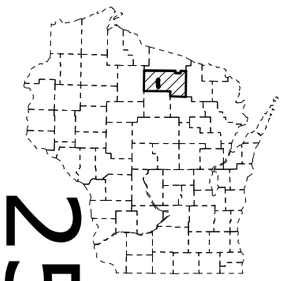
RHI MAR 2016

PROJECT ID: 1177-11-71

COUNTY: ONEIDA

ORDER OF SHEETS

TOTAL SHEETS = 130



25

DESIGN DESIGNATION

A.A.D.T. 2016	=	6,800
A.A.D.T. 2036	=	8,700
D.H.V. 2036	=	1,818
D.D.	=	68/32
T. -----	=	13.8%
DESIGN SPEED	=	55 MPH
ESALS	=	-------

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TOMAHAWK-MINOCQUA

BEARSKIN TRAIL STRUCTURE B-43-60

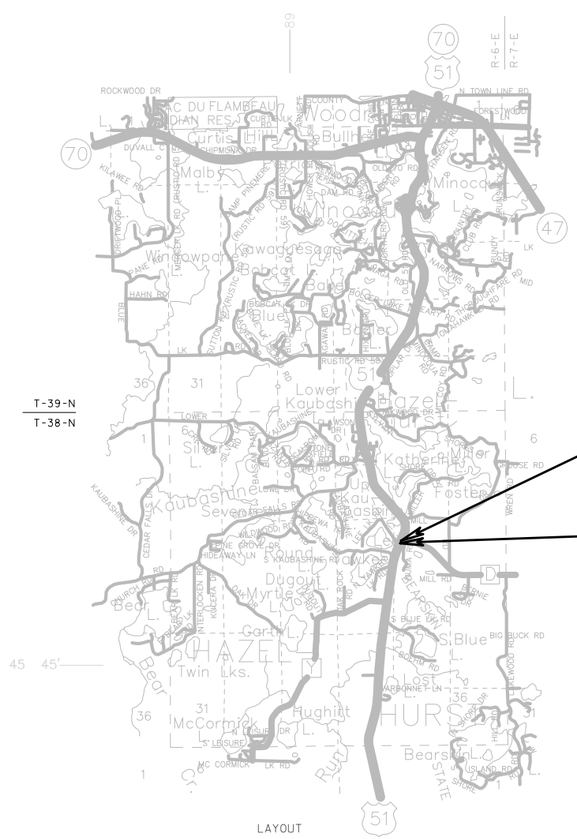
USH 51

ONEIDA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1177-11-71		

STATE PROJECT NUMBER

1177-11-71



PROPOSED CONSTRUCTION:2016

PROPOSED STRUCTURE B-43-60
STA. 1204+06.30

REMOVE EXISTING STRUCTURE B-43-0276
STA. 1203+58

TOTAL NET LENGTH OF CENTERLINE = N/A. PROJECT 1177-11-71

"Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Oneida County."

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	------
Designer	FORREST_A._VAN_ASTEN
Project Manager	MICHAEL_GRAGE
District Examiner	-------
District Supervisor	MICHAEL_WENDT
C.O. Examiner	----------

APPROVED FOR DISTRICT OFFICE

DATE: 10/30/15 Michael J. Grage (Signature)

E

2

GENERAL NOTES

2. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE FERTILIZED, SEEDED AND MULCHED OR COVERED WITH EROSION MAT AS DIRECTED BY THE ENGINEER.

3. THE LOCATIONS 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.

4. PERMANENT SIGNING STATIONING WAS CALCULATED FROM THE PHOTOLOG AND MAY BE PLUS OR MINUS 50 FEET.

5. ALL QUANTITIES, NOTES, AND REFERENCES TO BEARSKIN TRAIL STATIONING REFERS TO THE PROPOSED ALIGNMENT, NOT THE EXISTING ALIGNMENT.

6. ALL USH 51 SURFACES THAT ARE DISTURBED DURING CONSTRUCTION AND THAT ARE OPEN TO TRAFFIC MUST HAVE AN ASPHALTIC SURFACE PAVED BY THE END OF EACH WORKING DAY.

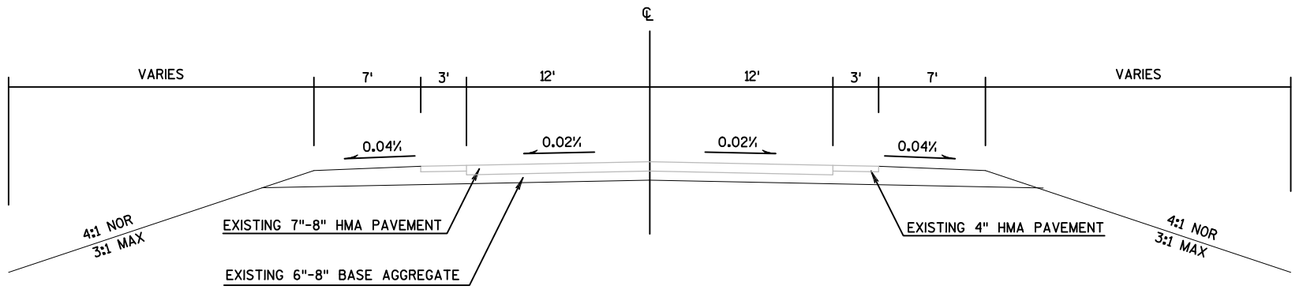
UTILITIES

CALVIN KLADE
FRONTIER COMMUNICATIONS OF WISCONSIN
(715) 847-1525

CLAYTON VIRCKS
WISCONSIN PUBLIC SERVICE CORPORATION
(715) 848-7317

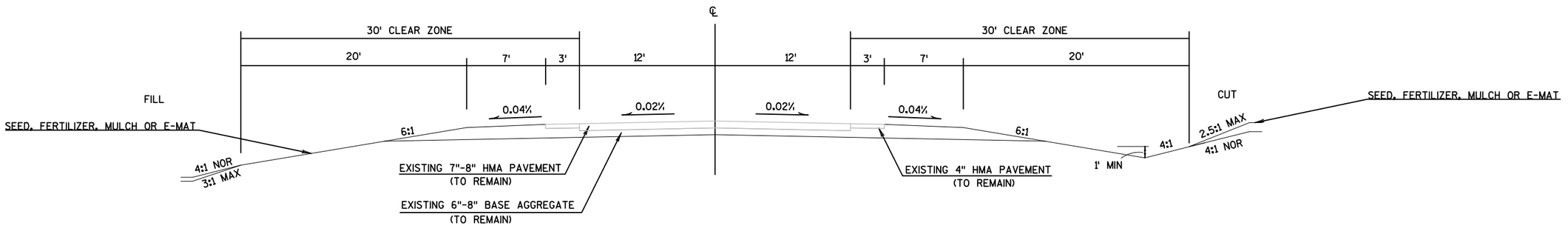
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NORTHERN REGION HEADQUARTERS
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
JON SIMONSEN
(715) 365-8916



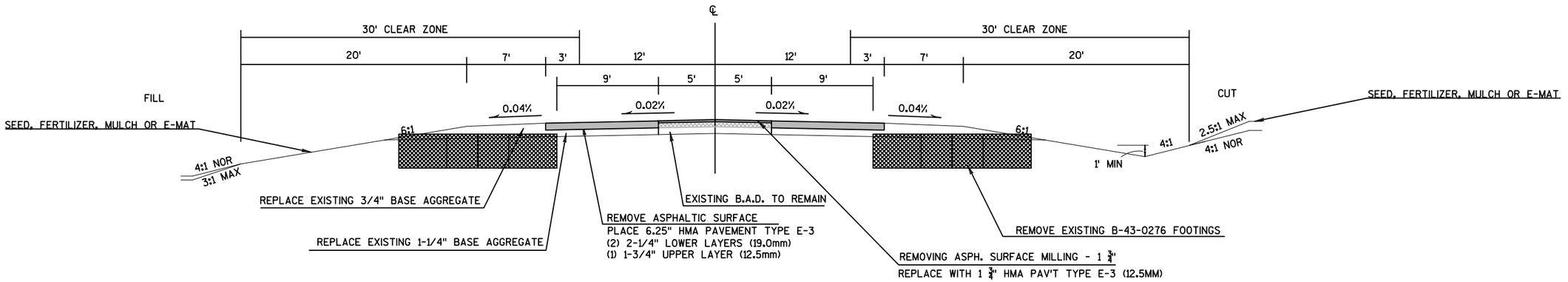
EXISTING TYPICAL SECTION

STA 1201+25 - STA 1207+50



PROPOSED TYPICAL SECTION

STA 1201+25 - 1207+50

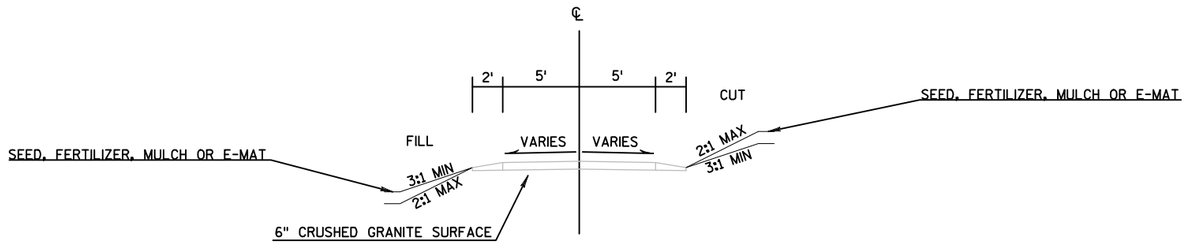


PROPOSED TYPICAL SECTION

STA 1202+88 - 1204+25
(BOTH SIDES SYMETRICAL)

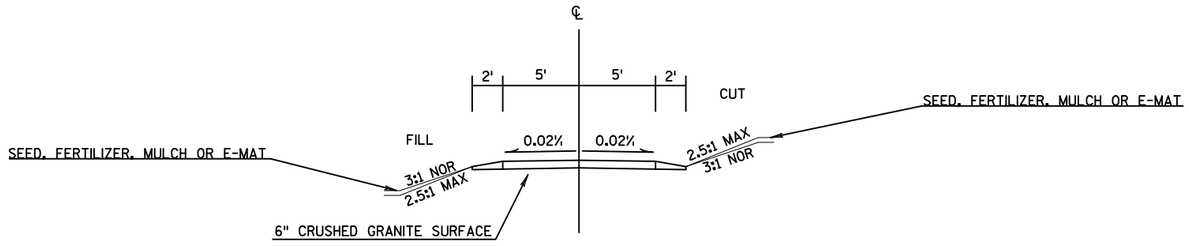
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	PLAN: TYPICAL SECTION	SHEET 3	E

2



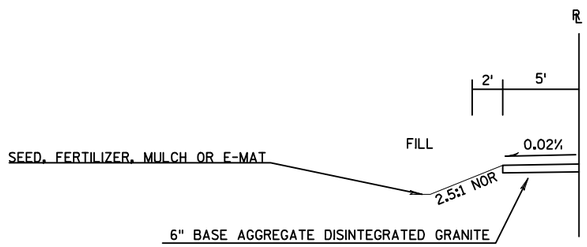
BEARSKIN TRAIL - EXISTING TYPICAL SECTION

STA 8+00 - 19+80



BEARSKIN TRAIL - PROPOSED TYPICAL SECTION

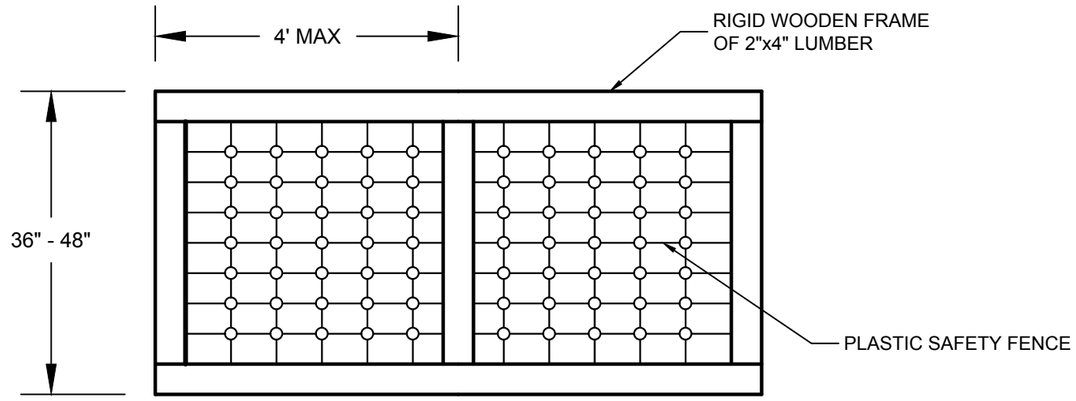
STA 8+00 - 19+80



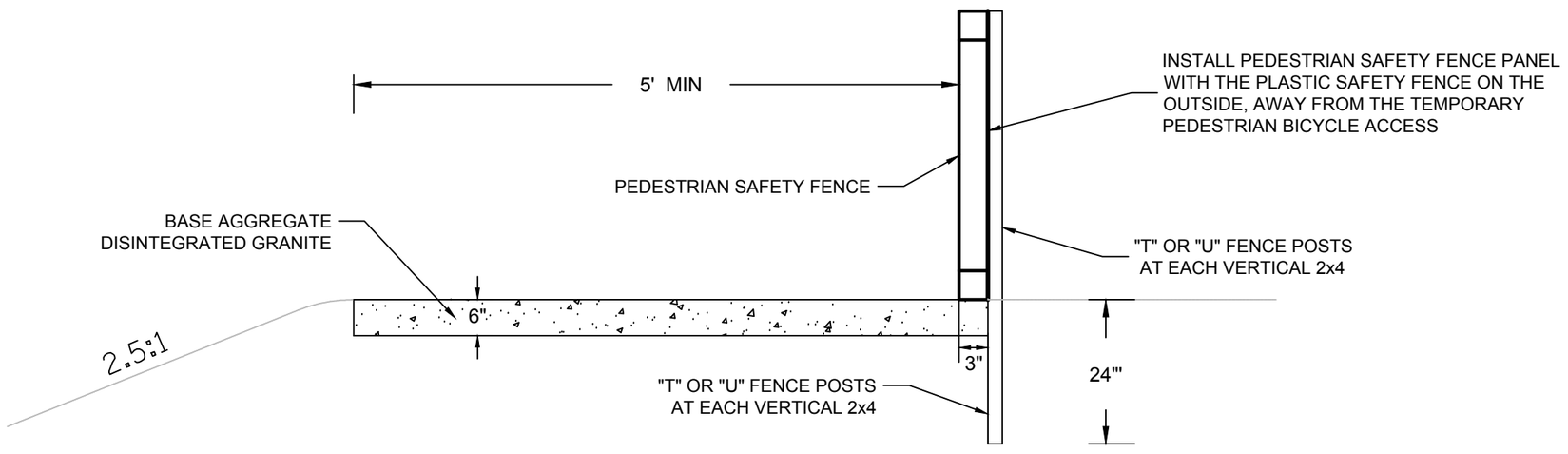
BEARSKIN TRAIL - TEMPORARY TRAIL SECTION

STA 0+00 - 2+94

2



TEMPORARY PEDESTRIAN SAFETY FENCE



TEMPORARY PEDESTRIAN / BICYCLE ACCESS

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	USH 51 CONSTRUCTION DETAIL - TEMPORARY ACCESS	SHEET 5	E

LEGEND	
EMAT CLASS I TYPE B (SLOPE)	
EMAT CLASS I TYPE B (DITCH)	
EMAT CLASS II TYPE B (SLOPE)	
SILT FENCE	
TEMPORARY DITCH CHECK	
SLOPE INTERCEPT	

LEE LK. RD.

BIKE PATH

WALLS

SIGN

SIGN

SIGN

SIGN

W

W

1200

1205

1210

PERMITTED WETLAND IMPACT

BP: 0+00.00

PCI: 0+94.04

BC: 1+36.85

PC: 1+97.54

PT: 2+31.82

EP: 2+93.46

C.T.H. "D"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL: BEARSKIN TRAIL - STAGE "A"	SHEET 6	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\EROSION CONTROL\EC_LAYOUT_TEMP_TRAIL.DWG PLOT DATE : 10/27/2015 1:55 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND	
EMAT CLASS I TYPE B (SLOPE)	
EMAT CLASS I TYPE B (DITCH)	
EMAT CLASS II TYPE B (SLOPE)	
SILT FENCE	
TEMPORARY DITCH CHECK	
SLOPE INTERCEPT	

PC: 18+49.54

PT: 16+68.75

LEE LK. RD.

PERMITTED WETLAND IMPACT

PC: 10+94.42

PT: 9+00.00

C.T.H. "D"

1200

1205

1210

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL: BEARSKIN TRAIL - STAGE "B"	SHEET 7	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\EROSION CONTROL\EC_LAYOUT_STAGE_B.DWG PLOT DATE : 10/27/2015 1:56 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND	
EMAT CLASS I TYPE B (SLOPE)	
EMAT CLASS I TYPE B (DITCH)	
EMAT CLASS II TYPE B (SLOPE)	
SILT FENCE	
TEMPORARY DITCH CHECK	
SLOPE INTERCEPT	

PC: 18+49.54

PT: 16+68.75

LEE LK. RD.

BIKE PATH

SIGN

WALLS

1200

1205

1210

PERMITTED WETLAND IMPACT

PC: 10+81.42

PT: 9+00.00

C.T.H. "D"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL: BEARSKIN TRAIL - STAGE "C"	SHEET 8	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\EROSION CONTROL\EC_LAYOUT_STAGE_C.DWG PLOT DATE : 10/27/2015 1:56 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND	
EMAT CLASS I TYPE B (SLOPE)	
EMAT CLASS I TYPE B (DITCH)	
EMAT CLASS II TYPE B (SLOPE)	
SILT FENCE	
TEMPORARY DITCH CHECK	
SLOPE INTERCEPT	

PC: 18+49.54

PT: 16+68.75

LEE LK. RD.

BIKE PATH

WALLS

SIGN

SIGN

SIGN

1200

1205

1210

PC: 10+94.42

PT: 9+00.00

10

C.T.H. "D"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	EROSION CONTROL: USH 51	SHEET 9	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\EROSION CONTROL\EC_LAYOUT_USH51.DWG PLOT DATE : 10/27/2015 1:56 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

NOTE: EACH SIGN WILL BE MOVED TWICE DURING CONSTRUCTION: ONCE TO A TEMPORARY POSITION DURING CONSTRUCTION OPERATIONS AND ONCE TO ITS FINAL POTITION

Lee Lake Road
MOVING SIGNS TYPE II
(RE-INSTALL AFTER CONSTRUCTION)
1

MOVING SIGNS TYPE II
(RE-INSTALL AFTER CONSTRUCTION)
2

14'-3"
REMOVE
3

JCT
COUNTY
D
MOVING SIGNS TYPE II
(RE-INSTALL AFTER CONSTRUCTION)
6

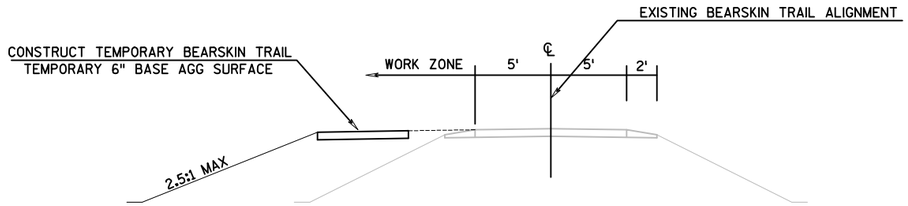
Camp American Legion
MOVING SIGNS TYPE II
(RE-INSTALL AFTER CONSTRUCTION)
5

MOVING SIGNS TYPE II
(RE-INSTALL AFTER CONSTRUCTION)
4

LEE LK. RD.
BIKE PATH
C.T.H. "D"
U.S.H. 51
WALLS
SIGN
1200
1205
1210

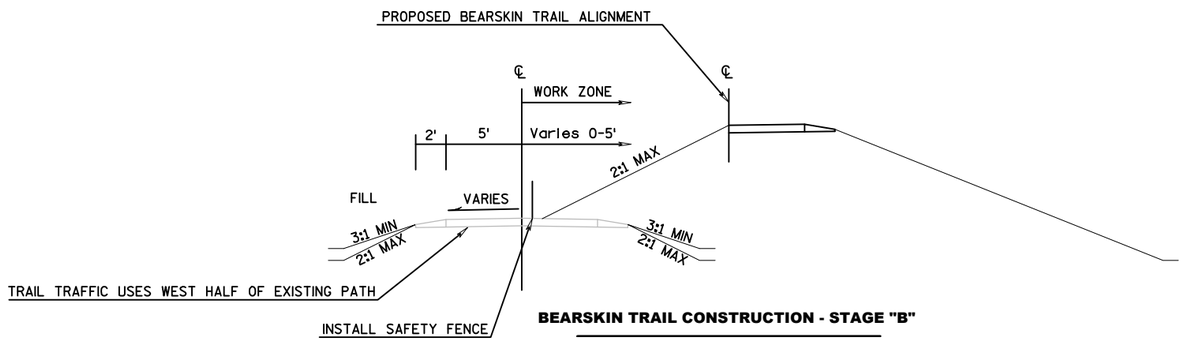
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	PERMANENT SIGNING	SHEET 10	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\023201-PS.DWG
LAYOUT NAME - 023201_PS
PLOT DATE : 10/29/2015 12:57 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME :
PLOT SCALE : 1 IN:100 FT



BEARSKIN TRAIL CONSTRUCTION - STAGE "A"

STA 8+36 - 11+30

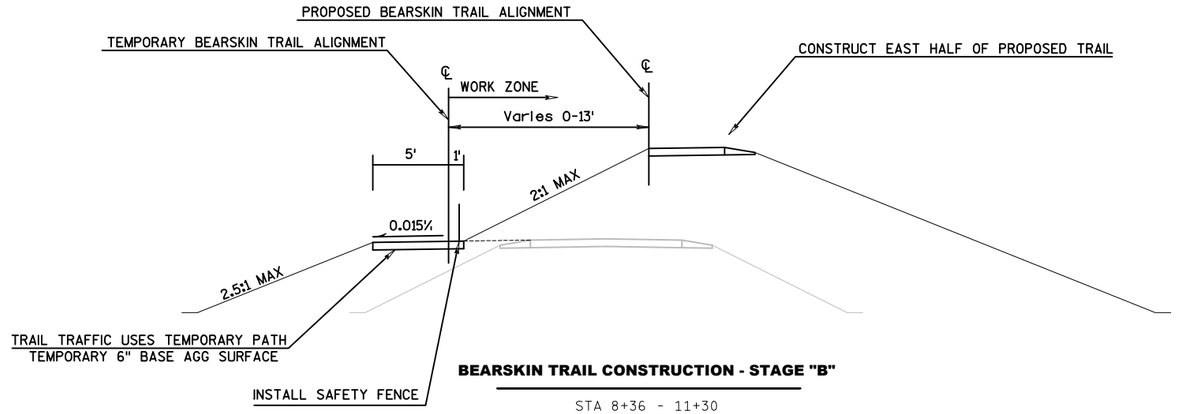


BEARSKIN TRAIL CONSTRUCTION - STAGE "B"

STA 8+00 - 8+36
STA 11+30 - 19+80

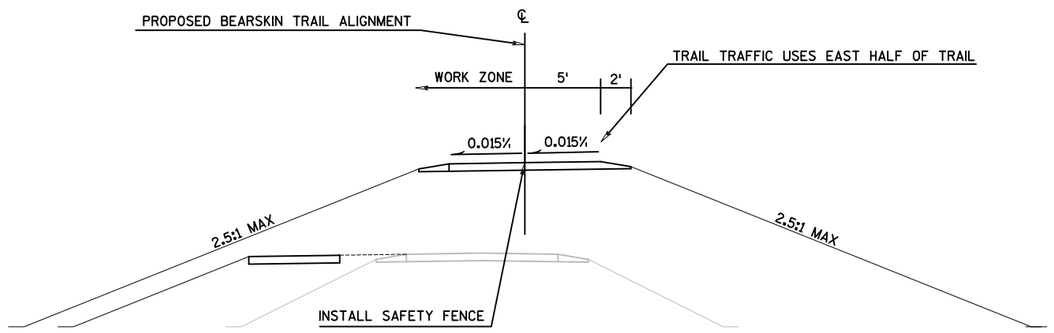
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL: BEARSKIN TRAIL STAGING	SHEET 11	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\TRAIL_STAGING.DWG
LAYOUT NAME - TRAIL_STAGING - 020301_TS 1 IN 10 FT
PLOT DATE : 12/1/2015 10:09 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



BEARSKIN TRAIL CONSTRUCTION - STAGE "B"

STA 8+36 - 11+30



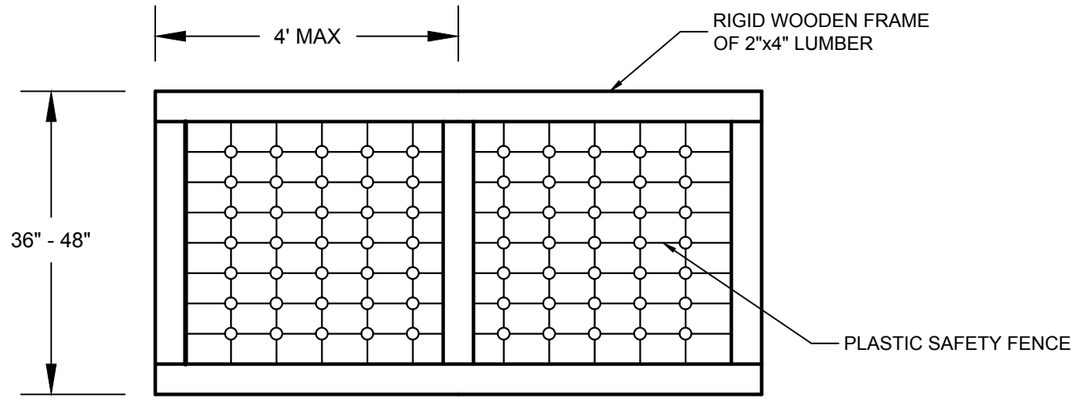
BEARSKIN TRAIL CONSTRUCTION - STAGE "C"

STA 8+00 - 19+80

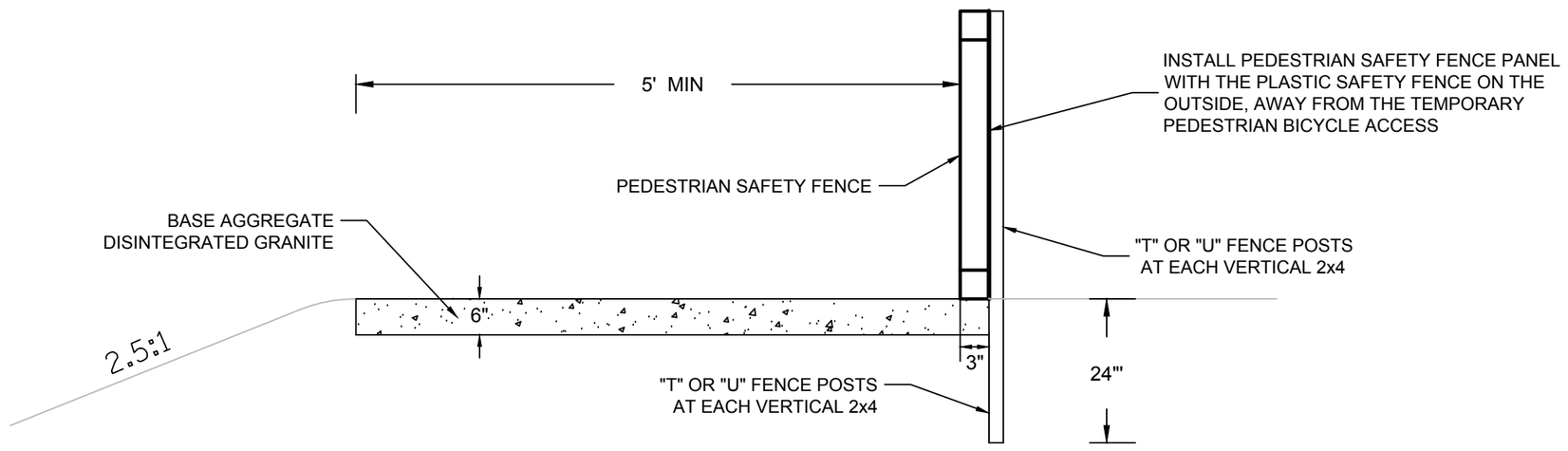
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL: BEARSKIN TRAIL STAGING	SHEET 12	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\TRAIL_STAGING.DWG
LAYOUT NAME - TRAIL_STAGING - 020302_TS 1 IN 10 FT
PLOT DATE : 12/1/2015 10:09 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

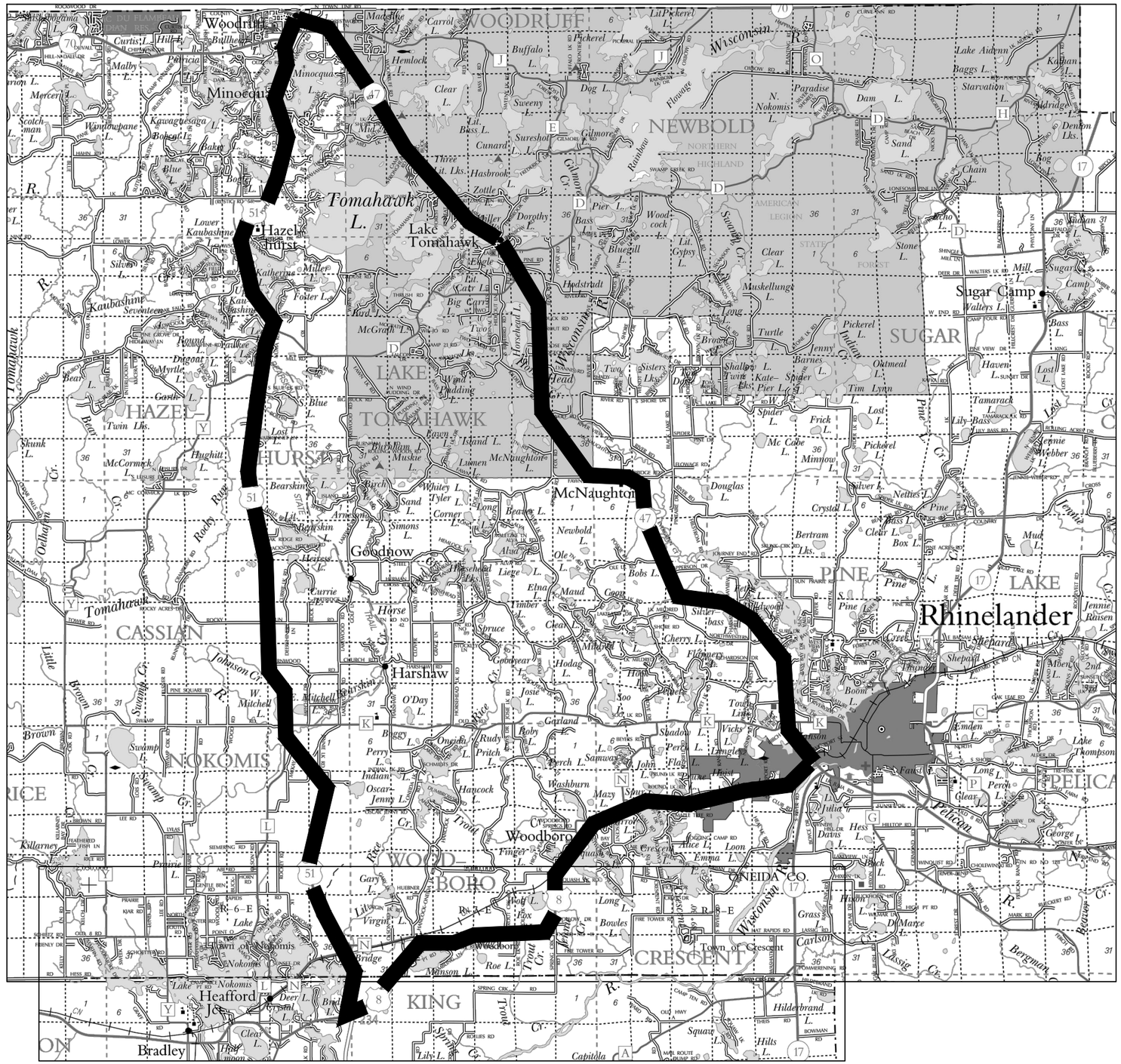
2



TEMPORARY PEDESTRIAN SAFETY FENCE



TEMPORARY PEDESTRIAN / BICYCLE ACCESS



PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL: USH 51 DETOUR	SHEET 14	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\DETOUR_OVERVIEW.DWG PLOT DATE : 12/1/2015 10:10 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1.321068

WISDOT/CADDS SHEET 42

FOLLOW SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

1
M1-4
24"X24"
ROAD CLOSED AHEAD
W20-3-A

2
M1-4
24"X24"
DETOUR 1 MILE
W20-2-F

3
DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"
M05-2R
21"X21"

4
DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"
M06-2
21"X21"

5
DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"
M06-1
21"X21"

6
DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"

7
DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"
M05-1L
21"X21"

8
DETOUR
M4-8
24"X12"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"
M06-1
21"X21"

9
END DETOUR
M4-8A
24"X18"
NORTH
M3-1
24"X12"
51
M1-4
24"X24"

10
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"
M05-1L
21"X21"

11
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"
M06-1
21"X21"

12
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"
M06-1
21"X21"

13
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"

14
51
M1-4
24"X24"
DETOUR AHEAD
W20-2-A

15
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"
M06-1
21"X21"

16
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"
M05-1R
21"X21"

17
END DETOUR
M4-8A
24"X18"
SOUTH
M3-3
24"X12"
51
M1-4
24"X24"

18
R11-3
48"X30"
ROAD CLOSED
9 MILES AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

19
R11-3
48"X30"
ROAD CLOSED
7 MILES AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

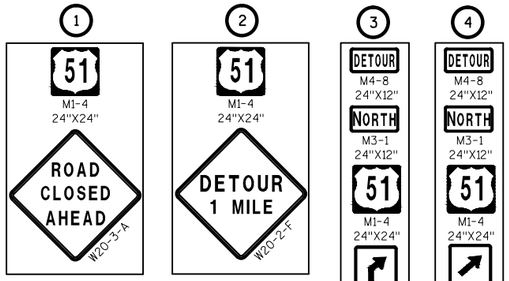
20
R11-3
48"X30"
ROAD CLOSED
1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

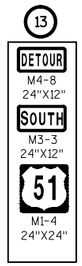
N

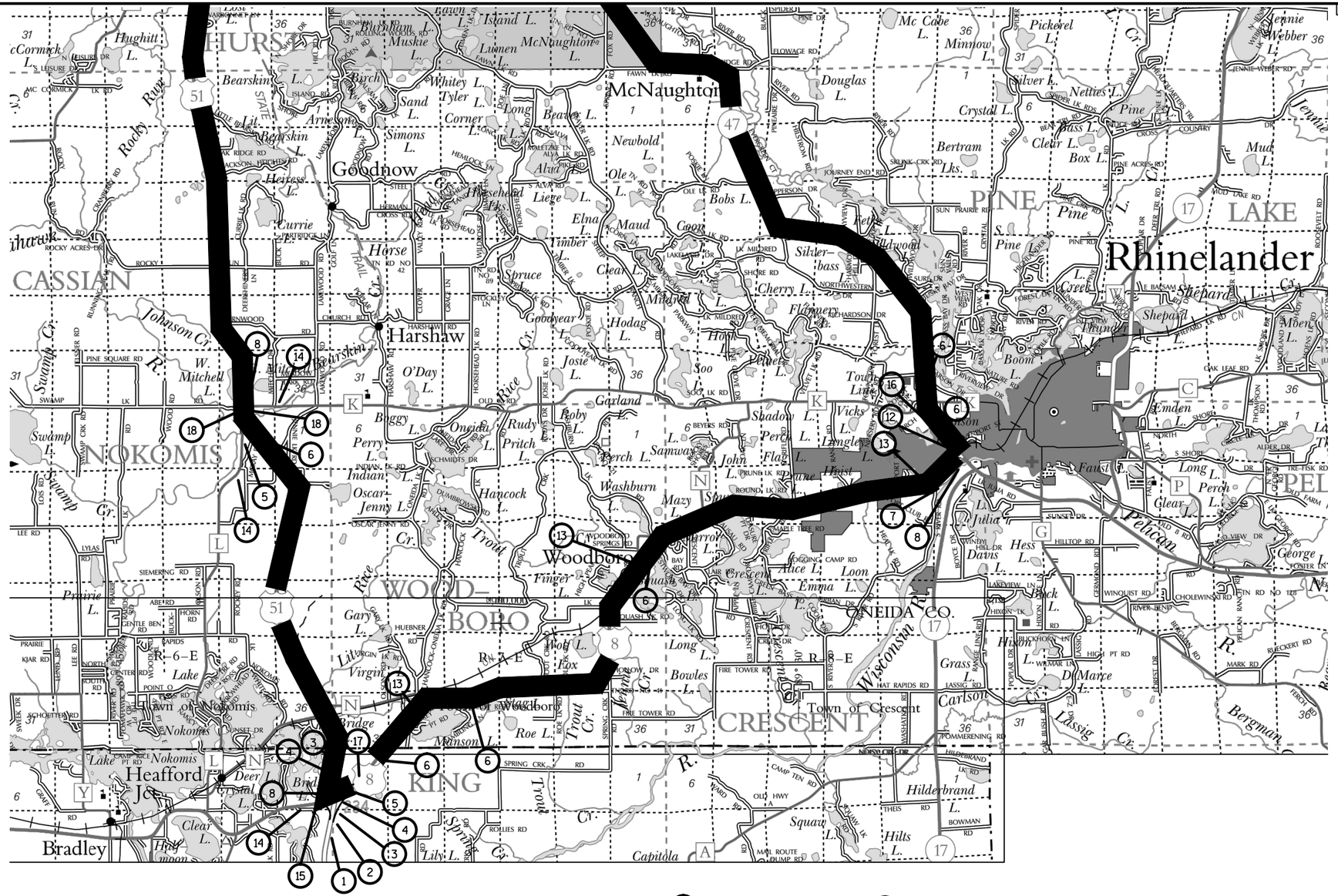
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL: USH 51 DETOUR	SHEET 15	E

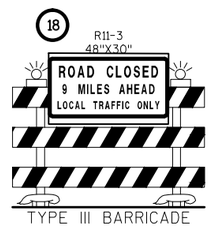
FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\DETOUR_47&51.DWG PLOT DATE : 12/1/2015 10:10 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1.759063

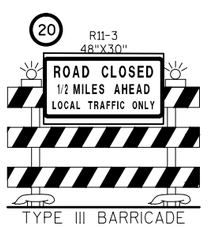
WISDOT/CADDS SHEET 42





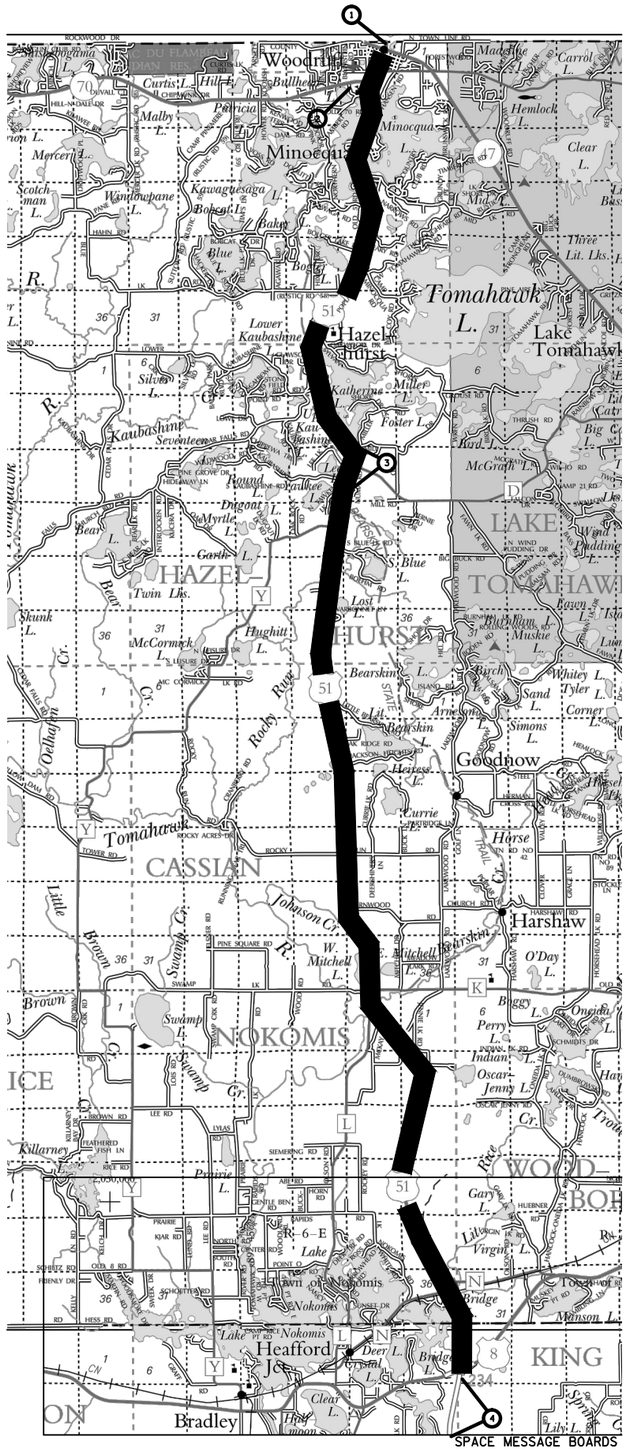






FOLLOW SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	USH 51	SHEET 16	E



N

SITE # / STAGE	1	2	3	4
7 DAYS PRIOR TO USH 51 CLOSURE	NO MESSAGE	NO MESSAGE	USH 51 TO BE CLOSED / NIGHT OF (MONTH_DATE)	NO MESSAGE
DURING USH 51 CLOSURE	USH 51 CLOSED 9 MILES / AHEAD FOLLOW DETOUR	SB USH 51 CLOSED 9 MILES / AHEAD FOLLOW DETOUR	USH 51 CLOSED / 1/2 MILE AHEAD	USH 51 CLOSED 19 MILES / AHEAD FOLLOW DETOUR

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL: USH 51 DETOUR PCMS BOARDS	SHEET 17	E

STAGE 1

- CLOSE SB USH 51 SHOULDER
- CONSTRUCT WEST PIER & ABUTMENT OF B-43-60

PT: 16+78.86

PC: 1214+79.93

LEE LK. RD.

U.S.H. 51

C.T.H. "D"

SIGN

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 1	SHEET 18	E

2

2

PT: 16+78.86

LEE LK. RD.

STAGE 2

- CLOSE NB USH 51 SHOULDER
- CONSTRUCT EAST PIER & ABUTMENT OF B-43-60

15

WALLS

SIGN

SIGN

SIGN

1200

1205

1210

10

5

PC: 4+32.23

C.T.H. "D"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 2	SHEET 19	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_2.DWG PLOT DATE : 12/1/2015 10:12 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

2

PC: 18+49.54

PT: 16+78.86

PT: 16+68.75

LEE LK. RD.

STAGE 3

- CLOSE USH 51 TRAFFIC OVERNIGHT AND DETOUR TRAFFIC TO USH 8 AND STH 47
- SET ALL BRIDGE GIRDERS

N

WALLS

SIGN

SIGN

SIGN

SIGN

W

W

W

T

T

T

15

15

15

1200

1205

1210

U.S.H.

PC: 10+94.42

PT: 9+00.00

15

C.T.H. "D"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 3	SHEET 20	E

2

PC: 18+49.54

PT: 16+78.86

PT: 16+68.75

LEE LK. RD.

STAGE 4

- CLOSE NB & SB USH 51 SHOULDERS
- CONSTRUCT B-43-60 DECK AND RAILING

WALLS

SIGN

SIGN

SIGN

SIGN

1200

1205

1210

U.S.H.

PC: 10+94.42

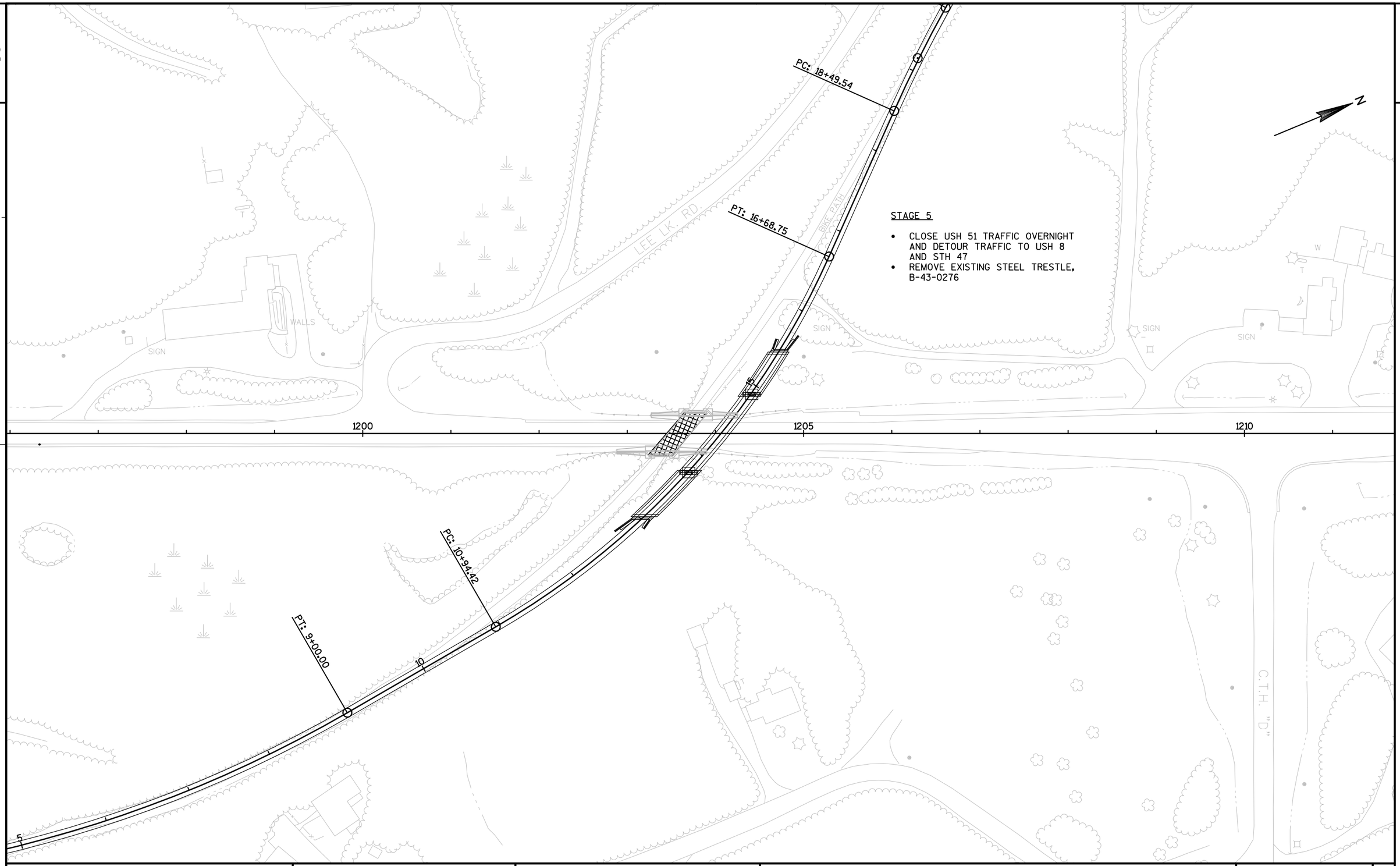
PT: 9+00.00

C.T.H. "D"

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 4	SHEET 21	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_4.DWG PLOT DATE : 12/1/2015 10:13 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 5	SHEET 22	E

2

2

KAUBASHINE RD.

STAGE 6

- CLOSE SB USH 51 TRAFFIC
- REMOVE WEST ABUTMENT OF B-43-0276
- COMPLETE USH 51 EARTHWORK IN SB DITCH SOUTH OF B-43-0276

FLAGS
16"X16" MIN
(ORANGE)

W03-3
48"X48"

NO PASSING ZONE
W14-3
36"X36"

PT: 11+38.57

W1-6
48"X24"

TYPE III BARRICADE

W05-52L
12"X36"

WALLS

SIGN

LEE

1190

1195

1200

ONE LANE ROAD AHEAD
W20-4-A
48"X48"

PC: 10+94.42

STOP HERE ON RED
R10-6
24"X36"
STA 1201+25

PT: 9+00.00

10

PC: 4+32.23

5

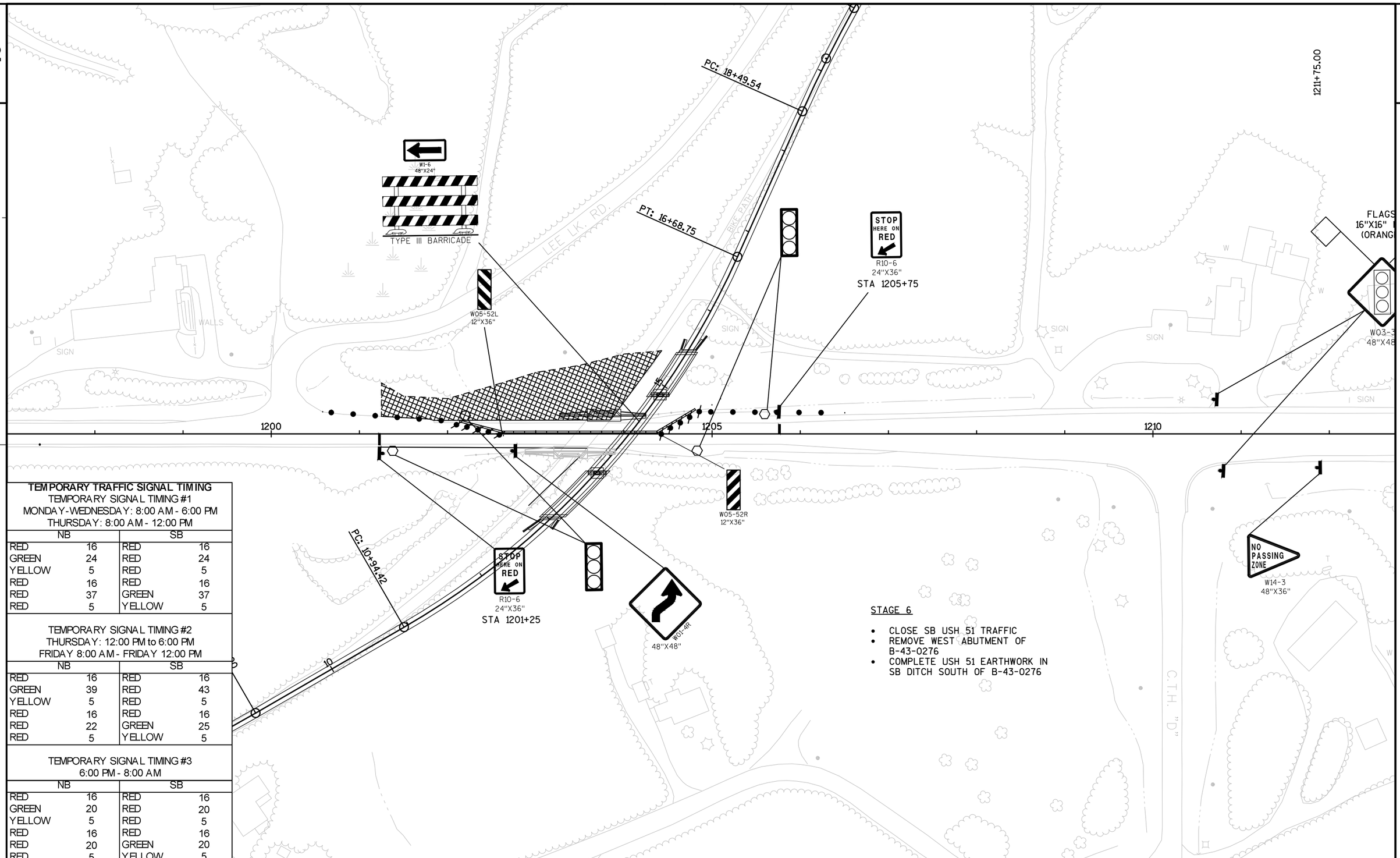
1+00.00

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 6	SHEET 23	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_10.DWG
LAYOUT NAME - 050107 (2)

PLOT DATE : 12/1/2015 10:16 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

2



TEMPORARY TRAFFIC SIGNAL TIMING

TEMPORARY SIGNAL TIMING #1
MONDAY-WEDNESDAY: 8:00 AM - 6:00 PM
THURSDAY: 8:00 AM - 12:00 PM

NB		SB	
RED	16	RED	16
GREEN	24	RED	24
YELLOW	5	RED	5
RED	16	RED	16
RED	37	GREEN	37
RED	5	YELLOW	5

TEMPORARY SIGNAL TIMING #2
THURSDAY: 12:00 PM to 6:00 PM
FRIDAY 8:00 AM - FRIDAY 12:00 PM

NB		SB	
RED	16	RED	16
GREEN	39	RED	43
YELLOW	5	RED	5
RED	16	RED	16
RED	22	GREEN	25
RED	5	YELLOW	5

TEMPORARY SIGNAL TIMING #3
6:00 PM - 8:00 AM

NB		SB	
RED	16	RED	16
GREEN	20	RED	20
YELLOW	5	RED	5
RED	16	RED	16
RED	20	GREEN	20
RED	5	YELLOW	5

STAGE 6

- CLOSE SB USH 51 TRAFFIC
- REMOVE WEST ABUTMENT OF B-43-0276
- COMPLETE USH 51 EARTHWORK IN SB DITCH SOUTH OF B-43-0276

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 6	SHEET 24	E

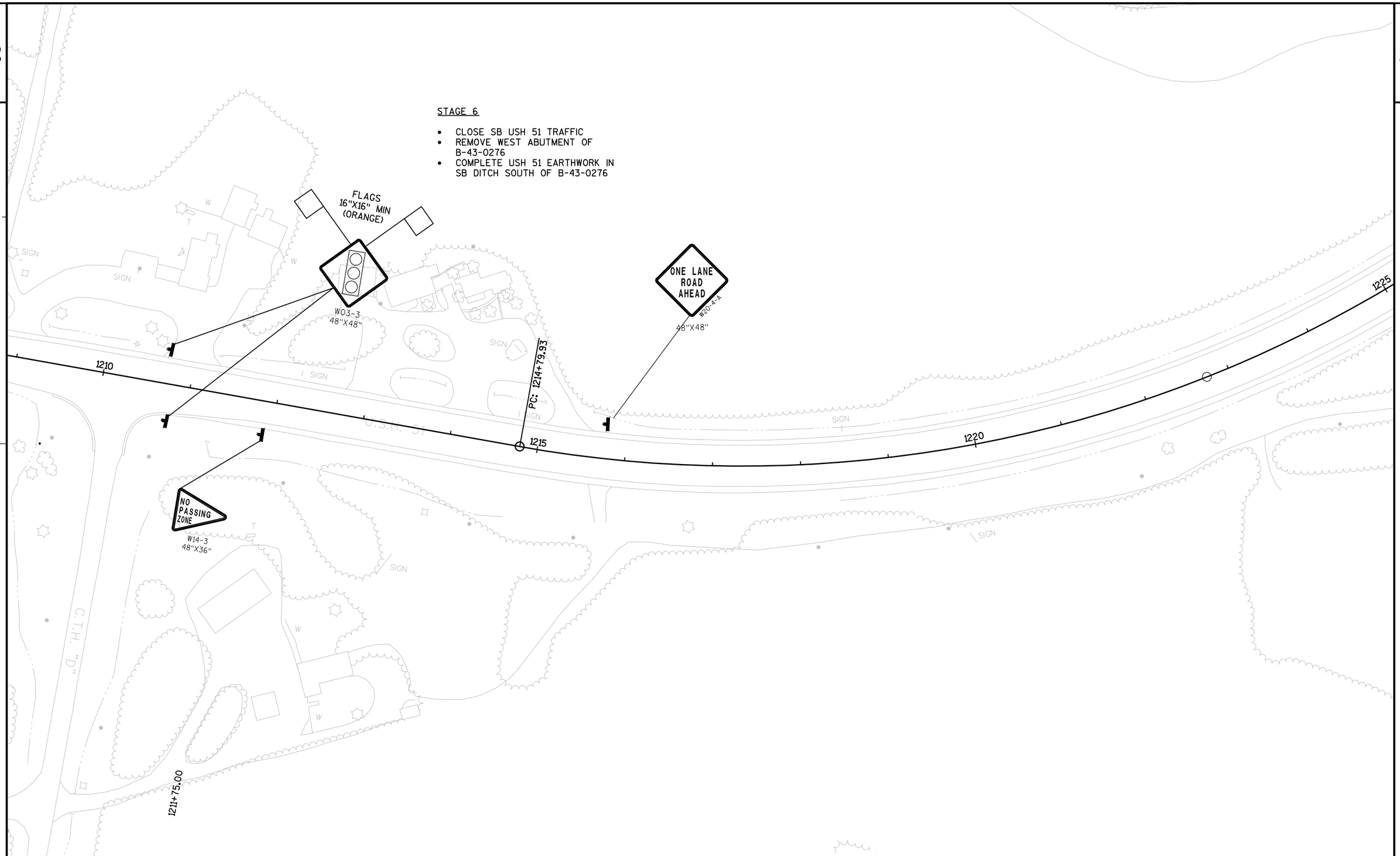
FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_10.DWG
LAYOUT NAME - 050107
PLOT DATE : 12/1/2015 10:16 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

STAGE 6

- CLOSE SB USH 51 TRAFFIC
- REMOVE WEST ABUTMENT OF B-43-0276
- COMPLETE USH 51 EARTHWORK IN SB DITCH SOUTH OF B-43-0276



PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 6	SHEET 25	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_10.DWG
LAYOUT NAME - 050109

PLOT DATE : 12/1/2015 10:16 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N. YAWKEY LAKE RD.

KAUBASHINE RD.

1193+75.00

STAGE 7

- CLOSE NB USH 51 TRAFFIC
- REMOVE EAST ABUTMENT OF B-43-0276
- COMPLETE USH 51 EARTHWORK IN NB DITCH SOUTH OF B-43-0276

PC: 1185+56.54

PT: 1192+38.19

NO PASSING ZONE
W14-3
48"X36"

1180

U.S.H. 51

1185

1190

U.S.H. 51

ONE LANE ROAD AHEAD
W20-4-A
48"X48"

RUINS

BP: 1+00.00

PC: 4+32.23

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 7	SHEET 26	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_11.DWG
LAYOUT NAME - 050110

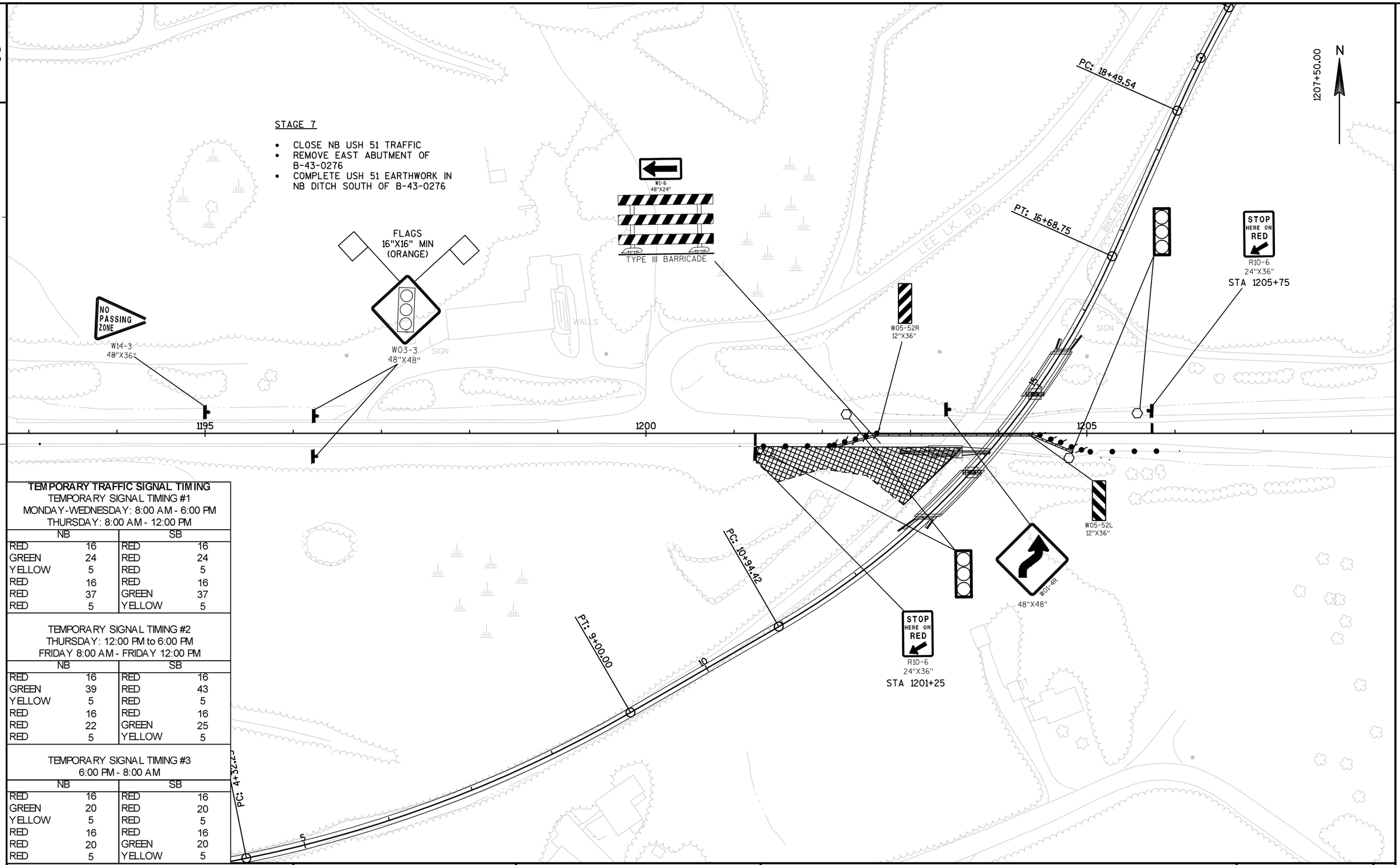
PLOT DATE : 12/1/2015 10:17 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

STAGE 7

- CLOSE NB USH 51 TRAFFIC
- REMOVE EAST ABUTMENT OF B-43-0276
- COMPLETE USH 51 EARTHWORK IN NB DITCH SOUTH OF B-43-0276



TEMPORARY TRAFFIC SIGNAL TIMING

TEMPORARY SIGNAL TIMING #1
MONDAY-WEDNESDAY: 8:00 AM - 6:00 PM
THURSDAY: 8:00 AM - 12:00 PM

NB		SB	
RED	16	RED	16
GREEN	24	RED	24
YELLOW	5	RED	5
RED	16	RED	16
RED	37	GREEN	37
RED	5	YELLOW	5

TEMPORARY SIGNAL TIMING #2
THURSDAY: 12:00 PM to 6:00 PM
FRIDAY 8:00 AM - FRIDAY 12:00 PM

NB		SB	
RED	16	RED	16
GREEN	39	RED	43
YELLOW	5	RED	5
RED	16	RED	16
RED	22	GREEN	25
RED	5	YELLOW	5

TEMPORARY SIGNAL TIMING #3
6:00 PM - 8:00 AM

NB		SB	
RED	16	RED	16
GREEN	20	RED	20
YELLOW	5	RED	5
RED	16	RED	16
RED	20	GREEN	20
RED	5	YELLOW	5

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 7	SHEET 27	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_11.DWG
LAYOUT NAME - 050111
PLOT DATE : 12/1/2015 10:17 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

STAGE 7

- CLOSE NB USH 51 TRAFFIC
- REMOVE EAST ABUTMENT OF B-43-0276
- COMPLETE USH 51 EARTHWORK IN NB DITCH SOUTH OF B-43-0276

STOP HERE ON RED
R10-6
24"X36"
STA 1205+75

FLAGS
16"X16" MIN
(ORANGE)

W03-3
48"X48"

ONE LANE ROAD AHEAD
W20-4-A
48"X48"

NO PASSING ZONE
W14-3
48"X36"

1207+50.00

PC: 1214+79.93

1210

1215

1220

U.S.H. 51

C.T.H. "D"

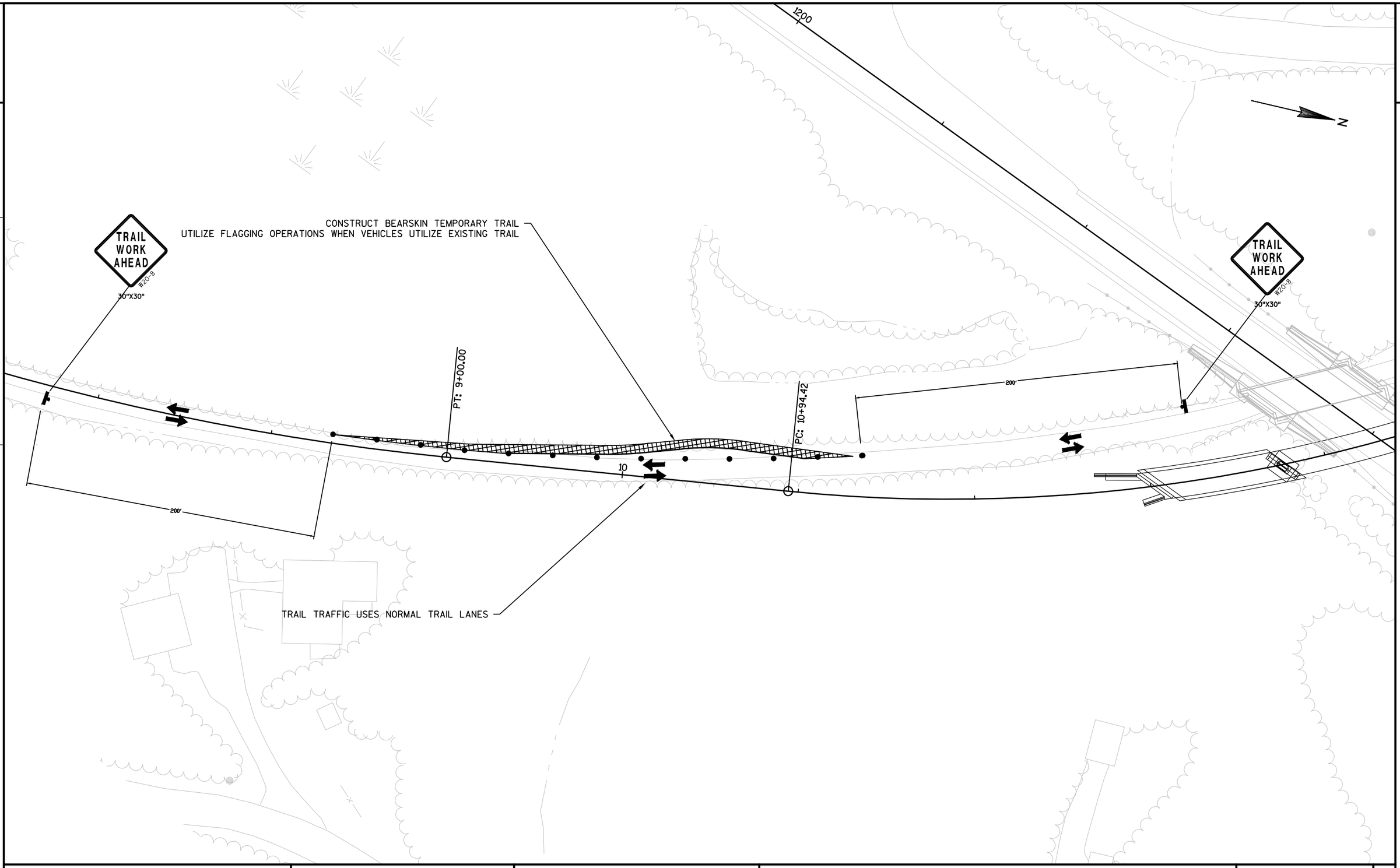
SIGN

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	WORK ZONE TRAFFIC CONTROL - STAGE 7	SHEET 28	E

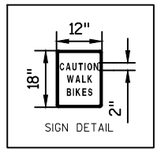
FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\STAGE_11.DWG
LAYOUT NAME - 050111 (2)

PLOT DATE : 12/1/2015 10:17 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	BEARSKIN TRAIL STAGE "A"	SHEET 29	E



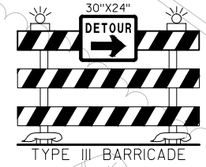
NOTE:

1. BIKE SIGNS TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.

2. SIGNS SHALL BE REFLECTIVE ORANGE.

100' TAPER
(DRUMS SPACED 25')

INSTALL TEMPORARY SAFETY FENCE



TYPE III BARRICADE

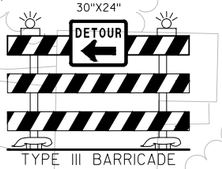
1200

N

1+00

2+00

200'



TYPE III BARRICADE

TRAIL TRAFFIC USES LEFT HALF OF EXISTING TRAIL AND FULL WIDTH OF TEMPORARY TRAIL

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	BEARSKIN TRAIL STAGE "B"	SHEET 30	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101 (71)\WORK ZONE TRAFFIC CONTROL SHEETS\TRAIL_PHASE_2.DWG
LAYOUT NAME - 050106

PLOT DATE : 12/9/2015 5:06 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

LEE LK. RD.

