MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLAN AND PROFILE OF

LEE - BRIDGE REPLACEMENT, L-05-004,
MEADOW STREET OVER POWDER MILL BROOK

IN THE TOWN OF

LEE

BERKSHIRE COUNTY

FEDERAL AID PROJECT NO. HIP(NGB)-003S(900)X

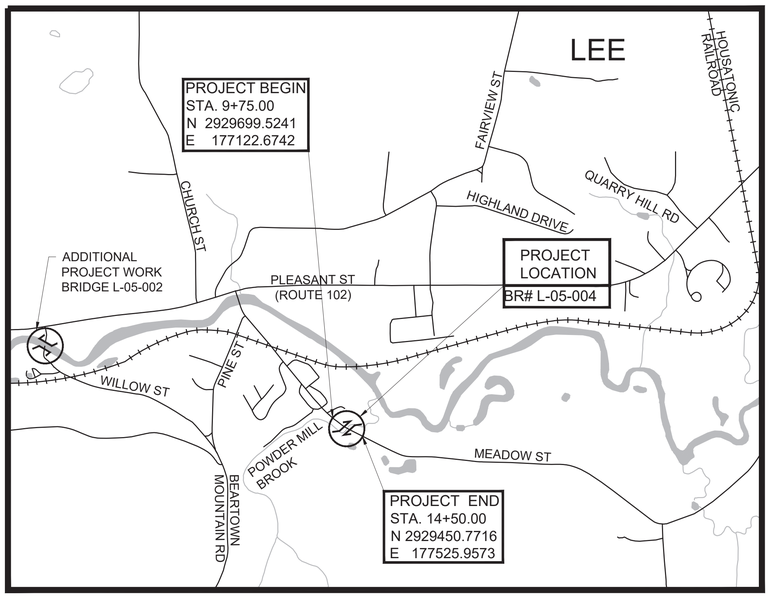
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	1	50
PROJECT FILE NO.	607597		

TITLE SHEET & INDEX

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



0 100 200 300 400

SCALE: 1" = 1000'

LENGTH OF PROJECT = 475.00 FEET = 0.090 MILES

DESIGN DESIGNATION (MEADOW STREET)

DESIGN SPEED	35 MPH
ADT (2020)	1,366
ADT (FUTURE)	N/A
K	N/A
D	N/A
T (PEAK HOUR)	N/A
T (AVERAGE DAY)	5%
DHV	N/A
DDHV	N/A
FUNCTIONAL CLASSIFICATION	URBAN COLLECTOR

COMMONWEALTH OF MASSACHUSETTS
JAMES P. TURNBULL
CIVIL
No. 53461
REGISTERED PROFESSIONAL ENGINEER

James P. Turnbull — Digitally signed by James P. Turnbull Date: 2025.10.07 11:04:47 -04'00'

GILL ENGINEERING
63 KENDRICK STREET
NEEDHAM, MA 02494
781-355-7100
781-355-7101 (FAX)

DATE	DESCRIPTION	REV #

MassDOT Massachusetts Department of Transportation Highway Division

APPROVED

Carrie Lavallee, P.E. — Carrie Lavallee, P.E. 2025.10.07 13:37:54 -04'00'

10/07/2025

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
Ⓒ	Ⓒ	CABLE MANHOLE
Ⓓ	Ⓓ	DRAINAGE MANHOLE
Ⓔ	Ⓔ	ELECTRIC MANHOLE
Ⓖ	Ⓖ	GAS MANHOLE
Ⓜ	Ⓜ	MISC MANHOLE
Ⓢ	Ⓢ	SEWER MANHOLE
Ⓣ	Ⓣ	TELEPHONE MANHOLE
Ⓦ	Ⓦ	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
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
		DEWATERING
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		EDGE OF WATER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
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
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
EW	EDGE OF WATER
EXIST (or EX)	EXISTING
EXC	EXCAVATION
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
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
M&O	MILL & OVERLAY
NIC	NOT IN CONTRACT
NO.	NUMBER
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
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY

ABBREVIATIONS (cont.)

GENERAL

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
UPL	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	2	50
	PROJECT FILE NO. 607597		

LEGEND, ABBREVIATIONS, & GENERAL NOTES

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
	DBYL	DOUBLE YELLOW LINE

SURVEY LEGEND

BF#	BANK FLAG
BM #	BENCHMARK
	BOUND (CONC, STONE, LAND COURT, ETC.)
	GUY WIRE ANCHOR
IP	IRON PIPE
MAG	MAG NAIL
	STUMP
	TRAVERSE POINT
TWW	TREE WITH WIRE REMAINS
WF-B-101	WETLAND FLAG

SURVEY ABBREVIATIONS

DEC	DECIDUOUS
FR	FRAME
OHW	OVERHEAD WIRE
EOG	EDGE OF GROUND
ETW	EDGE OF TRAVELED WAY
MMAG	MONUMENT MAGNETIC NAIL
MON – GPS	MONUMENT GLOBAL POSITION SYSTEM
MSTN	MONUMENT STONE
N/F	NOW OR FORMERLY
STY	STORY
VCP	VITRIFIED CLAT PIPE
WD	WOOD

GENERAL NOTES:

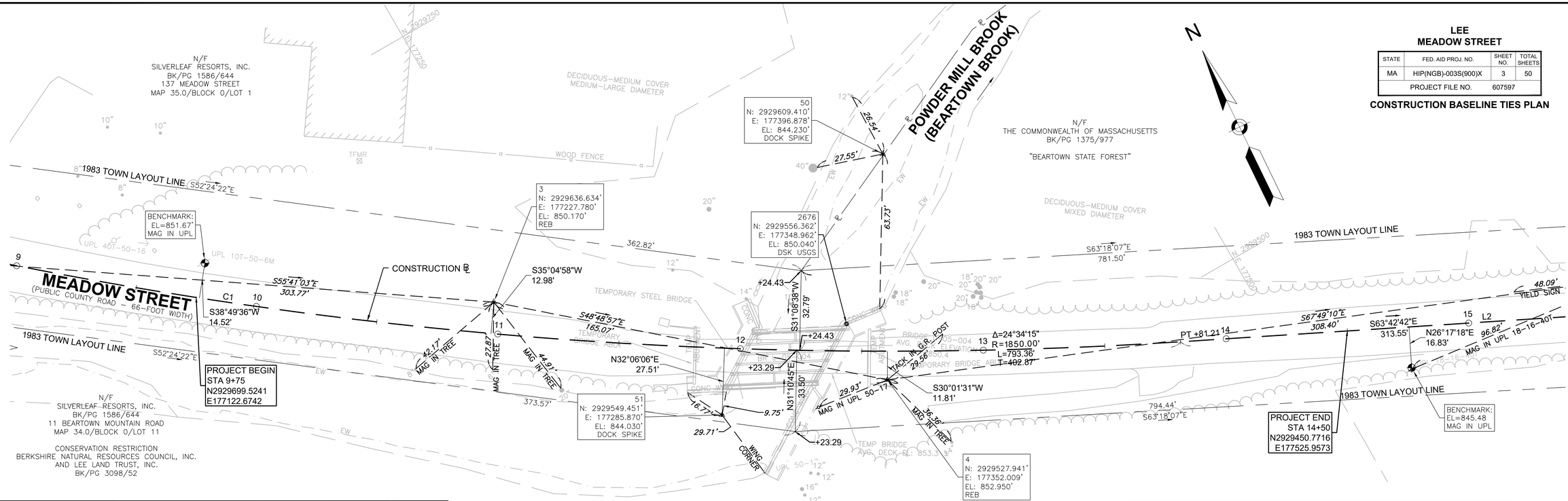
1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT DIGSAFE TO REQUEST EXISTING UTILITY MARKOUT IN THE FIELD PRIOR TO ANY EXCAVATION ACTIVITIES.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
3. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
4. TREES AND SHRUBS WITHIN THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
5. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
6. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
7. JOINTS BETWEEN NEW HOT MIX ASPHALT ROADWAY PAVEMENT TOP COURSE AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH HOT POURED RUBBERIZED ASPHALT SEALER.
8. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
9. FIELD SURVEY CONDUCTED ON DECEMBER 29, 2021 AND PROVIDED BY WSP USA; 433 RIVER STREET, 7TH FLOOR TROY, NEW YORK 12180.
10. ANY PROPERTY PINS OR HIGHWAY BOUNDS DAMAGED OR DESTROYED DURING CONSTRUCTION, MUST BE REPLACED PRIOR TO COMPLETION OF CONSTRUCTION.

HIGHWAY TITLE SHEET.DWG Plotted on 5-Sep-2025 3:34 PM

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	3	50
PROJECT FILE NO.	607597		

CONSTRUCTION BASELINE TIES PLAN



0 20 50 100
SCALE: 1" = 20'

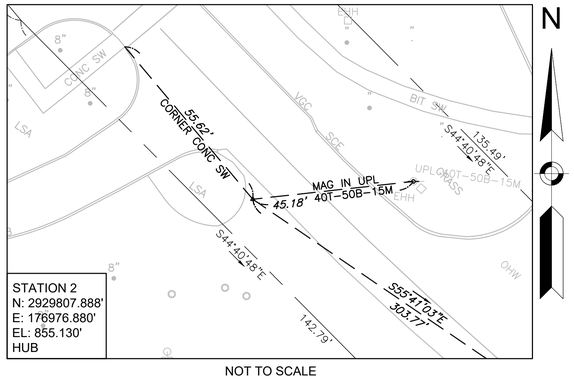
POINT NUMBER/NAME	DESCRIPTION	NORTHING COORDINATE	EASTING COORDINATE	ELEVATION
1	HUB	N2930180.179	E176652.433	856.015'
2	HUB	N2929807.888	E176976.880	855.130'
5	REBAR	N2929411.513	E177637.585	844.930'
0.4' X 0.4' MARBLE BOUND	0.3' ABOVE GRADE HELD FOR POSITION	N2930737.207	E176255.935	849.720'
CAPPED IRON PIPE	WITH ILLEGIBLE MARKINGS FLUSH WITH GROUND	N2930068.868	E176727.335	857.040'
IRON PIPE (DAMAGED END)	0.3' ABOVE GRADE S36°44'36"W 0.31' FROM COMPUTER CORNER	N2929756.127	E177012.320	853.330'
CAPPED IRON ROD	STAMPED "KGP 528-3291" 0.4' ABOVE GRADE HELD FOR ROTATION	N2929060.401	E179145.388	861.010'

PROPOSED MEADOW STREET CONSTRUCTION BL CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	5+00.00	2930040.268	176793.315		S39°08'27"E 87.85'	5+87.85	2929972.133	176848.768
C1	5+87.85	2929972.133	176848.768	R=1850.00' Δ=24°34'15" L=793.36' T=402.87'		13+81.21	2929481.238	177464.281
L2	13+81.21	2929481.238	177464.281		S63°42'42"E 313.55'	16+94.76	2929342.371	177745.402

PLAN REFERENCES:

1. PLAN TITLED "PLAN OF LAND IN LEE, MA. SURVEYED FOR OAK N' SPRUCE, INC.", DATED JANUARY 1981, PREPARED BY BROWN ASSOCIATES, INC. AND RECORDED IN THE BERKSHIRE MIDDLE REGISTRY OF DEEDS IN PLAN DRAWER E AT PAGE 58.
2. PLAN TITLED "SURVEY OF LAND IN LEE, MASS. PREPARED FOR OAK N' SPRUCE, INC.", DATED MARCH 22, 1985, PREPARED BY DENNIS C. DRUMM & ASSOCIATES AND RECORDED IN THE BERKSHIRE MIDDLE DISTRICT REGISTRY OF DEEDS IN PLAN DRAWER G AT PAGE 81.
3. PLAN TITLED "PLAN OF LAND IN LEE, MA. SURVEYED FOR OAK N' SPRUCE, INC.", DATED MARCH 1985, PREPARED BY BROWN ASSOCIATES, INC. AND RECORDED IN THE BERKSHIRE MIDDLE DISTRICT REGISTRY OF DEEDS IN PLAN DRAWER G AT PAGE 82.
4. PLAN TITLED "SURVEY OF LAND IN LEE, MASS. PREPARED FOR OAK N' SPRUCE, INC.", DATED APRIL 9, 1985, PREPARED BY DENNIS C. DRUMM & ASSOCIATES AND RECORDED IN THE BERKSHIRE MIDDLE DISTRICT REGISTRY OF DEEDS IN PLAN DRAWER H AT PAGE 24.
5. PLAN TITLED "SURVEY OF LAND IN LEE, MASS. PREPARED FOR DIVERSIFIED RESORTS, INC.", DATED JULY 14, 1986, PREPARED BY DENNIS C. DRUMM & ASSOCIATES AND RECORDED IN THE BERKSHIRE MIDDLE DISTRICT REGISTRY OF DEEDS IN PLAN DRAWER M AT PAGE 69



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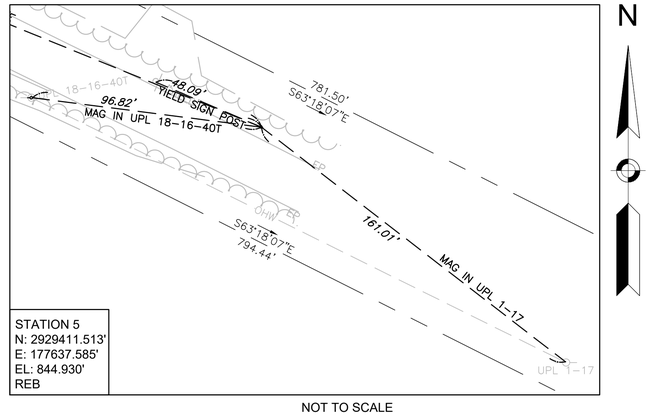


NOT TO SCALE

SURVEY NOTES

1. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM AN ACTUAL FIELD SURVEY COMPLETED BY WSP SURVEYORS ON DECEMBER 2, 2021.
2. NORTH ORIENTATION AND BEARING BASE SHOWN HEREON IS IN REFERENCE THE NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE.
3. HORIZONTAL COORDINATES SHOWN HEREON ARE IN REFERENCE TO THE NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83/2011) PROJECTED ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE.
4. ELEVATIONS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, (NAVD88).
5. HORIZONTAL COORDINATE AND ELEVATION UNITS SHOWN HEREON ARE U.S. SURVEY FEET.
6. THE LOCATION OF UNDERGROUND IMPROVEMENTS, UTILITIES OR ENCROACHMENTS, IF ANY EXIST, OR AS SHOWN HEREON, ARE NOT CERTIFIED. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A UTILITY MARK OUT SERVICE. THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THIS PLAN HAVE BEEN COMPILED FROM VARIOUS SOURCES, INCLUDING, BUT NOT LIMITED TO INFORMATION AND RECORD PLANS OBTAINED FROM VARIOUS UTILITY PROVIDERS, AND LOCATION OF STRUCTURES VISUALLY IDENTIFIED AND LOCATED DURING THE COURSE OF THE FIELD SURVEY. THE LOCATION OF ALL UTILITIES DEPICTED ON THIS PLAN SHALL BE CONSIDERED APPROXIMATE. WSP MAKES NO WARRANTY NOR GUARANTEE AS TO THE ACCURACY OF THE LOCATION OF THE UTILITY LINES DEPICTED ON THIS PLAT. FURTHERMORE, WSP MAKES NO WARRANTY NOR GUARANTEE THAT THE UTILITIES DEPICTED ON THIS MAP COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ROUTE, SIZE AND LOCATION OF ALL UTILITIES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES. THE PROPER UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION SHALL BE NOTIFIED, AND A UTILITY MARK OUT SERVICE DEPLOYED PRIOR TO CONDUCTING TEST BORINGS, EXCAVATIONS AND/OR CONSTRUCTION.
7. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN UP TO DATE ABSTRACT OF TITLE.
8. TWO GPS CONTROL POINTS WERE ESTABLISHED BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION GEODETIC DIVISION AT THE WESTERLY END OF THE PROJECT. ADDITIONAL SURVEY CONTROL WAS ESTABLISHED THROUGHOUT THE PROJECT AREA BY A GROUND TRAVERSE ORIGINATING ON CONTROL POINTS 2828 AND 2829 AND CLOSING ON CONTROL POINTS 4 AND 5. RTK GPS/GNSS METHODS WERE UTILIZED TO DETERMINE HORIZONTAL POSITIONS FOR CONTROL POINTS 4 AND 5, USING MASSDOT POINT NO. 2829 AS THE REFERENCE RTK GPS/GNSS CONTROL STATION, TO CALCULATE A TRAVERSE CLOSURE. DIFFERENTIAL LEVELS WERE RUN THROUGH THE GROUND TRAVERSE POINTS AND PROJECT BENCHMARKS, HOLDING THE MASSDOT PROVIDED ELEVATION OF CONTROL POINT 2829 AS THE REFERENCE NAVD88 ELEVATION FOR THE PROJECT.
9. NOTE THAT A PORTION OF THE BEARTOWN BROOK SHOWN HEREON WAS SURVEYED PURSUANT TO CHAPTER 1.1.5 OF THE 2013 LRFD BRIDGE MANUAL (REVISED JANUARY 2020). PORTIONS OF THE SURFACE MODEL ALONG THE BEARTOWN BROOK ARE BASED ON PUBLICLY AVAILABLE LIDAR DATA OBTAINED FROM MASSGIS. HYDRAULIC CROSS SECTION POINTS IN THE "PUBLIC LIDAR SURFACE" AREA SHOWN HEREON WERE LOCATED DURING THE CONVENTIONAL SURVEY AND THE CONTOUR INFORMATION DEPICTED WITHIN THE PUBLIC LIDAR SURFACE AREA IS BASED ON SAID PUBLICLY AVAILABLE LIDAR DATA. THE SURFACE MODEL BASED ON PUBLIC LIDAR DATA IS DEPICTED AT A LOWER LEVEL OF VERTICAL ACCURACY THAN THE CONVENTIONAL SURFACE AREA AND IS INTENDED TO BE USED FOR THE EXPRESS PURPOSE OF HYDRAULIC ANALYSIS CALCULATIONS.

PAVEMENT NOTES:

PROPOSED FULL DEPTH PAVEMENT

SURFACE COURSE:	1.75" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER ASPHALT EMULSION FOR TACK COAT*
INTERMEDIATE COURSE:	2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER ASPHALT EMULSION FOR TACK COAT*
BASE COURSE:	4" SUPERPAVE BASE COURSE - 37.5 (SBC-37.5) OVER
SUBBASE:	4" DENSE GRADED CRUSHED STONE FOR SUB-BASE OVER 8" GRAVEL BORROW, TYPE B
SUBGRADE:	24" SPECIAL BORROW (AS REQUIRED BY THE ENGINEER)

PROPOSED GRAVEL DRIVEWAY

SURFACE COURSE:	12" GRAVEL FOR SURFACING OVER EXISTING BASE MATERIAL

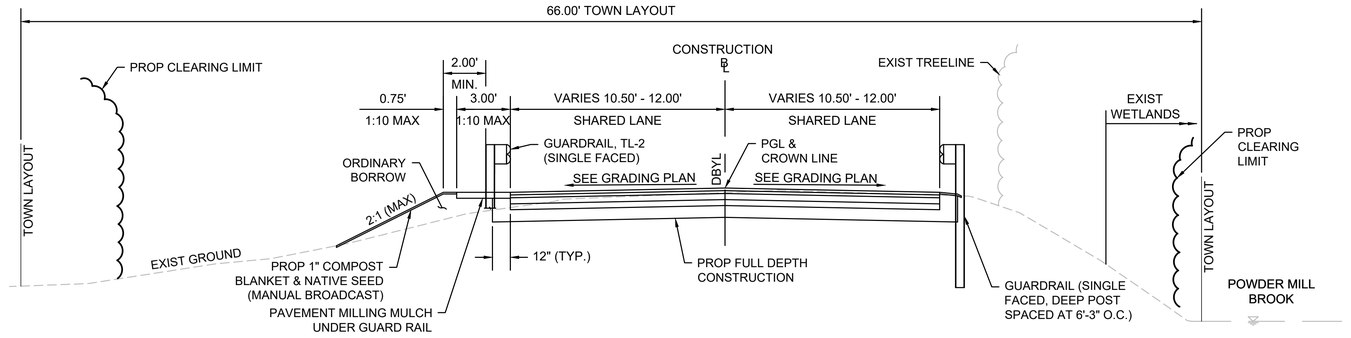
PROPOSED MILL & OVERLAY

SURFACE COURSE:	1.75" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER ASPHALT EMULSION FOR TACK COAT*
MILLING:	1.75" PAVEMENT FINE MILLING

PROPOSED BRIDGE DECK

SURFACE COURSE:	1.5" SUPERPAVE BRIDGE SURFACE COURSE - 9.5 (SSC-B-9.5) OVER ASPHALT EMULSION FOR TACK COAT*
PROTECTIVE COURSE:	1.5" SUPERPAVE BRIDGE PROTECTIVE COURSE - 9.5 (SPC-B-9.5) OVER MEMBRANE WATERPROOFING

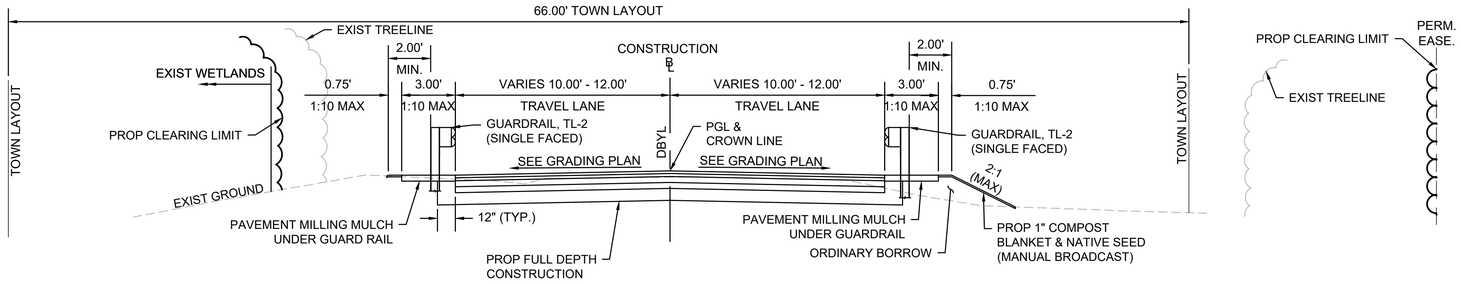
* MEETING THE REQUIREMENTS OF ASPHALT EMULSION FOR TACK COAT APPLICATION RATES AS SPECIFIED IN THE MOST RECENT STANDARD SPECIFICATIONS



MEADOW STREET WESTERN APPROACH – FULL DEPTH

NOT TO SCALE

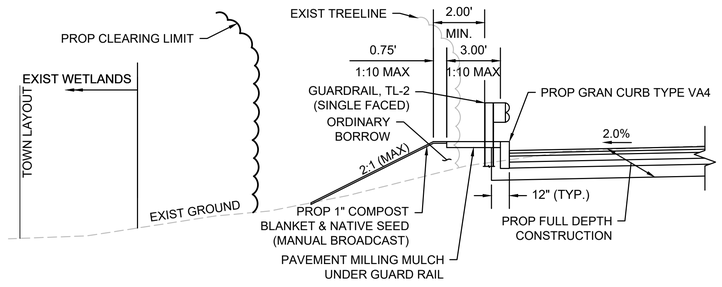
STA 10+00 TO STA 11+54



MEADOW STREET EASTERN APPROACH – FULL DEPTH

NOT TO SCALE

STA 12+95 TO STA 14+25

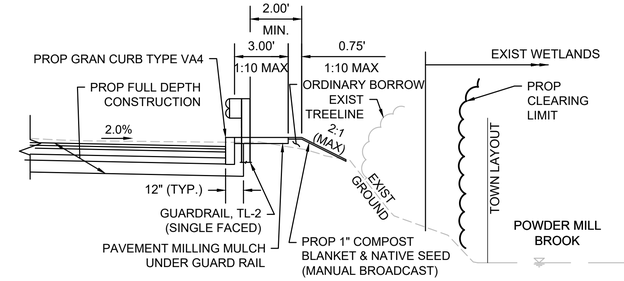


FULL DEPTH WITH CURB HEIGHT TRANSITION TO BRIDGE CURB

NOT TO SCALE

STA 11+65 TO STA 11+84 LT

STA 12+76 TO STA 12+95 LT

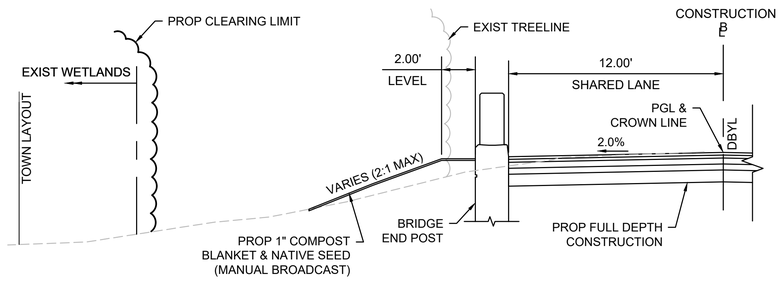


FULL DEPTH WITH CURB HEIGHT TRANSITION TO BRIDGE CURB

NOT TO SCALE

STA 11+54 TO STA 11+72 RT

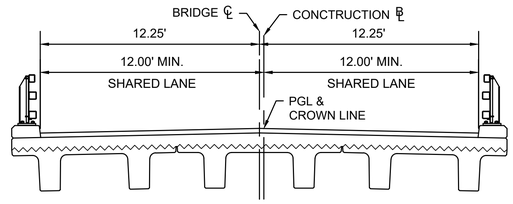
STA 12+63 TO STA 12+82 RT



MEADOW STREET WESTERN APPROACH – FULL DEPTH

NOT TO SCALE

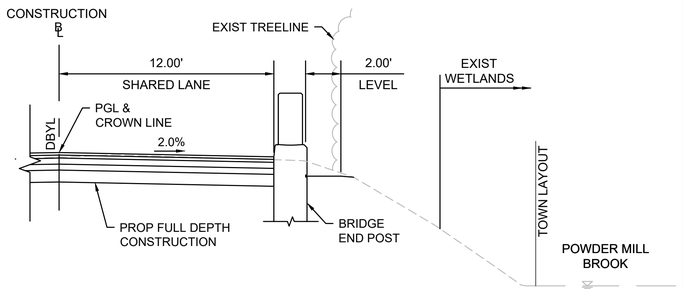
STA 11+84 LT TO STA 11+90 LT



PROPOSED BRIDGE CROSS SECTION

NOT TO SCALE

STA 11+90 TO STA 12+58



MEADOW STREET EASTERN APPROACH – FULL DEPTH

NOT TO SCALE

STA 12+58 RT TO STA 12+63 RT

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	4	50
PROJECT FILE NO.	607597		

TYPICAL SECTIONS 1

PERM. EASE.

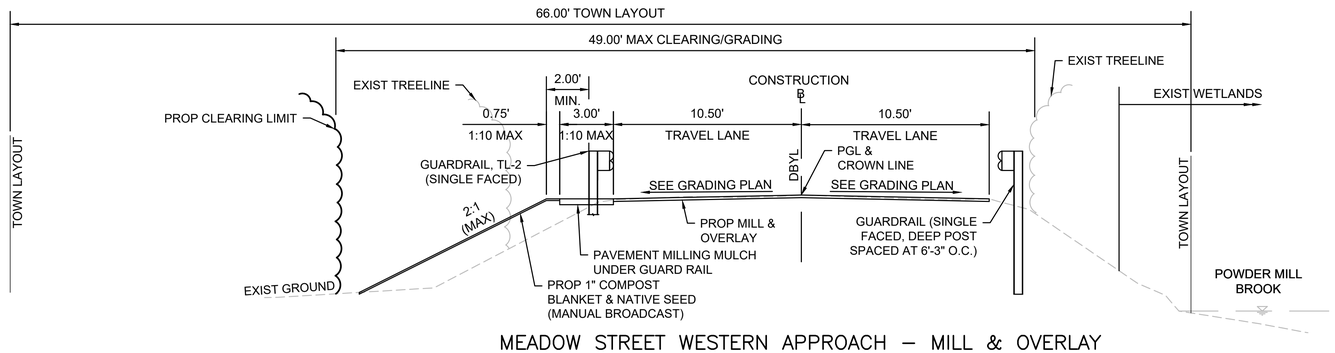
TEMP. EASE.

607597_HD(TYPICAL SECTIONS).DWG Plotted on 5-Sep-2025 3:34 PM

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	5	50
PROJECT FILE NO.	607597		

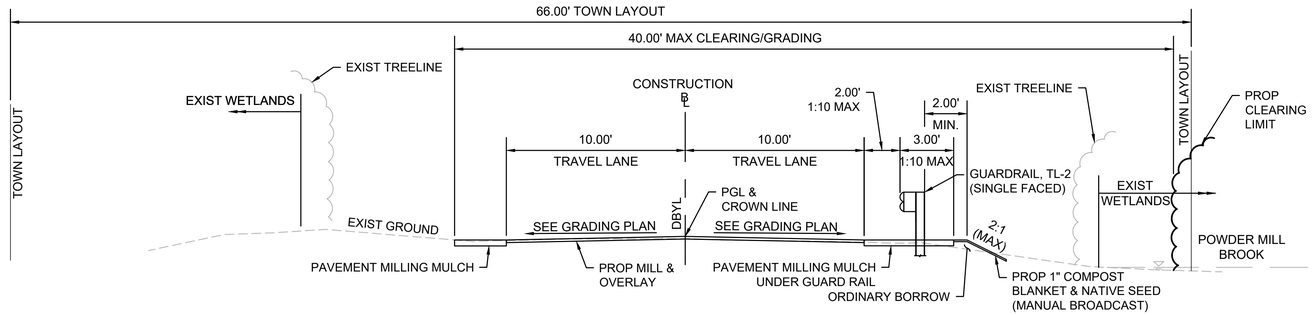
TYPICAL SECTIONS 2



MEADOW STREET WESTERN APPROACH – MILL & OVERLAY

NOT TO SCALE

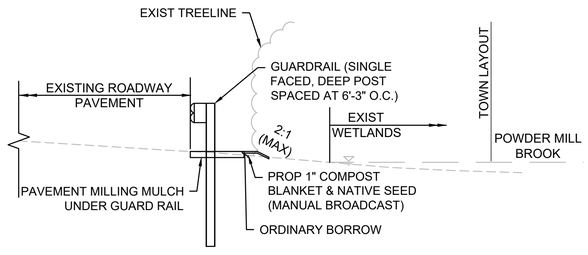
STA 9+75 TO STA 10+00



MEADOW STREET EASTERN APPROACH – MILL & OVERLAY

NOT TO SCALE

STA 14+25 TO STA 14+50

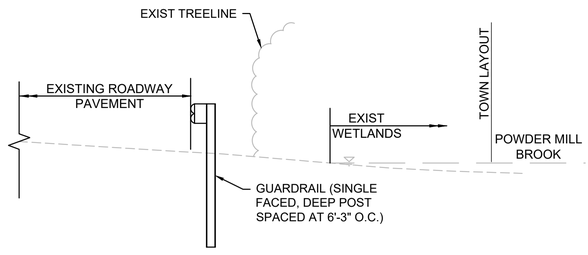


EXISTING ROADWAY WITH PROPOSED GUARDRAIL

NOT TO SCALE

STA 8+34 RT TO STA 8+92 RT

STA 14+50 RT TO STA 15+16 RT



EXISTING ROADWAY WITH PROPOSED GUARDRAIL

NOT TO SCALE

STA 8+92 RT TO STA 9+75 RT

HIGHWAY GUARD DETAILS

TRAILING ANCHORAGE: STA 8+26, 23.4' RT TO STA 8+36, 21.3' RT
GUARDRAIL, DEEP POST (SINGLE FACED): STA 8+36, 21.3' RT TO STA 11+41, 12.2' RT
TRANSITION TO BRIDGE RAIL: STA 11+41, 12.2' RT TO STA 11+75, 12.8' RT
TRAILING ANCHORAGE: STA 9+28, 10.8' LT TO STA 9+38, 10.7' LT
GUARDRAIL, TL-2 (SINGLE FACED): STA 9+38, 10.7' LT TO STA 11+53, 12.0' LT
TRANSITION TO BRIDGE RAIL: STA 11+53, 12.0' LT TO STA 11+87, 12.0' LT
TRANSITION TO BRIDGE RAIL: STA 12+74, 12.0' LT TO STA 13+08, 12.0' LT
GUARDRAIL, TL-2 (SINGLE FACED): STA 13+08, 12.0' LT TO STA 13+30, 12.0' LT
GUARDRAIL TANGENT END TREATMENT, TL-2: STA 13+30, 12.0' LT TO STA 13+83, 13.8' LT
TRANSITION TO BRIDGE RAIL: STA 12+61, 12.3' RT TO STA 12+95, 12.0' RT
TRAILING ANCHORAGE: STA 12+95, 12.0' RT TO STA 13+05, 12.0' RT
TRAILING ANCHORAGE: STA 13+39, 25.2' RT TO STA 13+48, 21.6' RT
GUARDRAIL, TL-2 (SINGLE FACED): STA 13+48, 21.6' RT TO STA 15+06, 12.0' RT
TRAILING ANCHORAGE: STA 15+06, 12.0' RT TO STA 15+16, 12.0' RT

NOTE: ALL DEEP GUARDRAIL POST SPACING SHALL BE ESTABLISHED AT 6'-3"

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

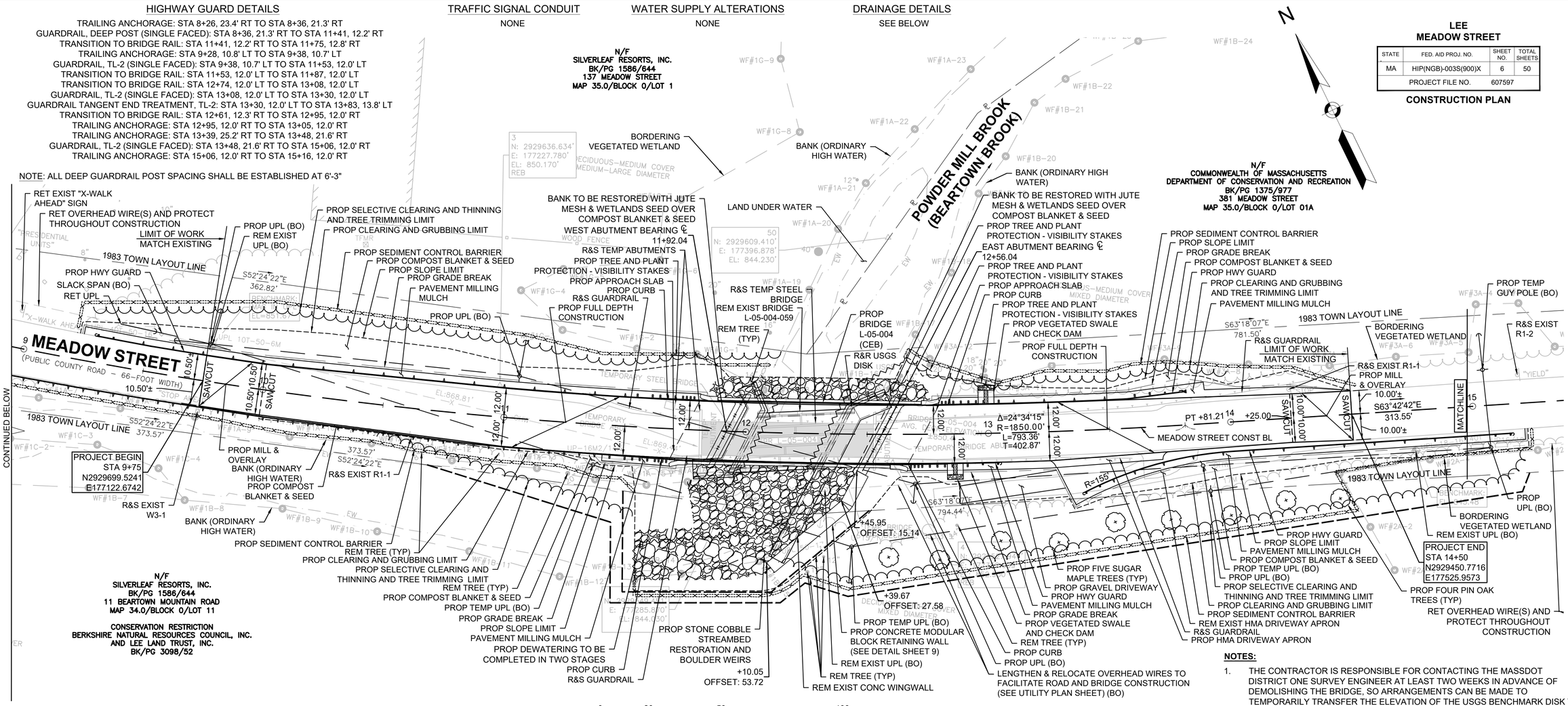
SEE BELOW

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	6	50
	PROJECT FILE NO. 607597		

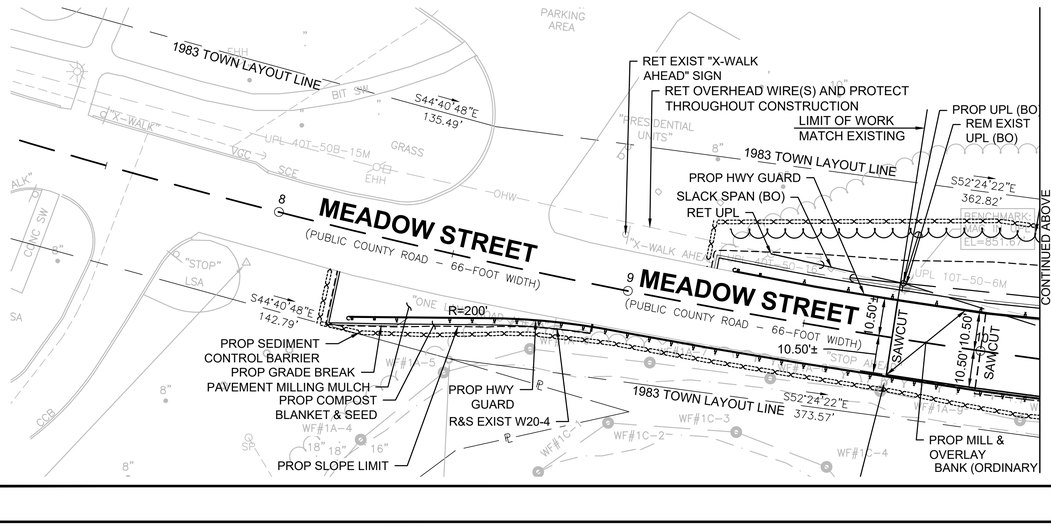
CONSTRUCTION PLAN

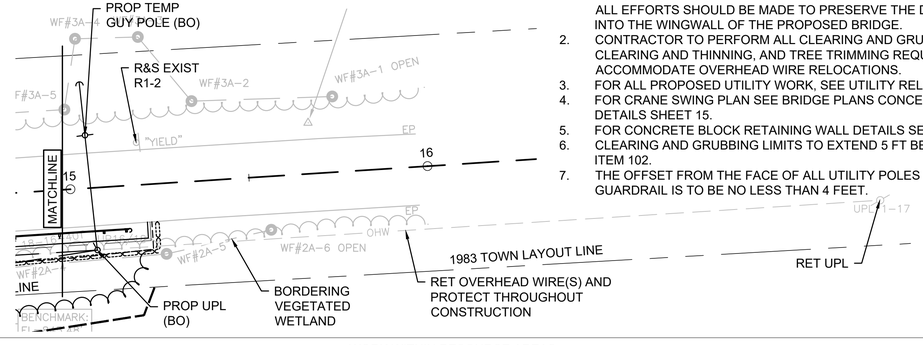
607597_HD(CONST PLANS).DWG Plotted on 5-Sep-2025 3:35 PM



NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE MASSDOT DISTRICT ONE SURVEY ENGINEER AT LEAST TWO WEEKS IN ADVANCE OF DEMOLISHING THE BRIDGE, SO ARRANGEMENTS CAN BE MADE TO TEMPORARILY TRANSFER THE ELEVATION OF THE USGS BENCHMARK DISK TT 15 TDA LOCATED ON THE NORTHEAST WINGWALL OF THE EXISTING BRIDGE. ALL EFFORTS SHOULD BE MADE TO PRESERVE THE DISK SO IT CAN BE RESET INTO THE WINGWALL OF THE PROPOSED BRIDGE.
2. CONTRACTOR TO PERFORM ALL CLEARING AND GRUBBING, SELECTIVE CLEARING AND THINNING, AND TREE TRIMMING REQUIRED TO ACCOMMODATE OVERHEAD WIRE RELOCATIONS.
3. FOR ALL PROPOSED UTILITY WORK, SEE UTILITY RELOCATION PLAN SHEET 17.
4. FOR CRANE SWING PLAN SEE BRIDGE PLANS CONCEPTUAL BEAM ERECTION DETAILS SHEET 15.
5. FOR CONCRETE BLOCK RETAINING WALL DETAILS SEE SHEET 9.
6. CLEARING AND GRUBBING LIMITS TO EXTEND 5 FT BEYOND SLOPE LIMITS PER ITEM 102.
7. THE OFFSET FROM THE FACE OF ALL UTILITY POLES TO THE FACE OF GUARDRAIL IS TO BE NO LESS THAN 4 FEET.





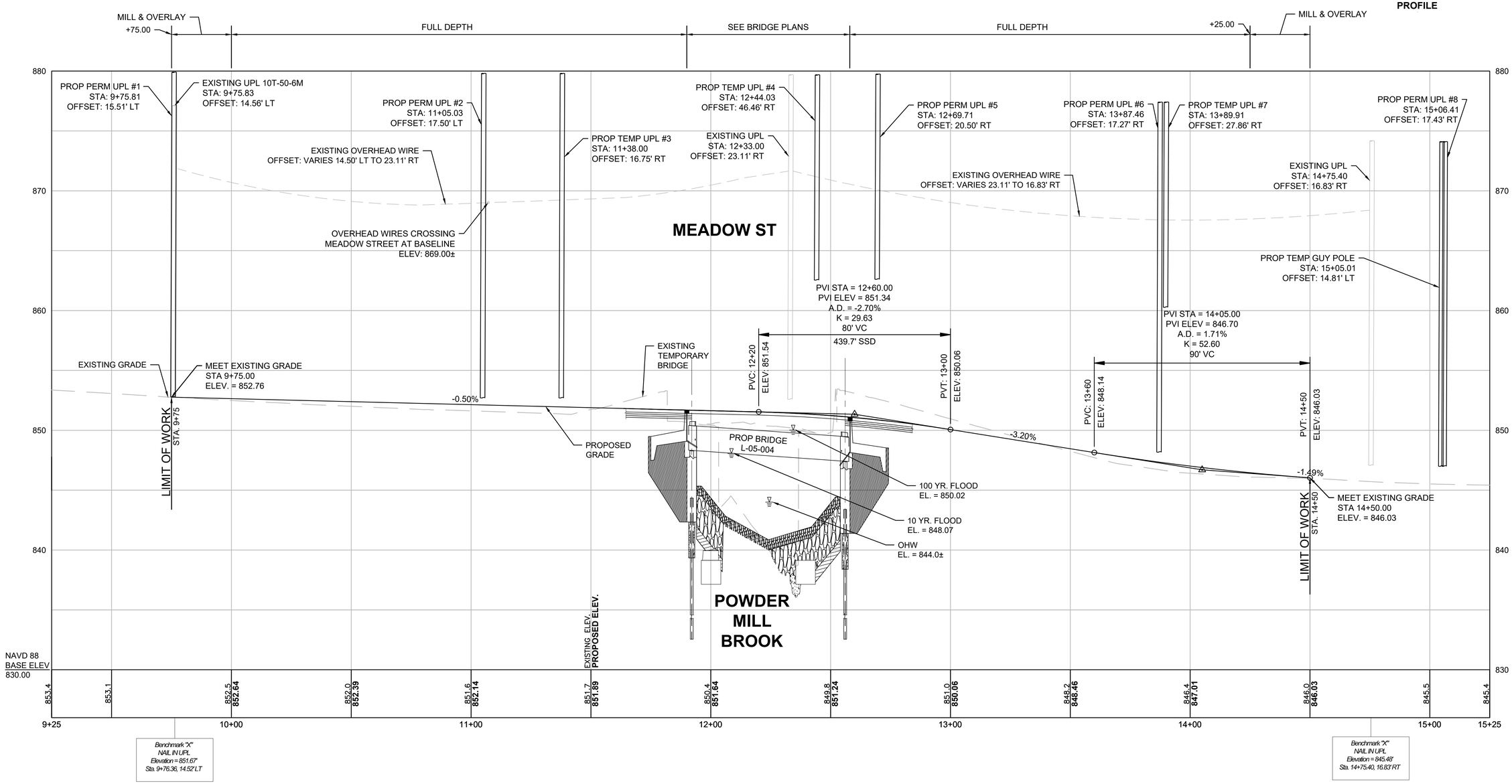
WORK WITHIN RESOURCE AREAS

LOCATION	AREA (SF)	LENGTH (LF)	PROP LUWW (SF)	EXIST LUWW (SF)	WETLAND TYPE	DESCRIPTION OF WORK
STA 10+81 RT TO 11+77 RT	-	100	-	-	BANKS (TEMPORARY)	SELECTIVE CLEARING AND THINNING AND TREE TRIMMING FOR OVERHEAD WIRES
STA 11+57 RT TO 12+62 LT	-	208	-	-	BANKS (PERMANENT)	STREAMBED WORK
STA 11+87 LT TO 12+11 LT	125	-	-	-	VEGETATED WETLAND	GRADING, STREAMBED WORK, CLEARING AND GRUBBING, SELECTIVE CLEARING AND THINNING, AND TREE TRIMMING
STA 11+57 RT TO 12+62 LT	-	-	-	3,441	PERENNIAL STREAM	STREAMBED WORK
STA 11+57 RT TO 12+62 LT	-	-	4,988	-	PERENNIAL STREAM	STREAMBED WORK

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	7	50
PROJECT FILE NO.	607597		

PROFILE



HOR. SCALE IN FEET
20 0 20 40
4 0 4 8
VER. SCALE IN FEET

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	8	50
PROJECT FILE NO.	607597		

CURB TIE & GRADING PLAN

607597_HD(CURB TIE & GRADING PLAN).DWG Plotted on 5-Sep-2025 3:37 PM

N

N/F
SILVERLEAF RESORTS, INC.
BK/PG 1586/644
137 MEADOW STREET
MAP 35.0/BLOCK 0/LOT 1

3
N: 2929636.634'
E: 177227.780'
EL: 850.170'
REB

50
N: 2929609.410'
E: 177396.878'
EL: 844.230'

POWDER MILL BROOK
(BEARTOWN BROOK)

N/F
THE COMMONWEALTH OF MASSACHUSETTS
BK/PG 1375/977
"BEARTOWN STATE FOREST"

1983 TOWN LAYOUT LINE
LIMIT OF WORK
MATCH EXISTING

MEADOW STREET
(PUBLIC COUNTY ROAD – 66-FOOT WIDTH)

S52°24'22"E
362.82'

S52°24'22"E
373.57'

S63°18'07"E
781.50'

S63°18'07"E
794.44'

S63°42'42"E
313.55'

BEG GRAN CURB
0" REVEAL
+64.28
OFFSET: 12.00

8" REVEAL
+70.32

END CURB
8" REVEAL
+82.90
OFFSET: 12.00

WETLAND
AREA TO BE
RESTORED

PROP
BRIDGE
L-05-004

BEG GRAN CURB
8" REVEAL
+77.45
OFFSET: 12.00

8" REVEAL
+90.02

END CURB
0" REVEAL
+96.06
OFFSET: 12.00

Δ=24°34'15"
R=1850.00'
L=793.36'
T=402.87'

PT +81.21

+25.00

+74.18
OFFSET: 10.59
ELEV: 847.29

+88.00
OFFSET: 21.49

+30.95
OFFSET: 23.48
ELEV. 848.67

+27.51
OFFSET: 16.01
ELEV: 848.79

+88.00
OFFSET: 28.76

BEG GRAN CURB
0" REVEAL
+52.83
OFFSET: 12.00

8" REVEAL
+58.79

END CURB
8" REVEAL
+71.21
OFFSET: 12.00

BEG GRAN CURB
8" REVEAL
+64.53
OFFSET: 12.41

8" REVEAL
+76.95

END CURB
0" REVEAL
+82.91
OFFSET: 12.00

PROJECT BEGIN
STA 9+75
N2929699.5241
E177122.6742

PROJECT END
STA 14+50
N2929450.7716
E177525.9573

BENCHMARK
EL=845.48

* SEE CROSS
SECTIONS FOR
GRADING

N/F
SILVERLEAF RESORTS, INC.
BK/PG 1586/644
11 BEARTOWN MOUNTAIN ROAD
MAP 34.0/BLOCK 0/LOT 11

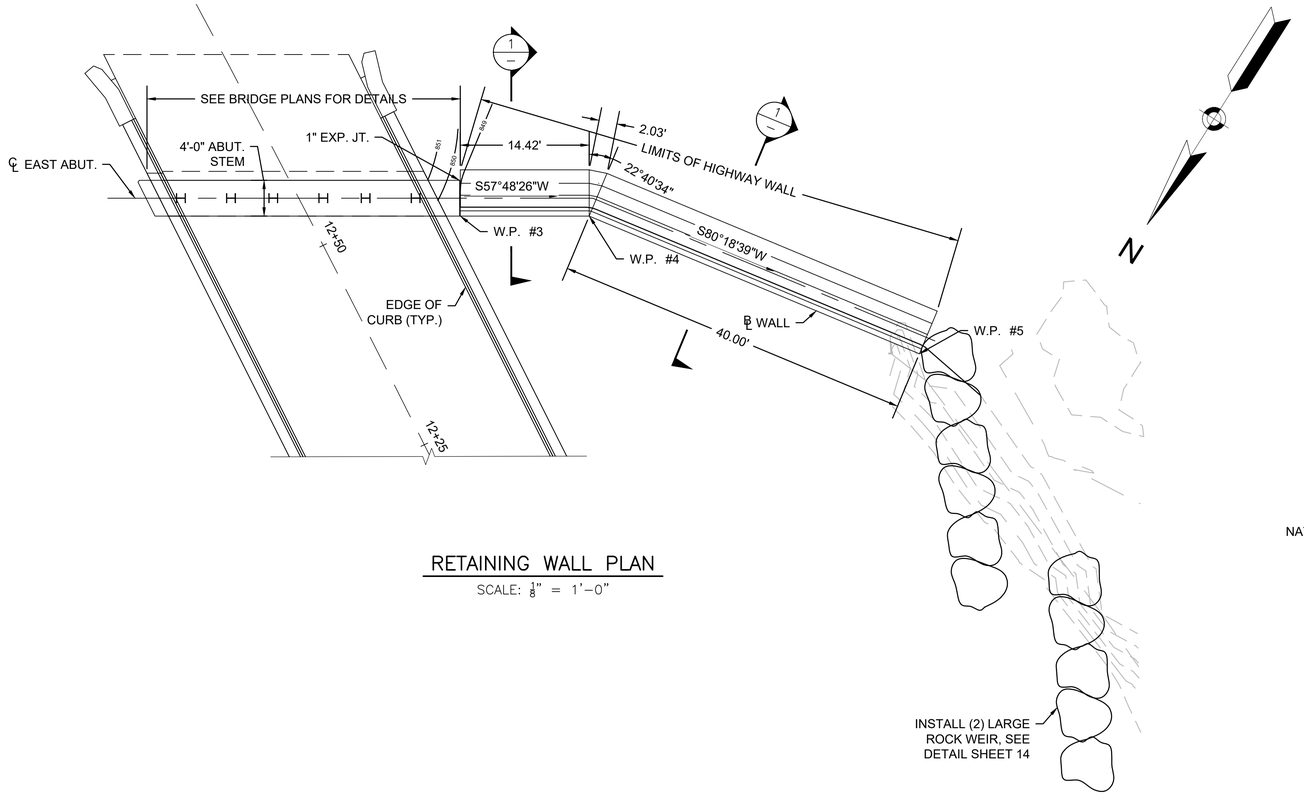
CONSERVATION RESTRICTION
BERKSHIRE NATURAL RESOURCES COUNCIL, INC.
AND LEE LAND TRUST, INC.
BK/PG 3098/52

0 20 50 100
SCALE: 1" = 20'

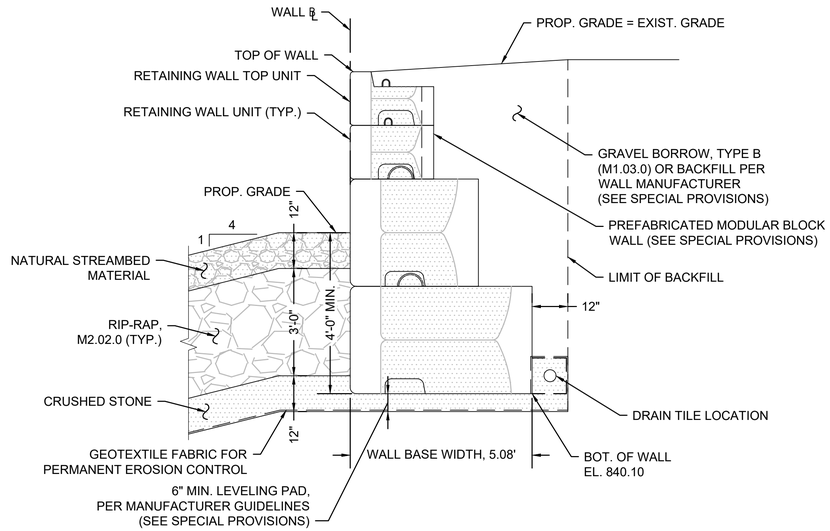
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	9	50
PROJECT FILE NO.	607597		

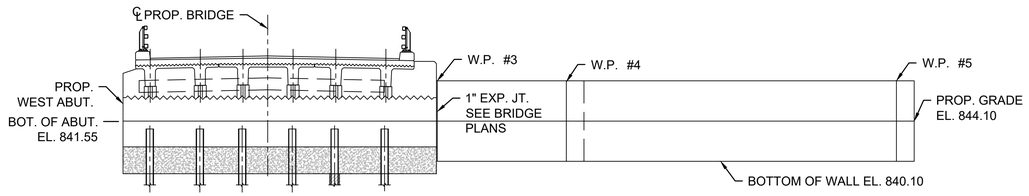
RETAINING WALL DETAILS



RETAINING WALL PLAN
SCALE: 1/8" = 1'–0"



SECTION 1
SCALE: 1/2" = 1'–0"



RETAINING WALL ELEVATION
SCALE: 1/8" = 1'–0"

WORKING POINT	NORTHING	EASTING	TOP OF WALL ELEVATION (FT)	STATION	OFFSET
W.P. #3	2929532.5212	177337.5499	849.10	12+45.86	15.14' RT
W.P. #4	2929524.6547	177325.6367	849.10	12+39.58	27.58' RT
W.P. #5	2929517.9025	177286.2123	849.10	12+09.96	53.73' RT

NOTES:

1. DETAILS SHOWN ARE FOR A PREFABRICATED MODULAR RETAINING WALL TO BE DESIGNED BY THE FABRICATOR. SEE SPECIAL PROVISIONS FOR DESIGN AND SUBMISSION REQUIREMENTS.
2. THE FACTORED BEARING PRESSURE, DONE UNDER PRELIMINARY DESIGN IS 1.95 KSF ASSUMING A BASE WIDTH OF 5.08 FT. AS PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS STRENGTH I LOADING COMBINATION. FINAL FACTORED BEARING PRESSURE TO BE DETERMINED BY CONTRACTOR. FACTORED BEARING RESISTANCE IS 3.59 KSF. FACTORED BEARING RESISTANCE IS THE PRODUCT OF THE NOMINAL BEARING RESISTANCE OF 7.97 KSF AND A RESISTANCE FACTOR OF 0.45.
3. WEIRS TO BE STAKED OUT IN FIELD AND CONFIRMED BY FLUVIAL GEOMORPHOLOGIST PRIOR TO CONSTRUCTION.
4. THIS DRAWING IS CONCEPTUAL AND WILL BE DETAILED PER THE WALL MANUFACTURER.
5. SEE GEOTECHNICAL MEMO PREPARED BY GILL ENGINEERING DATED APRIL 17, 2024 FOR ASSUMPTIONS USED IN THE PROVIDED CONCEPTUAL WALL DESIGN.

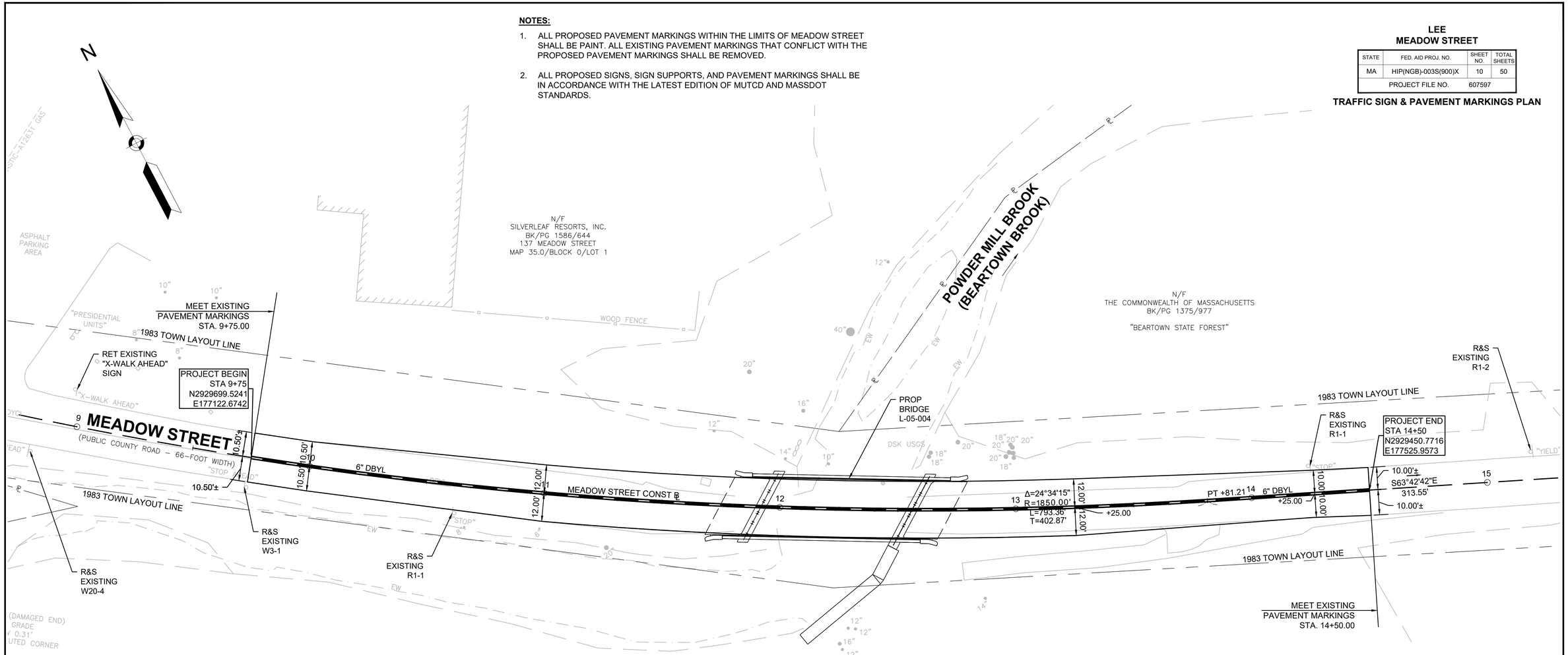
NOTES:

1. ALL PROPOSED PAVEMENT MARKINGS WITHIN THE LIMITS OF MEADOW STREET SHALL BE PAINT. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHALL BE REMOVED.
2. ALL PROPOSED SIGNS, SIGN SUPPORTS, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MUTCD AND MASSDOT STANDARDS.

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	10	50
PROJECT FILE NO.	607597		

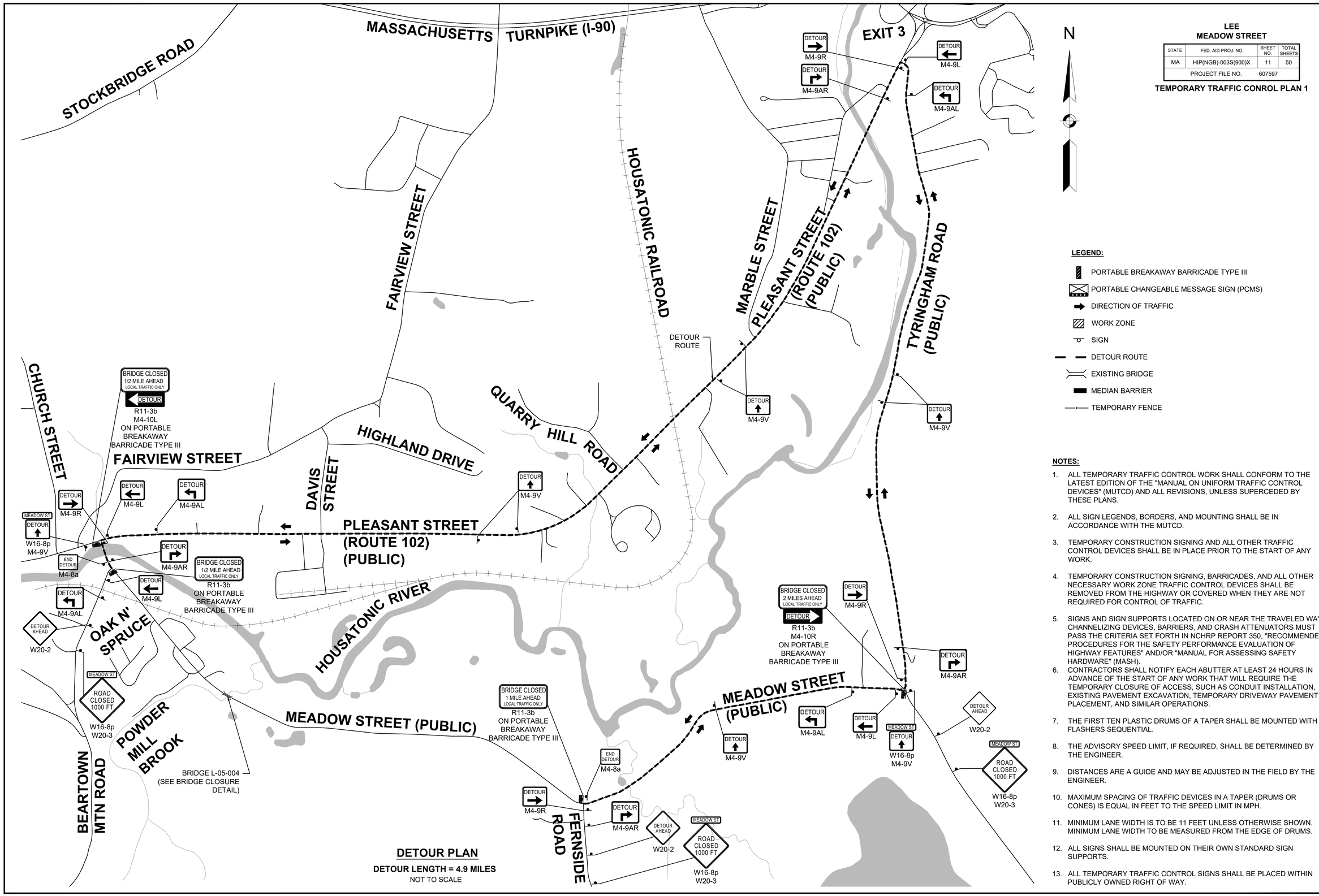
TRAFFIC SIGN & PAVEMENT MARKINGS PLAN



N/F
SILVERLEAF RESORTS, INC.
BK/PG 1586/644
11 BEARTOWN MOUNTAIN ROAD
MAP 34.0/BLOCK 0/LOT 11

CONSERVATION RESTRICTION
BERKSHIRE NATURAL RESOURCES COUNCIL, INC.
AND LEE LAND TRUST, INC.
BK/PG 3098/52

0 20 50 100
SCALE: 1" = 20'



DETOUR PLAN

DETOUR LENGTH = 4.9 MILES

NOT TO SCALE

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	11	50
PROJECT FILE NO.	607597		

TEMPORARY TRAFFIC CONROL PLAN 1

LEGEND:

- PORTABLE BREAKAWAY BARRICADE TYPE III
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- DIRECTION OF TRAFFIC
- WORK ZONE
- SIGN
- DETOUR ROUTE
- EXISTING BRIDGE
- MEDIAN BARRIER
- TEMPORARY FENCE

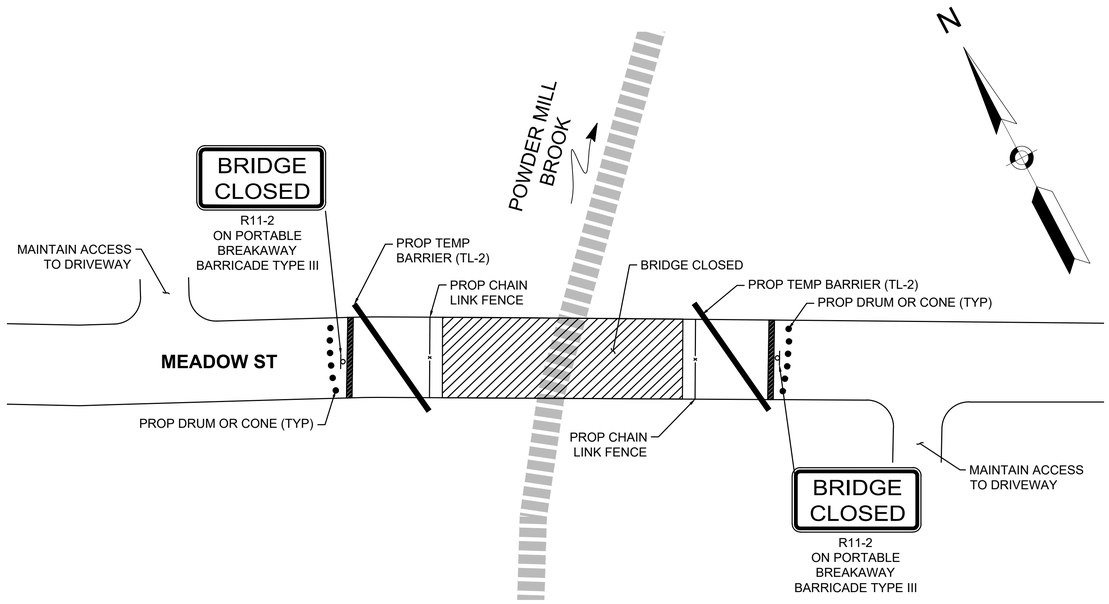
NOTES:

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 "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
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 FLASHERS SEQUENTIAL.
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 DRUMS.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
13. ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PLACED WITHIN PUBLICLY OWNED RIGHT OF WAY.

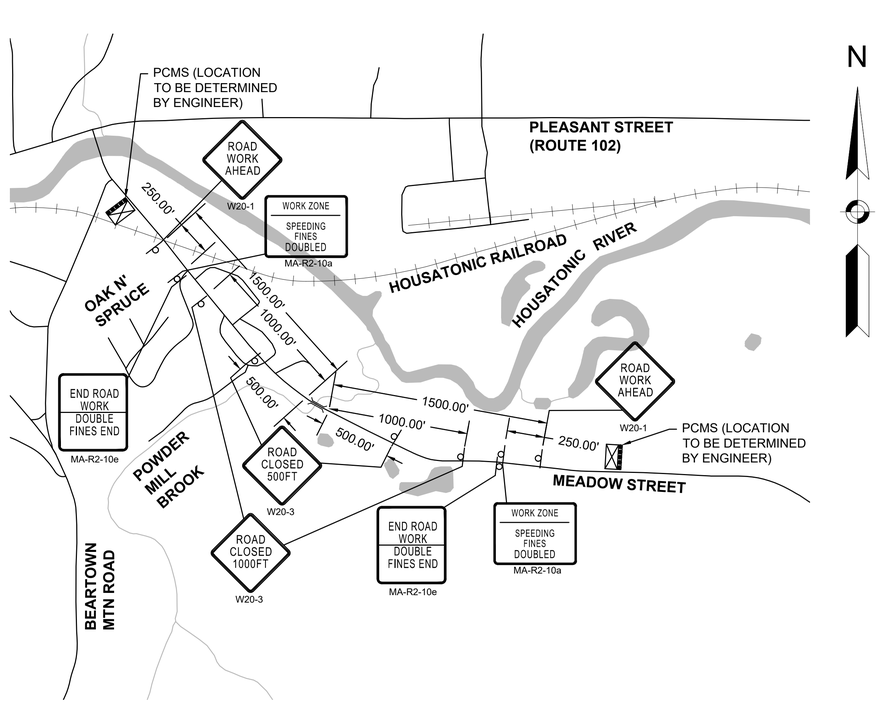
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	12	50
PROJECT FILE NO.	607597		

TEMPORARY TRAFFIC CONTROL PLAN 2



BRIDGE CLOSURE DETAIL
NOT TO SCALE



ADVANCED WARNING SIGNAGE PLAN
NOT TO SCALE

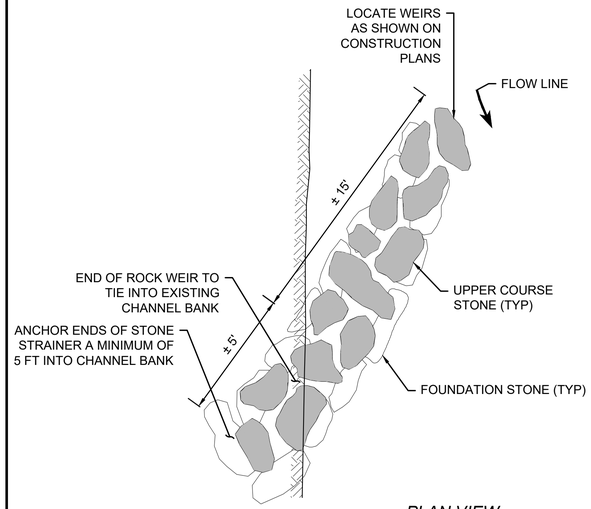
CONSTRUCTION SIGN SUMMARY

LEE
MEADOW STREET

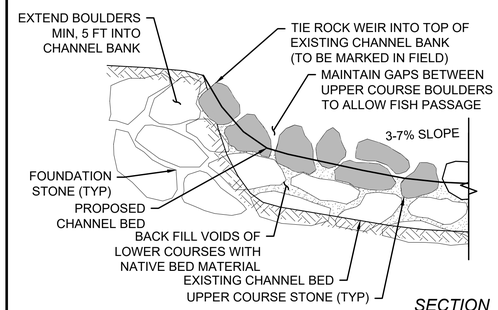
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	13	50
	PROJECT FILE NO. 607597		

CONSTRUCTION SIGN SUMMARY

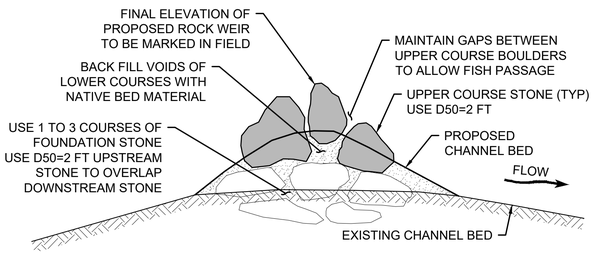
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
MA-R2-10a	48	36	WORK ZONES / SPEEDING FINES DOUBLED	SEE MASSDOT STANDARDS			2	FLOURESCENT ORANGE /WHITE	BLACK	BLACK		12	24
MA-R2-10e	36	48	END ROAD WORK / DOUBLE FINES END				2	FLOURESCENT ORANGE /WHITE	BLACK	BLACK		12	24
M4-8a	24	18	END DETOUR	SEE CURRENT MUTCD			2	FLOURESCENT ORANGE	BLACK	BLACK		3	6
M4-9L	30	24	DETOUR ←				4	FLOURESCENT ORANGE	BLACK	BLACK		5	20
M4-9R	30	24	DETOUR →				4	FLOURESCENT ORANGE	BLACK	BLACK		5	20
M4-9V	30	24	DETOUR ↑				9	FLOURESCENT ORANGE	BLACK	BLACK		5	45
M4-9AR	30	24	DETOUR ↱				4	FLOURESCENT ORANGE	BLACK	BLACK		5	20
M4-9AL	30	24	DETOUR ↰				4	FLOURESCENT ORANGE	BLACK	BLACK		5	20
R11-2	48	30	BRIDGE CLOSED				2	WHITE	BLACK	BLACK		10	20
R11-3b	60	30	BRIDGE CLOSED XX MILE AHEAD LOCAL TRAFFIC ONLY				4	WHITE	BLACK	BLACK		12.5	50
W20-1	36	36	ROAD WORK AHEAD				2	FLOURESCENT ORANGE	BLACK	NONE		9	18
W20-2	36	36	DETOUR AHEAD				3	FLOURESCENT ORANGE	BLACK	NONE		9	27
W20-3	36	36	ROAD CLOSED XX FT				7	FLOURESCENT ORANGE	BLACK	NONE		9	63
M4-10R	48	18	DETOUR →				1	FLOURESCENT ORANGE	BLACK	NONE		6	6
M4-10L	48	18	← DETOUR				1	FLOURESCENT ORANGE	BLACK	NONE		6	6
W16-8p	33	12	MEADOW ST				5	FLOURESCENT ORANGE	BLACK	BLACK		2.75	13.75
TOTAL AREA OF SIGNS (SQUARE FEET)													382.75



PLAN VIEW



SECTION

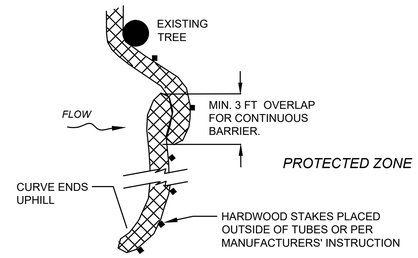


PROFILE VIEW

NOTES:
1. SOURCE OR SALVAGE UPPER COURSE BOULDERS FROM WITHIN THE CHANNEL AND ADJACENT FLOODPLAIN AREAS DURING CONSTRUCTION IF POSSIBLE. IF IMPORTED, USE WEATHERED NATURALLY-FORMED BOULDERS FOR UPPER COURSE.
2. USE FOUNDATION STONES SALVAGED FROM WITHIN THE CHANNEL AND ADJACENT FLOOD PLAIN AREAS TO INTERLOCK TOGETHER. IF EXISTING MATERIAL IS NOT SUITABLE, USE RIPRAP FOR LOWER COURSES OF FOUNDATION STONES.
3. OVERLAP UPSTREAM STONES OVER DOWNSTREAM STONES.
4. PLACE UPPER COURSE STONES SUCH THAT THEY INTERLOCK WITH FOUNDATION STONES.
5. FINISHED ELEVATION AND PLACEMENT OF BOULDERS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
6. ADJUSTMENT OF FINAL LOCATION AND PLACEMENT OF UPPER COURSE STONES MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
7. SEE SPECIAL PROVISION FOR ITEM 984.2 BOULDER BENDWAY WEIR FOR ADDITIONAL INFORMATION.
8. STONE BOULDERS SHOWN IN DETAILS ARE NOT DRAWN TO SCALE AND ARE FOR ILLUSTRATION PURPOSES ONLY.

BOULDER BENDWAY WEIR

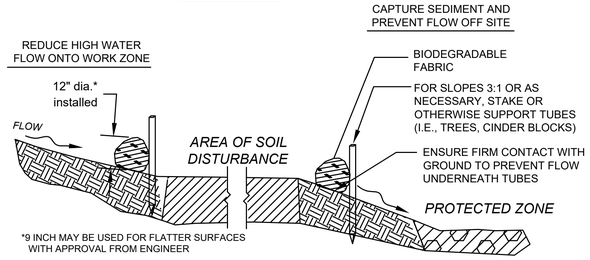
NOT TO SCALE



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.

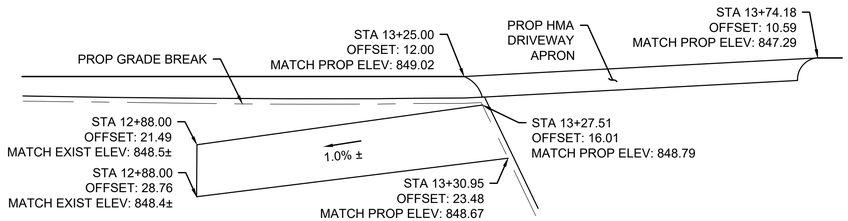
PLAN VIEW



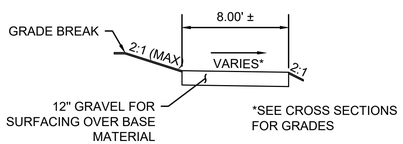
SECTION

SEDIMENT BARRIER - COMPOST FILTER TUBE

NOT TO SCALE



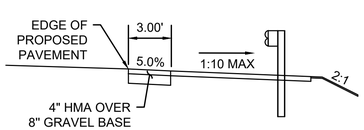
PLAN VIEW



SECTION VIEW

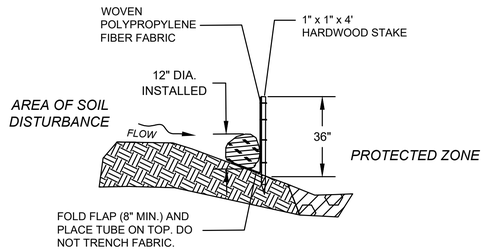
GRAVEL DRIVEWAY DETAIL

NOT TO SCALE



HMA APRON DETAIL

NOT TO SCALE

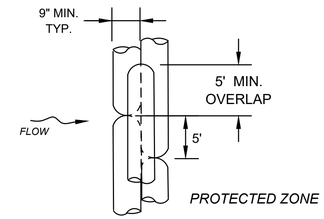


SECTION

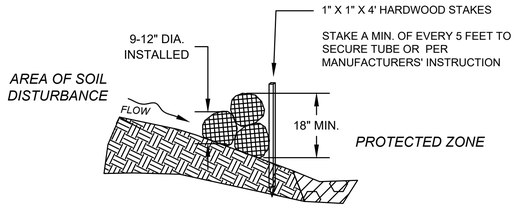
COMPOST FILTER TUBE & SILT FENCE

NOT TO SCALE

WHERE SPECIFIED ON CONSTRUCTION PLANS OR AS REQUIRED



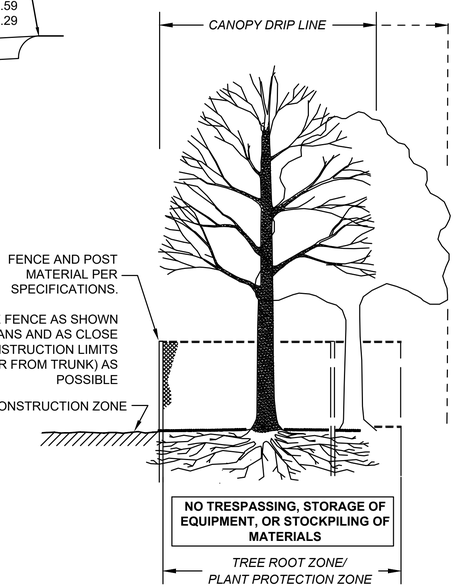
PLAN VIEW



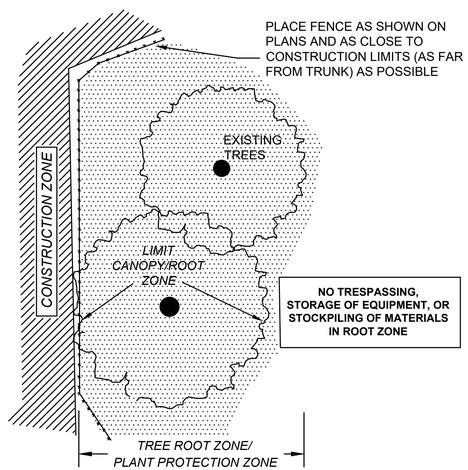
SECTION

COMPOST FILTER TUBES STACKED

NOT TO SCALE



SECTION - FENCE PROTECTION OF ROOT ZONE



PLAN VIEW - FENCE PROTECTION OF ROOT ZONE

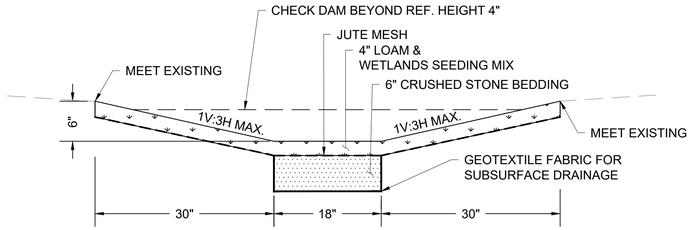
TREE PROTECTION - ROOT ZONE

NOT TO SCALE

LEE
MEADOW STREET

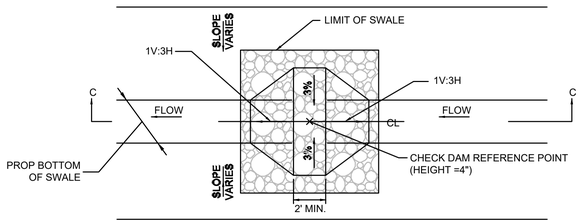
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	15	50
PROJECT FILE NO.	607597		

CONSTRUCTION DETAILS 2



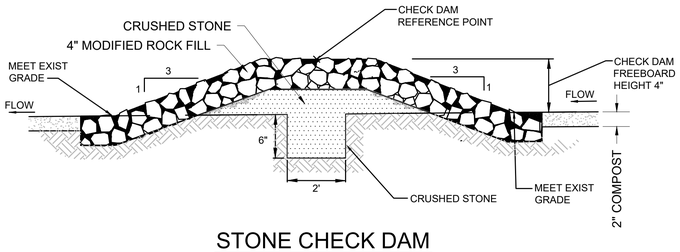
VEGETATED SWALE

NOT TO SCALE



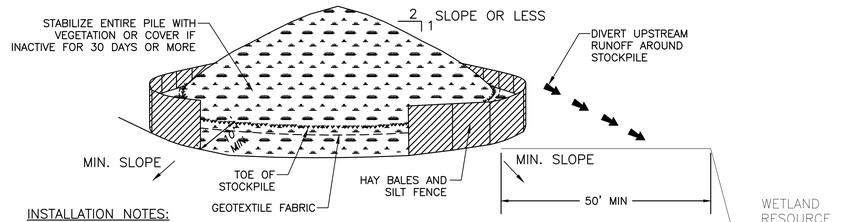
STONE CHECK DAM

NOT TO SCALE



STONE CHECK DAM
SECTION C-C

NOT TO SCALE



INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING AND HAYBALES, THEN STABILIZED WITH VEGETATION OR COVERED.

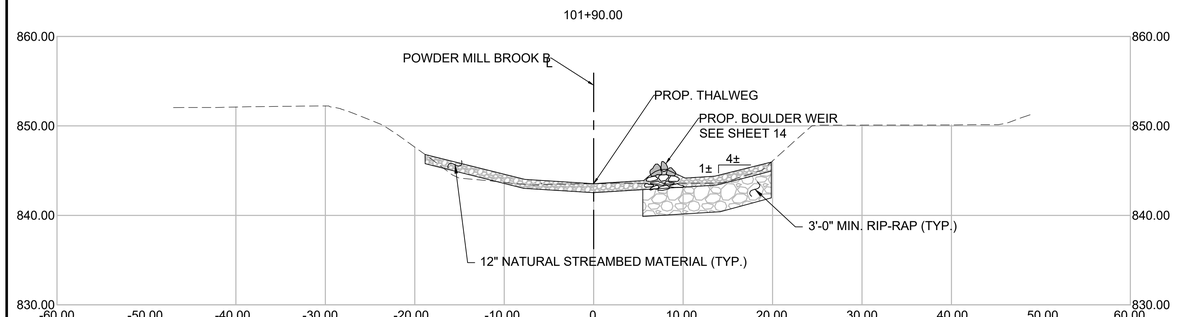
SOIL STOCKPILING

NOT TO SCALE

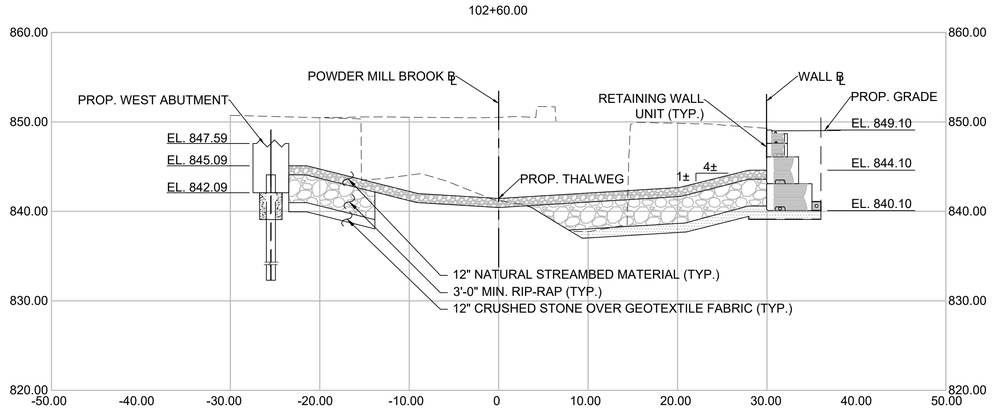
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	16	50
PROJECT FILE NO.	607597		

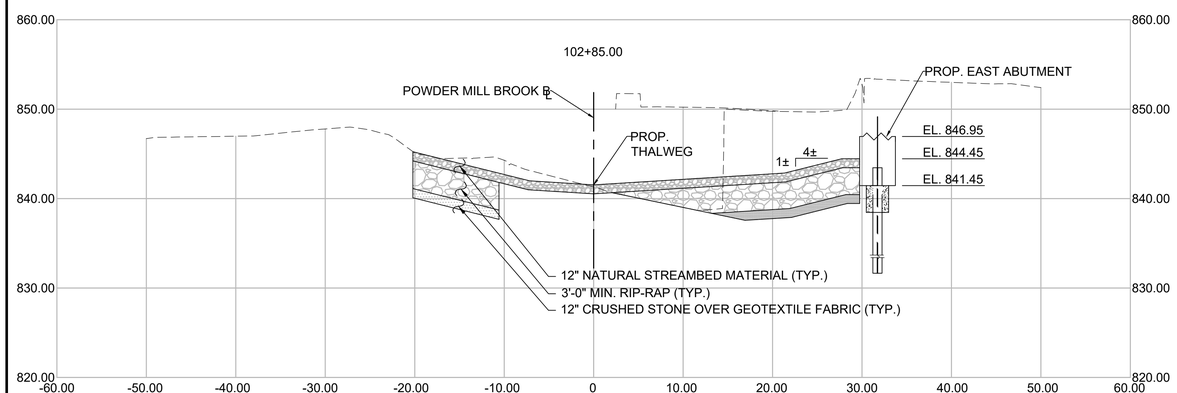
STREAM CROSS SECTIONS



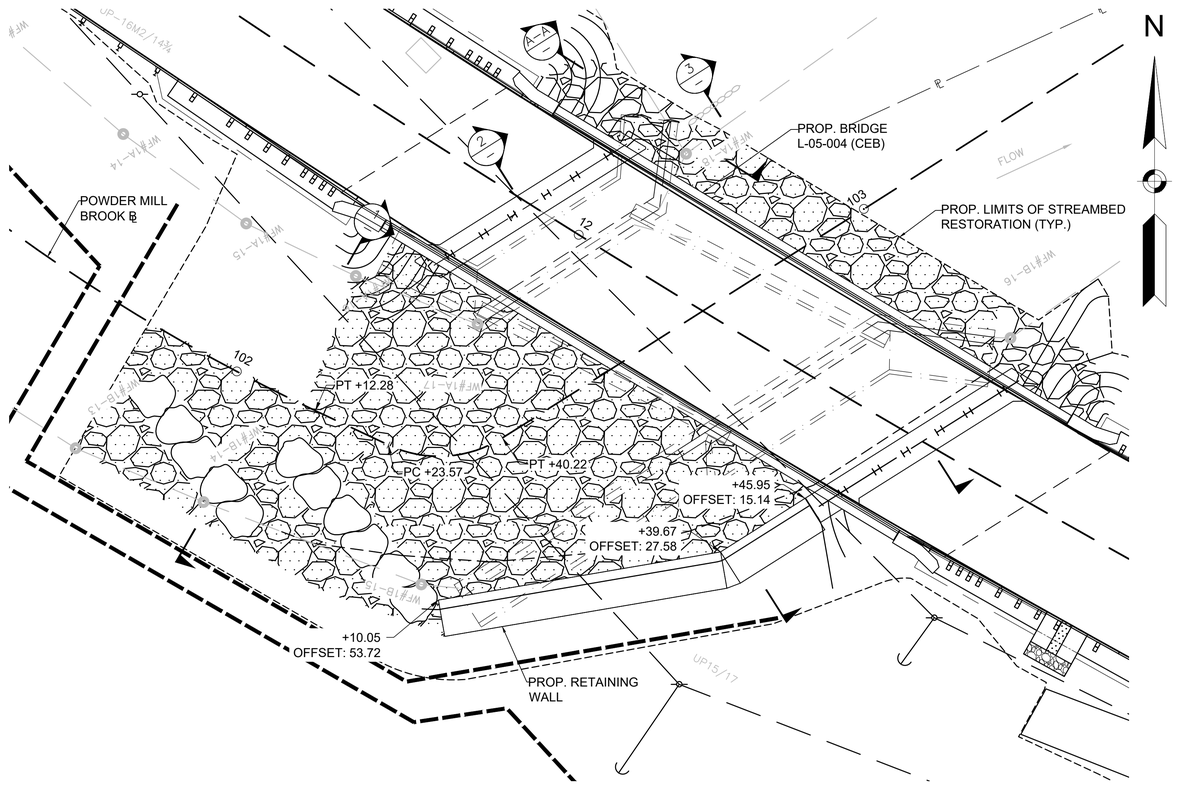
SECTION 1
SCALE: 1" = 8'



SECTION 2
SCALE: 1" = 8'

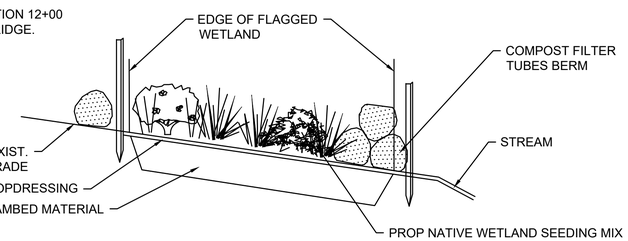


SECTION 3
SCALE: 1" = 8'



STREAM & WETLAND RESTORATION PLAN
SCALE: 1" = 10'

NOTE: SEE HIGHWAY CROSS SECTION 12+00
FOR TRANSVERSE SECTION AT BRIDGE.



TYPICAL WETLAND RESTORATION

SECTION A–A
SCALE: N.T.S.

OVERHEAD WIRE RELOCATION NOTES:

1. SEQUENCE SHALL BE AS FOLLOWS:
   - 1.1. CONTRACTOR TO PERFORM CLEARING AND GRUBBING, SELECTIVE CLEARING AND THINNING, AND TREE TRIMMING REQUIRED TO ACCOMMODATE OVERHEAD WIRE RELOCATION
   - 1.2. INSTALL TEMPORARY UTILITY POLES, GUY WIRES, AND GUY POLE
   - 1.3. RELOCATE UTILITY WIRES
   - 1.4. CLOSE ROAD AND DETOUR TRAFFIC
   - 1.5. COMPLETE BRIDGE AND APPROACH ROADWAY CONSTRUCTION
   - 1.6. INSTALL PERMANENT UTILITY POLES AND GUY WIRES, PERMANENTLY RELOCATE UTILITY WIRES, REMOVE TEMPORARY UTILITY POLES, GUY WIRES, AND GUY POLE
   - 1.7. OPEN THE ROAD TO TRAFFIC
2. CONTRACTOR SHALL MEET THE MINIMUM CLEARANCES TO THE OVERHEAD UTILITY LINES.
3. THE CONTRACTOR MUST MAINTAIN ACCEPTABLE ACCESS TO COMPLETE THE UTILITY RELOCATIONS. THIS MAY REQUIRE COMPLETION OF THE UTILITY RELOCATIONS PRIOR TO SETTING OF THE GUARDRAIL AND/OR THE PLANTINGS NEAR UP 15 ½ / 17M. COORDINATE REQUIRED ACCESS WITH UTILITIES PRIOR TO SETTING GUARDRAIL OR PLANTINGS. GUARDRAIL MUST BE COMPLETE PRIOR TO OPENING THE ROAD TO TRAFFIC, UNLESS OTHER TEMPORARY PROTECTIONS APPROVED BY THE ENGINEER ARE IN PLACE.
7. THE OFFSET FROM THE FACE OF ALL UTILITY POLES TO THE FACE OF GUARDRAIL IS TO BE NO LESS THAN 4 FEET.

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	17	50
PROJECT FILE NO.	607597		

UTILITY RELOCATION PLAN

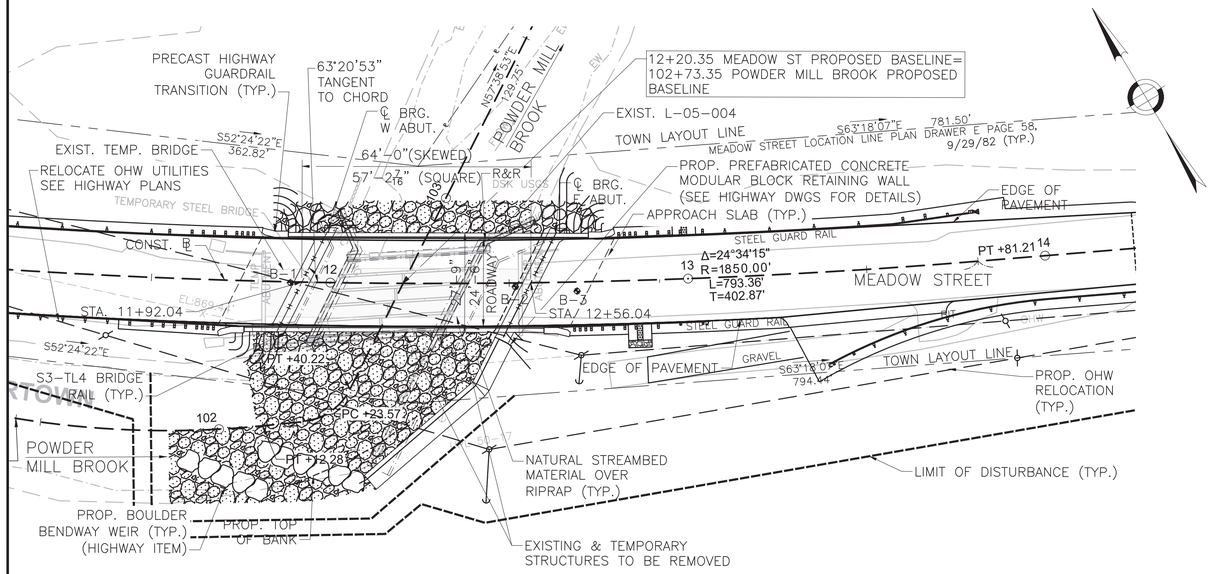
N

NOTE: CONTRACTOR TO PERFORM ALL CLEARING AND GRUBBING, SELECTIVE CLEARING AND THINNING, AND TREE TRIMMING REQUIRED TO ACCOMMODATE OVERHEAD WIRE RELOCATIONS.

NAME OF PROPOSED WORK	DESCRIPTION	NORTHING COORDINATE	EASTING COORDINATE
UTILITY POLE #1	PERMANENT	N2929711.0942	E177133.0316
UTILITY POLE #2	PERMANENT	N2929635.9066	E177236.6958
UTILITY POLE #3	TEMPORARY	N2929589.0352	E177244.6038
UTILITY POLE #4	TEMPORARY	N2929506.4831	E177320.0487
UTILITY POLE #5	PERMANENT	N2929515.7983	E177355.6900
UTILITY POLE #6	PERMANENT	N2929462.9871	E177462.2398
UTILITY POLE #7	TEMPORARY	N2929452.4040	E177459.7439
UTILITY POLE #8	PERMANENT	N2929410.1643	E177568.8175
GUY WIRE #1	PERMANENT	N2929726.5670	E177116.2161
GUY WIRE #2	PERMANENT	N2929719.9011	E177120.8891
GUY WIRE #3	PERMANENT	N2929721.2547	E177144.0663
GUY WIRE #4	PERMANENT	N2929647.3301	E177246.4170
GUY WIRE #5	TEMPORARY	N2929494.1010	E177311.5820
GUY WIRE #6	PERMANENT	N2929509.3111	E177351.0085
GUY WIRE #7	TEMPORARY	N2929453.3995	E177587.8780
GUY POLE	TEMPORARY	N2929439.6847	E177581.8379

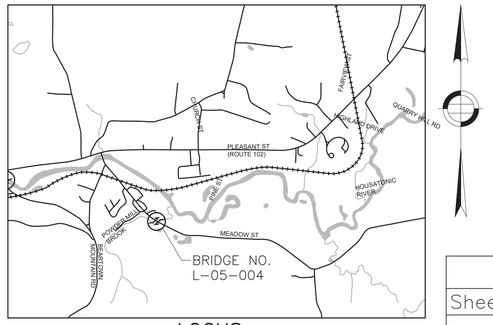
SCALE: 1" = 20'

607597_HDUTILITY RELOC PLAN).DWG Plotted on 5-Sep-2025 4:04 PM



KEY PLAN

SCALE: 1" = 20'



LOCUS

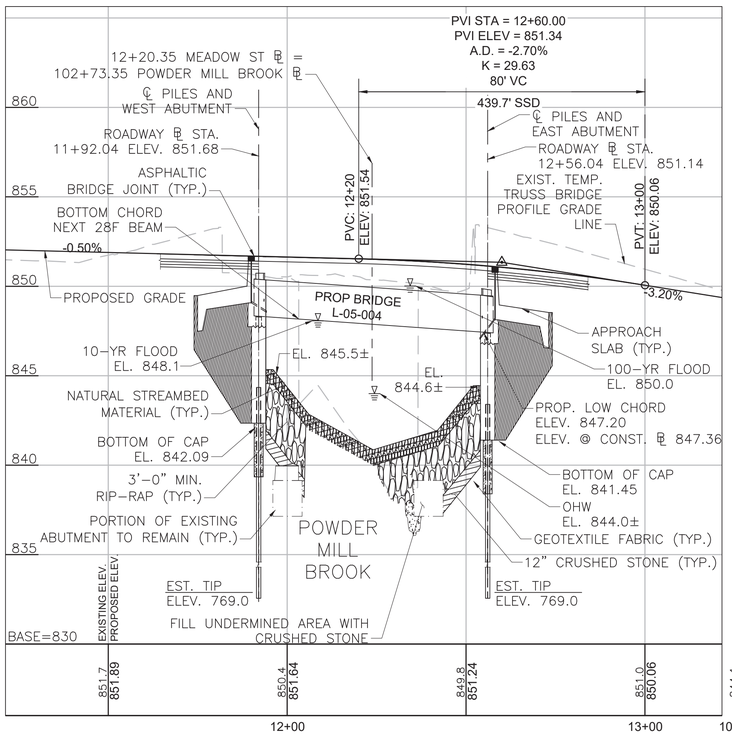
SCALE: 1" = 2000'

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	18	50
	PROJECT FILE NO. 607597		

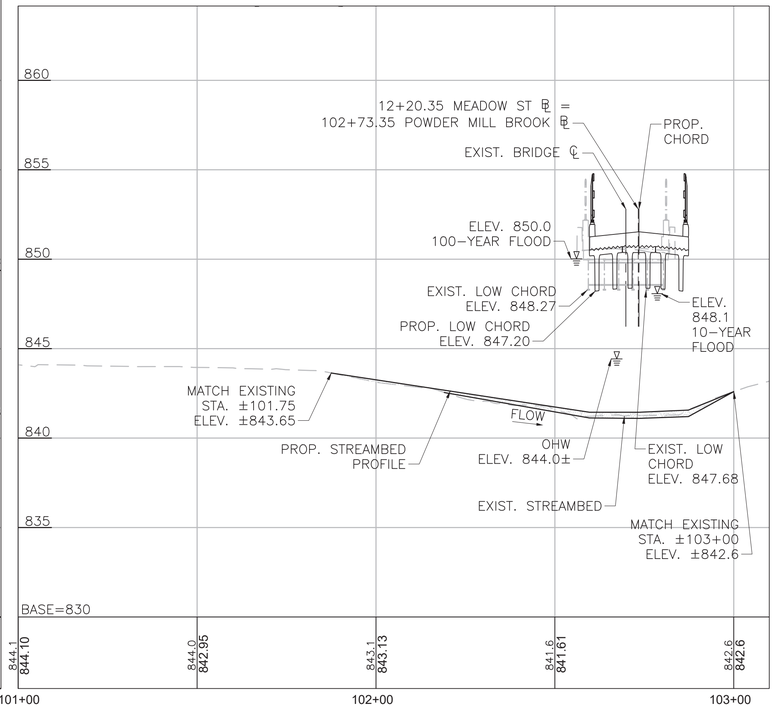
KEY PLAN LOCUS & PROFILES

SHEET INDEX



PROFILE – MEADOW STREET

HOR. 1" = 20', VER. 1" = 4'



PROFILE – POWDER MILL BROOK

HOR. 1" = 20', VER. 1" = 4'

NOTES:

1. EXISTING TEMPORARY BRIDGE IS NOT SHOWN ON PROFILES FOR CLARITY
2. SEE HIGHWAY PLANS FOR ROADWAY AND UTILITY DETAILS

COMMONWEALTH OF MASSACHUSETTS — KEITH T. NELSON — CIVIL — No. 49490 — REGISTERED PROFESSIONAL ENGINEER

Keith T. Nelson Digitally signed by Keith T. Nelson Date: 2025.10.17 13:59:12 -04'00'

GILL ENGINEERING
63 KENDRICK STREET, NEEDHAM, MA 02494

SEP. 13, 2025	ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

PROPOSED BRIDGE

LEE

MEADOW STREET
OVER POWDER MILL BROOK

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

Alexander K. Bardow, P.E.	Carrie Lavallee, P.E.
Digitally signed by Alexander K. Bardow, P.E. Date: 2025.10.17 14:41:41 -04'00'	2025.10.18 11:06:39 -04'00'
STATE BRIDGE ENGINEER	CHIEF ENGINEER

SHEET 1 OF 17 SHEETS BRIDGE NO. L-05-004 (CEB)

607597_BR(TITLE).DWG Plotted on 17-Oct-25 1:05 PM

08-Sept-2025 Final Structural Submittal (SF)

GENERAL NOTES:

DESIGN:
IN ACCORDANCE WITH THE 2020, 9TH EDITION OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS LRFD BRIDGE DESIGN SPECIFICATIONS WITH CURRENT INTERIM SPECIFICATIONS THROUGH 2021, FOR HL-93 LOADING.

MASSDOT BENCH MARK:
BENCH MARK: USGS DISK 2676
N: 2929556.362
E: 177348.962
EL. 850.040

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

EXISTING PLANS:
PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE THROUGH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PLANS AND RECORDS ROOM, 10 PARK PLAZA, BOSTON, MA.

TRAFFIC:
BRIDGE L-05-004 (CEB) SHALL BE CLOSED TO VEHICULAR TRAFFIC DURING ALL PHASES OF CONSTRUCTION. VEHICULAR TRAFFIC WILL FOLLOW A DETOUR IN ACCORDANCE WITH THE APPROVED TRAFFIC MANAGEMENT PLAN.

EXISTING CONDITIONS:
EXISTING DIMENSIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE AND VERIFY ALL PRESENT DIMENSIONS AND DETAILS NECESSARY FOR COMPLETION OF ALL WORK BY FIELD MEASUREMENT AND SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY AND ACCURACY THEREOF, AND SHALL NOT ORDER ANY MATERIAL OR COMMENCE ANY FABRICATION UNTIL HE/SHE HAS MADE THE REQUIRED MEASUREMENTS, AND THE EXTENT OF THE PROPOSED WORK HAS BEEN APPROVED BY THE ENGINEER.

UTILITIES:
THE CONTRACTOR SHALL LOCATE AND PROTECT FROM DAMAGE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE RESPECTIVE UTILITY OWNERS FOR ALL UTILITIES TO BE PERMANENTLY RELOCATED.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE NORTHEAST AND SOUTHWEST 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:
FIELD SURVEY PERFORMED BY WSP ON DECEMBER 2, 2021. 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-SIZE PRINTS.

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 TEMPLATE BEFORE THE CONCRETE IS PLACED.

STRUCTURAL STEEL PILES:
ALL PILES SHALL BE AASHTO M270 GRADE 50.

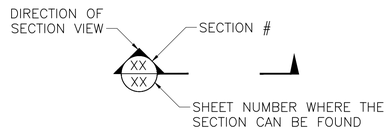
REINFORCEMENT:
REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 GRADE 60. UNLESS OTHERWISE NOTE ON THE CONSTRUCTION DRAWINGS, ALL BARS SHALL BE LAPPED AS FOLLOWS:

MODIFICATION CONDITION	#4 BARS	#5 BARS	#6 BARS
1. NONE	16"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. COATED BARS, COVER < 3db, OR CLEAR SPACING < 6db	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2 AND 3	26"	32"	39"
6. CONDITION 2 AND 4	24"	30"	36"

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

WELDING:
ALL WELDING, AND THE PREPARATION AND ASSEMBLY OF MATERIAL FOR WELDING, SHALL CONFORM TO THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND THE AASHTO/AWS BRIDGE WELDING CODE (ANSI/AASHTO AWS D1.5) AND ALL INTERIM REVISIONS PUBLISHED BY AASHTO AS OF THE BID OPENING DATE.

MEMBRANE WATERPROOFING:
ALL MEMBRANE WATERPROOFING USED ON BRIDGE DECKS SHALL BE MEMBRANE WATERPROOFING FOR BRIDGE DECKS – SPRAY APPLIED.

SECTION MARK:


CONCRETE SCHEDULE:

CONCRETE TYPE	APPLICATION
CAST IN PLACE	
5000 PSI, ¾ IN., 685 HP CEMENT CONCRETE	SAFETY CURBS, APPROACH SLABS, ABUTMENTS, WINGWALLS, DECK SLAB, AND PEDESTALS
PRECAST	
5000 PSI, ¾ IN., 685 HP CEMENT CONCRETE	GUARDRAIL TRANSITIONS

HYDRAULIC NOTES:
1. THE SUBJECT BRIDGE IS LOCATED WITHIN THE NATIONAL FLOOD INSURANCE PROGRAM SPECIAL FLOOD HAZARD AREA A8 DELINEATION. THE LISTED BASE FLOOD ELEVATION IS APPLICABLE TO THAT DELINEATION AT THE PROJECT LOCATION.
2. **NO INFORMATION IN THE MASSDOT NBIS DATABASE.
3. ***THE EXISTING EAST ABUTMENT AND UPSTREAM RETAINING WALL FOOTINGS WERE UNDERMINED DURING THE PASSAGE OF HURRICANE IRENE IN AUGUST 2011.

GEOTECHNICAL REPORT:
REFER TO GEOTECHNICAL REPORT PREPARED BY GILL ENGINEERING FEBRUARY 2023.

ESTIMATED QUANTITIES
NOT GUARANTEED

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
115.1	DEMOLITION OF BRIDGE NO. L-05-004	1	LS
140.	BRIDGE EXCAVATION	762	CY
151.1	GRAVEL BORROW FOR BRIDGE FOUNDATION	236	CY
156.	CRUSHED STONE	45	TON
160.3	CONTROLLED LOW-STRENGTH MATERIAL (>300 PSI)	2	CY
450.60	SUPERPAVE BRIDGE SURFACE COURSE – 9.5 (SSC-B – 9.5)	17	TON
450.70	SUPERPAVE BRIDGE PROTECTIVE COURSE – 9.5 (SPC-B – 9.5)	17	TON
942.124	STEEL PILE HP 12x84	900	FT
948.41	DYNAMIC LOAD TEST BY CONTRACTOR	2	EA
948.5	PILE SHOES	12	EA
991.1	CONTROL OF WATER – STRUCTURE NO. L-05-004	1	LS
995.01	BRIDGE STRUCTURE, BRIDGE NO. L-05-004	1	LS

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	19	50
	PROJECT FILE NO. 607597		

GENERAL NOTES

SEISMIC DESIGN CRITERIA	
DESIGN RETURN PERIOD:	1000
DESIGN SPECTRA	
As	0.230
SDs	0.330
SD1	0.130
SITE CLASS	E
SEISMIC DESIGN CATEGORY (SDC)	A

TRAFFIC DATA	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2020	N/A
AVERAGE DAILY TRAFFIC – PRESENT	1,366	N/A
AVERAGE DAILY TRAFFIC – DESIGN YEAR	N/A	N/A
DESIGN HOURLY VOLUME	N/A	N/A
DIRECTIONAL DISTRIBUTION	N/A	N/A
TRUCK PERCENTAGE – AVERAGE DAY	5%	N/A
TRUCK PERCENTAGE – PEAK HOUR	N/A	N/A
DESIGN SPEED	35 MPH	N/A
DIRECTIONAL DESIGN HOURLY VOLUME	N/A	N/A

HYDRAULIC DESIGN DATA	
DRAINAGE AREA (SQ. MILES)	8.82
DESIGN FLOOD DISCHARGE (C.F.S.)	1040
DESIGN FLOOD FREQUENCY (YEARS)	10
DESIGN FLOOD VELOCITY (F.P.S.)	6.22
DESIGN FLOOD ELEVATION (FEET, NAVD)	848.1
BASE (100-YEAR) FLOOD DATA	
BASE FLOOD DISCHARGE (C.F.S.)	2220
BASE FLOOD ELEVATION (FEET, NAVD)	850.0
DESIGN AND CHECK SCOUR DATA	
DESIGN SCOUR FLOOD EVENT RETURN FREQUENCY (YEARS)	25
DESIGN FLOOD ABUTMENT SCOUR DEPTH (FEET)	1.22
DESIGN FLOOD PIER SCOUR DEPTH (FEET)	N/A
CHECK SCOUR FLOOD EVENT RETURN FREQUENCY (YEARS)	50
CHECK FLOOD ABUTMENT SCOUR DEPTH (FEET)	1.09
CHECK FLOOD PIER SCOUR DEPTH (FEET)	N/A
FLOOD OF RECORD	
DISCHARGE (C.F.S.)	UNKNOWN
FREQUENCY (IF KNOWN, YEARS)	UNKNOWN
MAXIMUM ELEVATION (FEET, NAVD)	UNKNOWN
DATE (MM/YYYY)	09/1938
HISTORY OF ICE FLOES	NO**
EVIDENCE OF SCOUR AND EROSION	YES***

TEMPORARY WATER CONTROL DESIGN DATA	
DESIGN FLOOD DISCHARGE (C.F.S.)	446
DESIGN FLOOD FREQUENCY (YEARS)	2
DESIGN FLOOD VELOCITY (F.P.S.)	2.64
DESIGN FLOOD ELEVATION (FEET, NAVD)	846.3

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
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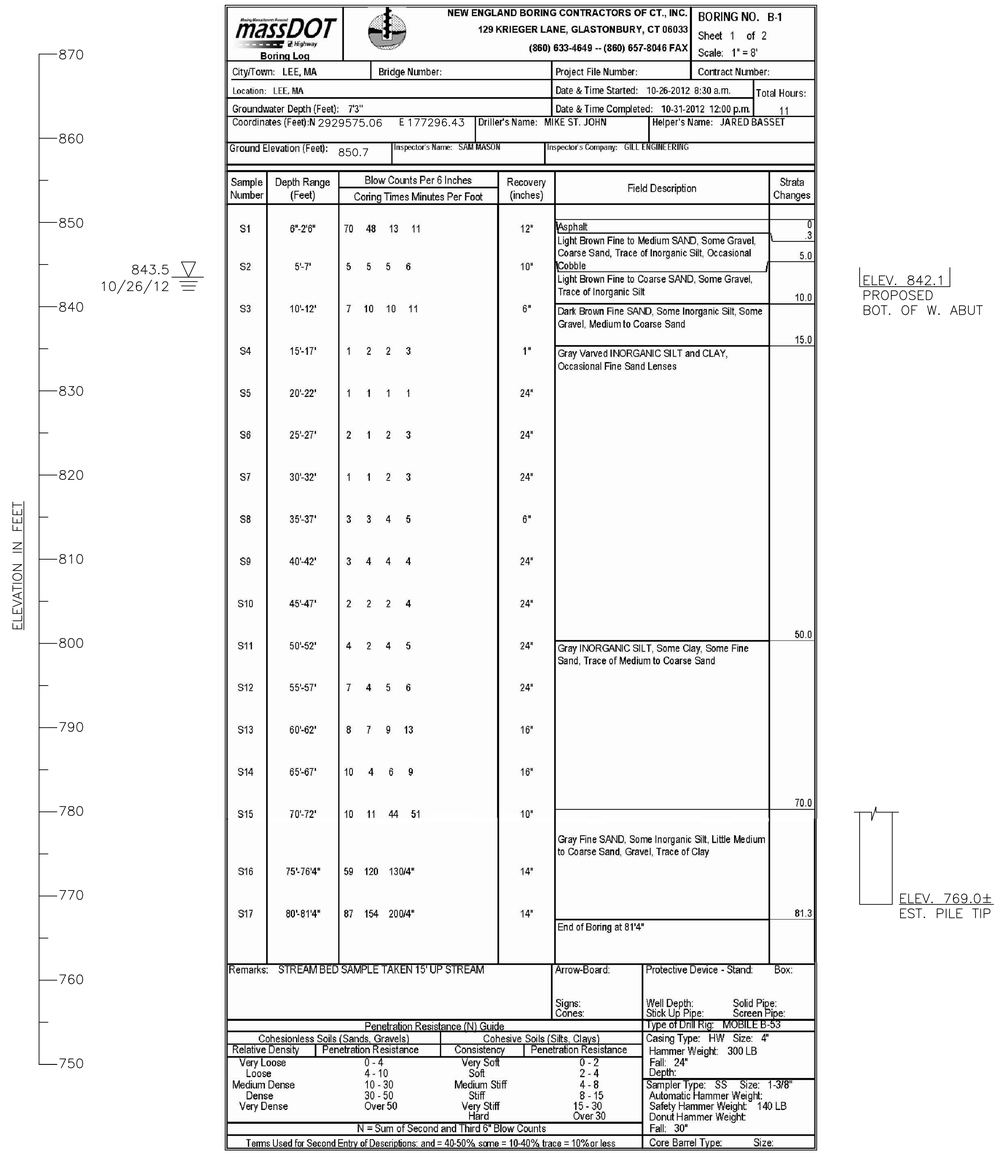

massDOT — Highway
Boring Log

NEW ENGLAND BORING CONTRACTORS OF CT., INC.
129 KRIEGER LANE, GLASTONBURY, CT 06033
(860) 633-4649 -- (860) 657-8046 FAX

BORING NO. B-1
Sheet 1 of 2
Scale: 1" = 8'

City/Town: LEE, MA	Bridge Number:	Project File Number:	Contract Number:
Location: LEE, MA		Date & Time Started: 10-26-2012 8:30 a.m.	Total Hours:
Groundwater Depth (Feet): 7'3"		Date & Time Completed: 10-31-2012 12:00 p.m.	11
Coordinates (Feet):N 2929575.06	E 177296.43	Driller's Name: MIKE ST. JOHN	Helper's Name: JARED BASSET
Ground Elevation (Feet): 850.7	Inspector's Name: SAM MASON	Inspector's Company: GILL ENGINEERING	

Sample Number	Depth Range (Feet)	Blow Counts Per 6 Inches / Coring Times Minutes Per Foot	Recovery (inches)	Field Description	Strata Changes
				Asphalt	0
S1	6"-2'6"	70 48 13 11	12"	Light Brown Fine to Medium SAND, Some Gravel, Coarse Sand, Trace of Inorganic Silt, Occasional Cobble	3 5.0
S2	5'-7"	5 5 5 6	10"	Light Brown Fine to Coarse SAND, Some Gravel, Trace of Inorganic Silt	10.0
S3	10'-12"	7 10 10 11	6"	Dark Brown Fine SAND, Some Inorganic Silt, Some Gravel, Medium to Coarse Sand	15.0
S4	15'-17"	1 2 2 3	1"	Gray Varved INORGANIC SILT and CLAY, Occasional Fine Sand Lenses	
S5	20'-22"	1 1 1 1	24"		
S6	25'-27"	2 1 2 3	24"		
S7	30'-32"	1 1 2 3	24"		
S8	35'-37"	3 3 4 5	6"		
S9	40'-42"	3 4 4 4	24"		
S10	45'-47"	2 2 2 4	24"		50.0
S11	50'-52"	4 2 4 5	24"	Gray INORGANIC SILT, Some Clay, Some Fine Sand, Trace of Medium to Coarse Sand	
S12	55'-57"	7 4 5 6	24"		
S13	60'-62"	8 7 9 13	16"		
S14	65'-67"	10 4 6 9	16"		
S15	70'-72"	10 11 44 51	10"		70.0
S16	75'-76'4"	59 120 130/4"	14"	Gray Fine SAND, Some Inorganic Silt, Little Medium to Coarse Sand, Gravel, Trace of Clay	
S17	80'-81'4"	87 154 200/4"	14"		81.3
				End of Boring at 81'4"	

Remarks: STREAM BED SAMPLE TAKEN 15' UP STREAM

Arrow-Board:
Signs:
Cones:

Protective Device - Stand: Box:
Well Depth: Solid Pipe:
Stick Up Pipe: Screen Pipe:

Penetration Resistance (N) Guide

Cohesionless Soils (Sands, Gravels)		Cohesive Soils (Silts, Clays)	
Relative Density	Penetration Resistance	Consistency	Penetration Resistance
Very Loose	0 - 4	Very Soft	0 - 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

N = Sum of Second and Third 6" Blow Counts

Terms Used for Second Entry of Descriptions: and = 40-50% some = 10-40% trace = 10% or less

Type of Drill Rig: MOBILE B-53
Casing Type: HW Size: 4"
Hammer Weight: 300 LB
Fall: 24"
Depth:
Sampler Type: SS Size: 1-3/8"
Automatic Hammer Weight:
Safety Hammer Weight: 140 LB
Donut Hammer Weight:
Fall: 30"
Core Barrel Type: Size:

ELEV. 842.1
PROPOSED
BOT. OF W. ABUT

ELEV. 769.0±
EST. PILE TIP

NOTES:

1. LOCATION OF BORINGS SHOWN ON THE PLAN THUS: B–1
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 1⅜" I.D. SPLIT SPOON SAMPLER 6" USING A 140 POUND WEIGHT FALLING 30".
5. BORING 1 AND 2 SAMPLES ARE NOT AVAILABLE.
6. BORINGS 1 AND 2 WERE MADE IN OCTOBER 2012.
7. BORING 3 WAS MADE IN JANUARY 2023.
8. BORING 3 SAMPLES ARE STORED AT A STORAGE FACILITY LOCATED ON ROUTE 114 (219 WINTHROP AVE.) IN LAWRENCE, MA. THE CONTRACTOR MAY EXAMINE THE SOIL SAMPLES BY CONTACTING THE MASSDOT GEOTECHNICAL SECTION AT 10 PARK PLAZA, BOSTON, MA.
9. BORINGS WERE MADE BY NEW ENGLAND BORING CONTRACTORS OF CT, INC. OF GLASTONBURY, CT.
10. THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS USED THROUGHOUT.

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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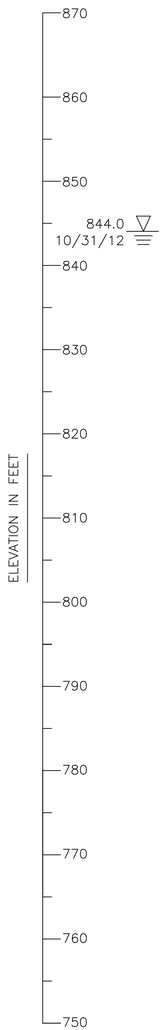


massDOT Highway Division — Boring Log

NEW ENGLAND BORING CONTRACTORS OF CT., INC.
129 KRIEGER LANE, GLASTONBURY, CT 06033
(860) 633-4649 -- (860) 657-8046 FAX

BORING NO. B-2
Sheet 1 of 2
Scale: 1" = 8'

City/Town: LEE, MA	Bridge Number:	Project File Number:	Contract Number:
Location: LEE, MA		Date & Time Started: 10-31-2012 1:00 p.m.	Total Hours: 8
Groundwater Depth (Feet): 6' at 1:00 p.m. on 11/1/2012		Date & Time Completed: 11-1-2012 1:30 p.m.	
Coordinates (Feet):N 2929541.70 E177349.72		Driller's Name: MKE ST. JOHN	Helper's Name: JARED BASSET
Ground Elevation (Feet): 850.0	Inspector's Name: SAM MASON	Inspector's Company: GILL ENGINEERING	

Sample Number	Depth Range (Feet)	Blow Counts Per 6 Inches / Coring Times Minutes Per Foot	Recovery (inches)	Field Description	Strata Changes
S1	6"-2'6"	14 9 6 8	9"	Asphalt	0
				Light Brown Fine to Medium SAND, Some Fine Gravel, Coarse Sand, Trace of Inorganic Silt, Occasional Cobbles, Boulders	3
S2	5'-7'	8 6 6 9	6"		
S3	10'-12'	5 3 2 1	10"		
S4	15'-17'	3 1 5 3	20"		15.0
				Gray Varved INORGANIC SILT and CLAY	
S5	20'-22'	1 2 1 3	24"		
S6	25'-27'	2 2 2 2	24"		
S7	30'-32'	3 3 3 5	24"		
S8	35'-37'	2 2 4 4	24"		
S9	40'-42'	2 1 2 3	24"		
S10	45'-47'	2 2 3 3	24"		
S11	50'-52'	3 4 4 7	24"		
					55.0
S12	55'-57'	10 9 10 9	16"	Gray INORGANIC SILT, Some Clay, Some Fine Sand, Trace of Fine Gravel	
					60.0
S13	60'-62'	11 11 14 13	15"	Gray Fine SAND, Some Inorganic Silt, Fine to Coarse Gravel, Cobbles - Till	
S14	65'-67'	35 25 12 12	6"		
S15	70'-72'	22 39 38 50	10"		
S16	75'-75'3"	130/3"	1"		
					80.4
S17	80'-80'5"	130/5"	3"	End of Boring at 80'5"	

Remarks: STREAM BED SAMPLE TAKEN 15' UP STREAM

Arrow-Board:
Signs:
Cones:

Protective Device - Stand: Box:
Well Depth: Solid Pipe:
Stick Up Pipe: Screen Pipe:

Type of Drill Rig: MOBILE B-53
Casing Type: HW Size: 4"
Hammer Weight: 300 LB
Fall: 24"
Depth:
Sampler Type: SS Size: 1-3/8"
Automatic Hammer Weight:
Safety Hammer Weight: 140 LB
Donut Hammer Weight:
Fall: 30"
Core Barrel Type: Size:

Penetration Resistance (N) Guide

Cohesionless Soils (Sands, Gravels)		Cohesive Soils (Silts, Clays)	
Relative Density	Penetration Resistance	Consistency	Penetration Resistance
Very Loose	0 - 4	Very Soft	0 - 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

N = Sum of Second and Third 6" Blow Counts

Terms Used for Second Entry of Descriptions: and = 40-50%, some = 10-40%, trace = 10%or less

GILL ENGINEERING

Gill Engineering Associates, Inc.
63 Kendrick Street
Needham, MA 02494

Boring No. B-3
Page 1 of 1

City/Town: Lee, MA	Bridge Number: L-05-004	Project File Number:	Contract Number:
Location: Meadow St. over Powder Mill Brook		Date & Time Started: 1/26/23 9:45am	Total Hours: 11
Groundwater Depth (Feet):	Date & Time: 1/26/23	Date & Time Completed: 1/27/23 3:30pm	
Coordinates: N2929531.77, E177363.91		Driller's Company & Name: NEBC, Rick Posa & Chris Sicatti	
Ground Elevation (Feet): 852.6		Gill Representative: Lily Spicer	

Depth (Feet)	Sample Number	Depth Range (Feet)	Blow Counts per 6 Inches / Coring Times Minutes per Foot	Recovery (inches)	Field Description	Strata Changes
-	S-1	50' – 52'	1/WOH18"	24"	Wet, very soft, greenish gray, CLAY	
-						
-						
-						
55	S-2	55' – 57'	1/WOH24"	9"	Wet, very soft, greenish gray, CLAY	
-						
-						58.0
-						
-						
60	S-3	60' – 62'	4 – 7 – 9 – 8	15"	Moist, very stiff, light gray, INORGANIC SILT and CLAY, some fine to medium sand, trace of gravel	
-						
-						
-						
65	S-4	65' – 67'	3 – 3 – 6 – 7	12"	Moist, stiff, light gray, INORGANIC SILT, trace fine sand	
-						
-						
-						
70	S-5	70' – 72'	9 – 9 – 9 – 6	9"	Moist, very stiff, light gray, INORGANIC SILT, some sand, trace fine sand	
-						
-						
-						73.0
75	S-6	75' – 75' 7"	74 – 50/1"	9"	Moist, very dense, olive gray, GRAVEL and COARSE SAND, some fine sand, trace of clay	
-						
-						
-						
80	S-7	80' – 80' 2"	100/2"	1"	Moist, very dense, olive gray, COARSE SAND, some gravel, some fine sand, trace of clay	
-						
-						
-						
85	S-8	85' – 85'	100/0"	0"	Boulders encountered; no sample recovered	
-						
-						
-						
90	S-9	90' – 90' 10"	53 – 100/4"	6"	Dry, very dense, olive gray and yellowish orange, COARSE SAND, some gravel, some fine sand, trace fines	
-						
-						
-						
95	S-10	95' – 95' 5"	100/5"	2"	Dry, very dense, olive gray, COARSE SAND, and GRAVEL, some fine sand, trace fines	
-						
-						
-						100.0
100	S-11	100' – 102'	38 – 58 – 72 – 67	14"	Dry, light gray, hard and very dense, SILT and COARSE SAND, some gravel, some fine sand	
-						
-					End of Boring at 102'	
-						
105						
-						
-						
-						
110						

Remarks:

Arrow-Board:
Signs:
Cones:

Protective Device – Stand: Box:
Well Depth: Solid Pipe:
Stick Up Pipe: Screen Pipe:

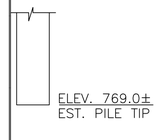
Type of Drill Rig: Mobile B-53
Casing Type: Flush Mount Size: 4"
Hammer Weight: 140 lb
Fall: 30"
Depth:
Sampler Type: Size: 2"
Automatic Hammer Weight: 140 lb
Safety Hammer Weight:
Donut Hammer Weight:
Fall: 30"
Core Barrel Type: Size:

Penetration Resistance (N) Guide

Cohesionless Soils (Sands, Gravels)		Cohesive Soils (Silts, Clays)	
Relative Density	Penetration Resistance	Consistency	Penetration Resistance
Very Loose	0 – 4	Very Soft	0 – 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

N = Sum of Second and Third 6" Blow counts

Terms Used for Second Entry of Descriptions: and = 40-50%, some = 10-40%, trace = 10% or less



*B–3 GROUNDWATER DEPTH NOT RECORDED.

DATE	DESCRIPTION
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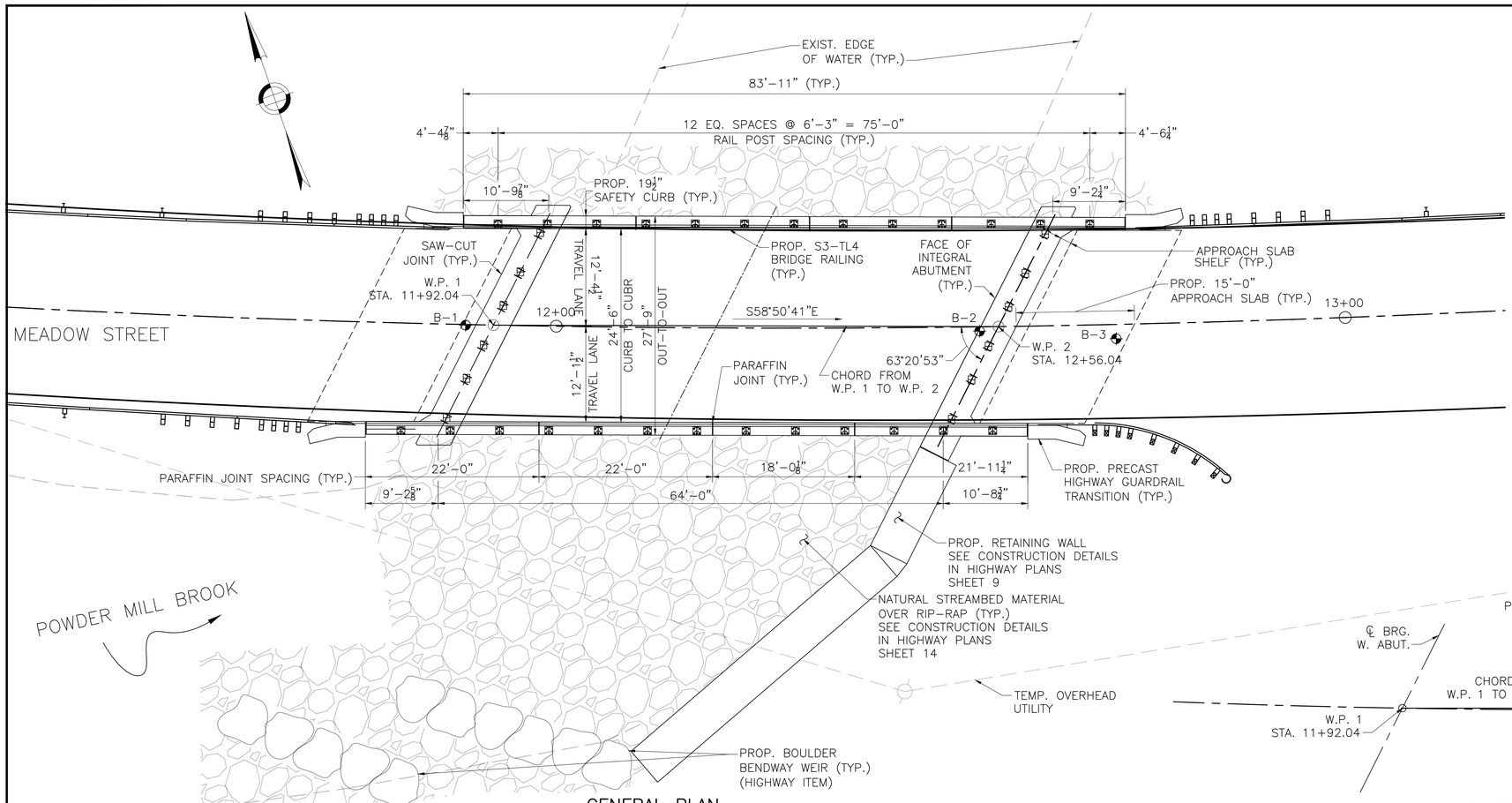
LEE
MEADOW STREET

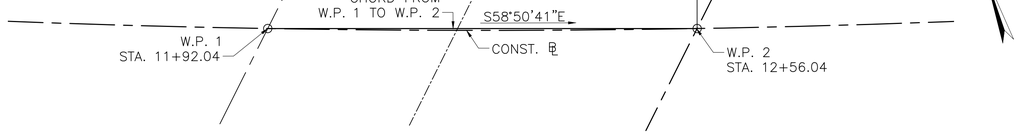
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	22	50
PROJECT FILE NO.	607597		

GENERAL PLAN AND ELEVATION



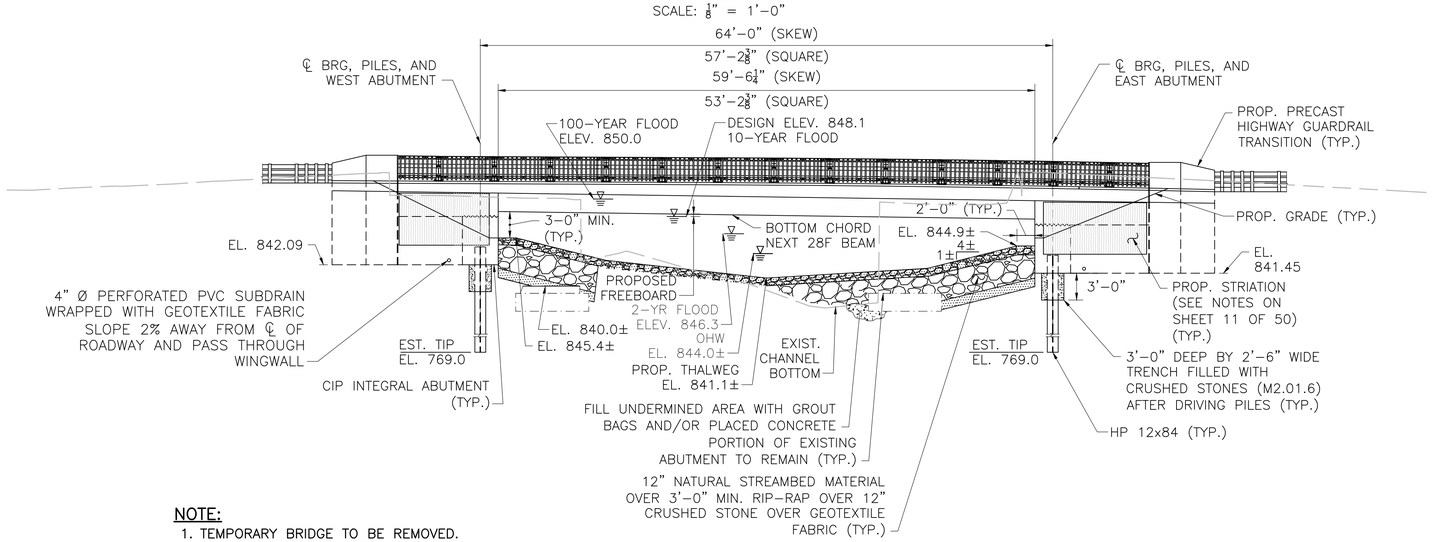
GENERAL PLAN

SCALE: 1/8" = 1'-0"



CONSTRUCTION GEOMETRY

SCALE: 3/32" = 1'-0"



SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

NOTE:

1. TEMPORARY BRIDGE TO BE REMOVED. NOT SHOWN FOR CLARITY.
2. FOR LIMITS OF GRAVEL BORROW SEE SHEET 7.

NOTE:

COORDINATE WITH MASSDOT SURVEY FOR REMOVAL OF USGS BENCHMARK DISK TT 15 TDA ON EXISTING NORTHEAST WINGWALL AND LOCATE THE DISK ON THE NEW NORTHEAST WINGWALL.

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
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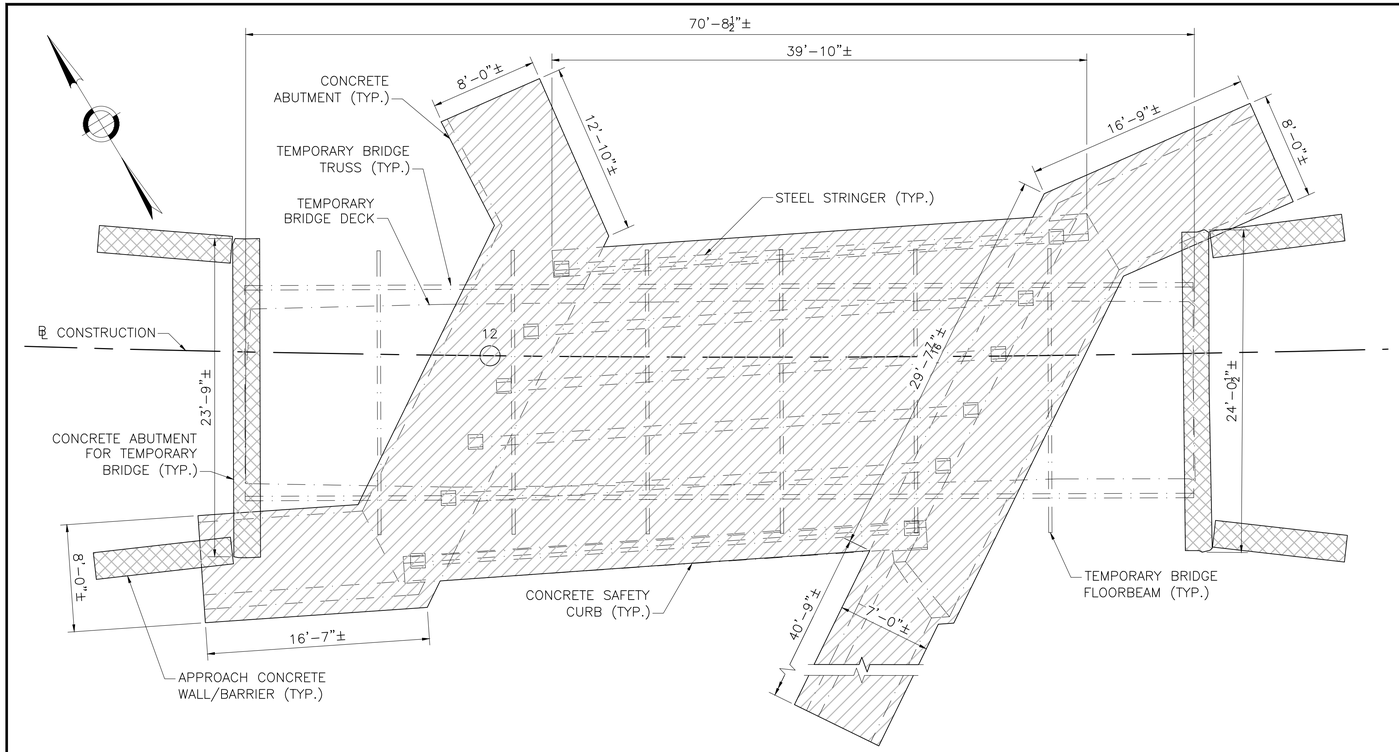
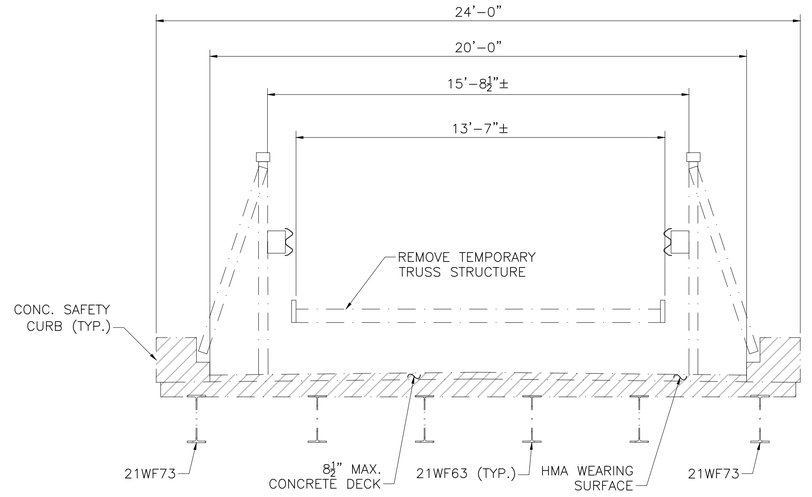
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	23	50
PROJECT FILE NO.	607597		

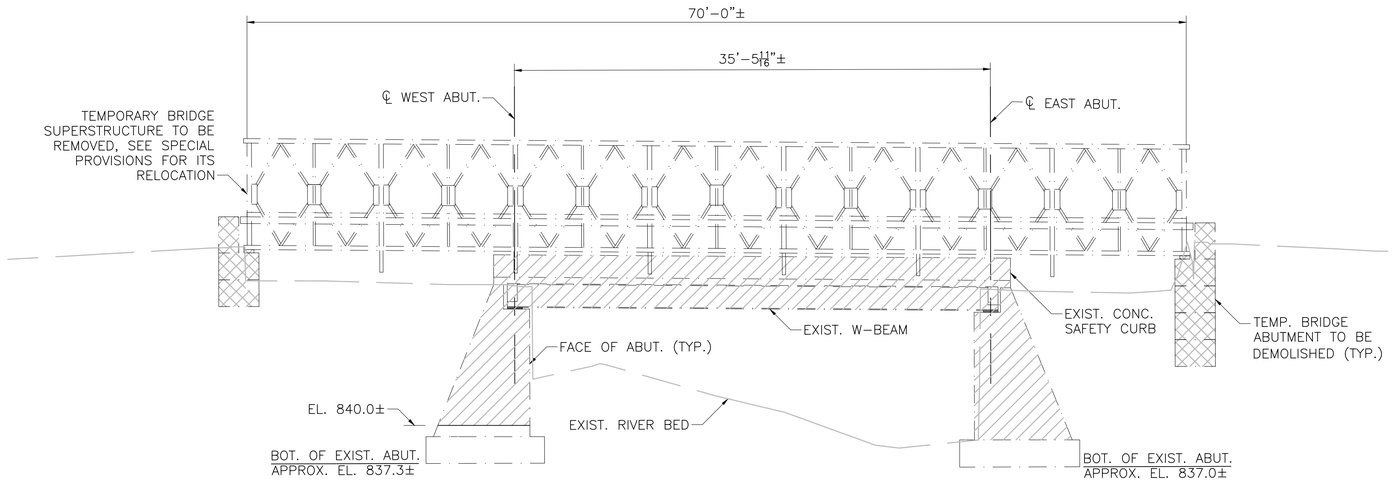
DEMOLITION PLAN



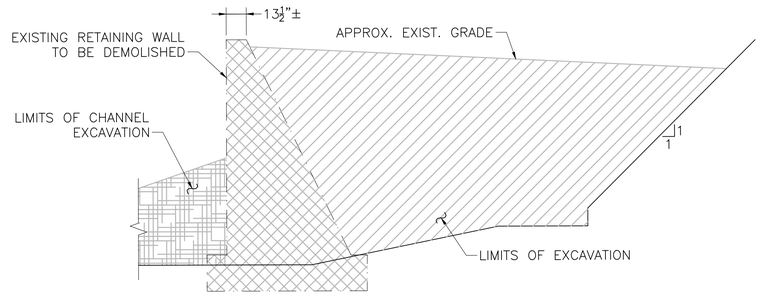
DEMOLITION PLAN
SCALE: 3/16" = 1'–0"



DEMOLITION – EXISTING BRIDGE TRANSVERSE SECTION
SCALE: 3/8" = 1'–0"



DEMOLITION – EXISTING BRIDGE SECTION
SCALE: 3/16" = 1'–0"



WALL DEMOLITION AND EXCAVATION SECTION
SCALE: 1/4" = 1'–0"

DEMOLITION NOTES

1. EXISTING BRIDGE STRUCTURES SHOWN ARE PER RECORD PLANS AND SURVEY.
2. TEMPORARY TRUSS STRUCTURE TO BE REMOVED CAREFULLY WITHOUT DAMAGE.
3. SEE SHEET 7 FOR STAGE DEMOLITION DETAILS.

DEMOLITION LEGEND

- LIMITS OF DEMOLITION OF EXISTING BRIDGE
- LIMITS OF DEMOLITION OF TEMPORARY BRIDGE ABUTMENTS

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
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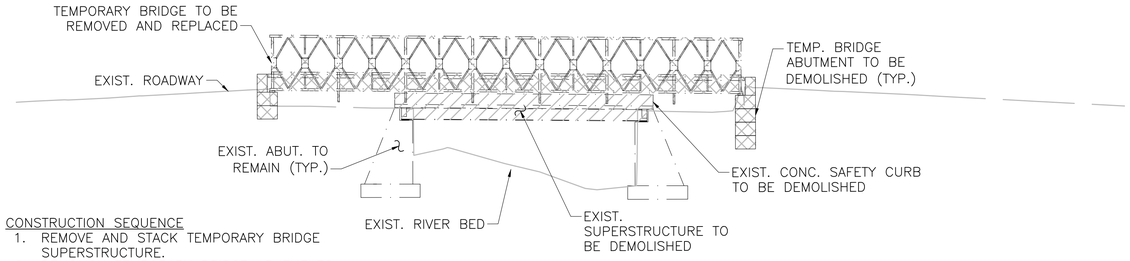
USE ONLY PRINTS OF LATEST DATE	

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	24	50
	PROJECT FILE NO. 607597		

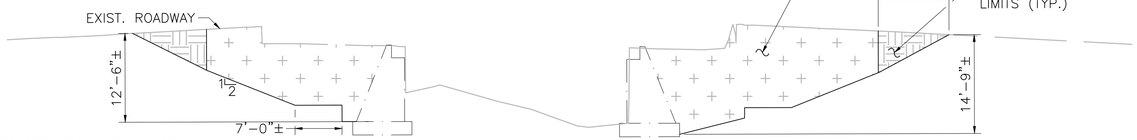
WATER CONTROL PLAN



CONSTRUCTION SEQUENCE
1. REMOVE AND STACK TEMPORARY BRIDGE SUPERSTRUCTURE.
2. DEMOLISH TEMPORARY BRIDGE ABUTMENTS.
3. DEMOLISH EXISTING SUPERSTRUCTURE.

STAGE 1 – DEMOLITION

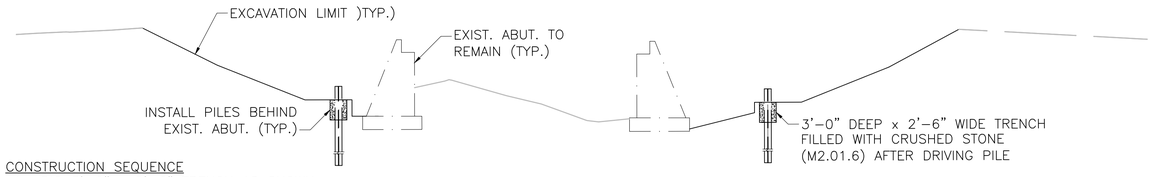
SCALE: $\frac{3}{32}$" = 1'–0"



CONSTRUCTION SEQUENCE
1. EXCAVATE TO LIMITS SHOWN. EXCAVATED MATERIAL MAY BE USED FOR BACKFILLING IF IT MEETS THE SPECIFICATIONS FOR M1.03.0, TYPE A.

STAGE 2 – EXCAVATION

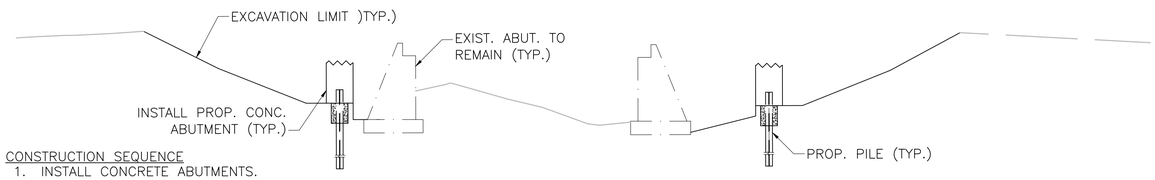
SCALE: $\frac{3}{32}$" = 1'–0"



CONSTRUCTION SEQUENCE
1. DIG 3'–0" x 2'–6" TRENCH AS SHOWN.
2. INSTALL PILES.
3. FILL TRENCH WITH CRUSHED STONE.

STAGE 3 – PILE INSTALLATION

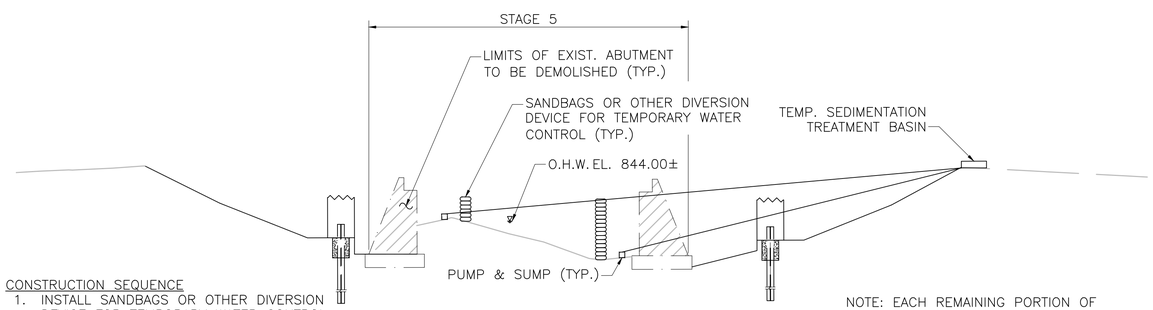
SCALE: $\frac{3}{32}$" = 1'–0"



CONSTRUCTION SEQUENCE
1. INSTALL CONCRETE ABUTMENTS.

STAGE 4 – ABUTMENT INSTALLATION

SCALE: $\frac{3}{32}$" = 1'–0"

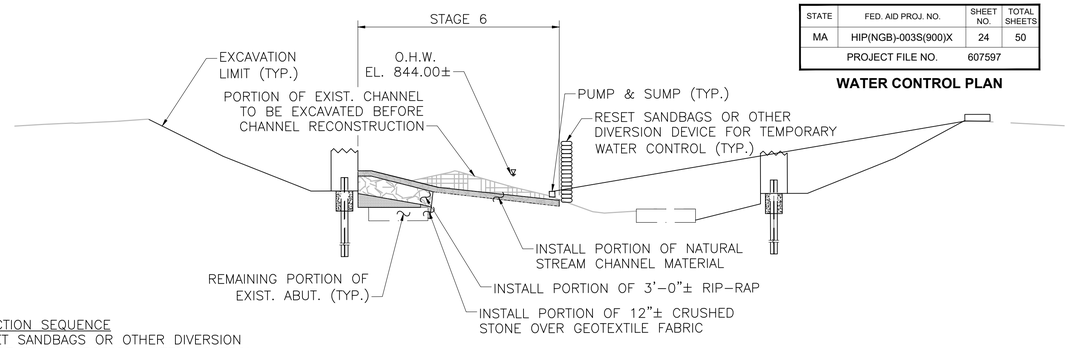


CONSTRUCTION SEQUENCE
1. INSTALL SANDBAGS OR OTHER DIVERSION DEVICE FOR TEMPORARY WATER CONTROL.
2. DEWATER AS NECESSARY.
3. DEMOLISH EXISTING ABUTMENTS TO LIMITS SHOWN.

NOTE: EACH REMAINING PORTION OF ABUTMENT DEMOLITION MAY BE DONE WITH EACH PHASE OF CHANNEL RECONSTRUCTION.

STAGE 5 – REMAINING DEMOLITION

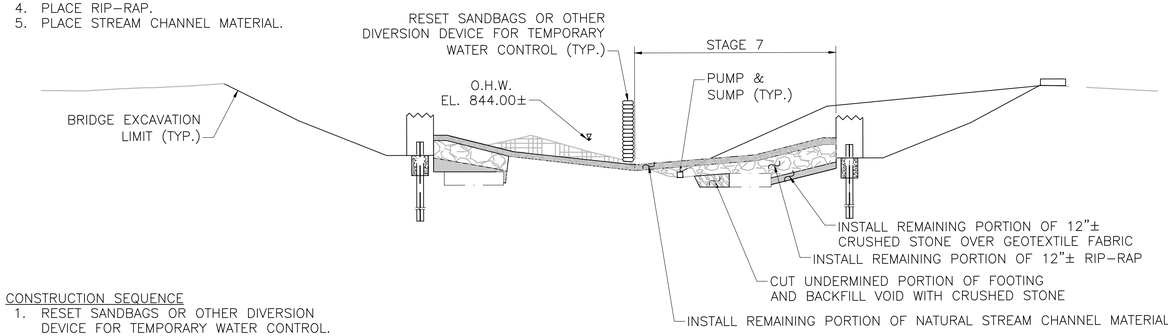
SCALE: $\frac{3}{32}$" = 1'–0"



CONSTRUCTION SEQUENCE
1. RESET SANDBAGS OR OTHER DIVERSION DEVICE FOR TEMPORARY WATER CONTROL.
2. DEWATER AS NECESSARY.
3. EXCAVATE CHANNEL AND PLACE CRUSHED STONE OVER GEOTEXTILE FABRIC TO LIMITS SHOWN.
4. PLACE RIP–RAP.
5. PLACE STREAM CHANNEL MATERIAL.

STAGE 6 – CHANNEL RECONSTRUCTION PHASE 1

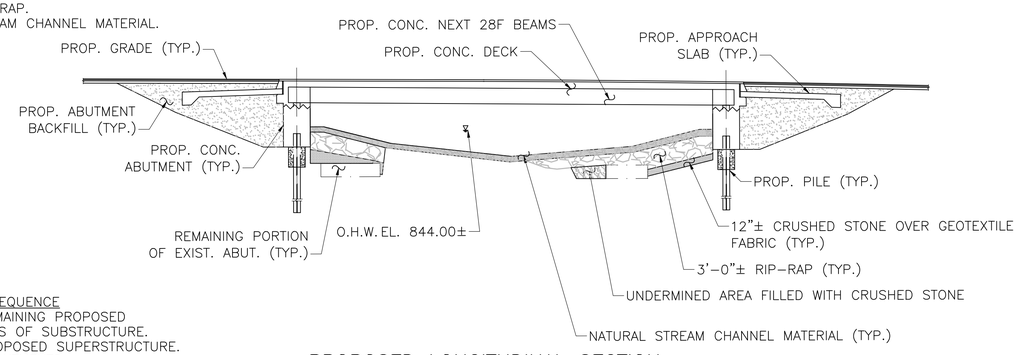
SCALE: $\frac{3}{32}$" = 1'–0"



CONSTRUCTION SEQUENCE
1. RESET SANDBAGS OR OTHER DIVERSION DEVICE FOR TEMPORARY WATER CONTROL.
2. DEWATER AS NECESSARY.
3. CUT UNDERMINED PORTION OF EXISTING FOOTING.
4. EXCAVATE CHANNEL AND PLACE CRUSHED STONE OVER GEOTEXTILE FABRIC. TO LIMITS SHOWN.
5. PLACE RIP–RAP.
6. PLACE STREAM CHANNEL MATERIAL.

STAGE 7 – CHANNEL RECONSTRUCTION PHASE 2

SCALE: $\frac{3}{32}$" = 1'–0"



CONSTRUCTION SEQUENCE
1. INSTALL REMAINING PROPOSED COMPONENTS OF SUBSTRUCTURE.
2. INSTALL PROPOSED SUPERSTRUCTURE.
3. BACKFILL ABUTMENTS.
4. PLACE HMA PAVEMENT.

PROPOSED LONGITUDINAL SECTION

SCALE: $\frac{3}{32}$" = 1'–0"

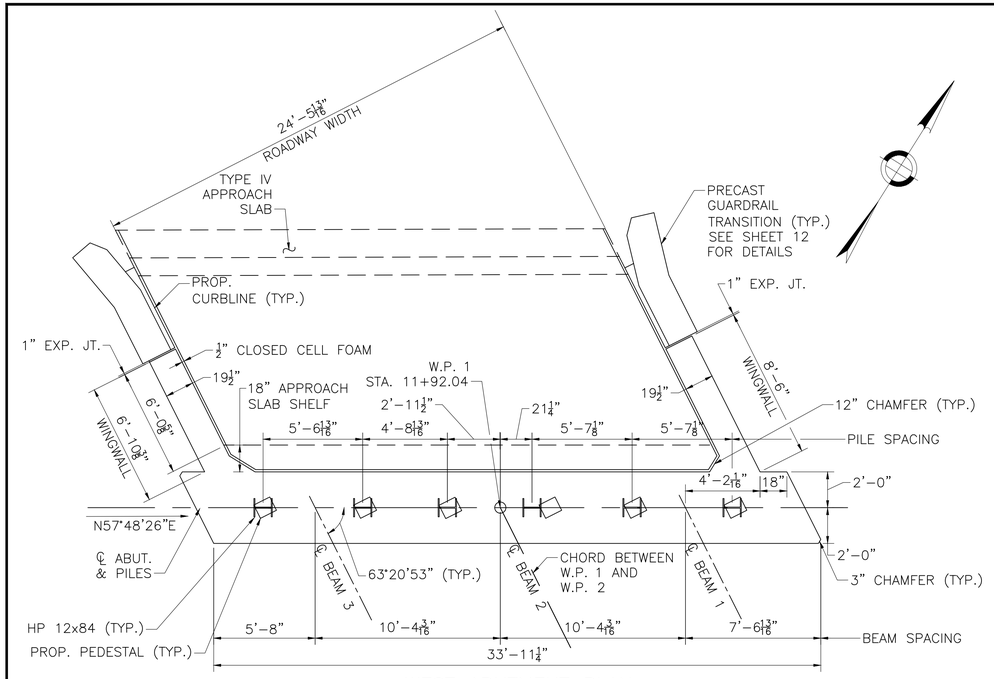
CONTROL OF WATER NOTES
1. SEE CONTROL OF WATER – STRUCTURE L–05–004 SPECIAL PROVISIONS FOR PROPER MEASURES IN DEWATERING STREAM.

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT AUTHORIZED SIGNATORY:	STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE	

LEE
MEADOW STREET

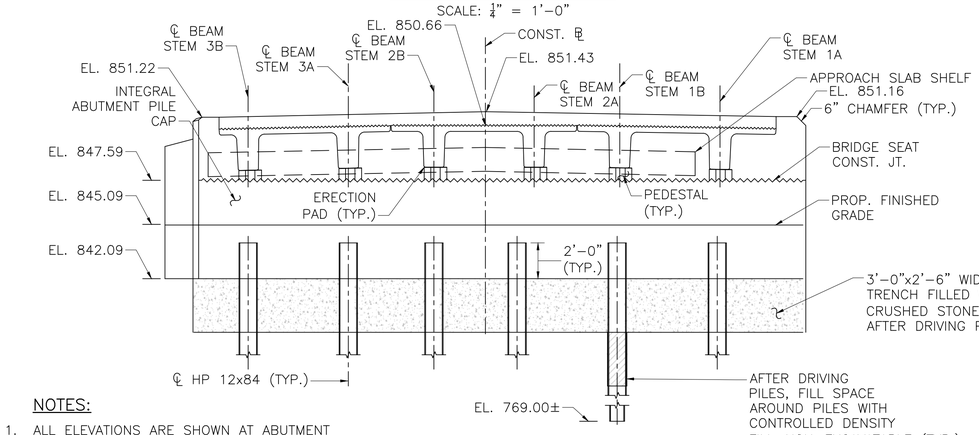
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	25	50
	PROJECT FILE NO. 607597		

ABUTMENT PLAN AND ELEVATIONS



WEST ABUTMENT PLAN

SCALE: 1/4" = 1'-0"

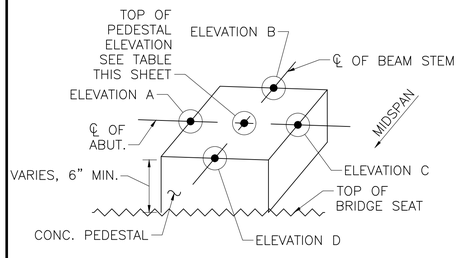


WEST ABUTMENT ELEVATION

SCALE: 1/4" = 1'-0"

NOTES:

1. ALL ELEVATIONS ARE SHOWN AT ABUTMENT CENTERLINE
2. DETAILS ABOVE DECK LEVEL AND WINGWALLS OMITTED FOR CLARITY



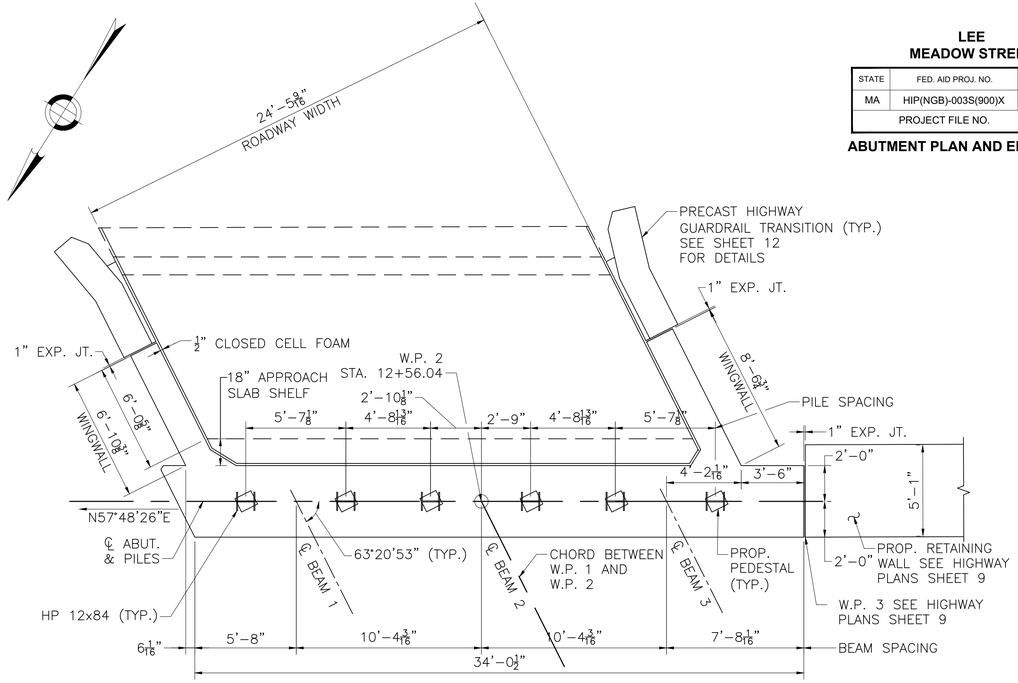
ADDITIONAL PEDESTAL ELEVATIONS

NOT TO SCALE

ADDITIONAL PEDESTAL ELEVATIONS – WEST ABUTMENT				
BEAM	ELEV. A	ELEV. B	ELEV. C	ELEV. D
BEAM 1A	848.10	848.09	848.08	848.10
BEAM 1B	848.20	848.18	848.18	848.19
BEAM 2A	848.27	848.27	848.27	848.28
BEAM 2B	848.28	848.28	848.28	848.29
BEAM 3A	848.18	848.19	848.20	848.20
BEAM 3B	848.08	848.09	848.10	848.10

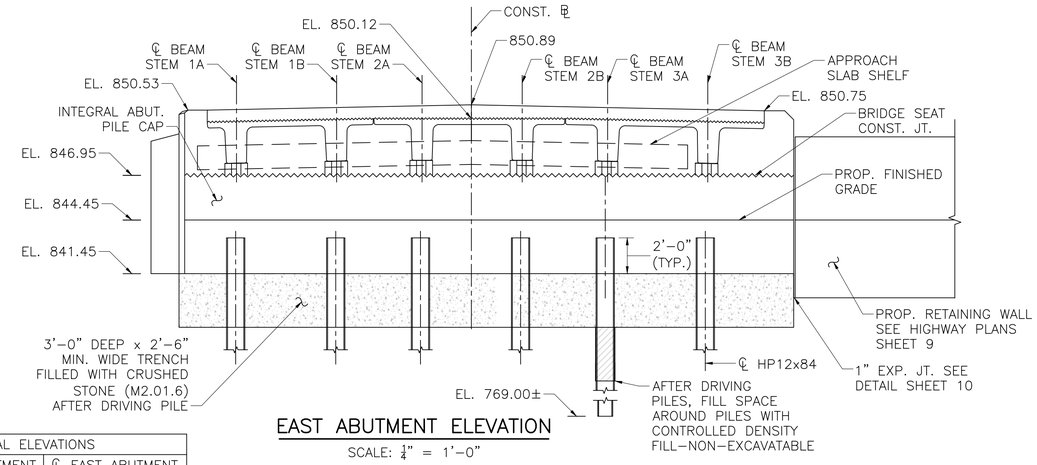
ADDITIONAL PEDESTAL ELEVATIONS – EAST ABUTMENT				
BEAM	ELEV. A	ELEV. B	ELEV. C	ELEV. D
BEAM 1A	847.44	847.45	847.46	847.46
BEAM 1B	847.59	847.60	847.61	847.61
BEAM 2A	847.71	847.71	847.71	847.72
BEAM 2B	847.76	847.76	847.76	847.77
BEAM 3A	847.71	847.70	847.69	847.71
BEAM 3B	847.64	847.63	847.62	847.63

NOTE: ELEVATIONS DO NOT INCLUDE ERECTION PAD THICKNESS



EAST ABUTMENT PLAN

SCALE: 1/4" = 1'-0"



EAST ABUTMENT ELEVATION

SCALE: 1/4" = 1'-0"

TOP OF PEDESTAL ELEVATIONS		
BEAM	℄ WEST ABUTMENT	℄ EAST ABUTMENT
BEAM 1A	848.09	847.45
BEAM 1B	848.19	847.60
BEAM 2A	848.27	847.71
BEAM 2B	848.28	847.76
BEAM 3A	848.19	847.70
BEAM 3B	848.09	847.63

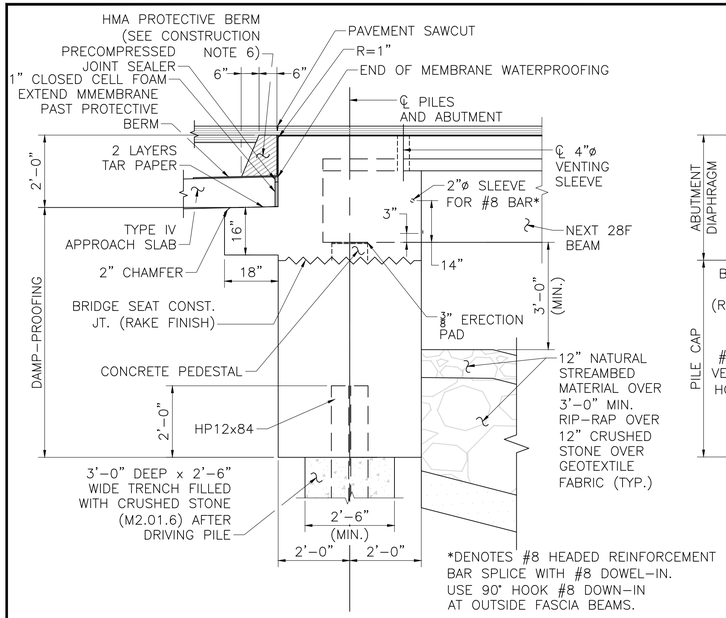
NOTE: THE ABOVE TOP OF PEDESTAL ELEVATIONS WERE CALCULATED ASSUMING AN ERECTION CAMBER OF 3/4". ACTUAL ERECTION CAMBER MAY DIFFER. MEASURE CAMBER IMMEDIATELY PRIOR TO BEAM INSTALLATION AND ADJUST ELEVATIONS SHOWN IN TABLE ACCORDINGLY.

IF THE MEASURED CAMBER IS LARGER THAN THE PREDICATED CAMBER, SUBTRACT THE DIFFERENCE BETWEEN THE CAMBERS FROM THE TOP OF PEDESTAL ELEVATIONS TO OBTAIN THE NEW PEDESTAL ELEVATION.

IF THE MEASURED CAMBER IS SMALLER THAN THE PREDICATED CAMBER, ADD THE DIFFERENCE BETWEEN THE CAMBERS TO THE TOP OF PEDESTAL ELEVATIONS TO OBTAIN THE NEW PEDESTAL ELEVATION.

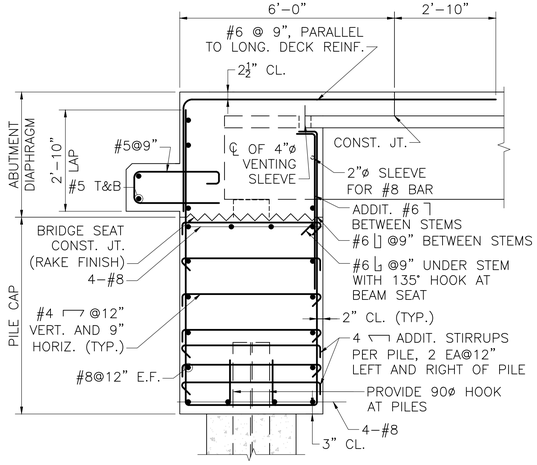
SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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



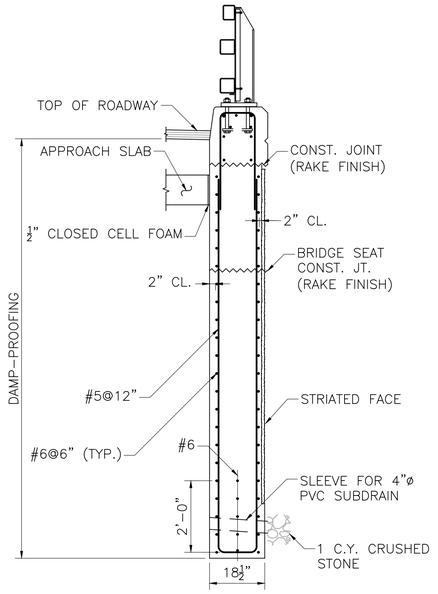
ABUTMENT SECTION

SCALE: 1/2" = 1'-0"



ABUTMENT REINFORCEMENT

SCALE: 1/2" = 1'-0"



SECTION 1

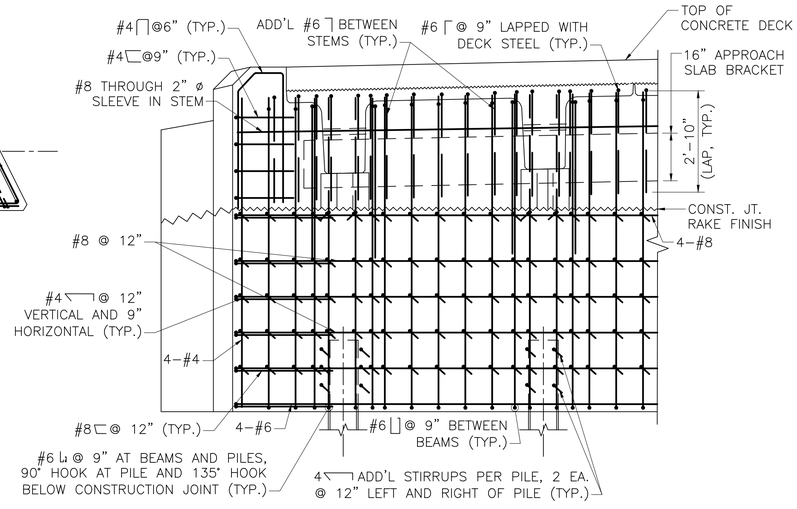
SCALE: 1/2" = 1'-0"

ABUTMENT HORIZONTAL SECTION THRU PILE CAP

SCALE: 3/8" = 1'-0"

ABUTMENT HORIZONTAL SECTION THRU DIAPHRAGM

SCALE: 3/8" = 1'-0"



ABUTMENT VERTICAL SECTION

SCALE: 3/8" = 1'-0"

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	26	50
	PROJECT FILE NO. 607597		

ABUTMENT DETAILS 1 OF 2

INTEGRAL ABUTMENT PILE NOTES:

1. A TRENCH WITH A DEPTH OF 3'-0" AND A MINIMUM WIDTH OF 2'-6" SHALL BE CONSTRUCTED DIRECTLY BELOW THE BOTTOM OF THE PILE CAP ELEVATION. AFTER THE PILES ARE DRIVEN, THE TRENCH SHALL BE FILLED WITH CRUSHED STONE (M2.01.6).
2. ALL PILE SPLICES SHALL BE BUTT JOINTS MADE USING COMPLETE PENETRATION WELDS. THERE SHALL BE NO SPLICES WITHIN THE TOP 20 FEET OF PILE. SPLICE WELDS SHALL BE 100% INSPECTED USING UT.
3. PILES SHALL CONFORM TO AASHTO M270 GRADE 50.
4. HEAVY DUTY PILE SHOES SHALL BE INSTALLED ON THE TIPS OF ALL PILES. PREFABRICATED PILE SHOES MAY BE USED IF APPROVED BY THE ENGINEER.
5. FACTORED AXIAL DESIGN LOAD PER PILE PER AASHTO LRFD DESIGN LOAD PER PILE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

   STRENGTH I LIMIT STATE
   FACTORED AXIAL DESIGN LOAD = 194 KIPS

6. THE FACTORED GEOTECHNICAL RESISTANCE IS 286 KIPS AND IS THE PRODUCT OF THE NOMINAL GEOTECHNICAL RESISTANCE OF 635 KIPS AND A RESISTANCE FACTOR OF 0.45. THE ESTIMATED TIP ELEVATION IS 769.00.
7. DETERMINATION OF THE DRIVEN PILE RESISTANCE, PILE DRIVING CRITERIA, AND PILE INTEGRITY, SHALL BE PERFORMED ON AT LEAST 1 PILE PER ABUTMENT USING DYNAMIC TESTING WITH A RESISTANCE FACTOR OF 0.65. PILE SHALL BE INSTALLED TO ACHIEVE A FACTORED DRIVEN RESISTANCE EQUAL TO OR GREATER THAN THE FACTORED AXIAL DESIGN LOAD NEGLECTING AN ESTIMATED 0.20 KIPS OF SIDE RESISTANCE THAT WILL BE LOST DUE TO 1.0 FEET OF DESIGN SCOUR.
8. THE CONTRACTOR SHALL SUBMIT A PILE SCHEDULE, PILE INSTALLATION, AND PILE DRIVING/TESTING PLAN FOR REVIEW AND APPROVAL BY THE ENGINEER.
9. AFTER PILE DRIVING IS COMPLETE, THE CONTRACTOR SHALL SUBMIT PILE DRIVING LOGS INCLUDING THE FINAL TIP ELEVATIONS AND THE RESULTS OF ANY DYNAMIC OR STATIC TESTING. SIGNIFICANT DEVIATIONS SHALL BE NOTED AS REVISIONS ON THE CONSTRUCTION DRAWINGS.

CONSTRUCTION NOTES:

1. ALL REINFORCEMENT SHALL BE EPOXY COATED.
2. DECK SLAB REINFORCEMENT IS OMITTED FOR CLARITY. CONTINUE DECK SLAB REINFORCEMENT TO THE BACK OF THE ABUTMENT.
3. THE CONTRACTOR SHALL FOLLOW THE DECK PLACEMENT SEQUENCE AS SHOWN ON SHEET 14 OF THESE CONSTRUCTION DRAWINGS.
4. ALL CONCRETE SHALL CONTAIN SUPERPLASTICIZER TO ENSURE ADEQUATE CONSOLIDATION.
5. BOTH ABUTMENTS SHALL BE BACKFILLED SIMULTANEOUSLY. NO MORE THAN TWO (2) DIFFERENTIAL BACKFILL HEIGHTS SHALL BE PERMITTED. BACKFILLING SHALL NOT BEGIN UNTIL THE ABUTMENT AND DECK CONSTRUCTION
6. 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.
7. THE NUMBER OF ADDITIONAL #6 BARS BETWEEN BEAMS SHALL BE EQUAL TO THE NUMBER OF #6 BARS WHICH ARE TERMINATED UNDERNEATH THE BEAM IN A 135° HOOK.

REQUIRED PILE LOCATION TOLERANCES

1. CONFORMANCE TO THE FOLLOWING TOLERANCES IS OF EXTREME IMPORTANCE TO FOUNDATIONS OF THIS TYPE.
2. PRIOR TO DRIVING, EACH ABUTMENT PILE SHALL BE HELD BY TEMPLATE TO WITHIN 1" OF THE PLAN LOCATION.
3. AFTER EACH ABUTMENT PILE IS DRIVEN, THE TOP OF THE PILE SHALL BE WITHIN 3" OF THE PLAN LOCATION.

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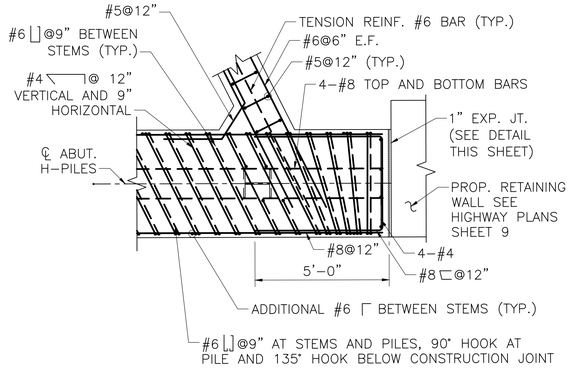
LEE
MEADOW STREET

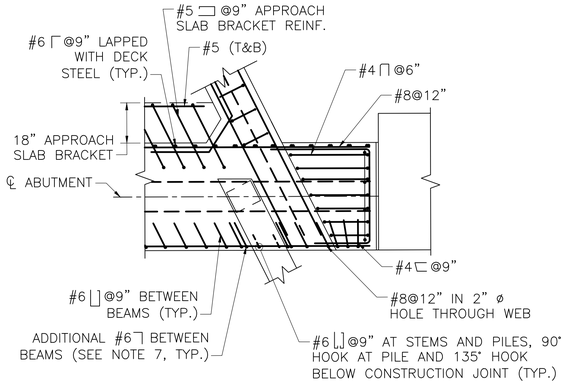
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	27	50
	PROJECT FILE NO. 607597		

ABUTMENT DETAILS 2 OF 2



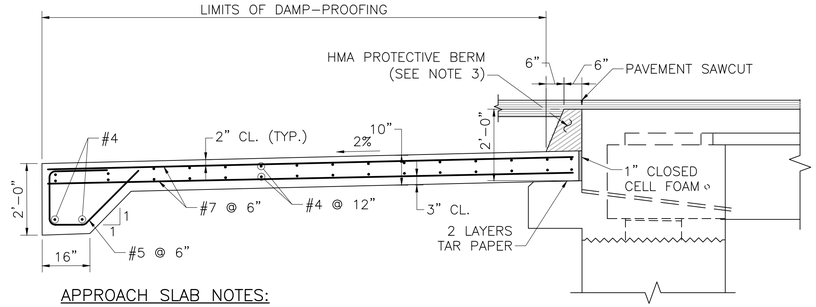
ABUTMENT HORIZONTAL SECTION THRU PILE CAP–SOUTHEAST CORNER

SCALE: $\frac{3}{8}$" = 1'–0"



ABUTMENT HORIZONTAL SECTION THRU DIAPHRAGM–SOUTHEAST CORNER

SCALE: $\frac{3}{8}$" = 1'–0"

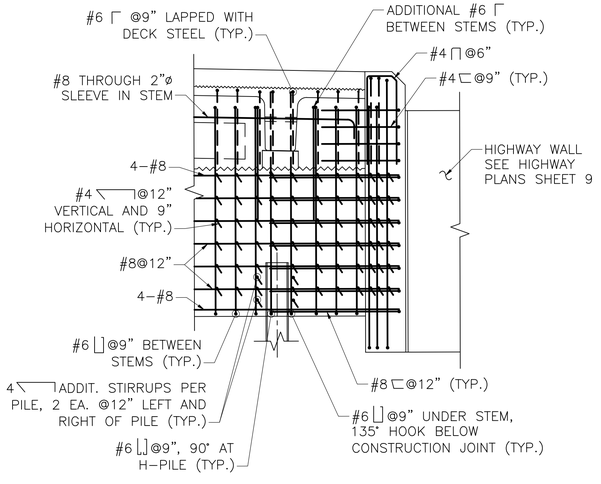


APPROACH SLAB NOTES:

1. PLACE LONGITUDINAL REINFORCEMENT PARALLEL TO ℄ OF BRIDGE. PLACE TRANSVERSE REINFORCEMENT PARALLEL TO ABUTMENT.
2. ALL REINFORCEMENT TO BE EPOXY COATED.
3. PROTECTIVE COURSE TO BE SUPERPAVE BRIDGE PROTECTIVE COURSE (SPC–B–12.5), PLACED IN 2" LAYERS AND COMPACTED WITH A MECHANICAL HAND–GUIDED TAMPER WITHIN 12 HOURS AFTER APPLICATION OF MEMBRANE WATERPROOFING.

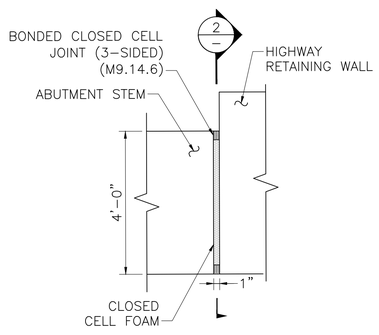
APPROACH SLAB DETAIL

SCALE: $\frac{1}{2}$" = 1'–0"



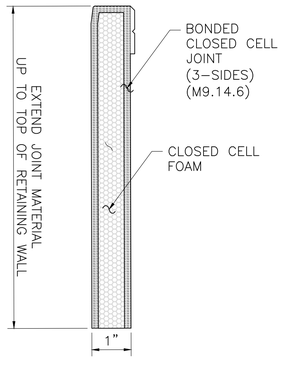
ABUTMENT VERTICAL SECTION–SOUTHEAST CORNER

SCALE: $\frac{3}{8}$" = 1'–0"



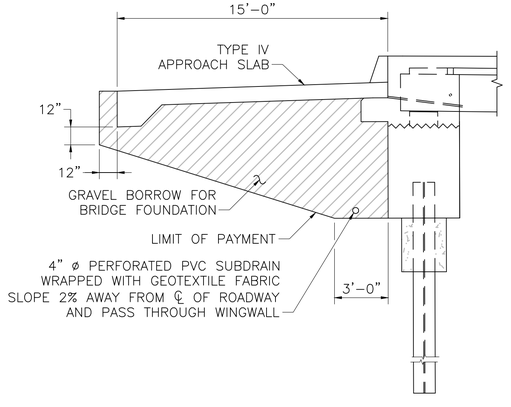
EXPANSION JOINT DETAIL

SCALE: $\frac{1}{2}$" = 1'–0"



SECTION 2 / –

SCALE: $\frac{1}{2}$" = 1'–0"



ABUTMENT BACKFILL

SCALE: $\frac{1}{4}$" = 1'–0"

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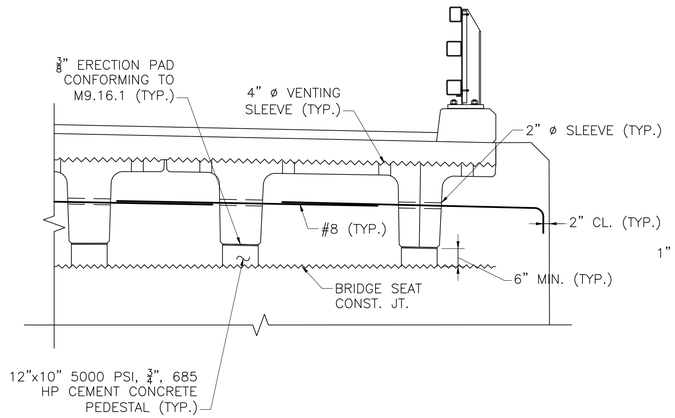
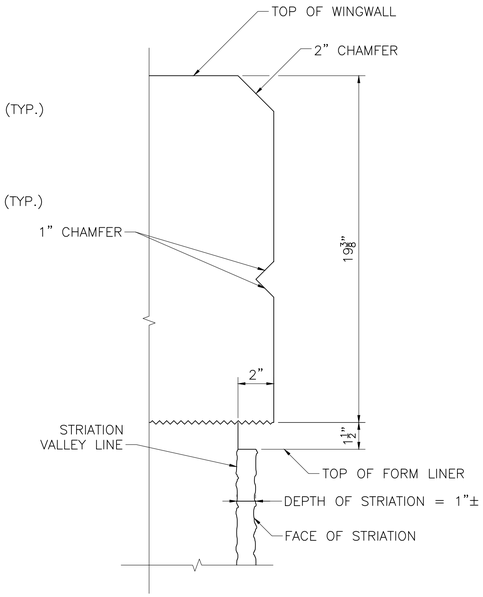


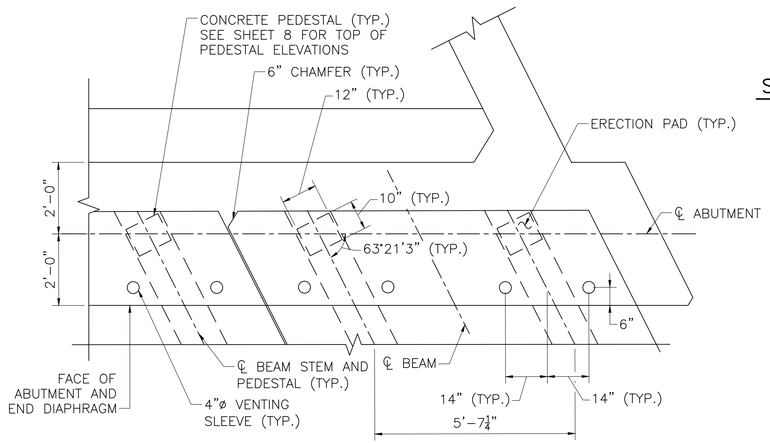
BEAM END ELEVATION

SCALE: ½" = 1'–0"



STRIATION DETAIL AT TOP OF WINGWALL

SCALE: 3" = 1'–0"

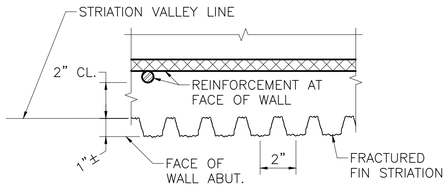


PEDESTAL/END OF BEAM PLAN

SCALE: ½" = 1'–0"

H–PILE SPLICER INSTALLATION NOTES:

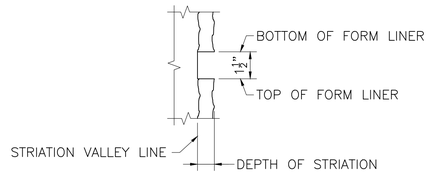
1. CUT OFF AND SQUARE A MINIMUM LENGTH OF 1 FOOT FROM THE TOP OF THE PILE THAT HAS JUST BEEN DRIVEN INTO THE GROUND.
2. BEVEL THE TWO FLANGES OF THE DRIVEN PILE 30° DEGREES (+10°, –5°) EACH WITH A MAXIMUM ROOT FACE OF 3/32" (+0, –3/32").
3. GRIND ALL FLAME CUT SURFACES SMOOTH.
4. LAYOUT AND FLAME CUT THE KEYWAY IN THE WEB OF THE DRIVEN PILE FOR THE KEY OF THE H–PILE SPLICER WITH THE SPECIFIED TOLERANCES. RADIUS THE BOTTOM OF THE SLOT ⅜" IN EACH CORNER.
5. GRIND ALL FLAME CUT SURFACES SMOOTH.
6. SLIDE THE H–PILE SPLICER ONTO THE PILE. THE KEY OF THE SPLICER MUST SLIDE DOWN THE KEYWAY IN THE WEB OF THE DRIVEN PILE.
7. SQUARE THE END OF THE PILE SECTION TO BE ADDED TO THE PREVIOUSLY DRIVEN PILE. BEVEL BOTH FLANGES OF THE PILE 30° DEGREES (+10°, –5°) EACH WITH A MAXIMUM ROOT FACE OF 3/32" (+0, –3/32").
8. GRIND ALL FLAME CUT SURFACES SMOOTH.
9. SLIDE THE TOP PILE SECTION WITH A CRANE INTO THE H–PILE SPLICER SLEEVE. PLUMB PILE; ALIGN THE FLANGES OF BOTH PILE SECTIONS. THE FLANGES MUST BE IN ALIGNMENT WITH THE MAXIMUM TOLERANCE OF +⅛". TACK WELD IN PLACE ON BACK SIDE OF JOINT AS PER THE APPROVED FILLET WELDING PROCEDURE.
10. FAYING SURFACES BETWEEN THE H–PILE SPLICER AND THE PILE FLANGES SHALL HAVE A GAP OF 0" (+⅛"). CLAMPS OR HYDRAULIC JACKS MAY BE USED TO ACCOMPLISH THIS. NO HEATING WILL BE ALLOWED.
11. USING A ⅜" FILLET WELD, WELD THE H–PILE SPLICER TO THE FLANGES, 4 INCHES OF WELD AT THE TOP AND BOTTOM OF EACH CORNER AND THE LENGTH OF THE SPLICER AS PER THE APPROVED FILLET WELDING PROCEDURE.
12. USING A PARTIAL PENETRATION GROOVE WELD, WELD THE FLANGES AS PER THE APPROVED GROOVE WELDING PROCEDURE. THE SIZE SHALL BE SHOWN ON THE WELDING PROCEDURE.



NOTES
1. THE CONTRACTOR SHALL MAKE SURE THAT THE STRIATION FINS ARE PLUMB AND LINED UP VERTICALLY FROM PANEL TO PANEL FOR THE FULL HEIGHT OF THE WALL.
2. THE HORIZONTAL JOINT MAY BE OMITTED IF THE CONTRACTOR CAN DEMONSTRATE THAT THE FORM LINER PANELS CAN BE INSTALLED END TO END WITHOUT CREATING A VISIBLE SEAM IN THE FINAL CAST CONCRETE.

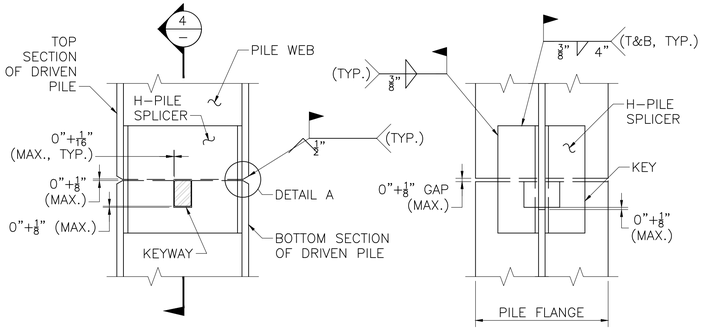
TYPICAL STRIATION DETAIL

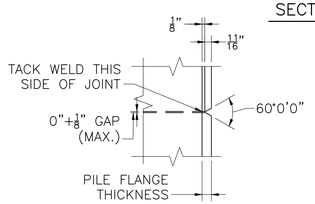
SCALE: 3" = 1'–0"



HORIZONTAL PANEL JOINT

SCALE: 3" = 1'–0"





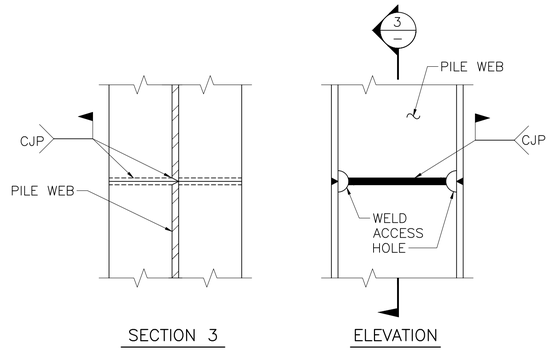
WELDED MECHANICAL H–PILE SPLICE DETAILS

NOT TO SCALE

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	28	50
PROJECT FILE NO.	607597		

SUBSTRUCTURE DETAILS



CJP H–PILE SPLICE DETAIL

NOT TO SCALE

PILE SPLICE NOTES:

1. ALL WELDS SHALL BE COMPLETE PENETRATION AND SHALL CONFORM TO THE ANSI/AASHTO/AWS BRIDGE WELDING CODE, D1.5.
2. WELDING PROCEDURE SPECIFICATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO WELDING.
3. WHENEVER POSSIBLE ALL PILES SHALL BE SPLICED ON THE GROUND IN A FLAT POSITION.
4. WEB SHALL BE COPED TO ALLOW FOR COMPLETE PENETRATION WELDING OF FLANGES.
5. WELDING MECHANICAL PILE SPLICERS MAY BE USED PROVIDED THAT COMPLETE DETAILS AND WELDING PROCEDURES HAVE BEEN REVIEWED AND APPROVED BY THE ENGINEER.
6. IF THE SPLICE LOCATION OCCURS WITHIN 25 FEET FROM THE BOTTOM OF THE ABUTMENT, ALL WELDS SHALL BE INSPECTED USING ULTRASONIC TESTING IN ACCORDANCE WITH THE BRIDGE WELDING CODE, ANSI/AASHTO/AWS D1.5. WELDS IN THIS LOCATION WILL BE CONSIDERED TO BE IN TENSION. TECHNICIANS PERFORMING THE TESTING SHALL HAVE PASSED THE PRACTICAL EXAM ADMINISTERED BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION.

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AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
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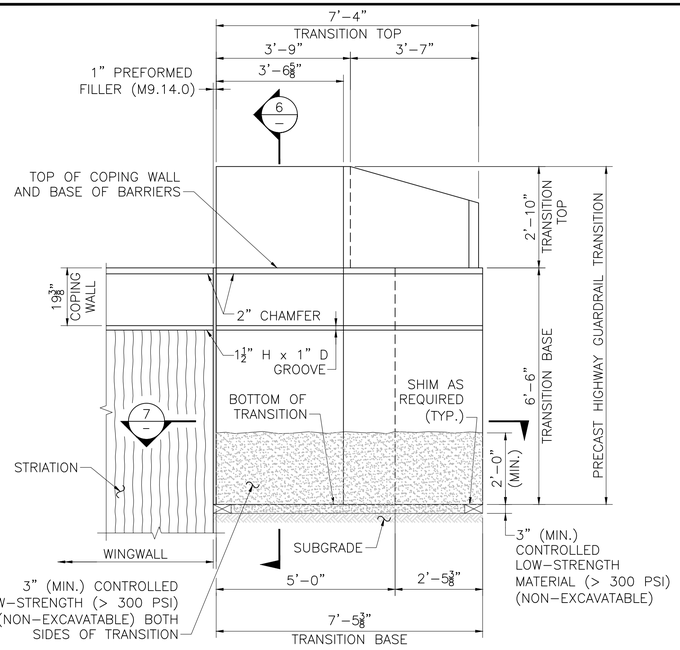
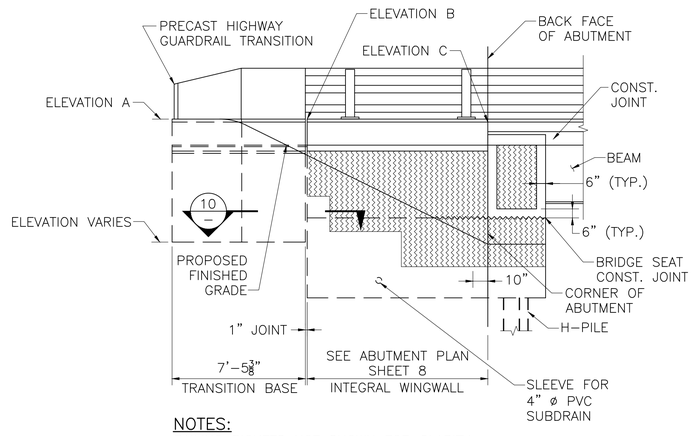


NOTES:

1. PRECAST GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾ IN, 685 HP CEMENT CONCRETE.
2. 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.
3. THE CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON–EXCAVATABLE) TO THE ELEVATION SHOWN.

PRECAST GUARDRAIL TRANSITION ELEVATION AT U–WINGWALL

SCALE: ½" = 1'–0"

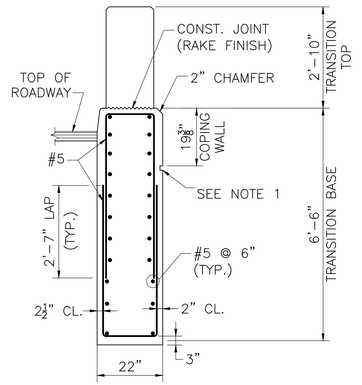


NOTES:
RAILING PICKETS NOT SHOWN FOR CLARITY.

WINGWALL ELEVATION

SCALE: ¼" = 1'–0"

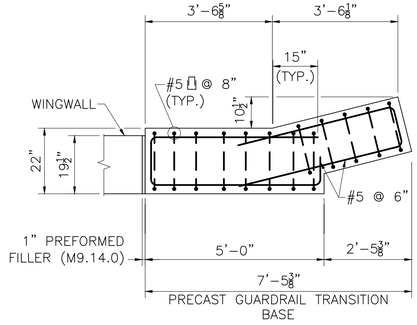
TOP OF CURB ELEVATIONS				
ELEVATION	NORTHWEST CORNER	NORTHEAST CORNER	SOUTHWEST CORNER	SOUTHEAST CORNER
A	852.13	851.24	852.17	851.50
B	852.13	851.24	852.17	851.50
C	852.09	851.39	852.14	851.62



NOTES:

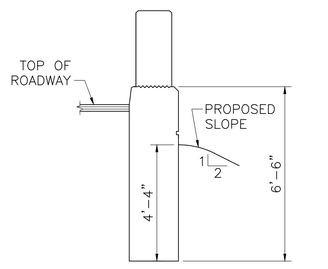
1. 1½" H x 1" D GROOVE. ALIGN WITH GROOVE AT TOP OF STRIATIONS.
2. REINFORCEMENT OF THE TRANSITION TOP IS NOT SHOWN FOR CLARITY.

SECTION 6 — SCALE: ½" = 1'–0"

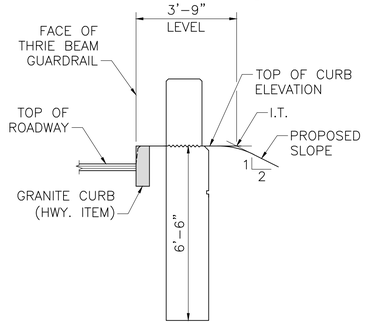


NOTE:
WINGWALL REINFORCEMENT AND STRIATIONS NOT SHOWN FOR CLARITY.

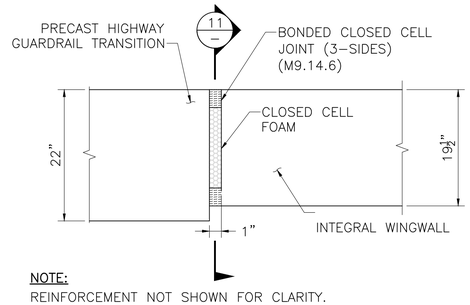
SECTION 7 — SCALE: ½" = 1'–0"



SECTION 8 — SCALE: ⅜" = 1'–0"

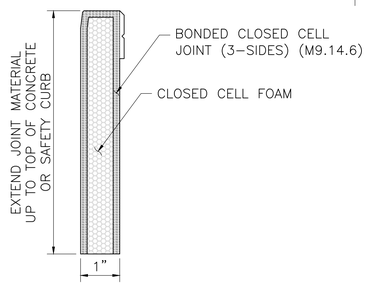


SECTION 9 — SCALE: ⅜" = 1'–0"



NOTE:
REINFORCEMENT NOT SHOWN FOR CLARITY.

SECTION 10 — SCALE: 1" = 1'–0"

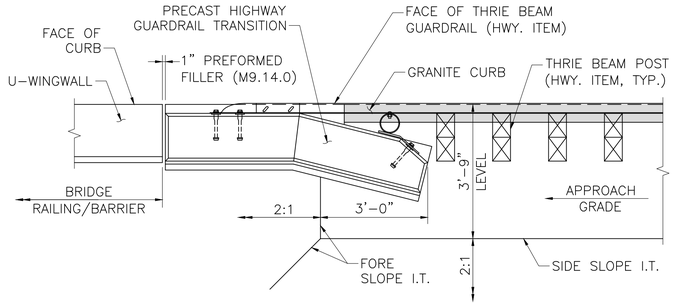


SECTION 11 — SCALE: ½" = 1'–0"

LEE
MEADOW STREET

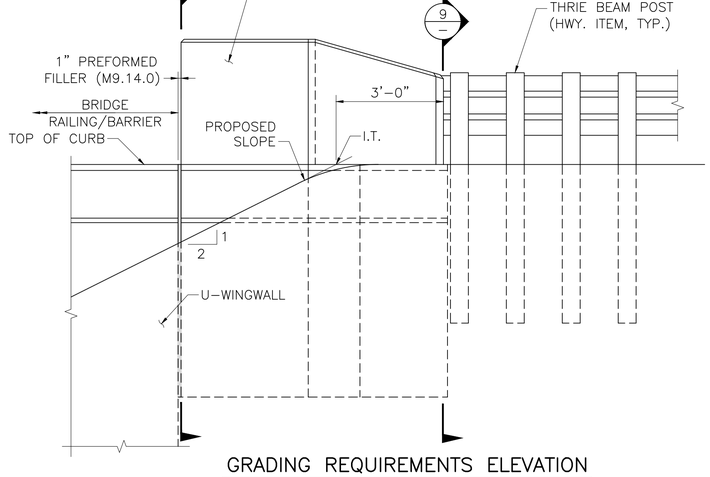
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	29	50
	PROJECT FILE NO. 607597		

WINGWALL & PRECAST HIGHWAY GUARDRAIL TRANSITION BASE DETAILS



GRADING REQUIREMENTS PLAN

SCALE: ½" = 1'–0"



GRADING REQUIREMENTS ELEVATION

SCALE: ½" = 1'–0"

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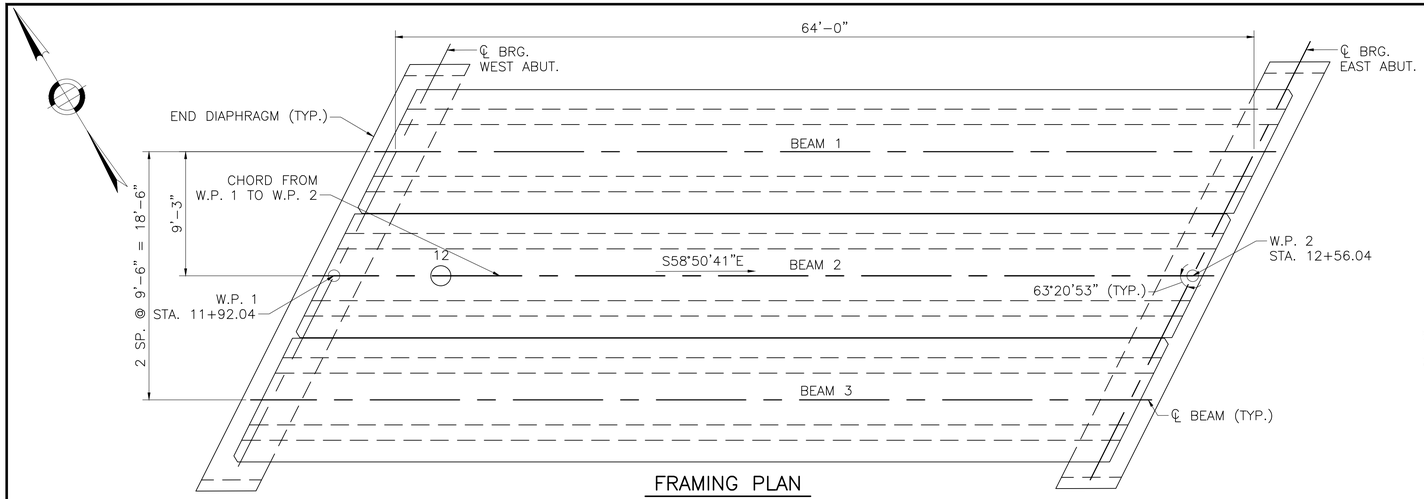
LEE
MEADOW STREET

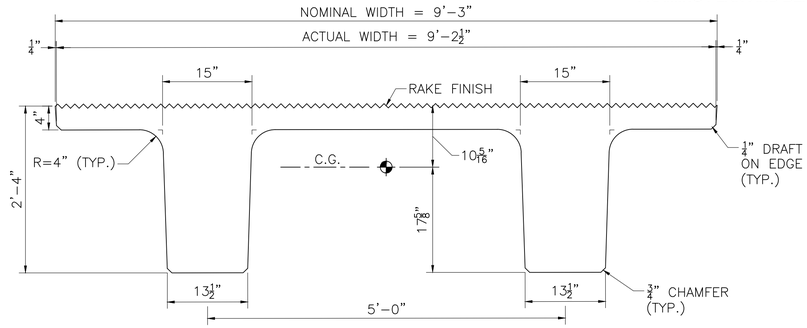
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	30	50
PROJECT FILE NO.	607597		

FRAMING PLAN AND BEAM DETAILS



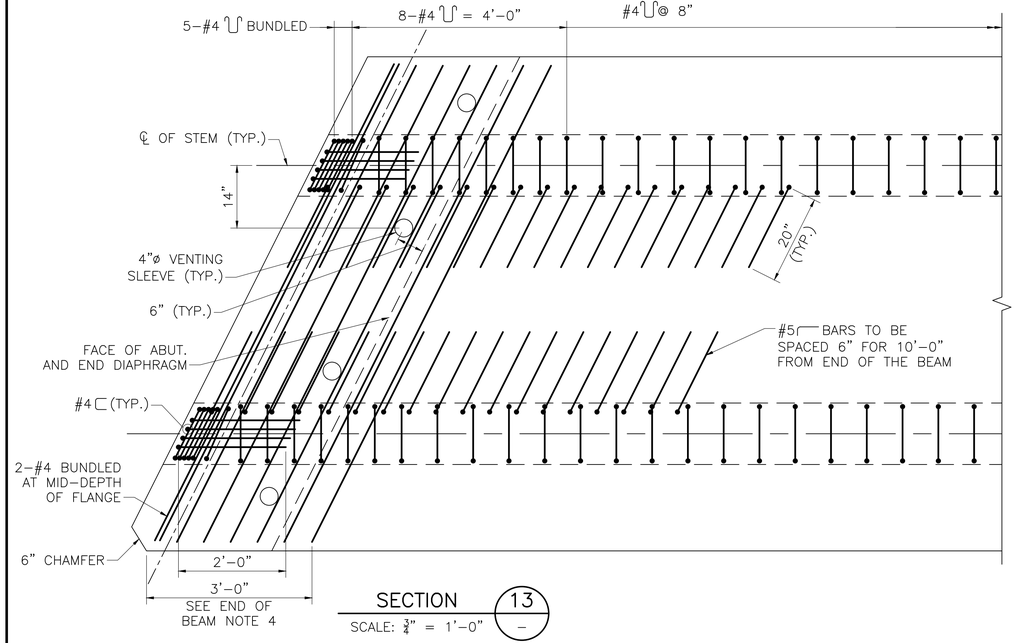
FRAMING PLAN

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



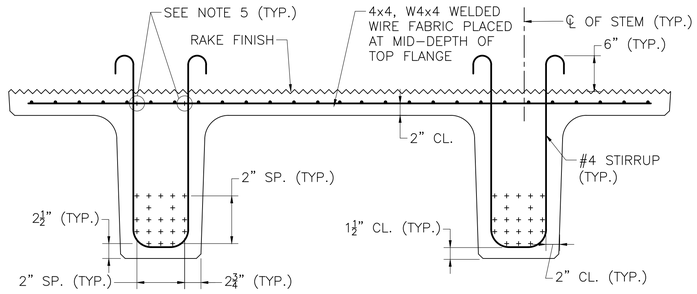
STANDARD NEXT 28F BEAM

SCALE: 1" = 1'-0"



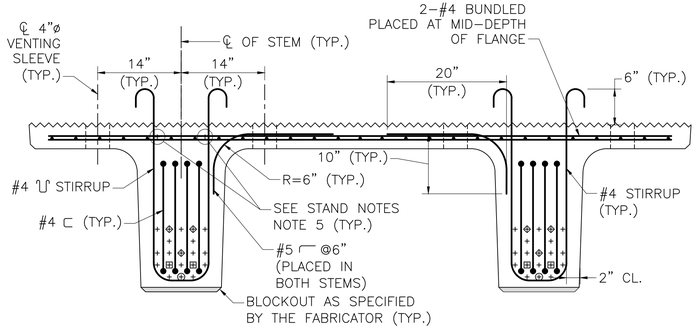
SECTION 13 / –

SCALE: ¾" = 1'-0"



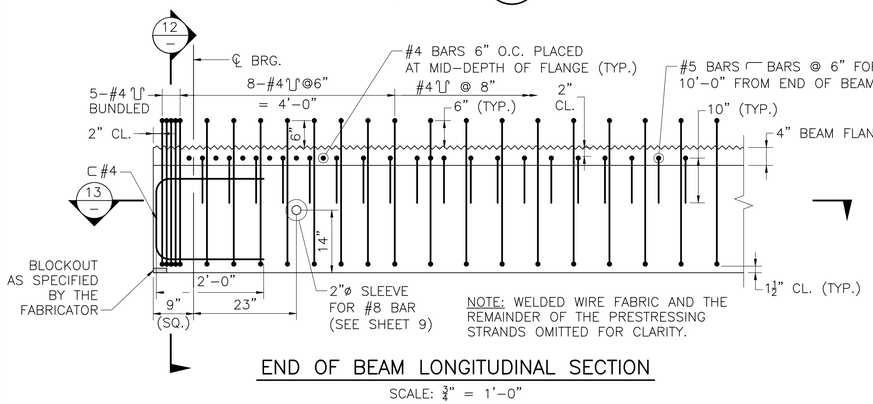
MIDSPAN SECTION

SCALE: 1" = 1'-0"



SECTION 12 / –

SCALE: 1" = 1'-0"



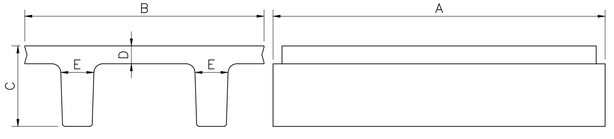
NOTE: WELDED WIRE FABRIC AND THE REMAINDER OF THE PRESTRESSING STRANDS OMITTED FOR CLARITY.

END OF BEAM LONGITUDINAL SECTION

SCALE: ¾" = 1'-0"

PRECAST BEAM FABRICATION TOLERANCES

A	LENGTH (OVERALL)	±1"
B	WIDTH (OVERALL)	±¼"
C	DEPTH (OVERALL)	±¼"
D	FLANGE THICKNESS	+¼", -⅛"
E	WEB THICKNESS	±⅛"



TYPICAL SECTION AND ELEVATION

NOT TO SCALE

STRAND NOTES:

1. + DENOTES STRAIGHT STRANDS
2. ⊕ DENOTES DEBONDED STRANDS (12'-0" EACH)
3. ⊕ DENOTES DEBONDED STRANDS (8'-0" EACH)
4. ⊞ DENOTES DEBONDED STRANDS (4'-0" EACH)
5. SEE BEAM PLAN AND ELEVATION FOR STIRRUP SPACING.
6. STRANDS IN FLANGE OF BEAM MAY BE PLACED AS SHOWN AND TENSIONED TO 5 KIPS EACH BY THE FABRICATOR FOR THEIR CONVENIENCE. THEIR PRESENCE IS NOT REQUIRED BY DESIGN.

END OF BEAM NOTES:

1. PRESTRESSING STRANDS NOT SHOWN FOR CLARITY.
2. AT THE END OF THE BEAM, SPLAY THE END STIRRUPS AS REQUIRED TO TRANSITION FROM SKEWED TO PERPENDICULAR.
3. WELDED WIRE FABRIC (WWF) IN THE TOP FLANGE NOT SHOWN FOR CLARITY.
4. PLACE #4@6" ON TOP OF WWF IN THE TOP FLANGE.

PRESTRESS NOTES:

1. ALL PRETENSIONING ELEMENTS SHALL BE 0.6"ø, UNCOATED, SEVEN-WIRE, LOW RELAXATION STEEL STRANDS AND SHALL CONFORM TO AASHTO M 203.
2. THE NOMINAL 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 STRENGTH SHALL BE 8,000 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 6000 PSI.
6. THE TOP OF ALL BEAMS SHALL BE GIVEN A RAKED FINISH (¼" 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. TO CONTROL CRACKING AT THE END OF THE BEAM, THE PRECASTER SHALL DEBOND APPROXIMATELY 50% OF THE STRANDS FOR THE FIRST 6" FROM THE END OF THE BEAM. TO MEET THIS REQUIREMENT ONLY IN THIS 6" END REGION OF THE BEAM, DEBONDED STRANDS MAY BE ADJACENT STRANDS HORIZONTALLY AND VERTICALLY.

BEAM STABILITY NOTE:

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.

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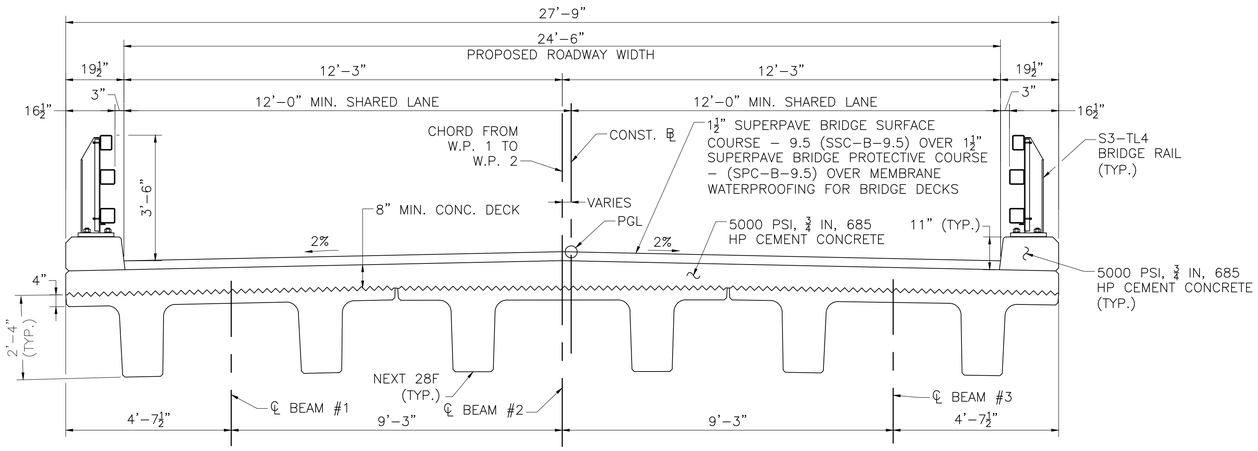


PROPOSED CROSS SECTION

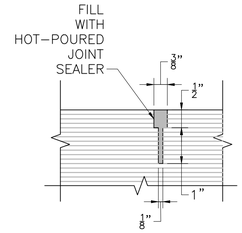
SCALE: ½" = 1'-0"

ESTIMATED CAMBER AND DEFLECTIONS AT MIDSPAN (INCHES)			
STATE OF BEAM	DIRECTION	BEAMS #1 AND #3	BEAM #2
CAMBER AT TRANSFER	UP	1.93	1.93
CAMBER AT ERECTION	UP	3.42	3.42
FINAL NCDL DEFLECTION	DOWN	1.98	1.98
FINAL CDL DEFLECTION	DOWN	0.62	0.54

THEORETICAL TOP OF DECK ELEVATION ALONG SPAN (INCREASING STATIONS)											
LOCATION	0.0L	0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	1.0L
EAST CURB	851.64	851.61	851.58	851.55	851.52	851.47	851.41	851.33	851.24	851.14	851.02
CENTERLINE OF DECK	851.43	851.40	851.37	851.34	851.31	851.27	851.22	851.16	851.09	851.00	850.89
WEST CURB	851.70	851.68	851.64	851.61	851.56	851.54	851.51	851.46	851.40	851.32	851.24

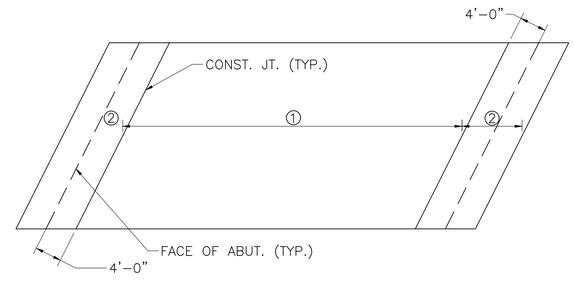
NOTES:

1. CAMBER AND DEFLECTIONS IN THE TABLE ARE NOT GUARANTEED AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
2. THE BEAM CONCRETE MODULUS OF ELASTICITY AT TRANSFER USED IN THE ABOVE CAMBER IS ASSUMED TO BE 4877 KSI.
3. THE BEAM CONCRETE MODULUS OF ELASTICITY USED IN THE ABOVE BEAM DEFLECTION IS ASSUMED TO BE 5363 KSI (AT 28 DAYS).



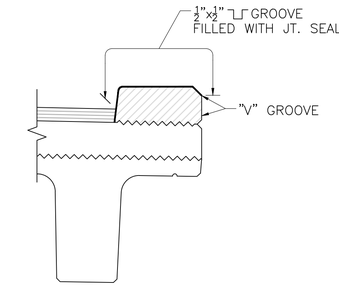
PAVEMENT SAWCUT DETAIL

NOT TO SCALE



DECK POURING SEQUENCE

SCALE: $\frac{3}{32}$" = 1'-0"

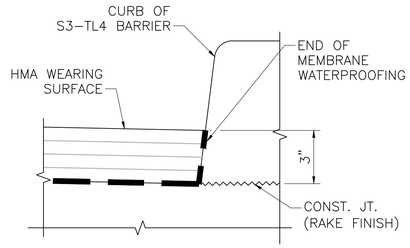


PARRAFIN JOINT DETAIL

SCALE: ¾" = 1'-0"

PARAFFIN JOINT NOTES:

1. ALL CONCRETE ABOVE SLAB SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH PARAFFIN JOINTS. END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO THE FACE OF THE CURB.
4. FOR ALL JOINT LOCATIONS, SEE SHEET 5.

