE LENGTH BURIED DEPTH = 5 FT.
26 FT. AL. = 31 FT. POLE LENGTH BURIED DEPTH = 5 FT. - 6 INCHES
31 FT. AL. = 36 FT. 10 INCHES POLE LENGTH BURIED DEPTH = 6 FT. - 4 INCHES

RISER CABLE LENGTH CHART
INTERNAL RISER CABLE IS COPPER 2#12UF WITH GROUND
21 FT. = 30 FT. OF CABLE
26 FT. = 35 FT. OF CABLE
31 FT. = 40 FT. OF CABLE

130B DETAIL NOT TO SCALE

TYPICAL ALUMINUM POLE INSTALLATION

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

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 18-MAY-2023 13:53
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC.12-2022

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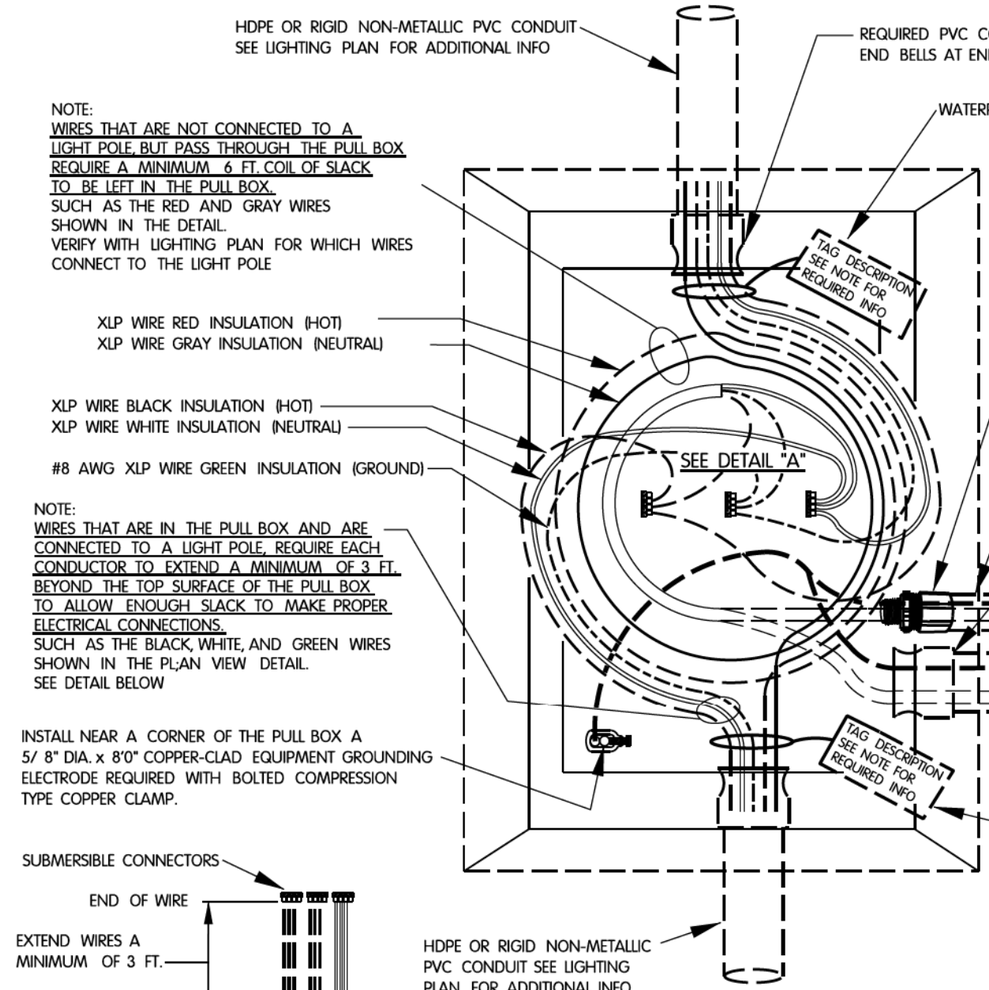
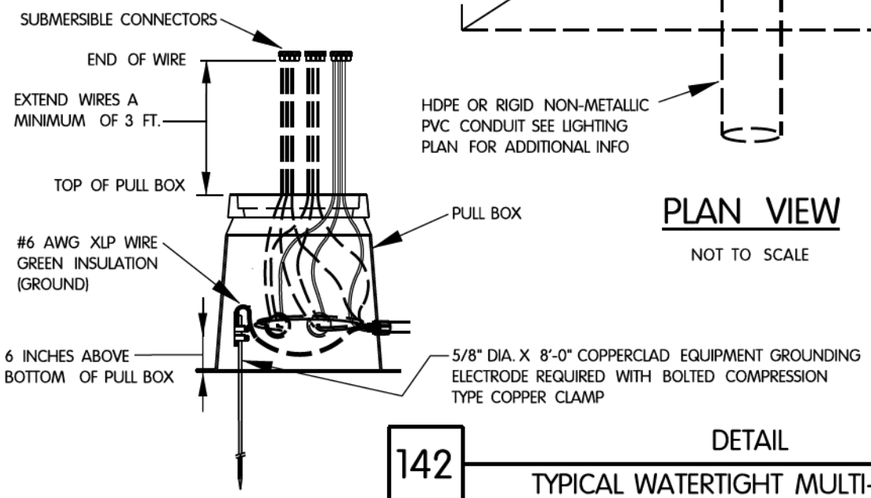
WISDOT/CADDS SHEET 42



PLAN VIEW

NOT TO SCALE



USE WHEN CONNECTING TO DIRECT BURIED POLE

USE 1 1/2 INCH NYLON LIQUIDTIGHT CONNECTOR (STRAIGHT GRAY)
WHEN CONNECTING 1 1/2 INCH NONMETALLIC LIQUIDTIGHT FLEXIBLE CONDUIT TO A PULL BOX.

USE 1 1/2 INCH NONMETALLIC LIQUIDTIGHT FLEXIBLE CONDUIT TYPE LFNC-B WHEN CONNECTING TO A DIRECT BURIED POLE.

USE WHEN CONNECTING TO CONCRETE LIGHT BASE

USE PVC CONDUIT END BELLS WHEN CONECTING RIGID NONMETALLIC CONDUIT TO A PULL BOX.

USE RIGID NONMETALLIC CONDUIT SCHEDULE 40 TO CONNECT TO CONCRETE LIGHT BASE.

#6 AWG XLP WIRE GREEN INSULATION (GROUND) GOES TO GOUNDING LUG IN HAND HOLE OF POLE

RISER CABLE
2#12 AWG "UF" TYPE WITH GROUND
NOTE - ONE RISER CABLE RUN PER LUMINIAIRE ON POLE

WATERPROOF CABLE TAG

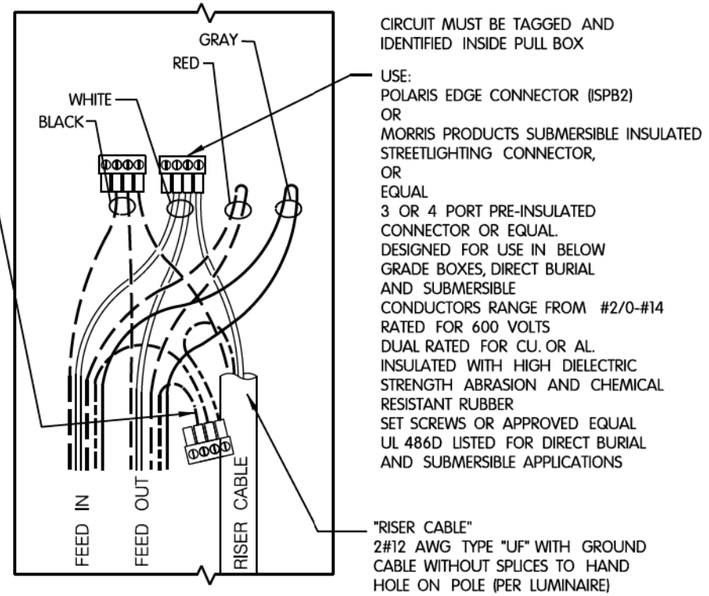
REQUIRED WATERPROOF TAGGING:

WHEN THERE IS MORE THAN ONE CIRCUIT, BUNDLE THE CIRCUIT CONDUCTORS WITH NYLON CABLE TIES OR ENGINEER APPROVED ELECTRICAL TAPE AT ACCESS POINTS.

AT EACH PULL BOX, IDENTIFY THE LINE SIDE OF EACH CIRCUIT WITH AN ATTACHED TAG USING A FADE-RESISTANT WATERPROOF BLACK MARKER PEN AND PROVIDE THE FOLLOWING INFO:

CIRCUIT ID: (CIR.WD-E)
LINE SIDE COMING FROM UNIT STREET LIGHT UNIT IS ON: (STREET NAME)
SIDE OF STREET LIGHT UNIT IS ON: (N,S,E,OR W)
NUMBER OF STREET LIGHTING UNITS FROM NEAREST CROSSING STREET: (1,2,3,4,5)
DIRECTION FROM THE NEAREST CROSSING STREET: (N,S,E,OR W)
NAME OF THE NEAREST CROSSING STREET: (STREET NAME)

EXAMPLE OF TAG INFO:
CIR.WD-E,
LINE SIDE FROM: W. CANAL ST. / N. / 1 / W. /OF POTAWATOMI CIR.



DETAIL "A"

CONNECTIONS WITHIN PULL BOX
NOT TO SCALE

NOTES:

WHEN WIRING A LUMINAIRE EITHER
BLACK (HOT) WITH WHITE (NEUTRAL) GO TOGETHER
OR
RED (HOT) WITH GRAY (NEUTRAL) GO TOGETHER

ALL WIRE CONNECTIONS REQUIRE ANTI-OXIDANT TO BE APPLIED TO THE CONNECTIONS

ALL HARDWARE NUT AND BOLT CONNECTIONS REQUIRE ANTI SEIZE TO BE APPLIED TO THEM

PULL ROPE SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS (.PDF FORMAT) FOR ALL THE WORK BEING DONE.

PROVIDE MINIMUM WIRE SLACK FOR PULL BOXES: 3-FT
ONE WAY IN OR OUT

PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINETS, PULL BOXES AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO ASSOCIATED CONDUIT PAY ITEM.

IMMEDIATELY AFTER THE CONTRACTOR HAS COMPLETED ALL THE ELECTRICAL PULL BOXES / VAULTS, 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 MANAGERS FOR FINAL INSPECTION AND APPROVAL OF ALL WORK. THESE NAMES AND NUMBERS CAN BE FOUND ON THE STREET LIGHTING GENERAL NOTES SHEET

142 DETAIL

TYPICAL WATERTIGHT MULTI-PORT CONNECTIONS

SPLICING CONDUCTORS WITHIN THE PULL BOX

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

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 3-MAR-2023 15:12
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: MAR.03-2023

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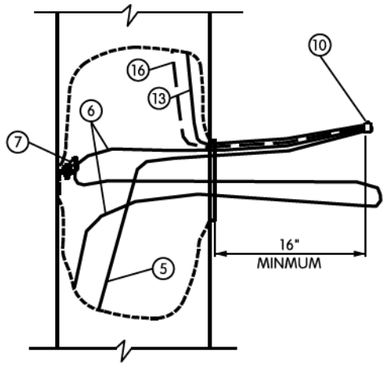
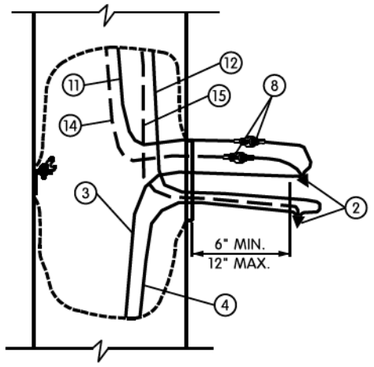
WISDOT/CADDS SHEET 42

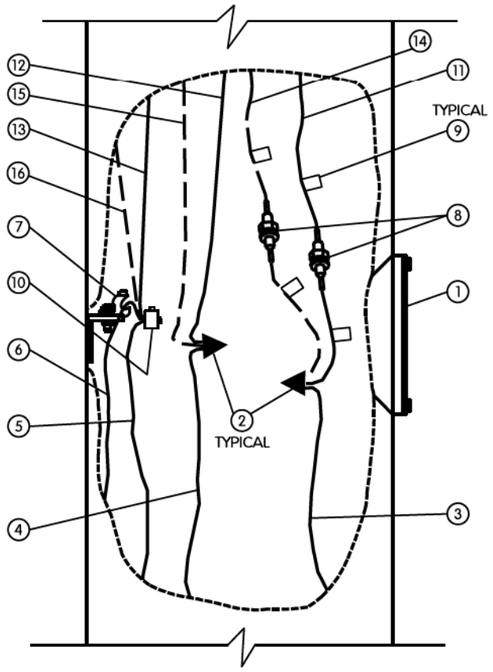


EQUIPMENT GROUNDING
CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK
(AND GROUNDED NEUTRAL SLACK
IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES

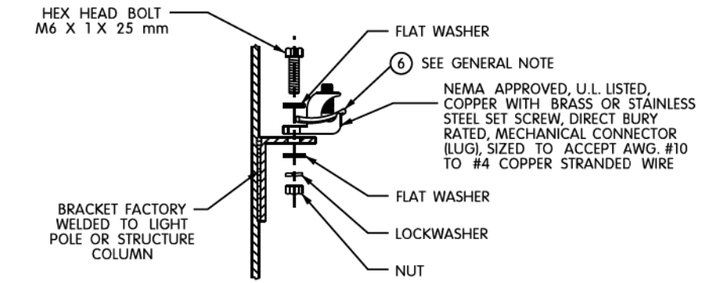


CUTAWAY HANDHOLE DETAIL

SEPARATED NEUTRAL SYSTEMS
SINGLE PHASE

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE TYPICAL CONDUCTOR SLACK AT HANDHOLES ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. SYSTEM UNGROUNDED LINE WIRE
4. SYSTEM GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. RISER UNGROUNDED POLE WIRE - LUMINAIRE #1
12. RISER GROUNDED POLE WIRE - LUMINAIRE #1
13. RISER EQUIPMENT GROUNDING POLE WIRE - LUMINAIRE #1
14. RISER UNGROUNDED POLE WIRE - LUMINAIRE #2
15. RISER GROUNDED POLE WIRE - LUMINAIRE #2
16. RISER EQUIPMENT GROUNDING POLE WIRE - LUMINAIRE #2



HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

- 600 VOLT RATED, UP TO 30 AMPS 1-POLE BREAKAWAY, SET SCREW TERMINALS FOR LOAD, WIRE SIZE RANGE #12 TO #8 AWG
- FAST ACTING 3 AMP 250 VOLT FUSE RECOMMENDED FROM FUSE LIST FROM IN-LINE FUSE HOLDER MANUFACTURER

WATERPROOF IN-LINE FUSE HOLDER ASSEMBLY

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	BLACK OR RED
4	GROUNDED LINE WIRE	WHITE OR GRAY
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	GREEN
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING,

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

CIRCUIT TAGS SHALL BE INSTALLED IN ALL THE PULL BOXES AND WHERE INDICATED ON THE PLANS AND SPECIAL PROVISIONS.

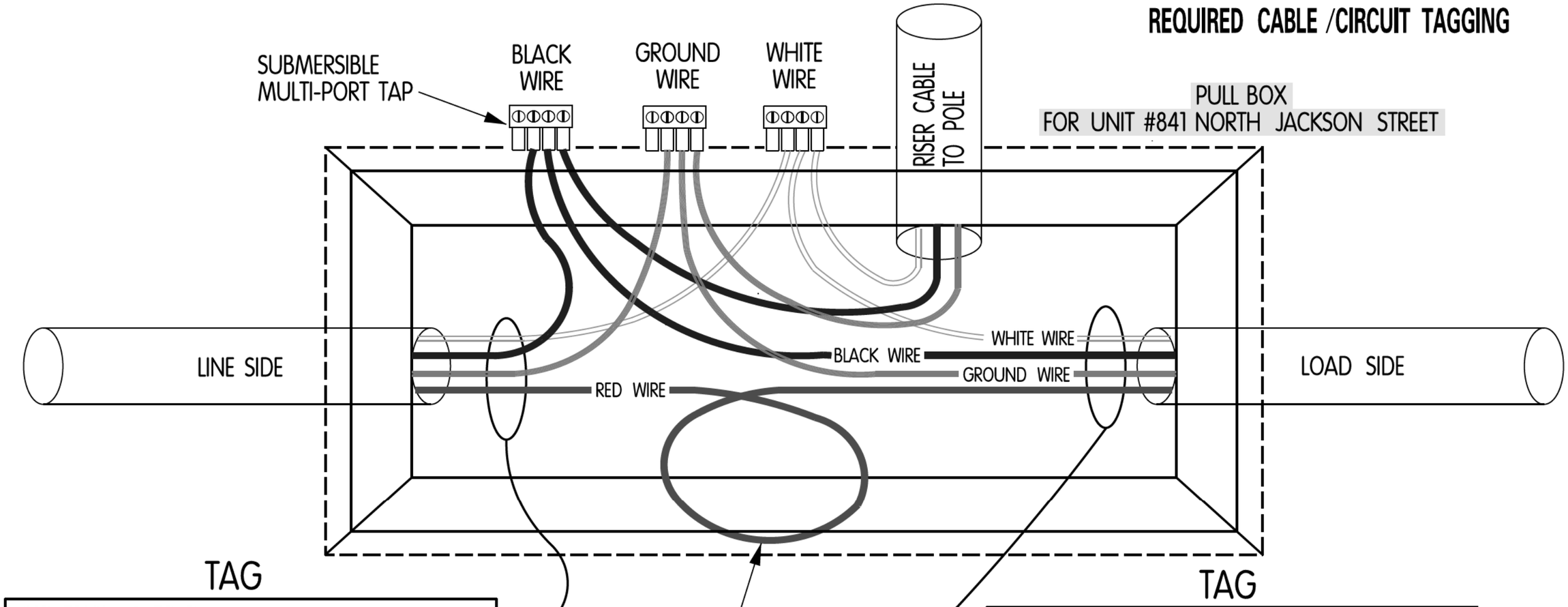
146 ELECTRICAL HANDHOLE WIRING DETAIL — NOT TO SCALE

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

REVISION BY: dkozel — REVISION DATE: 17-MAR-2023 06:12
APPROVED REVISION BY: E.K. LEE — APPROVED REVISION DATE: MAR.17-2023

REQUIRED CABLE /CIRCUIT TAGGING



TAG

CIR. ENCL.#3 EB-R
N. JACKSON ST./W /4 /S / E.WELLS ST..

TAG

CIR. ENCL.#3 EB-R
N. JACKSON ST./W /6 /N /E.KILBOURN AVE.

TAG DESCRIPTION BREAKDOWN - LINE SIDE

CIRCUIT ID: (CIR. ENCL.#3 EB-R)
LINE SIDE COMING FROM UNIT STREET LIGHT UNIT IS ON: (N. JACKSON ST.)
SIDE OF STREET LIGHT UNIT IS ON: (WEST SIDE)
NUMBER OF STREET LIGHTING UNITS FROM NEAREST CROSSING STREET: (COMING FROM UNIT 4)
DIRECTION FROM THE NEAREST CROSSING STREET: (TO THE SOUTH)
NAME OF THE NEAREST CROSSING STREET: (E. WELLS ST.)

TAG DESCRIPTION BREAKDOWN - LOAD SIDE

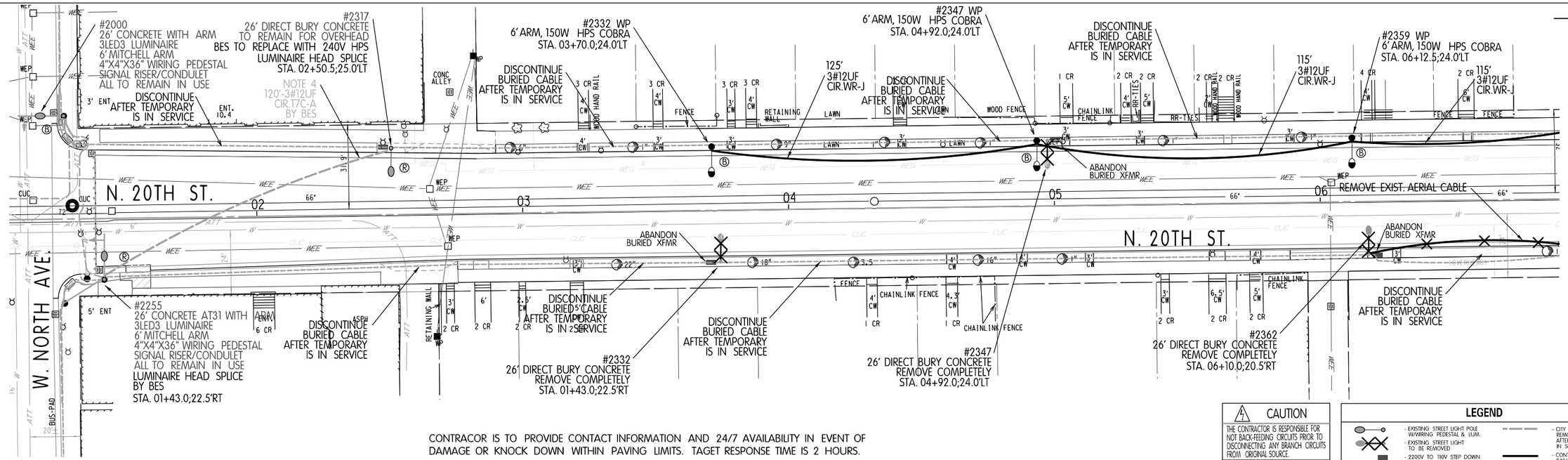
CIRCUIT ID: (CIR. ENCL.#3 EB-R)
LINE SIDE COMING FROM UNIT STREET LIGHT UNIT IS ON: (N. JACKSON ST.)
SIDE OF STREET LIGHT UNIT IS ON: (WEST SIDE)
NUMBER OF STREET LIGHTING UNITS FROM NEAREST CROSSING STREET: (GOING TO UNIT 6)
DIRECTION FROM THE NEAREST CROSSING STREET: (TO THE NORTH)
NAME OF THE NEAREST CROSSING STREET: (E. KILBOURN AVE.)

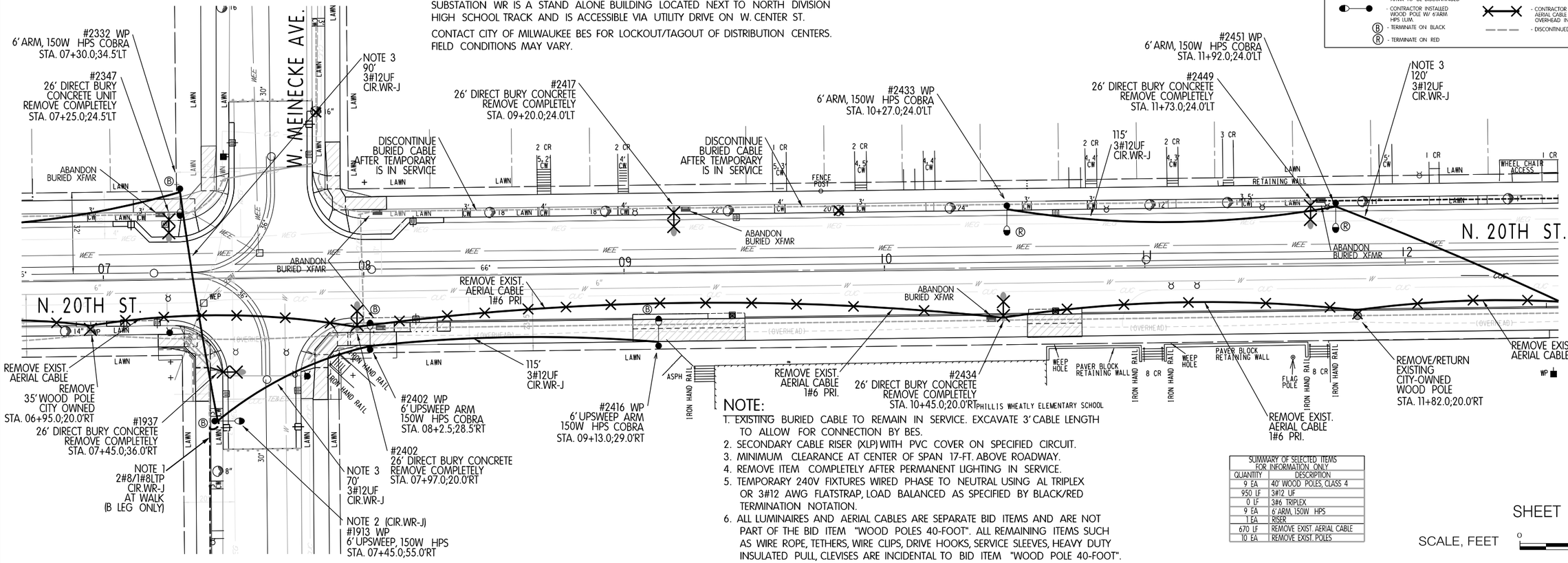
147 DETAIL

TYPICAL SCHEMATIC AND TAGGING

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkozel REVISION DATE: 23-MAR-2023 08:46
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: MAR.23-2023





CONTRACOR IS TO PROVIDE CONTACT INFORMATION AND 24/7 AVAILABILITY IN EVENT OF DAMAGE OR KNOCK DOWN WITHIN PAVING LIMITS. TAGET RESPONSE TIME IS 2 HOURS.

SUBSTATION WR IS A STAND ALONE BUILDING LOCATED NEXT TO NORTH DIVISION HIGH SCHOOL TRACK AND IS ACCESSIBLE VIA UTILITY DRIVE ON W. CENTER ST.

CONTACT CITY OF MILWAUKEE BES FOR LOCKOUT/TAGOUT OF DISTRIBUTION CENTERS. FIELD CONDITIONS MAY VARY.

CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM ORIGINAL SOURCE.

LEGEND

- EXISTING STREET LIGHT POLE W/WIRING PEDESTAL & LUM.
- EXISTING STREET LIGHT TO BE REMOVED
- 2200V TO 110V STEP DOWN XFMR TO BE DISCONTINUED
- CONTRACTOR INSTALLED WOOD POLE W/ 6'ARM, HPS LUM.
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- CITY INSTALLED 5KV AERIAL CABLE REMOVED BY CONTRACTOR AFTER PERMANENT LIGHTING IN SERVICE
- CONTRACTOR INSTALLED 240/480V AERIAL CABLE
- CONTRACTOR REMOVED AERIAL CABLE DURING TEMP. OVERHEAD INSTALLATION
- DISCONTINUED BURIED CIRCUITRY

NOTE:

1. EXISTING BURIED CABLE TO REMAIN IN SERVICE. EXCAVATE 3' CABLE LENGTH TO ALLOW FOR CONNECTION BY BES.
2. SECONDARY CABLE RISER (XLP) WITH PVC COVER ON SPECIFIED CIRCUIT.
3. MINIMUM CLEARANCE AT CENTER OF SPAN 17-FT. ABOVE ROADWAY.
4. REMOVE ITEM COMPLETELY AFTER PERMANENT LIGHTING IN SERVICE.
5. TEMPORARY 240V FIXTURES WIRED PHASE TO NEUTRAL USING AL TRIPLEX OR 3#12 AWG FLATSTRAP, LOAD BALANCED AS SPECIFIED BY BLACK/RED TERMINATION NOTATION.
6. ALL LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLES 40-FOOT". ALL REMAINING ITEMS SUCH AS WIRE ROPE, TETHERS, WIRE CLIPS, DRIVE HOOKS, SERVICE SLEEVES, HEAVY DUTY INSULATED PULL, CLEVISES ARE INCIDENTAL TO BID ITEM "WOOD POLE 40-FOOT".

SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
9 EA	40' WOOD POLES, CLASS 4
950 LF	3#12 UF
0 LF	3#6 TRIPLEX
9 EA	6' ARM, 150W HPS
1 EA	RISER
670 LF	REMOVE EXIST. AERIAL CABLE
10 EA	REMOVE EXIST. POLES

SHEET 1 OF 6

SCALE, FEET 0 40

PROJECT NO: 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY STREET LIGHTING	SHEET 143 E

SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
8 EA	40' WOOD POLES, CLASS 4
500 LF	3#12 UF
120 LF	3#6 TRIPLEX
4 EA	6' ARM, 150W HPS
1 EA	RISER
315 LF	REMOVE EXIST. AERIAL CABLE
5 EA	REMOVE EXIST. POLES

CONTRACOR IS TO PROVIDE CONTACT INFORMATION AND 24/7 AVAILABILITY IN EVENT OF DAMAGE OR KNOCK DOWN WITHIN PAVING LIMITS. TAGET RESPONSE TIME IS 2 HOURS.

SUBSTATION WK IS A LOCATED IN BUILDING AT 2620 W.CENTER ST. AND IS ACCESSIBLE VIA THE PARKING LOT OF THE WISCONSIN BLACK HISTORICAL SOCIETY/MUSEUM.

CONTACT CITY OF MILWAUKEE BES FOR LOCKOUT/TAGOUT OF DISTRIBUTION CENTERS. FIELD CONDITIONS MAY VARY.

LEGEND

- EXISTING STREET LIGHT POLE W/WARNING PEDESTAL & LUM.
- EXISTING STREET LIGHT TO BE REMOVED
- 2200V TO 120V STEP DOWN XFMR TO BE DISCONTINUED
- CONTRACTOR INSTALLED WOOD POLE W/ 6'ARM HPS LUM.
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- CITY INSTALLED 5KV AERIAL CABLE REMOVED BY CONTRACTOR AFTER PERMANENT LIGHTING IN SERVICE
- CONTRACTOR INSTALLED 240/480V AERIAL CABLE
- CONTRACTOR REMOVED AERIAL CABLE DURING TEMP. OVERHEAD INSTALLATION
- DISCONTINUED BURIED CIRCUITRY

N

DISCONTINUE AFTER TEMPORARY IS IN SERVICE

#2003 WP 6'UPSWEEP ARM 150W HPS COBRA STA. 14+10.0;49.5'LT

#2479 26' DIRECT BURY CONCRETE TO REMAIN IN USE DURING TEMPORARY LIGHTING REPLACE LUM. WITH BALLAST HPS COORDINATE REPLACEMENT WITH BES TO ABANDON 2200V CIRCUIT WK-3 STA. 13+89.5;23.5'LT

DISCONTINUE BURIED CABLE AFTER TEMPORARY IS IN SERVICE

NOTE 3 76' 3#12UF CIR.WR-J

40' WP (TR) STA. 14+57.0;60.5'LT

#2002 26' DIRECT BURY CONCRETE REMOVE COMPLETELY STA. 14+51.0;37.0'LT

REMOVE EXIST. AERIAL CABLE

REMOVE CITY-OWNED WOOD POLE STA. 14+70.0;25.0'LT

#2501 WP 6'UPSWEEP ARM 150W HPS COBRA STA. 14+82.0;24.0'LT

TRANSFER EXIST. AERIAL CABLE TO NEW #2501 WP CIR.WR-J

EXISTING CITY-OWNED WOOD POLE STA. 15+52.0; 24.0'LT

EXISTING AERIAL CABLE TO BE REUSED CIR.WR-J

#2519 26' DIRECT BURY CONCRETE TO REMAIN FOR OVERHEAD STA. 15+95.0;24.0'LT

REMOVE EXIST. AERIAL CABLE

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-C

#2551 26' DIRECT BURY CONCRETE TO REMAIN FOR OVERHEAD STA. 18+40.0;24.0'LT

EXISTING CITY-OWNED WOOD POLE STA. 17+64.0; 24.0'LT

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-C

DISCONTINUE BURIED CABLE

DISCONTINUE BURIED CABLE

#2532 26' DIRECT BURY CONCRETE TO REMAIN FOR OVERHEAD STA. 17+21.0;20.0'LT

N. 20TH ST.

W. WRIGHT ST.

W. CLARKE ST.

NOTE 3 120' 3#12UF CIR.WR-J

40' WOOD POLE (TR) STA. 13+86.5;20.5'RT

NOTE 3 90' 3#12UF CIR.WR-J

#2462 WP 6'UPSWEEP ARM 150W HPS COBRA STA. 12+82.0; 28.5'RT

#2464 26' DIRECT BURY CONCRETE REMOVE COMPLETELY STA. 12+89.0;20.0'RT

#1935 26' DIRECT BURY CONCRETE REMOVE COMPLETELY STA. 14+16.0;35.0'RT

#1930 WP 6'UPSWEEP ARM 150W HPS COBRA STA. 07+97.0;20.0'RT

NOTE 1 2#8/1#8LTP CIR.WR-J AT WALK (ONLY R LEG)

#2002 26' DIRECT BURY CONCRETE REMOVE COMPLETELY STA. 14+73.0;207.0'LT

40' WOOD POLE (TR) STA. 14+57.0;35.0'RT

NOTE 3 45' 3#6AL TRIPLEX CIR.WR-J

NOTE 3 70' 3#6 AL TRIPLEX CIR.WR-J

WEPCO WP

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-C

#2002 21' DIRECT BURY CONCRETE TO REMAIN FOR OVERHEAD STA. 21+17.0;48.0'LT

#2609 WEPCO WP (62-0929) 6'UPSWEEP ARM 150W HPS COBRA CONTRACTOR TRANSFER STA. 21+61.0;23.5'LT

#2615 WEPCO WP (62-0910) 6'UPSWEEP ARM 150W HPS COBRA CONTRACTOR TO TRANSFER TO WEPCO WP (62-0929) STA. 22+39.0;23.5'LT

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-B

#2551 26' DIRECT BURY CONCRETE TO REMAIN FOR OVERHEAD STA. 18+39.0;24.0'LT

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-C

#2579 WEPCO WP (78-4813) 6'UPSWEEP ARM, LUM TO REMAIN FOR OVERHEAD STA. 20+54.0;23.0'RT

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-C

#2566 21' DIRECT BURY ALUMINUM TO REMAIN FOR OVERHEAD STA. 19+62.0;20.0'RT

#1935 21' DIRECT BURY CONCRETE TO REMAIN FOR OVERHEAD STA. 20+82.0;49.0'RT

DISCONTINUE BURIED CABLE AFTER TEMPORARY IS IN SERVICE

NOTE 3 80' 3#12UF CIR.WK-C

#2604 26' DIRECT BURY AL REMOVE COMPLETELY STA. 21+38.0;20.0'RT

REMOVE EXIST AERIAL CABLE

DISCONTINUE BURIED CABLE

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-B

#2626 21' DIRECT BURY ALUMINUM TO REMAIN FOR OVERHEAD STA. 23+63.0;20.0'LT

NOTE:

1. EXISTING BURIED CABLE TO REMAIN IN SERVICE. EXCAVATE 3' CABLE LENGTH TO ALLOW FOR CONNECTION BY BES.
2. SECONDARY CABLE RISER (XLP) WITH PVC COVER ON SPECIFIED CIRCUIT.
3. MINIMUM CLEARANCE AT CENTER OF SPAN 17-FT. ABOVE ROADWAY.
4. REMOVE ITEM COMPLETELY AFTER PERMANENT LIGHTING IN SERVICE.
5. TEMPORARY 240V FIXTURES WIRED PHASE TO NEUTRAL USING AL TRIPLEX OR 3#12 AWG FLATSTRAP, LOAD BALANCED AS SPECIFIED BY BLACK/RED TERMINATION NOTATION.
6. ALL LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLES 40-FOOT". ALL REMAINING ITEMS SUCH AS WIRE ROPE, TETHERS, WIRE CLIPS, DRIVE HOOKS, SERVICE SLEEVES, HEAVY DUTY INSULATED PULL, CLEVISES ARE INCIDENTAL TO BID ITEM "WOOD POLE 40-FOOT".

CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM ORIGINAL SOURCE.

CONTINUED BELOW LEFT

SHEET 2 OF 6

SCALE, FEET 0 40

PROJECT NO: 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY STREET LIGHTING	SHEET 144 E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

NOTE:

1. EXISTING BURIED CABLE TO REMAIN IN SERVICE. EXCAVATE 3' CABLE LENGTH TO ALLOW FOR CONNECTION BY BES.
2. SECONDARY CABLE RISER (XLP) WITH PVC COVER ON SPECIFIED CIRCUIT.
3. MINIMUM CLEARANCE AT CENTER OF SPAN 17-FT. ABOVE ROADWAY.
4. REMOVE ITEM COMPLETELY AFTER PERMANENT LIGHTING IN SERVICE.
5. TEMPORARY 240V FIXTURES WIRED PHASE TO NEUTRAL USING AL TRIPLEX OR 3#12 AWG FLATSTRAP, LOAD BALANCED AS SPECIFIED BY BLACK/RED TERMINATION NOTATION.
6. ALL LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLES 40-FOOT". ALL REMAINING ITEMS SUCH AS WIRE ROPE, TETHERS, WIRE CLIPS, DRIVE HOOKS, SERVICE SLEEVES, HEAVY DUTY INSULATED PULL, CLEVISES ARE INCIDENTAL TO BID ITEM "WOOD POLE 40-FOOT".

CONTRACOR IS TO PROVIDE CONTACT INFORMATION AND 24/7 AVAILABILITY IN EVENT OF DAMAGE OR KNOCK DOWN WITHIN PAVING LIMITS. TAGET RESPONSE TIME IS 2 HOURS.

SUBSTATION WK IS A LOCATED IN BUILDING AT 2620 W.CENTER ST. AND IS ACCESSIBLE VIA THE PARKING LOT OF THE WISCONSIN BLACK HISTORICAL SOCIETY/MUSEUM.

CONTACT CITY OF MILWAUKEE BES FOR LOCKOUT/TAGOUT OF DISTRIBUTION CENTERS. FIELD CONDITIONS MAY VARY.

SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
8 EA	40' WOOD POLES, CLASS 4
500 LF	3#12 UF
275 LF	3#6 TRIPLEX
7 EA	6' ARM, 150W HPS
1 EA	RISER
350 LF	REMOVE EXIST. AERIAL CABLE
9 EA	REMOVE EXIST. POLES

LEGEND

- EXISTING STREET LIGHT POLE W/WIRING PEDESTAL & LUM.
- EXISTING STREET LIGHT TO BE REMOVED
- 2200V TO 110V STEP DOWN XFMR TO BE DISCONTINUED
- CONTRACTOR INSTALLED WOOD POLE W/ 6'ARM HPS LUM.
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- CITY INSTALLED 5kV AERIAL CABLE REMOVED BY CONTRACTOR AFTER PERMANENT LIGHTING IN SERVICE
- CONTRACTOR INSTALLED 240/480V AERIAL CABLE
- CONTRACTOR REMOVED AERIAL CABLE DURING TEMP. OVERHEAD INSTALLATION
- DISCONTINUED BURIED CIRCUITRY

N

#2647
WEPCO WP (62-0931)
6' UPSWEEP ARM, LUM
TO REMAIN FOR OVERHEAD
STA. 24+86.0;24.0'LT

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-B

EXISTING AERIAL CABLE TO BE REUSED CIR.WK-B

DISCONTINUE BURIED CABLE

#2668
21' DIRECT BURY CONCRETE
TO REMAIN FOR OVERHEAD
STA. 26+18.0;21.0'LT

EXISTING AERIAL CABLE TO BE REUSED

130' 3#6AL CIR.WK-B

WEPCO WP

#2677
26' DIRECT BURY CONCRETE
REMOVE COMPLETELY
STA. 27+20.5;25.0'LT

REMOVE EXIST. AERIAL CABLE

WEPCO WP
REMOVE EXIST. AERIAL CABLE

#2011
26' DIRECT BURY CONCRETE
XLP RISER
TO REMAIN IN USE
STA. 27+37.0;124.0'LT

NOTE 1
3#8/1#8LTP
CIR.WK-B

REMOVE EXIST. AERIAL CABLE

80' 3#6AL CIR.WK-B

#2002 WP
6' UPSWEEP ARM
150W HPS COBRA
STA. 27+13.5;32.5'LT

REMOVE CITY-OWNED WOOD POLE (TR SERVICE RISER)
STA. 27+00.0;23.5'LT

#2002 WP
6' UPSWEEP ARM
150W HPS COBRA
STA. 27+36.5;42.0'LT

30' 3#6AL CIR.WK-B

DISCONTINUE BURIED CABLE

#1935
26' DIRECT BURY AT-26 CONCRETE
REMOVE COMPLETELY
STA. 27+8.5;23.0'RT

40' WP (TR)
STA. 27+13.5;22.0'RT

#1931 WP
6' UPSWEEP ARM
150W HPS COBRA
STA. 27+8.5;23.0'RT

DISCONTINUE BURIED CABLE AFTER TEMPORARY IS IN SERVICE

#2002
26' DIRECT BURY AT-26 CONCRETE
REMOVE COMPLETELY
STA. 27+90.0;41.5'LT

40' WP (TR)
STA. 28+19.5;25.0'LT

NOTE 3
85'
3#6AL
CIR.WK-B

ABANDON BURIED XFMR

#2706 WP
6' UPSWEEP ARM
150W HPS COBRA
STA. 28+19.5;19.0'RT

#2702
26' DIRECT BURY ALUMINUM
REMOVE COMPLETELY
STA. 28+1.5;23.0'RT

NOTE 3
95'
3#12UF
CIR.WK-B

100'
3#12UF
CIR.WK-B

NOTE 3
50'
3#6AL
CIR.WK-B

#2717
26' DIRECT BURY AL
REMOVE COMPLETELY
STA. 29+24.5;25.0'LT

DISCONTINUE BURIED CABLE

ABANDON BURIED XFMR

#2715
WEPCO WP (62-XXXX)
6' UPSWEEP ARM
150W HPS COBRA
CONTRACTOR INSTALLED
STA. 28+19.5;19.0'RT

CONTINUED BELOW LEFT

N. 20TH ST.

W. CENTER ST.

W. HADLEY ST.

CAUTION
THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM ORIGINAL SOURCE.

NOTE 4
#2011
35' CITY OWNED WP
6' UPSWEEP ARM, 100W HPS
PRIMARY RISER CIR.WK-6
STA. 33+86.5;23.0'RT

1#8 CONC CIR.WK-6 TO REMAIN IN USE

#2002
21' DIRECT BURY AT-26 CONCRETE
REMOVE COMPLETELY
STA. 34+43.5;43.0'RT

NOTE 4
110'-1#6 LINE WIRE
CIR. WK-6

#2749
26' DIRECT BURY CONCRETE
REMOVE COMPLETELY
STA. 31+66.5;23.0'RT

#2777
26' DIRECT BURY AT-26 CONCRETE
REMOVE COMPLETELY
STA. 33+86.5;23.0'RT

DISCONTINUE BURIED CABLE

ABANDON BURIED XFMR

DISCONTINUE BURIED CABLE

#2732 1 CR
WEPCO WP (71-16549)
6' UPSWEEP ARM
150W HPS COBRA
REPLACE LUM. WITH BALLAST HPS
COORDINATE REPLACEMENT
WITH BES TO ABANDON
2200V CIRCUIT WK-3
STA. 30+40.0;19.0'LT

130' 3#12UF CIR.WK-B

#2762
26' DIRECT BURY CONC.
TO REMAIN FOR OVERHEAD
STA. 32+80.0;19.0'LT

DISCONTINUE BURIED CABLE

ABANDON BURIED XFMR

35' 3#12UF CIR.WR-L

95' 3#12UF CIR.WR-L

#2778 WP
2EA.-6' UPSWEEP ARM
2EA.-150W HPS COBRA
STA. 34+00.5;30.5'RT

#1913
21' DIRECT BURY CONCRETE
REMOVE COMPLETELY
STA. 34+12.5;36.5'RT

35' 3#12UF CIR.WR-L

NOTE 2 (CIR.WR-L)
25' WOOD POLE
CROSS ARM IF NECESSARY
(R LEG ONLY)

START OF CITY INSTALLED 2200V TEMPORARY OVERHEAD

NOTE 1
2#8/1#8LTP
CIR.WR-L
AT WALK

NOTE 4
110'-1#6 LINE WIRE
CIR. WK-6

#2802
26' DIRECT BURY CONCRETE
TO REMAIN FOR OVERHEAD
STA. 34+68.0;20.0'LT

SHEET 3 OF 6

SCALE, FEET 0 40

PROJECT NO: 2275–05–70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY STREET LIGHTING	SHEET 145 E

NOTE:

1. EXISTING BURIED CABLE TO REMAIN IN SERVICE. EXCAVATE 3' CABLE LENGTH TO ALLOW FOR CONNECTION BY BES.
2. SECONDARY CABLE RISER (XLP) WITH PVC COVER ON SPECIFIED CIRCUIT.
3. MINIMUM CLEARANCE AT CENTER OF SPAN 17-FT. ABOVE ROADWAY.
4. REMOVE ITEM COMPLETELY AFTER PERMANENT LIGHTING IN SERVICE.
5. TEMPORARY 240V FIXTURES WIRED PHASE TO NEUTRAL USING AL TRIPLEX OR 3#12 AWG FLATSTRAP, LOAD BALANCED AS SPECIFIED BY BLACK/RED TERMINATION NOTATION.
6. ALL LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLES 40-FOOT". ALL REMAINING ITEMS SUCH AS WIRE ROPE, TETHERS, WIRE CLIPS, DRIVE HOOKS, SERVICE SLEEVES, HEAVY DUTY INSULATED PULL, CLEVISES ARE INCIDENTAL TO BID ITEM "WOOD POLE 40-FOOT".

LEGEND

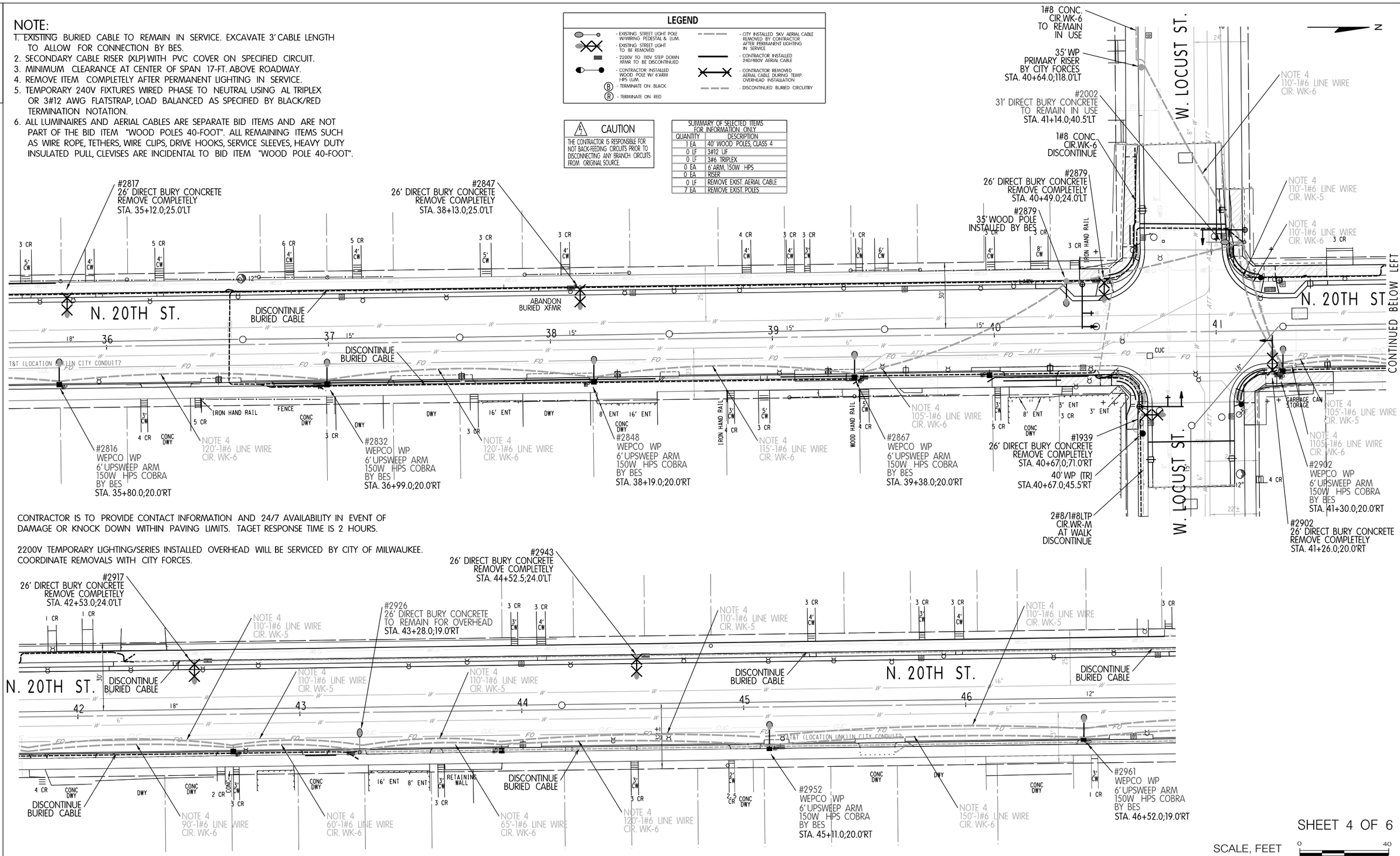
- EXISTING STREET LIGHT POLE W/WIRING PEDESTAL & LUM.
- EXISTING STREET LIGHT TO BE REMOVED
- 2200V TO 110V STEP DOWN XFMR TO BE DISCONTINUED
- CONTRACTOR INSTALLED WOOD POLE W/ 6'ARM, HPS LUM.
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- CITY INSTALLED 5KV AERIAL CABLE REMOVED BY CONTRACTOR AFTER PERMANENT LIGHTING IN SERVICE
- CONTRACTOR INSTALLED 240/480V AERIAL CABLE
- CONTRACTOR REMOVED AERIAL CABLE DURING TEMP. OVERHEAD INSTALLATION
- DISCONTINUED BURIED CIRCUITRY

CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM ORIGINAL SOURCE.

SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY

QUANTITY	DESCRIPTION
1 EA	40' WOOD POLES, CLASS 4
0 LF	3#12 UF
0 LF	3#6 TRIPLEX
0 EA	6' ARM, 150W HPS
0 EA	RISER
0 LF	REMOVE EXIST. AERIAL CABLE
7 EA	REMOVE EXIST. POLES



CONTRACTOR IS TO PROVIDE CONTACT INFORMATION AND 24/7 AVAILABILITY IN EVENT OF DAMAGE OR KNOCK DOWN WITHIN PAVING LIMITS. TAGET RESPONSE TIME IS 2 HOURS.

2200V TEMPORARY LIGHTING/SERIES INSTALLED OVERHEAD WILL BE SERVICED BY CITY OF MILWAUKEE. COORDINATE REMOVALS WITH CITY FORCES.

SHEET 4 OF 6

SCALE, FEET 0 40

PROJECT NO: 2275–05–70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY STREET LIGHTING	SHEET 146 E

2

N

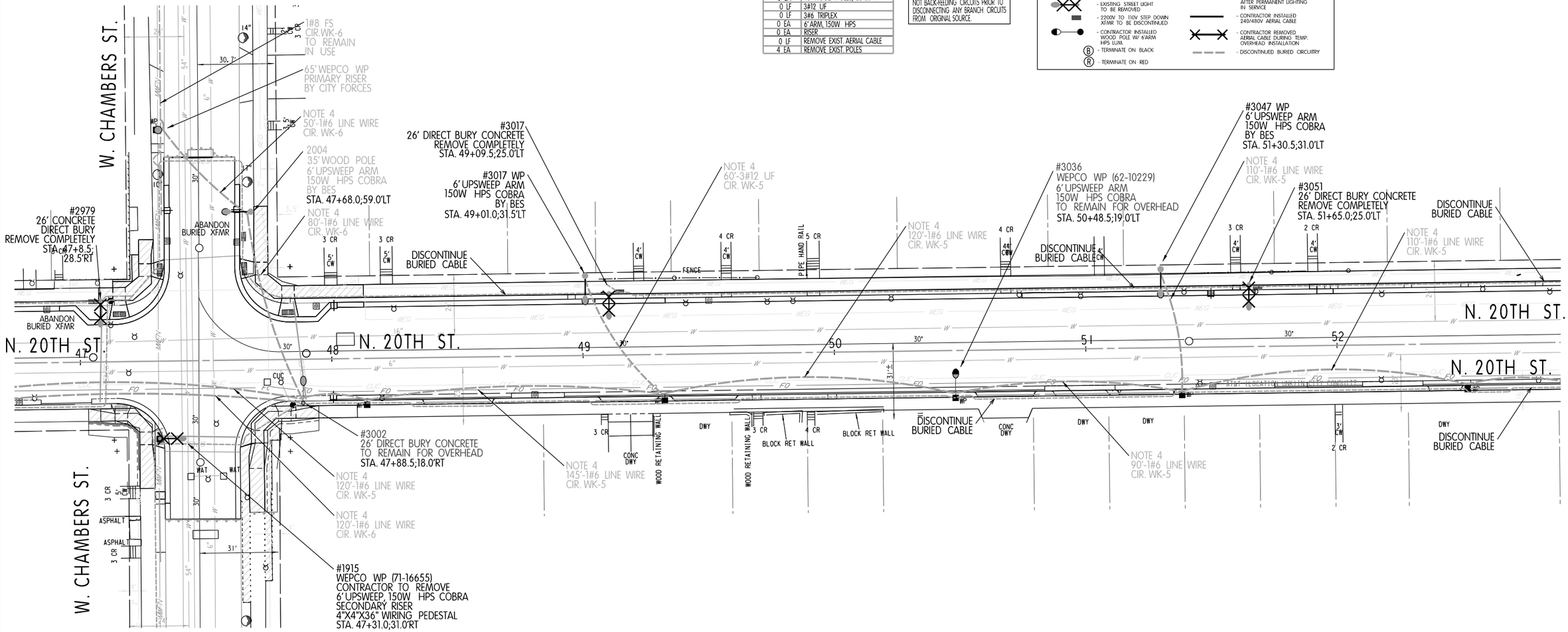
SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
0 EA	40' WOOD POLES, CLASS 4
0 LF	3#12 UF
0 LF	3#6 TRIPLEX
0 EA	6' ARM, 150W HPS
0 EA	RISER
0 LF	REMOVE EXIST. AERIAL CABLE
4 EA	REMOVE EXIST. POLES

CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM ORIGINAL SOURCE.

LEGEND

- EXISTING STREET LIGHT POLE W/WIRING PEDESTAL & LUM.
- EXISTING STREET LIGHT TO BE REMOVED
- 2200V TO 110V STEP DOWN XFMR TO BE DISCONTINUED
- CONTRACTOR INSTALLED WOOD POLE W/ 6'ARM HPS LUM.
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- CITY INSTALLED 5KV AERIAL CABLE REMOVED BY CONTRACTOR AFTER PERMANENT LIGHTING IN SERVICE
- CONTRACTOR INSTALLED 240/480V AERIAL CABLE
- CONTRACTOR REMOVED AERIAL CABLE DURING TEMP. OVERHEAD INSTALLATION
- DISCONTINUED BURIED CIRCUITRY



NOTE:

1. EXISTING BURIED CABLE TO REMAIN IN SERVICE. EXCAVATE 3' CABLE LENGTH TO ALLOW FOR CONNECTION BY BES.
2. SECONDARY CABLE RISER (XLP) WITH PVC COVER ON SPECIFIED CIRCUIT.
3. MINIMUM CLEARANCE AT CENTER OF SPAN 17-FT. ABOVE ROADWAY.
4. REMOVE ITEM COMPLETELY AFTER PERMANENT LIGHTING IN SERVICE.
5. TEMPORARY 240V FIXTURES WIRED PHASE TO NEUTRAL USING AL TRIPLEX OR 3#12 AWG FLATSTRAP, LOAD BALANCED AS SPECIFIED BY BLACK/RED TERMINATION NOTATION.
6. ALL LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLES 40-FOOT". ALL REMAINING ITEMS SUCH AS WIRE ROPE, TETHERS, WIRE CLIPS, DRIVE HOOKS, SERVICE SLEEVES, HEAVY DUTY INSULATED PULL, CLEVISES ARE INCIDENTAL TO BID ITEM "WOOD POLE 40-FOOT".

CONTRACTOR IS TO PROVIDE CONTACT INFORMATION AND 24/7 AVAILABILITY IN EVENT OF DAMAGE OR KNOCK DOWN WITHIN PAVING LIMITS. TAGET RESPONSE TIME IS 2 HOURS.

2200V TEMPORARY LIGHTING/SERIES INSTALLED OVERHEAD WILL BE SERVICED BY CITY OF MILWAUKEE. COORDINATE REMOVALS WITH CITY FORCES.

SHEET 5 OF 6

SCALE, FEET 0 40

PROJECT NO: 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY STREET LIGHTING	SHEET 147 E

NOTE:

1. EXISTING BURIED CABLE TO REMAIN IN SERVICE. EXCAVATE 3' CABLE LENGTH TO ALLOW FOR CONNECTION BY BES.
2. SECONDARY CABLE RISER (XLP) WITH PVC COVER ON SPECIFIED CIRCUIT.
3. MINIMUM CLEARANCE AT CENTER OF SPAN 17-FT. ABOVE ROADWAY.
4. REMOVE ITEM COMPLETELY AFTER PERMANENT LIGHTING IN SERVICE.
5. TEMPORARY 240V FIXTURES WIRED PHASE TO NEUTRAL USING AL TRIPLEX OR 3#12 AWG FLATSTRAP, LOAD BALANCED AS SPECIFIED BY BLACK/RED TERMINATION NOTATION.
6. ALL LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLES 40-FOOT". ALL REMAINING ITEMS SUCH AS WIRE ROPE, TETHERS, WIRE CLIPS, DRIVE HOOKS, SERVICE SLEEVES, HEAVY DUTY INSULATED PULL, CLEVISES ARE INCIDENTAL TO BID ITEM "WOOD POLE 40-FOOT".

LEGEND

- EXISTING STREET LIGHT POLE W/WIRING PEDESTAL & LUM.
- EXISTING STREET LIGHT TO BE REMOVED
- 2200V TO 110V STEP DOWN XFMR TO BE DISCONTINUED
- CONTRACTOR INSTALLED WOOD POLE W/ 6 ARM HPS LUM.
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- CITY INSTALLED 5KV AERIAL CABLE REMOVED BY CONTRACTOR AFTER PERMANENT LIGHTING IN SERVICE
- CONTRACTOR INSTALLED 240/480V AERIAL CABLE
- CONTRACTOR REMOVED AERIAL CABLE DURING TEMP. OVERHEAD INSTALLATION
- DISCONTINUED BURIED CIRCUITRY

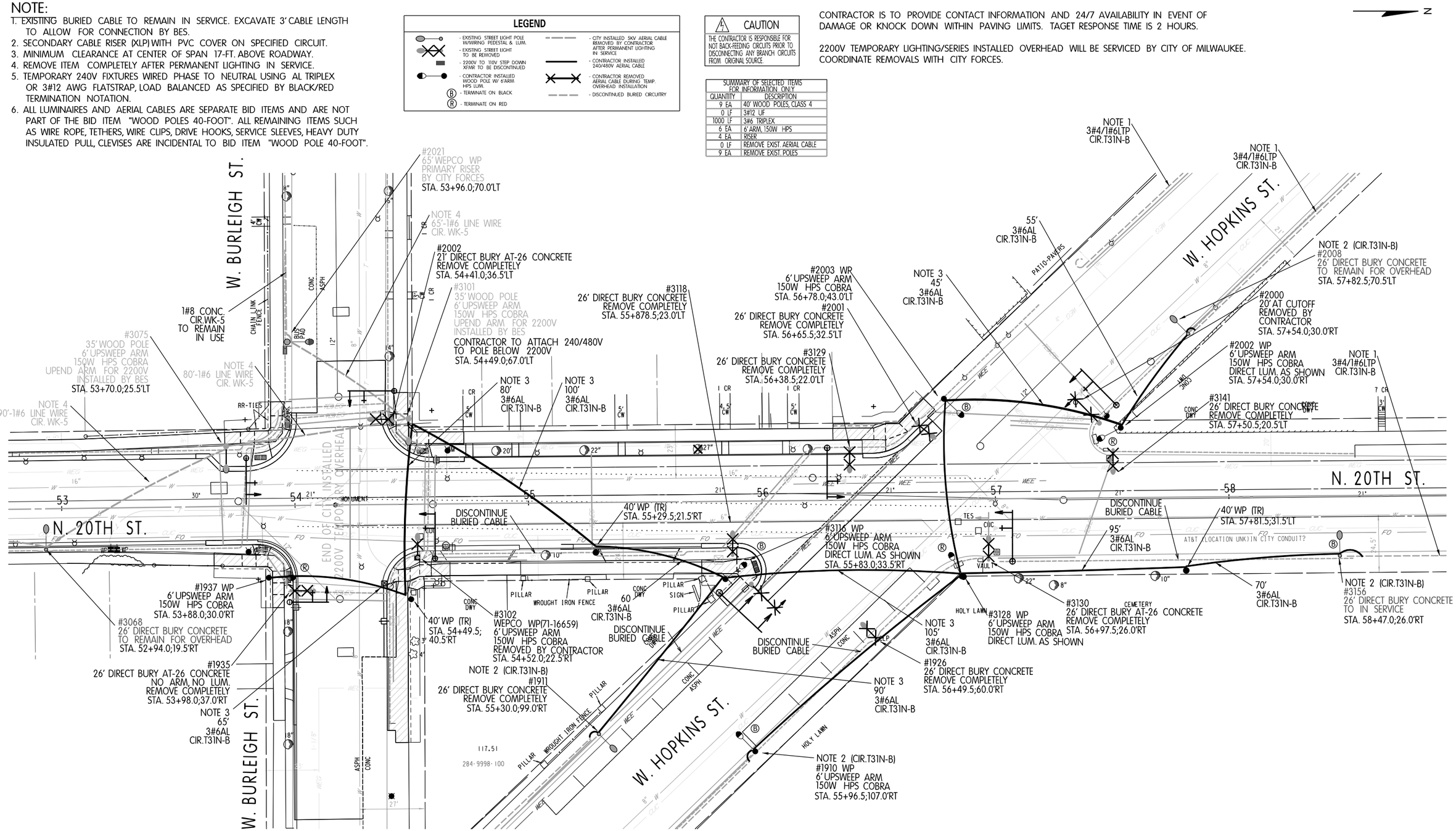
CAUTION

THE CONTRACTOR IS RESPONSIBLE FOR NOT BACK-FEEDING CIRCUITS PRIOR TO DISCONNECTING ANY BRANCH CIRCUITS FROM ORIGINAL SOURCE.

SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
9 EA	40' WOOD POLES, CLASS 4
0 LF	3#12 UF
1000 LF	3#6 TRIPLEX
6 EA	6' ARM, 150W HPS
4 EA	RISER
0 LF	REMOVE EXIST. AERIAL CABLE
9 EA	REMOVE EXIST. POLES

CONTRACTOR IS TO PROVIDE CONTACT INFORMATION AND 24/7 AVAILABILITY IN EVENT OF DAMAGE OR KNOCK DOWN WITHIN PAVING LIMITS. TAGET RESPONSE TIME IS 2 HOURS.

2200V TEMPORARY LIGHTING/SERIES INSTALLED OVERHEAD WILL BE SERVICED BY CITY OF MILWAUKEE. COORDINATE REMOVALS WITH CITY FORCES.



SHEET 6 OF 6

SCALE, FEET 0 40

PROJECT NO: 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY STREET LIGHTING	SHEET 148 E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM - MAST ARM
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE

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.

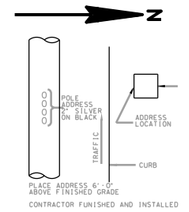
SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

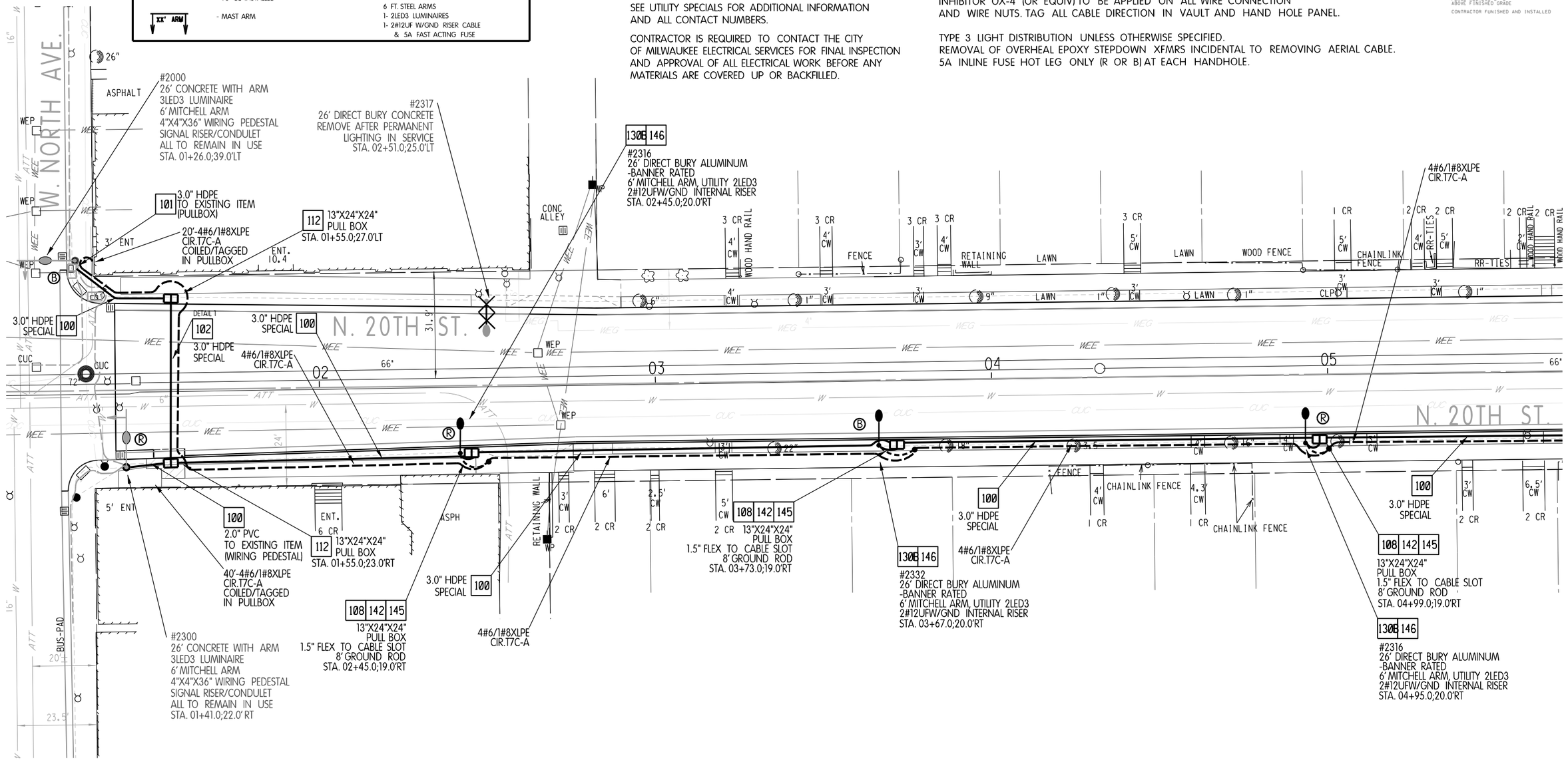
CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

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 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.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.





SCALE, FEET 0 30

SHEET 1 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 149	E

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- MAST ARM (XX' ARM)
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE

NOTE:

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SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

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5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

N

W. MEINECKE AVE.

4#6/1#8XLPE CIR.T7C-A
13"X24"X24" PULL BOX 112 STA. 07+48.0;43.0'LT
108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 07+25.0;24.0'LT
101 3.0" HDPE
130B 146 #2379 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 07+20.0;25.0'LT
130B 146 #2002 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 07+83.0;46.0'LT
108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 07+84.0;42.0'LT
101 3.0" HDPE
112 13"X24"X24" PULL BOX STA. 08+6.0;25.0'LT
DETAIL 1 102 3.0" HDPE
100 3.0" HDPE SPECIAL 4#6/1#8XLPE CIR.T7C-A

N. 20TH ST.

06 07 08 09 10

108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 06+19.0;20.0'RT
100 3.0" HDPE SPECIAL 4#6/1#8XLPE CIR.T7C-A
130B 146 #2362 26' DIRECT BURY ALUMINUM 6' MITCHELL ARM SINGLE BRACKET CLAMP UTILITY 2LED3 3#12UF INTERNAL RISER STA. 06+24.0;19.0'RT
112 13"X24"X24" PULL BOX STA. 07+29.0;19.0'RT
101 3.0" HDPE
130B 146 #1937 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 07+44.0;40.0'RT
108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 07+44.0;43.0'RT
130B 146 #2402 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 08+0.0;20.0'RT
112 13"X24"X24" PULL BOX
108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 08+6.0;19.0'RT
100 3.0" HDPE SPECIAL 4#6/1#8XLPE CIR.T7C-A
108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 09+17.0;19.0'RT
130B 146 #2418 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 09+13.0;20.0'RT
108 142 145 13"X24"X24" PULL BOX 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 10+38.0;19.0'RT
130B 146 #2434 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 10+43.0;20.0'RT
100 3.0" HDPE SPECIAL 4#6/1#8XLPE CIR.T7C-A

4 CR 4' CW · 2 CR 6' CW · 2 CR 5.2' CW · 2 CR 4' CW · 1 CR 5.3' CW · 2 CR 4.5' CW · 4.4' CW
FENCE · FENCE POST · CHAIN LINK FENCE · IRON HAND RAIL · ASPH · (OVERHEAD) · LAWN · WEP · WEE · W · CUC

PLACE ADDRESS 6"-0" ABOVE FINISHED GRADE
CONTRACTOR FURNISHED AND INSTALLED

SCALE, FEET 0 30

SHEET 2 OF 13

PROJECT NO: 2275-05-70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 150	E

FILE NAME : W:\bes_WisDot\2021\(2275-05-70) n20th - North to Hopkins\SL Conduit\n20 CONDUIT 100 Final.dgn
PLOT DATE : 24-JUL-2023 13:17 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 1:30
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.

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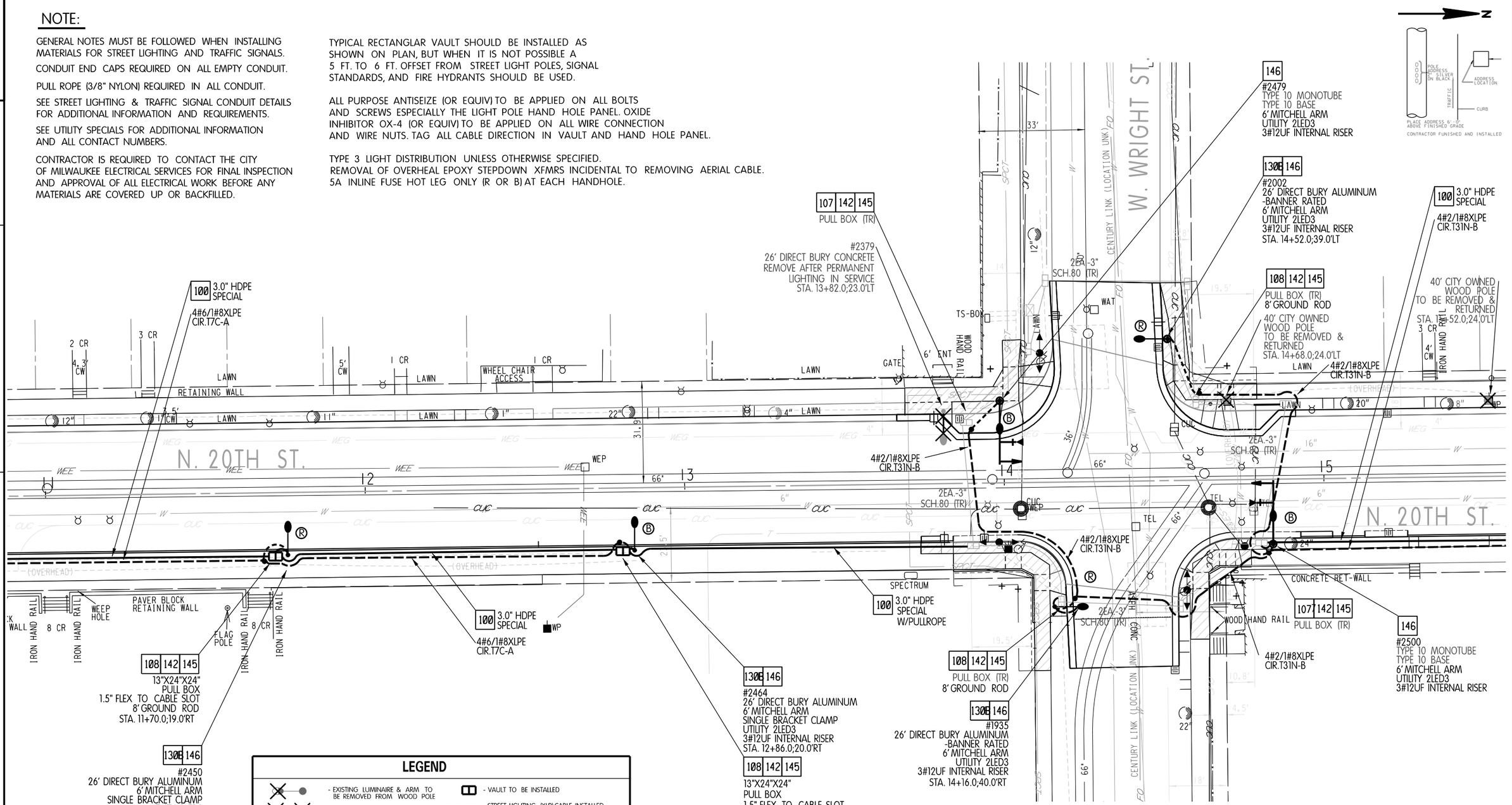
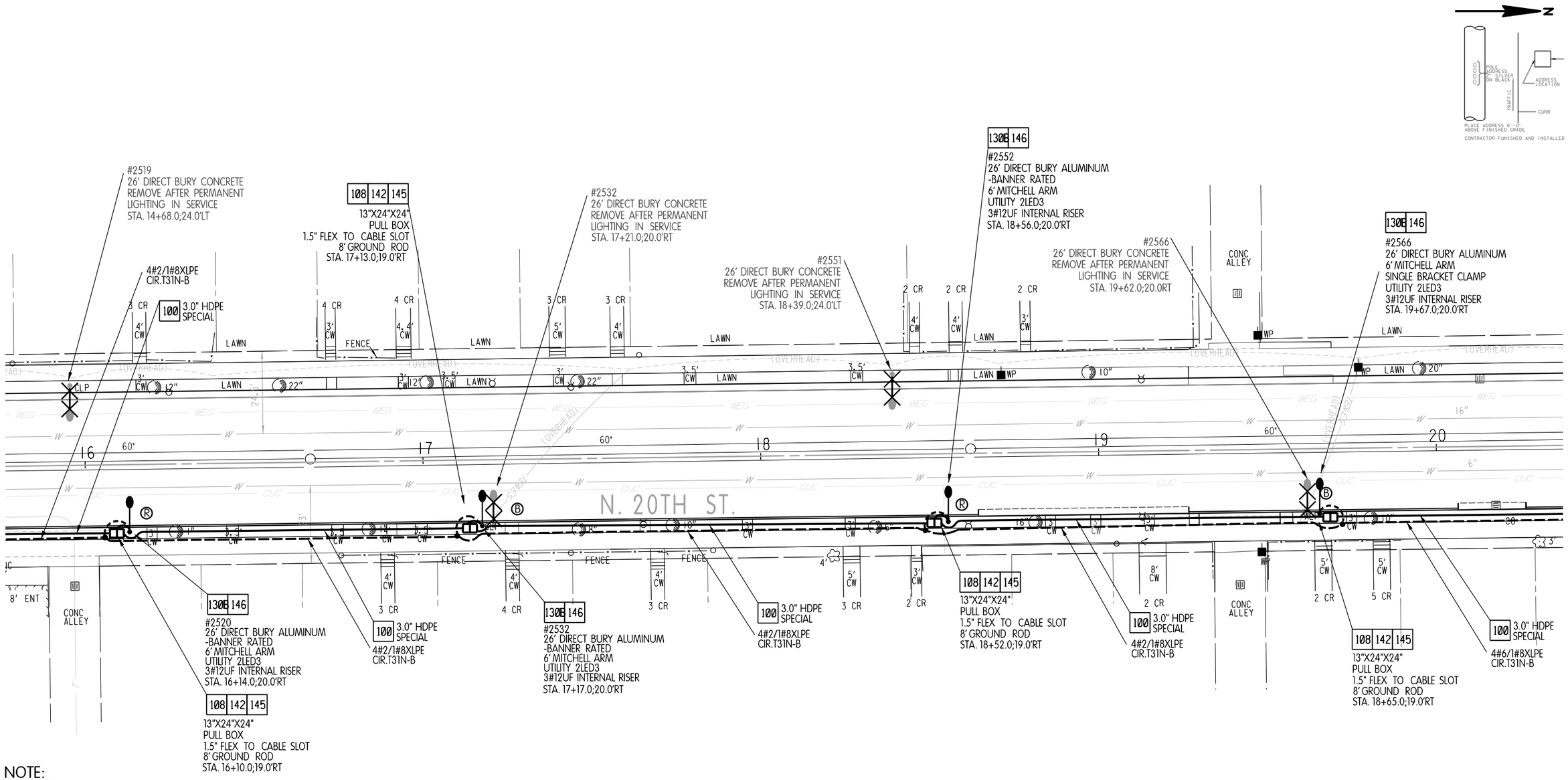


SHEET 3 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 151	E

2



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LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM - MAST ARM
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
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- MAST ARM (XX' ARM)
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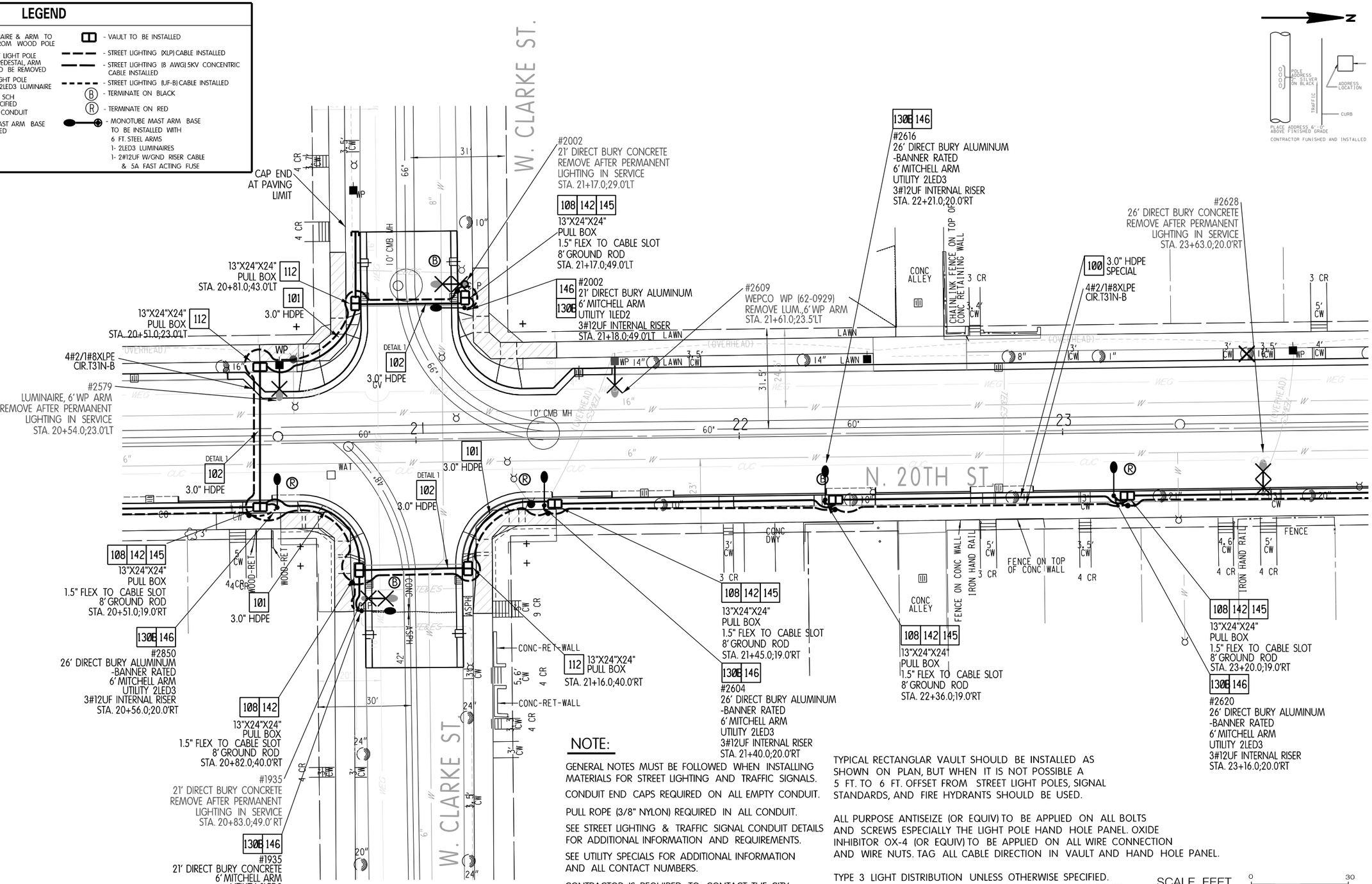

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SCALE, FEET 0 30

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 153	E

FILE NAME : W:\bes_WisDot\2021\(2275–05–70) n20th – North to Hopkins\SL Conduit\n20 CONDUIT 100 Final.dgn
PLOT DATE : 24–JUL–2023 13:18 PLOT BY : lnickm PLOT NAME : PLOT SCALE : 1:30
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
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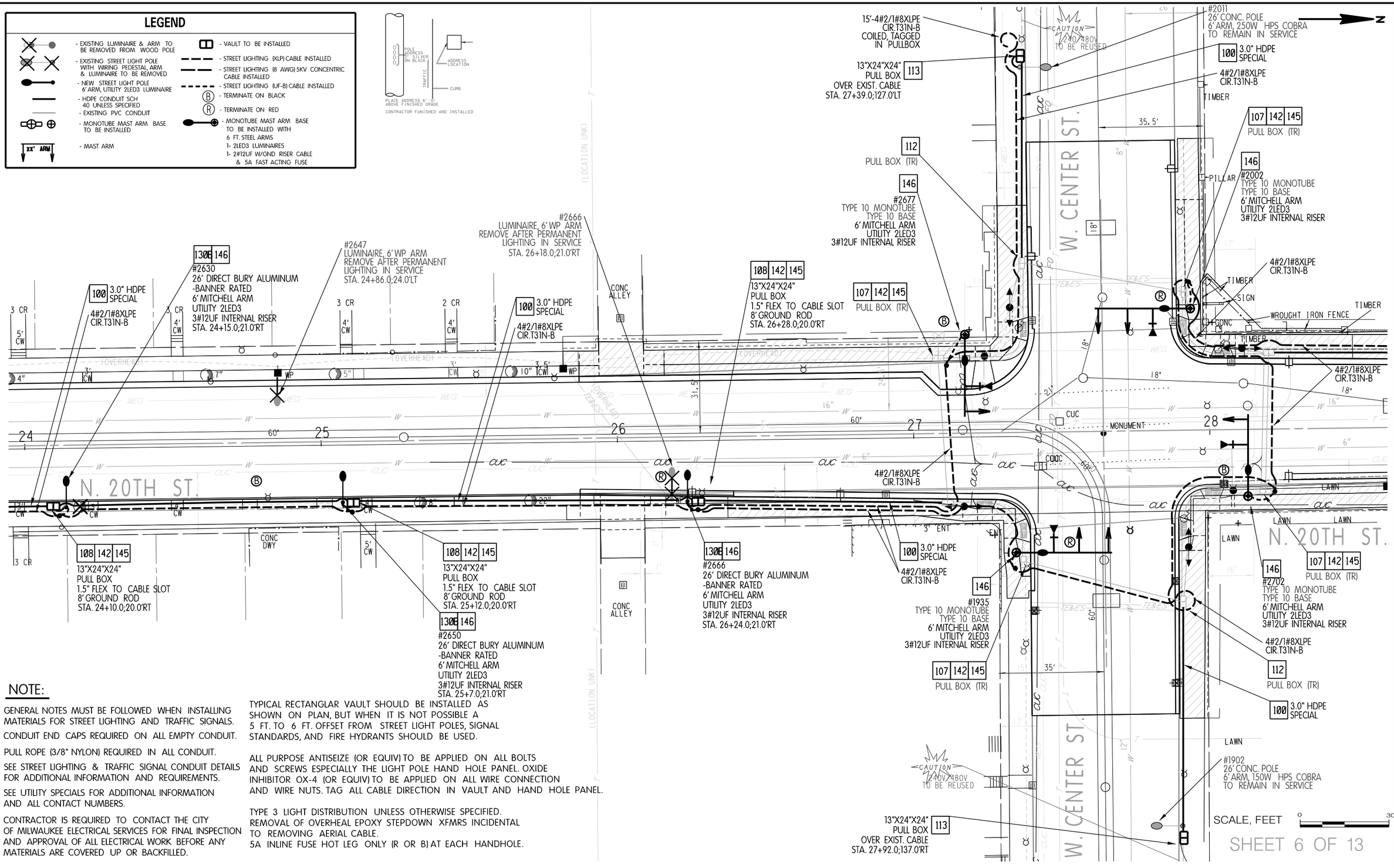

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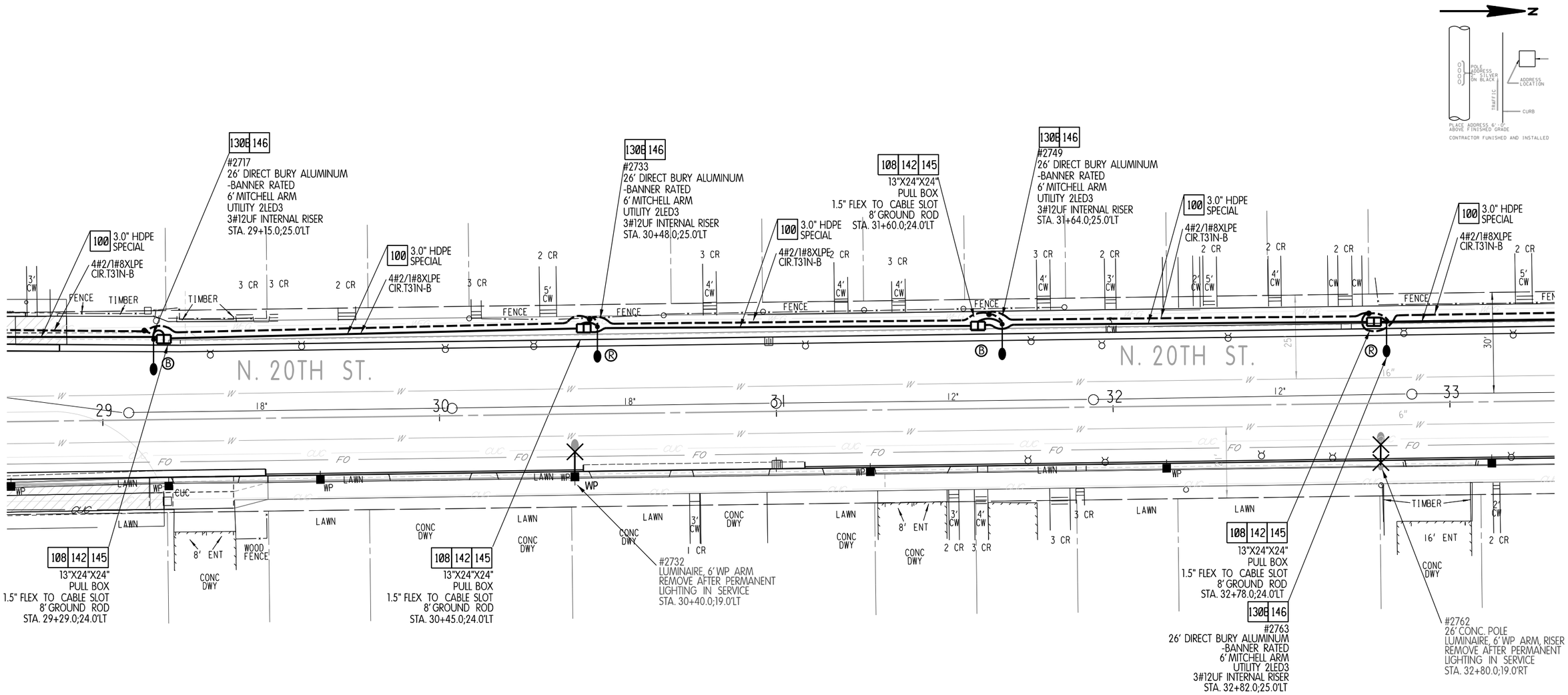
SHEET 6 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 154	E



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5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM - MAST ARM
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) - TERMINATE ON BLACK
- (R) - TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS, 1- 2LED3 LUMINAIRES, 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE

SCALE, FEET 0 30

SHEET 7 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 155	E

FILE NAME : W:\bes_WisDot\2021\(2275–05–70) n20th – North to Hopkins\SL Conduit\n20 CONDUIT 100 Final.dgn PLOT DATE : 24–JUL–2023 13:18 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 1:30

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.

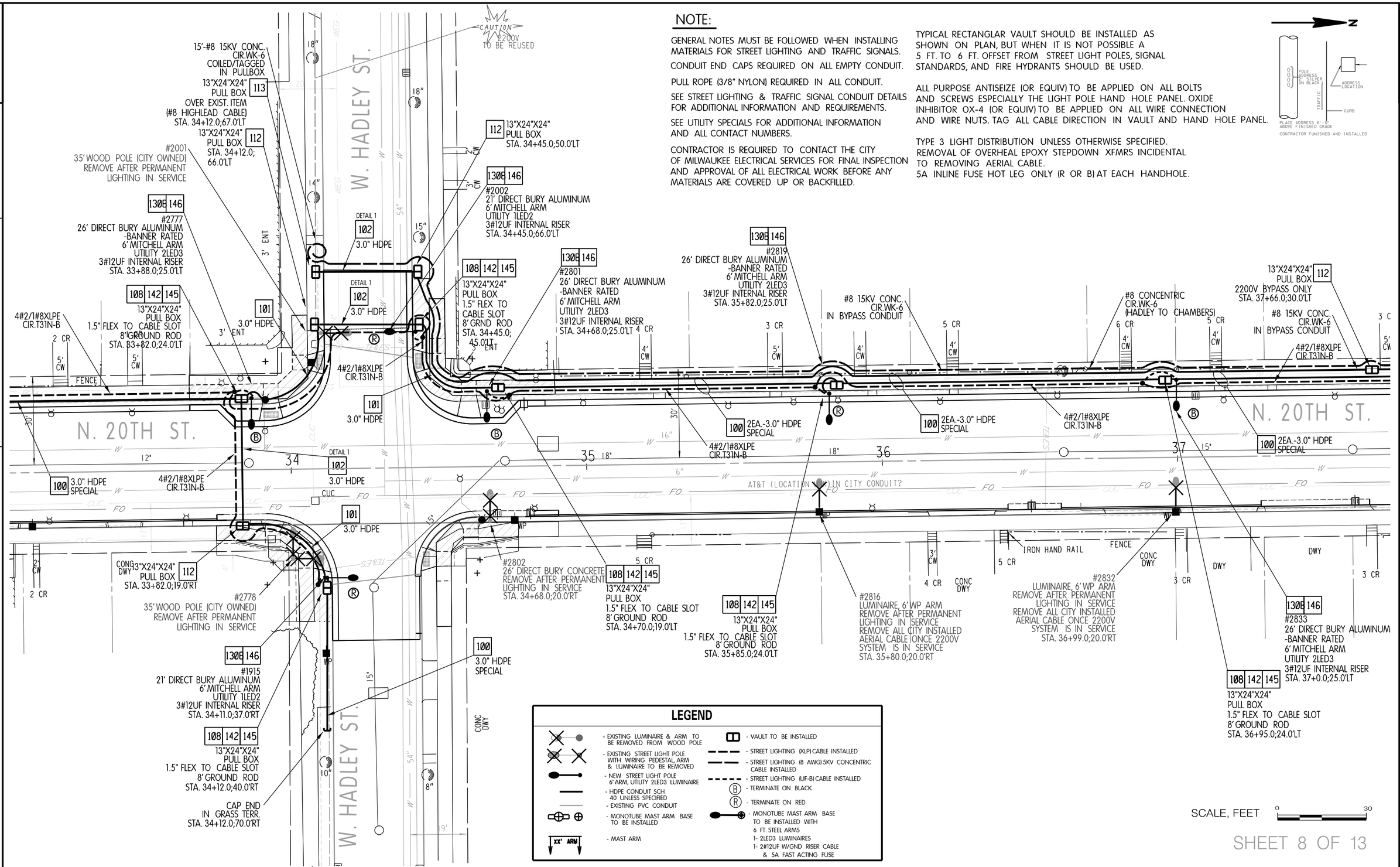
SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

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 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.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

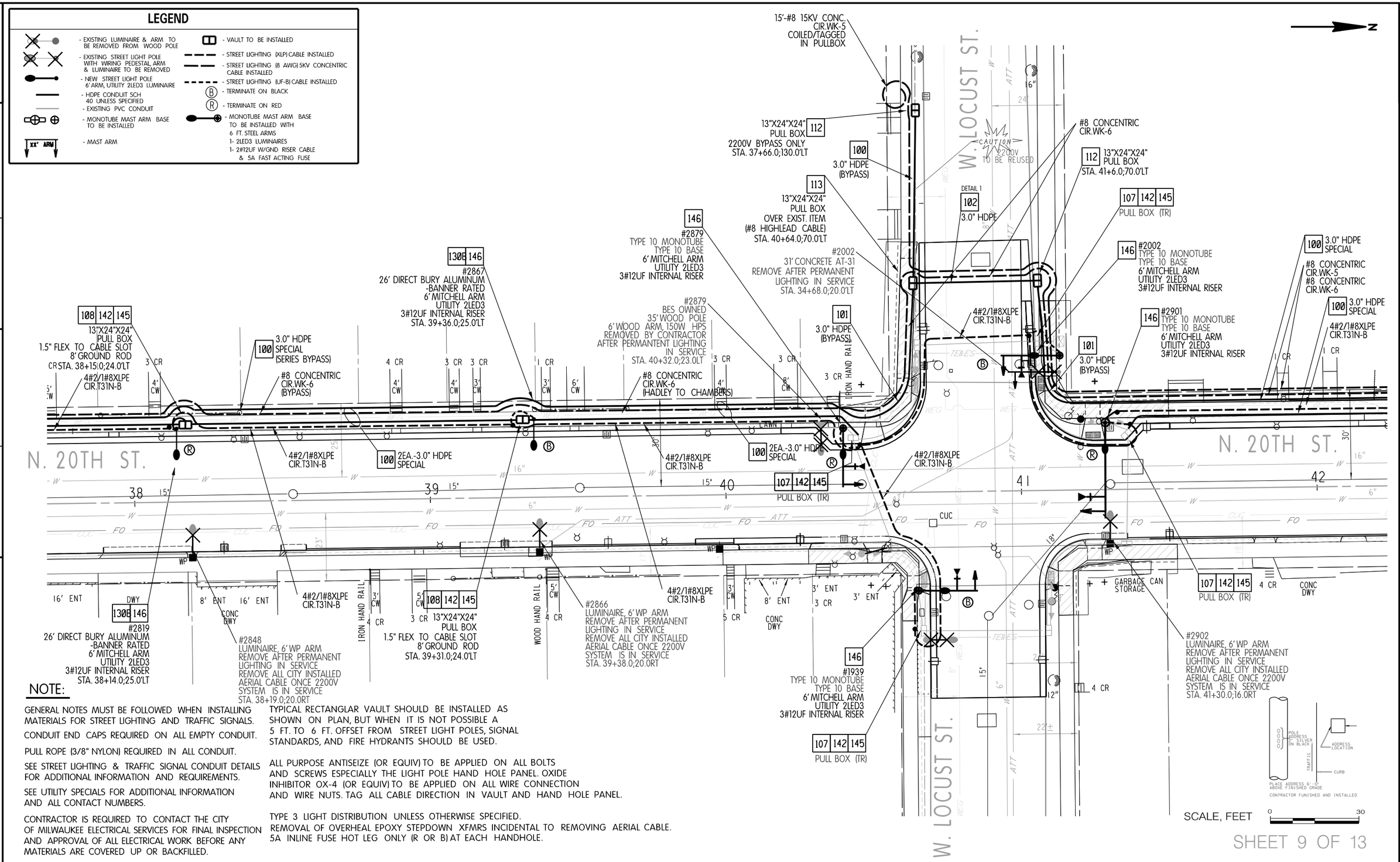


SHEET 8 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 156	E

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- MAST ARM (xx' ARM)
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE



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 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.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 157	E

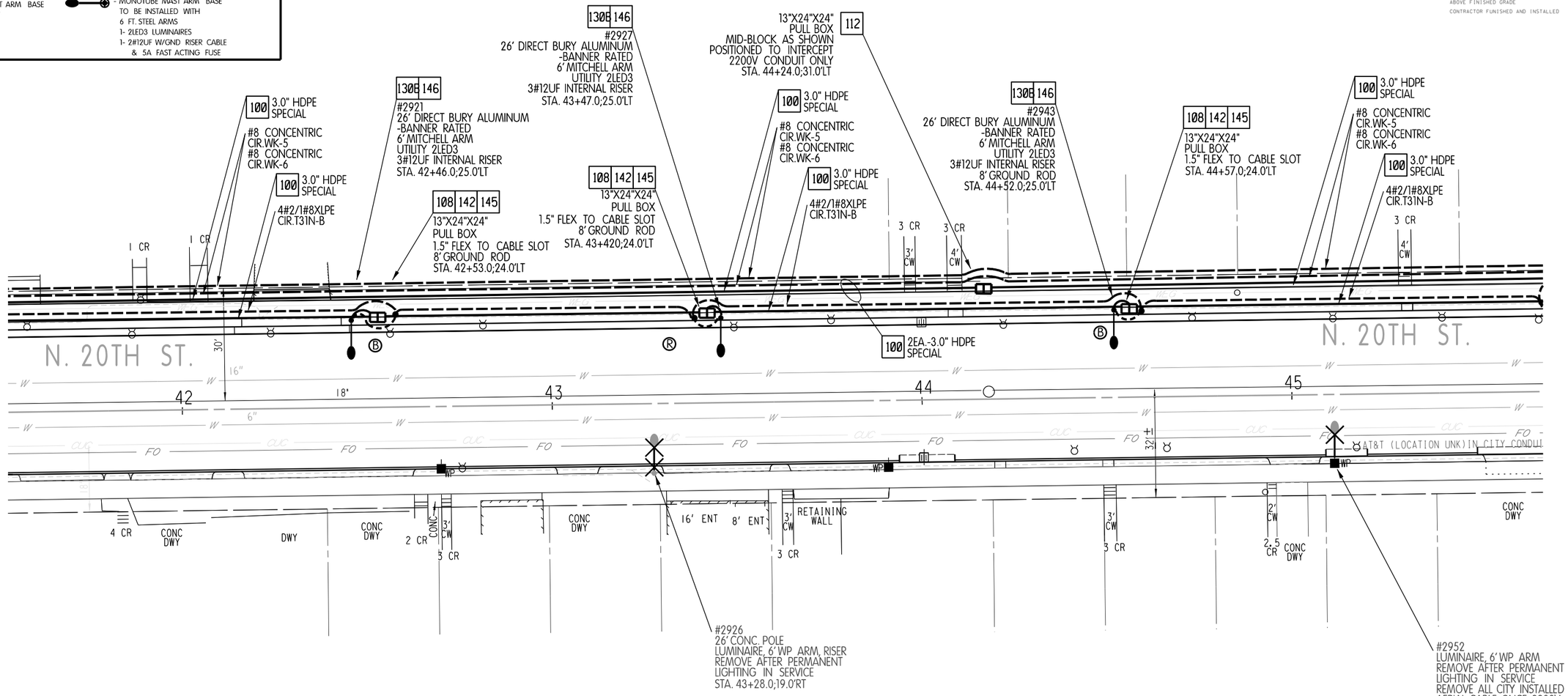
FILE NAME : W:\bes_WisDot\2021\(2275–05–70) n20th – North to Hopkins\SL Conduit\n20 CONDUIT 100 Final.dgn
PLOT DATE : 24–JUL–2023 13:19
PLOT BY : lnickm
PLOT NAME :
PLOT SCALE : 1:30
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- MAST ARM (XX' ARM)
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE

N

POLE ADDRESS 6" SILVER ON BLACK
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE FINISHED GRADE
CONTRACTOR FUNISHED 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.