INSTALL TEMPORARY SAFETY FENCE

M4-9L
30"X24"
DETOUR
TYPE III BARRICADE

M4-9R
30"X24"
DETOUR
TYPE III BARRICADE

W01-4R
30"X30"

TRAIL
WORK
AHEAD
W20-8
30"X30"

CAUTION
WALK
BIKES
12"X18"

200'

20

15

1205

100' TAPER
(DRUMS SPACED 25')

TRAIL TRAFFIC USES LEFT HALF OF EXISTING TRAIL

12"
18"
CAUTION
WALK
BIKES
2"
SIGN DETAIL

NOTE:

1. BIKE SIGNS TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.

2. SIGNS SHALL BE REFLECTIVE ORANGE.

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	BEARSKIN TRAIL STAGE "B"	SHEET 31	E

NOTE:

1. BIKE SIGNS TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.

2. SIGNS SHALL BE REFLECTIVE ORANGE.

TEMPORARY RAIL IS REMOVED AS PART OF PHASE 3 EARTHWORK

TRAIL WORK AHEAD
W20-8
30"X30"

CAUTION WALK BIKES
12"X18"

100' TAPER
(DRUMS SPACED 25')

W01-4R
30"X30"

1200

M4-9L
30"X24"
DETOUR
TYPE III BARRICADE

N

PT: 9+00.00

PC: 10+00.00

200'

M4-9R
30"X24"
DETOUR
TYPE III BARRICADE

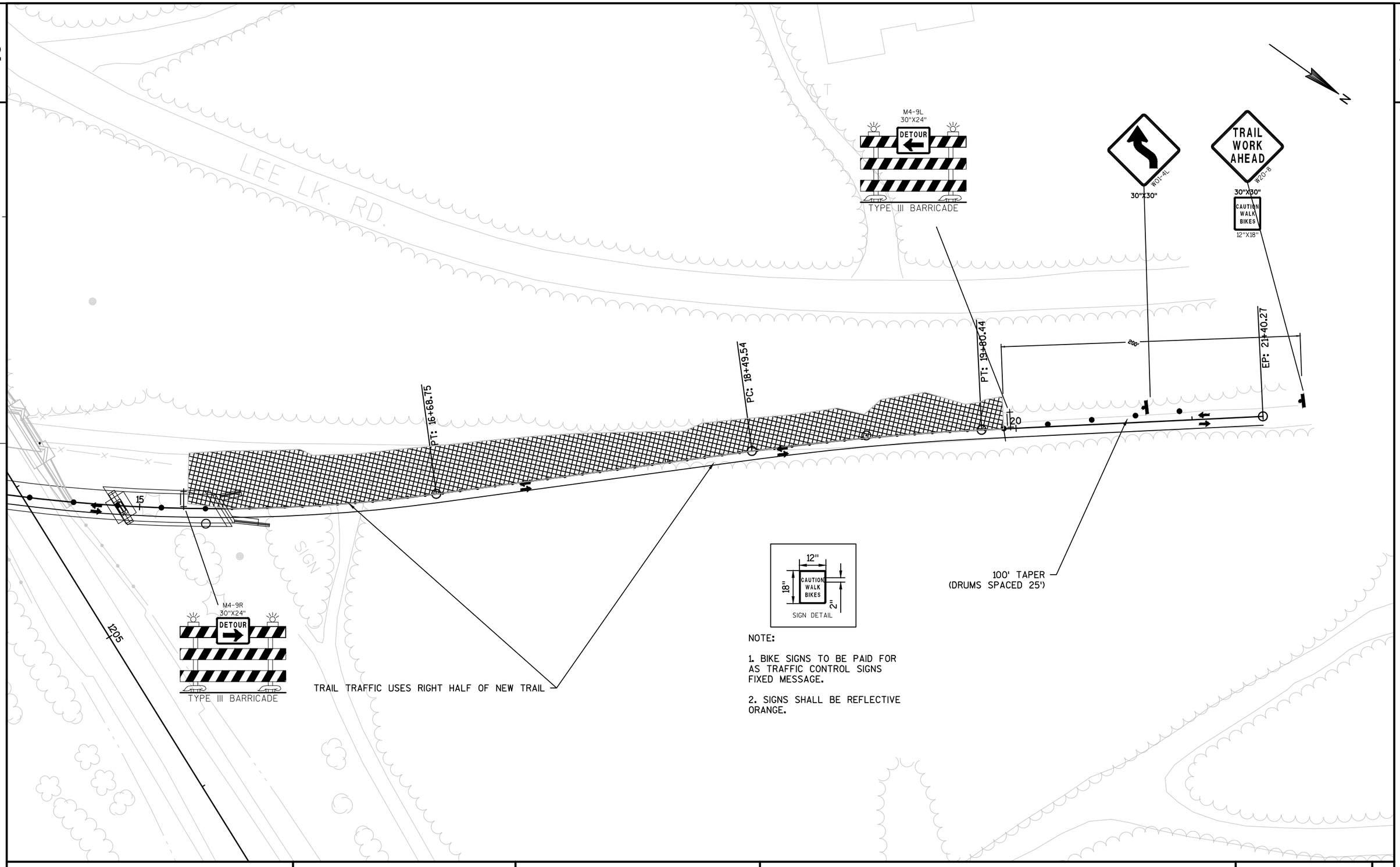
TRAIL TRAFFIC USES RIGHT HALF OF NEW TRAIL

2

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	BEARSKIN TRAIL STAGE "C"	SHEET 32	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\WORK ZONE TRAFFIC CONTROL SHEETS\TRAIL_PHASE_3.DWG
LAYOUT NAME - 050106
PLOT DATE : 12/9/2015 5:07 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



NOTE:

1. BIKE SIGNS TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.

2. SIGNS SHALL BE REFLECTIVE ORANGE.

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	BEARSKIN TRAIL STAGE "C"	SHEET 33 E

DATE 12JAN16 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	1177-11-71 QUANTITY
0010	201.0105	Clearing	STA	25.000	25.000
0020	201.0205	Grubbing	STA	25.000	25.000
0030	203.0200	Removing Old Structure (station) 01. 13+45	LS	1.000	1.000
0040	203.0225.S	Debris Containment (structure) 01. B-43-60	LS	1.000	1.000
0050	204.0110	Removing Asphaltic Surface	SY	304.000	304.000
0060	204.0120	Removing Asphaltic Surface Milling	SY	152.000	152.000
0070	204.0165	Removing Guardrail	LF	344.000	344.000
0080	205.0100	Excavation Common	CY	16,903.000	16,903.000
0090	206.1000	Excavation for Structures Bridges (structure) 01. B-43-60	LS	1.000	1.000
0100	208.0100	Borrow	CY	14,006.000	14,006.000
0110	210.0100	Backfill Structure	CY	200.000	200.000
0120	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1177-11-71	LS	1.000	1.000
0130	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	6.000	6.000
0140	213.0100	Finishing Roadway (project) 01. 1177-11-71	EACH	1.000	1.000
0150	305.0110	Base Aggregate Dense 3/4-Inch	TON	444.400	444.400
0160	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	467.000	467.000
0170	455.0105	Asphaltic Material PG58-28	TON	6.800	6.800
0180	455.0605	Tack Coat	GAL	38.000	38.000
0190	460.1103	HMA Pavement Type E-3	TON	121.000	121.000
0200	460.2000	Incentive Density HMA Pavement	DOL	80.000	80.000
0210	502.0100	Concrete Masonry Bridges	CY	416.000	416.000
0220	502.3210	Pigmented Surface Sealer	SY	245.000	245.000
0230	503.0146	Prestressed Girder Type I 45W-Inch	LF	493.000	493.000
0240	505.0400	Bar Steel Reinforcement HS Structures	LB	6,110.000	6,110.000
0250	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	52,340.000	52,340.000
0260	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	12.000	12.000
0270	506.4000	Steel Diaphragms (structure) 01. B-43-60	EACH	4.000	4.000
0280	509.5100.S	Polymer Overlay	SY	390.000	390.000
0290	511.1200	Temporary Shoring (structure) 01. B-43-60	SF	2,120.000	2,120.000
0300	516.0500	Rubberized Membrane Waterproofing	SY	20.000	20.000
0310	517.1010.S	Concrete Staining (structure) 01. B-43-060	SF	6,725.000	6,725.000
0320	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-43-060	SF	1,980.000	1,980.000
0330	517.1050.S	Architectural Surface Treatment (structure) 01. B-43-060	SF	1,980.000	1,980.000
0340	550.2106	Piling CIP Concrete 10 3/4 X 0.365-Inch	LF	2,825.000	2,825.000
0350	603.8000	Concrete Barrier Temporary Precast Delivered	LF	275.000	275.000
0360	603.8125	Concrete Barrier Temporary Precast Installed	LF	550.000	550.000
0370	604.0500	Slope Paving Crushed Aggregate	SY	330.000	330.000
0380	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	115.000	115.000
0390	619.1000	Mobilization	EACH	1.000	1.000
0400	624.0100	Water	MGAL	285.000	285.000
0410	625.0100	Topsoil	SY	10,915.000	10,915.000
0420	627.0200	Mulching	SY	4,098.000	4,098.000
0430	628.1504	Silt Fence	LF	540.000	540.000

3

DATE 12JAN16 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	1177-11-71 QUANTITY
0440	628.1520	Silt Fence Maintenance	LF	540.000	540.000
0450	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0460	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0470	628.2004	Erosion Mat Class I Type B	SY	4,100.000	4,100.000
0480	628.2023	Erosion Mat Class II Type B	SY	8,600.000	8,600.000
0490	628.7504	Temporary Ditch Checks	LF	45.000	45.000
0500	629.0210	Fertilizer Type B	CWT	4.000	4.000
0510	630.0120	Seeding Mixture No. 20	LB	138.000	138.000
0520	630.0130	Seeding Mixture No. 30	LB	38.000	38.000
0530	630.0200	Seeding Temporary	LB	62.000	62.000
0540	638.2102	Moving Signs Type II	EACH	12.000	12.000
0550	638.2602	Removing Signs Type II	EACH	1.000	1.000
0560	638.3000	Removing Small Sign Supports	EACH	1.000	1.000
0570	638.4000	Moving Small Sign Supports	EACH	14.000	14.000
0580	642.5001	Field Office Type B	EACH	1.000	1.000
0590	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 1177-11-71	DAY	135.000	135.000
0600	643.0300	Traffic Control Drums	DAY	3,672.000	3,672.000
0610	643.0420	Traffic Control Barricades Type III	DAY	442.000	442.000
0620	643.0705	Traffic Control Warning Lights Type A	DAY	212.000	212.000
0630	643.0715	Traffic Control Warning Lights Type C	DAY	336.000	336.000
0640	643.0900	Traffic Control Signs	DAY	2,434.000	2,434.000
0650	643.1000	Traffic Control Signs Fixed Message	SF	6.000	6.000
0660	643.1050	Traffic Control Signs PCMS	DAY	52.000	52.000
0670	643.2000	Traffic Control Detour (project) 01. 1177-11-71	EACH	1.000	1.000
0680	643.3000	Traffic Control Detour Signs	DAY	596.000	596.000
0690	644.1616.S	Temporary Pedestrian Safety Fence 01. Temporary Pedestrian Safety Fence	LF	2,081.000	2,081.000
0700	646.0106	Pavement Marking Epoxy 4-Inch	LF	900.000	900.000
0710	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	900.000	900.000
0720	646.0600	Removing Pavement Markings	LF	900.000	900.000
0730	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	5,400.000	5,400.000
0740	649.1400	Temporary Pavement Marking Stop Line Removable Tape 24-Inch	LF	96.000	96.000
0750	650.4500	Construction Staking Subgrade	LF	1,474.000	1,474.000
0760	650.5000	Construction Staking Base	LF	1,474.000	1,474.000
0770	650.6500	Construction Staking Structure Layout (structure) 01. B-43-0060	LS	1.000	1.000
0780	650.9910	Construction Staking Supplemental Control (project) 01. 1177-11-71	LS	1.000	1.000
0790	650.9920	Construction Staking Slope Stakes	LF	2,099.000	2,099.000
0800	661.0100	Temporary Traffic Signals for Bridges (structure) 01. B-43-0060	LS	1.000	1.000
0810	690.0150	Sawing Asphalt	LF	314.000	314.000
0820	715.0502	Incentive Strength Concrete Structures	DOL	2,496.000	2,496.000
0830	SPV.0090	Special 01. Fence Chain Link Polymer Coated 8-FT	LF	566.000	566.000
0840	SPV.0195	Special 01. Base Aggregate Disintegrated Granite	TON	613.000	613.000

3

3

CLEARING AND GRUBBING

CAT 0010 LOCATION				201.0105 CLEARING STA	201.0205 GRUBBING STA
USH 51					
STA 1201+00	–	STA 1206+00	LT	5	5
STA 1201+00	–	STA 1207+00	RT	6	6
BEARSKIN TRAIL					
STA 9+00	–	STA 13+00	RT	4	4
STA 15+00	–	STA 19+00	RT	4	4
STA 8+00	–	STA 12+00	LT	4	4
STA 18+00	–	STA 20+00	LT	2	2
			TOAL	25	25

PAVING ITEMS

CAT 0010

STATION		STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	211.0400 PREPARE FOUNDATION FOR ASPHALT SHOULDERS STA	211.0100 PREPARE FOUNDATION FOR ASPHALT PAVING LS	455.0105 ASPHALTIC MATERIAL PG 58-28 TON	455.0605 TACK COAT GAL	460.1103 HMA PAVEMENT TYPE E-3 TON	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
USH 51										
STA 1202+88	-	STA 1204+25	RT	152	3		3.4	19	61	76
STA 1202+88	-	STA 1204+25	LT	152	3		3.4	19	61	76
TOTAL				304	6	1	6.8	38	121	152

SAWCUTTING

CAT 0010

STATION		STATION	LOCATION	690.015 SAWING ASPHALT LF	
USH 51					
STA 1202+88	-	STA 1204+25	RT	137	LONGITUDINAL CUT
STA 1202+88	-	STA 1204+25	LT	137	LONGITUDINAL CUT
STA 1202+88			RT & LT	20	LATERAL CUT
STA 1204+25			RT & LT	20	LATERAL CUT
TOTAL				314	

WATER

CAT 0010

LOCATION	624.0100 WATER MGAL
LANDSCAPING	270
BEARSKIN TRAIL SURFACE COMPACTION	6
USH 51 BASE AGGREGATE COMPACTION	9
TOTAL	285

CONSTRUCTION STAKING

STA		STA	CAT	650.4500 SUB GRADE LF	650.5000 BASE LF	650.6500 STRUCTURE LAYOUT LS	650.9920 SLOPE STAKE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS
USH 51								
STA 1201+25	–	STA 1207+50					625	1
BEARSKIN TRAIL								
STA 8+00	-	STA 19+80		1,180	1,180		1,180	
BEARSKIN TEMPORARY TRAIL								
STA 0+00	-	STA 2+94		294	294		294	
			CAT 0020					
			STRUCTURES					
			B-43-60			1		
		TOTAL		1,474	1,474	1	2,099	1

REMOVING GUARDRAIL

CAT 0010

LOCATION	204.0165 REMOVING GUARDRAIL LF
B-43-0276	
NE QUADRANT	86
NW QUADRANT	86
SE QUADRANT	86
SW QUADRANT	86
TOTAL	344

3

EROSION CONTROL
CAT 0010

LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENCE LF	628.1905 MOBILIZATIONS FOR EROSION CONTROL EA	628.1910 MOBILIZATIONS FOR EMERGENCY EROSION CONTROL EA	628.2004 EROSION MAT CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.7504 TEMPORARY DITCH CHECKS LF
USH 51							
NB DITCHLINE	--	--	1	--	340	--	15
NB SIDE SLOPE	130	130	--	--	--	3,100	--
SB DITCHLINE	--	--	1	--	230	--	15
SB SIDESLOPE	--	--	--	--	1,420	--	--
BEARSKIN TRAIL STAGE "A"	--	--	1	--	--	--	--
TEMP TRAIL SIDESLOPE	300	300	--	--	--	1,150	--
BEARSKIN TRAIL STAGE "B"	--	--	1	--	--	--	--
WB SIDESLOPE	--	--	--	--	1,170	--	--
EB SIDESLOPE	--	--	--	--	--	1,160	--
BEARSKIN TRAIL STAGE "C"	--	--	1	--	--		--
EB SIDESLOPE	--	--	--	--	120	1,470	--
UNDISTRIBUTED	110	110	1	5	820	1,720	15
TOTAL	540	540	6	5	4,100	8,600	45

LANDSCAPING
CAT 0010

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE #20 LB	630.0130 SEEDING MIXTURE #30 LB	630.0200 SEEDING TEMPORARY LB
TEMPORARY TRAIL									
0+00	-	2+94	TEMP TRAIL LT	--	--	0.4	--	--	31
BEARSKIN TRAIL									
8+00	-	19+80	STAGE "B" TRAIL LT	--	--	0.4	--	--	31
8+00	-	13+00	BEARSKIN TRAIL RT	1,525	355	0.5	41	--	--
15+50	-	19+80	BEARSKIN TRAIL RT	714	714	0.2	19	--	--
8+00	-	13+00	BEARSKIN TRAIL LT	2,180	590	0.7	59	--	--
15+50	-	19+80	BEARSKIN TRAIL LT	702	702	0.2	19	--	--
USH 51									
1201+25	-	1207+50	USH 51 RT	3,851	926	1.4	--	19	--
1201+25	-	1207+50	USH 51 LT	1,945	812	0.8	--	19	--
TOTAL				10,915	4,098	4	138	38	62

PAVEMENT MARKING
CAT 0010

STAGE	LOCATION	649.0400 REMOVABLE TAPE 4-INCH WHITE LF	649.0400 REMOVABLE TAPE 4-INCH YELLOW LF	649.1400 STOP LINE REMOVABLE TAPE 24-INCH LF	646.0600 REMOVING PAVEMENT MARKINGS LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH (WHITE) LF	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH (YELLOW) LF	COMMENTS
6	WEST ABUTMENT WALL REMOVAL	450	--	24	900	--	--	TEMPORARY SIGNAL LAYOUT
	RE-ESTABLISH CENTER & NB EDGELINE	450	900	--	--	--	--	RE-ESTABLISH PAV'T MARKING
	WEST ABUTMENT FOOTING REMOVAL	450	--	24	--	--	--	TEMPORARY SIGNAL LAYOUT
	RE-ESTABLISH TEMP CENTER & PERMANENT NB EDGELINE	--	900	--	--	450	--	RE-ESTABLISH PAV'T MARKING
7	EAST ABUTMENT WALL REMOVAL	450	--	24	--	--	--	TEMPORARY SIGNAL LAYOUT
	RE-ESTABLISH CENTER & SB EDGELINE	450	900	--	--	--	--	RE-ESTABLISH PAV'T MARKING
	EAST ABUTMENT FOOTING REMOVAL	450	--	24	--	--	--	TEMPORARY SIGNAL LAYOUT
	RE-ESTABLISH PERMANENT CENTER SB EDGELINE	--	--	--	--	450	900	RE-ESTABLISH PAV'T MARKING
	SUB-TOTAL	2,700	2,700					
	GRAND TOTAL	5,400		96	900	900	900	

TRAFFIC CONTROL
CAT 0010

LOCATION	643.0200 SURVEILLANCE & MAINTENANCE DAYS	643.0300 TRAFFIC CONTROL DRUMS DAYS	603.8000 CONC BARRIER TEMP PRECAST DELIVERED LF	603.8125 CONC BARRIER TEMP PRECAST INSTALLED LF	643.0420 BARRICADES TYPE III DAYS	WARNING LIGHTS 643.0705 TYPE A DAYS	WARNING LIGHTS 643.0715 TYPE C DAYS	661.0100 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (B-43-0060)	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAY	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF	COMMENTS
USH 51														
STAGE 1	24	384	--	--	--	--	--	--	264	--	--	--	--	
STAGE 2	24	384	--	--	--	--	--	--	264	--	--	--	--	
STAGE 3	2	--	--	--	44	88	--	--	36	--	26	298	--	
STAGE 4	22	704	--	--	--	--	--	--	242	--		--	--	
STAGE 5	2	--	--	--	44	88	--	--	36	--	26	298	--	
STAGE 6	14	308	275	275	14	--	140	1	336	--	--	--	--	
STAGE 7	14	280	--	275	14	--	140		336	--	--	--	--	
BEARSKIN TRAIL														
STAGE A	--	70	--	--	--	--	--	--	10	--	--	--	--	
STAGE B	33	330	--	--	132	--	--	--	264	3	--	--	1,131	SOME STAGES MAY OCCUR CONCURRENTLY WITH USH 51 WORK, ITEM 643.0200 IS NOT DOUBLE COUNTED
STAGE C	--	600	--	--	120	--	--	--	240	3	--	--	950	
UNDISTRIBUTED	--	612	--	--	74	36	56	--	406	--	--	--	--	
TOTAL	135	3,672	275	550	442	212	336	1	2,434	6	52	596	2,081	

PERMANENT SIGNING

CAT 0010

SIGNING

STATION	LOCATION	SIGN #	SIGN CODE	SIZE IN x IN	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	DESCRIPTION	COMMENTS
1205+40	LT	1	D1-1	72X15			2	4	Lee Lake Road	RE-INSTALL IN SAME LOCATION AFTER CONSTRUCTION
1205+90	LT	2	W6-3	36X36			2	2	Two-Way Traffic Signal	RE-INSTALL IN SAME LOCATION AFTER CONSTRUCTION
1213+60	LT	3	W12-2	36X36	1	1			14'-3" Clearance	REMOVE
1205+60	RT	4	W6-1	36X36			2	2	Divided Highway Symbol	RE-INSTALL IN SAME LOCATION AFTER CONSTRUCTION
1201+70	RT	5	D1-1	102X24			2	4	Camp American Legion	RE-INSTALL IN SAME LOCATION AFTER CONSTRUCTION
1200+75	RT	6	J1-1	21X15 24X24			4	2	JCT COUNTY D	RE-INSTALL IN SAME LOCATION AFTER CONSTRUCTION
			SUB TOTAL		1	1	12	14		

BASE AGGREGATE DENSE

CAT 0010

ROADWAY	STATION		STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	SPC.0195.01 DISINTEGRATED GRANITE TON	COMMENTS
USH 51	1201+25	-	1202+88	RT	58.7	--	--	
USH 51	1202+88	-	1204+25	RT	46.3	233.5	--	
USH 51	1204+25	-	1207+50	RT	117.1	--	--	
USH 51	1201+25	-	1202+88	LT	58.7	--	--	
USH 51	1202+88	-	1204+25	LT	46.3	233.5	--	
USH 51	1204+25	-	1207+50	LT	117.1	--	--	
BEARSKIN TRAIL	8+00	-	19+80	LT & RT	--	--	559	
TEMPORARY TRAIL	0+00	-	2+94	LT	--	--	54	
				TOTAL	**444**	**467**	**613**	

EARTHWORK SUMMARY

Division	From / To Station	Location	Common Excavation (1) Cut (2)	Unexpanded Fill	Expanded Fill (13) Factor	Mass Ordinate + / - (14)	Waste	Borrow (item #208.0100)
Division 1								
USH 51	1201+00 - 1208+00	USH 51	16,767	34	41	16,726	16,726	0
Division 1 Subtotal			16,767	34	41	16,726	16,726	0
Division 2								
Bearskin Trail Stage "A"	0+00 - 2+93.46	Bearskin Trail	1	1,710	2,053	-2,052	0	2,052
Bearskin Trail Stage "B"	7+50 - 20+00	Bearskin Trail	54	8,372	10,046	-9,992	0	9,992
Bearskin Trail Stage "C"	7+50 - 20+00	Bearskin Trail	81	1,703	2,044	-1,963	0	1,963
Division 2 Subtotal			136	11,785	14,142	-14,007		14,007
Grand Total			16,903.13	11,819.87	14,183.85	2,719.29	16,726.12	14,006.83
Total Common Exc								

EARTHWORK NOTES

1) Expanded Fill Factor = 1.20

2) Expanded Fill = (Unexpanded Fill) * Fill Factor

3) 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.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ONEIDA COUNTY, NAD83 (1991) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

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.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES. FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER.

POINT NUMBER	EXISTING MONUMENTS DESCRIPTION	(Y)	(X)
PROP3042	1" IP	216397.700	186467.850
SIXT1127	1.5" IP	216403.593	186641.339
PROP1128	1.5" IP	216403.760	186669.219
PROP3028	1" IP	216935.232	186611.765
PROP3027	1" IP	216996.650	186409.300
PROP278	1.5" IP	216951.552	186833.982
PROP348	1" IP	217055.021	186447.807
PROP350	1" IP	217015.382	186571.355
PROP352	1" IP	217103.644	186679.213
PROP353	1" IP	217265.165	186745.945
PROP356	1" IP	217727.101	186937.001
PROP6082	1" IP	216861.110	186797.775
PROP6085	1.5" IP	216861.094	186798.156
PROP1134	1.5" IP	216729.673	186752.423
PROP1150	1.5" IP	216756.184	186919.638
PROP1151	1 " IP	216695.226	186899.778
PROP1152	1 " IP	216783.186	186947.320
PROP1153	1.5" IP	217096.302	187257.357
PROP1135	ALUM MON ON RR	217086.317	187306.267
PROP1155	1.5" IP	216406.445	187118.209
PROP1024	1.5" IP	216729.760	186752.454
PROP3026	1" IP	217181.710	186257.740
PROP3025	1" IP	217249.280	186130.930

SCHEDULE OF LANDS & INTERESTS REQUIRED

ALSO SEE SHEET ...-4.??	PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	FEE R/W ACRES OR (S.F.) REQUIRED			TLE AREA
				NEW	EXISTING	TOTAL	
4.02	110	STATE OF WISCONSIN DNR	TLE	------	------	------	0.56
	134	RANDOLPH R. RYDEN	FEE	0.02	------	0.02	------

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

PROPOSED RIGHT-OF-WAY CURVE TABLE

Curve no. OR From	To	Radius	Delta	Arc Length	Chord Bearing	Chord Length
PRW284	T141	1482.69'	-2°56'24"	76.08'	N 12°58'12" W	76.07'
PROP278	PROP1128	2764.90'	-11°52'31"	573.06'	S 16°44'24" W	572.03'
T140	PROP3028	2964.90'	10°43'37"	555.08'	N 15°00'28" E	554.27'
RW35	ERW15	2964.79'	0°46'45"	40.33'	N 22°12'27" E	40.33'

ROAD NAME	BASIS OF EXISTING R/W	YEAR
U.S.H. 51	PREV DOT DIVISION JOB NUMBER 7080	1937
U.S.H. 51	CSM 3689/2355	2009/2007
KAUBASHINE RD.	CSM 3689	2009

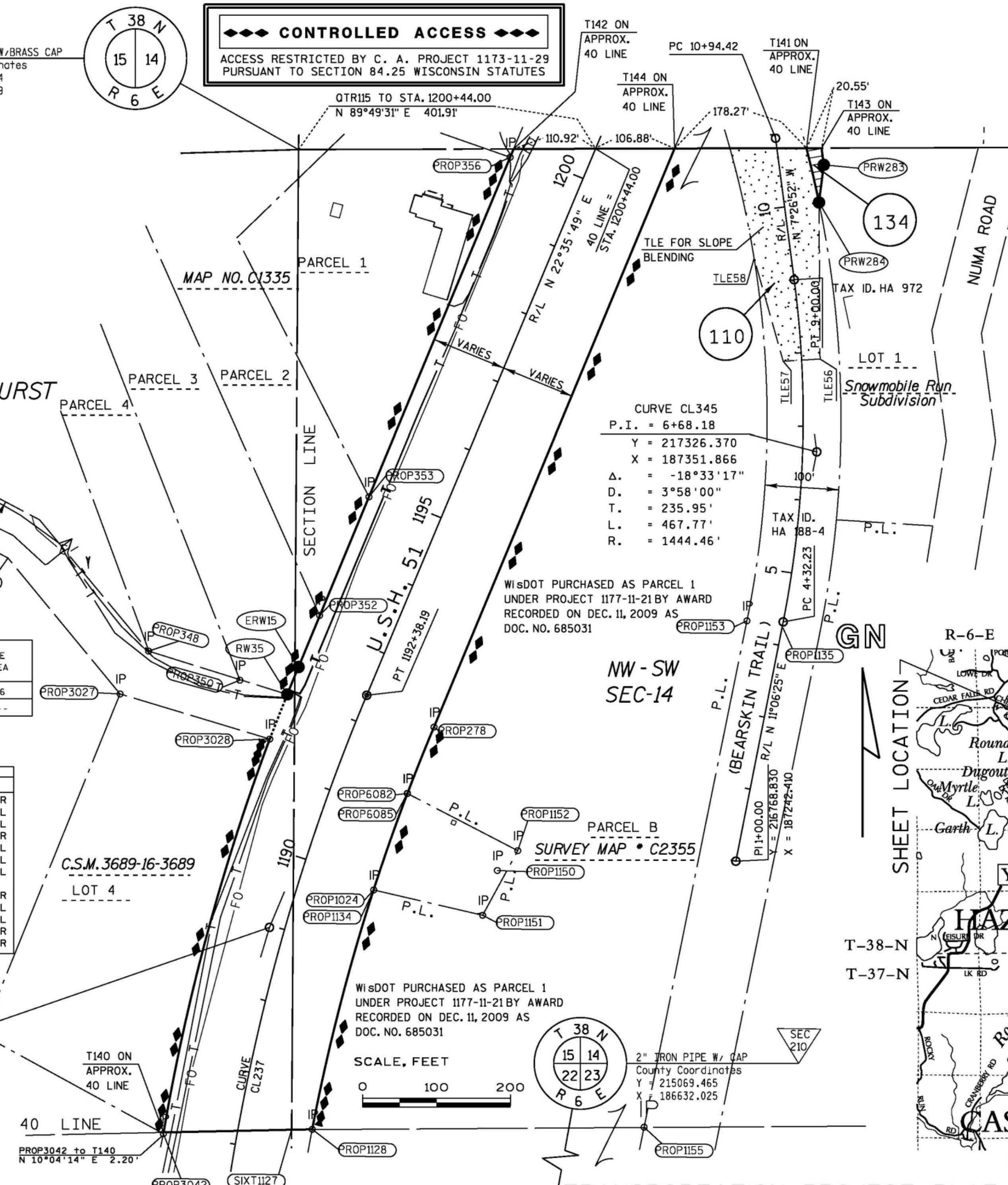
POINT TABLE - STATION AND OUT

POINT #	STATION	DIST.
PROP1128	1186+39.24	98.78'R
PROP3028	1191+36.23	100.12'L
RW35	1191+99.22	100.00'L
PROP278	1192+32.96	100.64'R
ERW15	1192+38.19	100.00'L
PROP353	1194+88.85	101.14'L
PROP356	1199+88.74	102.25'L
DNR BIKE	TRAIL	
TLE56	7+90.00	25.00'R
TLE57	7+90.00	25.00'L
TLE58	9+35.98	49.96'L
PRW284	10+00.00	46.94'R
PRW283	10+50.00	60.00'R

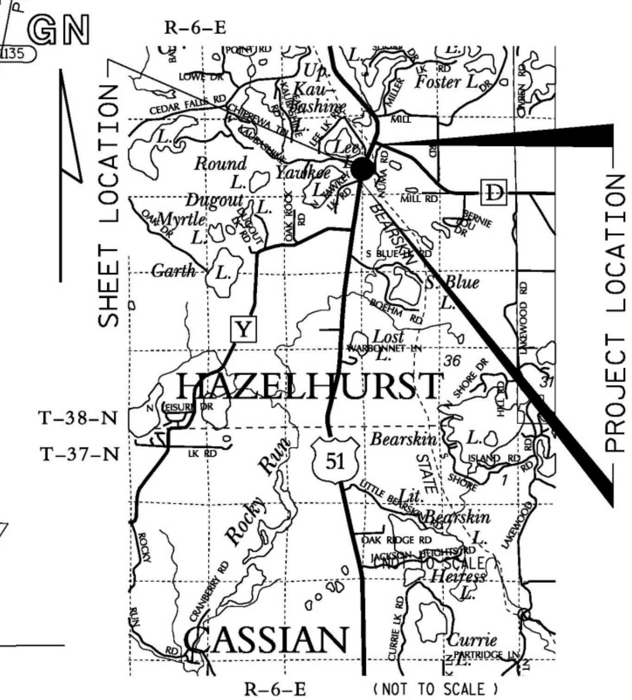
CONVENTIONAL UTILITY SYMBOLS

WATER, GAS, TELEPHONE, OVERHEAD TRANSMISSION LINES, ELECTRIC, CABLE TELEVISION, FIBER OPTIC, SANITARY SEWER, STORM SEWER

NON COMPENSABLE / COMPENSABLE: POWER POLE, TELEPHONE POLE, TELEPHONE PEDESTAL, ELECTRIC TOWER



CONTROLLED ACCESS
ACCESS RESTRICTED BY C. A. PROJECT 1173-11-29 PURSUANT TO SECTION 84.25 WISCONSIN STATUTES
QTR 115
2" IRON PIPE W/BRASS CAP
County Coordinates
Y = 217737.604
X = 186650.729
QTR115 TO STA. 1200+44.00
N 89°49'31" E 401.91'
T142 ON APPROX. 40 LINE
PC 10+94.42
T141 ON APPROX. 40 LINE
T144 ON APPROX. 40 LINE
T143 ON APPROX. 40 LINE
TLE FOR SLOPE BLENDING
MAP NO. C1335
PARCEL 1
PARCEL 2
PARCEL 3
PARCEL 4
TOWN OF HAZELHURST
KAUBASHINE RD.
GOV LOT 6
SEC-15
SECTION LINE
U.S.H. 51
NUMA ROAD
TAX ID. HA 972
LOT 1
Snowmobile Run Subdivision
CURVE CL345
P.I. = 6+68.18
Y = 217326.370
X = 187351.866
Δ. = -18°33'17"
D. = 3°58'00"
T. = 235.95'
L. = 467.77'
R. = 1444.46'
TAX ID. HA 188-4
WisDOT PURCHASED AS PARCEL 1 UNDER PROJECT 1177-11-21 BY AWARD RECORDED ON DEC. 11, 2009 AS DOC. NO. 685031
NW - SW
SEC-14
(BEARSKIN TRAIL)
PARCEL B
SURVEY MAP * C2355
C.S.M. 3689-16-3689
LOT 4
CURVE CL237
P.I. = 1188+98.98
Y = 216678.727
X = 186611.420
Δ. = 13°37'59"
D. = 2°00'00"
T. = 342.44'
L. = 681.65'
R. = 2864.79'
P.C. = 1185+56.54
Y = 216340.465
X = 186558.063
P.T. = 1192+38.19
T140 ON APPROX. 40 LINE
40 LINE
PROP3042 to T140
N 10°04'14" E 2.20'
SCALE, FEET
0 100 200
2" IRON PIPE W/ CAP
County Coordinates
Y = 215069.465
X = 186632.025
SEC 210



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Oneida COUNTY, WISCONSIN AT 2:12 PM ON August 18, 2014 AS DOCUMENT # 741952 AND FILED IN Vol. 1 TPP page 69

Laurie DiMeo, Deputy

SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1177-11-23-4.01
AMENDMENT NO:

PRW??? PRW??? = LONG CHORD BEARING & LONG CHORD DIST OF CURVE

COURSE TABLE

FROM	TO	BEARING	DIST.
SEC210	QTR115	N 00°24'06" E	2668.20'
QTR115	T142	N 89°49'31" E	290.98'
T142	T143	N 89°49'31" E	416.63'
T143	PRW283	S 07°26'52" E	23.12'
PRW283	PRW284	S 07°11'37" W	51.68'
*PRW284	T141*	N 12°58'12" W	76.07'
T141	T144	S 89°49'31" W	178.27'
T144	PROP278	S 22°27'23" W	852.23'
*PROP278	PROP1128*	S 16°44'24" W	572.03'
PROP1128	SIXT1127	S 89°39'27" W	27.88'
SIXT1127	T140	S 88°45'58" W	173.14'
*T140	PROP3028*	N 15°00'28" E	554.27'
PROP3028	RW35	N 21°17'38" E	65.19'
*RW35	ERW15*	N 22°12'27" E	40.33'
ERW15	PROP353	N 22°20'12" E	250.67'
PROP353	PROP356	N 22°28'12" E	499.89'
PROP356	T142	N 22°28'19" E	12.33'

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, JEFFREY T. BROCK PROFESSIONAL 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 DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN LAND SURVEYOR Jeffrey T. Brock S-2642 Rhinelander WI

SIGNATURE: Jeffrey T. Brock DATE: 8-8-2014
PRINT NAME: JEFFREY T. BROCK
REGISTRATION NUMBER: S-2642

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Brent L. Stella DATE: 8-8-2014
PRINT NAME: BRENT L. STELLA

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS REMAINING	ROR REM.
ACCESS RIGHTS	AR	RIGHT-OF-WAY	R/W
ACRES	AC.	SECTION	SEC.
AND OTHERS	ET.AL.	STATION	STA.
CENTERLINE	C/L	TEMPORARY LIMITED EASEMENT	TLE
CERTIFIED SURVEY MAP	CSM	VOLUME	V.
CORNER	COR.		
DOCUMENT	DOC.	CURVE DATA	
EASEMENT	EASE.	LONG CHORD	LCH
HIGHWAY EASEMENT	H.E.	LONG CHORD BEARING	LCB
LAND CONTRACT	LC	RADIUS	R
MONUMENT	MON.	DEGREE OF CURVE	D
PAGE	P.	CENTRAL ANGLE OR DELTA	DELTA
PERMANENT LIMITED EASEMENT	PLE	LENGTH OF CURVE	L
PROPERTY LINE	PL	TANGENT	TAN
RECORDED AS	(100')		
REFERENCE LINE	R/L		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN; R/W MONUMENT; R/W STANDARD; SIGN; SECTION CORNER MONUMENT; SECTION CORNER SYMBOL; FEE (HATCH VARIES); TEMPORARY LIMITED EASEMENT; PERMANENT LIMITED EASEMENT; R/W BOUNDARY POINT; PARCEL NUMBER; SIGN NUMBER (OFF PREMISE); BUILDING; PROPOSED R/W LINE; EXISTING H.E. LINE; PROPERTY LINE; LOT & TIE LINES; SLOPE INTERCEPTS; CORPORATE LIMITS; ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL); ACCESS RESTRICTED (BY ACQUISITION); NO ACCESS (BY STATUTORY AUTHORITY); SECTION LINE; QUARTER LINE; SIXTEENTH LINE; EXISTING CENTERLINE; PROPOSED REFERENCE LINE; PARALLEL OFFSET

TRANSPORTATION PROJECT PLAT NO: 1177-11-23 - 4.01

PART OF LOT 1 OF SNOWMOBILE RUN SUBDIVISION AND PART OF THE NW-SW OF SECTION 14, TOWNSHIP 38 NORTH, RANGE 6 EAST, TOWN OF HAZELHURST, ONEIDA COUNTY, WISCONSIN.

RELOCATION ORDER USH 51, TOMAHAWK - MINOCQUA (BEARSKIN TRAIL STRUCTURE B-43-0276)

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), 84.09 AND 84.30, 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.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ONEIDA COUNTY, NAD83 (1991) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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".

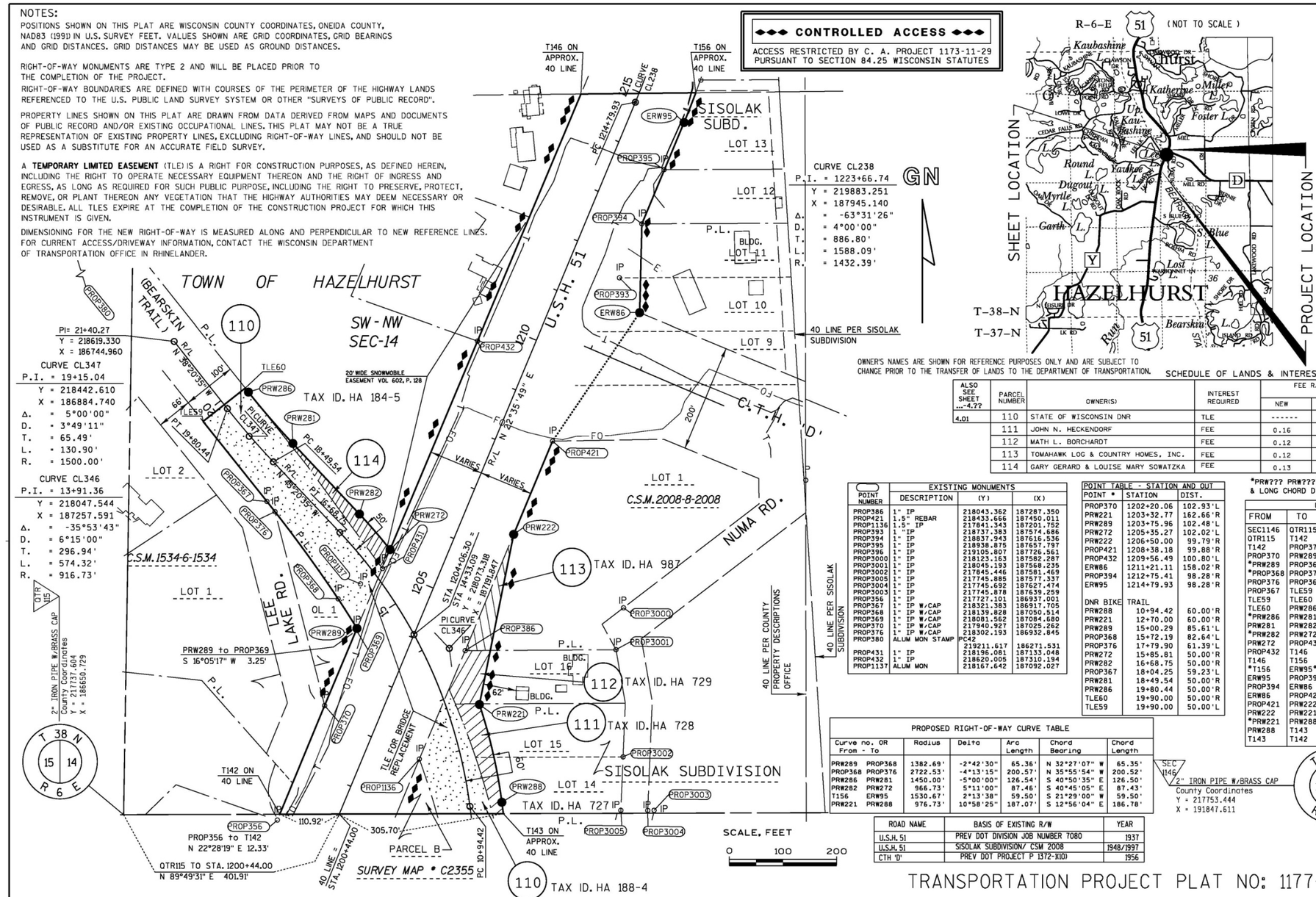
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD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

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.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES. FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER.

◆◆◆ CONTROLLED ACCESS ◆◆◆

ACCESS RESTRICTED BY C. A. PROJECT 1173-11-29 PURSUANT TO SECTION 84.25 WISCONSIN STATUTES



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Oneida COUNTY, WISCONSIN AT 2:52 PM ON August 18, 2014 AS DOCUMENT # 741953 AND FILED IN Vol. 1 TPP page 70

Laurie DeMeya Smith
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1177-11-23-4.02
AMENDMENT NO:

CONVENTIONAL UTILITY SYMBOLS

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

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

ALSO SEE SHEET ...-4.77	PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	FEE R/W ACRES OR (S.F.) REQUIRED NEW	EXISTING	TOTAL	TLE AREA
4.01	110	STATE OF WISCONSIN DNR	TLE	------	------	------	1.44
	111	JOHN N. HECKENDORF	FEE	0.16	------	0.16	------
	112	MATH L. BORCHARDT	FEE	0.12	------	0.12	------
	113	TOMAHAWK LOG & COUNTRY HOMES, INC.	FEE	0.12	------	0.12	------
	114	GARY GERARD & LOUISE MARY SOWATZKA	FEE	0.13	------	0.13	------

POINT NUMBER	EXISTING MONUMENTS DESCRIPTION	(Y)	(X)
PROP386	1" IP	218043.362	187287.350
PROP421	1.5" REBAR	218433.666	187450.011
PROP1136	1.5" IP	217841.343	187201.752
PROP393	1" IP	218737.383	187574.686
PROP394	1" IP	218837.943	187616.536
PROP395	1" IP	218938.875	187657.797
PROP396	1" IP	219105.807	187726.561
PROP3000	1" IP	218123.163	187582.287
PROP3001	1" IP	218045.193	187568.235
PROP3002	1" IP	217845.446	187581.469
PROP3005	1" IP	217745.885	187577.337
PROP3004	1" IP	217745.692	187627.474
PROP3003	1" IP	217745.878	187639.259
PROP356	1" IP	217727.101	186937.001
PROP367	1" IP W/CAP	218321.383	186917.705
PROP368	1" IP W/CAP	218139.828	187050.514
PROP369	1" IP W/CAP	218081.562	187084.680
PROP370	1" IP W/CAP	217940.927	187025.262
PROP376	1" IP W/CAP	218302.193	186932.845
PROP380	ALUM MON STAMP PC42	219211.617	186271.531
PROP431	1" IP	218196.081	187133.048
PROP432	1" IP	218620.005	187310.194
PROP1137	ALUM MON	218167.642	187092.027

POINT TABLE - STATION AND OUT POINT *	STATION	DIST.
PROP370	1202+20.06	102.93'L
PRW221	1203+32.77	162.66'R
PRW289	1203+75.96	102.48'L
PRW272	1205+35.27	102.02'L
PRW222	1206+50.00	99.79'R
PROP421	1208+38.18	99.88'R
PROP432	1209+56.49	100.80'L
ERW86	1211+21.11	158.02'R
PROP394	1212+75.41	98.28'R
ERW95	1214+79.93	98.28'R
DNR BIKE TRAIL		
PRW288	10+94.42	60.00'R
PRW221	12+70.00	60.00'R
PRW289	15+00.29	85.61'L
PROP368	15+72.19	82.64'L
PROP376	17+79.90	61.39'L
PRW272	15+85.81	50.00'R
PRW282	16+68.75	50.00'R
PROP367	18+04.25	59.23'L
PRW281	18+49.54	50.00'R
PRW286	19+80.44	50.00'R
TLE60	19+90.00	50.00'R
TLE59	19+90.00	50.00'L

PRW??? PRW??? = LONG CHORD BEARING & LONG CHORD DIST OF CURVE

COURSE TABLE

FROM	TO	BEARING	DIST.
SEC1146	QTR115	S 89°49'31" W	5196.91'
QTR115	T142	N 89°49'31" E	290.98'
T142	PROP370	N 22°25'37" E	219.00'
PROP370	PRW289	N 22°45'44" E	155.90'
*PRW289	PROP368*	N 32°27'07" W	65.35'
*PROP368	PROP376*	N 35°55'54" W	200.52'
PROP376	PROP367	N 38°16'18" W	24.44'
PROP367	TLE59	N 38°32'18" W	190.58'
TLE59	TLE60	N 51°39'25" E	100.00'
TLE60	PRW286	S 38°20'35" E	9.56'
*PRW286	PRW281*	S 40°50'35" E	126.50'
PRW281	PRW282	S 43°20'35" E	180.80'
*PRW282	PRW272*	S 40°45'05" E	87.43'
PRW272	PROP432	N 22°45'44" E	421.23'
PROP432	T146	N 22°44'22" E	498.57'
T146	T156	N 89°23'00" E	214.01'
*T156	ERW95*	S 21°29'00" W	59.50'
ERW95	PROP394	S 22°35'49" W	204.52'
PROP394	ERW86	S 01°26'01" W	165.46'
ERW86	PROP421	S 34°12'31" W	288.83'
PROP421	PRW222	S 22°37'27" W	188.18'
PRW222	PRW221	S 11°23'16" W	323.40'
*PRW221	PRW288*	S 12°56'04" E	186.78'
PRW288	T143	S 07°26'52" E	21.31'
T143	T142	S 89°49'31" W	416.63'

PROPOSED RIGHT-OF-WAY CURVE TABLE

Curve no. OR From - To		Radius	Delta	Arc Length	Chord Bearing	Chord Length
PRW289	PROP368	1382.69'	-2°42'30"	65.36'	N 32°27'07" W	65.35'
PROP368	PROP376	2722.53'	-4°13'15"	200.57'	N 35°55'54" W	200.52'
PRW286	PRW281	1450.00'	-5°00'00"	126.54'	S 40°50'35" E	126.50'
PRW282	PRW272	966.73'	5°11'00"	87.46'	S 40°45'05" E	87.43'
T156	ERW95	1530.67'	2°13'38"	59.50'	S 21°29'00" W	59.50'
PRW221	PRW288	976.73'	10°58'25"	187.07'	S 12°56'04" E	186.78'

ROAD NAME	BASIS OF EXISTING R/W	YEAR
U.S.H. 51	PREV DOT DIVISION JOB NUMBER 7080	1937
U.S.H. 51	SISOLAK SUBDIVISION/ CSM 2008	1948/1997
CTH 'D'	PREV DOT PROJECT P 1372-1(10)	1956

SEC 1146
2" IRON PIPE W/BRASS CAP
County Coordinates
Y = 217753.444
X = 191847.611

T 38 N R 6 E — 14 13

2" IRON PIPE W/BRASS CAP
County Coordinates
Y = 217731.604
X = 186650.729

T 38 N R 6 E — 15 14

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, JEFFREY T. BROCK PROFESSIONAL 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 DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Jeffrey T. Brock DATE: 8-8-2014
PRINT NAME: JEFFREY T. BROCK
REGISTRATION NUMBER: S-2642

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: Brent L Stella DATE: 8-8-2014
PRINT NAME: BRENT L. STELLA

WISCONSIN — Jeffrey T. Brock S-2642 Rhinelander WI — LAND SURVEYOR

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.	**CURVE DATA**	
EASEMENT	EASE.	LONG CHORD	LCH
HIGHWAY EASEMENT	H.E.	LONG CHORD BEARING	LCB
LAND CONTRACT	LC	RADIUS	R
MONUMENT	MON.	DEGREE OF CURVE	D
PAGE	P.	CENTRAL ANGLE OR DELTA	DELTA
PERMANENT LIMITED EASEMENT	PLE	LENGTH OF CURVE	L
PROPERTY LINE	PL	TANGENT	TAN
RECORDED AS	(DOT)		
REFERENCE LINE	R/L		

CONVENTIONAL SYMBOLS

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

TRANSPORTATION PROJECT PLAT NO: 1177-11-23 - 4.02

PART OF LOT 1 OF CSM 2008, PART OF LOTS 14, 15 AND 16 OF SISOLAK SUBDIVISION IN THE SW-NW OF SECTION 14, AND PART OF THE SW-NW OF SECTION 14, TOWNSHIP 38 NORTH, RANGE 6 EAST, TOWN OF HAZELHURST, ONEIDA COUNTY, WISCONSIN.

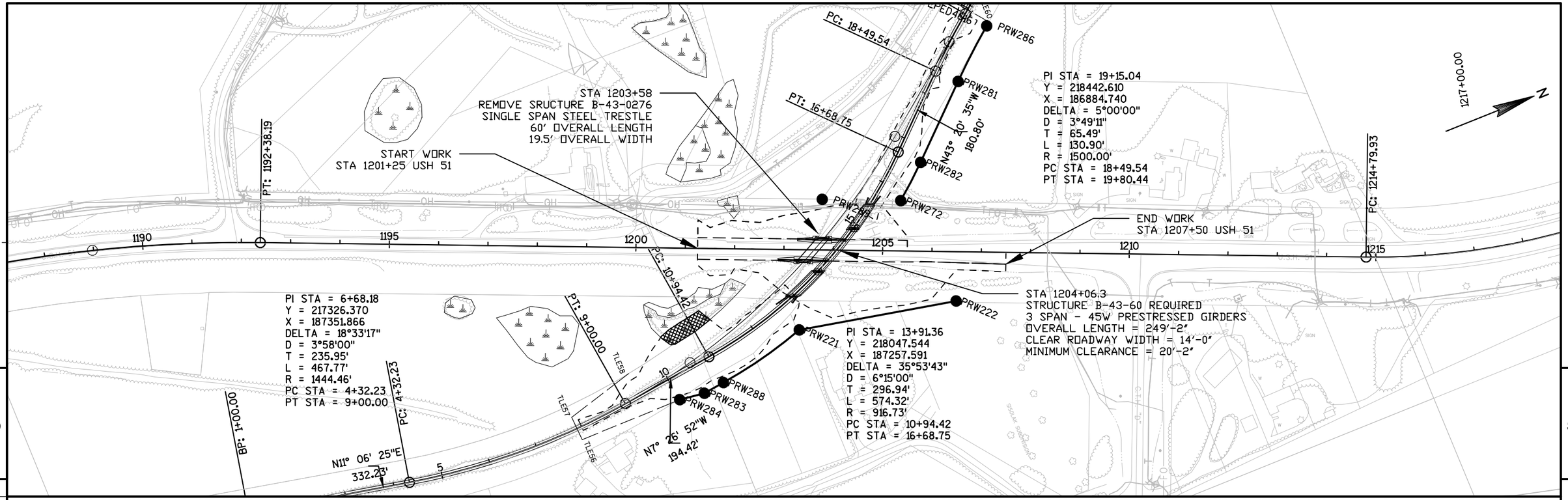
RELOCATION ORDER USH 51, TOMAHAWK - MINOCQUA (BEARSKIN TRAIL STRUCTURE B-43-0276)

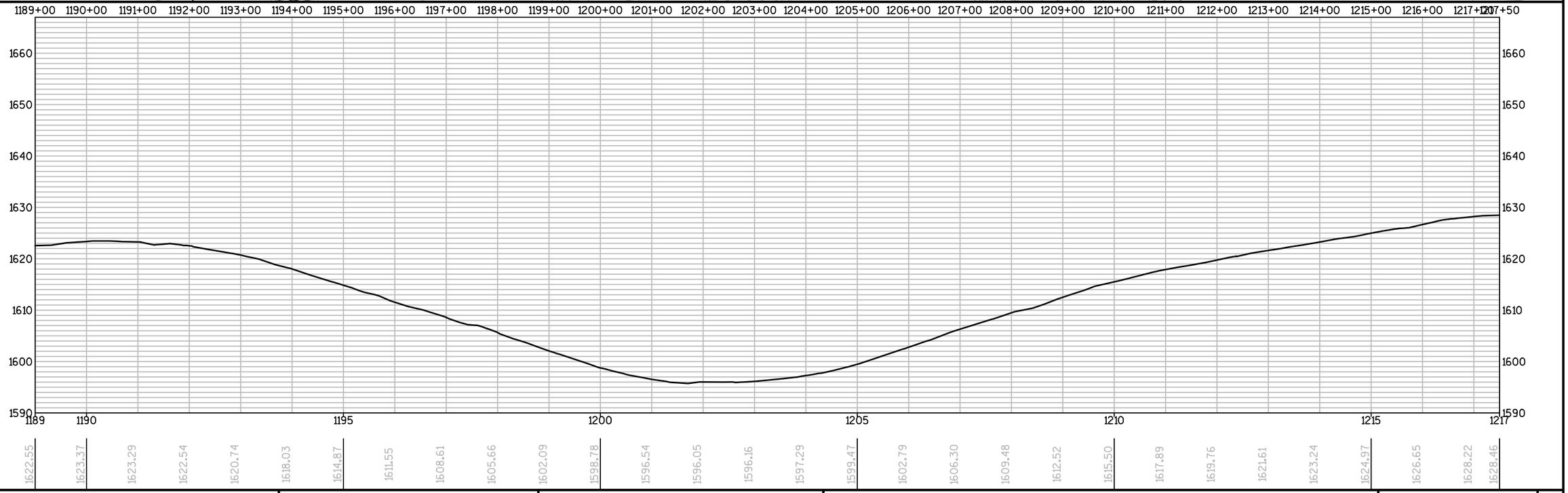
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, 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.

PROJECT NO:	1177-11-71	HWY:	USH 51	COUNTY:	ONEIDA	PLATS	SHEET:	42	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1





PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	PLAN AND PROFILE: USH 51	SHEET 43	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\PLAN AND PROFILE\11771101_PP.DWG PLOT DATE : 1/11/2016 11:32 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:200 FT

PI STA = 6+68.18
Y = 217326.370
X = 187351.866
DELTA = 18°33'17"
D = 3°58'00"
T = 235.95'
L = 467.77'
R = 1444.46'
PC STA = 4+32.23
PT STA = 9+00.00

BP: 1+00.00

N11° 06' 25"E
336.23'

PC: 4+32.23

PT: 9+00.00

PC: 10+94.42

PERMITTED WETLAND IMPACT

STA 1203+58
REMOVE SRUCTURE B-43-0276
SINGLE SPAN STEEL TRESTLE
60' OVERALL LENGTH
19.5' OVERALL WIDTH

PT: 16+68.75

PC: 18+49.54

PT: 19+80.44

EP: 21+40.27

N43° 20' 35"W
180.80'

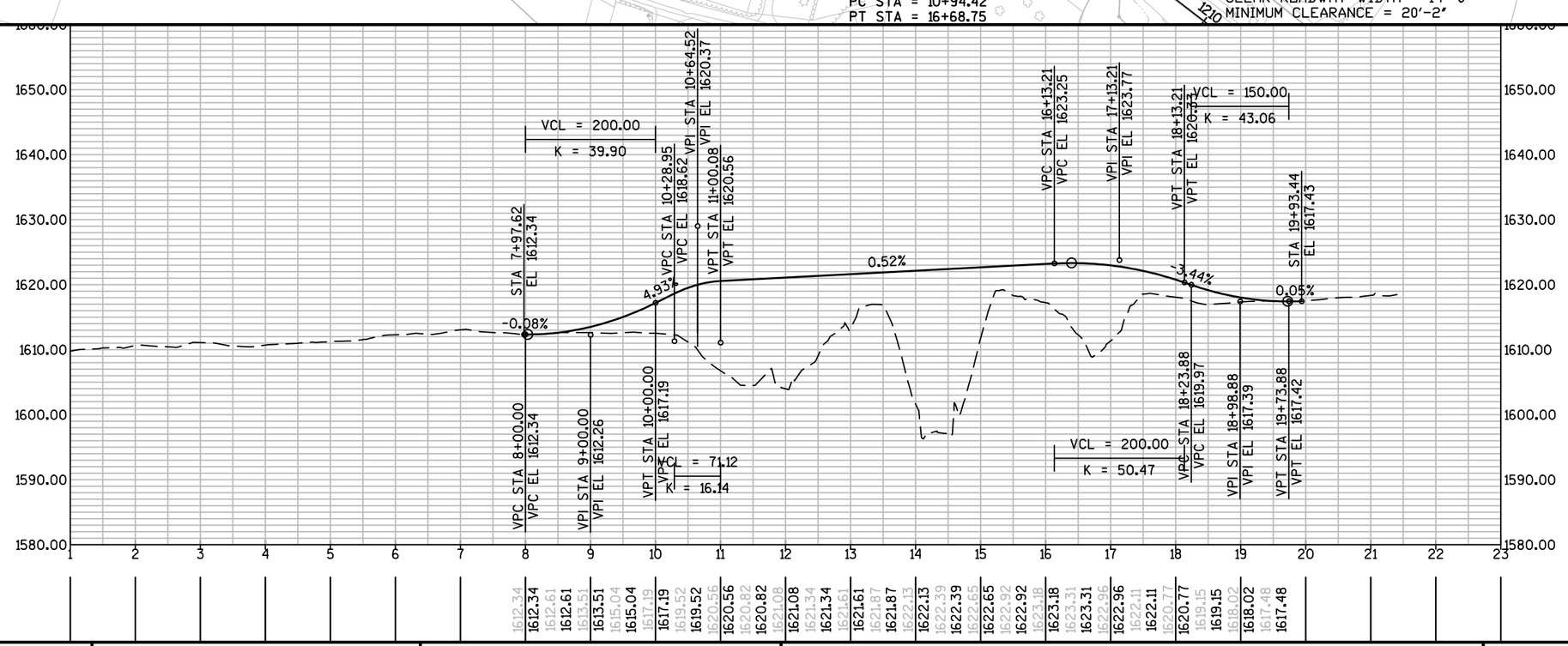
N7° 26' 52"W
194.42'

PI STA = 13+91.36
Y = 218047.544
X = 187257.591
DELTA = 35°53'43"
D = 6°15'00"
T = 296.94'
L = 574.32'
R = 916.73'
PC STA = 10+94.42
PT STA = 16+68.75

PI STA = 19+15.04
Y = 218442.610
X = 186884.740
DELTA = 5°00'00"
D = 3°49'11"
T = 65.49'
L = 130.90'
R = 1500.00'
PC STA = 18+49.54
PT STA = 19+80.44

STA 1204+06.3
STRUCTURE B-43-60 REQUIRED
3 SPAN - 45W PRESTRESSED GIRDERS
OVERALL LENGTH = 249'-2"
CLEAR ROADWAY WIDTH = 14'-0"
MINIMUM CLEARANCE = 20'-2"

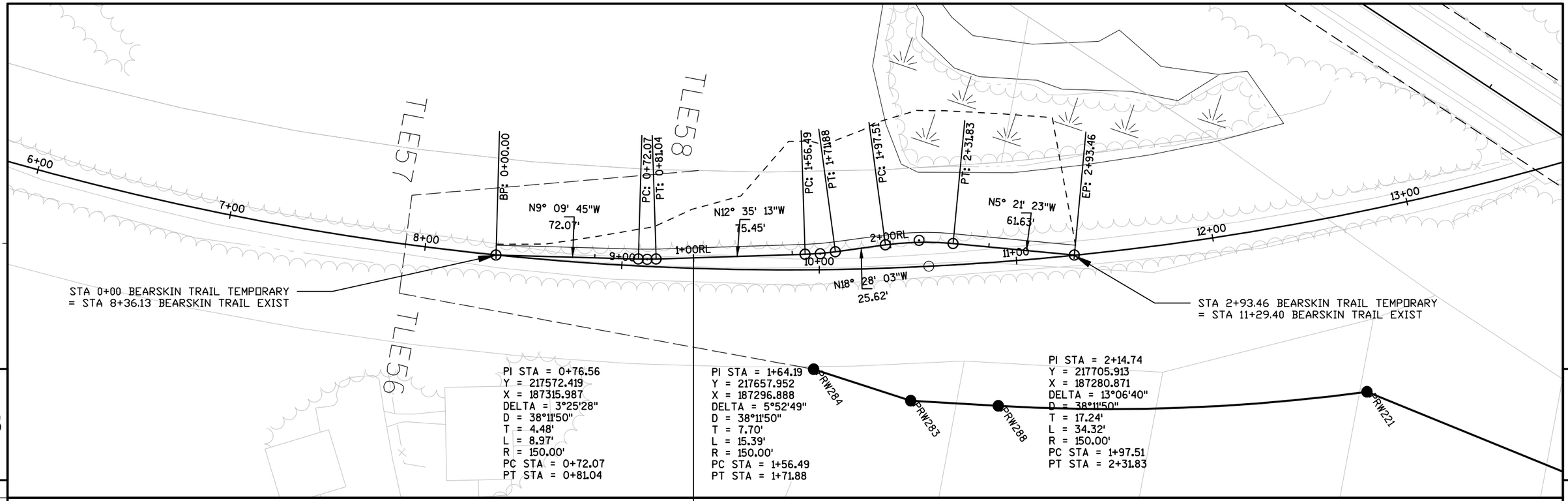
N



PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	PLAN AND PROFILE: BEARSKIN TRAIL	SHEET 44	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\PLAN AND PROFILE\11771101_PP.DWG PLOT DATE : 1/11/2016 11:32 AM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



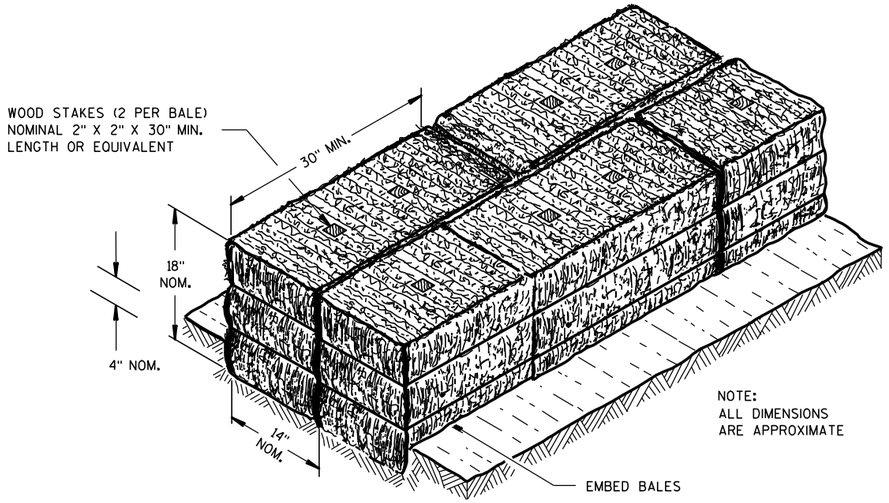
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	PLAN AND PROFILE: BEARSKIN TRAIL TEMPORARY	SHEET 45	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\PLAN AND PROFILE\11771101_TEMP_TRAIL_PP.DWG
LAYOUT NAME - 050111

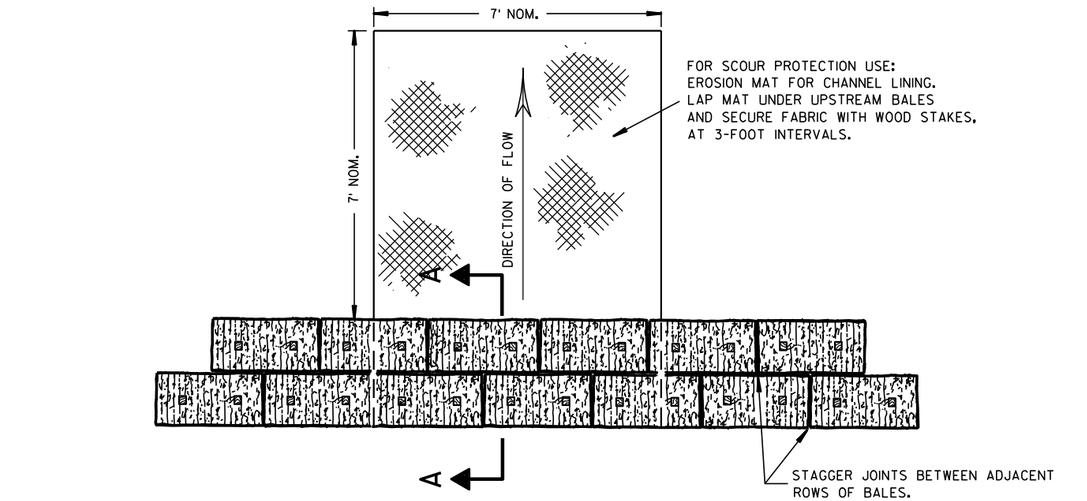
PLOT DATE : 10/28/2015 3:27 PM PLOT BY : VAN ASTEN, FORREST APLOT NAME : PLOT SCALE : 1 IN:50 FT

Standard Detail Drawing List

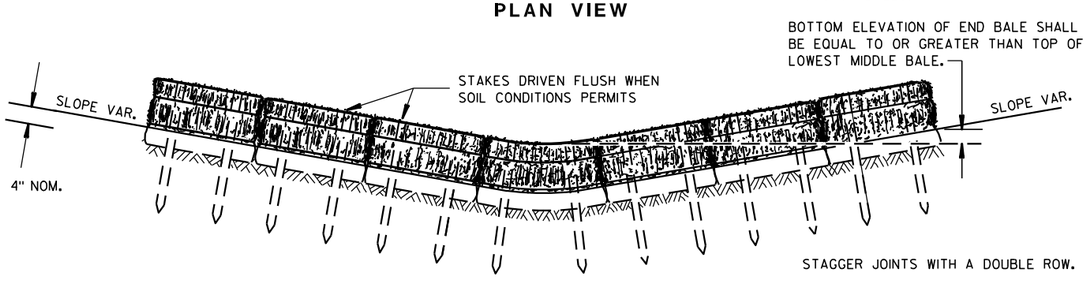
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
09G02-03A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
12A03-10	NAME PLATE (STRUCTURES)
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-03	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS



SECTION A-A



PLAN VIEW



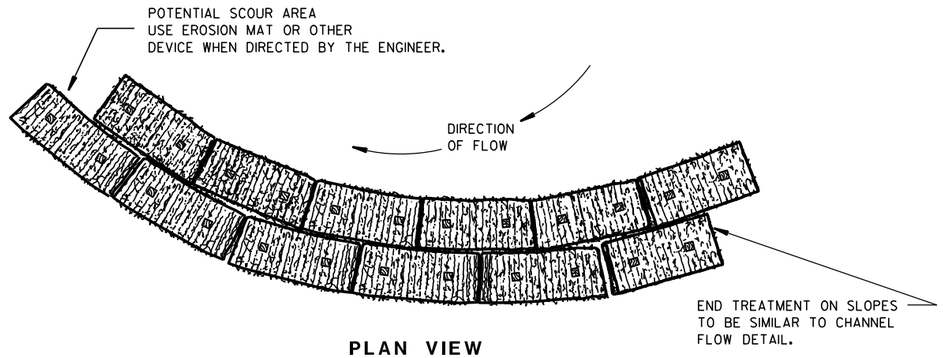
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

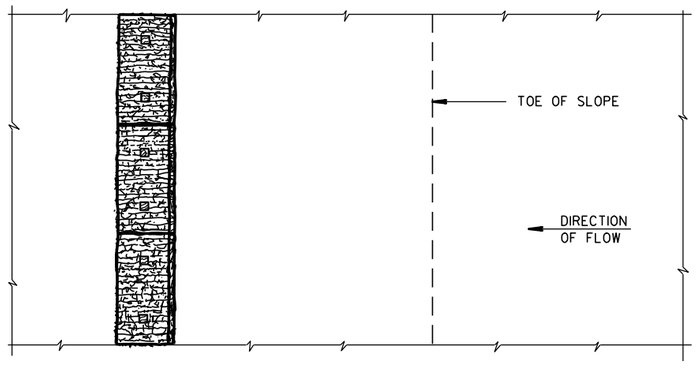
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

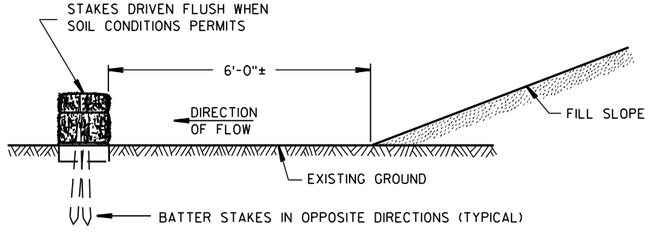


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

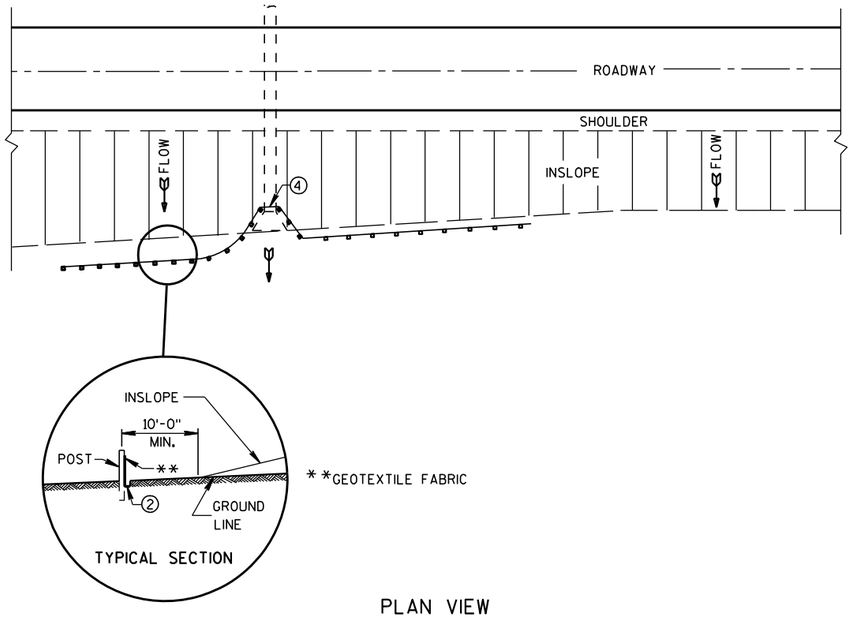
FHWA

6

S.D.D. 8 E 8-3

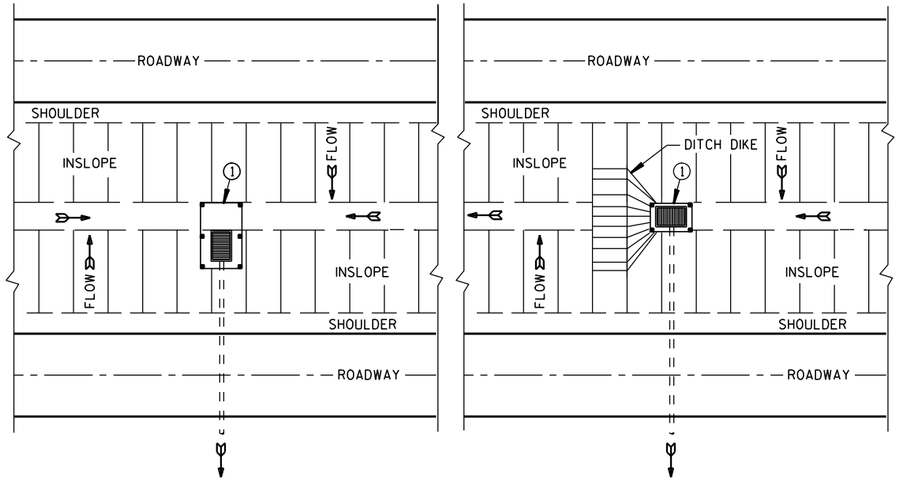
6

S.D.D. 8 E 8-3



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.

