RHI FEB 12

PROJECT ID: 1174-10-70

WITH:

COUNTY: ONEIDA

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 = 368

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1174-10-70	WISC 2013051	1
1174-10-71	———	———

MINOCQUA - WOODRUFF

FRONT STREET - OLD HWY 70

USH 51

ONEIDA COUNTY

STATE PROJECT NUMBER

1174-10-70

MINOCQUA - WOODRUFF

FRONT STREET - OLD HWY 70

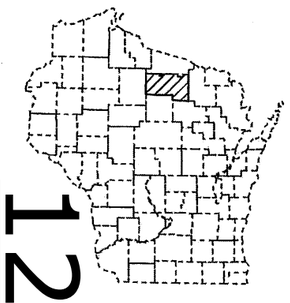
SANITARY AND WATER UTILITIES

USH 51

ONEIDA COUNTY

STATE PROJECT NUMBER

1174-10-71

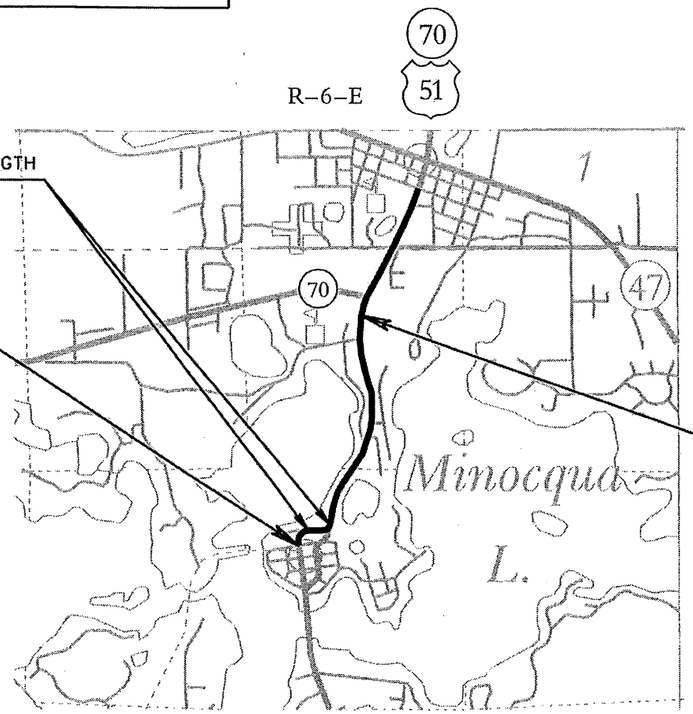


12

N

EXCEPTION TO NET CENTERLINE LENGTH

STA 431+96 - STA 436+36



BEGIN PROJECT 1174-10-70

STA 425+61

X = 187,806.639013

Y = 249,993.493767

END PROJECT

STA 487+50

DESIGN DESIGNATION

A.A.D.T. (2011)	=	18,300 - 19,400
A.A.D.T. (2031)	=	23,700 - 25,000
D.H.V. (2031)	=	2,820 - 4,235
D.D.	=	58/42
T.	=	7.3%
DESIGN SPEED	=	35 MPH
ESALS	=	5,482,300

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
- 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

LAYOUT

SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.089 MI.

"Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), ONEIDA COUNTY, NAD 1983 (91)."
"Elevations shown on this plan are referenced to the National Geodetic Vertical Datum of 1988"

SANITARY AND WATER UTILITIES PLAN

WISCONSIN SEAN M. SPROMBERG E-37771-006 SCHOFIELD, WI PROFESSIONAL ENGINEER

7/31/12 Date

Signature

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	COLEMAN ENGINEERING
Designer	FRED McCUE
Project Manager	RICHARD SIMON
District Examiner	CHERYL SIMON
District Supervisor	ROBIN W. STAFFORD
C.O. Examiner	Cyle Haag

APPROVED FOR DISTRICT OFFICE

DATE: 7/31/12 (Signature)

E

UTILITIES

FRONTIER COMMUNICATIONS
118 DIVISION STREET
PLYMOUTH, MN 53073

WISCONSIN PUBLIC SERVICE CORP.
425 W. DAVENPORT STREET
RHINELANDER, WI. 54501

CHARTER COMMUNICATIONS
821 LINCOLN STREET
RHINELANDER, WI. 54501

LAKELAND SANITARY DISTRICT NO. 1
8780 N. MORGAN RD.
P.O. BOX 289
MINOCQUA, WI. 54548-0289
(7156)356-4454
RON GROTH

WISCONSIN DEPT. OF NATURAL RESOURCES

NORTH CENTRAL DISTRICT HEADQUARTERS
JON SIMONSEN
107 SUTLIFF AVE.
RHINELANDER, WI. 54501
715-365-8916

GENERAL NOTES

1. WHEN THE QUANTITY OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL DEPTH WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL BY THE ENGINEER IN THE FIELD.
2. PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND SIDE ROADS SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER.
3. CONSTRUCTION LIMITS ON PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND SIDE ROADS SHALL BE DETERMINED BY THE ENGINEER.
4. ALL ASPHALTIC PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND SIDE ROADS WILL BE MATCHED WITH A BUTT JOINT.
5. NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
6. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE TOPSOILED, FERTILIZED, SEEDED AND MULCHED, OR EROSION MAT URBAN CLASS I TYPE A SHALL BE USED.
7. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
8. ELEVATIONS REFERENCING CURB AND GUTTER ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED. ELEVATIONS ALONG INTERSECTION RADII ARE SHOWN AT PC, PT, AND MID-POINT ALONG THE CURVE.
9. ALL CURB AND GUTTER RADII ARE SHOWN TO THE FLANGE LINE OF CURB AND GUTTER.
10. LATERAL CLEARANCE IS DEFINED AS AN OBSTRUCTION FREE AREA BEGINNING AT THE EDGE OF DRIVING LANE, AND EXTENDING A MINIMUM DISTANCE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE ROADWAY. THIS AREA CONTAINS NO FIXED OBJECTS SUCH AS UTLITY AND LIGHT POLES, SIGN POSTS, SIGN FACES, FIRE HYDRANTS, ETC.

PAVEMENT BORING LOG

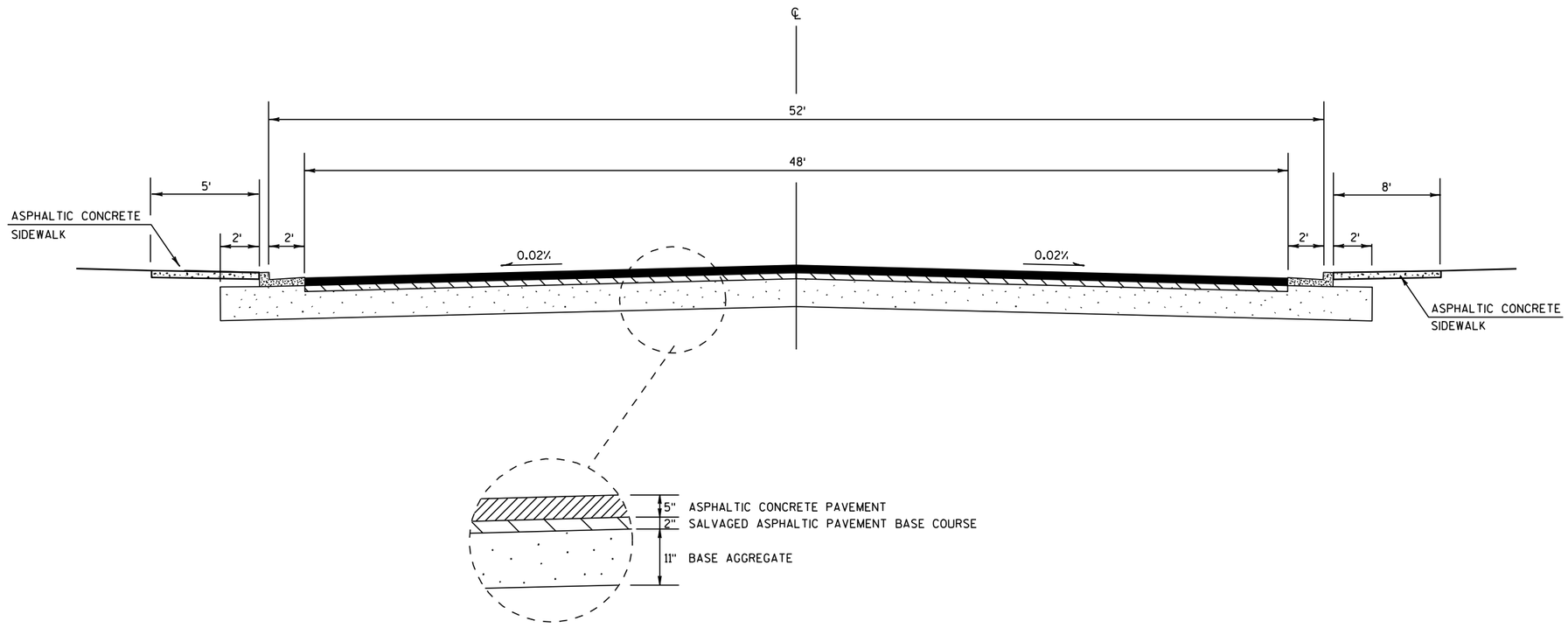
STATION	OFFSET	ASPHALT	BASE COURSE
441+60	18' LT	8.5"	16"
452+30	18' RT	9"	12"
462+86	20' LT	5"	17"
473+57	30' LT	8"	11"
473+57	5' LT	8"	10"
484+06	20' RT	9"	15"
494+57	18' RT	8.5"	6"
515+65	19' LT	6.5"	12"
515+65	3' LT	6.5"	18"
10+50	CTH J	9"	0"
12+00	CTH J	5"	0"

AS-BUILTS

1175-05-73
1175-05-74
1174-10-60
1177-05-70

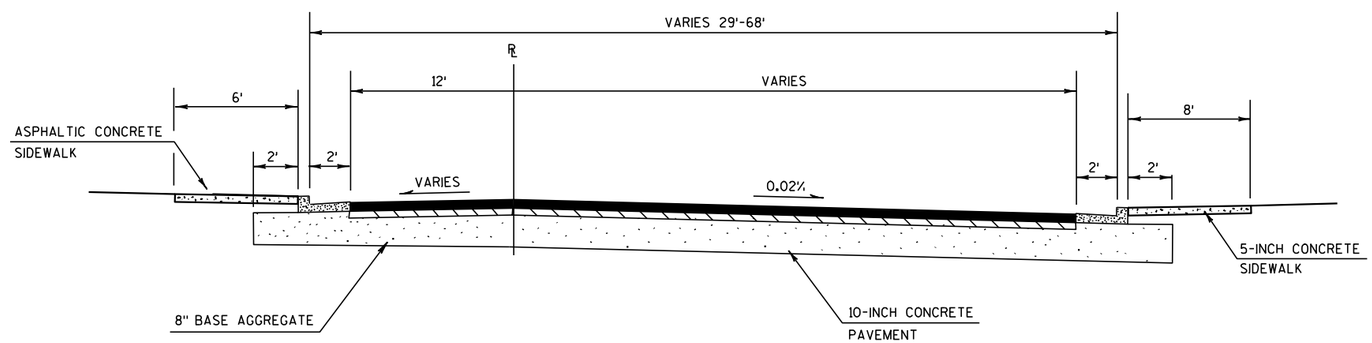
DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

2



EXISTING TYPICAL SECTION

STA 425+61 - STA 431+96
SOUTHBOUND USH 51

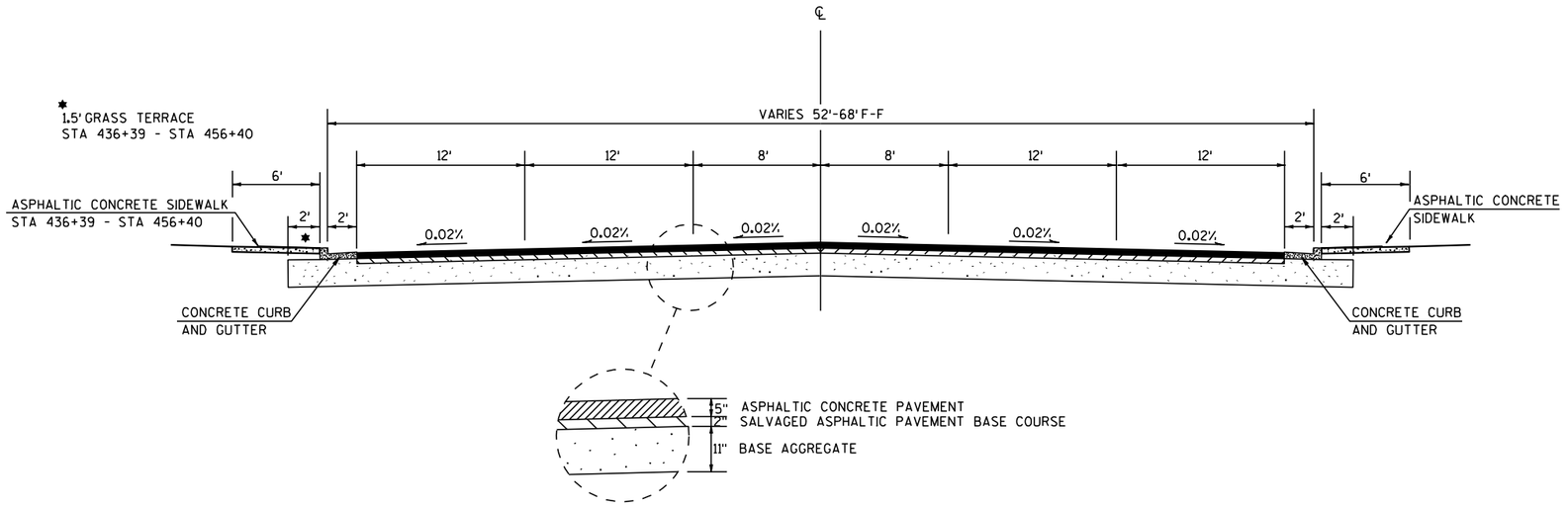


EXISTING TYPICAL SECTION

STA 431+96 - STA 436+36
SOUTHBOUND USH 51

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 3	E

2



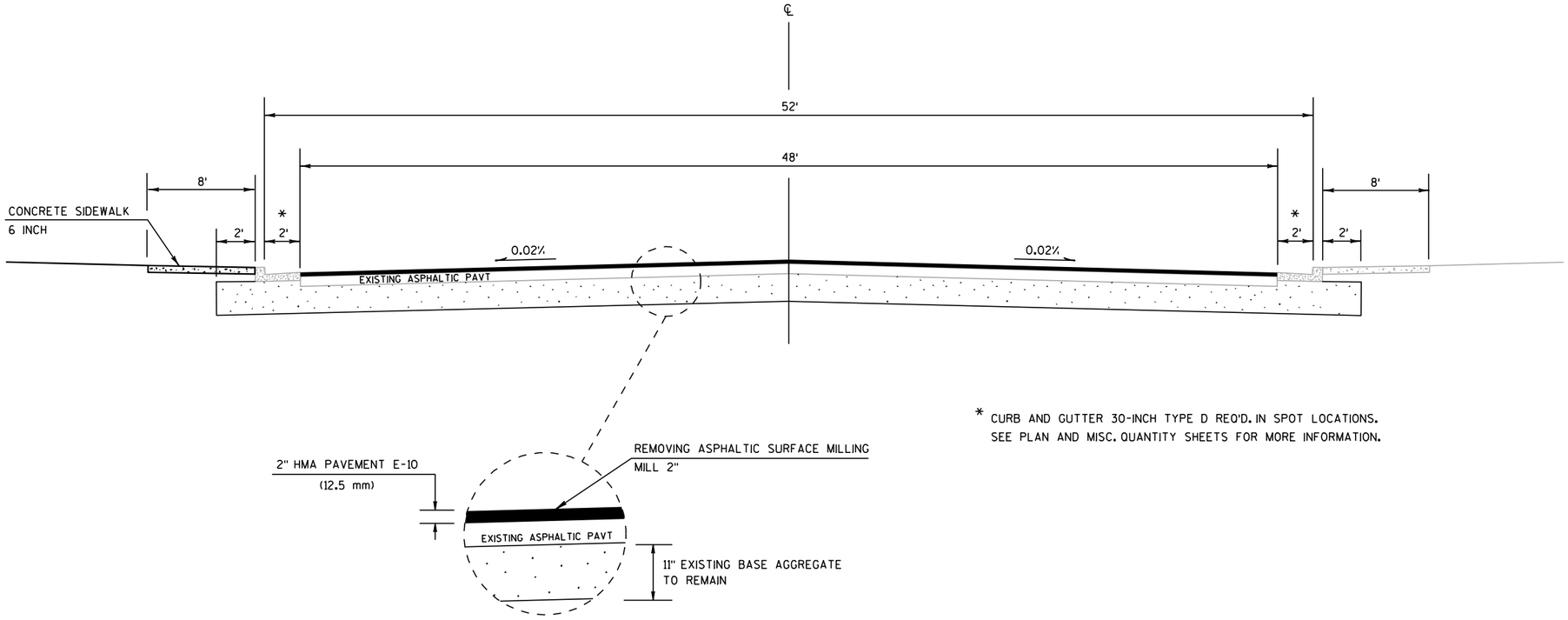
EXISTING TYPICAL SECTION

STA 436+36- STA 518+54

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\020302_ts.dgn PLOT DATE : 14-DEC-2012 15:21 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

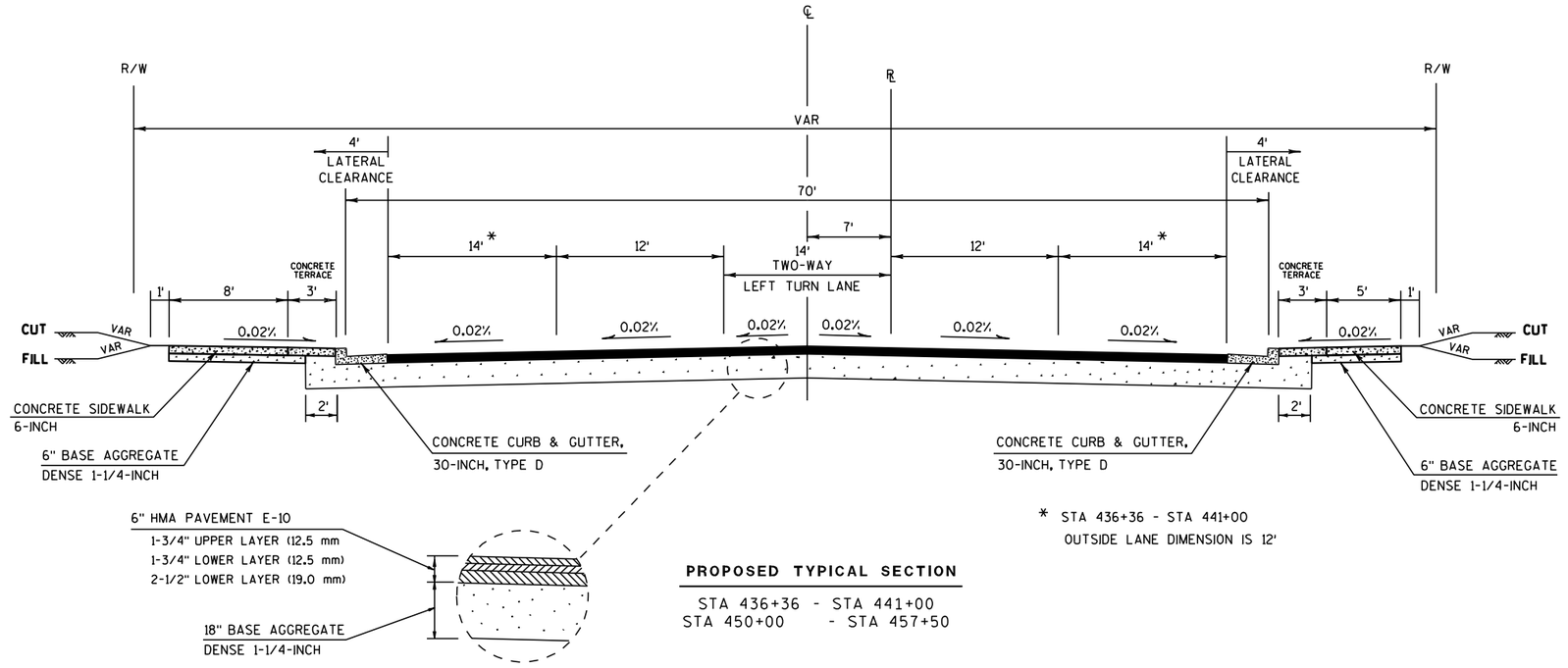


* CURB AND GUTTER 30-INCH TYPE D REQ'D. IN SPOT LOCATIONS.
SEE PLAN AND MISC. QUANTITY SHEETS FOR MORE INFORMATION.

PROPOSED TYPICAL SECTION

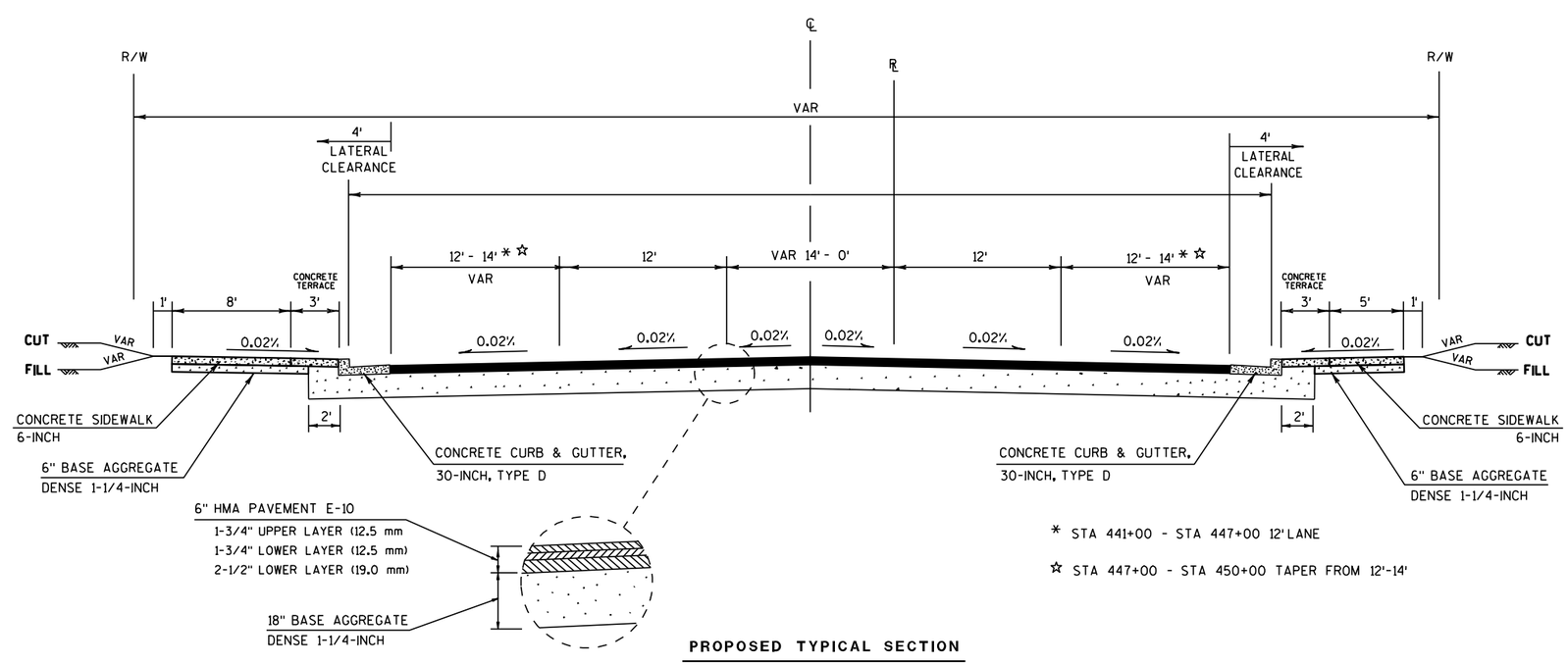
STA 425+61 - STA 431+96

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 5	E



PROPOSED TYPICAL SECTION

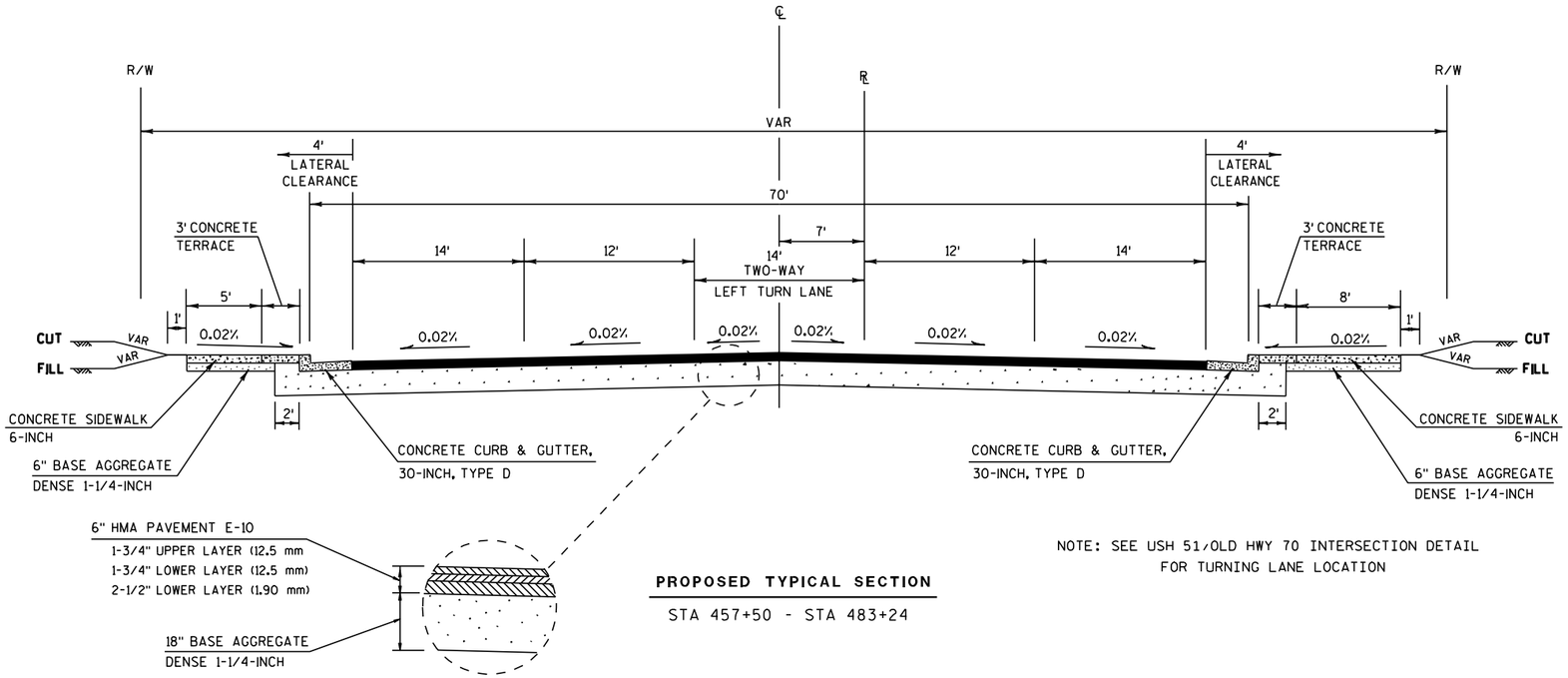
STA 436+36 - STA 441+00
STA 450+00 - STA 457+50



PROPOSED TYPICAL SECTION

STA 441+00 - STA 450+00

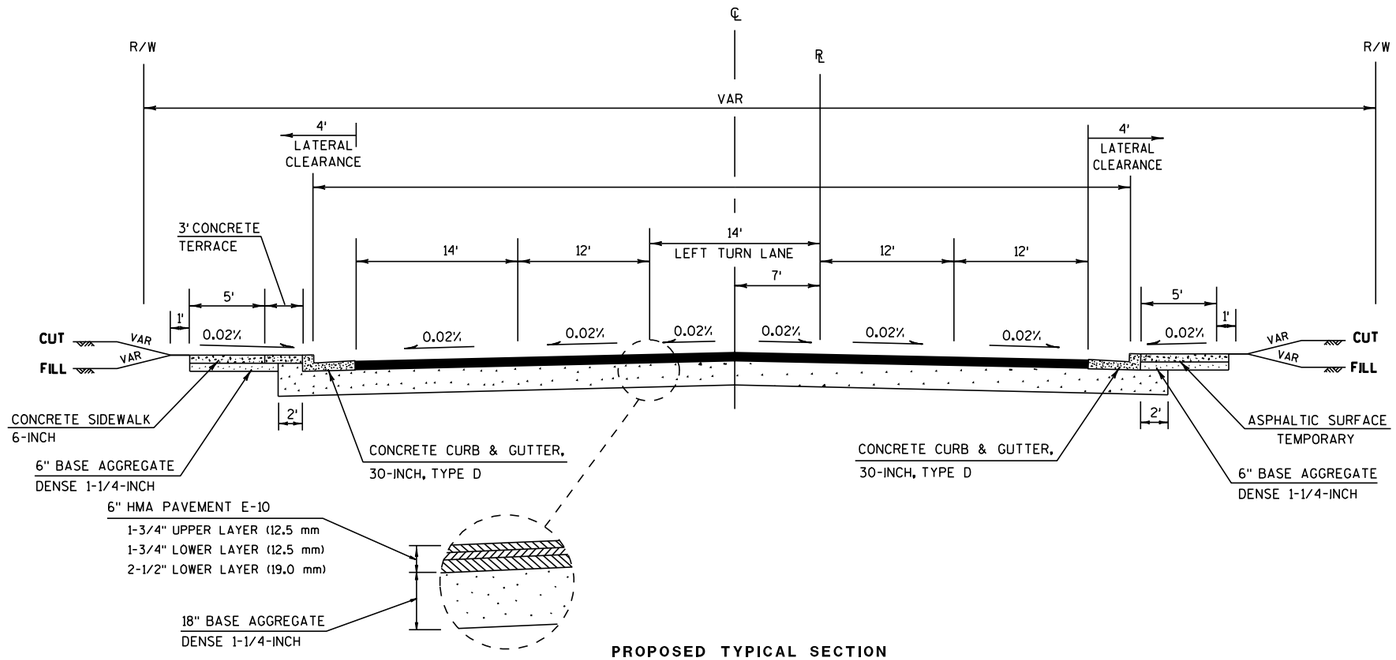
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 6	E



PROPOSED TYPICAL SECTION

STA 457+50 - STA 483+24

NOTE: SEE USH 51/OLD HWY 70 INTERSECTION DETAIL
FOR TURNING LANE LOCATION

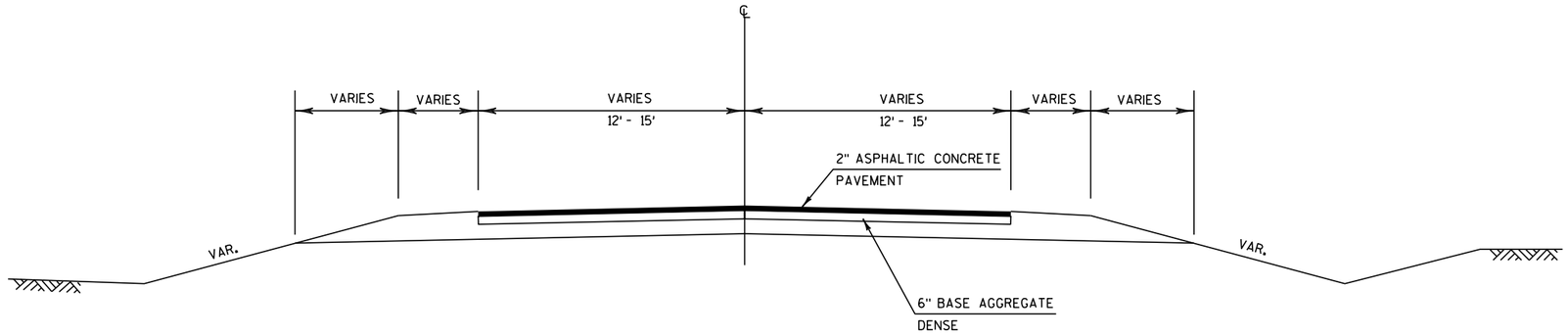


PROPOSED TYPICAL SECTION

STA 483+24 - STA 487+50

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 7	E

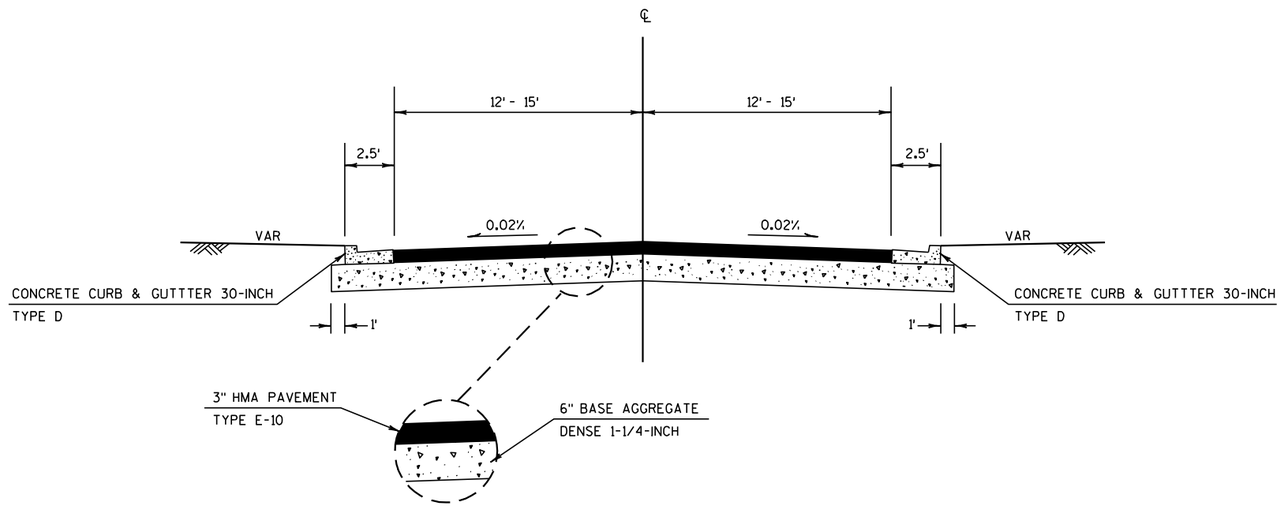
2



EXISTING TYPICAL SECTION

(LAKEVIEW DRIVE - TO BE PARTIALLY OBLITERATED)

ROGERS DRIVE
HUBER DRIVE
OLD HWY 70

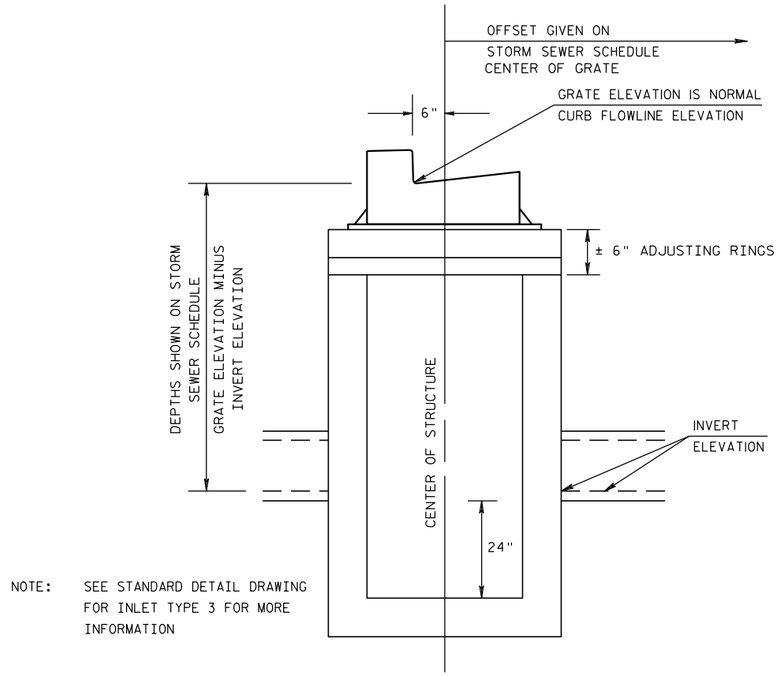


PROPOSED TYPICAL SECTION

(LAKEVIEW DRIVE - NOT TO BE RECONSTRUCTED)

ROGERS DRIVE
HUBER DRIVE
OLD HWY 70

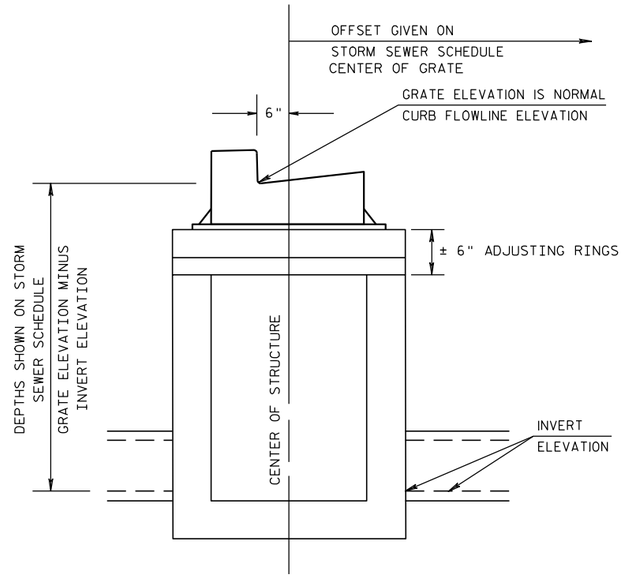
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 8	E



NOTE: SEE STANDARD DETAIL DRAWING FOR INLET TYPE 3 FOR MORE INFORMATION

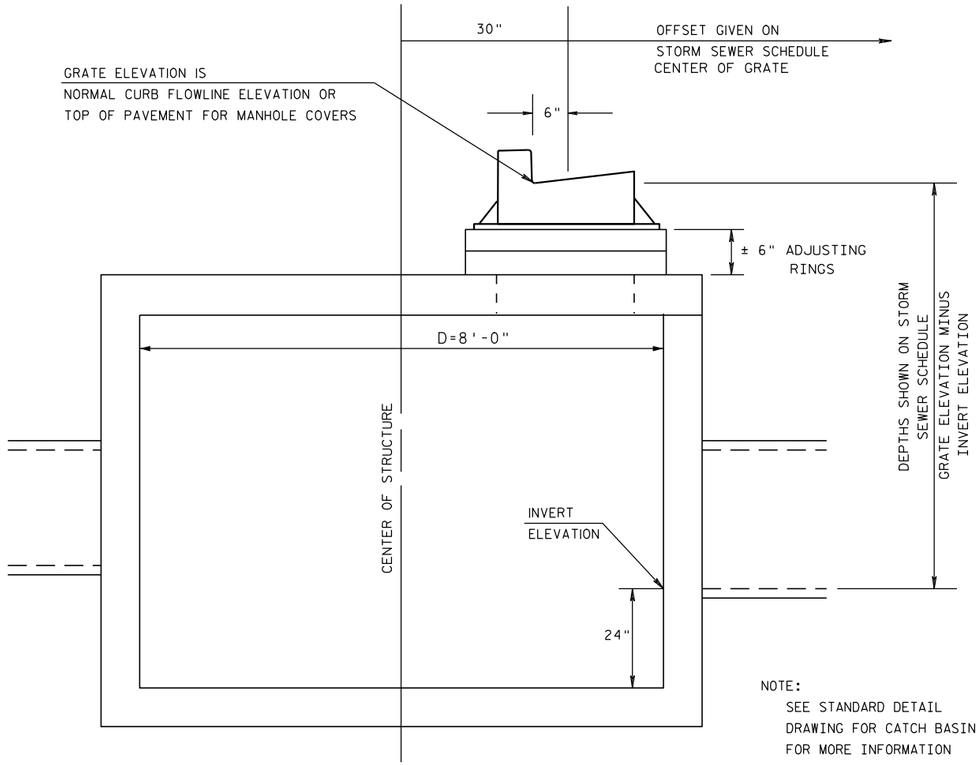
INLET TYPE 3M

SAME SPECIFICATIONS AND DIMENSIONS OF INLET TYPE 3, EXCEPT A 24" SUMP IS REQ'D.



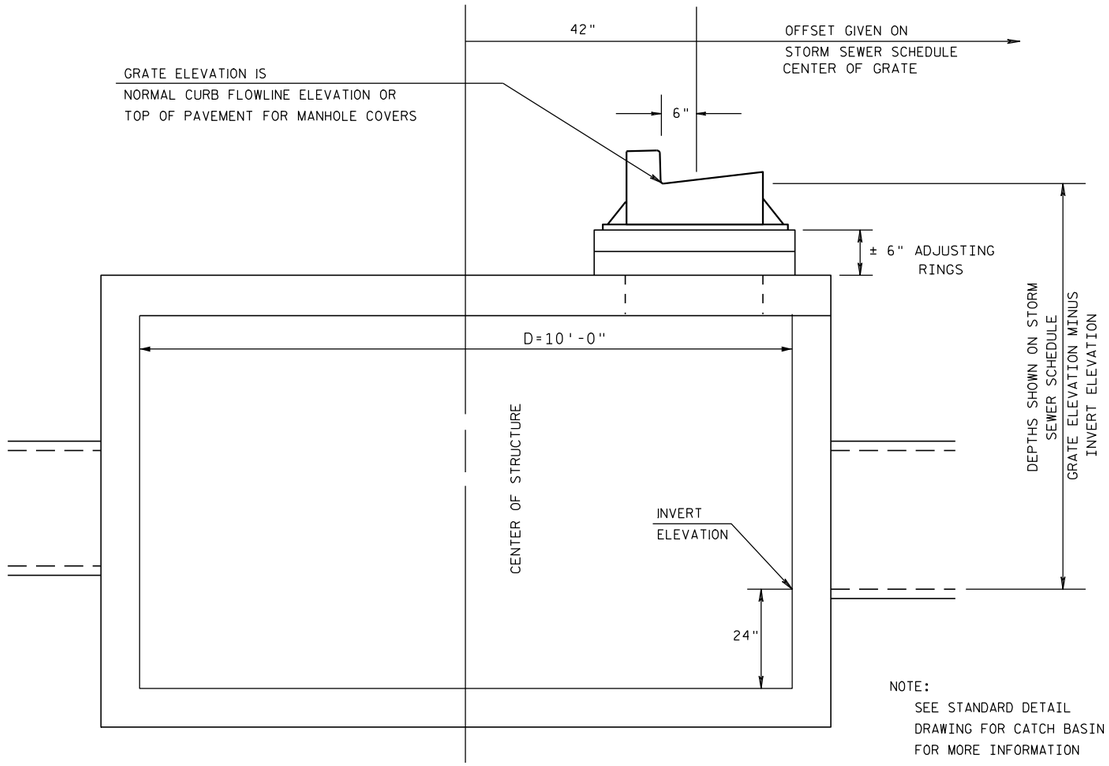
NOTE: SEE STANDARD DETAIL DRAWING FOR INLET TYPE 3 FOR MORE INFORMATION

INLET TYPE 3MA



NOTE:
SEE STANDARD DETAIL
DRAWING FOR CATCH BASIN
FOR MORE INFORMATION

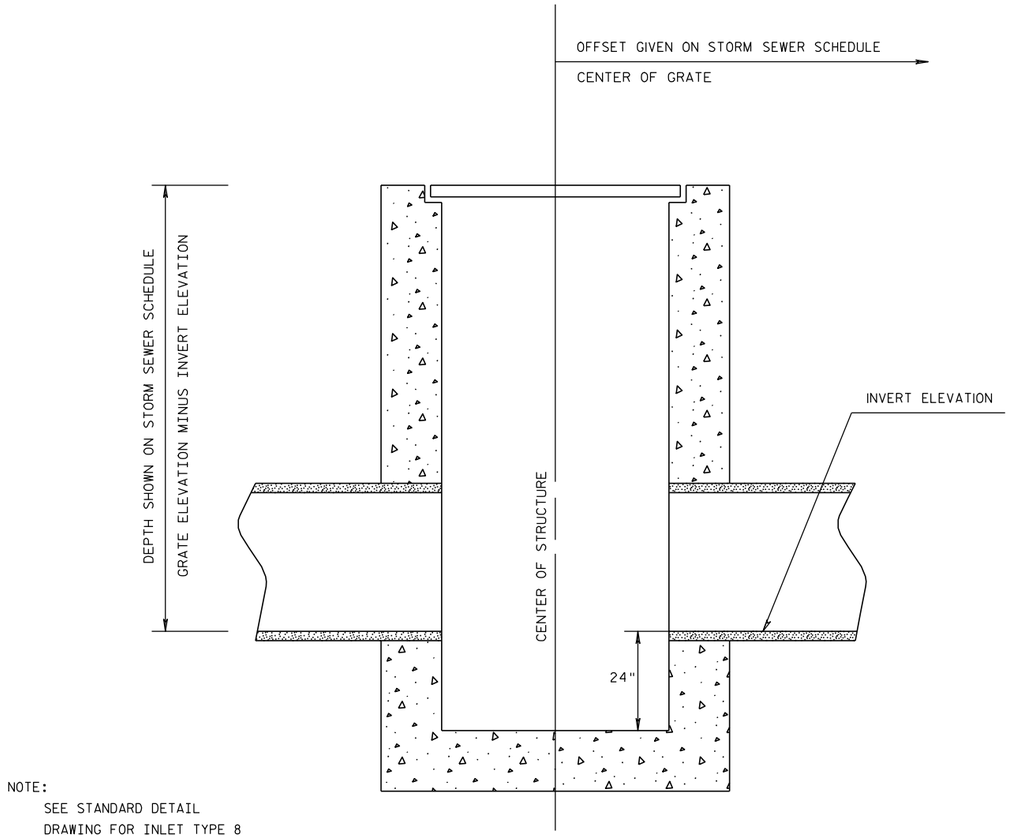
CATCH BASIN TYPE 5M-8



NOTE:
SEE STANDARD DETAIL
DRAWING FOR CATCH BASIN
FOR MORE INFORMATION

CATCH BASIN TYPE 5M-10

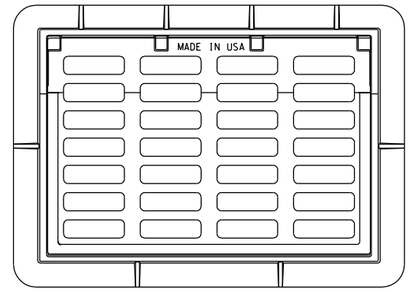
ELEVATION AND LAYOUT DETAIL FOR CATCH BASINS

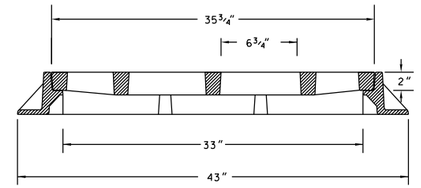


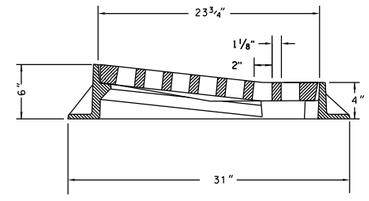
NOTE:
SEE STANDARD DETAIL
DRAWING FOR INLET TYPE 8
FOR MORE INFORMATION

INLET TYPE 8M

SAME SPECIFICATIONS AND DIMENSIONS OF INLET TYPE 8 EXCEPT A 24" SUMP IS REQ'D



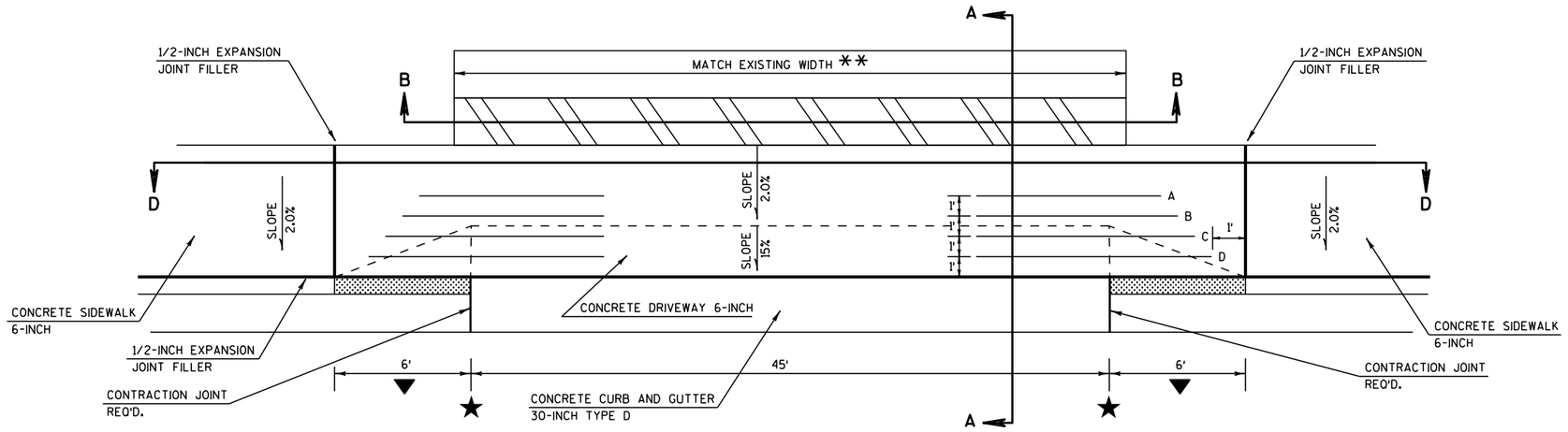




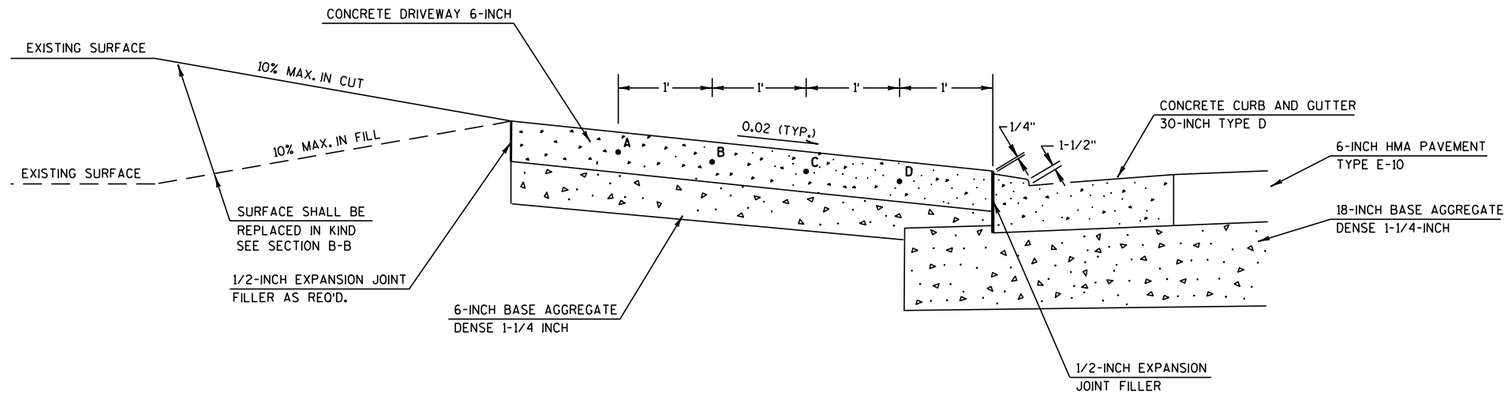
INLET COVER TYPE HM

GRATE TYPE A

NEENAH R-3290-A



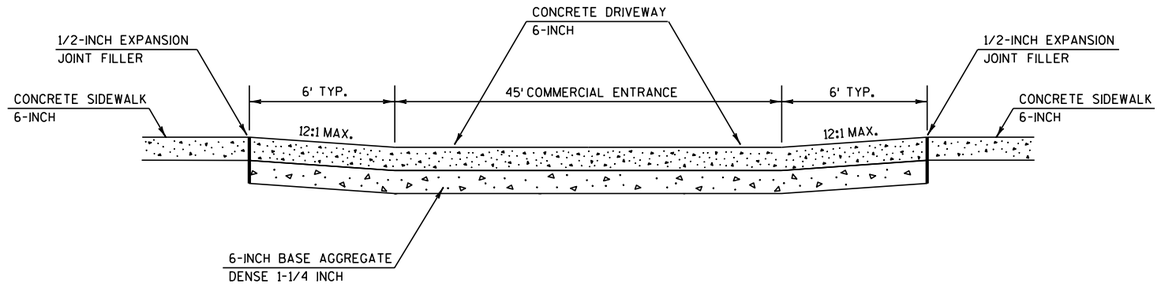
(#) A	NO. 4 x 7' - 0" TIE BAR
(#) B	NO. 4 x 8' - 0" TIE BAR
(#) C	NO. 4 x 9' - 0" TIE BAR
(#) D	NO. 4 x 10' - 0" TIE BAR



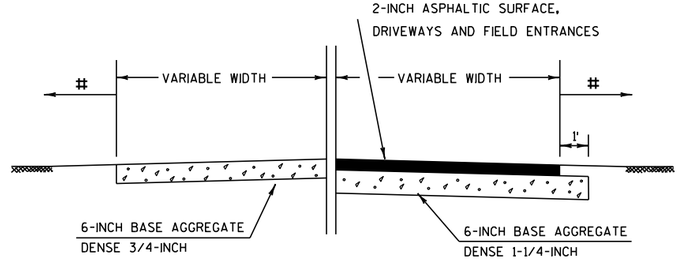
SECTION A-A

SYMBOL LEGEND

	EXISTING ENTRANCE - SURFACE SHALL BE REPLACED IN KIND
▼	CURB HEIGHT TAPER 1-1/2" TO 6"
**	16' PRIVATE ENTRANCE (TYP.) 35' COMMERCIAL ENTRANCE (TYP.)
#	TOPSOIL, SEED, FERTILIZE AND EMAT AS REQUIRED
★	LOCATION SHOWN ON PLAN DETAIL
(#)	TIE BARS INCIDENTAL TO CONCRETE DRIVEWAY



SECTION D-D

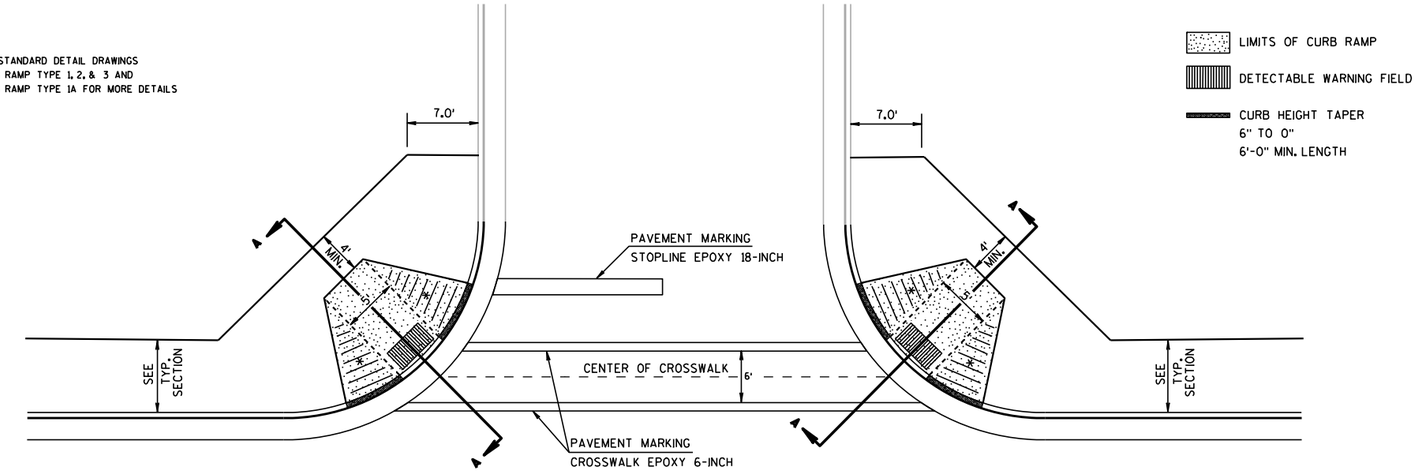


SECTION B-B

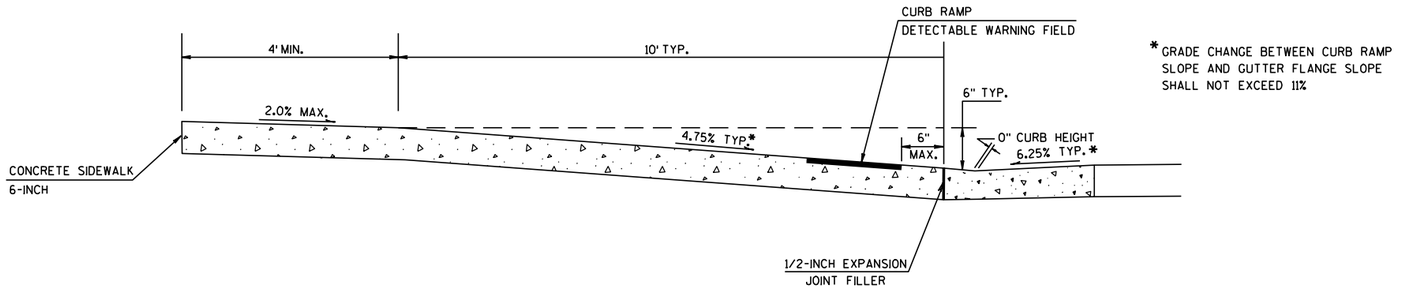
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	DRIVEWAY DETAIL	SHEET	E

2

NOTE: SEE STANDARD DETAIL DRAWINGS
CURB RAMP TYPE 1, 2, & 3 AND
CURB RAMP TYPE 1A FOR MORE DETAILS



* 12:1 MAX.



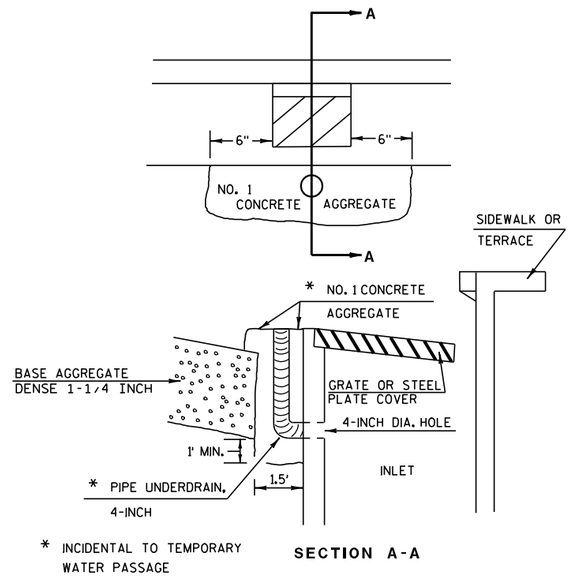
*GRADE CHANGE BETWEEN CURB RAMP SLOPE AND GUTTER FLANGE SLOPE SHALL NOT EXCEED 11%

SECTION A-A

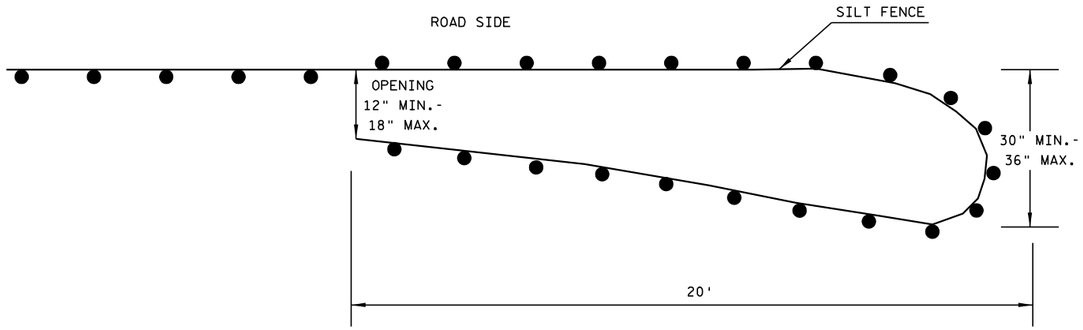
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CURB RAMP DETAIL	SHEET	E

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

TOTAL PROJECT AREA = 11.1 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 10.0 ACRES



TEMPORARY WATER PASSAGE

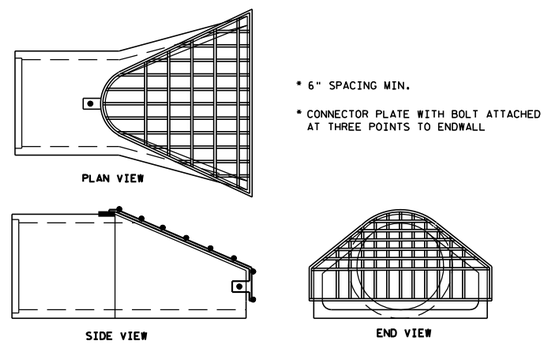


PLAN VIEW

GENERAL NOTES:

THE PURPOSE OF THE TURTLE TURN-AROUNDS ARE TO REDIRECT THE TURTLES AWAY FROM THE CONSTRUCTION ZONE. DESIGN SHOULD ALSO INCLUDE TRENCHED-IN SEDIMENT FENCING AND FENCING SUPPORTS ON UPSLOPE SIDE OF FENCE. SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.

TEMPORARY TURTLE TURN-AROUND DETAIL



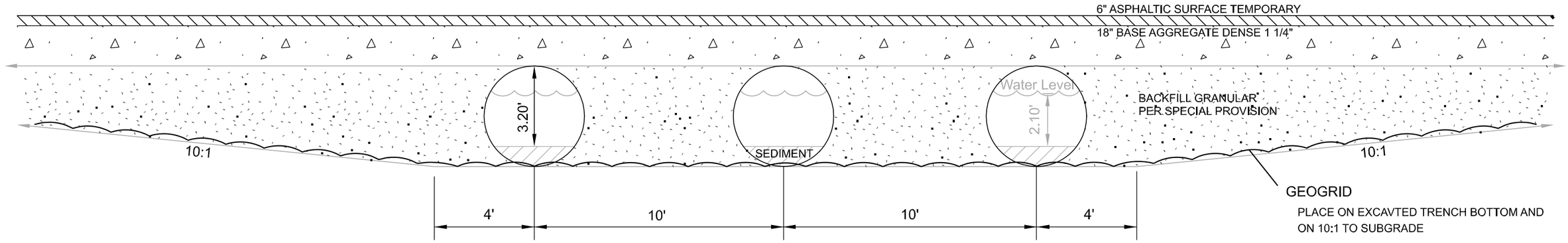
PIPE GRATE

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STORM SEWER DETAIL SHEET	SHEET	E

STA 444+85 C/L OF MIDDLE PIPE

3- CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH

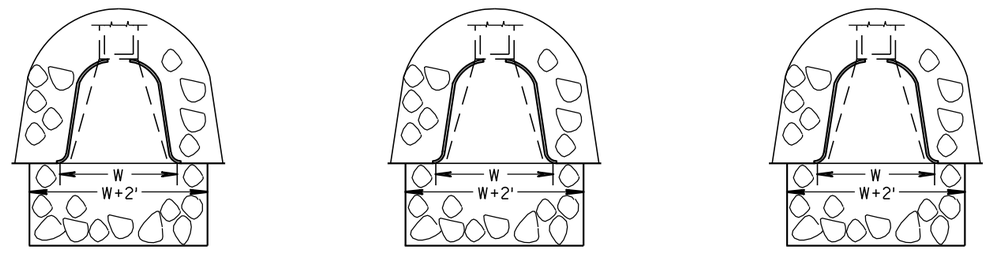
3- APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH



PROPOSED ELEVATIONS: (SAME FOR ALL)

WEST
TOP OF PIPE - 1585.4
INVERT - 1581.0

EAST
TOP OF PIPE - 1585.7
INVERT - 1581.3

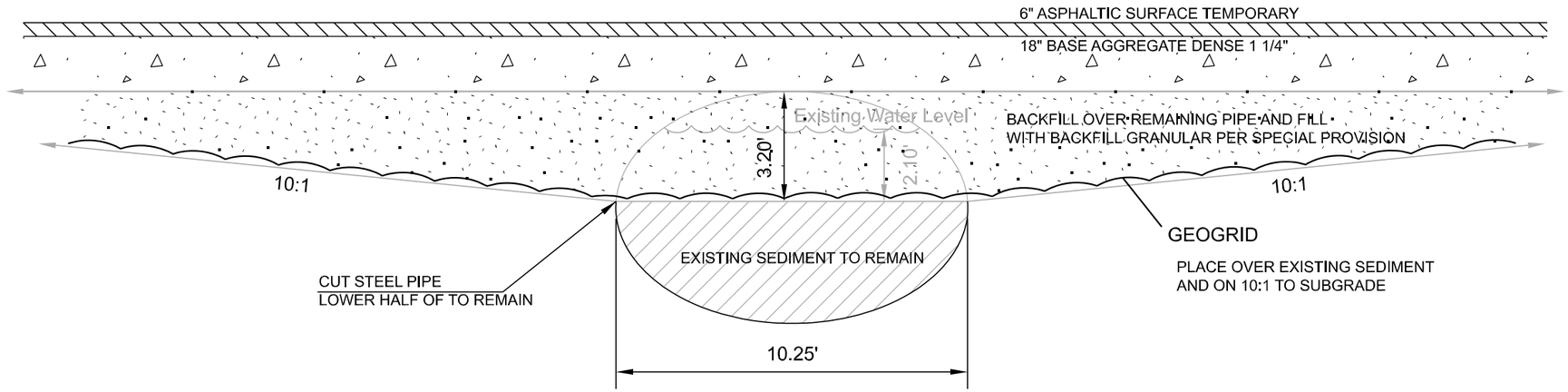


RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

For Each Pipe

2

EXISTING TOP HALF OF PIPE TO BE REMOVED
1- 10.25' X 6.5' CORRUGATED STEEL ARCH



WEST ELEVATION:
TOP OF PIPE- 1585.94
TOP OF GRAVEL- 1581.70

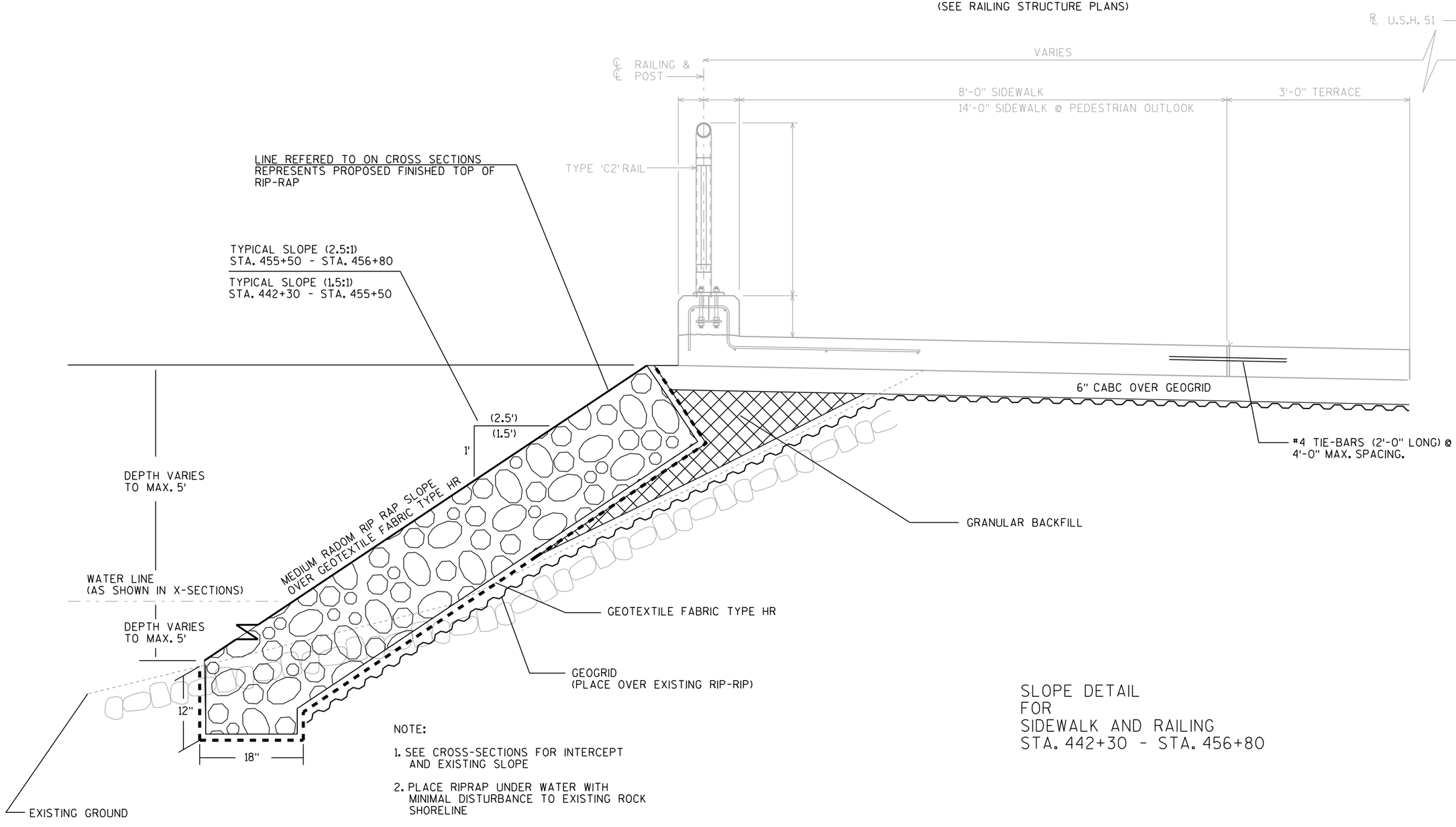
EAST ELEVATIONS:
TOP OF PIPE- 1585.71
TOP OF GRAVEL- 1582.11

REMOVING OLD STRUCTURE

STA 443+55 C/L

2

SECTION TRHU SIDEWALK AND RAILING
(SEE RAILING STRUCTURE PLANS)

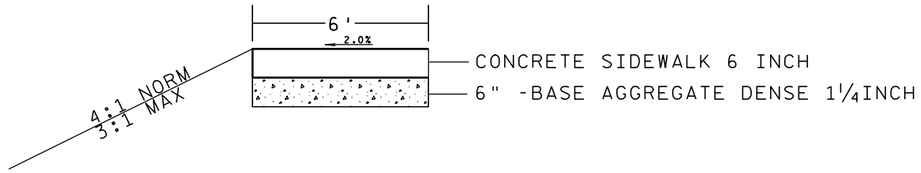


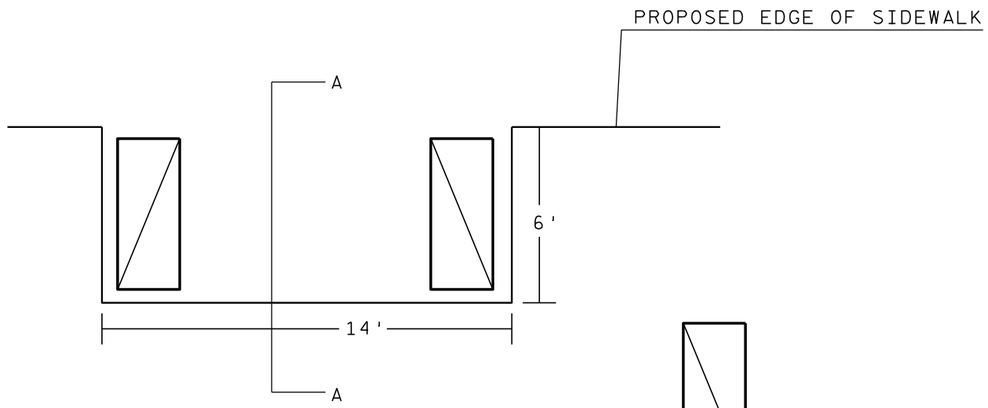
NOTE:

1. SEE CROSS-SECTIONS FOR INTERCEPT AND EXISTING SLOPE
2. PLACE RIPRAP UNDER WATER WITH MINIMAL DISTURBANCE TO EXISTING ROCK SHORELINE

SLOPE DETAIL
FOR
SIDEWALK AND RAILING
STA. 442+30 - STA. 456+80

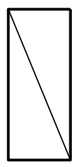
SECTION A-A





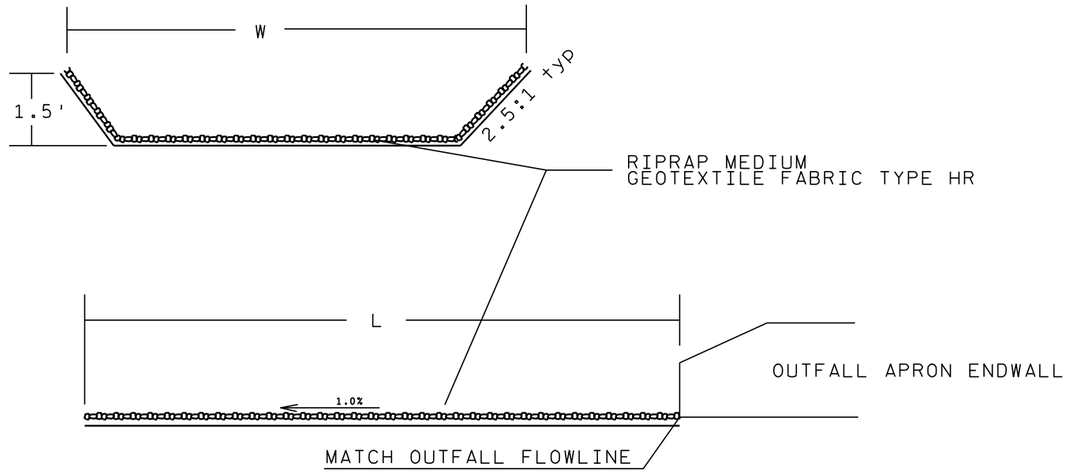
PEDESTRIAN OUTLOOK

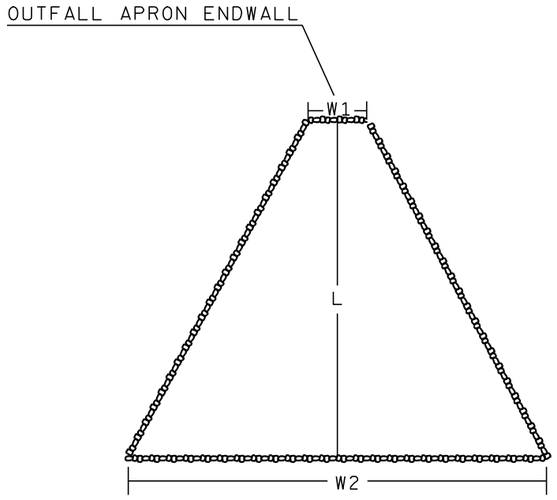
STA 442+18 LT
STA 442+50 RT
STA 446+00 RT



PARK BENCH

TO BE LOCATED AT EACH OF THE FIVE PEDESTRIAN OUTLOOKS AS SHOWN





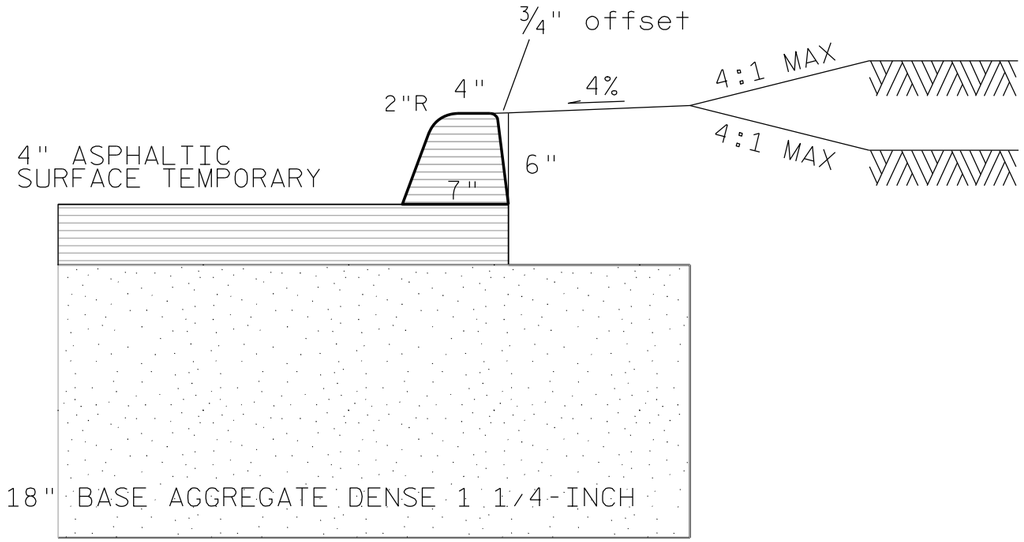
STORMWATER TREATMENT AREA

LOCATION	L	W1	W2
OUTFALL 1	15'	10'	30'
OUTFALL 7	28'	10'	60'
OUTFALL 100	50'	12'	20'

STORMWATER TREATMENT AREA DETAIL

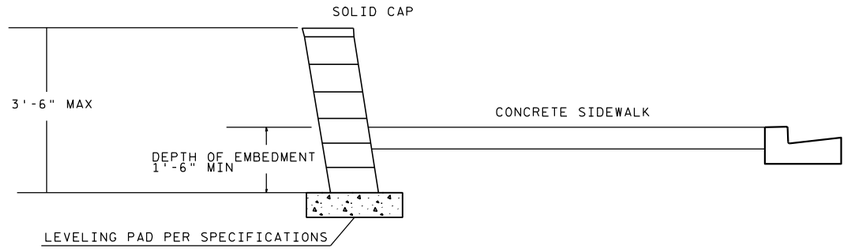
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PEDESTRIAN OUTLOOK & STORMWATER TREATMENT AREA DETAIL	SHEET	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\021011_cd_Bumpout_ssoutfall.dgn PLOT DATE : 14-DEC-2012 07:22 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 209.52381:1 WISDOT/CADDS SHE



ASPHALTIC CURB TEMPORARY

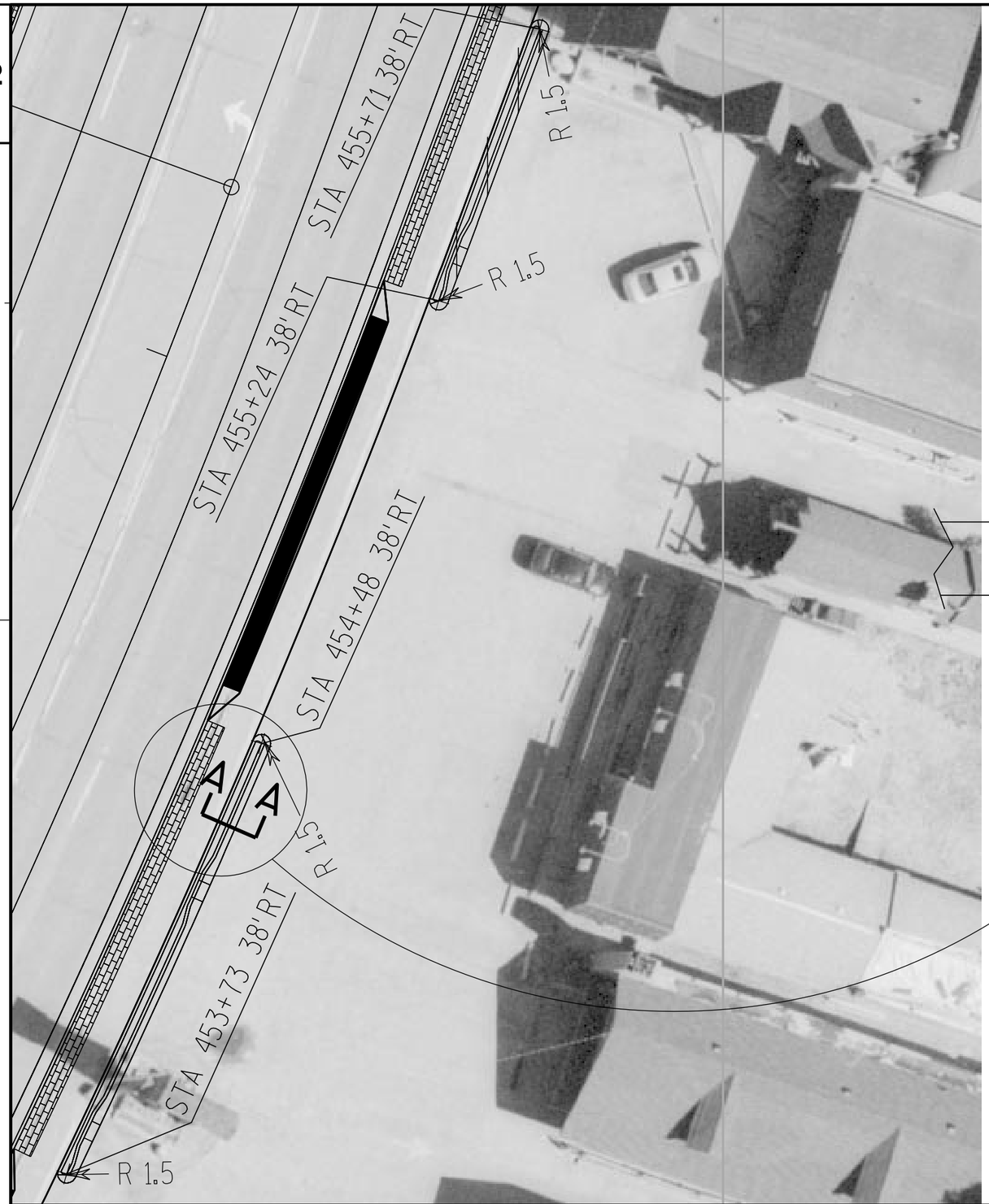
INCIDENTAL TO TEMPORARY ASPHALT PAVEMENT
LOCATIONS TO BE DETERMINED BY PROJECT ENGINEER

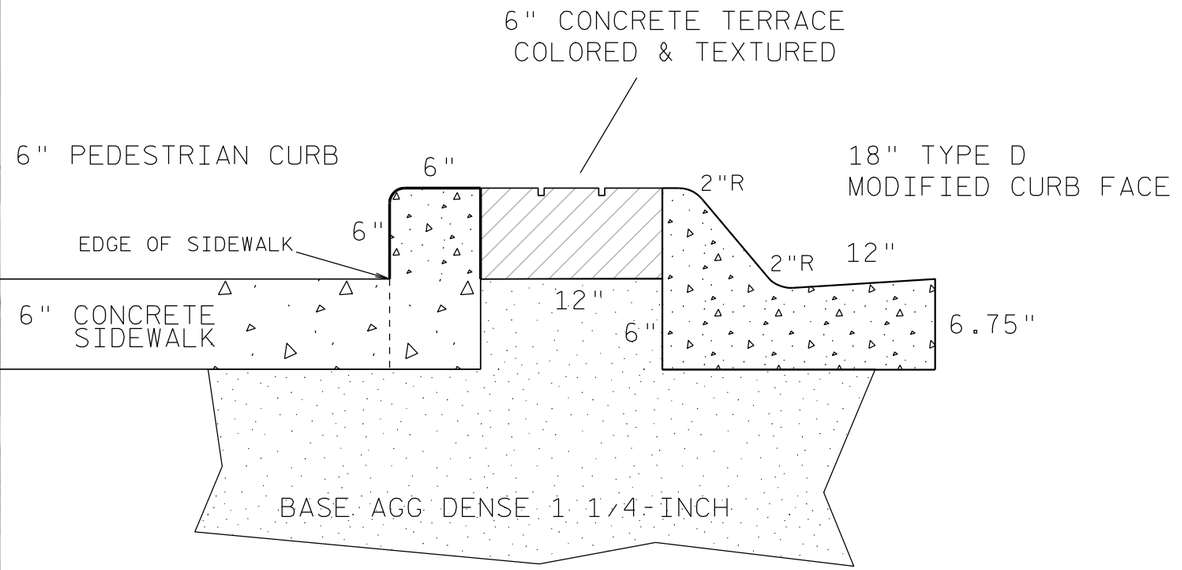


WALL MODULAR BLOCK GRAVITY

STA 457+86 - STA 459+00 LT

2





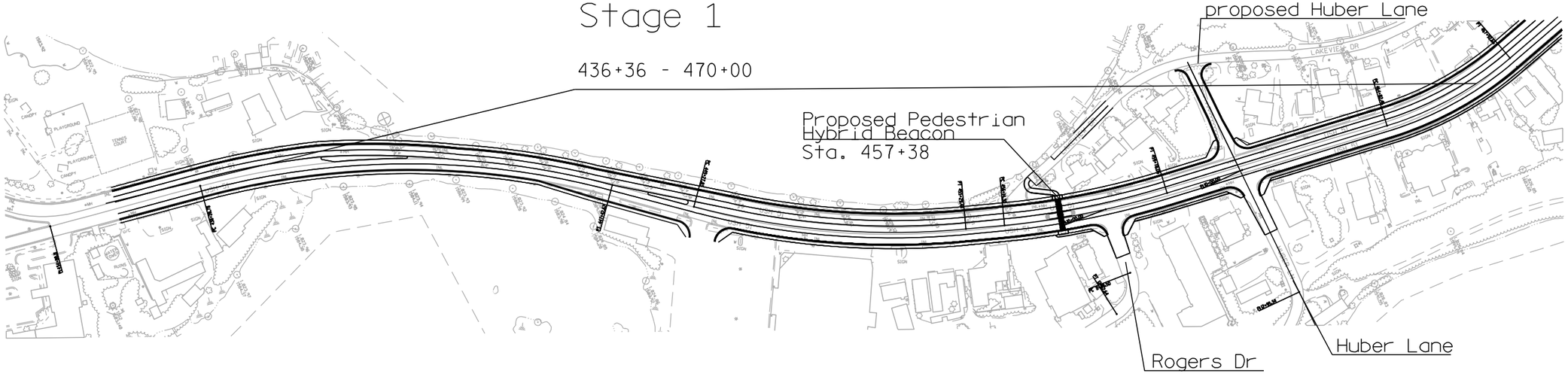
SLOPED CURB AND GUTTER

SECTION A-A

2

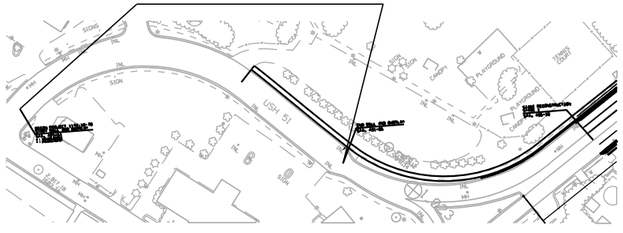
Stage 1

436+36 - 470+00



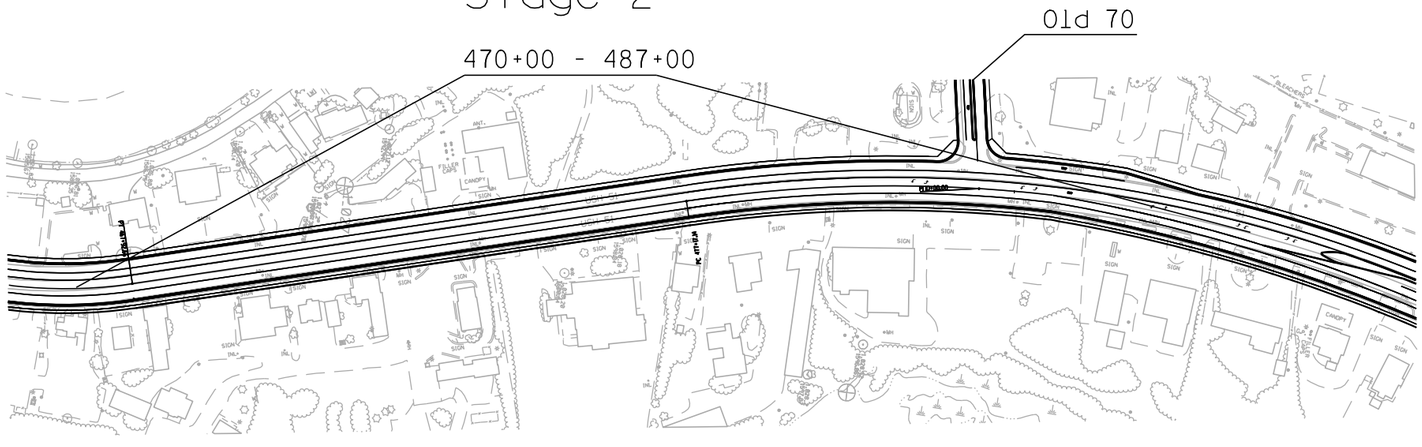
Mill & Overlay

425+61 - 431+96



Stage 2

470+00 - 487+00



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: Oneida	PLAN OVERVIEW	SHEET 21	E

2

2

BEGIN PROJECT 1174-10-70
START MILL AND OVERLAY

STA. 425+61
X = 187,806.639013
Y = 249,993.493767

P.I. = 428+45.20
Δ = 88°48'46.4"
D. = 21°00'00"
L. = 422.92'
R. = 272.84'
SE. = N.C.

BEGIN CONCRETE SIDEWALK 6-INC

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 22	E

2

SIDEWALK 6-INCH

END MILL AND OVERLAY
STA. 431+96

P.I. = 434+05.94
Δ = -77°52'22.0"
D. = 20°00'00"
L. = 389.36
R. = 286.48'
SE. = N.C.

START RECONSTRUCTION
STAGE 1
STA. 436+36

MATCH EXISTING CURB

PLAYGROUND
TENNIS COURT
CANOPY
SIGN
WATER TOWER
RUINS
MH
INL
SS
W
G
T
NWS
TU/C

431+14.48
432+00
433+00
434+00
435+00
436+00
437+00
438+00
PI 435+63.94
PI 436+33.00
PI 434+88.11
+10
+55
+14
+89
+44
+84
+39
+94

N

2

2

BEGIN RAILING STEEL TYPE C2
SEE STRUCTURE PLAN
M-43-1

STA 442+18
PEDESTRIAN OUTLOOK
14'x6'
SEE DETAIL

PI 442+96.37

REMOVING OLD STRUCTURE
STA 443+45 C/L
EXISTING 10'x8' STEEL ARCH PIPE

STA 444+00
38'LT

STA 441+00
14'LT

12'
12'

R 2.5

CONCRETE CORRUGATED MEDIAN

STA 441+00 11.5'LT

441+00

STA 441+32.6 R/L

R 1873.999

R 1848.999

R 2.5

443+00

STA 442+86.6 2.5'LT

444+00

+10 +55 +29 +74 +41 +86

440+00

439+00

438+00

+89 +14 +59 +05 +50

PC STA 438+78

STA 442+50
PEDESTRIAN OUTLOOK
14'x6'
SEE DETAIL

Stormwater Treatment
Area

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 24	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\021203_pd.dgn PLOT DATE : 18-DEC-2012 08:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

N

STA 444+85 C/L
3-CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH
6-APRON ENDWALLS

STA 444+00
24'LT

STA 444+00 R/L
END TRANSITION

444+00

445+00

446+00

STA 446+00
PEDESTRIAN OUTLOOK
14'x6'
SEE DETAIL

STA 447+00
24'LT

TREE TO REMAIN

12'

STA 447+00 R/L
START MEDIAN TAPER

STA 447+42.62
24'RT

RT 447+42.62

PEDESTRIAN OUTLOOK
SEE STRUCTURE PLAN
M-43-1

TREE TO REMAIN

R 2,544

STA 448+04.4 2.5'LT

STA 448+87 5.0'LT

449+00

R 5

CONCRETE CORRUGATED MEDIAN

449+27.83

14'

12'

450+00

+25

+68

STA 449+27.83
26'RT

1-023-93
1586.99

1-023-92
1586.28

1-024-84
1583.98

1-024-85
1584.20

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 25	E

2

2

N

STORM WATER TR
AREA

STA 450+00
26'LT

14'

12'

STA 450+00
14'LT

TREES TO REMAIN

STA 456+48.49

450+00

451+00

452+00

453+00

454+00

455+00

456+00

455+29.44

+78

+23

+23

+68

+54

+19

CONCRETE CURB TYPE J

STA 455+24 38'RT

STA 455+71 38'RT

STA 454+48 38'RT

STA 453+73 38'RT

R1.5

R1.5

R1.5

R1.5

CONCRETE CURB & GUTTER 8-INCH TYPE D
SEE CONSTRUCTION DETAIL

PI 452+31.81

USH 51

USH 51

SIGN

SIGN

MH

MH

INL

INL

SAN

W

NYS

12"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 26	E

2

END RAILING STEELTYPE C2
SEE STRUCTURE PLAN
M-43-1

STORM WATER TREATMENT
AREA

RAILING STEELTYPE C2
SEE STRUCTURE PLAN
M-43-1

STA 456+48.49 73.32'RT

R 80

R 20

STA 457+00.62 77.77'RT

STA 457+00.62 73.3'RT

TREES TO REMAIN

SIGNS TO REMAIN

STA 460+83.49 75.00'LT USH 51
STA 9+16.28 50'RT NEW HUBER

RETAINING WALL TO REMAIN

New Huber

STA 461+53.17 215.32'LT
STA 7+88.39 40.51'LT

50' TAPER

50' TAPER

CURB RAMP
TYPE 1

CURB RAMP
TYPE 7B

CONCRETE CURB & GUTTER 18-INCH TYPE D
REJECT CURB

STA 457+09 7'LT

STA 457+59 7'LT

COLORED TEXTURED CONCRETE
TERRACE, 6-INCH

CONCRETE MEDIAN SLOPED NOSE
TYPE 1

CONCRETE SIDEWALK, 6-INCH

STA 458+39.02 USH 51
STA 10+00 ROGERS DR

STA 461+45.82 USH 51
STA 10+00 HUBER LN/ NEW HUBER

456+00

457+00

458+00

459+00

460+00

461+00

462+00

10+00

CURB RAMP
TYPE 1

CURB RAMP
TYPE 7B

CURB RAMP
TYPE 1

STA 457+34
HAWK(High Intesity Crosswalk)
with
PEDESTRIAN HYBRID
BEACON
see signal details

TYPE 5 CURB RAMP
10' WIDE

STA 457+98.88 61.00'RT USH 51
STA 10+53.73 50'RT ROGERS DR

PI 457+96.00

STA 458+96.62 61.00'RT USH 51
STA 10+68.20 50'LT ROGERS DR

SIGN TO REMAIN

STA 461+04.74 61.00'RT USH 51
STA 10+53.92 50'RT HUBER LN

Rogers Dr.

Huber Ln.

11+00

R 22.496

END CONSTRUCTION
STA. 11+85 Rogers Dr.

END CONSTRUCTION
STA. 11+50 Huber Dr.

STA 457+91.74 159.88'RT USH 51
STA 11+91.41 74.37'RT ROGERS DR

R 90

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET E

2

STA 461+53.17 215.32'LT USH 51
STA 7+88.39 40.51'LT NEW HUBER

STA 461+84.71 75.00'LT USH 51
STA 9+31.90 50'LT NEW HUBER

SIGN TO REMAIN
SHAPE SLOPE TO AVOID

STA 462+05.95 61.00'RT USH 51
STA 10+69.56 50'LT HUBER LN

SIGN TO REMAIN

SIGN TO REMAIN
SHAPE SLOPE TO AVOID

Building Removed by Owner 2010

LAKEVIEW DR

USH 51

462+00 463+00 464+00 465+00 466+00 467+00 468+00

+50 +95 +94 +39 +09 +54 +40 +85 +13 +58 +23 +68 +64 +09 +44 +89

464+82.46

467+92.69

R 1466+39.81

R 354

N

2

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 28 E

2

2

STA 470+00
END STAGE 1
BEGIN STAGE 2

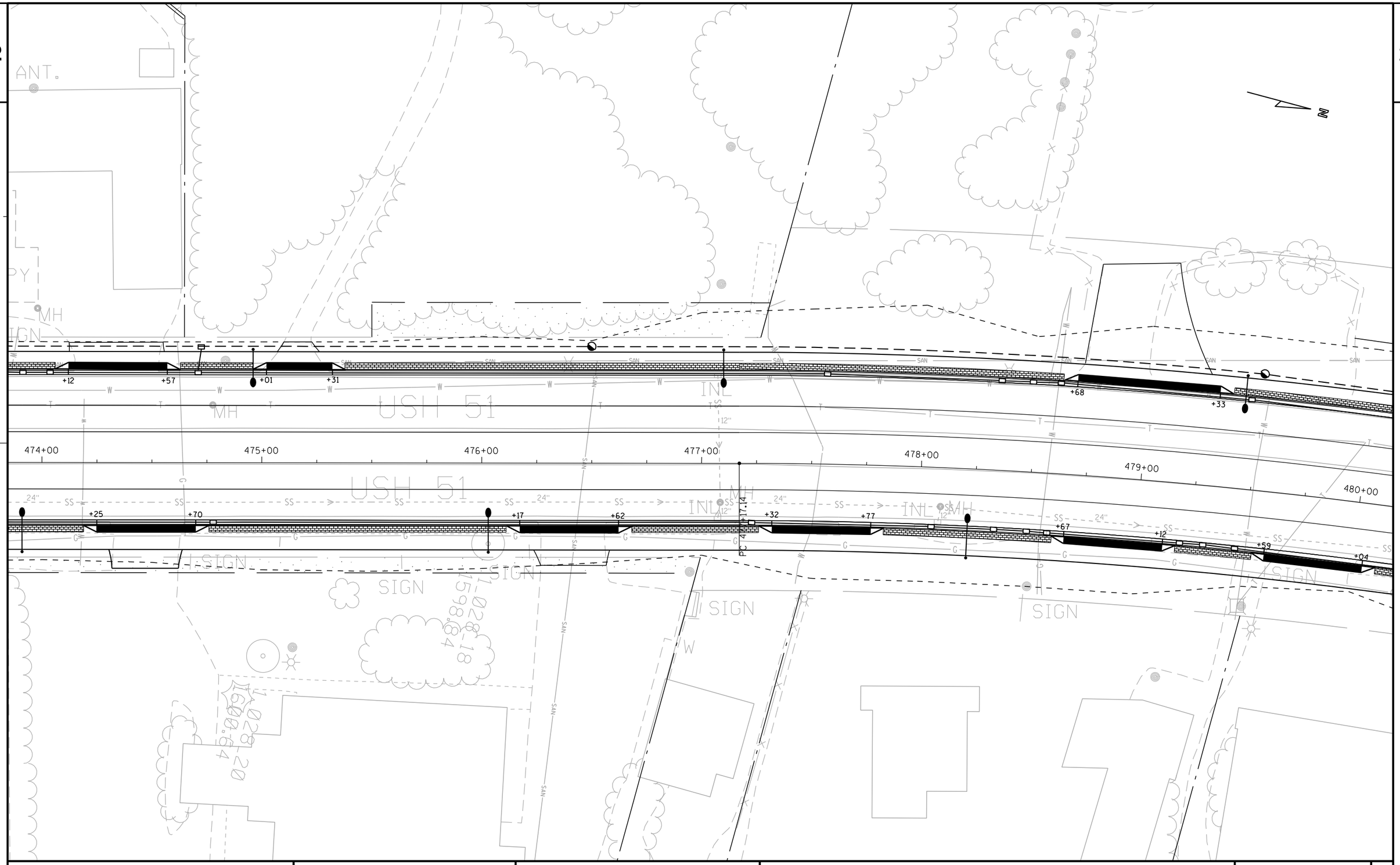
TREE TO REMAIN

Signs To Remain

CURB AND GUTTER
30 INCH TYPE D
MATCH EXITING CURB LINE

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 29	E

2



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAND DETAIL SHEET	SHEET 30 E

2

END CONSTRUCTION
STA. 8+65.19 OLD HWY 70

STA 481+31.11 75.00'LT USH 51
STA 9+18.29 64'RT OLD HWY 70

STA 482+41.84 90.00'LT USH 51
STA 9+20.67 51'LT OLD HWY 70

STA 483+29.26 50.00'LT

STA 484+28.07 40.00'LT

STA 482+01.71 USH 51
STA 10+00 OLD HWY 70

STA 483+24
26'RT

STA 484+24
24'RT

CURB RAMP TYPE 1

16' MEDIAN

END CONCRETE SIDEWALK 6 INCH

ASPHALTIC SURFACE TEMPORARY

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 31 E

2

MATCH EXISTING CURB LINE

+08 +53 +75 +20

486+00 487+00 488+00 489+00 490+00 491+00 492+00

SAW CUT

END PROJECT 1174-10-70
STAGE 2
STA. 487+50

MATCH EXISTING CURB LINE
MATCH EXISTING ASPHALT PATH

USH 51

CANOPY

G.P. FILLER CAPS

SIGN MH INL SAN W T G SS 12" 18"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PLAN DETAIL SHEET	SHEET 32	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\021211_pd.dgn PLOT DATE : 18-DEC-2012 08:45 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

LEGEND	
	EMAT URBAN CLASS I TYPE B
	SILT FENCE
A	INLET PROTECTION TYPE A
B	INLET PROTECTION TYPE B
C	INLET PROTECTION TYPE C
	RIPRAP MEDIUM
	PERMITTED WETLAND

N

426+00

427+00

428+00

429+00

430+00

431+00

432+00

P.I. = 428+45.20
Δ = 88°48'46.4"
D. = 21°00'00"
L. = 422.92'
R. = 272.84'
SE. = N.C.

PC 425+17.96

PT 430+00.88

D1425+47.85

D1431+74.48

BEGIN PROJECT 1174-10-70
START MILL AND OVERLAY

STA. 425+61
X = 187,806.639013
Y = 249,993.493767

2-017-12
1601.87

2-017
1599.97

2-017-18
1602.79

SIGN

SIGNS

MH

INL

USH 51

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022001_ec.dgn PLOT DATE : 13-DEC-2012 19:56 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

LEGEND

- EMAT URBAN CLASS I TYPE B
- SILT FENCE
- A INLET PROTECTION TYPE A
- B INLET PROTECTION TYPE B
- C INLET PROTECTION TYPE C
- RIPRAP MEDIUM
- PERMITTED WETLAND

END MILL AND OVERLAY
STA. 431+96

START RECONSTRUCTION
STAGE 1
STA. 436+36

PT 436+36.78

PI 436+53.00

PI 434+88.11

PI 431+74.48

430+00
431+00
432+00
433+00
434+00
435+00
436+00
437+00
438+00

A/C

INL
MH
W
SIGN
CANOPY
PLAYGROUND
TENNIS COURT
WATER TOWER
RUINS
U/C
1023
1599.55
1599.14

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET	E

2

LEGEND

- EMAT URBAN CLASS I TYPE B
- SILT FENCE
- A INLET PROTECTION TYPE A
- B INLET PROTECTION TYPE B
- C INLET PROTECTION TYPE C
- RIPRAP MEDIUM
- PERMITTED WETLAND

TEMPORARY TURTLE TURN-AROUND

TEMPORARY TURTLE TURN-AROUND

PI 442+96.37

PC 438+28.78

USH 51

439+00

440+00

441+00

442+00

443+00

444+00

438+00

MH

INL

SIGN

A|C

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022003_ec.dgn PLOT DATE : 13-DEC-2012 19:56 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

N

444+00

445+00

446+00

447+00

448+00

449+00

450+00

RT 449+27.83

RT 449+42.62

A C

TEMPORARY TURTLE TURN-AROUND

1-Ø23-93
1586.99

1-Ø23-92
1586.28

1-Ø24-84
1583.98

1-Ø24-85
1584.20

MH

INL

LEGEND

- EMAT URBAN CLASS I TYPE B
- SILT FENCE
- A INLET PROTECTION TYPE A
- B INLET PROTECTION TYPE B
- C INLET PROTECTION TYPE C
- RIPRAP MEDIUM
- PERMITTED WETLAND

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET 36	E

2

2

N

A C

450+00

451+00

452+00

453+00

454+00

455+00

456+00

455+29.44

USH 51

USH 51

INL

MH

SIGN

W

P.I. 452+31.81

A B

LEGEND

- EMAT URBAN CLASS I TYPE B
- SILT FENCE
- A INLET PROTECTION TYPE A
- B INLET PROTECTION TYPE B
- C INLET PROTECTION TYPE C
- RIPRAP MEDIUM
- PERMITTED WETLAND

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022005_ec.dgn PLOT DATE : 13-DEC-2012 19:56 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LAKEVIEW DR

New HUber

New HUber

SIGN

SIGN

SIGN

SIGN

SIGN

USH 51

USH 51

USH 51

INL MH

INL MH

INL MH

2

2

LAKEVIEW DR

USH 51

462+00

463+00

464+00

465+00

466+00

467+00

468+00

PC 464+82.46

PT 467+92.68

SIGN

MH

INL

A C

Building Removed by Owner
2010

LEGEND

EMAT URBAN CLASS I TYPE B

SILT FENCE

A INLET PROTECTION TYPE A

B INLET PROTECTION TYPE B

C INLET PROTECTION TYPE C

RIPRAP MEDIUM

PERMITTED WETLAND

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022007_ec.dgn PLOT DATE : 13-DEC-2012 19:56 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

ANT.

FILLER CAPS

CANOPY

SIGN

MH

INL

SIGN

SIGN

SIGN

2

2

ANT.

MH

IGN

MH

USH 51

INL

474+00

475+00

476+00

477+00

478+00

479+00

480+00

USH 51

INL MH

INL MH

SIGN

SIGN

SIGN

SIGN

SIGN

W

A C

LEGEND

EMAT URBAN CLASS I TYPE B

SILT FENCE

A INLET PROTECTION TYPE A

B INLET PROTECTION TYPE B

C INLET PROTECTION TYPE C

RIPRAP MEDIUM

PERMITTED WETLAND

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022009_ec.dgn PLOT DATE : 13-DEC-2012 19:56 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

END CONSTRUCTION
STA. 8+65.19 OLD HWY 70

N

480+00
481+00
482+00
PI 10+00.00
483+00
484+00
485+00
486+00
9+00

LEGEND

- EMAT URBAN CLASS I TYPE B
- SILT FENCE
- A INLET PROTECTION TYPE A
- B INLET PROTECTION TYPE B
- C INLET PROTECTION TYPE C
- RIPRAP MEDIUM
- PERMITTED WETLAND

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET	E

2

2

SIGN
SIGN
MH
INL
INL
SIGN
W
W
SIGN
MH
MH
SIGN
INL
INL
MH
INL
MH
MH
A C
USH 51
USH 51
486+00
487+00
488+00
489+00
490+00
491+00
492+00
END PROJECT 1174-10-70
STAGE 2
STA. 487+50
INL
MH
SIGN
SIGN
SIGN
SIGN
INL
MH
MH
CANOPY
SIGN
SIGN
G.P.
FILLER CAPS
SIGN

LEGEND

- EMAT URBAN CLASS I TYPE B
- SILT FENCE
- A INLET PROTECTION TYPE A
- B INLET PROTECTION TYPE B
- C INLET PROTECTION TYPE C
- RIPRAP MEDIUM
- PERMITTED WETLAND

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL	SHEET E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022011_ec.dgn PLOT DATE : 13-DEC-2012 19:56 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

START RECONSTRUCTION
STAGE 1
STA. 436+36

N

EXIST

CB-51
CB-52
MH-1
CB-42
CB-43

433+00
434+00
435+00
436+00
437+00
438+00

PI 434+05.94
PI 434+88.11
PI 435+63.34
PI 436+32.00

1-0232
1599.55

SIGN
INL
MH
W
SS
T
G
U/C

CB-51
Rim: 1,597.91'
Invert: 1,591.26'

MH-1
Rim: 1,596.27'
Invert: 1,589.72'

CB-52
Rim: 1,595.98'
Invert: 1,590.00'

① 12" SSPRC
8' @ 3.5%

EXIST 18" SSPRC
219' @ 0.7%

② 24" SSPRC
281' @ 1.5 %

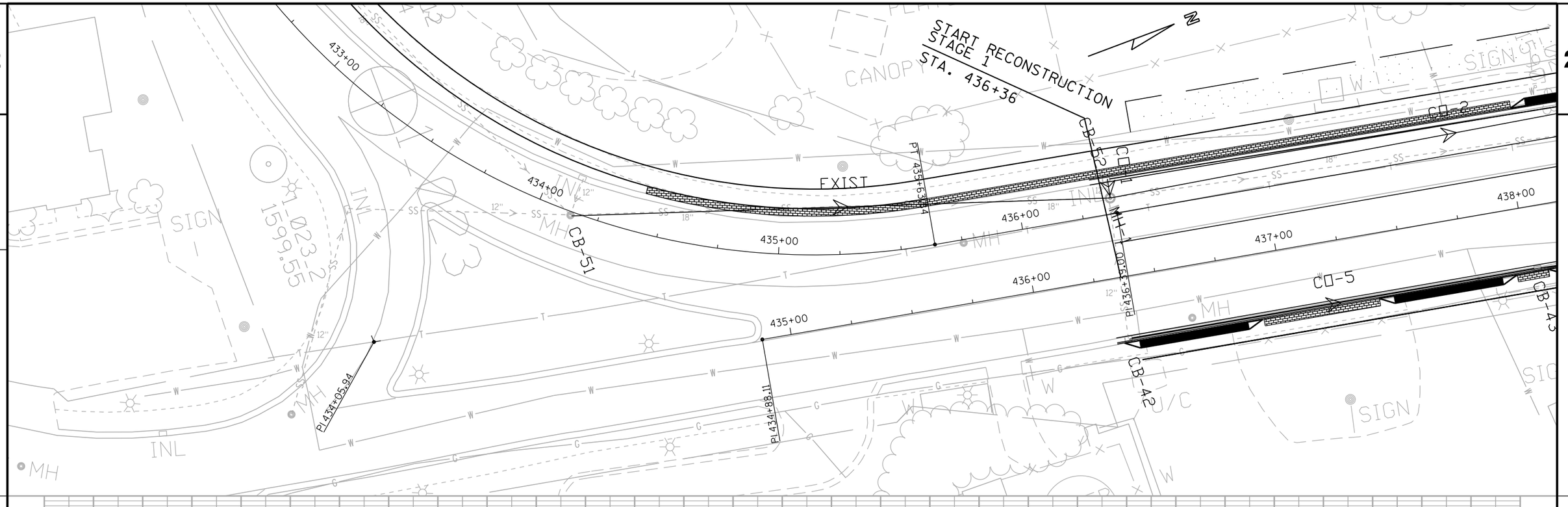
1598
1596
1594
1592
1590
1588
1586

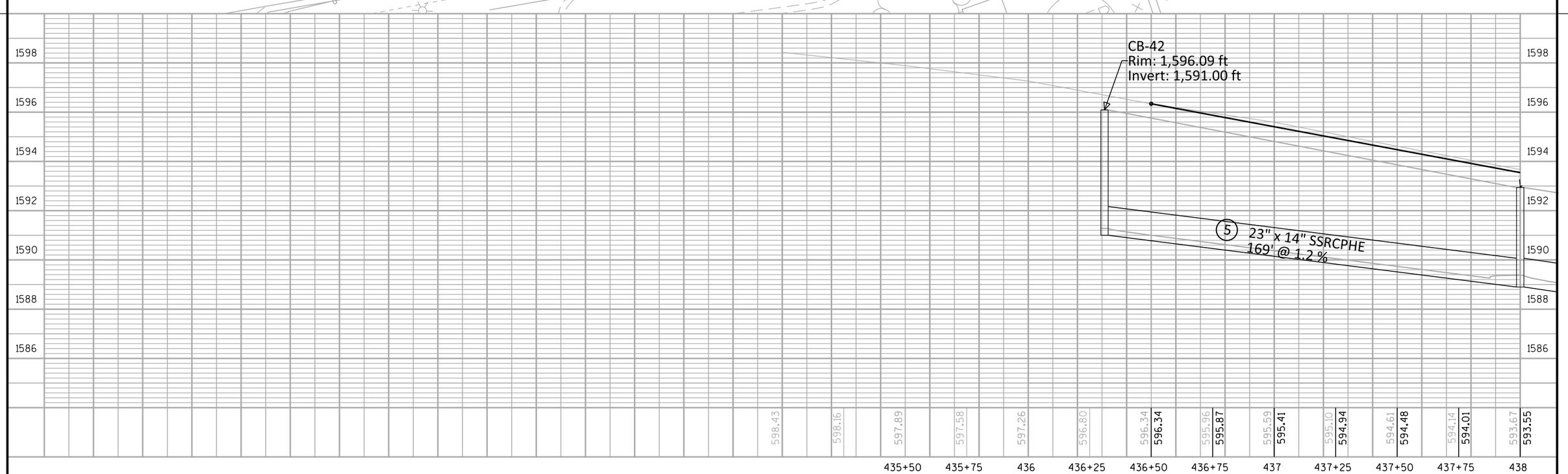
598.43
598.16
597.89
597.58
597.26
596.80
596.34 596.34
595.96 595.87
595.59 595.41
595.10 594.94
594.61 594.48
594.14 594.01
593.67 593.55

435+50 435+75 436 436+25 436+50 436+75 437 437+25 437+50 437+75 438

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 431+00 - 438+00 LT	SHEET	E

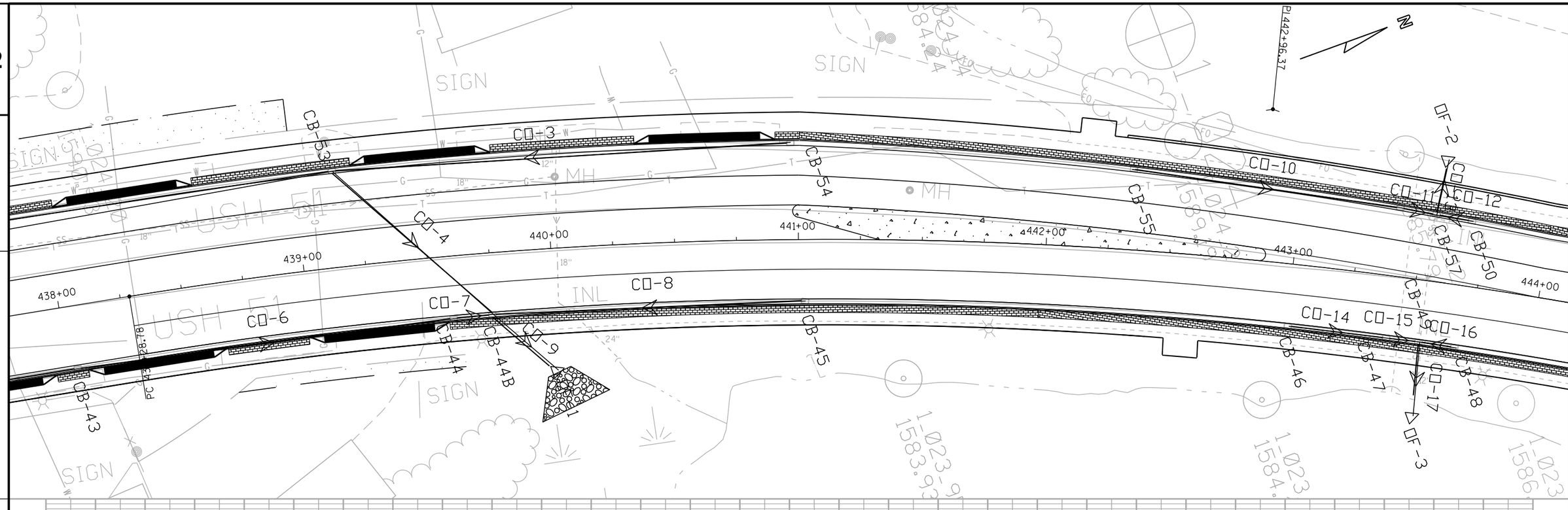
FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022502_ss_1.dgn PLOT DATE : 13-DEC-2012 20:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1
WISDOT/CADDS SHEET 410

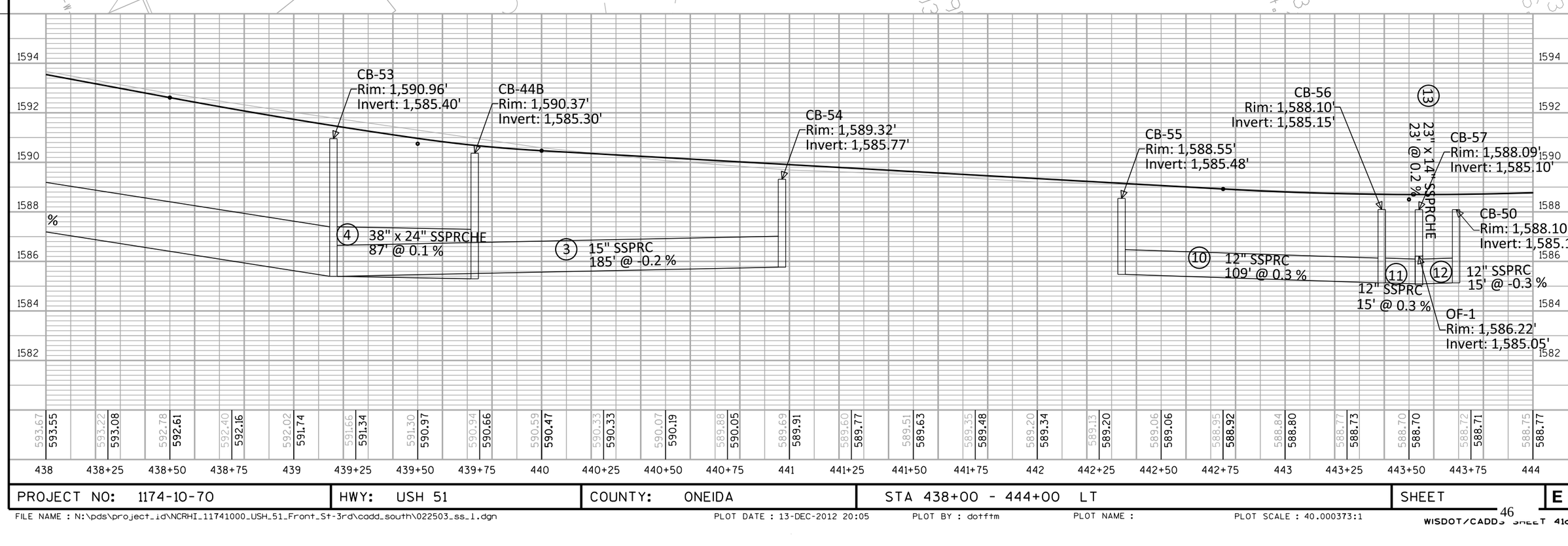




PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 431+00 - 438+00 RT	SHEET	E

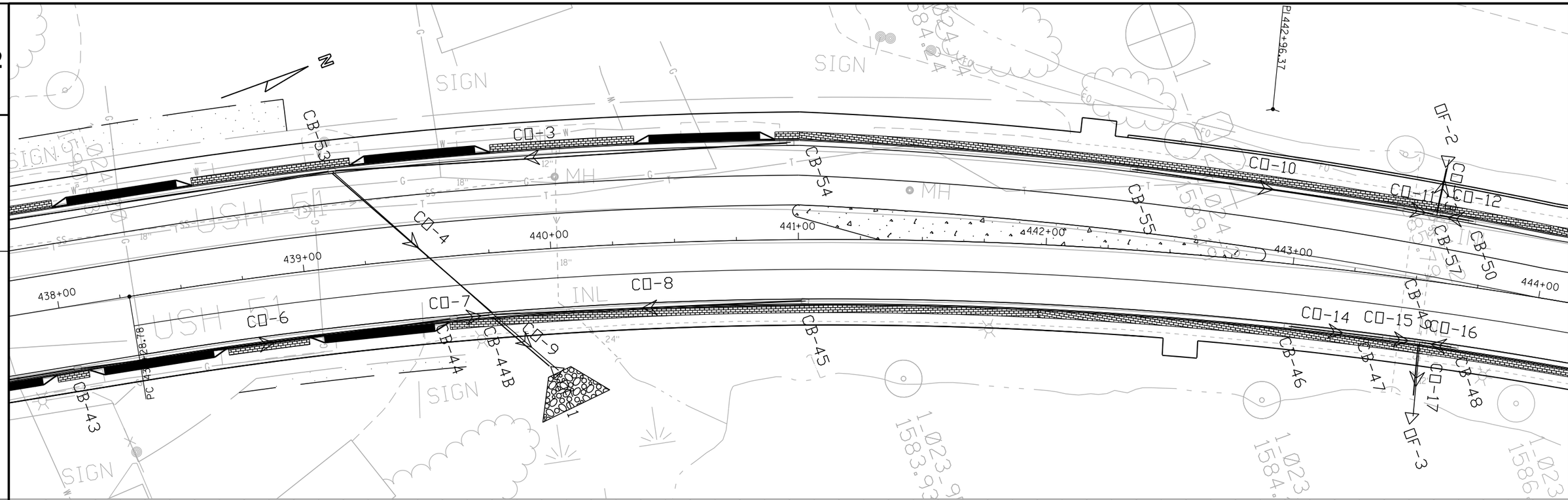
FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022502_ss_r.dgn PLOT DATE : 13-DEC-2012 20:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1

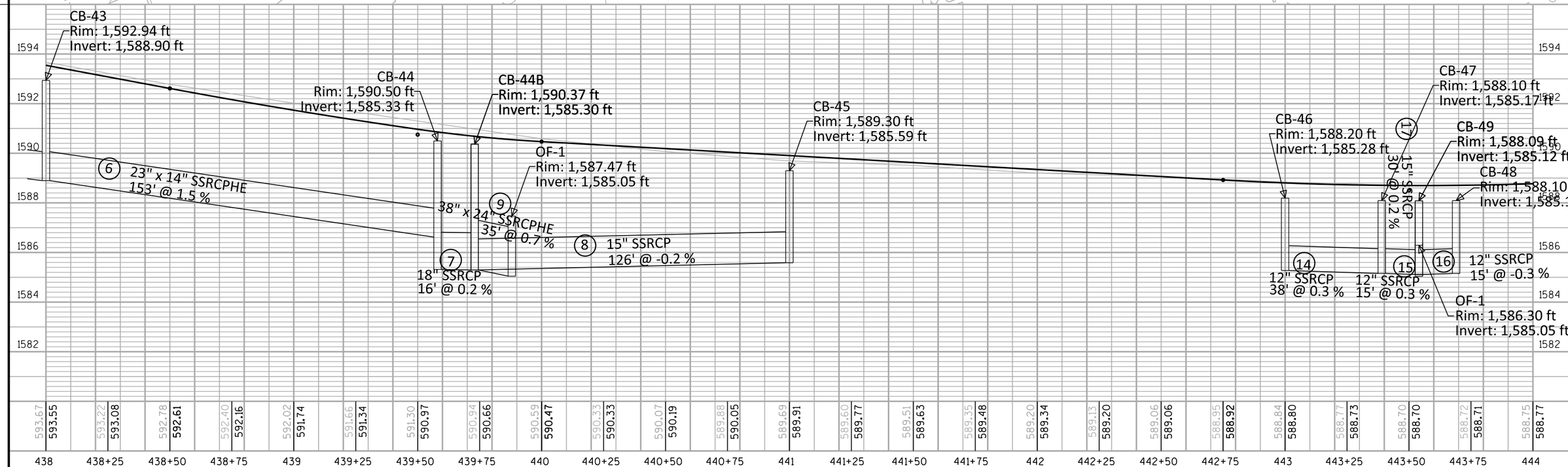




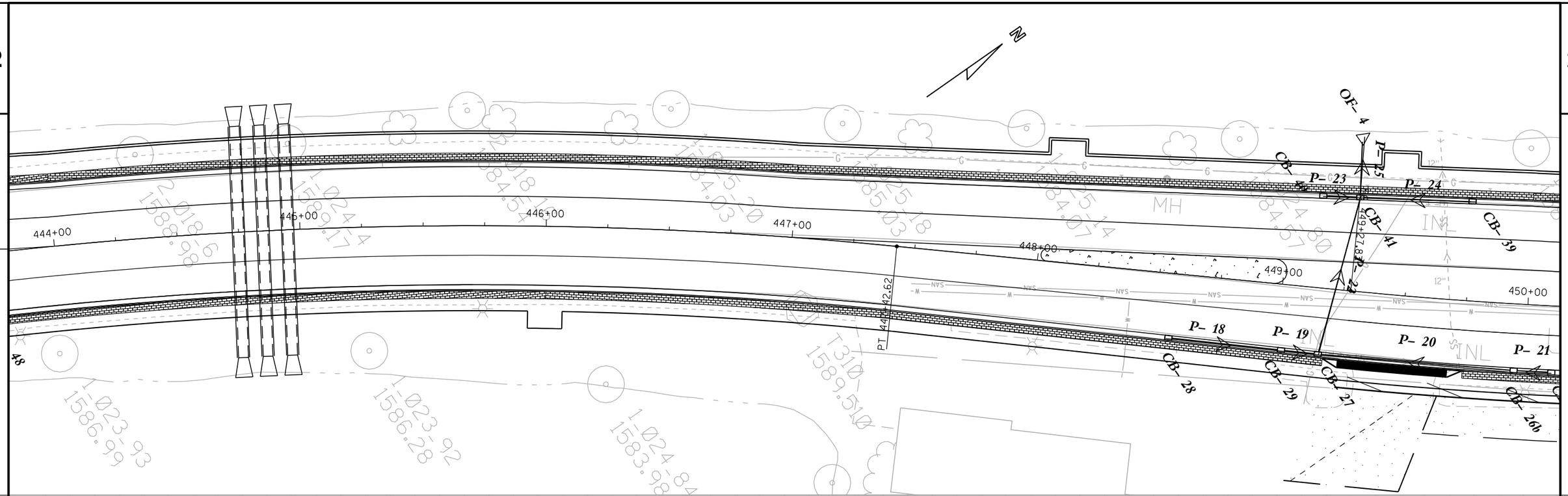
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 438+00 - 444+00 LT	SHEET	E

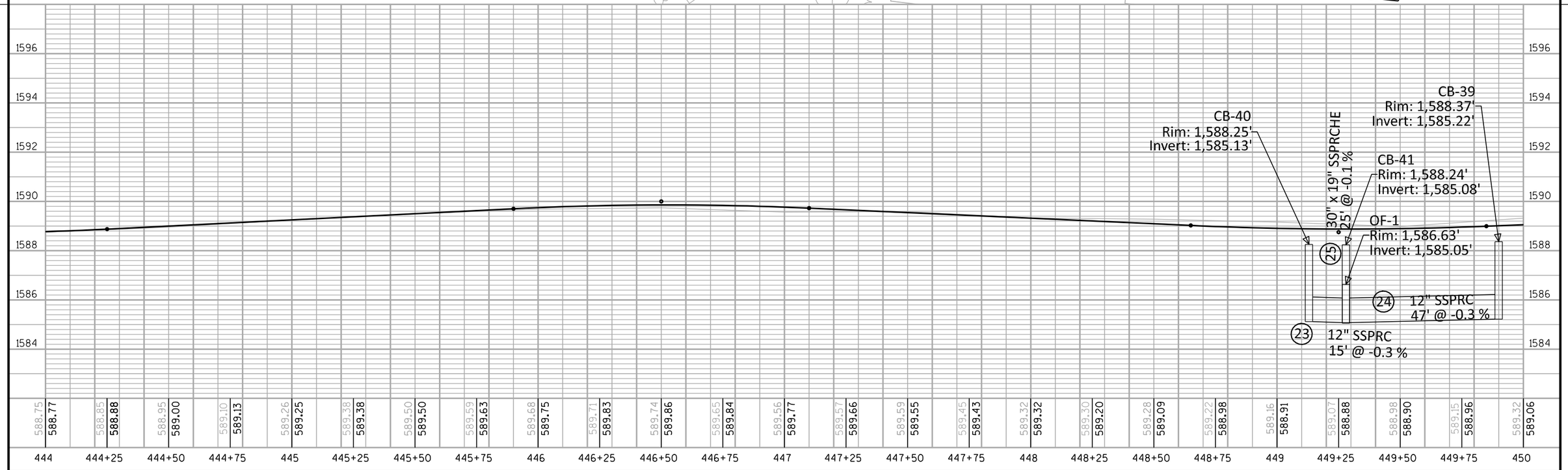
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PLOT DATE : 13-DEC-2012 20:05
PLOT BY : dotftm
PLOT NAME :
PLOT SCALE : 40.000373:1
WISDOT/CADDS SHEET 410



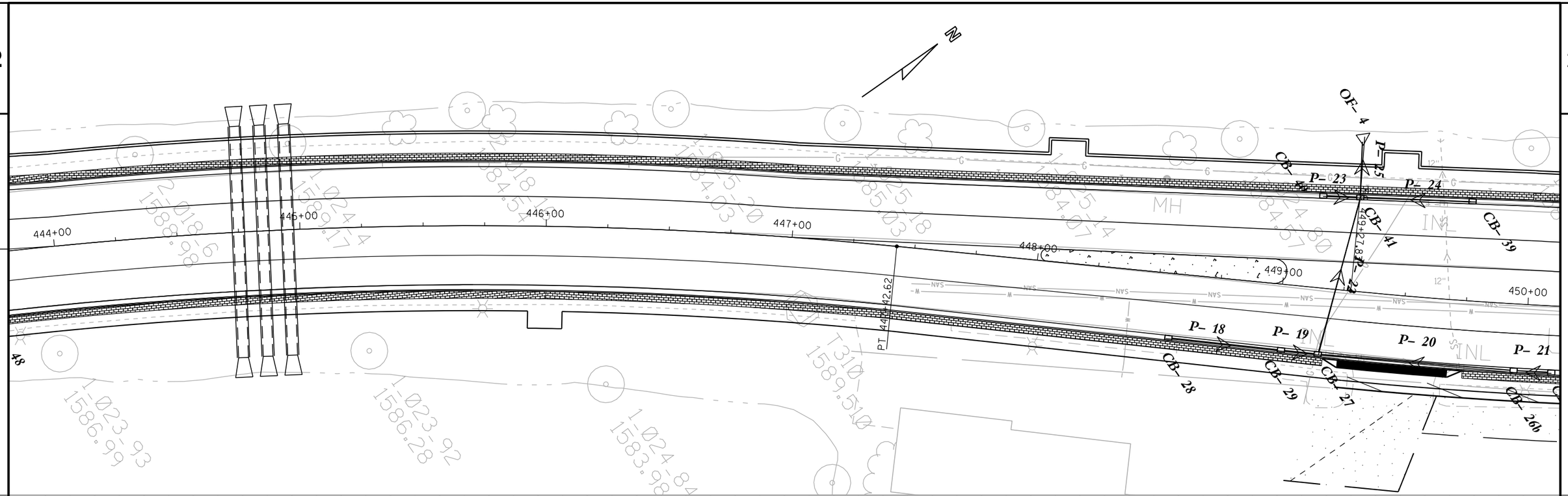


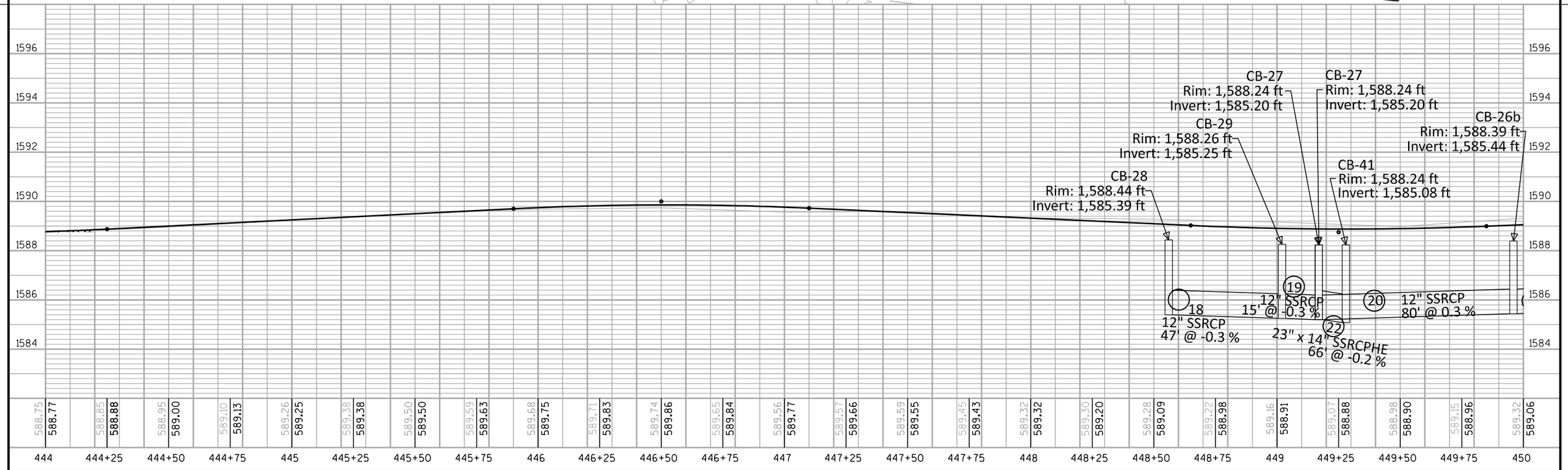
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 438+00 - 444+00 RT	SHEET	E



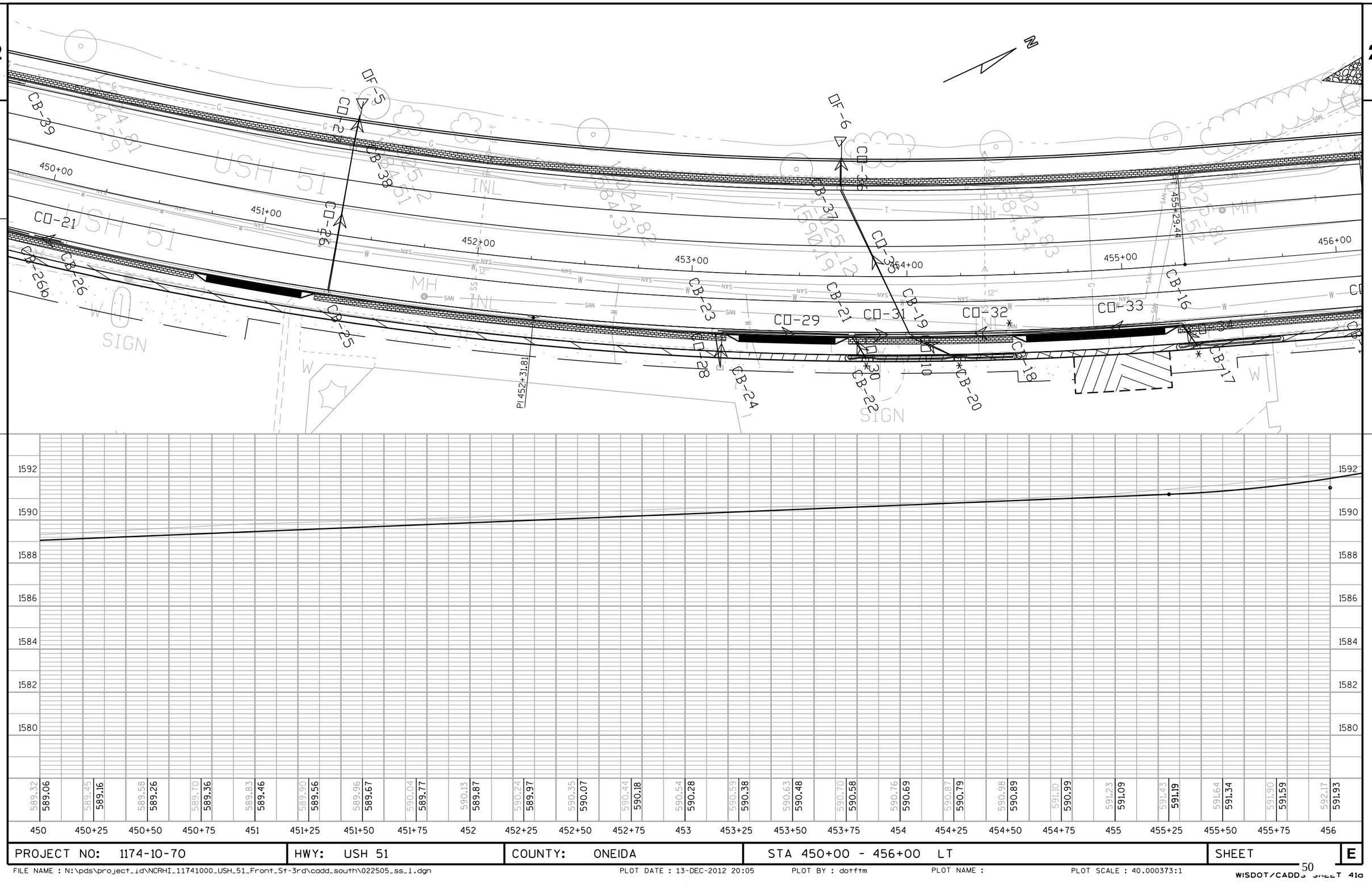


PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 444+00 - 450+00 LT	SHEET 48 E





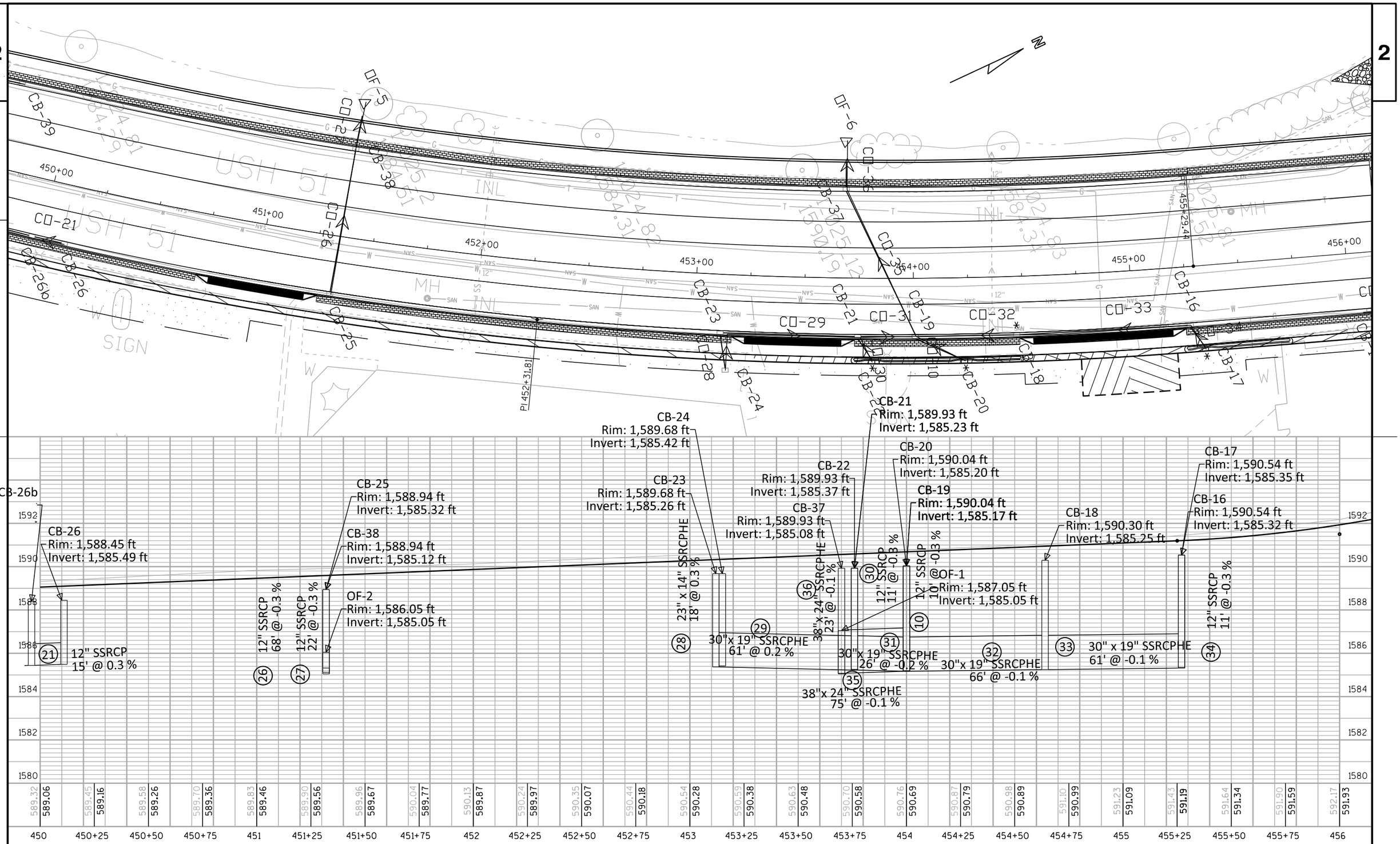
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 444+00 - 450+00 RT	SHEET 49 E



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 450+00 - 456+00 LT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022505_ss_1.dgn PLOT DATE : 13-DEC-2012 20:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1

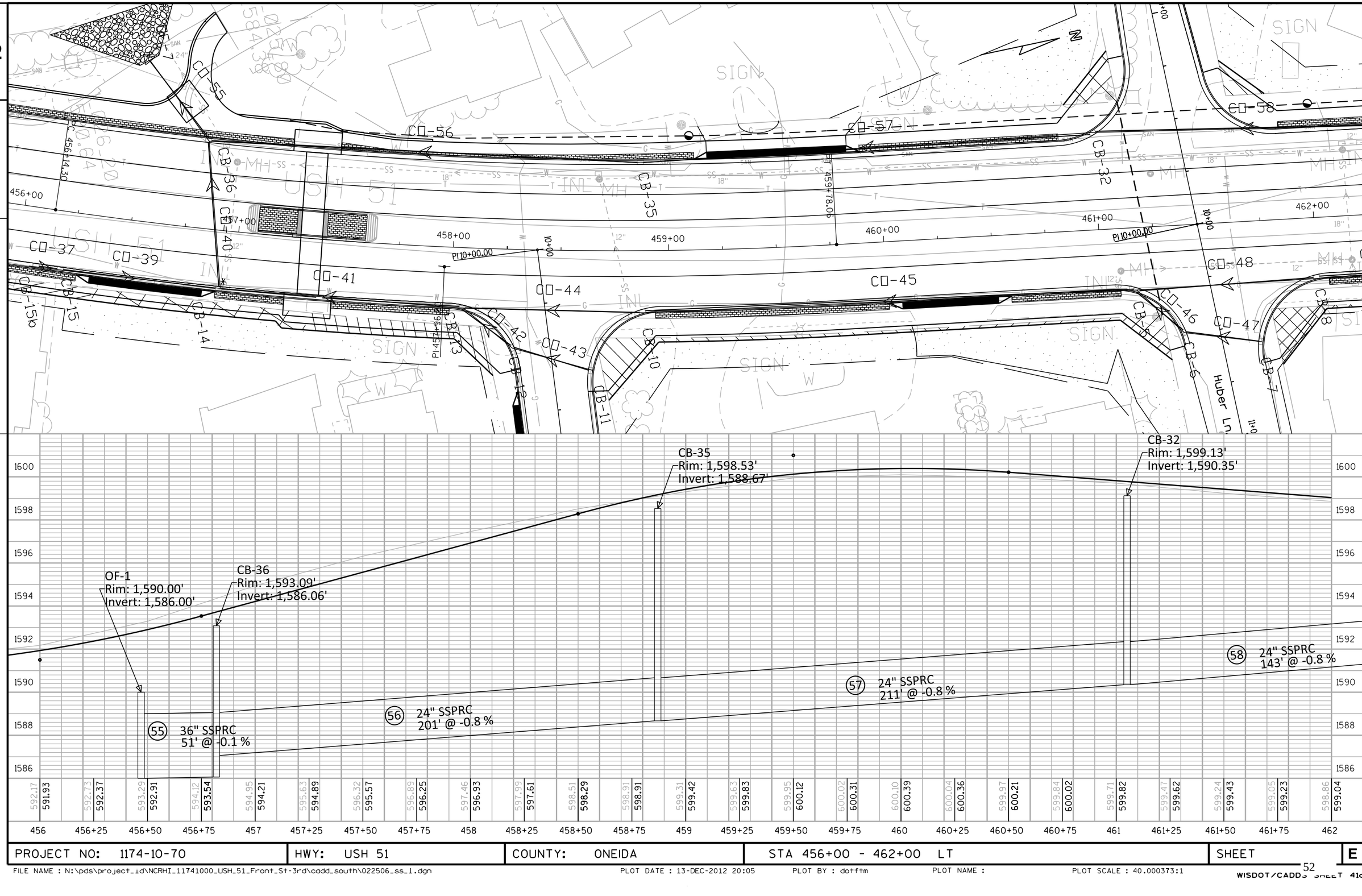
WISDOT/CADDS SHEET 41a



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 450+00 - 456+00 RT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022505_ss_r.dgn PLOT DATE : 13-DEC-2012 20:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1

WISDOT/CADDS SHEET 410



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 456+00 - 462+00 LT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022506_ss_1.dgn PLOT DATE : 13-DEC-2012 20:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1

WISDOT/CADDS SHEET 410

2

CB-5
Rim: 1,599.05 ft
Invert: 1,590.64 ft

CB-6
Rim: 1,598.92 ft
Invert: 1,591.63 ft

CB-7
Rim: 1,598.56 ft
Invert: 1,591.92 ft

CB-13
Rim: 1,596.44 ft
Invert: 1,588.14 ft

CB-11
Rim: 1,597.93 ft
Invert: 1,589.43 ft

CB-10
Rim: 1,598.53 ft
Invert: 1,588.81 ft

CB-8
Rim: 1,59
Invert: 1,

CB-12
Rim: 1,596.89 ft
Invert: 1,589.12 ft

CB-36
Rim: 1,593.09 ft
Invert: 1,586.06 ft

CB-15b
Rim: 1,591.40 ft
Invert: 1,587.15 ft

CB-14
Rim: 1,593.09 ft
Invert: 1,586.14 ft

CB-15
Rim: 1,591.67 ft
Invert: 1,587.10 ft

36" SSRCP
67' @ -0.001 %

(40)

(42) 15" SSRCP
29' @ -0.8 %

(43) 15" SSRCP
39' @ -0.8 %

(44) 24" SSRCP
83' @ -0.8 %

(45) 24" SSRCP
230' @ -0.8 %

(46) 15" SSRCP
30' @ -0.8 %

(47) 15" SSRCP
36' @ -0.8 %

(48) 24" SSRCP
84' @ -0.8 %

(41) 24" SSRCP
125' @ -0.8 %

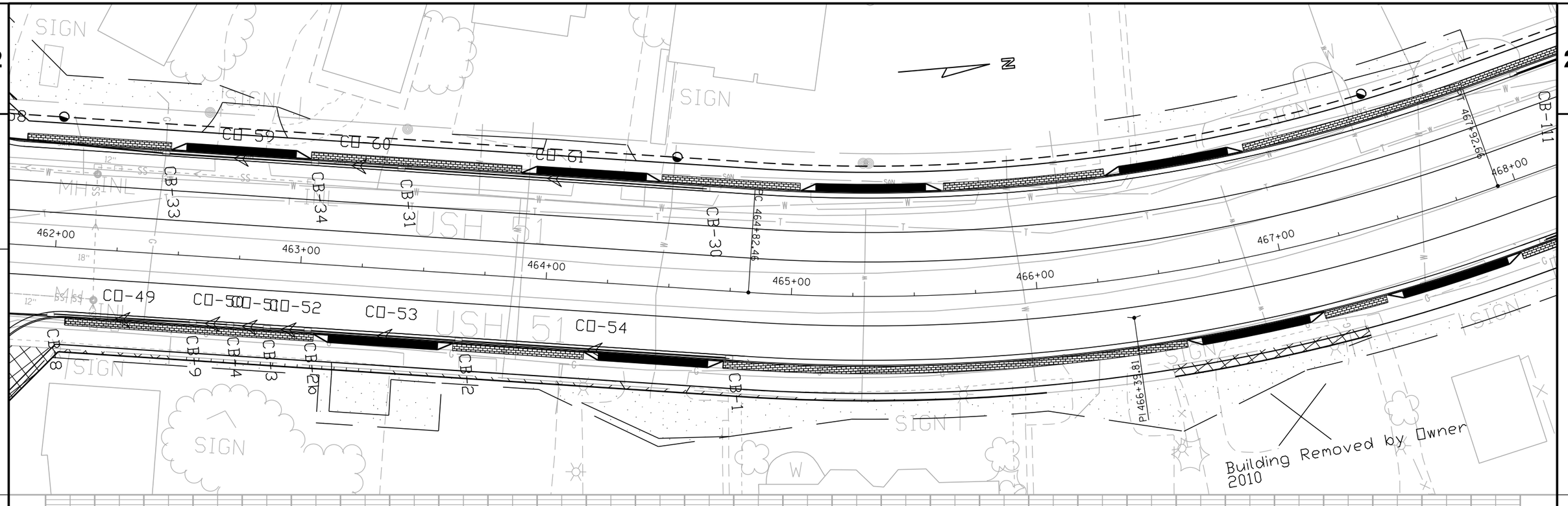
(39) 15" SSRCP
63' @ 0.3 %

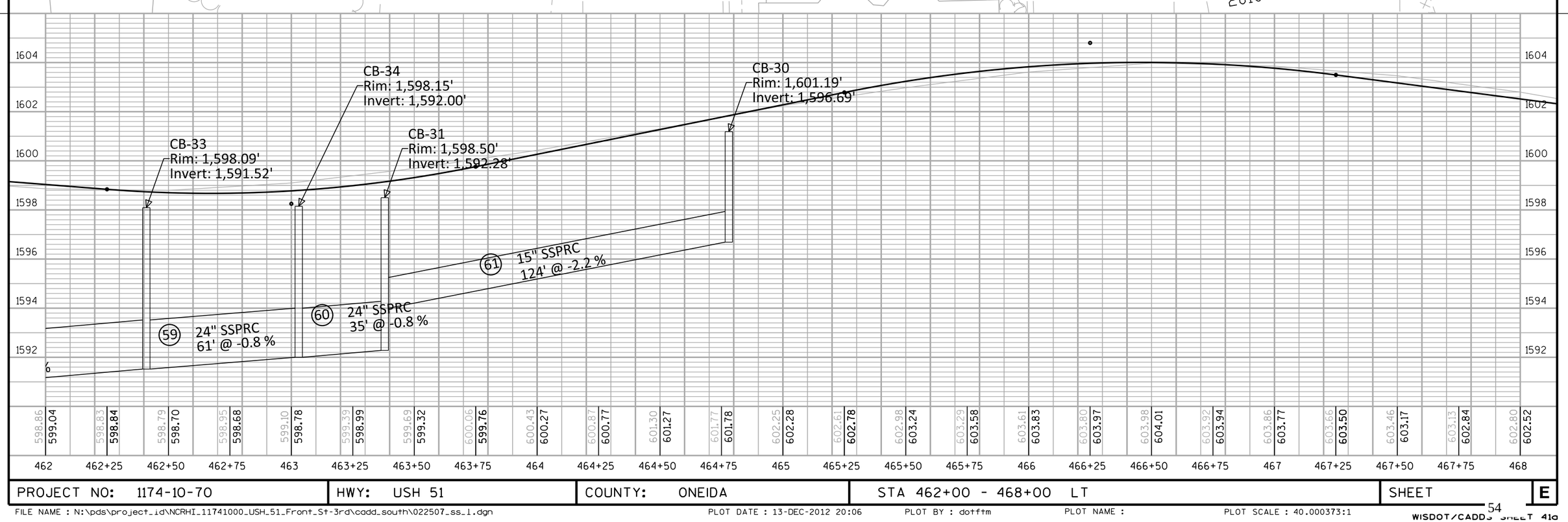
(37) 5" SSRCP
5' @ 0.3 %

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 456+00 - 462+00 RT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022506_ss_r.dgn PLOT DATE : 13-DEC-2012 20:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1 WISDOT/CADDS SHEET 410

2

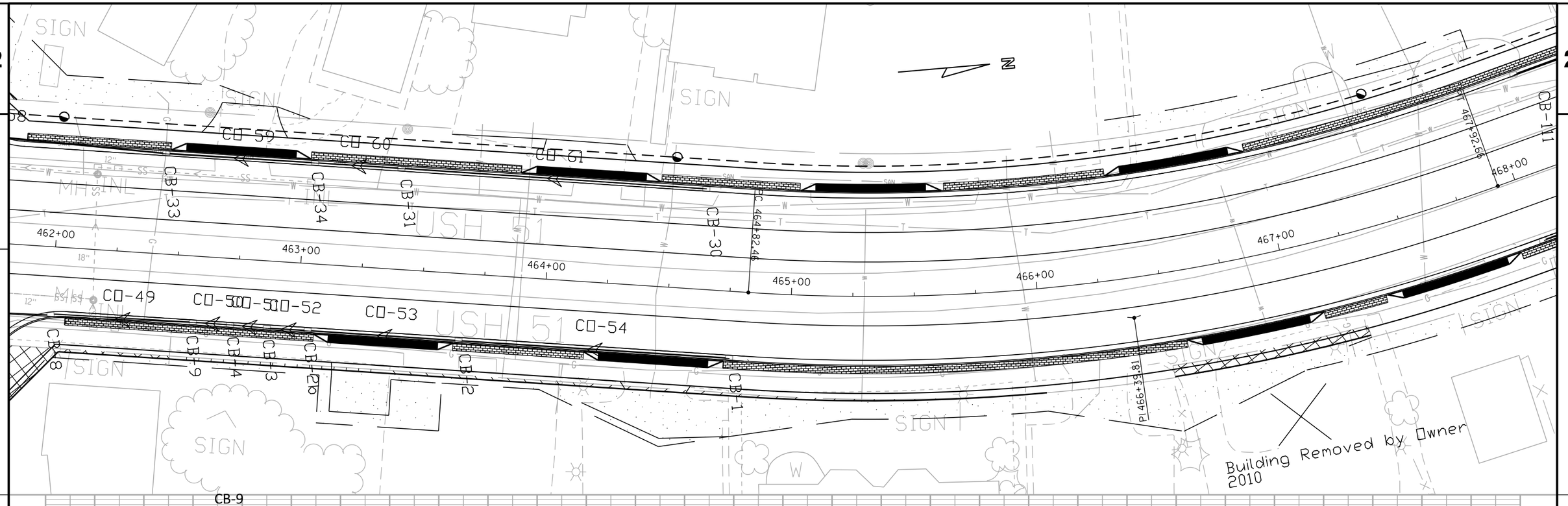


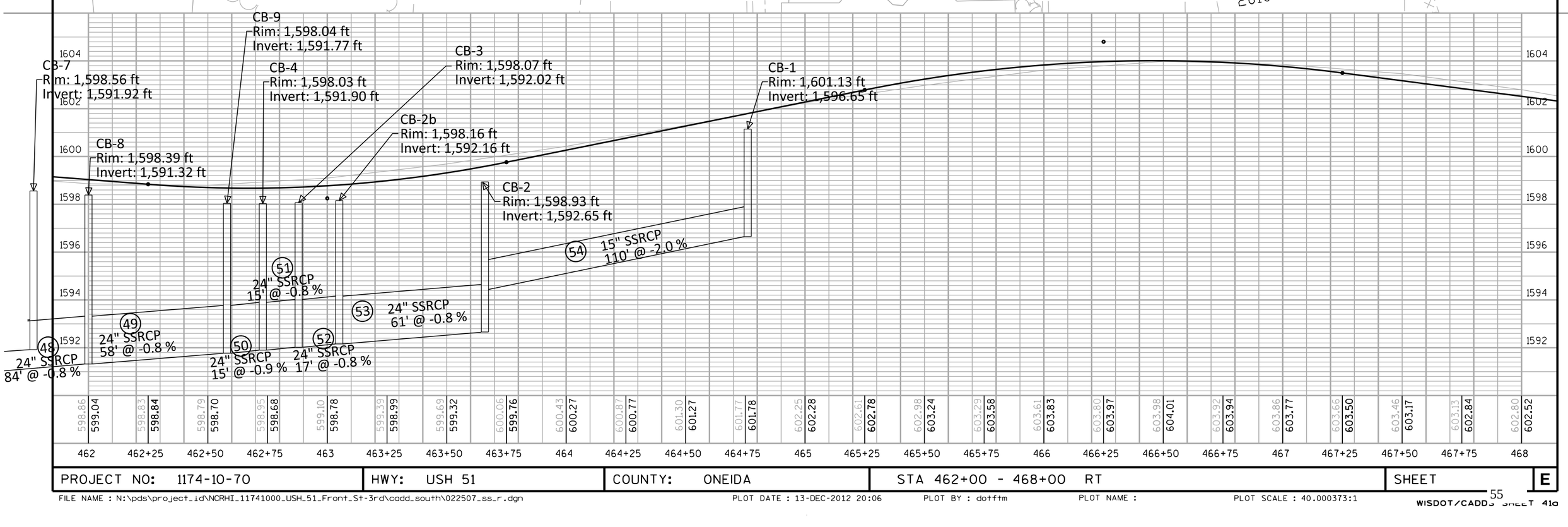


PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 462+00 - 468+00 LT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022507_ss_1.dgn PLOT DATE : 13-DEC-2012 20:06 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1

2

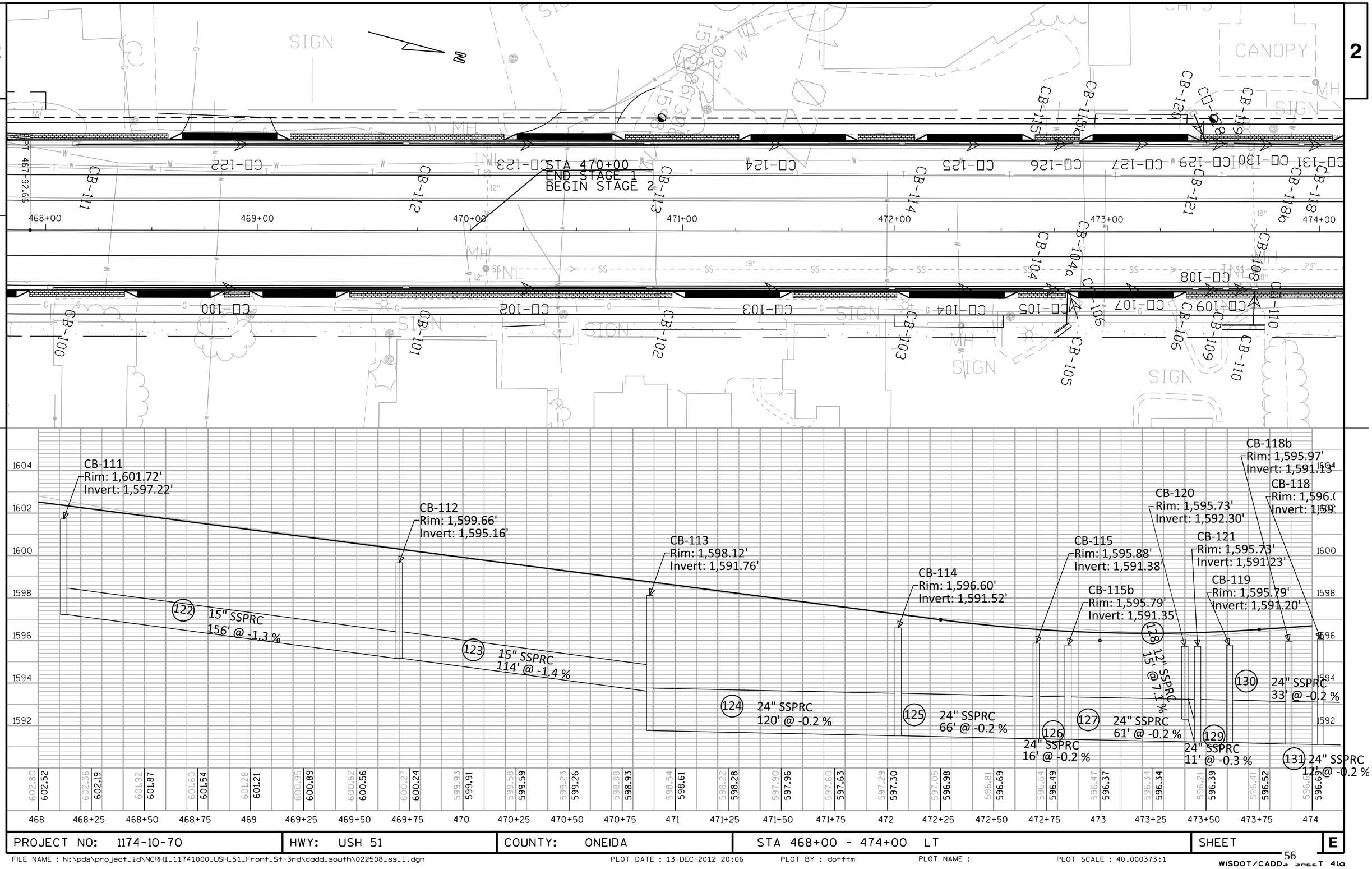




PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 462+00 - 468+00 RT	SHEET	E

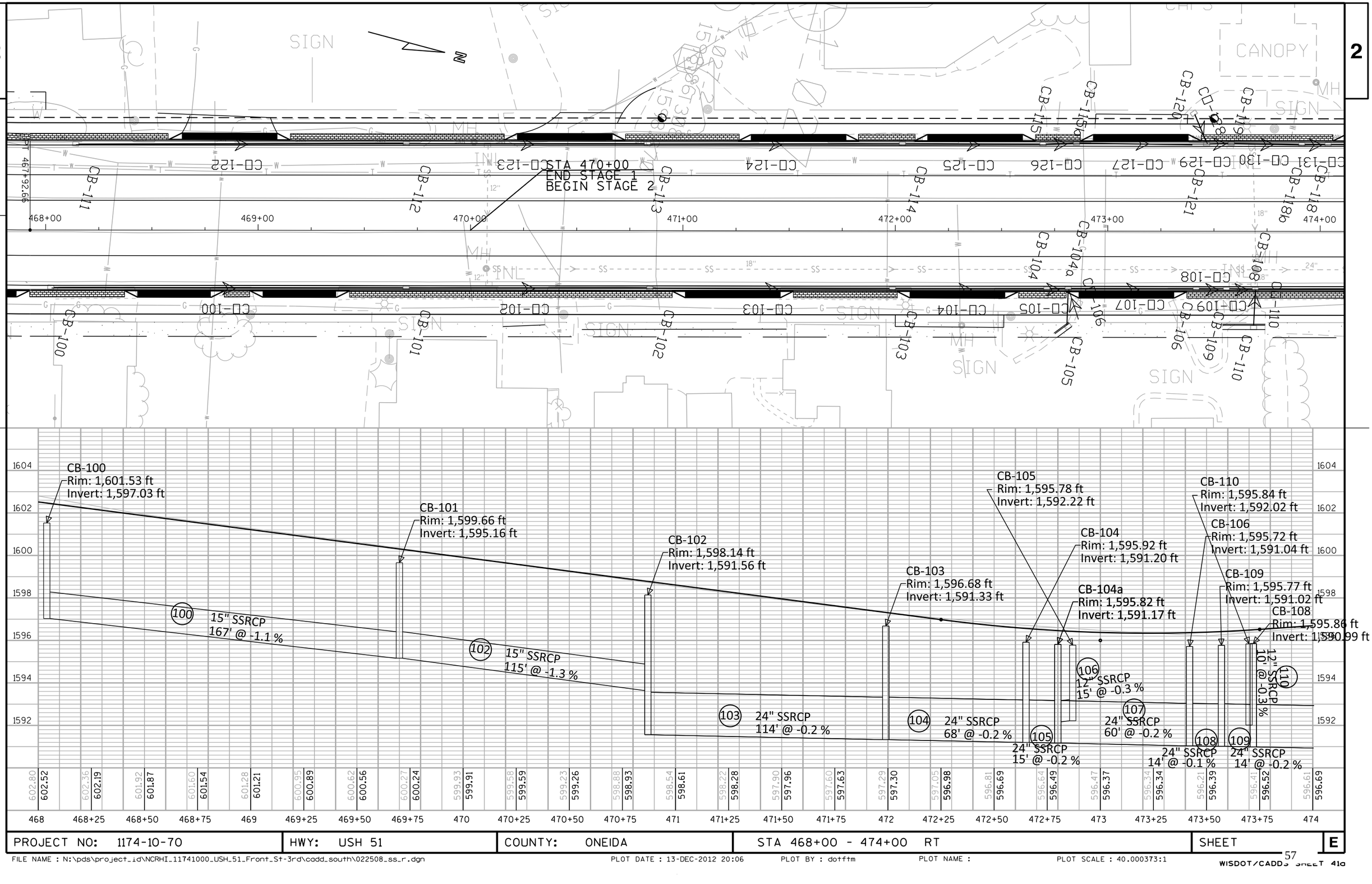
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WISDOT/CADDS SHEET 410

2

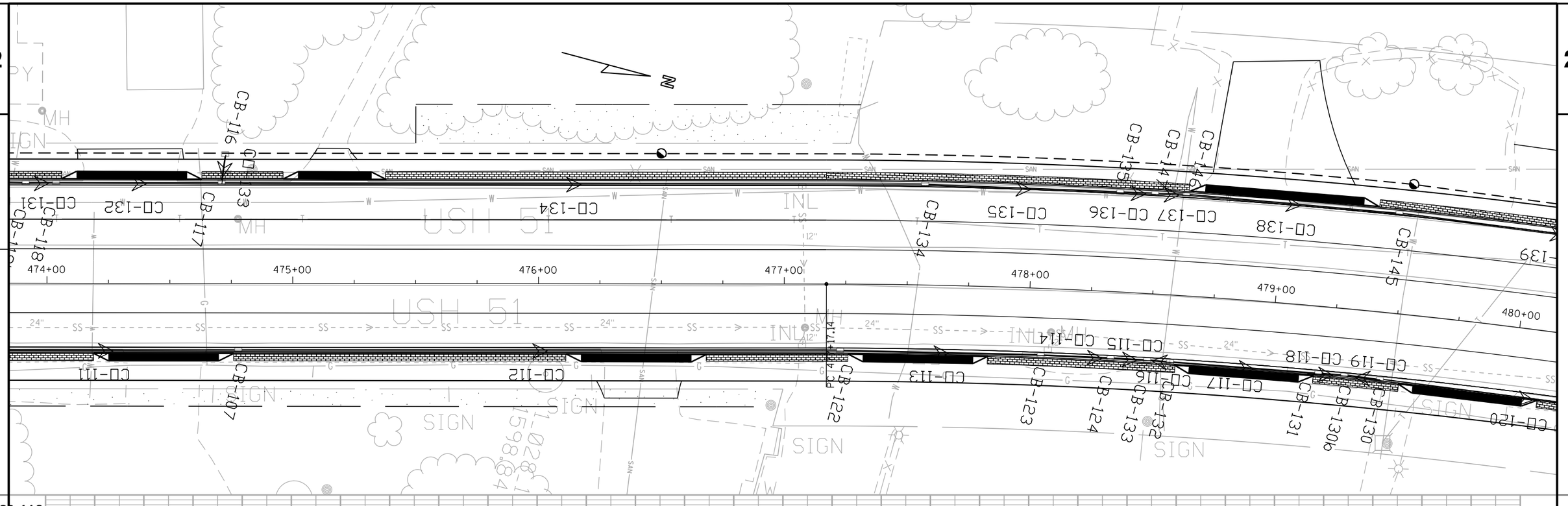


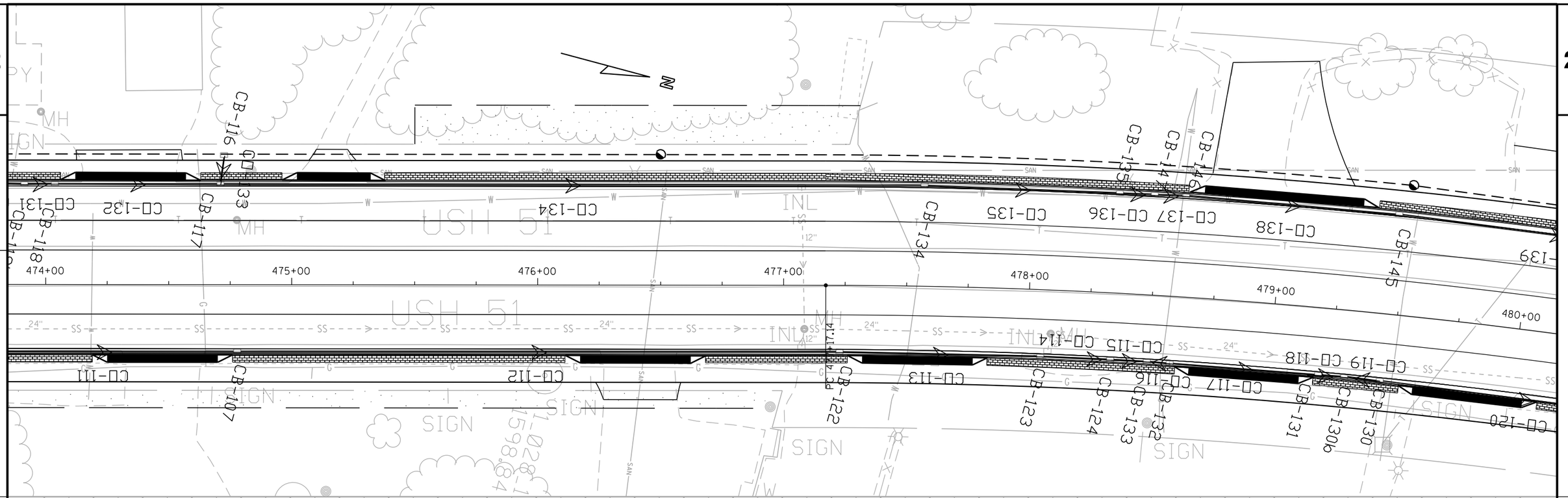
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 468+00 - 474+00 LT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022508_ss_1.dgn
PLOT DATE : 13-DEC-2012 20:06
PLOT BY : dotftm
PLOT NAME :
PLOT SCALE : 40.000373:1
WISDOT/CADDS SHEET 410


SIGN
N
CANOPY
MH
SIGN
INL
SIGN
SIGN
SIGN

2


N
CB-116
CB-117
CB-118
CB-131
CB-132
CB-133
CB-134
CB-135
CB-145
CB-147
CB-107
CB-111
CB-112
CB-113
CB-114
CB-115
CB-116
CB-117
CB-119
CB-120
CB-122
CB-123
CB-124
CB-130
CB-131
CB-132
CB-133
CB-139
CD-131
CD-132
CD-133
CD-134
CD-135
CD-136
CD-137
CD-138
CD-139
CD-111
CD-112
CD-113
CD-114
CD-115
CD-116
CD-117
CD-118
CD-119
CD-120
474+00
475+00
476+00
477+00
478+00
479+00
480+00
USH 51
SIGN
MH
INL
SAN
24" SS
12" W
24" SS
12" W
24" SS
12" W


N
CB-116
CB-117
CB-118
CB-119
CB-107
CB-122
CB-123
CB-124
CB-132
CB-133
CB-131
CB-130b
CB-130
CB-134
CB-135
CB-145
CB-139
CD-111
CD-112
CD-113
CD-114
CD-115
CD-116
CD-117
CD-118
CD-119
CD-120
CD-131
CD-132
CD-133
CD-134
CD-135
CD-136
CD-137
CD-138
474+00
475+00
476+00
477+00
478+00
479+00
480+00
USH 51
SIGN
MH
INL
SAN
24" SS
12" W
24" SS
12" W
24" SS
12" W

2

CB-136
Rim: 1,604.28'
Invert: 1,599.33'

CB-137
Rim: 1,602.45'
Invert: 1,596.83'

CB-138
Rim: 1,601.22'
Invert: 1,595.59'

CB-139b
Rim: 1,599.19'
Invert: 1,593.32'

CB-139
Rim: 1,599.34'
Invert: 1,593.54'

CB-140
Rim: 1,600.00'
Invert: 1,594.26'

CB-141
Rim: 1,600.38'
Invert: 1,594.50'

CB-142
Rim: 1,600.26'
Invert: 1,594.98'

CB-143b
Rim: 1,597.67'
Invert: 1,589.75'

CB-143
Rim: 1,597.77'
Invert: 1,589.72'

CB-144
Rim: 1,596.74'
Invert: 1,591.74'

CB-129
Rim: 1,597.75'
Invert: 1,589.58'

155 15" SSPRC 117' @ -1.5 %

154 24" SSPRC 82' @ -1.5 %

153 24" SSPRC 137' @ -1.5 %

152 24" SSPRC 15' @ -1.5 %

151 18" SSPRC 44' @ 1.0 %

150 18" SSPRC 24' @ 1.0 %

149 18" SSPRC 48' @ 1.0 %

148 24" SSPRC 173' @ -1.5 %

142 18" SSPRC 26' @ -2.0 %

141 36" SSPRC 68' @ -0.2 %

140 30" SSPRC 14' @ -0.2 %

139 30" SSPRC 130' @ -0.2 %

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 480+00 - 486+00 LT	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\022510_ss_1.dgn PLOT DATE : 13-DEC-2012 20:06 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40.000373:1 WISDOT/CADDS SHEET 410

2

N

CB-144 CD-142 CD-149 CD-150 CD-151 CD-153 CD-154 CD-155

CD-139 CD-140 CD-148 CD-152 CB-139 CB-139b CB-138 CB-137

CB-143 CD-141 482+00 483+00 484+00 485+00 486+00

PI 10+00.00

480+00 481+00

CD-145 CD-146 CD-147

CONNECT EXISTING 12 INCH SS PIPE TO EXISTING INLET

CONNECT EXISTING INLET TO CATCH BASIN 126 18 INCH SSPRC

CD-121 CD-120 CD-144 CB-129 CB-128 CB-127 CB-126 CB-125

MH-100

PLACE COVER PLATES TEMPORARY ON CB-125 CB-126 CB-127

SIGN

CB-125
Rim: 1,604.09 ft
Invert: 1,599.11 ft

CB-126
Rim: 1,601.99 ft
Invert: ~~1,596.36 ft~~

CB-127
Rim: 1,600.95 ft
Invert: 1,595.31 ft

CB-128
Rim: 1,599.54 ft
Invert: 1,593.52 ft

CB-129
Rim: 1,597.75 ft
Invert: 1,589.58 ft

MH-100
Rim: ~~1,597.75~~ ft
Invert: 1,589.47 ft

OF-100
Rim: 1,594.00 ft
Invert: 1,589.00 ft

147 15" SSRCP 133' @ -1.5 %

146 24" SSRCP 70' @ -1.5 %

145 24" SSRCP 119' @ -1.5 %

144 24" SSRCP 119' @ -1.7 %

121 48" SSRCPHE 70' @ -0.2 %

48" SSRCP 204' @ -0.2 %

120 45" x 29" SSRCPHE 149' @ 0.2 %

143

1604 1602 1600 1598 1596 1594 1592

598.33 597.92 598.04 598.17 598.33 598.50 598.71 598.93 599.18 599.44 599.70 599.96 600.22 600.49 600.79 601.11 601.45 601.82 602.22 602.62 603.03 603.44 603.84 604.25 604.66 605.06

480 480+25 480+50 480+75 481 481+25 481+50 481+75 482 482+25 482+50 482+75 483 483+25 483+50 483+75 484 484+25 484+50 484+75 485 485+25 485+50 485+75 486

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 480+00 - 486+00 RT	SHEET E



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 481+75 OUTFALL OF-100	SHEET	E

2

3
STOP
R1-1
30" X 30"

2
ONLY ONLY ONLY ONLY
R3-8V
72" X 30"

5
W3-3
36" X 36"

7
R3-2
24" X 24"

428+00
427+00
429+00
426+00
430+00
431+00

1
ONLY ONLY ONLY ONLY
R3-8V
72" X 30"

4
ONE WAY
R6-2R
24" X 30"

6
W3-3
36" X 36"

8
ONE WAY
R6-2R
24" X 30"
EXISTING SIGN MOUNTED ON LIGHT POLE

9
SPEED LIMIT 25
R2-1
24" X 30"
EXISTING SIGN MOUNTED ON LIGHT POLE

PT 430+00.88

11
ONE WAY
R6-2L
24" X 30"

PC 431+24.48

10
R3-1
24" X 24"
EXISTING SIGN MOUNTED ON LIGHT POLE

BEGIN PROJECT 1174-10-70
START MILL AND OVERLAY
STA. 425+61
X = 187,806.639013
Y = 249,993.493767

PC 425+71.96
PT 425+41.85

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 63 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\023201_ps.dgn PLOT DATE : 14-DEC-2012 14:23 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

END MILL AND OVERLAY
STA. 431+96

START RECONSTRUCTION
STAGE 1
STA. 436+36

11 ONE WAY R6-2L 24" X 30"

19 SOUTH M3-3 24" X 12" / 51 M1-4 24" X 24" / M6-2 21" X 21" / J3-1 24" X 57"

20 SPEED LIMIT 25 R2-1 24" X 30"

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

EXISTING SIGN MOUNTED ON LIGHT POLE

14 R3-2 24" X 24"

17 R4-7 24" X 30"

18 CENTER LANE ONLY R3-9B 24" X 36"

12 YIELD R1-2 36" X 31"

13 R3-1 24" X 24"

15 DO NOT ENTER R5-1 30" X 30"

16 DO NOT ENTER R5-1 30" X 30"

EXISTING SIGN MOUNTED ON LIGHT POLE

PC 431+74.28

PT 435+63.94

PI 436+35.00

PI 434+88.11

431+00 432+00 433+00 434+00 435+00 436+00 437+00 438+00

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 64 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\023202_ps.dgn PLOT DATE : 14-DEC-2012 14:23 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

N

PI 442+96.37

439+00

440+00

441+00

442+00

443+00

444+00

438+00

USH 51

PC 438+78

SPEED LIMIT 30
R2-1
24" X 30"
21
EXISTING SIGN MOUNTED ON LIGHT POLE

END
M4-6
24" X 12"
CENTER LANE ONLY
R3-9B
24" X 36"
22
23

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

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 65	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\023203_ps.dgn PLOT DATE : 14-DEC-2012 14:23 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

25

SPEED LIMIT 30
R2-1
24" X 30"

END
M4-6
24" X 12"

26

CENTER LANE ONLY
R3-9B
24" X 36"

27

444+00
445+00
446+00
447+00
448+00
449+00
450+00

RT 449+27.83

RT 447+42.62

MH

INL

SAN M

12"

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

CENTER LANE ONLY
R3-9B
24" X 36"

28

EXISTING SIGN MOUNTED ON LIGHT POLE

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 66	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\023204_ps.dgn PLOT DATE : 21-DEC-2012 11:23 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

END
M4-6
24" X 12"
26

CENTER LANE ONLY
R3-9B
24" X 36"
27

29

SPEED LIMIT 30
R2-1
24" X 30"

USH 51

450+00
451+00
452+00
453+00
454+00
455+00
456+00

PI 452+31.81

455+29.44

30

W11-2
30" X 30"
200' FROM OVERHEAD SIGNAL

AHEAD
W16-9P
24" X 8"
31

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 67 E

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

32 — STOP R1-1 30" X 30"

32A — W5-56 18" X 18"

32B — NO MOTOR VEHICLES R5-3 24" X 24"

33 — CENTER LANE ONLY R3-9B 24" X 36"

39 — W11-2 30" X 30"

W16-7L 24" X 12"

38

37 — CROSSWALK STOP ON RED R10-23 24" X 30"

456+00

PC 456+14.30

457+00

458+00

CROSSWALK STOP ON RED R10-23 24" X 30"

CROSSWALK STOP ON RED R10-23 24" X 30"

PI 10+00.00

10+00

459+00

460+00

461+00

462+00

PT 459+78.06

37A — STOP HERE ON RED R10-6 24" X 36"

200' FROM OVERHEAD SIGNAL

42 — W11-2 30" X 30"

43 — AHEAD W16-9P 24" X 8"

9+00

New Huber

N

W

SIGN

SAN

MH

INL

SS

T

G

W

12"

18"

LAKEVIEW DR

USH 51

STOP HERE ON RED R10-6 24" X 36"

36A

W11-2 30" X 30"

W16-7L 24" X 12"

35

W11-2 30" X 30"

W16-7L 24" X 12"

34

PI 10+49.66

EXISTING SIGN MOUNTED ON LIGHT POLE

CENTER LANE ONLY R3-9B 24" X 36"

40

PC 11+49.50

11+00 Rogers Dr.

STOP R1-1 30" X 30"

41

STOP R1-1 30" X 30"

44

Huber Ln.

11+00

END CONSTRUCTION

STA. 11+50 Huber Dr.

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 68 E

2 N 2

LAKEVIEW DR

USH 51

SIGN

47
SPEED LIMIT 30
R2-1
24" X 30"

45
SPEED LIMIT 30
R2-1
24" X 30"

46
CENTER LANE ONLY
R3-9B
24" X 36"

462+00 463+00 464+00 465+00 466+00 467+00 468+00

464+82.46

467+92.66

PI 466+39.81

Building Removed by Owner 2010

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 69 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\023207_ps.dgn PLOT DATE : 14-DEC-2012 14:24 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

48
CENTER LANE ONLY
R3-9B
24" X 36"

SIGN

STA 470+00
END STAGE 1
BEGIN STAGE 2

PT 467+92.66

468+00 469+00 470+00 471+00 472+00 473+00 474+00

ANT.
FILLER CAPS
CANOPY
MH
INL
SIGN

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 70 E

2

2

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

50
SPEED LIMIT 30
R2-1
24" X 30"
●■▲

SPEED LIMIT 30
R2-1
24" X 30"
●■▲
49

USH 51

474+00 475+00 476+00 477+00 478+00 479+00 480+00

PC 477+17.14

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 71 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\023209_ps.dgn PLOT DATE : 14-DEC-2012 14:24 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

N

SIGN

SIGN

MH

INL

SIGN

MH

W

SIGN

INL

MH

SIGN

INL

MH

USH 51

486+00

487+00

488+00

489+00

490+00

491+00

492+00

END PROJECT 1174-10-70
STAGE 2
STA. 487+50

INL

MH

MH

INL

USH 51

SIGN

SIGN

SIGN

SIGN

CANOPY

SIGN

SIGN

G.P.

FILLER CAPS

SIGN

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET 72	E

- REMOVING SIGNS
- REMOVING SMALL SIGN SUPPORTS
- SIGNS REFLECTIVE TYPE II
- EXISTING SIGNS
- PROPOSED SIGN (SINGLE POST)
- PROPOSED SIGN (DOUBLE POST)

1_025_8
1595.53
1_026_12
1595.65
1_026
1_026_2
1597.48
1_025_86
1587.96
1_025_83
1591.28
1_025_82
1584.67

32D
W1-2L
30" X 30"
END CONSTRUCTION
New HUber
32C
DEAD END
W14-1
30" X 30"
N
New HUber
8+00
9+00
10+00
11+00
P17+34.93
P10+00.00
HIGHWAY EASEMENT
462
460
Huber Ln.
Doc. No. 226221
EASEMENT
42
200' FROM OVERHEAD SIGNAL
W11-2
30" X 30"
43
AHEAD
W16-9P
24" X 8"
PT 459+78.06
STOP
R1-1
30" X 30"
44
END CONSTRUCTION
STA. 11+50 Huber Dr.
SIGN
MH
INL
SAN
W
T
G
SS

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING SHEET	SHEET E

MONOTUBE STRUCTURE NUMBERS	
BASE #	STRUCTURE #
SB 1	S-43-33(1)
SB 3	S-43-33(2)

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL STANDARD ALUMINUM 3.5 FEET WITH PUSH BUTTON
- (XX) SIGNAL HEAD AND MONOTUBE ARM
- PEDESTRIAN HEAD
- TYPE 12 BASE AND POLE
- PULL BOX, 24" X 42"
- XX BEACON HEAD NUMBER
- PEDESTRIAN HYBRID BEACON
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

- SIGN (SEE PERMANENT SIGNING PLAN)
- (R) RED CIRCLE INDICATOR
- (Y) YELLOW CIRCLE INDICATOR

N

LAKEVIEW DRIVE

CENTER LANE ONLY
R3-9B
24" X 36"

W11-2
30" X 30"

W16-7L
24" X 12"

STOP HERE ON RED
R10-6
24" X 36"

CROSSWALK
STOP ON RED
R10-23
24" X 30"

CROSSWALK
STOP ON RED
R10-23
24" X 30"

STOP HERE ON RED
R10-6
24" X 36"

W11-2
30" X 30"

W16-7L
24" X 12"

PB1 CB1 PB2 SB1 SB2 PB3 SB3 SB4

41 21 22 24 23 42

50' 35' 50' 35'

2-3"

R/W TLE SAN SS W T G

PC 456+14.30

PI 457+96.80

456+00 457+00 458+00

USH 51

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
3. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM. BOND ALL METAL PULL BOXES AND ASSOCIATED COVERS THAT CONTAIN CONDUCTORS CARRYING 50 VOLTS OR MORE.

TRAFFIC CONTROL SIGNAL
USH 51 & ROGERS DRIVE
CITY OF MINOCQUA
ONEIDA COUNTY

HYBRID BEACON 43-01 CONTROLLER TYPE:

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date_____ REGION TRAFFIC ENGINEER

APPROVED
Date_____ STATE TRAFFIC ENGINEER

REGION CONTACT:
DESIGNED BY: TAD, INC.
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	HAWK STA 457+34	SHEET 74 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\Proposed HAWK 120612 - Copy.dgn PLOT DATE : 13-DEC-2012 20:58 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 20:1

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

	HEAD NUMBERS	Ø1 NOT USED R/W	Ø1 CLEAR TO **	Ø1 CLEAR TO	Ø2 ⇨⇦ R/W	Ø2 CLEAR TO **	Ø2 CLEAR TO	Ø3 NOT USED R/W	Ø3 CLEAR TO **	Ø3 CLEAR TO	Ø4 ⇩ R/W	Ø4 CLEAR TO **	Ø4 CLEAR TO	FLASH
Ø2	21,22,23,24				-	FY	Y				RR	FR	-	Y
Ø4	41,42				D	D	D				*	FD	D	

N

CONTROLLER LOGIC

PHASE NUMBER	PHASE RECALL	PHASE ACTIVE
2	MIN.	YES
4		YES

RING 1

BARRIER

- = DARK SIGNAL
FY = FLASHING YELLOW
Y = STEADY YELLOW
RR = STEADY RED
FR = FLASHING RED
D = DON'T WALK
FD = FLASHING DON'T WALK

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
2	NONE	4
4	NONE	2

TYPE OF INTERCONNECT COMMUNICATION	
NONE	x
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF LIGHTING	
BY OTHER AGENCY	x
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE DOT LIGHTING CABINET	

USH 51 & ROGERS DRIVE
CITY OF MINOCQUA
ONEIDA COUNTY

HYBRID BEACON NO. 43-01

CONTROLLER TYPE:

DATE:

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	SEQUENCE OF OPERATIONS - PEDESTRIAN HYBRID BEACON	SHEET 75	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\Proposed HAWK 120612 - Copy.dgn PLOT DATE : 13-DEC-2012 20:58 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 20.000226:1

WISDOT/CADDS SHEET 42

PROJECT ID:	1174-10-70
INTERSECTION:	USH 51 AT ROGERS DRIVE

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB1 TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR								PED BUTTON	OTHER
					RED1	RED2	YELLOW	<RED	<YELLOW>	<GREEN>	D/WALK	WALK		
SB1		12	21		RED	ORG	GRN							
			22		RED/BLK	ORG/BLK	GRN/BLK							
			41								BLK	BLU		
SB2			B										WHT/BLK	
SB3		12	23		RED	ORG	GRN							
			24		RED/BLK	ORG/BLK	GRN/BLK							
			42								BLK	BLU		
SB4			B										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB1	PB2
SB3	PB3

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 18" 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.

USH 51 & ROGERS DRIVE
CITY OF MINOCQUA
ONEIDA COUNTY

HYBRID BEACON NO. 43-01

CONTROLLER TYPE:

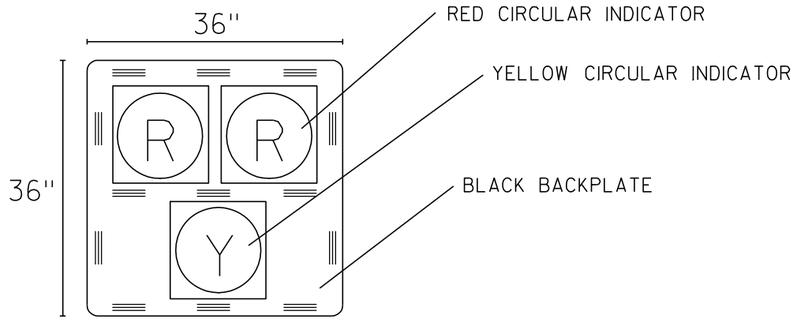
DATE:

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CABLE ROUTING - PEDESTRIAN HYBRID BEACON	SHEET 76	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\Proposed HAWK 120612 - Copy.dgn PLOT DATE : 13-DEC-2012 20:58 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 20.00004:1

WISDOT/CADDS SHEET 42

2



NOTE: 5" BORDER WITH ½" REINFORCING BENDS ON TOP, SIDES AND BOTTOM

BEACON BACKPLATE DETAIL

2

EPOXY 8-INCH (WHITE)

EPOXY 4-INCH (WHITE)

EPOXY 18-INCH (WHITE)

DIAGONAL EPOXY 12-INCH (WHITE)

EPOXY 8 INCH (WHITE)

BEGIN PROJECT 1174-10-70
START MILL AND OVERLAY

STA. 425+61
X = 187,806.639013
Y = 249,993.493767

EPOXY 4-INCH (WHITE)

DIAGONAL EPOXY 12-INCH (WHITE)

EPOXY 4-INCH (WHITE)

EPOXY 8-INCH (WHITE)

EPOXY 4-INCH (WHITE)

DIAGONAL EPOXY 12-INCH (WHITE)

EPOXY 8-INCH (WHITE)

EPOXY 8-INCH (WHITE)

PAVEMENT MARKING LEGEND

↑	ARROWS EPOXY TYPE 1 (WHITE)
↱ ↰	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 78	E

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱ ↱	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

EPOXY 4-INCH (WHITE)

END MILL AND OVERLAY
STA. 431+96

DIAGONAL EPOXY 12-INCH (WHITE)

DIAGONAL EPOXY 12-INCH (WHITE)

EPOXY 6-INCH (WHITE)

EPOXY 4-INCH (WHITE)

START RECONSTRUCTION STAGE 1
STA. 436+36

EPOXY 4-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

PC 431+14.48

PT 435+63.34

PL436+35.00

PL434+88.11

431+00 432+00 433+00 434+00 435+00 436+00 437+00 438+00

SIGN CANOPY PLAYGROUND TENNIS COURTS INL MH W TU/C WATER TOWER RUINS

2

2

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱ ↰	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

N

EPOXY 4-INCH (YELLOW)

ISLAND NOSE EPOXY (YELLOW)

DIAGONAL EPOXY 12-INCH (YELLOW)

PI 442+96.37

USH 51

INL

MH

SIGN

1-024-18 1588.45

1-023-95 1583.93

1-023-94 1584.11

1-023-93 1584.30

1-023-92 1586.99

438+00

439+00

440+00

441+00

442+00

443+00

444+00

PC 438+28.78

EPOXY 4-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

DIAGONAL EPOXY 12-INCH (YELLOW)

ISLAND NOSE EPOXY (YELLOW)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 80	E

2

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱ ↰	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

N

EPOXY 4-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

DIAGONAL EPOXY 12-INCH (YELLOW)

ISLAND NOSE EPOXY (YELLOW)

444+00

445+00

446+00

447+00

448+00

449+

449+27.83

450+00

PT 447+42.62

MH

INL

INL

INL

1-023-93 1586.99

1-023-92 1586.28

1-024-84 1583.98

1-024-85 1584.20

T310 1589.510

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 81	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\024504_pm.dgn PLOT DATE : 14-DEC-2012 14:35 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

N

EPOXY 4-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

USH 51

450+00

451+00

452+00

453+00

454+00

455+00

455+29.44

456+00

PI 452+31.81

MH

INL

SIGN

W

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 82	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\024505_pm.dgn PLOT DATE : 14-DEC-2012 14:35 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

STOP LINE EPOXY 18-INCH (WHITE)

CROSSWALK EPOXY 6-INCH (WHITE)

EPOXY 4-INCH (WHITE)

STOP LINE EPOXY 18-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

STOP LINE EPOXY 18-INCH (WHITE)

CROSSWALK EPOXY 6-INCH (WHITE)

DIAGONAL EPOXY 12-INCH (WHITE)

ISLAND NOSE EPOXY (YELLOW)

CROSSWALK EPOXY 6-INCH (WHITE)

CROSSWALK EPOXY 6-INCH (WHITE)

STOP LINE EPOXY 18-INCH (WHITE)

STOP LINE EPOXY 18-INCH (WHITE)

END CONSTRUCTION
STA. 11+50 Huber Dr.

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

LAKEVIEW DR

LAKEVIEW DRIVE

New HUber

New HUber

Rogers Dr.

ROGERS DRIVE

Huber Ln.

HUBER DRIVE

USH 51

USH 51

SIGN

INL

MH

W

PC 456+14.30

456+00

457+00

458+00

459+00

460+00

461+00

462+00

PI 10+00.00

10+00

9+00

PT 459+78.06

PI 457+96.00

11+00

PC 11+49.50

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 83 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\024506_pm.dgn PLOT DATE : 14-DEC-2012 14:35 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

LAKEVIEW DR

USH 51

SIGN

MH

INL

462+00

463+00

464+00

465+00

466+00

467+00

468+00

PC 464+82.46

467+92.81

PI 466+39.81

EPOXY 4-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

Building Removed by Owner 2010

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 84	E

2

2

PAVEMENT MARKING LEGEND

ARROWS EPOXY TYPE 1 (WHITE)

ARROWS EPOXY TYPE 2 (WHITE)

ONLY WORDS EPOXY (WHITE)

PT 467+92.66

STA 470+00
END STAGE 1
BEGIN STAGE 2

468+00 469+00 470+00 471+00 472+00 473+00 474+00

EPOXY 4-INCH (WHITE)

EPOXY 4-INCH (YELLOW)

SIGN
MH
INL
ANT.
FILLER CAPS
CANOPY

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 85	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\024508_pm.dgn PLOT DATE : 14-DEC-2012 14:36 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↩ ↱	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

ANT.

MH

IGN

MH

USH 51

INL

474+00

475+00

476+00

477+00

478+00

479+00

480+00

USH 51

INL MH

INL MH

PC 477+17.14

SIGN

SIGN

SIGN

SIGN

SIGN

SIGN

EPOXY 4-INCH
(WHITE)

EPOXY 4-INCH
(YELLOW)

W

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 86	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\024509_pm.dgn PLOT DATE : 14-DEC-2012 14:36 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

PAVEMENT MARKING LEGEND

ARROWS EPOXY TYPE 1 (WHITE)

ARROWS EPOXY TYPE 2 (WHITE)

ONLY WORDS EPOXY (WHITE)

END CONSTRUCTION
STA. 8+65.19 OLD HWY 70

STOP LINE EPOXY 18-INCH (WHITE)

CROSS WALK EPOXY 6-INCH (WHITE)

EPOXY 8-INCH (WHITE)

EPOXY 4-INCH (WHITE)

480+00 481+00 482+00 483+00 484+00 485+00 486+00

PI 10+66.39

OLD HIGHWAY 70

9+00

INL MH SIGN W USH

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 87	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\024510_pm.dgn PLOT DATE : 14-DEC-2012 14:36 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING LEGEND	
↑	ARROWS EPOXY TYPE 1 (WHITE)
↱ ↱	ARROWS EPOXY TYPE 2 (WHITE)
ONLY	WORDS EPOXY (WHITE)

EPOXY 4-INCH (YELLOW)

EPOXY 4-INCH (WHITE)

USH 51

486+00 487+00 488+00 489+00 490+00 491+00 492+00

END PROJECT 1174-10-70
STAGE 2
STA. 487+50

SIGN SIGN SIGN SIGN SIGN SIGN SIGN SIGN SIGN SIGN

MH MH MH MH MH MH MH MH

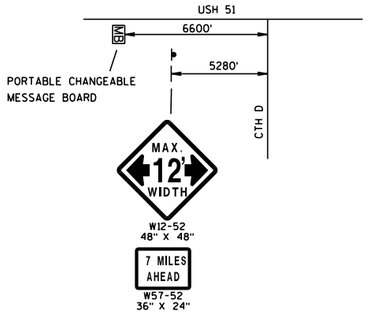
INL INL INL INL INL INL

W W W

CANOPY

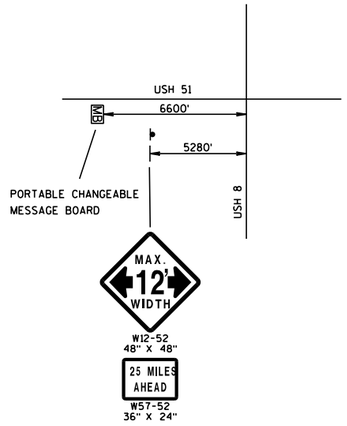
G.P. FILLER CAPS

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	PAVEMENT MARKING	SHEET 88	E



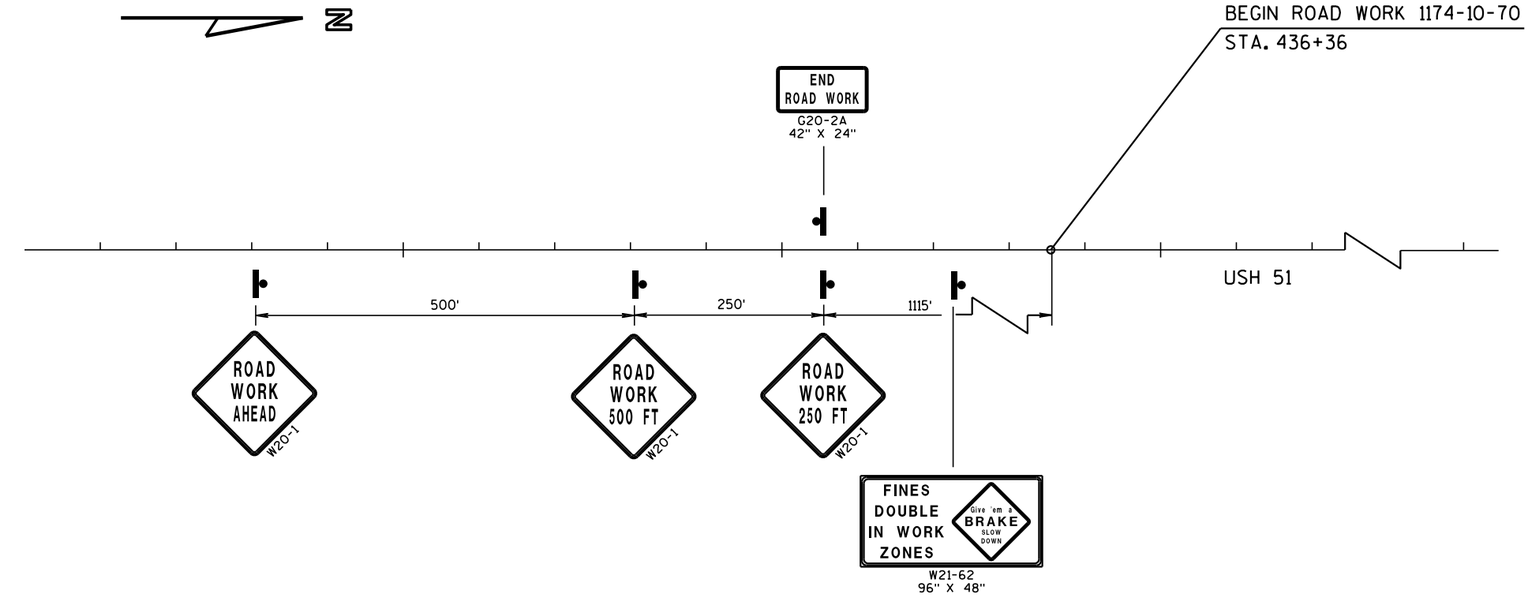
DETAIL PORTABLE CHANGEABLE MESSAGE BOARD

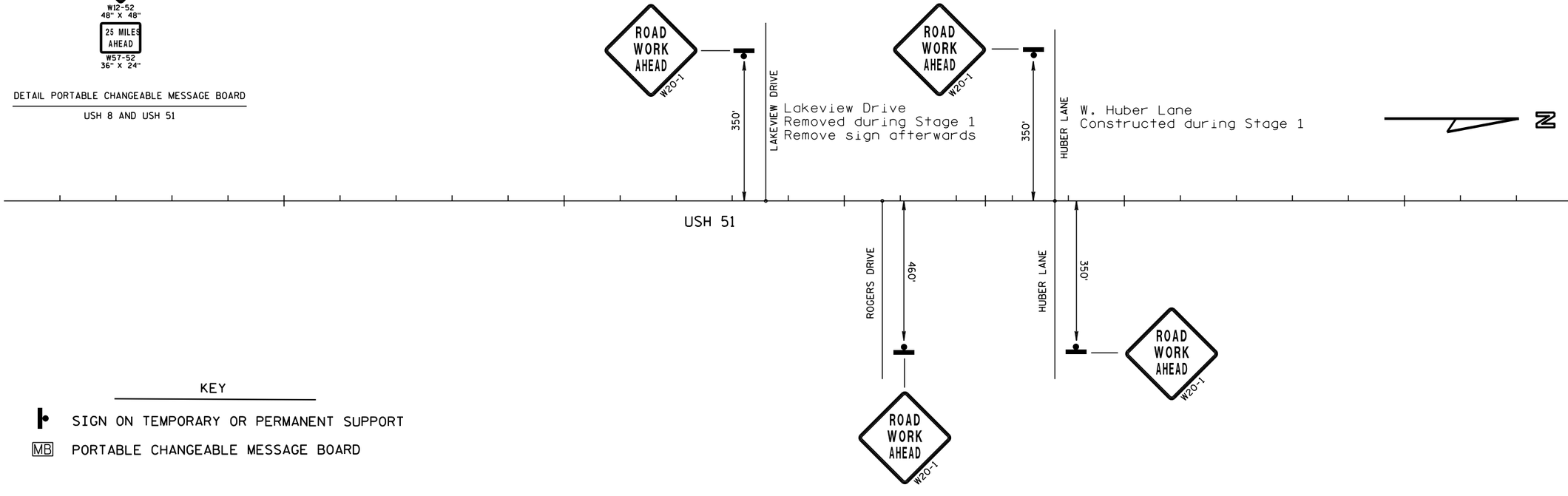
CTH D AND USH 51



DETAIL PORTABLE CHANGEABLE MESSAGE BOARD

USH 8 AND USH 51



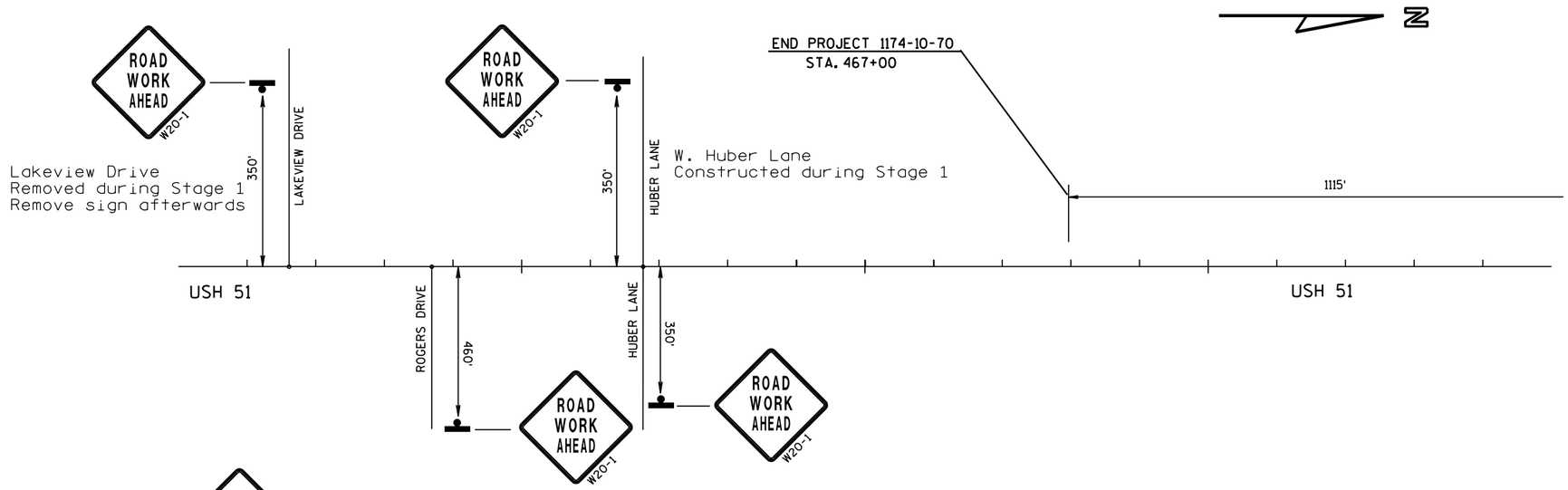


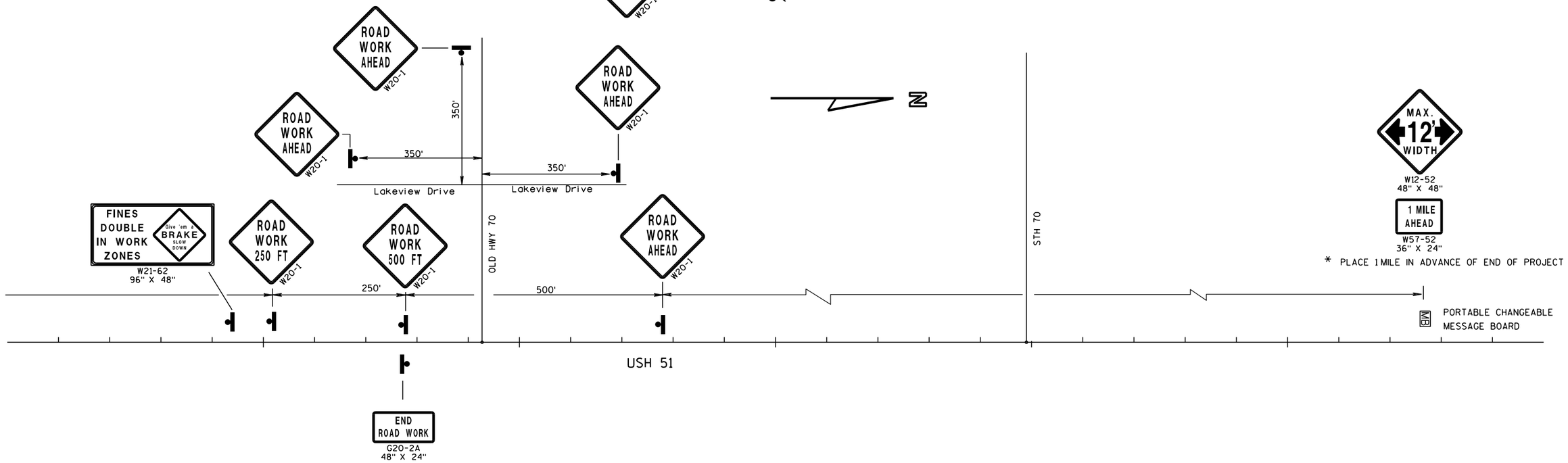
KEY

- SIGN ON TEMPORARY OR PERMANENT SUPPORT
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL STAGE 1	SHEET 1 OF 2	E

2





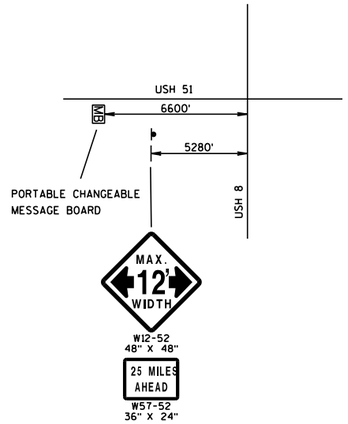
KEY

SIGN ON TEMPORARY OR PERMANENT SUPPORT

MB PORTABLE CHANGEABLE MESSAGE BOARD

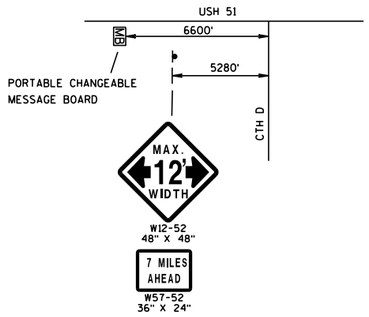
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL STAGE 1	SHEET 2 OF 2	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\BegEnd_Stage_1_TC_pt2.DGN PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 200:1



DETAIL PORTABLE CHANGEABLE MESSAGE BOARD

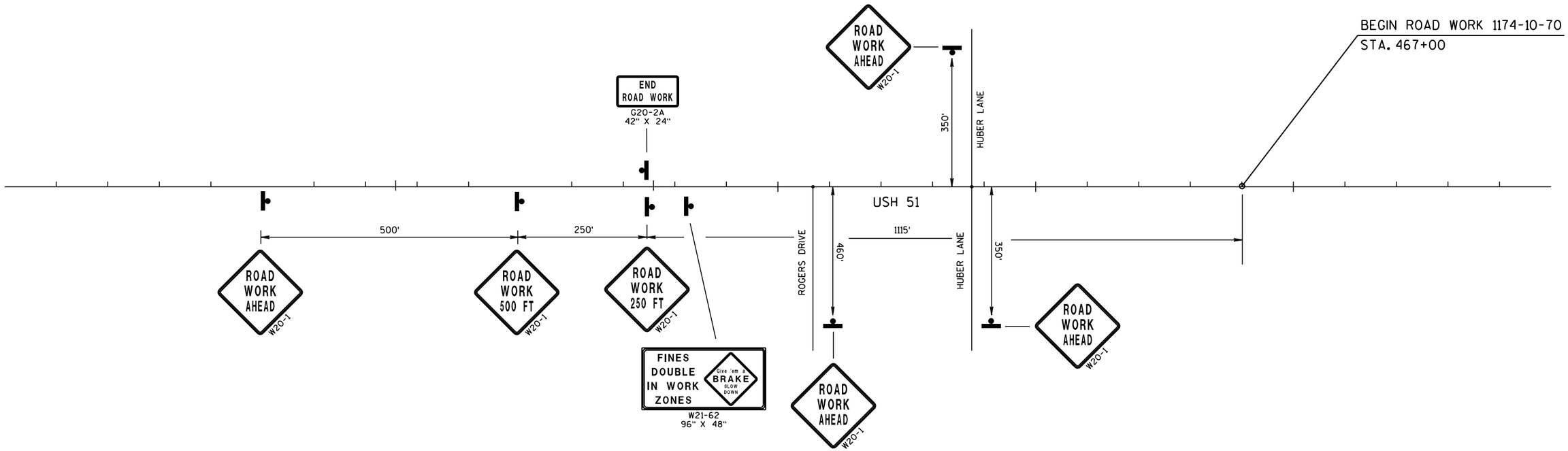
USH 8 AND USH 51



DETAIL PORTABLE CHANGEABLE MESSAGE BOARD

CTH D AND USH 51

N

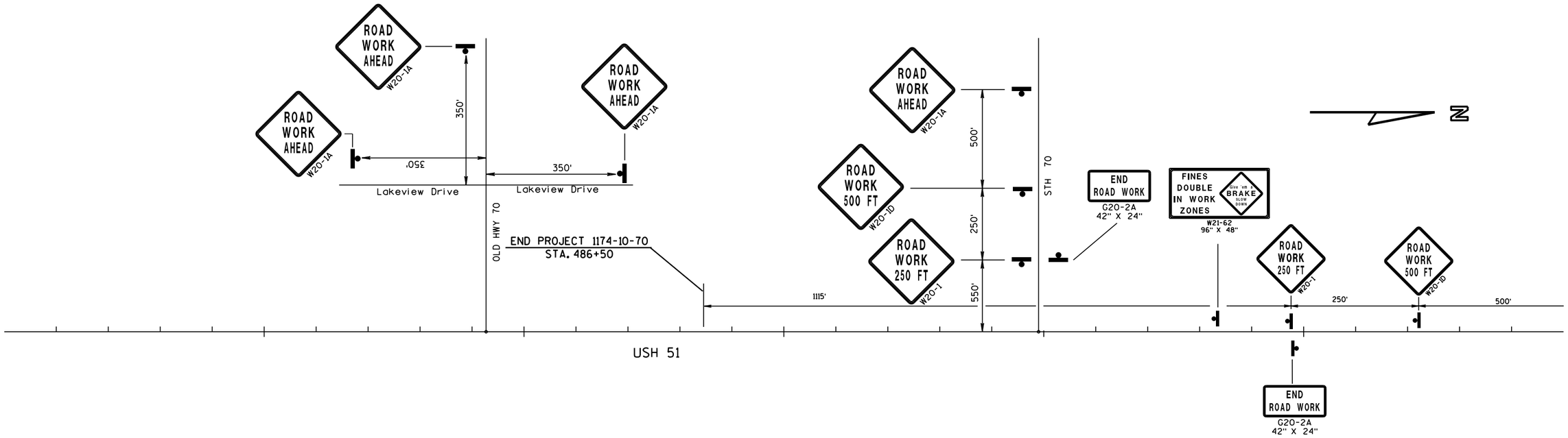


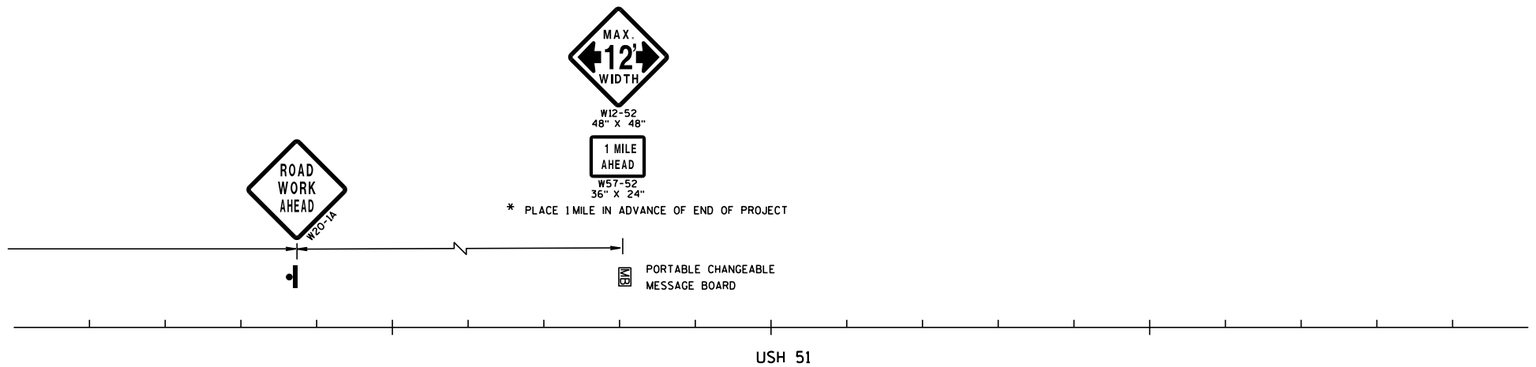
KEY

SIGN ON TEMPORARY OR PERMANENT SUPPORT

MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL STAGE 2	SHEET 1 OF 2	E





KEY

SIGN ON TEMPORARY OR PERMANENT SUPPORT

MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL STAGE 2	SHEET 2 OF 2	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\BegEnd_Stage_2_TC_pt2.DGN PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

2

N

2-Ø17-12
1601.87

2-Ø17-2
1599.97

426+00

427+00

428+00

429+00

430+00

431+00

432+00

P.I. = 428+45.20
Δ = 88°48'46.4"
D. = 21°00'00"
L. = 422.92'
R. = 272.84'
SE. = N.C.

BEGIN PROJECT 1174-10-70
START MILL AND OVERLAY

STA. 425+61
X = 187,806.639013
Y = 249,993.493767

2-Ø17-18
1602.78

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026001_s1_1.dgn PLOT DATE : 29-NOV-2012 18:37 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

434+00

LANE CLOSED
R11-2
48" X 30"

USH 51

W04-2R

LEGEND	
↕	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
⊢	SIGN ON TEMPORARY SUPPORT
⊙	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026002_s1_1.dgn PLOT DATE : 29-NOV-2012 18:37 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

CANOPY
PLAYGROUND
TENNIS COURT
PLAYGROUND
CANOPY
RUINS
T/C

432+00
433+00
434+00
435+00
435+00
436+00
436+00
437+00
438+00

W04-2R

LANE CLOSED
R11-2
48" X 30"

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026003_s1_1.dgn PLOT DATE : 29-NOV-2012 18:38 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

USH 51

USH 51

438+00

439+00

440+00

441+00

442+00

443+00

444+00

W04-2R

W06-3

DO NOT PASS
R4-1
36" X 48"

LANE CLOSED
R11-2(MOD)
48" X 30"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026004_s1_1.dgn PLOT DATE : 29-NOV-2012 18:38 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

LEGEND	
↕	TYPE III BARRICADE
↕	TYPE III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
●	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
⇶	FLASHING ARROW BOARD
⊢	SIGN ON PERMANENT SUPPORT
⊢	SIGN ON TEMPORARY SUPPORT
⊙	DELINEATOR FLEXIBLE/TUBULAR MARKER
▨	WORK AREA

N

W06-3

DO NOT PASS

R4-1
36" X 48"

444+00

445+00

446+00

447+00

448+00

449+00

450+00

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026005_s1_1.dgn PLOT DATE : 29-NOV-2012 18:38 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

W04-2L

LEFT LANE CLOSED AHEAD
W20-5

USH 51

450+00

451+00

452+00

453+00

454+00

455+00

456+00

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026006_s1_1.dgn PLOT DATE : 29-NOV-2012 18:38 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

LAKEVIEW DR

USH 51

USH 51

N

456+00 457+00 458+00 10+00 459+00 460+00 461+00 10+00 462+00

9+00

11+00

11+00

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026007_s1_1.dgn PLOT DATE : 29-NOV-2012 18:39 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LAKEVIEW DR

USH 51

462+00 463+00 464+00 465+00 466+00 467+00 468+00

USH 51

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026008_s1_1.dgn PLOT DATE : 29-NOV-2012 18:39 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

CANOPY

468+00 469+00 470+00 471+00 472+00 473+00 474+00

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026009_s1_1.dgn PLOT DATE : 29-NOV-2012 18:39 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

FINES DOUBLE IN WORK ZONES
Give 'em a BRAKE SLOW DOWN
W21-62
96" X 48"

ROAD WORK 250 FT
W20-1

USH 51

474+00 475+00 476+00 477+00 478+00 479+00 480+00

USH 51

END ROAD WORK
G20-2A
48" X 24"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026010_s1_1.dgn PLOT DATE : 29-NOV-2012 18:40 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.1 & 1.3	SHEET	E

2

N

2-Ø17-12
1601.87

2-Ø17-2
1599.97

2-Ø17-18
1602.78

426+00

427+00

428+00

429+00

430+00

431+00

432+00

P.I. = 428+45.20
Δ = 88°48'46.4"
D. = 21°00'00"
L. = 422.92'
R. = 272.84'
SE. = N.C.

BEGIN PROJECT 1174-10-70
START MILL AND OVERLAY

STA. 425+61
X = 187,806.639013
Y = 249,993.493767

END
ROAD WORK
G20-2A
48" X 24"

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

434+00

1-023-18
1604.63

1-023-2
1599.55

LEFT LANE CLOSED AHEAD
W20-5

USH 51

1-023-20
1603.94

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026102_s1_2.dgn PLOT DATE : 29-NOV-2012 18:41 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

END MILL AND OVERLAY
STA. 431+96

START RECONSTRUCTION
STAGE 1
STA. 436+36

TENNIS COURT
PLAYGROUND
PLAYGROUND
CANOPY
T/U/C
RUINS
USH 51
USH 51

432+00
433+00
434+00
435+00
435+00
436+00
436+00
437+00
438+00

W04-2L

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

USH 51

USH 51

438+00

439+00

440+00

441+00

442+00

443+00

444+00

W06-3

DO NOT PASS

R4-1

24" X 30"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026104_s1_2.dgn PLOT DATE : 29-NOV-2012 18:41 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

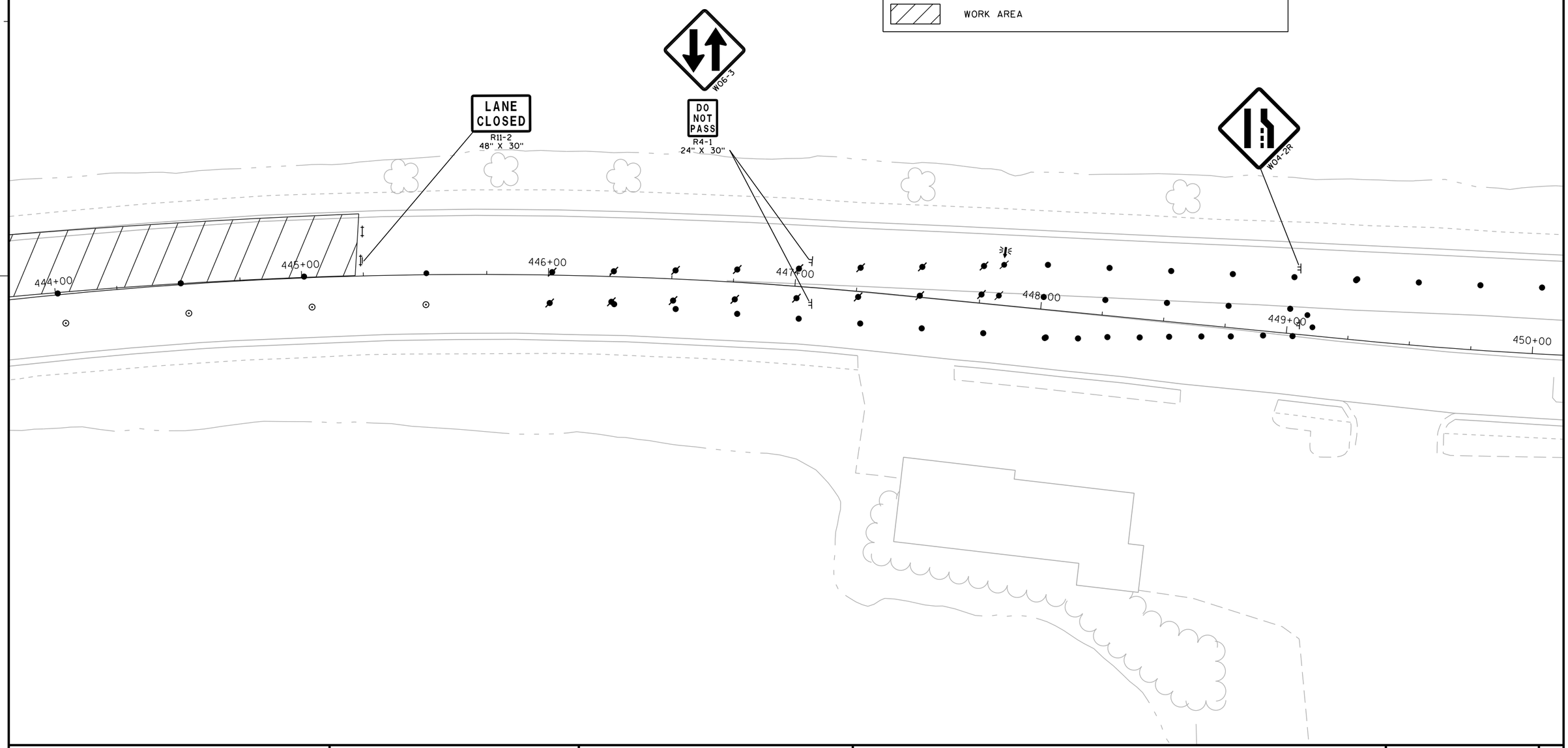
WISDOT/CADDS SHEET 42

2

2

LEGEND	
↕	TYPE III BARRICADE
↕	TYPE III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
●	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
⊙	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026105_s1_2.dgn PLOT DATE : 29-NOV-2012 18:42 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

W04-2R

USH 51

450+00

451+00

452+00

453+00

454+00

455+00

456+00

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026106_s1_2.dgn PLOT DATE : 29-NOV-2012 18:42 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LAKEVIEW DR

USH 51

USH 51

RIGHT LANE CLOSED AHEAD W20-5

456+00 457+00 458+00 459+00 460+00 461+00 462+00

10+00 11+00 9+00 10+00 11+00

N

LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026107_s1_2.dgn PLOT DATE : 29-NOV-2012 18:42 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LAKEVIEW DR

USH 51

462+00 463+00 464+00 465+00 466+00 467+00 468+00

USH 51

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026108_s1_2.dgn PLOT DATE : 29-NOV-2012 18:42 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

CANOPY

468+00 469+00 470+00 471+00 472+00 473+00 474+00

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

FINES DOUBLE IN WORK ZONES
Give 'em a BRAKE SLOW DOWN
W21-62
96" X 48"

ROAD WORK 250 FT
W20-1

USH 51

474+00 475+00 476+00 477+00 478+00 479+00 480+00

USH 51

END ROAD WORK
G20-2A
48" X 24"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026110_s1_2.dgn PLOT DATE : 29-NOV-2012 18:43 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



2

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.2 & 1.4	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026111_s1_2.dgn PLOT DATE : 29-NOV-2012 18:43 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

426+00

427+00

428+00

429+00

430+00

431+00

432+00

P.I. = 428+45.20
Δ = 88°48'46.4"
D. = 21°00'00"
L. = 422.92'
R. = 272.84'
SE. = N.C.

LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

CANOPY
PLAYGROUND
TENNIS COURT
PLAYGROUND
CANOPY
RUINS

432+00
433+00
434+00
435+00
435+00
436+00
436+00
437+00
438+00

LANE CLOSED
R11-2(MOD)
48" X 30"

N

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026202_s1_5.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

438+00

439+00

440+00

441+00

442+00

443+00

444+00

USH 51

USH 51

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026203_s1_5.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

444+00

445+00

446+00

447+00

448+00

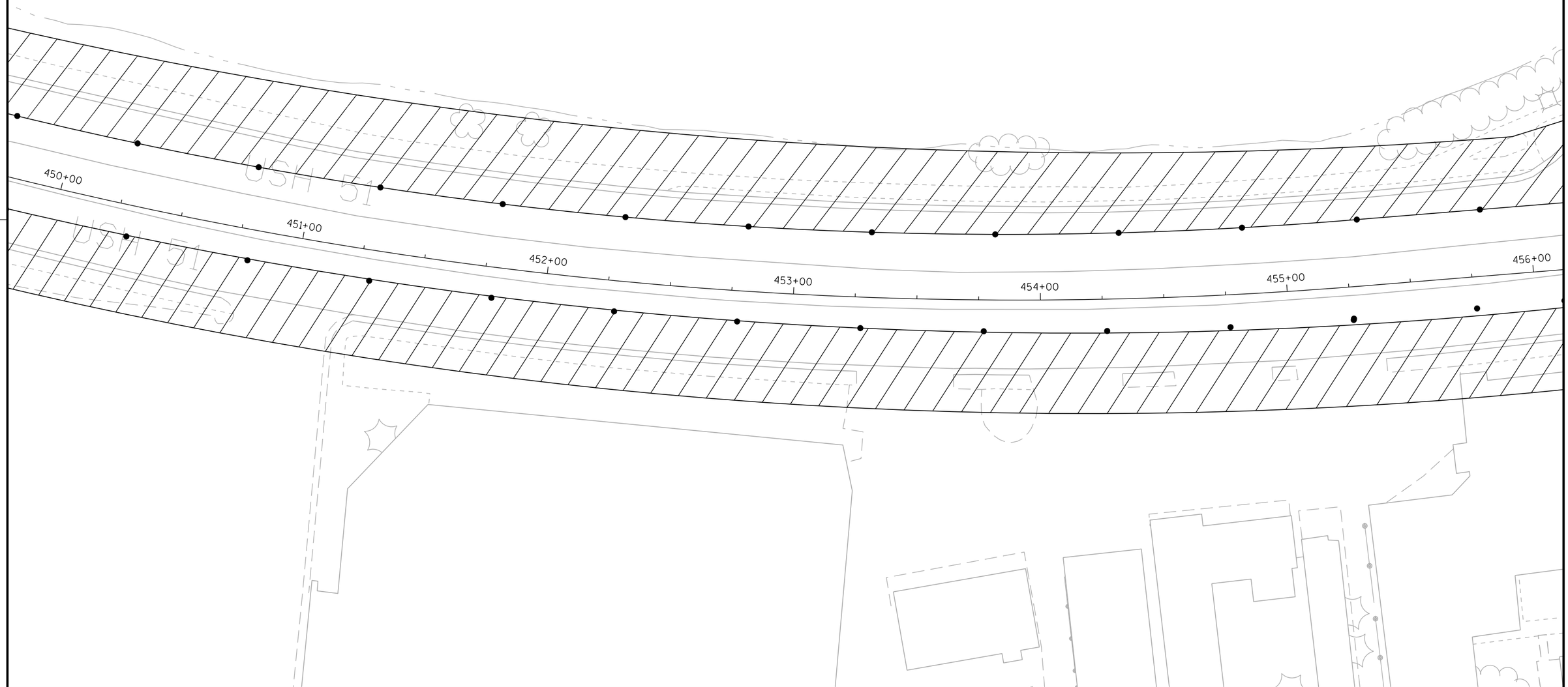
449+00

450+00

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

2

2

LAKEVIEW DR

USH 51

USH 51

N

9+00

10+00

11+00

12

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

RIGHT TURN LANE
R3-55R
24" X 30"

STOP
R1-1
30" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

RIGHT TURN LANE
R3-55R
24" X 30"

STOP
R1-1
30" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026206_s1_5.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LAKEVIEW DR

USH 51

USH 51

462+00

463+00

464+00

465+00

466+00

467+00

468+00

N

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
F	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026207_s1_5.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

LANE CLOSED
R11-2(MOD)
48" X 30"

CANOPY

468+00 469+00 470+00 471+00 472+00 473+00 474+00

N

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026208_s1_5.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

W04-2R

USH 51

474+00 475+00 476+00 477+00 478+00 479+00 480+00

USH 51

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET E

2



PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.5	SHEET	E

2

2

N

426+00

427+00

428+00

429+00

430+00

431+00

432+00

P.I. = 428+45.20
Δ = 88°48'46.4"
D. = 21°00'00"
L. = 422.92'
R. = 272.84'
SE. = N.C.

LEGEND

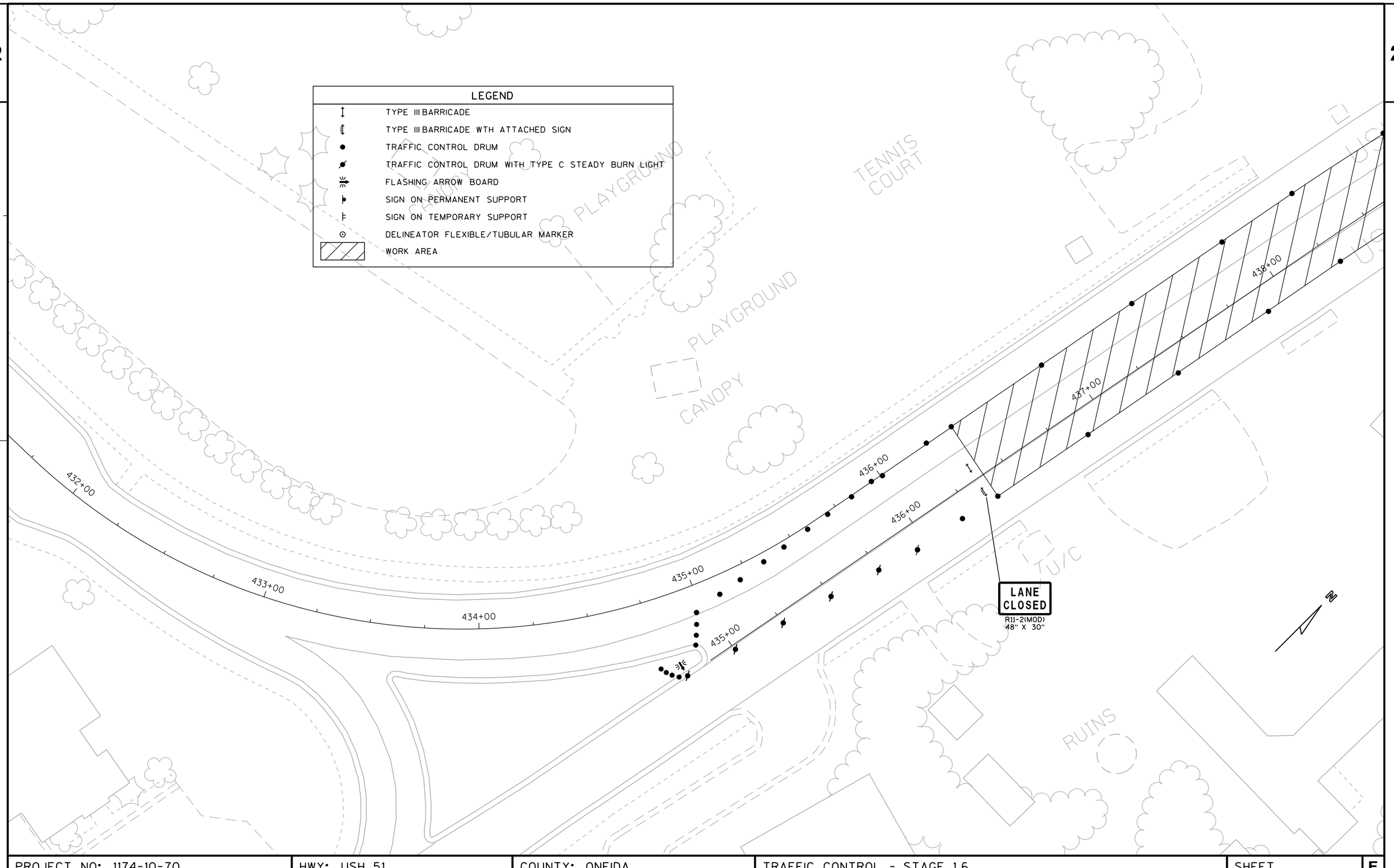
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026301_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

USH 51

USH 51

438+00

439+00

440+00

441+00

442+00

443+00

444+00

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026303_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

444+00

445+00

446+00

447+00

448+00

449+00

450+00

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026304_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

USH 51

INL

MH

W

SIGN

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026305_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LAKEVIEW DR

USH 51

USH 51

N

WQ1-6
48" X 24"

LEFT TURN LANE
R3-55L
24" X 30"

WQ1-6
48" X 24"

WQ1-6
48" X 24"

LEFT TURN LANE
R3-55L
24" X 30"

456+00
457+00
458+00
459+00
460+00
461+00
462+00
PI 10+00.00
PI 10+00.00
PC 11+49.50
9+00
10+00
11+00
11+00
12

LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026306_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LAKEVIEW DR

LEFT TURN LANE
R3-55L
24" X 30"

462+00
463+00
464+00
465+00
466+00
467+00
468+00

USH 51

USH 51

W01-6
48" X 24"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

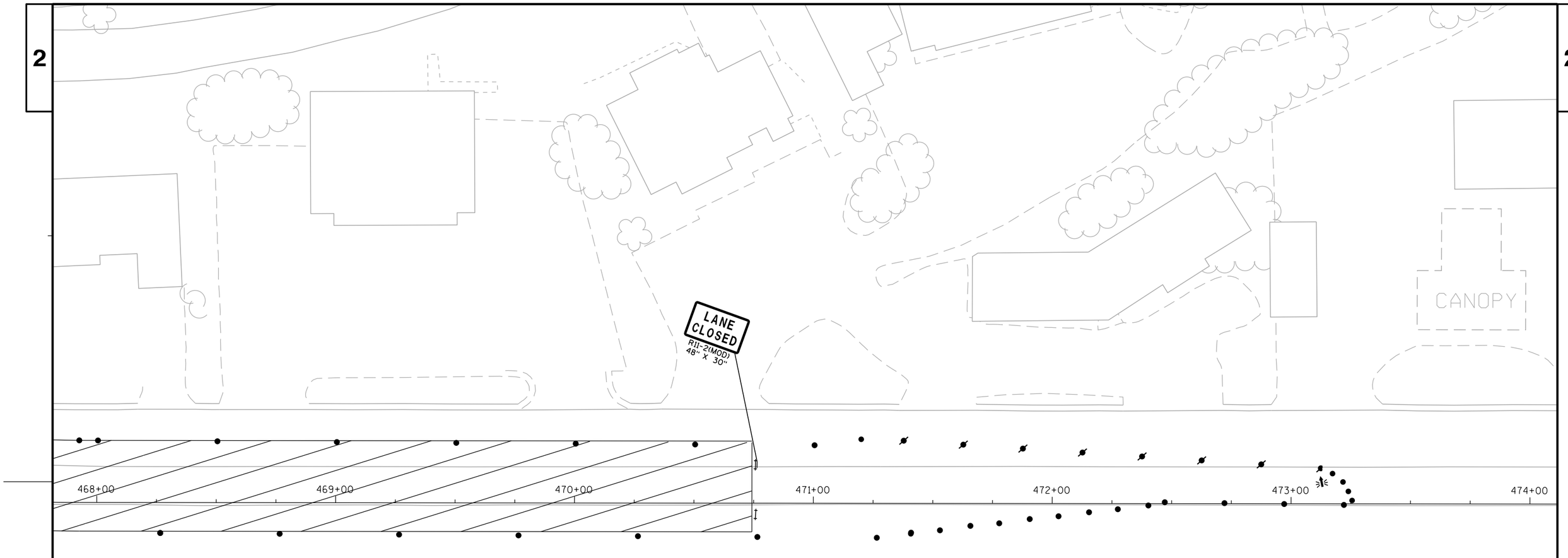
N

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026307_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026308_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

W04-2L

USH 51

474+00 475+00 476+00 477+00 478+00 479+00 480+00

USH 51

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026309_s1_6.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 1.6	SHEET	E

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

444+00
445+00
446+00
447+00
448+00
449+00
450+00

PT 447+42.62

PC 449+27.83

ROAD WORK AHEAD
W20-1

MH
INL
INL
INL

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026404_s2_1.dgn PLOT DATE : 29-NOV-2012 18:44 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

1024-81
1584.29

1025-2
1584.51

INL

1024-82
1584.31

1025-12
1590.19

INL

1024-83
1584.34

1025-81
1584.38

MH

USH 51

450+00

451+00

452+00

453+00

454+00

455+00

456+00

PT 455+29.44

END ROAD WORK
G20-2A
48" X 24"

USH 51

W

SIGN

MH

INL

W

PI 452+31.81

ROAD WORK 500 FT
W20-1

INL

SIGN

W

ROAD WORK 250 FT
W20-1

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026405_s2_1.dgn PLOT DATE : 29-NOV-2012 18:45 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

USH 51

PC 456+14.30

456+00 457+00 458+00 459+00 460+00 461+00 462+00

PI 10+00.00

10+00 9+00

PT 459+78.06

PI 457+96.80

11+00

PC 11+49.50

FINES DOUBLE IN WORK ZONES — Give 'em a BRAKE SLOW DOWN

W21-62 96" X 48"

RIGHT LANE CLOSED AHEAD W20-5

SIGN

INL MH W

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026406_s2_1.dgn PLOT DATE : 29-NOV-2012 18:45 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

LAKEVIEW DR

USH 51

MH INL

INL

SIGN

PC 464+82.46

462+00

463+00

464+00

465+00

466+00

467+00

PT 467+92.66

468+00

PI 466+39.81

W04-2R

LANE CLOSED
R11-2(MOD)
48" X 30"

N

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026407_s2_1.dgn PLOT DATE : 29-NOV-2012 18:45 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

PT 467+92.66

468+00 469+00 470+00 471+00 472+00 473+00 474+00

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026408_s2_1.dgn PLOT DATE : 29-NOV-2012 18:45 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

474+00 475+00 476+00 477+00 478+00 479+00 480+00

PC 477+17.14

ANT.

MH

USH 51

INL

SIGN

W

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

LANE CLOSED
R11-2(MOD)
48" X 30"

STOP
R1-1
30" X 30"

RIGHT TURN LANE
R3-55R
24" X 30"

N

9+00

480+00 481+00 PI 10+00.00 482+00 483+00 484+00 485+00 486+00

INL MH SIGN W USH

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026410_s2_1.dgn PLOT DATE : 29-NOV-2012 18:57 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

LANE CLOSED
R11-2(MOD)
48" X 30"

W04-2R

N

486+00 487+00 488+00 489+00 490+00 491+00 492+00

USH 51

SIGN INL MH W CANOPY G.P. FILLER CAPS

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

RIGHT LANE CLOSED AHEAD
W20-5

FINES DOUBLE IN WORK ZONES
Give 'em BRAKE SLOW DOWN
W21-62
96" X 48"

ROAD WORK 250 FT
W20-1

END ROAD WORK
G20-2A
48" X 24"

492+00 493+00 494+00 495+00 496+00 497+00 498+00

PT 495+63.07

USH 51

SIGN INL MH

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

ROAD WORK 500 FT
W20-1

PC 501+88.71

498+00 499+00 500+00 501+00 502+00 503+00 504+00

USH 51

INL MH SIGN W

2

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026413_s2_1.dgn PLOT DATE : 29-NOV-2012 18:45 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

ROAD WORK AHEAD W20-1

PC 7+01.22

PT 7+71.35

PT 8+40.97

PC 9+09.04

PT 505+61.07

PT 509+32.39

7+00

8+00

9+00

10+00

504+00

505+00

506+00

507+00

508+00

509+00

510+00

USH 51

USH 51

CTH J

PLANT RD

CEMETERY

SIGN

MH

INL

1-031-1599.18

1-031-1607.14

1-031-1607.29

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026414_s2_1.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

N

RIGHT TURN LANE
R3-5bR
24" X 30"

STOP
R1-1
30" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

PI 6+83.27

PI 10+00.00

7+00 8+00 9+00

484+00 483+00 482+00 481+00

OLD HIGHWAY 70

ATHLETIC FIELD

SIGN

INL

WH

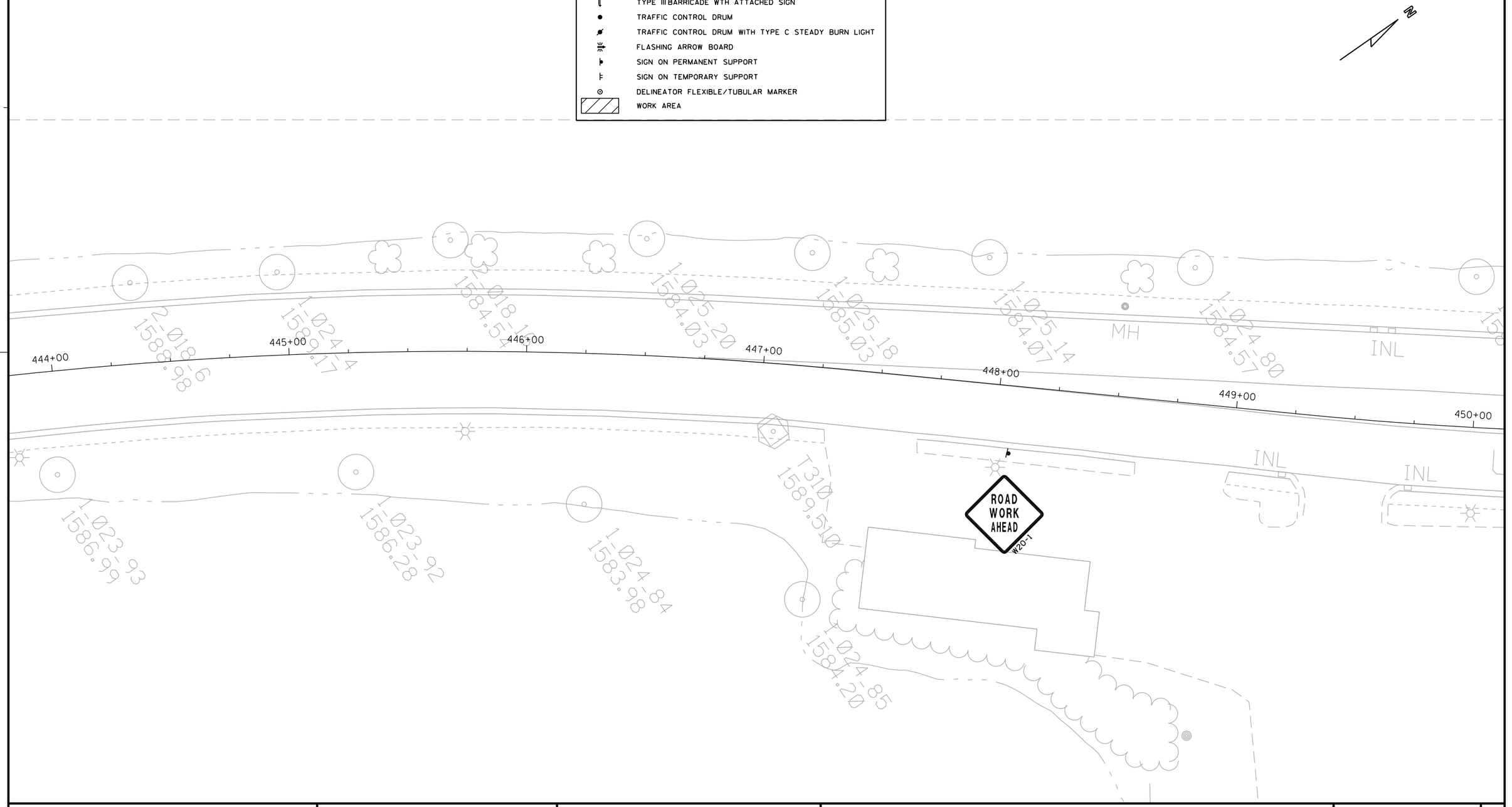
1594.52'

T307
1599.160'

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.1	SHEET	E

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026504_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
↕	TYPE III BARRICADE
↕	TYPE III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
●	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
⊢	SIGN ON PERMANENT SUPPORT
⊢	SIGN ON TEMPORARY SUPPORT
⊙	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK 500 FT
W20-1

ROAD WORK 250 FT
W20-1

450+00 451+00 452+00 453+00 454+00 455+00 456+00

USH 51

INL MH SIGN W

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026505_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LAKEVIEW DR

Δ=90°04'20"
R=58.00'
L=91.15'

Δ=90°04'20"
R=58.00'
L=91.15'

SIGN

SIGN

SIGN

SIGN

INL MH

INL MH

MH

MH

USH 51

USH 51

456+00

457+00

458+00

459+00

460+00

461+00

462+00

PI 10+00.00

PI 10+00.00

10+00

10+00

9+00

11+00

11+00

12+00

N

W

INL

INL

INL MH

MH

MH

FINES DOUBLE IN WORK ZONES

Give 'em a BRAKE SLOW DOWN

W21-62
96" X 48"

LEFT LANE CLOSED AHEAD

W20-5

PC 11+49.50

LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026506_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

LAKEVIEW DR

USH 51

462+00 463+00 464+00 465+00 466+00 467+00 468+00

W04-2L

LANE CLOSED
R11-2
48" X 30"

N

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026507_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

W

SIGN

W

MH

INL

SIGN

SIGN

SIGN

ANT.

FILLER CAPS

CANOPY

MH

SIGN

INL

468+00 469+00 470+00 471+00 472+00 473+00 474+00

MH

INL

SIGN

SIGN

SIGN

SIGN

INL

INL

MH

SIGN

INL

SIGN

MH

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026508_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

ANT.

PY

MH

IGN

N

INL

MH

USH 51

474+00

475+00

476+00

477+00

478+00

479+00

480+00

USH 51

INL MH

INL MH

SIGN

SIGN

SIGN

SIGN

SIGN

SIGN

W

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026509_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

W01-6
48" X 24"

LEFT TURN LANE
R3-55L
24" X 30"

W01-6
48" X 24"

480+00
481+00
482+00
PI 10+00.00
483+00
484+00
485+00
486+00
9+00

SIGN
INL
MH
W
USH

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026510_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LANE CLOSED
R11-2
48" X 30"

W04-2L

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026511_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

2

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA

LEFT LANE CLOSED AHEAD
W20-5

FINES DOUBLE IN WORK ZONES
W21-62
96" X 48"

ROAD WORK 250 FT
W20-1

END ROAD WORK
G20-2A
48" X 24"

USH 51

492+00 493+00 494+00 495+00 496+00 497+00 498+00

MH INL SIGN

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026512_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

ROAD WORK 500 FT
W20-1

498+00 499+00 500+00 501+00 502+00 503+00 504+00

USH 51

INL MH SIGN W

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026513_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA

N

ROAD WORK AHEAD W20-1

PC 7+01.22

PT 8+40.97

PC 9+09.04

PT 17+71.35

7+00

8+00

9+00

10+00

504+00

505+00

506+00

507+00

508+00

509+00

510+00

USH 51

USH 51

CTH J

PLANT RD

CEMETERY

SIGN

INL

MH

1-031-1599.18

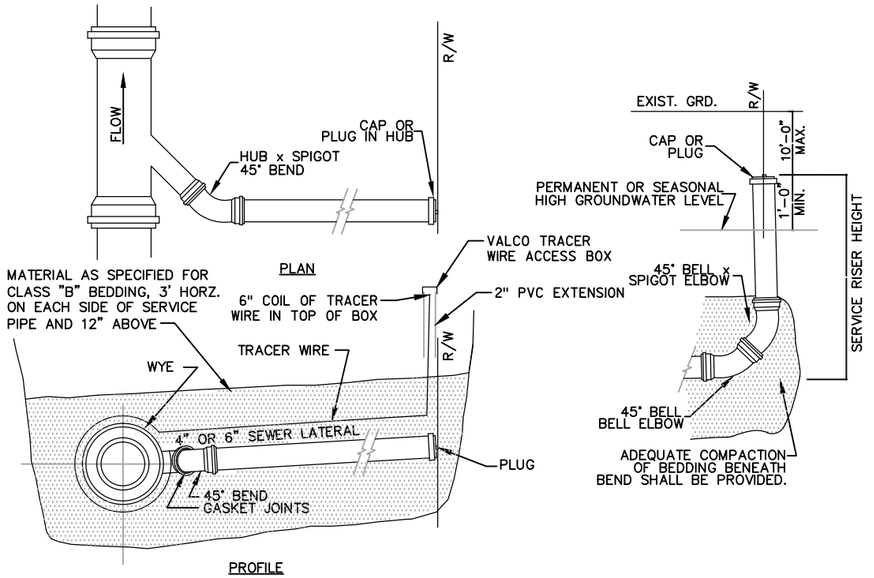
1-031-1607.14

1-031-1607.29

PROJECT NO: 1174-10-00	HWY: USH 51	COUNTY: ONEIDA	TRAFFIC CONTROL - STAGE 2.2	SHEET	E

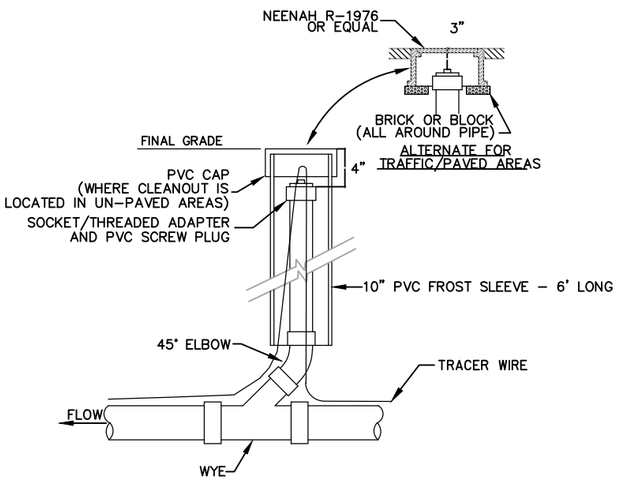
FILE NAME : N:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\TRAFFIC CONTROL\026514_s2_2.dgn PLOT DATE : 29-NOV-2012 18:46 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42



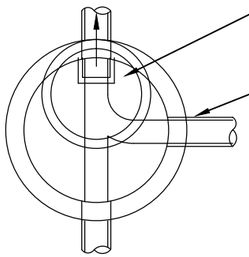
TYPICAL SEWER LATERAL/RISER CONNECTION DETAIL

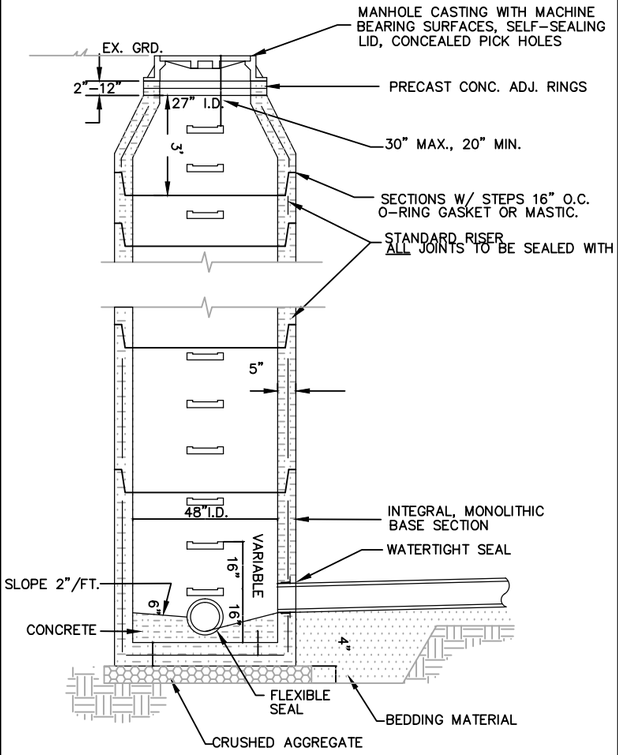
NOT TO SCALE
(SEWER 12 FEET DEEP OR MORE, OR WHERE GROUNDWATER EXISTS ABOVE LATERAL)



SEWER AND/OR LATERAL CLEANOUTS

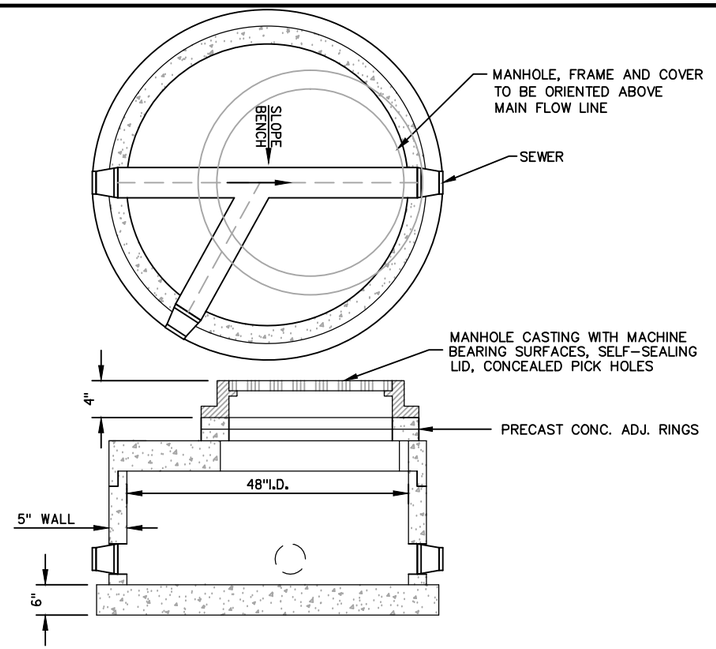
NOT TO SCALE
REQUIRED WHERE LATERAL IS MORE THAN 100 FT. LONG.





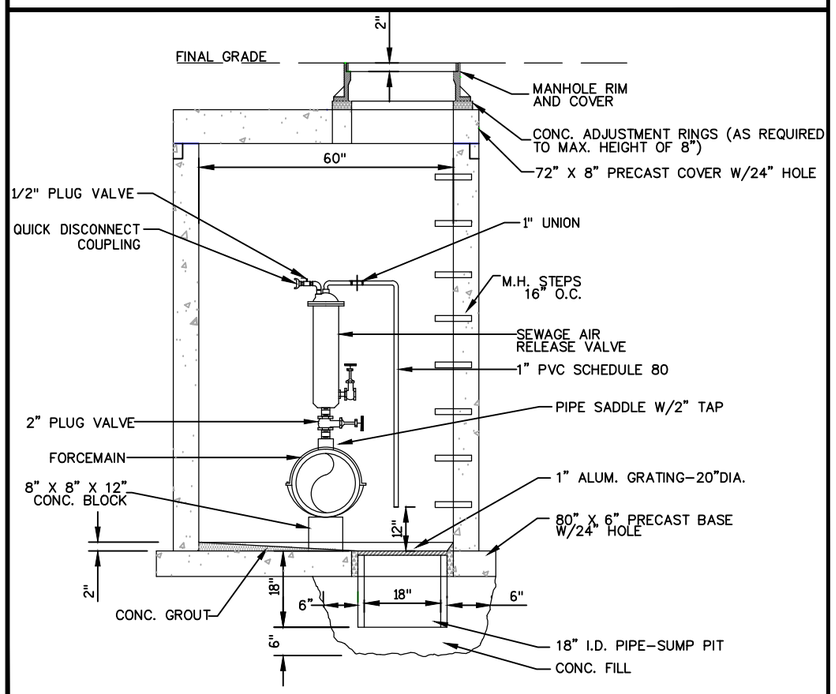
TYPICAL PRECAST MANHOLE

NOT TO SCALE



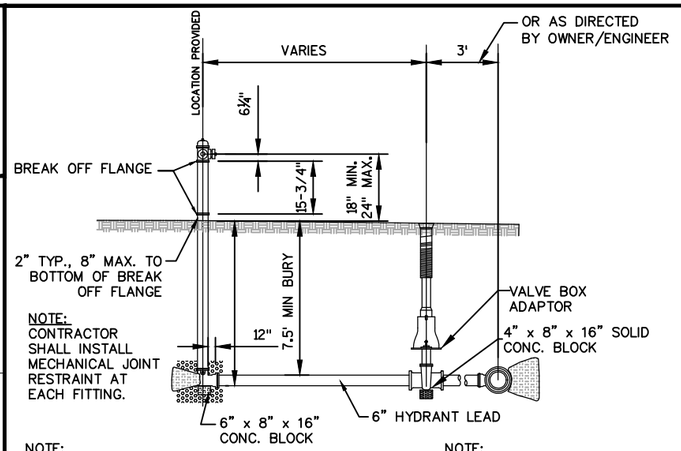
SHALLOW SANITARY MANHOLE

NOT TO SCALE



AIR RELEASE MANHOLE DETAIL

NOT TO SCALE



NOTE:
CONTRACTOR SHALL INSTALL MECHANICAL JOINT RESTRAINT AT EACH FITTING.

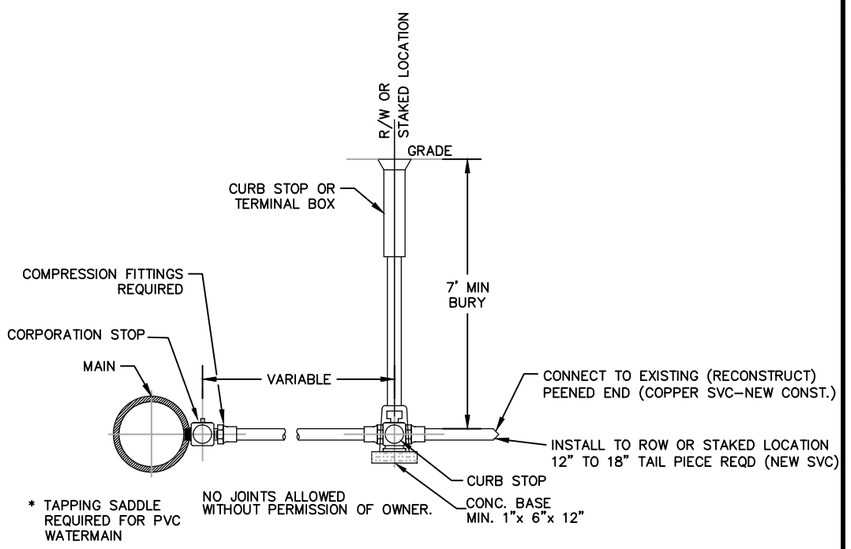
NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING HYDRANT TO FINISH GRADE AND SUPPLY HYDRANT BARREL EXTENSIONS IF NECESSARY.

NOTE:
DRAIN PORTS TO BE LEFT OPEN AND CLEAR OF ANY OBSTRUCTIONS UNLESS IT IS DIRECTED TO BE PLUGGED AS PER THE SPECIFICATIONS OR AS DIRECTED BY THE OWNER.

PROFILE VIEW

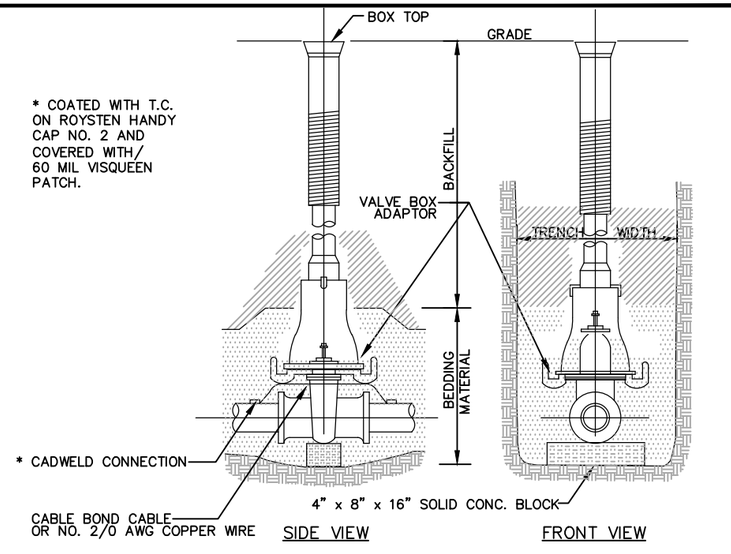
TYPICAL HYDRANT INSTALLATION

NOT TO SCALE



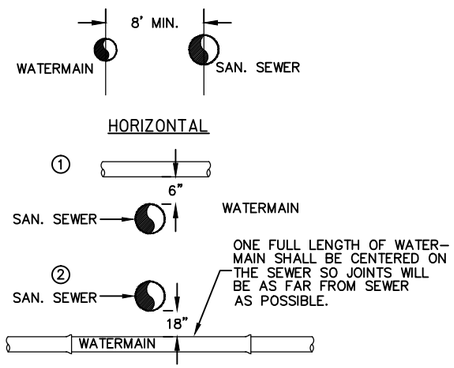
TYPICAL COPPER WATER SERVICE DETAIL

NOT TO SCALE



GATE VALVE BOX SETTING

NOT TO SCALE

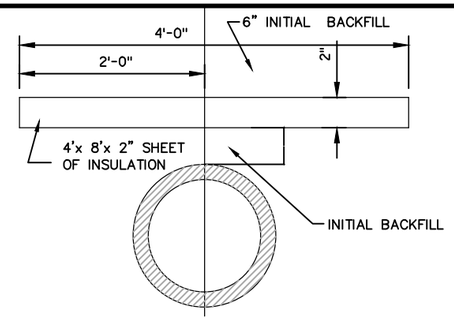


PIPE PLACEMENT IN ROCK EXCAVATION

WHEN THE ABOVE SEPARATIONS CANNOT BE MAINTAINED, THE OWNER MAY REQUIRE THE CONTRACTOR TO ENCASE THE SEWER IN CONCRETE

SEWER/WATERMAIN MIN. SEPARATION DISTANCE

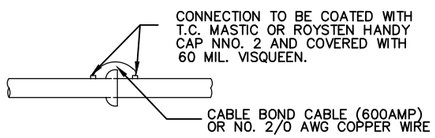
NOT TO SCALE



PIPELINE INSULATION DETAIL

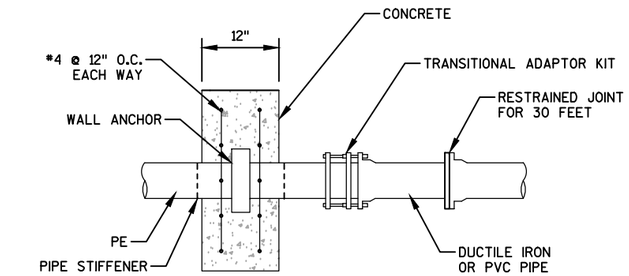
NOT TO SCALE

NOTE:
WHERE PERMITTED BY THE OWNER, GASKETS WITH CONTINUITY CLIPS MAY BE USED IN LIEU OF THE CABLE BOND.



D.I. ELECTRICAL CONTINUITY CONNECTION PIPE/PIPE JOINT OR PIPE FITTING JOINT

NOT TO SCALE



CONCRETE SIZE		
PIPE DIA	WIDTH	HEIGHT
6"	3'-0"	3'-0"
10"	4'-6"	4'-6"

WALL ANCHOR DIAGRAM

NOT TO SCALE

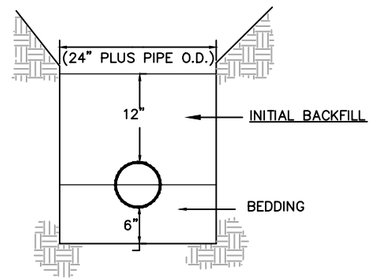
PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	DETAILS	SHEET 159	E

TABLE OF MINIMUM
LOW PRESSURE AIR TEST TIME
(MANHOLE TO MANHOLE)

Specification time (Min: Sec) required for loss of 1.0 psig air pressure for size and length of pipe											
Pipe Diameter	Minimum Time	Length for Minimum Time	Time for Longer Length	Specification time (Min: Sec) for length shown							
(in.)	(min: sec)	(ft)	(sec)	100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
4	3: 46	597	.390L	3: 46	3: 46	3: 46	3: 46	3: 46	3: 46	3: 46	3: 46
6	5: 40	398	.854L	5: 40	5: 40	5: 40	5: 40	5: 40	5: 40	5: 42	6: 24
8	7: 34	298	1.520L	7: 34	7: 34	7: 34	7: 34	7: 36	8: 52	10: 08	11: 24
10	9: 26	239	2.374L	9: 26	9: 26	9: 26	9: 53	11: 52	13: 51	15: 49	17: 48
12	11: 20	199	3.418L	11: 20	11: 20	11: 24	14: 15	17: 05	19: 56	22: 47	25: 38
15	14: 10	159	5.342L	14: 10	14: 10	17: 48	22: 15	26: 42	31: 09	35: 36	40: 04
18	17: 00	133	7.692L	17: 00	19: 13	25: 38	32: 03	38: 27	44: 52	51: 16	57: 41
21	19: 50	114	10.470L	19: 50	26: 10	34: 54	43: 37	52: 21	61: 00	69: 48	78: 31
24	22: 40	99	13.674L	22: 47	34: 11	45: 54	56: 58	68: 22	79: 46	91: 10	102: 23
27	25: 30	88	17.306L	28: 51	43: 16	57: 41	72: 07	86: 32	100: 57	115: 22	129: 48
30	28: 20	80	21.366L	35: 47	53: 25	71: 13	89: 02	106: 50	124: 38	142: 26	160: 15
33	31: 10	72	25.852L	43: 05	64: 38	86: 10	107: 43	129: 16	150: 43	172: 21	193: 53
36	34: 00	66	30.768L	51: 17	76: 55	102: 34	128: 12	153: 50	179: 29	205: 07	230: 46

SEWER LOW PRESSURE AIR TEST TIME

NOT TO SCALE



CLASS "B" BEDDING AND INITIAL BACKFILL

PIPE BEDDING CLASSIFICATIONS

NOT TO SCALE

LEAKAGE SHALL NOT EXCEED THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FOLLOWING EQUATION:

$$L = \frac{SD \times (P)^{1/2}}{133{,}200}$$

L= ALLOWABLE LEAKAGE IN GALLONS PER HOUR
S= LENGTH OF PIPELINE TESTED IN FEET
D= NOMINAL DIAMETER OF PIPE IN INCHES
P= TEST PRESSURE IN PSIG

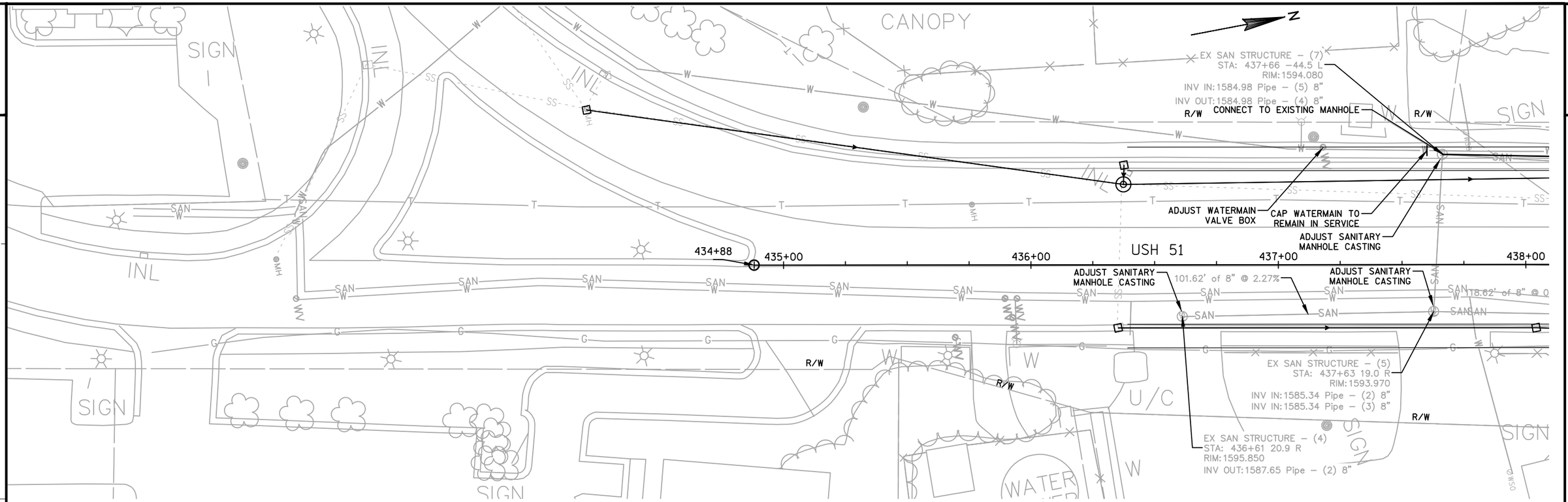
BASED ON 11.65 GPD PER MILE OF PIPE PER INCH OF NOMINAL DIAMETER AT 150 PSI. THE ALLOWABLE LEAKAGE PER 1,000 FEET OF PIPELINE IS AS FOLLOWS:

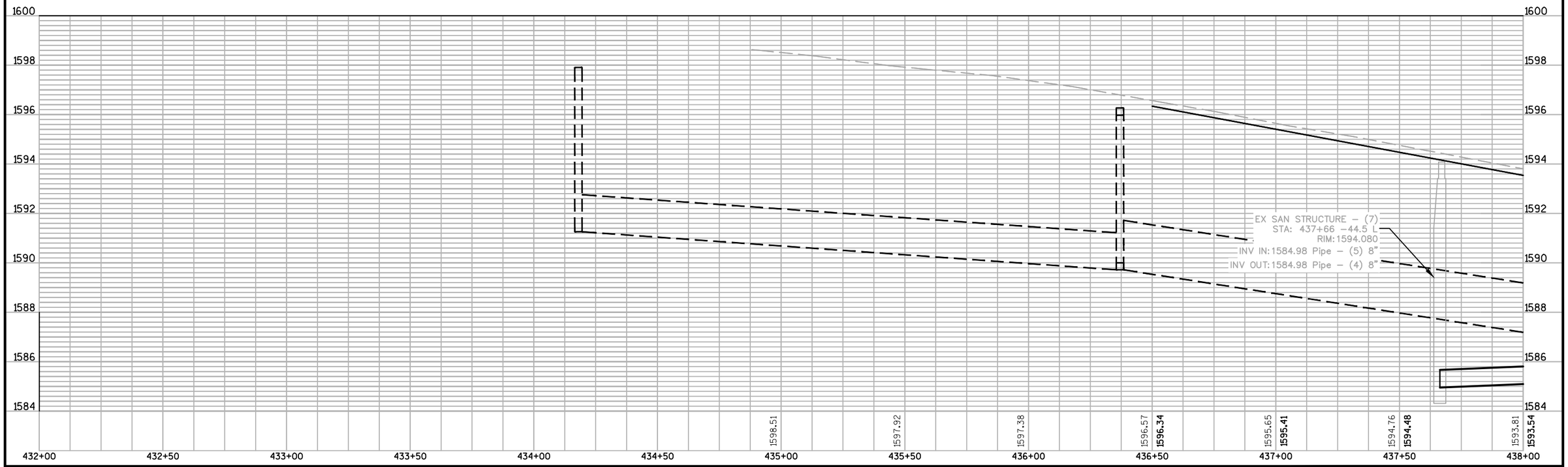
PIPE SIZE (INCHES)	ALLOWABLE LEAKAGE (GPH)
4	0.37
6	0.55
8	0.74
10	0.92
12	1.10
14	1.29
16	1.66

FORCEMAIN & WATERMAIN LEAKAGE TEST

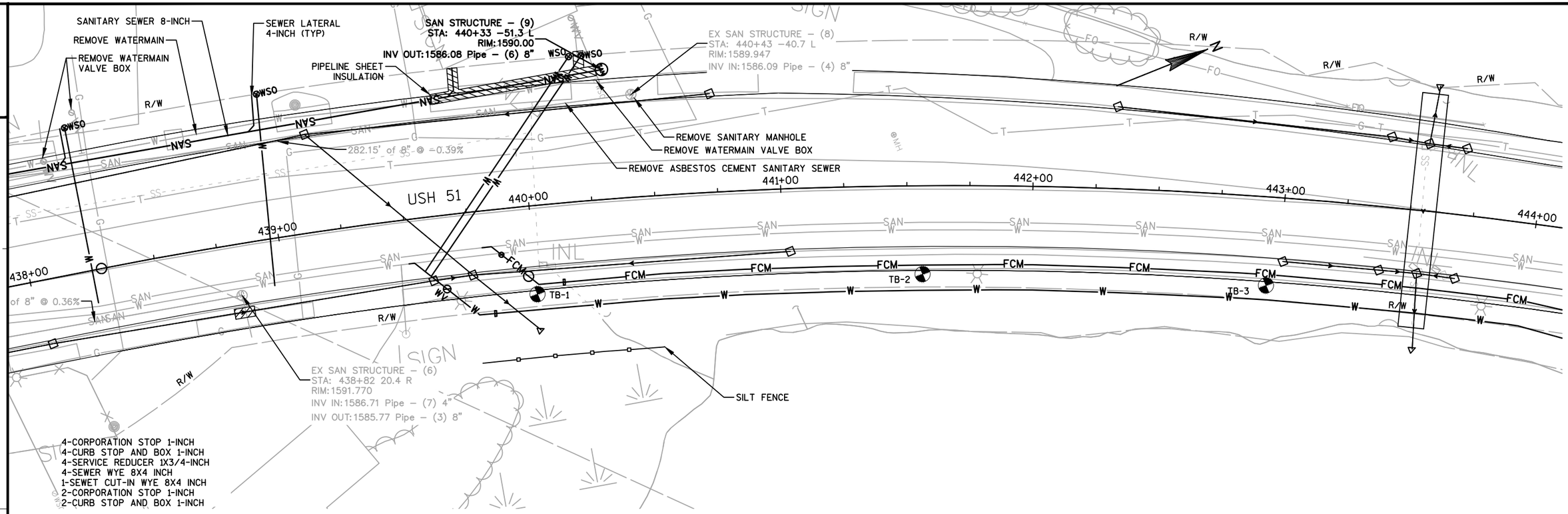
NOT TO SCALE

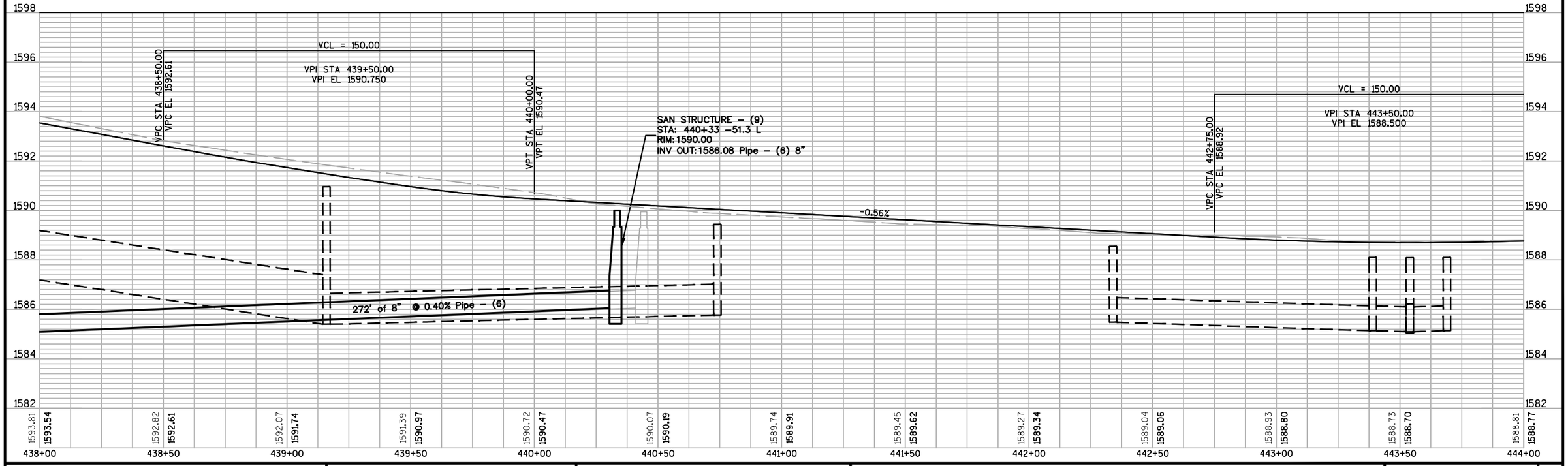
2





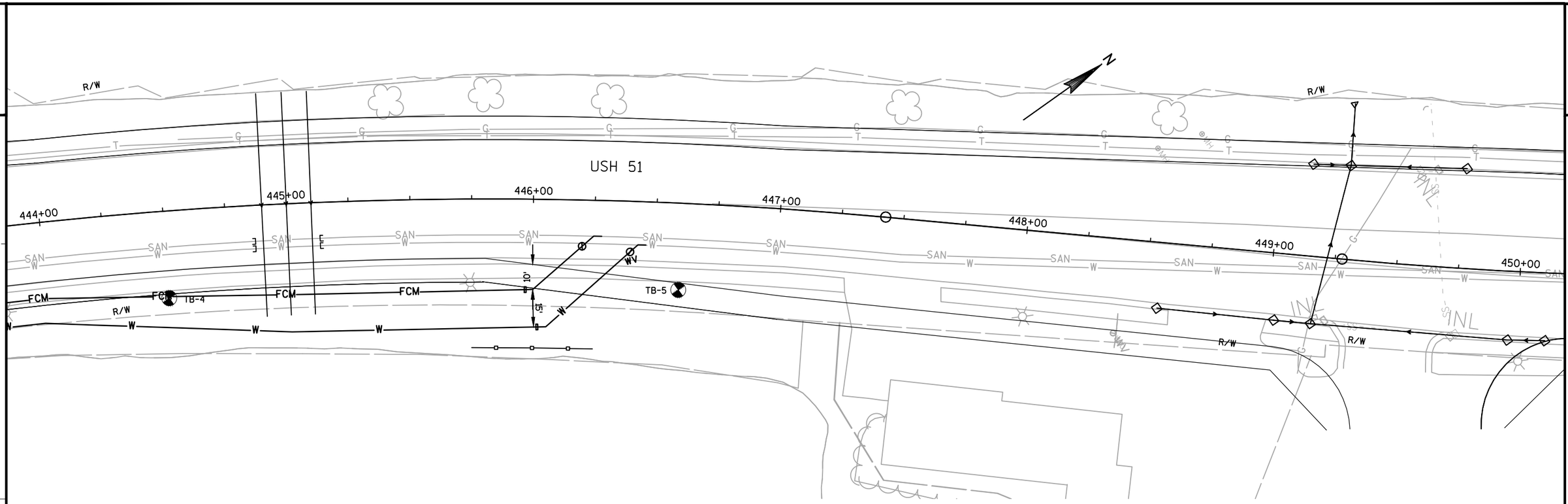
PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 161	E

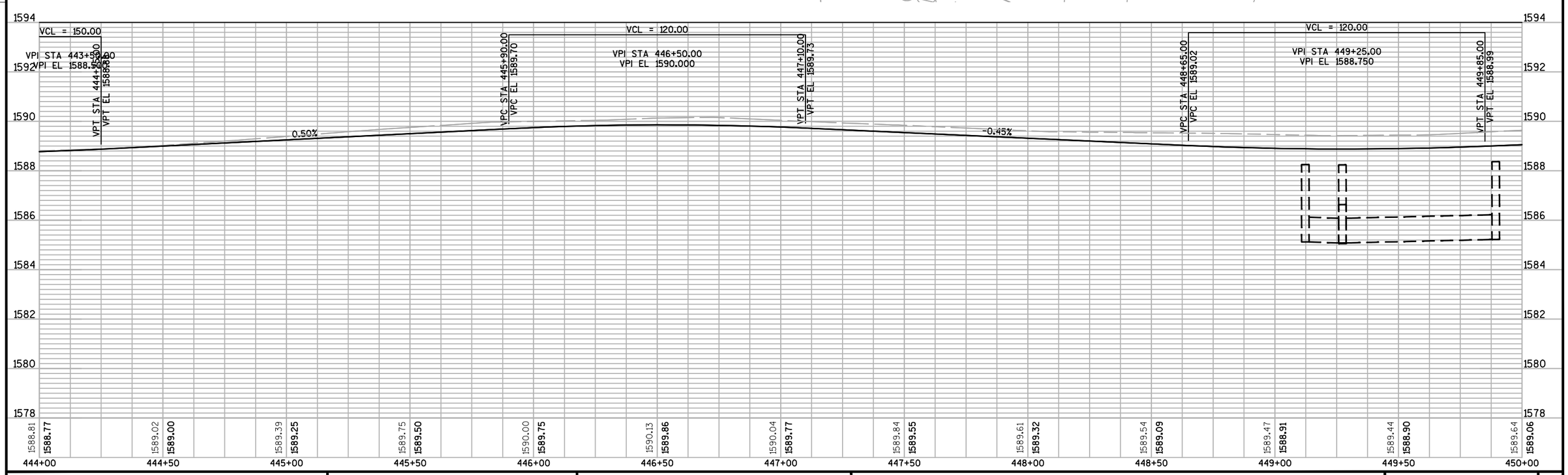




PROJECT NO:1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 162	E

2

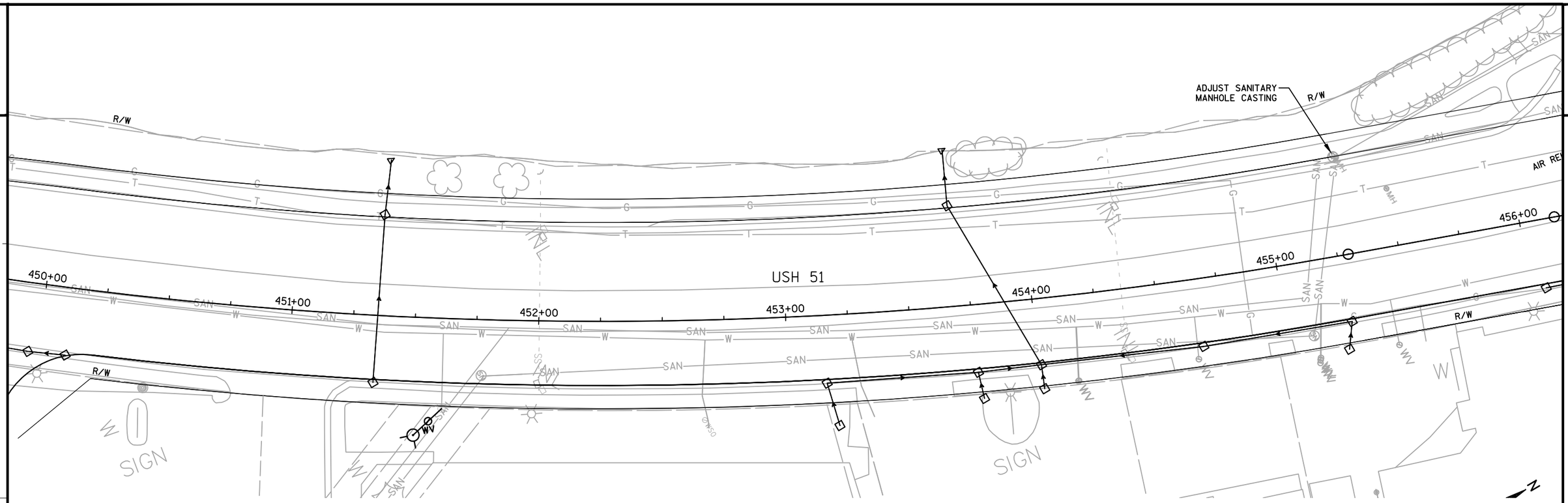


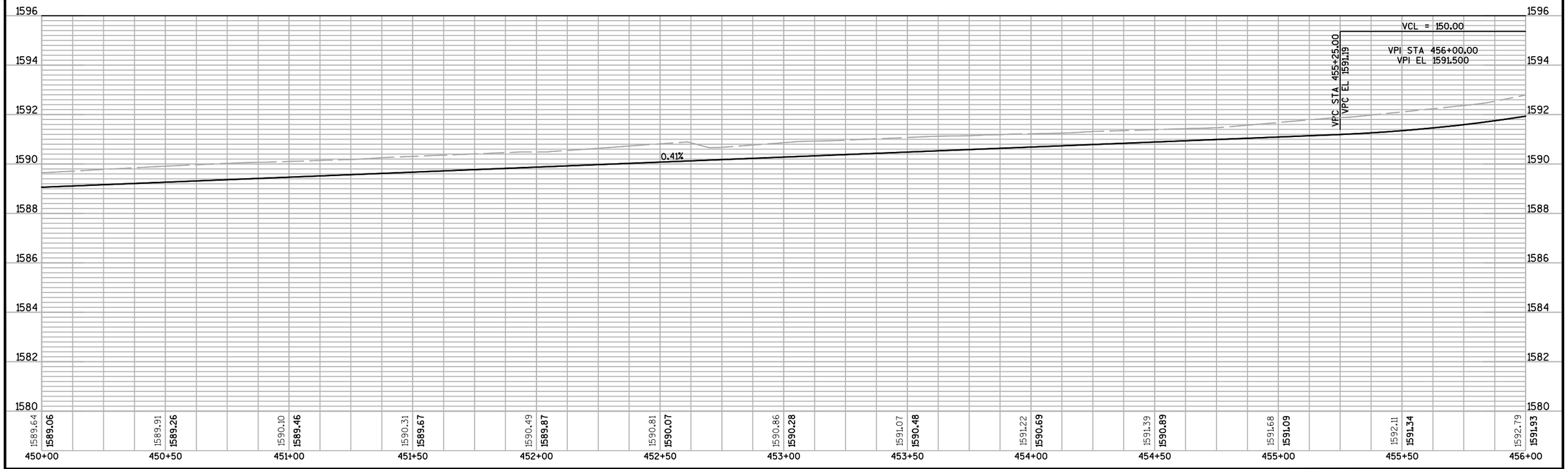


PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 163	E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:33 PM PLOT BY : GRAUN, MATT PLOT NAME : WEST 3 PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42





PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 164	E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:33 PM PLOT BY : GRAUN, MATT PLOT NAME : WEST 4 PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

2

1-FORCEMAIN COUPLING 6-INCH
4-FORCEMAIN BEND 45° 6-INCH

FORCEMAIN 6-INCH

REMOVE ASBESTOS CEMENT FORCEMAIN

AIR RELEASE MANHOLE

EXISTING SANITARY FORCEMAIN

REMOVE WATERMAIN VALVE BOX

REMOVE WATERMAIN VALVE BOX

WATERMAIN 6-INCH

USH 51

HUBER LN

HUBER LN

456+00 457+00 458+00 459+00 460+00 461+00 462+00

EX. 10" WTM

EX. 6" WTM

TOP OF 8" WATERMAIN

FORCEMAIN 6-INCH

VCL = 150.00
VPI STA 456+00.00
VPI EL 1591.500
VPT STA 456+75.00
VPT EL 1593.54
2.71%

VCL = 200.00
VPC STA 458+50.00
VPC EL 1598.29
VPI STA 459+50.00
VPI EL 1601.000
VPT STA 460+50.00
VPT EL 1600.21
-0.79%

1592.79	1594.04	1595.52	1596.95	1598.09	1599.08	1599.83	1600.32	1600.54	1600.31	1599.93	1599.52	1599.11
1591.93	**1592.91**	**1594.21**	**1595.57**	**1596.93**	**1598.29**	**1599.42**	**1600.12**	**1600.39**	**1600.21**	**1599.82**	**1599.43**	**1599.04**
456+00	456+50	457+00	457+50	458+00	458+50	459+00	459+50	460+00	460+50	461+00	461+50	462+00

PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 165 E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:33 PM PLOT BY : GRAUN, MATT PLOT NAME : WEST 5 PLOT SCALE : 1:40_XREF

2

2

N

R/W

REMOVE WATERMAIN VALVE BOX

ADJUST SANITARY MANHOLE CASTING

RIM 1598.74
SUMP

ADJUST SANITARY MANHOLE CASTING

ADJUST WATERMAIN VALVE BOX

USH 51

462+00 463+00 464+00 465+00 466+00 467+00

EX 6" WTM

SIGN

SAN W T SS G

1606 1608

VCL = 150.00

VPI STA 463+00.00
VPI EL 1598.250

VPC STA 462+25.00
VPC EL 1598.84

VPT STA 463+75.00
VPT EL 1599.76

2.02%

VCL = 200.00

VPI STA 466+25.00
VPI EL 1604.800

VPC STA 465+25.00
VPC EL 1602.78

VPT STA 467+25.00
VPT EL 1603.50

462+00	462+50	463+00	463+50	464+00	464+50	465+00	465+50	466+00	466+50	467+00	467+50	468+00
1599.11	1599.00	1599.37	1600.00	1600.78	1601.77	1602.62	1603.42	1604.10	1604.40	1604.30	1603.90	1603.15
1599.04	**1598.70**	**1598.78**	**1599.32**	**1600.27**	**1601.27**	**1602.28**	**1603.24**	**1603.83**	**1604.01**	**1603.77**	**1603.17**	**1602.52**

PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 166	E

2

4-WATERMAIN BEND 45 DEGREES 6-INCH
1-WATERMAIN GATE VALVE & BOX 6-BOX
1-HYDRANT

RECONSTRUCT SANITARY MANHOLE

ADJUST SANITARY MANHOLE CASTING

SALVAGE HYDRANT

6-INCH WATERMAIN

END OF STAGE 1
START OF STAGE 2

ADJUST SANITARY MANHOLE CASTING

6-INCH WATERMAIN

WATERMAIN 6-INCH

ADJUST WATERMAIN VALVE BOX

ADJUST WATERMAIN VALVE BOX

ADJUST WATERMAIN VALVE BOX

ADJUST WATERMAIN VALVE BOX

1-WATERMAIN TEE 8X6-INCH
1-WATERMAIN GATE VALVE & BOX 6-BOX
1-WATERMAIN COUPLING 8-INCH
1-HYDRANT

USH 51

468+00 469+00 470+00 471+00 472+00 473+00 474+00

R/W

SIGN

CANOPY

VCL = 150.00
VPI STA 473+00.00
VPI EL 1596.000
VPC STA 472+25.00
VPC EL 1596.98
VPT STA 473+75.00
VPT EL 1596.52
-1.30%
18"

	468+00	468+50	469+00	469+50	470+00	470+50	471+00	471+50	472+00	472+50	473+00	473+50	474+00
	1603.15	1602.41	1601.54	1600.86	1600.23	1599.63	1598.96	1598.25	1597.67	1597.21	1596.80	1596.68	1597.10
	1602.52	**1601.87**	**1601.21**	**1600.56**	**1599.91**	**1599.26**	**1598.61**	**1597.96**	**1597.30**	**1596.69**	**1596.37**	**1596.39**	**1596.69**

PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 167	E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:33 PM PLOT BY : GRAUN, MATT PLOT NAME : WEST 7 PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

ADJUST SANITARY MANHOLE CASTING

CAP WATERMAIN TO REMAIN IN SERVICE

REMOVE WATERMAIN VALVE BOX

REMOVE WATERMAIN

REMOVE WATERMAIN VALVE BOX

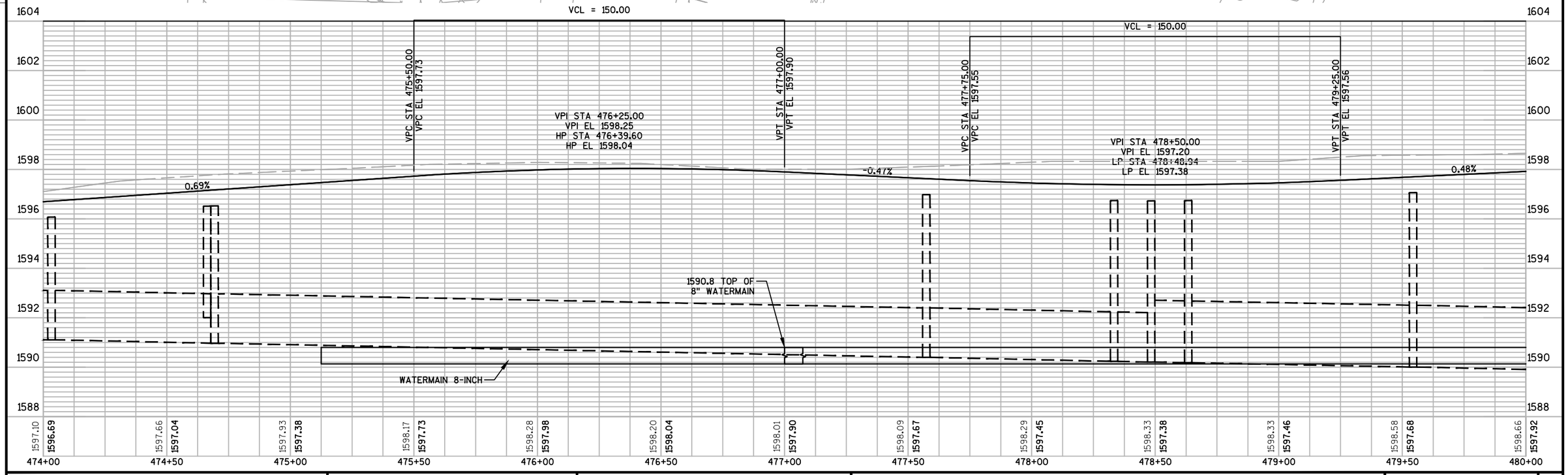
REMOVE WATERMAIN

8-INCH WATERMAIN

PC: 477+17.14

475+00 476+00 477+00 478+00 479+00 480+00

1-WATERMAIN GATE VALVE & BOX 8-INCH
1-WATERMAIN COUPLING 8-INCH
6-CORPORATION STOP 1-INCH
6-CURB STOP AND BOX 1-INCH
6-SERVICE REDUCER 1X3/4-INCH



PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 168	E

2

REMOVE WATERMAIN VALVE BOX

RECONSTRUCT SANITARY MANHOLE

REMOVE WATERMAIN VALVE BOX

PLUG WATERMAIN ABANDONED IN PLACE

REMOVE WATERMAIN VALVE BOX

480+00 481+00 482+00 483+00 484+00 485+00 486+00

1-WATERMAIN TEE 8X6-INCH
1-WATERMAIN GATE VALVE & BOX 6-INCH
1-WATERMAIN COUPLING 6-INCH
7-CORPORATION STOP 1-INCH
7-CURB STOP AND BOX 1-INCH
7-SERVICE REDUCER 1X3/4-INCH

1-WATERMAIN TEE 8X8-INCH
3-WATERMAIN GATE VALVE & BOX 8-INCH
2-WATERMAIN BEND 45 DEGREE BEND 8-INCH
2-WATERMAIN COUPLING 8-INCH
1-WATERMAIN 11-1/4 DEGREE BEND 8-INCH

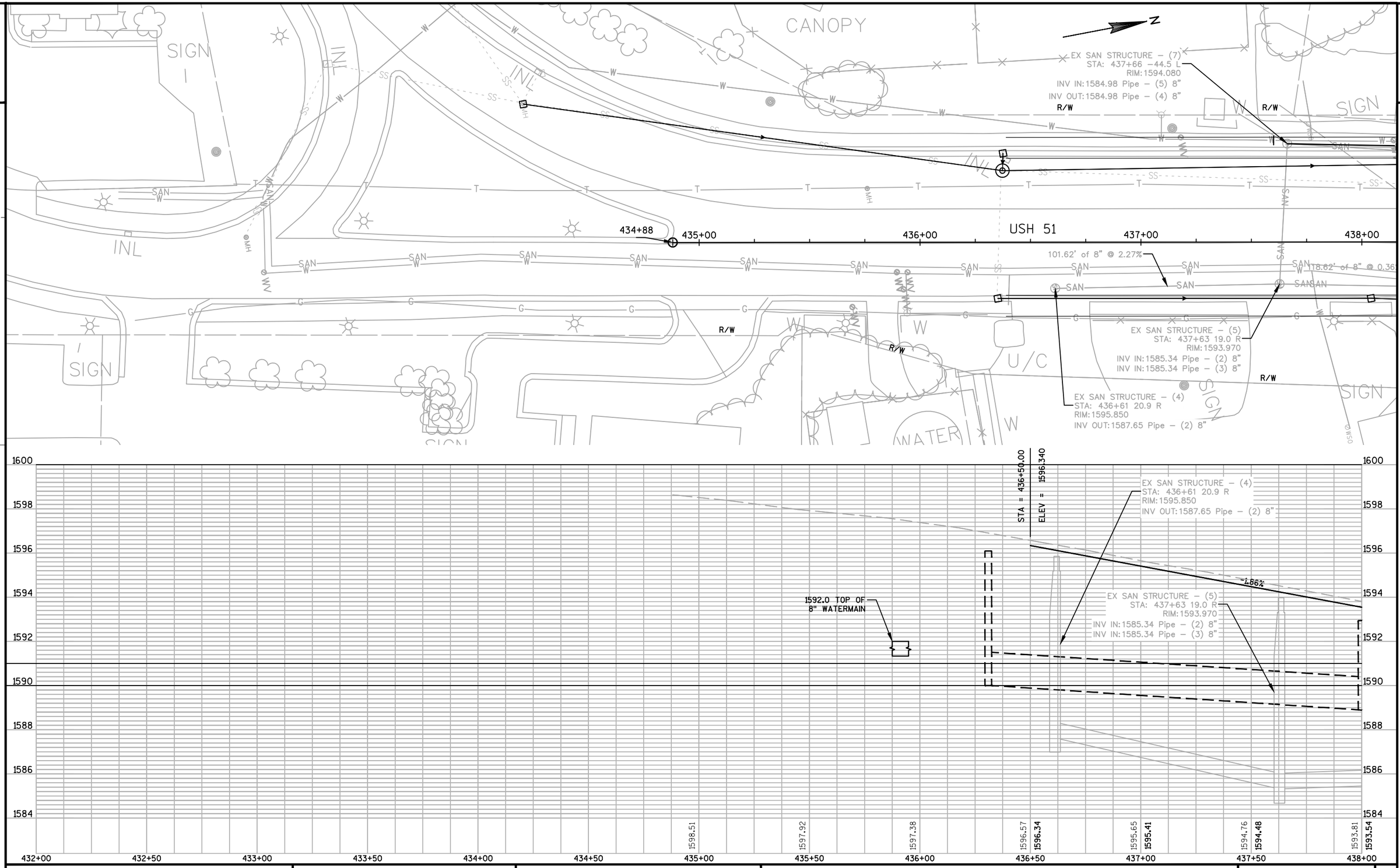
1590.8 TOP OF EXIST 8" WATERMAIN

1594.0 TOP OF EXIST 8" WATERMAIN

WATERMAIN 8-INCH

1598.66	1598.72	1598.97	1599.52	1599.95	1600.59	1601.21	1601.82	1602.54	1603.23	1604.10	1604.91	1605.86
1597.92	**1598.17**	**1598.51**	**1598.93**	**1599.44**	**1599.96**	**1600.49**	**1601.11**	**1601.82**	**1602.63**	**1603.44**	**1604.25**	**1605.06**
480+00	480+50	481+00	481+50	482+00	482+50	483+00	483+50	484+00	484+50	485+00	485+50	486+00

PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - LEFT	SHEET 169	E



PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 170 E

2

EX SAN STRUCTURE – (8)
STA: 440+43 -40.7 L
RIM:1589.947
INV IN:1586.09 Pipe – (4) 8"

REMOVE ASBESTOS CEMENT FORCEMAIN

282.15' of 8" @ -0.39%

PLUG FORCEMAIN
ABANDON IN PLACE

PLUG WATERMAIN
ABANDON IN PLACE

USH 51

RECONSTRUCT
SANITARY MANHOLE

AIR RELEASE MANHOLE

TB-1 TB-2 TB-3

WALL ANCHOR

WALL ANCHOR

EX SAN STRUCTURE – (6)
STA: 438+82 20.4 R
RIM:1591.770
INV IN:1586.71 Pipe – (7) 4"
INV OUT:1585.77 Pipe – (3) 8"

PIPELINE SHEET
INSULATION

SILT FENCE

1-WATERMAIN COUPLING -8-INCH
1-WATERMAIN REDUCER 10X8-INCH
2-WATERMAIN BEND 45° BEND 8-INCH
1-WATERMAIN GATE VALVE & BOX 8-INCH
2-FORCEMAIN BEND 45° 6-INCH
1-FORCEMAIN PLUG VALVE AND BOX 6-INCH
1-FORCEMAIN COUPLING 6-INCH

VCL = 150.00
VPC STA 438+50.00
VPC EL 1592.61
EX SAN STRUCTURE – (6)
STA: 438+82 20.4 R
RIM:1591.770
INV IN:1586.71 Pipe – (7) 4"
INV OUT:1585.77 Pipe – (3) 8"
BORING #1 ELEV. 1590.4
VPT STA 440+00.00
VPT EL 1590.47
TOPSOIL 35.1'
FILL
SILT
SAND
EOB 26.5
-0.56%
BORING #2 ELEV. 1589.0
STA 441+56 OFF
TOPSOIL 35.0'
FILL
SANDY SILT
SAND
EOB 26.5
VCL = 150.00
VPI STA 443+50.00
VPI EL 1588.500
VPC STA 442+75.00
VPC EL 1588.92
BORING #3 ELEV. 1589.0
STA 442+95 OFF
TOPSOIL 35.1'
FILL
SAND
EOB 26.5
WATERMAIN 10-INCH
FORCEMAIN 6-INCH

1600 1590 1580 1570 1560

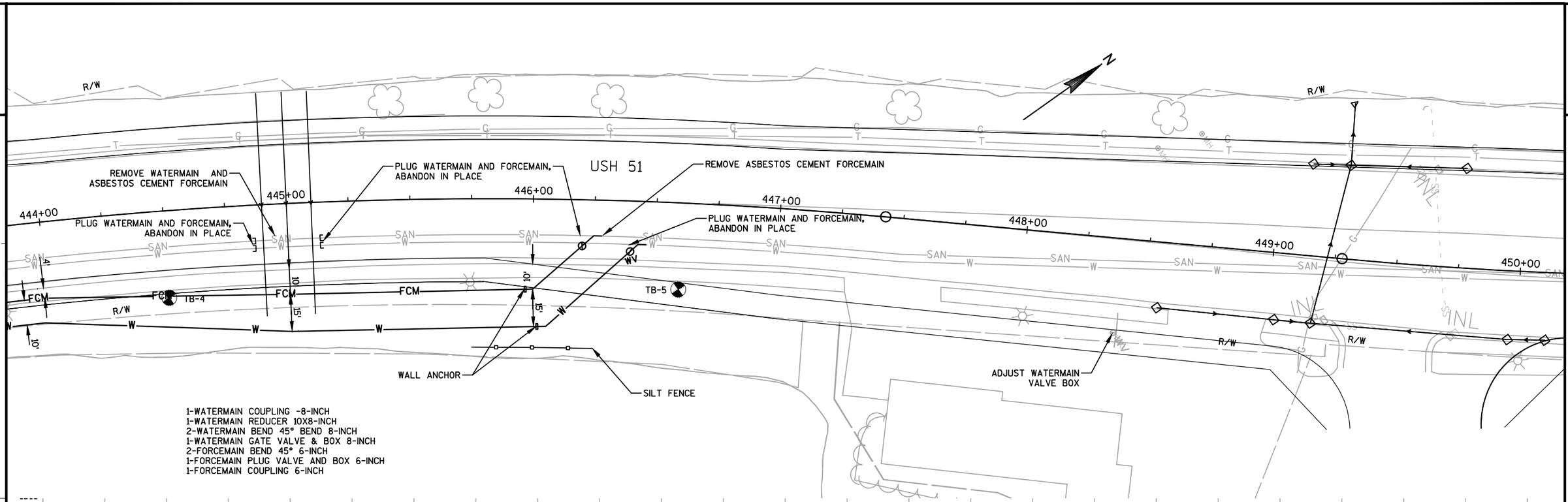
1593.81	1592.82	1592.07	1591.39	1590.72	1590.07	1589.74	1589.45	1589.27	1589.04	1588.93	1588.73	1588.81
1593.54	1592.61	1591.74	1590.97	1590.47	1590.19	1589.91	1589.62	1589.34	1589.06	1588.80	1588.70	1588.77
438+00	438+50	439+00	439+50	440+00	440+50	441+00	441+50	442+00	442+50	443+00	443+50	444+00

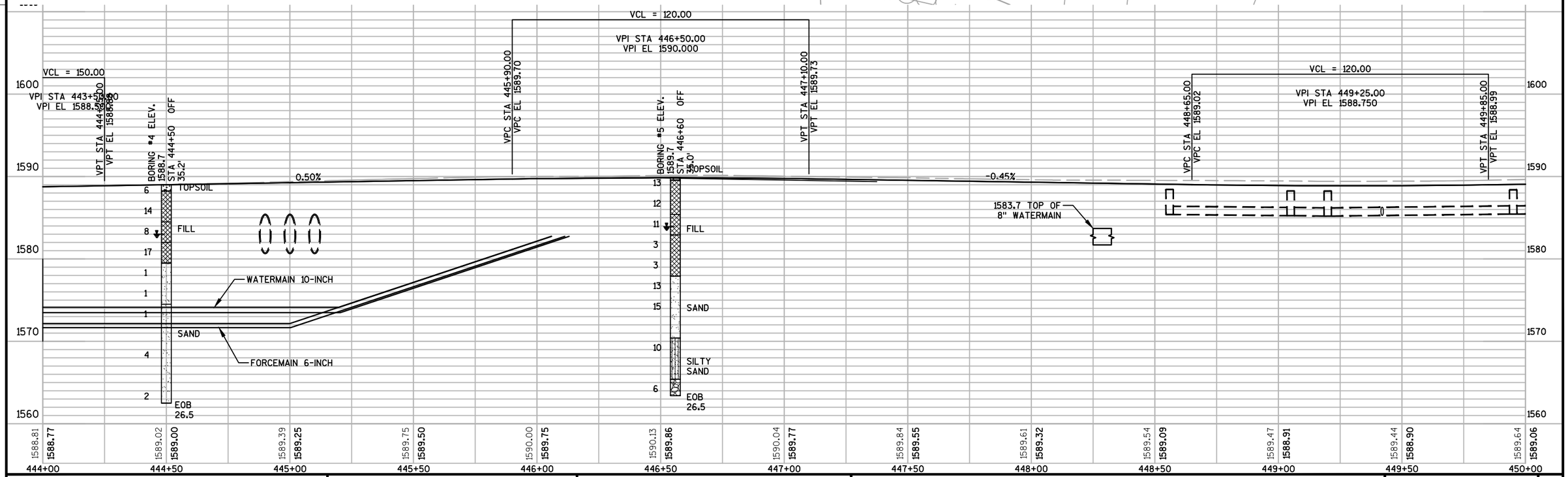
PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 171	E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:34 PM PLOT BY : GRAUN, MATT PLOT NAME : EAST 2 PLOT SCALE : 1:40_XREF

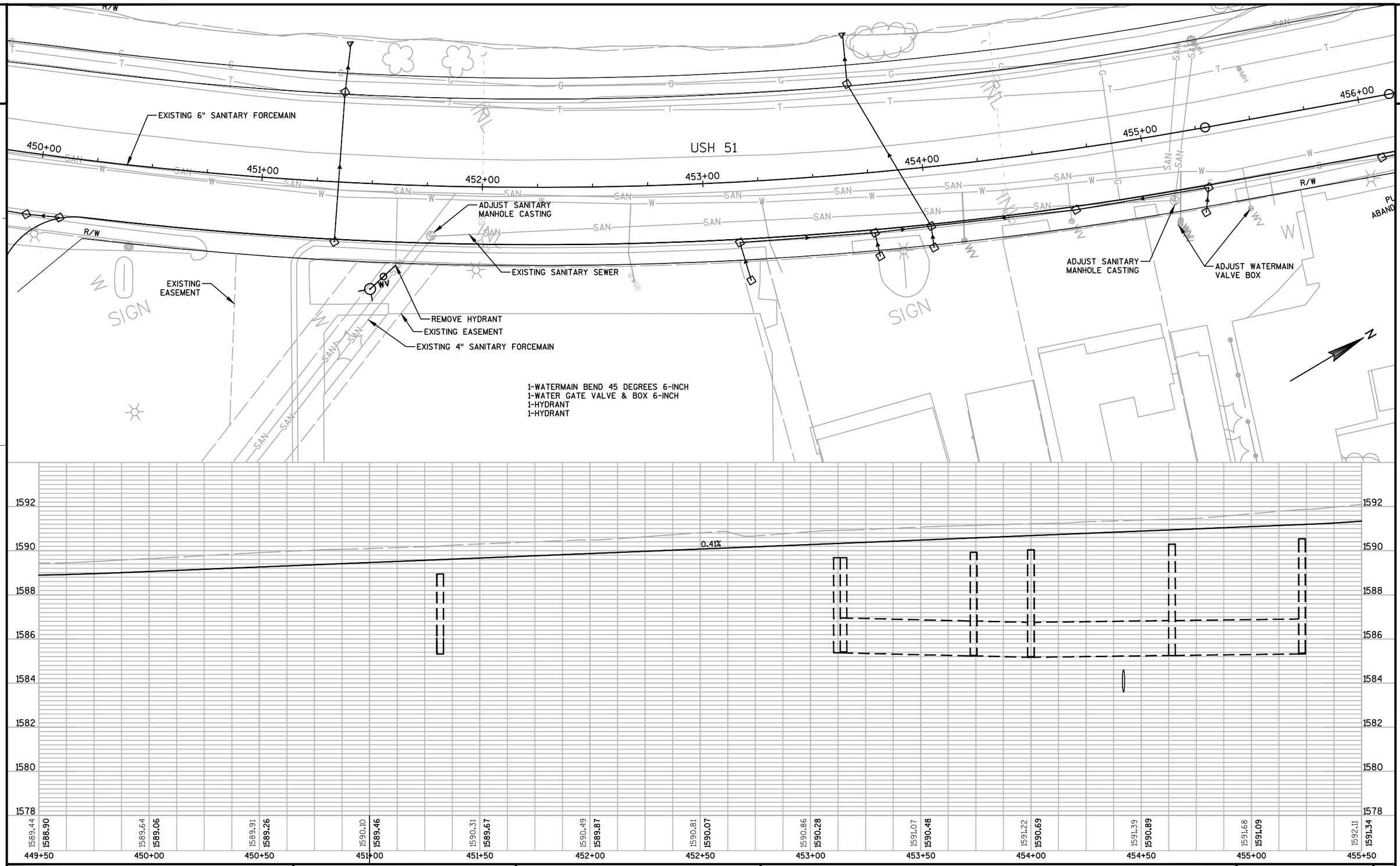
WISDOT/CADDS SHEET 42

2





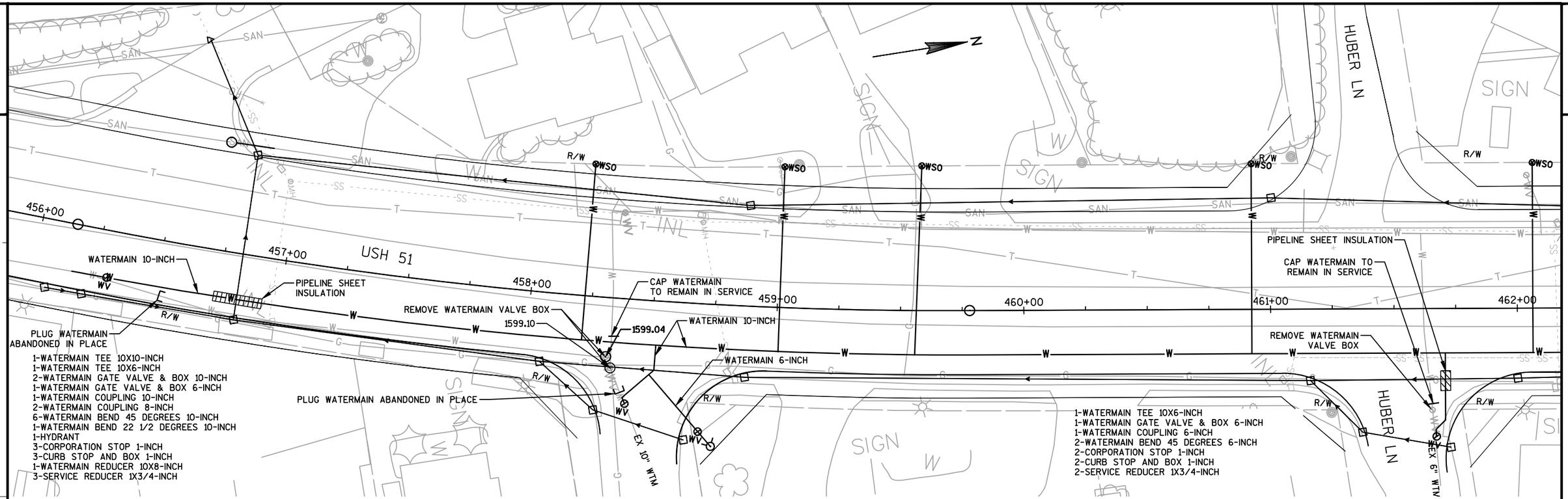
PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 172	E

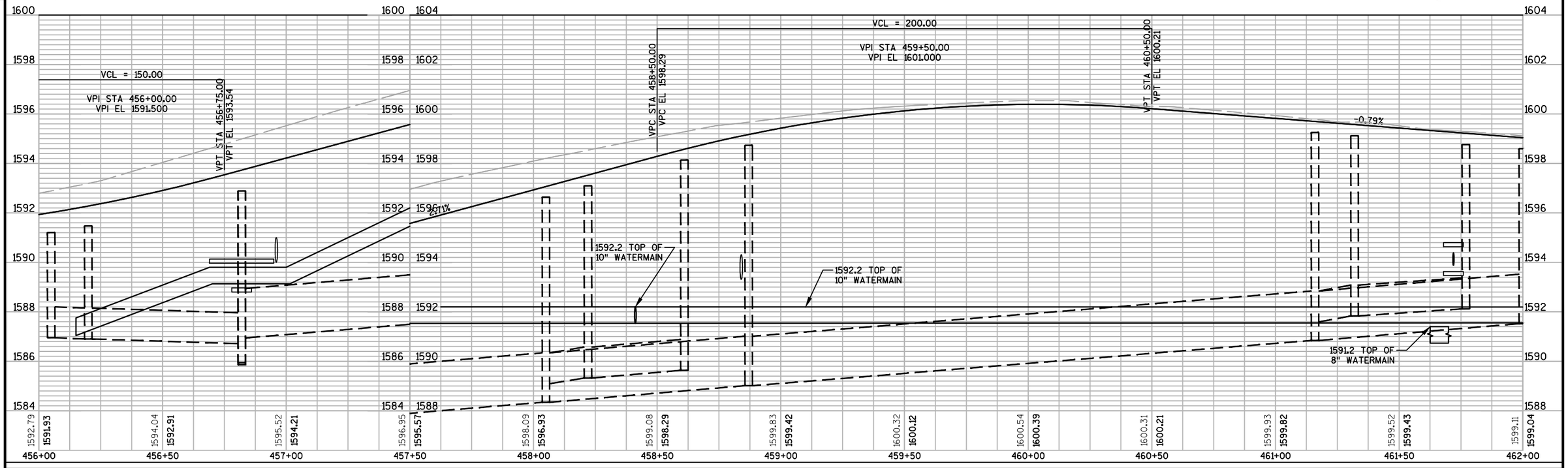


2

PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 173	E

2





PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 174 E

2

2

N

R/W

SIGN

USH 51

462+00

463+00

464+00

465+00

466+00

467+00

1-WATERMAIN TEE 8X8-INCH
1-WATERMAIN GATE VALVE & BOX 10-INCH
1-WATERMAIN GATE VALVE & BOX 8-INCH
1-WATERMAIN REDUCER 10X8-INCH
2-WATERMAIN BEND 45 DEGREES 10-INCH
1-WATERMAIN COUPLING 8-INCH

EX 6" WTM

ADJUST WATERMAIN VALVE BOX

ADJUST WATERMAIN VALVE BOX

ADJUST WATERMAIN VALVE BOX

VCL = 150.00
VPI STA 463+00.00
VPI EL 1598.250
VPC STA 462+25.00
VPC EL 1598.84
VPT STA 463+75.00
VPT EL 1599.76

VCL = 200.00
VPI STA 466+25.00
VPI EL 1604.800
VPC STA 465+25.00
VPC EL 1602.78
VPT STA 467+25.00
VPT EL 1603.50

2.02%

1606
1604
1602
1600
1598
1596
1594
1592
1590

1599.11 1599.04
1599.00 1598.70
1599.37 1598.78
1600.00 1599.32
1600.78 1600.27
1601.77 1601.27
1602.62 1602.28
1603.42 1603.24
1604.10 1603.83
1604.40 1604.01
1604.30 1603.77
1603.90 1603.17
1603.61 1602.84

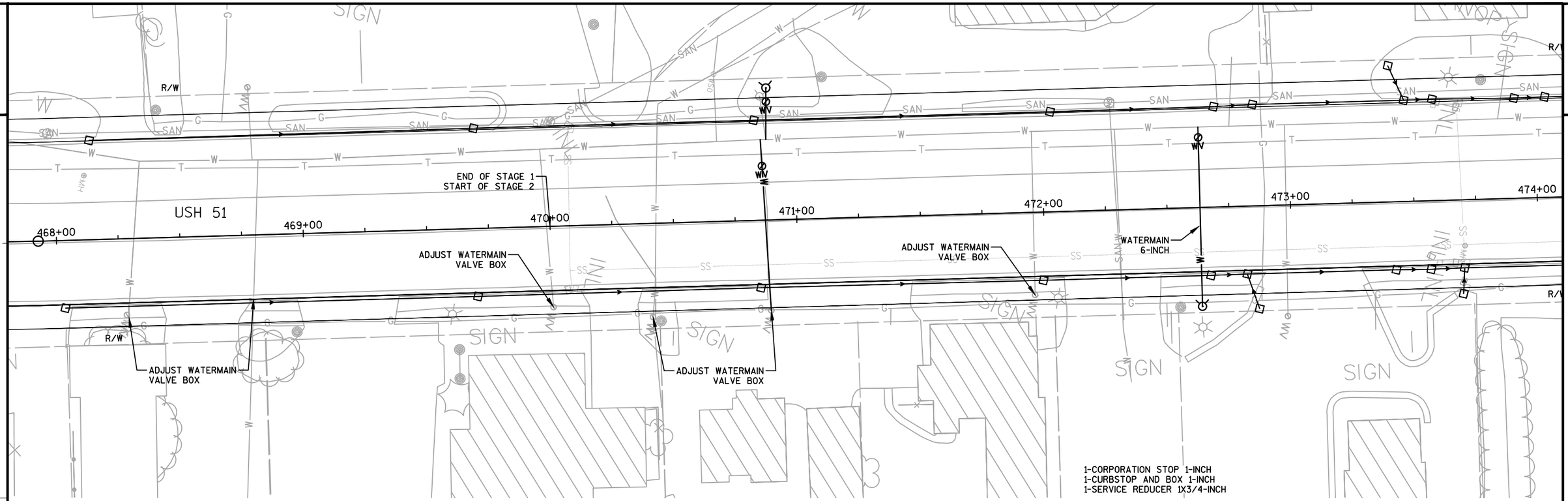
462+00 462+50 463+00 463+50 464+00 464+50 465+00 465+50 466+00 466+50 467+00 467+50 467+75

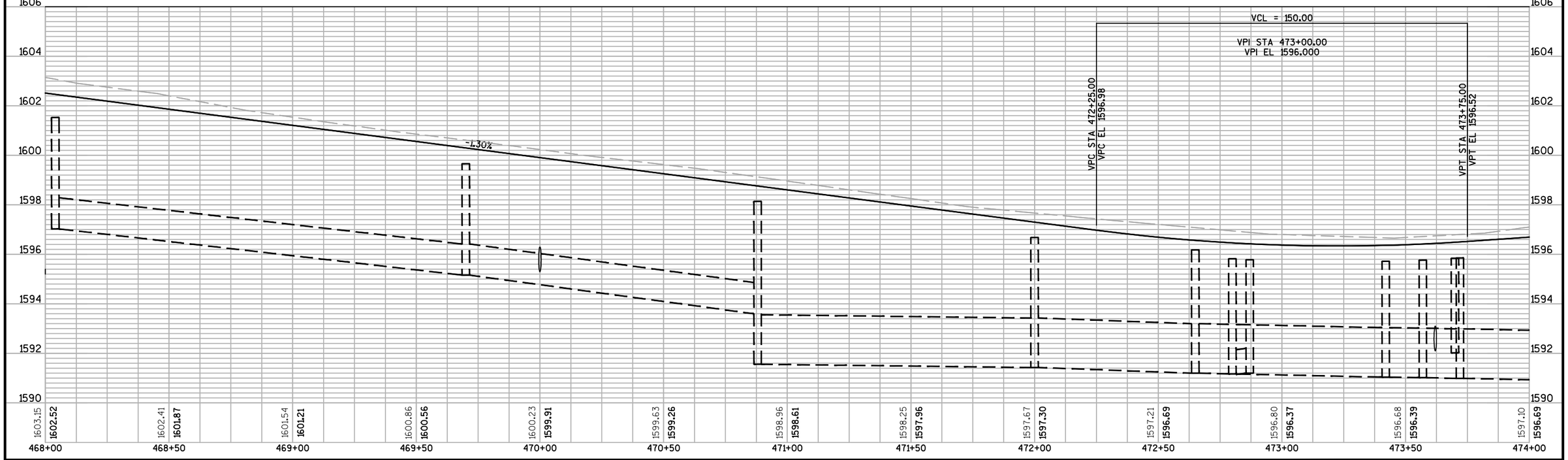
PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 175 E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:34 PM PLOT BY : GRAUN, MATT PLOT NAME : EAST 6 PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2





PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 176	E

FILE NAME : P:\2010\2010.083 - LSD#1 - WATERTOWER TO 3RD AVE\CAD\PLANS\PHASE 1\2010083 023001 UP-P1.DWG PLOT DATE : 12/10/2012 6:34 PM PLOT BY : GRAUN, MATT PLOT NAME : EAST 7 PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

R/W

WSO

WV

PC: 477+17.14

475+00 476+00 477+00 478+00 479+00 480+00

SAN SS W G T

SIGN

REMOVE WATERMAIN VALVE BOX

REMOVE WATERMAIN VALVE BOX

N

VCL = 150.00

VPC STA 475+50.00
VPC EL 1597.73

VPI STA 476+25.00
VPI EL 1598.25
HP STA 476+39.60
HP EL 1598.04

VPT STA 477+00.00
VPT EL 1597.90

VCL = 150.00

VPC STA 477+75.00
VPC EL 1597.55

VPI STA 478+50.00
VPI EL 1597.20
LP STA 478+48.94
LP EL 1597.38

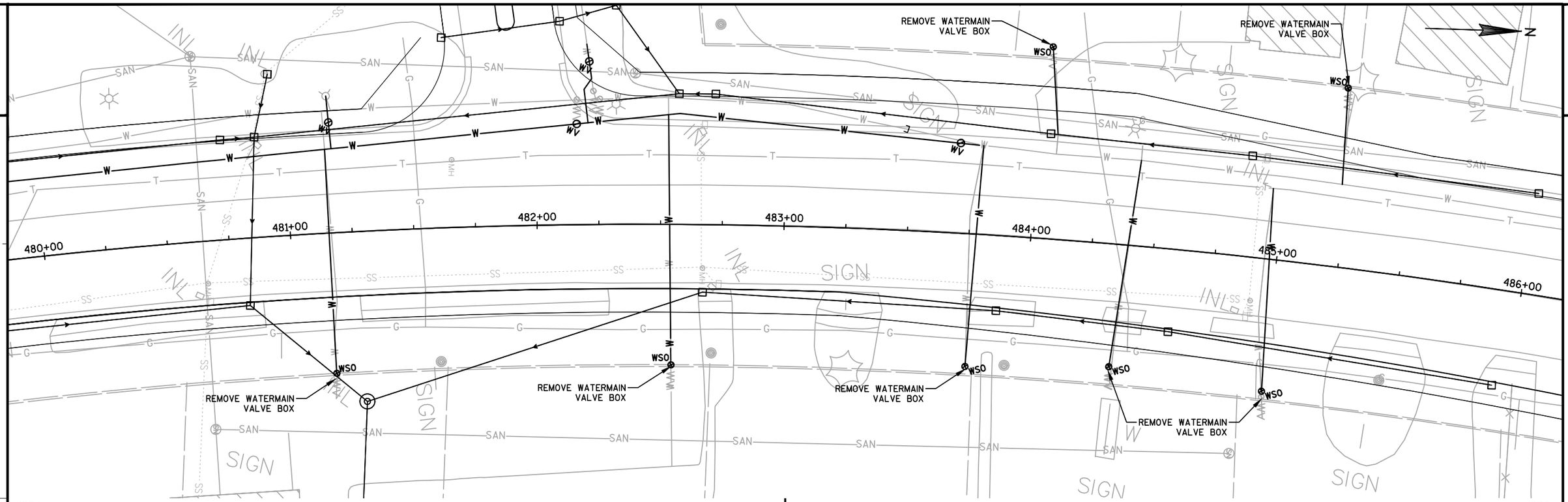
VPT STA 479+25.00
VPT EL 1597.56

0.69% -0.47% 0.48%

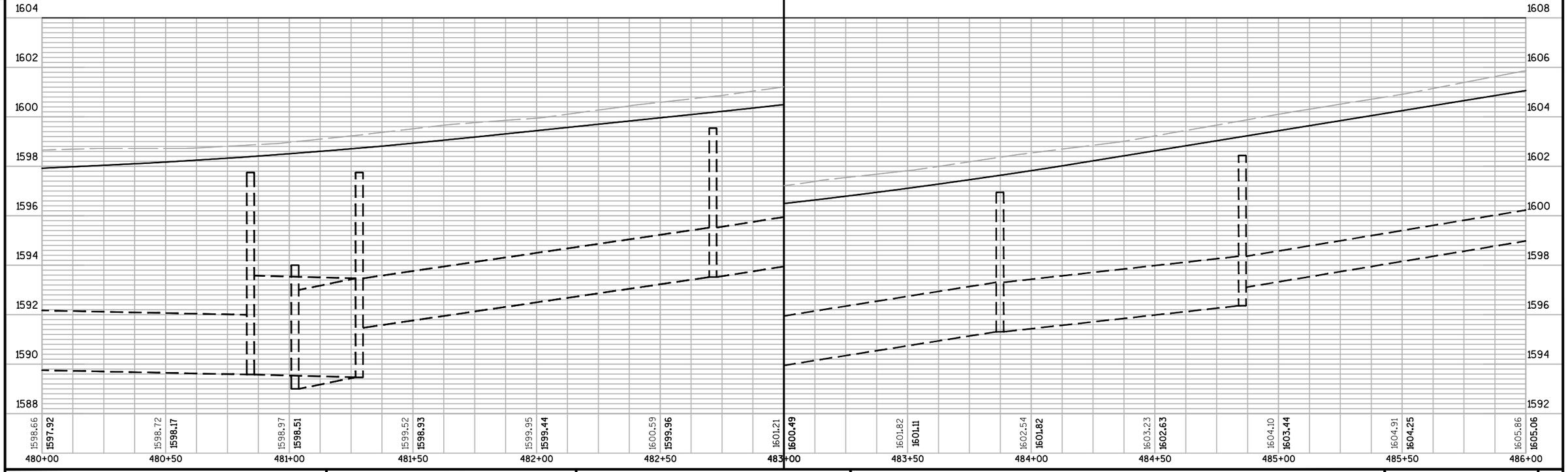
1604 1602 1600 1598 1596 1594 1592 1590 1588

1597.10	1597.66	1598.17	1598.28	1598.20	1598.01	1598.09	1598.29	1598.33	1598.33	1598.58	1598.66
1596.69	**1597.04**	**1597.38**	**1597.73**	**1597.98**	**1598.04**	**1597.90**	**1597.67**	**1597.45**	**1597.38**	**1597.46**	**1597.68**	**1597.92**
474+00	474+50	475+00	475+50	476+00	476+50	477+00	477+50	478+00	478+50	479+00	479+50	480+00

PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 177	E



2



PROJECT NO: 1174-10-71	HWY: USH 51	COUNTY: ONEIDA	SANITARY & WATER PLAN/PROFILE - RIGHT	SHEET 178	E

DATE 02JAN13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1174-10-70 QUANTITY	1174-10-71 QUANTITY
0010	201.0105	CLEARING	STA	3.000	3.000	
0020	201.0120	CLEARING	ID	100.000	100.000	
0030	201.0205	GRUBBING	STA	3.000	3.000	
0040	201.0220	GRUBBING	ID	100.000	100.000	
0050	203.0200	REMOVING OLD STRUCTURE (STATION) 01. STA 443+45	LS	1.000	1.000	
0060	203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) 01. SANITARY SEWER AND FORCEMAIN PIPE	LS	1.000		1.000
0070	204.0110	REMOVING ASPHALTIC SURFACE	SY	43,590.000	43,590.000	
0080	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	3,387.000	3,387.000	
0090	204.0150	REMOVING CURB & GUTTER	LF	10,267.000	10,267.000	
0100	204.0155	REMOVING CONCRETE SIDEWALK	SY	2,796.000	2,796.000	
0110	204.0210	REMOVING MANHOLES	EACH	15.000	15.000	
0120	204.0220	REMOVING INLETS	EACH	40.000	40.000	
0130	204.0245	REMOVING STORM SEWER (SIZE) 01. 12 - INCH	LF	1,172.000	1,172.000	
0140	204.0245	REMOVING STORM SEWER (SIZE) 02. 18 - INCH	LF	2,141.000	2,141.000	
0150	204.0245	REMOVING STORM SEWER (SIZE) 03. 24 - INCH	LF	1,000.000	1,000.000	
0160	204.0280	SEALING PIPES	EACH	2.000	2.000	
0170	205.0100	EXCAVATION COMMON	CY	39,488.000	39,488.000	
0180	205.0400	EXCAVATION MARSH	CY	251.000	251.000	
0190	206.5000	COFFERDAMS (STRUCTURE) 01. M-43-2	LS	1.000	1.000	
0200	208.0100	BORROW	CY	500.000	500.000	
0210	209.0100	BACKFILL GRANULAR	CY	2,018.000	2,018.000	
0220	210.0100	BACKFILL STRUCTURE	CY	330.000	330.000	
0230	213.0100	FINISHING ROADWAY (PROJECT) 01. 1174-10-70	EACH	1.000	1.000	
0240	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	56,230.000	56,230.000	
0250	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	2,613.000	2,613.000	
0260	455.0115	ASPHALTIC MATERIAL PG64-22	TON	475.000	475.000	
0270	455.0122	ASPHALTIC MATERIAL PG64-34	TON	216.000	216.000	
0280	455.0605	TACK COAT	GAL	1,898.000	1,898.000	
0290	460.1110	HMA PAVEMENT TYPE E-10	TON	12,562.000	12,562.000	
0300	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	8,034.000	8,034.000	
0310	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	999.000	999.000	
0320	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	460.000	460.000	
0330	522.0112	CULVERT PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	56.000	56.000	
0340	522.0148	CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	282.000	282.000	
0350	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	3.000	3.000	
0360	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	1.000	1.000	
0370	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	1.000	1.000	
0380	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	7.000	7.000	
0390	523.0514	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH	EACH	2.000	2.000	

3

DATE 02JAN13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1174-10-70 QUANTITY	1174-10-71 QUANTITY
0400	523.0519	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	EACH	1.000	1.000	
0410	523.0524	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH	EACH	2.000	2.000	
0420	532.0200.S	WALL MODULAR BLOCK GRAVITY	SF	300.000	300.000	
0430	601.0120	CONCRETE CURB TYPE J	LF	122.000	122.000	
0440	601.0407	CONCRETE CURB & GUTTER 18-INCH TYPE D	LF	222.000	222.000	
0450	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	11,332.000	11,332.000	
0460	602.0405	CONCRETE SIDEWALK 4-INCH	SF	150.000	150.000	
0470	602.0415	CONCRETE SIDEWALK 6-INCH	SF	58,494.000	58,494.000	
0480	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	96.000	96.000	
0490	606.0200	RIPRAP MEDIUM	CY	845.000	845.000	
0500	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	662.000	662.000	
0510	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	1,126.000	1,126.000	
0520	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	933.000	933.000	
0530	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	4,049.000	4,049.000	
0540	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	244.000	244.000	
0550	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	186.000	186.000	
0560	608.0348	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	275.000	275.000	
0570	610.0114	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 14X23-INCH	LF	433.000	433.000	
0580	610.0119	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH	LF	239.000	239.000	
0590	610.0124	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH	LF	343.000	343.000	
0600	610.0129	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	LF	149.000	149.000	
0610	611.0624	INLET COVERS TYPE H	EACH	109.000	109.000	
0620	611.0627	INLET COVERS TYPE HM	EACH	3.000	3.000	
0630	611.0645	INLET COVERS TYPE MS-A	EACH	4.000	4.000	
0640	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	57.000	57.000	
0650	611.1006	CATCH BASINS 6-FT DIAMETER	EACH	20.000	20.000	
0660	611.2004	MANHOLES 4-FT DIAMETER	EACH	1.000	1.000	
0670	611.2007	MANHOLES 7-FT DIAMETER	EACH	1.000	1.000	
0680	611.8120.S	COVER PLATES TEMPORARY	EACH	3.000	3.000	
0690	611.9800.S	PIPE GRATES	EACH	9.000	9.000	
0700	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1174-10-70	EACH	1.000	1.000	
0710	619.1000	MOBILIZATION	EACH	1.000	0.750	0.250
0720	620.0100	CONCRETE CORRUGATED MEDIAN	SF	2,375.000	2,375.000	
0730	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	128.000	128.000	
0740	624.0100	WATER	MGAL	100.000	100.000	
0750	625.0100	TOPSOIL	SY	5,851.000	5,851.000	

3

DATE 02JAN13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1174-10-70 QUANTITY	1174-10-71 QUANTITY
0760	628.1504	SILT FENCE	LF	1,550.000	1,550.000	
0770	628.1520	SILT FENCE MAINTENANCE	LF	387.000	387.000	
0780	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	13.000	13.000	
0790	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	13.000	13.000	
0800	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	5,851.000	5,851.000	
0810	628.6005	TURBIDITY BARRIERS	SY	972.000	972.000	
0820	628.7005	INLET PROTECTION TYPE A	EACH	116.000	116.000	
0830	628.7010	INLET PROTECTION TYPE B	EACH	2.000	2.000	
0840	628.7015	INLET PROTECTION TYPE C	EACH	114.000	114.000	
0850	629.0210	FERTILIZER TYPE B	CWT	3.700	3.700	
0860	630.0140	SEEDING MIXTURE NO. 40	LB	105.000	105.000	
0870	630.0200	SEEDING TEMPORARY	LB	158.000	158.000	
0880	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	40.000	40.000	
0890	634.0816	POSTS TUBULAR STEEL 2X2-INCH X 16-FT	EACH	17.000	17.000	
0900	637.0202	SIGNS REFLECTIVE TYPE II	SF	347.920	347.920	
0910	638.2602	REMOVING SIGNS TYPE II	EACH	47.000	47.000	
0920	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	32.000	32.000	
0930	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000	
0940	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 1174-10-70	DAY	190.000	190.000	
0950	643.0300	TRAFFIC CONTROL DRUMS	DAY	33,189.000	33,189.000	
0960	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,134.000	1,134.000	
0970	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	134.000	134.000	
0980	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	134.000	134.000	
0990	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	3,357.000	3,357.000	
1000	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	410.000	410.000	
1010	643.0900	TRAFFIC CONTROL SIGNS	DAY	30,970.000	30,970.000	
1020	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	570.000	570.000	
1030	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	1,690.000	1,690.000	
1040	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	16,152.000	16,152.000	
1050	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	613.000	613.000	
1060	646.0600	REMOVING PAVEMENT MARKINGS	LF	6,388.000	6,388.000	
1070	647.0156	PAVEMENT MARKING ARROWS EPOXY TYPE 1	EACH	3.000	3.000	
1080	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	33.000	33.000	
1090	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	6.000	6.000	
1100	647.0456	PAVEMENT MARKING CURB EPOXY	LF	425.000	425.000	
1110	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	190.000	190.000	
1120	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	6.000	6.000	
1130	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	220.000	220.000	
1140	647.0716	PAVEMENT MARKING DIAGONAL EPOXY 8-INCH	LF	107.000	107.000	
1150	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	1,074.000	1,074.000	
1160	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	674.000	674.000	
1170	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	10,200.000	10,200.000	
1180	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	1,000.000	1,000.000	
1190	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	116.000	116.000	
1200	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	5,897.000	5,897.000	
1210	650.5000	CONSTRUCTION STAKING BASE	LF	5,897.000	5,897.000	
1220	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	11,382.000	11,382.000	
1230	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	4.000	4.000	

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DATE 02JAN13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1174-10-70 QUANTITY	1174-10-71 QUANTITY
1240	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. M-43-0001	LS	1.000	1.000	
1250	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. M-43-2	LS	1.000	1.000	
1260	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 1174-10-70	LS	1.000	1.000	
1270	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1174-10-70	LS	1.000	1.000	
1280	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	6,011.000	6,011.000	
1290	652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	10.000	10.000	
1300	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	65.000	65.000	
1310	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	3,414.000	3,414.000	
1320	652.0615	CONDUIT SPECIAL 3-INCH	LF	190.000	190.000	
1330	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	16.000	16.000	
1340	654.0101	CONCRETE BASES TYPE 1	EACH	2.000	2.000	
1350	654.0113	CONCRETE BASES TYPE 13	EACH	2.000	2.000	
1360	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	1.000	1.000	
1370	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	320.000	320.000	
1380	655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	LF	665.000	665.000	
1390	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	545.000	545.000	
1400	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. HAWK, STA 457+34	LS	1.000	1.000	
1410	657.0100	PEDESTAL BASES	EACH	2.000	2.000	
1420	657.0405	TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT	EACH	2.000	2.000	
1430	657.1355	INSTALL POLES TYPE 12	EACH	2.000	2.000	
1440	657.1535	INSTALL MONOTUBE ARMS 35-FT	EACH	2.000	2.000	
1450	658.0416	PEDESTRIAN SIGNAL FACE 16-INCH	EACH	2.000	2.000	
1460	658.0500	PEDESTRIAN PUSH BUTTONS	EACH	2.000	2.000	
1470	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 01. HAWK, STA 457+34	LS	1.000	1.000	
1480	690.0150	SAWING ASPHALT	LF	3,058.000	3,058.000	
1490	690.0250	SAWING CONCRETE	LF	30.000	30.000	
1500	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	2,400.000	2,400.000	
1510	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,980.000	1,980.000	
1520	SPV.0035	SPECIAL 01. CONCRETE MASONRY CURB	CY	40.000	40.000	
1530	SPV.0035	SPECIAL 02. CONCRETE MASONRY, SPECIAL	CY	30.000	30.000	
1540	SPV.0045	SPECIAL 01. PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) CELLULAR COMMUNICATIONS	DAY	570.000	570.000	
1550	SPV.0060	SPECIAL 01. SALVAGE HYDRANT	EACH	2.000		2.000
1560	SPV.0060	SPECIAL 02. REMOVE WATERMAIN VALVE BOX	EACH	23.000		23.000
1570	SPV.0060	SPECIAL 03. PLUG WATERMAIN ABANDONED IN PLACE	EACH	7.000		7.000
1580	SPV.0060	SPECIAL 04. PLUG FORCEMAIN ABANDONED IN PLACE	EACH	4.000		4.000
1590	SPV.0060	SPECIAL 05. CAP WATERMAIN TO REMAIN IN SERVICE	EACH	4.000		4.000
1600	SPV.0060	SPECIAL 06. REMOVE SANITARY MANHOLE	EACH	1.000		1.000
1610	SPV.0060	SPECIAL 07. ADJUST WATERMAIN VALVE BOX	EACH	18.000		18.000
1620	SPV.0060	SPECIAL 08. ADJUST SANITARY MANHOLE CASTING	EACH	12.000		12.000
1630	SPV.0060	SPECIAL 09. RECONSTRUCT SANITARY MANHOLE	EACH	3.000		3.000

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DATE 02JAN13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1174-10-70 QUANTITY	1174-10-71 QUANTITY
1640	SPV.0060	SPECIAL 10. SANITARY MANHOLE CASTING	EACH	1.000		1.000
1650	SPV.0060	SPECIAL 11. SANITARY MANHOLE	EACH	1.000		1.000
1660	SPV.0060	SPECIAL 12. CONNECTION TO EXISTING SANITARY MANHOLE	EACH	1.000		1.000
1670	SPV.0060	SPECIAL 13. AIR RELEASE MANHOLE	EACH	2.000		2.000
1680	SPV.0060	SPECIAL 14. HYDRANT	EACH	4.000		4.000
1690	SPV.0060	SPECIAL 15. WATERMAIN GATE VALVE AND BOX 6-INCH	EACH	6.000		6.000
1700	SPV.0060	SPECIAL 16. WATERMAIN GATE VALVE AND BOX 8-INCH	EACH	7.000		7.000
1710	SPV.0060	SPECIAL 17. WATERMAIN GATE VALVE AND BOX 10-INCH	EACH	3.000		3.000
1720	SPV.0060	SPECIAL 18. FORCEMAIN PLUG VALVE AND BOX 6-INCH	EACH	2.000		2.000
1730	SPV.0060	SPECIAL 19. WATERMAIN CORPORATION STOP 1-INCH	EACH	23.000		23.000
1740	SPV.0060	SPECIAL 20. WATERMAIN CURB STOP AND BOX 1-INCH	EACH	23.000		23.000
1750	SPV.0060	SPECIAL 21. WATERMAIN SERVICE REDUCER 1 TO 3/4-INCH	EACH	22.000		22.000
1760	SPV.0060	SPECIAL 22. WATERMAIN COUPLING 6-INCH	EACH	2.000		2.000
1770	SPV.0060	SPECIAL 23. WATERMAIN COUPLINE 8-INCH	EACH	9.000		9.000
1780	SPV.0060	SPECIAL 24. WATERMAIN COUPLING 10-INCH	EACH	1.000		1.000
1790	SPV.0060	SPECIAL 25. WATERMAIN BEND 11-1/4 DEGREE 8-INCH	EACH	1.000		1.000
1800	SPV.0060	SPECIAL 26. WATERMAIN BEND 22-1/2 DEGREE 10-INCH	EACH	1.000		1.000
1810	SPV.0060	SPECIAL 27. WATERMAIN BEND 45 DEGREE 6-INCH	EACH	7.000		7.000
1820	SPV.0060	SPECIAL 28. WATERMAIN BEND 45 DEGREE 8-INCH	EACH	6.000		6.000
1830	SPV.0060	SPECIAL 29. WATERMAIN BEND 45 DEGREE 10-INCH	EACH	8.000		8.000
1840	SPV.0060	SPECIAL 30. WATERMAIN REDUCER 10 X 8-INCH	EACH	4.000		4.000
1850	SPV.0060	SPECIAL 31.WATERMAIN TEE 8 X 6-INCH	EACH	2.000		2.000
1860	SPV.0060	SPECIAL 32. WATERMAIN TEE 8 X 8-INCH	EACH	2.000		2.000
1870	SPV.0060	SPECIAL 33. WATERMAIN TEE 10 X 6-INCH	EACH	4.000		4.000
1880	SPV.0060	SPECIAL 34. WATERMAIN TEE 10 X 10-INCH	EACH	1.000		1.000
1890	SPV.0060	SPECIAL 35. FORCEMAIN COUPLING 6-INCH	EACH	2.000		2.000
1900	SPV.0060	SPECIAL 36. PARK BENCH	EACH	10.000	10.000	
1910	SPV.0060	SPECIAL 37. PLANTER	EACH	5.000	5.000	
1920	SPV.0060	SPECIAL 38. TRASH CONTAINER	EACH	5.000	5.000	
1930	SPV.0060	SPECIAL 39. RAILING STEEL GATE	EACH	2.000	2.000	
1940	SPV.0060	SPECIAL 40. WATERMAIN DIRECTIONAL BORE 10-INCH	EACH	1.000		1.000
1950	SPV.0060	SPECIAL 41. FORCEMAIN DIRECTION BORE 6-INCH	EACH	1.000		1.000
1960	SPV.0060	SPECIAL 44. PEDESTRIAN HYBRID BEACON	EACH	4.000	4.000	
1970	SPV.0060	SPECIAL 45. INLET TYPE 3M	EACH	26.000	26.000	
1980	SPV.0060	SPECIAL 46. CATCH BASIN TYPE 5M-8	EACH	6.000	6.000	
1990	SPV.0060	SPECIAL 47. CATCH BASIN TYPE 5M-10	EACH	2.000	2.000	
2000	SPV.0060	SPECIAL 48. INLET TYPE 8M	EACH	5.000	5.000	
2010	SPV.0060	SPECIAL 49. TEMPORARY WATER PASSAGE	EACH	116.000	116.000	
2020	SPV.0060	SPECIAL 50. FORCEMAIN BEND 45 DEGREE 6-INCH	EACH	4.000		4.000

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DATE 02JAN13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1174-10-70 QUANTITY	1174-10-71 QUANTITY
2030	SPV.0060	SPECIAL 51. SANITARY WYE 8 X 4-INCH	EACH	4.000		4.000
2040	SPV.0085	SPECIAL 01. BAR STEEL REINFORCEMENT HS COATED RAILING	LB	7,910.000	7,910.000	
2050	SPV.0085	SPECIAL 02. BAR STEEL REINFORCEMENT HS COATED, SPECIAL	LB	6,640.000	6,640.000	
2060	SPV.0090	SPECIAL 01. REMOVE WATERMAIN	LF	490.000		490.000
2070	SPV.0090	SPECIAL 02. REMOVE ASBESTOS CEMENT SANITARY SEWER	LF	282.000		282.000
2080	SPV.0090	SPECIAL 03. REMOVE ASBESTOS CEMENT FORCEMAIN	LF	54.000		54.000
2090	SPV.0090	SPECIAL 04. SANITARY SEWER LATERAL 4-INCH	LF	45.000		45.000
2100	SPV.0090	SPECIAL 05. SANITARY SEWER 8-INCH	LF	272.000		272.000
2110	SPV.0090	SPECIAL 07. WATER SERVICE 1-INCH	LF	1,739.000		1,739.000
2120	SPV.0090	SPECIAL 08. WATERMAIN 6-INCH	LF	202.000		202.000
2130	SPV.0090	SPECIAL 09. WATERMAIN 8-INCH	LF	990.000		990.000
2140	SPV.0090	SPECIAL 10. WATERMAIN 10-INCH	LF	694.000		694.000
2150	SPV.0090	SPECIAL 12. FORCEMAIN 6-INCH	LF	90.000		90.000
2160	SPV.0090	SPECIAL 13. PIPELINE SHEET INSULATION	LF	145.000		145.000
2170	SPV.0105	SPECIAL 01. RAILING STEEL TYPE C2 GALVANIZED PEDSTRIAN M-43-1	LS	1.000	1.000	
2180	SPV.0105	SPECIAL 02. EXCAVATION FOR STRUCTURES, SPECIAL M-43-2	LS	1.000	1.000	
2190	SPV.0120	SPECIAL 01. WATER FOR SEEDED AREAS	MGAL	20.000	20.000	
2200	SPV.0165	SPECIAL 01. COLORED TEXTURED CONCRETE TERRACE 6-INCH	SF	26,662.000	26,662.000	
2210	SPV.0180	SPECIAL 01. GEOGRID REINFORCEMENT	SY	4,824.000	4,824.000	
2220	SPV.0180	SPECIAL 02. PREPARING TOPSOIL FOR LAWN TYPE TURF	SY	5,851.000	5,851.000	

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WATERMAIN SCHEDULE REMOVALS

STA	OFFSET	TO	STA	OFFSET	SPV.0060.02 REMOVE WATERMAIN VALVE BOX EACH	SPV.0060.03 PLUG WATERMAIN ABANDONED IN PLACE EACH	SPV.0090.01 REMOVE WATERMAIN LF	SPV.0060.05 CAP WATERMAIN TO REMAIN IN SERVICE EACH	SPV.0060.01 SALVAGE HYDRANT EACH	SPV.0060.07 ADJUST WATERMAIN VALVE BOX EACH
437+15	46 LT	-	-	-	-	-	-	-	-	1
437+60	46 LT	-	-	-	-	-	-	1	-	-
437+60	46 LT	-	440+46	46 LT	-	-	292	-	-	-
438+10	45 LT	-	-	-	1	-	-	-	-	-
438+27	65 LT	-	-	-	1	-	-	-	-	-
439+52	18 RT	-	-	-	-	1	-	-	-	-
440+30	47 LT	-	-	-	1	-	-	-	-	-
444+87	18 RT	-	445+13	17 RT	-	-	26	-	-	-
444+87	18 RT	-	-	-	-	1	-	-	-	-
445+13	17 RT	-	-	-	-	1	-	-	-	-
446+40	17 RT	-	-	-	-	1	-	-	-	-
448+40	38 RT	-	-	-	-	-	-	-	-	1
451+62	37 RT	-	-	-	-	-	-	-	1	-
455+10	40 RT	-	-	-	-	-	-	-	-	1
455+11	40 RT	-	-	-	-	-	-	-	-	1
455+12	40 RT	-	-	-	-	-	-	-	-	1
455+44	40 RT	-	-	-	-	-	-	-	-	1
456+35	20 RT	-	-	-	-	1	-	-	-	-
458+34	15 RT	-	-	-	-	-	-	1	-	-
458+36	35 LT	-	-	-	1	-	-	-	-	-
458+39	39 RT	-	-	-	-	1	-	-	-	-
458+32	24 RT	-	-	-	1	-	-	-	-	-
458+34	28 RT	-	-	-	1	-	-	-	-	-
459+00	60 LT	-	-	-	1	-	-	-	-	-
461+65	38 RT	-	-	-	-	-	-	1	-	-
461+66	41 RT	-	-	-	1	-	-	-	-	-
462+05	55 LT	-	-	-	1	-	-	-	-	-
463+87	42 RT	-	-	-	-	-	-	-	-	1
464+46	42 RT	-	-	-	-		-	-	-	1
465+30	40 RT	-	-	-	-	-	-	-	-	1
465+95	35 RT	-	-	-	-	-	-	-	-	1
466+90	32 RT	-	-	-	-	-	-	-	-	1
467+50	30 RT	-	-	-	-	-	-	-	-	1
467+70	52 LT	-	-	-	-	-	-	-	-	1
468+28	31 RT	-	-	-	-	-	-	-	-	1
468+80	26 RT	-	-	-	-	-	-	-	-	1
470+02	33 RT	-	-	-	-	-	-	-	-	1
470+43	36 RT	-	-	-	-	-	-	-	-	1
470+86	50 LT	-	-	-	-	-	-	-	1	-
470+96	33 RT	-	-	-	-	-	-	-	-	1
476+25	35 LT	-	-	-	-	-	-	1	-	-
477+30	72 LT	-	-	-	1	-	-	-	-	-
477+44	54 RT	-	-	-	1	-	-	-	-	-
477+50	38 LT	-	479+22	41 LT	-	-	172	-	-	-
478+12	38 LT	-	-	-	1	-	-	-	-	-
478+56	55 RT	-	-	-	1	-	-	-	-	-
478+58	58 LT	-	-	-	1	-	-	-	-	-
479+50	53 RT	-	-	-	1	-	-	-	-	-
482+17	51 LT	-	-	-	1	-	-	-	-	-
482+23	54 LT	-	-	-	1	-	-	-	-	-
482+26	51 LT	-	-	-	1	-	-	-	-	-
483+49	41 lt	-	-	-	-	1	-	-	-	-
483+75	58 RT	-	-	-	1	-	-	-	-	-
484+08	77 LT	-	-	-	1	-	-	-	-	-
484+40	50 RT	-	-	-	1	-	-	-	-	-
484+95	56 RT	-	-	-	1	-	-	-	-	-
485+20	73 LT	-	-	-	1	-	-	-	-	-
				TOTALS	23	7	490	4	2	18

WATERMAIN TEES & REDUCERS SCHEDULE

STA	OFFSET	SPV.0060.33 WATERMAIN TEE 10 x 6-INCH EACH	SPV.0060.34 WATERMAIN TEE 10 x 10-INCH EACH	SPV.0060.31 WATERMAIN TEE 8 x 6-INCH EACH	SPV.0060.32 WATERMAIN TEE 8 x 8-INCH EACH	SPV.0060.30 WATERMAIN REDUCER 10 x 8-INCH EACH
439+82	41 RT	-	-	-	-	1
446+02	51 RT	-	-	-	-	1
456+15	16 RT	-	-	-	-	1
458+52	18 RT	-	1	-	-	-
458+48	30 RT	1	-	-	-	-
461+71	18 RT	1	-	-	-	-
462+05	55 LT	1	-	-	-	-
463+19	27 LT	-	-	-	-	1
463+19	31 LT	-	-	-	1	-
467+70	52 kt	1	-	-	-	-
472+63	33 LT	-	-	1	-	-
481+18	34 LT	-	-	1	-	-
482+21	41 LT	-	-	-	1	-
	TOTAL	4	1	2	2	4

WATERMAIN COUPLINGS & BENDS SCHEDULE

STA	OFFSET	SPV.0060.22 WATERMAIN COUPLING 6-INCH EACH	SPV.0060.23 WATERMAIN COUPLING 8-INCH EACH	SPV.0060.24 WATERMAIN COUPLING 10-INCH EACH	SPV.0060.27 WATERMAIN BEND 45 DEGREE 6-INCH EACH	SPV.0060.28 WATERMAIN BEND 45 DEGREE 8-INCH EACH	SPV.0060.29 WATERMAIN BEND 45 DEGREE 10-INCH EACH	SPV.0060.26 WATERMAIN BEND 22 1/2 DEGREE 10-INCH EACH	SPV.0060.25 WATERMAIN BEND 11-1/4 DEGREE 8-INCH EACH
439+50	17 RT	-	1	-	-	-	-	-	-
439+52	17 RT	-	-	-	-	1	-	-	-
439+76	41 RT	-	-	-	-	1	-	-	-
446+05	52 RT	-	-	-	-	1	-	-	-
446+43	17 RT	-	-	-	-	1	-	-	-
446+47	17 RT	-	1	-	-	-	-	-	-
451+62	37 RT	-	-	-	1	-	-	-	-
456+66	25 RT	-	1	-	-	-	-	-	-
456+68	16 RT	-	-	-	-	-	1	-	-
456+73	16 RT	-	-	-	-	-	1	-	-
456+96	16 RT	-	-	-	-	-	1	-	-
457+00	16 RT	-	-	-	-	-	1	-	-
456+11	16 RT	-	1	-	-	-	-	-	-
458+40	40 RT	-	-	-	-	-	1	-	-
458+45	47 RT	-	-	1	-	-	-	-	-
458+52	28 RT	-	-	-	-	-	1	-	-
458+42	42 RT	-	-	-	-	-	-	1	-
461+67	49 RT	-	-	-	1	-	-	-	-
461+67	54 RT	1	-	-	-	-	-	-	-
461+71	45 RT	-	-	-	1	-	-	-	-
462+75	18 RT	-	-	-	-	-	1	-	-
463+14	31 LT	-	1	-	-	-	-	-	-
463+19	23 LT	-	-	-	-	-	1	-	-
470+89	38 LT	-	-	-	1	-	-	-	-
470+89	40 LT	-	-	-	1	-	-	-	-
470+89	44 LT	-	-	-	1	-	-	-	-
470+89	46 LT	-	-	-	1	-	-	-	-
472+63	33 LT	-	1	-	-	-	-	-	-
475+13	32 LT	-	1	-	-	-	-	-	-
481+17	55 LT	1	-	-	-	-	-	-	-
482+19	55 LT	-	-	-	-	1	-	-	-
482+23	60 LT	-	-	-	-	1	-	-	-
482+21	73 LT	-	1	-	-	-	-	-	-
482+53	44 LT	-	-	-	-	-	-	-	1
483+77	36 LT	-	1	-	-	-	-	-	-
	TOTAL	2	9	1	7	6	8	1	1

WATERMAIN VALVES & HYDRANTS SCHEDULE

STA	OFFSET	SPV.0060.14 HYDRANT EACH	SPV.0060.15 WATERMAIN GATE VALVE AND BOX 6-INCH EACH	SPV.0060.16 WATERMAIN GATE VALVE AND BOX 8-INCH EACH	SPV.0060.17 WATERMAIN GATE VALVE AND BOX 10-INCH EACH	SPV.0060.19 WATERMAIN CORPORATION STOP 1-INCH EACH	SPV.0060.20 WATERMAIN CURB STOP AND BOX 1-INCH EACH	SPV.0060.21 WATERMAIN REDUCER 1 X 3/4 INCH EACH
438+24	13 RT	-	-	-	-	1	-	-
439+00	57 LT	-	-	-	-	-	1	-
438+24	57 LT	-	-	-	-	-	1	1
438+96	19 RT	-	-	-	-	1	-	-
439+56	20 RT	-	-	-	-	1	-	-
439+58	24 RT	-	-	-	-	1	-	-
439+63	29 RT	-	-	1	-	-	-	-
440+20	57 LT	-	-	-	-	-	1	1
440+25	57 LT	-	-	-	-	-	1	1
446+40	20 RT	-	-	1	-	-	-	-

(Continued in next column on this page)

WATERMAIN VALVES & HYDRANTS SCHEDULE (Continued)

STA	OFFSET	SPV.0060.14 HYDRANT EACH	SPV.0060.15 WATERMAIN GATE VALVE AND BOX 6-INCH EACH	SPV.0060.16 WATERMAIN GATE VALVE AND BOX 8-INCH EACH	SPV.0060.17 WATERMAIN GATE VALVE AND BOX 10-INCH EACH	SPV.0060.19 WATERMAIN CORPORATION STOP 1-INCH EACH	SPV.0060.20 WATERMAIN CURB STOP AND BOX 1-INCH EACH	SPV.0060.21 WATERMAIN REDUCER 1 X 3/4 INCH EACH
451+51	48 RT	1	-	-	-	-	-	-
451+57	42 RT	-	1	-	-	-	-	-
456+30	16 RT	-	-	-	1	-	-	-
458+22	57 LT	-	-	-	-	-	1	1
458+22	18 RT	-	-	-	-	1	-	-
458+41	44 RT	-	-	-	1	-	-	-
458+70	52 RT	-	1	-	-	-	-	-
458+76	58 RT	1	-	-	-	-	-	-
459+00	57 LT	-	-	-	-	-	1	1
459+00	18 RT	-	-	-	-	1	-	-
459+58	59 LT	-	-	-	-	-	1	1
459+58	18 RT	-	-	-	-	1	-	-
460+92	59 LT	-	-	-	-	-	1	1
460+92	18 RT	-	-	-	-	1	-	-
461+67	52 RT	-	1	-	-	-	-	-
462+06	59 LT	-	-	-	-	-	1	1
462+06	18 RT	-	-	-	-	1	-	-
463+16	31 LT	-	-	1	-	-	-	-
463+19	25 LT	-	-	-	1	-	-	-
470+89	48 LT	-	1	-	-	-	-	-
470+89	32 LT	-	-	-	-	1	-	-
470+89	38 RT	-	-	-	-	-	1	1
470+89	53 LT	1	-	-	-	-	-	-
472+63	40 LT	-	1	-	-	-	-	-
472+63	40LT	1	-	-	-	-	-	-
474+17	32 LT	-	-	-	-	1	-	-
474+17	48 RT	-	-	-	-	-	1	1
475+25	32 LT	-	-	1	-	-	-	-
477+30	32 LT	-	-	-	-	1	-	-
477+30	72 LT	-	-	-	-	-	1	1
477+44	32 LT	-	-	-	-	1	-	-
477+44	54 RT	-	-	-	-	-	1	1
478+54	32 LT	-	-	-	-	1	-	-
478+56	55 RT	-	-	-	-	-	1	1
478+58	58 LT	-	-	-	-	-	1	1
478+59	39 LT	-	-	-	-	1	-	-
479+50	53 RT	-	-	-	-	-	1	1
479+54	32 LT	-	-	-	-	1	-	-
481+18	34 LT	-	-	-	-	1	-	-
481+18	57 RT	-	-	-	-	-	1	1
481+18	34 LT	-	1	-	-	-	-	-
482+21	65 LT	-	-	1	-	-	-	-
482+22	66 LT	-	-	1	-	-	-	-
482+53	44 LT	-	-	-	-	1	-	-
482+55	57 LT	-	-	-	-	-	1	1
483+70	37 LT	-	-	1	-	-	-	-
483+75	36 LT	-	-	-	-	1	-	-
483+75	58 RT	-	-	-	-	-	1	1
484+08	35 LT	-	-	-	-	1	-	-
484+08	77 LT	-	-	-	-	-	1	1
484+40	35 LT	-	-	-	-	1	-	-
484+40	50 RT	-	-	-	-	-	1	1
484+95	35 LT	-	-	-	-	1	-	-
484+95	56 RT	-	-	-	-	-	1	1
485+20	33 LT	-	-	-	-	1	-	-
485+20	73 LT	-	-	-	-	-	1	1
	TOTAL	4	6	7	3	23	23	22

WATERMAIN SERVICE SCHEDULE

STA	OFFSET	TO	STA	OFFSET	SPV .0090.07 WATER SERVICE 1-INCH LF
438+24	13 RT	-	438+24	57 LT	70
438+96	19 RT	-	439+00	57 LT	76
439+56	21 RT	-	440+20	57 LT	100
439+58	24 RT	-	440+25	57 LT	100
458+22	18 RT	-	458+22	57 LT	75
459+00	18 RT	-	459+00	57 LT	75
459+58	18 RT	-	459+58	59 LT	77
460+92	18 RT	-	460+92	59 LT	77
462+06	18 RT	-	462+06	59 LT	77
470+89	32 LT	-	470+89	38 RT	70
474+17	32 LT	-	474+17	48 RT	80
477+30	32 LT	-	477+30	72 LT	40
477+44	32 LT	-	477+44	54 RT	87
478+54	32 LT	-	478+56	55 RT	87
478+58	58 LT	-	478+59	39 LT	19
479+50	53 RT	-	479+54	32 LT	85
481+16	57 RT	-	481+18	34 LT	91
482+53	44 LT	-	482+55	57 RT	101
483+75	36 LT	-	483+75	58 RT	94
484+08	35 LT	-	484+08	77 LT	42
484+40	35 LT	-	484+40	50 RT	85
484+95	35 LT	-	484+95	56 RT	91
485+20	33 LT	-	485+20	73 LT	40
				TOTAL	1739

WATERMAIN SCHEDULE

STA	OFFSET	TO	STA	OFFSET	SPV .0090.08 WATERMAIN 6-INCH LF	SPV .0090.09 WATERMAIN 8-INCH LF	SPV .0090.10 WATERMAIN 10-INCH LF
439+50	17 RT	-	439+78	41 RT	-	37	-
446+03	52 RT	-	446+43	17 RT	-	56	-
451+51	48 RT	-	451+62	37 RT	12	-	-
456+15	16 RT	-	463+19	31 LT	-	-	665
458+50	30 RT	-	458+76	57 RT	38	-	-
458+52	18 RT	-	458+45	47 RT	-	-	29
461+67	52 RT	-	461+71	18 RT	37	-	-
470+88	32 LT	-	470+89	53 LT	21	-	-
472+63	33 LT	-	472+63	40 RT	73	-	-
475+13	32LT	-	483+77	36 LT	-	864	-
481+17	55 LT	-	481+18	34 LT	21	-	-
482+21	41 LT	-	482+21	73 LT	-	33	-
				TOTAL	202	990	694

PIPELINE SHEET INSULATION

STA	OFFSET	TO	STA	OFFSET	SPV.0090.13 PIPELINE SHEET INSULATION LF
439+64	45 LT	-	440+33	52 LT	69
439+75	47 LT	-	439+75	56 LT	9
440+25	50 LT	-	440+25	57 LT	7
438+76	26 RT	-	438+84	26 RT	8
456+75	16 RT	-	456+95	16 RT	20
456+80	20 RT	-	456+88	20 RT	8
461+70	24 RT	-	461+70	32 RT	8
461+70	20 RT	-	461+70	36 RT	16
				TOTAL	145

203.0210.S ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) SANITARY SEWER AND FORCEMAIN PIPE

ITEM	STA	OFFSET	TO	STA	OFFSET	LF	LS
8-INCH SANITARY SEWER	437+66	45 LT	-	440+43	41 LT	282	-
6-INCH FORCEMAIN	433+86	15 RT	-	439+90	15 RT	4	-
6 INCH FORCEMAIN	444+87	14 RT	-	445+13	15 RT	26	-
6 INCH FORCEMAIN	446+23	14 RT	-	446+27	14 RT	4	-
6 INCH FORCEMAIN	456+68	44 LT	-	456+88	44 LT	20	-
					TOTAL	**336**	1

NOTES: = ITEMS AND QUANTITIES LISTED FOR BID INFORMATION ONLY

SANITARY REMOVALS

STA	OFFSET	TO	STA	OFFSET	SPV.0090.02 REMOVE ASBESTOS CEMENT SANITARY SEWER LF	SPV.0060.06 REMOVE SANITARY SEWER MANHOLE EACH
437+66	45 LT	-	440+43	41 LT	282	-
440+43	41 LT	-	-	-	-	1
				TOTAL	282	1

SANITARY MANHOLE SCHEDULE

STA	OFFSET	SPV.0060.12 CONNECTION TO EXISTING SANITARY MANHOLE EACH	SPV.0060.10 SANITARY MANHOLE CASTING EACH	SPV.0060.11 SANITARY MANHOLE EACH	SPV.0060.13 AIR RELEASE MANHOLE EACH	SPV.0060.08 ADJUST SANITARY MANHOLE CASTING EACH	SPV.0060.09 RECONSTRUCT SANITARY MANHOLE EACH
436+62	21 RT	-	-	-	-	1	-
437+62	19 RT	-	-	-	-	1	-
437+66	45 LT	-	-	-	-	1	-
437+66	45 LT	1	-	-	-	-	-
438+83	20 RT	-	-	-	-	-	1
439+97	27 RT	-	-	-	1	-	-
440+33	52 LT	-	1	1	-	-	-
451+72	26 RT	-	-	-	-	1	-
451+77	23 RT	-	-	-	-	1	-
455+11	30 RT	-	-	-	-	1	-
455+30	40 LT	-	-	-	-	1	-
456+70	44 LT	-	-	-	1	-	-
463+29	42 LT	-	-	-	-	1	-
466+12	40 LT	-	-	-	-	1	-
467+98	43 LT	-	-	-	-	-	1
470+02	42 LT	-	-	-	-	1	-
472+28	43 LT	-	-	-	-	1	-
476+52	52 LT	-	-	-	-	1	-
482+39	62 LT	-	-	-	-	-	1
	TOTAL	1	1	1	2	12	3

SANITARY SEWER AND FORCEMAIN SCHEDULE

STA	OFFSET	TO	STA	OFFSET	SPV.0090.05 SANITARY SEWER 8-INCH LF	SPV.0090.04 SEWER LATERAL 4-INCH LF	SPV.0090.12 FORCEMAIN 6-INCH LF	SPV.0060.51 SANITARY WYE 8X4-INCH EACH
437+66	45 LT	-	440+33	52 LT	272	-	-	-
438+23	44 LT	-	-	-	-	-	-	1
438+23	44 LT	-	438+23	59 LT	-	15	-	-
438+97	44 LT	-	-	-	-	-	-	1
438+97	44 LT	-	438+23	58 LT	-	14	-	-
439+75	50 LT	-	-	-	-	-	-	1
439+75	47 LT	-	439+75	56 LT	-	9	-	-
439+80	15 RT	-	440+10	32 RT	-	-	35	-
440+25	50 LT	-	-	-	-	-	-	1
440+25	50 LT	-	440+25	57 LT	-	7	-	-
445+98	37 RT	-	446+28	15 RT	-	-	35	-
456+68	44 LT	-	456+88	44 LT	-	-	20	-
				TOTAL	272	45	90	4

FORCEMAIN SCHEDULE

STA	OFFSET	SPV.0060.18 PLUG VALVE AND BOX 6-INCH EACH	SPV.0060.35 FORCEMAIN COUPLING 6-INCH EACH	SPV.0060.50 FORCEMAIN BEND 45 DEGREE 6-INCH EACH
439+80	15 RT	-	1	-
439+84	15 RT	-	-	1
439+87	18 RT	1	-	-
440+01	31 RT	-	-	1
446+00	36 RT	-	-	1
446+20	19 RT	1	-	-
446+25	15 RT	-	-	1
446+28	15 RT	-	1	-
	TOTAL	2	2	4

FORCEMAIN REMOVALS

STA	OFFSET	TO	STA	OFFSET	SPV.0090.03 REMOVE ASBESTOS CEMENT FORCEMAIN LF	SPV.0060.04 PLUG FORCEMAIN ABANDONED IN PLACE EACH
439+86	15 RT	-	-	-	-	1
439+86	15 RT	-	439+90	15 RT	4	-
444+87	14 RT	-	-	-	-	1
444+87	14 RT	-	445+13	15 RT	26	-
445+13	15 RT	-	-	-	-	1
446+23	14 RT	-	446+27	14 RT	4	1
456+68	44 LT	-	456+88	44 LT	20	-
				TOTAL	54	4

DIRECTIONAL BORE SCHEDULE

STA	OFFSET	TO	STA	OFFSET	SPV .0060.40 WATERMAIN DIRECTIONAL BORE 10-INCH Each	SPV .0060.41 FORCEMAIN DIRECTIONAL BORE 6-INCH Each
439+50	0 RT	-	446+48	18 LT	1	0
439+80	15 RT	-	446+30	15 RT	0	1
				TOTAL	1	1

REMOVING ASPHALTIC SURFACE

STATION	TO	STATION	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
STA 425+61	-	STA 431+96		3,387
STA 436+36	-	STA 441+00	4,021	
STA 441+00	-	STA 449+00	5,511	
STA 449+00	-	STA 456+40	6,413	
STA 456+40	-	STA 487+50	27,644	
TOTAL			43,590	3,387

REMOVING CURB AND GUTTER

STATION	TO	STATION	LOCATION	204.0150 REMOVING CURB AND GUTTER LF
STA 436+30	-	STA 460+82	LT	2,513
STA 461+85	-	STA 481+31	LT	2,053
STA 482+46	-	STA 487+50	LT	562
STA 436+30	-	STA 458+00	RT	2,219
STA 458+97	-	STA 461+05	RT	316
STA 462+06	-	STA 487+50	RT	2,604
TOTAL				10,267

REMOVING SIDEWALK

STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK LF
STA 429+84	-	STA 436+30	LT	646
STA 436+30	-	STA 456+30	LT	2000
STA 451+21			42' RT	30
STA 464+80			39.5' RT	63
STA 465+90			39.5' RT	27
STA 472+72			39.5' RT	29
TOTAL				2796

REMOVING STORM SEWER

STATION	TO	STATION	LOCATION	204.0245.01 12-INCH LF	204.0245.02 18-INCH LF	204.0245.03 24-INCH LF	204.0280 SEALING PIPES EACH
STA 436+35	-	STA 440+05	LEFT		368		
STA 436+35			LEFT/RIGHT	65			
STA 440+03			LEFT/RIGHT		63		
STA 440+03			RIGHT			35	
STA 443+55	-	STA 443+65	LEFT	7			
STA 443+55	-	STA 443+65	RIGHT	7			
STA 443+55			LEFT/RIGHT	75			
STA 449+60			LEFT	8			
STA 449+22	-	STA 449+74	RIGHT	53			
STA 449+68			LEFT/RIGHT	95			
STA 452+00			LEFT/RIGHT	91			
STA 454+36			LEFT/RIGHT	89			
STA 456+45	-	STA 456+96	LEFT			81	
STA 456+96			LEFT/RIGHT	58			
STA 456+96	-	STA 462+16	LEFT		565		
STA 458+67	-	STA 458+83	LEFT/RIGHT	66			
STA 461+07	-	STA 461+10	RIGHT	13			
STA 461+10	-	STA 462+16	RIGHT	117			
STA 462+16			LEFT/RIGHT		65		
STA 462+16	-	STA 462+25	RIGHT	8			
STA 462+16	-	STA 463+00	LEFT	87			
STA 470+08	-	STA 473+68	RIGHT		360		
STA 470+08			LEFT/RIGHT	67			
STA 473+68			LEFT/RIGHT		60		
STA 473+68			RIGHT	20			
STA 473+57	-	STA 473+68	LEFT	10			
STA 473+57	-	STA 473+68	RIGHT	12			
STA 473+68	-	STA 480+65	RIGHT			694	
STA 477+08			LEFT/RIGHT	66			
STA 478+10			RIGHT	10			
STA 480+65			RIGHT			190	
STA 480+65	-	STA 480+93	LEFT/RIGHT		90		
STA 480+93	-	STA 481+50	LEFT		70		
STA 481+50	-	STA 482+20	LEFT		80		
STA 480+65	-	STA 482+65	RIGHT		200		
STA 482+65			LEFT/RIGHT	60			
STA 482+65	-	STA 482+72	RIGHT	10			
STA 482+65	-	STA 484+90	RIGHT		220		
STA 484+90			LEFT/RIGHT	60			
STA 484+88	-	STA 484+90	RIGHT	8			
STA 480+30			270' RT				1
STA 480+65			30' RT				1
TOTAL				1,172	2,141	1,000	2

REMOVING INLETS AND MANHOLES

STATION	LOCATION	204.0220 REMOVING INLETS EACH	204.0210 REMOVING MANHOLES EACH
440+04	30 LEFT		1
440+04	40 LEFT	1	
440+04	23 RIGHT		1
440+04	25 RIGHT	1	
443+55	25 LEFT	1	
443+55	26 RIGHT	1	
443+65	25 LEFT	1	
443+65	26 RIGHT	1	
449+27	27 RIGHT	1	
449+74	28 RIGHT	1	
449+60	28 LEFT	1	
449+68	40 LEFT	1	
452+00	38 LEFT	1	
452+00	27 RIGHT	1	
454+36	39 LEFT	1	
454+36	30 RIGHT	1	
456+96	33 LEFT		1
456+96	25 RIGHT	1	
456+90	40 LEFT	1	
458+67	36 LEFT	1	
458+67	34 LEFT		1
458+83	31 RIGHT	1	
461+07	32 RIGHT	1	
461+10	19 RIGHT		1
462+16	34 LEFT	1	
462+16	31 LEFT		1
462+16	34 RIGHT	1	
462+16	21 RIGHT		1
462+25	34 LEFT	1	
462+25	34 RIGHT	1	
463+00	34 LEFT	1	
470+08	41 LEFT	1	
470+08	18 RIGHT		1
470+08	26 RIGHT	1	
473+68	27 LEFT	1	
473+68	18 RIGHT		1
473+68	26 RIGHT	1	
473+57	42 LEFT	1	
473+68	35 RIGHT	1	
477+08	41 LEFT	1	
477+08	25 RIGHT	1	
477+08	18 RIGHT		1
478+10	25 RIGHT	1	
478+12	18 RIGHT		1
480+65	16 RIGHT		1
480+65	26 RIGHT	1	
480+93	41 LEFT	1	
481+00	66 LEFT	1	
481+50	109 LEFT		1
482+65	41 LEFT	1	
482+72	26 RIGHT	1	
482+80	20 RIGHT		1
484+90	40 LEFT	1	
484+90	17 RIGHT		1
TOTAL		40	15

3

CLEARING AND GRUBBING

STATION	TO	STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID	201.0105 CLEARING STA	201.0205 GRUBBING STA
STA 445+00	-	STA 449+00	LT	100	100		
STA 7+00	-	STA 9+50	HUBER			2.5	2.5
STA 456+00	-	STA 456+50	LT			0.5	0.5
TOTAL				100	100	3	3

WATER

STAGE	624.0100 WATER MGAL
STAGE 1	50
STAGE 2	50
TOTALS	100

REMOVING OLD STRUCTURE

STATION	LOCATION	203.0200.01 LS
STA 443+45	USH 51	1
TOTAL		1

3

HMA PAVEMENT

STATION	TO	STATION	LOCATION	455.0122 ASPHALTIC MATERIAL PG 64-34 TON	455.0115 ASPHALTIC MATERIAL PG 64-22 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	455.0605 TACK COAT GALS	465.0125 ASPHALTIC SURFACE TEMPORARY TON
425+61	-	431+96	USH 51	21		379	85	
436+36	-	441+00	USH 51	18	45	1,143	170	
441+00	-	449+00	USH 51	25	61	1,553	231	
449+00	-	487+50	USH 51	152	370	9486	1,412	
STA 10+26	-	STA 12+00	ROGERS DR	3	0.31	62	29	
STA 10+26	-	STA 11+50	HUBER LN	2	0.22	44	21	
STA 7+50	-	STA 9+60	NEW HUBER	4	0.37	75	35	
STA 6+85	-	STA 9+60	OLD HWY 70	5	0.48	99	46	
STA 443+00	-	STA 444+00	USH 51					209
STA 444+25	-	STA 445+45	USH 51					251
TOTAL				216	475	12,562	1,898	460

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0120 1 1/4 INCH TONS
STA 436+36	-	STA 441+00	USH 51	4,747
STA 441+00	-	STA 449+00	USH 51	6,630
STA 449+00	-	STA 487+50	USH 51	39,391
STA 10+26	-	STA 12+00	ROGERS DR	320
STA 10+26	-	STA 11+50	HUBER LN	228
STA 7+50	-	STA 9+60	HUBER	386
STA 6+85	-	STA 9+60	OLD HWY 70	696
			SIDEWALK BASE	2,680
			TERRACE BASE	1,153
TOTAL				56,230

EINFORCEMENT HS COATED RAILING

TO	STATION	LOCATION	SPV.0085.01 BAR STEEL REINFORCEMENT HS COATED RAILIING LB	COMMENTS
-	456+50	LEFT	474	TIE BARS TO BE PLACED IN SIDEWALK
			474	

*ADDITIONAL QUANTITY IN RAILING PLANS

CULVERT PIPE

STATION	LOCATION	522.0148 CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH LF	522.0112 CULVERT PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH
STA 444+85	USH 51	282			6
STA 7+60	NEW HUBER		56	2	
TOTAL		282	56	2	6

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	465.0120 TONS
STA 436+61	RT	9
STA 437+66	RT	12
STA 438+32	LT	28
STA 438+37	RT	41
STA 439+50	LT	13
STA 440+63	LT	25
STA 449+49	RT	127
STA 453+45	RT	82
STA 456+59	RT	70
STA 459+20	RT	8
STA 459+52	LT	17
STA 460+30	RT	41
STA 462+73	LT	7
STA 463+35	RT	19
STA 464+16	LT	7
STA 464+46	RT	8
STA 465+32	LT	24
STA 466+64	LT	24
STA 466+84	RT	12
STA 467+65	RT	28
STA 468+61	RT	10
STA 468+86	LT	22
STA 469+20	RT	11
STA 470+44	LT	15
STA 471+24	RT	30
STA 472+29	RT	14
STA 473+09	RT	14
STA 473+16	LT	13
STA 474+34	LT	12
STA 474+47	RT	9
STA 475+17	LT	6
STA 476+40	RT	9
STA 477+55	RT	77
STA 479+00	LT	19
STA 479+82	RT	99
STA 484+27	LT	12
STA 486+29	LT	10
STA 486+95	LT	12
TOTAL		999

SAWING ASPHALT

STATION	LOCATION	690.0150 LF
STA 436+61	USH 51 RT	27
STA 437+66	USH 51 RT	38
STA 438+32	USH 51 LT	86
STA 438+37	USH 51 RT	126
STA 439+50	USH 51 LT	40
STA 440+63	USH 51 LT	76
STA 449+49	USH 51 RT	390
STA 453+45	USH 51 RT	250
STA 456+59	USH 51 RT	214
STA 459+20	USH 51 RT	26
STA 459+52	USH 51 LT	52
STA 460+30	USH 51 RT	125
STA 462+73	USH 51 LT	21
STA 463+35	USH 51 RT	58
STA 464+16	USH 51 LT	22
STA 464+46	USH 51 RT	24
STA 465+32	USH 51 LT	73
STA 466+64	USH 51 LT	72
STA 466+84	USH 51 RT	38
STA 467+65	USH 51 RT	87
STA 468+61	USH 51 RT	32
STA 468+86	USH 51 LT	67
STA 469+20	USH 51 RT	35
STA 470+44	USH 51 LT	46
STA 471+24	USH 51 RT	93
STA 472+29	USH 51 RT	42
STA 473+09	USH 51 RT	43
STA 473+16	USH 51 LT	39
STA 474+34	USH 51 LT	38
STA 474+47	USH 51 RT	28
STA 475+17	USH 51 LT	19
STA 476+40	USH 51 RT	28
STA 477+55	USH 51 RT	237
STA 479+00	USH 51 LT	59
STA 479+82	USH 51 RT	304
STA 484+27	USH 51 LT	36
STA 486+29	USH 51 LT	30
STA 486+95	USH 51 LT	37
TOTAL		3,058

CONCRETE CURB AND GUTTER

STATION	TO	STATION	LOCATION	601.0411 30 - INCH TYPE D LF	601.0407 18 - INCH TYPE D LF	601.0120 CONCRETE CURB TYPE J LF	650.5500 CONSTRUCTION STAKING LF
STA 436+30	-	STA 460+82	LT	2,513			2,513
STA 461+85	-	STA 481+31	LT	2,053			2,053
STA 482+46	-	STA 487+50	LT	562			562
STA 436+30	-	STA 458+00	RT	2,219			2,219
STA 458+97	-	STA 461+05	RT	316			316
STA 462+06	-	STA 487+50	RT	2,604			2,604
			HUBER	408			408
			OLD HWY 70	423			423
			ROGERS	234			234
STA 457+09	-	STA 457+59	MEDIAN ISLAND		100		50
STA 453+50	-	STA 456+00	RT		122	122	
			TOTAL	11,332	222	122	11,382

CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0405 CONCRETE SIDEWALK 4 IN SF
STA 429+84	-	STA 436+36	LEFT	5,216	
STA 436+36	-	STA 456+25	LEFT & RIGHT	23,177	
STA 456+25	-	STA 457+50	LEFT & RIGHT	1,400	
STA 457+50	-	STA 485+50	LEFT & RIGHT	27,105	
STA 6+83	-	STA 9+24	OLD HWY 70	980	
STA 457+09	-	STA 457+50	MEDIAN/HAWK	140	
STA 451+21			42' USH 51 RT		30
STA 464+80			39.5' RIGHT		63
STA 465+90			39.5' RIGHT		27
STA 472+72			39.5' RIGHT		29
TOTAL				58,018	150

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE MEDIAN

STATION	TO	STATION	LOCATION	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPE NOSE SF
STA 441+00	-	STA 443+00	MEDIAN	1,630	
STA 448+00	-	STA 449+00	MEDIAN	745	
STA 457+09	-	STA 457+50	MEDIAN/HAWK		128
TOTAL				2,375	128

RIPRAP GEOTEXTILE FABRIC AND GEOGRID REINFORCEMENT

STATION	TO	STATION	LOCATION		606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY	SPV.0180.01 GEOGRID REINFORCEMENT SY	209.0100 BACKFILL GRANULAR CY
STA 442+30	-	STA 447+00	LT	SLOPE STABILIZATION	283	566	1,141	250
STA 447+50	-	STA 448+50	LT	SLOPE STABILIZATION	41	83	205	75
STA 449+00	-	STA 455+50	LT	SLOPE STABILIZATION	354	709	1,503	325
		STA 443+45		PIPE REMOVAL	14	27	847	555
		STA 444+85		PIPES	44	89	1,128	813
		STA 440+12	RT	SS OUTFALL 1	18	35		
		STA 456+50	LT	SS OUTFALL 7	49	97		
		STA 481+50	RT	SS OUTFALL 100	42	83		
TOTAL					845	1,690	4,824	2018

3

3

COLORED TEXTURED CONCRETE TERRACE

STATION	TO	STATION	LOCATION	CAT 0020 SPV.0165.01 COLORED TEXTURED CONCRETE TERRACE 6-INCH SF
STA 429+84	-	STA 436+36	LEFT	1935
STA 436+36	-	STA 456+25	LEFT & RIGHT	10,524
STA 456+25	-	STA 457+50	LEFT & RIGHT	615
STA 457+50	-	STA 485+50	LEFT & RIGHT	12,600
STA 6+83	-	STA 9+24	OLD HWY 70	588
STA 457+09	-	STA 457+50	MEDIAN/HAWK	400
TOTAL				26,662

BENCH PLANTERS AND TRASH CONTAINERS

LOCATION TO BE DECIDED BY TOWN AFTER PROJECT	S.F.	CAT 0020 SPV.0060.36 PARK BENCH EACH	CAT 0020 SPV.0060.37 PLANTER S.Y.	CAT 0020 SPV.0060.38 TRASH CONTAINER S.Y.
PROJECT		10	5	5
TOTAL		10	5	5

CONCRETE SIDEWALK

LOCATION	CAT 0020 602.0415 CONCRETE SIDEWALK 6-INCH SF
PEDESTRIAN OUTLOOKS	476
TOTAL	476

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER

STAGE 1 **PAGE 1**

OFFSET IS TO CENTER OF COVER

STRUCTURE	STATION	OFFSET	LOCATION	ELEVATION RIM (FT)	ELEVATION INVERT (FT)	SPV.0060.47 CATCH BASIN 5M-10 EACH	SPV.0060.46 CATCH BASIN 5M-8 EACH	611.1006 CATCH BASIN 6' DIAMETER EACH	611.1004 CATCH BASIN 4' DIAMETER EACH	SPV.0060.48 INLET TYPE 8M EACH	SPV.0060.45 INLET TYPE 3M EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0645 INLET COVERS TYPE MS-A EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH
MH-1	STA 436+37	-32.4	LT	1,596.27	1,589.72											1	
CB-52	STA 436+37	-39.5	LT	1,595.98	1,590.00						1	1			1		
CB-53	STA 439+16	-39.5	LT	1,590.96	1,585.40	1						1			1		
CB-54	STA 440+97	-39.5	LT	1,589.32	1,585.77				1			1			1		
CB-45	STA 441+00	25.5	RT	1,589.30	1,585.59				1			1			1		
CB-44	STA 439+58	25.5	RT	1,590.50	1,585.33				1			1			1		
CB-43	STA 438+00	25.5	RT	1,592.94	1,587.60				1			1			1		
CB-42	STA 436+31	25.5	RT	1,596.09	1,589.70				1			1			1		
CB-51	STA 434+20	EXISTING	LT	1,597.91	1,591.26												
CB-44B	STA 439+67	25.5	RT	1,590.37	1,585.30	1						1			1		
CB-57	STA 443+54	-27.5	LT	1,588.09	1,585.10			1				1			1		
CB-50	STA 443+69	-26.9	LT	1,588.10	1,585.15						1	1			1		
CB-56	STA 443+39	-28	LT	1,588.10	1,585.15						1	1			1		
CB-55	STA 442+34	-33	LT	1,588.55	1,585.48						1	1			1		
CB-46	STA 443+00	25.5	RT	1,588.20	1,585.28						1	1			1		
CB-47	STA 443+39	25.5	RT	1,588.10	1,585.17						1	1			1		
CB-49	STA 443+54	25.5	RT	1,588.09	1,585.12				1			1			1		
CB-48	STA 443+69	25.5	RT	1,588.10	1,585.17						1	1			1		
CB-40	STA 449+13	-38	LT	1,588.25	1,585.13						1	1			1		
CB-41	STA 449+28	-38.7	LT	1,588.24	1,585.08			1				1			1		
CB-39	STA 449+90	-41	LT	1,588.37	1,585.22						1	1			1		
CB-26	STA 450+11	27.5	RT	1,588.45	1,585.49						1	1			1		
CB-26B	STA 449+96	27.5	RT	1,588.40	1,585.44						1	1			1		
CB-27	STA 449+17	27.4	RT	1,588.24	1,585.20			1				1			1		
CB-29	STA 449+02	27.2	RT	1,588.26	1,585.25						1	1			1		
CB-28	STA 448+56	26.7	RT	1,588.44	1,585.39						1	1			1		
CB-38	STA 451+32	-41.5	LT	1,588.94	1,585.12						1	1			1		
CB-25	STA 451+32	27.5	RT	1,588.94	1,585.32						1	1			1		
CB-24	STA 453+15	27.5	RT	1,589.68	1,585.42						1		1		1		
				SUBTOTAL		2	0	3	6	0	16	26	1	0	27	1	0

STORM SEWER

STAGE 1 **PAGE 2**

OFFSET IS TO CENTER OF COVER

STRUCTURE	STATION	OFFSET	LOCATION	ELEVATION RIM (FT)	ELEVATION INVERT (FT)	SPV.0060.47 CATCH BASIN 5M-10 EACH	SPV.0060.46 CATCH BASIN 5M-8 EACH	611.1006 CATCH BASIN 6' DIAMETER EACH	611.1004 CATCH BASIN 4' DIAMETER EACH	SPV.0060.48 INLET TYPE 8M EACH	SPV.0060.45 INLET TYPE 3M EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0645 INLET COVERS TYPE MS-A EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH
CB-23	STA 453+12	27.5	RT	1,589.68	1,585.37			1				1			1		
CB-21	STA 453+76	27.5	RT	1,589.94	1,585.23			1				1			1		
CB-22	STA 453+76	27.5	RT	1,589.94	1,585.26						1	1			1		
CB-19	STA 454+00	27.5	RT	1,590.04	1,585.17		1					1			1		
CB-20	STA 454+00	27.5	RT	1,590.04	1,585.20						1	1			1		
CB-37	STA 453+70	-41.5	LT	1,589.93	1,585.08		1					1			1		
CB-18	STA 454+64	27.5	RT	1,590.30	1,585.25			1				1			1		
CB-16	STA 455+27	27.5	RT	1,590.55	1,585.32			1				1			1		
CB-17	STA 455+27	27.5	RT	1,590.55	1,585.35				1			1			1		
CB-36	STA 456+82	-41.5	LT	1,593.09	1,586.06			1				1			1		
CB-14	STA 456+82	27.5	RT	1,593.09	1,586.14			1				1			1		
CB-13	STA 458+05	27.5	RT	1,596.44	1,588.14		1					1			1		
CB-12	STA 458+22	27.5	RT	1,596.89	1,589.12				1			1			1		
CB-11	STA 458+61	27.5	RT	1,597.93	1,589.43						1	1			1		
CB-10	STA 458+78	27.5	RT	1,598.53	1,588.81				1			1			1		
CB-5	STA 461+16	27.5	RT	1,599.05	1,590.64		1					1			1		
CB-6	STA 461+32	27.5	RT	1,598.92	1,591.63				1			1			1		
CB-7	STA 461+77	27.5	RT	1,598.56	1,591.92				1			1			1		
CB-8	STA 462+00	27.5	RT	1,598.39	1,591.32				1			1			1		
CB-9	STA 462+58	27.5	RT	1,598.04	1,591.77				1			1			1		
CB-4	STA 462+73	27.5	RT	1,598.03	1,591.90				1			1			1		
CB-3	STA 462+88	27.5	RT	1,598.07	1,592.02				1			1			1		
CB-2B	STA 463+05	27.5	RT	1,598.16	1,592.16				1			1			1		
CB-2	STA 463+66	27.5	RT	1,598.94	1,592.65				1			1			1		
CB-1	STA 464+76	27.5	RT	1,601.13	1,596.65				1			1			1		
CB-30	STA 464+78	-41.5	LT	1,601.19	1,596.69				1			1			1		
CB-31	STA 463+38	-41.5	LT	1,598.50	1,592.28				1			1			1		
CB-34	STA 463+04	-41.5	LT	1,598.16	1,592.00				1			1			1		
CB-33	STA 463+04	-41.5	LT	1,598.09	1,591.52				1			1			1		
CB-32	STA 461+05	-41.5	LT	1,599.13	1,590.35				1			1			1		
CB-35	STA 458+87	-41.5	LT	1,598.53	1,588.67				1			1			1		
CB-15	STA 456+19	27.5	RT	1,591.65	1,587.10				1			1			1		
CB-15B	STA 456+05	27.5	RT	1,591.39	1,587.15				1			1			1		
CB-111	STA 468+12	-41.5	LT	1,601.72	1,597.22				1			1			1		
CB-100	STA 468+04	27.5	RT	1,601.53	1,597.03				1			1			1		
CB-112	STA 469+70	-41.5	LT	1,599.66	1,595.16				1			1			1		
CB-101	STA 469+70	27.5	RT	1,599.66	1,595.16				1			1			1		
CB-200	STA 7+75	13.5	NEW HUBER RT	1,588.55	1,586.00						1	1			1		
CB-201	STA 7+75	-16	NEW HUBER LT	1,588.49	1,585.90						1	1			1		
			PAGE 2 SUBTOTAL			0	4	6	24	0	5	39	0	0	39	0	0
			STAGE 1 TOTAL			2	4	9	30	0	21	65	1	0	66	1	0

STORM SEWER

STAGE 2 **PAGE 1**

OFFSET IS TO CENTER OF COVER

STRUCTURE	STATION	OFFSET	LOCATION	ELEVATION RIM (FT)	ELEVATION INVERT (FT)	SPV.0060.47 CATCH BASIN 5M-10 EACH	SPV.0060.46 CATCH BASIN 5M-8 EACH	611.1006 CATCH BASIN 6' DIAMETER EACH	611.1004 CATCH BASIN 4' DIAMETER EACH	SPV.0060.48 INLET TYPE 8M EACH	SPV.0060.45 INLET TYPE 3M EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0645 INLET COVERS TYPE MS-A EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH
CB-113	STA 470+88	-41.5	LT	1,598.12	1,591.76				1			1			1		
CB-102	STA 470+87	27.5	RT	1,598.14	1,591.56				1			1			1		
CB-114	STA 472+05	-41.5	LT	1,596.60	1,591.52				1			1			1		
CB-103	STA 471+99	27.5	RT	1,596.68	1,591.33				1			1			1		
CB-115	STA 472+70	-41.5	LT	1,595.88	1,591.38				1			1			1		
CB-115B	STA 472+85	-41.5	LT	1,595.79	1,591.35				1			1			1		
CB-104	STA 472+65	27.5	RT	1,595.92	1,591.20				1			1			1		
CB-104A	STA 472+80	27.5	RT	1,595.82	1,591.17			1				1			1		
CB-105	STA 472+87	41	RT	1,595.78	1,592.22						1		1		1		
CB-120	STA 473+40	-54.5	LT	1,595.73	1,592.30					1				1	1		
CB-121	STA 473+46	-41.5	LT	1,595.73	1,591.23			1				1			1		
CB-119	STA 473+61	-41.5	LT	1,595.79	1,591.20				1			1			1		
CB-106	STA 473+42	27.5	RT	1,595.72	1,591.04				1			1			1		
CB-109	STA 473+57	27.5	RT	1,595.77	1,591.02				1			1			1		
CB-108	STA 473+72	27.5	RT	1,595.86	1,590.99			1				1			1		
CB-110	STA 473+70	41	RT	1,595.84	1,592.02					1				1	1		
CB-118B	STA 473+89	-41.5	LT	1,595.97	1,591.13				1			1			1		
CB-118	STA 474+04	-41.5	LT	1,596.08	1,591.11				1			1			1		
CB-116	STA 474+67	-54.5	LT	1,596.51	1,592.01					1				1	1		
CB-117	STA 474+70	-41.5	LT	1,596.53	1,590.97			1				1			1		
CB-107	STA 474+78	27.5	RT	1,596.59	1,590.78				1			1			1		
CB-122	STA 477+23	27.5	RT	1,597.15	1,590.29				1			1			1		
CB-134	STA 477+58	-41.5	LT	1,596.98	1,590.40				1			1			1		
CB-123	STA 478+05	27.5	RT	1,596.79	1,590.12			1				1			1		
CB-124	STA 478+34	27.5	RT	1,596.74	1,593.55						1	1			1		
CB-135	STA 478+34	-41.5	LT	1,596.74	1,590.24				1			1			1		
CB-147	STA 478+49	-41.5	LT	1,596.73	1,590.21			1				1			1		
CB-146	STA 478+64	-41.5	LT	1,596.74	1,590.18			1				1			1		
STAGE 2 PAGE 1TOTAL						0	0	7	16	3	2	24	1	3	28	0	0

STORM SEWER

STAGE 2 **PAGE 2**

OFFSET IS TO CENTER OF COVER

STRUCTURE	STATION	OFFSET		ELEVATION RIM (FT)	INVERT (FT)	SPV.0060.47 CATCH BASIN 5M-10 EACH	SPV.0060.46 CATCH BASIN 5M-8 EACH	611.1006 CATCH BASIN 6' DIAMETER EACH	611.1004 CATCH BASIN 4' DIAMETER EACH	SPV.0060.48 INLET TYPE 8M EACH	SPV.0060.45 INLET TYPE 3M EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0645 INLET COVERS TYPE MS-A EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.8120.S COVER PLATES TEMPORARY EACH
CB-133	STA 478+49	27.5	RT	1,596.73	1,590.04			1				1			1			
CB-132	STA 478+59	27.5	RT	1,596.74	1,593.54						1	1			1			
CB-131	STA 479+20	27.5	RT	1,596.89	1,593.86						1	1			1			
CB-130A	STA 479+40	27.5	RT	1,596.99	1,589.88					1		1			1			
CB-145	STA 479+55	-41.5	LT	1,597.06	1,590.01			1				1			1			
CB-130	STA 479+55	27.5	RT	1,597.06	1,593.86						1	1			1			
CB-143	STA 480+88	-41.5	LT	1,597.77	1,589.72		1					1			1			
CB-143B	STA 480+73	-41.5	LT	1,597.67	1,589.75			1				1			1			
CB-144	STA 480+93	-66.5	LT	1,596.74	1,591.74					1				1	1			
CB-129	STA 480+85	27.5	RT	1,597.75	1,589.58		1					1			1			
MH-100	STA 481+50	53	RT	1597.75	1,589.47												1	
CB-142	STA 9+16	30.5	OLD HWY 70	1,600.26	1,594.98				1			1			1			
CB-141	STA 9+16	-17.5	OLD HWY 70	1,600.38	1,594.50				1			1			1			
CB-140	STA 9+16	-44	OLD HWY 70	1,600.00	1,594.26				1				1		1			
CB-139B	STA 482+57	-51.5	LT	1,599.19	1,593.32			1				1			1			
CB-139	STA 482+72	-51.5	LT	1,599.34	1,593.54				1			1			1			
CB-128	STA 482+67	27.5	RT	1,599.54	1,593.52				1			1			1			
CB-127	STA 484+12	32	RT	1,600.95	1,595.31				1			1			1			1
CB-138	STA 484+05	-43.5	LT	1,601.22	1,595.59				1			1			1			
CB-126	STA 484+58	34	RT	1,601.99	1,596.36				1			1			1			1
CB-137	STA 484+88	-41.5	LT	1,602.45	1,596.83				1			1			1			
CB-125	STA 485+68	38	RT	1,604.09	1,599.11				1			1			1			1
CB-136	STA 486+00	-41.5	LT	1,604.28	1,599.33				1			1			1			
			STAGE 2 SUB-TOTAL			0	2	4	11	2	3	20	1	1	22	0	1	3
			STAGE 2	TOTAL		0	2	11	27	5	5	44	2	4	50	0	1	3
			STAGE 1	TOTAL		2	4	9	30	0	21	65	1	0	66	1	0	0
			GRAND TOTAL			2	6	20	57	5	26	109	3	4	116	1	1	3

STORM SEWER

STAGE 1 PAGE 1

LABEL	NODE	(FT)	NODE	(FT)	(FT/FT)	TYPE	608.0348 SSPRC CLASS III 48 INCH LF	608.0336 SSPRC CLASS III 36 INCH LF	608.0330 SSPRC CLASS III 30 INCH LF	608.0324 SSPRC CLASS III 24 INCH LF	608.0318 SSPRC CLASS III 18 INCH LF	608.0315 SSPRC CLASS III 15 INCH LF	608.0312 SSPRC CLASS III 12 INCH LF	610.0129 SSPRCHE CLASS III 29x45 INCH LF	610.0124 SSPRCHE CLASS III 24x38 INCH LF	610.0119 SSPRCHE CLASS III 19x30 INCH LF	610.0114 SSPRCHE CLASS III 14x23 INCH LF	522.1012 AEWSSPRC 12 INCH EACH	522.1015 AEWSSPRC 15 INCH EACH	522.1036 AEWSSPRC 36 INCH EACH	523.0514 AEWPRCHE 14x23 INCH EACH	522.0519 AEWPRCHE 19x30 INCH EACH	523.0524 AEWPRCHE 24x38 INCH EACH	522.1048 AEWSSPRC 48 INCH EACH
EXIST	CB-51	1591.26	MH-1	1589.72	0.007	SSPRC					219													
P-2	MH-1	1589.72	CB-53	1585.40	0.015	SSPRC				281														
P-3	CB-53	1585.40	CB-54	1587.77	-0.002	SSPRC						185												
P-1	CB-52	1590.00	MH-1	1589.72	0.035	SSPRC							8											
P-5	CB-42	1591.00	CB-43	1588.90	0.012	SSPRC					169													
P-6	CB-43	1588.90	CB-44	1586.63	0.015	SSPRC					153													
P-7	CB-44	1585.33	CB-44B	1585.30	0.002	SSPRC					16													
P-8	CB-44B	1585.30	CB-45	1585.59	-0.002	SSPRC						126												
P-4	CB-53	1585.40	CB-44B	1585.30	0.001	SSPRDHE									87									
P-9	CB-44B	1585.30	OF-1	1585.05	0.007	SSPRDHE									35								1	
P-10	CB-55	1587.48	CB-56	1585.15	0.003	SSPRC							109											
P-11	CB-56	1585.15	CB-57	1585.10	0.003	SSPRC							15											
P-12	CB-57	1585.10	CB-50	1585.15	-0.003	SSPRC							15											
P-13	CB-57	1585.10	OF-2	1585.05	0.002	SSPRDHE											23				1			
P-14	CB-46	1585.28	CB-47	1585.17	0.003	SSPRC							38											
P-15	CB-47	1585.17	CB-49	1585.12	0.003	SSPRC							15											
P-16	CB-49	1585.12	CB-48	1587.17	-0.003	SSPRC							15											
P-17	CB-49	1585.12	OF-3	1585.05	0.002	SSPRC						30							1					
P-25	OF-4	1585.05	CB-41	1585.08	-0.001	SSPRDHE										25						1		
P-23	CB-41	1585.08	CB-40	1585.13	-0.003	SSPRC							15											
P-22	CB-41	1585.08	CB-27	1585.20	-0.002	SSPRDHE											66							
P-19	CB-27	1585.20	CB-29	1585.25	-0.003	SSPRC							15											
P-18	CB-29	1585.25	CB-28	1585.39	-0.003	SSPRC							47											
P-21	CB-26	1585.49	CB-26B	1585.44	0.003	SSPRC							15											
P-20	CB-26B	1585.44	CB-27	1585.20	0.003	SSPRC							80											
P-24	CB-41	1585.08	CB-39	1585.22	-0.003	SSPRC							47											
P-27	OF-5	1585.05	CB-38	1585.12	-0.003	SSPRC							22					1						
P-26	CB-38	1585.12	CB-25	1585.32	-0.003	SSPRC							68											
P-36	OF-6	1585.05	CB-37	1585.08	-0.001	SSPRDHE									23								1	
P-35	CB-37	1585.08	CB-19	1585.17	-0.001	SSPRDHE									75									
P-32	CB-19	1585.17	CB-18	1585.25	-0.001	SSPRDHE										66								
P-33	CB-18	1585.25	CB-16	1585.32	-0.001	SSPRDHE										61								
PAGE 1 TOTAL							0	0	0	281	557	341	524	0	220	152	89	1	1	0	1	1	2	0

STORM SEWER
STAGE 1 PAGE 2

PIPE	START	INVERT	STOP	INVERT	SLOPE	TYPE	608.0348 SSPRC CLASS III 48 INCH LF	608.0336 SSPRC CLASS III 36 INCH LF	608.0330 SSPRC CLASS III 30 INCH LF	608.0324 SSPRC CLASS III 24 INCH LF	608.0318 SSPRC CLASS III 18 INCH LF	608.0315 SSPRC CLASS III 15 INCH LF	608.0312 SSPRC CLASS III 12 INCH LF	610.0129 SSPRCHE CLASS III 29x45 INCH LF	610.0124 SSPRCHE CLASS III 24x38 INCH LF	610.0119 SSPRCHE CLASS III 19x30 INCH LF	610.0114 SSPRCHE CLASS III 14x23 INCH LF	522.1012 AEWSSPRC 12 INCH EACH	522.1015 AEWSSPRC 15 INCH EACH	522.1036 AEWSSPRC 36 INCH EACH	523.0514 AEWPRCHE 14x23 INCH EACH	522.0519 AEWPRCHE 19x30 INCH EACH	523.0524 AEWPRCHE 24x38 INCH EACH	522.1048 AEWSSPRC 48 INCH EACH
P-34	CB-16	1585.32	CB-17	1585.35	-0.003	SSPRC							11												
P-31	CB-19	1585.17	CB-21	1585.23	-0.002	SSPRDHE										26									
P-30	CB-21	1585.23	CB-22	1585.26	-0.003	SSPRC							11												
P-10	CB-19	1585.17	CB-20	1585.20	-0.003	SSPRC							10												
P-28	CB-24	1585.42	CB-23	1585.37	0.003	SSPRDHE											18								
P-29	CB-23	1585.37	CB-21	1585.23	0.002	SSPRDHE										61									
P-55	OF-7	1586.00	CB-36	1586.06	-0.001	SSPRC		51												1					
P-40	CB-36	1586.06	CB-14	1586.14	-0.001	SSPRC		67																	
P-41	CB-14	1587.14	CB-13	1588.14	-0.008	SSPRC				125															
P-44	CB-13	1588.14	CB-10	1588.81	-0.008	SSPRC				83															
P-45	CB-10	1588.81	CB-5	1590.64	-0.008	SSPRC				230															
P-48	CB-5	1590.64	CB-8	1591.32	-0.008	SSPRC				84															
P-49	CB-8	1591.32	CB-9	1591.77	-0.008	SSPRC				58															
P-50	CB-9	1591.77	CB-4	1591.90	-0.009	SSPRC				15															
P-51	CB-4	1591.90	CB-3	1592.02	-0.008	SSPRC				15															
P-52	CB-3	1592.02	CB-2B	1592.16	-0.008	SSPRC				17															
P-46	CB-5	1591.39	CB-6	1591.63	-0.008	SSPRC						30													
P-47	CB-6	1591.63	CB-7	1591.92	-0.008	SSPRC						36													
P-42	CB-13	1588.89	CB-12	1589.12	-0.008	SSPRC						29													
P-43	CB-12	1591.12	CB-11	1589.43	-0.008	SSPRC						39													
P-37	CB-15B	1587.15	CB-15	1587.10	0.003	SSPRC						15													
P-39	CB-15	1587.10	CB-14	1586.91	0.003	SSPRC						63													
P-53	CB-2B	1592.16	CB-2	1592.65	-0.008	SSPRC				61															
P-54	CB-2	1594.44	CB-1	1596.65	-0.008	SSPRC					110														
P-56	CB-36	1587.06	CB-35	1588.67	-0.008	SSPRC				201															
P-57	CB-35	1588.67	CB-32	1590.35	-0.008	SSPRC				211															
P-58	CB-32	1590.35	CB-33	1591.52	-0.008	SSPRC				143															
P-59	CB-33	1591.52	CB-34	1592.00	-0.008	SSPRC				61															
P-60	CB-34	1592.00	CB-31	1592.28	-0.008	SSPRC				35															
P-61	CB-31	1594.00	CB-30	1596.69	-0.008	SSPRC					124														
P-122	CB-112	1595.2	CB-111	1597.2	-0.002	SSPRC						156													
P-100	CB-101	1595.2	CB-100	1597	-0.002	SSPRC						167													
P-200	CB-200	1586.00	CB-201	1585.90	-0.002	SSPRDHE											30								
P-201	CB-201	1585.90	OF-202	1585.80	-0.002	SSPRDHE											24				1				
STAGE 1 SUB-TOTAL							0	118	0	1339	234	535	32	0	0	87	72	0	0	1	1	0	0	0	

3

STORM SEWER

STAGE 2 PAGE 1

LABEL	START	INVERT	STOP	INVERT	SLOPE	TYPE	608.0348 SSPRC CLASS III 48 INCH LF	608.0336 SSPRC CLASS III 36 INCH LF	608.0330 SSPRC CLASS III 30 INCH LF	608.0324 SSPRC CLASS III 24 INCH LF	608.0318 SSPRC CLASS III 18 INCH LF	608.0315 SSPRC CLASS III 15 INCH LF	608.0312 SSPRC CLASS III 12 INCH LF	610.0129 SSPRCHE CLASS III 29x45 INCH LF	610.0124 SSPRCHE CLASS III 24x38 INCH LF	610.0119 SSPRCHE CLASS III 19x30 INCH LF	610.0114 SSPRCHE CLASS III 14x23 INCH LF	522.1012 AEWSSPRC 12 INCH EACH	522.1015 AEWSSPRC 15 INCH EACH	522.1036 AEWSSPRC 36 INCH EACH	523.0514 AEWPRCHE 14x23 INCH EACH	522.0519 AEWPRCHE 19x30 INCH EACH	523.0524 AEWPRCHE 24x38 INCH EACH	522.1048 AEWSSPRC 48 INCH EACH
P-143	OF-100	1589	MH-100	1589.5	-0.002	SSPRC	204																	1
P-121	MH-100	1589.5	CB-129	1598.6	-0.002	SSPRC	71																	
P-113	CB-123	1590.1	CB-122	1590.3	-0.002	SSPRC				81														
P-112	CB-122	1590.3	CB-107	1590.8	-0.002	SSPRC				245														
P-111	CB-107	1590.8	CB-108	1591	-0.002	SSPRC				108														
P-109	CB-108	1591	CB-109	1591	-0.002	SSPRC				14														
P-108	CB-109	1591	CB-106	1591	-0.001	SSPRC				14														
P-107	CB-106	1591	CB-104A	1591.2	-0.002	SSPRC				60														
P-105	CB-104A	1591.2	CB-104	1591.2	-0.002	SSPRC				15														
P-104	CB-104	1591.2	CB-103	1591.3	-0.002	SSPRC				68														
P-103	CB-103	1591.3	CB-102	1591.6	-0.002	SSPRC				114														
P-102	CB-102	1593.6	CB-101	1595.2	-0.002	SSPRC				115														
P-106	CB-104A	1592.2	CB-105	1592.2	-0.003	SSPRC							15											
P-110	CB-108	1592	CB-110	1592	-0.003	SSPRC							10											
P-141	CB-129	1589.6	CB-143	1589.7	-0.002	SSPRC		68																
P-140	CB-143	1589.7	CB-143B	1589.8	-0.002	SSPRC			14															
P-139	CB-143B	1589.8	CB-145	1590	-0.002	SSPRC			130															
P-138	CB-145	1590	CB-146	1590.2	-0.002	SSPRC			87															
P-137	CB-146	1590.2	CB-147	1590.2	-0.002	SSPRC			13															
P-136	CB-147	1590.2	CB-135	1590.2	-0.002	SSPRC				14														
P-135	CB-135	1590.2	CB-134	1590.4	-0.002	SSPRC				79														
P-134	CB-134	1590.4	CB-117	1591	-0.002	SSPRC				286														
P-132	CB-117	1591	CB-118	1591.1	-0.002	SSPRC				67														
P-131	CB-118	1591.1	CB-118B	1591.1	-0.002	SSPRC				12														
				PAGE 1 TOTAL			275	68	244	1292	0	0	25	0	0	0	0	0	0	0	0	0	0	1

STORM SEWER

STAGE 2 PAGE 2

LABEL	START	INVERT	STOP	INVERT	SLOPE	TYPE	608.0348 SSPRC CLASS III 48 INCH LF	608.0336 SSPRC CLASS III 36 INCH LF	608.0330 SSPRC CLASS III 30 INCH LF	608.0324 SSPRC CLASS III 24 INCH LF	608.0318 SSPRC CLASS III 18 INCH LF	608.0315 SSPRC CLASS III 15 INCH LF	608.0312 SSPRC CLASS III 12 INCH LF	610.0129 SSPRCHE CLASS III 29x45 INCH LF	610.0124 SSPRCHE CLASS III 24x38 INCH LF	610.0119 SSPRCHE CLASS III 19x30 INCH LF	610.0114 SSPRCHE CLASS III 14x23 INCH LF	522.1012 AEWSSPRC 12 INCH EACH	522.1015 AEWSSPRC 15 INCH EACH	522.1036 AEWSSPRC 36 INCH EACH	523.0514 AEWPRCHE 14x23 INCH EACH	522.0519 AEWPRCHE 19x30 INCH EACH	523.0524 AEWPRCHE 24x38 INCH EACH	522.1048 AEWSSPRC 48 INCH EACH
P-130	CB-118B	1591.1	CB-119	1591.2	-0.002	SSPRC				33														
P-129	CB-119	1591.2	CB-121	1591.2	-0.003	SSPRC				11														
P-127	CB-121	1591.2	CB-115B	1591.4	-0.002	SSPRC				61														
P-126	CB-115B	1591.4	CB-115	1591.4	-0.002	SSPRC				16														
P-125	CB-115	1591.4	CB-114	1591.5	-0.002	SSPRC				66														
P-124	CB-114	1591.5	CB-113	1591.8	-0.002	SSPRC				120														
P-123	CB-113	1593.6	CB-112	1595.2	-0.002	SSPRC				114														
P-128	CB-120	1592.3	CB-121	1592.2	0.005	SSPRC							15											
P-133	CB-116	1592	CB-117	1592	0.003	SSPRC							12											
P-142	CB-143	1591.2	CB-144	1591.7	-0.02	SSPRC					26													
P-149	CB-142	1595	CB-141	1594.5	0.01	SSPRC					48													
P-150	CB-141	1594.5	CB-140	1594.3	0.01	SSPRC					24													
P-148	CB-143	1590.7	CB-139B	1593.3	-0.015	SSPRC				173														
P-152	CB-139B	1593.3	CB-139	1593.5	-0.015	SSPRC				15														
P-153	CB-139	1593.5	CB-138	1595.6	-0.015	SSPRC				137														
P-154	CB-138	1595.6	CB-137	1596.8	-0.015	SSPRC				82														
P-155	CB-137	1597.6	CB-136	1599.3	-0.015	SSPRC						117												
P-144	MH-100	1591.5	CB-128	1593.5	-0.017	SSPRC				120														
P-145	CB-128	1593.5	CB-127	1595.3	-0.015	SSPRC				119														
P-146	CB-127	1597.3	CB-126	1596.4	-0.015	SSPRC				70														
P-147	CB-126	1597.1	CB-125	1599.1	-0.015	SSPRC						133												
P-114	CB-123	1590.1	CB-133	1593.5	0.002	SSPRDHE									43		43							
P-117	CB-133	1590	CB-130B	1589.9	0.002	SSPRDHE									80		80							
P-120	CB-130B	1589.9	CB-129	1589.6	0.002	SSPRDHE								149			149							
P-118	CB-131	1593.9	CB-130B	1593.8	0.002	SSPRC							15											
P-119	CB-130	1593.9	CB-130B	1593.8	0.002	SSPRC							15											
P-116	CB-132	1593.5	CB-133	1593.5	0.002	SSPRC							9											
P-115	CB-124	1593.6	CB-133	1593.5	0.002	SSPRC							15											
P-151	CB-140	1594.3	CB-139B	1593.8	0.01	SSPRC					44													
PAGE 2 TOTAL							0	0	0	1137	142	250	81	149	123	0	272	0	0	0	0	0	0	0
STAGE 2 TOTAL							275	68	244	2429	142	250	106	149	123	0	272	0	0	0	0	0	0	*1
STAGE 1 TOTAL							0	118	0	1620	791	876	556	0	220	239	161	1	1	1	2	1	2	0
PROJECT TOTAL							275	186	244	4049	933	1126	662	149	343	239	433	1	1	1	2	1	2	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL

	STATION	TO	STATION	643.0420 BARRICADES TYPE III DAYS	643.0300 DRUMS DAYS	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH
STAGE 1	436+36	-	470+00					2323		
STAGE 1.1	442+00	-	447+00	15	680	205	20	75	7	7
STAGE 1.2	442+00	-	447+00	10	655	225	15	115	9	9
STAGE 1.3	442+00	-	447+00	15	680	205	20	75	7	7
STAGE 1.4	442+00	-	447+00	10	655	225	15	115	9	9
STAGE 1.5	436+36	-	470+00	300	9700	750	100	600	34	34
STAGE 1.6	436+36	-	470+00	372	6324	434	62	341	34	34
STAGE 2	470+00	-	487+50					2314		
STAGE 2.1	470+00	-	487+50	100	8450	650	100	900	17	17
STAGE 2.2	470+00	-	487+50	312	6045	663	78	819	17	17
TOTAL				1134	33189	3357	410	30970	134	134

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

	STATION	TO	STATION	643.0200.01 DAYS	REMARKS
STAGE 1	436+36	-	470+00	101	
STAGE 2	470+00	-	487+50	89	
TOTAL				190	

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TRAFFIC CONTROL SIGNS PCMS

	LOCATION	643.1050 PCMS SIGNS DAYS	SPV.0045.01 PCMS CELLULAR COMMUNICATION DAYS	REMARKS
STAGE 1	USH 51 NB	101	101	6600' SOUTH OF USH 8 INTERCHANGE
STAGE1	USH 51 NB	101	101	6600' SOUTH OF CTH D INTERSECTION
STAGE1	USH 51 SB	101	101	1 MILE IN ADVANCE OF NORTH PROJECT LIMIT
STAGE 2	USH 51 NB	89	89	6600' SOUTH OF USH 8 INTERCHANGE
STAGE 2	USH 51 NB	89	89	6600' SOUTH OF CTH D INTERSECTION
STAGE 2	USH 51 SB	89	89	1 MILE IN ADVANCE OF NORTH PROJECT LIMIT
TOTAL		570	570	

TEMPORARY PAVEMENT MARKING

	STATION	TO	STATION	649.0200 4-INCH REFLECTIVE PAINT LF	649.0400 4-INCH REMOVABLE TAPE LF	REMARKS
STAGE 1	436+36	-	470+00	6,700	1,000	AS DIRECTED BY ENGINEER
STAGE 2	470+00	-	487+50	3,500	0	AS DIRECTED BY ENGINEER
	TOTAL			10,200	1,000	

REMOVING PAVEMENT MARKINGS

	STATION	TO	STATION	646.0600 REMOVING LF	REMARKS
STAGE 1	436+36	-	470+00	4,200	AS DIRECTED BY ENGINEER
STAGE 2	470+00	-	487+50	2,188	AS DIRECTED BY ENGINEER
	TOTAL			6,388	

3

PAVEMENT MARKING
DIAGONAL

STATION	LOCATION	647.0716 DIAGONAL 8-INCH WHITE LF	647.0726 DIAGONAL 12-INCH WHITE LF	647.0726 DIAGONAL 12-INCH YELLOW LF
STA 425+61 - 487+50	LT & RT	107	143	460
STA 425+61 - 487+50	CROSSWALKS		471	
SUBTOTAL		107	614	460
TOTAL			1,074	

PAVEMENT MARKING
MAINLINE

STATION	LOCATION	646.0106 4-INCH EPOXY WHITE LF	646.0106 4-INCH EPOXY YELLOW LF	646.0126 8-INCH CHANNELIZING EPOXY WHITE LF
STA 425+61 - 487+50	LT & RT	1,059		503
STA 425+61 - 487+50	LANE LINES	2,855		
STA 425+61 - 487+50	CL SKIPS		2,063	
STA 425+61 - 487+50	CL		9,948	
OLD HIGHWAY 70				
STA 8+00 - 9+50	CL		227	110
SUBTOTAL		3,914	12,238	613
TOTAL		16,152		

PAVEMENT MARKING
WORDS AND ARROWS

STATION	LOCATION	647.0156 ARROWS TYPE 1 EPOXY EACH	647.0166 ARROWS TYPE 2 EPOXY EACH	647.0356 WORDS, EPOXY EACH
STA 425+61 - 487+50	TURN LANE	3	3	6
STA 425+61 - 487+50	CENTER LANE		27	
STA 8+00 - 9+50	TURN LANE		3	
	OLD HIGHWAY 70			
TOTAL		3	33	6

PAVEMENT MARKING
ISLAND AND CURB

STATION	LOCATION	647.0456 CURB EPOXY YELLOW LF	647.0606 ISLAND NOSE EPOXY YELLOW EACH
STA 425+61 - 487+50	LT & RT	425	6
TOTAL		425	6

PAVEMENT MARKING
STOP LINE

STATION	LOCATION	647.0566 18-INCH STOP LINE EPOXY LF
STA 425+48	LT & RT	50
STA 457+90	LT	25
STA 456+90	RT	25
ROGERS DR		
STA 10+43	LT	20
NEW HUBER		
STA 9+27	RT	20
HUBER DR		
STA 10+44	LT	20
OLD HIGHWAY 70		
STA 9+27	RT	30
TOTAL		190

PAVEMENT MARKING
CURB RAMP DETECTABLE WARNING FIELD

STATION	LOCATION	602.0505 WARNING FIELD SF
STA 457+40	LT CL RT	32
STA 458+18	38' RT	8
STA 458+75	40' RT	8
STA 461+09	56' LT	8
STA 461+25	40' RT	8
STA 461+66	54' LT	8
STA 461+80	40' RT	8
STA 481+61	63' LT	8
STA 482+23	65' LT	8
TOTAL		96

CONCRETE DRIVEWAY

STATION	TO	STATION	#	COMMENTS	LOCATION	416.0160 DRIVEWAY 6-INCH SY
STA 454+86			1	65 FT DRIVEWAY	RIGHT	68
STA 456+59			1	53 FT DRIVEWAY	RIGHT	58
STA 459+52			1	65 FT DRIVEWAY	LEFT	68
STA 468+61			1	35 FT DRIVEWAY	RIGHT	57
STA 469+19			1	35 FT DRIVEWAY	RIGHT	57
STA 475+17			1	30 FT DRIVEWAY	LEFT	37
STA 479+00			1	65 FT DRIVEWAY	LEFT	68
STA 436+36	-	STA 457+34	3	45 FT DRIVEWAY	LEFT	209
STA 436+36	-	STA 457+34	7	45 FT DRIVEWAY	RIGHT	355
STA 457+34	-	STA 483+00	14	45 FT DRIVEWAY	RIGHT	975
STA 457+34	-	STA 487+50	13	45 FT DRIVEWAY	LEFT	659
TOTAL			44			2,613

PAVEMENT MARKING
PARKING STALL AND CROSSWALK

STATION	LOCATION	647.0656 4-INCH PARKING STALL EPOXY WHITE LF	647.0766 6-INCH CROSS WALK EPOXY WHITE LF
STA 427+00 - 431+00	RT	150	
STA 430+00 - 432+00	LT	70	
STA 432+16			70
STA 457+34	LT & RT		104
STA 10+36	ROGERS DR		100
STA 9+35	NEW HUBER		100
STA 10+36	HUBER DR		100
STA 8+11	LAKEVIEW DRIVE		100
STA 9+35	OLD HIGHWAY 70		100
TOTAL		220	674

SAWING CONCRETE

STATION	LOCATION	690.0250 SAWING CONCRETE LF
STA 451+21	42' RT	5
STA 464+80	39.5' RT	13
STA 465+90	39.5' RT	5
STA 472+72	39.5' RT	7
TOTAL		30

TEMPORARY WATER PASSAGE

STATION	LOCATION	SPV.0060.49 EACH
STA 425+61 - 487+50	USH 51	114
TOTAL		114

REMOVING SIGNS AND SUPPORTS
SIGNS AND SUPPORTS

* NOTE: CITY/BUSINESS SIGN ALSO POSTED

STATION	LOCATION	SIGN #	SIGN CODE	WIDTH	HEIGHT	HEIGHT FT	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0814 POSTS TUBULAR STEEL 2X2 INCH X 14 FT EACH	634.0816 POSTS TUBULAR STEEL 2X2 INCH X 16 FT EACH	MOUNT ON SAME POST AS SIGN #	DESCRIPTION	COMMENTS	NEEDS EVALUATION FOR CORRECT POST SIZE(S)
427+57	RIGHT	1	R3-8V	72	30	2.50	1	2	15.00	2	0		VARIOUS ONLYS	LEFT STRAIGHT STRAIGHT RIGHT	
427+63	LEFT	2	R3-8V	72	30	2.50	1	2	15.00	2	0		VARIOUS ONLYS	LEFT STRAIGHT STRAIGHT RIGHT	
427+86	LEFT	3	R1-1	30	30	2.50	1	1	6.25	1	0		STOP		
428+15	RIGHT	4	R6-2R	24	30	2.50	1	1	5.00	1	0		ONE WAY RIGHT ARROW		
428+60	LEFT	5	W3-3	36	36	3.00	1	1	9.00	0	1		TRAFFIC SIGNALS AHEAD		
428+85	RIGHT	6	W3-3	36	36	3.00	1	1	9.00	0	1		TRAFFIC SIGNALS AHEAD		
429+50	LEFT	7	R3-2	24	24	2.00	1	1	4.00	1	0		NO LEFT TURN		
429+76	RIGHT	8	R6-2R	24	30	2.50	1	0	5.00	0	1	9	ONE WAY RIGHT ARROW		
429+76	RIGHT	9	R2-1	24	30	2.50	1	0	5.00	0	0	8	SPEED LIMIT	25	
						5.00				0	1				
431+60	RIGHT	10	R3-1	24	24	2.00	1	0	4.00	1	0		NO RIGHT TURN		
431+86	LEFT	11	R6-2L	24	30	2.50	1	1	5.00	1	0		ONE WAY LEFT ARROW		
433+70	RIGHT	12	R1-2	36	31	2.58	1	1	7.75	1	0		YIELD		
433+77	RIGHT	13	R3-1	24	24	2.00	1	1	4.00	1	0		NO RIGHT TURN		
433+85	RIGHT	14	R3-2	24	24	2.00	1	1	4.00	1	0		NO LEFT TURN		
434+69	RIGHT	15	R5-1	30	30	2.50	1	1	6.25	1	0		DO NOT ENTER		
434+70	RIGHT	16	R5-1	30	30	2.50	1	0	6.25	1	0		DO NOT ENTER		
434+95	RIGHT	17	R4-7	24	30	2.50	1	1	5.00	1	0		KEEP RIGHT		
436+15	RIGHT	18	R3-9B	24	36	3.00	1	1	6.00	0	1		CENTER LANE LEFT TURN ONLY		
436+25	LEFT	19	J3-1	24	57	4.75	3	1	9.50	0	1		DIRECTIONAL ASSEMBLY (1 HEADED ROUTE PANEL)		
			M3-3	24	12								CARDINAL DIRECTION MARKER FOR J ASSEMBLY	SOUTH	
			M1-4	24	24								USH ROUTE MARKER FOR ASSEMBLIES	51	
			M6-2	21	21								DIRECTIONAL ARROWS FOR J ASSEMBLIES	DIAGONAL RIGHT	
437+46	LEFT	20	R2-1	24	30	2.50	1	1	5.00	1	0		SPEED LIMIT	25	
438+00	RIGHT	21	*R2-1	24	30	2.50	1	0	5.00	1	0		SPEED LIMIT	30	
441+00	RIGHT	22	M4-6	24	12	1.00	1	1	2.00	0	1	23	END		
441+00	RIGHT	23	R3-9B	24	36	3.00	1	0	6.00	0	0	22	CENTER LANE LEFT TURN ONLY		
						4.00									
442+75	RIGHT	24	R2-1	24	30	2.50	1	1	5.00	1	0		SPEED LIMIT	30	
447+09	LEFT	25	R2-1	24	30	2.50	1	1	5.00	0	0		SPEED LIMIT	30	
449+89	LEFT	26	M4-6	24	12	1.00	0	0	2.00	0	1	27	END		
449+89	LEFT	27	R3-9B	24	36	3.00	0	0	6.00	0	0	26	CENTER LANE LEFT TURN ONLY		
						4.00									
449+96	RIGHT	28	R3-9B	24	36	3.00	1	0	6.00	0	1		CENTER LANE LEFT TURN ONLY		
455+46	LEFT	29	R2-1	24	30	2.50	1	1	5.00	1	0		SPEED LIMIT	30	
456+00	RIGHT	30	W11-2	30	30	2.50	0	0	6.25	1	0	31	PEDESTRIAN CROSSING SYMBOL		
456+00	RIGHT	31	W16-9P	24	8	0.67	0	0	1.33	0	0	30	AHEAD		
						3.17				1	0				
						SUB TOTAL	29	22	185.58	21	9				

REMOVING SIGNS AND SUPPORTS
SIGNS AND SUPPORTS

* NOTE: CITY/BUSINESS SIGN ALSO POSTED

STATION	LOCATION	SIGN #	SIGN CODE	WIDTH	HEIGHT	HEIGHT FT	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0814 POSTS TUBULAR STEEL 2X2 INCH X 14 FT EACH	634.0816 POSTS TUBULAR STEEL 2X2 INCH X 16 FT EACH	MOUNT ON SAME POST AS SIGN #	DESCRIPTION	COMMENTS	NEEDS EVALUATION FOR CORRECT POST SIZE(S)
456+20	LEFT	32	R1-1	30	30	2.50	1	1	6.25	0	0		STOP		
456+75	LEFT	32A	W5-56	18	18	1.5	0	0	2.25	1				LAKEVIEW DR	
456+75	LEFT	32B	R5-3	24	24	2	0	0	4	1				LAKEVIEW DR	
461+50	LEFT	32C	W14-I	30	30	2.5	0	0	6.25	1				STA 7+50 NEW HUBER DR	
461+50	LEFT	32D	W1-2L	30	30	2.5	0	0	6.25	1				STA 7+50 NEW HUBER DR	
457+09	LEFT	33	R3-9B	24	36	3.00	0	0	6.00	0	1		CENTER LANE LEFT TURN ONLY		
457+39	RIGHT	34	W16-7L	24	12	1.00	0	0	2.00	1	0	35	LEFT DIAGONAL ARROW POINTING DOWNWARD		
457+39	RIGHT	35	W11-2	30	30	2.50	0	0	6.25	1	0	34	PEDESTRIAN CROSSING SYMBOL		
						3.50	0	0		1					
457+29	CENTER	36	R10-23	24	30	2.50	0	0	5.00	1	0		CROSSWALK STOP ON RED		
457+39	CENTER	37	R10-23	24	30	2.50	0	0	5.00	1	0		CROSSWALK STOP ON RED		
457+29	LEFT	38	W16-7L	24	12	1.00	0	0	2.00	1	0	39	LEFT DIAGONAL ARROW POINTING DOWNWARD		
457+29	LEFT	39	W11-2	30	30	2.50	0	0	6.25	1	0	38	PEDESTRIAN CROSSING SYMBOL		
456+89	RIGHT	37A	R10-6	24	36	3.00	0	0	6.00	0	1	38	STOP HERE ON RED		
457+79	LEFT	36A	R10-6	24	36	3.00	0	0	6.00	0	1	38	STOP HERE ON RED		
						3.50									
457+96	RIGHT	40	R3-9B	24	36	3.00	1	0	6.00	0	1		CENTER LANE LEFT TURN ONLY		
458+70	RIGHT	41	R1-1	30	30	2.50	1	1	6.25	1	0		STOP		
459+97	LEFT	42	W11-2	30	30	2.50	0	0	6.25	1	0	43	PEDESTRIAN CROSSING SYMBOL		
459+97	LEFT	43	W16-9P	24	8	0.67	0	0	1.33	0	0	42	AHEAD		
						3.17									
461+87	RIGHT	44	R1-1	30	30	2.50	1	1	6.25	1	0		STOP		
463+59	RIGHT	45	R2-1	24	30	2.50	1	1	5.00	1	0		SPEED LIMIT	30	
465+72	RIGHT	46	R3-9B	24	36	3.00	0	0	6.00	0	1		CENTER LANE LEFT TURN ONLY		
466+31	LEFT	47	R2-1	24	30	2.50	0	0	5.00	1	0		SPEED LIMIT	30	
469+43	LEFT	48	R3-9B	24	36	3.00	1	1	6.00	0	1		CENTER LANE LEFT TURN ONLY		
474+22	RIGHT	49	R2-1	24	30	2.50	1	1	5.00	1	0		SPEED LIMIT	30	
477+10	LEFT	50	R2-1	24	30	2.50	1	1	5.00	1	0		SPEED LIMIT	30	
481+58	LEFT	51	R1-1	30	30	2.50	1	1	6.25	1	0		STOP		
483+25	RIGHT	52	J2-3	72	57	4.75	9	2	28.50	0	2		DIRECTIONAL ASSEMBLY (3 HEADED PANEL)		
			M3-4	24	12	1.00							CARDINAL DIRECTION MARKER FOR J ASSEMBLY	WEST	
			M1-6	24	24	2.00							STH ROUTE MARKER 2 OR 3 DIGITS	70	
			M5-1L	21	21	1.75							DIRECTIONAL ARROWS FOR J ASSEMBLIES	ADVANCE ARROW LEFT TURN	
			M3-1	24	12	1.00							CARDINAL DIRECTION MARKER FOR J ASSEMBLY	NORTH	
			M1-4	24	24	2.00							USH ROUTE MARKER FOR ASSEMBLIES	51	
			M6-1	21	21	1.75							DIRECTIONAL ARROWS FOR J ASSEMBLIES	AHEAD	
			M3-2	24	12	1.00							CARDINAL DIRECTION MARKER FOR J ASSEMBLY	EAST	
			M1-6	24	24	2.00							STH ROUTE MARKER 2 OR 3 DIGITS	70	
			M6-1	21	21	1.75							DIRECTIONAL ARROWS FOR J ASSEMBLIES	AHEAD	
					SUB-TOTAL		18.00	10.00	162.33	19.00	8.00				
					GRAND TOTAL		**47.00**	**32**	**347.92**	**40.00**	**17.00**				

LANDSCAPING

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	SPV.0180.02 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO 40 LB	630.0200 SEEDING TEMPORARY LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
STA 436+00		STA 461+00	USH 51 RT	1095.46	1095.46	0.7	20	30	5
STA 461+00		STA 480+00	USH 51 RT	552.76	552.76	0.3	10	15	5
STA 429+00		STA 463+00	USH 51 LT	1886.50	1886.50	1.2	34	51	5
STA 463+00		STA 488+00	USH 51 LT	2316.66	2316.66	1.5	42	63	5
			TOTALS	5,851	5,851	3.7	105	158	20

EROSION CONTROL

STATION	TO	STATION	LOCATION	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6005 TURBIDITY BARRIERS SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
STA 436+00		STA 461+00	USH 51 RT	1095			
STA 461+00		STA 480+00	USH 51 RT	553			
STA 429+00		STA 463+00	USH 51 LT	1887			
STA 463+00		STA 488+00	USH 51 LT	2317			
STA 443+00		STA 445+50	USH 51 RT		67		
STA 442+00		STA 457+00	USH 51 LT		905		
STA 439+50		STA 447+50	USH 51 RT			737	184
STA 441+50		STA 469+00	USH 51 LT			812	203
			TOTALS	5851	972	1550	387

MOBILIZATIONS EROSION CONTROL
MOBILIZATIONS EMERGENCY EROSION CONT

STAGE	628.1905 EROSION CONTROL EACH	628.1910 EMERGENCY EROSION CONTROL EACH
STAGE 1	8	8
STAGE 2	5	5
TOTALS	13	13

PIPE GRATES
STAGE 1

STATION	LOCATION	PIPE SIZE (INCH)	611.9800.S PIPE GRATES EACH
440+12	OF-1	24x38	1
443+65	OF-2	14x23	1
443+55	OF-3	15	1
449+30	OF-4	19x30	1
451+51	OF-5	12	1
453+70	OF-6	24x38	1
456+50	OF-7	36	1
7+50	OF-202	14x23	1
SUBTOTAL			8

PIPE GRATES
STAGE 2

STATION	LOCATION	PIPE SIZE (INCH)	611.9800.S PIPE GRATES EACH
481+50	OF-100	48	1
SUBTOTAL			1
TOTAL			9

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.6000 PIPE CULVERTS EACH	650.6500.01 STRUCTURE LAYOUT M-43-0001 EACH	650.8500.01 ELECTRICAL INSTALLATION LS	650.9910.01 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF
STA 436+36	-	STA 441+00	USH 51	464	464					464
STA 441+00	-	STA 449+00	USH 51	800	800					800
STA 449+00	-	STA 487+50	USH 51	3,850	3,850					3,850
STA 10+26	-	STA 12+00	ROGERS DR	174	174					174
STA 10+26	-	STA 11+50	HUBER LN	124	124					124
STA 7+50	-	STA 9+60	HUBER	210	210					210
STA 6+85	-	STA 9+60	OLD HWY 70	275	275					275
STA 442+30	-	STA 457+85	RAILING				1			
			HAWK					1		
		STA 444+85	USH 51			3				
			PROJECT						1	
		STA 7+60	NEW HUBER			1				
TOTAL				5,897	5,897	4	1	1	1	6,011

INLET PROTECTION

STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
STA 425+61 - 487+50	USH 51	114	2	112
7+75	New Huber	2		2
		116	2	114

3

NON-METALLIC CONDUIT

LOCATION		LOCATION	652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	CONSTRUCTION METHOD
STA 457+34 HAWK CROSSWALK		CB1-STUB	10			TRENCH
STA 457+34 HAWK CROSSWALK		CB1-PB1			30	TRENCH
STA 457+34 HAWK CROSSWALK		PB1-PB2			70	TRENCH
STA 457+34 HAWK CROSSWALK		PB2-SB1		10		TRENCH
STA 457+34 HAWK CROSSWALK		PB2-SB2		35		TRENCH
STA 457+34 HAWK CROSSWALK		PB3-SB3		10		TRENCH
STA 457+34 HAWK CROSSWALK		PB3-SB4		10		TRENCH
STA 457+18	55' LT USH 51	PB2-PB4			184	
STA 459+10	53' LT USH 51	PB4-PB5			284	
STA 462+00	53' LT USH 51	PB5-PB6			246	
STA 464+50	53' LT USH 51	PB6-PB7			277	
STA 467+50	53' LT USH 51	PB7-PB8			333	
STA 470+90	53' LT USH 51	PB8-PB9			256	
STA 473+50	53' LT USH 51	PB9-PB10			296	
STA 476+50	53' LT USH 51	PB10-PB11			305	
STA 479+51	53' LT USH 51	PB11-PB12			301	
STA 482+48	63' LT USH 51	PB12-PB13			182	
STA 484+28	53' LT USH 51	PB13-PB14			329	
STA 487+51	53' LT USH 51	PB14 -			221	
TOTAL			10	65	3,414	

PULL BOXES

LOCATION	PB NO.	(1) STATION	(1) OFFSET	653.0140 PULLBOXES STEEL 24X42-INCH EACH
STA 457+34 HAWK CROSSWALK	PB1	456+83	68' LT	1
STA 457+34 HAWK CROSSWALK	PB2	457+18	55' LT	1
STA 457+34 HAWK CROSSWALK	PB3	457+23	39' RT	1
USH 51	PB4	459+10	53' LT	1
USH 51	PB5	462+00	53' LT	1
USH 51	PB6	464+50	53' LT	1
USH 51	PB7	467+50	53' LT	1
USH 51	PB8	470+90	53' LT	1
USH 51	PB9	473+50	53' LT	1
USH 51	PB10	476+50	53' LT	1
USH 51	PB11	479+51	53' LT	1
USH 51	PB12	482+48	63' LT	1
USH 51	PB13	484+28	53' LT	1
USH 51	PB14	487+51	53' LT	1
TOTAL				16

CONDUIT SPECIAL

LOCATION	LOCATION	652.0615 CONDUIT SPECIAL 3-INCH LF	CONSTRUCTION METHOD
STA 457+34 HAWK CROSSWALK	PB2-PB3	190	DIRECTIONAL BORE
TOTAL		190	

SIGNAL FACES

LOCATION	SB NO.	HEAD NO.	TYPE OF MOUNT	SPV.0060.44 PEDESTRIAN HYBRID BEACON EACH	658.0416 PEDESTRIAN SIGNAL FACES 16-INCH EACH
STA 457+34 HAWK CROSSWALK	SB1	3	MAST ARM VERTICAL	1	
		4	MAST ARM VERTICAL	1	
		6	PEDESTRIAN		1
	SB2	1	MAST ARM VERTICAL	1	
		2	MAST ARM VERTICAL	1	
		5	PEDESTRIAN		1
TOTAL				4	2

WALL MODULAR BLOCK GRAVITY

STATION	TO	STATION	LOCATION	532.0200.S WALL MODULAR BLOCK GRAVITY SF
STA 457+86	-	STA 459+00	LEFT	300
TOTAL				300

3

TRAFFIC SIGNAL CABLE

LOCATION	LOCATION	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF
STA 457+34 HAWK CROSSWALK	CB1-SB1		130
	CB1-SB2		120
	CB1-SB3		225
	CB1-SB4		190
	INSIDE POLES	320	
TOTAL		320	665

PULL BOX BONDING JUMPERS

LOCATION	LOCATION	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) LF
STA 457+34 HAWK CROSSWALK	CB1-PB1	20
	SB1-PB2	25
	SB3-PB3	25
TOTAL		70

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE BASES

LOCATION	SB NO.	(1) STATION	(1) OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
STA 457+34 HAWK CROSSWALK	CB1	456+88.6	69.5' LT			1
	SB1	457+26.8	54.7' LT		1	
	SB2	457+49.5	45.3' LT	1		
	SB3	457+29.7	40.8' RT		1	
	SB4	457+28.1	31.3' RT	1		
TOTAL				2	2	1

(1) STATION/OFFSET ARE APPROXIMATE

* FOR INFORMATION ONLY ITEMS PAID FOR UNDER THE ITEM "DECORATIVE POLE AND BASE ASSEMBLY SPV.0060.03"

EQUIPMENT GROUNDING CONDUCTORS

LOCATION	LOCATION	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) LF
STA 457+34 HAWK CROSSWALK	CB1-SB1	65
	SB1-SB2	60
	SB2-SB3	155
	SB3-SB4	35
	SB4-CB1	160
TOTAL		475

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL BASES MAST ARMS AND LUMINAIRES

LOCATION	SB NO.	657.0100 PEDESTAL BASES EACH	657.1355 INSTALL POLES TYPE 12 EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.1535 INSTALL MONOTUBE ARMS 35-F00T EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH
STA 457+34 HAWK CROSSWALK	SB1	-	1	-	1	-
	SB2	1	-	1	-	1
	SB3	-	1	-	1	-
	SB4	1	-	1	-	1
	CB1	-	-	-	-	-
TOTAL		2	2	2	2	2

MISCELLANEOUS ITEMS

LOCATION	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	658.5069.01 SIGNAL MOUNTING HARDWARE LS
STA 457+34 HAWK CROSSWALK	1	1
TOTAL	1	1

3

Division	From / To Station	Location	Common Excavation (1) Cut (2)	Available Material (5)	Marsh Excavation (6) (item #205.0500)	Reduced Marsh in Fill (8) Factor 0.60	Expanded Marsh Backfill (10) Factor 1.50	Unexpanded Fill	Expanded Fill (13) Factor 1.25	Mass Ordinate + / - (14)	Waste	Borrow (item #208.0100)	Comment:
	436+50-489+00	USH 51	39,089	39,089	0	0	0	1,126	1,407	37,681	37,681	0	
	10+26-11+36	Rogers Dr	210	210	0	0	0	0	0	210	210	0	
	10+29-11+50	Huber Lane	189	189	0	0	0	1	1	188	188	0	
	7+50-9+56	New Huber	1	1	251	150	376	400	501	-500	0	-500	
	7+00-9+00	Old Hwy 70	679		0			153	191	-191	0	-191	
Grand Total			39,488	39,488	251	150	376	1,527	1,909	37,580	38,079	-691	

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.
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 20505
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
13) Expanded Fill. Factor = 1.25
Depending on selections: **Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
14) 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.

FILE NAME :N:\pds\project_id\d7_11741000_USH51_Front-Third\design\quantities PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

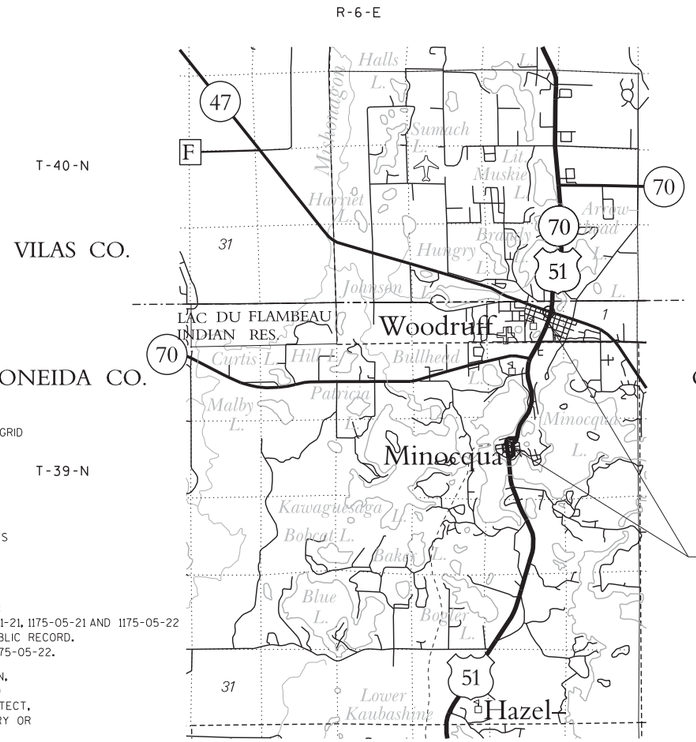
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 1174-10-21

FRONT STREET - 3RD AVENUE
U.S.H. 51
ONEIDA COUNTY







LAYOUT
SCALE 0 1 MI.

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, ONEIDA COUNTY ZONE, NAD83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECT 1075-04(1), 1142-01-21, 1175-05-21 AND 1175-05-22
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD.
EXISTING ACCESS CONTROL ALONG USH 51 ESTABLISHED FROM PREVIOUS PROJECTS 1175-05-21 AND 1175-05-22.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

R/W MONUMENT (SET) IS A 1" X 18" LONG IRON PIPE WITH A WDOT CAP, OR COUNTERSUNK A 3" STEEL SURVEY SPIKE WITH A 1" DIMPLED HEAD.

FOR ACCESS/DRIVEWAY INFORMATION CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN RHINELANDER.

UTILITY INFORMATION IS NOT SHOWN ON THIS PLAT.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT, DRIVEWAY CONNECTION	AP	RECORDED AS	(100')
ACCESS RIGHTS	A.R.	REFERENCE LINE	R/L
ACRES	AC.	RELEASE OF RIGHTS	ROR
AND OTHERS	ET.AL.	REMAINING	REM.
CENTERLINE	C/L	RIGHT-OF-WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC.
CORNER	COR.	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
FOUND	FD		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LD (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	32	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1174-10-21 - 4.05
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : F:\Data\CAD PROJECTS\CAD07452 WDOT MINOCQUA ROW PLAT\dwg\Monumentation_Plat\Title Sheet.dgn
PLOT DATE : 5/23/2012
PLOT BY : Jeff Gilroy
PLOT SCALE : 100.0000 sf / in.
APPRAISAL PLAT DATE : 05/22/2012

TITLE SHEET

TRANSPORTATION PROJECT PLAT NO: 1174-10-21 - 4.05 AMENDMENT NO: 1

ADDS UTILITY NUMBER 41 TO TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.05
RECORDED AS DOCUMENT NO: 715420 VOL. 1 PAGE 28.

THAT PART OF LOTS 1 AND 3, C.S.M. 2826; PART OF LOT 2, C.S.M. 2114; AND PART GOV'T LOT 2; SECTION 14, TOWNSHIP 39 NORTH, RANGE 6 EAST, TOWN OF MINOCQUA, ONEIDA COUNTY, WISCONSIN

RELOCATION ORDER USH 51 ONEIDA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREA ACRES REQUIRED NEW	EXISTING	TOTAL	TLE SF
104	MINOCQUA TOWNSHIP	TLE	---	---	---	1533
119	KURT JUSTICE	TLE	---	---	---	423
121	RYNDERS REALTY, INC.	TLE	---	---	---	1698

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
41	LAKELAND SANITARY DISTRICT	RELEASE OF RIGHTS

RIGHT-OF-WAY COORDINATE TABLE (USH 51)

PT.*	STATION	OFFSET	Y	X
1202	435+36.26	42.48'R	250482.101	188582.652
1203	435+43.44	37.17'R	250490.139	188578.771
1015	435+69.91	57.48'L	250533.726	188490.677
1300	436+21.37	41.12'R	250565.984	188597.114
1204	436+24.46	59.83'R	250565.547	188616.070
1301	438+15.43	41.40'R	250756.620	188633.409
1205	438+21.61	66.44'R	250758.043	188659.164
1016	438+32.05	57.11L	250791.346	188539.721
1206	438+74.99	40.32'R	250814.187	188643.795
1207	439+62.00	40.14'R	250896.834	188663.657
1017	442+39.11	57.67'L	251191.624	188665.096
1018	442+47.66	57.73'L	251199.703	188668.667
2000	443+26.81	49.12'L	251269.455	188711.804
CL20	443+51.05	0.00'L	251268.678	188766.725
2100	443+78.98	52.97'R	251267.834	188826.400

RIGHT-OF-WAY COORDINATE TABLE (S.B. USH 51)

PT.*	STATION	OFFSET	Y	X
1000	N/A	N/A	249964.923	187770.246
1100	N/A	N/A	249975.681	187847.246
CL10	425+47.85	0.00'R	249980.345	187806.695
1002	425+67.63	27.09'L	250000.009	187779.519
1001	425+67.95	41.26'L	250000.265	187765.350
1101	425+98.29	40.09'R	250027.957	187847.224
1003	426+15.22	37.02'L	250052.497	187772.249
1103	426+53.34	32.59'R	250076.162	187847.991
1004	426+53.70	44.07'L	250097.167	187774.263
1102	426+55.81	37.52'R	250076.889	187853.321
1005	426+56.47	36.86'L	250098.241	187782.065
1006	426+89.35	57.02'L	250141.286	187776.103
1008	427+30.22	113.76'L	250214.938	187750.594
1007	427+44.24	91.53'L	250218.907	187779.753
1009	427+47.25	135.54'L	250247.644	187746.143
1010	427+64.49	110.40'L	250252.417	187781.265
1011	427+74.00	120.73'L	250269.426	187782.032
1012	427+85.22	107.34'L	250272.257	187802.638
1013	428+01.31	137.77'L	250310.238	187797.593
1104	429+42.54	47.25'R	250230.795	188026.049
1107	432+09.72	35.76'R	250256.367	188286.496
1108	432+47.34	48.62'R	250252.976	188331.368
1109	433+46.12	109.18'R	250254.016	188470.204
1014	433+71.73	55.18'L	250400.209	188390.368
1201	433+82.96	152.73'R	250254.533	188539.233
1202	435+41.62	69.55'R	250482.101	188582.652
1203	435+47.14	63.77'R	250490.139	188578.771
1015	435+69.91	31.48L	250533.726	188490.677
1300	436+21.37	67.12'R	250565.984	188597.114
1204	436+24.46	85.83'R	250565.547	188616.070

FOUND EXISTING MONUMENTATION COORDINATE TABLE (USH 51)

PT.*	STATION	OFFSET	Y	X	DESC.	R/W PT.*
IP2443	435+36.26	42.48'R	250482.101	188582.652	FI-#DOT	1202
IP2444	435+43.44	37.17'R	250490.139	188578.771	FI-#DOT	1203
IP2445	435+47.13	38.23'R	250493.576	188580.496	IP-LS	
IP9118	435+59.97	305.56'R	250456.571	188845.566	FD	
IP2446	436+24.46	59.83'R	250565.547	188616.070	FI-SPINDLE	1204
IP2448	437+69.65	57.19L	250729.933	188528.033	FI-SSPK	
IP2447	438+21.61	66.44'R	250758.043	188659.164	IP-1	1205
IP9003	438+46.50	160.66'R	250763.401	188756.147	FD	
X9144	443+52.81	420.62'R	250973.720	189139.420	ANGLE-DOORS	
X9145	444+76.61	528.41'R	251098.268	189277.782	ANGLE-DOORS	
X9146	445+19.74	273.96'R	251263.397	189081.377	CALC-INT	

FOUND EXISTING MONUMENTATION COORDINATE TABLE (S.B. USH 51)

PT.*	STATION	OFFSET	Y	X	DESC.	R/W PT.*
IP9125	425+67.11	39.08L	249999.441	187767.531	FD	
IP9124	426+46.25	64.26L	250093.719	187752.455	FD	
IP9172	426+53.62	44.05L	250097.076	187774.259	ALUM PIPE W/CAP	1004
IP9171	427+44.29	91.58L	250218.999	187779.747	ALUM PIPE	1007
IP9120	427+50.62	145.01L	250257.313	187741.427	FD	
IP9121	428+24.47	318.72L	250474.725	187711.347	FD	
IP9000	428+40.60	36.92'R	250204.653	187943.790	FD	
IP9122	428+52.88	296.75L	250491.951	187773.290	FD	
IP9123	428+61.86	290.81L	250496.646	187792.278	FD	
IP2442	429+42.54	47.25'R	250230.795	188026.048	IP-2	1104
IP9001	430+08.81	48.02'R	250236.561	188081.725	FD	
IP2441	432+09.74	35.76'R	250256.370	188286.527	IP-2	1107
X9140	433+01.81	175.74'R	250162.873	188448.088	FD	
IP9141	433+06.54	175.61'R	250166.495	188454.812	FD	
IP9002	433+61.66	474.05'R	249982.935	188716.227	FD	
IP2443	435+41.62	69.55'R	250482.101	188582.652	FI-#DOT	
IP2444	435+47.14	63.77'R	250490.139	188578.771	FI-#DOT	
IP2445	435+50.20	64.63'R	250493.576	188580.496	IP-LS	
IP9118	435+62.05	331.57'R	250456.571	188845.566	FD	
IP2446	436+24.46	85.83'R	250565.547	188616.070	FI-SPINDLE	

RIGHT-OF-WAY COURSE TABLE

PT.* - PT.*	BEARING	DIST.
CL10 - 1000	S 67°04'00" W	39.58'
1000 - 1001	N 07°53'11" W	35.68'
1001 - 1002	S 88°57'40" E	14.17'
1002 - 1003	N 07°53'11" W	52.99'
1003 - 1004	N 02°34'55" E	44.72'
1004 - 1005	N 82°09'43" E	7.88'
1005 - 1006	N 07°53'11" W	43.46'
1006 - 1007	N 02°41'33" E	77.71'
1007 - 1008	S 82°14'57" W	29.43'
1008 - 1009	N 07°45'03" W	33.01'
1009 - 1010	N 82°15'37" E	35.44'
1010 - 1011	N 02°34'55" E	17.03'
1011 - 1012	N 82°10'35" E	20.80'
1012 - 1013	N 07°33'58" W	38.31'
1013 - 1014	N 81°22'10" E	599.56'
1014 - 1015	N 36°55'01" E	167.00'
1015 - 1016	N 10°46'43" E	262.25'
*1016 - 1017	N 17°23'30" E	419.45'
1017 - 1018	N 23°50'59" E	8.83'
1018 - 2000	N 31°44'02" E	82.01'
2000 - CL20	S 89°11'22" E	54.93'
CL20 - 2100	S 89°11'22" E	59.68'
2100 - 1207	S 23°41'06" W	405.13'
*1207 - 1206	S 13°30'47" W	85.00'
*1206 - 1205	S 15°18'33" E	58.21'
1205 - 1301	S 86°50'16" W	25.79'
1301 - 1300	S 10°46'47" W	194.06'
1300 - 1204	S 88°40'44" E	18.96'
1204 - 1203	S 26°19'07" W	84.13'
1203 - 1202	S 25°46'28" E	8.93'
1202 - 1201	S 10°48'07" W	231.67'
1201 - 1109	S 89°34'15" W	69.03'
1109 - 1108	S 89°34'15" W	138.84'
1108 - 1107	N 85°40'45" W	45.00'
1107 - 1104	S 84°23'33" W	261.70'
*1104 - 1103	S 49°01'40" W	235.83'
1103 - 1102	N 82°14'33" E	5.38'
*1102 - 1101	S 07°06'09" W	49.31'
1101 - 1100	S 00°01'27" E	52.28'
1100 - CL10	N 83°26'18" W	40.82'

* INDICATES LCH AND LCB

USH 51 ALIGNMENT COURSE TABLE

PT.* - PT.*	BEARING	DIST.
CL18 - CL19	N 10°41'47" E	340.67'
*CL19 - CL20	N 19°14'46" E	520.34'

* INDICATES LCH AND LCB

S.B. USH 51 ALIGNMENT COURSE TABLE

PT.* - PT.*	BEARING	DIST.
CL10 - CL11	N 00°14'37" W	30.11'
*CL11 - CL12	N 44°09'47" E	381.83'
CL12 - CL13	S 88°34'07" W	173.60'
*CL13 - CL14	N 49°37'58" E	360.08'
CL14 - CL15	N 10°41'47" E	75.16'

* INDICATES LCH AND LCB

CURVE DATA S.B. USH 51 (CUR CL1)
PI STA. 428+45.20
Y = 250277.691
X = 187805.431
Δ = 88°48'47" RT
D = 21°00'00"
L = 422.92'
T = 267.24'
R = 272.84'
PC STA. 425+77.96
PT STA. 430+00.88

CURVE DATA S.B. USH 51 (CUR CL2)
PI STA. 434+05.94
Y = 250294.476
X = 188477.525
Δ = 77°52'23" LT
D = 20°00'00"
L = 389.37'
T = 231.46'
R = 286.48'
PC STA. 431+74.48
PT STA. 435+63.84

CURVE DATA USH 51 (CUR CL3)
PI STA. 442+96.37
Y = 251236.892
X = 188681.995
Δ = 29°55'11" RT
D = 3°16'27"
L = 913.84'
T = 467.60'
R = 1750.00'
PC STA. 438+28.78
PT STA. 447+42.62

1016 - 1017: Δ = 13°13'26" RT, L = 420.39', R = 1821.43'
1207 - 1206: Δ = 02°56'30" LT, L = 85.01', R = 1655.68'
1104 - 1103: Δ = 70°43'48" LT, L = 251.50', R = 203.73'
1206 - 1205: Δ = 9°46'54" RT, L = 58.28', R = 341.57'
1102 - 1101: Δ = 14°15'12" LT, L = 49.44', R = 198.73'
CL19 - CL20: Δ = 17°05'58" RT, L = 522.28', R = 1750.00'

LOCATION MAP, NOT TO SCALE

SCALE, FEET
0 60 120

N

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JOHN R. GARSKE, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.05 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 07-23-12

JOHN R. GARSKE, R.L.S. 1685
COLEMAN ENGINEERING COMPANY

WISCONSIN JOHN R. GARSKE S-1685 IRONWOOD MICHIGAN SURVEYOR

THIS PLAT AND RELOCATION ORDER IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.
SIGNATURE _____ DATE 8-1-12

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1174-10-21-4.05
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ---------- COUNTY, WISCONSIN AT ..:.. .M ON ----------
AS DOCUMENT *---------- AND FILED IN ----------

SIGNATURE OF REGISTER OF DEEDS

4.05

PLOT NAME : PLOT SCALE : 60.0000 sf / in.
PLOT BY : Jeff Gilroy
PLOT DATE : 8/1/2012
FILE NAME : C:\Users\jgilroy.COLEMANIM.000\Documents\Minoqua TPP\040105_rp.dgn
APPRAISAL PLAT DATE : 05/22/2012

TRANSPORTATION PROJECT PLAT NO: 1174-10-21 - 4.06 AMENDMENT NO: 1

REMOVES UTILITY PARCELS 260, 261 AND 262 AND ADDS UTILITY NUMBERS 40, 41 AND 42 TO TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.06, RECORDED AS DOCUMENT NO: 716177 IN VOL. 1, PAGE 29.

THAT PART OF LOTS 1-2, C.S.M. 1386, AND THE GOV'T LOT 6 OF SECTION 11, TOWNSHIP 39 NORTH, RANGE 6 EAST, TOWN OF MINOCQUA, ONEIDA COUNTY, WISCONSIN

RELOCATION ORDER USH 51 ONEIDA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREA ACRES REQUIRED NEW	EXISTING	TOTAL	TLE SF	PLE SF	H.E. SF
200	SAVEMORE FOOD MARKETS, INC.	TLE	---	---	---	2417	---	---
203	SAVEMORE FOOD MARKETS, INC.	FEE, PLE, TLE	0.037	---	0.037	3466	1866	---
205	BOARDWALK PROP. OF MINOCQUA, LLC	FEE, TLE	0.007	---	0.007	588	---	---
206	CATHERINE M. BOSACKI	FEE, TLE, H.E.	0.004	---	0.004	372	---	373
207	RANDALL & JUDITH GORSKI	FEE, TLE, H.E.	0.013	---	0.013	971	---	388
208	GLENN N. & ERMYL E. GONDER	FEE, TLE	0.014	---	0.014	1502	---	---
210	MINOCQUA LEASING, LLC.	FEE, TLE	0.016	---	0.016	1591	---	---
211	JOAN T. SERAMUR	FEE, TLE	0.015	---	0.015	2193	---	---
212	JOAN T. SERAMUR	FEE, TLE	0.008	---	0.008	3307	---	---
213	MICHAEL J. MEYERS	FEE, TLE	0.001	---	0.001	1089	---	---
215	JAMES S. & KELLY C. PHILLIPS	TLE	---	---	---	157	---	---
216	MOM'S LAUNDROMAT, LLC.	TLE	---	---	---	380	---	---
217	EMIL A. & MARIE A. BOOHER	FEE, TLE	0.007	---	0.007	2731	---	---

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSED ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
40	WISCONSIN PUBLIC SERVICE	RELEASE OF RIGHTS
41	LAKELAND SANITARY DISTRICT	RELEASE OF RIGHTS
42	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

FOUND EXISTING MONUMENTATION COORDINATE TABLE

PT.*	STATION	OFFSET	Y	X	DESC.	R/W PT.*
IP2449	447+28.04	43.99'R	251552.380	189030.579	IP-L5	
IP2452	449+19.56	39.86'R	251700.203	189131.841	IP-1	
IP2450	449+24.97	34.76'R	251707.634	189131.491	IP-1	
IP2451	449+25.05	39.73'R	251704.455	189135.313	IP-1	2102
IP2453	449+78.22	34.37'R	251749.575	189165.936	IP-1	
IP2454	453+27.50	36.13'R	252046.989	189361.407	IP-1	
IP2455	454+32.62	36.37'R	252143.873	189407.623	IP-1	
IP2456	454+96.44	36.16'R	252204.160	189432.403	IP-1	
IP2473	456+75.25	104.24'L	252418.180	189361.317	IP-FOLTZ	2004
IP5296	456+99.32	73.91'L	252430.557	189397.230	IP	2005
IP2472	456+99.32	73.91'L	252430.576	189397.178	IP-FOLTZ	2005
IP2474	457+32.92	35.42'R	252430.181	189511.492	FI-SSPK	
IP2471	457+70.47	50.15'L	252489.678	189439.539	IP-BENT	2007
IP9116	458+06.60	138.84'L	252545.419	189362.513	FD	
IP9115	458+13.12	142.47'L	252552.129	189360.462	FD	
X9004	458+14.60	35.38'R	252510.539	189533.388	FD	
IP2470	458+64.18	54.82'L	252579.108	189456.810	FI-FOLTZ	2008
IP2457	458+66.18	40.50'R	252560.659	189550.341	FI-DRILLHOLE	
IP9117	458+82.75	178.27'L	252621.946	189339.736	FD	
X9010	459+28.36	285.18'L	252681.465	189242.452	FD	
IP2458	459+89.85	41.01'R	252684.677	189573.568	IP-WILD	
X9005	460+26.27	41.10'R	252720.664	189579.209	FD	
IP2469	460+27.86	58.88'L	252737.459	189480.636	IP-WILD	
IP9008	460+82.15	248.82'L	252820.048	189301.176	FD	
IP9009	460+84.00	236.96'L	252820.070	189313.183	FD	
IP2468	461+11.88	58.78'L	252820.490	189493.528	IP-WILD	
IP9007	461+61.19	311.25'R	252812.867	189866.753	FD	
IP9089	461+69.15	308.52'R	252821.150	189865.264	FD	
IP9091	461+76.12	363.04'R	252819.726	189920.215	FD	

RIGHT-OF-WAY COORDINATE TABLE

PT.*	STATION	OFFSET	Y	X
2000	443+26.81	49.12'L	251269.455	188711.804
CL20	443+51.05	0.00'L	251268.678	188766.725
2100	443+78.98	52.97'R	251267.834	188826.400
2101	447+28.05	44.16'R	251552.268	189010.715
2200	447+28.49	75.20'R	251532.579	189034.716
2001	447+42.62	53.58'L	251626.722	188945.720
P200	449+25.05	39.50'R	251704.602	189135.136
2102	449+25.05	40.02'R	251704.270	189135.535
2002	449+27.82	65.15'L	251774.836	189057.508
P220	449+27.82	39.50'R	251706.712	189136.945
HE2	454+75.68	56.50'R	252176.802	189443.362
HE1	454+75.68	39.50'R	252183.212	189427.618
HE4	455+19.23	39.50'R	252224.698	189443.891
HE3	455+19.23	56.50'R	252218.694	189459.794
P201	455+29.44	39.50'R	252234.482	189447.551
2003	455+29.44	61.70'L	252269.658	189352.663
P202	456+14.30	39.50'R	252314.051	189477.047
2004	456+68.71	112.22'L	252414.888	189351.794
2005	456+99.32	73.97'L	252430.576	189397.178
2006	457+07.98	79.59'L	252440.173	189394.301
P203	457+20.56	39.50'R	252416.922	189511.764
P204	457+23.55	42.50'R	252418.976	189515.524
P212	457+65.63	52.55'L	252485.777	189435.956
P205	458+02.17	42.50'R	252496.483	189537.180
P213	458+07.22	52.55'L	252524.803	189446.310
P206	458+20.23	58.89'R	252510.510	189557.597
2108	458+31.61	107.46'R	252510.654	189607.597
2008	458+64.18	54.82'L	252579.108	189456.810
P207	458+72.36	69.50'R	252560.739	189580.030
2109	458+82.34	118.38'R	252560.883	189630.030
P208	458+94.97	42.50'R	252589.066	189558.355
P209	459+78.06	42.50'R	252672.806	189573.246
2009	459+92.71	58.80'L	252702.708	189475.360
P214	460+86.87	58.79'L	252795.765	189489.714
P210	461+07.68	42.50'R	252800.908	189592.987
P215	461+08.09	82.79'L	252820.397	189469.223
CL30	461+21.02	0.00'L	252820.571	189553.016
P211	461+30.75	62.26'R	252820.701	189616.027

RIGHT-OF-WAY COURSE TABLE

PT.* - PT.*	BEARING	DIST.
CTRS9023-CL30	S 11°12'16" E	1583.11'
CL30-P211	N 89°52'52" E	63.01'
P211-P210	S 49°20'04" W	30.37'
P210-P209	S 08°45'38" W	129.61'
*P209-P208	S 10°05'00" W	85.05'
P208-P207	S 37°25'19" E	35.67'
P207-2109	N 89°50'07" E	50.00'
2109-2108	S 24°03'58" W	55.01'
2108-P206	S 89°50'08" W	50.00'
P206-P205	S 55°30'34" W	24.77'
*P205-P204	S 15°36'39" W	80.48'
P204-P203	S 61°21'12" W	4.28'
*P203-P202	S 18°38'55" W	108.57'
P202-P201	S 20°20'23" W	84.86'
*P201-HE4	S 20°30'42" W	10.45'
HE4-HE3	S 69°18'59" E	17.00'
HE3-HE2	S 21°25'03" W	45.00'
HE2-HE1	N 67°50'54" W	17.00'
*HE1-P220	S 31°23'02" W	558.16'
P220-P200	S 40°36'38" W	2.78'
P200-2102	S 50°14'54" E	0.52'
2102-2101	S 39°23'32" W	196.68'
2101-2200	S 50°38'15" E	31.04'
2200-2100	S 38°11'51" W	336.88'
2100-CL20	N 89°11'22" W	59.68'
CL20-2000	N 89°11'22" W	54.93'
2000-2001	N 33°12'51" E	427.03'
2001-2002	N 37°02'36" E	185.57'
2002-2003	N 30°48'56" E	576.16'
2003-2004	N 00°20'34" W	145.23'
2004-2005	N 70°55'52" E	48.02'
2005-2006	N 76°41'08" W	10.02'
2006-P212	N 42°24'30" E	61.77'
P212-P213	N 14°51'33" E	40.38'
P213-2008	N 10°56'35" E	55.31'
2008-2009	N 08°32'06" E	124.98'
2009-P214	N 08°46'08" E	94.16'
P214-P215	N 39°45'24" W	32.04'
P215-CL30	N 89°52'52" E	83.79'

* INDICATES LCH AND LCB

CURVE DATA USH 51 (CUR CL6)

P.I.STA.	457+96.80
Y =	252498.906
X =	189503.445
Δ =	11°34'44" LT
D =	03°10'59"
L =	363.76'
T =	182.50'
R =	1800.00'
P.C. STA.	456+14.30
P.T. STA.	459+78.06

CURVE DATA USH 51 (CUR CL7)

P.I.STA.	452+31.81
Y =	251963.179
X =	189304.853
Δ =	20°16'35" LT
D =	03°22'13"
L =	601.62'
T =	303.99'
R =	1700.00'
P.C. STA.	449+27.82
P.T. STA.	455+29.44

P209 - P208: Δ = 2°38'43" RT; L = 85.06'; R = 1842.49'

P205 - P204: Δ= 2°30'10" RT; L = 80.48'; R = 1842.49'

P203 - P202: Δ = 3°22'56" RT; L = 108.59'; R = 1839.50'

P201 - HE4: Δ = 0°20'39" RT; L = 10.45'; R = 1739.50'

HE1 - P220: Δ = 18°27'52" RT; L = 560.58'; R = 1739.50'

CURVE DATA USH 51 (CUR CL3)

P.I.STA.	442+96.37
Y =	251236.892
X =	188682.000
Δ =	29°55'11" RT
D =	03°16'27"
L =	913.84'
T =	467.60'
R =	1750.00'
P.C. STA.	438+28.78
P.T. STA.	447+42.62

CL20 - CL21: Δ = 12°49'13" RT; L = 391.57'; R = 1750.00'

USH 51 ALIGNMENT COURSE TABLE

PT.* - PT.*	BEARING	DIST.
*CL20 - CL21	N 34°12'22" E	390.75'
CL21 - CL22	N 40°36'58" E	185.20'
*CL22 - CL23	N 30°28'40" E	598.48'
CL23 - CL24	N 20°20'23" E	84.86'
*CL24 - CL25	N 14°33'01" E	363.14'
CL25 - CL30	N 08°45'39" E	142.96'

* INDICATES LCH AND LCB

CORNER LOCATION BEYOND SCALE LIMITS OF SHEET

CTRS *9023 ALUMINUM CAP Y = 254373.510 X = 189245.398

T 39 N R 6 E 11

S 11°12'16" E 1583.11' (CTRS TO C.)

ELEC AND GAS EASEMENT V. 510 P. 764 DOC. 333236

EML A. & MARIE A. BOOHER TAX KEY *01601-2179-31 DOC. NO. 395066

WISCONSIN PUBLIC SERVICE

TLE 460+98.37 145.00' | TLE 460+88.49 143.46' | TLE 460+95.28 100.00' | 10'

TLE FOR GRADING

MOM'S LAUNDROMAT, LLC. TAX KEY *01601-2179-32 DOC. NO. 524750

MAP B5171 REIN

JAMES S. & KELLY C. PHILLIPS TAX KEY *01601-2179-33 DOC. NO. 593912

MICHAEL J. MEYERS TAX KEY *01601-2179-35 DOC. NO. 538940

MINOCQUA LEASING, LLC. TAX KEY *01601-2179-36 DOC. NO. 686748

FRONTIER COMMUNICATIONS

TELEPHONE EASEMENT V. 447 P. 472 DOC. 302939 V. 447 P. 473 DOC. 302940

PERMISSION FOR SLOPES GLENN N. & ERMYL E. GONDER TAX KEY *01601-2179-37 DOC. NO. 363088

TLE FOR GRADING

TLE 456+25 45.00' & 55.00'

RANDALL & JUDITH GORSKI TAX KEY *01601-2179-38 DOC. NO. 500844

TLE 456+50 45.00' & 50.00' | TLE 455+19.23 50.00'

CATHERINE M. BOSACKI TAX KEY *01601-2179-40 DOC. NO. 672840 MAP B1785 REIN

TLE 454+75.68 50.00' | TLE 454+50 45.00' & 50.00'

BOARDWALK PROP. OF MINOCQUA, LLC TAX KEY *01601-2179-41 DOC. NO. 598349

ROAD EASEMENT V. 467 P. 247 DOC. 311283

LAKELAND SANITARY DISTRICT

12' ROAD EASEMENT

TLE OF GRADING

SAVEMORE FOOD MARKETS, INC. TAX KEY *01601-2179-44 DOC. NO. 497557 & 670135

10' SEWER AND WATER EASEMENT

10' SEWER AND WATER EASEMENT V. 258 P. 212 DOC. 196635

12' ROAD EASEMENT V. 467 P. 246 DOC. 311282

SAVEMORE FOOD MARKETS, INC. TAX KEY *01601-2179-45 DOC. NO. 497557

MAP C1570 INMAN

TLE 451+00 55.00' & 45.00'

LAKELAND SANITARY DISTRICT

10' SEWER EASEMENT V. 258 P. 207 DOC. 196642 V. 258 P. 231 DOC. 196653

PLE 449+65.75 39.50' | TLE 449+61.05 55.00'

EX 50' TRAFFIC SIGNAL PLE V. 831 P. 641 DOC. 468731

PLE 449+53.80 79.50'

PLE 449+19.48 40.14'

PLE 449+08.17 79.29'

SAVEMORE FOOD MARKETS, INC. TAX KEY *01601-2179-47 DOC. NO. 237850

ACCESS EASEMENT V. 421 P. 621 DOC. 209768

TLE 449+15.19 55.00'

MAP B2906 INMAN

SAVEMORE FOOD MARKETS, INC. TAX KEY *01601-2179-48 DOC. NO. 363588

OTR *300 RECORD POSTION Y = 251260.326 X = 189357.134

T 39 N R 6 E 11 14

TLE 447+28.20 55.00'

S 89°11'22" E 590.47' (OTR TO C.)

TOWN 39N - RANGE 6E TOWN OF MINOCQUA

PROJECT LOCATION Minocqua L.

SHEET LOCATION

LOCATION MAP NOT TO SCALE

SCALE, FEET 0 60 120

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 1 OF TRANSPORTATION PROJECT PLATS, PAGE 28, AS DOCUMENT NO. 715420 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JOHN R. GARSKE, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.06 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 07-23-12

JOHN R. GARSKE, R.L.S. S-1685
COLEMAN ENGINEERING COMPANY

WISCONSIN JOHN R. GARSKE S-1685 IRONWOOD MICHIGAN SURVEYOR

THIS PLAT AND RELOCATION ORDER IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE _____ DATE 8-1-12

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1174-10-21-4.06
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN _____ COUNTY, WISCONSIN AT ____:____ .M ON _____ AS DOCUMENT *_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

4.06

PLOT SCALE : 60.0000 sf / in.

PLOT NAME :

PLOT BY : Jeff Gilroy

PLOT DATE : 8/1/2012

FILE NAME : C:\Users\gilroj.COLEMANIM.000\Documents\Minoqua TPP\04106_rp.dgn

APPRAISAL PLAT DATE : 05/22/2012

211

TRANSPORTATION PROJECT PLAT NO: 1174-10-21 - 4.07 AMENDMENT NO: 1

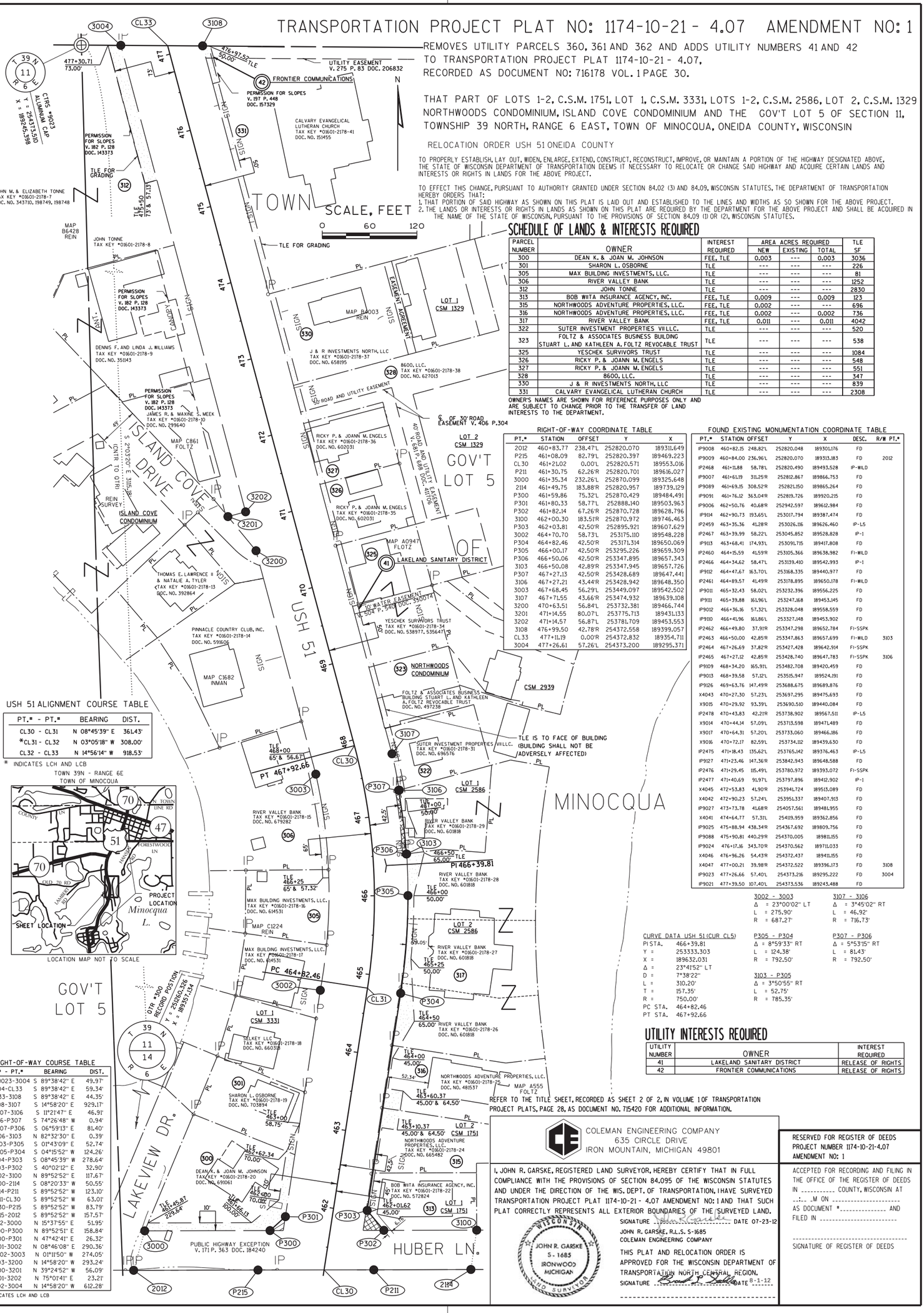
REMOVES UTILITY PARCELS 360, 361 AND 362 AND ADDS UTILITY NUMBERS 41 AND 42 TO TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.07, RECORDED AS DOCUMENT NO: 716178 VOL. 1 PAGE 30.

THAT PART OF LOTS 1-2, C.S.M. 1751, LOT 1, C.S.M. 3331, LOTS 1-2, C.S.M. 2586, LOT 2, C.S.M. 1329 NORTHWOODS CONDOMINIUM, ISLAND COVE CONDOMINIUM AND THE GOV'T LOT 5 OF SECTION 11, TOWNSHIP 39 NORTH, RANGE 6 EAST, TOWN OF MINOCQUA, ONEIDA COUNTY, WISCONSIN

RELOCATION ORDER USH 51 ONEIDA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREA ACRES REQUIRED NEW	EXISTING	TOTAL	TLE SF
300	DEAN K. & JOAN M. JOHNSON	FEE, TLE	0.003	---	0.003	3036
301	SHARON L. OSBORNE	TLE	---	---	---	226
305	MAX BUILDING INVESTMENTS, LLC.	TLE	---	---	---	81
306	RIVER VALLEY BANK	TLE	---	---	---	1252
312	JOHN TONNE	TLE	---	---	---	2830
313	BOB WITA INSURANCE AGENCY, INC.	FEE, TLE	0.009	---	0.009	123
315	NORTHWOODS ADVENTURE PROPERTIES, LLC.	FEE, TLE	0.002	---	---	696
316	NORTHWOODS ADVENTURE PROPERTIES, LLC.	FEE, TLE	0.002	---	0.002	736
317	RIVER VALLEY BANK	FEE, TLE	0.011	---	0.011	4042
322	SUTER INVESTMENT PROPERTIES VIII,LC.	TLE	---	---	---	520
323	FOLTZ & ASSOCIATES BUSINESS BUILDING STUART L. AND KATHLEEN A. FOLTZ REVOCABLE TRUST	TLE	---	---	---	538
325	YESCHEK SURVIVORS TRUST	TLE	---	---	---	1084
326	RICKY P. & JOANN M. ENGELS	TLE	---	---	---	548
327	RICKY P. & JOANN M. ENGELS	TLE	---	---	---	551
328	8600, LLC.	TLE	---	---	---	347
330	J & R INVESTMENTS NORTH, LLC	TLE	---	---	---	839
331	CALVARY EVANGELICAL LUTHERAN CHURCH	TLE	---	---	---	2308

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

RIGHT-OF-WAY COORDINATE TABLE

PT.*	STATION	OFFSET	Y	X
2012	460+83.77	238.47'L	252820.070	189311.649
P215	461+08.09	82.79'L	252820.397	189469.223
CL 30	461+21.02	0.00'L	252820.571	189553.016
P211	461+30.75	62.26'R	252820.701	189616.027
3000	461+35.34	232.26'L	252870.099	189325.648
2114	461+49.75	183.88'R	252820.957	189739.129
P300	461+59.86	75.32'L	252870.429	189484.491
P301	461+80.33	58.77'L	252888.140	189503.963
P302	461+82.14	67.26'R	252870.728	189628.796
3100	462+00.30	183.51'R	252870.972	189746.463
P303	462+03.81	42.50'R	252895.921	189607.629
3002	464+70.70	58.73'L	253175.110	189548.228
P304	464+82.46	42.50'R	253171.314	189650.069
P305	466+00.17	42.50'R	253295.226	189659.309
P306	466+50.06	42.50'R	253347.895	189657.343
3103	466+50.08	42.89'R	253347.945	189657.726
P307	467+27.13	42.50'R	253428.689	189647.441
3106	467+27.21	43.44'R	253428.942	189648.350
3003	467+68.45	56.29'L	253449.097	189542.502
3107	467+71.55	43.66'R	253474.932	189639.108
3200	470+63.51	56.84'L	253732.381	189466.744
3201	471+14.55	80.07'L	253775.713	189431.133
3202	471+14.57	56.87'L	253781.709	189453.553
3108	476+99.50	42.78'R	254372.558	189399.057
CL 33	477+11.19	0.00'R	254372.832	189354.711
3004	477+26.61	57.26'L	254373.200	189295.371

FOUND EXISTING MONUMENTATION COORDINATE TABLE

PT.*	STATION	OFFSET	Y	X	DESC.	R/W PT.*
IP9008	460+82.15	248.82'L	252820.048	189301.176	FD	
IP9009	460+84.00	236.96'L	252820.070	189313.183	FD	2012
IP2468	461+11.88	58.78'L	252820.490	189493.528	IP-W/LD	
IP9007	461+61.19	311.25'R	252812.867	189866.753	FD	
IP9089	461+69.15	308.52'R	252821.150	189865.264	FD	
IP9091	461+76.12	363.04'R	252819.726	189920.215	FD	
IP9006	462+50.76	40.68'R	252942.597	189612.984	FD	
IP9114	462+90.73	193.65'L	253017.794	189387.474	FD	
IP2459	463+35.36	41.28'R	253026.116	189626.460	IP-L5	
IP2467	463+39.99	58.22'L	253045.852	189528.828	IP-1	
IP9113	463+68.41	174.93'L	253091.715	189417.808	FD	
IP2460	464+15.59	41.59'R	253105.366	189638.982	FI-W/LD	
IP2466	464+34.62	58.47'L	253139.410	189542.993	IP-1	
IP9112	464+47.67	163.70'L	253168.335	189440.977	FD	
IP2461	464+89.57	41.49'R	253178.895	189650.178	FI-W/LD	
IP9011	465+32.43	58.02'L	253232.396	189556.225	FD	
IP9111	465+39.88	161.96'L	253247.168	189453.145	FD	
IP9012	466+36.16	57.32'L	253328.048	189558.559	FD	
IP9110	466+41.96	161.86'L	253327.148	189453.902	FD	
IP2462	466+49.80	37.91'R	253347.298	189652.784	FI-SSPK	
IP2463	466+50.00	42.85'R	253347.863	189657.699	FI-W/LD	3103
IP2464	467+26.69	37.82'R	253427.428	189642.914	FI-SSPK	
IP2465	467+27.12	42.85'R	253428.740	189647.783	FI-SSPK	3106
IP9109	468+34.20	165.91'L	253482.708	189420.459	FD	
IP9013	468+39.58	57.12'L	253515.947	189524.191	FD	
IP9126	469+63.76	147.49'R	253688.675	189689.876	FD	
IP4043	470+27.30	57.23'L	253697.295	189475.693	FD	
IP9015	470+29.92	93.39'L	253690.510	189440.084	FD	
IP2478	470+43.83	42.21'R	253738.902	189567.511	IP-L5	
IP9014	470+44.14	57.09'L	253713.598	189471.489	FD	
IP9017	470+64.31	57.20'L	253733.060	189466.186	FD	
IP9016	470+72.17	82.59'L	253734.112	189439.630	FD	
IP2475	471+18.43	135.62'L	253765.142	189376.463	IP-L5	
IP9127	471+23.46	147.36'R	253842.943	189648.588	FD	
IP2476	471+29.45	115.49'L	253780.972	189393.072	FI-SSPK	
IP2477	471+40.69	91.97'L	253797.896	189412.902	IP-1	
IP4045	472+53.83	41.90'R	253941.724	189513.089	FD	
IP4042	472+90.23	57.24'L	253951.337	189407.913	FD	
IP9027	473+73.78	41.68'R	254057.561	189481.955	FD	
IP4041	474+64.77	57.31'L	254119.959	189362.856	FD	
IP9025	475+88.94	438.34'R	254367.692	189809.756	FD	
IP9088	475+90.81	440.29'R	254370.005	18981.155	FD	
IP9024	476+17.16	343.70'R	254370.562	18971.033	FD	
IP4046	476+96.26	54.43'R	254372.437	18941.155	FD	
IP4047	477+00.21	39.98'R	254372.522	189396.173	FD	3108
IP9023	477+26.66	57.40'L	254373.216	189295.222	FD	3004
IP9021	477+39.50	107.40'L	254373.536	189243.488	FD	

USH 51 ALIGNMENT COURSE TABLE

PT.* - PT.*	BEARING	DIST.
CL 30 - CL 31	N 08°45'39" E	361.43'
*CL 31 - CL 32	N 03°05'18" W	308.00'
CL 32 - CL 33	N 14°56'14" W	918.53'

* INDICATES LCH AND LCB

RIGHT-OF-WAY COURSE TABLE

PT.* - PT.*	BEARING	DIST.
CTRS9023-3004	S 89°38'42" E	49.97'
3004-CL 33	S 89°38'42" E	59.34'
CL 33-3108	S 89°38'42" E	44.35'
3108-3107	S 14°58'20" E	929.17'
*3107-3106	S 11°21'47" E	46.91'
3106-P307	S 74°26'48" W	0.94'
*P307-P306	S 06°59'13" E	81.40'
P306-3103	N 82°32'30" E	0.39'
*3103-P305	S 01°43'09" E	52.74'
*P305-P304	S 04°15'52" W	124.26'
P304-P303	S 08°45'39" W	278.64'
P303-P302	S 40°02'12" E	32.90'
P302-3100	N 89°52'52" E	117.67'
3100-2114	S 08°20'33" W	50.55'
2114-P211	S 89°52'52" W	123.10'
P211-CL 30	S 89°52'52" W	63.01'
CL 30-P215	S 89°52'52" W	83.79'
P215-2012	S 89°52'52" W	157.57'
2012-3000	N 15°37'55" E	51.95'
3000-P300	N 89°52'51" E	158.84'
P300-P301	N 47°42'41" E	26.32'
P301-3002	N 08°46'08" E	290.36'
*3002-3003	N 01°11'50" W	274.05'
3003-3200	N 14°58'20" W	293.24'
3200-3201	N 39°24'52" W	56.09'
3201-3202	N 75°01'41" E	23.21'
3202-3004	N 14°58'20" W	612.28'

* INDICATES LCH AND LCB

CURVE DATA USH 51 (CUR CL5)

P.I.STA.	466+39.81
Y =	253333.303
X =	189632.031
Δ =	23°41'52" LT
D =	7°38'22"
L =	310.20'
T =	157.35'
R =	750.00'
PC STA.	464+82.46
PT STA.	467+92.66

3002 - 3003	
Δ =	23°00'02" LT
L =	275.90'
R =	687.27'
3107 - 3106	
Δ =	3°45'02" RT
L =	46.92'
R =	716.73'
P305 - P304	
Δ =	8°59'33" RT
L =	124.38'
R =	792.50'
P307 - P306	
Δ =	5°53'15" RT
L =	81.43'
R =	792.50'
3103 - P305	
Δ =	3°50'55" RT
L =	52.75'
R =	785.35'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
41	LAKELAND SANITARY DISTRICT	RELEASE OF RIGHTS
42	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JOHN R. GARSKE, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.07 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 07-23-12

JOHN R. GARSKE, R.L.S. S-1685
COLEMAN ENGINEERING COMPANY

JOHN R. GARSKE S-1685 IRONWOOD MICHIGAN WISCONSIN LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE _____ DATE 8-1-12

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1174-10-21-4.07
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ---------- COUNTY, WISCONSIN AT ..:.. .M ON ---------- AS DOCUMENT *---------- AND FILED IN ----------

---

SIGNATURE OF REGISTER OF DEEDS

4.07

PLOT SCALE : 60.000000 sf / in.

PLOT NAME :

PLOT BY : Jeff Gilroy

PLOT DATE : 8/1/2012

FILE NAME : C:\Users\jgilroy.COLEMANJM.000\Documents\Minocqua TPP\040107_rp.dgn

APPRAISAL PLAT DATE : 05/22/2012

TRANSPORTATION PROJECT PLAT NO: 1174-10-21 - 4.08 AMENDMENT NO: 1

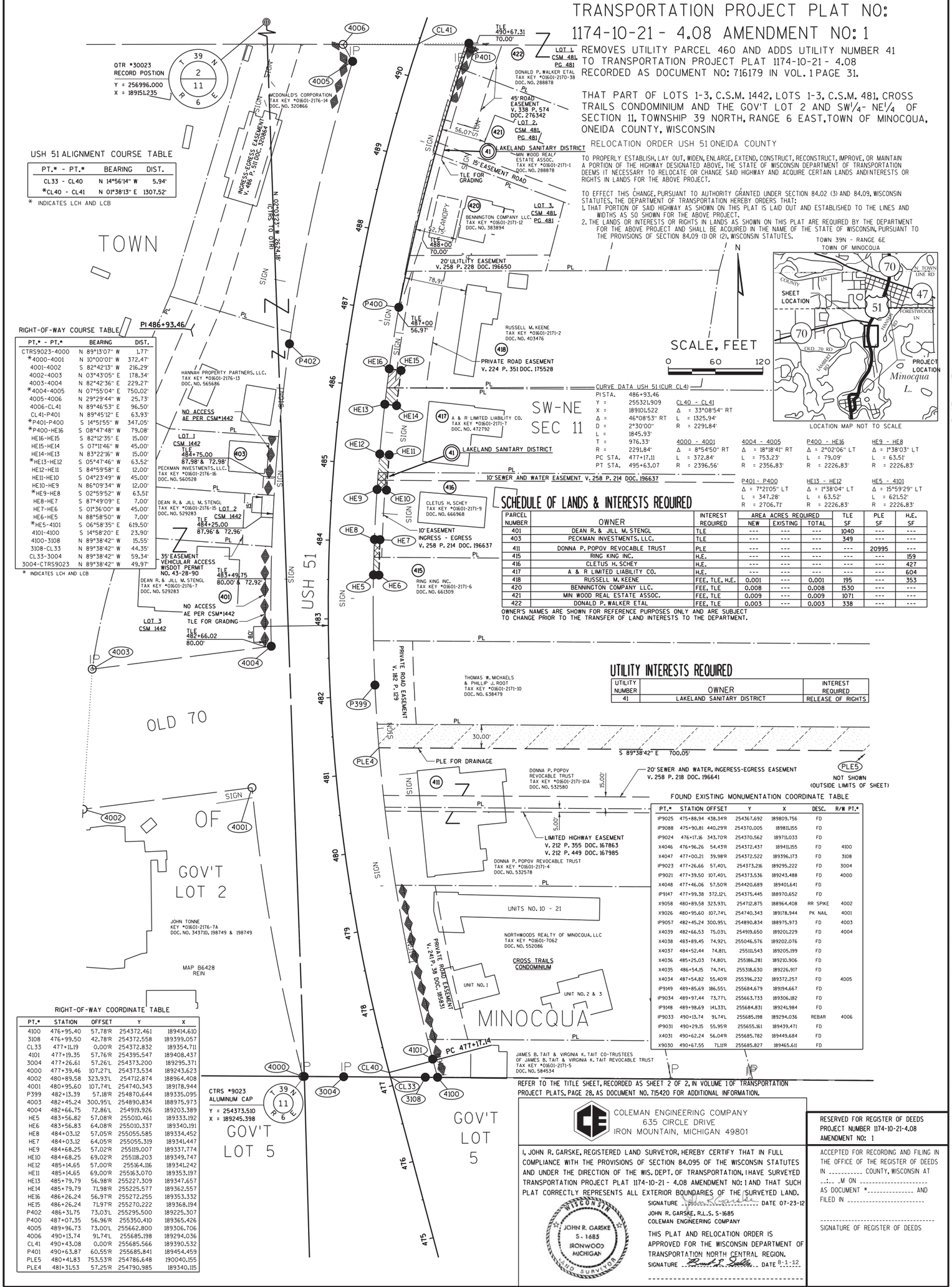
REMOVES UTILITY PARCEL 460 AND ADDS UTILITY NUMBER 41 TO TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.08 RECORDED AS DOCUMENT NO: 716179 IN VOL. 1 PAGE 31.

THAT PART OF LOTS 1-3, C.S.M. 1442, LOTS 1-3, C.S.M. 481, CROSS TRAILS CONDOMINIUM AND THE GOV'T LOT 2 AND SW1/4- NE1/4 OF SECTION 11, TOWNSHIP 39 NORTH, RANGE 6 EAST, TOWN OF MINOCQUA, ONEIDA COUNTY, WISCONSIN

RELOCATION ORDER USH 51 ONEIDA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND/INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREA ACRES REQUIRED NEW	EXISTING	TOTAL	TLE SF	PLE SF	H.E. SF
401	DEAN R. & JILL M. STENGL	TLE	---	---	---	1040	---	---
403	PECKMAN INVESTMENTS, LLC.	TLE	---	---	---	349	---	---
411	DONNA P. POPOV REVOCABLE TRUST	PLE	---	---	---	---	20995	---
415	RING KING INC.	H.E.	---	---	---	---	---	159
416	CLETUS H. SCHEY	H.E.	---	---	---	---	---	427
417	A & R LIMITED LIABILITY CO.	H.E.	---	---	---	---	---	604
418	RUSSELL M. KEENE	FEE, TLE, H.E.	0.001	---	0.001	195	---	353
420	BENNINGTON COMPANY LLC.	FEE, TLE	0.008	---	0.008	1530	---	---
421	MIN WOOD REAL ESTATE ASSOC.	FEE, TLE	0.009	---	0.009	1071	---	---
422	DONALD P. WALKER ETAL	FEE, TLE	0.003	---	0.003	338	---	---

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
41	LAKELAND SANITARY DISTRICT	RELEASE OF RIGHTS

FOUND EXISTING MONUMENTATION COORDINATE TABLE

PT.*	STATION	OFFSET	Y	X	DESC.	R/W PT.*
IP9025	475+88.94	438.34'R	254367.692	189809.756	FD	
IP9088	475+90.81	440.29'R	254370.005	189811.155	FD	
IP9024	476+17.16	343.70'R	254370.562	189711.033	FD	
X4046	476+96.26	54.43'R	254372.437	189411.155	FD	4100
X4047	477+00.21	39.98'R	254372.522	189396.173	FD	3108
IP9023	477+26.66	57.40'L	254373.216	189295.222	FD	3004
IP9021	477+39.50	107.40'L	254373.536	189243.488	FD	4000
X4048	477+46.06	57.50'R	254420.689	189401.641	FD	
IP9147	477+99.38	372.12'L	254375.445	188970.652	FD	
X9058	480+89.58	323.93'L	254712.875	188964.408	RR SPIKE	4002
X9026	480+95.60	107.74'L	254740.343	189178.944	PK NAIL	4001
IP9057	482+45.24	300.95'L	254890.834	188975.973	FD	4003
X4039	482+66.53	75.03'L	254919.650	189201.229	FD	4004
X4038	483+89.45	74.92'L	255046.576	189202.076	FD	
X4037	484+52.44	74.81'L	255111.543	189205.199	FD	
X4036	485+25.03	74.80'L	255186.281	189210.906	FD	
X4035	486+54.15	74.74'L	255318.630	189226.917	FD	
X4034	487+54.82	55.40'R	255396.232	189372.257	FD	4005
IP9349	489+85.69	186.55'L	255684.679	189194.667	FD	
IP9034	489+97.44	73.77'L	255663.733	189306.182	FD	
IP9348	489+98.69	141.33'L	255684.831	189241.984	FD	
IP9033	490+13.74	91.74'L	255685.198	189294.036	REBAR	4006
IP9031	490+29.15	55.95'R	255655.161	189439.471	FD	
X4031	490+62.24	56.04'R	255685.782	189449.684	FD	
X9030	490+67.55	71.11'R	255685.827	189465.611	FD	

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 1 OF TRANSPORTATION PROJECT PLATS, PAGE 28, AS DOCUMENT NO. 715420 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JOHN R. GARSKE, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1174-10-21 - 4.08 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 07-23-12

JOHN R. GARSKE, R.L.S. S-1685
COLEMAN ENGINEERING COMPANY

WISCONSIN JOHN R. GARSKE S-1685 IRONWOOD MICHIGAN LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE _____ DATE 8-1-12

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1174-10-21-4.08
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ---------- COUNTY, WISCONSIN AT ..:.. .M ON ---------- AS DOCUMENT *---------- AND FILED IN ----------

---

SIGNATURE OF REGISTER OF DEEDS

4.08

PLOT SCALE : 60.0000 sf / in.

PLOT NAME :

PLOT BY : Jeff Gilroy

PLOT DATE : 8/1/2012

FILE NAME : C:\Users\gilroj.COLEMANIM.000\Documents\Minocqua TPP\040108_rp.dgn

APPRAISAL PLAT DATE : 05/22/2012

END MILL AND OVERLAY
STA. 431+96

START RECONSTRUCTION
STAGE 1
STA. 436+36

PI = 434+05.94
DELTA = 77°52'22.0" LT
R = 286.479'
T = 231.460'
L = 389.364'
SE = NC
DEG = 20°00'00.0"
X = 188477.524
Y = 250294.475

PC 431+44.48
PT 435+33.84
PI 436+35.20

VPOT STA 436+50.00
VPOT EL596.34

-1.86 %

PFGRD1

435+50	435+75	436	436+25	436+50	436+75	437	437+25	437+50	437+75	438
598.43	598.16	597.89	597.58	597.26	596.80	596.34	595.96	595.59	595.10	594.61	594.14	593.67
						596.34	595.87	595.41	594.94	594.48	594.01	593.55

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 431+00 - 438+00 PLAN PROFILE	SHEET 214	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\050102_pp.dgn PLOT DATE : 21-DEC-2012 11:06 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 30

PI = 442+96.37
DELTA = 29°55'10.3" RT
R = 1750'
T = 467.594'
L = 913.840'
SE = NC
DEG = 3°16'26.6"
X = 188681.996
Y = 251236.892

PI 442+96.37

N

SIGN

USH 51

MH

INL

438+00 439+00 440+00 441+00 442+00 443+00 444+00

590.36 589.86 589.58 589.30 589.02 588.74 588.46 588.20 588.09 588.13

591.13 592.01 592.94 590.36 589.86 589.58 589.30 589.02 588.74 588.46 588.20 588.09 588.17

PC 438+78

5

5

1598
1596
1594
1592
1590
1588
1586

VCL 150.00
K = 115.31

VCL 150.00
K = 141.18

VPC STA 438+50.00
VPC EL592.61

VPI STA 439+50.00
VPI EL590.75

VPT STA 440+00.00
VPT EL590.47

-0.56 %

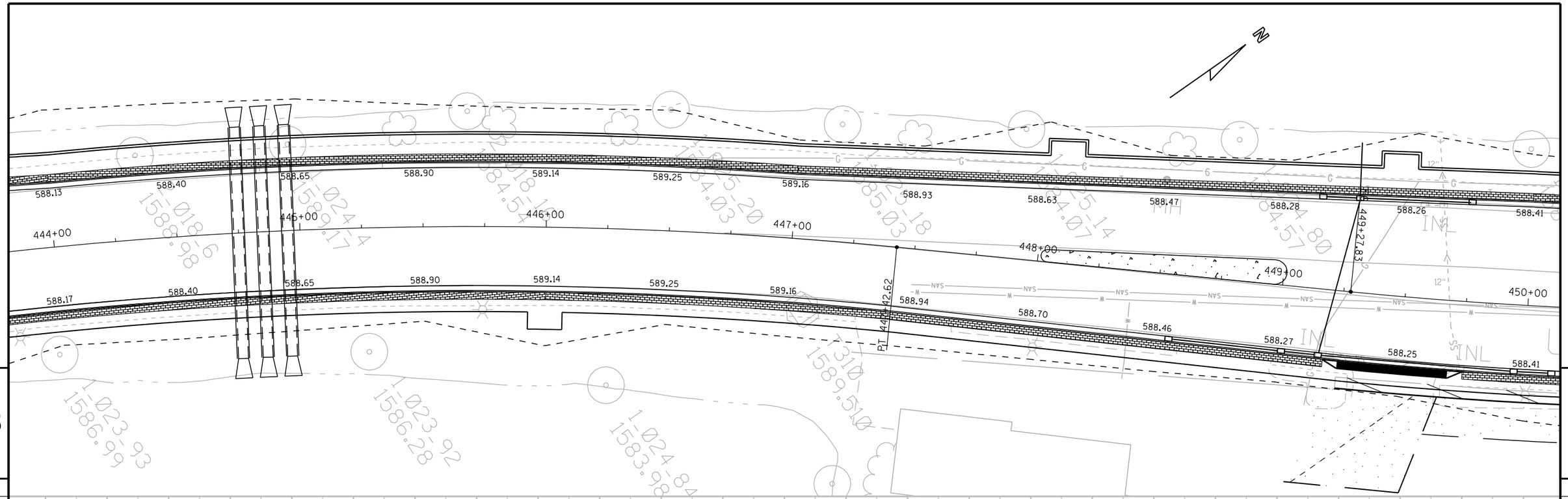
-0.56 %

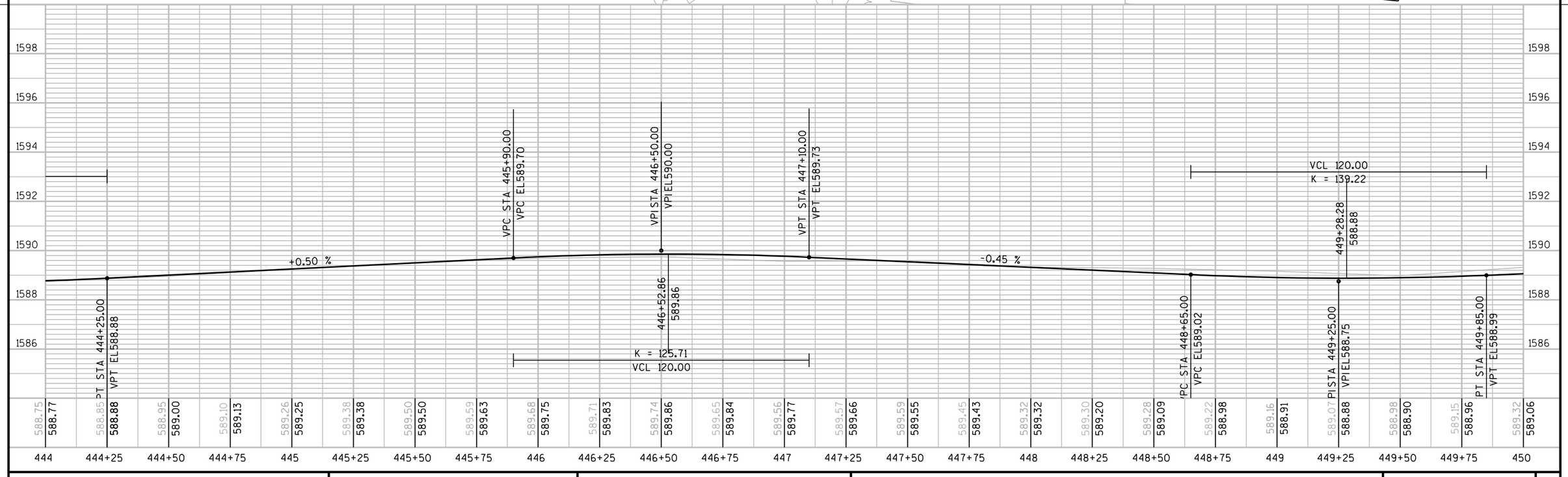
PC STA 442+75.00
VPC EL588.92

443+54.41
588.70

VPI STA 443+50.00
VPI EL588.50

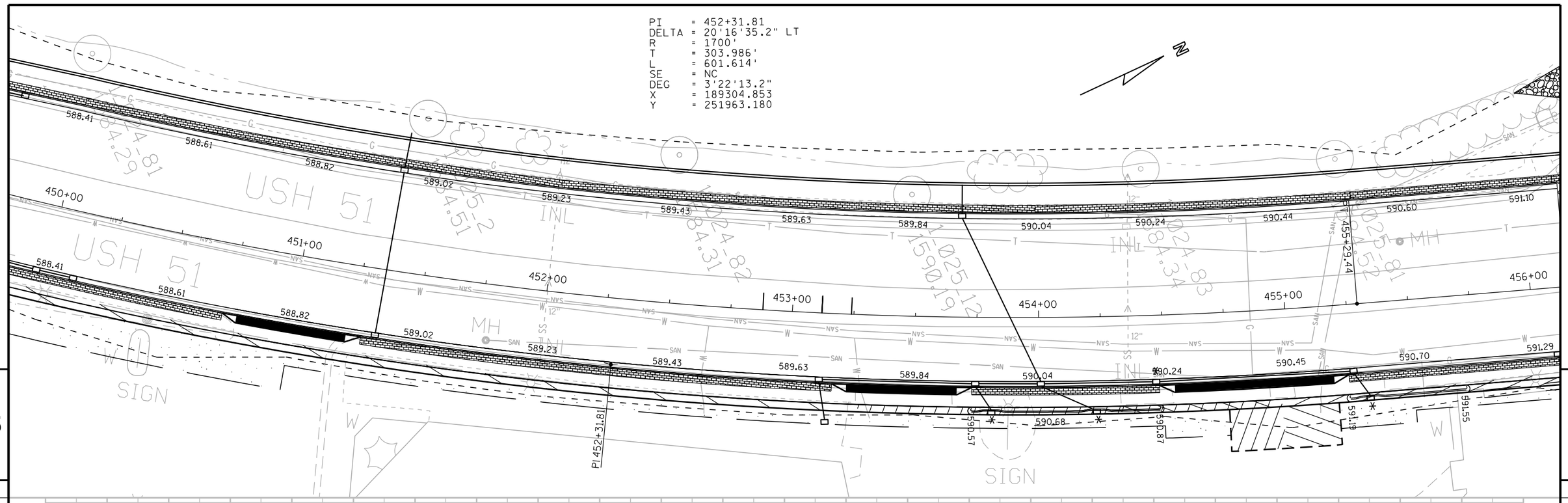
| | | |





PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 444+00 - 450+00 PLAN PROFILE	SHEET 216 E

PI = 452+31.81
DELTA = 20'16'35.2" LT
R = 1700'
T = 303.986'
L = 601.614'
SE = NC
DEG = 3'22'13.2"
X = 189304.853
Y = 251963.180

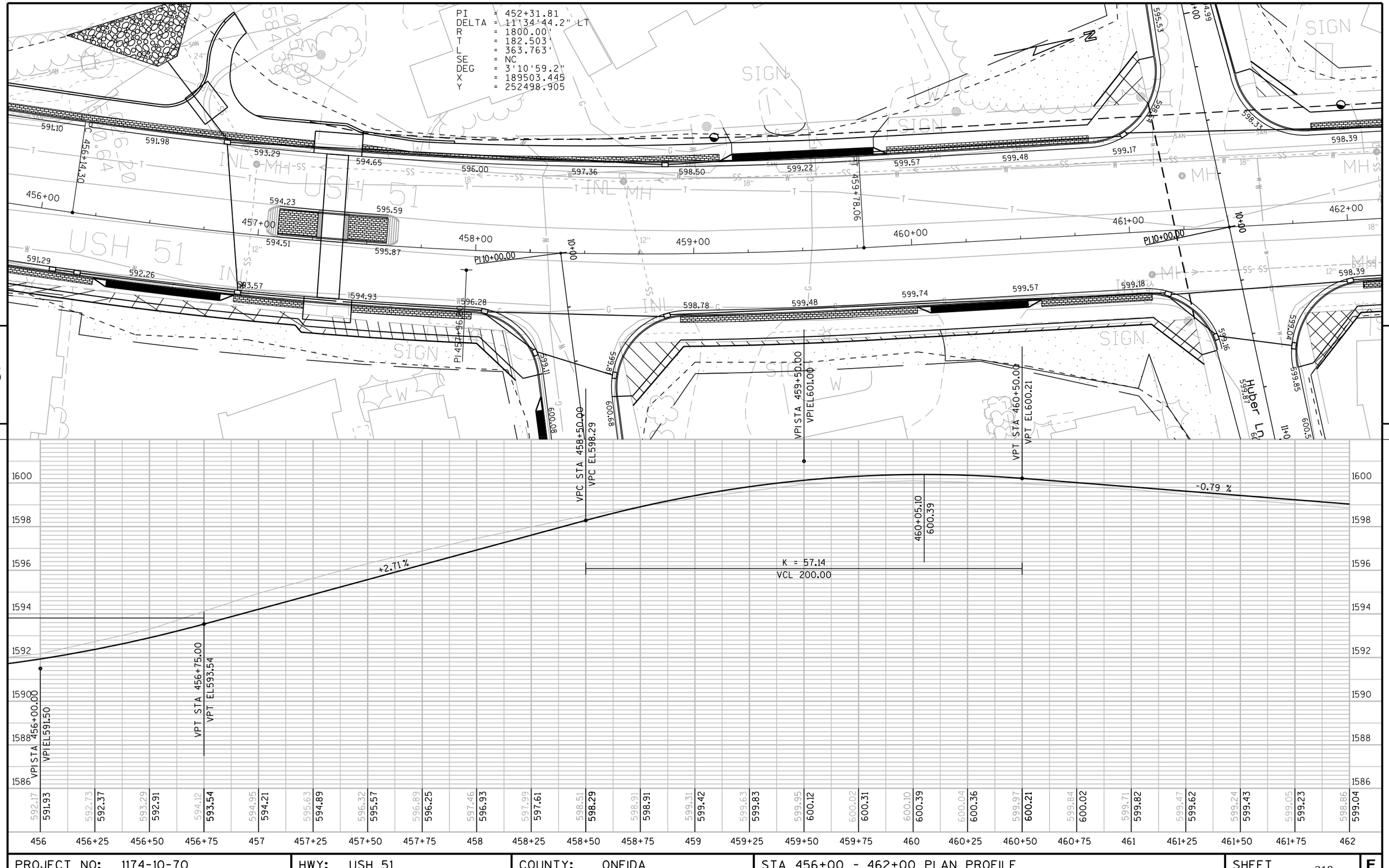


PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 450+00 - 456+00 PLAN PROFILE	SHEET 217 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\050105_pp.dgn PLOT DATE : 21-DEC-2012 11:07 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 30

PI = 452+31.81
DELTA = 11°34'44.2" LT
R = 1800.00'
T = 182.503'
L = 363.763'
SE = NC
DEG = 3°10'59.2"
X = 189503.445
Y = 252498.905



PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 456+00 - 462+00 PLAN PROFILE	SHEET 218 E

PI = 466+39.81
DELTA = 23°41'52.3" LT
R = 750.00'
T = 1157.35'
L = 310.20'
SE = NC
DEG = 7°38'22.0"
X = 189632.031
Y = 253333.303

598.39 598.06 598.13 598.67 599.55 600.47 601.39 602.31 602.90 603.08 602.85 602.25 601.67

462+00 463+00 464+00 465+00 466+00 467+00 468+00

464+82.46 467+92.86

598.39 598.06 598.13 598.67 599.62 600.63 601.64 602.59 603.18 603.36 603.13 602.53 601.87

PI 466+39.81

Building Removed by Owner 2010

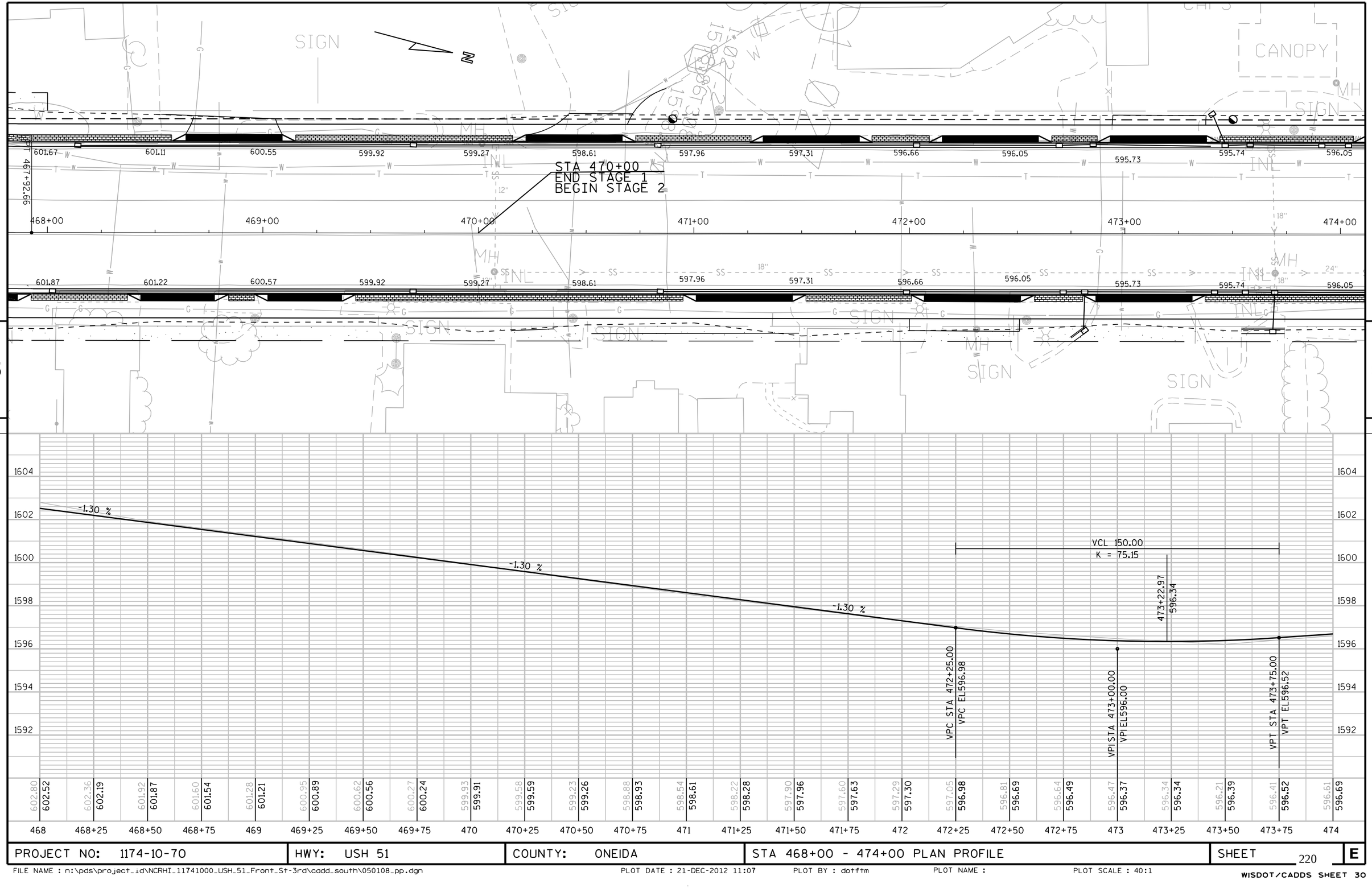
VPC STA 462+25.00 VPC EL598.84
VPI STA 463+00.00 VPI EL598.25
VPT STA 463+75.00 VPT EL599.76
VPC STA 465+25.00 VPC EL602.78
VPI STA 466+25.00 VPI EL604.80
VPT STA 467+25.00 VPT EL603.50

VCL 150.00
K = 53.55
462+67.08
598.67
+2.02 %
466+46.44
604.01
K = 60.26
VCL 200.00

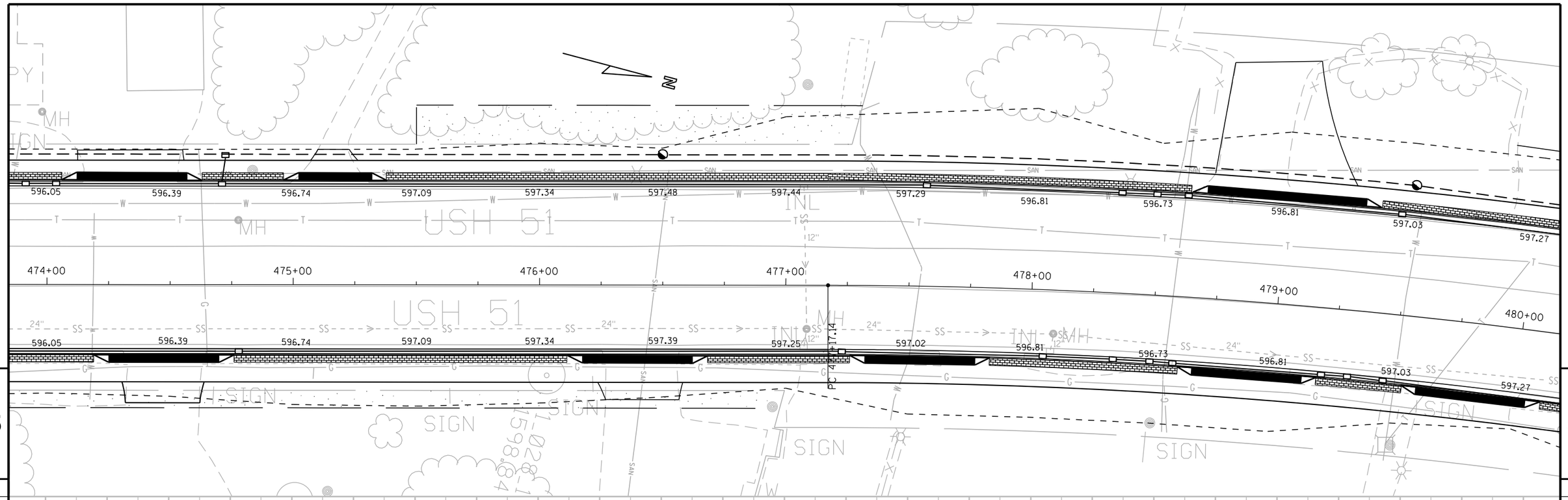
598.86	598.83	598.79	598.95	599.10	599.39	599.69	600.06	600.43	600.87	601.30	601.77	602.25	602.61	602.98	603.29	603.61	603.80	603.98	603.92	603.86	603.66	603.46	603.13	602.80
599.04	598.84	598.70	598.68	598.78	598.99	599.32	599.76	600.27	600.77	601.27	601.78	602.28	602.78	603.24	603.58	603.83	603.97	604.01	603.94	603.77	603.50	603.17	602.84	602.52
462	462+25	462+50	462+75	463	463+25	463+50	463+75	464	464+25	464+50	464+75	465	465+25	465+50	465+75	466	466+25	466+50	466+75	467	467+25	467+50	467+75	468

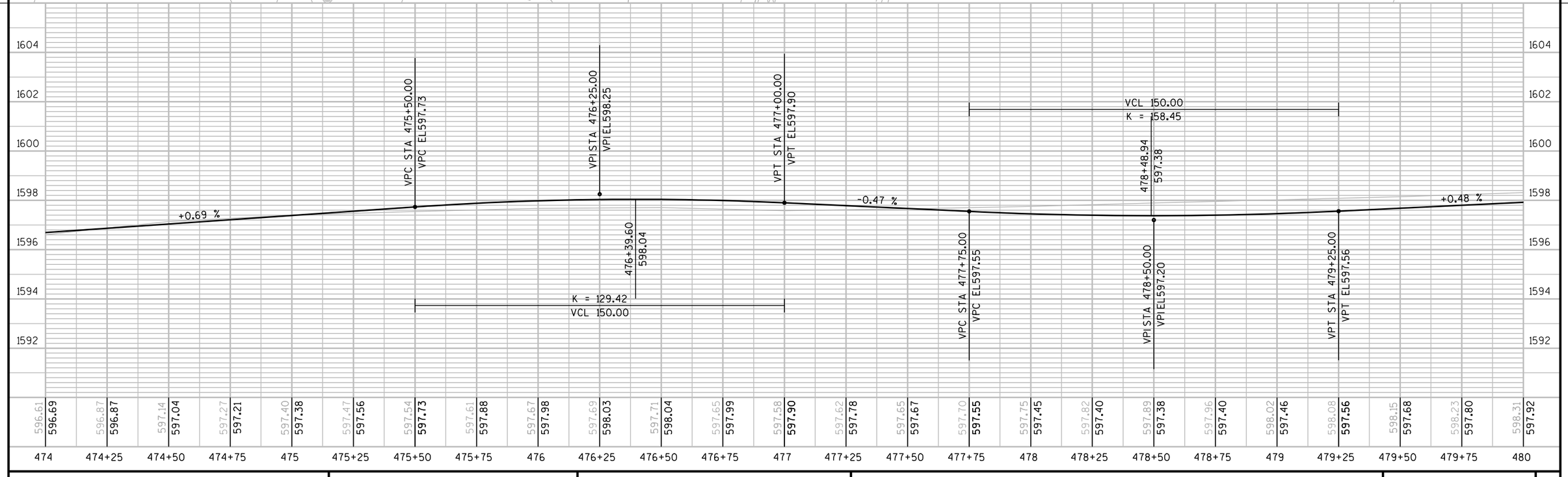
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 462+00 - 468+00 PLAN PROFILE	SHEET 219 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\050107_pp.dgn PLOT DATE : 21-DEC-2012 11:07 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

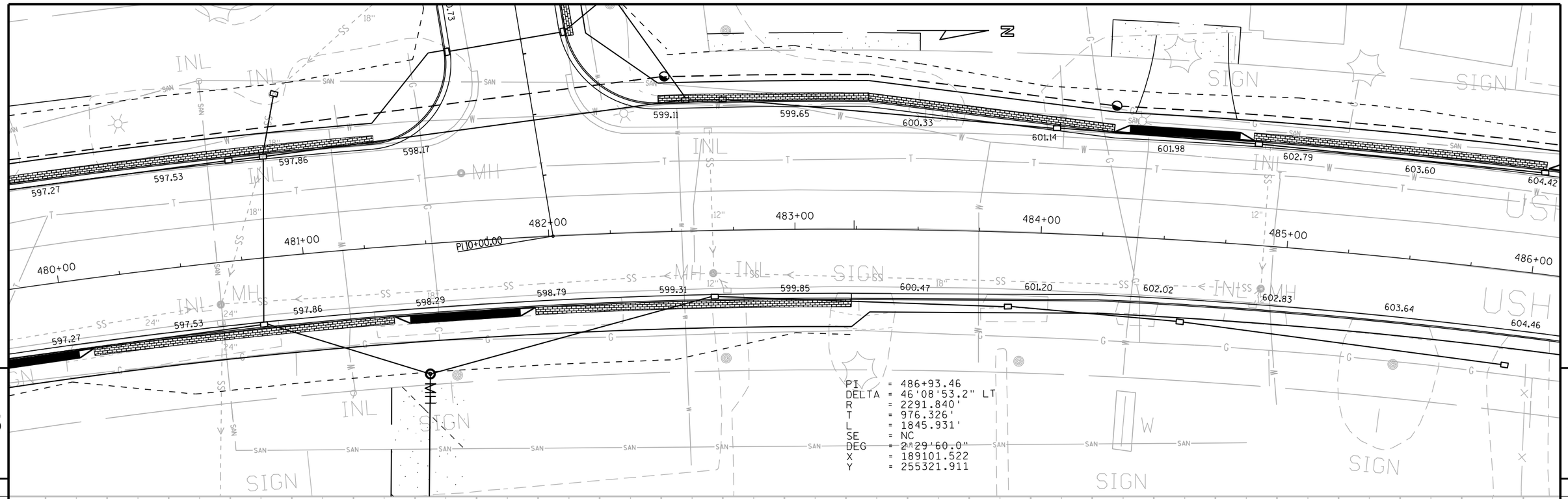


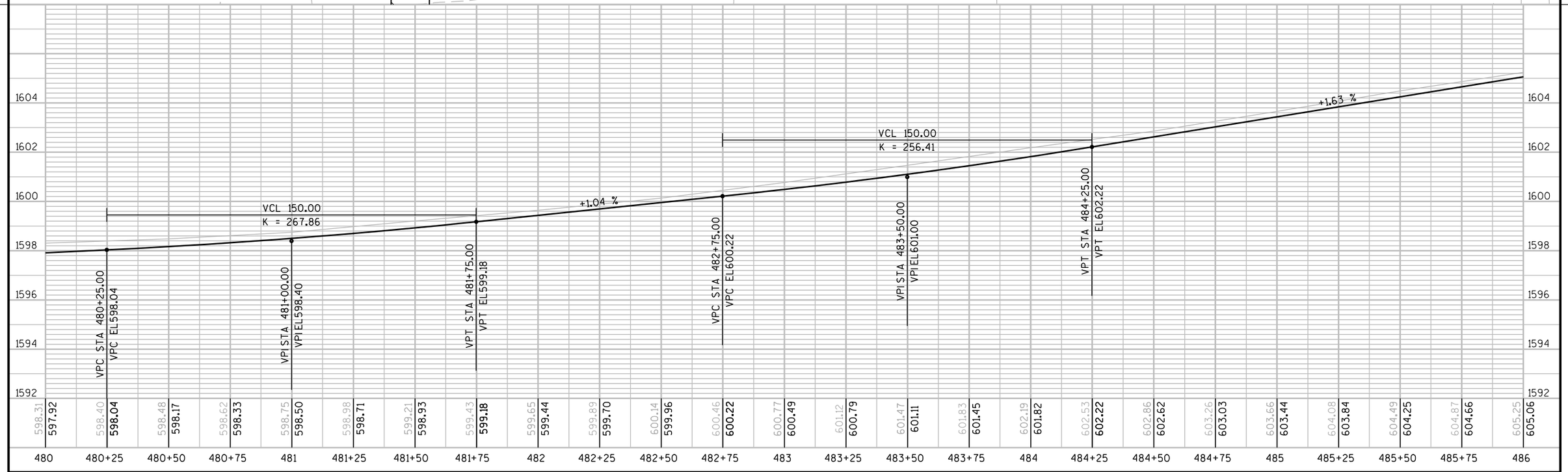
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 468+00 - 474+00 PLAN PROFILE	SHEET 220	E



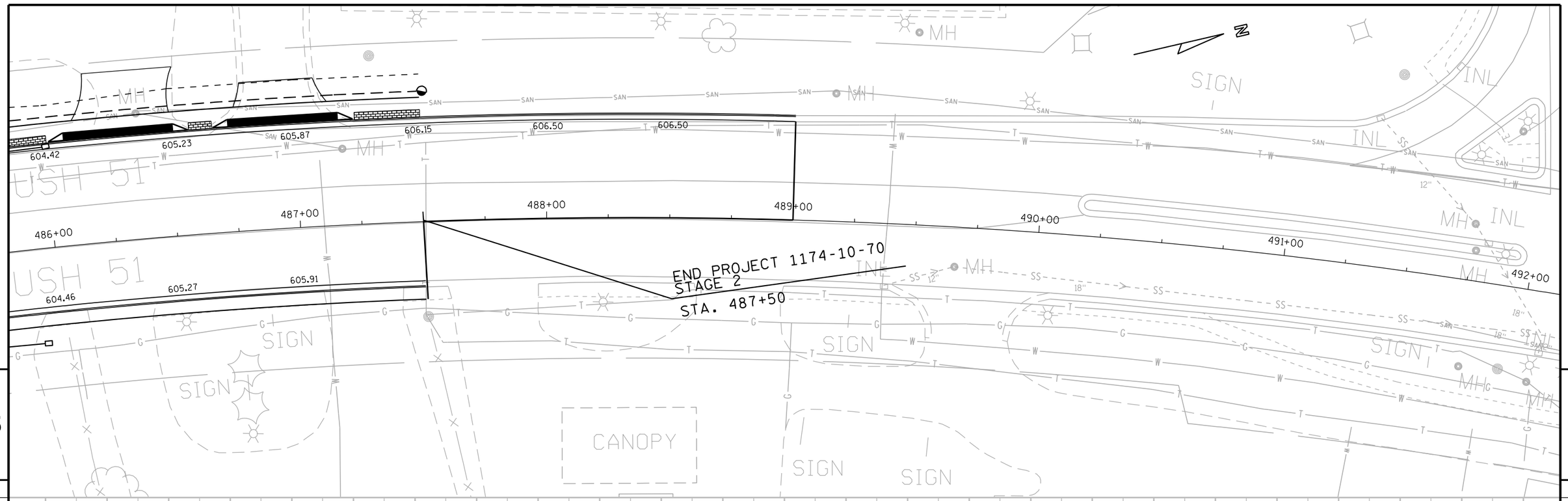


PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 474+00 - 480+00 PLAN PROFILE	SHEET 221	E





PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 480+00 - 486+00 PLAN PROFILE	SHEET 222 E



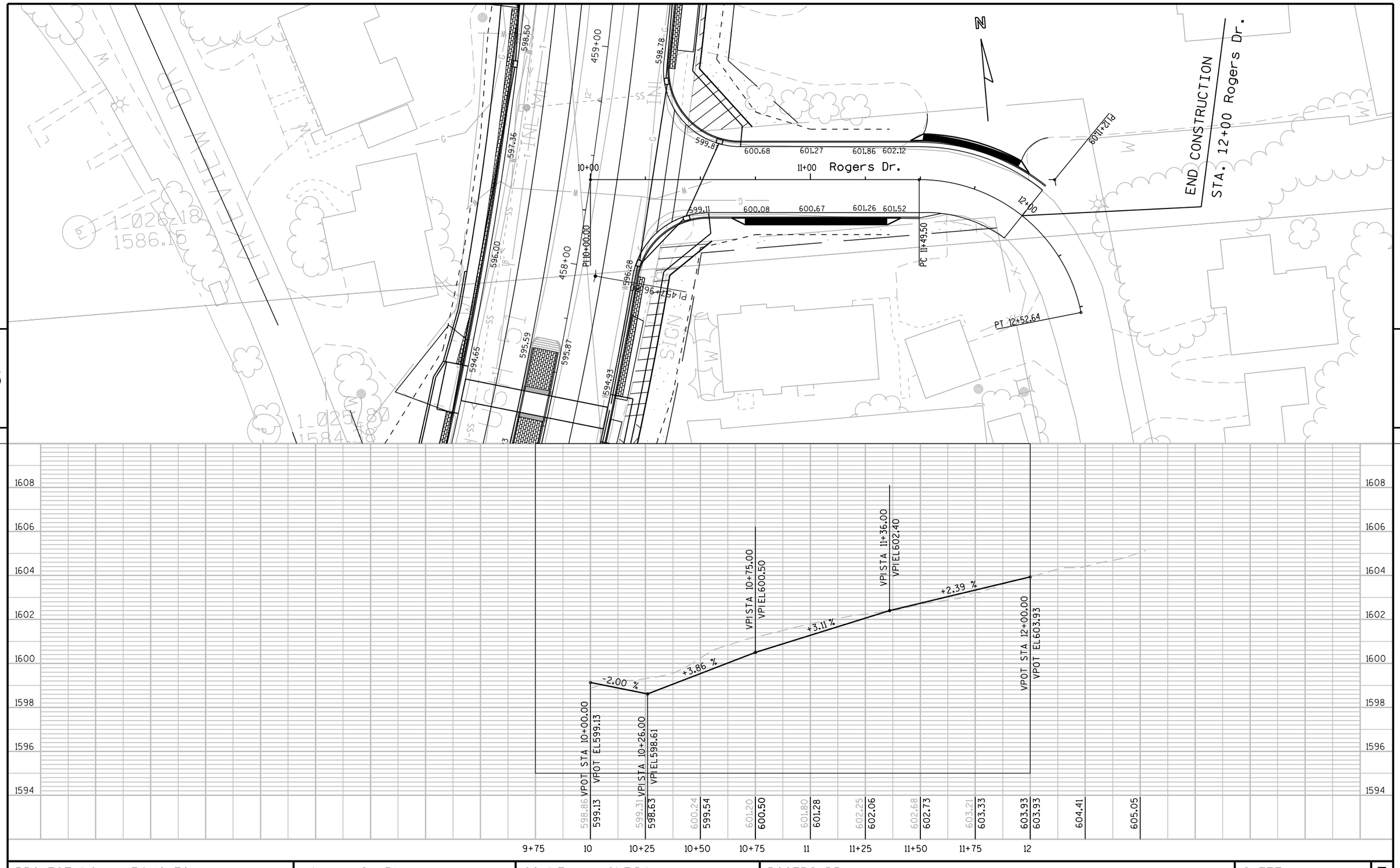
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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	STA 486+00 - 492+00 PLAN PROFILE	SHEET 223 E

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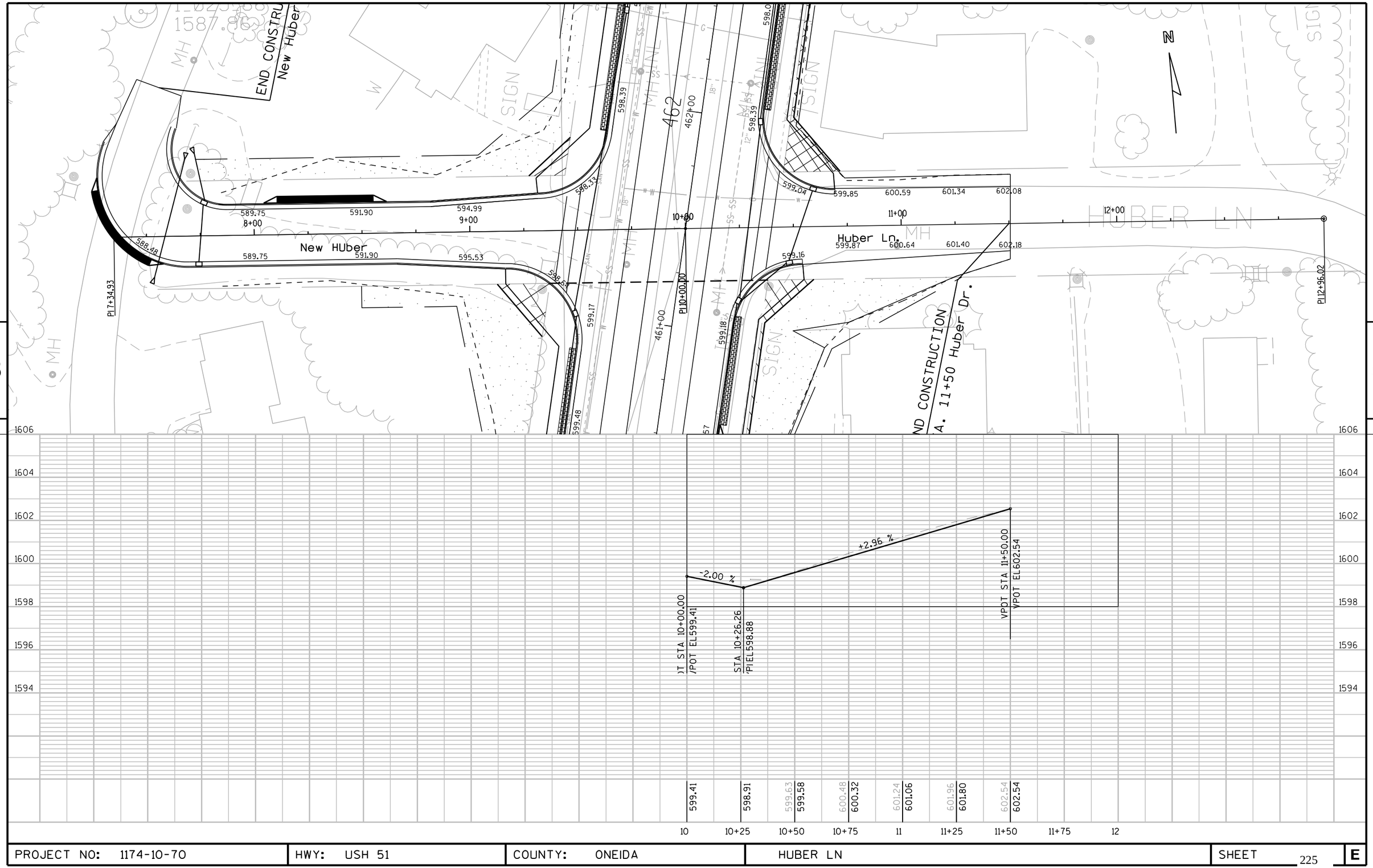
WISDOT/CADDS SHEET 30



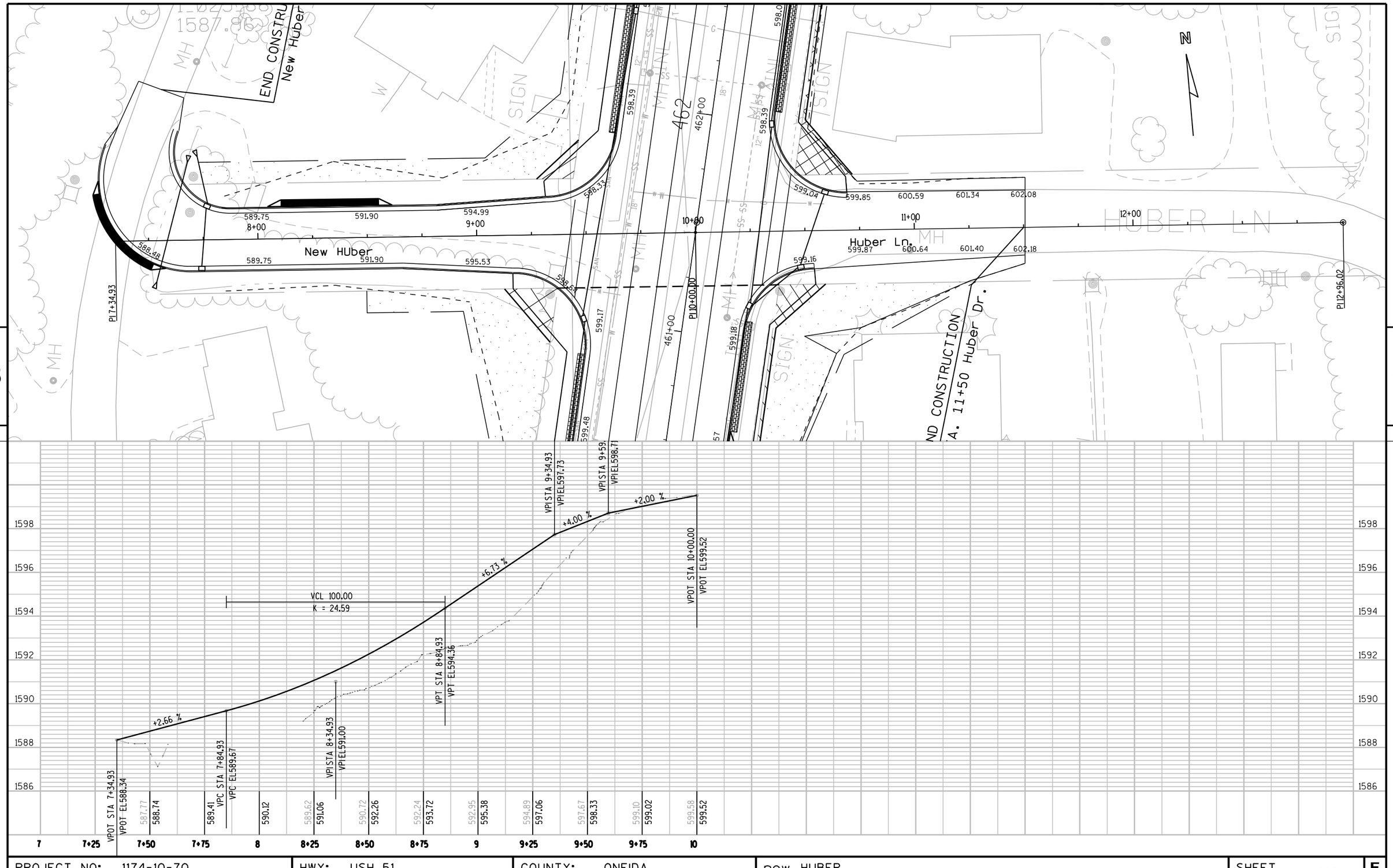
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	ROGERS DR	SHEET 224 E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\050120_pp_rogers.dgn PLOT DATE : 02-JAN-2013 11:36 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 30



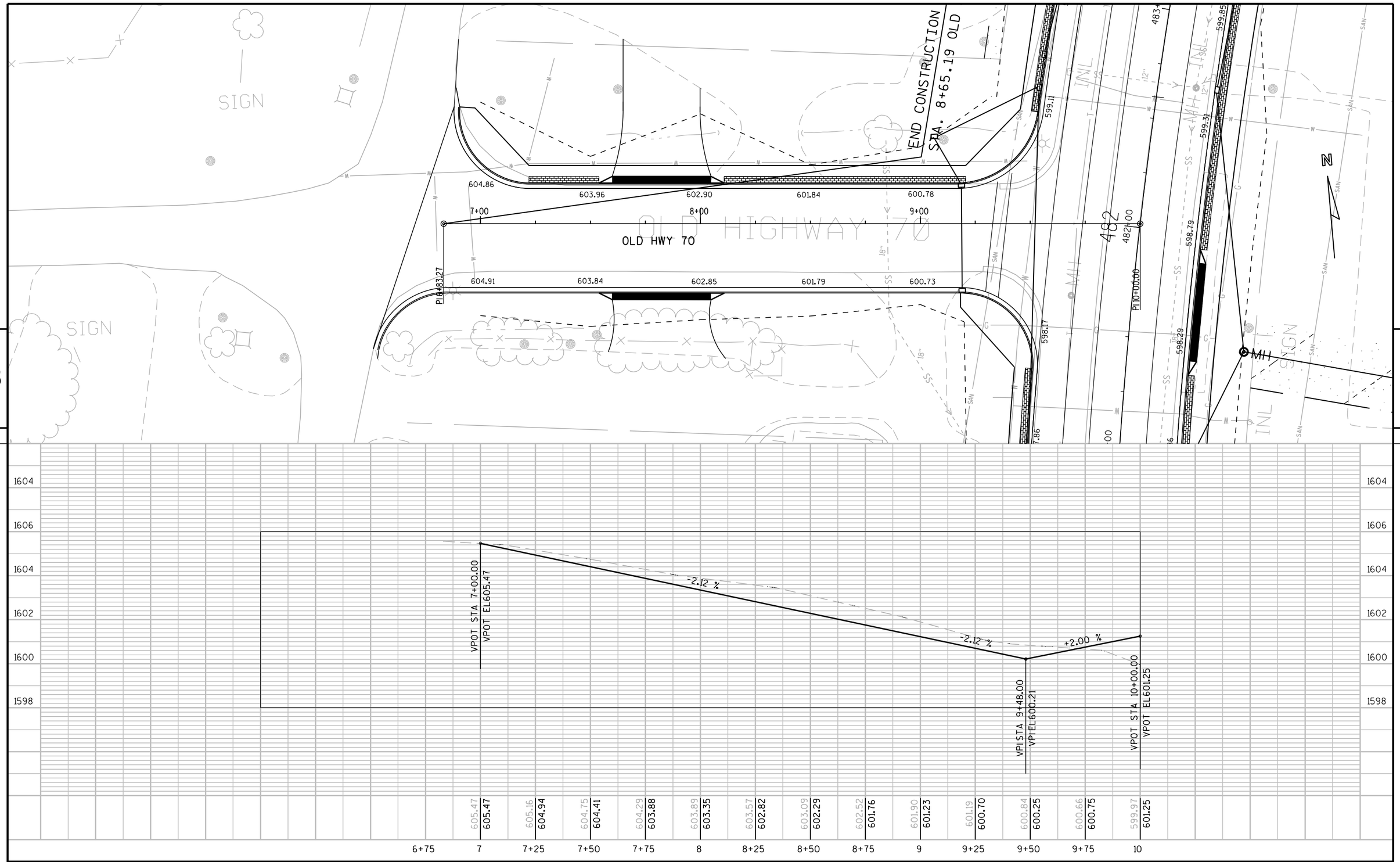
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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	new HUBER	SHEET 226 E

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WISDOT/CADDS SHEET 30



5

5

PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	OLD HWY 70	SHEET 227	E

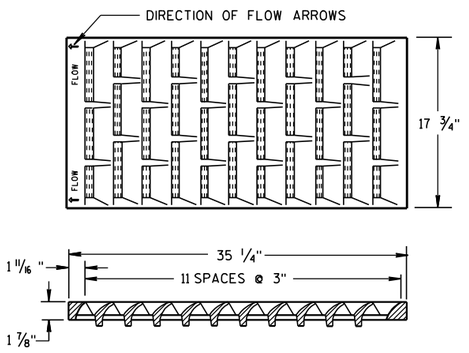
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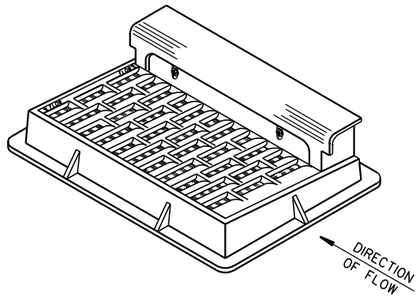
Standard Detail Drawing List

08A05-16A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-16B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C01-05	INLETS TYPE 1, 2, 3 & 4
08C05-02	INLETS TYPE 8, 9, 10, AND 11
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-06	JOINT TIES FOR CONCRETE PIPE
09B02-07	CONDUIT
09B04-09	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C05-07	CONCRETE CONTROL CABINET BASES
09C12-02A	CONCRETE BASE TYPE 13
09C12-02B	CONCRETE BASE TYPE 13
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-02	SIGNAL OR LIGHTING CONTROL CABINET
09E08-04D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-04E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-14A	PAVEMENT MARKING (MAINLINE)
15C08-14E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-14F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C18-03	MEDIAN ISLAND MARKING
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE

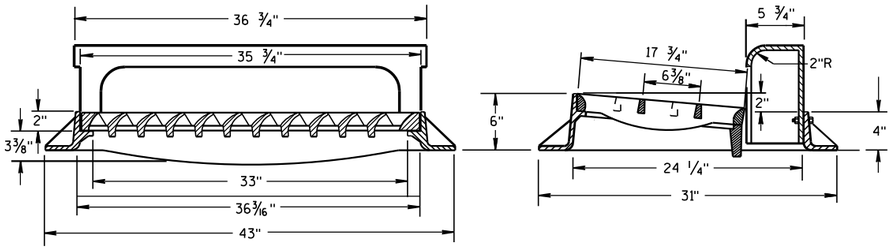
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NOTE:
GRATE IS REVERSIBLE.





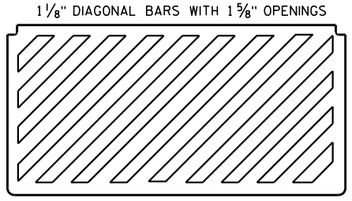
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



TYPE "H"

(APPROXIMATE WEIGHT 422 LBS.)
FRAME..... 175 LBS.
GRATE..... 138 LBS.
CURB BOX..... 109 LBS.

1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 172 LBS.)
GRATE..... 172 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

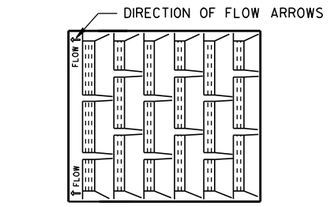
GENERAL NOTES

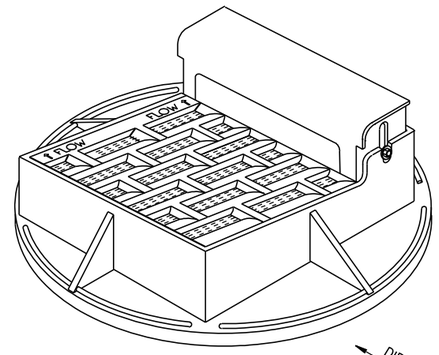
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

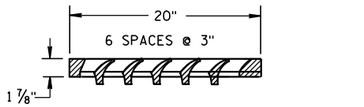
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

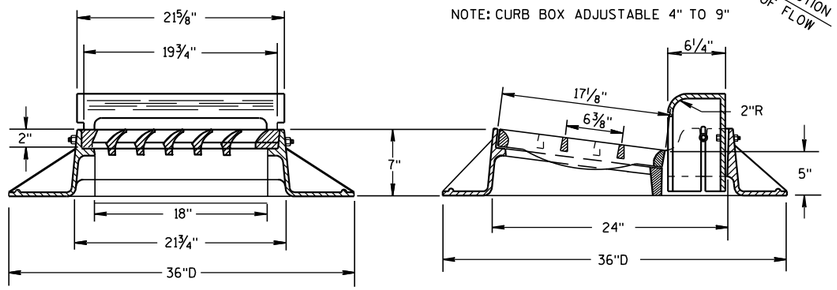




NOTE:
GRATE IS REVERSIBLE.



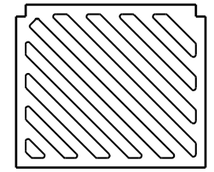
NOTE: CURB BOX ADJUSTABLE 4" TO 9"



TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

1" DIAGONAL BARS WITH 1 1/2" OPENINGS



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

INLET COVERS TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

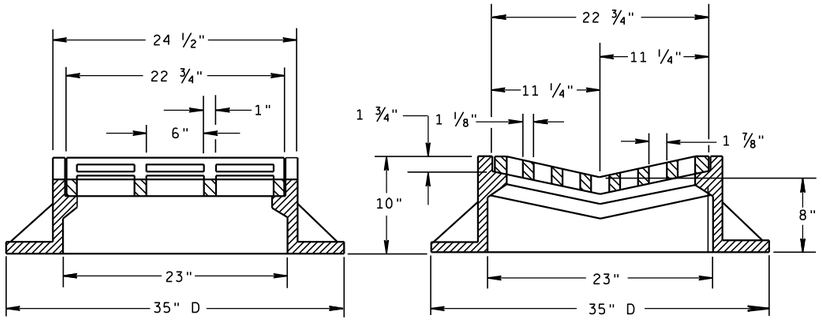
APPROVED
10/4/1999 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

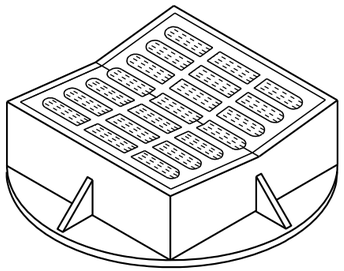
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S.D.D. 8 A 5-16a

6

S.D.D. 8 A 5-16a

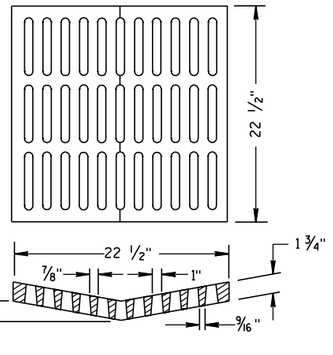




TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

FRAME..... 285 LBS.
GRATE..... 110 LBS.

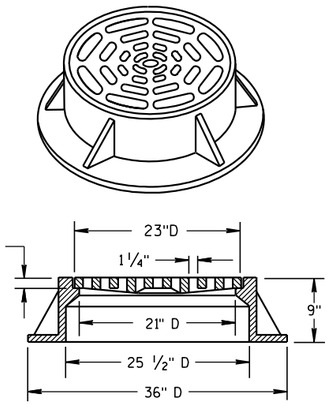


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE.....125 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME..... 235 LBS.
GRATE..... 105 LBS.

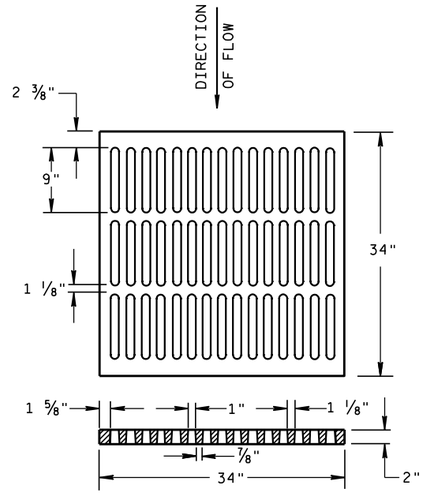
GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

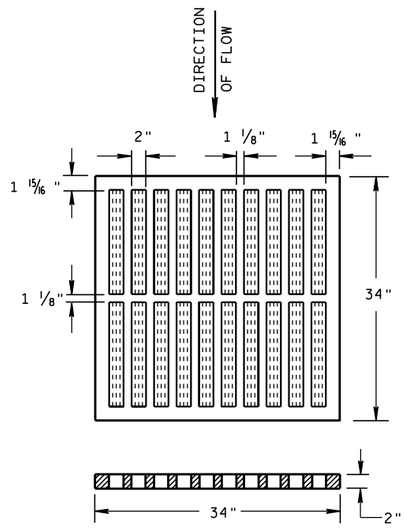


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE.....365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

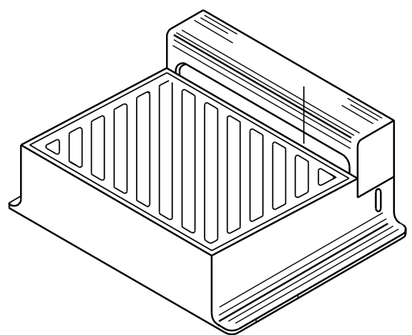


TYPE "MS"

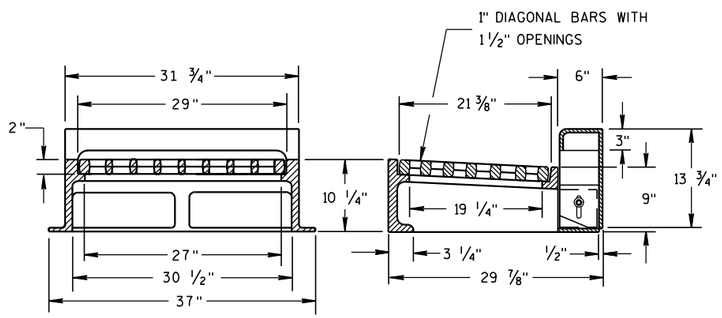
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE.....270 LBS.

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 670 LBS.)

FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

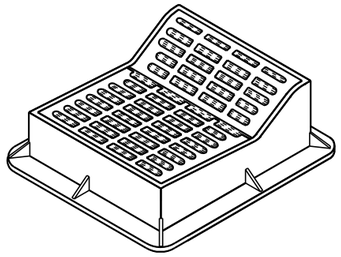
10/4/1999
DATE

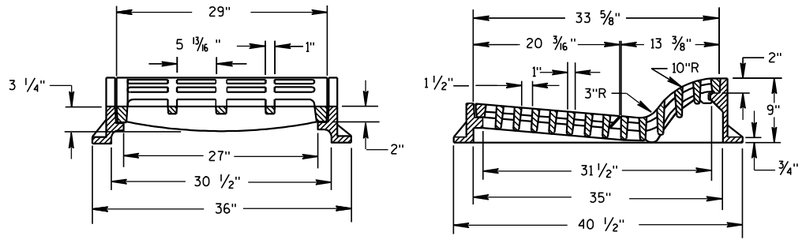
/S/ Rory L. Rhinesmith
CHEIF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 8 A 5-16b



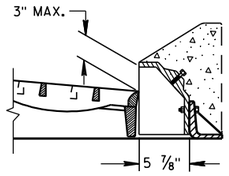


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

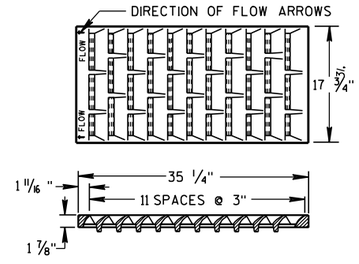
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

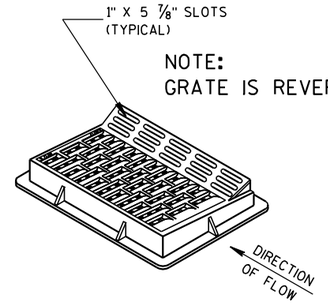
GENERAL NOTES

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

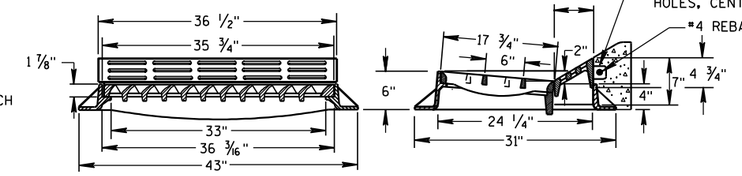
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





NOTE:
GRATE IS REVERSIBLE.

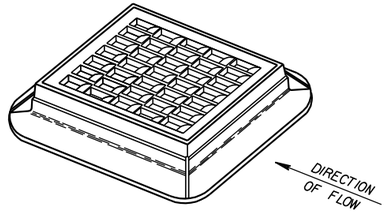


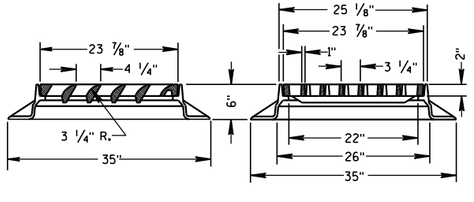
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)
FRAME..... 181 LBS.
GRATE..... 159 LBS.
CURB BOX..... 74 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

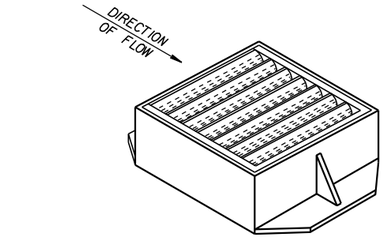


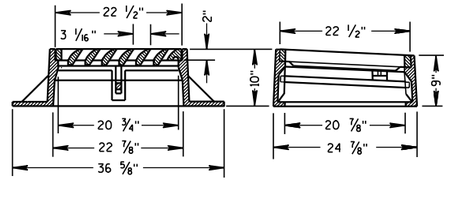


TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE..... 169 LBS.

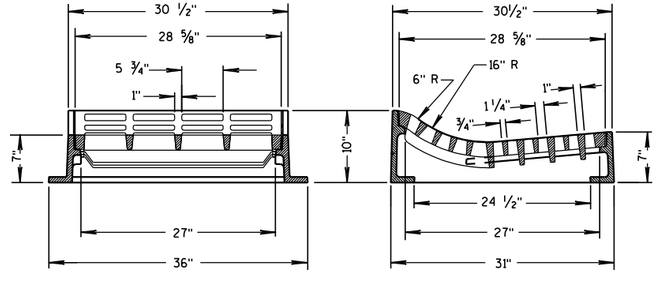




TYPE "V"

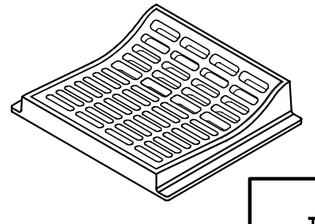
(APPROXIMATE WEIGHT 410 LBS.)

FRAME..... 269 LBS.
GRATE..... 136 LBS.
SAFETY BAR..... 5 LBS.



TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

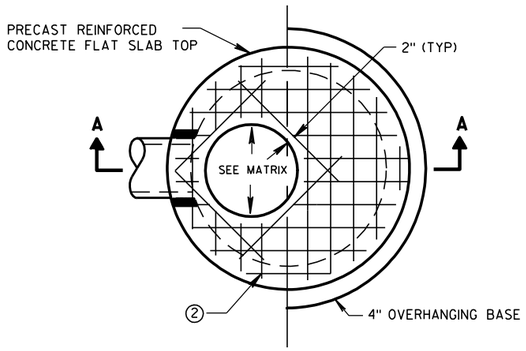
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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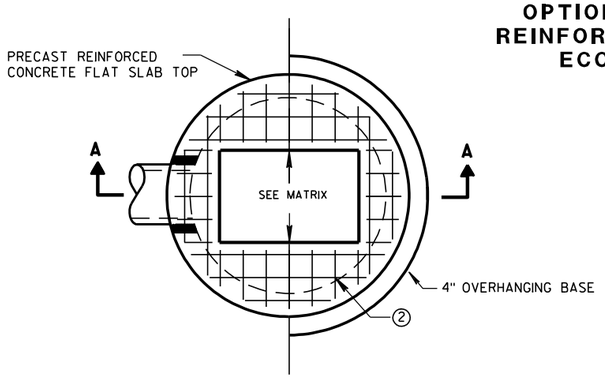
S.D.D. 8 A 5-18c

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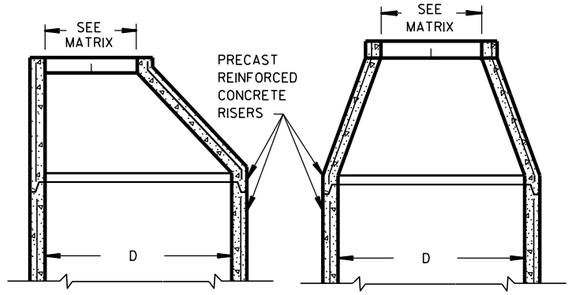
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PLAN VIEW CIRCULAR OPENING

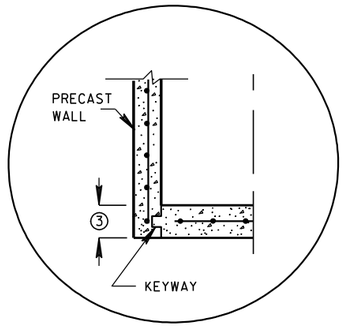


PLAN VIEW RECTANGULAR OPENING

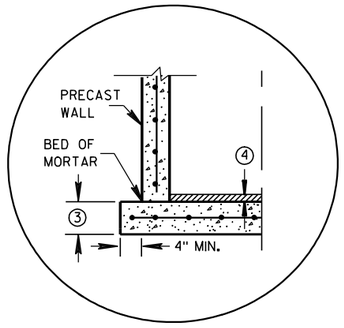


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

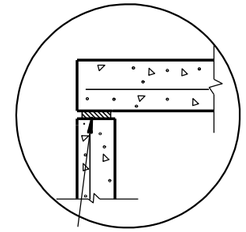


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



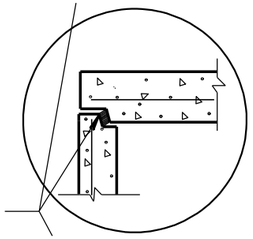
SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

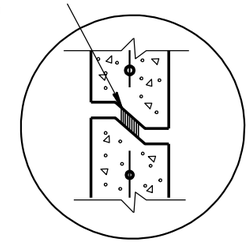


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

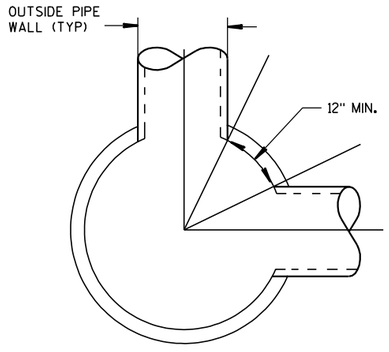


TOP WITH TONGUE AND GROOVE JOINT

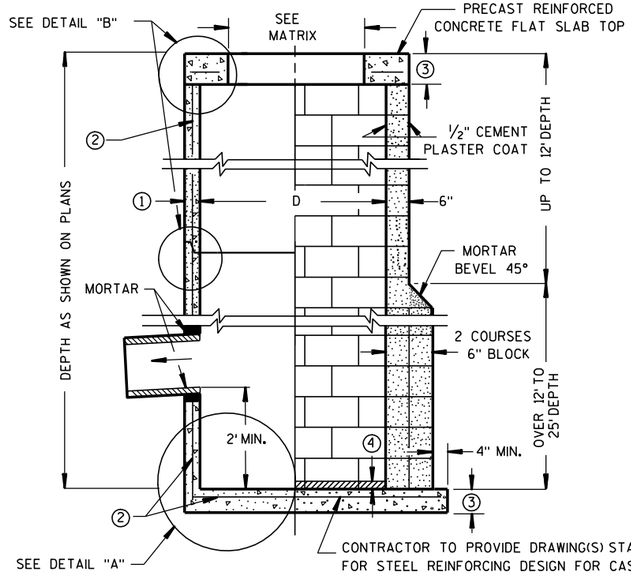


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

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 CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ 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 INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

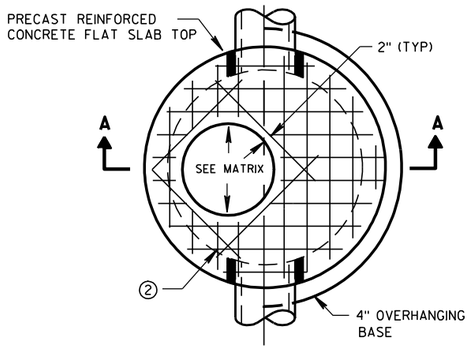
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

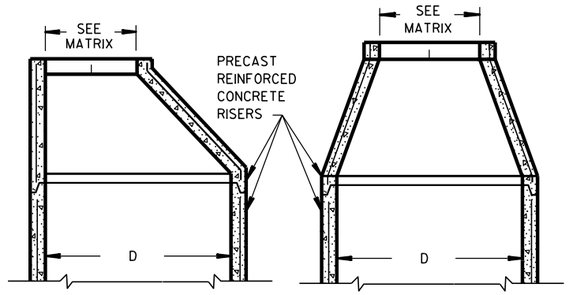
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

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S.D.D. 8 A 8-1

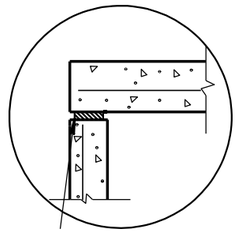


PLAN VIEW CIRCULAR OPENING

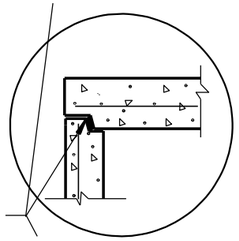


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

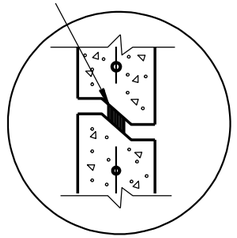


TOP WITH PLAIN END JOINT



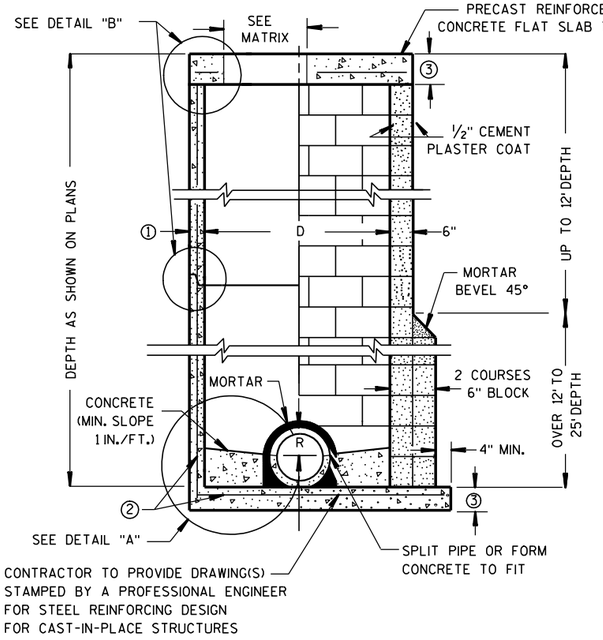
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



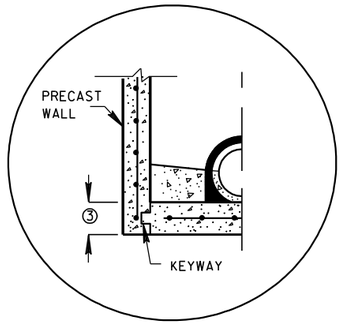
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

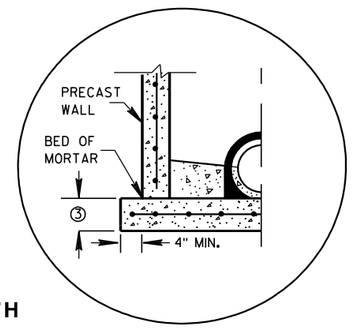


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

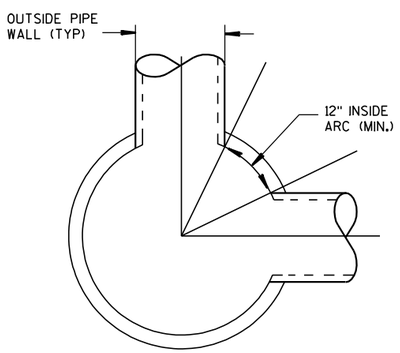


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

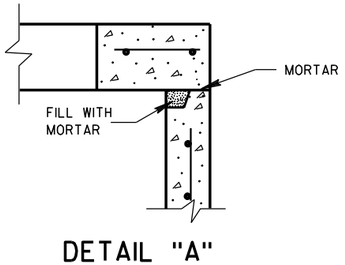
APPROVED

6/5/2012
DATE

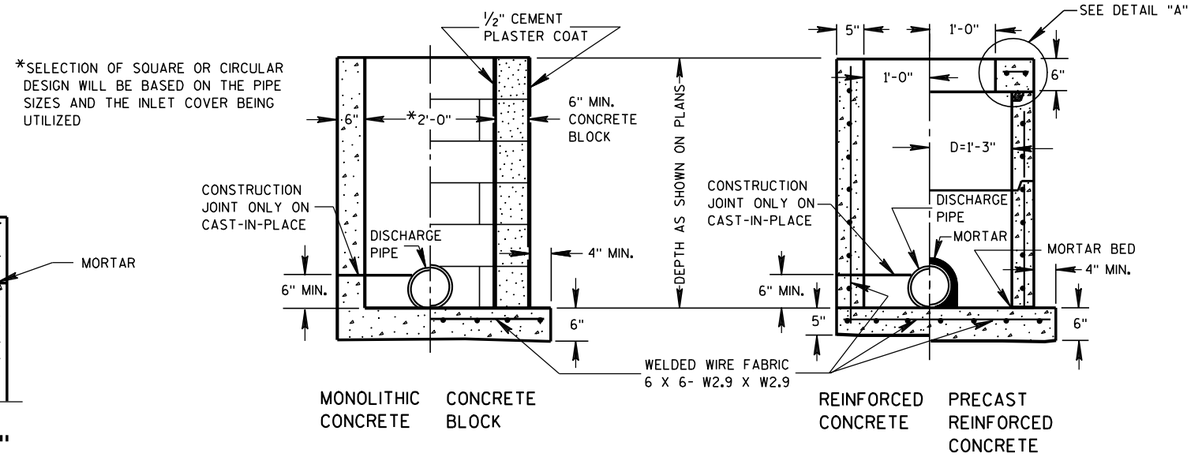
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 B 9-1



DETAIL "A"



INLETS TYPE 1

GENERAL NOTES

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

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ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

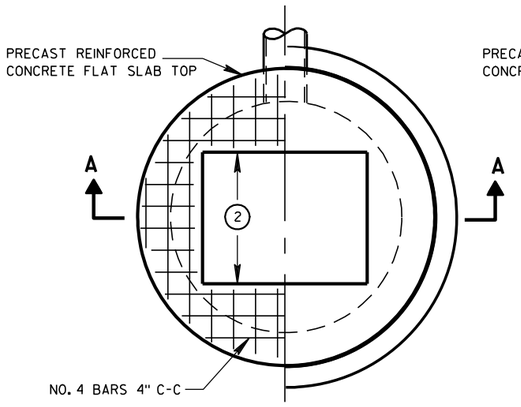
PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

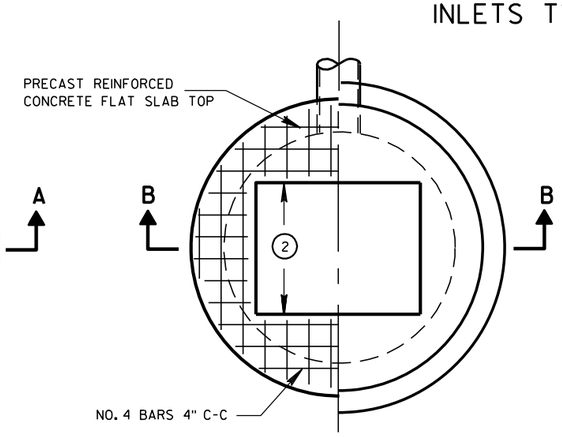
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

(1) USE 2'-6" OPENING FOR TYPE 2 INLETS, 3'-0" OPENING FOR TYPE 3 INLETS, AND 2'-11" FOR TYPE 4 INLETS.

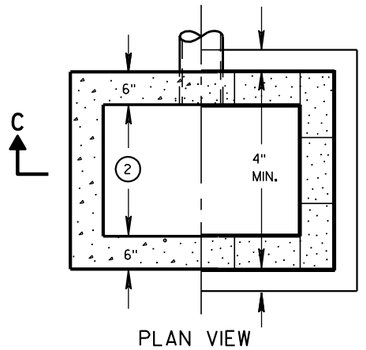
(2) USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6½" OPENING FOR TYPE 4 INLETS.



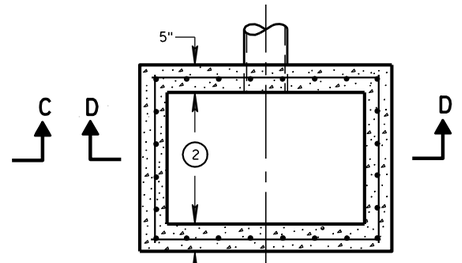
PLAN VIEW



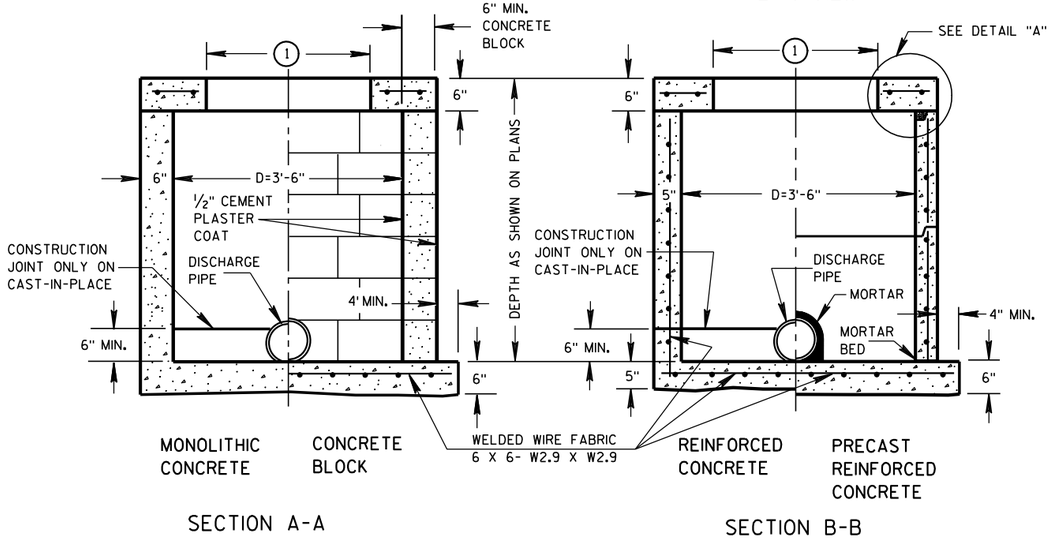
PLAN VIEW



PLAN VIEW

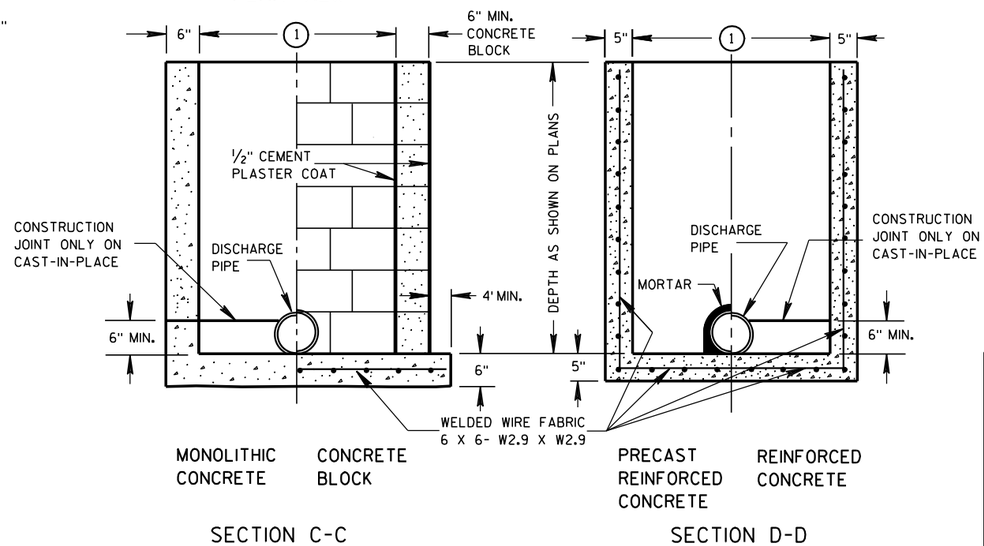


PLAN VIEW



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

INLETS TYPE 2, 3 & 4

INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1/31/95
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

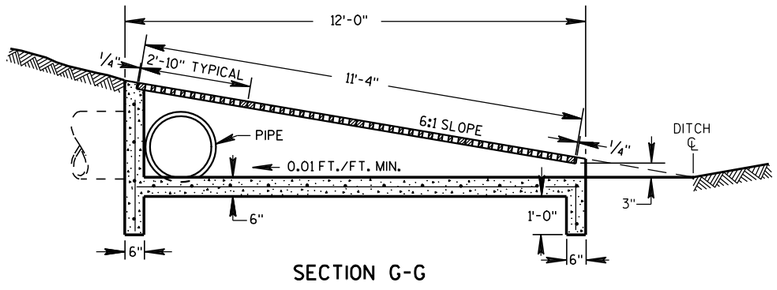
FHWA

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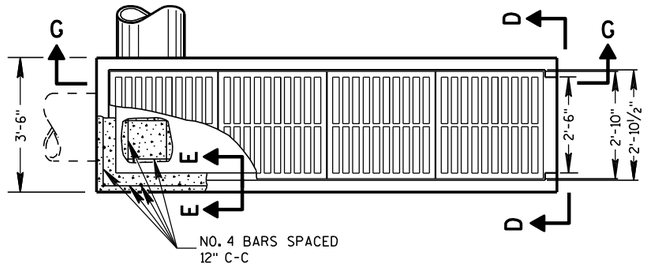
S.D.D. 8 C 1-5

6

S.D.D. 8 C 1-5

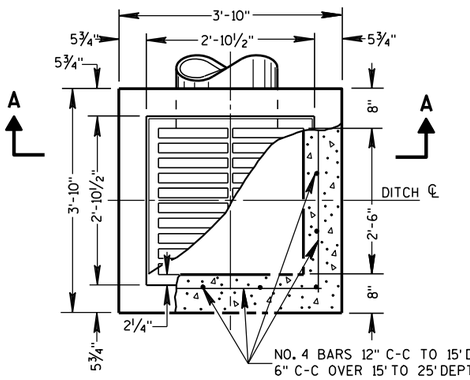


SECTION G-G

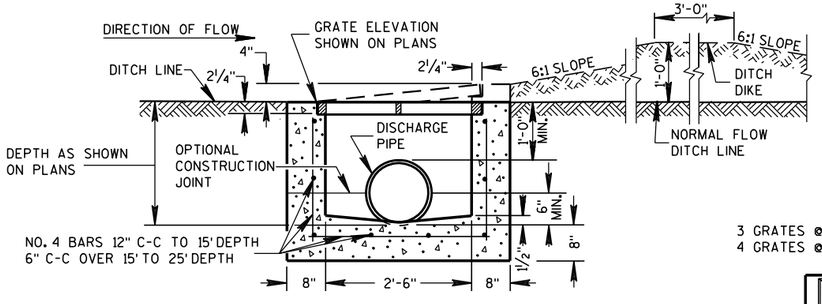


PLAN VIEW

REINFORCED CONCRETE INLET TYPE 11

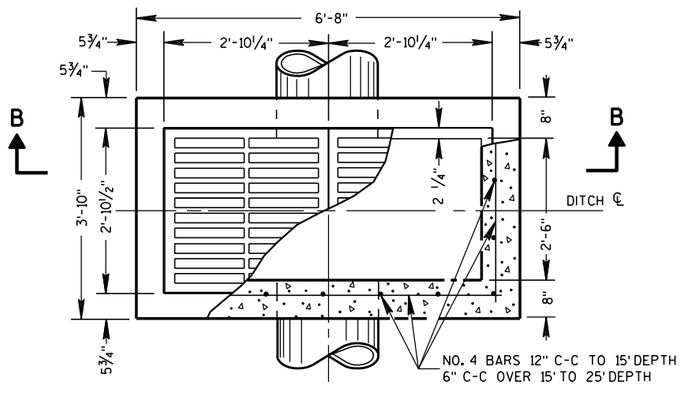


PLAN VIEW

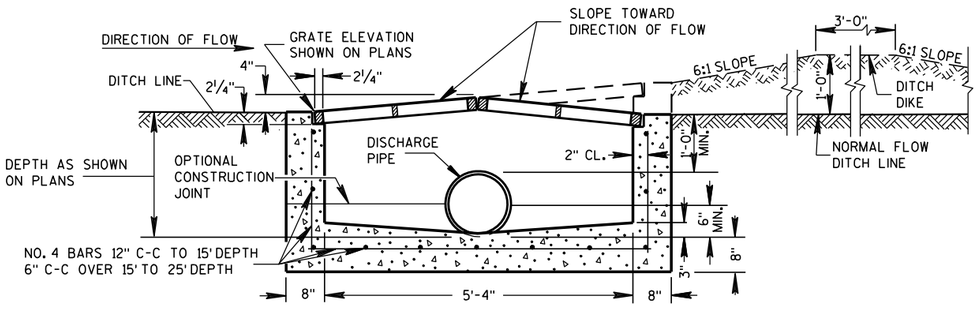


SECTION A-A

REINFORCED CONCRETE INLET TYPE 8

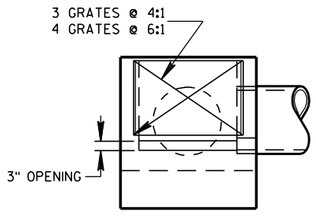


PLAN VIEW



SECTION B-B

REINFORCED CONCRETE INLET TYPE 9



SECTION D-D

GENERAL NOTES

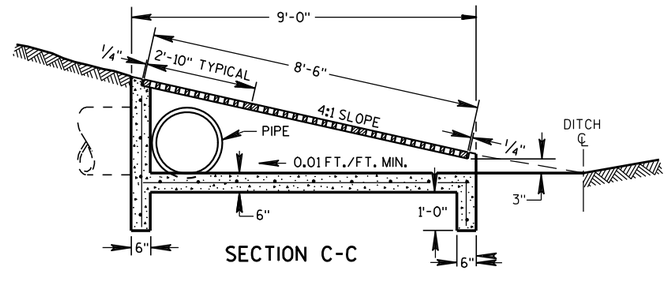
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

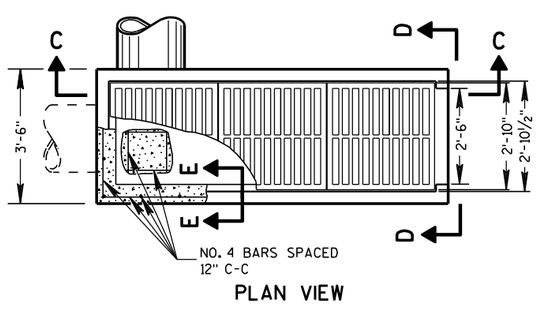
PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

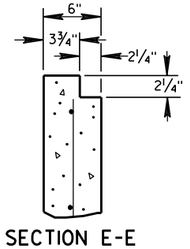


SECTION C-C



PLAN VIEW

REINFORCED CONCRETE INLET TYPE 10



SECTION E-E

INLETS TYPE 8, 9, 10 & 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

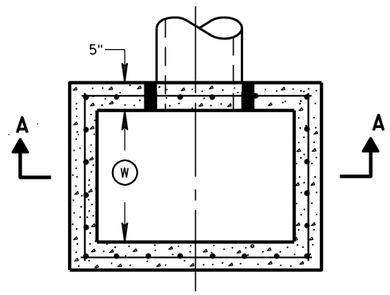
APPROVED
8/10/94 DATE
/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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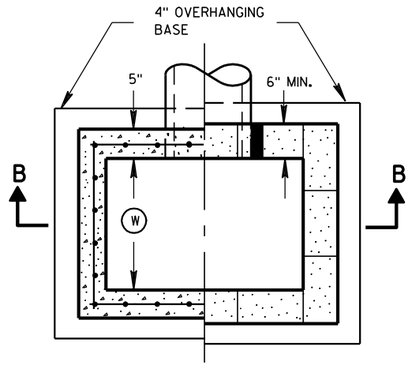
S.D.D. 8 C 5-2

6

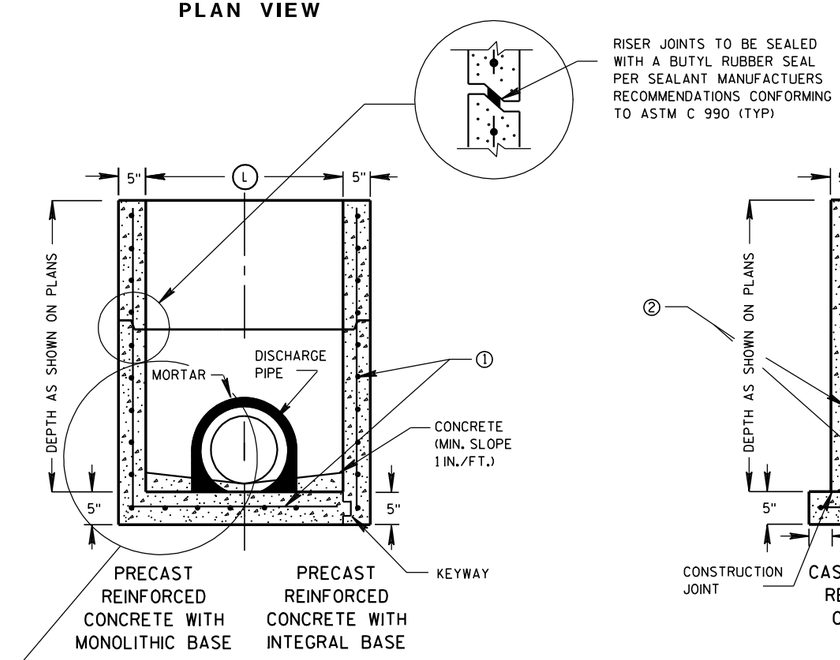
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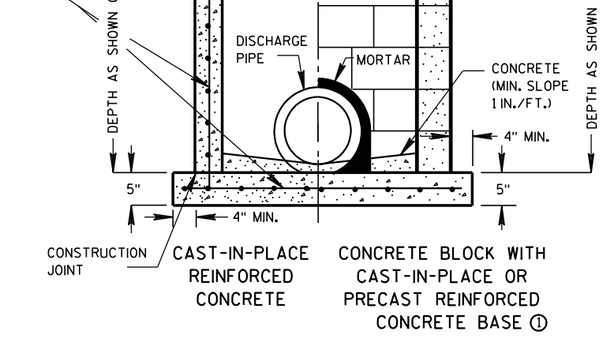
PLAN VIEW



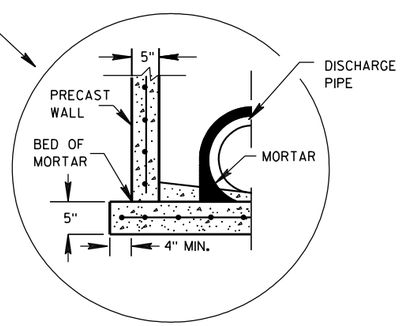
PLAN VIEW



SECTION A-A



SECTION B-B



SEPERATE 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 GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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 SEPERATE 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.

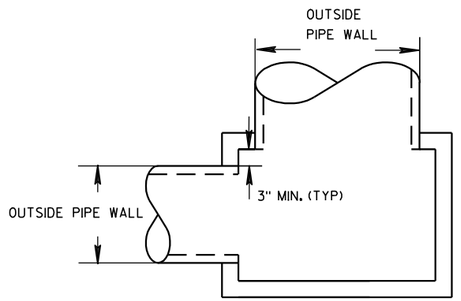
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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

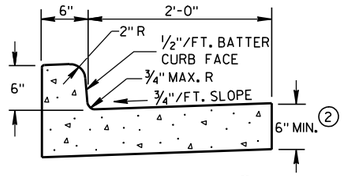
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS D ENGINEER
FHWA

6

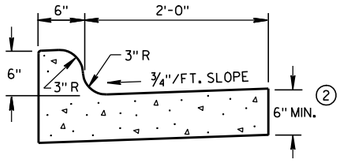
S.D.D. 8 C 7-1

6

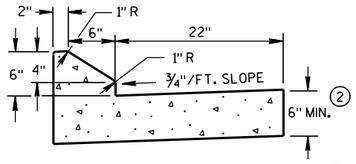
S.D.D. 8 C 7-1



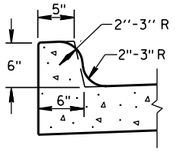
TYPES A & D (1)



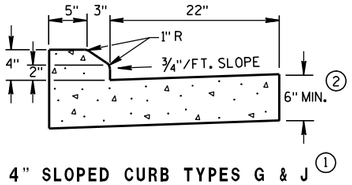
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

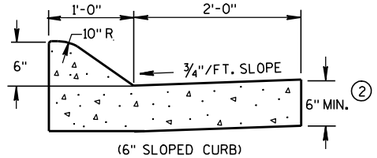


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

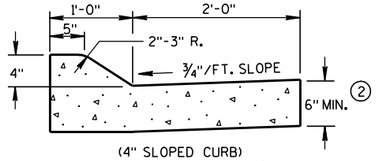


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

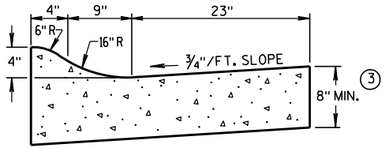


(6" SLOPED CURB)



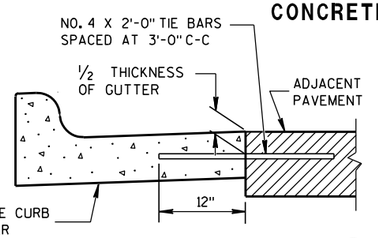
(4" SLOPED CURB)

TYPES A & D (1)

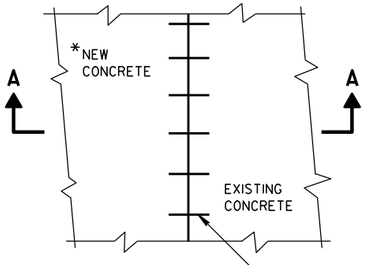


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

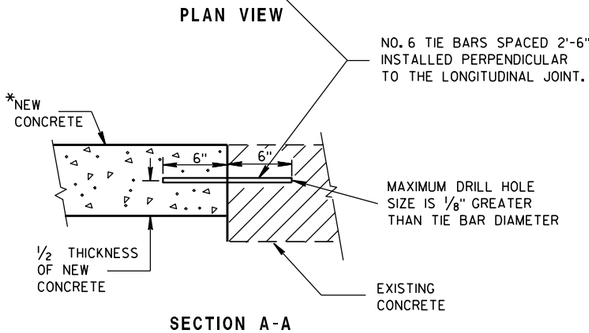


TYPICAL TIE BAR LOCATION (1)



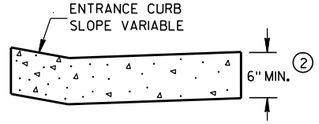
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

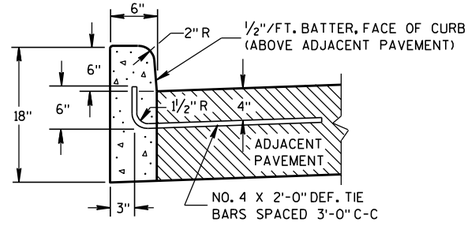


SECTION A-A

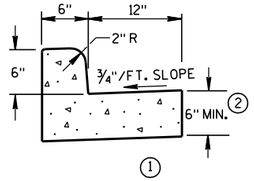
TIE BARS DRILLED INTO EXISTING PAVEMENT



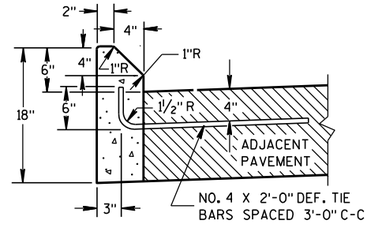
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

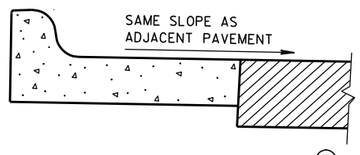


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

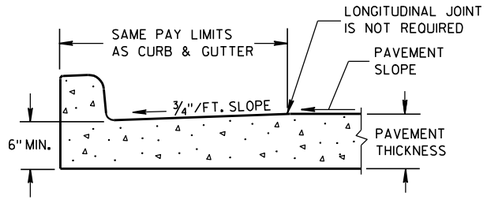
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

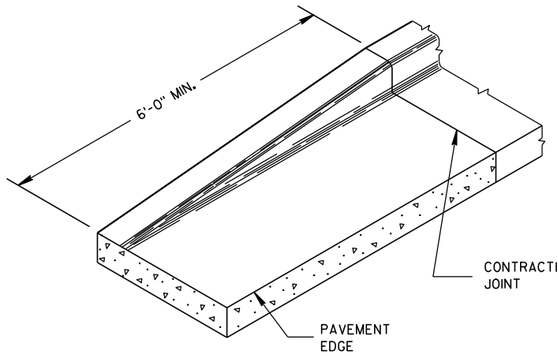
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

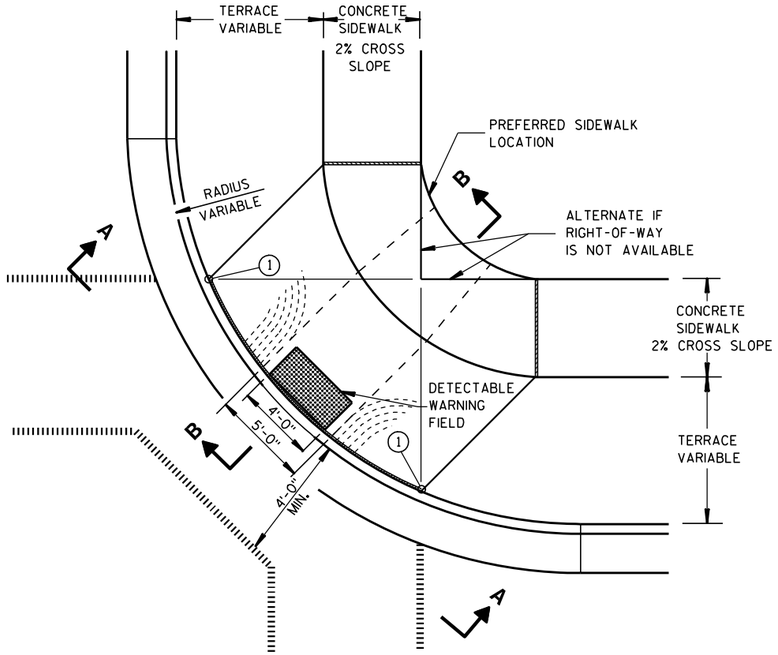
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
237
FHWA
ENT

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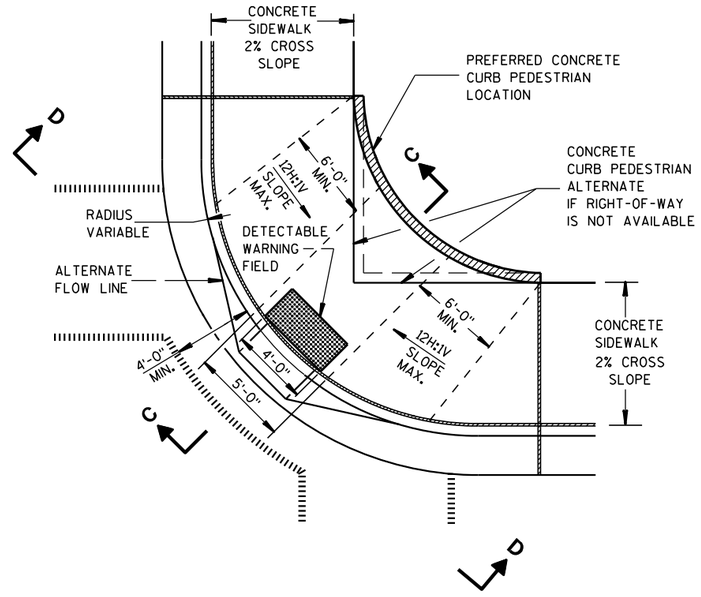
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

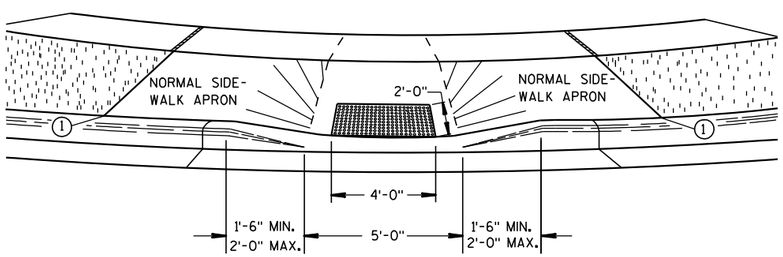
SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

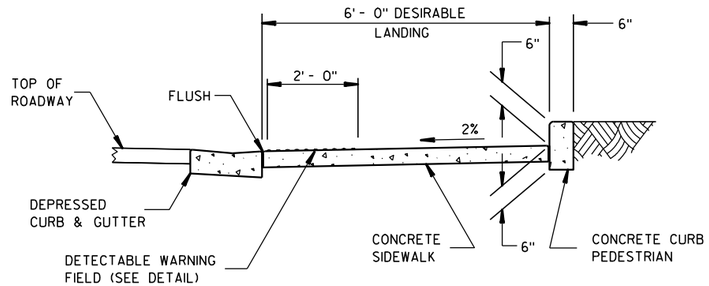
(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

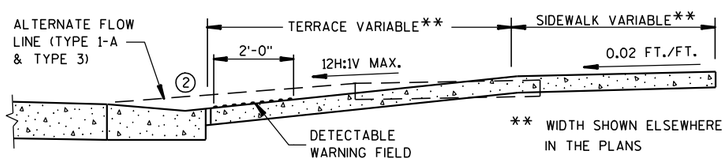
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



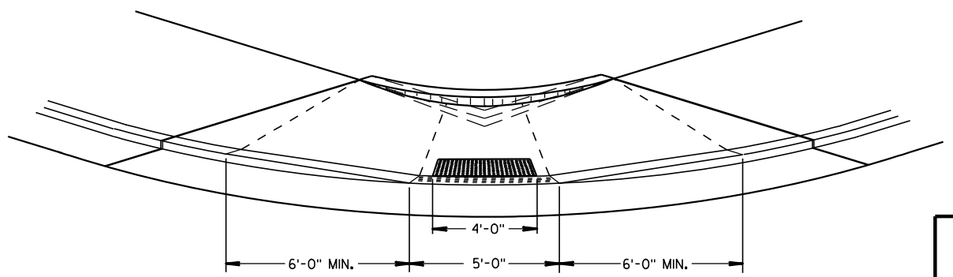
VIEW A-A



SECTION C-C



SECTION B-B

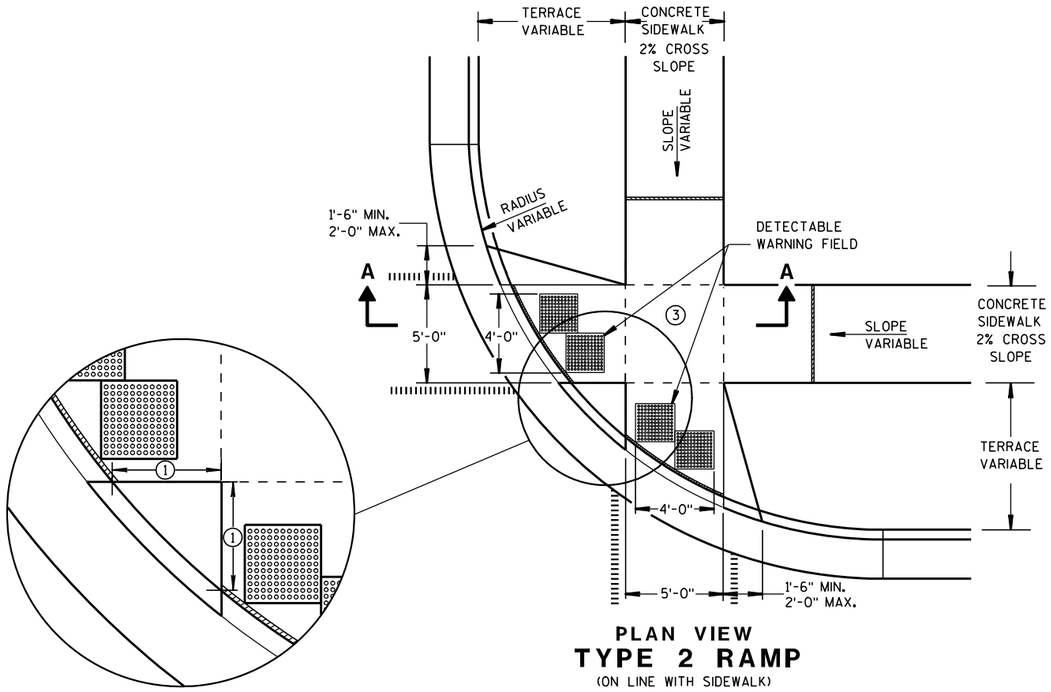


VIEW D-D

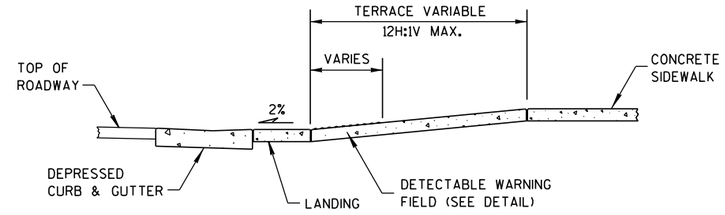
CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

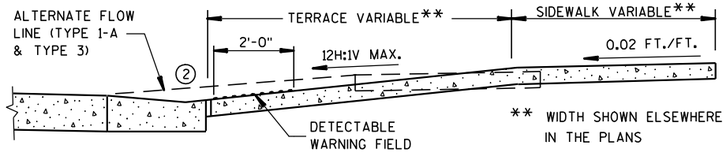
6
S.D.D. 8 D 5-14a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

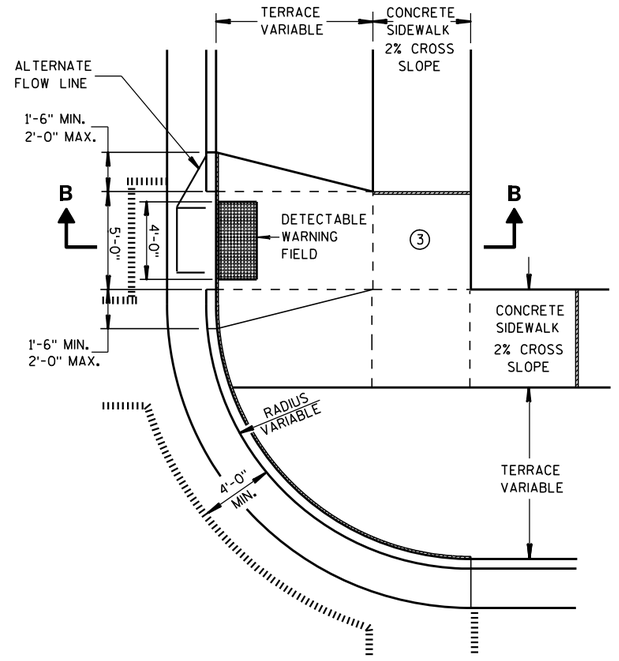
(1) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

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

(3) PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

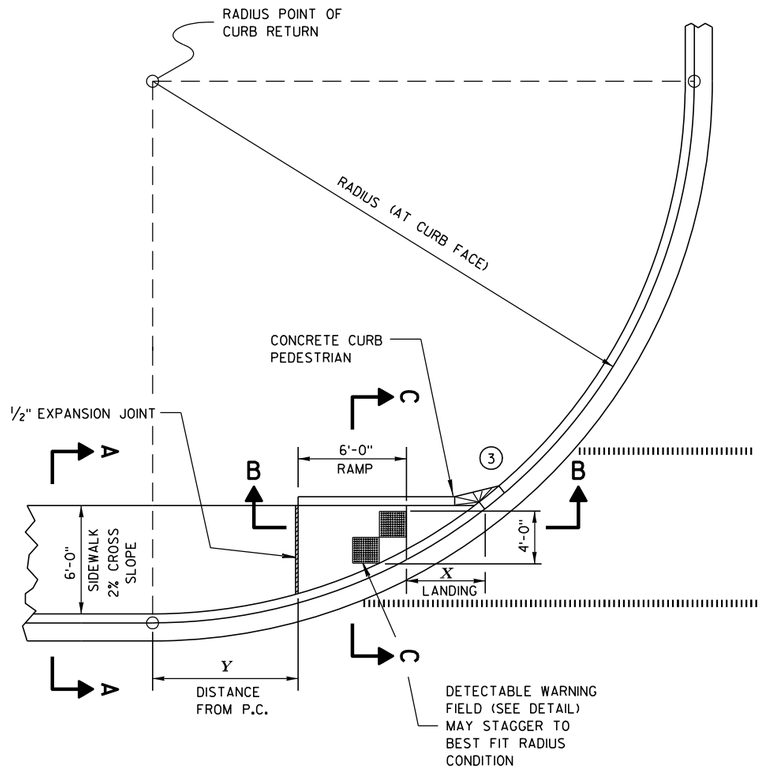


PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

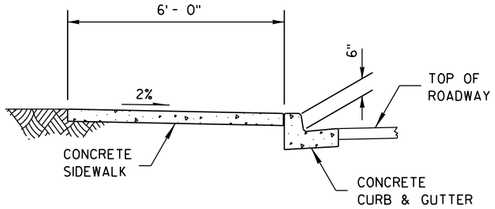
6
S.D.D. 8 D 5-14b



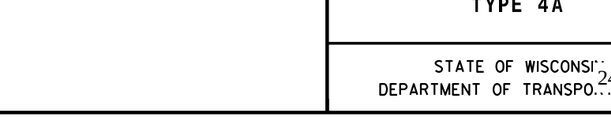
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

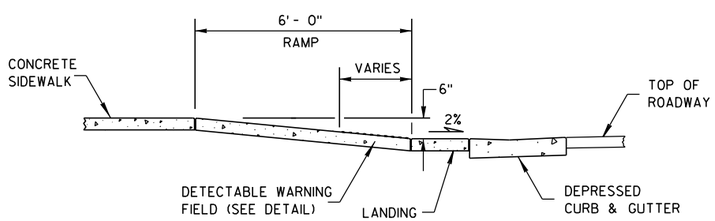
INTERMEDIATE RADII CAN BE INTERPOLATED



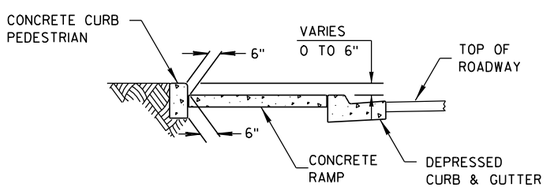
SECTION A-A



ISOMETRIC VIEW



SECTION B-B



SECTION C-C

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

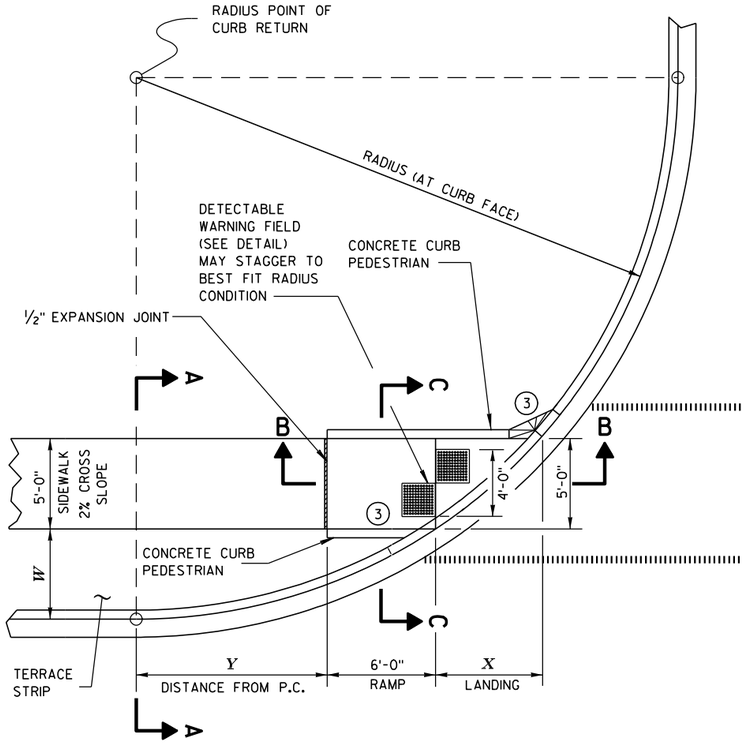
LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 8 D 5-14c



CURB RAMP TYPE 4B
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

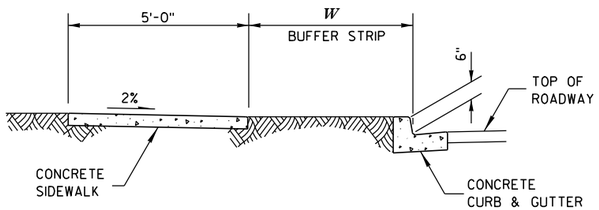
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

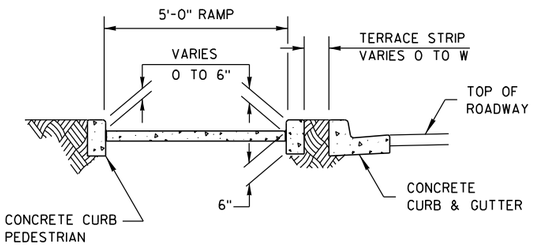
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"
70 FEET	12'-2¾"	14'-3¼"	11'-¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'- ½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

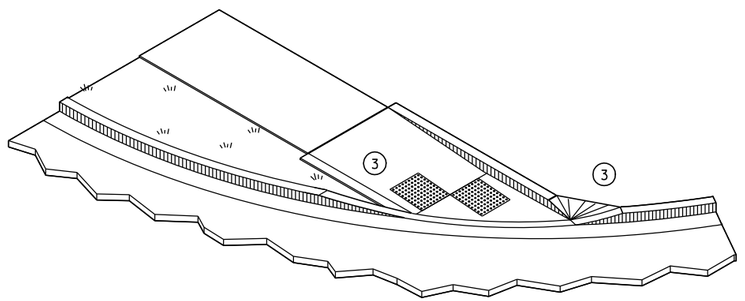
INTERMEDIATE RADII CAN BE INTERPOLATED



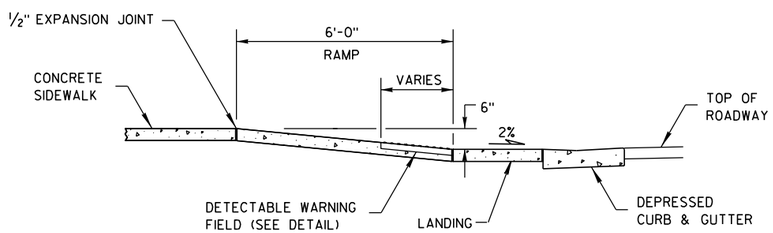
SECTION A-A



SECTION C-C



ISOMETRIC VIEW



SECTION B-B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

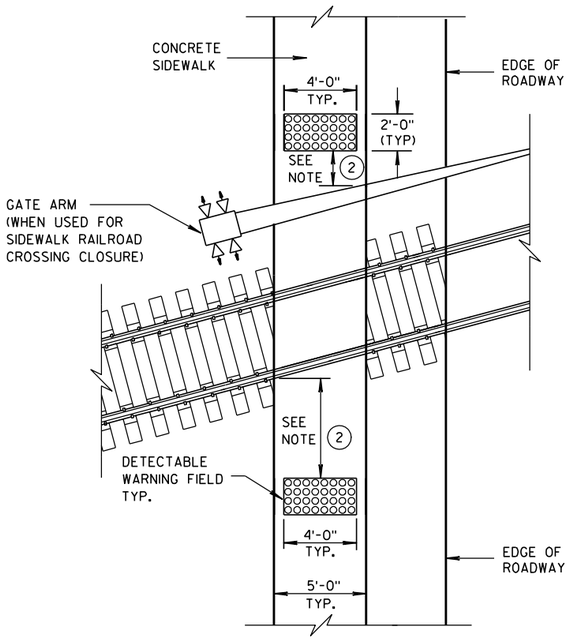
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B

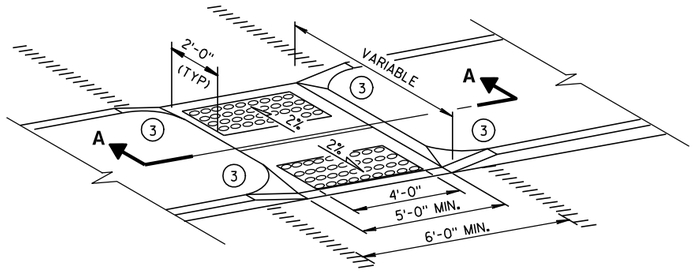
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

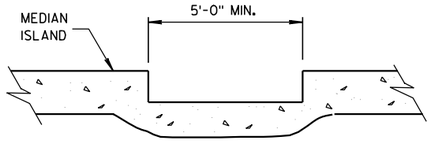
S.D.D. 8 D 5-14d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



SECTION A-A

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

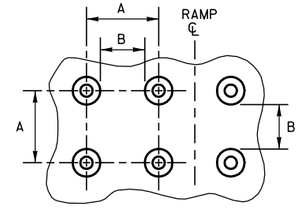
(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

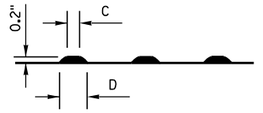
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

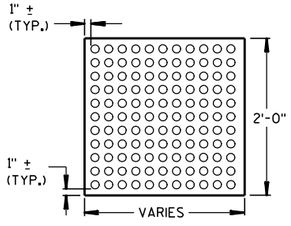
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



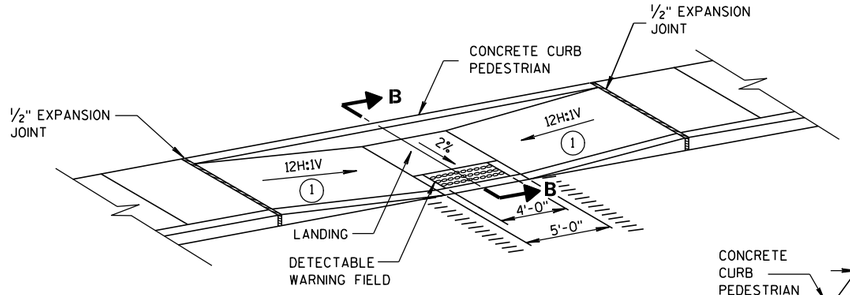
ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

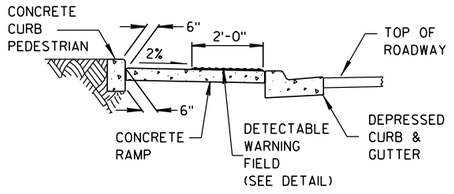


PLAN VIEW

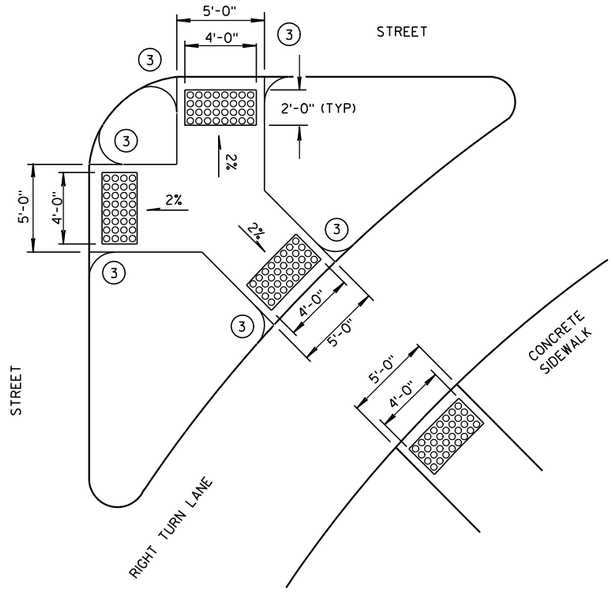
DETECTABLE WARNING FIELD (TYPICAL)



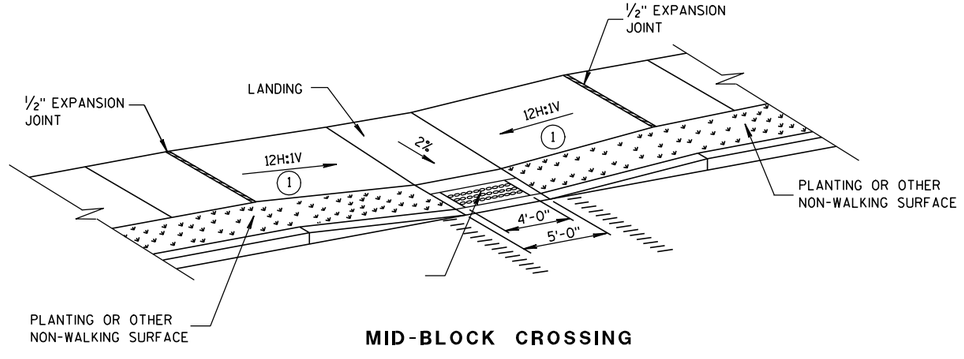
MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



TYPE 6
DETECTABLE WARNING AT ISLANDS



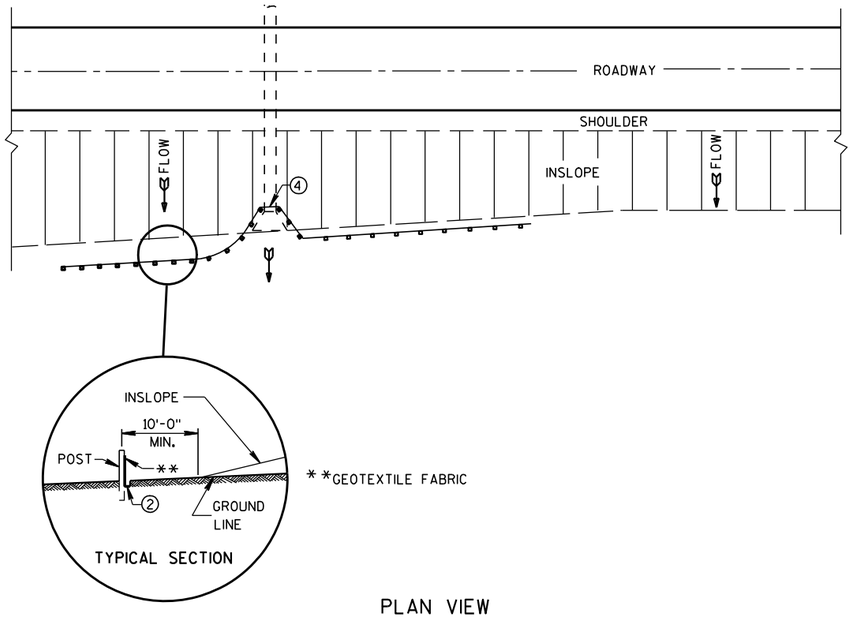
MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

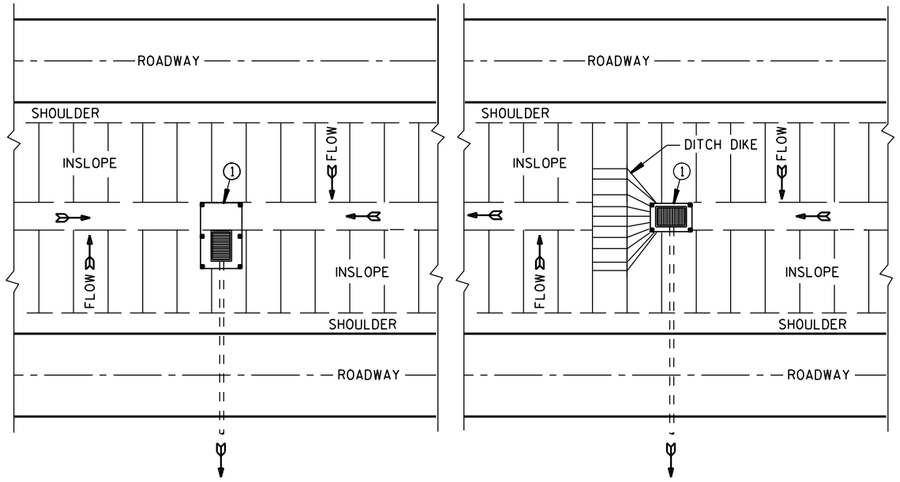
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-9-10 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
242
FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

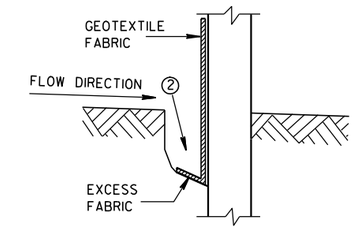
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

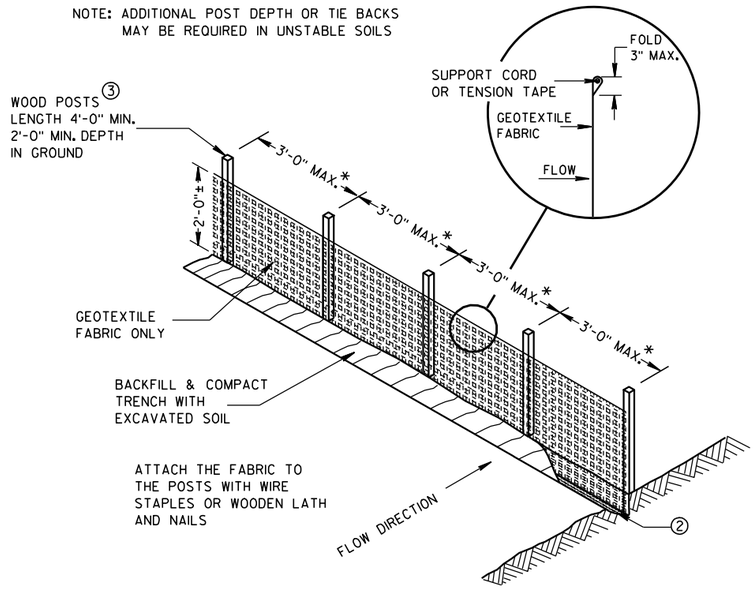
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

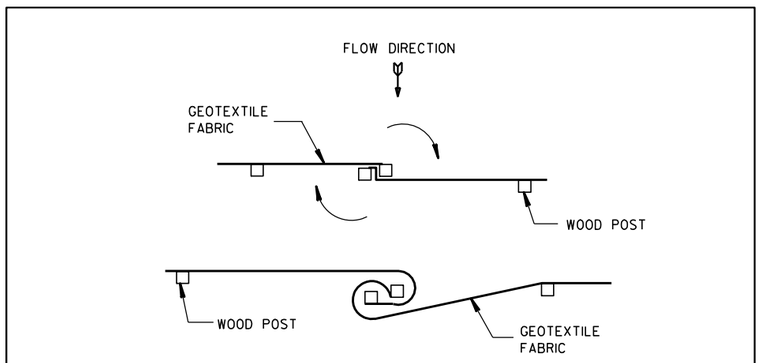
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



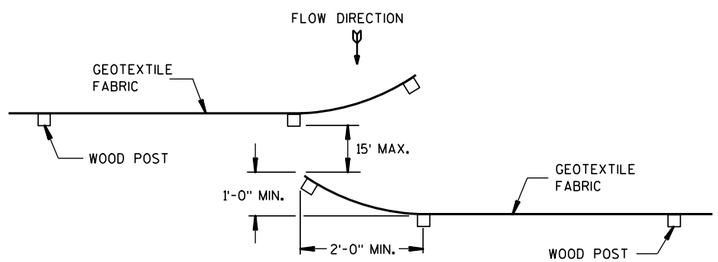
TRENCH DETAIL



SILT FENCE

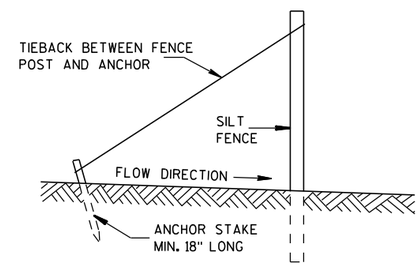


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

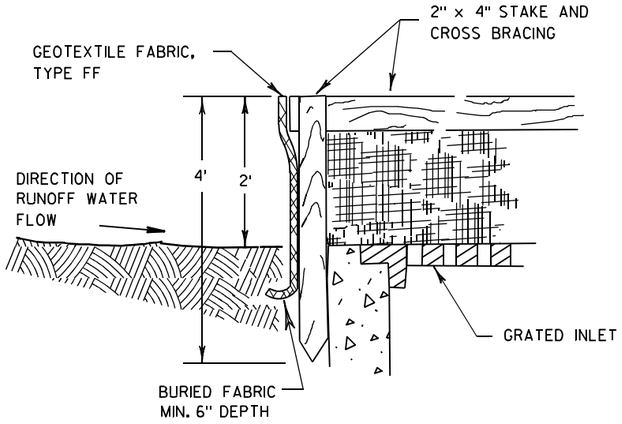
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

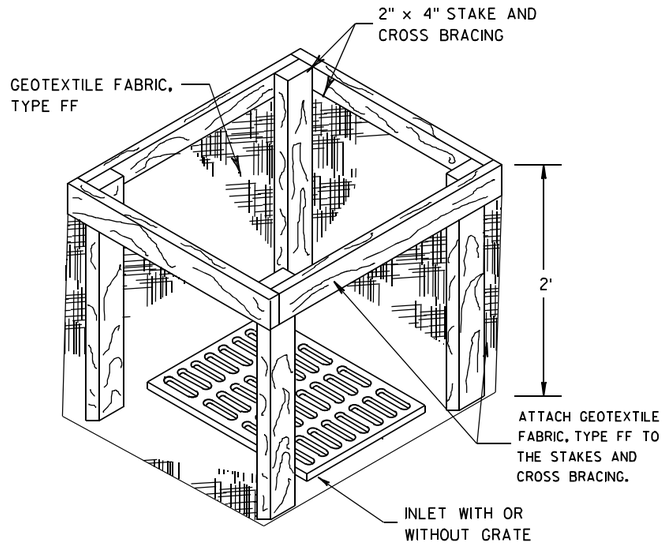
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S.D.D. 8 E 9-6

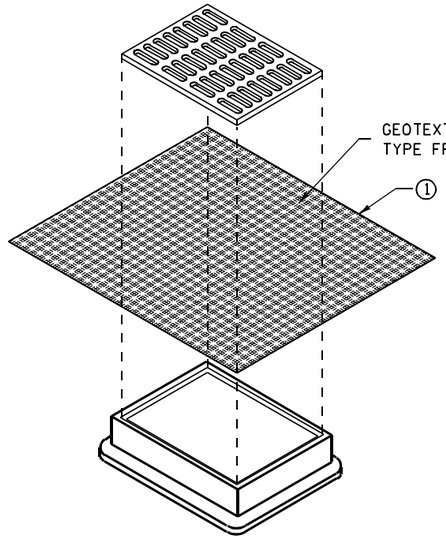
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S.D.D. 8 E 9-6



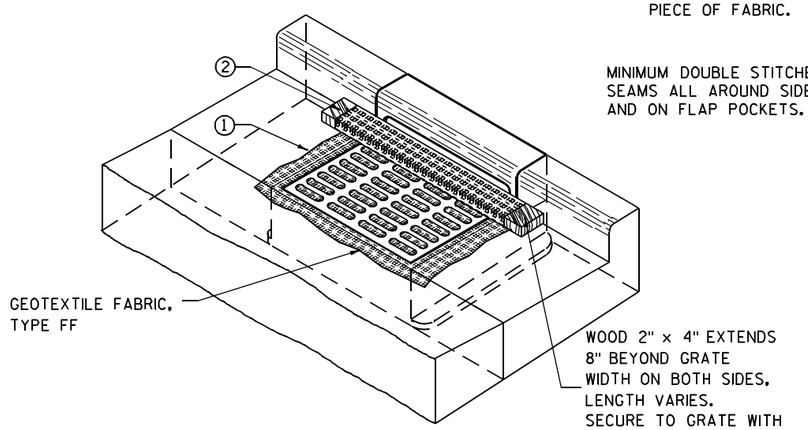


INLET PROTECTION, TYPE A

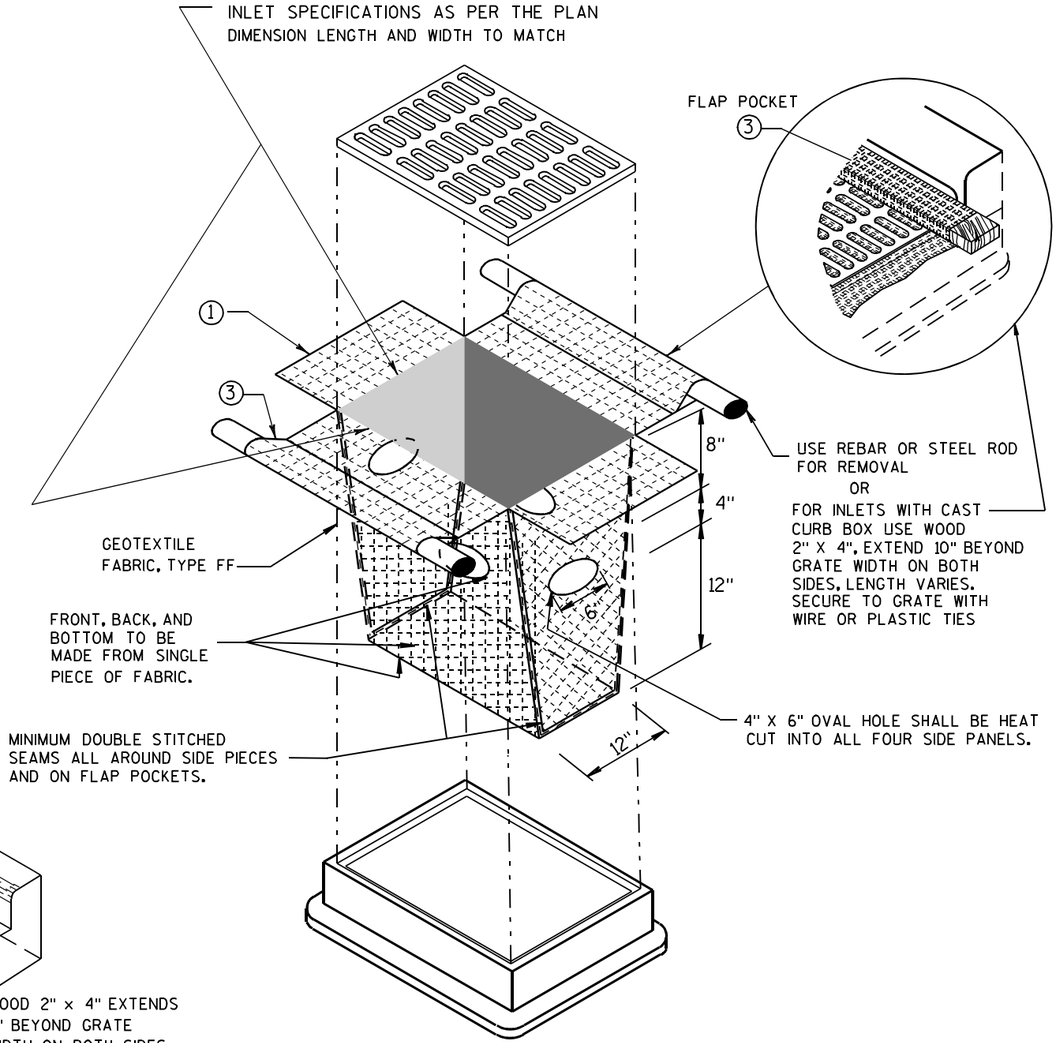


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

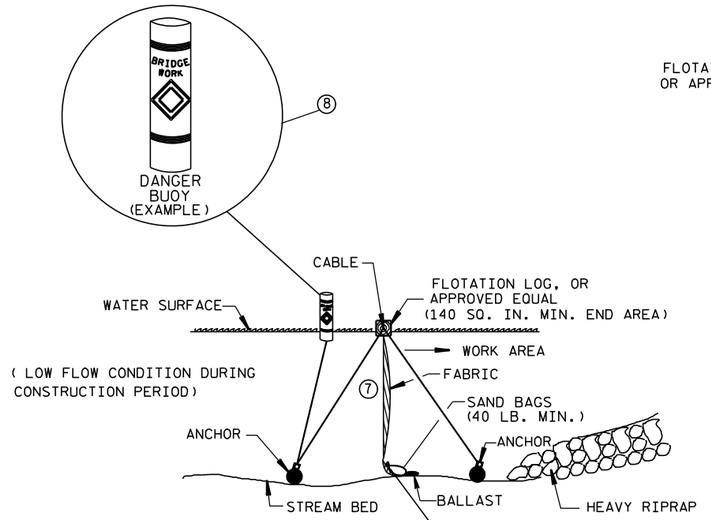
FHWA

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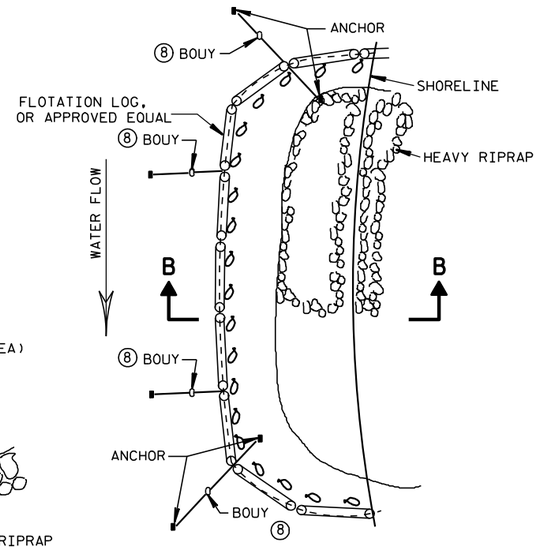
S.D.D. 8 E 10-2

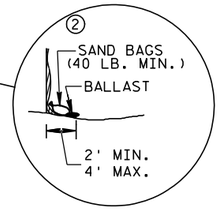
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S.D.D. 8 E 10-2

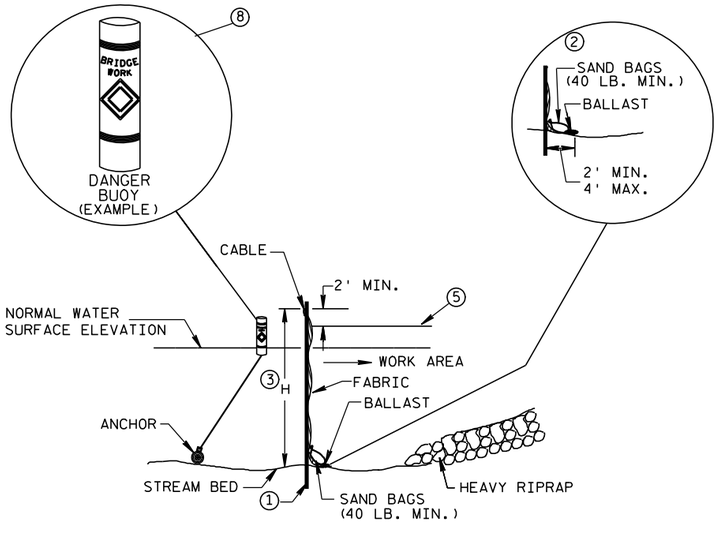


SECTION B-B

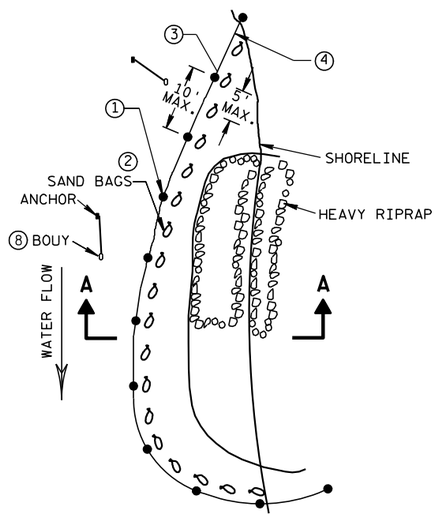




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

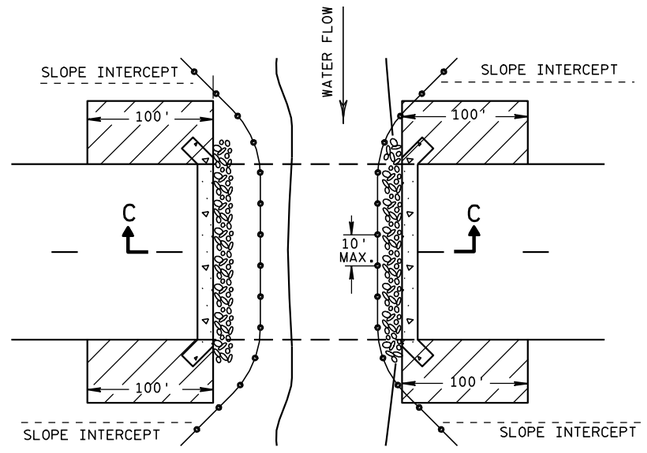
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

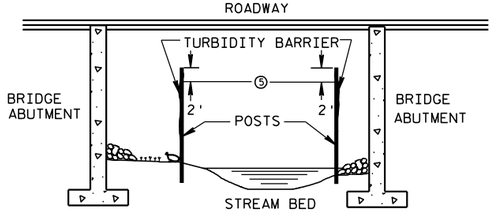
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

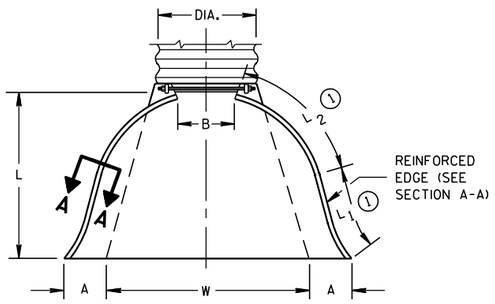
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

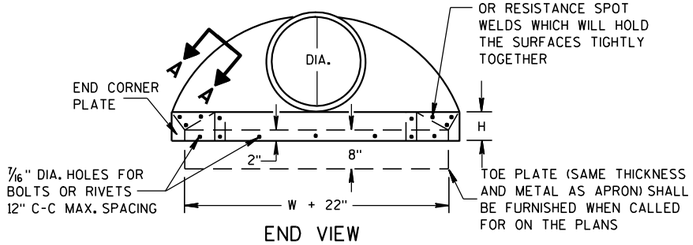
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

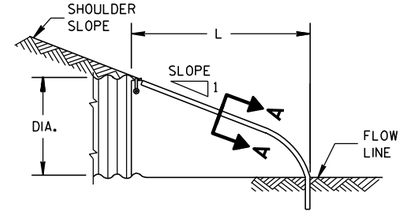
*MINIMUM
**MAXIMUM



PLAN VIEW

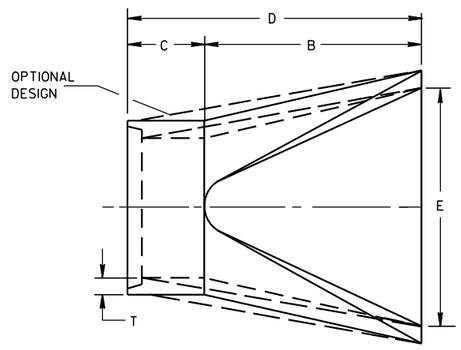


END VIEW

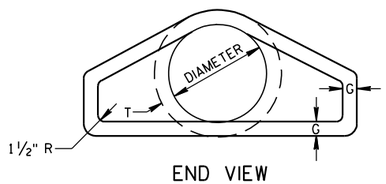


SIDE ELEVATION

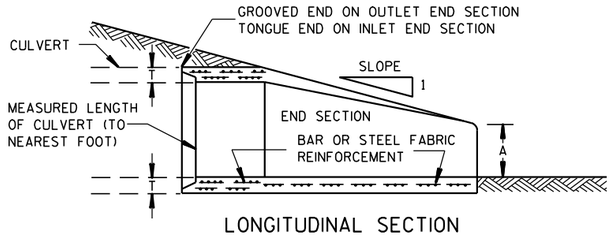
METAL ENDWALLS



PLAN

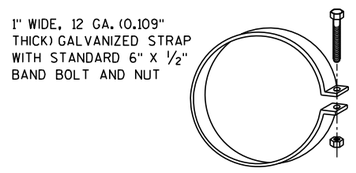


END VIEW



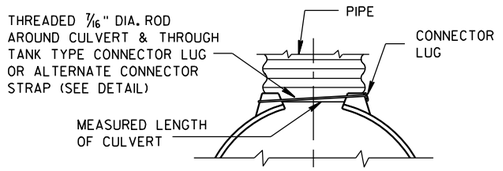
LONGITUDINAL SECTION

CONCRETE ENDWALLS

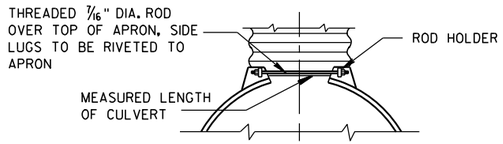


ALTERNATE FOR TYPE 1 CONNECTION

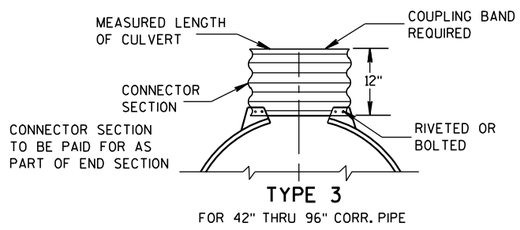
END SECTION CONNECTOR STRAP



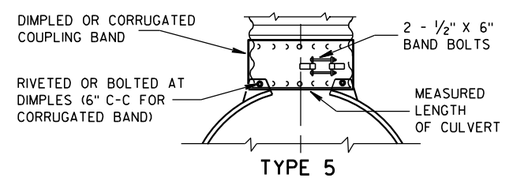
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

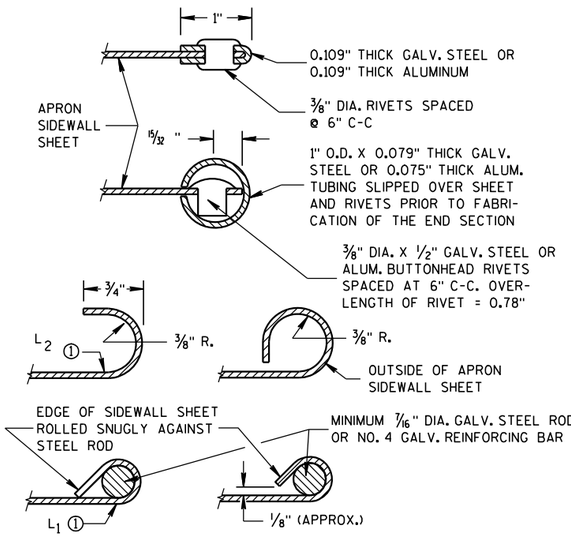
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

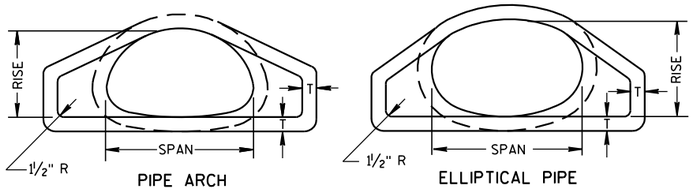
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

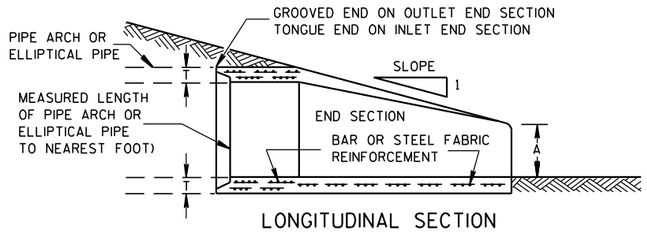
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

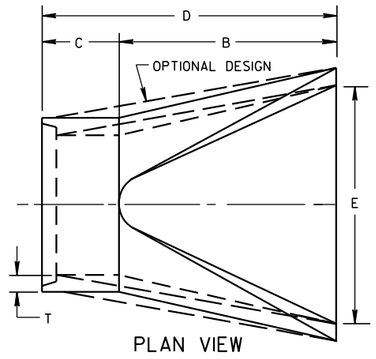
6
S.D.D. 8 F 1-11



END VIEW

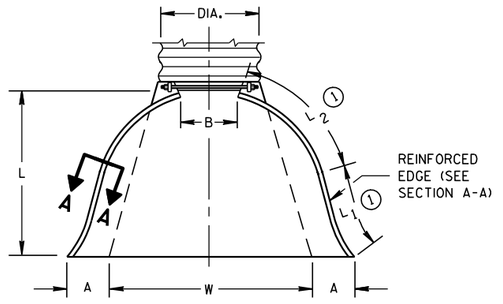


LONGITUDINAL SECTION

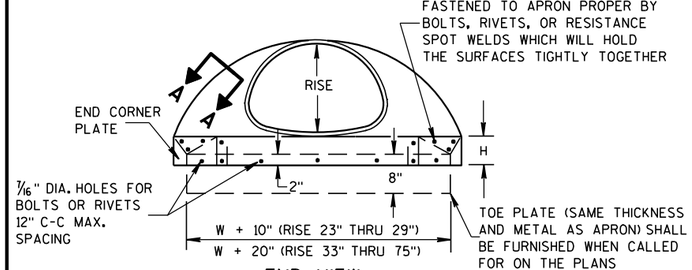


PLAN VIEW

CONCRETE ENDWALLS

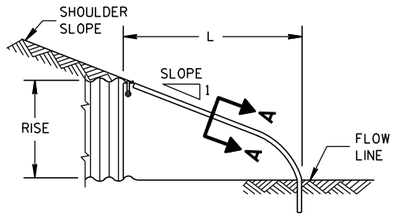


PLAN VIEW



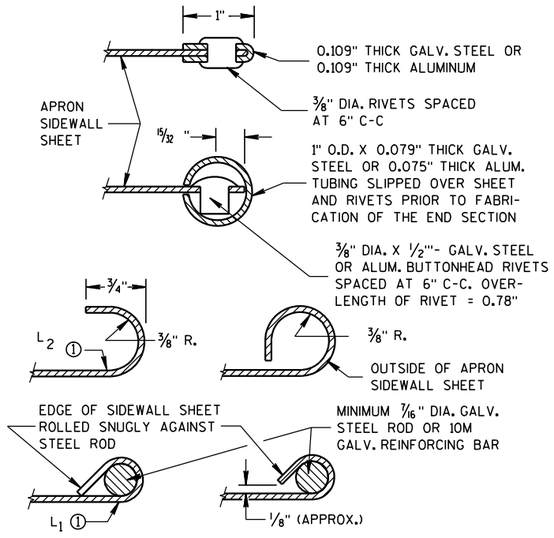
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

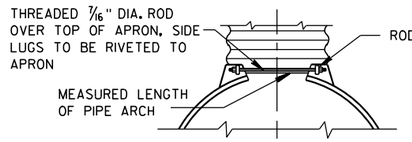
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

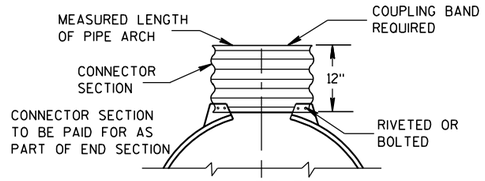
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



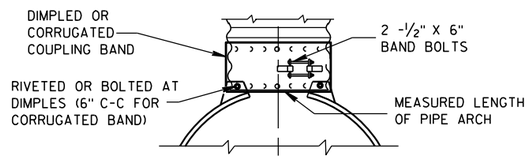
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

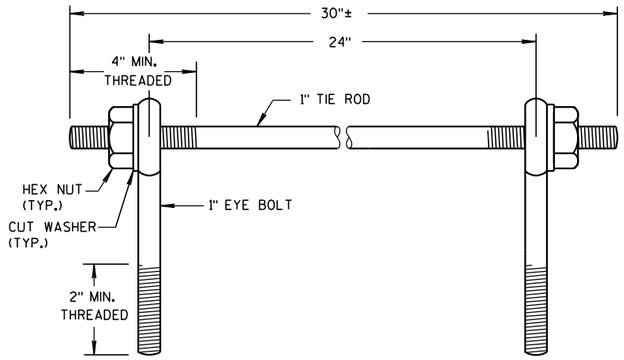
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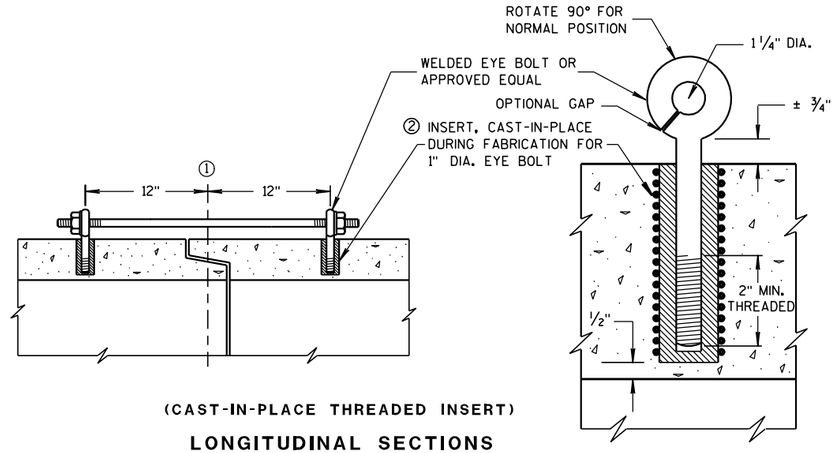
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EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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 PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON 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 CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CILVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

① ℄ 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.

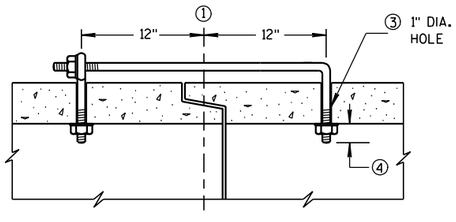
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

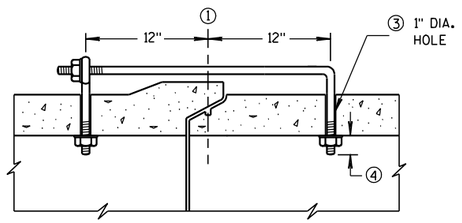
⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

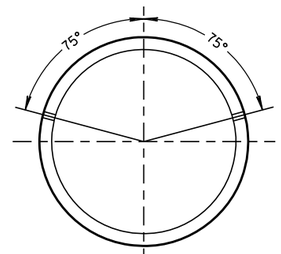
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

ADJUSTABLE TIE ROD TABLE

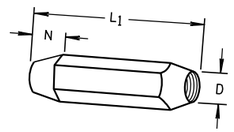
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES

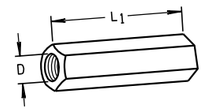


PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



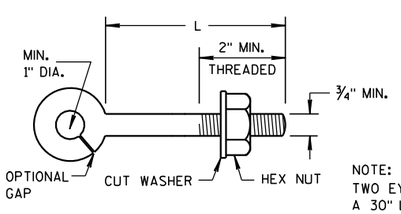
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PLAIN

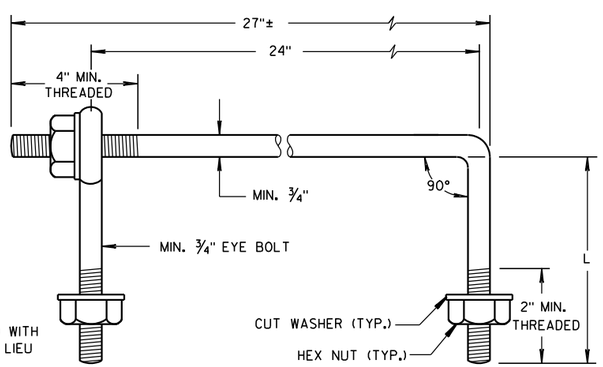
RIGHT AND LEFT THREADS

SLEEVE NUTS



EYE BOLT

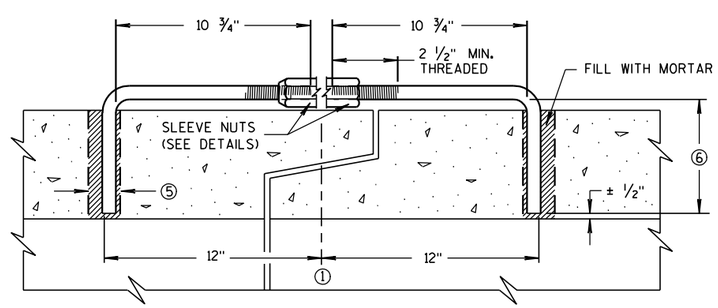
NOTE:
TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

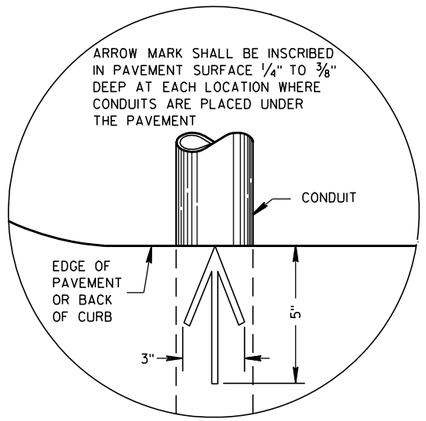
12/17/07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

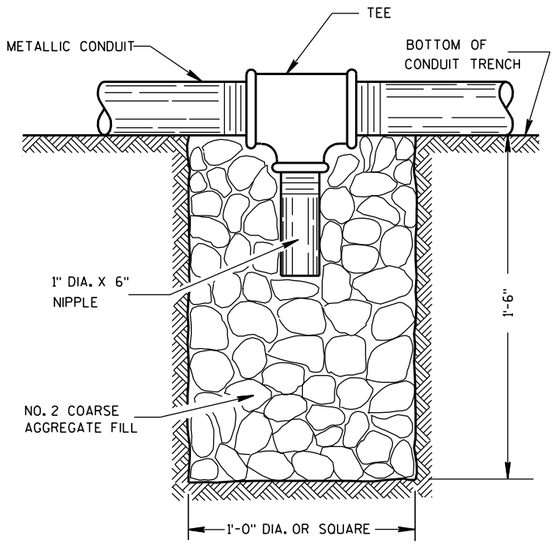
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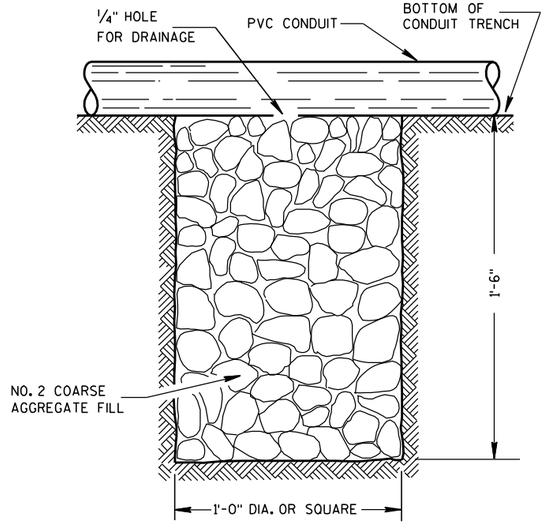
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

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.

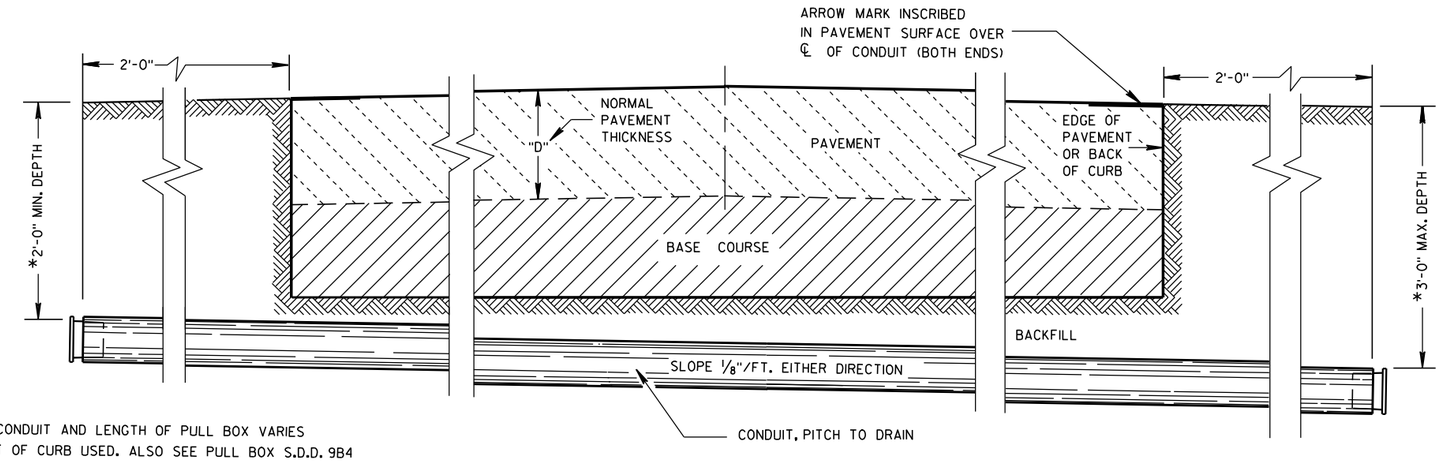
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI

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HWYS

FHWA

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 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
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.

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 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

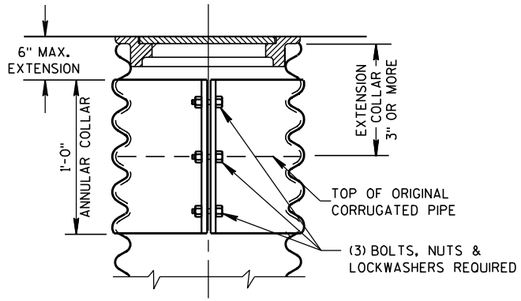
GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

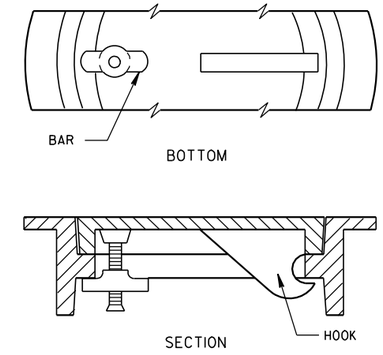
S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

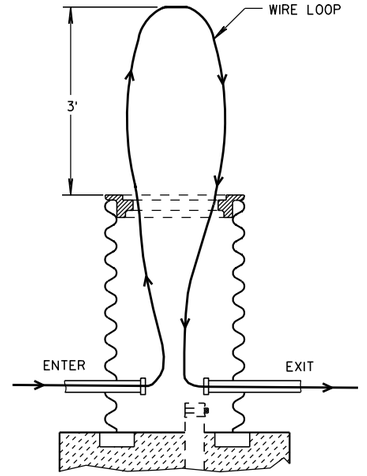


CORRUGATED PIPE EXTENDER

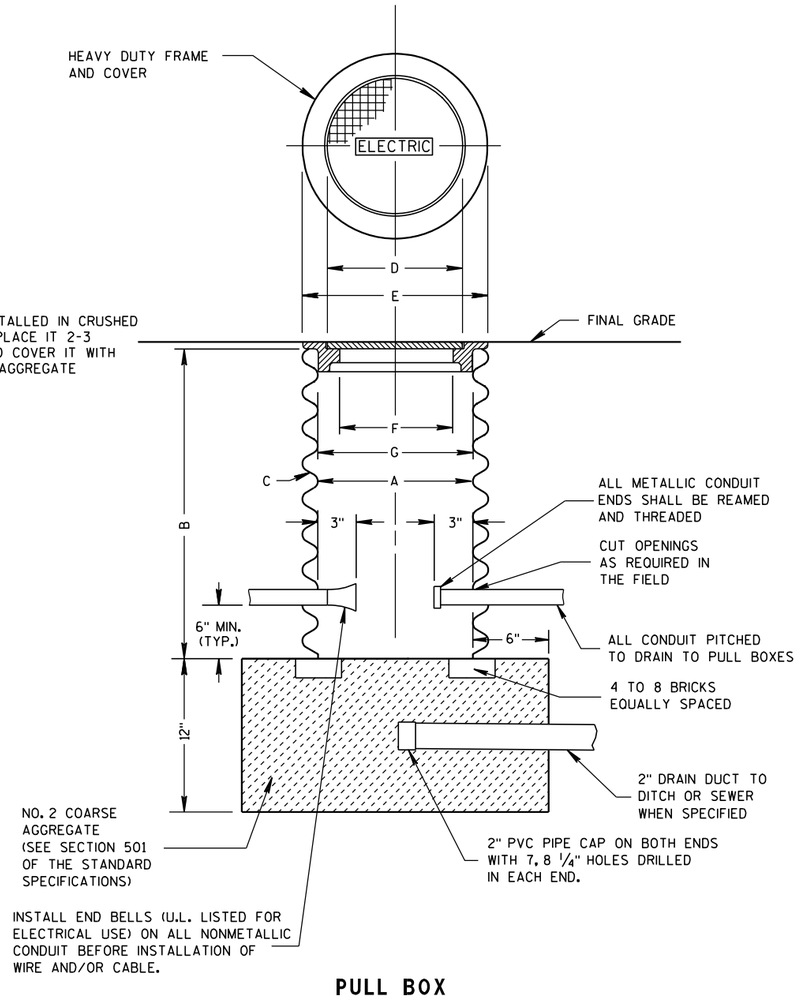


ALTERNATE COVER (LOCKING)

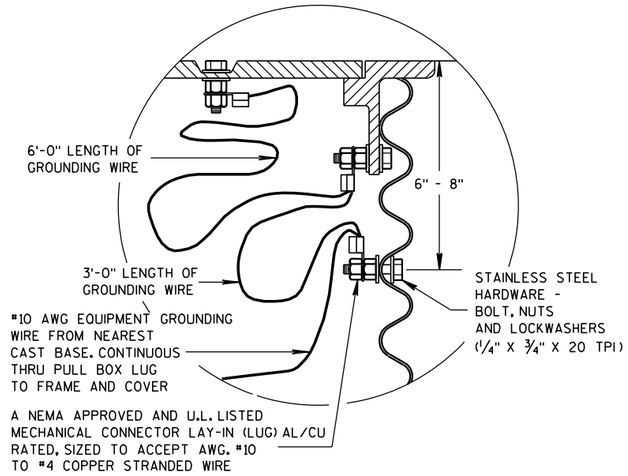
TIGHTENING BAR TYPE



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

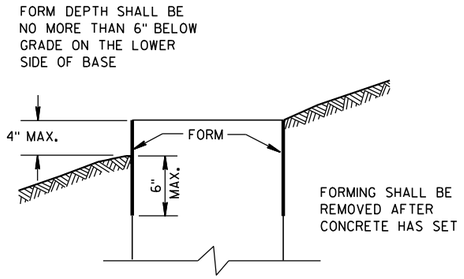
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/27/06 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 250 HWYS

FHWA



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
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 DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES 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 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

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 BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

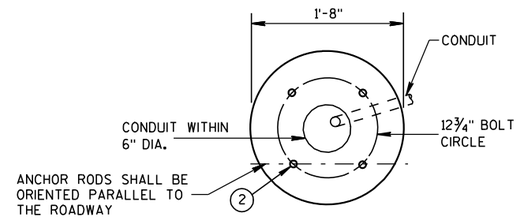
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

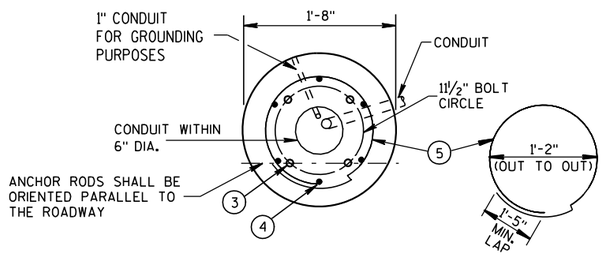
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

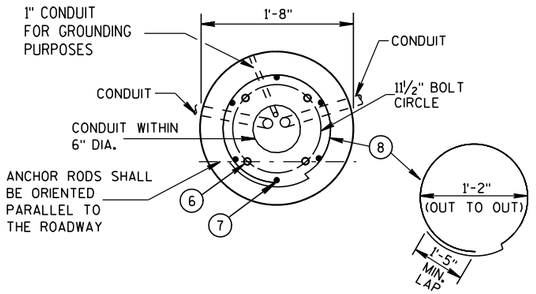
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

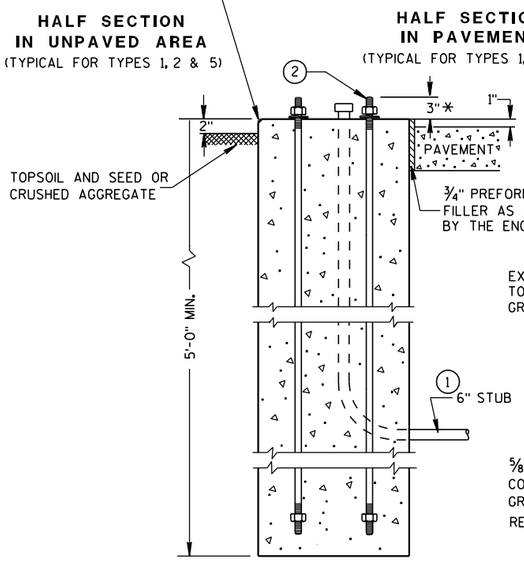






FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

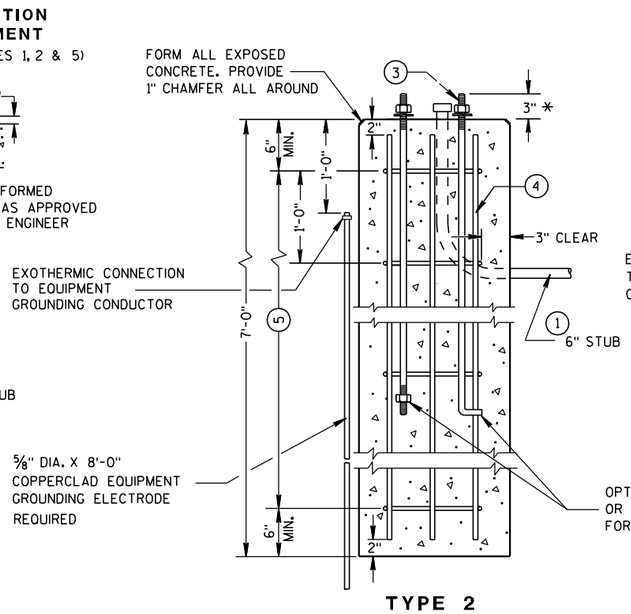
HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2 & 5)



HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)

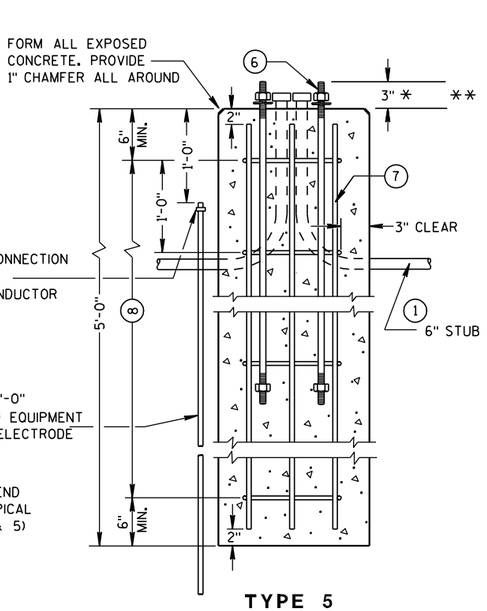
TYPE 1

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 2

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10 — DATE
/S/ Joanna L. Rush — STATE ELECTRICAL ENGI 251 — HWYS
FHWA

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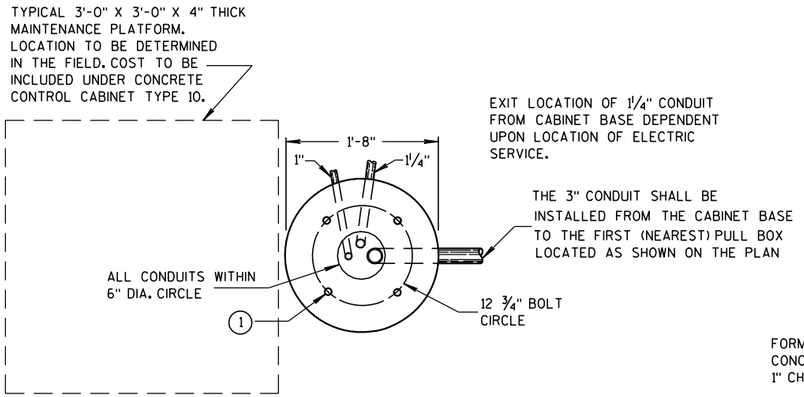
S.D.D. 9 C 2-6

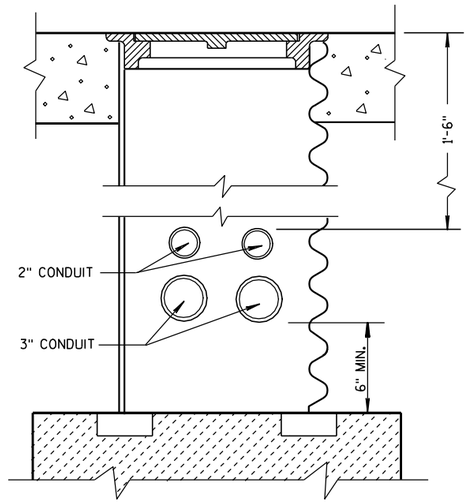
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S.D.D. 9 C 2-6

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

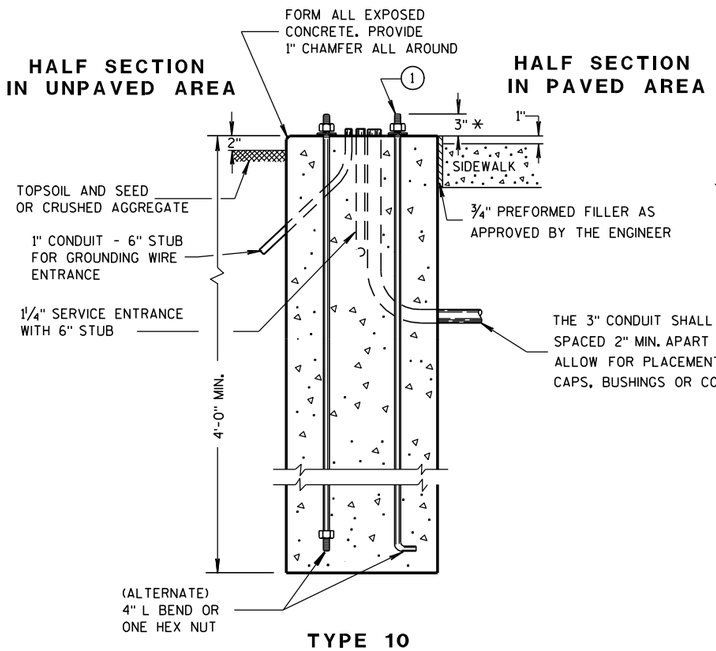
* INCLUDES MAINTENANCE PLATFORM.



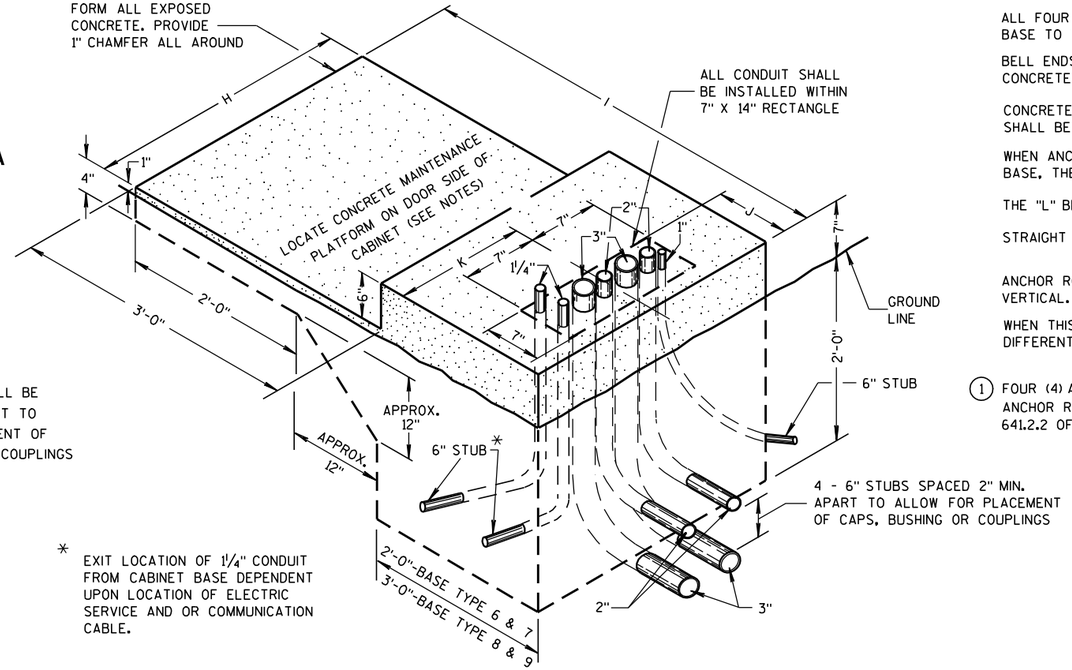


CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10



TYPE 6,7,8 AND 9 (ISOMETRIC VIEW)

* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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

WHEN THIS DRAWING IS USED FOR STREET LIGHTING CABINET BASES, CONDUIT MAY BE DIFFERENT AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6"
ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

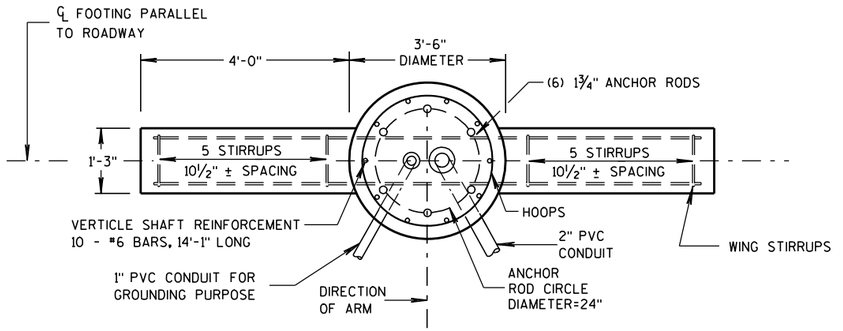
CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

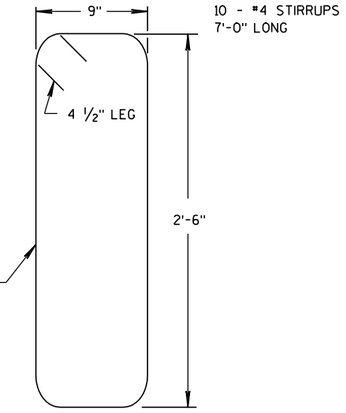
APPROVED
3/3/10 DATE
/S/ Joanna L. [illegible]
STATE ELECTRICAL ENGI
HWYS
FHWA

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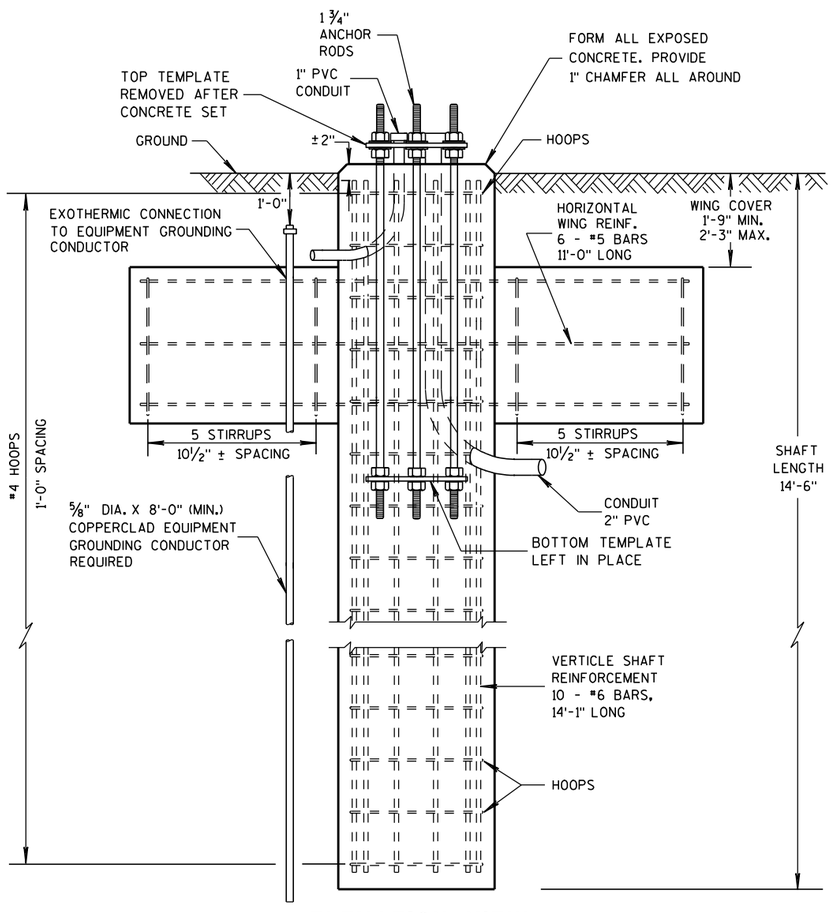
S.D.D. 9 C 5-7



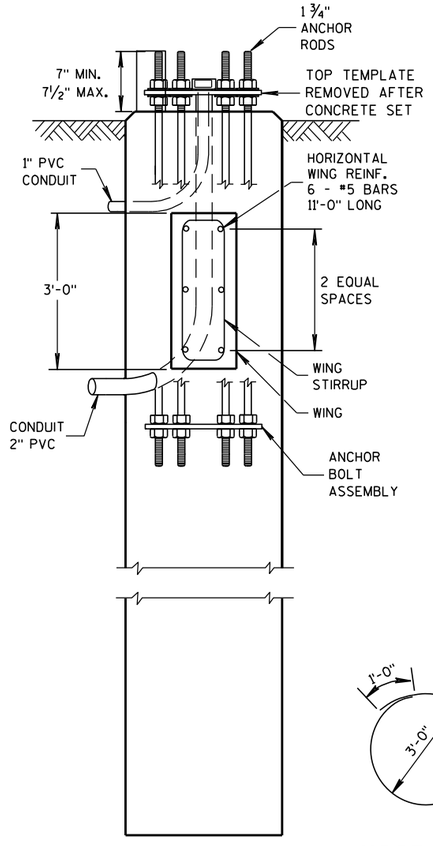
PLAN VIEW



WING STIRRUP

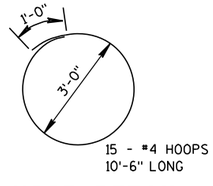


ELEVATION VIEW



SIDE VIEW

DOES NOT SHOW HOOPS OR
VERTICAL SHAFT REINFORCEMENT



15 - #4 HOOPS
10'-6" LONG

HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL 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.

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

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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 THE WRITTEN APPROVAL OF THE ENGINEER.

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

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

(FOR TYPE 12 & 13 POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 LBS.

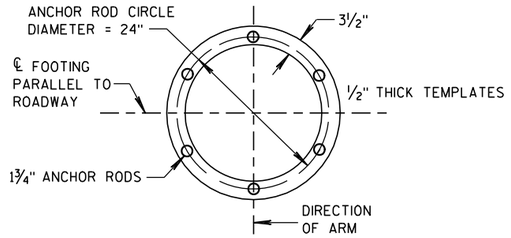
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-1 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

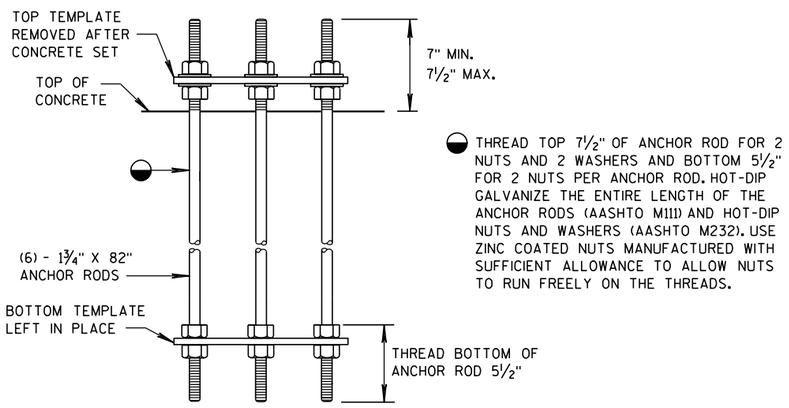
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 9 C 12 -2a



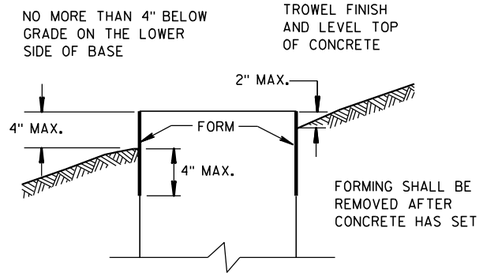
TOP AND BOTTOM TEMPLATES



◒ THREAD TOP 7½" OF ANCHOR ROD FOR 2 NUTS AND 2 WASHERS AND BOTTOM 5½" FOR 2 NUTS PER ANCHOR ROD. HOT-DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR RODS (AASHTO M111) AND HOT-DIP NUTS AND WASHERS (AASHTO M232). USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

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S.D.D. 9 C 12-2b

S.D.D. 9 C 12-2b

CONCRETE BASE TYPE 13

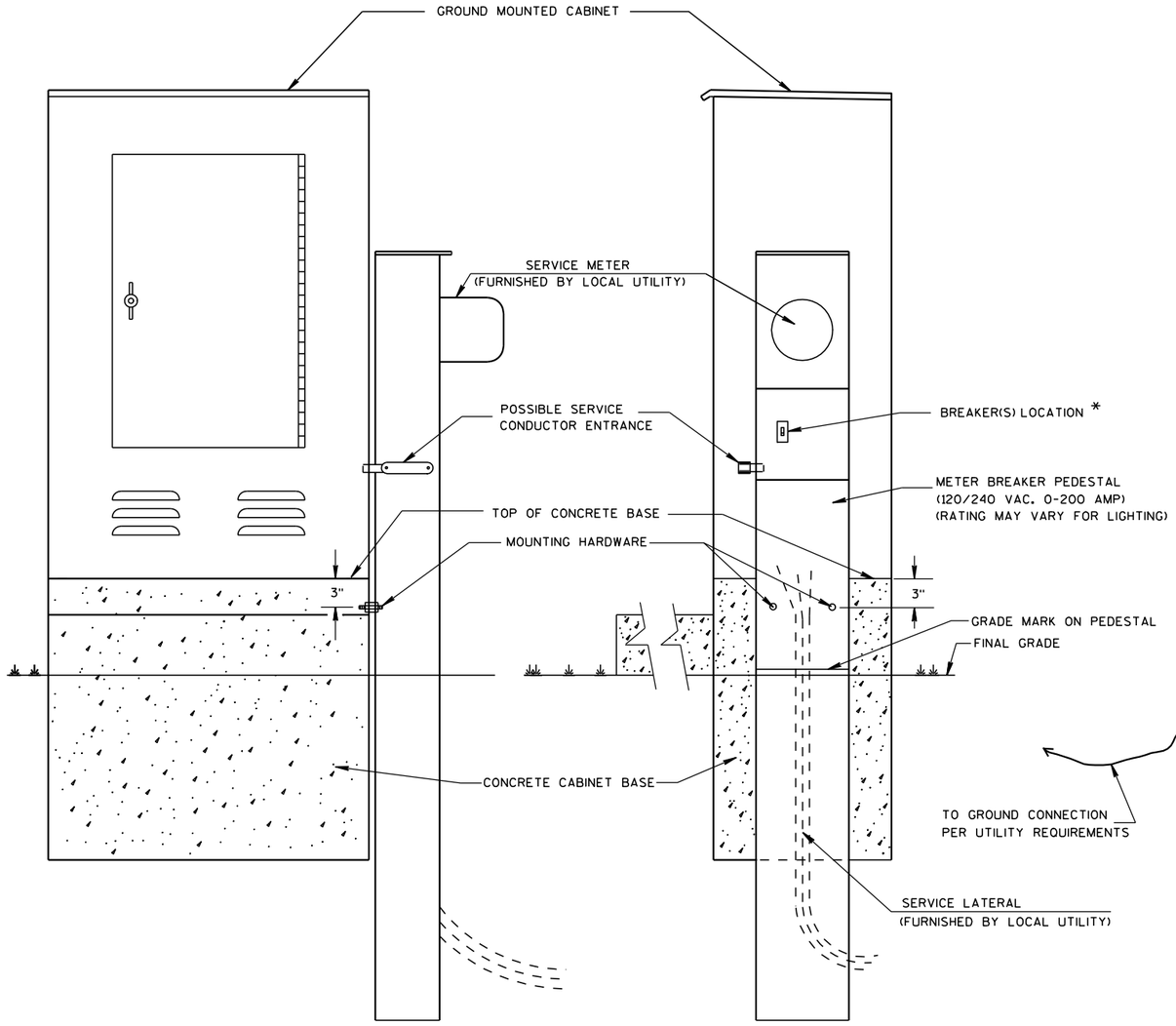
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3-2-11 DATE

/S/ Thomas J. Gosnion
STATE ELECTRICAL ENGI 254 HWYS

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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

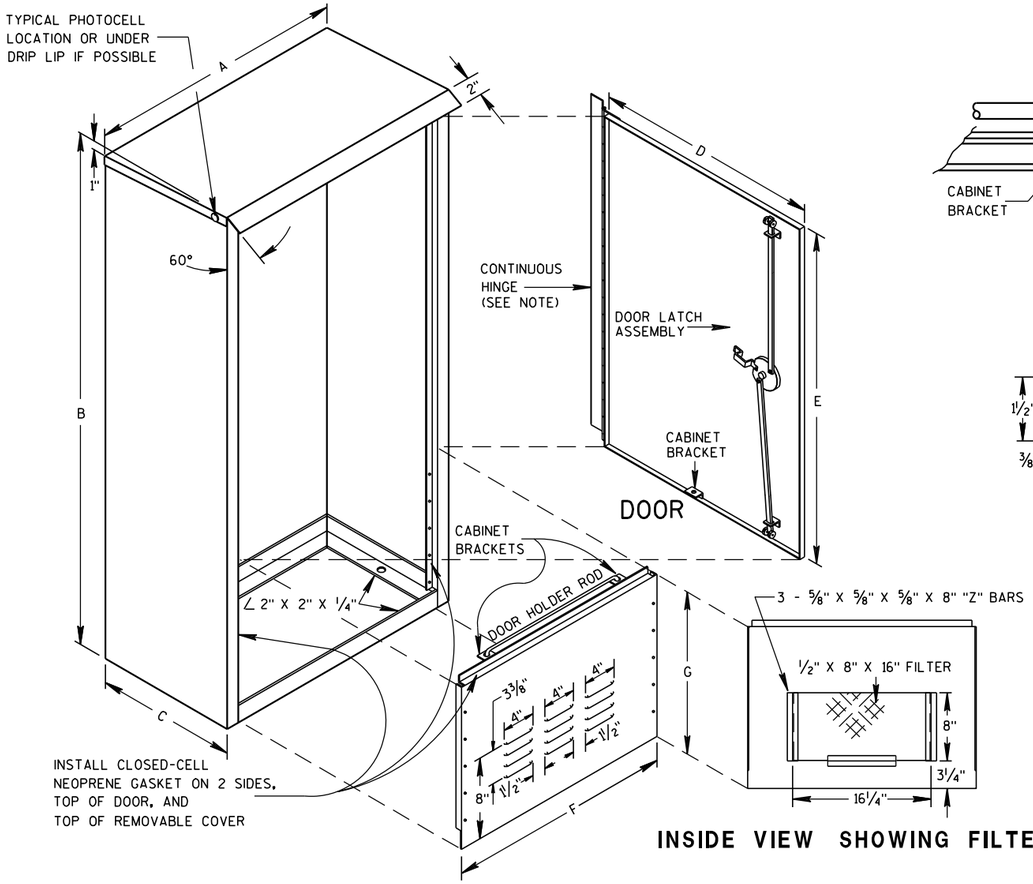
IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

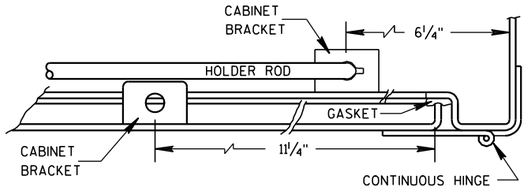
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/27/09 DATE
/S/ Joanna L. Bush
STATE ELECTRICAL ENGI 255 HWYS
FHWA

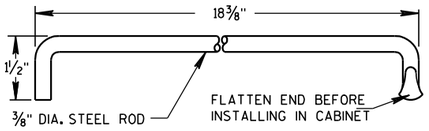


REMOVABLE COVER

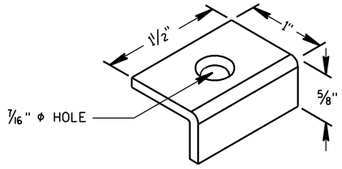
INSIDE VIEW SHOWING FILTER



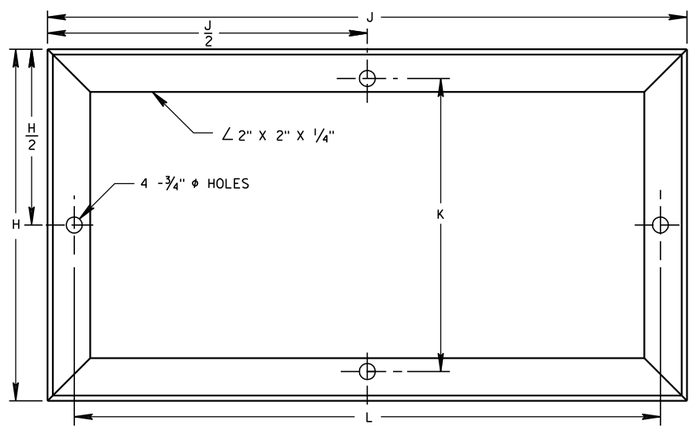
HINGE & DOOR HOLDER



HOLDER ROD



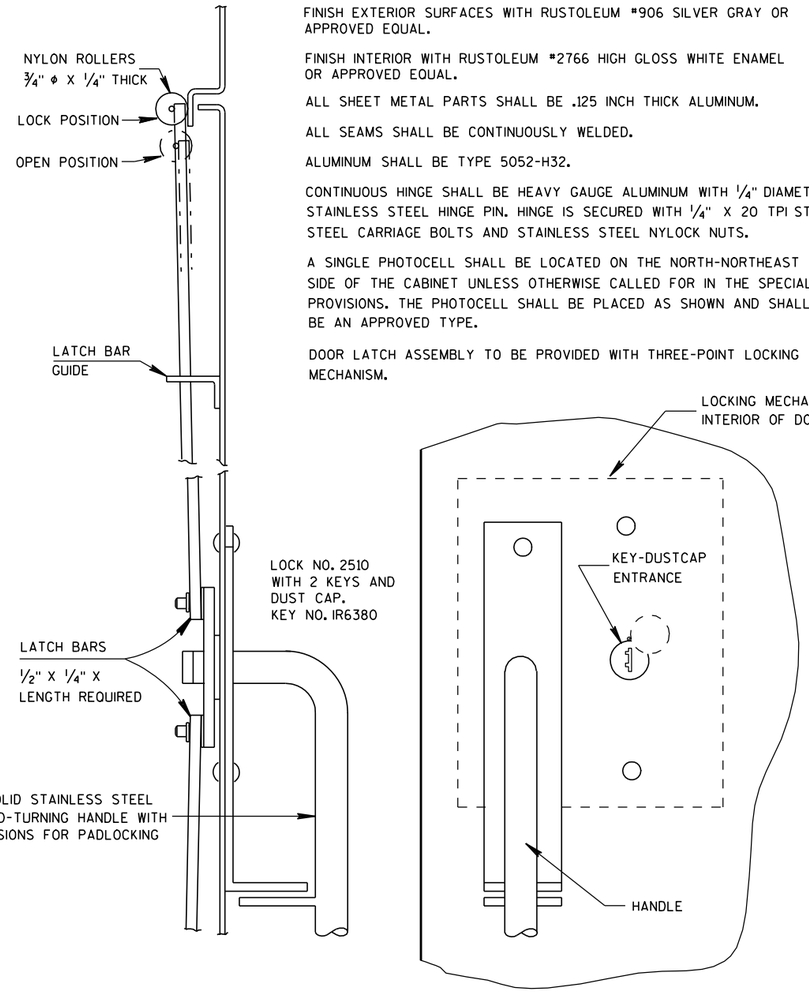
CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

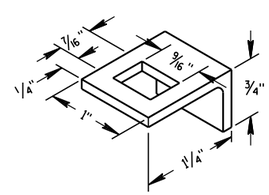
MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

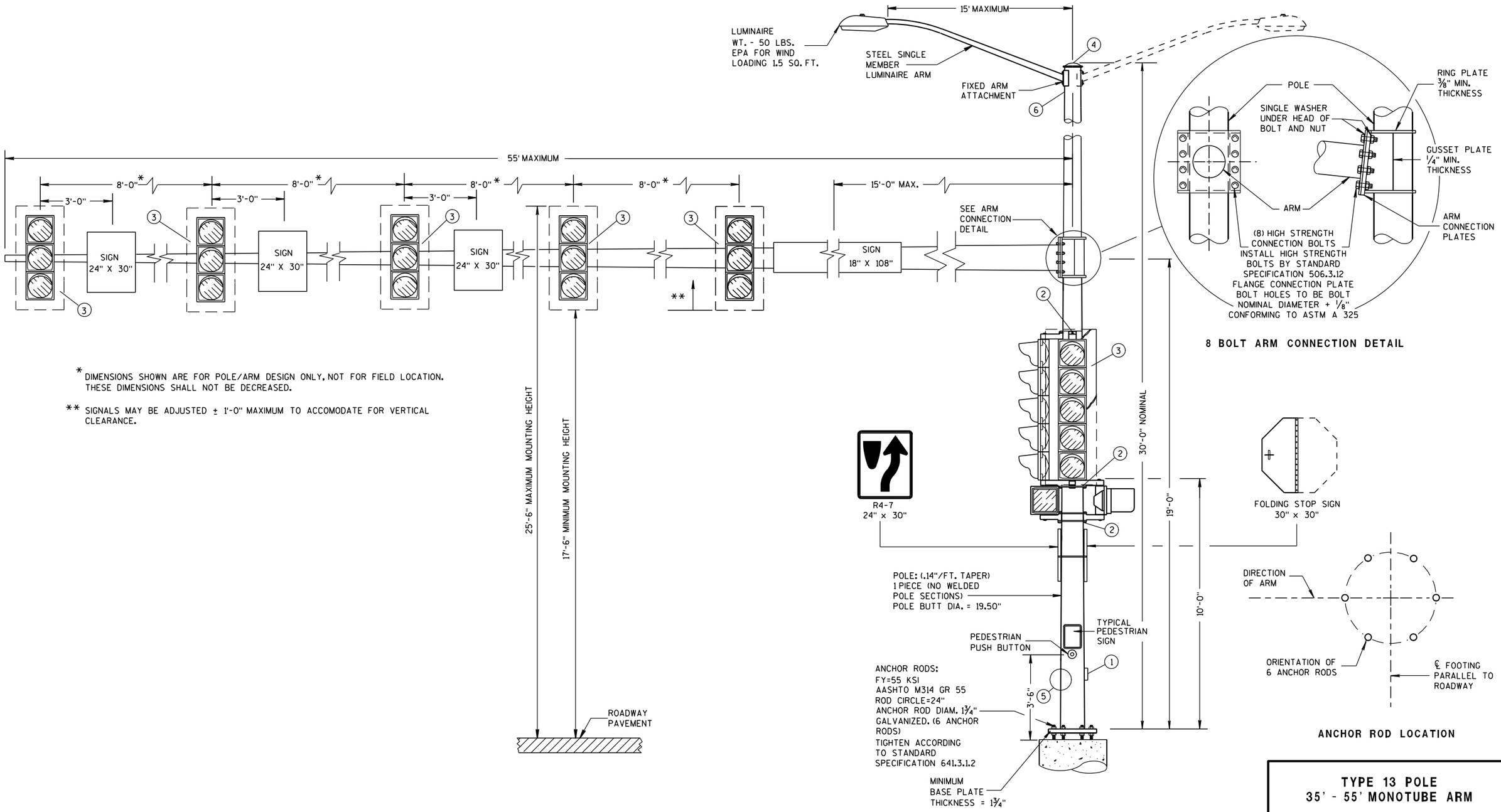
A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI
256
HWYS
FHWA



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

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

8 BOLT ARM CONNECTION DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE 35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE

/S/ Thomas J. Cannon
STATE ELECTRICAL ENGI 257 HWYS

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S.D.D. 9 E 8-4d

6

S.D.D. 9 E 8-4d

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE LATEST AASHTO AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

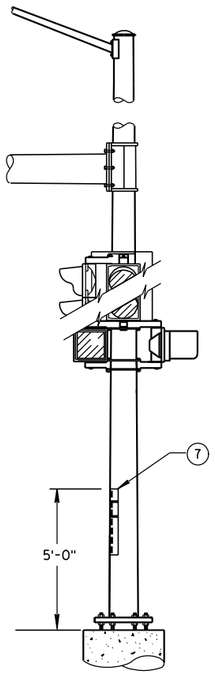
(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

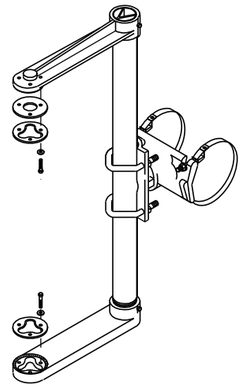
(7) INSTALL DEPARTMENT PROVIDED STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 5'-0" ABOVE THE CURB OR SHOULDER . ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

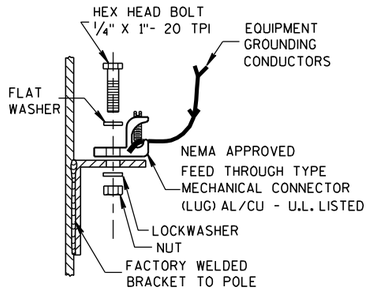


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



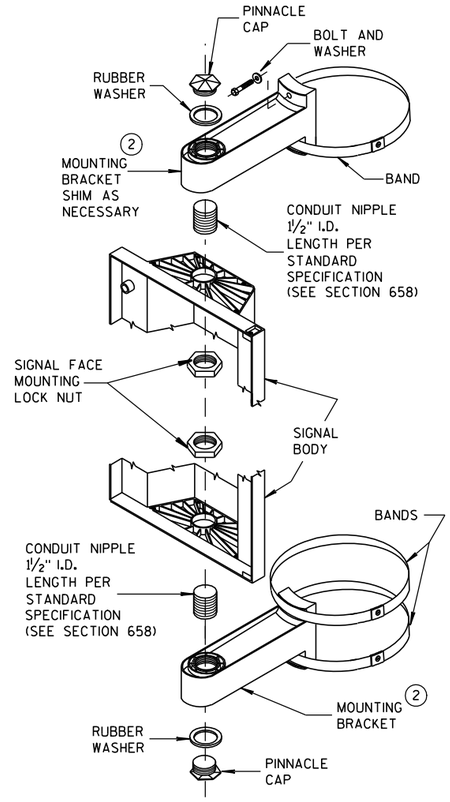
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

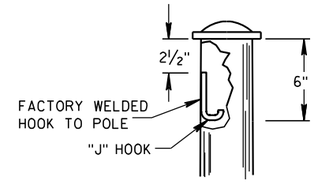


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE

/S/ Thomas J. Corrigan
STATE ELECTRICAL ENGI

258

HWYS

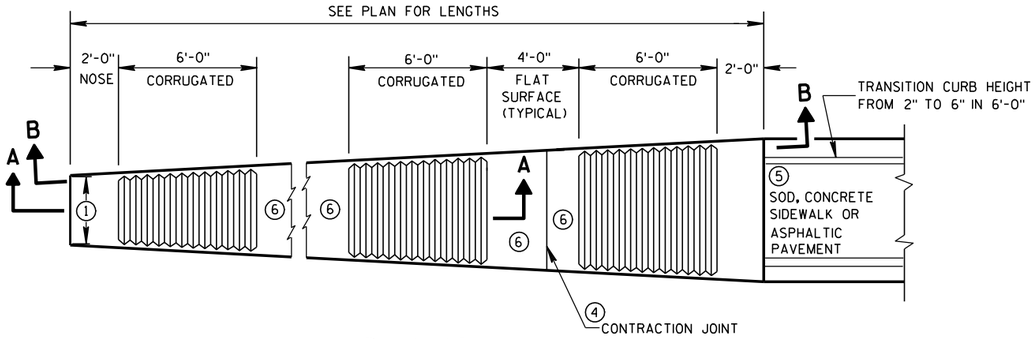
FHWA

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S.D.D. 9 E 8-4e

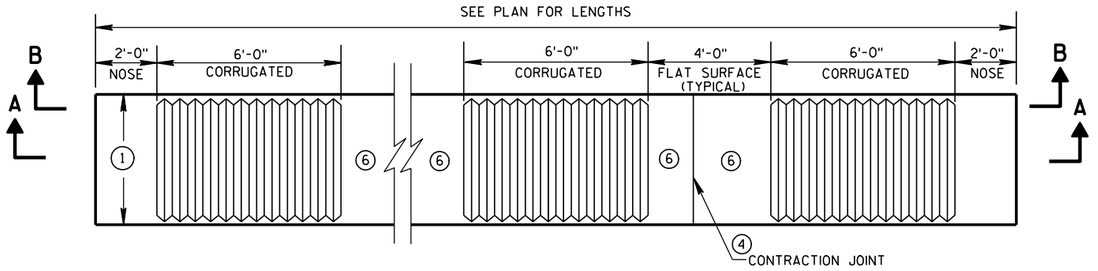
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S.D.D. 9 E 8-4e



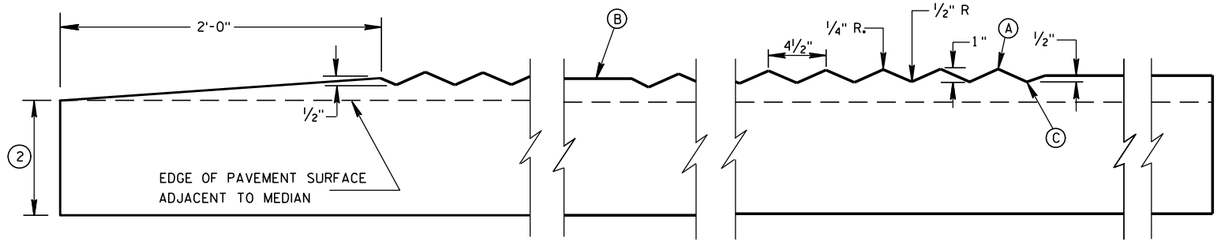
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

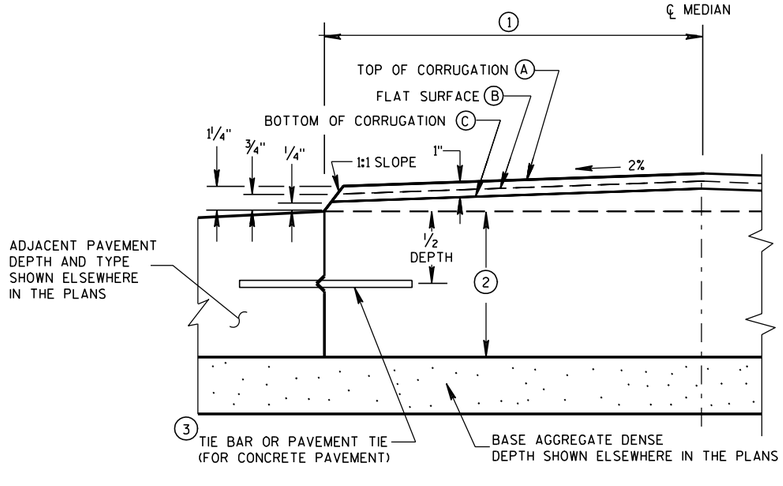
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

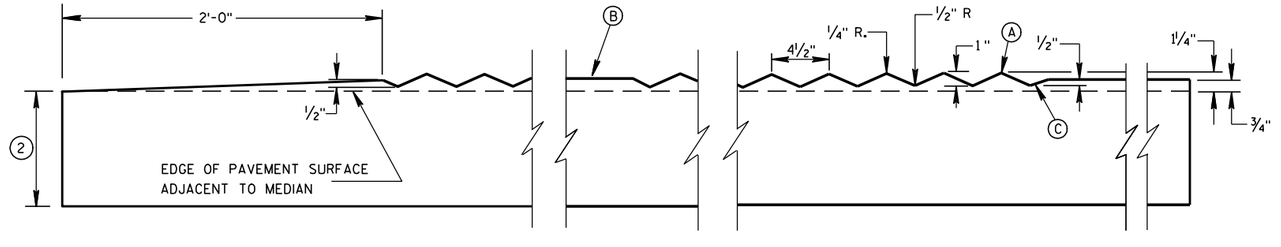
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

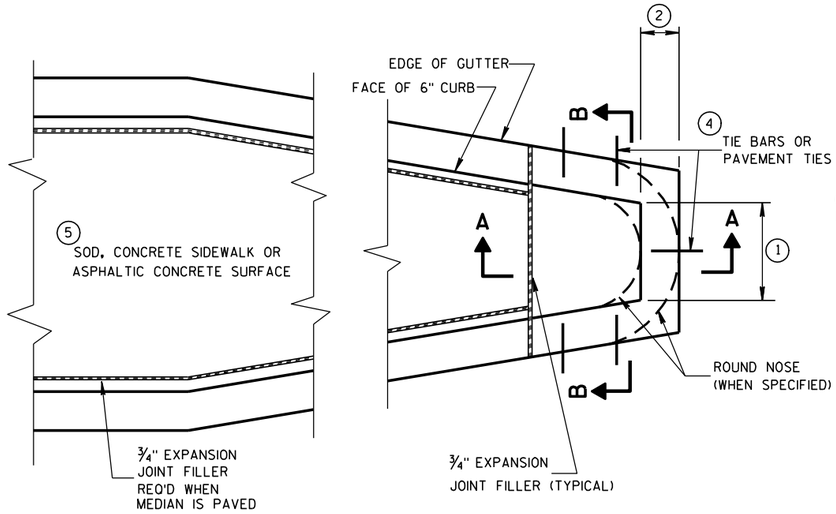
FHWA

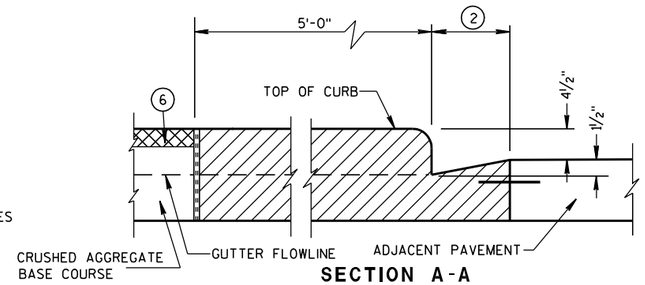
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S.D.D. 11 B 1-5

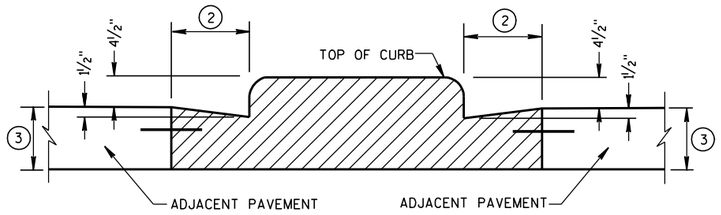
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S.D.D. 11 B 1-5





SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

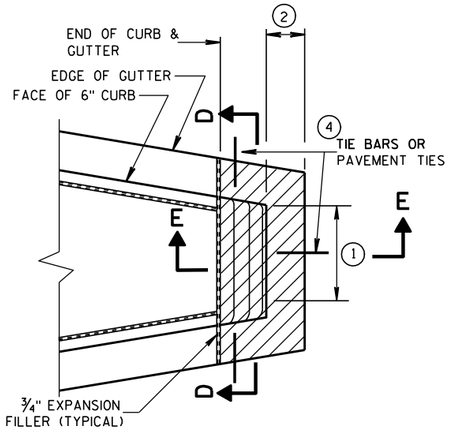
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

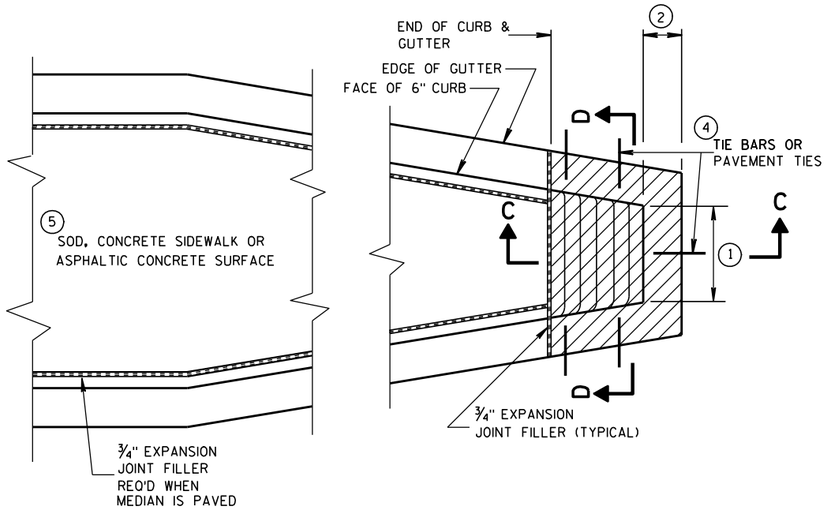
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

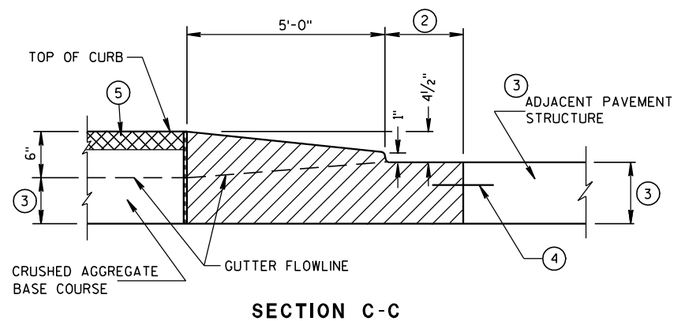
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

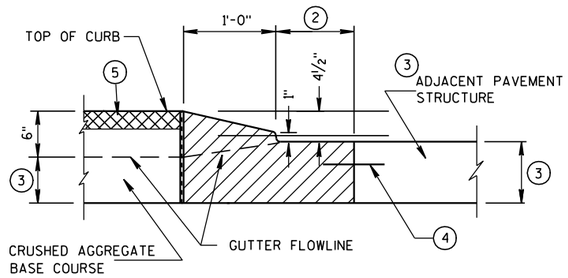




CONCRETE MEDIAN SLOPED NOSE TYPE 1

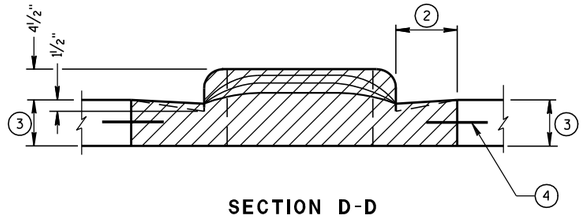


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

260

NT

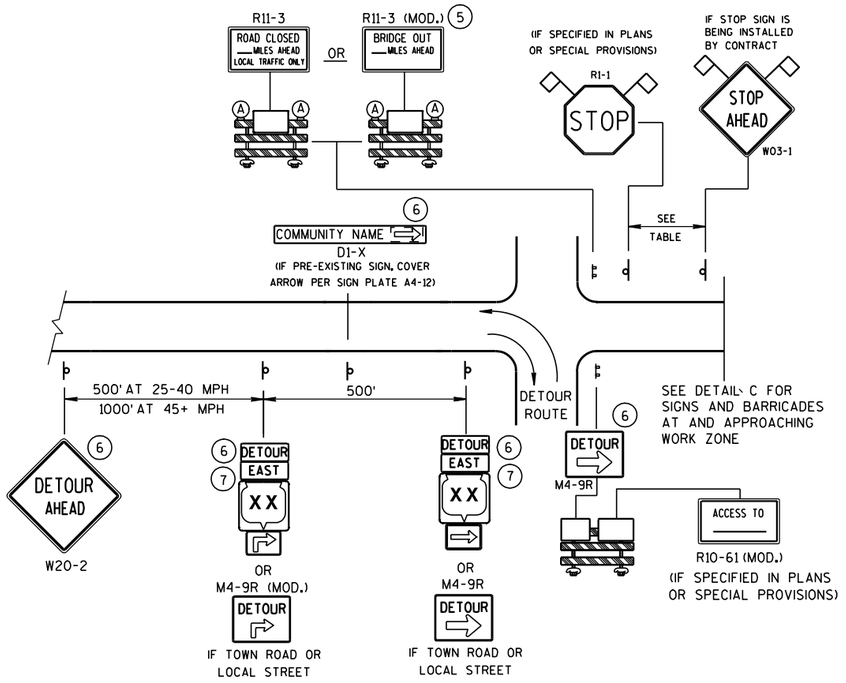
FHWA

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S.D.D. 11 B 2-2

6

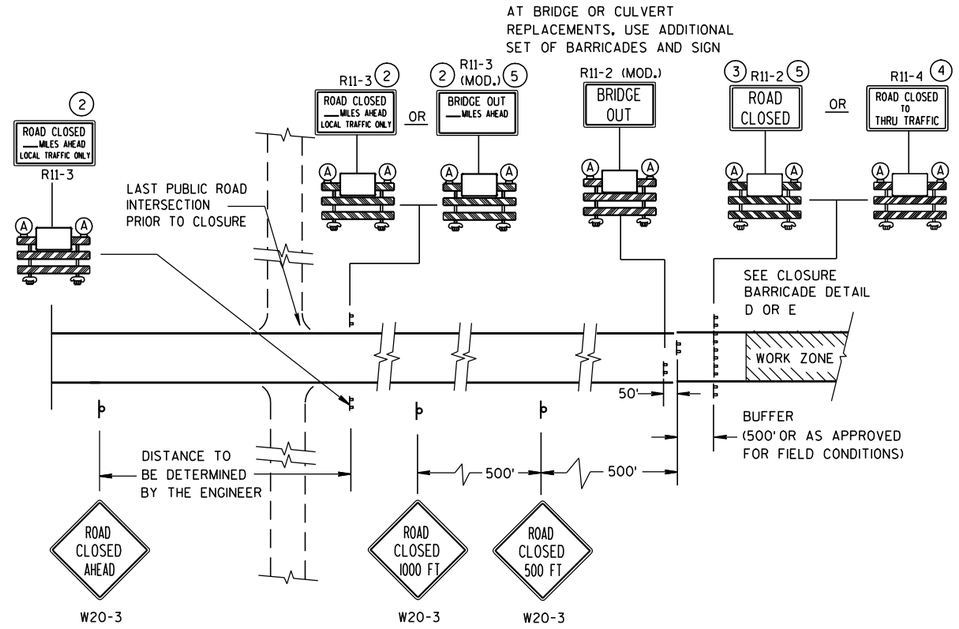
S.D.D. 11 B 2-2



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

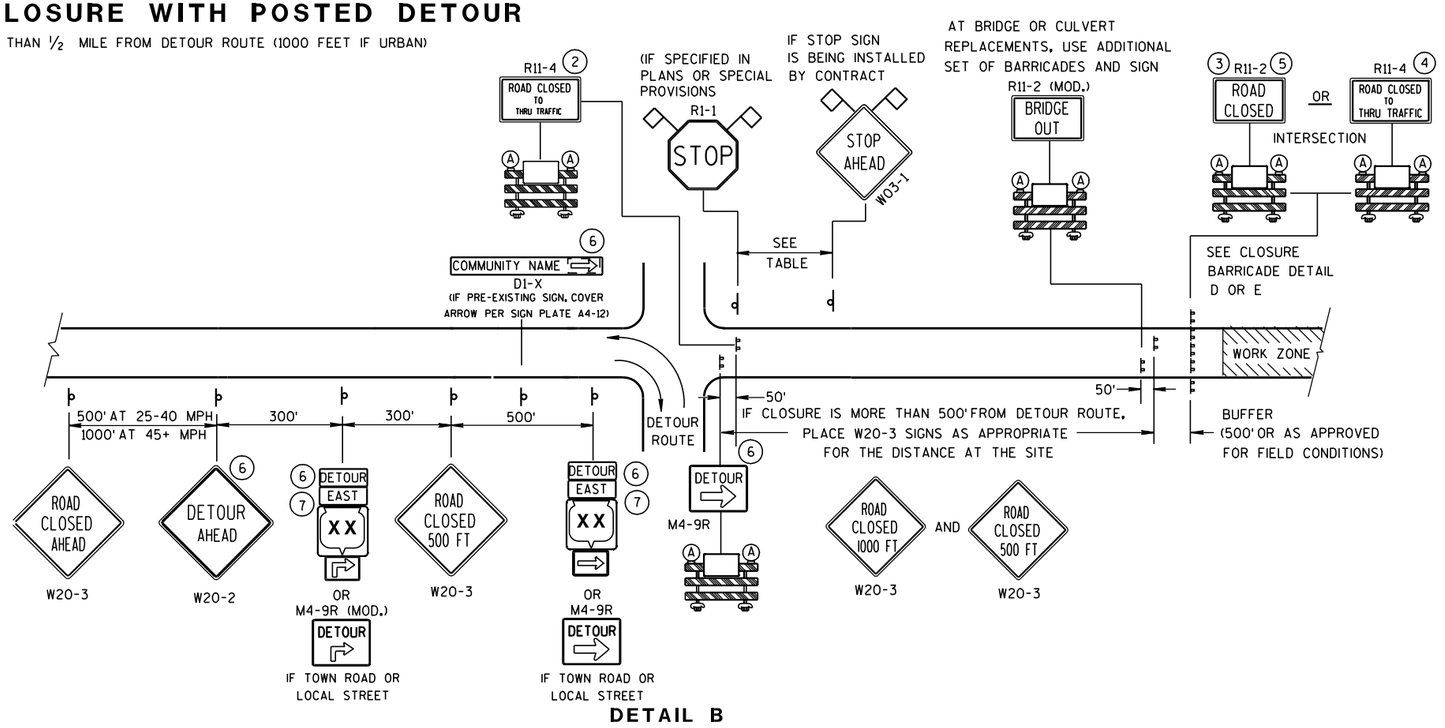


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

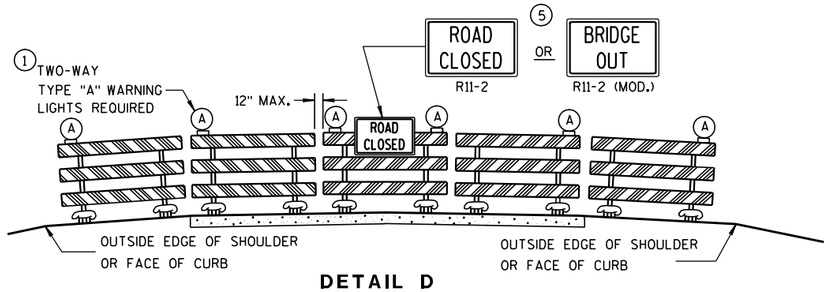
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1; M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

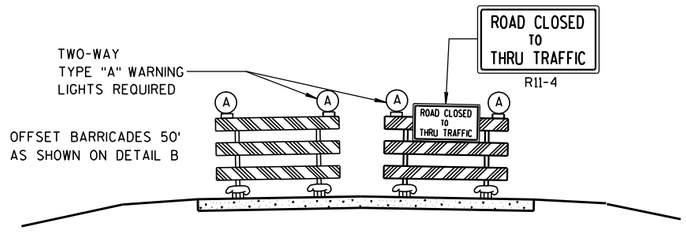
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a 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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

"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, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 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 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 LANE 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 MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

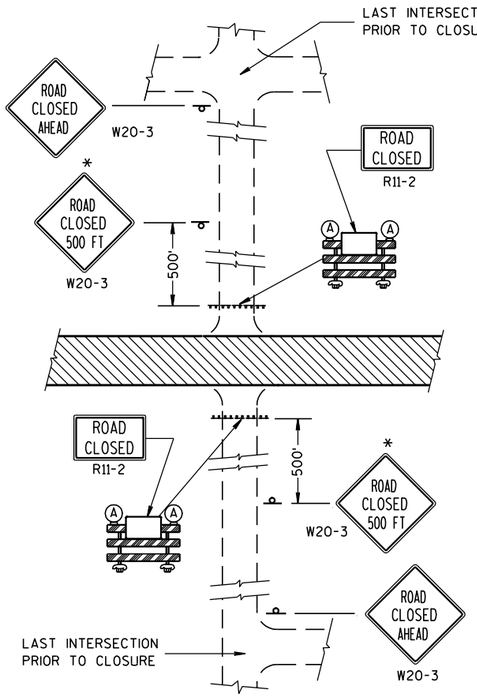
9/16/03
DATE

/S/ Thomas N. N[illegible]
CHIEF SIGNS AND MARKINGS ENGINEER

FHWA

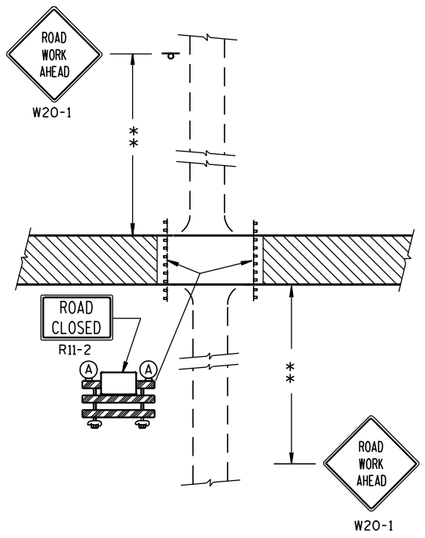
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S.D.D. 15 C 2-4b



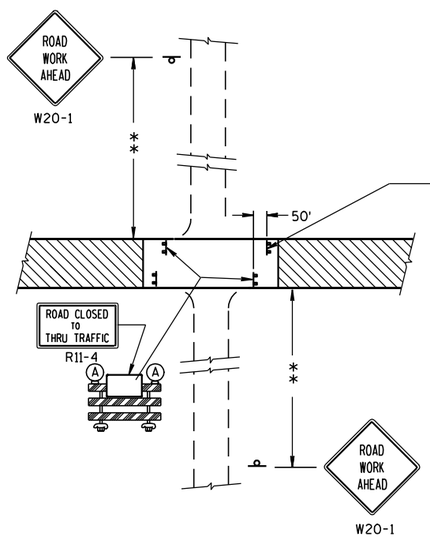
DETAIL 1

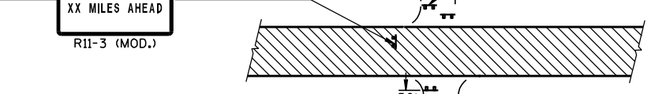
(NO ACCESS TO PROJECT)

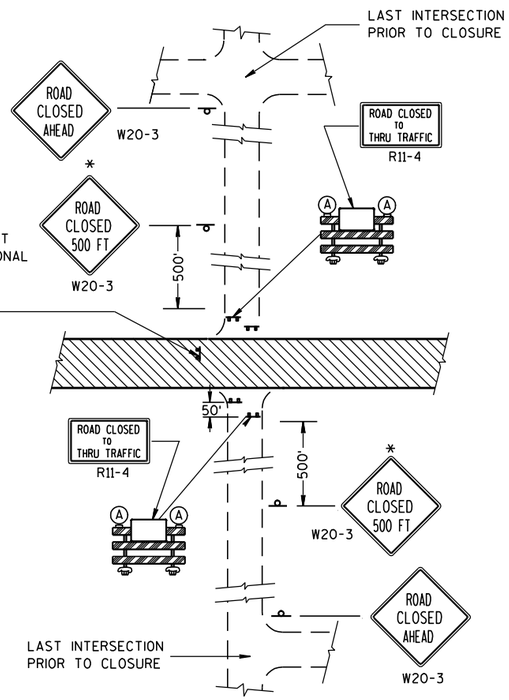


DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).







DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

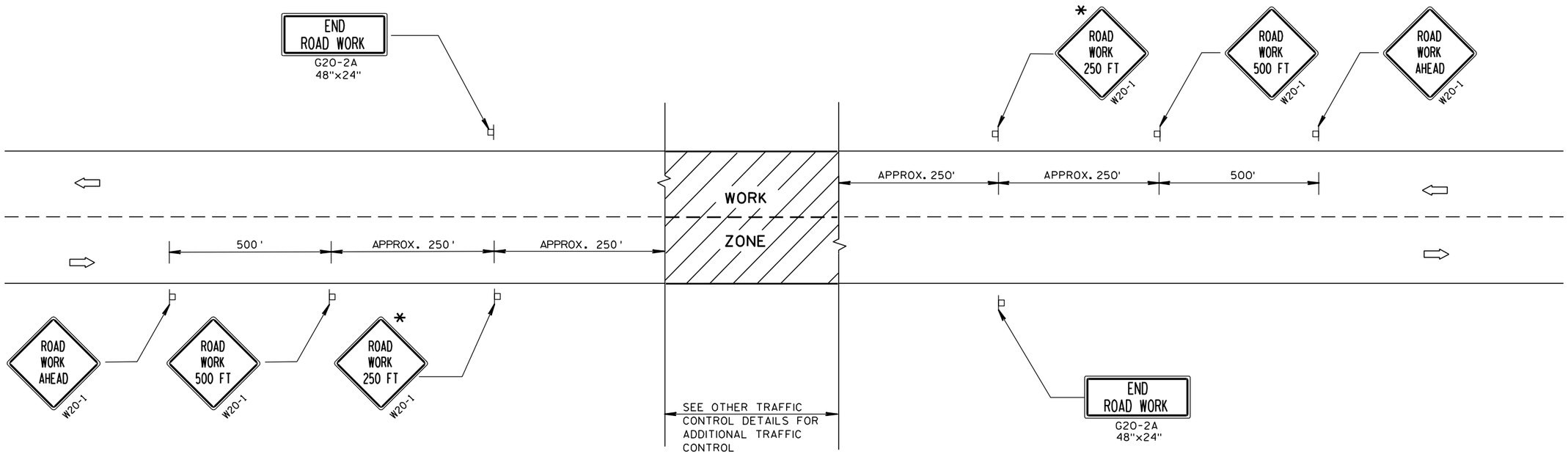
9-16-03
DATE

/S/ Thomas N. N[illegible]
CHIEF SIGNS AND MAR[illegible] ENGINEER

FHWA

6

S.D.D. 15 C 3-1



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

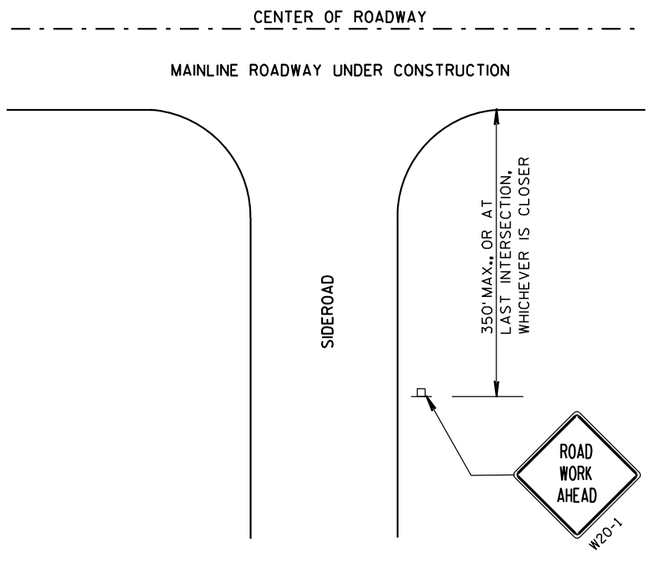
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/00
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 5-1

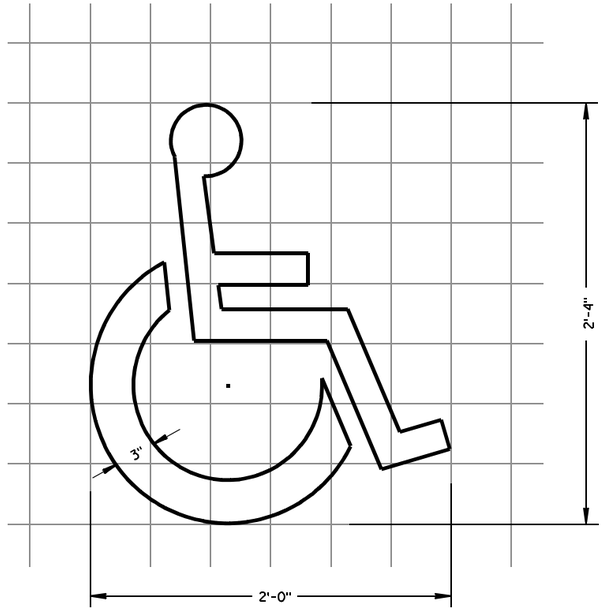
S.D.D. 15 C 5-1

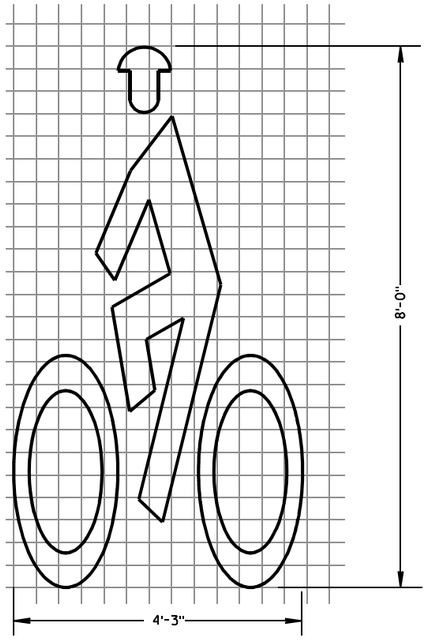
GENERAL NOTES

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

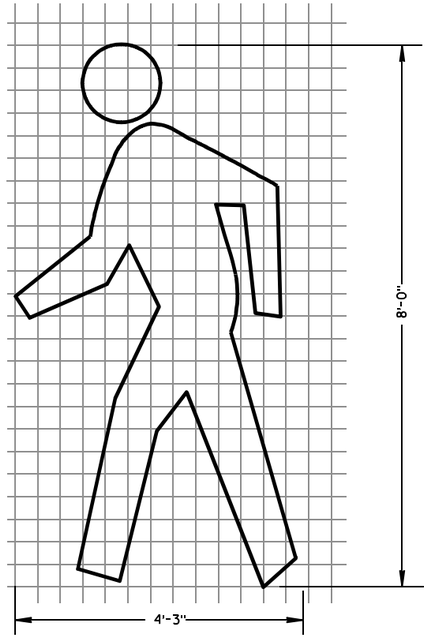
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

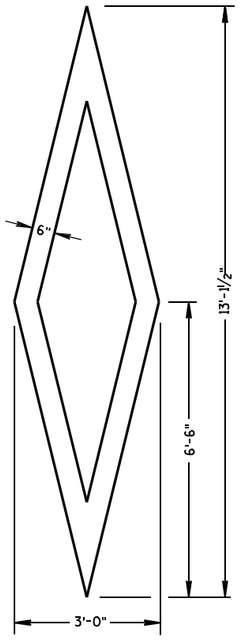




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 DATE

/S/ Thomas N Nathan
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12a

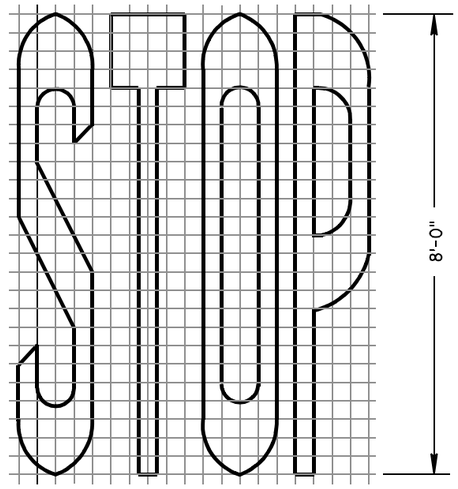
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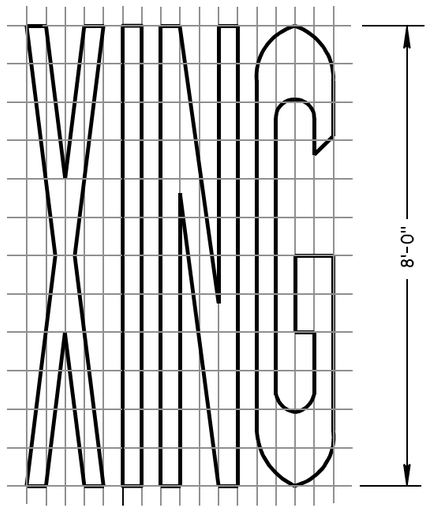
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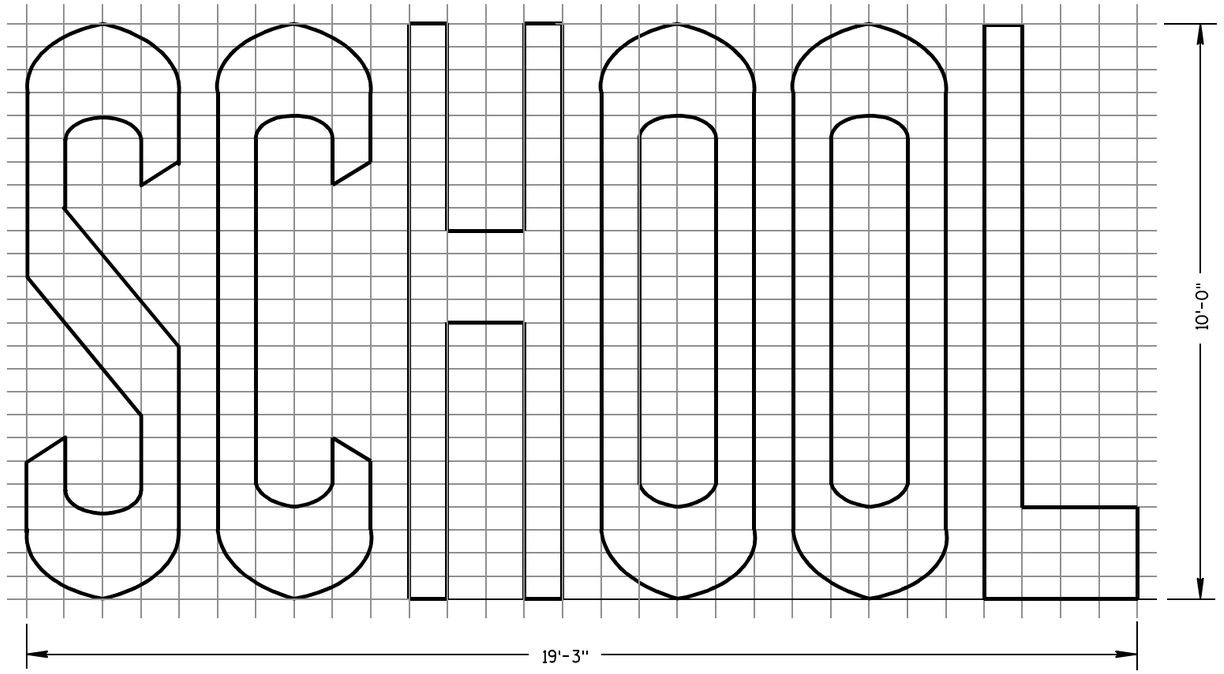
GENERAL NOTES

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

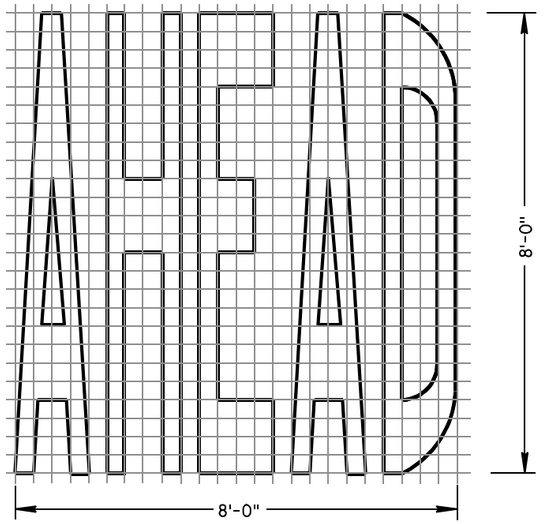
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

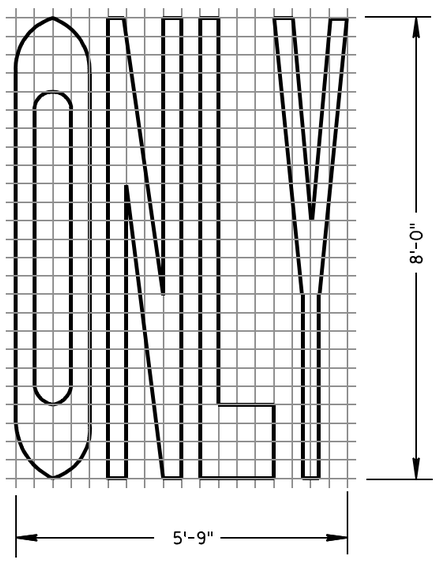


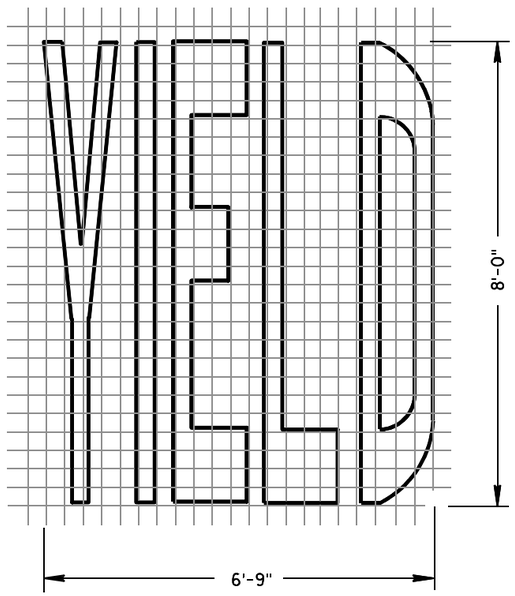


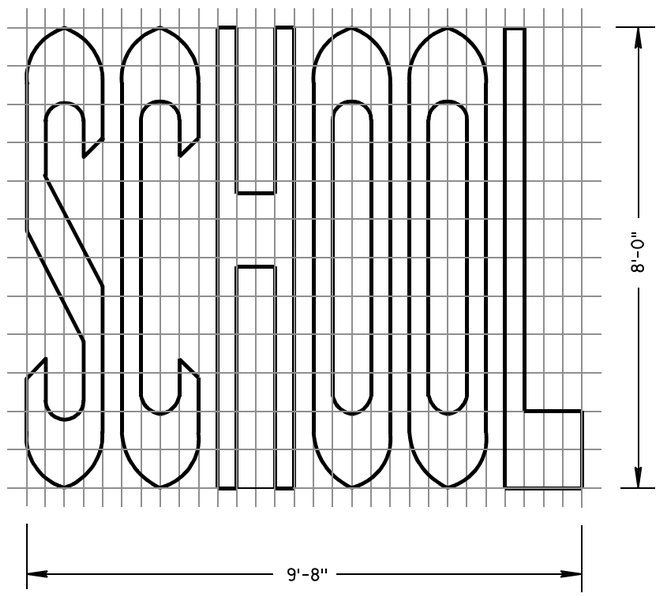


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nottbohm STATE TRAFFIC ENGINEER — IGN

FHWA

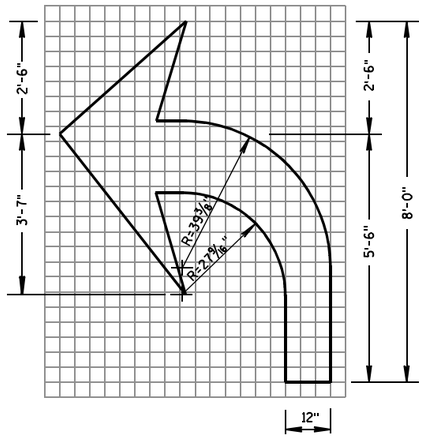
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S.D.D. 15 C 7-12b

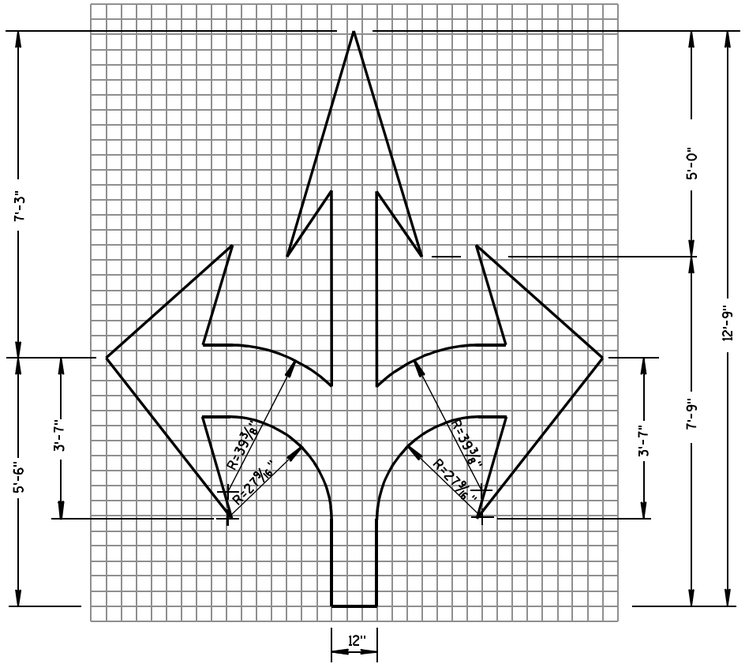
GENERAL NOTES

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

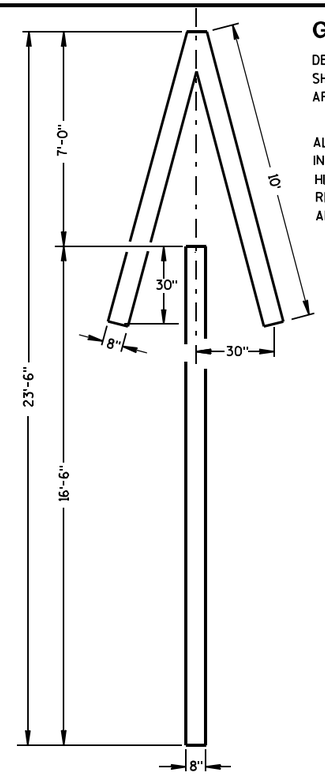
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



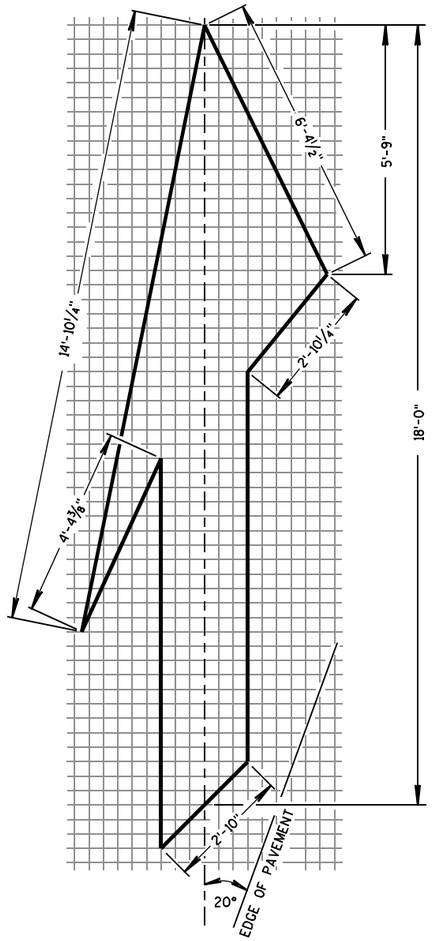
TYPE 2



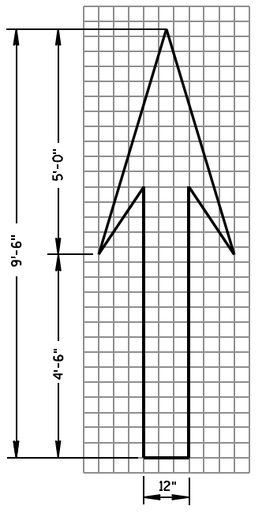
TYPE 6



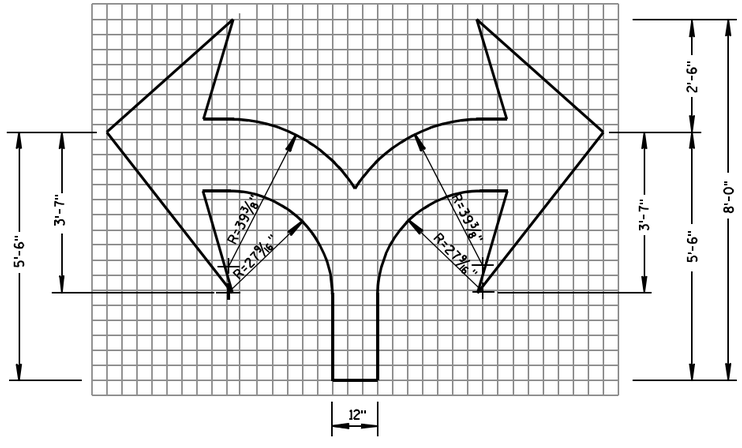
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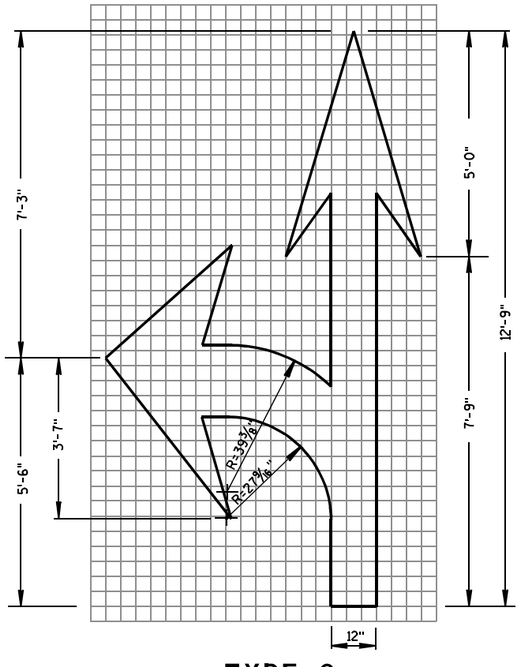
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

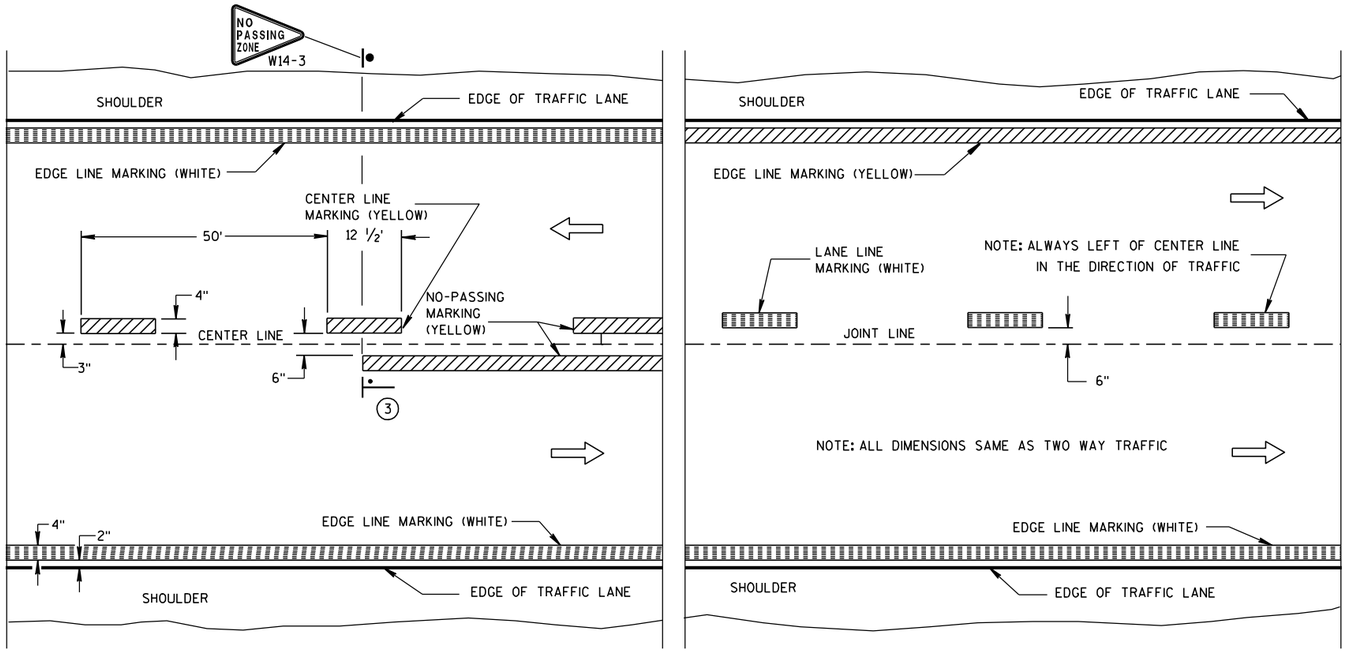
FHWA

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S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

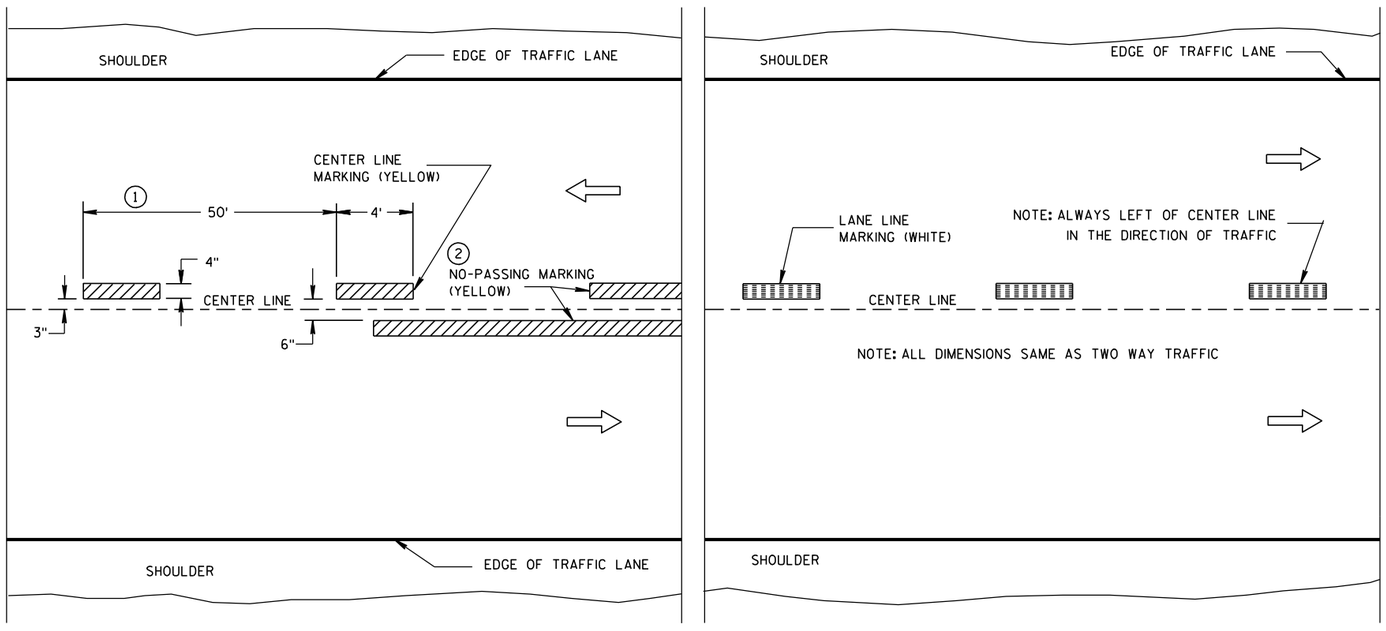
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

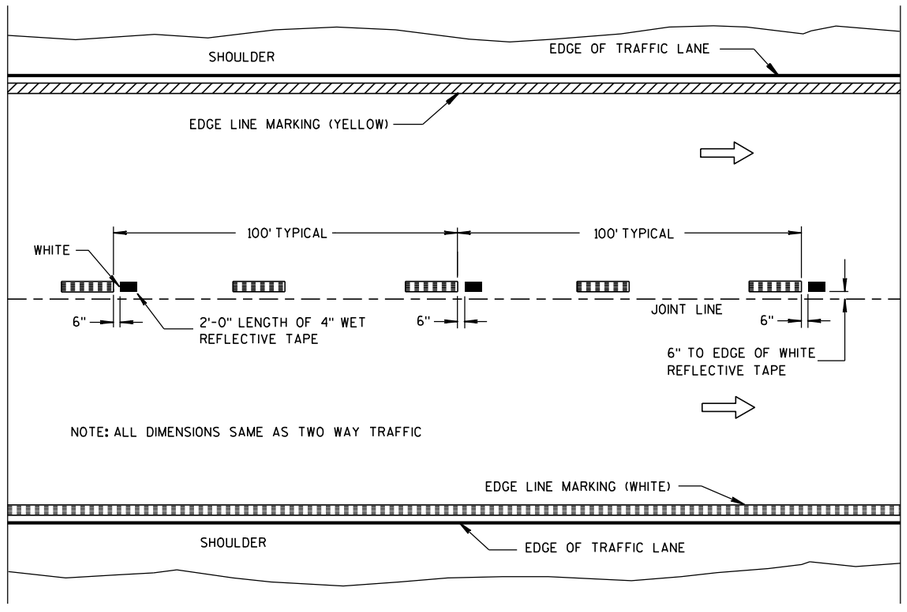


TWO WAY TRAFFIC

ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)



WET REFLECTIVE TAPE SUPPLEMENT TO SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-23-11 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER

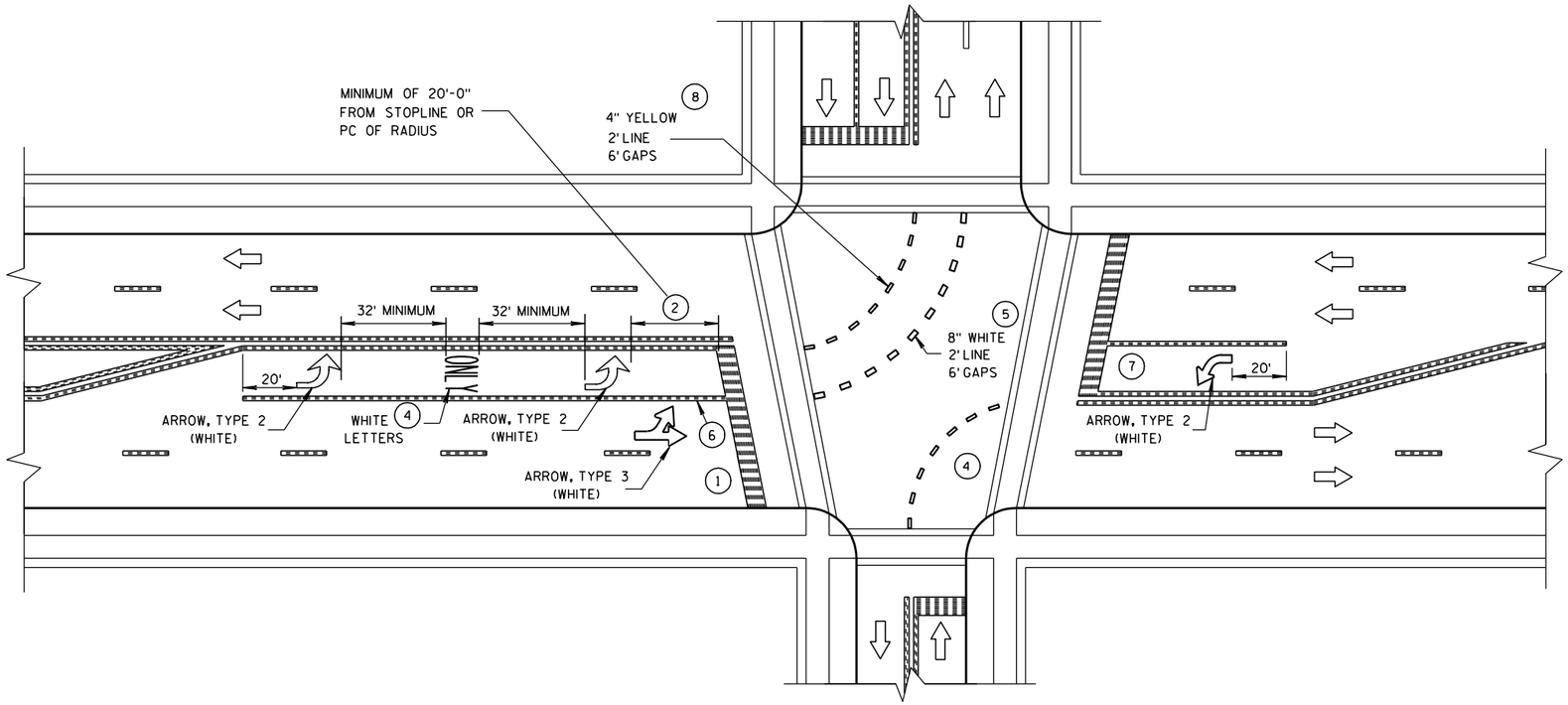
FHWA

6

S.D.D. 15 C 8-14a

6

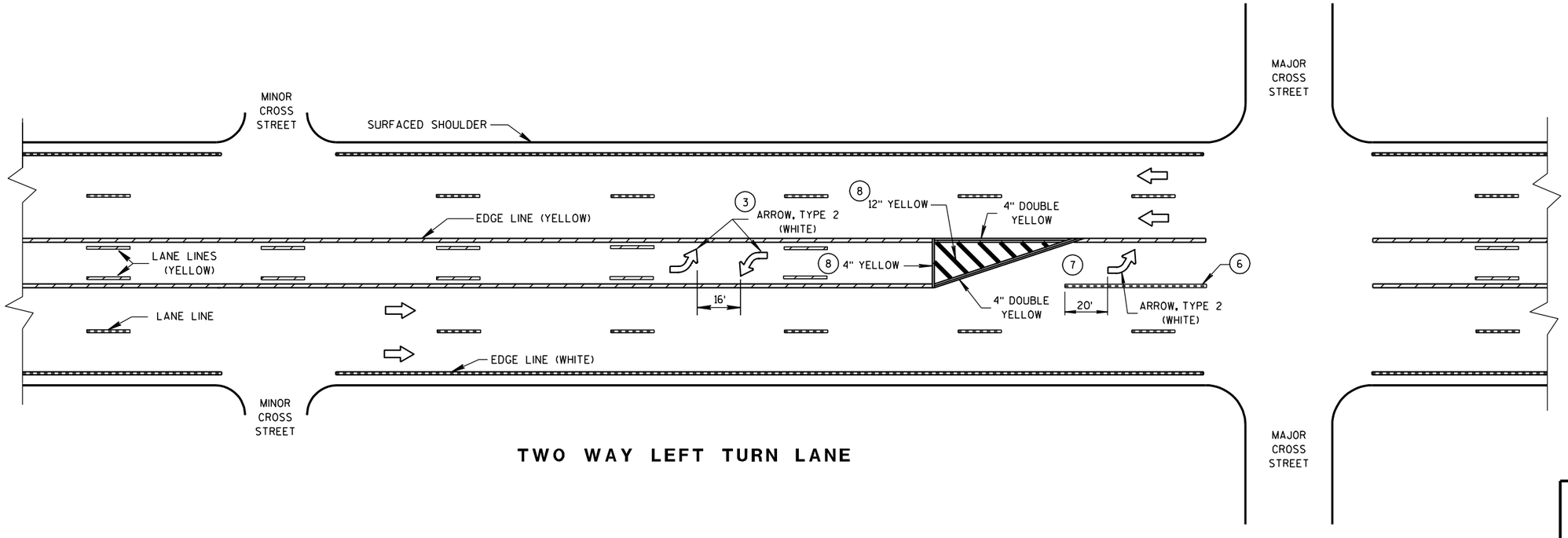
S.D.D. 15 C 8-14a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(LEFT TURN LANE)

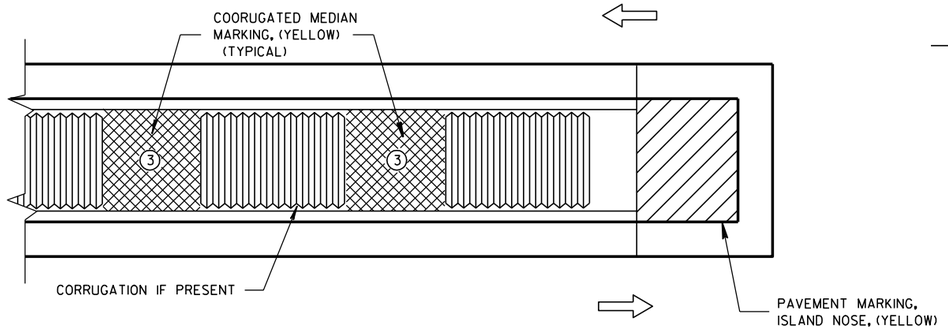
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

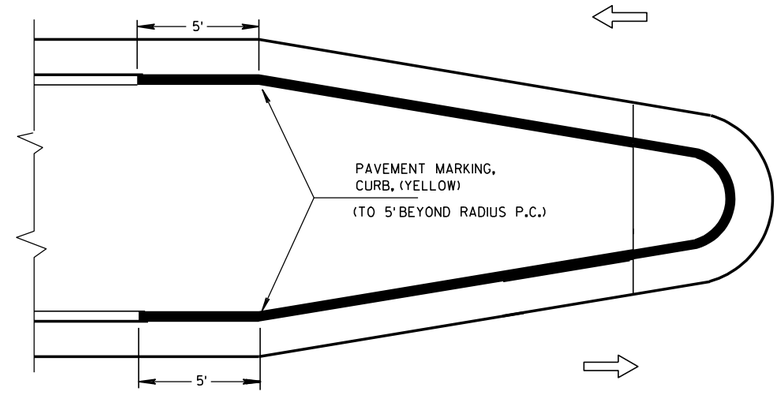
S.D.D. 15 C 8-14e

6

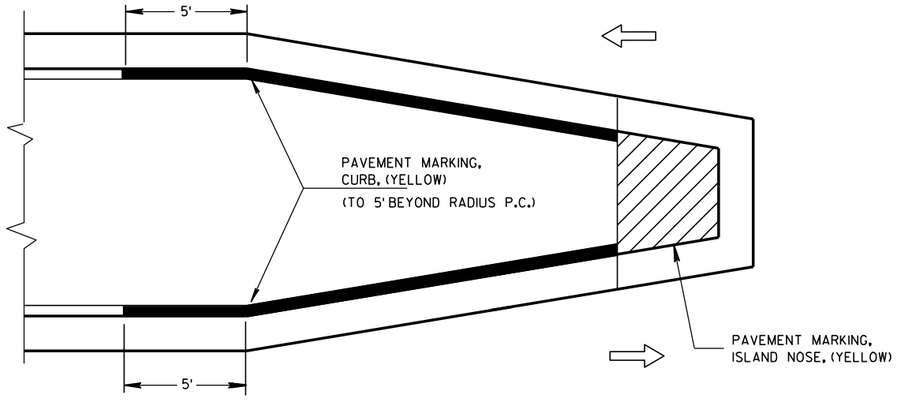
S.D.D. 15 C 8-14e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

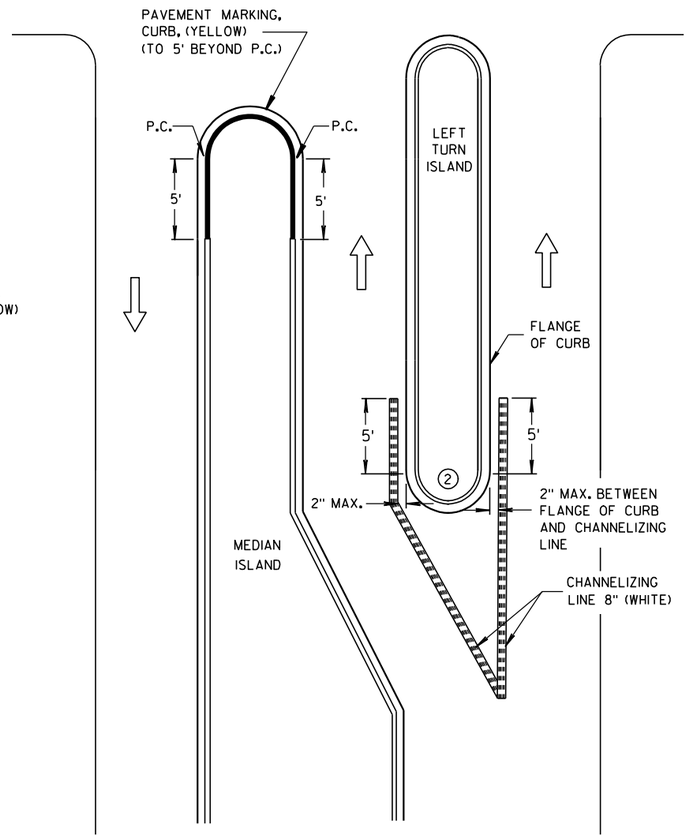


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

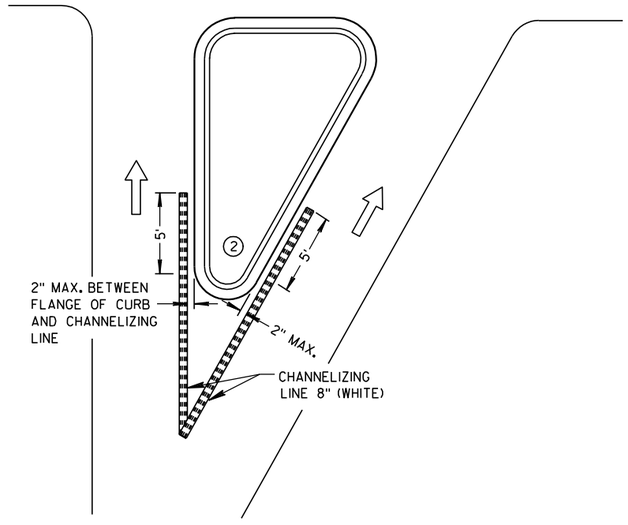
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



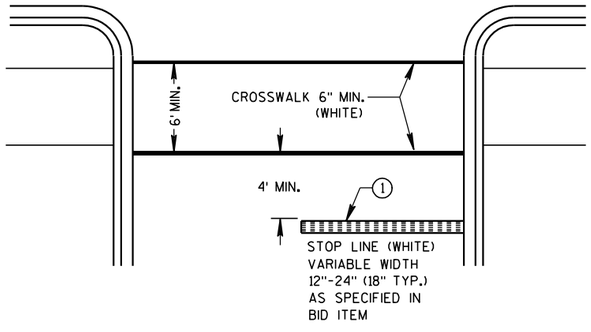
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
3. 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 AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

- ISLAND NOSE MARKING
- CURB MAKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

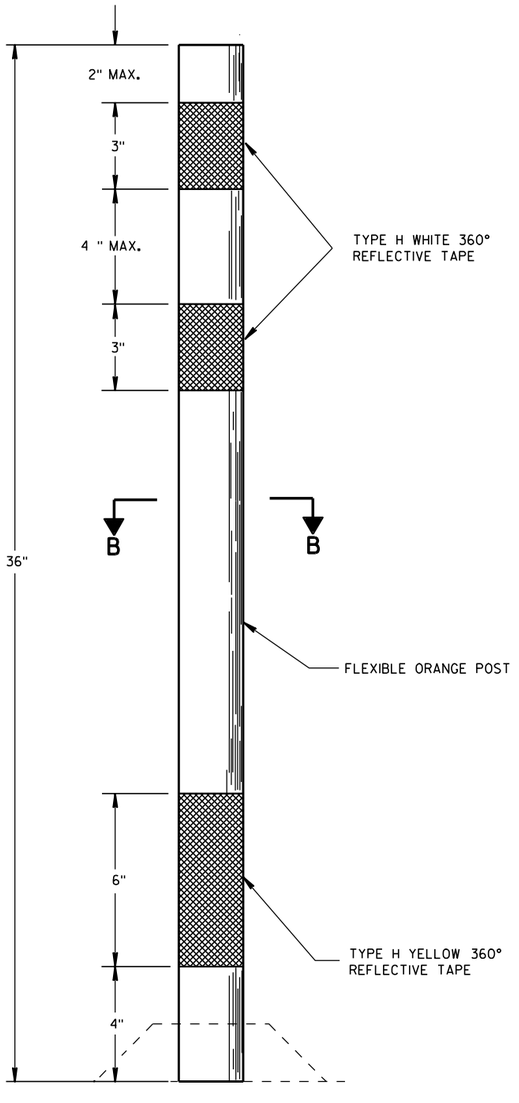
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

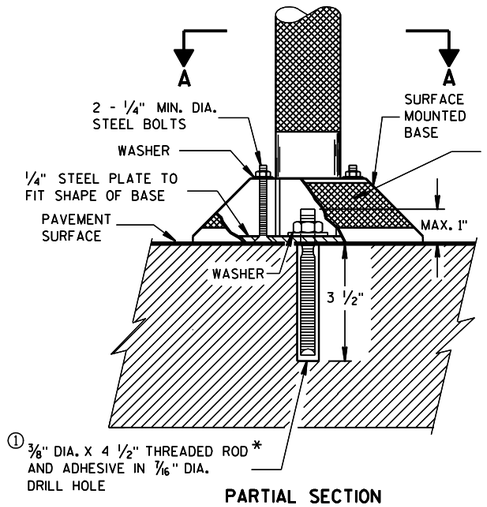
S.D.D. 15 C 8-14f

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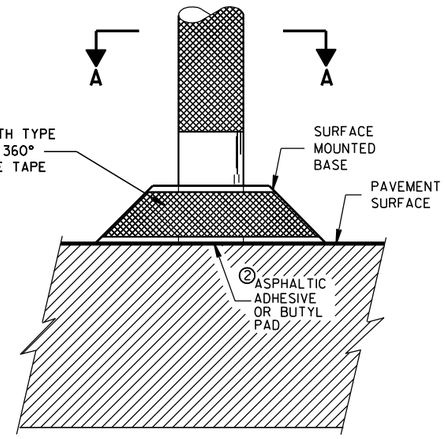
S.D.D. 15 C 8-14f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

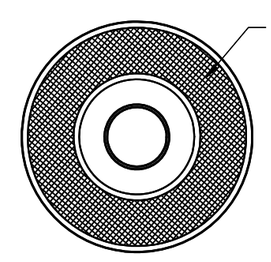
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

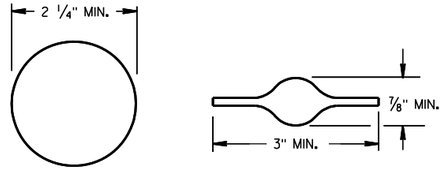
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



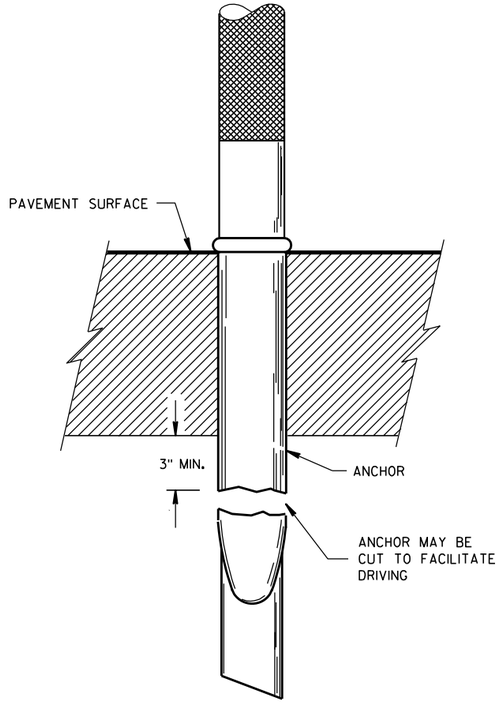
SECTION A-A

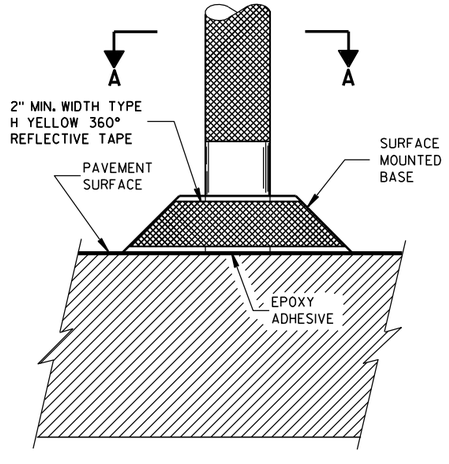
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

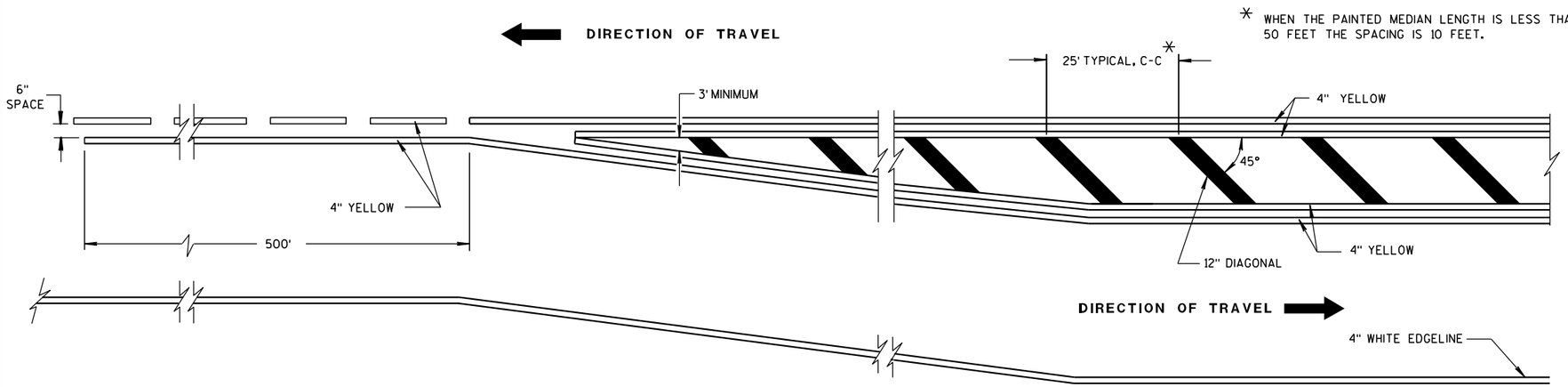
FHWA

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S.D.D. 15 C 11-5

6

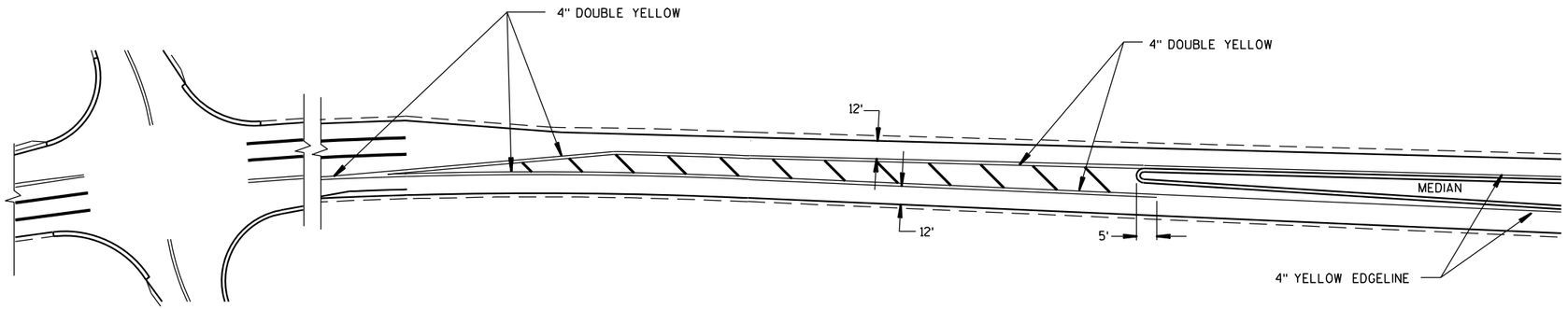
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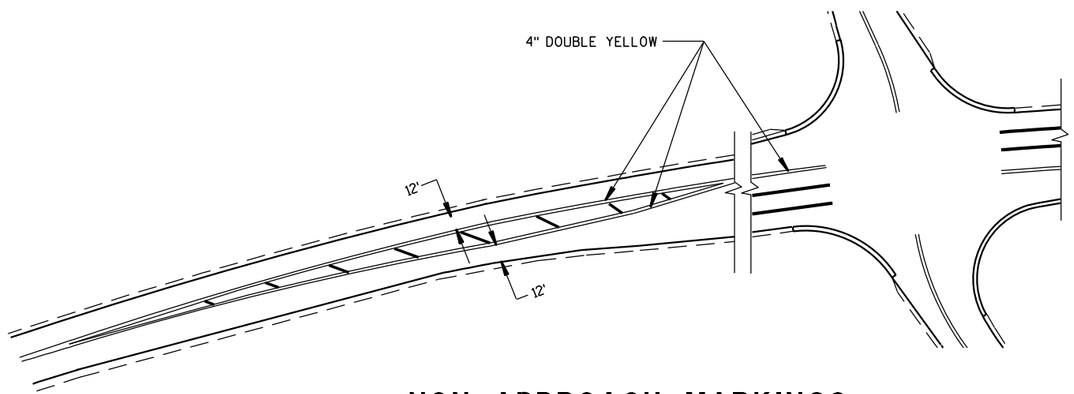
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 272 IGN
FHWA	

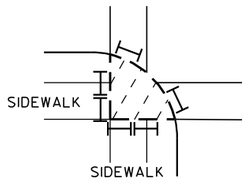
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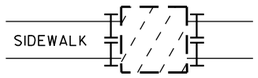
S.D.D. 15 C 18-3

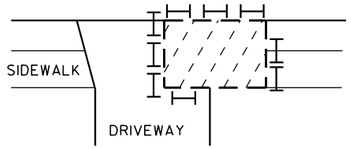
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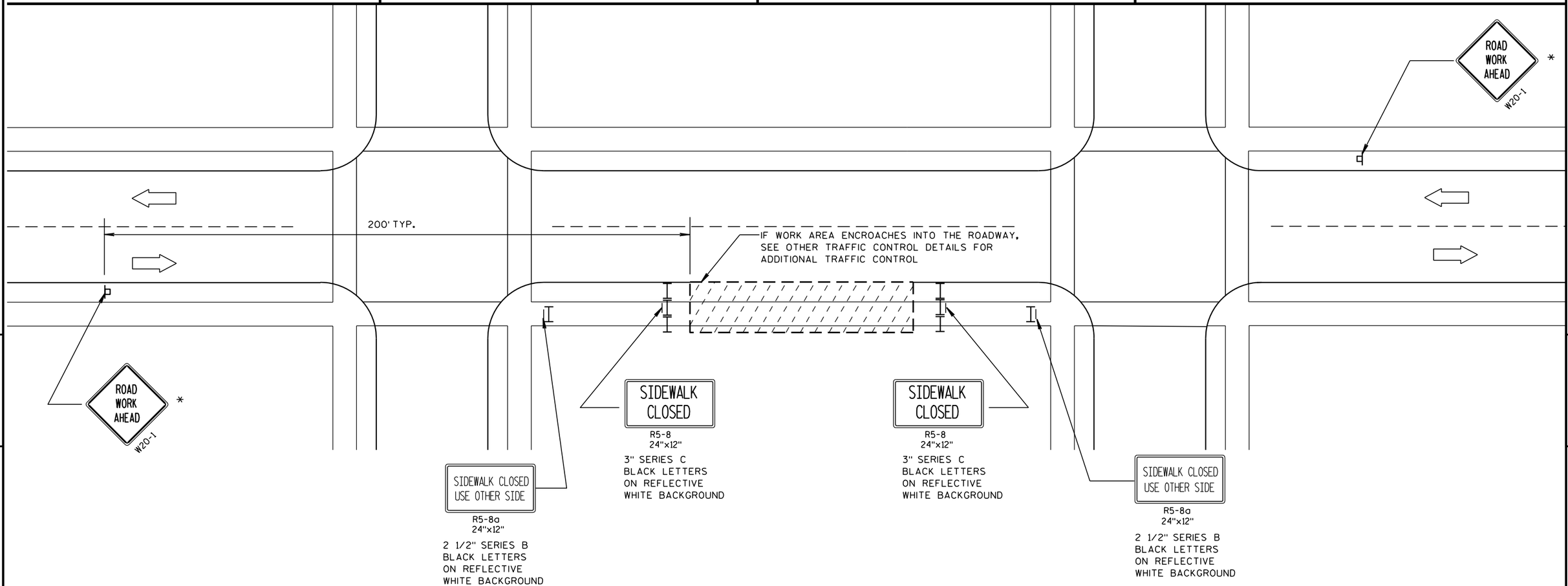
S.D.D. 15 C 18-3

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible] ENGINEER
FHWA

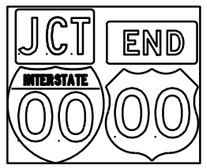
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S.D.D. 15 D 30-1

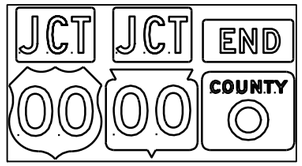
TYPICAL ASSEMBLIES



J1-1



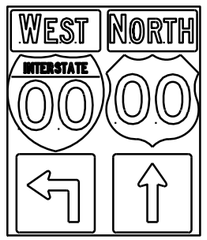
J1-2



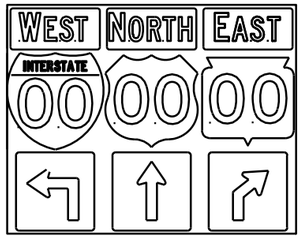
J1-3



J2-1



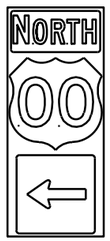
J2-2



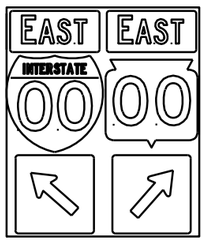
J2-3



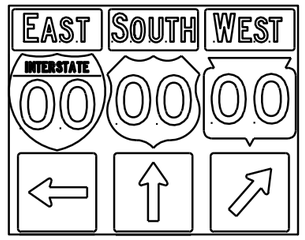
JV



J3-1



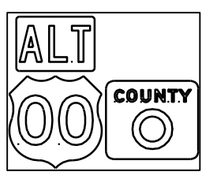
J3-2



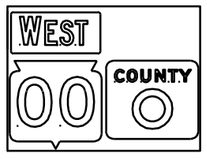
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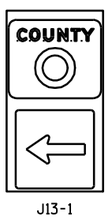
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



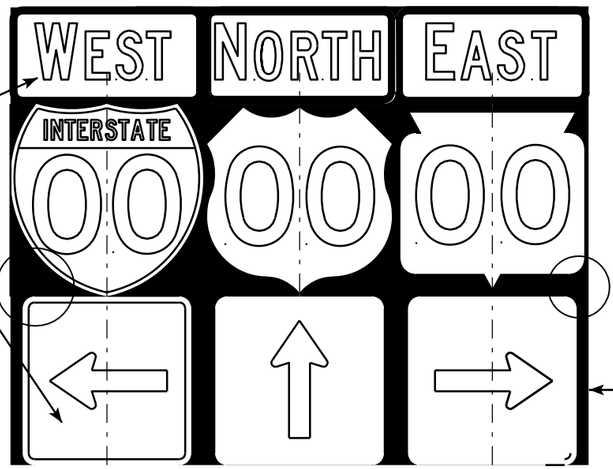
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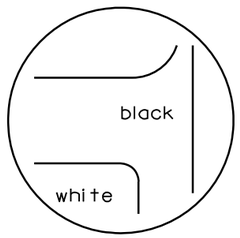


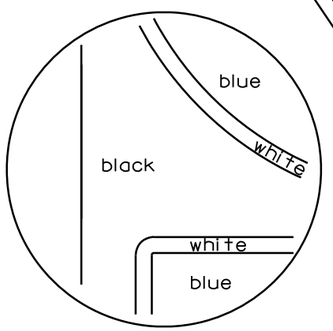
J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
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.







ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

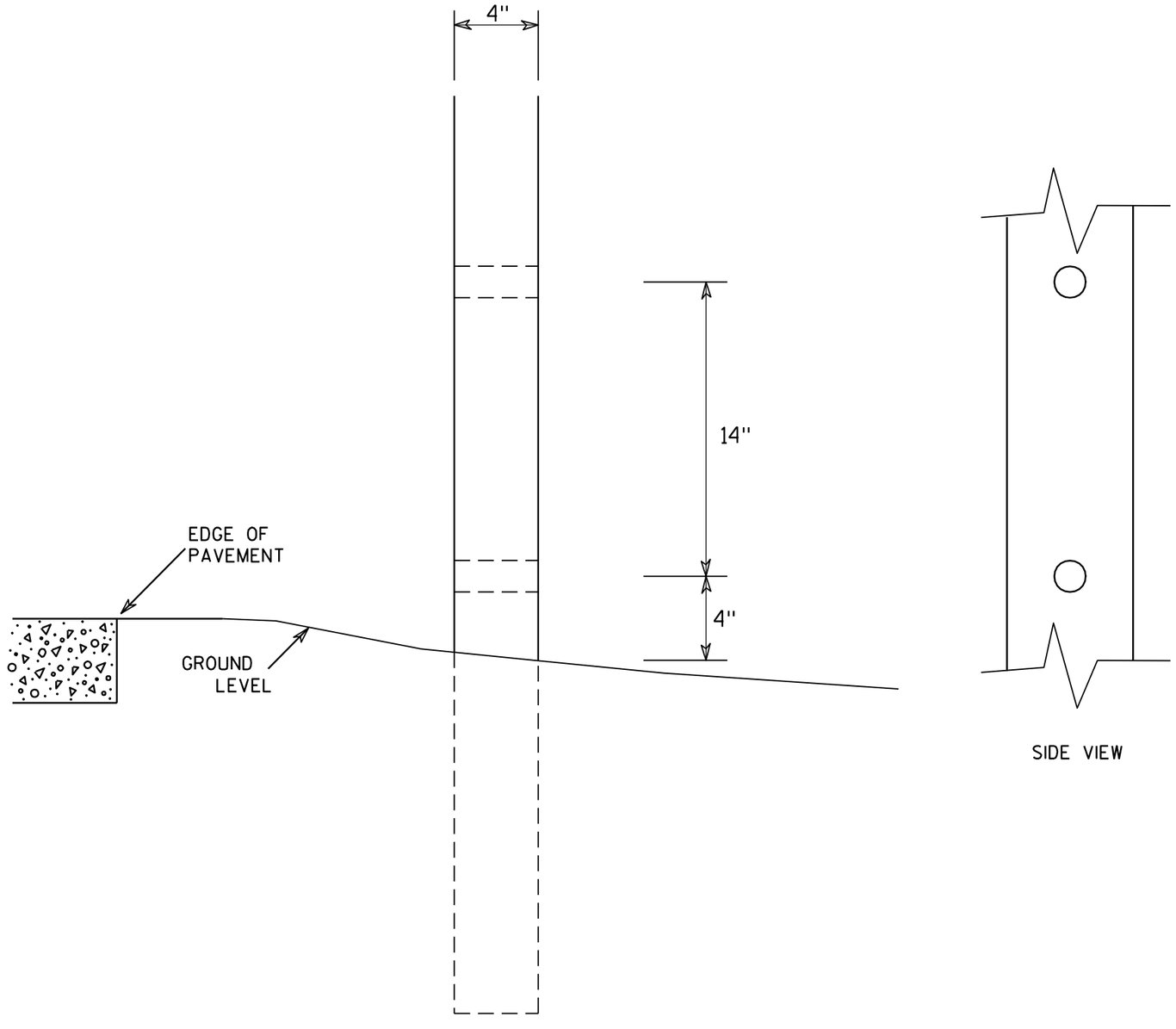
DATE 10/21/09 PLATE NO. A2-1S.6

7

7

PROJECT NO:

SHEET NO: 274 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.

7

7

4 X 6 WOOD POST MODIFICATIONS

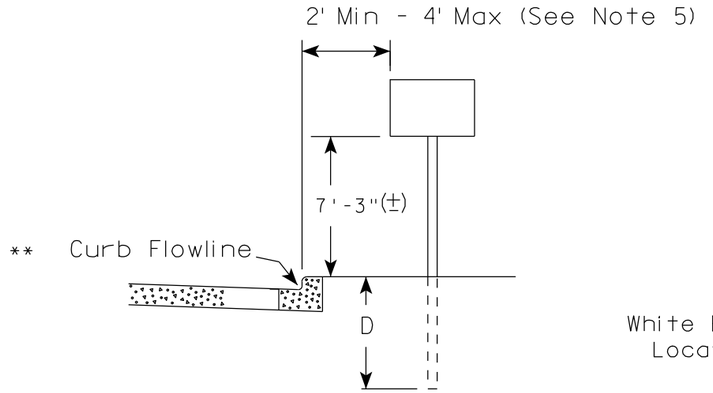
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

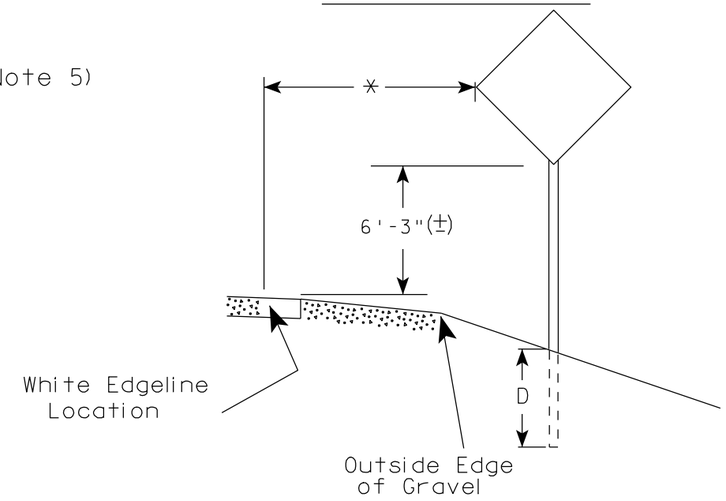
DATE 3/27/97 PLATE NO. A4-11.2

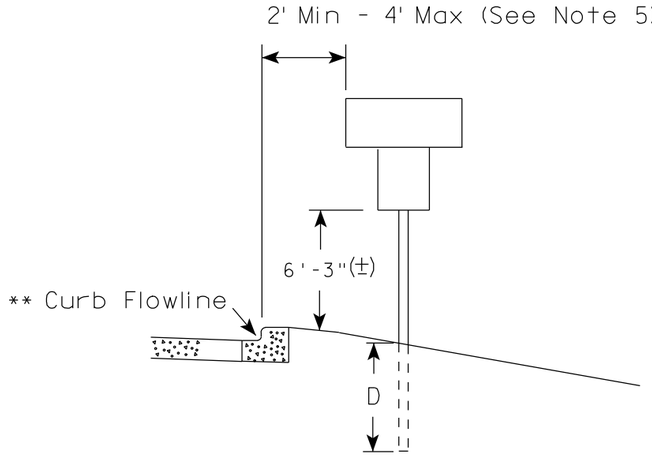
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 275	E

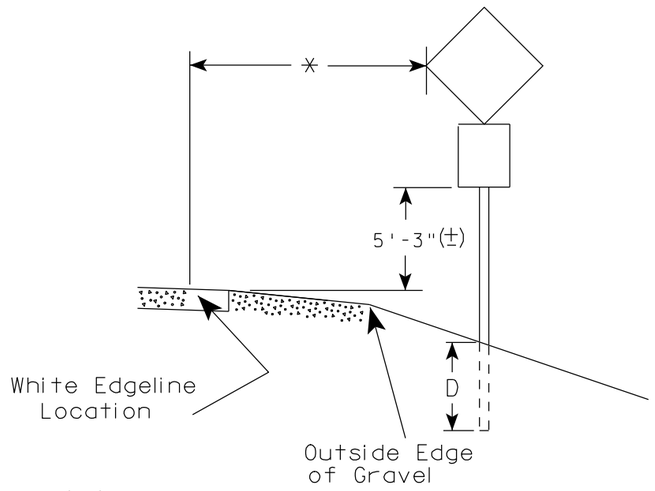
URBAN AREA



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.

GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

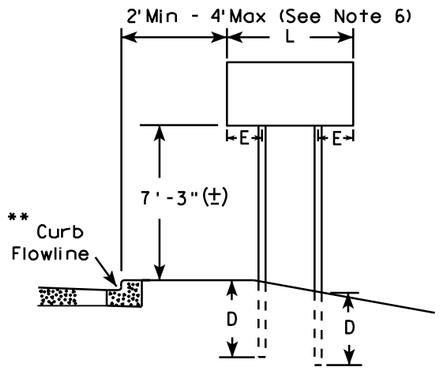
DATE 9/21/2011 PLATE NO. A4-3.16

7

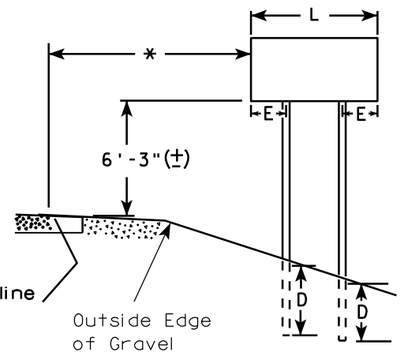
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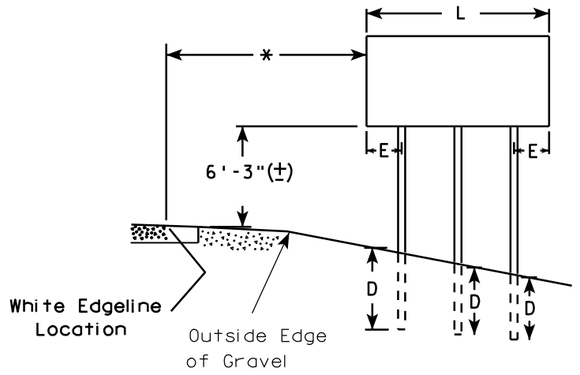
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 276 | E

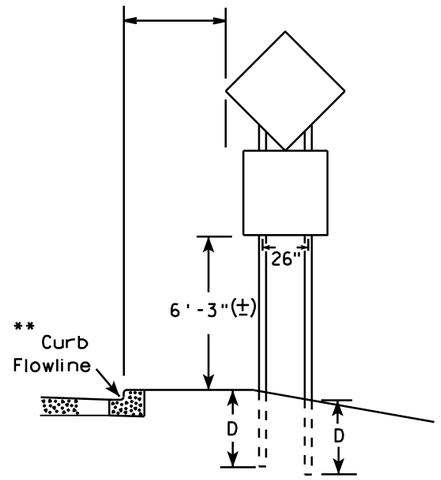
URBAN AREA



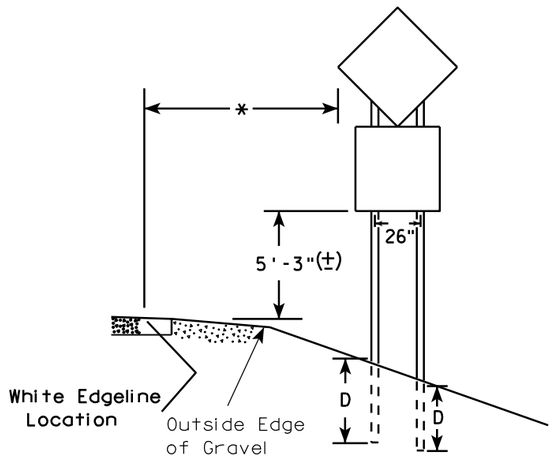
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. For multiple 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. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) 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 or 20 S.F. or less in area.

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

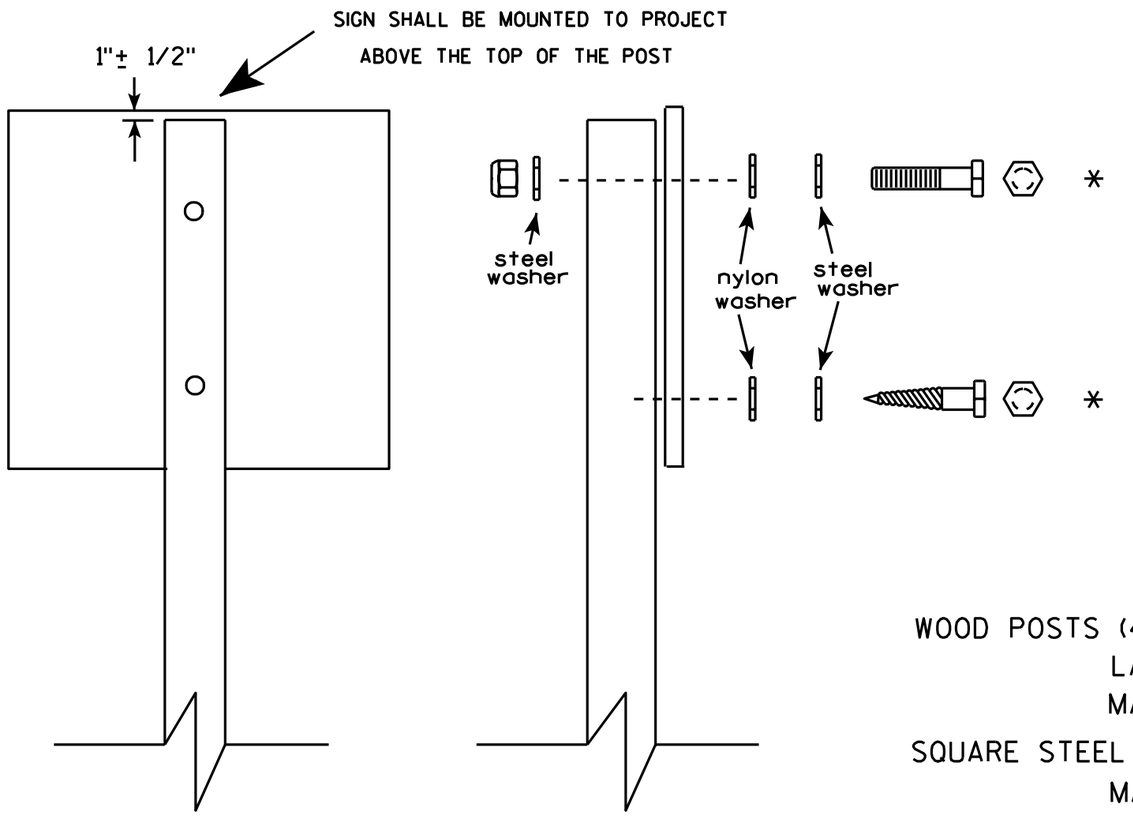
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 277	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A44.DGN PLOT DATE : 21-SEP-2011 13:36 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 109.249131:1.000000 WISDOT/CADDS SHEET 42



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

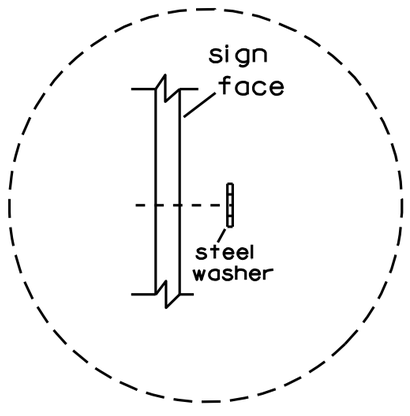
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of 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 3/23/10 PLATE NO. A4-8.7

7

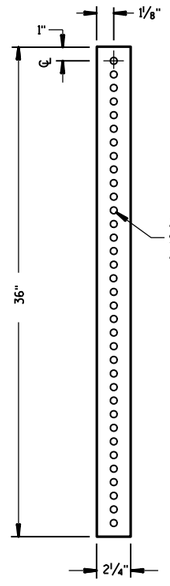
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PROJECT NO:

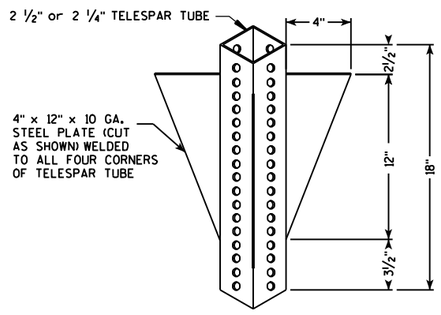
SHEET NO: 278 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

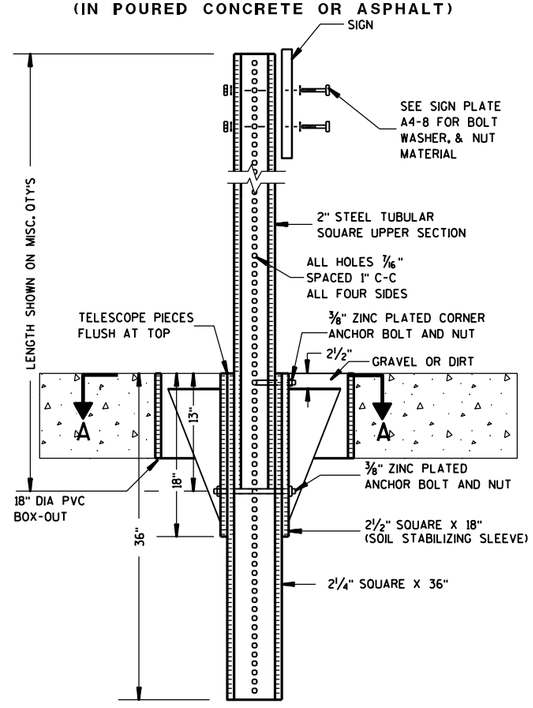
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



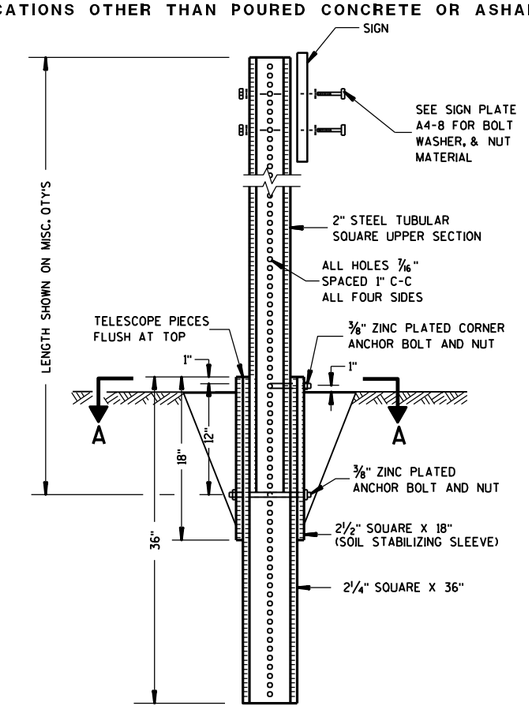
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

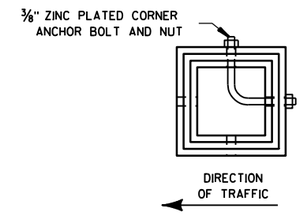


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASHALT)





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

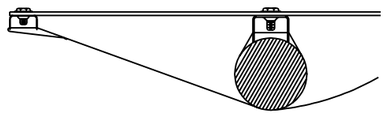
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

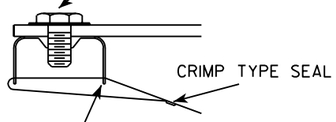
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 279	E

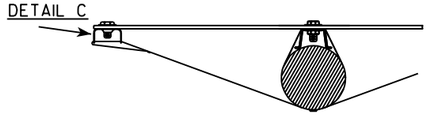
BRACE BANDING

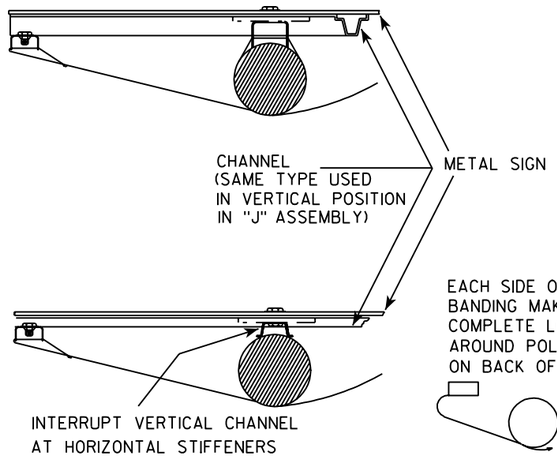


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER



DETAIL C

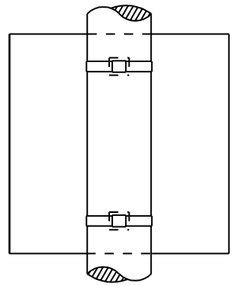


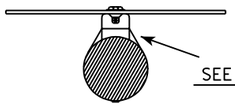


EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE

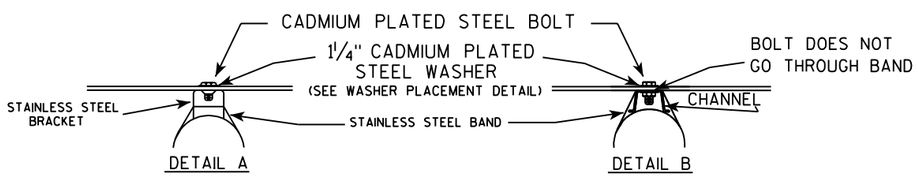
BRACKET BANDING

SINGLE SIGN

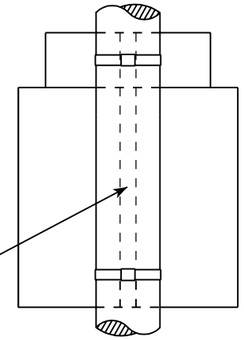




SEE DETAIL A



"J" ASSEMBLY

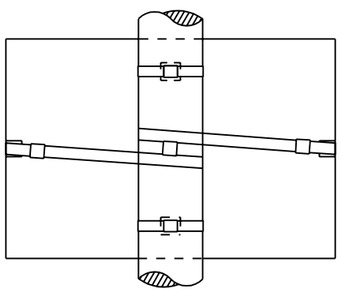


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

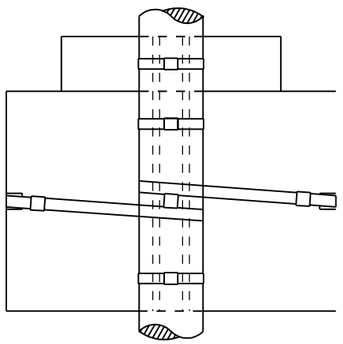
GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' 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.

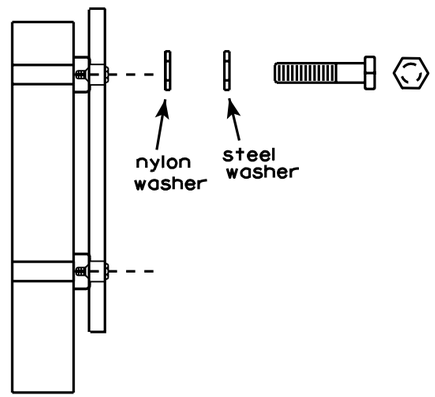


BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF 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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

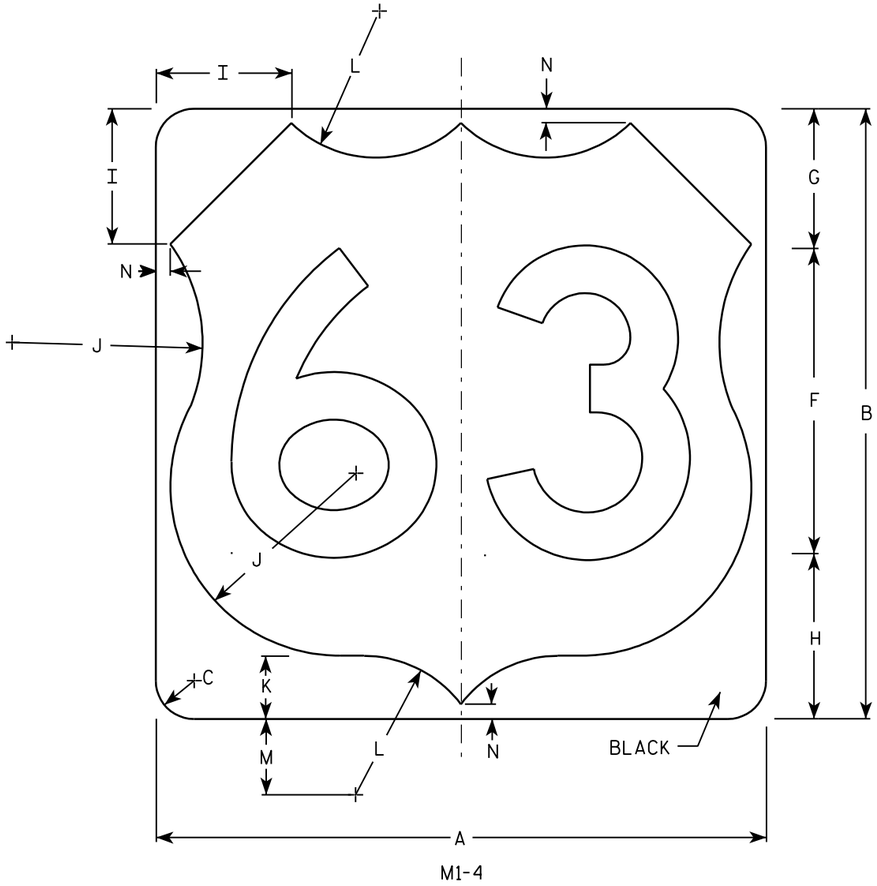
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

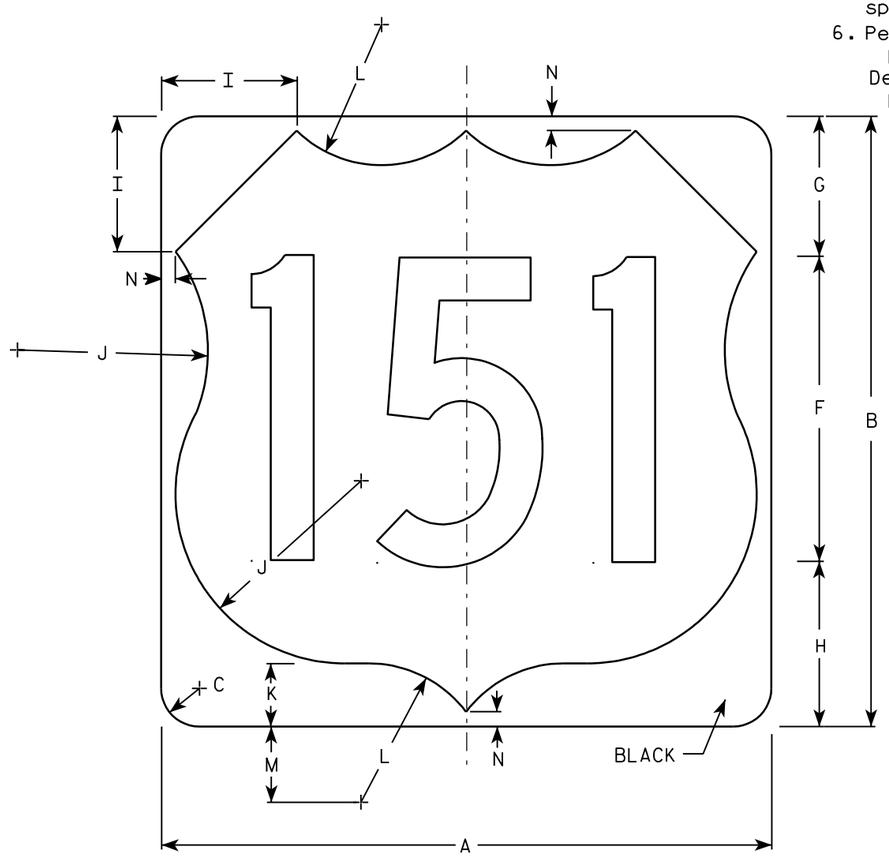
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 280	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

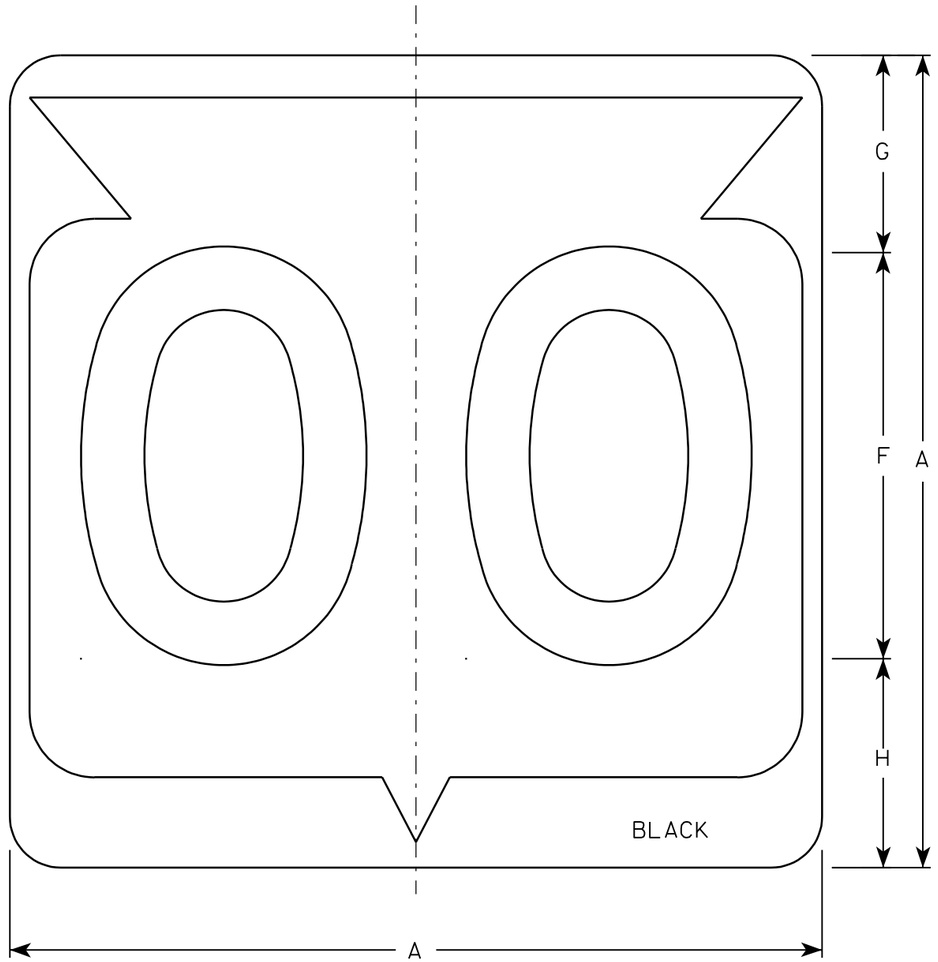
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

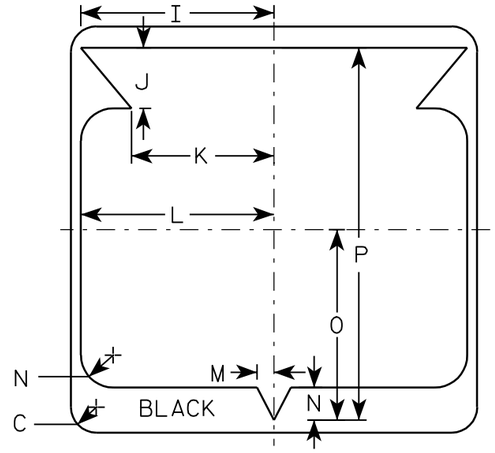
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 281 | E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			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	.36
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	.81
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	.81
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	.81

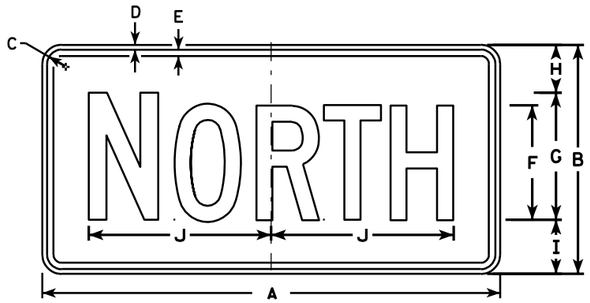
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

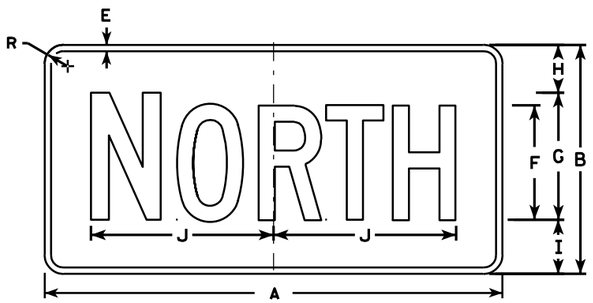
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

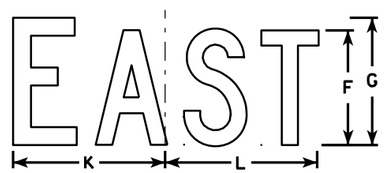
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 282	E



M3-1
MK3-1
MO3-1



MB3-1
MG3-1
MM3-1
MN3-1



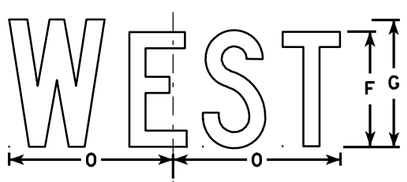
M3-2
MK3-2
MO3-2



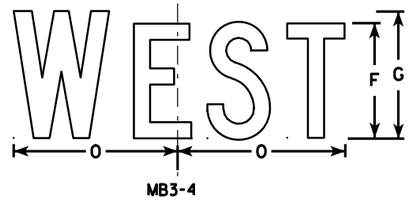
MB3-2
MG3-2
MM3-2
MN3-2

M3-3
MK3-3
MO3-3

MB3-3
MG3-3
MM3-3
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective) Message - Black
   MB3-1 thru MB3-4 Background - Blue Message - White - Type H Reflective (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective Message - Green
   MN3-1 thru MN3-4 Background - Brown Message - White - Type H Reflective
   M03-1 thru M03-4 Background - Orange - Reflective Message - Black
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

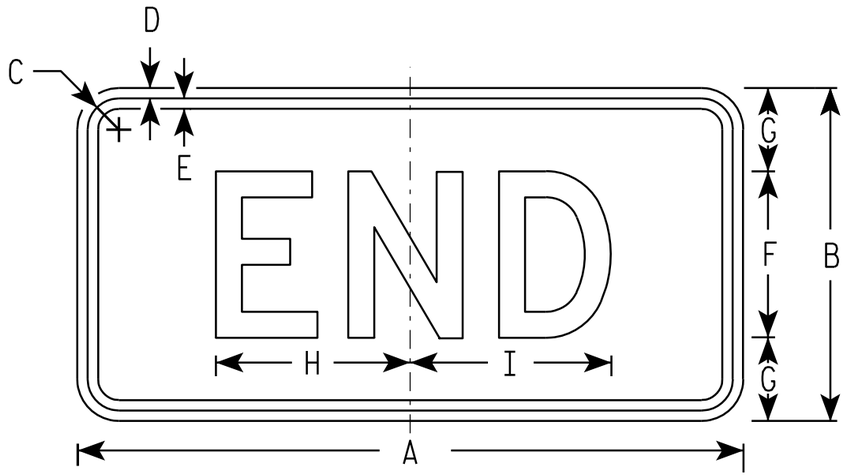
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

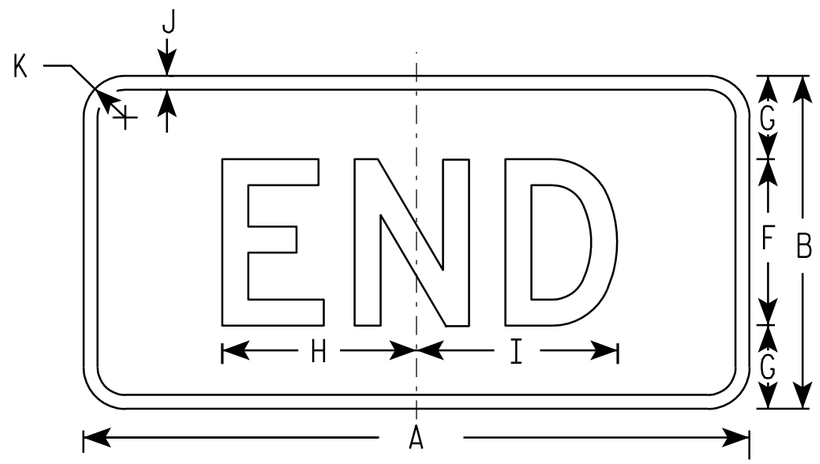
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 283	E



M4-6
MK4-6
MM4-6
MR4-6



MB4-6
MG4-6
MN4-6

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-6 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
   Message - Black

   MB4-6 Background - Blue
   Message - White - Type H Reflective (Detour or temporary Signs - Reflective)

   MG4-6 Background - Green
   Message - White - Type H Reflective

   MK4-6 Background - Green
   Message - White - Type H Reflective

   MM4-6 Background - White - Type H Reflective
   Message - Green

   MN4-6 Background - Brown
   Message - White - Type H Reflective

   MR4-6 Background - Brown
   Message - Yellow - Type H Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-6

WISCONSIN DEPT OF TRANSPORTATION

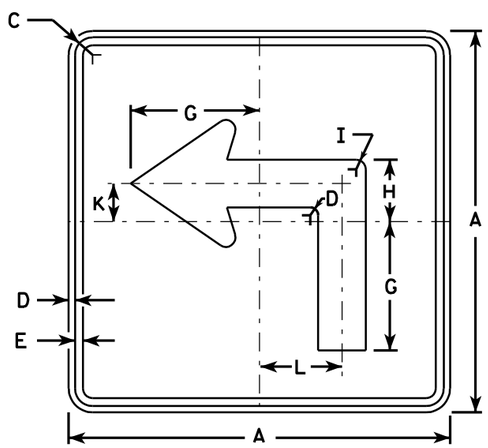
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-6.7

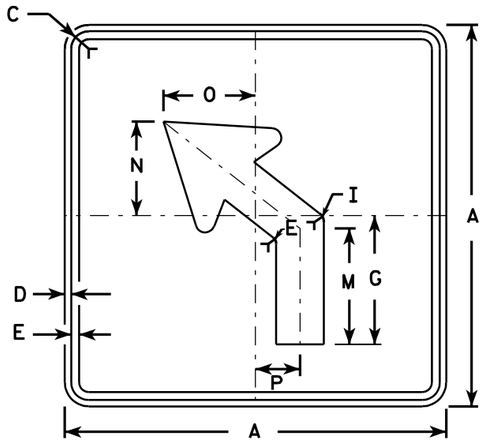
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 284 | E

7

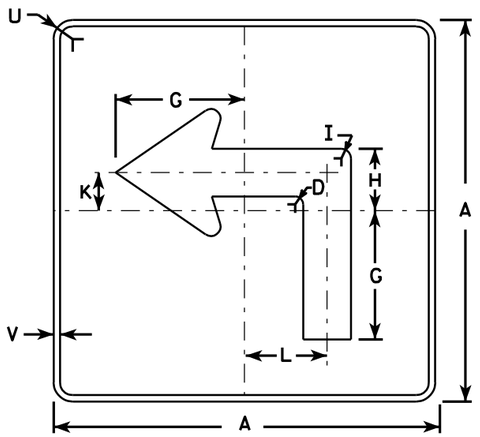
FILE NAME : C:\Users\PROJECTS\tr_stdplate\M46.DGN PLOT DATE : 10-NOV-2010 12:57 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 5.462457:1.000000
WISDOT/CADDS SHEET 42



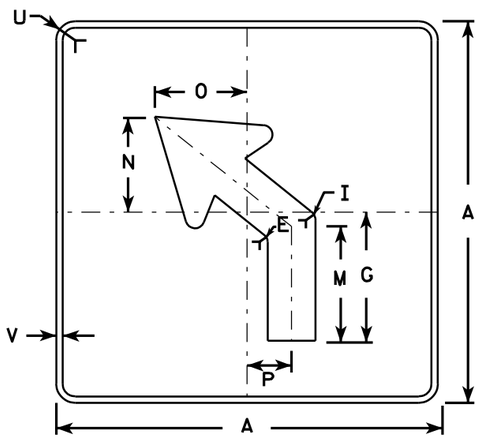
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



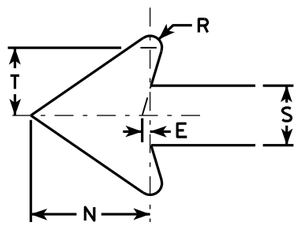
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB5-1 and MB5-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG5-1 and MG5-2 Background - Green Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective Message - Green
   MN5-1 and MN5-2 Background - Brown Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Reflective Message - Black
   MR5-1 and MR5-2 Background - Brown Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

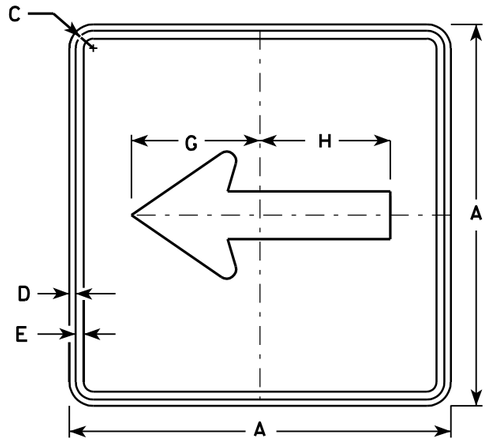
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

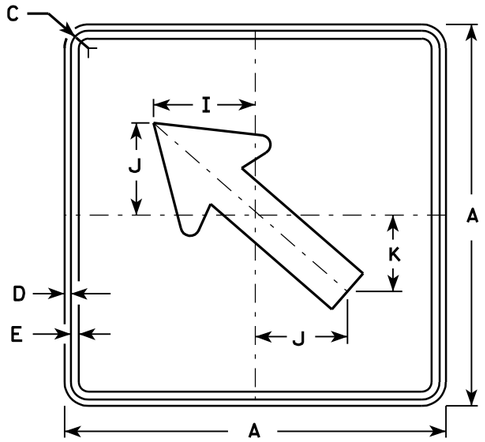
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M5-1.11

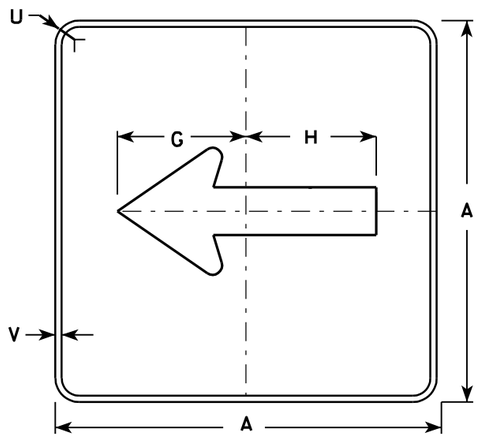
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 285	E



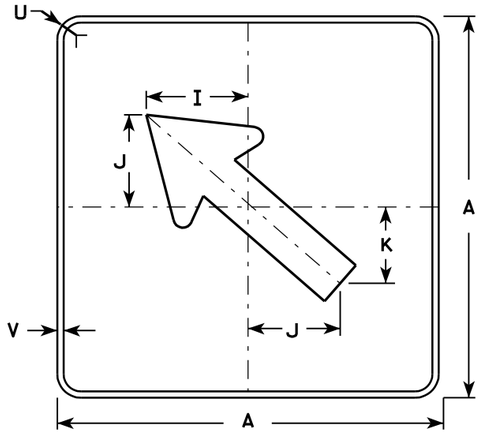
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



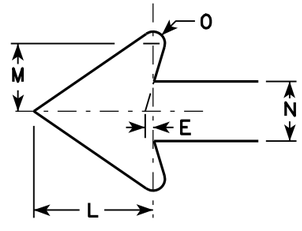
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
   MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective Message - Black
   MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

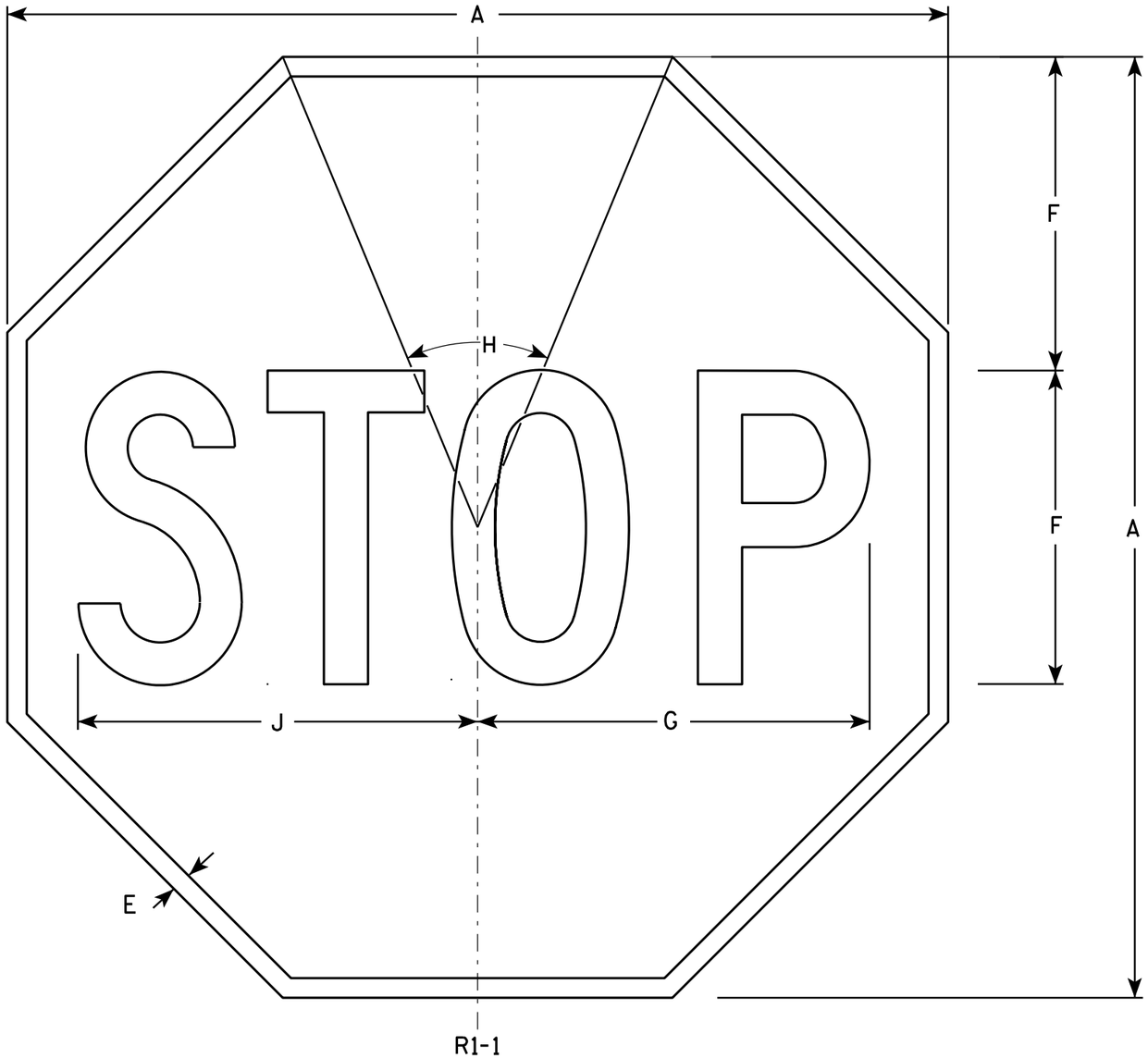
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 286	E



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	24				3/8	8	10	45°		10 1/4																	3.31
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

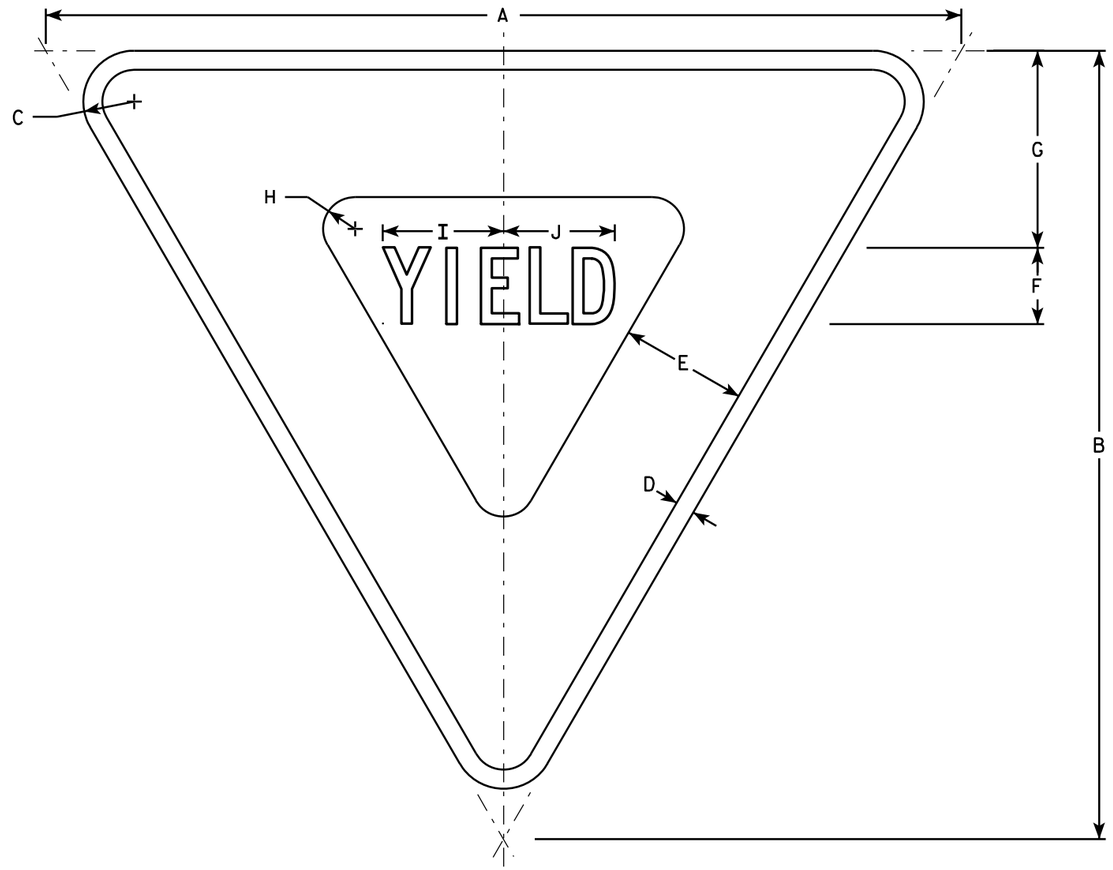
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 287	E



R1-2

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 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. The border strip and word message are reflectorized red.

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	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

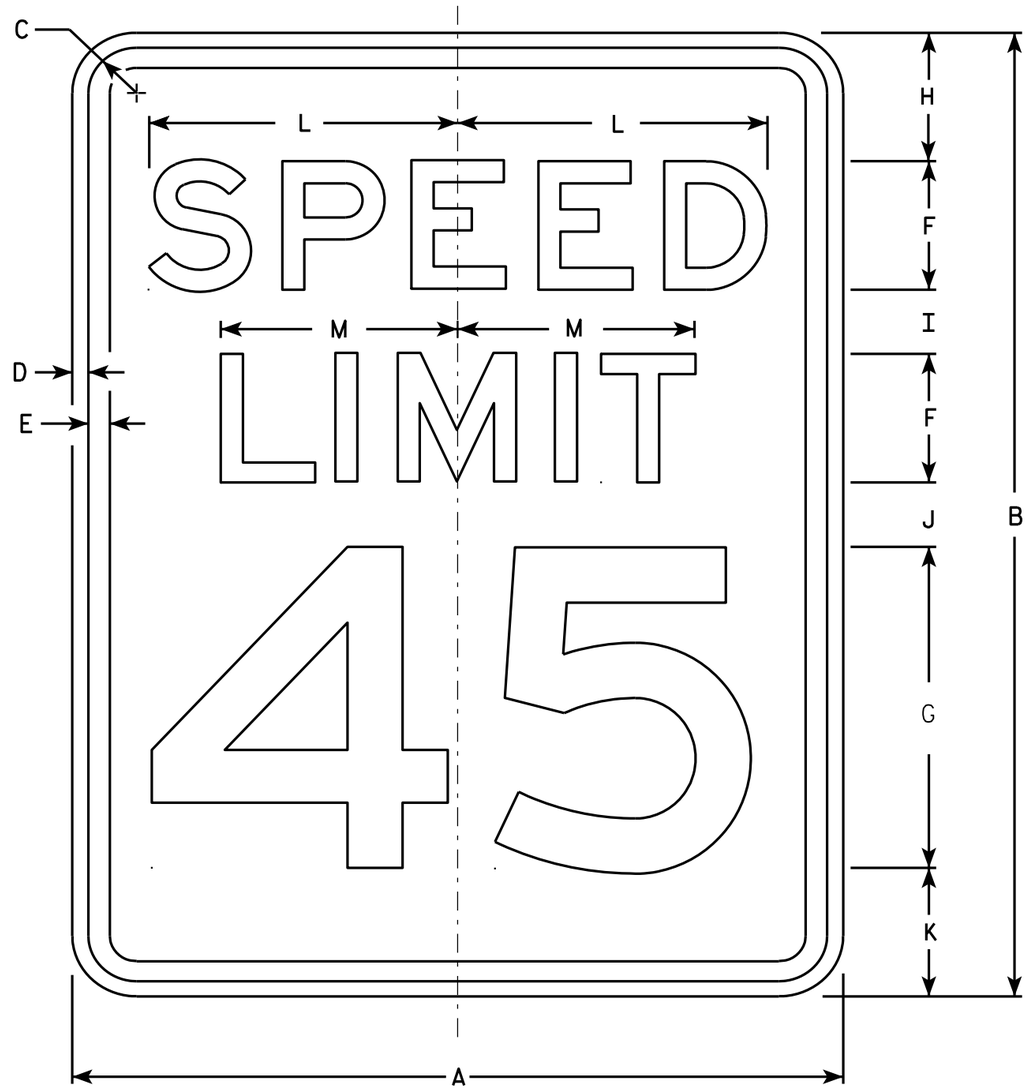
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 288 | 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

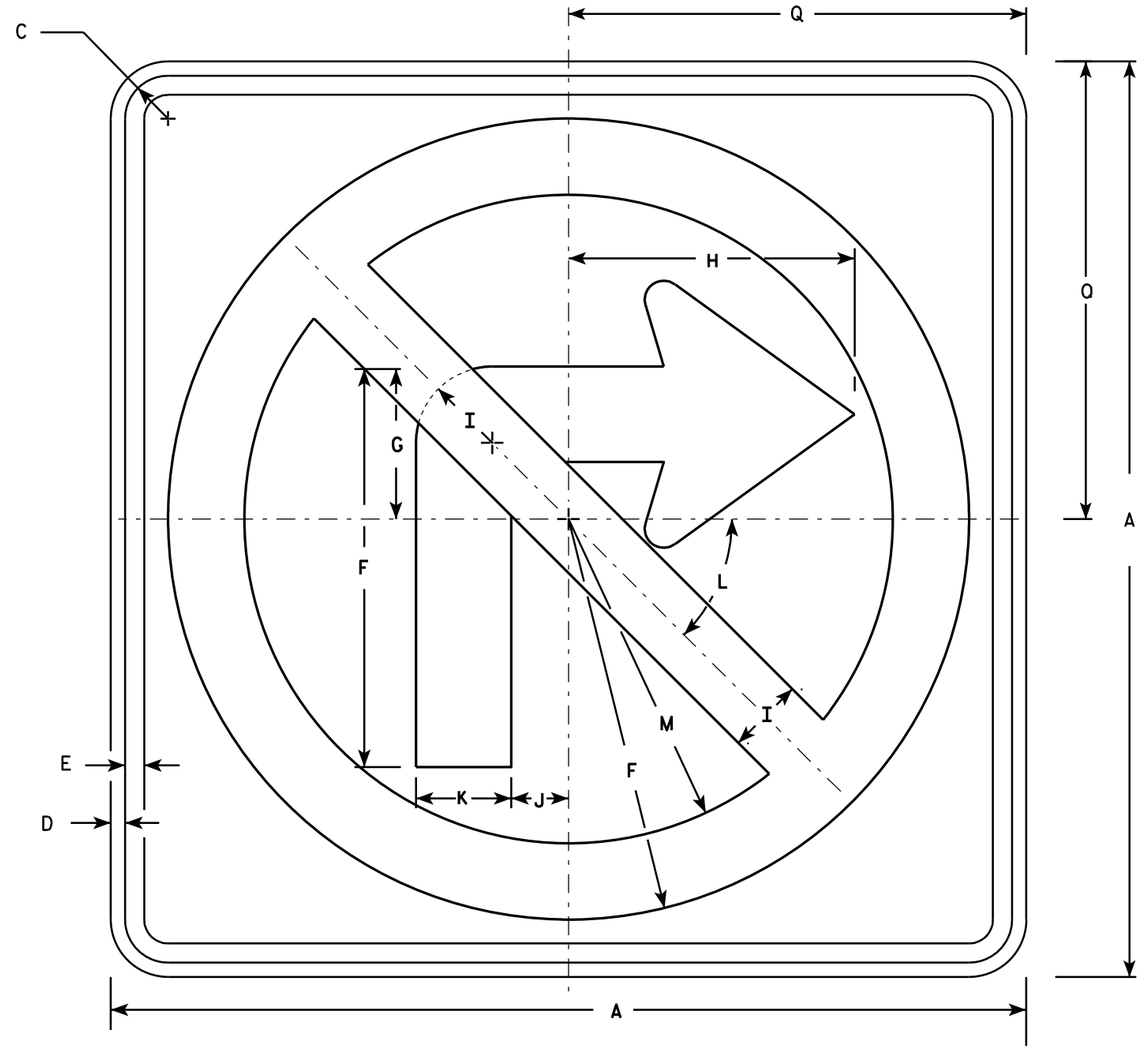
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

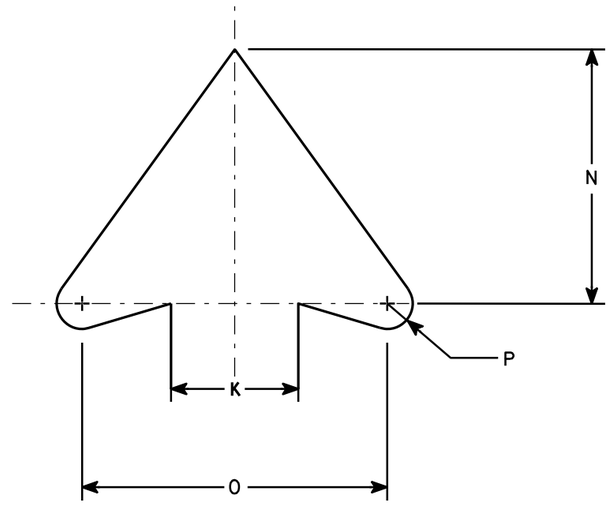
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 289 | E



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

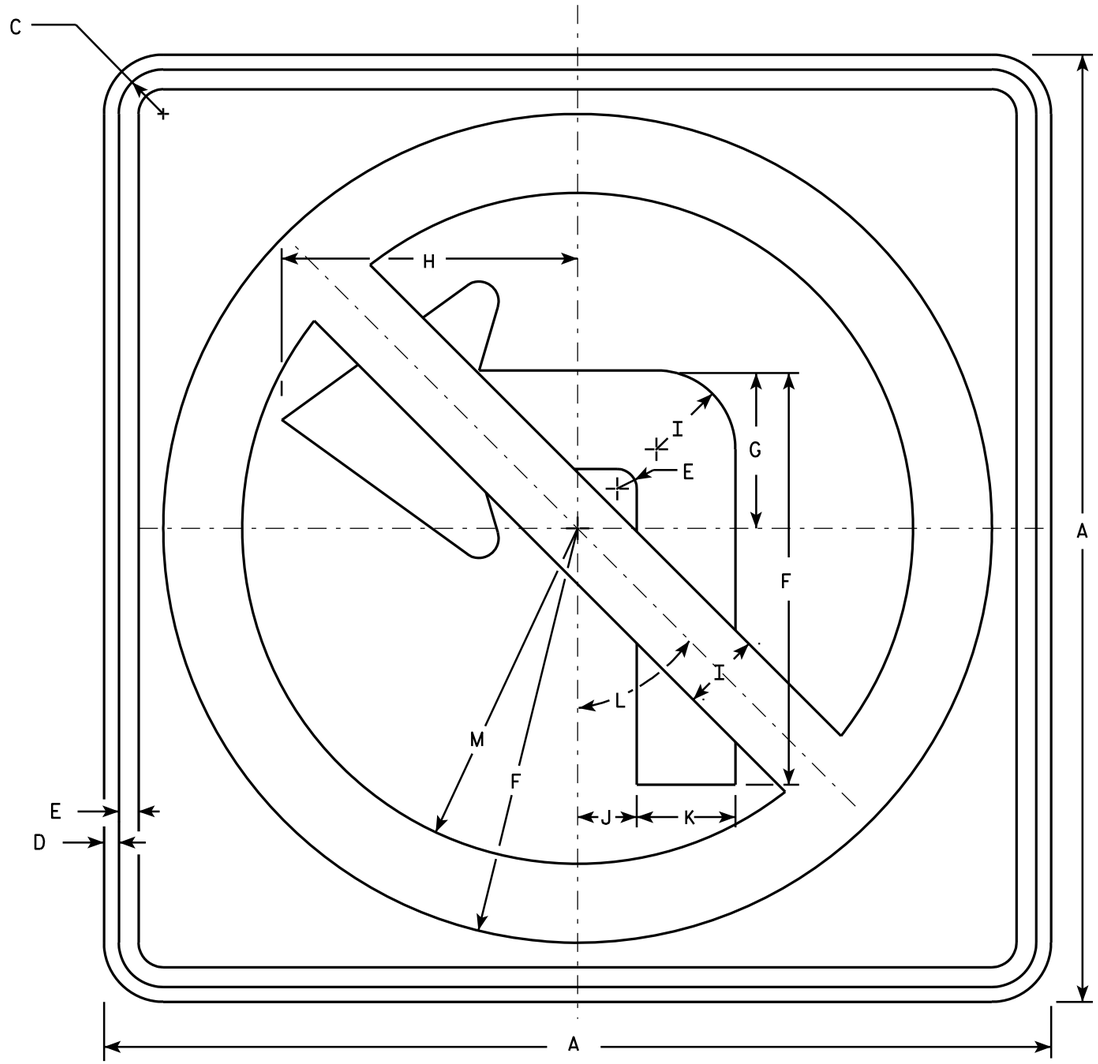
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

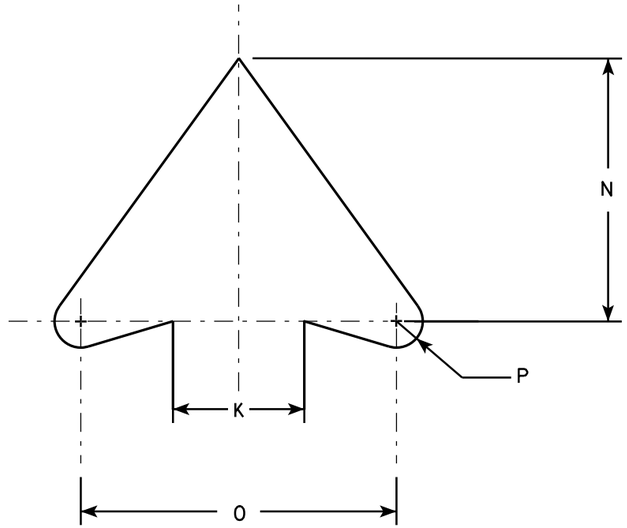
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 290	E



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

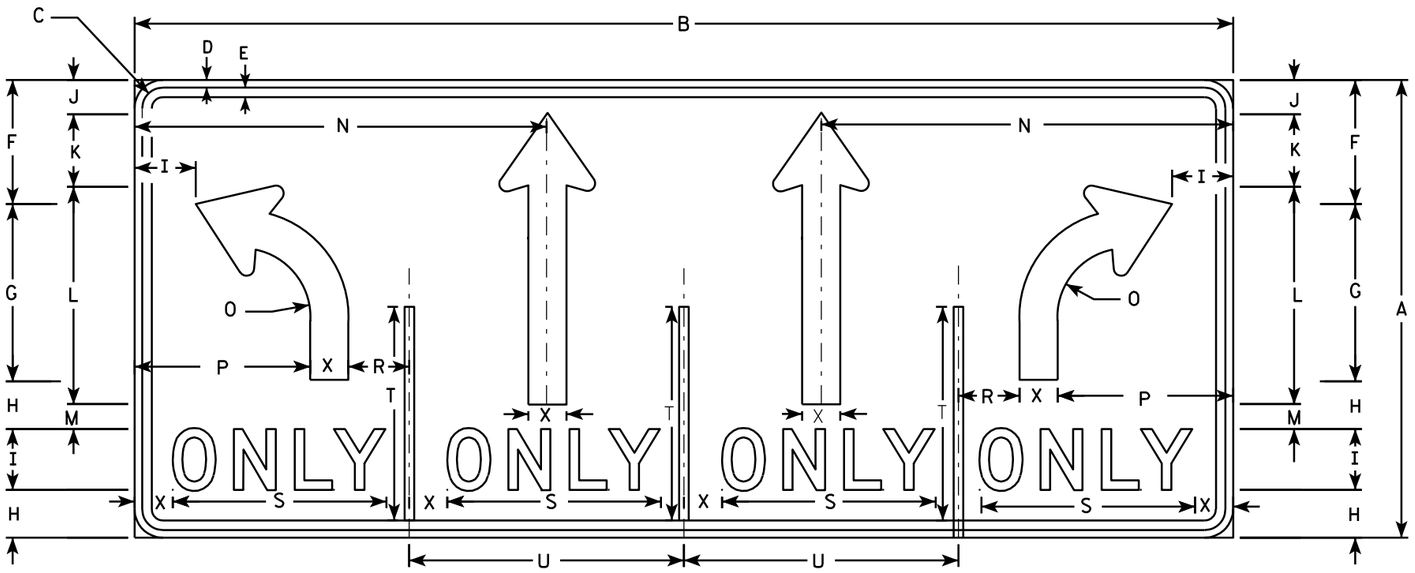
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

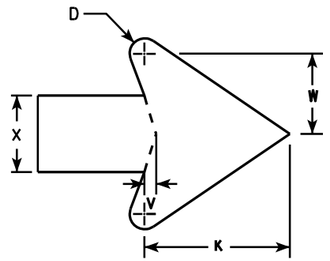
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 291	E



R3-8V

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	72	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	27	4 1/2	11 1/2		4	14	14	18	3/8	2 5/8	2 1/2			15.0
2M	30	72	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	27	4 1/2	11 1/2		4	14	14	18	3/8	2 5/8	2 1/2			15.0
3																											
4	48	108	2 1/4	3/4	1	14 3/8	17 1/4	5 3/8	6	5 3/8	7 1/8	21 1/2	3	40 1/2	7 1/4	17 1/4		6	20 5/8	22 3/8	27	5/8	4	3 3/4			36.0
5	48	108	2 1/4	3/4	1	14 3/8	17 1/4	5 3/8	6	5 3/8	7 1/8	21 1/2	3	40 1/2	7 1/4	17 1/4		6	20 5/8	22 3/8	27	5/8	4	3 3/4			36.0

STANDARD SIGN
R3-8V

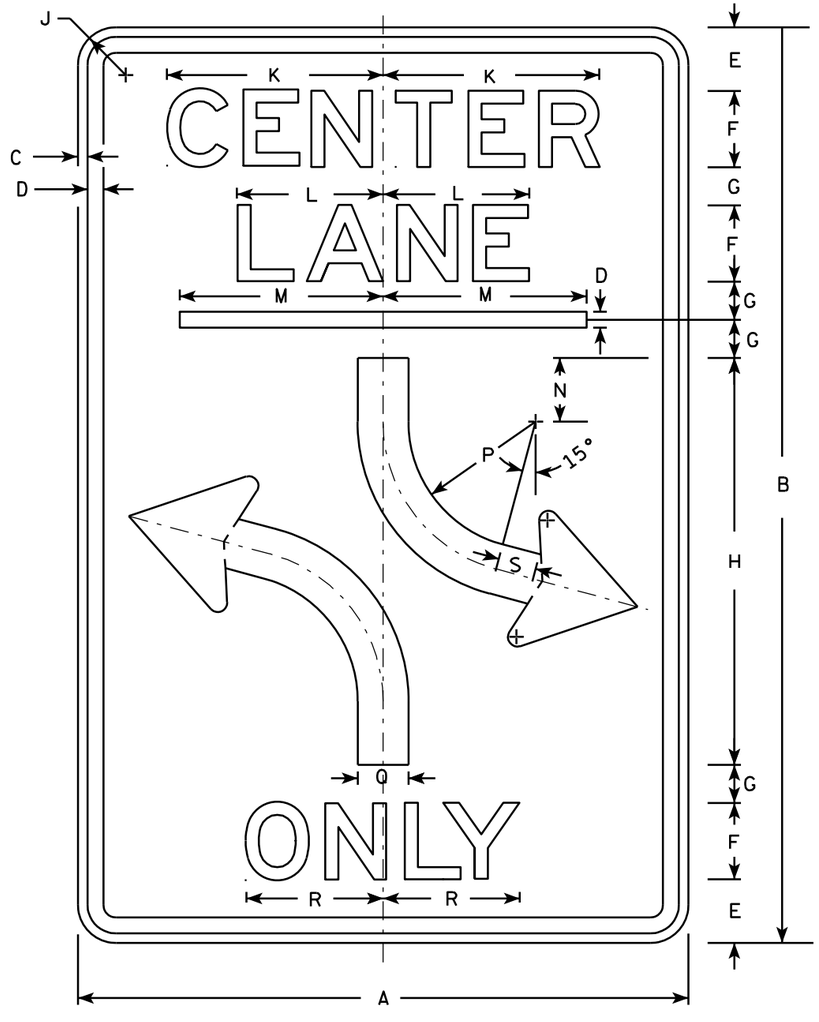
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/18/11 PLATE NO. R3-8V.3

PROJECT NO:

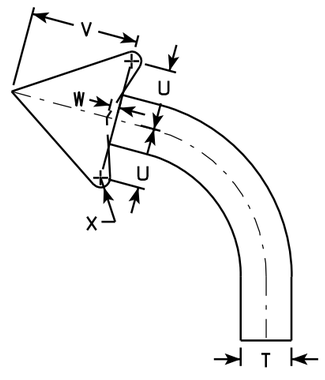
SHEET NO: 292 E



R3-9B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
2M	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
3	36	48	5/8	7/8	3 1/2	5	1 1/2	20		2 1/4	14 1/8	9 1/2	12	3		4	3	9 7/8	2		3 1/2	6 1/8	1/2				12.0
4																											
5																											

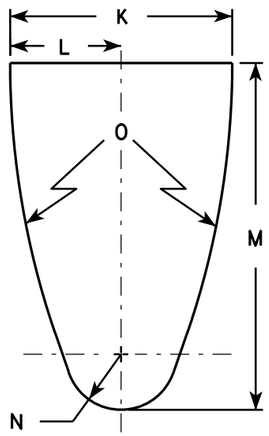
STANDARD SIGN
R3-9B

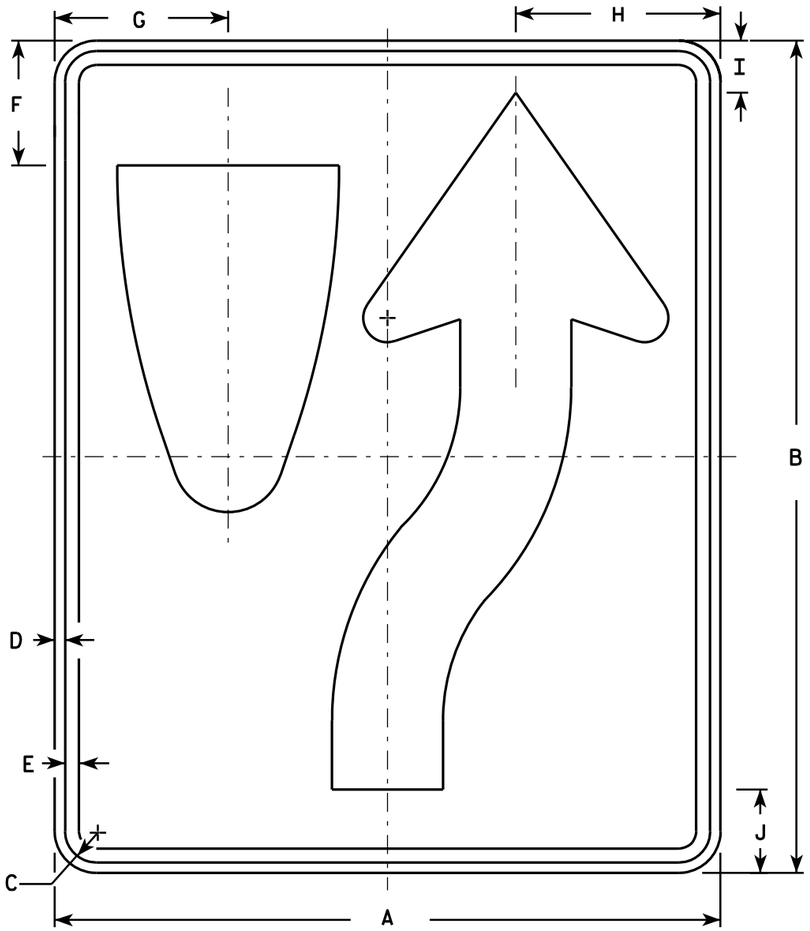
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9B.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 293 | E

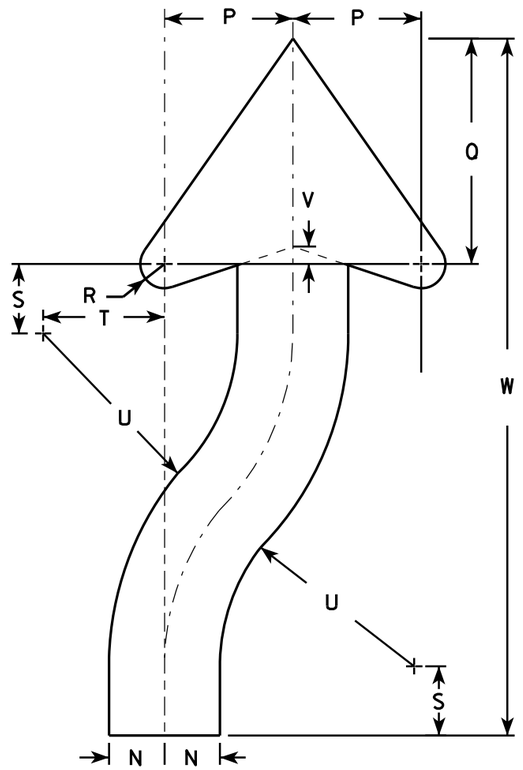




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

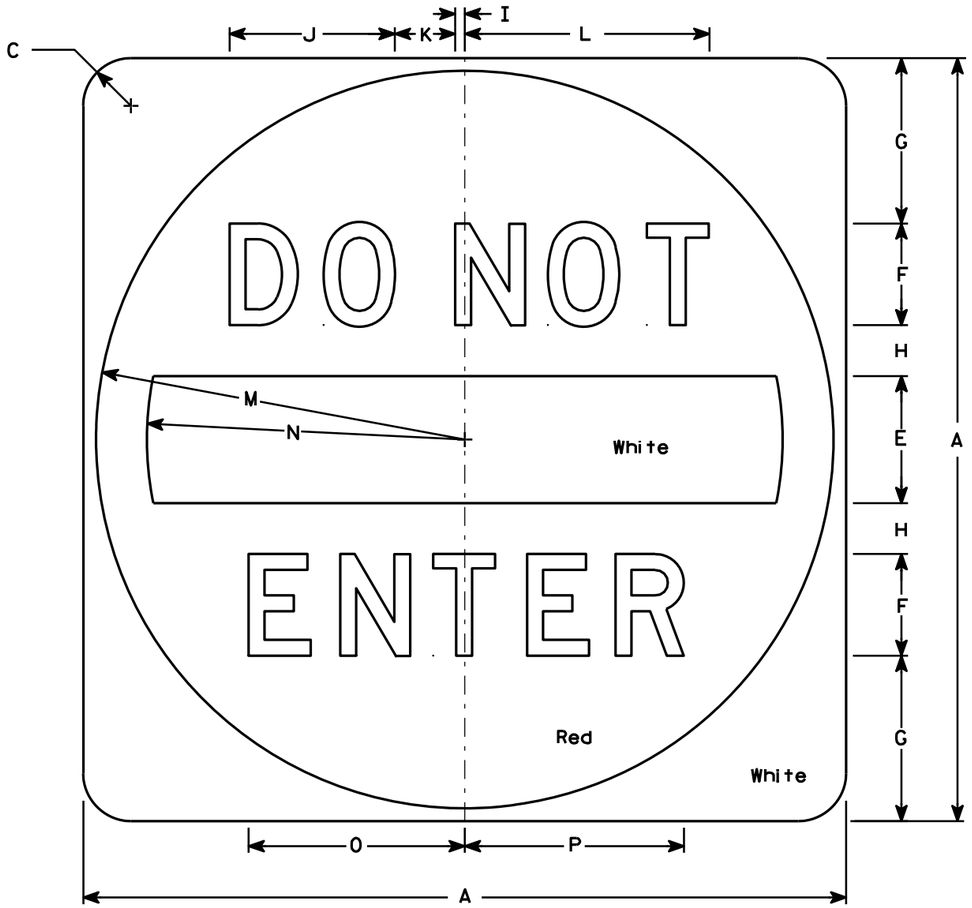
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 294	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

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											6.26
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

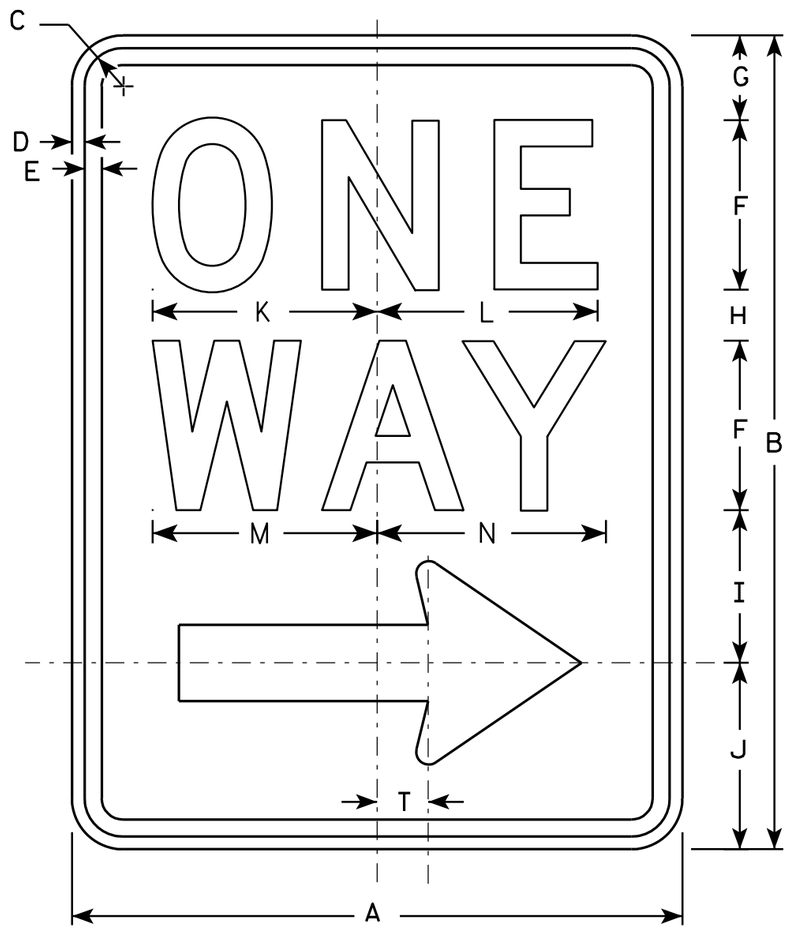
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

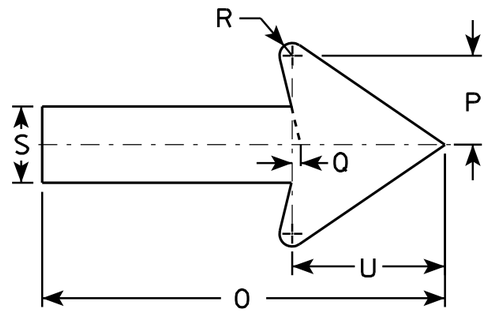
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 295 | E



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																										

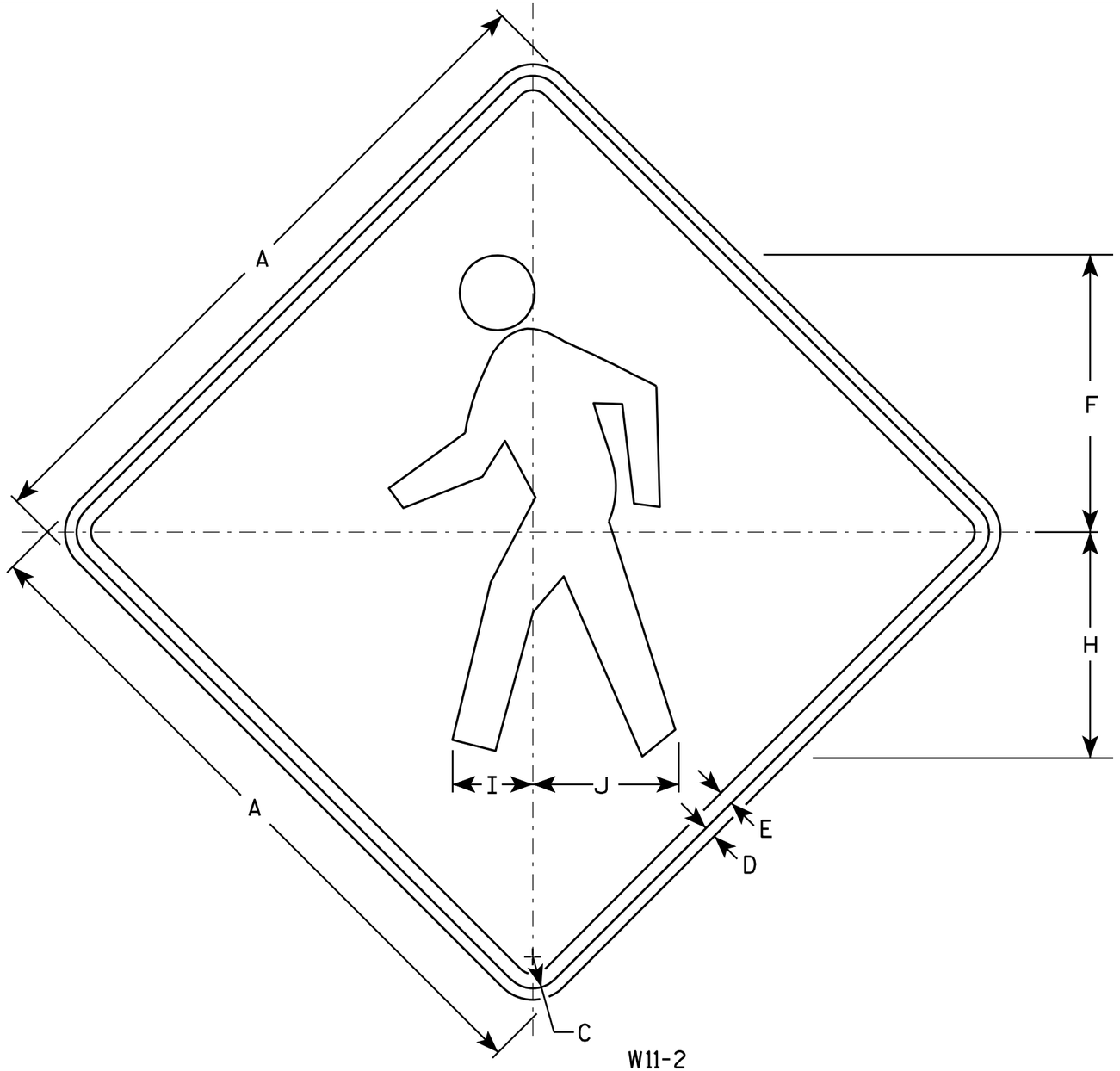
STANDARD SIGN
R6-2 R&L

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: 296 | E



W11-2

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.

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	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

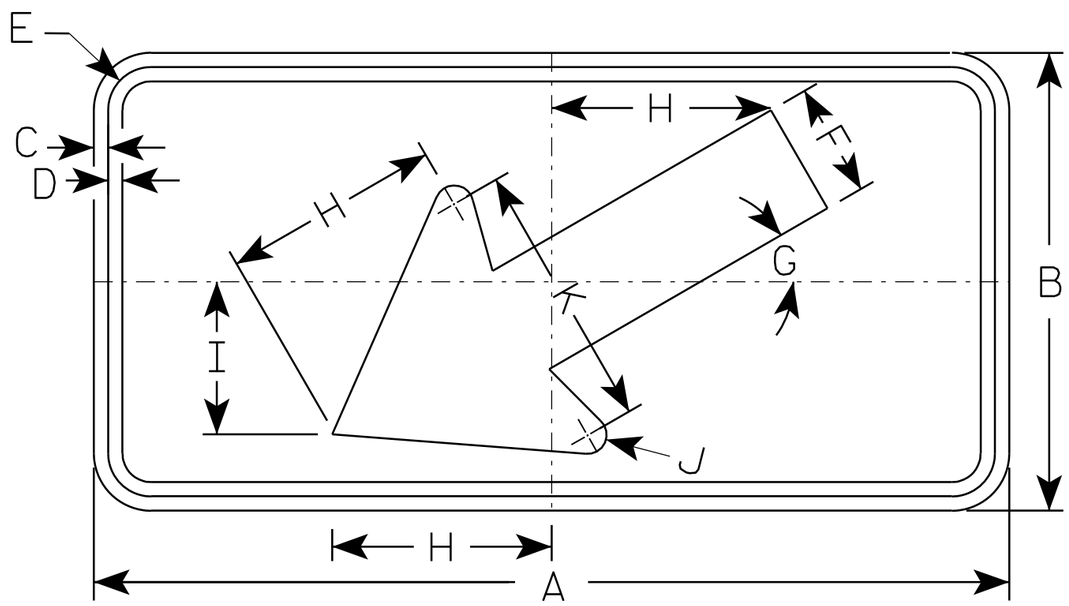
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 297	E



W16-7L

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. W16-7R is the same as W16-L 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																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

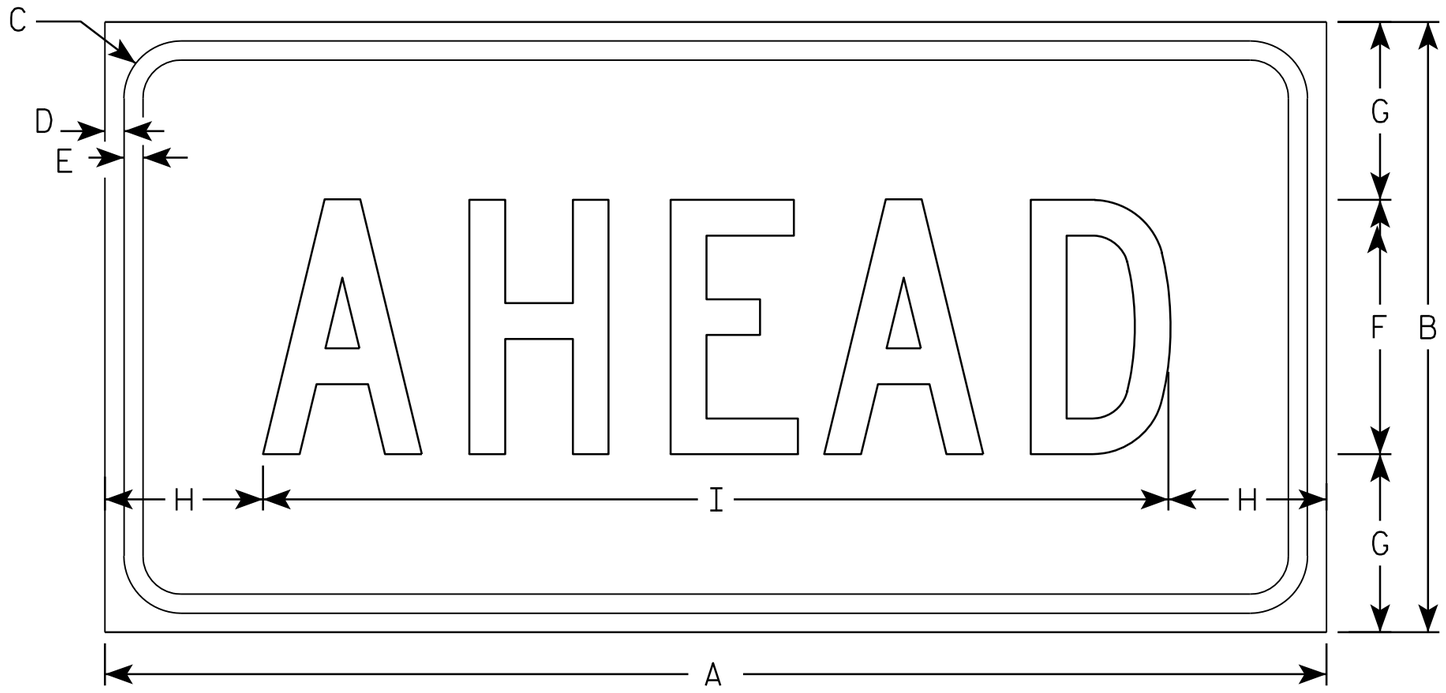
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 298	E



W16-9P

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
   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	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
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
W16-9P

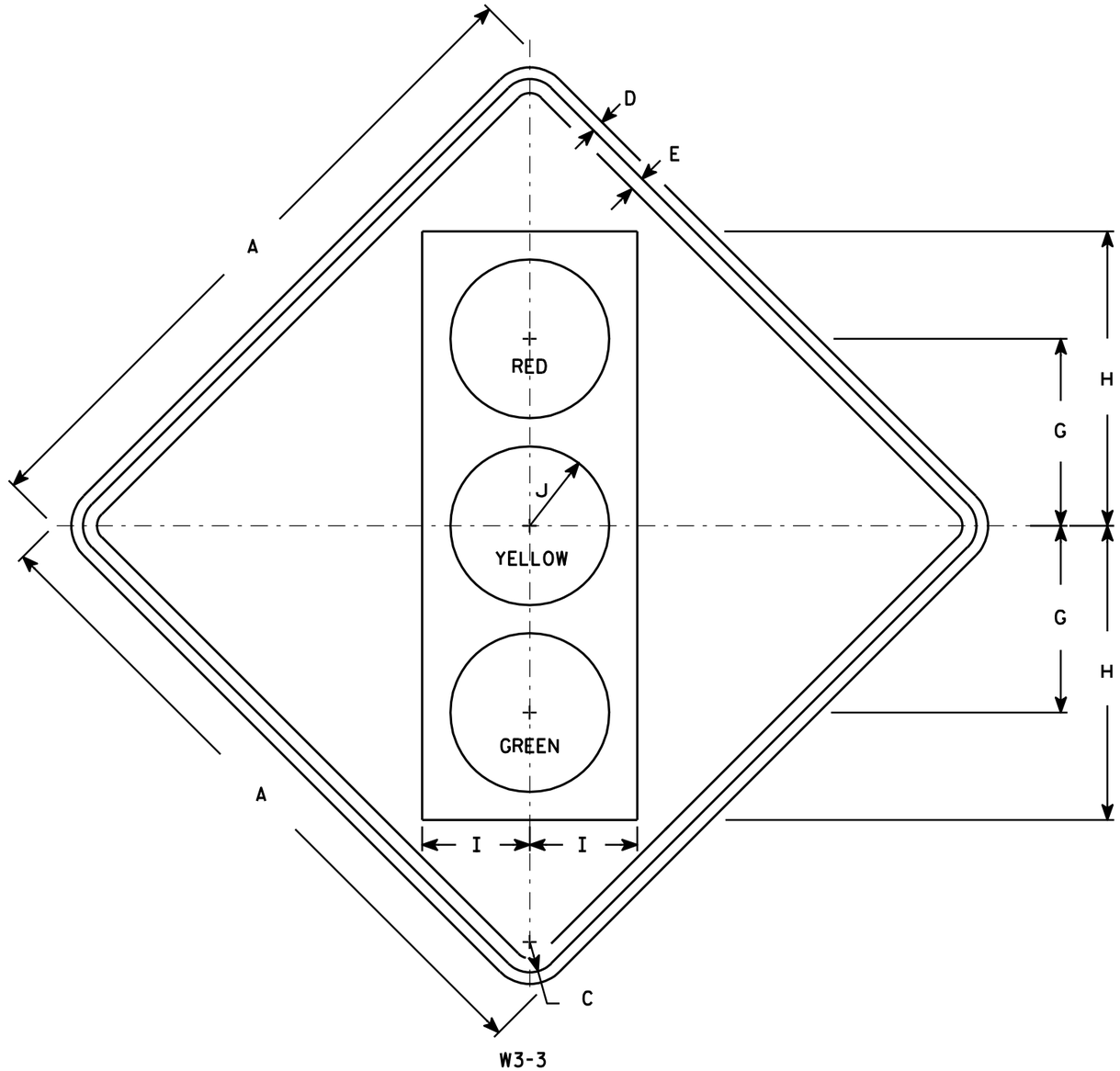
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 299 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000
WISDOT/CADDS SHEET 42



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 - 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. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 300 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000

STATE PROJECT NUMBER

1174-10-70

SIDEWALK GEOMETRY TABLE

ALIGNMENT STATION	OFFSET	CURB RADIUS TO OUTSIDE EDGE (FT)
442+21.20	46.57' LT.	
442+27.04	46.29' LT.	1888.50'
444+00.80	38.50' LT.	1888.50'
447+00.00	38.50' LT.	1788.50'
448+00.05	44.07' LT.	
447+99.69	50.05' LT.	
448+16.16	51.05' LT.	
448+16.52	45.06' LT.	
449+35.32	52.20' LT.	
449+34.98	58.19' LT.	
449+52.04	59.03' LT.	
449+52.33	53.04' LT.	
450+00.03	54.50' LT.	1645.50'
455+29.44	54.50' LT.	
456+14.30	54.50' LT.	1760.03'
456+47.87	54.50' LT.	19.00'
456+67.67	73.95' LT.	
456+67.60	77.70' LT.	31.00'
456+79.12	101.81' LT.	31.00'
456+84.36	105.20' LT.	

456+98.81	54.50' LT.	1745.50'
457+36.68	54.50' LT.	
457+44.73	51.55' LT.	
457+70.52	49.50' LT.	1498.63'
457+80.43	49.57' LT.	1498.63'
457+86.60	49.62' LT.	

RAIL GEOMETRY TABLE

RAIL STATION	ALIGNMENT STATION	OFFSET	RADIUS AT ℄ RAIL (FT)
1+00.00'R'	442+27.67	45.84' LT.	
2+77.43'R'	444+00.79	38.08' LT.	1888.08
5+83.15'R'	447+00.00	38.08' LT.	1788.08
6+85.00'R'	448+00.74	43.69' LT.	
6+91.00'R'	448+00.38	49.68' LT.	
7+06.17'R'	448+15.52	50.59' LT.	
7+12.17'R'	448+15.88	44.60' LT.	
8+32.29'R'	449+36.03	51.82' LT.	
8+38.29'R'	449+35.69	57.81' LT.	
8+53.46'R'	449+51.37	58.58' LT.	
8+59.46'R'	449+51.66	52.59' LT.	
9+06.34'R'	450+00.03	54.08' LT.	1645.92
14+18.91'R'	455+29.44	54.08' LT.	
15+03.77'R'	456+14.30	54.08' LT.	1760.45
15+36.33'R'	456+47.87	54.09' LT.	19.42
15+67.39'R'	456+68.10	73.96' LT.	
15+71.14'R'	456+68.03	77.71' LT.	30.58
15+97.46'R'	456+78.87	101.05' LT.	

100+00.00'S'	456+99.50	54.08' LT.	1745.92
100+36.00'S'	457+36.61	54.08' LT.	
100+44.33'S'	457+44.64	51.13' LT.	
100+69.55'S'	457+70.50	49.08' LT.	1499.04
100+78.55'S'	457+79.75	49.15' LT.	

CURVE DATA

℞ U.S.H. 51

P.I. = 442+96.37
Δ = 29°-55'-10.3"
D = 3°-16'-26.6"
T = 467.594'
L = 913.84'
R = 1750.00'
S.E. = N.C.
P.C. = 438+28.78
P.T. = 447+42.62

CURVE DATA

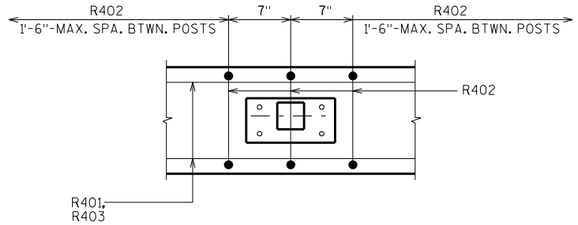
℞ U.S.H. 51

P.I. = 452+31.81
Δ = 20°-16'-35.2"
D = 3°-22'-13.2"
T = 303.99'
L = 601.61'
R = 1700.00'
S.E. = N.C.
P.C. = 449+27.83
P.T. = 455+29.44

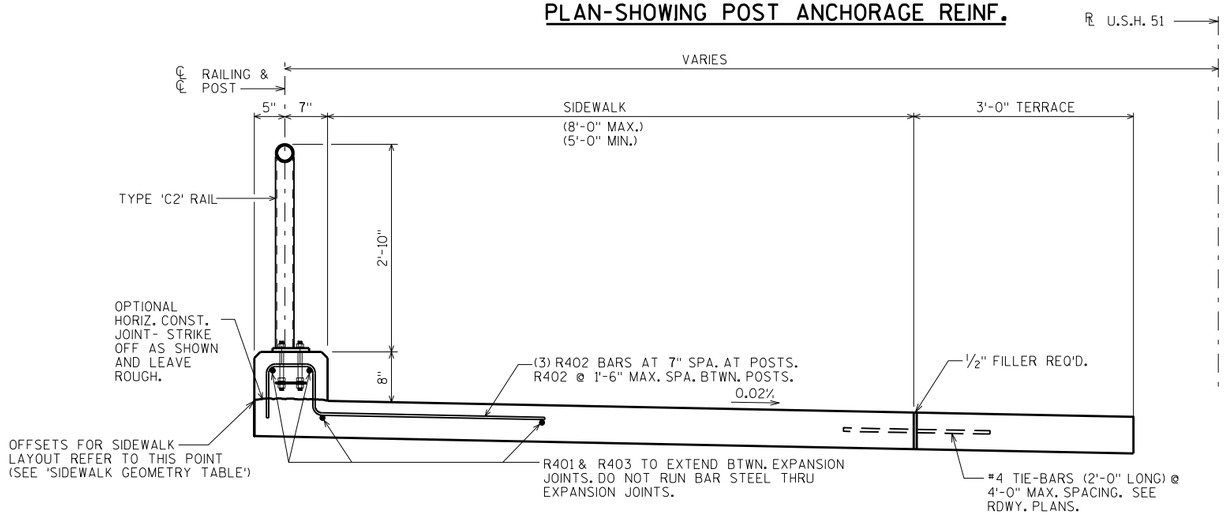
CURVE DATA

℞ U.S.H. 51

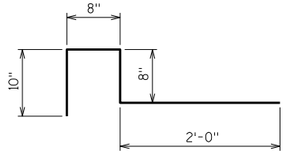
P.I. = 457+96.80
Δ = 11°-34'-44.2"
D = 3°-10'-59.2"
T = 182.50'
L = 363.76'
R = 1800.00'
S.E. = N.C.
P.C. = 456+14.30
P.T. = 459+78.06



PLAN-SHOWING POST ANCHORAGE REINF.



SECTION THRU SIDEWALK AND RAILING



R402

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
⚠	R401	X	4	1499'-0"			CURB & SDWK.-LONGIT.-1ST SECTION OF CURB
	R402	X	1405	3'-11"	X		CURB & SDWK.-TRANS.
⚠	R403	X	4	82'-4"			CURB & SDWK.-LONGIT.-2ND SECTION OF CURB

⚠ NUMBER REQUIRED & LENGTH SHOWN FOR QUANTITY PURPOSES ONLY. CONTRACTOR TO DETERMINE ACTUAL LENGTHS & NUMBER OF R401 & R403 BARS AFTER RAIL PANELS & FIELD ERECTION JOINTS HAVE BEEN LAID OUT BY RAIL SUPPLIER.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
SPV.0035	CONCRETE MASONRY CURB	CY	40
SPV.0060	RAILING STEEL GATE	EACH	2
SPV.0085	BAR STEEL REINFORCEMENT HS COATED RAILING	LB	7910
SPV.0105	RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN M-43-1	LS	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE RAILING LOCATIONS, LENGTHS, AND HEIGHTS.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

CONSTRUCT EXPANSION AND CONTRACTION JTS. IN CURB TO MATCH SIDEWALK.

ALIGN SIDEWALK EXPANSION JTS. WITH RAIL FIELD ERECTION JTS. (SEE RAIL SHOP PLAN FOR LOCATIONS.)

CURB HEAD TO BE PAID FOR UNDER 'CONCRETE MASONRY CURB'

SIDEWALK TO BE PAID FOR UNDER 'SIDEWALK' BID ITEM. (NOT IN STRUCTURE PLANS)

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

BAR STEEL SHALL HAVE A 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL RAIL STATIONING AND OFFSETS ARE GIVEN TO THE ℄ OF RAILING AND OUTSIDE EDGE OF CURB.

DESIGN DATA

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY (SIDEWALK AND CURB) ——— f'c = 3,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

LIST OF DRAWINGS

1. CROSS SECTION & QUANTITIES
2. SIDEWALK LAYOUT 1
3. SIDEWALK LAYOUT 2
4. SIDEWALK LAYOUT 3
5. SIDEWALK LAYOUT 4
6. RAIL POST SPACING 1
7. RAIL POST SPACING 2
8. RAIL POST SPACING 3
9. COMBINATION RAIL TYPE "C2" DETAILS 1
10. COMBINATION RAIL TYPE "C2" DETAILS 2

STRUCTURE DESIGN CONTACTS:

BRANDAN BURGER (608) 267-4019
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LS — 12/14/12
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE M-43-1

RAILING ALONG U.S.H. 51

COUNTY: ONEIDA — TOWN: MINOCQUA

DESIGN SPEC.: AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BLB	ARC	CRJ	ARC

CROSS SECTION & QUANTITIES

SHEET 1 OF 10

301

I.D. 1174-10-00

DATE: DEC '12

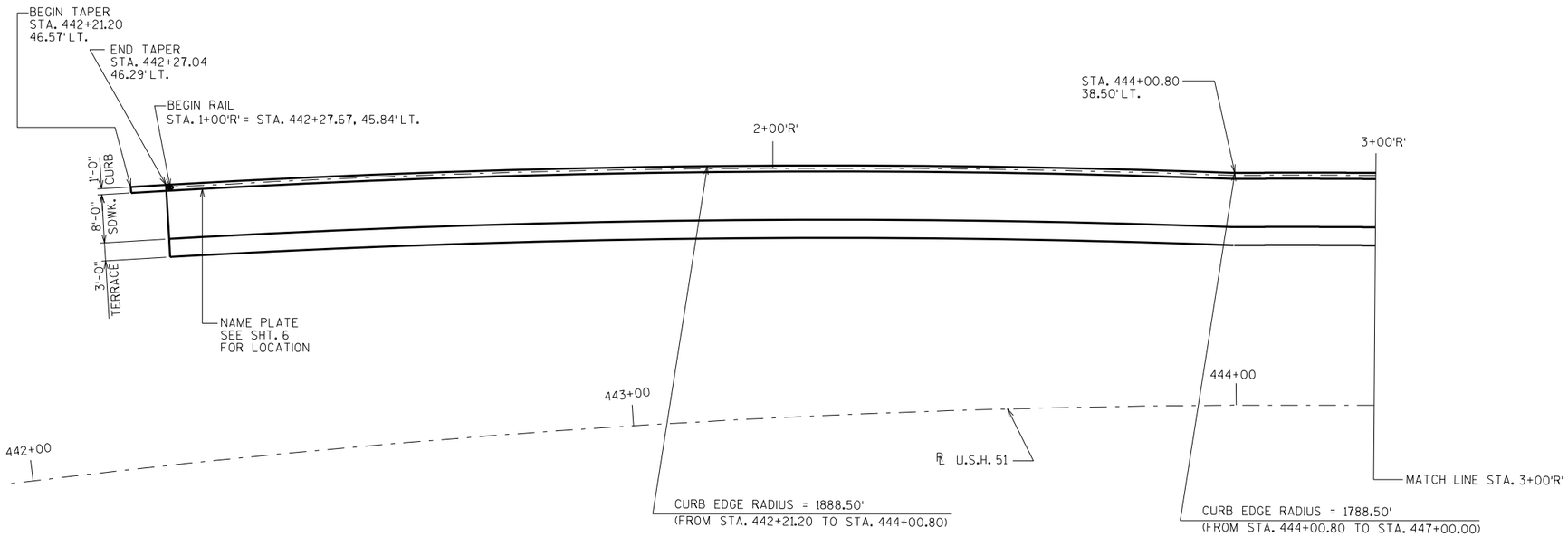
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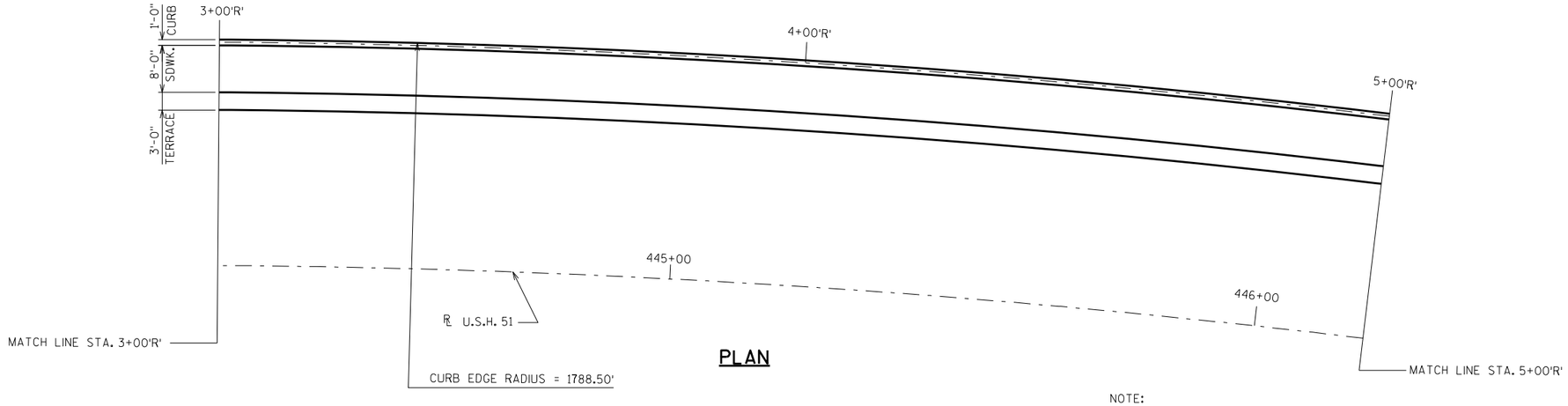
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STATE PROJECT NUMBER

1174-10-70



PLAN



PLAN

NOTE:
FOR ALIGMENT/RAIL STATIONS, OFFSETS & RADIUS
SEE SHT. 1

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

SIDEWALK LAYOUT 1

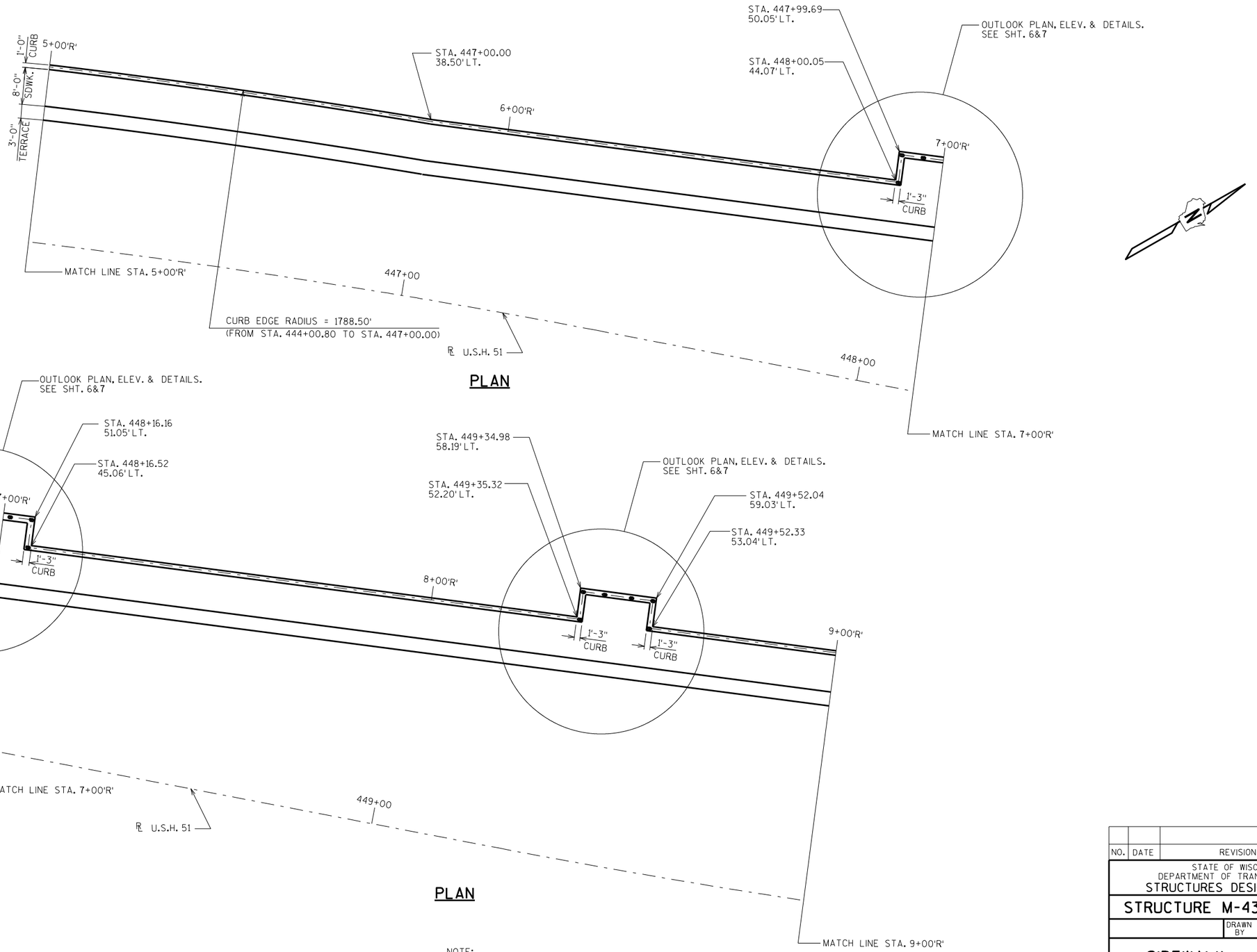
SHEET 2

302

SCALE = 1:1

STATE PROJECT NUMBER

1174-10-70



PLAN

PLAN

NOTE:
FOR ALIGNMENT/RAIL STATIONS, OFFSETS & RADIUS
SEE SHT. 1

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

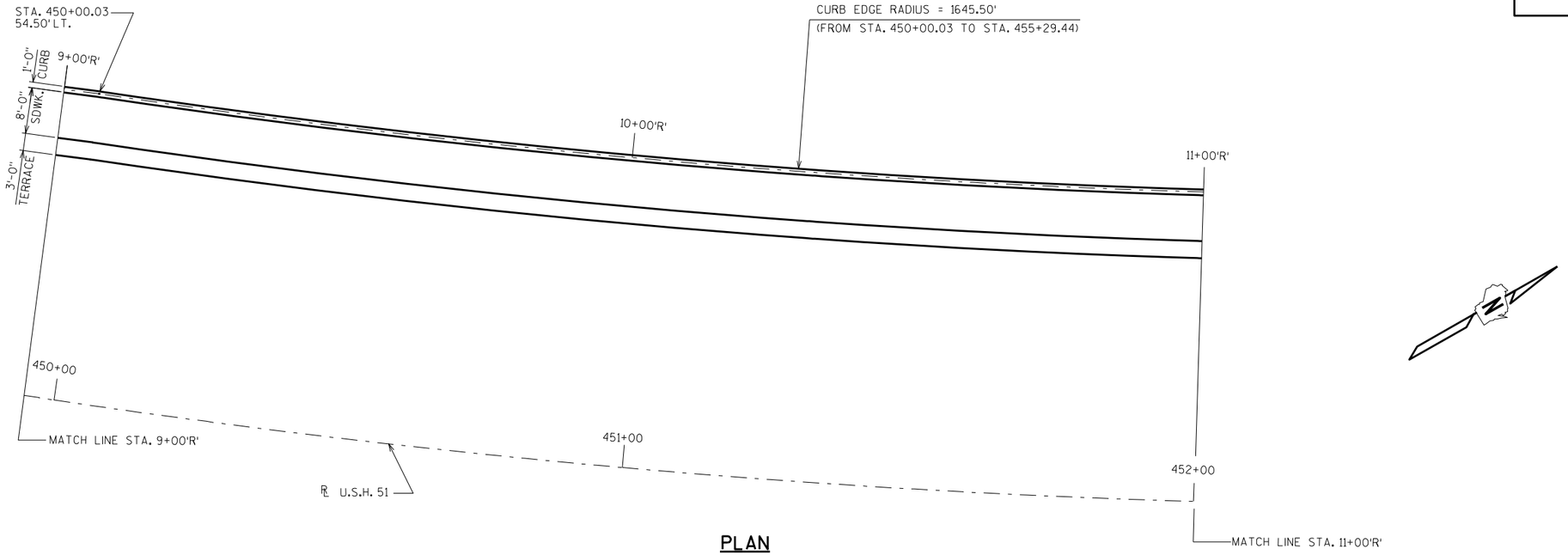
SIDEWALK LAYOUT 2

SHEET 3

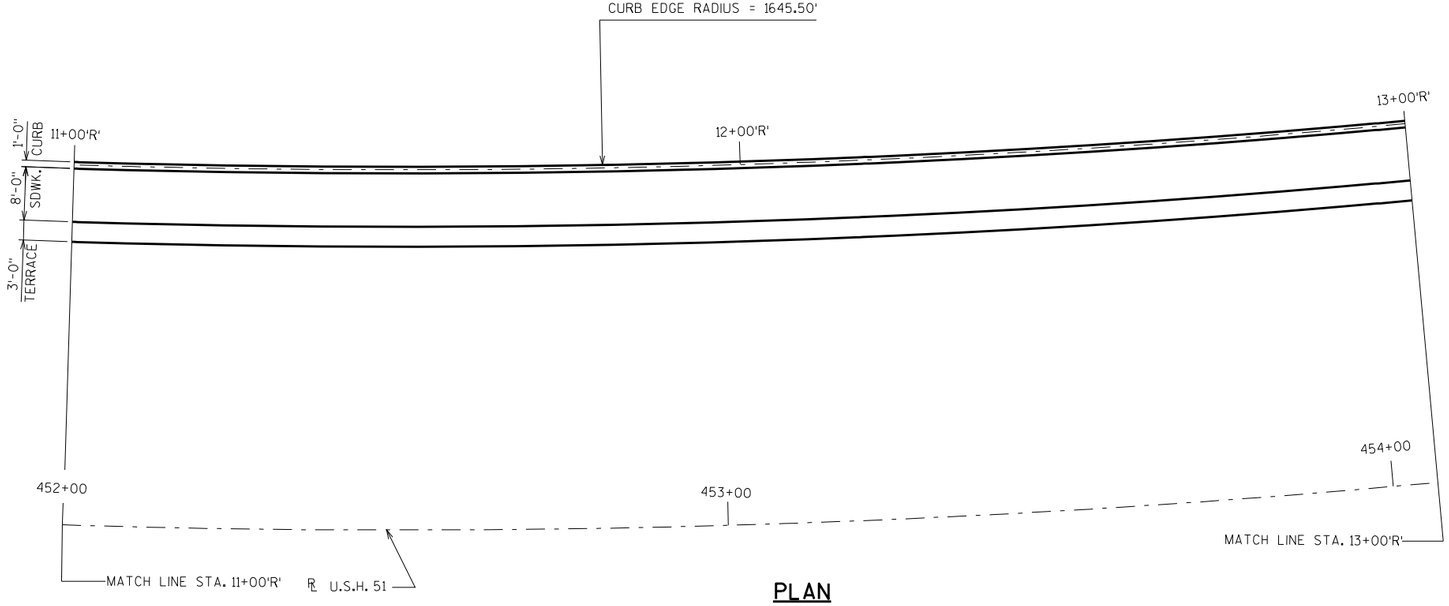
303

SCALE = 1"

STATE PROJECT NUMBER
1174-10-70



PLAN



PLAN

NOTE:
FOR ALIGNMENT/RAIL STATIONS, OFFSETS & RADIUS
SEE SHT. 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

SIDEWALK LAYOUT 3

SHEET 4

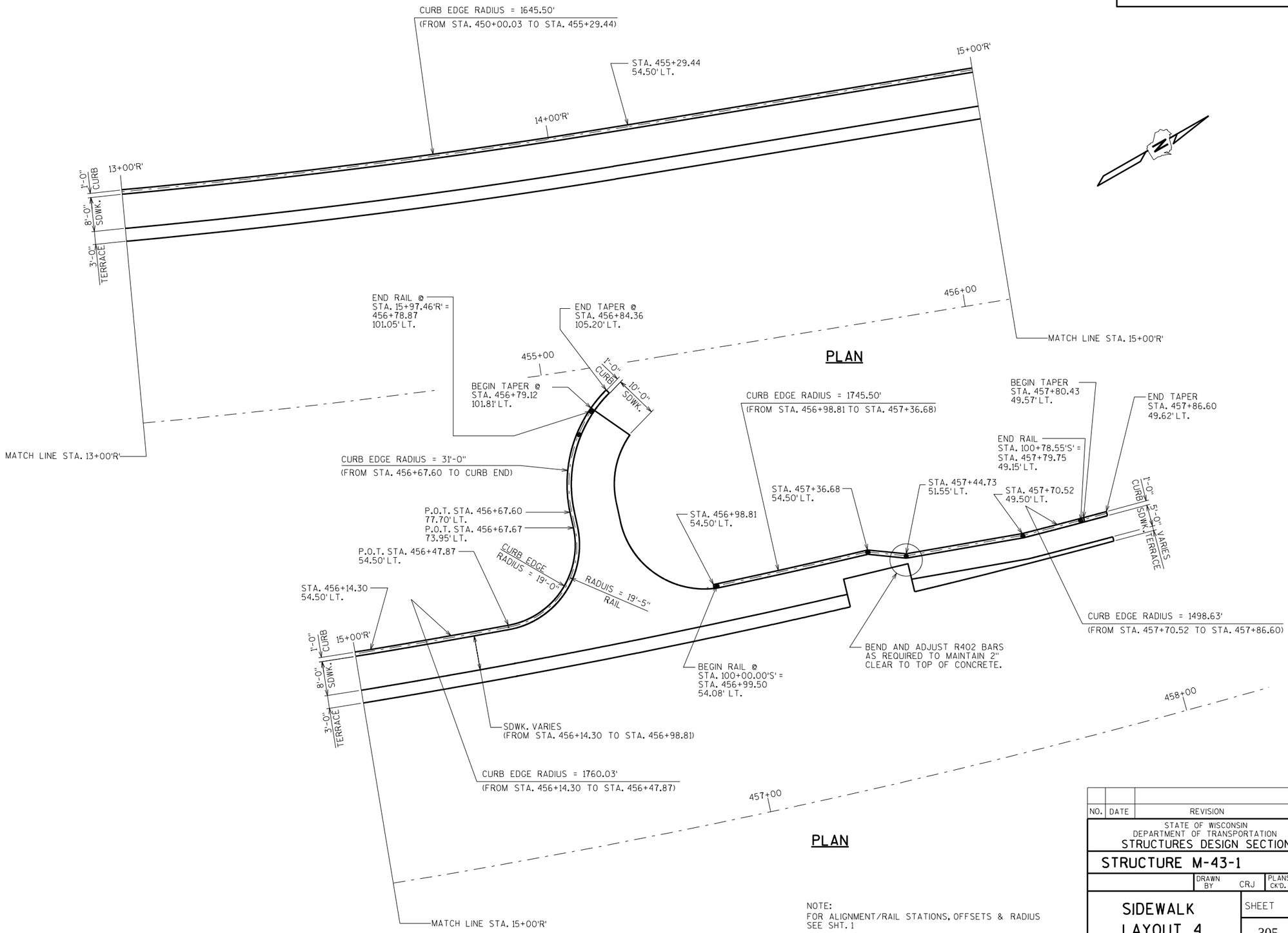
304

8

8

SCALE = 1"

STATE PROJECT NUMBER
1174-10-70



NOTE:
FOR ALIGNMENT/RAIL STATIONS, OFFSETS & RADIUS
SEE SHT. 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

SIDEWALK LAYOUT 4

SHEET 5

305

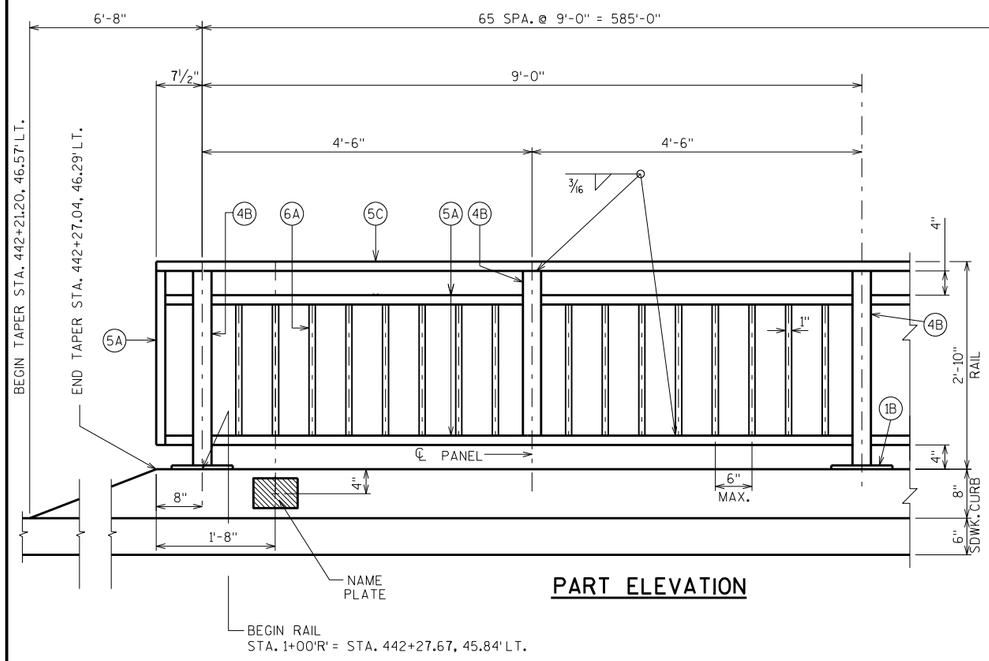
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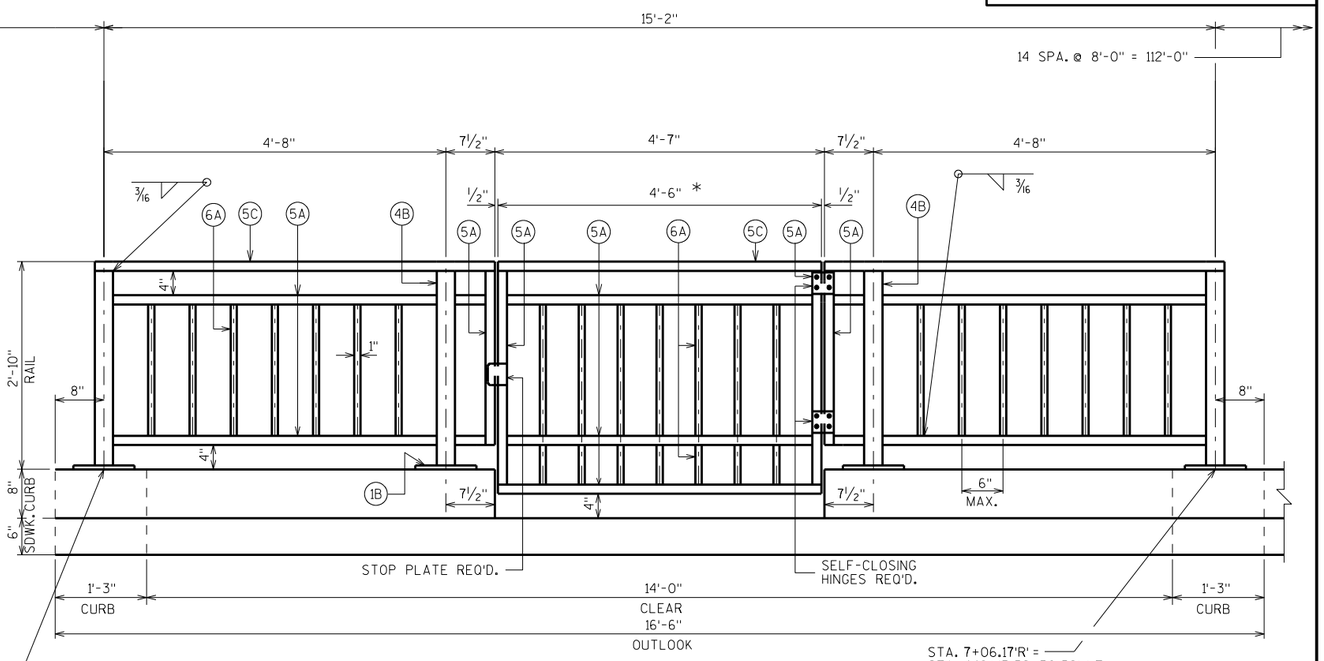
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STATE PROJECT NUMBER

1174-10-70

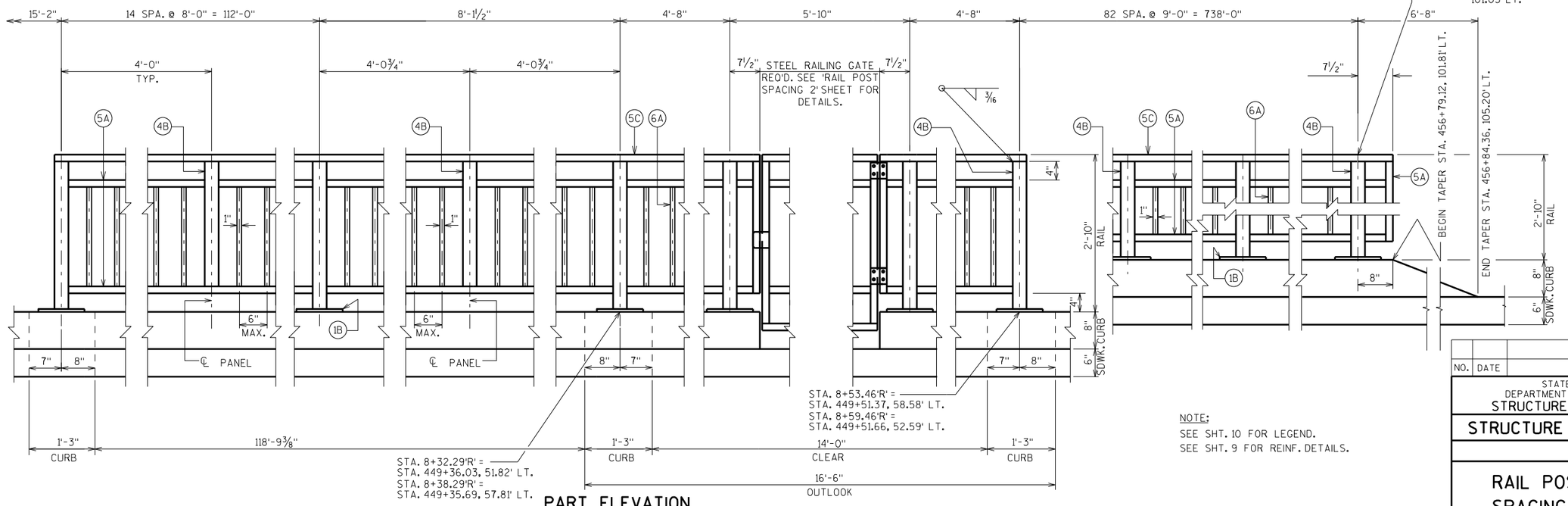


PART ELEVATION



PART ELEVATION

* GATE WIDTH MAY BE ADJUSTED TO ACCOMODATE HINGES.



PART ELEVATION

NOTE:
SEE SHT. 10 FOR LEGEND.
SEE SHT. 9 FOR REINF. DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

RAIL POST SPACING 1

SHEET 6

306

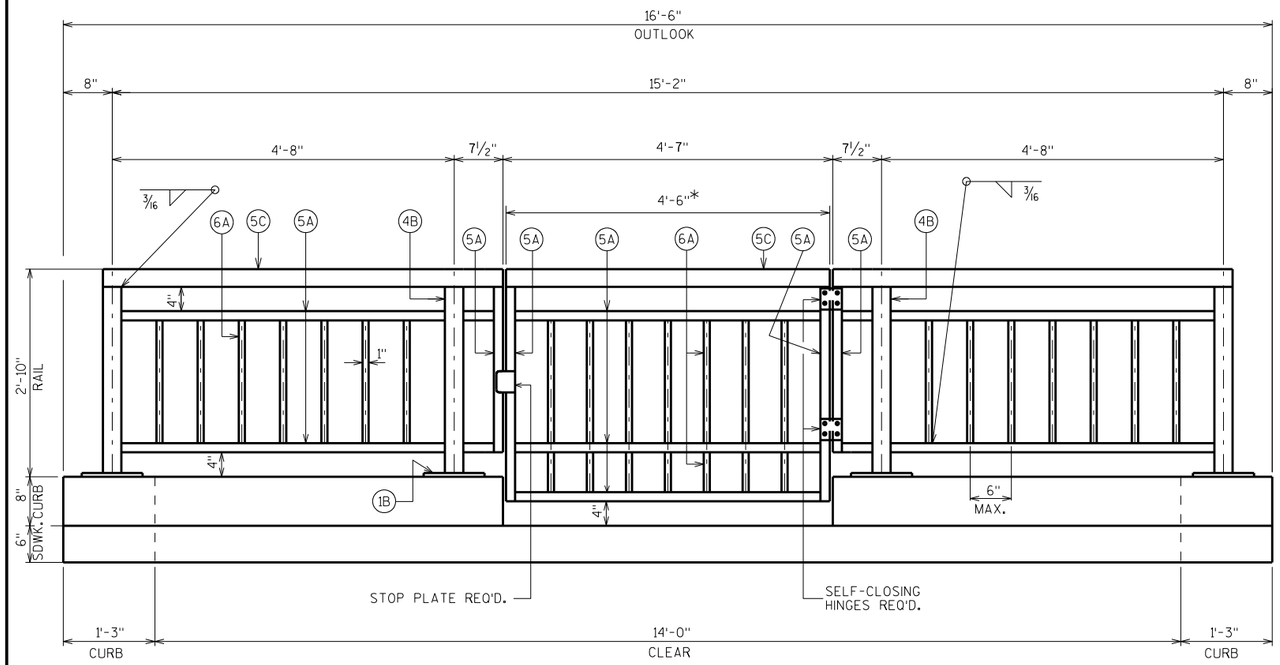
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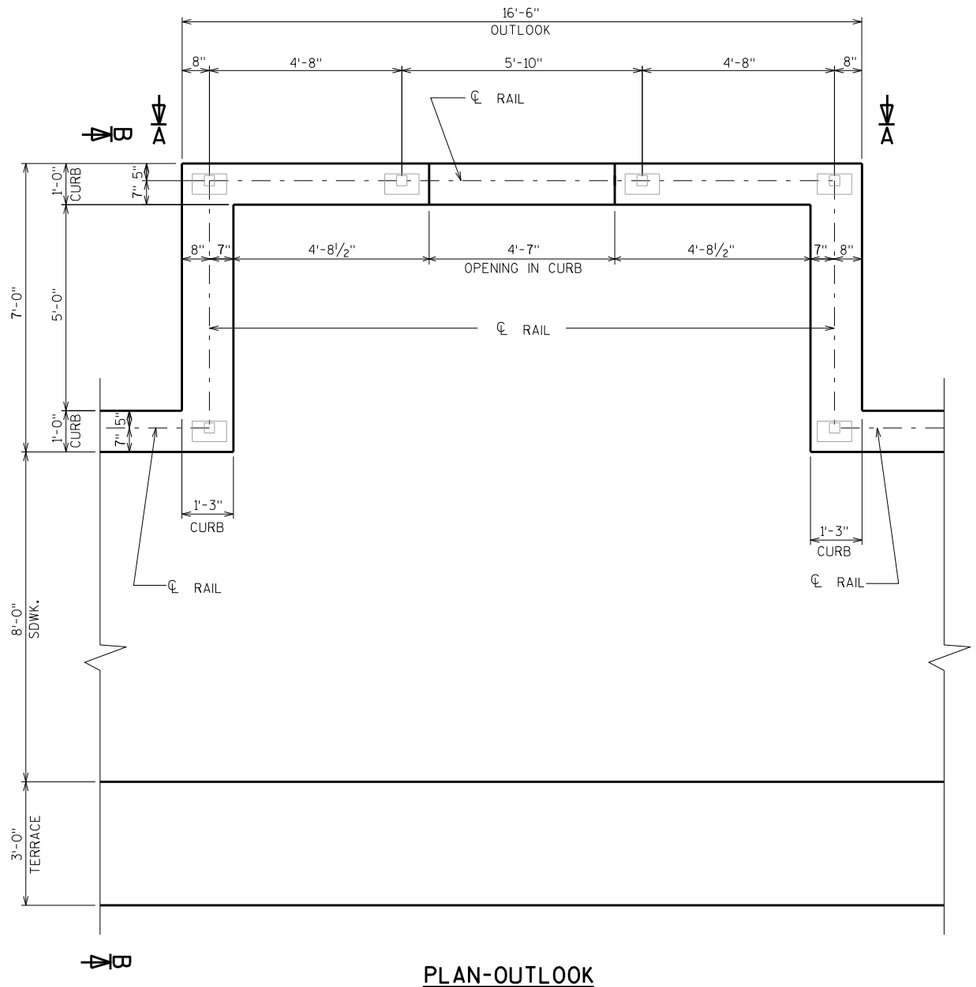
STATE PROJECT NUMBER

1174-10-70

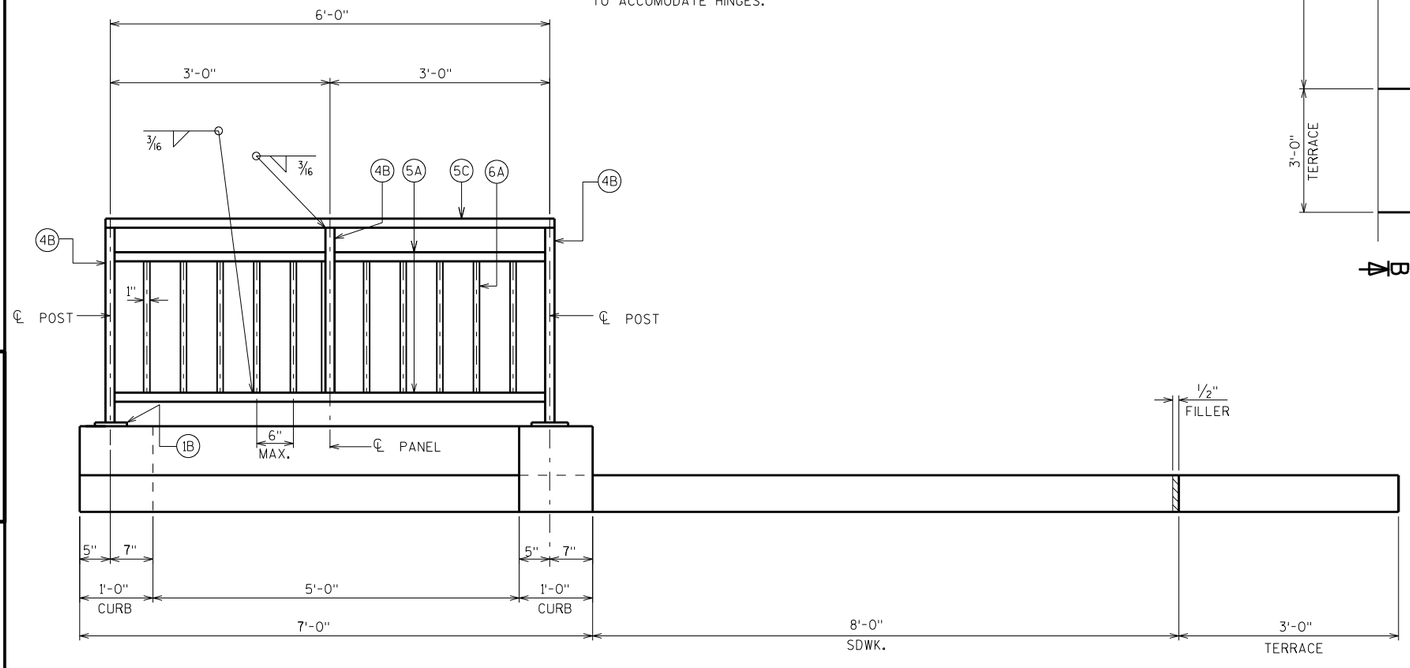


VIEW A-A

* GATE WIDTH MAY BE ADJUSTED TO ACCOMODATE HINGES.



PLAN-OUTLOOK



VIEW/SECTION B-B

NOTE:
SEE SHT. 10 FOR LEGEND.
SEE SHT. 9 FOR REINF. DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

RAIL POST SPACING 2

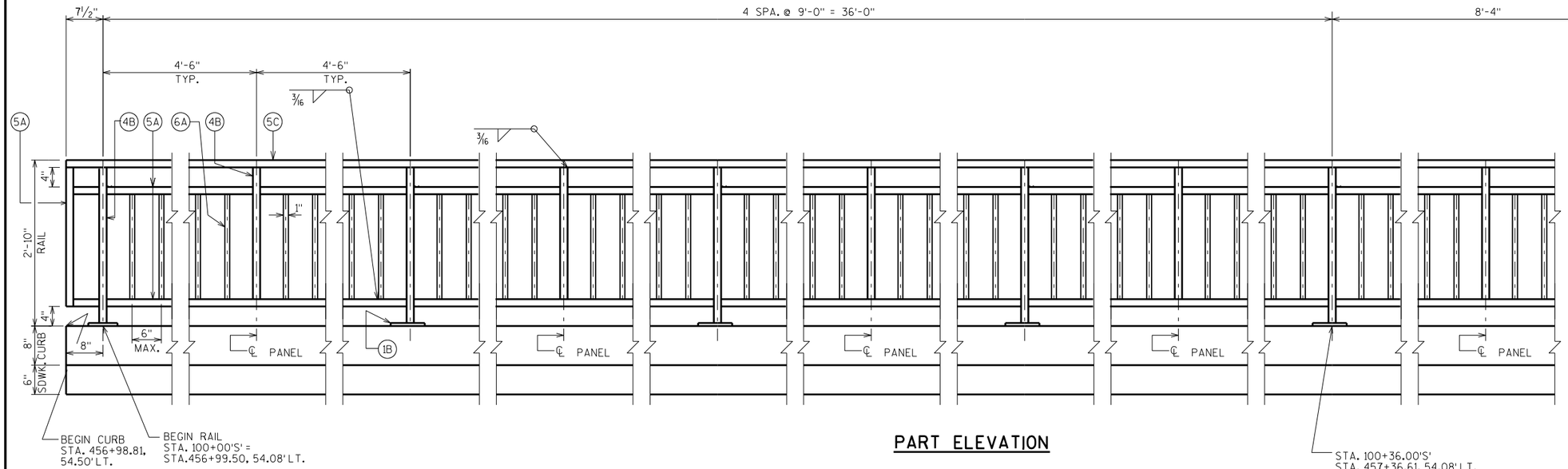
SHEET 7

307

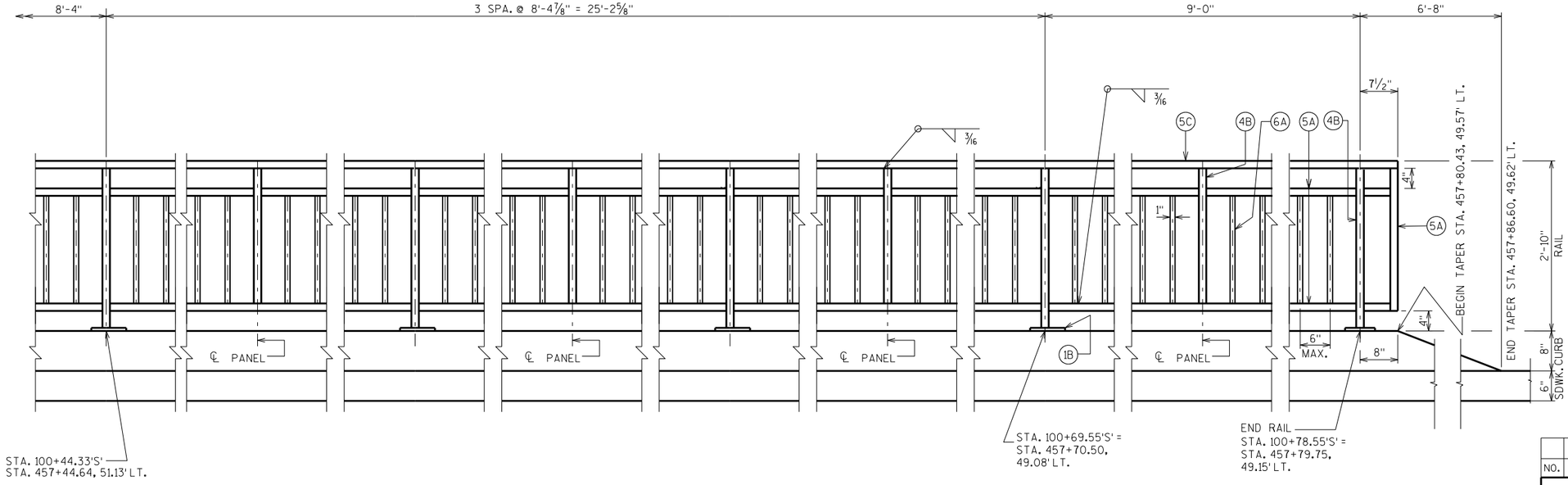
SCALE = 1

STATE PROJECT NUMBER

1174-10-70



PART ELEVATION



PART ELEVATION

NOTE:

SEE SHT. 10 FOR LEGEND.
SEE SHT. 9 FOR REINF. DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

RAIL POST SPACING 3

SHEET 8

308

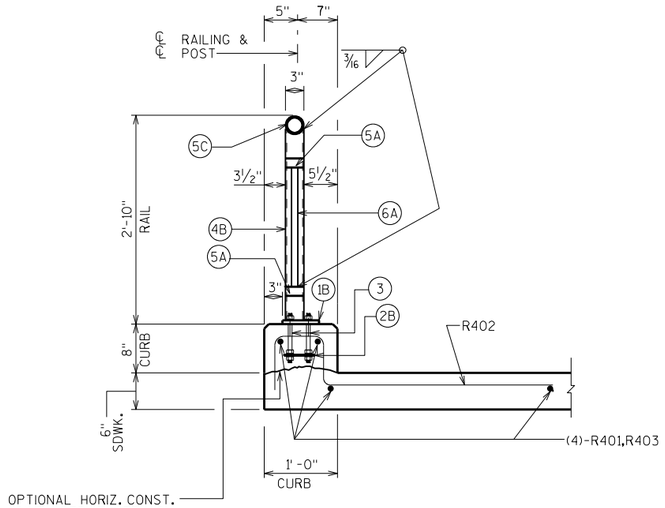
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8

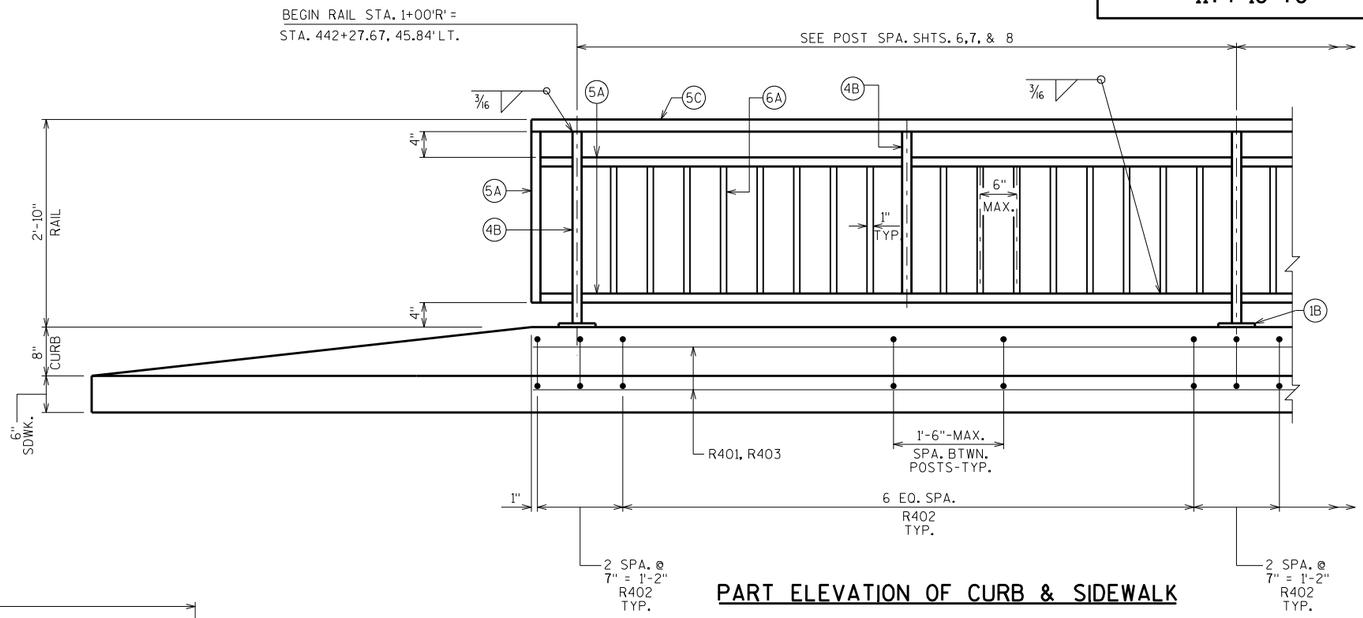
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STATE PROJECT NUMBER

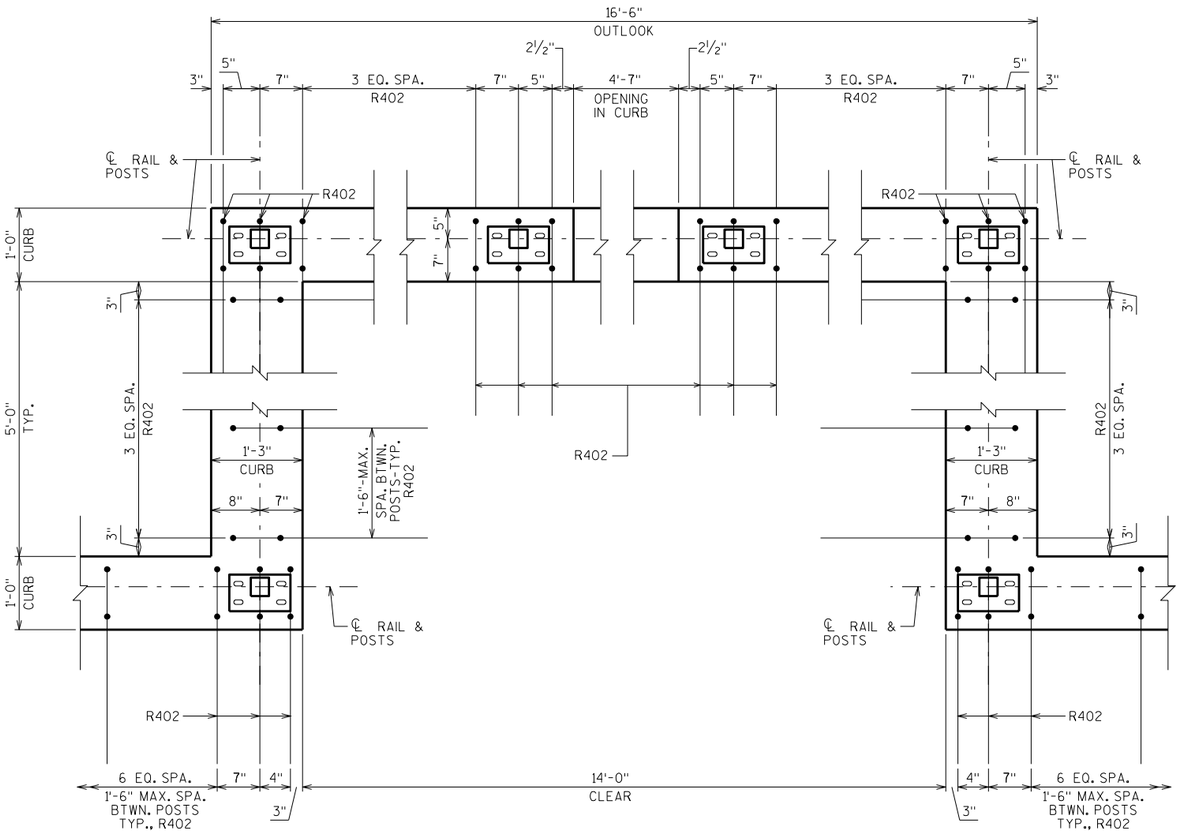
1174-10-70



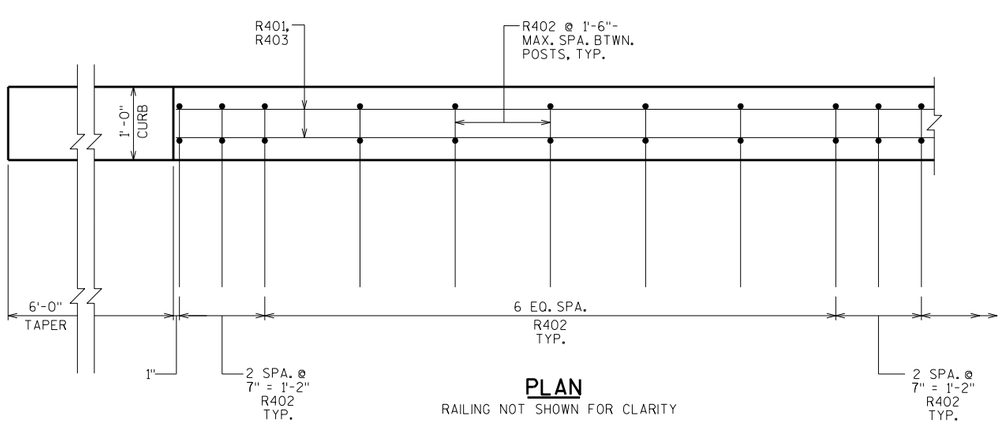
END VIEW



PART ELEVATION OF CURB & SIDEWALK



PLAN-REINF. DETAIL AT OUTLOOK CORNERS



PLAN

RAILING NOT SHOWN FOR CLARITY

NOTE:

SEE SHT. 10 FOR LEGEND.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

COMBINATION RAIL TYPE "C2" DETAILS 1

SHEET 9

309

8

8

SCALE = 1

STATE PROJECT NUMBER

1174-10-70

LEGEND

(1B) PLATE 5/8" X 6" X 10" WITH 3/4" X 1 1/2" SLOTTED HOLES

(2B) 1/4" X 5" X 9" ANCHOR PLATE WITH 11/16" ϕ HOLES FOR THR'D. RODS NO. 3.

(3) 5/8" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), 5/8" ϕ, MINIMUM PULLOUT CAPACITY OF 13 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS AND 5" FOR END RAILS.)

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

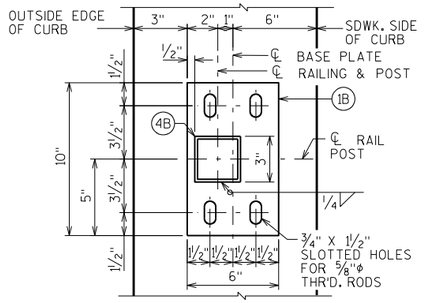
(5C) 2 1/2" ϕ STANDARD PIPE RAIL (2.875" O.D.). WELD TO NO. 1 & NO. 4. INSIDE OF PIPE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5A. PLACE VERTICAL.

(9B) CIRCULAR SLEEVE FABRICATED FROM 2"ϕ STANDARD PIPE.

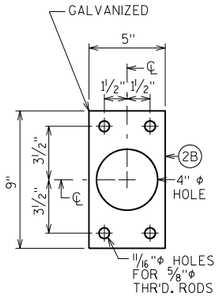
(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

(10B) CIRCULAR SLEEVE FABRICATED FROM 2" ϕ STANDARD PIPE. (1'-4" @ FIELD ERECTION JTS.)

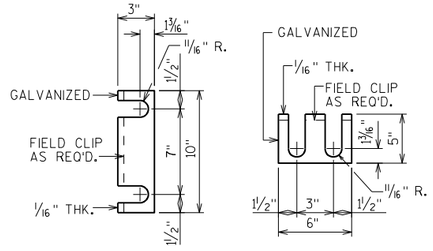


TYPICAL RAIL POST BASE PLATE

(UPRIGHTS @ 1'-3" CURB SIMILAR)

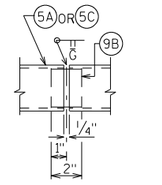


ANCHOR PLATE



RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN M-43-1", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO. 1, 2, 6, 9, AND NO. 10 SHALL CONFORM TO ASTM A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B (NO. 4 AND NO. 5).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

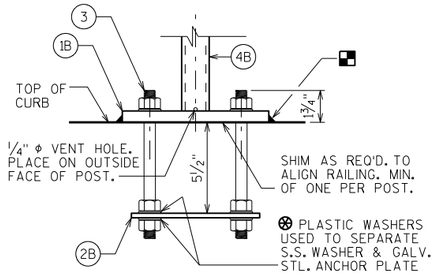
◪ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE "BRIDGE SPECIAL PROVISIONS". THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

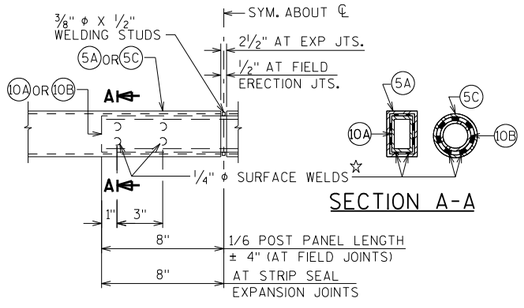
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-1

DRAWN BY CRJ | PLANS CK'D. ARC

COMBINATION RAIL TYPE "C2" DETAILS 2

SHEET 10

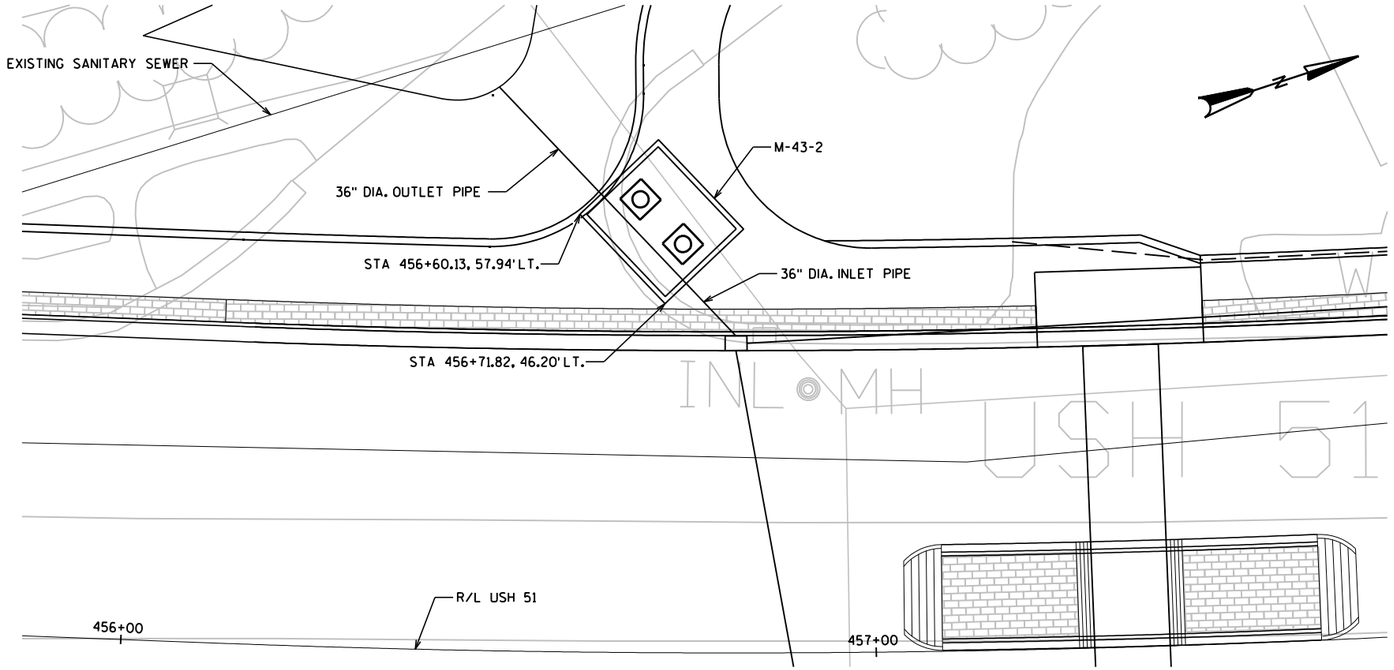
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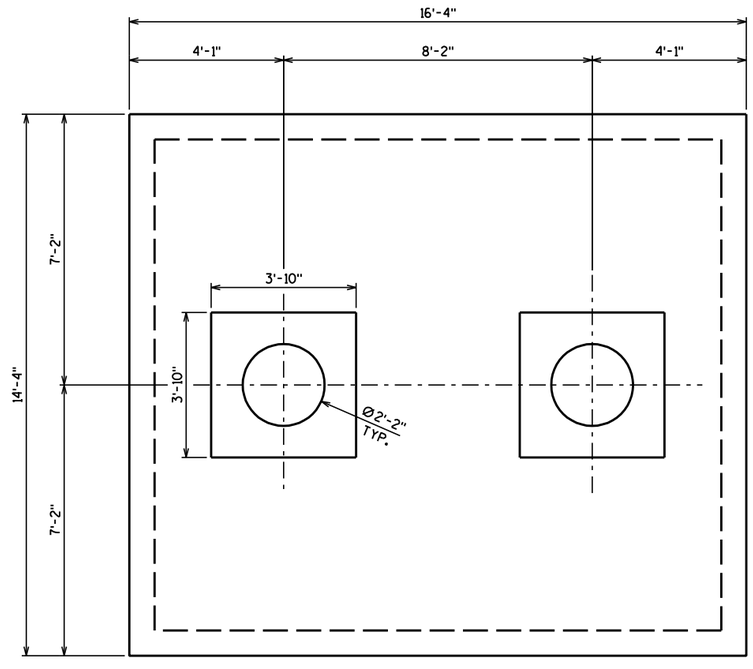
1 2 3 4 6 8 11

SCALE = 1.000

STATE PROJECT NUMBER
1174-10-70



PLAN VIEW



MANHOLE LAYOUT

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUNDLINE.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURAL BACKFILL TO THE ELEVATION OF THE TOP OF THE BOX WITHIN THE LENGTH OF THE BOX. THE PAY LIMITS OF THE STRUCTURAL BACKFILL ARE 3 FEET BEYOND THE HORIZONTAL PLAN LIMITS AT THE BOTTOM OF THE BOX AND UP AT A 1:1.5 BACKFILL SLOPE FROM BOTTOM OF SLAB TO TOP OF BOX PLUS UNDERCUT AREA.

PLACE AN 18" (MIN.) WIDE SHEET OF RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT BETWEEN WALLS AND TOP SLAB.

MANHOLE FRAMES AND LIDS AND ADJUSTING RINGS ARE NOT PART OF THE STRUCTURE PORTION OF THIS PROJECT BUT ARE INCLUDED AS ROADWAY ITEMS UNDER THE GENERAL CONTRACT.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	AMOUNT
206.5000	COFFERDAM (M-43-2)	LS	1
210.0100	BACKFILL STRUCTURE	CY	330
SPV.0035.02	CONCRETE MASONRY, SPECIAL	CY	30
SPV.0085.02	BAR STEEL REINFORCEMENT HS COATED, SPECIAL	LB	6640
SPV.0105.02	EXCAVATION FOR STRUCTURES, SPECIAL (M-43-2)	LS	1
	ROADWAY ITEMS		
	MANHOLE COVERS, MODIFIED	EA	2

DESIGN DATA

LIVE LOAD: HL93
EARTHLOAD: DESIGNED FOR 1.75 FT OF FILL

MATERIAL STRENGTHS

CONCRETE MASONRY, GRADE A-FA ———— fc' = 3,500 P.S.I.
HIGH STRENGTH BAR STEEL RENFORCEMENT — fy = 60,000 P.S.I.

LIST OF DRAWINGS

1. GENERAL PLAN
2. BOX LAYOUT
3. MAIN WALL DETAILS
4. INTERIOR WALLS & BAR DETAILS

BRIDGE OFFICE CONTACT

WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT

KRISTOFER OLSON
OMNNI ASSOCIATES
(920) 735-6900

WISCONSIN
KRISTOFER R. OLSON
E-35236
APPLETON, WI
PROFESSIONAL ENGINEER

12/10/12

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
OMNNI ASSOCIATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 12/11/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE M-43-2

USH 51 STORMWATER VAULT

COUNTY	TOWN
ONEIDA	MINOCQUA

DESIGN SPEC.	LOAD
AASHTO LRFD DESIGN SPEC. 4th EDITION	HL-93

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BRE	KRO	BRE	KRO

GENERAL PLAN

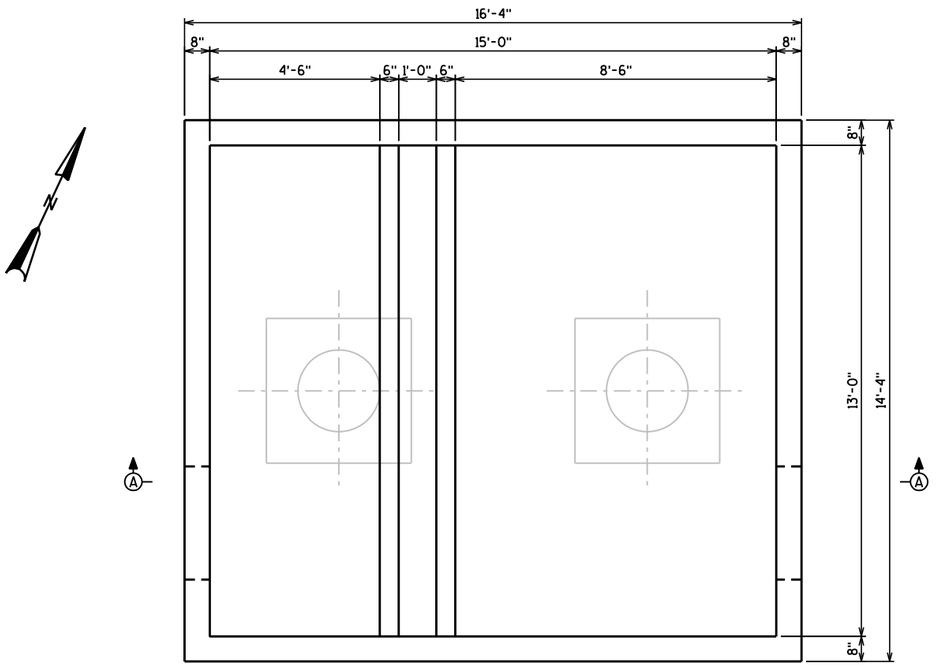
SHEET 1 OF 4

311

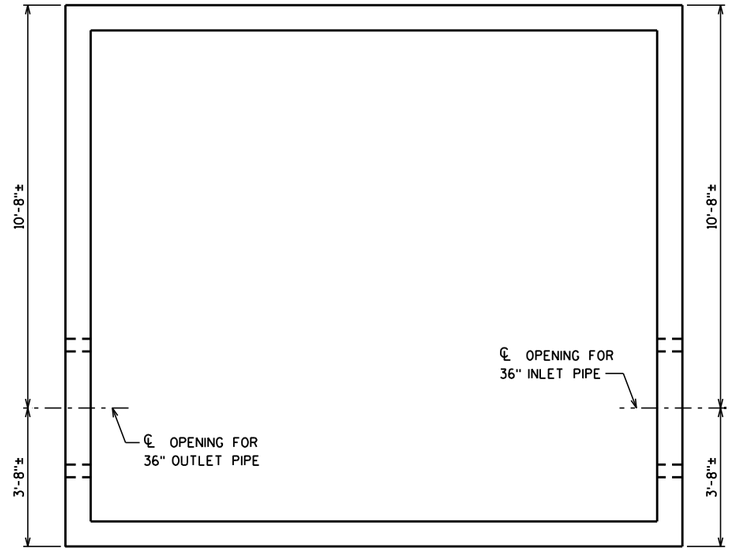
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8

STATE PROJECT NUMBER
1174-10-70

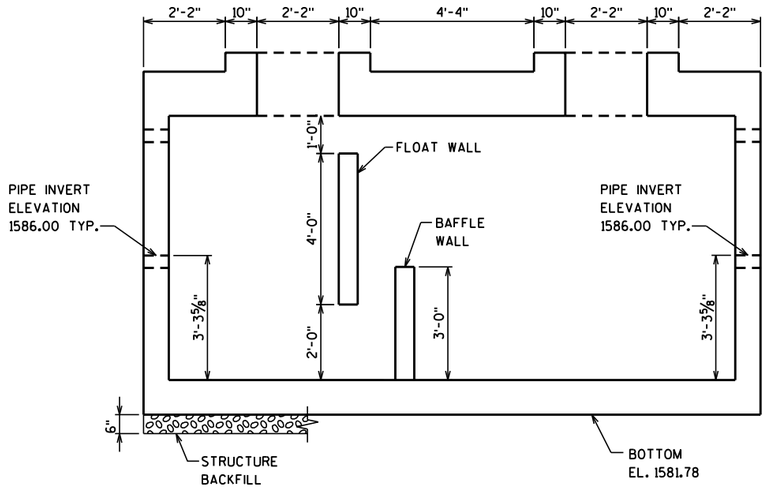


PLAN VIEW THRU WALLS

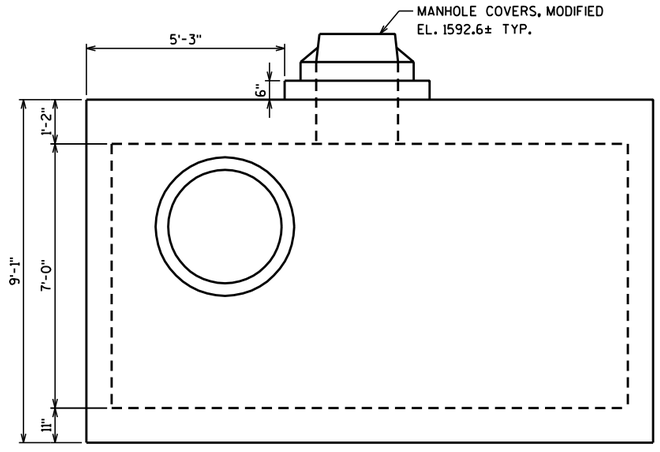


PLAN VIEW - PIPE OPENINGS

NOTE: WALL OPENINGS ARE PIPE DIAMETER
PLUS 2 X WALL THICKNESS



SECTION A-A



END VIEW

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-2

DRAWN BY BRE | PLANS CK'D. KRO

BOX LAYOUT

SHEET 2 OF 4

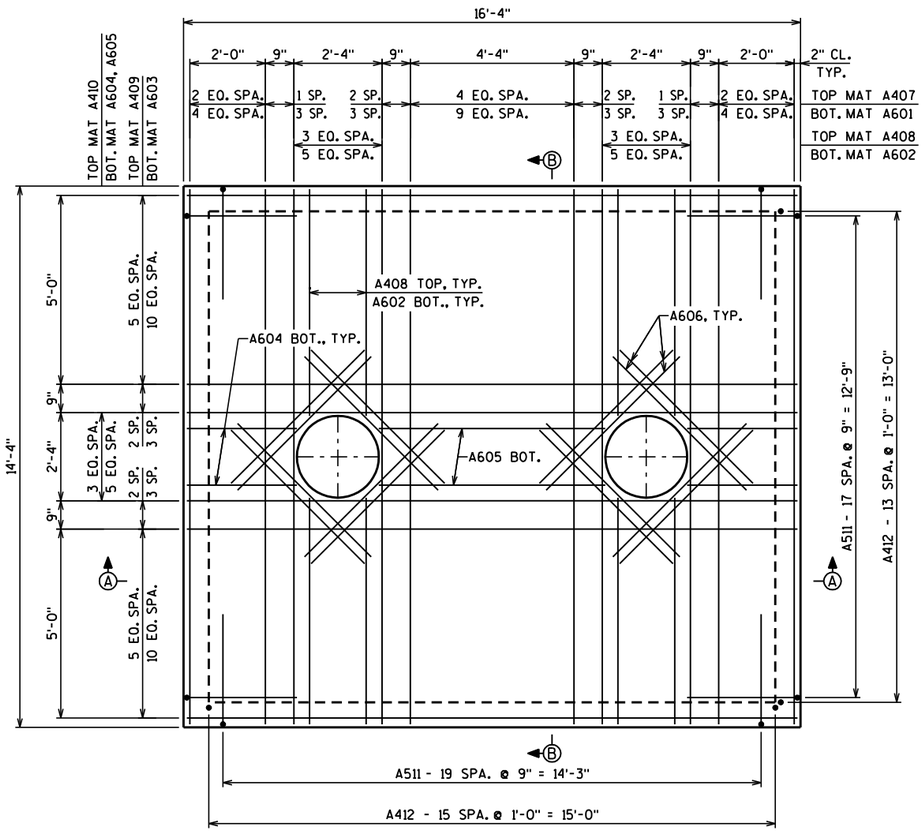
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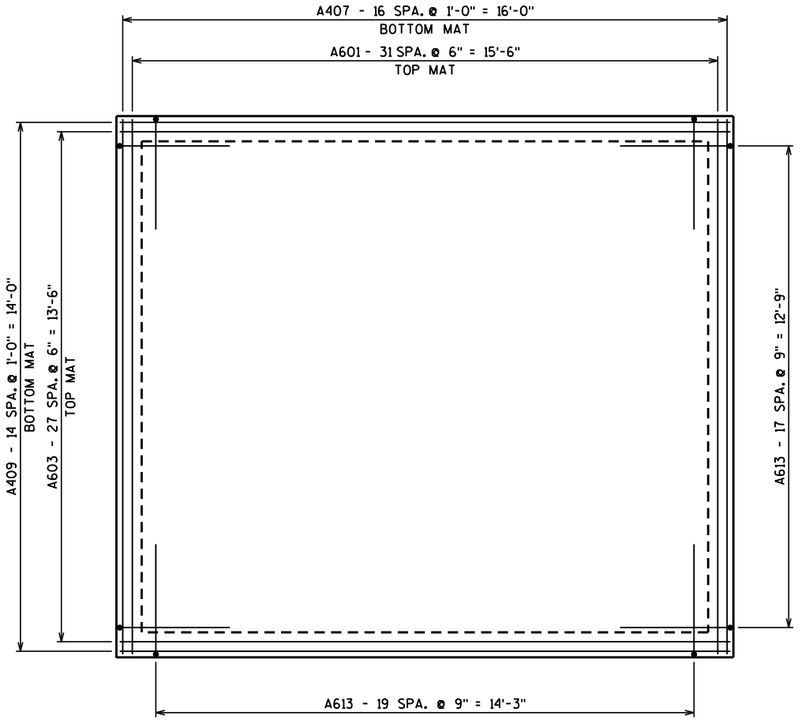
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FILE NAME : F:±TR±JOBS±E2009B12±Sheets±Plan±M-43-2 02 box layout.dgn PLOT BY : olsonk PLOT DATE: 7/31/2012 7:27:18 AM

STATE PROJECT NUMBER
1174-10-70

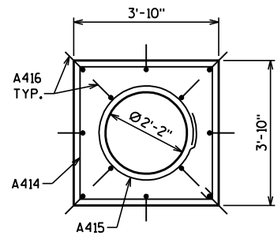


REINFORCEMENT PLAN TOP SLAB



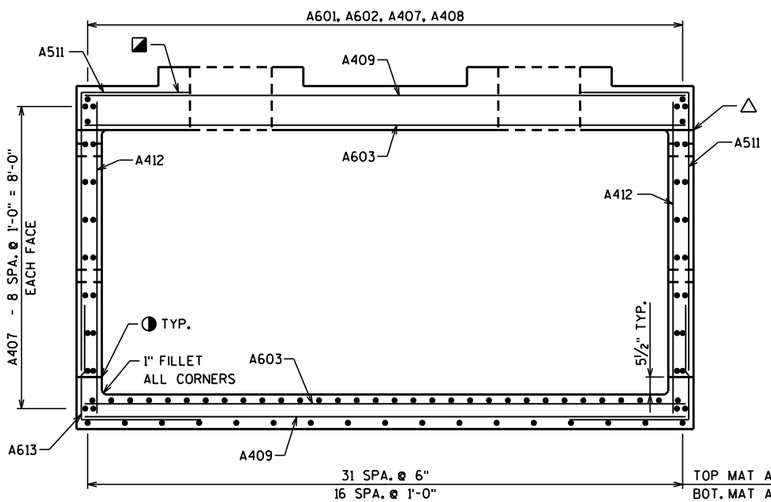
REINFORCEMENT PLAN BOTTOM SLAB

NOTE: WALL OPENINGS ARE PIPE DIAMETER PLUS 2 X WALL THICKNESS

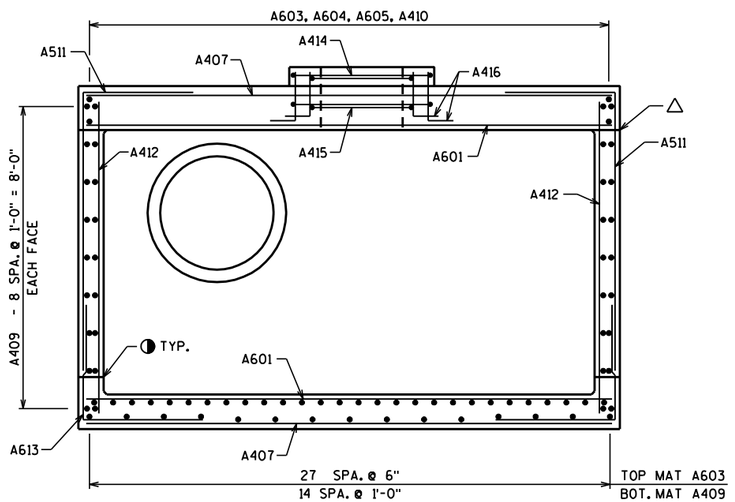


MANHOLE PLAN

(COVER NOT SHOWN)



SECTION A-A



SECTION B-B

NOTES

- FAN BARS TO AVOID MANHOLE OPENING
- HORIZONTAL CONSTRUCTION JOINT
- OPTIONAL CONSTRUCTION JOINT. OMIT 1" FILLET IF OPTIONAL CONST. JOINT IS USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-2

DRAWN BY: BRE | PLANS CK'D.: KRO

MAIN WALL DETAILS

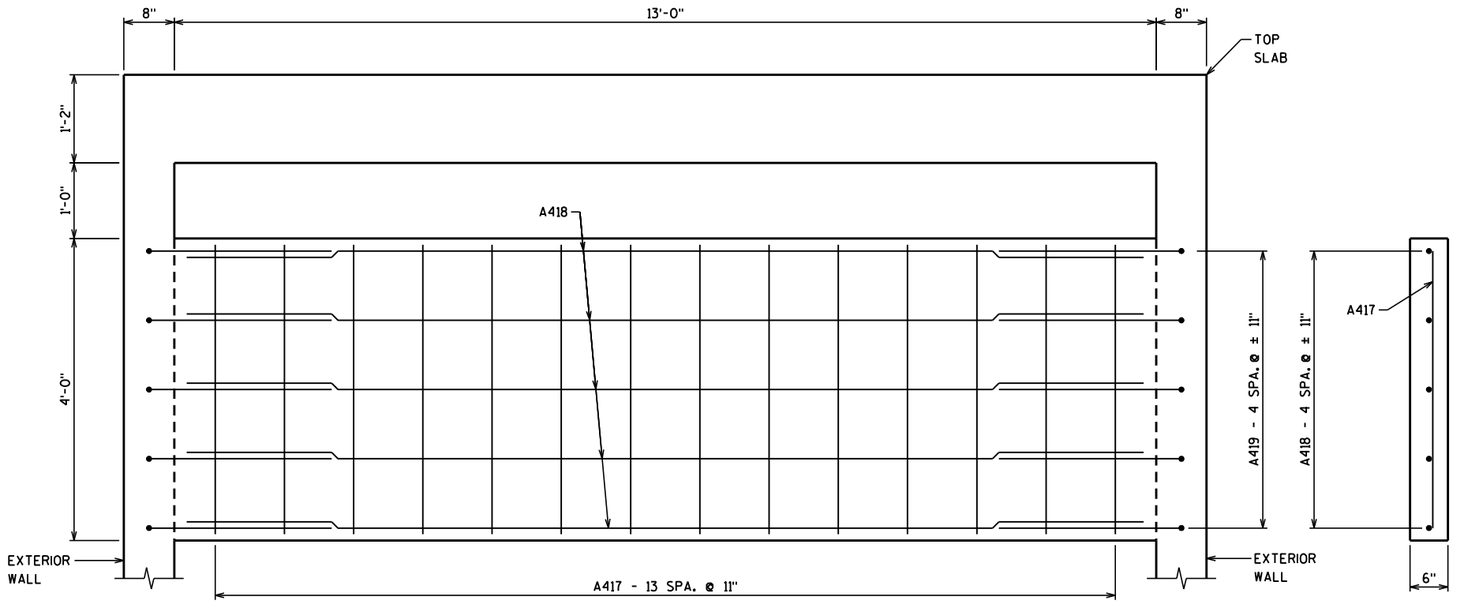
SHEET 3 OF 4

313

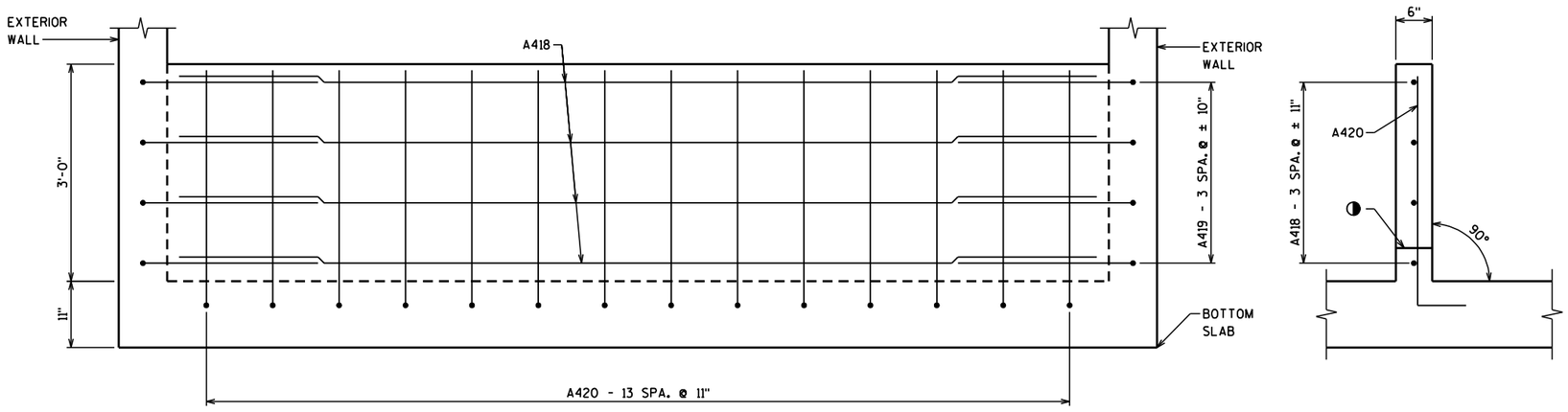
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STATE PROJECT NUMBER
1174-10-70



FLOAT WALL DETAIL



BAFFLE WALL DETAIL

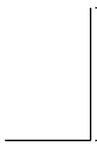
BILL OF BARS

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
	A601	X	64	14'-0"		TOP & BOT. SLAB, INTERIOR FACE
	A602	X	16	5'-9"		TOP SLAB, INTERIOR FACE
	A603	X	56	16'-0"		TOP & BOT. SLAB, INTERIOR FACE
	A604	X	8	2'-8"		TOP SLAB, INTERIOR FACE
	A605	X	4	5'-8"		TOP SLAB, INTERIOR FACE
	A606	X	16	5'-0"		TOP SLAB, INTERIOR FACE
△	A407	X	70	14'-0"		TOP & BOT. SLAB & WALLS HORIZ.
	A408	X	8	5'-9"		TOP SLAB, EXTERIOR FACE
	A409	X	67	16'-0"		TOP & BOT. SLAB & WALLS HORIZ.
	A410	X	2	5'-8"		TOP SLAB, EXTERIOR FACE
△	A511	X	76	10'-3"	X	TOP CORNER
△	A412	X	60	8'-2"		WALLS VERTICAL
	A613	X	76	7'-0"	X	BOTTOM CORNER
	A414	X	4	14'-6"	X	STIRRUP MANHOLES
	A415	X	4	8'-10"	X	STIRRUP MANHOLES
	A416	X	24	1'-9"	X	VERTICAL DOWEL MANHOLES
	A417	X	14	3'-8"		FLOAT WALL, VERTICAL
	A418	X	9	12'-8"		FLOAT & BAFFLE WALLS, HORIZONTAL
	A419	X	18	3'-3"	X	FLOAT & BAFFLE WALLS, HORIZONTAL
	A420	X	14	3'-9"	X	BAFFLE WALL VERITCAL

NOTES

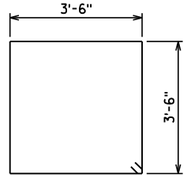
◑ HORIZONTAL CONSTRUCTION JOINT

△ FIELD CUT AS NECESSARY TO PROVIDE OPENING FOR STORM SEWER PIPES OR FOR MANHOLES.

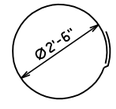


BAR	"A"
A511	7'-5"
A613	4'-0"
A416	1'-2"
A419	2'-8"
A420	3'-2"

A511, A613, A416, A419, A420



A414



A415

BAR BEND DIAGRAMS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-43-2

DRAWN BY BRE | PLANS CK'D. KRO

INTERIOR WALLS & BAR DETAILS

SHEET 4 OF 4

314

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USH 51 Stage1

STATION	Distance	AREA (SF) Cut	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
436+50.00		177	8					
437+00.00	50	185	1	335	8	335	10	324.56
437+50.00	50	184	1	341	2	676	12	664.17
438+00.00	50	182	4	339	4	1,015	17	997.45
438+50.00	50	179	9	334	11	1,349	32	1,317.34
439+00.00	50	192	1	343	9	1,693	42	1,650.17
439+50.00	50	193	0	356	1	2,049	43	2,005.42
440+00.00	50	185	0	350	0	2,398	44	2,354.53
440+50.00	50	162	7	321	7	2,719	52	2,667.02
441+00.00	50	149	18	288	23	3,007	81	2,925.51
441+50.00	50	151	2	277	19	3,284	105	3,179.34
442+00.00	50	153	8	281	9	3,565	116	3,449.25
442+50.00	50	141	1	272	8	3,837	125	3,711.67
443+00.00	50	153	1	272	1	4,109	127	3,982.28
443+50.00	50	139	10	270	10	4,379	139	4,239.75
444+00.00	50	141	1	259	11	4,638	152	4,485.64
444+50.00	50	136	2	257	3	4,895	157	4,738.11
445+00.00	50	144	2	259	3	5,154	161	4,993.19
445+50.00	50	156	0	278	2	5,433	163	5,269.17
446+00.00	50	159	3	292	3	5,724	167	5,557.25
446+50.00	50	154	1	290	3	6,015	171	5,843.34
447+00.00	50	156	1	287	1	6,302	173	6,128.58
447+50.00	50	124	4	259	4	6,561	179	6,382.48
448+00.00	50	182	0	284	3	6,845	183	6,662.18
448+50.00	50	140	0	299	0	7,144	183	6,960.93
449+00.00	50	148	0	267	0	7,411	183	7,228.05
449+50.00	50	211	0	333	0	7,744	183	7,560.92
450+00.00	50	227	0	406	0	8,149	183	7,966.24
450+50.00	50	242	0	434	0	8,583	183	8,400.08
451+00.00	50	234	0	440	0	9,024	183	8,840.49
451+50.00	50	232	0	431	0	9,455	183	9,271.18
452+00.00	50	226	0	424	0	9,878	183	9,695.09
452+50.00	50	230	0	423	0	10,301	183	10,117.80
453+00.00	50	214	0	411	0	10,712	183	10,528.96
453+50.00	50	206	0	388	0	11,101	183	10,917.39
454+00.00	50	203	0	379	0	11,480	184	11,295.70
454+50.00	50	203	0	376	0	11,856	184	11,671.77
455+00.00	50	217	0	389	0	12,245	184	12,060.77
455+50.00	50	162	0	350	0	12,595	184	12,411.18
456+00.00	50	160	0	297	0	12,893	184	12,708.66
456+50.00	50	263	0	392	0	13,285	184	13,100.30
457+00.00	50	297	1	519	1	13,803	186	13,617.59
457+50.00	50	159	0	423	1	14,226	187	14,038.68
458+00.00	50	159	0	295	0	14,521	187	14,333.21

USH 51 Stage 1 continued

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
458+50.00	50	144	0	281	0	14,801	187	14,613.84
459+00.00	50	230	0	346	0	15,147	187	14,960.12
459+50.00	50	200	0	398	0	15,545	188	15,357.44
460+00.00	50	181	19	352	18	15,897	210	15,687.14
460+50.00	50	180	105	333	115	16,231	354	15,876.62
461+00.00	50	184	300	336	375	16,567	823	15,744.44
461+50.00	50	126	0	287	278	16,854	1,170	15,684.52
462+00.00	50	172	32	276	30	17,131	1,207	15,923.95
462+50.00	50	187	25	333	53	17,464	1,273	16,191.10
463+00.00	50	216	2	374	25	17,838	1,304	16,533.26
463+50.00	50	224	2	407	4	18,244	1,309	16,935.66
464+00.00	50	209	4	401	5	18,645	1,315	17,329.78
464+50.00	50	216	1	393	5	19,038	1,321	17,717.05
465+00.00	50	202	2	386	3	19,425	1,325	18,099.10
465+50.00	50	196	2	368	4	19,792	1,330	18,462.26
466+00.00	50	204	1	370	2	20,163	1,333	18,829.39
466+50.00	50	224	6	396	6	20,559	1,341	19,217.87
467+00.00	50	236	2	426	7	20,984	1,350	19,634.14
467+50.00	50	231	7	432	8	21,417	1,361	20,055.99
468+00.00	50	229	1	426	8	21,842	1,370	20,472.13
468+50.00	50	207	0	404	2	22,246	1,372	20,874.02
469+00.00	50	199	0	376	1	22,622	1,373	21,249.13
469+50.00	50	202	0	371	0	22,993	1,373	21,619.24
470+00.00	50	200	0	372	0	23,365	1,373	21,991.43

USH 51 Stage 2

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
470+00.00								
470+50.00	50	195	0	366	0	23,731	1,374	22,356.95
471+00.00	50	200	0	366	0	24,097	1,374	22,722.39
471+50.00	50	204	0	375	0	24,471	1,374	23,097.03
472+00.00	50	216	0	389	0	24,861	1,374	23,486.23
472+50.00	50	219	0	402	0	25,263	1,374	23,888.46
473+00.00	50	209	0	396	0	25,658	1,374	24,284.04
473+50.00	50	207	0	385	0	26,043	1,374	24,668.58
474+00.00	50	208	0	384	0	26,427	1,374	25,052.34
474+50.00	50	220	0	396	0	26,823	1,375	25,447.72
475+00.00	50	231	0	417	0	27,239	1,375	25,864.05
475+50.00	50	224	0	421	0	27,661	1,375	26,285.24
476+00.00	50	216	0	408	0	28,069	1,375	26,693.18
476+50.00	50	193	0	379	0	28,448	1,375	27,072.32
477+00.00	50	202	0	366	0	28,813	1,375	27,438.00
477+50.00	50	236	0	405	0	29,219	1,375	27,843.10
478+00.00	50	296	0	493	0	29,711	1,375	28,335.77
478+50.00	50	297	0	549	0	30,260	1,375	28,884.79
479+00.00	50	290	0	543	0	30,803	1,375	29,427.95
479+50.00	50	289	0	536	0	31,339	1,375	29,963.54
480+00.00	50	248	0	497	0	31,836	1,375	30,460.21
480+50.00	50	235	2	447	2	32,283	1,378	30,904.72
481+00.00	50	181	4	386	6	32,669	1,385	31,283.27
481+50.00	50	302	2	448	5	33,116	1,392	31,724.31
482+00.00	50	129	1	399	3	33,516	1,395	32,120.03
482+50.00	50	310	0	407	1	33,922	1,397	32,525.49
483+00.00	50	326	0	589	0	34,511	1,397	33,114.42
483+50.00	50	305	0	584	0	35,095	1,397	33,698.28
484+00.00	50	276	0	537	0	35,632	1,397	34,235.67
484+50.00	50	260	0	496	0	36,128	1,397	34,731.52
485+00.00	50	260	0	481	0	36,609	1,397	35,212.49
485+50.00	50	261	0	482	0	37,091	1,397	35,694.25
486+00.00	50	253	0	475	0	37,566	1,397	36,169.53
486+50.00	50	232	0	449	0	38,015	1,397	36,618.29
487+00.00	50	214	0	414	0	38,429	1,397	37,031.70
487+50.00	50	194	4	378	4	38,807	1,402	37,405.06
488+00.00	50	22	0	200	4	39,007	1,406	37,600.35
488+50.00	50	22	0	41	0	39,048	1,407	37,641.16
489+00.00	50	22	0	41	0	39,089	1,407	37,681.41

USH 51 Total	39,089	1,126

Rogers Drive

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
10+29	1,029		21	0					
10+38	1,038	9	10	0	5	0	5	0	5.20
10+50	1,050	12	92	0	22	0	28	0	27.63
10+75	1,075	25	58	0	70	0	97	0	97.28
11+00	1,100	25	52	0	51	0	148	0	148.50
11+25	1,125	25	44	0	45	0	193	0	193.06
11+36	1,136	11	38	0	17	0	210	0	209.80

Total	210	0

NewHuber

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) Marsh Exc	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) Marsh Exc	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 6	Mass Ordinate Note 8
7+50.00	750		0	0	55								
8+00.00	800	50	0	63	69	0	59	115	0	73	173	69.18	-73.29
8+50.00	850	50	0	48	38	0	104	100	0	203	322	128.99	-202.44
9+00.00	900	50	0	98	0	0	136	36	0	372	376	150.33	-371.82
9+46.95	947	47	0	18	0	0	101	0	1	498	376	150.33	-497.84
9+56.71	957	10	1	5	0	0	2	0	1	501	376	150.33	-499.50

Total	1	400	251

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9

PROJECT NO:	HWY:	COUNTY:	EARTHWORK	SHEET: 319	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

Huber Lane

STATION	Real Station	Distance	AREA (SF) Cut	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
10+29.48	1,029		6	0					
10+38.26	1,038	9	9	0	2	0	2	0	2.39
10+50.00	1,050	12	86	0	20	0	23	0	22.84
10+75.00	1,075	25	54	0	65	0	88	0	87.57
11+00.00	1,100	25	39	0	43	0	131	0	130.50
11+25.00	1,125	25	32	0	33	0	163	0	162.94
11+50.00	1,150	25	23	0	25	0	189	1	187.94

Total	189	1

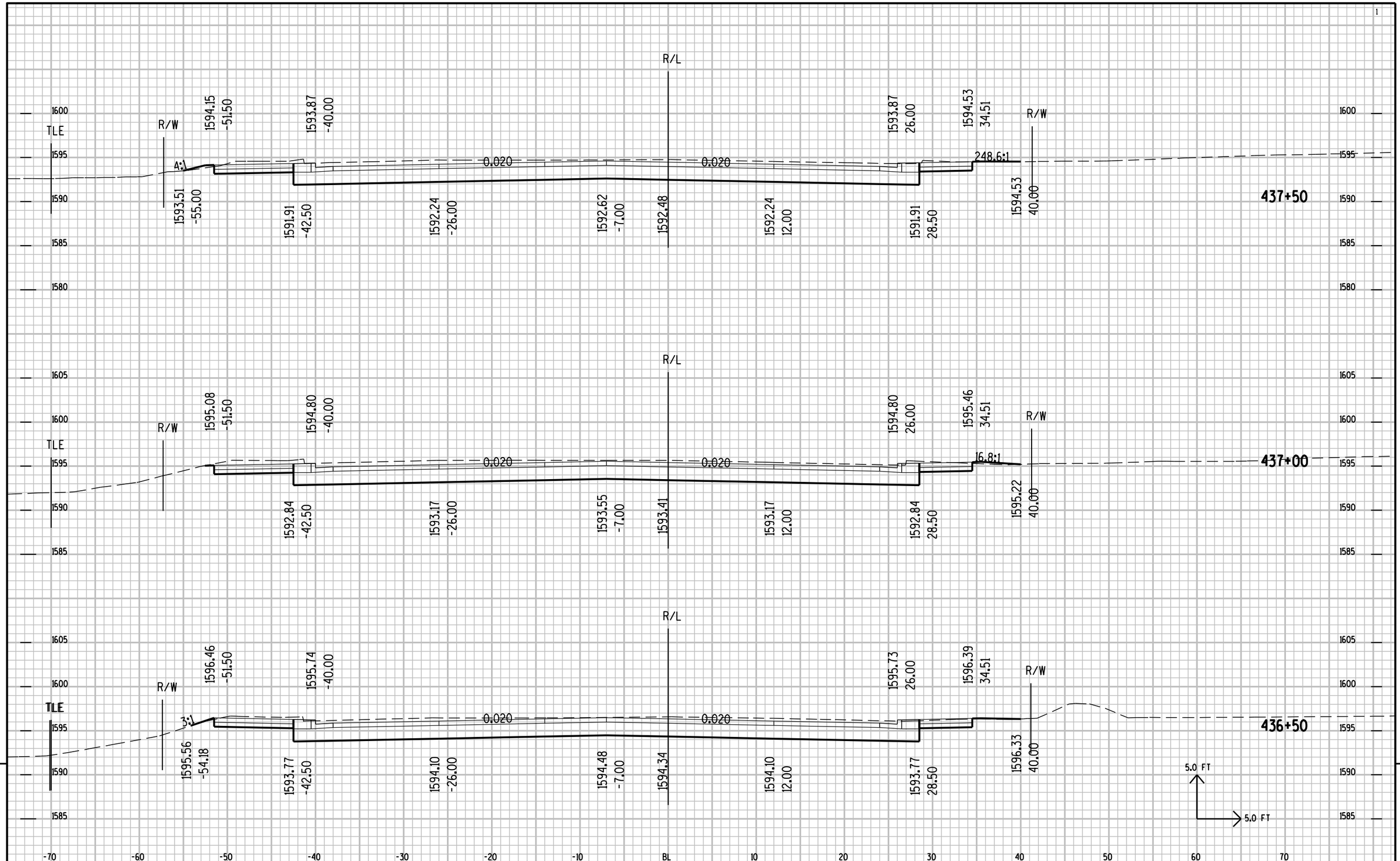
PROJECT NO:	HWY:	COUNTY:	EARTHWORK	SHEET: 320	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

Old Hwy 70

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted Cut Note 1	Incremental Vol (CY) (Unadjusted Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
7+00.00	700		72	32					
7+50.00	750	50	82	21	143	49	143	61	82.12
8+00.00	800	50	89	34	158	51	301	124	177.18
8+50.00	850	50	108	11	182	41	484	176	307.66
9+00.00	900	50	103	2	195	12	679	191	487.53

Total	679	153

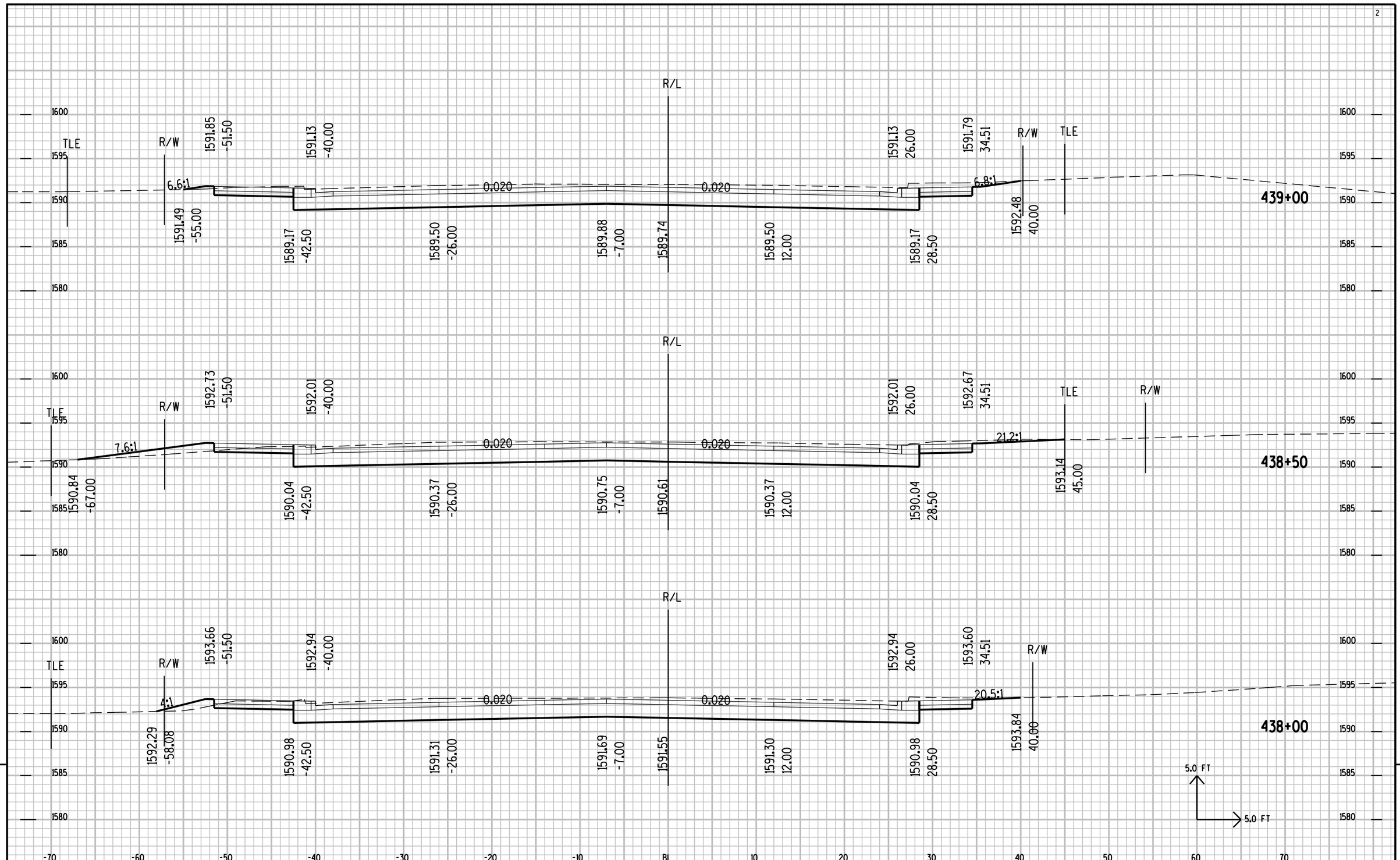


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 322	E

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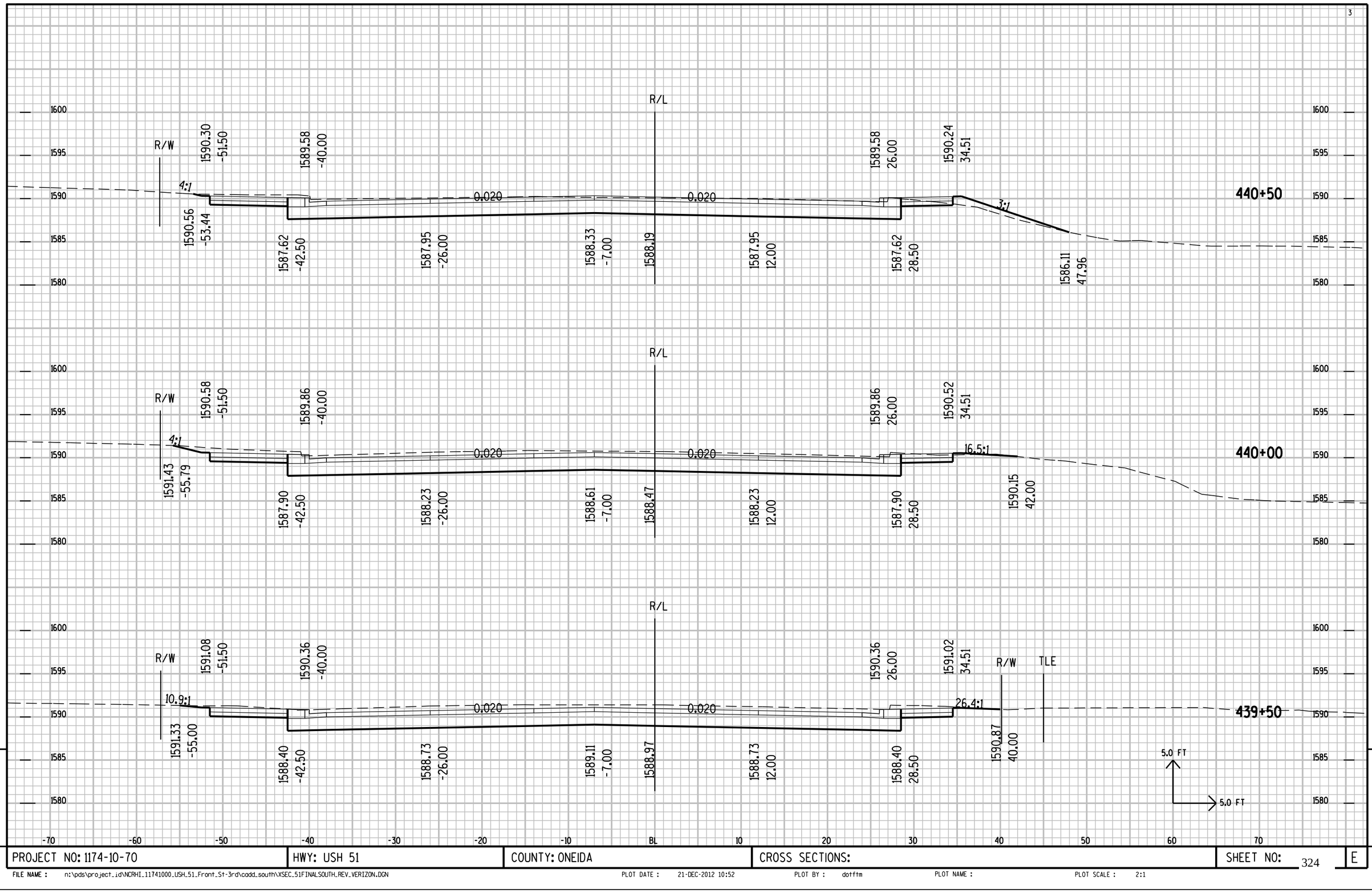


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 323	E

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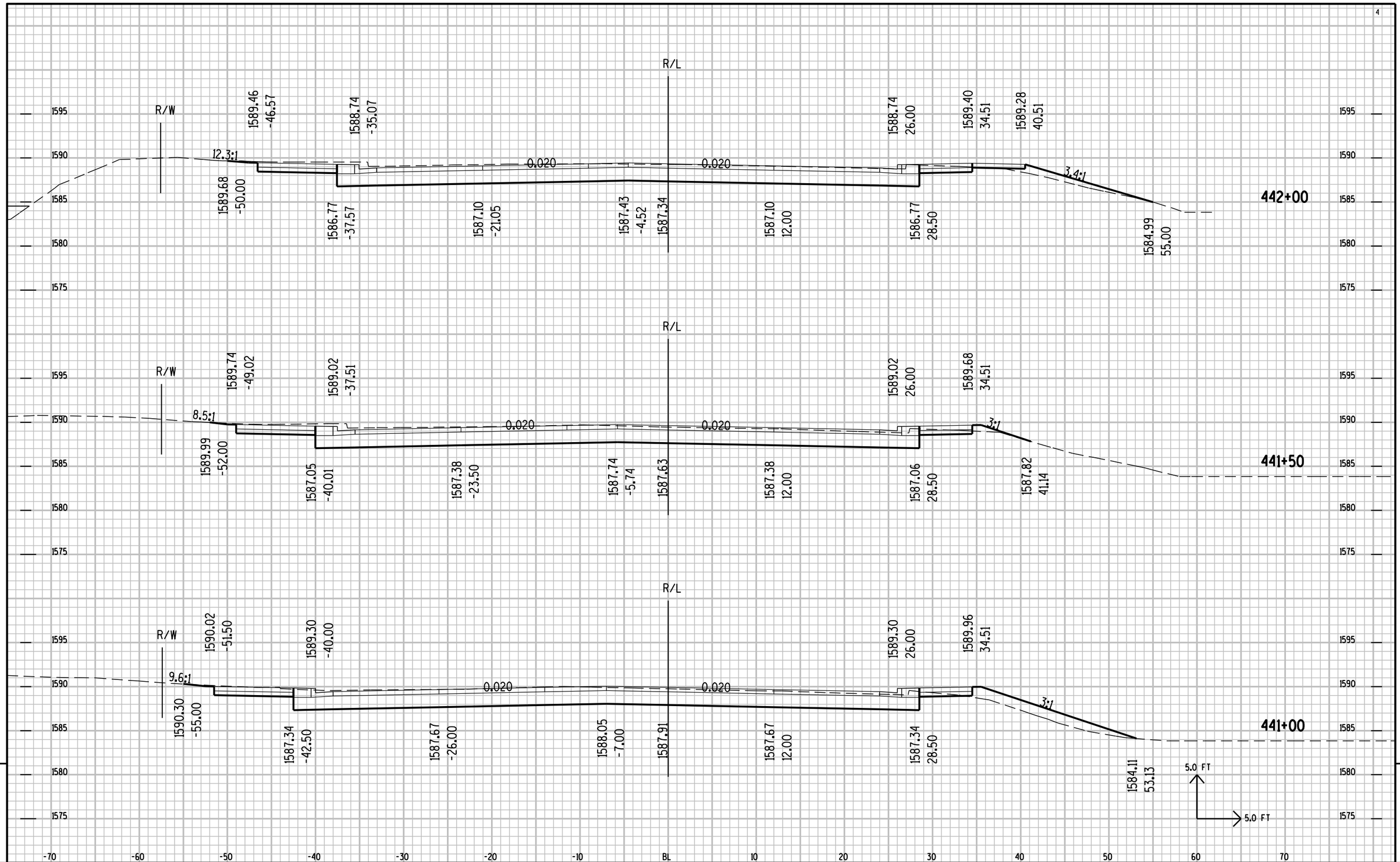


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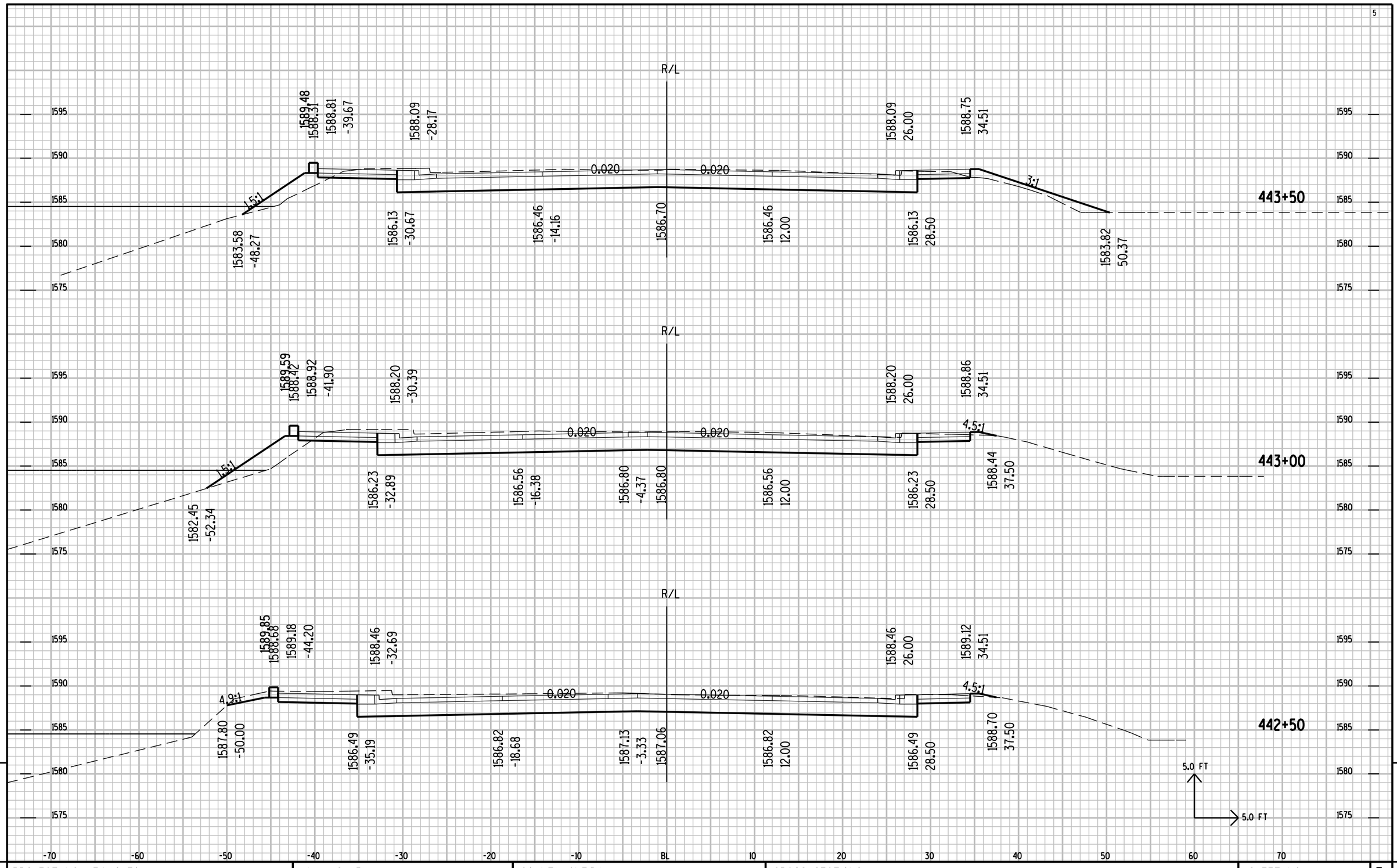


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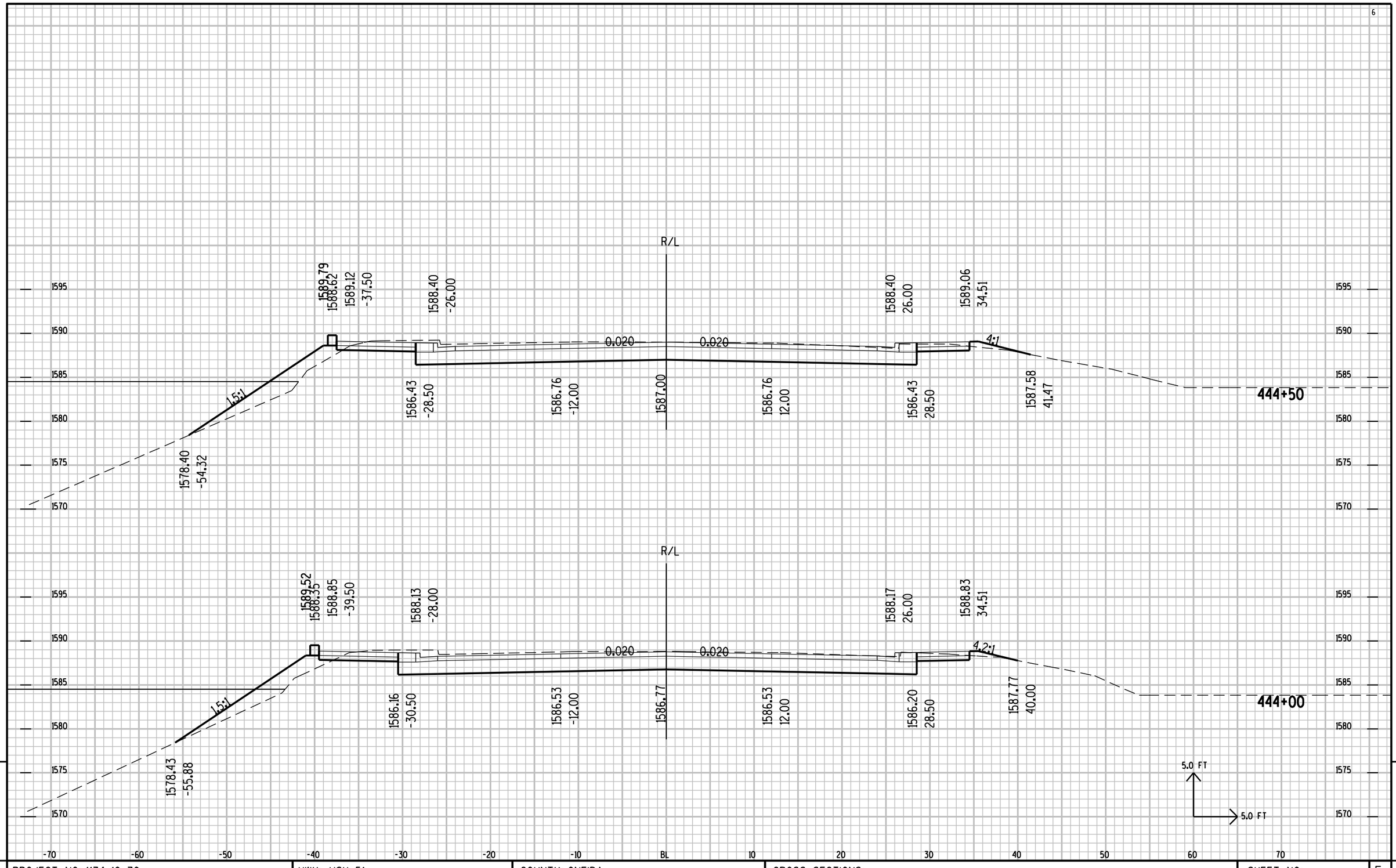


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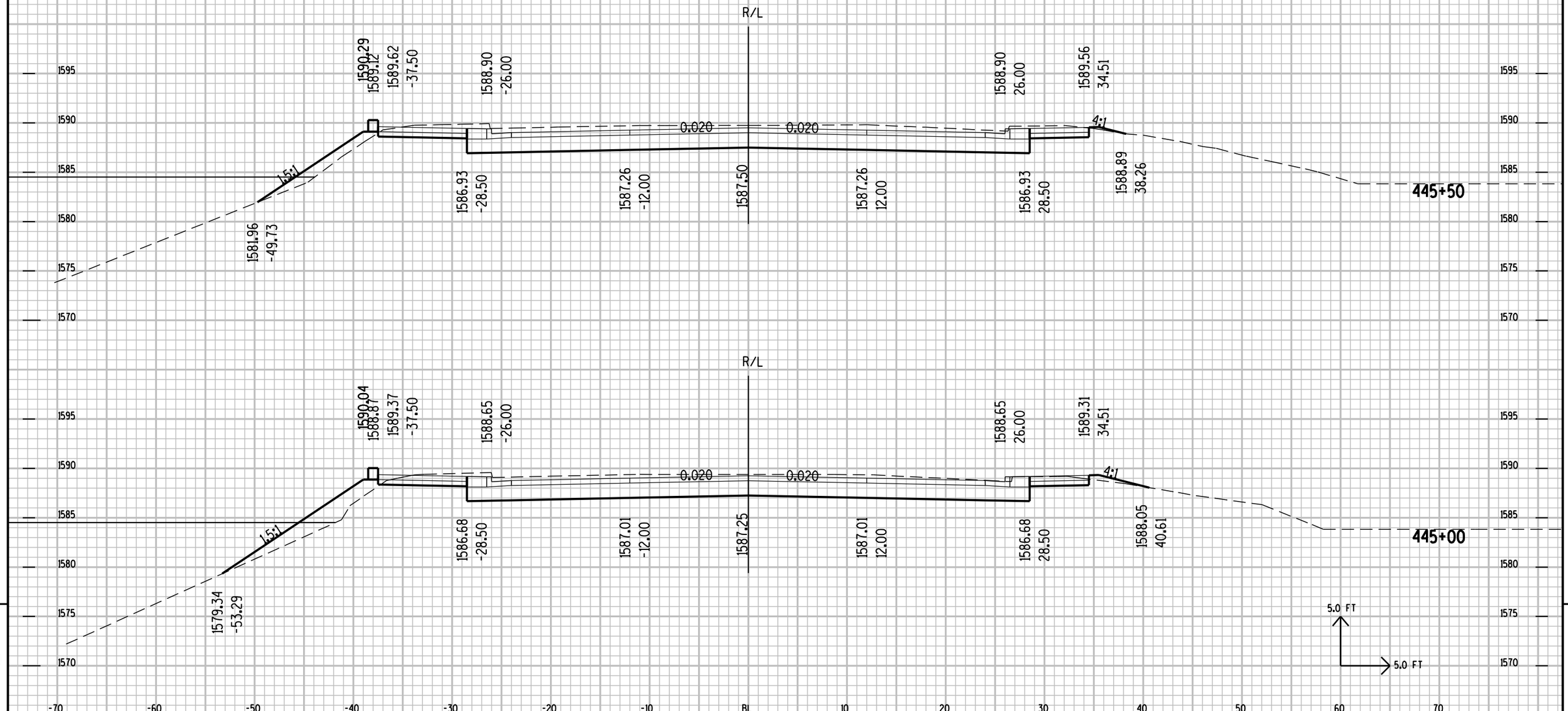


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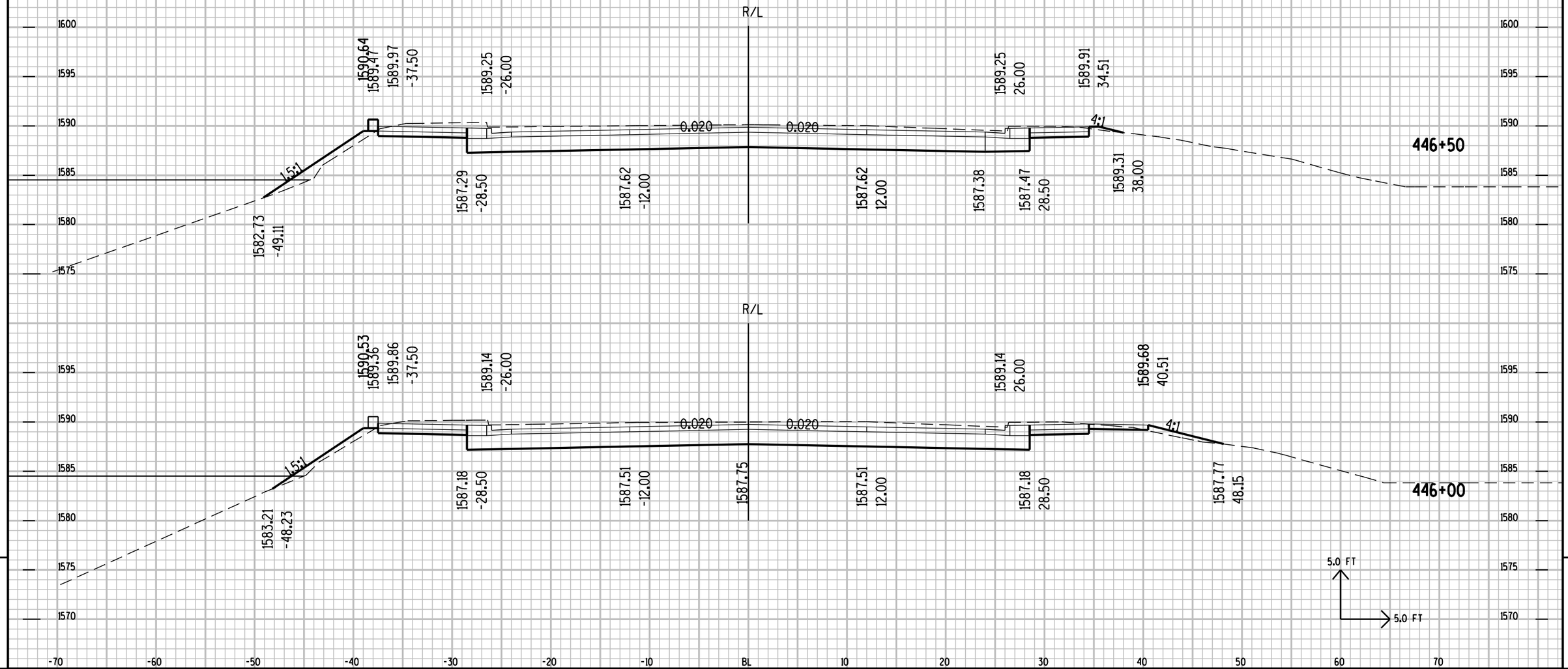


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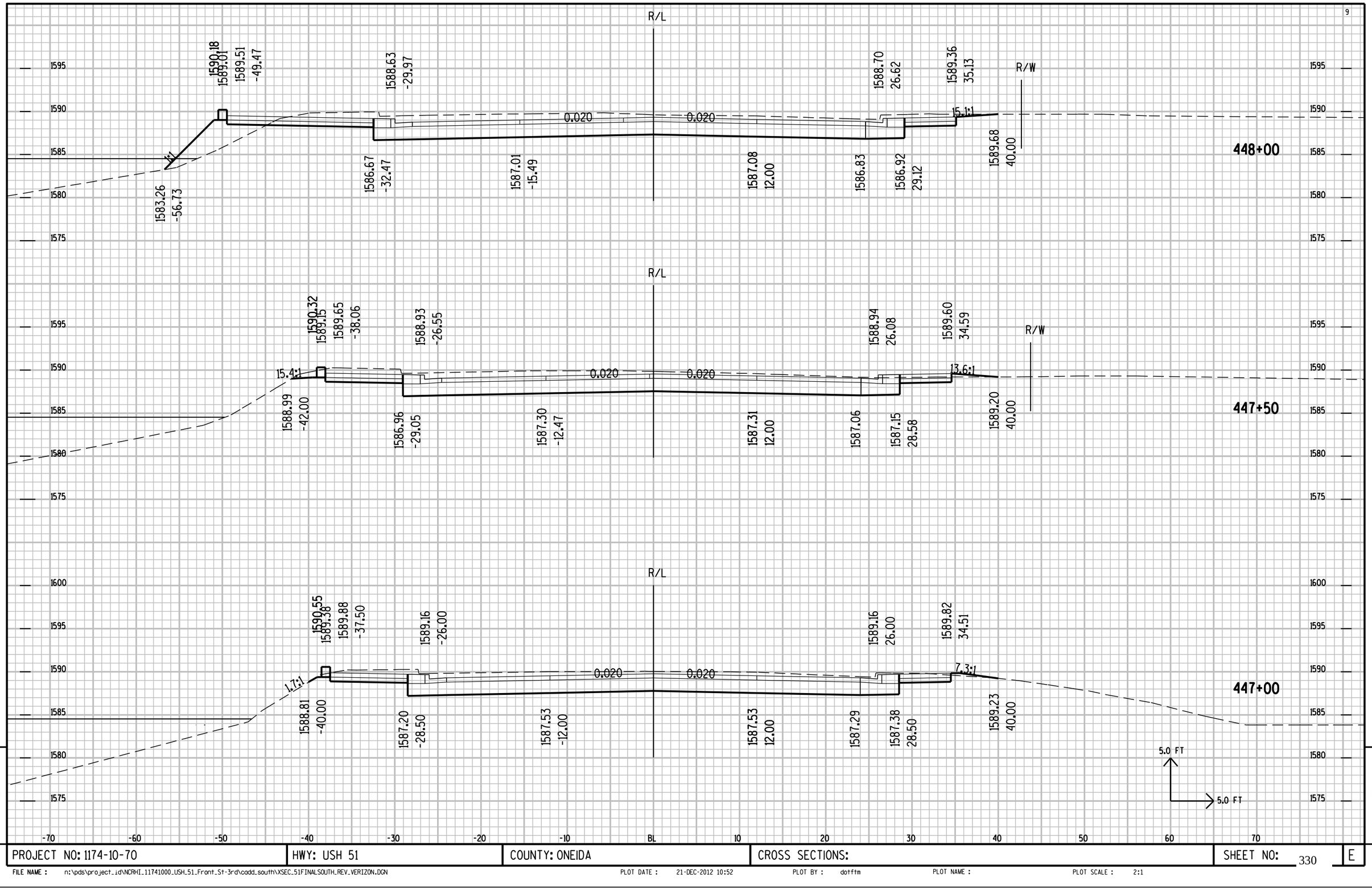


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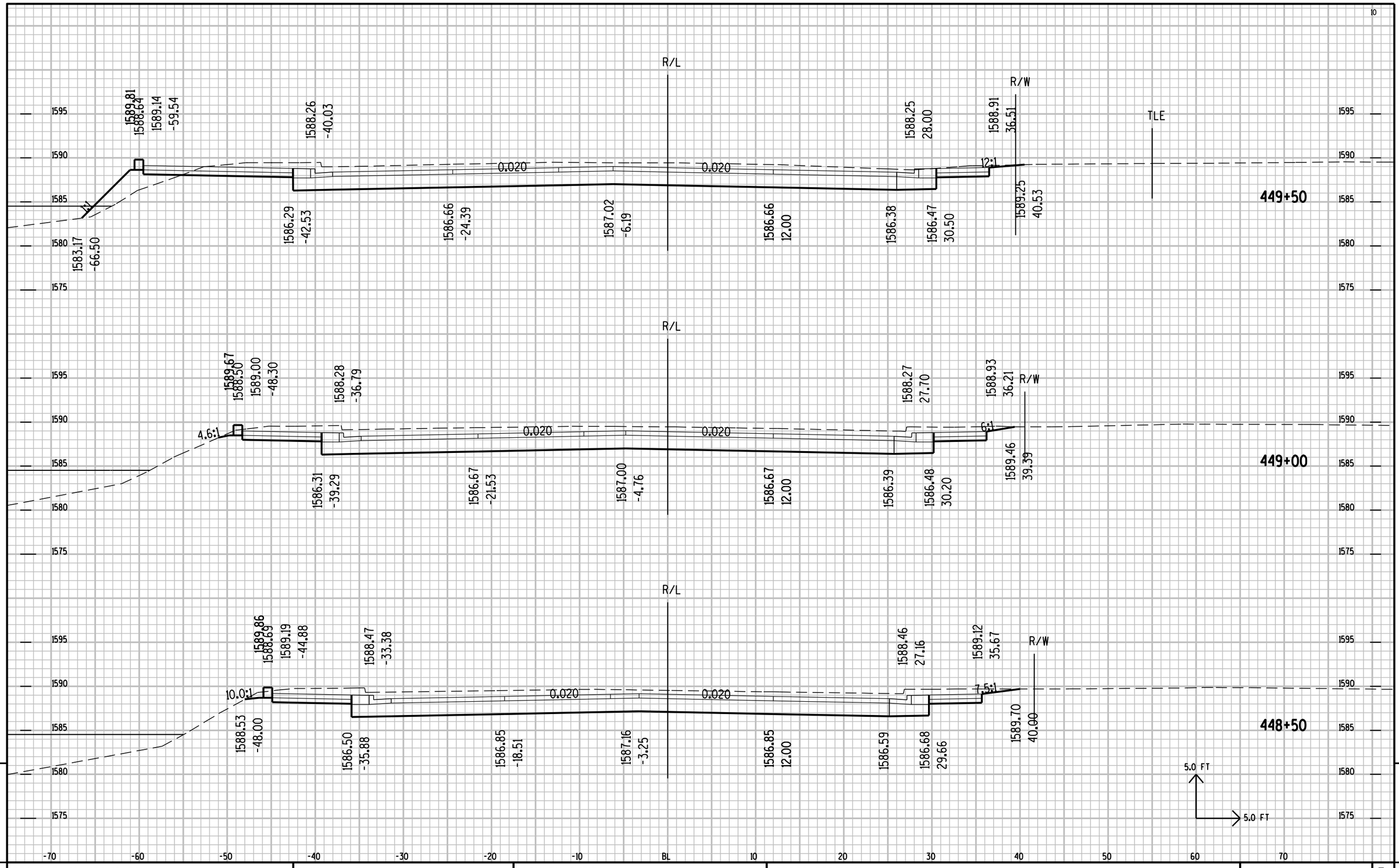


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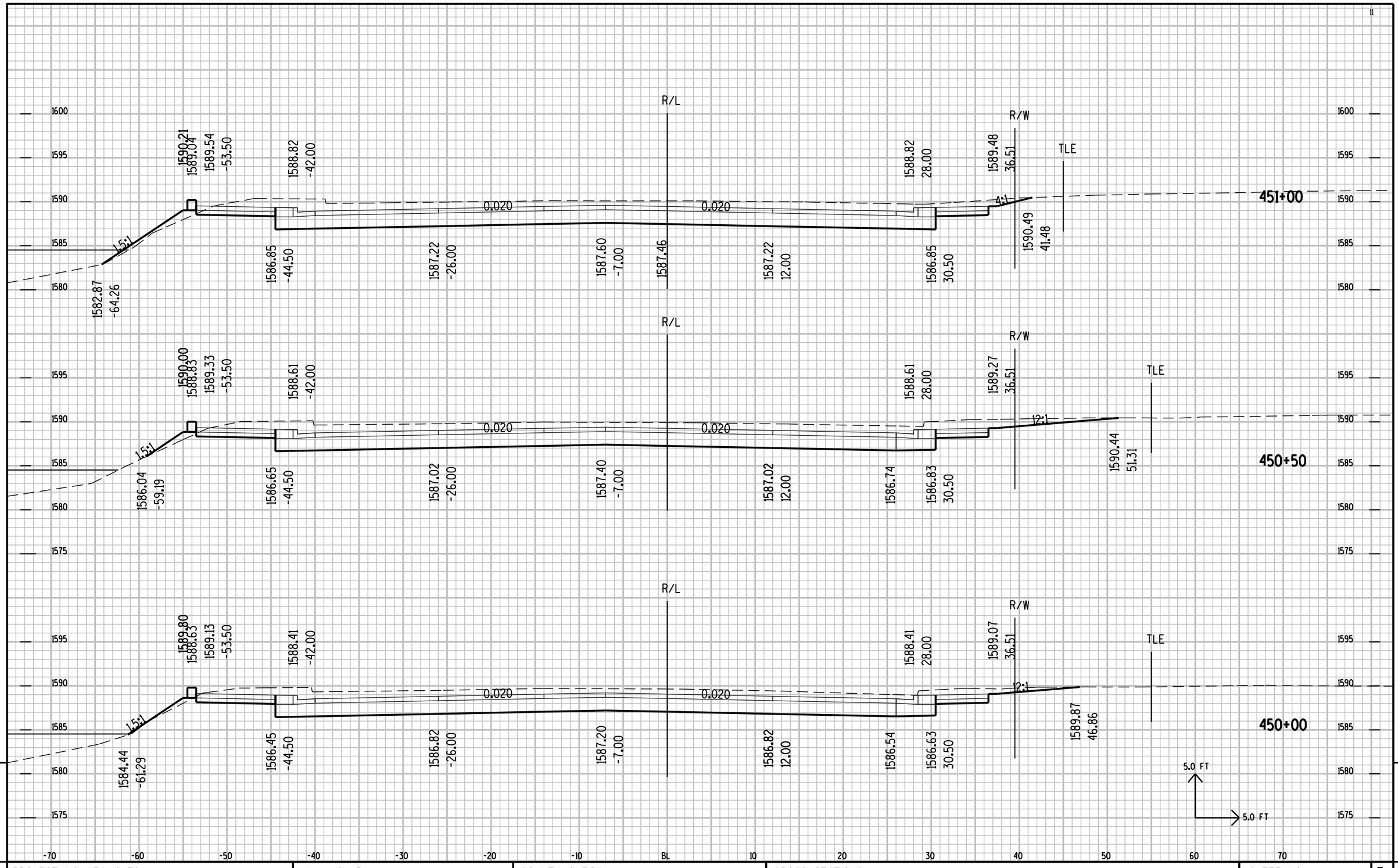


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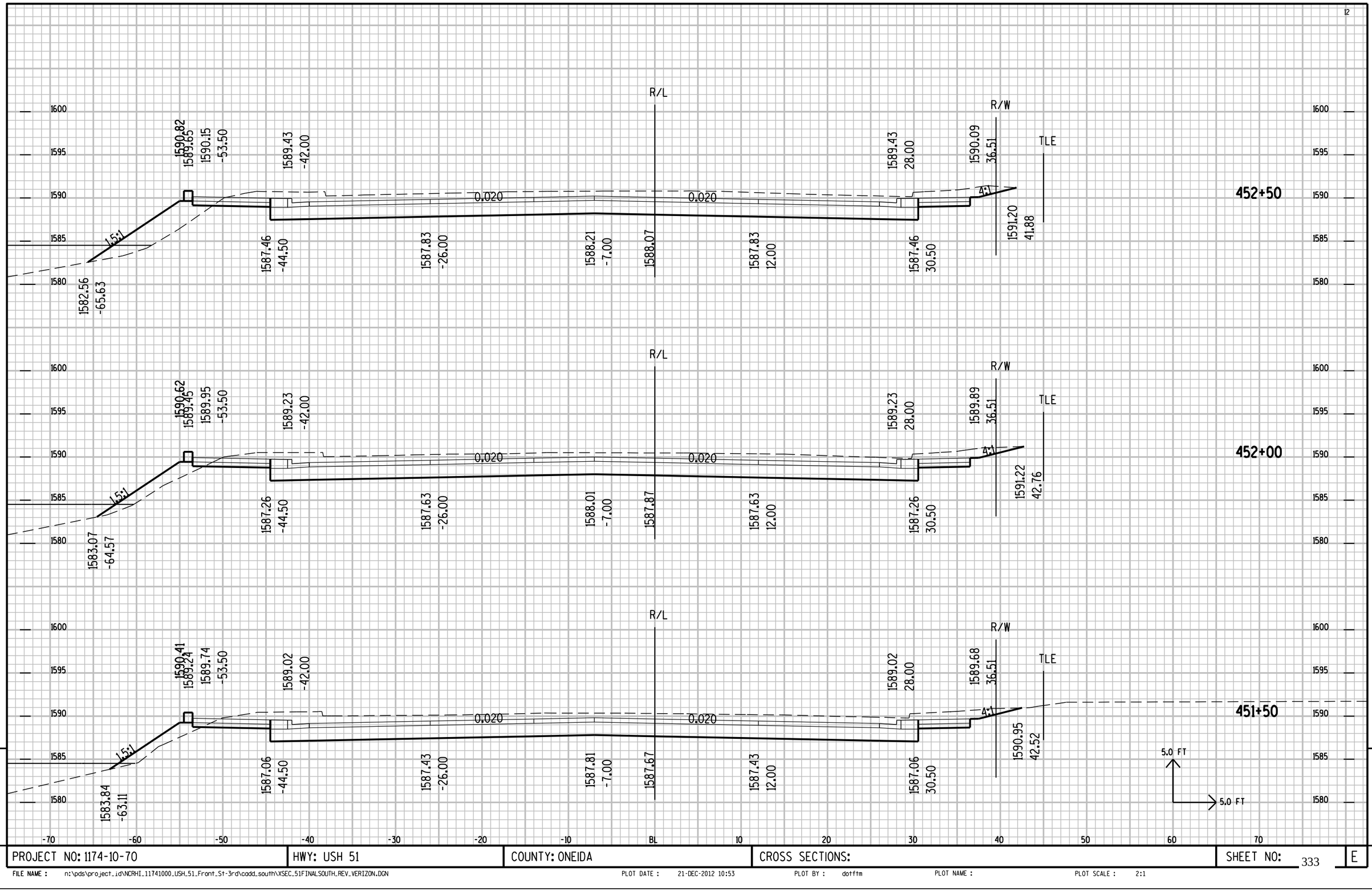


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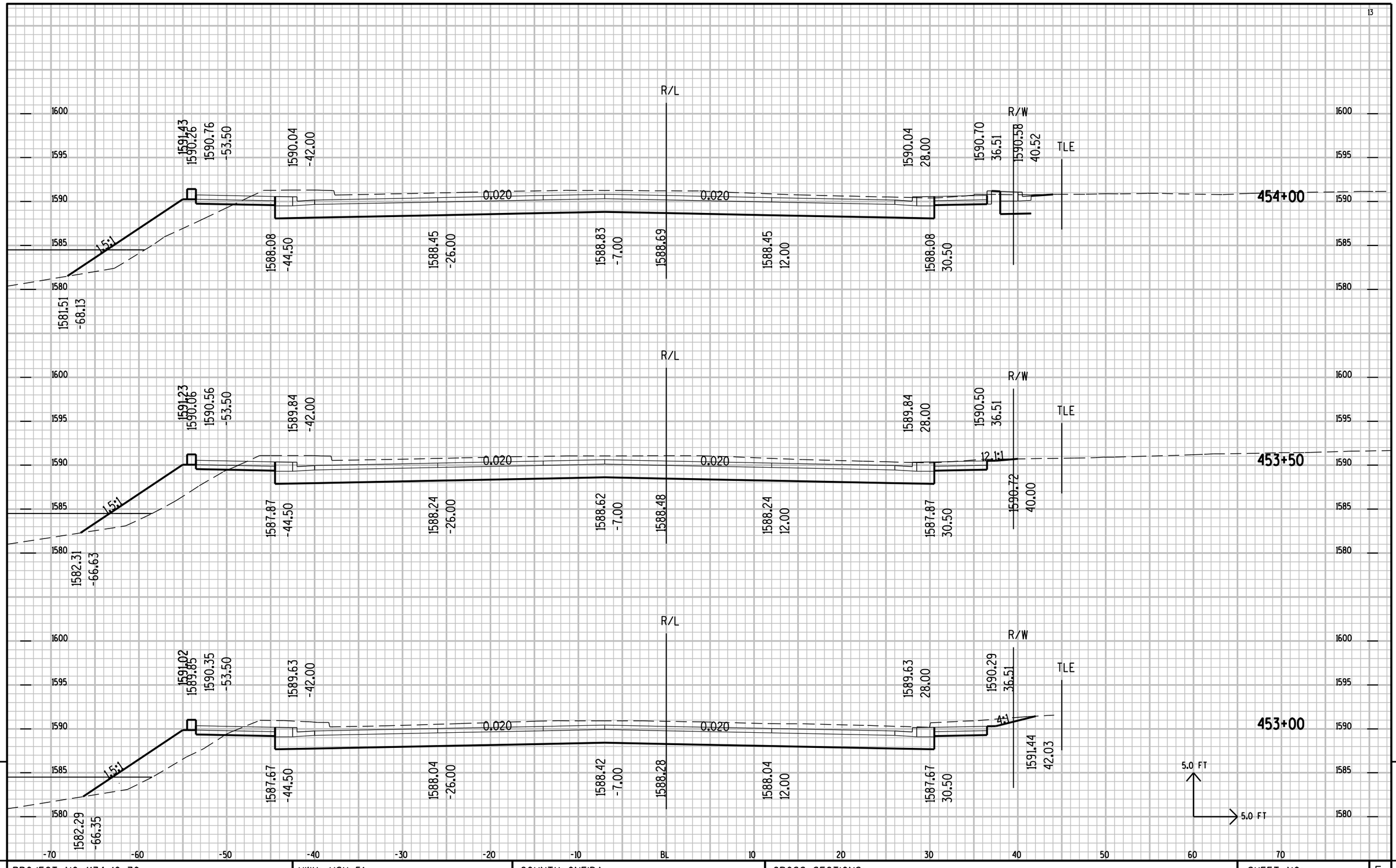


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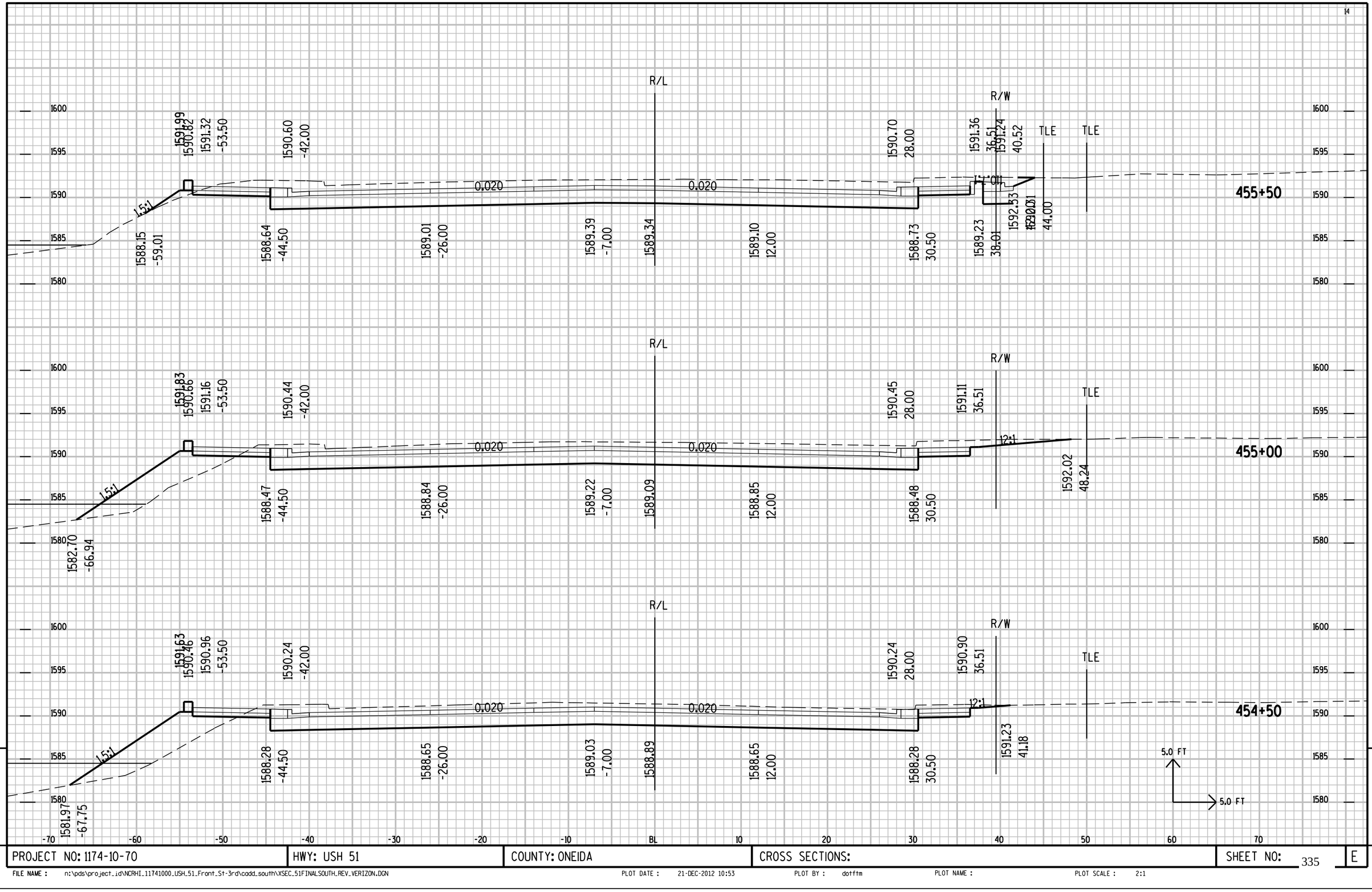
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FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:53 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 334	E

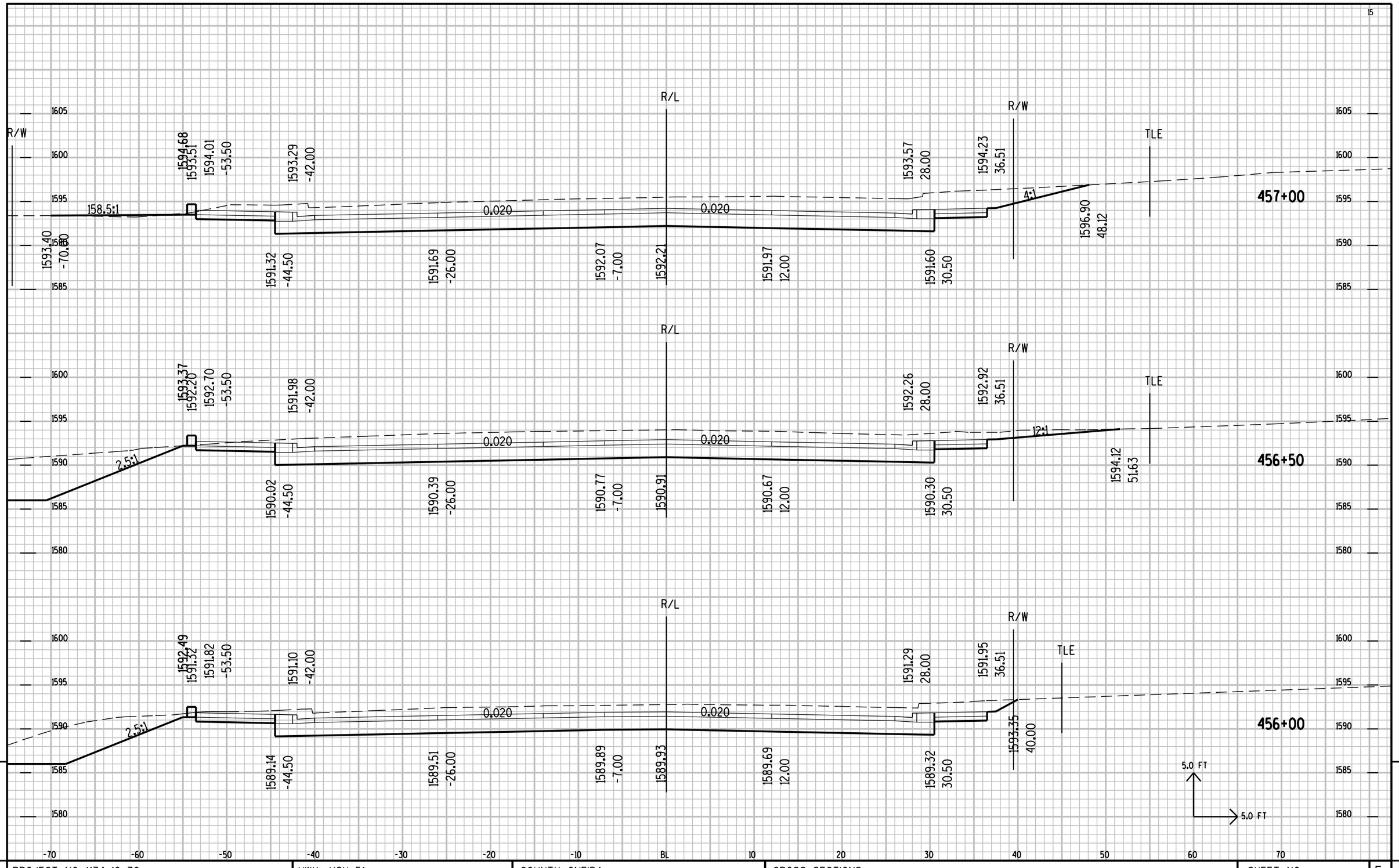


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 335	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:53 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



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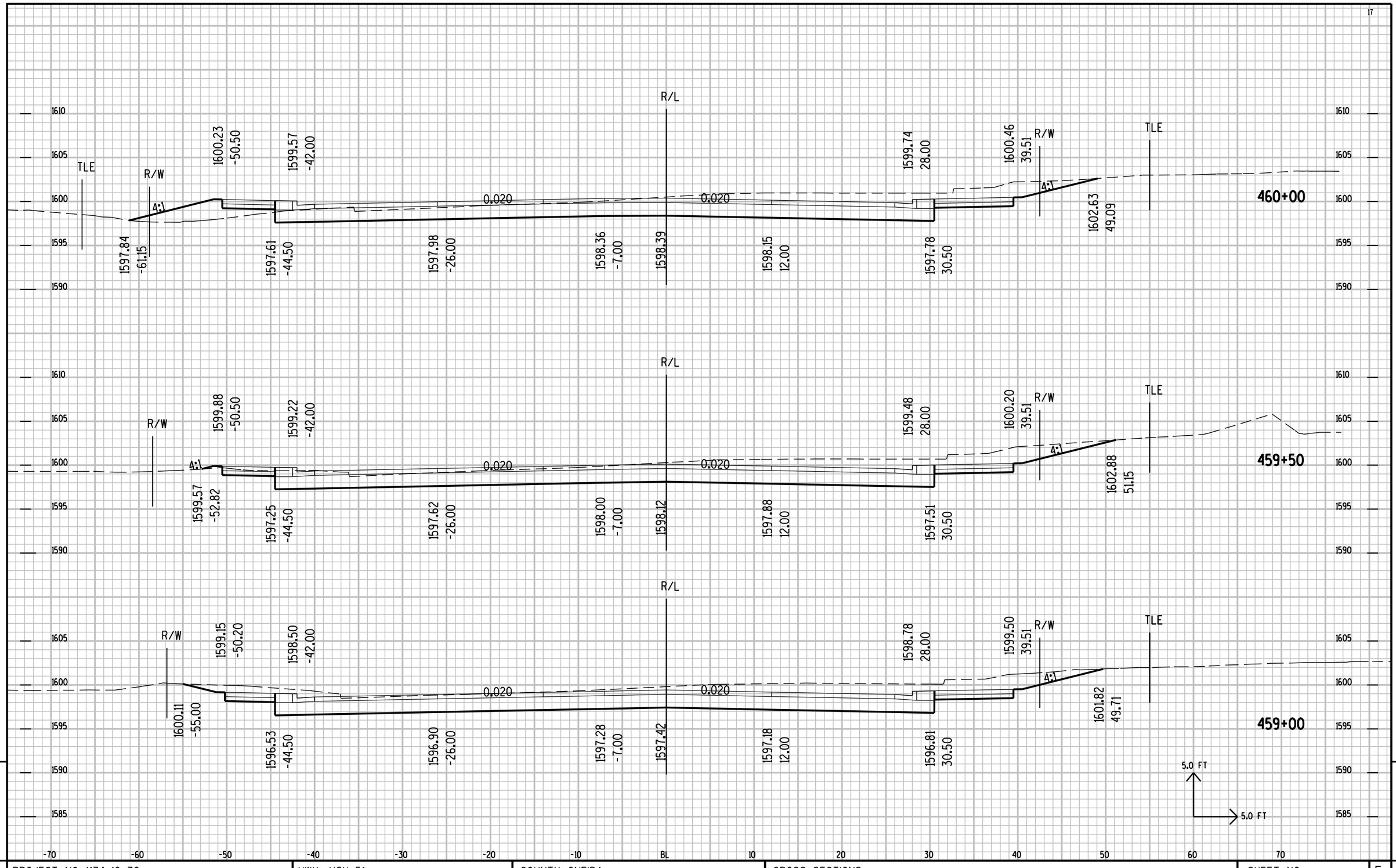
PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 336	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:53 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 337	E

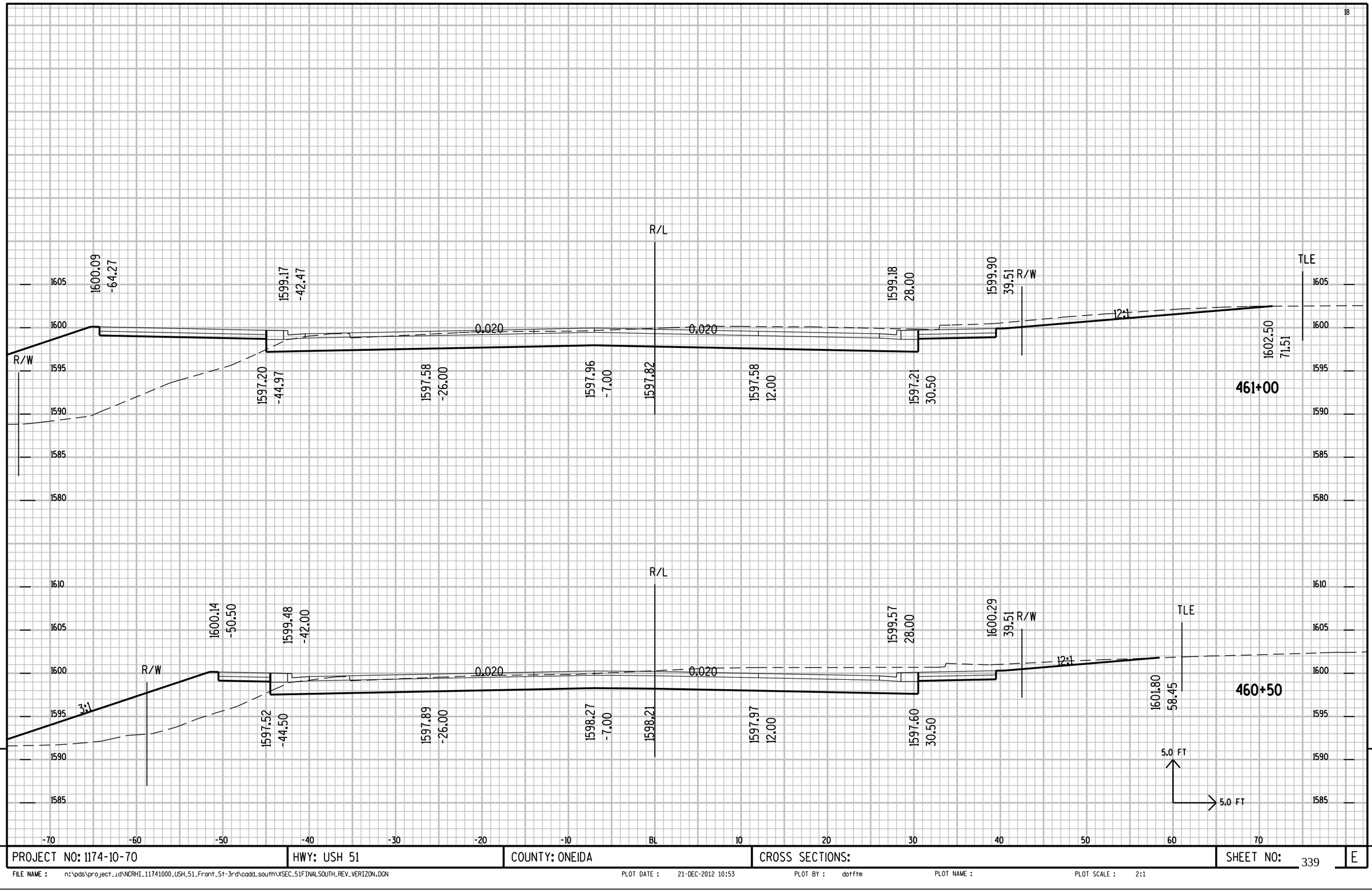


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 338	E

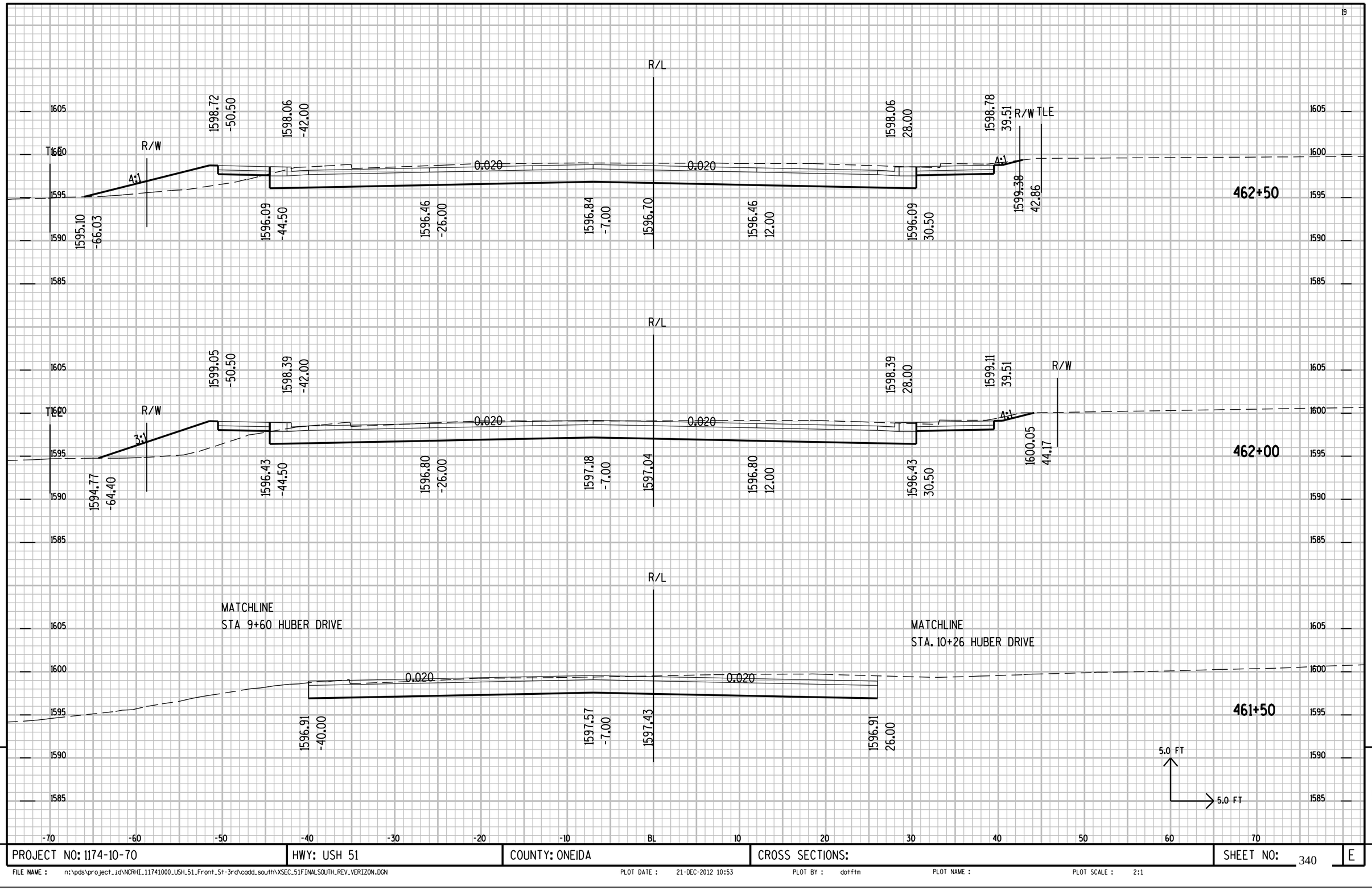
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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 339	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:53 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

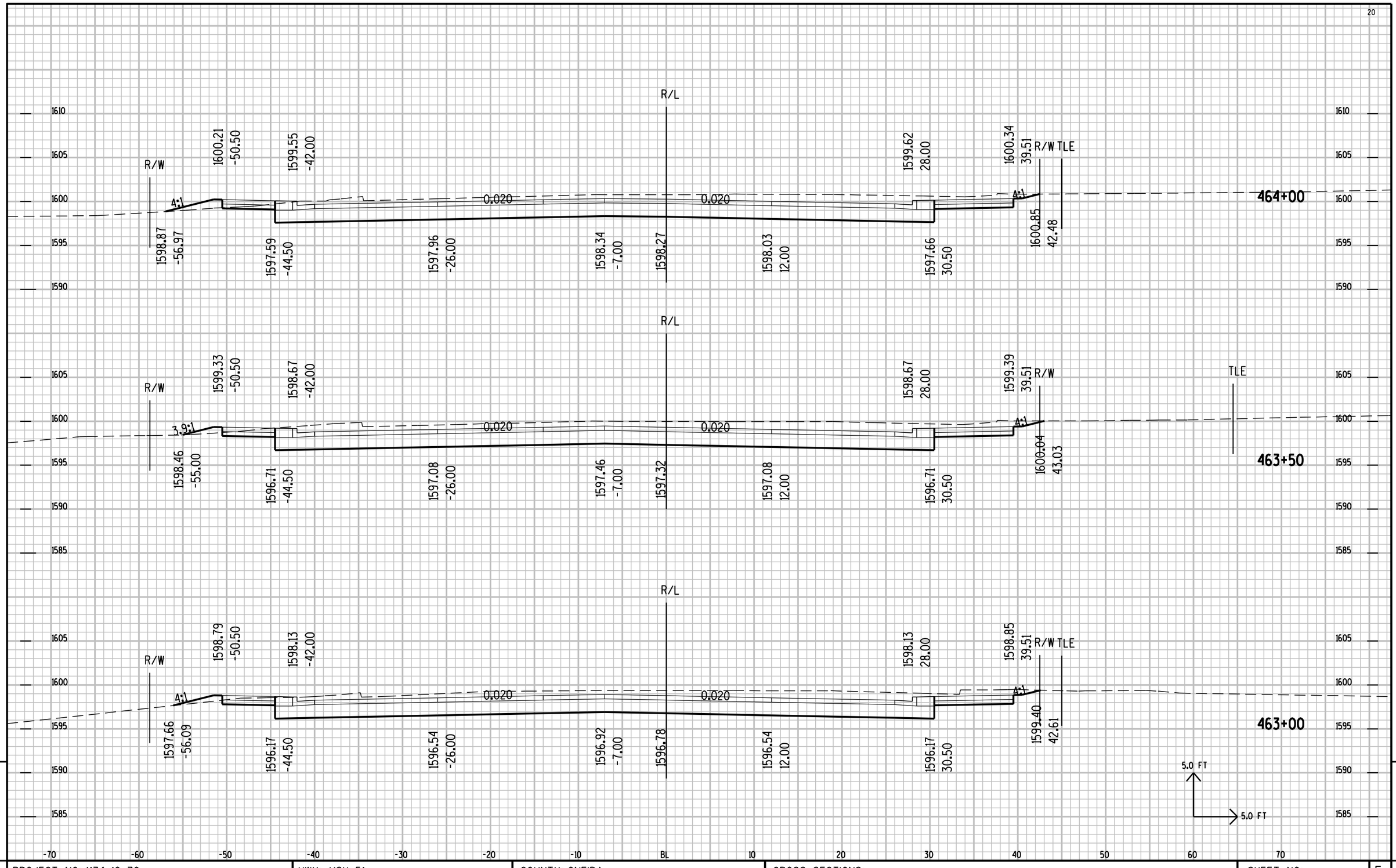


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 340	E

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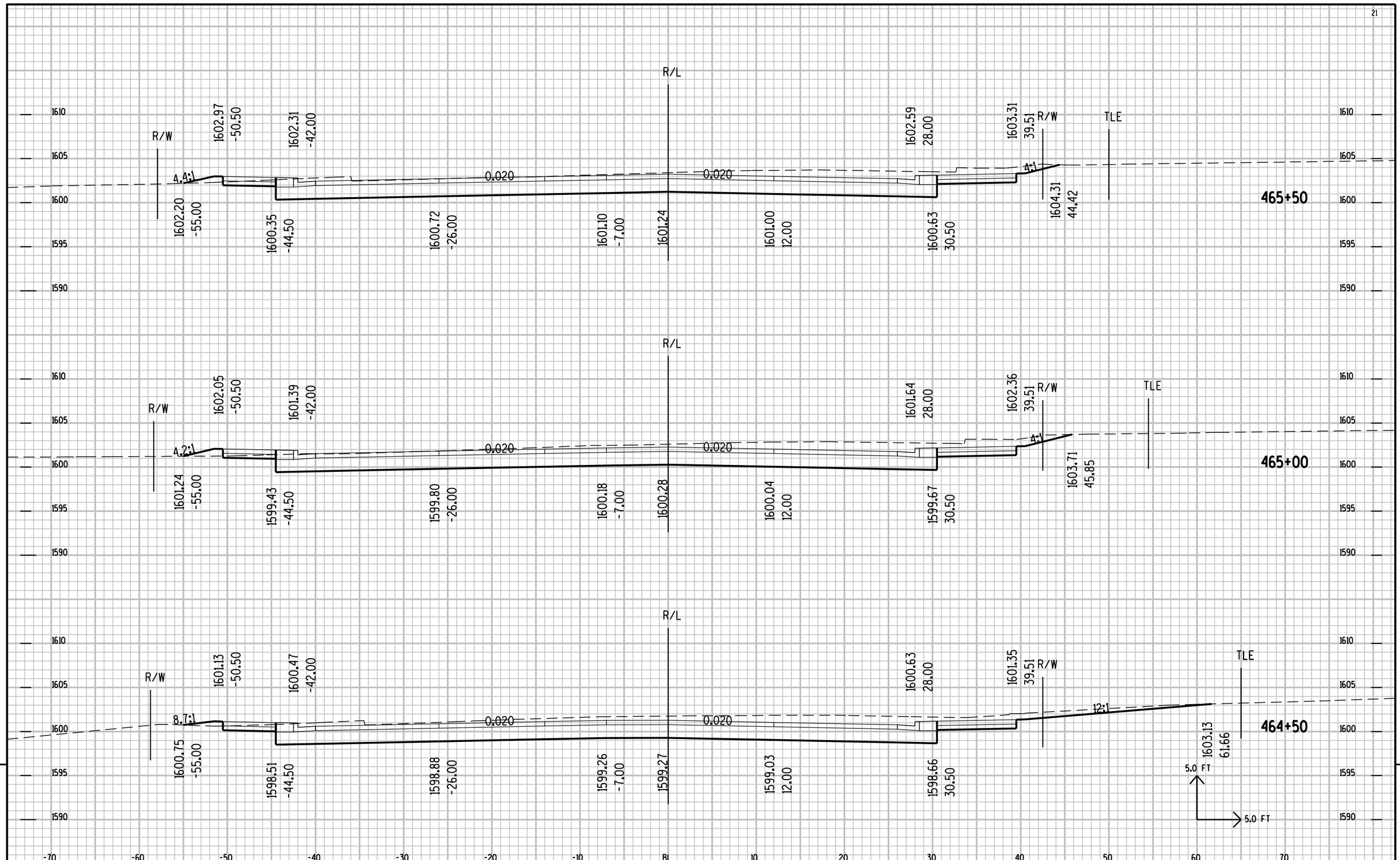


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 341	E

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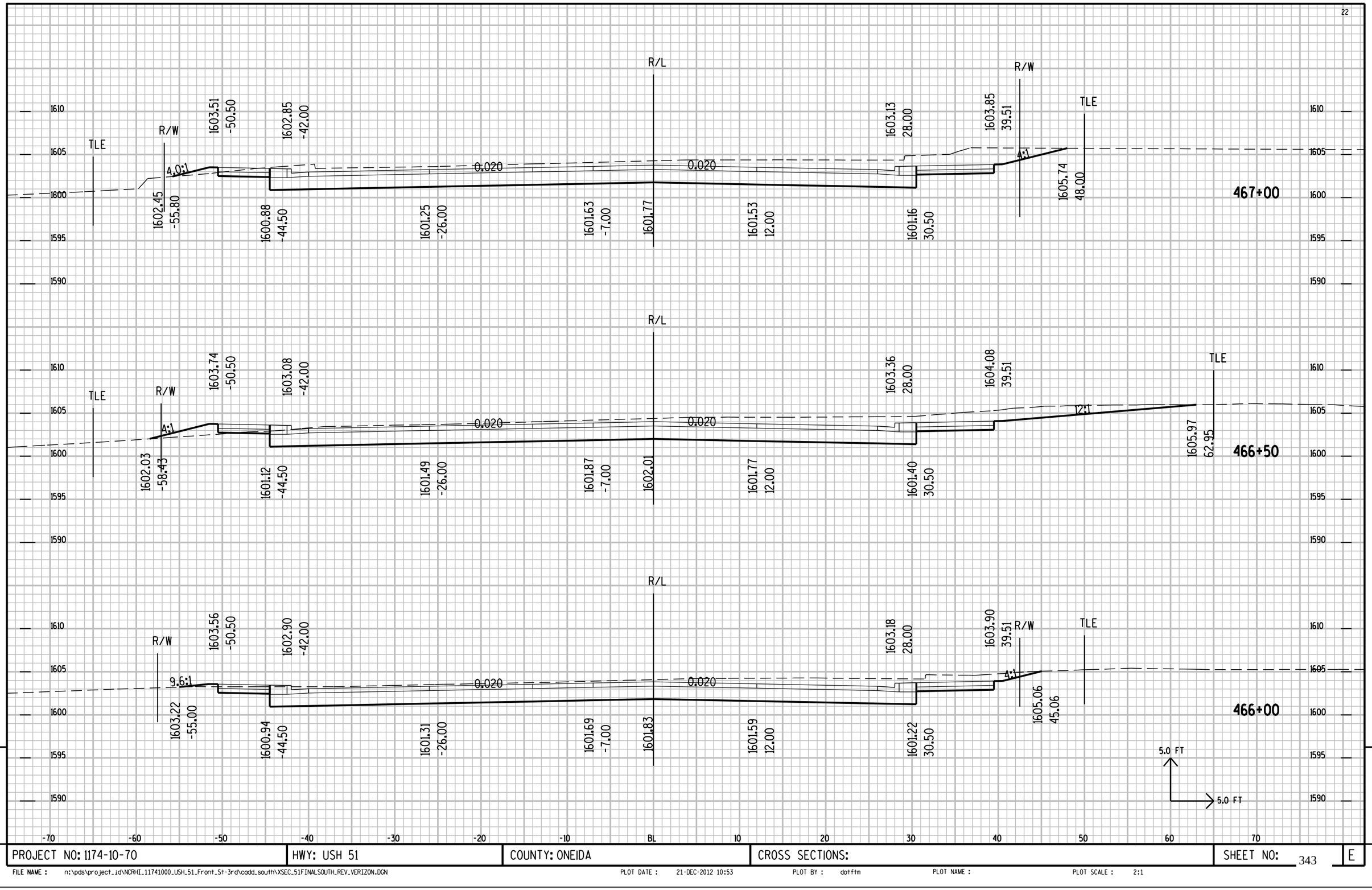


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 342	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:53 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

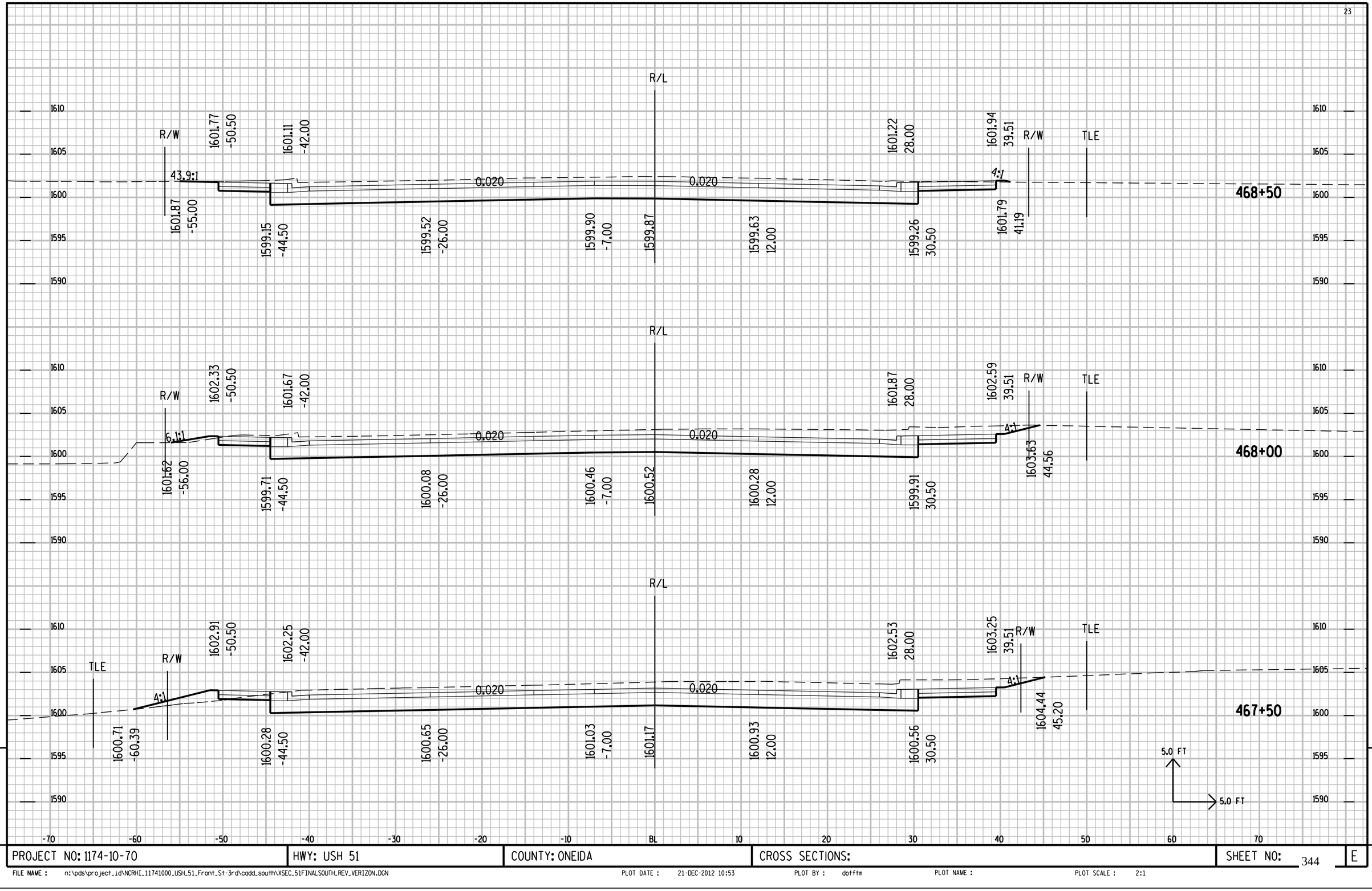


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 343	E

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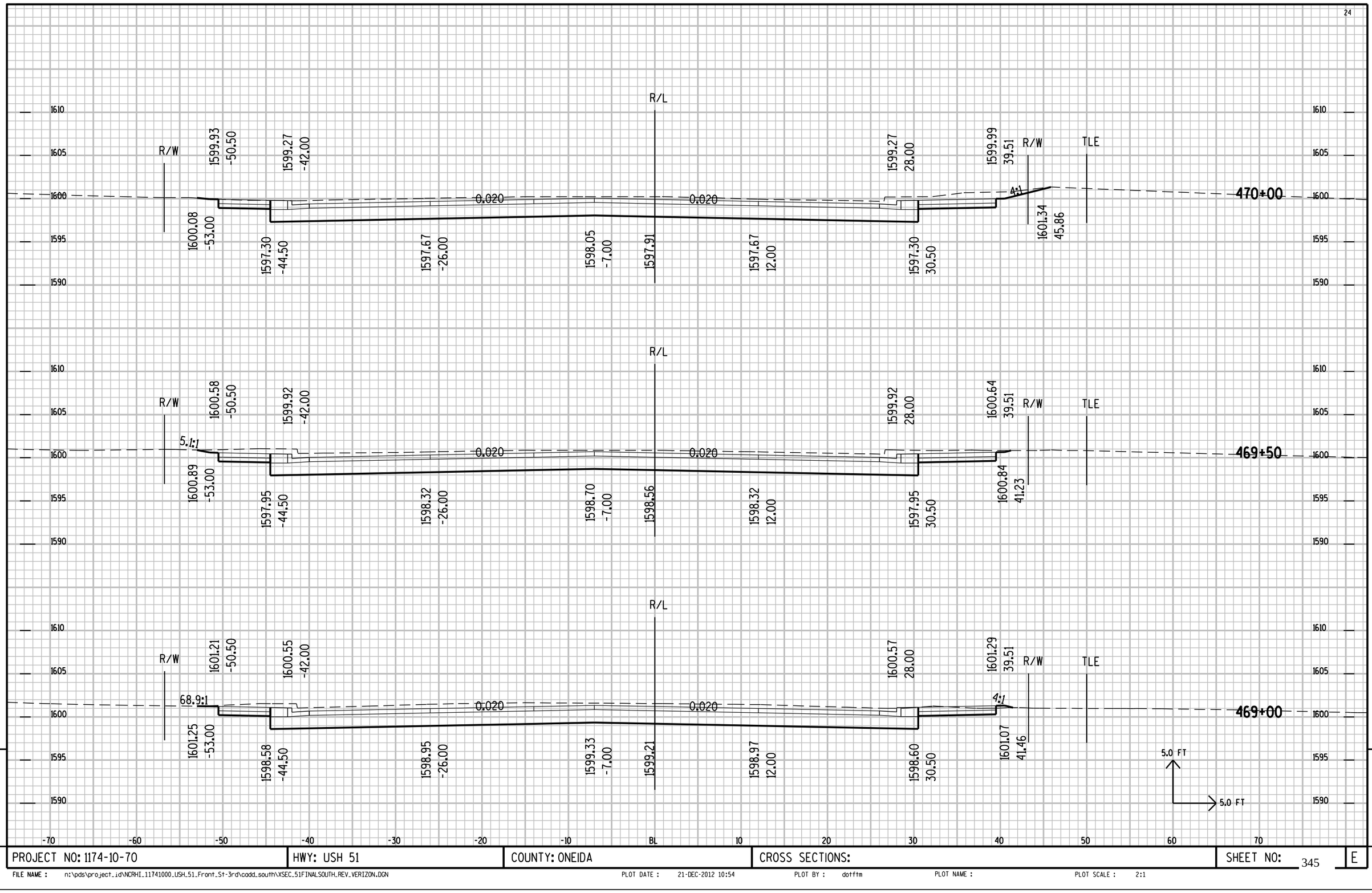


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 344	E

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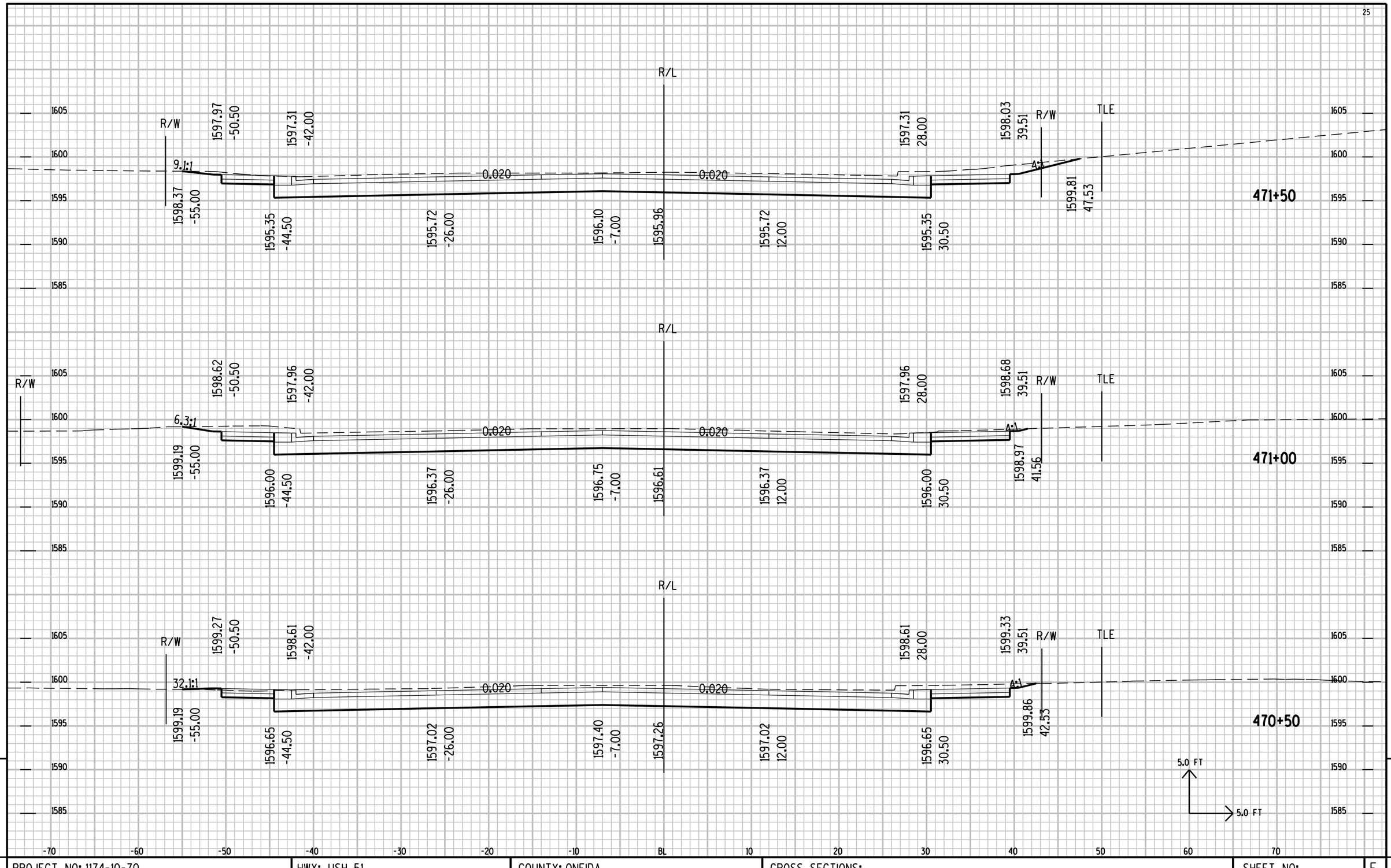


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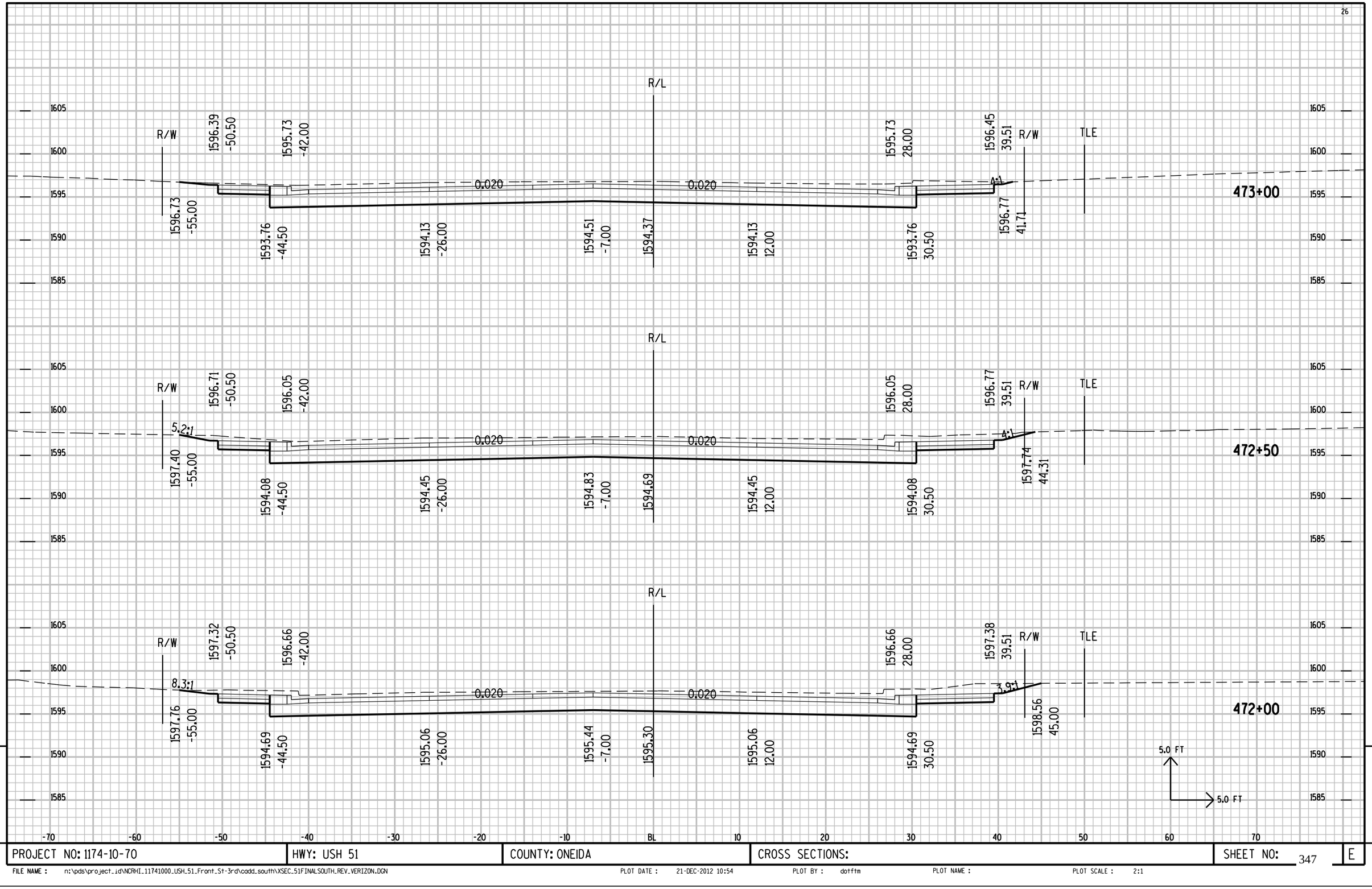


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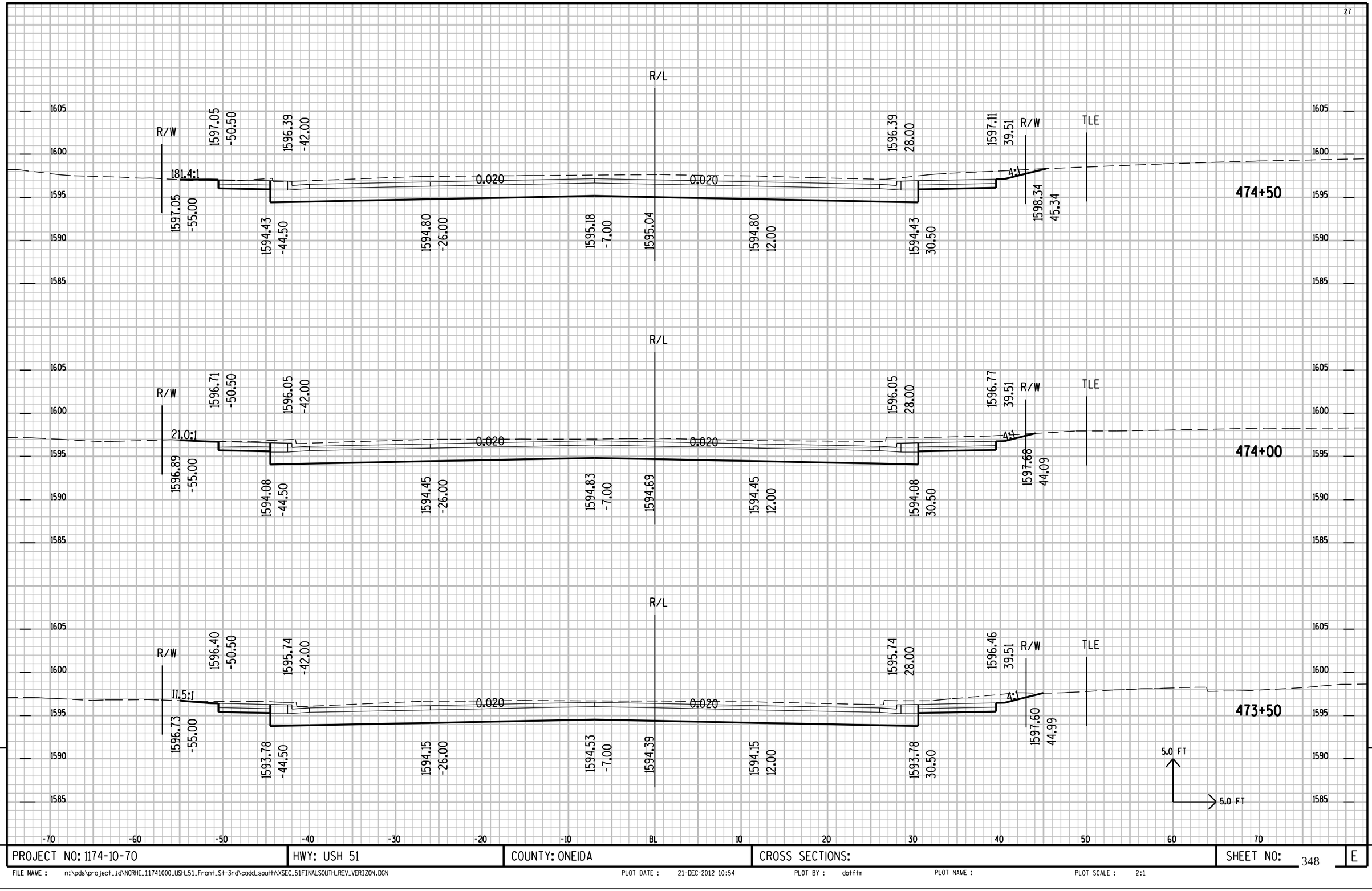


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 347	E

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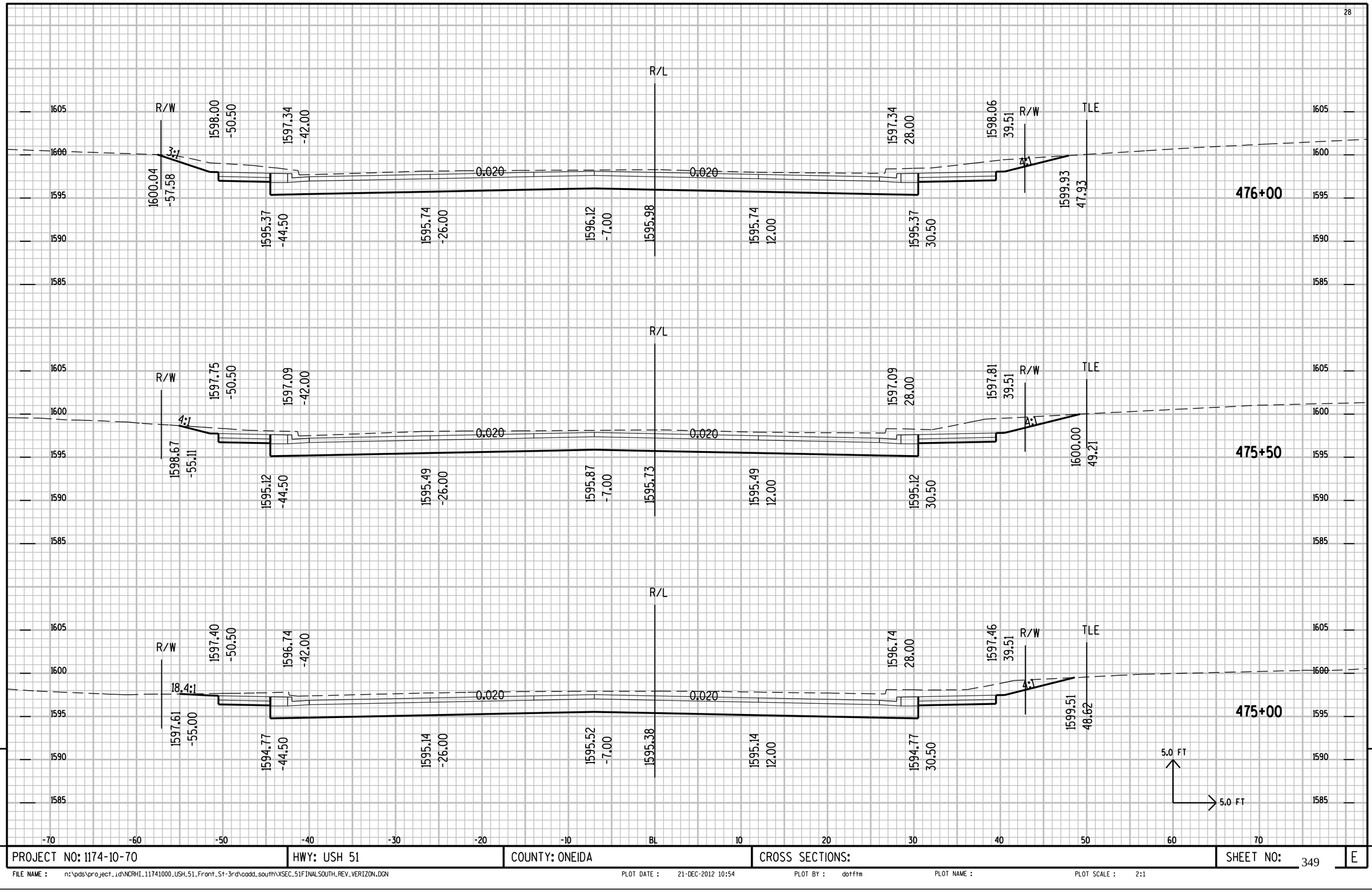


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 348	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:54 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

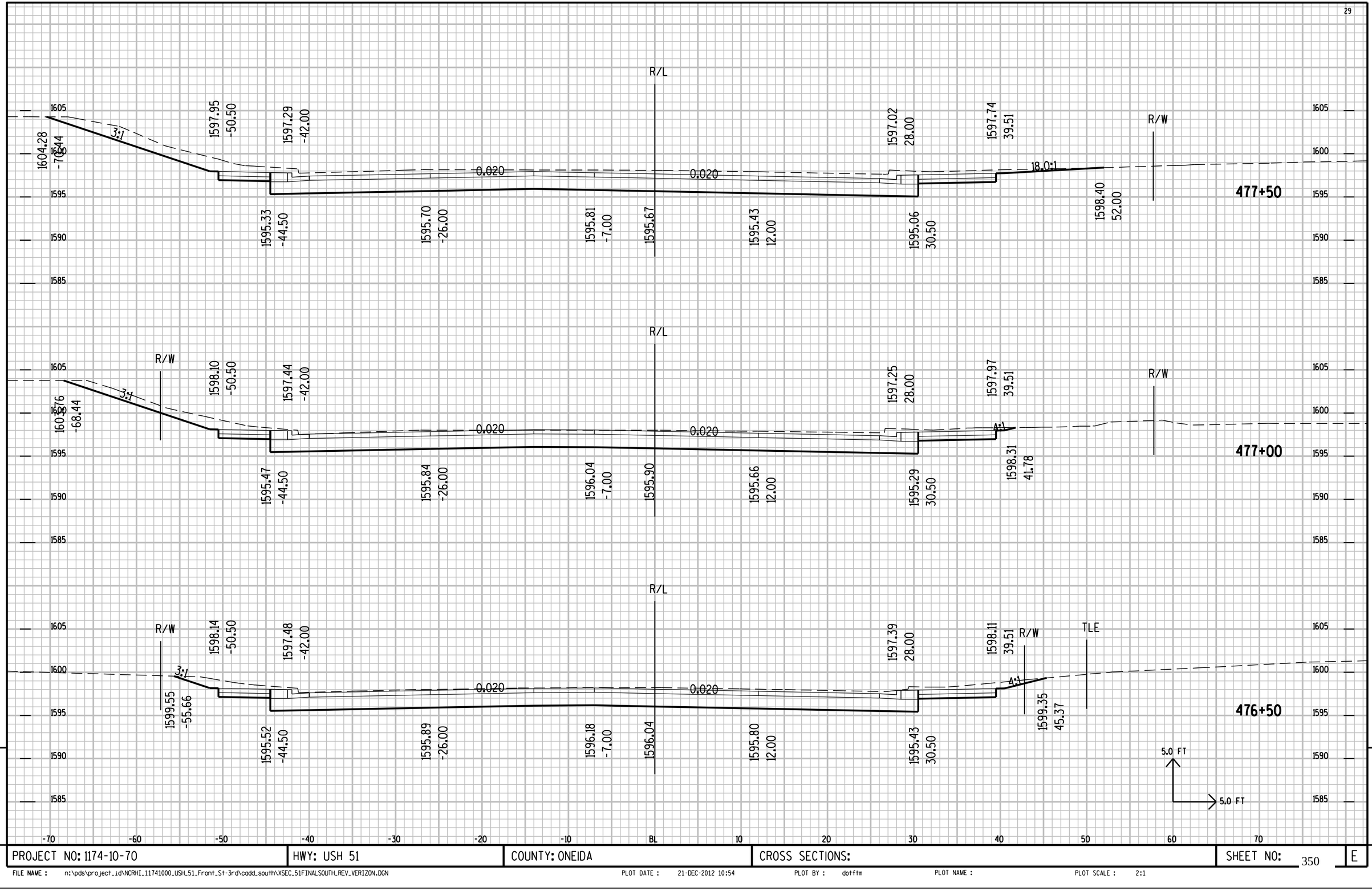


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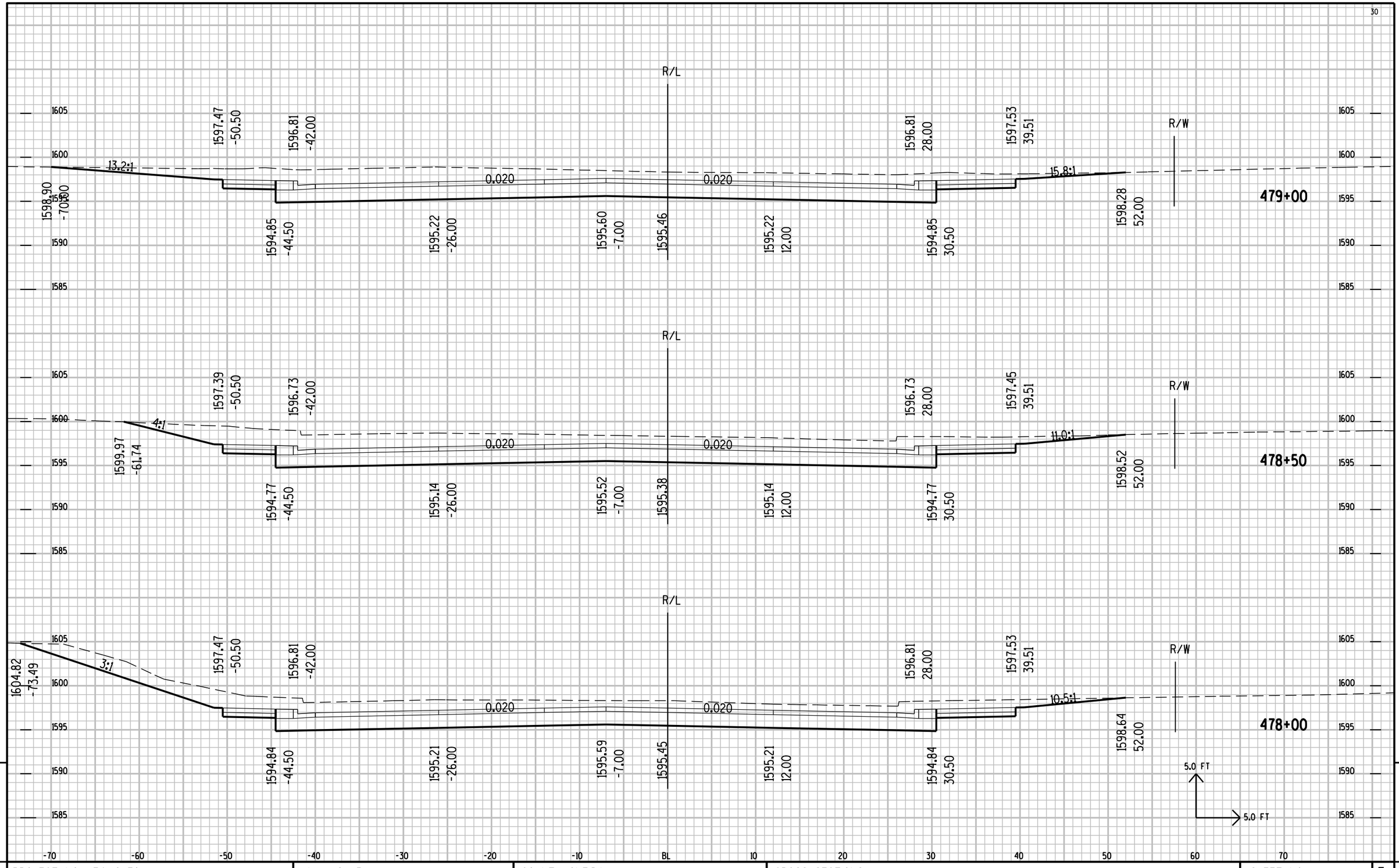
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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 350	E

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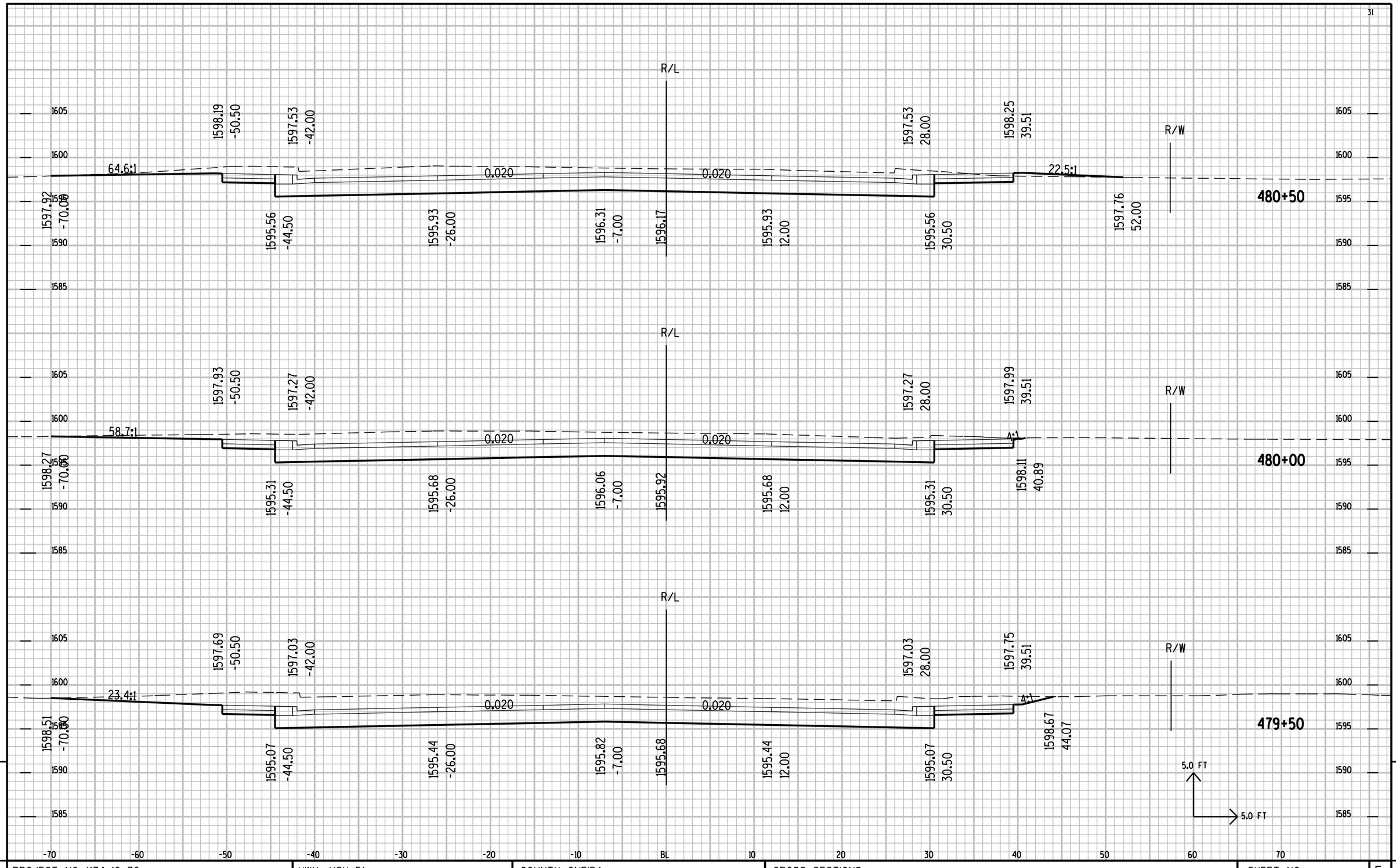


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 351	E

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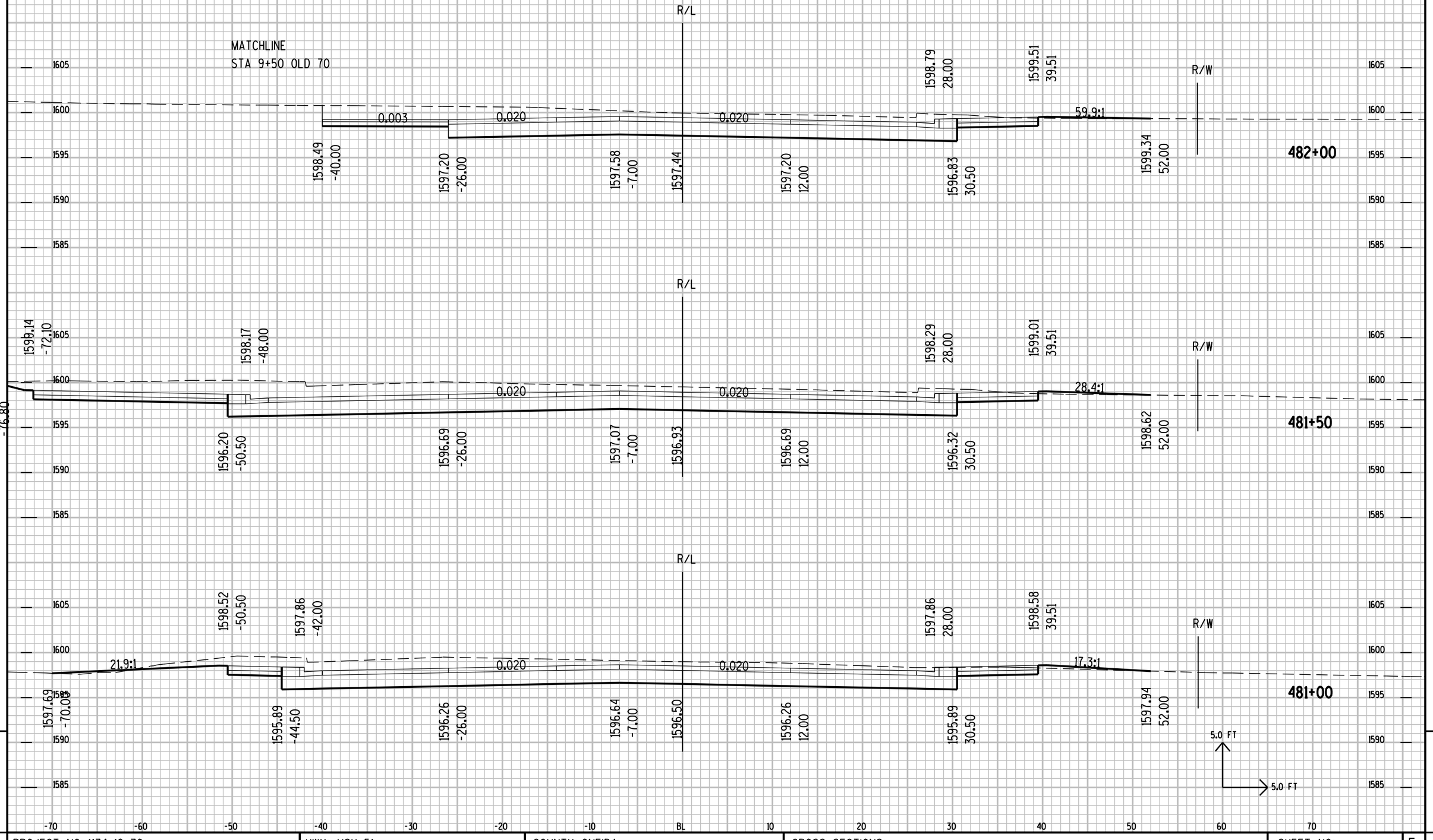
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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 352	E

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MATCHLINE
STA 9+50 OLD 70

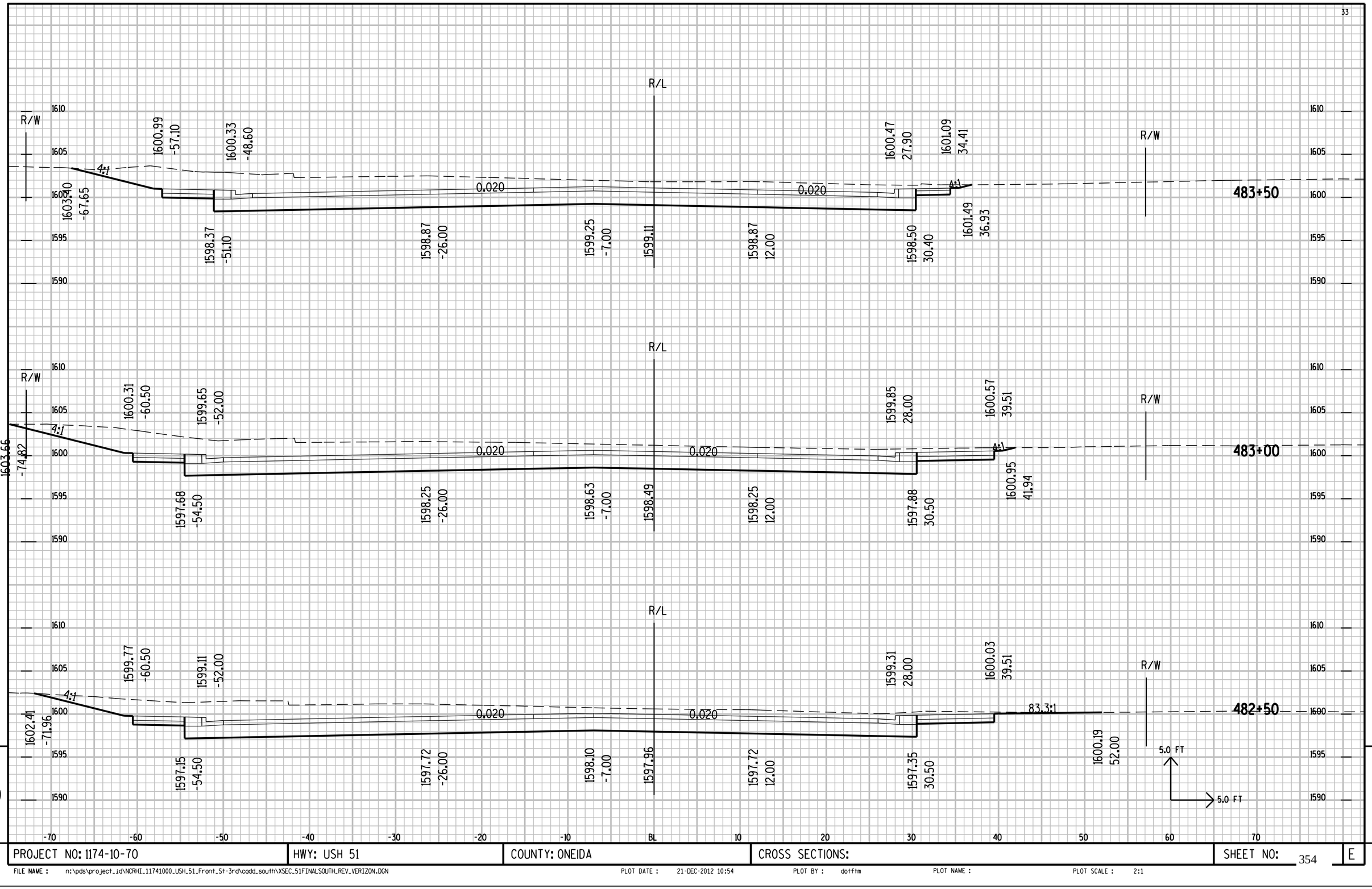


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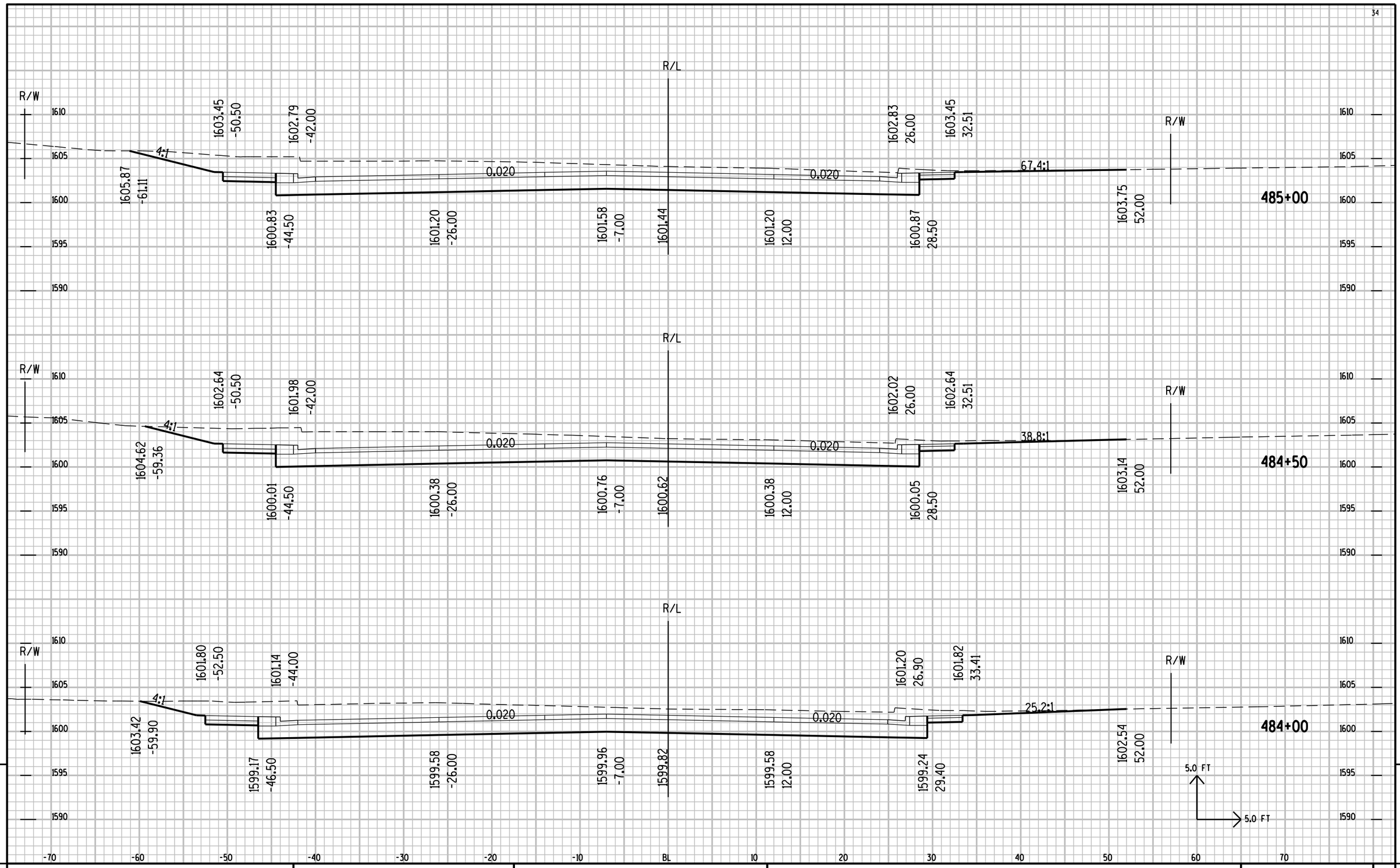
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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 354	E

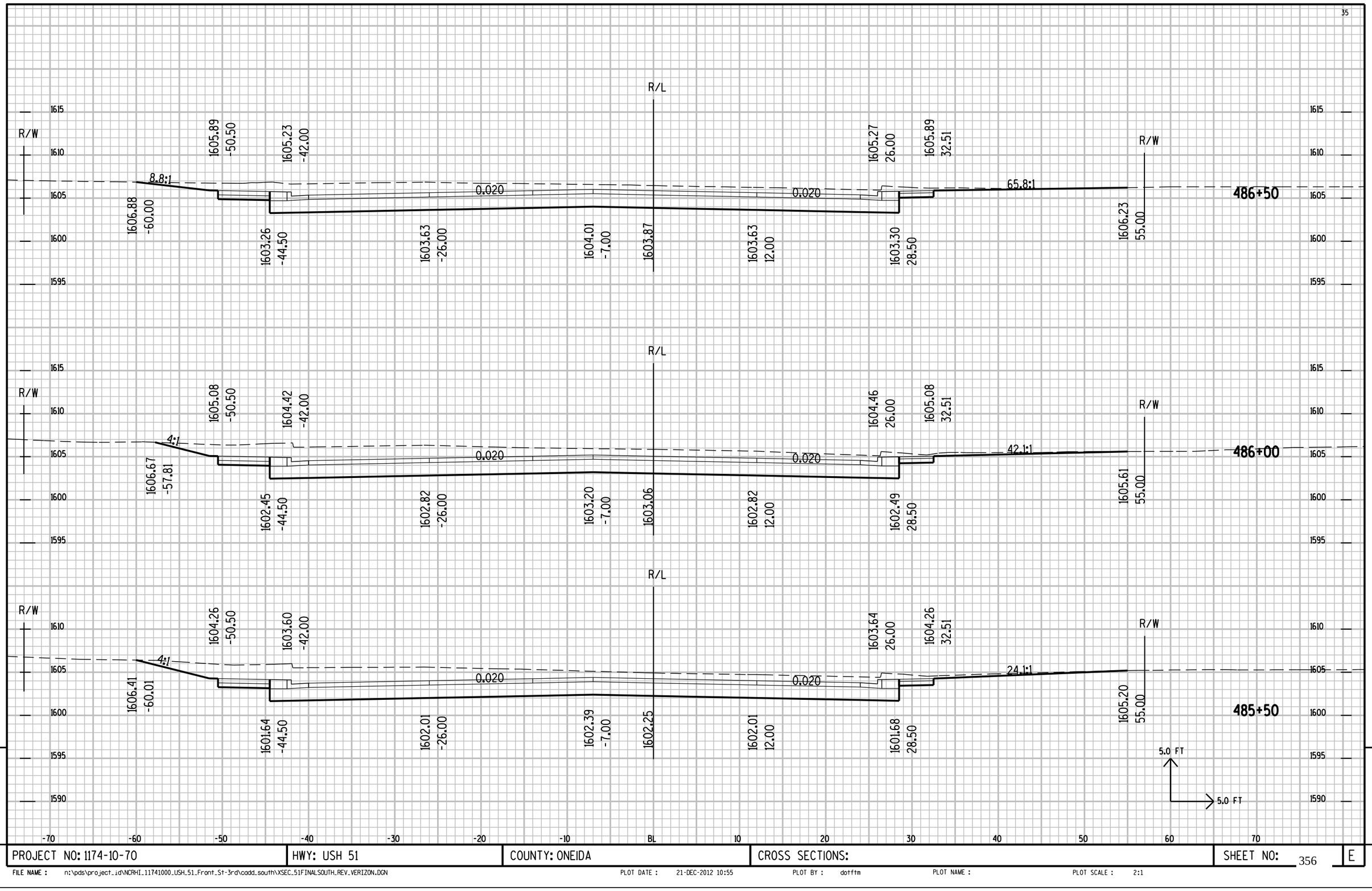


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 355	E

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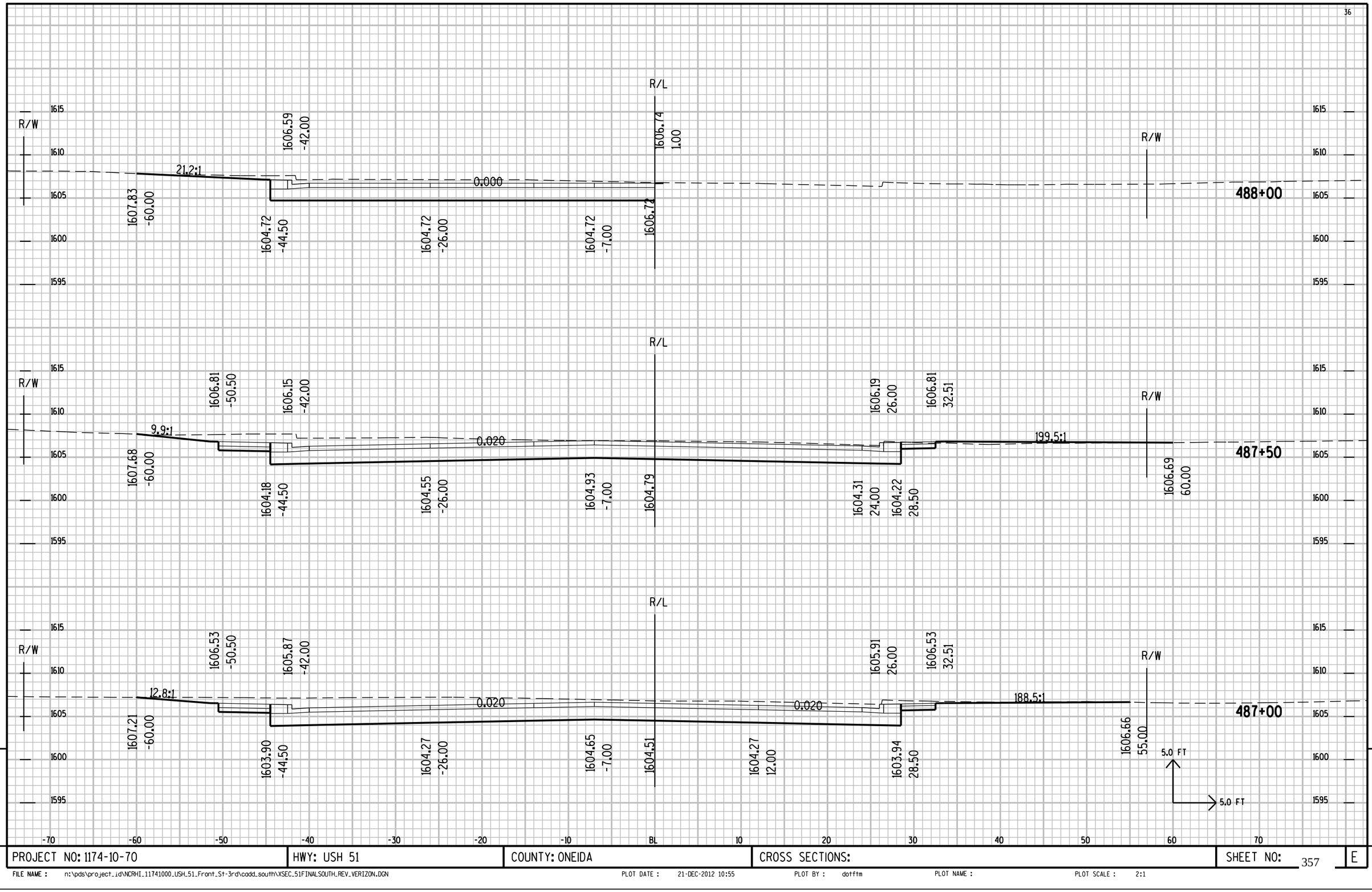


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 356	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:55 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

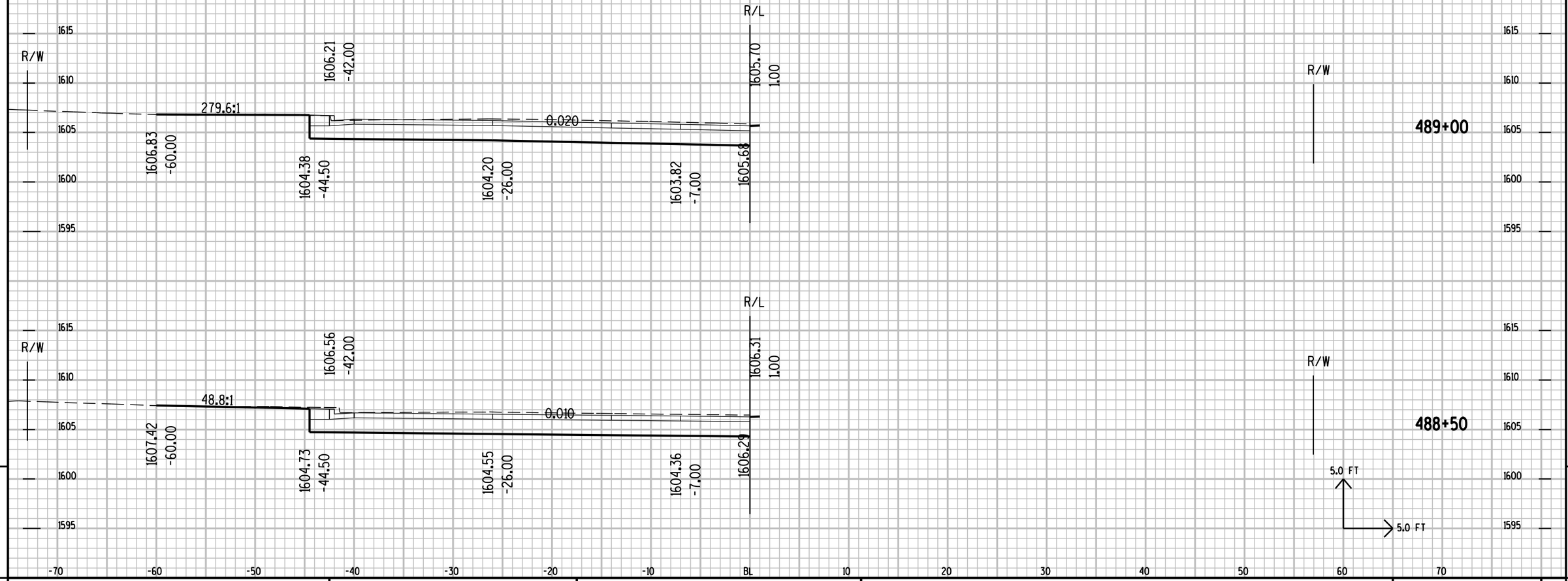


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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 357	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:55 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



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PROJECT NO: 1174-10-70	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 358	E

FILE NAME : n:\pds\project_id\NCRHI_11741000_USH_51_Front_St-3rd\cadd_south\XSEC_51FINALSOUTH_REV_VERIZON.DGN PLOT DATE : 21-DEC-2012 10:55 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

1600.02
-47.60
1599.04
-23.10
C/L
1599.16
17.00
1599.89
-49.07
0.020
0.020
1598.36
-23.60
1598.83
1598.48
17.50
1601.95
53.42
10+50

MATCH STA. 461+79.13
USH 51

1598.28
-36.00
C/L
0.025
1597.59
-36.50
1598.49
10+38.26

MATCH STA. 461+33.61
USH 51

1598.76
26.70
C/L
0.004
10+29.48
1598.23
1598.13
27.20

5.0 FT
5.0 FT

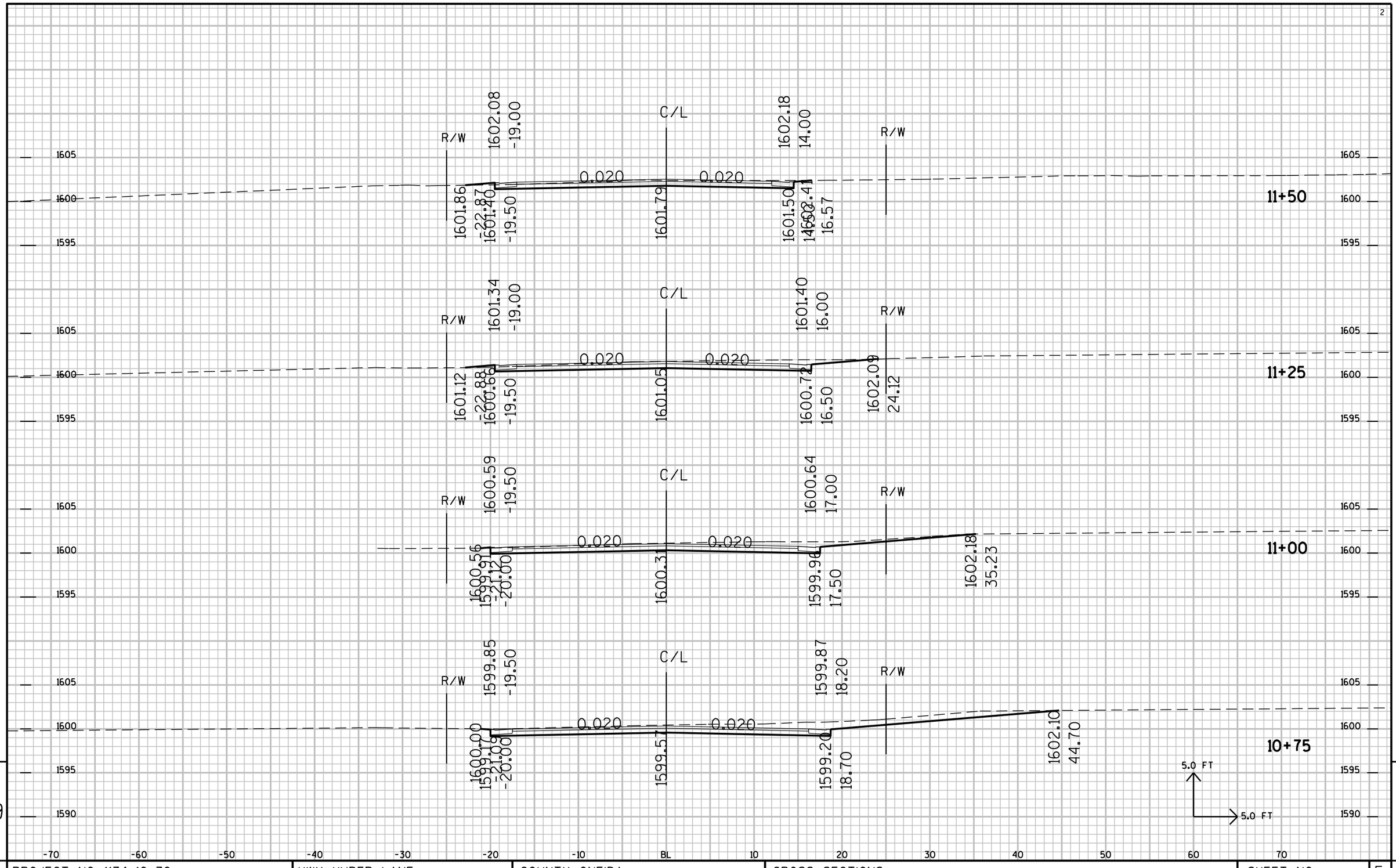
1610
1605
1600
1595
1590

-70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70

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PROJECT NO: 1174-10-70	HWY: HUBER LANE	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 359	E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_HUBER_FINAL.DGN PLOT DATE : 14-DEC-2012 15:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



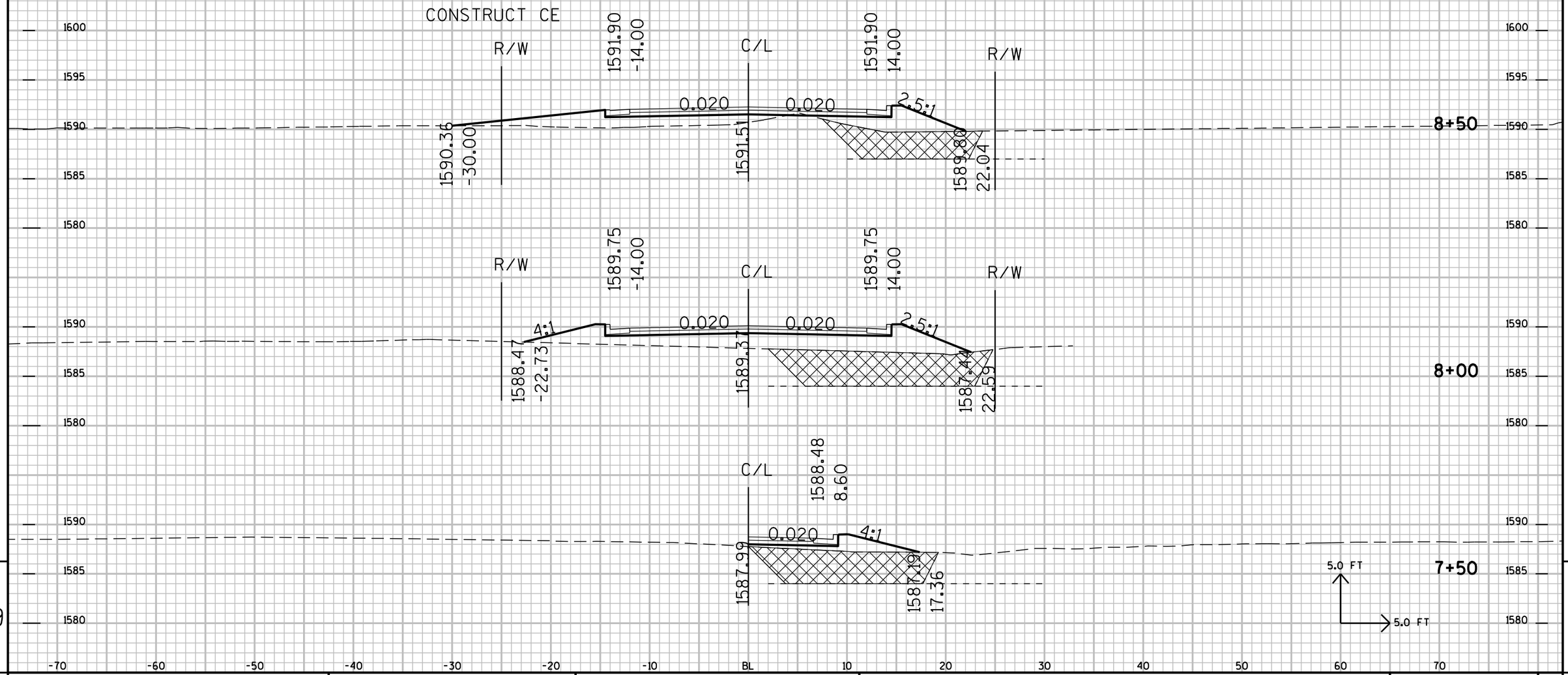
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PROJECT NO: 1174-10-70	HWY: HUBER LANE	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 360	E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_HUBER_FINAL.DGN PLOT DATE : 14-DEC-2012 15:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

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CONSTRUCT CE

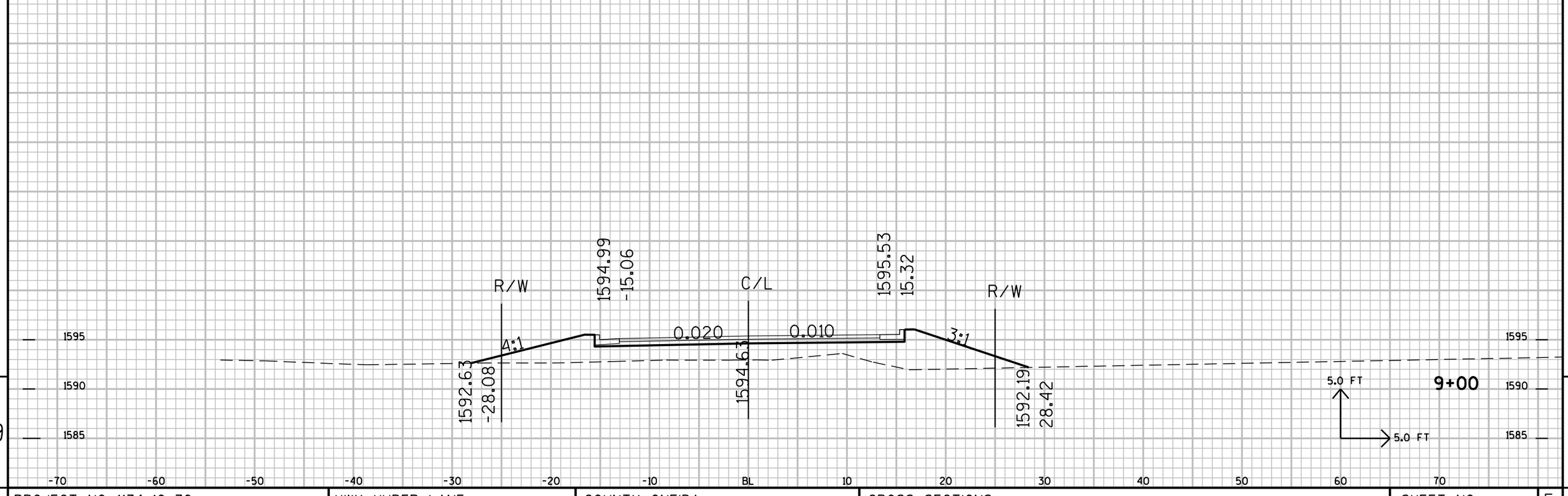


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PROJECT NO: 1174-10-70	HWY: HUBER LANE	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 361	E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_NEWHUBER_FINAL.DGN PLOT DATE : 14-DEC-2012 15:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

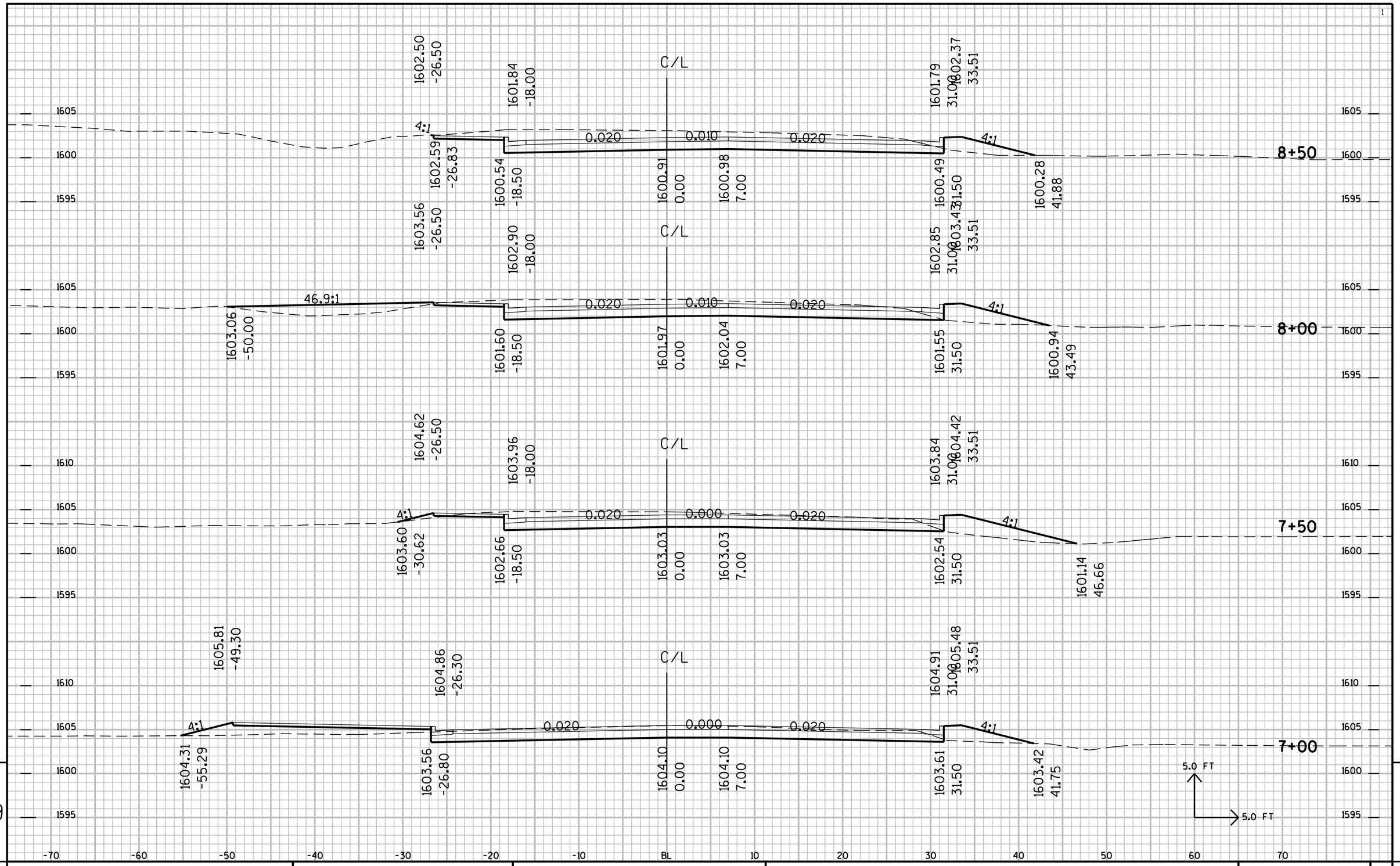


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PROJECT NO: 1174-10-70	HWY: HUBER LANE	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 362	E

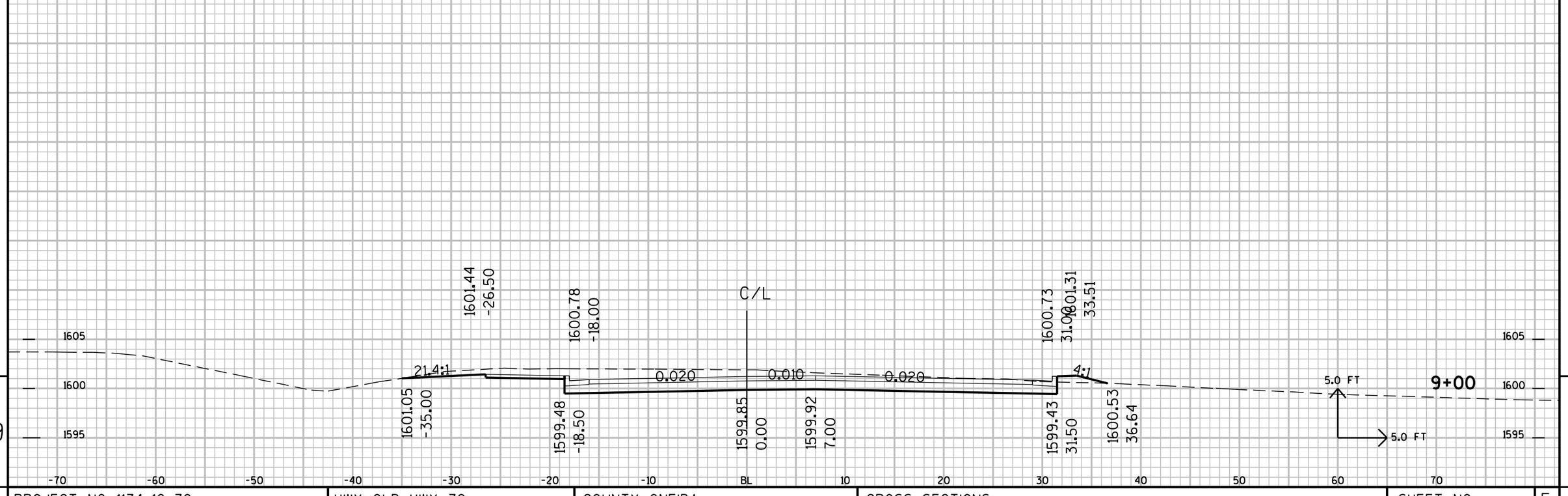
FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_NEWHUBER_FINAL.DGN PLOT DATE : 14-DEC-2012 15:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



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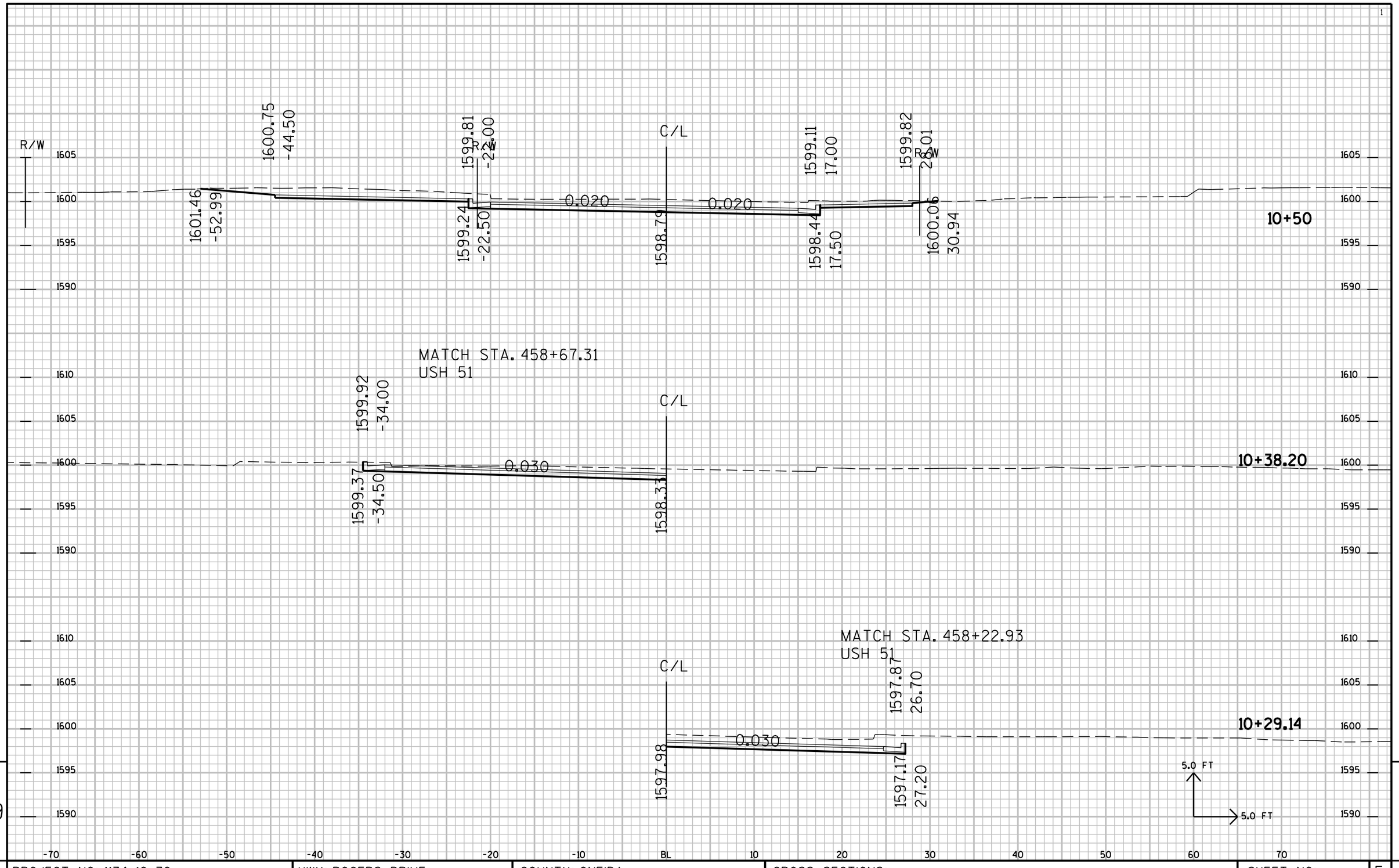
PROJECT NO: 1174-10-70	HWY: OLD HWY 70	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 363	E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_OLDHWY70_FINAL.DGN PLOT DATE : 14-DEC-2012 15:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



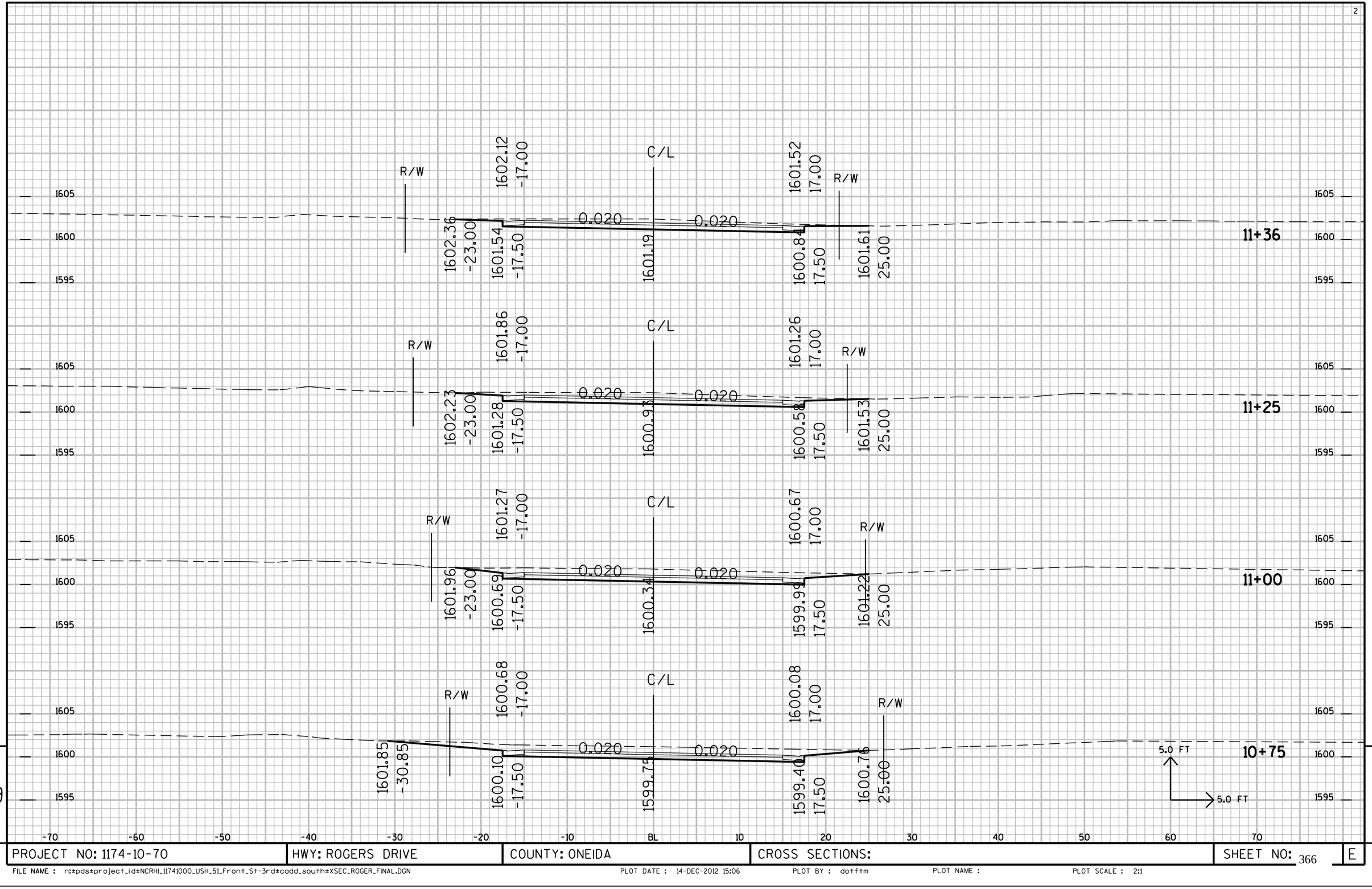
PROJECT NO: 1174-10-70	HWY: OLD HWY 70	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 364	E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_OLDHWY70_FINAL.DGN PLOT DATE : 14-DEC-2012 15:05 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



PROJECT NO: 1174-10-70	HWY: ROGERS DRIVE	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 365 E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_ROGER_FINAL.DGN PLOT DATE : 14-DEC-2012 15:06 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1



9

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PROJECT NO: 1174-10-70	HWY: ROGERS DRIVE	COUNTY: ONEIDA	CROSS SECTIONS:	SHEET NO: 366	E

FILE NAME : n:±pds±project_id±NCRHI_11741000_USH_51_Front_St-3rd±cadd_south±XSEC_ROGER_FINAL.DGN PLOT DATE : 14-DEC-2012 15:06 PLOT BY : dotftm PLOT NAME : PLOT SCALE : 2:1

Notes

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