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SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

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REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

SCALE, FEET 0 30

SHEET 10 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 158	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.

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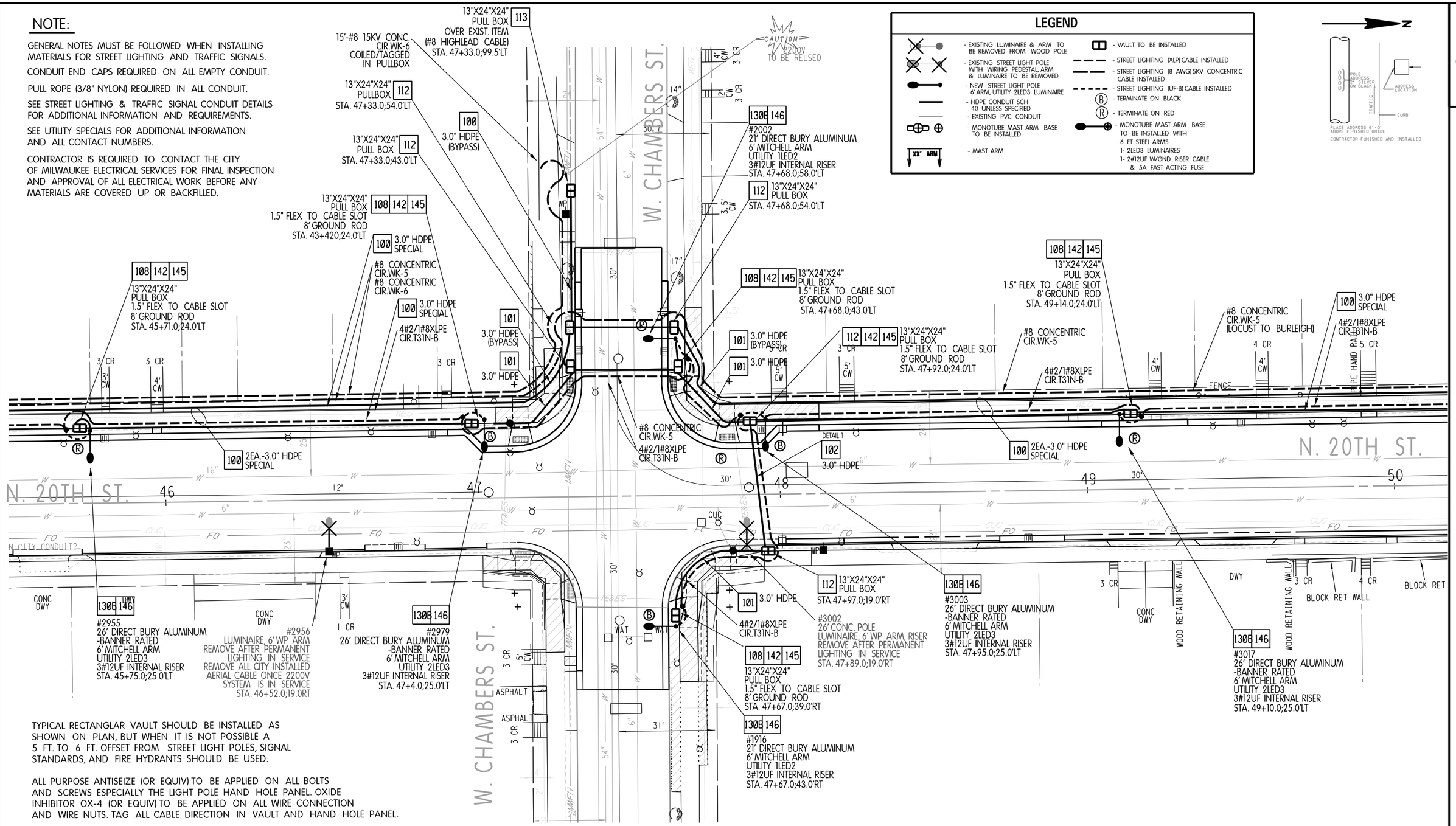

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REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

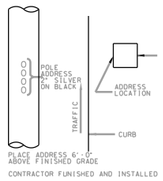
SCALE, FEET 0 30

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 159	E

FILE NAME : W:\bes_WisDot\2021\(2275–05–70) n20th – North to Hopkins\SL Conduit\n20 CONDUIT 100 Final.dgn
PLOT DATE : 24–JUL–2023 13:19
PLOT BY : lhickm
PLOT NAME :
PLOT SCALE : 1:30
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- XX' ARM - MAST ARM
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE



PLACE ADDRESS 6'-0" ABOVE FINISHED GRADE
CONTRACTOR FUNISHED AND INSTALLED

#3035
26' DIRECT BURY ALUMINUM -BANNER RATED
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER
STA. 50+30.0;25.0'LT

112 13"X24"X24" PULL BOX MID-BLOCK AS SHOWN POSITIONED TO INTERCEPT 2200V CONDUIT ONLY STA. 50+85.0;24.0'LT

108 142 145 13"X24"X24" PULL BOX
1.5" FLEX TO CABLE SLOT
8' GROUND ROD
STA. 51+40.0;24.0'LT

#3051
26' DIRECT BURY ALUMINUM -BANNER RATED
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER
STA. 51+45.0;25.0'LT

#8 CONCENTRIC CIR.WK-5 (LOCUST TO BURLEIGH)

#3067
26' DIRECT BURY ALUMINUM -BANNER RATED
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER
STA. 52+66.0;25.0'LT

108 142 145 13"X24"X24" PULL BOX
1.5" FLEX TO CABLE SLOT
8' GROUND ROD
STA. 52+74.0;24.0'LT

#2002
TYPE 10 MONOTUBE
TYPE 10 BASE
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER

#3081
TYPE 10 MONOTUBE
TYPE 10 BASE
6' MITCHELL ARM
SINGLE BRACKET CLAMP
UTILITY 2LED3
3#12UF INTERNAL RISER

10'-#8 CONCENTRIC CIR.WK-5

100 3.0" HDPE (BYPASS)

113 13"X24"X24" PULL BOX OVER EXIST. ITEM (#8 HIGHLEAD CABLE) STA. 53+96.0;65.0'LT

107 142 145 PULL BOX (TR)

4#2/1#8XLPE CIR.T31N-B

100 2EA.-3.0" HDPE SPECIAL

#3036
LED LUMINAIRE, 6' WP ARM RISER W/COVER, WIRING PED. REMOVE AFTER PERMANENT LIGHTING IN SERVICE REMOVE ALL CITY INSTALLED AERIAL CABLE ONCE 2200V SYSTEM IS IN SERVICE STA. 50+49.0;19.0'RT

#3068
26' CONC. POLE
LED LUMINAIRE, 6' WP ARM, RISER
REMOVE AFTER PERMANENT LIGHTING IN SERVICE
STA. 47+89.0;19.0'RT

#1935
TYPE 10 MONOTUBE
TYPE 10 BASE
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER

#3102
TYPE 10 MONOTUBE
TYPE 10 BASE
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER

13"X24"X24" PULL BOX (ROADWAY CROSSING) STA. 54+41.0;121.0'RT (FIELD VERIFY CONDUIT CROSSING)

#1908
26' CONC. POLE
6' ARM, LED COBRA
4"X4"X36" WIRING PED
TO BE REMOVED AFTER NEW #1908 IS IN SERVICE
STA. 54+41.0;124.0'RT

#1908
26' DIRECT BURY ALUMINUM -BANNER RATED
6' MITCHELL ARM
UTILITY 2LED3
3#12UF INTERNAL RISER
8' GROUND ROD
STA. 54+4.0;128.0'RT

15'-4#2/1#8XLPE CIR.T31N-B COILED, TAGGED IN PULLBOX

W. BURLEIGH ST.

CAUTION 2200V TO BE REUSED

SCALE, FEET 0 30

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.

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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.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 160	E

FILE NAME : W:\bes_WisDot\2021\(2275–05–70) n20th – North to Hopkins\SL Conduit\n20 CONDUIT 100 Final.dgn PLOT DATE : 24–JUL–2023 13:20 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 1:30
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING LUMINAIRE & ARM TO BE REMOVED FROM WOOD POLE
- EXISTING STREET LIGHT POLE WITH WIRING PEDESTAL, ARM & LUMINAIRE TO BE REMOVED
- NEW STREET LIGHT POLE 6' ARM, UTILITY 2LED3 LUMINAIRE
- HDPE CONDUIT SCH 40 UNLESS SPECIFIED
- EXISTING PVC CONDUIT
- MONOTUBE MAST ARM BASE TO BE INSTALLED
- MAST ARM (XX' ARM)
- VAULT TO BE INSTALLED
- STREET LIGHTING (XLP) CABLE INSTALLED
- STREET LIGHTING (8 AWG) 5KV CONCENTRIC CABLE INSTALLED
- STREET LIGHTING (UF-B) CABLE INSTALLED
- (B) TERMINATE ON BLACK
- (R) TERMINATE ON RED
- MONOTUBE MAST ARM BASE TO BE INSTALLED WITH 6 FT. STEEL ARMS 1- 2LED3 LUMINAIRES 1- 2#12UF W/GND RISER CABLE & 5A FAST ACTING FUSE

POLE ADDRESS 6" SILVER ON BLACK
TRAFFIC
ADDRESS LOCATION
CURB
PLACE ADDRESS 6'-0" ABOVE FINISHED GRADE
CONTRACTOR FUNISHED AND INSTALLED

146 #2015 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 57+42.0;102.0'LT (AT RETAINING WALL)

10'-4#2/1#8XLPE CIR.T31N-B COILED/TAGGED IN PULLBOX

RETAINING WALL

PATIO-PAVERS

146 #2002 TYPE 10 MONOTUBE TYPE 10 BASE 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 57+45.0;105.0'LT 4#2/1#8XLPE CIR.T31N-B

3.0" HDPE SPECIAL 100

CAUTION XLP CABLE TO BE REUSED

113 13"X24"X24" PULL BOX OVER EXISTING ITEM (CONDUIT) 1.5" FLEX TO CABLE SLOT STA. 57+45.0;105.0'LT

#2008 26' DIRECT BUY CONCRETE TO BE REMOVED STA. 57+80.5;57.0LT

107 142 145 PULL BOX (TR)

130E 146 #3141 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 57+62.0;22.0'LT

130E 146 #3118 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER 8' GROUND ROD STA. 44+52.0;25.0'LT

146 #3119 TYPE 10 MONOTUBE TYPE 10 BASE 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER

107 142 145 PULL BOX (TR) 4.5' CW

130E 146 #2001 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER 8' GROUND ROD STA. 44+52.0;25.0'LT

108 142 145 PULL BOX (TR) 8' GROUND ROD

W. HOPKINS ST.

N. 20TH ST.

4#2/1#8XLPE CIR.T31N-B

3.0" HDPE SPECIAL 100

108 142 145 PULL BOX (TR) 8' GROUND ROD

107 142 145 PULL BOX (TR)

TES

CUC

VAULT

AT&T (LOCATION UNK) IN CITY CONDUIT?

PILLAR

WROUGHT IRON FENCE

CONC DWY

SIGN

146 #1925 TYPE 10 MONOTUBE TYPE 10 BASE 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER

#3068 26' CONC. POLE LED LUMINAIRE, 6' WP ARM, RISER REMOVE AFTER PERMANENT LIGHTING IN SERVICE STA. 55+31.0;90.0'RT

130E 146 #1909 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 55+12.0;114.0RT (AT PILLAR)

108 113 13"X24"X24" PULL BOX OVER EXISTING ITEM (CONDUIT) 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 55+8.0;118.0'RT

20'-4#2/1#8XLPE CIR.T31N-B COILED, TAGGED

CAUTION XLP CABLE TO BE REUSED

ASPH

CONC

CLP

CEMETERY

108 142 145 PULL BOX (TR) 8' GROUND ROD

130E 146 #1926 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER 8' GROUND ROD STA. 44+52.0;25.0'LT

146 #3130 TYPE 10 MONOTUBE TYPE 10 BASE 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER

3.0" HDPE SPECIAL 100

#3156 26' DIRECT BURY CONCRETE TO REMAIN IN SERVICE 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 58+46.0;25.0RT

108 113 142 13"X24"X24" PULL BOX OVER EXISTING ITEM (CONDUIT) 1.5" FLEX TO CABLE SLOT STA. 58+51.0;24.0RT 20'-4#2/1#8XLPE CIR.T31N-B COILED, TAGGED

CAUTION XLP CABLE TO BE REUSED

100 3.0" HDPE SPECIAL

HOLY LAWN

130E 146 #1908 26' DIRECT BURY ALUMINUM -BANNER RATED 6' MITCHELL ARM UTILITY 2LED3 3#12UF INTERNAL RISER STA. 55+12.0;114.0RT

108 113 13"X24"X24" PULL BOX OVER EXISTING ITEM (CONDUIT) 1.5" FLEX TO CABLE SLOT 8' GROUND ROD STA. 55+12.0;114.0RT

20'-4#2/1#8XLPE CIR.T31N-B COILED, TAGGED

CAUTION XLP CABLE TO BE REUSED

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.

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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.

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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.

TYPE 3 LIGHT DISTRIBUTION UNLESS OTHERWISE SPECIFIED.
REMOVAL OF OVERHEAL EPOXY STEPDOWN XFMRS INCIDENTAL TO REMOVING AERIAL CABLE.
5A INLINE FUSE HOT LEG ONLY (R OR B) AT EACH HANDHOLE.

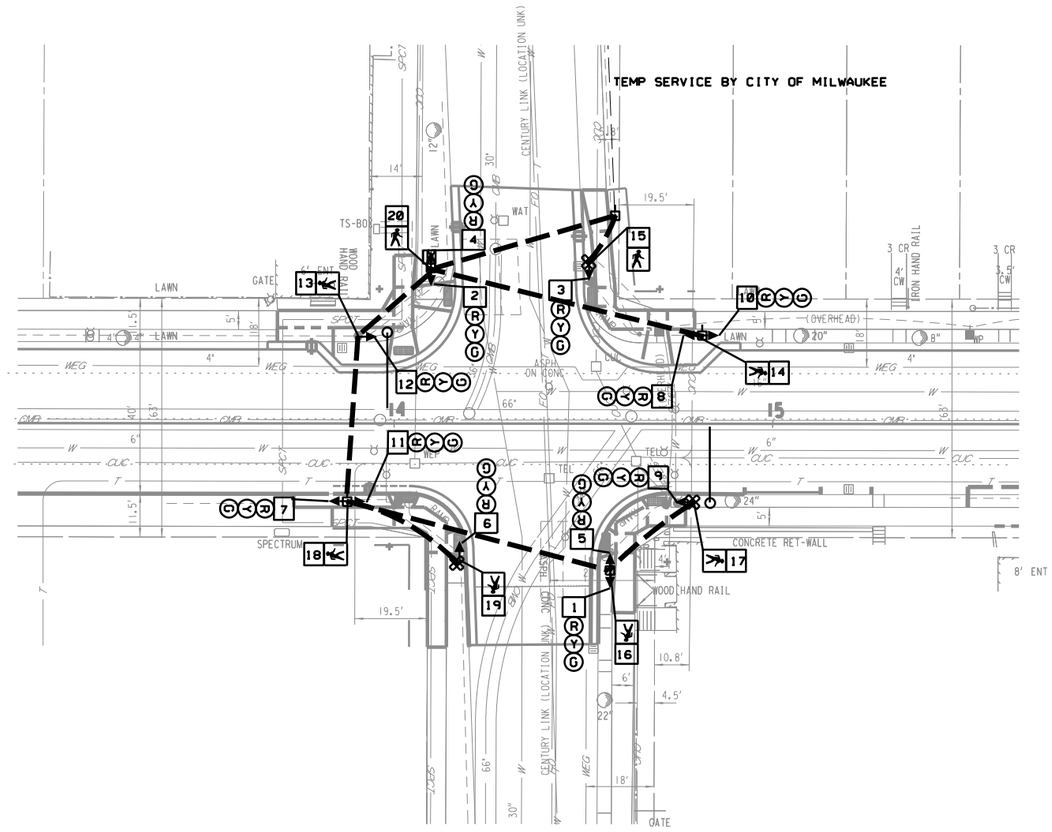
SCALE, FEET 0 30

SHEET 13 OF 13

PROJECT NO: 2275–05–70	HWY: N. 20TH ST.	COUNTY: MILWAUKEE	STREET LIGHTING	SHEET 161	E

2

N



LEGEND

- CONTROL CABINET
- EXISTING SIGNAL POLE
- 35' CLASS 4 WOOD POLE
- MOVEABLE SIGNAL STANDARD
- UNDERGROUND CABLE IN SERVICE
- OVERHEAD TRAFFIC CABLE

NOTE:

PROPOSED MONOTUBE

TRAFFIC CONTROL SIGNAL
W. WRIGHT ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

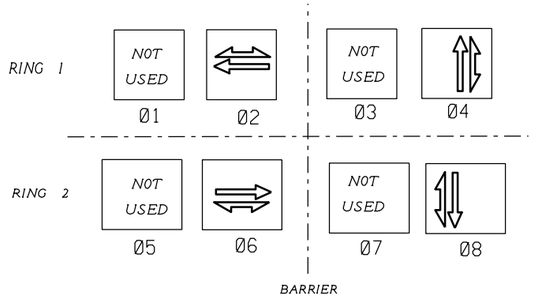
PAGE 1 OF

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 162	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION



	HEAD NUMBERS	FLASH
OLA		
Ø2	10,11,12	R
OLB		
Ø4	1,2,3	R
OLC		
Ø6	7,8,9	R
OLD		
Ø8	4,5,6	R
Ø2P	13,14	
Ø4P	15,16	
Ø6P	17,18	
Ø8P	19,20	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS. .	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY Y / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	COORD.	X
3				
4		8	PED	X
5				
6		2	COORD.	X
7				
8		4	PED	X

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. WRIGHT ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

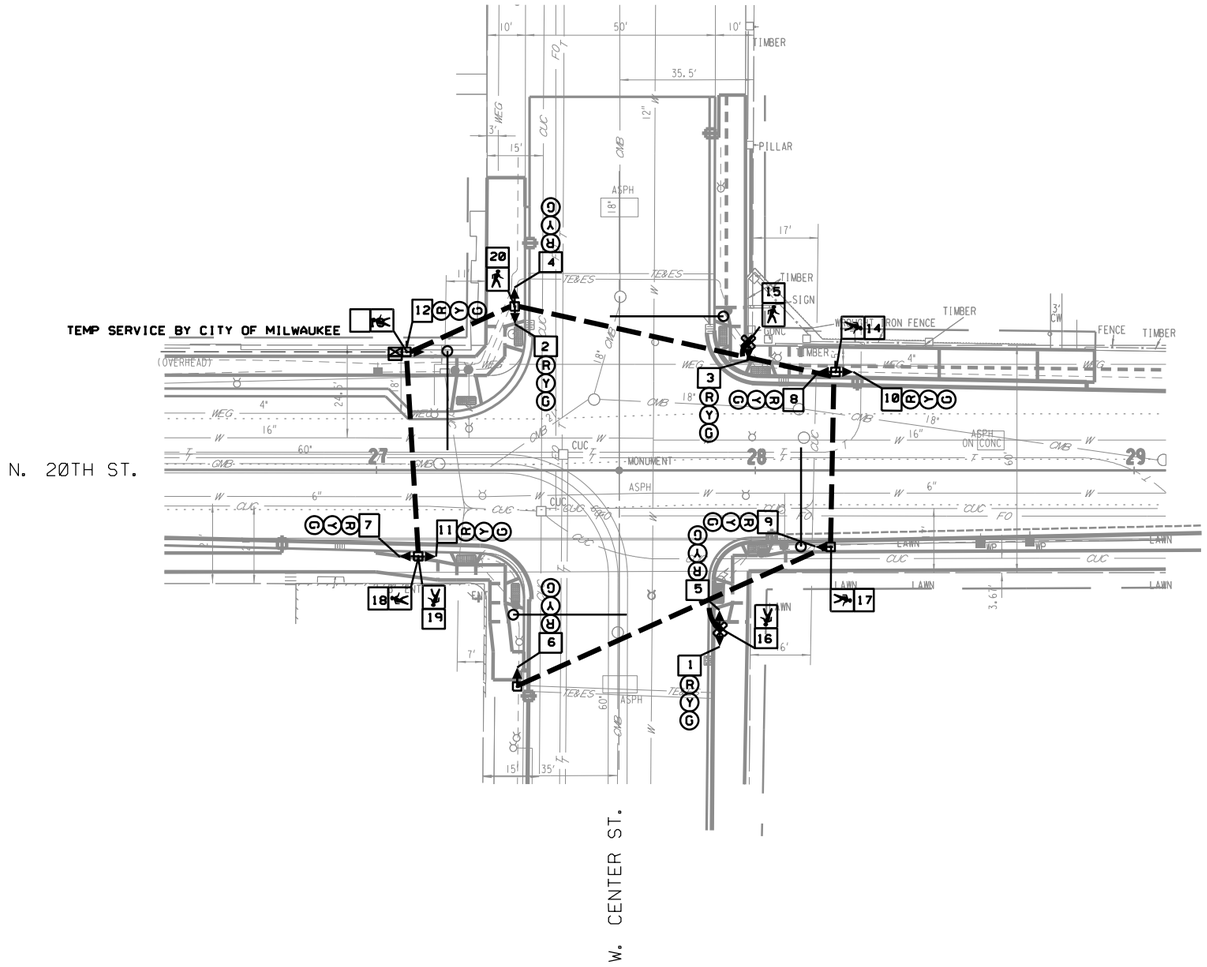
SIGNAL NO.

CONTROLLER TYPE: 170E

DATE PAGE NO. OF

2

N



LEGEND

- CONTROL CABINET
- EXISTING SIGNAL POLE
- 35' CLASS 4 WOOD POLE
- MOVEABLE SIGNAL STANDARD
- UNDERGROUND CABLE IN SERVICE
- OVERHEAD TRAFFIC CABLE

NOTE:

PROPOSED MONOTUBE

TRAFFIC CONTROL SIGNAL
W. CENTER ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

PAGE 1 OF

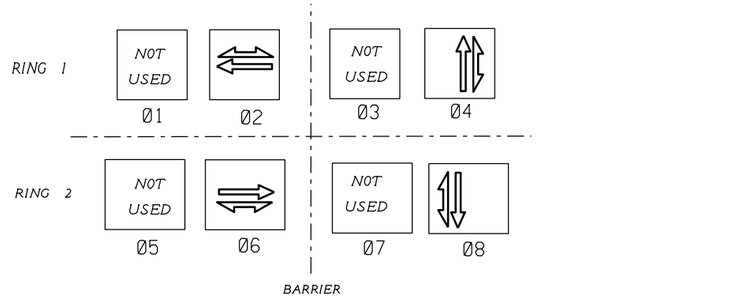
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 164	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
0LA		
02	10,11,12	R
0LB		
04	1,2,3	R
0LC		
06	7,8,9	R
0LD		
08	4,5,6	R
02P	13,14	
04P	15,16	
06P	17,18	
08P	19,20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS. .	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY Y / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	PED	X
3				
4		8	COORD.	X
5				
6		2	PED	X
7				
8		4	COORD.	X

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. CENTER ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: 170E

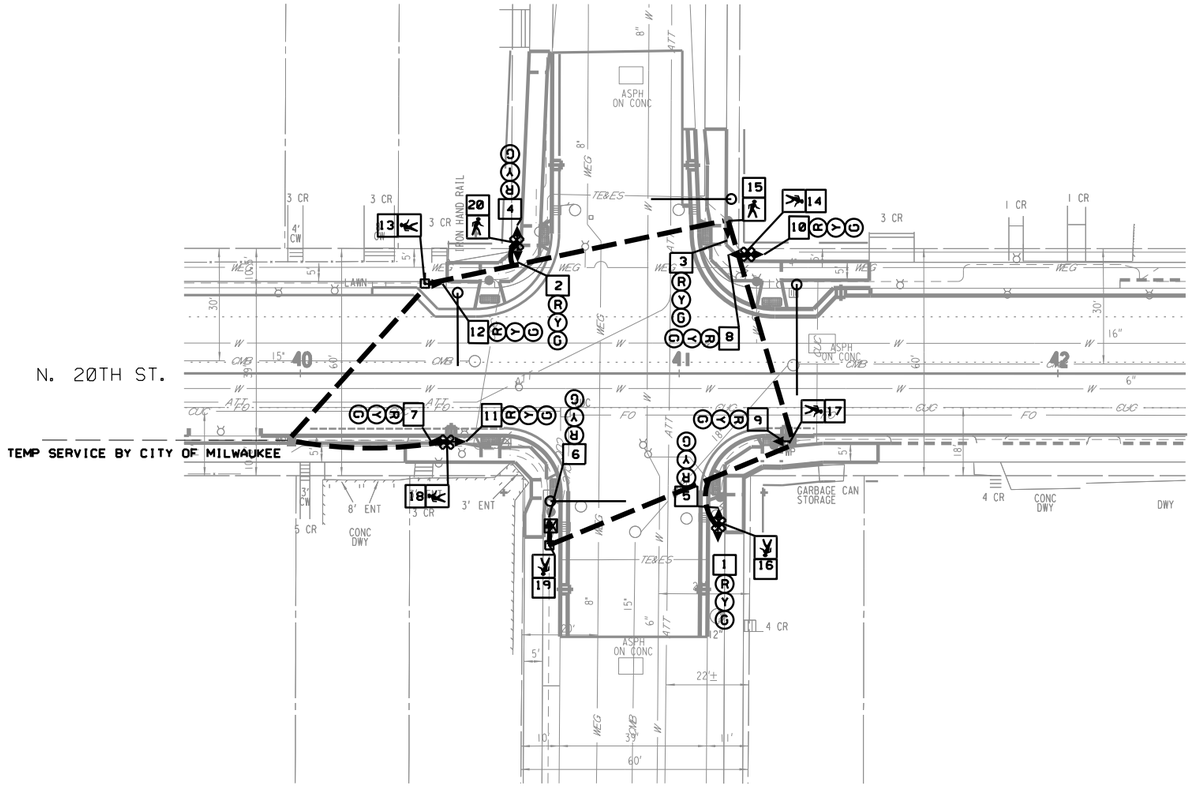
DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	TEMPORARY SEQUENCE OF OPERATIONS	SHEET	E

FILE NAME : $$....DESIGNFILE....$$ PLOT DATE : $$...PLOTTINGDATE...$$ PLOT BY : $$...PLOTUSER...$$ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$ WISDOT/CADDS SHEET 42

2

N



LEGEND

- CONTROL CABINET
- EXISTING SIGNAL POLE
- 35' CLASS 4 WOOD POLE
- MOVEABLE SIGNAL STANDARD
- UNDERGROUND CABLE IN SERVICE
- OVERHEAD TRAFFIC CABLE

NOTE:

PROPOSED MONOTUBE

TRAFFIC CONTROL SIGNAL
W. LOCUST ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

PAGE 1 OF

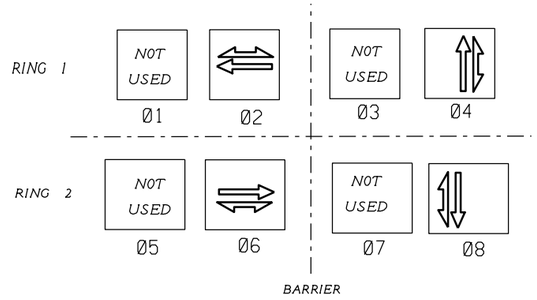
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 166	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
0LA		
Ø2	10.11.12	R
0LB		
Ø4	1.2.3	R
0LC		
Ø6	7.8.9	R
0LD		
Ø8	4.5.6	R
Ø2P	13.14	
Ø4P	15.16	
Ø6P	17.18	
Ø8P	19.20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S.
SIGNAL SYSTEM *:	SS. .

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY Y / @	PHASE RECALL	PHASE ACTIVE
1				
2		6	COORD.	X
3				
4		8	PED	X
5				
6		2	COORD.	X
7				
8		4	PED	X

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. LOCUST ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: 170E

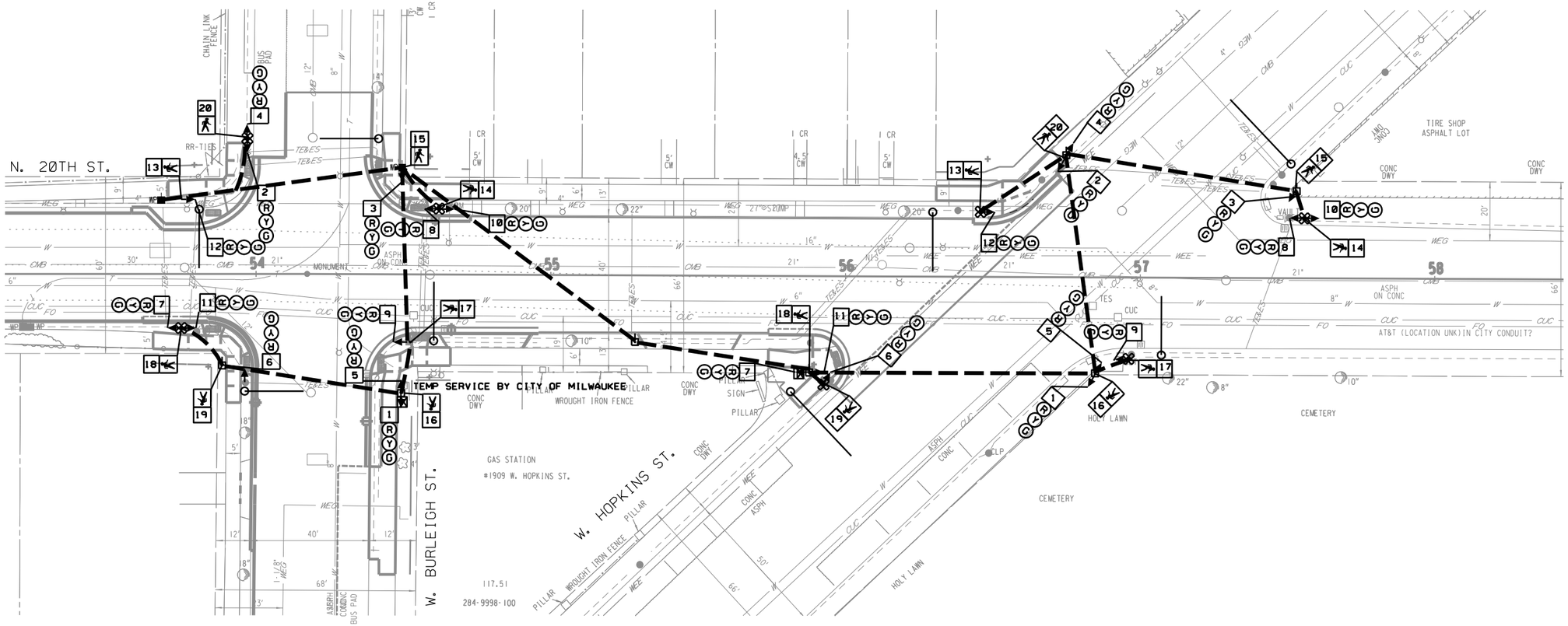
DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	TEMPORARY SEQUENCE OF OPERATIONS	SHEET	E

FILE NAME : $$....DESIGNFILE....$$ PLOT DATE : $$...PLOTTINGDATE...$$ PLOT BY : $$...PLOTUSER...$$ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$ WISDOT/CADDS SHEET 42

2

N



LEGEND

- CONTROL CABINET
- EXISTING SIGNAL POLE
- 35' CLASS 4 WOOD POLE
- MOVEABLE SIGNAL STANDARD
- UNDERGROUND CABLE IN SERVICE
- OVERHEAD TRAFFIC CABLE

NOTE:

PROPOSED MONOTUBE

TRAFFIC CONTROL SIGNAL
W. HOPKINS ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY: PAGE 1 OF

TRAFFIC CONTROL SIGNAL
W. BURLEIGH ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

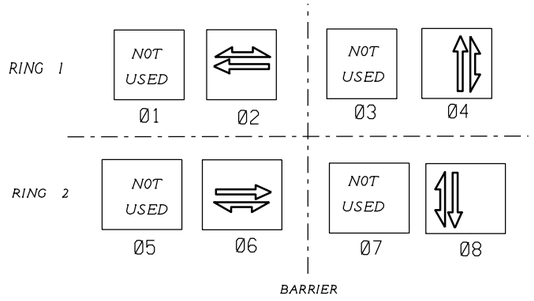
MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY: PAGE 1 OF

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 168	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

	HEAD NUMBERS	FLASH
0LA		
Ø2	10,11,12	R
0LB		
Ø4	1,2,3	R
0LC		
Ø6	7,8,9	R
0LD		
Ø8	4,5,6	R
Ø2P	13,14	
Ø4P	15,16	
Ø6P	17,18	
Ø8P	19,20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS. .	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY Y / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	COORD.	X
3				
4		8	PED	X
5				
6		2	COORD.	X
7				
8		4	PED	X

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. BURLEIGH ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: 170E

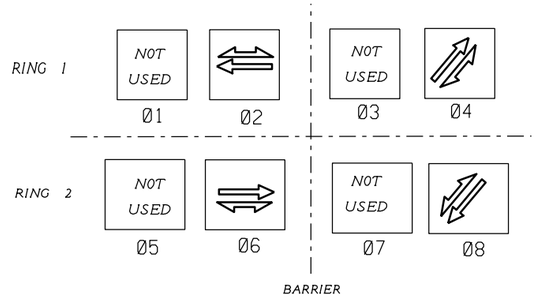
DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	TEMPORARY SEQUENCE OF OPERATIONS	SHEET	E

FILE NAME : $$....DESIGNFILE....$$ PLOT DATE : $$...PLOTTINGDATE...$$ PLOT BY : $$...PLOTUSER...$$ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$ WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
0LA		
Ø2	10.11.12	R
0LB		
Ø4	1.23	R
0LC		
Ø6	7.89	R
0LD		
Ø8	4.5.6	R
Ø2P	13.14	
Ø4P	15.16	
Ø6P	17.18	
Ø8P	19.20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S.
SIGNAL SYSTEM *:	SS. .

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	PED	X
3				
4		8	COORD.	X
5				
6		2	PED	X
7				
8		4	COORD.	X

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. HOPKINS ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: 170E

DATE PAGE NO. OF

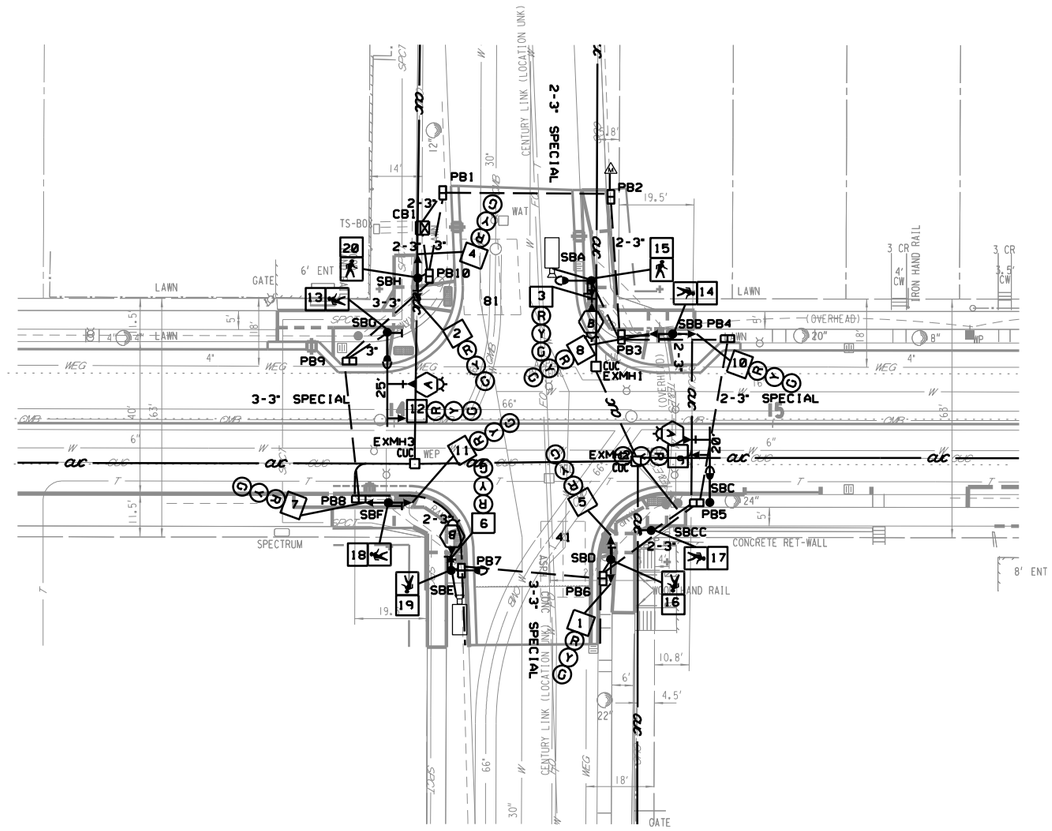
2

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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



LEGEND

- SERVICE POLE
- METER PEDESTAL
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- DB — CABLE-DIRECT BURIED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TRAFFIC SIGNAL BASE, POLE, TRANSFORMER BASE, ARM
- (XX) MONOTUBE BASE, POLE, 45'-55' ARM
- (XX) MONOTUBE BASE, POLE, 15'-40' ARM
- LUMINAIRE, LIGHT POLE
- CONFIRMATION LIGHT
- SIGNAL HEAD NUMBER
- TRAFFIC SIGNAL HEAD
- PULL BOX OR VAULT POLYMER CONCRETE
- *CAMERA*
- PUSHBUTTON
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) (R) RED ARROW
- (Y) (Y) YELLOW ARROW
- (G) (G) GREEN ARROW
- DON'T WALK/WALK INDICATOR 12"
  COUNTDOWN TIMER INDICATOR 12"
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- LANE DESIGNATION FOR INFO ONLY

NOTES: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING
ALL STREET CROSSING CONDUIT SCHEDULE 80 OPEN CUT OR TRENCH.
ALL SPECIAL CONDUIT HDPE

TRAFFIC CONTROL SIGNAL
W. WRIGHT ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

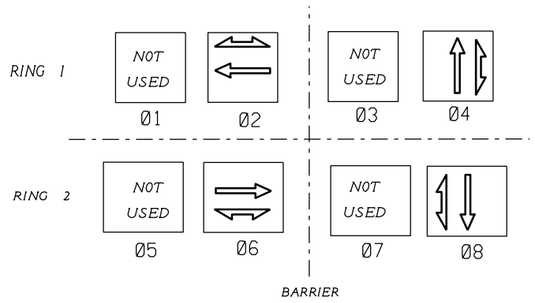
PAGE 1 OF

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 171	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION



	HEAD NUMBERS	FLASH
02	10,11,12	R
04	1,23	R
06	7,8,9	R
08	4,5,6	R
02P	13,14	
04P	15,16	
06P	17,18	
08P	19,20	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS. .	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	COORD.	X
3				
4		8		X
5				
6		2	COORD.	X
7				
8		4		X

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR	41		81					
CALLED PHASE	4		8					
CALL OPTION	X		X					
DELAY TIME								
EXTENTION OPTION	X		X					
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL A	CHANNEL B
MOVEMENT	← →	↓ ↑
PHASE	2-6	4-8

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. WRIGHT ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: ECONOLITE COBALT

DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY: STH 57	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET 172	E

PROJECT ID:	2275-05-70
INTERSECTION:	W. WRIGHT ST. & N. 20TH ST.

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE: 7/13/2023

CB TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YELLOW>	<GREEN>	D/WALK	WALK		
SBA		12	3	4	RED	ORG	GRN								
			15	4								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT
SBB		15	8	6	RED	ORG	GRN								
			10	2	RED/BLK	ORG/BLK	GRN/BLK								
			14	2								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBC		12	9	6	RED	ORG	GRN								
	SBCC	12	17	6								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBD		15	1	4	RED	ORG	GRN								
			5	8	RED/BLK	ORG/BLK	GRN/BLK								
			16	4								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBE		12	6	8	RED	ORG	GRN								
			19	8								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBF		15	7	6	RED	ORG	GRN								
			11	2	RED/BLK	ORG/BLK	GRN/BLK								
			18	6								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBG		12	12	2	RED	ORG	GRN								
			13	2								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBH		12	2	4	RED	ORG	GRN								
			4	8	RED/BLK	ORG/BLK	GRN/BLK								
			20	8								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SBA
SBA	SBB
SBB	SBC
SBC	SBCC
SBCC	SBD
SBD	SBE
SBE	SBF
SBF	SBG
SBG	SBH
SBH	CB1

EMERGENCY VEHICLE PREEMPTION AND UF 2-12 CONFIRMATION	
FROM	TO
CB1	SBA
SBA	HEAD B
CB1	SBC
SBC	HEAD A
CB1	SBE
SBE	HEAD B
CB1	SBG
SBG	HEAD A

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

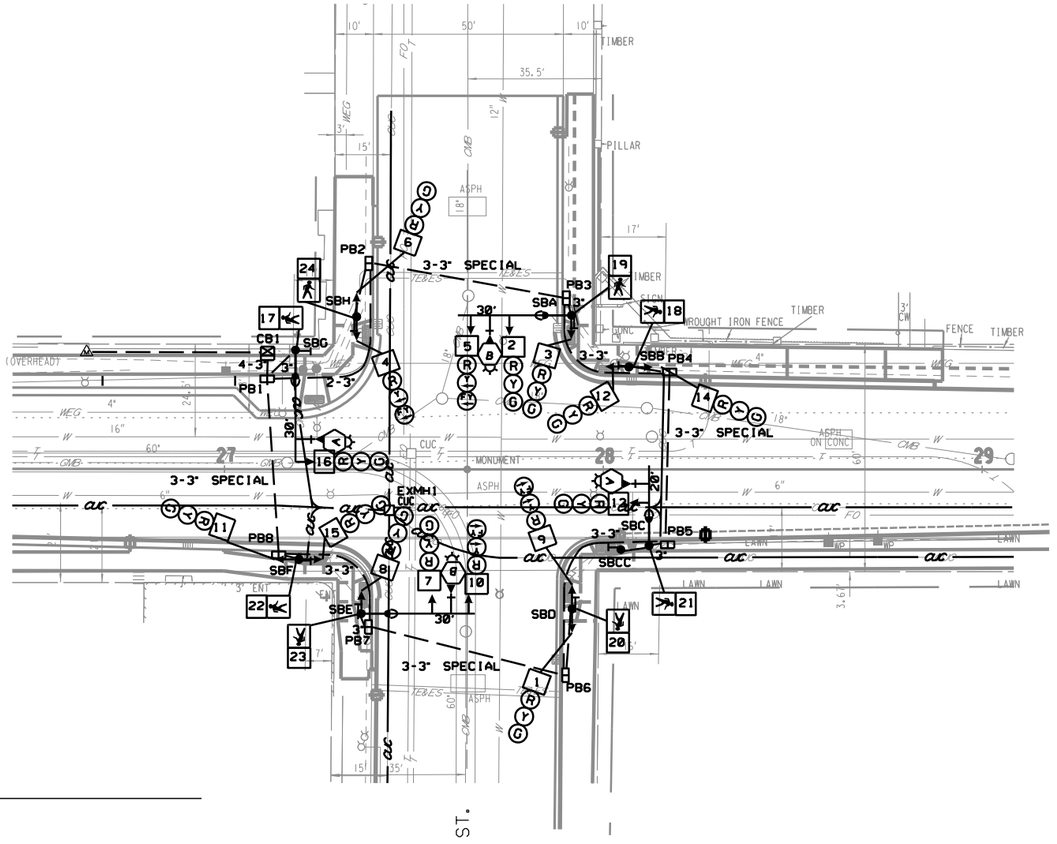
2

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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



LEGEND

- SERVICE POLE
- METER PEDESTAL
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- DB — CABLE-DIRECT BURIED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TRAFFIC SIGNAL BASE, POLE, TRANSFORMER BASE, ARM
- (XX) MONOTUBE BASE, POLE, 45'-55' ARM
- (XX) MONOTUBE BASE, POLE, 15'-40' ARM
- LUMINAIRE, LIGHT POLE
- CONFIRMATION LIGHT
- SIGNAL HEAD NUMBER
- TRAFFIC SIGNAL HEAD
- PULL BOX OR VAULT POLYMER CONCRETE
- SMALL CELL POLE
- PUSHBUTTON
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK/WALK INDICATOR 12"
  COUNTDOWN TIMER INDICATOR 12"
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- LANE DESIGNATION FOR INFO ONLY

NOTES:
- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING
- ALL STREET CROSSING CONDUIT SCHEDULE 80 OPEN CUT OR TRENCH.
- ALL SPECIAL CONDUIT HDPE

TRAFFIC CONTROL SIGNAL
W. CENTER ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

PAGE 1 OF

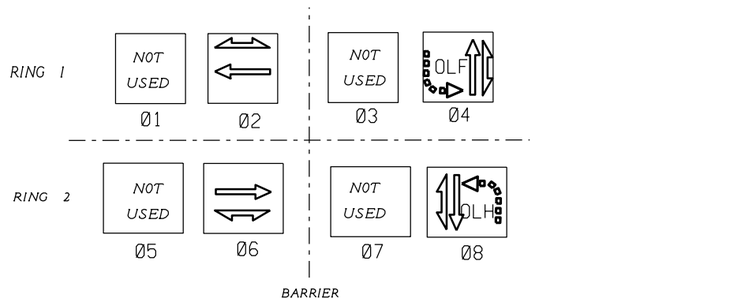
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 174	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø2	14.15.16	R
OLF	9.10	R
Ø4	1.2.3	R
Ø6	11.12.13	R
OLH	4.5	R
Ø8	6.7.8	R
Ø2P	17.18	
Ø4P	19.20	
Ø6P	21.22	
Ø8P	23.24	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS.	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL A	CHANNEL B
MOVEMENT	← →	↓ ↑
PHASE	2-6	4-8

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	PED	X
3				
4		8	COORD.	X
5				
6		2	PED	X
7				
8		4	COORD.	X

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. CENTER ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: ECONOLITE COBALT

DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET 175	E

PROJECT ID:	2275-05-70
INTERSECTION:	W. CENTER ST. & N. 20TH ST.

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE: 7/13/2023

CB TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YELLOW>	<GREEN>	D/WALK	WALK		
SBA		15	2	4	RED	ORG	GRN								
			3	4	RED/BLK	ORG/BLK	GRN/BLK								
			5	OLH				RED/WHT	BLU/WHT	GRN/WHT					
			19	4								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT
SBB		12	12	6	RED	ORG	GRN								
			14	2	RED/BLK	ORG/BLK	GRN/BLK								
			18	2								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBC		19	13	6	RED	ORG	GRN								
			21	6								BLU	BLK		
	SBCC	12	PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBD		12	1	4	RED	ORG	GRN								
			9	OLF				RED/BLK	ORG/BLK	GRN/BLK					
			20	4								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBE		15	7	8	RED	ORG	GRN								
			8	8	RED/BLK	ORG/BLK	GRN/BLK								
			10	OLF				RED/WHT	BLU/WHT	GRN/WHT					
			23	8								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBF		12	11	6	RED	ORG	GRN								
			15	2	RED/BLK	ORG/BLK	GRN/BLK								
			22	6								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBG		12	16	2	RED	ORG	GRN								
			17	2								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBH		12	4	OLH				RED/BLK	ORG/BLK	GRN/BLK					
			6	8	RED	ORG	GRN								
			24	8								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SBG
SBG	SBH
SBH	SBA
SBA	SBB
SBB	SBC
SBC	SBCC
SBCC	SBD
SBD	SBE
SBE	SBF
SBF	CB1

EMERGENCY VEHICLE PREEMPTION AND UF 2-12 CONFIRMATION	
FROM	TO
CB1	SBA
SBA	HEAD B
CB1	SBC
SBC	HEAD A
CB1	SBE
SBE	HEAD B
CB1	SBG
SBG	HEAD A

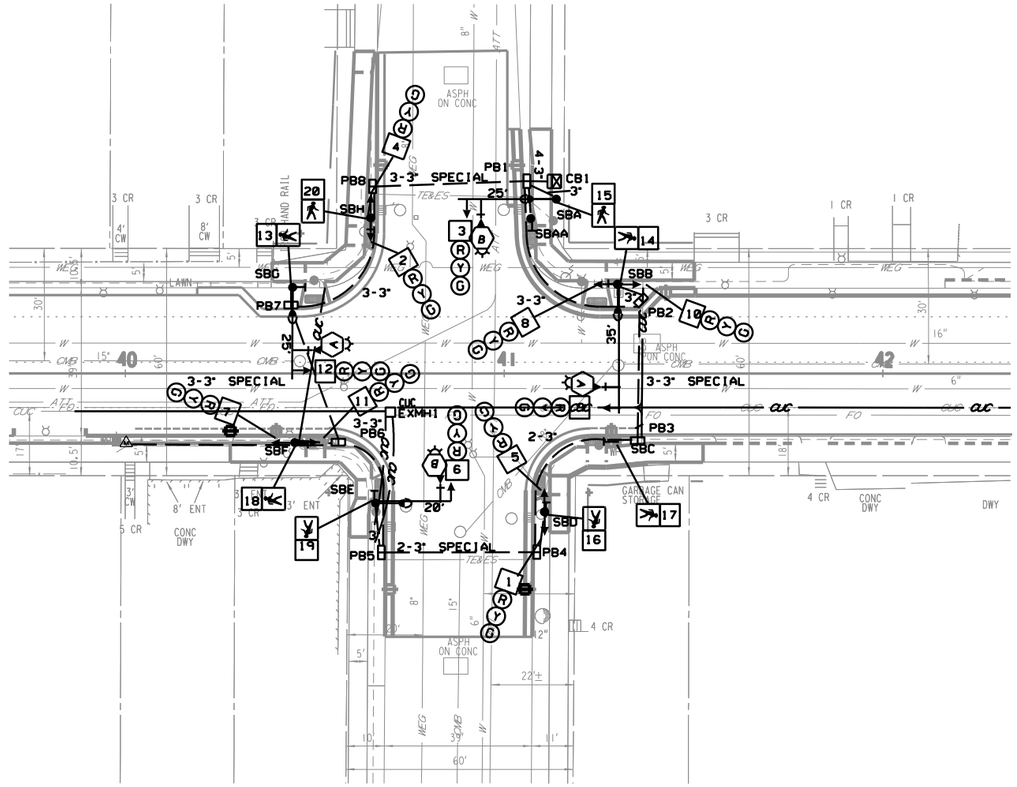
NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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



LEGEND

- SERVICE POLE
- METER PEDESTAL
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- DB — CABLE-DIRECT BURIED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TRAFFIC SIGNAL BASE, POLE, TRANSFORMER BASE, ARM
- (XX) MONOTUBE BASE, POLE, 45'-55' ARM
- (XX) MONOTUBE BASE, POLE, 15'-40' ARM
- LUMINAIRE, LIGHT POLE
- CONFIRMATION LIGHT
- SIGNAL HEAD NUMBER
- TRAFFIC SIGNAL HEAD
- PULL BOX OR VAULT POLYMER CONCRETE
- SMALL CELL POLE
- PUSHBUTTON
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) (R) RED ARROW
- (Y) (FY) (Y) YELLOW ARROW
- (G) (G) (G) GREEN ARROW
- DON'T WALK/WALK INDICATOR 12" COUNTDOWN TIMER INDICATOR 12"
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- LANE DESIGNATION FOR INFO ONLY

NOTES: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING
ALL STREET CROSSING CONDUIT SCHEDULE 80 OPEN CUT OR TRENCH.
ALL SPECIAL CONDUIT HDPE

TRAFFIC CONTROL SIGNAL
W. LOCUST ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY:

PAGE 1 OF

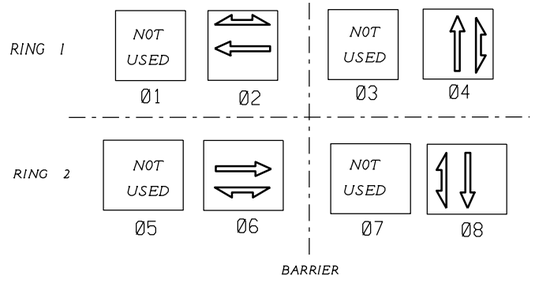
STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 177	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø2	10,11,12	R
Ø4	1,23	R
Ø6	7,8,9	R
Ø8	4,5,6	R
Ø2P	13,14	
Ø4P	15,16	
Ø6P	17,18	
Ø8P	19,20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS.	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL A	CHANNEL B
MOVEMENT	← →	↓ ↑
PHASE	2-6	4-8

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	PED	X
3				
4		8	COORD.	X
5				
6		2	PED	X
7				
8		4	COORD.	X

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. LOCUST ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: ECONOLITE COBALT

DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET	E

FILE NAME : $$....DESIGNFILE....$$ PLOT DATE : $$...PLOTTINGDATE...$$ PLOT BY : $$...PLOTUSER...$$ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$ WISDOT/CADDS SHEET 42

PROJECT ID:	2275-05-70
INTERSECTION:	W. LOCUST ST. & N. 20TH ST.

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE: 7/13/2023

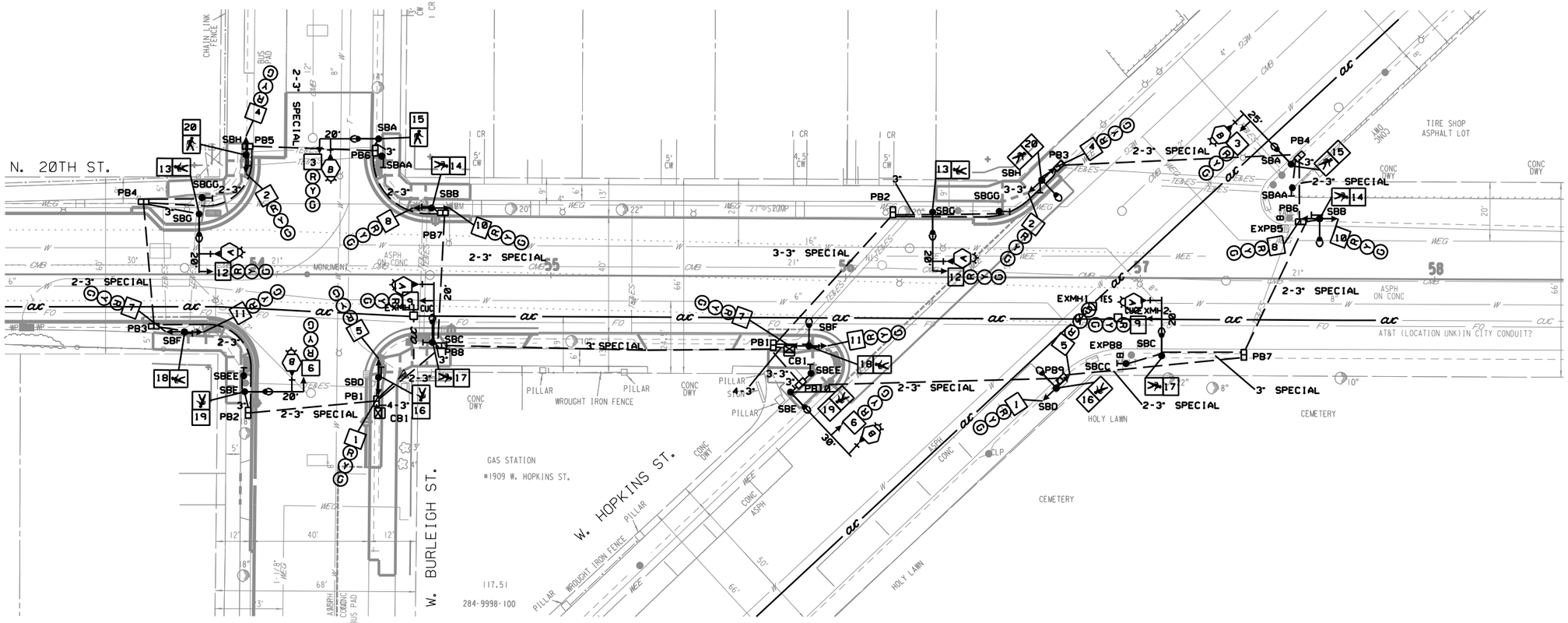
CB__ TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YELLOW>	<GREEN>	D/WALK	WALK		
SBA		12	3	4	RED	ORG	GRN								
			15	4								BLU	BLK		
SBAA		12	PUSHBUTTON	2										WHT/BLK	BLK/WHT
SBB		15	8	6	RED	ORG	GRN								
			9	6	RED/BLK	ORG/BLK	GRN/BLK								
			10	2	RED/WHT	BLU/WHT	GRN/WHT								
			14	2								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBC		12	17	6								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBD		15	1	4	RED	ORG	GRN								
			5	8	RED/BLK	ORG/BLK	GRN/BLK								
			16	4								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBE		12	6	8	RED	ORG	GRN								
			19	8								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBF		12	7	6	RED	ORG	GRN								
			11	2	RED/BLK	ORG/BLK	GRN/BLK								
			18	6								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBG		12	12	2	RED	ORG	GRN								
			13	2								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBH		12	2	4	RED	ORG	GRN								
			4	8	RED/BLK	ORG/BLK	GRN/BLK								
			20	8								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SBA
SBA	SBAA
SBAA	SBB
SBB	SBC
SBC	SBD
SBD	SBE
SBE	SBF
SBF	SBG
SBG	SBH
SBH	CB1

EMERGENCY VEHICLE PREEMPTION AND UF 2-12 CONFIRMATION	
FROM	TO
CB1	SBA
SBA	HEAD B
CB1	SBB
SBB	HEAD A
CB1	SBE
SBE	HEAD B
CB1	SBG
SBG	HEAD A

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

2



LEGEND

- SERVICE POLE
- METER PEDESTAL
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- DB — CABLE-DIRECT BURIED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TRAFFIC SIGNAL BASE, POLE, TRANSFORMER BASE, ARM
- (XX) MONOTUBE BASE, POLE, 45'-55' ARM
- (XX) MONOTUBE BASE, POLE, 15'-40' ARM
- LUMINAIRE, LIGHT POLE
- CONFIRMATION LIGHT
- SIGNAL HEAD NUMBER
- TRAFFIC SIGNAL HEAD
- PULL BOX OR VAULT POLYMER CONCRETE
- SMALL CELL POLE
- PUSHBUTTON
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) (R) RED ARROW
- (Y) (Y) YELLOW ARROW
- (G) (G) GREEN ARROW
- DON'T WALK/WALK INDICATOR 12"
  COUNTDOWN TIMER INDICATOR 12"
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- LANE DESIGNATION FOR INFO ONLY

NOTES: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING
ALL STREET CROSSING CONDUIT SCHEDULE 80 OPEN CUT OR TRENCH.
ALL SPECIAL CONDUIT HDPE

NOTE:

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

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

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

TRAFFIC CONTROL SIGNAL
W. HOPKINS ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY: PAGE 1 OF

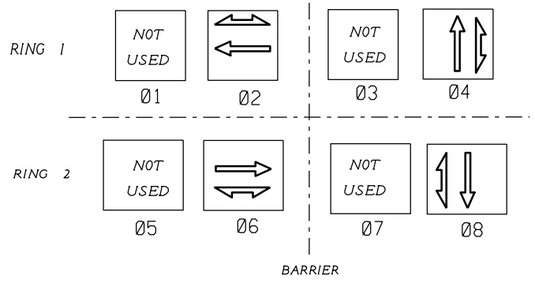
TRAFFIC CONTROL SIGNAL
W. BURLEIGH ST. & N. 20TH ST.
S.T.H. 57
CITY OF MILWAUKEE, MILWAUKEE COUNTY

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: CITY OF MILWAUKEE-DPW
REVISED BY: PAGE 1 OF

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 40	SHEET 180	E

	HEAD NUMBERS	FLASH
02	10,11,12	R
04	1,23	R
06	7,8,9	R
08	4,5,6	R
02P	13,14	
04P	15,16	
06P	17,18	
08P	19,20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS.	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL A	CHANNEL B
MOVEMENT	← →	↓ ↑
PHASE	2-6	4-8

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2		6	COORD.	X
3				
4		8	PED	X
5				
6		2	COORD.	X
7				
8		4	PED	X

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. BURLIEGH ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: ECONOLITE COBALT

DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET 181	E

PROJECT ID:	2275-05-70
INTERSECTION:	W. BURLEIGH ST. & N. 20TH ST.

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE: 7/14/2023

CB TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YELLOW>	<GREEN>	D/WALK	WALK		
SBA		12	3	4	RED	ORG	GRN								
			15	4								BLU	BLK		
	SBAA	12	PUSHBUTTON	2										WHT/BLK	BLK/WHT
SBB		12	8	6	RED	ORG	GRN								
			10	2	RED/BLK	ORG/BLK	GRN/BLK								
			14	2								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBC		12	9	6	RED	ORG	GRN								
			17	6								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBD		12	1	4	RED	ORG	GRN								
			5	8	RED/BLK	ORG/BLK	GRN/BLK								
			16	4								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBE		12	6	8	RED	ORG	GRN								
			19	8								BLU	BLK		
	SBEE	12	PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBF		12	7	6	RED	ORG	GRN								
			11	2	RED/BLK	ORG/BLK	GRN/BLK								
			18	6								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBG		12	12	2	RED	ORG	GRN								
			13	2								BLU	BLK		
	SBGG	12	PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBH		12	2	4	RED	ORG	GRN								
			4	8	RED/BLK	ORG/BLK	GRN/BLK								
			20	8								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT

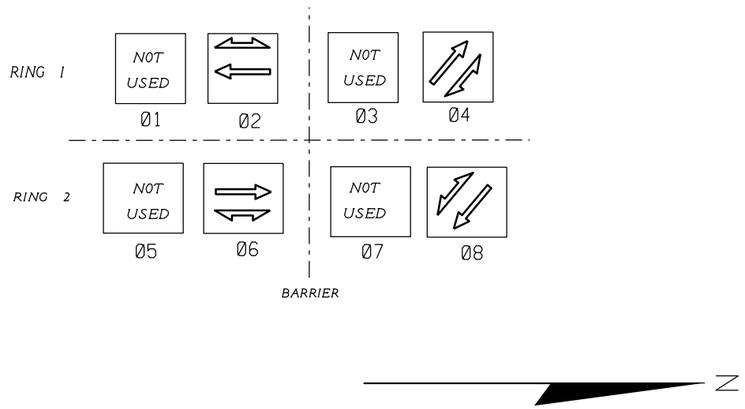
EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SBD
SBD	SBE
SBE	SBEE
SBEE	SBF
SBF	SBG
SBG	SBGG
SBGG	SBH
SBH	SBA
SBA	SBAA
SBAA	SBB
SBB	SBC
SBC	CB1

EMERGENCY VEHICLE PREEMPTION AND UF 2-12 CONFIRMATION	
FROM	TO
CB1	SBA
SBA	HEAD B
CB1	SBC
SBC	HEAD A
CB1	SBE
SBE	HEAD B
CB1	SBG
SBG	HEAD A

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

	HEAD NUMBERS	FLASH
02	10,11,12	R
04	1,2,3	R
06	7,8,9	R
08	4,5,6	R
02P	13,14	
04P	15,16	
06P	17,18	
08P	19,20	

SEQUENCE OF OPERATION



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S.	
SIGNAL SYSTEM *: SS.	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / 8	PHASE RECALL	PHASE ACTIVE
1				
2		6	PED	X
3				
4		8	COORD.	X
5				
6		2	PED	X
7				
8		4	COORD.	X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL A	CHANNEL B
MOVEMENT	← →	↓ ↑
PHASE	2-6	4-8

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TRAFFIC CONTROL SIGNAL
W. HOPKINS ST. & N. 20TH ST.
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO.

CONTROLLER TYPE: ECONOLITE COBALT

DATE PAGE NO. OF

STATE PROJECT NUMBER 2275-05-70	HWY:STH 57	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET	E

FILE NAME : $$....DESIGNFILE....$$ PLOT DATE : $$...PLOTTINGDATE...$$ PLOT BY : $$...PLOTUSER...$$ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$ WISDOT/CADDS SHEET 42

PROJECT ID:	2275-05-70
INTERSECTION:	W. HOPKINS ST. & N. 20TH ST.

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE: 7/14/2022

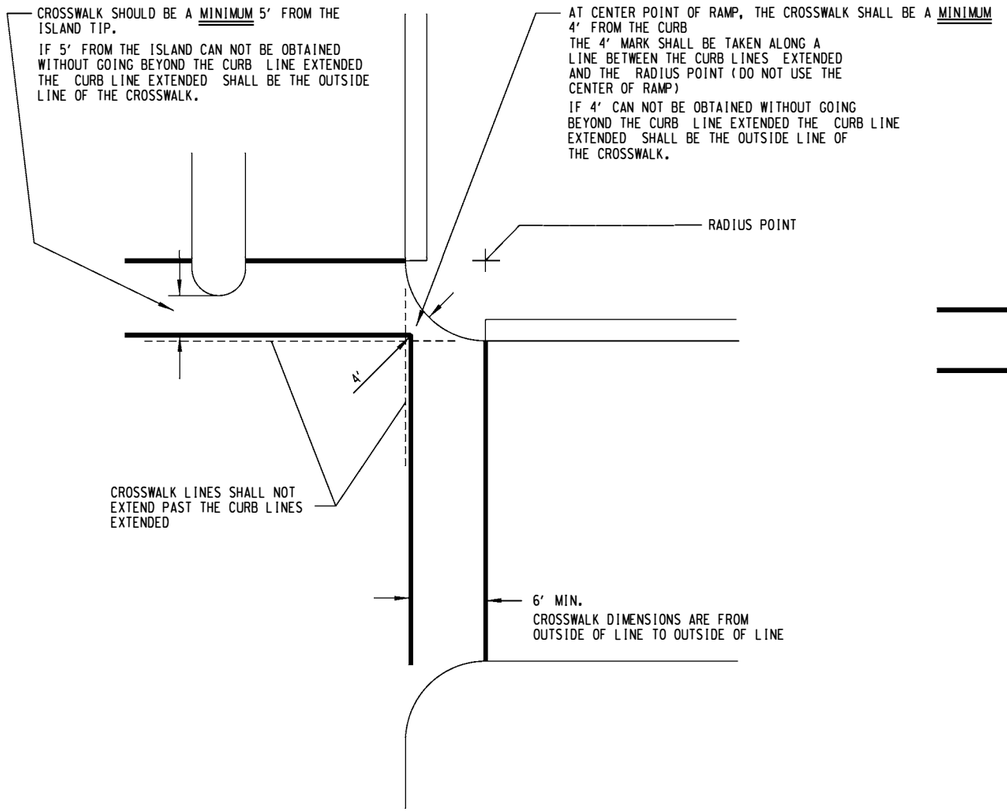
CB TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YELLOW>	<GREEN>	D/WALK	WALK		
SBA		12	3	4	RED	ORG	GRN								
			15	4								BLU	BLK		
	SBAA	12	PUSHBUTTON	2										WHT/BLK	BLK/WHT
SBB		12	8	6	RED	ORG	GRN								
			10	2	RED/BLK	ORG/BLK	GRN/BLK								
			14	2								BLU	BLK		
			PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBC		12	9	6	RED	ORG	GRN								
			17	6								BLU	BLK		
	SBCC	12	PUSHBUTTON	4										WHT/BLK	BLK/WHT
SBD		12	1	4	RED	ORG	GRN								
			5	8	RED/BLK	ORG/BLK	GRN/BLK								
			16	4								BLU	BLK		
			PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBE		12	6	8	RED	ORG	GRN								
			19	8								BLU	BLK		
	SBEE	12	PUSHBUTTON	6										WHT/BLK	BLK/WHT
SBF		12	7	6	RED	ORG	GRN								
			11	2	RED/BLK	ORG/BLK	GRN/BLK								
			18	6								BLU	BLK		
			PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBG		12	12	2	RED	ORG	GRN								
			13	2								BLU	BLK		
	SBGG	12	PUSHBUTTON	8										WHT/BLK	BLK/WHT
SBH		12	2	4	RED	ORG	GRN								
			4	8	RED/BLK	ORG/BLK	GRN/BLK								
			20	8								BLU	BLK		
			PUSHBUTTON	2										WHT/BLK	BLK/WHT

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SBF
SBF	SBG
SBG	SBGG
SBGG	SBH
SBH	SBA
SBA	SBAA
SBAA	SBB
SBB	SBC
SBC	SBCC
SBCC	SBD
SBD	SBE
SBE	SBEE
SBEE	CB1

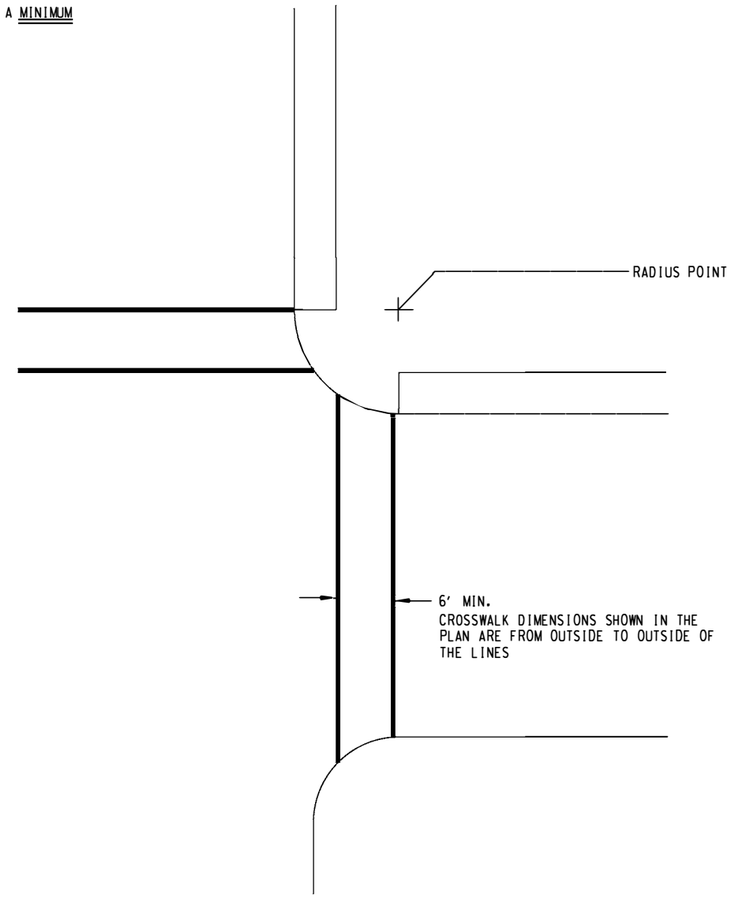
EMERGENCY VEHICLE PREEMPTION AND UF 2-12 CONFIRMATION	
FROM	TO
CB1	SBA
SBA	HEAD B
CB1	SBC
SBC	HEAD A
CB1	SBE
SBE	HEAD B
CB1	SBG
SBG	HEAD A

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

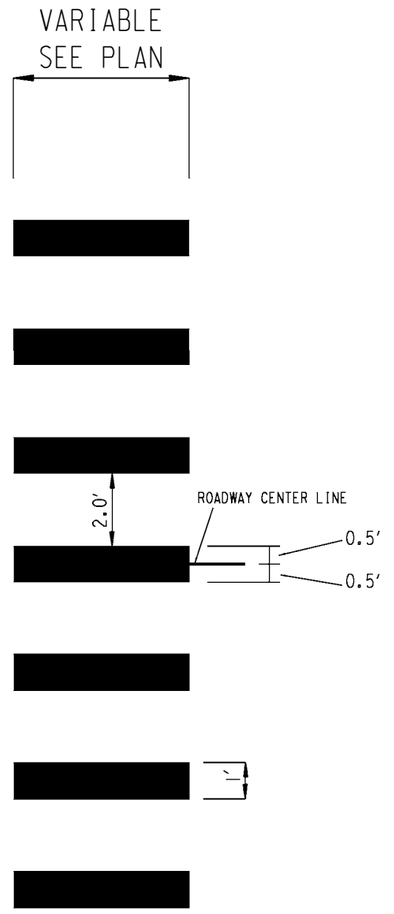
2



TYPICAL CROSS WALK INSTALLATION
WITH TYPE I RAMP
(PLASTIC, EPOXY, PAINT)



WITH TYPE 2 RAMP
(PLASTIC, EPOXY, PAINT)



CONTINENTAL CROSSWALK
DETAIL

NOTE: PAVEMENT MARKINGS SHOULD BE PARALLEL TO DIRECTION OF TRAVEL EVEN WHEN CROSSWALK IS SKEWED

PAID FOR AS "MARKING CROSSWALK LINE EPOXY BLOCK STYLE 12-INCH

SHEET 11 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 185	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

W. NORTH AVE.

N. 20TH ST.

50'

30'

01 +50 02 +50 03 +50 04 +50 05 +50 06 +50

MATCH LINE 06-70

MATCH LINE 06-70

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 1 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 186	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

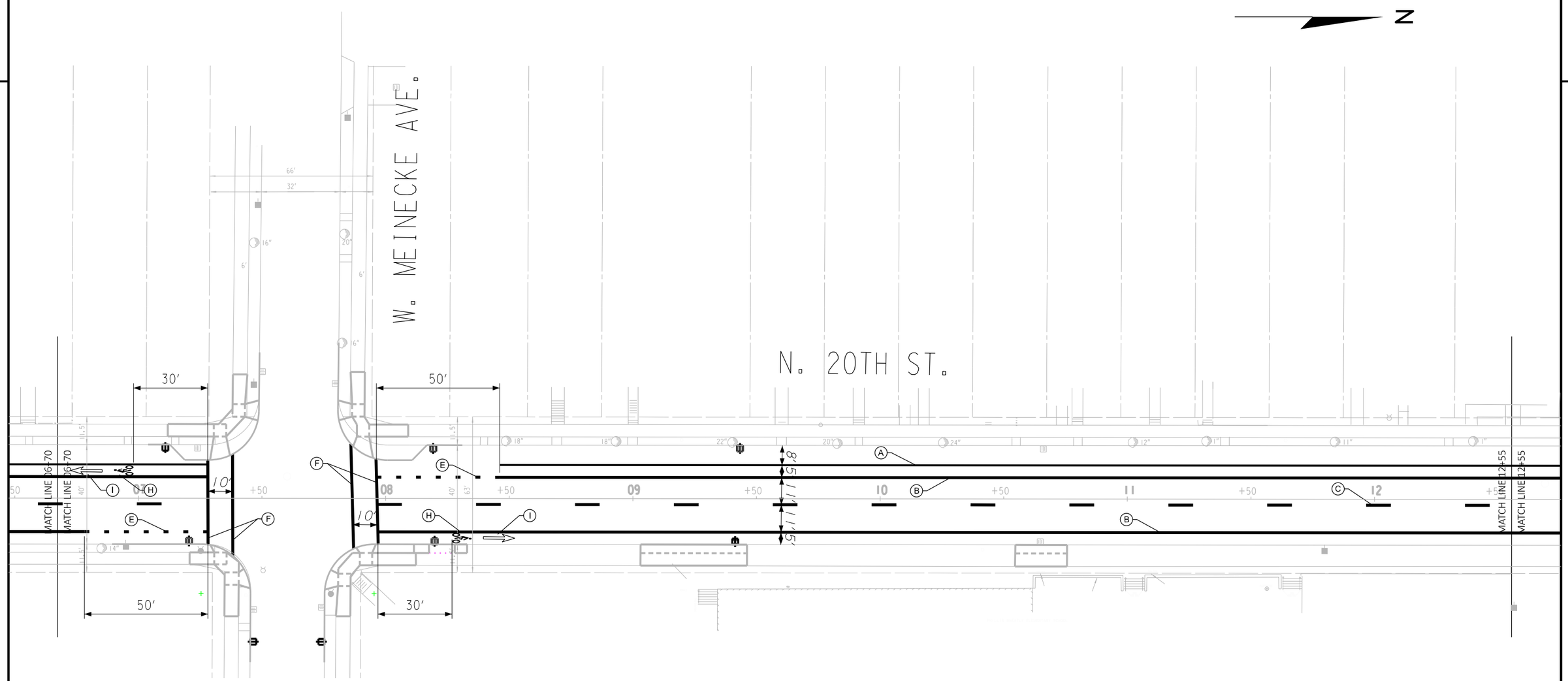
REVISED DATE: 04-24-2023 BY CP

2

N

W. MEINECKE AVE.

N. 20TH ST.



LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 4-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 187	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

W. WRIGHT ST.

N. 20TH ST.

MATCH LINE 12+55

MATCH LINE 12+55

MATCH LINE 18+43

MATCH LINE 18+43

30′

50′

50′

30′

10′

10′

10′

66′

60′

13′

32′

15′

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 3 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0′ 40′	SHEET NO: 188	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

W. CLARKE ST.

N. 20TH ST.

MATCH LINE 18+43

MATCH LINE 18+43

MATCH LINE 24+31

MATCH LINE 24+31

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 4 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 189	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

W. CENTER ST.

N. 20TH ST.

MATCH LINE 24+31

MATCH LINE 24+31

MATCH LINE 30+19

MATCH LINE 30+19

25

26

27

29

30

30′

50′

10′

50′

10′

10′

10′

10′

50′

30′

10′

50′

10′

70′

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 5 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0′ 40′	SHEET NO: 190	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

N

N. 20TH ST.

W. HADLEY ST.

MATCH LINE 30-19

MATCH LINE 30-19

MATCH LINE 36-07

MATCH LINE 36-07

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 6 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 191 E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

N. 20TH ST.

W. LOCUST ST.

MATCH LINE 86-07

MATCH LINE 86-07

MATCH LINE 11-95

MATCH LINE 11-95

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

12"

8"

16"

15' 30' 15'

60'

30'

50'

10'

10'

10'

10'

50'

30'

10' 41'

60'

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 7 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 192	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

N. 20TH ST.

W. CHAMBERS ST.

MATCH LINE I-95

MATCH LINE I-95

MATCH LINE I-43

MATCH LINE I-43

+50 43 +50 44 +50 45 +50 46 +50 47 +50 48

75'

60'

15' 30' 15'

14"

17"

10"

30'

10'

50'

15' 30' 15'

1"

60'

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

SHEET 8 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 193	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

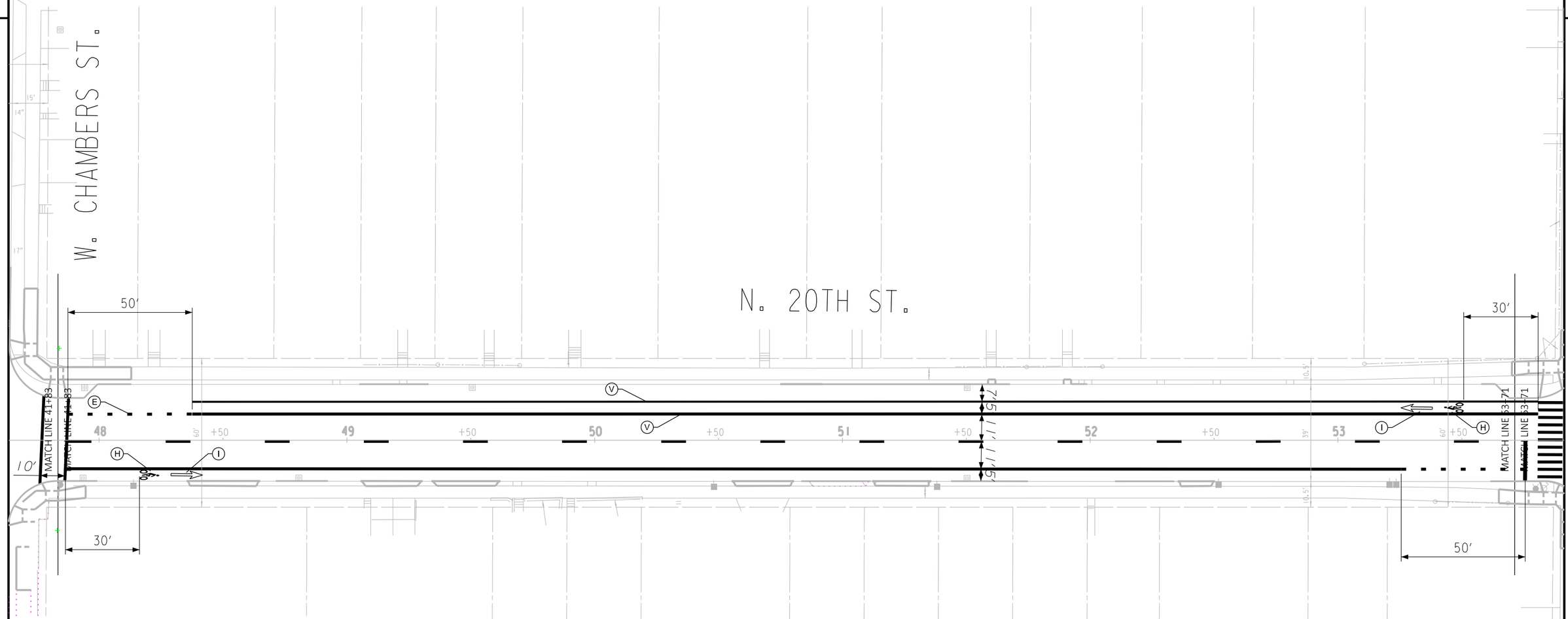
REVISED DATE: 04-24-2023 BY CP

2

N

W. CHAMBERS ST.

N. 20TH ST.



LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 194	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

2

N

W. BURLEIGH ST.

N. 20TH ST.

W. HOPKINS ST.

MATCH LINE 53+71

MATCH LINE 53+71

LEGEND

- (A) MARKING LINE EPOXY 4-INCH, WHITE
- (B) MARKING LINE EPOXY 6-INCH, WHITE
- (C) MARKING LINE EPOXY 4-INCH, YELLOW (30' SKIP, 10' LINE)
- (D) MARKING LINE EPOXY 4-INCH, WHITE (30' SKIP, 10' LINE)
- (E) MARKING LINE EPOXY 6-INCH, WHITE (6' SKIP, 2' LINE)
- (F) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH
- (G) MARKING STOP LINE EPOXY 24-INCH, WHITE
- (H) MARKING SYMBOL EPOXY, BICYCLIST
- (I) MARKING ARROW EPOXY, BIKE LANE ARROW
- (J) MARKING CONTINENTAL CROSSWALK, SEE DETAIL

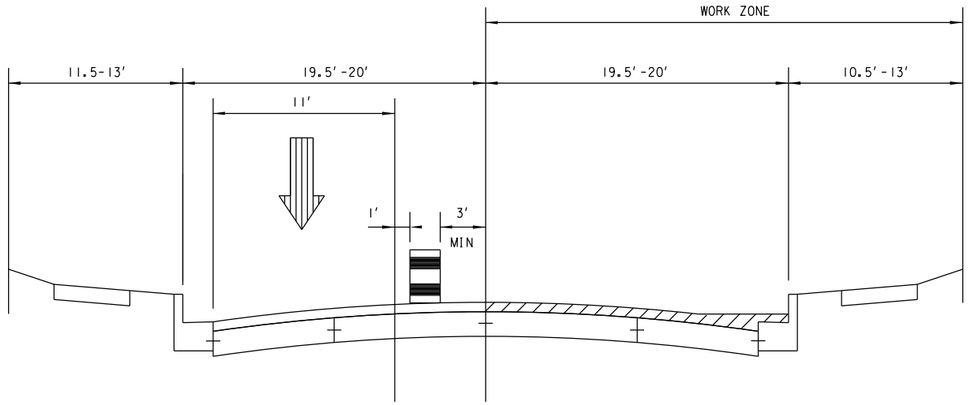
SHEET 10 OF 11

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 40'	SHEET NO: 195	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\2275-05-70 - N 20TH ST - PAVEMARK.DGN

REVISED DATE: 04-24-2023 BY CP

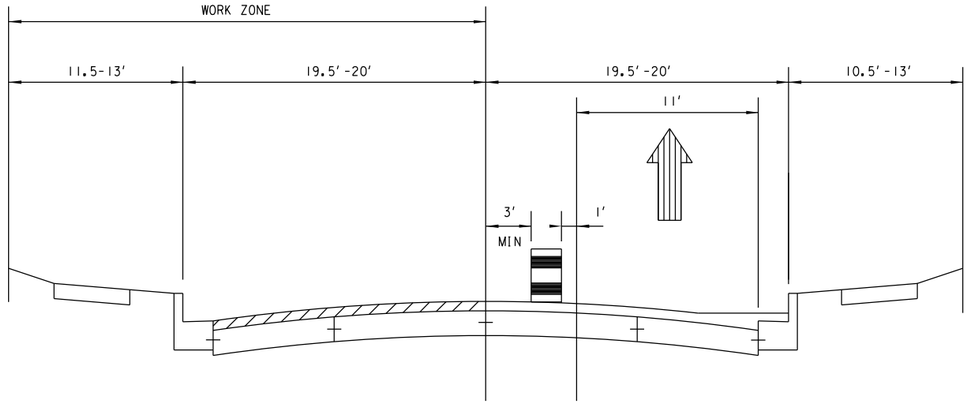
2



STAGE 1 TYPICAL SECTION

NORTH 20TH STREET

(LOOKING NORTH)



STAGE 2 TYPICAL SECTION

NORTH 20TH STREET

(LOOKING NORTH)

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	CONSTRUCTION STAGING TYPICALS	SCALE FEET	SHEET NO: 196	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\TYPSEC-TC.DGN

REVISED DATE: 03-10-2022 BY TK

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.

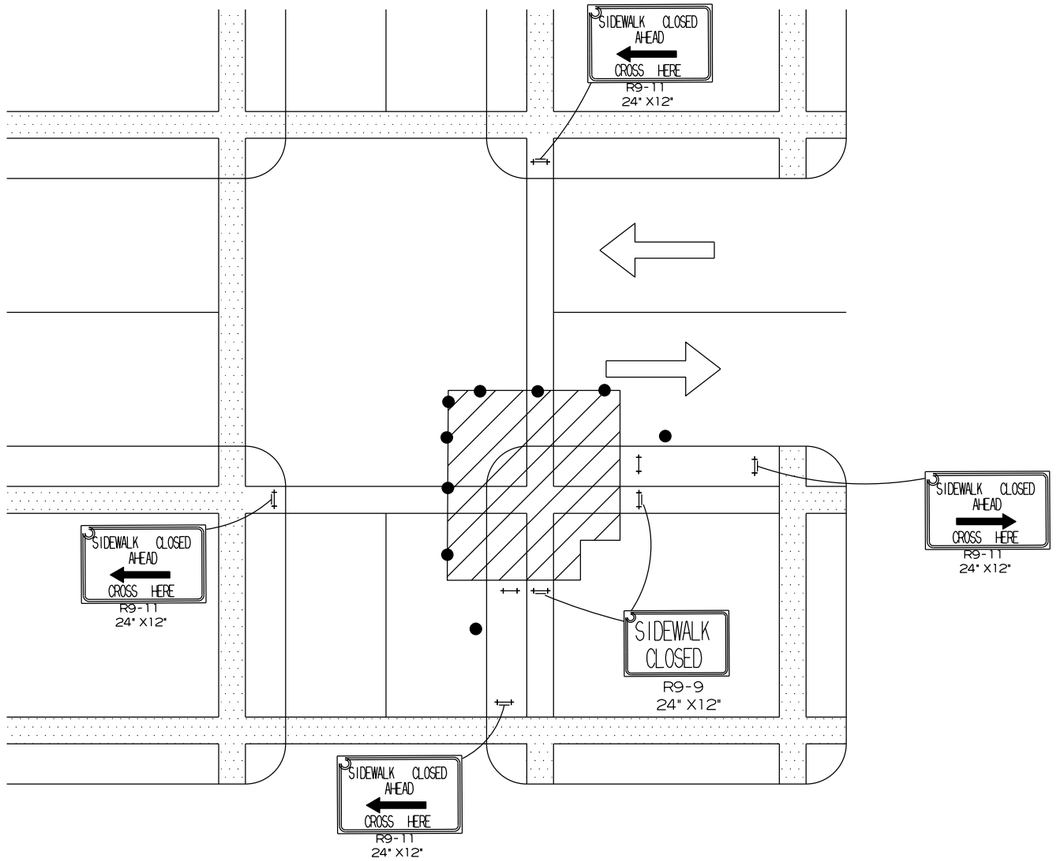
ANY SIDEWALK REMOVALS, TEMPORARY OR PERMANENT, MUST HAVE TEMPORARY ACCOMMODATIONS PLACED IMMEDIATELY UPON REMOVAL; AND MUST BE PLACE AT ANY AREA OF SIDEWALK REMOVALS BEFORE ANOTHER AREA OF REMOVALS MAY BEGIN.

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.

N 20TH ST
INTERSECTION DETAIL



STAGE I

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N

N. 20TH AVE.

W. NORTH ST.

#2000-2040 W. FOND DU LAC AVE.

#2000 W. NORTH AVE.

#2325 #2329 #2333 #2339 #2341 #2345

#1919-1935 W. NORTH AVE.

#2308

VAULT CONC ASPH MONUMENT

PCMS

PLACE 2 PCMS UNITS:
LOCATION 1- ON NB. S 20TH STREET BETWEEN W. BROWN AND W. GARFIELD
LOCATION 2- ON WB W. FOND DU LAC WEST OF W. LLOYD STREET

WIS 57 20TH ST

CLOSED AT NORTH AV

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36"	1	R11-2 ROAD CLOSED 48" X30"	4	R3-2 24" X24"	7	R6-2L ONE WAY 24" X30"	10	W01-6L 48" X24"	12
W20-3 ROAD CLOSED AHEAD 36" X36"	2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"	5	R3-1 24" X24"	8	R6-2R ONE WAY 24" X30"	11	W01-6R 48" X24"	13
G020-2 END ROAD WORK 36" X18"	3	R5-1 DO NOT ENTER 30" X30"	6	R1-1 STOP 30" X30"	9			W01-4L 36" X36"	14
								W01-4R 36" X36"	15

SHEET 1 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 198	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-17-2023 BY JC

STAGE I

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N

N. 20TH AVE.

ST.

W. MEINECKE

#2377 #2403 #2407 #2411-2411A #2415 #2423 #2427-2427A #2431 #2435 #2439 #2443

#2346 #2354-2356 #2358-2360 #2364-2366 #2442

PLACE SIGN 20' WEST OF N. 19TH STREET

PLACE SIGN EAST OF N. 19TH STREET

SIGN LEGEND

1. W20-1 ROAD WORK AHEAD 36" X36"
2. W20-3 ROAD CLOSED AHEAD 36" X36"
3. G020-2 END ROAD WORK 36" X18"
4. R11-2 ROAD CLOSED 48" X30"
5. R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"
6. R5-1 DO NOT ENTER 30" X30"
7. R3-2 24" X24"
8. R3-1 24" X24"
9. R1-1 STOP 30" X30"
10. R6-2L ONE WAY 24" X30"
11. R6-2R ONE WAY 24" X30"
12. W01-6L 48" X24"
13. W01-6R 48" X24"
14. W01-4L 36" X36"
15. W01-4R 36" X36"

SHEET 2 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 199	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE 1

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N

N. 20TH ST.

W. WRIGHT ST.

#2479 #2501 #2505 #2509 #2513 #2521 #2527 #2529-2531 #2533 #2537-2539

#1932-1934 W. WRIGHT ST. #2520 #2524 #2528 #2532

66'

60'

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36" — 1	R11-2 ROAD CLOSED 48" X30" — 4	R3-2 24" X24" — 7
W20-3 ROAD CLOSED AHEAD 36" X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30" — 5	R3-1 24" X24" — 8
G020-2 END ROAD WORK 36" X18" — 3	R5-1 DO NOT ENTER 30" X30" — 6	R1-1 STOP 30" X30" — 9
R6-2L ONE WAY 24" X30" — 10	W01-6L 48" X24" — 12	
R6-2R ONE WAY 24" X30" — 11	W01-6R 48" X24" — 13	
	W01-4L 36" X36" — 14	
	W01-4R 36" X36" — 15	

PLACE SIGN 20' WEST OF N. 19TH STREET

PLACE SIGN EAST OF N. 19TH STREET

SHEET 3 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 200	E

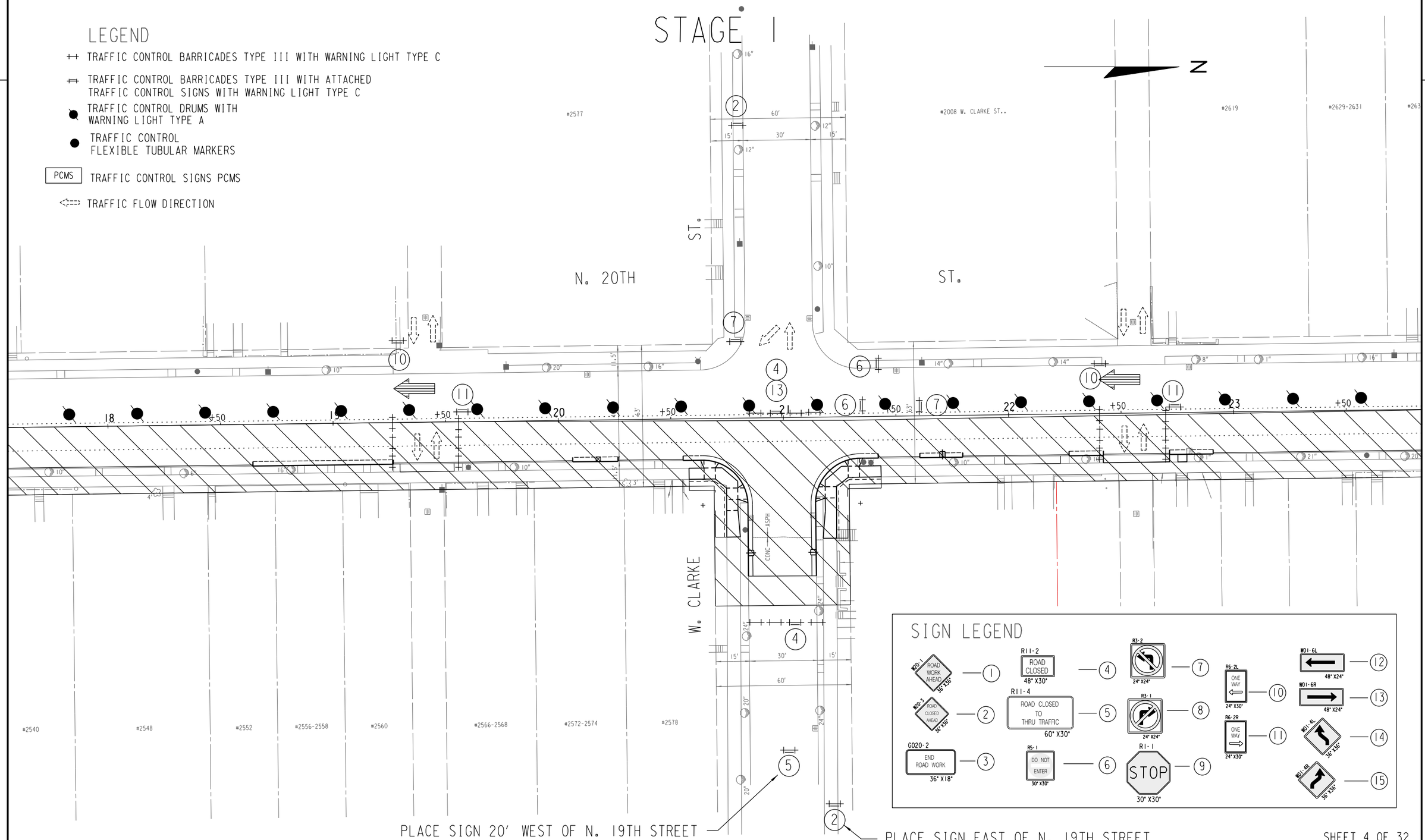
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE I

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION



SIGN LEGEND

SHEET 4 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 201	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE 1

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36" — 1	R11-2 ROAD CLOSED 48" X30" — 4	R3-2 24" X24" — 7
W20-3 ROAD CLOSED AHEAD 36" X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30" — 5	R3-1 24" X24" — 8
G020-2 END ROAD WORK 36" X18" — 3	R5-1 DO NOT ENTER 30" X30" — 6	R1-1 STOP 30" X30" — 9

R6-2L ONE WAY 24" X30" — 10	W01-6L 48" X24" — 12	
R6-2R ONE WAY 24" X30" — 11	W01-6R 48" X24" — 13	
	W01-4L 36" X36" — 14	
	W01-4R 36" X36" — 15	

CLOSE EXISTING LEFT TURN LANE WITH DRUMS

INSTALL 100' TAPER

PERFORM WORK UNDER TRAFFIC MAINTAINING ONE 12' LANE IN EACH DIRECTION. USE LANE SHIFT TO COMPLETE ONE SIDE AT A TIME. MOVE TRAFFIC CONTROL DEVICES AWAY FROM TRAVEL LANES WHEN NO WORK IS BEING PERFORMED.

PLACE SIGN EAST OF N. 18TH STREET

PLACE SIGN EAST OF N. 17TH STREET

N. 20TH ST.

W. CENTER ST.

#2001-2007 W. CENTER ST.

#1935 W. CENTER ST.

#2655

#2659-2661

#2008

#2704

#2717-19

#2721-23

#2725-27

#2717 N. 19TH ST.

#2723 N. 19TH ST.

#2725 N.

N

SHEET 5 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 202	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE 1

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N

N. 20TH ST.

W. HADLEY ST.

#2749 #2753 #2757 #2763 #2769 #2773 #2777-79 #2801 #2807 #2815 #2817

18" 18" 14" 15" 60' 30' 15' 15'

10.5' 10.5'

+50 31 +50 32 +50 33 +50 34 +50 6 7 35 +50 36

2 4 13 6 7 4 5 2

PLACE SIGN WEST OF N. 19TH STREET

PLACE SIGN WEST OF N. 18TH STREET

19TH ST. #2765 N. 19TH ST. #2770 #1911-1913 W. HADLEY ST. #2810 #2813 N. 19TH ST. #2818

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36" — 1	R11-2 ROAD CLOSED 48" X30" — 4	R3-2 24" X24" — 7	R6-2L ONE WAY 24" X30" — 10
W20-3 ROAD CLOSED AHEAD 36" X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30" — 5	R3-1 24" X24" — 8	R6-2R ONE WAY 24" X30" — 11
G020-2 END ROAD WORK 36" X18" — 3	R5-1 DO NOT ENTER 30" X30" — 6	R1-1 STOP 30" X30" — 9	W01-6L 48" X24" — 12
			W01-6R 48" X24" — 13
			W01-4L 36" X36" — 14
			W01-4R 36" X36" — 15

SHEET 6 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 203 E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE I

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N

#2853 #2857 #2861-63 #2865 #2869-71 #2873-75 #2877-79 #2917

INSTALL 50' LONG TAPER

N. 20TH ST.

ST.

15' 30' 15'

60'

8" 16"

12°

+50 37 +50 38 +50 39 +50 40 +50 +50 +50 +50

PERFORM WORK UNDER TRAFFIC MAINTAINING ONE 12' LANE IN EACH DIRECTION. USE LANE SHIFT TO COMPLETE ONE SIDE AT A TIME. MOVE TRAFFIC CONTROL DEVICES AWAY FROM TRAVEL LANES WHEN NO WORK IS BEING PERFORMED.

W. LOCUST

INSTALL 50' LONG TAPER

PLACE SIGN EAST OF N. 18TH STREET

PLACE SIGN EAST OF N. 17TH STREET

#2858 #2866-2866A #2873 N. 19TH ST. #2878 #2901-2903 N. 19TH ST. #2911-2913 N. 19TH ST. #2917 N. 19TH ST.

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36"X36" — 1	R11-2 ROAD CLOSED 48"X30" — 4	R3-2 24"X24" — 7	R6-2L ONE WAY 24"X30" — 10
W20-3 ROAD CLOSED AHEAD 36"X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60"X30" — 5	R3-1 24"X24" — 8	R6-2R ONE WAY 24"X30" — 11
G020-2 END ROAD WORK 36"X18" — 3	R5-1 DO NOT ENTER 30"X30" — 6	R1-1 STOP 30"X30" — 9	W01-6L 48"X24" — 12
			W01-6R 48"X24" — 13
			W01-4L 36"X36" — 14
			W01-4R 36"X36" — 15

SHEET 7 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 204	E

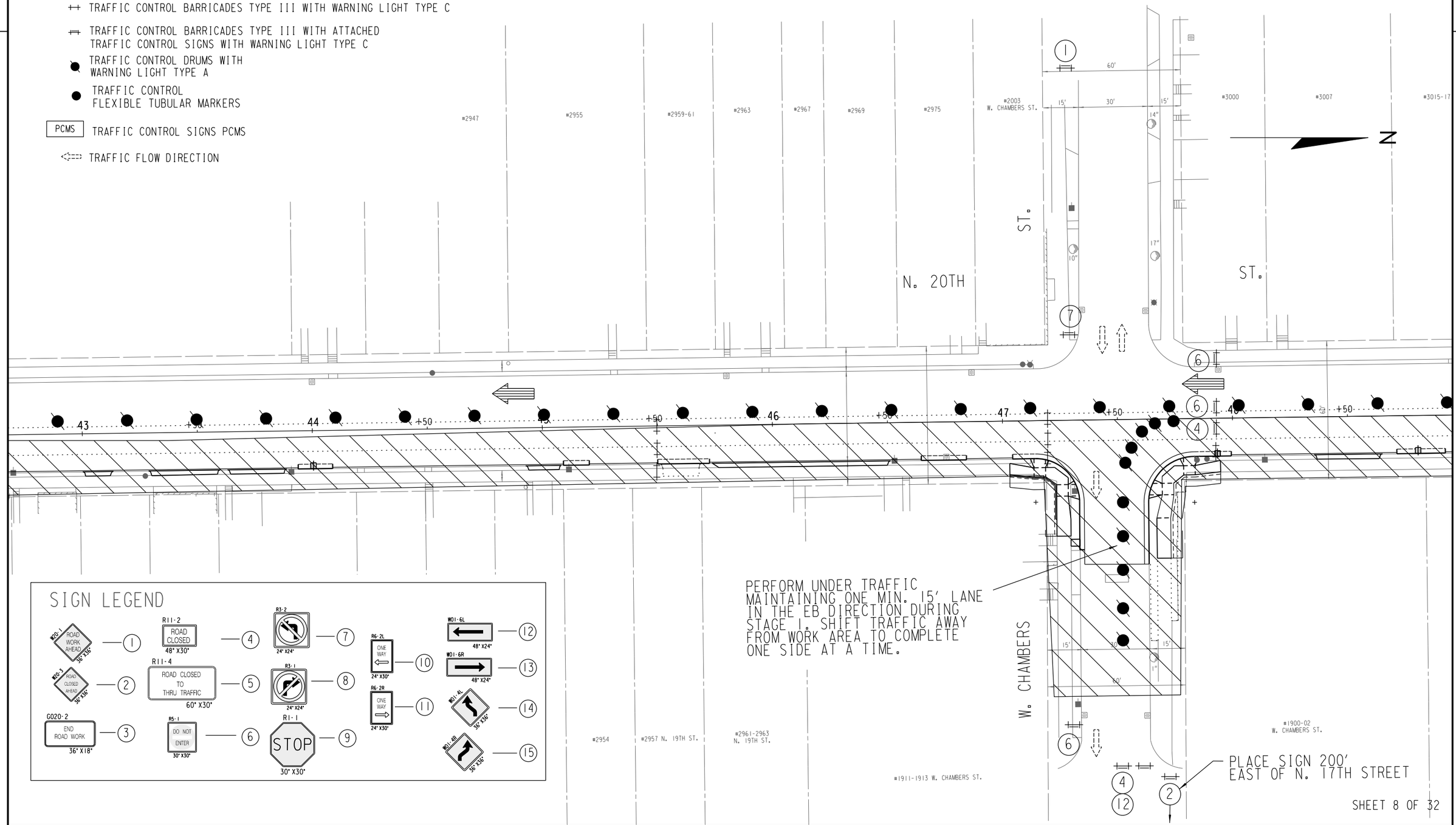
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE I.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE I

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION



SIGN LEGEND

SHEET 8 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 205	E

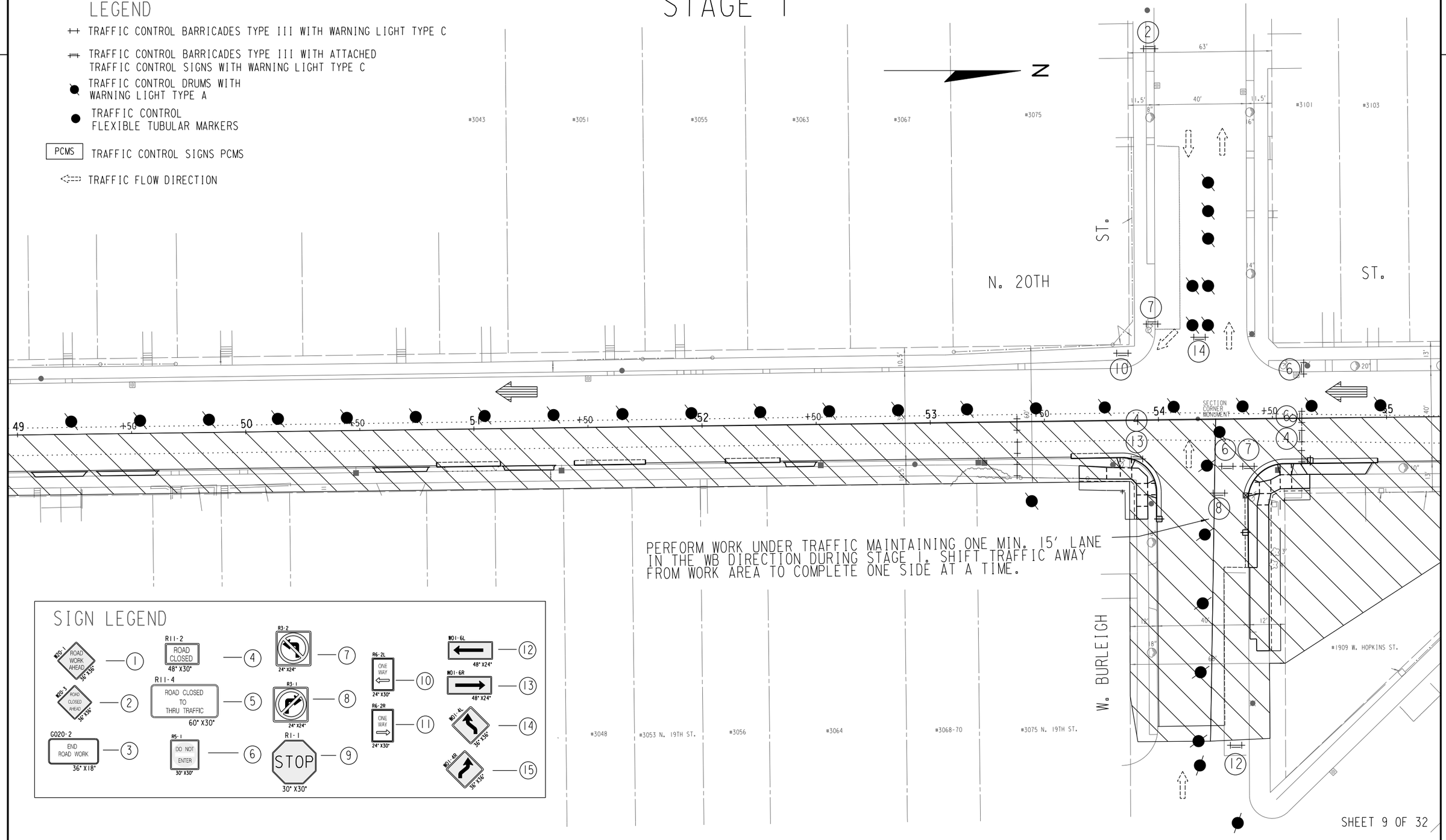
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE I.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE 1

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION



PERFORM WORK UNDER TRAFFIC MAINTAINING ONE MIN. 15' LANE IN THE WB DIRECTION DURING STAGE 1. SHIFT TRAFFIC AWAY FROM WORK AREA TO COMPLETE ONE SIDE AT A TIME.

SIGN LEGEND

SHEET 9 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 206	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE 1

PLACE SIGN EAST OF W. AUER AVENUE

PLACE SIGN 200' PRIOR TO START OF SHIFT

INSTALL 100' LANE SHAFT

N. 20TH ST.

W. HOPKINS ST.

INSTALL 100' LANE SHAFT

PLACE SIGN 200' PRIOR TO START OF SHIFT

PLACE SIGN WEST OF W. AUER AVENUE

N

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

SIGN LEGEND

1. W20-1 ROAD WORK AHEAD 36" X36"
2. W20-3 ROAD CLOSED AHEAD 36" X36"
3. G020-2 END ROAD WORK 36" X18"
4. R11-2 ROAD CLOSED 48" X30"
5. R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"
6. R5-1 DO NOT ENTER 30" X30"
7. R3-2 24" X24"
8. R3-1 24" X24"
9. R1-1 STOP 30" X30"
10. R6-2L ONE WAY 24" X30"
11. R6-2R ONE WAY 24" X30"
12. W01-6L 48" X24"
13. W01-6R 48" X24"
14. W01-4L 36" X36"
15. W11-6R 36" X36"

SHEET 10 OF 32

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 207	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 1.DGN

REVISED DATE: 07-24-2023 BY EM

STAGE 2

PLACE SIGN EAST OF W. AUER AVENUE

PLACE SIGN 200' PRIOR TO START OF SHIFT

INSTALL 100' LANE SHIFT

N. 20TH ST.

W. HOPKINS

B.M. HYD AT NW CORNER OF W. HOPKINS ST. & N. 20TH ST. NW BOLT, YEAR 2009 ELEV. 119.15

TIRE SHOP ASPHALT LOT

CEMETERY

HOLY LAWN

INSTALL 100' LANE SHIFT

PLACE SIGN 200' PRIOR TO START TO SHIFT

PLACE SIGN WEST OF N. 18TH STREET

PLACE 2 PCMS UNITS:
LOCATION 1- ON SB. S 20TH STREET
SOUTH OF W. CONCORDIA AVENUE
LOCATION 2- ON SB W. HOPKINS STREET
BETWEEN N. 23RD STREET AND W. AUER AVENUE

WIS 57 20TH ST	CLOSED AT HOPKINS	USE ALT ROUTE

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

SIGN LEGEND

1. W20-1 ROAD WORK AHEAD 36" X36"
2. W20-3 ROAD CLOSED AHEAD 36" X36"
3. G020-2 END ROAD WORK 36" X18"
4. R11-2 ROAD CLOSED 48" X30"
5. R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"
6. R5-1 DO NOT ENTER 30" X30"
7. R3-2 24" X24"
8. R3-1 24" X24"
9. R1-1 STOP 30" X30"
10. R6-2L ONE WAY 24" X30"
11. R6-2R ONE WAY 24" X30"
12. W01-6L 48" X24"
13. W01-6R 48" X24"
14. W01-4L 36" X36"
15. W01-4R 36" X36"

SHEET 33 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 208	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N. 20TH AVE.

W. NORTH ST.

#2000-2040 W. FOND DU LAC AVE.

#2000 W. NORTH AVE.

#2325 #2329 #2333 #2339 #2341 #2345

#2308

#1919-1935 W. NORTH AVE.

350-1506-100 217.31

325-1211-000 130

325-1213-100 60

325-1214-000 30

325-1215-000 30

325-1216-000 30

325-1217-000 30

325-1218-000 30

BM - NE COR DOOR THESHOLD #2000 N.20TH ST ELEV: 92.32

B.M. HYD AT SE CORNER OF W. NORTH AVE. & N. 20TH ST. NW BOLT, YEAR 2017 ELEV. 93.65

00 01 02 03 04 +50

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36"	1	R11-2 ROAD CLOSED 48" X30"	4	R3-2 24" X24"	7	R6-2L ONE WAY 24" X30"	10	W01-6L 48" X24"	12
W20-3 ROAD CLOSED AHEAD 36" X36"	2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"	5	R3-1 24" X24"	8	R6-2R ONE WAY 24" X30"	11	W01-6R 48" X24"	13
G020-2 END ROAD WORK 36" X18"	3	R5-1 DO NOT ENTER 30" X30"	6	R1-1 STOP 30" X30"	9			W01-4L 36" X36"	14
								W01-4R 36" X36"	15

SHEET 24 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 209	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 21TH STREET (2)

PLACE SIGN 20' EAST OF N. 21TH STREET (5)

N. 20TH AVE.

ST.

W. MEINECKE

PHILLIS WHEATLY ELEMENTARY SCHOOL

B.M. SE CORNER OF 5TH CONC RISER
2349 N 20TH ST
ELEV. 97.51

B.M. HYD AT NE CORNER OF
W. MEINECKE AVE. & N. 20TH ST.
NW BOLT, YEAR 2014
ELEV. 94.25

B.M. FLAG OLE BASE@
PHILLIS WHEATLEY SCHOO
E/S OF N. 20TH ST.
ELEV. 97.56

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36" — 1	R11-2 ROAD CLOSED 48" X30" — 4	R3-2 24" X24" — 7
W20-3 ROAD CLOSED AHEAD 36" X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30" — 5	R3-1 24" X24" — 8
G020-2 END ROAD WORK 36" X18" — 3	R5-1 DO NOT ENTER 30" X30" — 6	R1-1 STOP 30" X30" — 9

R6-2L ONE WAY 24" X30" — 10	W01-6L 48" X24" — 12	
R6-2R ONE WAY 24" X30" — 11	W01-6R 48" X24" — 13	
	W01-4L 36" X36" — 14	
	W01-4R 36" X36" — 15	

SHEET 25 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 210	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 21TH STREET (2)

PLACE SIGN 20' EAST OF N. 21TH STREET

STAGE 2

N. 20TH ST.

ST.

W. WRIGHT

CENTURY LINK (LOCATION UNK.)

B.M. HYD AT NE CORNER OF W. WRIGHT ST. & N. 20TH ST. NW BOLT, YEAR 1997 ELEV. 95.79

#1932-1934 W. WRIGHT ST.

SIGN LEGEND

1	W20-1 ROAD WORK AHEAD 36" X36"	7	R3-2 24" X24"
2	W20-3 ROAD CLOSED AHEAD 36" X36"	8	R3-1 24" X24"
3	G020-2 END ROAD WORK 36" X18"	9	R1-1 STOP 30" X30"
4	R11-2 ROAD CLOSED 48" X30"	10	R6-2L ONE WAY 24" X30"
5	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"	11	R6-2R ONE WAY 24" X30"
6	R5-1 DO NOT ENTER 30" X30"	12	W01-6L 48" X24"
		13	W01-6R 48" X24"
		14	W01-4L 36" X36"
		15	W01-4R 36" X36"

SHEET 26 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 211	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 21TH STREET

PLACE SIGN 20' EAST OF N. 21TH STREET

STAGE 2

N. 20TH ST.

W. CLARKE

SIGN LEGEND

1 — W20-1 ROAD WORK AHEAD 36" X36"	4 — R11-2 ROAD CLOSED 48" X30"	7 — R3-2 24" X24"	10 — R6-2L ONE WAY 24" X30"
2 — W20-3 ROAD CLOSED AHEAD 36" X36"	5 — R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"	8 — R3-1 24" X24"	11 — R6-2R ONE WAY 24" X30"
3 — G020-2 END ROAD WORK 36" X18"	6 — R5-1 DO NOT ENTER 30" X30"	9 — R1-1 STOP 30" X30"	12 — W01-6L 48" X24"
			13 — W01-6R 48" X24"
			14 — W01-4L 36" X36"
			15 — W01-4R 36" X36"

B.M. HYD AT NE CORNER OF W. CLARKE ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 96.28

ELEV. 95.31

SHEET 27 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 212	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 22TH STREET

PLACE SIGN WEST OF N. 21TH STREET

INSTALL 100' LANE SHAFT

PERFORM WORK UNDER TRAFFIC MAINTAINING ONE 12' LANE IN EACH DIRECTION. USE LANE SHIFT TO COMPLETE ONE SIDE AT A TIME. MOVE TRAFFIC CONTROL DEVICES AWAY FROM TRAVEL LANES WHEN NO WORK IS BEING PERFORMED.

INSTALL 100' LANE SHAFT

PLACE SIGN EAST OF N. 18TH STREET

PLACE SIGN EAST OF N. 17TH STREET

B.M. HYD AT SW CORNER OF W. CENTER ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 99.46

B.M. NE CORNER OF CONC RETAINING WALL @ 2690 N. 20TH ST. ELEV. 97.09

N. 20TH ST.

W. CENTER ST.

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36" — 1	R11-2 ROAD CLOSED 48" X30" — 4	R3-2 24" X24" — 7	R6-2L ONE WAY 24" X30" — 10
W20-3 ROAD CLOSED AHEAD 36" X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30" — 5	R3-1 24" X24" — 8	R6-2R ONE WAY 24" X30" — 11
G020-2 END ROAD WORK 36" X18" — 3	R5-1 DO NOT ENTER 30" X30" — 6	R1-1 STOP 30" X30" — 9	W01-6L 48" X24" — 12
			W01-6R 48" X24" — 13
			W01-4L 36" X36" — 14
			W01-4R 36" X36" — 15

SHEET 28 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 213	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

N

PLACE SIGN WEST OF N. 21TH STREET

PLACE SIGN WEST OF N. 21TH STREET

B.M. HYD AT SW CORNER OF W. HADLEY ST. & N. 20TH ST. NW BOLT, YEAR 1965 ELEV. 103.85

B.M. SE CORNER OF 1ST CONC RISER @ 2745 N. 20TH ST. ELEV. 102.51

N. 20TH ST.

W. HADLEY ST.

ASPH OR CONC

AT&T (LOCATION UNK) IN CITY CONDUIT

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36"X36"	1	R11-2 ROAD CLOSED 48"X30"	4	R3-2 24"X24"	7	R6-2L ONE WAY 24"X30"	10	W01-6L 48"X24"	12
W20-3 ROAD CLOSED AHEAD 36"X36"	2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60"X30"	5	R3-1 24"X24"	8	R6-2R ONE WAY 24"X30"	11	W01-6R 48"X24"	13
G020-2 END ROAD WORK 36"X18"	3	R5-1 DO NOT ENTER 30"X30"	6	R1-1 STOP 30"X30"	9			W01-4L 36"X36"	14
								W01-4R 36"X36"	15

#2737-2737A N. 19TH ST. · #2745 N. 19TH ST. · #2748 · #2752 · #2763 N. 19TH ST. · #2765 N. 19TH ST. · #2770 · #1911-1913 W. HADLEY ST. · #2810 · #2813 N. 19TH ST. · #2818

SHEET 29 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0 40	SHEET NO: 214	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 22TH STREET

PLACE SIGN WEST OF N. 21TH STREET

PLACE 50' LONG TAPER

PERFORM WORK UNDER TRAFFIC MAINTAINING ONE 12' LANE IN EACH DIRECTION. USE LANE SHIFT TO COMPLETE ONE SIDE AT A TIME. MOVE TRAFFIC CONTROL DEVICES AWAY FROM TRAVEL LANES WHEN NO WORK IS BEING PERFORMED.

PLACE SIGN 50' WEST OF N. 17TH STREET

B.M. HYD AT NW CORNER OF W. LOCUST ST. & N. 20TH ST. NW BOLT, YEAR 2017 ELEV. 107.31

B.M. TOP OF CONC WINDOW SILL EAST SIDE NORTHSIDE CHURCH ENTRANCE ELEV. 107.79

2832 N. 20TH ST. ELEV. 107.57

N. 20TH ST.

W. LOCUST ST.

310-2831 | 310-1307-100-7 | 310-1306 | 310-1305 | 310-1304 | 310-1303 | 310-1302 | 310-1301 | 310-2761

48.50 | 40 | 30 | 30 | 30 | 30 | 30 | 30 | 275.84

#2845 | #2853 | #2857 | #2861-63 | #2865 | #2869-71 | #2873-75 | #2877-79 | #2917

#2858 | #2866-2866A | #2873 N. 19TH ST. | #2878 | #2901-2903 N. 19TH ST. | #2911-2913 N. 19TH ST. | #2917 N. 19TH ST.

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36" — 1	R11-2 ROAD CLOSED 48" X30" — 4	R3-2 24" X24" — 7	R6-2L ONE WAY 24" X30" — 10	W01-6L 48" X24" — 12			
W20-3 ROAD CLOSED AHEAD 36" X36" — 2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30" — 5	R3-1 24" X24" — 8	R6-2R ONE WAY 24" X30" — 11	W01-6R 48" X24" — 13			
G020-2 END ROAD WORK 36" X18" — 3	R5-1 DO NOT ENTER 30" X30" — 6	R1-1 STOP 30" X30" — 9		W01-4L 36" X36" — 14			
				W01-4R 36" X36" — 15			

SHEET 30 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 215	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 21TH STREET

PLACE SIGN 20' EAST OF N. 21TH STREET

B.M. HYD AT SW CORNER OF W. CHAMBERS ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 108.57

B.M. CENTER OF CONC RISER @ 2979 N. 20TH ST. ELEV. 108.42

N. 20TH ST.

W. CHAMBERS ST.

SIGN LEGEND

W20-1 ROAD WORK AHEAD 36" X36"	1	R11-2 ROAD CLOSED 48" X30"	4
W20-3 ROAD CLOSED AHEAD 36" X36"	2	R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"	5
G020-2 END ROAD WORK 36" X18"	3	R5-1 DO NOT ENTER 30" X30"	6
R3-2 24" X24"	7	R6-2L ONE WAY 24" X30"	10
R3-1 24" X24"	8	R6-2R ONE WAY 24" X30"	11
R1-1 STOP 30" X30"	9	W01-6L 48" X24"	12
		W01-6R 48" X24"	13
		W01-8L 36" X36"	14
		W01-8R 36" X36"	15

PLACE SIGN EAST OF N. 19TH STREET

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0' 40'	SHEET NO: 216	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP

STAGE 2

LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHT TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS
- PCMS — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC FLOW DIRECTION

PLACE SIGN WEST OF N. 22TH STREET

PLACE SIGN WEST OF N. 21TH STREET

PERFORM WORK UNDER TRAFFIC MAINTAINING ONE 12' LANE IN EACH DIRECTION. USE LANE SHIFT TO COMPLETE ONE SIDE AT A TIME. MOVE TRAFFIC CONTROL DEVICES AWAY FROM TRAVEL LANES WHEN NO WORK IS BEING PERFORMED.

INSTALL 50' LANE SHIFT

N. 20TH ST.

W. BURLEIGH

B.M. HYD AT NW CORNER OF W. BURLEIGH ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 113.66

GAS STATION #1909 W. HOPKINS ST. 117.51 284-9998-100

SIGN LEGEND

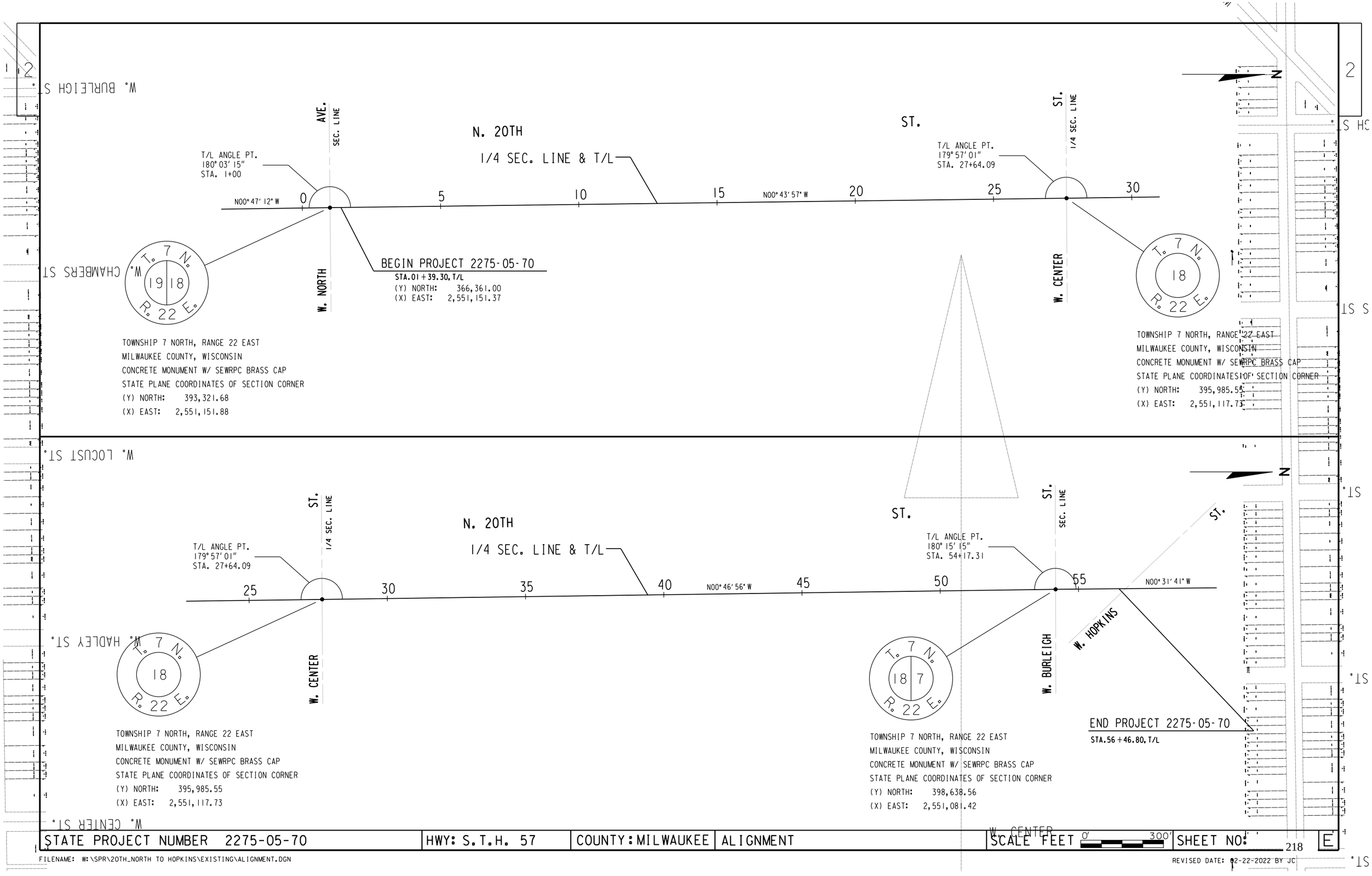
1. W20-1 ROAD WORK AHEAD 36" X36"
2. W20-3 ROAD CLOSED AHEAD 36" X36"
3. G020-2 END ROAD WORK 36" X18"
4. R11-2 ROAD CLOSED 48" X30"
5. R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X30"
6. R5-1 DO NOT ENTER 30" X30"
7. R3-2 24" X24"
8. R3-1 24" X24"
9. R1-1 STOP 30" X30"
10. R6-2L ONE WAY 24" X30"
11. R6-2R ONE WAY 24" X30"
12. W01-6L 48" X24"
13. W01-6R 48" X24"
14. W01-4L 36" X36"
15. W01-4R 36" X36"

SHEET 32 OF 33

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	TRAFFIC CONTROL	SCALE FEET 0 40	SHEET NO: 217	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\TRAFFIC\TRAFFIC CONTROL - STAGE 2.DGN

REVISED DATE: 05-04-2023 BY CP



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	ALIGNMENT	SCALE FEET	SHEET NO: 218 E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\ALIGNMENT.DGN

REVISED DATE: 12-22-2022 BY JC

N

217.31

66'

8'

50'

8'

23'

#2000-2040 W. FOND DU LAC AVE.

NORTH 20TH STREET

AVENUE

SECTION LINE

#2000 W. NORTH

BM - NE COR
DOOR THESHOLD
#2000 N.20TH ST
ELEV: 92.32

26"

ASPHALT

CP 102
CHIS T
STA. 02+00, 27' LT
(Y) NORTH: 393,421.33
(X) EAST: 2,551,123.60
EL: 92.1

3' ENT

R/W

ENT. 10.4'

RAMP

WEP

FD

8"

G

CLP

VAULT

FO

CONC ASPH CUC

T/L

00 60' +50 01 +50 02 63' N00° 43' 57"W

MONUMENT

TEL

CUC

VAULT VAULT VAULT

GUARD

RAMP

5' ENT

CP 2
CHIS T
STA. 02+00, 25' RT
(Y) NORTH: 393,421.99
(X) EAST: 2,551,175.57
EL: 92.33

CONCRETE MONUMENT
W/ SEWRPC BRASS CAP
STA. 01+00, ON T/L
(Y) NORTH: 393,321.68
(X) EAST: 2,551,151.88
EL: 91.77 (SEWRPC)

NORTH

3' ENT

8'

50'

8'

BUS-PAD

BUSPAD

23'

CLP

3' ENT

WEST

NORTH AVE.

#2308

66'

B.M. HYD AT SE CORNER OF
W. NORTH AVE. & N. 20TH ST.
NW BOLT, YEAR 2017
ELEV. 93.65

120

N

120

B.M. HYD AT SW CORNER OF
W. CENTER ST. & N. 20TH ST.
NW BOLT, YEAR 2003
ELEV. 99.46

ALLEY

#2008

07 W. CENTER ST.

NORTH 20TH STREET

70'

10'

50'

10'

TIMBER

PILLAR

CP 128
CHIS T
(Y) NORTH: 393,421.33
(X) EAST: 2,551,123.60
STA. 28+00, 27' LT
EL:

STREET

EL: 97.42
STA. 27+00, 27' LT
(Y) NORTH: 395,921.11
(X) EAST: 2,551,091.55
CP 127
CHIS T

ASPH

TIMBER

SIGN

CONC

WROUGHT IRON FENCE

TIMBER

R/W

TIMBER

179° 57' 01"

SECTION CORNER MONUMENT

ASPH ON CON

27 N00° 43' 57"W +50 28 N00° 46' 56"W +50

CUC

ASPH

LAWN

R/W

LAWN

CP 27
CHIS T
(Y) NORTH: 395,921.78
(X) EAST: 2,551,143.55
STA. 02+00, 25' RT
EL: 96.83

CP 28
CHIS T
(Y) NORTH: 396,021.72
(X) EAST: 2,551,138.24
STA. 28+00, 21' RT
EL: 96.72

CONCRETE MONUMENT
W/ SEWRPC BRASS CAP
STA. 27+64.09, ON T/L
(Y) NORTH: 395,985.55
(X) EAST: 2,551,117.73
EL: 97.347 (SEWRPC)

CENTER

WEST

B.M. NE CORNER OF CONC
RETAINING WALL @
2690 N. 20TH ST.
ELEV. 97.09

CENTER ST.

#2704

70'

120

N

77.12

30

63'

30

P.L.

P.L.

B.M. HYD AT NW CORNER
OF W. BURLEIGH ST.
& N. 20TH ST.
NW BOLT, YEAR 196
ELEV. 113.66

11.5'

40'

11.5'

#3075

#3101

#3103

NORTH 20TH STREET

8"

6"

6'

4' CW

I CR

6'

I CR

5' CW

I CR

CHAIN LINK FENCE

CONC ASPH

BUS PAD

14'

CP 155
CHIS T
STA. 55+00, 27' LT
(Y) NORTH: 398,720.99
(X) EAST: 2,551,053.66
EL: 112.44

RR-TIES

R/W

5'

R/W

5'

BM

20"

180° 15' 15"

SECTION CORNER MONUMENT

ASPH ON CON

60' +50 54 +50 55

CUC

WP

R/W

R/W

CONC DWY

10"

PILLAR

WROUGHT IR

CP 55
CHIS T
STA. 55+00, 27' RT
(Y) NORTH: 398,721.49
(X) EAST: 2,551,107.65
EL: 112.93

CONCRETE MONUMENT
W/ SEWRPC BRASS CAP
STA. 54+17.31, ON T/L
(Y) NORTH: 398,638.56
(X) EAST: 2,551,081.42
EL: 110.917 (SEWRPC)

BURLEIGH

8"

5'

3'

4'

12'

40'

12'

8"

68'

9'

ASPH

CONC BUS PAD

GAS STATION
#1909 W. HOPKINS ST.
117.51
284-9998-100

PILLAR

WROUGHT IR

WEST

#3075 N. 19TH ST.

67

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT SURVEY CONTROL	SCALE FEET 0' 40'	SHEET NO: 219	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\CONTROL POINTS\SURVEY CONTROL.DGN

REVISED DATE: 07-14-2023 BY SB

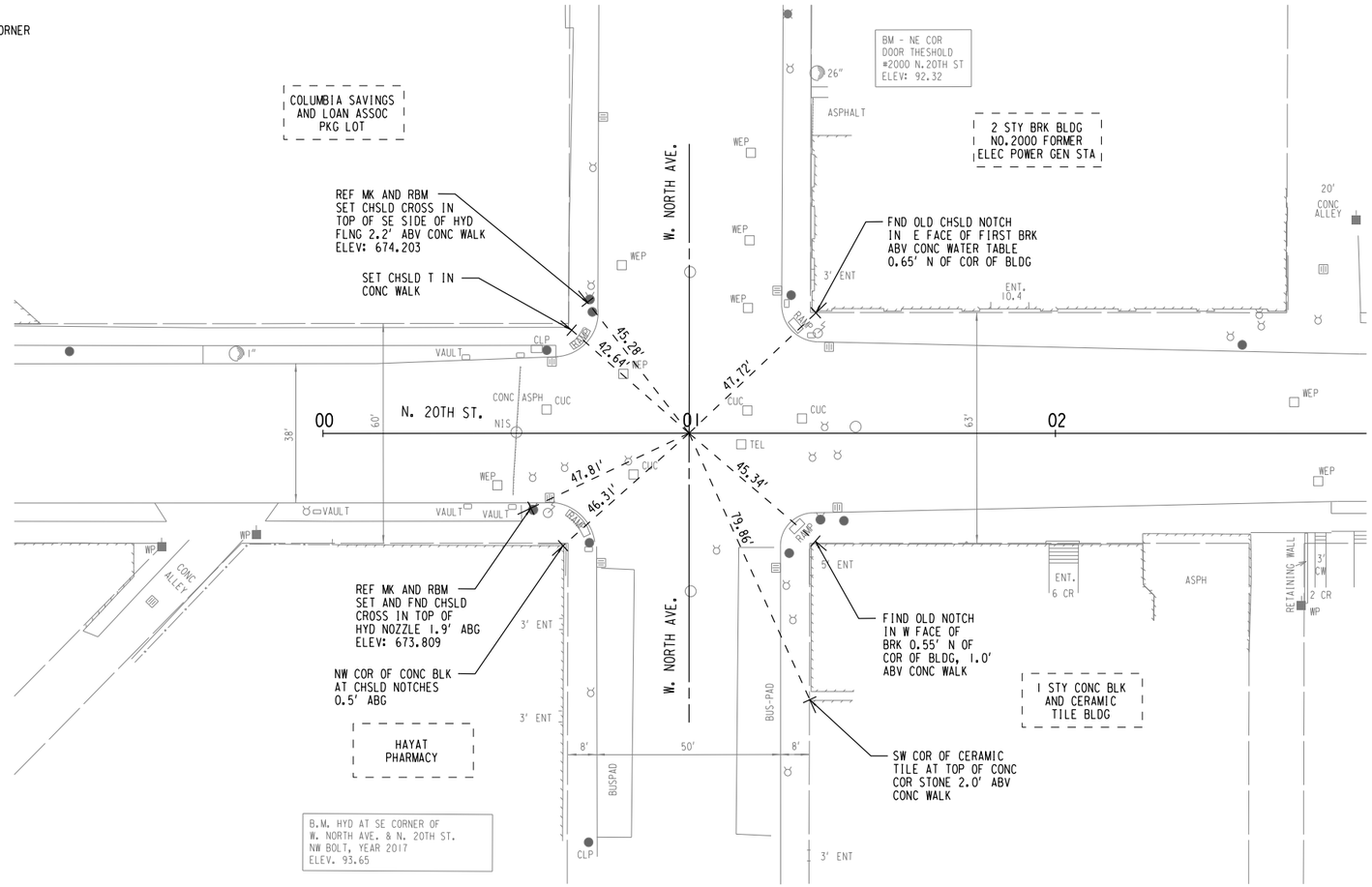
2

T. 7 N.
18
19
R. 22 E.

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

STATE PLANE COORDINATES OF QUARTER SECTION CORNER
NORTH: 393,322.03
EAST: 2,551,151.83
ELEV: 672.37

SURVEY DATE: 2008



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

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	LANDMARK REFERENCE PLAN	SCALE FEET 0' 20'	SHEET NO: 220	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\LANDMARK REFERENCE.DGN

REVISED DATE: 02-01-2022 BY JC

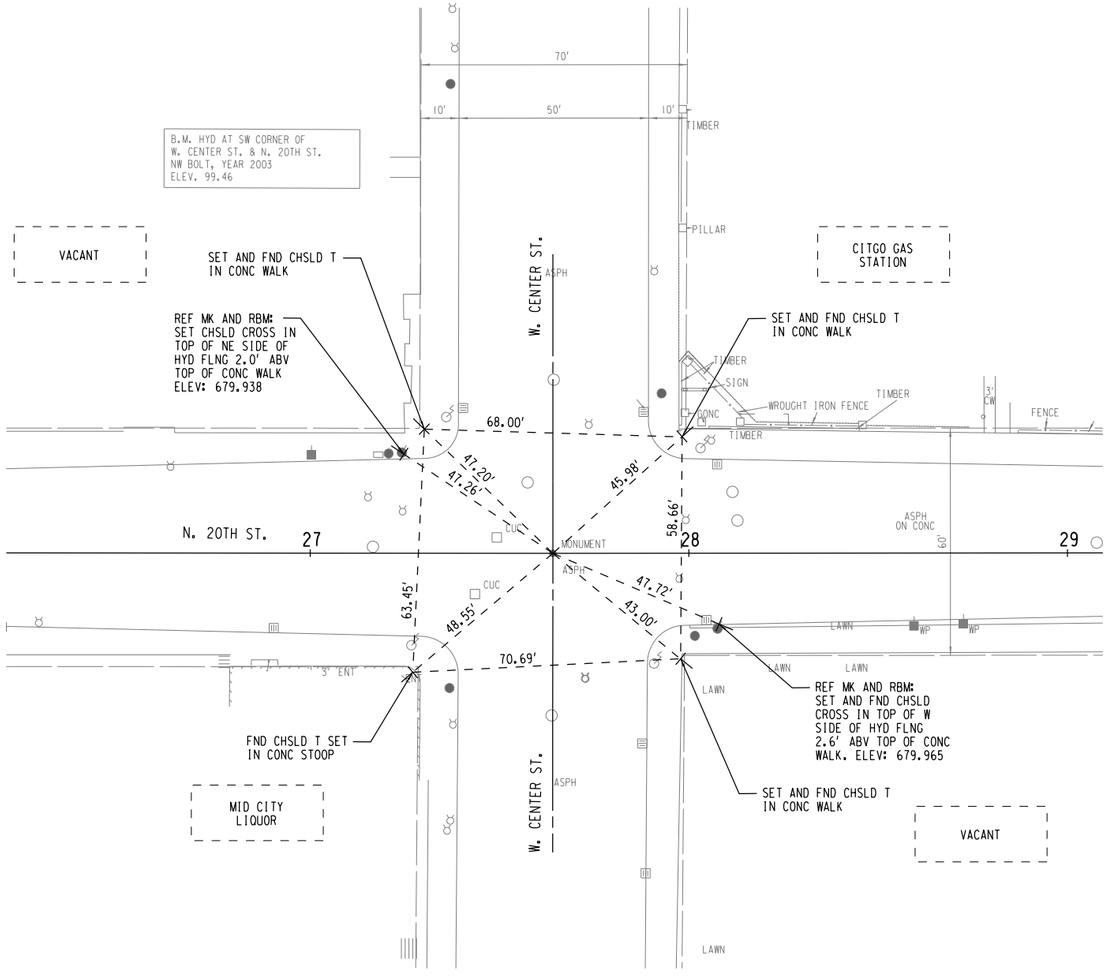
2

T. 7 N.
18
R. 22 E.

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

STATE PLANE COORDINATES OF QUARTER SECTION CORNER
NORTH: 395,985.55
EAST: 2,551,117.73
ELEV: 677.95

SURVEY DATE: 2013



U.S. PUBLIC LAND SURVEY CORNER
N. 20TH ST. & W. CENTER ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	LANDMARK REFERENCE PLAN	SCALE FEET 0' 20'	SHEET NO: 221	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\LANDMARK REFERENCE.DGN

REVISED DATE: 02-01-2022 BY JC

2

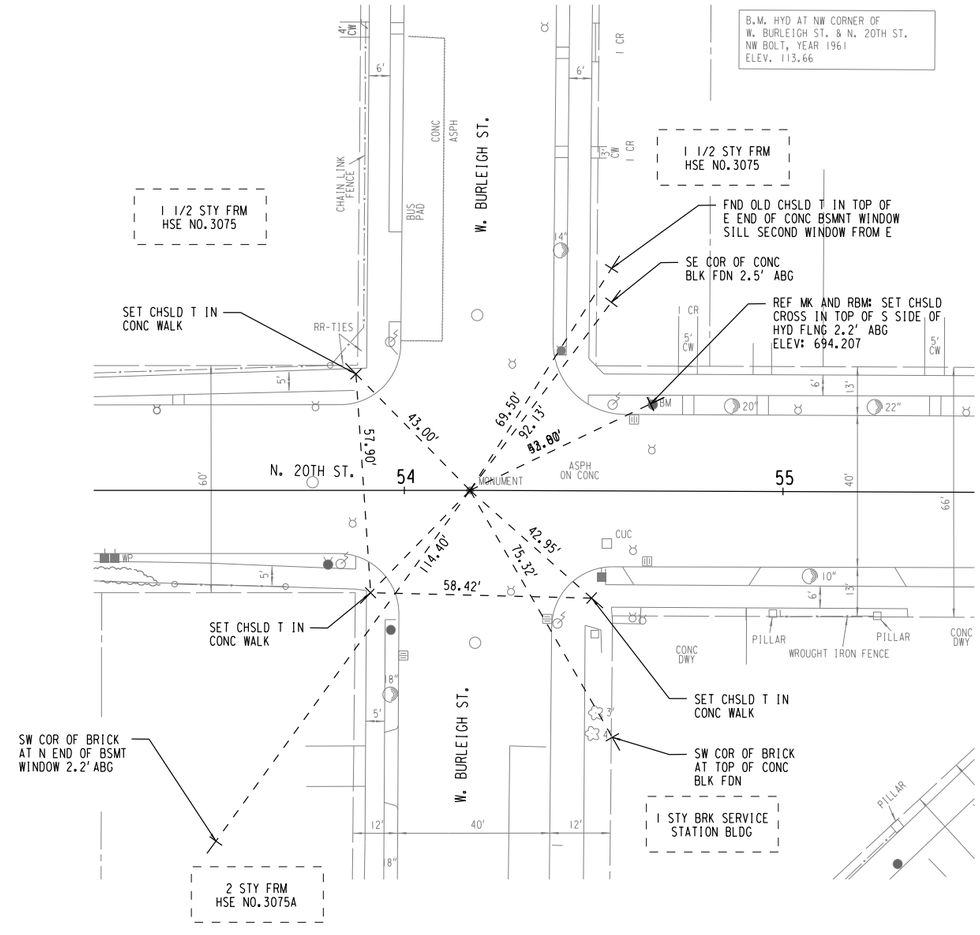
T. 7 N.
7
18
R. 22 E.

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

STATE PLANE COORDINATES OF QUARTER SECTION CORNER
NORTH: 398,638.56
EAST: 2,551,081.42
ELEV: 691.52

SURVEY DATE: 2000

N



U.S. PUBLIC LAND SURVEY CORNER
N. 20TH ST. & W. BURLEIGH ST.

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	LANDMARK REFERENCE PLAN	SCALE FEET 0' 20'	SHEET NO: 222	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\EXISTING\LANDMARK REFERENCE.DGN

REVISED DATE: 02-02-2022 BY JC

2275-05-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	57.000	57.000
0004	201.0220	Grubbing	ID	155.000	155.000
0006	204.0100	Removing Concrete Pavement	SY	460.000	460.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	180.000	180.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	26,760.000	26,760.000
0012	204.0150	Removing Curb & Gutter	LF	3,650.000	3,650.000
0014	204.0155	Removing Concrete Sidewalk	SY	2,396.000	2,396.000
0016	204.0195	Removing Concrete Bases	EACH	18.000	18.000
0018	204.0215	Removing Catch Basins	EACH	18.000	18.000
0020	204.0255	Abandoning Catch Basins	EACH	24.000	24.000
0022	204.0270	Abandoning Culvert Pipes	EACH	24.000	24.000
0024	205.0100	Excavation Common	CY	636.000	636.000
0026	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	81.850	81.850
0028	211.0101	Prepare Foundation for Asphaltic Paving (project) 001. 2275-05-70	EACH	1.000	1.000
0030	213.0100	Finishing Roadway (project) 001. 2275-05-70	EACH	1.000	1.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	600.000	600.000
0034	320.0145	Concrete Base 8-Inch	SY	60.000	60.000
0036	320.0155	Concrete Base 9-Inch	SY	210.000	210.000
0038	390.0100	Removing Pavement for Base Patching	CY	2,445.000	2,445.000
0040	390.0305	Base Patching Concrete HES	CY	2,445.000	2,445.000
0042	415.0090	Concrete Pavement 9-Inch	SY	20.000	20.000
0044	416.0610	Drilled Tie Bars	EACH	1,530.000	1,530.000
0046	416.0620	Drilled Dowel Bars	EACH	3,520.000	3,520.000
0048	455.0605	Tack Coat	GAL	3,211.000	3,211.000
0050	460.2000	Incentive Density HMA Pavement	DOL	3,910.000	3,910.000
0052	460.6223	HMA Pavement 3 MT 58-28 S	TON	3,431.000	3,431.000
0054	460.6224	HMA Pavement 4 MT 58-28 S	TON	2,669.000	2,669.000
0056	601.0322	Concrete Curb & Gutter 22-Inch	LF	410.000	410.000
0058	601.0331	Concrete Curb & Gutter 31-Inch	LF	3,152.000	3,152.000
0060	601.0600	Concrete Curb Pedestrian	LF	240.000	240.000
0062	602.0410	Concrete Sidewalk 5-Inch	SF	20,370.000	20,370.000
0064	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	660.000	660.000
0066	602.0815	Concrete Driveway 7-Inch	SY	160.000	160.000
0068	608.0512	Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	LF	1,154.000	1,154.000
0070	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000
0072	611.3225	Inlets 2x2.5-FT	EACH	2.000	2.000
0074	611.8120.S	Cover Plates Temporary	EACH	10.000	10.000
0076	611.9705	Salvaged Manhole Covers	EACH	4.000	4.000
0078	611.9710	Salvaged Inlet Covers	EACH	17.000	17.000
0080	619.1000	Mobilization	EACH	1.000	1.000
0082	621.0100	Landmark Reference Monuments	EACH	2.000	2.000
0084	624.0100	Water	MGAL	5.000	5.000
0086	625.0100	Topsoil	SY	600.000	600.000
0088	628.7005	Inlet Protection Type A	EACH	55.000	55.000
0090	628.7015	Inlet Protection Type C	EACH	95.000	95.000
0092	628.7020	Inlet Protection Type D	EACH	8.000	8.000
0094	631.0300	Sod Water	MGAL	13.300	13.300
0096	631.1000	Sod Lawn	SY	600.000	600.000
0098	632.0101	Trees (species, root, size) 001. Apollo Maple (3.5-Inch Cal.)	EACH	7.000	7.000

2275-05-70

Line	Item	Item Description	Unit	Total	Qty
0100	632.0101	Trees (species, root, size) 002. Regal Pin Oak (3-Inch Cal.)	EACH	7.000	7.000
0102	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	1.000	1.000
0104	637.2220	Signs Type II Reflective SH	SF	469.500	469.500
0106	637.2230	Signs Type II Reflective F	SF	60.900	60.900
0108	638.2102	Moving Signs Type II	EACH	3.000	3.000
0110	638.2602	Removing Signs Type II	EACH	99.000	99.000
0112	638.3000	Removing Small Sign Supports	EACH	14.000	14.000
0114	642.5201	Field Office Type C	EACH	1.000	1.000
0116	643.0300	Traffic Control Drums	DAY	33,594.000	33,594.000
0118	643.0410	Traffic Control Barricades Type II	DAY	10,692.000	10,692.000
0120	643.0420	Traffic Control Barricades Type III	DAY	15,642.000	15,642.000
0122	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	42.000	42.000
0124	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	84.000	84.000
0126	643.0705	Traffic Control Warning Lights Type A	DAY	31,284.000	31,284.000
0128	643.0715	Traffic Control Warning Lights Type C	DAY	33,594.000	33,594.000
0130	643.0900	Traffic Control Signs	DAY	16,170.000	16,170.000
0132	643.0920	Traffic Control Covering Signs Type II	EACH	12.000	12.000
0134	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0136	643.3250	Temporary Marking Line Removable Tape 8-Inch	LF	900.000	900.000
0138	643.5000	Traffic Control	EACH	1.000	1.000
0140	644.1410	Temporary Pedestrian Surface Asphalt	SF	1,760.000	1,760.000
0142	644.1430	Temporary Pedestrian Surface Plate	SF	1,760.000	1,760.000
0144	644.1440	Temporary Pedestrian Surface Matting	SF	1,760.000	1,760.000
0146	644.1601	Temporary Pedestrian Curb Ramp	DAY	2,100.000	2,100.000
0148	644.1605	Temporary Pedestrian Detectable Warning Field	SF	350.000	350.000
0150	644.1810	Temporary Pedestrian Barricade	LF	700.000	700.000
0152	646.1020	Marking Line Epoxy 4-Inch	LF	5,690.000	5,690.000
0154	646.2020	Marking Line Epoxy 6-Inch	LF	8,983.000	8,983.000
0156	646.5020	Marking Arrow Epoxy	EACH	18.000	18.000
0158	646.5220	Marking Symbol Epoxy	EACH	18.000	18.000
0160	650.4000	Construction Staking Storm Sewer	EACH	44.000	44.000
0162	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,120.000	3,120.000
0164	650.8501	Construction Staking Electrical Installations (project) 001. 2275-05-70	EACH	1.000	1.000
0166	650.9000	Construction Staking Curb Ramps	EACH	34.000	34.000
0168	650.9500	Construction Staking Sidewalk (project) 001. 2275-05-70	EACH	1.000	1.000
0170	650.9911	Construction Staking Supplemental Control (project) 001. 2275-05-70	EACH	1.000	1.000
0172	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	405.000	405.000
0174	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	2,135.000	2,135.000
0176	652.0615	Conduit Special 3-Inch	LF	2,805.000	2,805.000
0178	654.0101	Concrete Bases Type 1	EACH	25.000	25.000
0180	654.0110	Concrete Bases Type 10	EACH	17.000	17.000
0182	654.0120	Concrete Bases Type 10-Special	EACH	1.000	1.000
0184	655.0230	Cable Traffic Signal 5-14 AWG	LF	2,885.000	2,885.000
0186	655.0260	Cable Traffic Signal 12-14 AWG	LF	5,175.000	5,175.000
0188	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,160.000	1,160.000
0190	655.0280	Cable Traffic Signal 19-14 AWG	LF	280.000	280.000
0192	655.0305	Cable Type UF 2-12 AWG Grounded	LF	9,170.000	9,170.000
0194	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	3,555.000	3,555.000
0196	655.0900	Traffic Signal EVP Detector Cable	LF	4,120.000	4,120.000

2275-05-70

Line	Item	Item Description	Unit	Total	Qty
0198	657.0100	Pedestal Bases	EACH	25.000	25.000
0200	657.0350	Poles Type 10	EACH	17.000	17.000
0202	657.0352	Poles Type 10-Special	EACH	1.000	1.000
0204	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	9.000	9.000
0206	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	15.000	15.000
0208	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	1.000	1.000
0210	657.0520	Monotube Arms 20-FT	EACH	9.000	9.000
0212	657.0525	Monotube Arms 25-FT	EACH	4.000	4.000
0214	657.0530	Monotube Arms 30-FT	EACH	4.000	4.000
0216	657.0536	Monotube Arms 35-FT-Special	EACH	1.000	1.000
0218	658.0173	Traffic Signal Face 3S 12-Inch	EACH	64.000	64.000
0220	658.0412	Pedestrian Signal Face 12-Inch	EACH	40.000	40.000
0222	658.5070	Signal Mounting Hardware (location) 001. Wright	EACH	1.000	1.000
0224	658.5070	Signal Mounting Hardware (location) 002. Center	EACH	1.000	1.000
0226	658.5070	Signal Mounting Hardware (location) 003. Locust	EACH	1.000	1.000
0228	658.5070	Signal Mounting Hardware (location) 004. Burleigh	EACH	1.000	1.000
0230	658.5070	Signal Mounting Hardware (location) 005. Hopkins	EACH	1.000	1.000
0232	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	16.000	16.000
0234	661.0201	Temporary Traffic Signals for Intersections (location) 001. Wright	EACH	1.000	1.000
0236	661.0201	Temporary Traffic Signals for Intersections (location) 002. Center	EACH	1.000	1.000
0238	661.0201	Temporary Traffic Signals for Intersections (location) 003. Locust	EACH	1.000	1.000
0240	661.0201	Temporary Traffic Signals for Intersections (location) 004. Burleigh	EACH	1.000	1.000
0242	661.0201	Temporary Traffic Signals for Intersections (location) 005. Hopkins	EACH	1.000	1.000
0244	690.0150	Sawing Asphalt	LF	3,230.000	3,230.000
0246	690.0250	Sawing Concrete	LF	12,748.000	12,748.000
0248	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0250	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	3,000.000	3,000.000
0252	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	7,200.000	7,200.000
0254	SPV.0060	Special 001. Utility Line Opening	EACH	20.000	20.000
0256	SPV.0060	Special 004. Adjusting Water Valve Boxes	EACH	49.000	49.000
0258	SPV.0060	Special 010. Temporary No Parking Signs	EACH	64.000	64.000
0260	SPV.0060	Special 102. Inlet Covers Type MS 57	EACH	46.000	46.000
0262	SPV.0060	Special 103. Manhole Covers Type MS 58-A	EACH	46.000	46.000
0264	SPV.0060	Special 110. Catch Basin Type 44-A	EACH	36.000	36.000
0266	SPV.0060	Special 111. Catch Basin Type 44-B	EACH	4.000	4.000
0268	SPV.0060	Special 115. Pipe Connection to Existing Structure	EACH	1.000	1.000
0270	SPV.0060	Special 201. Install City Precast Controller Base	EACH	5.000	5.000
0272	SPV.0060	Special 205. ATC Controller and Cabinet Installed	EACH	5.000	5.000
0274	SPV.0060	Special 215. Electrical Service Pedestal	EACH	4.000	4.000
0276	SPV.0060	Special 218. EVP 1 Direction Detector	EACH	20.000	20.000
0278	SPV.0060	Special 221. EVP Phase Selector Card 4 Channel	EACH	5.000	5.000
0280	SPV.0060	Special 223. EVP Confirmation Light	EACH	20.000	20.000
0282	SPV.0060	Special 225. Vehicular Video Detection System- 2 Cameras	EACH	1.000	1.000
0284	SPV.0060	Special 228. Electrical Riser	EACH	7.000	7.000
0286	SPV.0060	Special 243. Remove Traffic Signals Wright	EACH	1.000	1.000
0288	SPV.0060	Special 244. Remove Traffic Signals Center	EACH	1.000	1.000
0290	SPV.0060	Special 245. Remove Traffic Signals Locust	EACH	1.000	1.000
0292	SPV.0060	Special 246. Remove Traffic Signals Burleigh	EACH	1.000	1.000
0294	SPV.0060	Special 247. Remove Traffic Signals Hopkins	EACH	1.000	1.000

2275-05-70

Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0060	Special 267. Pedestrian Countdown Signal Face 12-Inch	EACH	40.000	40.000
0298	SPV.0060	Special 268. Voice Instruction Audible Pushbutton	EACH	40.000	40.000
0300	SPV.0060	Special 269. Voice Instruction Control Unit	EACH	5.000	5.000
0302	SPV.0060	Special 280. Round Aluminum Sign Post System in Soft Surface 7-Foot	EACH	6.000	6.000
0304	SPV.0060	Special 281. Round Aluminum Sign Post System in Soft Surface 10-Foot	EACH	7.000	7.000
0306	SPV.0060	Special 282. Round Aluminum Sign Post System in Soft Surface 11-Foot	EACH	1.000	1.000
0308	SPV.0060	Special 285. Round Aluminum Sign Post System in Concrete Surface 10-Foot	EACH	1.000	1.000
0310	SPV.0060	Special 286. Round Aluminum Sign Post System in Concrete Surface 11-Foot	EACH	1.000	1.000
0312	SPV.0060	Special 291. Street Name Sign Mounting Hardware on Mast Arm	EACH	18.000	18.000
0314	SPV.0060	Special 302. Pull Boxes 13-Inch x 24-Inch x 24-Inch	EACH	81.000	81.000
0316	SPV.0060	Special 303. Fiberglass/Polymer Concrete Pull Boxes 17-Inch x 30-Inch x 24-Inch	EACH	42.000	42.000
0318	SPV.0060	Special 310. Remove Poles	EACH	76.000	76.000
0320	SPV.0060	Special 313. Poles Type 26-AL Banner Rated direct bury	EACH	53.000	53.000
0322	SPV.0060	Special 315. Poles Type (22-Ft Aluminum, Direct Bury)	EACH	6.000	6.000
0324	SPV.0060	Special 334. 40-Ft Wood Pole	EACH	35.000	35.000
0326	SPV.0060	Special 339. Install Secondary Riser	EACH	7.000	7.000
0328	SPV.0060	Special 343. Water tight Splices and Connections	EACH	235.000	235.000
0330	SPV.0060	Special 345. Luminaire Arm Single Member 6-Ft	EACH	77.000	77.000
0332	SPV.0060	Special 346. Luminaire ArmS Single Member 6-Ft WP Mount	EACH	23.000	23.000
0334	SPV.0060	Special 353. Install Equipment Grounding Electrode	EACH	59.000	59.000
0336	SPV.0060	Special 366. City Furnished Luminaire Utility High Pressure Sodium	EACH	26.000	26.000
0338	SPV.0060	Special 374. Luminaire Utility 1LED	EACH	6.000	6.000
0340	SPV.0060	Special 375. Luminaire Utility 2LED	EACH	71.000	71.000
0342	SPV.0060	Special 400. Adjusting CUC Manhole Covers	EACH	9.000	9.000
0344	SPV.0060	Special 410. 4' Diameter "Doghouse" Manhole Type CUC	EACH	1.000	1.000
0346	SPV.0060	Special 412. 5' Diameter "Doghouse" Manhole Type CUC	EACH	2.000	2.000
0348	SPV.0060	Special 420. Removing CUC Manhole	EACH	3.000	3.000
0350	SPV.0090	Special 003. Marking Crosswalk Epoxy Transverse Line 12-Inch	LF	569.000	569.000
0352	SPV.0090	Special 004. Marking Stop Line Epoxy 24-Inch	LF	296.000	296.000
0354	SPV.0090	Special 005. Marking Crosswalk Line Epoxy Block Style 12-Inch	LF	2,290.000	2,290.000
0356	SPV.0090	Special 300. City Supplied #8 Concentric 5kV cable	LF	3,400.000	3,400.000
0358	SPV.0090	Special 302. Electrical Cable Type 3#6 AL Triplex	LF	1,499.000	1,499.000
0360	SPV.0090	Special 314. Remove Aerial Cable	LF	4,050.000	4,050.000
0362	SPV.0090	Special 319. Liquidtight Flexible Nonmetallic Conduit 1 1/2-Inch	LF	475.000	475.000
0364	SPV.0090	Special 323. Electrical Cable 3#4/1#8 XLPE USE-2	LF	555.000	555.000
0366	SPV.0090	Special 324. Electrical Cable 4#2/1#8 XLPE USE-2	LF	8,950.000	8,950.000
0368	SPV.0090	Special 325. 3-Inch HDPE Conduit	LF	10,100.000	10,100.000
0370	SPV.0090	Special 402. 2-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60	LF	35.000	35.000

3

CATEGORY 0010

STREET	LOCATION	201.0120 CLEARING I.D.	201.0220 GRUBBING I.D.	NOTES
N 20th St	STA 07+83 W/S	17	17	
N 20th St	STA14+90 E/S	23	23	
N 20th St	STA 18+80 E/S	17	17	
N 20th St	STA 09+82 W/S	--	20	STUMP
N 20th St	STA 19+96 W/S	--	20	STUMP
N 20th St	STA 20+41 W/S	--	16	STUMP
N 20th St	STA 23+57 W/S	--	21	STUMP
N 20th St	STA 55+74 W/S	--	21	STUMP
PROJECT TOTAL		57	155	

REMOVALS

STATION TO STATION	LOCATION	ITEM NO. CAT.0010 204.0100 REMOVING CONCRETE PAVEMENT SY	CAT.0020 204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	CAT.0020 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	CAT.0010 204.0150 REMOVING CURB & GUTTER LF	CAT.0010 204.0155 REMOVING CONCRETE SIDEWALK SY	CAT.0020 390.0100 REMOVING PAVEMENT FOR BASE PATCHING CY	CAT.0020 690.0150 SAWING ASPHALT LF	CAT.0020 690.0250* SAWING CONCRETE LF
STA 01+00 TO STA 5+00		-	-	1,560	-	-	-	-	-
STA 05+00 TO STA 11+00		40	10	3,060	410	205	-	400	-
STA 11+00 TO STA 17+00		80	20	2,840	320	169	-	360	-
STA 17+00 TO STA 23+00		30	10	2,840	450	159	-	360	30
STA 23+00 TO STA 29+00		80	10	3,400	670	609	-	610	20
STA 29+00 TO STA 35+00		50	20	2,720	330	202	-	280	-
STA 35+00 TO STA 40+00		30	20	2,060	128	-	-	120	40
STA 40+00 TO STA 46+00		50	30	3,060	410	182	-	450	20
STA 46+00 TO STA 52+00		40	40	2,780	540	198	-	320	40
STA 52+00 TO STA 57+00		60	20	2,440	360	261	-	330	10
UNDISTRIBUTED		-	-	-	32	411	2445	-	-
PROJECT TOTAL		460	180	26,760	3650	2396	2445	3230	160

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

EXCAVATION COMMON

CATEGORY 0010

ITEM NO.	205.0100 EXCAVATION COMMON
LOCATION	CY
N 20th St	636
PROJECT TOTAL	636

CATEGORY 0020

ITEM NO.	211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (2275-05-70)
LOCATION	EACH
N 20th St	1
PROJECT TOTAL	1

FINISHING ROADWAY

CATEGORY 0010

ITEM NO.	213.0100 FINISHING ROADWAY (PROJECT) (2275-05-70)
LOCATION	EACH
N 20th St	1
PROJECT TOTAL	1

3

EARTH WORK SUMMARY

Excavation Common (1) (item # 205.0100)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (6)	Mass Ordinate +/- (7)	Waste	Borrow(8)
Cut (2)	EBS Excavation (3)				1.20 Factor			
CY	CY	CY	CY	CY	CY	CY	CY	CY
636	0	153	483	0	0	483	636	0

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Expanded Fill. Factor = 1.20
7) 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.
8) To be bid as part of base aggregated dense 1-1/4"

3

ROADWAY ITEMS

ITEM NO.	CAT.0020 305.0120 BASE AGGREGATE DENSE 1-1/4 INCH	CAT.0010 320.0145 CONCRETE BASE 8-INCH	CAT.0010 320.0155 CONCRETE BASE 9-INCH	CAT.0010 415.0090 CONCRETE PAVEMENT 9-INCH	CAT.0020 416.0610* DRILLED TIE BARS	CAT.0010 601.0322 CONCRETE CURB & GUTTER 22-INCH	CAT.0010 601.0331 CONCRETE CURB & GUTTER 31-INCH	CAT.0010 601.0600 CONCRETE CURB PEDESTRIAN	CAT.0010 602.0410 CONCRETE SIDEWALK 5-INCH	CAT.0010 602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	CAT.0010 602.0815 CONCRETE DRIVEWAY 7-INCH	CAT.0010 624.0000 WATER
LOCATION	TON	SY	SY	SY	EACH	LF	LF	LF	SF	SF	SY	MGAL
STA 05+00 TO STA 11+00	-	-	-	-	-	-	-	-	-	-	-	-
STA 05+00 TO STA 11+00	100	-	40	-	20	-	420	30	3,470	80	-	-
STA 11+00 TO STA 17+00	50	-	20	-	20	-	330	100	1,340	80	-	-
STA 17+00 TO STA 23+00	60	-	20	-	20	-	460	-	1,260	80	10	-
STA 23+00 TO STA 29+00	140	30	40	20	20	220	430	-	3,900	80	90	-
STA 29+00 TO STA 35+00	50	-	20	-	20	-	230	40	1,630	80	10	-
STA 35+00 TO STA 40+00	10	-	10	-	20	-	120	-	-	-	20	-
STA 40+00 TO STA 46+00	60	20	20	-	20	-	430	30	1,530	80	10	-
STA 46+00 TO STA 52+00	70	-	30	-	20	-	550	40	1,450	80	-	-
STA 52+00 TO STA 57+00	60	10	10	-	20	190	150	-	2,090	100	20	-
UNDISTRIBUTED	-	-	-	-	-	-	32	-	3,700	-	-	5
PROJECT TOTAL	600	60	210	20	180	410	3,152	240	20,370	660	160	5

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

TREES

CATEGORY 0010

ITEM NO.			632.0101 TREES 01. APOLLO MAPLE (3.5-INCH CAL.)	632.0101 TREES 02. REGAL PIN OAK (3-INCH CAL.)
LOCATION			EACH	EACH
STA	6+44	W/S	1	-
STA	13+51	W/S	1	-
STA	15+76	W/S	1	-
STA	23+42	W/S	1	-
STA	23+90	W/S	1	-
STA	5+03	E/S	1	-
STA	23+85	E/S	1	-
STA	9+82	W/S	-	1
STA	10+75	W/S	-	1
STA	19+96	W/S	-	1
STA	24+90	W/S	-	1
STA	15+00	E/S	-	1
STA	15+40	E/S	-	1
STA	16+85	E/S	-	1
PROJECT TOTAL			7	7

LANDMARK REFERENCE MONUMENT

CATEGORY 0010

ITEM NO.	621.0100 LANDMARK REFERENCE MONUMENT
LOCATION	EACH
2275-05-70	2
PROJECT TOTAL	2

CATEGORY 0010

	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL
LOCATION	I.D.
STA 0+00 TO 1+00	12.46
STA 27+60 TO 28+20	12.46
STA 54+25 TO 55+00	56.93
PROJECT TOTAL	81.85

BASE PATCHING

CATEGORY 0020

ITEM NO.	390.0305 BASE PATCHING CONCRETE	416.0610* DRILLED TIE BARS	416.0620 DRILLED DOWEL BARS	690.0250* SAWING CONCRETE
LOCATION	CY	EACH	EACH	LF
UNDISTRIBUTED	2445	1350	3520	12428
PROJECT TOTAL	2445	1350	3520	12428

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

LANDSCAPE ITEMS

CATEGORY 0010

ITEM NO.	625.0100 TOPSOIL	631.1000 SOD LAWN	631.0300 SOD WATER
LOCATION	SY	SY	Mgal
STA 05+00 TO STA 11+00	60	60	1.3
STA 11+00 TO STA 17+00	100	100	2.2
STA 17+00 TO STA 23+00	10	10	0.2
STA 23+00 TO STA 29+00	130	130	2.9
STA 29+00 TO STA 35+00	50	50	1.0
STA 35+00 TO STA 40+00	20	20	0.5
STA 40+00 TO STA 46+00	80	80	1.8
STA 46+00 TO STA 52+00	110	110	2.5
STA 52+00 TO STA 57+00	40	40	0.9
PROJECT TOTAL	600	600	13.3

3

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

ASPHALT ITEMS

CATEGORY 0020

ITEM NO.	455.0605	460.6223	460.6224
	TACK COAT	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S
LOCATION	GAL	TON	TON
STA 01+00 TO STA 05+00	187	203	158
STA 05+00 TO STA 11+00	367	366	284
STA 11+00 TO STA 17+00	341	366	284
STA 17+00 TO STA 23+00	341	366	284
STA 23+00 TO STA 29+00	408	444	346
STA 29+00 TO STA 35+00	326	354	276
STA 35+00 TO STA 40+00	247	270	210
STA 40+00 TO STA 46+00	367	377	293
STA 46+00 TO STA 52+00	334	371	289
STA 52+00 TO STA 57+00	293	315	245
PROJECT TOTAL	3211	3431	2669

EROSION CONTROL

CATEGORY 0010

ITEM NO.	628.7005	628.7015	628.7015
	INLET PROTECTION TYPE A	INLET PROTECTION TYPE C	INLET PROTECTION TYPE D
LOCATION	EACH	EACH	EACH
N 20th St	55	95	8
PROJECT TOTAL	55	95	8

ADJUSTING WATER VALVES

CATEGORY 0030

ITEM NO.	SPV.0060.004
	ADJUSTING WATER VALVE BOXES
LOCATION	EACH
2275-05-70	49
PROJECT TOTAL	49

MOBILIZATION

CATEGORY 0010

ITEM NO.	619.1000
	MOBILIZATION
LOCATION	EACH
N 20th St	1
PROJECT TOTAL	1

CONSTRUCTION STAKING

CATEGORY 0010

ITEM NO.	650.5500	650.9000	650.9911	650.9911
-	CONSTRUCTION STAKING CURB	CONSTRUCTION STAKING CURB RAMP	CONSTRUCTION STAKING SIDEWALK (2275-05-70)	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (2275-05-70)
-				
LOCATION	LF	EACH	EACH	EACH
N 20TH ST	3120	34	1	1
PROJECT TOTAL	3120	34	1	1

LOCATION: N. 20TH STREET

EXISTING AND 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 (FT/FT)	PLAN LENGTH	PIPE SIZE (IN)	PIPE MATERIAL	PIPE REMARKS
100	EXISTING MANHOLE	1+45.5	1.8' LT	91.99		MS-58A	NEW FRAME & LID ONLY									
101	EXISTING MANHOLE	4+32.3	1.8' LT	93.27		MS-58A	NEW FRAME & LID ONLY									
102	EXISTING MANHOLE	7+19.5	1.6' LT	92.78		MS-58A	NEW FRAME & LID ONLY									
103	CATCH BASIN - 44A	7+10.9	21.6' LT	92.09	9.02	MS-57	NEW STRUCTURE	103	102	87.05	86.55	0.02381	21	12	CL IV RCP	Protect & Support 4" Dia. Gas Main, Electric
104	CATCH BASIN - 44A	7+20.6	18.5' RT	92.35	8.33	MS-57	NEW STRUCTURE	104	102	88.00	87.50	0.02632	19	12	CL IV RCP	Protect & Support CUC, Protect 6" Dia. Water Main
105	CATCH BASIN - 44A	7+48.9	51.2' LT	91.50	8.23	MS-57	REPLACE STRUCTURE	105	107	87.25	86.70	0.03437	16	12	CL IV RCP	Protect & Support Gas & Electric
106	CATCH BASIN - 44A	7+45.3	58.0' RT	91.67	8.25	MS-57	NEW STRUCTURE	106	109	87.40	86.90	0.02083	24	12	CL IV RCP	Protect & Support CUC, TE&ES, Gas
107	EXISTING MANHOLE	7+65.1	45.8' LT	92.16		MS-58A	NEW FRAME & LID ONLY									
108	CATCH BASIN - 44A	7+75.3	58.0' RT	91.63	8.61	MS-57	NEW STRUCTURE	108	109	87.00	86.50	0.02273	22	12	CL IV RCP	Protect & Support CUC, TE&ES, Protect 8" Dia. Water Main
109	EXISTING MANHOLE	7+62.3	39.8' RT	92.35		MS-58A	NEW FRAME & LID ONLY									
110	CATCH BASIN - 44A	7+80.9	58.0' LT	91.47	8.25	MS-57	REPLACE STRUCTURE	110	107	87.20	86.70	0.02632	19	12	CL IV RCP	Protect & Support CUC
111	EXISTING MANHOLE	8+03.1	2.0' LT	92.71		MS-58A	NEW FRAME & LID ONLY									
112	CATCH BASIN - 44A	8+19.2	21.6' LT	91.80	8.23	MS-57	REPLACE STRUCTURE	112	111	87.55	87.00	0.02292	24	12	CL IV RCP	Protect & Support 4" Dia. Gas Main, Electric
113	CATCH BASIN - 44A	8+19.9	18.6' RT	92.10	8.28	MS-57	REPLACE STRUCTURE	113	111	87.80	87.20	0.02308	26	12	CL IV RCP	Protect & Support CUC, Protect 6" Dia. Water Main
113A	EXISTING CATCH BASIN	9+41.4	18.6' RT	92.35		MS-57	NEW FRAME & LID ONLY									
114	EXISTING CATCH BASIN	9+43.4	21.4' LT	92.27		MS-57	NEW FRAME & LID ONLY									
115	EXISTING CATCH BASIN	10+66.0	21.4' LT	92.44			NO WORK									
115A	EXISTING MANHOLE	11+00.5	1.9' LT	93.35		MS-58A	NEW FRAME & LID ONLY									
116	EXISTING CATCH BASIN	10+64.9	18.6' RT	92.70			SALVAGE COVER									
117	CATCH BASIN - 44A	13+78.2	21.6' LT	93.00	8.23	MS-57	NEW STRUCTURE	117	119	88.75	88.15	0.02222	27	12	CL IV RCP	Protect & Support 4" Dia. Gas Main
118	CATCH BASIN - 44A	13+93.5	18.5' RT	92.65	8.93	MS-57	REPLACE STRUCTURE	118	119	87.70	87.20	0.02632	19	12	CL IV RCP	Protect & Support CUC, Telephone, Protect 6" Dia. Water Main
119	EXISTING MANHOLE	13+96.3	0.9' LT	93.45		MS-58A	NEW FRAME & LID ONLY									
120	CATCH BASIN - 44B	14+15.5	51.9' LT	92.32	3.52	MS-57	NEW STRUCTURE	120	121	89.80	89.55	0.02083	12	8	CORR. PVCP	Protect 30" Dia. Water Main
120A	EXISTING MANHOLE	14+19.8	2.6' LT	93.39			SALVAGE COVER									
121	EXISTING MANHOLE	14+26.8	46.2' LT	92.82		MS-58A	NEW FRAME & LID ONLY									
122	CATCH BASIN - 44A	14+50.0	50.0' LT	92.60	8.28	MS-57	NEW STRUCTURE	122	121	88.30	87.00	0.05909	22	12	CL IV RCP	Protect & Support 6" WM, TE&ES, FO
123	EXISTING CATCH BASIN	15+20.0	18.5' RT	92.75			NO WORK									
123A	EXISTING CATCH BASIN	15+20.1	21.2' LT	92.61			SALVAGE COVER									
124	EXISTING MANHOLE	16+66.7	0.9' LT	93.83		MS-58A	NEW FRAME & LID ONLY									
125	EXISTING MANHOLE	18+62.1	1.4' LT	94.82		MS-58A	NEW FRAME & LID ONLY									
125A	EXISTING CATCH BASIN	20+15.0	18.5' RT	93.95		MS-57	NEW FRAME & LID ONLY									
126	EXISTING MANHOLE	20+57.3	0.6' LT	94.83		MS-58A	NEW FRAME & LID ONLY									
126A	EXISTING CATCH BASIN	20+13.1	21.4' LT	93.83			NO WORK									
127	EXISTING MANHOLE	20+79.1	1.7' RT	94.87		MS-58A	NEW FRAME & LID ONLY									
128	INLETS - 2'x2.5'	20+83.5	55.0' LT	94.10	4.25	MS-57	NEW STRUCTURE	128	128A	89.85	89.60	0.02273	11	12	CL IV RCP	
128A	EXISTING CATCH BASIN	20+83.5	44.5' LT	94.32			SALVAGE COVER									Existing CB built in 2012, keep structure
129	CATCH BASIN - 44A	20+83.7	60.0' RT	94.10	8.53	MS-57	NEW STRUCTURE	129	131	89.55	89.00	0.02292	24	12	CL IV RCP	Protect & Support 16" Dia. Gas Main
130	EXISTING MANHOLE	20+95.1	47.8' LT	94.59		MS-58A	NEW FRAME & LID ONLY									
131	EXISTING MANHOLE	20+97.8	40.3' RT	94.65		MS-58A	NEW FRAME & LID ONLY									
131A	INLETS - 2'x2.5'	21+13.5	55.0' LT	94.15	3.70	MS-57	NEW STRUCTURE	131A	132A	90.45	90.15	0.02727	11	12	CL IV RCP	Protect & Support TE&ES, Protect 6" WM
132	CATCH BASIN - 44B	21+13.7	60.0' RT	94.07	4.67	MS-57	NEW STRUCTURE	132	131	90.40	89.85	0.02200	25	12	CL IV RCP	Protect & Support TE&ES, Protect 6" WM
132A	EXISTING CATCH BASIN	21+13.7	43.9' LT	94.42			SALVAGE COVER									
133	EXISTING MANHOLE	21+40.3	2.5' RT	94.89		MS-58A	NEW FRAME & LID ONLY									
134	EXISTING CATCH BASIN	21+50.5	21.5' LT	94.20			SALVAGE COVER									
134A	EXISTING CATCH BASIN	21+70.4	18.5' RT	94.50			SALVAGE COVER									
135	EXISTING CATCH BASIN	22+80.0	18.5' RT	94.80		MS-57	NEW FRAME & LID ONLY									
135A	CATCH BASIN - 44A	22+80.0	21.3' LT	94.58	12.56	MS-57	REPLACE STRUCTURE	135A	Dir. Con.	86.00	85.50	0.03125	16	12	CL IV RCP	Direct Connection into 60" Dia. Combined.Sewer, Protect 16" Water Main
136	EXISTING MANHOLE	23+36.3	1.8' LT	95.48		MS-58A	NEW FRAME & LID ONLY									
137	EXISTING MANHOLE	25+27.9	1.7' LT	96.39		MS-58A	NEW FRAME & LID ONLY									
137A	CATCH BASIN - 44A	26+75.0	20.6' RT	96.46	8.24	MS-57	NEW STRUCTURE	137A	138	92.20	91.20	0.02128	47	12	CL IV RCP	Protect & Support CUC, Protect 6" Dia. Water Main
138	EXISTING MANHOLE	27+16.6	1.7' LT	97.37		MS-58A	NEW FRAME & LID ONLY									
139	CATCH BASIN - 44A	27+39.3	60.0' LT	96.85	8.83	MS-57	NEW STRUCTURE	139	142	92.00	91.20	0.02857	28	12	CL IV RCP	Protect & Support CUC, TEES,Tel, FO
140	EXISTING CATCH BASIN	27+38.9	60.0' RT	96.67			SALVAGE COVER									
141	EXISTING MANHOLE	27+57.7	18.7' LT	97.57		MS-58A	NEW FRAME & LID ONLY									
142	EXISTING MANHOLE	27+64.3	45.8' LT	97.49		MS-58A	NEW FRAME & LID ONLY									
143	CATCH BASIN - 44A	27+89.2	89.0' LT	96.70	8.23	MS-57	NEW STRUCTURE	143	142	92.45	91.40	0.02143	49	12	CL IV RCP	Protect & Support 12" Dia. Water Main
144	EXISTING MANHOLE	27+63.7	42.8' RT	97.23		MS-58A	NEW FRAME & LID ONLY									
144A	EXISTING CATCH BASIN	27+88.5	85.8' RT	96.45		MS-57	NEW FRAME & LID ONLY									
144B	EXISTING CATCH BASIN	27+89.0	50.2' RT	96.44			SALVAGE COVER									
145	CATCH BASIN - 44A	28+27.0	24.4' LT	96.75	8.43	MS-57	NEW STRUCTURE	145	147	92.30	91.90	0.02353	17	12	CL IV RCP	
146	CATCH BASIN - 44B	28+04.6	18.9' RT	96.65	4.25	MS-57	SALVAGE COVER, REPLACE STRUCTURE	146	147	93.40	92.65	0.02143	35	12	CL IV RCP	Reset Trap, Protect & Support CUC, Tel, FO
147	EXISTING MANHOLE	28+11.5	16.4' LT	97.18		MS-58A	NEW FRAME & LID ONLY									
148	EXISTING MANHOLE	29+07.8	2.8' LT	98.00			SALVAGE COVER									
149	EXISTING CATCH BASIN	31+00.3	16.4' RT	99.67			SALVAGE COVER									
149A	EXISTING CATCH BASIN	30+98.1	22.6' LT	99.55			NO WORK									
150	EXISTING MANHOLE	31+00.0	2.9' LT	100.25		MS-58A	SALVAGE COVER									
151	EXISTING MANHOLE	32+88.7	3.0' LT	101.83		MS-58A	NEW FRAME & LID ONLY									
152	EXISTING MANHOLE	33+85.7	0.8' LT	102.40		MS-58A	NEW FRAME & LID ONLY									
153	EXISTING MANHOLE	34+27.5	39.9' RT	102.46		MS-58A	NEW FRAME & LID ONLY									
154	CATCH BASIN - 44A	34+79.1	22.5' LT	102.40	8.28	MS-57	NEW STRUCTURE	154	155	98.10	97.60	0.02500	20	12	CL IV RCP	Protect 16" Dia. Water Main

LOCATION: N. 20TH STREET

EXISTING AND 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 (FT/FT)	PLAN LENGTH	PIPE SIZE (IN)	PIPE MATERIAL	PIPE REMARKS
155	EXISTING MANHOLE	34+72.4	2.4' LT	103.19		MS-58A	NEW FRAME & LID ONLY									
156	CATCH BASIN - 44A	34+69.5	16.5' RT	102.70	12.68	MS-57	NEW FRAME & LID ONLY	156	155	94.00	93.50	0.02778	18	12	CL IV RCP	Protect & Support CUC, FO, Protect 6" Dia. Water Main
157	CATCH BASIN - 44A	36+50.4	16.4' RT	103.70	8.23	MS-57	REPLACE STRUCTURE	157	158	99.45	99.00	0.02143	21	12	CL IV RCP	Protect & Support CUC, FO, Protect 6" Dia. Water Main
157A	EXISTING CATCH BASIN	37+06.2	21.6' LT	103.70			NO WORK									
158	EXISTING MANHOLE	36+61.5	2.7' LT	104.28		MS-58A	NEW FRAME & LID ONLY									
158A	EXISTING CATCH BASIN	37+06.3	22.4' LT	103.70		MS-57	NEW FRAME & LID ONLY									
159	EXISTING MANHOLE	37+59.2	2.3' LT	104.56		MS-58A	NEW FRAME & LID ONLY									
160	EXISTING CATCH BASIN	37+59.9	16.4' RT	103.90	8.88		SALVAGE COVER	160	159	99.00	98.30	0.02188	32	12	CL IV RCP	Protect & Support CUC, FO, and Protect 6" Dia. WM, Reset Trap
160A	EXISTING CATCH BASIN	38+37.4	22.6' LT	104.09			SALVAGE COVER									
161	EXISTING CATCH BASIN	38+30.2	16.5' RT	103.95	8.33		SALVAGE COVER	161	162	99.60	98.95	0.02167	30	12	CL IV RCP	Protect & Support CUC, FO, and Protect 6" Dia. WM, Reset Trap
161A	EXISTING CATCH BASIN	38+59.9	22.5' LT	104.31			NO WORK									
162	EXISTING MANHOLE	38+53.6	2.6' LT	104.75		MS-58A	NEW FRAME & LID ONLY									
163	EXISTING MANHOLE	39+50.6	3.4' LT	104.75		MS-58A	NEW FRAME & LID ONLY									
163A	EXISTING CATCH BASIN	39+59.9	22.5' RT	104.31			SALVAGE COVER									
164	CATCH BASIN - 44A	39+25.1	16.5' RT	104.00	8.53	MS-57	REPLACE STRUCTURE	164	163	99.45	98.75	0.02188	32	12	CL IV RCP	Protect & Support CUC, FO, and protect 6" Dia. Water Main
165	EXISTING CATCH BASIN	40+39.8	16.4' RT	104.72	8.70		SALVAGE COVER	165	166	100.00	99.55	0.02250	20	12	CL IV RCP	Protect & Support CUC, FO, ATT, and protect 6" Dia. Water Main, Reset Trap
166	EXISTING MANHOLE	40+46.0	3.3' LT	105.20		MS-58A	NEW FRAME & LID ONLY									
167	CATCH BASIN - 44A	40+66.5	55.0' LT	104.55	8.23	MS-57	NEW STRUCTURE	167	168	100.30	100.00	0.02308	13	12	CL IV RCP	Protect & Support TE&ES
168	4-FT MANHOLE	40+72.4	43.2' LT	105.00	9.98	MS-58A	REPLACE STRUCTURE	168	166	99.00	96.50	0.05208	48	12	CL IV RCP	Protect & Support 4" Dia. Gas Main, 16" Dia. Water Main
169	CATCH BASIN - 44A	40+68.6	57.0' RT	104.35	8.58	MS-57	REPLACE STRUCTURE	169	171	99.75	99.25	0.02083	24	12	CL IV RCP	Protect & Support 8" Dia. Gas Main
170	CATCH BASIN - 44A	41+07.5	57.0' RT	104.10	8.28	MS-57	NEW STRUCTURE	170	171	99.80	99.30	0.02083	24	12	CL IV RCP	Protect & Support AT&T, Protect 6" Dia. Water Main
171	EXISTING MANHOLE	40+88.4	41.9' RT	104.95		MS-58A	NEW FRAME & LID ONLY									
172	CATCH BASIN - 44A	41+04.8	55.0' LT	104.65	8.63	MS-57	NEW STRUCTURE	172	168	100.00	99.25	0.02273	33	12	CL IV RCP	Protect & Support ATT, 8" Dia. Gas Main, Protect 6" Water Main
173	EXISTING CATCH BASIN	44+00.1	22.5' LT	106.01			NO WORK									
174	EXISTING MANHOLE	41+30.1	2.1' LT	105.33		MS-58A	NEW FRAME & LID ONLY									
175	CATCH BASIN - 44A	41+42.7	22.5' LT	104.80	8.28	MS-57	NEW STRUCTURE	175	174	100.50	100.00	0.02174	23	12	CL IV RCP	Protect 16" Dia. Water Main
176	CATCH BASIN - 44A	41+28.2	16.5' RT	104.70	9.03	MS-57	REPLACE STRUCTURE	176	174	99.65	99.15	0.02778	18	12	CL IV RCP	Protect & Support CUC, FO, and 6" Dia. Water Main, Reset Trap
177	CATCH BASIN - 44A	44+00.3	16.6' RT	106.05	8.48		SALVAGE COVER, REPLACE STRUCTURE	177	178	101.55	101.00	0.02200	25	12	CL IV RCP	Protect & Support FO, CUC, Protect 6" Dia. Water Main, Reset Trap
177A	EXISTING CATCH BASIN	45+80.3	22.6' LT	106.46			NO WORK									
178	EXISTING MANHOLE	44+18.1	2.3' LT	106.63		MS-58A	NEW FRAME & LID ONLY									
178A	CATCH BASIN - 44A	46+75.3	15.2' RT	106.82	9.05	MS-57	REPLACE STRUCTURE	178A	179	101.75	101.00	0.02206	34	12	CL IV RCP	Protect & Support CUC, FO, Protect 6" Dia. Water Main
179	EXISTING MANHOLE	47+05.1	2.0' LT	107.21		MS-58A	NEW FRAME & LID ONLY									
179A	CATCH BASIN - 44A	46+86.9	22.6' LT	106.32	8.25		SALVAGE COVER	179A	179	102.05	101.30	0.02885	26	12	CL IV RCP	Protect 16" Dia. Water Main
180	CATCH BASIN - 44B	47+34.1	60.0' LT	106.55	4.05	MS-57	NEW STRUCTURE	180	181	103.50	103.00	0.02500	20	12	CL IV RCP	Protect 54" Dia. Water Main Under crossing
181	EXISTING MANHOLE	47+47.9	45.0' LT	107.22		MS-58A	NEW FRAME & LID ONLY									
182	EXISTING MANHOLE	47+47.2	40.3' RT	107.09		MS-58A	NEW FRAME & LID ONLY									
183	CATCH BASIN - 44A	47+64.1	60.0' LT	106.50	8.23	MS-57	NEW STRUCTURE	183	181	102.25	101.80	0.02143	21	12	CL IV RCP	Protect & Support 6" Dia. Water Main
184	EXISTING MANHOLE	47+89.9	2.4' LT	107.35		MS-58A	NEW FRAME & LID ONLY									
185	CATCH BASIN - 44B	48+01.2	22.5' LT	106.80	4.30	MS-57	NEW STRUCTURE	185	184	103.50	103.00	0.02273	22	12	CL IV RCP	
186	CATCH BASIN - 44A	47+93.5	16.5' RT	106.80	8.23		SALVAGE COVER, REPLACE STRUCTURE	186	184	102.55	102.00	0.03056	18	12	CL IV RCP	Protect & Support CUC, FO, Protect 6" Dia. Water Main
186A	EXISTING CATCH BASIN	48+80.6	16.2' RT	106.95		MS-57	NEW FRAME & LID ONLY									
187	EXISTING MANHOLE	51+41.2	2.6' LT	108.71		MS-58A	NEW FRAME & LID ONLY									
187A	EXISTING CATCH BASIN	49+50.7	22.5' LT	107.29		MS-57	NEW FRAME & LID ONLY									
188	CATCH BASIN - 44A	51+50.1	22.6' LT	108.23	8.26	MS-57	REPLACE STRUCTURE	188	187	103.95	103.45	0.02174	23	12	CL IV RCP	Protect 16" Dia. Water Main
188A	EXISTING CATCH BASIN	51+50.3	16.5' RT	108.25	8.63		SALVAGE COVER	188A	187	103.60	103.15	0.02250	20	12	CL IV RCP	Protect 6" Dia. Water Main, Protect & Support FO, CUC, Reset Trap
189	EXISTING MANHOLE	53+75.7	2.2' LT	110.32		MS-58A	NEW FRAME & LID ONLY									
190	EXISTING CATCH BASIN	53+98.6	43.6' RT	110.01	8.24		SALVAGE COVER	190	192	105.75	105.25	0.02632	19	12	CL IV RCP	Reset Trap
191	EXISTING CATCH BASIN	54+66.6	14.9' RT	111.30	8.53		SALVAGE COVER	191	194	106.75	106.25	0.02632	19	12	CL IV RCP	Protect & Support CUC, FO, Protect 6" Dia. Water Main, Reset Trap
191A	EXISTING MANHOLE	54+19.0	46.3' LT	110.58			SALVAGE COVER									
192	EXISTING MANHOLE	54+18.7	40.3' RT	111.00		MS-58A	NEW FRAME & LID ONLY									
193	CATCH BASIN - 44A	54+38.7	50.0' RT	110.65	8.28	MS-57	NEW STRUCTURE	193	192	106.35	105.85	0.02381	21	12	CL IV RCP	Protect 8" Dia. Water Main
194	4-FT MANHOLE	54+59.0	0.1' LT	111.70		MS-58A	NEW STRUCTURE			98.78	98.78		10	21	CL IV RCP	
195	CATCH BASIN - 44A	54+60.8	20.0' LT	110.80	8.28		SALVAGE COVER, REPLACE STRUCTURE	195	194	106.50	106.00	0.03125	16	12	CL IV RCP	Protect & Support 16" Dia. Water Main
196	EXISTING MANHOLE	56+12.4	4.0' LT	116.25		MS-58A	NEW FRAME & LID ONLY									

608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	611.2004 MANHOLES 4-FT DIAMETER	611.3225 INLETS 2'X2.5'	611.9705 SALVAGED MANHOLE COVERS	611.9710 SALVAGED INLET COVERS	650.4000 CONSTRUCTION STAKING STORM SEWER	SPV.0060.102 INLET COVERS TYPE MS-57	SPV.0060.103 MANHOLE COVERS TYPE MS 58-A	SPV.0060.110 CATCH BASIN TYPE 44-A	SPV.0060.111 CATCH BASIN TYPE 44-B	SPV.0060.115 PIPE CONNECTION TO EXISTING STRUCTURE	SPV.0090.102 STORM SEWER PIPE CORRUGATED PVC 8-INCH
LF	EACH	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH	LF
1130	2	2	4	17	1142	46	46	35	5	1	12

ALL ITEMS CATEGORY 0010

[A] DEPTH = COVER ELEVATION - LOWEST PIPE INVERT ELEVATION + SUMP(FOR TYPE 44A & 44B CATCH BASINS)

CATCH BASIN REMOVALS

STRUCTURE NUMBER	STATION	OFFSET	204.0215 REMOVING CATCH BASINS EACH
500	7+20.4	17.3' RT	1
505	7+49.0	50.6' LT	1
506	8+19.2	20.2' LT	1
507	8+19.9	17.3' RT	1
509	13+93.6	17.4' RT	1
510	14+16.7	51.9' LT	1
524	28+04.7	17.6' RT	1
527	34+69.6	15.2' RT	1
528	36+50.4	16.0' RT	1
530	46+81.7	21.4' RT	1
531	39+25.1	15.2' RT	1
532	40+39.8	15.2' RT	1
539	41+28.2	15.3' RT	1
541	46+75.4	14.1' RT	1
545	47+93.5	15.3' RT	1
546	51+50.0	21.3' LT	1
547	53+99.7	43.6' RT	1
548	44+00.3	16.5' RT	1
550	54+64.1	18.6' RT	1
TOTAL			18

ALL ITEMS CATEGORY 0010

PIPE CONNECTION TO EXISTING STRUCTURE

STRUCTURE NUMBER	STATION	OFFSET	SPV.0060.115 PIPE CONNECTION TO EXISTING STRUCTURE EACH
135A	22+80.0	5.0' LT	1
TOTAL			1

ALL ITEMS CATEGORY 0010

CATCH BASIN ABANDONMENT

STRUCTURE NUMBER	STATION	OFFSET	204.0255 ABANDON CATCH BASIN EACH	204.0270 ABANDONING CULVERT PIPES EACH
501	7+23.9	20.3' LT	1	1
502	7+46.4	45.0' RT	1	1
503	7+74.3	44.1' RT	1	1
504	7+79.6	46.5' LT	1	1
508	13+86.2	19.9' LT	1	1
511	14+48.6	41.6' LT	1	1
514	20+84.9	44.4' RT	1	1
515	21+12.7	43.5' RT	1	1
518	26+90.4	19.8' RT	1	1
522	27+40.4	38.4' LT	1	1
523	27+88.1	37.2' LT	1	1
525	28+07.5	23.4' LT	1	1
526	34+66.1	21.4' LT	1	1
533	40+67.5	43.1' LT	1	1
534	41+03.8	43.3' LT	1	1
535	40+70.0	40.4' RT	1	1
536	40+74.1	35.1' RT	1	1
537	41+02.0	38.3' RT	1	1
538	41+06.5	38.0' LT	1	1
540	41+30.2	21.3' LT	1	1
542	47+35.1	47.9' LT	1	1
543	47+62.9	47.1' LT	1	1
544	47+94.1	21.3' LT	1	1
551	54+37.8	33.9' RT	1	1
TOTAL			24	24

ALL ITEMS CATEGORY 0010

3

TRAFFIC CONTROL DEVICES

CATEGORY 0010

ITEM NO.		643.0300		643.0410		643.0420		643.0705		643.0715		643.0500	643.0600	643.0900		643.0920	643.1050		643.3250
		TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL BARRICADES TYPE II		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL WARNING LIGHTS TYPE C		TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL COVERING SIGNS TYPE II	TRAFFIC CONTROL SIGNS PCMS		TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
LOCATION		DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	EACH	EACH	DAYS	EACH	EACH	DAYS	LF
N 20TH ST	STAGE 1	66	278	18,348	95	6,270	121	7,986	242	15,972	278	18,348	19	38	127	8382	10	2	7	400
	STAGE 2	66	231	15,246	67	4,422	116	7,656	232	15,312	231	15,246	23	46	118	7788	2	2	7	500
PROJECT TOTAL				33,594		10,692		15,642		31,284		33,594	42	84		16,170	12		14	900

(1) All Drums have one Type C Steady Burn Light

(2) All Type III Barricades have two Type A Flashing Lights

(3) One Cycle of Traffic Control Covering Signs Type II

TRAFFIC CONTROL

CATEGORY 0010

ITEM NO.	643.5000 TRAFFIC CONTROL
LOCATION	EACH
N 20th St	1
PROJECT TOTAL	1

TEMPORARY PEDESTRIAN ACCOMMODATIONS

CATEGORY 0010

ITEM NO.	644.1601	644.1605
	TEMPORARY PEDESTRIAN CURB RAMP	TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
LOCATION	DAY	SF
UNDISTRIBUTED	2100	350
PROJECT TOTAL	2,100	350

PEDESTRIAN ACCOMMODATIONS SURFACES

CATEGORY 0010

	644.1410	644.1430	644.1440	644.1810
	TEMPORARY PEDESTRIAN SURFACE ASPHALT	TEMPORARY PEDESTRIAN SURFACE PLATE	TEMPORARY PEDESTRIAN SURFACE MATTING	TEMPORARY PEDESTRIAN BARRICADE
LOCATION	SF	SF	SF	LF
N 20TH ST	1,760	1,760	1,760	700
PROJECT TOTAL	1,760	1,760	1,760	700

3

PAVEMENT MARKING

CATEGORY 0010

ITEM NO.	646.1020		646.2020	646.5020	646.5220	SPV.0090.003	SPV.0090.004	SPV.0090.705
	MARKING LINE EPOXY 4-INCH (WHITE)	MARKING LINE EPOXY 4-INCH (YELLOW)	MARKING LINE EPOXY 6-INCH	MARKING ARROW EPOXY	MARKING SYMBOL EPOXY	MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH	MARKING STOP LINE EPOXY 24-INCH	MARKING CROSSWALK LINE EPOXY BLOCK STYLE 12-INCH
LOCATION	LF	LF	LF	EACH	EACH	LF	LF	LF
N 20th St	4440	1,250	8,983	18	18	569	296	2,290
PROJECT TOTAL	5,690		8,983	18	18	569	296	2,290

UTILITY LINE OPENING

CATEGORY 0010

ITEM NO.	SPV.0060.001 UTILITY LINE OPENING
LOCATION	EACH
2275-05-70	20
PROJECT TOTAL	20

CATEGORY 0010

ITEM NO.	611.8120.S COVER PLATES TEMPORARY
LOCATION	EACH
UNDISTRIBUTED	10
PROJECT TOTAL	10

CATEGORY 0010

ITEM NO.	SPV.0060.010 TEMPORARY NO PARKING SIGNS
LOCATION	EACH
N 20th St	64
PROJECT TOTAL	64

FIELD OFFICE

CATEGORY 0010

ITEM NO.	642.5201 FIELD OFFICE TYPE C
LOCATION	EACH
N 20th St	1
PROJECT TOTAL	1

REMOVING SIGNS

SIGN NO.	DESCRIPTION	638.2602 REMOVE SIGNS TYPE II EACH	638.3000 REMOVE SMALL SIGN SUPPORTS EACH	REMARKS
1-1	ONE WAY ←	1	-	ON CONCRETE LIGHT POLE
1-2	ONE WAY →	1	-	ON POLE WITH 1-1
1-3	SPEED LIMIT 30	1	-	ON CONCRETE LIGHT POLE
1-4	FINES HIGHER	1	-	ON POLE WITH 1-3
1-5	2 HOUR PARKING 7AM-7PM EXCEPT SUN ↔	1	-	ON POLE WITH 1-3
1-6	2 HOUR PARKING 7AM-7PM EXCEPT SUN ↔	1	1	-
1-7	(SCHOOL ZONE SYMBOL)	1	-	ON CONCRETE LIGHT POLE
1-8	AHEAD	1	-	ON POLE WITH 1-7
1-9	2 HOUR PARKING 7AM-7PM EXCEPT SUN ↔	1	1	-
2-1	W MEINECKE AV	1	-	ON CONCRETE LIGHT POLE
2-2	STOP	1	-	ON WOOD UTILITY POLE
2-3	STOP	1	-	ON POLE WITH 2-2
2-4	AMANI (NEIGHBORHOOD SIGN)	-	-	TO BE REMOVED BY OTHERS
2-5	STOP	1	1	-
2-6	STOP	1	-	ON POST WITH 2-5
2-7	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
2-8	(NO PARKING SYMBOL) ← / 2 HOUR PARKING 7AM-7PM EXCEPT SUN →	1	1	-
2-9	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	1	-	ON CONCRETE LIGHT POLE
3-1	W WRIGHT ST	1	-	ON CONCRETE LIGHT POLE
3-2	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
3-3	W WRIGHT ST	1	-	ON CONCRETE LIGHT POLE
3-4	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
3-5	(NO PARKING SYMBOL)SCH DAYS 7-4:30 EX BUSES ↔	1	-	ON CONCRETE LIGHT POLE
3-6	(NO PARKING SYMBOL)SCH DAYS 7-4:30 EX BUSES ↔	1	-	ON CONCRETE LIGHT POLE
4-1	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	1	-	ON CONCRETE LIGHT POLE
4-2	(SCHOOL ZONE SYMBOL)	1	-	ON WOOD UTILITY POLE
4-3	AHEAD	1	-	ON POLE WITH 4-2
4-4	SPEED LIMIT 30	1	-	ON CONCRETE LIGHT POLE
5-1	W CLARKE ST	1	-	ON WOOD UTILITY POLE
5-2	STOP	1	1	-
5-3	(NO PARKING SYMBOL) ←	1	1	-
5-4	AMANI (NEIGHBORHOOD SIGN)	-	-	TO BE REMOVED BY OTHERS
5-5	N 20TH ST	1	-	ON ALUMINUM LIGHT POLE
5-6	W CLARKE ST	1	-	ON POLE WITH 5-5
5-7	STOP	1	1	-
5-8	(NO PARKING SYMBOL) ←	1	1	-

REMOVING SIGNS

SIGN NO.	DESCRIPTION	638.2602 REMOVE SIGNS TYPE II EACH	638.3000 REMOVE SMALL SIGN SUPPORTS EACH	REMARKS
6-1	SPEED LIMIT 30	1	-	ON WOOD UTILITY POLE
6-2	W CENTER ST	1	-	ON CONCRETE LIGHT POLE
6-3	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
6-4	W CENTER ST	1	-	ON CONCRETE LIGHT POLE
6-5	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
7-1	END SCH ZONE	1	-	ON CONCRETE LIGHT POLE
7-2	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
7-3	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	1	-	ON WOOD UTILITY POLE
7-4	FINES HIGHER	1	-	ON POLE WITH 7-3
7-5	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
7-6	(SCHOOL ZONE SYMBOL)	1	-	ON WOOD UTILITY POLE
7-7	AHEAD	1	-	ON POLE WITH 7-6
8-1	STOP	1	1	-
8-2	ONE WAY ←	1	-	ON CONCRETE LIGHT POLE
8-3	ONE WAY →	1	-	ON POLE WITH 8-2
8-4	(NO PARKING SYMBOL) ←	1	1	-
8-5	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
8-6	END SCHOOL ZONE	1	-	ON WOOD UTILITY POLE
8-7	W HADLEY ST	1	-	ON CONCRETE LIGHT POLE
8-8	STOP	1	1	-
8-9	STOP	1	-	ON POST WITH 8-8
8-10	ONE WAY ←	1	-	ON CONCRETE LIGHT POLE
8-11	ONE WAY →	1	-	ON POLE WITH 8-10
8-12	(SCHOOL ZONE SYMBOL)	1	1	-
8-13	DIAGONAL DOWN ARROW ↘	1	-	ON POST WITH 8-12
8-14	(SCHOOL ZONE SYMBOL)	1	-	ON POST WITH 8-12
8-15	DIAGONAL DOWN ARROW ↙	1	-	ON POST WITH 8-12
9-1	RESERVED PARKING (DISABLED SYMBOL) THIS SPACE	1	-	ON CONCRETE LIGHT POLE
9-2	(NO TRUCKS SYMBOL) 3 TONS OR OVER	1	-	ON CONCRETE LIGHT POLE
9-3	N 20TH ST	1	-	ON POLE WITH 9-2
9-4	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
9-5	W LOCUST ST	1	-	ON CONCRETE LIGHT POLE
9-6	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
9-7	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE

REMOVING SIGNS

SIGN NO.	DESCRIPTION	638.2602 REMOVE SIGNS TYPE II EACH	638.3000 REMOVE SMALL SIGN SUPPORTS EACH	REMARKS
10-1	(NO PARKING SYMBOL) ← / NO PARKING 3:30-5:30 EX SAT & SUN →	1	-	ON WOOD UTILITY POLE
10-2	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
10-3	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON CONCRETE LIGHT POLE
11-1	W CHAMBERS ST	1	-	ON CONCRETE LIGHT POLE
11-2	STOP	1	1	-
11-3	STOP	1	-	ON POST WITH 11-2
11-4	AMANI (NEIGHBORHOOD SIGN)	-	-	TO BE REMOVED BY OTHERS
11-5	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
11-6	W CHAMBERS ST	1	-	ON CONCRETE LIGHT POLE
11-7	STOP	1	-	ON CONCRETE LIGHT POLE
11-8	STOP	1	-	ON POLE WITH 11-7
11-9	N 20TH ST	1	-	ON WOOD UTILITY POLE
12-1	SPEED LIMIT 30	1	-	ON CONCRETE LIGHT POLE
12-2	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
12-3	NO PARKING 3:30-5:30 EX SAT & SUN ↔	1	-	ON WOOD UTILITY POLE
13-1	W HOPKINS ST	1	-	ON CONCRETE LIGHT POLE
13-2	(SCHOOL ZONE SYMBOL)	1	-	ON CONCRETE LIGHT POLE
13-3	AHEAD	1	-	ON POLE WITH 13-2
13-4	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
13-5	W HOPKINS ST	1	-	ON CONCRETE LIGHT POLE
13-6	N 20TH ST	1	-	ON CONCRETE LIGHT POLE
13-7	(NO PARKING SYMBOL) ↔	1	1	-
13-8	(NO PARKING SYMBOL) BUS STOP ↔	1	-	ON CONCRETE LIGHT POLE
	PROJECT TOTALS	93	14	

SIGN INSTALLATION

SIGN NO.	SIGN CODE	MESSAGE	SIZE INCHES	X	SIZE INCHES	SPV .0060.280 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7.0 FEET EACH	SPV .0060.281 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10.0 FEET EACH	SPV .0060.282 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11.0 FEET EACH	SPV .0060.285 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10.0 FEET EACH	SPV .0060.286 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11.0 FEET EACH	SPV .0060.291 STREET NAME SIGN MOUNTING HARDWARE ON MAST ARM EACH	637.2220 SIGNS TYPE II REFLECTIVE SH SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
1-1	R6-2L	ONE WAY ←	18	X	24	-	1	-	-	-	-	3.0	-	
1-2	R6-2R	ONE WAY →	18	X	24	-	-	-	-	-	-	3.0	-	ON POST WITH 1-1
1-3	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
1-4	R2-1	SPEED LIMIT 30	24	X	30	-	-	-	-	-	-	5.0	-	ATTACH TO LIGHT POLE
1-5	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
2-1	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ATTACH TO UTILITY POLE
2-2	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POLE WITH 2-1
2-3	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	1	-	-	-	-	-	3.0	-	
2-4	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
2-5	R1-1	STOP	30	X	30	-	1	-	-	-	-	6.3	-	
2-6	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POST WITH 2-5
2-7	M1-94H	N 20TH ST	30	X	10	-	-	-	-	-	-	2.1	-	ATTACH TO LIGHT POLE
2-8	M1-94H	W MEINECKE AV	42	X	10	-	-	-	-	-	-	2.9	-	ON POLE WITH 2-7
2-9	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
3-1	M1-94H	W WRIGHT ST	72	X	18	-	-	-	-	-	1	9.0	-	
3-2	R10-4BL	PUSH BUTTON FOR (PED SYMBOL) ←	6	X	8	-	-	-	-	-	-	0.3	-	ATTACH TO MAST ARM POLE
3-3	R5-2	(NO TRUCKS SYMBOL)	24	X	24	-	-	-	-	-	-	4.0	-	ATTACH TO LIGHT POLE
3-4	R5-2A	3 TONS OR OVER	24	X	12	-	-	-	-	-	-	2.0	-	ON POLE WITH 3-3
3-5	M1-94H	N 20TH ST	30	X	10	-	-	-	-	-	-	2.1	-	ON POLE WITH 3-3
3-6	R10-4BR	PUSH BUTTON FOR (PED SYMBOL) →	6	X	8	-	-	-	-	-	-	0.3	-	ATTACH TO SIGNAL POLE
3-7	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	1	-	-	-	-	-	3.0	-	
3-8	M1-94H	W WRIGHT ST	72	X	18	-	-	-	-	-	1	9.0	-	
3-9	R10-4BL	PUSH BUTTON FOR (PED SYMBOL) ←	6	X	8	-	-	-	-	-	-	0.3	-	ATTACH TO SIGNAL POLE
3-10	M1-94H	N 20TH ST	30	X	10	-	-	-	-	-	-	2.1	-	ATTACH TO LIGHT POLE
3-11	R5-2	(NO TRUCKS SYMBOL)	24	X	24	-	-	-	-	-	-	4.0	-	ON POLE WITH 3-10
3-12	R5-2A	3 TONS OR OVER	24	X	12	-	-	-	-	-	-	2.0	-	ON POLE WITH 3-10
3-13	R10-4BR	PUSH BUTTON FOR (PED SYMBOL) →	6	X	8	-	-	-	-	-	-	0.3	-	ATTACH TO SIGNAL POLE
3-14	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
3-15	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
4-1	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
4-2	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
5-1	R1-1	STOP	30	X	30	-	1	-	-	-	-	6.3	-	
5-2	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POST WITH 5-1
5-3	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	1	-	-	-	-	-	3.0	-	
5-4	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
5-5	M1-94H	N 20TH ST	30	X	10	-	-	-	-	-	-	2.1	-	ATTACH TO LIGHT POLE
5-6	M1-94H	W CLARKE ST	36	X	10	-	-	-	-	-	-	2.5	-	ON POLE WITH 5-5
5-7	R1-1	STOP	30	X	30	-	1	-	-	-	-	6.3	-	
5-8	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POST WITH 5-7

SIGN INSTALLATION

SIGN NO.	SIGN CODE	MESSAGE	SIZE INCHES	X	SIZE INCHES	SPV.0060.280 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7.0 FEET EACH	SPV.0060.281 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10.0 FEET EACH	SPV.0060.282 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11.0 FEET EACH	SPV.0060.285 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10.0 FEET EACH	SPV.0060.286 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11.0 FEET EACH	SPV.0060.291 STREET NAME SIGN MOUNTING HARDWARE ON MAST ARM EACH	637.2220 SIGNS TYPE II REFLECTIVE SH SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
6-1	R2-1	SPEED LIMIT 30	24	X	30	-	-	-	-	-	-	5.0	-	ATTACH TO UTILITY POLE
6-2	M1-94H	W CENTER ST	72	X	18	-	-	-	-	-	1	9.0	-	
6-3	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	1	-	-	-	-	-	3.0	-	
6-4	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
6-5	M1-94H	W CENTER ST	72	X	18	-	-	-	-	-	1	9.0	-	
6-6	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
6-7	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
6-8	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5.	-	ATTACH TO LIGHT POLE
7-1	R2-1	SPEED LIMIT 30	24	X	30	-	-	-	-	-	-	5.0	-	ATTACH TO LIGHT POLE
7-2	S5-2	END SCHOOL ZONE	24	X	30	-	-	-	-	-	-	5.0	-	ON POLE WITH 7-1
7-3	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
7-4	S4-51	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	24	X	48	-	-	-	-	-	-	6.6	1.4	ATTACH TO UTILITY POLE
7-5	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
7-6	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	-	-	-	-	6.3	ATTACH TO UTILITY POLE
7-7	S16-9P	AHEAD	24	X	12	-	-	-	-	-	-	-	2.0	ON POLE WITH 7-6
7-8	R2-6P	FINES HIGHER	24	X	18	-	-	-	-	-	-	3.0	-	ON POLE WITH 7-6
7-9	R2-1	SPEED LIMIT 30	24	X	30	-	-	-	-	-	-	5.0	-	ATTACH TO UTILITY POLE
7-10	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ON POLE WITH 7-9
8-1	R1-1	STOP	30	X	30	-	-	1	-	-	-	6.3	-	
8-2	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POST WITH 8-1
8-3	R6-1L	ONE WAY ←	36	X	12	-	-	-	-	-	-	3.0	-	ON POST WITH 8-1
8-4	R6-1R	ONE WAY →	36	X	12	-	-	-	-	-	-	3.0	-	ON POST WITH 8-1
8-5	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	-	1	-	-	6.3	
8-6	S16-7	DIAGONAL DOWN ARROW ↘	24	X	12	-	-	-	-	-	-	-	2.0	ON POST WITH 8-5
8-7	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	-	-	-	-	6.3	ON POST WITH 8-5
8-8	S16-7	DIAGONAL DOWN ARROW ↙	24	X	12	-	-	-	-	-	-	-	2.0	ON POST WITH 8-5
8-9	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	-	-	-	-	-	-	3.0	-	ON POST WITH 8-5
8-10	S4-51	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	24	X	48	-	-	-	-	-	-	6.6	1.4	ATTACH TO LIGHT POLE
8-11	R2-1	SPEED LIMIT 30	24	X	30	-	-	-	-	-	-	5.0	-	ATTACH TO UTILITY POLE
8-12	S5-2	END SCHOOL ZONE	24	X	30	-	-	-	-	-	-	5.0	-	ON POLE WITH 8-11
8-13	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ON POLE WITH 8-11
8-14	R1-1	STOP	30	X	30	-	1	-	-	-	-	6.3	-	
8-15	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POST WITH 8-14
8-16	R6-2L	ONE WAY ←	18	X	24	-	-	-	-	-	-	3.0	-	ATTACH TO LIGHT POLE
8-17	R6-2R	ONE WAY →	18	X	24	-	-	-	-	-	-	3.0	-	ON POLE WITH 8-16
8-18	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	1	-	-	-	6.3	
8-19	S16-7	DIAGONAL DOWN ARROW ↘	24	X	12	-	-	-	-	-	-	-	2.0	ON POST WITH 8-18
8-20	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	-	-	-	-	6.3	ON POST WITH 8-18
8-21	S16-7	DIAGONAL DOWN ARROW ↙	24	X	12	-	-	-	-	-	-	-	2.0	ON POST WITH 8-18

SIGN INSTALLATION

SIGN NO.	SIGN CODE	MESSAGE	SIZE INCHES	X	SIZE INCHES	SPV.0060.280 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7.0 FEET EACH	SPV.0060.281 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10.0 FEET EACH	SPV.0060.282 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11.0 FEET EACH	SPV.0060.285 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10.0 FEET EACH	SPV.0060.286 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11.0 FEET EACH	SPV.0060.291 STREET NAME SIGN MOUNTING HARDWARE ON MAST ARM EACH	637.2220 SIGNS TYPE II REFLECTIVE SH SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
9-1	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	-	-	-	-	6.3	ATTACH TO LIGHT POLE
9-2	S16-9P	AHEAD	24	X	12	-	-	-	-	-	-	-	2.0	ON POLE WITH 9-1
9-3	S2-6P	FINES HIGHER	24	X	18	-	-	-	-	-	-	3.0	-	ON POLE WITH 9-1
9-4	M1-94H	W LOCUST ST	72	X	18	-	-	-	-	-	1	9.0	-	
9-5	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
9-6	R5-2	(NO TRUCKS SYMBOL)	24	X	24	-	-	-	-	-	-	4.0	-	ATTACH TO MAST ARM POLE
9-7	R5-2A	3 TONS OR OVER	24	X	12	-	-	-	-	-	-	2.0	-	ON POLE WITH 9-6
9-8	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	1	-	-	-	-	-	3.0	-	
9-9	M1-94H	W LOCUST ST	72	X	18	-	-	-	-	-	1	9.0	-	
9-10	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
9-11	R5-2	(NO TRUCKS SYMBOL)	24	X	24	-	-	-	-	-	-	4.0	-	ATTACH TO MAST ARM POLE
9-12	R5-2A	3 TONS OR OVER	24	X	12	-	-	-	-	-	-	2.0	-	ON POLE WITH 9-11
9-13	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
10-1	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
10-2	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
11-1	M1-94H	W CHAMBERS ST	42	X	10	-	-	-	-	-	-	2.9	-	ATTACH TO LIGHT POLE
11-2	R1-1	STOP	30	X	30	-	1	-	-	-	-	6.3	-	
11-3	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POST WITH 11-2
11-4	R5-2	(NO TRUCKS SYMBOL)	24	X	24	-	-	-	-	-	-	4.0	-	ATTACH TO LIGHT POLE
11-5	R5-2A	3 TONS OR OVER	24	X	12	-	-	-	-	-	-	2.0	-	ON POLE WITH 11-4
11-6	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	1	-	-	-	-	-	3.0	-	
11-7	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
11-8	M1-94H	N 20TH ST	30	X	10	-	-	-	-	-	-	2.1	-	ATTACH TO LIGHT POLE
11-9	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POLE WITH 11-8
11-10	R1-1	STOP	30	X	30	-	-	-	-	-	-	6.3	-	ON POLE WITH 11-8
12-1	R2-1	SPEED LIMIT 30	24	X	30	-	-	-	-	-	-	5.0	-	ATTACH TO LIGHT POLE
12-2	M1-94H	W BURLEIGH ST	84	X	18	-	-	-	-	-	1	10.5	-	
12-3	W5-52R	OBJECT MARKER - RIGHT MOUNT	12	X	36	-	-	-	-	-	-	3.0	-	ATTACH TO MAST ARM POLE
12-4	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
12-5	M1-94H	W BURLEIGH ST	84	X	18	-	-	-	-	-	1	10.5	-	
12-6	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
12-7	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
12-8	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO UTILITY POLE
13-1	M1-94H	W HOPKINS ST	84	X	18	-	-	-	-	-	1	10.5	-	
13-2	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
13-3	S1-1	(SCHOOL ZONE SYMBOL)	30	X	30	-	-	-	-	-	-	-	6.3	ATTACH TO MAST ARM POLE
13-4	S16-9P	AHEAD	24	X	12	-	-	-	-	-	-	-	2.0	ON POLE WITH 13-3
13-5	S2-6P	FINES HIGHER	24	X	18	-	-	-	-	-	-	3.0	-	ON POLE WITH 13-3
13-6	M1-94H	W HOPKINS ST	84	X	18	-	-	-	-	-	1	10.5	-	
13-7	M1-94H	N 20TH ST	48	X	18	-	-	-	-	-	1	6.0	-	
13-8	R7-1D	(NO PARKING SYMBOL) ↔	12	X	18	-	1	-	-	-	-	1.5	-	
13-9	R7-7D	(NO PARKING SYMBOL) BUS STOP ↔	12	X	18	-	-	-	-	-	-	1.5	-	ATTACH TO LIGHT POLE
PROJECT TOTALS						6	7	1	1	1	18	433.5	60.9	

REMOVING SIGNS

SIGN NO.	DESCRIPTION	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVE SIGNS TYPE II EACH	638.2602 REMOVE SMALL SIGN SUPPORTS EACH	REMARKS
1-1	JUNCTION 145	–	–	–	TO BE RELOCATED BY OTHERS
1-2	NORTH 57	–	1	–	ON CONCRETE LIGHT POLE
3-1	SOUTH 57	–	1	–	ON CONCRETE LIGHT POLE
3-2	NORTH 57	–	1	–	ON CONCRETE LIGHT POLE
6-1	SOUTH 57	–	1	–	ON WOOD POLE
7-1	NORTH 57	–	1	–	ON WOOD POLE
8-1	TO INTERSTATE 43 ↱	–	–	–	TO REMAIN
9-1	TO INTERSTATE 43 ←	1	–	–	ON CONCRETE LIGHT POLE
9-2	TO INTERSTATE 43 →	1	–	–	ON CONCRETE LIGHT POLE
10-1	TO INTERSTATE 43 ↰	1	–	–	ON CONCRETE LIGHT POLE
12-1	SOUTH 57	–	1	–	ON CONCRETE LIGHT POLE
	TOTALS	3	6	0	

SIGN INSTALLATION

SIGN NO.	SIGN CODE	MESSAGE	SIZE INCHES	X	SIZE INCHES	SPV . 0060. 280 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7. 0 FEET EACH	SPV . 0060. 281 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10. 0 FEET EACH	SPV . 0060. 282 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11. 0 FEET EACH	SPV . 0060. 285 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10. 0 FEET EACH	SPV . 0060. 286 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11. 0 FEET EACH	SPV . 0060. 291 STREET NAME SIGN MOUNTING HARDWARE ON MAST ARM EACH	637. 2220 SIGNS TYPE II REFLECTIVE SH SF	637. 2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
1-1	J4-1	NORTH 57	24	X	36	-	-	-	-	-	-	6. 0	-	ATTACH TO CONCRETE POLE
3-1	J4-1	SOUTH 57	24	X	36	-	-	-	-	-	-	6. 0	-	ATTACH TO MAST ARM POLE
3-2	J4-1	NORTH 57	24	X	36	-	-	-	-	-	-	6. 0	-	ATTACH TO MAST ARM POLE
6-1	J4-1	SOUTH 57	24	X	36	-	-	-	-	-	-	6. 0	-	ATTACH TO WOOD POLE
7-1	J4-1	NORTH 57	24	X	36	-	-	-	-	-	-	6. 0	-	ATTACH TO WOOD POLE
12-1	J4-1	SOUTH 57	24	X	36	-	-	-	-	-	-	6. 0	-	ATTACH TO LIGHT POLE
					TOTALS	0	0	0	0	0	0	36. 0	0	

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CUC MISCELLANEOUS QUANTITIES

LOCATION			SPV.0060.401 ADJUSTING CUC MANHOLE COVERS EACH		SPV0060.420 REMOVING CUC MANHOLE EACH	SPV0060.410 4' DIAMETER "DOGHOUSE" MANHOLE TYPE CUC EACH	SPV0060.412 5' DIAMETER "DOGHOUSE" MANHOLE TYPE CUC EACH	SPV0090.402 2-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60 LF
MANHOLE								
600	STA 1+30.8	4.1 LT		OUT OF PAVING				
601	STA 7+38.4	10.5 RT	1	NEW COVER				
602	STA 14+05.4	10.5 RT	1	NEW COVER				
603	STA 14+53.3	15.1 LT	1	NEW COVER				
604	STA 14+63.9	9.8 RT			1		1	
605	STA 20+73.6	10.5 RT	1	NEW COVER				
606	STA 27+43.5	10.8 RT	1	NEW COVER				
607	STA 29+19.1	23.7 RT	1	NEW COVER				
608	STA 33+91.3	23.1 RT			1	1		
609	STA 34+08.0	9.7 RT			1		1	
610	STA 40+69.9	10.2 RT	1	NEW COVER				
611	STA 47+24.2	8.7 RT	1	NEW COVER				
612	STA 54+53.5	13.9 RT	1	NEW COVER				
STA 54+53.5, 20.5 RT TO TRAFFIC CONTROL CABINET								29
STA 55+84.9, 19.0 RT TO TRAFFIC CONTROL CABINET								6
TOTAL			9		3	1	2	35

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STREET LIGHTING ITEMS

ITEM NO.	ITEM	UNIT	QUANTITY
650.8500	Electrical Staking	LS	1
655.0305*	Cable Type UF 2#12AWG Grounded	LF	5,050
SPV.0090.300	City supplied #8 concentric 5KV cable	LF	3,400
SPV.0060.302	Pull Boxes 13"x24"x24"	EACH	81
SPV.0060.310	Remove Poles	EACH	76
SPV.0060.313	Poles Type 26-AL Banner Rated direct bury	EACH	53
SPV.0060.315	Poles Type 22-AL direct bury	EACH	6
SPV.0060.334	40ft. Wood poles	EACH	35
SPV.0060.339	Secondary Riser	EACH	7
SPV.0060.343	Water Tight Splices & Connections	EACH	235
SPV.0060.345	Luminiare Arm Single Member 6-ft	EACH	77
SPV.0060.346	Luminaire Arm Single Member 6-ft wood pole mount	EACH	23
SPV.0060.353	Installing equipment grounding electrode	EACH	59
SPV.0060.366	City Furnished Luminaire Utility High Pressure Sodium 2	EACH	26
SPV.0060.374	Luminaire Utility LED 1	EACH	6
SPV.0060.375	Luminaire Utility LED 2	EACH	71
659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	16
SPV.0090.302	Electrical Cable 3#6AL	LF	1,499
SPV.0090.314	Remove Aerial Cable	LF	4,050
SPV.0090.319	Liquidtight Flexible Nonmetallic conduit 1 1/2 in	LF	475
SPV.0090.324	Electrical Cable 4#2/1#8 XLPE USE-2	LF	8,950
SPV.0090.325	3" HDPE Conduit	LF	10,100

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNALS W. WRIGHT ST. & N. 20TH ST.

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0520 MONOTUBE ARMS 20-FT EACH	657.0525 MONOTUBE ARMS 25-FT EACH	SPV.0060.218 EVP 1 DIRECTION DETECTOR EACH	SPV.0060.223 EVP CONFIRMATION LIGHT EACH	SPV.0060.228 ELECTRICAL RISER EACH	SPV.0060.268 VOICE INSTRUCTION AUDIBLE PUSHBUTTON EACH
SBA							1	1	1	1
SBB	1		1							1
SBC		1			1		1	1		
SBCC	1			1						1
SBD	1		1							1
SBE							1	1	1	1
SBF	1		1							1
SBG		1				1	1	1		1
SBH	1		1							1
SUBTOTAL	5	2	4	1	1	1	4	4	2	8

SIGNAL BASE NO.	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH
SBB	14+74', 24' L	1	
SBC	14+83', 21' R		1
SBCC	14+68', 28' R	1	
SBD	14+57', 36' R	1	
SBF	13+99', 21' R	1	
SBG	13+99', 24' L		1
SBH	14+06', 38' L	1	
	SUBTOTAL	5	2

LOCATION	SPV.0060.201 INSTALL CITY PRECAST CONTROLLER BASE EACH	SPV.0060.205 ATC CONTROLLER AND CABINET INSTALLED EACH	SPV.0060.221 EVP PHASE SELECTOR CARD 4 CHANNEL EACH	SPV.0060.269 VOICE INSTRUCTION AUDIBLE CONTROL UNIT EACH
14+08', 52' L	1	1	1	1
SUBTOTAL	1	1	1	1

QUANTITY TOTALS ELSEWHERE

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0412 PEDESTRIAN SIGNAL FACE 12-INCH EACH	SPV.0060.267 PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH EACH
1	SBD	1		
2	SBH	1		
3	SBA	1		
4	SBH	1		
5	SBD	1		
6	SBE	1		
7	SBF	1		
8	SBB	1		
9	SBC	1		
10	SBB	1		
11	SBF	1		
12	SBG	1		
13	SBG		1	1
14	SBB		1	1
15	SBA		1	1
16	SBD		1	1
17	SBCC		1	1
18	SBF		1	1
19	SBE		1	1
20	SBH		1	1
	SUBTOTAL	12	8	8

All Items on this page are Category 0010

TRAFFIC SIGNALS W. WRIGHT ST. & N. 20TH ST.

LOC.	TO	LOC.	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
CB1	TO	PB1		15	
PB1	TO	PB2			90
PB2	TO	PB3		70	
PB2	TO	METER	5		
PB3	TO	SBA	20		
PB3	TO	SBB	10		
PB3	TO	PB4		50	
PB4	TO	PB5			90
PB5	TO	SBC		5	
PB5	TO	SBCC	15		
PB5	TO	PB6		60	
PB6	TO	SBD	5		
PB6	TO	PB7			110
PB7	TO	SBE	5		
PB7	TO	PB8		80	
PB8	TO	SBF	10		
PB8	TO	PB9			105
PB9	TO	SBG		15	
PB9	TO	PB10		90	
PB10	TO	SBH	5		
PB10	TO	CB1		30	
PB10	TO	PB1		20	
		SUBTOTAL	75	435	395

SUMMARY OF MAJOR ITEMS FOR TRAFFIC SIGNAL CABLING

	DESCRIPITON	L.F
655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	395
655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	740
655.0270	CABLE TRAFFIC SIGNAL 15-14 AWG	530
655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	810
655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	645
655.0900	TRAFFIC SIGNAL EVP DETECTOR CABLE	810
SPV.0090.323	ELECTRICAL CABLE 3#4/1#8 XLP	80

	658.5070.001 SIGNAL MOUNTING HARDWARE WRIGHT ST EACH	661.0201.001 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS WRIGHT ST EACH	SPV.0060.243 REMOVE TRAFFIC SIGNALS WRIGHT ST EACH
SUBTOTAL	1	1	1

QUANTITY TOTALS ELSEWHERE

PULL BOX NO.	LOCATION	SPV.0060.303 PULLBOXES 17-INCHX30-INCHX24-INCH EACH
PB1	14+13', 61' L	1
PB2	14+57', 60' L	1
PB3	14+60', 23' L	1
PB4	14+88', 23' L	1
PB5	14+80', 21' R	1
PB6	14+55', 41' R	1
PB7	14+18', 39' R	1
PB8	13+91', 20' R	1
PB9	13+88', 17' L	1
PB10	14+10', 38' L	1
	SUBTOTAL	10

SIGNAL BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
SBB	14+65', 24' L	1
SBD	14+56', 35' R	1
SBF	14+04', 21' R	1
SBH	14+12', 38' L	1
	SUBTOTAL	4

	SPV.0060.225 VEHICULAR VIDEO DETECTION SYSTEM- 2 CAMERAS EACH
SUBTOTAL	1

LOCATION	SPV.0060.215 ELECTRICAL SERVICE PEDESTAL EACH
14+57', 67' L	1
SUBTOTAL	1

All Items on this page are Category 0010

TRAFFIC SIGNALS W. CENTER ST. & N. 20TH ST.

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0520 MONOTUBE ARMS 20-FT EACH	657.0530 MONOTUBE ARMS 30-FT EACH	SPV.0060.218 EVP 1 DIRECTION DETECTOR EACH	SPV.0060.223 EVP CONFIRMATION LIGHT EACH	SPV.0060.268 VOICE INSTRUCTION AUDIBLE PUSHBUTTON EACH
SBA		1				1	1	1	1
SBB	1			1					1
SBC		1			1		1	1	
SBCC	1		1						1
SBD	1			1					1
SBE		1				1	1	1	1
SBF	1			1					1
SBG		1				1	1	1	1
SBH	1			1					1
SUBTOTAL	5	4	1	4	1	3	4	4	8

SIGNAL BASE NO.	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH
SBA	27+92', 41' L		1
SBB	28+08', 27' L	1	
SBC	28+12', 20' R		1
SBCC	28+05', 21' R	1	
SBD	27+92', 37' R	1	
SBE	27+36', 38' R		1
SBF	27+20', 24' R	1	
SBG	27+19', 32' L		1
SBH	27+35', 40' L	1	
	SUBTOTAL	5	4

LOCATION	SPV.0060.201 INSTALL CITY PRECAST CONTROLLER BASE EACH	SPV.0060.205 ATC CONTROLLER AND CABINET INSTALLED EACH	SPV.0060.221 EVP PHASE SELECTOR CARD 4 CHANNEL EACH	SPV.0060.269 VOICE INSTRUCTION AUDIBLE CONTROL UNIT EACH
27+12', 31' L	1	1	1	1
SUBTOTAL	1	1	1	1

QUANTITY TOTALS ELSEWHERE

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0412 PEDESTRIAN SIGNAL FACE 12-INCH EACH	SPV.0060.267 PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH EACH
1	SBD	1		
2	SBA	1		
3	SBA	1		
4	SBH	1		
5	SBA	1		
6	SBH	1		
7	SBE	1		
8	SBE	1		
9	SBD	1		
10	SBE	1		
11	SBF	1		
12	SBB	1		
13	SBC	1		
14	SBB	1		
15	SBF	1		
16	SBG	1		
17	SBG		1	1
18	SBB		1	1
19	SBA		1	1
20	SBD		1	1
21	SBC		1	1
22	SBF		1	1
23	SBE		1	1
24	SBH		1	1
	SUBTOTAL	16	8	8

All Items on this page are Category 0010

TRAFFIC SIGNALS W. CENTER ST. & N. 20TH ST.

LOC.	TO	LOC.	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
CB1	TO	PB1		20	
CB1	TO	METER	50		
PB1	TO	SBG		10	
PB1	TO	PB2		105	
PB2	TO	SBH	15		
PB2	TO	PB3			160
PB3	TO	SBA		5	
PB3	TO	PB4		125	
PB4	TO	SBB	15		
PB4	TO	PB5			135
PB5	TO	SBC		5	
SBC	TO	SBCC	5		
PB5	TO	PB6		180	
PB6	TO	SBD	20		
PB6	TO	PB7			160
PB7	TO	SBE		5	
PB7	TO	PB8		110	
PB8	TO	SBF	5		
PB8	TO	PB1			135
		SUBTOTAL	110	565	590

SUMMARY OF MAJOR ITEMS FOR TRAFFIC SIGNAL CABLING

	DESCRIPITON	L.F
655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	710
655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	715
655.0270	CABLE TRAFFIC SIGNAL 15-14 AWG	315
655.0280	CABLE TRAFFIC SIGNAL 19-14 AWG	280
655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	850
655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	685
655.0900	TRAFFIC SIGNAL EVP DETECTOR CABLE	850
SPV.0090.323	ELECTRICAL CABLE 3#4/1#8 XLP	65

QUANTITY TOTALS ELSEWHERE

PULL BOX NO.	LOCATION	SPV.0060.303 PULLBOXES 17-INCHX30-INCHX24-INCH EACH
PB1	27+11', 24' L	1
PB2	27+38', 55' L	1
PB3	27+90', 45' L	1
PB4	28+18', 26' L	1
PB5	28+17', 20' R	1
PB6	27+90', 54' R	1
PB7	27+38', 42' R	1
PB8	27+14', 23' R	1
	SUBTOTAL	8

SIGNAL BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
SBB	28+03', 28' L	1
SBD	27+91', 29' R	1
SBF	27+27', 24' R	1
SBH	27+36', 36' L	1
	SUBTOTAL	4

LOCATION	SPV.0060.215 ELECTRICAL SERVICE PEDESTAL EACH
27+02', 24' L	1
SUBTOTAL	1

	658.5070.002 SIGNAL MOUNTING HARDWARE CENTER ST EACH	661.0201.002 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS CENTER ST EACH	SPV.0060.244 REMOVE TRAFFIC SIGNALS CENTER ST EACH
SUBTOTAL	1	1	1

All Items on this page are Category 0010

TRAFFIC SIGNALS W. LOCUST ST. & N. 20TH ST.

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0352 POLES TYPE 10 SPECIAL EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0520 MONOTUBE ARMS 20-FT EACH	657.0525 MONOTUBE ARMS 25-FT EACH	657.0536 MONOTUBE ARMS 35-FT SPECIAL EACH	SPV.0060.218 EVP 1 DIRECTION DETECTOR EACH	SPV.0060.223 EVP CONFIRMATION LIGHT EACH	SPV.0060.228 ELECTRICAL RISER EACH	SPV.0060.268 VOICE INSTRUCTION AUDIBLE PUSHBUTTON EACH
SBA		1					1		1	1		
SBAA	1			1								1
SBB			1					1	1	1		1
SBC											1	1
SBD	1				1							1
SBE		1				1			1	1		1
SBF	1				1							1
SBG		1					1		1	1		1
SBH	1				1							1
SUBTOTAL	4	3	1	1	3	1	2	1	4	4	1	8

SIGNAL BASE NO.	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0120 CONCRETE BASES TYPE 10 SPECIAL EACH
SBA	41+14', 46' L		1	
SBAA	41+07', 41' L	1		
SBB	41+31', 23' L			1
SBD	41+11', 37' R	1		
SBE	41+66', 33' R		1	
SBF	40+45', 18' R	1		
SBG	40+44', 24' L		1	
SBH	40+65', 41' L	1		
	SUBTOTAL	4	3	1

LOCATION	SPV.0060.201 INSTALL CITY PRECAST CONTROLLER BASE EACH	SPV.0060.205 ATC CONTROLLER AND CABINET INSTALLED EACH	SPV.0060.221 EVP PHASE SELECTOR CARD 4 CHANNEL EACH	SPV.0060.269 VOICE INSTRUCTION AUDIBLE CONTROL UNIT EACH
41+14', 51' L	1	1	1	1
SUBTOTAL	1	1	1	1

QUANTITY TOTALS ELSEWHERE

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0412 PEDESTRIAN SIGNAL FACE 12-INCH EACH	SPV.0060.267 PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH EACH
1	SBD	1		
2	SBH	1		
3	SBA	1		
4	SBH	1		
5	SBD	1		
6	SBE	1		
7	SBF	1		
8	SBB	1		
9	SBB	1		
10	SBB	1		
11	SBF	1		
12	SBG	1		
13	SBG		1	1
14	SBB		1	1
15	SBA		1	1
16	SBD		1	1
17	SBC		1	1
18	SBF		1	1
19	SBE		1	1
20	SBH		1	1
	SUBTOTAL	12	8	8

All Items on this page are Category 0010

TRAFFIC SIGNALS W. LOCUST ST. & N. 20TH ST.

LOC.	TO	LOC.	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
CB1	TO	PB1		25	
PB1	TO	SBA		10	
PB1	TO	SBAA	10		
PB1	TO	PB2		165	
PB2	TO	SBB		10	
PB2	TO	PB3			120
PB3	TO	SBC	5		
PB3	TO	PB4		100	
PB4	TO	SBD	10		
PB4	TO	PB5			80
PB5	TO	SBE		15	
PB5	TO	PB6		105	
PB6	TO	SBF	15		
PB6	TO	PB7			120
PB7	TO	SBG		5	
PB7	TO	PB8		135	
PB8	TO	SBH	10		
PB8	TO	PB1			120
		SUBTOTAL	50	570	440

SUMMARY OF MAJOR ITEMS FOR TRAFFIC SIGNAL CABLING

	DESCRIPITON	L.F
655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	655
655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	900
655.0270	CABLE TRAFFIC SIGNAL 15-14 AWG	315
655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	755
655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	640
655.0900	TRAFFIC SIGNAL EVP DETECTOR CABLE	755
SPV.0090.323	ELECTRICAL CABLE 3#4/1#8 XLP	205

	658.5070.003 SIGNAL MOUNTING HARDWARE LOCUST ST EACH	661.0201.003 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LOCUST ST EACH	SPV.0060.245 REMOVE TRAFFIC SIGNALS LOCUST ST EACH
SUBTOTAL	1	1	1

PULL BOX NO.	LOCATION	SPV.0060.303 PULLBOXES 17-INCHX30-INCHX24-INCH EACH
PB1	41+06', 51' L	1
PB2	41+36', 19' L	1
PB3	41+35', 18' R	1
PB4	41+09', 47' R	1
PB5	40+68', 47' R	1
PB6	40+56', 18' R	1
PB7	40+44', 18' L	1
PB8	40+65', 49' L	1
	SUBTOTAL	8

SIGNAL BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
SBB	41+16', 25' L	1
SBD	41+10', 37' R	1
SBF	40+54', 19' R	1
SBH	40+63', 37' L	1
	SUBTOTAL	4

LOCATION	SPV.0060.215 ELECTRICAL SERVICE PEDESTAL EACH
40+00', 18' R	1
SUBTOTAL	1

QUANTITY TOTALS ELSEWHERE

All Items on this page are Category 0010

TRAFFIC SIGNALS W. BURLEIGH ST. & N. 20TH ST.

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0520 MONOTUBE ARMS 20-FT EACH	SPV.0060.218 EVP 1 DIRECTION DETECTOR EACH	SPV.0060.223 EVP CONFIRMATION LIGHT EACH	SPV.0060.268 VOICE INSTRUCTION AUDIBLE PUSHBUTTON EACH
SBA		1			1	1	1	
SBAA	1		1					1
SBB	1			1				1
SBC		1			1	1	1	1
SBD	1			1				1
SBE		1			1	1	1	
SBEE	1		1					1
SBF	1			1				1
SBG		1			1	1	1	
SBGG	1		1					1
SBH	1			1				1
SUBTOTAL	7	4	3	4	4	4	4	8

SIGNAL BASE NO.	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH
SBA	54+42', 46' L		1
SBAA	54+43', 40' L	1	
SBB	54+60', 23' L	1	
SBC	54+60', 23' R		1
SBD	54+42', 35' R	1	
SBE	53+98', 40' R		1
SBEE	53+96', 34' R	1	
SBF	53+76', 19' R	1	
SBG	53+80', 20' L		1
SBGG	83+82', 26' L	1	
SBH	53+97', 41' L	1	
	SUBTOTAL	7	4

LOCATION	SPV.0060.201 INSTALL CITY PRECAST CONTROLLER BASE EACH	SPV.0060.205 ATC CONTROLLER AND CABINET INSTALLED EACH	SPV.0060.221 EVP PHASE SELECTOR CARD 4 CHANNEL EACH	SPV.0060.269 VOICE INSTRUCTION AUDIBLE CONTROL UNIT EACH
54+41', 47' R	1	1	1	1
SUBTOTAL	1	1	1	1

QUANTITY TOTALS ELSEWHERE

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0412 PEDESTRIAN SIGNAL FACE 12-INCH EACH	SPV.0060.267 PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH EACH
1	SBD	1		
2	SBH	1		
3	SBA	1		
4	SBH	1		
5	SBD	1		
6	SBE	1		
7	SBF	1		
8	SBB	1		
9	SBC	1		
10	SBB	1		
11	SBF	1		
12	SBG	1		
13	SBG		1	1
14	SBB		1	1
15	SBA		1	1
16	SBD		1	1
17	SBC		1	1
18	SBF		1	1
19	SBE		1	1
20	SBH		1	1
	SUBTOTAL	12	8	8

All Items on this page are Category 0010

TRAFFIC SIGNALS W. BURLEIGH ST. & N. 20TH ST.

LOC.	TO	LOC.	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
CB1	TO	PB1		10	
PB1	TO	SBD	10		
PB1	TO	PB2			85
PB2	TO	SBE		5	
SBE	TO	SBEE	5		
PB2	TO	PB3		110	
PB3	TO	SBF	15		
PB3	TO	PB4			80
PB4	TO	SBG		20	
PB4	TO	SBGG	20		
PB4	TO	PB5			100
PB5	TO	SBH	5		
PB5	TO	PB6			85
PB6	TO	SBA		5	
PB6	TO	SBAA	5		
PB6	TO	PB7		80	
PB7	TO	SBB	5		
PB7	TO	PB8			90
PB8	TO	SBC		5	
PB1	TO	METER	15		
PB8	TO	PB1		60	
		SUBTOTAL	80	295	440

SUMMARY OF MAJOR ITEMS FOR TRAFFIC SIGNAL CABLING

	DESCRIPITON	L.F
655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	545
655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	1265
655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	775
655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	700
655.0900	TRAFFIC SIGNAL EVP DETECTOR CABLE	775
SPV.0090.323	ELECTRICAL CABLE 3#4/1#8 XLP	35

	658.5070.004 SIGNAL MOUNTING HARDWARE BURLEIGH ST EACH	661.0201.004 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS BURLEIGH ST EACH	SPV.0060.246 REMOVE TRAFFIC SIGNALS BURLEIGH ST EACH
SUBTOTAL	1	1	1

PULL BOX NO.	LOCATION	SPV.0060.303 PULLBOXES 17-INCHX30-INCHX24-INCH EACH
PB1	54+41', 43' R	1
PB2	53+97', 47' R	1
PB3	53+65', 18' R	1
PB4	53+62', 24' L	1
PB5	53+97', 43' L	1
PB6	54+40', 42' L	1
PB7	54+64', 21' L	1
PB8	54+63', 24' R	1
	SUBTOTAL	8

SIGNAL BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
SBB	54+55', 23' L	1
SBD	54+40', 35' R	1
SBF	53+83', 19' R	1
SBG	53+85', 26' L	1
SBH	53+96', 39' L	1
	SUBTOTAL	5

LOCATION	SPV.0060.215 ELECTRICAL SERVICE PEDESTAL EACH
54+50', 33' R	1
SUBTOTAL	1

QUANTITY TOTALS ELSEWHERE

All Items on this page are Category 0010

TRAFFIC SIGNALS W. HOPKINS ST. & N. 20TH ST.

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0520 MONOTUBE ARMS 20-FT EACH	657.0525 MONOTUBE ARMS 25-FT EACH	657.0530 MONOTUBE ARMS 30-FT EACH	SPV.0060.218 EVP 1 DIRECTION DETECTOR EACH	SPV.0060.223 EVP CONFIRMATION LIGHT EACH	SPV.0060.228 ELECTRICAL RISER EACH	SPV.0060.268 VOICE INSTRUCTION AUDIBLE PUSHBUTTON EACH
SBA		1			1		1	1		
SBAA	1		1							1
SBB									1	1
SBC		1		1			1	1		
SBCC	1		1							1
SBD									1	1
SBE		1				1	1	1		
SBEE	1		1							1
SBF									1	1
SBG		1		1			1	1		
SBGG	1		1							1
SBH									1	1
SUBTOTAL	4	4	4	2	1	1	4	4	4	8

SIGNAL BASE NO.	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH
SBA	57+51', 39' L		1
SBAA	57+51', 30' L	1	
SBC	57+07', 26' R		1
SBCC	56+95', 30' R	1	
SBE	55+81', 39' R		1
SBEE	55+88', 33' R	1	
SBG	56+30', 22' L		1
SBGG	56+53', 22' L	1	
	SUBTOTAL	4	4

LOCATION	SPV.0060.201 INSTALL CITY PRECAST CONTROLLER BASE EACH	SPV.0060.205 ATC CONTROLLER AND CABINET INSTALLED EACH	SPV.0060.221 EVP PHASE SELECTOR CARD 4 CHANNEL EACH	SPV.0060.269 VOICE INSTRUCTION AUDIBLE CONTROL UNIT EACH
55+81', 25' R	1	1	1	1
SUBTOTAL	1	1	1	1

QUANTITY TOTALS ELSEWHERE

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0412 PEDESTRIAN SIGNAL FACE 12-INCH EACH	SPV.0060.267 PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH EACH
1	SBD	1		
2	SBH	1		
3	SBA	1		
4	SBH	1		
5	SBD	1		
6	SBE	1		
7	SBF	1		
8	SBB	1		
9	SBC	1		
10	SBB	1		
11	SBF	1		
12	SBG	1		
13	SBG		1	1
14	SBB		1	1
15	SBA		1	1
16	SBD		1	1
17	SBC		1	1
18	SBF		1	1
19	SBE		1	1
20	SBH		1	1
	SUBTOTAL	12	8	8

All Items on this page are Category 0010

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LOC.	TO	LOC.	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
CB1	TO	PB1		20	
PB1	TO	PB8 BURLEIGH			110
PB1	TO	SBF	10		
PB1	TO	PB2			180
PB2	TO	SBG		15	
SBG	TO	SBGG	25		
PB2	TO	PB3		180	
PB3	TO	SBH	10		
PB3	TO	PB4			165
PB4	TO	SBA		5	
PB4	TO	SBAA	10		
PB4	TO	PB6			45
PB6	TO	SBB	10		
PB6	TO	PB7			100
PB7	TO	SBC			30
PB7	TO	SBCC	15		
PB7	TO	PB9			130
PB9	TO	SBD	5		
PB9	TO	PB10			180
PB10	TO	SBE		5	
PB10	TO	SBEE	5		
PB10	TO	PB1		45	
		SUBTOTAL	90	270	940

SUMMARY OF MAJOR ITEMS FOR TRAFFIC SIGNAL CABLING

	DESCRIPITON	L.F
655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	580
655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	1555
655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	930
655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	885
655.0900	TRAFFIC SIGNAL EVP DETECTOR CABLE	930
SPV.0090.323	ELECTRICAL CABLE 3#4/1#8 XLP	170

PULL BOX NO.	LOCATION	SPV.0060.303 PULLBOXES 17-INCHX30-INCHX24-INCH EACH
PB1	55+76', 23' R	1
PB2	56+16', 22' L	1
PB3	56+73', 38' L	1
PB4	57+56', 43' L	1
PB6	57+54', 20' L	1
PB7	57+36', 25' R	1
PB9	56+73', 34' R	1
PB10	55+85', 36' R	1
	SUBTOTAL	8

SIGNAL BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
SBD	56+72', 37' R	1
	SUBTOTAL	1

	658.5070.005 SIGNAL MOUNTING HARDWARE HOPKINS ST EACH	661.0201.005 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS HOPKINS ST EACH	SPV.0060.247 REMOVE TRAFFIC SIGNALS HOPKINS ST EACH
SUBTOTAL	1	1	1

QUANTITY TOTALS ELSEWHERE

All Items on this page are Category 0010

3

TRAFFIC SIGNALS TOTALS

204.0195 REMOVING CONCRETE BASES EACH	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0120 CONCRETE BASES TYPE 10 SPECIAL EACH	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0352 POLES TYPE 10 SPECIAL EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH
18	25	17	1	25	17	1	9	15	1

657.0520 MONOTUBE ARMS 20-FT EACH	657.0525 MONOTUBE ARMS 25-FT EACH	657.0530 MONOTUBE ARMS 30-FT EACH	657.0536 MONOTUBE ARMS 35-FT SPECIAL EACH	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0412 PEDESTRIAN SIGNAL FACE 12-INCH EACH
9	4	4	1	64	40

658.5070.001 SIGNAL MOUNTING HARDWARE WRIGHT EACH	658.5070.002 SIGNAL MOUNTING HARDWARE CENTER EACH	658.5070.003 SIGNAL MOUNTING HARDWARE LOCUST EACH	658.5070.004 SIGNAL MOUNTING HARDWARE BURLEIGH EACH	658.5070.005 SIGNAL MOUNTING HARDWARE HOPKINS EACH	661.0201.001 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS WRIGHT EACH	661.0201.002 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS CENTER EACH	661.0201.003 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LOCUST EACH	661.0201.004 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS BURLEIGH EACH	661.0201.005 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS HOPKINS EACH
1	1	1	1	1	1	1	1	1	1

SPV.0060.201 INSTALL CITY PRECAST CONTROLLER BASE EACH	SPV.0060.205 ATC CONTROLLER AND CABINET INSTALLED EACH	SPV.0060.215 ELECTRICAL SERVICE PEDESTAL EACH	SPV.0060.218 EVP 1 DIRECTION DETECTOR EACH	SPV.0060.221 EVP PHASE SELECTOR CARD 4 CHANNEL EACH	SPV.0060.223 EVP CONFIRMATION LIGHT EACH	SPV.0060.225 VEHICULAR VIDEO DETECTION SYSTEM- 2 CAMERAS EACH	SPV.0060.228 ELECTRICAL RISER EACH	SPV.0060.243 REMOVE TRAFFIC SIGNALS WRIGHT ST EACH	SPV.0060.244 REMOVE TRAFFIC SIGNALS CENTER ST EACH
5	5	4	20	5	20	1	7	1	1

SPV.0060.245 REMOVE TRAFFIC SIGNALS LOCUST ST EACH	SPV.0060.246 REMOVE TRAFFIC SIGNALS BURLEIGH ST EACH	SPV.0060.247 REMOVE TRAFFIC SIGNALS HOPKINS ST EACH	SPV.0060.267 PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH EACH	SPV.0060.268 VOICE INSTRUCTION AUDIBLE PUSHBUTTON EACH	SPV.0060.269 VOICE INSTRUCTION AUDIBLE CONTROL UNIT EACH	SPV.0060.303 PULLBOXES 17"X30"X24" EACH
1	1	1	40	40	5	42

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615* CONDUIT SPECIAL 3-INCH LF	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF	655.0280 CABLE TRAFFIC SIGNAL 19-14 AWG LF	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE LF	SPV.0090.323 ELECTRICAL CABLE 3 #4/1#8 XLPE USE-2 LF
405	2135	2805	2885	5175	1160	280	4120	3555	4120	555

*NOTE: ADDITIONAL QUANTITIES SHOWN ELSEWHERE

All Items on this page are Category 0010

NORTH

#2000-2040 W. FOND DU LAC AVE.

AVENUE

20TH

#2000 W. NORTH AVE.

STREET

#2325 #2329 #2333 #2339 #2341 #2345 #2349

N

BEGIN PROJECT
STA. 01+39.32 T/L
Y= 366,361.00
X= 2,551,151.37

SECTION LINE

BM - NE COR DOOR THESHOLD #2000 N.20TH ST ELEV: 92.32

B.M. SE C @ 2349 N ELEV. 97.

CAUTION

R/W

ASPHALT

3' ENT

ENT. 10.4

20' CONC. ALLEY

WOOD HAND RAIL

RETAINING WALL

FENCE

LAWN

WOOD FENCE

CHA FE

VAULT

CLP

CONC

ASPH

CUC

MONUMENT

TEL

T/L

00 +50 01 +50 02 +50 03 +50 04 +50 05

91.75 92.05 91.93 92.25 92.10 92.40 92.33 92.65 92.55 92.90 92.80 93.10 93.05 93.35 93.30 93.60

91.85 92.20 92.40 92.65 92.90 93.10 93.30 93.55

91.95G 92.30G 92.50G 92.70G 92.90G 93.10G 93.30G

VAR. 12'

N00°43'57"W

OTR. SEC. LINE

14"

CONC ALLEY

NORTH

3' ENT

8' 50' 8'

23'

BUS PAD

5' ENT

ENT. 6 CR

ASPH

RETAINING WALL

2 CR

6'

5'

4' CHAINLINK FENCE

4.3'

CHAINLINK FENCE

WEST

#1919-1935 W. NORTH AVE.

#2308 #2320 #2322-2324 #2330 #2338 #2344 #2346

B.M. HYD AT SE CORNER OF W. NORTH AVE. & N. 20TH ST. NW BOLT, YEAR 2017 ELEV. 93.65

66'

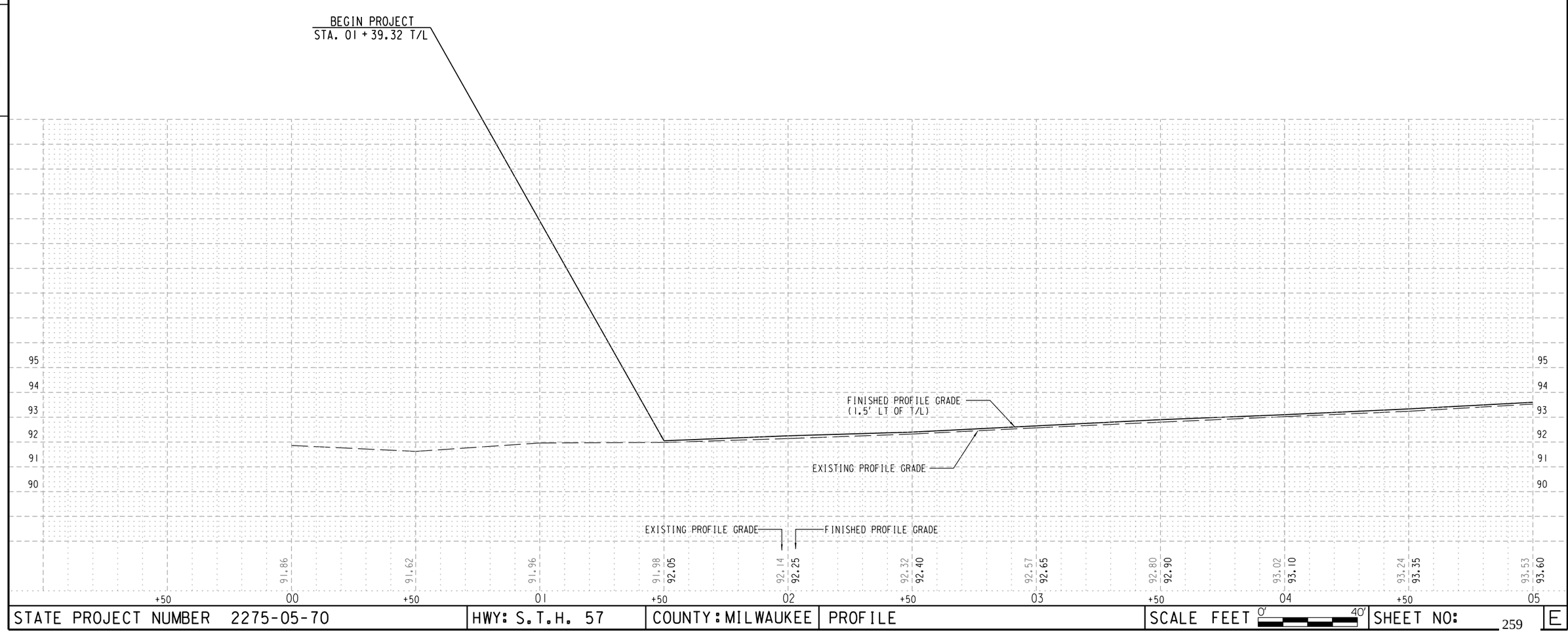
(CC) CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(J) SAW ASPHALT
(M) MATCH EXISTING
(P) HMA PAVEMENT
(W) CONSTRUCT 5" CONCRETE WALK

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 258	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\00-05.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 259	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\00-05.DGN

REVISED DATE: 12-09-2021 BY JC

N

NORTH AVENUE

20TH STREET

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. SE CORNER OF 5TH CONC RISER @ 2349 N 20TH ST ELEV. 97.51

#2349 #2355 #2337 #2361 #2365 #2369 #2373-2375 #2377 #2403 #2407 #2411-2411A #2415 #2423 #2427-2427A #2431 #2435 #2439

CHAINLINK FENCE · RR-TIES · WOOD HAND RAIL · CONC HAND RAIL · FENCE POST · R/W · CONC ALLEY · LAWN · ASPH ON CONC · WP · WEP · T/L · P.L.

92.00C 91.50G 91.62F +48.9 51.2' LT (105)
92.70C 92.45G 92.49F
92.59C 92.09G 92.21F +10.9 (103)
92.86
92.80
92.57C 92.13G 92.21F
92.27
92.23C 91.90G 91.96F
92.37
59' LT (K) 67' LT (J)
92.16 50' LT (107) 92.15 35.5' LT
92.97C 91.47G 91.59F +80.9 58' LT (110)
92.16
92.25
92.23C 91.90G 91.96F
92.60C 92.35G 92.41F
92.55C 92.30G 92.38F
92.30C 91.80G 91.92F +19.2 (112)
92.79
92.69
92.60C 92.35G 92.41F (102)
92.85
92.75
28.7'
54.6'
92.70 (111)
92.83C 92.58G 92.64F
92.55G
92.78G
92.28
92.28
92.45 32.5' RT (109)
92.30 50' RT
92.90C 92.65G (S)
92.77C 92.35G 92.43F +20.6 (104)
92.65C 92.40G 92.46F
92.77
92.47
92.33C 92.00G 92.06F
92.35
92.17C 91.67G 91.79F +45.3 58' RT (106)
66.3' RT (J) MATCH
92.69
92.41
92.13C 91.63G 91.75F +75.3 58' RT (108)
92.55C 92.18G 92.10F +19.9 (113)
92.53C 92.28G 92.34F
92.77C 92.35G 92.43F +41.4 (113A)
TEMP. LIMITED EASEMENT
IRON HAND RAIL · WEEP HOLE · PAVER BLOCK RETAINING WALL · 8 CR
PHILLIS WHEATLY ELEMENTARY SCHOOL

MEINECKE AVENUE

SEE DETAIL FOR INTERSECTION RDWY GRADES

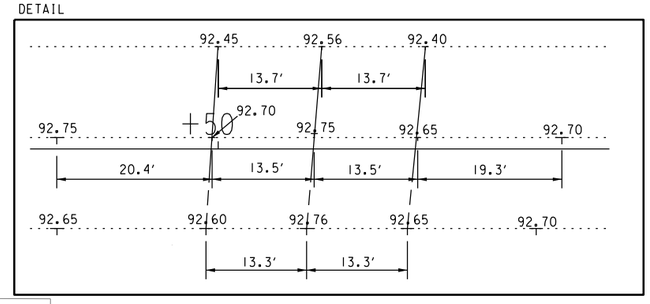
SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. HYD AT NE CORNER OF W. MEINECKE AVE. & N. 20TH ST. NW BOLT, YEAR 2014 ELEV. 94.25

B.M. FLAG OLE PHLLIS WHEATL E/S OF N. 20 ELEV. 97.56

#2346 #2354-2356 #2358-2360 #2364-2366 #2442

DETAIL



(2) CONSTRUCT TYPE 2 CURB RAMP
(C) CONSTRUCT 31" VFCC&G
(CC) CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(GD) GRIND DRIVEWAY
(K) SAW CONCRETE
(L) GRADE & SOD
(P) HMA PAVEMENT
(S) SAW
(J) SAW ASPHALT
(W) CONSTRUCT 5" CONCRETE WALK
(PC) CONSTRUCT PEDESTRIAN CURB
(SI) SLOPE INTERCEPT

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 260	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\05-11.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.

5

5

95
94
93
92
91
90

FINISHED PROFILE GRADE LINE
(1.5' LT OF T/L)

EXISTING PROFILE GRADE

EXISTING PROFILE GRADE

FINISHED PROFILE GRADE

| | | |

N

NORTH 20TH ST. STREET

#2443 #2447 #2451-2451A #2459 #2463 #2467 #2479 #2501 #2505 #2509 #2513 #2521 #2527 #2529-2531

CAUTION

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

TEMPORARY LIMITED EASEMENT

92.90C 92.32G 92.44F +15.5 51.9'LT (120)
93.25C 92.75G 92.81F
93.45C 93.20G 93.28F
93.53
93.58C 93.00G 93.08F +78.2 (117)
93.40C 93.15G 93.21F
93.64
93.30
92.85
93.00
92.87C 92.70G 92.76F
93.33
93.40 +56.9 51'LT
93.56
93.43
93.18C 92.60G 92.72F +50.0 50'LT (122)
93.17C 93.00G 93.06F
93.28C 92.95G 93.03F
93.25C 92.75G 92.83F

62' CENTERLINE (J)

93.20 93.40 93.60 93.80 93.75 93.50 93.25 93.25 93.15 93.05 93.10 93.35 93.55 93.80
93.35 93.58 93.80 94.00 93.90 93.70 93.45 93.40 93.35 93.30 93.35 93.55 93.75 94.00
L1 (114A) +50 L2 T/L +50 L3 +50 +66.6 L4 (120A) +50 (123) L5 +91.4 (123A) L6 (124) L7
93.15 93.40 93.65 93.90 93.80 93.60 93.30 93.30 93.30 93.30 93.20 93.20 93.45 93.65 93.90
92.88G 93.13G 93.40G 93.70G 93.79G +65 +54.0 93.62G 93.37G +73.5 92.90G 93.15G 93.40G 93.65G

46.1' (119) 23.3' 15.3' 15.3' 24.1' 25.9'
20' +12.6 30' +57.6 +6.9 +26.0

R/W

2 CR 3 CR 1 CR 1 CR 3 CR 4 CR 4 CR
LAWN RETAINING WALL WHEEL CHAIR ACCESS IRON HAND RAIL FENCE
PAVER BLOCK RETAINING WALL WEEP HOLE FLAG POLE 8 CR
12" 11" 1" 22" 20" 8" 18" 12"
5' CW 4' CW 3' CW 4.3' CW 3.5' CW 4.4' CW 3.5' CW 7.5' CW

WP WEP

B.M. FLAG OLE BASE@ PHILLIS WHEATLEY SCHOOL E/S OF N. 20TH ST. ELEV. 97.56

B.M. HYD AT NE CORNER OF W. WRIGHT ST. & N. 20TH ST. NW BOLT, YEAR 1997 ELEV. 95.79

(2) CONSTRUCT TYPE 2 CURB RAMP
(C) CONSTRUCT 31" VFCC&G
(CC) CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(GD) GRIND DRIVEWAY
(G2) GRIND 2" BUTT JOINT
(J) SAW ASPHALT
(L) GRADE & SOD
(M) MATCH EXISTING
(P) HMA PAVEMENT
(PC) CONSTRUCT PEDESTRIAN CURB
(W) CONSTRUCT 5" CONCRETE WALK
(SI) SLOPE INTERCEPT

92.80C 92.65G 93.22F +93.5 18.5'RT (118)
93.35C 93.10G 93.16F
93.10C 92.85G 92.91F
93.31C 92.73G 92.85F 45'RT
93.58 93.63 +90 93.70 93.63 93.70 93.62 93.65 93.50
93.15 92.95 59'RT
92.90
92.64C 92.11G
93.03C 92.53G 92.65F 45'RT
93.09
93.22C 93.05G 93.11F
93.17C 92.75G 92.83F +20.0 (123)
92.92.6 +12.6

WRIGHT WEST

SEE INTERSECTION CURB RAMP DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

#1932-1934 W. WRIGHT ST. #2520 #2524 #2528

CENTURY LINK (LOCATION ONLY) CONC HWY CONC ALLEY CONC WALK WOOD HAND RAIL CONCRETE RET-WALL

#2442

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 262	E

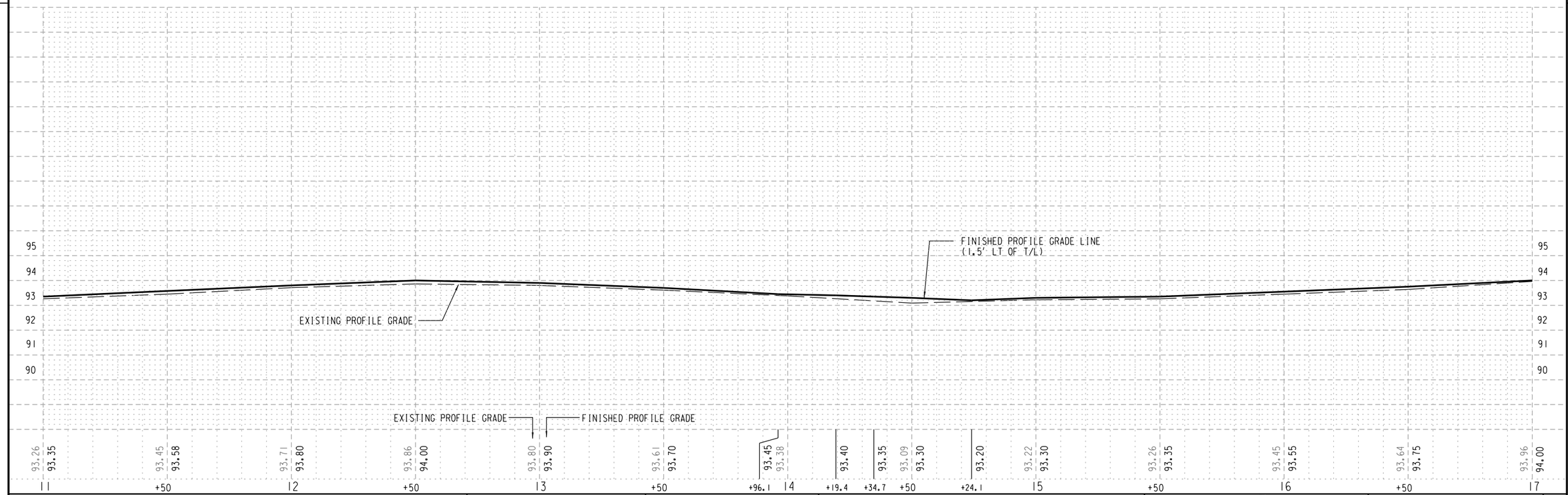
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\11-17.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.

5

5



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 263	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\11-17.DGN

REVISED DATE: 12-13-2021 BY JC

N

NORTH 20TH STREET

- (2) CONSTRUCT TYPE 2 CURB RAMP
- (C) CONSTRUCT 31" VFCC&G
- (CC) CONSTRUCT 31" VFCC&G (COVERED FLANGE)
- (DC) CONSTRUCT 7" CONCRETE DRIVEWAY APPROACH - DEPRESSED- COVERED GUTTER
- (G2) GRIND 2" BUTT JOINT
- (GD) GRIND DRIVEWAY
- (L) GRADE & SOD
- (M) MATCH EXISTING
- (P) HMA PAVEMENT
- (W) CONSTRUCT 5" CONCRETE WALK
- (SI) SLOPE INTERCEPT

B.M. NORTHWEST CORNER OF IST CONC RISER @ 2548 N. 20TH ST. ELEV. 95.31

B.M. HYD AT NE CORNER OF W. CLARKE ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 96.28

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 264	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\17-23.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.

5

5

EXISTING PROFILE GRADE

FINISHED PROFILE GRADE LINE

96 95 94 93 92 91 90

97 96 95 94 93 92 91 90

EXISTING PROFILE GRADE

FINISHED PROFILE GRADE

| | | |

NORTH

20TH ST.

STREET

N

CAUTION

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. HYD AT SW CORNER OF W. CENTER ST. & N. 20TH ST. NW BOLT, YEAR 2003 ELEV. 99.46

#2619 #2629-2631 #2633-2635 #2639-2641 #2645 #2649-2651 #2655 #2659-2661 #2001-2007 W. CENTER ST. #2008

TEMPORAY LIMITED EASEMENT

R/W

ALLEY

CONC ALLEY

TIMBER

FENCE

ASPH

CONC

LAWN

SEE DETAIL FOR INTERSECTION ROWY GRADES

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. NE CORNER OF CONC RETAINING WALL @ 2690 N. 20TH ST. ELEV. 97.09

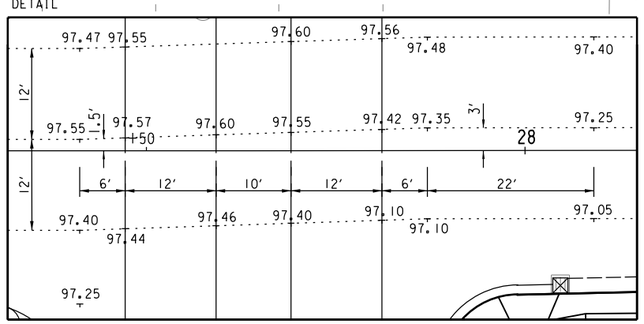
#1935 W. CENTER ST.

#2704

WEST CENTER

(2) CONSTRUCT TYPE 2 CURB RAMP
(AB) CONSTRUCT 2" ASPHALT ON VT CONC BASE
(C) CONSTRUCT 31" VFCC&G
(CC) CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(C4) CONSTRUCT 4" SLANTED CURB AND GUTTER - 31"
(C22) CONSTRUCT 22" VFCC&G
(D7) CONSTRUCT 7" CONCRETE DRIVEWAY
(GD) GRIND DRIVEWAY
(J) SAW ASPHALT
(K) SAW CONCRETE
(L) GRADE & SOD
(P) HMA PAVEMENT
(W) CONSTRUCT 5" CONCRETE WALK
(S1) SLOPE INTERCEPT

DETAIL



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 266	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\23-29.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.

5

5

99
98
97
96
95
94
93
92

FINISHED PROFILE GRADE LINE
(-1.5' LT OF T/L)

EXISTING PROFILE GRADE

EXISTING PROFILE GRADE
FINISHED PROFILE GRADE

23	+50	24	+50	25	+50	26	+50	27	+19.2	+41.2	+47.2	+50	+59.2	+69.2	+81.2	+87.2	28	+9.2	+50	29
95.20	95.44	95.64	95.90	96.15	96.25	96.63	96.86	97.07	97.40	97.55	97.57	97.41	97.60	97.55	97.42	97.35	97.05	97.25	97.33	97.84
95.30	95.55	95.75	96.00	96.25	96.50	96.75	96.95	97.20											97.40	97.90

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 267	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\23-29.DGN

REVISED DATE: 01-10-2022 BY JC

N

NORTH 20TH STREET

B.M. SE CORNER OF IST CONC RISER @
2745 N. 20TH ST.
ELEV. 102.51

B.M. HYD AT SW CORNER OF
W. HADLEY ST. & N. 20TH ST.
NW BOLT, YEAR 1965
ELEV. 103.85

SEE INTERSECTION CURB RAMP DETAILS
FOR ADDITIONAL INFORMATION
ON CURB RAMPS

- (2) CONSTRUCT TYPE 2 CURB RAMP
- (C) CONSTRUCT 31" VFCC&G
- (CC) CONSTRUCT 31" VFCC&G (COVERED FLANGE)
- (G2) GRIND 2" BUTT JOINT
- (GD) GRIND DRIVEWAY
- (J) SAW ASPHALT
- (K) SAW CONCRETE
- (L) GRADE & SOD
- (M) MATCH EXISTING
- (P) HMA PAVEMENT
- (PC) CONSTRUCT PEDESTRIAN CURB
- (W) CONSTRUCT 5" CONCRETE WALK
- (SI) SLOPE INTERCEPT

#2717-19 #2721-23 #2725-27 #2729-31 #2737 #2743 #2745 #2749 #2753 #2757 #2763 #2769 #2773 #2777-79 #2801

#2717 N. 19TH ST. #2723 N. 19TH ST. #2725 N. 19TH ST. #2737-2737A N. 19TH ST. #2745 N. 19TH ST. #2748 #2752 #2763 N. 19TH ST. #2765 N. 19TH ST. #2770 #1911-1913 W. HADLEY ST. #2810

WEST HADLEY ST.

SEE INTERSECTION CURB RAMP DETAILS
FOR ADDITIONAL INFORMATION
ON CURB RAMPS

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 268	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\29-35.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.

5

5

104
103
102
101
100
99
98
97
96

FINISHED PROFILE GRADE LINE
(3'LT OF T/L)

EXISTING PROFILE GRADE

EXISTING PROFILE GRADE
FINISHED PROFILE GRADE

| | | |

N

NORTH 20TH STREET

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

#2807 #2815 #2817 #2823 #2831 #2835 #2845 #2845 #2853 #2857 #2861-63 #2865 #2869-71 #2873-75

B.M. SE CORNER OF 5TH CONC
RISER @
2835 N. 20TH ST.
ELEV. 107.57

CAUTION

4 CR 3 CR 5 CR 6 CR 5 CR 3 CR 3 CR 4 CR 3 CR 1 CR 3 CR

4' CW 5' CW 4' CW 4' CW 6' CW 4' CW 5' CW 4' CW 4' CW 3' CW 3' CW 6' CW 4' CW

R/W R/W LAWN

158A 161A 163A

103.15 103.60 103.90 104.15 104.15 104.35 104.55 104.65 104.75 104.83 104.90

SPH CONC 103.45 103.75 104.10 104.25 104.40 104.55 104.65 104.75 104.85 104.95 105.05

35 +50 (P) 36 +50 (158) 37 +50 (159) 38 +50 (162) 39 +50 (163) 40

T/L N00° 46' 56" W T/L

3.5' 12' 3' 12' 7.5' 5' 5' 10.5' 5' +18.9

103.25 103.60 103.85 104.20 104.25 104.35 104.36 104.50 104.55 104.65 104.85

102.90G 103.35G 103.57G 103.90G +30 104.30G 104.25G

+42.4 +60.4 +28.0 +64.7 +89.2 +19.2 +87.5 +9.9 +41.0

CC CC CC CC

GD GD GD K L C6 D26 L D26 K DC DC K

+49.3 +57.8 +2.5

5 CR 4 CR 5 CR 3 CR 5 CR 3 CR 3 CR 4 CR 5 CR 3 CR 1 CR 5 CR

CONC DWY DWY DWY DWY 16' ENT 8' ENT 16' ENT 8' ENT CONC DWY IRON HAND RAIL WOOD HAND RAIL 8' ENT CONC DWY

IRON HAND RAIL FENCE

103.76G +39

103.95C 103.70G 103.78F +50.4 (157)

104.16C 103.95G 104.11C 103.90G 103.98F +59.9 (160)

104.13C 103.92G

104.26C 104.05G

104.31C 104.10G

104.44C 104.15G

104.20C 103.95G 104.03F +30.0 (161)

104.21C 104.00G

104.25G 104.00G 104.12F +25.1 (164)

104.55G

CAUTION

CC	CONSTRUCT 31" VFCC&G (COVERED FLANGE)
C6	CONSTRUCT 6" SLANTED CURB AND GUTTER - 31"
D26	CONSTRUCT 7" CONCRETE DRIVEWAY (FIG 26)
DC	CONSTRUCT 7" CONCRETE DRIVEWAY APPROACH - DEPRESSED - COVERED GUTTER
GD	GRIND DRIVEWAY
K	SAW CONCRETE
L	GRADE & SOD
P	HMA PAVEMENT

#2810 #2813 N. 19TH ST. #2818 #2825 N. 19TH ST. #2833-2835 N. 19TH ST. #2837 N. 19TH ST. #2841 N. 19TH ST. #2849 N. 19TH ST. #2858 #2866-2866A #2873 N. 19TH ST

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

5 5

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 270	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\35-40.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.

5

5

107
106
105
104
103
102
101
100
99

FINISHED PROFILE GRADE LINE
(3' LT OF T/L)

EXISTING PROFILE GRADE

EXISTING PROFILE GRADE

FINISHED PROFILE GRADE

103.33	103.67	104.01	104.17	104.33	104.45	104.51	104.65	104.75	104.80	104.89	104.93
103.45	103.75	104.10	104.25	104.40	104.55	104.65	104.75	104.85	104.75	105.05	105.20

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

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 271	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\35-40.DGN

REVISED DATE: 01-14-2022 BY JC

N

NORTH

CAUTION

ST.

20TH

STREET

B.M. HYD AT NW CORNER OF W. LOCUST ST. & N. 20TH ST. NW BOLT, YEAR 2017 ELEV. 107.31

B.M. TOP OF CONC WINDOW SILL EAST SIDE NORTHSIDE CHURCH ENTRANCE ELEV. 107.79

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAIL FOR INTERSECTION RDWY GRADES

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

B.M. TOP OF NW CORNER OF NORTHERNLY GARAGE CONC WALL (APPROXIMATELY 32" ABOVE GROUND @ 2938 N. 19TH ST. ELEV. 109.80

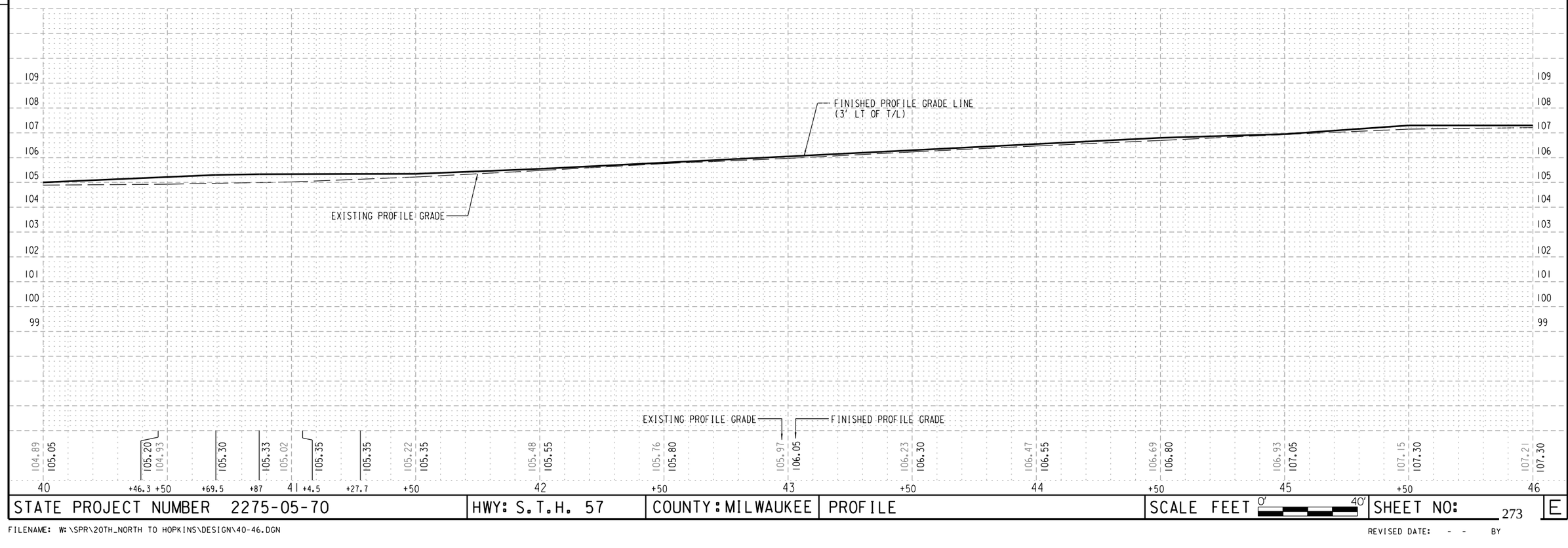
(2)	CONSTRUCT TYPE 2 CURB RAMP
(AB)	CONSTRUCT 2" ASPHALT ON VT CONC BASE
(C)	CONSTRUCT 31" VFCC&G
(CC)	CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(DC)	CONSTRUCT 7" CONCRETE DRIVEWAY APPROACH - DEPRESSED - COVERED GUTTER
(G2)	GRIND 2" BUTT JOINT
(GD)	GRIND DRIVEWAY
(J)	SAW ASPHALT
(K)	SAW CONCRETE
(L)	GRADE & SOD
(M)	MATCH EXISTING
(P)	HMA PAVEMENT
(P2)	GRIND TO 2-INCH MINIMUM SUBGRADE AND CONSTRUCT ASPHALTIC CONCRETE PAVEMENT
(PC)	CONSTRUCT PEDESTRIAN CURB
(W)	CONSTRUCT 5" CONCRETE WALK
(S1)	SLOPE INTERCEPT

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40	SHEET NO: 272	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\40-46.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 273	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\40-46.DGN

REVISED DATE: - - BY

N

NORTH

20TH STREET

ST.

B.M. HYD AT SW CORNER OF W. CHAMBERS ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 108.57

B.M. CENTER OF CONC RISER @ 2979 N. 20TH ST. ELEV. 108.42

#2963 #2967 #2969 #2975 #2003 W. CHAMBERS ST. #3000 #3007 #3015-17 #3019 #3023 #3029 #3039 #3043 #3051 #3055

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

SEE CONST. DETAIL FOR INTERSECTION RDWY GRADES

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

TEMPORARY LIMITED EASEMENT

TEMP. LIMITED EASEMENT

CHAMBERS

WEST

#1911-1913 W. CHAMBERS ST.

#1900-02 W. CHAMBERS ST.

#3019 N. 19TH ST. #3024 #3028 #3035 N. 19TH ST. #3041 N. 19TH ST. #3045 N. 19TH ST. #3048 #3053 N. 19TH ST.

N00°46'56"W

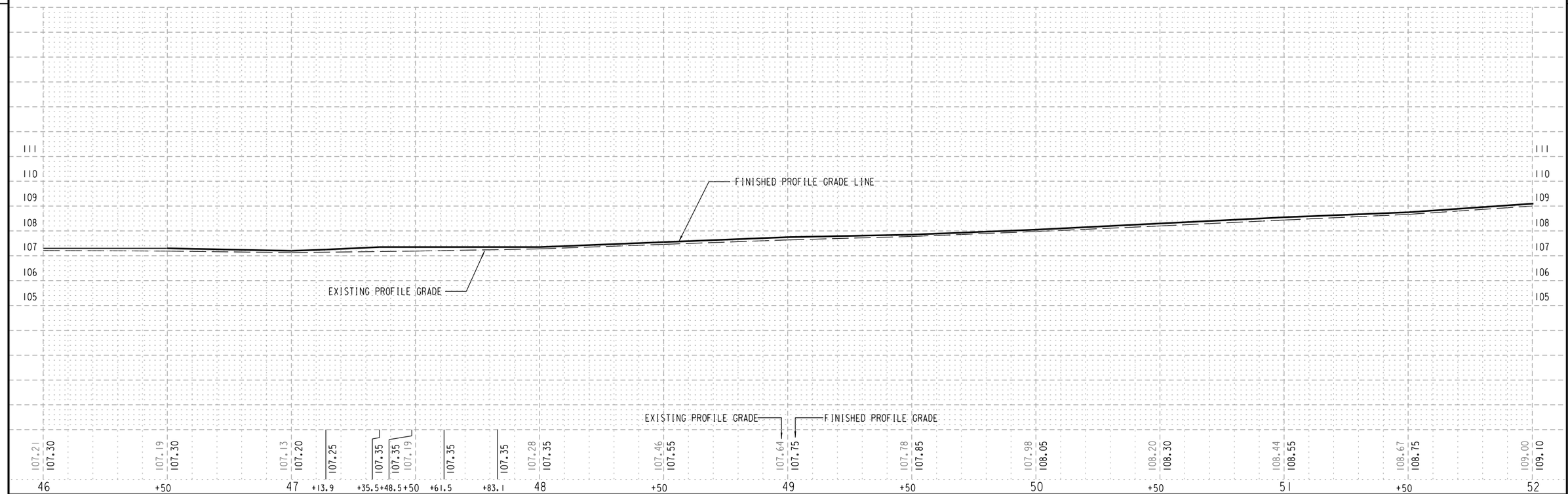
(2)	CONSTRUCT TYPE 2 CURB RAMP
(C)	CONSTRUCT 31" VFCC&G
(CC)	CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(GD)	GRIND DRIVEWAY
(J)	SAW ASPHALT
(K)	SAW CONCRETE
(L)	GRADE & SOD
(M)	MATCH EXISTING
(P)	HMA PAVEMENT
(PC)	CONSTRUCT PEDESTRIAN CURB
(W)	CONSTRUCT 5" CONCRETE WALK
(SI)	SLOPE INTERCEPT

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 274	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\46-52.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 275	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\46-52.DGN

REVISED DATE: - - BY

NORTH 20TH STREET

B.M. HYD AT NW CORNER OF W. BURLEIGH ST. & N. 20TH ST. NW BOLT, YEAR 1961 ELEV. 113.66

B.M. HYD AT NW CORNER OF W. HOPKINS ST. & N. 20TH ST. NW BOLT, YEAR 2009 ELEV. 119.15

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION ON CURB RAMPS

TEMPORARY LIMITED EASEMENT

CAUTION

R/W

BURLEIGH ST.

NORTH HOPKINS STREET

WEST END PROJECT STA. 56+46.8 T/L

GAS STATION #1909 W. HOPKINS ST.

TIRE SHOP ASPHALT LOT

CEMETERY

HOLY LAWN

N00°46'56"W

N00°31'41"W

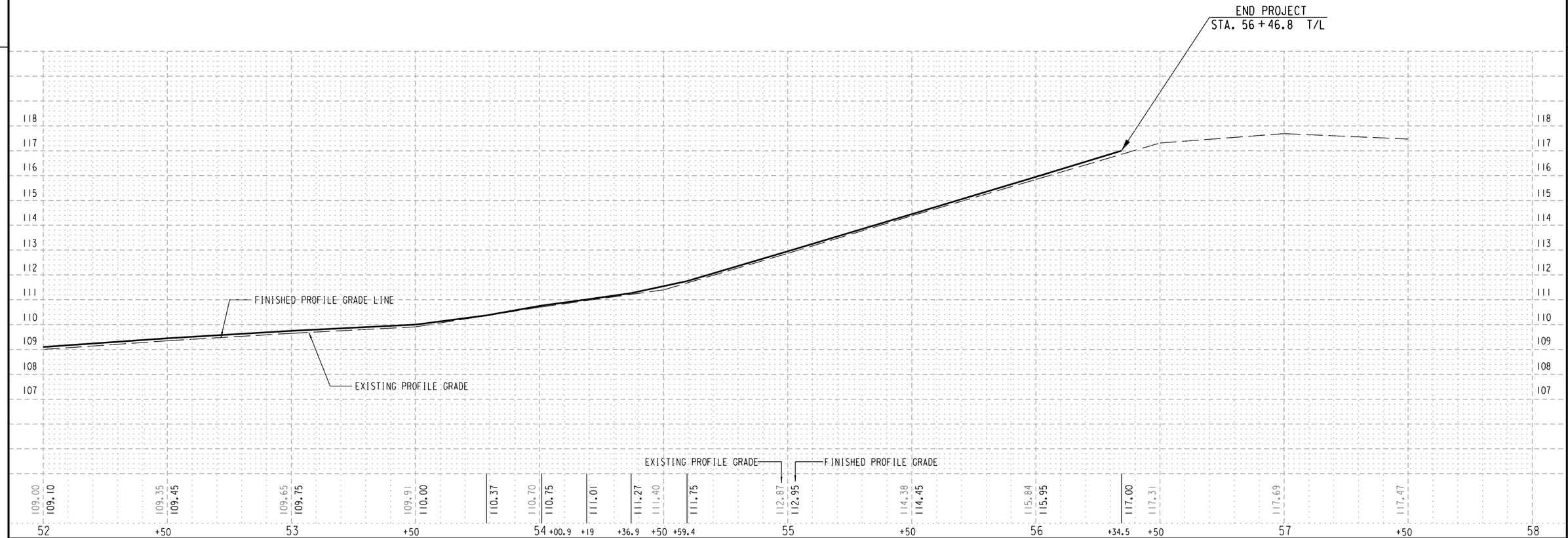
(I)	CONSTRUCT TYPE I CURB RAMP
(2)	CONSTRUCT TYPE 2 CURB RAMP
(C)	CONSTRUCT 31" VFCC&G
(CC)	CONSTRUCT 31" VFCC&G (COVERED FLANGE)
(C22)	CONSTRUCT 22" VFCC&G
(CC22)	CONSTRUCT 22" VFCC&G (COVERED FLANGE)
(D26)	CONSTRUCT 7" CONSTRUCT DRIVEWAY (FIG 26)
(D7)	CONSTRUCT 7" CONCRETE DRIVEWAY
(GD)	GRIND DRIVEWAY (SEE DETAIL)
(K)	SAW CONCRETE
(L)	GRADE & SOD
(M)	MATCH
(P)	HMA PAVEMENT
(P2)	GRIND TO 2-INCH MINIMUM SUBGRADE AND CONSTRUCT ASPHALTIC CONCRETE PAVEMENT
(V22)	CONSTRUCT 22" VFCC&G - COVERED FLANGE
(W)	CONSTRUCT 5" CONCRETE WALK
(SI)	SLOPE INTERCEPT

STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 276	E

FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\52-58.DGN

REVISED DATE: 09-06-2023 BY JC

N. 20TH ST.



STATE PROJECT NUMBER 2275-05-70	HWY: S.T.H. 57	COUNTY: MILWAUKEE	PROFILE	SCALE FEET 0' 40'	SHEET NO: 277	E

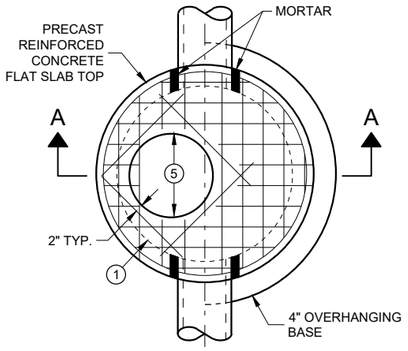
FILENAME: W:\SPR\20TH_NORTH TO HOPKINS\DESIGN\52-58.DGN

REVISED DATE: 02-24-2022 BY JC

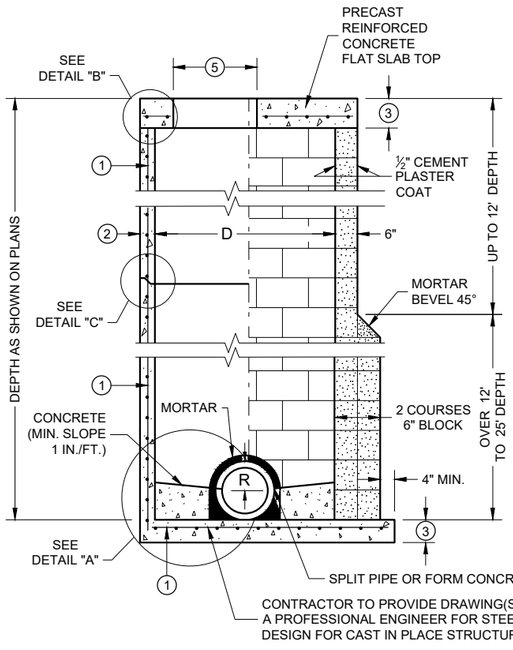
Standard Detail Drawing List

08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-23A	CONCRETE CURB & GUTTER
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-12	PULL BOX
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C11-10	CONCRETE BASE TYPE 10
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09F	TYPE 10 SPECIAL POLE 35' MONOTUBE ARM
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09B	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
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6



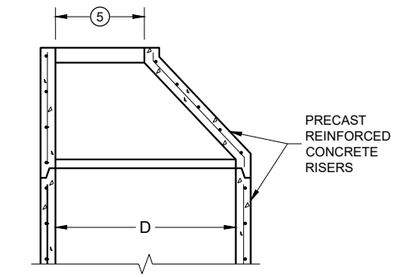
PLAN VIEW
CIRCULAR OPENING



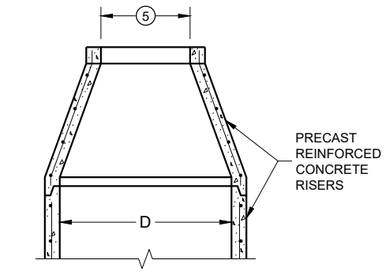
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

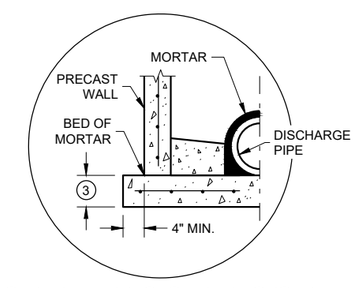
MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

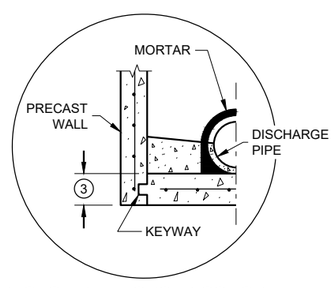
PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

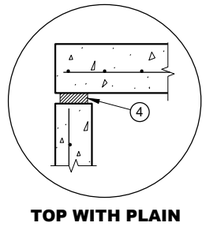


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

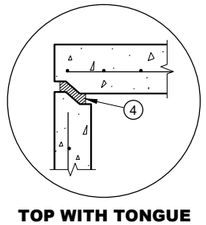


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

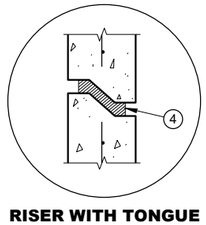


TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

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 CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. 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 INCH 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.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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 "D".

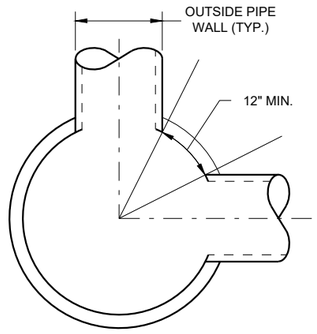
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

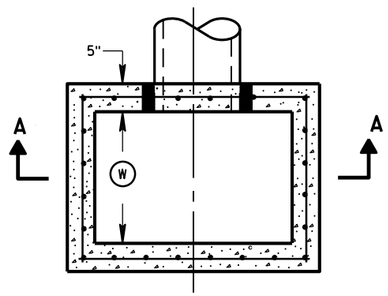
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

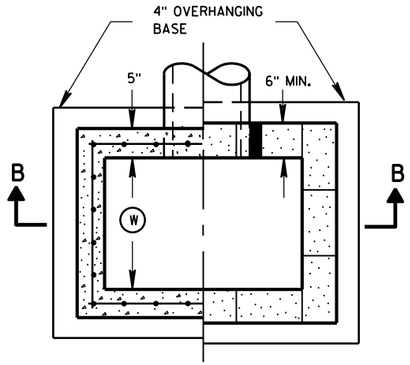
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
279
FHWA

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

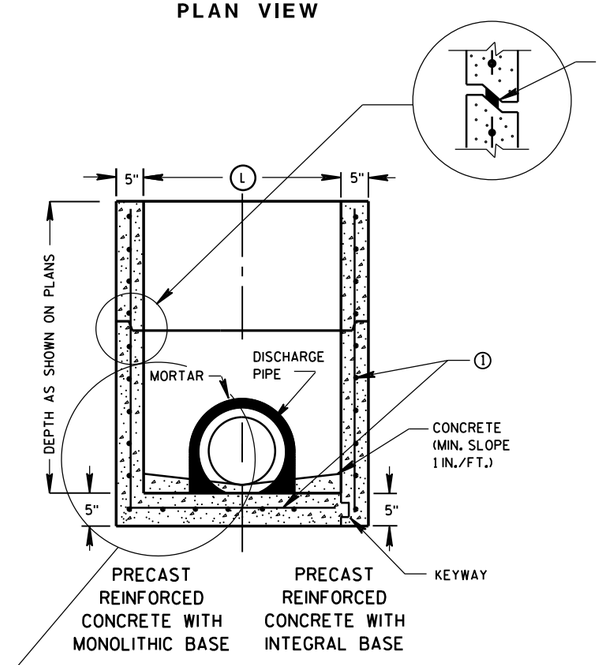
6
SDD 08B09 - 03



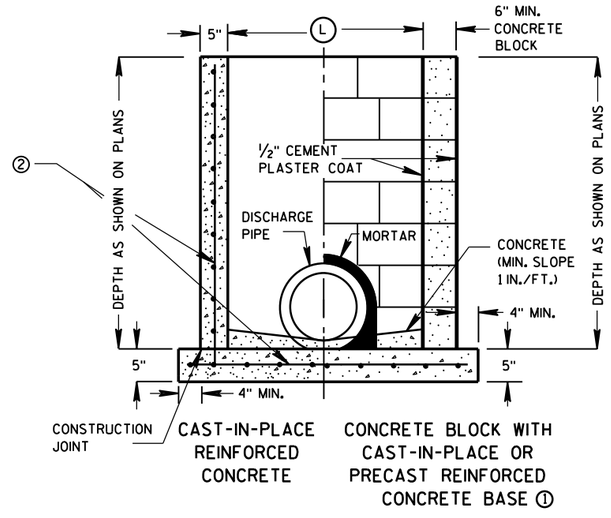
PLAN VIEW



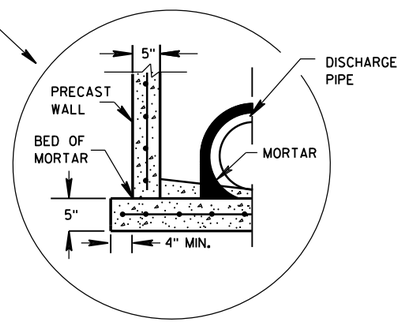
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

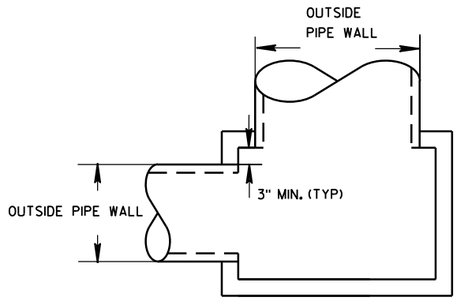
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

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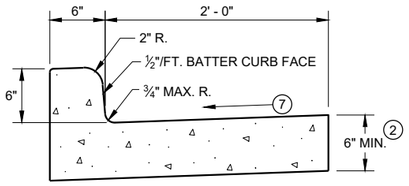
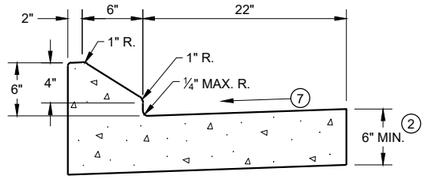
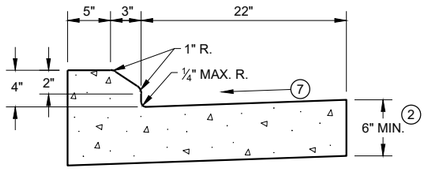


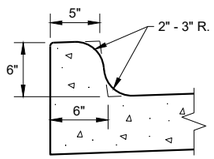
TYPES A (1) & D



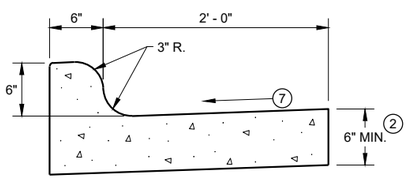
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

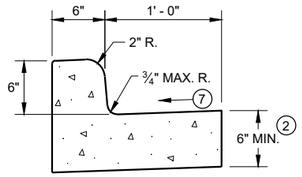


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



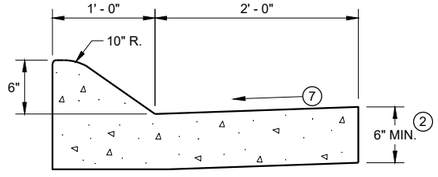
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

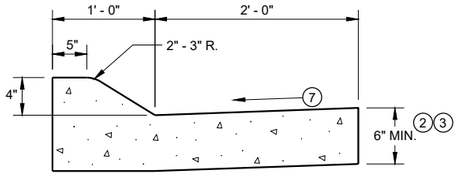


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

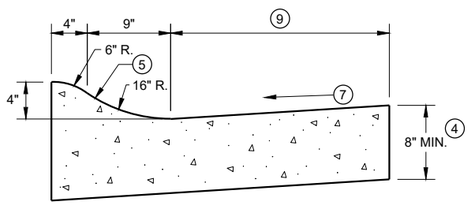


6" SLOPED CURB TYPES A (1) & D



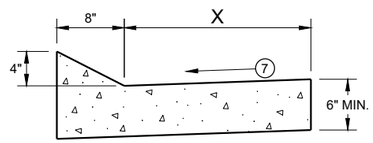
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

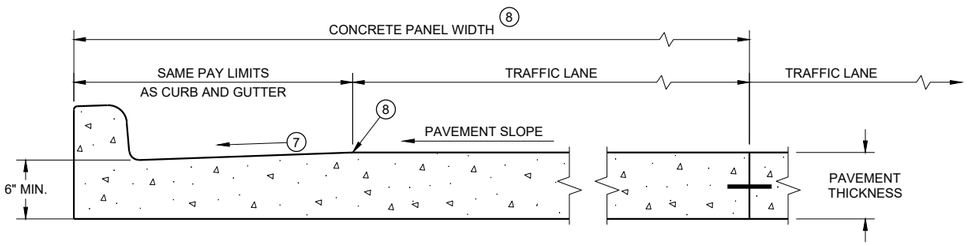


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

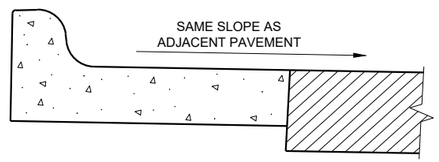
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS 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) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES 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.

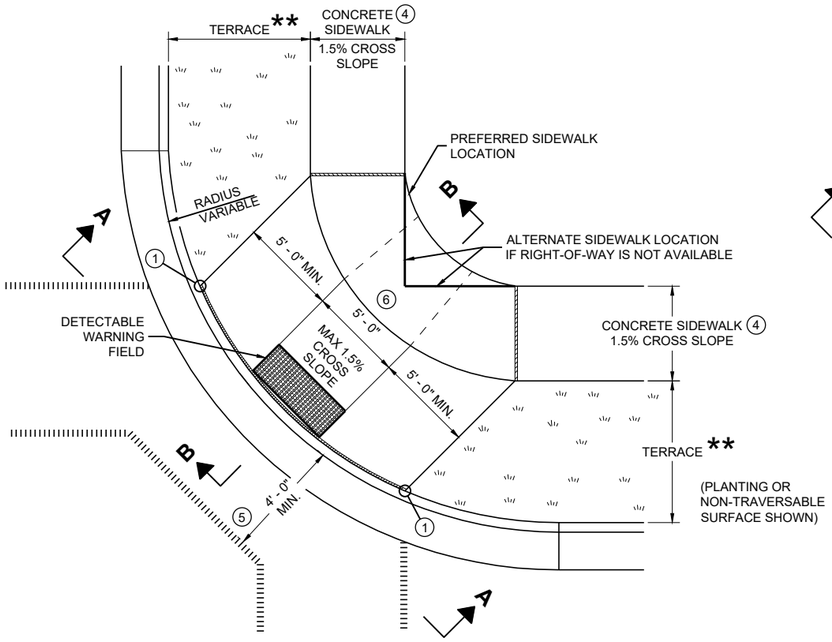
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

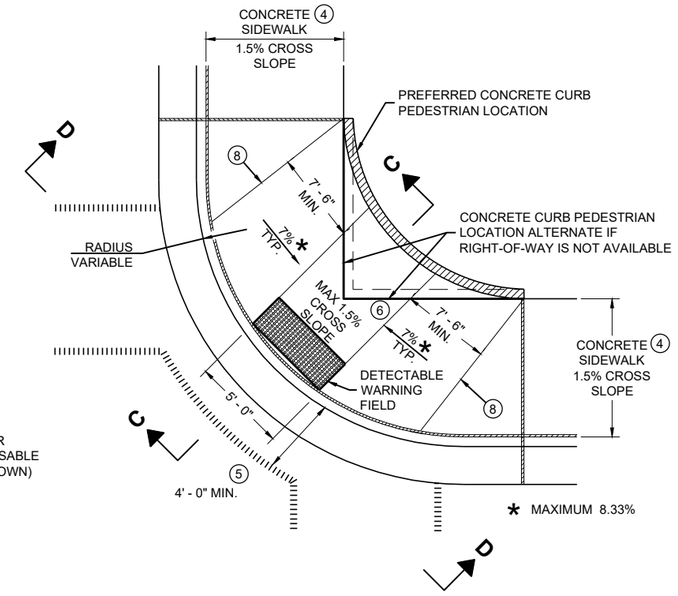
6
SDD 08D01 - 23a



PLAN VIEW

CURB RAMP TYPE 1

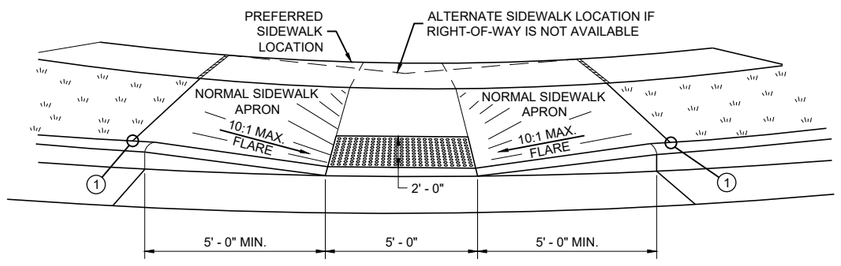
(CENTER OF CORNER RADIUS)



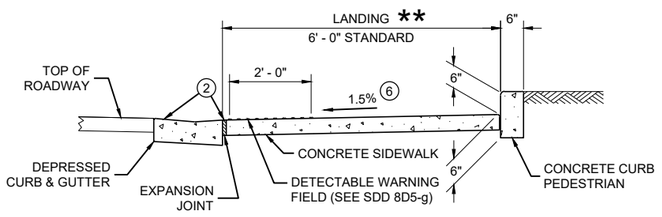
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

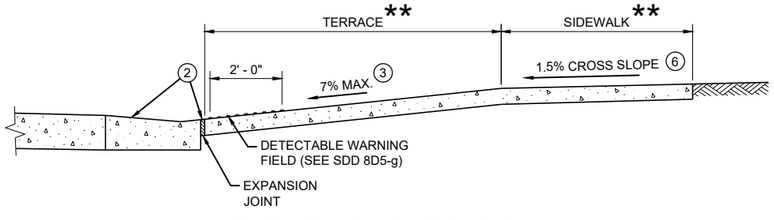


VIEW A - A FOR TYPE 1

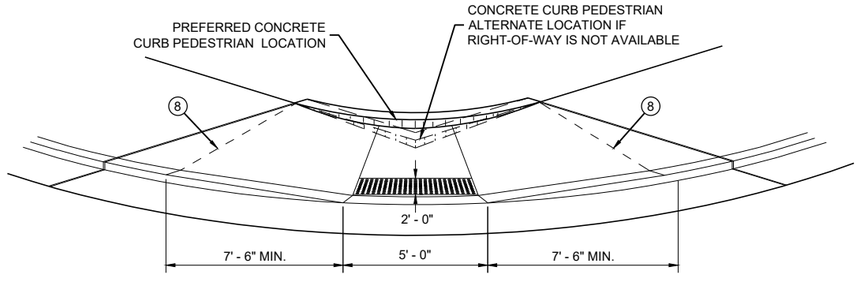


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

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 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED 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 LINEAR 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 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) MAXIMUM 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. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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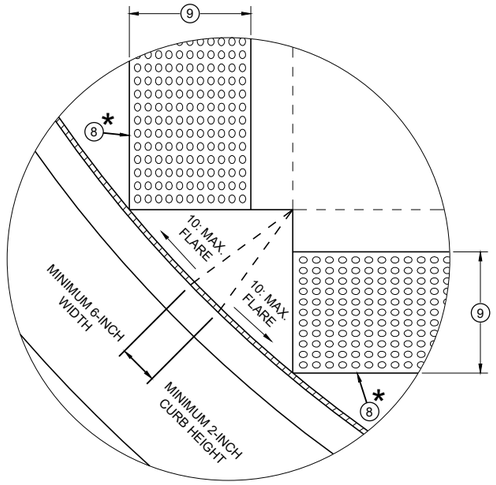
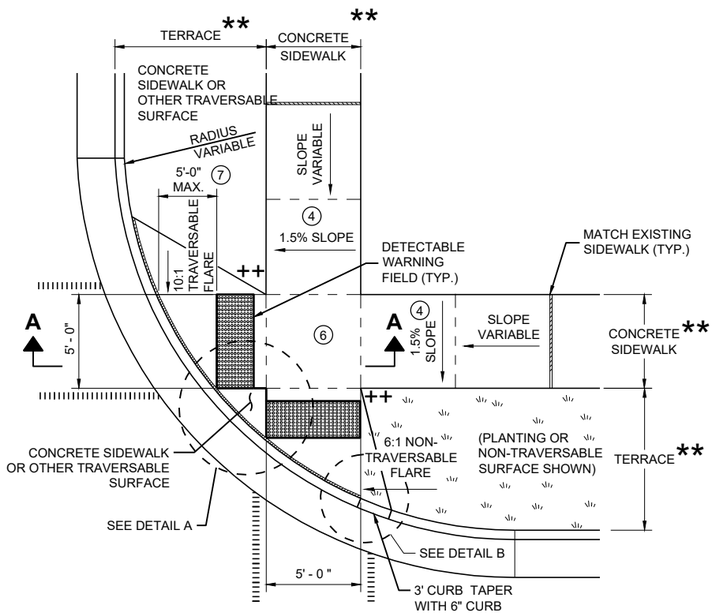
SDD 08D05-21a



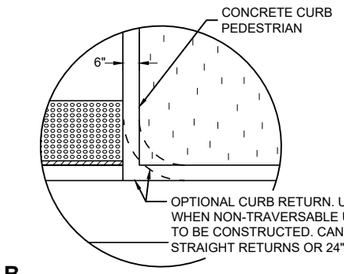
DETAIL A



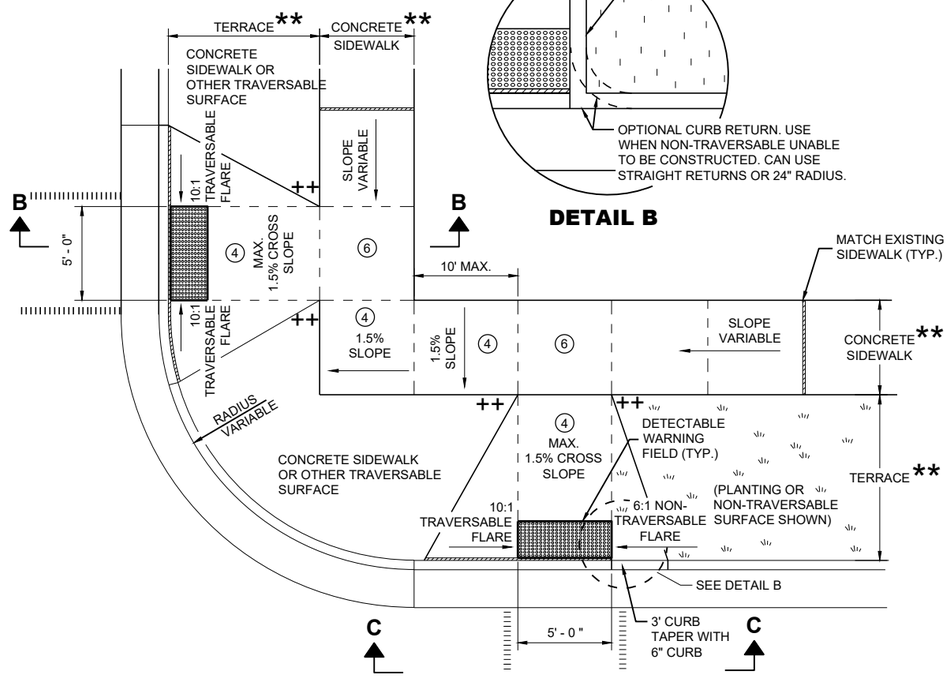
PLAN VIEW

CURB RAMP TYPE 2

(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW

CURB RAMP TYPE 3

(OUTSIDE OF CROSSWALK AREA)

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.

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) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

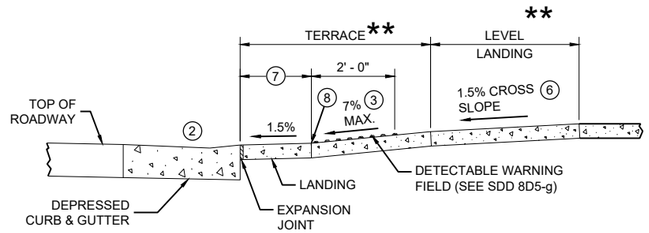
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN 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 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.

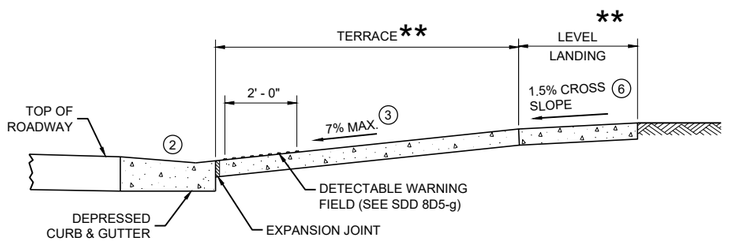


SECTION A - A FOR TYPE 2

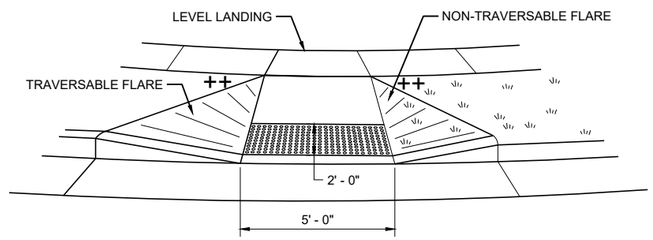
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



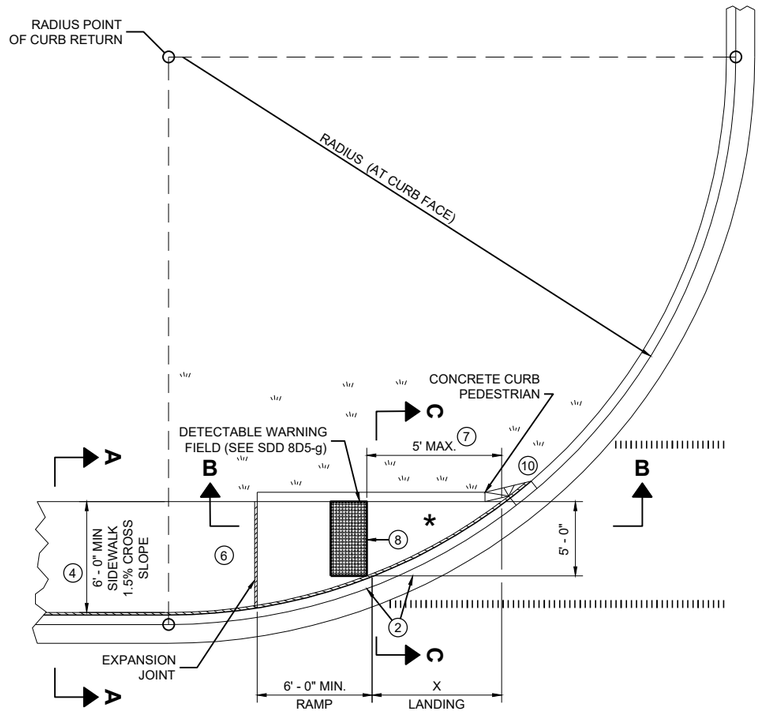
VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

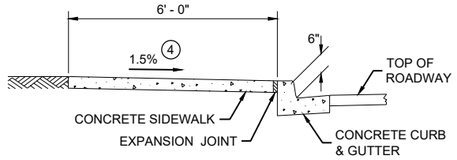


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

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) AN 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 LEVEL LANDING SIZE IS 5 FEET BY 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.

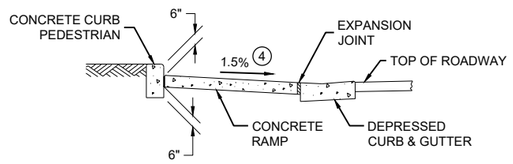
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

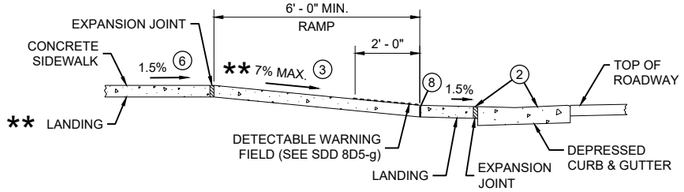
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

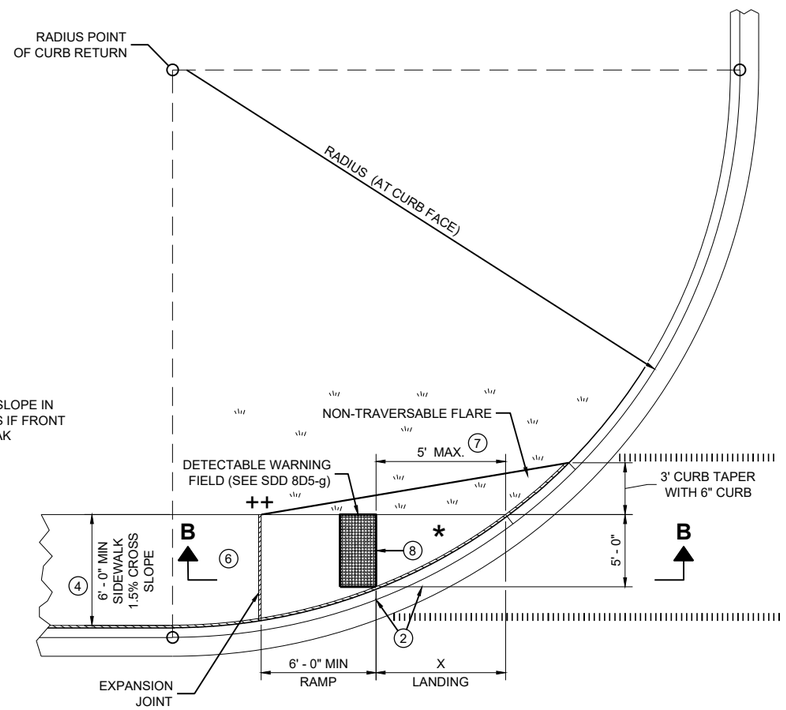


SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

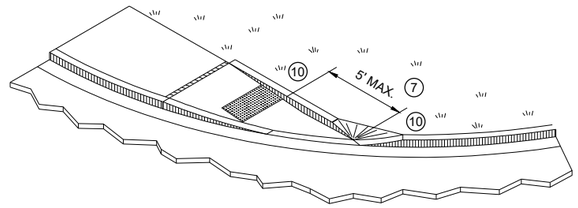


* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

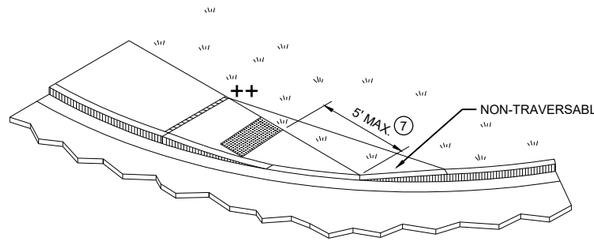
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4A

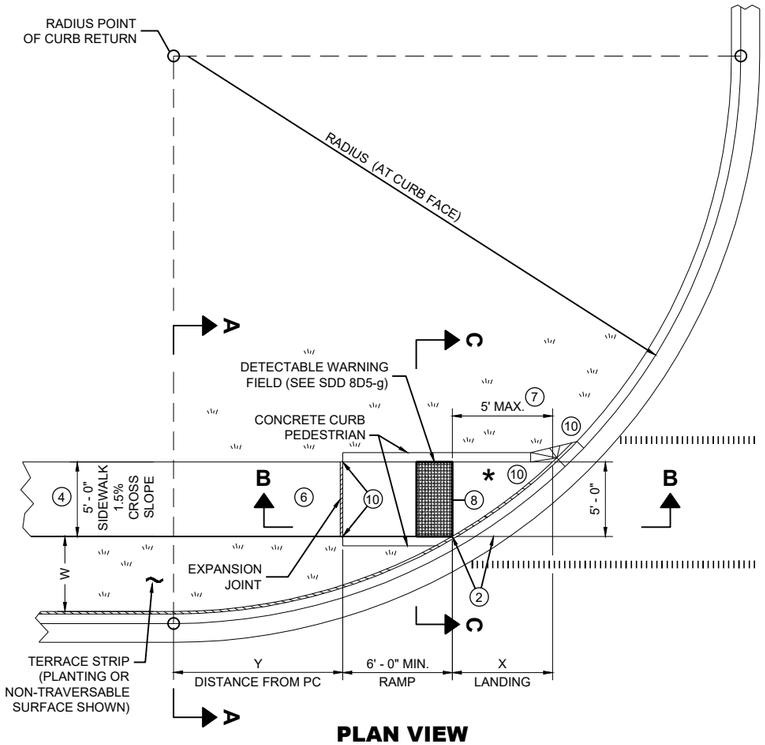


ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05-21c



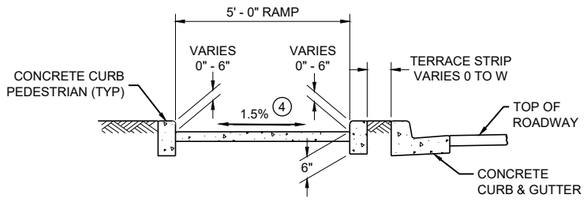
PLAN VIEW
CURB RAMP TYPE 4B

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' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

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

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C - C FOR TYPE 4B

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.

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) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

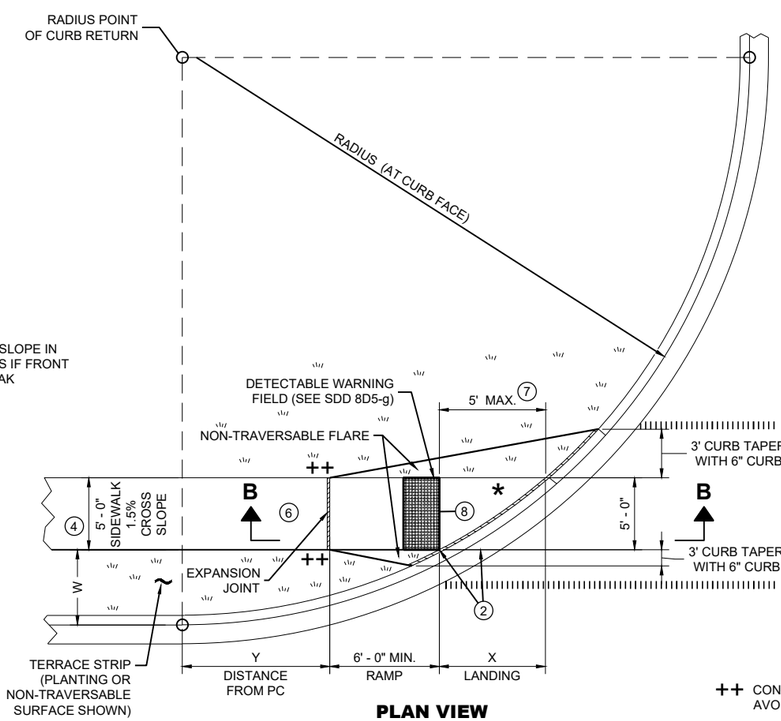
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 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.

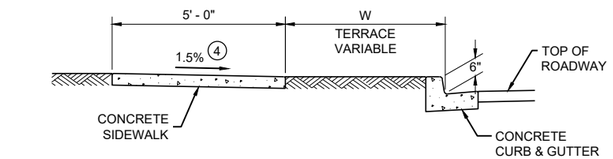
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



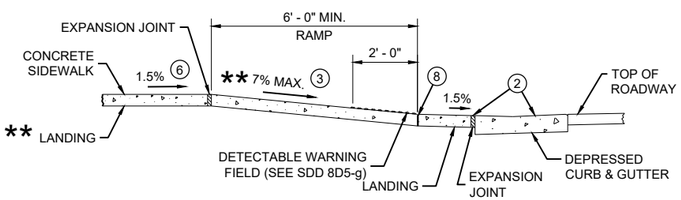
PLAN VIEW
CURB RAMP TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

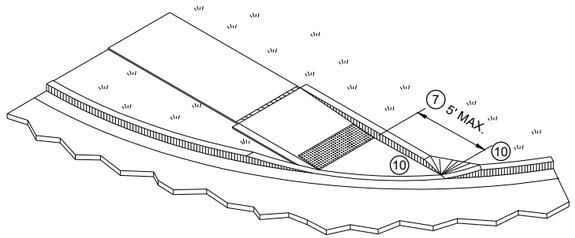


SECTION A - A FOR TYPE 4B

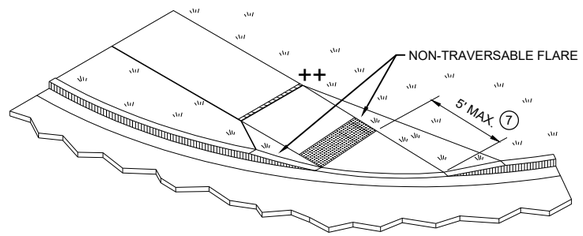


SECTION B - B FOR TYPE 4B AND TYPE 4B1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



ISOMETRIC VIEW FOR TYPE 4B



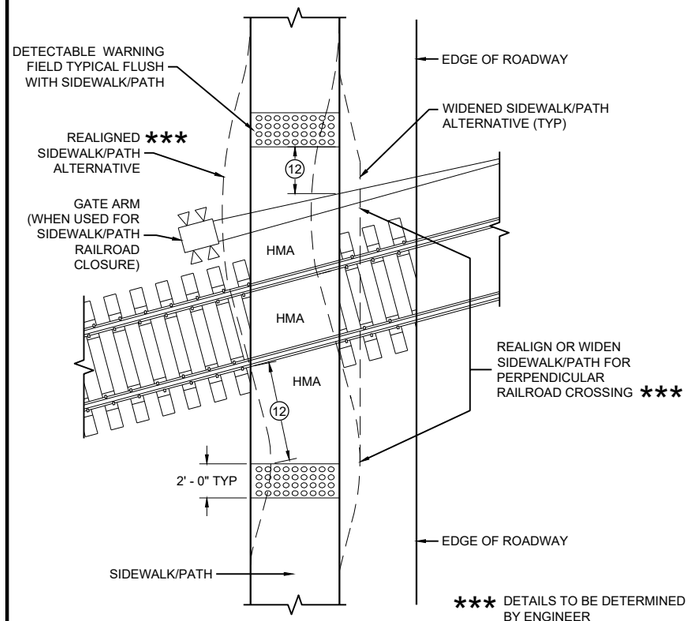
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

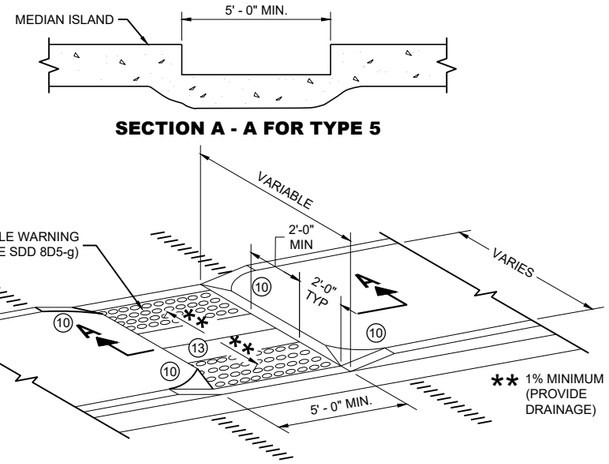
6

SDD 08D05-21d



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

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.

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 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) AN 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 LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

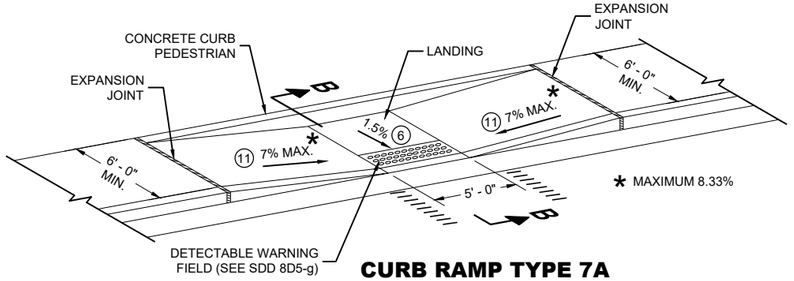
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

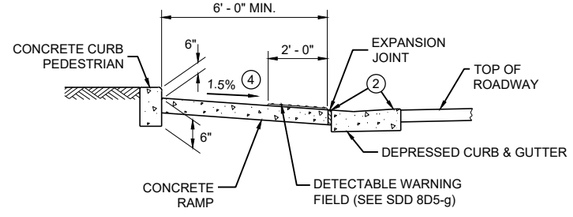
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

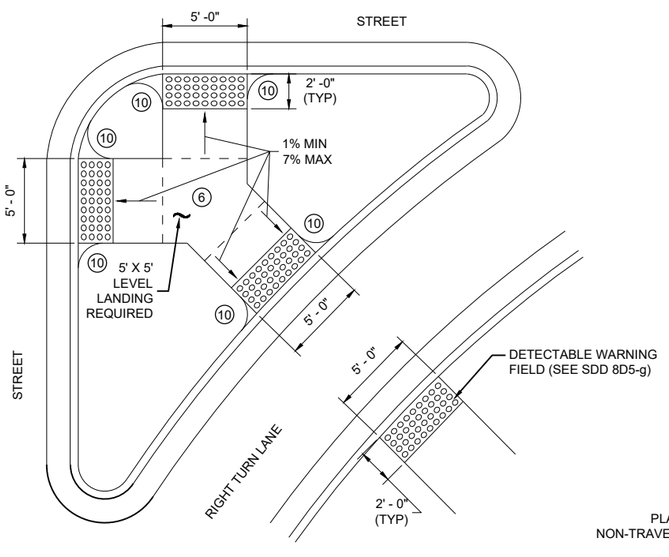


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



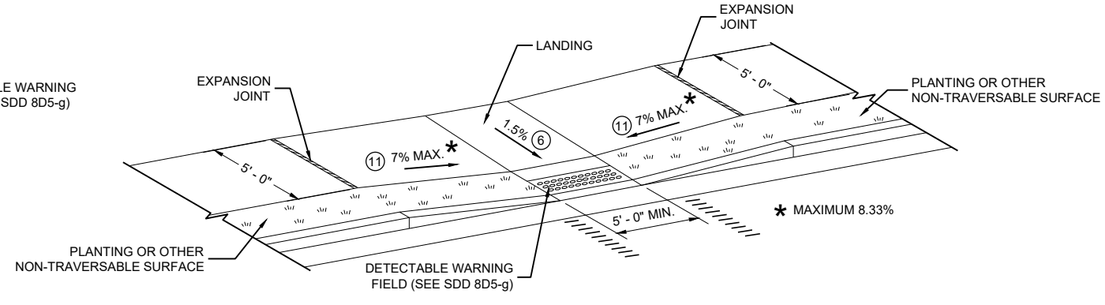
SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



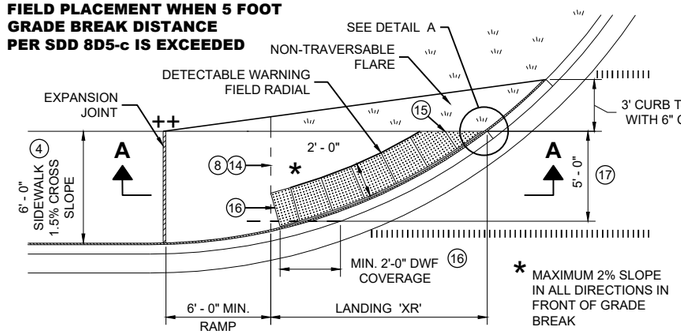
CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

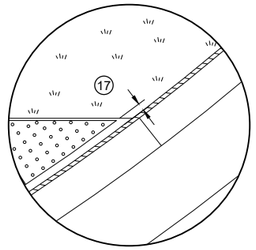
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

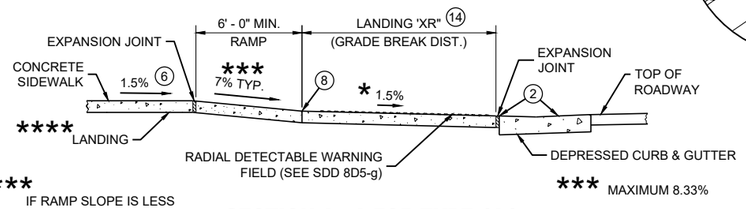


PLAN VIEW

CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

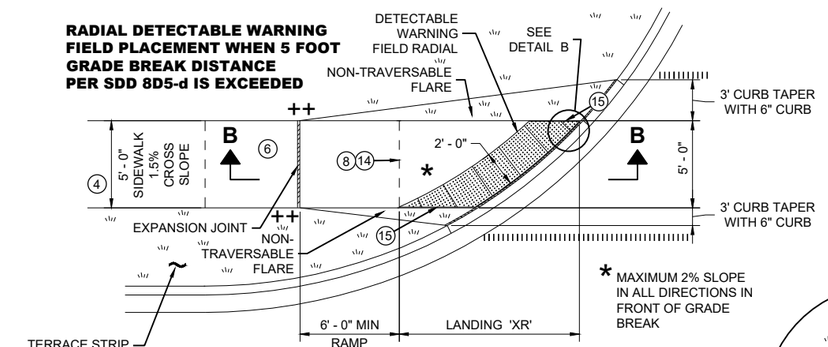


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

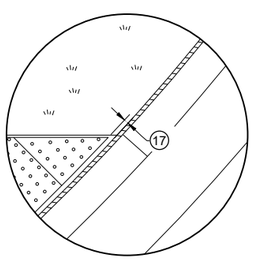
SECTION A - A FOR TYPE 4A1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

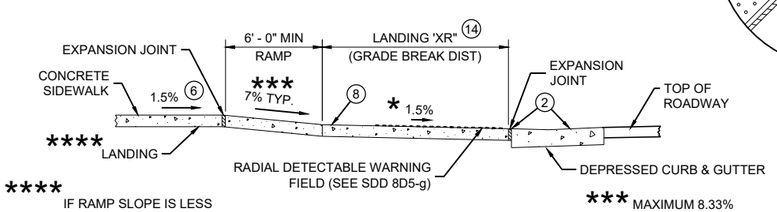


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

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.

DETECTABLE WARNING FIELDS 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 FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD 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) AN 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 BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

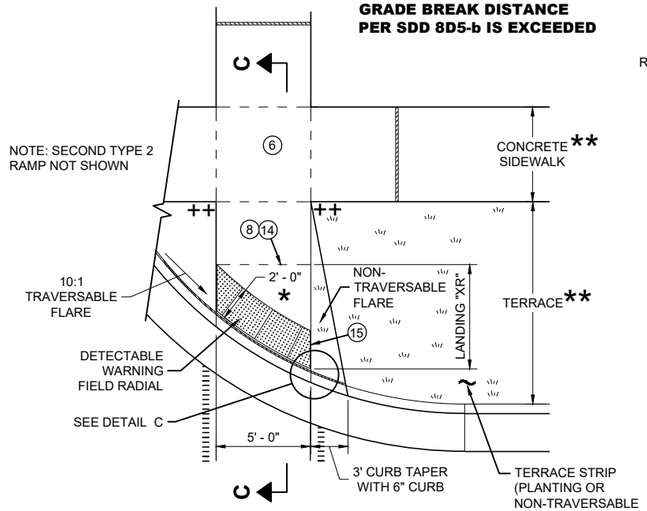
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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 ⅛" 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.

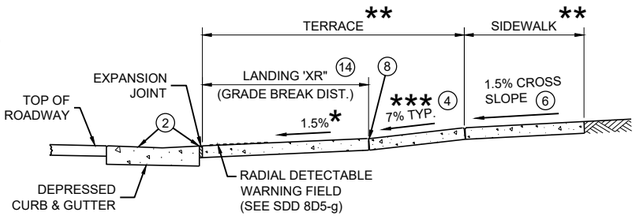
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

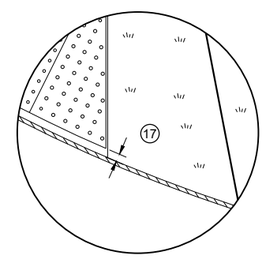


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
RADIAL DETECTABLE WARNING

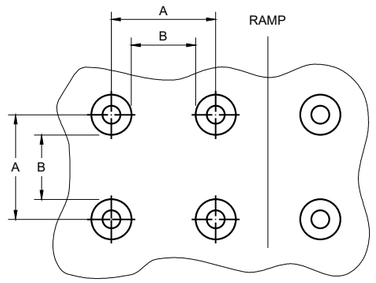
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

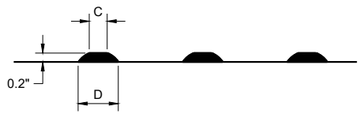
SDD 08D05-21f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

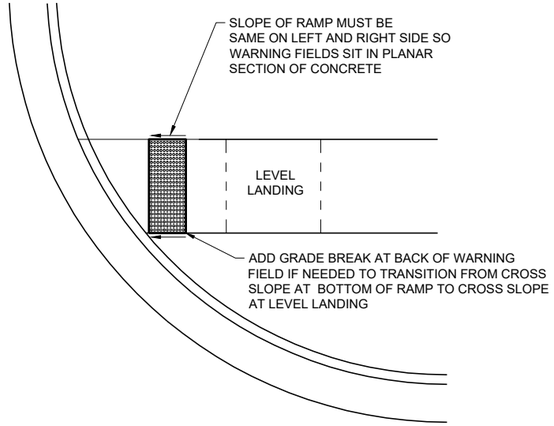
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP 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 FILED 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.

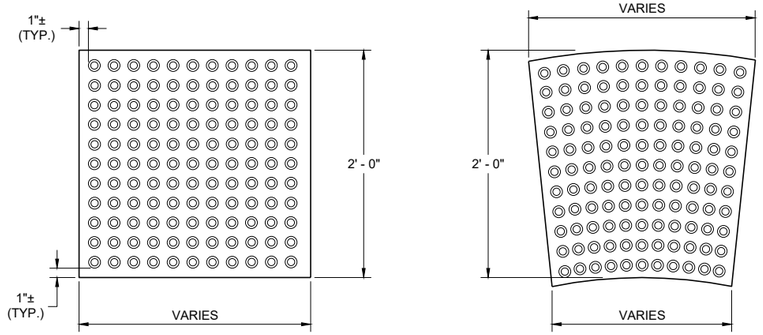
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. 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 ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

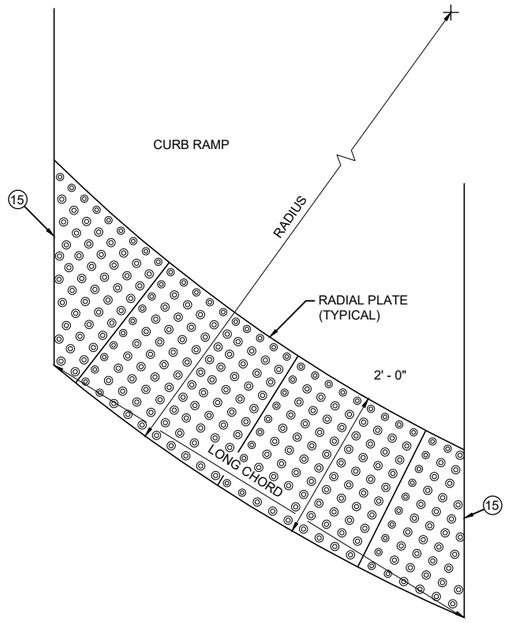
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



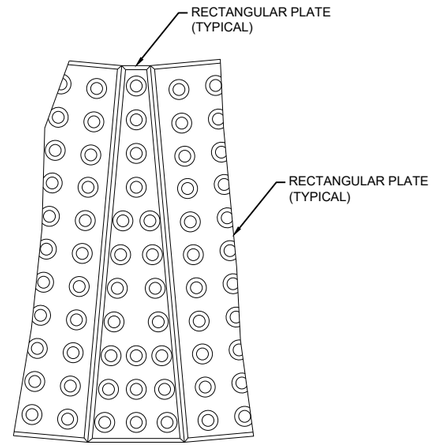
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

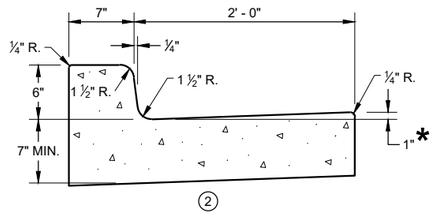
APPROVED

July 2023 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

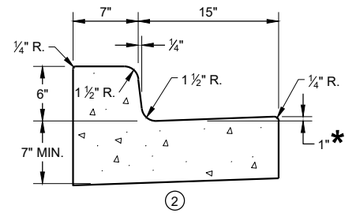
FHWA

6
SDD 08D05-21g

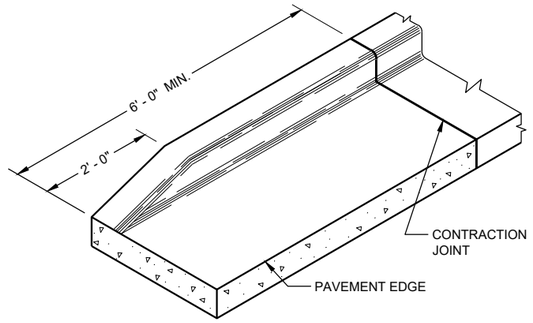


CONCRETE CURB AND GUTTER 31" ①

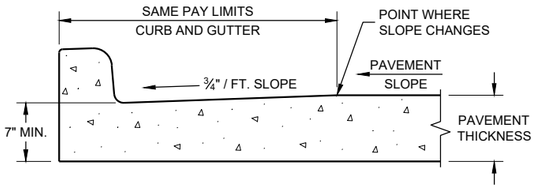
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



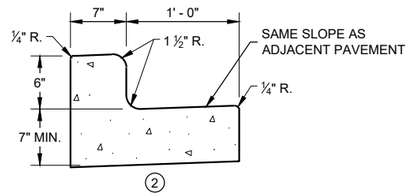
CONCRETE CURB AND GUTTER 22" ①



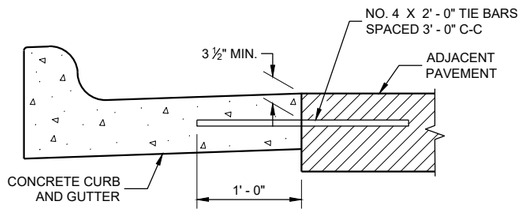
END SECTIONCURB AND GUTTER



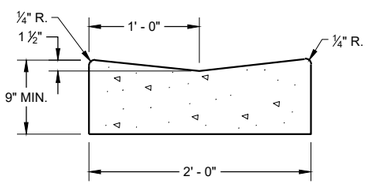
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



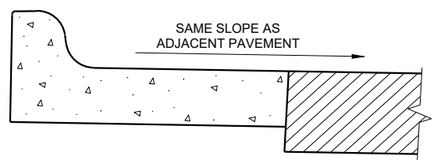
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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.

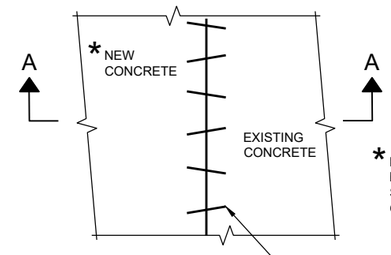
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

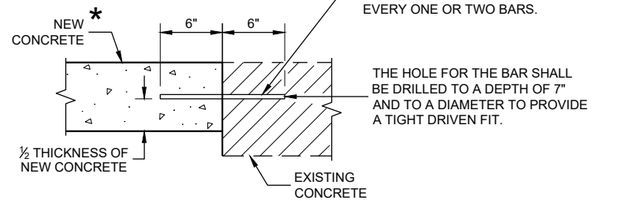
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

*EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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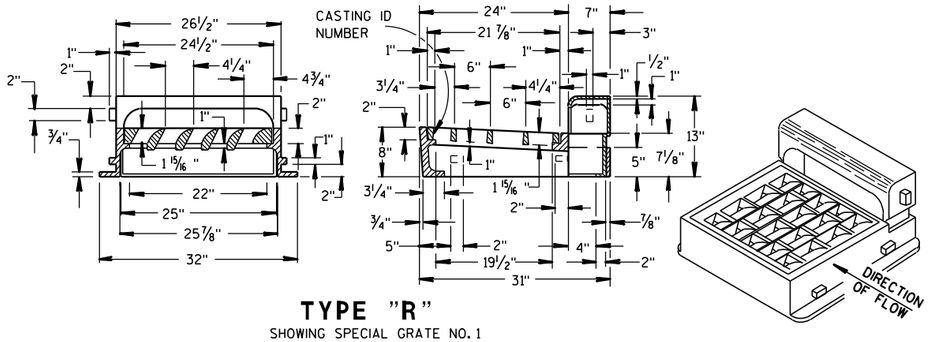
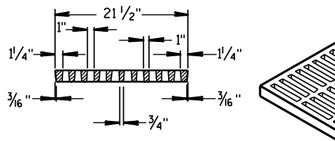
SDD 08D16 - 11
SDD 08D16 - 11

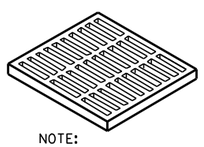
INLET COVERS



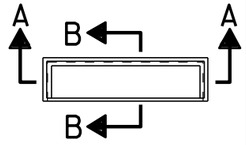
TYPE "R"

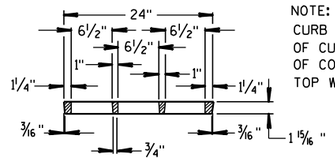
SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)



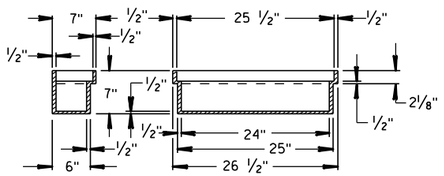


(APPROX. WEIGHT - 510 LBS.)
FRAME..... 245 LBS.
CURB..... 120 LBS.
GRATE..... 145 LBS.





NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.



GRATE FOR TYPE "R" INLET COVER

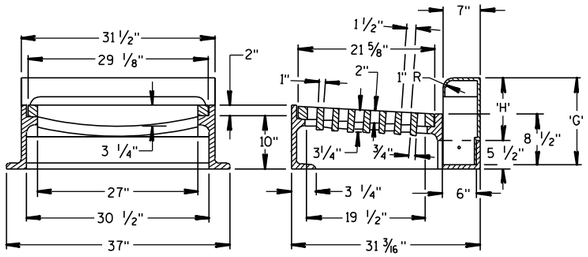
(GRATE..... 150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

SECTION B-B SECTION A-A

SPECIAL CURB PLUG "P"

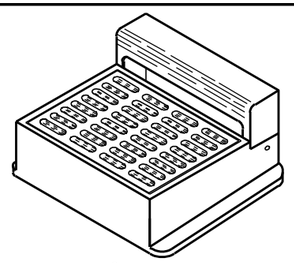
(CURB PLUG..... 85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)

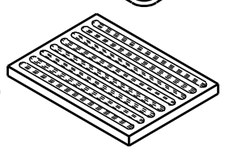
'H' = 9" FOR 6" CURB
'H' = 11" FOR 8" CURB
'G' = 13 3/4" FOR 6" CURB
'G' = 15 3/4" FOR 8" CURB



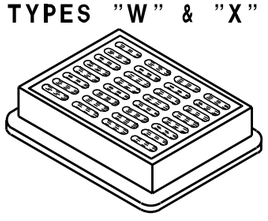
TYPE "W"

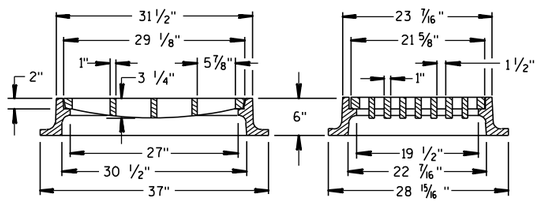
(APPROX. WEIGHT - 670 LBS.)
FRAME..... 350 LBS.
CURB BOX..... 135 LBS.
GRATE..... 185 LBS.





ALTERNATE GRATE
(FOR EXPRESSWAY RAMPS)
TYPES "W" & "X"

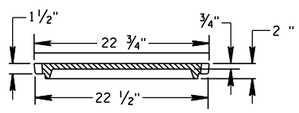




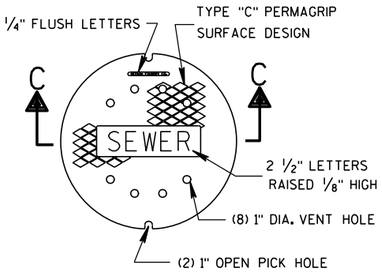
TYPE "X"

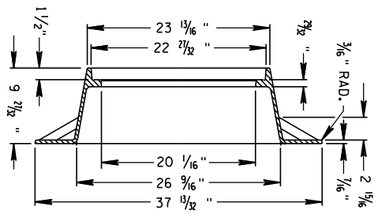
(APPROX. WEIGHT - 470 LBS.)

MANHOLE COVER



SECTION C-C





TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

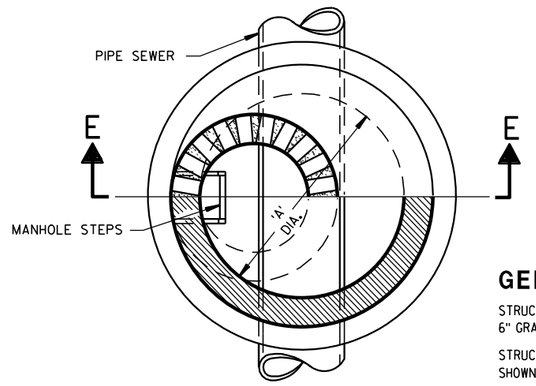
TABLE OF DIMENSIONS

TYPE	'A'	'B'	'C'
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

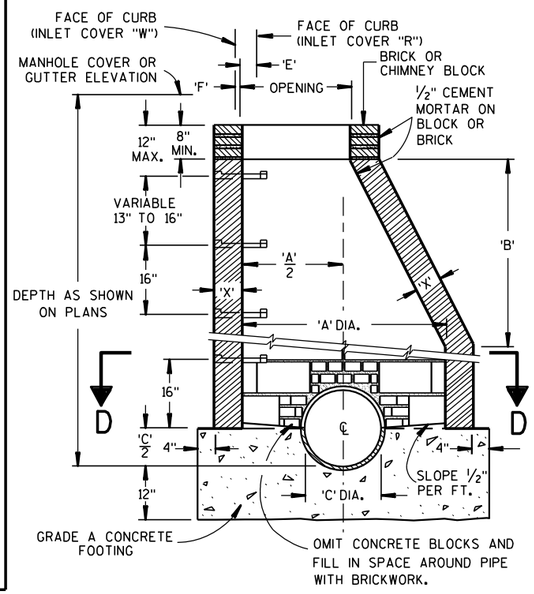
MANHOLE



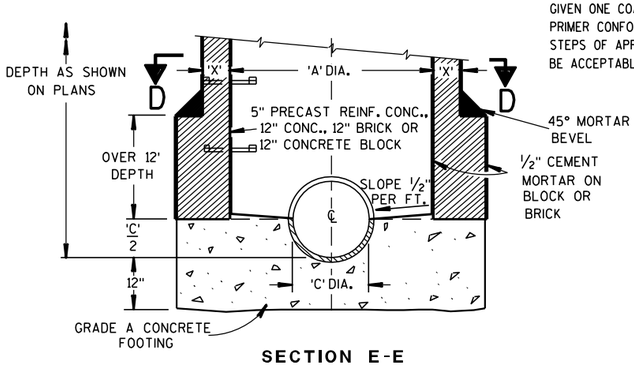
HALF SECTION D-D

TABLE OF OPENING DIMENSIONS

COVER TYPE	COVER DESCRIPTION	OPENING	'E'	'F'
"O"	ROUND	2'-2" DIA.	—	—
"W"	CURB BOX	1'-8" X 2'-6"	—	1"
"X"	INLET	1'-10" X 2'-6"	—	—
"R"	CURB BOX	2'-0" X 2'-1"	4"	—



SECTION E-E



SECTION E-E

TYPES 11, 12, 13 & 14

GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6" IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACK-FILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

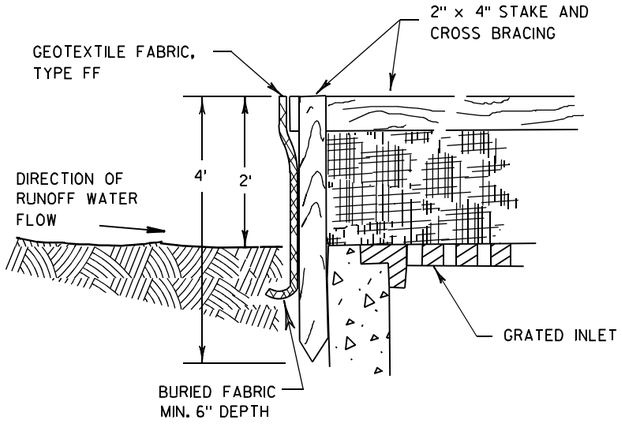
STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 5/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

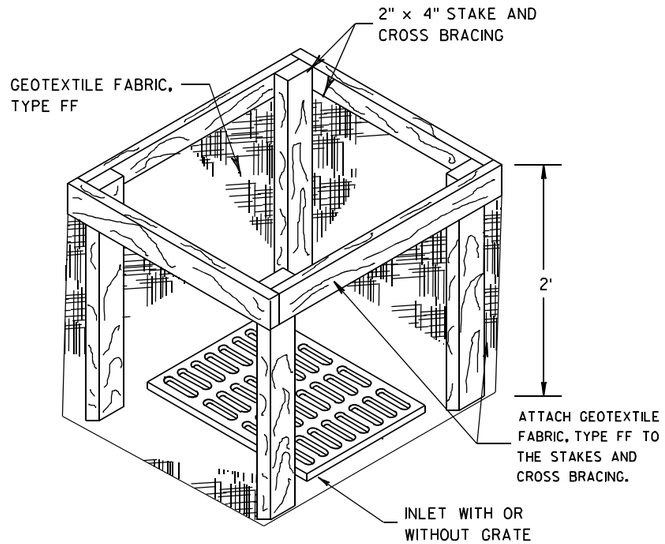
SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

MANHOLES, MANHOLE & INLET COVERS

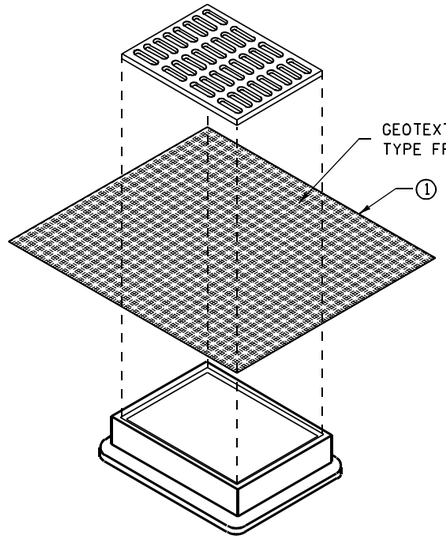
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
FHWA



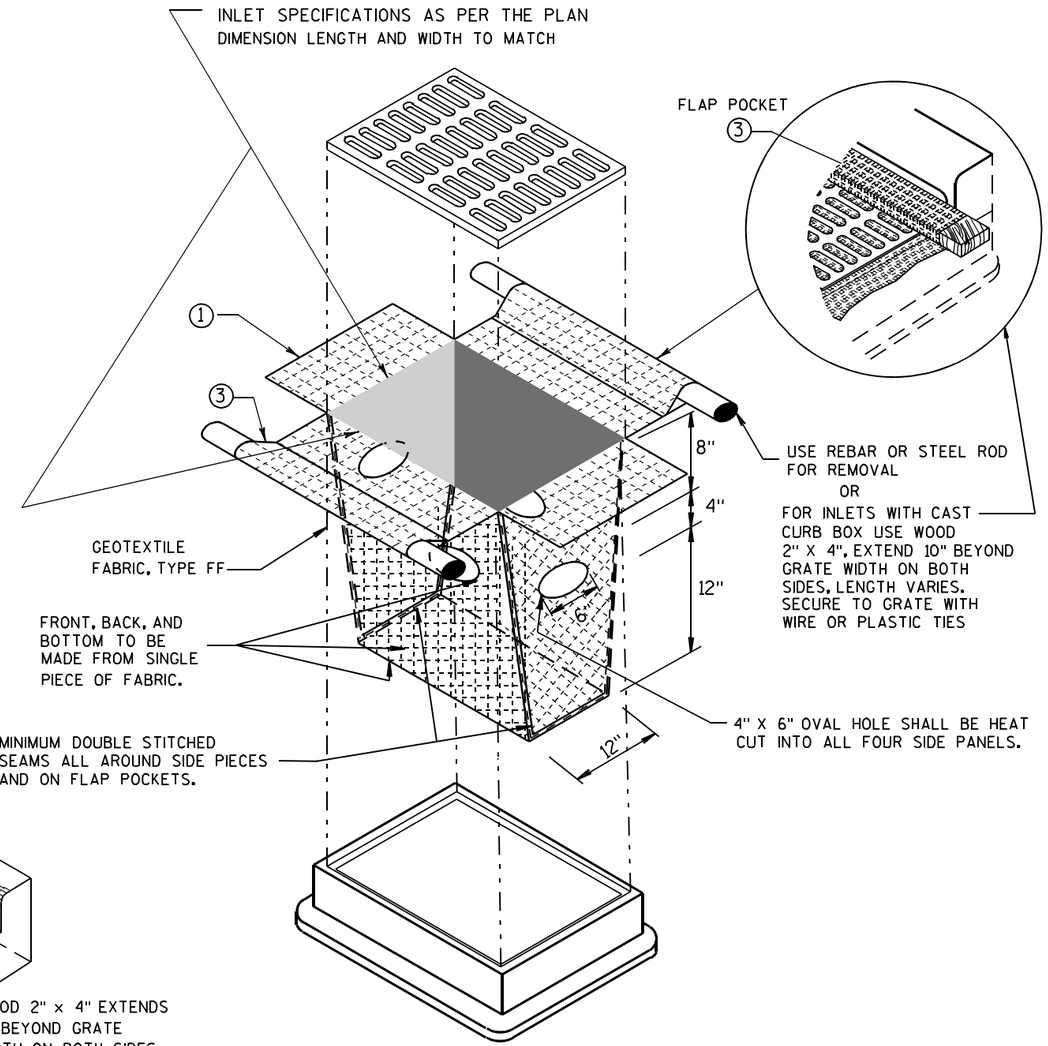


INLET PROTECTION, TYPE A



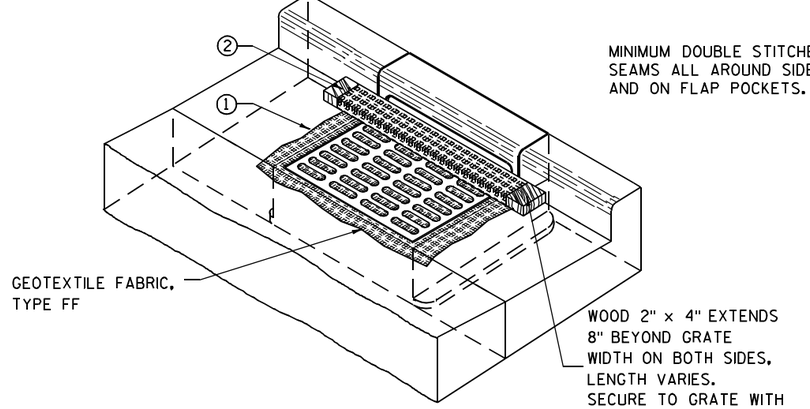
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

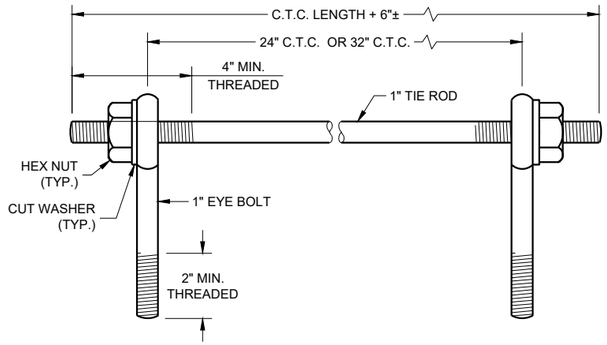
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

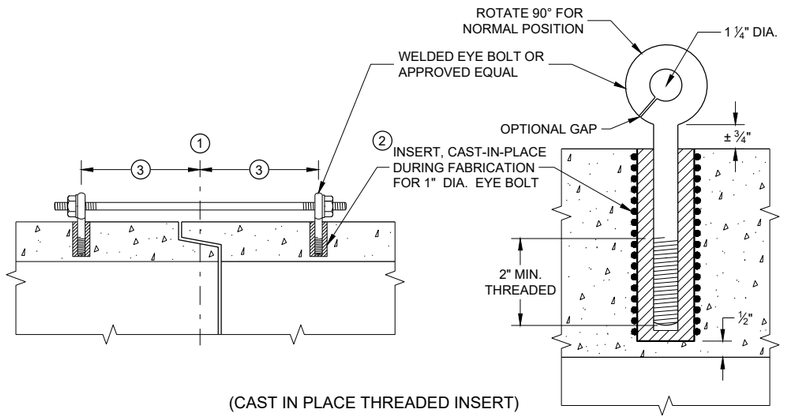
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

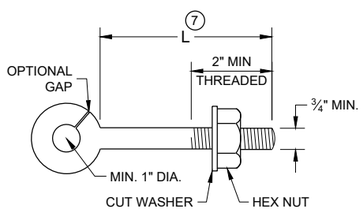
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

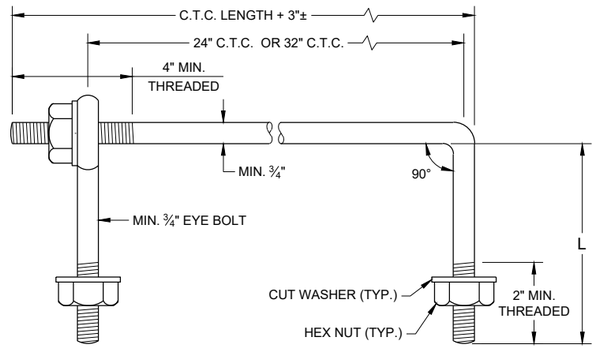
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

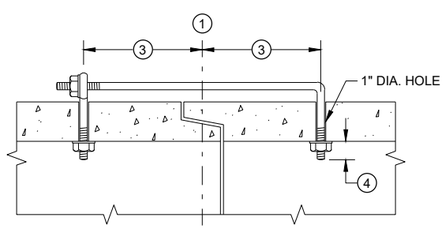


EYE BOLT (7)

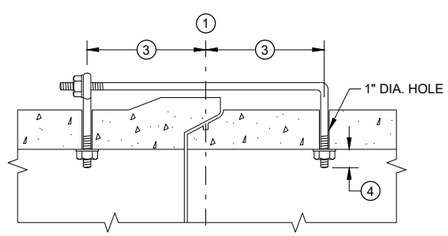
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

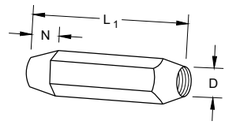
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



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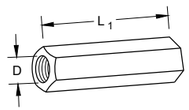
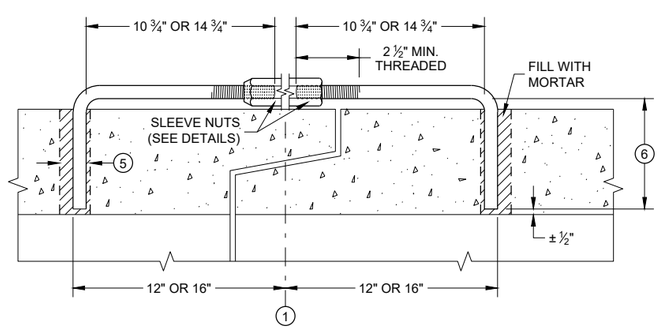


PLAIN

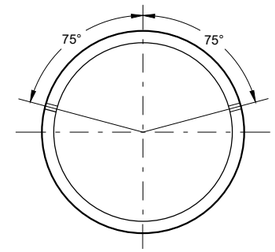
RIGHT AND LEFT THREADS

SLEEVE NUTS



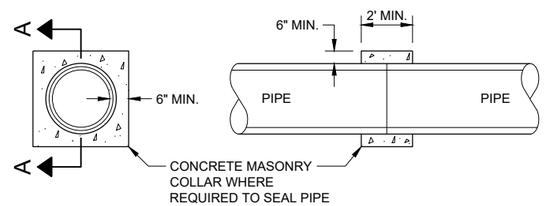
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

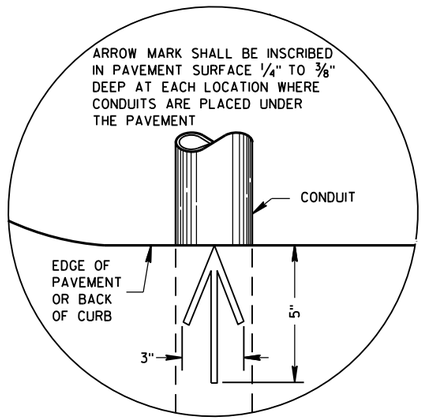
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

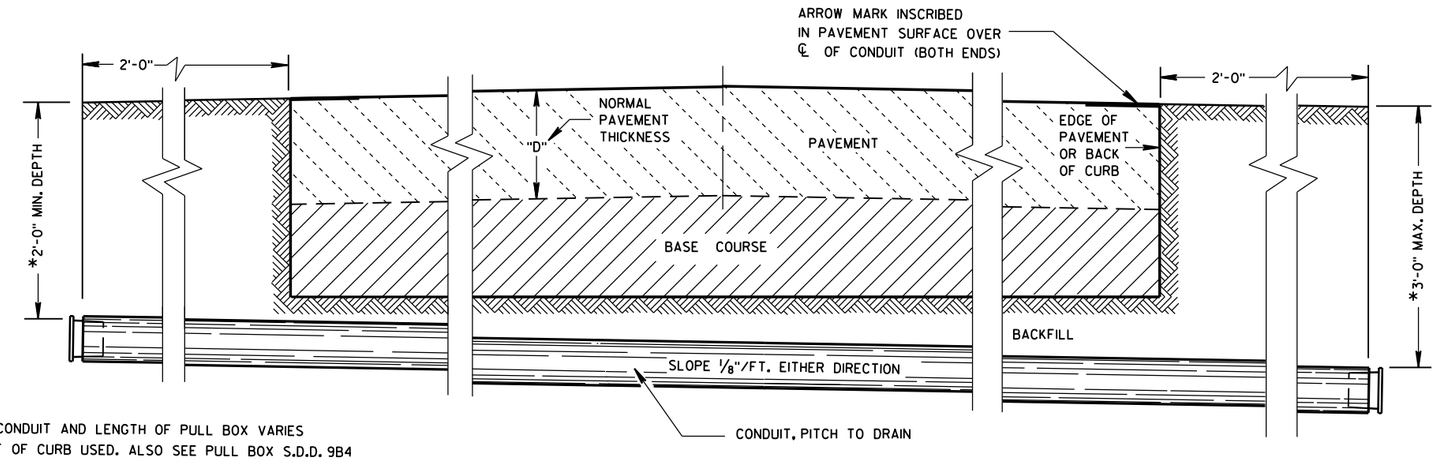
SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

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

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

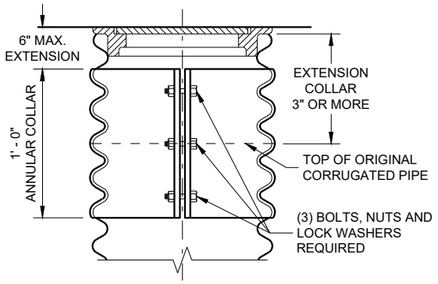
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

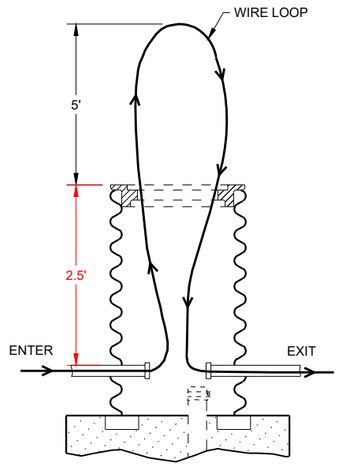
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

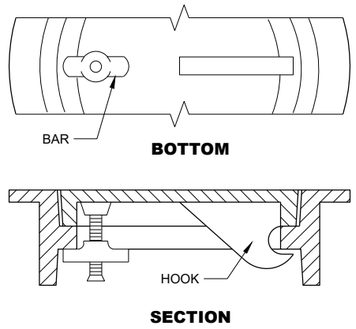
S.D.D. 9 B 2-10



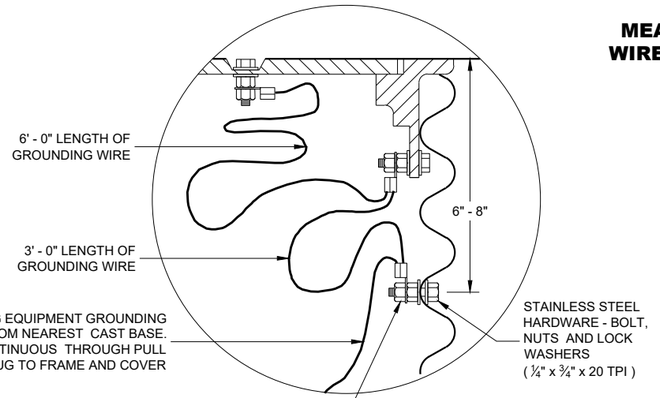
CORRUGATED PIPE EXTENDER



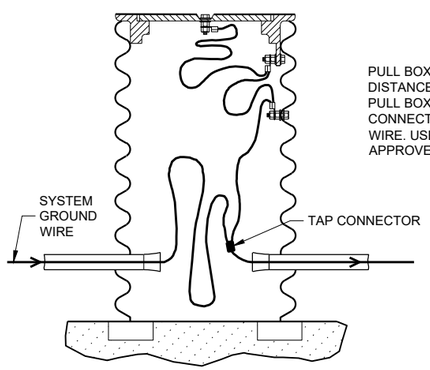
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

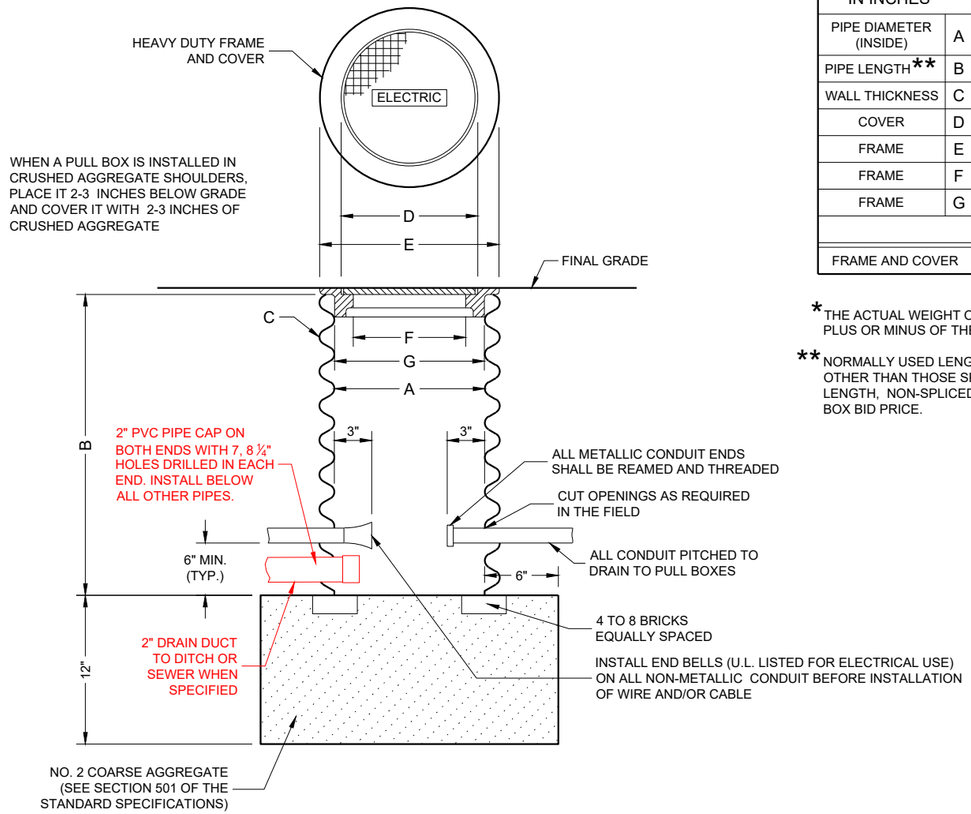


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH**	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

**NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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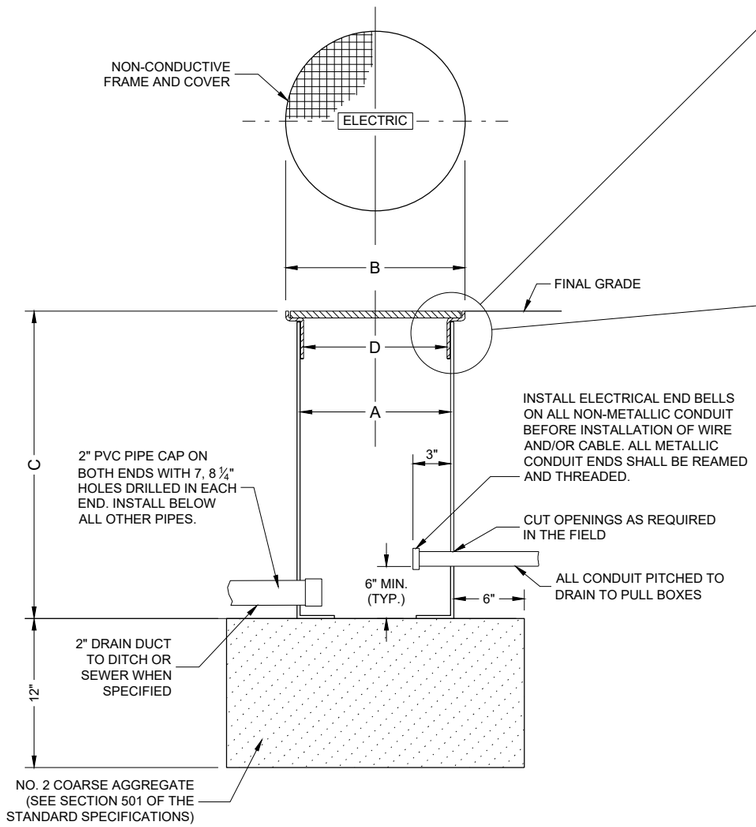
SDD 09B04-12

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

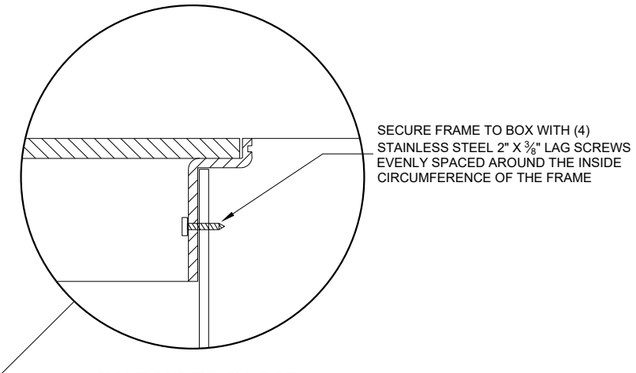
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

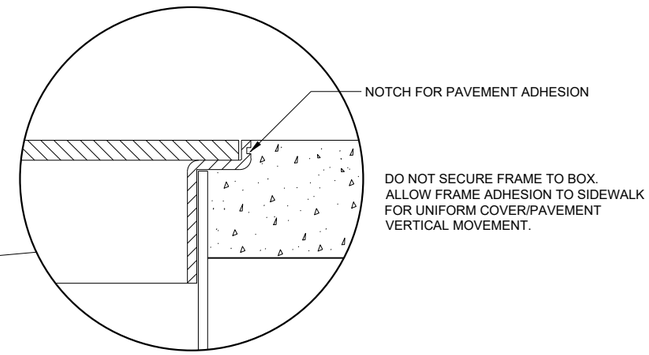
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



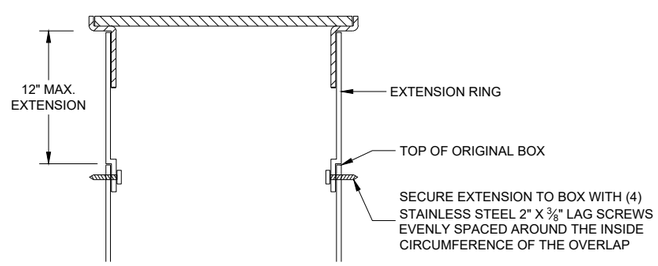
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

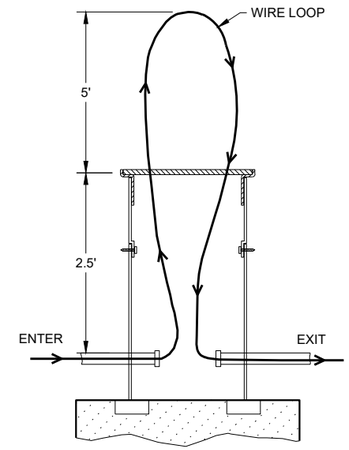
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

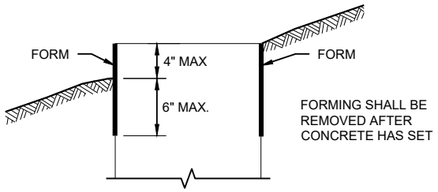
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 295

FHWA

6
SDD 09B16 - 02

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 ENDS 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 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.

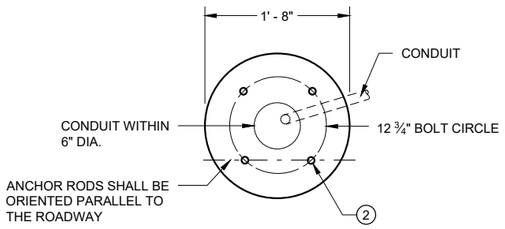
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

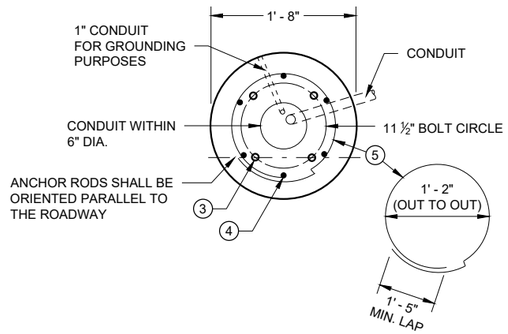
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

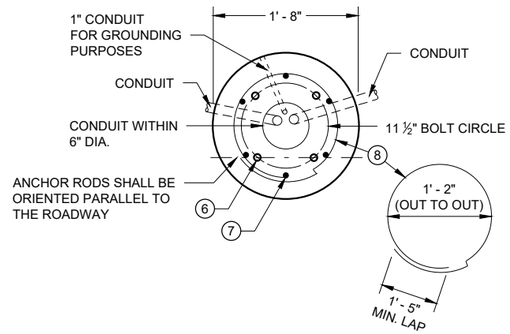
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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).







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

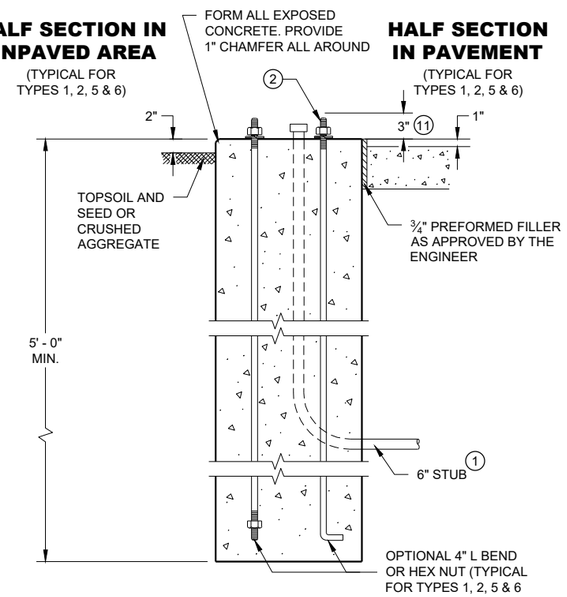
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

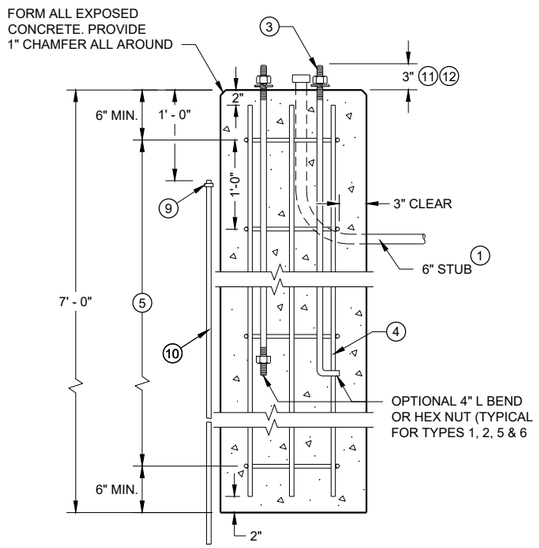
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

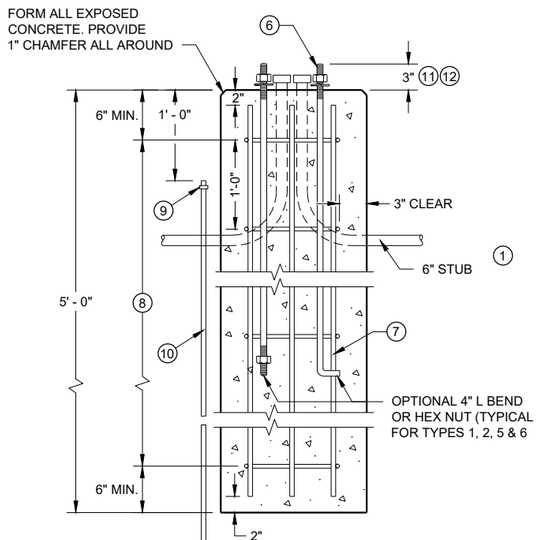
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 296
FHWA

SDD 09C02 - 09
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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 531.2.2 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.

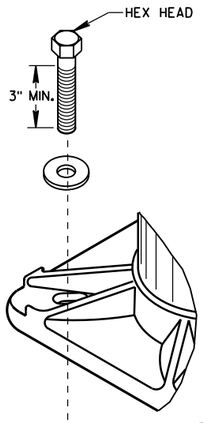
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

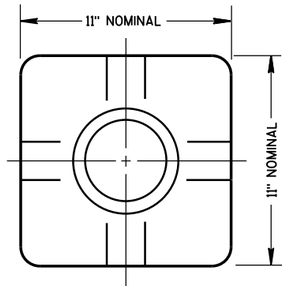
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

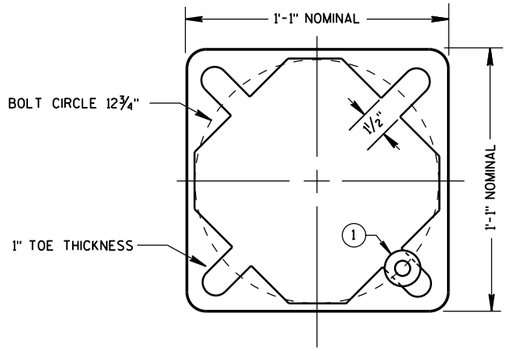
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

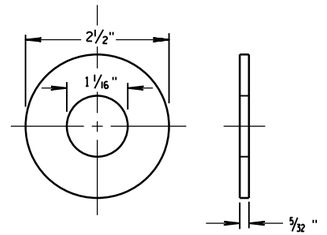




TOP VIEW
(PEDESTAL BASE)

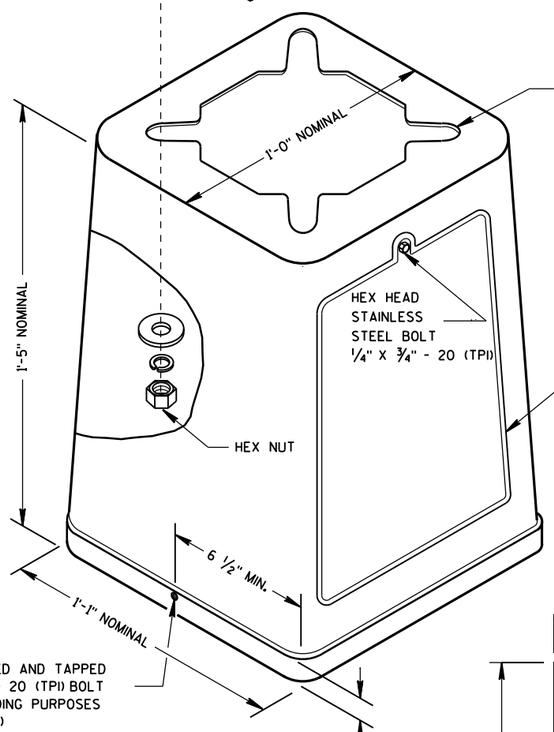


BOTTOM VIEW
(PEDESTAL BASE)

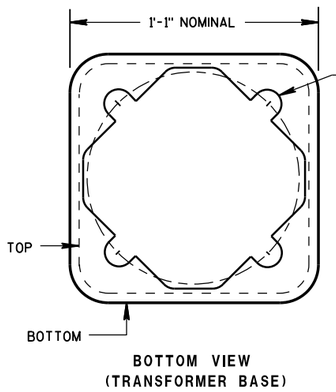


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

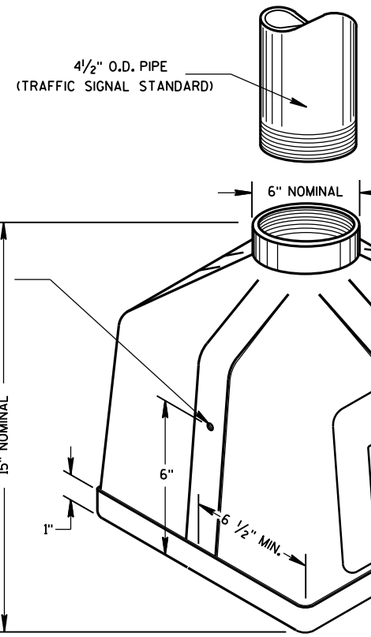
PEDESTAL BASE WASHER (1)



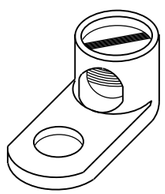
ISOMETRIC VIEW



BOTTOM VIEW
(TRANSFORMER BASE)

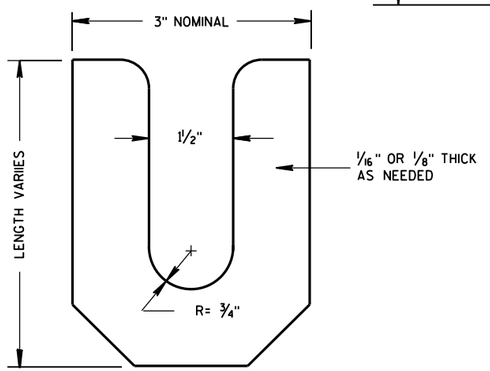


ISOMETRIC VIEW
PEDESTAL BASE



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

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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 (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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).

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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 ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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 BE FURNISHED AND INSTALLED TO 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.

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.

(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 OF THE ENGINEER.

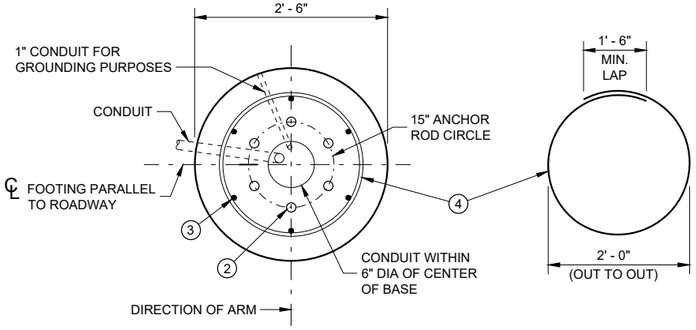
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

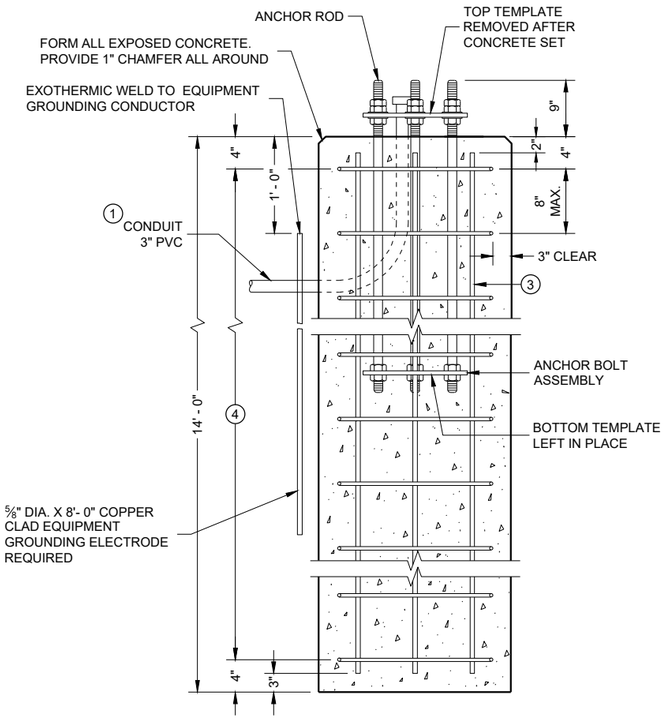
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (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 .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

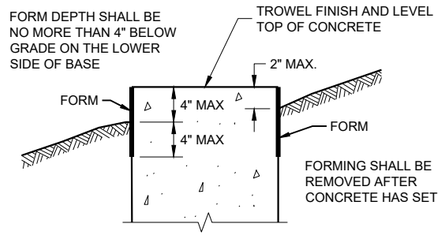
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



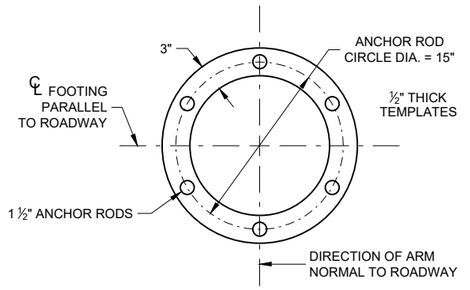


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

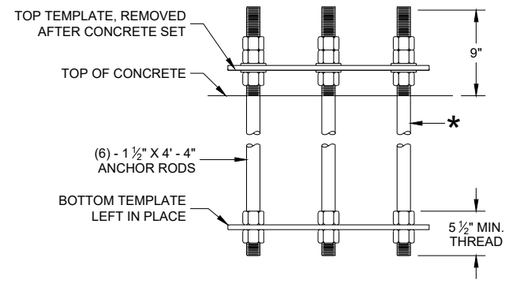
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

GENERAL NOTES

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

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

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).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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 ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

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 BE FURNISHED AND INSTALLED TO 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.