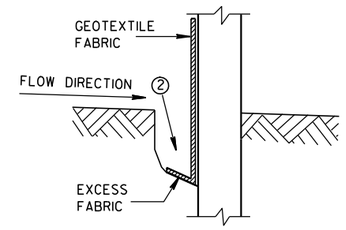
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

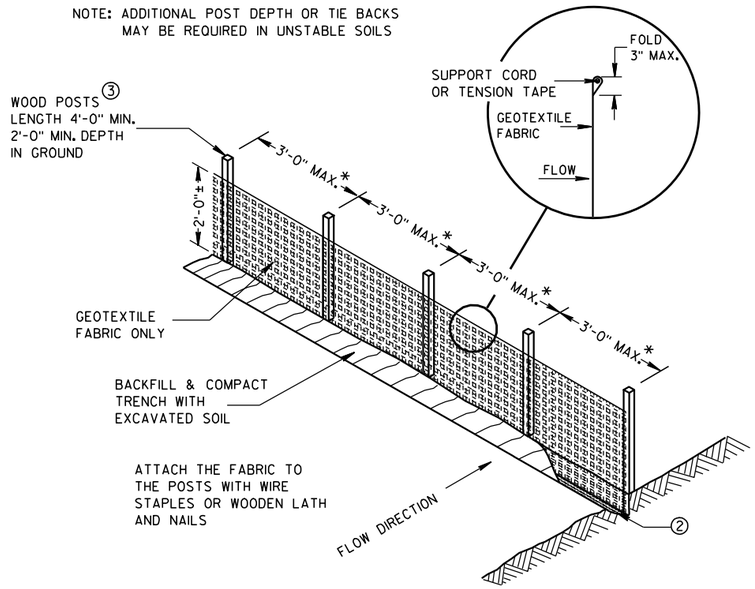
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

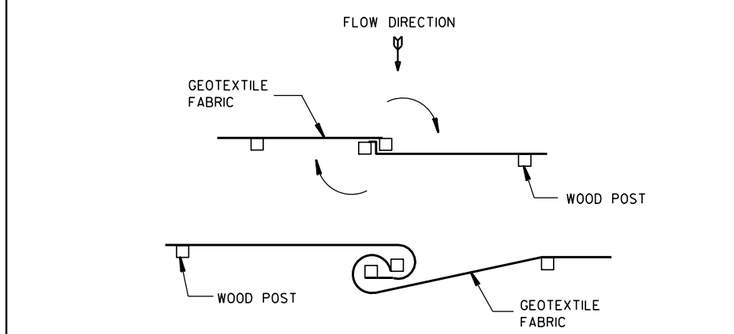
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



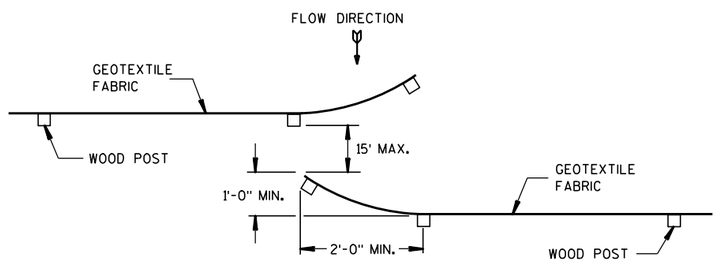
TRENCH DETAIL



SILT FENCE

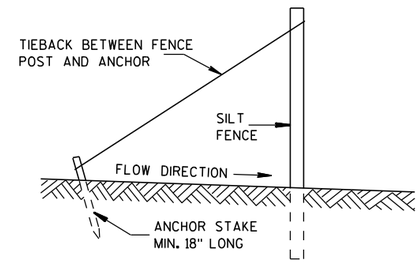


TWIST METHOD



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

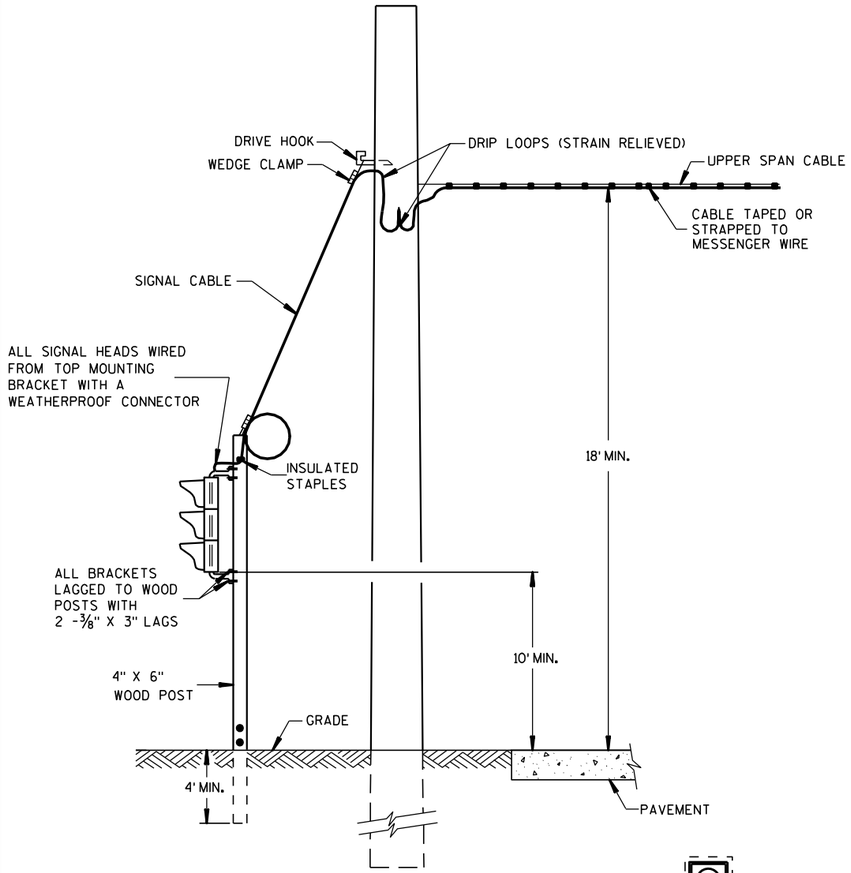
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

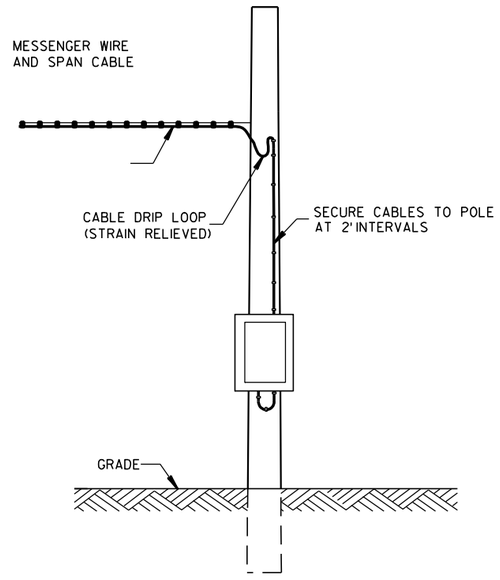
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAYBE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY PLOLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

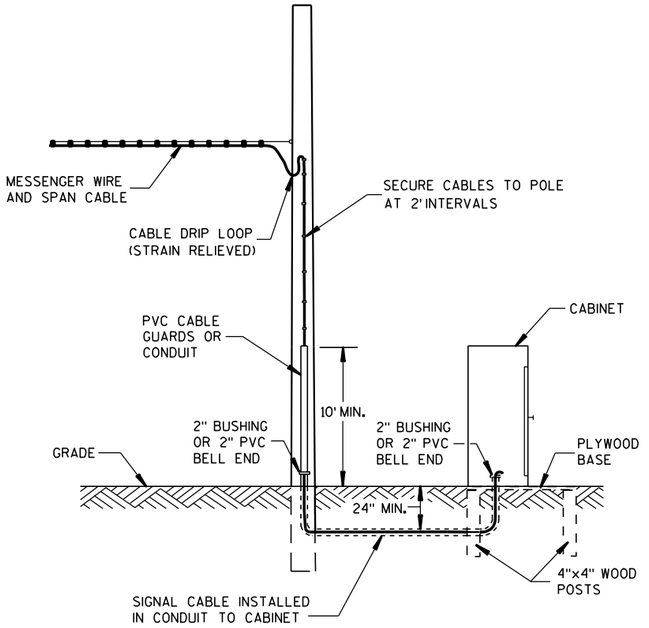
WOOD POLES (NONBREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAMGUARD, ETC.).

WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

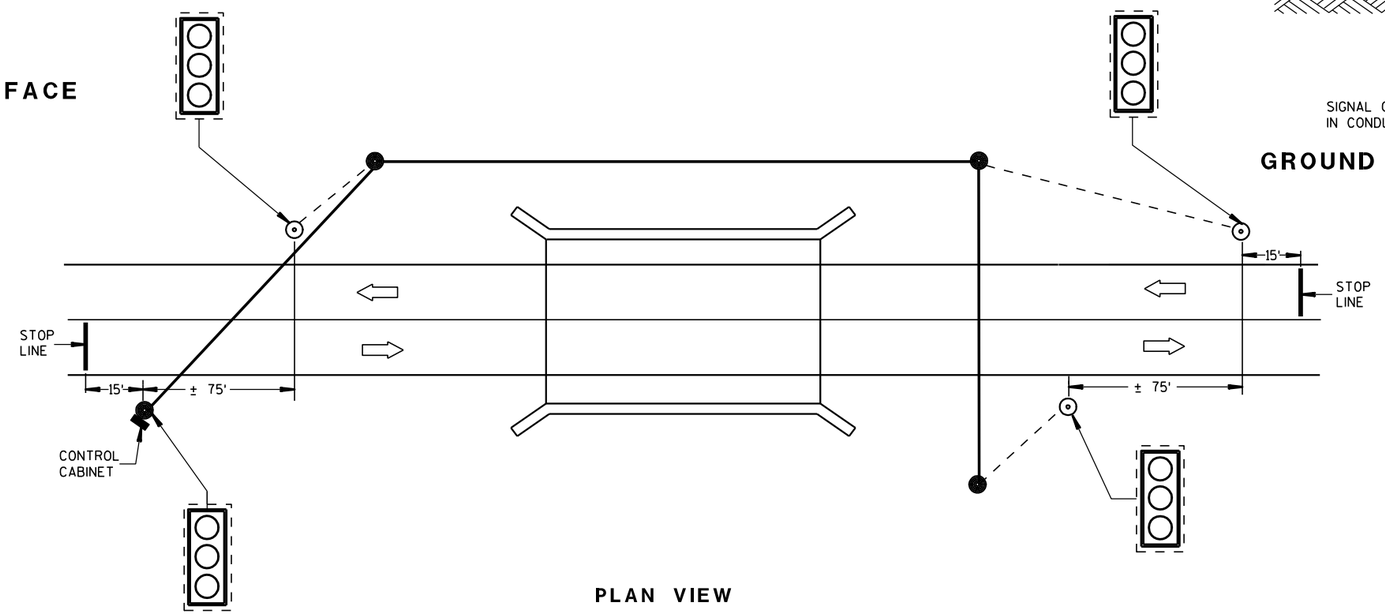
EACH TRAFFIC SIGNAL FACE SHALL HAVE A BACKPLATE.



GROUND MOUNT CABINET INSTALLATION

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE**
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/ CURBS	2 FT

**NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.



PLAN VIEW

TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NONBREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- LED TRAFFIC SIGNAL FACE WITH BACKPLATE (3-12")
- DIRECTION OF TRAFFIC

MINIMUM POLE LENGHTS	CLASS	MINIMUM BURIAL DEPTHS
25 FEET	V	5 FEET
30 FEET	V	6 FEET
35 FEET	IV	7 FEET
40 FEET	IV	8 FEET
45 FEET	IV	9 FEET

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE

/S/ Thomas J. Gosling STATE ELECTRICAL ENGI

FHWA

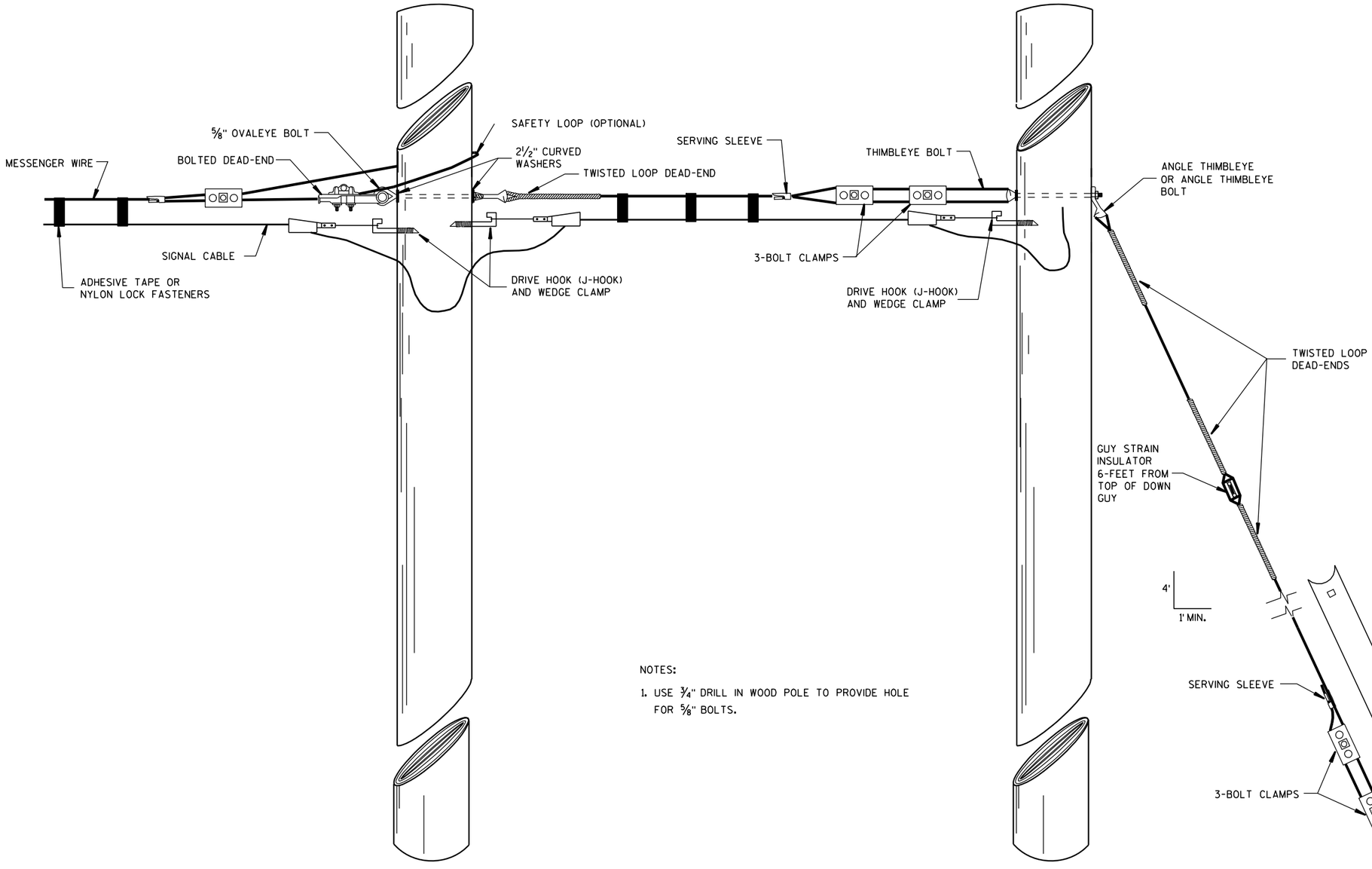
HWYS

6

S.D.D. 9 G 2-3a

6

S.D.D. 9 G 2-3a



SPAN WIRE POLE

GUY POLE

NOTES:

1. USE 3/4" DRILL IN WOOD POLE TO PROVIDE HOLE FOR 5/8" BOLTS.

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE

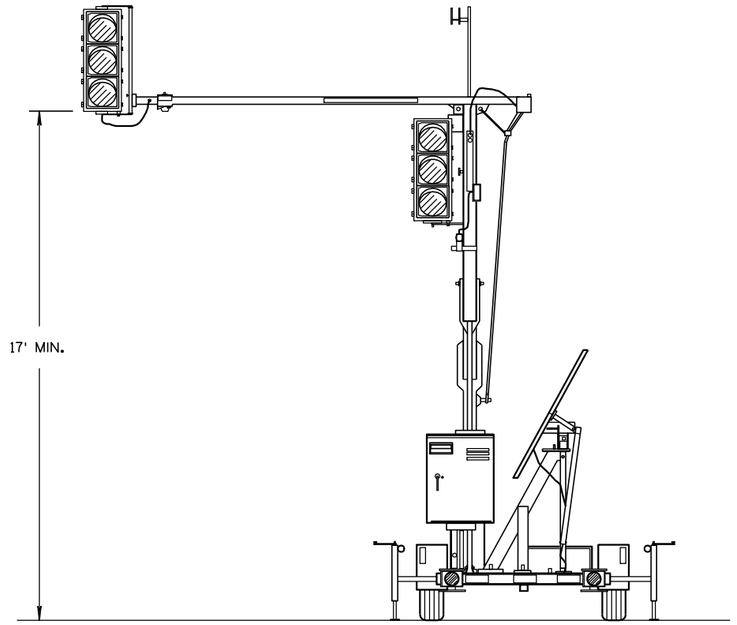
/S/ Thomas J. G... STATE ELECTRICAL ENGI

HWYS

FHWA

6

S.D.D. 9 G 2-3b

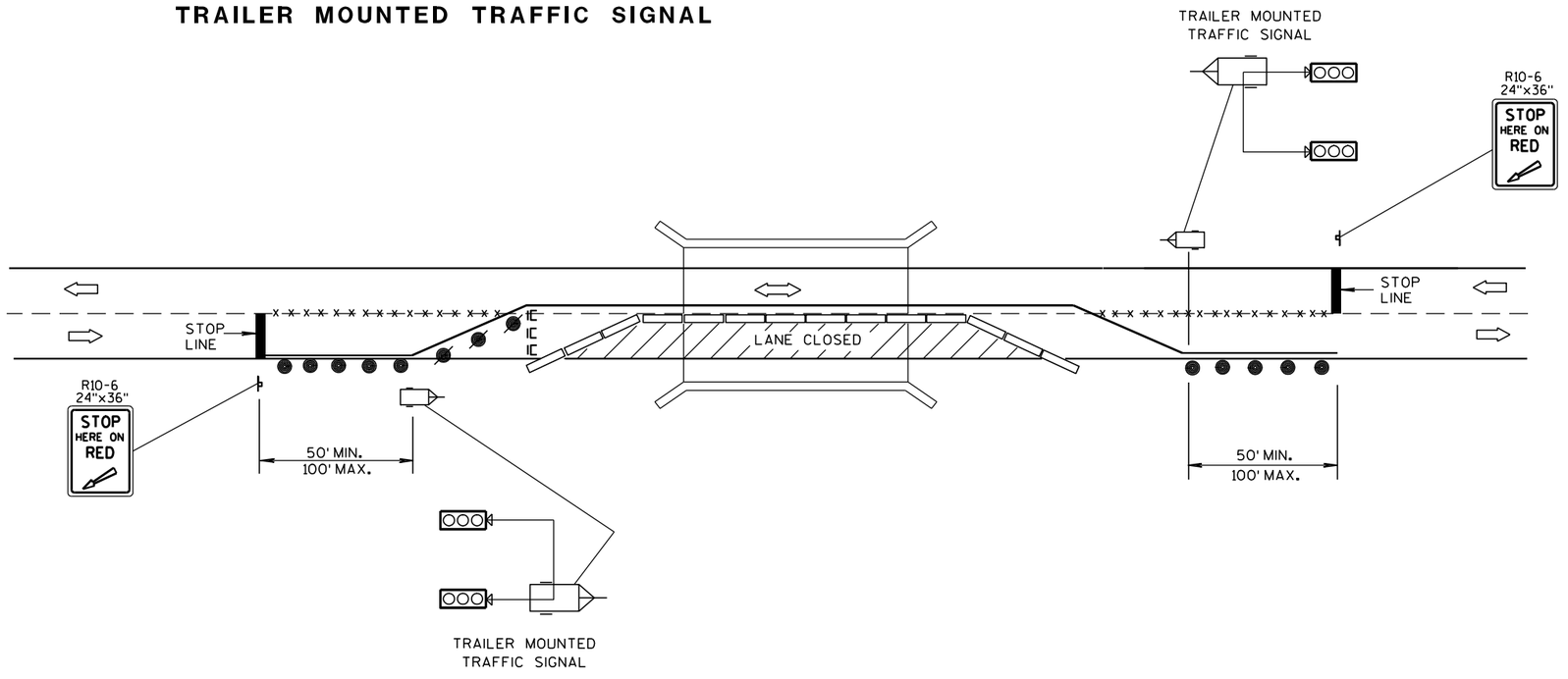


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- DIRECTION OF TRAFFIC FLOW

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 — DATE

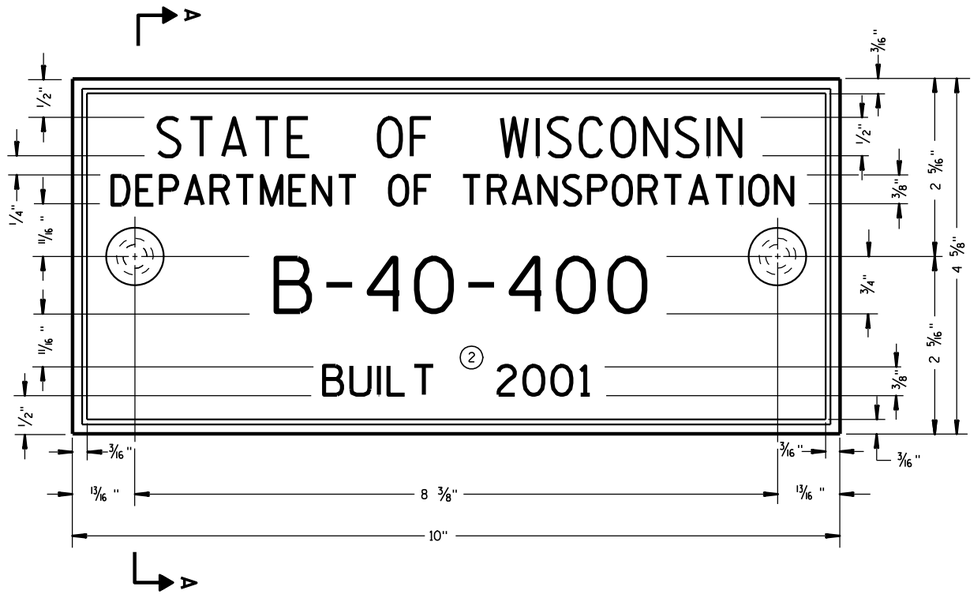
/S/ Thomas J. Gosling — STATE ELECTRICAL ENGI

FHWA

HWYS

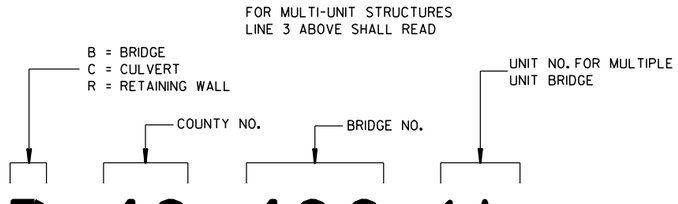
6

S.D.D. 9 G 2-3c



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

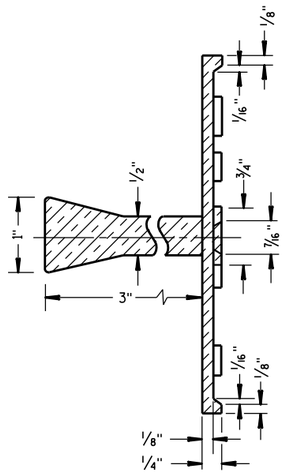
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

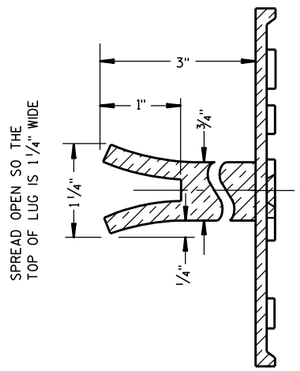
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

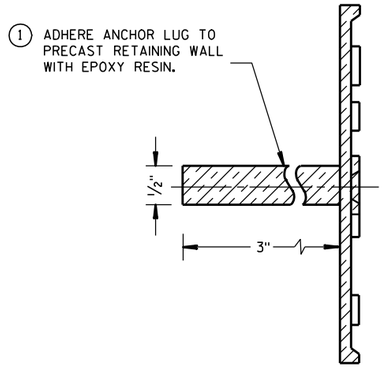
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

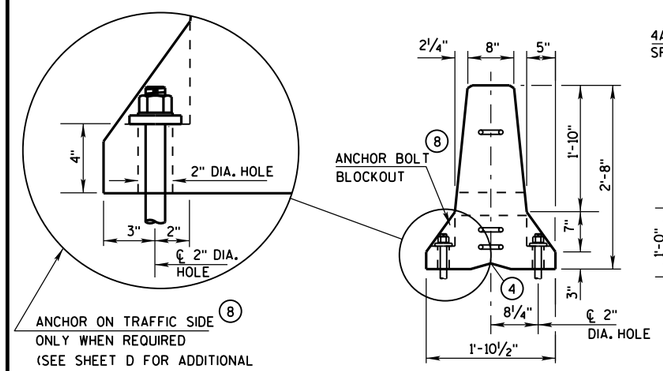
APPROVED

3/26/10 DATE — /S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

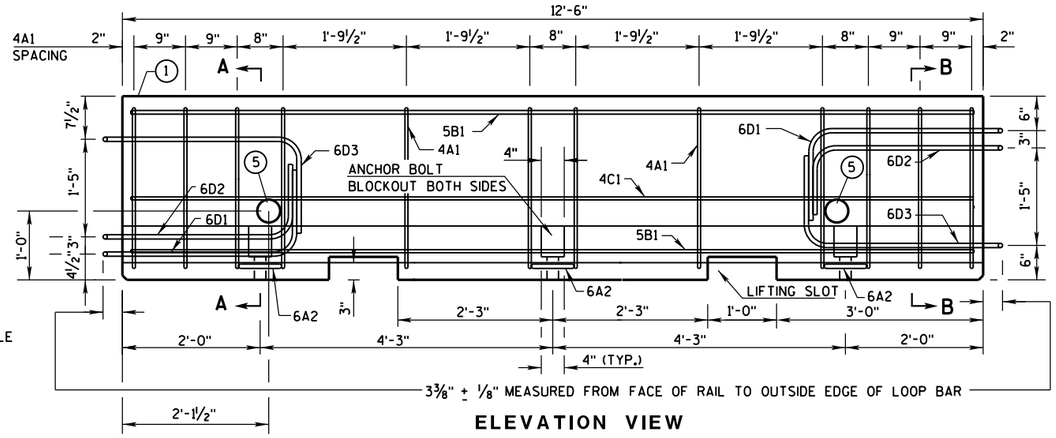
FHWA

6

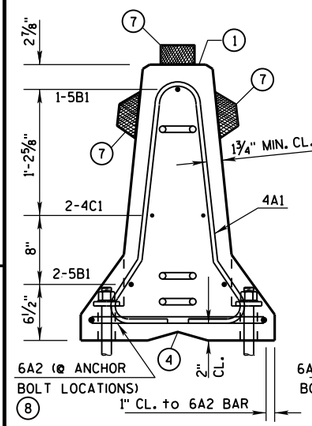
S.D.D. 12 A 3-10



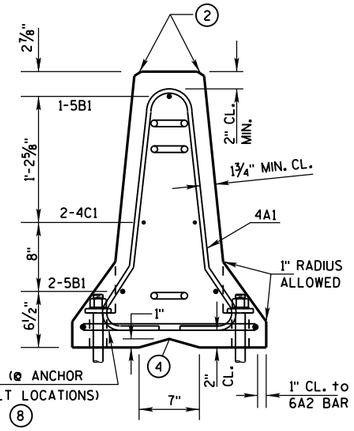
END VIEW



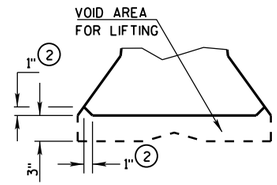
ELEVATION VIEW



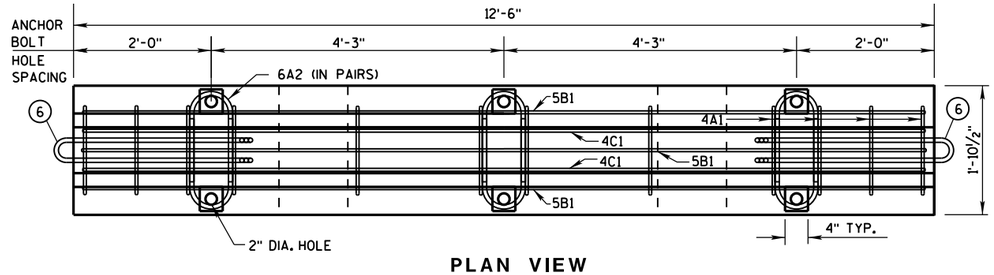
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

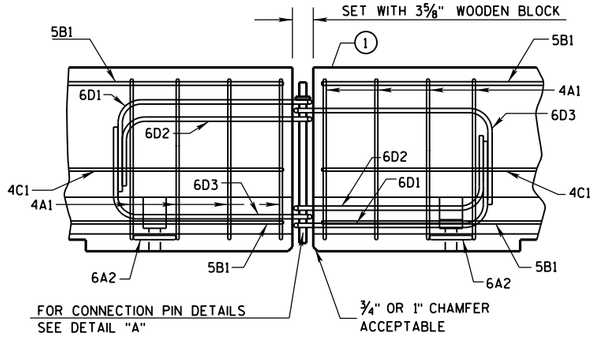


DETAIL "B"
LIFTING SLOT DETAIL

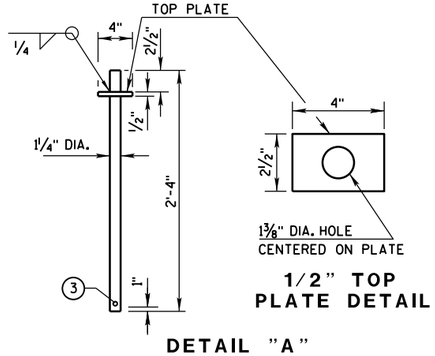


PLAN VIEW

DETAILS OF BARRIER SECTION

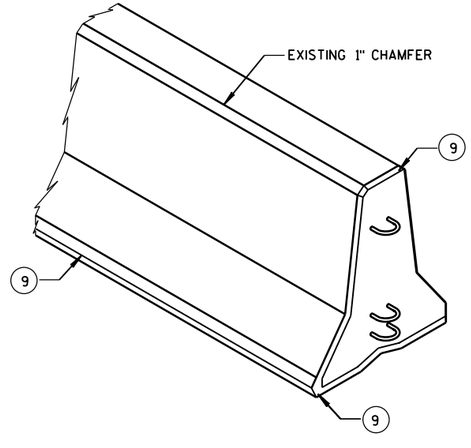


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

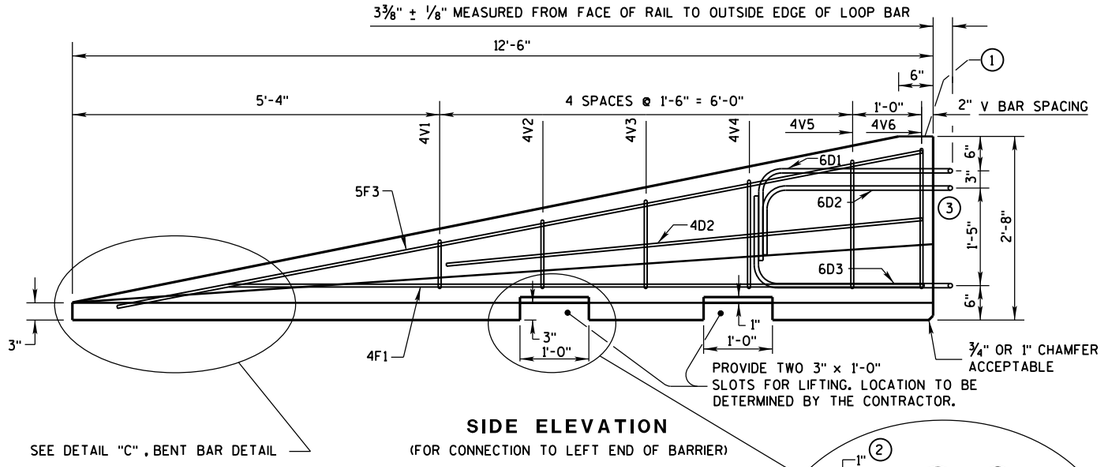
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.

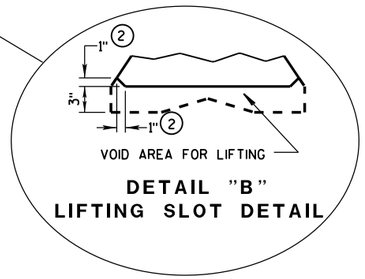
(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

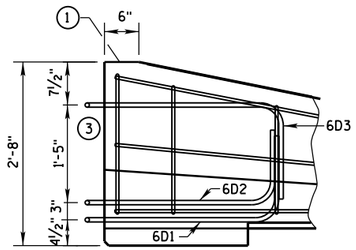
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 53



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



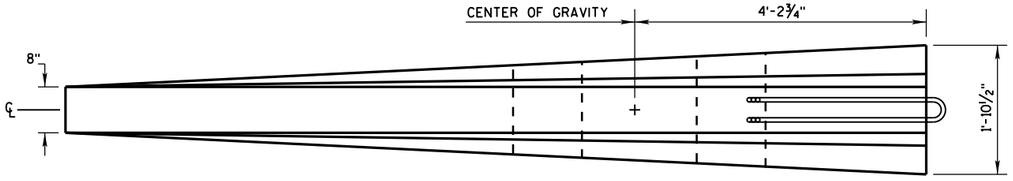
DETAIL "B"
LIFTING SLOT DETAIL



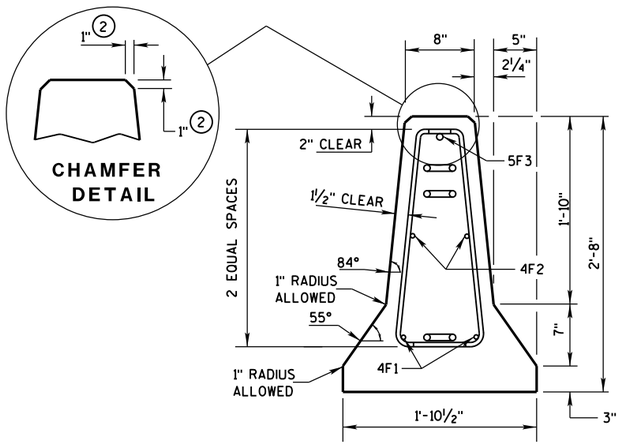
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

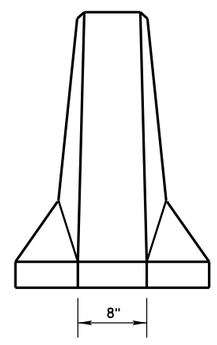
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



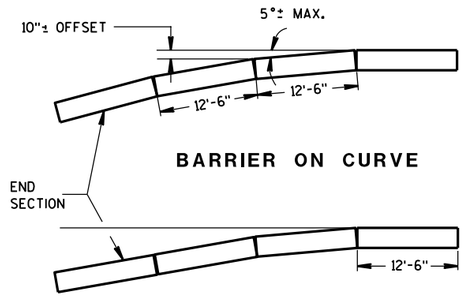
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

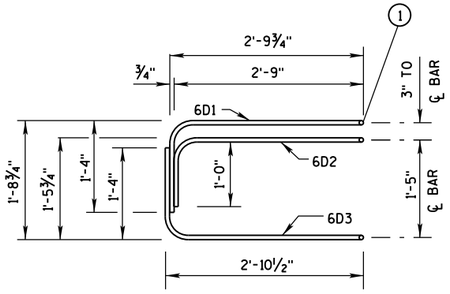
6

S.D.D. 14 B 7-14b

BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY

DETAIL "C"
BENT BAR DETAIL

BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

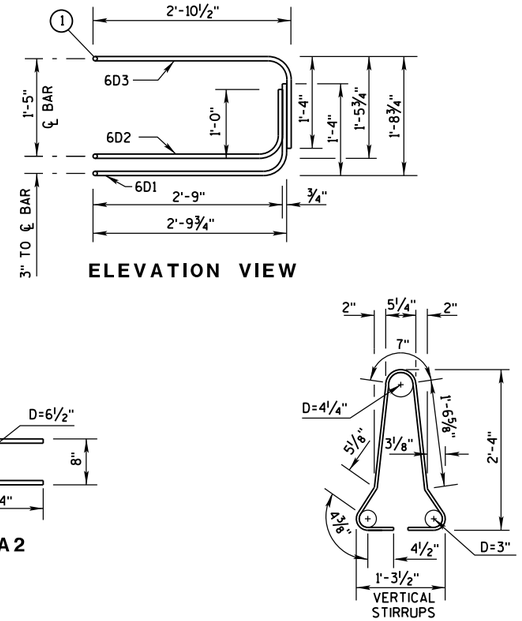
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)

6A2



ELEVATION VIEW

4A1

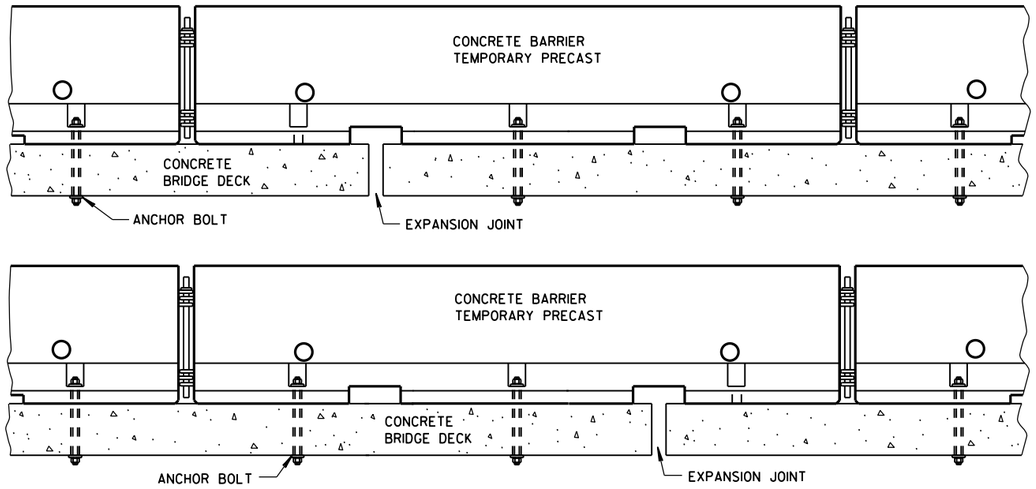
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

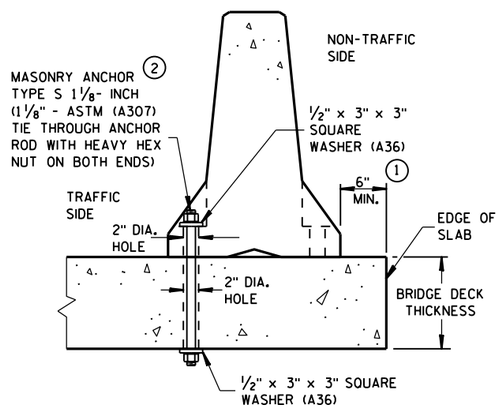
6

S.D.D. 14 B 7-14c



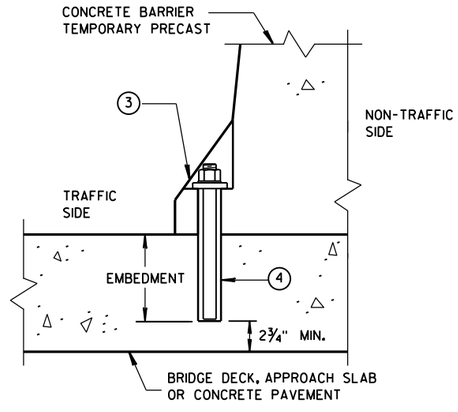
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

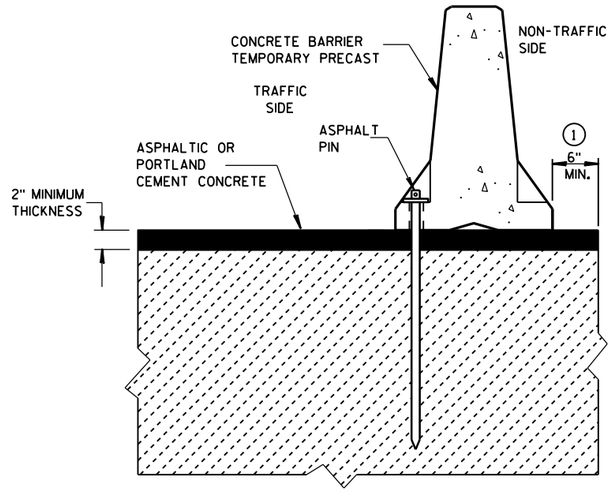
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

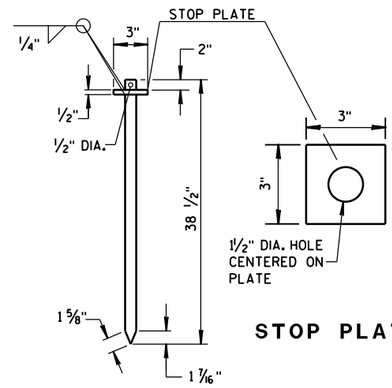
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



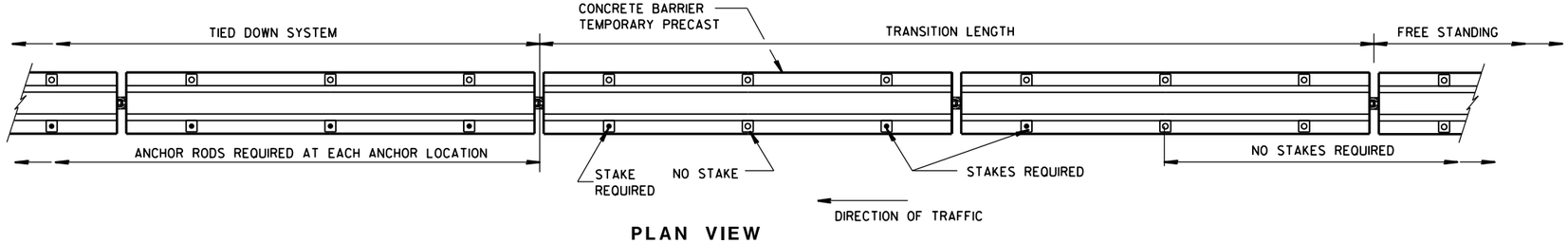


STOP PLATE

ASPHALT PIN
(ASTM A36 STEEL)

STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

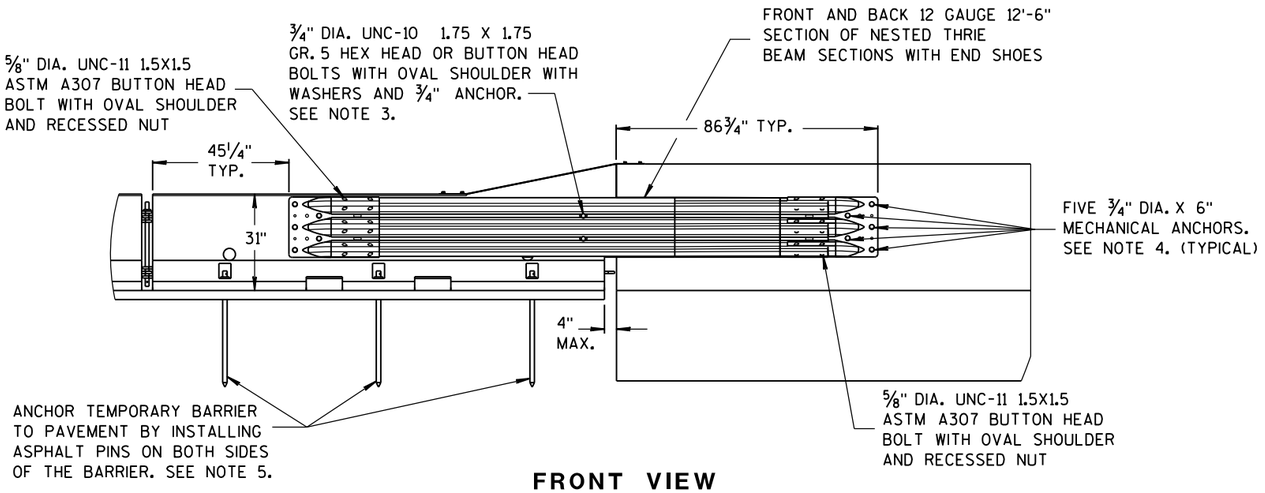
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

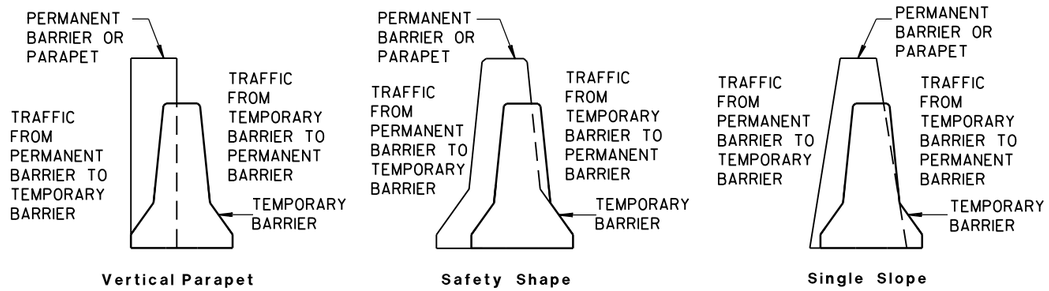
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW

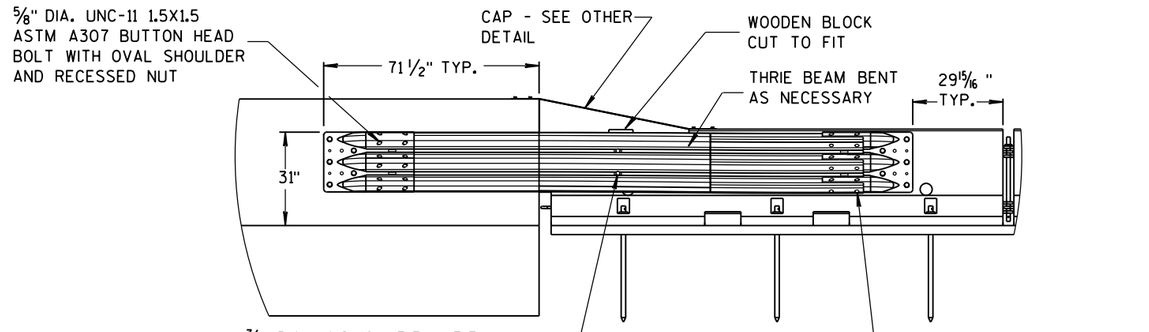


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

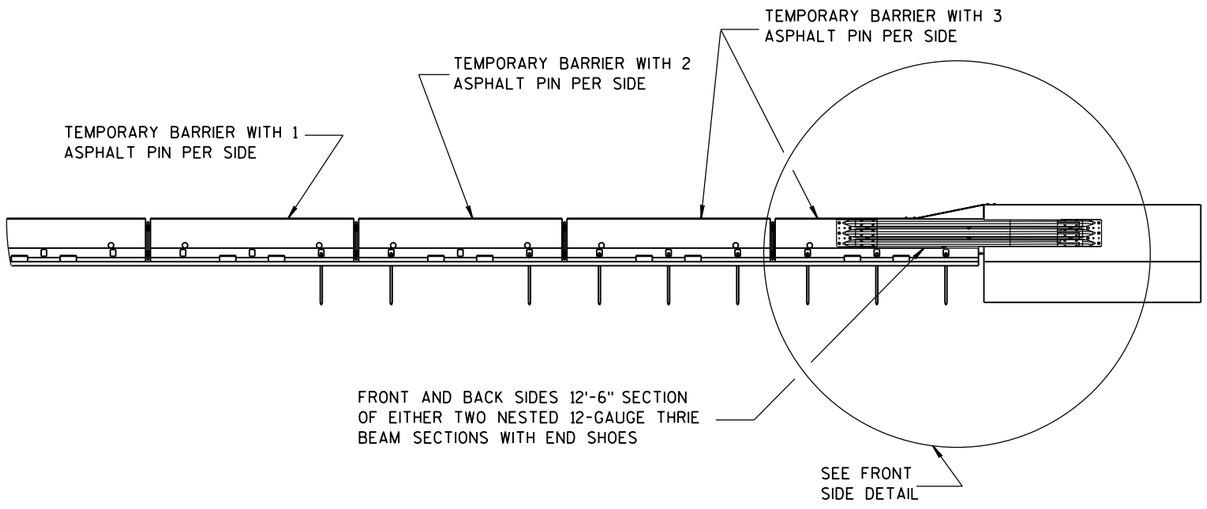
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

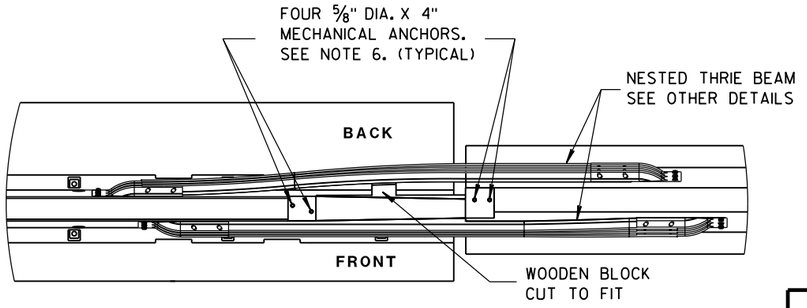
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



BACK VIEW



FRONT VIEW



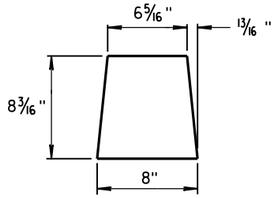
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

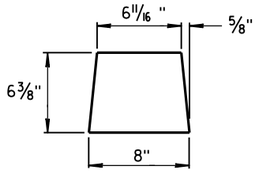
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

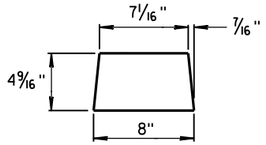
6
S.D.D. 14 B 7-14e



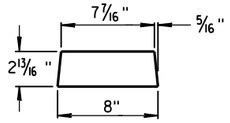
GUSSET 1



GUSSET 2

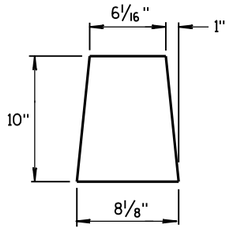


GUSSET 3

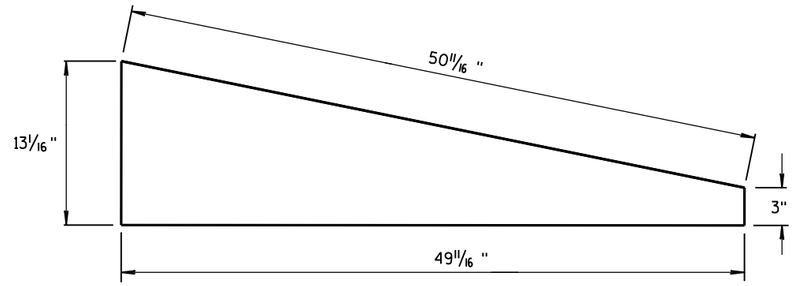


GUSSET 4

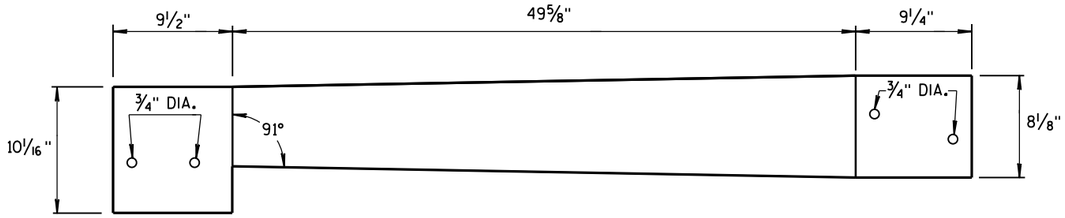
GUSSETS

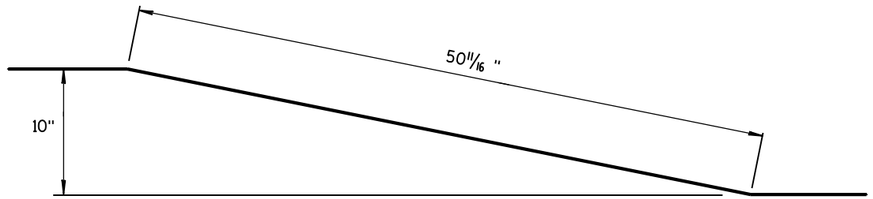


END PLATE



SIDE PLATE

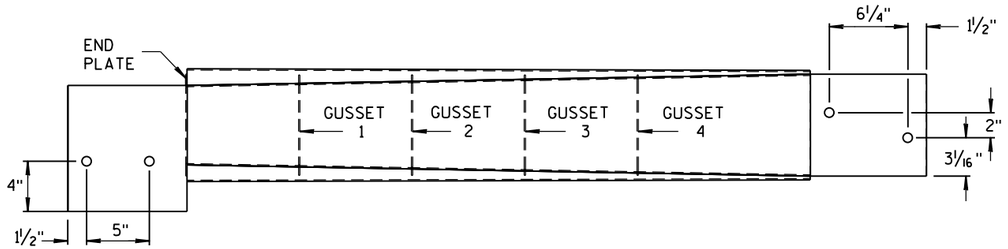


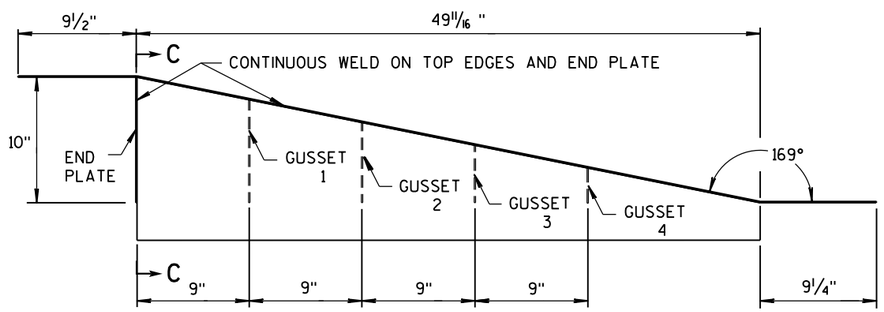


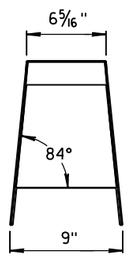
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

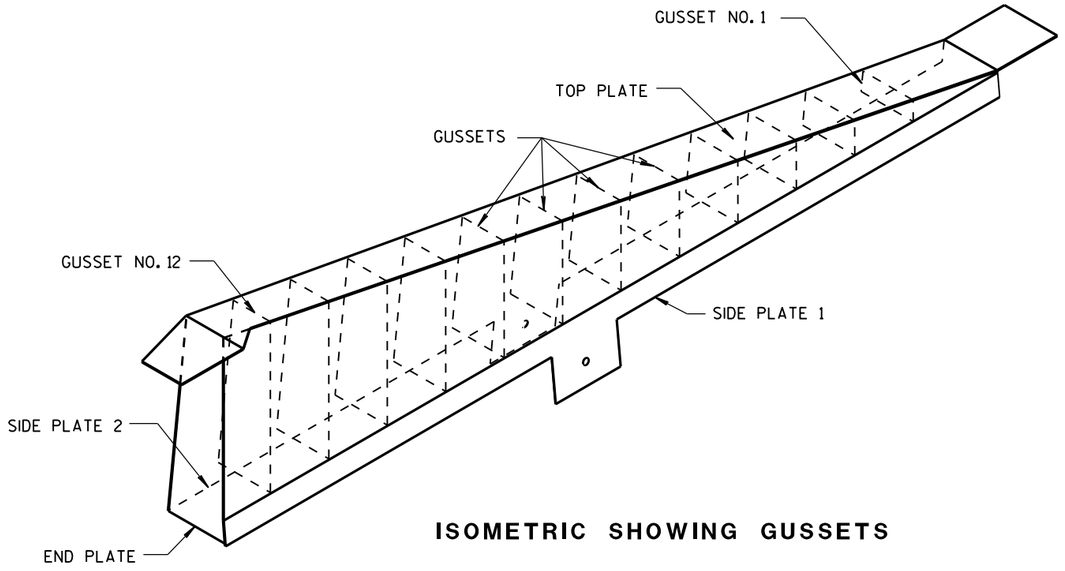
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

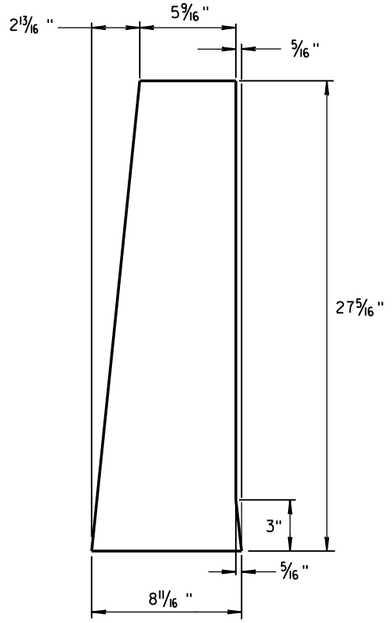
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14f

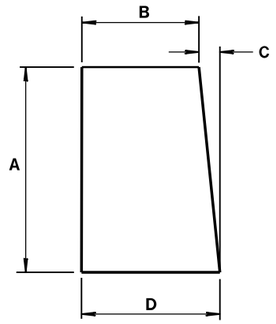


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



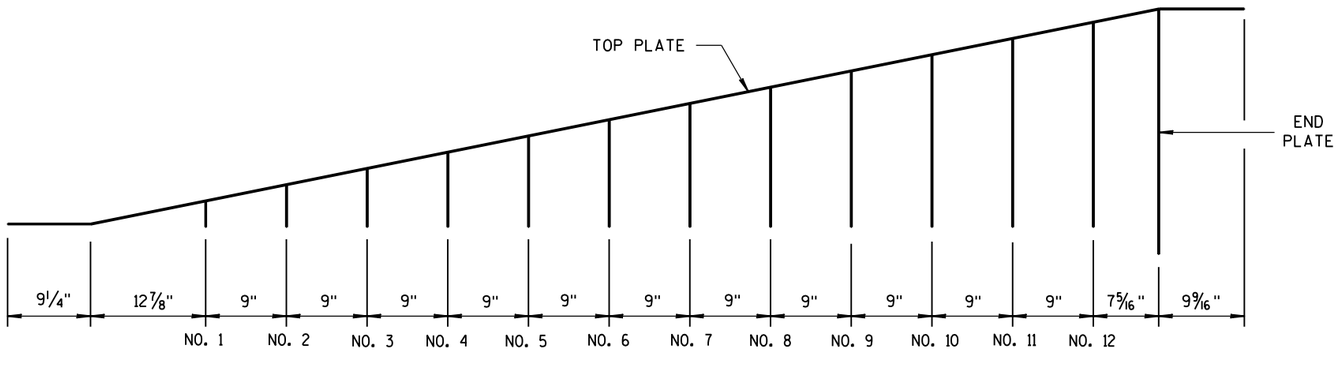
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

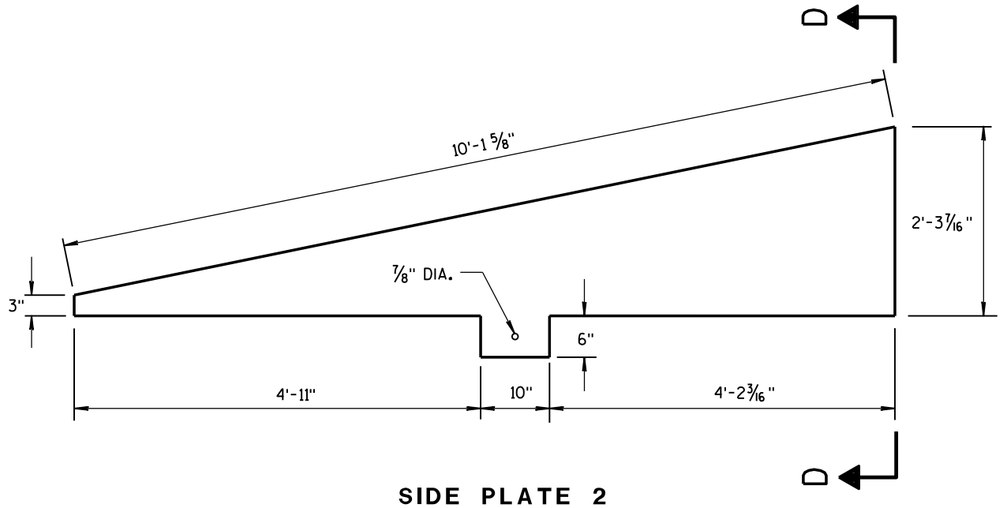
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

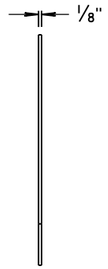
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

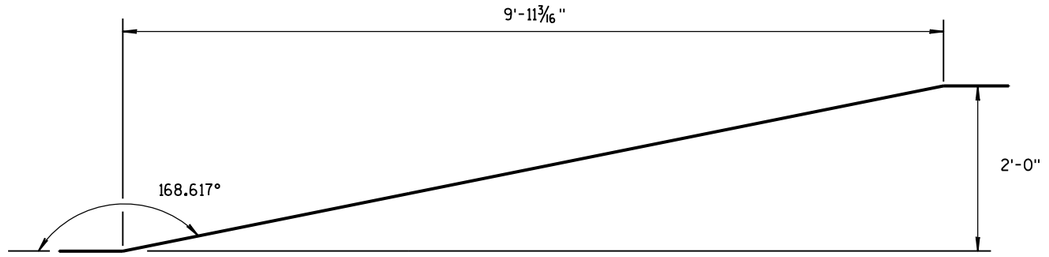
S.D.D. 14 B 7-14g



SIDE PLATE 2

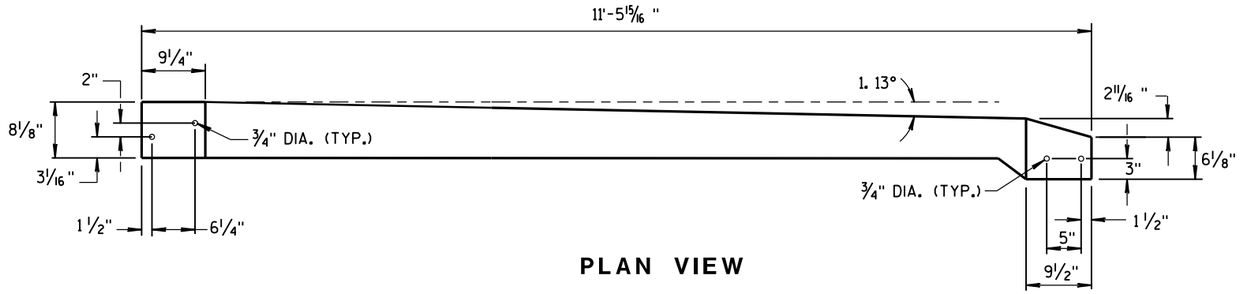


END VIEW



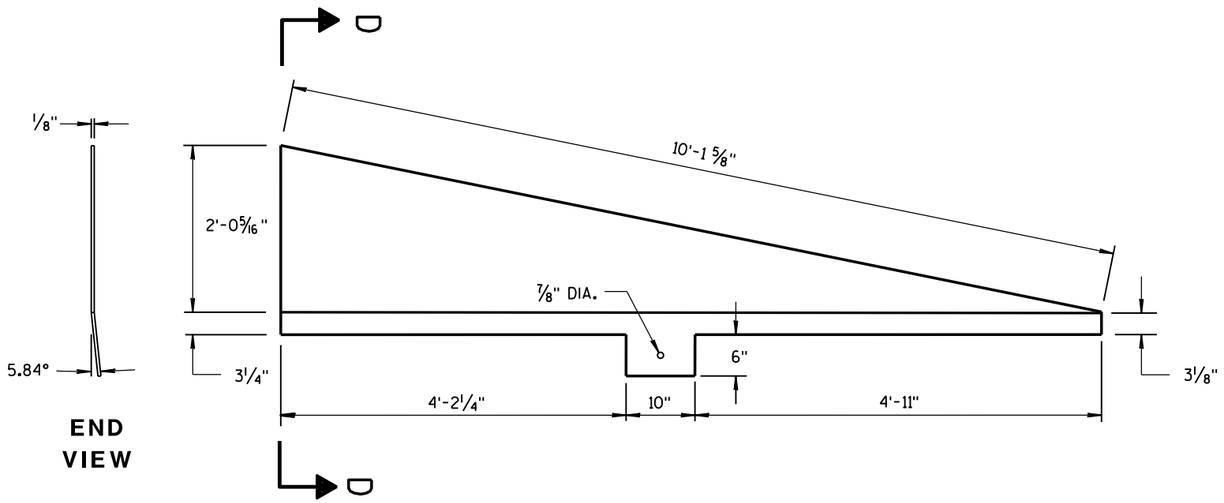
SIDE VIEW

TOP PLATE



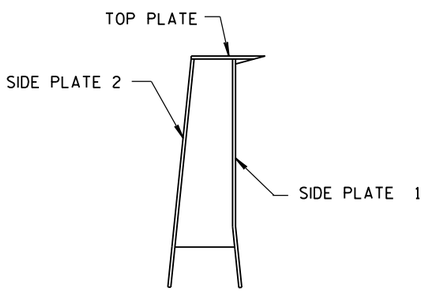
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

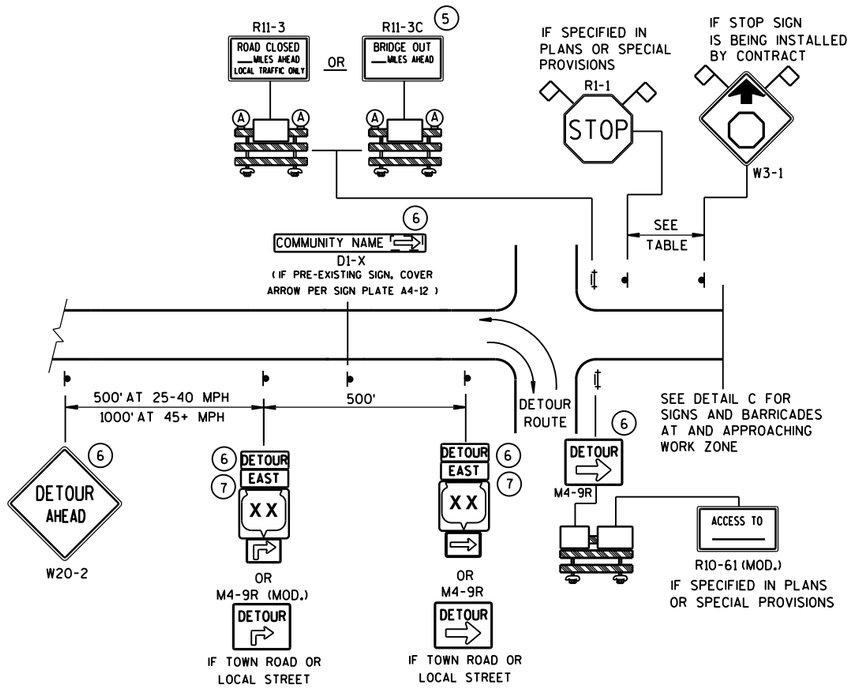
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 7-14h

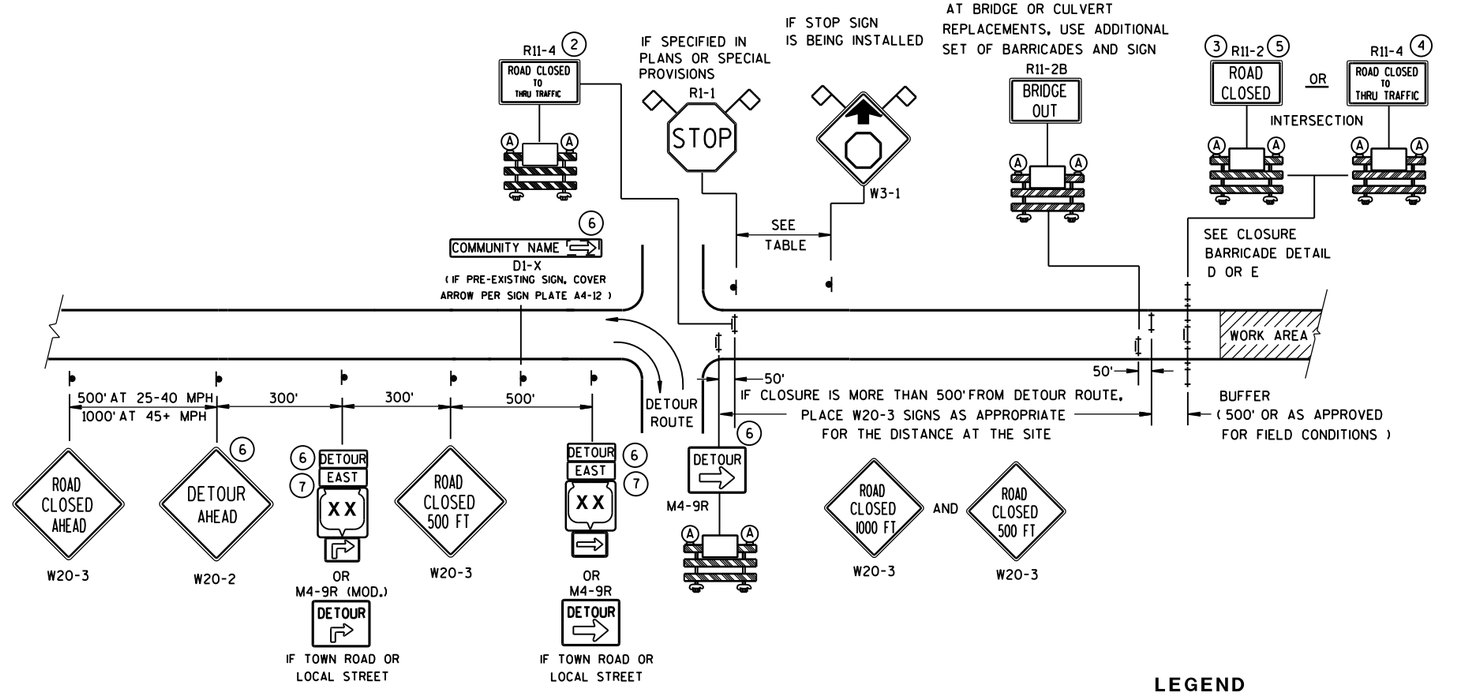
6

S.D.D. 14 B 7-14h



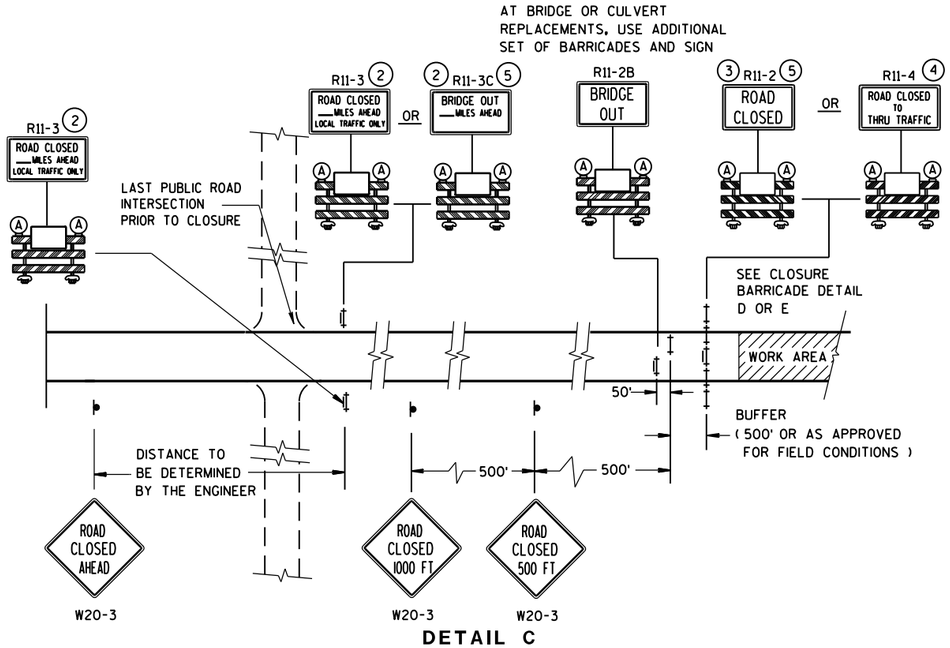
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

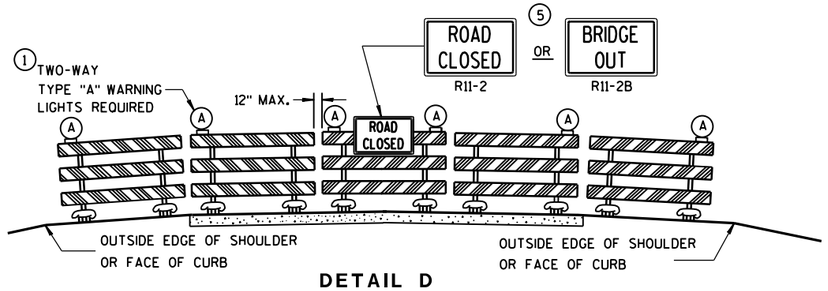
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — DESIGN

FHWA

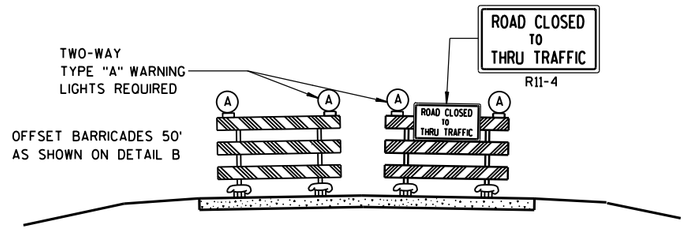
6
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (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

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

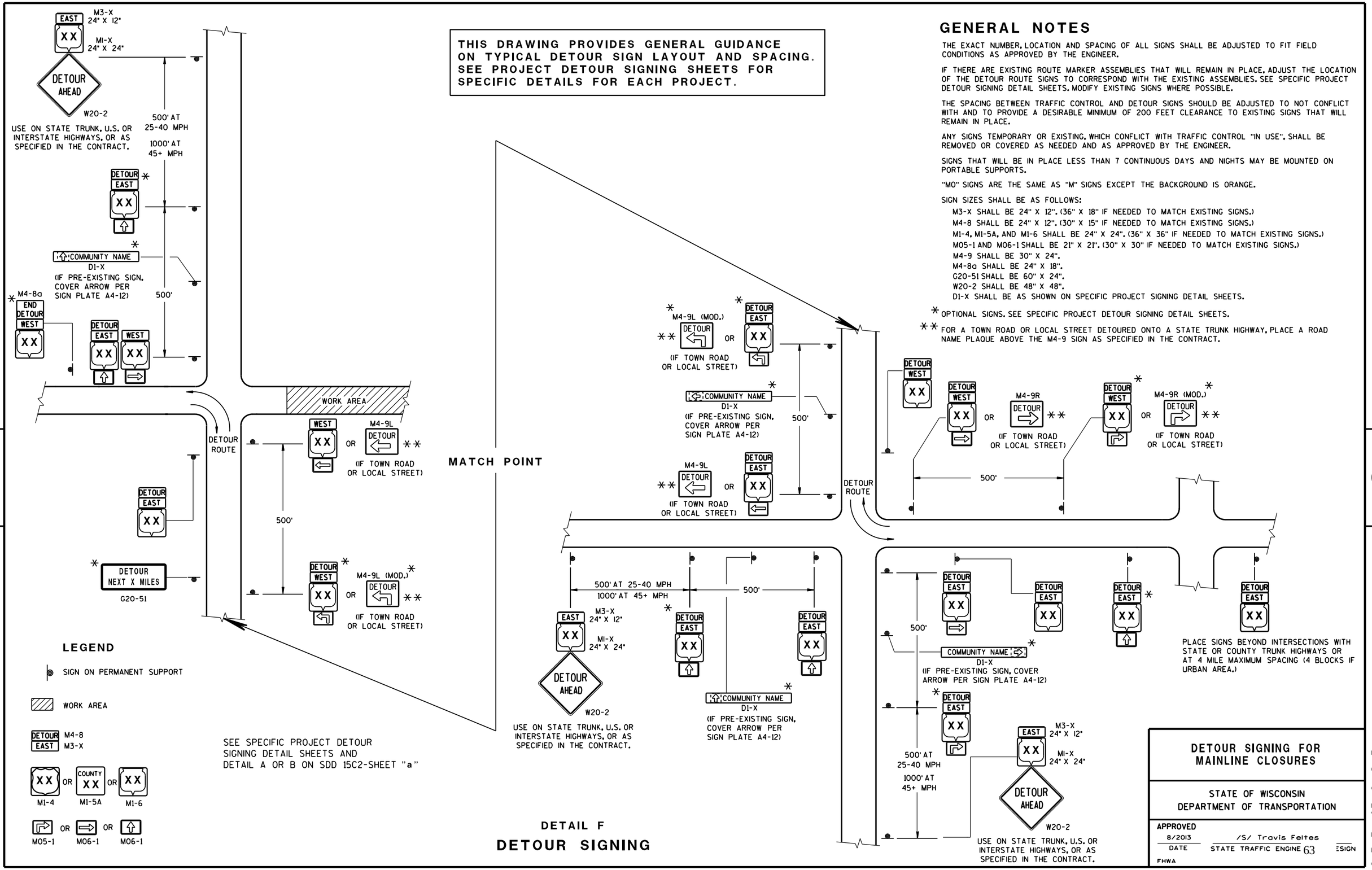
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- M05-1 OR M06-1 OR M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

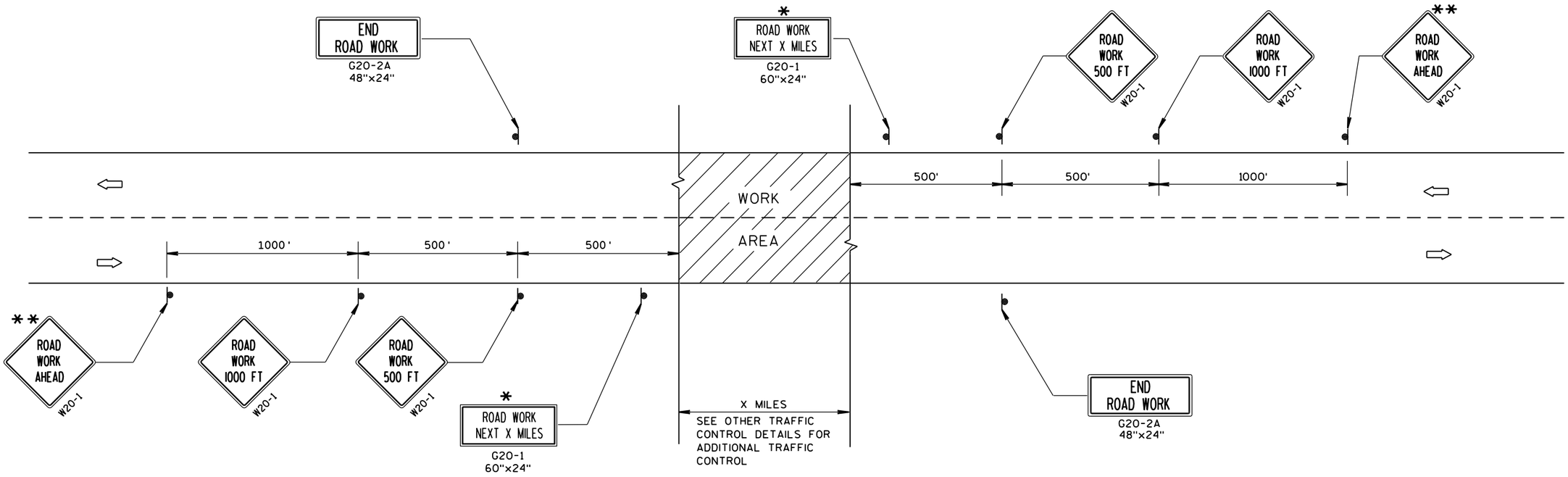
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

S.D.D. 15 C 2-5c



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

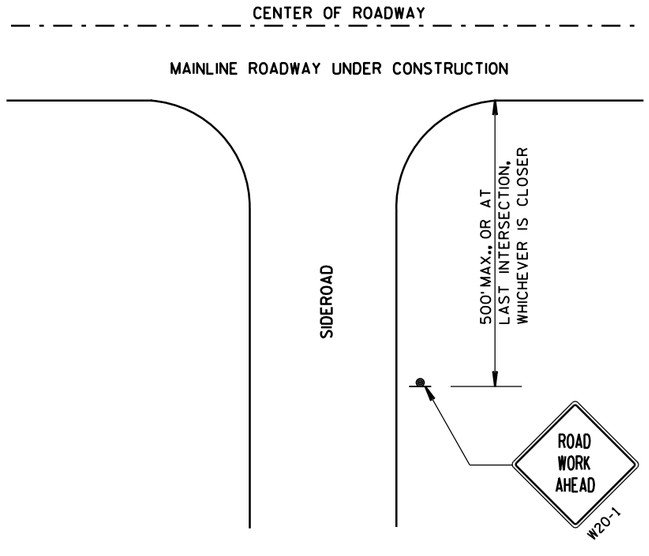
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

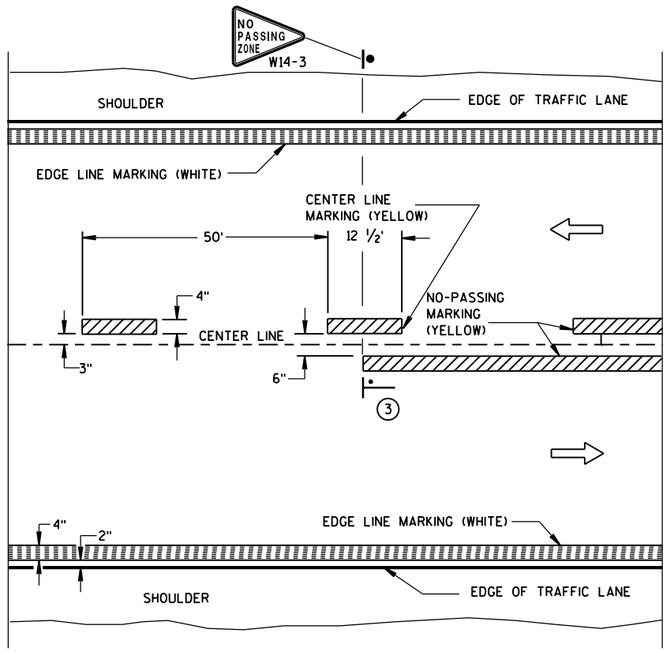
FHWA

6

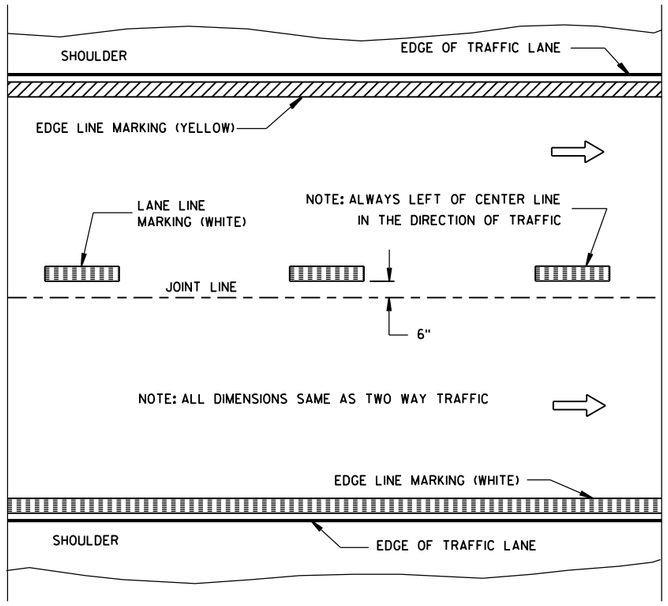
S.D.D. 15 C 4-2

6

S.D.D. 15 C 4-2

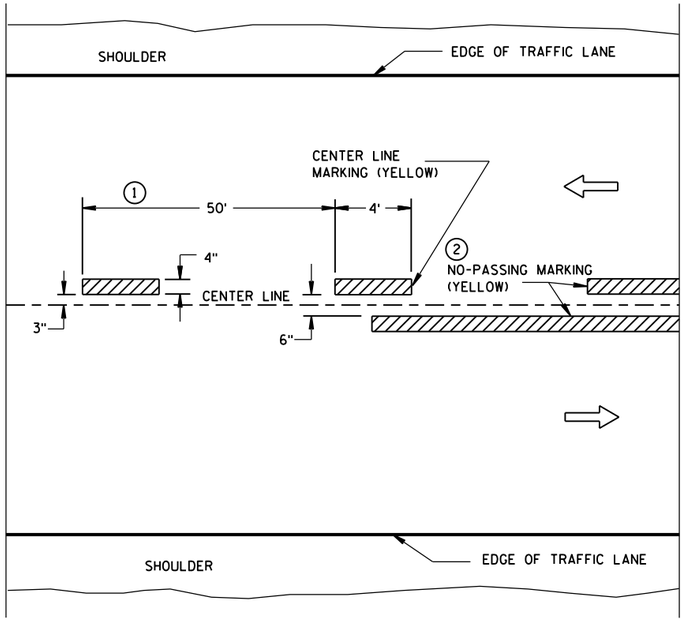


TWO WAY TRAFFIC

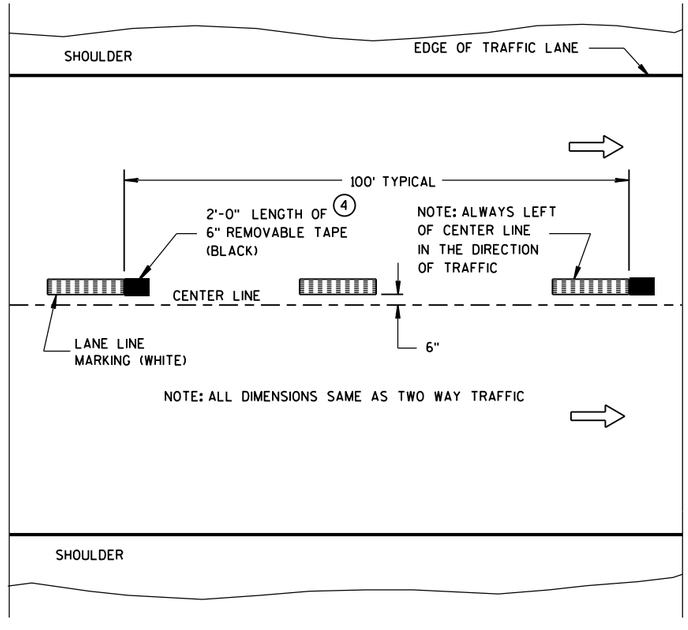


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

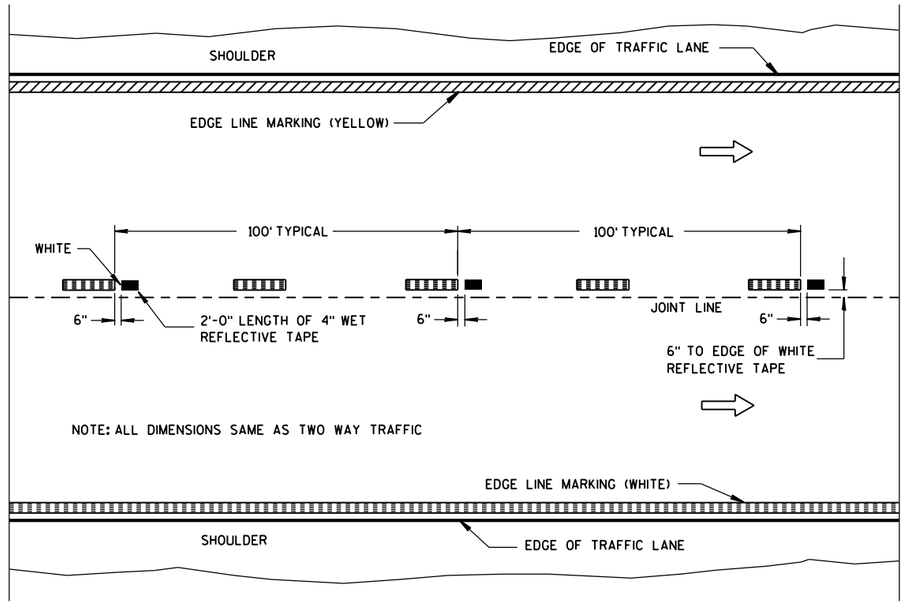
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

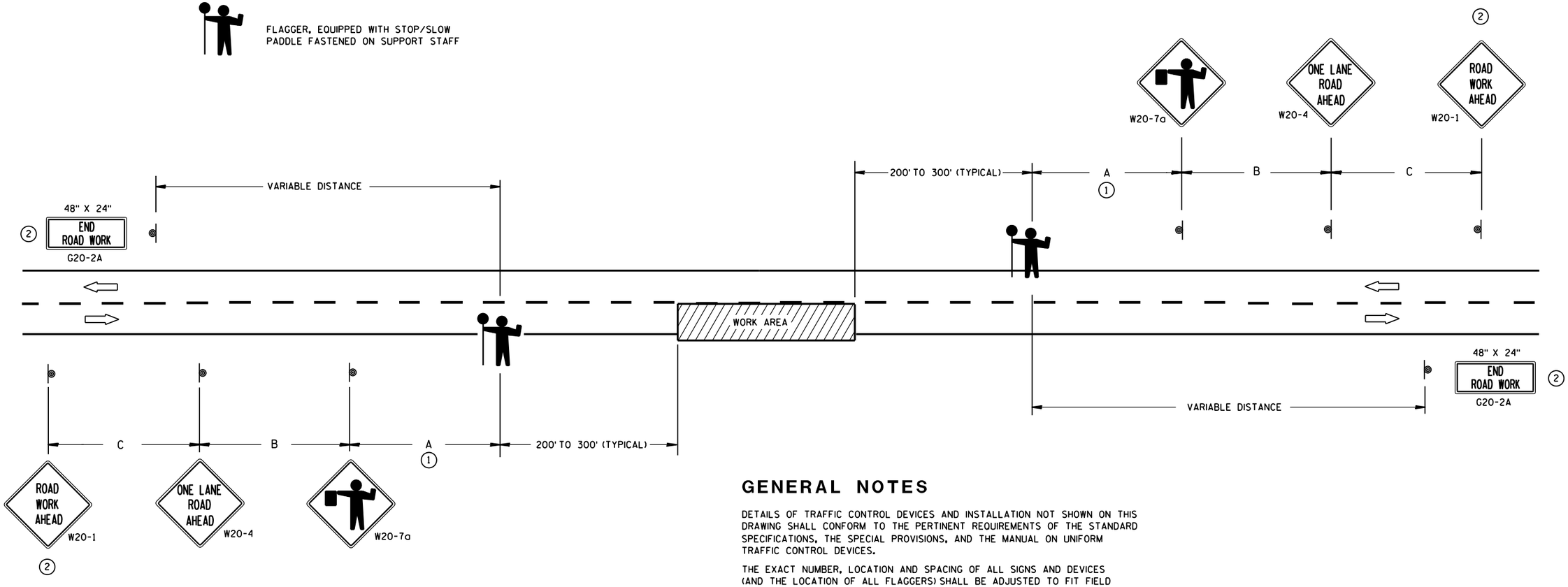
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

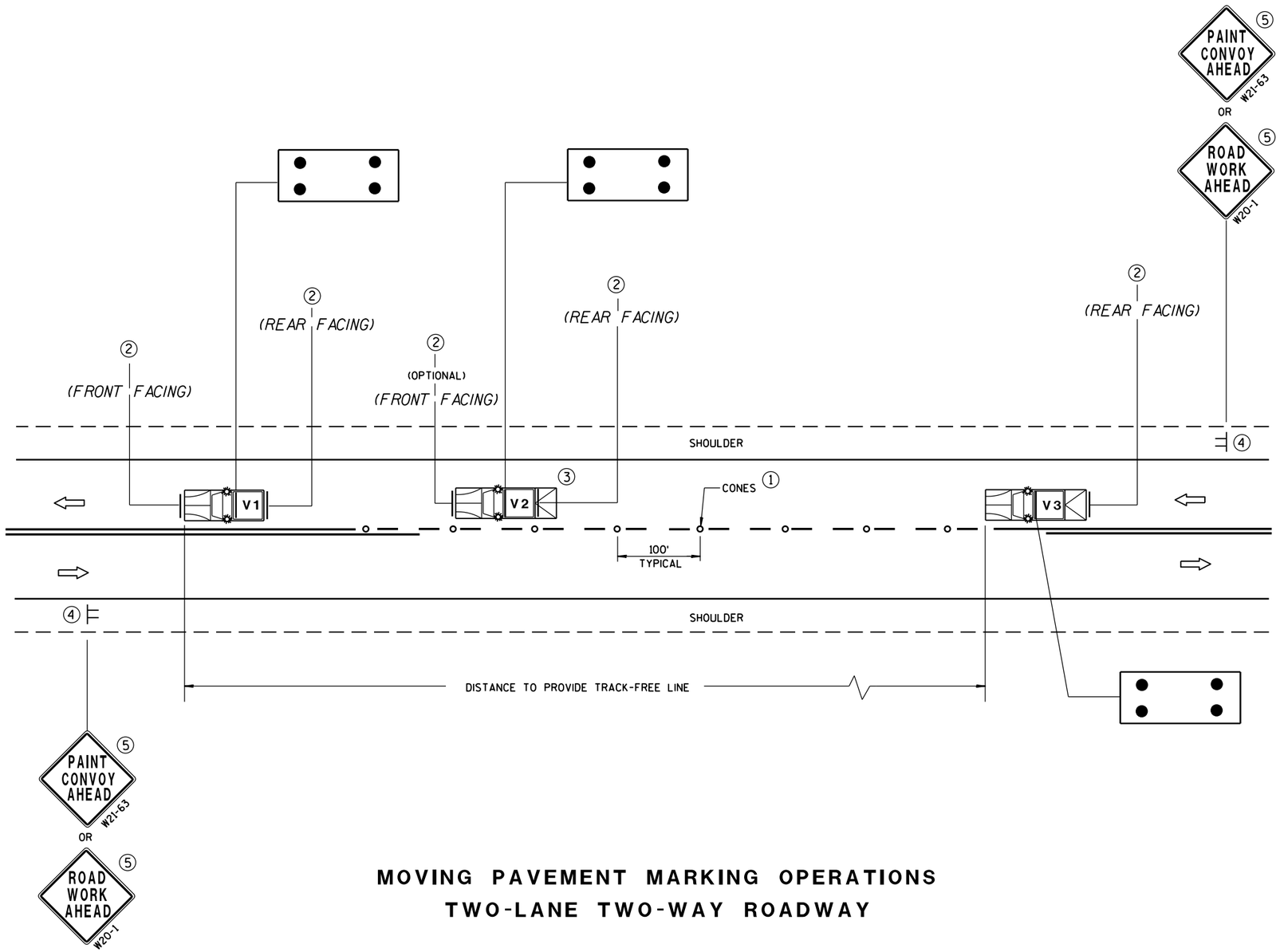
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

6

S.D.D. 15 C 19-2a

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

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

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

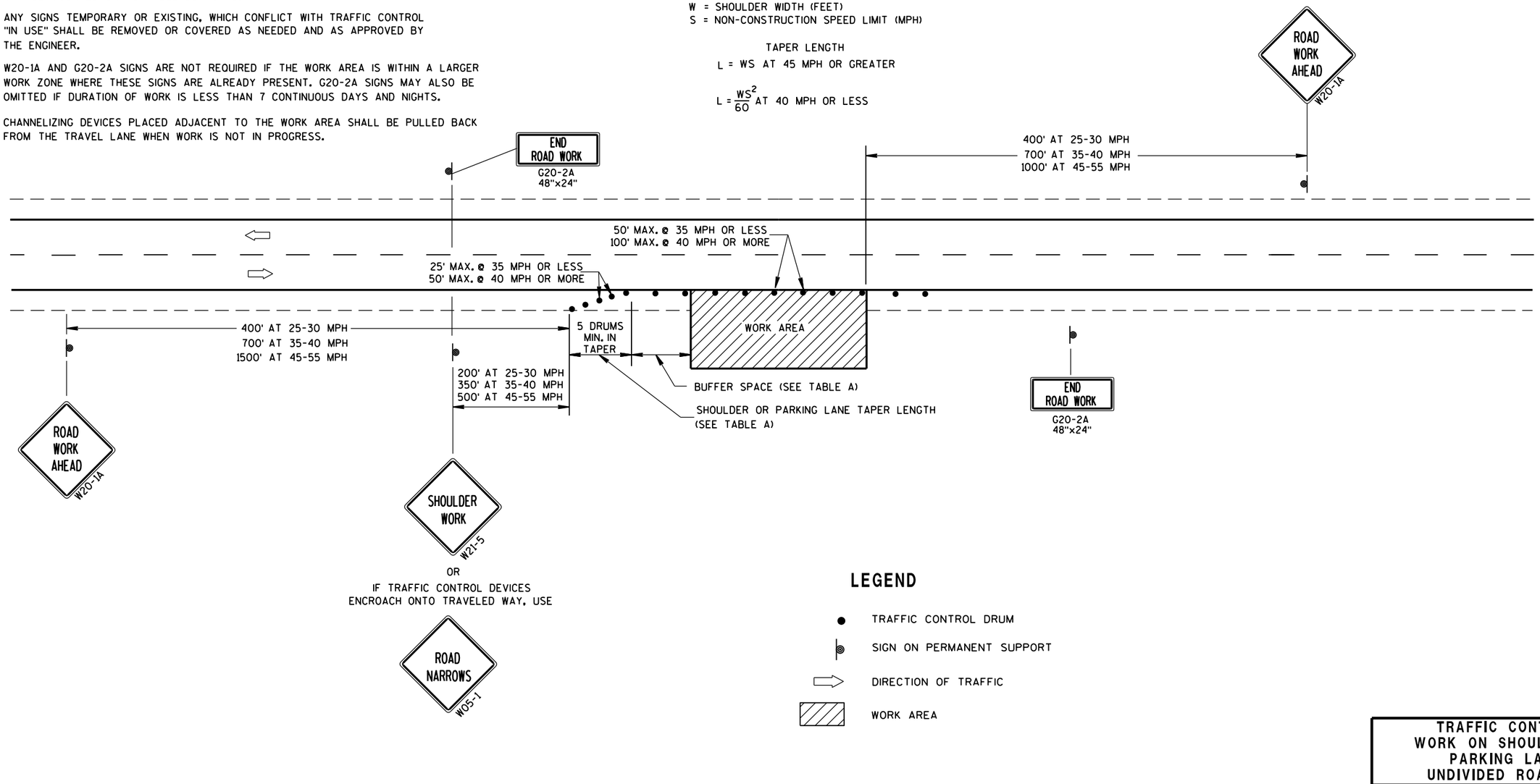
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC

FHWA

6

S.D.D. 15 D 28-3

LEGEND

- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH ATTACHED SIGN
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" x 16" MIN., (ORANGE)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC
- 4" X 6" WOOD POST
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE

W057-52
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

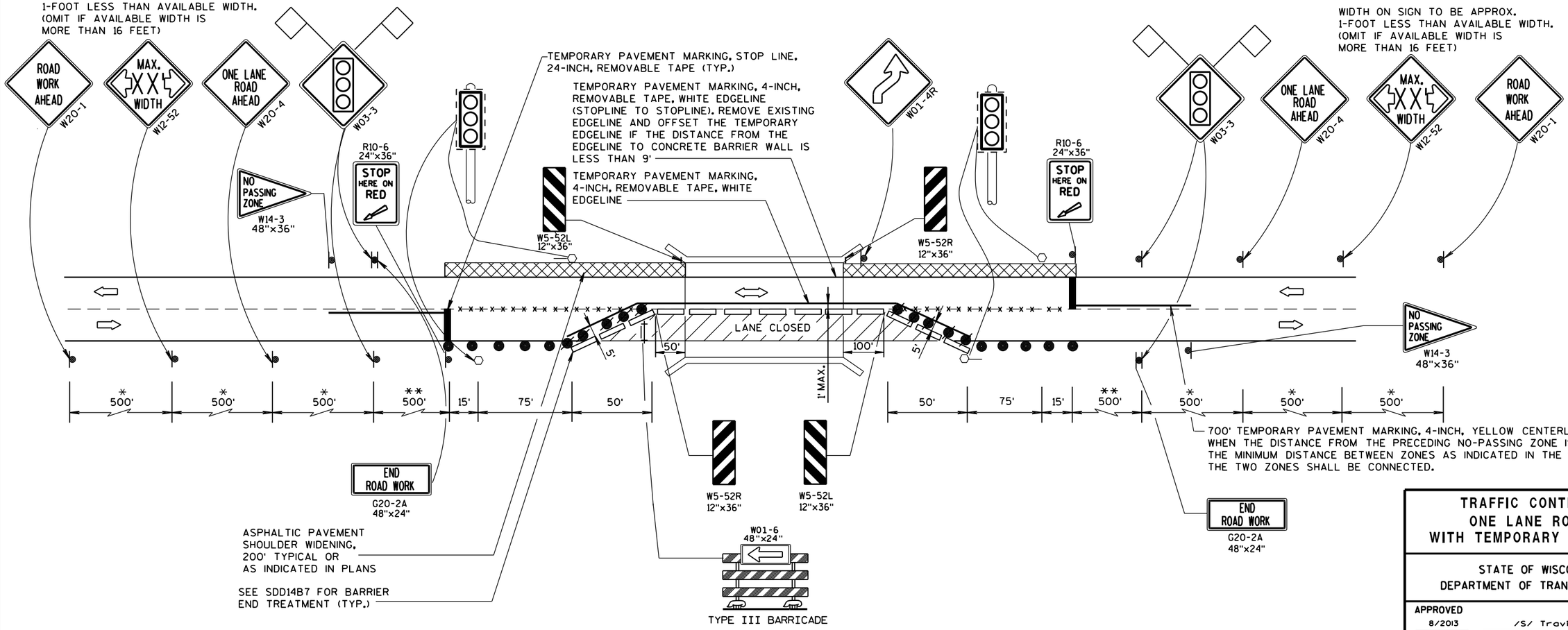
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.

** USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

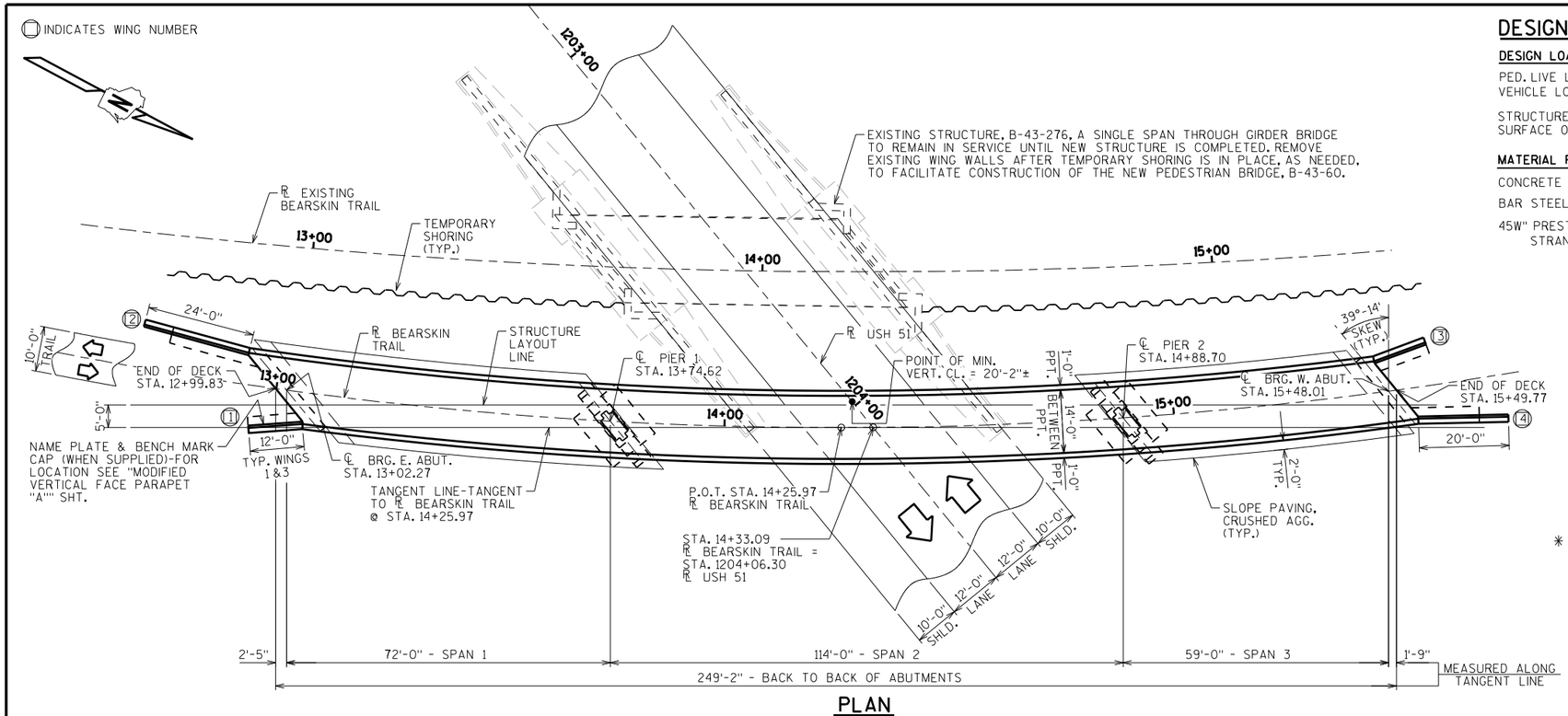
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

SIGN

FHWA

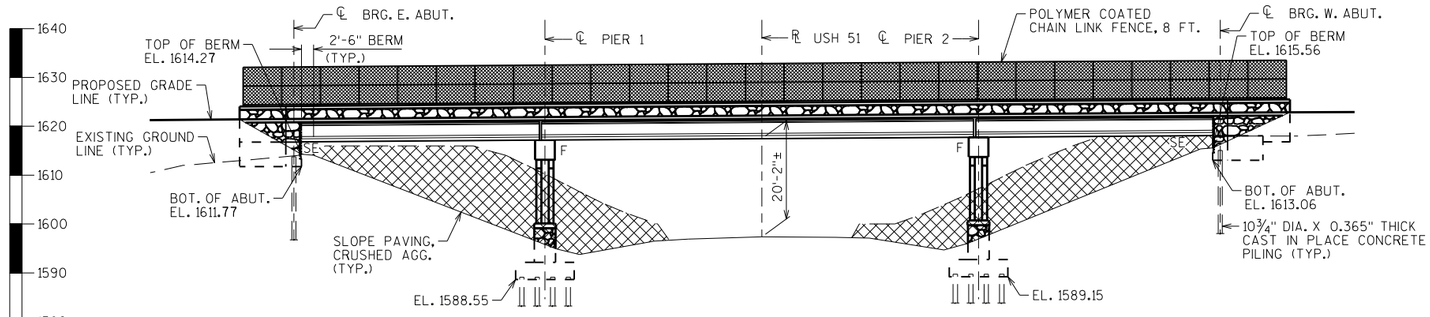
6

S.D.D. 15 D 33-3



PLAN

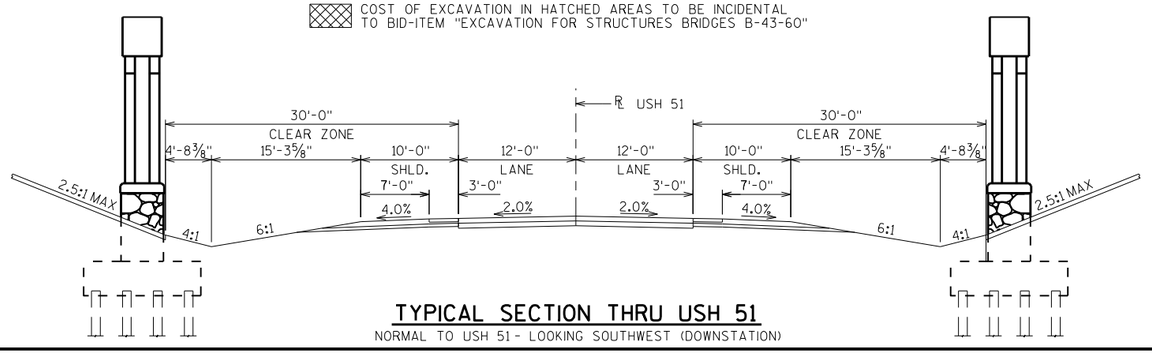
3-SPAN 45W" PRESTRESSED GIRDERS



ELEVATION

NORMAL TO USH 51 - LOOKING SOUTHWEST (DOWNSTATION)

COST OF EXCAVATION IN HATCHED AREAS TO BE INCIDENTAL TO BID-ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-43-60"



TYPICAL SECTION THRU USH 51

NORMAL TO USH 51 - LOOKING SOUTHWEST (DOWNSTATION)

DESIGN DATA

DESIGN LOADS:

PED. LIVE LOAD = 90 PSF
VEHICLE LOAD = H-10 (20,000 LBS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY DECK — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

45W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 9,000 P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

EAST ABUTMENT TO BE SUPPORTED ON 10.75" DIA. X 0.365-INCH THICK C.I.P. CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 150 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 95'-0" LONG.

WEST ABUTMENT TO BE SUPPORTED ON 10.75" DIA. X 0.365-INCH THICK C.I.P. CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 70'-0" LONG.

PIERS 1 & 2 TO BE SUPPORTED ON 10.75" DIA. X 0.365-INCH THICK C.I.P. CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 150 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 80'-0" LONG AT PIER 1
ESTIMATED 45'-0" LONG AT PIER 2

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

CURVE DATA

BEARSKIN TRAIL

P.I. = STA. 13+91.36
Δ = 35°-53'-42.8'
D = 6°-15'
T = 296.94'
L = 574.32'
R = 916.73'
S.E. = 2.0%
P.C. = STA. 10+94.42
P.T. = STA. 16+68.75

TRAFFIC VOLUME

USH 51
A.D.T.=12500 (2041)
R.D.S.=60 M.P.H.

LIST OF DRAWINGS

STATE PROJECT NUMBER

1177-11-71

STRUCTURE DESIGN CONTACTS:

NICK RICE (608) 266-5092
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher — CHIEF STRUCTURES DESIGN ENGINEER — 1/5/16 DATE

STRUCTURE B-43-60

BEARSKIN RECREATIONAL TRAIL OVER USH 51

COUNTY	TOWN ~~CITY/VILLAGE~~
ONEIDA	HAZELHURST

DESIGN SPEC. AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
NAR	EMK	NAR	EMK

GENERAL PLAN

SHEET 1 OF 28

70

I.D. 1177-11-00

DATE: SEPT. 2015

SCALE = 15

8

8

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.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE ENTIRE FRONT FACE AND THE TOP OF THE PARAPET, INCLUDING PARAPETS ON ABUTMENT WINGS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

CONCRETE FOR ABUTMENT AND PIER DIAPHRAGMS SHALL BE PLACED WITH THE DECK CONCRETE.

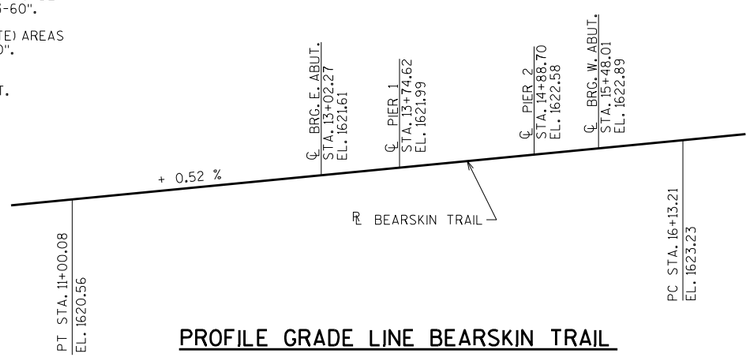
POLYMER OVERLAY TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF DECK SURFACE.

ALL FORMLINER WORK SHALL BE COVERED UNDER THE BID ITEM "ARCHITECTURAL SURFACE TREATMENT".

ALL ARCHITECTURAL SURFACE TREATMENT AREAS TO BE STAINED. WORK TO BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING MULTI-COLOR B-43-60".

STAINING OF NON-ARCHITECTURAL SURFACE TREATMENT (PLAIN CONCRETE) AREAS SHALL BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING B-43-60".

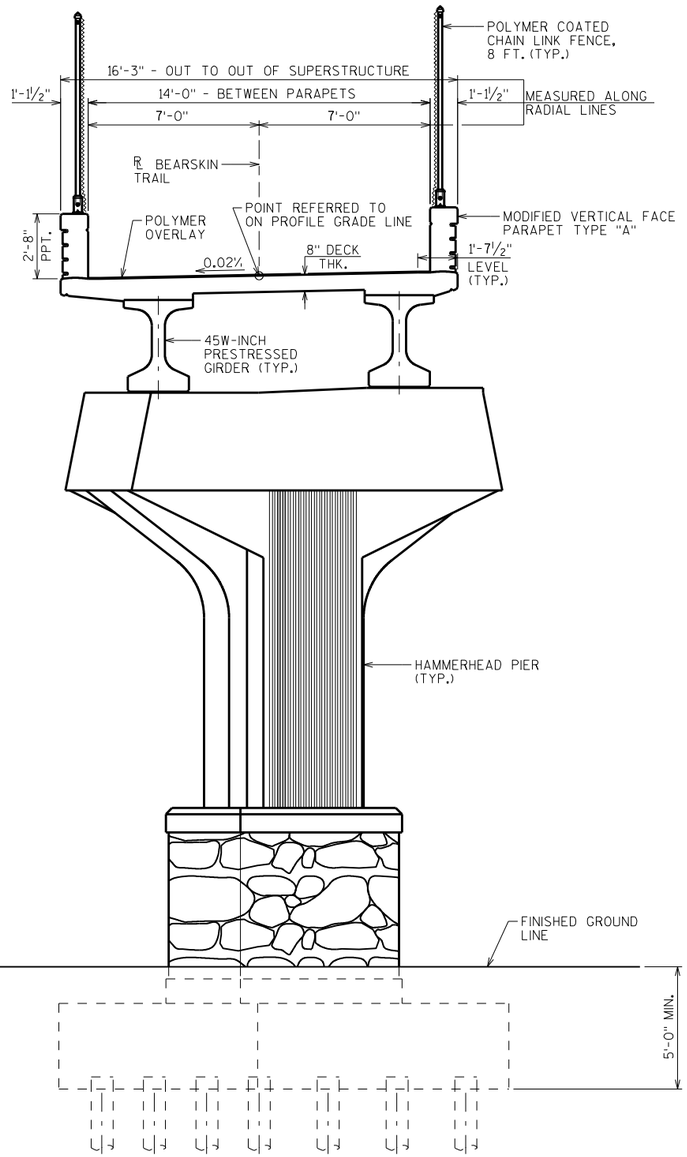
IF TOUCH UP PAINTING IS REQUIRED, IT SHALL BE DONE TO THE SATISFACTION OF THE FIELD ENGINEER AT NO ADDITIONAL COST.



PROFILE GRADE LINE BEARSKIN TRAIL

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	EAST ABUT.	WEST ABUT.	PIER 1	PIER 2	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 13+50	LS	———	———	———	———	———	1
203.0225.S	DEBRIS CONTAINMENT B-43-276	LS	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES B-43-60	LS	———	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	110	90	———	———	200
502.0100	CONCRETE MASONRY BRIDGES	CY	204	50	42	60	60	416
502.3210	PIGMENTED SURFACE SEALER	SY	215	15	15	———	———	245
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	493	———	———	———	———	493
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	1,970	1,720	1,210	1,210	6,110
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	32,040	2,780	2,300	7,610	7,610	52,340
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	12	———	———	———	———	12
506.4000	STEEL DIAPHRAGMS B-43-60	EACH	4	———	———	———	———	4
509.5100.S	POLYMER OVERLAY	SY	390	———	———	———	———	390
511.1200	TEMPORARY SHORING B-43-60	SF	———	1,105	1,015	———	———	2,120
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	10	10	———	———	20
517.1010.S	CONCRETE STAINING B-43-60	SF	5,055	65	55	775	775	6,725
517.1015.S	CONCRETE STAINING MULTI-COLOR B-43-60	SF	1,105	295	250	165	165	1,980
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-43-60	SF	1,105	295	250	165	165	1,980
550.2106	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	———	475	350	1280	720	2,825
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	———	180	150	———	———	330
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	60	55	———	———	115
SPV.0090	FENCE CHAIN LINK POLYMER COATED 8-FT	LF	500	35	31	———	———	566
	NON-BID ITEMS							
	FILLER	SIZE						1/2",3/4",& 1"



CROSS-SECTION THRU BEARSKIN TRAIL

NORMAL TO BEARSKIN TRAIL - LOOKING NORTHWEST

STATE PROJECT NUMBER

1177-11-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

CROSS SECTION & QUANTITIES

SHEET 2

71

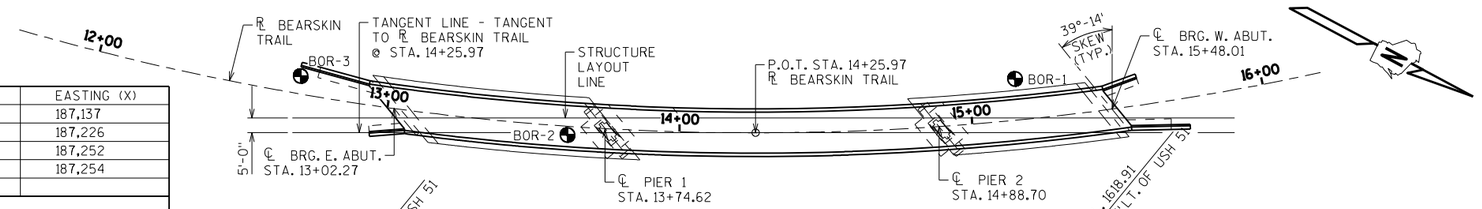
SCALE = 3

8

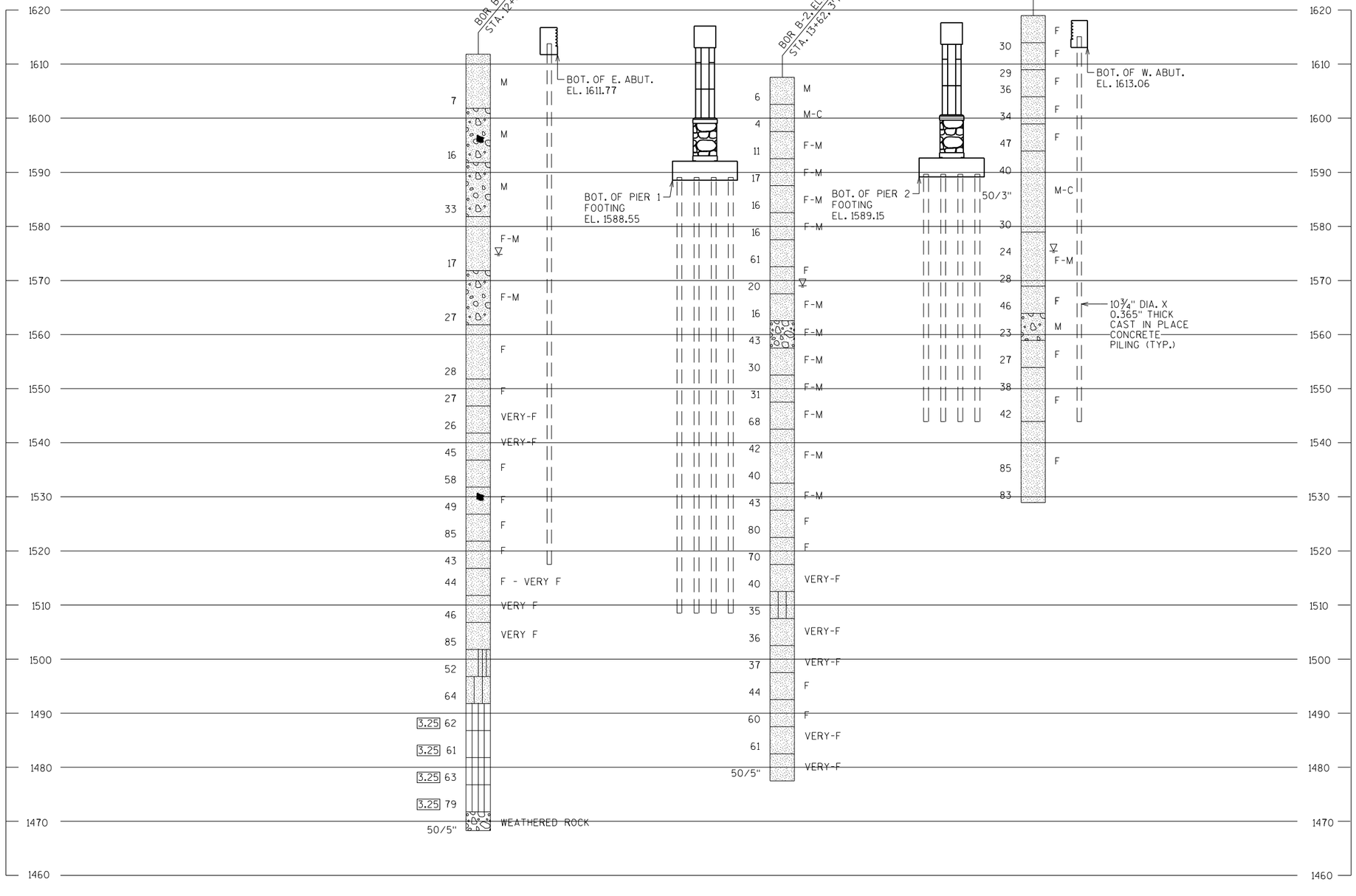
8

JACKSON HEIGHTS RD - CTH Y
BEARSKIN BIKE STRUCTURE

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/24/2012	218,136	187,137
2	9/25/2012	218,011	187,226
3	9/27/2012	217,921	187,252
4	9/26/2012	217,842	187,254
BORINGS COMPLETED BY: RVT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) ONEIDA COUNTY			



PLAN



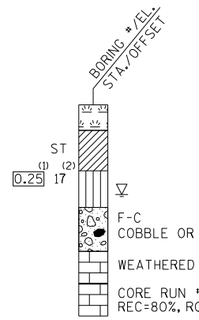
STATE PROJECT NUMBER

1177-11-71

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING
▼ END OF DRILLING
▼ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY PR/NAR | PLANS CK'D. EMK

SUBSURFACE EXPLORATION

SHEET 3

72

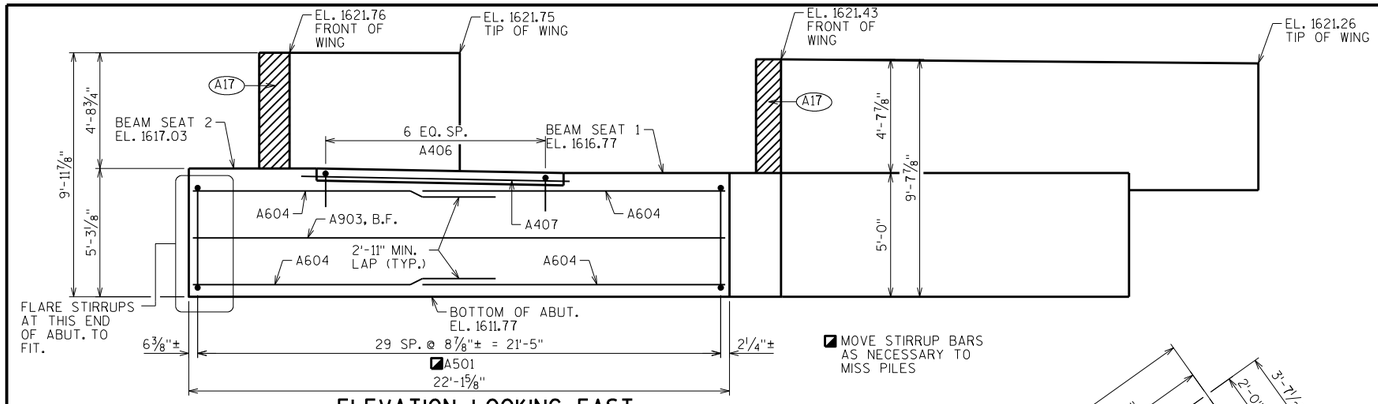
SCALE = 25

8

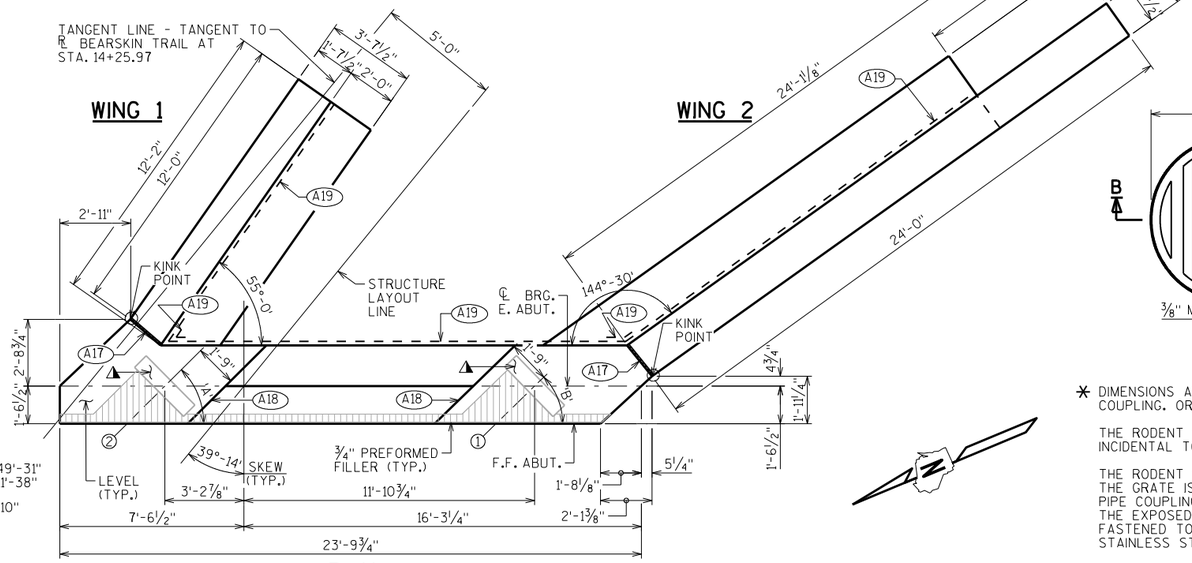
8

STATE PROJECT NUMBER

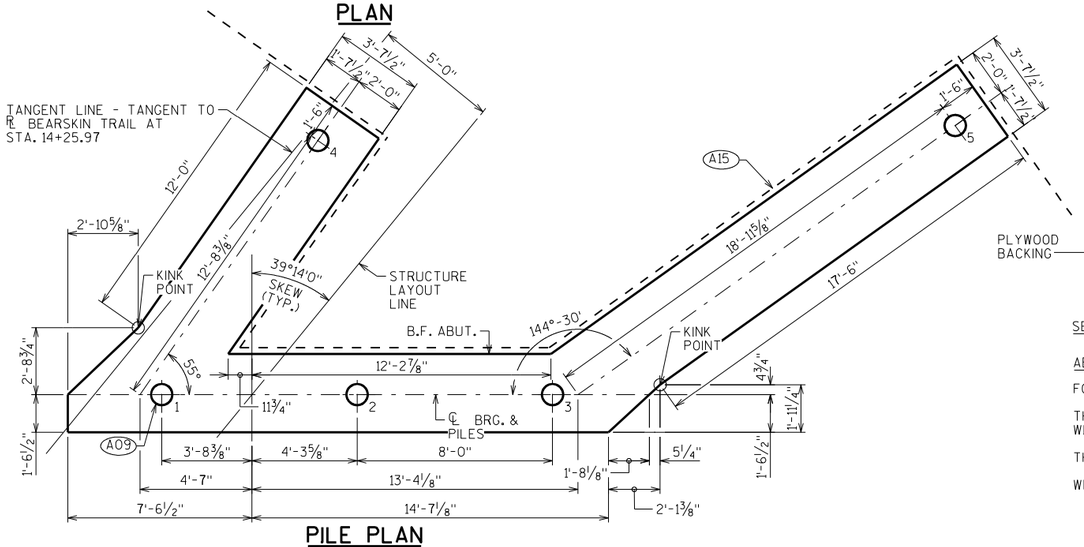
1177-11-71



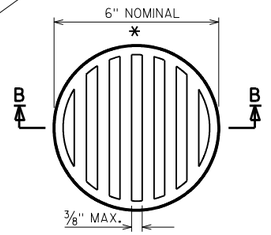
ELEVATION LOOKING EAST



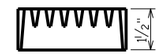
PLAN



PILE PLAN



RODENT SHIELD DETAIL



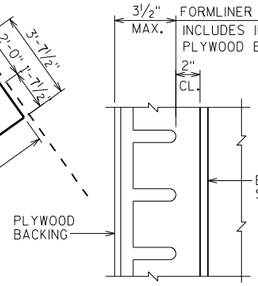
SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

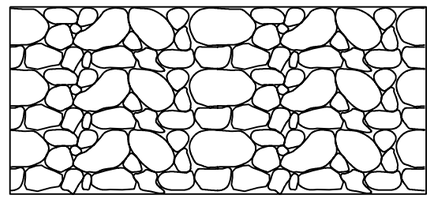
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

SECTION THRU BODY



SECTION THRU FORMLINER



FIELD STONE - RANDOM SIZES BETWEEN 6" & 24" MAX. RELIEF = 2½"

ABUTMENT FORMLINER NOTES:

FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.

FORMLINER DETAILS

(A09) SUPPORT ABUTMENT ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 95'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A90) ARCHITECTURAL SURFACE TREATMENT. FOR ADDITIONAL DETAILS SEE "AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

EAST ABUTMENT

SHEET 4

73

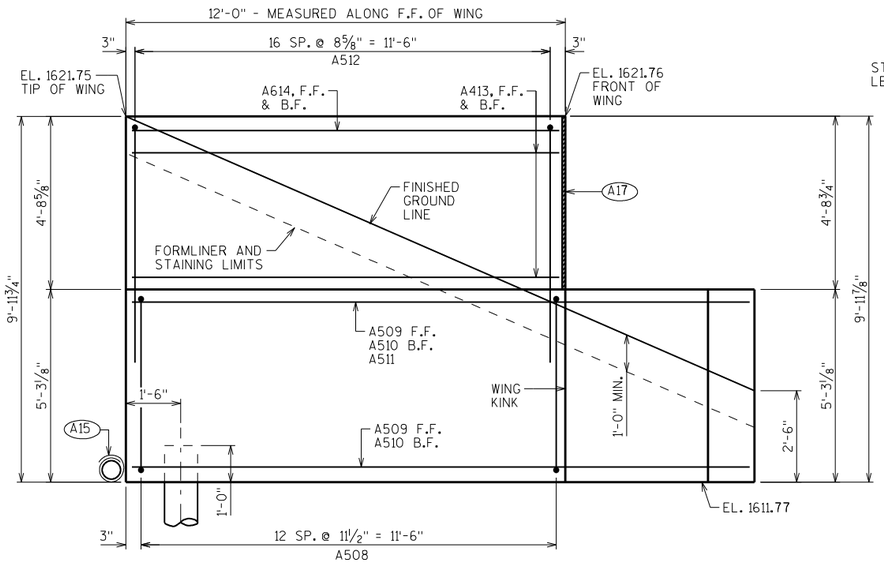
SCALE = 3

8

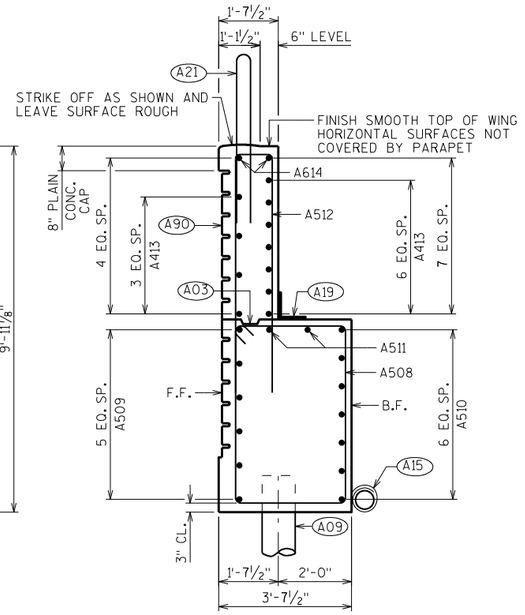
8

STATE PROJECT NUMBER

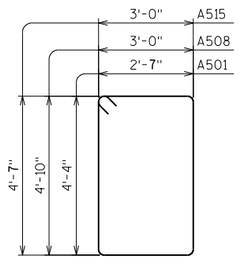
1177-11-71



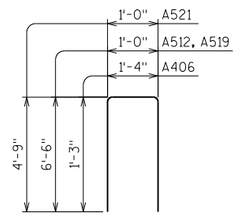
WING 1 ELEVATION



SECTION THRU WING 1



A501, A508, A515

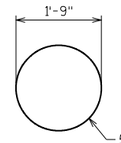


A406, A512, A519, A521

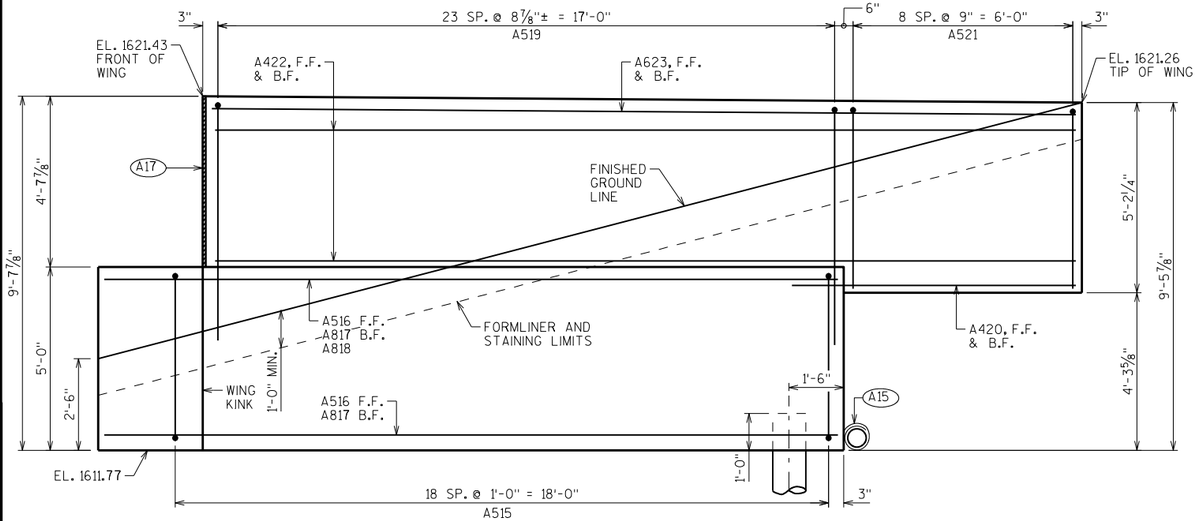
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

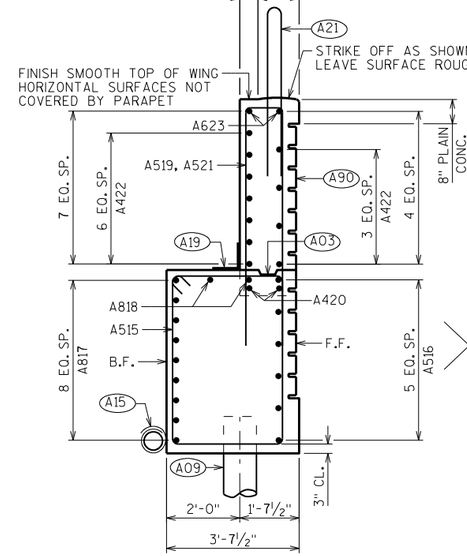
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		30	14'-6"	X		BODY-STIRRUPS
A402		6	2'-3"			PILES-2 PER BODY PILE
A903		8	22'-7"			BODY-HORIZONTAL-B.F.
A604		18	13'-0"			BODY-HORIZONTAL
A405		3	28'-0"	X		PILES-1 PER BODY PILE
A406		7	3'-8"	X		BODY-VERTICAL-BETWEEN BEAM SEATS
A407		2	12'-2"			BODY-HORIZONTAL-BETWEEN BEAM SEATS
A508		13	16'-4"	X		WING 1-BOT.-VERTICAL-STIRRUP
A509		6	16'-1"			WING 1-BOT.-HORIZONTAL-F.F.
A510		7	14'-1"			WING 1-BOT.-HORIZONTAL-B.F.
A511		2	14'-9"			WING 1-BOT.-HORIZONTAL
A512	X	17	13'-9"	X		WING 1-TOP-VERTICAL
A413	X	11	11'-8"			WING 1-TOP-HORIZONTAL-F.F.&B.F.
A614	X	2	11'-8"			WING 1-TOP-HORIZONTAL-F.F.&B.F.
A515	X	19	15'-10	X		WING 2-BOT.-VERTICAL-STIRRUP
A516	X	6	20'-7"			WING 2-BOT.-HORIZONTAL-F.F.
A817	X	9	24'-6"			WING 2-BOT.-HORIZONTAL-B.F.
A818	X	2	21'-10			WING 2-BOT.-HORIZONTAL
A519	X	24	13'-9"	X		WING 2-TOP-VERTICAL
A420	X	2	7'-9"			WING 2-TOP-HORIZONTAL-F.F&B.F
A521	X	9	10'-3"	X		WING 2-TOP-VERTICAL
A422	X	11	23'-8"			WING 2-TOP-HORIZONTAL-F.F.&B.F.
A623	X	2	23'-8"			WING 2-TOP-HORIZONTAL-F.F.&B.F.



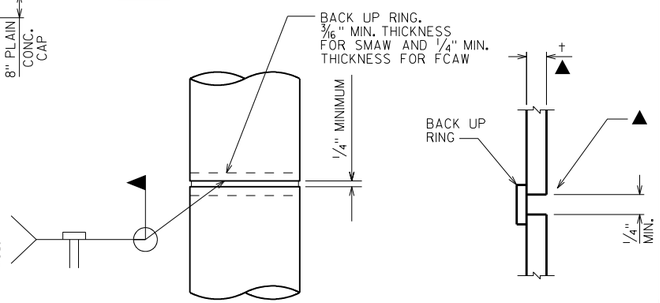
A405



WING 2 ELEVATION



SECTION THRU WING 2



CAST-IN-PLACE 'PIPE PILE'

C.I.P. PILE WELD DETAIL

PILE DETAILS

▲ IF '+' > 1/4" USE SINGLE BEVEL GROOVE WELD B-U4a OR B_U4a-GF

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A09) SUPPORT ABUTMENT ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 95'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

(A90) ARCHITECTURAL SURFACE TREATMENT. FOR ADDITIONAL DETAILS SEE "AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

EAST ABUTMENT DETAILS

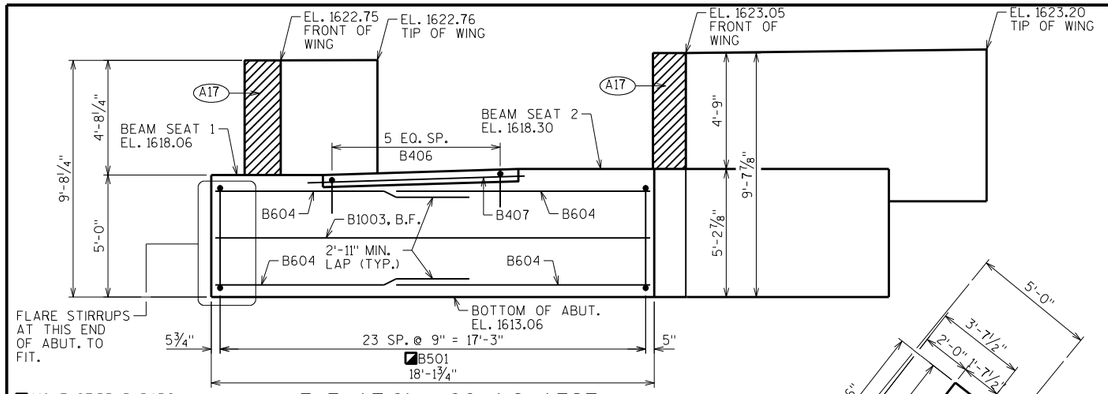
SHEET 5

74

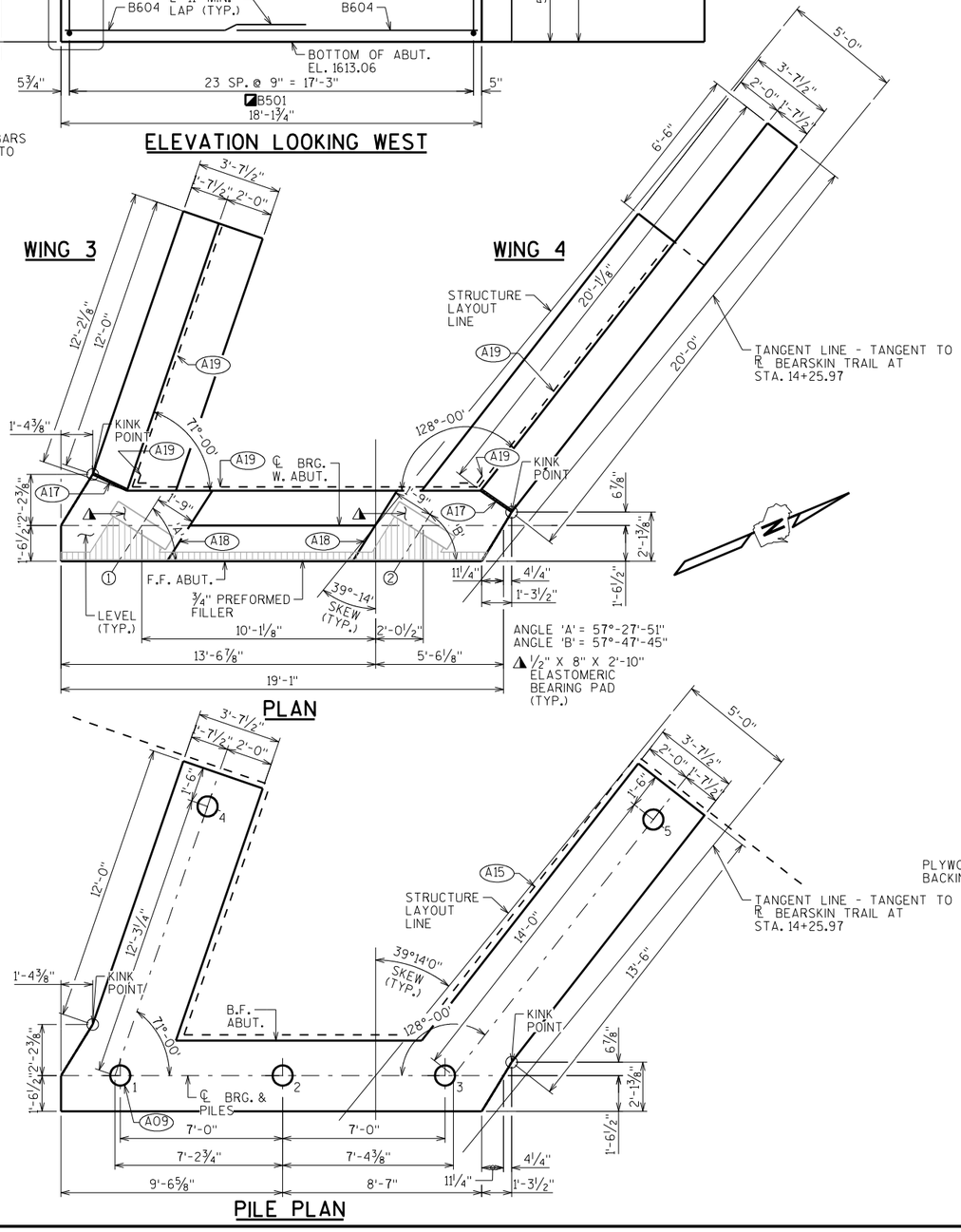
SCALE = 2

STATE PROJECT NUMBER

1177-11-71

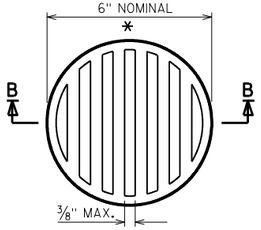


ELEVATION LOOKING WEST



PLAN

PILE PLAN



RODENT SHIELD DETAIL

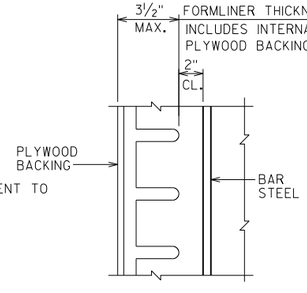
✳ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

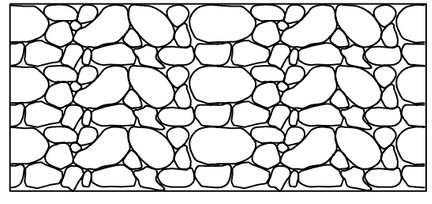
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

SECTION B-B

SECTION THRU BODY



SECTION THRU FORMLINER



FIELD STONE - RANDOM SIZES BETWEEN 6" & 24" MAX. RELIEF = 2½"

ABUTMENT FORMLINER NOTES:

FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.

FORMLINER DETAILS

(A09) SUPPORT ABUTMENT ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 70'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A90) ARCHITECTURAL SURFACE TREATMENT. FOR ADDITIONAL DETAILS SEE "AESTHETIC DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

WEST ABUTMENT

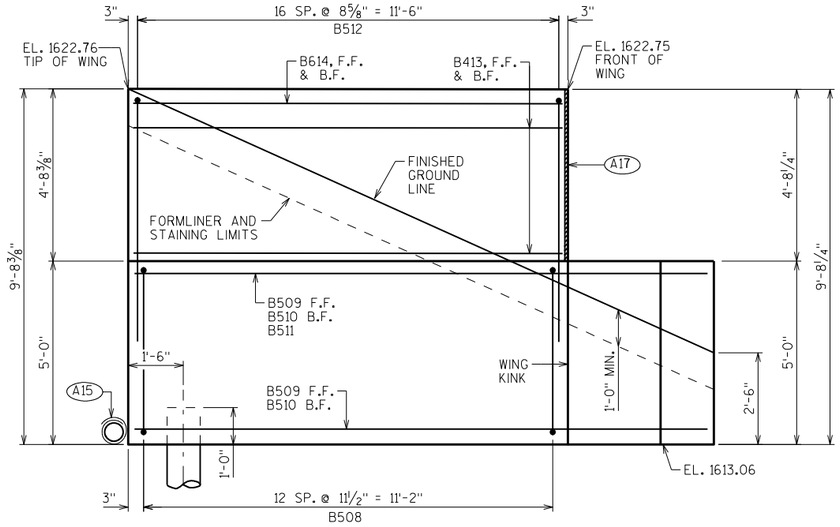
SHEET 6

75

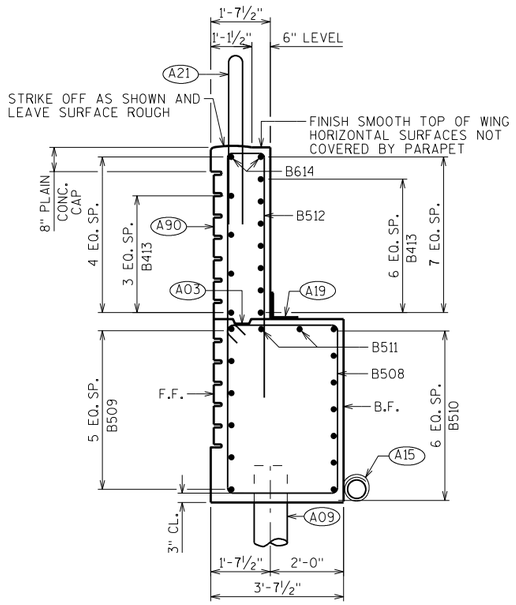
SCALE = 3

8

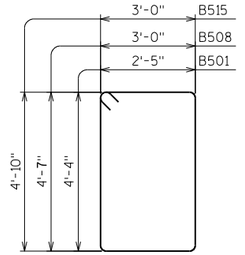
8



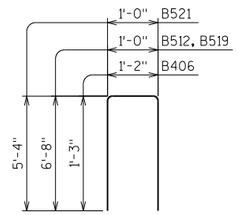
WING 3 ELEVATION



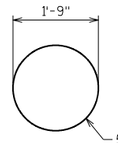
SECTION THRU WING 3



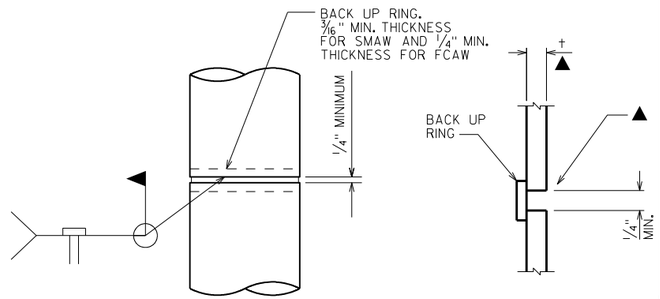
B501, B508, B515



B406, B512,
B519, B521



B405



CAST-IN-PLACE 'PIPE PILE'

C.I.P. PILE WELD DETAIL

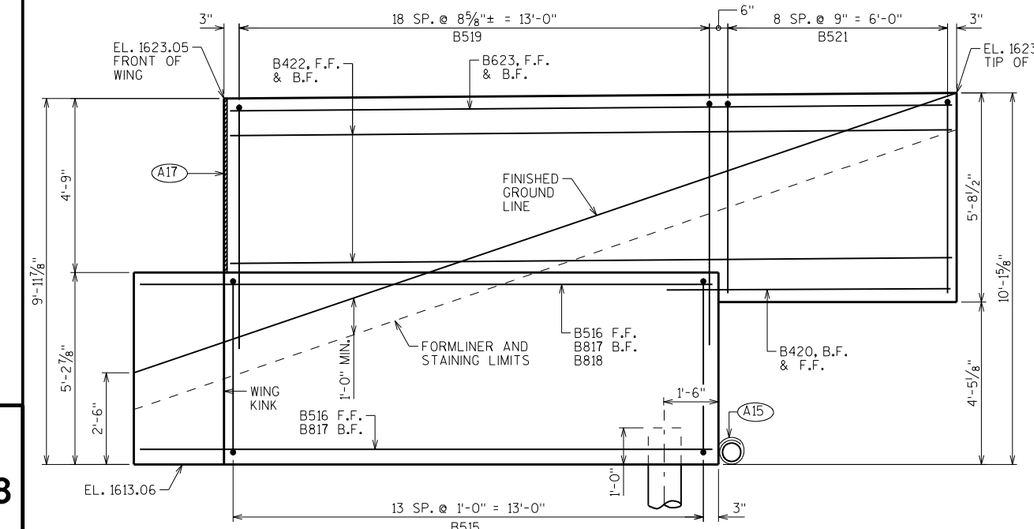
PILE DETAILS

▲ IF '+' > ¼" USE SINGLE BEVEL GROOVE WELD B-U4a OR B_U4a-GF

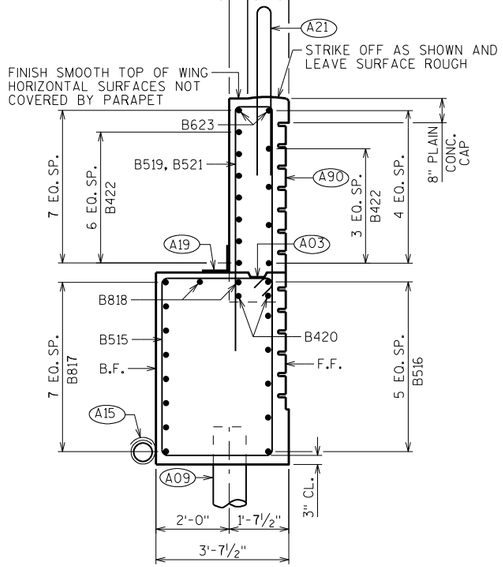
BILL OF BARS

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
B501		24	14'-2"	X		BODY-STIRRUPS
B402		6	2'-3"			PILES-2 PER BODY PILE
B1003		7	17'-11"			BODY-HORIZONTAL-B.F.
B604		18	10'-9"			BODY-HORIZONTAL
B405		3	28'-0"	X		PILES-1 PER BODY PILE
B406		6	3'-6"	X		BODY-VERTICAL-BETWEEN BEAM SEATS
B407		2	10'-0"			BODY-HORIZONTAL-BETWEEN BEAM SEATS
B508		13	15'-10"	X		WING 3-BOT.-VERTICAL-STIRRUP
B509		6	15'-1"			WING 3-BOT.-HORIZONTAL-F.F.
B510		7	14'-1"			WING 3-BOT.-HORIZONTAL-B.F.
B511		2	14'-5"			WING 3-BOT.-HORIZONTAL
B512	X	17	14'-1"	X		WING 3-TOP-VERTICAL
B413	X	11	11'-8"			WING 3-TOP-HORIZONTAL-F.F.&B.F.
B614	X	2	11'-8"			WING 3-TOP-HORIZONTAL-F.F.&B.F.
B515	X	14	16'-4"	X		WING 4-BOT.-VERTICAL-STIRRUP
B516	X	6	15'-11"			WING 4-BOT.-HORIZONTAL-F.F.
B817	X	8	18'-0"			WING 4-BOT.-HORIZONTAL-B.F.
B818	X	2	16'-6"			WING 4-BOT.-HORIZONTAL
B519	X	19	14'-1"	X		WING 4-TOP-VERTICAL
B420	X	2	7'-9"			WING 4-TOP-HORIZONTAL-F.F&B.F
B521	X	9	11'-5"	X		WING 4-TOP-VERTICAL
B422	X	11	19'-8"			WING 4-TOP-HORIZONTAL-F.F.&B.F.
B623	X	2	19'-8"			WING 4-TOP-HORIZONTAL-F.F.&B.F.



WING 4 ELEVATION



SECTION THRU WING 4

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A09) SUPPORT ABUTMENT ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 70'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

(A90) ARCHITECTURAL SURFACE TREATMENT. FOR ADDITIONAL DETAILS SEE "AESTHETIC DETAILS" SHEET.

STATE PROJECT NUMBER

1177-11-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

WEST ABUTMENT DETAILS

SHEET 7

76

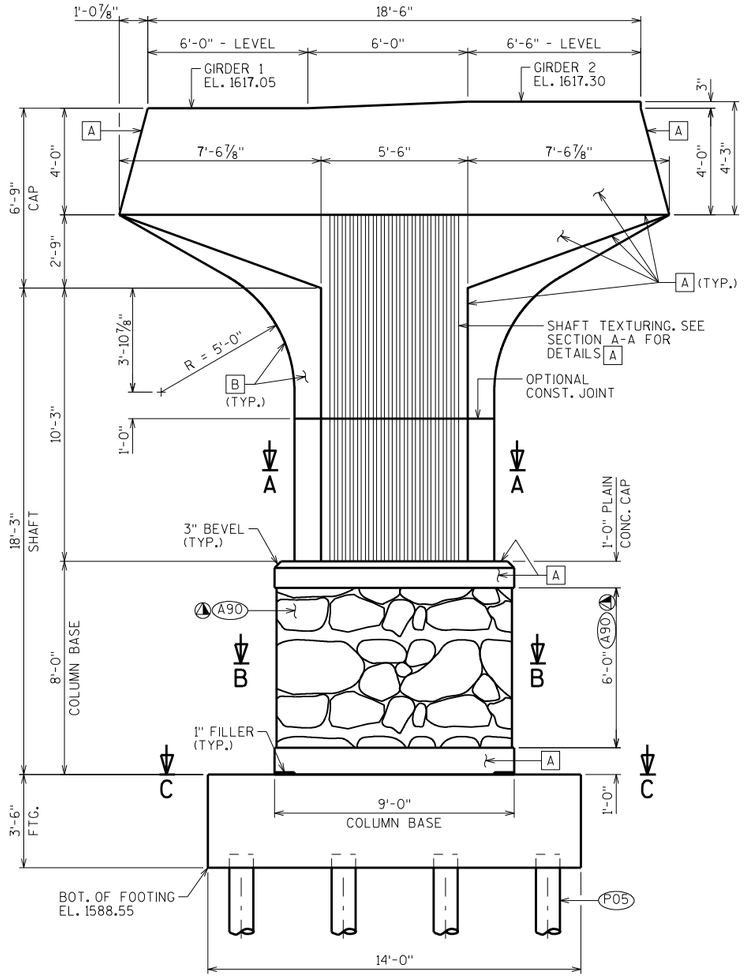
SCALE = 2

8

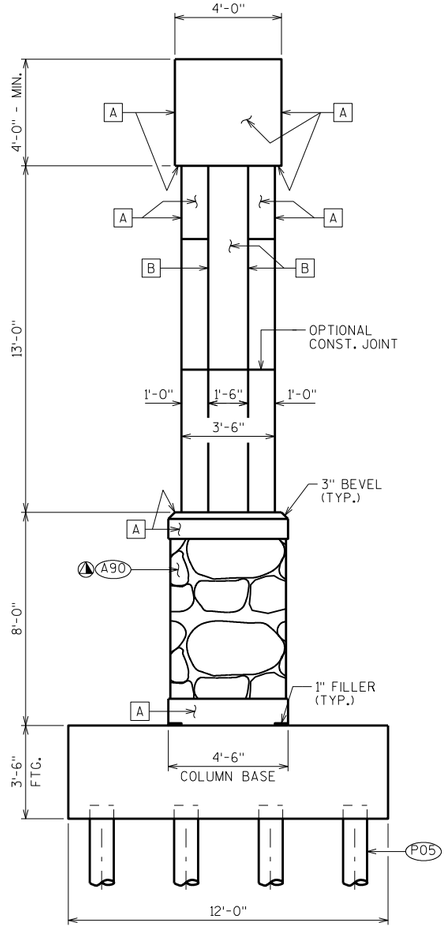
8

STATE PROJECT NUMBER

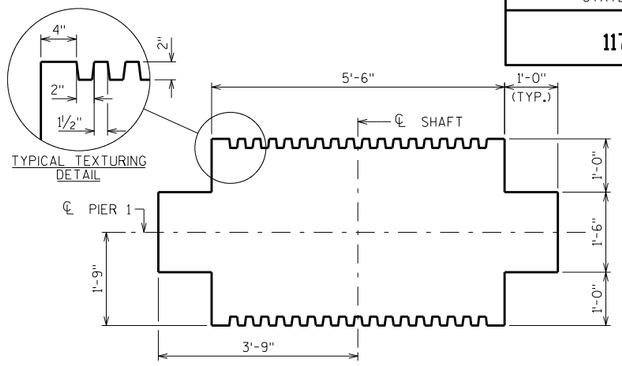
1177-11-71



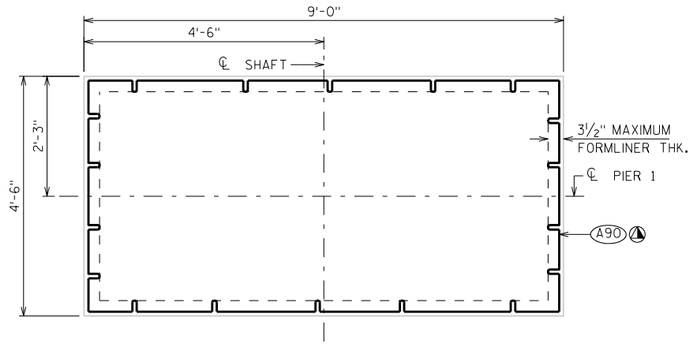
ELEVATION
(LOOKING UPSTATION)



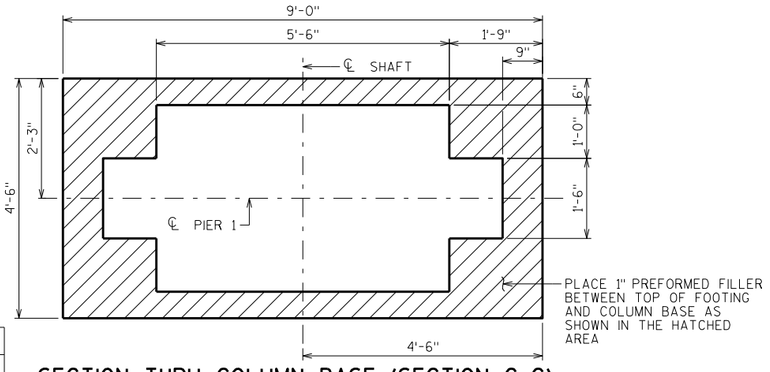
SIDE ELEVATION



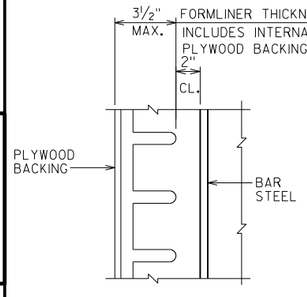
SECTION THRU COLUMN (SECTION A-A)



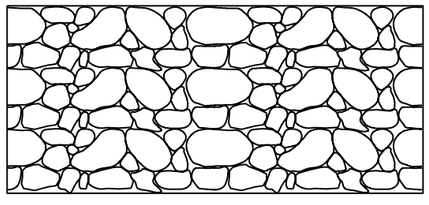
SECTION THRU COLUMN BASE (SECTION B-B)



SECTION THRU COLUMN BASE (SECTION C-C)



SECTION THRU FORMLINER



FIELD STONE - RANDOM SIZES BETWEEN 6" & 24"
MAX. RELIEF = 2½"

PIER FORMLINER NOTES:

FORMLINER COURSING ON PIERS SHALL BE LEVEL.

THE FORMLINER COURSING ON ALL FACES OF EACH COLUMN SHALL BE VERTICALLY ALIGNED.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.

FORMLINER DETAILS

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR	PIER SHAFT & CAP	ALL VERTICAL AND HORIZONTAL SURFACES, EXCEPT THE TOP OF PIER CAP AND AS NOTED FOR ACCENT COLORS
		PIER COLUMN BASE	ALL VERTICAL AND HORIZONTAL SURFACES NOT RECEIVING ARCHITECTURAL SURFACE TREATMENT
B	ACCENT COLOR #1	PIER SHAFT - SIDES	ALL VERTICAL AND HORIZONTAL SURFACES AS SHOWN ABOVE

BASE COLOR : FEDERAL COLOR NUMBER 30122
ACCENT COLOR #1: FEDERAL COLOR NUMBER 36642

(A90) ALL ARCHITECTURAL SURFACE TREATMENT AREAS SHALL BE STAINED IN A RANDOMLY MIXED COLOR ARRANGEMENT TO ACHIEVE A TEXTURED LOOK AS DIRECTED BY THE ENGINEER BY APPLYING A MULTI-COLOR STAIN USING FEDERAL COLOR NO. 36642 AS THE BASE COLOR, FEDERAL COLOR NOS. 33722, 31158, & 36134 AS THE ACCENT COLORS, & FEDERAL COLOR NO. 36306 AS THE JOINT COLOR. THE INTENT IS TO MATCH THE LOOK OF THE MULTI-COLOR STAIN ON THE 4TH ST. BRIDGE (B-35-154) OVER LAKE MOHAWKSIN/THE WISCONSIN RIVER IN THE CITY OF TOMAHAWK.

(P05) SUPPORT PIER ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A90) ARCHITECTURAL SURFACE TREATMENT. SEE FORMLINER DETAILS ON THIS SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

PIER 1

SHEET 8

77

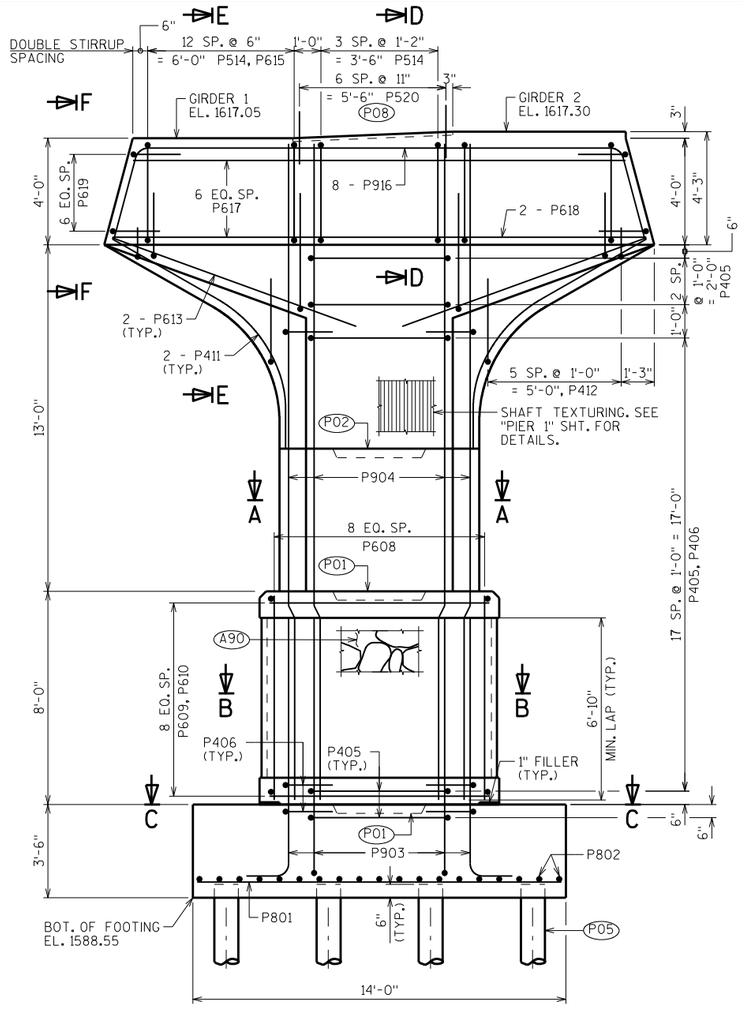
SCALE = 2.75

8

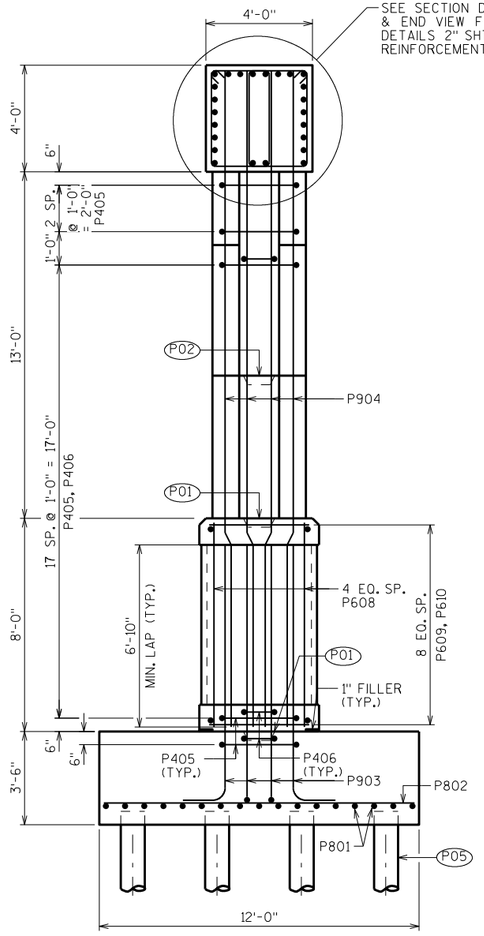
8

STATE PROJECT NUMBER

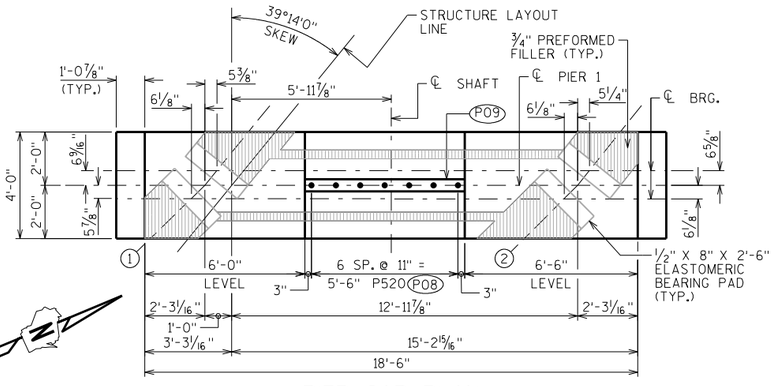
1177-11-71



ELEVATION
(LOOKING UPSTATION)



END VIEW



PIER CAP PLAN

(P01) KEYED CONST. JOINT FORMED BY BEVELED KEYWAY 4" DEEP X 1'-2" WIDE X 3'-6" LONG. EXPOSED EDGES OF CONST. JOINT SHALL BE FLUSH AND NOT BEVELED.

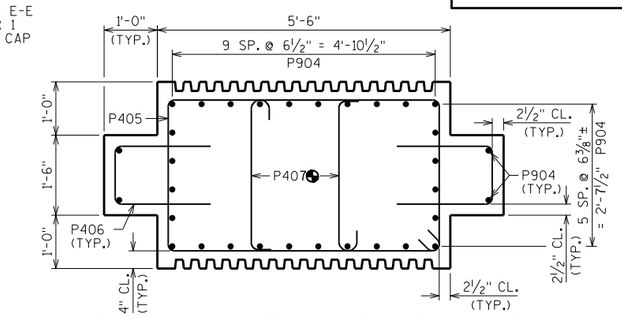
(P02) OPTIONAL KEYED CONST. JOINT FORMED BY BEVELED KEYWAY 4" DEEP X 1'-2" WIDE X 3'-6" LONG. EXPOSED EDGES OF CONST. JOINT SHALL BE FLUSH AND NOT BEVELED.

(P05) SUPPORT PIER ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

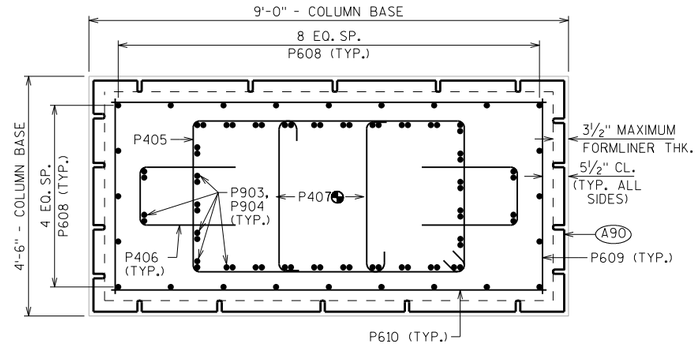
(P08) BARS @ 11" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

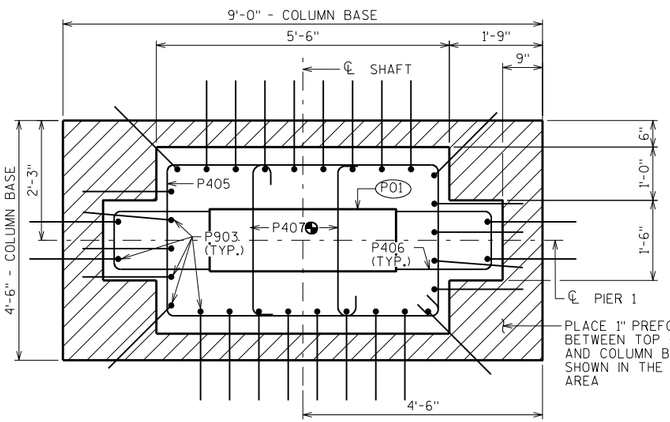
(A90) ARCHITECTURAL SURFACE TREATMENT. FOR ADDITIONAL DETAILS SEE "PIER 1" SHT.



SECTION THRU SHAFT (SECTION A-A)



SECTION THRU COLUMN BASE (SECTION B-B)



SECTION THRU COLUMN BASE (SECTION C-C)

ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

PIER 1 DETAILS 1

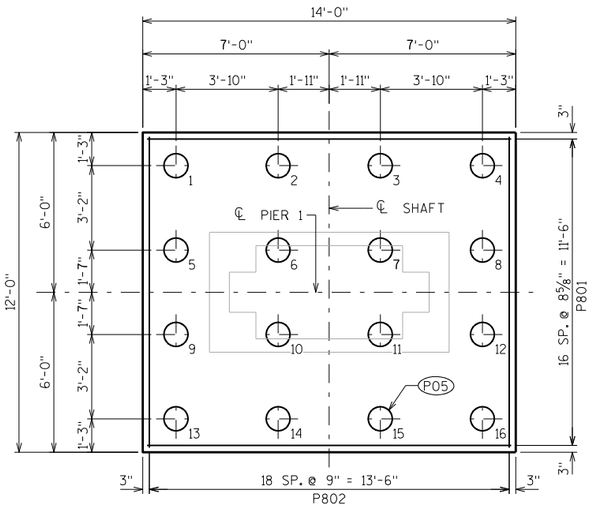
SHEET 9

78

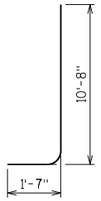
SCALE = 2.75

8

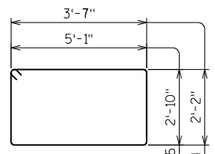
8



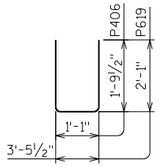
PILE/FOOTING PLAN



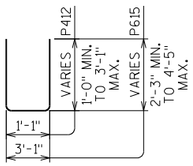
P903



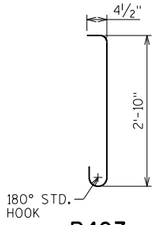
P405, P514



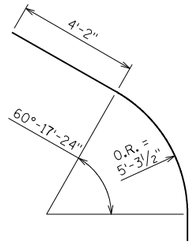
P406, P619



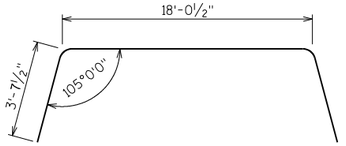
P412, P615



P407



P411



P916

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

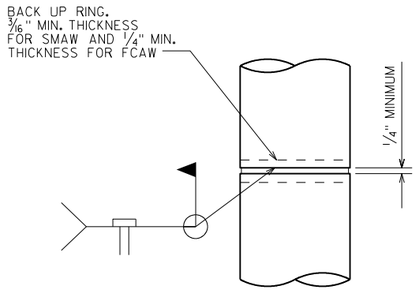
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	P801		17	13'-8"			FOOTING-HORIZ.-LONGIT.
	P802		19	11'-8"			FOOTING-HORIZ.-TRANS.
	P903	X	32	12'-0"	X		FOOTING/SHAFT-DOWELS-VERT.
	P904	X	32	24'-8"			SHAFT-VERT.
	P405	X	22	16'-4"	X		FOOTING/SHAFT-STIRRUPS-HORIZ.
	P406	X	38	4'-6"	X		FOOTING/SHAFT-TIES-HORIZ.
	P407	X	44	3'-8"	X		FOOTING/SHAFT-TIES-HORIZ.
	P608	X	24	7'-7"			COLUMN BASE-SIDES&ENDS-VERT.
	P609	X	18	3'-7"			COLUMN BASE-ENDS-HORIZ.
	P610	X	18	8'-1"			COLUMN BASE-SIDES-HORIZ.
	P411	X	4	11'-0"	X		SHAFT/CAP-ENDS-VERT.
⚠	P412	X	12	5'-0"	X	X	SHAFT/CAP-ENDS-VERT.
	P613	X	4	9'-9"			CAP-BOTTOM-HORIZ.
	P514	X	60	12'-2"	X		CAP-STIRRUPS-VERT.
⚠	P615	X	26	9'-5"	X	X	CAP-TIES-VERT.
	P916	X	8	25'-0"	X		CAP-TOP-HORIZ.
⚠	P617	X	14	19'-3"		X	CAP-SIDES-HORIZ.
	P618	X	2	20'-0"			CAP-BOTTOM-HORIZ.
	P619	X	14	7'-4"	X		CAP-ENDS-HORIZ.
	P520	X	7	2'-0"			CAP-TOP-BTWN. BEAM SEATS-VERT.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

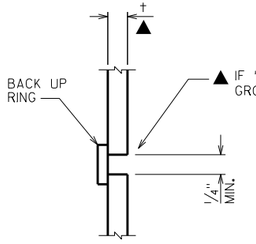
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
P412	2 SERIES OF 6	2'-11" TO 7'-1"
P615	2 SERIES OF 13	7'-3" TO 11'-7"
P617	2 SERIES OF 7	18'-6" TO 20'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

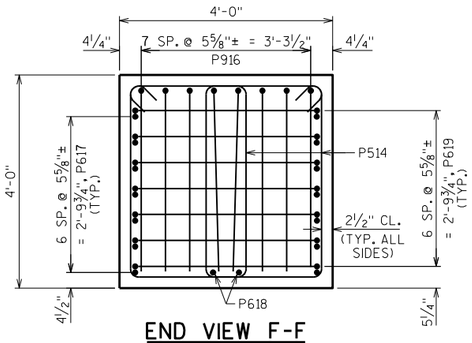


CAST-IN-PLACE 'PIPE PILE'

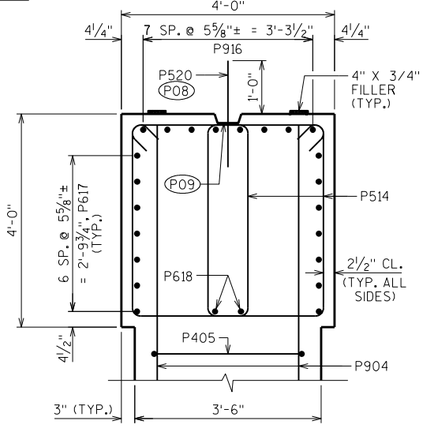


C.I.P. PILE WELD DETAIL

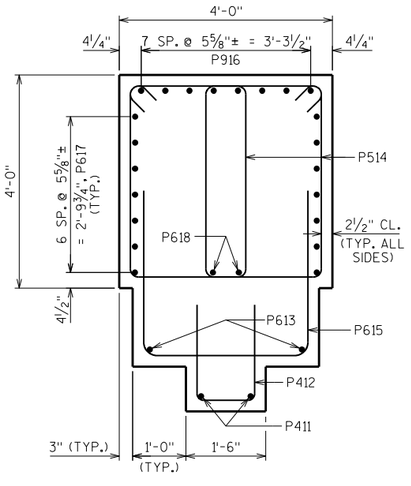
PILE DETAILS



END VIEW F-F



SECTION D-D



SECTION E-E

(P05) SUPPORT PIER ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(P08) BARS @ 11" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

PIER 1 DETAILS 2

SHEET 10

79

STATE PROJECT NUMBER

1177-11-71

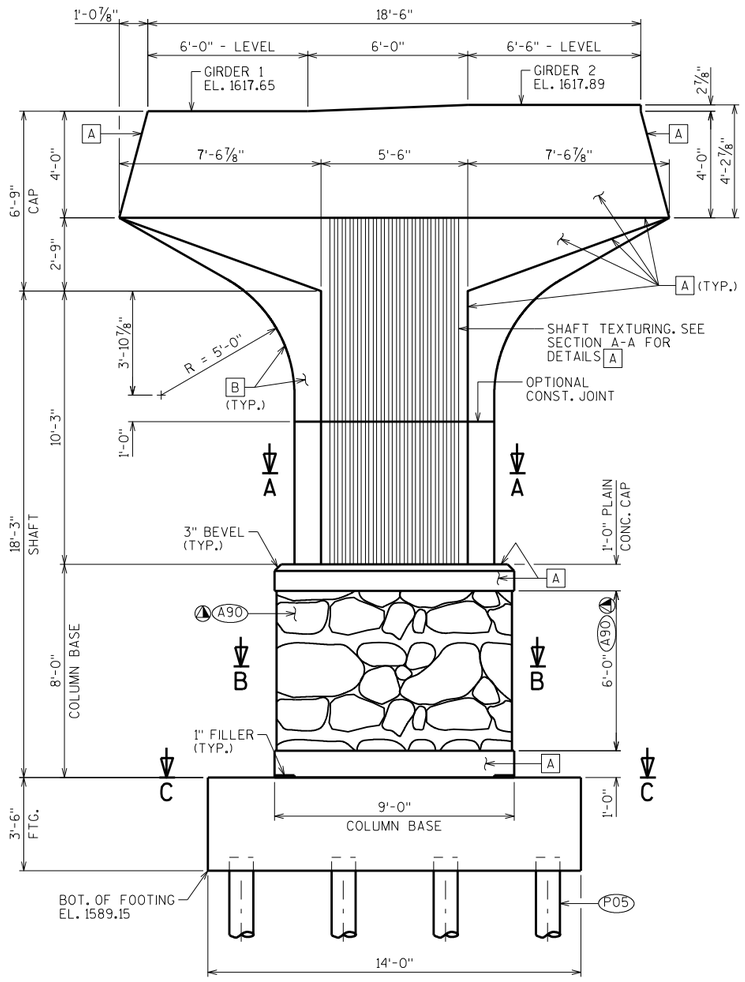
8

8

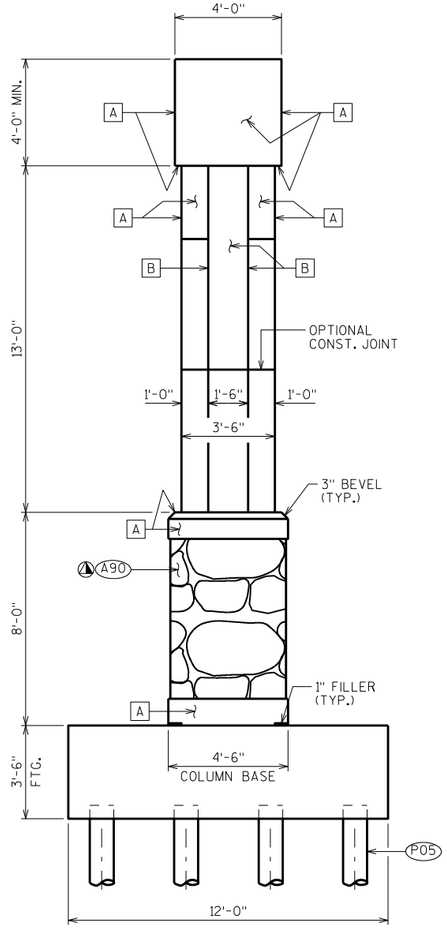
SCALE = 2.75

STATE PROJECT NUMBER

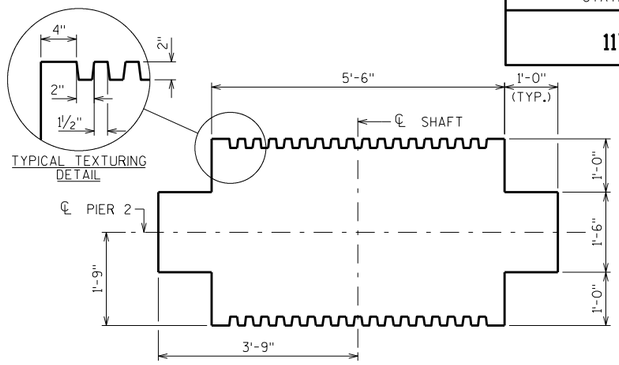
1177-11-71



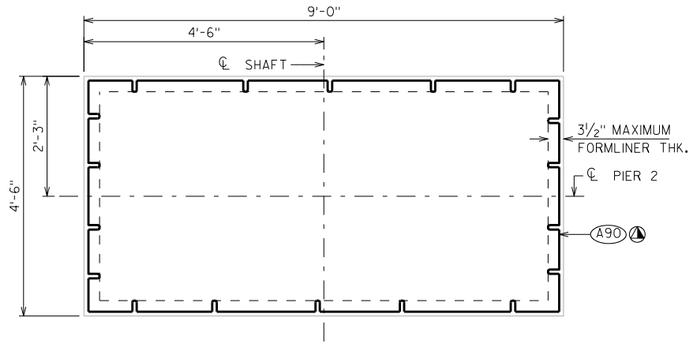
ELEVATION
(LOOKING UPSTATION)



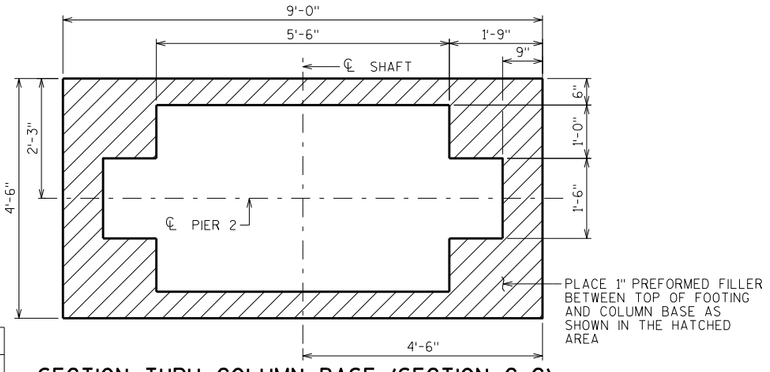
SIDE ELEVATION



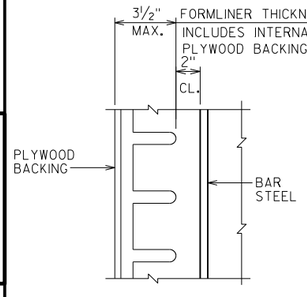
SECTION THRU COLUMN (SECTION A-A)



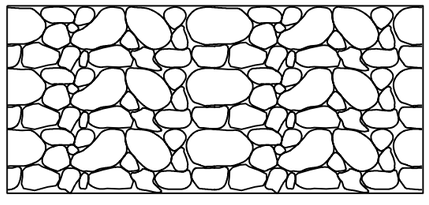
SECTION THRU COLUMN BASE (SECTION B-B)



SECTION THRU COLUMN BASE (SECTION C-C)



SECTION THRU FORMLINER



FIELD STONE - RANDOM
SIZES BETWEEN 6" & 24"
MAX. RELIEF = 2½"

PIER FORMLINER NOTES:

FORMLINER COURSING ON PIERS SHALL BE LEVEL.

THE FORMLINER COURSING ON ALL FACES OF EACH COLUMN SHALL BE VERTICALLY ALIGNED.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.

FORMLINER DETAILS

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR	PIER SHAFT & CAP	ALL VERTICAL AND HORIZONTAL SURFACES, EXCEPT THE TOP OF PIER CAP AND AS NOTED FOR ACCENT COLORS
		PIER COLUMN BASE	ALL VERTICAL AND HORIZONTAL SURFACES NOT RECEIVING ARCHITECTURAL SURFACE TREATMENT
B	ACCENT COLOR #1	PIER SHAFT - SIDES	ALL VERTICAL AND HORIZONTAL SURFACES AS SHOWN ABOVE

BASE COLOR : FEDERAL COLOR NUMBER 30122
ACCENT COLOR #1: FEDERAL COLOR NUMBER 36642

(A90) ALL ARCHITECTURAL SURFACE TREATMENT AREAS SHALL BE STAINED IN A RANDOMLY MIXED COLOR ARRANGEMENT TO ACHIEVE A TEXTURED LOOK AS DIRECTED BY THE ENGINEER BY APPLYING A MULTI-COLOR STAIN USING FEDERAL COLOR NO. 36642 AS THE BASE COLOR, FEDERAL COLOR NOS. 33722, 31158, & 36134 AS THE ACCENT COLORS, & FEDERAL COLOR NO. 36306 AS THE JOINT COLOR. THE INTENT IS TO MATCH THE LOOK OF THE MULTI-COLOR STAIN ON THE 4TH ST. BRIDGE (B-35-154) OVER LAKE MOHAWKSIN/THE WISCONSIN RIVER IN THE CITY OF TOMAHAWK.

(P05) SUPPORT PIER ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A90) ARCHITECTURAL SURFACE TREATMENT. SEE FORMLINER DETAILS ON THIS SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

PIER 2

SHEET 11

80

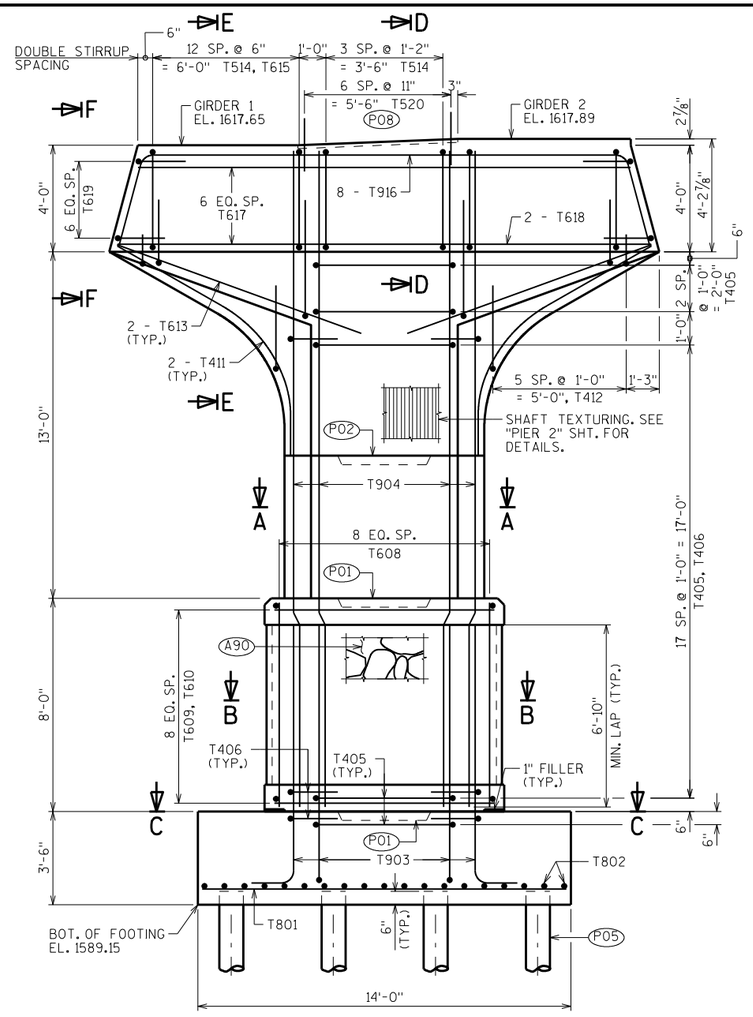
SCALE = 2.75

8

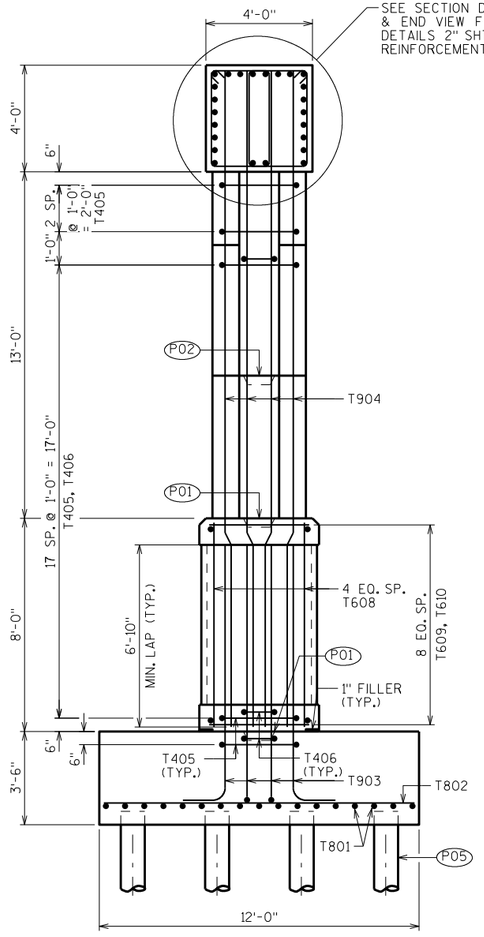
8

STATE PROJECT NUMBER

1177-11-71



ELEVATION
(LOOKING UPSTATION)



END VIEW

PIER CAP PLAN

(P01) KEYED CONST. JOINT FORMED BY BEVELED KEYWAY 4" DEEP X 1'-2" WIDE X 3'-6" LONG. EXPOSED EDGES OF CONST. JOINT SHALL BE FLUSH AND NOT BEVELED.

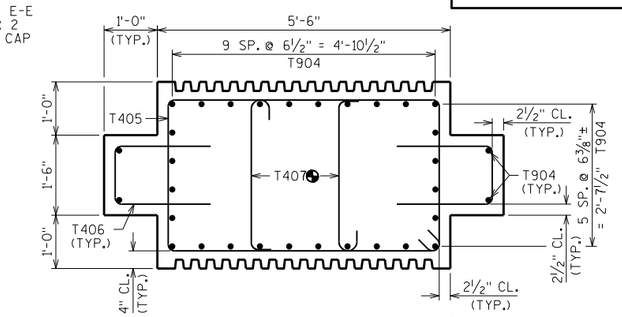
(P02) OPTIONAL KEYED CONST. JOINT FORMED BY BEVELED KEYWAY 4" DEEP X 1'-2" WIDE X 3'-6" LONG. EXPOSED EDGES OF CONST. JOINT SHALL BE FLUSH AND NOT BEVELED.

(P05) SUPPORT PIER ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

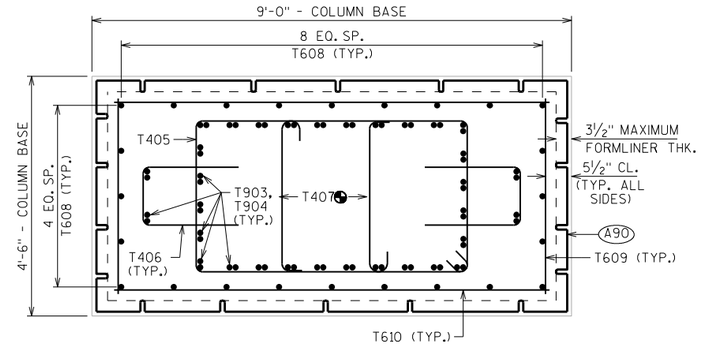
(P08) BARS @ 11" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

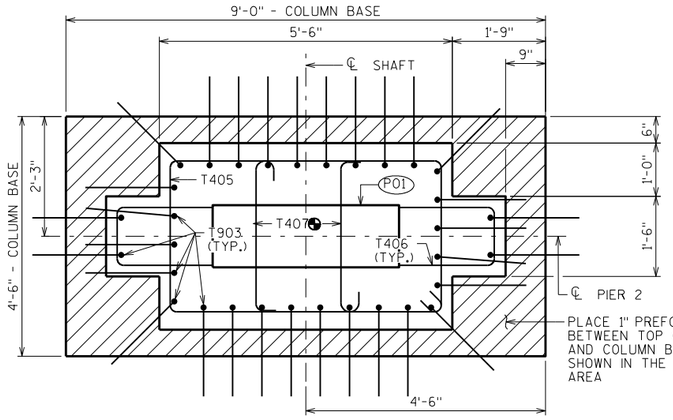
(A90) ARCHITECTURAL SURFACE TREATMENT. FOR ADDITIONAL DETAILS SEE "PIER 2" SHT.



SECTION THRU SHAFT (SECTION A-A)



SECTION THRU COLUMN BASE (SECTION B-B)



SECTION THRU COLUMN BASE (SECTION C-C)

◔ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

PIER 2 DETAILS 1

SHEET 12

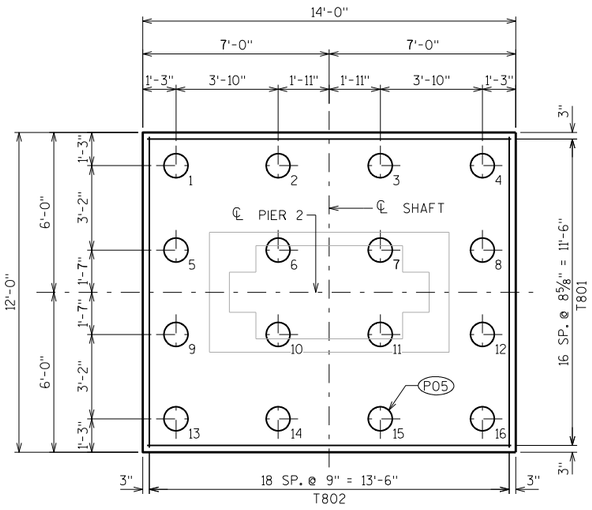
81

8

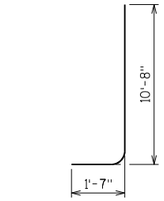
8

SCALE = 2.75

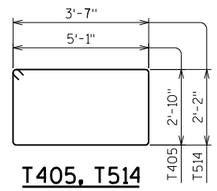
STATE PROJECT NUMBER
1177-11-71



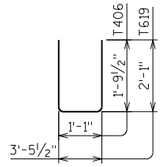
PILE/FOOTING PLAN



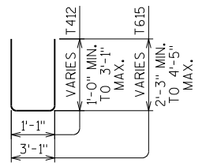
T903



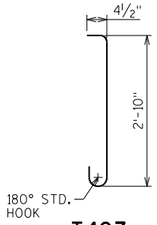
T405, T514



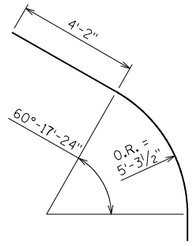
T406, T619



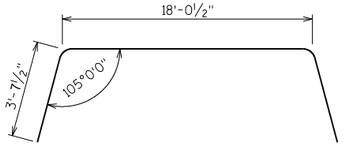
T412, T615



T407



T411



T916

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

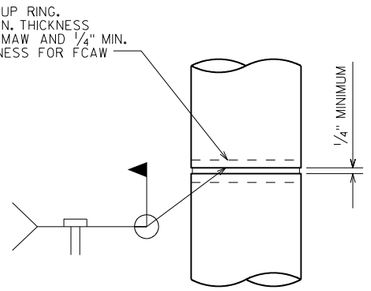
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	T801		17	13'-8"			FOOTING-HORIZ.-LONGIT.
	T802		19	11'-8"			FOOTING-HORIZ.-TRANS.
	T903	X	32	12'-0"	X		FOOTING/SHAFT-DOWELS-VERT.
	T904	X	32	24'-8"			SHAFT-VERT.
	T405	X	22	16'-4"	X		FOOTING/SHAFT-STIRRUPS-HORIZ.
	T406	X	38	4'-6"	X		FOOTING/SHAFT-TIES-HORIZ.
	T407	X	44	3'-8"	X		FOOTING/SHAFT-TIES-HORIZ.
	T608	X	24	7'-7"			COLUMN BASE-SIDES&ENDS-VERT.
	T609	X	18	3'-7"			COLUMN BASE-ENDS-HORIZ.
	T610	X	18	8'-1"			COLUMN BASE-SIDES-HORIZ.
	T411	X	4	11'-0"	X		SHAFT/CAP-ENDS-VERT.
⚠	T412	X	12	5'-0"	X	X	SHAFT/CAP-ENDS-VERT.
	T613	X	4	9'-9"			CAP-BOTTOM-HORIZ.
	T514	X	60	12'-2"	X		CAP-STIRRUPS-VERT.
⚠	T615	X	26	9'-5"	X	X	CAP-TIES-VERT.
	T916	X	8	25'-0"	X		CAP-TOP-HORIZ.
⚠	T617	X	14	19'-3"		X	CAP-SIDES-HORIZ.
	T618	X	2	20'-0"			CAP-BOTTOM-HORIZ.
	T619	X	14	7'-4"	X		CAP-ENDS-HORIZ.
	T520	X	7	2'-0"			CAP-TOP-BTWN. BEAM SEATS-VERT.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

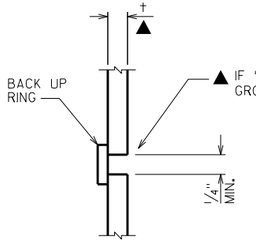
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
T412	2 SERIES OF 6	2'-11" TO 7'-1"
T615	2 SERIES OF 13	7'-3" TO 11'-7"
T617	2 SERIES OF 7	18'-6" TO 20'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

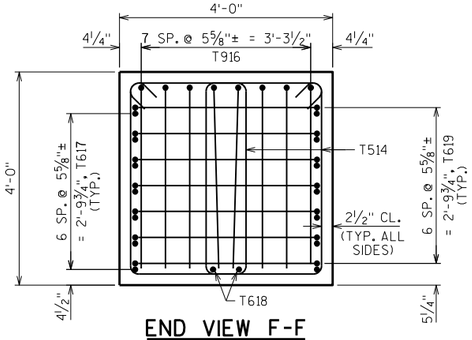


CAST-IN-PLACE 'PIPE PILE'

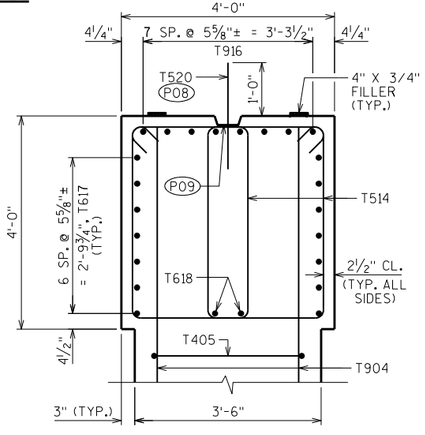


C.I.P. PILE WELD DETAIL

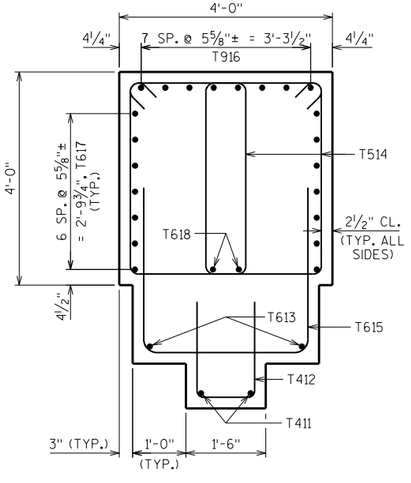
PILE DETAILS



END VIEW F-F



SECTION D-D



SECTION E-E

P05 SUPPORT PIER ON 10 3/4" DIA. CAST-IN-PLACE CONCRETE PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

P08 BARS @ 11" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

PIER 2 DETAILS 2

SHEET 13

82

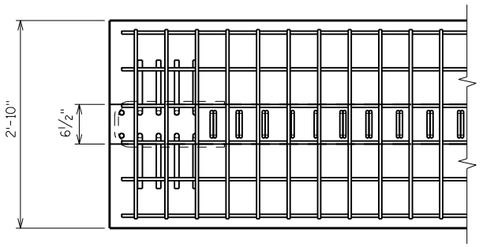
SCALE = 2.75

8

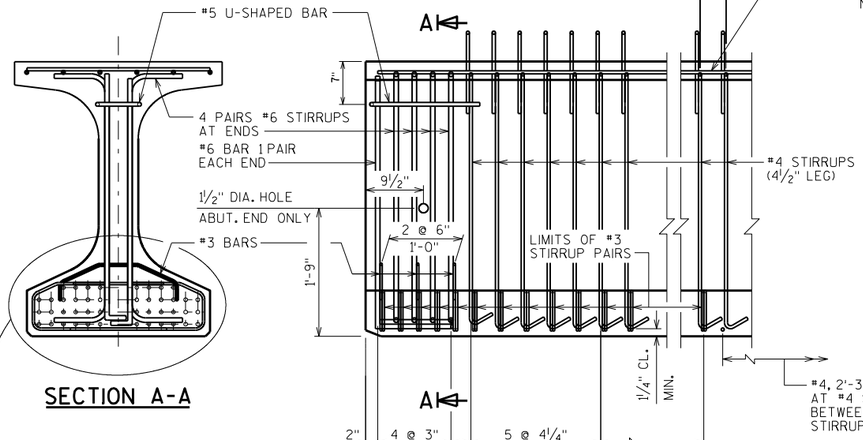
8

STATE PROJECT NUMBER

1177-11-71



TOP FLANGE

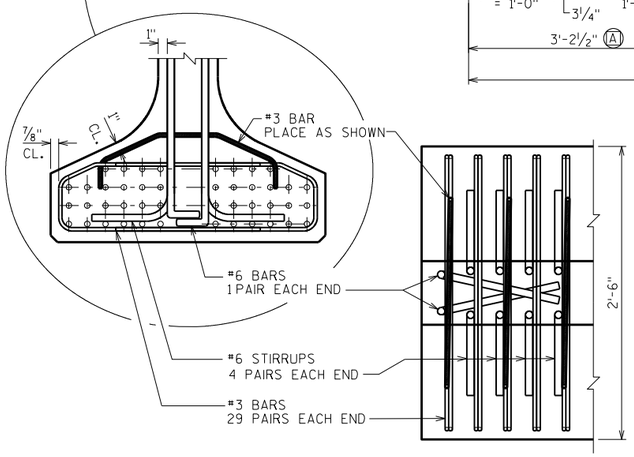


SECTION A-A

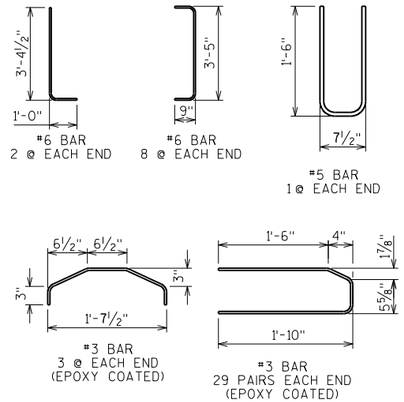
SIDE VIEW & TYPICAL SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



BOTTOM FLANGE



NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" 1ST ⅓ OF GIRDER	"P" MID ⅓ OF GIRDER	"P" END ⅓ OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	1	74'-0½"	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.3	0.2	9,000	8.0	8.0	8.0	0.6							16	6,800
1	2	73'-2½"	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.3	0.1	9,000	8.0	8.0	8.0	0.6							16	6,800
2	1	113'-11"	1.0	1.8	2.5	3.0	3.1	3.0	2.5	1.8	1.0	9,000	8.0	8.0	8.0	0.6	38	6,800	40	13.75	16.75	5		
2	2	113'-1"	1.0	1.9	2.6	3.1	3.2	3.1	2.6	1.9	1.0	9,000	8.0	8.0	8.0	0.6	38	6,800	40	13.75	16.75	5		
3	1	59'-0½"	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	9,000	8.0	8.0	8.0	0.6							16	6,800
3	2	58'-9"	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	9,000	8.0	8.0	8.0	0.6							16	6,800

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

45W" PRESTRESSED GIRDER DETAILS 1

SHEET 14

83

SCALE = 1

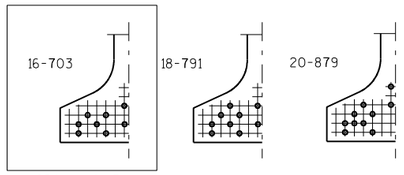
7-13
G45W

8 18 9 5 12

8

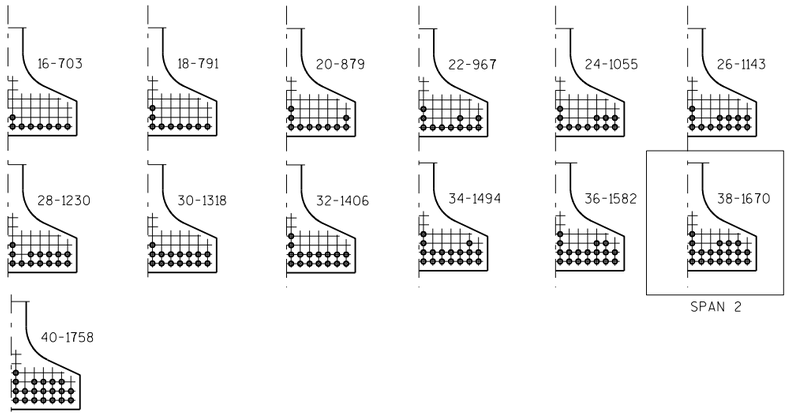
STATE PROJECT NUMBER

1177-11-71



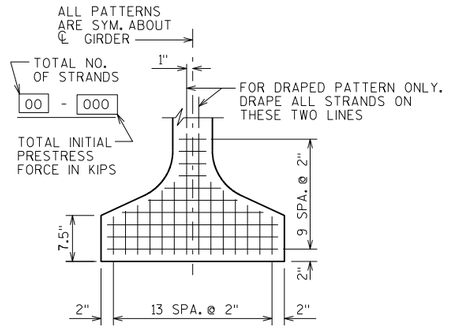
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS

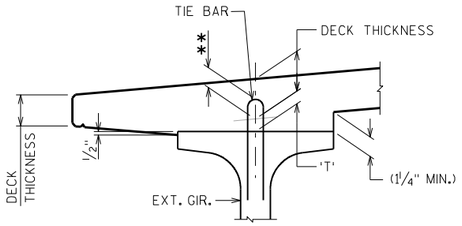


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



TYP. STRAND PATTERN



DECK HAUNCH DETAIL

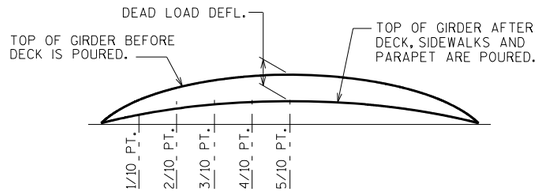
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

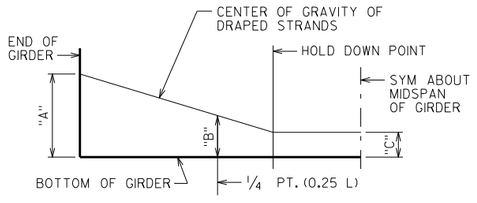
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.5" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	0.91
2	4.34
3	0.74

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

45W" PRESTRESSED GIRDER DETAILS 2

SHEET 15

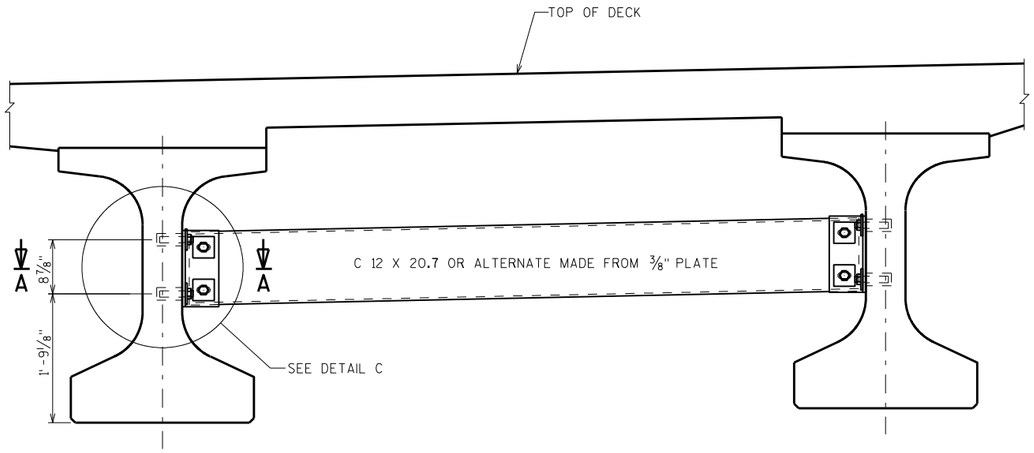
84

G45W
7-13

SCALE =

STATE PROJECT NUMBER

1177-11-71



PART TRANSVERSE SECTION AT DIAPHRAGM

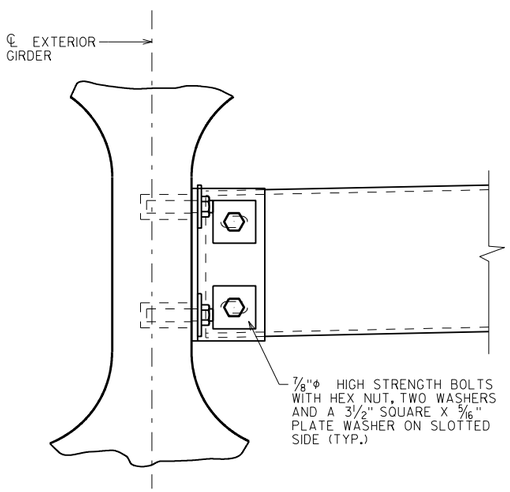
NOTES

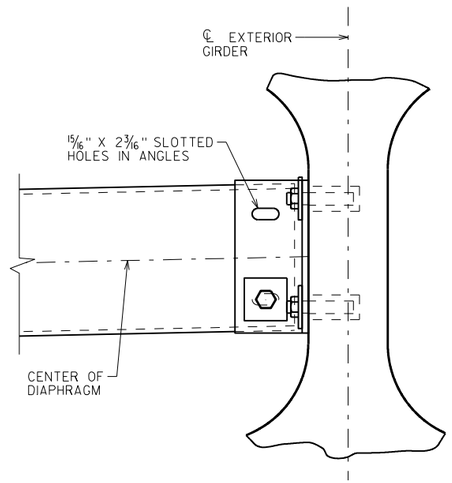
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-43-60", EACH.

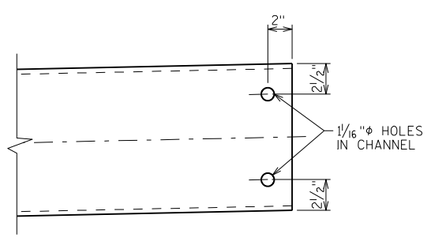
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

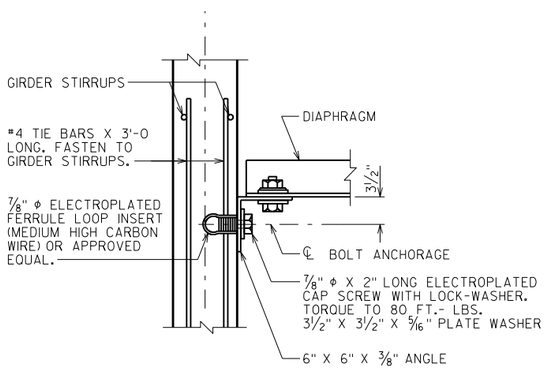
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.





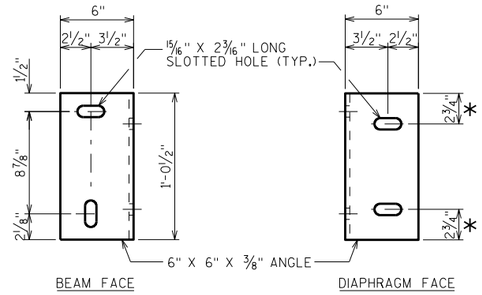


DETAIL C



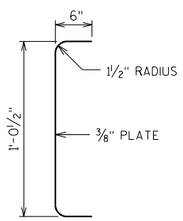
SECTION A-A

(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

* 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY JPH | PLANS CK'D. EMK

STEEL DIAPHRAGM

SHEET 16

85

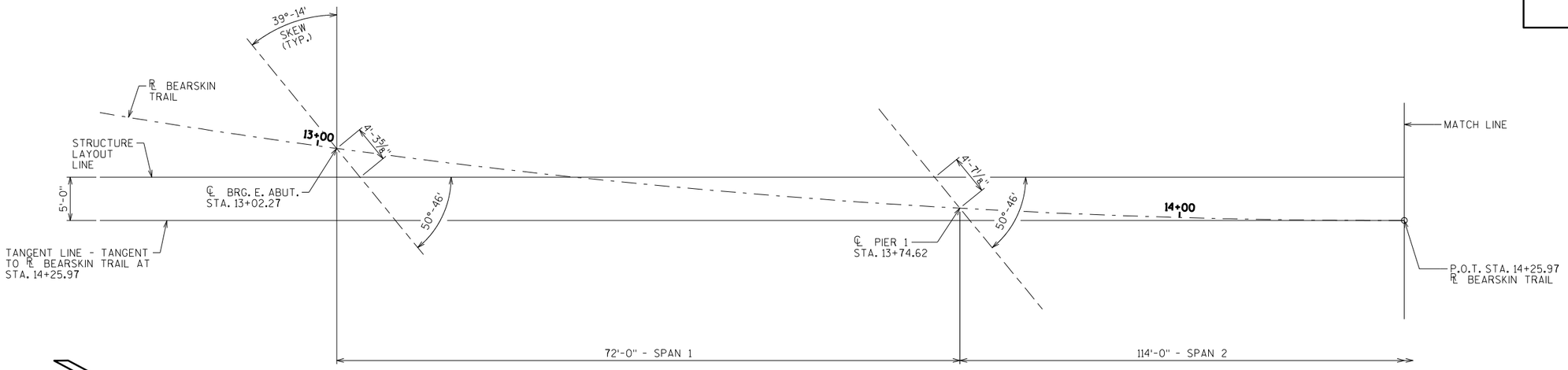
8

8

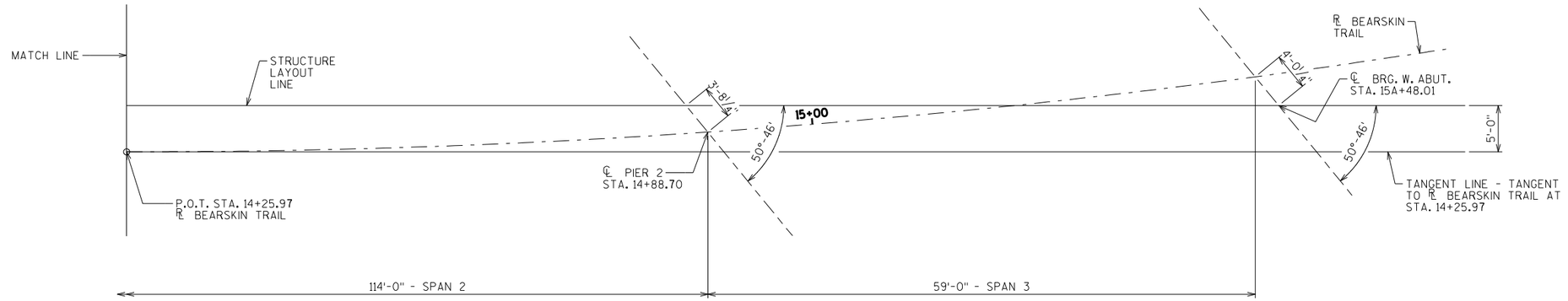
SCALE = 1

STATE PROJECT NUMBER

1177-11-71



STRUCTURE LAYOUT



STRUCTURE LAYOUT

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

LAYOUT DETAILS

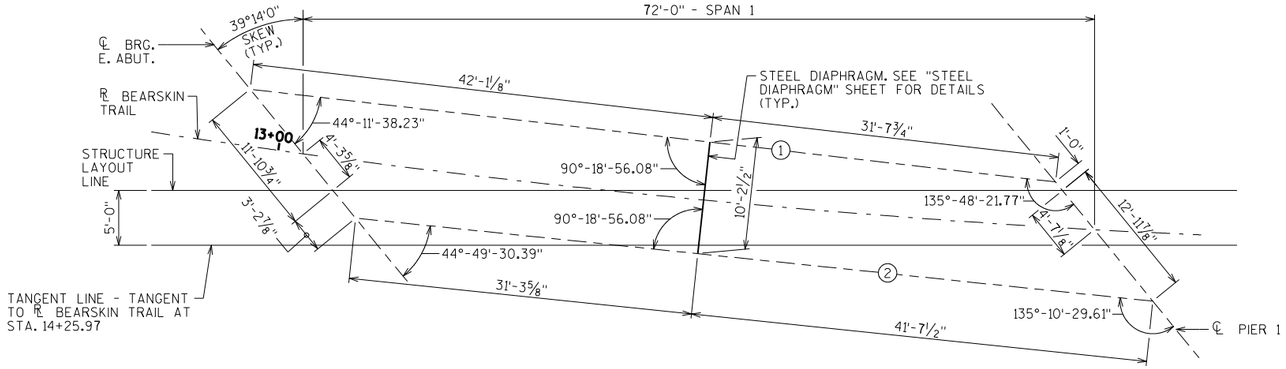
SHEET 17

86

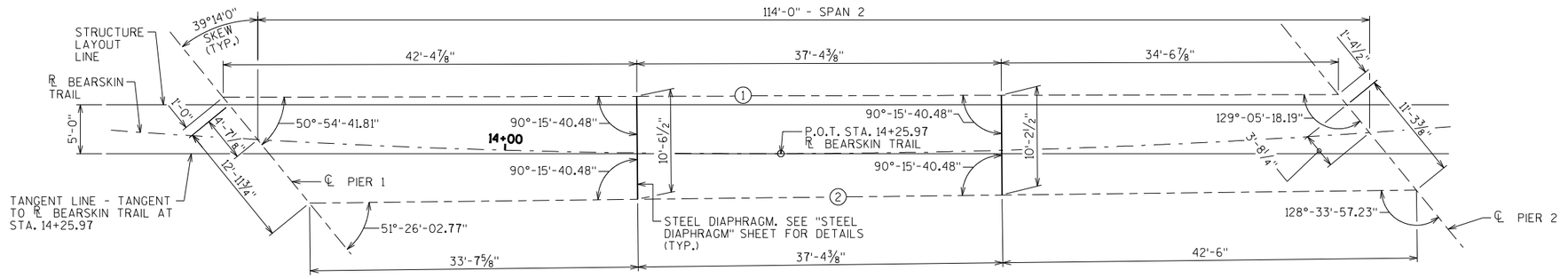
SCALE = 6.667

STATE PROJECT NUMBER
1177-11-71

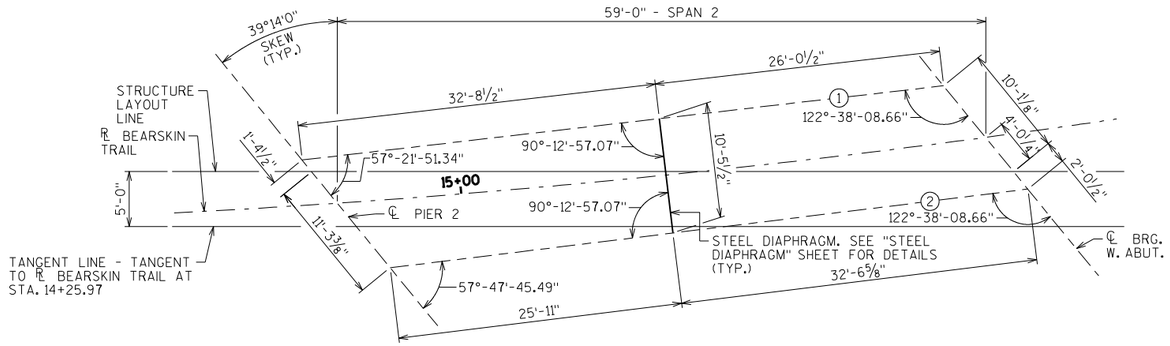
◯ INDICATES GIRDER NUMBER



FRAMING PLAN - SPAN 1
SHOWING GIRDER & DIAPH. SPA.



FRAMING PLAN - SPAN 2
SHOWING GIRDER & DIAPH. SPA.



FRAMING PLAN - SPAN 3
SHOWING GIRDER & DIAPH. SPA.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

FRAMING PLAN

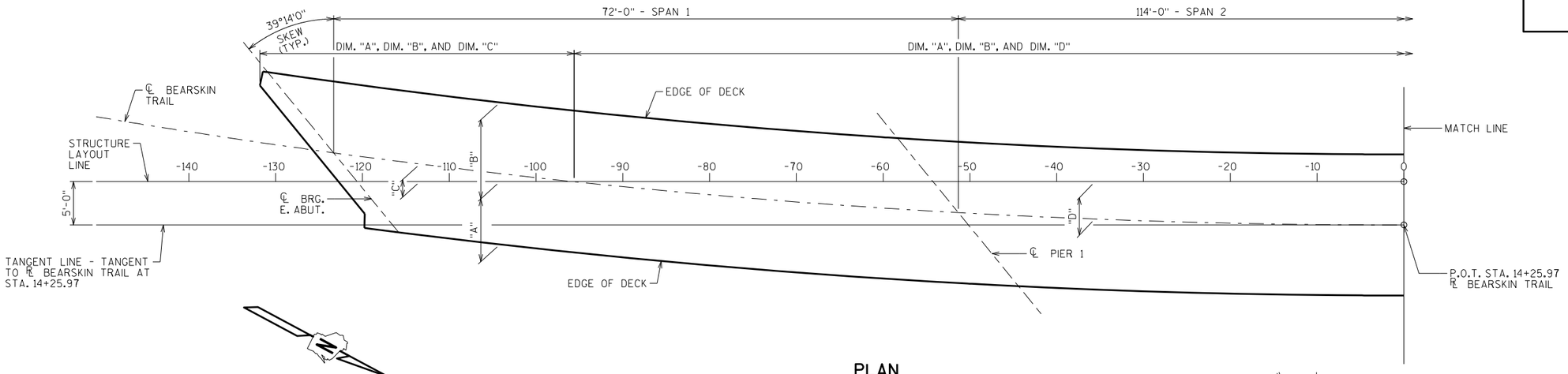
SHEET 18

87

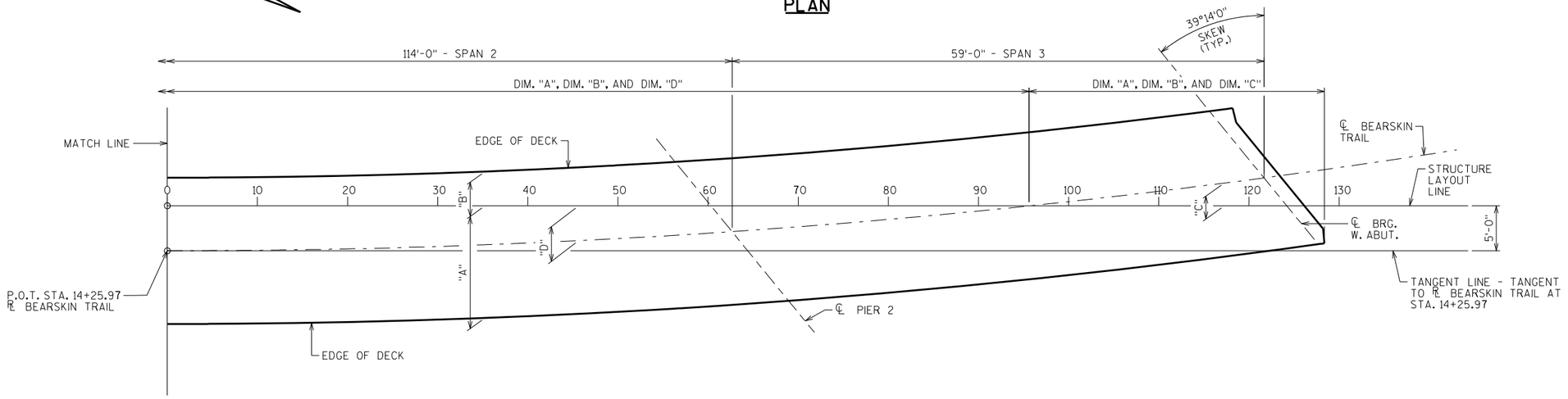
SCALE = 6.667

STATE PROJECT NUMBER

1177-11-71



PLAN



PLAN

TABLE OF LAYOUT LINE OFFSETS

LOCATION	"A"	"B"	"C"	"D"
-140	——	——	——	——
-130	——	12'-5⅝"	——	——
-120	——	11'-1"	2'-10⅝"	——
-110	6'-6¾"	9'-9¾"	1'-7½"	——
-100	7'-8⅜"	8'-7¾"	5⅝"	——
-90	8'-8⅞"	7'-7⅛"	——	6⅞"
-80	9'-7⅞"	6'-7⅞"	——	1'-6"
-70	10'-5⅝"	5'-9⅞"	——	2'-3⅞"
-60	11'-2⅛"	5'-1¼"	——	3'-0⅜"
-50	11'-9¼"	4'-6"	——	3'-7⅝"
-40	12'-3⅛"	4'-0⅛"	——	4'-1½"
-30	12'-7⅝"	3'-7½"	——	4'-6⅛"
-20	12'-10⅞"	3'-4⅛"	——	4'-9⅜"
-10	13'-0⅞"	3'-2⅛"	——	4'-11⅜"

NOTE: ALL DIMENSIONS ARE MEASURED NORMAL TO THE TANGENT LINE

TABLE OF LAYOUT LINE OFFSETS

LOCATION	"A"	"B"	"C"	"D"
0	13'-1½"	3'-1½"	——	5'-0"
10	13'-0⅞"	3'-2⅛"	——	4'-11⅜"
20	12'-10⅞"	3'-4⅛"	——	4'-9⅜"
30	12'-7⅝"	3'-7½"	——	4'-6⅛"
40	12'-3⅛"	4'-0⅛"	——	4'-1½"
50	11'-9¼"	4'-6"	——	3'-7⅝"
60	11'-2⅛"	5'-1¼"	——	3'-0⅜"
70	10'-5⅝"	5'-9⅞"	——	2'-3⅞"
80	9'-7⅞"	6'-7⅞"	——	1'-6"
90	8'-8⅞"	7'-7⅛"	——	6⅞"
100	7'-8⅜"	8'-7¾"	5⅝"	——
110	6'-6¾"	9'-9¾"	1'-7½"	——
120	5'-3⅝"	——	3'-1⅜"	——
130	——	——	——	——

NOTE: ALL DIMENSIONS ARE MEASURED NORMAL TO THE TANGENT LINE

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

LAYOUT LINE OFFSET PLAN

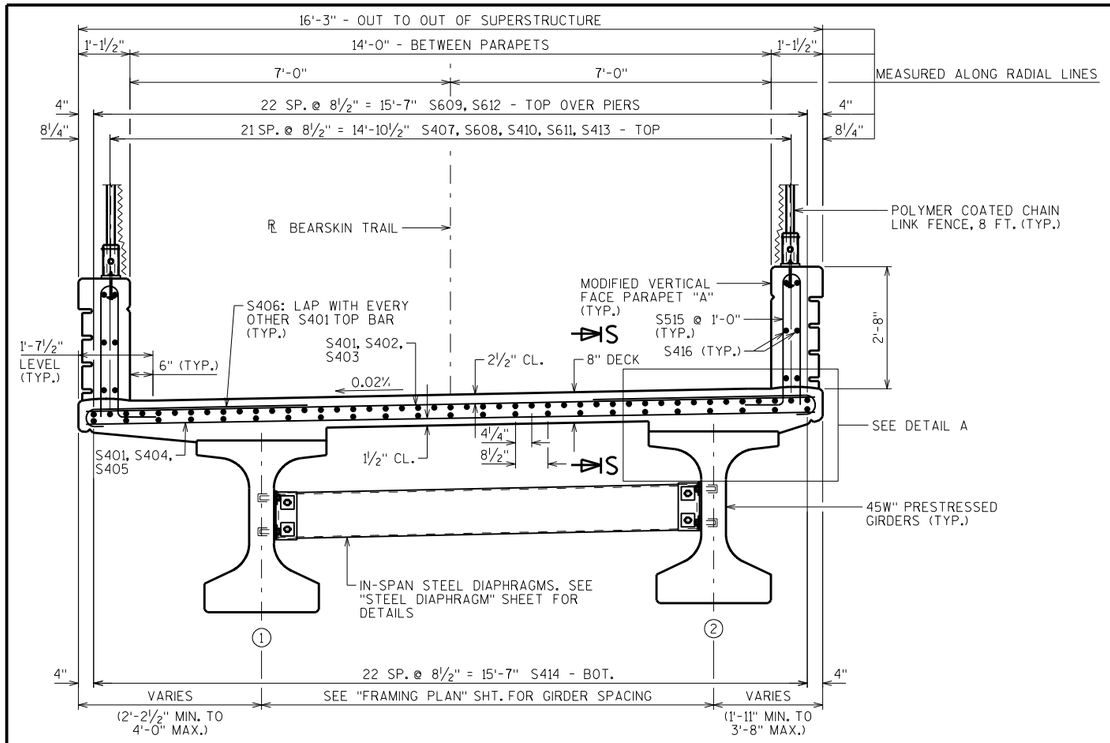
SHEET 19

88

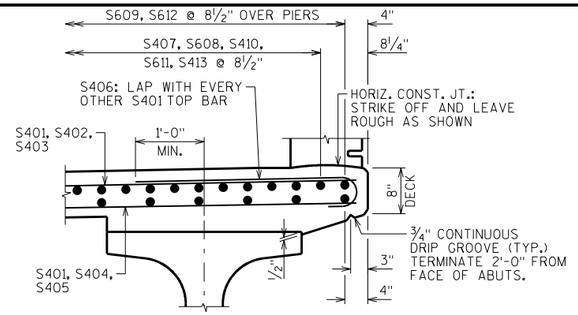
SCALE = 6.667

STATE PROJECT NUMBER

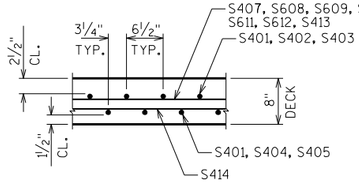
1177-11-71



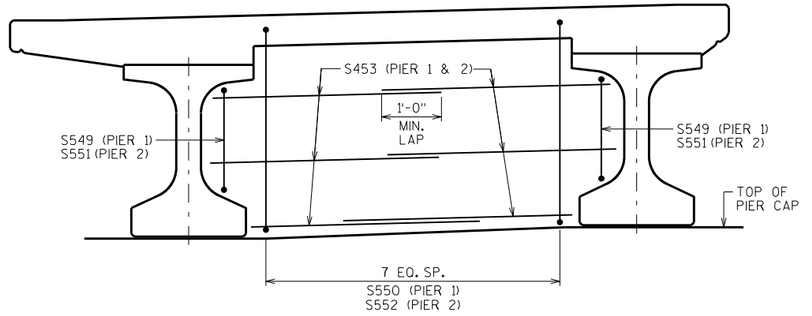
CROSS SECTION THRU BRIDGE



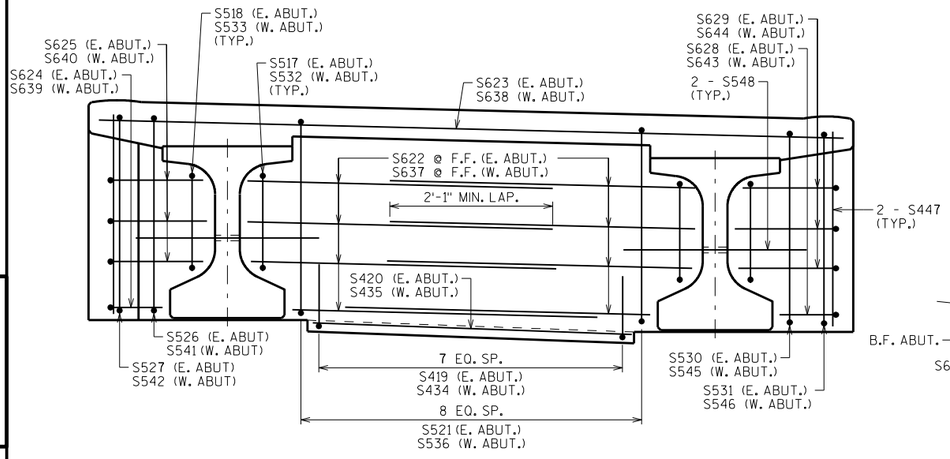
DETAIL A



SECTION S

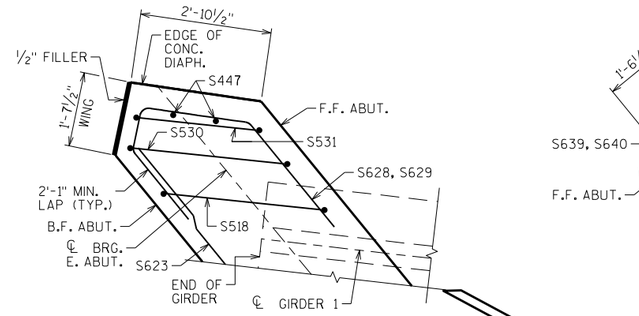


CROSS SECTION THRU PIER DIAPHRAGMS

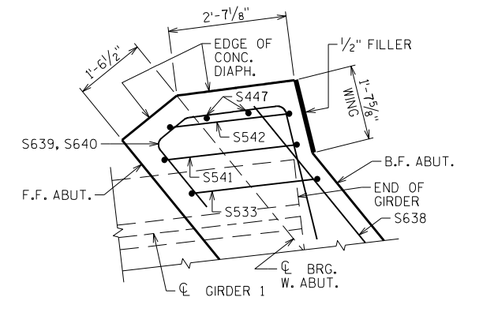


CROSS SECTION THRU ABUTMENT DIAPHRAGMS

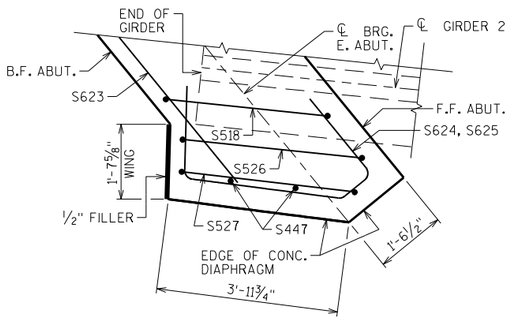
(EAST ABUTMENT SHOWN, WEST ABUTMENT IS SIMILAR)



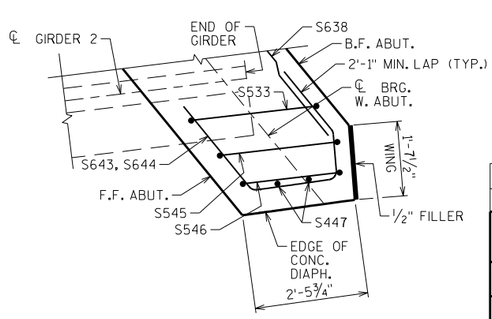
DIAPHRAGM CORNER DETAIL AT WING 2



DIAPHRAGM CORNER DETAIL AT WING 3



DIAPHRAGM CORNER DETAIL AT WING 1



DIAPHRAGM CORNER DETAIL AT WING 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

SUPERSTRUCTURE CROSS SECTION

SHEET 20

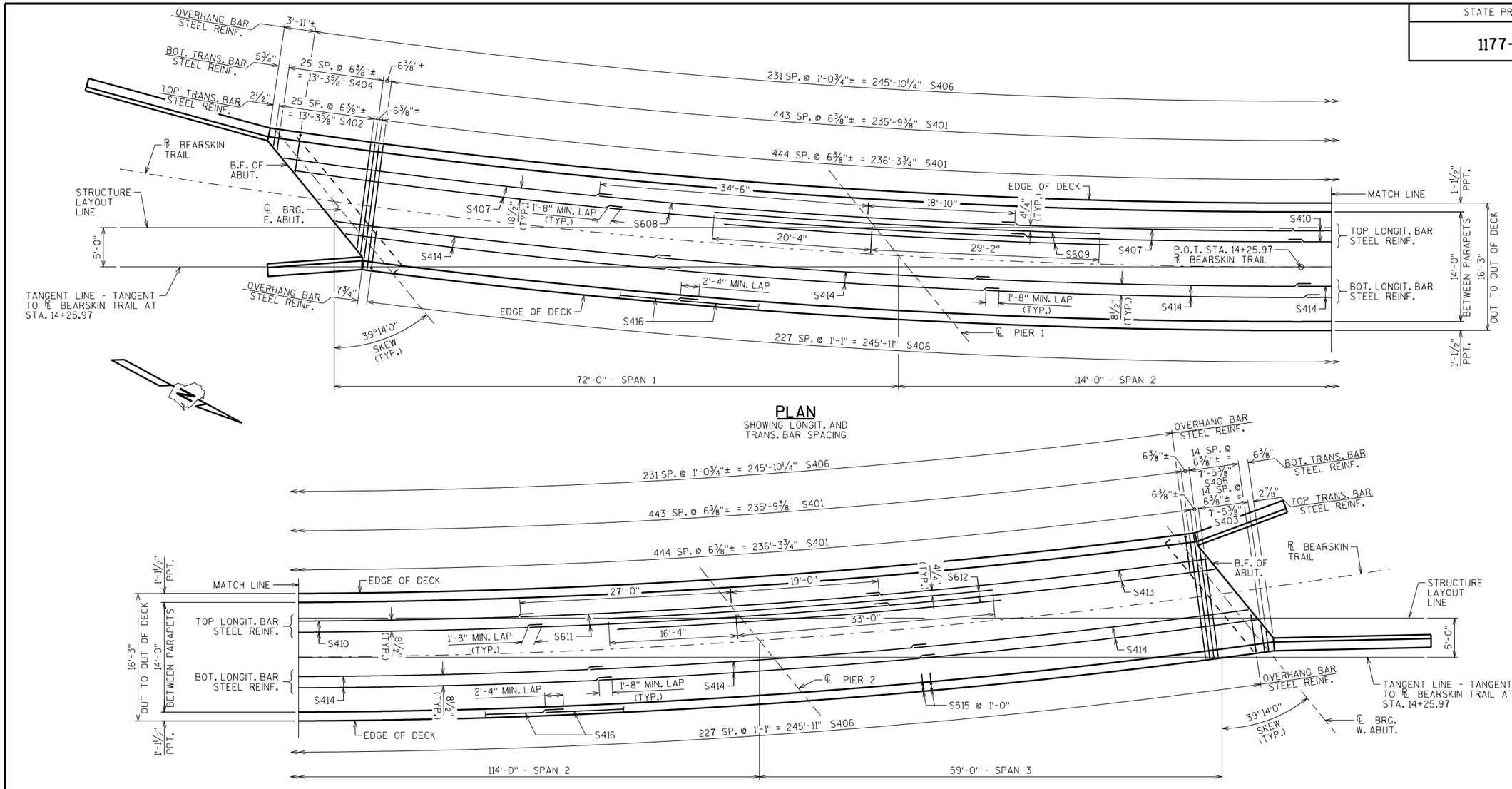
89

SCALE = 8

8

8

STATE PROJECT NUMBER
1177-11-71



PLAN
SHOWING LONGIT. AND TRANS. BAR SPACING

PLAN
SHOWING LONGIT. AND TRANS. BAR SPACING

TOP OF DECK ELEVATIONS

	℄ BRG. E. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2
LT. EOD	1621.44	1621.47	1621.51	1621.55	1621.59	1621.63	1621.67	1621.70	1621.74	1621.78	1621.82	1621.88	1621.94	1622.00	1622.06	1622.12	1622.18	1622.24	1622.30	1622.36	1622.42
GIRDER 1	1621.48	1621.51	1621.55	1621.58	1621.62	1621.66	1621.71	1621.75	1621.79	1621.84	1621.88	1621.93	1621.98	1622.03	1622.09	1622.14	1622.21	1622.27	1622.34	1622.41	1622.48
REF. LINE	1621.61	1621.65	1621.69	1621.72	1621.76	1621.80	1621.84	1621.87	1621.91	1621.95	1621.99	1622.05	1622.11	1622.17	1622.22	1622.28	1622.34	1622.40	1622.46	1622.52	1622.58
GIRDER 2	1621.74	1621.77	1621.81	1621.85	1621.88	1621.92	1621.96	1622.01	1622.05	1622.09	1622.14	1622.18	1622.23	1622.28	1622.34	1622.40	1622.46	1622.52	1622.58	1622.65	1622.72
RT. EOD	1621.79	1621.82	1621.86	1621.90	1621.93	1621.97	1622.01	1622.04	1622.08	1622.12	1622.16	1622.21	1622.27	1622.33	1622.39	1622.45	1622.51	1622.57	1622.62	1622.68	1622.74

	℄ PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. W. ABUT.
LT. EOD	1622.42	1622.45	1622.48	1622.51	1622.55	1622.58	1622.61	1622.64	1622.67	1622.70	1622.73
GIRDER 1	1622.48	1622.50	1622.53	1622.56	1622.58	1622.61	1622.64	1622.67	1622.70	1622.73	1622.77
REF. LINE	1622.58	1622.61	1622.64	1622.67	1622.70	1622.74	1622.77	1622.80	1622.83	1622.86	1622.89
GIRDER 2	1622.72	1622.75	1622.77	1622.80	1622.83	1622.86	1622.88	1622.91	1622.94	1622.97	1623.01
RT. EOD	1622.74	1622.77	1622.80	1622.83	1622.86	1622.89	1622.92	1622.95	1622.98	1623.01	1623.04

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

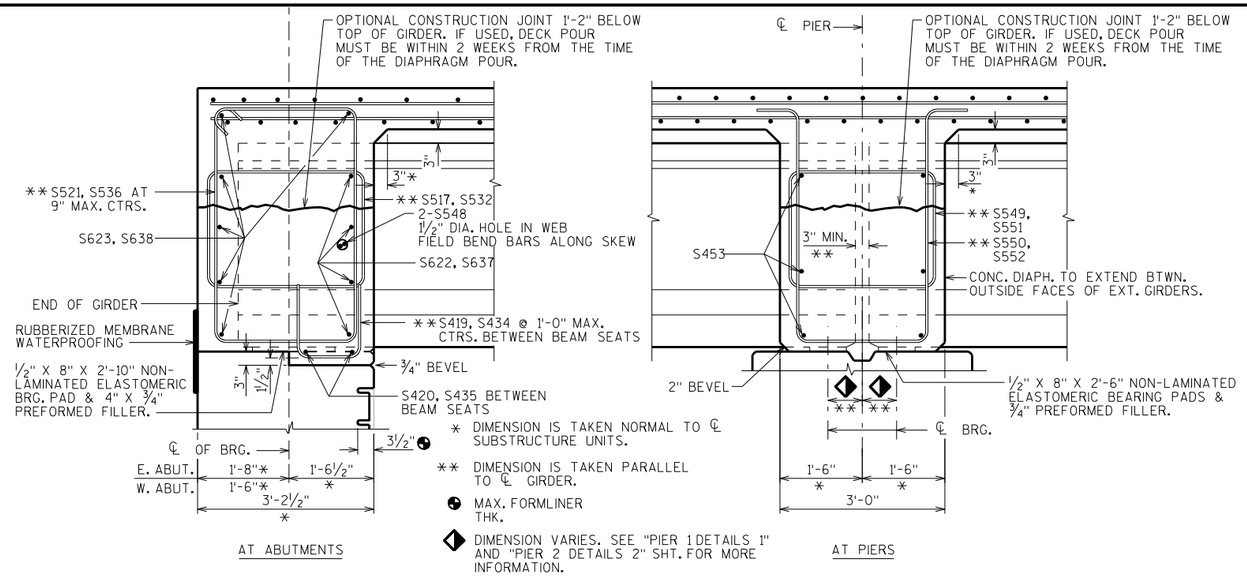
DRAWN BY NAR | PLANS CK'D. EMK

SUPERSTRUCTURE PLAN

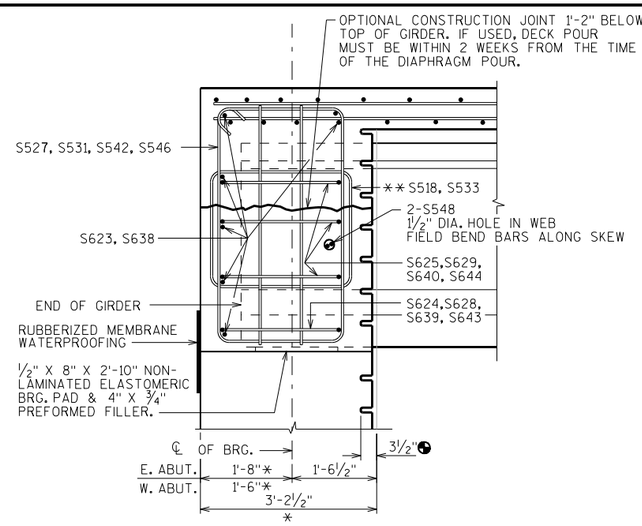
SHEET 21

90

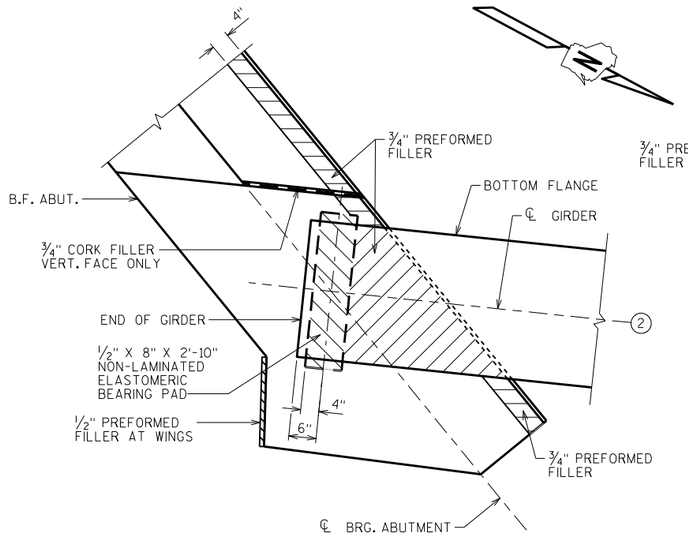
SCALE = 6.667



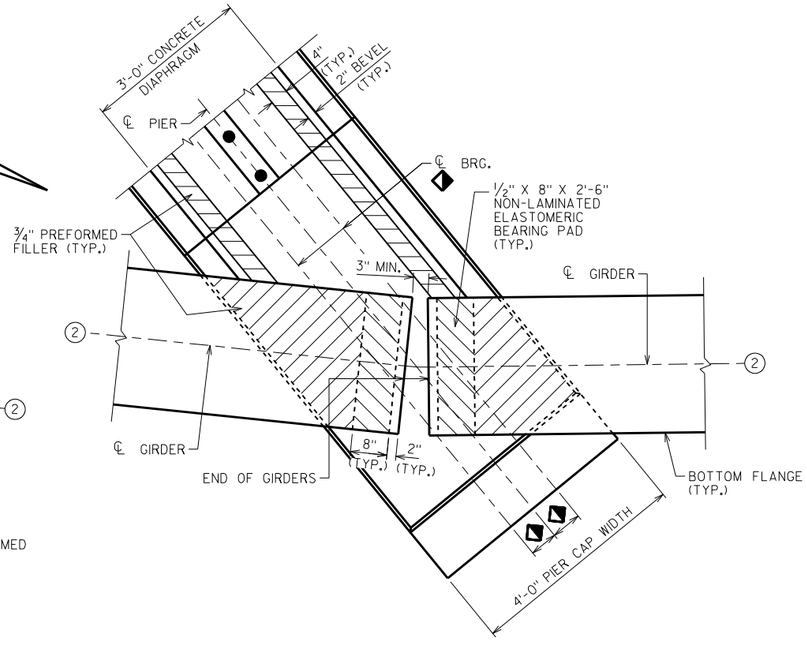
PARTIAL LONGIT. SECTIONS BETWEEN GIRDERS



PARTIAL LONGIT. SECTION AT END OF ABUTMENTS



PLAN VIEW AT EAST ABUT. DIAPHRAGM
(WEST ABUTMENT SIMILAR)



PLAN VIEW AT PIER 1 DIAPHRAGM
(PIER 2 IS SIMILAR)

BEARING PAD DETAILS

(GIRDER 2 SHOWN, GIRDER 1 IS SIMILAR)

STATE PROJECT NUMBER

1177-11-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

SUPERSTRUCTURE DETAILS 1

SHEET 22

91

SCALE = 1.333

8

8

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

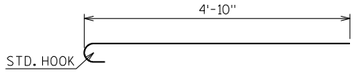
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	889	15'-11"			DECK-TOP & BOT.-TRANS.-SPANS 1-3
S402	X	26	7'-9"		X	DECK-TOP-TRANS.-SPAN 1
S403	X	15	7'-9"		X	DECK-TOP-TRANS.-SPAN 3
S404	X	26	8'-0"		X	DECK-BOT.-TRANS.-SPAN 1
S405	X	15	8'-2"		X	DECK-BOT.-TRANS.-SPAN 3
S406	X	460	5'-5"	X		DECK-TOP-TRANS.-OVERHANGS-SPANS 1-3
S407	X	22	42'-2"			DECK-TOP-LONGIT.-SPAN 1
S608	X	22	53'-4"			DECK-TOP-LONGIT.-OVER PIER 1
S609	X	23	49'-6"			DECK-TOP-LONGIT.-OVER PIER 1
S410	X	44	37'-0"			DECK-TOP-LONGIT.-SPAN 2
S611	X	22	46'-0"			DECK-TOP-LONGIT.-OVER PIER 2
S612	X	23	49'-4"			DECK-TOP-LONGIT.-OVER PIER 2
S413	X	22	44'-6"			DECK-TOP-LONGIT.-SPAN 3
S414	X	138	43'-0"			DECK-BOT.-LONGIT.-SPANS 1-3
S515	X	502	6'-9"	X		DECK/PARAPET-VERT.-TRANS.
S416	X	72	43'-8"			PARAPET-HORIZ.-LONGIT.
S517	X	2	13'-1"	X		E. ABUT. DIAPH.-VERT.-UNDER GIRS.
S518	X	2	12'-2"	X		E. ABUT. DIAPH.-VERT.-UNDER GIRS.
S419	X	8	4'-3"	X		E. ABUT. DIAPH.-F.F.-BOT.-VERT-BTWN. GIRS.
S420	X	2	9'-8"			E. ABUT. DIAPH.-F.F.-BOT.-HORIZ.-BTWN. GIRS.
S521	X	9	17'-2"	X		E. ABUT. DIAPH.-VERT.-BETWEEN GIRS.
S622	X	8	8'-3"			E. ABUT. DIAPH.-F.F.-HORIZ. BTWN. GIRS.
S623	X	6	21'-0"			E. ABUT. DIAPH.-B.F.&DECK-HORIZ.
S624	X	1	7'-11"	X		E. ABUT. DIAPH.-WING 1 CORNER-HORIZ.
S625	X	3	9'-0"	X		E. ABUT. DIAPH.-WING 1 CORNER-HORIZ.
S526	X	1	17'-0"	X		E. ABUT. DIAPH.-WING 1 CORNER-VERT.
S527	X	1	16'-9"	X		E. ABUT. DIAPH.-WING 1 CORNER-VERT.
S628	X	1	7'-5"	X		E. ABUT. DIAPH.-WING 2 CORNER-HORIZ.
S629	X	3	8'-9"	X		E. ABUT. DIAPH.-WING 2 CORNER-HORIZ.
S530	X	1	16'-3"	X		E. ABUT. DIAPH.-WING 2 CORNER-VERT.
S531	X	1	14'-7"	X		E. ABUT. DIAPH.-WING 2 CORNER-VERT.
S532	X	2	11'-4"	X		W. ABUT. DIAPH.-VERT.-UNDER GIRS.
S533	X	2	10'-8"	X		W. ABUT. DIAPH.-VERT.-UNDER GIRS.
S434	X	8	3'-11"	X		W. ABUT. DIAPH.-F.F.-BOT.-VERT.-BTWN. GIRS.
S435	X	2	7'-7"			W. ABUT. DIAPH.-F.F.-BOT.-HORIZ.-BTWN. GIRS.
S536	X	9	15'-5"	X		W. ABUT. DIAPH.-VERT.-BETWEEN GIRS.
S637	X	8	7'-0"			W. ABUT. DIAPH.-F.F.-HORIZ. BTWN. GIRS.
S638	X	6	16'-9"			W. ABUT. DIAPH.-B.F.&DECK-HORIZ.
S639	X	1	6'-6"	X		W. ABUT. DIAPH.-WING 3 CORNER-HORIZ.
S640	X	3	7'-8"	X		W. ABUT. DIAPH.-WING 3 CORNER-HORIZ.
S541	X	1	15'-0"	X		W. ABUT. DIAPH.-WING 3 CORNER-VERT.
S542	X	1	14'-6"	X		W. ABUT. DIAPH.-WING 3 CORNER-VERT.
S643	X	1	6'-7"	X		W. ABUT. DIAPH.-WING 4 CORNER-HORIZ.
S644	X	3	7'-9"	X		W. ABUT. DIAPH.-WING 4 CORNER-HORIZ.
S545	X	1	14'-4"	X		W. ABUT. DIAPH.-WING 4 CORNER-VERT.
S546	X	1	13'-5"	X		W. ABUT. DIAPH.-WING 4 CORNER-VERT.
S447	X	8	4'-2"			ABUT. DIAPH.-CORNERS-VERT.
S548	X	8	6'-0"			ABUT. DIAPH.-HORIZ.-THRU GIRS.
S549	X	2	12'-6"	X		PIER 1 DIAPH.-VERT.-UNDER GIRS.
S550	X	8	16'-10	X		PIER 1 DIAPH.-VERT.-BETWEEN GIRS.
S551	X	2	12'-2"	X		PIER 2 DIAPH.-VERT.-UNDER GIRS.
S552	X	8	16'-6"	X		PIER 2 DIAPH.-VERT.-BETWEEN GIRS.
S453	X	24	7'-6"			PIER DIAPH.-HORIZ.-BETWEEN GIRS.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

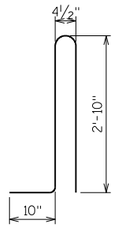
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
S402	1 SERIES OF 26	1'-6" TO 13'-11"
S403	1 SERIES OF 15	1'-7" TO 13'-10"
S404	1 SERIES OF 26	1'-9" TO 14'-2"
S405	1 SERIES OF 15	2'-0" TO 14'-3"

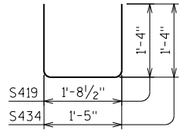
BUNDLE AND TAG EACH SERIES SEPARATELY.



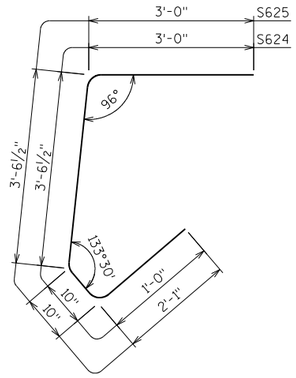
S406



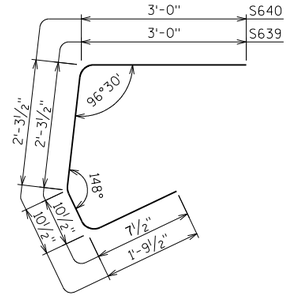
S515



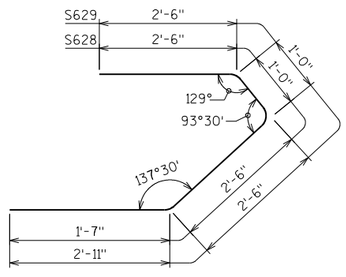
S419, S434



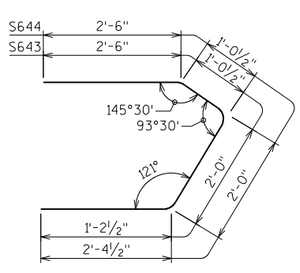
S624, S625



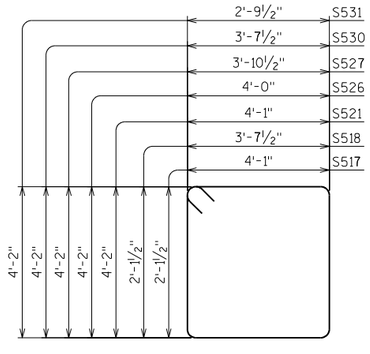
S639, S640



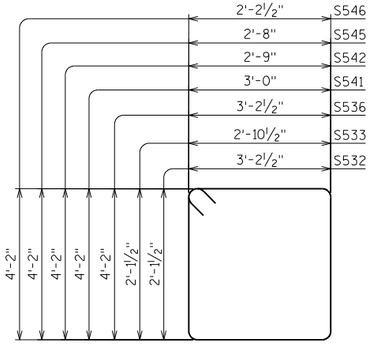
S628, S629



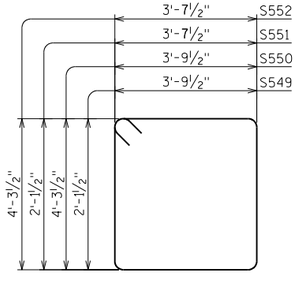
S643, S644



S517, S518, S521, S526 S527, S530, S531



S532, S533, S536, S541, S542, S545, S546



S549, S550, S551, S552

STATE PROJECT NUMBER

1177-11-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

SUPERSTRUCTURE DETAILS 2

SHEET 23

92

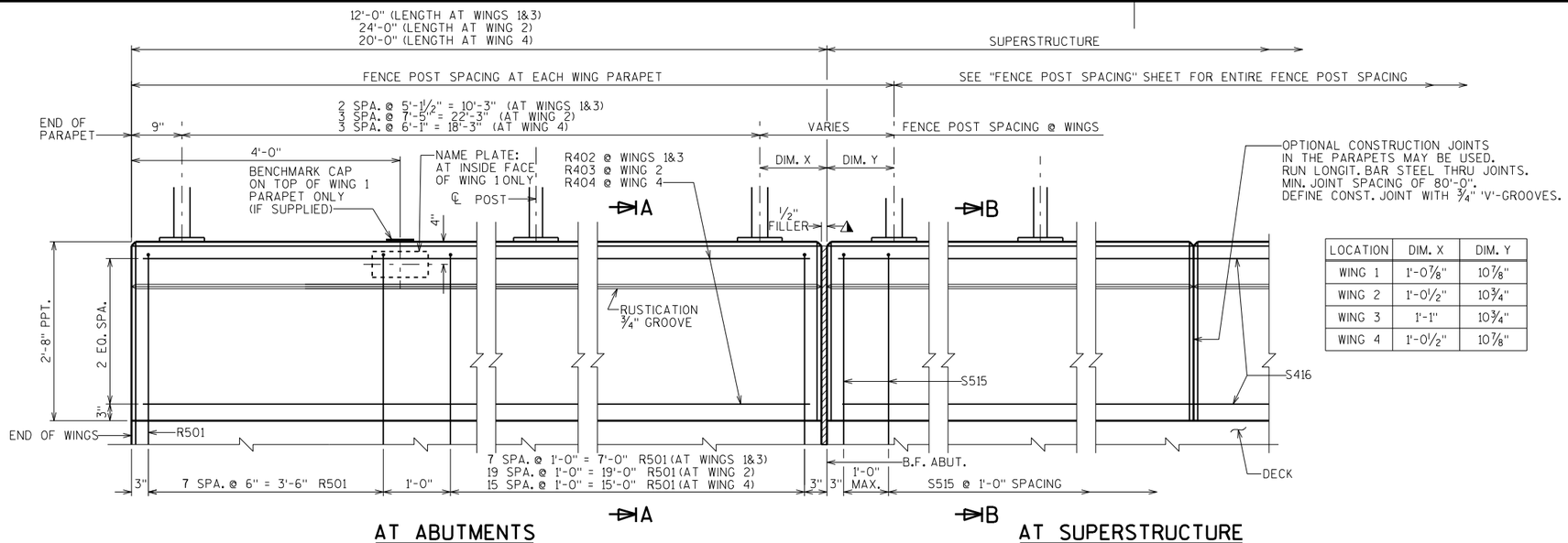
SCALE = 1.333

8

8

STATE PROJECT NUMBER

1177-11-71



LOCATION	DIM. X	DIM. Y
WING 1	1'-0⅞"	10⅞"
WING 2	1'-0½"	10¾"
WING 3	1'-1"	10¾"
WING 4	1'-0½"	10⅞"

A ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING AND NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. COLOR OF JOINT SEALER SHALL MATCH THE ADJACENT CONCRETE STAINING COLOR AND MUST BE APPROVED BY THE ENGINEER.

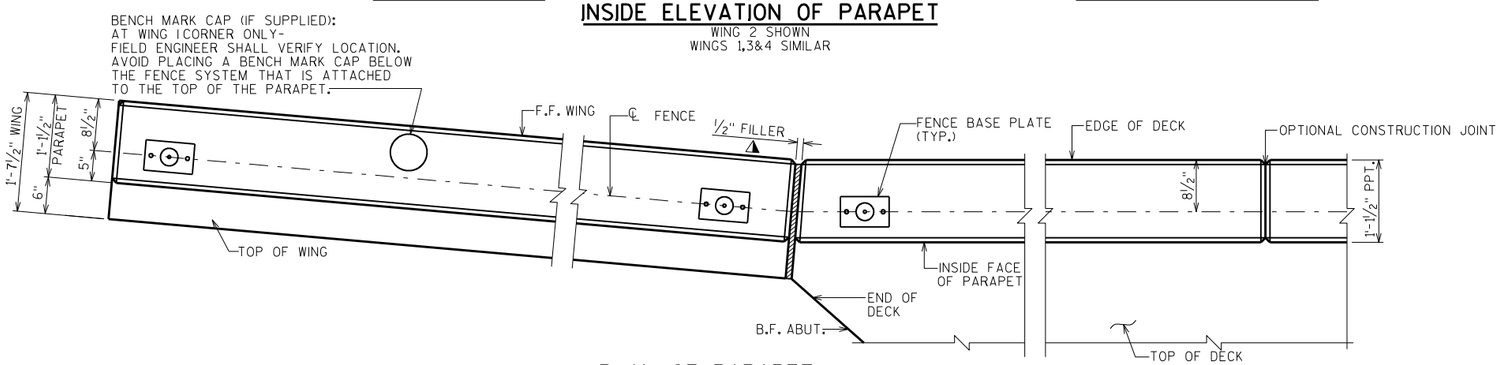
HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH

AT ABUTMENTS

AT SUPERSTRUCTURE

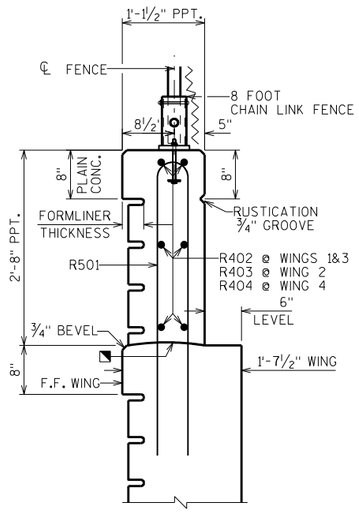
INSIDE ELEVATION OF PARAPET

WING 2 SHOWN
WINGS 1,3&4 SIMILAR

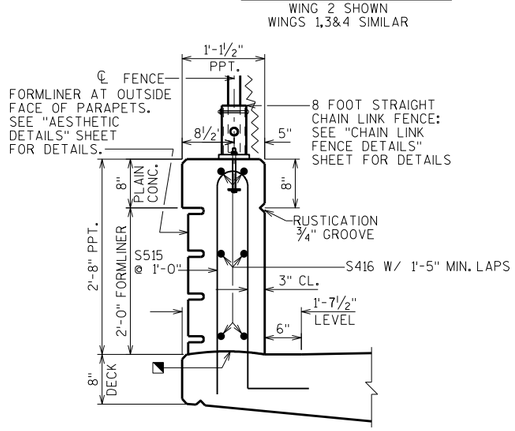


PLAN OF PARAPET

WING 2 SHOWN
WINGS 1,3&4 SIMILAR



SECTION A-A (AT WING)



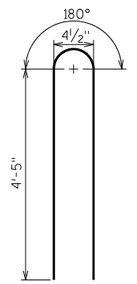
SECTION B-B (AT DECK)

SEE "SUPERSTRUCTURE DETAILS 2" SHEET FOR THE BILL OF BARS AND BAR DETAILS.

BILL OF BARS

REBAR FOR ABUTMENT WING PARAPETS ONLY

BAR MARK	COAT	NO. REQUIRED E.ABUT	NO. REQUIRED W.ABUT	LENGTH	BENT	LOCATION
R501	X	44	40	9'-5"	X	WING/PARAPET-VERT.-TRANS.-AT ALL 4 WINGS
R402	X	6	6	11'-8"		PARAPET-HORIZ.-LONGIT.-BOTH FACES-AT WINGS 1&3
R403	X	6	--	23'-8"		PARAPET-HORIZ.-LONGIT.-BOTH FACES-AT WING 2
R404	X	--	6	19'-8"		PARAPET-HORIZ.-LONGIT.-BOTH FACES-AT WING 4



R501

NOTE:
SEE "AESTHETIC DETAILS" SHEET FOR THE FORMLINER & CONCRETE STAINING DETAILS AT THE OUTSIDE FACES OF BOTH PARAPETS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY JPH | PLANS CK'D. EMK

MODIFIED VERTICAL FACE PARAPET "A"

SHEET 24

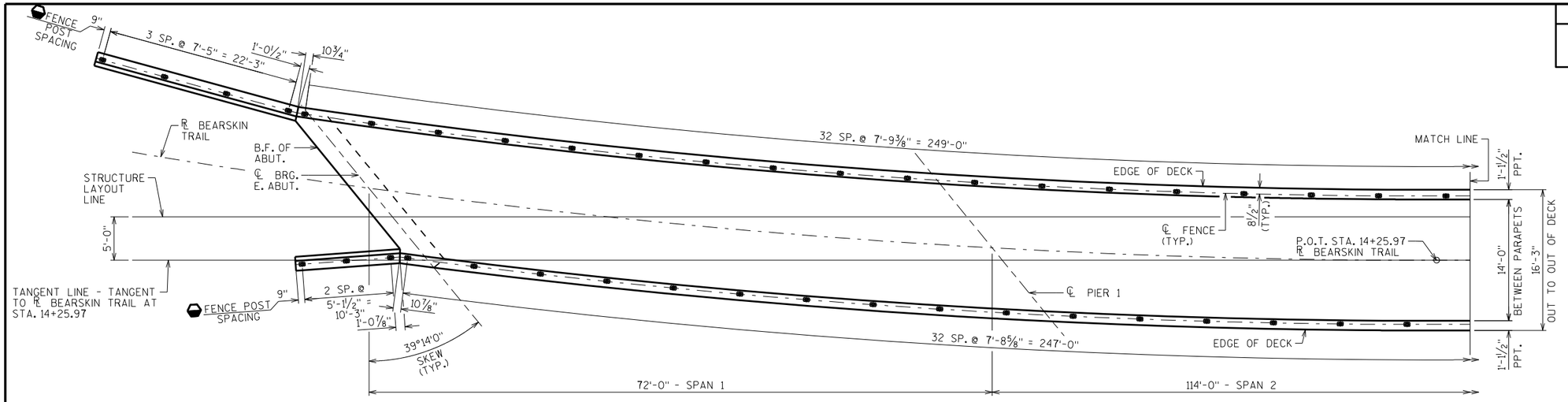
93

SCALE = 1

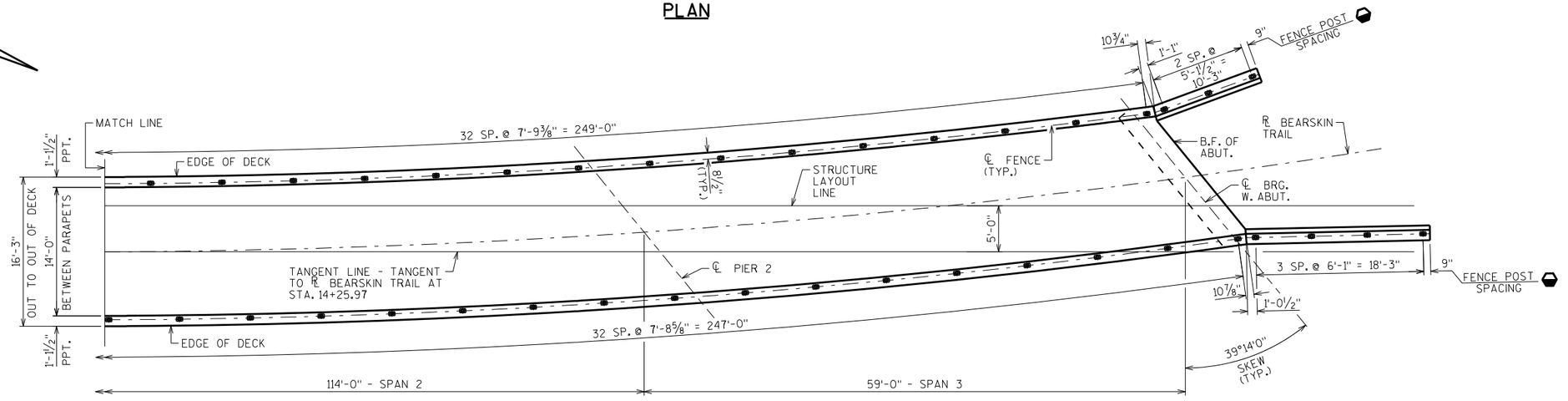
8

8

STATE PROJECT NUMBER
1177-11-71



PLAN



PLAN

⬬ MEASURED ALONG ℄ FENCE. SEE "CHAIN LINK FENCE" DETAILS SHT. FOR MORE DETAILS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY NAR | PLANS CK'D. EMK

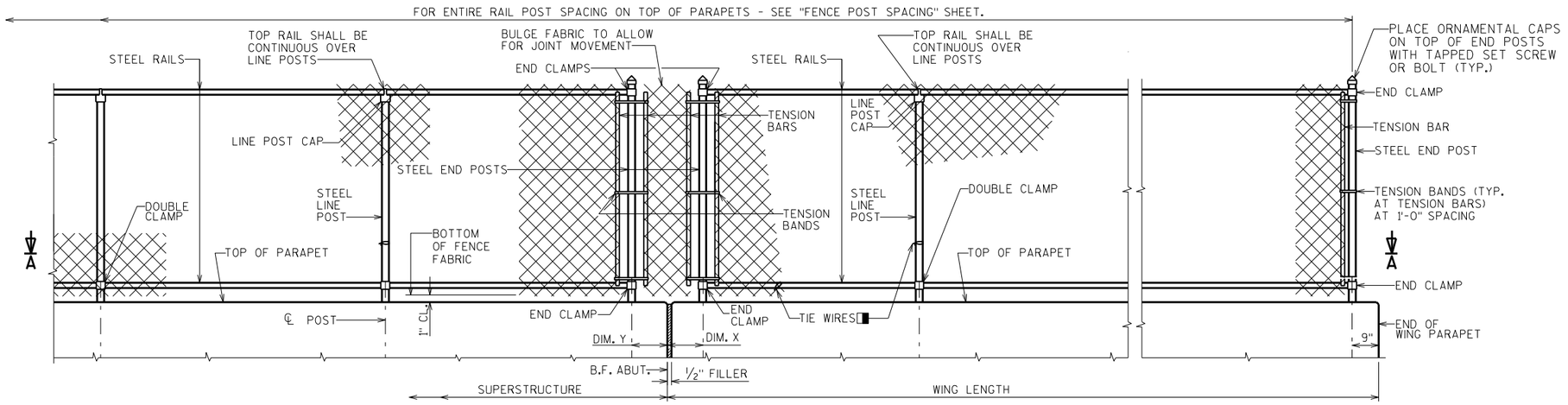
FENCE POST SPACING

SHEET 25

94

SCALE = 6.667

STATE PROJECT NUMBER
1177-11-71



FENCE PART ELEVATION

VIEWING FABRIC SIDE - INSIDE FACE OF PARAPET

LOCATION	DIM. X	DIM. Y
WING 1	1'-0⅞"	10⅛"
WING 2	1'-0½"	10¾"
WING 3	1'-1"	10¾"
WING 4	1'-0½"	10⅞"

FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12

GENERAL NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL WITH A COLORED POLYMER-COATING ON THE OUTSIDE.

FABRIC SHALL CONFORM TO ASTM F668, CLASS 2B. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626. SEE THE "BRIDGE SPECIAL PROVISIONS" FOR ADDITIONAL DETAILS.

THE COLOR OF POLYMER-COATING FOR THIS FENCING SHALL BE BROWN (FEDERAL COLOR NO. 30140 OR SIMILAR AS APPROVED BY THE ENGINEER) IN ACCORDANCE WITH ASTM F934.

THE BID ITEM SHALL BE "FENCE CHAIN LINK POLYMER COATED 8-FT", LF.

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

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 CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE ℄ FENCE.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

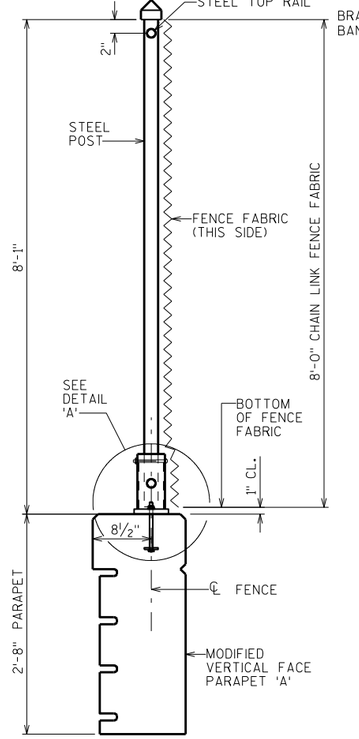
△ ½" DIA. X 6⅞" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE "S", ½" DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR ½" DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE "S" ANCHORS ARE USED. SEE ☆

☆ MASONRY ANCHOR TYPE S ½-INCH. EMBED 6" IN CONCRETE. ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.

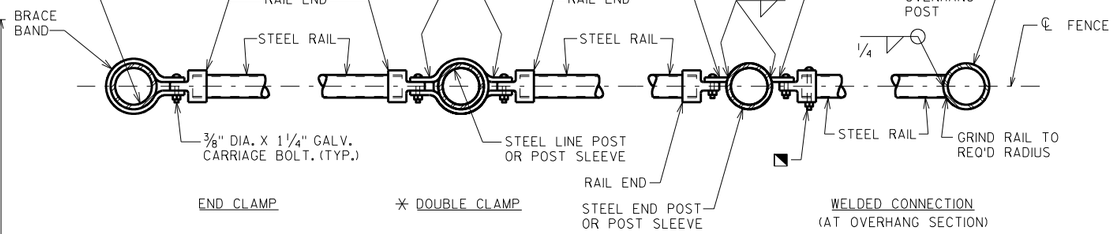
◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◹ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.

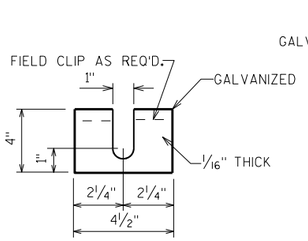


SECTION THRU FENCE



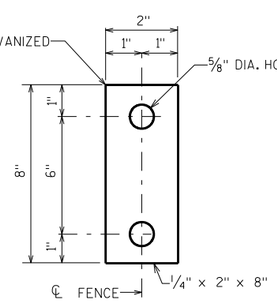
SECTION A-A

NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS

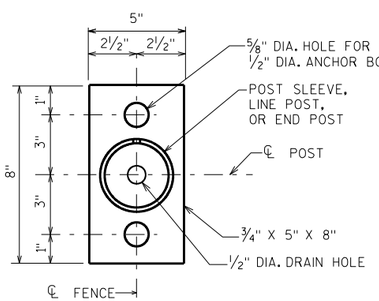


POST SHIM DETAILS

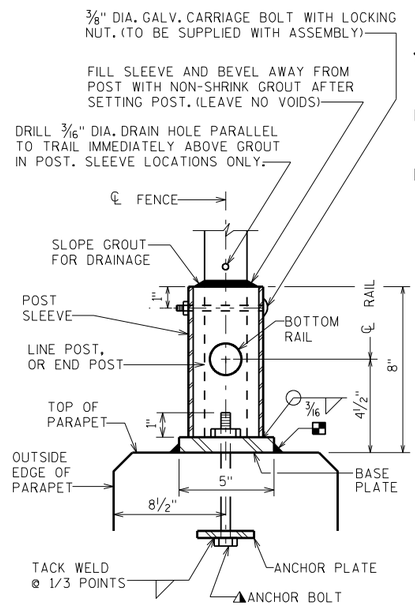
SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



ANCHOR PLATE



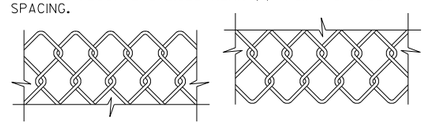
BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.



FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY JPH | PLANS CK'D. EMK

CHAIN LINK FENCE DETAILS

SHEET 26

95

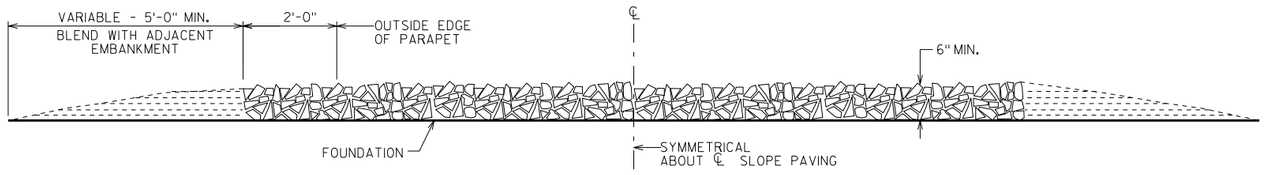
8

8

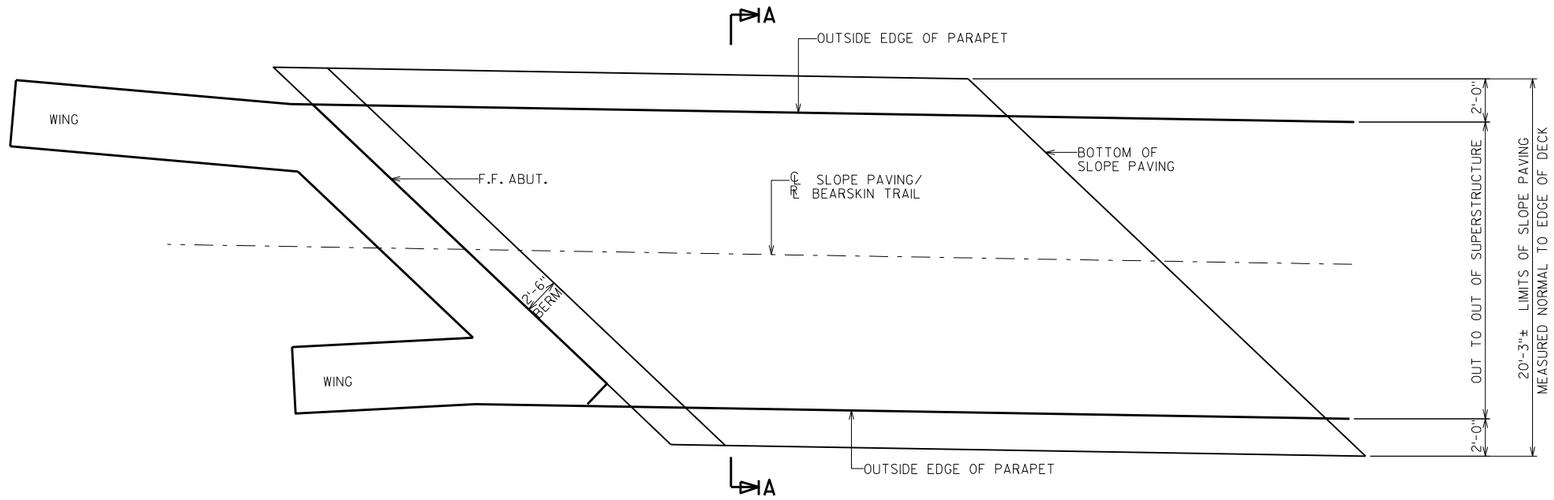
SCALE = 5.3333

STATE PROJECT NUMBER

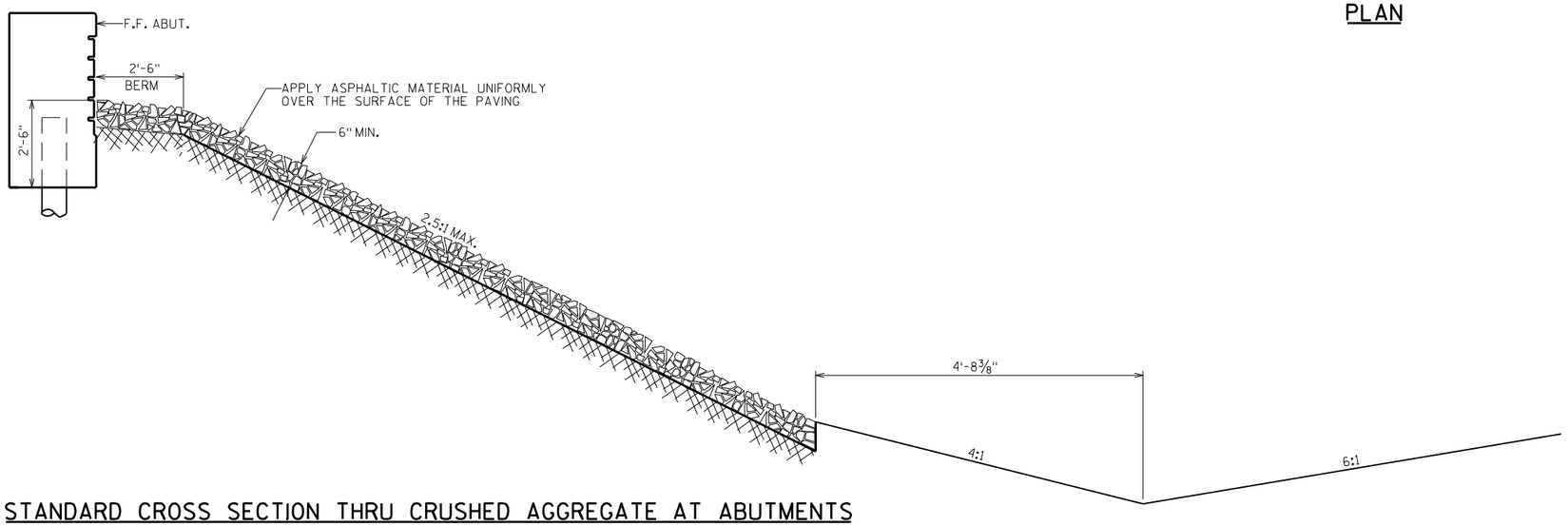
1177-11-71



SECTION A-A



PLAN



STANDARD CROSS SECTION THRU CRUSHED AGGREGATE AT ABUTMENTS

ROUND STONE WILL NOT BE ACCEPTED

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY JPH | PLANS CK'D. EMK

SLOPE PAVING, CRUSHED AGGREGATE

SHEET 27

96

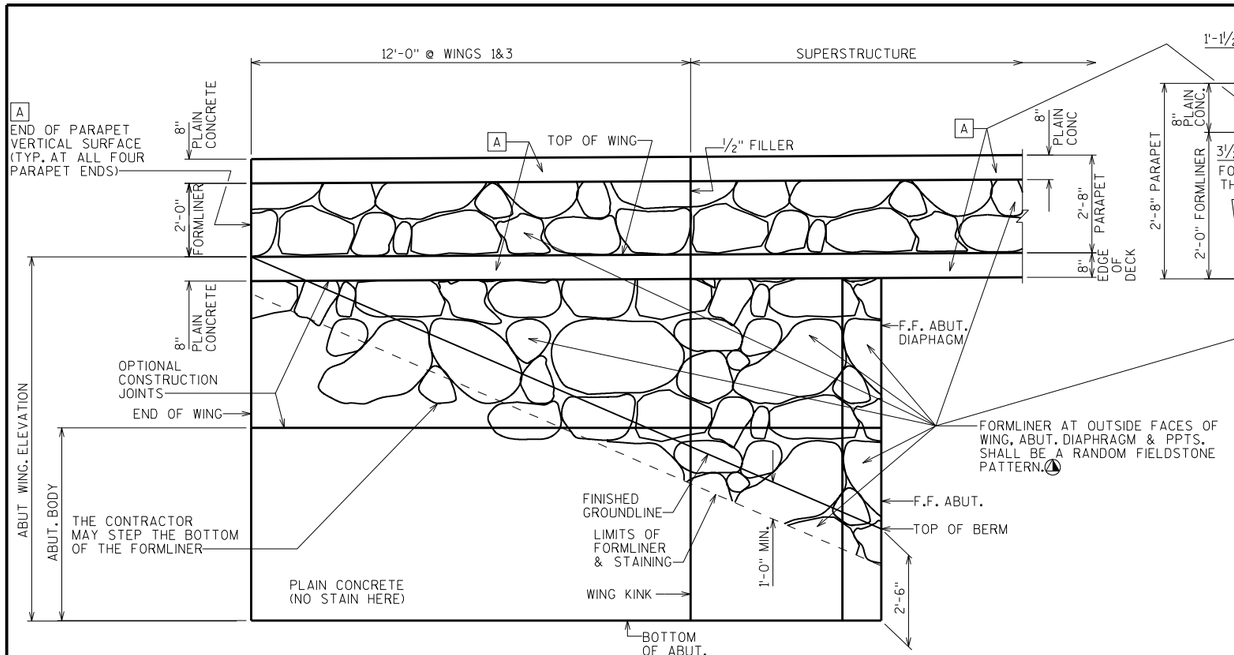
SCALE = 1

8

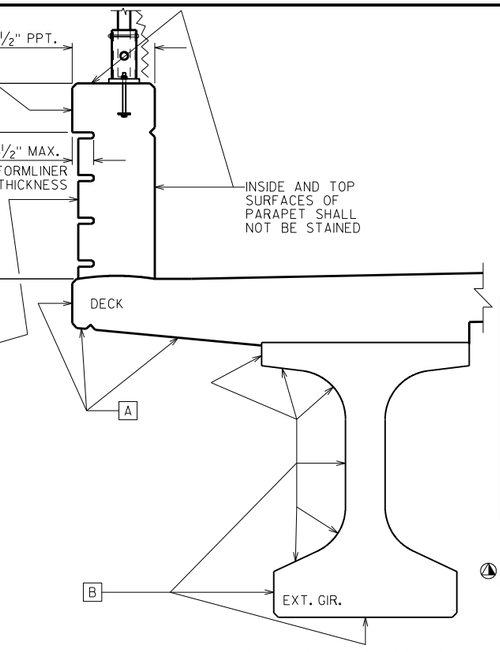
8

STATE PROJECT NUMBER

1177-11-71



WING ELEVATION LOOKING @ F.F. WINGS 1&3 SHOWING FORMLINER



PARTIAL CROSS SECTION AT EDGES OF DECK

FORMLINER NOTES

FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT FACE OF THE ABUTMENT AND THE ABUTMENT DIAPHRAGM.

WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.

FORMLINER COURSING ON ABUTMENT DIAPHRAGMS, ABUTMENTS AND WINGS SHALL BE LEVEL.

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.

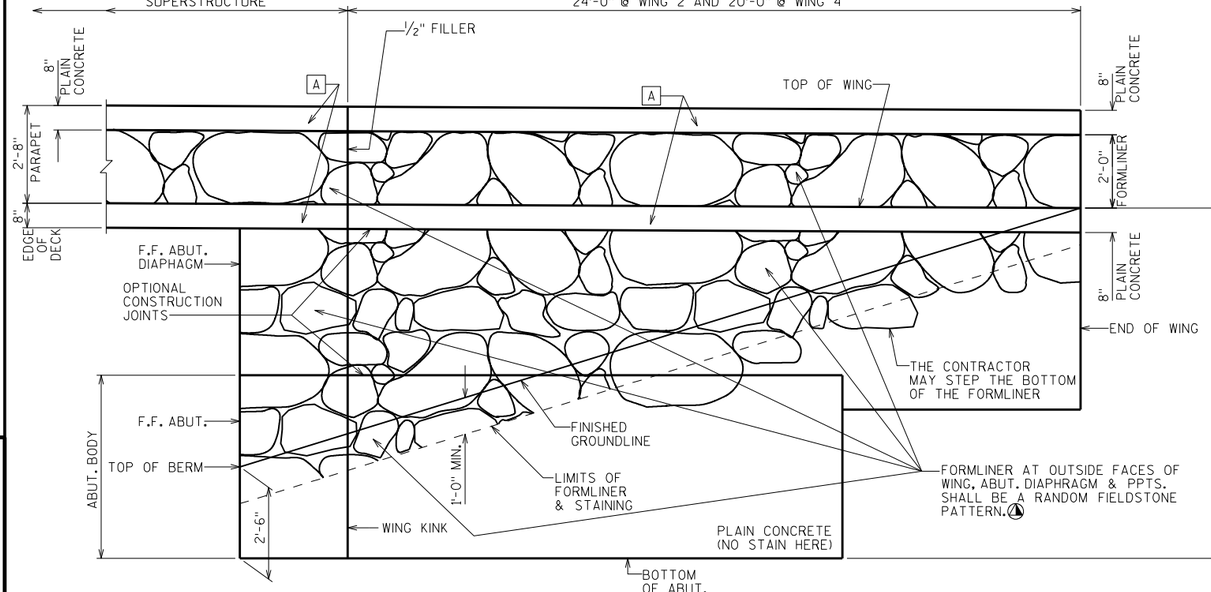
THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

CONCRETE STAINING SCHEDULE

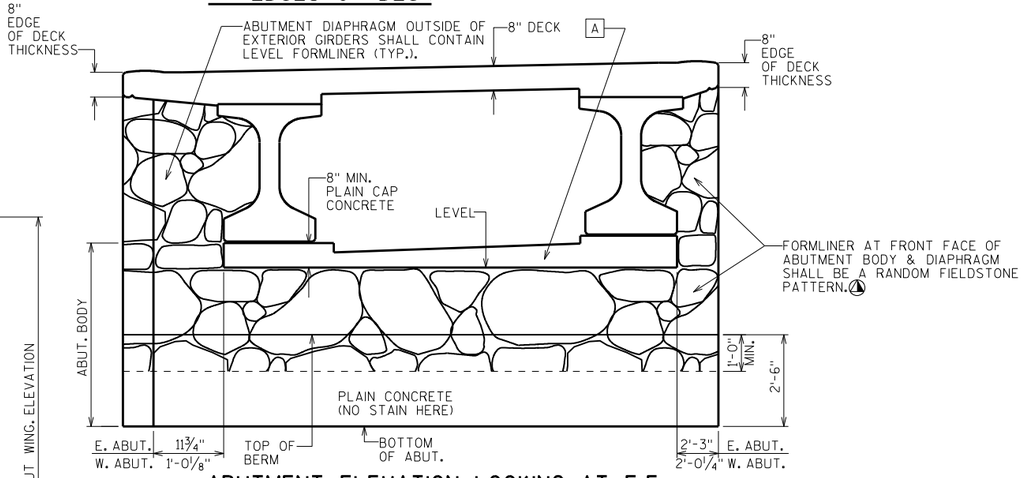
MARK	COLOR	LOCATION	NOTES
A	BASE COLOR	DECK	EDGE & UNDERSIDE OF DECK AS SHOWN
		PARAPETS	TOP & END OF PARAPETS, PLAIN CONCRETE CAP
		ABUTMENTS & WING WALLS	PLAIN CONCRETE CAP AT ABUTMENT & WING FRONT FACE
B	ACCENT COLOR #1	GIRDERS	ALL HORIZONTAL AND VERTICAL SURFACES AS SHOWN

BASE COLOR : FEDERAL COLOR NUMBER 30122
ACCENT COLOR #1: FEDERAL COLOR NUMBER 36642

(1) ALL ARCHITECTURAL SURFACE TREATMENT AREAS SHALL BE STAINED IN A RANDOMLY MIXED COLOR ARRANGEMENT TO ACHIEVE A TEXTURED LOOK AS DIRECTED BY THE ENGINEER BY APPLYING A MULTI-COLOR STAIN USING FEDERAL COLOR NO. 36642 AS THE BASE COLOR, FEDERAL COLOR NOS. 33722, 31158, & 36134 AS THE ACCENT COLORS, & FEDERAL COLOR NO. 36306 AS THE JOINT COLOR. THE INTENT IS TO MATCH THE LOOK OF THE MULTI-COLOR STAIN ON THE 4TH ST. BRIDGE (B-35-154) OVER LAKE MOHAWKSIN/THE WISCONSIN RIVER IN THE CITY OF TOMAHAWK.

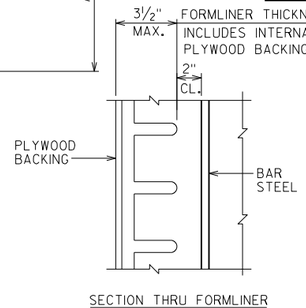


WING ELEVATION LOOKING @ F.F. WINGS 2&4 SHOWING FORMLINER

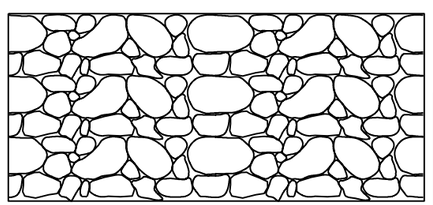


ABUTMENT ELEVATION LOOKING AT F.F.

(TYPICAL AT BOTH ABUTMENTS)



SECTION THRU FORMLINER



FIELD STONE - RANDOM SIZES BETWEEN 6" & 24" MAX. RELIEF = 2 1/2"

FORMLINER DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-43-60

DRAWN BY JPH | PLANS CK'D. EMK

AESTHETIC DETAILS

SHEET 28

97

SCALE = 2

8

8

BEARSKIN TEMPORARY TRAIL STAGE "A"

STATION	Real Station	Distance	AREA (SF) Incremental Vol (CY) (Unadjusted) Cut	Fill	Cumulative Vol (CY) Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.20	Mass Ordinate Note 8
00+00	0.00	0.00	0.42	0.00	0	0	0	0	0.00
00+50	50.00	50.00	0.00	4.32	0	4	0	5	-4.41
01+00	100.00	50.00	0.00	27.90	0	30	0	41	-40.20
01+50	150.00	50.00	0.00	200.94	0	212	0	295	-294.48
02+00	200.00	50.00	0.15	343.96	0	505	1	900	-899.78
02+50	250.00	50.00	0.01	370.67	0	662	1	1,694	-1,693.66
02+93.46	293.46	43.46	0.01	0.23	0	299	1	2,053	-2,051.88

BEARSKIN TRAIL STAGE "B"

STATION	Real Station	Distance	AREA (SF) Incremental Vol (CY) (Unadjusted) Cut	Fill	Cumulative Vol (CY) Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.20	Mass Ordinate Note 8
07+50	750.00	0.00	0.00	0.00	0	0	0	0	0.00
08+00	800.00	50.00	3.35	0.00	3	0	3	0	3.10
08+50	850.00	50.00	2.89	0.00	6	0	9	0	8.88
09+00	900.00	50.00	0.00	3.61	3	3	12	4	7.54
09+00	900.00	0.00	0.00	3.61	0	0	12	4	7.54
09+50	950.00	50.00	0.00	27.52	0	29	12	39	-27.04
10+00	1000.00	50.00	0.00	159.85	0	173	12	247	-235.24
10+50	1050.00	50.00	0.00	465.30	0	579	12	941	-929.85
10+94.42	1094.42	44.42	0.00	636.69	0	907	12	2,029	-2,017.72
11+00	1100.00	5.58	0.00	657.39	0	134	12	2,190	-2,178.10
11+50	1150.00	50.00	0.00	829.36	0	1,377	12	3,842	-3,830.04
12+00	1200.00	50.00	0.00	649.71	0	1,370	12	5,485	-5,473.45
12+50	1250.00	50.00	0.00	472.46	0	1,039	12	6,732	-6,720.31
13+00	1300.00	50.00	0.00	252.91	0	672	12	7,538	-7,526.28
13+50	1350.00	50.00	0.00	0.00	0	234	12	7,819	-7,807.28
14+00	1400.00	50.00	0.00	0.00	0	0	12	7,819	-7,807.28
14+50	1450.00	50.00	0.00	0.00	0	0	12	7,819	-7,807.28
15+00	1500.00	50.00	0.00	0.00	0	0	12	7,819	-7,807.28
15+50	1550.00	50.00	0.00	141.58	0	131	12	7,976	-7,964.60
16+00	1600.00	50.00	0.00	123.53	0	245	12	8,271	-8,259.16
16+50	1650.00	50.00	0.00	297.66	0	390	12	8,739	-8,727.15
16+68.75	1668.75	18.75	0.00	369.23	0	232	12	9,017	-9,004.97
17+00	1700.00	31.25	0.00	308.41	0	392	12	9,487	-9,475.60
17+50	1750.00	50.00	0.00	62.30	0	343	12	9,899	-9,887.51
18+00	1800.00	50.00	0.00	21.30	0	77	12	9,992	-9,980.40
18+49.54	1849.54	49.54	0.00	11.42	0	30	12	10,028	-10,016.43
18+50	1850.00	0.46	0.00	11.33	0	0	12	10,028	-10,016.66
19+00	1900.00	50.00	0.00	2.45	0	13	12	10,044	-10,031.97
19+50	1950.00	50.00	17.60	0.00	16	2	28	10,046	-10,018.39
19+80.44	1980.44	30.44	17.32	0.00	20	0	48	10,046	-9,998.70
20+00	2000.00	19.56	0.00	0.00	6	0	54	10,046	-9,992.43

9

9

PROJECT NO: 1177-11-71 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: EARTHWORK DETAILS | SHEET 98 | E

BEARSKIN TRAIL STAGE "C"

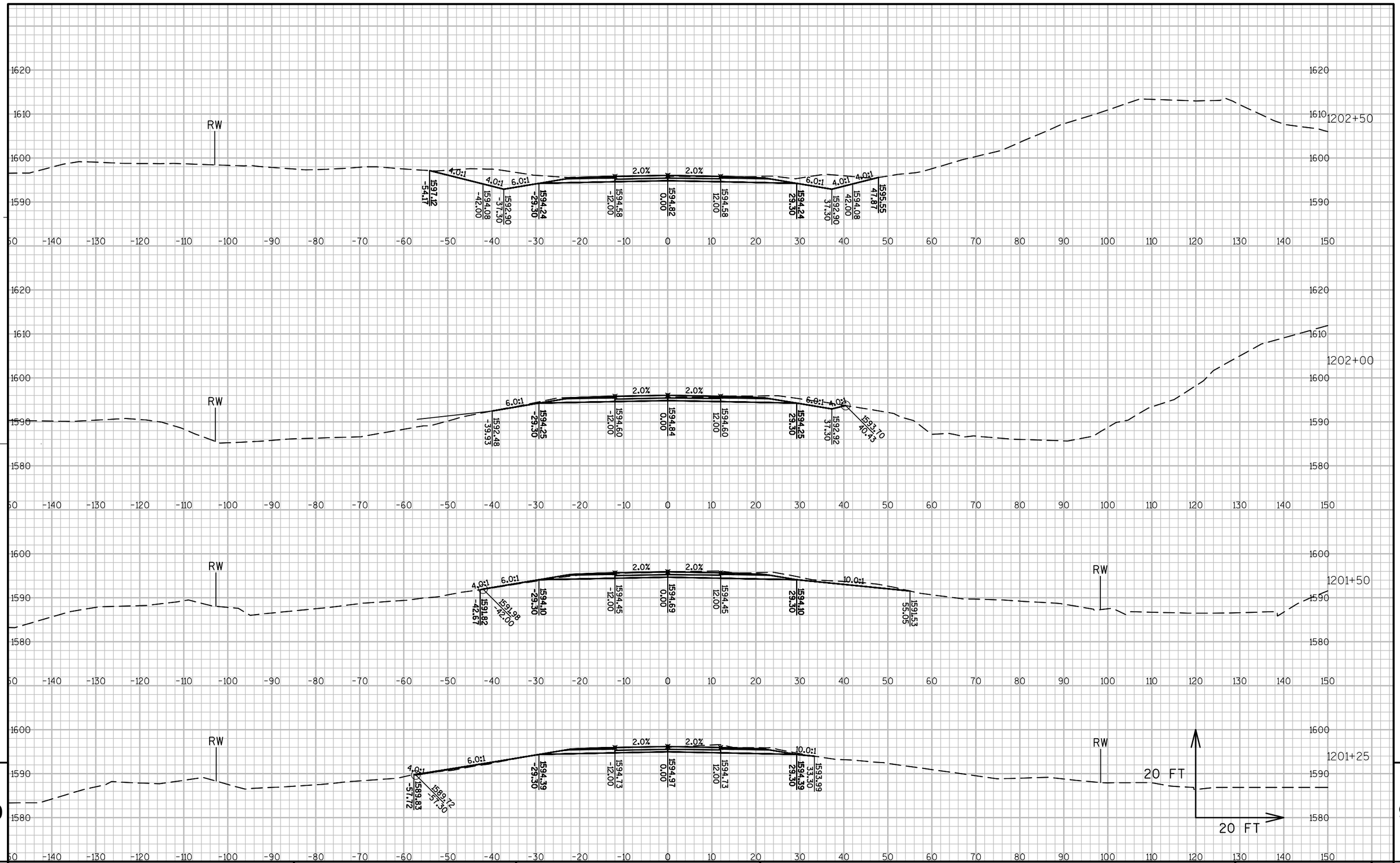
STATION	Real Station	Distance	AREA (SF) Incremental Vol (CY) (Unadjusted) Cut	Fill	Cumulative Vol (CY) Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.20	Mass Ordinate Note 8
07+50	750.00	0.00	0.00	0.00	0	0	0	0	0.00
08+00	800.00	50.00	7.36	0.00	7	0	7	0	6.82
08+50	850.00	50.00	3.04	0.00	10	0	16	0	16.45
09+00	900.00	50.00	0.02	8.59	3	8	19	10	9.73
09+00	900.00	0.00	0.02	8.60	0	0	19	10	9.73
09+50	950.00	50.00	0.17	19.68	0	26	19	41	-21.51
10+00	1000.00	50.00	0.22	63.93	0	77	20	134	-114.06
10+50	1050.00	50.00	0.13	106.20	0	158	20	323	-302.77
10+94.42	1094.42	44.42	0.20	147.81	0	209	20	574	-553.24
11+00	1100.00	5.58	0.24	147.88	0	31	20	610	-589.84
11+50	1150.00	50.00	0.26	62.60	0	195	21	844	-823.25
12+00	1200.00	50.00	0.26	77.31	0	130	21	1,000	-978.22
12+50	1250.00	50.00	0.26	79.30	0	145	22	1,174	-1,151.74
13+00	1300.00	50.00	0.22	32.34	0	103	22	1,298	-1,275.34
13+50	1350.00	50.00	0.00	0.00	0	30	23	1,334	-1,311.07
14+00	1400.00	50.00	0.00	0.00	0	0	23	1,334	-1,311.07
14+50	1450.00	50.00	0.00	0.00	0	0	23	1,334	-1,311.07
15+00	1500.00	50.00	0.00	0.00	0	0	23	1,334	-1,311.07
15+50	1550.00	50.00	0.22	32.03	0	30	23	1,369	-1,346.45
16+00	1600.00	50.00	0.26	62.17	0	87	23	1,474	-1,450.67
16+50	1650.00	50.00	0.26	66.97	0	120	24	1,617	-1,593.68
16+68.75	1668.75	18.75	0.26	63.63	0	45	24	1,672	-1,647.90
17+00	1700.00	31.25	0.26	57.76	0	70	24	1,756	-1,731.91
17+50	1750.00	50.00	0.26	45.52	0	96	25	1,871	-1,846.19
18+00	1800.00	50.00	0.26	28.73	0	69	25	1,953	-1,928.20
18+49.54	1849.54	49.54	0.26	20.95	0	46	26	2,008	-1,982.41
18+50	1850.00	0.46	0.26	20.82	0	0	26	2,008	-1,982.83
19+00	1900.00	50.00	0.35	5.43	1	24	26	2,038	-2,011.44
19+50	1950.00	50.00	28.40	0.00	27	5	53	2,044	-1,990.85
19+80.44	1980.44	30.44	13.30	0.00	24	0	76	2,044	-1,967.34
20+00	2000.00	19.56	0.00	0.00	5	0	81	2,044	-1,962.53

USH 51 DITCH GRADING

STATION	Real Station	Distance	AREA (SF) Incremental Vol (CY) (Unadjusted) Cut	Fill	Cumulative Vol (CY) Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.20	Mass Ordinate Note 8
1201+00	120100.00	0.00	0.00	0.00	0	0	0	0	0.00
1201+50	120150.00	50.00	81.41	1.62	75	1	75	2	73.58
1202+00	120200.00	50.00	78.74	15.96	148	16	224	21	202.34
1202+50	120250.00	50.00	170.44	0.00	231	15	454	39	415.32
1203+00	120300.00	50.00	1026.35	0.00	1,108	0	1,563	39	1,523.46
1203+50	120350.00	50.00	1762.55	0.00	2,582	0	4,145	39	4,105.77
1204+00	120400.00	50.00	2055.16	0.00	3,535	0	7,680	39	7,640.68
1204+50	120450.00	50.00	1551.90	0.00	3,340	0	11,020	39	10,980.55
1205+00	120500.00	50.00	1283.99	0.00	2,626	0	13,645	39	13,606.38
1205+50	120550.00	50.00	630.82	0.09	1,773	0	15,418	39	15,379.26
1206+00	120600.00	50.00	303.81	0.00	865	0	16,284	39	16,244.56
1206+50	120650.00	50.00	36.38	0.39	315	0	16,599	40	16,559.12
1207+00	120700.00	50.00	34.89	0.45	66	1	16,665	41	16,624.17
1207+50	120750.00	50.00	38.01	0.11	68	1	16,732	41	16,691.05
1208+00	120800.00	50.00	0.00	0.00	35	0	16,767	41	16,726.12

9

9

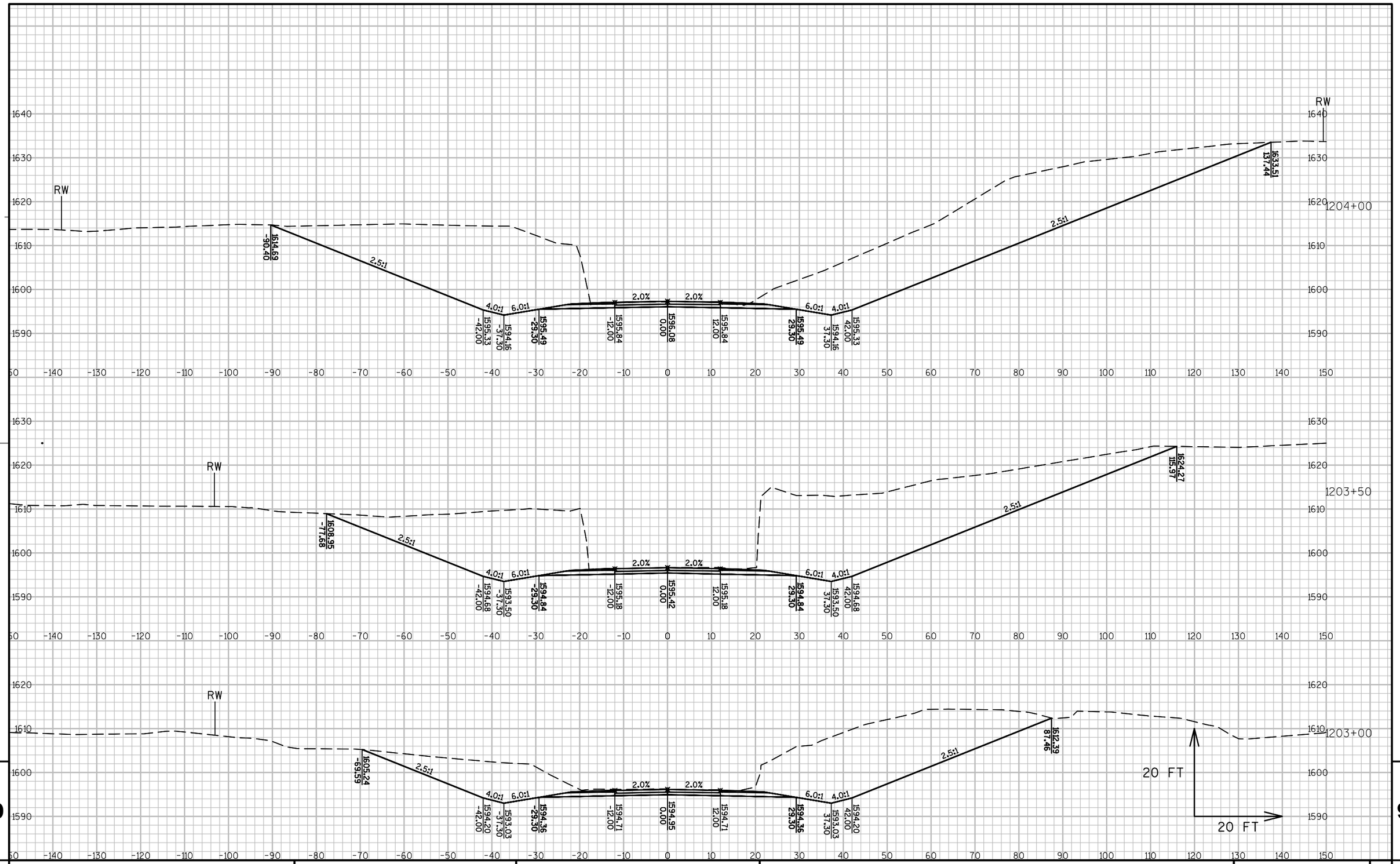


9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: USH 51	SHEET 101	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\090201_XS.DWG PLOT DATE : 10/22/2015 6:58 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1:20_XREF

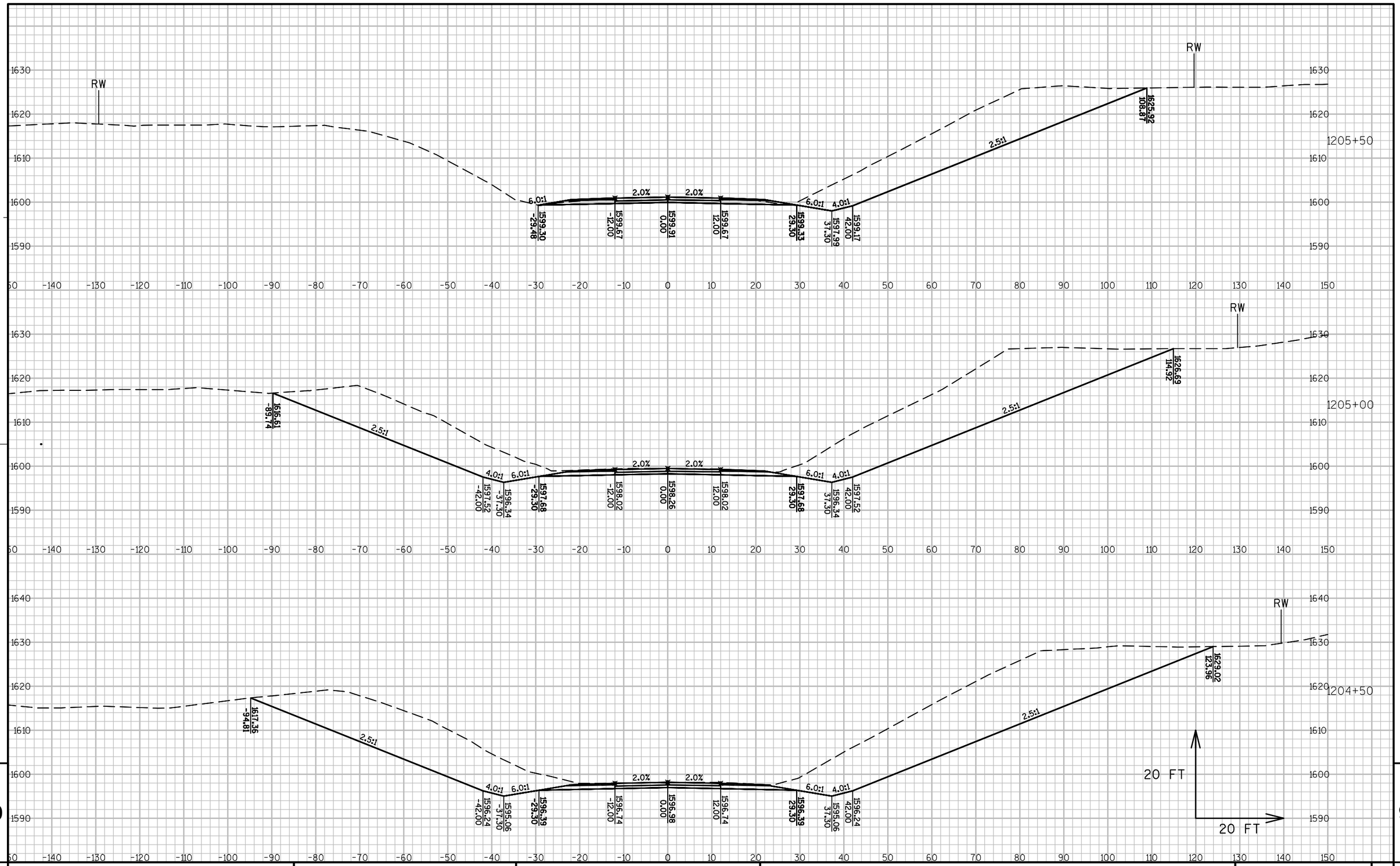


9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: USH 51	SHEET E

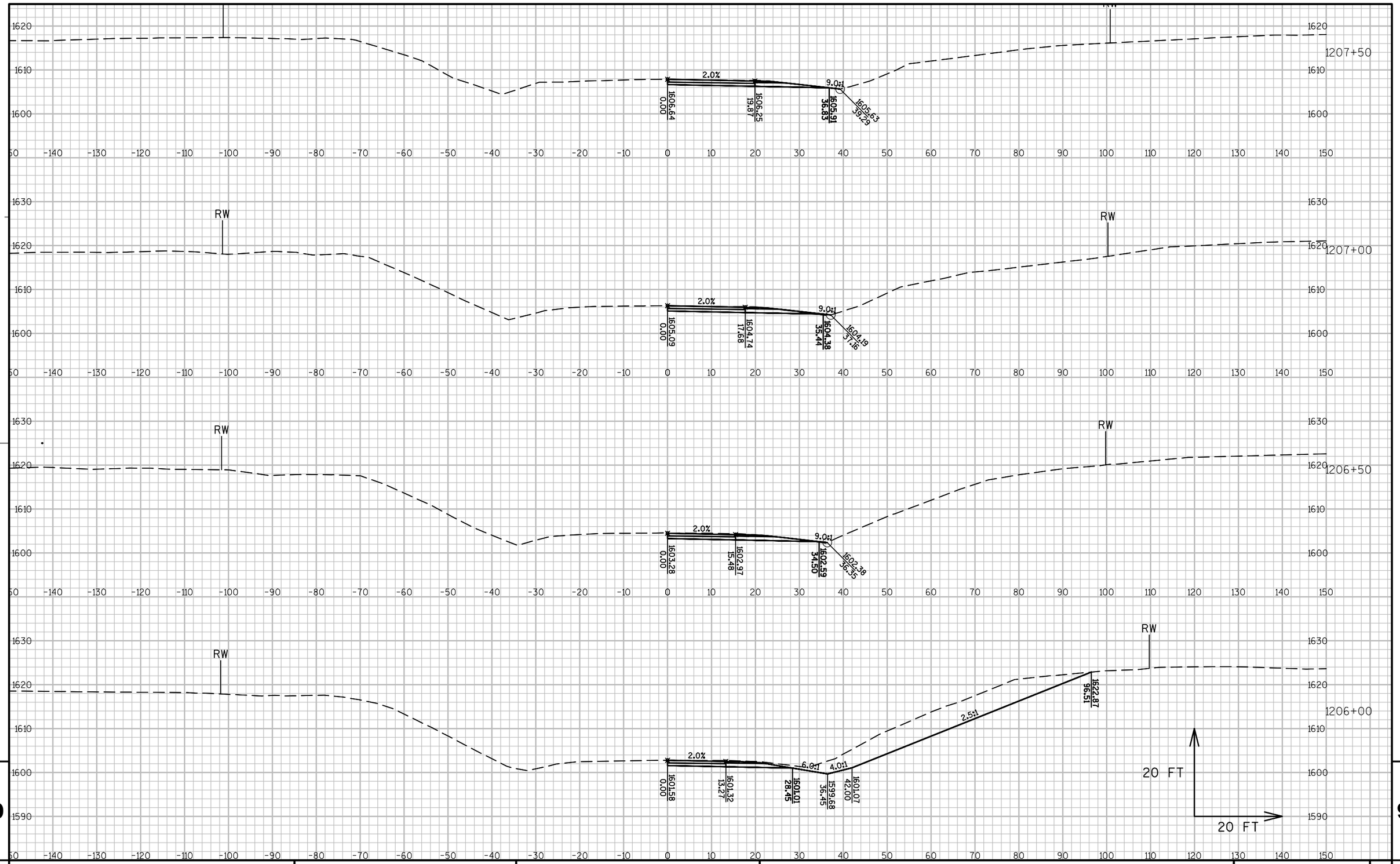
FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\090201_XS.DWG PLOT DATE : 10/22/2015 6:58 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1:20_XREF



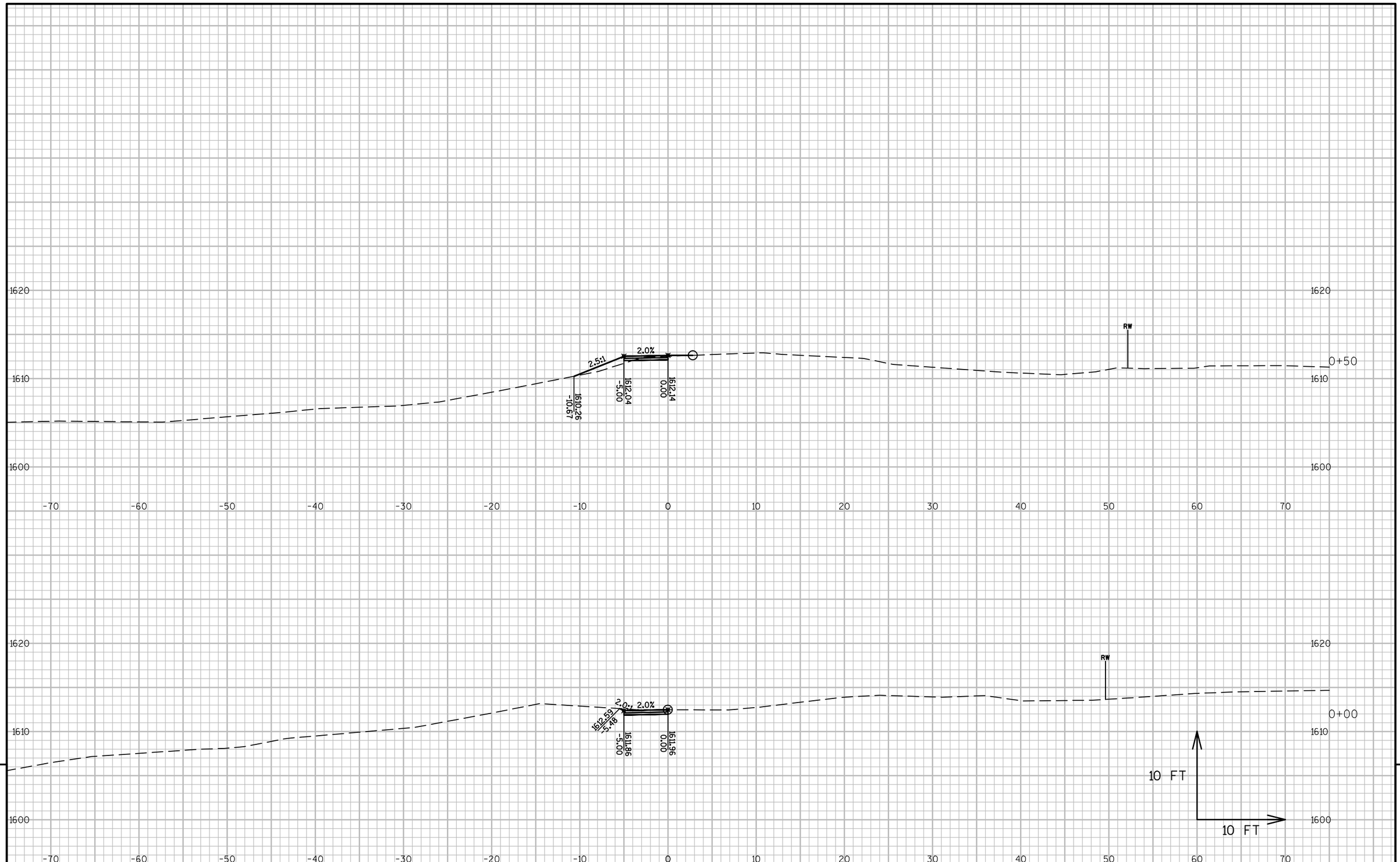
9 9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: USH 51	SHEET 103 E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\090201_XS.DWG PLOT DATE : 10/22/2015 6:58 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: USH 51	SHEET 104	E



9

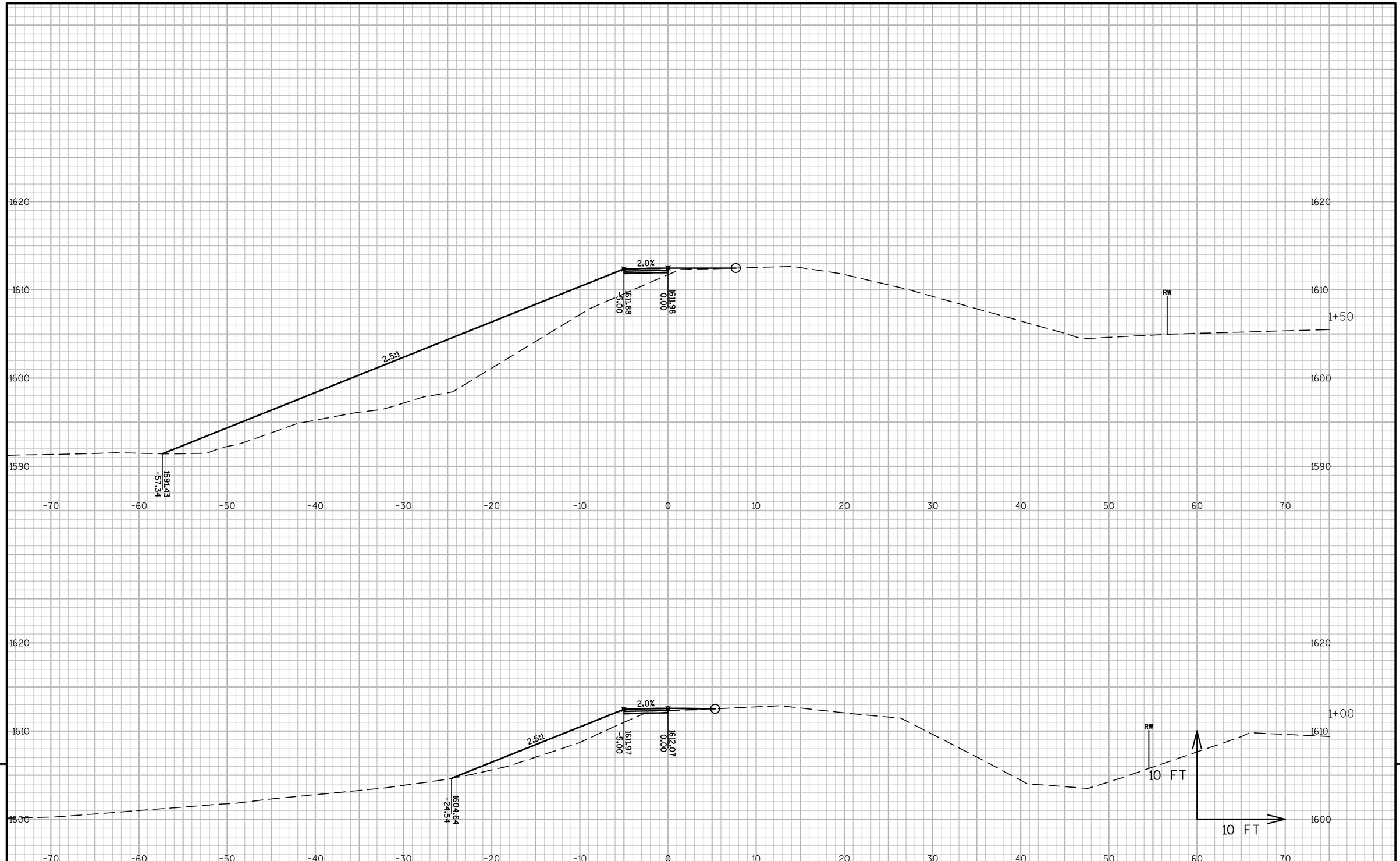
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL TEMPORARY STAGE "A"	SHEET 105	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_TEMP_TRAIL_XS.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 10/22/2015 7:01 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

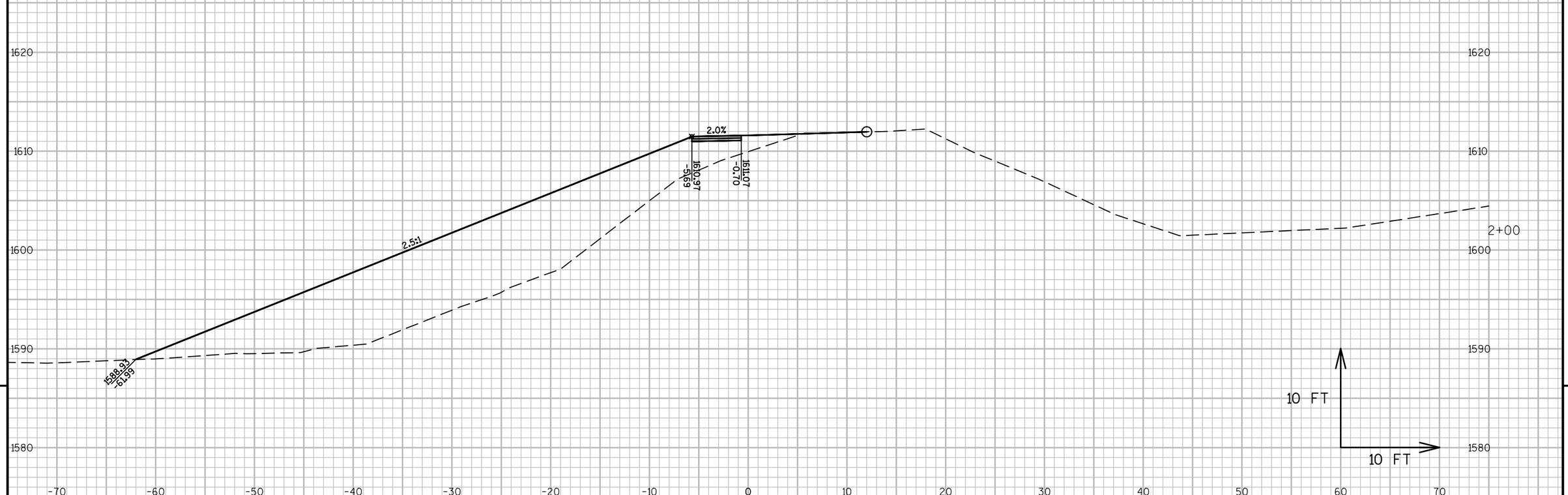
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL TEMPORARY STAGE "A"	SHEET 106	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_TEMP_TRAIL_XS.DWG
LAYOUT NAME - SECTION SHEET - (7)

PLOT DATE : 10/22/2015 7:01 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

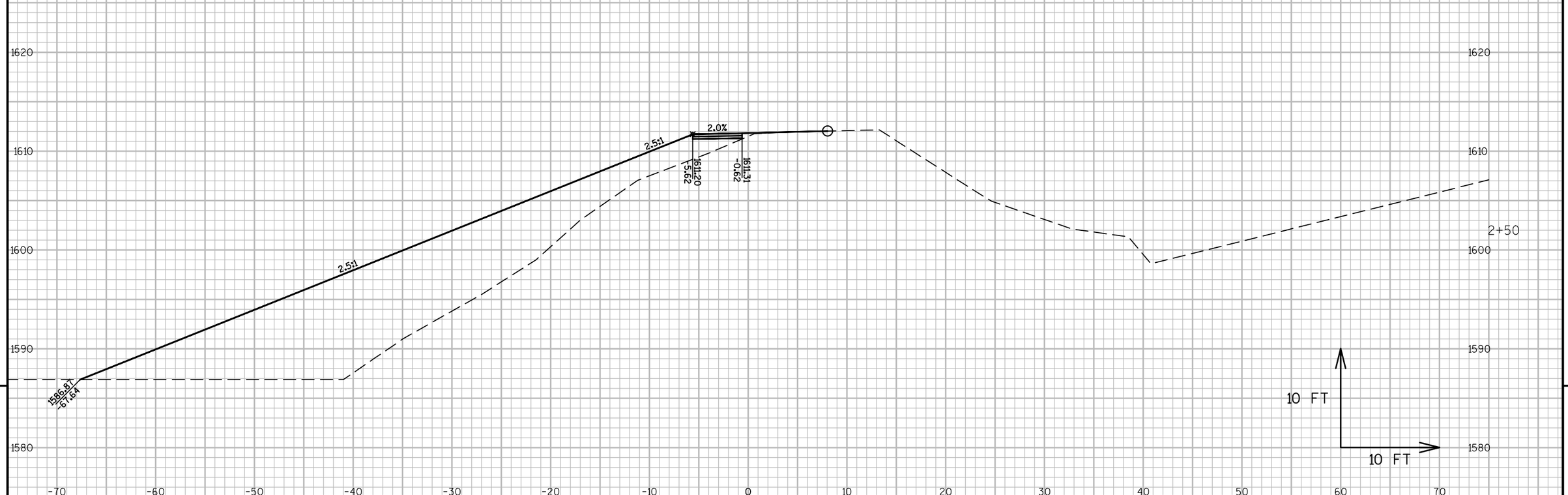
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL TEMPORARY STAGE "A"	SHEET 107	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_TEMP_TRAIL_XS.DWG
LAYOUT NAME - SECTION SHEET - (8)

PLOT DATE : 10/22/2015 7:01 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



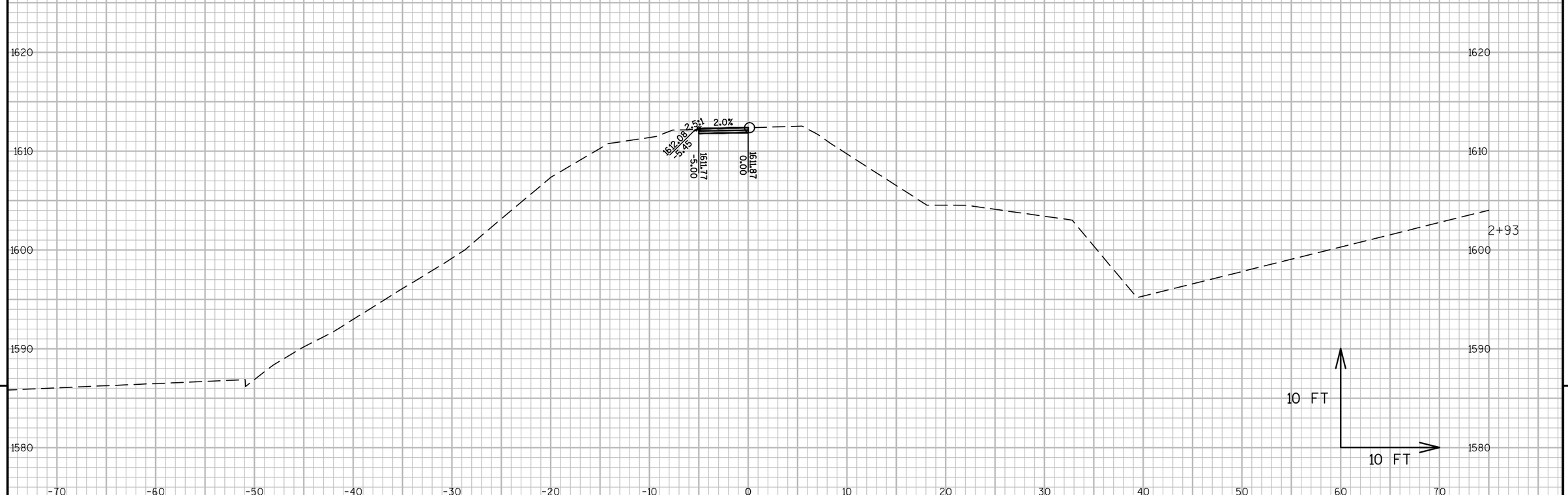
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL TEMPORARY STAGE "A"	SHEET 108	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_TEMP_TRAIL_XS.DWG
LAYOUT NAME - SECTION SHEET - (9)

PLOT DATE : 10/22/2015 7:01 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT



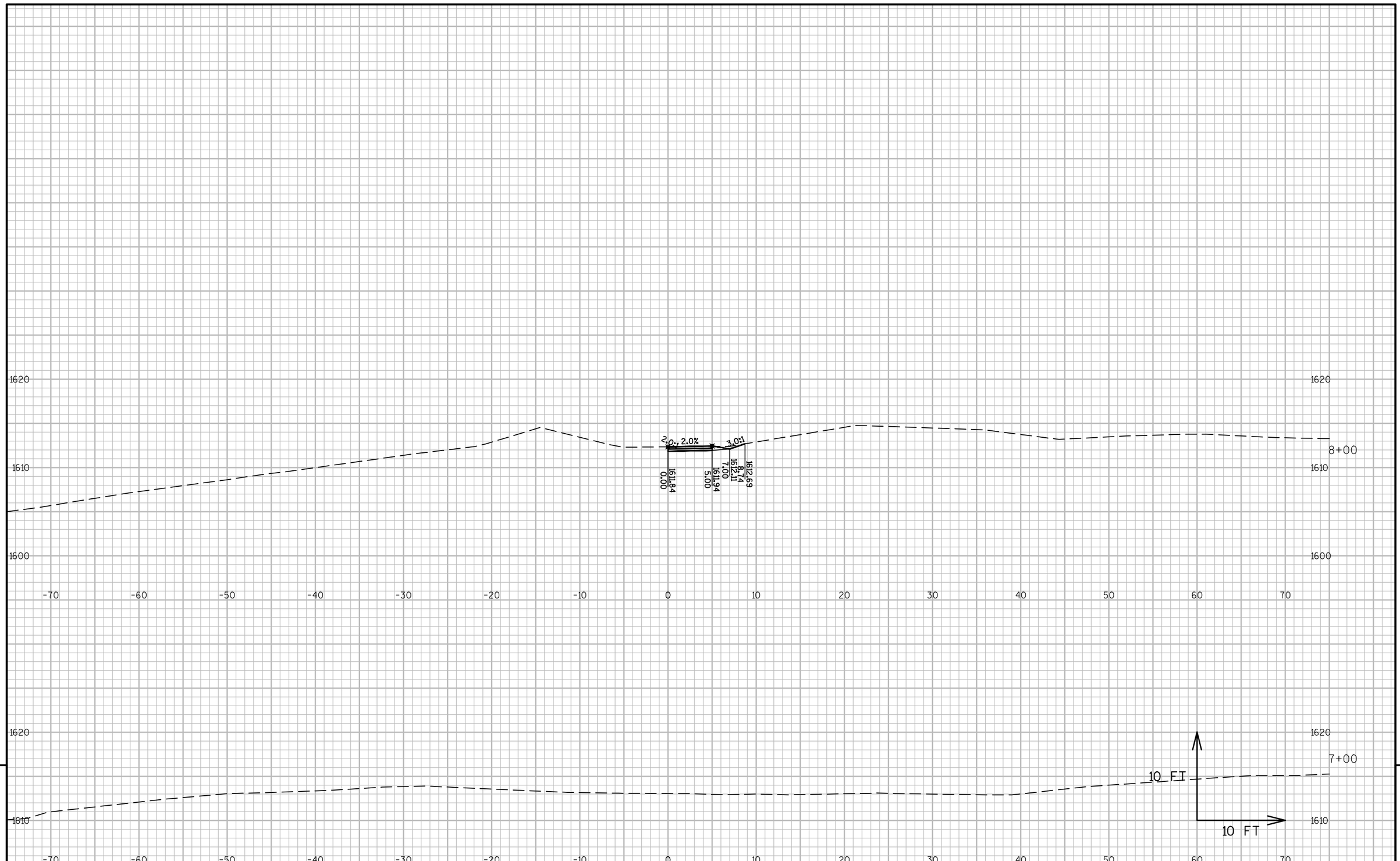
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL TEMPORARY STAGE "A"	SHEET 109	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_TEMP_TRAIL_XS.DWG
LAYOUT NAME - SECTION SHEET - (10)

PLOT DATE : 10/22/2015 7:01 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT



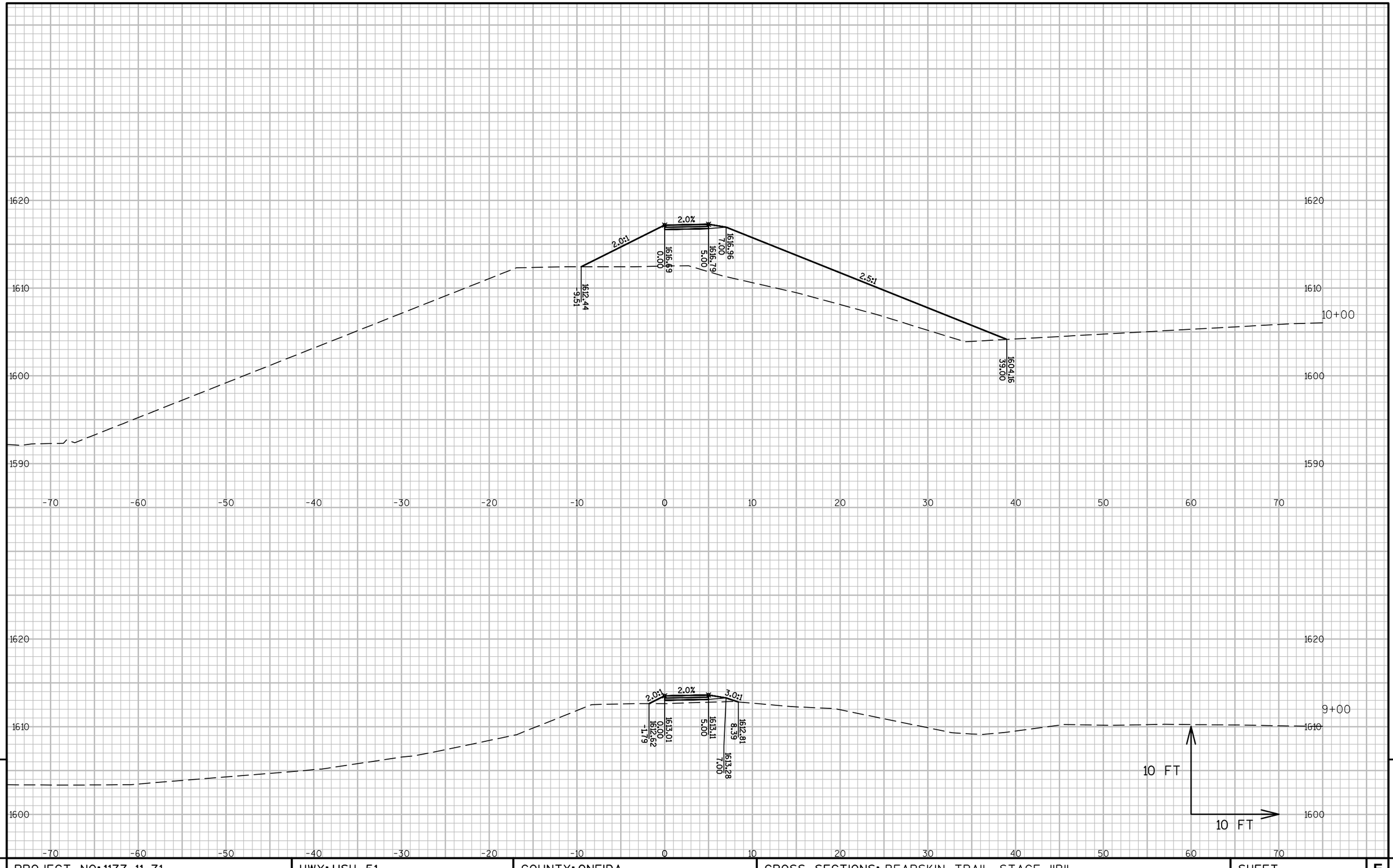
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 110	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (11)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

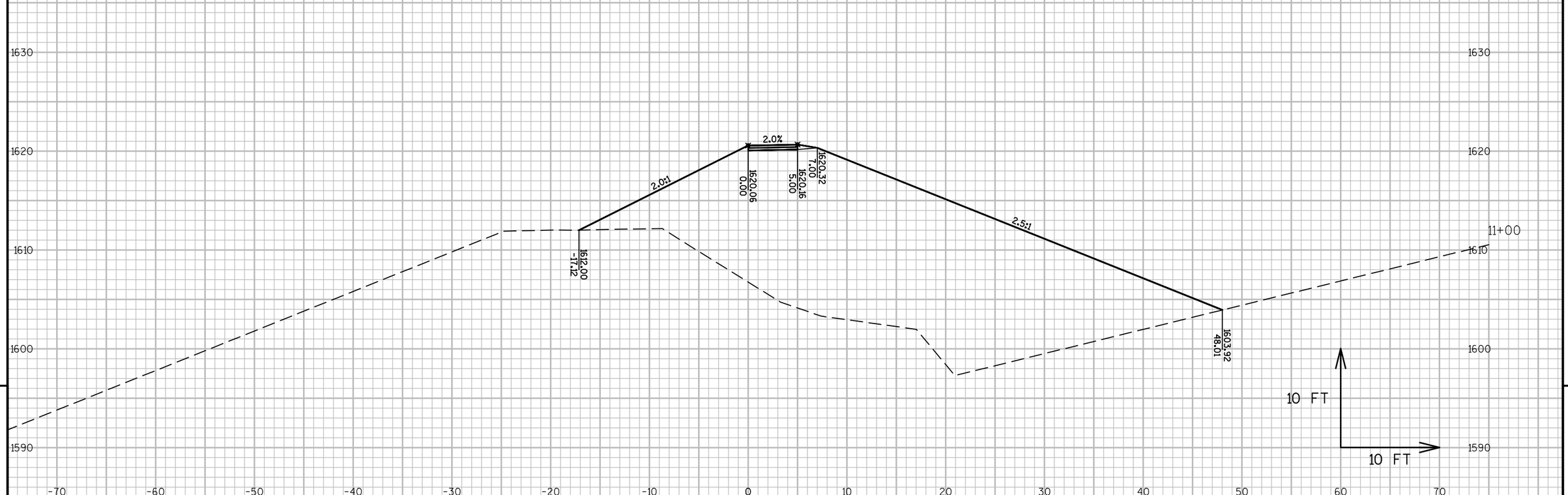


PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 111	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (12)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



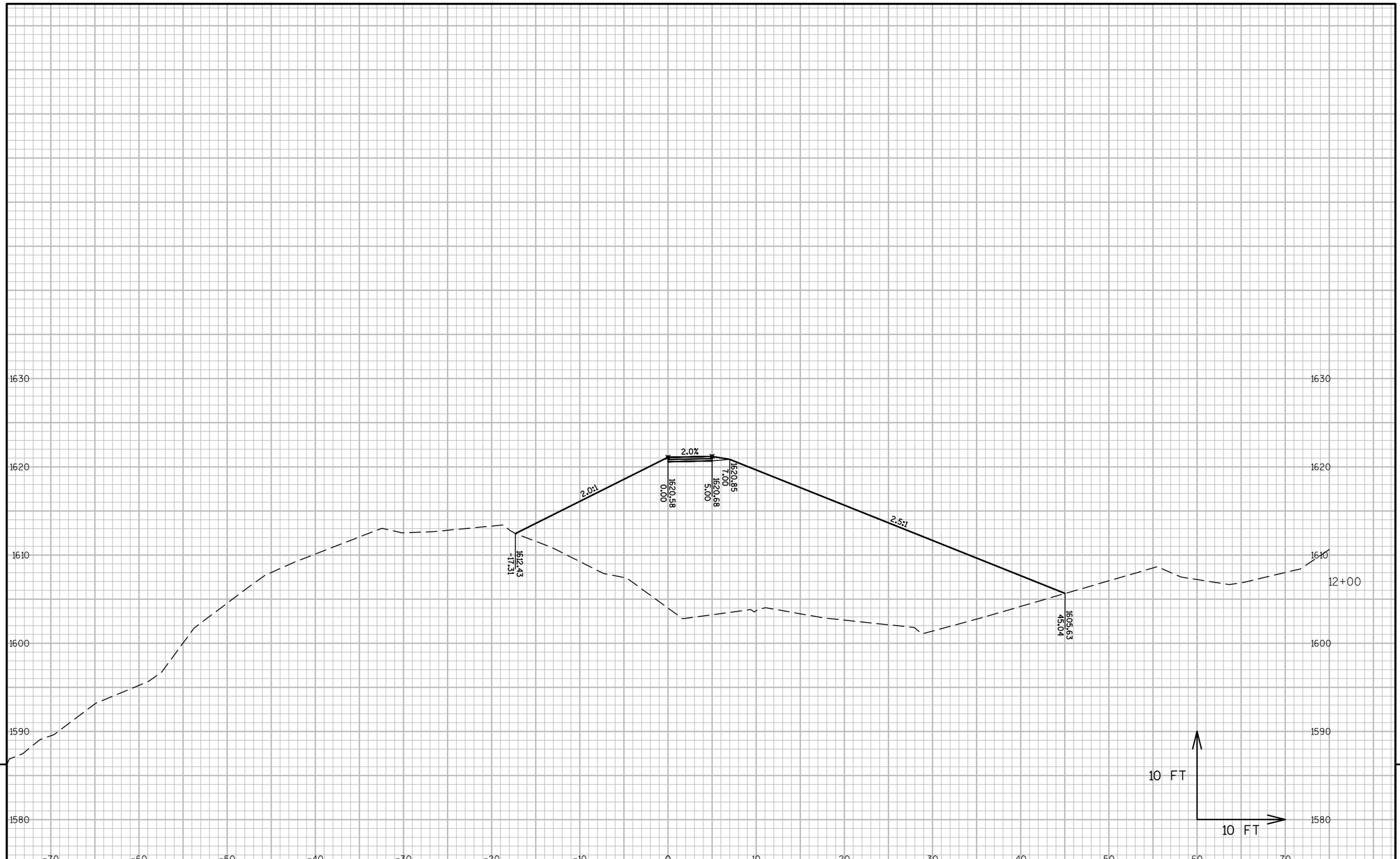
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 112	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (13)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT



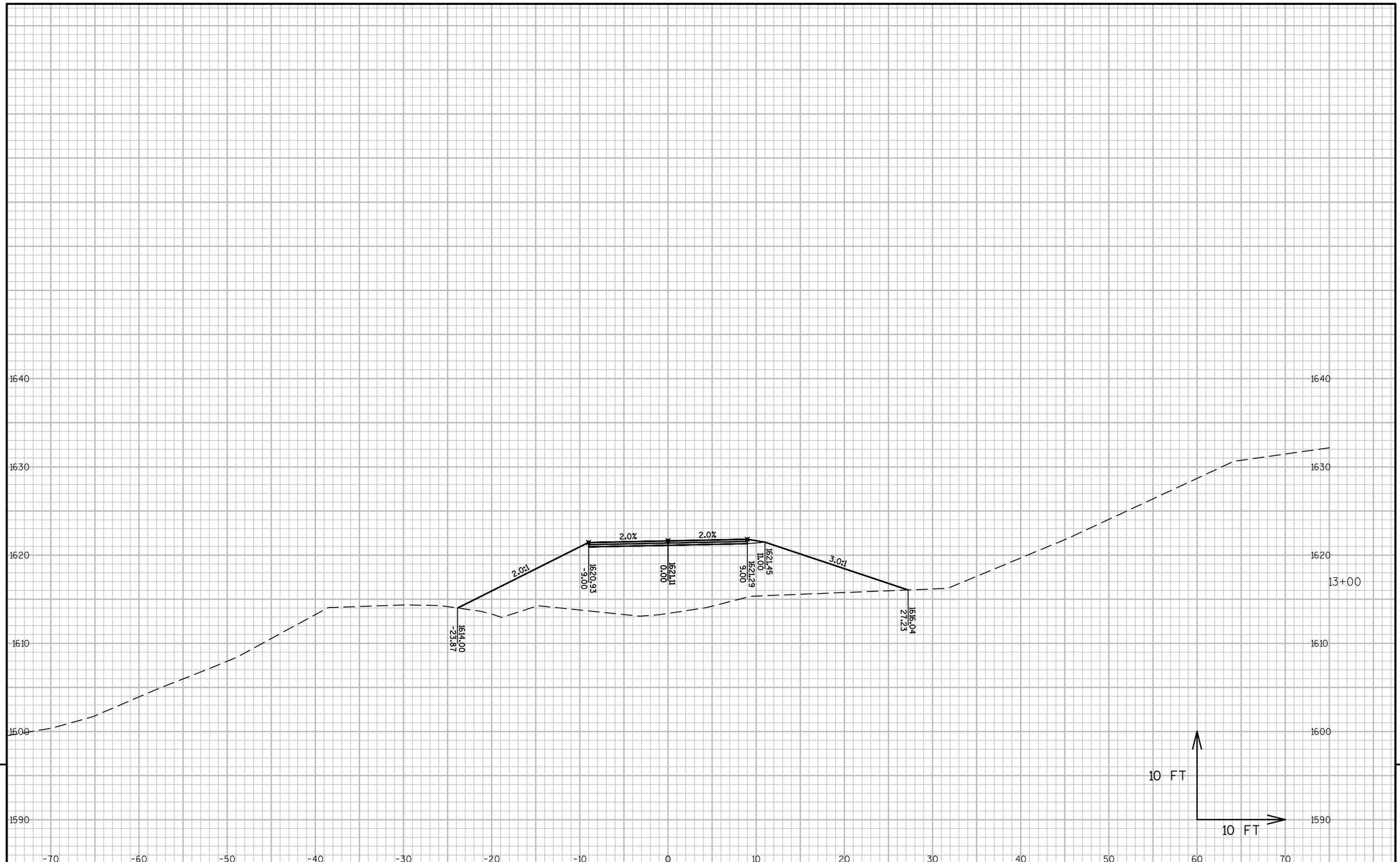
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 113	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (14)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 114	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (15)

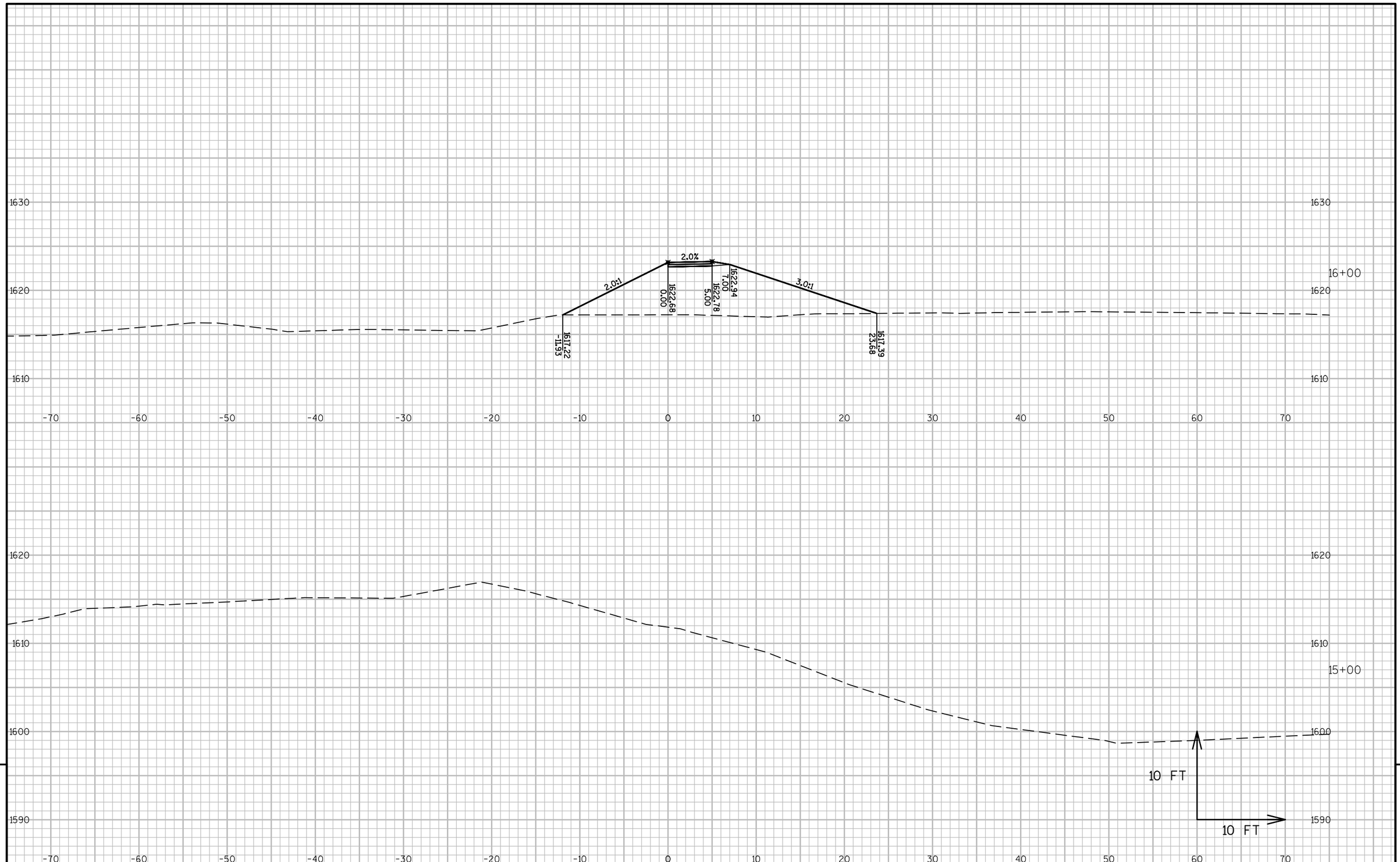
PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 115	E



9

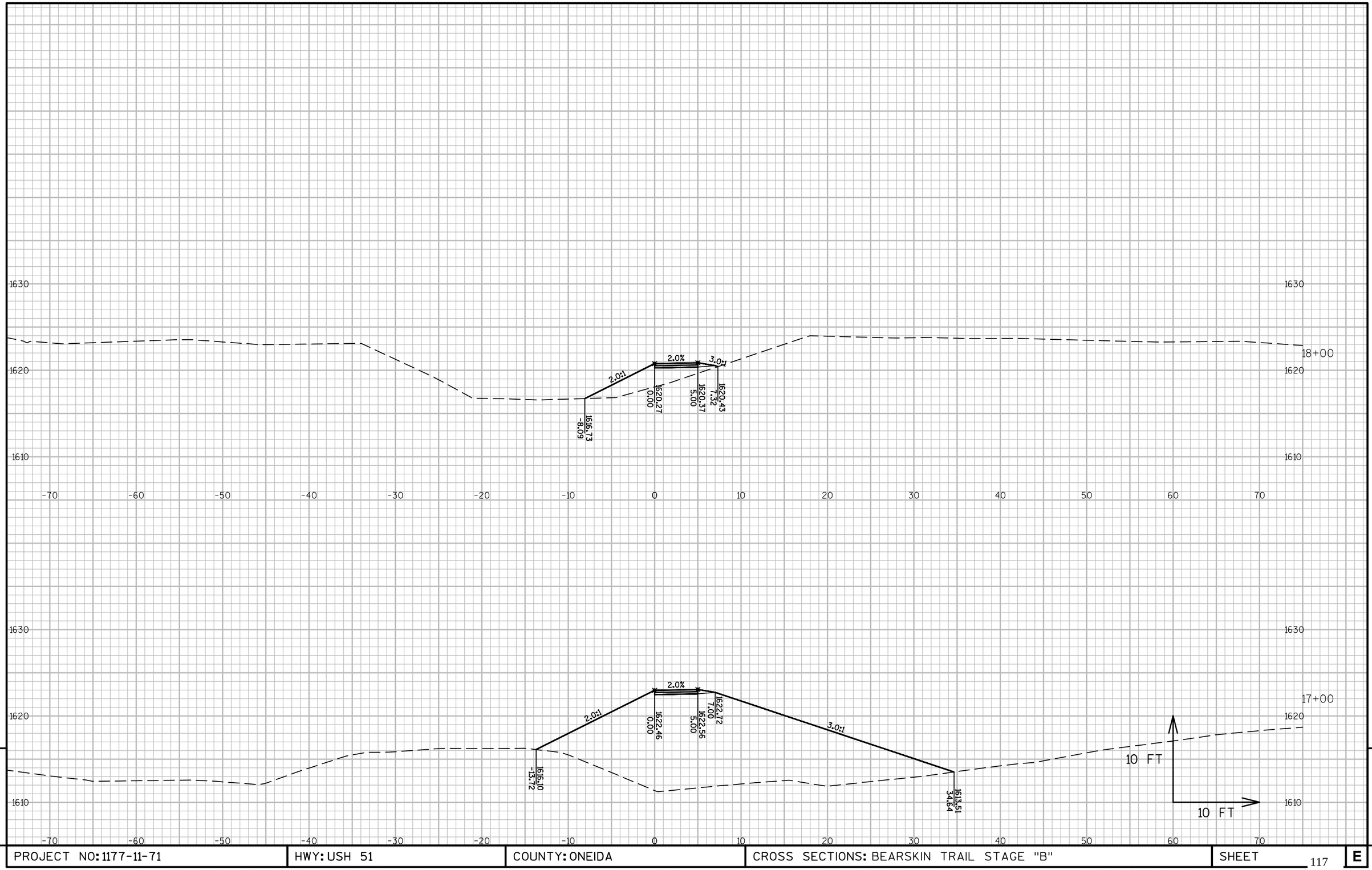
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 116	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (17)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

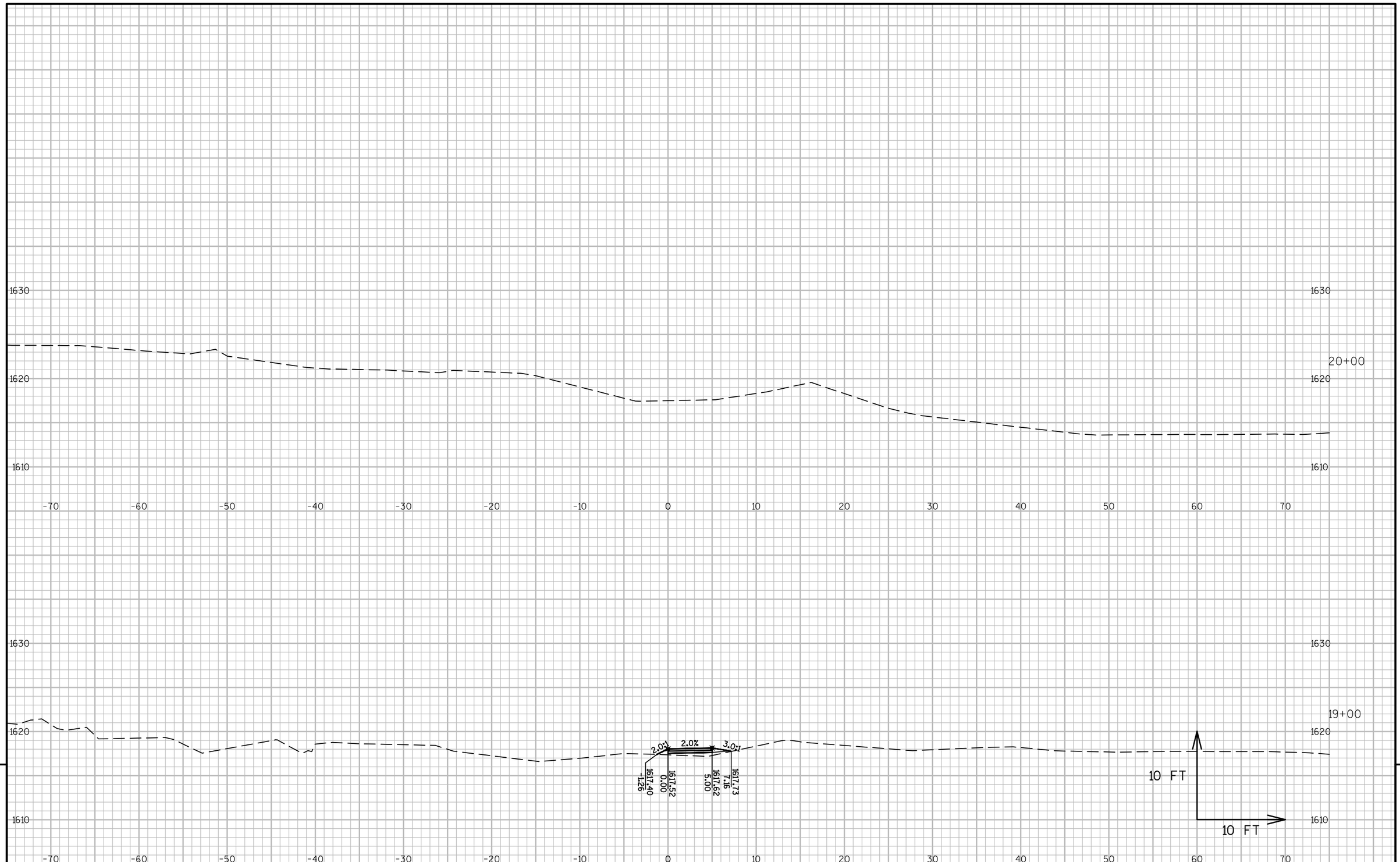
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 117	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (18)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



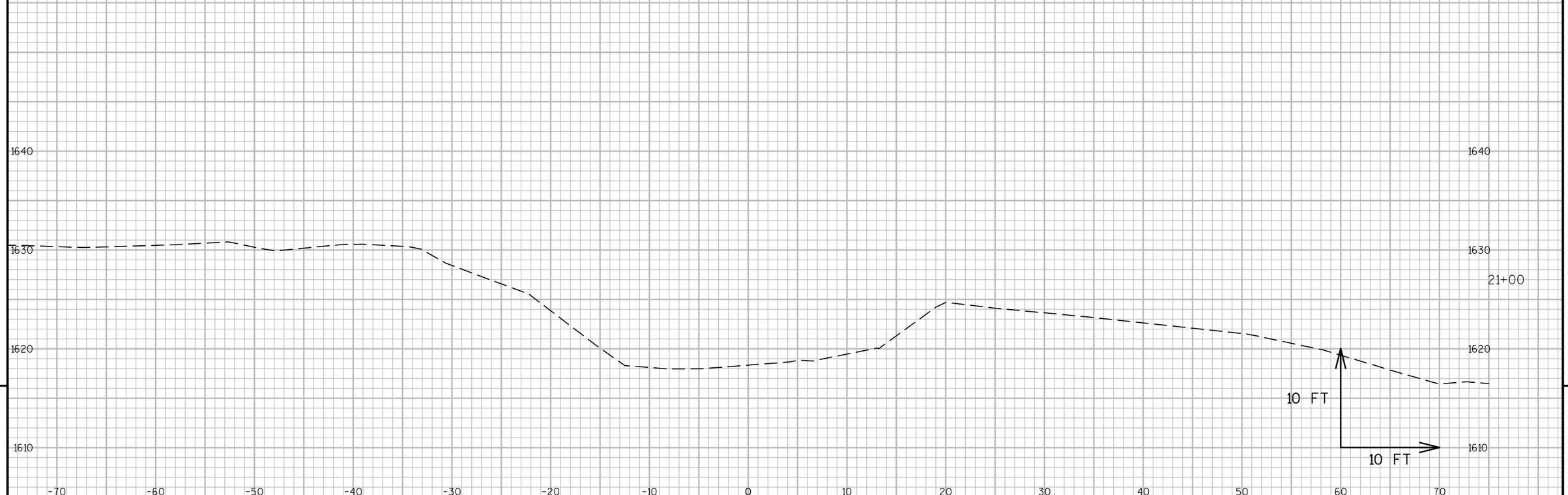
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 118	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (19)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

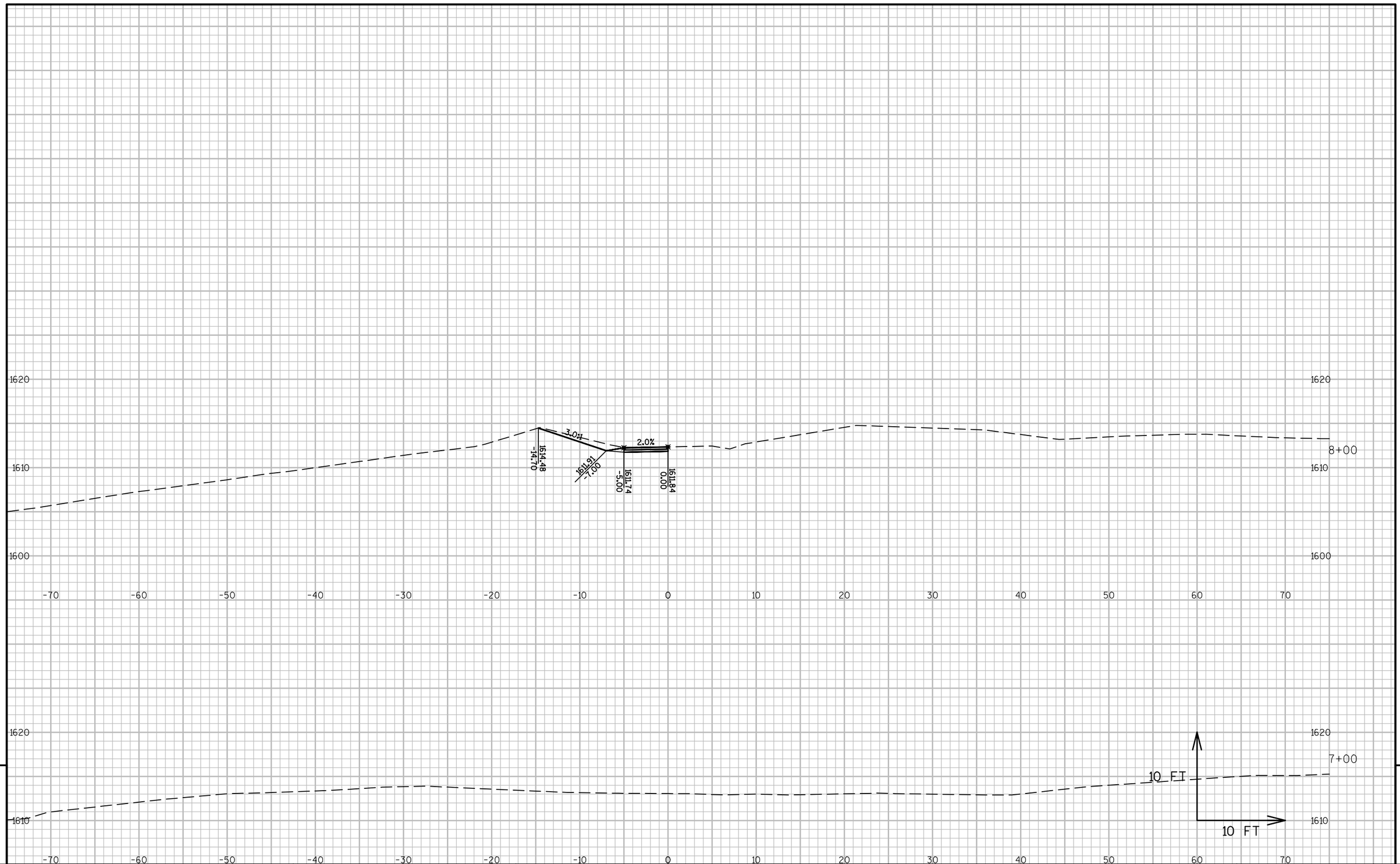
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL STAGE "B"	SHEET 119	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_1_XS.DWG
LAYOUT NAME - SECTION SHEET - (20)

PLOT DATE : 10/22/2015 7:08 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

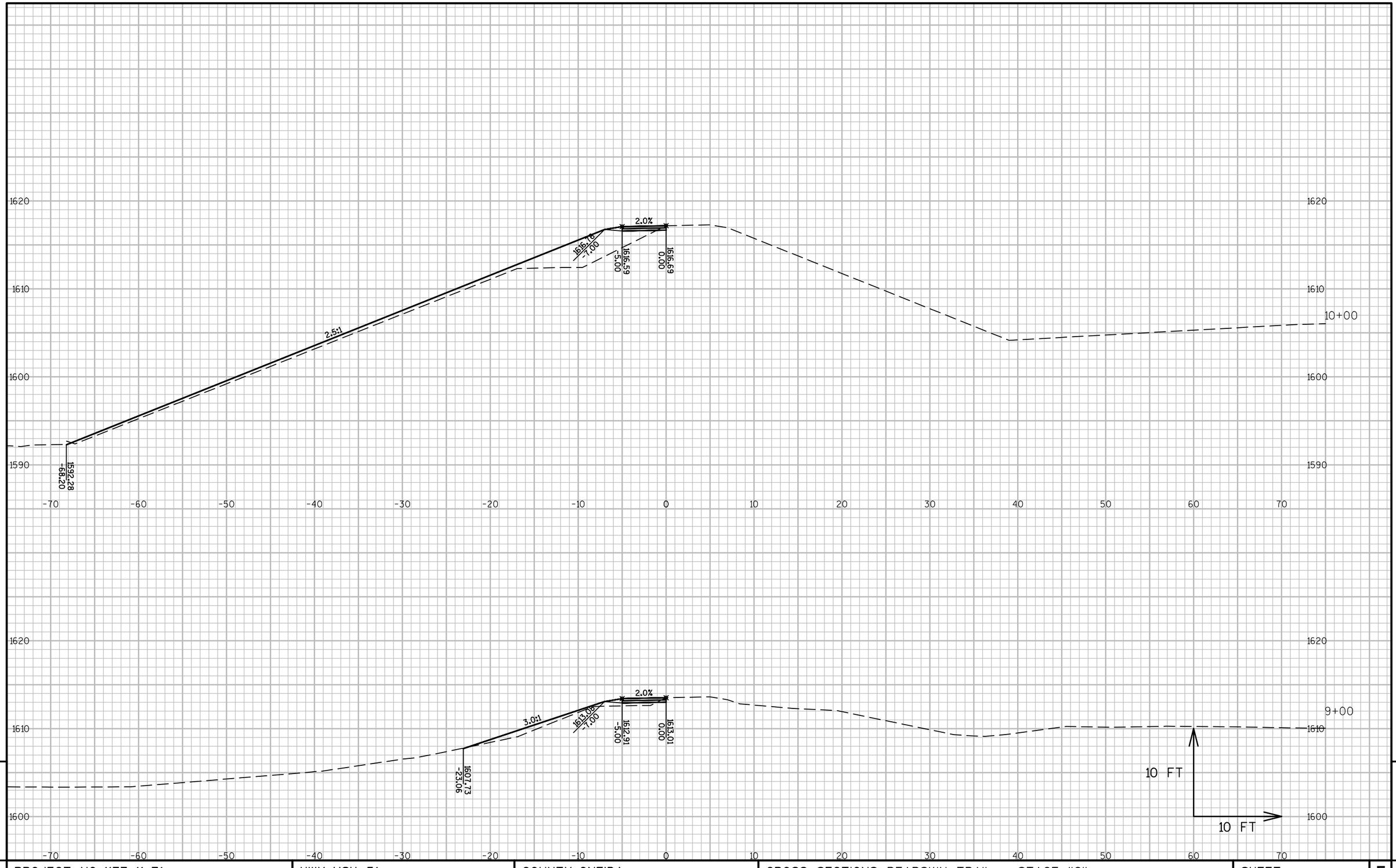
PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 120	E

9

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101 (71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (11)

PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



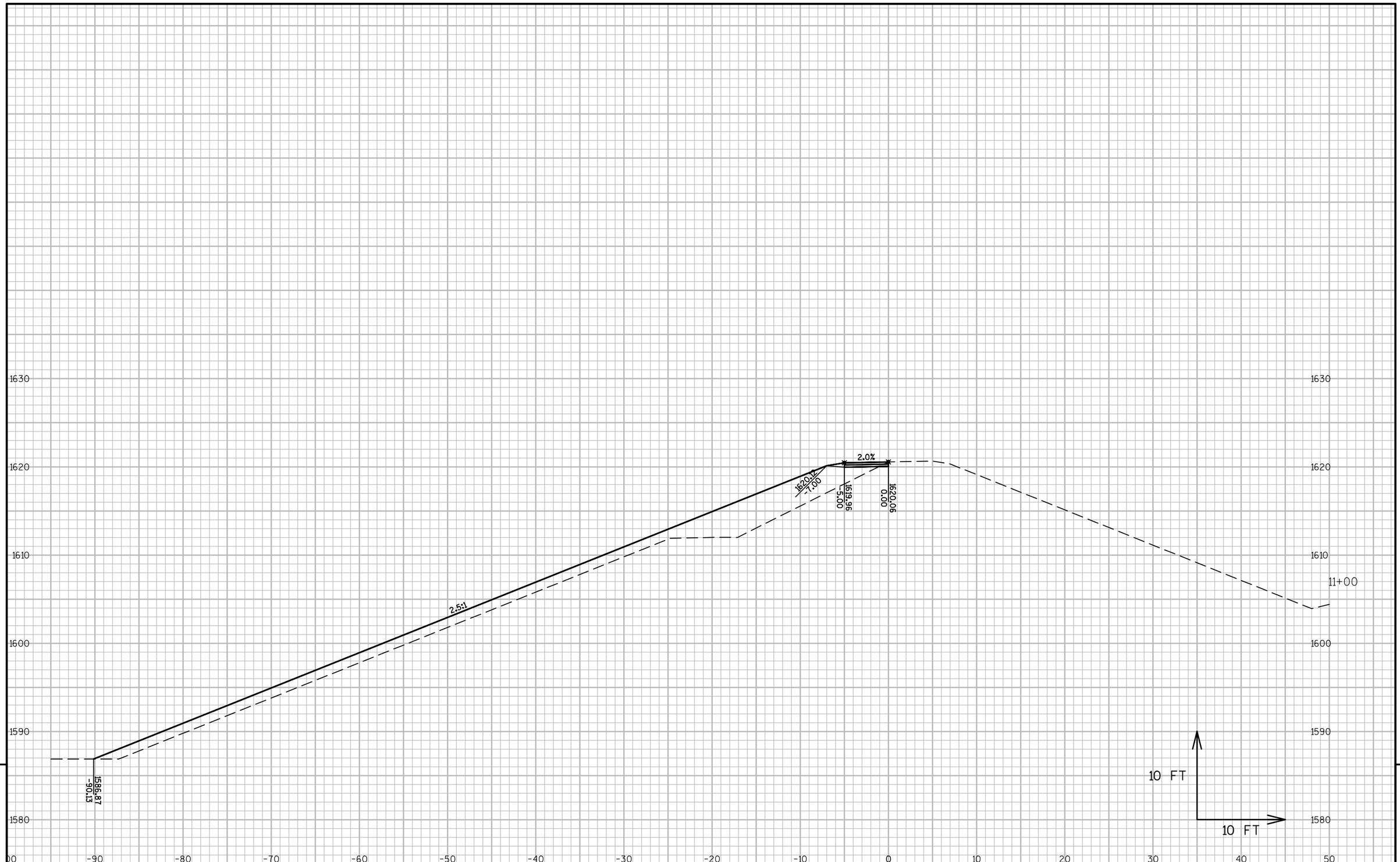
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 121	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (12)

PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

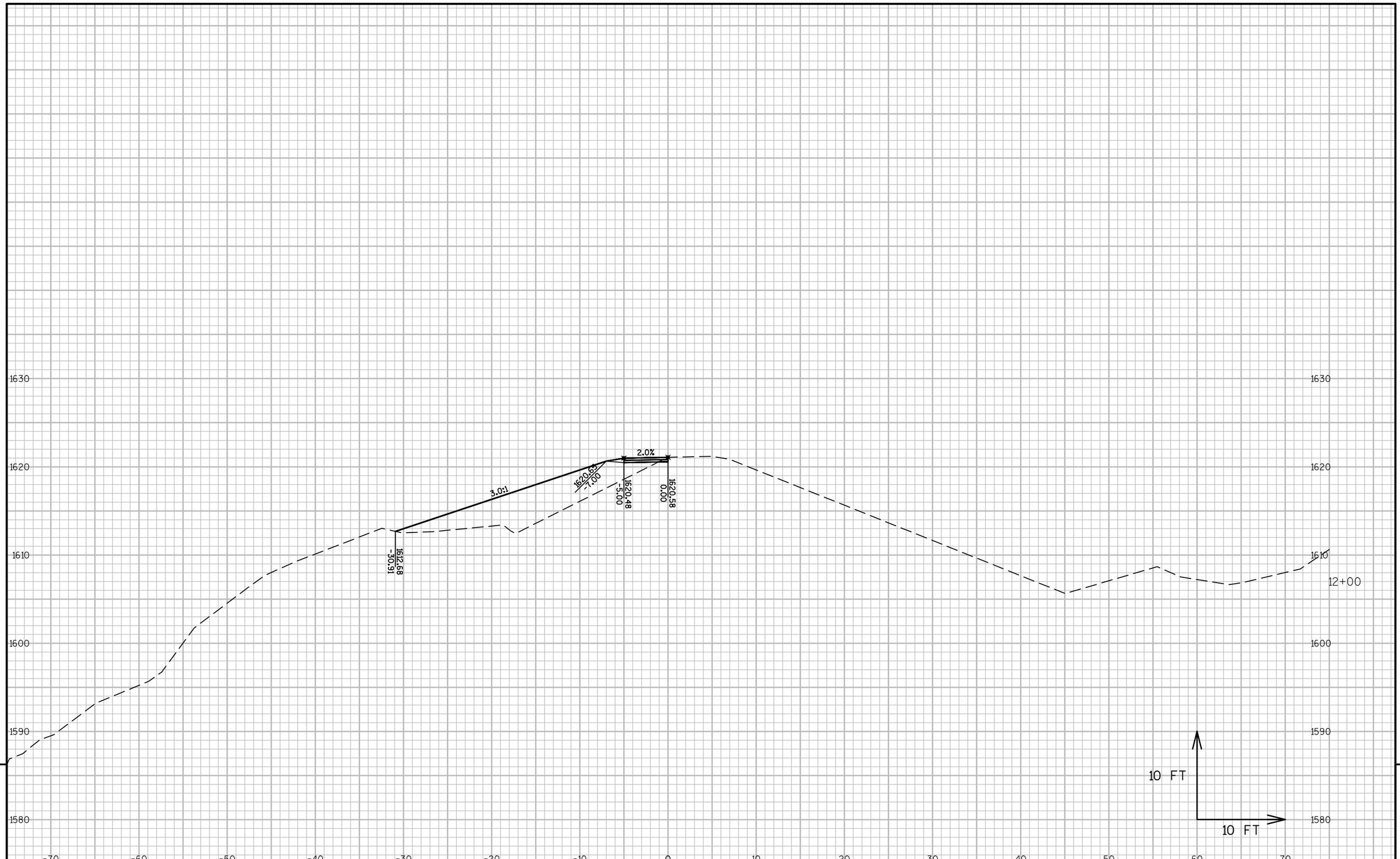


9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 122	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (13)
PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



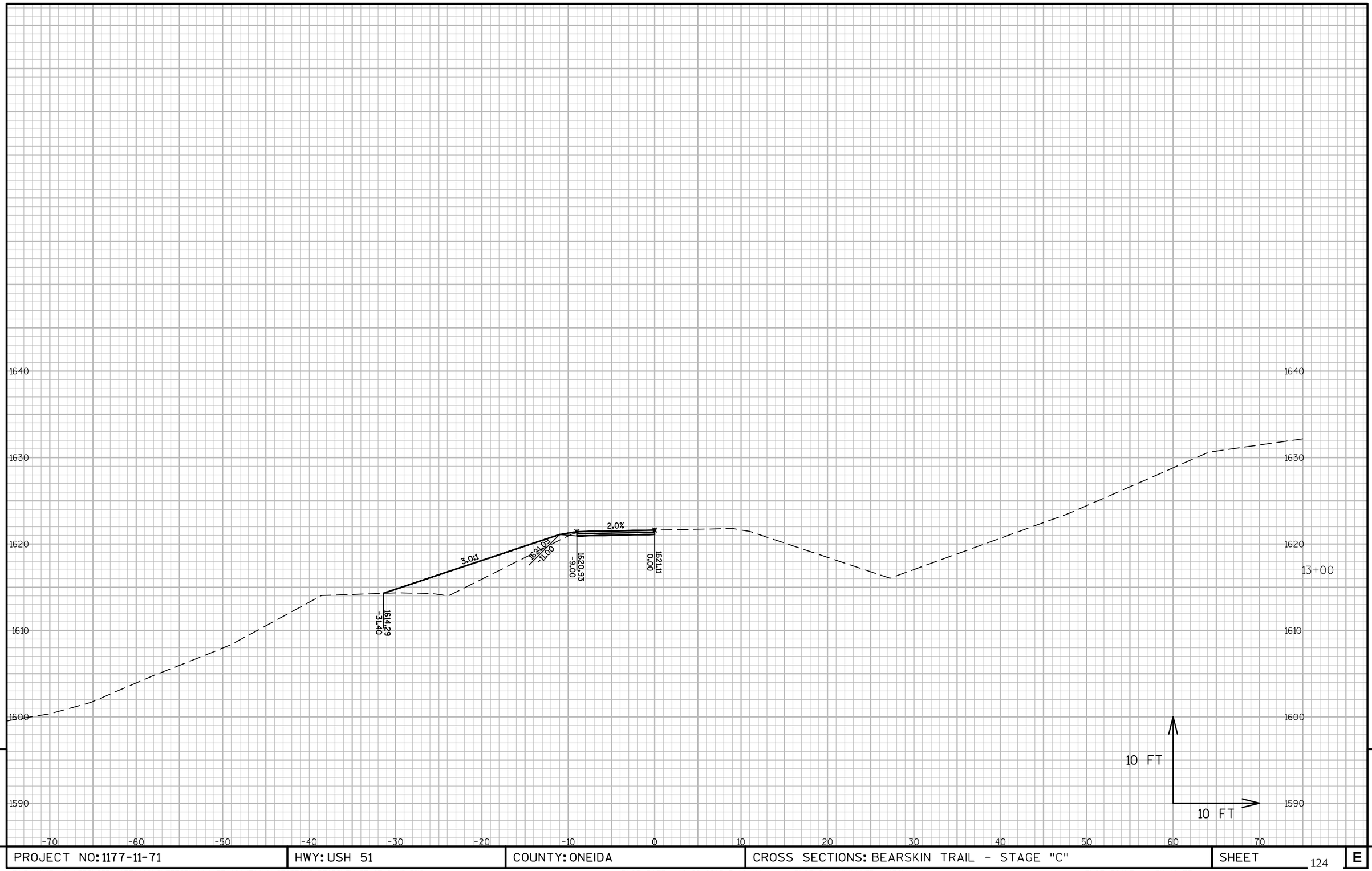
9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 123	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (14)

PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT



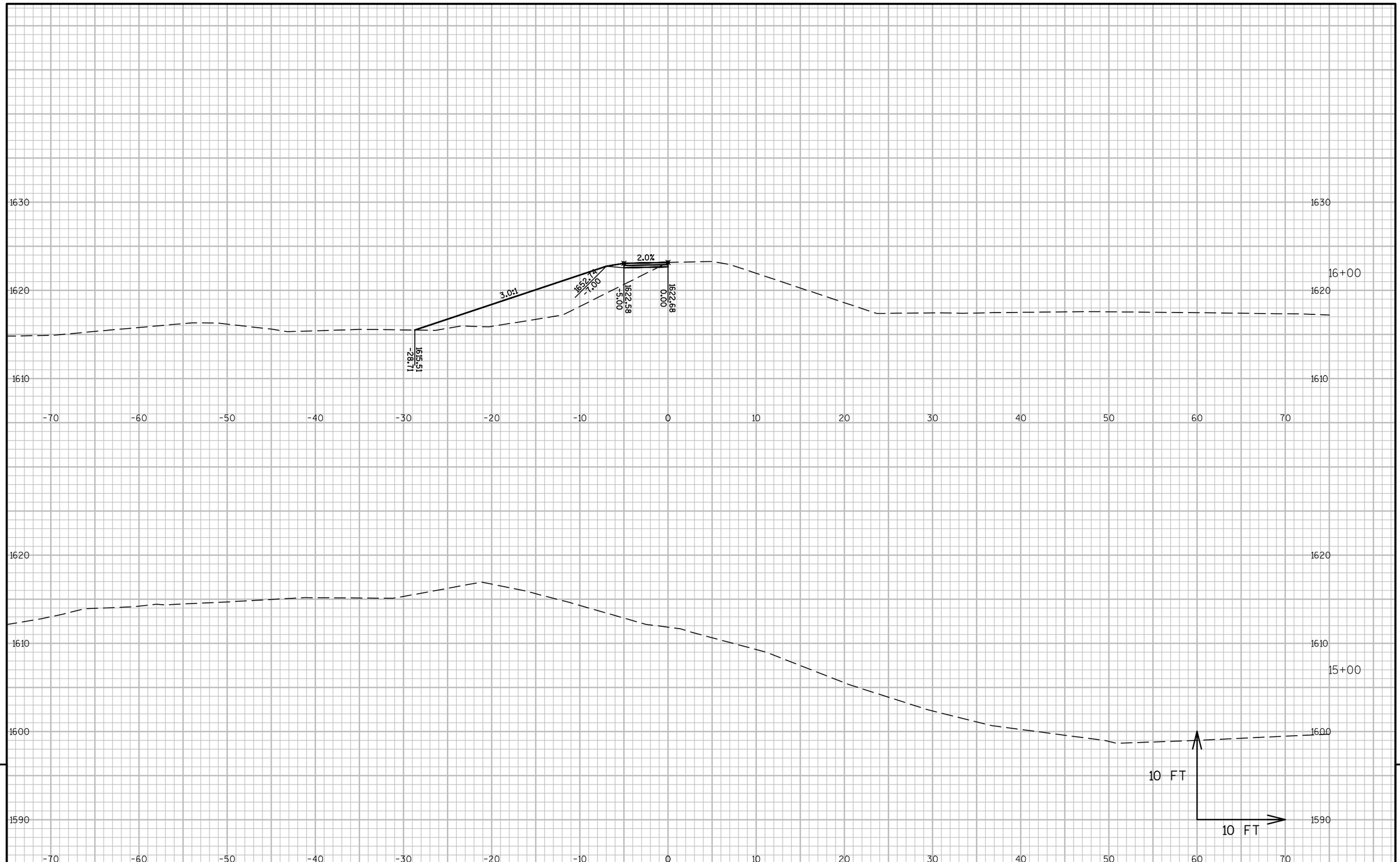
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 124	E

9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 125	E



9

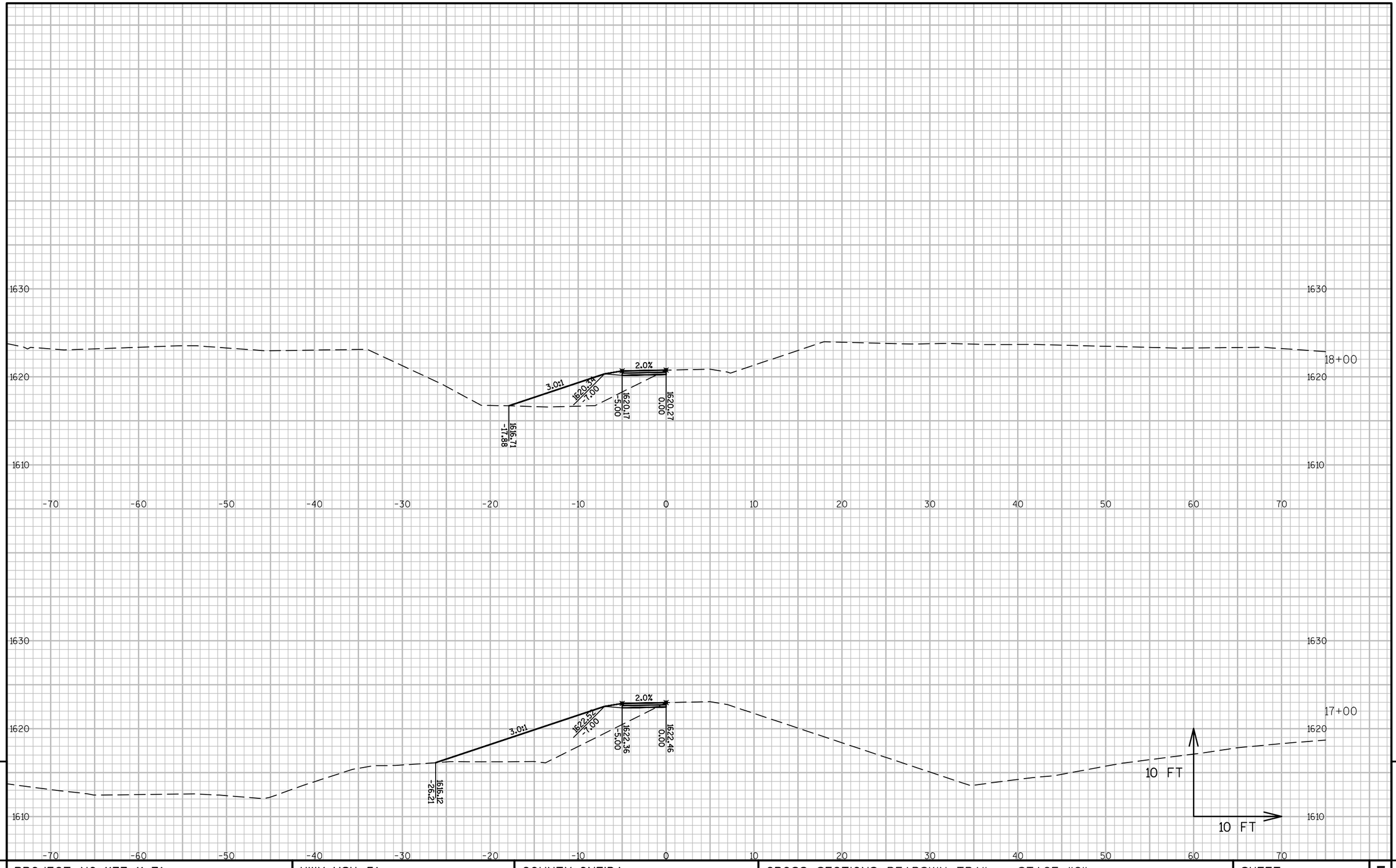
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 126	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (17)

PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

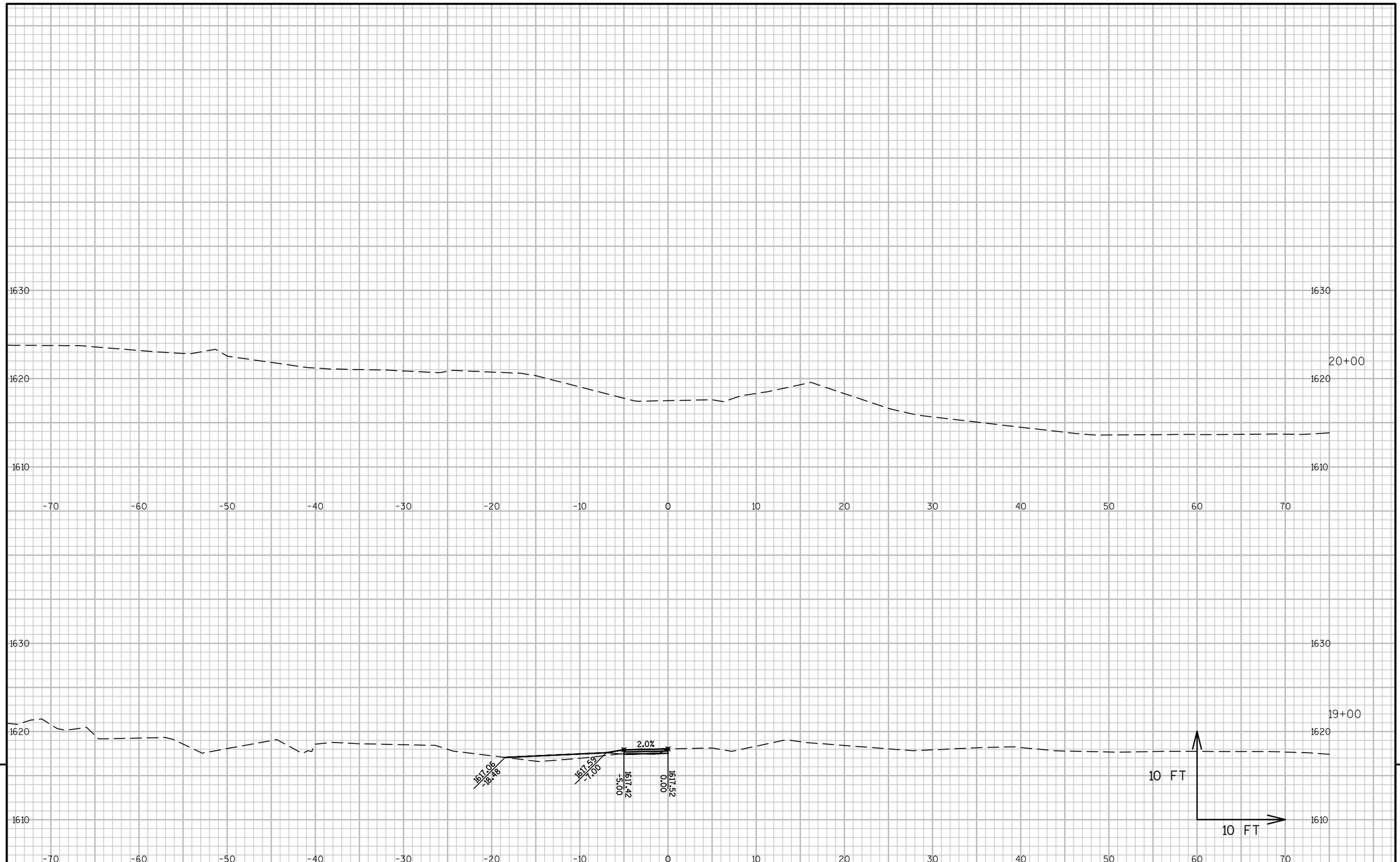
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 127	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (18)

PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

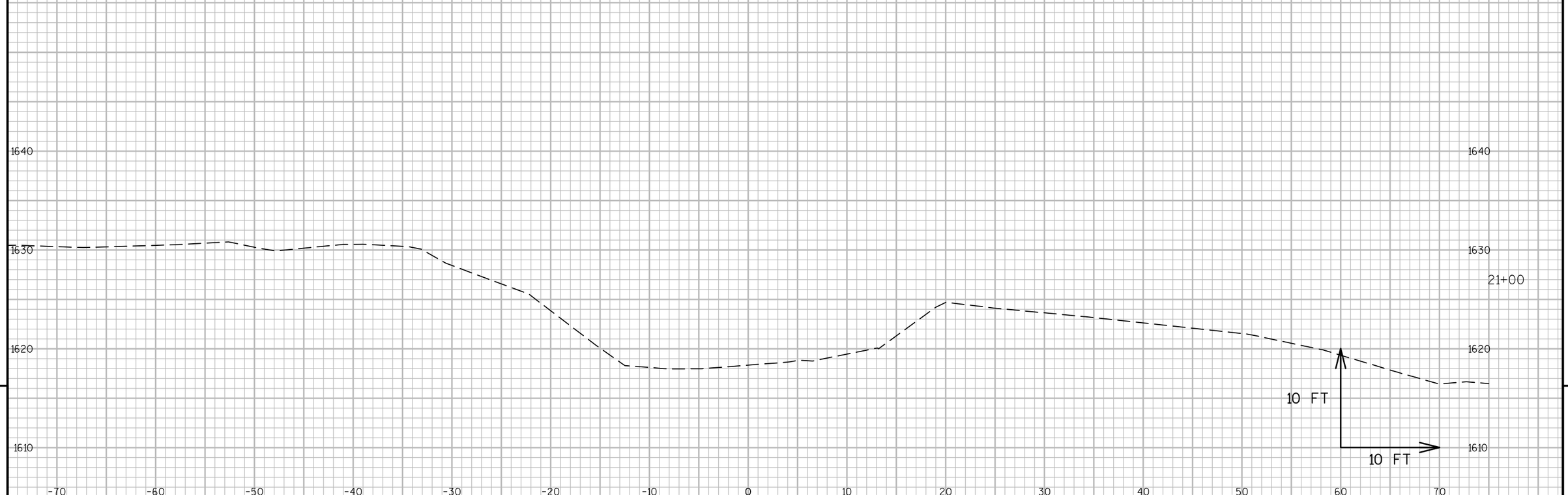
9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 128	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (19)

PLOT DATE : 10/22/2015 7:16 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1177-11-71	HWY: USH 51	COUNTY: ONEIDA	CROSS SECTIONS: BEARSKIN TRAIL - STAGE "C"	SHEET 129	E

FILE NAME : N:\PDS\C3D\11771100\SHEETSPLAN\11771101(71)\X-SECTIONS\BEARSKIN_STAGE_2_XS.DWG
LAYOUT NAME - SECTION SHEET - (20)

PLOT DATE : 10/22/2015 7:17 AM PLOT BY : WALLNER, AARON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov