PROJECT ID: **3240-17-60**

WITH:

COUNTY: **KENOSHA**

ORDER OF SHEETS

TOTAL SHEETS =

N

DESIGN DESIGNATION

A.A.D.T.	(2020)	=	12,170
A.A.D.T.	(2040)	=	14,070
D.H.V.	(2040)	=	1,565
D.D.		=	59/41
T.		=	4.9%
DESIGN SPEED		=	50MPH
ESALS		=	N/A

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STH 32 - STORM SEWER REPAIR

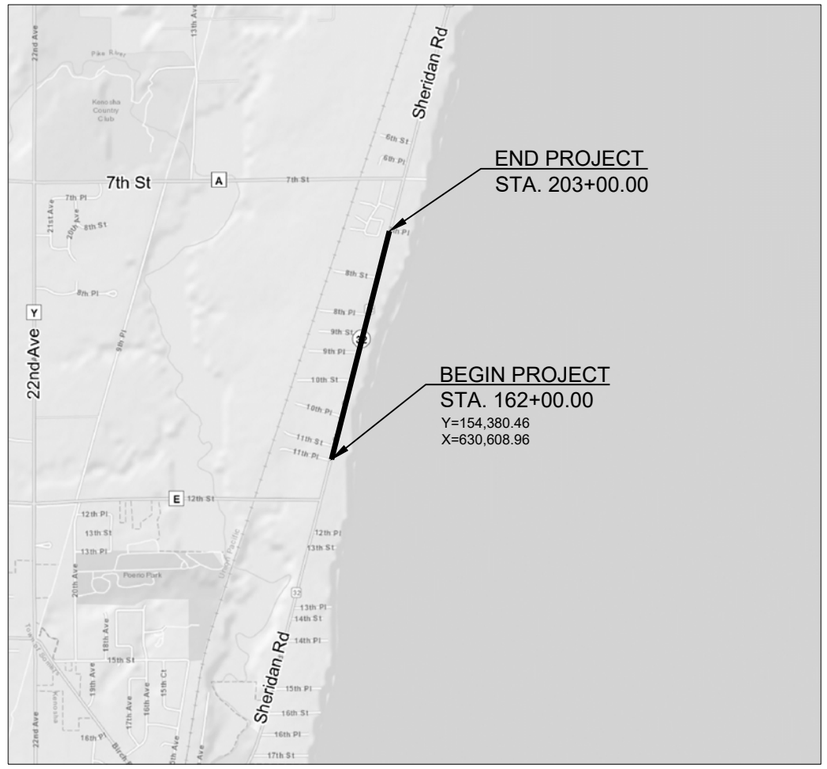
7TH PLACE, 875 SHERIDAN RD, 11TH PL

NON HWY
KENOSHA COUNTY

STATE PROJECT NUMBER
3240-17-60

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3240-17-60		

DRAFT PS&E
DECEMBER 4, 2019



LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.777 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), KENOSHA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GEOID 12A.

ORIGINAL PLANS PREPARED BY

GRAEF 125 S. 84TH STREET, SUITE 401 MILWAUKEE, WI 53214

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GRAEF
Designer	GRAEF
Project Manager	DOUG CAIN
Regional Examiner	STEVE CHOJNACKI
Regional Supervisor	BENEDICT ERUCHALU

APPROVED FOR THE DEPARTMENT

DATE: _____ (Signature)

E

GENERAL NOTES

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

THE EXACT LOCATION OF PRIVATE ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

ALL RADIUS DIMENSIONS FOR CURB & GUTTER ARE GIVEN TO THE FLANGE. ALL ELEVATIONS ALONG CURB & GUTTER ARE GIVEN TO THE FLANGE. OFFSETS NOTED ARE TO THE FLANGE OR EDGE OF LANE IF NO CURB, UNLESS OTHERWISE NOTED.

THE LOCATION OF KNOWN EXISTING UTILITIES IN THE VICINITY OF THE PROJECT ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITIES IN THE AREA THAT ARE NOT SHOWN.

ASPHALT AND CONCRETE DRIVEWAYS SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

HMA PAVEMENT SHALL CONSIST OF LAYERS AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

6" DEPTH	4" OF HMA PAVEMENT 3 MT 58-28 S AS THE LOWER LAYER 2" OF HMA PAVEMENT 4 MT 58-28 S AS THE UPPER LAYER
2" DEPTH	2" OF HMA PAVEMENT 4 MT 58-28 S AS THE UPPER LAYER

INDEX OF DETAIL SHEETS

STANDARD ABBREVIATIONS

AEW	APRON END WALL
AGG	AGGREGATE
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CONC	CONCRETE
CP	CULVERT PIPE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC-YARD
D	DEGREE OF CURVE
△	DELTA
DISCH	DISCHARGE
FE	FIELD ENTRANCE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
NTS	NOT TO SCALE
PACS	PIPE ARCH CORRUGATED STEEL
PAVT	PAVEMENT
PB	PULL BOX
PC	POINT-OF-CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RAD	RADIUS
RC	REVERSE CROWN
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RT	RIGHT
SALV	SALVAGED
SB	SIGNAL BASE
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TC	TOP OF CURB
TLE	TEMPORARY LIMITED EASEMENT

WISDOT CONTACT

MR. DOUG CAIN, P.E.
WISCONSIN DEPARTMENT OF TRANSPORTATION
SOUTHEAST REGION
141 NW BARSTOW
WAUKESHA, WI 53187-0798
(262) 548-5603
DOUGLAS.CAIN@DOT.WI.GOV

DESIGN CONTACT

GRAEF
MS. MARY BETH PETTIT, P.E.
HONEY CREEK CORPORATE CENTER
125 S. 84TH STREET, SUITE 401
MILWAUKEE, WI 53212
(414) 266-9175
MARYBETH.PETTIT@GRAEF-USA.COM

DNR LIAISON

MR. CRAIG WEBSTER
141 NW BARSTOW, ROOM 180
WAUKESHA, WI 53188
(262) 574-2141
CRAIG.WEBSTER@WISCONSIN.GOV

UTILITIES

AT&T LOCAL NETWORK
MS. JENNIFER NAVARRO
6070 N FLINT RD
GLENDALE, WI 53209
(414) 459-3564
J.NAVARRO@NORTHWINDTECH.COM

AT&T WISCONSIN
MR. MICHAEL VANBOVEN
411 7TH STREET
RACINE, WI 53403
(262) 636-0514
MV3658@ATT.COM

CHARTER COMMUNICATION
MR. NEAL LONG
1320 N DR MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
(414) 277-4271
NEAL.LONG@CHARTER.COM

FRONTIER COMMUNICATIONS OF WI, LLC
MR. RUSS RYAN
118 DIVISION STREET
PLYMOUTH, WI 53073
(920) 583-3275
RUSSELL.W.RYAN@FTR.COM

VILLAGE OF SOMERS - SEWER & WATER
MR. WILLIAM MORRIS
7511 12TH ST
P.O. BOX 197
SOMERS, WI 53171
(262) 859-2822
BMORRIS@SOMERS.ORG

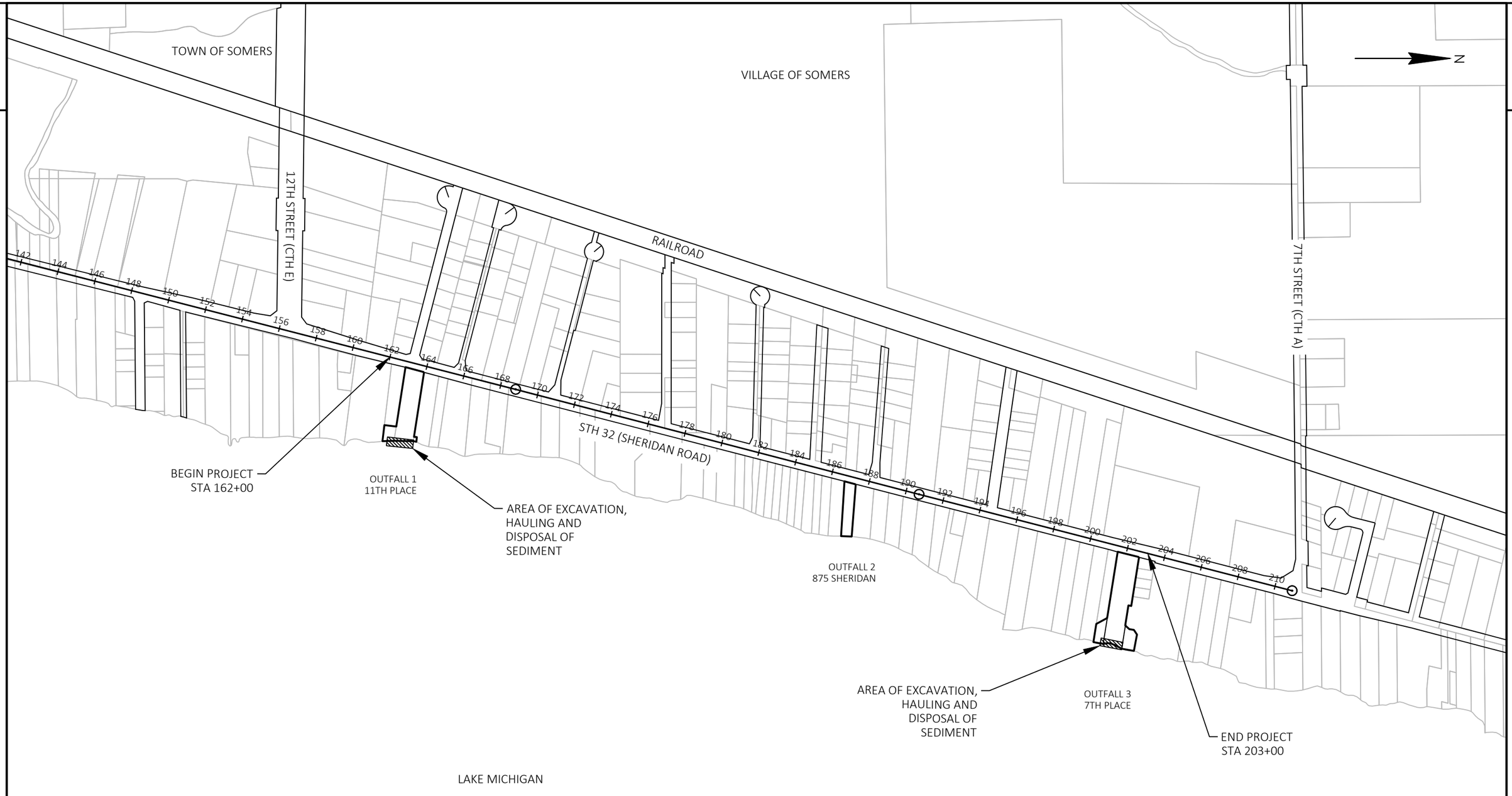
WE ENERGIES - ELECTRIC
SEND ALL CORRESPONDENCE TO:
MS. NICOLE SMULLEN
A299
333 W EVERETT ST
MILWAUKEE, WI 53203
(414) 221 - 5617
NICOLE.SMULLEN@WECENERGYGROUP.COM

CONSTRUCTION FIELD CONTACT:
MR. JAMES NELSON
7815 NORTHWESTERN AVENUE
RACINE, WI 53406
(262) 884-6734
JAMES.NELSON@WE-ENERGIES.COM

WE ENERGIES - GAS/PETROLEUM
SEND ALL CORRESPONDENCE TO:
MS. NICOLE SMULLEN
A299
333 W EVERETT ST
MILWAUKEE, WI 53203
(414) 221 - 5617
NICOLE.SMULLEN@WECENERGYGROUP.COM

CONSTRUCTION FIELD CONTACT:
MR. CHRIS DEGRAVE
7815 NORTHWESTERN AVENUE
RACINE, WI 53406
(262)886-7018
CHRIS.DEGRAVE@WE-ENERGIES.COM

WINDSTREAM
MS. MARY BETH FISHER
13935 BISHOPS DR
BROOKFIELD, WI 53005
(262) 792-7938
MARY.B.FISHER@WINDSTREAM.COM



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PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PROJECT OVERVIEW	SHEET 3	E

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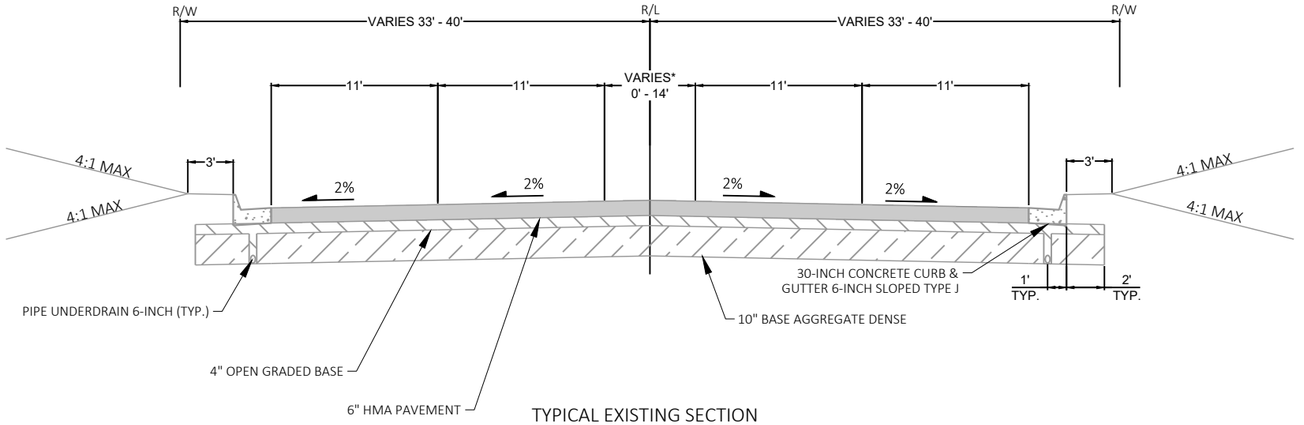
LAYOUT NAME - 020201_po
PLOT DATE : 12/4/2019 4:12 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

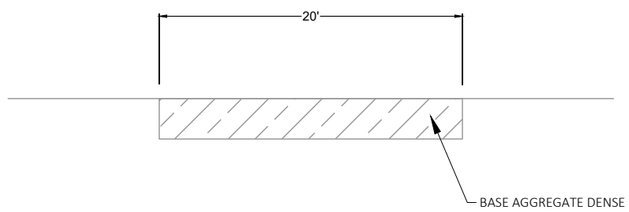


TYPICAL EXISTING SECTION

STH 32

STA. 187+10 TO STA. 201+95

*STA. 198+90 TO STA. 201+95



TYPICAL EXISTING SECTION

7TH PLACE

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 4	E

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LAYOUT NAME - 020301_ts
PLOT DATE : 12/4/2019 4:13 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

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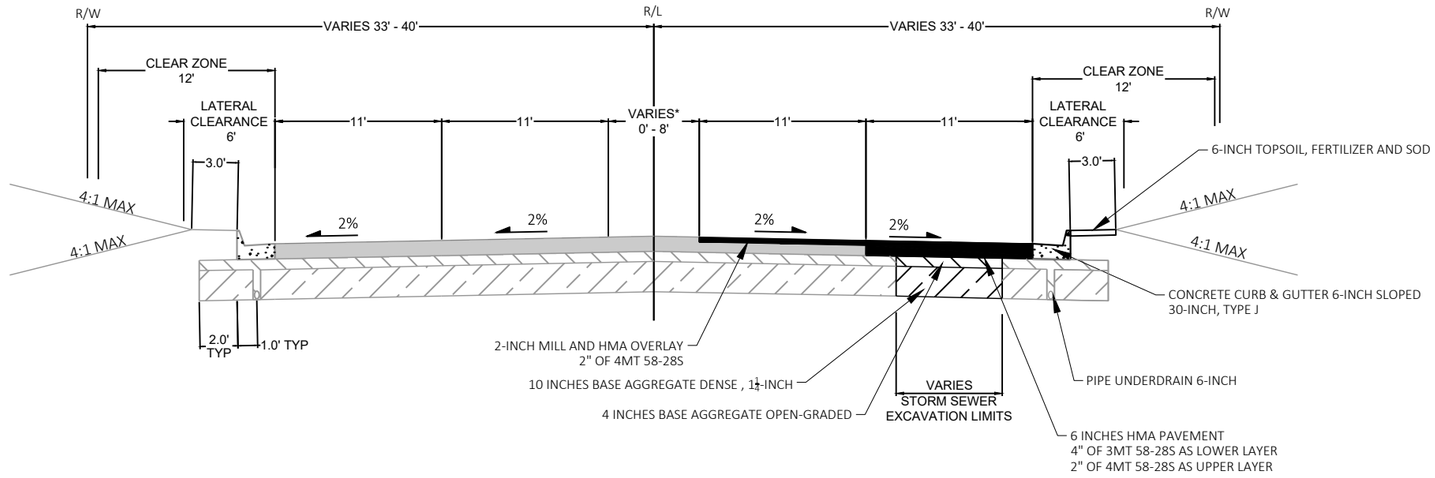
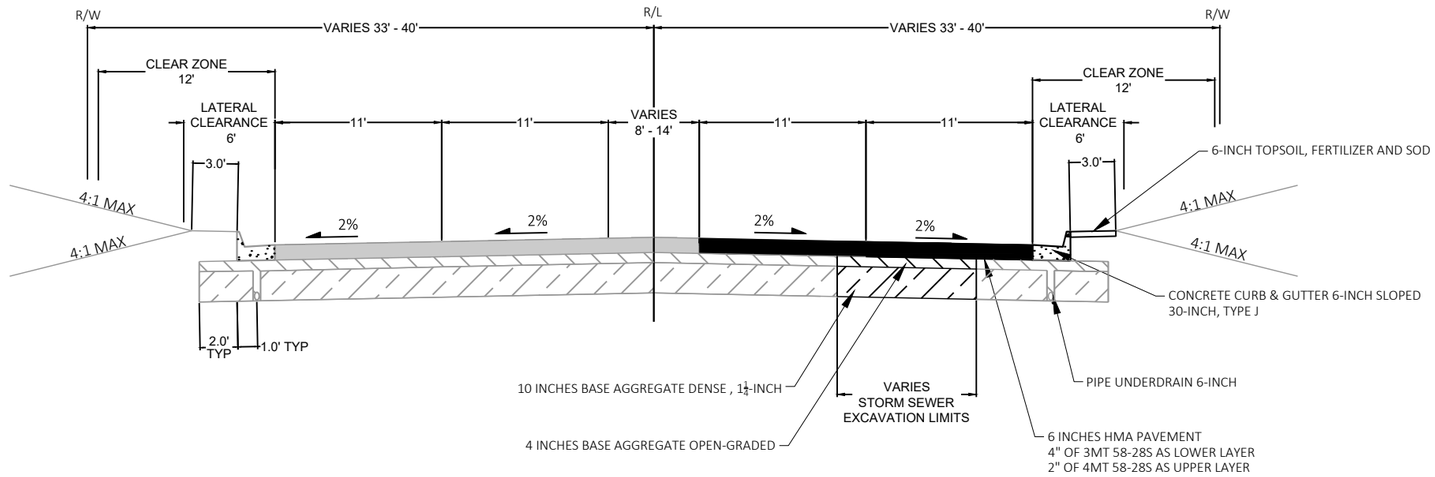


TYPICAL FINISHED SECTION

STH 32
STA. 187+10 TO STA. 200+75

*STA. 198+90 TO 200+75



TYPICAL FINISHED SECTION

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STA. 200+75 TO STA. 201+95

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 5	E

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LAYOUT NAME - 020302_ts

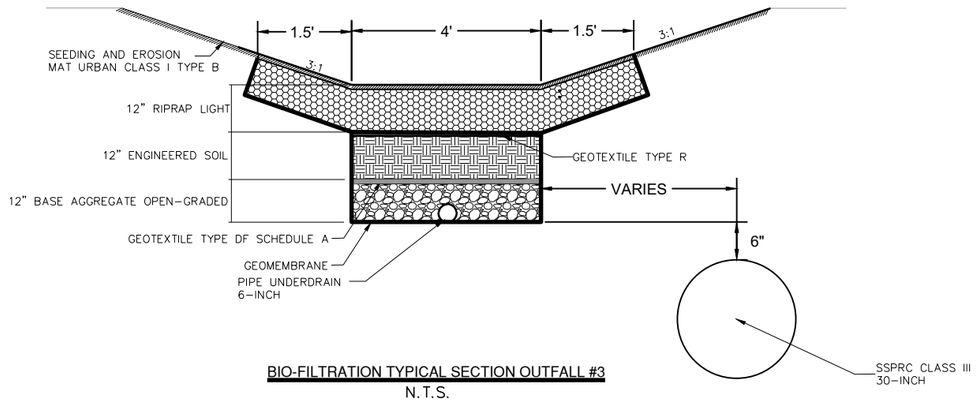
PLOT DATE : 12/4/2019 4:13 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:10 FT

LEGEND

SEEDING AND EROSION MAT URBAN CLASS I TYPE B

ENGINEERED SOIL

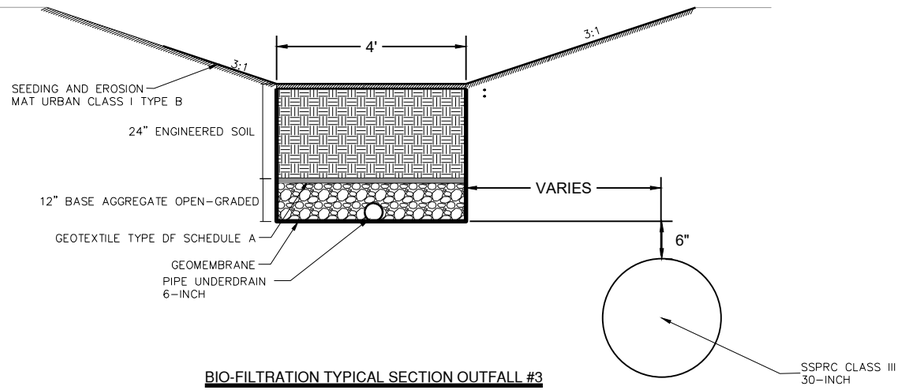
GRAVEL STORAGE



BIO-FILTRATION TYPICAL SECTION OUTFALL #3

N.T.S.

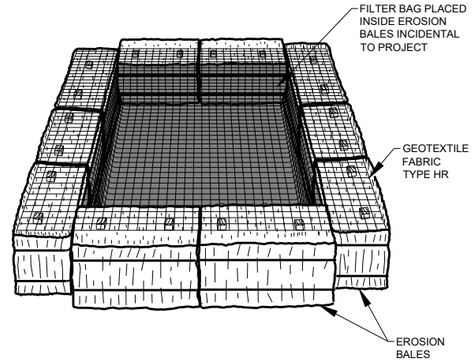
STA. 10+95 TO 11+05



BIO-FILTRATION TYPICAL SECTION OUTFALL #3

N.T.S.

STA. 11+05 TO 12+20



(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

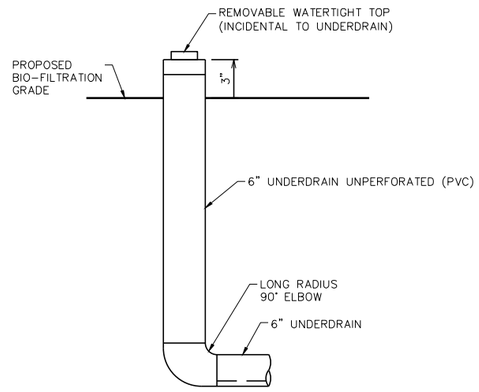
EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

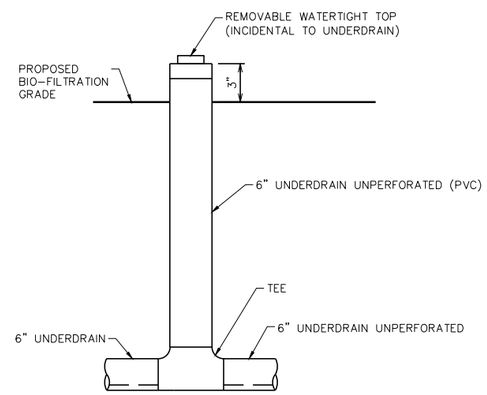
$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.

USE A 20 FT. X 27 FT. BASIN

TEMPORARY SETTLING BASIN



STA 10+95

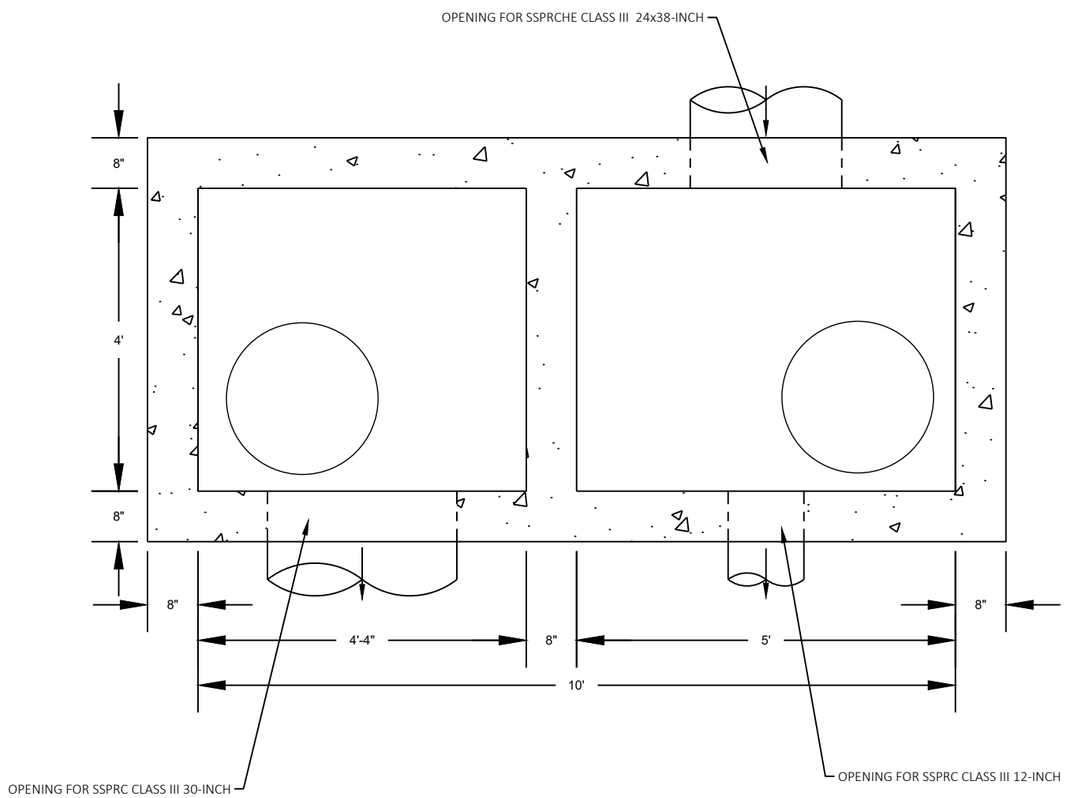


STA 12+20

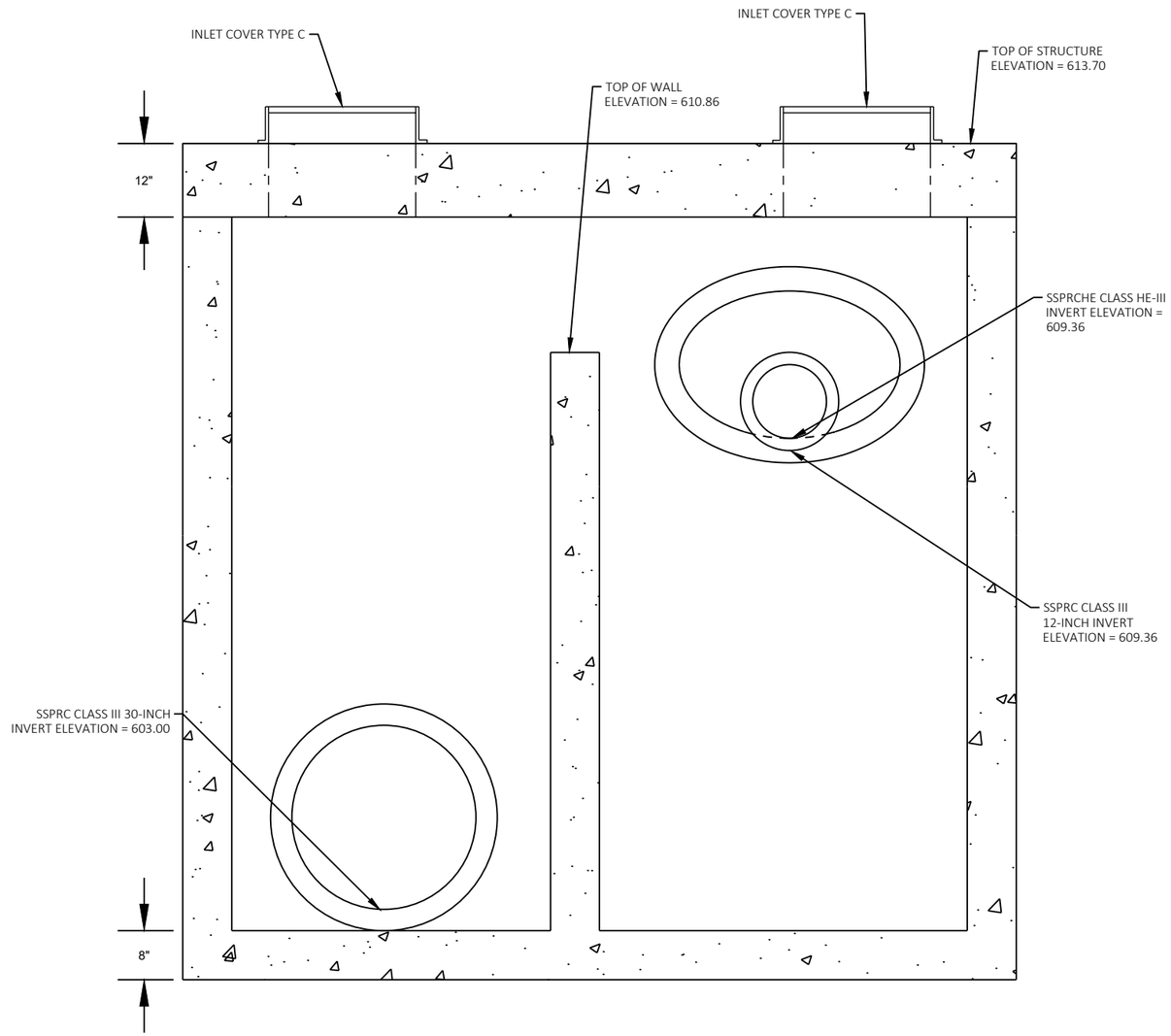
BIO-FILTRATION BASIN CLEANOUT DETAIL

N.T.S.

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET 6	E



PLAN VIEW



PROFILE VIEW

NOTES:

SEE SDD 8B10 "MANHOLES 3X3-FT, 4X4-FT, 5X5-FT, AND 6X6-FT", FOR DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP.

MANHOLE SPECIAL 4-FT X 10-FT

MANHOLE 100
STA. 201+96.8, 78.5' RT (CENTER OF STRUCTURE)

2

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE
- SAWCUT CONCRETE
- SAWCUT ASPHALT

N

8TH PLACE

STH 32 (SHERIDAN ROAD)

PI: 190+69.47

MATCHLINE STA. 191+50

186+00 187+00 188+00 189+00 190+00 191+00

SAWCUT CURB

POST

15"

7"

5"

19"

BLDG.

MW

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	REMOVAL PLANS	SHEET 8	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\021010_RM.DWG
LAYOUT NAME - 021201_pd

PLOT DATE : 12/4/2019 4:14 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

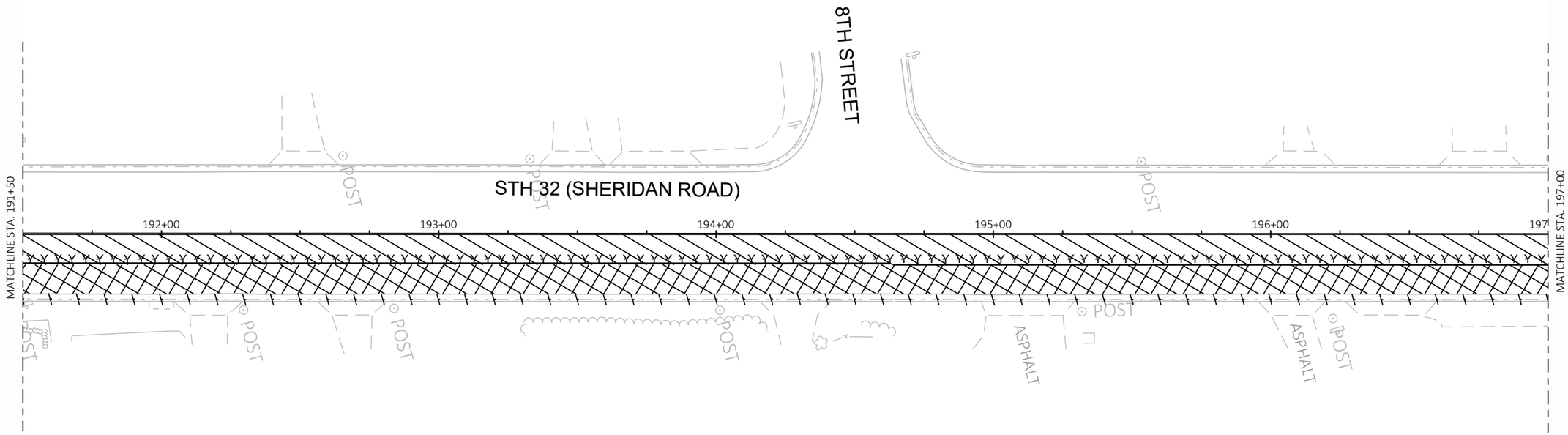
2

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE
- SAWCUT CONCRETE
- SAWCUT ASPHALT

N



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	REMOVAL PLANS	SHEET 9	E

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LAYOUT NAME - 021202_pd

PLOT DATE : 12/4/2019 4:14 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE
- SAWCUT CONCRETE
- SAWCUT ASPHALT

N

STH 32 (SHERIDAN ROAD)

MATCHLINE STA. 197+00

197+00 198+00 199+00 200+00 201+00 202+00

BP: 10+00.00

11+00

7TH PL. OVERLOOK PARK

KIDS SWING

GRAVEL DRIVEWAY

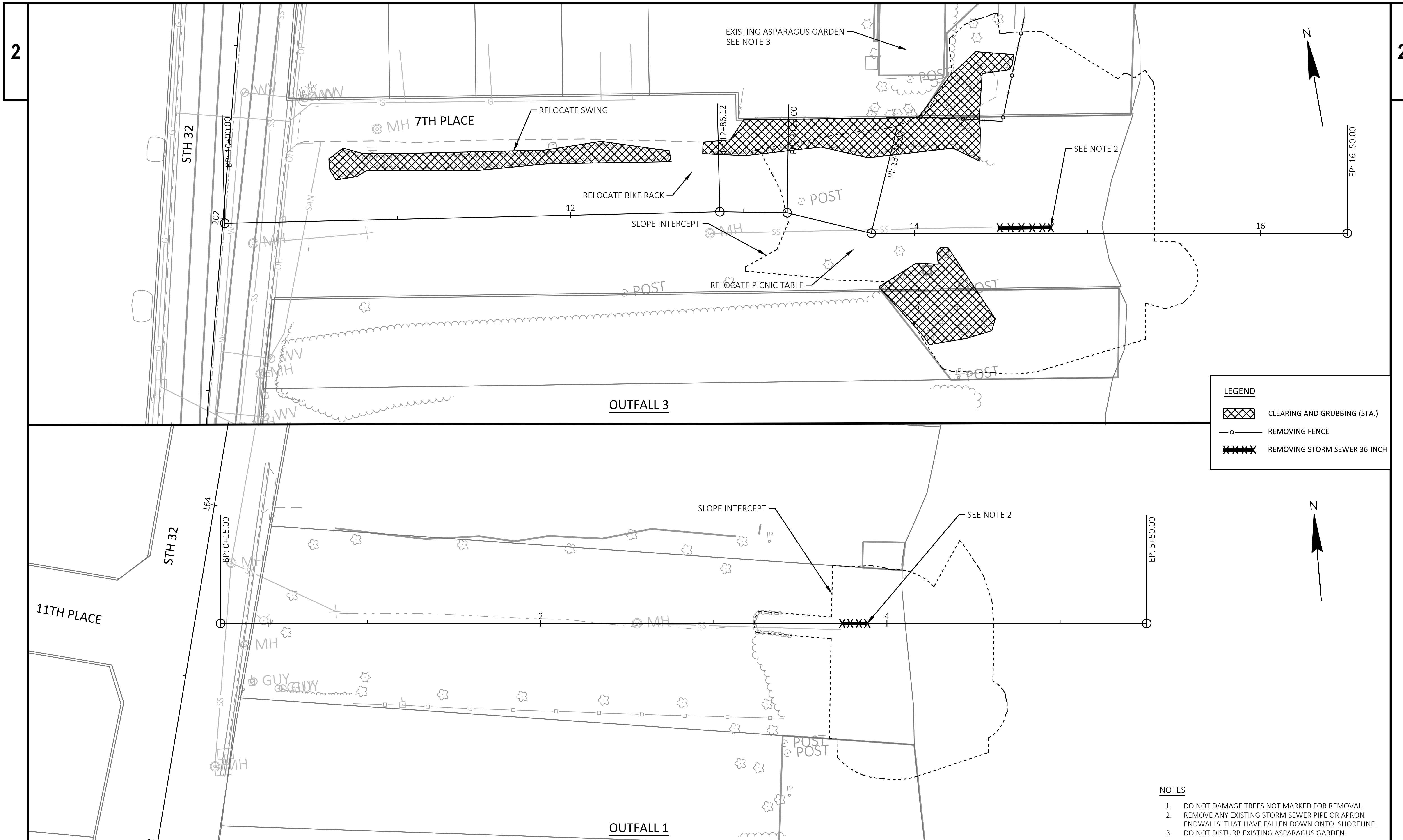
POST

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	REMOVAL PLANS	SHEET 10	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\021010_RM.DWG
LAYOUT NAME - 021203_pd

PLOT DATE : 12/5/2019 9:50 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	REMOVALS	SHEET 11	E

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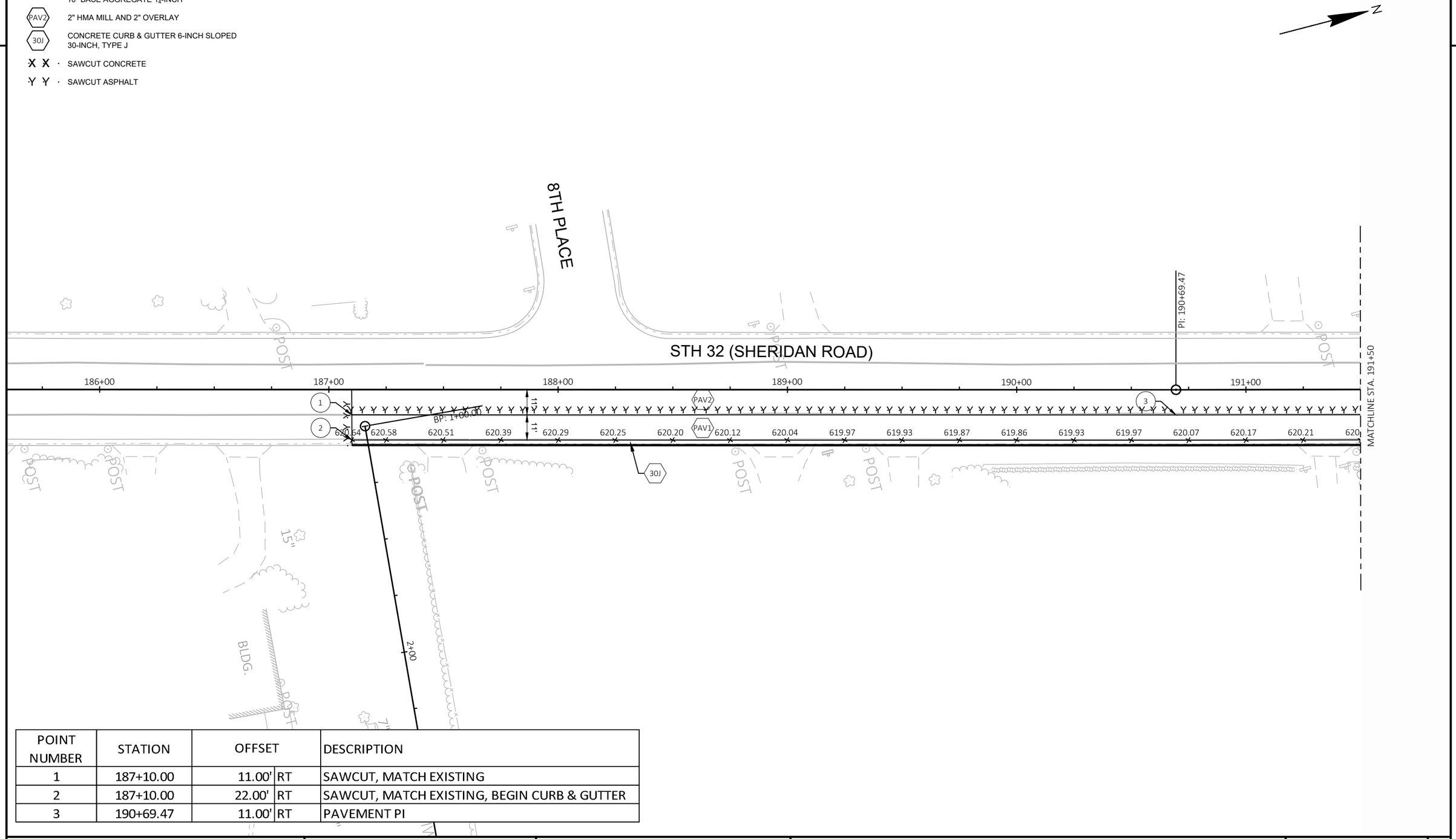
LAYOUT NAME - 01
PLOT DATE : 12/3/2019 3:49 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- PAV1 — 6" HMA PAVEMENT OVER 4" BASE AGGREGATE OPEN GRADED OVER 10" BASE AGGREGATE 1¼-INCH
- PAV2 — 2" HMA MILL AND 2" OVERLAY
- 30J — CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH, TYPE J
- X X · SAWCUT CONCRETE
- Y Y · SAWCUT ASPHALT



POINT NUMBER	STATION	OFFSET		DESCRIPTION
1	187+10.00	11.00'	RT	SAWCUT, MATCH EXISTING
2	187+10.00	22.00'	RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
3	190+69.47	11.00'	RT	PAVEMENT PI

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PLAN DETAILS	SHEET 12	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201_pd
PLOT DATE : 12/5/2019 11:25 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

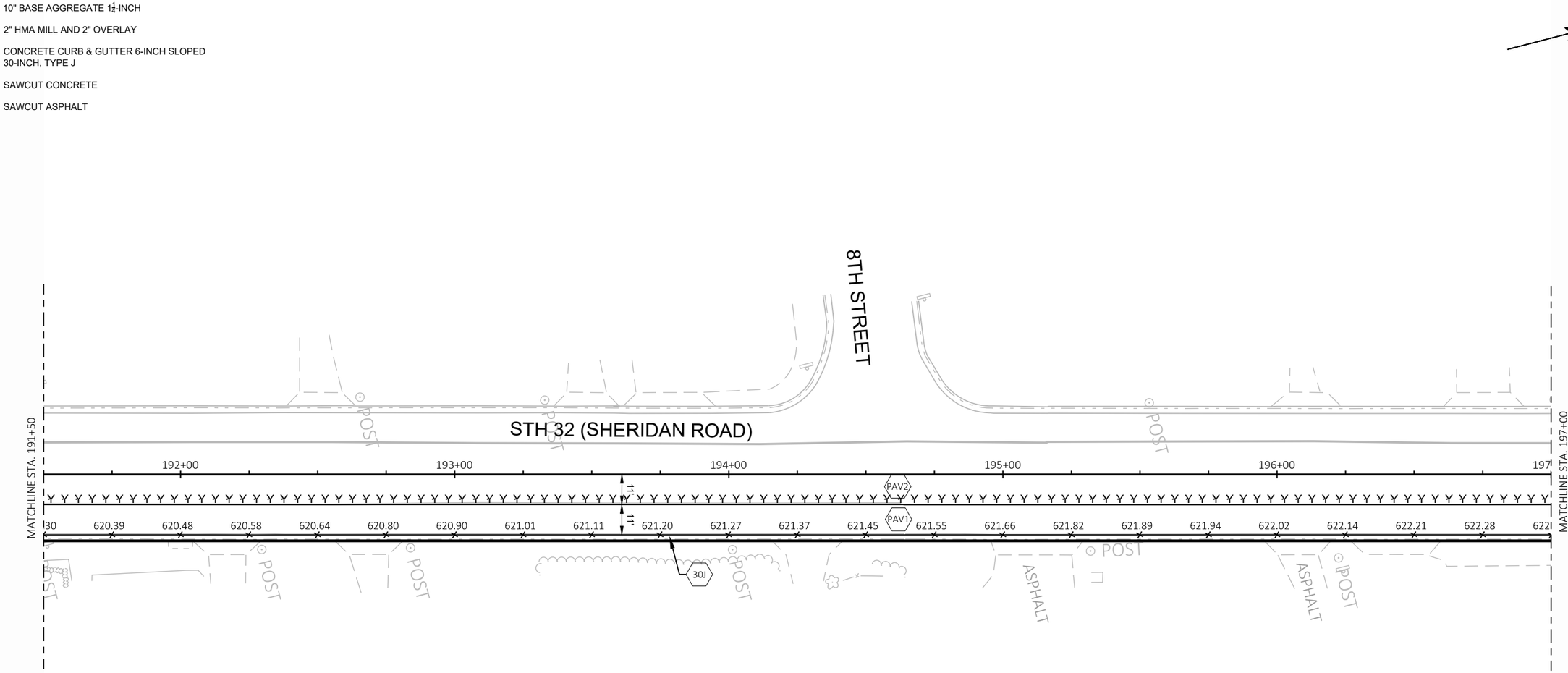
PAV1 — 6" HMA PAVEMENT OVER
4" BASE AGGREGATE OPEN GRADED OVER
10" BASE AGGREGATE 1¼-INCH

PAV2 — 2" HMA MILL AND 2" OVERLAY

30J — CONCRETE CURB & GUTTER 6-INCH SLOPED
30-INCH, TYPE J

X X · SAWCUT CONCRETE

Y Y · SAWCUT ASPHALT



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PLAN DETAILS	SHEET 13	E

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LAYOUT NAME - 021202_pd

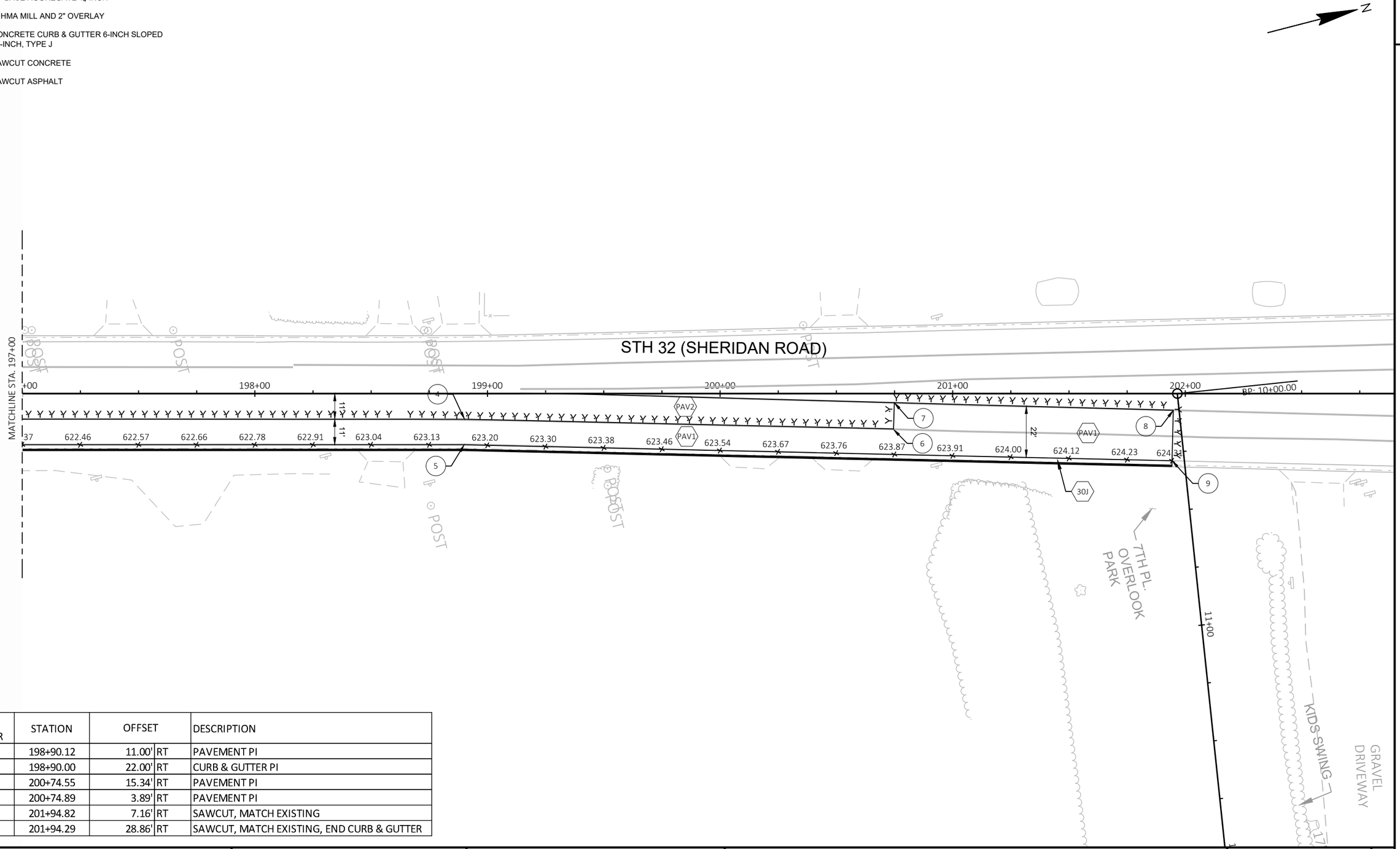
PLOT DATE : 12/5/2019 11:25 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- PAV1 — 6" HMA PAVEMENT OVER 4" BASE AGGREGATE OPEN GRADED OVER 10" BASE AGGREGATE 1¼-INCH
- PAV2 — 2" HMA MILL AND 2" OVERLAY
- 30J — CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH, TYPE J
- X X · SAWCUT CONCRETE
- Y Y · SAWCUT ASPHALT



POINT NUMBER	STATION	OFFSET		DESCRIPTION
4	198+90.12	11.00'	RT	PAVEMENT PI
5	198+90.00	22.00'	RT	CURB & GUTTER PI
6	200+74.55	15.34'	RT	PAVEMENT PI
7	200+74.89	3.89'	RT	PAVEMENT PI
8	201+94.82	7.16'	RT	SAWCUT, MATCH EXISTING
9	201+94.29	28.86'	RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PLAN DETAILS	SHEET 14	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203_pd
PLOT DATE : 12/5/2019 11:26 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

EROSION MAT URBAN CLASS I TYPE B
SEEDING MIX NO. 20

SEED MIX NO.20,
FERTILIZER, AND MULCH

SOD

SILT FENCE

INLET PROTECTION TYPE C
(UNLESS OTHERWISE NOTED)

N

8TH PLACE

STH 32 (SHERIDAN ROAD)

186+00 187+00 188+00 189+00 190+00 191+00

PI 190+69.47

MATCHLINE STA. 191+50

BP: 1+00.00

12+00

D D

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	EROSION CONTROL	SHEET 15	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 021201_pd

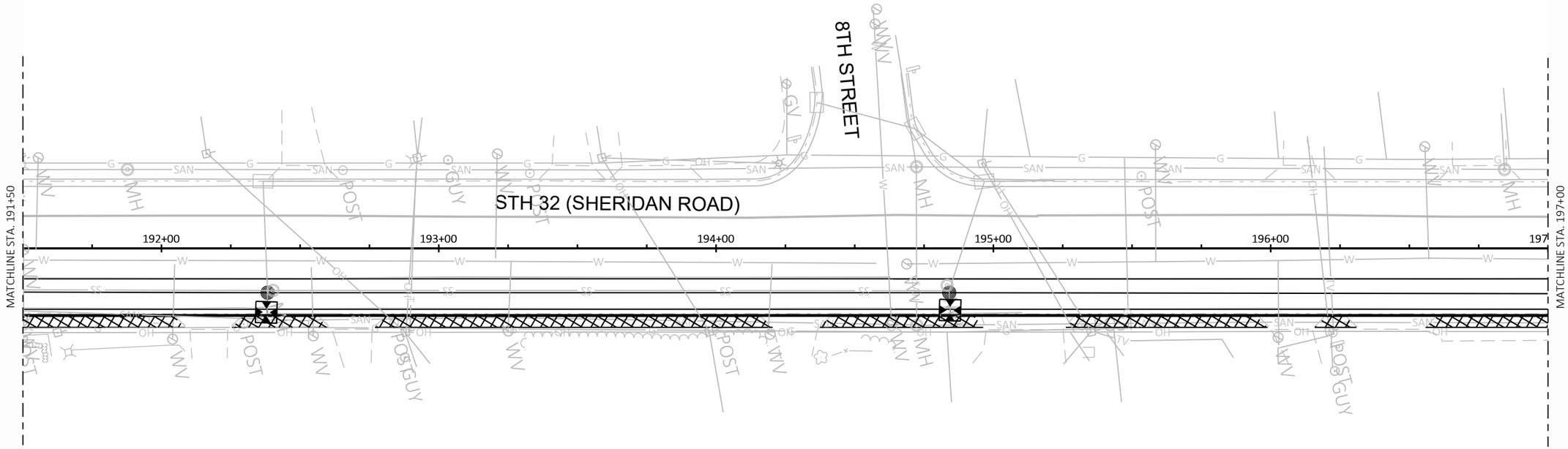
PLOT DATE : 12/4/2019 4:23 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EROSION MAT URBAN CLASS I TYPE B
SEEDING MIX NO. 20
SEED MIX NO.20,
FERTILIZER, AND MULCH
SOD
SILT FENCE
INLET PROTECTION TYPE C
(UNLESS OTHERWISE NOTED)



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	EROSION CONTROL	SHEET 16	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 021202_pd
PLOT DATE : 12/4/2019 4:23 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LEGEND

EROSION MAT URBAN CLASS I TYPE B
SEEDING MIX NO. 20

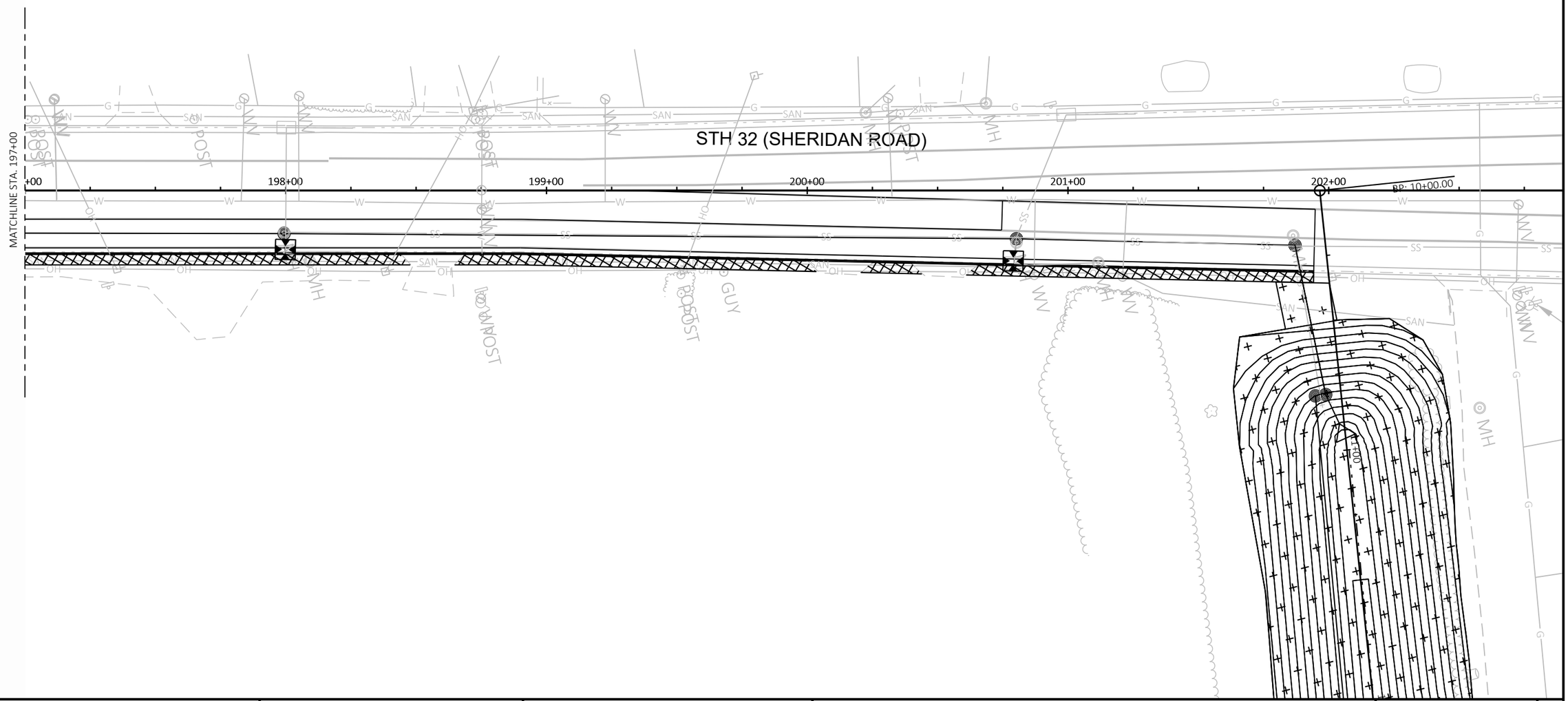
SEED MIX NO.20,
FERTILIZER, AND MULCH

SOD

SILT FENCE

INLET PROTECTION TYPE C
(UNLESS OTHERWISE NOTED)

N



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	EROSION CONTROL	SHEET 17	E

2

LEGEND

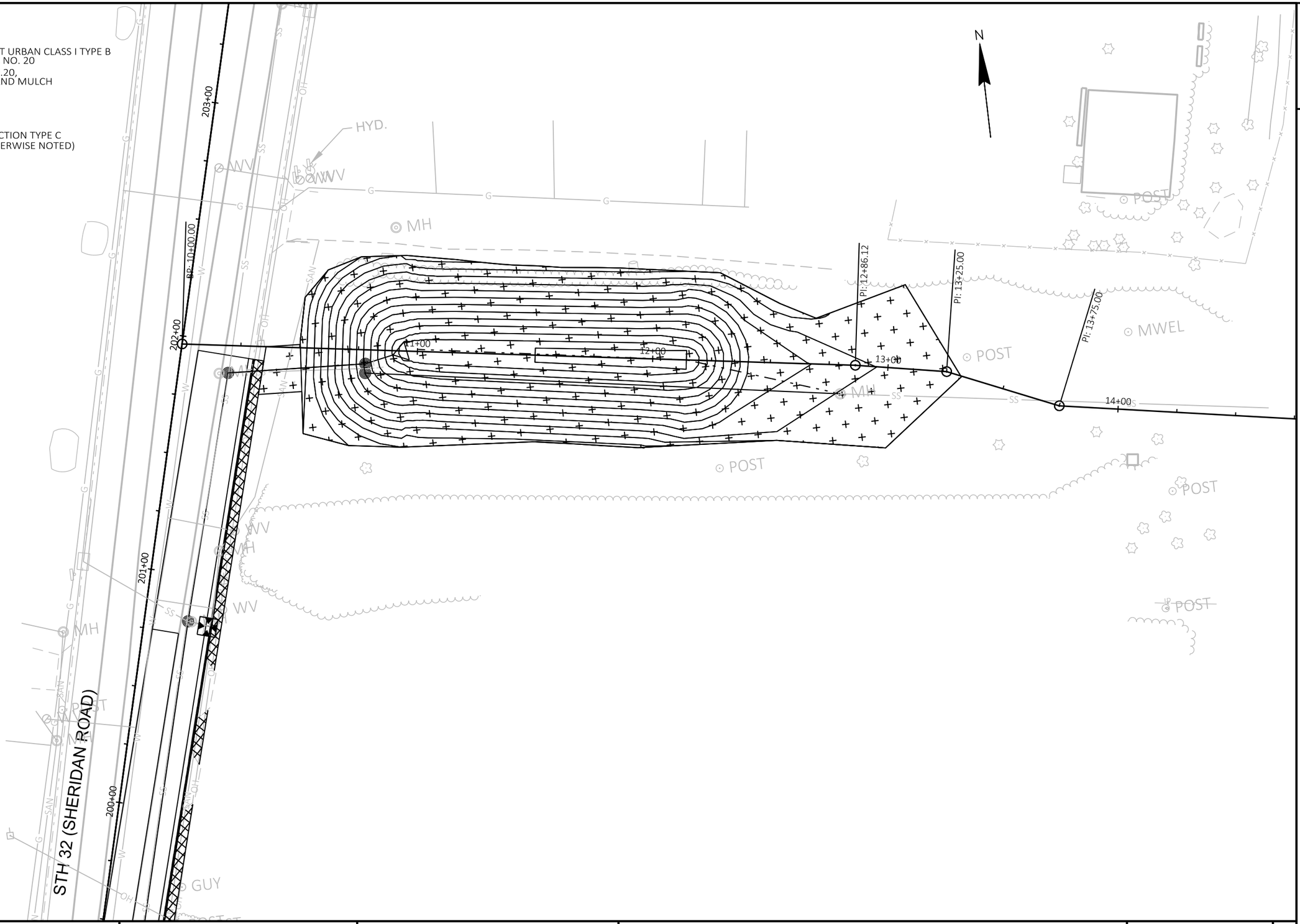
EROSION MAT URBAN CLASS I TYPE B
SEEDING MIX NO. 20

SEED MIX NO.20,
FERTILIZER, AND MULCH

SOD

SILT FENCE

INLET PROTECTION TYPE C
(UNLESS OTHERWISE NOTED)



2

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	EROSION CONTROL	SHEET 18	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 021205_pd

PLOT DATE : 12/4/2019 4:24 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

8TH PLACE

STH 32 (SHERIDAN ROAD)

188+00

187+00

BP: 1+00.00

EP: 4+87.23

REMOVE STORM SEWER 30-INCH

ABANDON STORM SEWER 30-INCH

20'+/-

2+00

3+00

4+00

ABANDON MANHOLE

N

POST

GUY

WV

MH

MWE

7"

15"

5"

19"

BLDG.

620

610

600

590

600

590

580

570

REMOVE 30" SSPRC

20'+/-

ABANDON 30" SSPRC

ABANDON 30" SSPRC

ABANDON 30" SSPRC

620.79

621.39

620.66

620.26

606.57

581.62

575.86

573.37

1+00

2+00

3+00

4+00

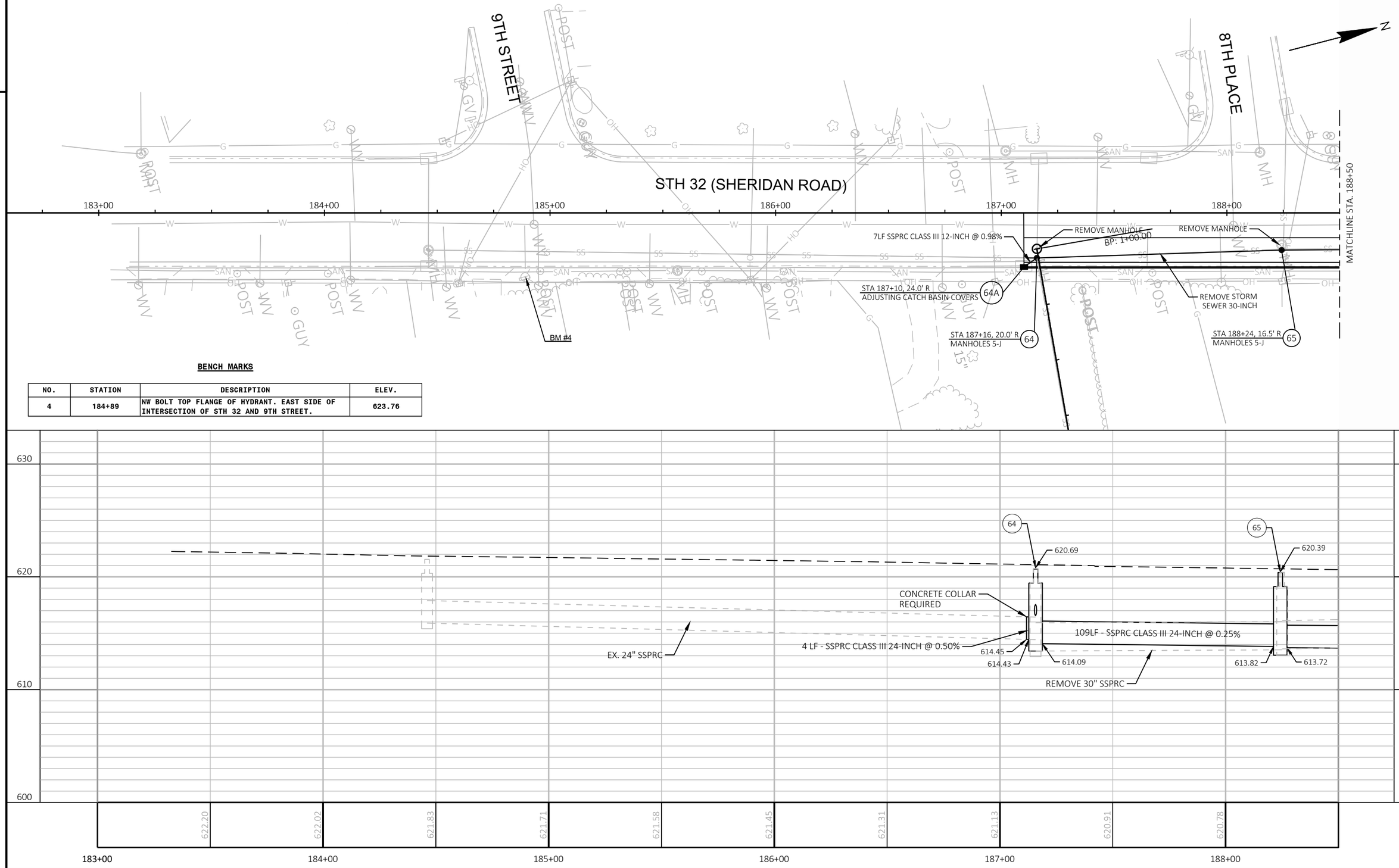
5+00

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	STORM SEWER - OUTFALL #2 (875 SHERIDAN ROAD)	SHEET 19	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022505_ss

PLOT DATE : 12/4/2019 4:27 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



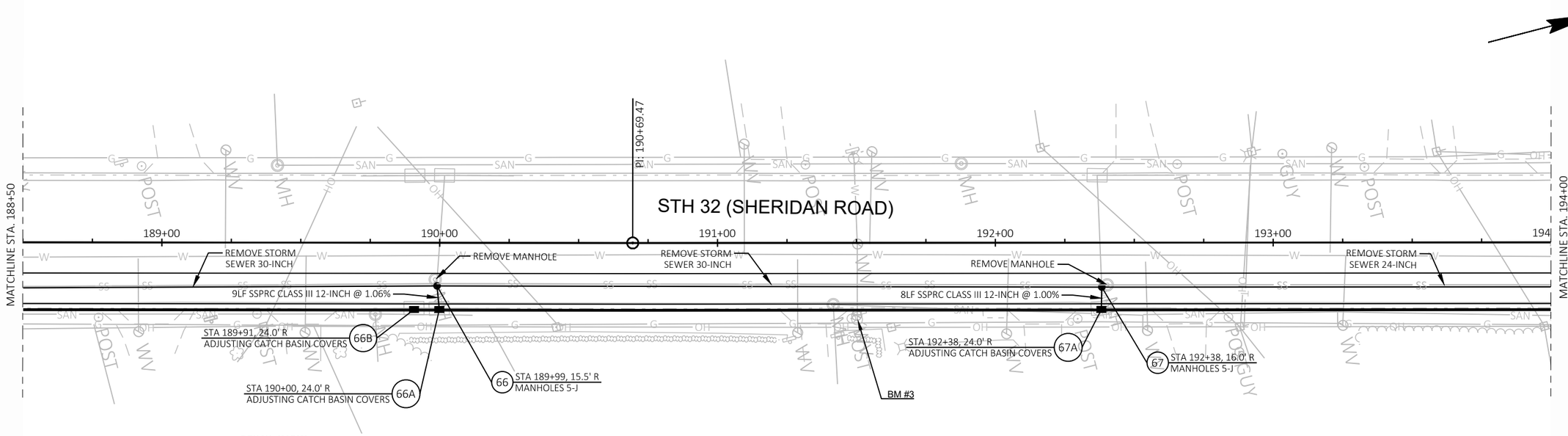
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
4	184+89	NW BOLT TOP FLANGE OF HYDRANT. EAST SIDE OF INTERSECTION OF STH 32 AND 9TH STREET.	623.76

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	STORM SEWER	SHEET 20	E

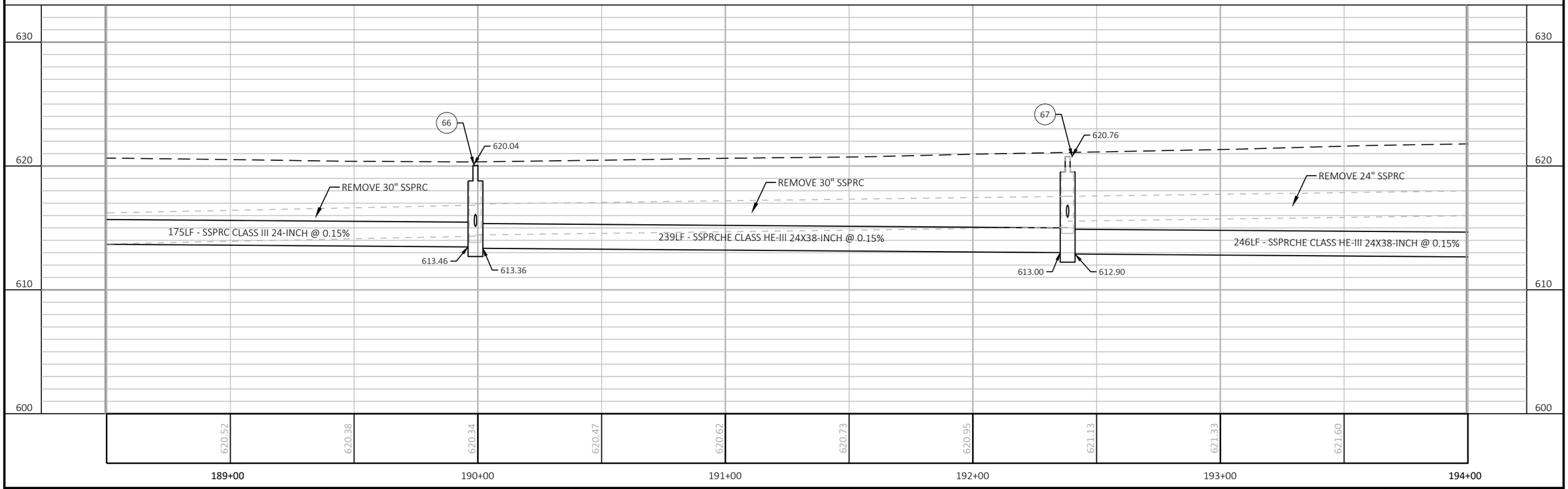
FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_ss
PLOT DATE : 12/4/2019 4:25 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2



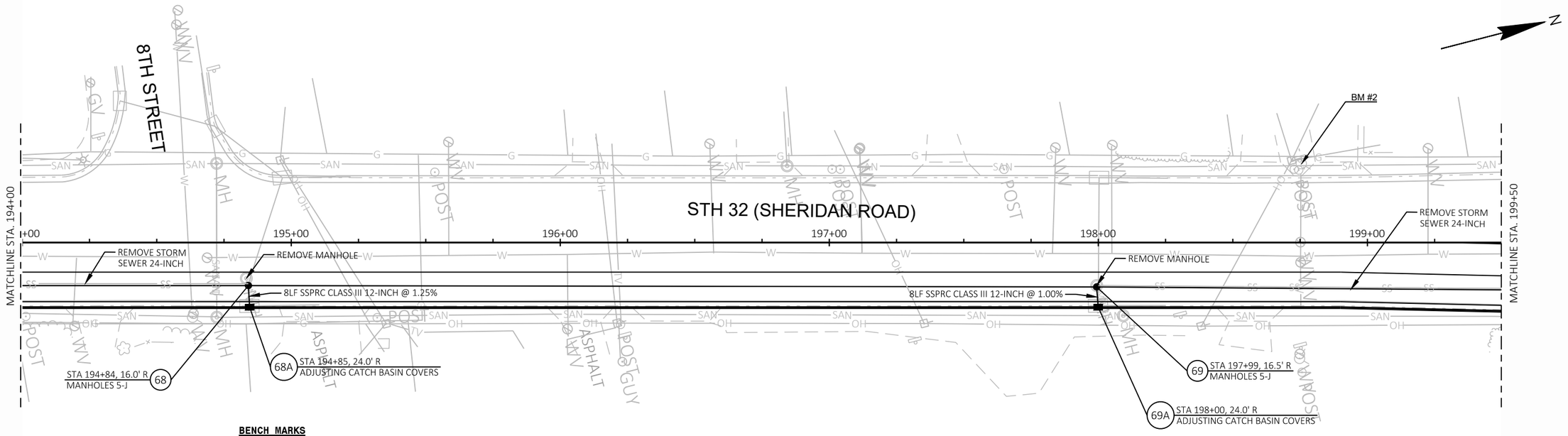
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	191+50	NW BOLT TOP FLANGE OF HYDRANT. EAST SIDE OF STH 32 AND 300 FEET SOUTH OF 8TH STREET.	623.35



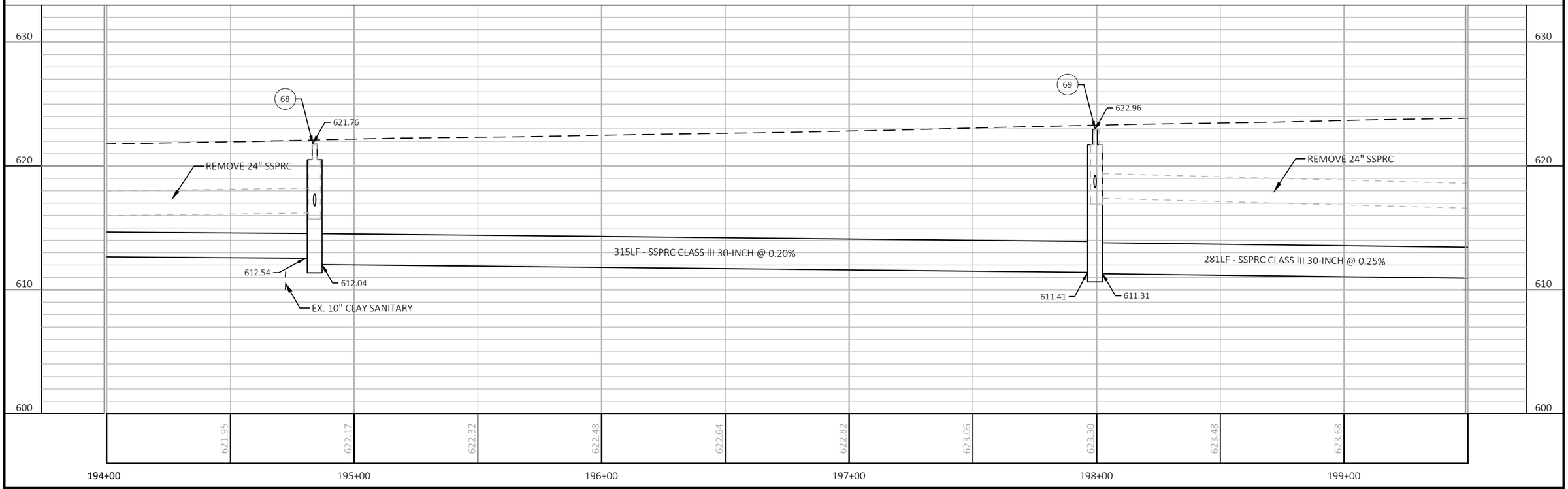
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	STORM SEWER	SHEET 21	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022502_ss
PLOT DATE : 12/4/2019 4:26 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



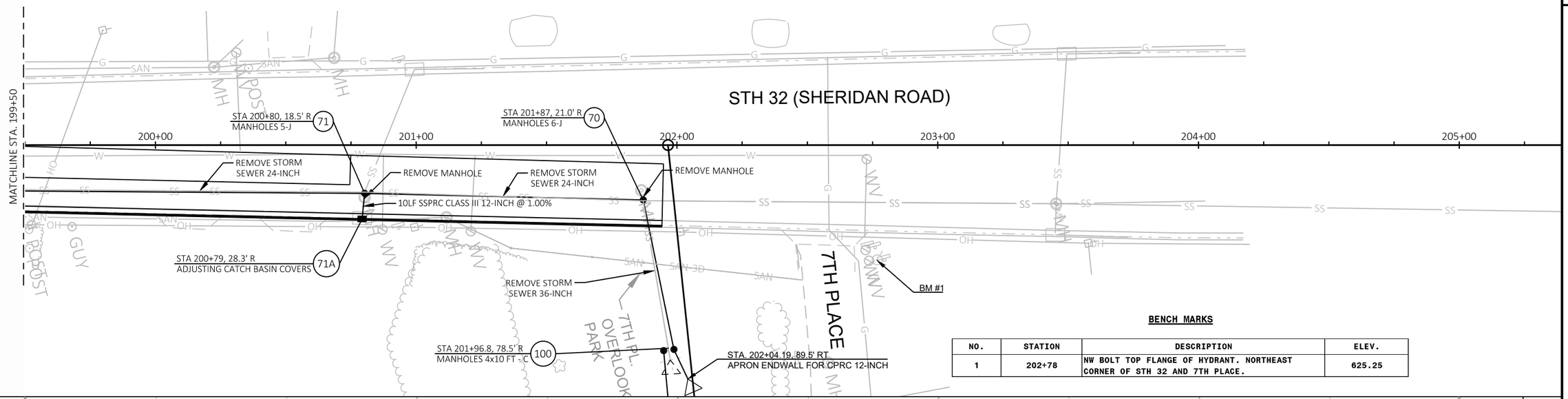
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
2	198+76	NW BOLT TOP FLANGE OF HYDRANT. WEST SIDE OF STH 32 AND 375 FEET SOUTH OF 7TH PLACE.	625.86



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	STORM SEWER	SHEET 22	E

2

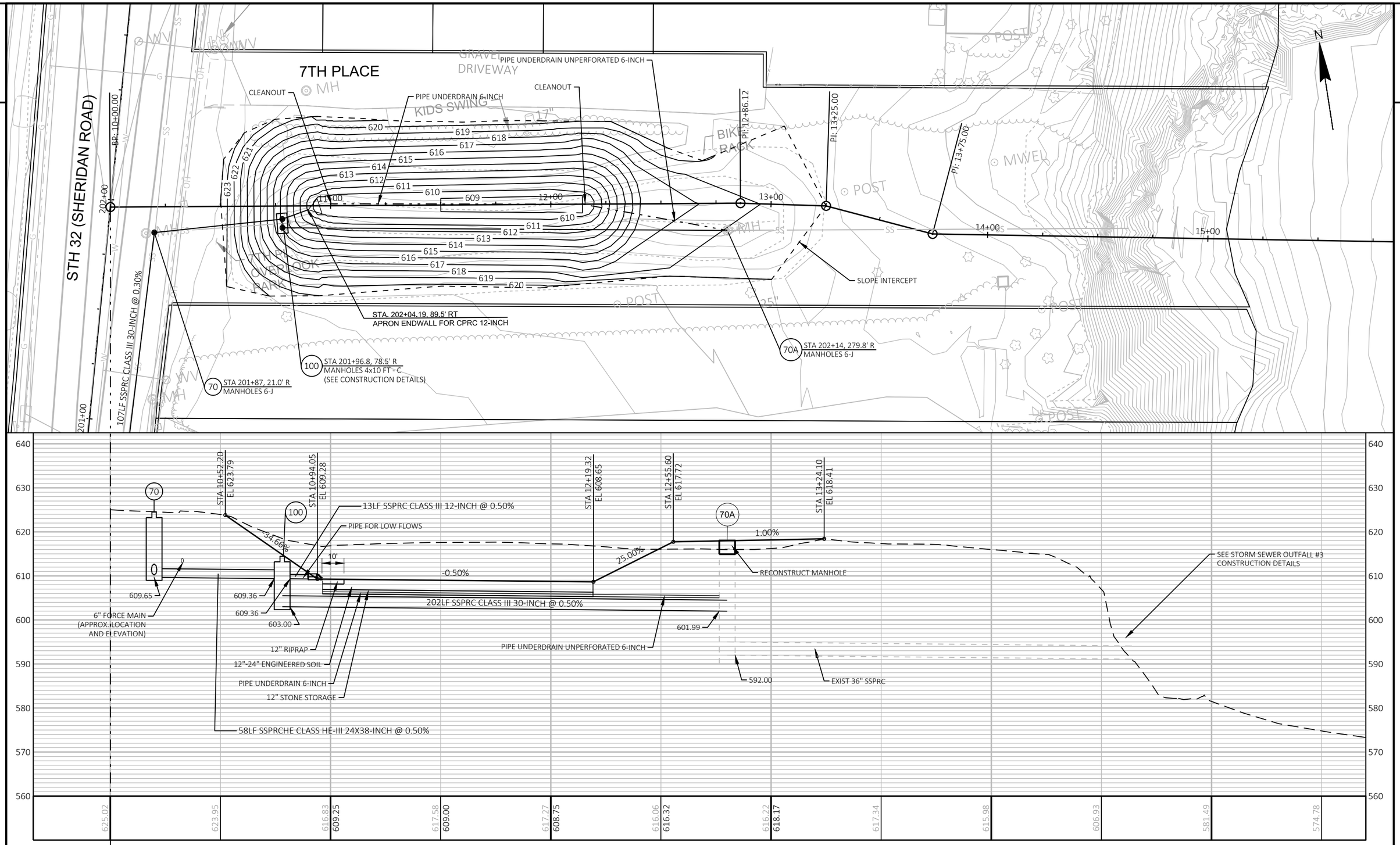


BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	202+78	NW BOLT TOP FLANGE OF HYDRANT. NORTHEAST CORNER OF STH 32 AND 7TH PLACE.	625.25

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	STORM SEWER	SHEET 23	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022504_ss
PLOT DATE : 12/4/2019 4:27 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	STORM SEWER OUTFALL 3 - BIOFILTER	SHEET 24 E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\022502_SS.DWG
LAYOUT NAME - 022506_ss
PLOT DATE : 12/4/2019 4:30 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

SHEET 1 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 25	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023201_PS

PLOT DATE : 10/14/2019 10:39 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

SHEET 2 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 26	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023202_PS

PLOT DATE : 10/14/2019 10:40 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

SHEET 3 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 27	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023203_PS

PLOT DATE : 10/14/2019 10:40 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

SHEET 4 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 28	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023204_PS

PLOT DATE : 10/14/2019 10:40 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

SHEET 5 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 29	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023205_PS

PLOT DATE : 10/14/2019 10:40 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

N

NO SIGNS
THIS SHEET

9TH ST

8TH PL

STH 32

PI: 190+69.47

185 186 187 188 189 190 191

1

SPEED LIMIT 45

R2-1

MOVE

SHEET 6 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 30	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023206_PS

PLOT DATE : 10/14/2019 10:41 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

NO SIGNS
THIS SHEET

LEGEND

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

N

8TH ST

STH 32

191 192 193 194 195 196 197

SHEET 7 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 31	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023207_PS

PLOT DATE : 10/14/2019 10:41 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

N

STH 32

197 198 199 200 201 202 203

2

JCT
COUNTY
A

J1-1
MOVE

3

CENTER LANE ONLY

R3-9B
MOVE

7TH PL

SHEET 8 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 32	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023208_PS

PLOT DATE : 10/14/2019 10:41 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

NO SIGNS
THIS SHEET

LEGEND

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

N

STH 32

203 204 205 206 207 208 209

SHEET 9 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 33	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023209_PS

PLOT DATE : 10/14/2019 10:42 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

SHEET 10 OF 10

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PERMANENT SIGNING PLAN	SHEET 34	E

FILE NAME : N:\PDS\C3D\CAD\32401730\SIGN\023201_PS_18.DWG
LAYOUT NAME - 023210_PS

PLOT DATE : 10/14/2019 10:42 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

8TH PLACE

STH 32 (SHERIDAN ROAD)

MARKING LINE EPOXY
4-INCH DOUBLE YELLOW

PI: 190+69.47

186+00 187+00 188+00 189+00 190+00 191+00

11'
11'

MATCHLINE STA. 191+50

MARKING LINE EPOXY
4-INCH WHITE

MARKING LINE EPOXY
4-INCH WHITE
(37.5' SKIP, 12.5' LINE)

POST

15"

BLDG.

7"

5"

19"

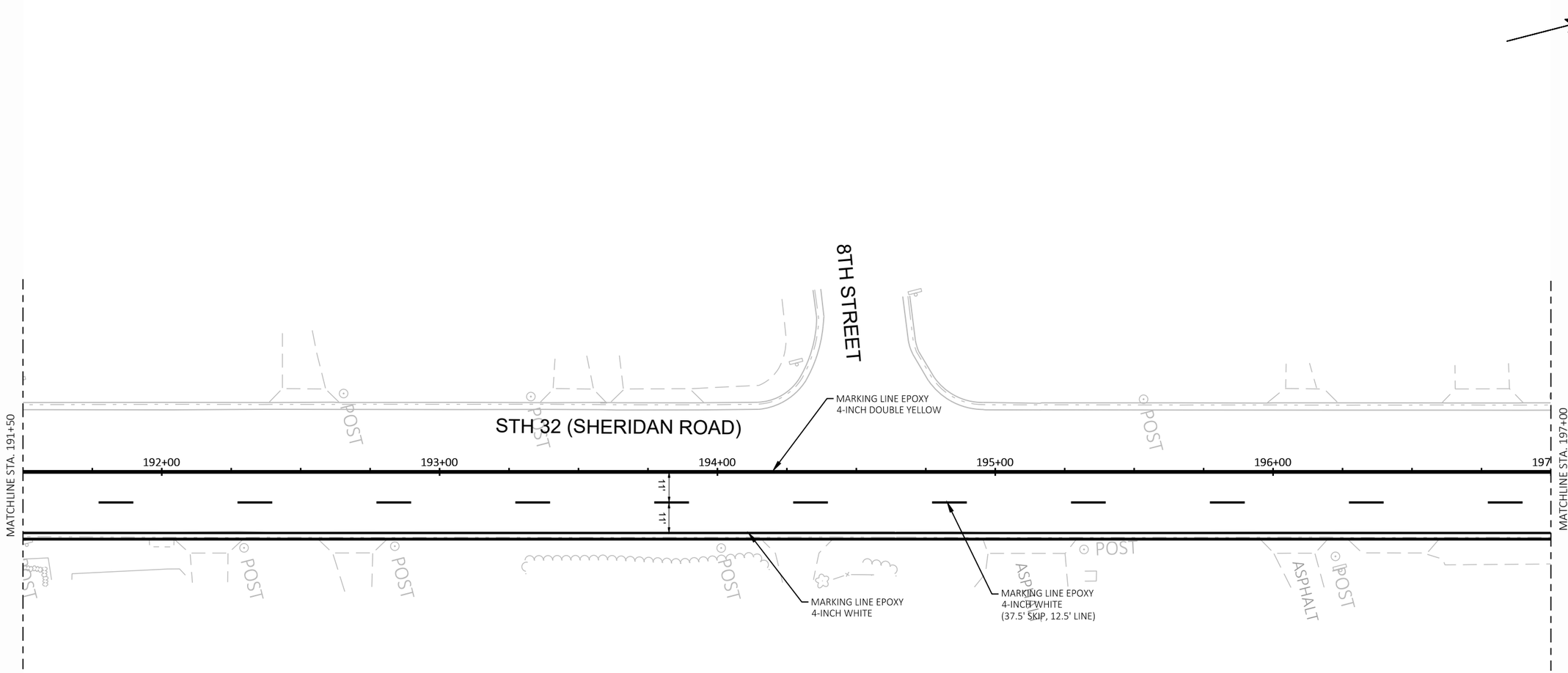
MW

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 35	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024501_pm

PLOT DATE : 12/4/2019 4:33 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 36	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024502_pm
PLOT DATE : 12/4/2019 4:34 PM
PLOT BY : TROY, AMELIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

MATCHLINE STA. 197+00

STH 32 (SHERIDAN ROAD)

+00 198+00 199+00 200+00 201+00 202+00

MARKING LINE EPOXY
4-INCH DOUBLE YELLOW

STA 201+00 END DOUBLE
YELLOW BEGIN SKIP DASH

MARKING LINE EPOXY
4-INCH YELLOW
(37.5' SKIP, 12.5' LINE)

11'

11'

11'

11'

MARKING LINE EPOXY
4-INCH WHITE

MARKING LINE EPOXY
4-INCH WHITE
(37.5' SKIP, 12.5' LINE)

MARKING LINE EPOXY
4-INCH YELLOW

POST

7TH PL.
OVERLOOK
PARK

KIDS SWING

GRAVEL
DRIVEWAY

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 37	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024503_pm

PLOT DATE : 12/4/2019 4:34 PM PLOT BY : TROY, AMELIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

DESIGN CRITERIA

1. LAKE WATER LEVELS:

   LOW WATER: 575.4 IGLD85

   HIGH WATER: 583.3 IGLD85

   MEAN WATER: 579.2 IGLD85

   ORDINARY HIGH WATER MARK: 572.2 IGLD85

2. WIND:

   WIND SPEED 53.9 MPH, 100-YR. RETURN PERIOD EVENT. ANALYZED FROM USCOE WIS HINDCAST STATION 94039 (1979-2014).

3. DESIGN WATER LEVELS:

   50-YR. RETURN PERIOD SURGE EVENT 582.9 FT IGLD85 (DESIGN LEVEL FOR REVETMENT). WATER LEVELS FOR OTHER RETURN PERIOD EVENTS LISTED BELOW

RETURN PERIOD (YR.)	SURGE (FT IGLD85)
1	580.0
50	582.9
100	583.1

4. WAVES:

   DESIGN WAVE 50 YR. RETURN PERIOD

   SIGNIFICANT WAVE HEIGHT, HM0= 7.0 FT

   PEAK WAVE PERIOD, TP= 11.1S

5. DESIGN SERVICE LIFE: 25 YEARS DESIGN LIFE ASSUMES NO MAJOR REPAIRS OR REBUILDING DURING THE DESIGN LIFE, UNLESS DAMAGE OCCURS FROM A STORM EVENT IN EXCESS OF DESIGN CRITERIA

6. CURRENTS:

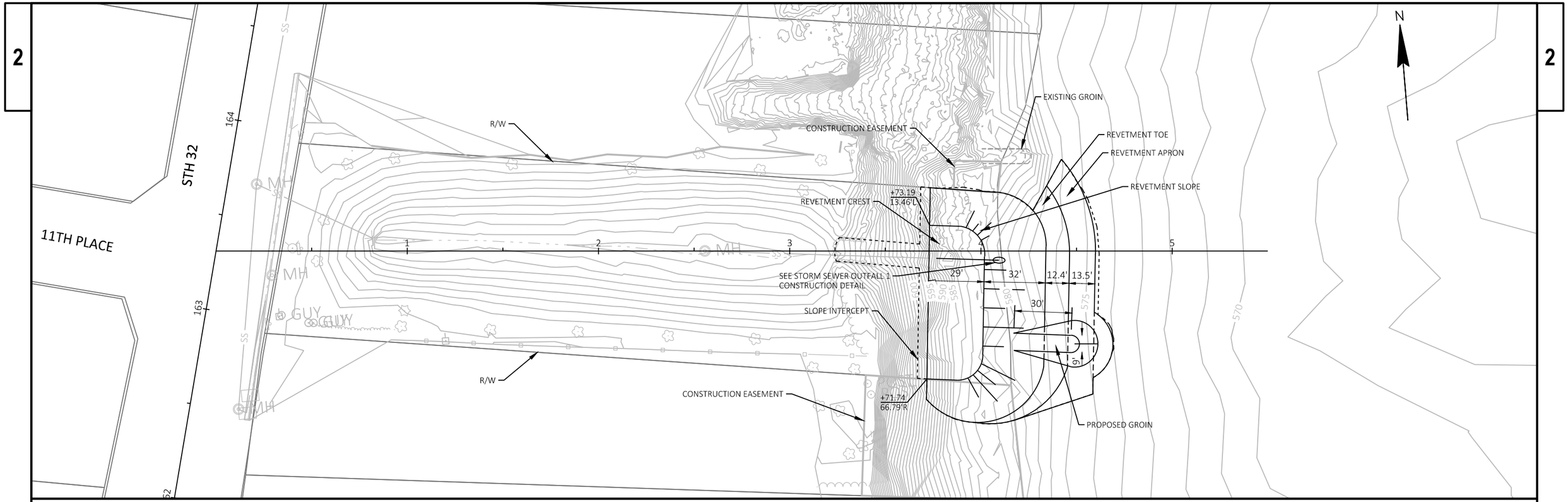
   OPERATIONAL CURRENTS: 0.6 KNOTS NORTH- NORTHEAST TO SOUTH SOUTHWEST. CURRENT DATA EXTRACTED FROM THE GREAT LAKES COASTAL FORECASTING SYSTEM (GLCFS) DATABASE IN JAN. 2019.

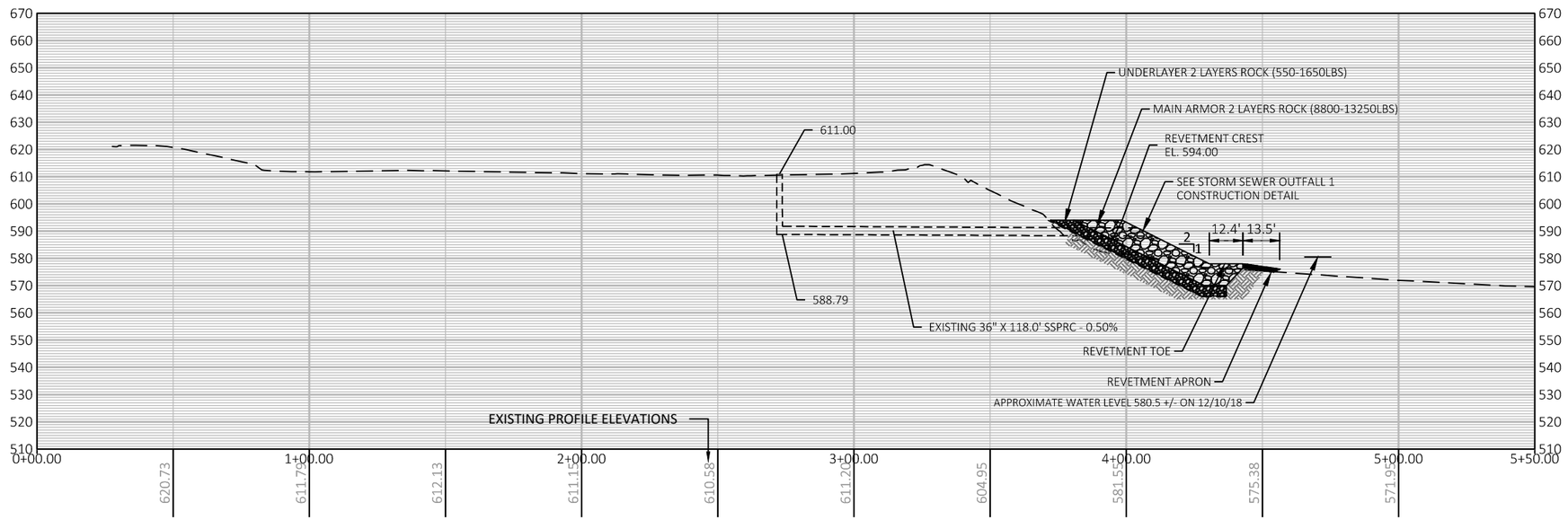
PROJECT DATUM AND SURVEY NOTES:

1. VERTICAL ELEVATIONS REFER TO INTERNATIONAL GREAT LAKE DATUM 1985 (IGLD85).
2. BATHYMETRY SURVEYED IN FEET BY COLLINS ENGINEER ON 10 DECEMBER 2018.
3. LAKE WATER LEVEL AT THE TIME OF SURVEY WAS 580.74 IGLD85

CONSTRUCTION PHASING/STAGING

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS FOR THE STAGING OF BARGES AND OTHER CRAFT NEEDED FOR THE SUCCESSFUL COMPLETION OF THE WORK.
2. CONTRACTOR SHALL PHASE THE WORK SUCH THAT IT BEGINS FROM THE NORTHERN END OF THE SITE AND PROGRESSES SOUTH.



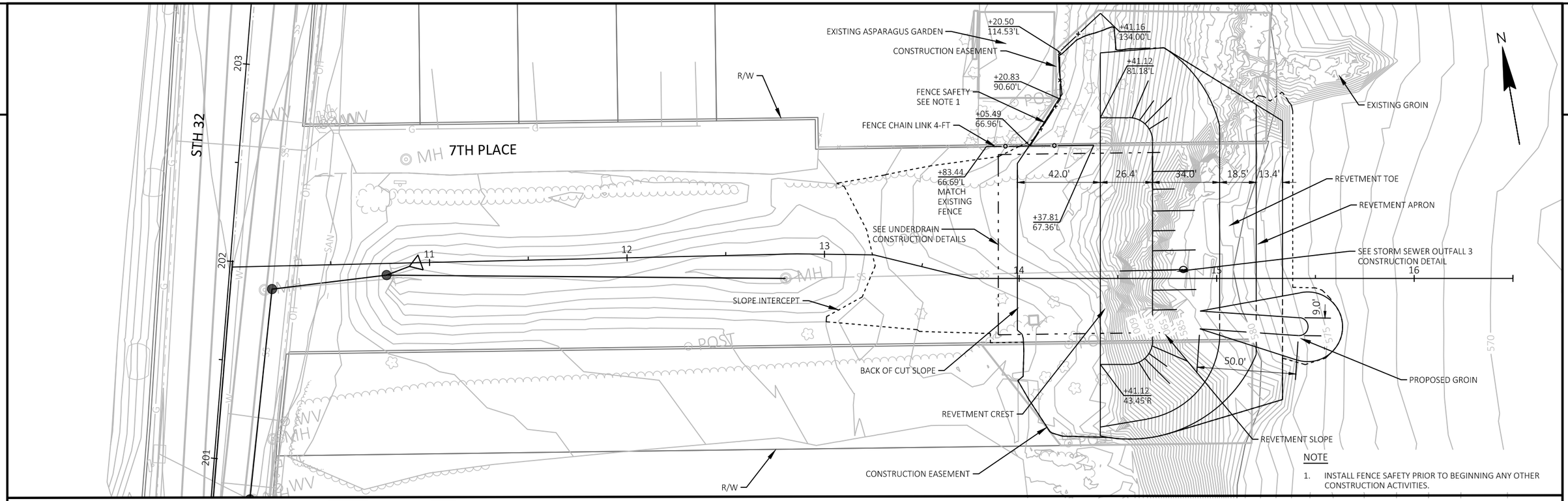


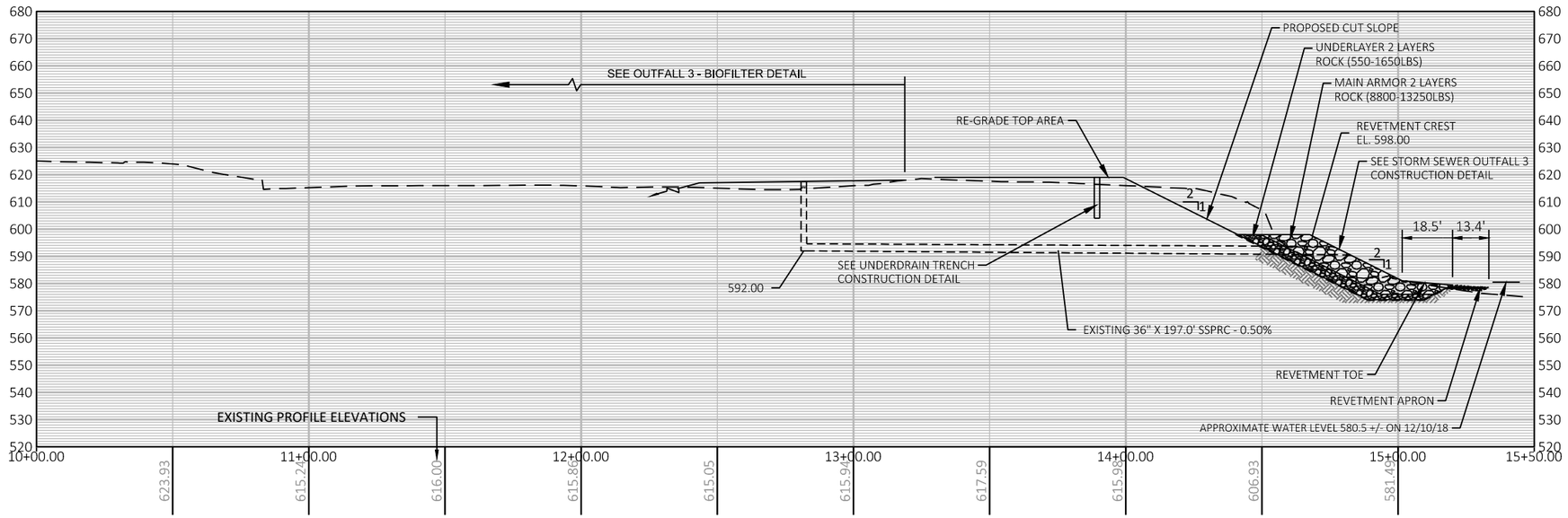
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	PLAN AND PROFILE: OUTFALL LOCATION #1 (11TH PLACE)	SHEET 39	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\03_SS_OUTFALLS_PP.DWG
LAYOUT NAME - 01

PLOT DATE : 12/3/2019 3:59 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42





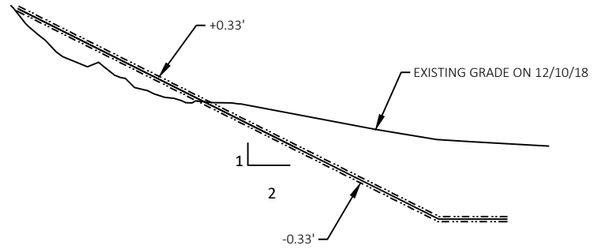
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	PLAN AND PROFILE: OUTFALL LOCATION #3 (7TH PLACE)	SHEET 40	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\03_SS_OUTFALLS_PP.DWG
LAYOUT NAME - 03

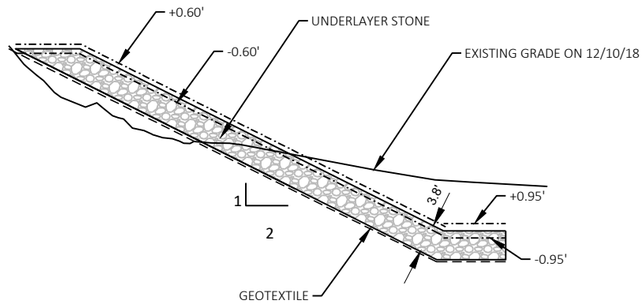
PLOT DATE : 12/3/2019 3:59 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

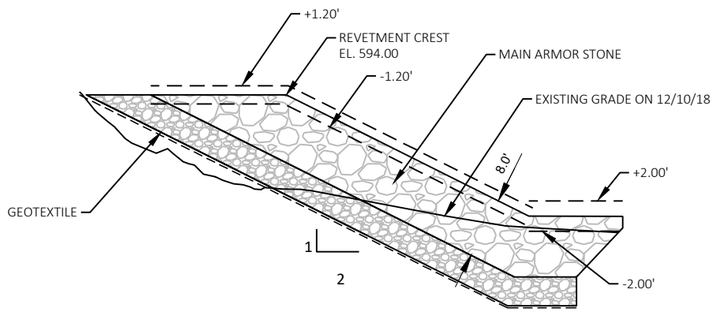
2



SUBSURFACE PREPARATION TOLERANCES



UNDERLAYER TOLERANCES AND MATERIAL PLACEMENT

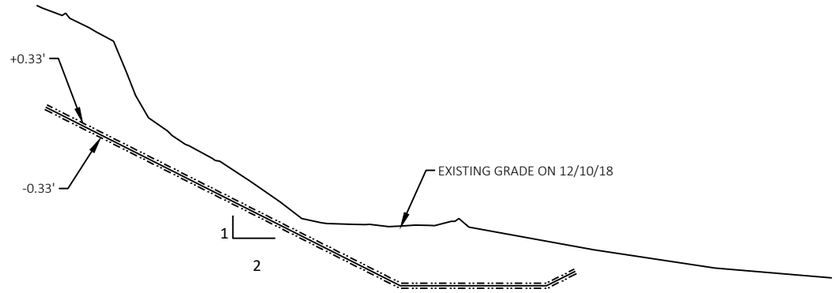


MAIN ARMOR LAYER TOLERANCES AND MATERIAL PLACEMENT

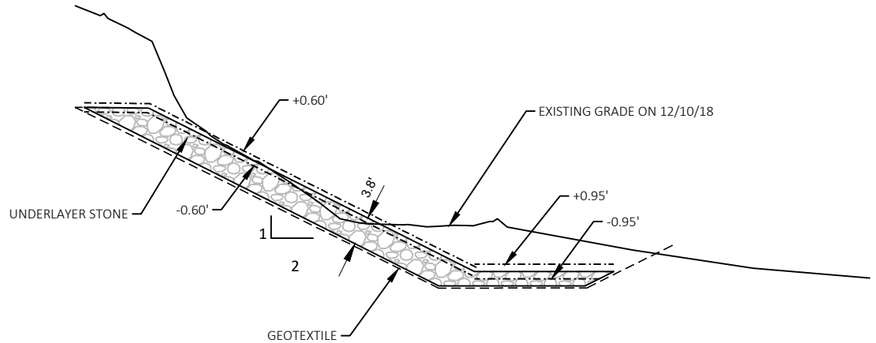
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: REVETMENT - OUTFALL LOCATION #1 (11TH PLACE)	SHEET 41	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\04_SS_OUTFALLS_CD_REVETMENT.DWG
LAYOUT NAME - 01
PLOT DATE : 12/3/2019 5:41 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

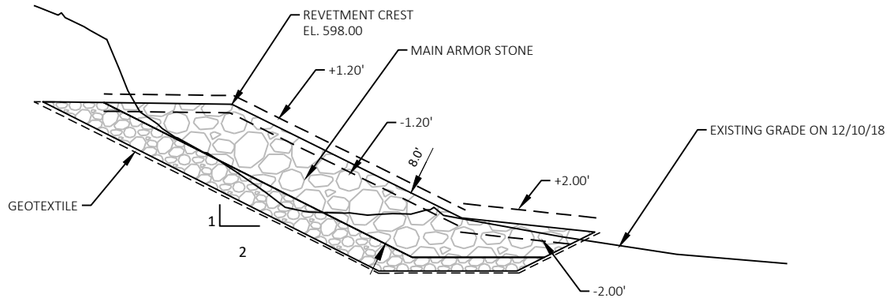
2



SUBSURFACE PREPARATION TOLERANCES



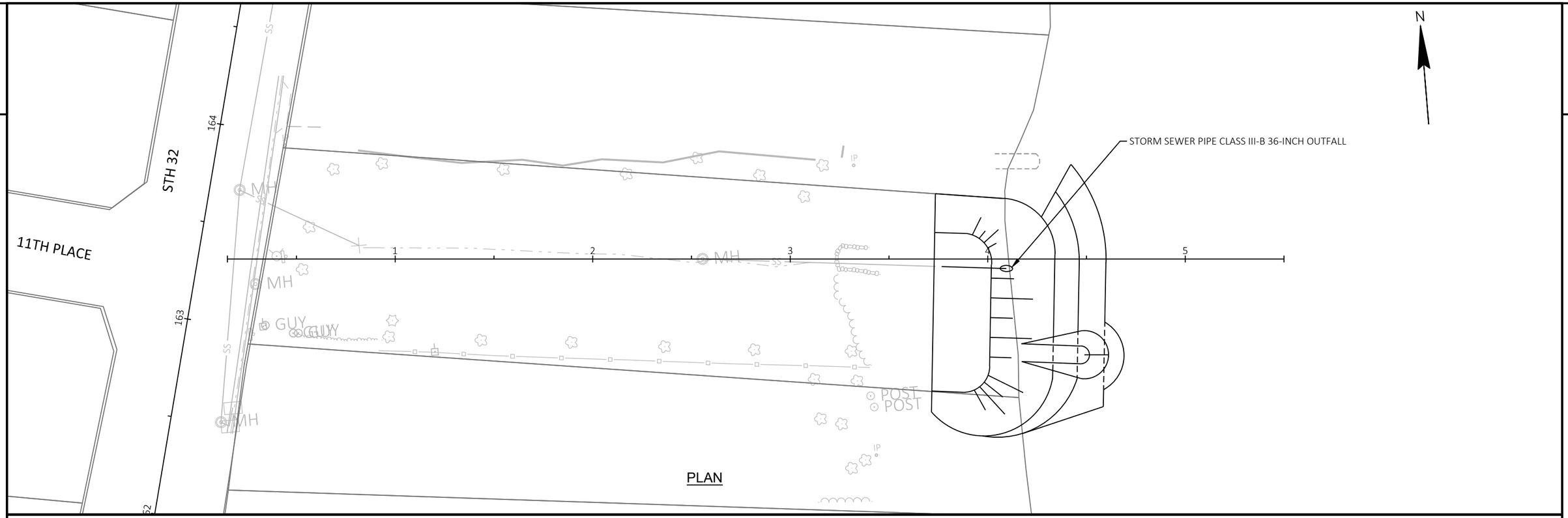
UNDERLAYER TOLERANCES AND MATERIAL PLACEMENT



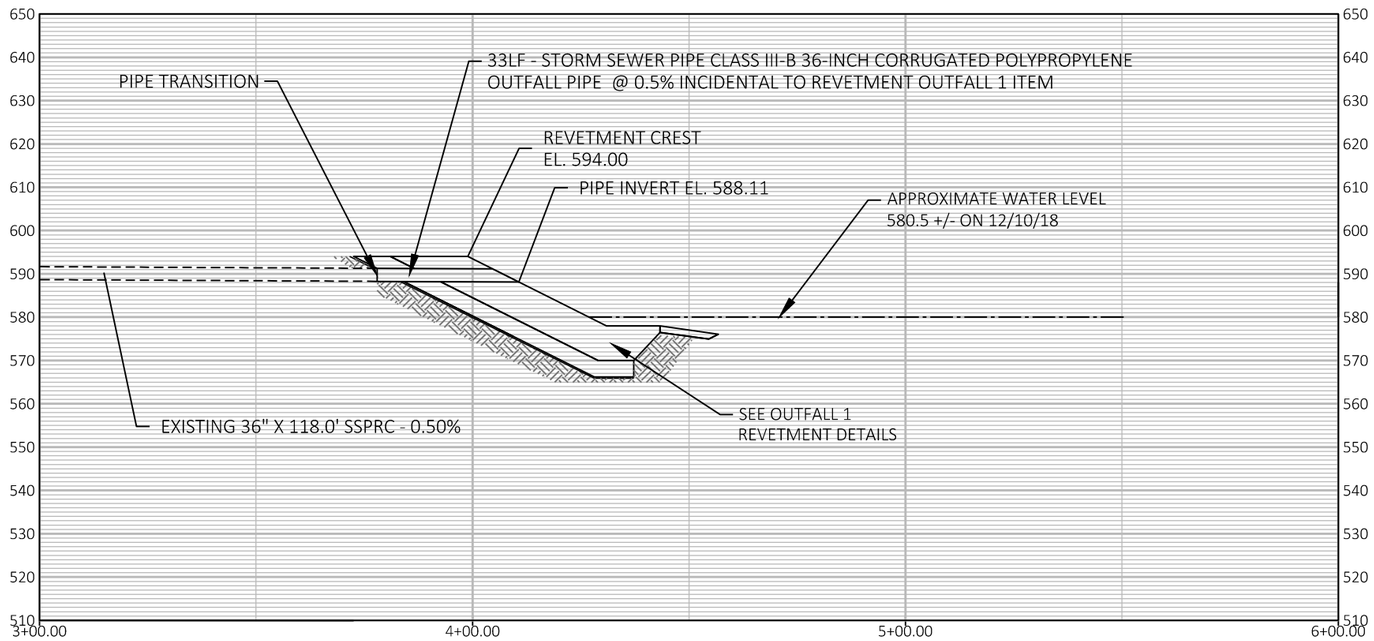
MAIN ARMOR LAYER TOLERANCES AND MATERIAL PLACEMENT

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: REVETMENT - OUTFALL LOCATION #3 (7TH PLACE)	SHEET 42	E

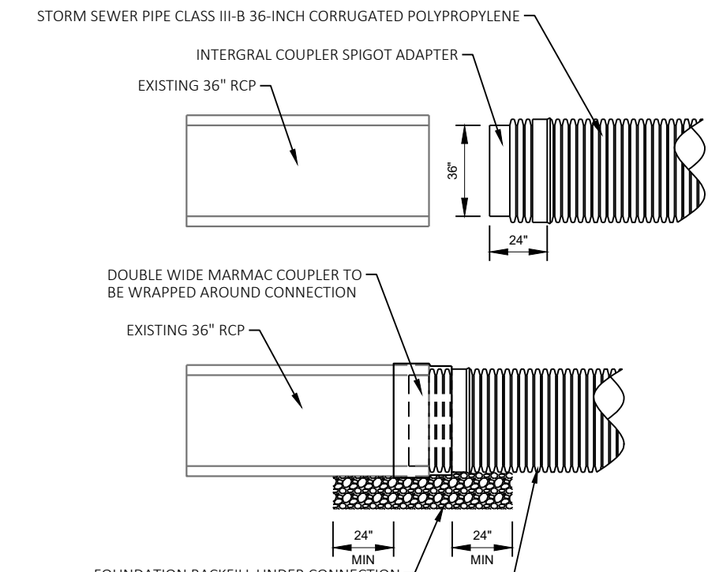
FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\04_SS_OUTFALLS_CD_REVETMENT.DWG
LAYOUT NAME - 03
PLOT DATE : 12/3/2019 5:41 PM
PLOT BY : SCHARLAU, DAVE/MKE
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



PLAN



ELEVATION



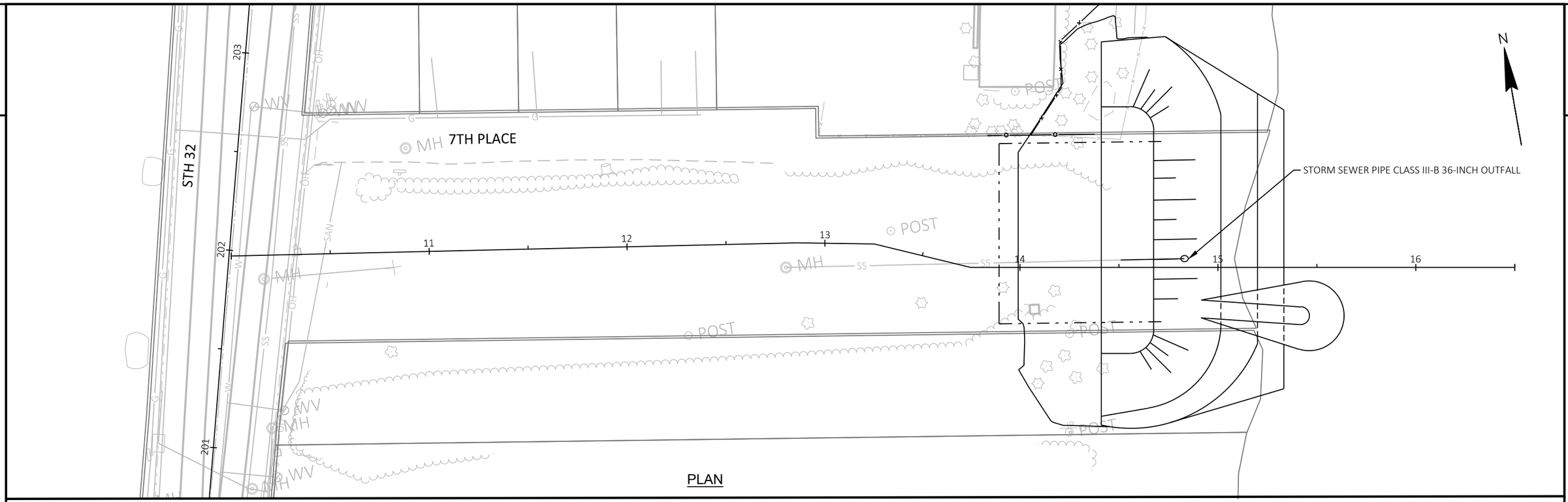
PIPE TRANSITION

NOTE

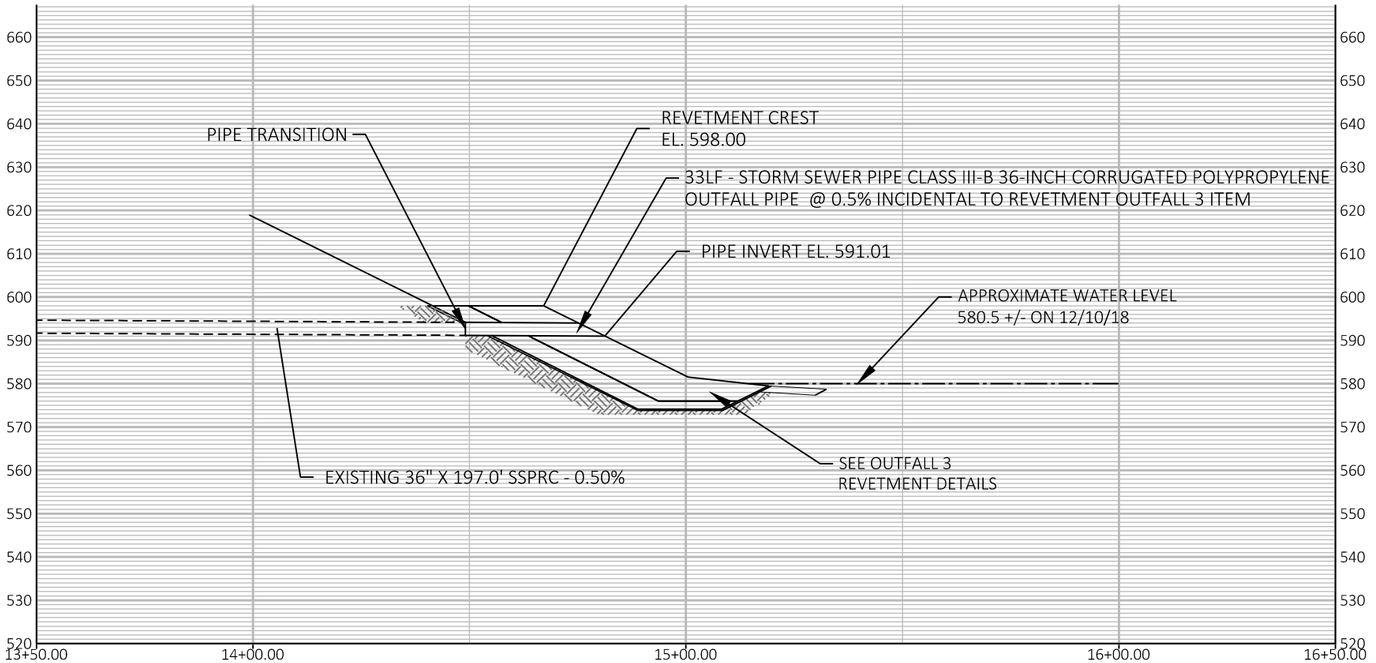
1. PIPE TRANSITION IS INCIDENTAL TO REVETMENT OUTFALL 1 ITEM

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: STORM SEWER OUTFALL - OUTFALL LOCATION #1 (11TH PLACE)	SHEET 43	E

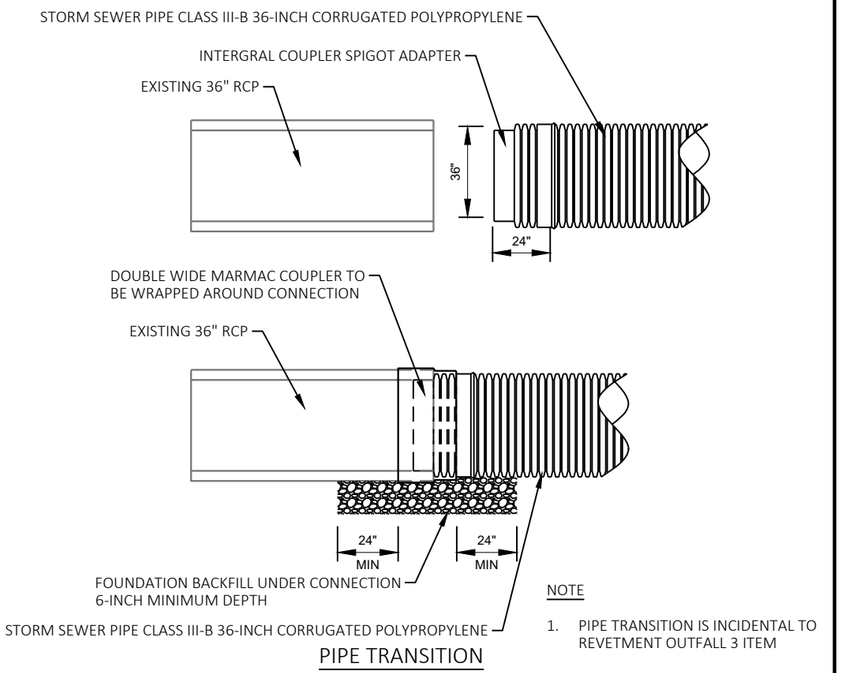
FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\05_SS_OUTFALLS_CD_DRAIN.DWG
LAYOUT NAME - 01
PLOT DATE : 12/3/2019 4:04 PM
PLOT BY : SCHARLAU, DAVE/MKE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



PLAN



ELEVATION



PIPE TRANSITION

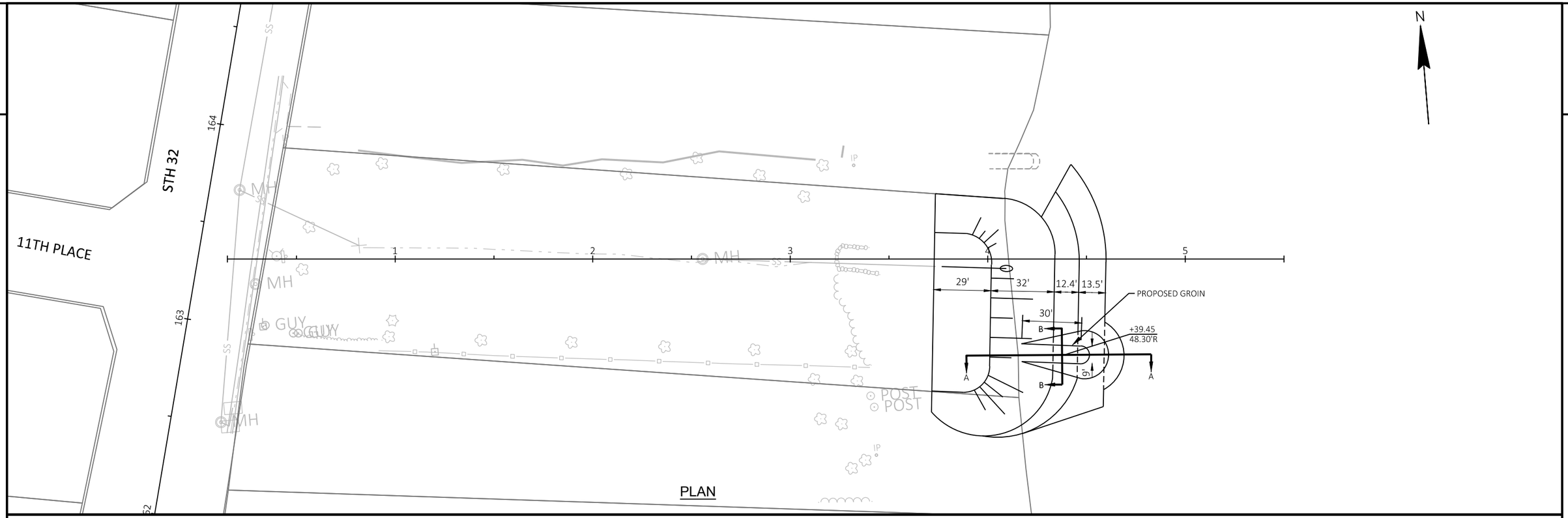
NOTE

1. PIPE TRANSITION IS INCIDENTAL TO REVETMENT OUTFALL 3 ITEM

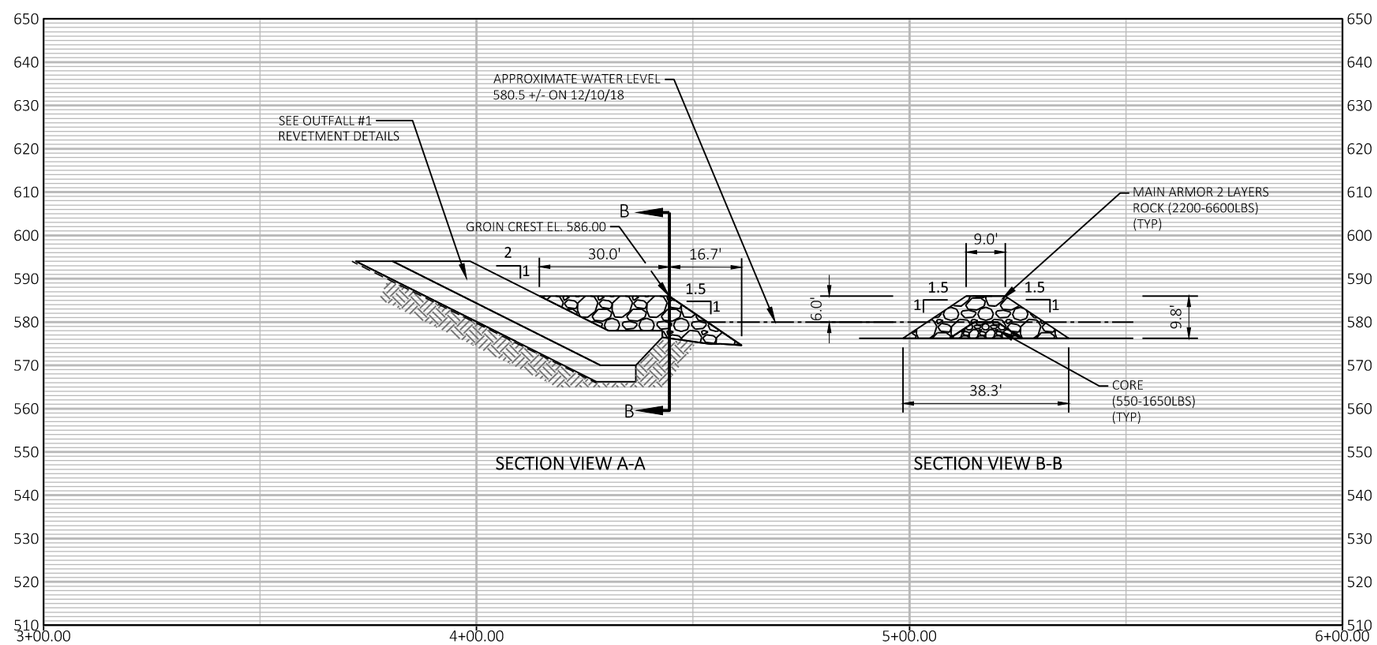
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: STORM SEWER OUTFALL - OUTFALL LOCATION #3 (7TH PLACE)	SHEET 44	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\05_SS_OUTFALLS_CD_DRAIN.DWG
LAYOUT NAME - 03
PLOT DATE : 12/3/2019 4:06 PM
PLOT BY : SCHARLAU, DAVE/MKE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



PLAN

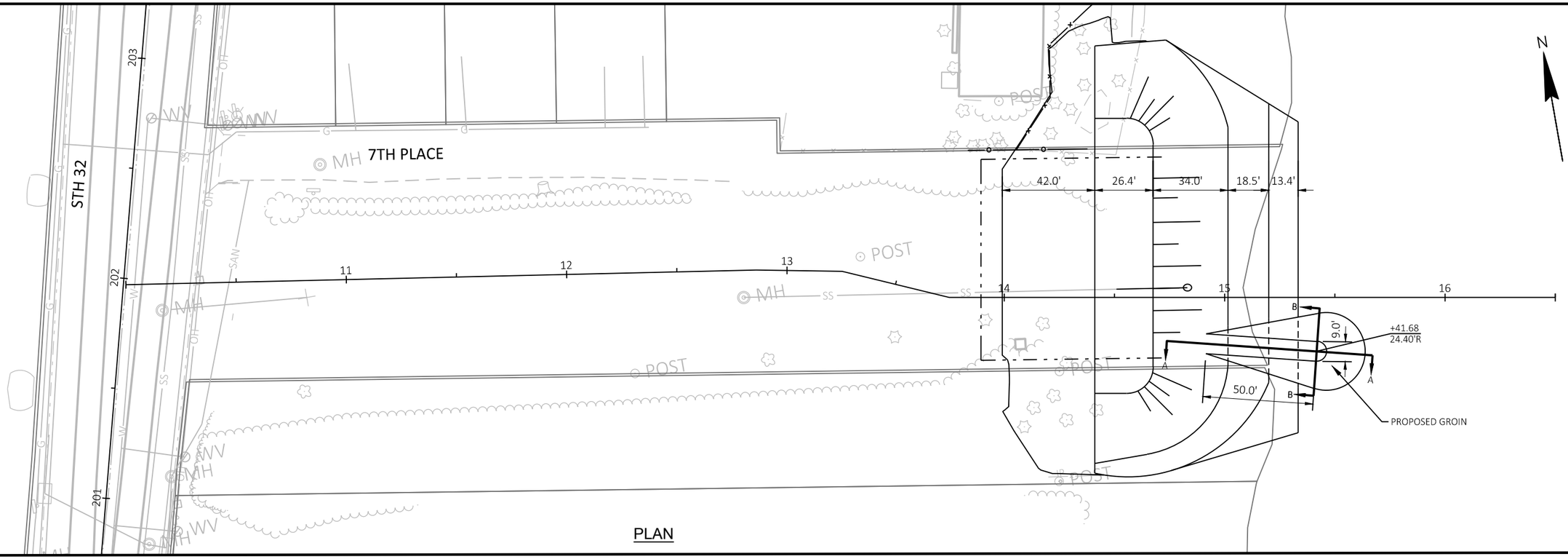


ELEVATION

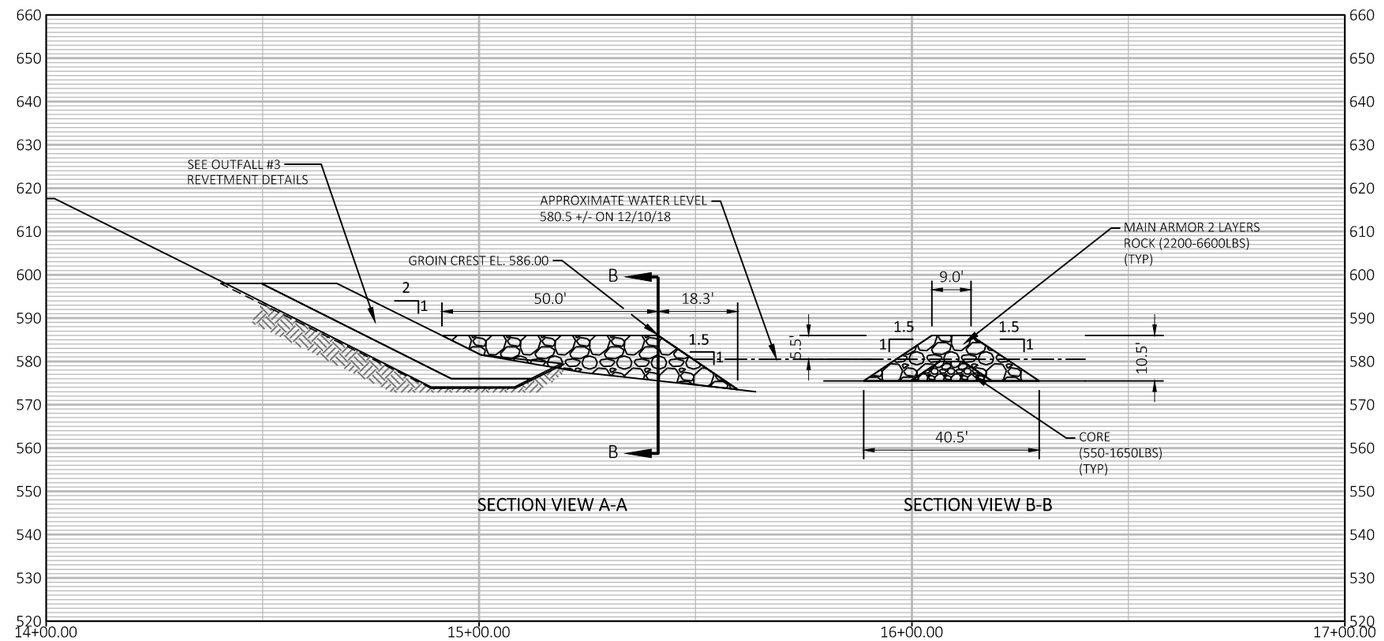
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: GROIN - OUTFALL LOCATION #1 (11TH PLACE)	SHEET 45	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\06_SS_OUTFALLS_CD_GROIN.DWG
LAYOUT NAME - 01
PLOT DATE : 12/3/2019 1:39 PM
PLOT BY : SCHARLAU, DAVE/MKE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



PLAN

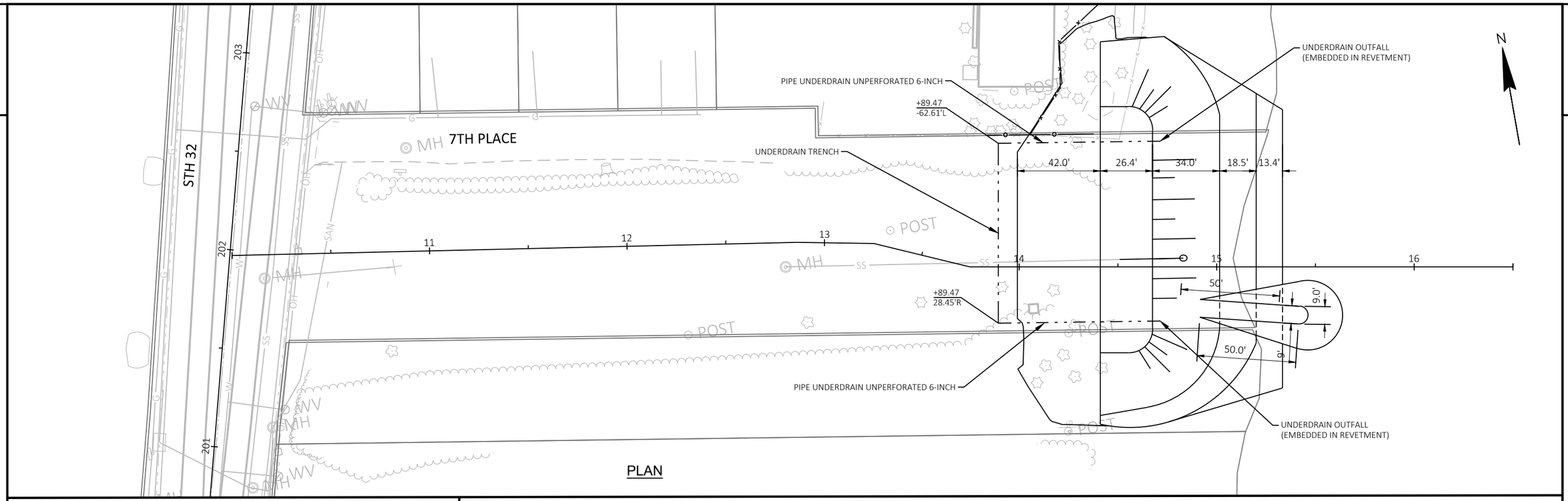


ELEVATION

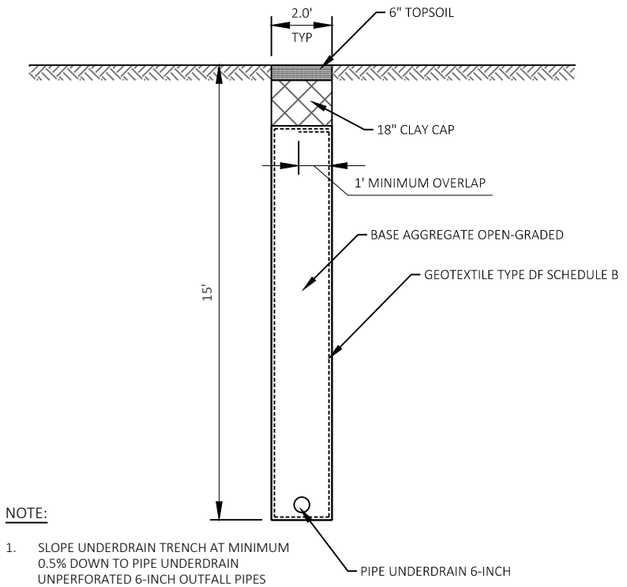
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: GROIN - OUTFALL LOCATION #3 (7TH PLACE)	SHEET 46	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\06_SS_OUTFALLS_CD_GROIN.DWG
LAYOUT NAME - 03

PLOT DATE : 12/3/2019 4:17 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : 1 IN:50 FT



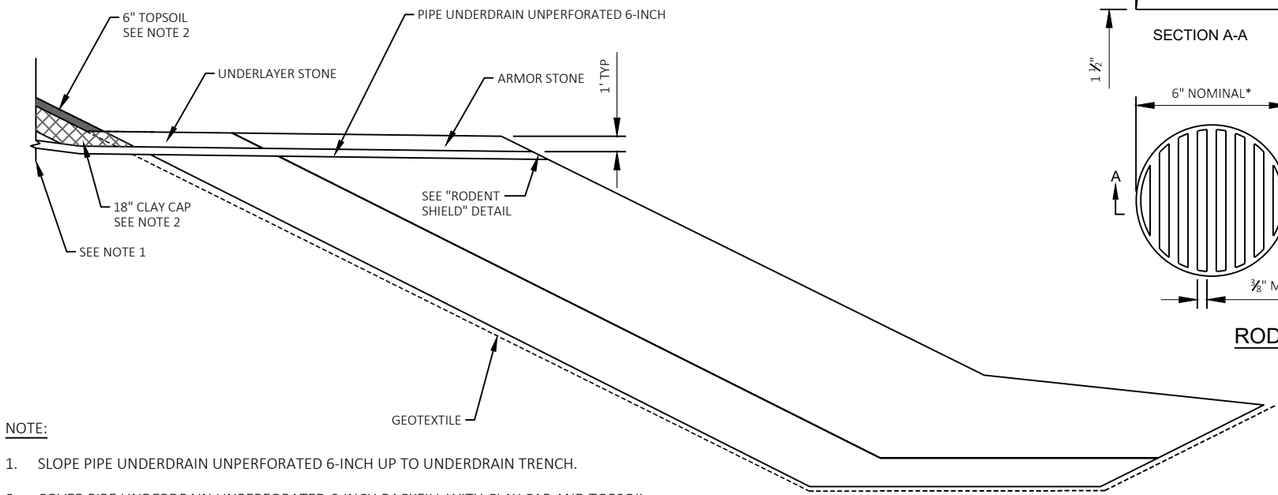
PLAN



NOTE:

1. SLOPE UNDERDRAIN TRENCH AT MINIMUM 0.5% DOWN TO PIPE UNDERDRAIN UNPERFORATED 6-INCH OUTFALL PIPES
2. MINIMUM 2' OVERLAP OF GEOTEXTILE TYPE DF SCHEDULE B ALONG TRENCH.

UNDERDRAIN TRENCH



NOTE:

1. SLOPE PIPE UNDERDRAIN UNPERFORATED 6-INCH UP TO UNDERDRAIN TRENCH.
2. COVER PIPE UNDERDRAIN UNPERFORATED 6-INCH BACKFILL WITH CLAY CAP AND TOPSOIL.
3. CONSTRUCT PIPE UNDERDRAIN UNPERFORATED 6-INCH OUTFALL BY LAYING PIPE 1' BELOW TOP OF REVETMENT LAYER AT A MINIMUM OF 0.5% SLOPE. AFTER UNDERDRAIN IS LAID COVER UNDERDRAIN WITH 1' OF ARMOR AND UNDERLAYER STONE TAKING CARE NOTE TO CRUSH UNDERDRAIN.

UNDERDRAIN OUTFALL

NOTE:

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING

1. ORIENT SHIELD SO SLOTS ARE VERTICAL.
2. RODENT SHIELD, PIPE COUPLING, AND SCREWS ARE INCIDENTAL TO BID ITEM "PIPE UNDERDRAIN UNPERFORATED 6-INCH"
3. THE RODENT SHIELD SHALL BE A PVC GRADE SIMILAR TO THIS DETAIL. THE GATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

RODENT SHIELD

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	CONSTUCTION DETAILS: UNDERDRAIN - OUTFALL LOCATION #3 (7TH PLACE)	SHEET 47	E

FILE NAME : C:\PW_WORKDIR\DEN001\CH2MHILL_NG065598\D1396025\07_SS_OUTFALLS_CD_UNDERDRAIN.DWG
LAYOUT NAME - 03
PLOT DATE : 12/4/2019 9:50 AM
PLOT BY : GIBSON-MURPHY, NIKKI/MKE PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

STH 32

7TH PLACE

BP: 10+00.00

PI: 12+86.12

PI: 13+25.00

PI: 13+75.00

EP: 16+50.00

OUTFALL 3

STH 32

11TH PLACE

BP: 0+15.00

EP: 5+50.00

OUTFALL 1

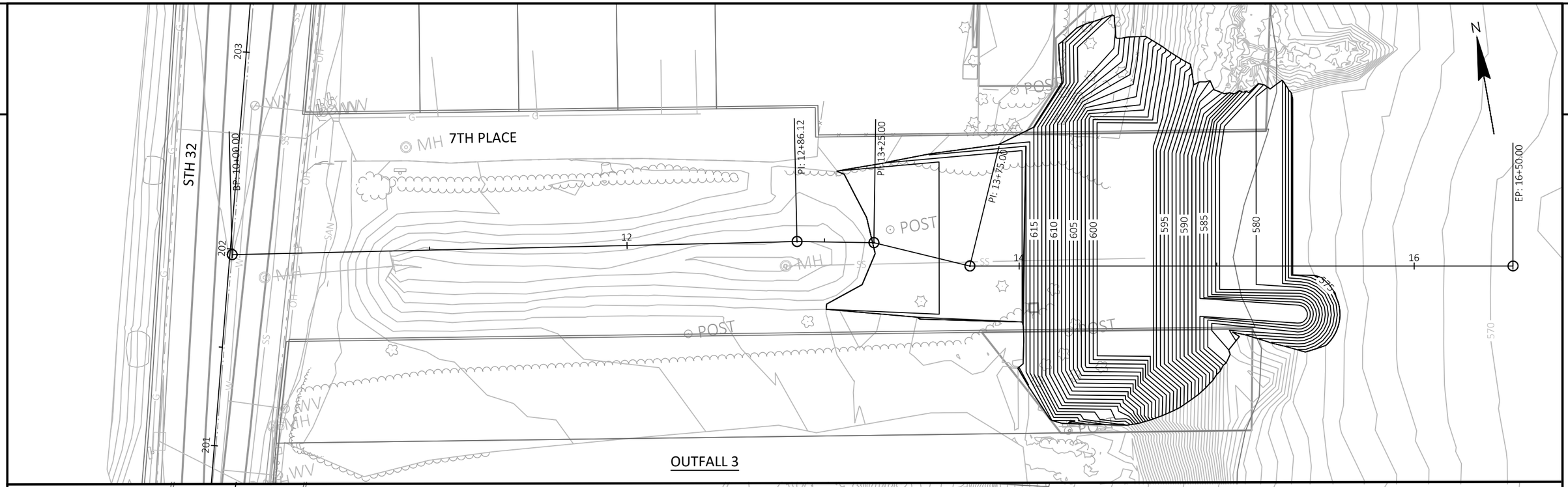
NOTE
EXISTING CONTOURS ON 12/10/18

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	EXISTING CONTOURS	SHEET 48	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\08A_SS_OUTFALLS_CM_EXIST.DWG
LAYOUT NAME - 01

PLOT DATE : 12/3/2019 1:41 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



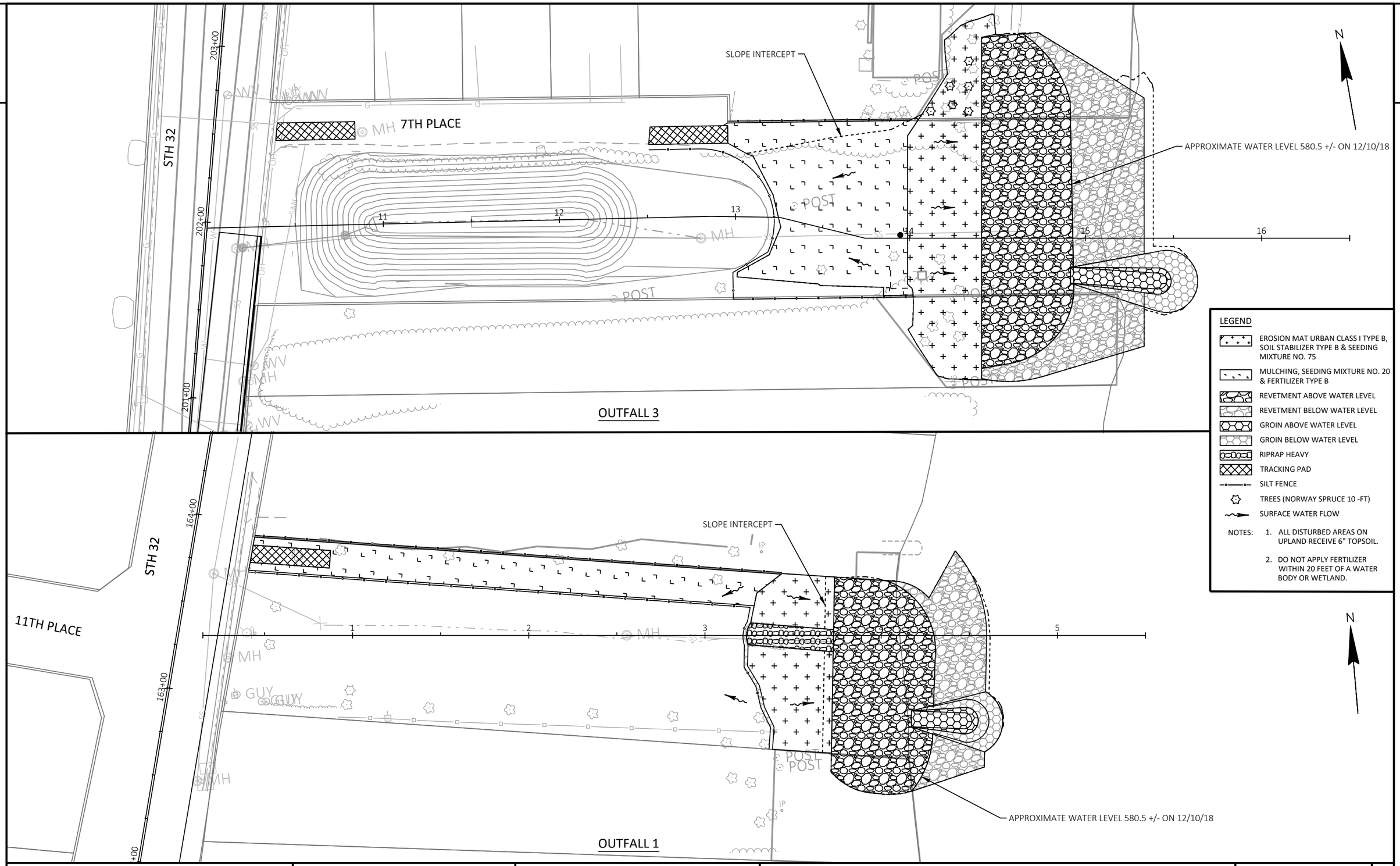
NOTE
EXISTING CONTOURS ON 12/10/18

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	EXISTING/PROPOSED CONTOURS	SHEET 49	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\08B_SS_OUTFALLS_CM.DWG
LAYOUT NAME - 01

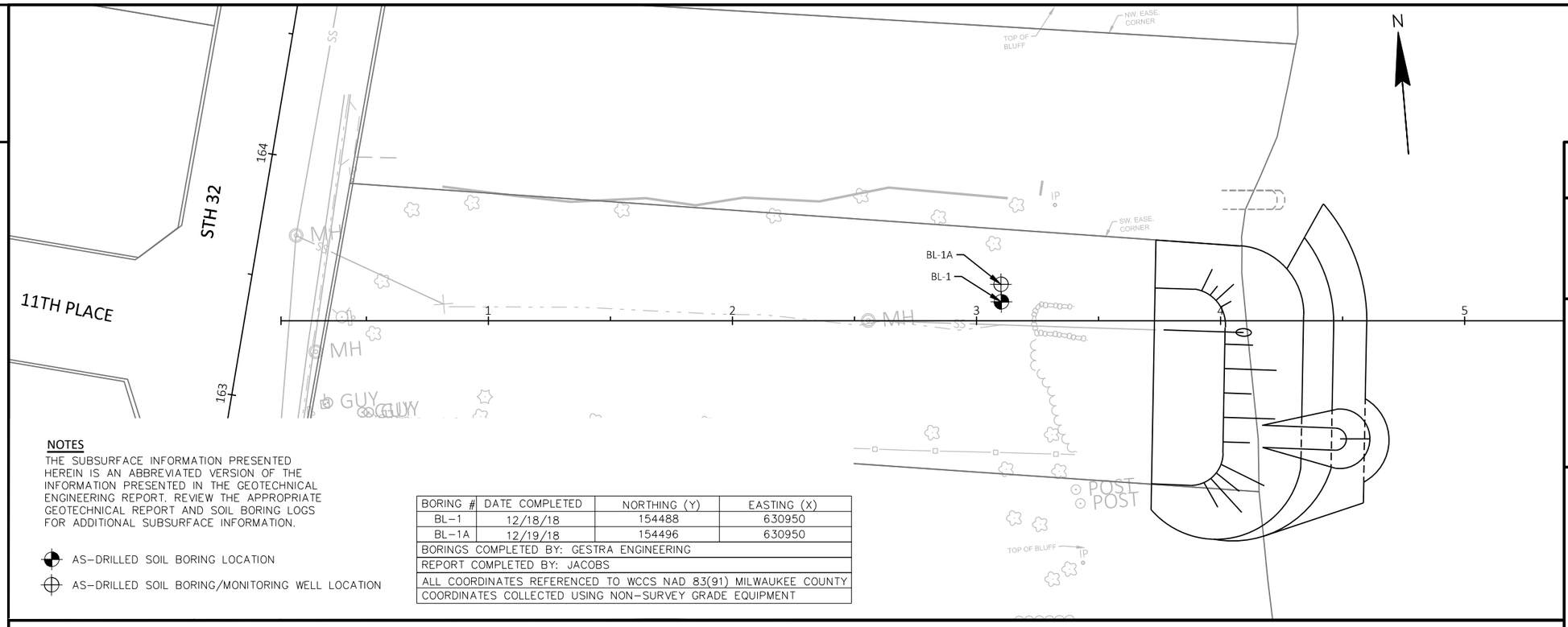
PLOT DATE : 12/3/2019 4:18 PM PLOT BY : SCHARLAU, DAVE/MKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	EROSION CONTROL	SHEET 50	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\09_SS_OUTFALLS_EC.DWG
LAYOUT NAME - 01
PLOT DATE : 12/3/2019 1:41 PM
PLOT BY : SCHARLAU, DAVE/MKE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



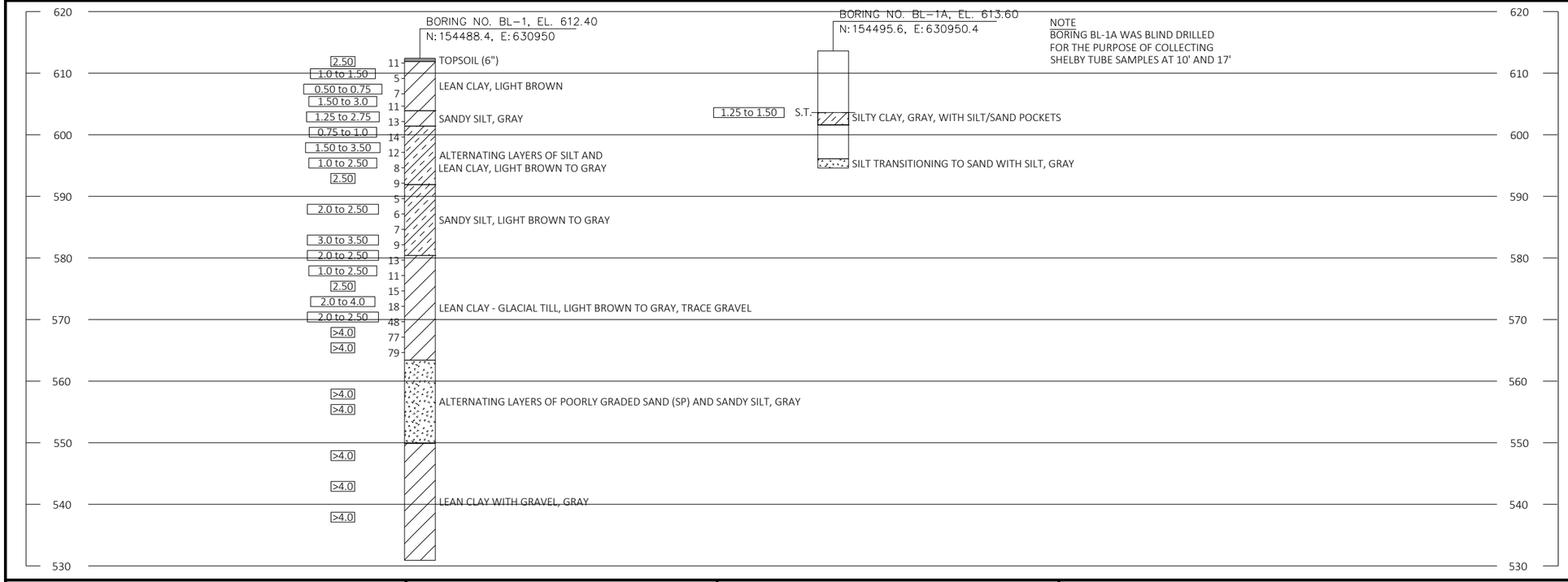
NOTES

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

AS-DRILLED SOIL BORING LOCATION

AS-DRILLED SOIL BORING/MONITORING WELL LOCATION

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BL-1	12/18/18	154488	630950
BL-1A	12/19/18	154496	630950
BORINGS COMPLETED BY: GESTRA ENGINEERING			
REPORT COMPLETED BY: JACOBS			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) MILWAUKEE COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			



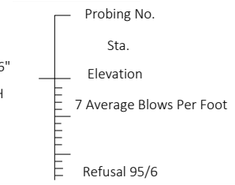
ABBREVIATIONS

F-Fine M-Medium C-Coarse
Ws-Weathered So-Sound

MATERIAL SYMBOLS

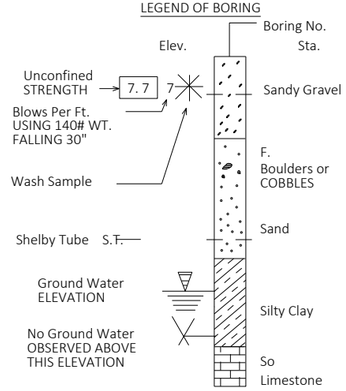
Topsoil / fill, Sand, Gravel, Silt, Peat, Clay, Sandstone, Limestone, Igneous Rock

LEGEND OF PROBING



95/6=95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING



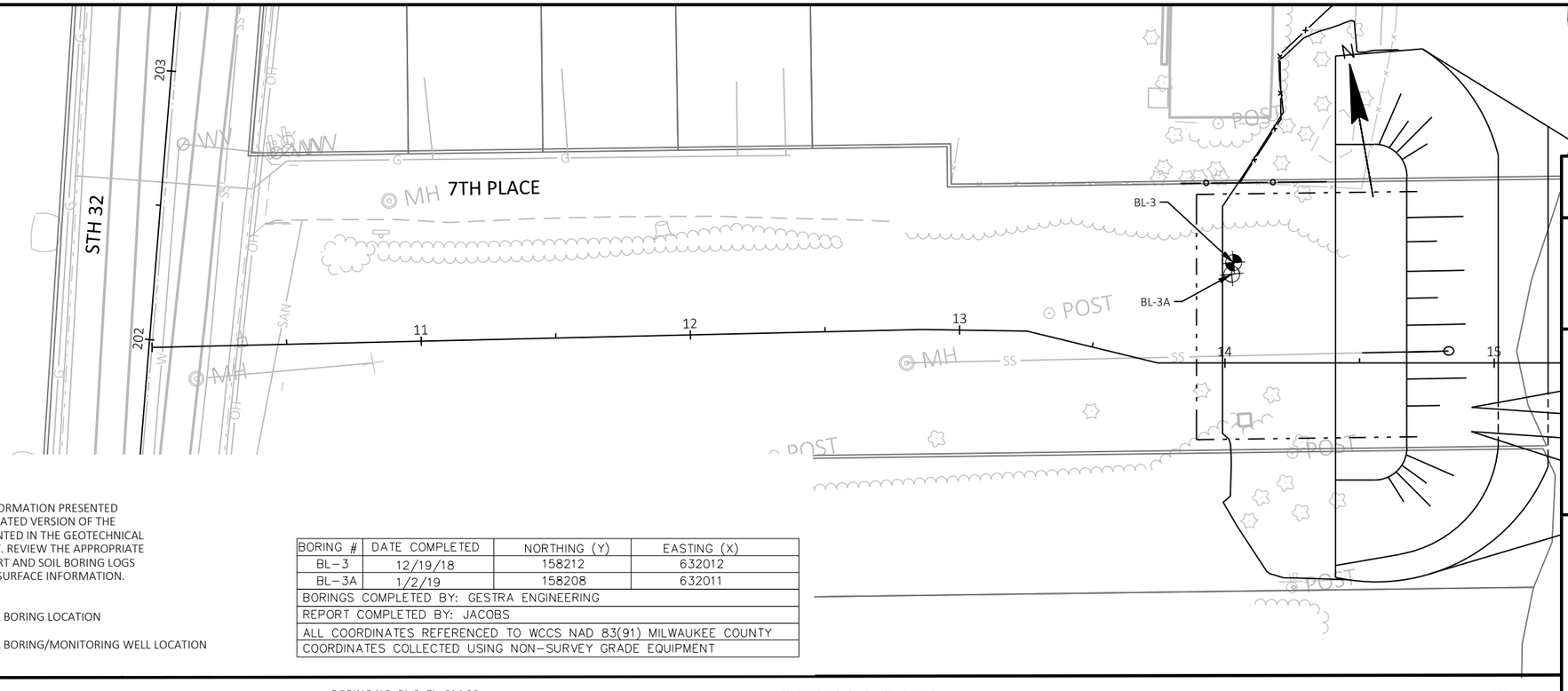
UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	SOIL BORINGS: OUTFALL LOCATION #1 (11TH PLACE)	SHEET 51	E

FILE NAME : C:\PW_WORKDIR\DEN001\DSCHARLA\D1396025\10_SS_OUTFALLS_SB.DWG
LAYOUT NAME - 01
PLOT DATE : 12/3/2019 1:42 PM
PLOT BY : SCHARLAU, DAVE/MKE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



NOTES

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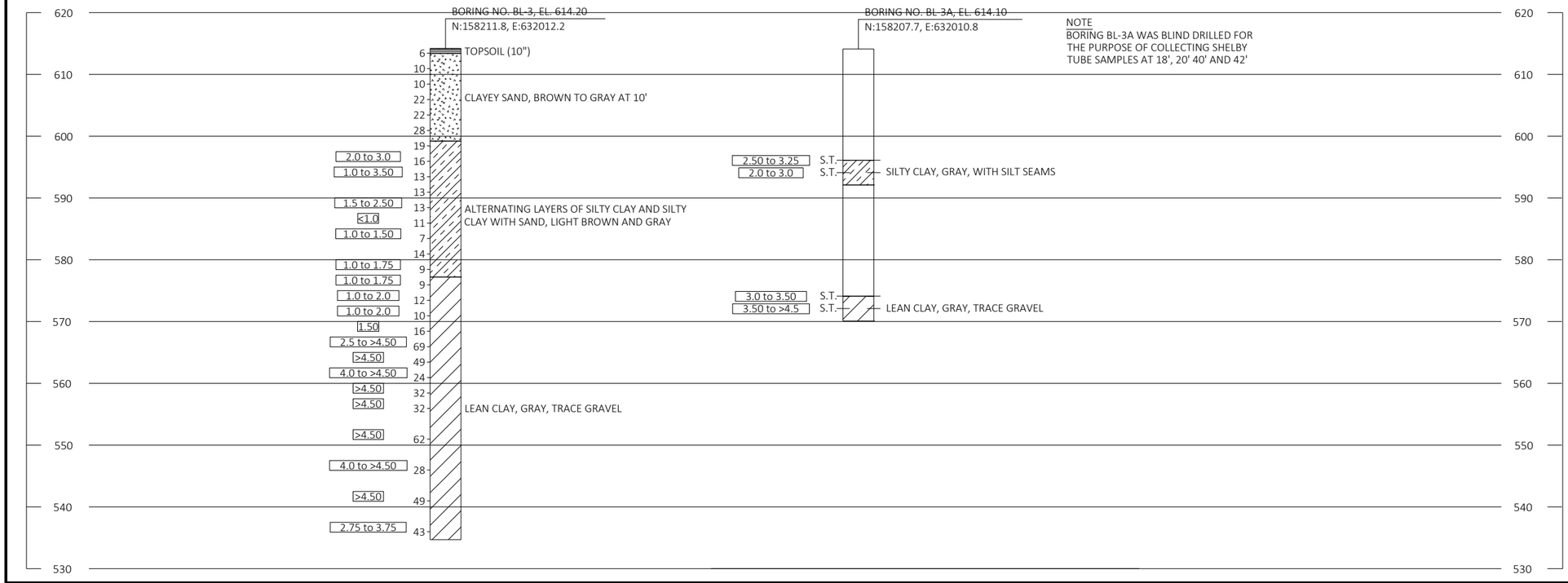
AS-DRILLED SOIL BORING LOCATION

AS-DRILLED SOIL BORING/MONITORING WELL LOCATION

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BL-3	12/19/18	158212	632012
BL-3A	1/2/19	158208	632011
BORINGS COMPLETED BY: GESTRA ENGINEERING			
REPORT COMPLETED BY: JACOBS			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) MILWAUKEE COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			



ABBREVIATIONS

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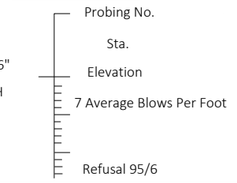
Ws-Weathered So-Sound

MATERIAL SYMBOLS

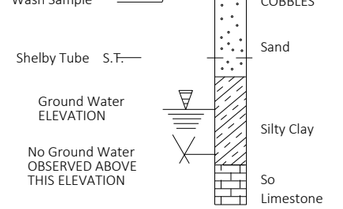
Topsoil / fill, Sand, Gravel, Silt, Peat, Clay, Sandstone, Limestone, Igneous Rock

LEGEND OF PROBING



95/6=95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING



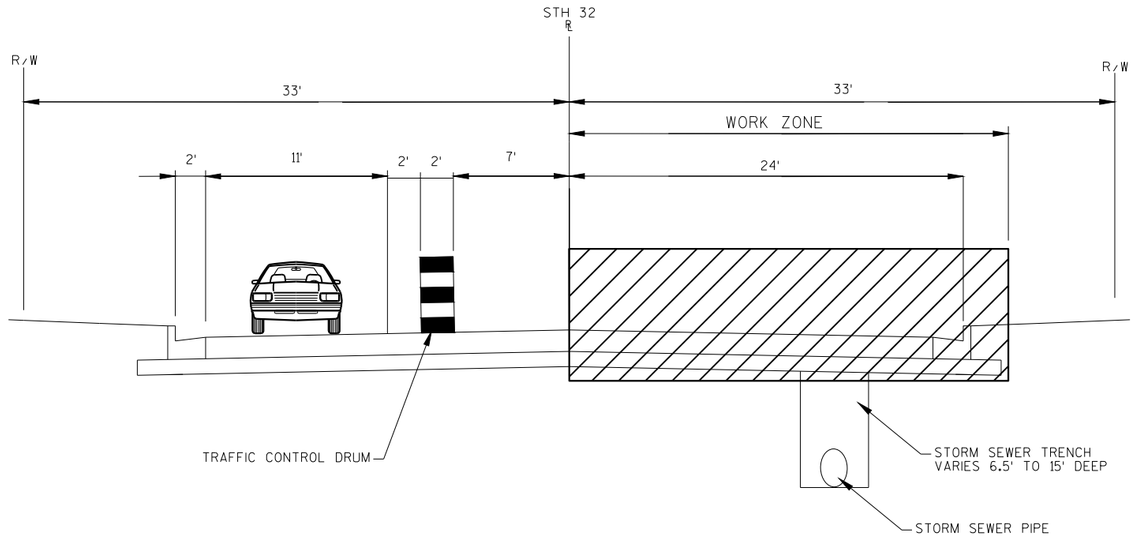
UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENSOSHA	SOIL BORINGS: OUTFALL LOCATION #3 (7TH PLACE)	SHEET 52	E

2



TRAFFIC CONTROL TYPICAL SECTION

STA. 187+00 TO STA. 202+00

2

LEGEND

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

WORK AREA

DIRECTION OF TRAFFIC

FLASHING ARROW BOARD

N

10TH STREET

END ROAD WORK
G20-2A
48"X24"

STH 32 (SHERIDAN ROAD)

174+00 175+00 176+00 177+00 178+00 179+00 180

MATCHLINE STA. 180+00

50' TYP.

540' LANE DROP

1000' 1000' 500'

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH WHITE

HWY 32 CLOSED AT 9TH	BEGINS XXXDAY XX XX XX

PLACE PCMS AT AT 12TH STREET INTERSECTION 7 CALENDAR DAYS PRIOR TO CLOSURE

ROAD WORK AHEAD W20-1A

RIGHT LANE CLOSED AHEAD W20-5A

W04-2R

NOTE: SEE DETOUR PLAN FOR ADDITIONAL SIGNING

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 54	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026001_s1

PLOT DATE : 12/4/2019 3:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

WORK AREA

DIRECTION OF TRAFFIC

FLASHING ARROW BOARD

N

9TH PLACE

9TH STREET

POST

STH 32 (SHERIDAN ROAD)

MATCHLINE STA. 180+00

180+00

181+00

182+00

183+00

184+00

185+00

186

MATCHLINE STA. 186+00

11'

11'

50' TYP.

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH WHITE

540' LANE DROP

LANE CLOSED
R11-2L
48"X30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 55	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026002_s1

PLOT DATE : 12/4/2019 3:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

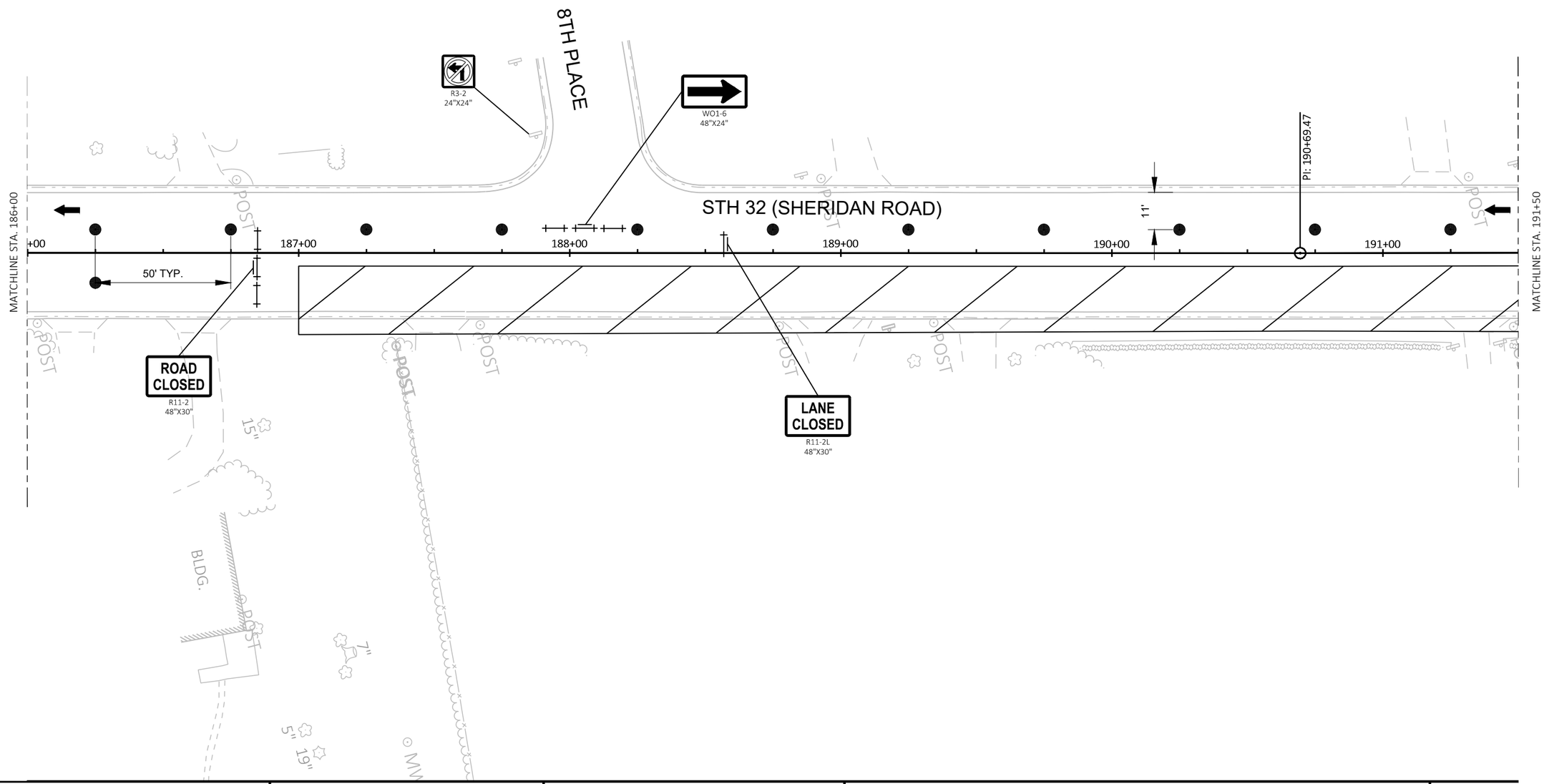
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD

N



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 56	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026003_s1

PLOT DATE : 12/4/2019 3:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

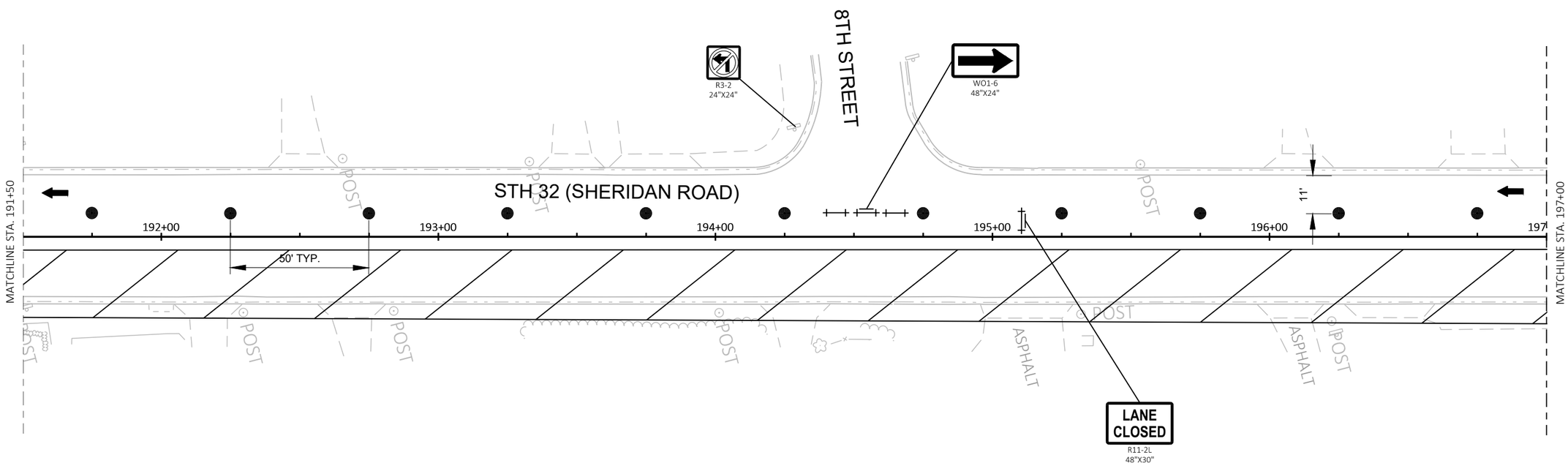
TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

WORK AREA

DIRECTION OF TRAFFIC

FLASHING ARROW BOARD



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 57	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026004_s1

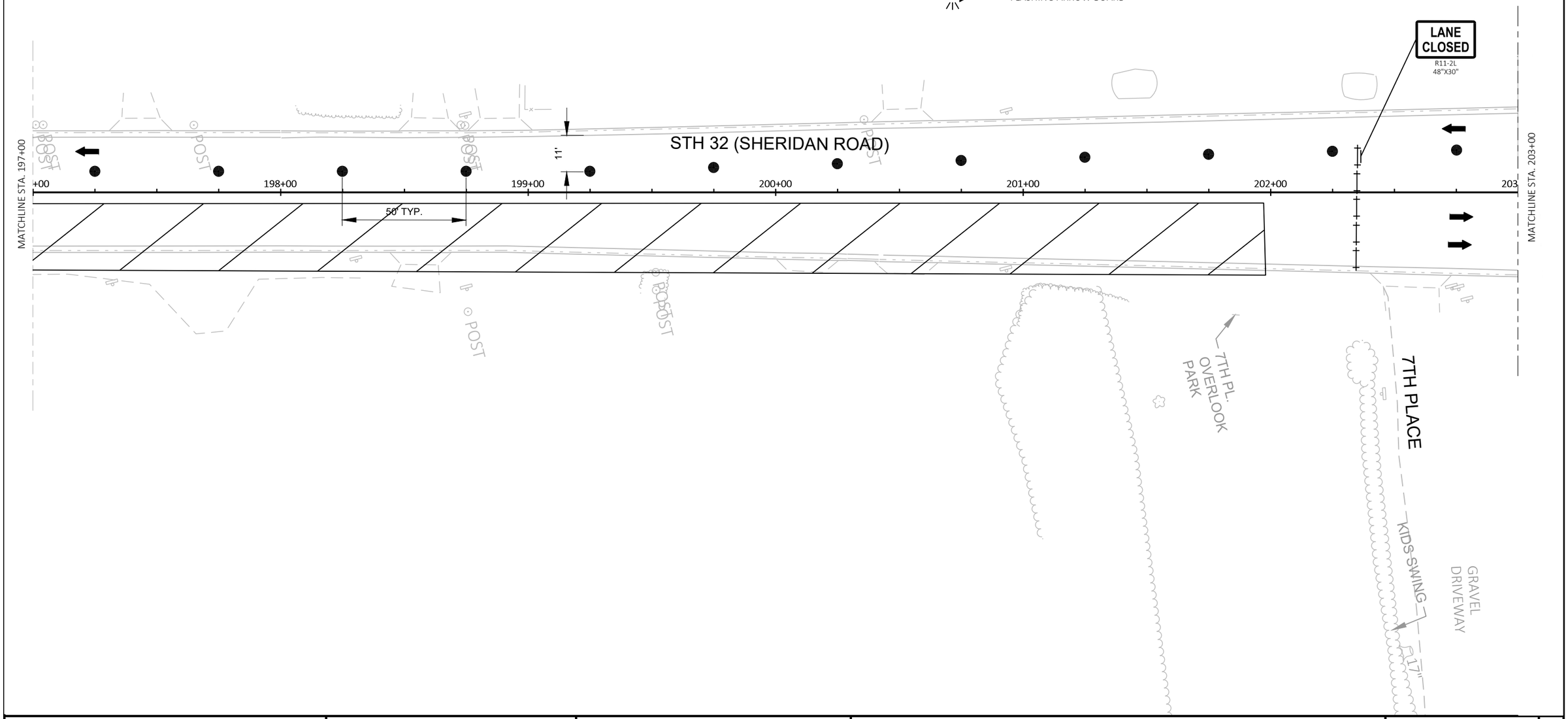
PLOT DATE : 12/4/2019 3:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD



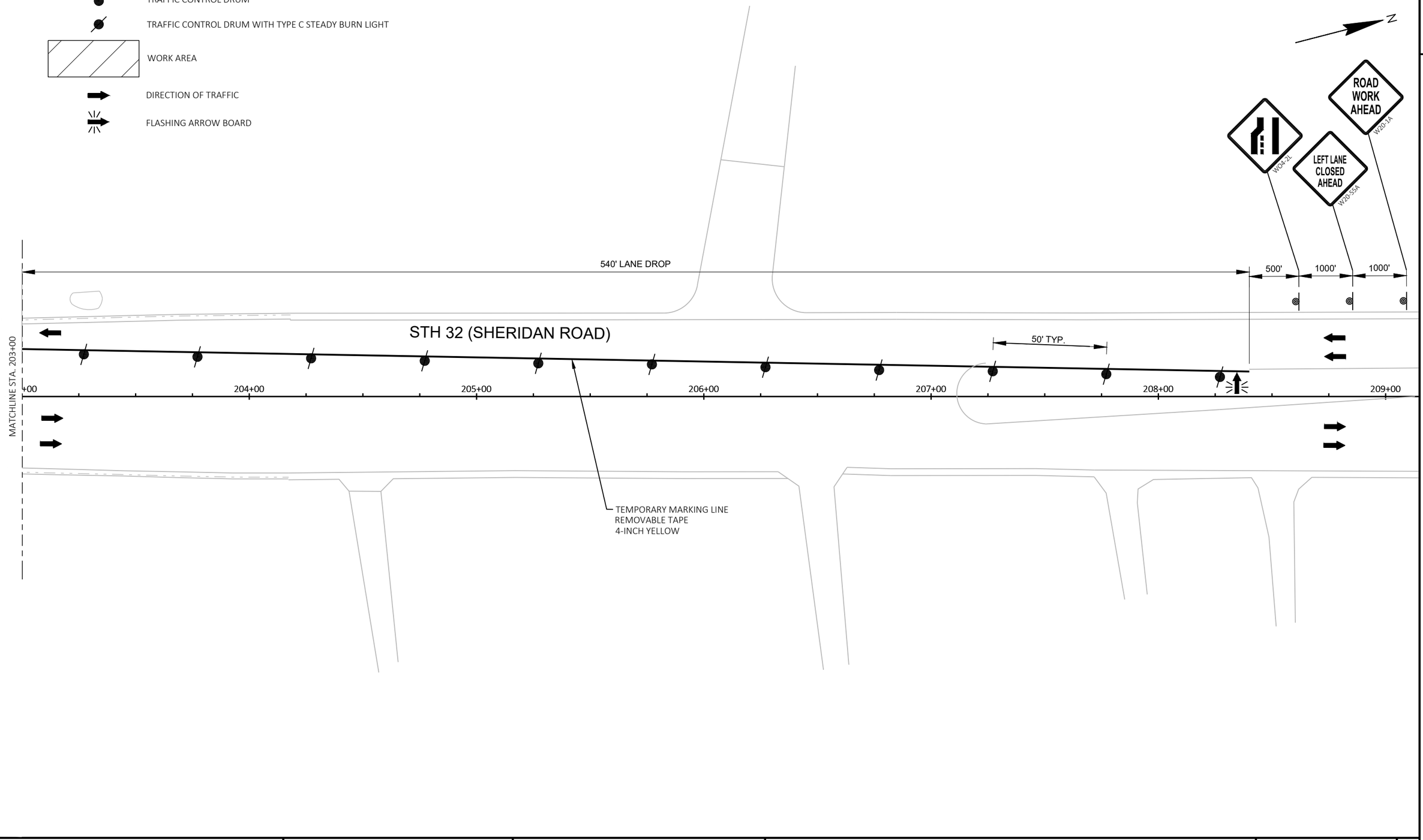
PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 58	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026005_s1

PLOT DATE : 12/4/2019 3:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD



PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 59	E

2

2

CTH A (7TH STREET)

CTH E (12TH STREET)

CTH Y (22ND AVENUE)

13TH AVENUE

21ST AVENUE

20TH AVENUE

RAILROAD

STH 32 (SHERIDAN ROAD)

6TH STREET

6TH PLACE

7TH PLACE

8TH ST

8TH PLACE

9TH STREET

9TH PLACE

10TH STREET

10TH PLACE

11TH STREET

11TH PLACE

12TH PLACE

13TH STREET

2B

2C

2D

2A

1

3

4

N

LEGEND

DETOUR ROUTE

WORK ZONE

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE WITH ATTACHED SIGN

1

NORTH M3-1 24"X12"
32 M1-6B 24"X24"
DETOUR AHEAD W20-2A

2

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
32 M1-6B 24"X24"

3

END DETOUR M4-8A 24"X18"
32 M1-6B 24"X24"

4

ROAD CLOSED
0.6 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"

A MO6-1 21"X21"

B MO6-1 21"X21"

C MO5-1R 21"X21"

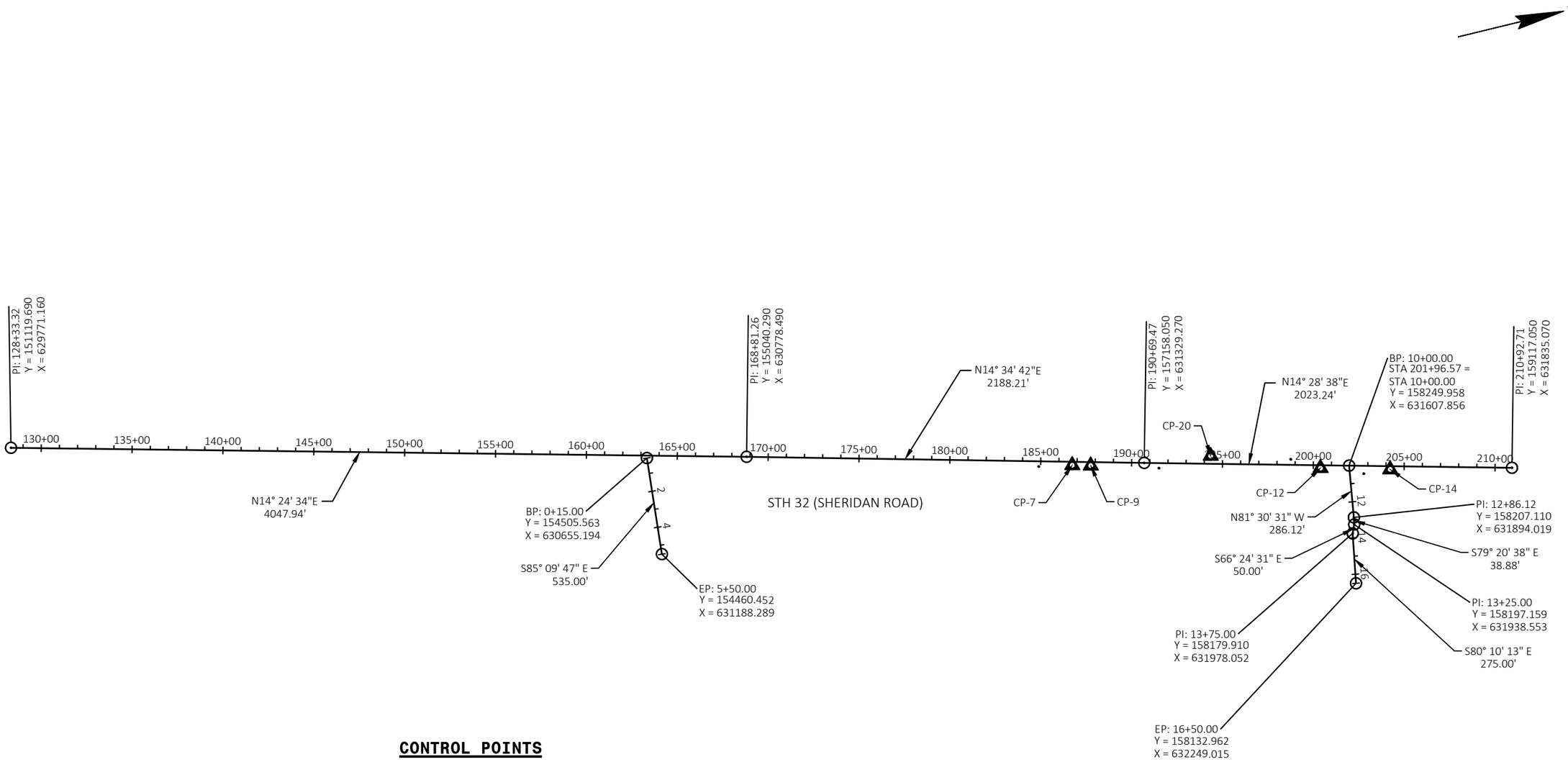
D MO5-1L 21"X21"

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	DETOUR PLAN	SHEET 60	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - 027001_dt

PLOT DATE : 12/4/2019 3:02 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2



CONTROL POINTS

POINT #	DESCRIPTION	STATION	OFFSET	Y	X
7	MAG NAIL	186+98.83	21.42 RT	156,793.95	631,256.70
9	MAG NAIL	187+93.89	21.42 RT	156,885.95	631,280.64
12	MAG NAIL	200+36.49	24.21 RT	158,088.31	631,594.46
14	MAG NAIL	204+18.71	32.98 RT	158,456.20	631,698.51
20	5/8" REBAR WITH PINK CAP	194+11.04	26.45 LT	157,495.39	631,389.05

REMOVING PAVEMENT

STREET	LOCATION	204.0100 SY
STH 32	UNDISTRIBUTED - DRIVEWAY APRONS	30
	PROJECT TOTAL	30

REMOVING ASPHALTIC SURFACE

STREET	FROM	TO	204.0110 SY
STH 32	187+10	201+95	1,961
		PROJECT TOTALS	1,961

3

REMOVING ASPHALTIC SURFACE MILLING

STREET	FROM	TO	204.0120 SY
STH 32	187+10	200+75	1680
		PROJECT TOTALS	1,680

REMOVING CURB & GUTTER

STREET	FROM	TO	204.0150 LF
STH 32	187+10	201+95	1484
		PROJECT TOTAL	1484

ALL CATEGORY 0010

3

REMOVING MANHOLES

STREET	STATION	OFFSET	REMOVING MANHOLES 204.0210 EACH
STH 32	187+16	RT	1
STH 32	188+24	RT	1
STH 32	189+99	RT	1
STH 32	192+38	RT	1
STH 32	194+84	RT	1
STH 32	197+99	RT	1
STH 32	200+80	RT	1
STH 32	201+87	RT	1
	PROJECT TOTAL		8

REMOVING STORM SEWER

STREET	STATION	-	STATION	204.0245.01 12-INCH LF	204.0245.02 24-INCH LF	204.0245.03 30-INCH LF	204.0245.04* 36-INCH LF
STH 32	187+10	-	201+95	49	640	698	66
			PROJECT TOTAL	49	640	698	66

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

ABANDONING MANHOLES

STREET	STATION	204.0250 EACH
OUTFALL #2	2+87	1
	PROJECT TOTAL	1

ABANDONING SEWER

STREET	STATION	TO	STATION	204.0291.S CY
OUTFALL #2	2+67	-	2+87	15
			PROJECT TOTAL	15

ALL CATEGORY 0010

3

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (6)	MASS ORDINATE +/- (7)	WASTE	208.0100 BORROW	COMMENT:
			CUT (2)	EBS EXCAVATION (3)				FACTOR 1.20				
DIVISION 1												
Outfall 3 Earthwork	10+25/12+75	BIOFILTER	1,960	0	0	1,960	88	106	1,854	1,854	0	
DIVISION 1 SUBTOTAL			1,960	0	0	1,960	88	106	1,854	1,854	0	
GRAND TOTAL			1,960	0	0	1,960	88	106	1,854	1,854	0	
TOTAL COMMON EXC			1,960									

NOTES:

(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 WITHIN THE DIVISION.

3

BASE AGGREGATE DENSE 1-1/4 INCH

STREET	STATION	TO	STATION	305.0120 TON
STH 32	187+10	-	201+95	1,008
UNDISTRIBUTED				100
			PROJECT TOTAL	1,108

BASE AGGREGATE OPEN-GRADED

STREET	STATION	TO	STATION	305.0110* TON
STH 32	187+10	-	201+95	404
UNDISTRIBUTED				50
			PROJECT TOTAL	454

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE DRIVEWAY 6-INCH

STREET	LOCATION		416.0160 CONCRETE DRIVEWAY 6-INCH SY
STH 32	UNDISTRIBUTED		30
		PROJECT TOTAL	30

ASPHALT

STREET	STATION	TO	STATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON
STH 32	187+10	-	201+95	182	471	437
			PROJECT TOTAL	182	471	437

ALL CATEGORY 0010

3

CONCRETE COLLARS FOR PIPE

STREET	STATION	520.8000 EACH
STH 32	187+12	1
STH 32	UNDISTRIBUTED	2
PROJECT TOTAL		3

3

STORM SEWER PIPES

FROM	-	TO	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.2324 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH LF	JOINT TIES* EACH	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	COMMENTS
-	-	64	STH 32		4				614.45	614.43	0.0050	CONCRETE COLLAR REQUIRED
64	-	65	STH 32		109				614.09	613.82	0.0025	
65	-	66	STH 32		175				613.72	613.46	0.0015	
66	-	67	STH 32				239		613.36	613.00	0.0015	
67	-	68	STH 32				246		612.90	612.54	0.0015	
68	-	69	STH 32			315			612.04	611.41	0.0020	
69	-	71	STH 32			281			611.31	610.61	0.0025	
71	-	70	STH 32			107			610.51	610.19	0.0030	
70	-	100	OUTFALL 3				58		609.65	609.36	0.0050	
100	-	70A	OUTFALL 3			202			603.00	601.99	0.0050	
64A	-	64	STH32	7					616.62	616.55	0.0100	
66B	-	66A	STH32									
66A	-	66	STH32	9					615.20	615.11	0.0100	
67A	-	67	STH32	8					615.93	615.85	0.0100	
68A	-	68	STH32	8					616.87	616.77	0.0125	
69A	-	69	STH32	8					618.32	618.24	0.0100	
71A	-	71	STH32	10					619.30	619.20	0.0100	
100	-	OF3	OUTFALL 3	13				4	609.36	609.30	0.0046	
			TOTALS	63	288	905	543					

* NON-BID ITEM: FOR INFORMATION ONLY

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	611.0420 RECONSTRUCTING MANHOLES EACH	611.0612 INLET COVERS TYPE C EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.8105 ADJUSTING CATCH BASIN COVERS EACH	611.9705 SALVAGED MANHOLE COVERS EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.02 MANHOLES 4X10-FT EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH*** FT	COMMENTS
64A	187+10.08	24' RT	STH 32							1		1		620.67	614.62		
64	187+15.77	20' RT	STH 32					1			1	1		620.69	614.09	5.36	CONNECT 12" PIPE FROM WEST I.E. 615.34
65	188+24.23	16.5' RT	STH 32					1			1	1		620.39	613.72	5.43	CONNECT 12" PIPE FROM WEST I.E. 614.22
66B	189+90.78	24' RT	STH 32							1		1		619.91	615.59		
66A	189+99.89	24' RT	STH 32							1		1		619.92	613.19		
66	189+99.03	15.5' RT	STH 32					1			1	1		620.04	613.36	5.44	CONNECT 12" PIPE FROM WEST I.E. 614.84
67A	192+38.11	23.5' RT	STH 32							1		1		620.62	613.96		
67	192+38.28	16' RT	STH 32					1			1	1		620.76	612.90	6.62	CONNECT 12" PIPE FROM WEST I.E. 615.65
68	194+84.06	16' RT	STH 32					1			1	1		621.76	612.04	8.48	CONNECT 12" PIPE FROM WEST I.E. 615.90
68A	194+84.54	24' RT	STH 32							1		1		621.65	615.37		
69	197+99.37	16.5' RT	STH 32					1			1	1		622.96	611.31	10.41	CONNECT 12" PIPE FROM WEST I.E. 617.55
69A	197+99.94	24' RT	STH 32							1		1		622.84	616.82		
71A	200+79.27	28.3' RT	STH 32							1		1		623.91	617.80		
71	200+80.22	18.5' RT	STH 32					1			1	1		624.06	610.51	12.31	CONNECT 12" PIPE FROM WEST I.E. 618.92
70	201+87.04	21' RT	STH 32						1		1	1		624.49	609.65	13.60	CONNECT 24" PIPE FROM NORTH I.E. 615.34
100	201+96.80	78.5' RT	STH 32			2						1	1	614.45	603.00	10.71	NO ADJUSTMENT RINGS. PLACE COVER ON TOP OF DECK
OF3	202+04.19	89.5' RT	STH 32	1								1			609.30		
70A	202+14.52	279.8' RT	STH 32		1									618.22			EXISTING RIM ELEVATION 615.93
UNDISTRIBUTED			STH 32				1										
			TOTALS	1	1	2	1	7	1	7	8	17	1				

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

CONCRETE CURB & GUTTER

STREET	STATION	TO	STATION	601.0415 CONCRETE CURB 6-INCH SLOPED 30-INCH TYPE J LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
STH 32	187+10	-	201+95	1484	1484
PROJECT TOTAL				1484	1484

ALL CATEGORY 0010

3

PIPE UNDERDRAIN & GEOTEXTILE FABRIC

STREET	LOCATION	612.0106* PIPE UNDERDRAIN 6-INCH LF	645.0111* GEOTEXTILE TYPE DF SCHEDULE A SY
STH 32	UNDISTRIBUTED	200	100
PROJECT TOTAL		200	100

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

MAINTENANCE AND REPAIR OF HAUL ROAD
ID 3240-17-60

STREET	618.0100 EACH
7TH PLACE	1
PROJECT TOTAL	1

3

LANDSCAPING

STREET	STATION	TO	STATTION	625.0100* TOPSOIL SY	629.0210* FERTILIZER TYPE B CWT	630.0120* SEEDING MIXTURE NO. 20 LB	630.0500* SEED WATER MGAL
OUTFALL #2	1+10	-	2+70	377	0.5	10	8
STH 32	187+00	-	202+00	584	0.5	16	13
BIOFILTER	10+30	-	13+25	2172	1.5	59	49
UNDISTRIBUTED				313	0.5	8	7
			PROJECT TOTAL	3,445	3	93	77

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

MULCHING

STREET	STATION	TO	627.0200* SY
OUTFALL #2	1+10	2+70	343
UNDISTRIBUTED			34
		PROJECT TOTAL	377

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL CATEGORY 0010

3

TEMPORARY SETTLING BASINS

STREET	628.1104 EROSION BALES EACH	645.0120* GEOTEXTILE TYPE HR SY
UNDISTRIBUTED	30	50
PROJECT TOTAL	30	50

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SILT FENCE

STREET	STATION	628.1504* SILT FENCE LF	628.1520* SILT FENCE MAINTENANCE LF
OUTFALL #2	2+70	30	9
PROJECT TOTAL		30	9

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

EROSION CONTROL MOBILIZATIONS

LOCATION	628.1905* MOBILIZATIONS EROSION CONTROL EACH	628.1910* MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
STH 32	1	1
PROJECT TOTAL	1	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EROSION MAT

LOCATION	STATION	TO	STATION	628.2008* EROSION MAT URBAN CLASS I TYPE B SY
BIOFILTER	10+30	-	13+25	2,228
		PROJECT TOTALS		2,228

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL CATEGORY 0010

3

INLET PROTECTION

STREET	STATION	TO	STATTION	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
STH 32	187+00	-	202+00	5	2
			PROJECT TOTAL	5	2

SOD QUANTITIES

STREET	STATION	TO	STATTION	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
STH 32	187+00	-	202+00	12	531
UNDISTRIBUTED				1	53
			PROJECT TOTAL	13	584

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

BIOFILTER

LOCATION	STATION	TO	STATION	310.0110* BASE AGGREGATE OPEN GRADED TON	606.0100 RIPRAP LIGHT CY	612.0106* PIPE UNDERDRAIN 6-INCH LF	612.0206* PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	645.0111* GEOTEXTILE TYPE DF SCHEDULE A SY	645.0130 GEOTEXTILE TYPE R SY	SPV.0035.01 ENGINEERED SOIL CY	SPV.0180.01 GEOMEMBRANE SY
BIOFILTER	10+30	-	13+25	40	3	125	73	56	9	40	142
			PROJECT TOTALS	40	3	125	73	56	9	40	142

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL CATEGORY 0010

3

TRAFFIC CONTROL

LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF
PROJECT 3240-17-60	2,520	680	1,360	880	80	640	7	1,080
PROJECT TOTALS	2,520	680	1,360	880	80	640	7	1,080

PAVEMENT MARKING

STREET	FROM	TO	646.1020 MARKING LINE EPOXY 4-INCH SOLID WHITE LF	SOLID YELLOW LF	SKIP-DASH (37.5'X12.5') WHITE LF	SKIP-DASH (37.5'X12.5') YELLOW LF
STH 32	187+10 -	201+95	1484	2875	1484	95
		SUB TOTALS	1484	2875	1484	95
		PROJECT TOTALS			5938	

3

SAWCUTTING

STREET	STATION	TO	STATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
STH 32	187+10	-	201+95	1,540	5
PROJECT TOTAL				1,540	5

SALVAGE CATCH BASINS

STREET	LOCATION	SPV.0060.01 EACH
STH 32	UNDISTRIBUTED	2
	PROJECT TOTAL	2

RELOCATE SWING

STREET	STATION	OFFSET	SPV.0105.03 LS
OUTFALL 3	11+80	LT	1
PROJECT TOTAL			1

RELOCATE BIKE RACK

STREET	STATION	OFFSET	SPV.0105.04 LS
OUTFALL 3	12+70	LT	1
PROJECT TOTAL			1

MOVE WOOD SIGN

STREET	STATION	OFFSET	SPV.0105.05 LS
STH 32	201+85	RT	1
PROJECT TOTAL			1

ALL CATEGORY 0010

TYPE II PERMANENT SIGNING

3240-17-60 STH 32

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H	**637.2210** SIGNS TYPE II REFLECTIVE H (SF)	**637.2230** SIGNS TYPE II RELFECTIVE F (SF)	**638.3000** REMOVING SMALL SIGN SUPPORTS (EA)	**638.2602** REMOVING SIGNS TYPE II (EA)	**638.2102** MOVING SIGNS TYPE II (EA)	**634.0618** POSTS WOOD 4" X 6" X 18' (EA)	**634.0816** POSTS TUBULAR STEEL 2" X 2" X 16' (EA)	MOUNT ON SAME POST AS	
1	R2-1					1		1	1			
2	J1-1					1		1	1			
3	R3-9B					1		1	1			
UNDISTRIBUTED				20.000	20.000	--	1.000	3	5	3	--	--
TOTALS				20.000	20.000	2.000	1.000	5	7	3	--	--

SHEET 1 OF 1

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	**E**

REMOVING STORM SEWER

STATION		STATION	LOCATION	* 204.0245.04 REMOVING STORM SEWER 36-INCH LF
CAT 0010				
PROJECT NO: 3240-17-60				
OUTFALL 1				
3+79	-	3+92	RT	15
OUTFALL 1 SUBTOTAL				**15**
OUTFALL 3				
14+56	-	14+72	LT	30
OUTFALL 3 SUBTOTAL				**30**
TOTAL				**45**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LANDSCAPING ITEMS

STATION	OFFSET	632.0101.01 TREES NORWAY SPRUCE 24-INCH DIAMETER 10-FT HEIGHT EACH	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH
CAT 0010			
PROJECT NO: 3240-17-60			
OUTFALL 3			
PROJECT WIDE		--	10
14+12	72.02' LT	1	--
14+23	86.22' LT	1	--
14+24	75.66' LT	1	--
14+34	71.89' LT	1	--
14+34	86.15' LT	1	--
14+34	100.41' LT	1	--
OUTFALL 3 SUBTOTAL		**6**	**10**
TOTAL		**6**	**10**

FENCE ITEMS

STATION	OFFSET	STATION	OFFSET	616.0204 FENCE CHAIN LINK 4-FT LF	616.0600.S FENCE SAFETY LF
CAT 0010					
PROJECT NO: 3240-17-60					
OUTFALL 3					
13+83	66.69' LT	14+38	67.36' LT	55	--
14+05	66.96' LT	14+41	134.00' LT	--	85
OUTFALL 3 SUBTOTAL				**55**	**85**
TOTAL				**55**	**85**

EROSION CONTROL ITEMS

STATION	TO	STATION	606.0300 RIPRAP HEAVY CY	* 628.1504 SILT FENCE LF	* 628.1520 SILT FENCE MAINTENANCE LF	* 628.1905 MOBILIZATIONS EROSION CONTROL EACH	* 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	* 628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE	628.7560 TRACKING PADS EACH	* 645.0120 GEOTEXTILE TYPE HR SY
CAT 0010							EMERGENCY				
PROJECT NO: 3240-17-60											
OUTFALL 1											
0+40	-	4+60	45	671	201	3	2	394	0.1	1	153
UNDISTRIBUTED			5	68	21	1	1	40	0.1	--	--
OUTFALL 1 SUBTOTAL			**50**	**739**	**222**	**4**	**3**	**434**	**0.2**	**1**	**153**
OUTFALL 3											
10+40	-	15+55	--	359	108	3	2	799	0.2	2	--
UNDISTRIBUTED			--	36	11	1	1	80	0.1	--	--
OUTFALL 3 SUBTOTAL			**--**	**395**	**119**	**4**	**3**	**879**	**0.3**	**2**	**--**
TOTAL			**50**	**1,134**	**341**	**8**	**6**	**1,313**	**0.5**	**3**	**153**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING FENCE

STATION	TO	STATION	LOCATION	204.0170 REMOVING FENCE LF
CAT 0010				
PROJECT NO: 3240-17-60				
OUTFALL 3				
13+83	-	14+63	LT	130
OUTFALL 3 SUBTOTAL				**130**
TOTAL				**130**

REVETMENT ITEMS

LOCATION	SPV.0105.01 REVETMENT OUTFALL 1 LS	SPV.0105.02 REVETMENT OUTFALL 3 LS
CAT 0010		
PROJECT NO: 3240-17-60		
OUTFALL 1	1	--
OUTFALL 3	--	1
TOTAL	**1**	**1**

3

CLEARING AND GRUBBING ITEMS

	STATION	TC	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
CAT 0010						
PROJECT NO: 3240-17-60						
OUTFALL 3						
	10+00	-	15+00	LT	5	5
	13+00	-	15+00	RT	2	2
OUTFALL 3 SUBTOTAL					**7**	**7**
TOTAL					**7**	**7**

PIPE UNDERDRAIN ITEMS

	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	* 310.0115 BASE AGGREGATE OPEN-GRADED CY	* 612.0106 PIPE UNDERDRAIN 6-INCH LF	* 612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	645.0112 GEOTEXTILE TYPE DF SCHEDULE B SY	SPV.0035.05 CLAY CAP CY
CAT 0010									
PROJECT NO: 3240-17-60									
OUTFALL 3									
	13+89	28.45' RT	13+89	62.61' LT	89	92	--	2,860	11
	13+89	28.45' RT	14+71	27.36' RT	--	--	83	--	10
	13+89	62.61' LT	14+71	63.70' LT	--	--	83	--	10
OUTFALL 3 SUBTOTAL					**89**	**92**	**166**	**2,860**	**31**
TOTAL					**89**	**92**	**166**	**2,860**	**31**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

HAZARDOUS MATERIAL ITEMS

	LOCATION	SPV.0195.02 EXCAVATION, HAULING, AND DISPOSAL OF SEDIMENT TON
CAT 0010		
PROJECT NO: 3240-17-60		
	OUTFALL 1	2,809
	OUTFALL 3	1,339
TOTAL		**4,148**

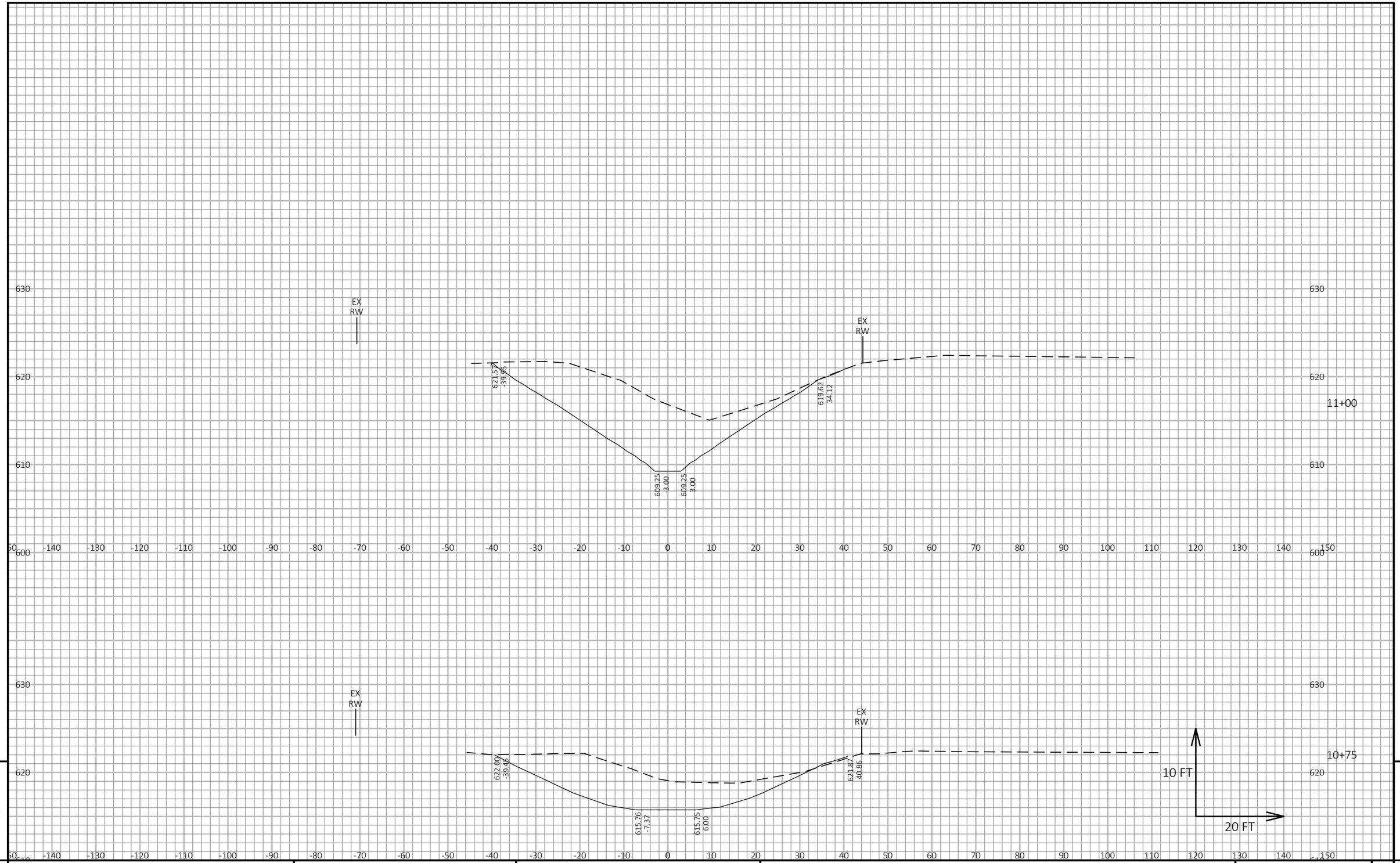
RESTORATION ITEMS

STATION	TO	STATION	* 625.0100 TOPSOIL SY	* 627.0200 MULCHING SY	* 629.0210 FERTILIZER TYPE B CWT	* 630.0120 SEEDING MIXTURE NO. 20 LB	630.0175 SEEDING MIXTURE NO. 75 LB	630.0200 SEEDING TEMPORARY LB	* 630.0500 SEED WATER MGAL
CAT 0010									
PROJECT NO: 3240-17-60									
OUTFALL 1									
0+40	-	4+60	1009	615	1	17	3	30	23
UNDISTRIBUTED			101	62	1	2	1	3	3
OUTFALL 1 SUBTOTAL			**1,110**	**677**	**2**	**19**	**4**	**33**	**26**
OUTFALL 3									
10+40	-	15+55	1677	878	1	24	6	48	38
UNDISTRIBUTED			170	88	1	3	1	5	4
OUTFALL 3 SUBTOTAL			**1,847**	**966**	**2**	**27**	**7**	**53**	**42**
TOTAL			**2,957**	**1,643**	**4**	**46**	**11**	**86**	**68**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

DIVISION 1 - Outfall 3 Biofilter

STATION	DISTANCE	AREA (SF) CUT	AREA (SF) SALVAGED/UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT	INCREMENTAL VOL (CY) (UNADJUSTED) SALVAGED/UNUSABLE PAVEMENT MATERIAL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.20	CUMULATIVE VOL (CY) MASS ORDINATE
10+25	0.00	0.00	0.00	0.00	0	0	0	0	0	0
10+50	25.00	0.00	0.00	0.00	0	0	0	0	0	0
10+75	25.00	203.26	0.00	1.28	94	0	1	94	1	93
11+00	25.00	306.18	0.00	0.01	236	0	1	330	1	329
11+25	25.00	319.74	0.00	0.23	290	0	0	620	2	618
11+50	25.00	330.64	0.00	0.00	301	0	0	921	2	919
11+75	25.00	350.01	0.00	0.00	315	0	0	1,236	2	1,234
12+00	25.00	346.37	0.00	0.01	322	0	0	1,558	2	1,557
12+25	25.00	246.85	0.00	0.00	275	0	0	1,833	2	1,831
12+50	25.00	13.26	0.00	47.32	120	0	22	1,953	28	1,925
12+75	25.00	0.00	0.00	92.95	6	0	65	1,960	106	1,854
					1,960	0	88			



9

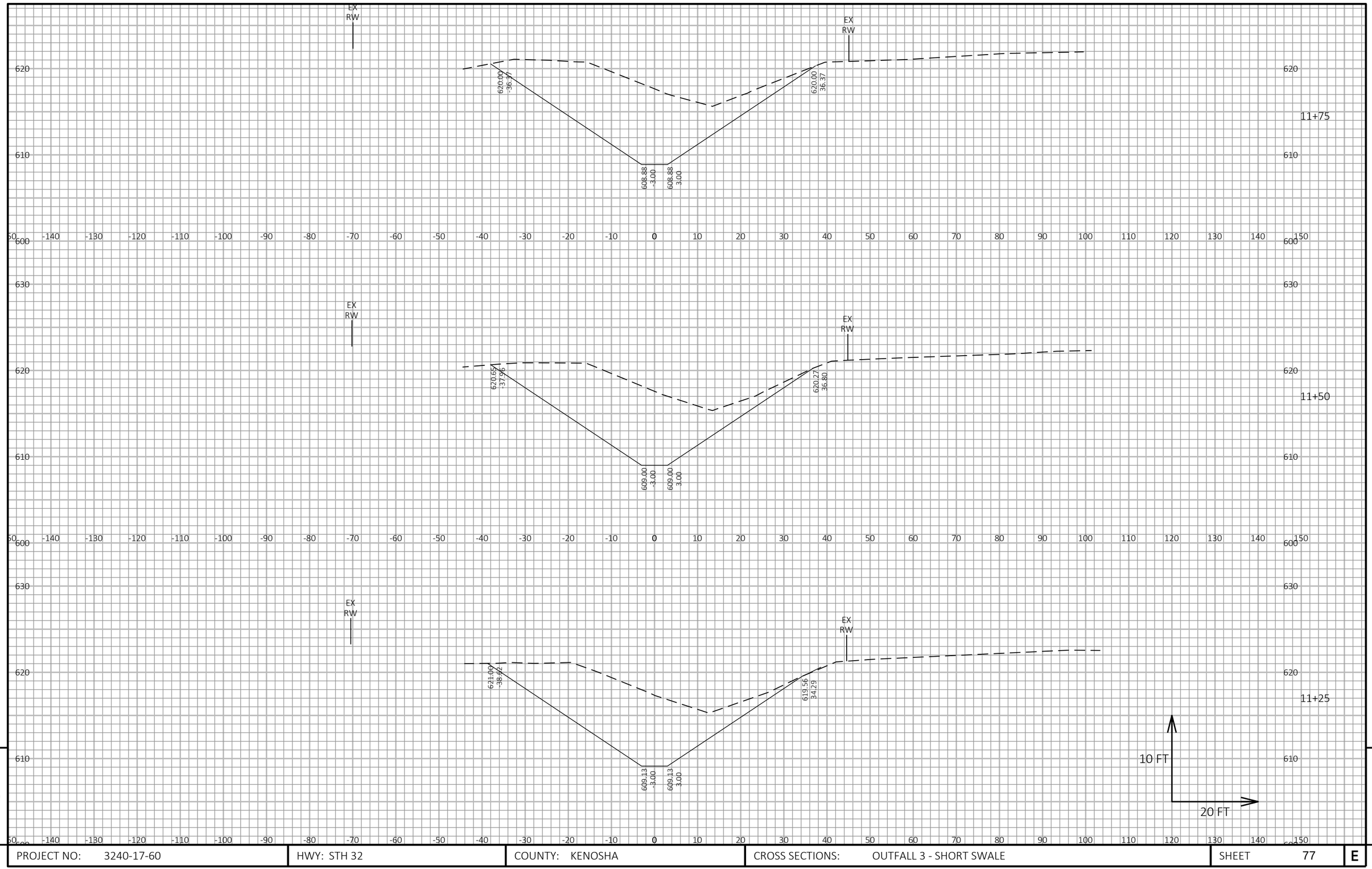
9

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	CROSS SECTIONS: OUTFALL 3 - SHORT SWALE	SHEET 76	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\090202_OUTFALL 3_SHORT SWALE_XS.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 12/4/2019 3:04 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

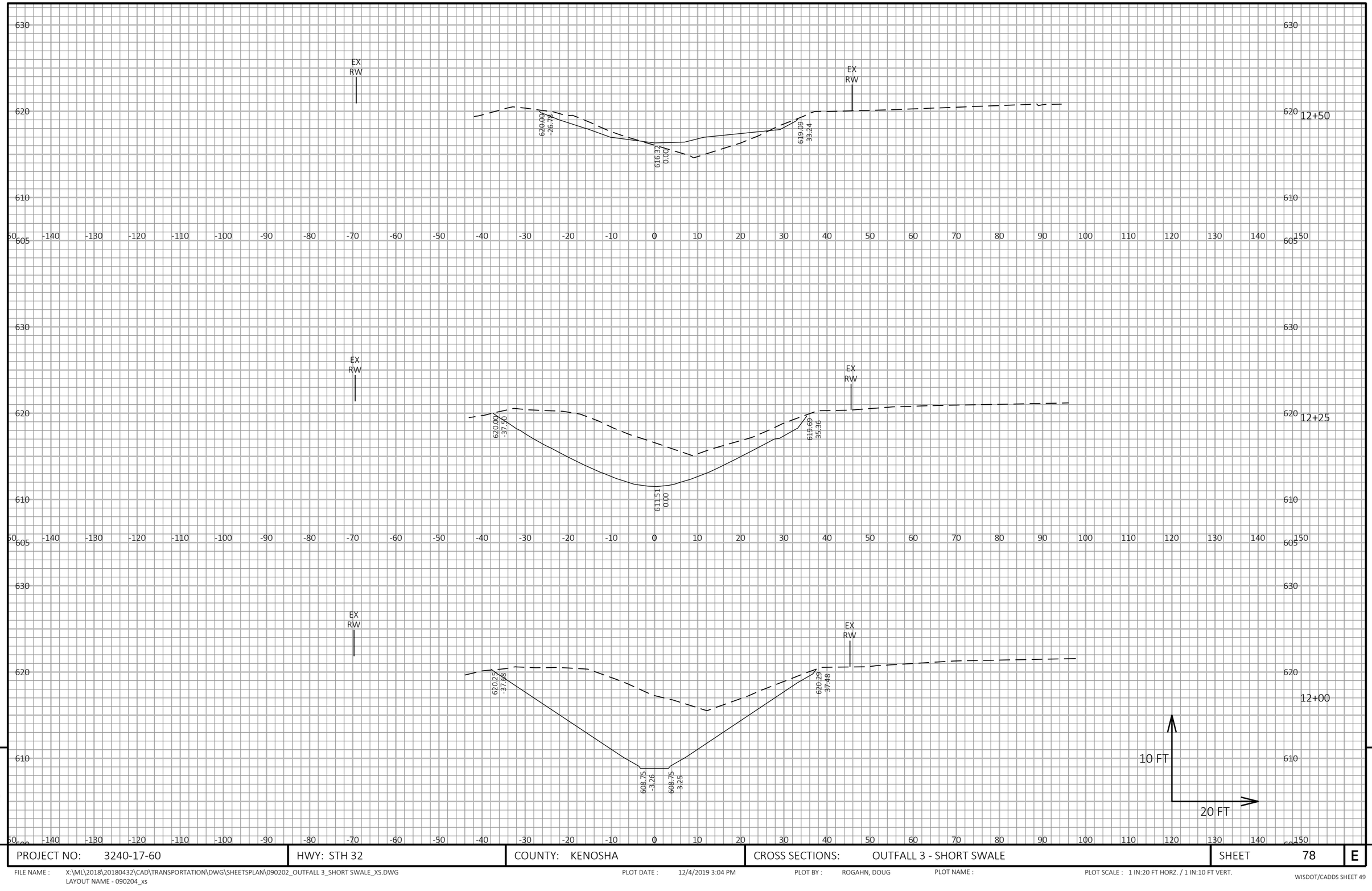
9

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	CROSS SECTIONS: OUTFALL 3 - SHORT SWALE	SHEET 77	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\090202_OUTFALL 3_SHORT SWALE_XS.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 12/4/2019 3:04 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	CROSS SECTIONS: OUTFALL 3 - SHORT SWALE	SHEET 78	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\090202_OUTFALL 3_SHORT SWALE_XS.DWG
LAYOUT NAME - 090204_xs

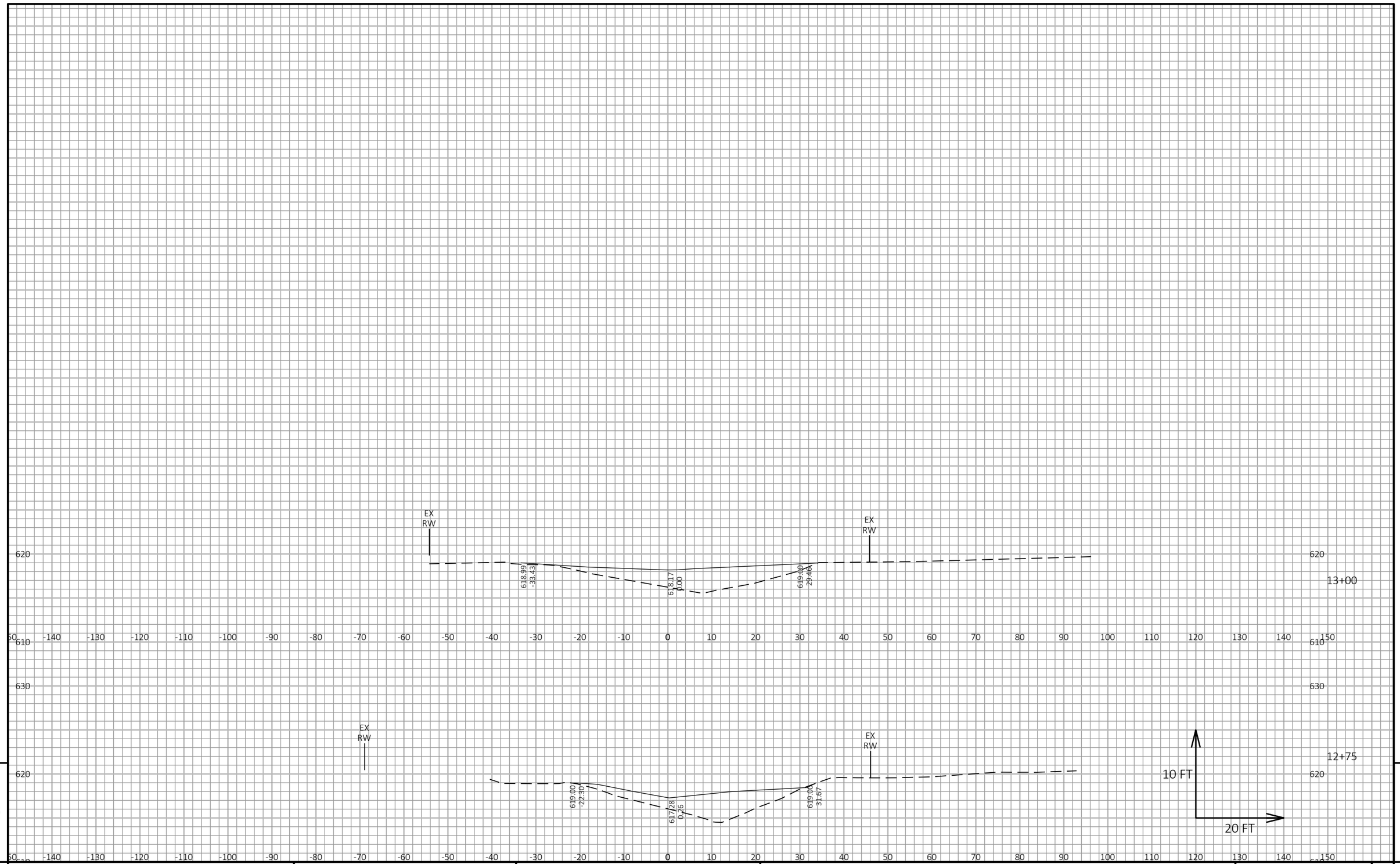
PLOT DATE : 12/4/2019 3:04 PM

PLOT BY : ROGAHN, DOUG

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3240-17-60	HWY: STH 32	COUNTY: KENOSHA	CROSS SECTIONS: OUTFALL 3 - SHORT SWALE	SHEET 79	E

FILE NAME : X:\ML\2018\20180432\CAD\TRANSPORTATION\DWG\SHEETSPLAN\090202_OUTFALL 3_SHORT SWALE_XS.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 12/4/2019 3:04 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49