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CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
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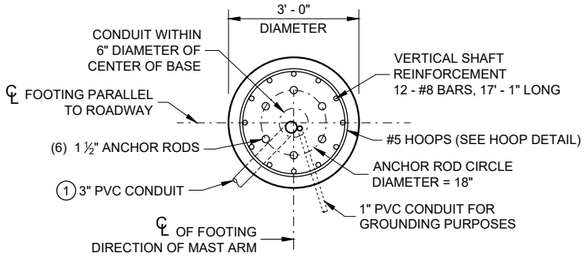
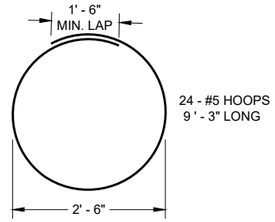
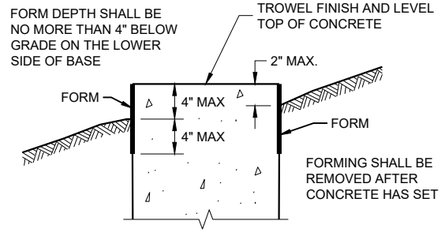


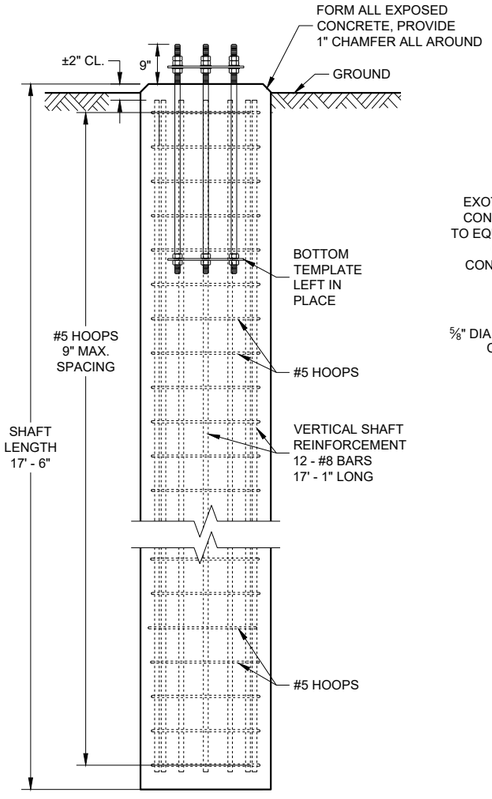
PLAN VIEW



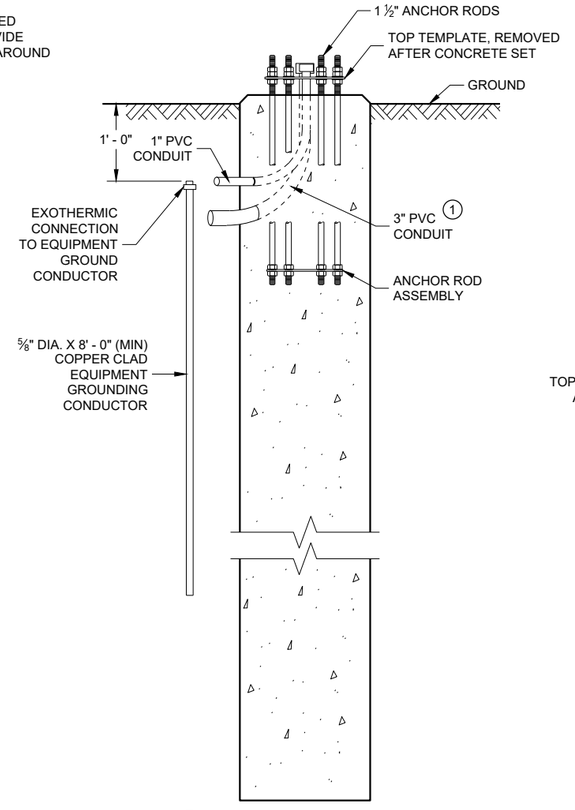
HOOP DETAIL



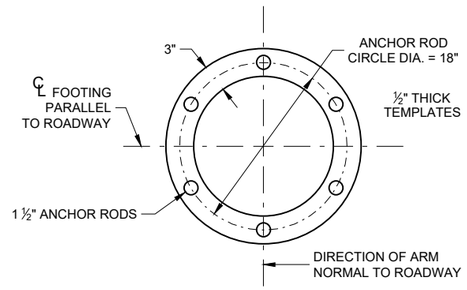
FORMING DETAIL



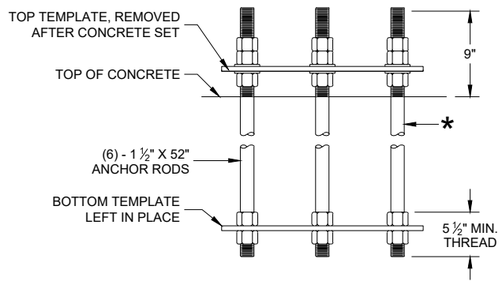
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

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CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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SDD 09C15 - 01

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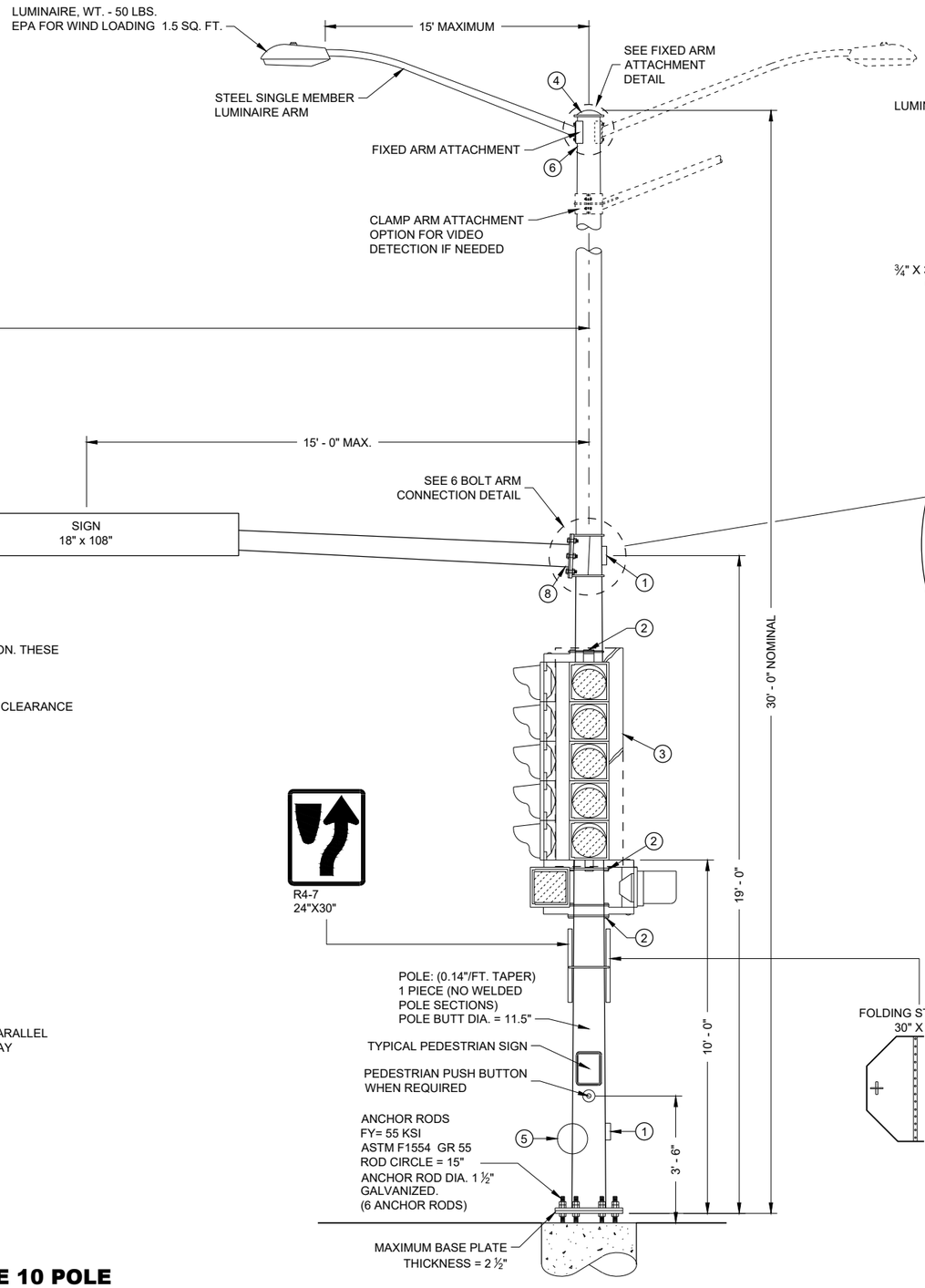
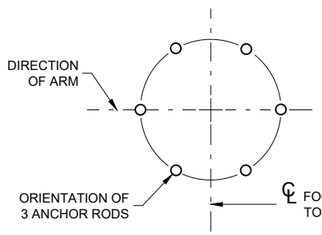
SDD 09C15 - 01

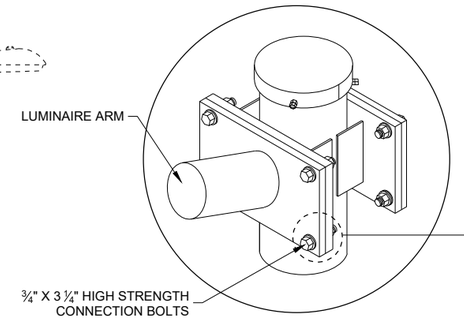


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

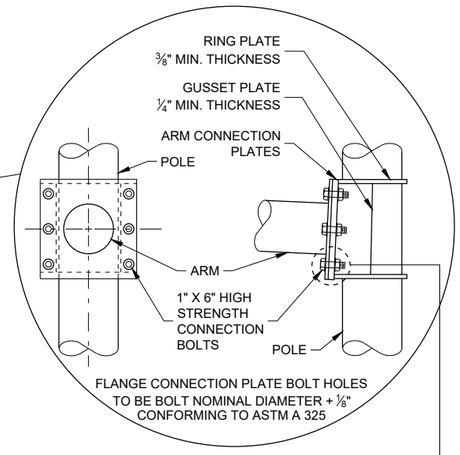
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



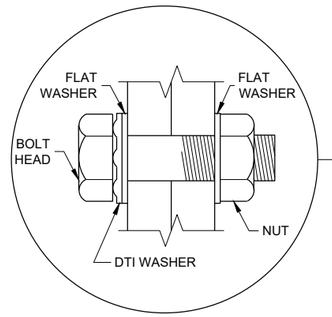
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 300

FHWA

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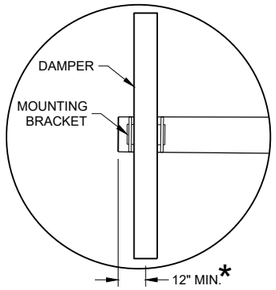
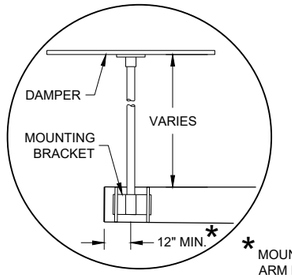
SDD 09E08 - 09e

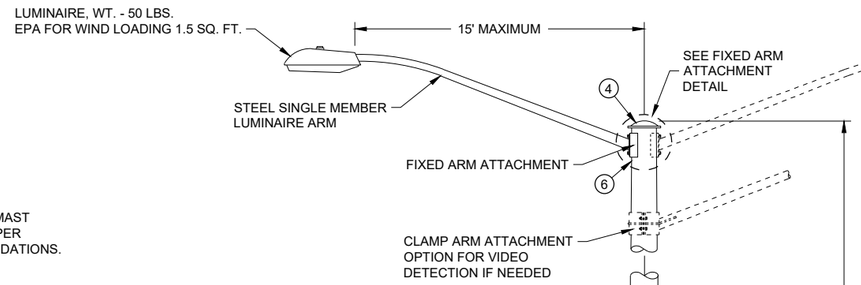


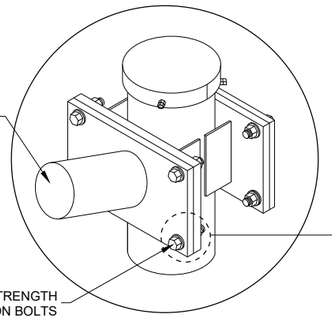
DUMBBELL VIBRATION DAMPER



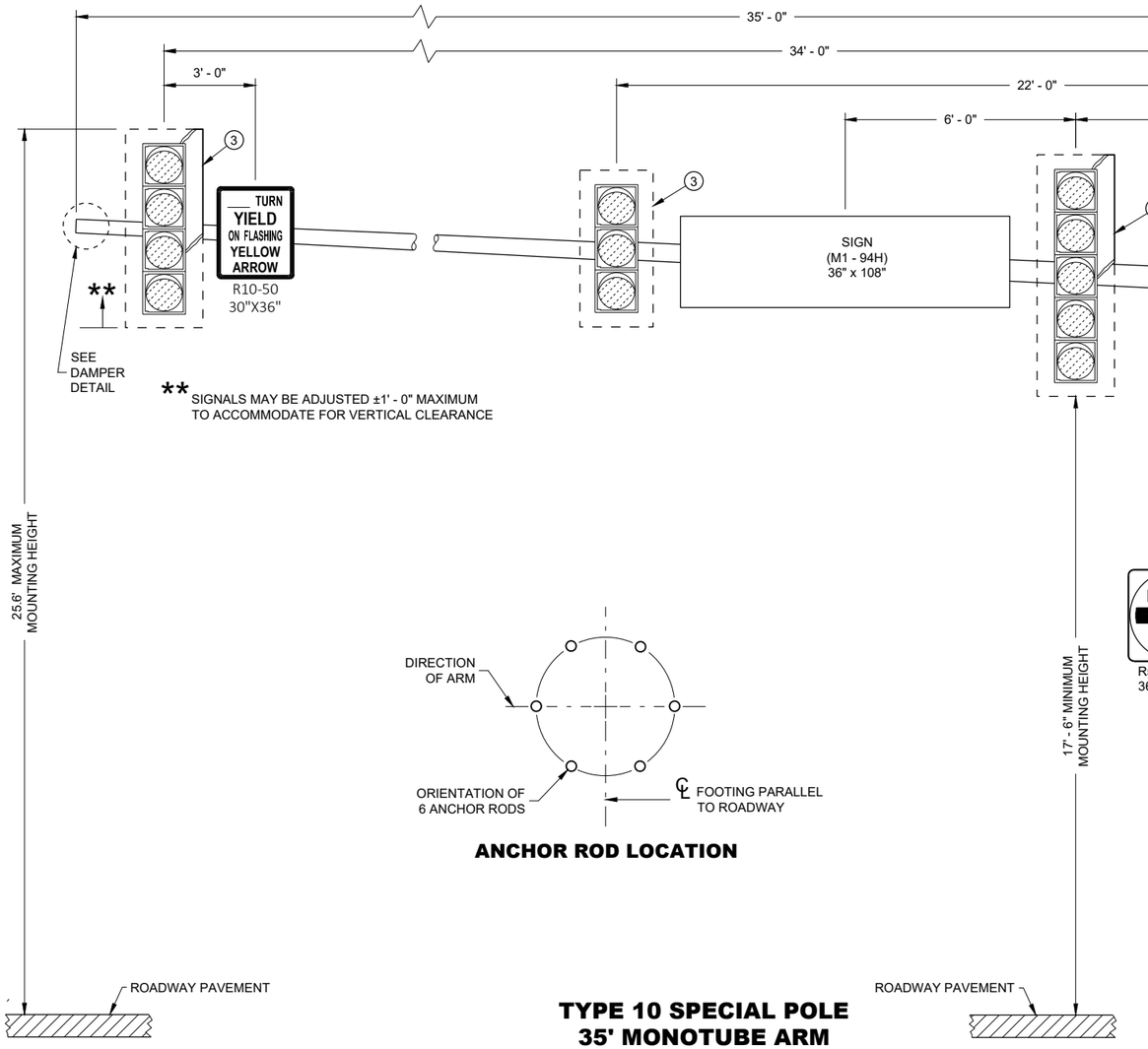
FLAT VIBRATION DAMPER

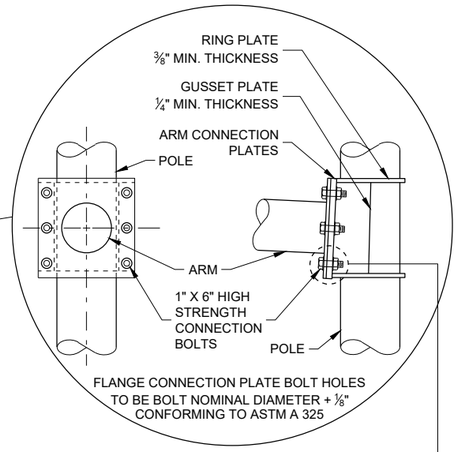
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



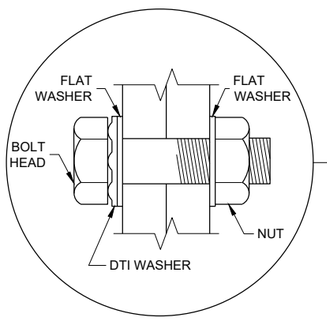


FIXED ARM ATTACHMENT DETAIL





6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

301

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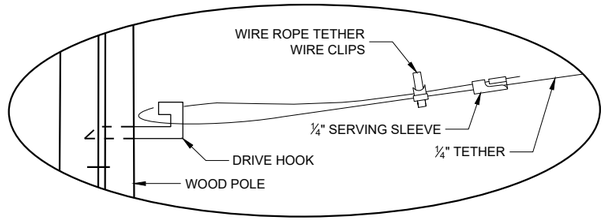
SDD 09E08 - 09f

MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

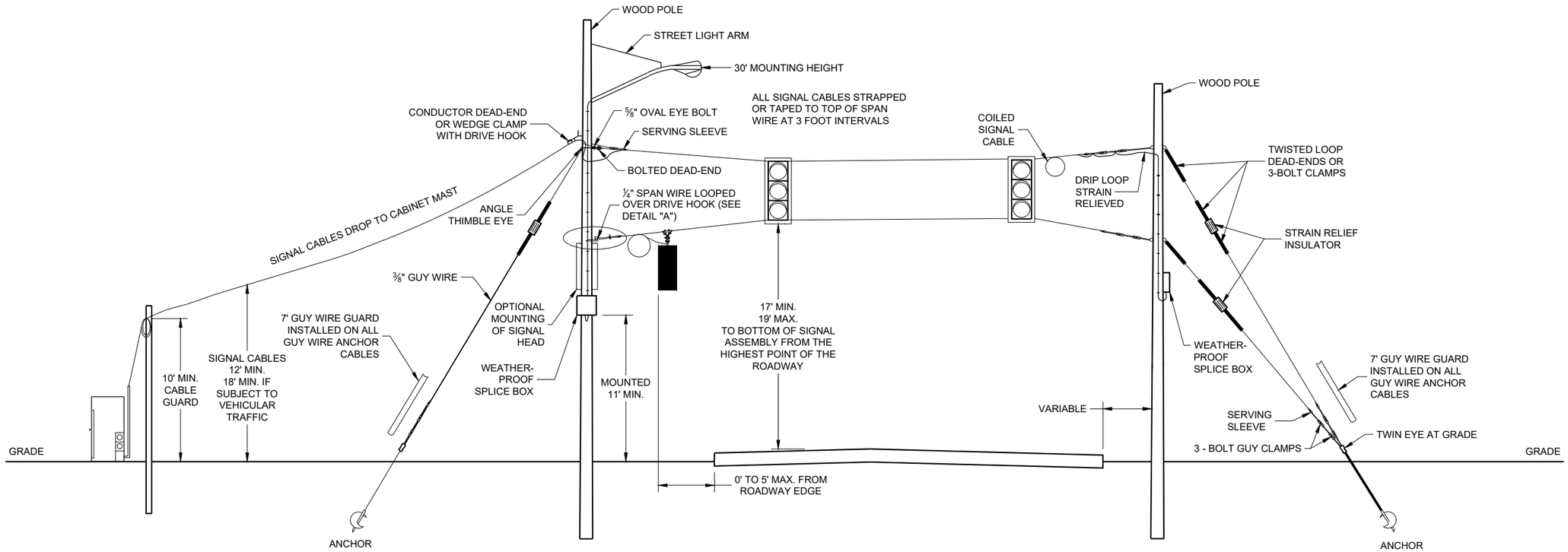


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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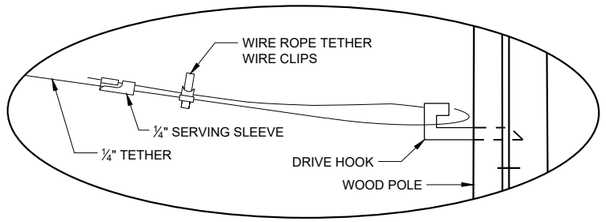
SDD09G01 - 04a

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



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   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
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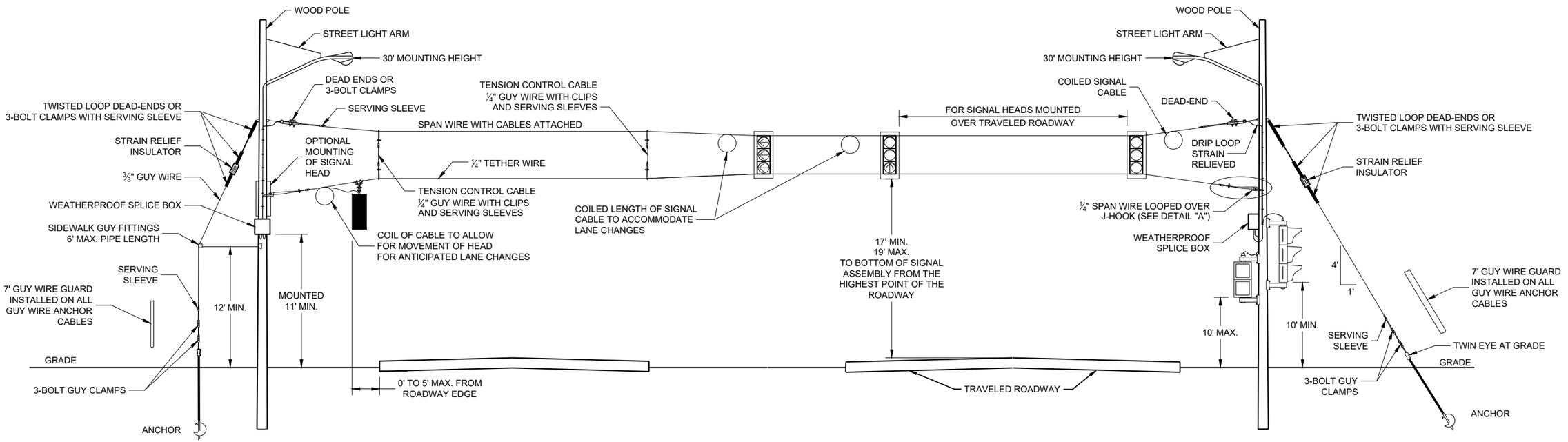
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

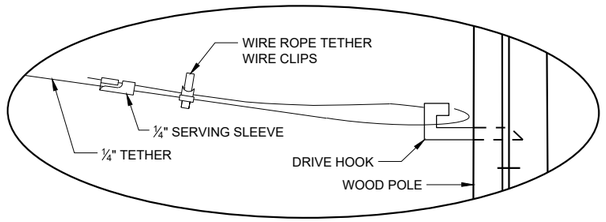
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI
FHWA

SDD09G01 - 04b

SDD09G01 - 04b

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

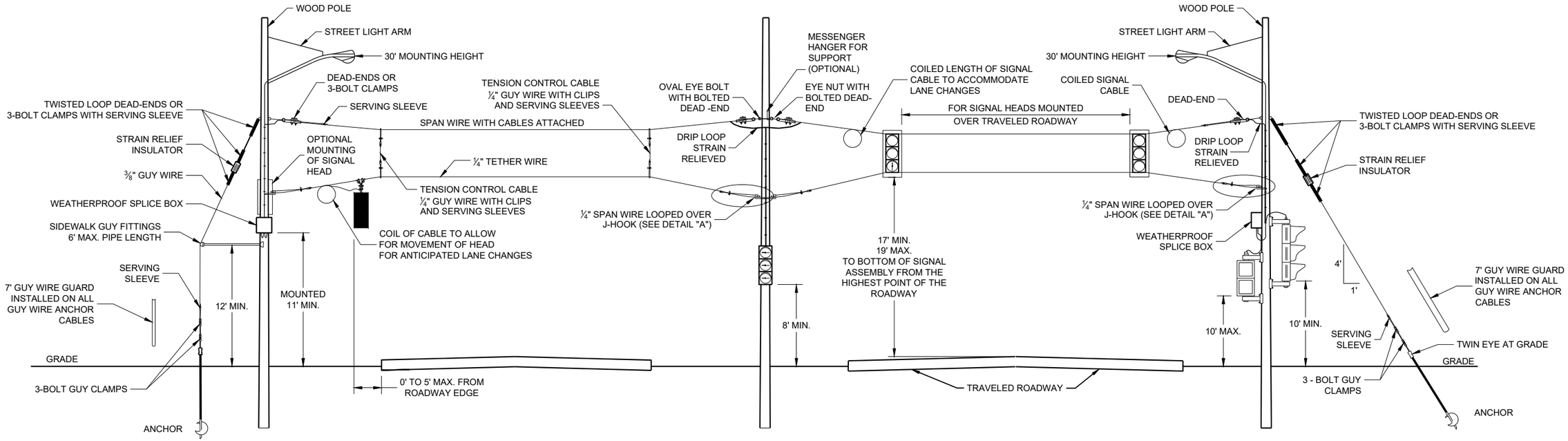


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   - A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   - B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   - C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   - D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   - E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
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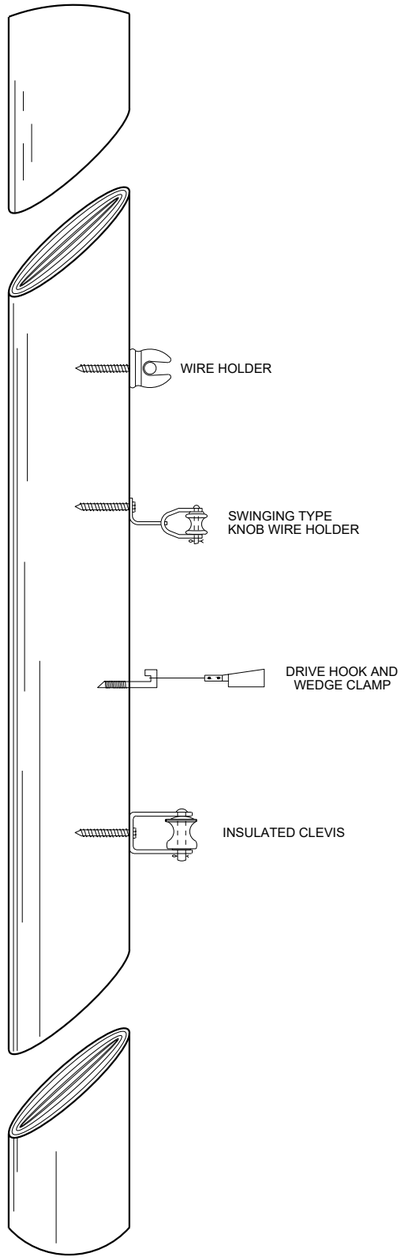
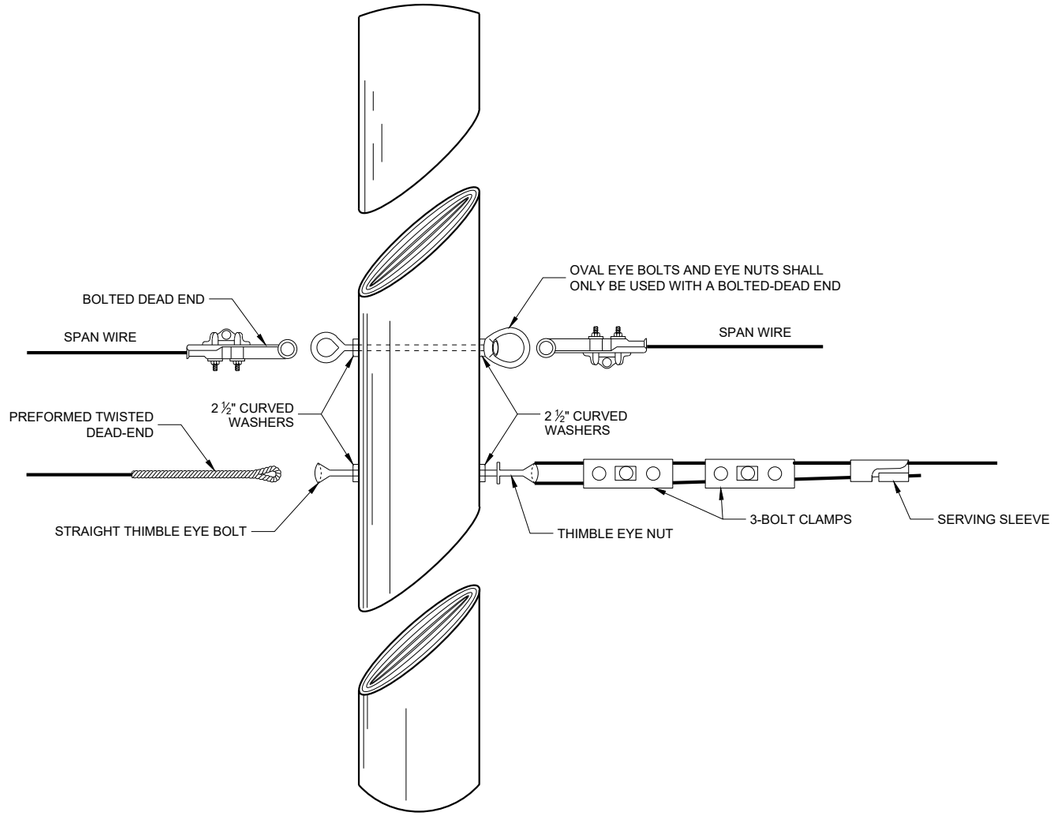
STATE ELECTRICAL ENGI

FHWA

SDD09G01 - 04c





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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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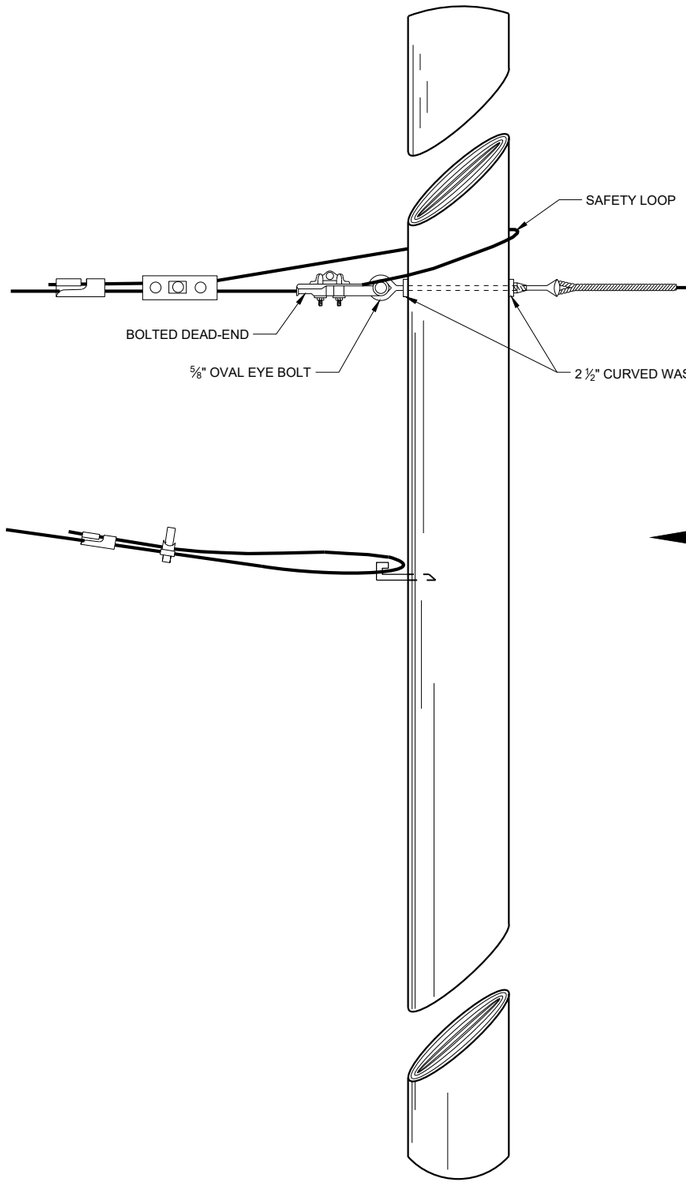
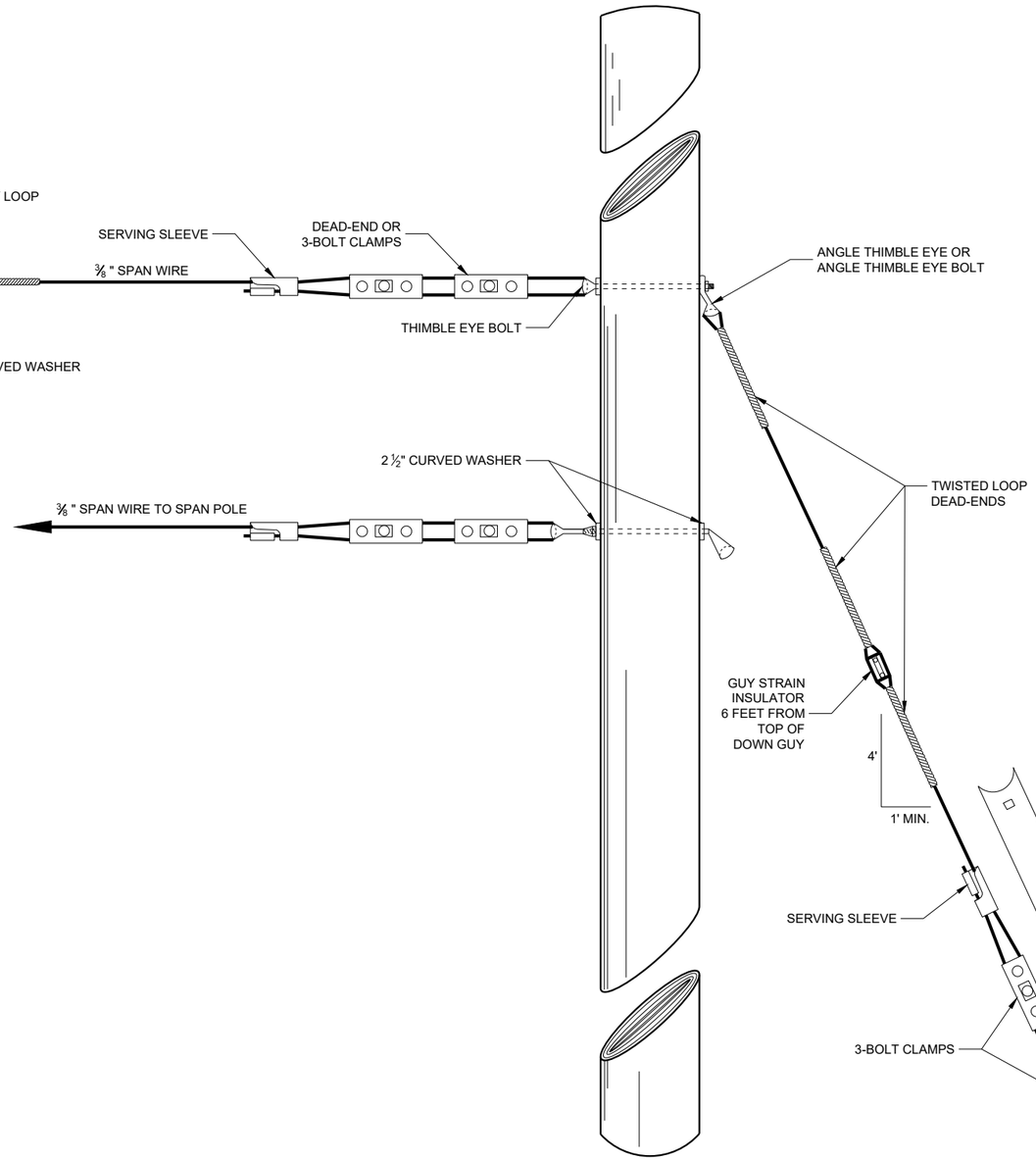
SDD 09G01 - 4d

GENERAL NOTES

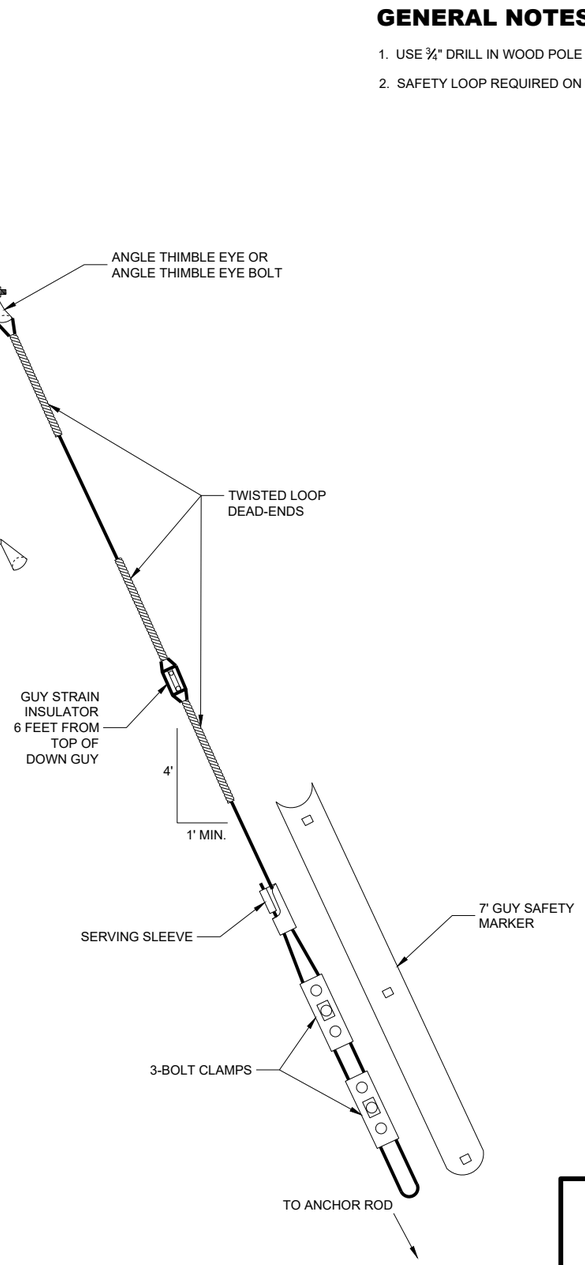
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE



TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE

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ROADWAY STANDARDS DEVE ENGINEER

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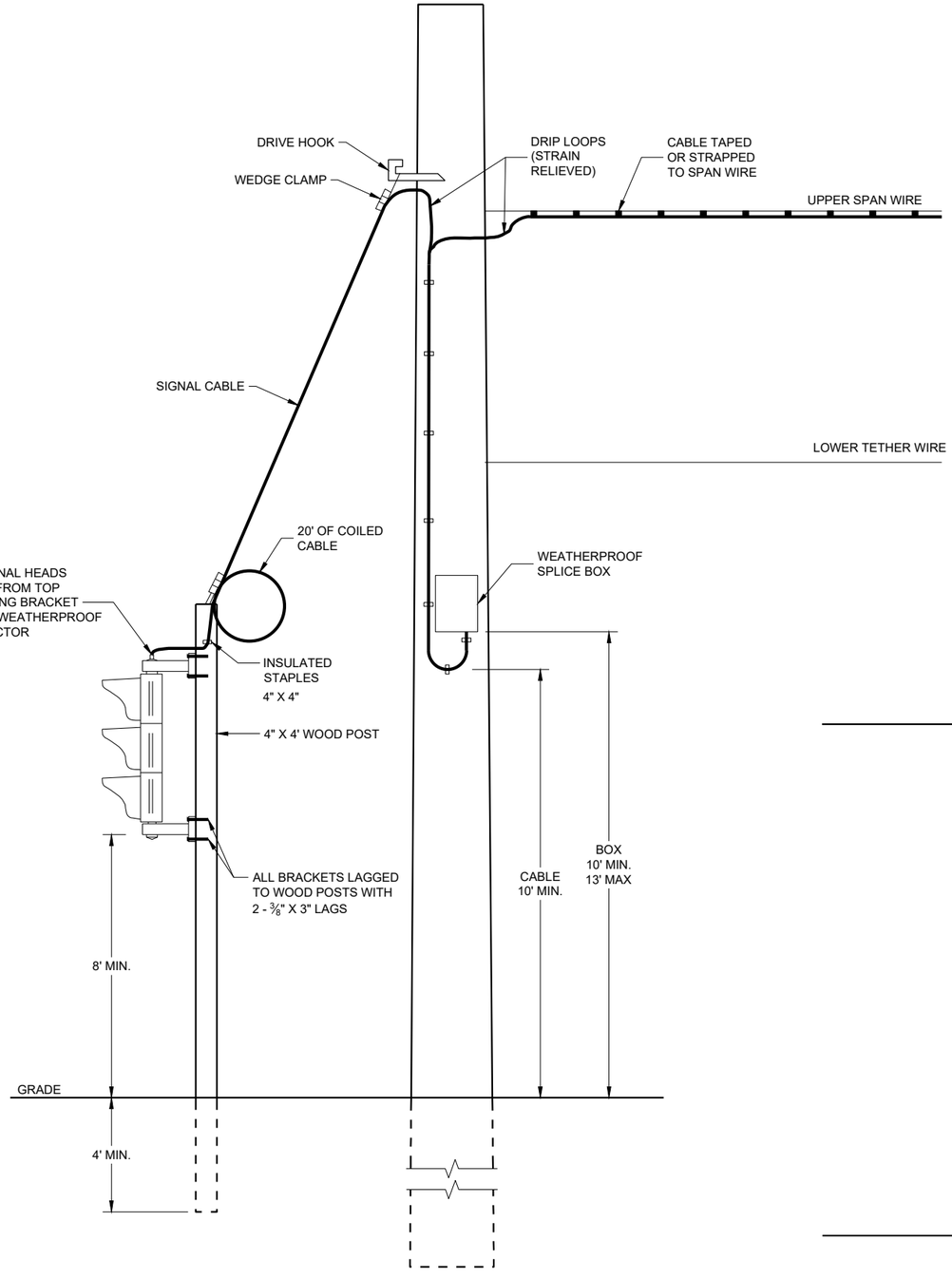
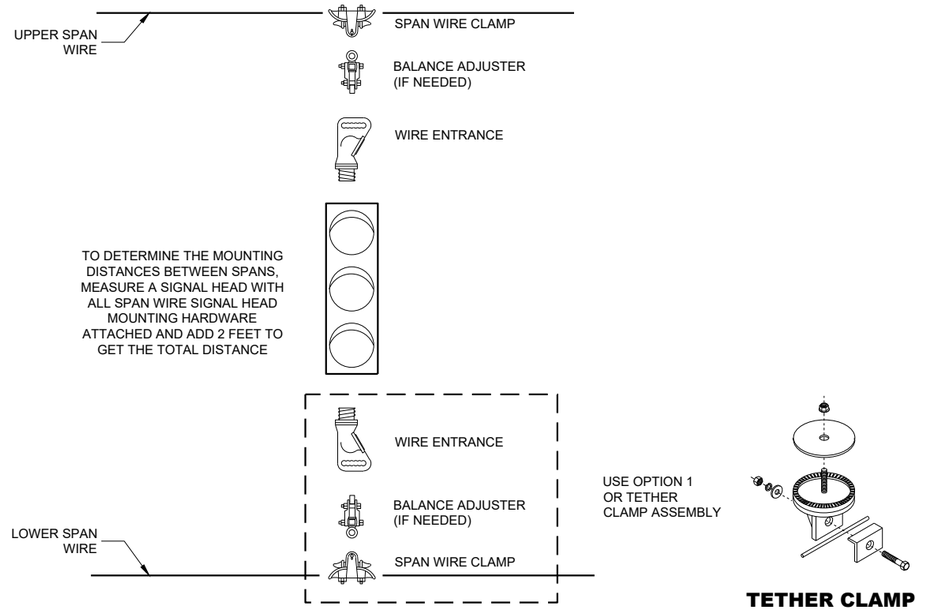


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL

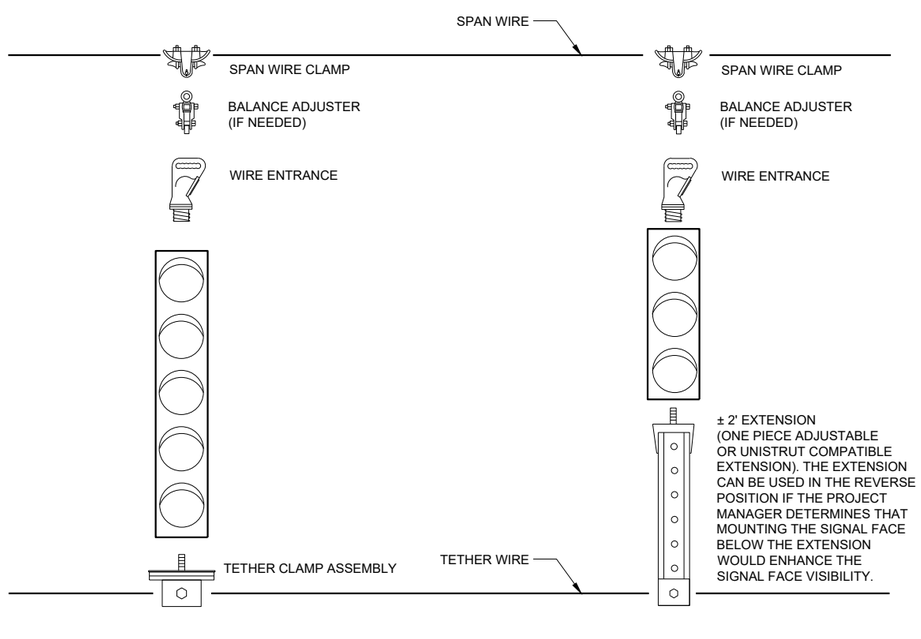


OPTION 1

USE OPTION 1 OR TETHER CLAMP ASSEMBLY

TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

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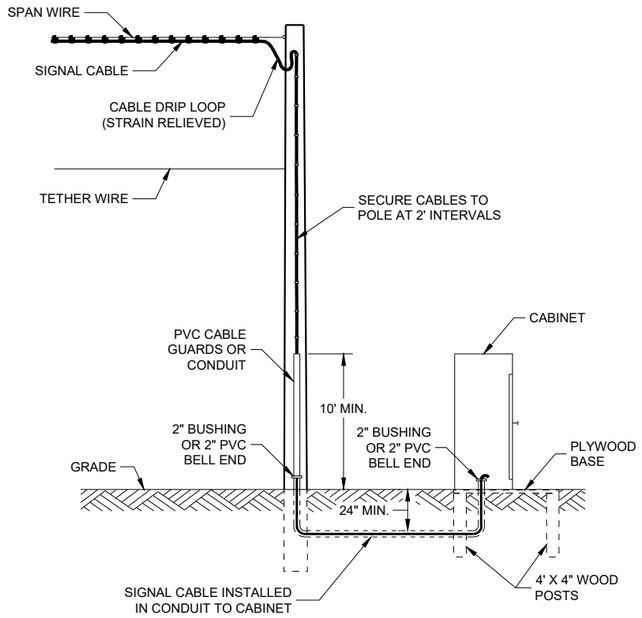
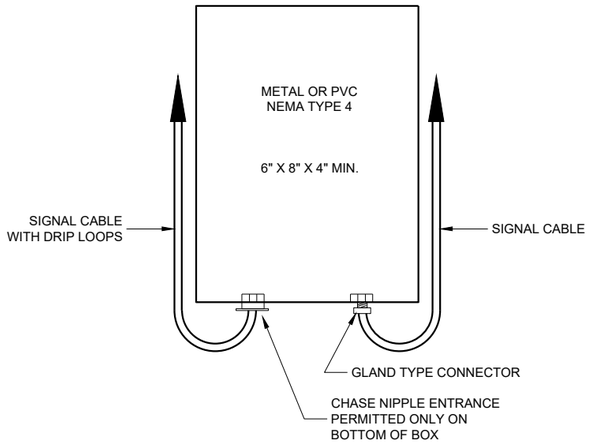
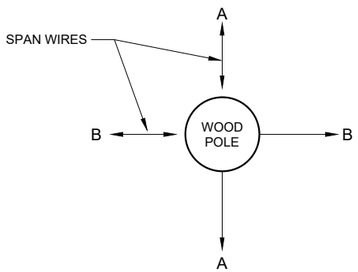
SDD 09G01 - 4f





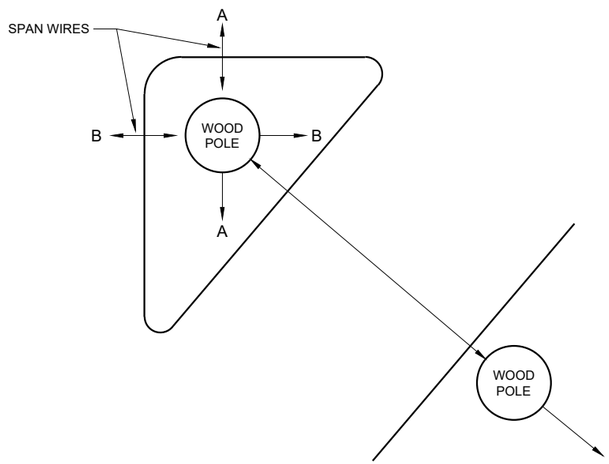
SPLICE BOX

TYPICAL SKID TYPE TEMPORARY

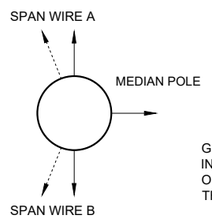


ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM INTERSECTION OR IN OPPOSITE DIRECTION OF THE SPAN LOADING

MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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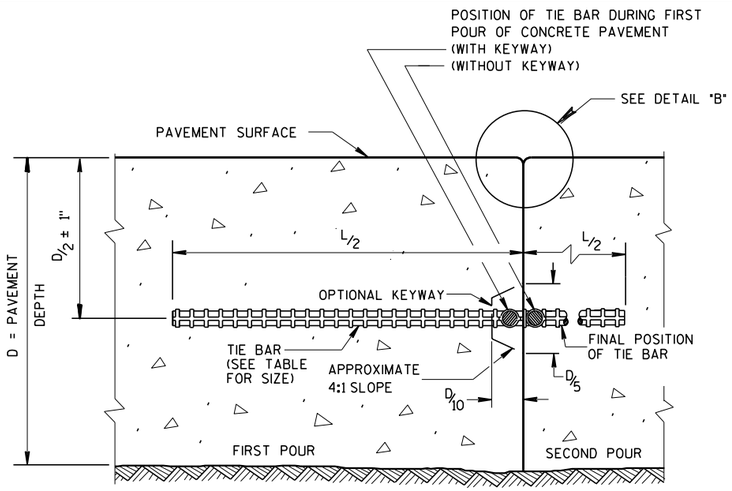
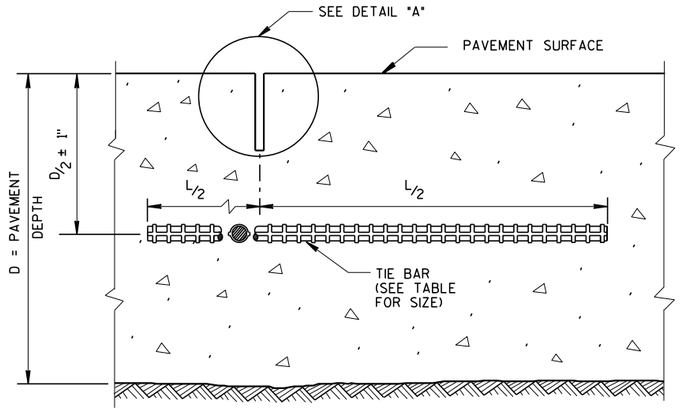
SDD 09G01 - 4g



CONSTRUCTION JOINT



SAWED JOINT

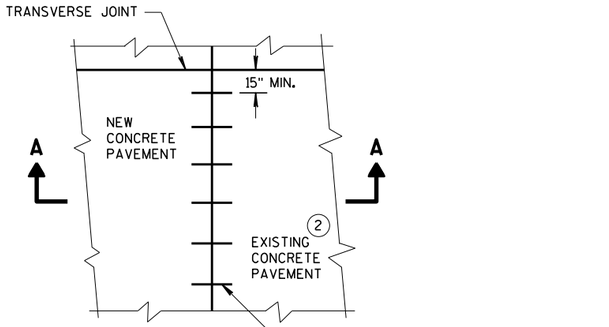
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

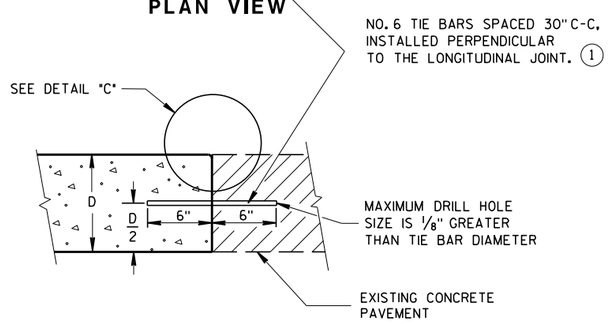
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

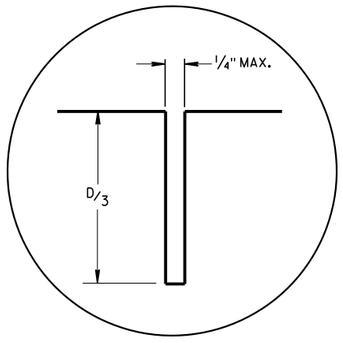


PLAN VIEW

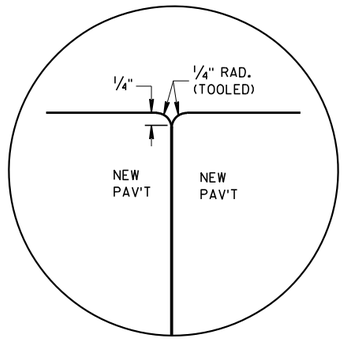


SECTION A-A

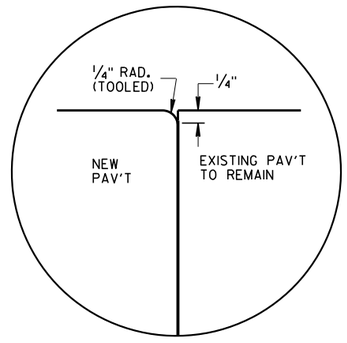
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



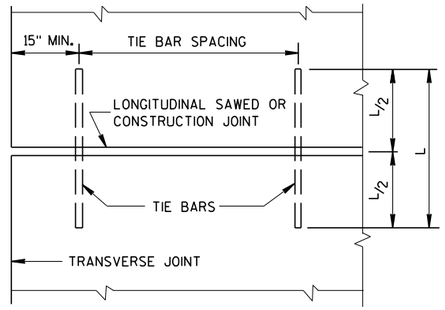
DETAIL "C"

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, PE — PAVEMENT SUPE
FHWA

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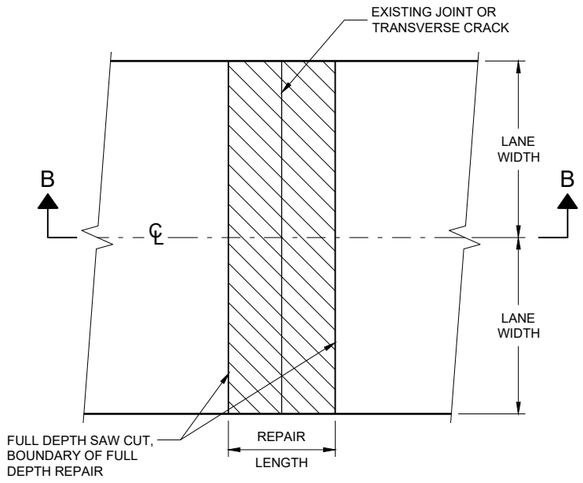
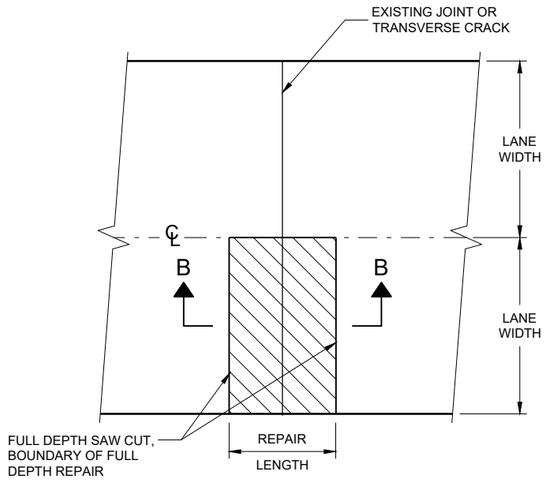
S.D.D. 13 C 1-19



PLAN VIEW
DOUBLE LANE REPAIR



PLAN VIEW
SINGLE LANE REPAIR

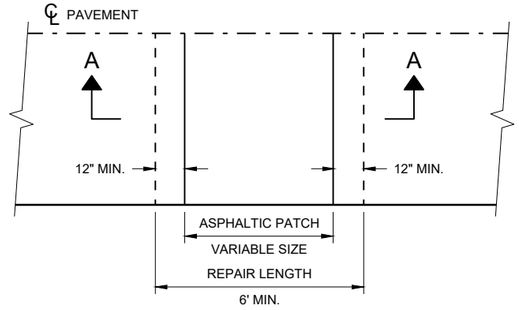
GENERAL NOTES

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 A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

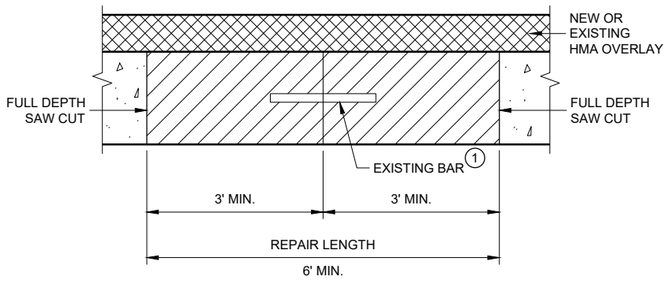
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.

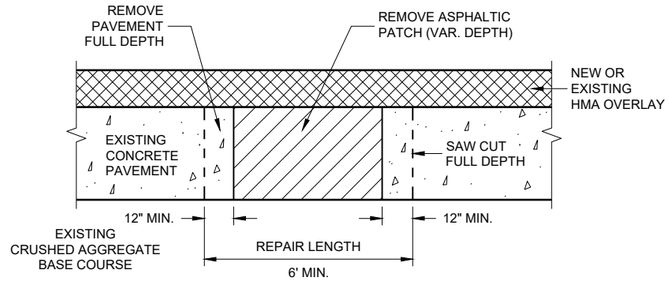


PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B
CONCRETE REMOVAL



SECTION A - A

HMA PATCH REMOVAL

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 310

SDD 13C14 - 07a

SDD 13C14 - 07a

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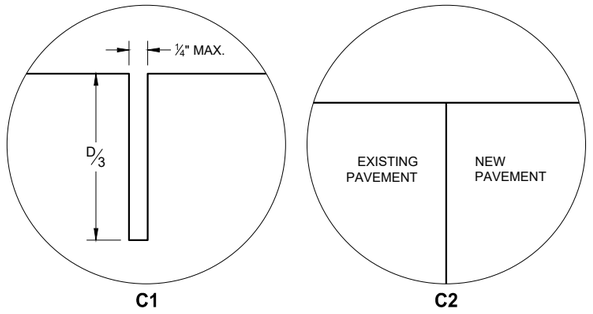
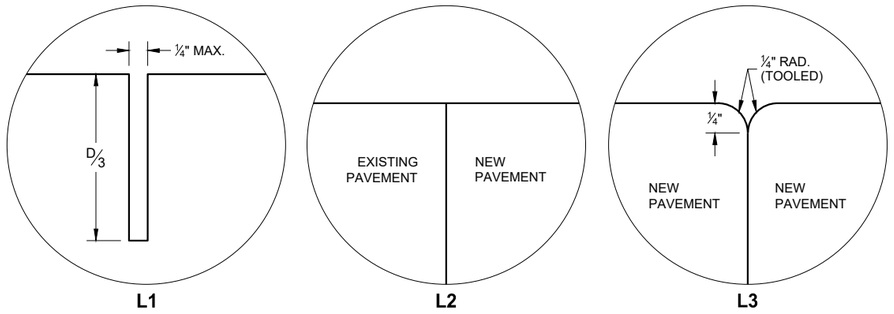
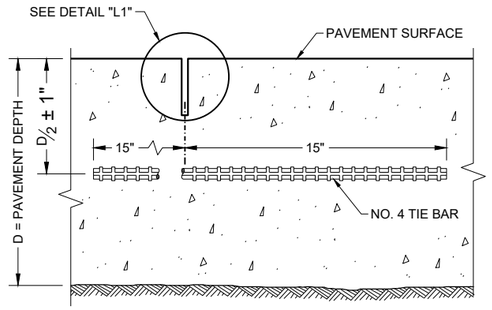


TRANSVERSE JOINTS

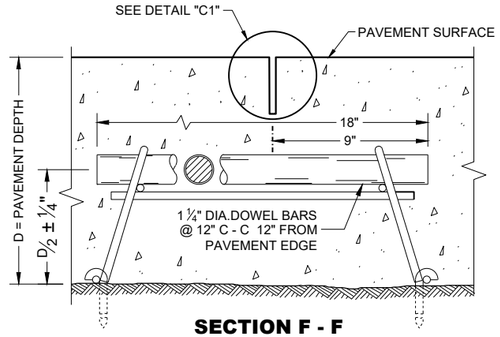


LONGITUDINAL JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

CONTRACTION JOINT

GENERAL NOTES

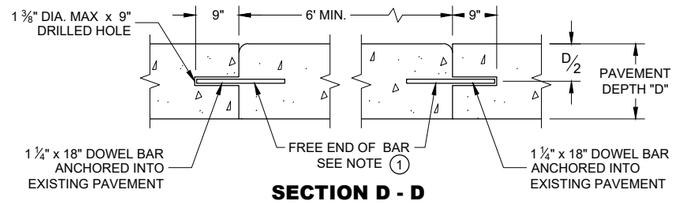
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

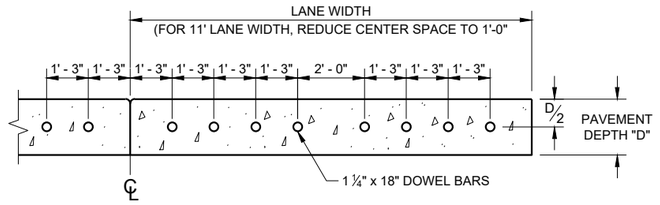
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT O EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

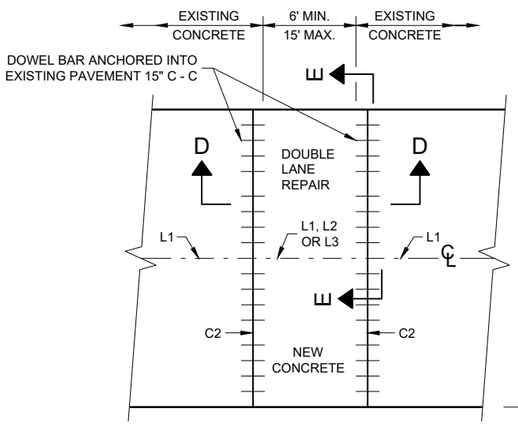


SECTION D - D



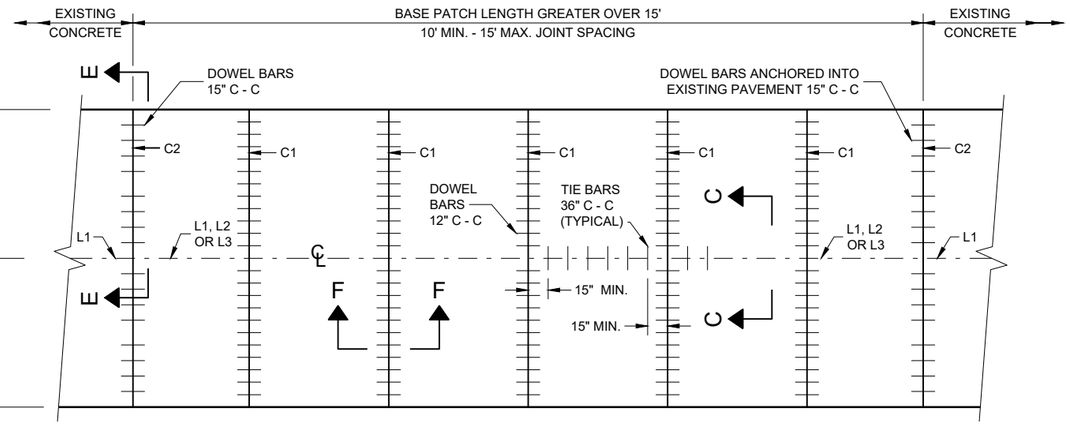
SECTION E - E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

MULTILANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTILANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 311

SDD 13C14 - 07b

SDD 13C14 - 07b

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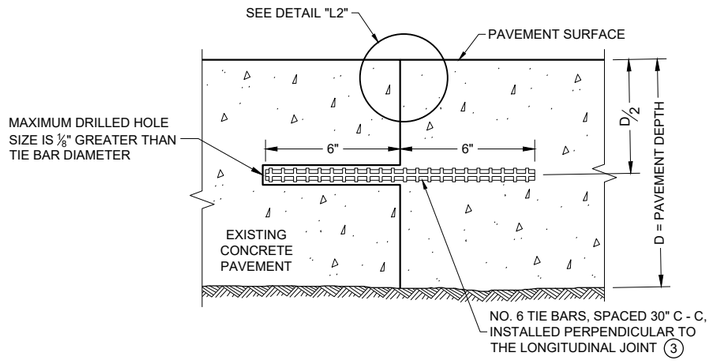
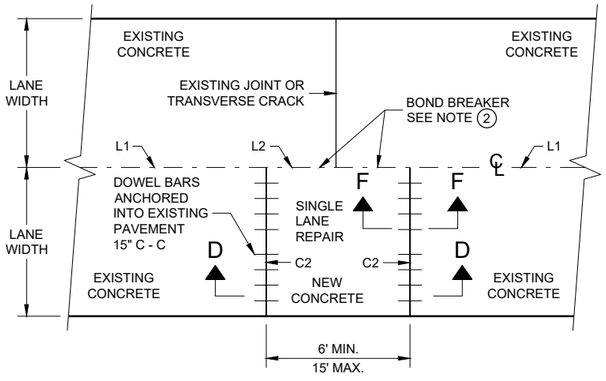


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

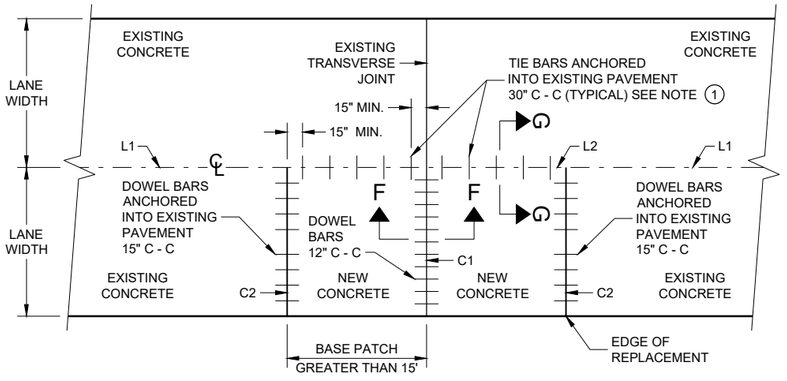
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS 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.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISO

FHWA

SDD 13C14 - 07c

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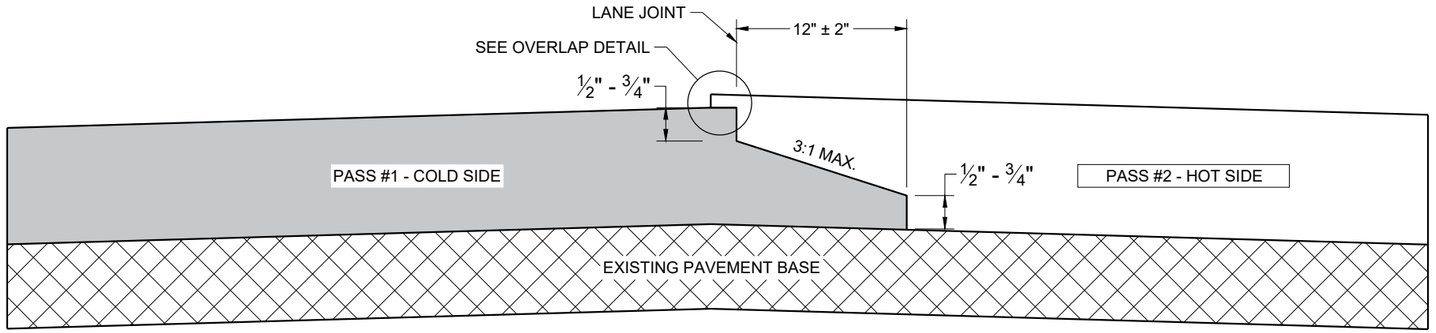
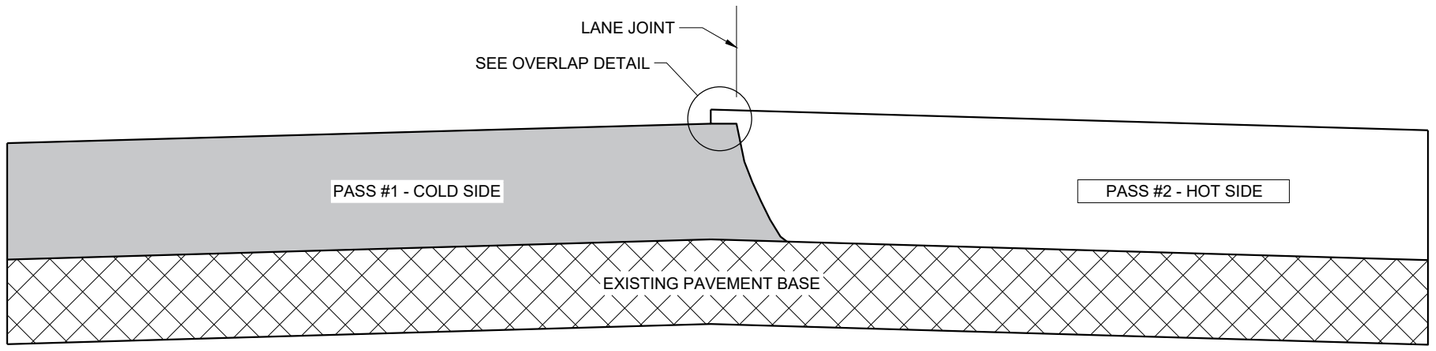
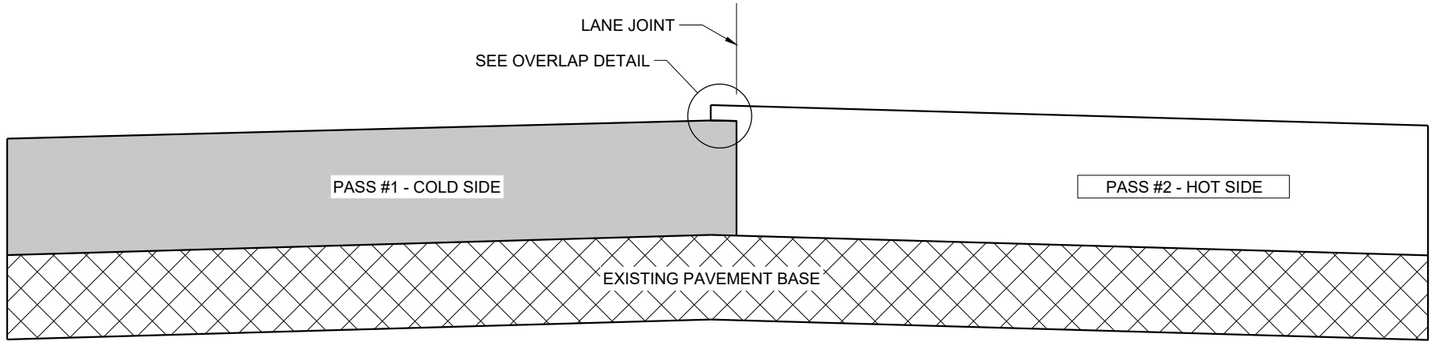
SDD 13C14 - 07c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

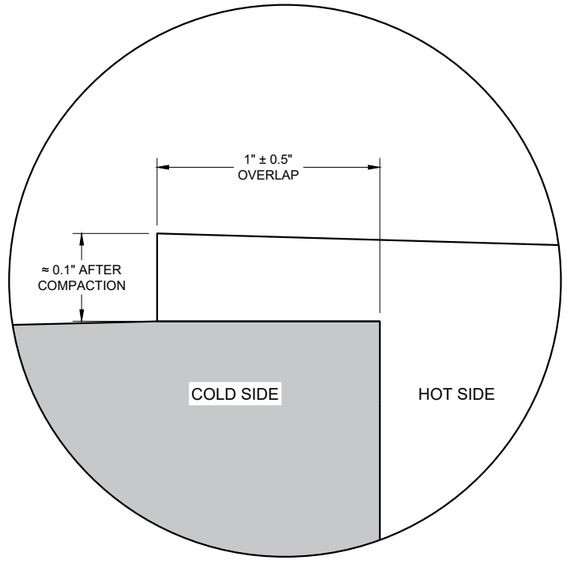
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

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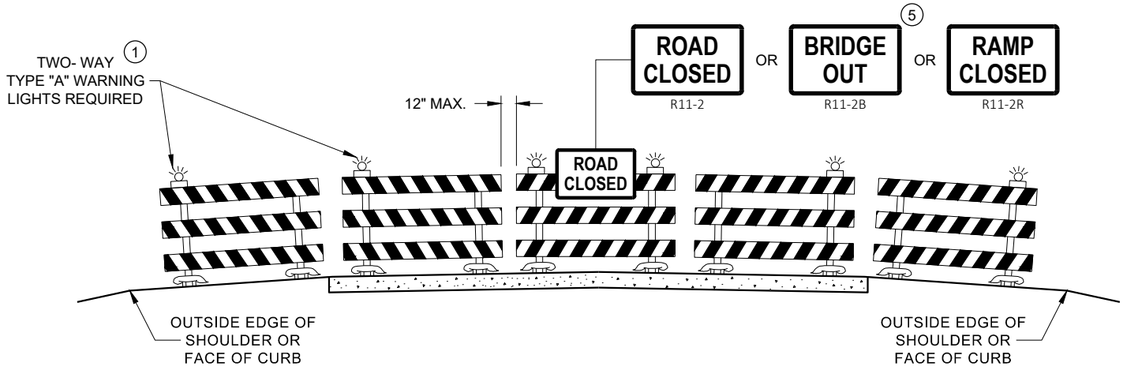
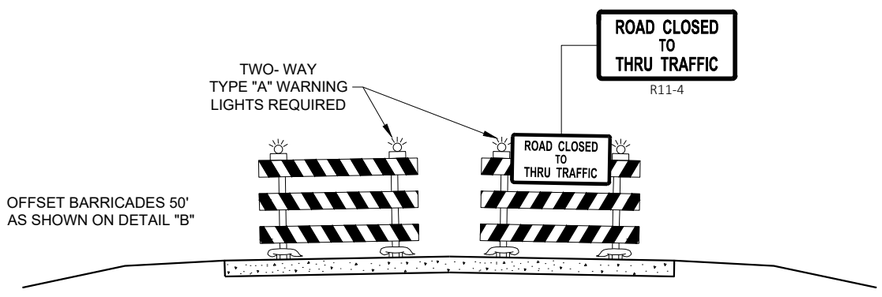
SDD 13C19 - 03



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 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, 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 18" 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 CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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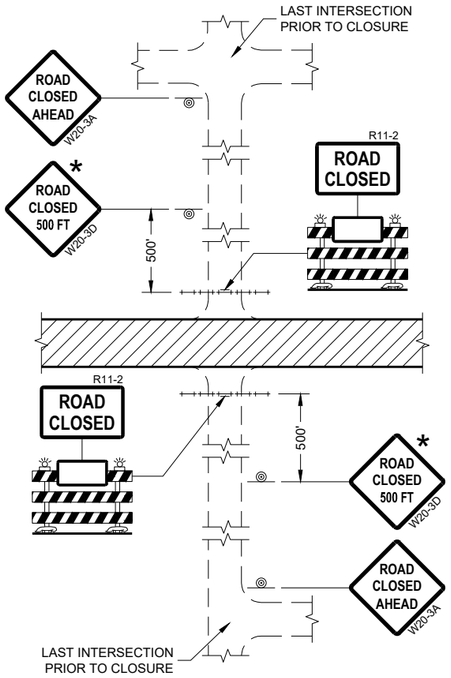
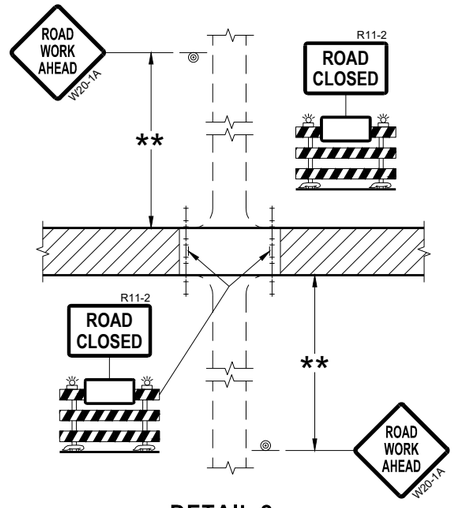
SDD 15C02 - 09b



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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 (500 FEET DESIRABLE) 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 REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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.

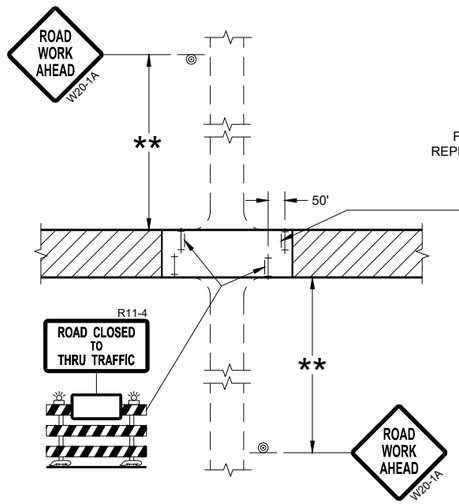
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

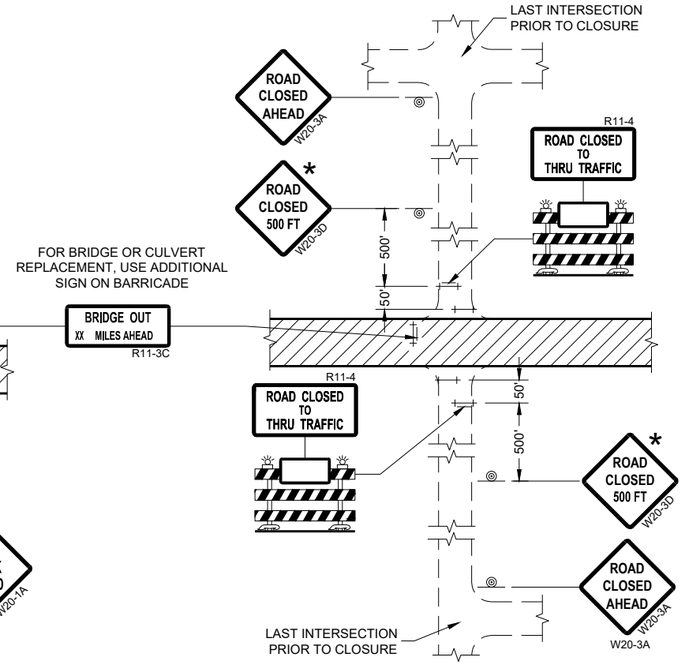
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

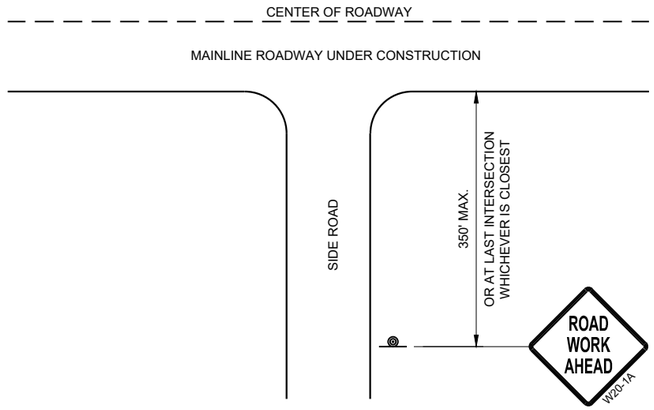
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 REESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



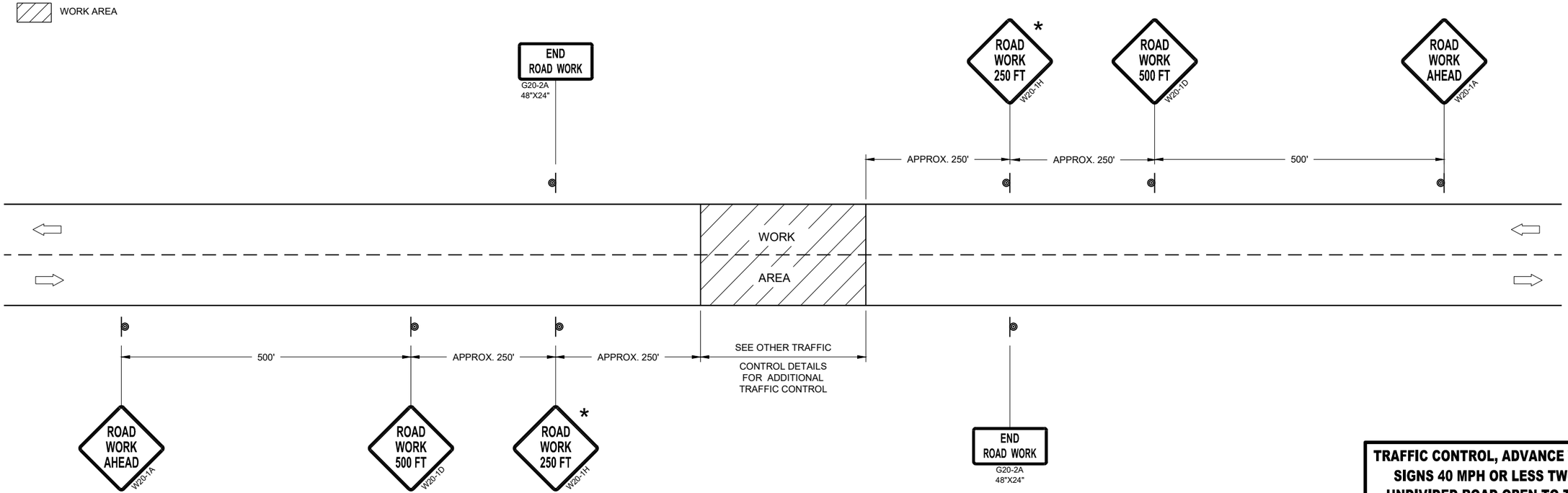
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

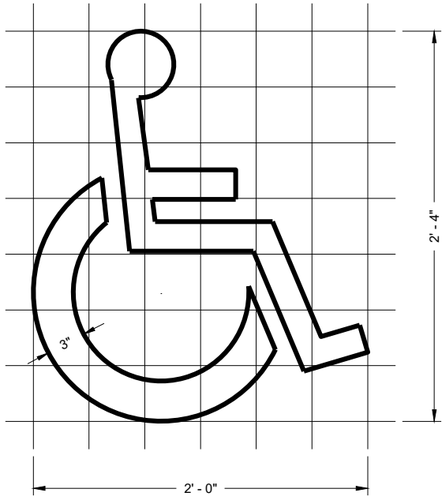
FHWA

6

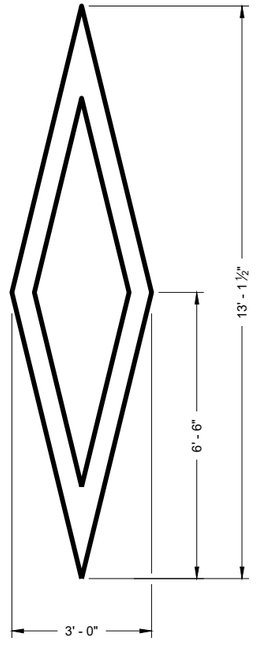
SDD 15C05 - 05

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

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SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

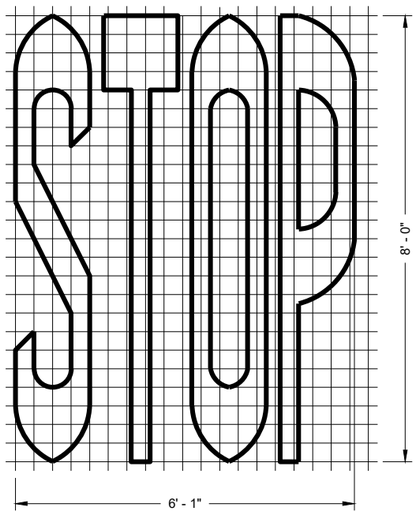
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

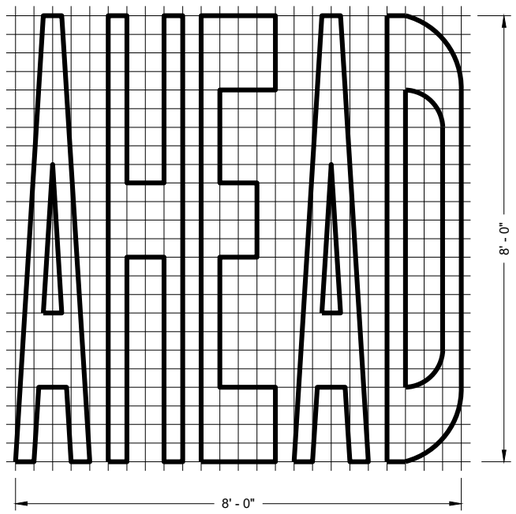
APPROVED

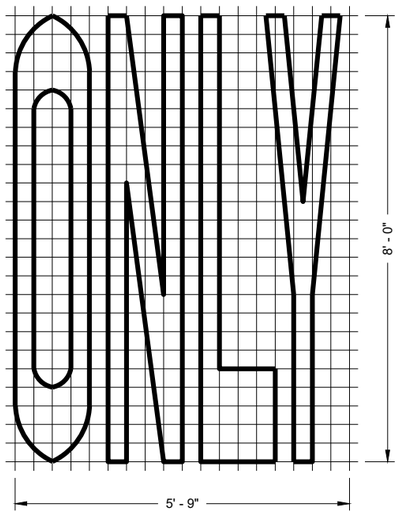
November 2019
DATE

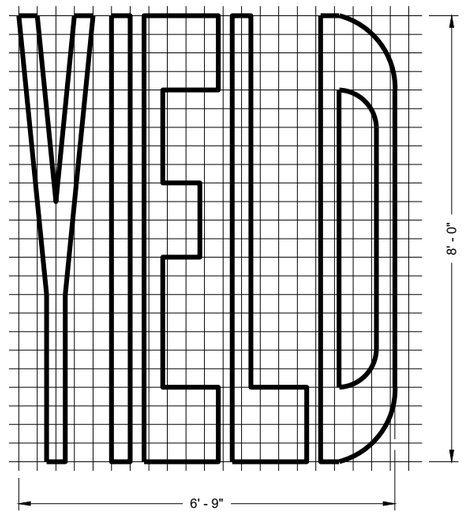
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

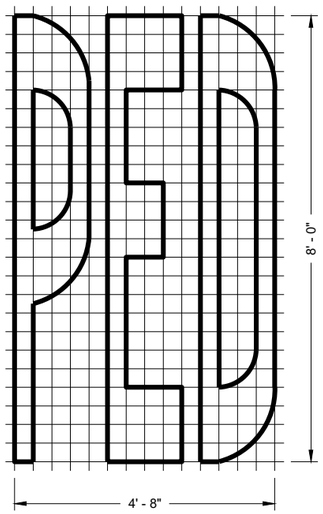
FHWA

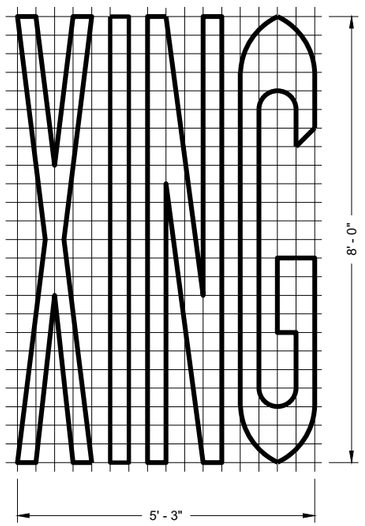


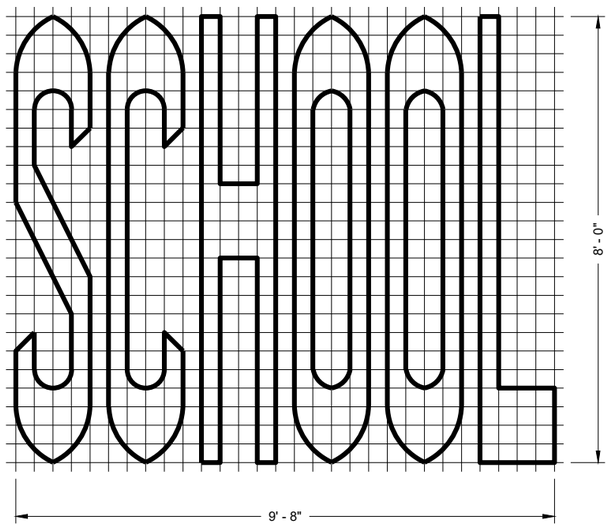




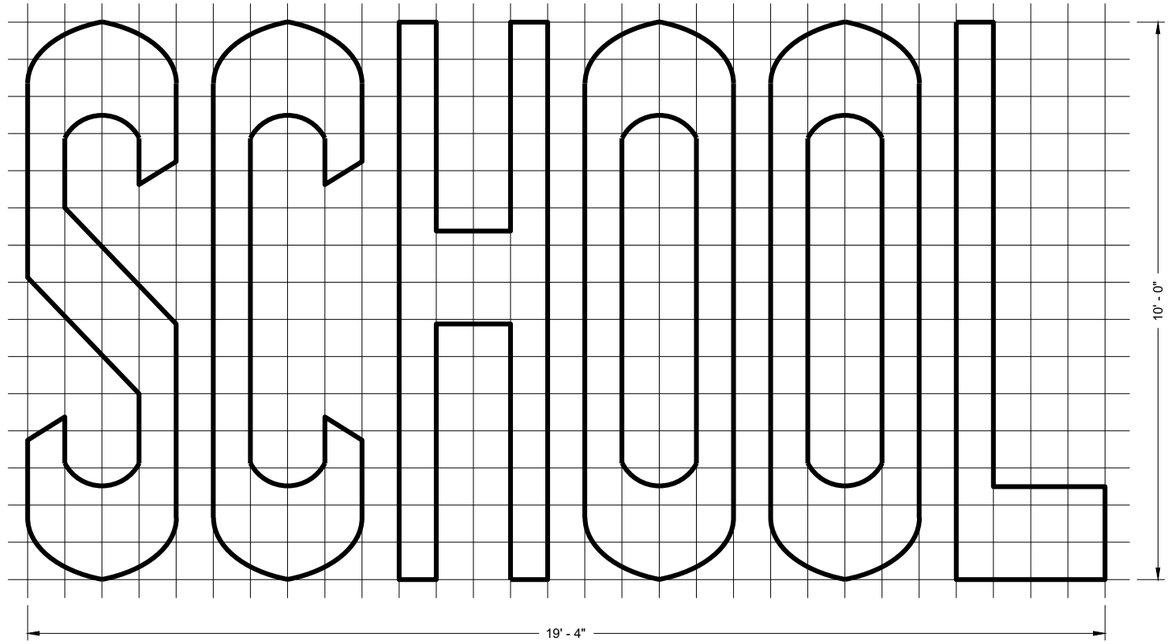








SINGLE LANE



TWO - LANE

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 WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

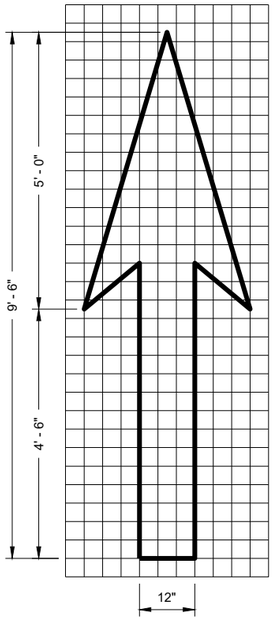
6

SDD 15C07 - 15b

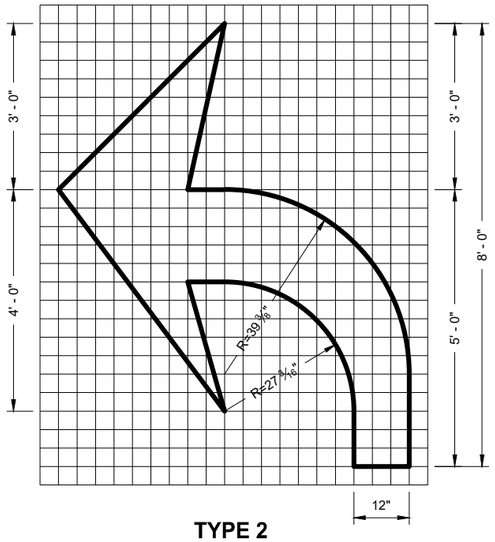
SDD 15C07 - 15b

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 1



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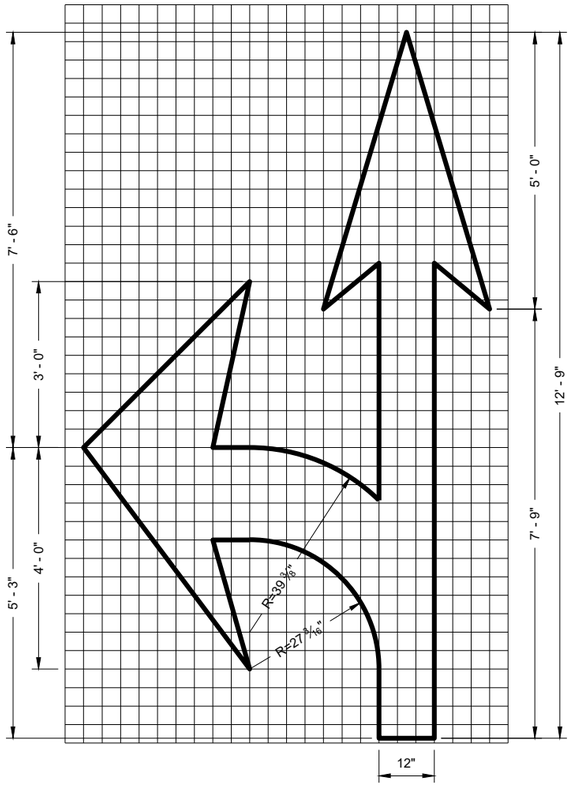

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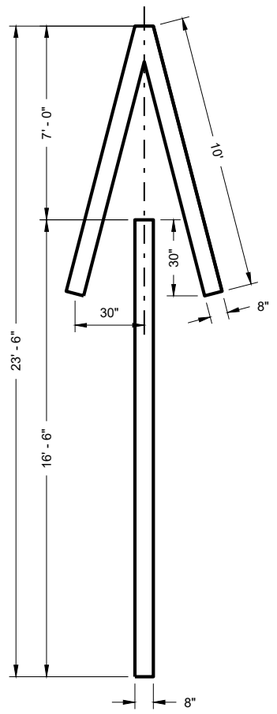

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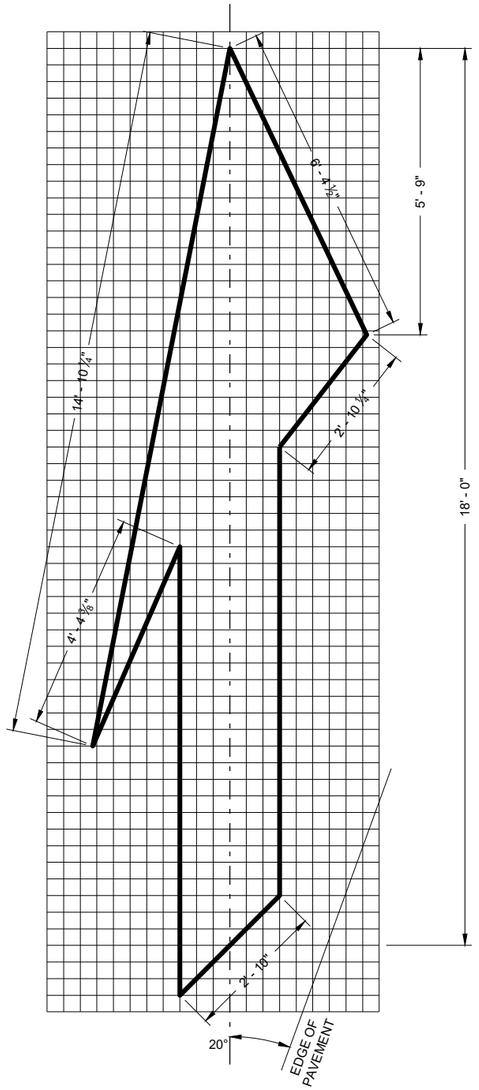
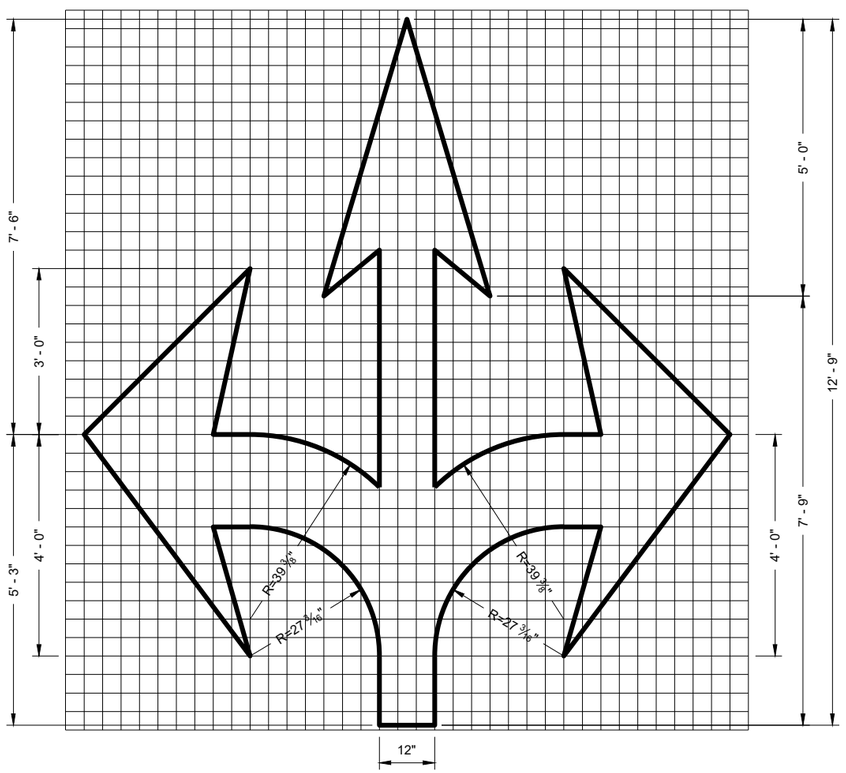
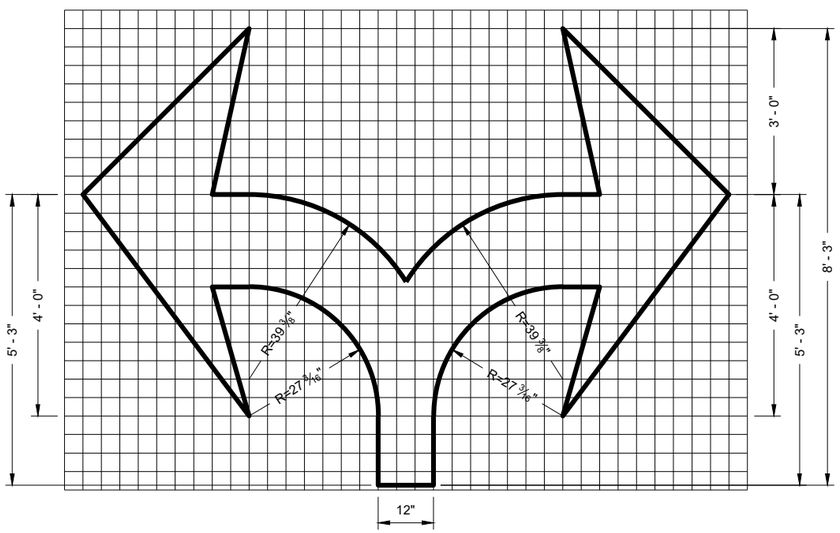


TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

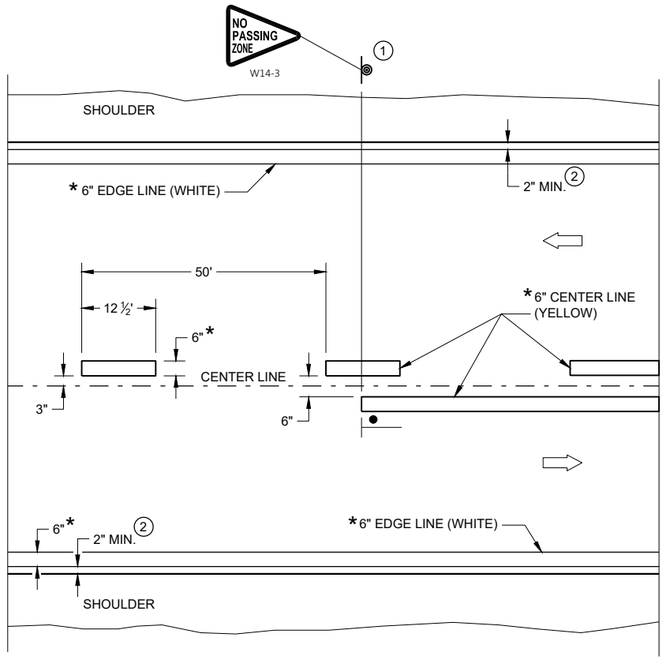
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

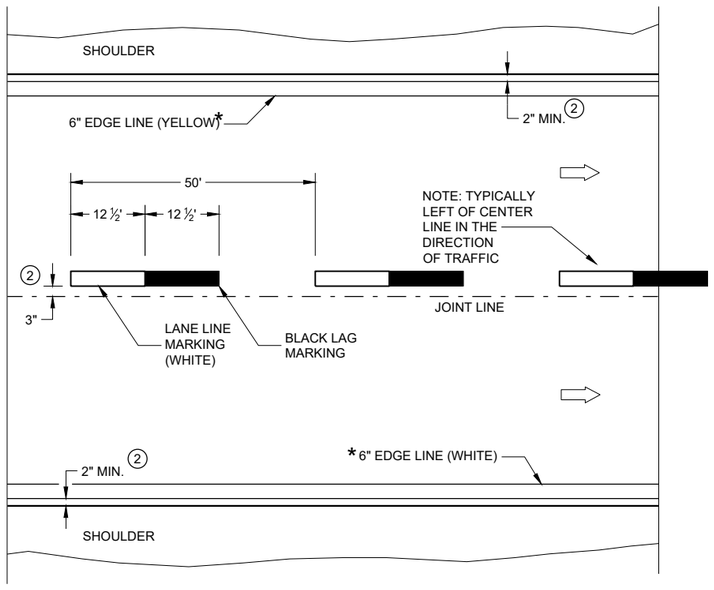
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

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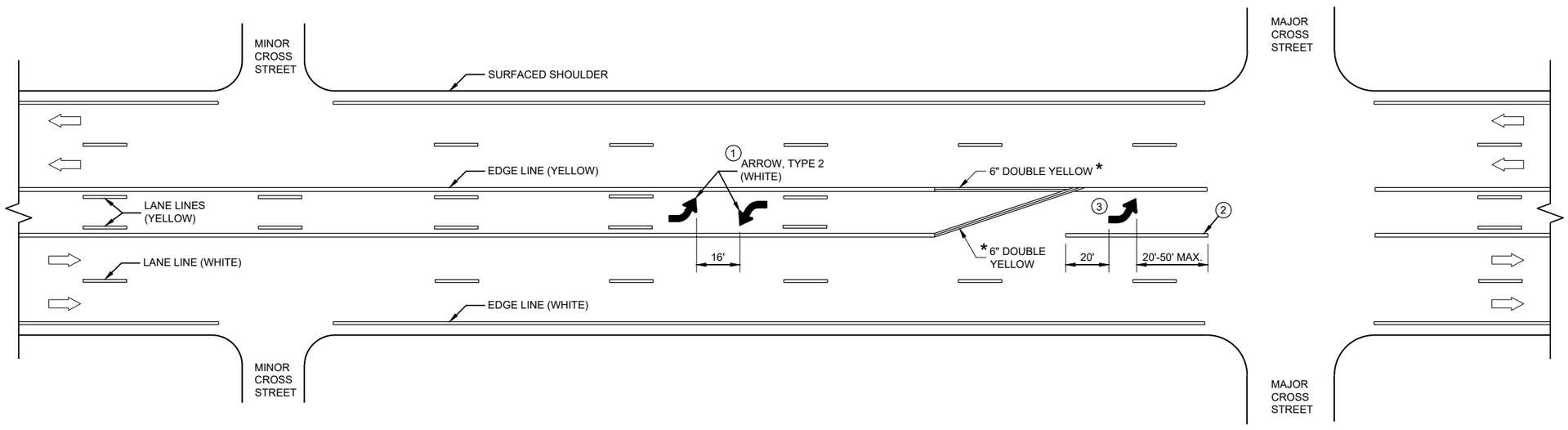
SDD 15C08-23a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

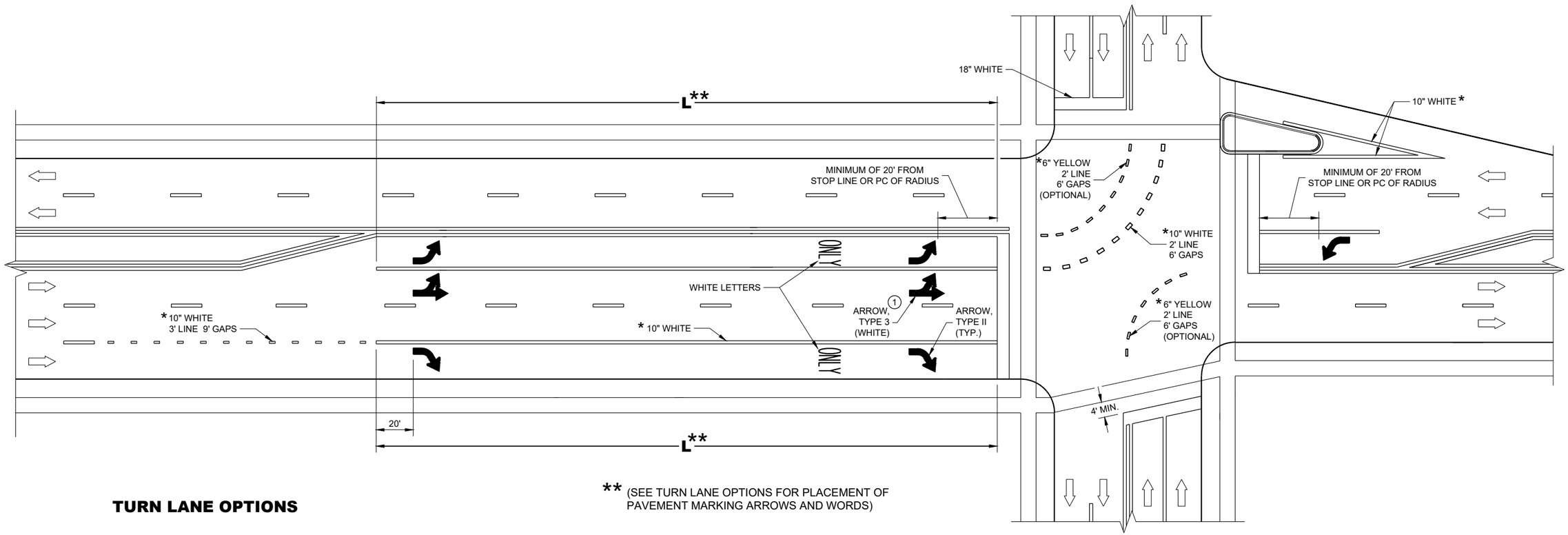
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 321

6

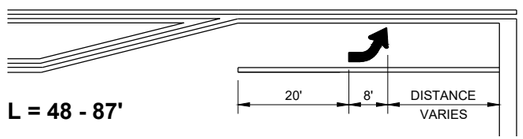
SDD 15C08-23c



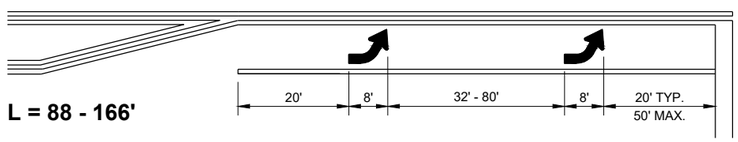
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

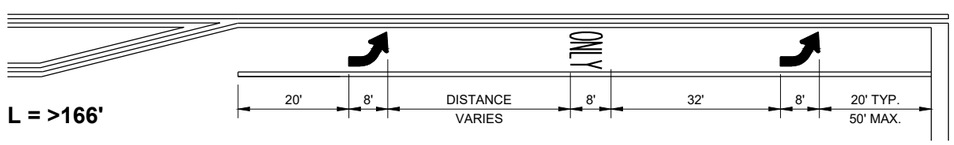
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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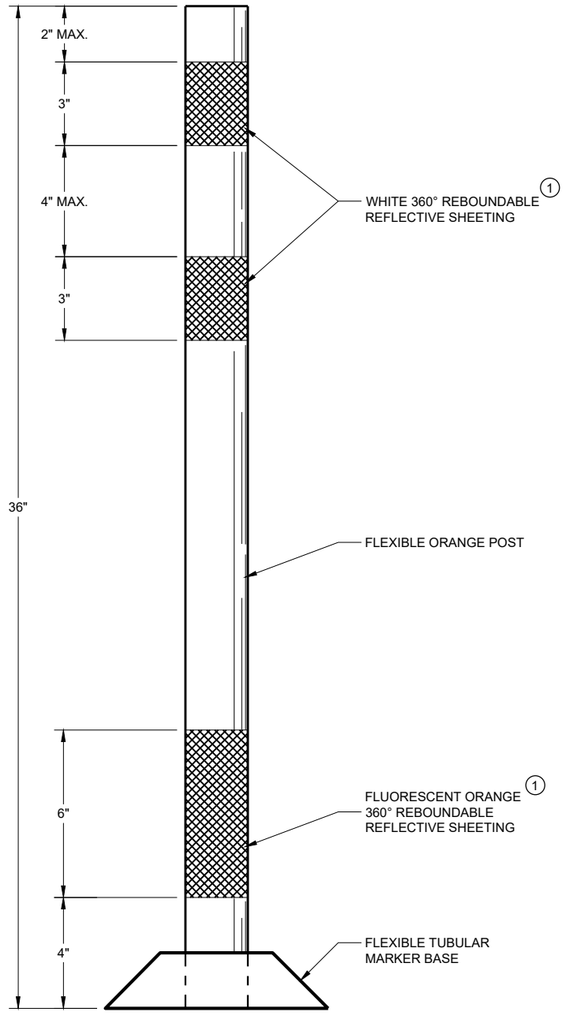
SDD 15C08-23d

SDD 15C08-23d



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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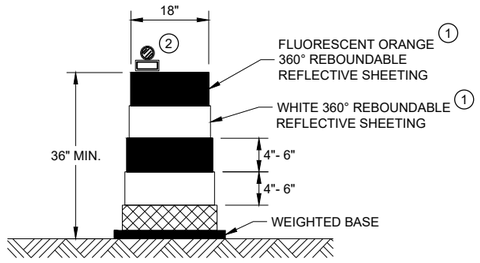
SDD 15C11 - 10a

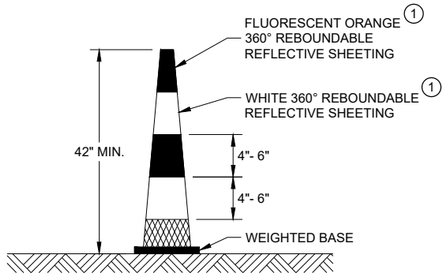
GENERAL NOTES

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.



DRUM

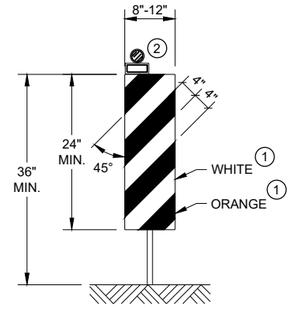
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

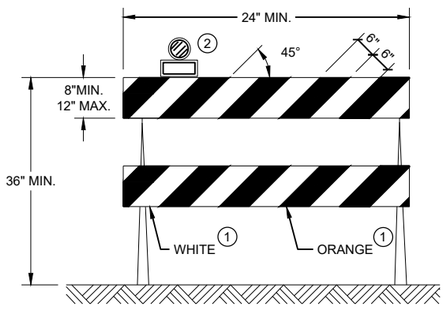
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



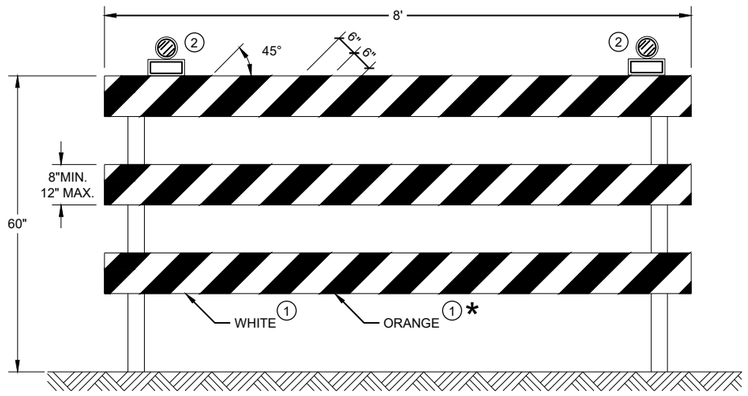
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III 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
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 10b

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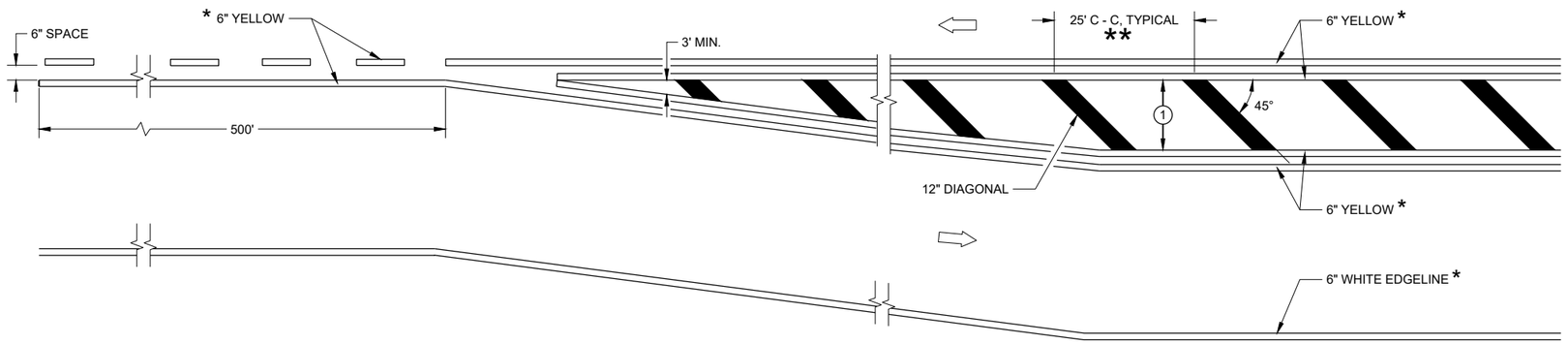
SDD 15C11 - 10b



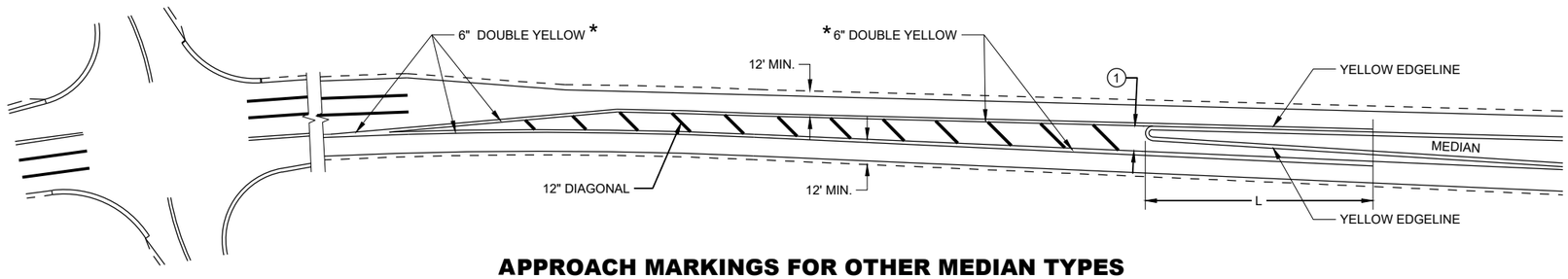
MEDIAN ISLAND DETAIL

GENERAL NOTES

(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

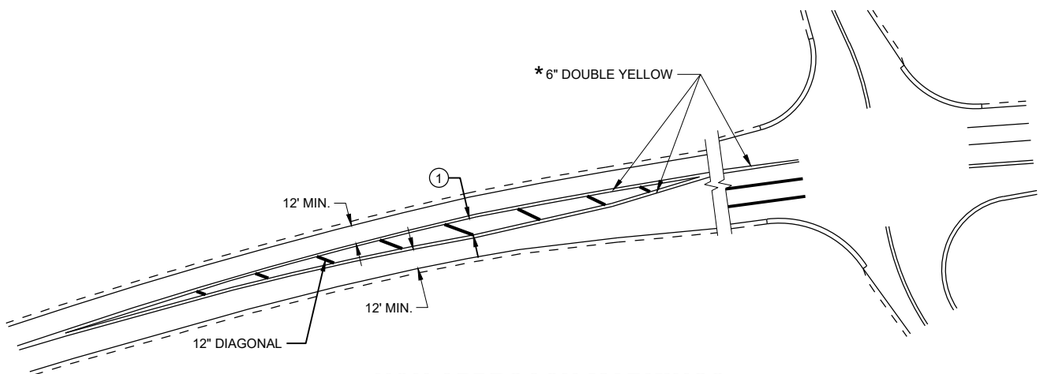
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

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SDD 15C18-08a

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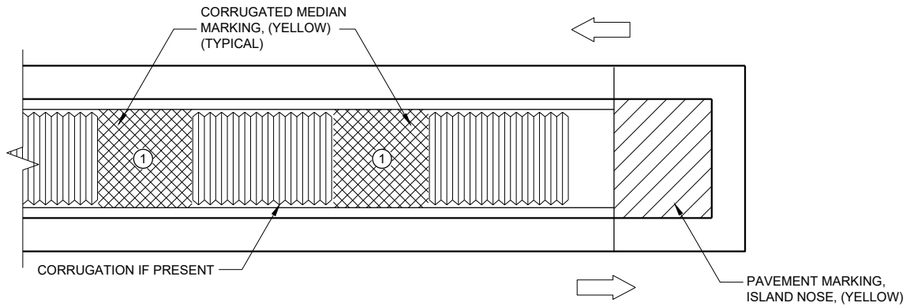
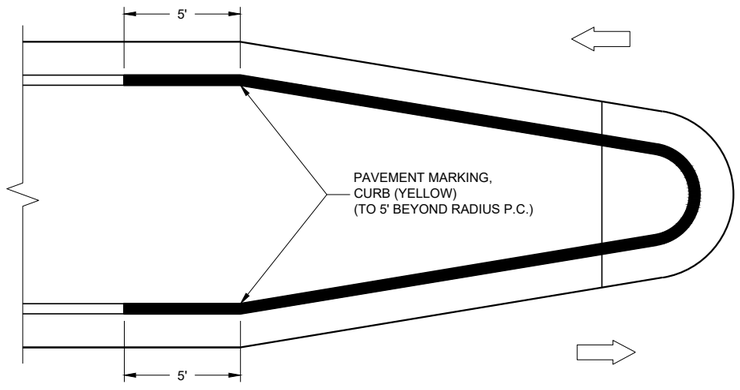
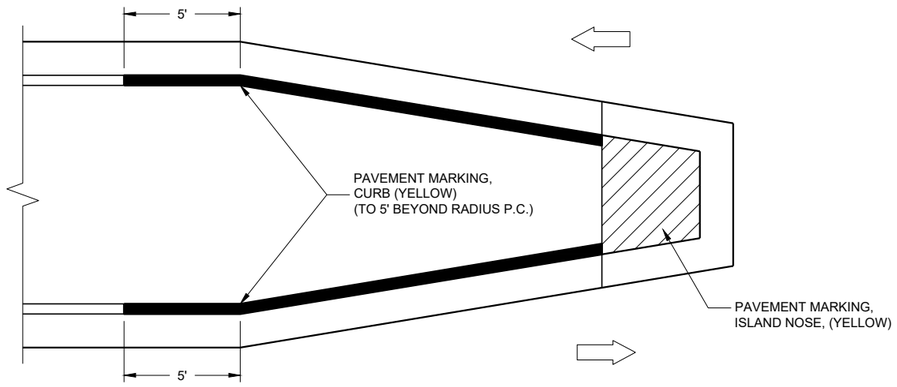
SDD 15C18-08a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAR ENGINEER

FHWA

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SDD 15C18-08b

6

SDD 15C18-08b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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.

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 REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

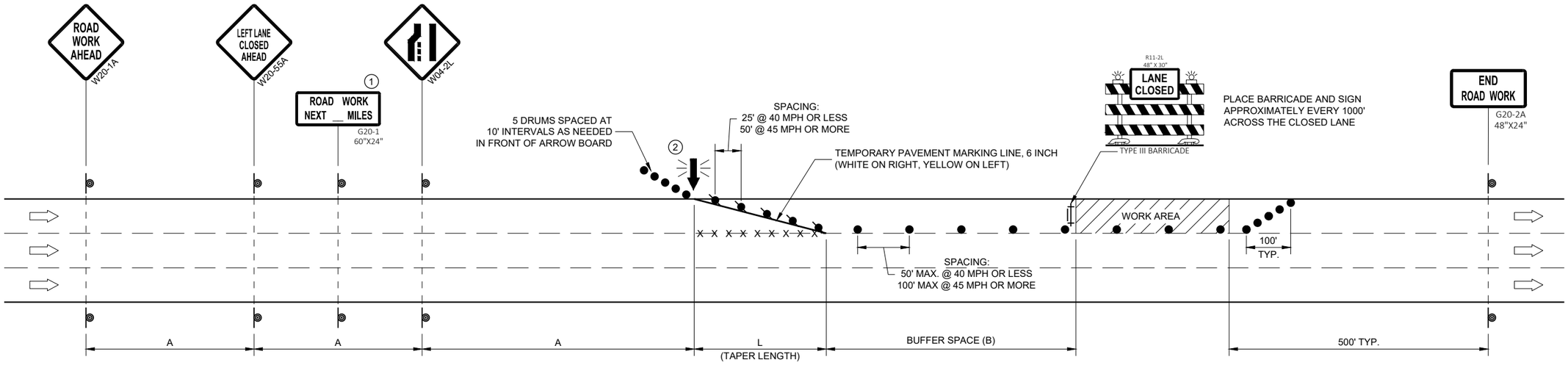
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-07a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

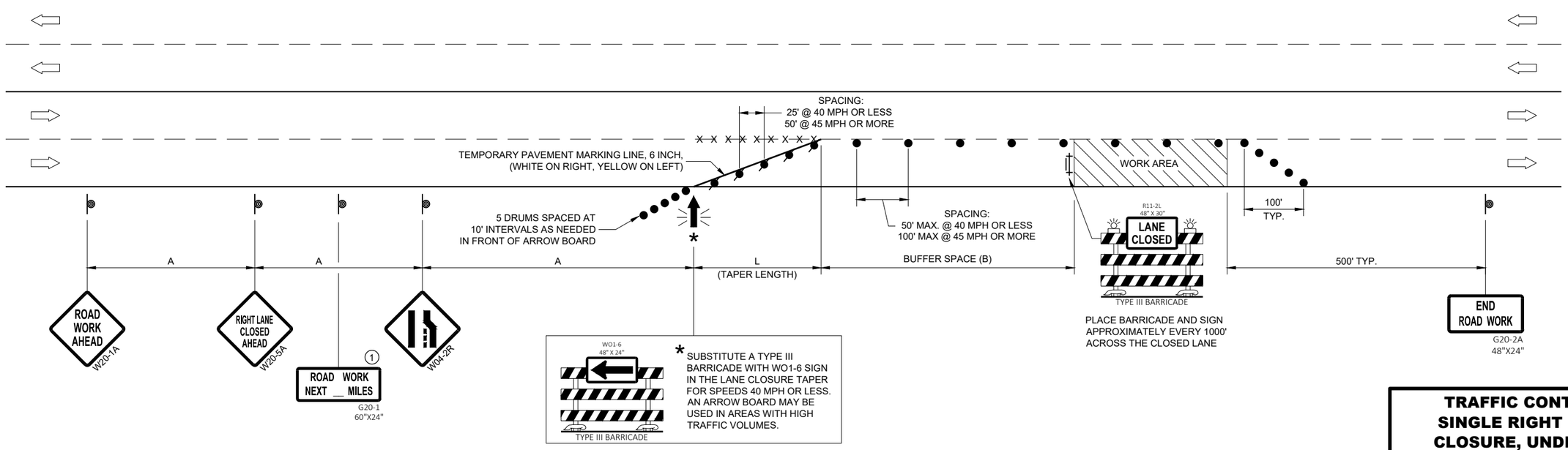
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-07b
SDD 15D20-07b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

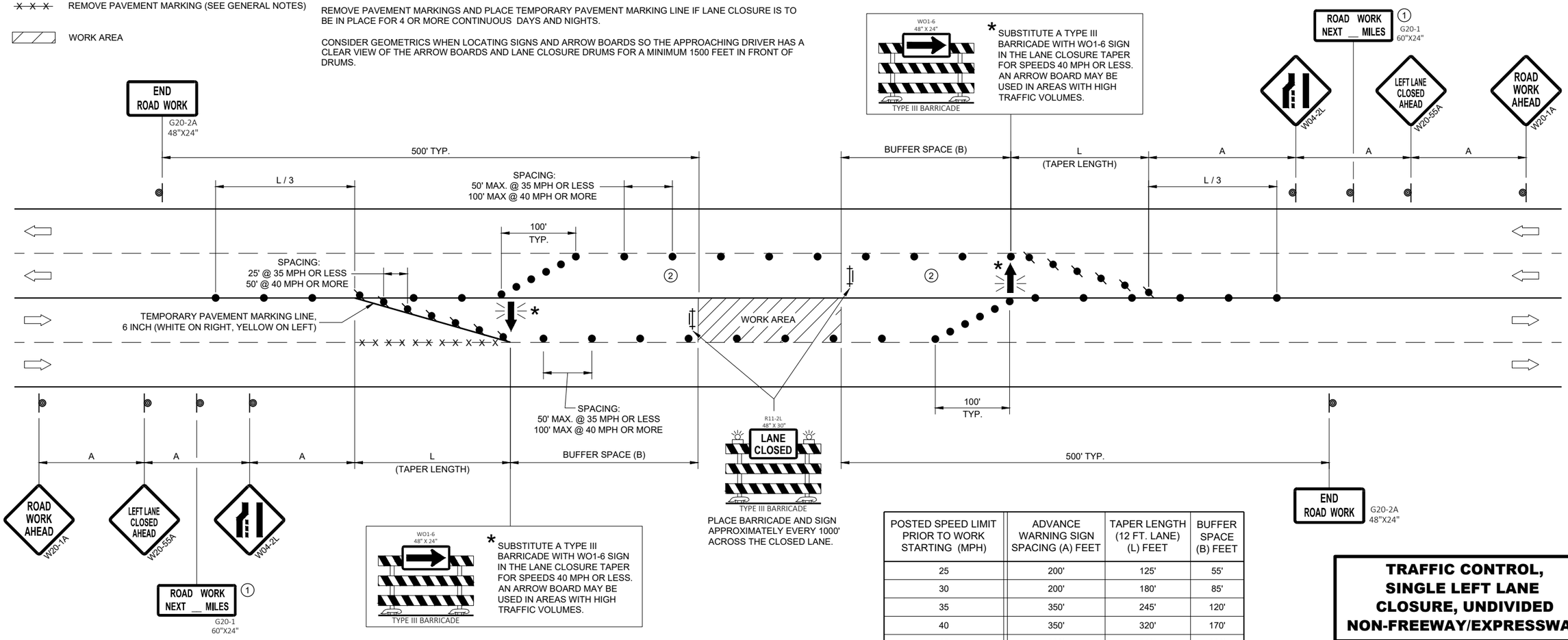
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



WO1-6 48" X 24"

TYPE III BARRICADE

* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

WO1-6 48" X 24"

TYPE III BARRICADE

* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D20-07c

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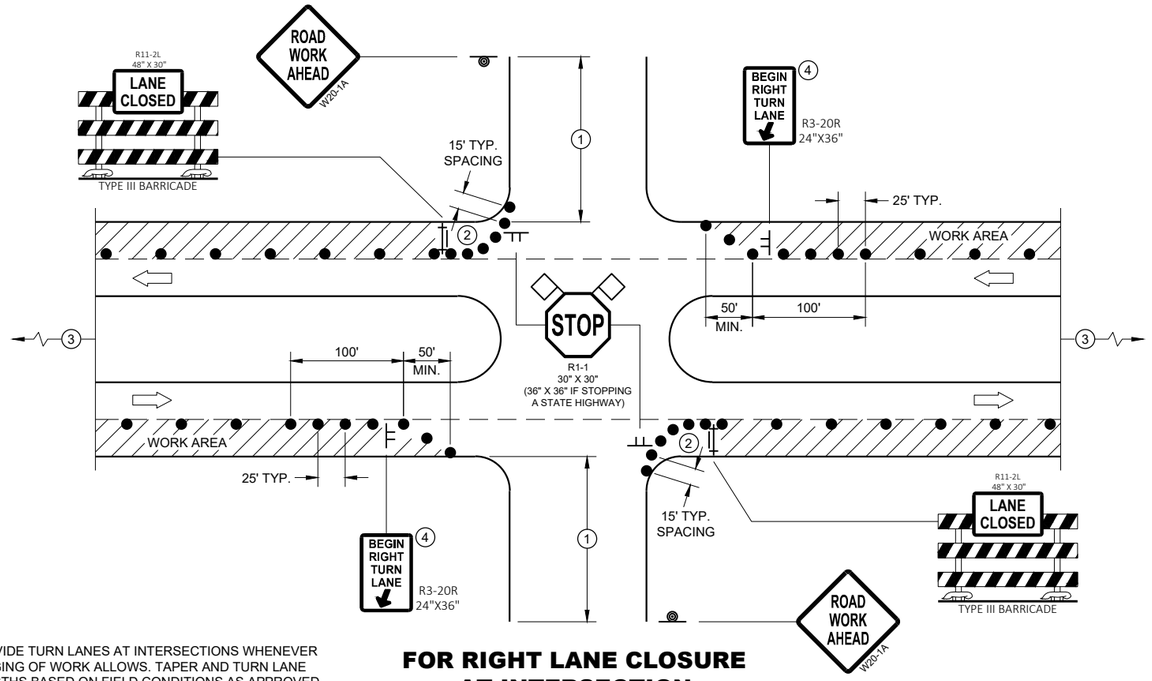
SDD 15D20-07c



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

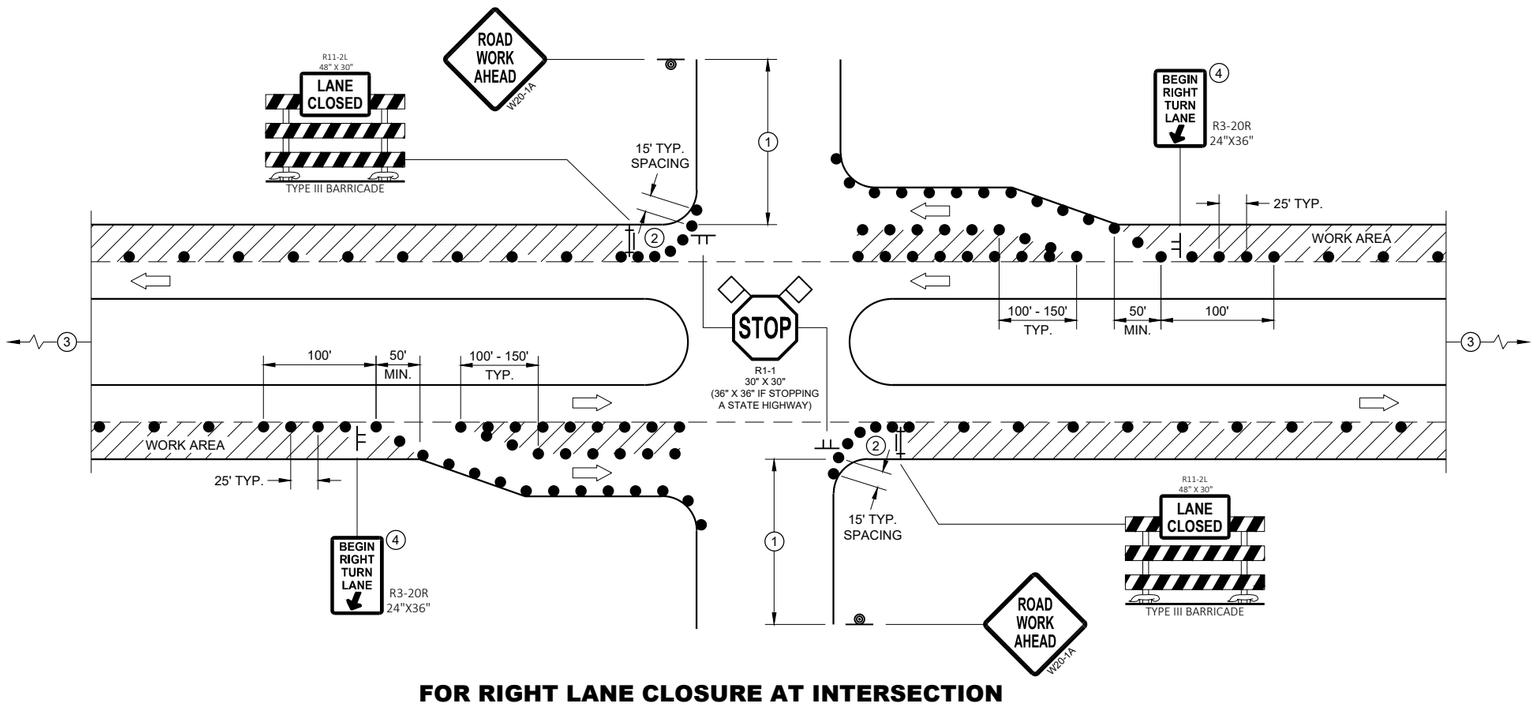
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

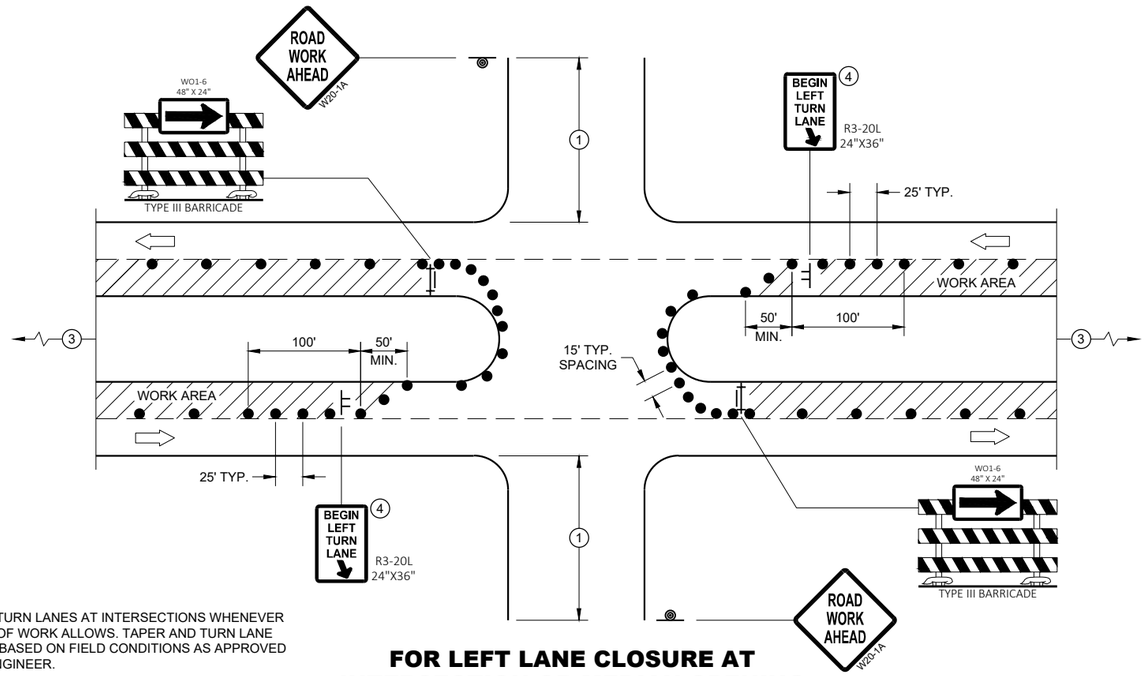
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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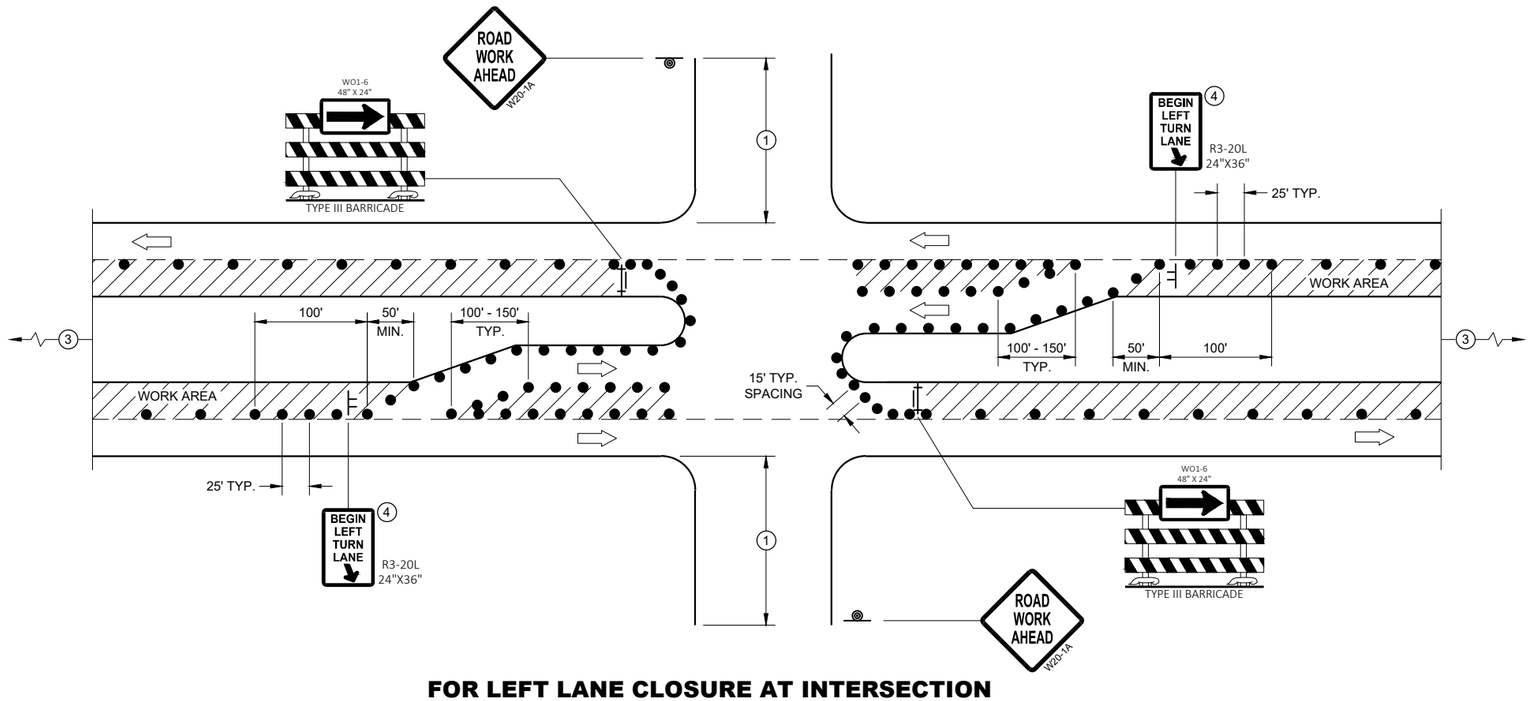
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

GENERAL NOTES

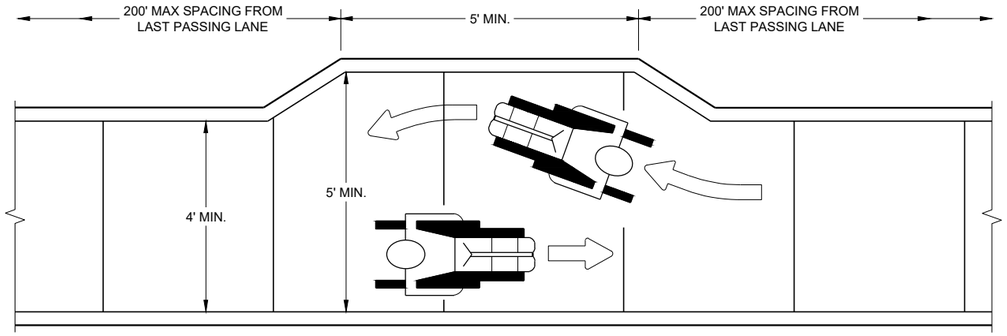
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

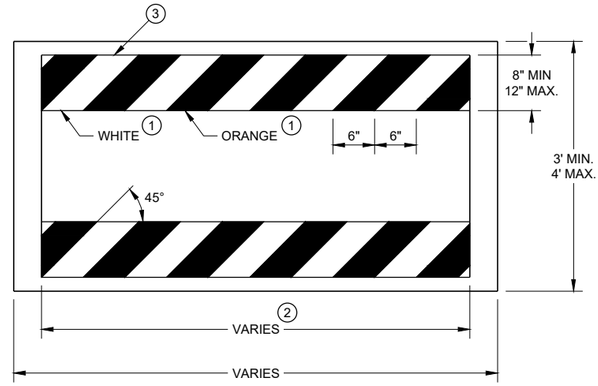
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

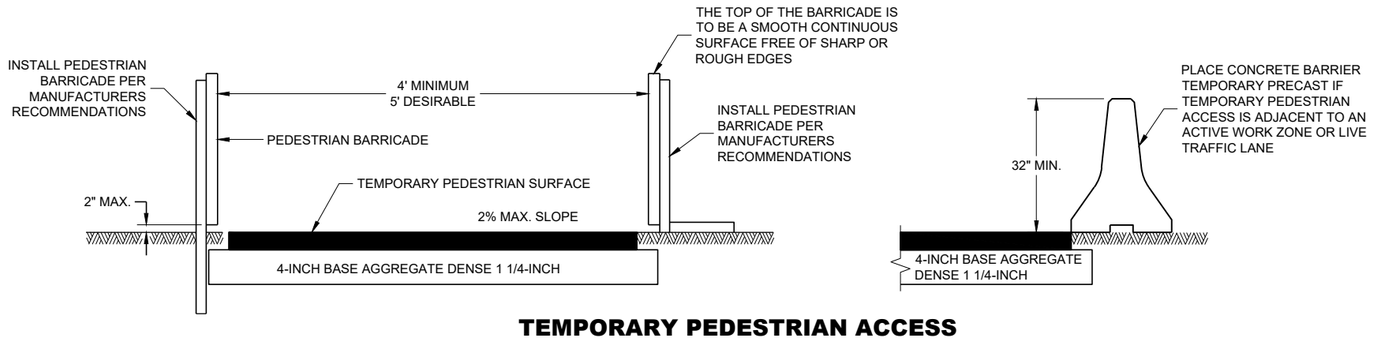
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*

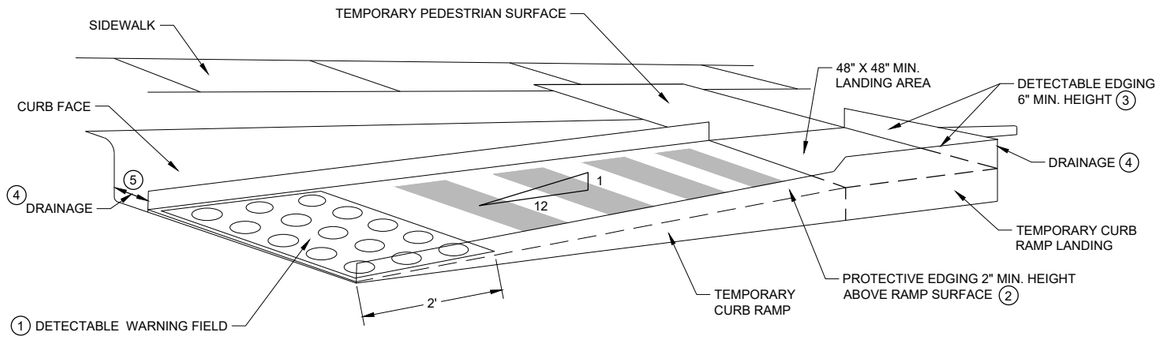


TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09a



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

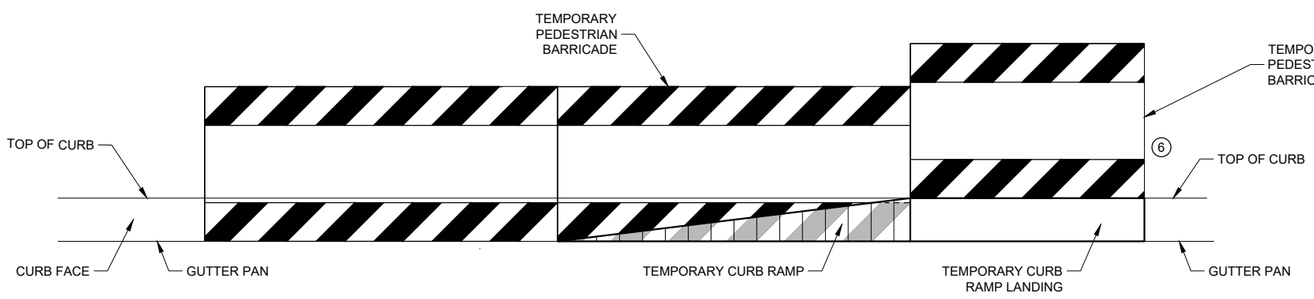
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

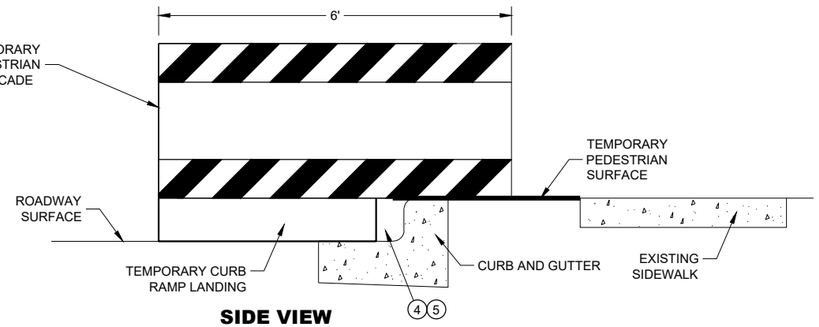
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

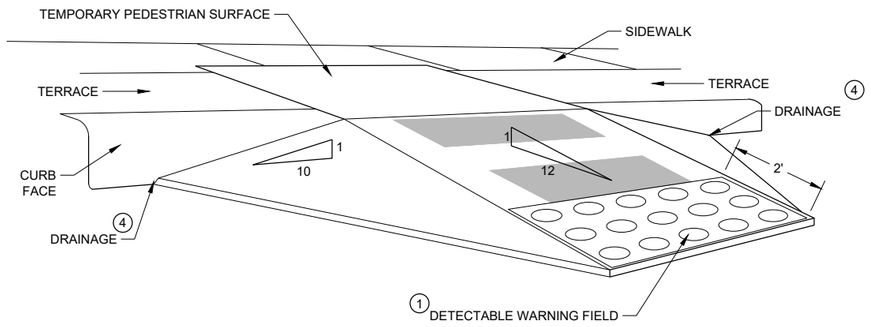
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

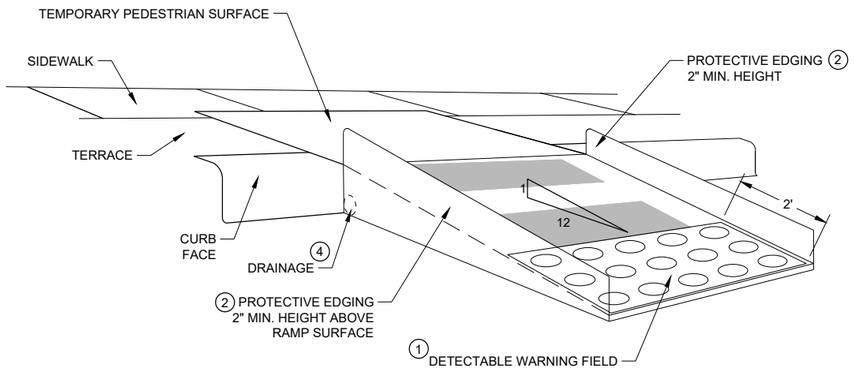
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

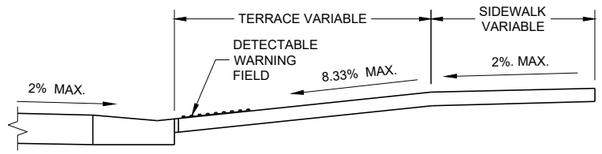
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

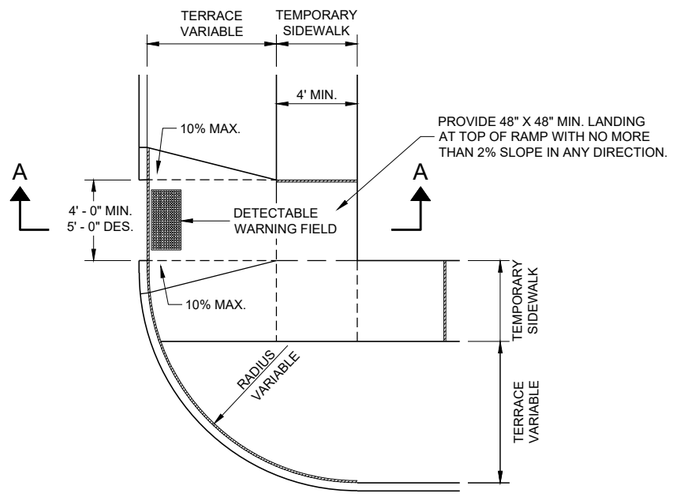
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

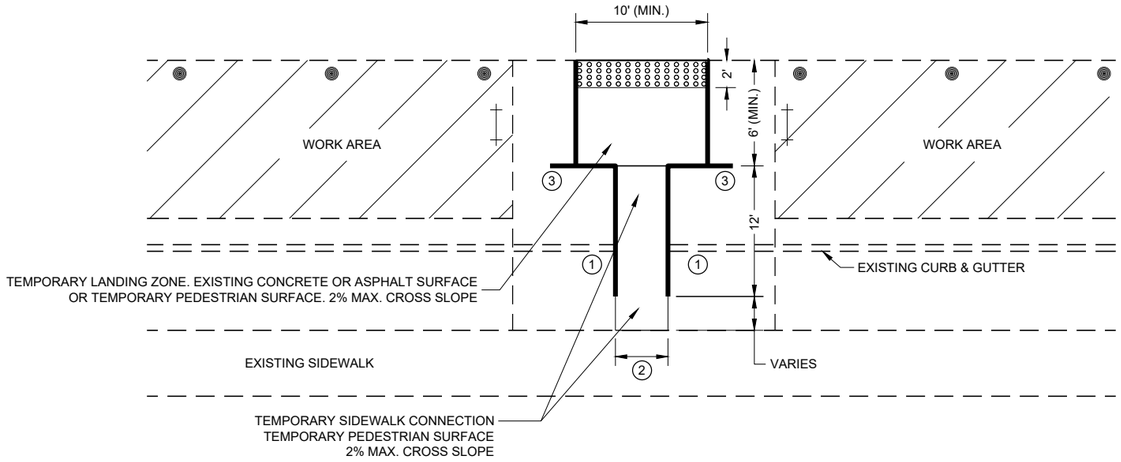
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

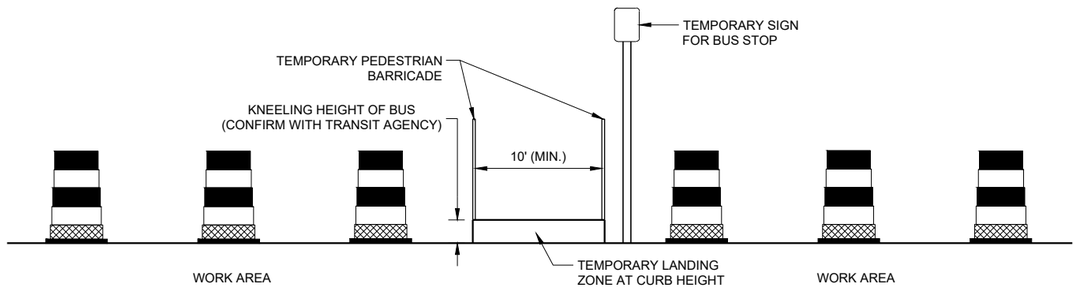
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D30-09d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

6

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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

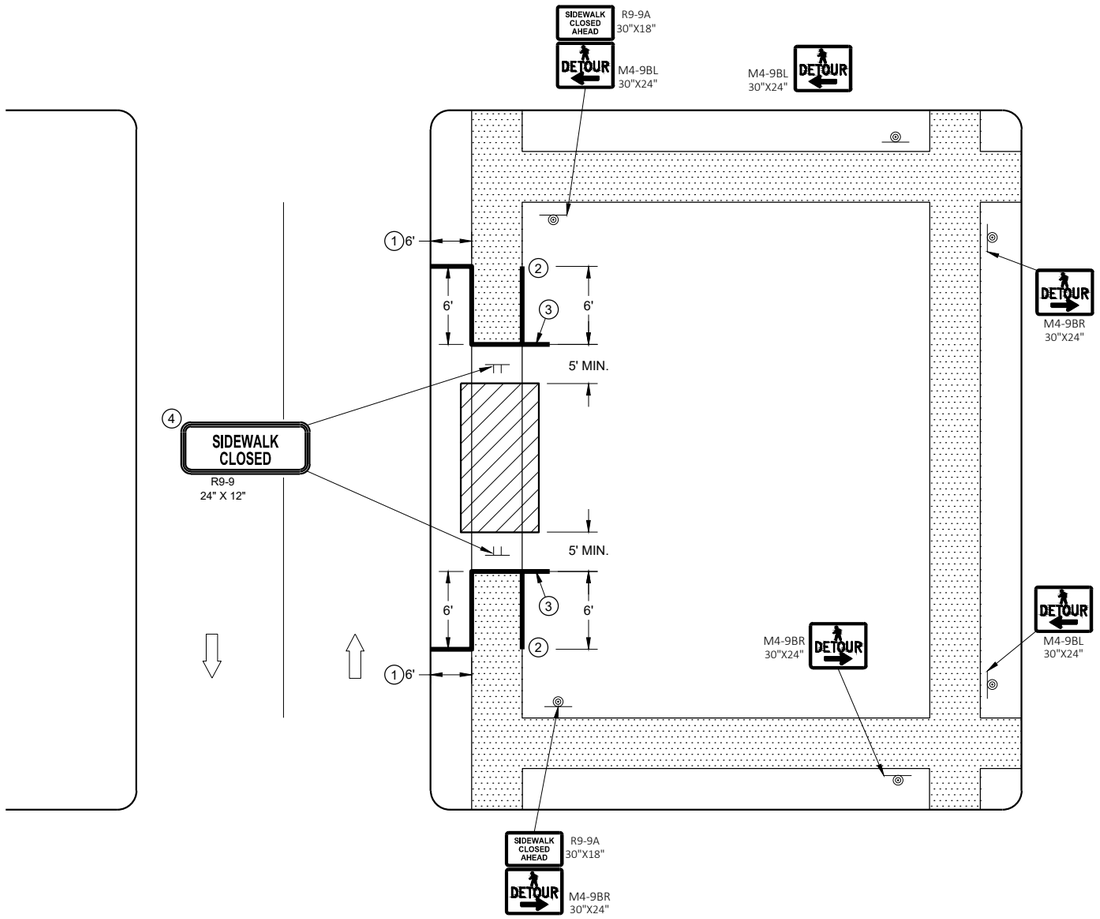
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09e

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

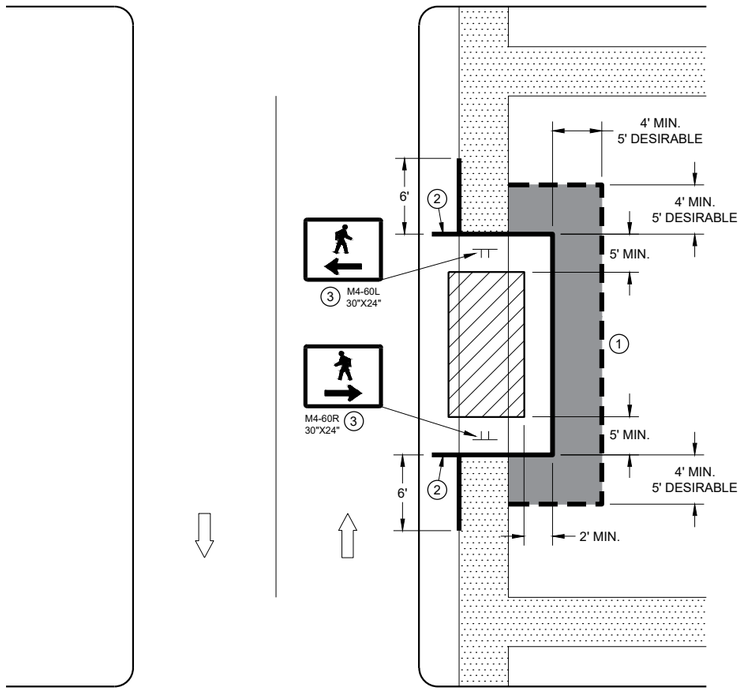
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

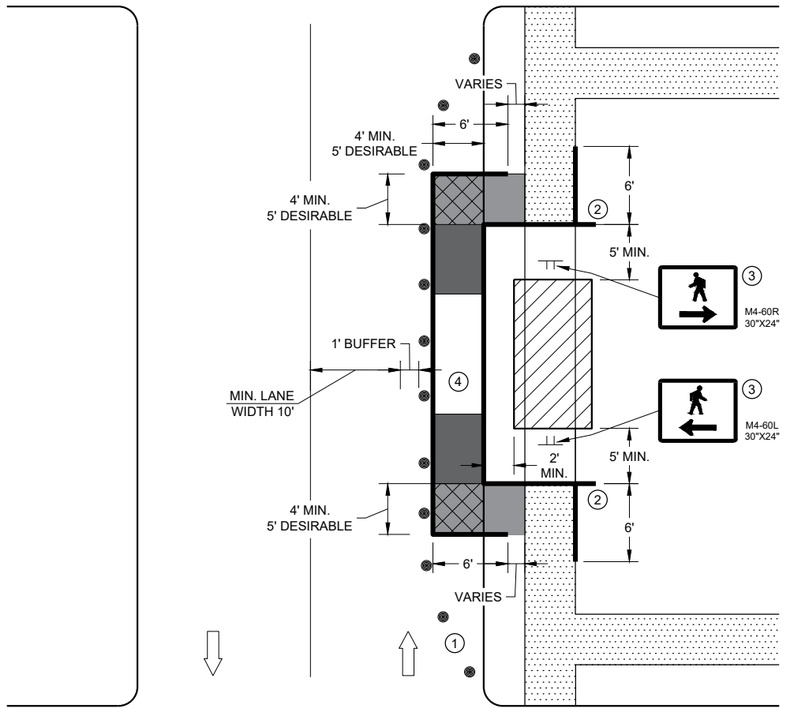
6

SDD15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK DIVERSION, SINGLE SIDE

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

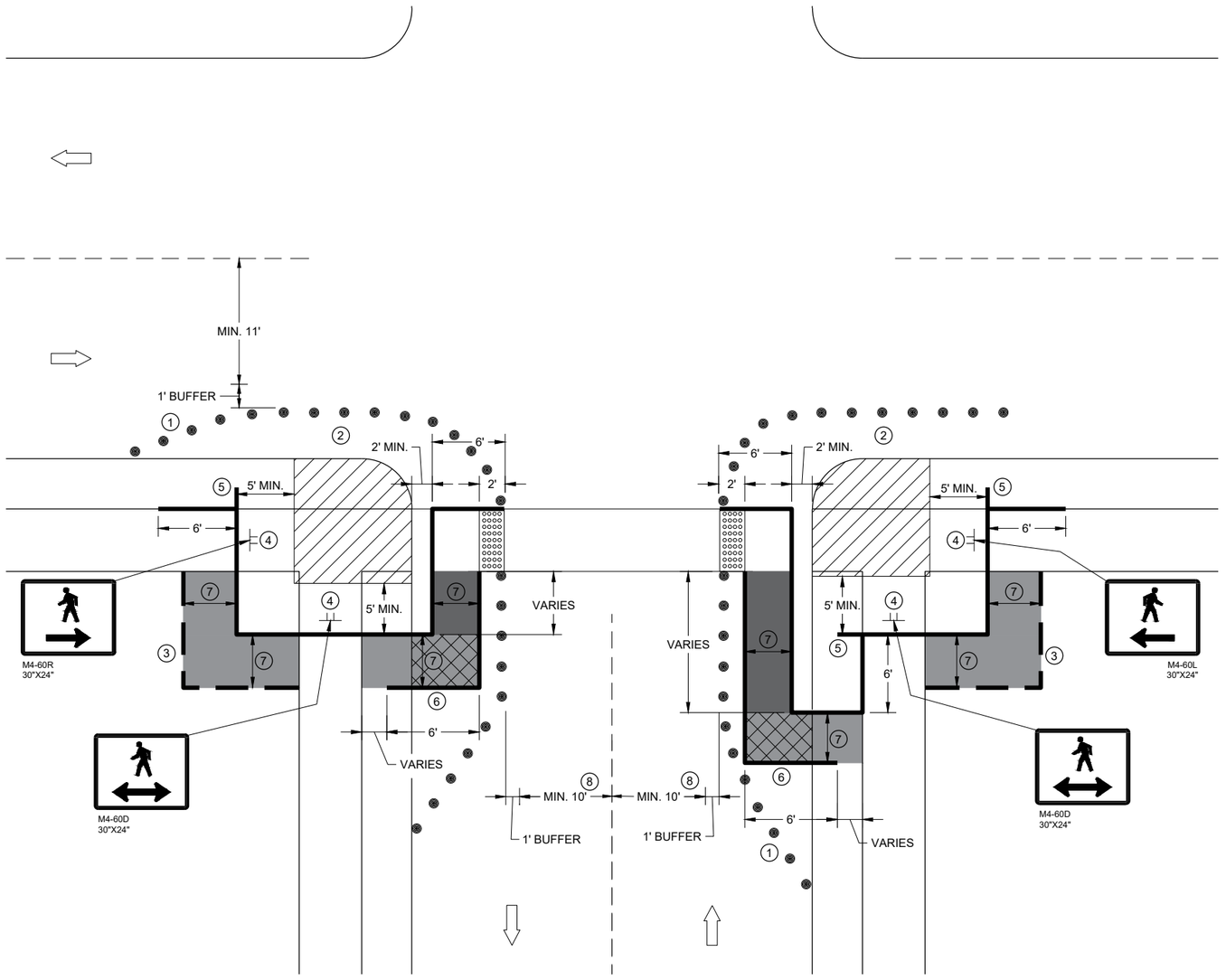
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.

6

SDD 15D30 - 09h

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(7) 4 FEET MINIMUM, 5 FEET DESIRABLE

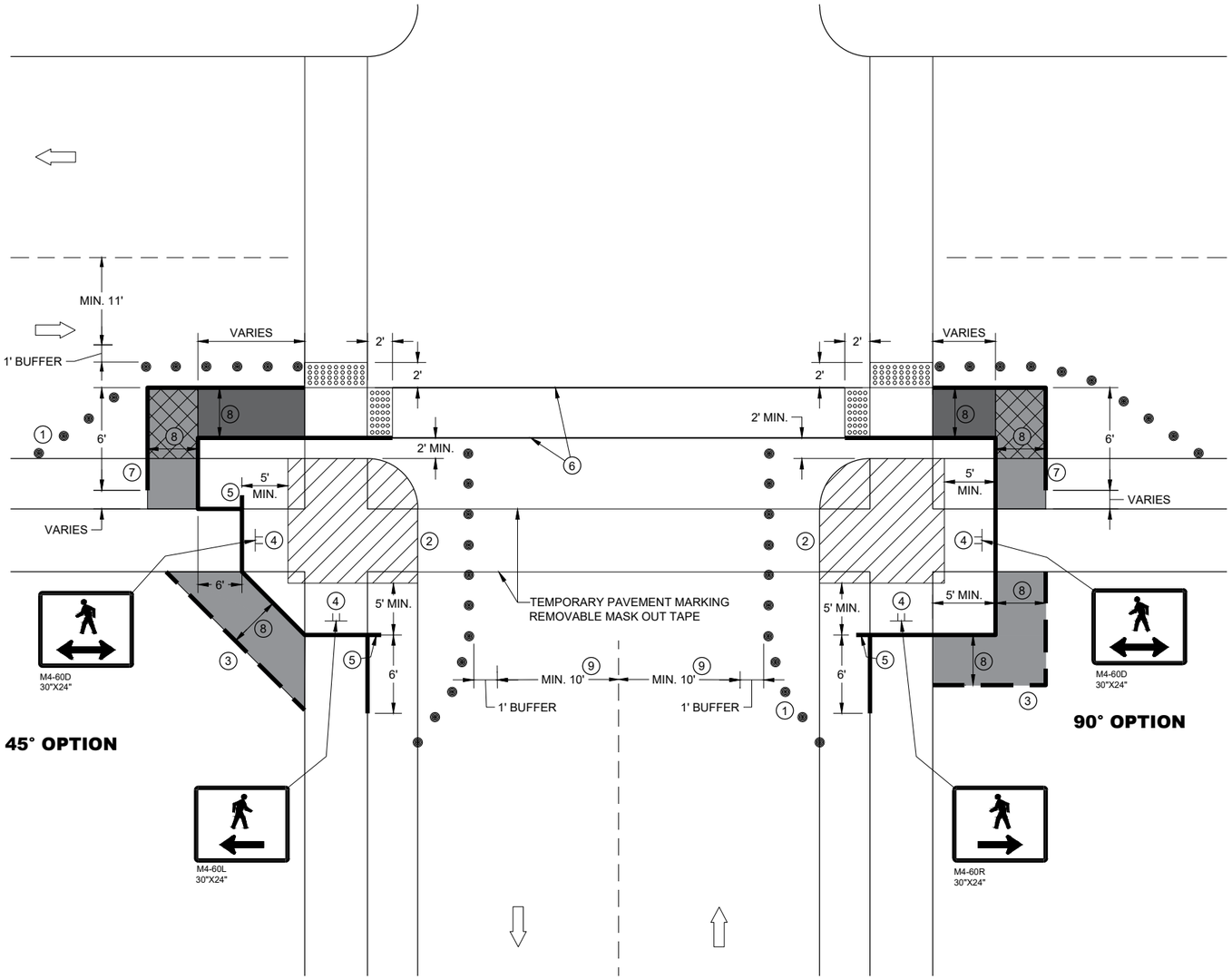
(8) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

6
SDD 15D30 - 09i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09j

6

LEGEND

SIGN ON PERMANENT SUPPORT

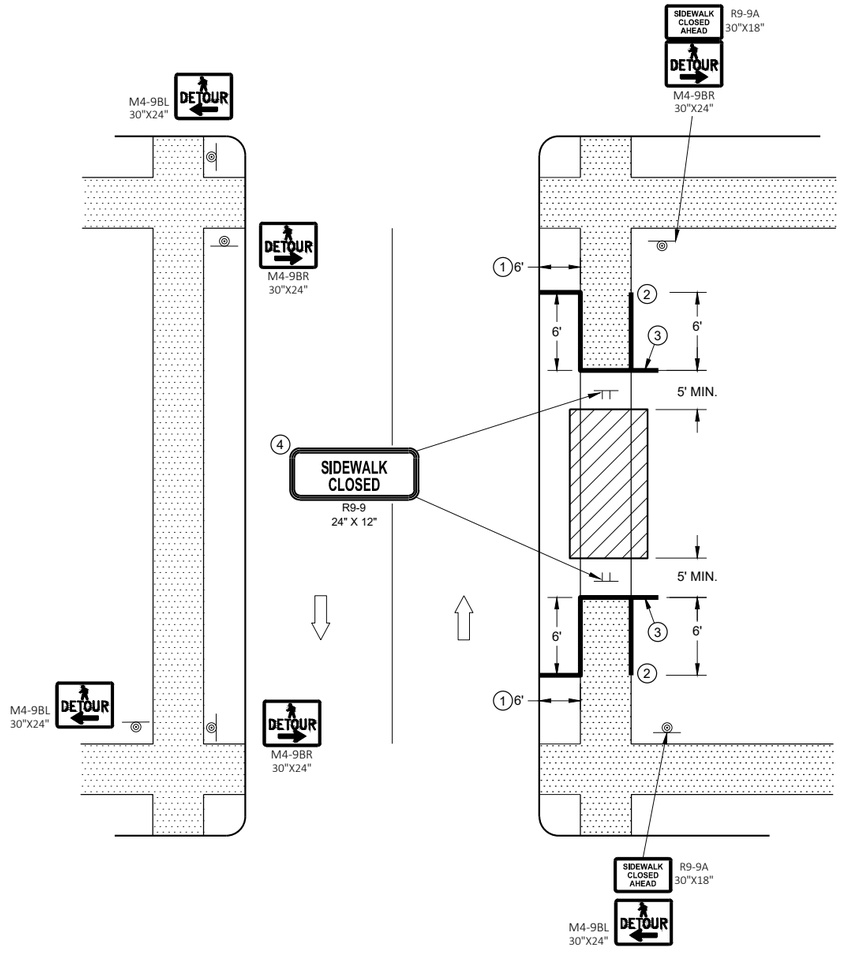
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

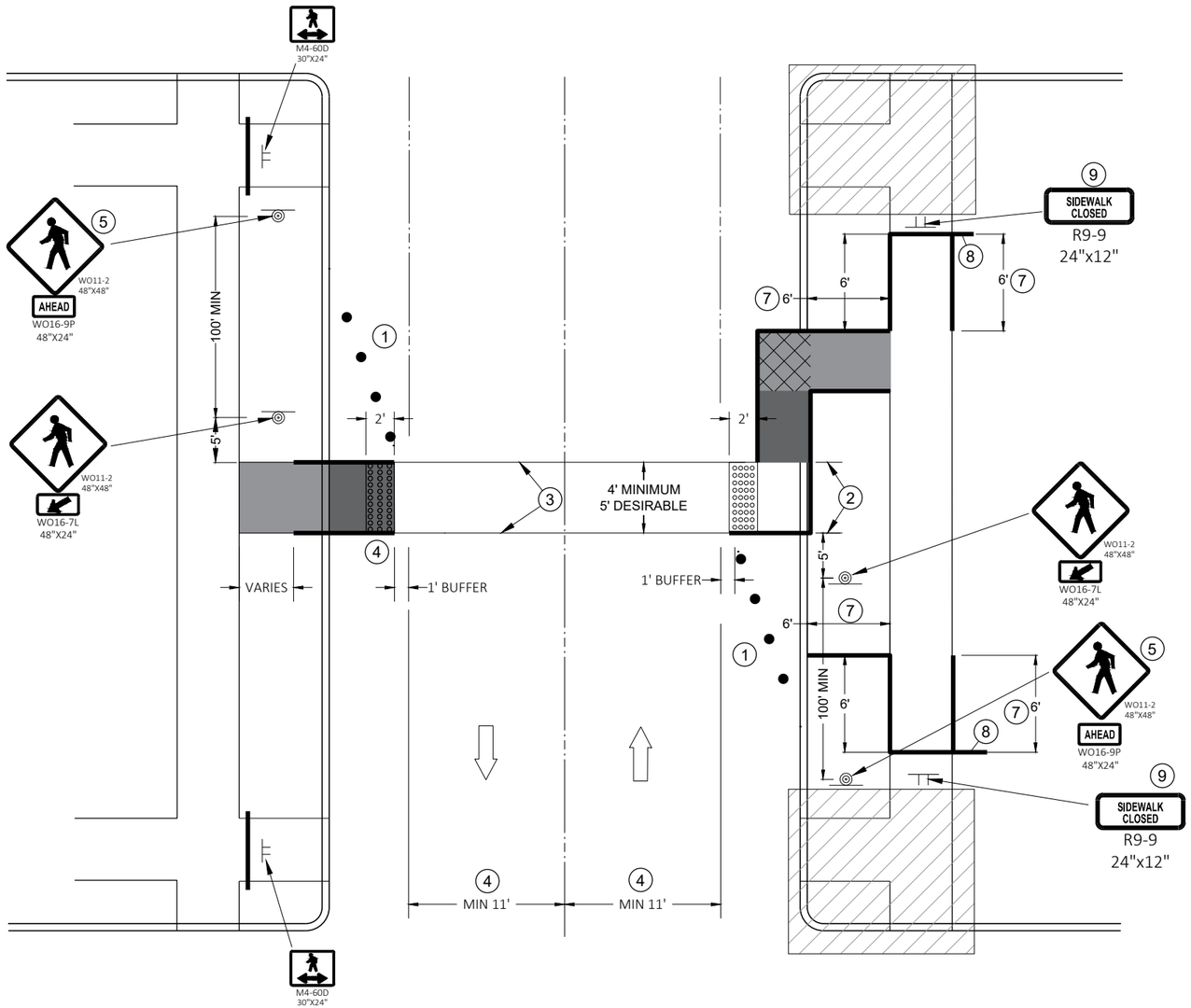
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09k



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

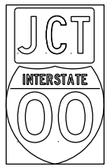
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6

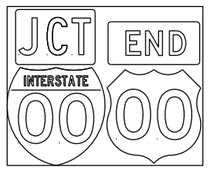
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09L

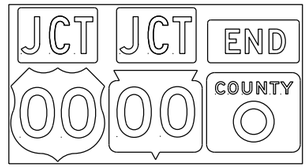
TYPICAL ASSEMBLIES



J1-1



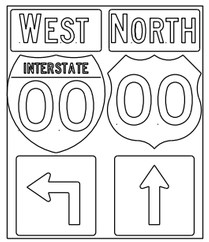
J1-2



J1-3

JR1-1

J2-1



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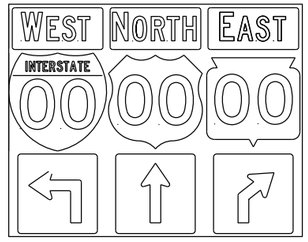
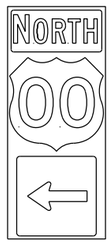


J2-3

JV
(Typical Vertical J-Assembly
See Note 10 and 11)



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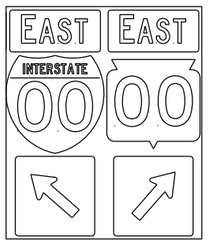

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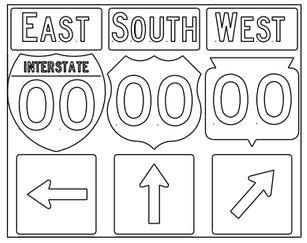
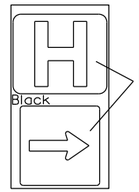
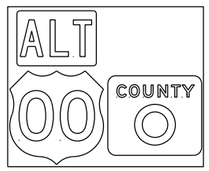


J3-3

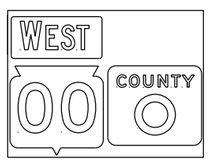


Blue Background
JH-1

J4-1

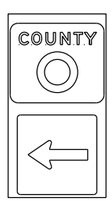


J4-2

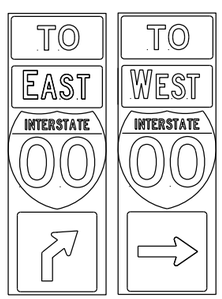


J4-2

J12-1

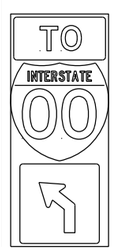


J13-1

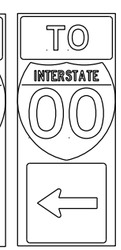


J32-1

J33-1



J22-1

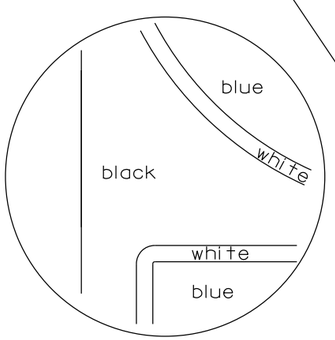


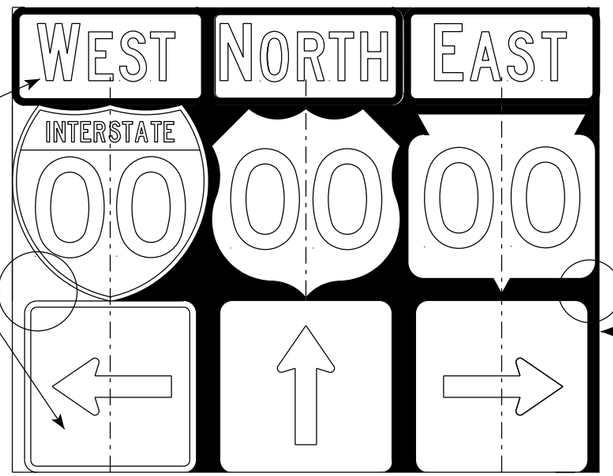
J23-1

JR13-1

JR23-1

JR99-1





NOTES

1. Signs are Type II - Type H Reflective
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

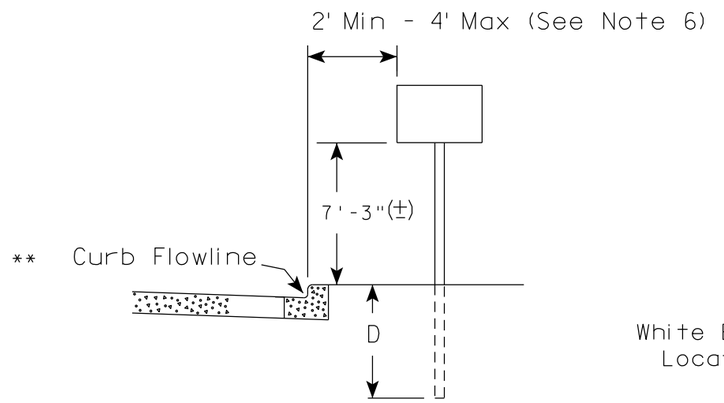
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

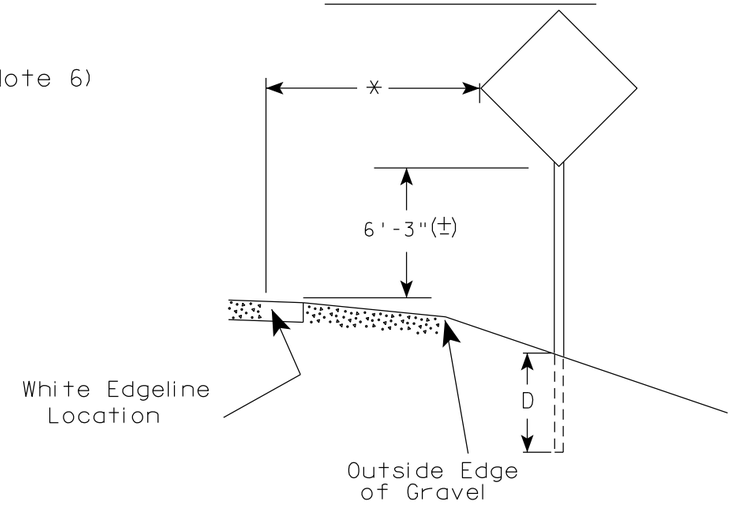
PROJECT NO:

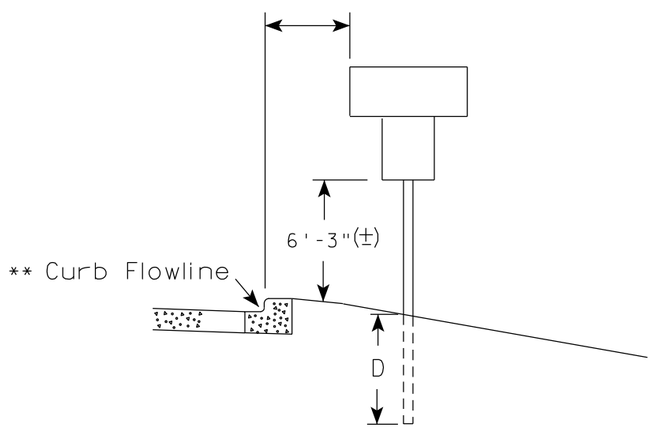
SHEET NO: 344 E

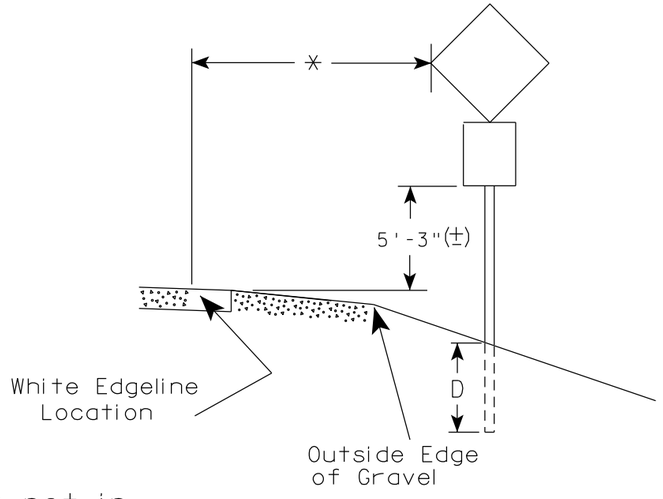
URBAN AREA



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 or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

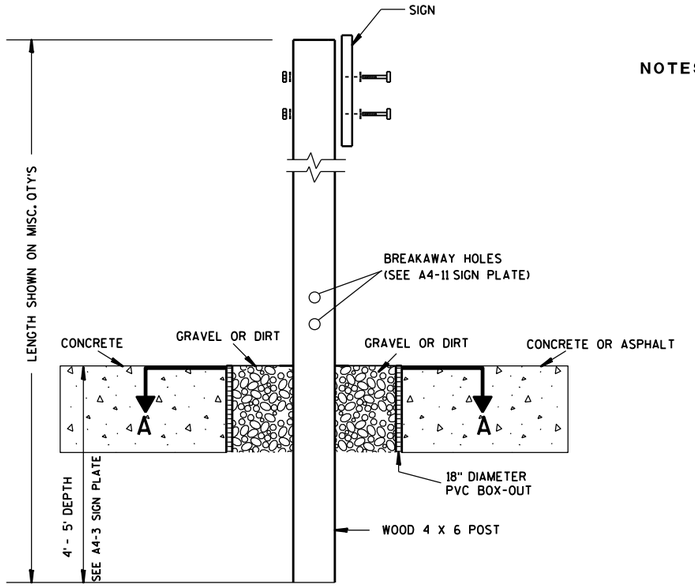
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

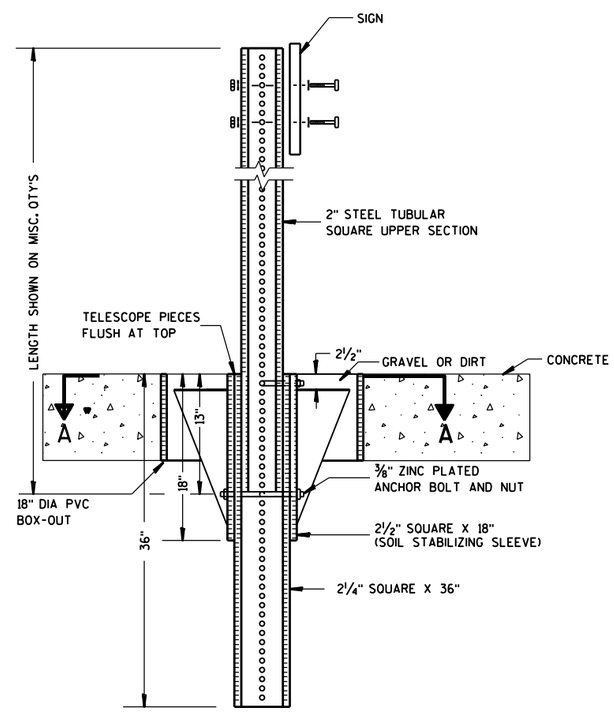
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 345	E



ELEVATION VIEW

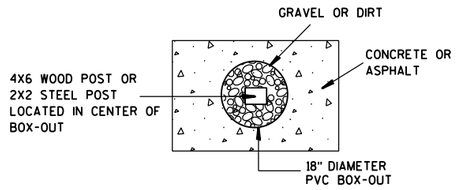
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

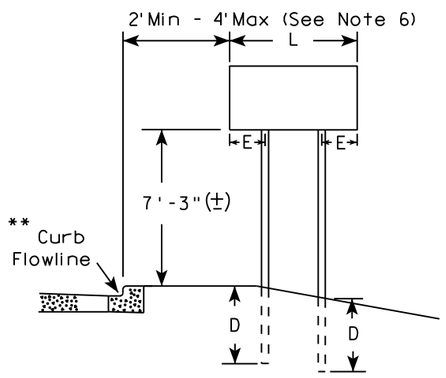
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

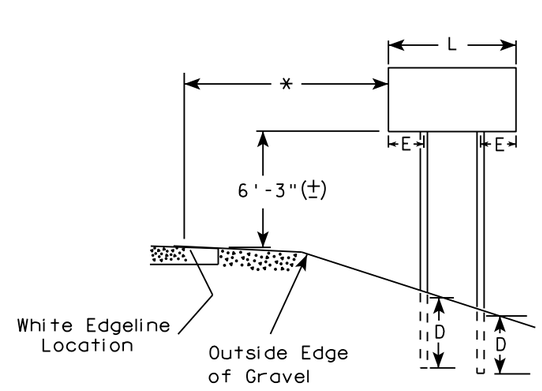
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

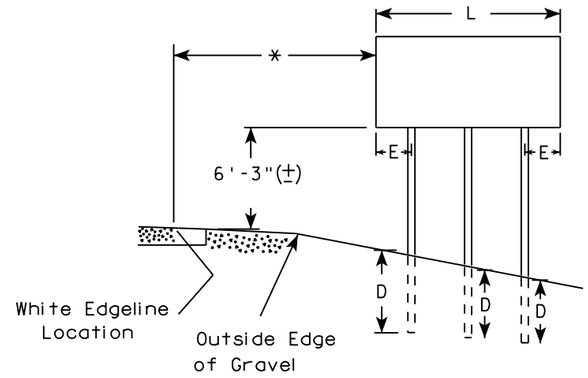
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

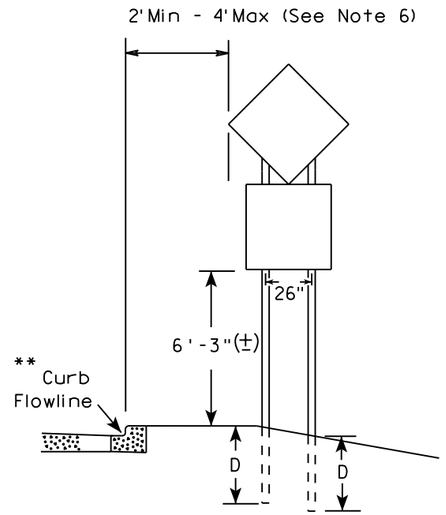
URBAN AREA



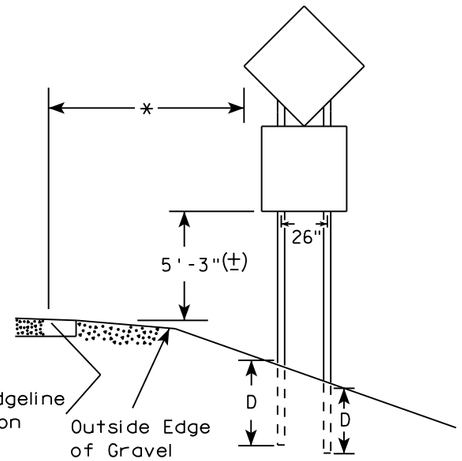
RURAL AREA (See Note 3)







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'

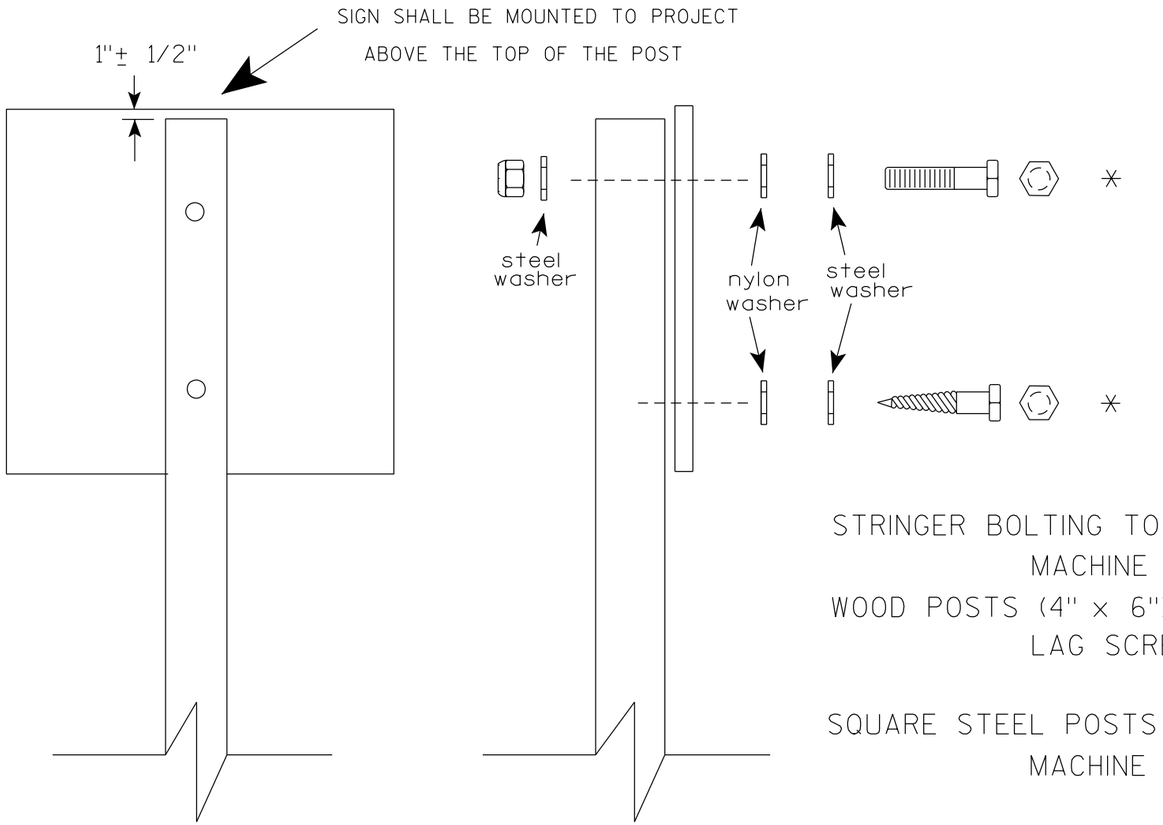
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 347	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 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

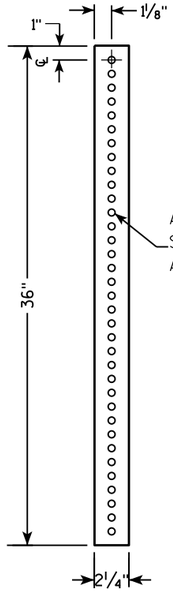
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

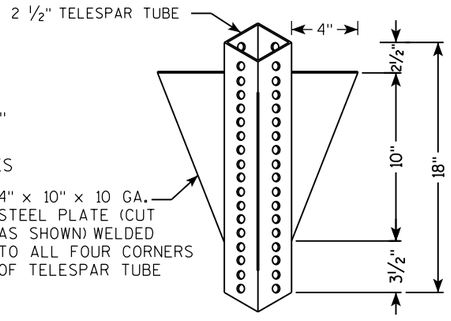
SHEET NO: 348 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

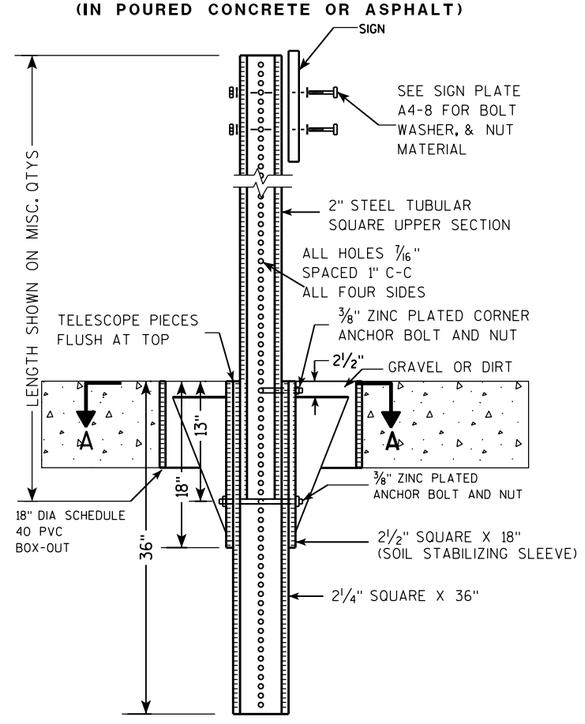
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



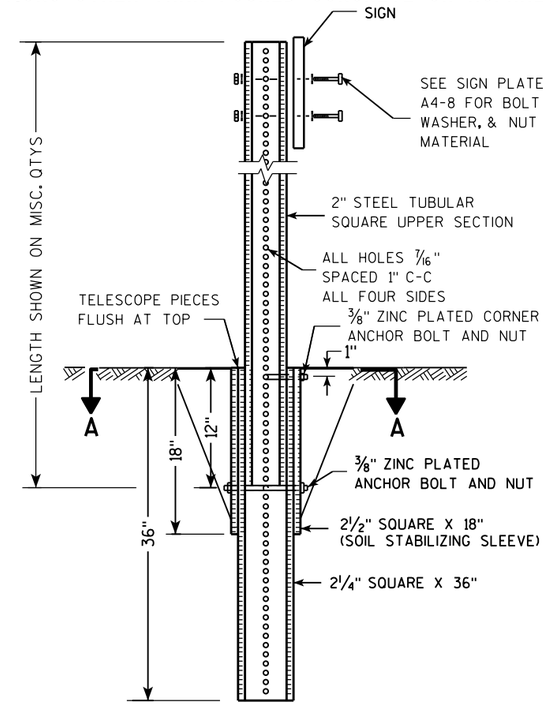
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

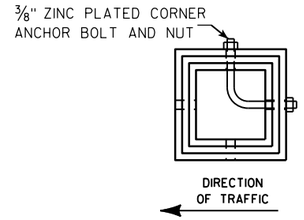


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

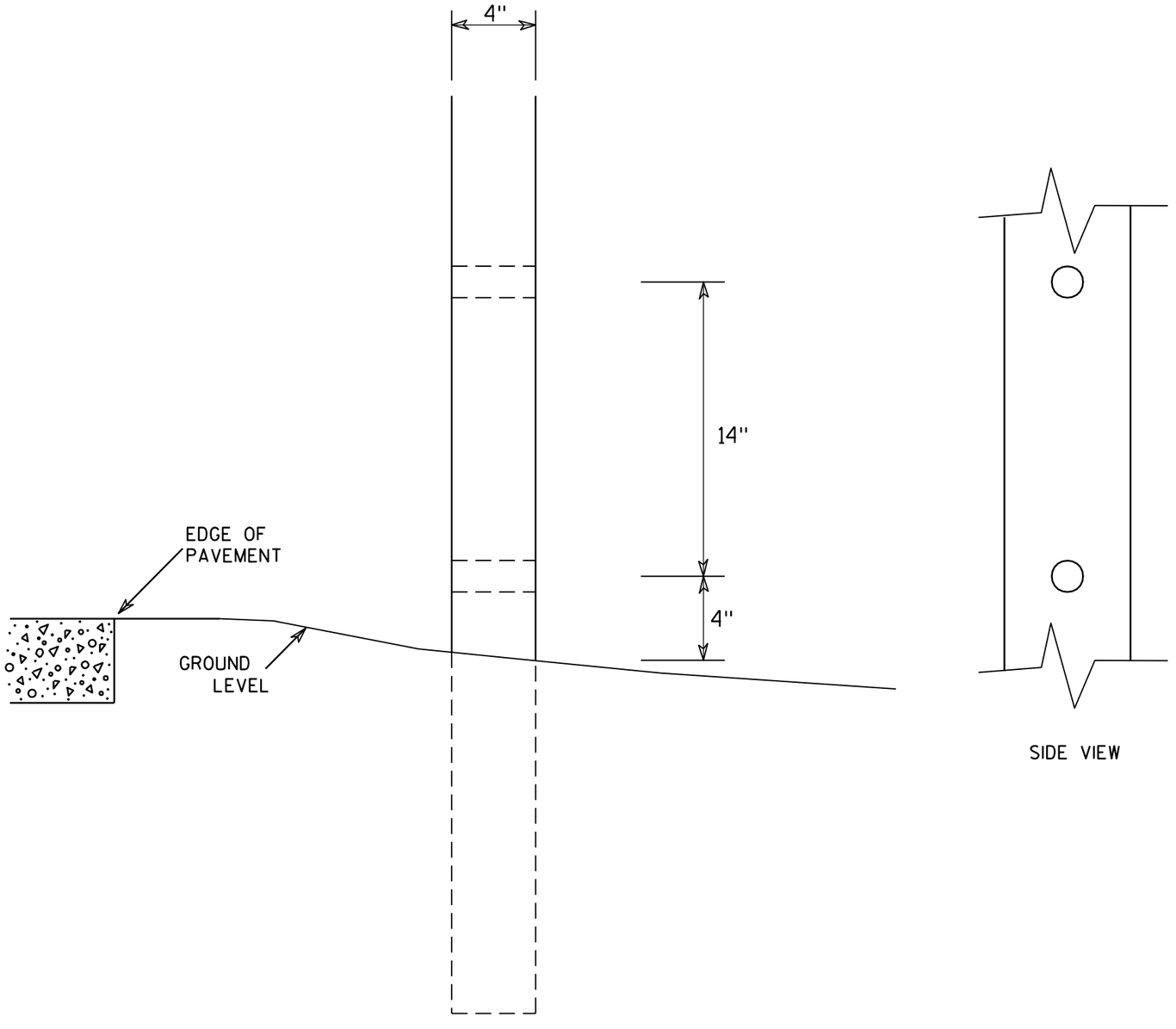
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 349 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

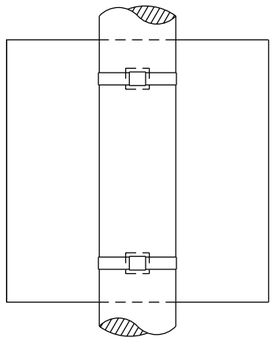
APPROVED Chester J Spang for State Traffic Engineer

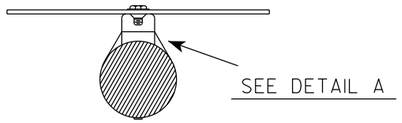
DATE 3/27/97 PLATE NO. A4-11.2

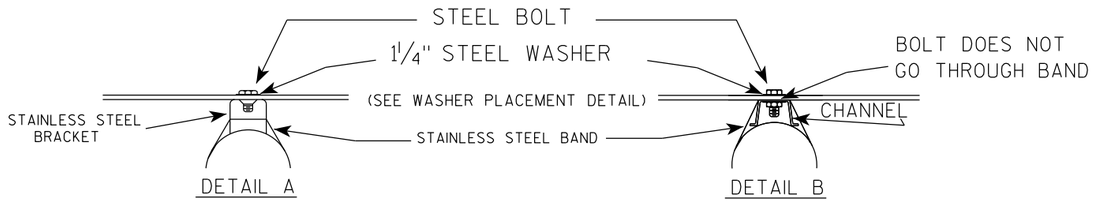
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 350	E

BANDING

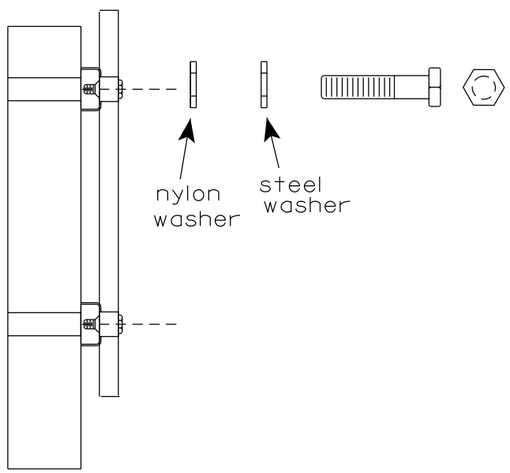
SINGLE SIGN







WASHER PLACEMENT

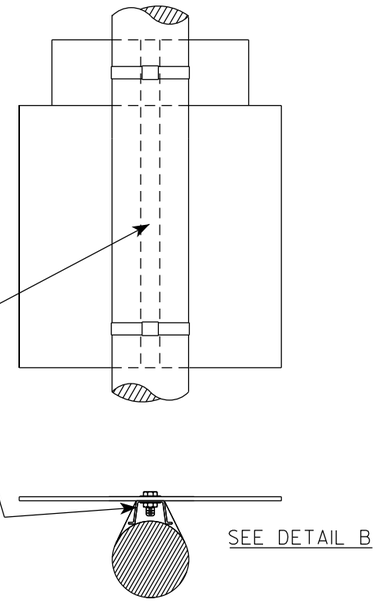


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

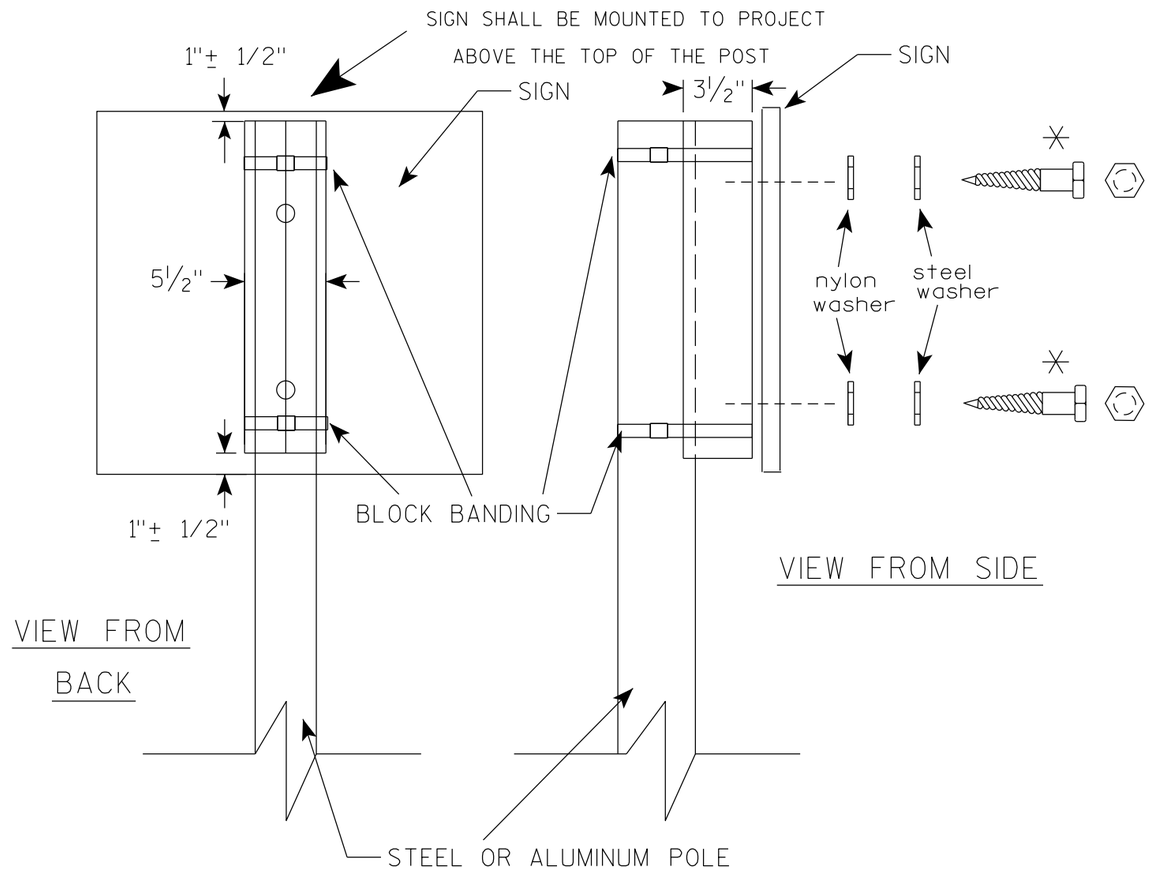
WISCONSIN DEPT OF TRANSPORTATION

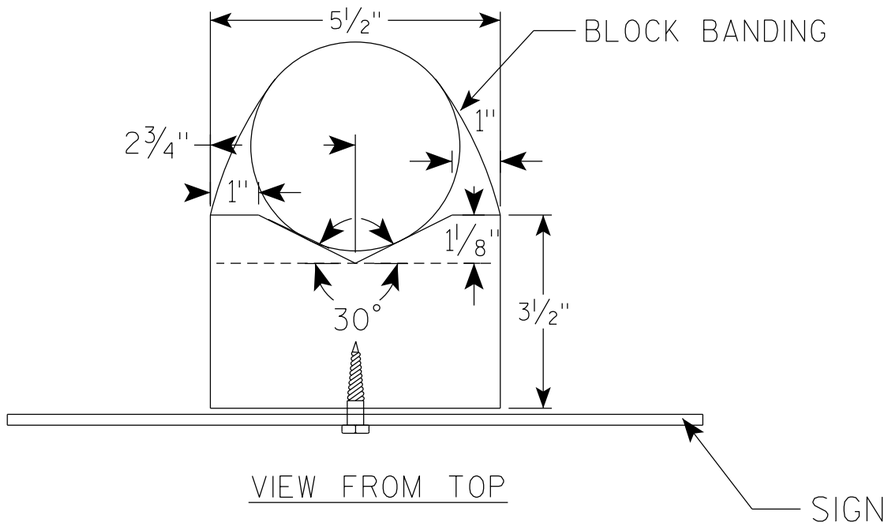
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 351	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





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
   b. 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)

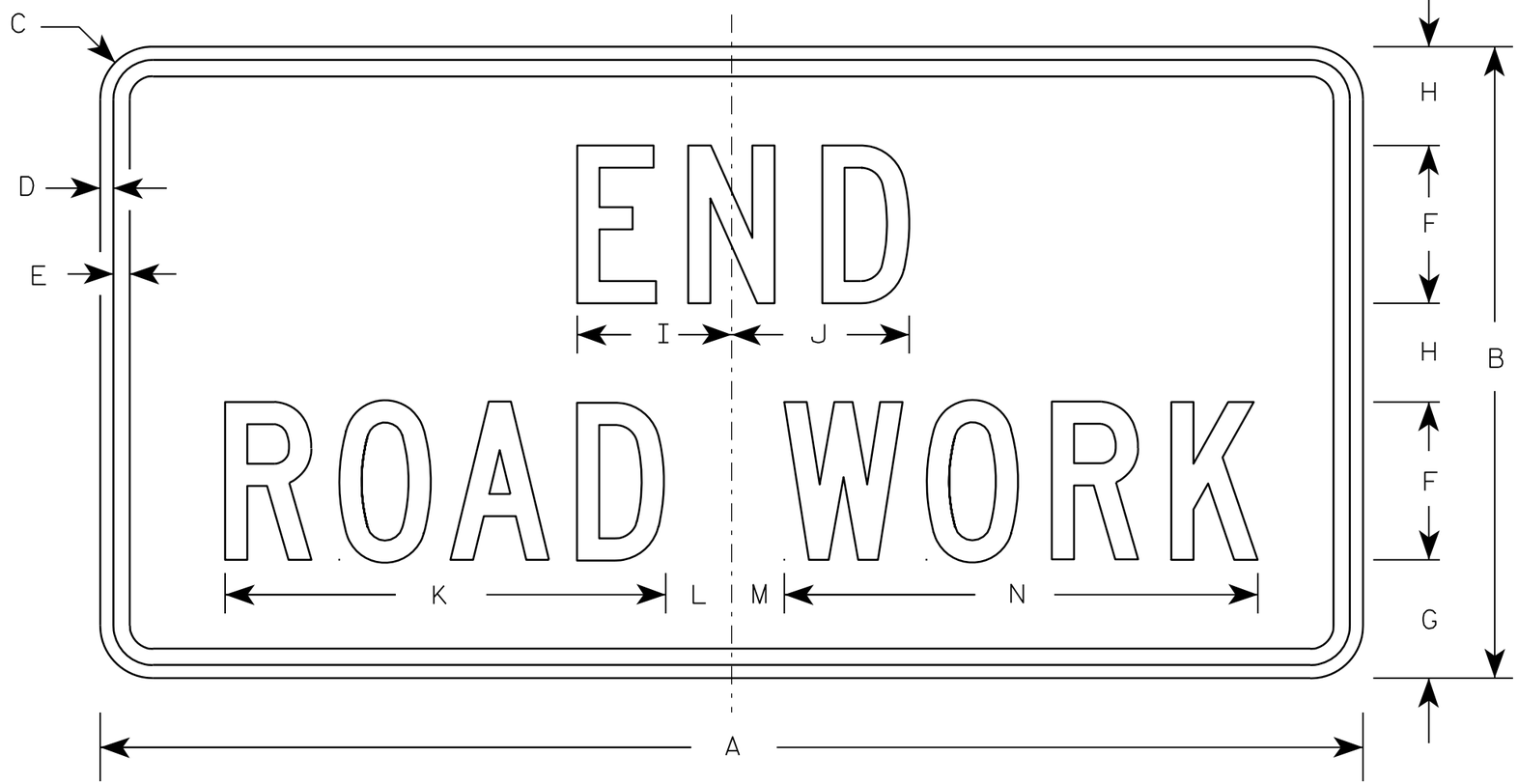
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 352 E



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

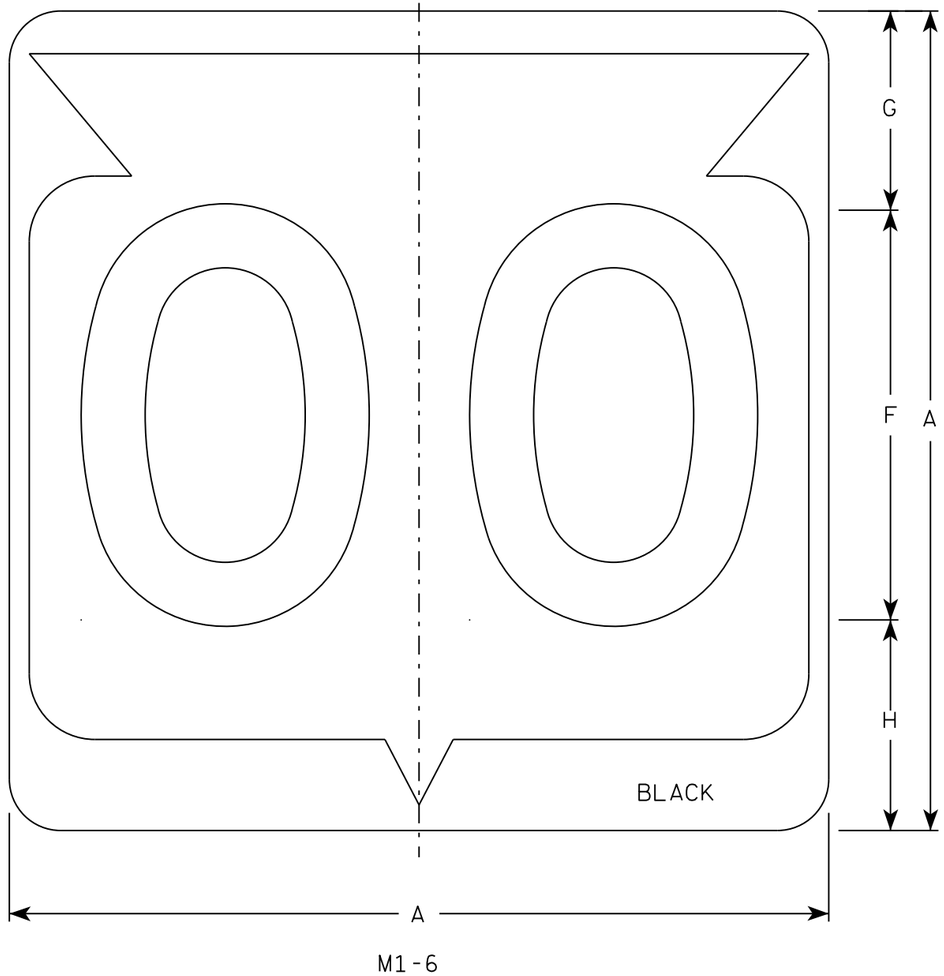
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

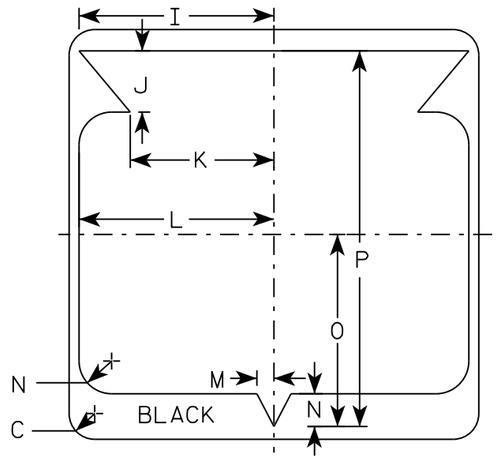
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 353	E



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

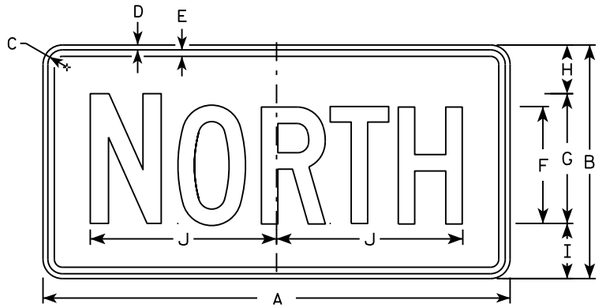
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

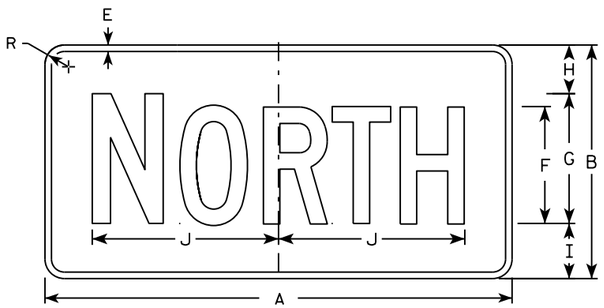
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 354 E



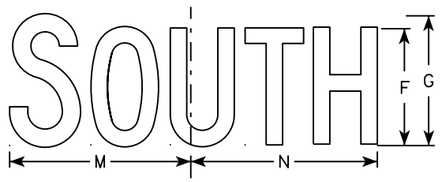
M3-1
MM3-1
MP3-1



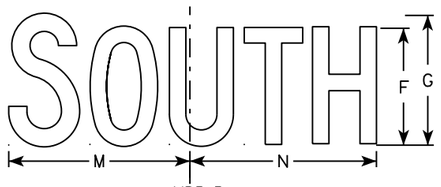
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

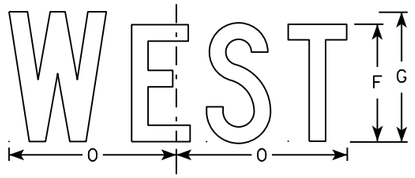
MB3-2
MK3-2
MN3-2



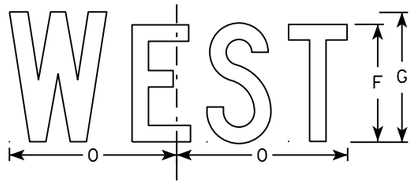
M3-3
MM3-3
MP3-3



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

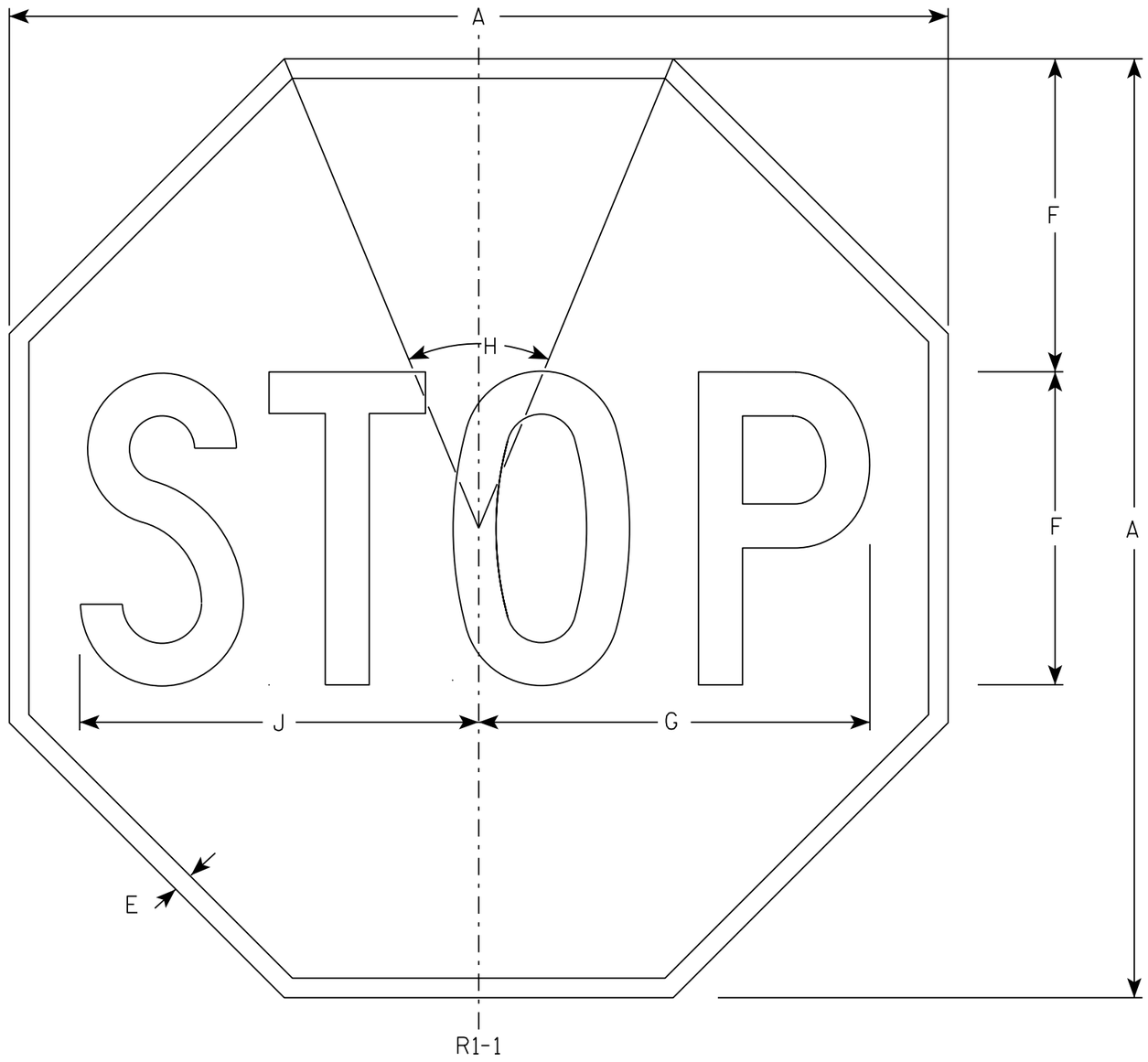
WISCONSIN DEPT OF TRANSPORTATION

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



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

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				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

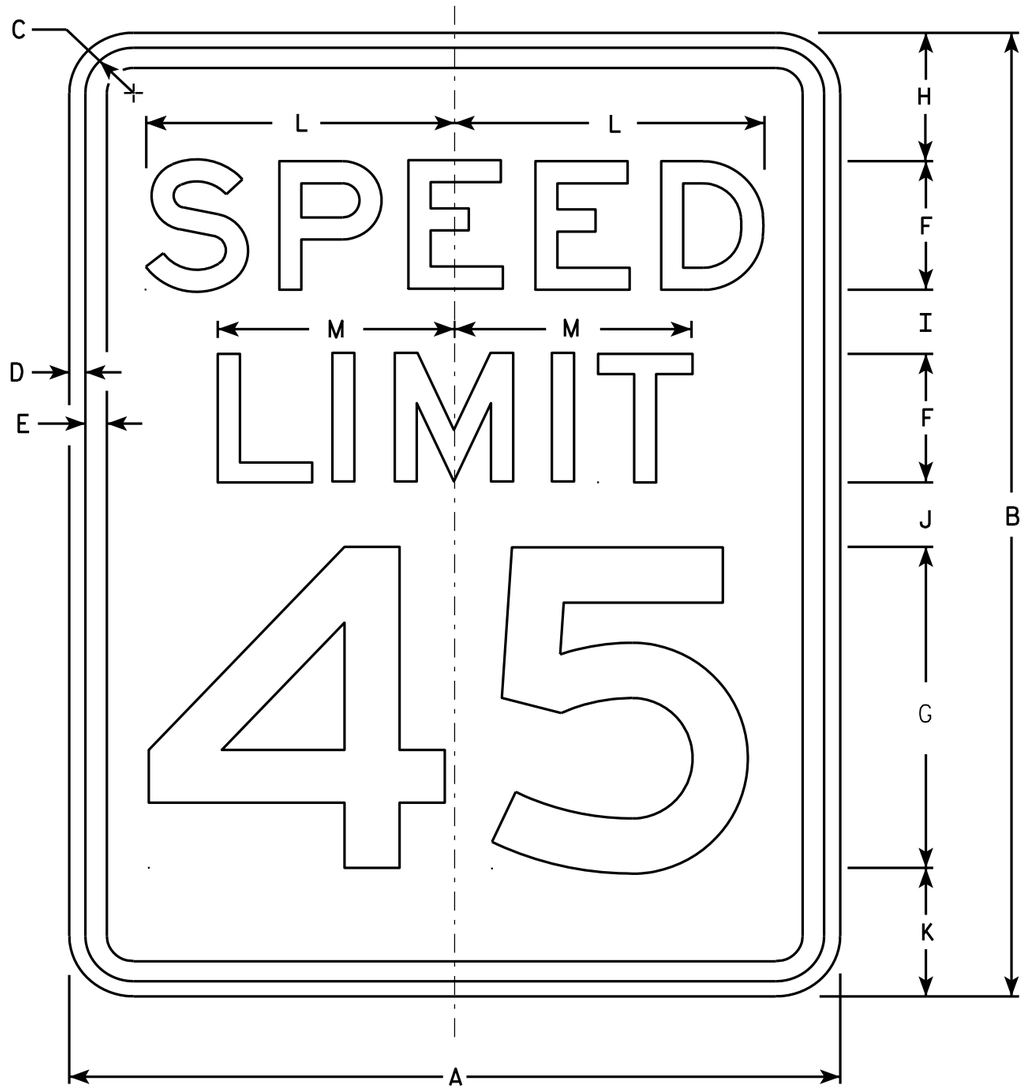
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 356	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

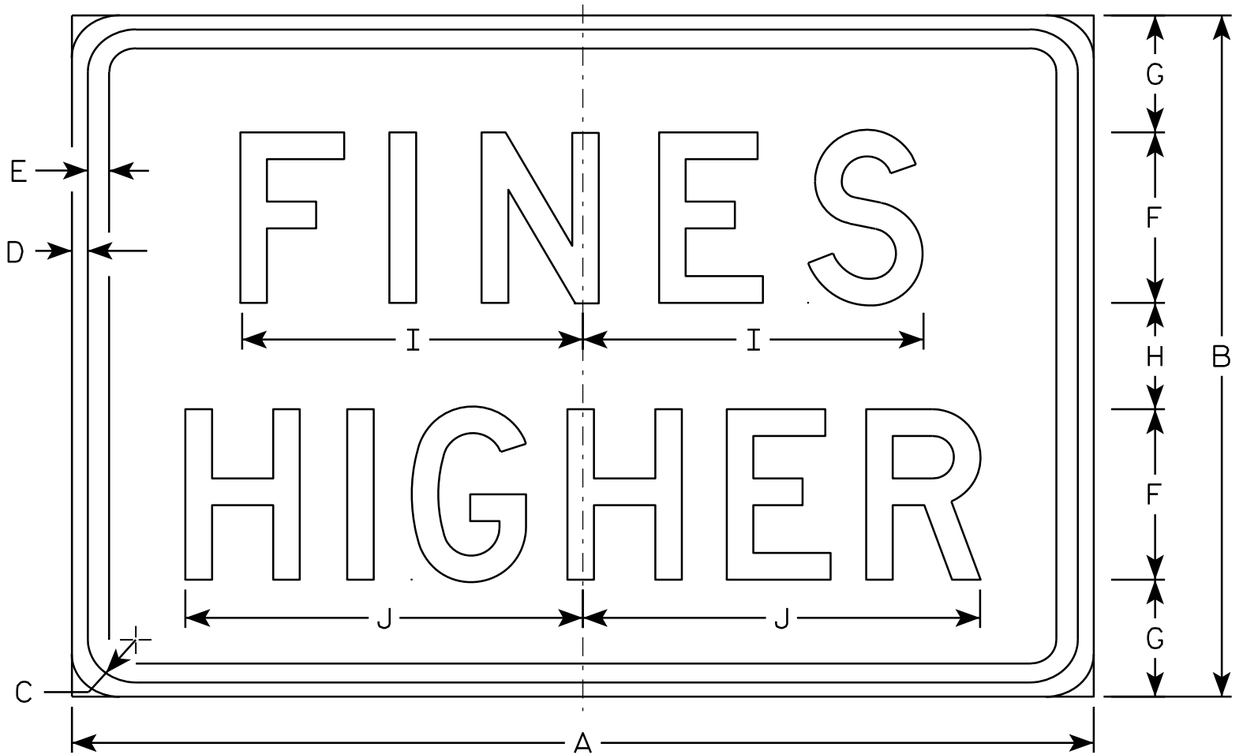
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 357 | E



R2-6P

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.

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	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

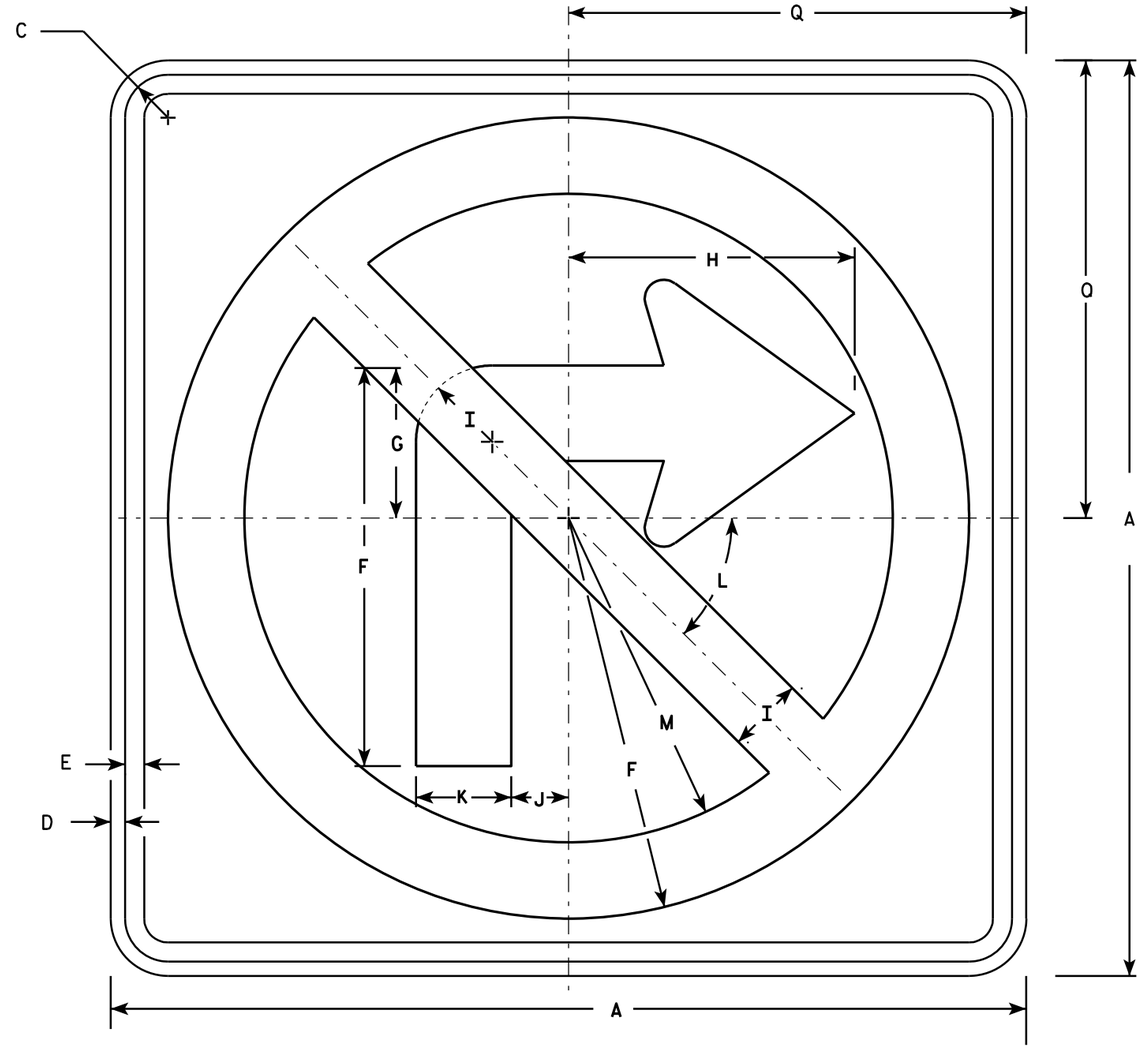
STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

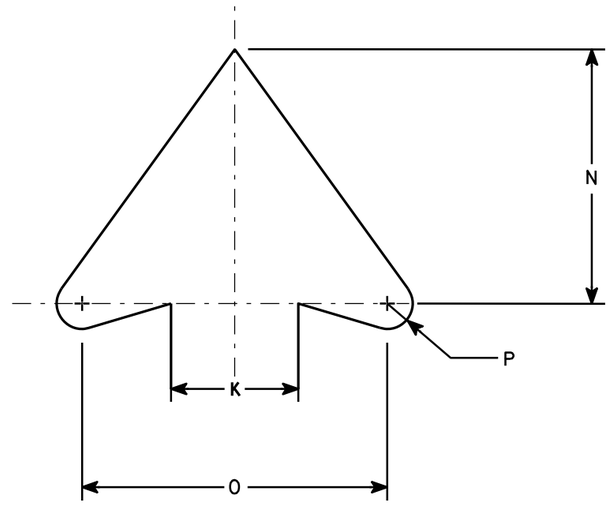
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 358 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - 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	12										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	12										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	18										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	18										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	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

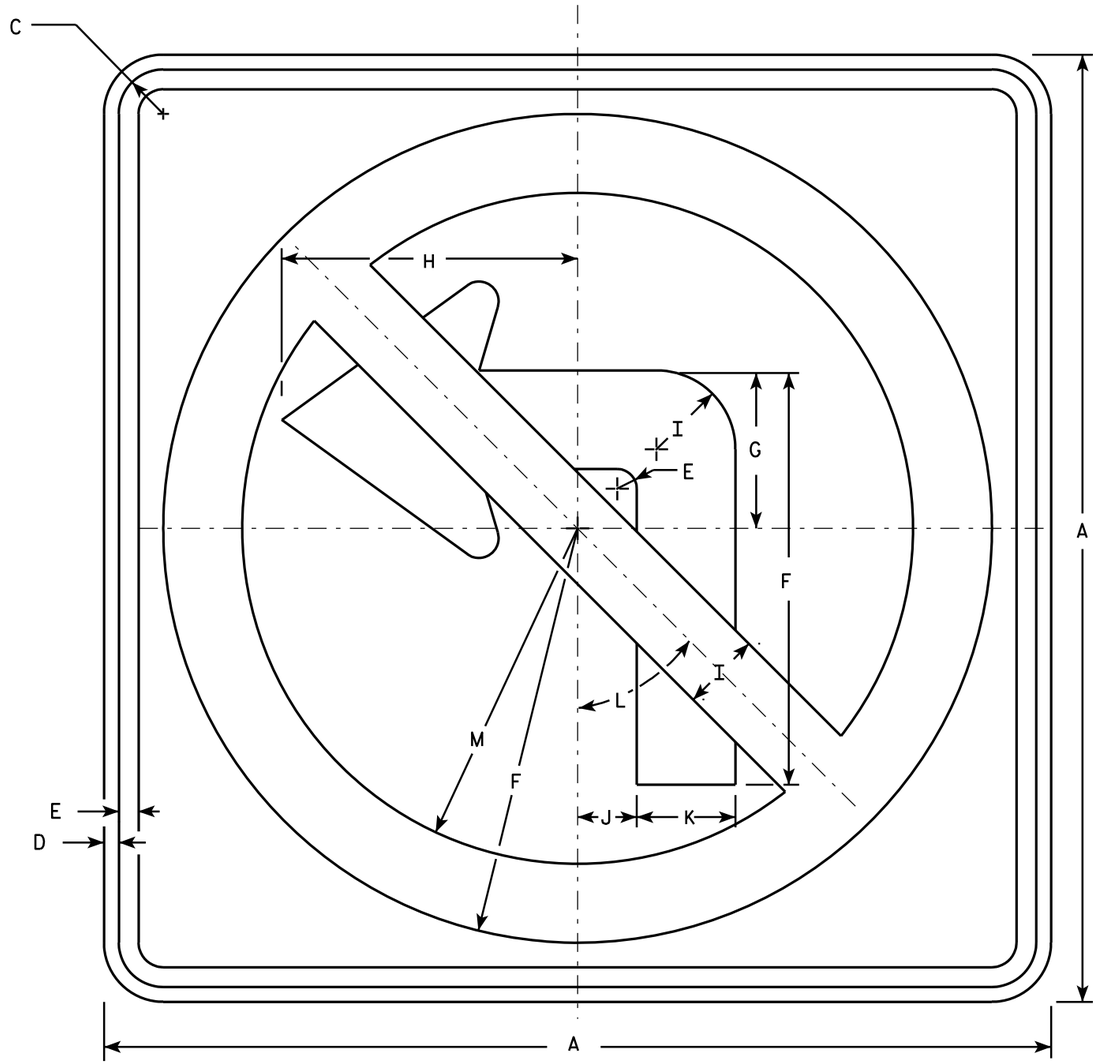
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

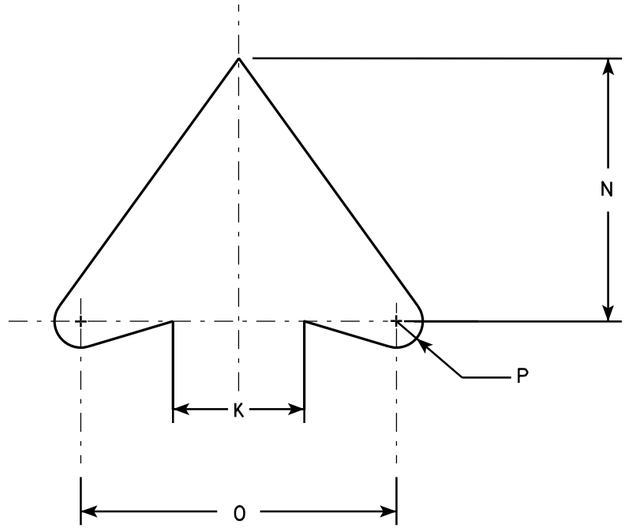
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 359	E



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

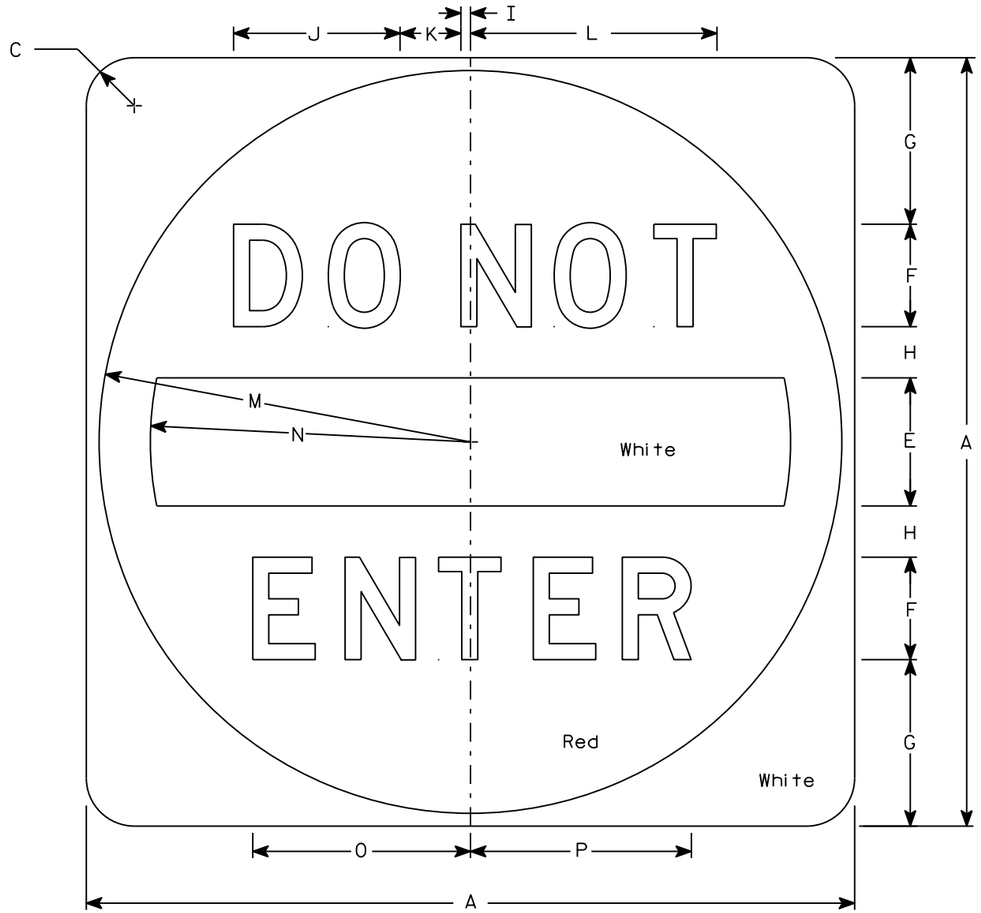
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 360	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R32.DGN PLOT DATE : 08-DEC-2010 14:41 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.760408:1.000000

WISDOT/CADDS SHEET 42



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

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	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

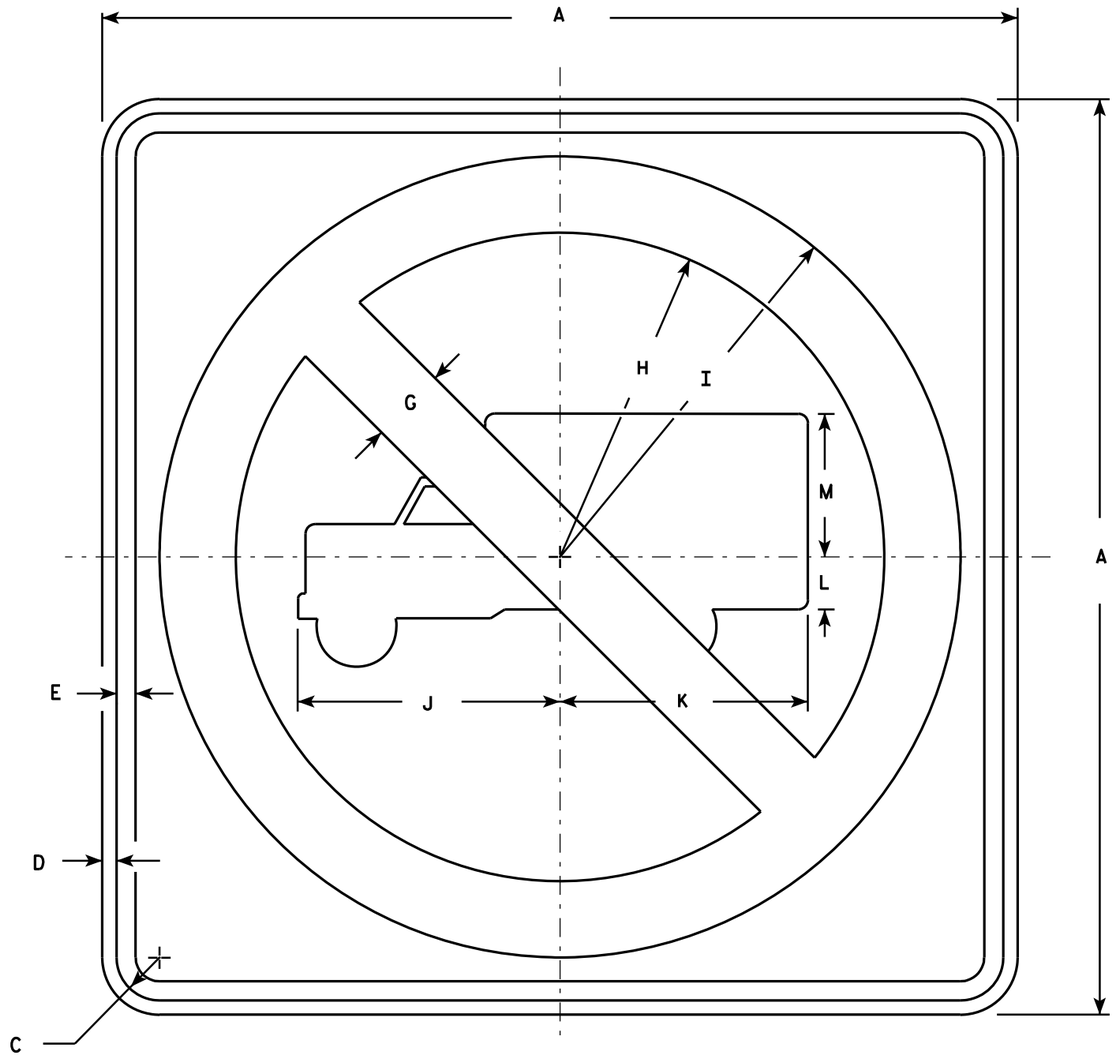
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 361 | E



R5-2

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. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

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		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

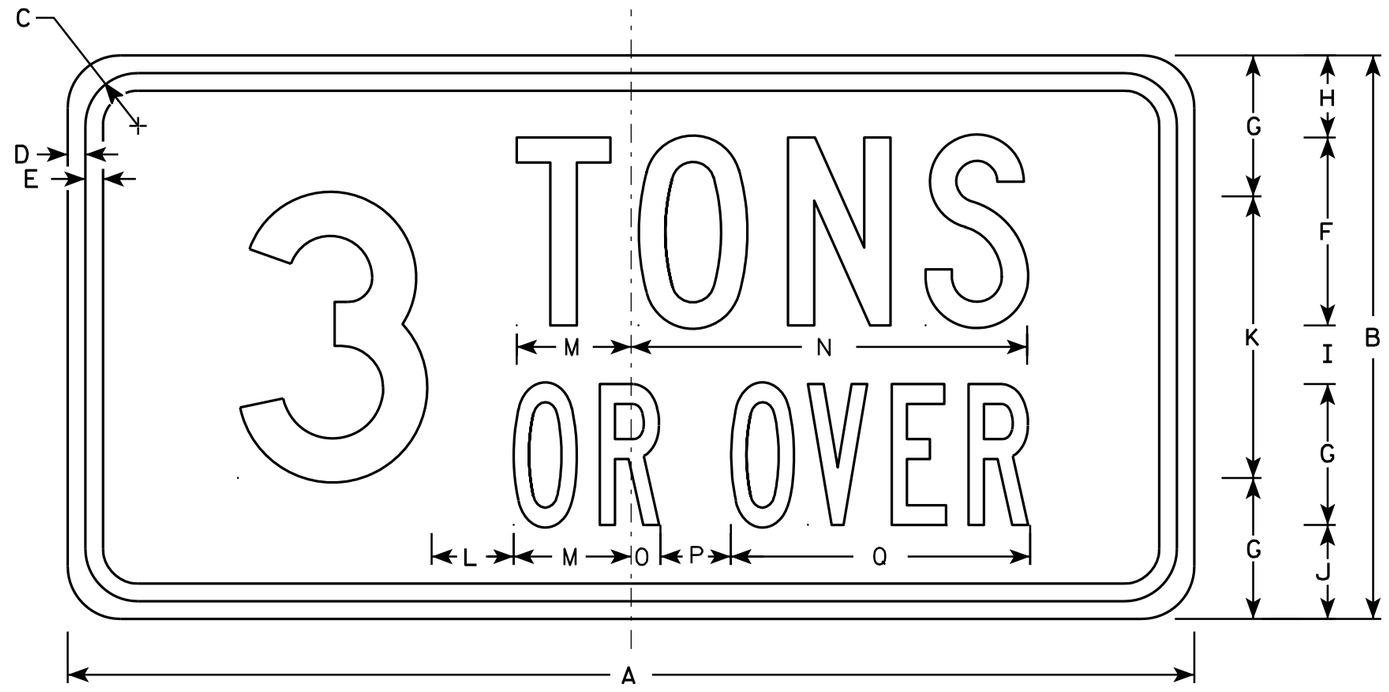
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 362	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R52.DGN PLOT DATE : 29-MAR-2011 11:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

7



R5-2A

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 - 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. Line 1 is Series "C"
   Line 2 is Series "B"
   Numeral is Series "D"
6. Substitute appropriate numerals.

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	4	3	1 3/4	1 1/4	2	6	1 3/4	2 1/2	8 1/2	5/8	1 1/2	6 3/8										2.0
2M	24	12	1 1/8	3/8	3/8	4	3	1 3/4	1 1/4	2	6	1 3/4	2 1/2	8 1/2	5/8	1 1/2	6 3/8										2.0
3	30	15	1 1/8	3/8	1/2	5	4	2 1/8	1 3/8	2 1/2	7	2 1/4	3 1/8	10 1/2	1	2 3/8	8 1/2										2.25
4	36	18	1 1/8	3/8	1/2	6	5	2 5/8	1 3/8	3	9	2 1/2	3 3/4	12 5/8	1 3/8	3 1/8	10 1/2										4.5
5	48	24	1 3/8	3/8	5/8	8	6	3 1/2	2 1/2	4	12	3 1/2	4 7/8	16 7/8	1 1/4	3	12 3/4										8.0

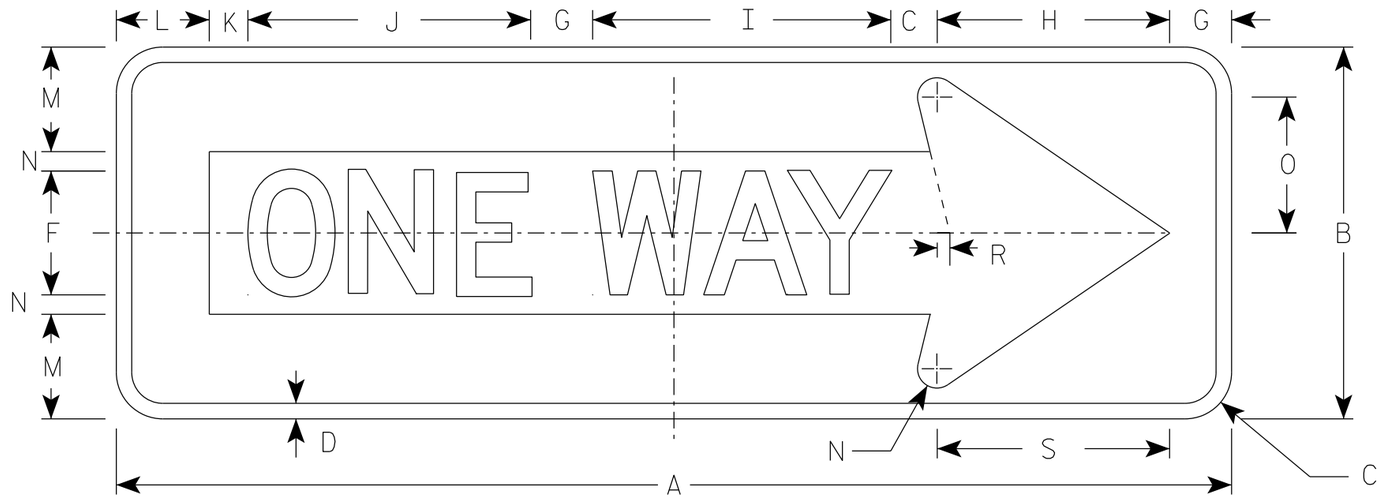
STANDARD SIGN
R5-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2A.7

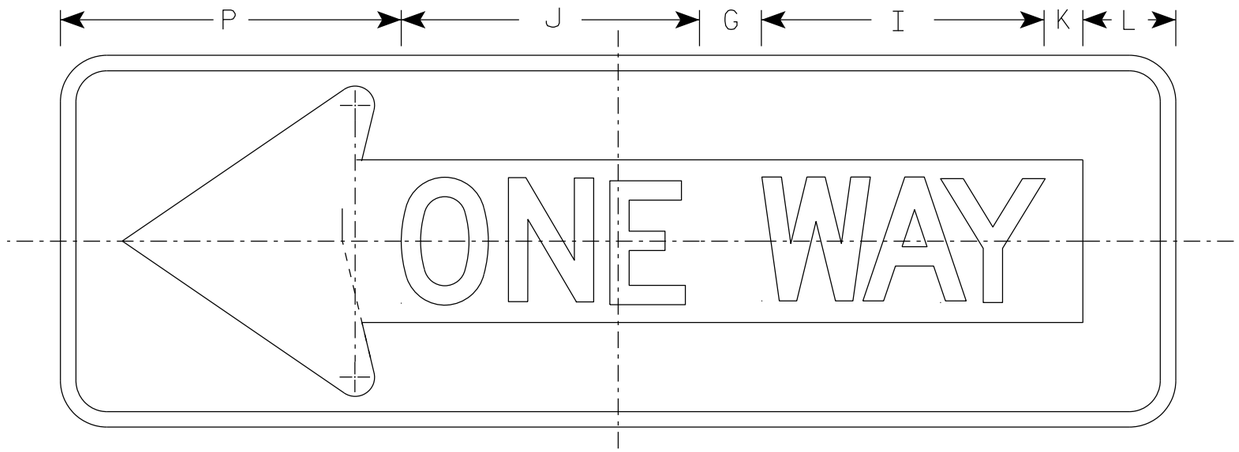
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 363 | E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



R6-1L

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	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

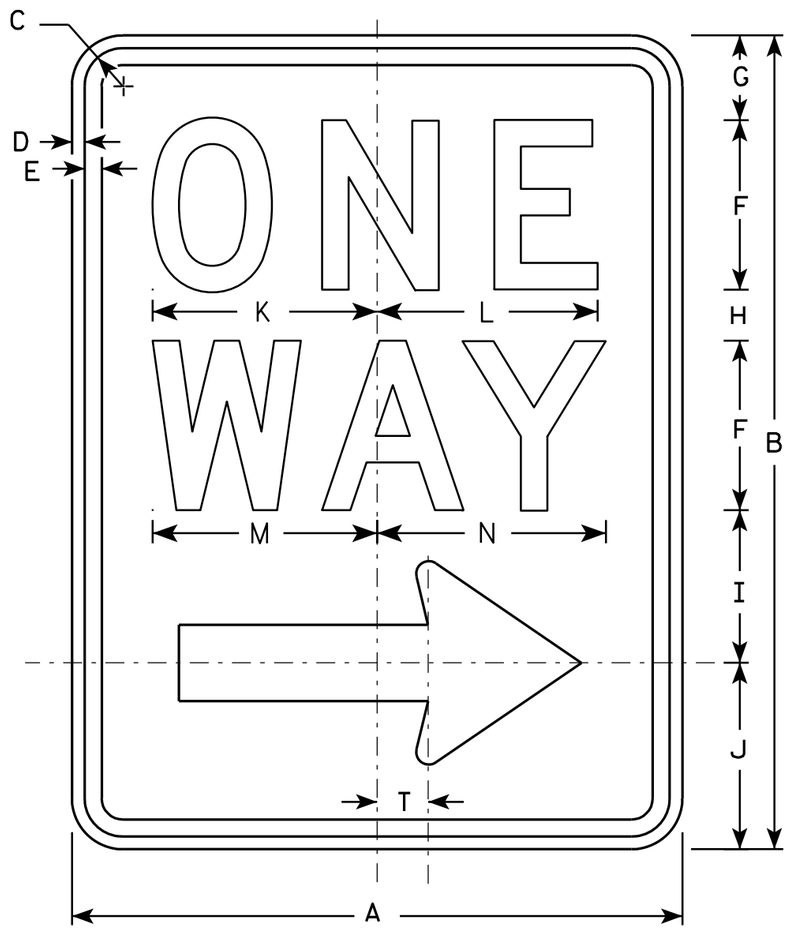
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

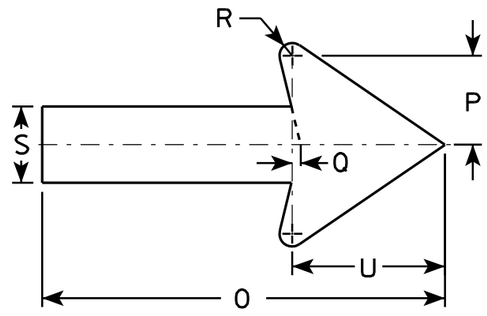
SHEET NO: 364 E



R6-2R

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. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

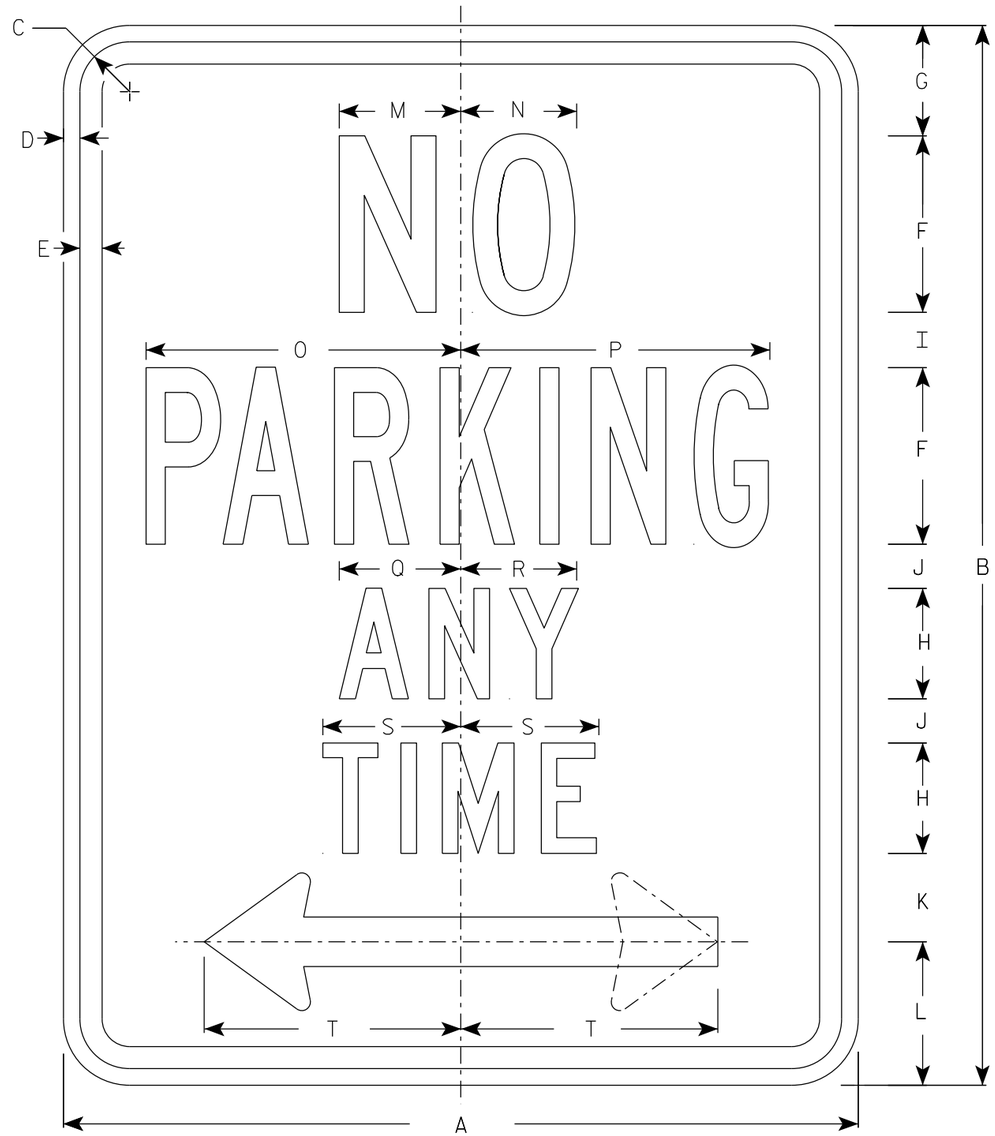
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

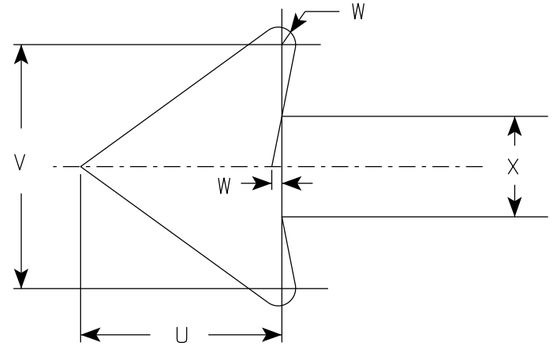
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 365	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

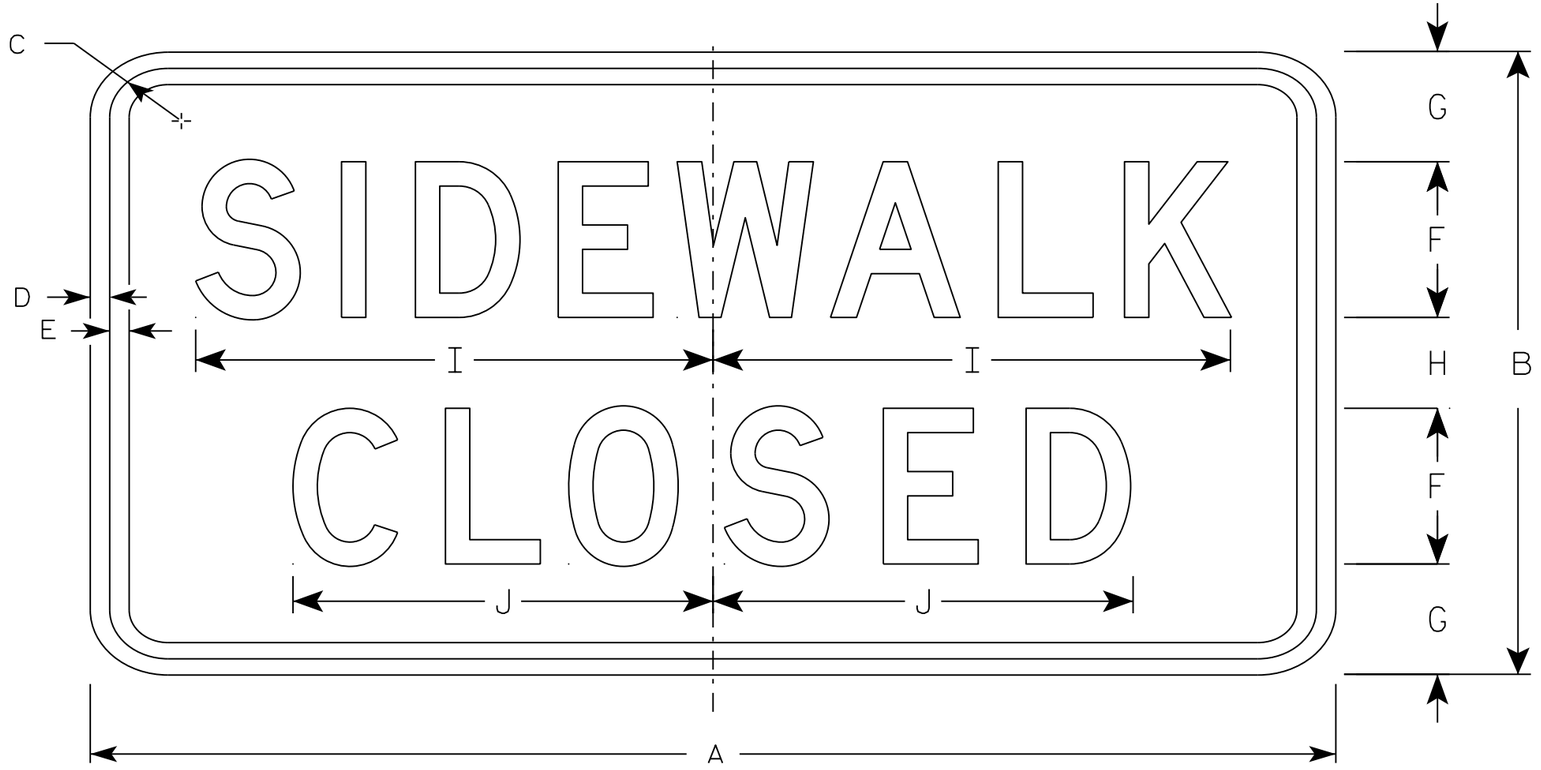
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 366 E

7

7



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

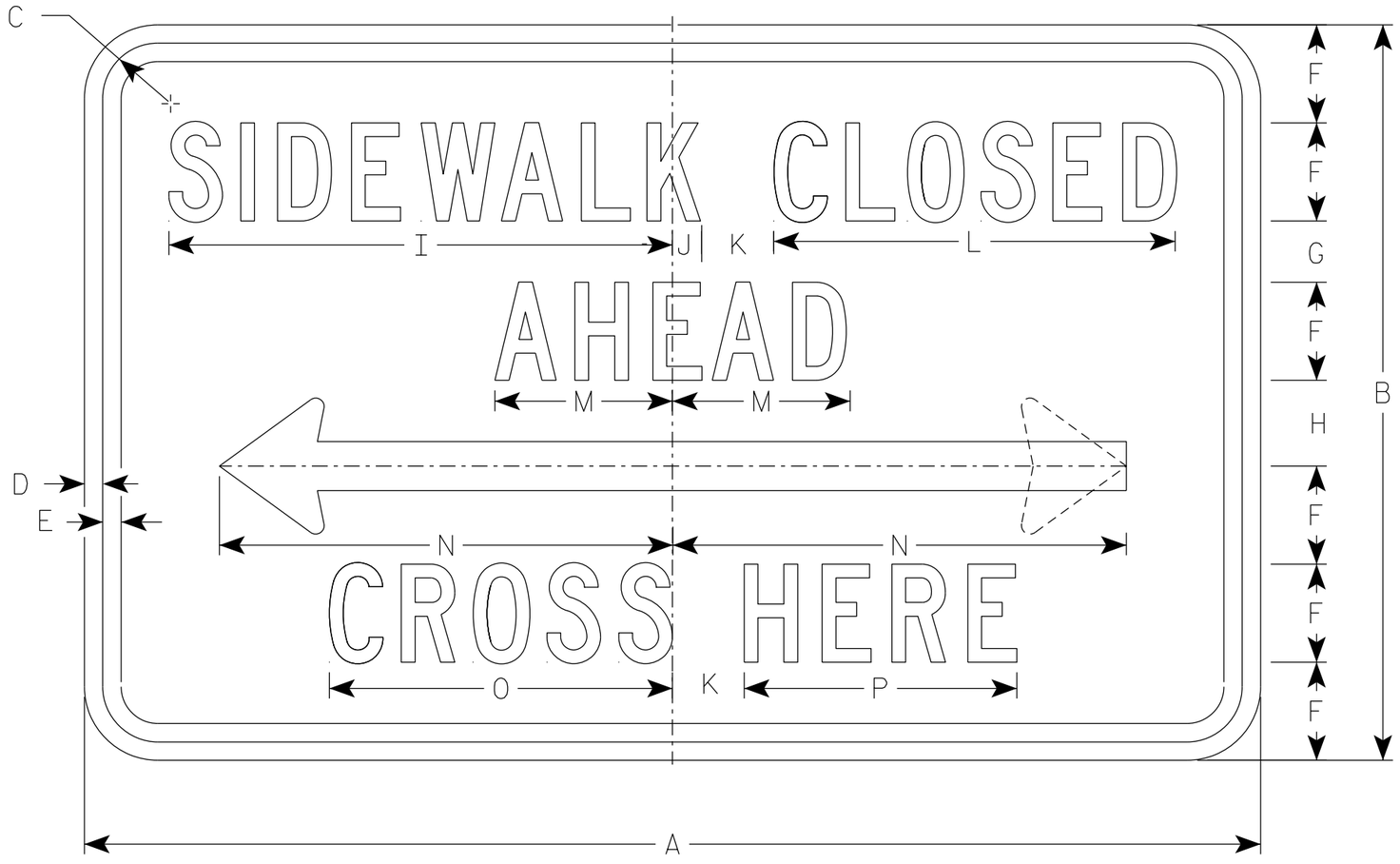
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

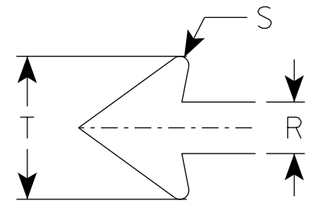
DATE 8/11/16 PLATE 367 R9-9.6

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.
6. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (right arrow)

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																											

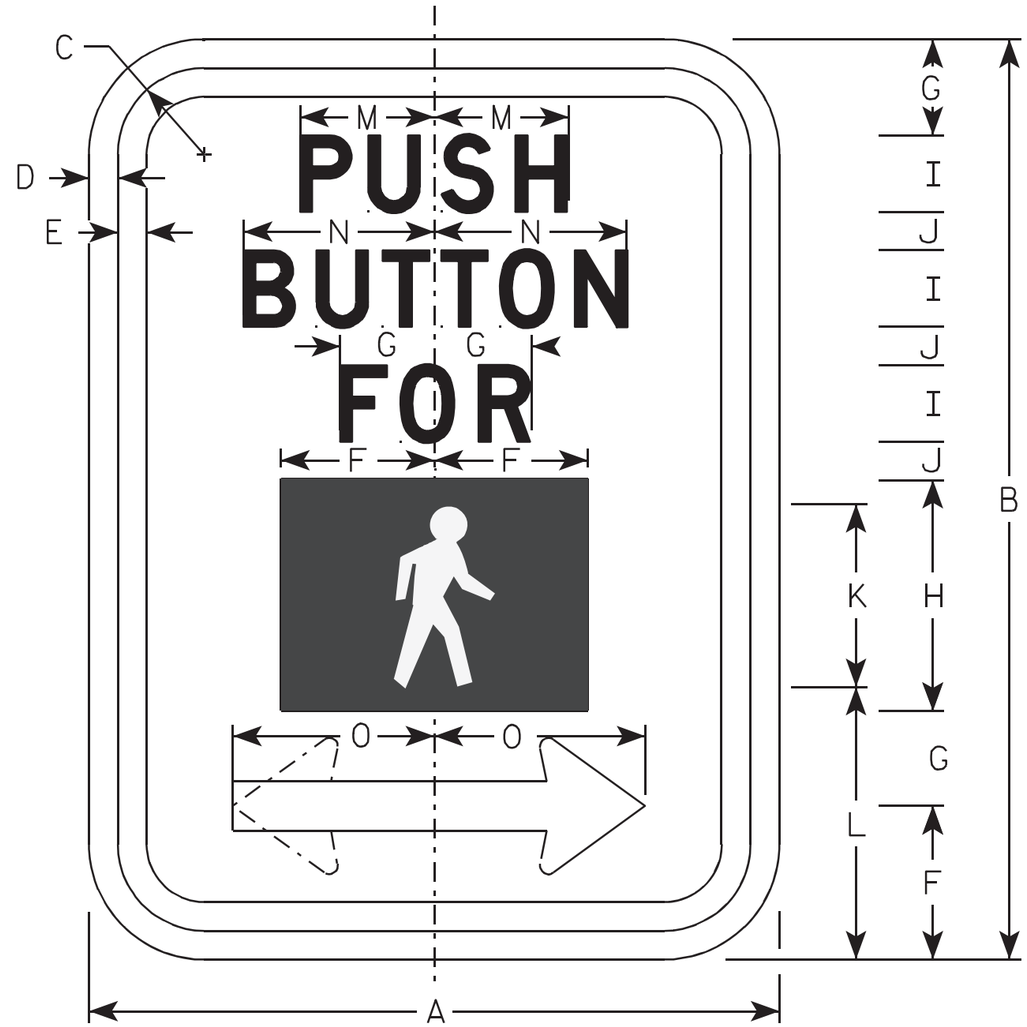
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/30/2021 PLATE NO. R9-11.4

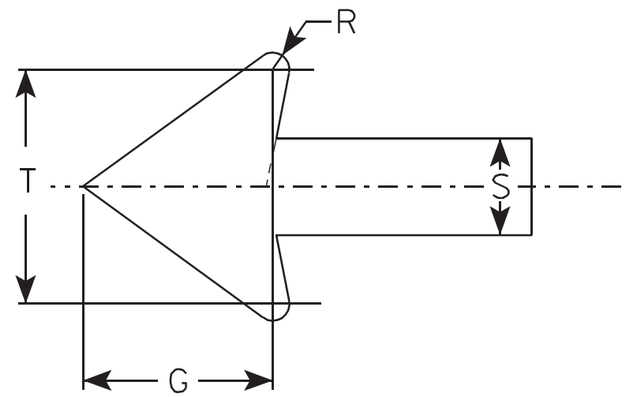
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 368 | E



R10-4BR

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
   Symbol - White on 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. R10-4BD (DOUBLE)
   R10-4BL (LEFT)
   R10-4BR (RIGHT)



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	6	9	1/2	1/8	1/8	1 1/2	7/8	2 1/4	3/4	3/8	1 3/4	2 5/8	1 1/8	1 5/8	1 3/4			1/8	1/2	1 1/8							0.38
2S	9	12	1 1/8	3/8	3/8	2	1 1/4	3	1	1/2	2 3/8	3 1/2	1 3/4	2 1/2	2 5/8			1/8	5/8	1 1/2							0.75
2M	9	12	1 1/8	3/8	3/8	2	1 1/4	3	1	1/2	2 3/8	3 1/2	1 3/4	2 1/2	2 5/8			1/8	5/8	1 1/2							0.75
3																											
4																											
5																											

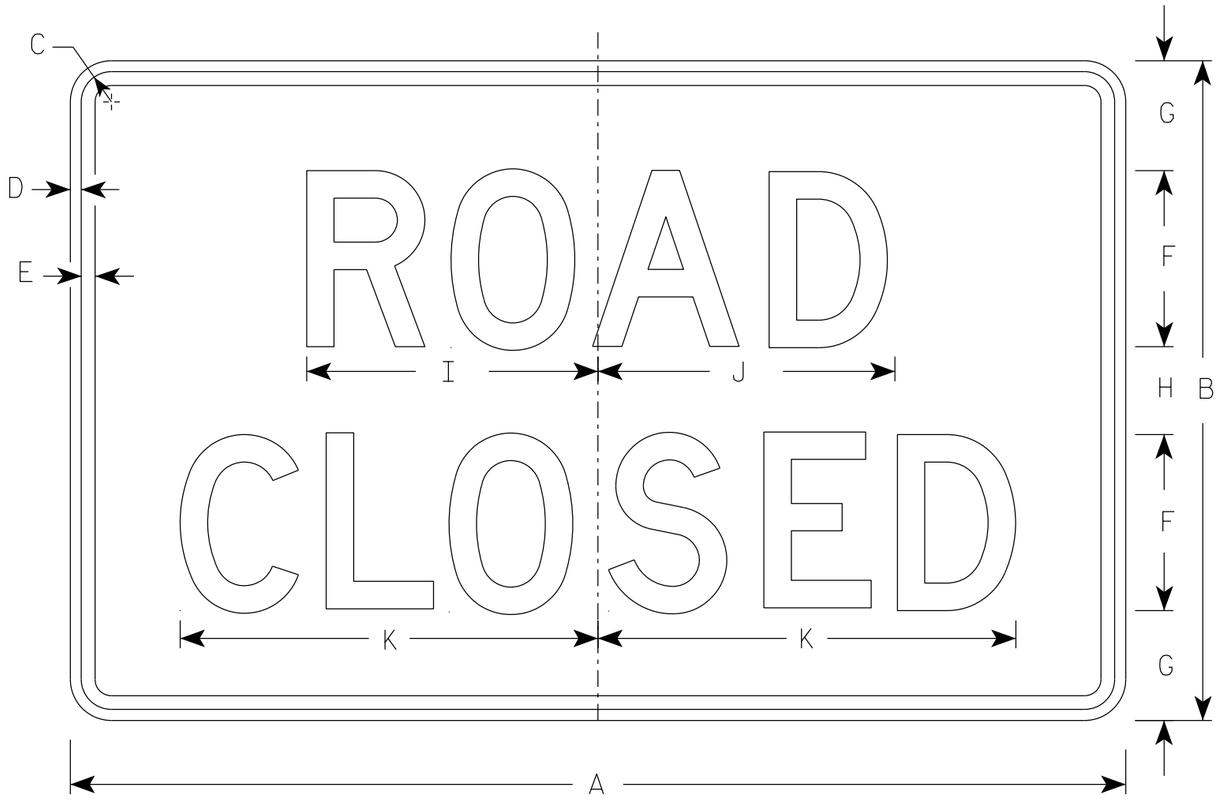
STANDARD SIGN
R10-4BD, L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-4B.2

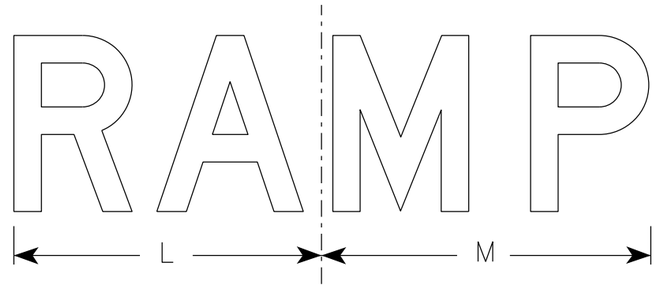
PROJECT NO: | SHEET NO: E



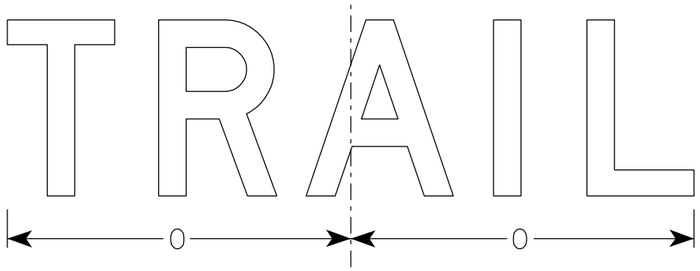
R11-2

NOTES

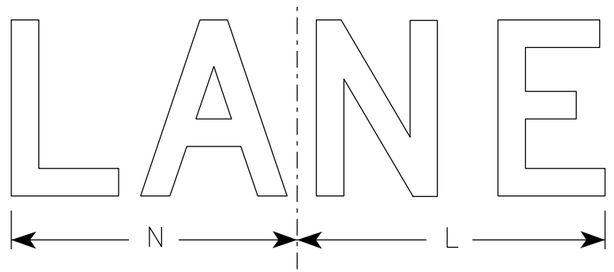
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												10.0

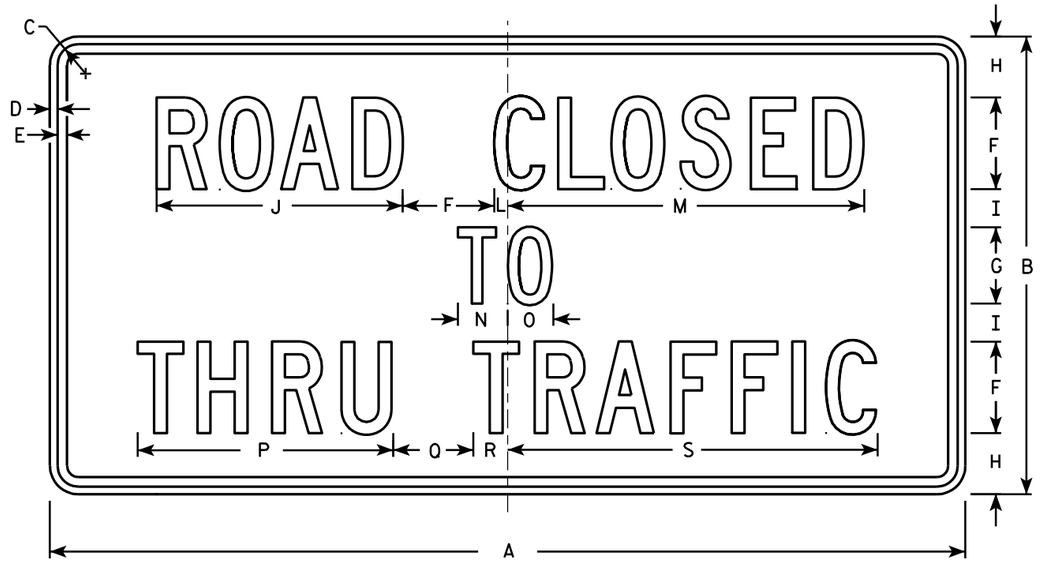
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 370 E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

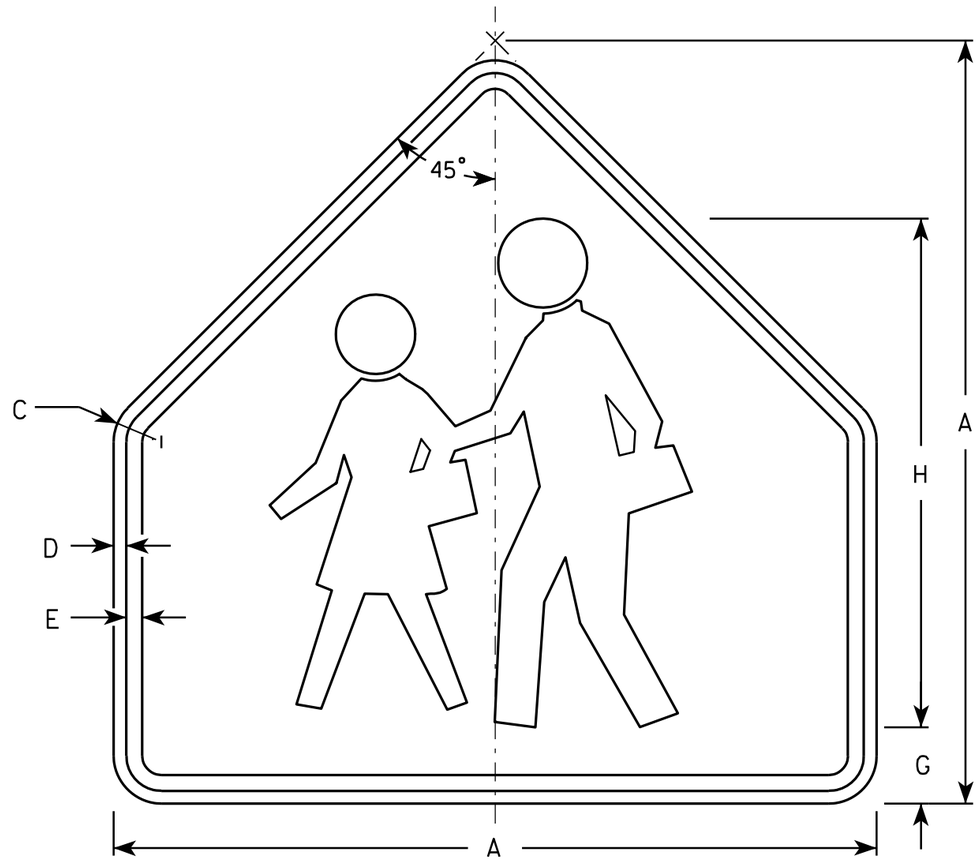
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 371 | E



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

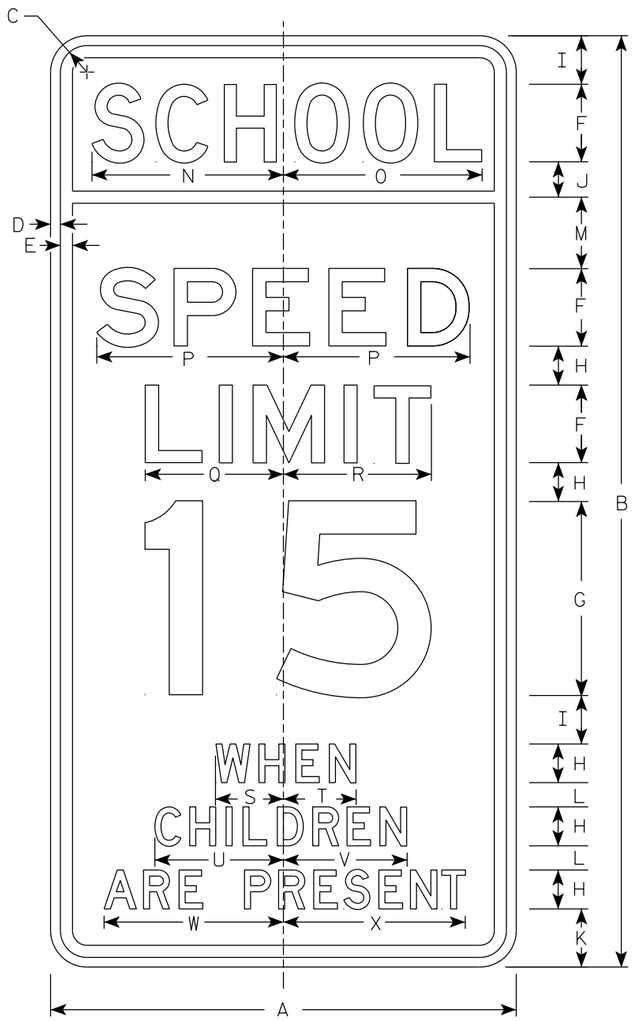
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 372	E



S4-51

NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color:
   Background - See Note 4
   Message - Black
3. Message Series - See Note 5
4. Top panel (SCHOOL) background - Yellow Green - Type F Reflective
   Lower panel background - White - Type SH Reflective
5. From top to bottom:
   Lines 1, 5, 6 & 7 are series D
   Lines 2, 3 & 4 are series E
6. Line 4 substitute appropriate numerals and adjust spacing to achieve proper balance.

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	48	1 3/8	1/2	5/8	4	10	2	2 1/2	1 3/4	3	1 1/4	3 3/4	9 7/8	10 1/4	9 5/8	7 1/8	7 5/8	3 1/2	3 3/8	6 5/8	6 3/8	9 1/4	9 3/8			8.00
3	36	72	2 1/4	3/4	1	6	15	3	3 3/4	2 3/4	4 1/2	1 7/8	5 1/2	15	15 1/4	14 1/2	11 1/4	11 1/2	5 1/2	5 3/4	10	9 3/4	14	14 1/8			18.00
4																											
5																											

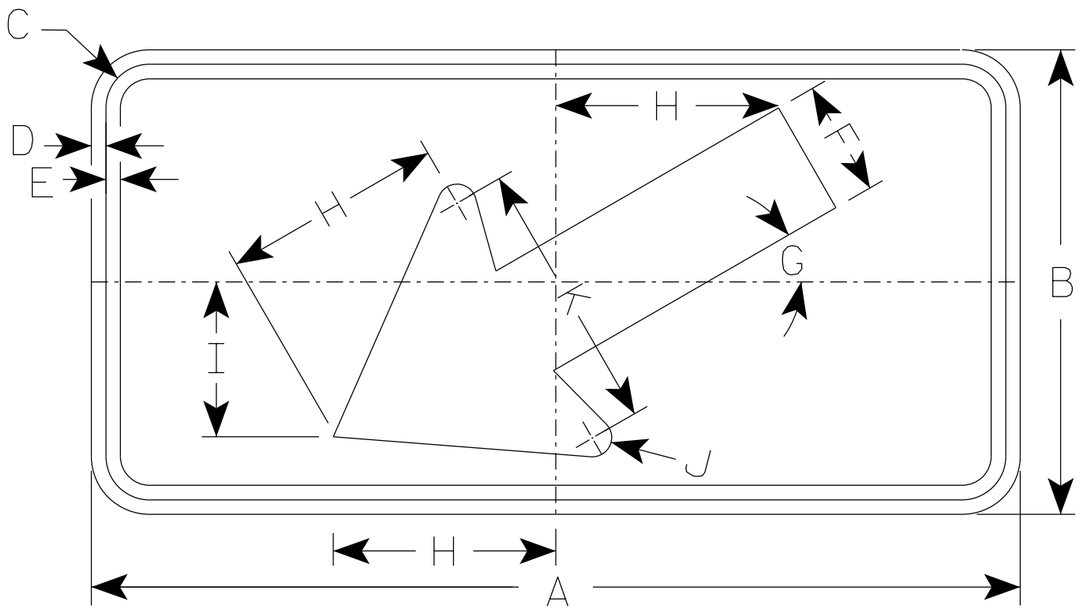
STANDARD SIGN
S4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/27/2020 PLATE NO. S4-51.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 373 E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black
3. S16-7R are the same as S16-7L 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	24	12	1 1/8	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

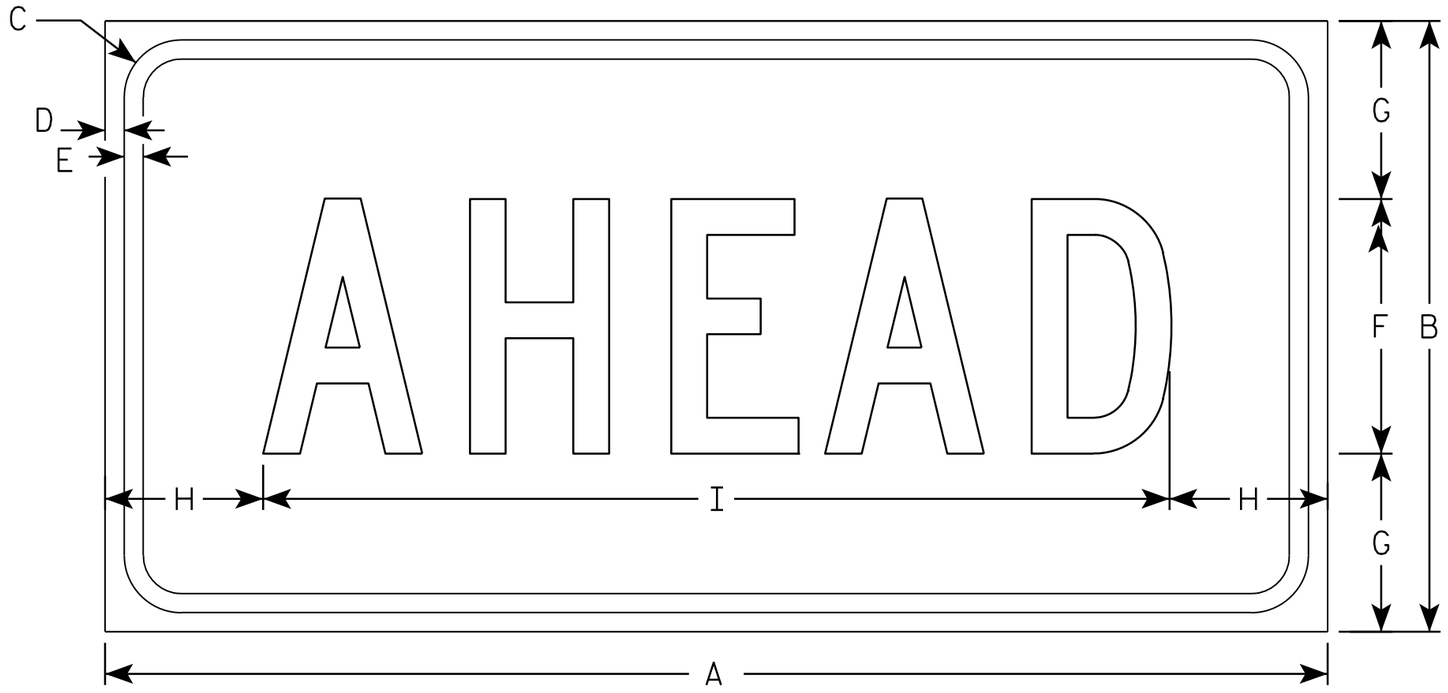
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. S16-7.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 374 E



S16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

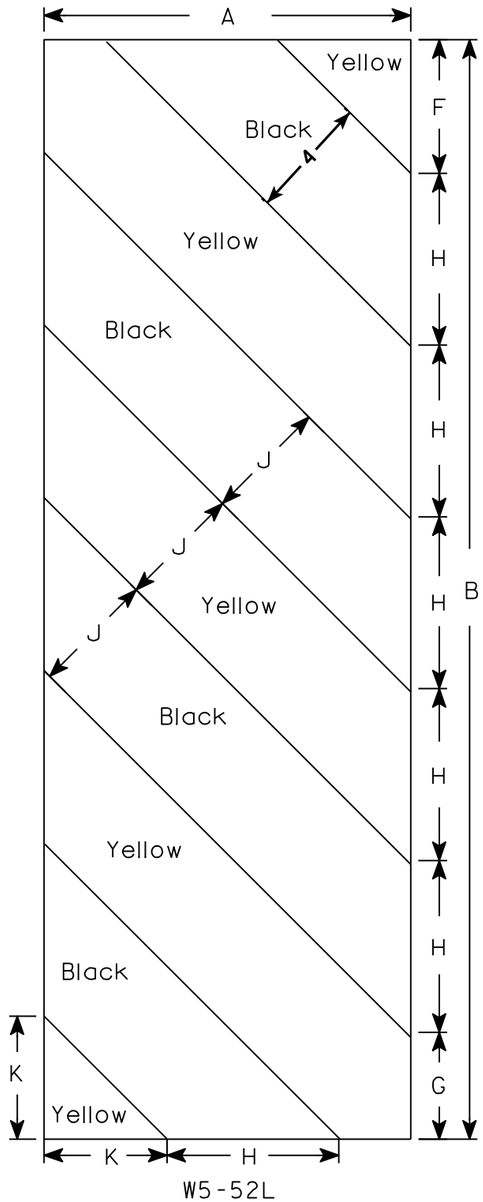
STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

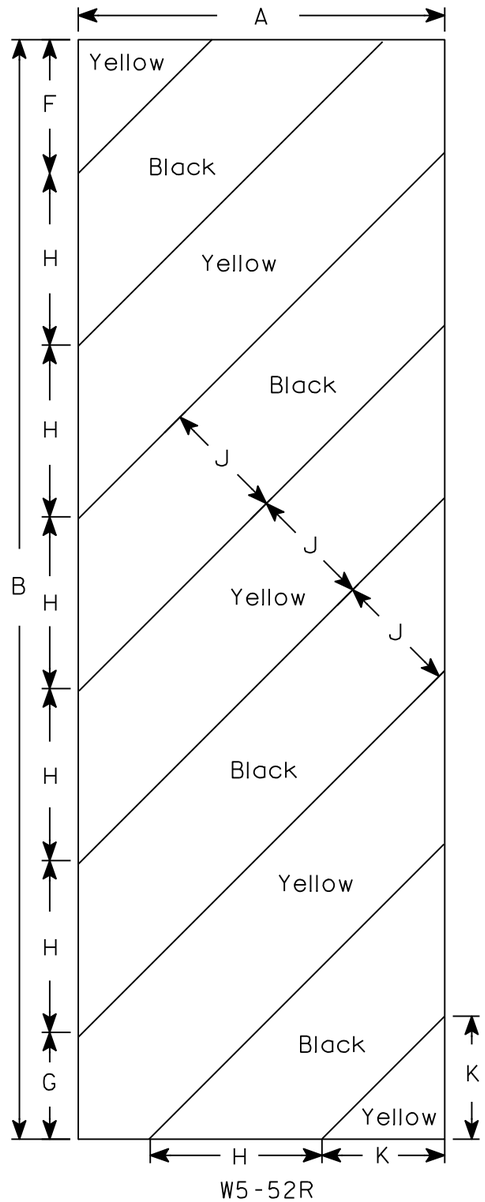
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 375 | E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

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	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

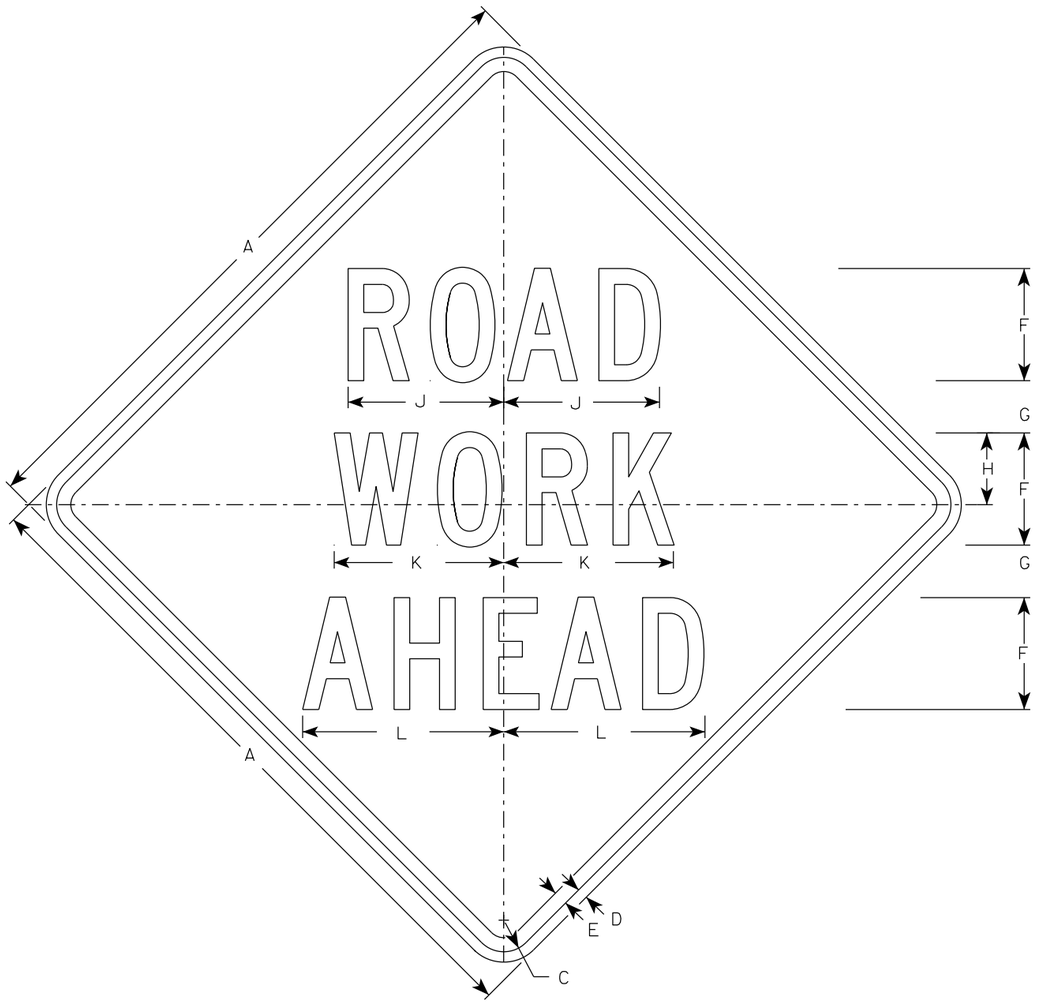
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

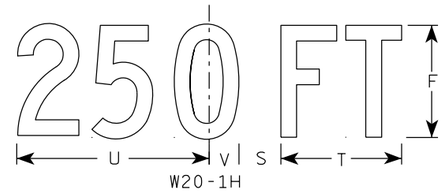
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 376 | E

NOTES

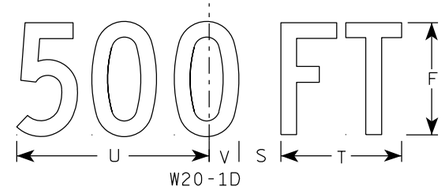
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

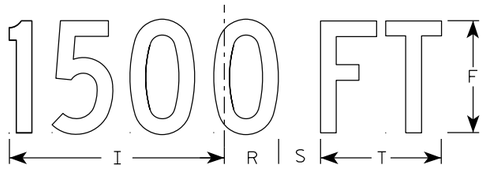


W20-1H

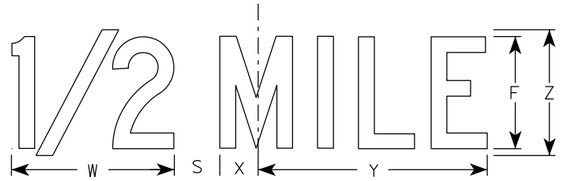


W20-1D

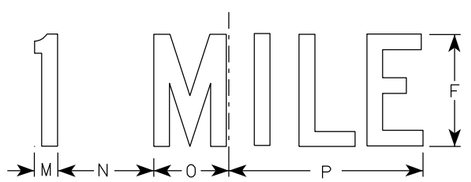
W20-1C



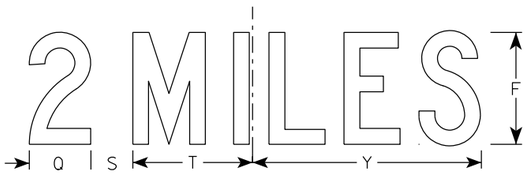
W20-1B



W20-1G



W20-1F



W20-1E

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	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	3 1/4	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, E, F, G & H

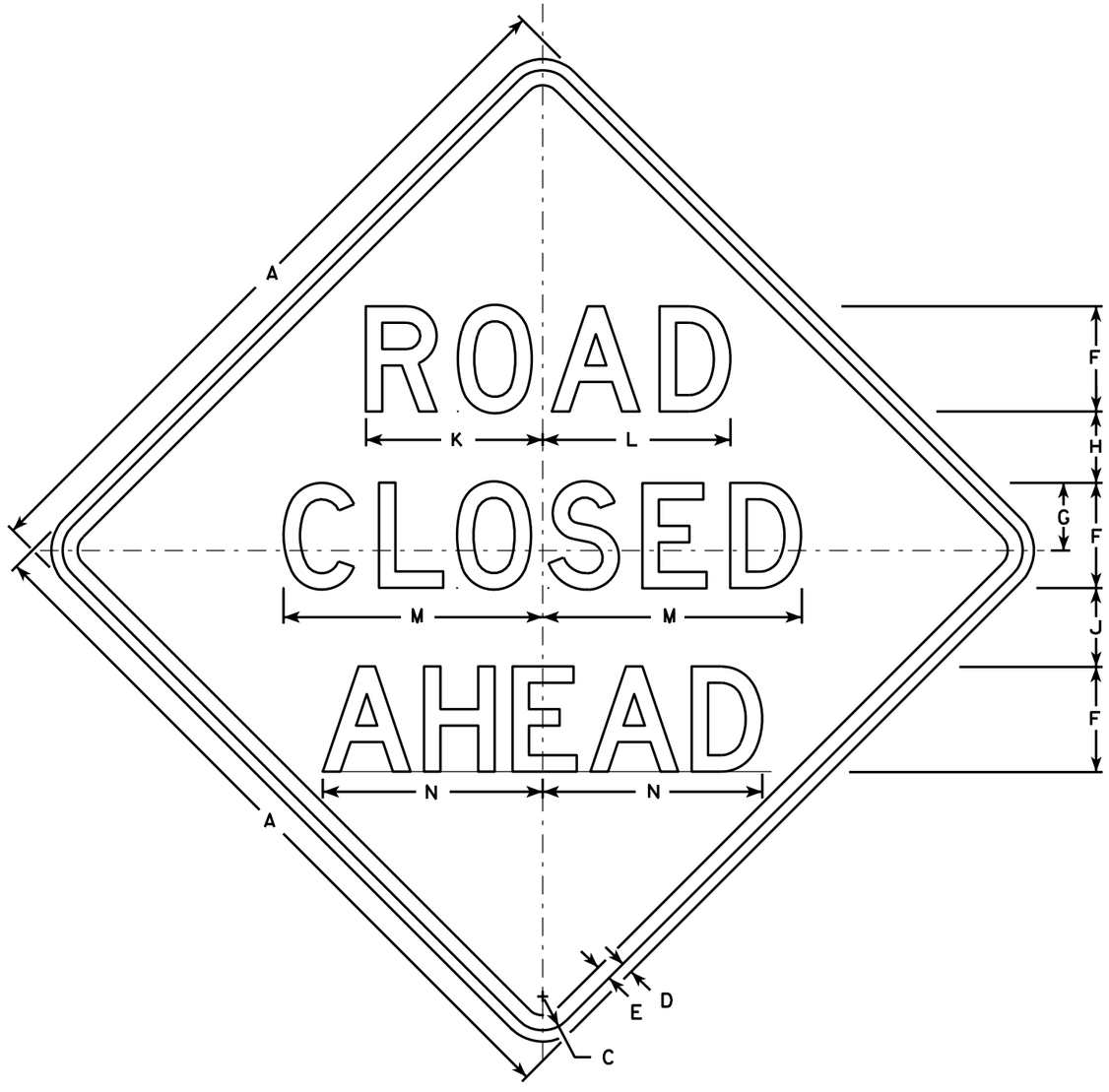
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

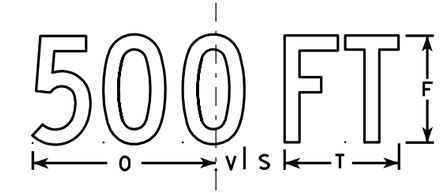
DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

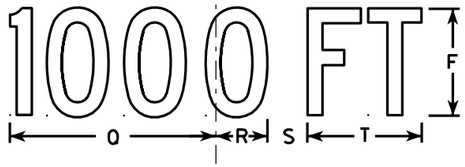
SHEET NO: 377 E



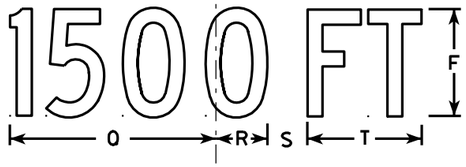
W20-3A



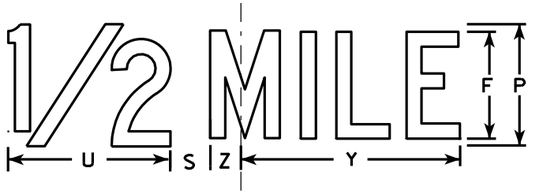
W20-3D



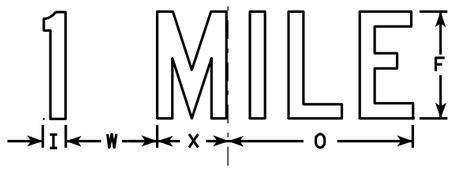
W20-3C



W20-3B



W20-3G



W20-3F

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. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

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	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

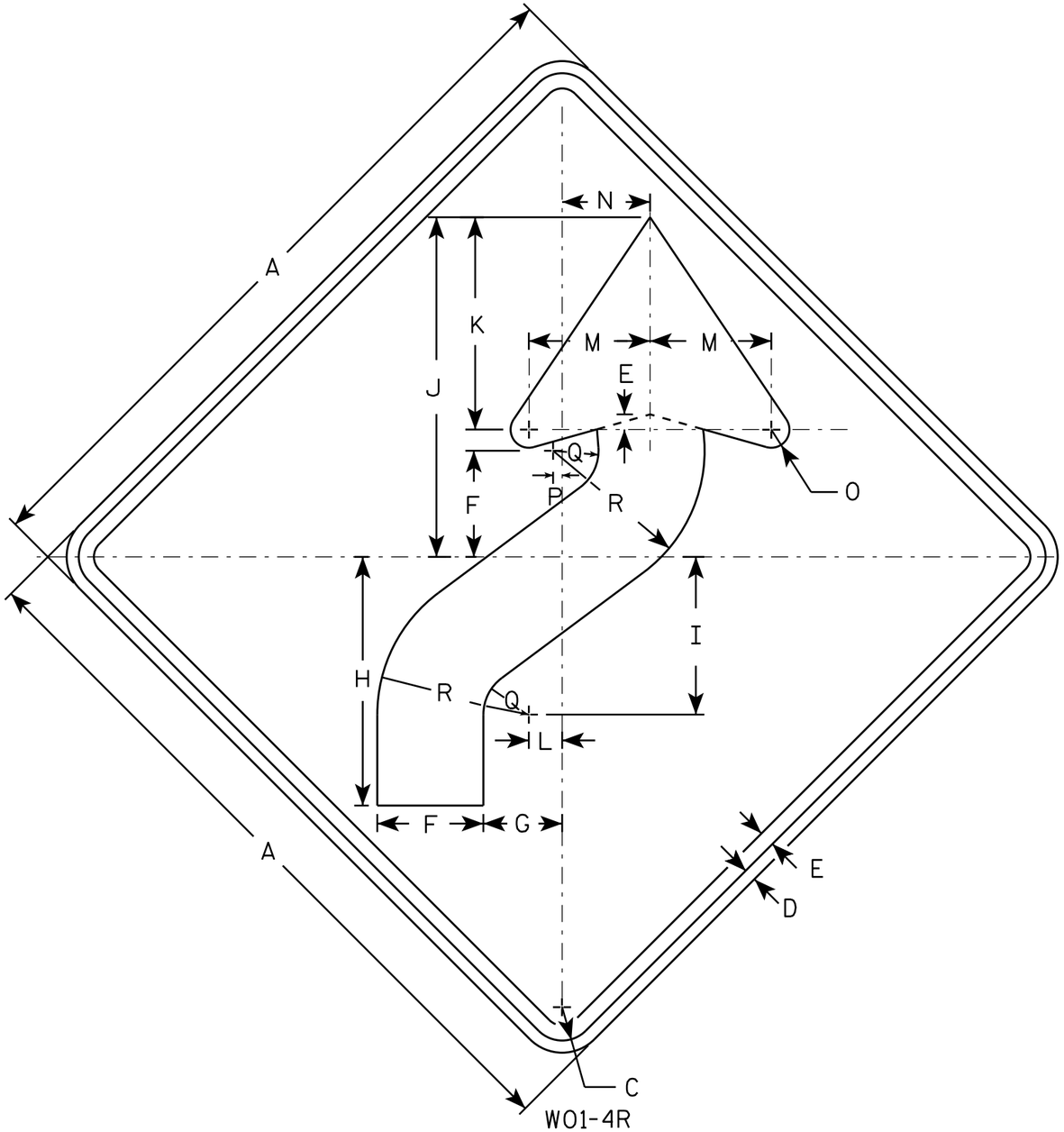
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 378 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
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

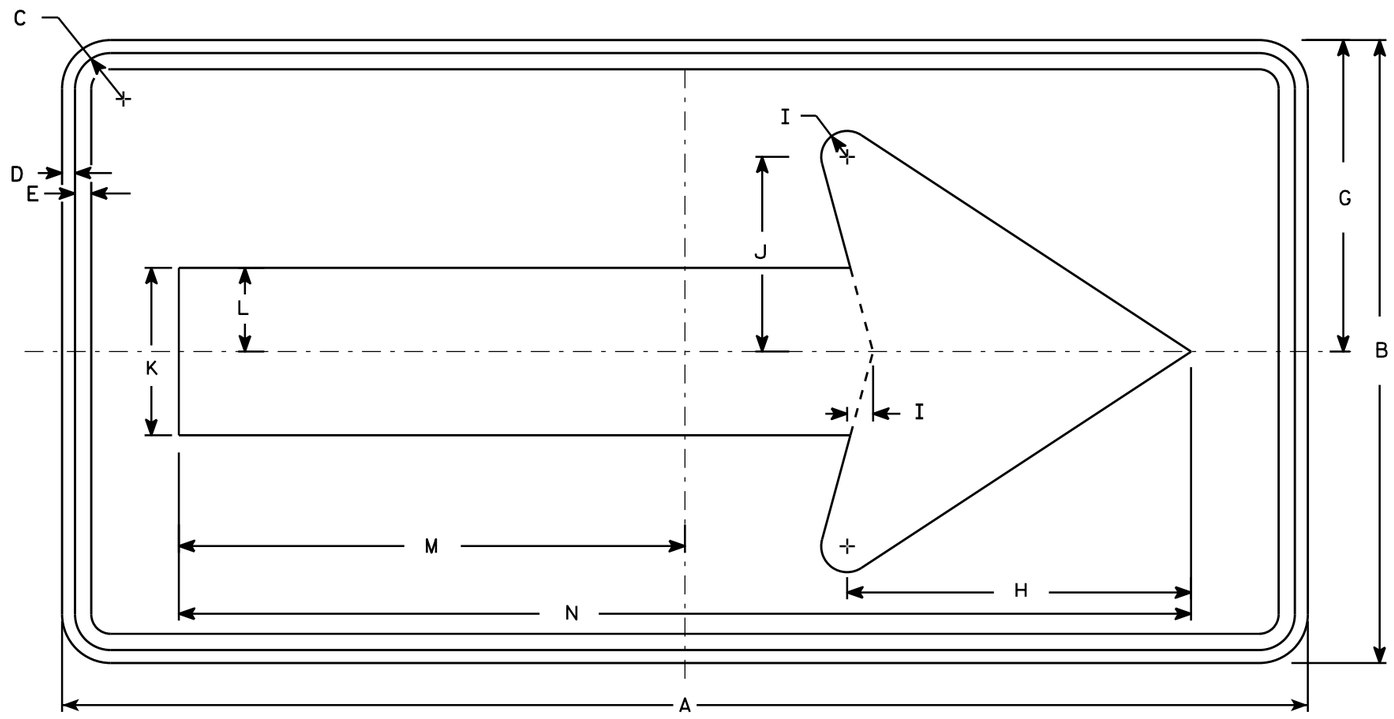
WISCONSIN DEPT OF TRANSPORTATION

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

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov