MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLAN AND PROFILE OF

COUNTY ROAD

BRIDGE NO. S-10-024 (02H)

IN THE TOWN OF

SHEFFIELD

BERKSHIRE COUNTY

FEDERAL AID PROJECT NO. HIP(NGB)-003S(928)X

SHEFFIELD
COUNTY ROAD

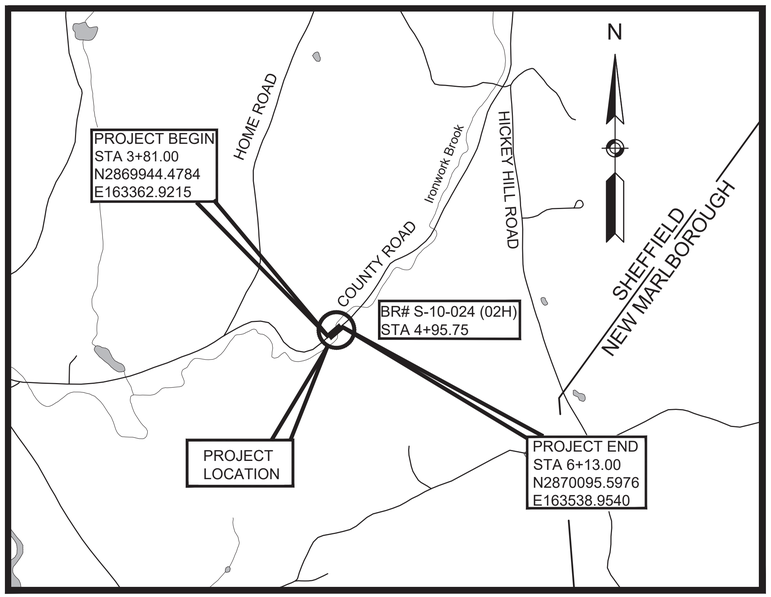
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	1	40
	PROJECT FILE NO. 611942		

TITLE SHEET & INDEX

611942_HD(TL).DWG Plotted on 3-Feb-2026 1:55 PM

THESE PLANS ARE SUPPLEMENTED BY THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS, AS IDENTIFIED IN THE CONTRACT SPECIAL PROVISIONS: THE MASSDOT CONSTRUCTION STANDARD DETAILS, THE MASSDOT STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE MASSDOT STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, THE MASSDOT OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, THE MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, AND THE ANSI AMERICAN STANDARD FOR NURSERY STOCK.

INDEX



0 1000 2000 3000 4000

SCALE: 1" = 1000'

LENGTH OF PROJECT = 232.00 FEET = 0.044 MILES

DESIGN DESIGNATION (COUNTY ROAD)

DESIGN SPEED	45 MPH
ADT (2021)	790
ADT (2041)	1175
K	13.0%
D	51% EB
T (PEAK HOUR)	20.4%
T (AVERAGE DAY)	14.3%
DHV	155
DDHV	80
FUNCTIONAL CLASSIFICATION	RURAL MAJOR COLLECTOR

COMMONWEALTH OF MASSACHUSETTS
KATHRYN L. EAGAN
No. 54123
REGISTERED PROFESSIONAL ENGINEER

Kathryn L. Eagan Digitally signed by Kathryn L. Eagan Date: 2026.02.04 08:52:03 -05'00'

BSC GROUP
BUILD | SUPPORT | CONNECT
803 SUMMER STREET
BOSTON, MASSACHUSETTS 02127
617-896-4300 | www.bscgroup.com

DATE	DESCRIPTION	REV #

massDOT
Massachusetts Department of Transportation
Highway Division

APPROVED

Carrie Lavallee, P.E. Digitally signed by Carrie Lavallee, P.E. Date: 2026.02.09 08:13:11 -05'00' 02/06/2026

CHIEF ENGINEER DATE

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
JB	JB	JERSEY BARRIER
CB	CB	CATCH BASIN
		CATCH BASIN CURB INLET
FP	FP	FLAG POLE
GP	GP	GAS PUMP
MB	MB	MAIL BOX
		POST SQUARE
		POST CIRCULAR
WELL	WELL	WELL
EHH	EHH	ELECTRIC HANDHOLE
		FENCE GATE POST
GG	GG	GAS GATE
BHL #	BHL #	BORING HOLE
MW #	MW #	MONITORING WELL
TP #	TP #	TEST PIT
		HYDRANT
		LIGHT POLE
CO.BD.		COUNTY BOUND
		GPS POINT
C	C	CABLE MANHOLE
D	D	DRAINAGE MANHOLE
E	E	ELECTRIC MANHOLE
G	G	GAS MANHOLE
M	M	MISC MANHOLE
S	S	SEWER MANHOLE
T	T	TELEPHONE MANHOLE
W	W	WATER MANHOLE
MHB	MHB	MASSACHUSETTS HIGHWAY BOUND
MON		MONUMENT
SB		STONE BOUND
TB		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
TPL or GUY	TPL or GUY	TROLLEY POLE OR GUY POLE
HTP		TRANSMISSION POLE
UFB	UFB	UTILITY POLE W/ FIREBOX
UPDL	UPDL	UTILITY POLE WITH DOUBLE LIGHT
ULT	ULT	UTILITY POLE W / 1 LIGHT
UPL	UPL	UTILITY POLE
		BUSH
SIZE & TYPE		TREE
		STUMP
		SWAMP / MARSH
WG	WG	WATER GATE
PM	PM	PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
100 99		CONTOURS (ON-THE-GROUND SURVEY DATA)
100 99		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
x	x	CHAIN LINK OR METAL FENCE
		WOOD FENCE
		SEDIMENT BARRIER
		COIR LOG SEDIMENT BARRIER
		TREE LINE
		SAWCUT LINE
		PAVEMENT MILLING MULCH
		TOP OR BOTTOM OF SLOPE
		LIMIT OF WORK
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

ENVIRONMENTAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
WF#XX-XX		WETLAND FLAGS
BF#XX-XX		BANK FLAGS

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
1	1	CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
RRSG	RRSG	RAILROAD SIGNAL
OR		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
	20'	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
	20'	MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
ONLY	ONLY	LEGEND "ONLY" - WHITE
	SL	STOP LINE
	CW	CROSSWALK
	SWL	SOLID WHITE LINE
	SYL	SOLID YELLOW LINE
	BWL	BROKEN WHITE LINE
	BYL	BROKEN YELLOW LINE
	DWL	DOTTED WHITE LINE
	DYL	DOTTED YELLOW LINE
	DWLEx	DOTTED WHITE LINE EXTENSION
	DYLEx	DOTTED YELLOW LINE EXTENSION
	DBWL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BARR	BARRIER
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
EXIST (or EX)	EXISTING
EXC	EXCAVATION
FES	FLARED END SECTION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LOW	LIMIT OF WORK
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
O.C.	ON CENTER
OHW	ORDINARY HIGH WATER
OVHD	OVERHEAD
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	PEDESTRIAN CURB RAMP
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	2	40
	PROJECT FILE NO. 611942		

LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

GENERAL

PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
VGC	VERTICAL GRANITE CURB
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

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SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	3	40
	PROJECT FILE NO. 611942		

GENERAL NOTES

SURVEY NOTES

1. NO EASEMENT RESEARCH WAS COMPLETED FOR THIS PROJECT. EASEMENTS SHOWN HEREON ARE FROM PLANS WHICH WERE FOUND WHILE COMPILING PROPERTY LINES.
2. THIS PLAN IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY BY BSC GROUP INC. IN JULY AND AUGUST 2019 AND UPDATED IN JULY AND SEPTEMBER, 2023.
3. THE HORIZONTAL DATUM SHOWN HEREON REFERENCES THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE, US SURVEY FEET, NAD83 (2011-EPOCH 2010.00) AND IS BASED ON A GPS SURVEY BY BSC GROUP INC. IN JULY 2019.
4. THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD88 AND IS BASED ON A GPS SURVEY BY BSC GROUP INC. IN JULY 2019
5. THE COUNTY COMMISSIONER ESTABLISHED COUNTY ROAD AS PART OF THE 16TH MASSACHUSETTS TURNPIKE ON DECEMBER 31, 1808, COUNTY COMMISSIONERS BOOK 2, PAGE 85 (CCB2). THE ORIGINAL LOCATION OF THE ROADWAY IS NOT DESCRIBED IN A WAY THAT ALLOWS FOR ACCURATE PLACEMENT IN THE PROJECT AREA. ADDITIONAL RESEARCH AND CALCULATIONS SUPPORT THAT THE ROAD WAS ESTABLISHED IN THE GENERAL PROJECT AREA AND IN A SHAPE SIMILAR TO THE EXISTING ROADWAY. THE LOCATION SHOWN ON THIS PLAN IS BASED ON THE CENTERLINE OF THE EXISTING PAVED ROADWAY AND A FIXED WIDTH OF FOUR RODS EVENLY OFFSET 2 RODS IN EACH DIRECTION FROM THE CENTERLINE (CCB2 INDICATES THE ROAD IS 4 RODS WIDE IN THE PROJECT AREA).
6. COMBINED SCALE FACTOR = 0.99993453.
7. WETLANDS SHOWN WERE LOCATED AT THE TIME OF SURVEY AND DELINEATED BY BSC GROUP INC. IN JUNE 2019 AND UPDATED IN SEPTEMBER, 2023.

GENERAL NOTES

1. ALL EXISTING UTILITY CASTINGS THAT ARE TO REMAIN WITHIN AREAS TO BE REPAVED SHALL BE ADJUSTED TO LINE AND GRADE BY THE CONTRACTOR UNLESS OTHERWISE NOTED. ALL PRIVATE TELEPHONE, GAS, AND ELECTRICAL CASTINGS SHALL BE ADJUSTED BY OTHERS.
2. ALL UTILITY WORK BY OTHERS (BO) SHALL BE PERFORMED BY THE PARTY RESPONSIBLE FOR THE UTILITY AND CAN BE FOUND WITHIN THE PUC FORM, INCLUDED WITH THE CONTRACT DOCUMENTS.
3. THE LOCATIONS OF EXISTING SUBSURFACE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM AVAILABLE RECORD DRAWINGS AND ARE NOT WARRANTIED TO BE CORRECT. THE LOCATIONS ARE APPROXIMATE ONLY AND IN SOME CASES MAY BE INCOMPLETE. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES REQUIRED AND VERIFY THE LOCATIONS OF ALL EXISTING SUBSURFACE UTILITIES PRIOR TO PERFORMING ANY WORK.
4. PRIOR TO THE INSTALLATION OF PROPOSED UTILITIES, THE CONTRACTOR SHALL EXCAVATE TEST PITS AT LOCATIONS OF UTILITY CROSSINGS TO VERIFY DEPTHS OF EXISTING PIPES, CONDUITS OR OTHER FACILITIES AS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL ENSURE THAT ALL ROADWAY RUNOFF SHALL BE DIRECTED AWAY FROM THE ROADWAY AND/OR TOWARDS THE DROP INLET.
6. THE CONTRACTOR SHALL VERIFY ALL OUTLET GRADES OF DRAINAGE STRUCTURES PRIOR TO CONSTRUCTING THE DRAINAGE IMPROVEMENTS.
7. THE CONTRACTOR SHALL SAWCUT TO THE FULL PAVEMENT DEPTH AT BOUNDARIES BETWEEN FULL DEPTH CONSTRUCTION AND EXISTING PAVEMENT.
8. 2015 USGS LIDAR: MAINE & MASSACHUSETTS QL1 & QL2 DATA WAS USED TO SUPPLEMENT TOPOGRAPHIC DATA OBTAINED BY ON-THE-GROUND INSTRUMENT SURVEY.
9. ALL AREAS OUTSIDE OF THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S OWN EXPENSE.
10. ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM DAMAGE CAUSED BY CONTRACTOR OPERATIONS.
11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT DIGSAFE TO MARK OUT UTILITIES WITHIN THE PROJECT AREA. 1-888-344-7233: 1-888-DIG-SAFE.
12. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY HIGHWAY BOUND OR PRIVATE PROPERTY PIN THAT MAY BE DAMAGED OR DESTROYED DURING CONSTRUCTION TO ITS LOCATION JUST PRIOR TO CONSTRUCTION.
13. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES FOR DETERMINATION OF TREE REMOVAL AND TRIMMING REQUIRED FOR OVERHEAD WIRES, UTILITY POLES AND GUY WIRE ANCHORS. NOTE IT MAY BE REQUIRED TO MOBILIZE AN ADDITIONAL TIME AFTER THE MAIN WORK IS COMPLETED AND THE POLE RELOCATION WORK HAS BEEN DETERMINED TO CLEARLY IDENTIFY THE TREE REMOVAL AND TRIMMING NECESSARY FOR THE UTILITY POLE RELOCATIONS.
14. RARE PLANT PROTECTION FENCE MUST BE INSTALLED PRIOR TO ANY WORK OCCURRING ADJACENT TO OR ABOVE THE RATE PLANTS. PLANT PROTECTION FENCE TO BE INSTALLED BY BSC GROUP IN COORDINATION WITH MASSDOT.

PAVEMENT NOTES

PROPOSED FULL DEPTH PAVEMENT

SURFACE: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) OVER
0.06-0.08 GAL/SY TACK COAT OVER

INTERMEDIATE: 2 ½" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5) OVER
0.06-0.08 GAL/SY TACK COAT OVER

BASE: 4 ½" SUPERPAVE BASE COURSE - 37.5 (SBC-37.5) OVER

SUBBASE: 4" DENSE GRADED CRUSHED STONE FOR SUB-BASE PLACED OVER
8" GRAVEL BORROW (M1.03.0 TYPE b)

PROPOSED HMA DRIVEWAY APRON

SURFACE: 1 ½" HMA SURFACE COURSE OVER

INTERMEDIATE: 2 ½" HMA INTERMEDIATE COURSE OVER

SUBBASE: 8" GRAVEL BORROW (M1.03.0 TYPE b)

PROP RESURFACING OVERLAY TRANSITION AT LIMITS OF WORK

SURFACE: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) OVER
0.07-0.09 GAL/SY TACK COAT OVER
1 ½" PAVEMENT FINE MILLING

PROP GRAVEL DRIVEWAY

SURFACE: 12" GRAVEL BORROW (M1.03.0 TYPE b) OVER COMPACTED SUBGRADE

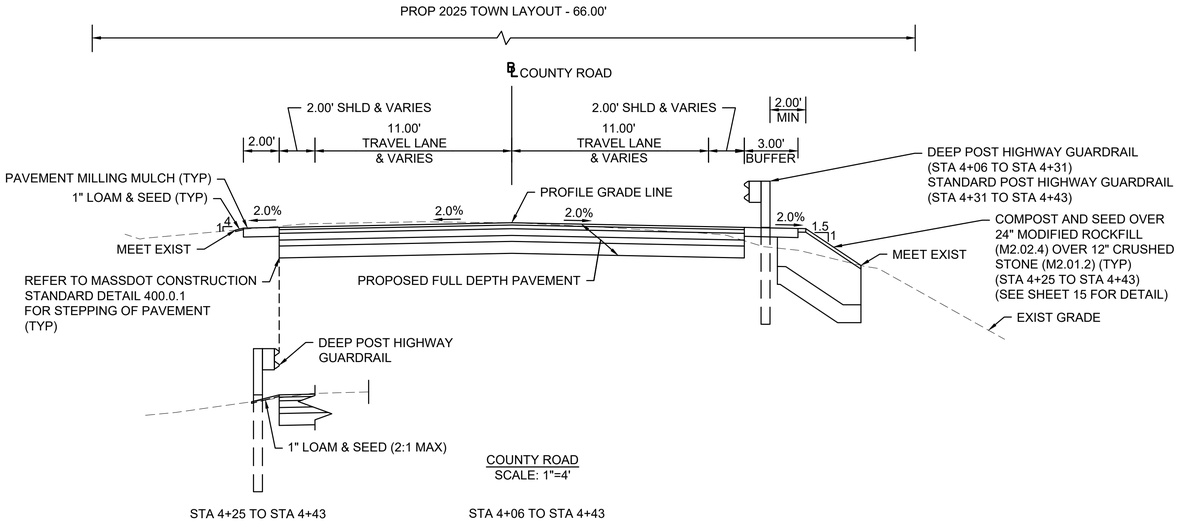
NOTES:

1. NEW SUBBASE TO BE PLACED ONLY WHERE EXISTING SUBBASE MATERIAL FAILS TO MEET REQUIREMENTS OF M1.03.0 TYPE b AND AS DIRECTED BY THE ENGINEER
2. SEE STANDARD DETAIL 400.0.1 FOR METHOD OF STEPPING SURFACE AND BASE COURSE LAYERS.
3. PREPARATION OF UNDERLYING SURFACE, ASPHALT EMULSION FOR TACK COAT, HMA FOR PATCHING, AND HMA JOINT SEALANT SHALL BE IN ACCORDANCE WITH SUBSECTION 450 OF THE MASSDOT STANDARD SPECIFICATIONS.
4. ASPHALT EMULSION FOR TACK COAT SHALL MEET ALL REQUIREMENTS OUTLINED IN THE 2025 CONSTRUCTION SPECIFICATIONS FOR ASPHALT EMULSIONS (SECTION M3.03.0), AND TACK COAT SHALL BE APPLIED TO COVER A MINIMUM OF 95% OF THE PAVEMENT SURFACE PRIOR TO PAVING.
5. CONSTRUCTION TOLERANCE +/- 0.5%.
6. HMA JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL AND TRANSVERSE JOINTS IN HMA PAVEMENT COURSES AS REQUIRED AND IN ACCORDANCE WITH 450.49: HOT MIX ASPHALT JOINTS.

SHEFFIELD
COUNTY ROAD

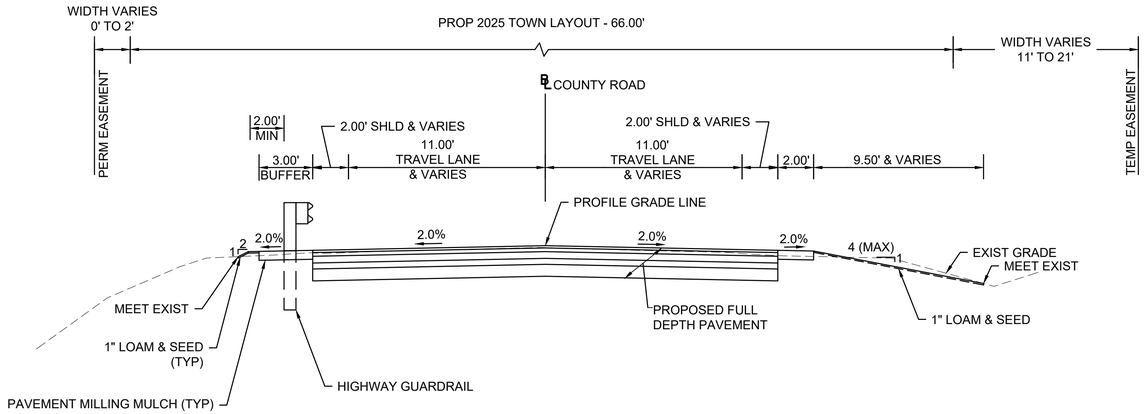
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	4	40
PROJECT FILE NO.	611942		

TYPICAL SECTIONS



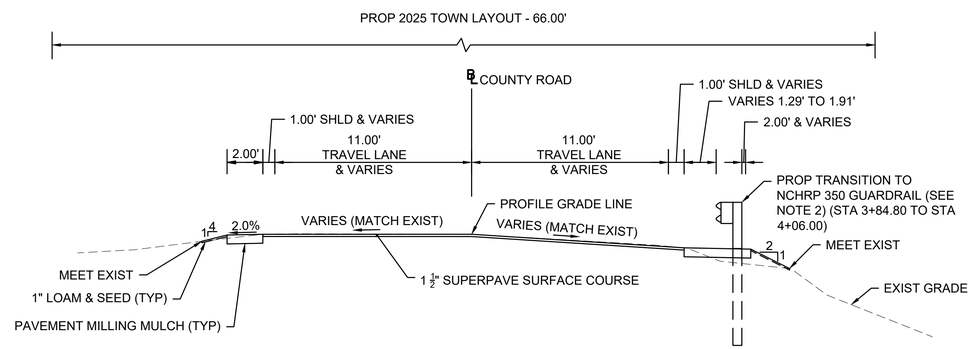
COUNTY ROAD
SCALE: 1"=4'

STA 4+25 TO STA 4+43 STA 4+06 TO STA 4+43



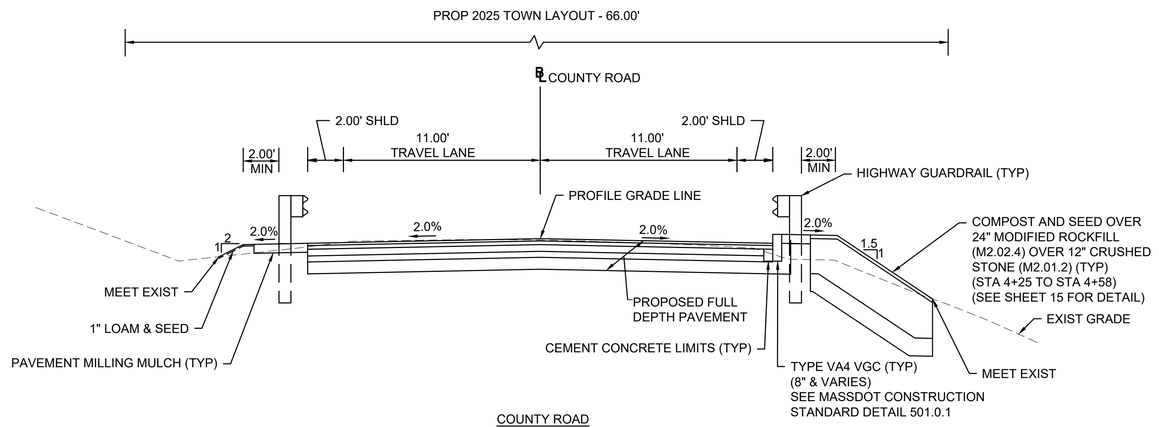
COUNTY ROAD
SCALE: 1"=4'

STA 5+54 TO STA 5+88



COUNTY ROAD
SCALE: 1"=4'

STA 3+81 TO STA 4+06



COUNTY ROAD
SCALE: 1"=4'

STA 4+43 TO STA 4+62

GUARDRAIL NOTES

1. DEEP POST HIGHWAY GUARDRAIL SHALL BE USED WHERE A 2.00' MINIMUM OFFSET BEHIND THE BACK OF THE POST CANNOT BE ACHIEVED.
2. SEE STANDARD DETAIL 628.21.1. EXISTING GUARDRAIL TO BE RETAINED FROM STA 3+81.00 TO STA 3+84.80

PAVEMENT NOTES

PROPOSED FULL DEPTH PAVEMENT

SURFACE: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) OVER
0.06-0.08 GAL/SY TACK COAT OVER

INTERMEDIATE: 2 ½" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5) OVER
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BASE: 4 ½" SUPERPAVE BASE COURSE - 37.5 (SBC-37.5) OVER

SUBBASE: 4" DENSE GRADED CRUSHED STONE FOR SUB-BASE PLACED OVER
8" GRAVEL BORROW (M1.03.0 TYPE b)

PROPOSED HMA DRIVEWAY APRON

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SUBBASE: 8" GRAVEL BORROW (M1.03.0 TYPE b)

PROP RESURFACING OVERLAY TRANSITION AT LIMITS OF WORK

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PROP GRAVEL DRIVEWAY

SURFACE: 12" GRAVEL BORROW (M1.03.0 TYPE b) OVER COMPACTED SUBGRADE

NOTES:

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2. SEE STANDARD DETAIL 400.0.1 FOR METHOD OF STEPPING SURFACE AND BASE COURSE LAYERS.
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5. CONSTRUCTION TOLERANCE +/- 0.5%.
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SHEFFIELD
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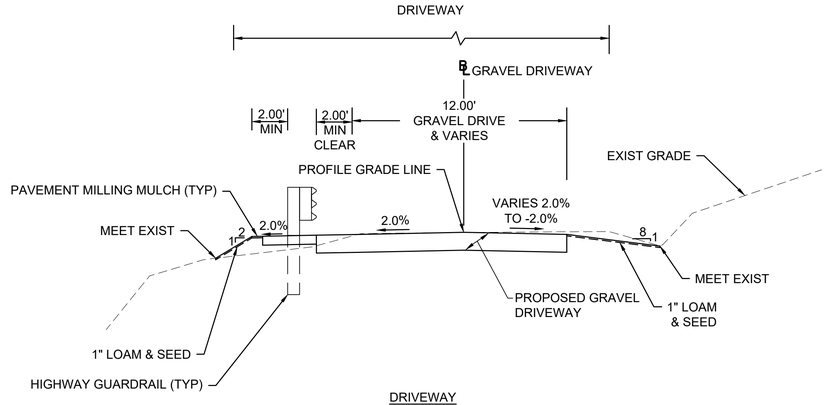
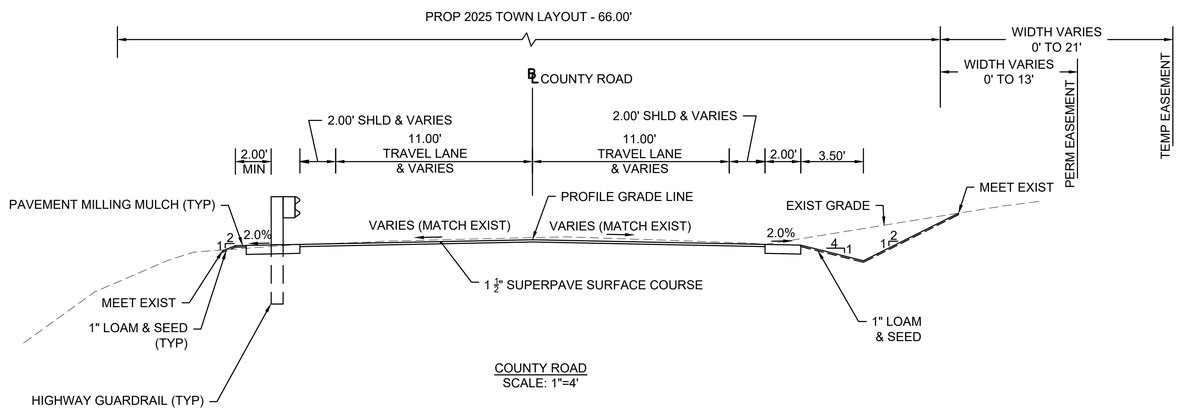
MA	HIP(NGB)-003S(928)X	5	40
	PROJECT FILE NO. 611942		

TYPICAL SECTIONS



DRIVEWAY
SCALE: 1"=4'

STA 0+05 TO STA 0+50



COUNTY ROAD
SCALE: 1"=4'

STA 5+88 TO STA 6+13

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	6	40
PROJECT FILE NO. 611942			

TYPICAL SECTIONS

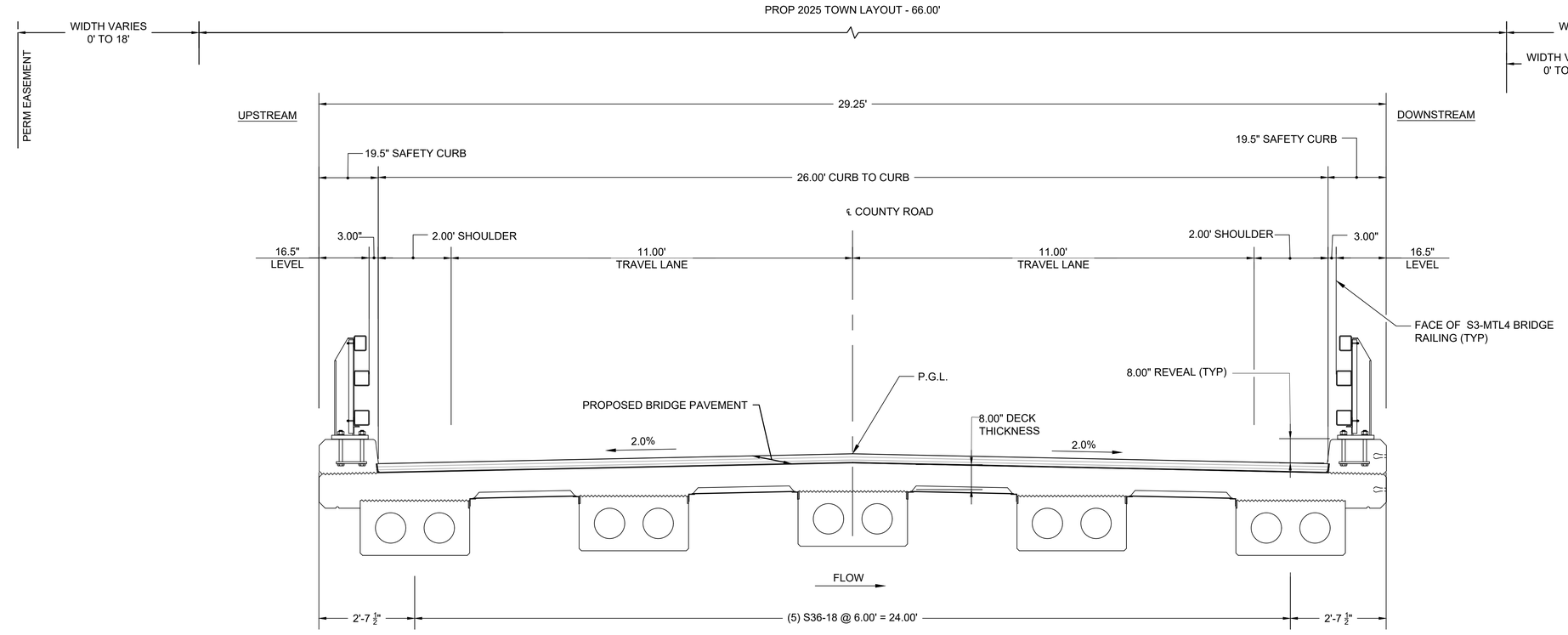
PAVEMENT NOTES

PROPOSED BRIDGE PAVEMENT

SURFACE: 1 ½ " SUPERPAVE BRIDGE SURFACE COURSE- 9.5 POLYMER (SSC-B - 9.5 - P) OVER
0.06-0.08 GAL/SY TACK COAT OVER
1 ½" SUPERPAVE BRIDGE PROTECTIVE COURSE - 9.5 POLYMER (SPC-B - 9.5 - P) OVER
MEMBRANE WATERPROOFING (SPRAY APPLIED)

NOTES:

1. SEE STANDARD DETAIL 400.1.0 FOR METHOD OF STEPPING SURFACE AND BASE COURSE LAYERS.
2. PREPARATION OF UNDERLYING SURFACE, ASPHALT EMULSION FOR TACK COAT, HMA FOR PATCHING, AND HMA JOINT SEALANT SHALL BE IN ACCORDANCE WITH SUBSECTION 450 OF THE MASSDOT STANDARD SPECIFICATIONS.
3. ASPHALT EMULSION FOR TACK COAT SHALL MEET ALL REQUIREMENTS OUTLINED IN THE 2025 CONSTRUCTION SPECIFICATIONS FOR ASPHALT EMULSIONS (SECTION M3.03.0), AND TACK COAT SHALL BE APPLIED TO COVER A MINIMUM OF 95% OF THE PAVEMENT SURFACE PRIOR TO PAVING.
4. CONSTRUCTION TOLERANCE +/- 0.5%.
5. HMA JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL AND TRANSVERSE JOINTS IN HMA PAVEMENT COURSES AS REQUIRED AND IN ACCORDANCE WITH 450.49: HOT MIX ASPHALT JOINTS.