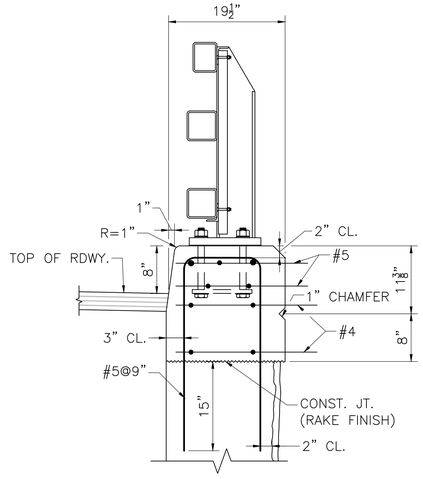


FACE OF SAFETY CURB DETAIL

SCALE: 3" = 1'-0"

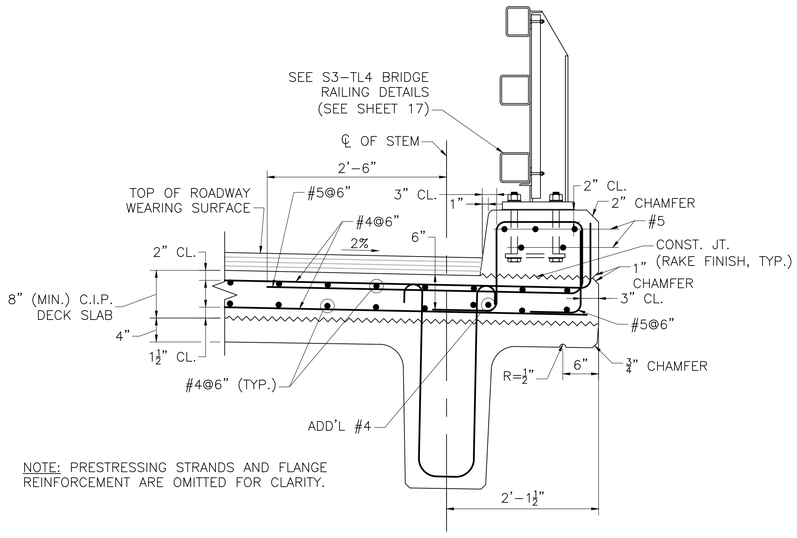
DECK POUR SEQUENCING NOTES:

1. BRIDGE DECK SLAB SHALL BE PLACED IN ACCORDANCE WITH THE PLACEMENT SEQUENCE SHOWN ON THE CONSTRUCTION DRAWINGS.
2. THE CONTRACTOR MAY PLACE THE ENTIRE DECK IN THE CONTINUOUS OPERATION WITHOUT CONSTRUCTION JOINTS WITH APPROVAL OF THE ENGINEER, PROVIDED THAT THE INITIAL SET (f'c = 500 PSI) OF ALL CONCRETE DOES NOT OCCUR UNTIL AFTER THE COMPLETION OF THE PLACEMENT. AN APPROVED RETARDER SHALL BE USED, WHEN NECESSARY, TO RETAIN THE WORKABILITY OF THE CONCRETE. IF MULTIPLE PLACEMENTS ARE MADE, A MINIMUM OF 72 HOURS SHALL PASS BETWEEN PLACEMENTS.
3. IMMEDIATELY BEFORE NEW CONCRETE IS CAST, THE PREVIOUSLY CAST CONCRETE SHALL BE CLEANED OF ALL DUST, DIRT, AND CARBONATION USING A HIGH-PRESSURE WATER BLAST. THE SURFACES SHALL THEN BE WETTED NO MORE THAN 24 HOURS PRIOR TO THE PLACEMENT OF THE NEW CONCRETE, SO THAT THE SURFACES SHALL HAVE A SATURATED SURFACE DRY (SSD) CONDITION.
4. THE CONTRACTOR MAY SUBMIT A PROPOSAL DETAILING THE ELIMINATION OF THE CLOSURE POUR FOR THE APPROVAL OF THE ENGINEER. THE PROPOSAL SHALL DETAIL THE CONTRACTOR'S MEANS AND METHODS FOR ACCURATELY CONSTRUCTING THE DECK SLAB TO THE LINES, GRADES, AND THICKNESS SHOWN ON THE CONSTRUCTION DRAWINGS WITHOUT LEAKAGE OF CONCRETE.
5. DOWEL BAR SPLICERS SHALL BE USED WHERE LAP OF SPLICES IS NOT FEASIBLE.



TOP OF U-WINGWALL DETAILS AT SAFETY CURB

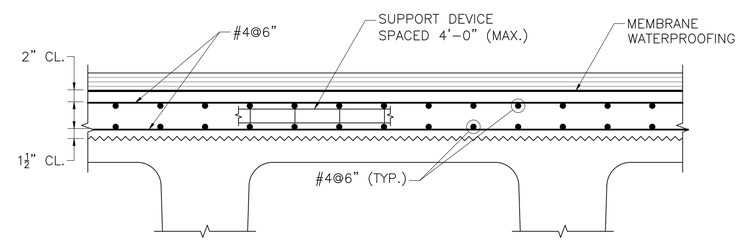
SCALE: 1" = 1'-0"



NOTE: PRESTRESSING STRANDS AND FLANGE REINFORCEMENT ARE OMITTED FOR CLARITY.

SECTION THRU SAFETY CURB

SCALE: ½" = 1'-0"



TYPICAL DECK REINFORCEMENT

SCALE: ½" = 1'-0"

NOTES:

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

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	31	50
PROJECT FILE NO.	607597		

DECK AND MISCELLANEOUS DETAILS

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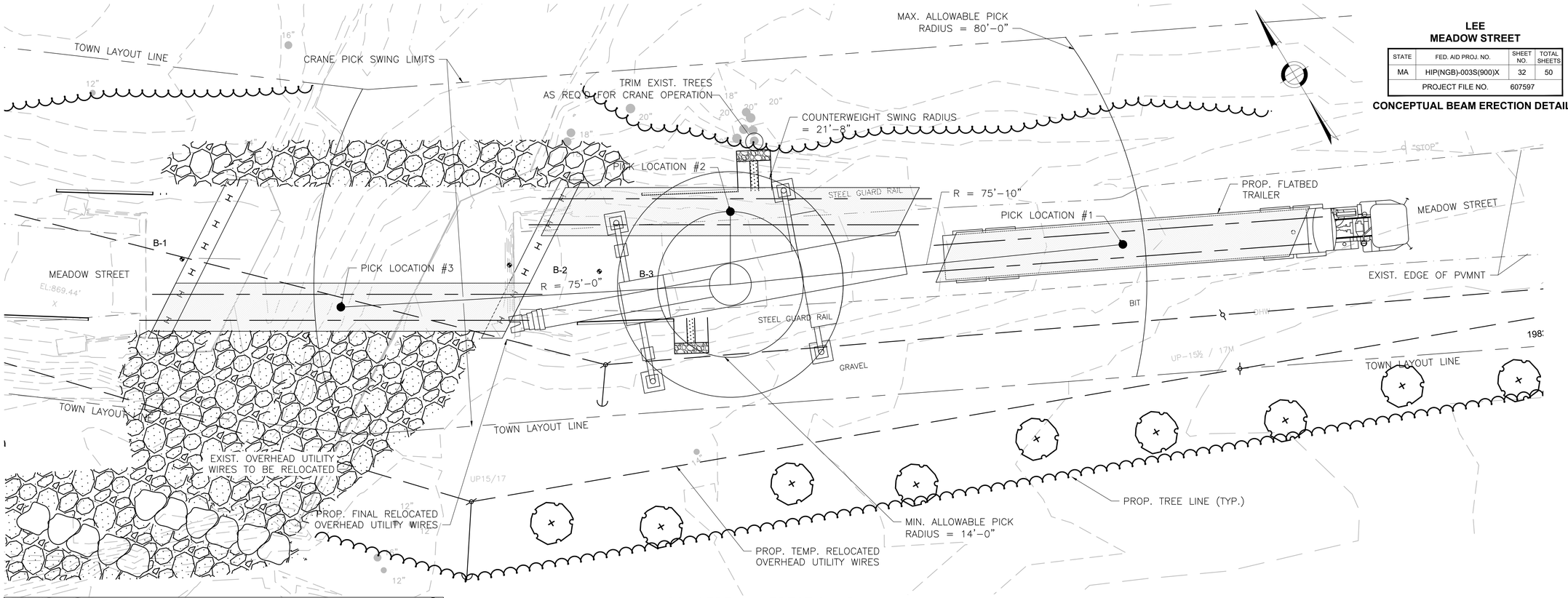
LEE
MEADOW STREET

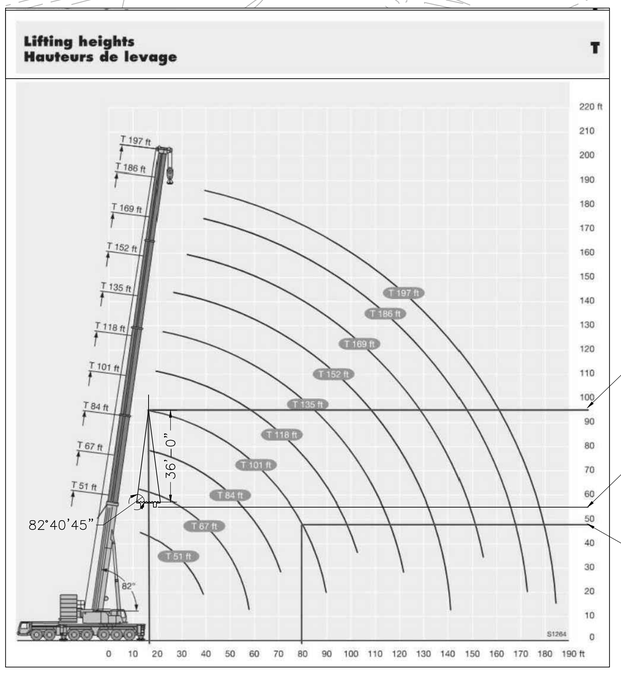
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	32	50
PROJECT FILE NO.	607597		

CONCEPTUAL BEAM ERECTION DETAILS



CONCEPTUAL ERECTION PLAN

SCALE: 1" = 10'



MAX. VERTICAL PICK HEIGHT = ~94'-0"

APPROX. BEAM HEIGHT = ~56'-0"

MIN. VERTICAL PICK HEIGHT = ~48'-0"

NOTE: TAKEN FROM TECHNICAL DATA BROCHURE FOR THE LIEBHERR 1400

CRANE PICK HEIGHTS

NOT TO SCALE

BEAM ERECTION NOTES:

1. THE PLAN AND NOTES DEPICT A POTENTIAL ERECTION SCHEME. ALTERNATE SCHEMES MAY BE USED.
2. SEE CRANE DATA FOR MAXIMUM PICK WEIGHT AND RADIUS.
3. THE FACTORED PICK WEIGHT IS BASED ON A F.S. OF 1.50.
4. EXACT LIFT LOCATIONS AND DECK STRESSES TO BE EVALUATED BY CONTRACTOR PRIOR TO ERECTION.
5. THE PICK WEIGHTS & CRANE CAPACITIES ARE PRELIMINARY AND ARE PROVIDED FOR INFORMATION PURPOSES ONLY.
6. CONTRACTOR SHALL SUBMIT HIS/HER OWN ERECTION PROCEDURE FOR APPROVAL BY THE ENGINEER.
7. THE CRANE SWING SHALL NOT PASS THE TOWN LAYOUT LINE.

CRANE DATA (FOR EXAMPLE):

CRANE:	LIEBHERR 1500
CRANE DESCRIPTION:	TELESCOPIC BOOM CRANE
MAX. UNFACTORED SINGLE PICK WEIGHT:	72 KIPS
MAX. FACTORED SINGLE PICK WEIGHT:	108 KIPS
MAX. BOOM LENGTH:	164 FEET
MAX. VERTICAL PICK HEIGHT:	94 FEET
MAX. ANTICIPATED PICK RADIUS:	80 FEET
DESIGN PICK RADIUS:	80 FEET
CRANE CAPACITY:	133 KIPS

DATE	DESCRIPTION
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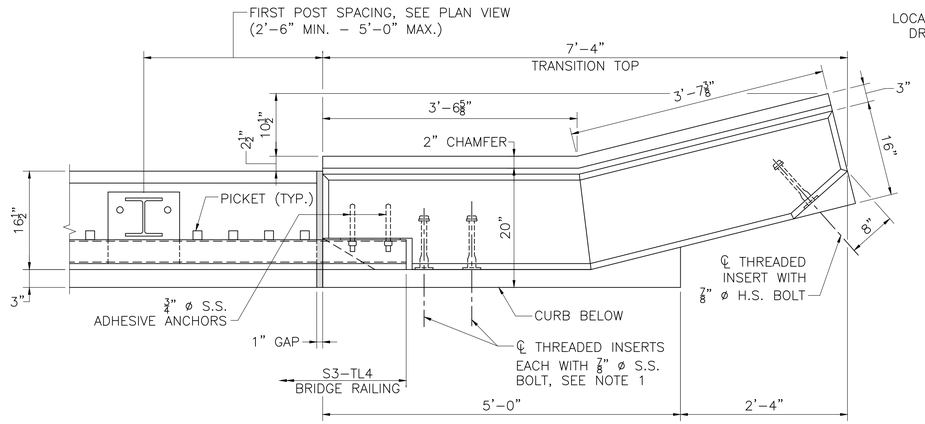
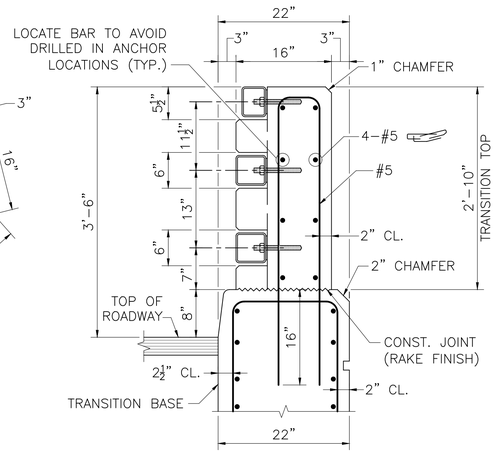
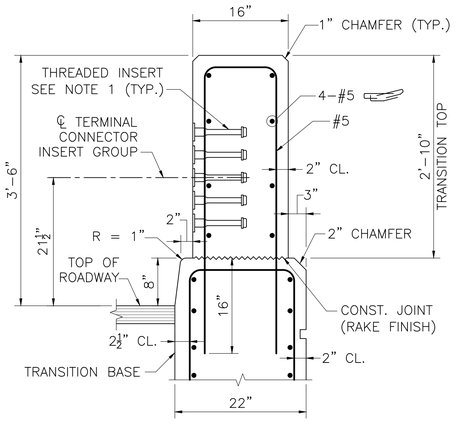
USE ONLY PRINTS OF LATEST DATE



PLAN AT SAFETY CURB
SCALE: 1" = 1'-0"



SECTION 17 AT SAFETY CURB
SCALE: 1" = 1'-0"

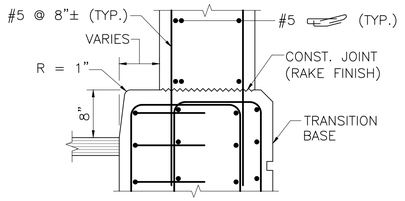


SECTION 18 AT SAFETY CURB
SCALE: 1" = 1'-0"

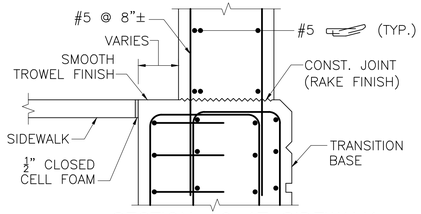
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	33	50
	PROJECT FILE NO. 607597		

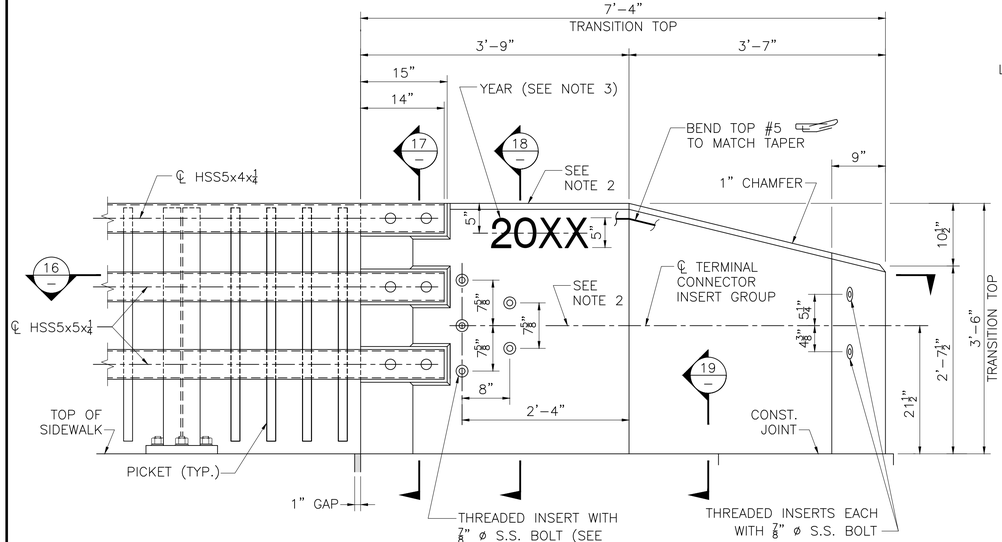
PRECAST GUARDRAIL TRANSITION



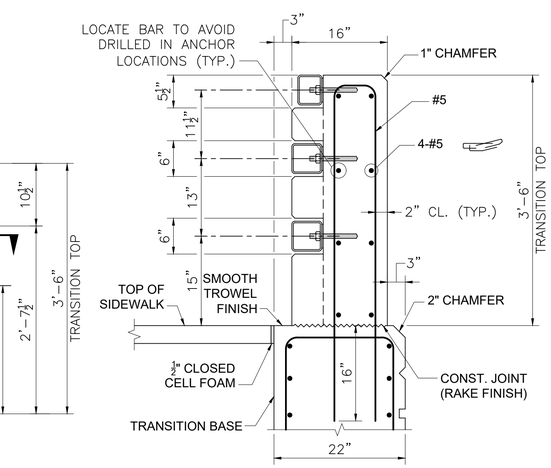
SECTION 19 AT SAFETY CURB
SCALE: 1" = 1'-0"



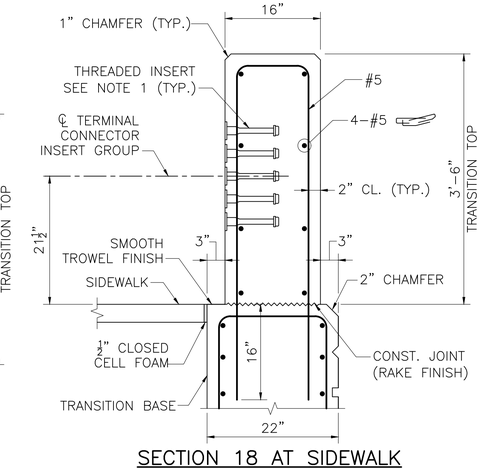
SECTION 19 AT SIDEWALK
SCALE: 1" = 1'-0"



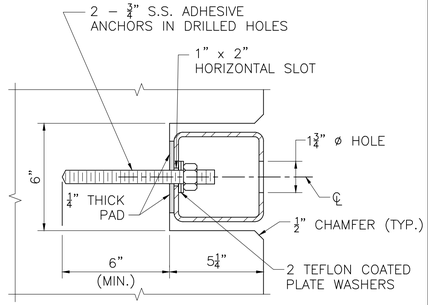
ELEVATION AT SIDEWALK
SCALE: 1" = 1'-0"



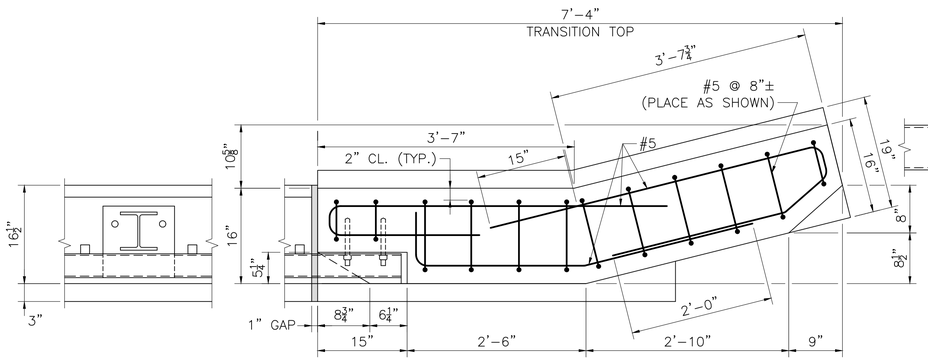
SECTION 17 AT SIDEWALK
SCALE: 1" = 1'-0"



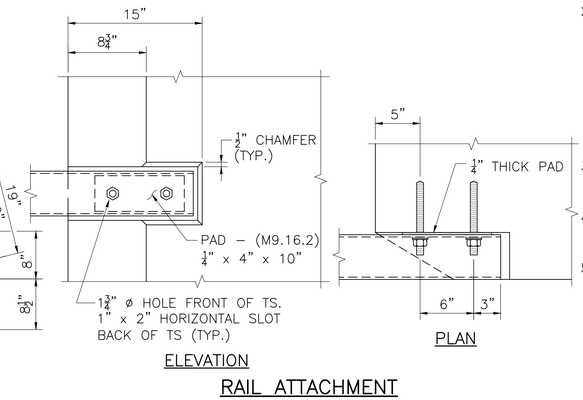
SECTION 18 AT SIDEWALK
SCALE: 1" = 1'-0"



SECTION 20
SCALE: 3" = 1'-0"



SECTION 16
SCALE: 1" = 1'-0"



RAIL ATTACHMENT
SCALE: 1½" = 1'-0"

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. BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1½" LONG FULLY THREADED AISI TYPE 304N STAINLESS STEEL. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. 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.

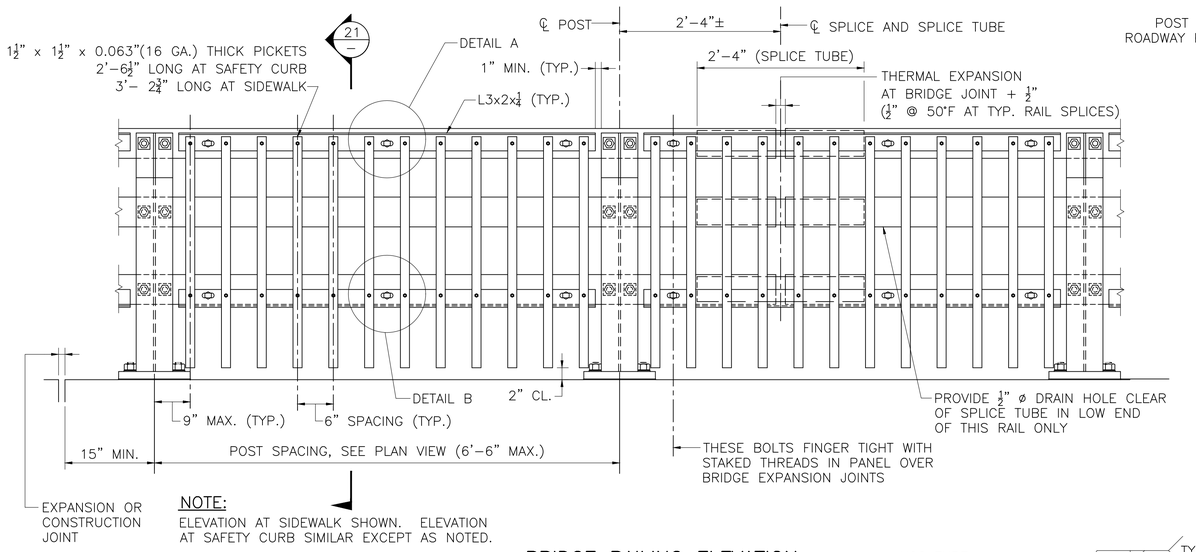
   FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF CURB SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.
3. USE LATEST CONTRACT COMPLETION YEAR IN EFFECT WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR ALL GUARDRAIL TRANSITIONS.
4. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE.
5. 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.

DATE	DESCRIPTION
SEP. 13, 2025	ISSUED FOR CONSTRUCTION

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

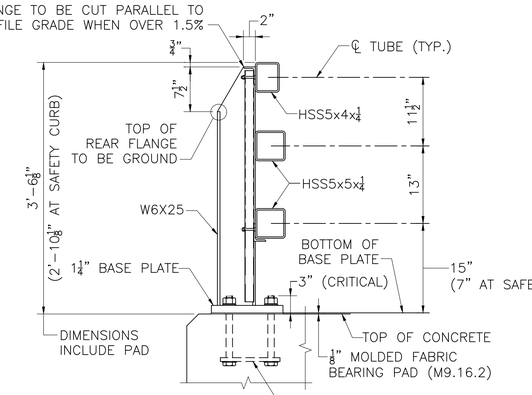
USE ONLY PRINTS OF LATEST DATE

TOP OF PRECAST HIGHWAY GUARDRAIL TRANSITION FOR S3-TL4 RAILING



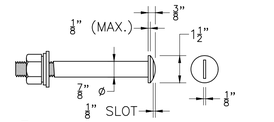
NOTE:
ELEVATION AT SIDEWALK SHOWN. ELEVATION AT SAFETY CURB SIMILAR EXCEPT AS NOTED.

BRIDGE RAILING ELEVATION
SCALE: 1" = 1'–0"

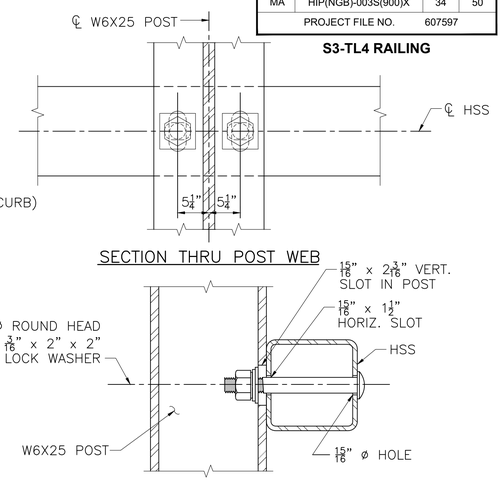


NOTE:
SECTION AT SIDEWALK SHOWN. SECTION AT SAFETY CURB SIMILAR, EXCEPT AS NOTED.

SECTION 21
SCALE: 1" = 1'–0"



⅞" ø ROUND HEAD BOLT
SCALE: 3" = 1'–0"

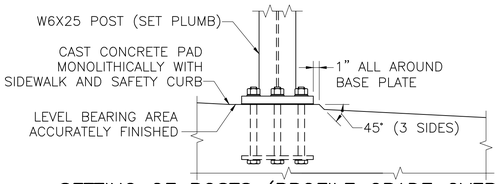


SECTION THRU POST WEB

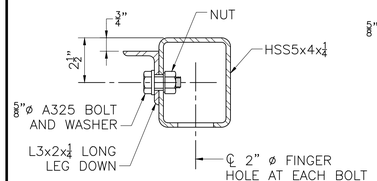
SECTION THRU RAIL

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

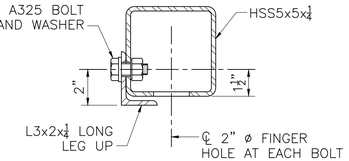
TYPICAL RAIL TO POST CONNECTIONS
SCALE: 1" = 1'–0"



SETTING OF POSTS (PROFILE GRADE OVER 1.5%)
SCALE: 1" = 1'–0"



SECTION 22



SECTION 24

SECTION 23

SECTION 25

TYPICAL PICKET TO RAIL DETAILS
SCALE: 3" = 1'–0"

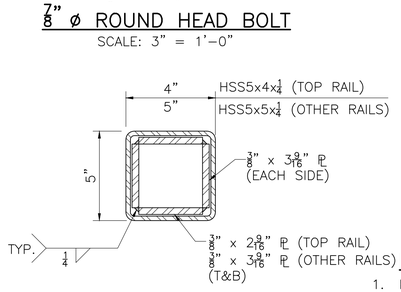
ANCHOR PLATE
SCALE: 3" = 1'–0"

ANCHOR BOLT
SCALE: 3" = 1'–0"

BASE PLATE
SCALE: 3" = 1'–0"

SPLICE DETAIL
FULL SIZE

TYPICAL SPLICE
SCALE: 1" = 1'–0"



SPLICE TUBE DETIALS
SCALE: 3" = 1'–0"

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. RAILS SHALL BE SPLICED IN THE PANELS OVER EXPANSION JOINT.
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 FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING. WELD SHALL BE BACK–GOUGED ON BACK SIDE EXCEPT AT WEB. WELD IS THE SAME ON BOTH FLANGES.
8. ⅞" ø ROUND HEAD BOLTS SHALL CONFORM TO THE CHEMICAL AND PHYSICAL REQUIREMENTS OF AASHTO M 164.

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT AUTHORIZED SIGNATORY:	STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE	

S3–TL4 BRIDGE RAILING

LEE
MEADOW STREET

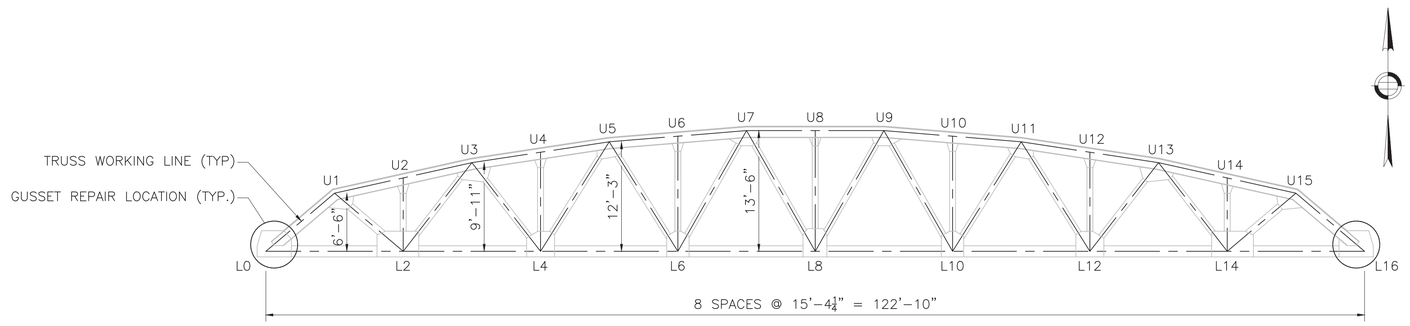
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	34	50
	PROJECT FILE NO. 607597		

S3-TL4 RAILING

SHEET 17 OF 17 SHEETS BRIDGE NO. L–05–004 (CEB)

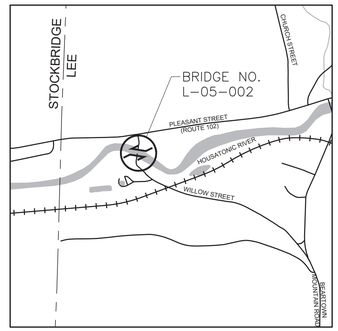
607597_BR(RAILING).DWG Plotted on 17-Oct-2025 1:19 PM

Final Structural Submittal (SF) 08-Sept-2025



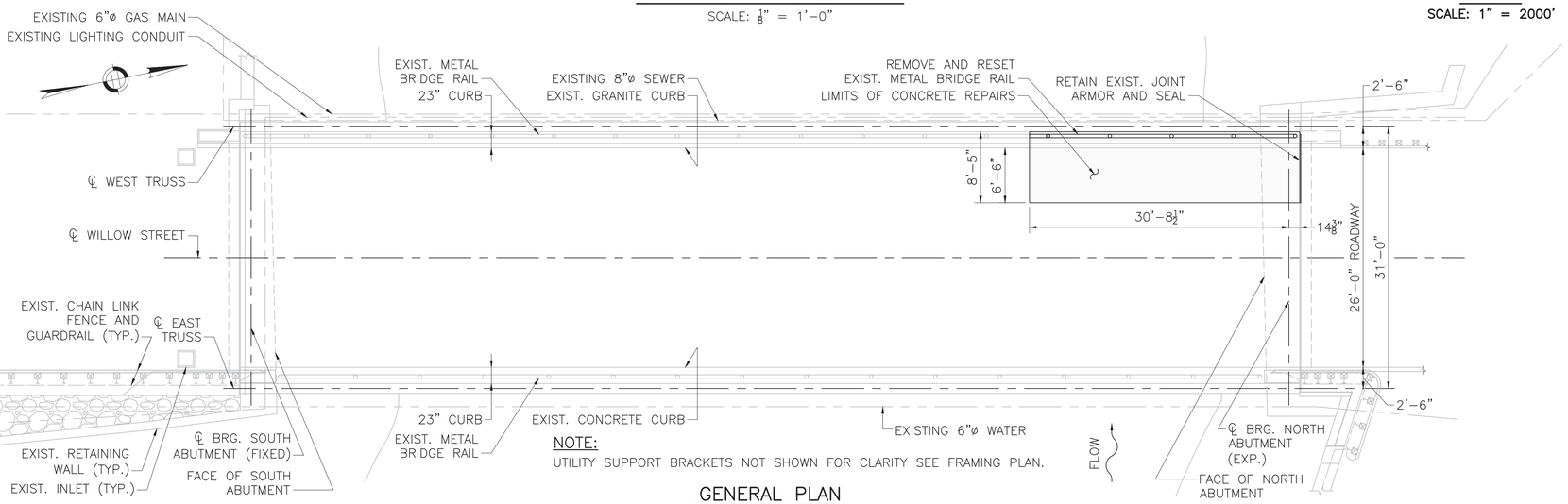
TYPICAL TRUSS ELEVATION

SCALE: ⅛" = 1'-0"



LOCUS

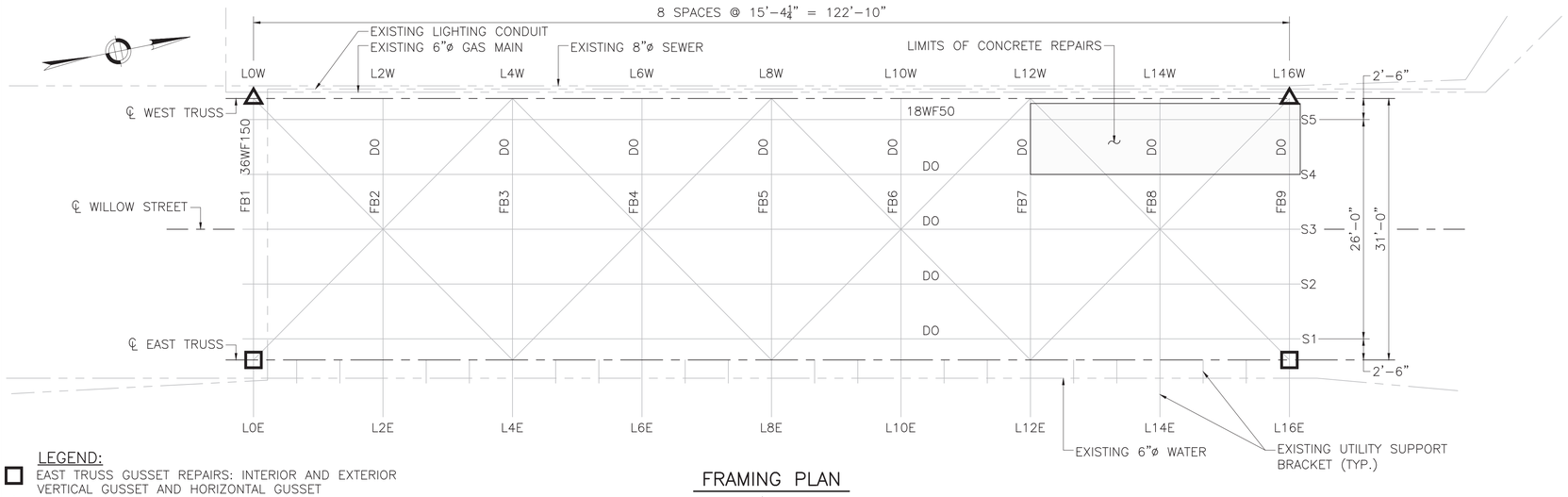
SCALE: 1" = 2000'



NOTE:
UTILITY SUPPORT BRACKETS NOT SHOWN FOR CLARITY SEE FRAMING PLAN.

GENERAL PLAN

SCALE: ⅛" = 1'-0"



LEGEND:
- □ EAST TRUSS GUSSET REPAIRS: INTERIOR AND EXTERIOR VERTICAL GUSSET AND HORIZONTAL GUSSET
- △ WEST TRUSS GUSSET REPAIRS: INTERIOR VERTICAL GUSSET

FRAMING PLAN

SCALE: ⅛" = 1'-0"

LEE
WILLOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	35	50
	PROJECT FILE NO. 607597		

GENERAL PLAN, INDEX, AND LOCUS

GENERAL NOTES:

DESIGN:

IN ACCORDANCE WITH THE 2002 DESIGN SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) FOR HS-20 LOADING.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION 2025 STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND THE PROJECT SPECIAL PROVISIONS.

EXISTING PLANS:

PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE THROUGH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION ELECTRONICALLY FROM PLANS AND RECORDS.

SCALES:

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

UTILITIES:

THE CONTRACTOR SHALL LOCATE AND PROTECT FROM DAMAGE ALL UTILITIES.

TRAFFIC CONTROL:

TEMPORARY TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED TTCP PROVIDED ON SHEET 6.

ESTIMATED QUANTITIES

NOT GUARANTEED

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
127.42	REINFORCED CONCRETE DECK EXCAVATION BRIDGE L-05-002(057)	8	CY
904.01	4000 PSI, 3/4 INCH, 610 CEMENT CONCRETE BRIDGE L-05-002(057)	8	CY
910.11	STEEL REINFORCEMENT FOR STRUCTURES EPOXY COATED BRIDGE L-05-002(057)	700	LB
960.01	STRUCTURAL STEEL MODIFICATIONS BRIDGE L-05-002(057)	2000	LB
961.301	CLEAN (FULL REMOVAL) AND PAINT SELECT STEEL ELEMENTS OF BRIDGE NO. L-05-002(057)	1	LS

SHEET INDEX

COMMONWEALTH OF MASSACHUSETTS
PRESTON A. HUCKABEE
STRUCTURAL
NO. 40113
REGISTERED
PROFESSIONAL ENGINEER

Preston A. Huckabee P.E. — Digitally signed by Preston A. Huckabee P.E. Date: 2025.10.17 13:55:17 -04'00'

GILL ENGINEERING
63 KENDRICK STREET, NEEDHAM, MA 02494

SEP. 13, 2025 | ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

PROPOSED BRIDGE REPAIRS

LEE

WILLOW STREET
OVER HOUSATONIC RIVER

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: 2025.10.17 14:40:03 -04'00'
STATE BRIDGE ENGINEER

Carrie Lavallee, P.E. — 2025.10.18 11:09:26 -04'00'
CHIEF ENGINEER

L05002 (057) - GENERAL PLAN, INDEX, AND LOCUS.DWG Plotted on 16-Oct-2025 4:11 PM

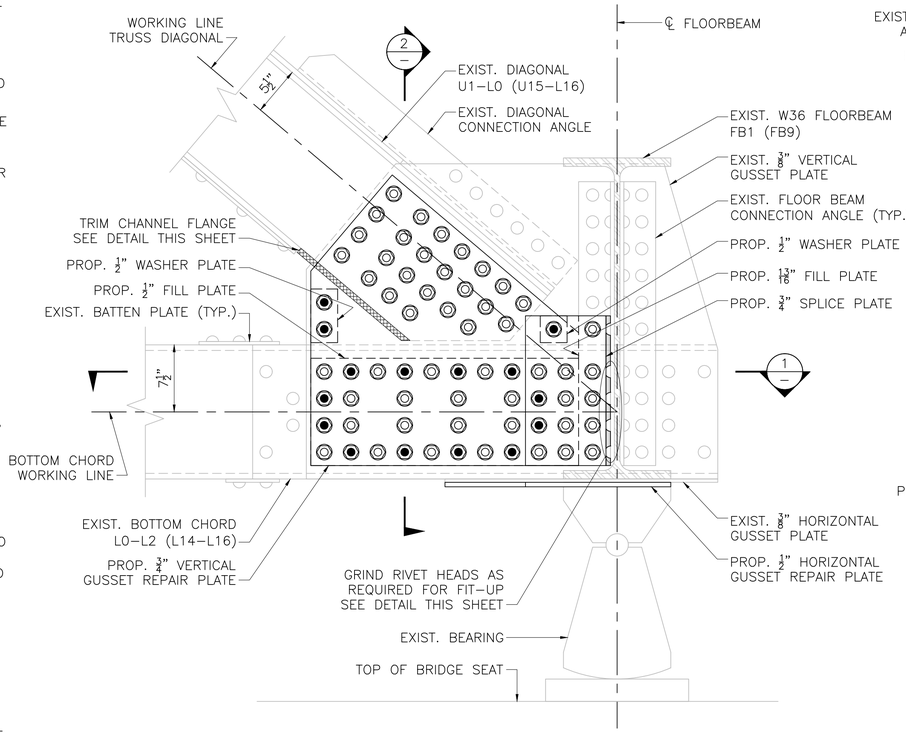
Final Structural Submittal (SF) 08-Sept-2025

GUSSET REPAIR NOTES:

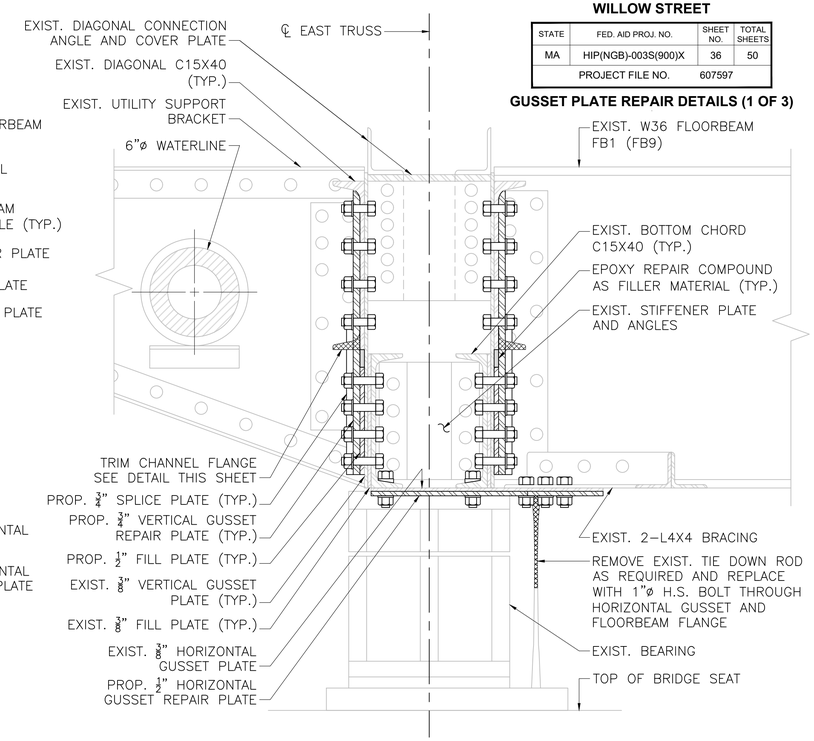
1. THE DETAILS DEPICTED HEREIN ARE BASED UPON THE 1951 BRIDGE RECORD PLANS, 1988 BRIDGE REHABILITATION PLANS, THE 2014 BRIDGE REPAIR PLANS AND SOME FIELD MEASUREMENTS. THE EXISTING PITCH AND GAGE OF THE RIVETS IS NOT GUARANTEED. THE CONTRACTOR WILL BE REQUIRED TO CONDUCT A FIELD SURVEY TAKING ALL NECESSARY MEASUREMENTS AND IDENTIFYING ALL DETAILS REQUIRED FOR THE COMPLETION OF WORK PRIOR TO THE PREPARATION OF SHOP DRAWINGS.
2. PRIOR TO THE INSTALLATION OF ANY NEW STEEL, THE EXISTING STEEL SHALL BE THOROUGHLY CLEANED TO SSPC–SP10 CONDITION AND ONE COAT OF NEPCOAT APPROVED PRIMER SHALL BE APPLIED (SEE CLEANING AND PAINTING NOTES SHEET 4).
3. AT ALL LOCATIONS WHERE NEW STEEL WILL BE BOLTED USING EXISTING RIVET HOLES, THE CONTRACTOR SHALL MAKE TEMPLATES TO TRANSFER THE EXACT BOLT SPACING TO THE NEW STEEL.
4. ALL PROPOSED STEEL SHALL CONFORM TO AASHTO M270, GRADE 50. ALL GUSSET REPAIR PLATES AND SPLICE PLATES ARE MAIN MEMBERS AND ARE SUBJECT TO THE REQUIREMENTS OF FRACTURE CRITICAL MEMBERS (FCM). ALL FILL AND WASHER PLATES ARE SECONDARY COMPONENTS. ALL NEW STEEL SHALL BE BROUGHT TO THE JOB SITE WITH ONE COAT OF A NEPCOAT APPROVED PRIMER. THE SURFACE CONDITION SHALL BE CLASS B WITH A SLIP COEFFICIENT OF 0.50.
5. ALL EXISTING RIVETS ARE ASSUMED TO BE 7/8" DIA. IN 15/16" DIA. HOLES.
6. HIGH STRENGTH BOLTS SHALL CONFORM TO SUBSECTION M8.04.3 OF THE STANDARD SPECIFICATIONS FOR ASTM F3125 GRADE A325 TYPE 1 AND SHALL BE MECHANICALLY GALVANIZED WITH COMPATIBLE NUTS AND WASHERS. ALL NEW BOLTS SHALL BE 7/8" DIA. HIGH STRENGTH BOLTS IN 15/16" DIA. HOLES.
7. ALL HOLES IN THE NEW STEEL SHALL BE SUB DRILLED TO $\frac{13}{16}$ INCH DIA. UNLESS NOTED OTHERWISE AND FIELD REAMED TO $\frac{15}{16}$ INCH DIA.
8. REMOVE EXISTING STEEL AS INDICATED THAT WILL INTERFERE WITH THE STRENGTHENING MEMBERS (SEE CUTTING EXISTING STEEL NOTES). ANY UNEXPECTED STEEL DETERIORATION, MATERIAL LOSS, AND/OR CRACKS REVEALED DURING THE REPAIR PROCESS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER WHO WILL EXAMINE AND ASSESS THE DETERIORATION.
9. NO REPAIRS SHALL COMMENCE UNTIL ALL MATERIALS ARE ON HAND.
10. ONCE ALL PROPOSED STEEL FOR A PARTICULAR LOCATION IS ON HAND AND THE CONTRACTOR IS READY FOR INSTALLATION, THEY SHALL CAREFULLY REMOVE THE RIVET HEADS WHICH INTERFERE WITH THE INSTALLATION OF THE NEW PLATES. IT IS INTENDED TO MAINTAIN THE REMAINING PORTION OF THE RIVETS (SHANK AND FAR SIDE HEAD). ANY RIVETS WHICH ARE FOUND TO BE LOOSE SHALL BE REMOVED AND IMMEDIATELY REPLACED WITH A FULL BODY DRIFT PIN. THE DIAMETER OF THE MAIN BODY OF THE DRIFT PIN SHALL COMPLETELY FILL THE EXISTING HOLE TO ENSURE GOOD FIT. THE HOLE SHALL BE REAMED TO A UNIFORM DIAMETER IF NECESSARY. THE LEADING–EDGE TAPER SHALL BE SUFFICIENT TO ALLOW REASONABLE DRIVING INTO PLACE AND THE BACK END SHALL BE TURNED TO A DIMENSION WHICH ALLOWS THE NEW PLATE TO BE PLACED OVER IT.
11. RIVET HEAD REMOVAL SHALL UTILIZE A LIGHT CHIPPING HAMMER WITH AN APPROPRIATE ATTACHMENT OR GRINDING, BURNING WILL NOT BE ALLOWED. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE THE EXISTING STEEL TO REMAIN. ANY DAMAGE SHALL BE REPAIRED USING A PROCEDURE APPROVED BY THE ENGINEER.
12. IN LOCATIONS WHERE AN EXISTING RIVET IS TO BE REPLACED, NO MORE THAN ONE RIVET MAY BE REMOVED AT ANY ONE TIME. THE HOLES SHALL BE REAMED TO FULL SIZE, $\frac{15}{16}$ INCH DIA., AND A $\frac{7}{8}$ INCH DIA. H.S. BOLT INSTALLED. THE REMOVAL OF THE RIVET SHALL BE ACCOMPLISHED BY PUNCHING THE BODY OF THE SHANK OUT. IF THE RIVET CANNOT BE REMOVED IN THIS MANNER IT SHALL BE REMOVED BY DRILLING A $\frac{13}{16}$ INCH DIA. HOLE AND REAMING TO FULL SIZE. CUTTING AND BURNING WILL NOT BE ALLOWED.
13. WHERE A NEW $\frac{15}{16}$ INCH DIA. HOLE IS CALLED FOR, USING THE PROPOSED STEEL IN PLACE AS A TEMPLATE, HOLES IN THE EXISTING STEEL SHALL BE SUB DRILLED TO $\frac{13}{16}$ INCH DIA. THEN BOTH HOLES IN PROPOSED STEEL AND HOLES IN EXISTING STEEL SHALL BE REAMED TO FULL SIZE, $\frac{15}{16}$ INCH DIA., AND A $\frac{7}{8}$ INCH DIA. H.S. BOLT INSTALLED.
14. THE PROPOSED STEEL SHALL BE PROPERLY POSITIONED OVER ANY PINS AND SECURED IN PLACE WITH CLAMPS OR OTHER MECHANICAL MEANS. WELDING WILL NOT BE ALLOWED.
15. THE INSTALLATION OF NEW BOLTS SHALL BE PERFORMED ONE AT A TIME.
16. AT LOCATIONS WHERE A DRIFT PIN IS TO BE REPLACED WITH A NEW BOLT THE PIN SHALL BE DRIVEN OUT AND A NEW BOLT INSTALLED.
17. ALL BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH THE REQUIREMENTS OF M8.04.3. AFTER ALL BOLTS ARE INSTALLED, A FINAL TENSIONING PASS SHALL BE PERFORMED ON THE ENTIRE REPAIR TO ENSURE PROPER TENSIONING OF ALL BOLTS.
18. AFTER REPAIRS AT EACH GUSSET LOCATION ARE COMPLETE, APPLY SILICONE SEALER TO THE PLATE EDGE SEAMS BETWEEN LAMINATES AND APPLY 2 COATS OF PAINT (SEE CLEANING AND PAINTING NOTES SHEET 4).

CUTTING EXISTING STEEL NOTES:

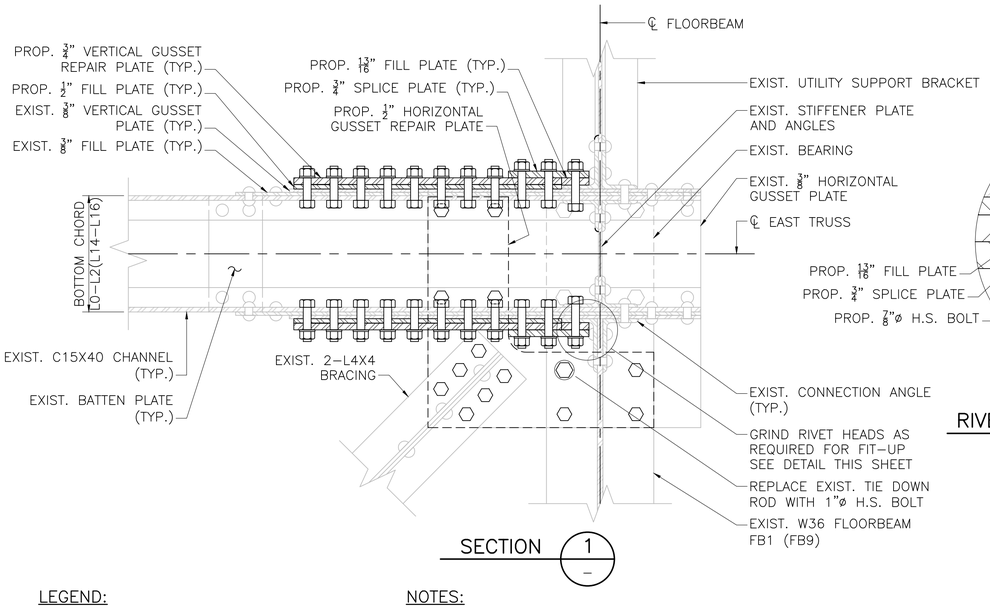
1. PRIOR TO CUTTING ANY PAINTED STEEL SURFACES, THE CONTRACTOR SHALL CHEMICALLY OR MECHANICALLY REMOVE THE ENTIRE COATING DOWN TO BARE METAL. THE PAINT COATING MUST BE REMOVED IN AN AREA CONSISTENT WITH THE SPECIAL PROVISIONS GENERAL REQUIREMENTS FOR DEMOLITION AND WORK INVOLVING PAINTED STEEL.
2. CUTTING MAY BE PERFORMED BY CARBON AIR ARC CUTTING, PLASMA CUTTING, OR BY MECHANICAL MEANS. THERMAL CUTS SHALL BE MADE INSIDE THE LIMITS OF THE CUTS AND GROUND TO THE FINAL PROFILE. FLAME CUTTING SHALL NOT BE ALLOWED.
3. THERMAL CUTTING SHALL BE DONE IN A MANNER TO NOT CREATE EXCESSIVE HEAT IN THE STEEL TO REMAIN. THE CONTRACTOR SHALL USE TEMP–STICK INDICATING CRAYONS FOR 275°F TO 300°F OR INFRARED THERMOMETERS TO MONITOR THE TEMPERATURE IN THE STEEL. TEMPERATURES SHALL BE MONITORED ON THE STEEL TO REMAIN 3 INCHES AWAY FROM THE LINE BEING CUT. IF THE TEMPERATURE OF THE BASE STEEL EXCEEDS 275°F, CUTTING SHALL BE TEMPORARILY DISCONTINUED TO ALLOW THE STEEL TO COOL. IF THE TEMPERATURE EXCEEDS 300°F IN THE BASE STEEL, THEN THAT CUTTING PROCESS SHALL BE DISCONTINUED, AND OTHER METHODS SHALL BE EMPLOYED TO CUT WITHIN THE SAME TEMPERATURE RESTRICTIONS.
4. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL DETAILED PROCEDURES DEMONSTRATING HOW THE STEEL WILL BE CUT, REMOVED AND PREPARED FOR INSTALLATION OF THE NEW STEEL. ALL PERSONNEL INVOLVED IN CUTTING AND WELD REMOVAL SHALL BE MASSDOT CERTIFIED WELDERS.
5. IN THE EVENT THE CONTRACTOR DAMAGES MATERIALS TO REMAIN DURING CUTTING OPERATIONS, THE CONTRACTOR SHALL REPLACE, REPAIR, OR REINFORCE THE DAMAGED AREA AS MAY BE REQUIRED TO RESTORE THE AREA TO THE ORIGINAL CONDITION OR BETTER PRIOR TO DAMAGE.



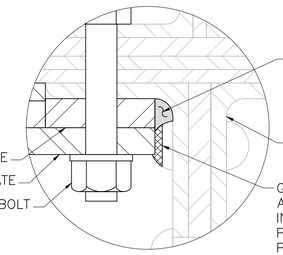
ELEVATION (INTERIOR)



SECTION 2

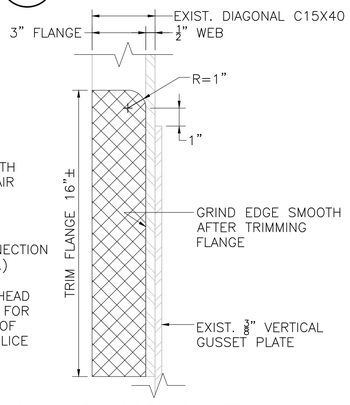


SECTION 1



RIVET INTERFERENCE DETAIL

NOT TO SCALE



CHANNEL COPING DETAIL

SCALE: 3" = 1'–0"

LEGEND:

- ○ ○ EXISTING RIVET OR BOLT TO REMAIN
- ◯ ◎ PROPOSED H.S. BOLT IN EXISTING RIVET HOLE
- ● ◉ PROPOSED H.S. BOLT IN NEW HOLE

NOTES:

1. GUSSET PLATE AT PANEL POINT L0E SHOWN, REPAIR AT L16E SIMILAR AS NOTED BY PARENTHESIS AND OPPOSITE HAND.
2. SEE SHEET 3 FOR ALL PLATE DETAILS AND PACK RUST REMOVAL NOTES AND DETAILS.
3. SEE SHEET 4 FOR LIMITS OF EPOXY REPAIR COMPOUND AND CLEANING AND PAINTING NOTES AND DETAILS.

EAST TRUSS GUSSET PLATE REPAIR

SCALE: 1½" = 1'–0"

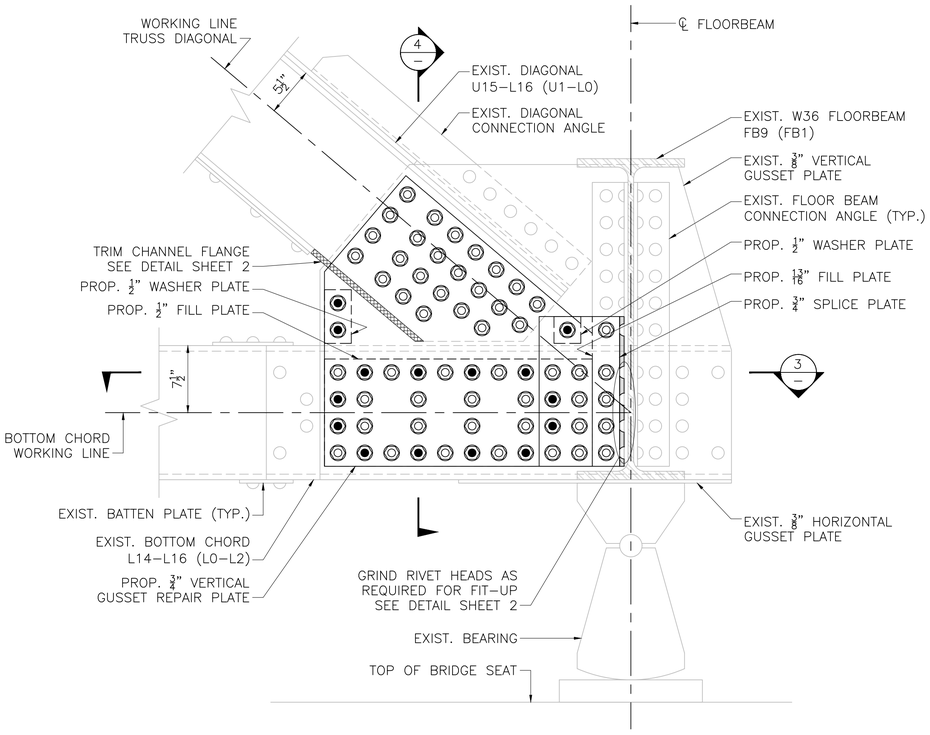
LEE
WILLOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	36	50
	PROJECT FILE NO. 607597		

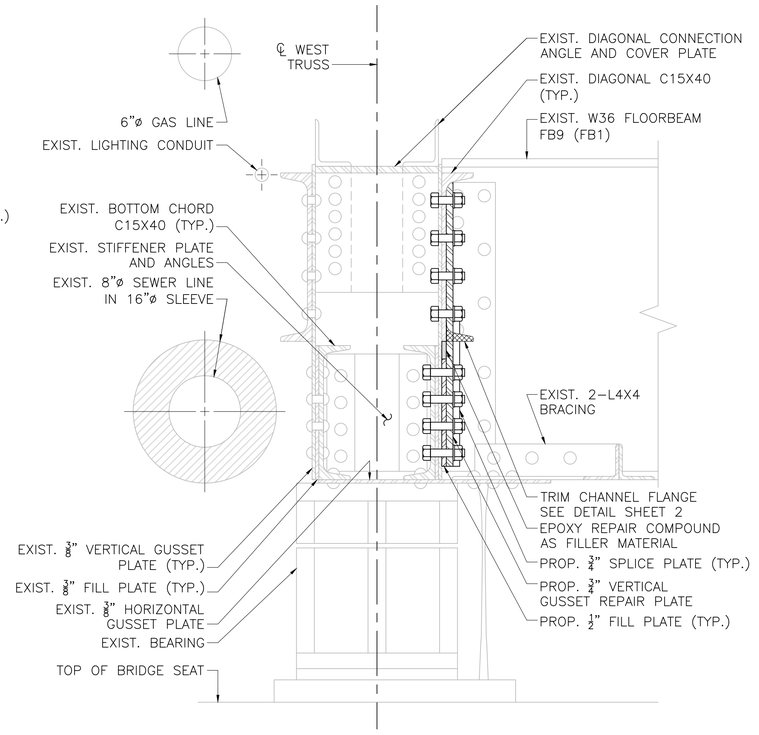
GUSSET PLATE REPAIR DETAILS (1 OF 3)

DATE	DESCRIPTION
SEP. 13, 2025	ISSUED FOR CONSTRUCTION

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



ELEVATION (INTERIOR)

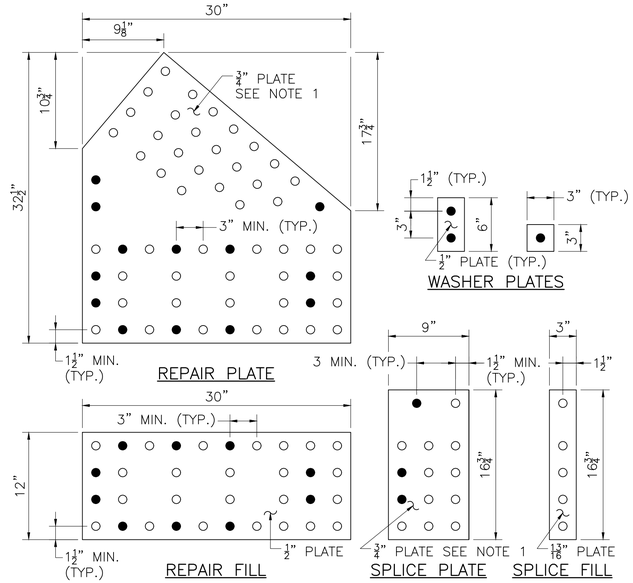


SECTION 4

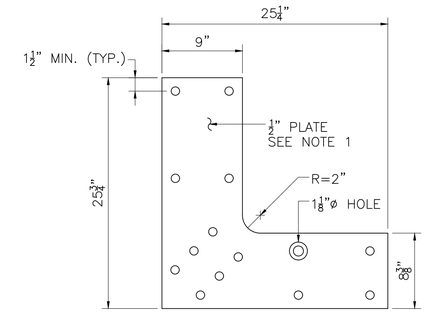
LEE
WILLOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	37	50
	PROJECT FILE NO. 607597		

GUSSET PLATE REPAIR DETAILS (2 OF 3)



VERTICAL GUSSET REPAIR PLATES



HORIZONTAL GUSSET REPAIR PLATES

LEGEND:

○ HOLE TO MATCH EXISTING RIVET HOLES

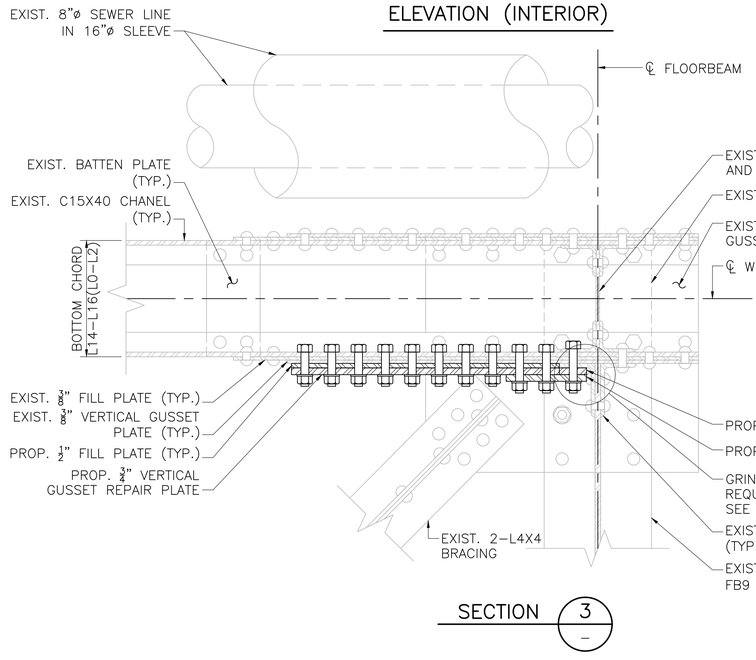
● HOLE FOR NEW BOLT

NOTES:

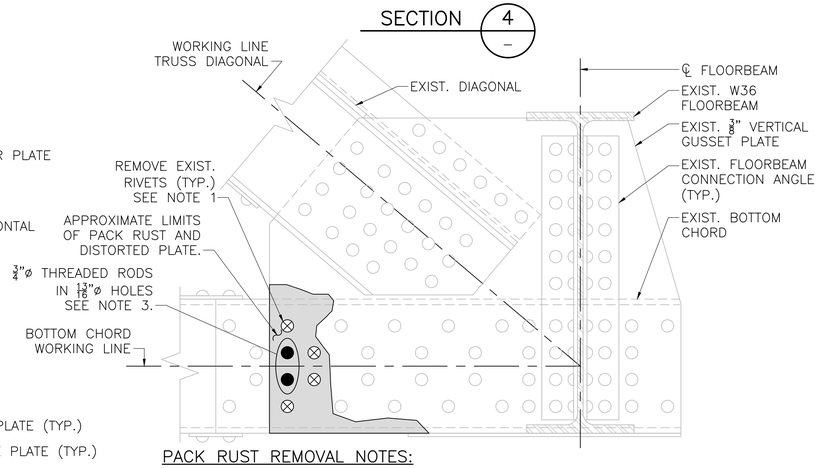
1. GUSSET REPAIR PLATES AND SPLICE PLATES ARE MAIN MEMBER, SEE GUSSET PLATE REPAIR NOTES SHEET 2.
2. PLATE DIMENSIONS PROVIDED ARE APPROXIMATE AND NEED TO BE VERIFIED BY THE CONTRACTOR, SEE GUSSET REPAIR NOTES SHEET 2.

REPAIR PLATE DETAILS

SCALE: 1½" = 1'–0"



SECTION 3



SECTION 4

PACK RUST REMOVAL NOTES:

1. REMOVE ONLY THE EXISTING RIVETS SHOWN, NO ADDITIONAL RIVETS SHALL BE REMOVED.
2. PRY BACK EXISTING VERTICAL GUSSET PLATE AND REMOVE PACK RUST IN ACCORDANCE WITH SUBSECTION 961.61 OF THE STANDARD SPECIFICATIONS TO THE EXTENT PRACTICAL.
3. AFTER CLEANING, INSTALL ¾" DIA. A449 THREADED RODS IN 1 3/16" DIA. HOLES AND ⅞" DIA. RIVET HOLES AND DRAW GUSSET PLATE TIGHT TO BOTTOM CHORD TO REMOVE THE PLATE BUCKLE TO THE EXTENT PRACTICABLE.
4. ONCE THE PLATE HAS BEEN FLATTENED THE RODS MAY BE REMOVED AND THE REPAIR PLATE INSTALLED. REINSTALL THE THREADED ROD AS REQUIRED TO DRAW THE NEW STEEL TO EXISTING. REPLACE THE THREADED RODS ONE AT A TIME BY REAMING HOLES TO FULL SIZE AND FILLING WITH H.S. BOLTS.
5. THE REMAINING OPEN HOLES SHALL BE REAMED AND FILLED WITH H.S. BOLTS THEN THE CONTRACTOR SHALL FOLLOW THE GUSSET PLATE REPAIR PROCEDURE ON SHEET 2.

TYPICAL PACK RUST REMOVAL

LEGEND:

○○ EXISTING RIVET OR BOLT TO REMAIN

⬡◎ PROPOSED H.S. BOLT IN EXISTING RIVET HOLE

⬢◉ PROPOSED H.S. BOLT IN NEW HOLE

NOTES:

1. GUSSET PLATE AT PANEL POINT L16W SHOWN, REPAIR AT LOW SIMILAR AS NOTED BY PARENTHESIS AND OPPOSITE HAND.
2. SEE SHEET 4 FOR LIMITS OF EPOXY REPAIR COMPOUND AND CLEANING AND PAINTING NOTES AND DETAILS.

WEST TRUSS GUSSET PLATE REPAIR

SCALE: 1½" = 1'–0"

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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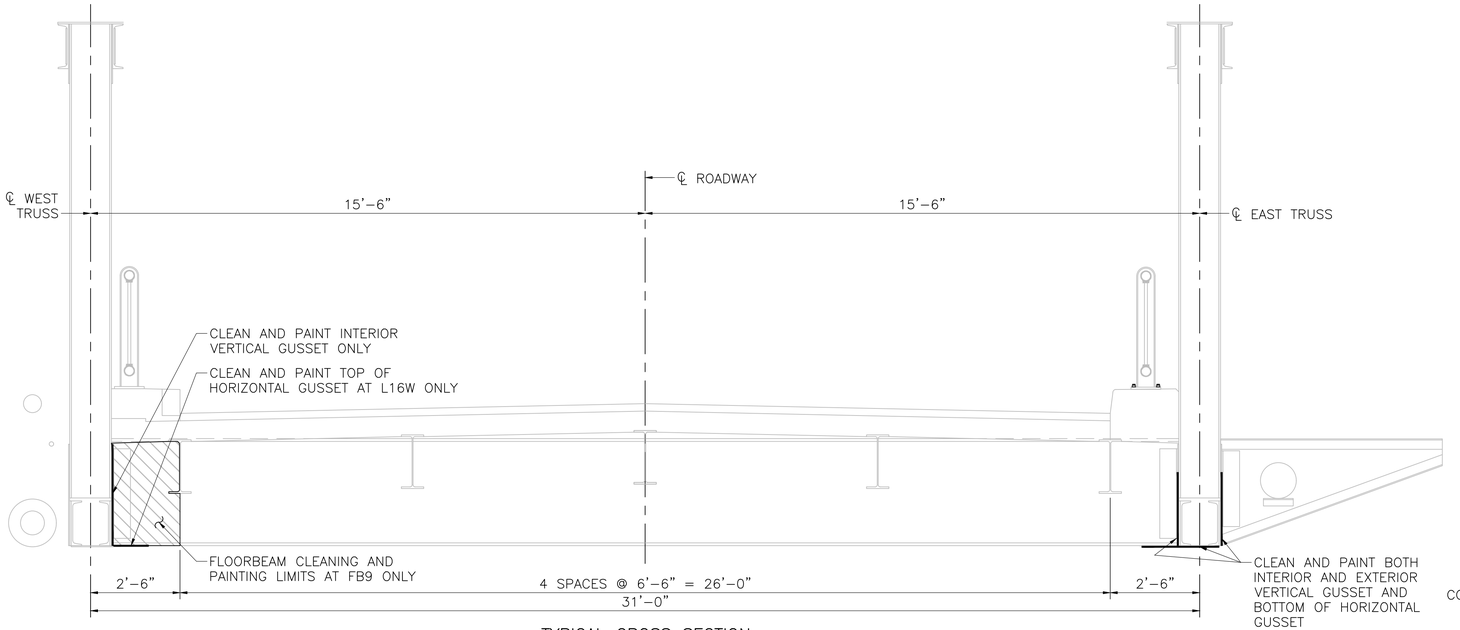
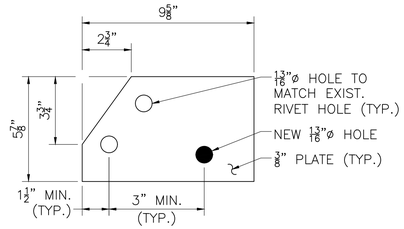
USE ONLY PRINTS OF LATEST DATE



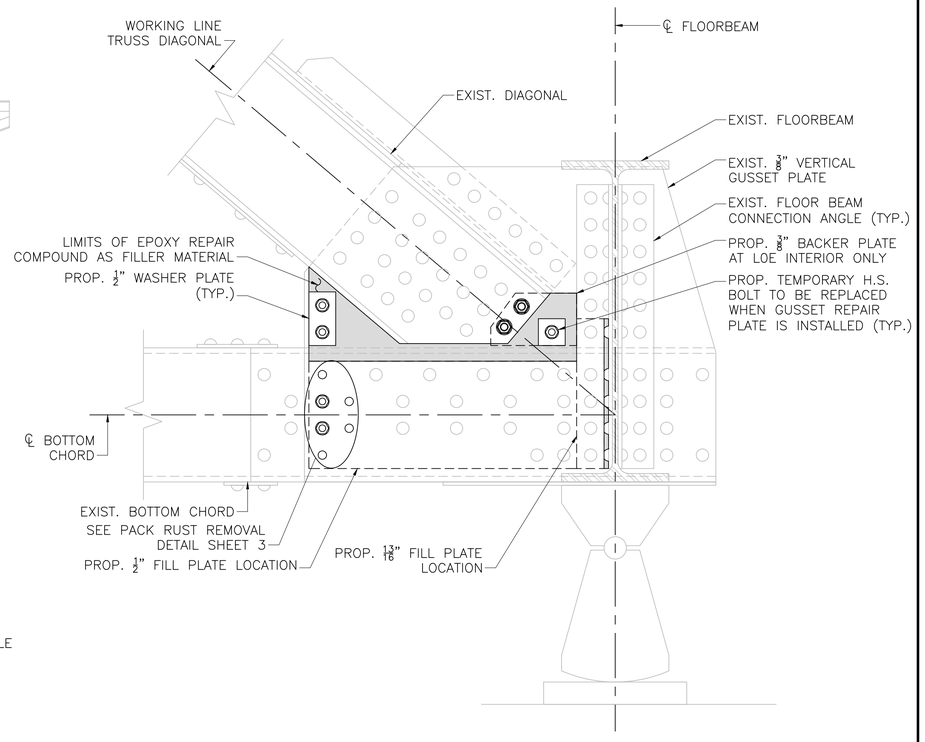
TYPICAL CROSS SECTION

SCALE: $\frac{1}{2}$" = 1'–0"



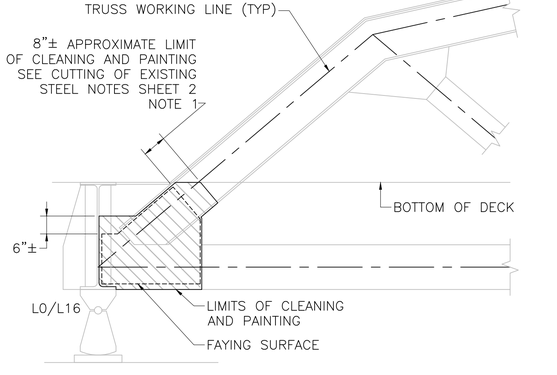
L0E BACKER PLATE

SCALE: 3" = 1'–0"



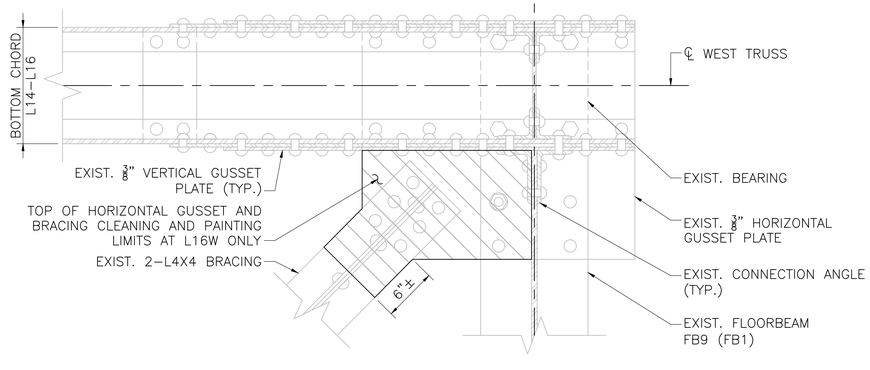
EPOXY REPAIR COMPOUND DETAIL

SCALE: 1½" = 1'–0"



VERTICAL GUSSET AND TRUSS MEMBERS

SCALE: $\frac{1}{2}$" = 1'–0"



L16W HORIZONTAL GUSSET

SCALE: 1½" = 1'–0"

LIMITS OF CLEANING AND PAINTING

CLEANING AND PAINTING NOTES:

1. THE CONTRACTOR SHALL ASSUME ALL EXISTING COATINGS CONTAIN LEAD UNLESS OTHERWISE DETERMINED BY TESTING. LOCAL CONTAINMENT SHALL BE PROVIDED FOR ALL DEBRIS CREATED BY CLEANING AND PAINTING OPERATIONS.
2. PRIOR TO THE INSTALLATION OF ANY NEW STEEL, THE EXISTING STEEL SHALL BE THOROUGHLY CLEANED TO SSPC–SP10 CONDITION TO THE LIMITS SHOWN AND A PRIME OF PAINT SHALL BE APPLIED. THE PRIME COAT PAINT SYSTEM SHALL BE IN ACCORDANCE WITH SUBSECTION 961.64 OF THE MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND SHALL BE COMPATIBLE WITH THE PAINT SYSTEM BEING EMPLOYED BY THE CONTRACTOR.
3. AFTER REPAIRS AT EACH LOCATION ARE COMPLETE, APPLY PAINTABLE SEALER TO THE EDGE SEAMS BETWEEN STEEL LAMINATES BEFORE PAINTING.
4. ALL STRUCTURAL STEEL ELEMENTS AND HIGH STRENGTH BOLTS SHALL BE PAINTED IN ACCORDANCE WITH SUBSECTION 961.64 OF THE MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES. CLEANING AND PAINTING SHALL EXTEND A MINIMUM OF 6 INCHES BEYOND THE PERIMETER OF THE PROPOSED REPAIRS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. THE FINISH COAT SHALL BE FEDERAL STANDARD COLOR #14223 GREEN.

EPOXY REPAIR COMPOUND NOTES:

IN LOCATIONS WHERE HEAVY DETERIORATION HAS OCCURRED OR AS DIRECTED BY THE ENGINEER, EPOXY REPAIR COMPOUND SHALL BE APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND AS FOLLOWS:

1. THE EPOXY REPAIR COMPOUND SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL THE METHODS, PROCEDURES, AND MATERIALS TO BE USED FOR THE WORK.
2. THE REPAIR COMPOUND SHALL BE USED AS A FILLER MATERIAL BETWEEN NEW AND EXISTING STEEL AS SHOWN IN THESE DETAILS. ADDITIONALLY THE REPAIR COMPOUND SHALL BE APPLIED TO AREAS OF THE EXISTING STEEL THAT EXHIBIT SEVERE SECTION LOSS TO COMPLETELY FILL THE IRREGULARITIES IN THE EXISTING PLATE SUCH THAT NO VOIDS REMAIN BETWEEN THE PLIES OF THE EXISTING STEEL AND THE PROPOSED STRENGTHENING STEEL IN THE FINAL REPAIRED CONDITION. ALSO, ANY VOIDS ADJACENT TO OR COVERED BY REPAIR STEEL SHALL BE FILLED WITH THE EPOXY REPAIR COMPOUND SO MOISTURE DOES NOT COLLECT
3. THE PROPOSED REPAIR STEEL SHALL BE PROPERLY POSITIONED AND BROUGHT INTO FIRM CONTACT WITHIN THE WORKING TIME LIMITS OF THE EPOXY REPAIR COMPOUND. THE REPAIR STEEL SHALL BE SECURED IN PLACE USING CLAMPS BY OR OTHER MECHANICAL MEANS TO BRING THE PLIES OF THE EXISTING STEEL AND NEW STEEL INTO FIRM CONTACT. WELDING IS NOT ALLOWED.
4. ONCE THE PROPOSED STEEL HAS BEEN SECURED INTO POSITION WITH THE POSITIONING BOLTS, AND THE EPOXY COMPOUND HAS CURED, THE CONTRACTOR MAY CONTINUE WITH THE REPAIR PROCEDURE OUTLINED IN THE GUSSET PLATE REPAIR NOTES ON SHEET 2.
5. EPOXY COMPOUND FOR STRUCTURAL STEEL REPAIRS SHALL BE A SOLVENT FREE, MOISTURE TOLERANT, EPOXY PASTE ADHESIVE SYSTEM. THE EPOXY PASTE SHALL BE DEVELOPED SPECIFICALLY FOR FILLING, SMOOTHING, SEALING, OR FAIRING APPLICATIONS ON METALS. THE PASTE SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S LATEST WRITTEN INSTRUCTIONS.

LEE
WILLOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	38	50
	PROJECT FILE NO. 607597		

GUSSET PLATE REPAIR DETAILS (3 OF 3)

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

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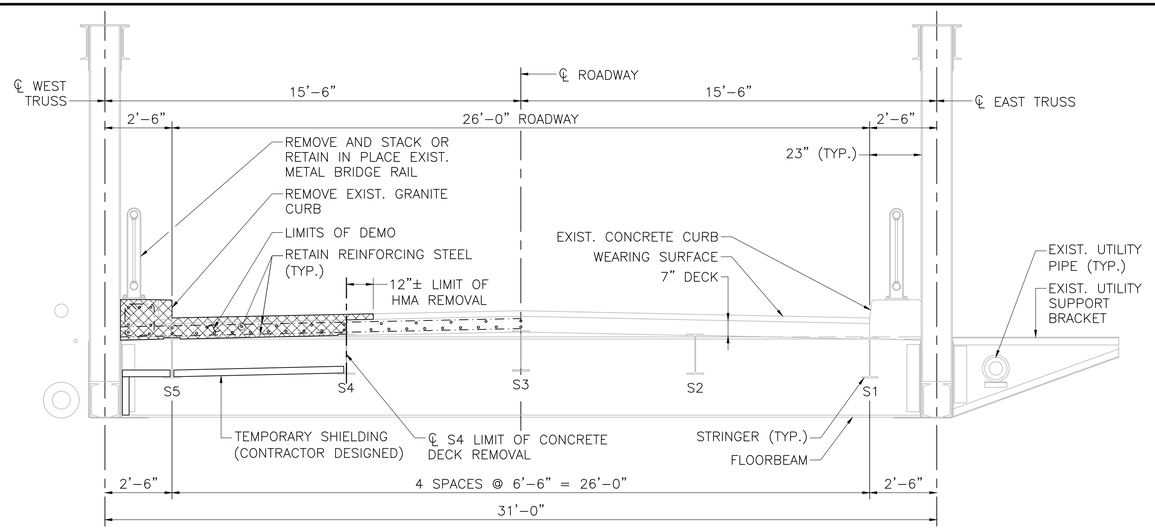
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

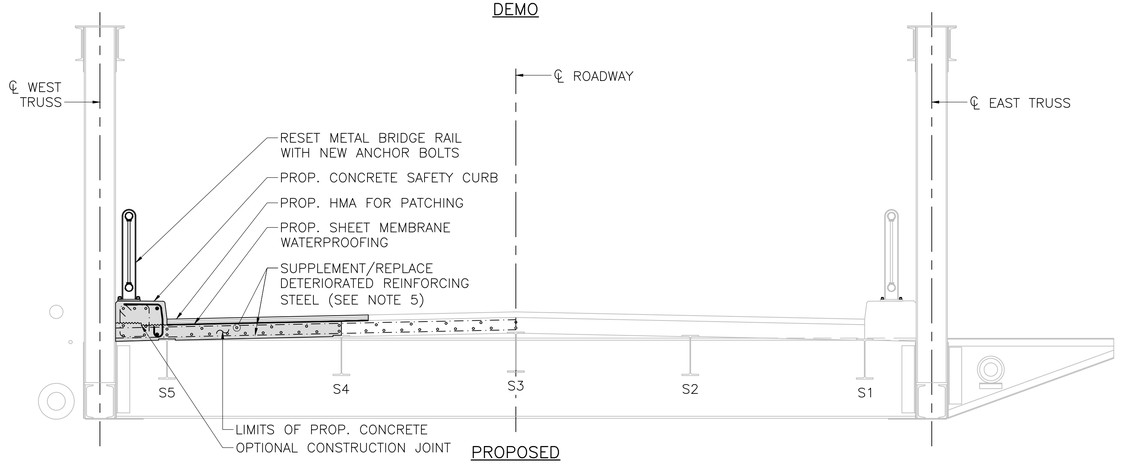
LEE
WILLOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	39	50
PROJECT FILE NO.	607597		

CONCRETE REPAIR DETAILS



DEMO



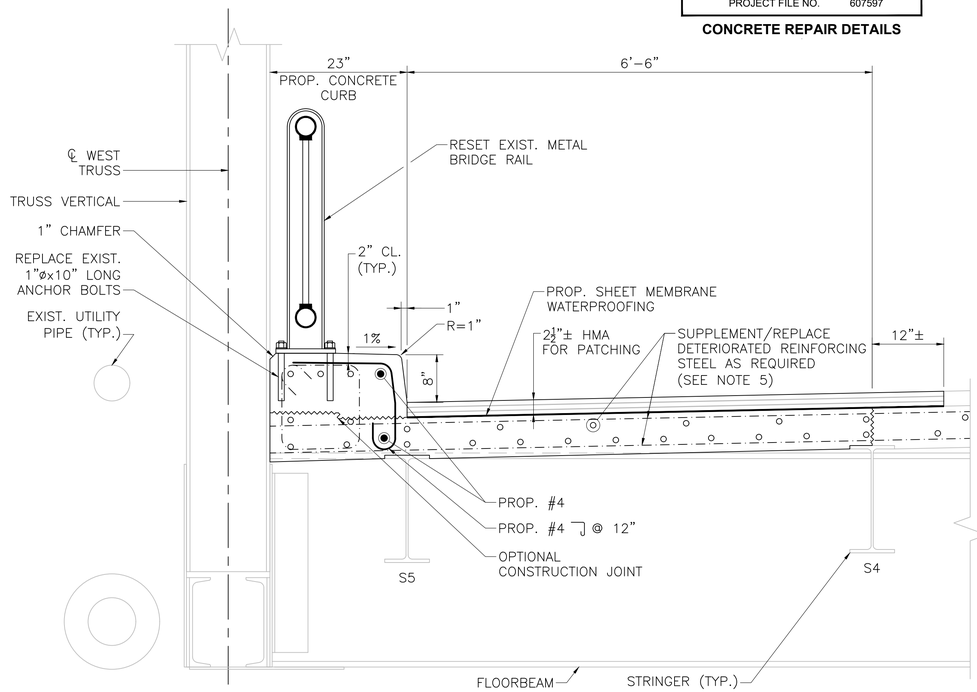
PROPOSED

CONCRETE REPAIR LIMITS – TYPICAL CROSS SECTION

SCALE: $\frac{3}{8}$" = 1'–0"

CONCRETE REPAIR LIMITS – AT BRIDGE JOINT

SCALE: 1" = 1'–0"



CONCRETE REPAIR DETAIL

SCALE: 1" = 1'–0"

CONCRETE REPAIR NOTES:

1. PROPOSED CONCRETE SHALL BE 4000 PSI, $\frac{3}{4}$", 610 CEMENT CONCRETE.
2. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 GRADE 60, EPOXY COATED.
3. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 105 TYPE 2A WITH COMPATIBLE NUTS AND WASHERS.
4. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF $\frac{3}{4}$" TO PRODUCE A CLEAN EDGE.
5. ALL EXISTING REINFORCEMENT SHALL BE RETAINED. NEW REINFORCING STEEL SHALL BE PLACED TO SUPPLEMENT EXISTING REINFORCEMENT THAT HAS SECTION LOSS OF 25% OR MORE OF THE ORIGINAL CROSS SECTION AREA OR HAS BROKEN, AS DETERMINED BY THE ENGINEER. ANY EXISTING STEEL DEEMED UNSUITABLE FOR REUSE BY THE ENGINEER SHALL BE REPLACED. ALL NEW REINFORCEMENT SHALL EXTEND PAST THE LIMITS OF DETERIORATION TO THE LENGTHS REQUIRED FOR NON–CONTACT LAP SPLICES. WELDING OF STEEL REINFORCEMENT SHALL NOT BE ALLOWED. NEW SUPPLEMENTAL REINFORCEMENT SHALL BE PLACED AT THE SAME LEVEL ALONGSIDE THE EXISTING DETERIORATED OR BROKEN REINFORCING STEEL.
6. CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH REPAIR CONCRETE SHALL BE ABRASIVELY BLAST CLEANED OR CLEANED WITH HIGH PRESSURE WASHING IN ORDER TO REMOVE ALL RUST, OIL, AND DEBRIS THAT IS NOT TIGHTLY ADHERED. EXISTING REINFORCING STEEL SHALL BE CLEANED BY MECHANICAL MEANS AND HIGH PRESSURE WASHING. ALL HIGH PRESSURE WASHING SHALL BE DONE WITH WATER THAT DOES NOT CONTAIN DETERGENTS OR ANY BOND INHIBITING CHEMICALS.
7. PRIOR TO CONCRETE PLACEMENT, THE EXCAVATED SURFACES SHALL RECEIVE A THOROUGH APPLICATION OF WATER FROM A PRESSURE WASHER CAPABLE OF DELIVERING 1500 PSI AT THE NOZZLE FOR A MINIMUM OF 10 MINUTES. AFTER PRESSURE WASHING, ANY STANDING WATER SHOULD BE BLOWN OUT TO PRODUCE A SATURATED SURFACE DRY (SSD) CONDITION USING OIL FREE COMPRESSED AIR.

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
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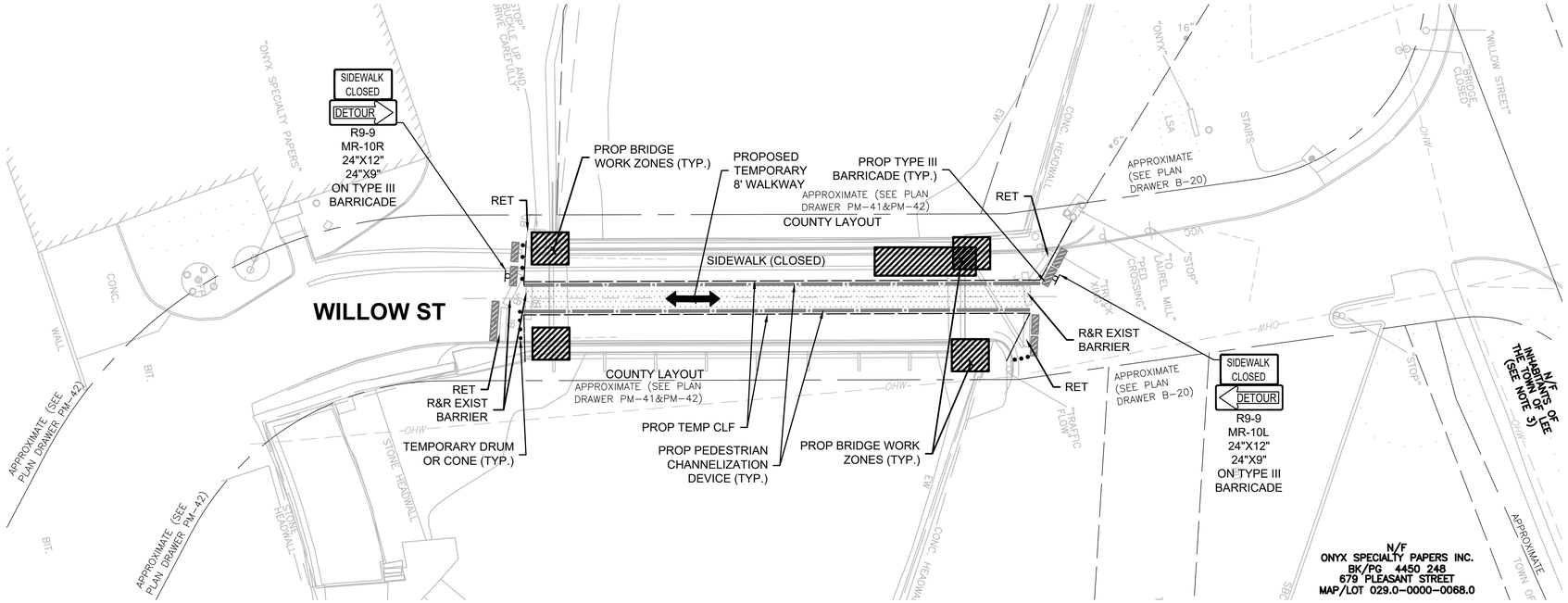
AUTHORIZED SIGNATORY: STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE

LEE
WILLOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	40	50
	PROJECT FILE NO. 607597		

TEMPORARY TRAFFIC CONTROL PLAN



LEGEND:

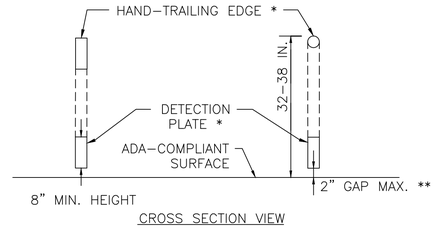
- TYPE III BARRICADE
- DIRECTION OF TRAFFIC
- WORK ZONE
- HMA OVERLAY
- SIGN
- TEMPORARY BARRIER
- TEMPORARY CHAIN LINK FENCE
- CONSTRUCTION FENCE GATE
- TEMPORARY DRUM OR CONE
- PEDESTRIAN BARRICADE WITH PEDESTRIAN CHANNELIZING DEVICES

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACKGROUND	LEGEND	BORDER			
MR-10L	24	9	DETOUR	SEE LATEST M.U.T.C.D			1	BLACK/ ORANGE	BLACK	BLACK	-	1.5	1.5
MR-10R	24	9	DETOUR				1	BLACK/ ORANGE	BLACK	BLACK	-	1.5	1.5
R9-9	24	12	SIDEWALK CLOSED				2	WHITE	BLACK	BLACK	-	2	4
											TOTAL		7

NOTES:

1. ALL 'ORANGE' SIGNS SHALL BE 'FLUORESCENT ORANGE'



CROSS SECTION VIEW

PEDESTRIAN CHANNELIZNG DEVICE

NOTES:

* THE HAND TRAILING EDGE AND DETECTION PLATE SHALL BE CONTINUOUS THROUGHOUT THE LENGTH OF THE PATH SUCH THAT A PEDESTRIAN USER WITH A LONG CANE CAN FOLLOW IT.

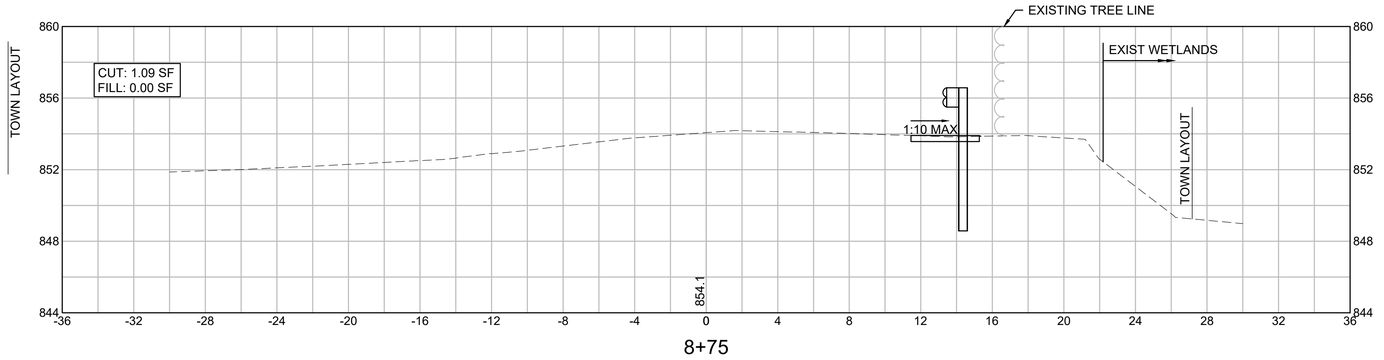
** A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.

SEP. 13, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
THIS SHEET IS APPROVED FOR CONSTRUCTION BY MASSDOT AUTHORIZED SIGNATORY:	STATE BRIDGE ENGINEER
USE ONLY PRINTS OF LATEST DATE	

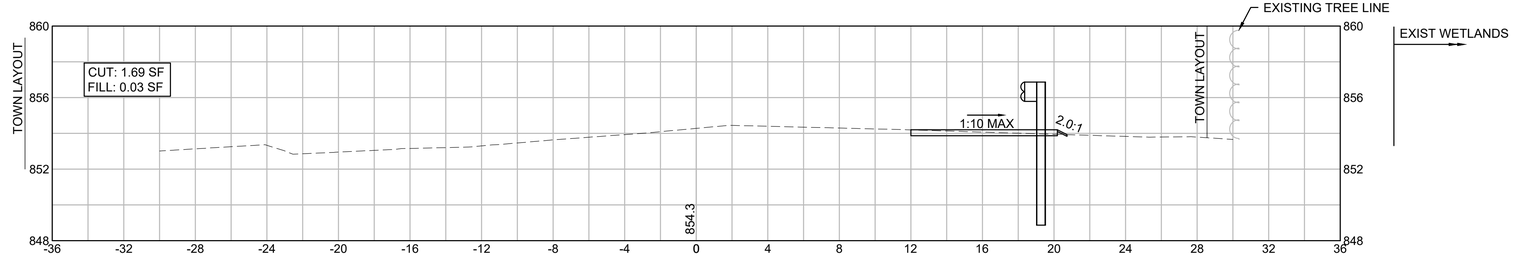
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	41	50
	PROJECT FILE NO. 607597		

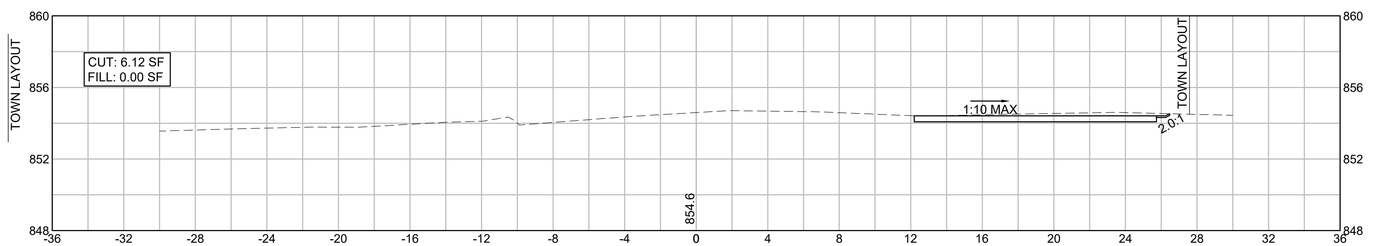
CROSS SECTIONS 1



8+75



8+50



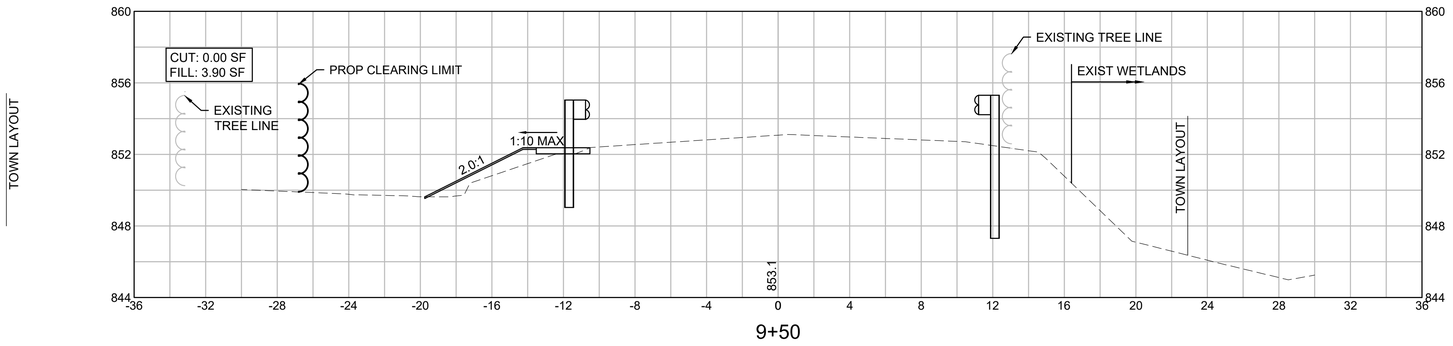
8+25

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

LEE
MEADOW STREET

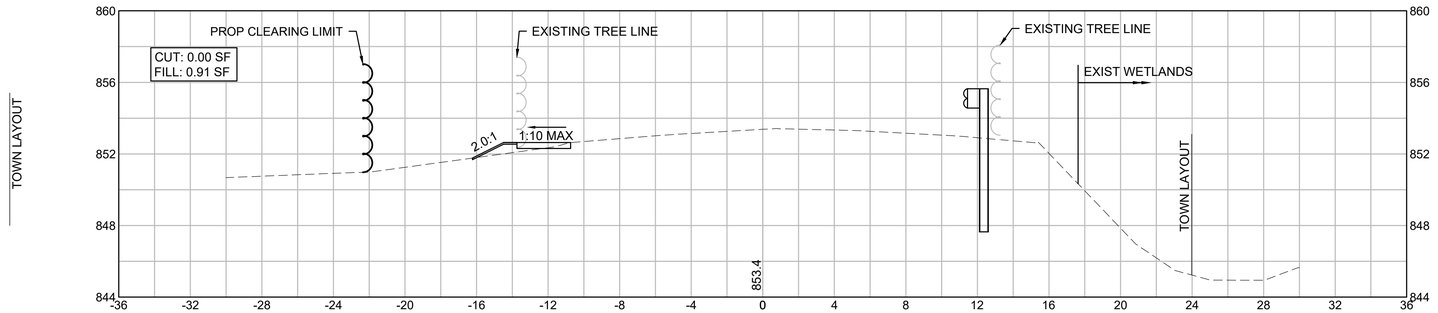
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	42	50
	PROJECT FILE NO. 607597		

CROSS SECTIONS 2

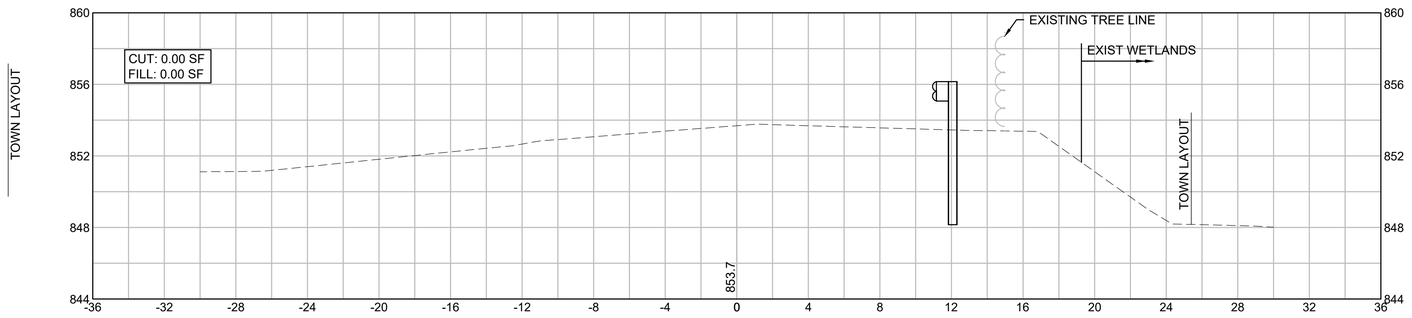


9+50

EXIST UPL
9+37.67



9+25



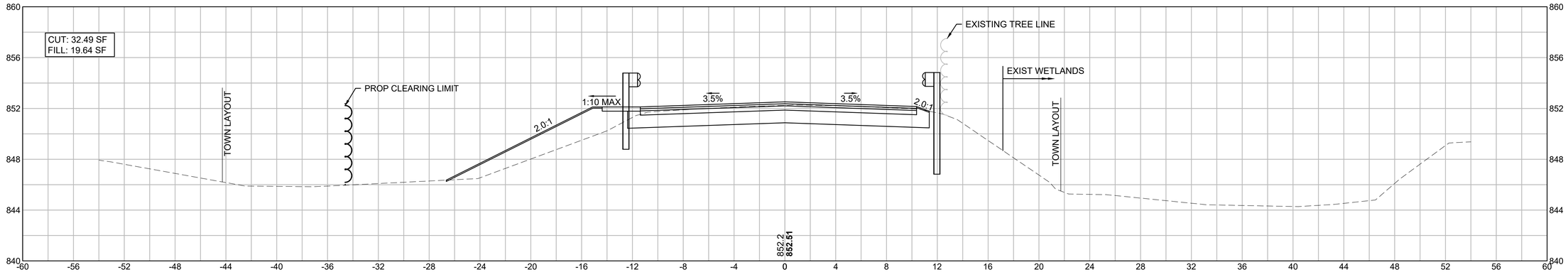
9+00

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

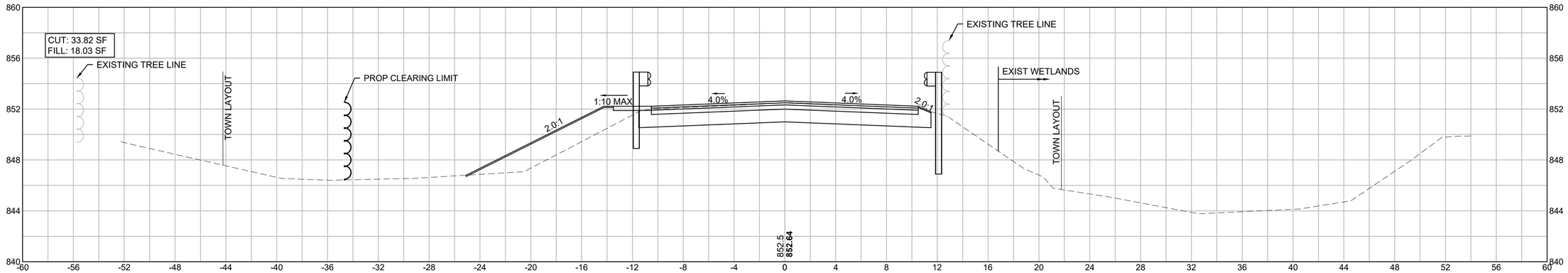
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	43	50
PROJECT FILE NO.	607597		

CROSS SECTIONS 3



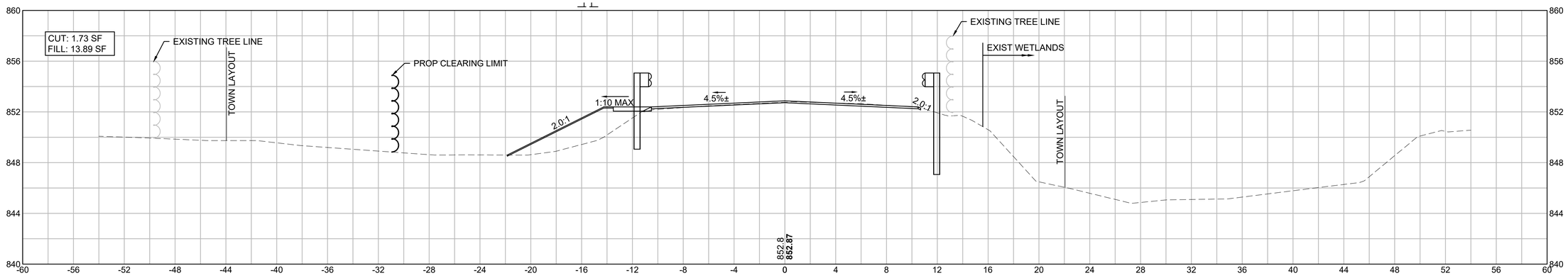
10+25



EXIST UPL
9+75.83

10+00

PROP PERM UPL #1
9+75.81



9+75

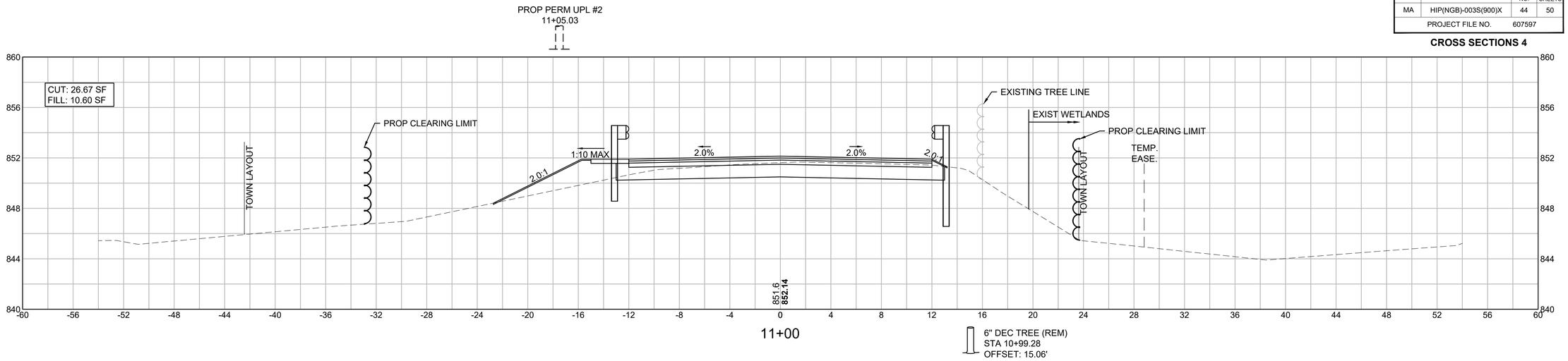
HOR. SCALE IN FEET
4 0 4 8
4 0 4 8
VER. SCALE IN FEET

607597_HD\CROSS SECTIONS).DWG Plotted on 5-Sep-2025 3:41 PM

LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	44	50
	PROJECT FILE NO. 607597		

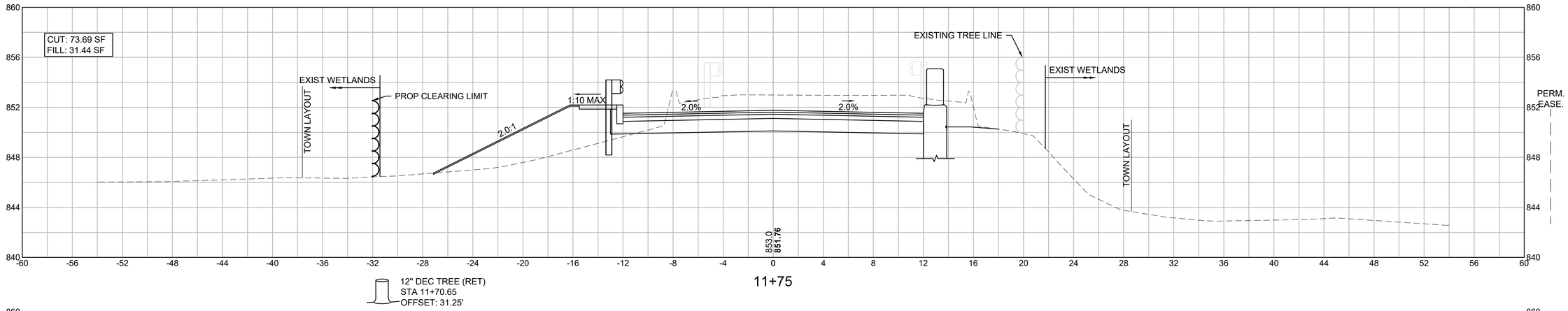
CROSS SECTIONS 4



LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	45	50
	PROJECT FILE NO.	607597	

CROSS SECTIONS 5

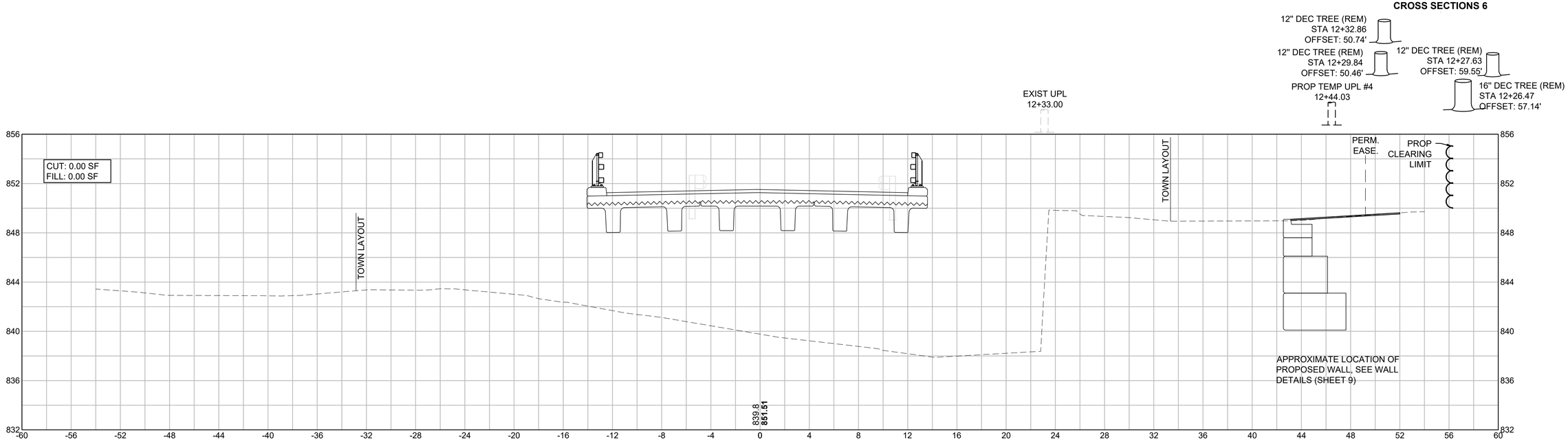


HOR. SCALE IN FEET
4 0 4 8
4 0 4 8
VER. SCALE IN FEET

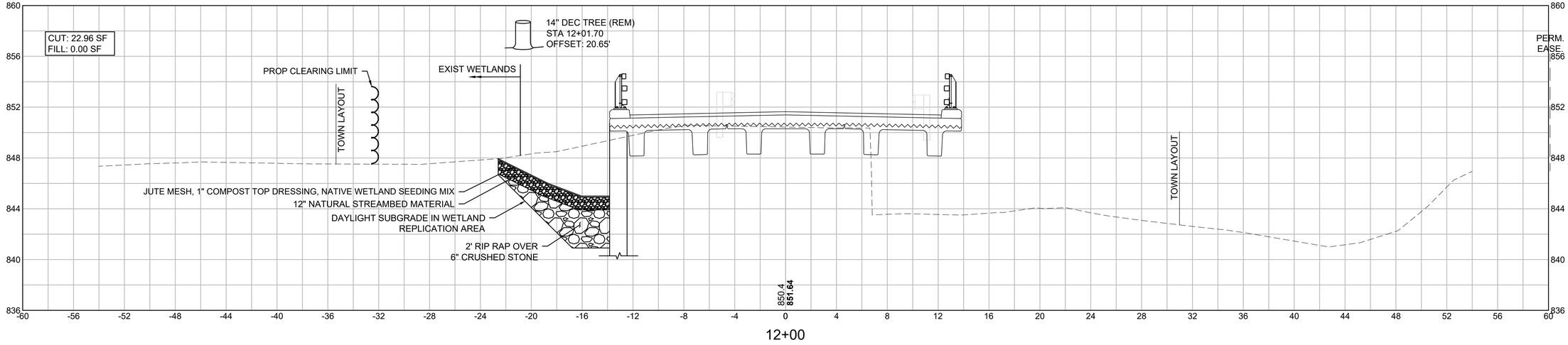
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	46	50
	PROJECT FILE NO. 607597		

CROSS SECTIONS 6



12+25



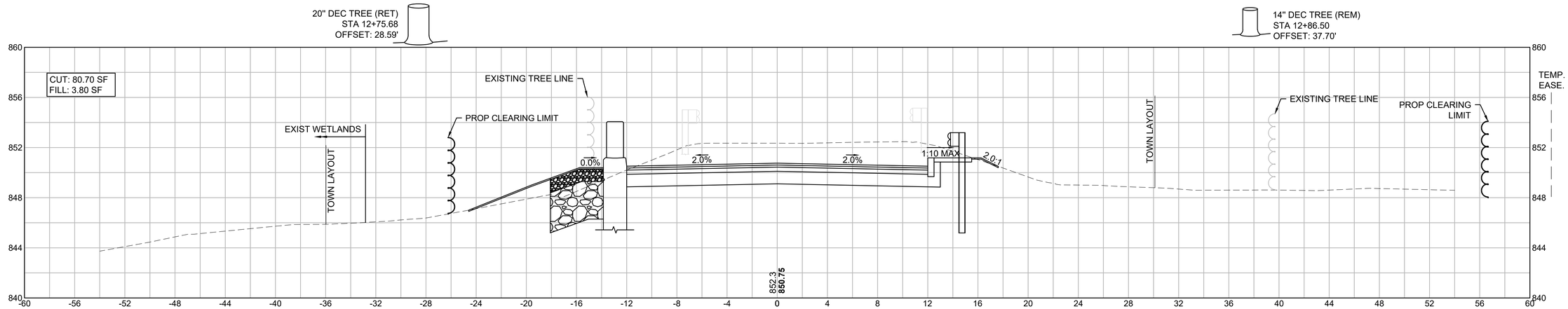
12+00

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

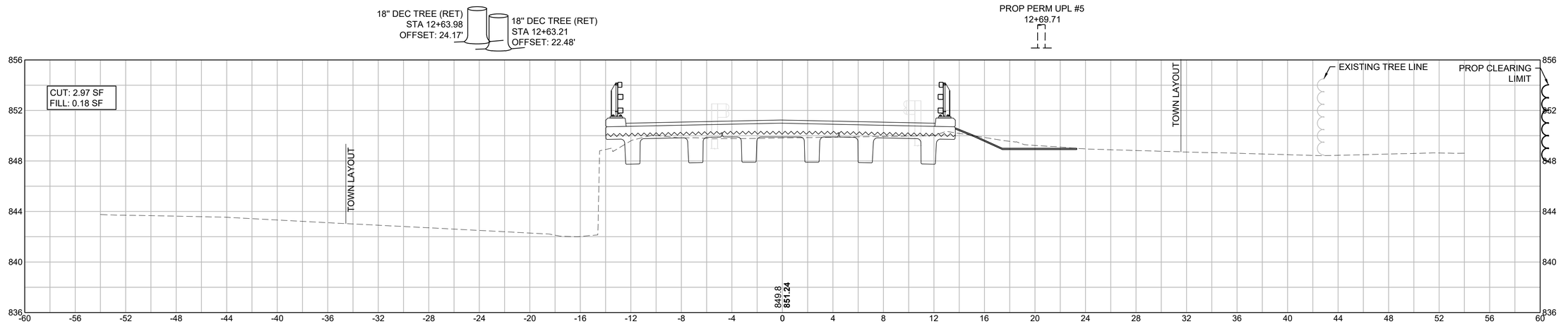
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	47	50
PROJECT FILE NO.	607597		

CROSS SECTIONS 7



12+75



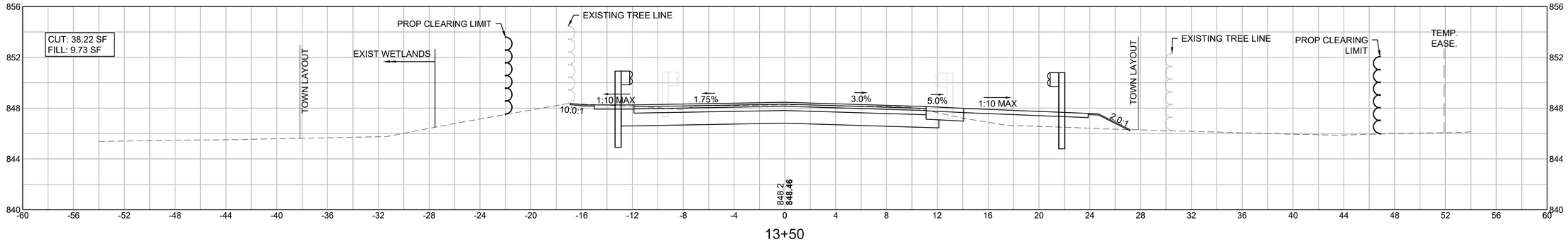
12+50

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

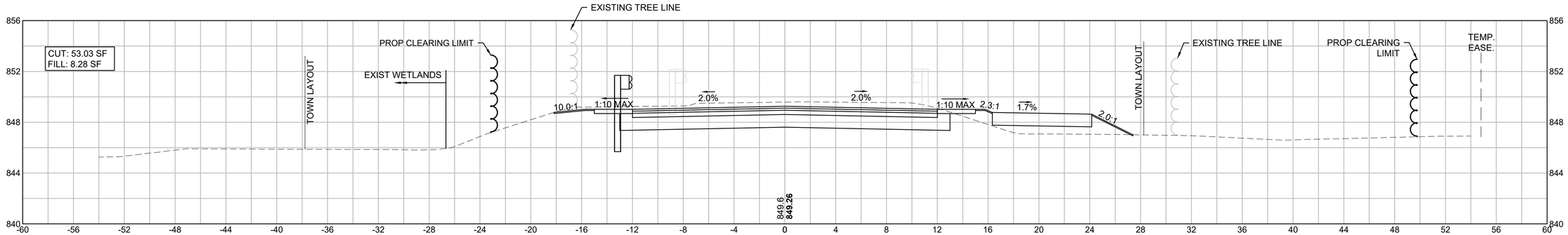
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	48	50
	PROJECT FILE NO. 607597		

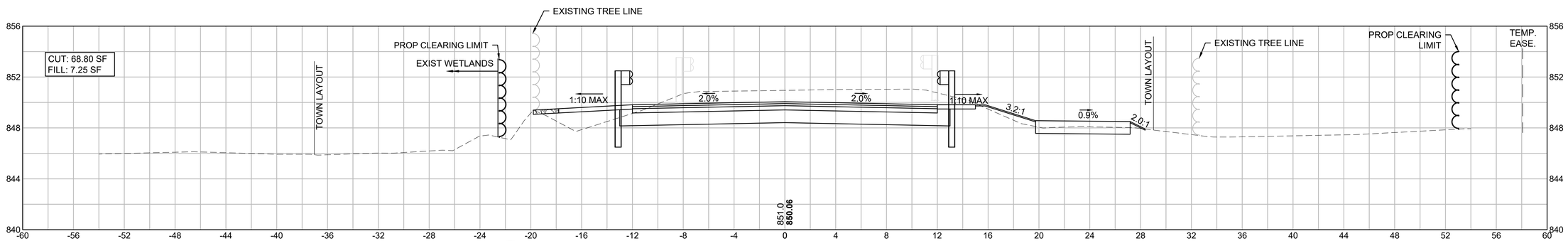
CROSS SECTIONS 8



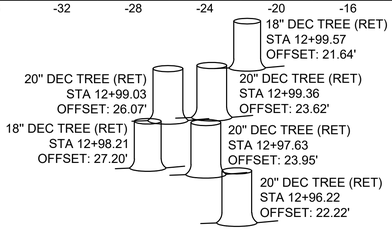
13+50



13+25



13+00



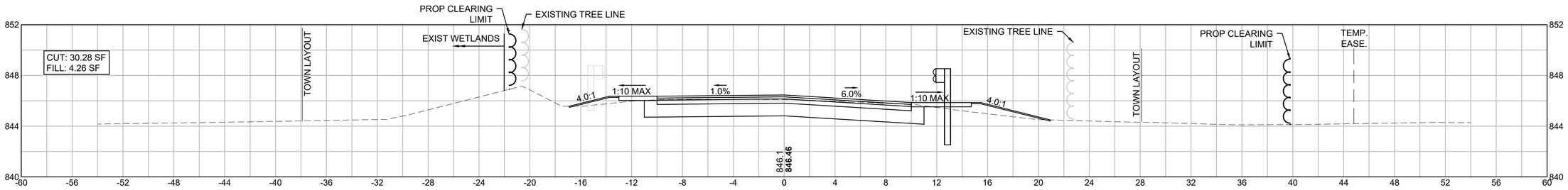
HOR. SCALE IN FEET
4 0 4 8
4 0 4 8
VER. SCALE IN FEET

607597_HD(CROSS SECTIONS).DWG Plotted on 5-Sep-2025 3:41 PM

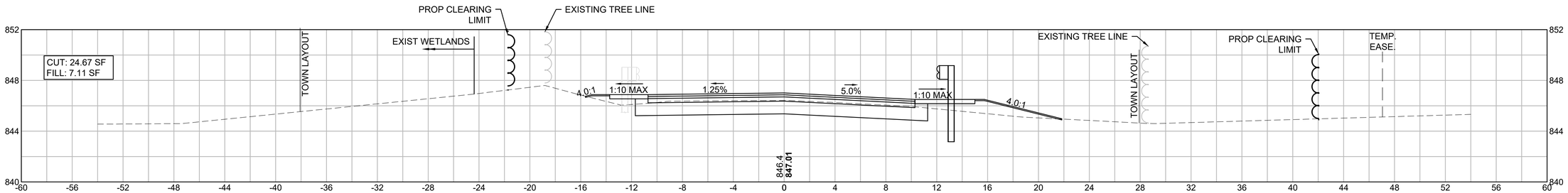
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	49	50
PROJECT FILE NO.	607597		

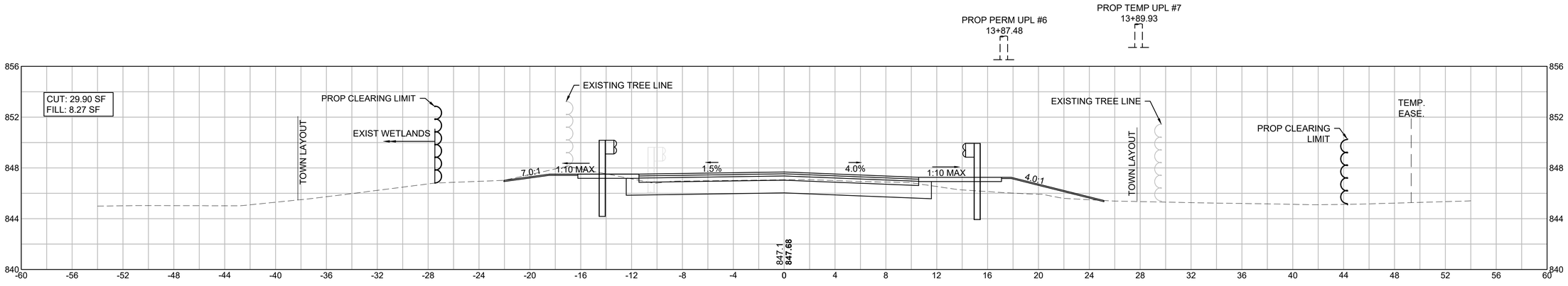
CROSS SECTIONS 9



14+25



14+00



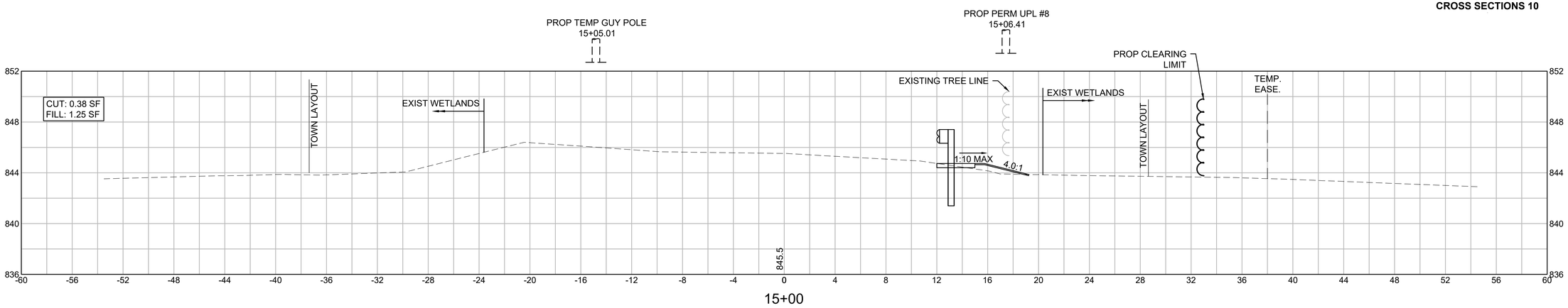
13+75

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

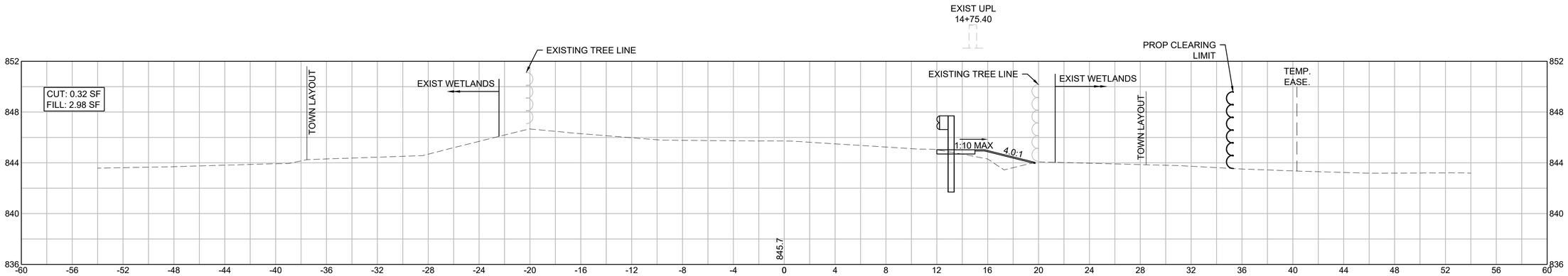
LEE
MEADOW STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HIP(NGB)-003S(900)X	50	50
	PROJECT FILE NO. 607597		

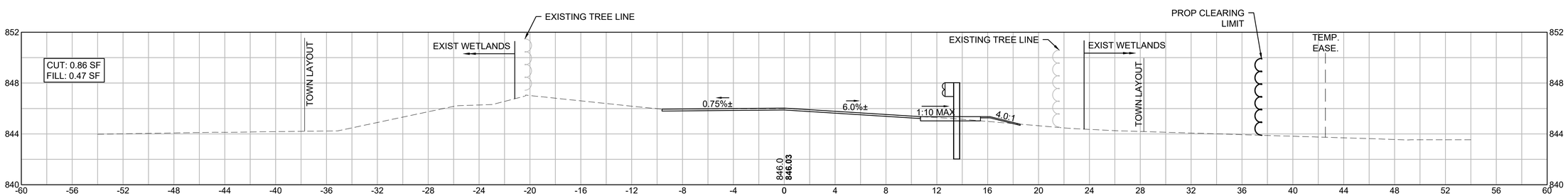
CROSS SECTIONS 10



15+00



14+75



14+50

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