BRIDGE NO. S-10-024
SCALE: 1"=4'

STA 4+78.64 TO STA 5+12.74

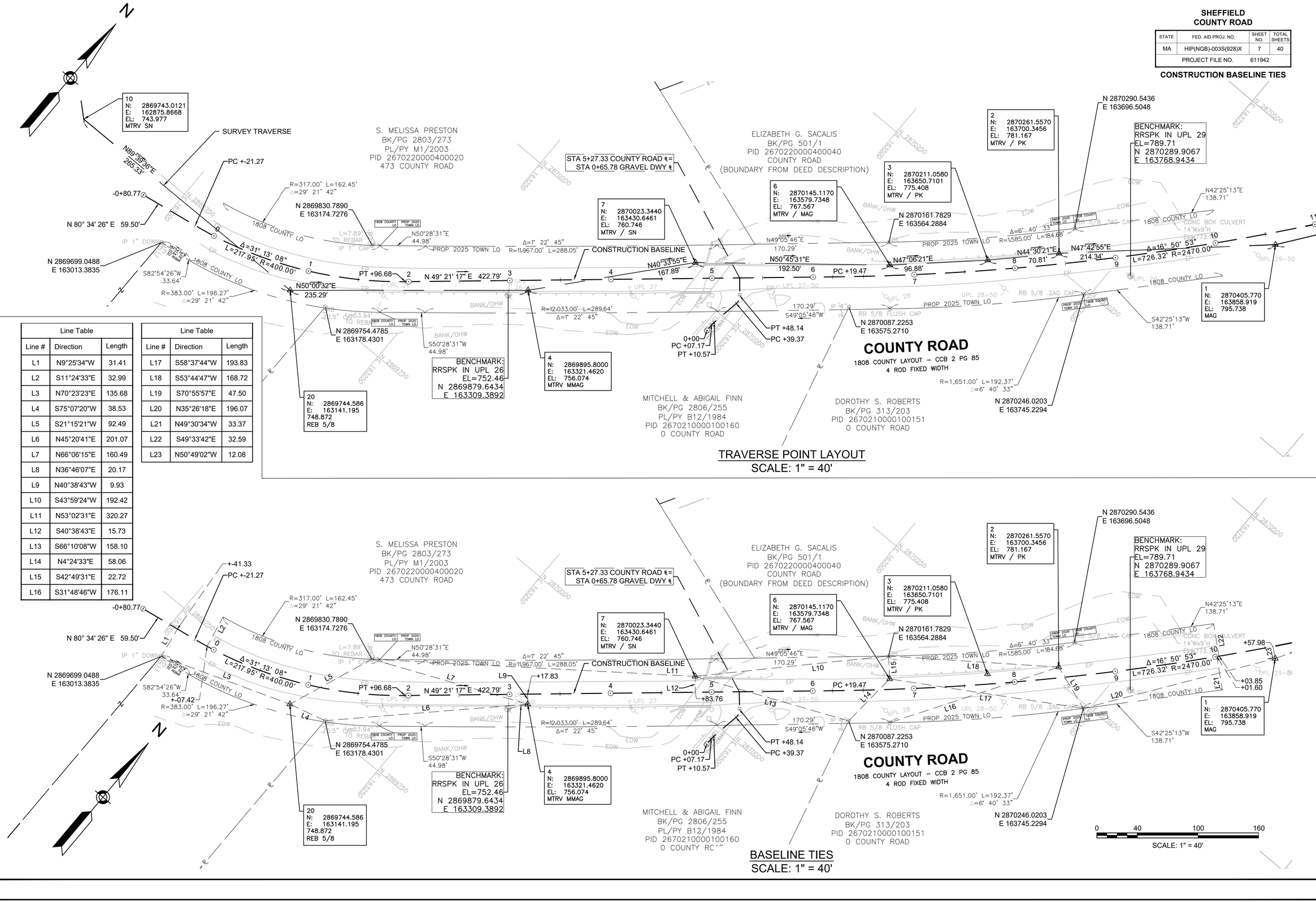
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	7	40
PROJECT FILE NO.	611942		

CONSTRUCTION BASELINE TIES

Line Table		
Line #	Direction	Length
L1	N9°25'34"W	31.41
L2	S11°24'33"E	32.99
L3	N70°23'23"E	135.68
L4	S75°07'20"W	38.53
L5	S21°15'21"W	92.49
L6	N45°20'41"E	201.07
L7	N66°06'15"E	160.49
L8	N36°46'07"E	20.17
L9	N40°38'43"W	9.93
L10	S43°59'24"W	192.42
L11	N53°02'31"E	320.27
L12	S40°38'43"E	15.73
L13	S66°10'08"W	158.10
L14	N4°24'33"E	58.06
L15	S42°49'31"E	22.72
L16	S31°48'46"W	176.11

Line Table		
Line #	Direction	Length
L17	S58°37'44"W	193.83
L18	S53°44'47"W	168.72
L19	S70°55'57"E	47.50
L20	N35°26'18"E	196.07
L21	N49°30'34"W	33.37
L22	S49°33'42"E	32.59
L23	N50°49'02"W	12.08



HIGHWAY GUARD DETAILS

STA 3+84.80 TO STA 4+19.17 RT (TRANSITION TO NCHRP GUARDRAIL, DEEP POST)
STA 4+19.17 TO STA 4+31.67 RT (W-BEAM, DEEP POST, TL-3)
STA 4+31.67 TO STA 4+62.89 RT (TRANSITION TO BRIDGE RAIL)
STA 4+25.11 TO STA 4+34.49 LT (TRAILING ANCHORAGE)
STA 4+34.49 TO STA 4+53.24 LT (W-BEAM, DEEP POST, TL-3)
STA 4+53.24 TO STA 4+84.47 LT (TRANSITION TO BRIDGE RAIL)

STA 5+05.54 TO STA 5+16.95 RT (TRANSITION TO BRIDGE RAIL - CURVED, 6'-0" RADIUS*)
STA 5+16.95 TO STA 4+97.19 RT (STEEL THRIE BEAM, TL-3)
STA 4+97.19 TO STA 4+95.41 RT (STEEL THRIE BEAM ROUNDED END UNIT*)
STA 5+28.53 TO STA 5+59.77 LT (TRANSITION TO BRIDGE RAIL)
STA 5+59.77 TO STA 6+00.62 LT (TANGENT END TREATMENT, TL-3)

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

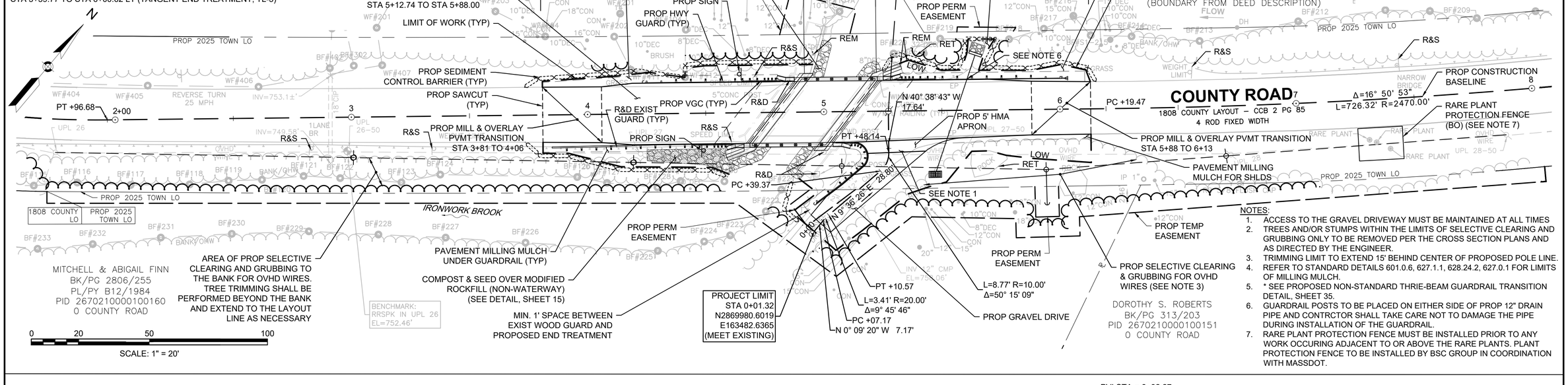
DRAINAGE DETAILS

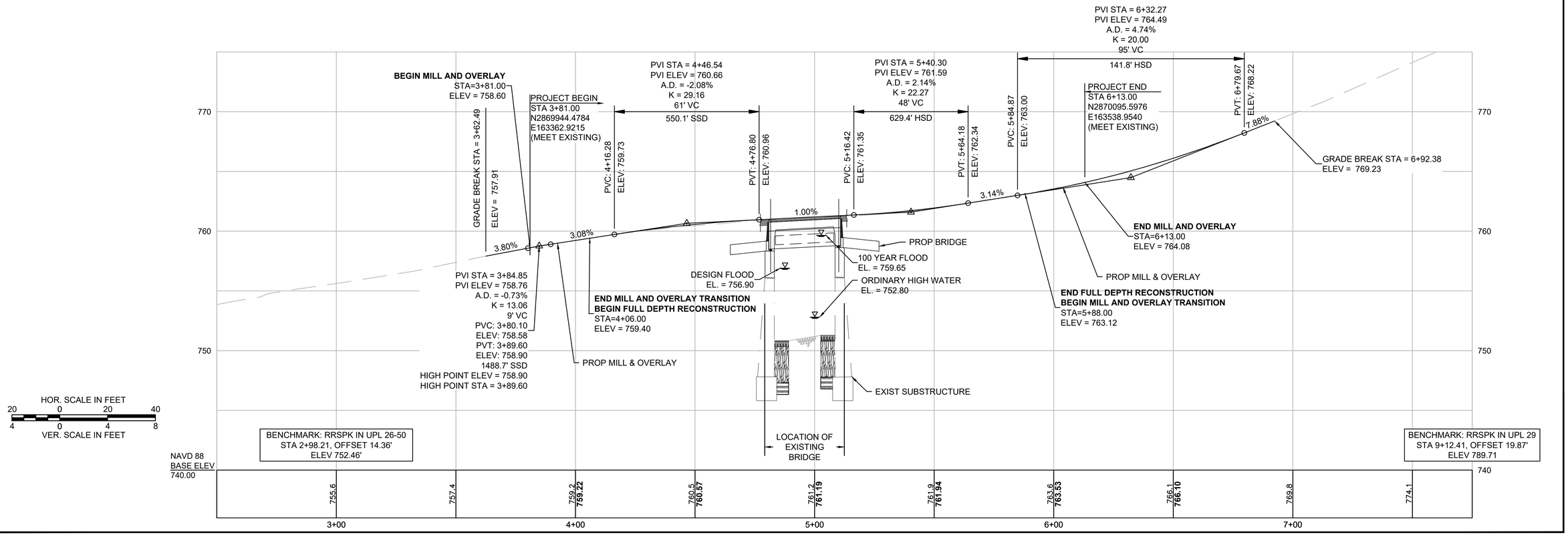
SEE SHEET 14

SHEFFIELD COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	8	40
	PROJECT FILE NO. 611942		

CONSTRUCTION PLAN & PROFILE



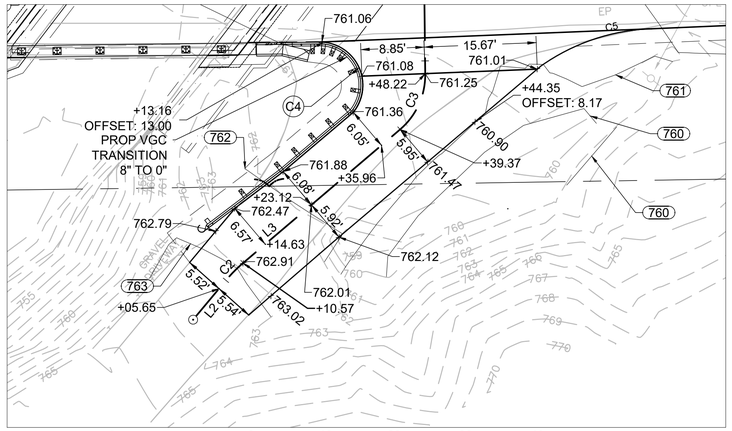


NOTES:

1. ACCESS TO THE GRAVEL DRIVEWAY MUST BE MAINTAINED AT ALL TIMES
2. TREES AND/OR STUMPS WITHIN THE LIMITS OF SELECTIVE CLEARING AND GRUBBING ONLY TO BE REMOVED PER THE CROSS SECTION PLANS AND AS DIRECTED BY THE ENGINEER.
3. TRIMMING LIMIT TO EXTEND 15' BEHIND CENTER OF PROPOSED POLE LINE.
4. REFER TO STANDARD DETAILS 601.0.6, 627.1.1, 628.24.2, 627.0.1 FOR LIMITS OF MILLING MULCH.
5. * SEE PROPOSED NON-STANDARD THRIE-BEAM GUARDRAIL TRANSITION DETAIL, SHEET 35.
6. GUARDRAIL POSTS TO BE PLACED ON EITHER SIDE OF PROP 12" DRAIN PIPE AND CONTRCTOR SHALL TAKE CARE NOT TO DAMAGE THE PIPE DURING INSTALLATION OF THE GUARDRAIL.
7. RARE PLANT PROTECTION FENCE MUST BE INSTALLED PRIOR TO ANY WORK OCCURING ADJACENT TO OR ABOVE THE RARE PLANTS. PLANT PROTECTION FENCE TO BE INSTALLED BY BSC GROUP IN COORDINATION WITH MASSDOT.

CURBING TABLE				
WEST OF BRIDGE				
RIGHT	**STATION**	**TO**	**STATION**	**OFFSET**
TRANSITION CURB	4+44.15		4+50.40	13.00'
8" REVEAL	4+50.40		4+61.05	13.00'
LEFT	**STATION**	**TO**	**STATION**	**OFFSET**
TRANSITION CURB	4+65.73		4+71.98	13.00'
8" REVEAL	4+71.98		4+82.63	13.00'

CURBING TABLE				
EAST OF BRIDGE				
RIGHT	**STATION**	**TO**	**STATION**	**OFFSET**
8" REVEAL	5+08.79		5+18.13	13.00'/16.73'
TRANSITION CURB	5+18.13		5+16.93	16.73'/23.06'
LEFT	**STATION**	**TO**	**STATION**	**OFFSET**
8" REVEAL	5+30.38		5+41.02	13.00'
TRANSITION CURB	5+41.02		5+47.27	13.00'

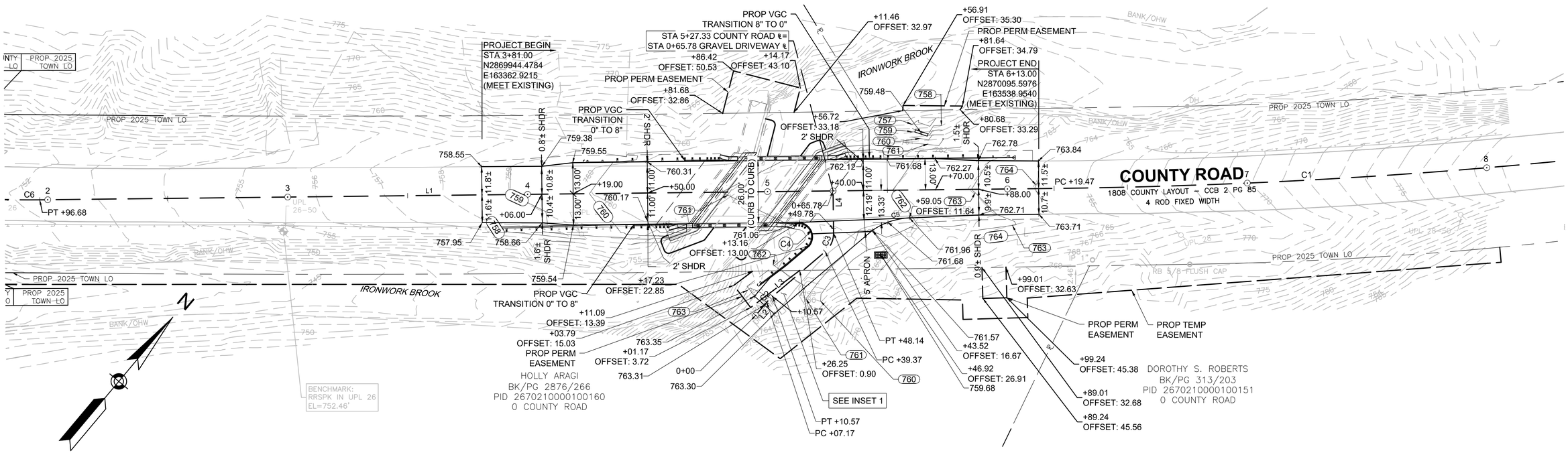


SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	9	40
	PROJECT FILE NO. 611942		

CURB TIE & GRADING PLAN

611942_HD(CT).DWG Plotted on 6-Jan-2026 2:36 PM



COUNTY ROAD CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C6	-0+21.27	2869733.322	163028.029	R=400.00' Δ=31°13'08" L=217.95' T=111.75'		1+96.68	2869824.418	163223.068
L1	1+96.68	2869824.418	163223.068		N49°21'17"E 422.79'	6+19.47	2870099.809	163543.860
C1	6+19.47	2870099.809	163543.860	R=2470.00' Δ=16°50'53" L=726.32' T=365.80'		13+45.78	2870646.567	164017.990

GRAVEL DRIVEWAY CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L2	0+00.00	2869979.282	163482.640		N0°09'20"W 7.17'	0+07.17	2869986.447	163482.621
C2	0+07.17	2869986.447	163482.621	R=20.00' Δ=9°45'46" L=3.41' T=1.71'		0+10.57	2869989.839	163482.901
L3	0+10.57	2869989.839	163482.901		N9°36'26"E 28.80'	0+39.37	2870018.233	163487.707
C3	0+39.37	2870018.233	163487.707	R=10.00' Δ=50°15'09" L=8.77' T=4.69'		0+48.14	2870026.416	163485.435
L4	0+48.14	2870026.416	163485.435		N40°38'43"W 17.64'	0+65.78	2870039.798	163473.947

LINE & CURVE DATA			
NUMBER	STARTING	CURVE DATA	ENDING
C4	N: 2870015.875 E: 163481.168	R= 6.045 Δ=125°24'27.19" L=13.23 T=11.714	N: 2870020.593 E: 163471.516
C5	N: 2870037.691 E: 163497.090	R= 28.560 Δ=33°12'51.17" L=16.56 T=8.518	N: 2870051.624 E: 163505.597

0 20 50 100
SCALE: 1" = 20'

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	10	40
	PROJECT FILE NO. 611942		

TRAFFIC SIGN & PAVEMENT MARKING PLAN

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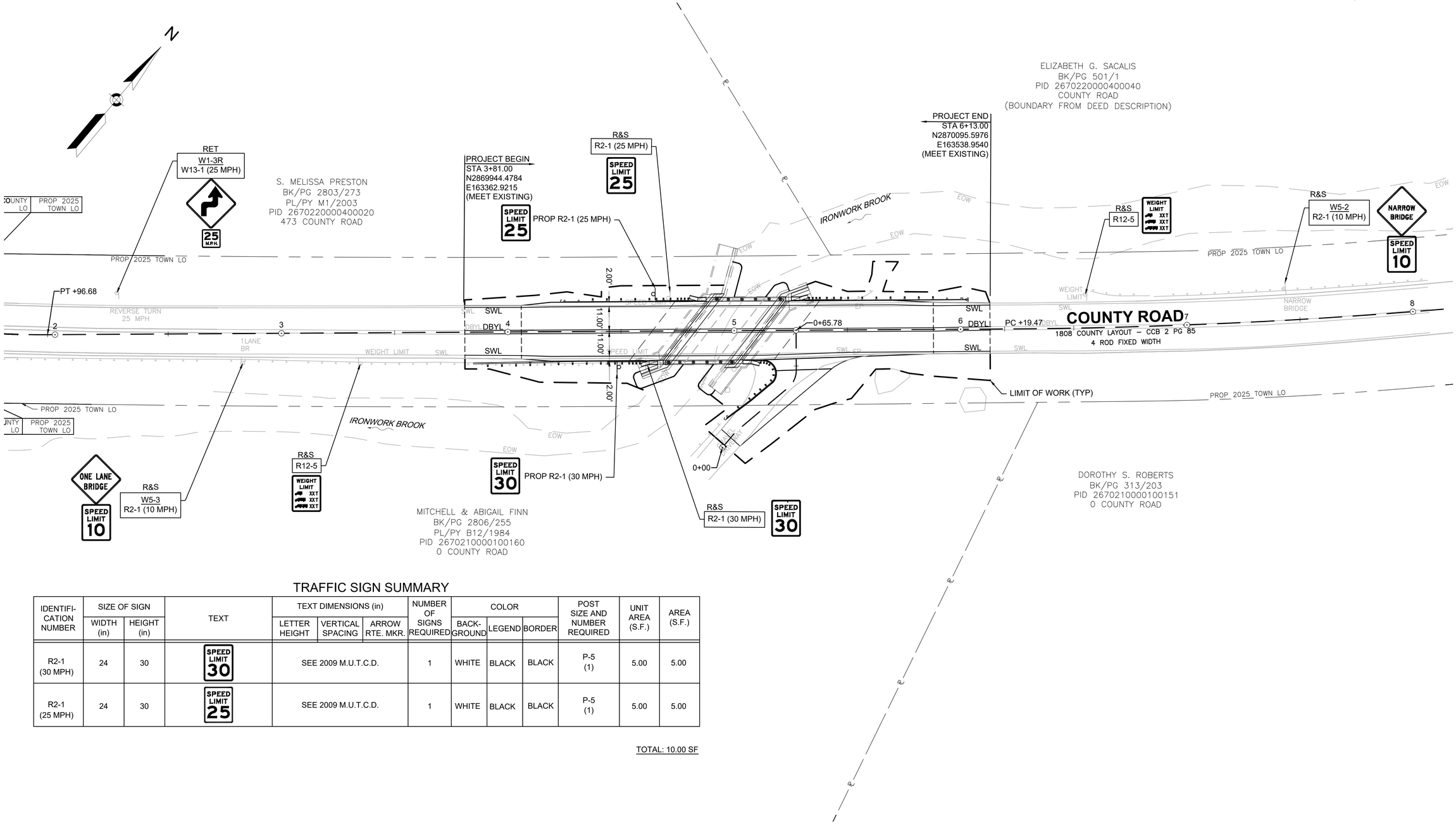


TRAFFIC SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA (S.F.)
	WIDTH (in)	HEIGHT (in)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R2-1 (30 MPH)	24	30	SPEED LIMIT 30	SEE 2009 M.U.T.C.D.			1	WHITE	BLACK	BLACK	P-5 (1)	5.00	5.00
R2-1 (25 MPH)	24	30	SPEED LIMIT 25	SEE 2009 M.U.T.C.D.			1	WHITE	BLACK	BLACK	P-5 (1)	5.00	5.00

TOTAL: 10.00 SF

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
2. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
5. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES." AND/OR MASH "MANUAL FOR ASSESSING SAFETY HARDWARE."
6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
7. THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING LIGHTS.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
11. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZING DEVICE OR BARRIER.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

massDOT Highway Division | Notes for Traffic Management | FIGURE Gen-1 GENERAL GUIDELINES

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS **		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350
MOST OTHER ROADWAYS*	500	500	500
FREEWAYS AND EXPRESSWAYS*	1,000	1,500	2,640

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

R2-10a, R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED* (mph)	DISTANCE (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION

massDOT Highway Division | Notes for Traffic Management | FIGURE Gen-2 NOTES ON WORK ZONE DISTANCES

CONVENTIONAL ROADWAY- A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

EXPRESSWAY- A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

FREEWAY- A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

LOW-VOLUME ROAD- A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: MUTCD LATEST EDITION

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MIN. 100 FT MAX.
DOWNSTREAM TAPER	50 FT MIN. 100 FT MAX. PER LANE

Source: Table 6C-3 MUTCD LATEST EDITION

FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	L= WS

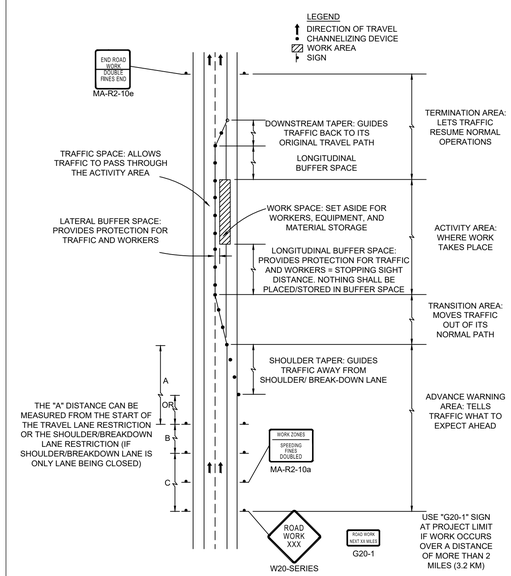
WHERE: L = TAPER LENGTH IN FEET

W = WIDTH OF OFFSET IN FEET

S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICAPATED OPERATING SPEED IN MPH

Source: Table 6C-4 MUTCD LATEST EDITION

massDOT Highway Division | Notes for Traffic Management | FIGURE Gen-3 NOTES ON WORK ZONE DISTANCES



COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE

massDOT Highway Division | Standard Details and Drawings for the Development of TemporaryTraffic Control Plans | FIGURE Gen-4 COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE NOT TO SCALE

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	11	40
	PROJECT FILE NO. 611942		

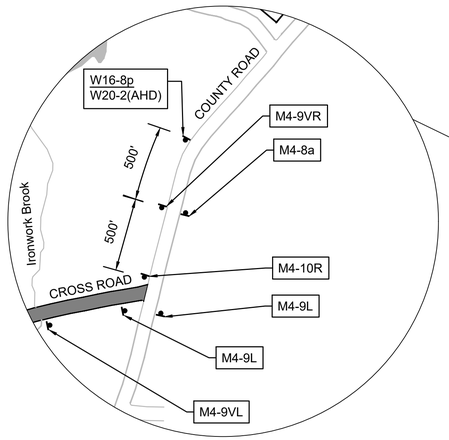
TEMPORARY TRAFFIC CONTROL PLAN DETAILS

611942_HD(TTCP).DWG Plotted on 6-Jan-2026 2:36 PM

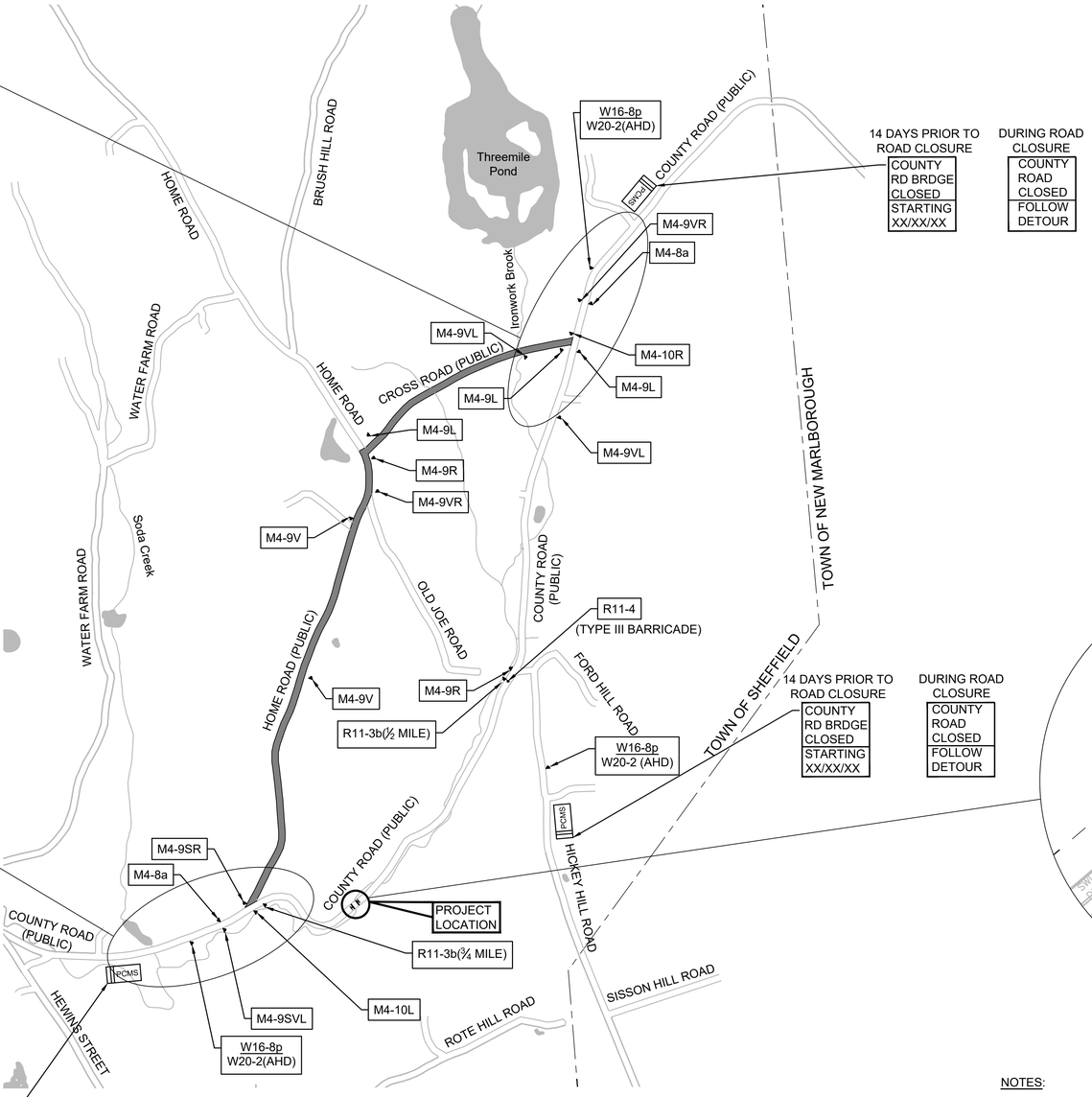
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	12	40
	PROJECT FILE NO. 611942		

TEMPORARY TRAFFIC CONTROL PLAN
DETOUR



SCALE: 1"=500'



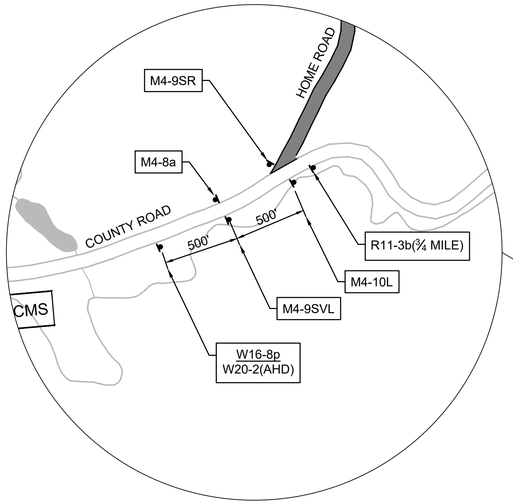
14 DAYS PRIOR TO ROAD CLOSURE

COUNTY RD BRDGE CLOSED STARTING XX/XX/XX

DURING ROAD CLOSURE

COUNTY ROAD CLOSED
FOLLOW DETOUR

N



SCALE: 1"=500'

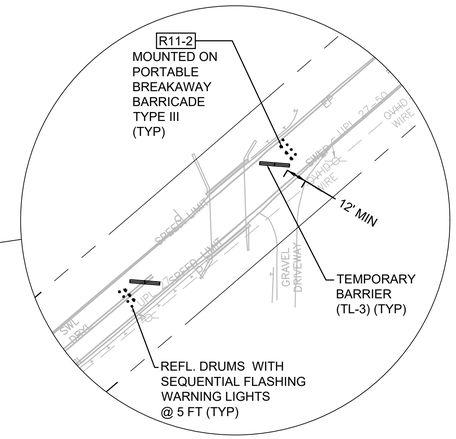
14 DAYS PRIOR TO ROAD CLOSURE

COUNTY RD BRDGE CLOSED STARTING XX/XX/XX

DURING ROAD CLOSURE

COUNTY ROAD CLOSED
FOLLOW DETOUR

DETOUR PLAN
SCALE: 1"=1000'



CLOSURE DETAIL
SCALE: 1"=40'

NOTES:

1. THE CONTRACTOR MUST MAINTAIN ACCESS TO THE GRAVEL DRIVEWAY AT ALL TIMES.
2. THE CONTRACTOR IS RESPONSIBLE FOR CLOSING OFF PEDESTRIAN ACCESS TO THE BRIDGE CLOSURE AREA.

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	13	40
	PROJECT FILE NO. 611942		

TEMPORARY TRAFFIC CONTROL PLAN
SIGN SUMMARY

TEMPORARY TRAFFIC CONTROL SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (in)	SIZE OF SIGN HEIGHT (in)	TEXT	TEXT DIMENSIONS (in) LETTER HEIGHT	TEXT DIMENSIONS (in) VERTICAL SPACING	TEXT DIMENSIONS (in) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	AREA (S.F.)
M4-8a	24	18	END DETOUR	SEE 2009 M.U.T.C.D.			2	FLUORESCENT ORANGE	BLACK	BLACK	3.00	6.00
M4-9L/R	30	24	DETOUR ← / DETOUR →				3 / 2	FLUORESCENT ORANGE	BLACK	BLACK	5.00	25.00
M4-9VL/R	30	24	DETOUR ↰ / DETOUR ↱				2 / 2	FLUORESCENT ORANGE	BLACK	BLACK	5.00	20.00
M4-9SR	30	24	DETOUR ↗				1	FLUORESCENT ORANGE	BLACK	BLACK	5.00	5.00
M4-9SVL	30	24	DETOUR ↖				1	FLUORESCENT ORANGE	BLACK	BLACK	5.00	5.00
M4-9V	30	24	DETOUR ↑				2	FLUORESCENT ORANGE	BLACK	BLACK	5.00	10.00
M4-10L/R	48	18	← DETOUR / DETOUR →				1 / 1	FLUORESCENT ORANGE	BLACK	BLACK	6.00	12.00
R11-2	48	30	ROAD CLOSED				2	WHITE	BLACK	BLACK	10.00	20.00
R11-3b (½ MILE)	60	30	BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY				1	WHITE	BLACK	BLACK	12.50	12.50
R11-3b (¾ MILE)	60	30	BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY				1	WHITE	BLACK	BLACK	12.50	12.50
R11-4	60	30	ROAD CLOSED TO THRU TRAFFIC				1	WHITE	BLACK	BLACK	12.50	12.50
W16-8p	51	12	COUNTY RD				3	FLUORESCENT ORANGE	BLACK	BLACK	4.25	12.75
W20-2 (AHD)	36	36	DETOUR AHEAD				3	FLUORESCENT ORANGE	BLACK	BLACK	9.00	27.00

ESTIMATED TOTAL: 180.25 S.F.

TRAFFIC MANAGEMENT NOTES

GENERAL:

1. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES - 2009 EDITION(M.U.T.C.D.) ; MASSDOT'S STANDARD SPECIFICATIONS; MASSDOT'S STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS, THE LATEST EDITION, AND THEIR LATEST REVISIONS; AND THE FOLLOWING:
2. UNLESS WRITTEN PERMISSION FROM MASSDOT IS OBTAINED, ALL TRAVEL WAYS CAN ONLY BE OCCUPIED DURING THE HOURS STATED IN THE SPECIAL PROVISIONS, SUBSECTION 7.09 PUBLIC SAFETY AND CONVENIENCE.
3. WARNING SIGNS SHALL HAVE AN ORANGE BACKGROUND, AND REGULATORY SIGNS SHALL BE BLACK TEXT ON A WHITE BACKGROUND.

CONSTRUCTION SIGNING:

1. FINAL LOCATION OF SIGNS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD BY MASSDOT'S REPRESENTATIVE.
2. ADVISORY SPEED PLATES (W13-1(XX)) SHALL BE USED IF APPROPRIATE AND AS DIRECTED BY THE ENGINEER. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
3. AT THE END OF EACH WORKDAY/SHIFT, THE CONTRACTOR SHALL COVER TEMPORARY TRENCHES WITH STEEL PLATES AND PROVIDE A TEMPORARY SIDEWALK WITH A STABLE AND FIRM SURFACE. TEMPORARY TRAFFIC CONTROL DEVICES, I.E., DRUMS AND CONSTRUCTION FENCES, SHALL BE REMOVED FROM THE TRAVELWAY OR MOVED TO THE BACK OF THE SIDEWALK.
4. NON-ESSENTIAL TEMPORARY CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED FROM THE HIGHWAY WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.

MISCELLANEOUS:

1. THE WORKSITE SHALL BE ADEQUATELY PROTECTED (DURING BOTH WORKING AND NON-WORKING HOURS) TO ENSURE THE SAFETY OF ALL MODES OF TRAFFIC.
2. AT ALL TIMES, MAINTAIN INGRESS AND EGRESS TO ALL STREETS AND DRIVES.
3. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE THE TEMPORARY SIGNAGE AND MARKINGS AND RESTORE THE PAVEMENT MARKINGS TO THEIR ORIGINAL LOCATION.

PCMS SCHEDULE

PANEL 1	PANEL 2
COUNTY RD BRDGE CLOSED	STARTING XX/XX/XX
COUNTY ROAD CLOSED	FOLLOW DETOUR

PCMS NOTES:

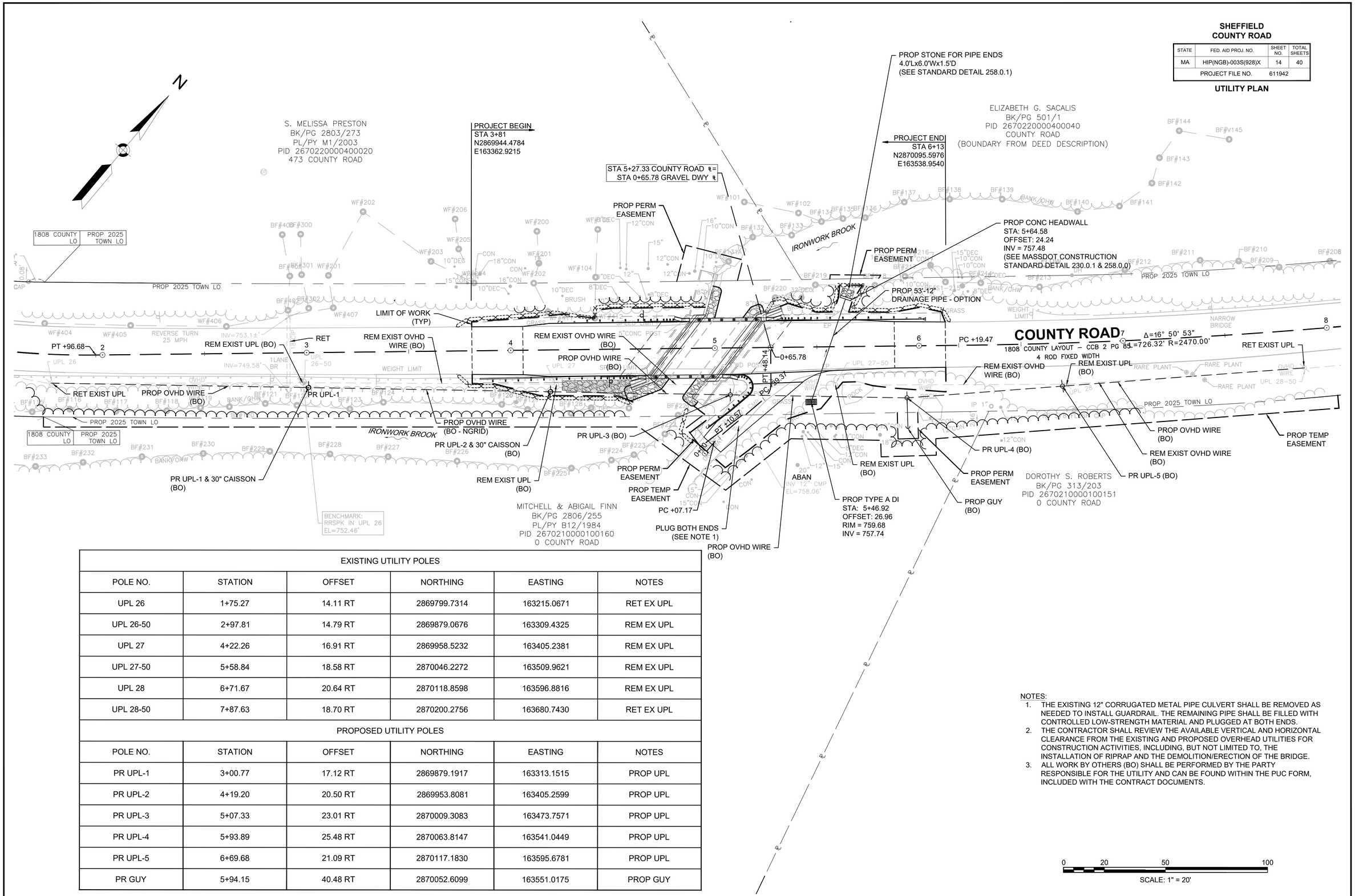
1. PCMS 1 SHALL BE USED A MINIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION, FOR ANY MAJOR CHANGES IN TRAFFIC PATTERNS DURING CONSTRUCTION, AND AS DIRECTED BY THE ENGINEER.
2. PCMS 2 SHALL BE USED FOR TWO MONTHS FROM THE START OF THE ROAD CLOSURE AND AS DIRECTED BY THE ENGINEER.

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	14	40
PROJECT FILE NO.	611942		

UTILITY PLAN

611942_HD(UT).DWG Plotted on 6-Jan-2026 2:37 PM



EXISTING UTILITY POLES					
POLE NO.	STATION	OFFSET	NORTHING	EASTING	NOTES
UPL 26	1+75.27	14.11 RT	2869799.7314	163215.0671	RET EX UPL
UPL 26-50	2+97.81	14.79 RT	2869879.0676	163309.4325	REM EX UPL
UPL 27	4+22.26	16.91 RT	2869958.5232	163405.2381	REM EX UPL
UPL 27-50	5+58.84	18.58 RT	2870046.2272	163509.9621	REM EX UPL
UPL 28	6+71.67	20.64 RT	2870118.8598	163596.8816	REM EX UPL
UPL 28-50	7+87.63	18.70 RT	2870200.2756	163680.7430	RET EX UPL
PROPOSED UTILITY POLES					
POLE NO.	STATION	OFFSET	NORTHING	EASTING	NOTES
PR UPL-1	3+00.77	17.12 RT	2869879.1917	163313.1515	PROP UPL
PR UPL-2	4+19.20	20.50 RT	2869953.8081	163405.2599	PROP UPL
PR UPL-3	5+07.33	23.01 RT	2870009.3083	163473.7571	PROP UPL
PR UPL-4	5+93.89	25.48 RT	2870063.8147	163541.0449	PROP UPL
PR UPL-5	6+69.68	21.09 RT	2870117.1830	163595.6781	PROP UPL
PR GUY	5+94.15	40.48 RT	2870052.6099	163551.0175	PROP GUY

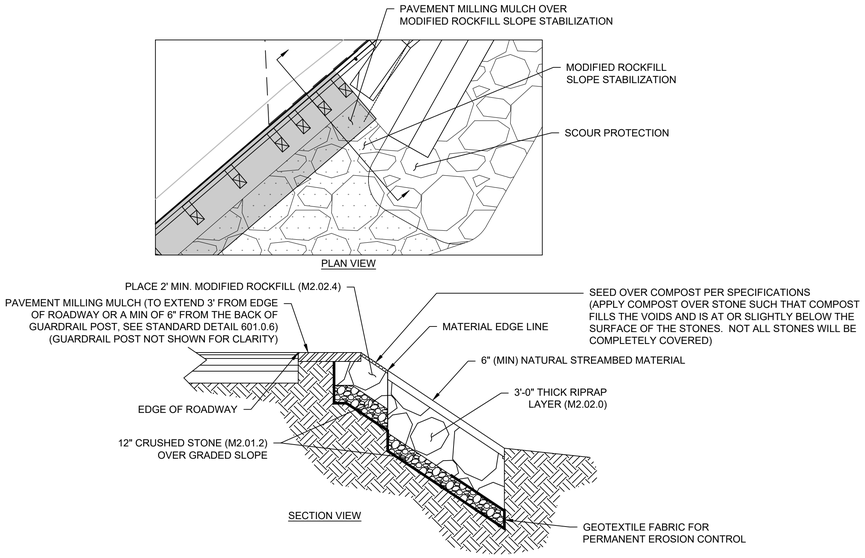
NOTES:
1. THE EXISTING 12" CORRUGATED METAL PIPE CULVERT SHALL BE REMOVED AS NEEDED TO INSTALL GUARDRAIL. THE REMAINING PIPE SHALL BE FILLED WITH CONTROLLED LOW-STRENGTH MATERIAL AND PLUGGED AT BOTH ENDS.
2. THE CONTRACTOR SHALL REVIEW THE AVAILABLE VERTICAL AND HORIZONTAL CLEARANCE FROM THE EXISTING AND PROPOSED OVERHEAD UTILITIES FOR CONSTRUCTION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, THE INSTALLATION OF RIPRAP AND THE DEMOLITION/ERECTION OF THE BRIDGE.
3. ALL WORK BY OTHERS (BO) SHALL BE PERFORMED BY THE PARTY RESPONSIBLE FOR THE UTILITY AND CAN BE FOUND WITHIN THE PUC FORM, INCLUDED WITH THE CONTRACT DOCUMENTS.

0 20 50 100
SCALE: 1" = 20'

SHEFFIELD
COUNTY ROAD

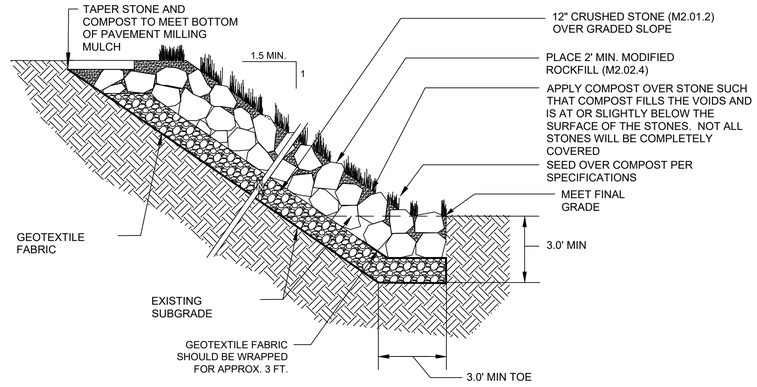
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	15	40
	PROJECT FILE NO. 611942		

CONSTRUCTION DETAILS



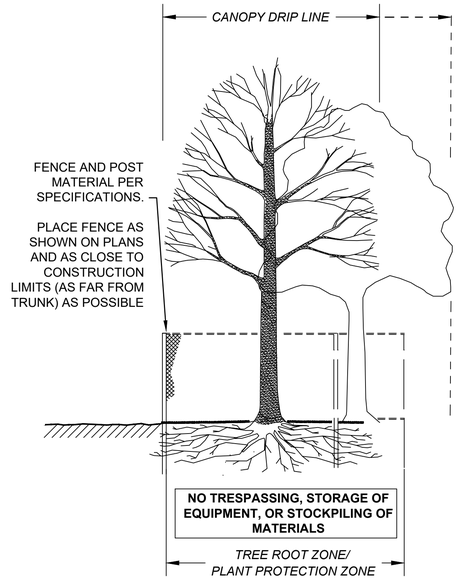
COMPOST AND SEED OVER MODIFIED ROCKFILL SLOPE (NON-WATERWAY) TO SCOUR PROTECTION TRANSITION

NOT TO SCALE

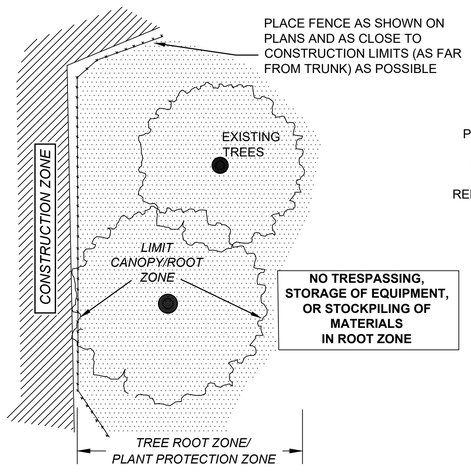


COMPOST AND SEED OVER MODIFIED ROCKFILL SLOPE (NON-WATERWAY)

NOT TO SCALE



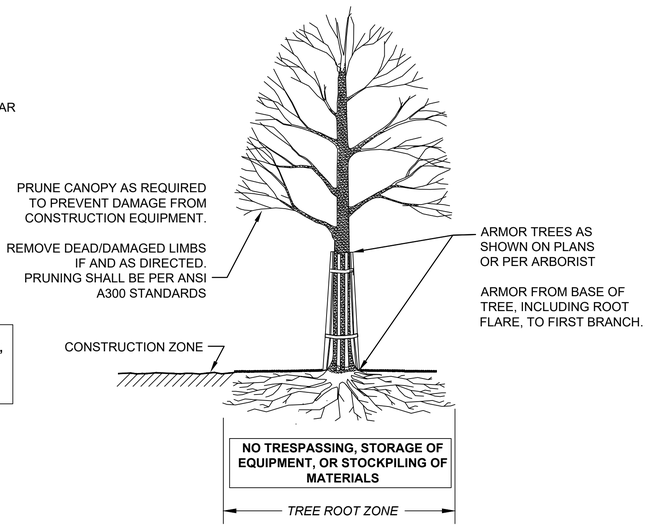
SECTION - FENCE PROTECTION OF ROOT ZONE



PLAN VIEW - FENCE PROTECTION OF ROOT ZONE

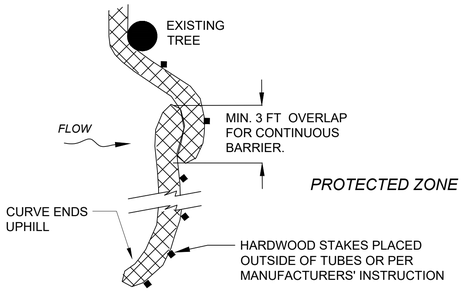
TREE PROTECTION - ROOT ZONE

NOT TO SCALE



SECTION - TRUNK ARMORING & PRUNING

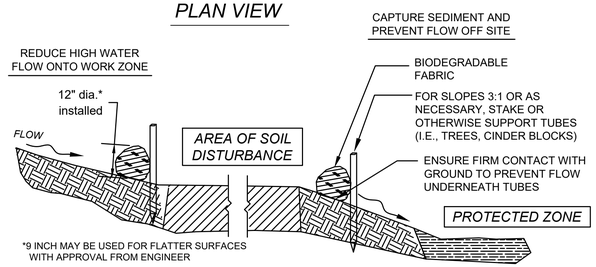
TREE PROTECTION - TRUNK



PLACE TUBE AS CLOSE TO LIMIT OF SOIL DISTURBANCE AS POSSIBLE, ALONG CONTOURS, AND PERPENDICULAR TO FLOW.

ADJUST LOCATION AS REQUIRED FOR OPTIMUM EFFECTIVENESS. DO NOT INSTALL IN WATERWAYS.

PLAN VIEW

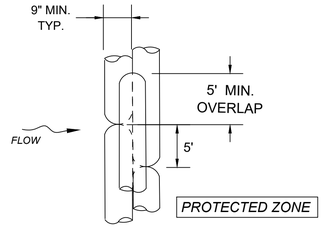


SECTION

SEDIMENT BARRIER - COMPOST FILTER TUBE

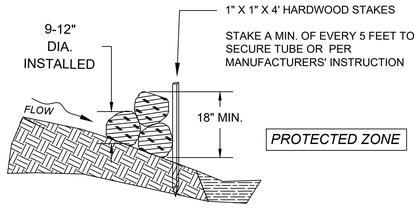
NOT TO SCALE

WHERE SPECIFIED ON CONSTRUCTION PLANS OR AS REQUIRED



PLAN VIEW

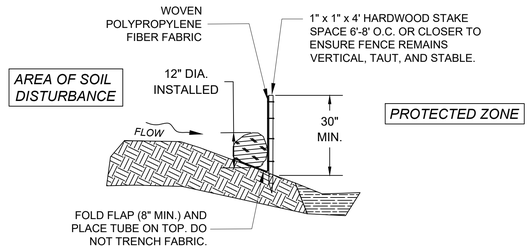
AREA OF SOIL DISTURBANCE



SECTION

COMPOST FILTER TUBE STACKED

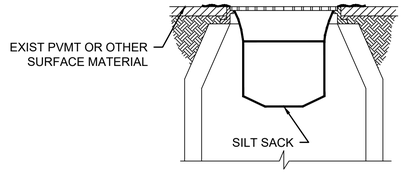
NOT TO SCALE



SECTION

COMPOST FILTER TUBE & SILT FENCE

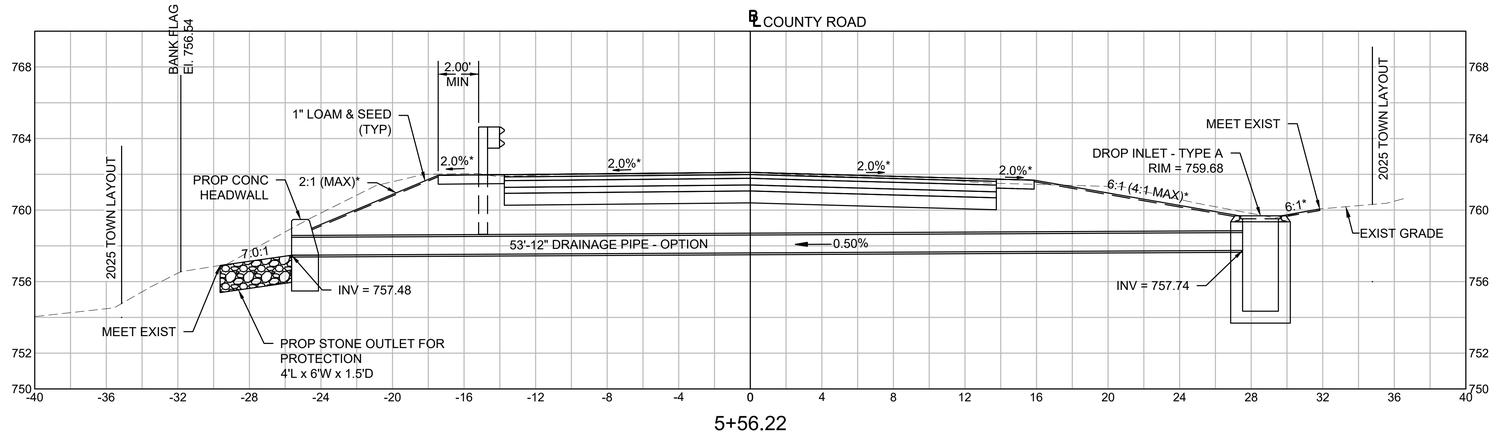
NOT TO SCALE



NOTE:
SILT SACKS TO BE PLACED IN ALL CATCH BASINS IN THE VICINITY OF NEW CONSTRUCTION. CATCH BASINS ARE TO BE PROTECTED AS SHOWN, WITH MINIMUM WEEKLY MAINTENANCE, OR AS REQUIRED AND REPLACED IF NECESSARY.

SILT SACK INLET PROTECTION

SCALE: NONE

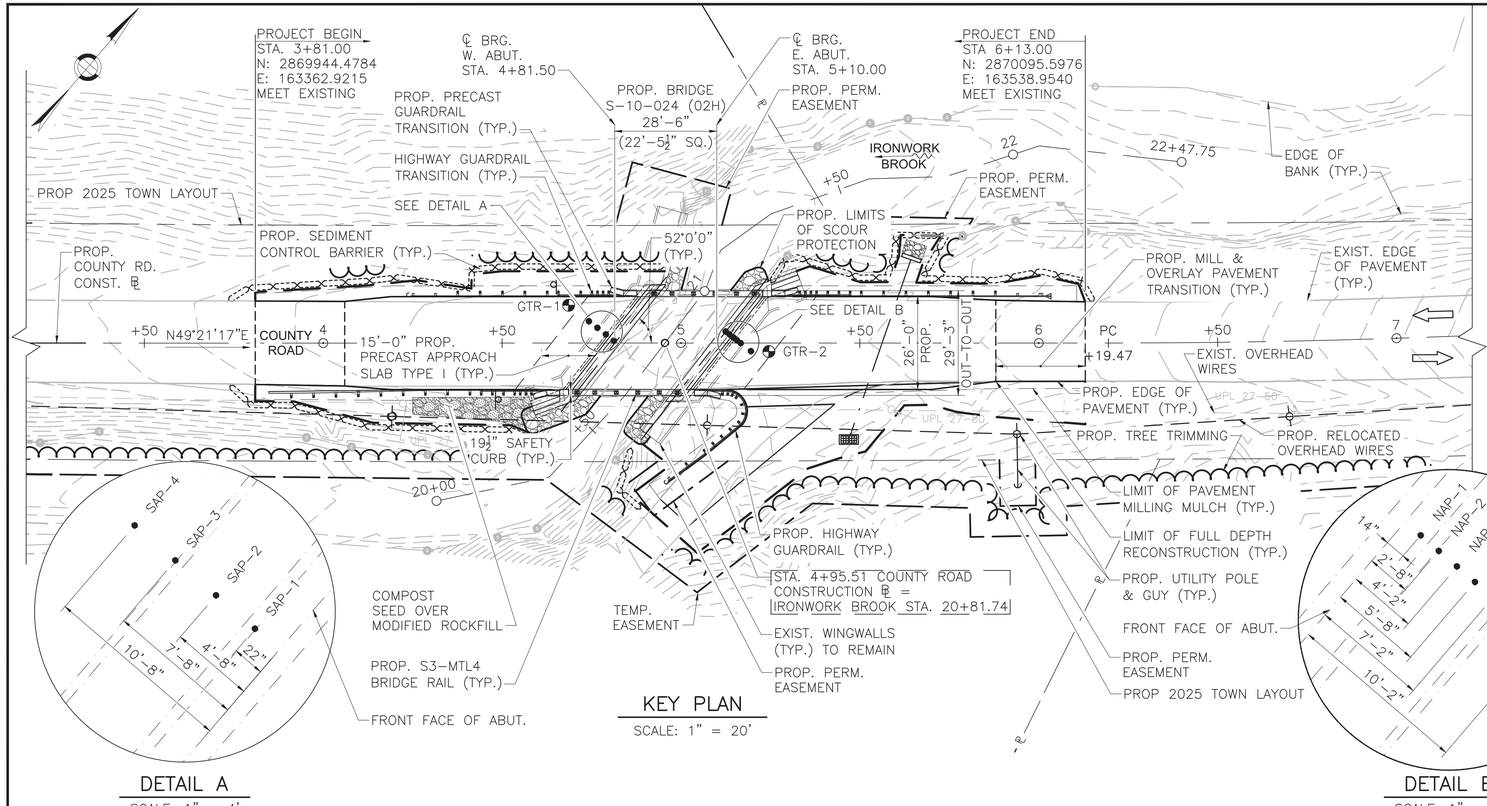


5+56.22

PRECAST DROP INLET AND CPP INSTALLATION DETAIL

SCALE: 1" = 4'

NOTES:
1. DETAIL CROSS SECTION SHOWN IS SKEWED TO FOLLOW THE PROPOSED PIPE CENTERLINE AND IS NOT PERPENDICULAR TO THE CONSTRUCTION BASELINE.
2. * SLOPES REPRESENT GRADE MEASURE PERPENDICULAR FROM THE CONSTRUCTION BASELINE.
3. GUARDRAIL POSTS TO BE PLACED ON EITHER SIDE OF PROP 12" DRAIN PIPE AND CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE THE PIPE DURING INSTALLATION OF THE GUARDRAIL.

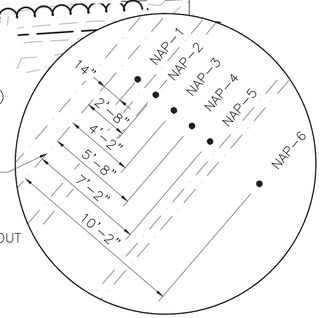


KEY PLAN

SCALE: 1" = 20'

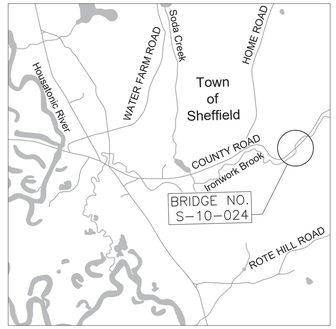
DETAIL A

SCALE: 1" = 4'



DETAIL B

SCALE: 1" = 4'



LOCUS PLAN

1" = 2000'

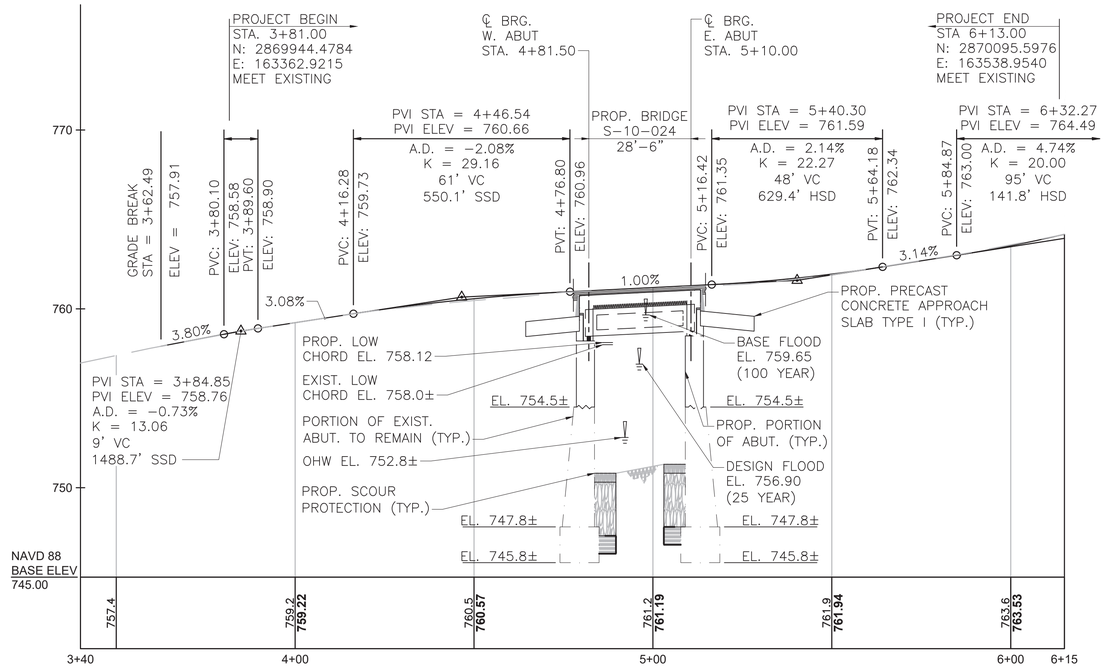
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	17	40
PROJECT FILE NO.	611942		

KEYPLAN LOCUS & PROFILES

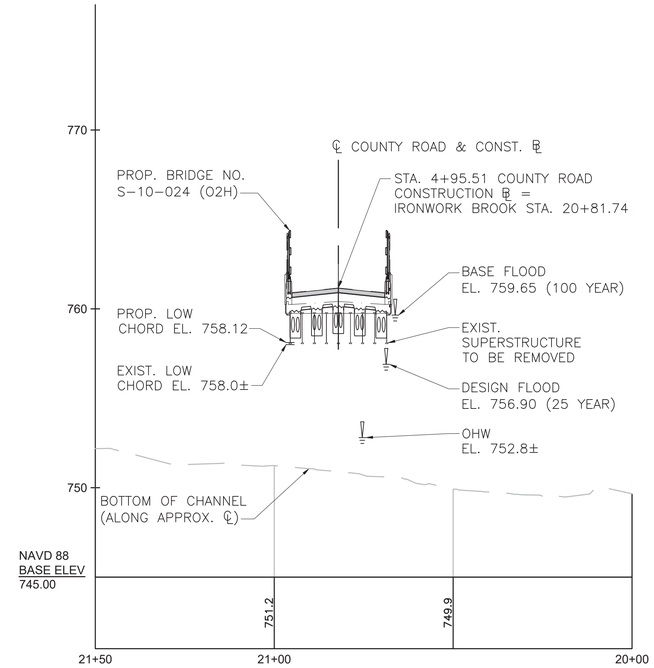
NOTE:
THE CONTRACTOR SHALL REVIEW THE AVAILABLE VERTICAL AND HORIZONTAL CLEARANCE FROM THE EXISTING AND PROPOSED OVERHEAD UTILITIES FOR CONSTRUCTION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, THE INSTALLATION OF RIPRAP AND THE DEMOLITION/ERECTION OF THE BRIDGE.

INDEX



COUNTY ROAD PROFILE

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 4'



IRONWORK BROOK PROFILE

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 4'

COMMONWEALTH OF MASSACHUSETTS
MICAH C MORRISON
STRUCTURAL
No. 46726
REGISTERED PROFESSIONAL ENGINEER

Micah Morrison Digitally signed by Micah Morrison Date: 2026.01.26 04:41:34 -05'00'

BSC GROUP
BUILD | SUPPORT | CONNECT
803 SUMMER STREET
BOSTON, MASSACHUSETTS 02127
617-896-4300 | www.bscgroup.com

FEBRUARY 14, 2026 | ISSUED FOR CONSTRUCTION

MassDOT
Massachusetts Department of Transportation
Highway Division

PROPOSED SUPERSTRUCTURE
REPLACEMENT
SHEFFIELD
COUNTY ROAD
OVER IRONWORK BROOK

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Alexander K. Bardow, P.E. — Digitally signed by Alexander K. Bardow, P.E. Date: 2026.01.30 09:30:52 -05'00'
STATE BRIDGE ENGINEER

Carrie Lavallee, P.E. — Digitally signed by Carrie Lavallee, P.E. Date: 2026.02.02 12:21:19 -05'00'
CHIEF ENGINEER

SHEET 1 OF 19 SHEETS BRIDGE NO. S-10-024 (02H)

611942_BR1(S-10-24).DWG Plotted on 6-Jan-2026 2:37 PM

09-January-2026 Final Structural Submittal (SF)

GENERAL NOTES:

DESIGN:

IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020, FOR HL-93 LOADING.

MASSDOT BENCH MARK:

BENCH MARK 1:
RRSPK IN UTILITY POLE 26
N = 2869879.643, E = 163309.389,
EL. = 752.46

BENCH MARK 2:
RRSPK IN UTILITY POLE 29
N=2870289.907, E=163768.943,
EL. = 789.71

ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

DATE:

TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST AND NORTHEAST HIGHWAY GUARDRAIL TRANSITIONS. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE THE LATEST YEAR OF CONTRACT COMPLETION AS OF THE DATE THE FIRST HIGHWAY GUARDRAIL TRANSITION IS CONSTRUCTED. BOTH HIGHWAY GUARDRAIL TRANSITIONS SHALL FEATURE THE SAME DATE.

MASSDOT SURVEY NOTEBOOKS:

COPIES OF ELECTRONIC FILES MAY BE OBTAINED FROM MASSDOT.

SCALES:

SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZED PRINTS (A3).

FOUNDATIONS:

FOUNDATIONS MAY BE ALTERED, IF NECESSARY, TO SUIT CONDITIONS ENCOUNTERED DURING CONSTRUCTION, WITH THE APPROVAL OF THE ENGINEER.

UNSUITABLE MATERIAL:

ALL UNSUITABLE MATERIAL SHALL BE REMOVED WITHIN THE LIMITS OF THE FOUNDATIONS OF THE STRUCTURE, AS DIRECTED BY THE ENGINEER.

ANCHOR BOLTS:

ALL ANCHOR BOLTS SHALL BE SET BY A TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:

UNLESS OTHERWISE SPECIFIED, ALL CONCRETE SHALL BE 5000 HP CONCRETE.

* SEE SHEET 12 OF 19 FOR PRESTRESSED B36-18 BEAM DETAILS.

ALL CIP AND PRECAST CONCRETE POURS SHOWN ON THESE CONSTRUCTION DRAWINGS WHERE ALL VOLUMETRIC DIMENSIONS ARE 4 FEET OR GREATER SHALL BE CONSIDERED TO BE MASS CONCRETE PLACEMENTS AND SHALL REQUIRE A HEAT OF HYDRATION ANALYSIS AND THERMAL CONTROL PLAN, AS SPECIFIED IN THE MASSDOT STANDARD SPECIFICATIONS.

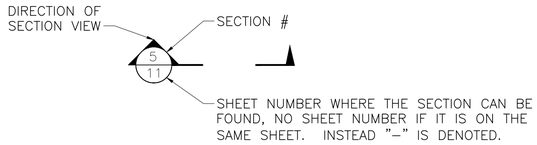
REINFORCEMENT:

REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 GRADE 60. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWING, ALL BARS SHALL BE LAPPED AS FOLLOWS:

MODIFICATION CONDITION	#4 BARS	#5 BARS	#6 BARS	#7 BARS
1. NONE	16"	17"	21"	33"
2. 12" OF CONCRETE BELOW BAR	18"	22"	27"	42"
3. COATED BARS, COVER < $3d_b$, OR CLEAR SPACING < $6d_b$	21"	26"	31"	49"
4. COATED BARS, ALL OTHER CASES	17"	21"	25"	39"
5. CONDITION 2. AND 3.	23"	29"	35"	55"
6. CONDITION 2. AND 4.	21"	27"	32"	51"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

SECTION MARK:



EXISTING CONDITIONS:

ALL DIMENSIONS AND DETAILS SHOWN FOR THE EXISTING STRUCTURE ARE NOT GUARANTEED TO BE CORRECT. EXISTING SKETCHES ARE BASED FROM THE EXISTING 1938 BRIDGE PLANS AND LIMITED SURVEY. THE CONTRACTOR SHALL DETERMINE AND ESTABLISH ALL DIMENSIONS AND DETAILS NECESSARY FOR THE COMPLETION OF THE WORK BY FIELD MEASUREMENT AND SURVEY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY AND ADEQUACY THEREOF AND SHALL NOT COMMENCE ANY FABRICATION UNTIL THEY HAVE MADE THE REQUIRED MEASUREMENTS ON THE ACTUAL STRUCTURE AND THE SUBMITTED SHOP DRAWINGS HAVE BEEN APPROVED BY THE ENGINEER. SHOP DRAWINGS SHALL STATE THAT THE EXISTING DIMENSIONS, ANGLES, ELEVATIONS AND FIELD CONDITIONS HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS REQUIRED FOR THE PROPER PERFORMANCE OF THE WORK. FIELD CONDITIONS MAY EXIST, WHICH DEVIATE FROM THE TYPICAL WORK AND THEORETICAL DIMENSION SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FABRICATION AND FIT OF THEIR WORK.

TRAFFIC NOTES:

THE BRIDGE WILL REMAIN CLOSED FOR THE DURATION OF CONSTRUCTION.

UTILITIES:

THE CONTRACTOR SHALL PROTECT FROM DAMAGE, AS NECESSARY, ANY EXISTING UTILITIES/POLES. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE RESPECTIVE UTILITY OWNERS FOR ALL UTILITIES THAT ARE TO BE TEMPORARILY OR PERMANENTLY RELOCATED FOR THE BRIDGE WORK.

ESTIMATED QUANTITIES
(NOT GUARANTEED)

ITEM	DESCRIPTION	QUANTITY	UNIT
107.855	PRESSURE INJECTION OF CRACKS	45	FT
114.11	DEMOLITION OF SUPERSTRUCTURE OF BRIDGE NO. S-10-024 (02H)	1	LS
127.1	REINFORCED CONCRETE EXCAVATION	70	CY
140.	BRIDGE EXCAVATION	150	CY
143.	CHANNEL EXCAVATION	98	CY
144.	CLASS B ROCK EXCAVATION	15	CY
151.2	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	110	CY
156.5	CRUSHED STONE FOR FILTER BLANKET	20	CY
160.3	CONTROLLED LOW STRENGTH MATERIAL (>300 PSI)	15	CY
450.601	SUPERPAVE BRIDGE SURFACE COURSE - 9.5 POLYMER (SSC-B - 9.5-P)	9	TON
450.701	SUPERPAVE BRIDGE PROTECTIVE COURSE - 9.5 POLYMER (SPC-B - 9.5-P)	12	TON
698.4	GEOTEXTILE FABRIC FOR PERMANENT EROSION CONTROL	210	SY
905.2	5000 PSI, $\frac{3}{8}$ INCH, 710 HP CEMENT CONCRETE	2	CY
909.2	CEMENTITIOUS MORTAR FOR PATCHING	50	SF
912.	DRILLING AND GROUTING DOWELS	250	EA
983.12	RIPRAP WITH GRAVEL PACKED VOIDS	126	TON
983.521	STREAMBED/BANK RESTORATION	35	CY
991.1	CONTROL OF WATER - STRUCTURE NO. S-10-024 (02H)	1	LS
994.01	TEMPORARY PROTECTIVE SHIELDING BRIDGE NO. S-10-024 (02H)	1	LS
995.	BRIDGE SUPERSTRUCTURE, BRIDGE NO. S-10-024 (02H)	1	LS

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	18	40
	PROJECT FILE NO. 611942		

GENERAL NOTES & ESTIMATED QUANTITIES

TRAFFIC DATA	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2041	N/A
AVERAGE DAILY TRAFFIC - PRESENT	790	N/A
AVERAGE DAILY TRAFFIC - DESIGN YEAR	1175	N/A
DESIGN HOURLY VOLUME	155	N/A
DIRECTIONAL DISTRIBUTION	51% EB	N/A
TRUCK PERCENTAGE - AVERAGE DAY	14.3%	N/A
TRUCK PERCENTAGE - PEAK HOUR	20.4%	N/A
DESIGN SPEED	45 MPH	N/A
DIRECTIONAL DESIGN HOURLY VOLUME	80	N/A

SEISMIC DESIGN CRITERIA	
DESIGN RETURN PERIOD:	1000
DESIGN SPECTRA	
As	0.071
SDs	0.156
SD1	0.065
SITE CLASS	C
SEISMIC DESIGN CATEGORY (SDC)	A

HYDRAULIC DESIGN DATA	
DRAINAGE AREA (SQ. MILES)	8.28
DESIGN FLOOD DISCHARGE (C.F.S.)	881
DESIGN FLOOD FREQUENCY (YEARS)	25
DESIGN FLOOD VELOCITY (F.P.S.)	7.25
DESIGN FLOOD ELEVATION (FEET, NAVD)	756.90
BASE (100-YEAR) FLOOD DATA	
BASE FLOOD DISCHARGE (C.F.S.)	1,300
BASE FLOOD ELEVATION (FEET, NAVD)	759.65
DESIGN AND CHECK SCOUR DATA	
DESIGN SCOUR FLOOD EVENT RETURN FREQUENCY (YEARS)	50
DESIGN FLOOD ABUTMENT SCOUR DEPTH (FEET)	5.01
DESIGN FLOOD PIER SCOUR DEPTH (FEET)	N/A
CHECK SCOUR FLOOD EVENT RETURN FREQUENCY (YEARS)	100
CHECK FLOOD ABUTMENT SCOUR DEPTH (FEET)	5.01
CHECK FLOOD PIER SCOUR DEPTH (FEET)	N/A
FLOOD OF RECORD	
DISCHARGE (C.F.S.)	N/A
FREQUENCY (IF KNOWN, YEARS)	N/A
MAXIMUM ELEVATION (FEET, NAVD)	N/A
DATE (MM/YYYY)	N/A
HISTORY OF ICE FLOES	N/A
EVIDENCE OF SCOUR AND EROSION	N/A

NOTE:

TEMPORARY CONTROL OF WATER DESIGN DATA IS BASED ON CONTROL OF WATER BEING IN PLACE FOR NOT MORE THAN 1-YEAR WITH CHANNEL WIDTH BEING REDUCED TO 13'-0".

TEMPORARY WATER CONTROL DESIGN DATA	
DESIGN FLOOD DISCHARGE (C.F.S.)	285
DESIGN FLOOD FREQUENCY (YEARS)	2
DESIGN FLOOD VELOCITY (F.P.S.)	9.20
DESIGN FLOOD ELEVATION (FEET, NAVD)	754.81

DATE	DESCRIPTION
FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION

THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	19	40
	PROJECT FILE NO. 611942		

BORING LOGS GTR-1

GEOSCIENCSE TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, No. Chelmsford, MA 01863
Phone: (978) 251-9395 Fax: (978) 251-9396

Boring No: GTR-1 Contract No: Pg. No.: 1 of 1
GTR Project Num: 19.187 GTR Rep: TJS/SRH
Proj. Name: County Rd. over Ironworks Brook Drilling Company: Seaboard Drilling, Inc.
Location: Sheffield, MA

Driller: Doug Feeley Helper(s): Jarrett Sudyka
Start Date: 6/13/2019 End Date: 6/13/2019
Gnd Surface Elev (ft): ~+ 761 feet
Loc. North: 2870009.531 East: 163422.482
Note: Truck-Mounted Mobile Drill B-53 with a Safety Hammer

Equipment	Casing	Sampler	Core
Type	HW	SS	-
Size I.D.	4"	1.5"	-
Hammer Wt.	300 lb	140 lb	-
Hammer Fall	30"	30"	-

Groundwater		Depth (ft)		
Date	Time	Water	Casing	Hole
14-Jun	8:20	10'	14	25.5

ELEVATION (FEET)	Depth	Case BPF	Sample Data No.	Pen/ Recv (in)	Depth (ft)	Blows per 6 inches	Field Test	Description and Classification	Stratum Description	Additional Data	Notes
760.00			SS-1	24/15	0-2	2-6		Moist, medium dense, brown, fine to medium SAND, little fine Gravel, little Silt	FILL		
						9-10					
	5		SS-2	24/1	4-6	8-10		Dense, brown, fine to medium SAND and Gravel, little Silt			1
755.00						24-40					
			SS-3	24/13	9-11	10-15		Dense, brown, SILT and Clay, little fine Sand, trace fine Gravel	8' GLACIAL TILL	EL. 751.0± OBSERVED GROUND WATER 6/14/2019	
750.00	10					16-21					
	15		SS-4	24/16	14-16	28-29		Very Dense, brown, completely weathered ROCK	13'	EL. 745.8± BOTTOM OF EXIST. FOOTING	
745.00						51-67					
			SS-5	22/16	16-17.9	55-68		Very Dense, brown, completely weathered ROCK			
						88-100/4					
	20		SS-6	23/16	19-20.9	43-49		Very Dense, brown, completely weathered ROCK	COMPLETELY WEATHERED ROCK		
740.00						66-100/5					
	25		SS-7	17/12	24-25.4	35-36		Very Dense, brown, completely weathered ROCK			2
735.00						100/5					3
								Boring Terminated at 25.4 feet below ground surface with no refusal encountered.	25.4'		
730.00	30										

NOTES:
1 Quartz stone in spoon tip, soil recovery limited to <1"
2 Completely weathered rock, texture was clear and evident but was reduced in strenth to strong sand. No fragments of strong rock were observed.
3 Completely weathered rock consisted of SILT and fine Sand, little to trace Clay, trace Gravel

Order of Sample Description (Modified Burmister)
1. Moisture Content: Dry, Moist, Wet
2. Soil Relative Density or Consistency
3. Color
4. Major Component: Should be capitalized
5. Minor Component: "and" - 35% to 50% minor grain size
"some" - 20% to 35% minor grain size
"little" - 10% to 20% minor grain size
"trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE

Cohesionless Soils (Sands)	Cohesive Soils (Clays)
Relative Density / Blows per Foot	Consistency / Blows per Foot
Very Loose >> 0 - 4	Very Soft >> Below 2
Loose >> 4 - 10	Soft >> 2 - 4
Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30
	Hard >> Over 30

BORING LOG GTR-1
SCALE: $\frac{1}{4}$" = 1'-0"

BORING NOTES:

1. LOCATION OF BORINGS SHOWN ON THE PLAN THUS: GTR-#.
2. BORINGS ARE TAKEN FOR PURPOSE OF DESIGN AND SHOW CONDITIONS AT BORING POINTS ONLY, BUT DO NOT NECESSARILY SHOW THE NATURE OF THE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION.
3. WATER LEVELS SHOWN ON THE BORING LOGS WERE OBSERVED AT THE TIME OF TAKING BORINGS AND DO NOT NECESSARILY SHOW THE TRUE GROUND WATER LEVEL.
4. FIGURES IN COLUMNS INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE A 1$\frac{3}{8}$" I.D. SPLIT SPOON SAMPLER 6" USING A 140 POUND WEIGHT FALLING 30".
5. BORING SAMPLES ARE STORED AT A STORAGE FACILITY LOCATED ON ROUTE 114 (219 WINTHROP AVE.) IN LAWRENCE, MA. THE CONTRACTOR MAY EXAMINE THE SOIL AND ROCK SAMPLES BY CONTACTING MASSDOT GEOTECHNICAL SECTION AT 10 PARK PLAZA, BOSTON, MA.
6. ALL BORINGS WERE MADE IN JUNE, 2019.
7. BORINGS WERE MADE BY SEABOARD DRILLING SERVICE, LOCATED AT 649 MEADOW STREET CHICOPEE, MA 01013.
8. THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS USED THROUGHOUT.
9. LOCATION OF PROBES SHOWN ON THE PLAN THUS: SAP-# & NAP-#.

GROUND WATER:

1. THE WATER LEVELS RECORDED IN THESE TABLES ARE THOSE MEASURED ON THE DATE GIVEN AND DO NOT NECESSARILY REPRESENT GROUND WATER LEVELS AT TIME OF CONSTRUCTION.

PROBE SUMMARY TABLE

PROBE NUMBER	TERMINATION DEPTH (FT. BGS)*	DISTANCE (FT.)
SAP-1	0.4	1.8
SAP-2	5.6	4.7
SAP-3	9.0	7.7
SAP-4	17.0 **	10.7
NAP-1	0.9	1.2
NAP-2	2.5	2.7
NAP-3	4.5	4.2
NAP-4	7.5	5.7
NAP-5	12.0	7.2
NAP-6	17.5 **	10.2

* PROBES WERE PERFORMED TO OBTAIN THE SUBSURFACE LIMITS OF THE EXISTING BACK FACE OF THE ABUTMENTS. PROBE DEPTHS ARE BASED ON AUGER REFUSAL.

** NO REFUSAL ENCOUNTERED.

DATE	DESCRIPTION
FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION

THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	20	40
	PROJECT FILE NO. 611942		

BORING LOGS GTR-2

GEOSCIENCSE TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, No. Chelmsford, MA 01863
Phone: (978) 251-9395 Fax: (978) 251-9396

Boring No: GTR-2 Contract No: Pg. No.: 1 of 2
GTR Project Num: 19.187 GTR Rep: TJS
Proj. Name: County Rd. over Ironwork Brook Drilling Company: Seaboard Drilling, Inc.
Location: Sheffield, MA

Driller: Doug Feeley Helper(s): Jarrett Sudyka
Start Date: 6/14/2019 End Date: 6/14/2019
Gnd Surface Elev (ft): ~ + 761 feet
Loc. North: 2870036.181 East: 163473.404
Note: Truck-Mounted Mobile Drill B-53 with a Safety Hammer

Equipment	Casing	Sampler	Core	Groundwater		Depth (ft)		
Type	HW	SS	-	Date	Time	Water	Casing	Hole
Size I.D.	4"	1.5"	-	14-Jun	14:00	9'	14	45.9
Hammer Wt.	300 lb	140 lb	-					
Hammer Fall	30"	30"	-					

Depth	Case BPF	No.	Pen/ Rcvy (in)	Depth (ft)	Blows per 6 inches	Field Test	Description and Classification	Stratum Description	Additional Data	Notes
760.00								ASPHALT 12"		
		SS-1	24/15	1-3	19-17		Dry,medium dense, brown, fine to medium			
					13-9		SAND and Silt, some Gravel			
	5	SS-2	24/13	4-6	10-6		Medium desnse, brown, fine SAND and	GRANULAR FILL		
755.00					8-14		Silt, little fine gravel, trace Organics	7.5'		
	10	SS-3	24/4	9-11	48-40		Very dense, brown, fine GRAVEL and	GLACIAL TILL		
750.00					67-67		Clayey Silt, little fine Sand	12.5'		
	15	SS-4	24/18	14-16	19-26		Dense, brown, completely weathered			
745.00					30-44		ROCK			
		SS-5	24/16	16-18	40-45		Very dense, brown, completely weathered			
					54-61		ROCK			
		SS-6	24/15	18-20	21-29		Very dense, brown, completely weathered			
	20				39-49		ROCK			
740.00								COMPLETELY WEATHERED ROCK		
	25	SS-7	24/15	24-26'	25-33		Very dense, brown, completely weathered			1
735.00					28-37		ROCK			2
	30	SS-8	24/16	29-31	26-27		Very dense, brown, completely weathered			
730.00					57-77		ROCK			

ELEVATION (FEET)

EL. 752.0± OBSERVED GROUND WATER 06/14/2019

EL. 745.8± BOTTOM OF EXIST. FOOTING

NOTES:
1 Completely weathered rock, texture was clear and evident but was reduced in strength to strong sand. No fragments of strong rock were observed.
2 Completely weathered rock consisted of fine SAND and Silt, trace Clay, trace Gravel

Order of Sample Description (Modified Burmister)
1. Moisture Content: Dry, Moist, Wet
2. Soil Relative Density or Consistency
3. Color
4. Major Component: Should be capitalized
5. Minor Component: "and" - 35% to 50% minor grain size
"some" - 20% to 35% minor grain size
"little" - 10% to 20% minor grain size
"trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE

Cohesionless Soils (Sands)	Cohesive Soils (Clays)
Relative Density / Blows per Foot	Consistency / Blows per Foot
Very Loose >> 0 - 4	Very Soft >> Below 2
Loose >> 4 - 10	Soft >> 2 - 4
Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30
	Hard >> Over 30

BORING LOG GTR-2
SCALE: $\frac{1}{4}$" = 1'-0"

GEOSCIENCSE TESTING AND RESEARCH, INC.

55 Middlesex Street, Suite 225, No. Chelmsford, MA 01863
Phone: (978) 251-9395 Fax: (978) 251-9396

Boring No: GTR-2 Contract No: Pg. No.: 2 of 2
GTR Project Num: 19.187 GTR Rep: TJS
Proj. Name: County Rd. over Ironwork Brook Drilling Company: Seaboard Drilling, Inc.
Location: Sheffield, MA

Driller: Doug Feeley Helper(s): Jarrett Sudyka
Start Date: 6/14/2019 End Date: 6/14/2019
Gnd Surface Elev (ft): ~ + 761 feet
Loc. North: 2870036.181 East: 163473.404
Note: Truck-Mounted Mobile Drill B-53 with a Safety Hammer

Equipment	Casing	Sampler	Core	Groundwater		Depth (ft)		
Type	HW	SS	-	Date	Time	Water	Casing	Hole
Size I.D.	4"	1.5"	-	14-Jun	14:00 9'		14	45.9
Hammer Wt.	300 lb	140 lb	-					
Hammer Fall	30"	30"	-					

Depth	Case BPF	No.	Pen/ Rcvy (in)	Depth (ft)	Blows per 6 inches	Field Test	Description and Classification	Stratum Description	Additional Data	Notes
730.00										
	35	SS-9	24/16	34-36	42-57		Very dense, brown, completely weathered			
725.00					78-85		ROCK			
	40	SS-10	11/11	39-39'11"	75-100/5		Very dense, brown, fine GRAVEL and Silt,	COMPLETELY WEATHERED ROCK		1
720.00							little fine Sand			2
	45	SS-11	23/16	44-45'11"	29-48		Very dense, brown, completely weathered			3
715.00					82-100/5		ROCK			
							Boring terminated at 45.9 feet below ground surface with no refusal encountered.	45.9'		
	50									
710.00										
	55									
705.00										
	60									
700.00										

ELEVATION (FEET)

NOTES:
1 Completely weathered rock, texture was clear and evident but was reduced in strength to strong sand. No fragments of strong rock were observed.
2 Completely weathered rock consisted of fine SAND and Silt, trace Clay, trace Gravel
3 Spoon refusal at 39' 11", advanced bore hole to a depth of 41'6" without roller-bit refusal

Order of Sample Description (Modified Burmister)
1. Moisture Content: Dry, Moist, Wet
2. Soil Relative Density or Consistency
3. Color
4. Major Component: Should be capitalized
5. Minor Component: "and" - 35% to 50% minor grain size
"some" - 20% to 35% minor grain size
"little" - 10% to 20% minor grain size
"trace" - < 10% of minor grain size

PENETRATION RESISTANCE (N) GUIDE

Cohesionless Soils (Sands)	Cohesive Soils (Clays)
Relative Density / Blows per Foot	Consistency / Blows per Foot
Very Loose >> 0 - 4	Very Soft >> Below 2
Loose >> 4 - 10	Soft >> 2 - 4
Medium Dense >> 10 - 30	Medium Stiff >> 4 - 8
Dense >> 30 - 50	Stiff >> 8 - 15
Very Dense >> Over 50	Very Stiff >> 15 - 30
	Hard >> Over 30

BORING LOG GTR-2 CONT'D
SCALE: $\frac{1}{4}$" = 1'-0"

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

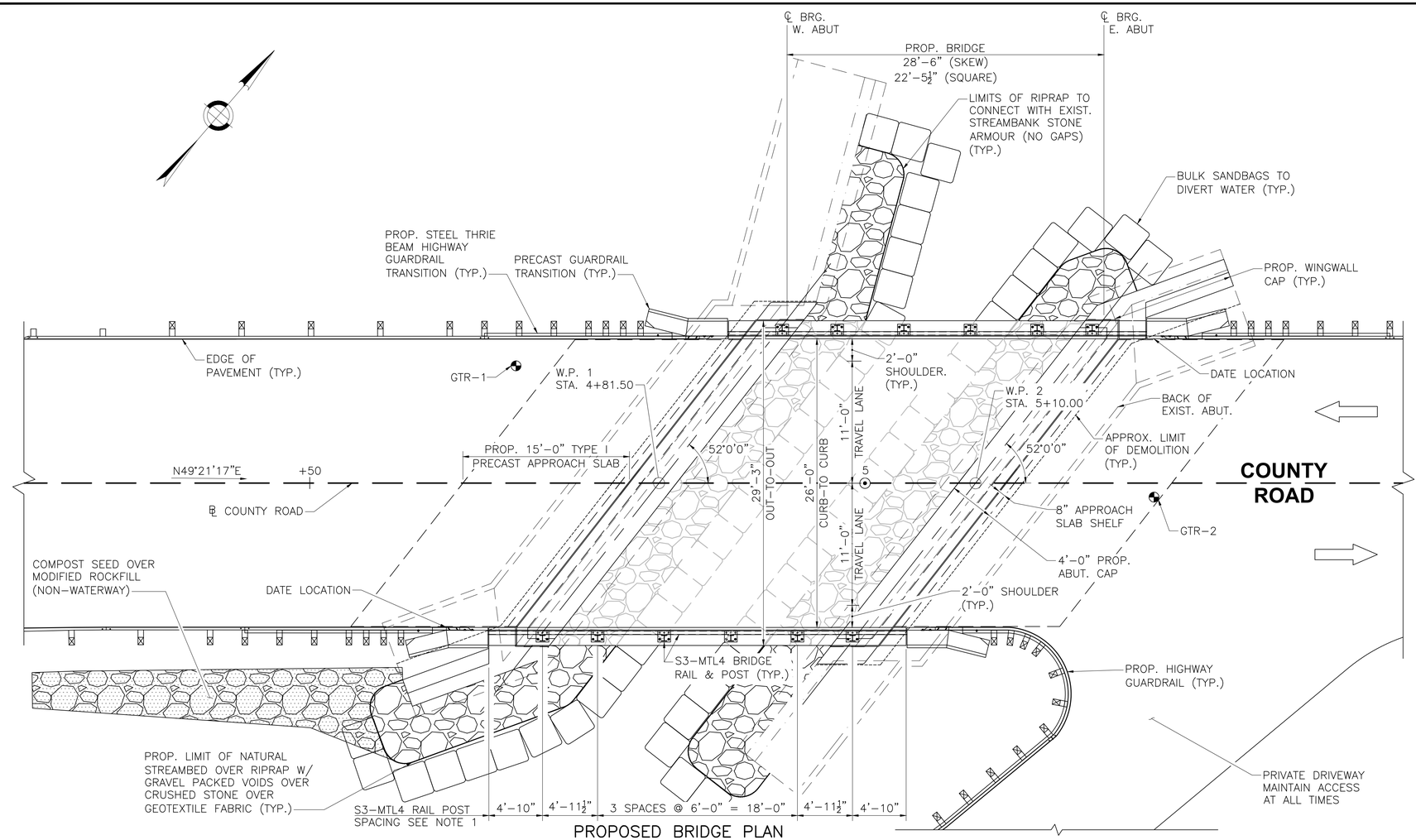
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	21	40
PROJECT FILE NO. 611942			

PLAN & ELEVATION

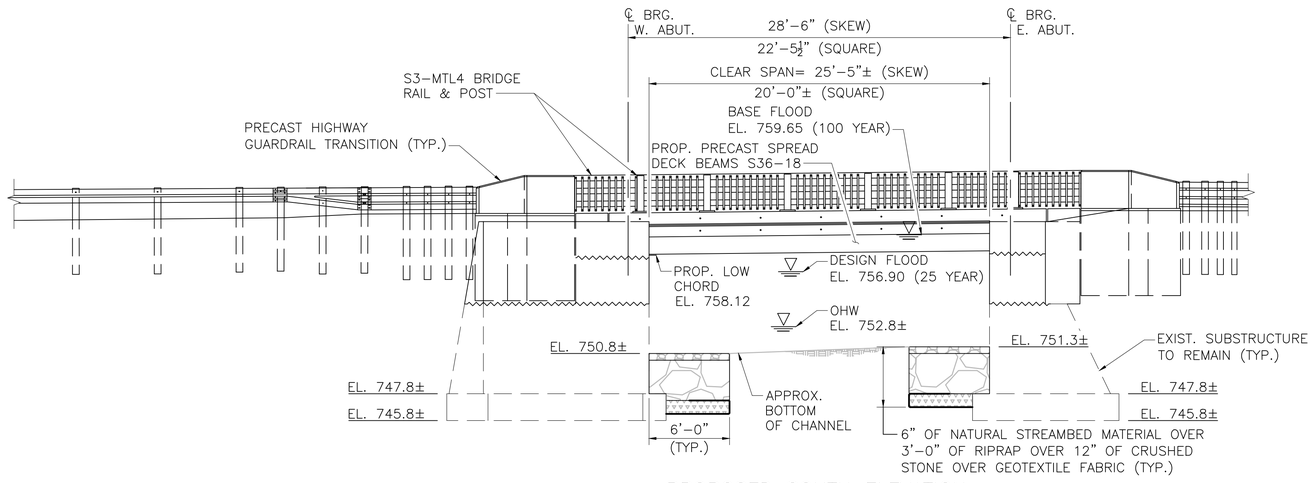
NOTES:

1. BRIDGE RAIL POST SPACING IS DIMENSIONED FROM FACE OF PRECAST HIGHWAY GUARDRAIL TRANSITION TO CENTER LINE OF POST
2. PROBE LOCATION NOT SHOWN FOR CLARITY.
3. RIPRAP AND CONTROL OF WATER SYSTEM TO BE INSTALLED IN PHASES. MINIMUM CHANNEL WIDTH OF 13'–0" IS TO BE MAINTAINED.



PROPOSED BRIDGE PLAN

SCALE: $\frac{3}{16}$" = 1'–0"



PROPOSED SOUTH ELEVATION

SCALE: $\frac{3}{16}$" = 1'–0"

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER

USE ONLY PRINTS OF LATEST DATE

611942_BR5-X(S-10-24).DWG Plotted on 6-Jan-2026 2:38 PM

09-January-2026 Final Structural Submittal (SF)

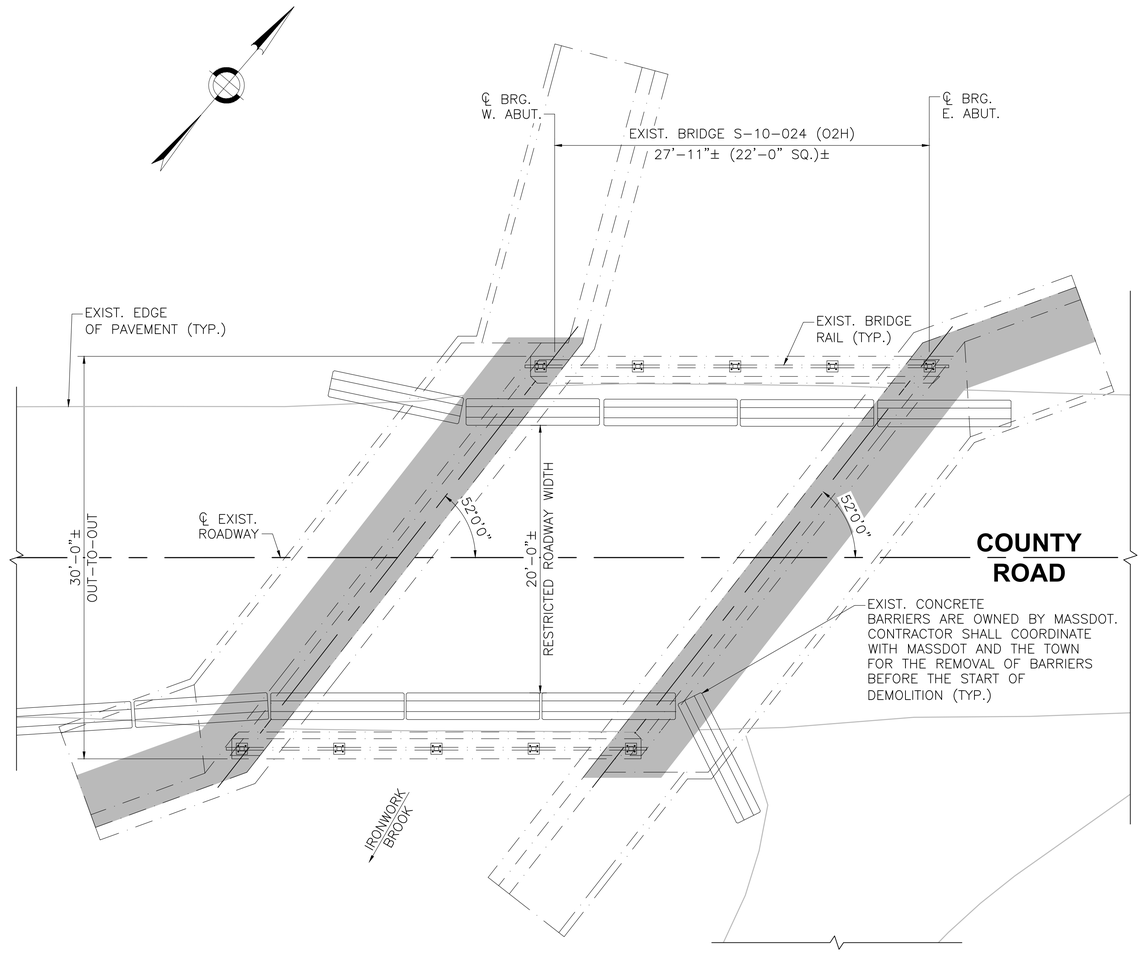
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	22	40
	PROJECT FILE NO. 611942		

EXISTING BRIDGE DEMOLITION PLAN

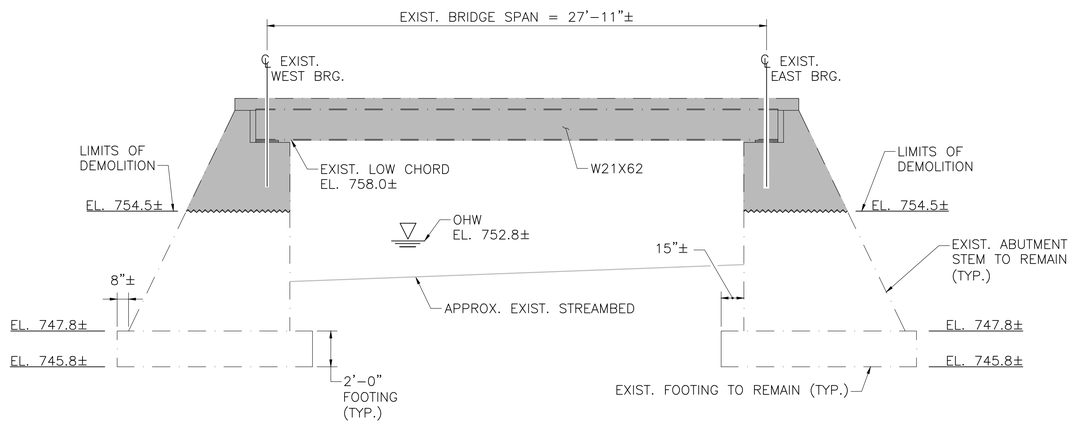
NOTES:

1. THE ENTIRE EXISTING SUPERSTRUCTURE AND A PORTION OF THE SUBSTRUCTURE SHADED IN GRAY, ARE TO BE DEMOLISHED.
2. DIMENSIONS OF THE BURIED/HIDDEN PORTIONS OF THE EXISTING STRUCTURE MAY NOT BE ACCURATE. THE DEPICTED STRUCTURE IS BASED UPON EXISTING 1938 PLANS.
3. ALL DEMOLITION ACTIVITIES SHALL OCCUR IN THE DRY.
4. THE CONTRACTOR SHALL SUBMIT A CONTROL OF WATER (INCLUDING ANY NECESSARY TEMPORARY EARTH SUPPORT BASED ON THE CONTRACTORS MEANS AND METHODS) AND DEMOLITION PLANS AND PROCEDURES STAMPED BY AN ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS PRIOR TO THE START OF DEMOLITION.
5. THE CONTRACTOR SHALL DISPOSE OF ANY DEMOLITION DEBRIS, CONSTRUCTION DEBRIS, WOOD WASTE, CONTAMINATED SOILS, HAZARDOUS MATERIALS & OTHER MATERIALS OR SPECIAL WASTES IN STRICT ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.



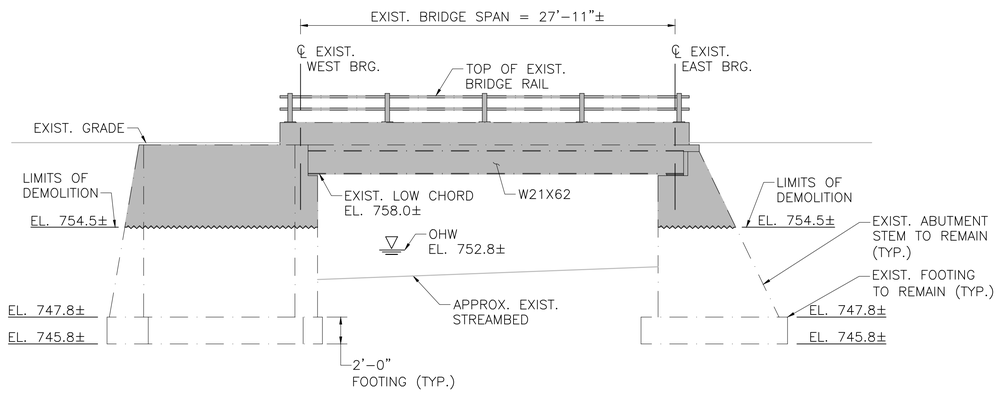
EXISTING FRAMING & SUBSTRUCTURE PLAN

SCALE: $\frac{3}{16}$" = 1'-0"



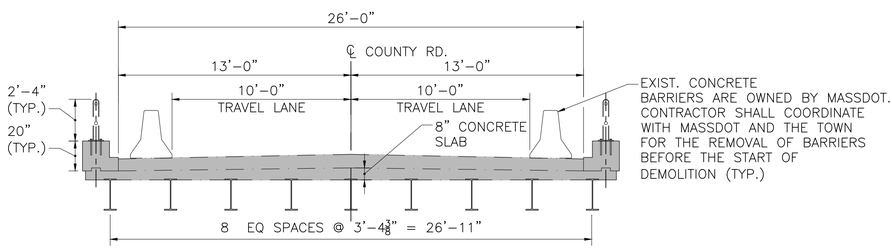
EXISTING LONGITUDINAL SECTION

SCALE: $\frac{1}{4}$" = 1'-0"



EXISTING SOUTH ELEVATION

SCALE: $\frac{3}{16}$" = 1'-0"



EXISTING TRANSVERSE SECTION

SCALE: $\frac{1}{4}$" = 1'-0"

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER

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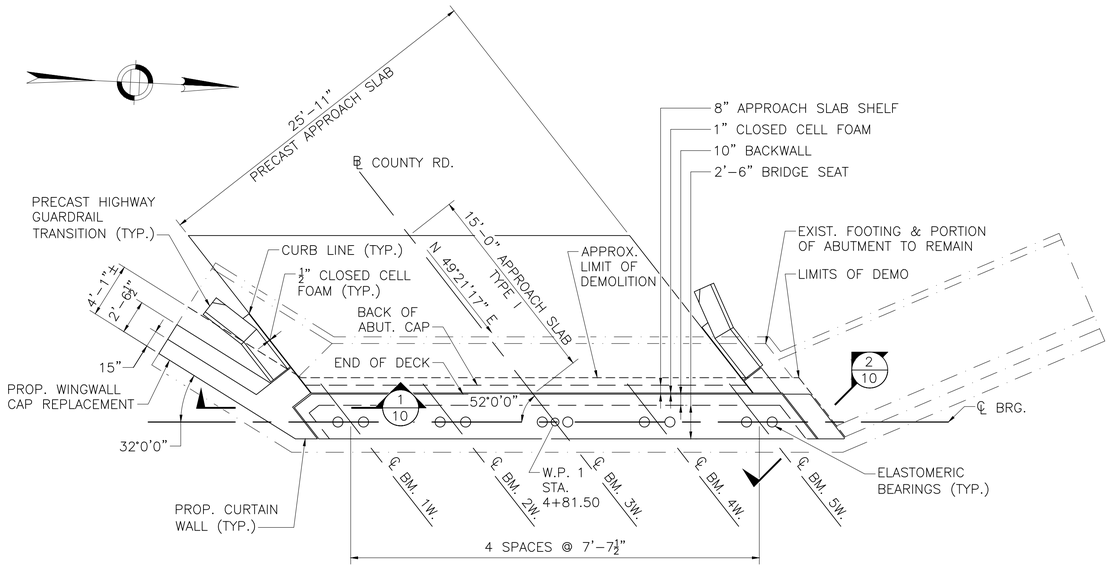
SHEFFIELD
COUNTY ROAD

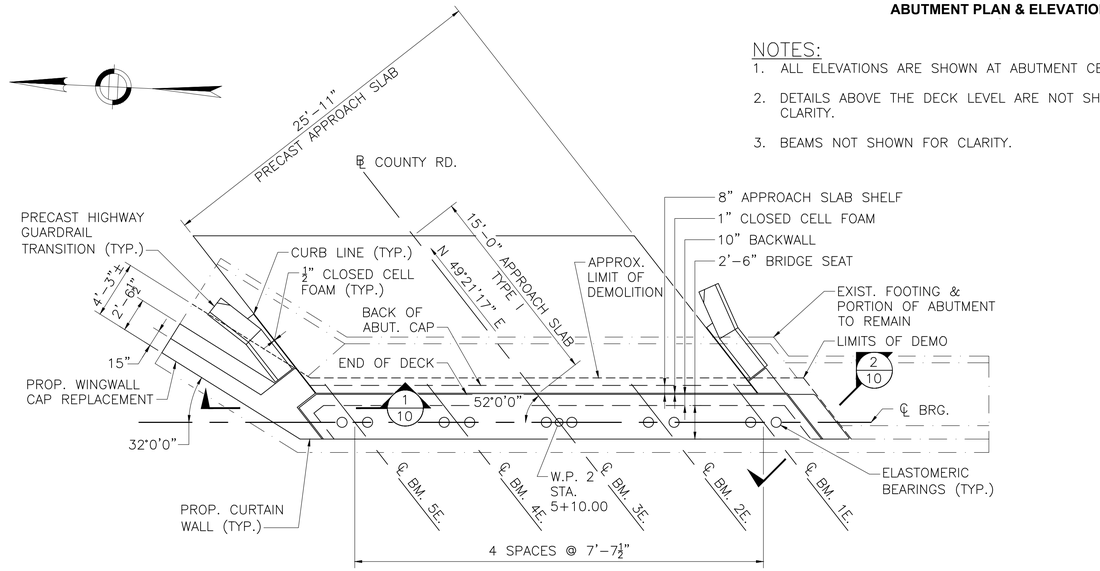
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	23	40
	PROJECT FILE NO. 611942		

ABUTMENT PLAN & ELEVATION

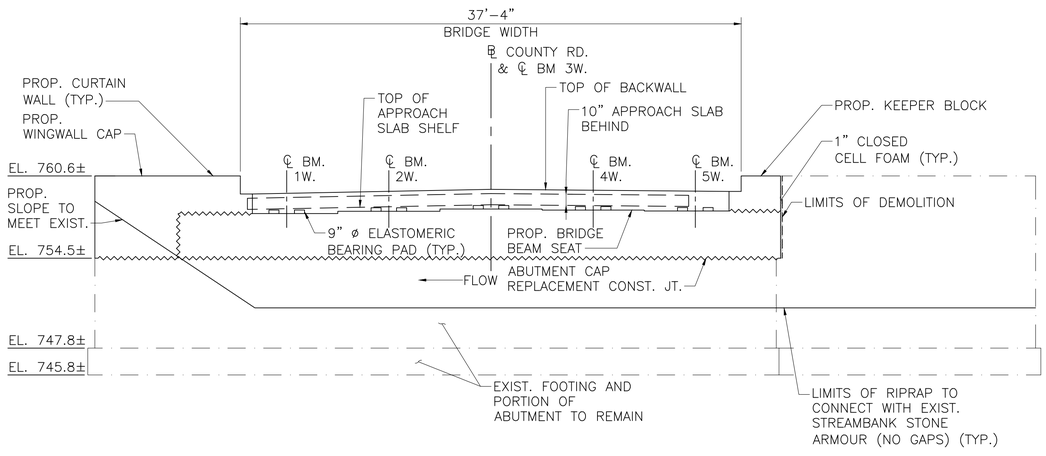
NOTES:
1. ALL ELEVATIONS ARE SHOWN AT ABUTMENT CENTERLINE.
2. DETAILS ABOVE THE DECK LEVEL ARE NOT SHOWN FOR CLARITY.
3. BEAMS NOT SHOWN FOR CLARITY.



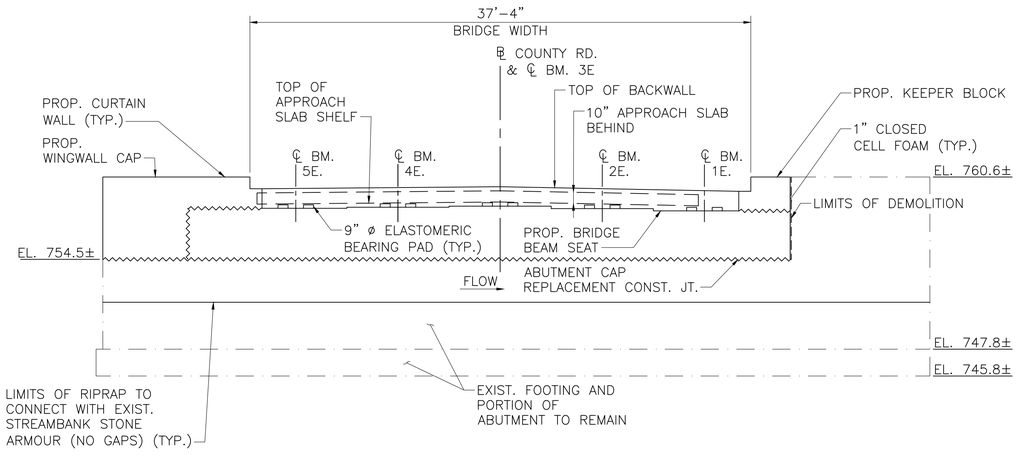
WEST ABUTMENT PLAN
SCALE: $\frac{3}{16}$" = 1'-0"



EAST ABUTMENT PLAN
SCALE: $\frac{3}{16}$" = 1'-0"



WEST ABUTMENT ELEVATION
SCALE: $\frac{3}{16}$" = 1'-0"



EAST ABUTMENT ELEVATION
SCALE: $\frac{3}{16}$" = 1'-0"

BEAM SEAT ELEVATIONS			
BM 1W	757.83	BM 1E	758.11
BM 2W	758.00	BM 2E	758.28
BM 3W	758.17	BM 3E	758.46
BM 4W	758.09	BM 4E	758.38
BM 5W	758.02	BM 5E	758.30

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
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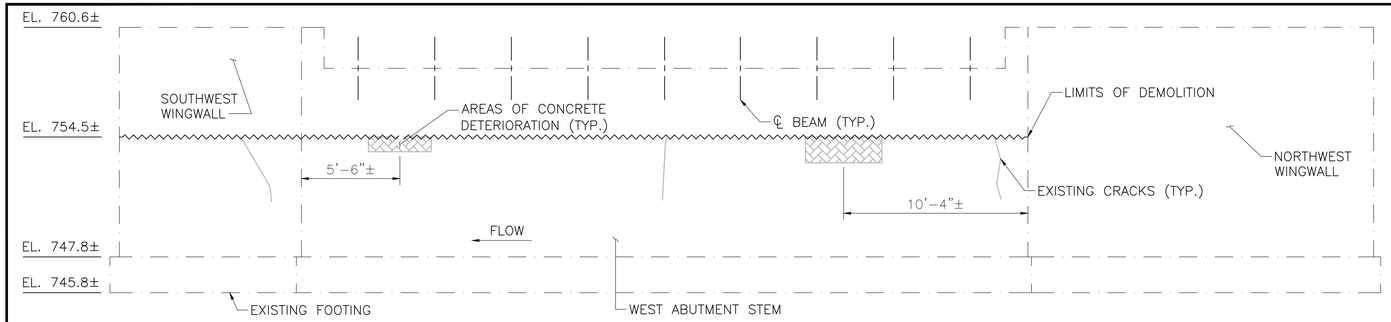
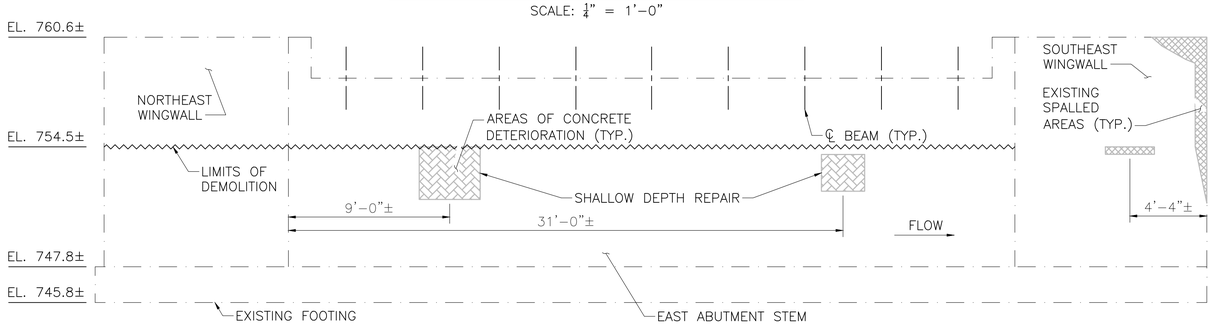


WEST ABUTMENT & WINGWALL REPAIRS

SCALE: ¼" = 1'-0"

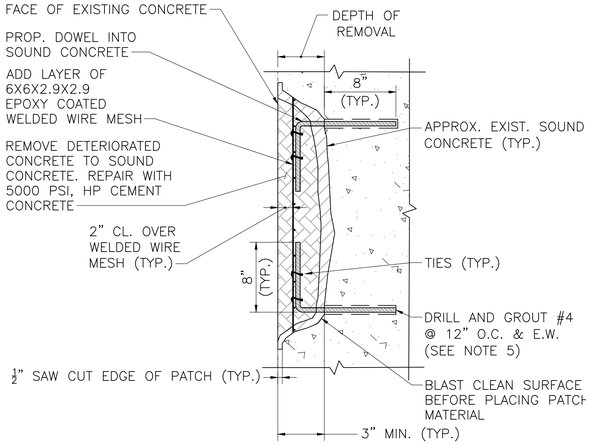


EAST ABUTMENT & WINGWALL REPAIRS

SCALE: ¼" = 1'-0"

STRUCTURE	GPR POTENTIAL DETERIORATION AREA (SF)	IDENTIFIED SPALLED AREA (SF)	APPROX. OPEN CRACKING VISIBLE (FT)
NORTHWEST WINGWALL	0.00	0.00	0.00
WEST ABUTMENT STEM	11.30	0.00	12.3*
SOUTHWEST WINGWALL	5.05	0.00	9.60
NORTHEAST WINGWALL	0.00	0.00	0.00
EAST ABUTMENT STEM	13.30	0.00	0.00
SOUTHEAST WINGWALL	2.10	9.60	4.40

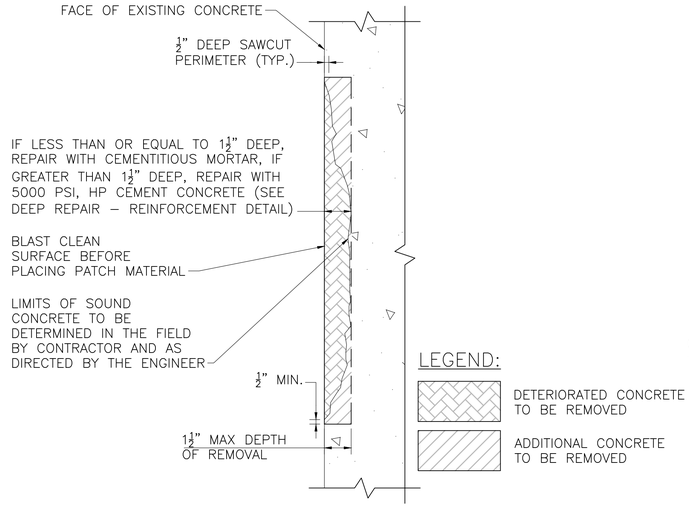
* TOTAL ACTUAL LENGTH IS LONGER DUE TO CRACKING EXTENDING BELOW THE WATERLINE



NOTE:
IF THE EXISTING CONCRETE REMOVAL DEPTH IS GREATER THAN 1½" THEN THE DETERIORATED CONCRETE SHALL BE REMOVED TO A MINIMUM DEPTH OF 3"

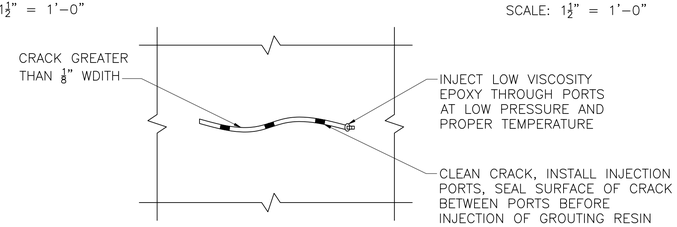
DEEP REPAIR – REINFORCING

SCALE: 1½" = 1'-0"



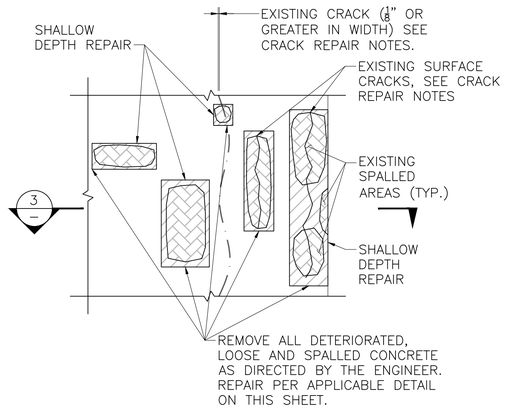
SHALLOW DEPTH CONCRETE REPAIR

SCALE: 1½" = 1'-0"



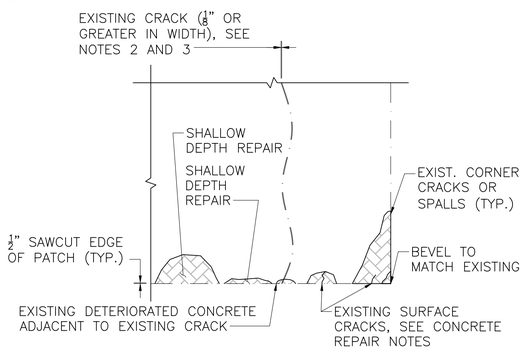
CRACK REPAIR

SCALE: 3" = 1'-0"



GENERAL REPAIR TYPE EXAMPLES – ELEVATION

SCALE: ¼" = 1'-0"



SECTION 3 / –

SCALE: ¼" = 1'-0"

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	24	40
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CONCRETE REPAIR DETAILS

DETERIORATED CONCRETE NOTES:

1. GROUND PENETRATING RADAR WAS PREVIOUSLY USED TO MAP THE LOCATIONS OF CONCRETE DETERIORATION. THE BRIDGE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING/SOUNDING AND MARKING WITH PAINT, THE LIMITS OF CONCRETE DETERIORATION/REMOVAL. APPROVAL BY THE ENGINEER, OF THE PAY LIMITS OF ITEM 127.1 REINFORCED CONCRETE EXCAVATION, WILL BE REQUIRE BEFORE STARTING WORK.
2. CRACKS SHALL BE REPAIRED IN THE EXISTING CONCRETE SUBSTRUCTURE AT LOCATIONS DESIGNATED BY THE ENGINEER.
3. CRACKS DESIGNATED FOR REPAIR BY PRESSURE INJECTION SHALL BE BONDED BY PENETRATION WITH A MASSDOT APPROVED EPOXY ADHESIVE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
4. ALL CONCRETE REPAIRS WITH A DEPTH GREATER THAN 3" SHALL INCLUDE #4 EPOXY COATED REBAR DOWELS DRILLED AND GROUTED INTO THE EXISTING ABUTMENT AS SHOWN.
5. REMOVE ALL LOOSE OR HOLLOW SOUNDING CONCRETE; REMOVE ALL DIRT AND PREPARE SURFACE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. THE CONTRACTOR WILL OBTAIN APPROVAL FROM THE ENGINEER BEFORE PROCEEDING IF THE REPAIR DEPTH IS TO EXCEED 6"
7. AFTER PARTIALLY DEMOLISHING THE SUBSTRUCTURE, AND BEFORE CONSTRUCTING THE NEW CAPS, IT IS REQUIRED FOR THE CONTRACTOR TO IDENTIFY ANY FULL–WIDTH CRACKS IN THE PORTIONS OF THE EXISTING ABUTMENTS AND WINGWALLS THAT ARE TO REMAIN, AND IMMEDIATELY NOTIFY THE ENGINEER.
8. IMMEDIATELY PRIOR TO PLACING NEW CONCRETE OR MORTAR AGAINST EXISTING CONCRETE, THE CONTRACTOR SHALL CLEAN EXISTING SURFACES BY ABRASIVE BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER CONTAINING NO DETERGENTS NOR BOND–INHIBITING CHEMICALS AND APPLY APPROVED EPOXY BONDING COMPOUND.

DRILLING & GROUTING FOR CONCRETE SUBSTRUCTURE REPAIRS

1. DRILLING AND GROUTING CONSISTS OF DRILLING HOLES IN THE EXISTING CONCRETE STRUCTURE AND GROUTING STEEL REINFORCING DOWELS INTO THEM. DOWELS SHALL BE GROUTED INTO DRILLED HOLES IN EXISTING CONCRETE AS DEPICTED IN THE CONTRACT DRAWINGS
2. THE EMBEDDED DOWEL MUST BE SUFFICIENT TO FULLY DEVELOP 100% OF THE YIELD STRENGTH OF THE DOWEL. TECHNICAL DATA SHEETS AND THE MANUFACTURER'S INSTALLATION PROCEDURE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
3. THE CEMENTITIOUS NON–SHRINK GROUT TO BE USED SHALL BE FROM MASSDOT'S PRE–APPROVED PRODUCT LIST.
4. ALL DETERIORATED AREAS SHALL BE DELINEATED BY A ½" SAWCUT. THE COST OF SAWCUTTING SHALL BE INCLUDED IN ITEM 127.1.
5. THE DRILLED HOLES SHALL BE THE MORE CONSERVATIVE OF THE MANUFACTURER'S RECOMMENDATIONS OR THE MINIMUMS PROVIDED BELOW:
   - MINIMUM EDGE DISTANCE = 4"
   - MINIMUM HOLE DIAMETER = 2"
   - MINIMUM HOLE DEPTH = #4 BAR 8" (SUBSTRUCTURE REPAIR ONLY)

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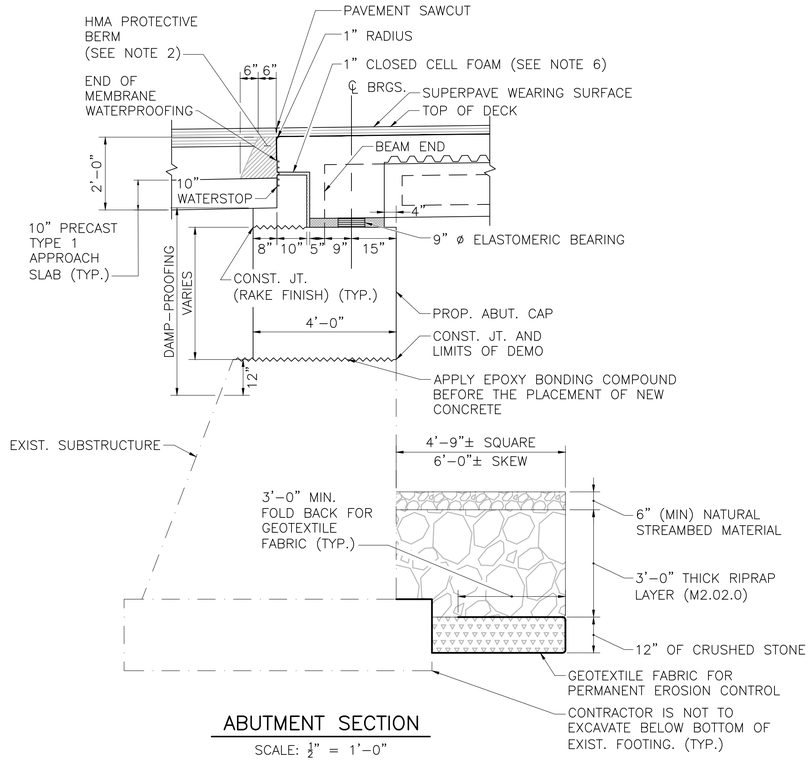
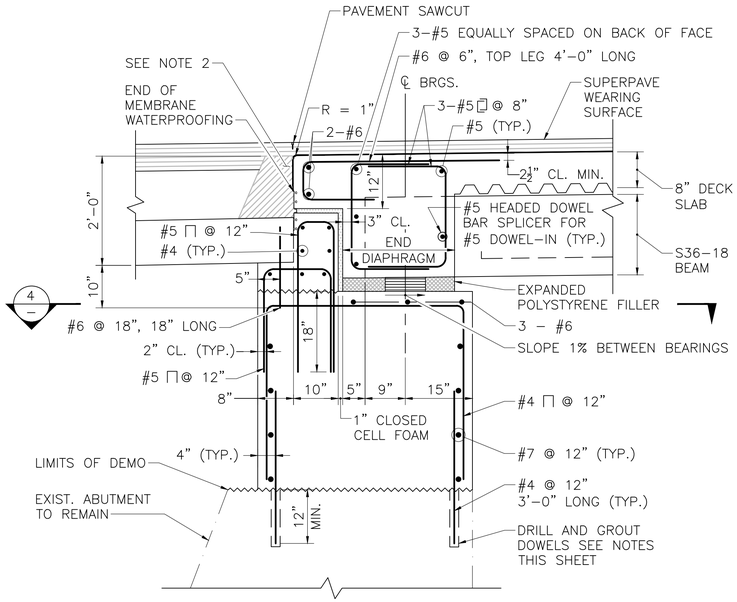


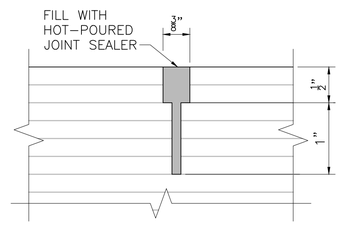
ABUTMENT SECTION

SCALE: $\frac{1}{2}$" = 1'-0"



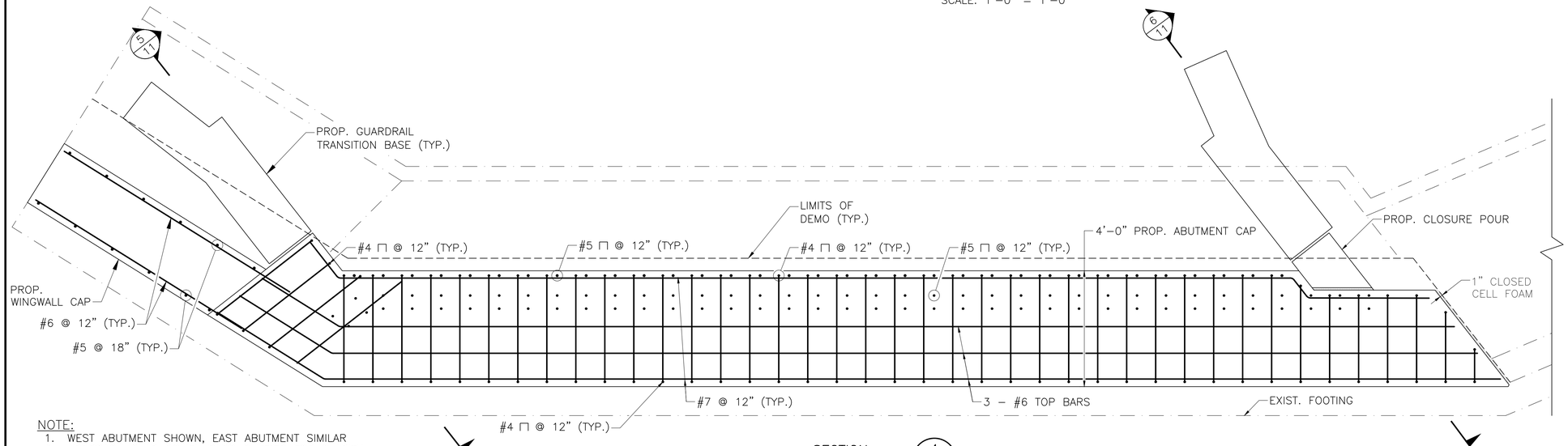
TYPICAL ABUTMENT REINFORCEMENT

SCALE: $\frac{3}{4}$" = 1'-0"



PAVEMENT SAWCUT DETAIL

SCALE: 1'-0" = 1'-0"



NOTE:
1. WEST ABUTMENT SHOWN, EAST ABUTMENT SIMILAR
2. APPROACH SLAB DOWEL BARS OMITTED FOR CLARITY
3. EXISTING PORTION OF ABUTMENT SHOWN FOR REFERENCE

SECTION 4/—

SCALE: $\frac{1}{2}$" = 1'-0"

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	25	40
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ABUTMENT DETAILS

ABUTMENT SECTION NOTES:

1. ALL REINFORCEMENT SHALL BE COATED.
2. HMA PROTECTIVE BERM TO BE SUPERPAVE BRIDGE PROTECTIVE COURSE (SPC-B-12.5), PLACED IN 2" LAYERS AND COMPACTED WITH A MECHANICAL HAND-GUIDED TAMPER.
3. TOP OF BACKWALL SHALL BE TROWELED SMOOTH PARALLEL TO THE PROFILE GRADE.
4. THE BACKWALL, KEEPER BLOCKS AND CURTAIN WALL CONCRETE MUST BE PLACED AND SUFFICIENTLY CURED PRIOR TO PLACING THE END DIAPHRAGM CONCRETE.
5. PRIOR TO PLACING END DIAPHRAGM CONCRETE, CLOSED CELL FOAM OF THE SPECIFIED THICKNESS SHALL BE ATTACHED WITH ADHESIVE TO ALL SURFACES OF THE BACKWALL, KEEPER BLOCKS, AND CURTAIN WALLS AS SHOWN ON THE CONSTRUCTION DRAWINGS. THE BOTTOM OF THE END DIAPHRAGM SHALL BE FORMED BY PLACING EXPANDED POLYSTYRENE FILLER OF THE REQUIRED THICKNESS ON THE BRIDGE SEAT AND TUCKING IT UNDER THE BEAM BOTTOM FLANGES. THE CONTRACTOR SHALL MAKE SURE THAT THE CLOSED CELL FOAM AND EXPANDED POLYSTYRENE FILLER HAVE BEEN PROPERLY AND SECURELY INSTALLED SO THAT THE END DIAPHRAGM CONCRETE SHALL NOT COME IN DIRECT CONTACT WITH THE ABUTMENT CONCRETE.
6. ¾" ø GALVANIZED THREADED INSERTS FOR #5 REINFORCING BARS SHALL BE CAST IN THE BEAMS BY THE FABRICATOR AND SHALL BE EMBEDDED AS REQUIRED TO PROVIDE A MINIMUM NOMINAL TENSILE RESISTANCE OF 17 KIPS AS SPECIFIED BY THE MANUFACTURER.
7. DECK SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.
8. BOTH ABUTMENTS SHALL BE BACKFILLED SIMULTANEOUSLY. NO MORE THAN TWO (2) FEET OF DIFFERENTIAL BACKFILL HEIGHT SHALL BE PERMITED. BACKFILLING SHALL NOT BEGIN UNTIL THE ABUTMENT AND DECK CONSTRUCTION IS COMPLETE.
9. THE FACTORED BEARING PRESSURE – 5.21 KSF AS PER AASHTO LRFD BRIDGE DESING SPECIFICATION STRENGTH I LOAD COMBINATION.
10. FACTORED BEARING RESISTANCE = 8.00 KSF. FACTORED BEARING RESISTANCE IS THE PRODUCT OF THE NOMINAL BEARING RESISTANCE AND A RESISTANCE FACTOR OF 0.45.

DRILLING & GROUTING

1. DRILLING AND GROUTING CONSISTS OF DRILLING HOLES IN THE EXISTING CONCRETE STRUCTURE AND GROUTING STEEL REINFORCING DOWELS INTO THEM. DOWELS SHALL BE GROUTED INTO DRILLED HOLES IN EXISTING CONCRETE AS DEPICTED IN THE CONTRACT DRAWINGS
2. THE EMBEDDED DOWEL MUST BE SUFFICIENT TO FULLY DEVELOP 100% OF THE YIELD STRENGTH OF THE DOWEL. TECHNICAL DATA SHEETS AND THE MANUFACTURER'S INSTALLATION PROCEDURE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
3. THE CEMENTITIOUS NON-SHRINK GROUT TO BE USED SHALL BE FROM MASSDOT'S PRE-APPROVED PRODUCT LIST.
4. ALL DETERIORATED AREAS SHALL BE DELINEATED BY A ½" SAWCUT. THE COST OF SAWCUTTING SHALL BE INCLUDED IN ITEM 127.12.
5. THE DRILLED HOLES SHALL BE THE MORE CONSERVATIVE OF THE MANUFACTURER'S RECOMMENDATIONS OR THE MINIMUMS PROVIDED BELOW:

MINIMUM EDGE DISTANCE	= 4"
MINIMUM HOLE DIAMETER	= 2"
MINIMUM HOLE DEPTH	= #4 BAR 12" #5 BAR 14"

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SHEFFIELD
COUNTY ROAD

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MA	HIP(NGB)-003S(928)X	26	40
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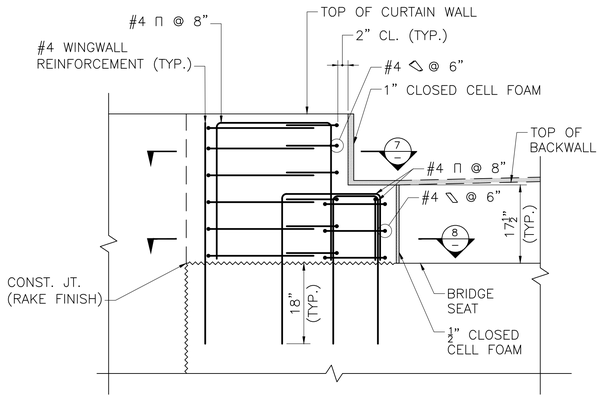
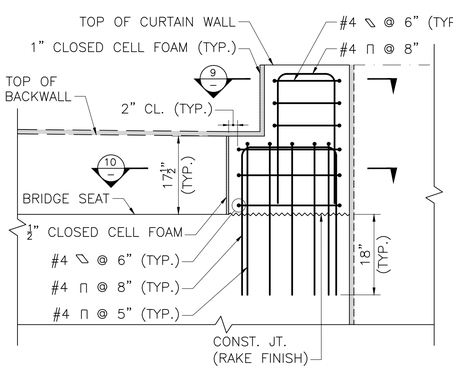
CURTAIN WALL DETAILS



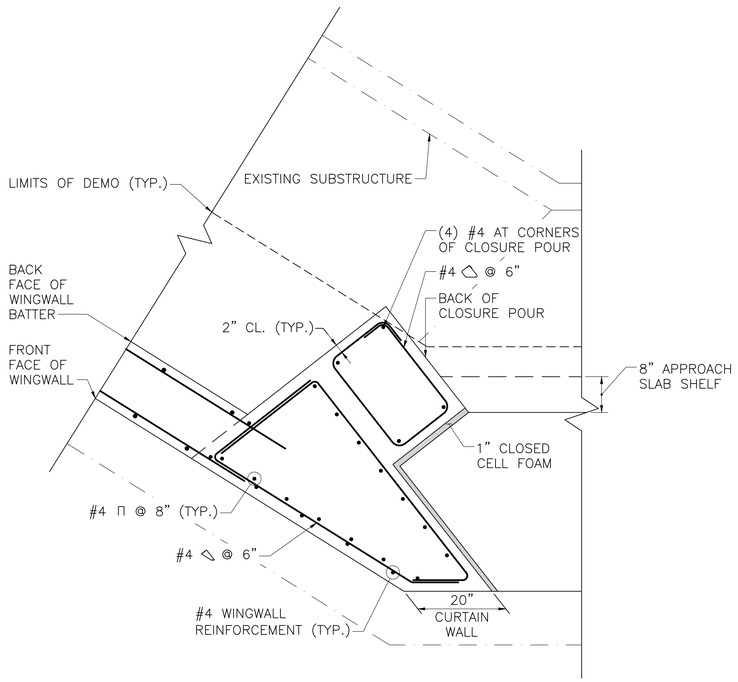
SECTION 1/7
SCALE: ¾" = 1'–0"

NOTE:
SEE DETAIL ON SHEET 14 OF 19 FOR ADDITIONAL SAFETY CURB AND DECK INFORMATION.

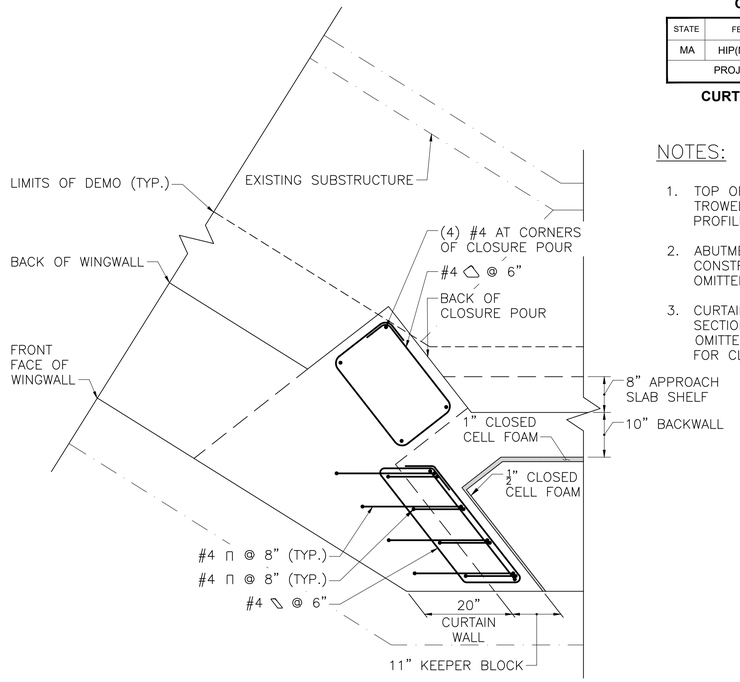


SECTION 2/7
SCALE: ¾" = 1'–0"

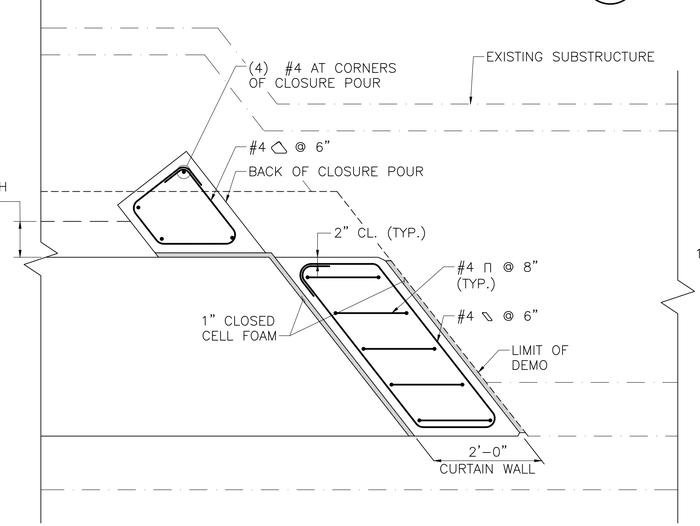
NOTE:
SEE DETAIL ON SHEET 14 OF 19 FOR ADDITIONAL SAFETY CURB AND DECK INFORMATION.



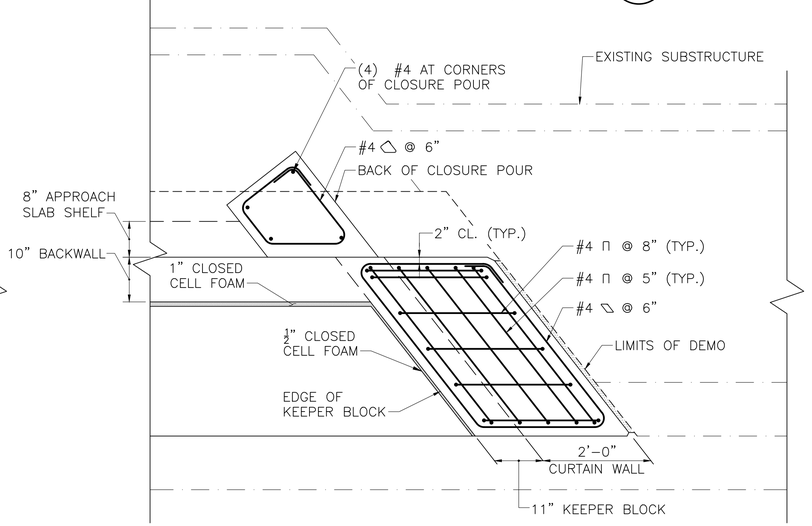
SECTION 7/–
SCALE: ¾" = 1'–0"



SECTION 8/–
SCALE: ¾" = 1'–0"



SECTION 9/–
SCALE: ¾" = 1'–0"



SECTION 10/–
SCALE: ¾" = 1'–0"

NOTES:

1. TOP OF KEEPER BLOCK SHALL BE TROWELED SMOOTH PARALLEL TO PROFILE GRADE.
2. ABUTMENT REINFORCEMENT BELOW CONSTRUCTION JOINT HAS BEEN OMITTED FOR CLARITY.
3. CURTAIN WALL REINFORCEMENT IN SECTIONS 7 AND 9 HAS BEEN OMITTED FROM SECTIONS 8 AND 10 FOR CLARITY.

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SHEFFIELD
COUNTY ROAD

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MA	HIP(NGB)-003S(928)X	27	40
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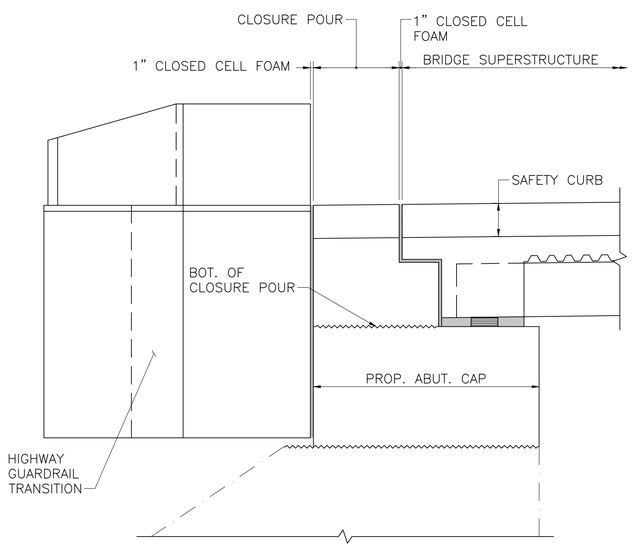
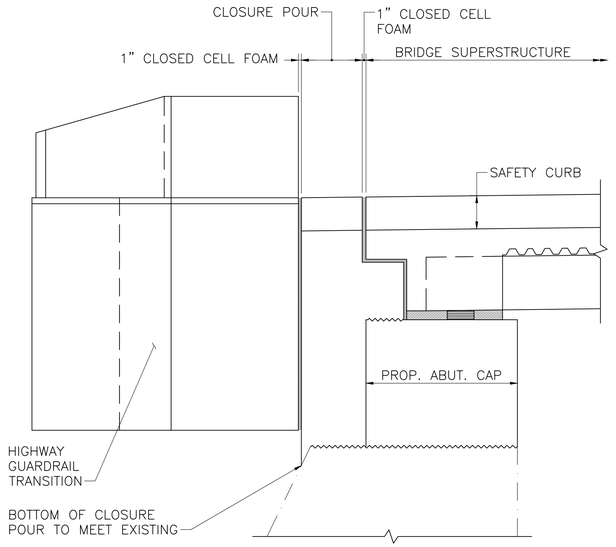
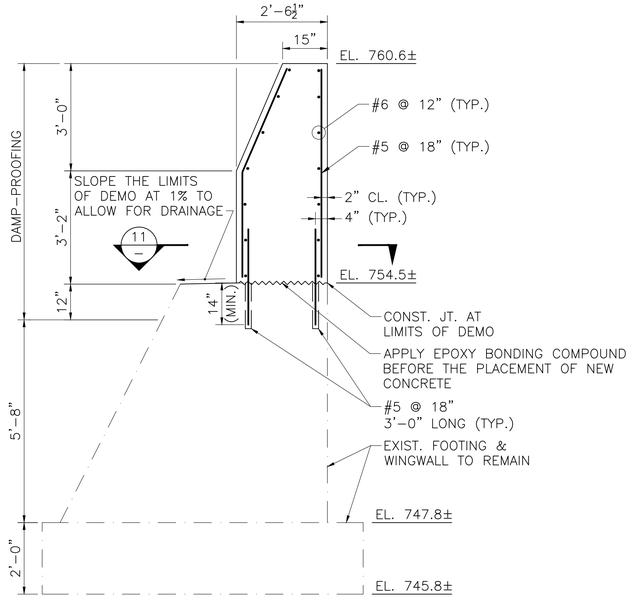
WINGWALL PLAN & SECTION



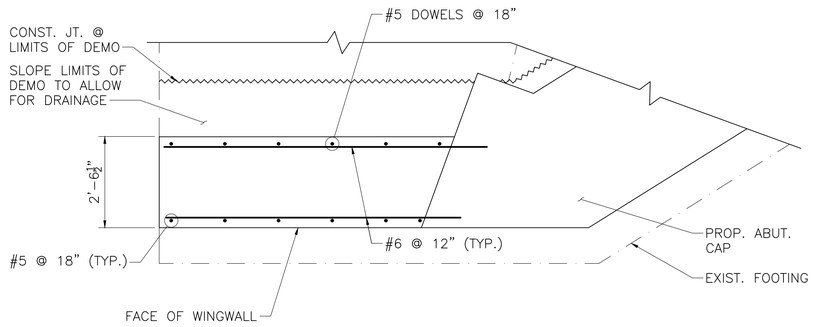
SECTION 5/9
SCALE: ½" = 1'–0"



SECTION 6/9
SCALE: ½" = 1'–0"



SOUTHWEST WINGWALL SECTION
SCALE: ½" = 1'–0"



SECTION 11/–
SCALE: ½" = 1'–0"

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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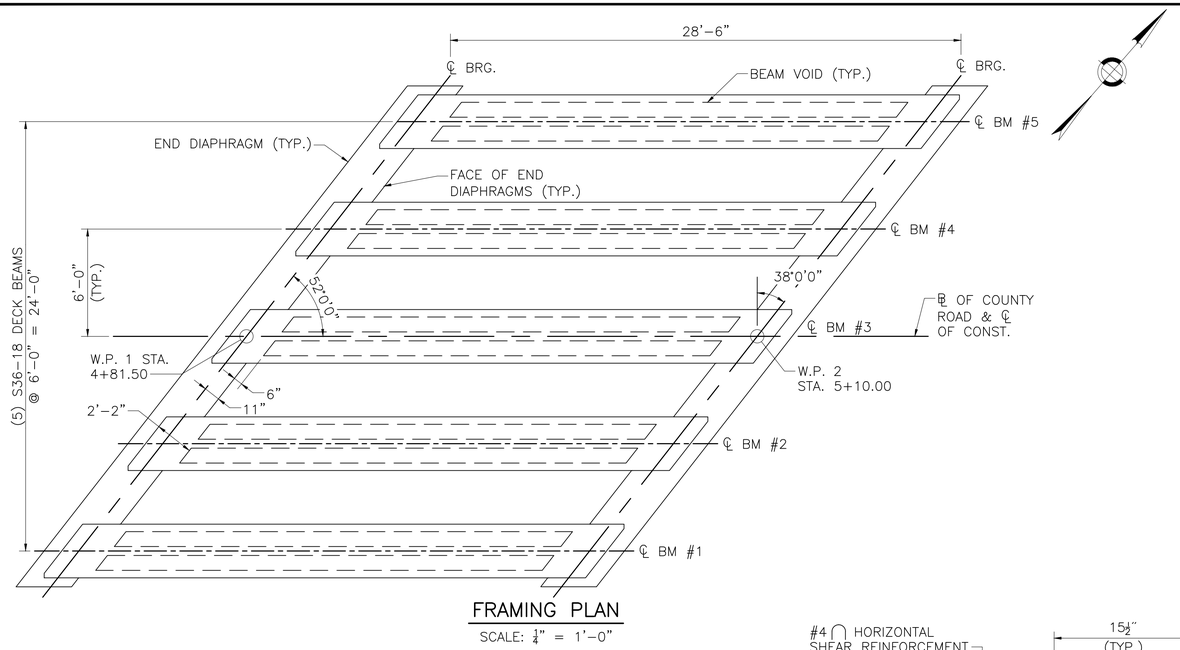
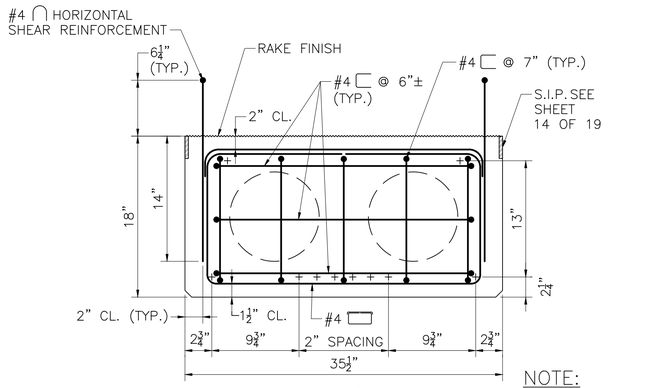


FRAMING PLAN

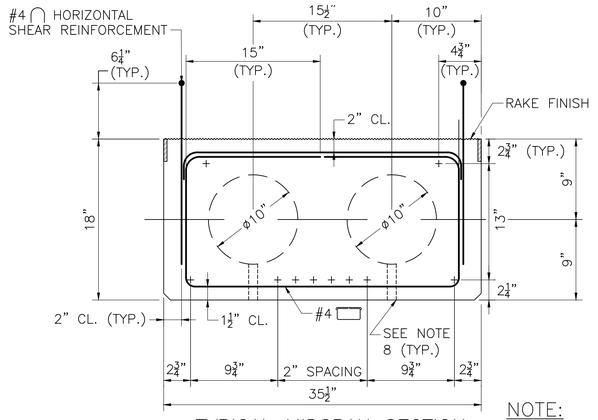
SCALE: $\frac{1}{4}$" = 1'-0"



TYPICAL END SECTION

SCALE: $1\frac{1}{2}$" = 1'-0"

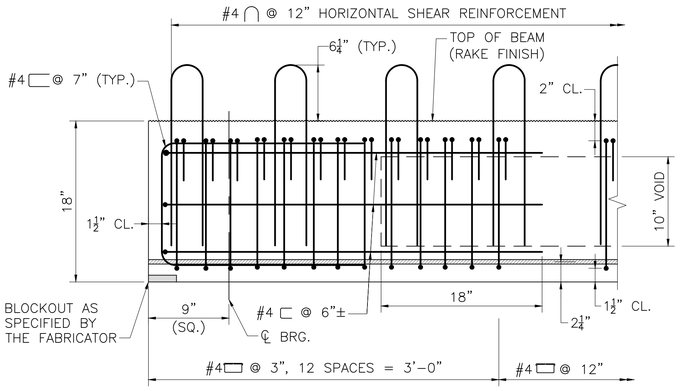
NOTE:
10 PRESTRESSING STRANDS



TYPICAL MIDSPAN SECTION

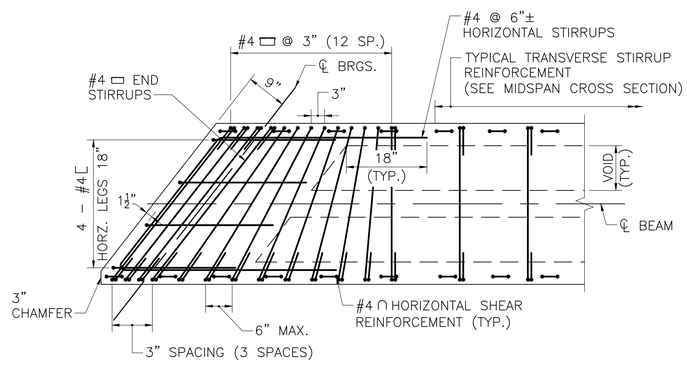
SCALE: $1\frac{1}{2}$" = 1'-0"

NOTE:
10 PRESTRESSING STRANDS



LONGITUDINAL SECTION

SCALE: $1\frac{1}{2}$" = 1'-0"



END OF BEAM PLAN

SCALE: $\frac{3}{4}$" = 1'-0"

NOTE:
STRANDS NOT SHOWN FOR CLARITY

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	28	40
	PROJECT FILE NO. 611942		

FRAMING PLAN & BEAM DETAILS

BEAM END DETAILS NOTES:

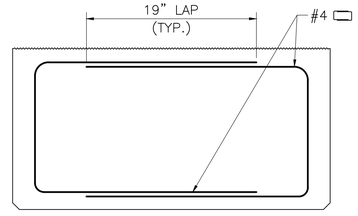
1. THE LATERAL STABILITY OF THE BEAMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR DURING ERECTION AND CONSTRUCTION. A LATERAL SUPPORT SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN AND BRIDGE CONSTRUCTION SPECIFICATIONS.

FRAMING PLAN NOTES:

1. SEE STANDARD SPECIFICATIONS FOR BEAM ERECTION AND LAYOUT.

PRESTRESS NOTES:

1. ALL PRETENSIONING ELEMENTS SHALL BE 0.6" ø, UNCOATED, SEVEN-WIRE, LOW RELAXATION STEEL STRANDS AND SHALL CONFORM TO AASHTO M203.
2. THE TENSILE STRENGTH OF THE PRETENSIONING STRANDS SHALL BE 270 KSI.
3. THE INITIAL TENSION PER 0.6" ø STRAND SHALL BE 44 KIPS.
4. THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL BE 6500 PSI.
5. NO PRESTRESS SHALL BE TRANSFERRED TO THE CONCRETE UNTIL IT HAS ATTAINED A COMPRESSIVE STRENGTH, AS SHOWN BY CYLINDER TEST, OF AT LEAST 4500 PSI.
6. THE TOP OF ALL BEAMS SHALL BE GIVEN A RAKE FINISH ($\frac{1}{4}$" AMPLITUDE) ACROSS THE WIDTH (PERPENDICULAR TO THE BEAM'S AXIS).
7. THE FABRICATOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE LIFTING DEVICES WHICH SHALL BE ADEQUATE FOR THE SAFETY FACTORS REQUIRED BY THE ERECTION PROCEDURE.
8. 1" ø DRAIN, PLACED AT BOTH ENDS OF EACH VOID.
9. + DENOTES STRAIGHT STRANDS.
10. TO CONTROL CRACKING AT THE END OF THE BEAM, THE FABRICATOR SHALL DEBOND APPROXIMATELY 50% OF THE STRANDS FOR THE FIRST 6" FROM THE END OF THE BEAM.



NOTE:
1. CONTRACTOR MAY SUBMIT ABOVE STIRRUP PATTERN TO THE ENGINEER FOR APPROVAL PROVIDED THAT THE ABOVE CRITERIA IS MET.
2. MAINTAIN ALL CLEARANCES AS SHOWN ON THE MIDSPAN SECTION

ALTERNATE STIRRUP PATTERN

SCALE: $1\frac{1}{2}$" = 1'-0"

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FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION

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AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
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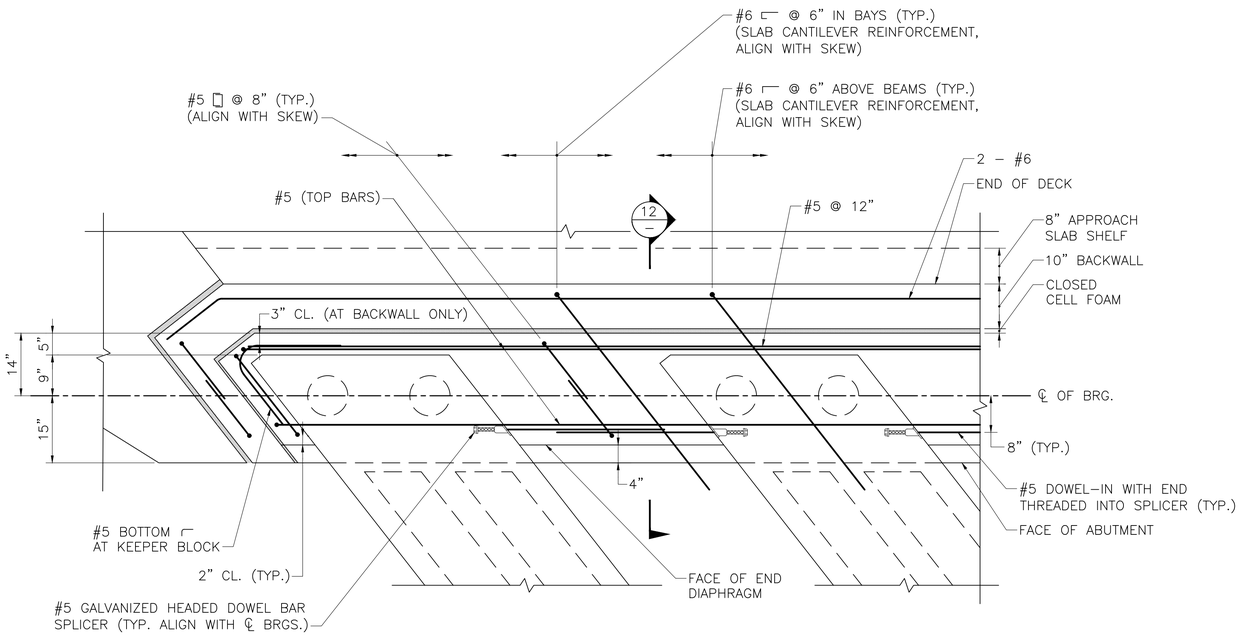
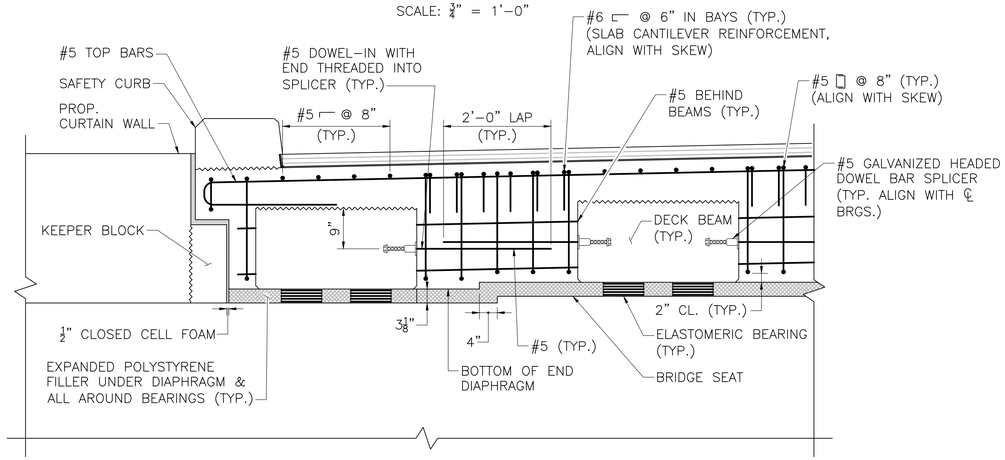


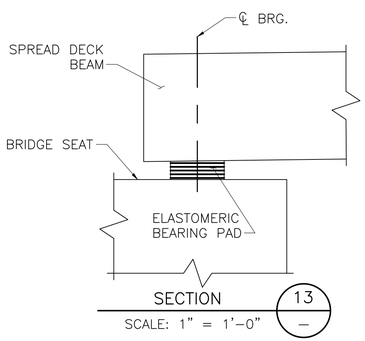
END DIAPHRAGM PLAN

SCALE: $\frac{3}{4}$" = 1'–0"



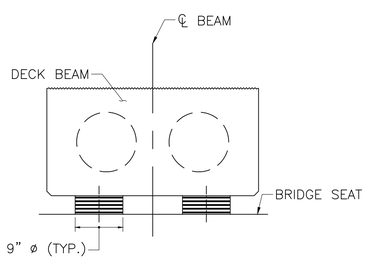
END DIAPHRAGM ELEVATION

SCALE: $\frac{3}{4}$" = 1'–0"



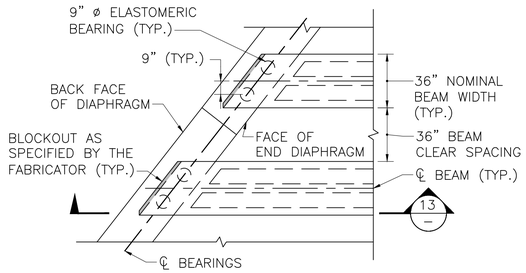
SECTION 13

SCALE: 1" = 1'–0"



ELASTOMERIC BEARING ELEVATION

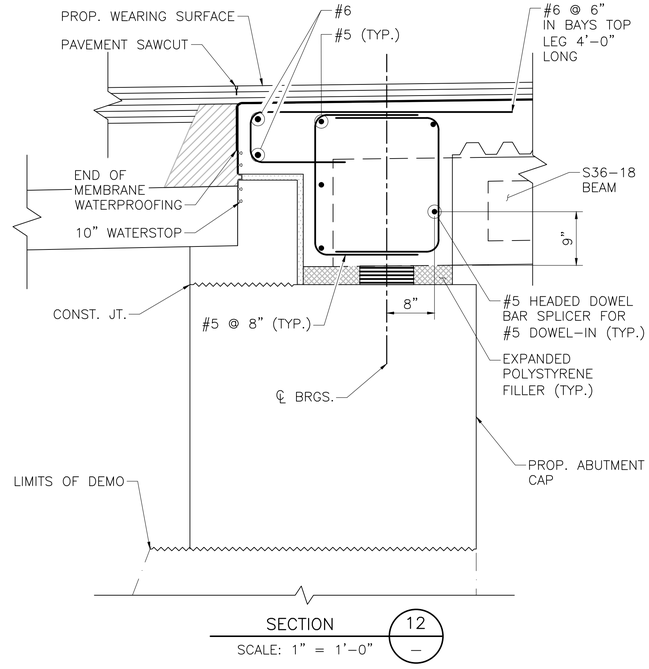
SCALE: 1" = 1'–0"



NOTE:
PROVIDE $\frac{1}{8}$"/FT. SLOPE BETWEEN BEARINGS.

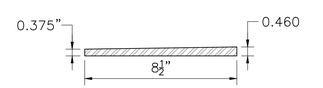
LAYOUT OF ELASTOMERIC BEARINGS

SCALE: $\frac{1}{4}$" = 1'–0"



SECTION 12

SCALE: 1" = 1'–0"



INTERNAL LOAD PLATE DETAIL

SCALE: 3" = 1'–0"

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	29	40
PROJECT FILE NO.	611942		

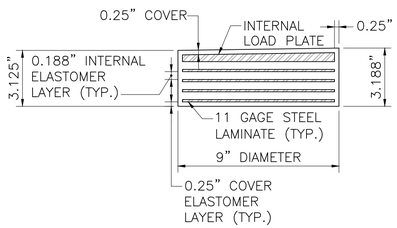
END DIAPHRAGM DETAILS

NOTES:

1. CONTRACTOR MAY USE EXPANDED POLYSTYRENE FILLER OR A REMOVABLE FORM TO FORM THE BOTTOM OF THE END DIAPHRAGM.
2. DECK SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.
3. $\frac{3}{4}$" ø GALVANIZED THREADED INSERTS FOR #5 REINFORCING BARS SHALL BE CAST IN THE BEAMS BY THE FABRICATOR AND SHALL BE EMBEDDED AS REQUIRED TO PROVIDE A MINIMUM NOMINAL TENSILE RESISTANCE OF 17 KIPS AS SPECIFIED BY THE MANUFACTURER.

ELASTOMERIC BEARING NOTES:

1. BEARING IS DESIGNED USING AASHTO METHOD B.
2. ELASTOMER SHALL HAVE A SHEAR MODULUS OF 0.160 KSI.
3. STEEL LAMINATES SHALL CONFORM TO ASTM A 1011 GRADE 36 OR HIGHER. ALL EDGES OF STEEL LAMINATES SHALL BE GROUND SMOOTH.
4. THE COMPRESSIVE DESIGN LOAD ON THE BEARING PAD IS 33.8 KIPS. THE COMPRESSIVE DESIGN STRESS IS THE RESULT OF DIVIDING THE COMPRESSIVE DESIGN LOAD BY THE AREA OF THE PAD AND IS EQUAL TO 0.53 KSI.
5. THE 25 YEAR CREEP STRAIN SHALL BE LIMITED TO 35%.
6. TAPERED INTERNAL LOAD PLATE SHALL CONFORM TO AASHTO M 270 GRADE 36 OR GRADE 50. ALL EDGES OF TAPERED INTERNAL LOAD PLATE SHALL BE GROUND SMOOTH.
7. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A $\frac{1}{32}$" DEEP DIRECTION ARROW THAT POINTS UP–STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER BEARING IS INSTALLED.
8. BEAMS SHALL BE ERECTED WHEN THE AMBIENT TEMPERATURE IS BETWEEN 30 °F AND 90 °F. IF BEAMS ARE ERECTED AT OTHER AMBIENT TEMPERATURES, THEY WILL HAVE TO BE JACKED AND THE ELASTOMERIC BEARINGS RECENTERED WHEN THE TEMPERATURE RETURNS TO THAT RANGE.



ELASTOMERIC BEARING PAD

SCALE: 3" = 1'–0"

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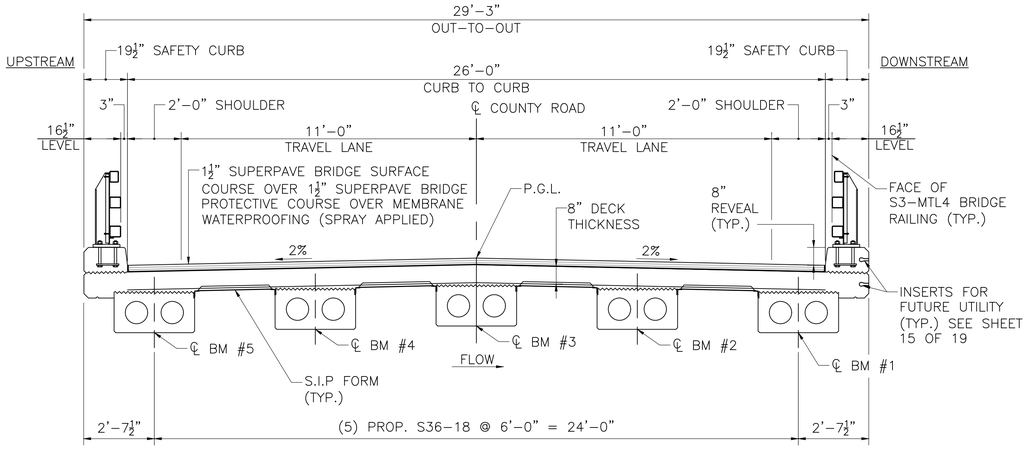
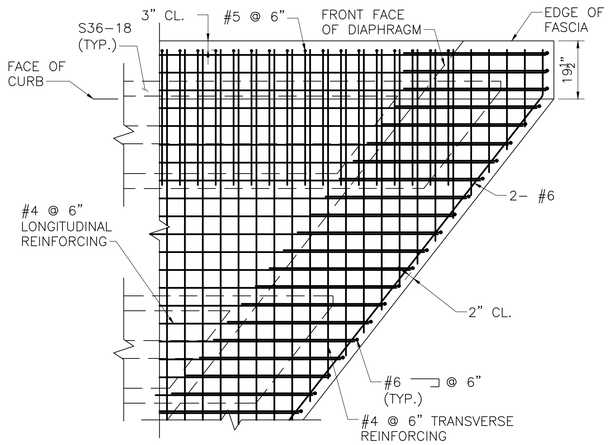


TRANSVERSE SECTION

SCALE: ⅜" = 1'-0"



PLAN AT ACUTE CORNER

SCALE: ½" = 1'-0"

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	30	40
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TRANSVERSE SECTION & DECK DETAILS

DECK NOTES:

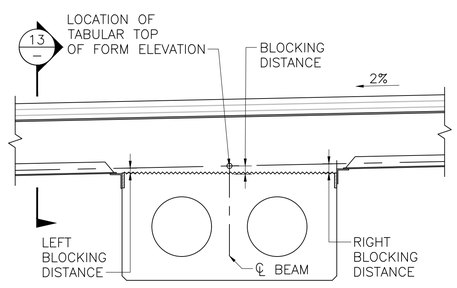
1. LONGITUDINAL REINFORCEMENT SHALL BE PLACED PARALLEL TO THE ℄ OF CONSTRUCTION. TRANSVERSE (PRIMARY) REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO THE ℄ OF CONSTRUCTION.
2. ALL REINFORCEMENT AND SUPPORT DEVICES SHALL BE COATED.
3. THE FINISHED SURFACE OF THE BRIDGE DECK SHALL BE SMOOTH AND WITHOUT ANY PROJECTIONS THAT COULD PUNCTURE THE MEMBRANE WATERPROOFING OR DEPRESSIONS THAT COULD RETAIN WATER.

STAY-IN-PLACE FORM NOTES:

1. FOR 2" S.I.P. FORM, SET BOTTOM OF FORM 1" BELOW ELEVATION GIVEN IN TABLE. FOR 3" S.I.P. FORM, SET BOTTOM OF FORM 1½" BELOW TABLE ELEVATIONS.
2. FORM ENDS SHALL BE CRIMPED CLOSED IN A TAPERED MANNER. SEPARATE END CLOSURE PIECES WILL NOT BE ALLOWED.
3. SUPPORT ANGLES SHALL BE PLACED IN THE "LEG DOWN" POSITION WHERE POSSIBLE. WHERE "LEG UP" POSITION IS NECESSARY, THE UPPER MOST PORTION OF THE ANGLE SHALL NOT PROJECT MORE THAN 1" ABOVE THE TOP FLANGE. THE CONTRACTOR SHALL HAVE AN ASSORTMENT OF ANGLES OF VARIOUS SIZES AVAILABLE ON THE SITE TO CONFORM TO THIS REQUIREMENT.
4. ALL MAIN STEEL REINFORCEMENT IN THE LOWER MAT SHALL BE CENTERED OVER THE VALLEY OF THE S.I.P. FORM.
5. THE CONTRACTOR SHALL DESIGN AND DETAIL ALL ELEMENTS OF THE FORMING SYSTEM AND SHALL SUBMIT TO THE ENGINEER FOR APPROVAL.
6. IN CASES WHERE STANDARD 2" OR 3" DEEP S.I.P. FORMS DO NOT SATISFY DESIGN REQUIREMENTS AN ALTERNATIVE FORMING SYSTEM CONSISTING OF DEEPER S.I.P. FORMS OR REMOVABLE FORMS SHALL BE DESIGNED AND DETAILED BY THE CONTRACTOR AND SUBMITTED IT TO THE ENGINEER FOR APPROVAL. THE DESIGN THICKNESS OF THE SLAB SHALL NOT BE REDUCED.

STAY-IN-PLACE FORM ATTACHMENT NOTES:

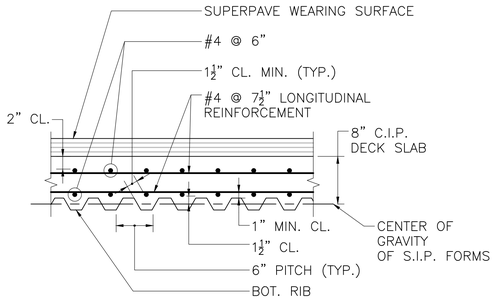
1. EMBEDDED ATTACHMENT PLATES SHALL BE HOT-DIP GALVANIZED AASHTO M 270 GRADE 36 OR GRADE 50 STEEL. THE PLATES SHALL BE IN LENGTHS FROM 3' TO 12' WITH PIECES BUTTED TOGETHER WITHOUT END CONNECTIONS FOR FULL LENGTH OF BEAM. THE HEADED ANCHORS SHALL BE ATTACHED TO THE PLATES PRIOR TO GALVANIZING.
2. HEADED ANCHORS SHALL CONFORM TO M8.04.1 FOR MATERIAL REQUIREMENTS ONLY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE S.I.P. FORM SEAT AND WELD.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE CONCRETE LAITANCE FROM THE ATTACHMENT PLATE BEFORE INSTALLING THE S.I.P. FORMS.



HAUNCH DETAIL

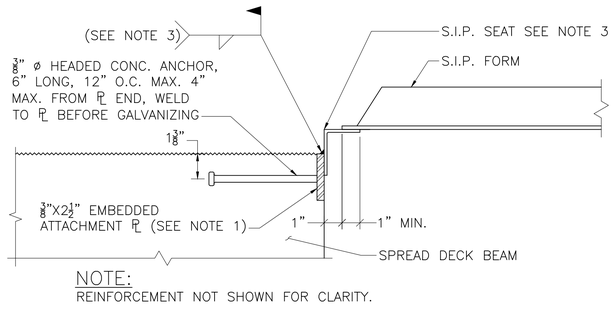
SCALE: 1" = 1'-0"

NOTE:
1. THE RIGHT AND LEFT ORIENTATION IS TAKEN LOOKING UPSTATION ALONG THE BEAM
2. RIGHT BLOCKING DISTANCE = THEORETICAL BLOCKING DISTANCE + ("R." = +0.38"). LEFT BLOCKING DISTANCE = THEORETICAL BLOCKING DISTANCE + ("L" = -0.38").



SECTION 13 / —

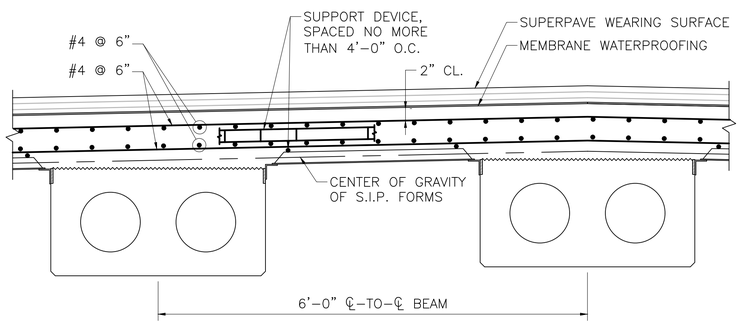
SCALE: 1" = 1'-0"



STAY-IN-PLACE FORM ATTACHEMENT DETAIL

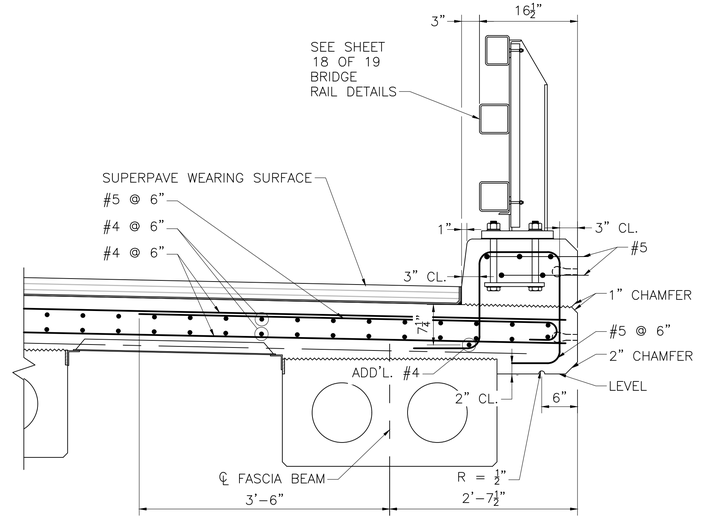
SCALE: 3" = 1'-0"

NOTE:
REINFORCEMENT NOT SHOWN FOR CLARITY.



TYPICAL DECK REINFORCEMENT

SCALE: 1" = 1'-0"



SECTION THRU SAFETY CURB

SCALE: 1" = 1'-0"

BEAM NO.	TOP OF FORM ELEVATIONS FOR DECK SLAB PRIOR TO PLACEMENT OF CONCRETE				
	INCREASING STATIONS →				
	℄ BRG.	1/4 PT.	1/2 PT.	3/4 PT.	℄ BRG.
1	759.75	759.83	759.91	759.97	760.03
2	759.92	760.00	760.08	760.14	760.21
3	760.09	760.17	760.25	760.32	760.38
4	760.02	760.09	760.17	760.24	760.30
5	759.94	760.02	760.09	760.16	760.22

NOTE:
AFTER THE BEAMS ARE ERECTED BUT BEFORE THE FORMS ARE PLACED, THE ELEVATION AT THE TOP OF THE FLANGE OF EACH BEAM SHALL BE OBTAINED AT THE POINTS INDICATED IN THE TABLE. THE DIFFERENCE BETWEEN EACH OBTAINED ELEVATION AND ITS CORRESPONDING ELEVATION SHOWN IN THE TABLE IS THE BLOCKING DISTANCE FROM THE TOP OF THE BEAM TO THE BOTTOM OF THE SLAB AT THE CENTERLINE OF THE BEAM.

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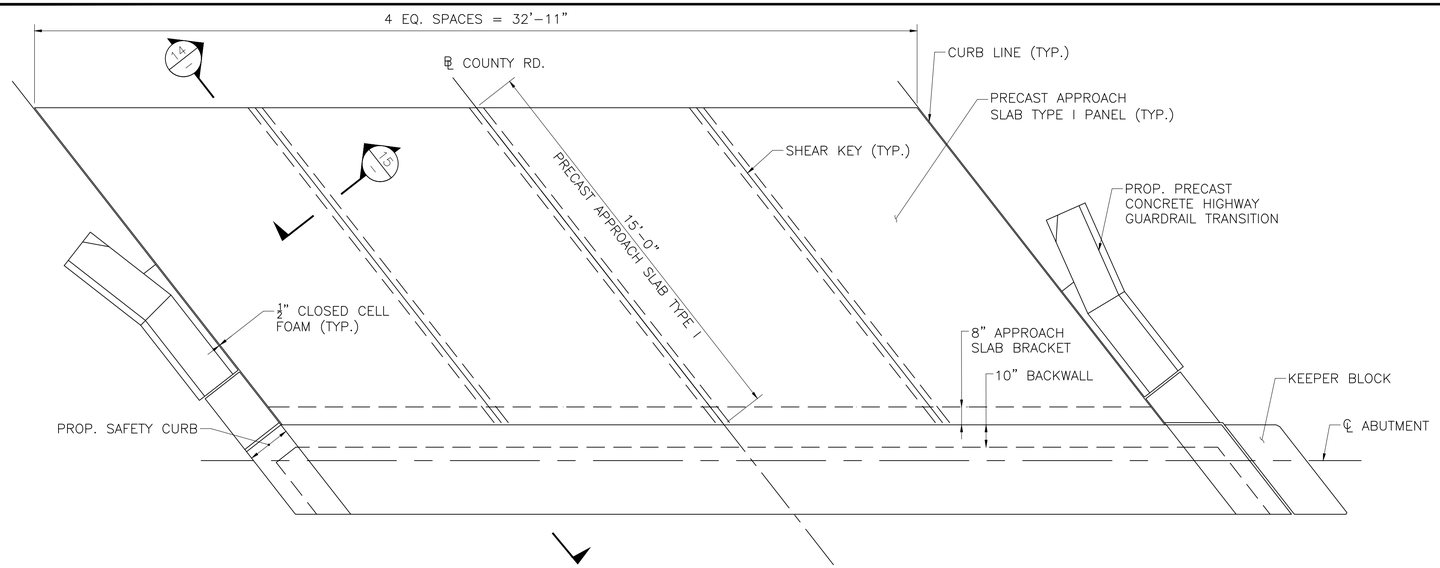
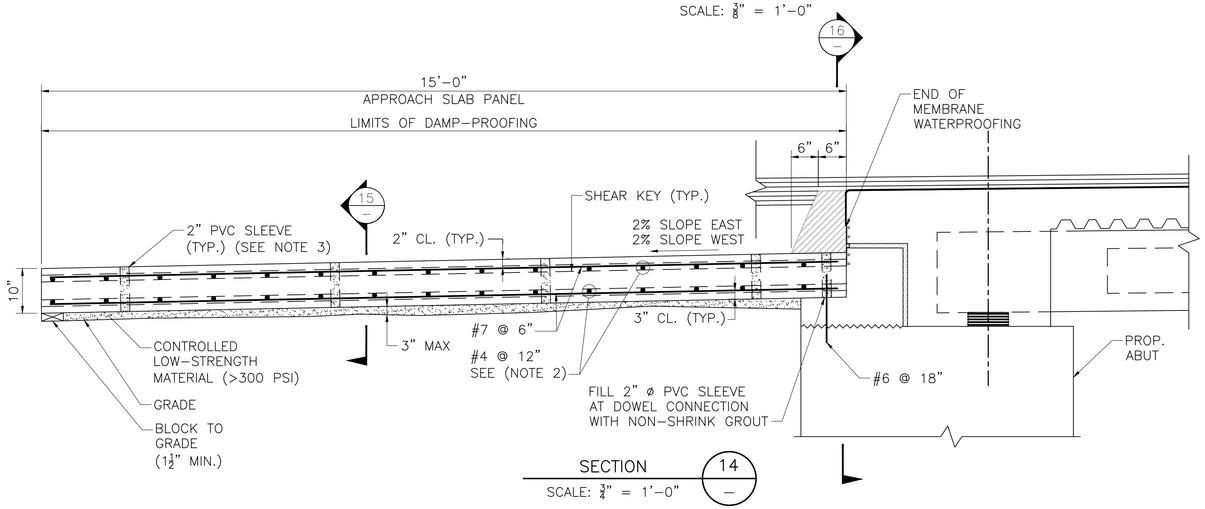


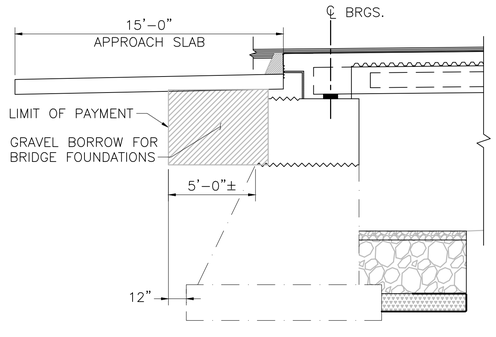
APPROACH SLAB PLAN

SCALE: ⅜" = 1'-0"



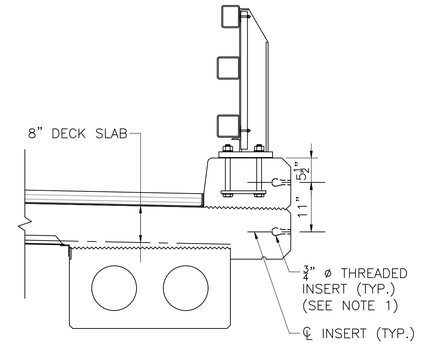
SECTION 14

SCALE: ¾" = 1'-0"



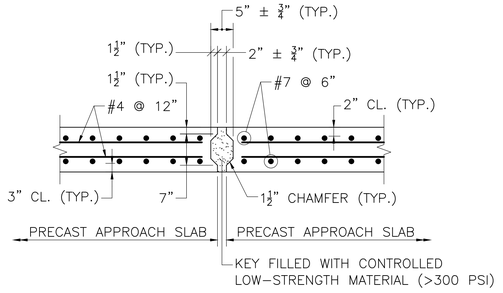
LIMITS OF BACKFILL

SCALE: ½" = 1'-0"



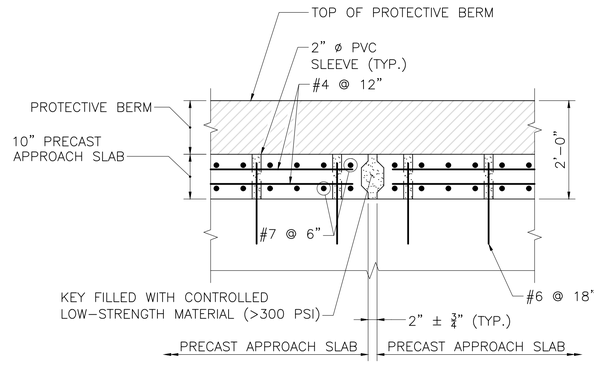
FUTURE UTILITY INSERT DETAIL

SCALE: ¾" = 1'-0"



SECTION 15

SCALE: ¾" = 1'-0"



SECTION 16

SCALE: ¾" = 1'-0"

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	31	40
	PROJECT FILE NO. 611942		

PRECAST APPROACH SLAB DETAILS

APPROACH SLAB NOTES:

1. HMA PROTECTIVE BERM TO BE SUPERPAVE BRIDGE PROTECTIVE COURSE (SPC-B-12.5), PLACED IN 2" LAYERS AND COMPACTED WITH A MECHANICAL HAND-GUIDED TAMPER.
2. PLACE LONGITUDINAL REINFORCEMENT PARALLEL TO THE ℄ OF THE BRIDGE. PLACE TRANSVERSE REINFORCEMENT PARALLEL TO THE ABUTMENT.
3. PVC SLEEVES TO BE INCLUDED IN PRECAST APPROACH SLAB TO FACILITATE PLACEMENT OF CONTROLLED LOW-STRENGTH MATERIAL (>300 PSI).
4. ALL SHEAR KEYS SHALL HAVE AN EXPOSED AGGREGATE FINISH.
5. ALL REINFORCEMENT SHALL NOT BE COATED.

FACE OF CURB NOTES:

1. TURN MEMBRANE UP AT CURB FACE, 3" HIGH.

FUTURE UTILITY NOTES:

1. TURN ¾" ø GALVANIZED THREADED INSERTS FOR ¾" ø GALVANIZED H.S. BOLTS SHALL BE CAST INTO THE DECK/SAFETY CURB AND SHALL PROVIDE A MINIMUM NOMINAL TENSILE RESISTANCE OF 6.0 KIPS AND A MINIMUM NOMINAL SHEAR RESISTANCE OF 6.0 KIPS IN 3000 PSI CONCRETE. MAX INSERT SPACING = 4'-6" (TYP.) DESIGNED FOR 250 LB/FT UTILITY LOAD AT 12" FROM THE EXTERIOR FACE OF DECK/SAFETY CURB. MEMBRANE UP INTO 3" HIGH POCKET. DIMENSIONS AT THE FACE OF THE CURB ARE THE SAME FOR THE SAFETY CURB.

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
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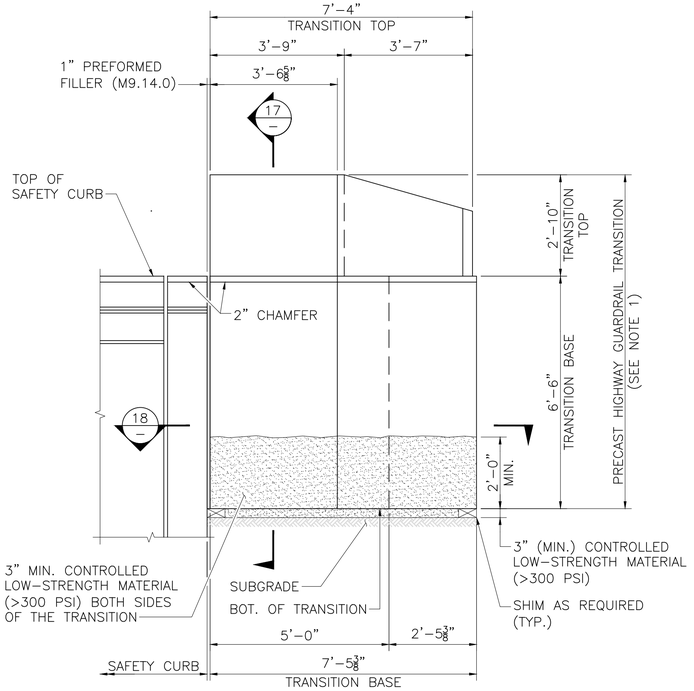
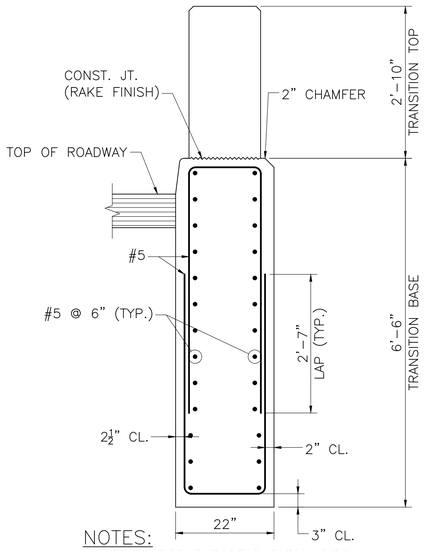


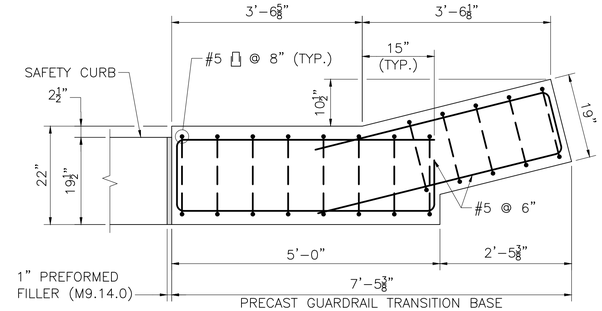
PRECAST GUARDRAIL TRANSITION ELEVATION AT SAFETY CURB

SCALE: ½" = 1'-0"



NOTES:
1. REINFORCEMENT OF THE TRANSITION TOP IS NOT SHOWN FOR CLARITY.

SECTION 17 — SCALE: ¾" = 1'-0"



NOTE:
SAFETY CURB REINFORCEMENT NOT SHOWN FOR CLARITY.

SECTION 18 — SCALE: ¾" = 1'-0"

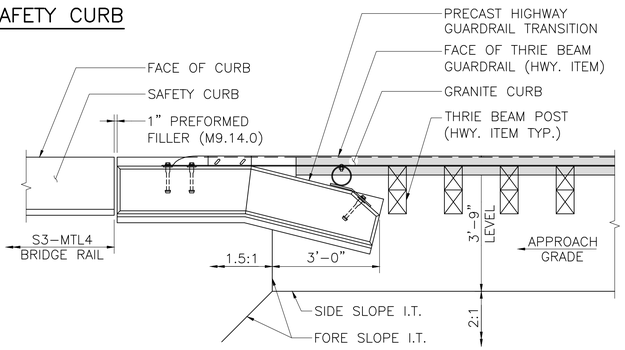
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	32	40
PROJECT FILE NO.	611942		

PRECAST HIGHWAY GUARDRAIL TRANSITION DETAILS

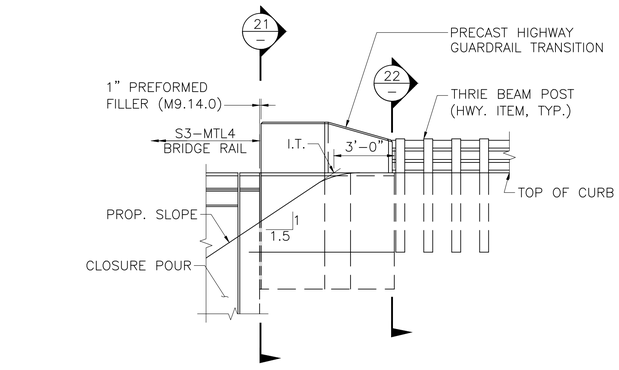
NOTES:
1. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'-0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
2. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED LOW-STRENGTH MATERIAL (>300 PSI) TO THE ELEVATION SHOWN.
3. THE REST OF THE REINFORCEMENT IS NOT SHOWN FOR CLARITY.

GUARDRAIL TRANSITION ELEVATION TABLE				
ELEVATION #	NORTHWEST	NORTHEAST	SOUTHWEST	SOUTHEAST
1	754.96	755.34	754.75	755.12
2	761.46	761.84	761.25	761.62
3	760.52	760.89	760.30	760.68
4	761.46	761.84	761.25	761.62



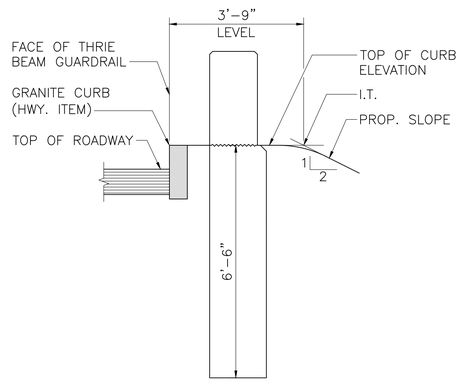
GRADING REQUIREMENTS PLAN

SCALE: ½" = 1'-0"



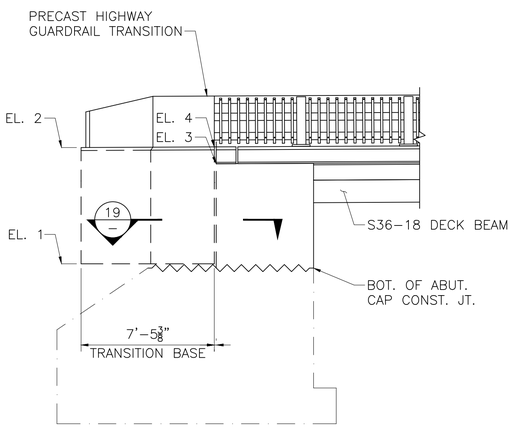
PRECAST GUARDRAIL TRANSITION ELEVATION AT SAFETY CURB

SCALE: ¼" = 1'-0"



SAFETY CURB

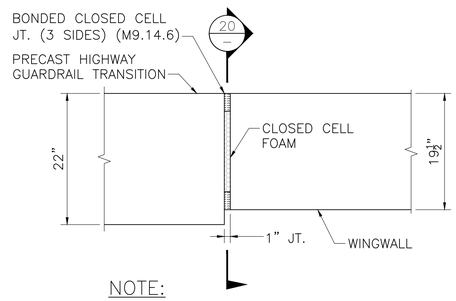
SECTION 22 — SCALE: ½" = 1'-0"



NOTE:
SEE TRANSITION ELEVATION TABLE THIS SHEET.
SOUTH WEST CORNER SHOWN, OTHER CORNERS SIMILAR

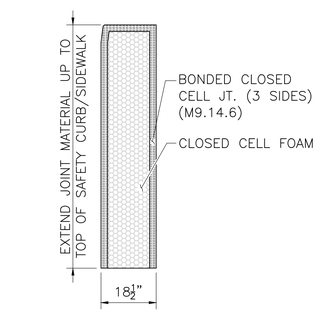
TYPICAL GUARDRAIL TRANSITION ELEVATIONS

SCALE: ¼" = 1'-0"

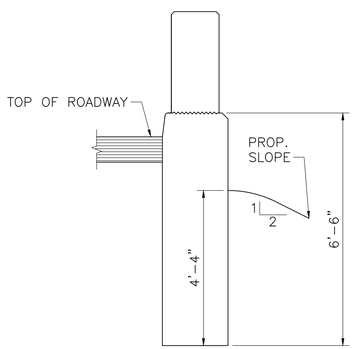


NOTE:
REINFORCEMENT NOT SHOWN FOR CLARITY.

SECTION 19 — SCALE: 1" = 1'-0"



SECTION 20 — SCALE: ½" = 1'-0"

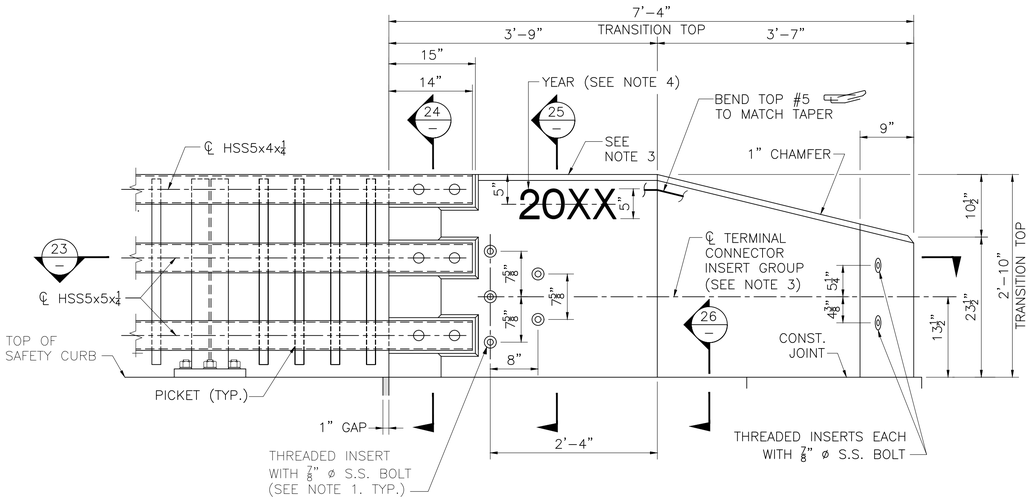


SAFETY CURB

SECTION 21 — SCALE: ½" = 1'-0"

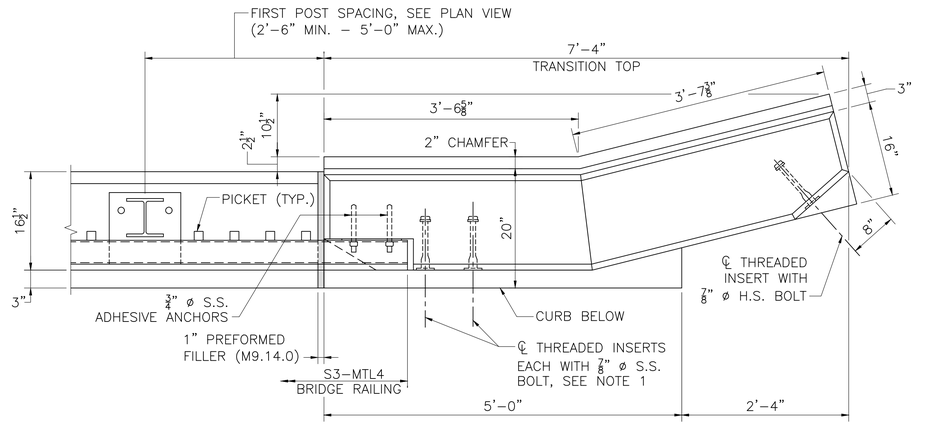
FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE



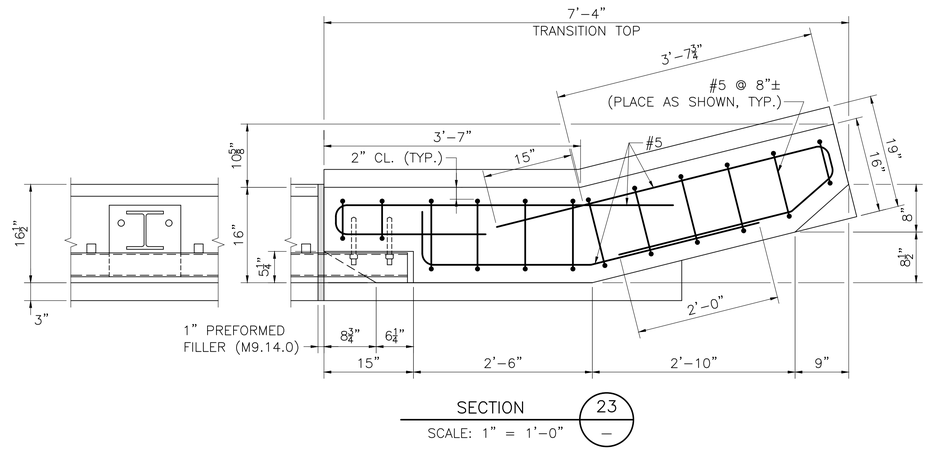
ELEVATION AT SAFETY CURB

SCALE: 1" = 1'-0"



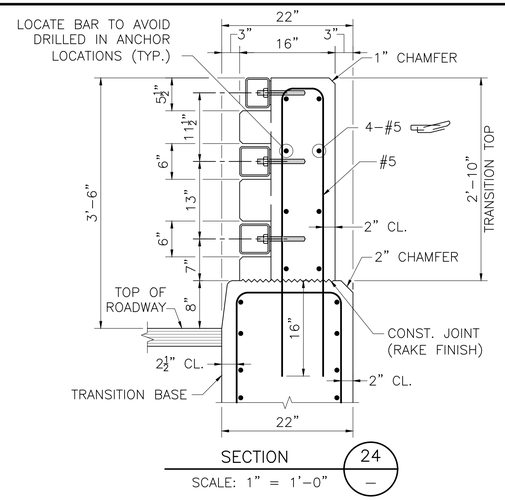
PLAN AT SAFETY CURB/SIDEWALK

SCALE: 1" = 1'-0"



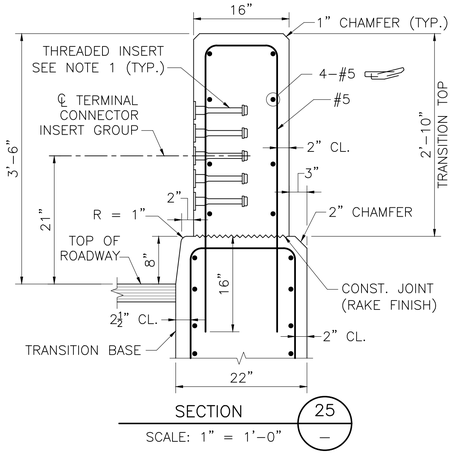
SECTION 23

SCALE: 1" = 1'-0"



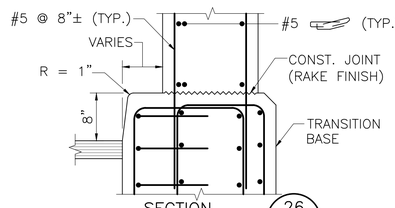
SECTION 24

SCALE: 1" = 1'-0"



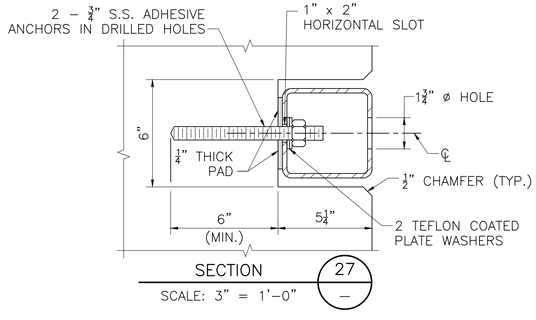
SECTION 25

SCALE: 1" = 1'-0"



SECTION 26

SCALE: 1" = 1'-0"



SECTION 27

SCALE: 3" = 1'-0"

SHEFFIELD
COUNTY ROAD

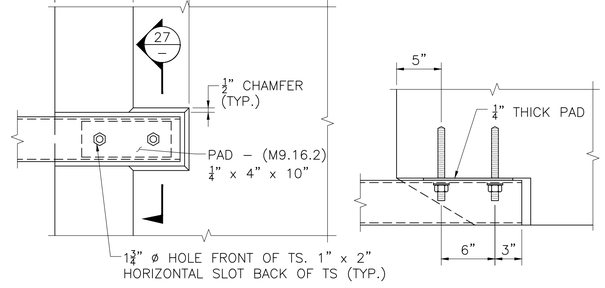
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	33	40
	PROJECT FILE NO. 611942		

HIGHWAY GUARDRAIL TRANSITIONS S3-MTL4

GUARDRAIL TRANSITION NOTES

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. (STAINLESS STEEL) BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1½" LONG FULLY THREADED CONFORMING TO ASTM F593D WITH AISI TYPE 304N S.S. WASHERS. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. ⅞" ø HIGH STRENGTH BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125 AND BE GALVANIZED. USE ADDITIONAL WASHERS AS REQUIRED TO PROPERLY ENGAGE THE BOLTS.
3. FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF CURB SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.

   FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.
4. USE LATEST CONTRACT COMPLETION YEAR IN EFFECT WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR ALL GUARDRAIL TRANSITIONS.
5. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 HP CEMENT CONCRETE.
6. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.



ELEVATION PLAN

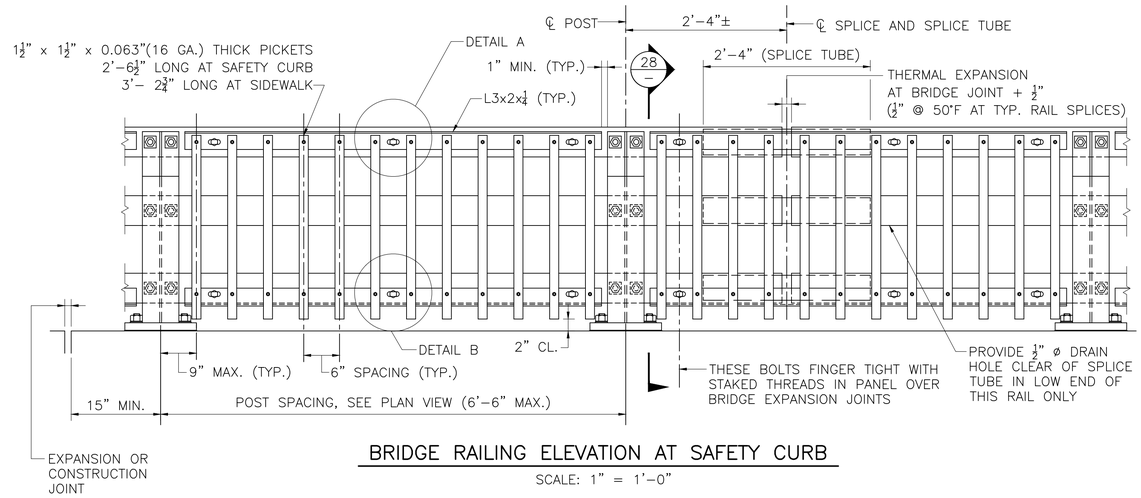
RAIL ATTACHMENT

SCALE: 1½" = 1'-0"

FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

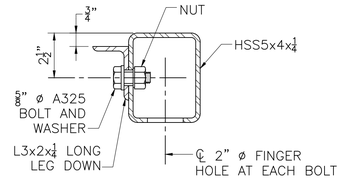
THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER

USE ONLY PRINTS OF LATEST DATE

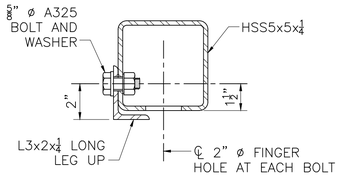


BRIDGE RAILING ELEVATION AT SAFETY CURB

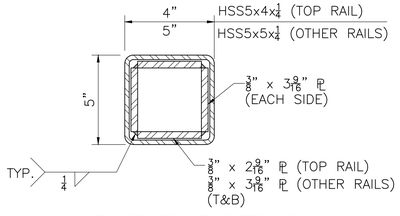
SCALE: 1" = 1'–0"



SECTION 29 — SCALE: 1" = 1'–0"

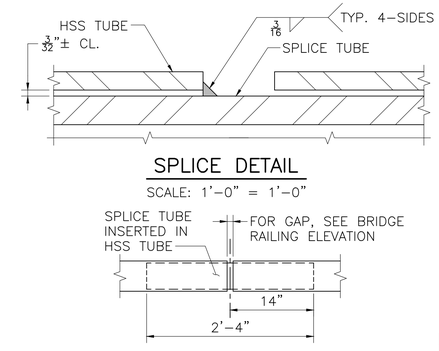


SECTION 31 — SCALE: 1" = 1'–0"



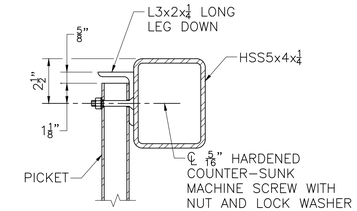
SPLICE TUBE DETAILS

SCALE: 3" = 1'–0"

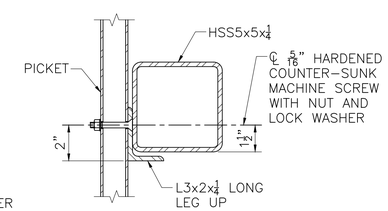


TYPICAL SPLICE

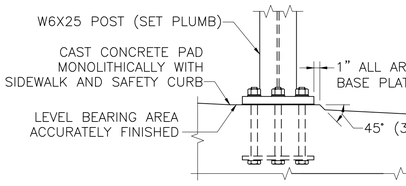
SCALE: 1" = 1'–0"



SECTION 30 — SCALE: 1" = 1'–0"

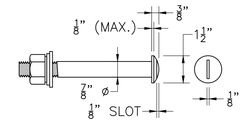


SECTION 32 — SCALE: 1" = 1'–0"



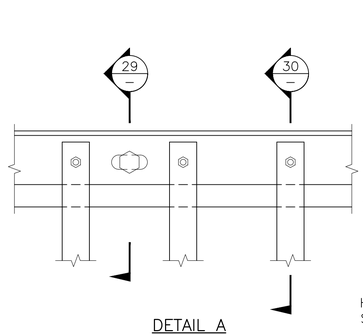
SETTING OF POSTS (PROFILE GRADE OVER 1.5%)

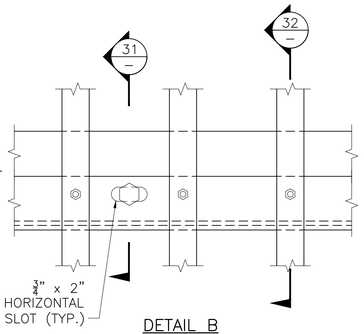
SCALE: 1" = 1'–0"



7/8" DIA. ROUND BOLT

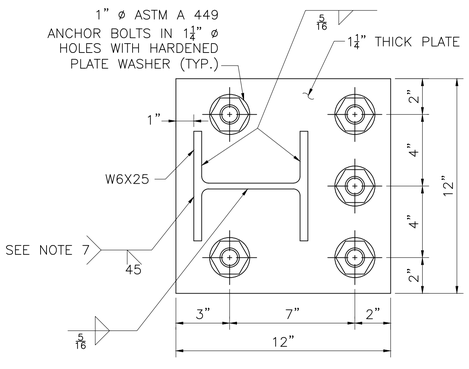
SCALE: 3" = 1'–0"





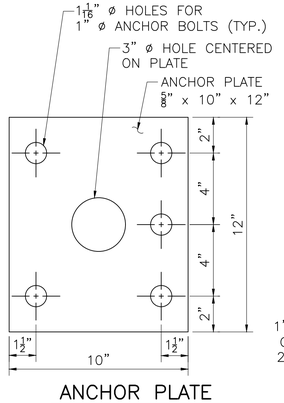
TYPICAL PICKET TO RAIL DETAILS

SCALE: 3" = 1'–0"



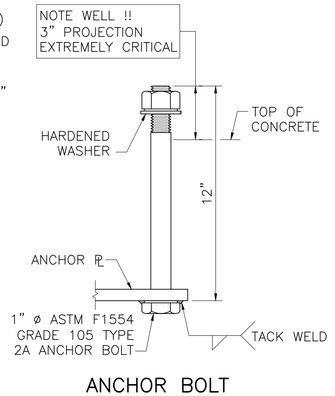
BASE PLATE

SCALE: 3" = 1'–0"



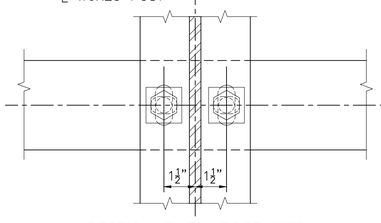
ANCHOR PLATE

SCALE: 3" = 1'–0"

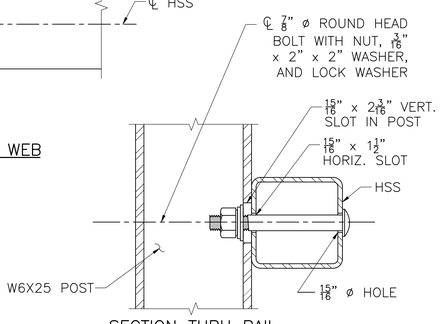


ANCHOR BOLT

SCALE: 3" = 1'–0"



SECTION THRU POST WEB



SECTION THRU RAIL

NOTE:
CONNECTIONS AT LOWER RAILS SHOWN.
CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS

SCALE: 1" = 1'–0"

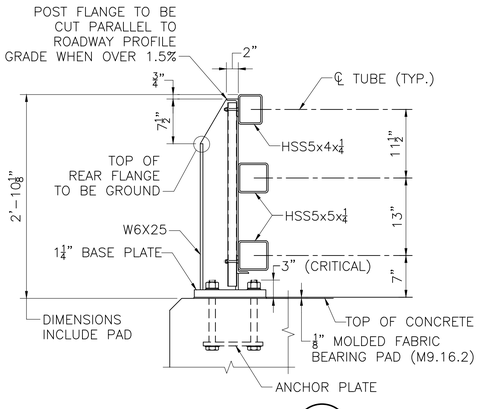
SHEFFIELD COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	34	40
PROJECT FILE NO.	611942		

S3-MTL4 RAILING DETAILS

RAILING NOTES:

1. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING (HSS) SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 500 WITH A CERTIFIED Fy = 50 KSI MINIMUM. THE MINIMUM HORIZONTAL BENDING RADII OF THE HSS TUBING SHALL BE 8 FEET. PICKET CARRIER ANGLES, ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 36. PICKET TUBING SHALL CONFORM TO ASTM A 513 WITH Fy = 36 KSI MIN. OR A 500 GRADE B.
2. ALL STEEL (EXCEPT THE ⅝" ANCHOR PLATE AND FASTENERS) SHALL BE GALVANIZED AND PAINTED DARK BRONZE (FEDERAL STD. 595B COLOR NO. 10045). ANCHOR PLATE SHALL BE GALVANIZED ONLY. HEADS OF ⅞" ø ROUND HEAD BOLTS SHALL BE PAINTED TO MATCH RAIL.
3. ANCHOR BOLTS SHALL BE SET WITH TEMPLATES. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN AFTER STEEL IS IN PLACE.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR (4) POSTS WITHOUT SPLICES WHERE POSSIBLE. IN ADDITION SPLICES SHALL ALSO BE LOCATED IN RAILS OVER BRIDGE EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. ALL POSTS TO BE PLUMB WHEN PROFILE GRADE EXCEEDS 1.5%. FOR PROFILE GRADES LESS THAN 1.5%, POSTS SHALL BE SET PERPENDICULAR TO GRADE.
7. POST TO FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING. BEVEL OUTSIDE FLANGES OF POST. FIT POST TO BASE PLATE. WELD ⅝" FILLET ON INSIDE OF FLANGE AND WEB. BACKGOUGE OUTSIDE OF FLANGE TO SOUND METAL. COMPLETE GROOVE WELD WITH MINIMUM OF ⅛" REINFORCEMENT. WELD IS THE SAME ON BOTH FLANGES.
8. ⅞" ø ROUND HEAD BOLTS SHALL CONFORM TO THE CHEMICAL AND PHYSICAL REQUIREMENTS OF ASTM F3125 GRADE 325 TYPE 1 GALVANIZED.



SECTION 28 — SCALE: 1" = 1'–0"

SPLICE DETAIL

SCALE: 1'–0" = 1'–0"

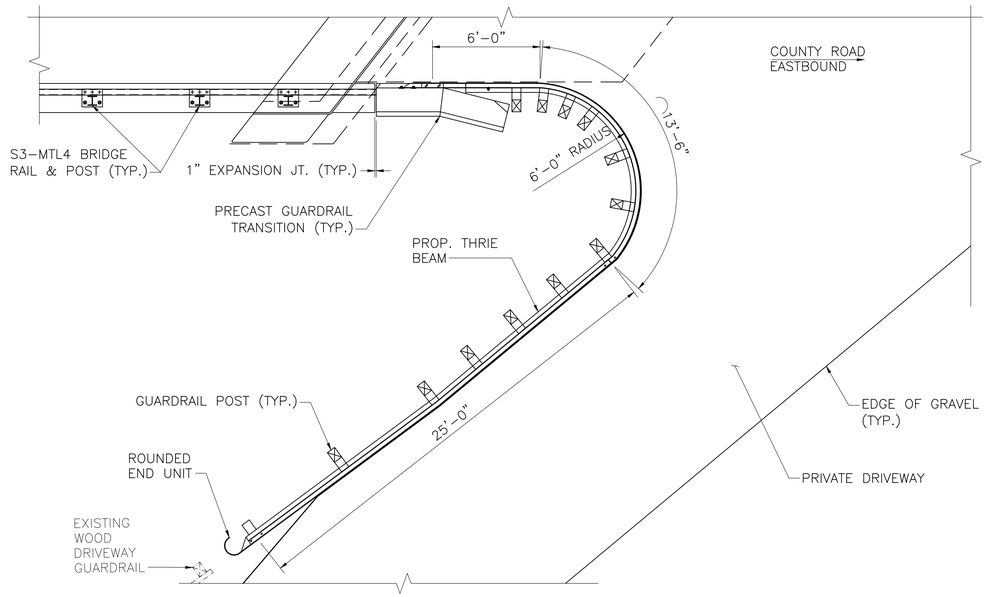
DATE	DESCRIPTION
FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION

THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

SHEFFIELD
COUNTY ROAD

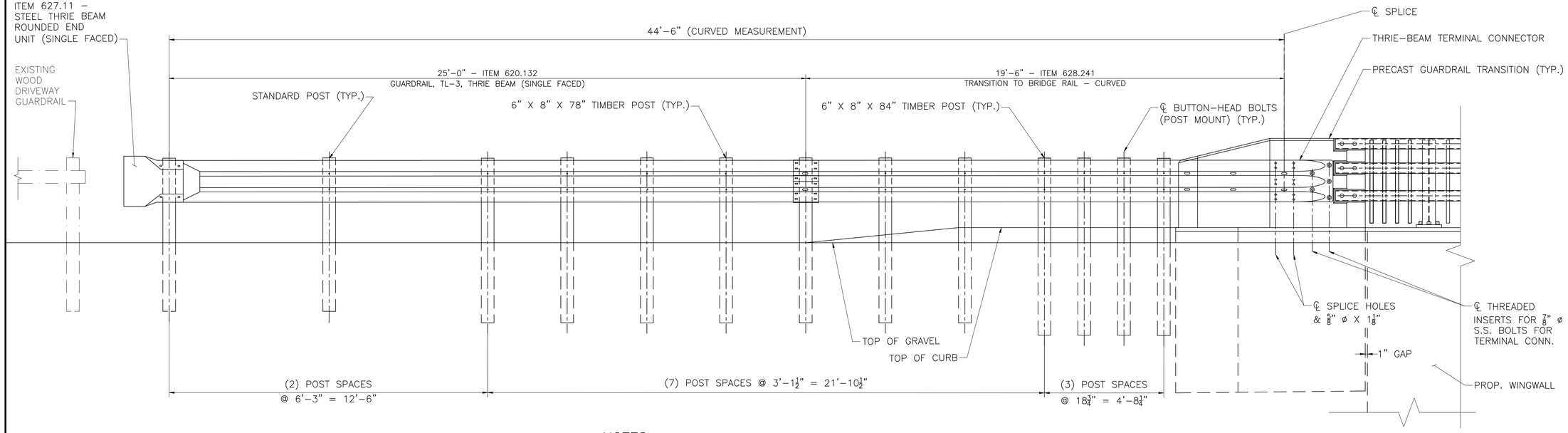
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	35	40
	PROJECT FILE NO. 611942		

NON-STANDARD HIGHWAY GUARDRAIL DETAILS



NON-STANDARD THRIE-BEAM GUARDRAIL - PLAN

SCALE: $\frac{1}{4}$" = 1'-0"



NOTES:

1. THRIE BEAM SHOWN STRAIGHT FOR CLAIRTY.

NON-STANDARD THRIE-BEAM GUARDRAIL - ELEVATION

SCALE: $\frac{1}{2}$" = 1'-0"

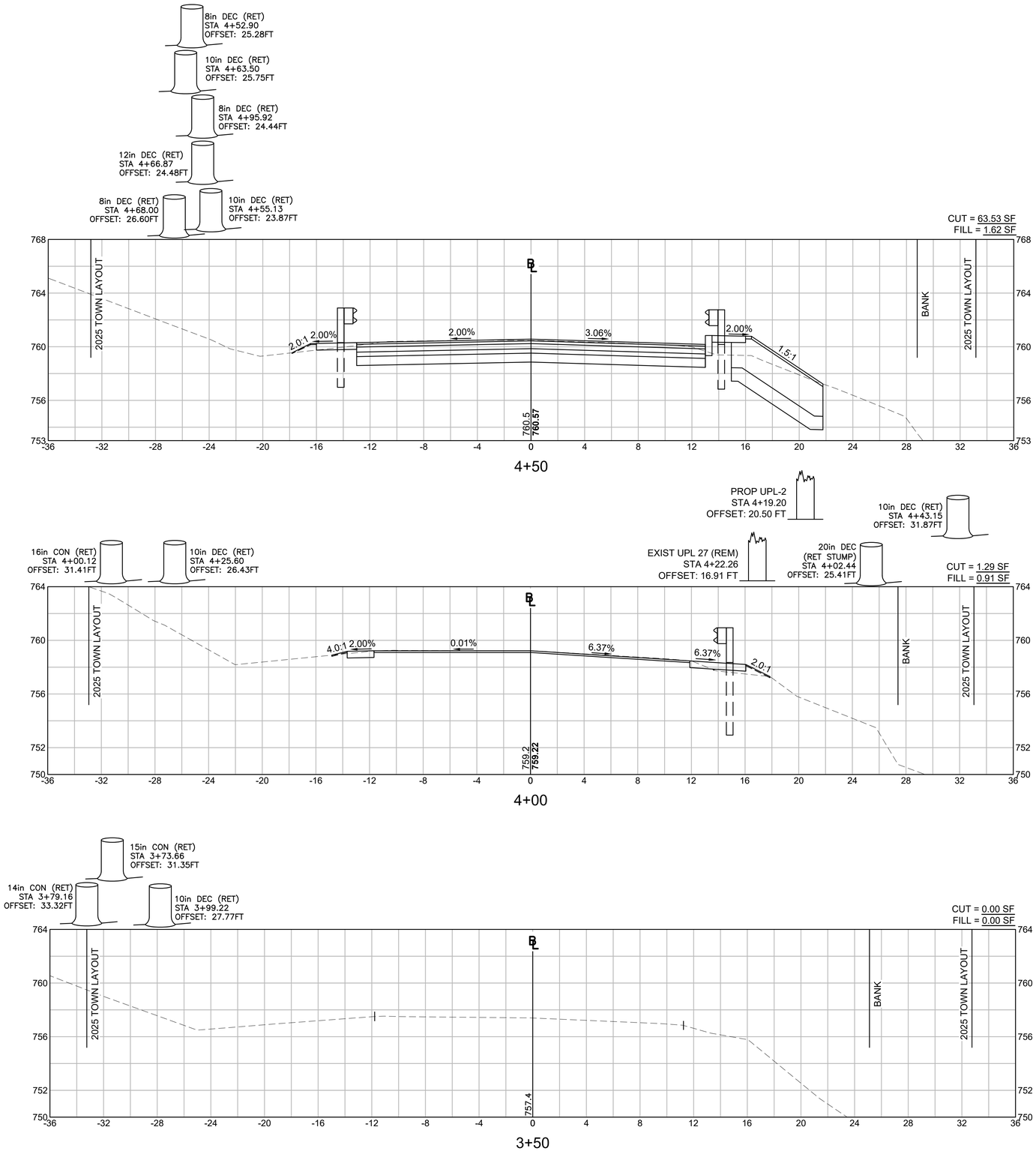
FEBRUARY 14, 2026	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

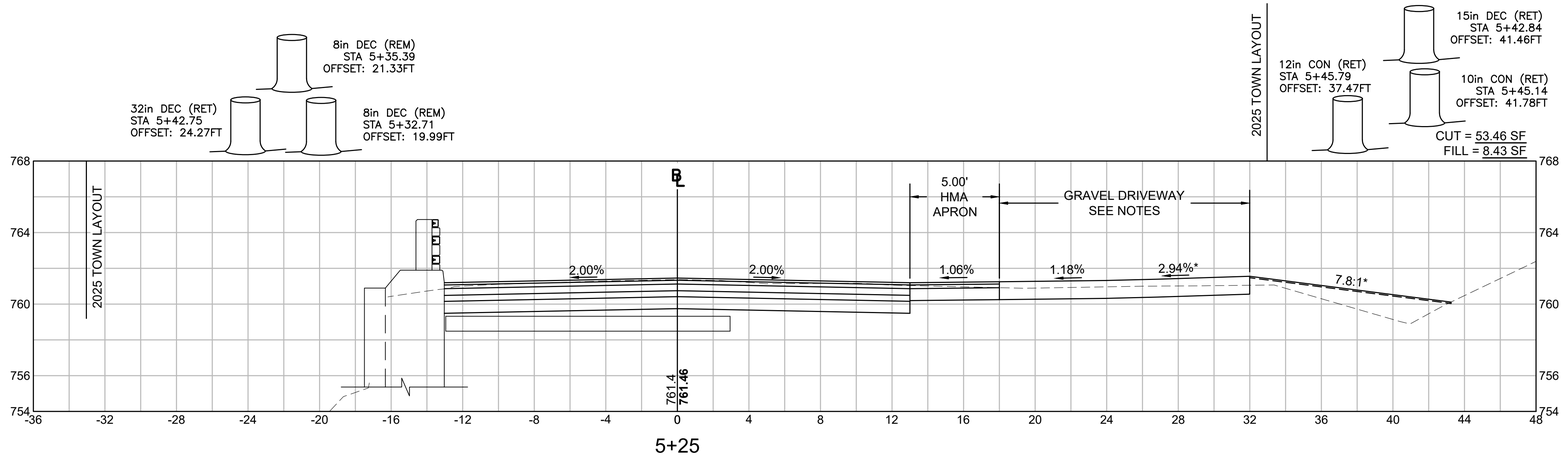
THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	36	40
PROJECT FILE NO.	611942		

CROSS SECTIONS
COUNTY ROAD





SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	37	40
PROJECT FILE NO.	611942		

CROSS SECTIONS
COUNTY ROAD

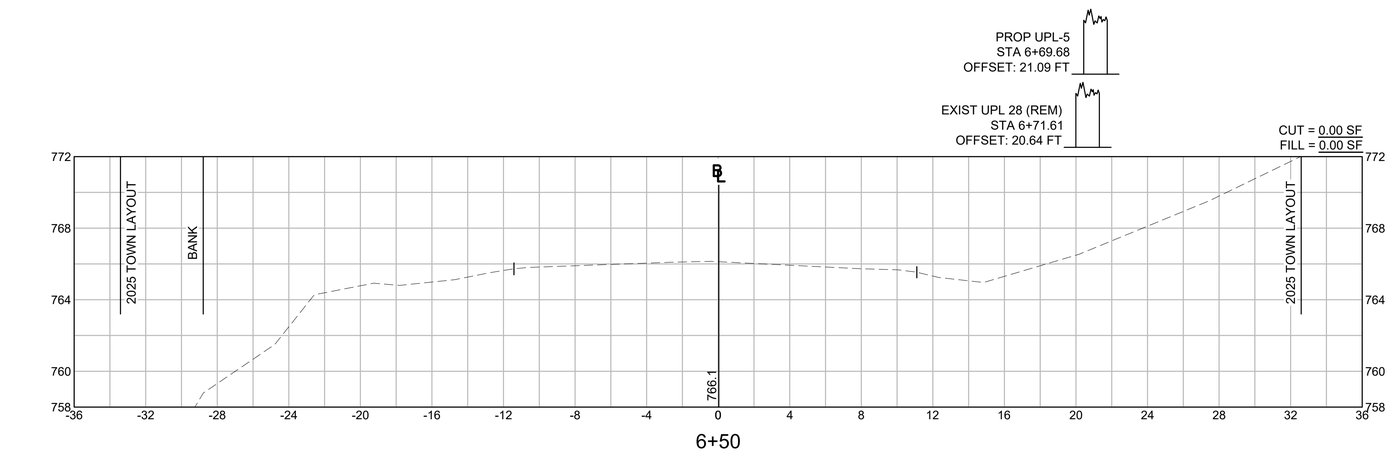
NOTES:
1. EARTHWORKS QUANTITIES FOR THE GRAVEL DRIVEWAY ARE CALCULATED AND SHOWN IN THE DRIVEWAY CROSS SECTIONS (SHEETS 39-40).
2. CROSS SECTION AT STATION 5+25 IS TAKEN PERPENDICULAR TO THE COUNTY ROAD CONSTRUCTION BASELINE AND DOES NOT FOLLOW THE CENTERLINE OF THE GRAVEL DRIVEWAY.
3. *GRAVEL DRIVEWAY SLOPES REPRESENT GRADE MEASURED PERPENDICULAR TO THE COUNTY ROAD CONSTRUCTION BASELINE.

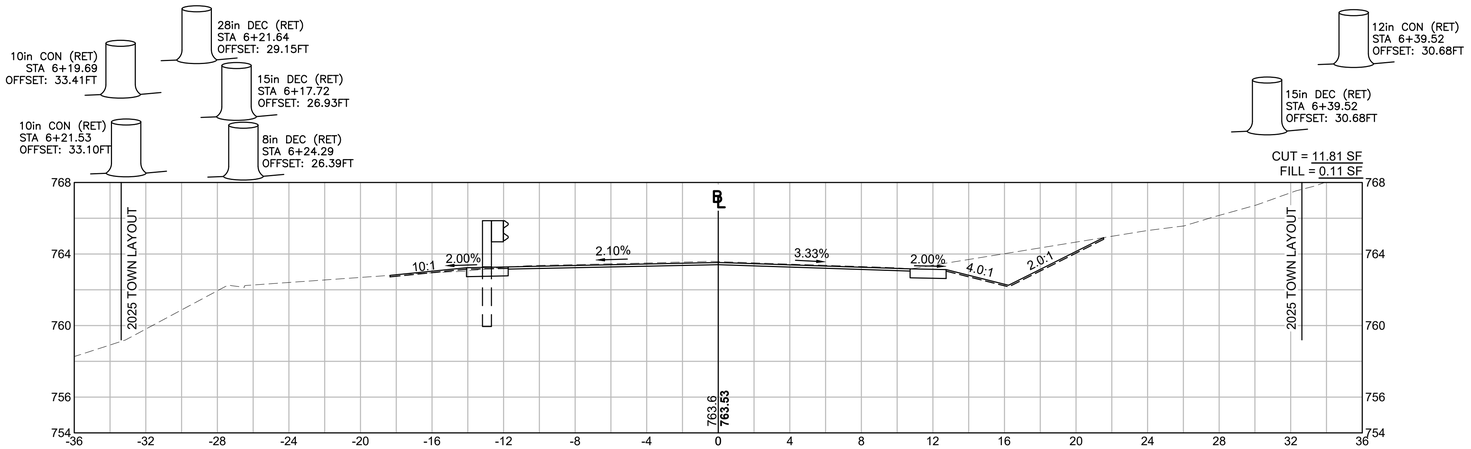
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

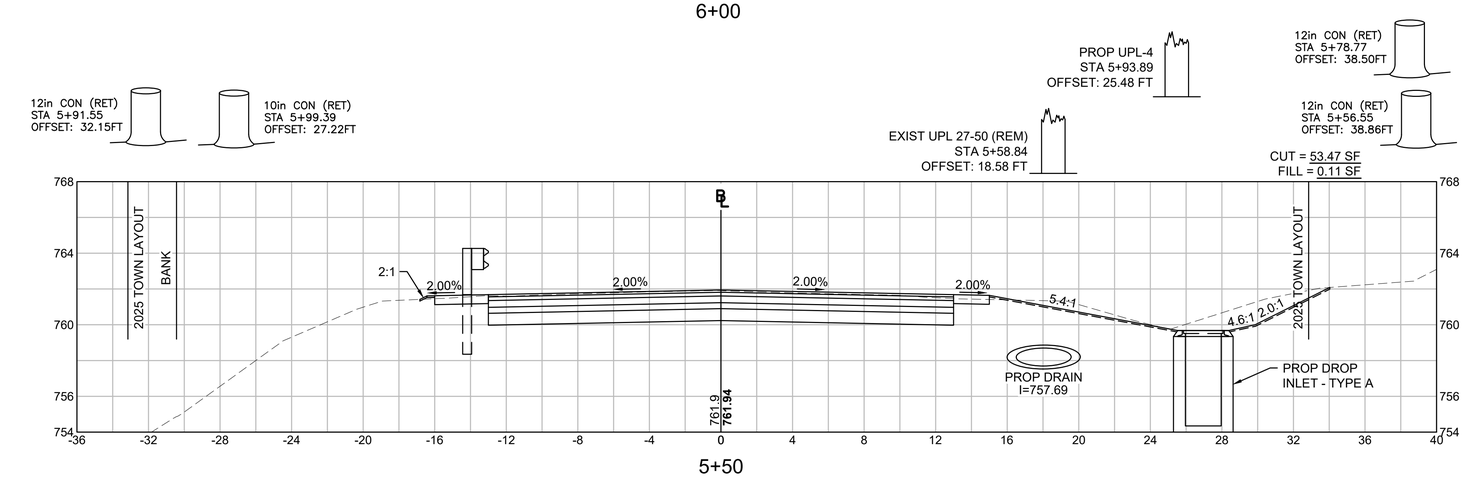
SHEFFIELD
COUNTY ROAD

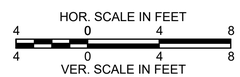
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	38	40
PROJECT FILE NO.	611942		

CROSS SECTIONS
COUNTY ROAD





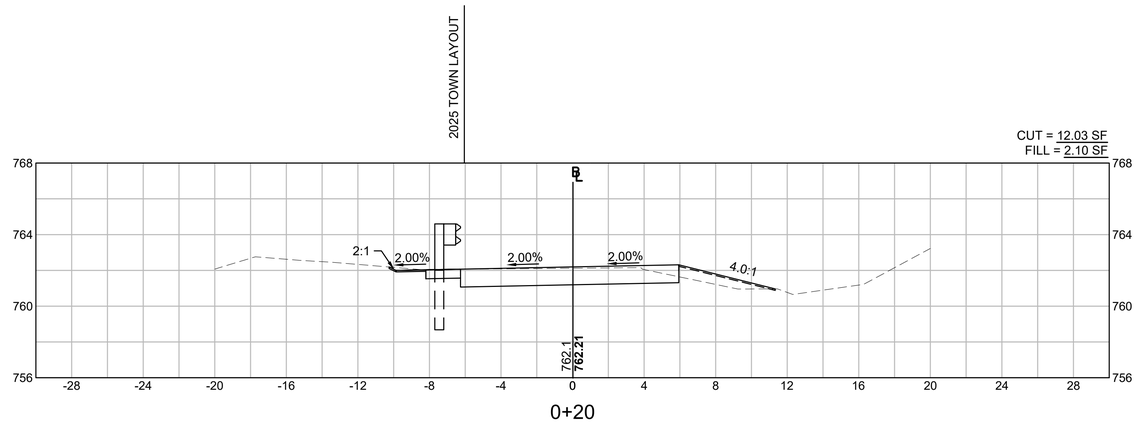




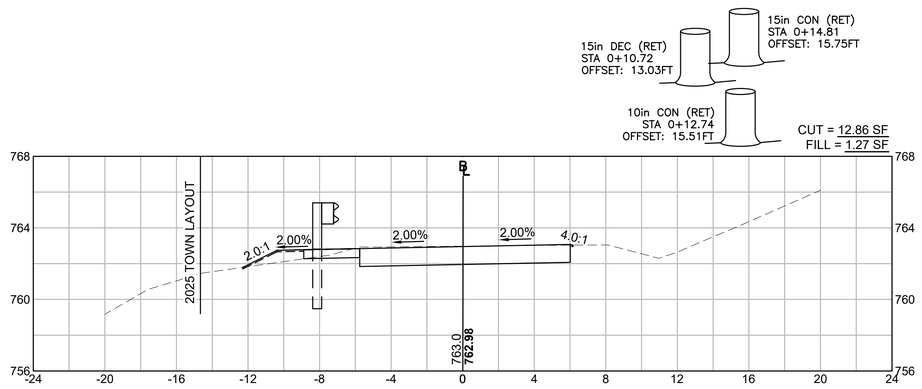
SHEFFIELD
COUNTY ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	39	40
	PROJECT FILE NO. 611942		

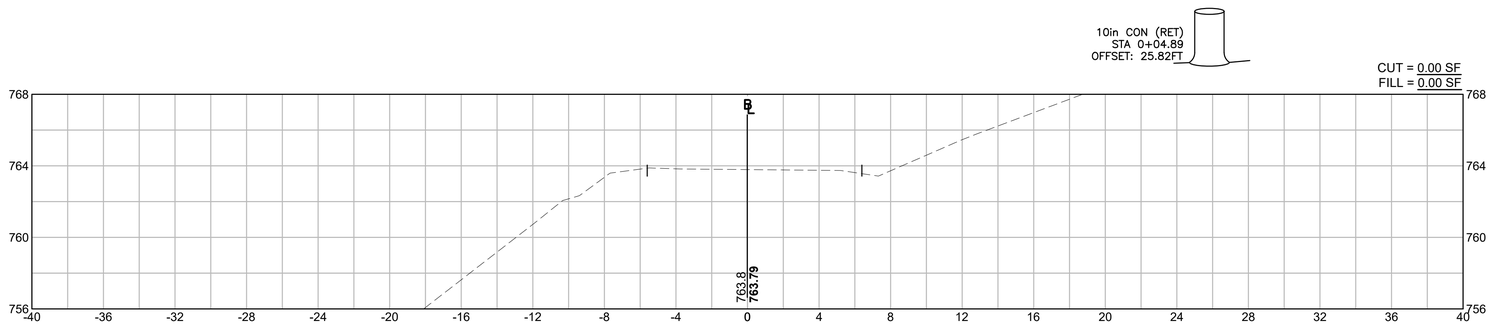
CROSS SECTIONS
GRAVEL DRIVEWAY



0+20



0+10



0+00

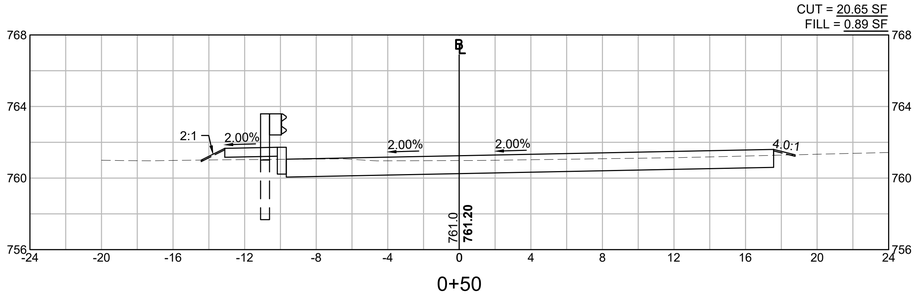
HOR. SCALE IN FEET
4 0 4 8
4 0 4 8
VER. SCALE IN FEET

SHEFFIELD
COUNTY ROAD

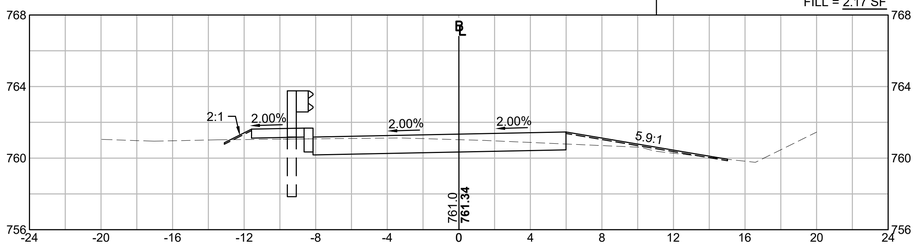
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(928)X	40	40
PROJECT FILE NO.	611942		

CROSS SECTIONS
GRAVEL DRIVEWAY

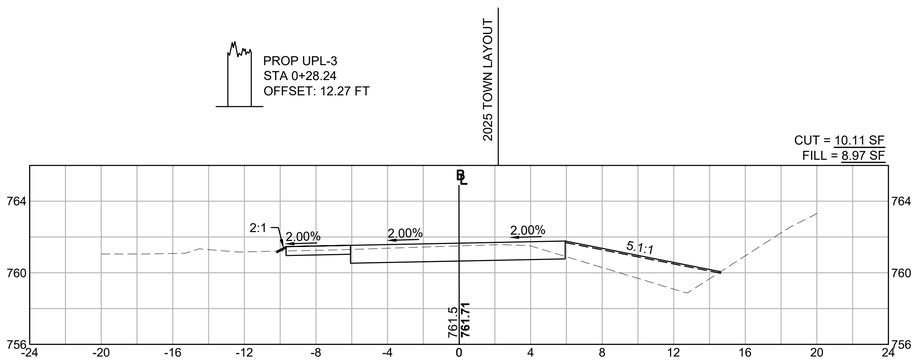
EXIST - UPL 27-50 (REM)
STA 0+47.91
OFFSET: 31.53FT



0+50



0+40



0+30

HOR. SCALE IN FEET
4 0 4 8
4 0 4 8
VER. SCALE IN FEET

611942_HD(XS).DWG Plotted on 8-Jan-2026 1:24 PM