MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLAN AND PROFILE OF

MILESTONE ROAD AT POLPIS ROAD

IN THE TOWN OF

NANTUCKET

NANTUCKET COUNTY

FEDERAL AID PROJECT NO.: HSI(VUS)-003S(749)X

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

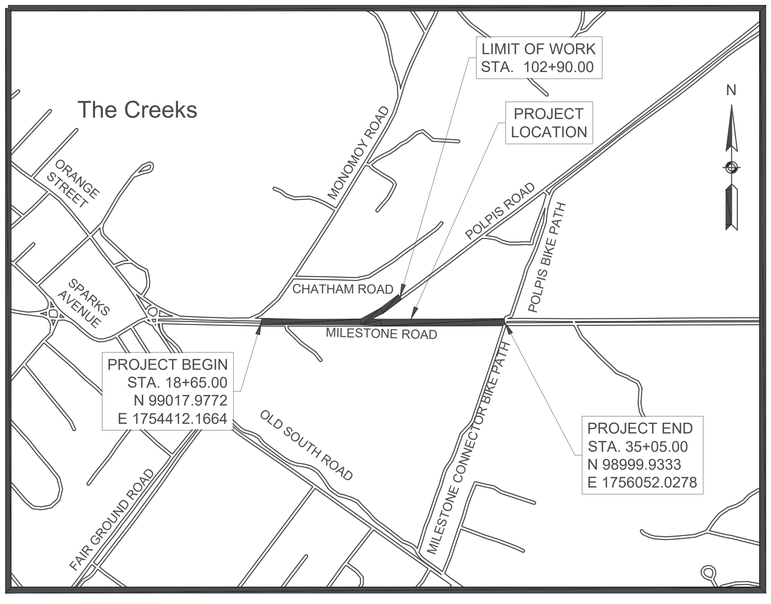
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	1	50
	PROJECT FILE NO. 613129		

TITLE SHEET & INDEX

613129_HD (CS_LE).DWG Plotted on 28-May-2024 9:10 AM

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX



0 100 200 300 400 500

SCALE: 1" = 500'

LENGTH OF PROJECT = 1,910.00 FEET = 0.36 MILES

DESIGN DESIGNATION

	MILESTONE ROAD	POLPIS ROAD
DESIGN SPEED	35 MPH	30 MPH
ADT (2023)	15,600	7,100
ADT (2043)	16,400	7,500
K	8.6%	8.7%
D	54% EB	50%
T (PEAK HOUR)	5.4%	4.7%
T (AVERAGE DAY)	4.8%	3.8%
DHV	1,350	620
DDHV	730	310
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL	URBAN MINOR ARTERIAL

COMMONWEALTH OF MASSACHUSETTS
JOHN W. DIAZ
CIVIL
No. 40436
REGISTERED PROFESSIONAL ENGINEER

John Diaz Digitally signed by John Diaz Date: 2024.06.07 09:45:52 -04'00'

GPI Engineering Design Planning Construction Management
978.570.2999 GPINET.COM
Greenman-Pedersen, Inc.
181 Ballardvale Street, Suite 202
Wilmington, MA 01887

DATE	DESCRIPTION	REV #

massDOT Massachusetts Department of Transportation Highway Division

APPROVED

Carrie Lavallee, P.E. Digitally signed by Carrie Lavallee, P.E. Date: 2024.06.12 09:55:58 -04'00'

CHIEF ENGINEER, P.E. — DATE: 06/12/2024

GENERAL SYMBOLS

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

GENERAL NOTES

1. TOPOGRAPHICAL INFORMATION WAS PROVIDED BY MASSDOT, AUGUST 2017 (508-824-6633). SUPPLEMENTAL SURVEY WAS PROVIDED BY GREENMAN-PEDERSEN, INC. JANUARY 2018, MARCH 2021, APRIL 2023, & OCTOBER 2023. VERTICAL DATUM IS BASED ON NAVD88. HORIZONTAL DATUM IS BASED ON MA ISLAND ZONE NAD83 (2011).
2. THE LOCATIONS AND SIZES 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 AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
3. WHERE AN EXISTING UNDERGROUND 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.
4. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
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 THE CONTRACTOR'S EXPENSE.
6. THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS, OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE & RESET" (R&R).
7. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS NOTED OTHERWISE.
8. ALL PROPOSED PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
9. ALL EXISTING [STATE, COUNTY, CITY AND TOWN] LOCATION LINES HAVE BEEN ESTABLISHED BY CADASTRAL SURVEY AND FOUND MONUMENTATION. PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
10. ALL TRANSVERSE JOINTS, AND ALL LONGITUDINAL JOINTS BETWEEN NEW SURFACE PAVEMENT AND EXISTING SURFACE PAVEMENT TO REMAIN SHALL BE COATED WITH A HOT POURED RUBBERIZED ASPHALT ADHESIVE MEETING THE REQUIREMENTS OF ITEM 453.
11. ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, EDGING, BERM OR PAVEMENT SURFACE.
12. THE LIMIT OF WORK AREA SHALL BE THE STREET RIGHT OF WAY UNLESS SHOWN OTHERWISE.
13. PRIOR TO THE START OF ANY NEW UTILITY WORK, ALL ELEVATIONS OF EXISTING UTILITIES IN THOSE AREAS ARE TO BE VERIFIED. THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY SHOULD ANY DISCREPANCIES OCCUR.
14. ALL CASTINGS SHALL BE SET FLUSH WITH FINISHED GRADE.
15. ALL PUBLICLY OWNED GATE BOXES, SERVICE BOXES, MANHOLE FRAMES AND COVERS SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR.
16. ALL NEW SIDEWALKS AND DRIVEWAY GRADES SHALL MATCH EXISTING GRADES AT BACK OF SIDEWALK LINE UNLESS SHOWN OTHERWISE ON THE PLANS AND CROSS SECTIONS.
17. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT ALL EXISTING TREES AND ROOTS THAT ARE NOT DESIGNATED FOR REMOVAL.
18. CONTRACTOR TO CONTACT ENGINEER PRIOR TO INSTALLATION OF BOUNDS FOR FINAL LOCATIONS.
19. DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH THE PROPOSED DRAINAGE DESIGN. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER. ONLY AFTER THE CONTRACTOR VERIFIES ELEVATIONS FOR THE CONSTRUCTABILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED. ANY FIELD ADJUSTMENTS TO LINE & GRADE UP TO A DEPTH OF 5' SHALL BE INCLUDED IN THE COST OF THE PIPE. PIPE EXCAVATION GREATER THAN 5' WILL BE PAID UNDER CLASS B TRENCH EXCAVATION.

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	2	50
PROJECT FILE NO.	613129		

LEGEND & ABBREVIATIONS

GENERAL ABBREVIATIONS

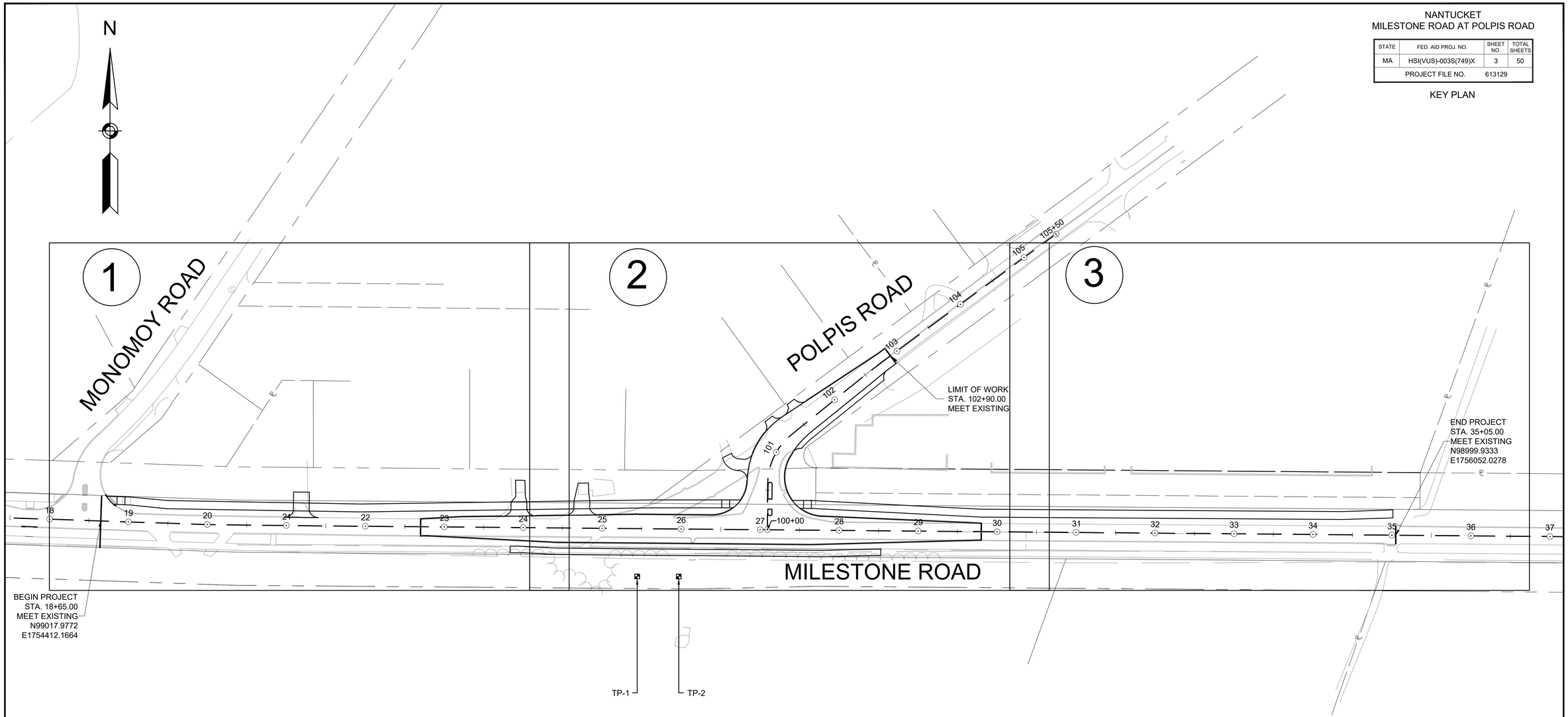
AADT	ANNUAL AVERAGE DAILY TRAFFIC	DIP	DUCTILE IRON PIPE	NIC	NOT IN CONTRACT	SMH	SEWER MANHOLE
ABAN	ABANDON	DW	STEADY DON'T WALK - PORTLAND ORANGE	NO.	NUMBER	ST	STREET
ADJ	ADJUST	DWY	DRIVEWAY	PC	POINT OF CURVATURE	STA	STATION
APPROX.	APPROXIMATE	ELEV (or EL.)	ELEVATION	PCC	POINT OF COMPOUND CURVATURE	SSD	STOPPING SIGHT DISTANCE
A.C.	ASPHALT CONCRETE	EMB	EMBANKMENT	P.G.L.	PROFILE GRADE LINE	SHLO	STATE HIGHWAY LAYOUT LINE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE	EOP	EDGE OF PAVEMENT	PI	POINT OF INTERSECTION	SW	SIDEWALK
BIT.	BITUMINOUS	EXIST (or EX)	EXISTING	POC	POINT ON CURVE	T	TANGENT DISTANCE OF CURVE/TRUCK %
BC	BOTTOM OF CURB	EXC	EXCAVATION	POT	POINT ON TANGENT	TAN	TANGENT
BD.	BOUND	F&C	FRAME AND COVER	PRC	POINT OF REVERSE CURVATURE	TEMP	TEMPORARY
BL	BASELINE	F&G	FRAME AND GRATE	PROJ	PROJECT	TC	TOP OF CURB
BLDG	BUILDING	FDN.	FOUNDATION	PROP	PROPOSED	TOS	TOP OF SLOPE
BM	BENCHMARK	FLDSTN	FIELDSTONE	PSB	PLANTABLE SOIL BORROW	TYP	TYPICAL
BO	BY OTHERS	GAR	GARAGE	PT	POINT OF TANGENCY	UP	UTILITY POLE
BOS	BOTTOM OF SLOPE	GD	GROUND	PVC	POINT OF VERTICAL CURVATURE	VAR	VARIES
BR.	BRIDGE	GG	GAS GATE	PVCC	POINT OF VERTICAL COMPOUND CURVATURE	VERT	VERTICAL
CB	CATCH BASIN	GI	GUTTER INLET	PVI	POINT OF VERTICAL INTERSECTION	VC	VERTICAL CURVE
CBCI	CATCH BASIN WITH CURB INLET	GIP	GALVANIZED IRON PIPE	PVRC	POINT OF VERTICAL REVERSE CURVATURE	WCR	WHEEL CHAIR RAMP
CC	CEMENT CONCRETE	GRAN	GRANITE	PVT	POINT OF VERTICAL TANGENCY	WG	WATER GATE
CCM	CEMENT CONCRETE MASONRY	GRAV	GRAVEL	PVMT	PAVEMENT	WIP	WROUGHT IRON PIPE
CEM	CEMENT	GRD	GUARD	PWW	PAVED WATER WAY	WM	WATER METER/WATER MAIN
CI	CURB INLET	HDW	HEADWALL	R	RADIUS OF CURVATURE	X-SECT	CROSS SECTION
CIP	CAST IRON PIPE	HMA	HOT MIX ASPHALT	R&D	REMOVE AND DISPOSE		
CIT	CHANGE IN TYPE	HOR	HORIZONTAL	RCP	REINFORCED CONCRETE PIPE		
CLF	CHAIN LINK FENCE	HYD	HYDRANT	RD	ROAD		
CL	CENTERLINE	INV	INVERT	RDWY	ROADWAY		
CMP	CORRUGATED METAL PIPE	JCT	JUNCTION	REM	REMOVE		
CSP	CORRUGATED STEEL PIPE	L	LENGTH OF CURVE	RET	RETAIN		
CO.	COUNTY	LB	LEACH BASIN	RET WALL	RETAINING WALL		
CONC	CONCRETE	LP	LIGHT POLE	ROW	RIGHT OF WAY		
CONT	CONTINUOUS	LT	LEFT	RR	RAILROAD		
CONST	CONSTRUCTION	MAX	MAXIMUM	R&R	REMOVE AND RESET		
CR GR	CROWN GRADE	MB	MAILBOX	R&S	REMOVE AND STACK		
DHV	DESIGN HOURLY VOLUME	MH	MANHOLE	RT	RIGHT		
DI	DROP INLET	MHB	MASSACHUSETTS HIGHWAY BOUND	SB	STONE BOUND		
DIA	DIAMETER	MIN	MINIMUM	SHLD	SHOULDER		

613129_HD (CS_LE).DWG Plotted on 23-May-2024 4:12 PM

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	3	50
PROJECT FILE NO.	613129		

KEY PLAN



SHEET REFERENCE:	1	2	3
Drawing Title:	Drawing Number:		
CONSTRUCTION BASELINE TIES	5	6	7
CONSTRUCTION PLANS	8	9	10
CURB TIE & GRADING PLANS	14	15	16
DRAINAGE & UTILITY PLANS	17	18	19
TRAFFIC SIGN & PAVEMENT MARKING PLANS	21	22	23

TP-# = TEST PIT LOCATION AND NUMBER

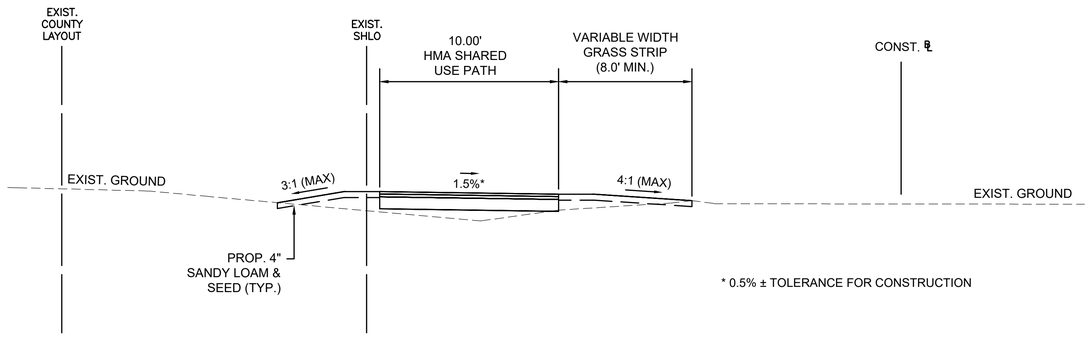
0 60 120 180 240

SCALE: 1" = 60'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

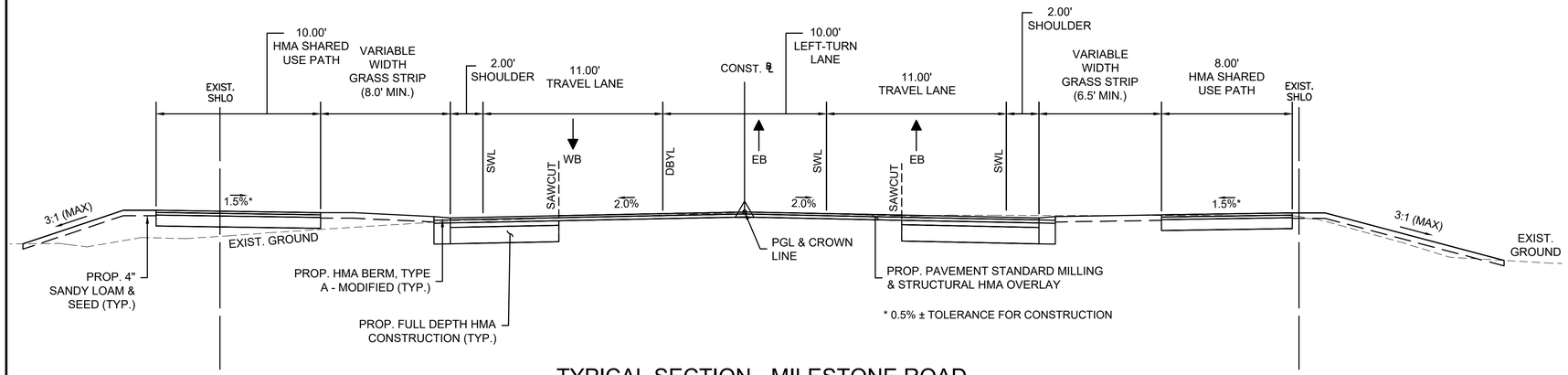
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	4	50
PROJECT FILE NO.	613129		

TYPICAL SECTIONS



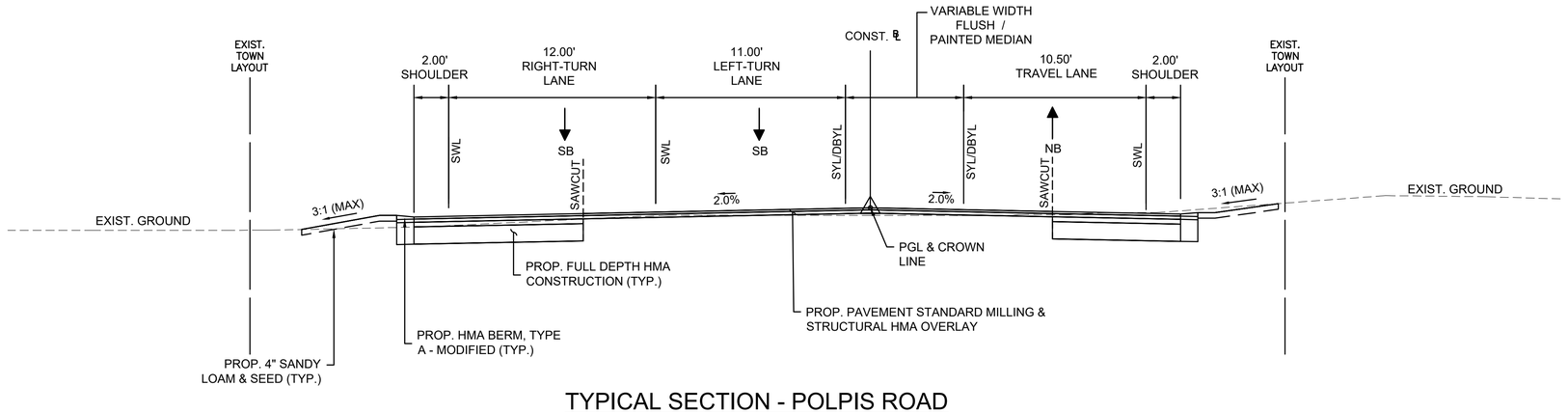
TYPICAL SECTION - MILESTONE ROAD SHARED USE PATH

STA. 18+95 LT TO STA. 22+70 LT
STA. 29+80 LT TO STA. 35+00 LT



TYPICAL SECTION - MILESTONE ROAD

STA. 24+75 TO STA. 27+50



TYPICAL SECTION - POLPIS ROAD

STA. 100+45 TO STA. 101+30

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

PAVEMENT NOTES

FULL DEPTH HMA CONSTRUCTION

SURFACE COURSE: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 POLYMER (SSC-9.5-P) OVER ASPHALT EMULSION FOR TACK COAT (RS-1h)
2 ½" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER ASPHALT EMULSION FOR TACK COAT (RS-1h)

BASE: 3 ¼" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER

SUBBASE: 12" GRAVEL BORROW TYPE B (OR SUITABLE EXISTING MATERIAL)

PAVEMENT STANDARD MILLING & STRUCTURAL HMA OVERLAY

PROPOSED RESURFACING: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 POLYMER (SSC-9.5-P) OVER ASPHALT EMULSION FOR TACK COAT (RS-1h)
2 ½" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER ASPHALT EMULSION FOR TACK COAT (RS-1h)

SURFACE MILLING: 2" MIN. TO 4" MAX. PAVEMENT MILLING (TO MEET LINES AND GRADES AND HMA QUALITY ASSURANCE)

FULL DEPTH HMA CONSTRUCTION LESS THAN 4 FEET

SURFACE COURSE: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 POLYMER (SSC-9.5-P) OVER ASPHALT EMULSION FOR TACK COAT (RS-1h)
2 ¼" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER ASPHALT EMULSION FOR TACK COAT (RS-1h)

BASE: 6" HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE OVER

SUBBASE: 8" GRAVEL BORROW TYPE B (OR SUITABLE EXISTING MATERIAL)

CEMENT CONCRETE PEDESTRIAN CURB RAMPS

SURFACE COURSE: 4" CEMENT CONCRETE (AIR ENTRAINED 4000 PSI, 3/4", 610) OVER

SUBBASE: 8" GRAVEL BORROW TYPE B

HMA DRIVEWAYS AND SHARED USE PATHS

SURFACE COURSE: 1 ½" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) OVER
2 ½" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER

SUBBASE: 8" GRAVEL BORROW TYPE B

GENERAL NOTES

1. HMA, HMA FOR PATCHING, ASPHALT EMULSION FOR TACK COAT AND HMA JOINT ADHESIVE AND PAVEMENT MILLING SHALL BE IN ACCORDANCE WITH SECTION 450 HMA PAVEMENT AND M3 ASPHALTIC MATERIALS SPECIFICATION.

2. THE PROPOSED HMA RESURFACING, BOTH SURFACE AND INTERMEDIATE COURSES, SHALL EXTEND ACROSS THE FULL DEPTH CONSTRUCTION TO MEET SECTION 450 AND PAVING OPERATIONS.

3. THE SECTIONS OF PROPOSED ROADWAY NOT COVERED IN THE RANGE OF STATIONS ASSOCIATED WITH THE TYPICAL SECTIONS ARE EITHER AT INTERSECTIONS OR IN AREAS OF TRANSITION AND THEREFORE HAVE NOT BEEN SHOWN. THESE SECTIONS ARE:

STA. 18+65	TO STA. 18+95	MILESTONE ROAD
STA. 22+70	TO STA. 24+75	MILESTONE ROAD
STA. 27+50	TO STA. 29+80	MILESTONE ROAD
STA. 35+00	TO STA. 35+05	MILESTONE ROAD
STA. 100+00	TO STA. 100+45	POLPIS ROAD
STA. 101+32	TO STA. 102+90	POLPIS ROAD

4. ASPHALT EMULSION FOR TACK COAT (RS-1h) SHALL BE APPLIED AT THE RATE OF 0.06 TO 0.08 GALLONS PER SQUARE YARD OVER NEW HMA SURFACES NOT OPENED TO TRAFFIC AS WELL AS OVER EXISTING TIGHT SMOOTH PAVEMENT. ON MILLED SURFACES, THE EMULSION APPLICATION RATE SHALL EQUAL 0.07 TO 0.09 GALLONS PER SQUARE YARD. ON NEW HMA PATCHES, THE EMULSION APPLICATION RATE SHALL EQUAL 0.06 TO 0.09 GALLONS PER SQUARE YARD.

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

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MA	HSI(VUS)-003S(749)X	5	50
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CONSTRUCTION BASELINE TIES

613129_HD (BLT).DWG Plotted on 23-May-2024 4:15 PM

N

CHATHAM ROAD

MONOMOY ROAD

MILESTONE ROAD

#4 MONOMOY ROAD
APN 55-67-0
FOUR MONOMOY NOMINEE TRUST
CERT. 23971

#1 CHATHAM ROAD
APN 54-48-0
DAVID S. & ENIC M. WISE
CERT. 22208

#8 MILESTONE ROAD
APN 54-47-0
8 MILESTONE ROAD REALTY TRUST
CERT. 22628

#1 MONOMOY ROAD
APN 55-68-0
MEDIA ONE OF MASSACHUSETTS INC
CERT. 18477

#5 CHATHAM ROAD
APN 54-132-0
GARRETT S. & JILL B. PRITCHARD
CERT. 25974

#16E MILESTONE ROAD
APN 54-130-4
MADAKET REALTY LLC
CERT. U42123

1891 COUNTY LAYOUT
DOC. 16567
PLAN BOOK D#1, PLAN 145

APPROX. COUNTY LAYOUT

1894 SHLO NO. 7

1894 SHLO BASELINE 7

MATCHLINE

CONTINUED ON SHEET 6

MILESTONE ROAD CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	10+00.00	99047.476	1753547.669		S88°02'44"E 996.91'	19+96.91	99013.479	1754543.998
L2	19+96.91	99013.479	1754543.998		S89°15'43"E 112.18'	21+09.09	99012.034	1754656.170
L3	21+09.09	99012.034	1754656.170		S89°30'05"E 1063.79'	31+72.88	99002.776	1755719.916

40
N: 99062.7932
E: 1754377.9346
EL: 25.3610
SN

BEGIN PROJECT
STA. 18+65.00
MEET EXISTING
N99017.9772
E1754412.1664

2
N: 98987.7636
E: 1754584.6481
EL: 29.2340
MAG

LIMIT OF ROADWAY WORK
STA. 22+70.00
MEET EXISTING

S1°57'16"W 43.62'
S23°28'26"E 48.30'
S56°19'35"E 83.16'
TRAVERSE
N70°03'03"W 219.91'
N57°40'56"W 48.10'
N0°44'17"E 34.51'
S0°44'17"W 31.45'
N0°44'17"E 25.19'
N71°15'21"E 75.53'
TRAVERSE S89°34'13"E 998.88'

PI +96.91
PI +36.85
PI +00.00
PI +37.11
PI +37.89
PI +09.91
+29.26

PROP. CONST. & PGL

0 20 50 100
SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

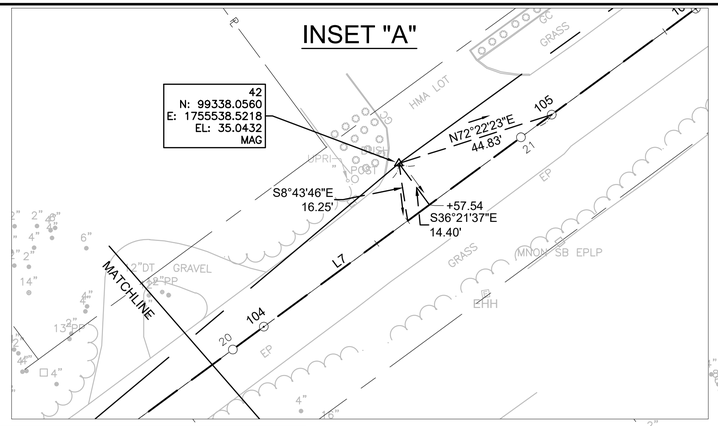
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	6	50
PROJECT FILE NO.	613129		

CONSTRUCTION BASELINE TIES

613129_HD (BLT).DWG Plotted on 23-May-2024 4:15 PM

N

INSET "A"



POLPIS ROAD CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L5	100+00.00	99006.812	1755256.142		N0°29'32"E 58.53'	100+58.53	99065.340	1755256.645
C1	100+58.53	99065.340	1755256.645	R=80.00' Δ=50°29'41" L=70.50' T=37.73'		101+29.03	99126.813	1755286.282
L6	101+29.03	99126.813	1755286.282		N50°59'12"E 110.25'	102+39.28	99196.215	1755371.945
C2	102+39.28	99196.215	1755371.945	R=1000.00' Δ=2°39'10" L=46.30' T=23.16'		102+85.58	99224.519	1755408.584
L7	102+85.58	99224.519	1755408.584		N53°38'23"E 264.42'	105+50.00	99381.281	1755621.518

CONTINUED ON SHEET 5

MATCHLINE

#4 POLPIS ROAD
APN 54-187-0
VON KAMPEN NOMINEE TRUST
CERT. 22232

#11 CHATHAM ROAD
APN 54-186-0
ROBERT H. & JUDITH A. BRUST
CERT. 24700

LIMIT OF WORK
STA. 102+90.00
MEET EXISTING

SEE INSET "A"

POLPIS ROAD CONST. ℄ STA. 102+85.58 =
SHLO 5447 CONST. ℄ STA. 18+96.32

POLPIS ROAD

1964 TOWN LAYOUT

1957 SHLO NO. 4584
TRANSFERRED TO TOWN BY 1964 SHLO

1 POLPIS ROAD
APN 54-121
N/F
ISLAND LUMBER HOLDING COMPANY
CERT. 5489, LCC 34603A
BOOK 1321, PAGE 211
PLAN NO. 35 OF 2011

#2 POLPIS ROAD
APN 54-128-0
JUNE E. LIFE JOHNSEN ESTATE
CERT. 20086

APPROX. COUNTY LAYOUT

MILESTONE ROAD CONST. ℄ STA. 25+67.48 =
SHLO 5447 CONST. ℄ STA. 15+31.19

41
N: 99042.8652
E: 1755188.0240
EL: 29.3778
SN

MILESTONE ROAD CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L3	21+09.09	99012.034	1754656.170		S89°30'05"E 1063.79'	31+72.88	99002.776	1755719.916

CONTINUED ON SHEET 7

MATCHLINE

1894 SHLO NO. 7

15' BIKE PATH EASEMENT
BK/PG 1321/211

LIMIT OF ROADWAY WORK
STA. 29+80.00
MEET EXISTING

1894 SHLO BASELINE 7

PROP. CONST. ℄ & PGL

MILESTONE ROAD

53
N: 98977.0991
E: 1755164.0544
EL: 28.9025
MAG

3
N: 98980.2623
E: 1755583.4998
EL: 34.6191
MAG

MILESTONE ROAD CONST. ℄ STA. 27+09.08 =
POLPIS ROAD CONST. ℄ STA. 100+00.00

0 20 50 100
SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	7	50
	PROJECT FILE NO.	613129	

CONSTRUCTION BASELINE TIES

Plotted on 23-May-2024 4:16 PM

613129_HD (BLT).DWG

1 POLPIS ROAD
APN 54-121
N/F
ISLAND LUMBER HOLDING COMPANY
CERT. 5489, LCC 34603A
BOOK 1321, PAGE 211
PLAN NO. 35 OF 2011

CONTINUED ON SHEET 6

MILESTONE ROAD CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L3	21+09.09	99012.034	1754656.170		S89°30'05"E 1063.79'	31+72.88	99002.776	1755719.916
L4	31+72.88	99002.776	1755719.916		S89°30'34"E 691.94'	38+64.82	98996.853	1756411.830

0 20 50 100
SCALE: 1" = 20'

HIGHWAY GUARD DETAILS
NONE

TRAFFIC SIGNAL CONDUIT
NONE

WATER SUPPLY ALTERATIONS
NONE

DRAINAGE DETAILS
SEE SHEET 17

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	8	50
PROJECT FILE NO.	613129		

CONSTRUCTION PLANS

613129_HD (CO).DWG Plotted on 23-May-2024 4:16 PM

LEGEND

- PROP. TREE PROTECTION - ARMORING & PRUNING (TYP.)
- PROP. TREE & PLANT PROTECTION FENCE (TYP.)
- PROP. LIMIT OF CLEARING (TYP.)

N

CHATHAM ROAD

MONOMOY ROAD

MILESTONE ROAD

#1 CHATHAM ROAD
APN 54-48-0
DAVID S. & ENIC M. WISE
CERT. 22208

#8
MILESTONE
ROAD
APN
54-47-0
8 MILESTONE
ROAD REALTY
TRUST
CERT. 22628

#1 MONOMOY ROAD
APN 55-68-0
MEDIA ONE OF MASSACHUSETTS INC
CERT. 18477

#5 CHATHAM ROAD
APN 54-132-0
GARRETT S. & JILL B.
PRITCHARD
CERT. 25974

#16E MILESTONE ROAD
APN 54-130-4
MADAKET REALTY LLC
CERT. U42123

1891 COUNTY LAYOUT

1894 SHLO NO. 7

APPROX. COUNTY LAYOUT

BEGIN PROJECT
STA. 18+65.00
MEET EXISTING
N99017.9772
E1754412.1664

PROP. PCR-1

PROP. TREE & PLANT PROTECTION FENCE (TYP.)

PROP. VAR. WIDTH GRASS STRIP (8.0' MIN.) (STA. 18+82 TO STA. 23+21)

PROP. CLEARING & GRUBBING (STA. 18+95 TO STA. 20+57)

REM. TREES

REM. TREE

(BOS)

(RET.)

19

S88°02'44"E
996.91'

PI +96.91

20

S89°15'43"E
112.18'

RET. TREES

REM. TREE

PROP. 10.0' HMA SHARED USE PATH (TYP.)

R&R BOUND

REM. TREE

REM. SHRUBS

(RET.)

PROP. DWY-1

PT +09.09

21

PROP. FULL DEPTH HMA DRIVEWAY (TYP.)

REM. TREE

REM. HMA BERM (STA. 20+97 TO STA. 21+16)

PROP. HMA SHARED USE PATH AT DRIVEWAY (TYP.)

REM. TREES

22

S89°30'05"E
1063.79'

PROP. CLEARING & GRUBBING (STA. 21+30 TO STA. 23+35)

PROP. SLOPE LIMIT (TYP.)

PROP. SANDY LOAM & SEED (TYP.)

REM. TREES

REM. TREE

RET. TREES

RET. TREE

REM. TREES

SAWCUT

23

PROP. CONST. & PGL

(REM.)

SAWCUT

(TOS)

PROP. TREE PROTECTION - ARMORING & PRUNING (TYP.)

RET. TREES

REM. TREE

(BOS)

PROP. DWY-2

24

R&S LIGHTS

PROP. 8.0' GRASS STRIP (STA. 23+21 TO STA. 26+19)

PROP. HMA BERM, TYPE A - MODIFIED (TYP.)

PROP. FULL DEPTH HMA DRIVEWAY (TYP.)

REM. SHRUBS

REM. SHRUBS

MATCHLINE

LIMIT OF ROADWAY WORK
STA. 22+70.00
MEET EXISTING

PROP. SLOPE LIMIT (TYP.)

PROP. HMA BERM, TYPE A - MODIFIED (TYP.)

PROP. PAVEMENT STANDARD MILLING & STRUCTURAL HMA OVERLAY (TYP.)

PROP. SANDY LOAM & SEED (TYP.)

MEET EXIST. SHARED USE PATH (STA. 23+84± RT)

PROP. CLEARING & GRUBBING (STA. 23+80 TO STA. 24+32)

PROP. FULL DEPTH HMA CONSTRUCTION (TYP.)

PROP. 8.0' HMA SHARED USE PATH (TYP.)

CONTINUED ON SHEET 9

FOR PROFILE: SEE SHEET NO. 11

0 20 50 100

SCALE: 1" = 20'

HIGHWAY GUARD DETAILS
NONE

TRAFFIC SIGNAL CONDUIT
NONE

WATER SUPPLY ALTERATIONS
NONE

DRAINAGE DETAILS
SEE SHEET 18

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	9	50
PROJECT FILE NO.	613129		

CONSTRUCTION PLANS

613129_HD (CO).DWG Plotted on 23-May-2024 4:16 PM

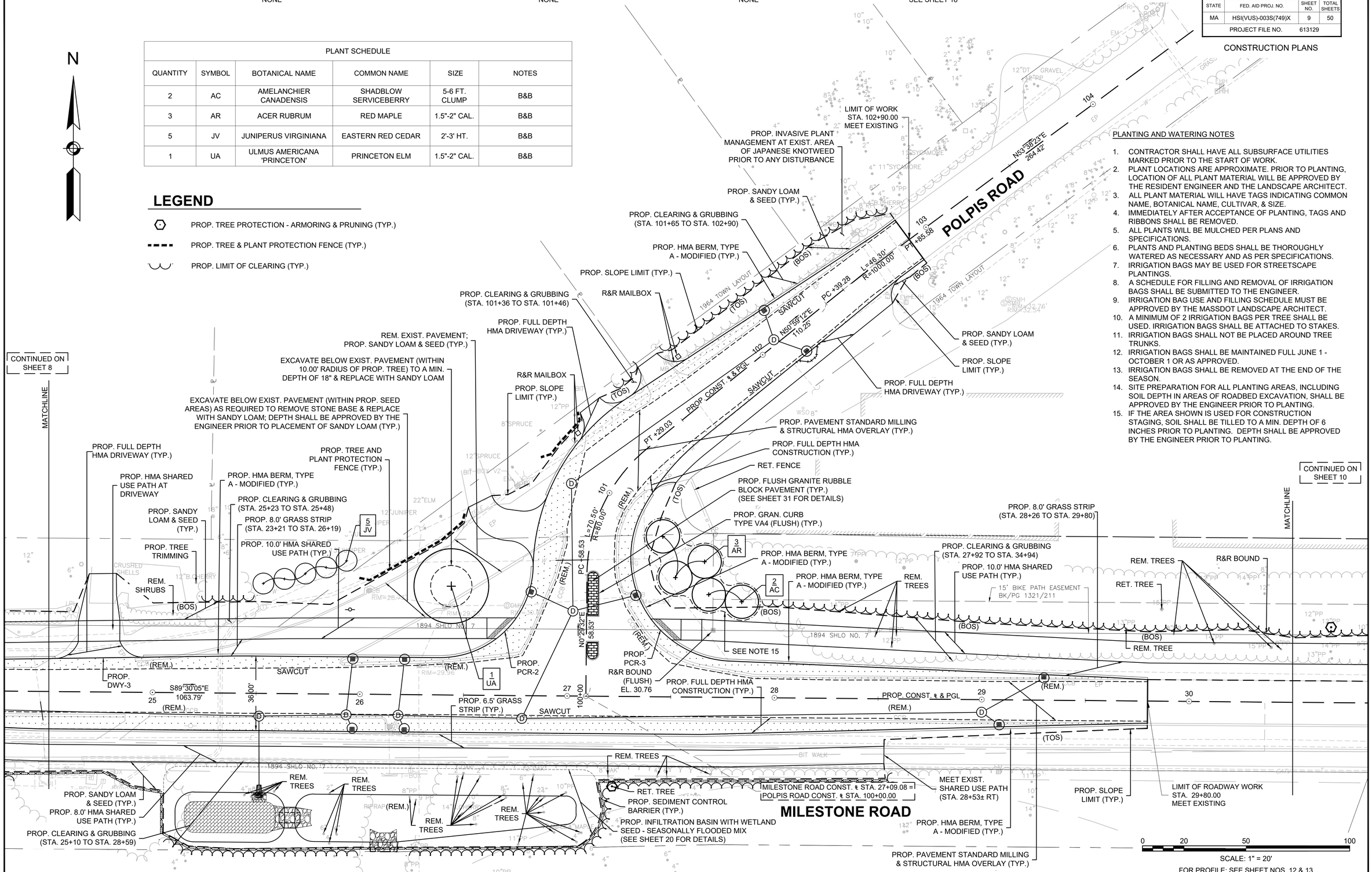
PLANT SCHEDULE					
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
2	AC	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	5-6 FT. CLUMP	B&B
3	AR	ACER RUBRUM	RED MAPLE	1.5"-2" CAL.	B&B
5	JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	2'-3' HT.	B&B
1	UA	ULMUS AMERICANA 'PRINCETON'	PRINCETON ELM	1.5"-2" CAL.	B&B

LEGEND

- PROP. TREE PROTECTION - ARMORING & PRUNING (TYP.)
- PROP. TREE & PLANT PROTECTION FENCE (TYP.)
- PROP. LIMIT OF CLEARING (TYP.)

PLANTING AND WATERING NOTES

1. CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
2. PLANT LOCATIONS ARE APPROXIMATE. PRIOR TO PLANTING, LOCATION OF ALL PLANT MATERIAL WILL BE APPROVED BY THE RESIDENT ENGINEER AND THE LANDSCAPE ARCHITECT.
3. ALL PLANT MATERIAL WILL HAVE TAGS INDICATING COMMON NAME, BOTANICAL NAME, CULTIVAR, & SIZE.
4. IMMEDIATELY AFTER ACCEPTANCE OF PLANTING, TAGS AND RIBBONS SHALL BE REMOVED.
5. ALL PLANTS WILL BE MULCHED PER PLANS AND SPECIFICATIONS.
6. PLANTS AND PLANTING BEDS SHALL BE THOROUGHLY WATERED AS NECESSARY AND AS PER SPECIFICATIONS.
7. IRRIGATION BAGS MAY BE USED FOR STREETSCAPE PLANTINGS.
8. A SCHEDULE FOR FILLING AND REMOVAL OF IRRIGATION BAGS SHALL BE SUBMITTED TO THE ENGINEER.
9. IRRIGATION BAG USE AND FILLING SCHEDULE MUST BE APPROVED BY THE MASSDOT LANDSCAPE ARCHITECT.
10. A MINIMUM OF 2 IRRIGATION BAGS PER TREE SHALL BE USED. IRRIGATION BAGS SHALL BE ATTACHED TO STAKES.
11. IRRIGATION BAGS SHALL NOT BE PLACED AROUND TREE TRUNKS.
12. IRRIGATION BAGS SHALL BE MAINTAINED FULL JUNE 1 - OCTOBER 1 OR AS APPROVED.
13. IRRIGATION BAGS SHALL BE REMOVED AT THE END OF THE SEASON.
14. SITE PREPARATION FOR ALL PLANTING AREAS, INCLUDING SOIL DEPTH IN AREAS OF ROADBED EXCAVATION, SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.
15. IF THE AREA SHOWN IS USED FOR CONSTRUCTION STAGING, SOIL SHALL BE TILLED TO A MIN. DEPTH OF 6 INCHES PRIOR TO PLANTING. DEPTH SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.



HIGHWAY GUARD DETAILS
NONE

TRAFFIC SIGNAL CONDUIT
NONE

WATER SUPPLY ALTERATIONS
NONE

DRAINAGE DETAILS
SEE SHEET 19

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

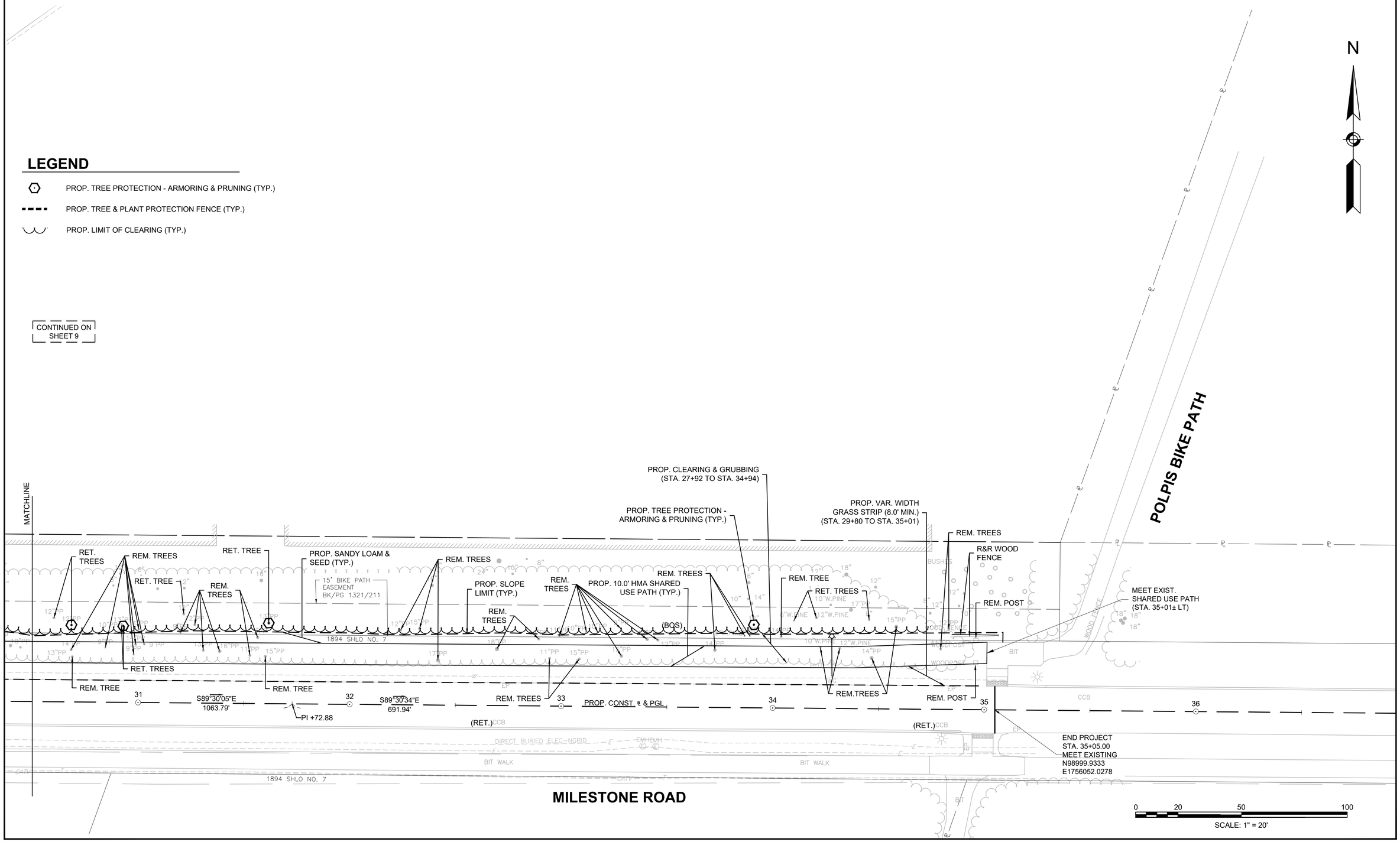
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	10	50
PROJECT FILE NO.	613129		

CONSTRUCTION PLANS

LEGEND

- PROP. TREE PROTECTION - ARMORING & PRUNING (TYP.)
- PROP. TREE & PLANT PROTECTION FENCE (TYP.)
- PROP. LIMIT OF CLEARING (TYP.)

CONTINUED ON SHEET 9

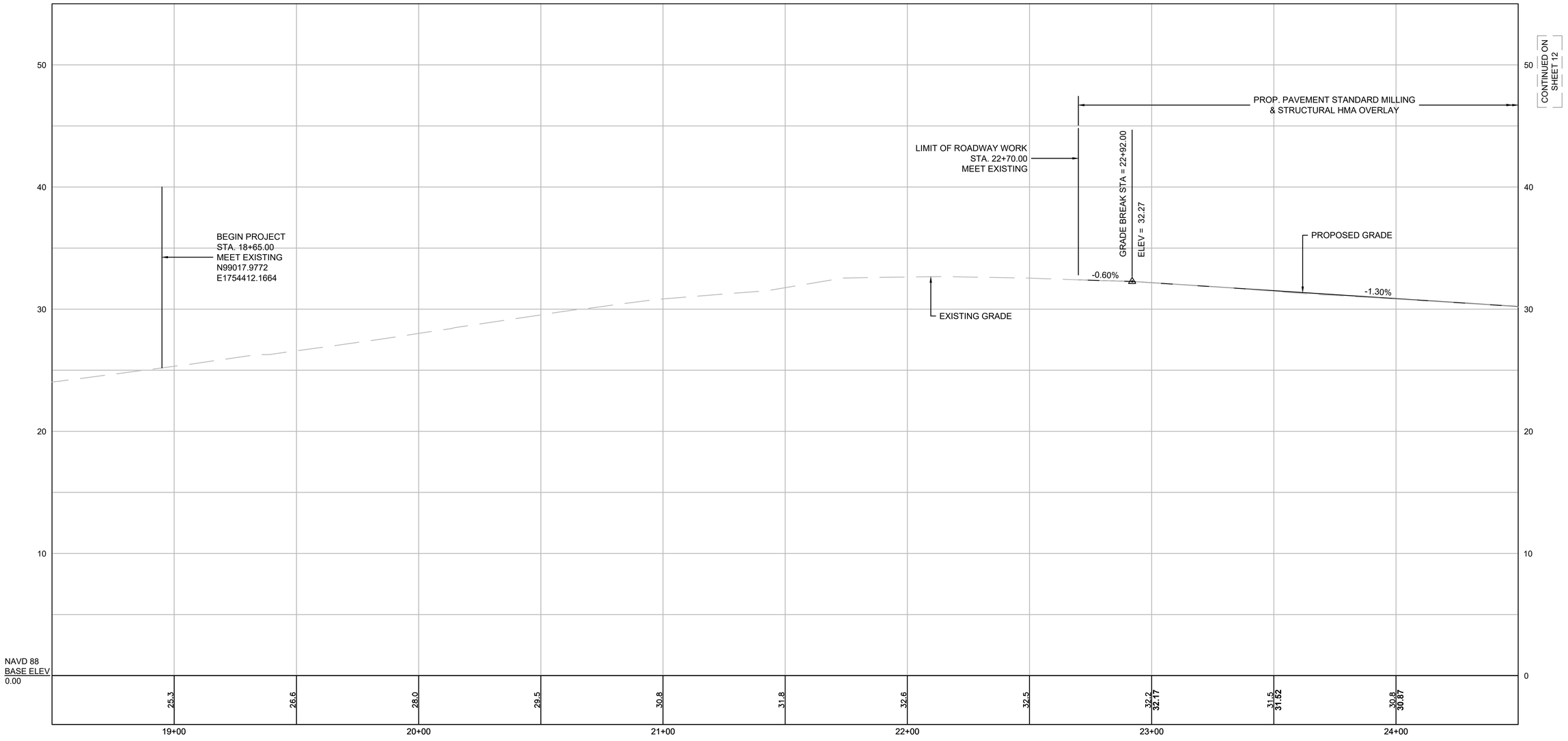


NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	11	50
PROJECT FILE NO.	613129		

CONSTRUCTION PROFILES

MILESTONE ROAD



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

FOR CONSTRUCTION PLAN: SEE SHEET NO. 8

613129_HD (PR).DWG Plotted on 23-May-2024 4:17 PM

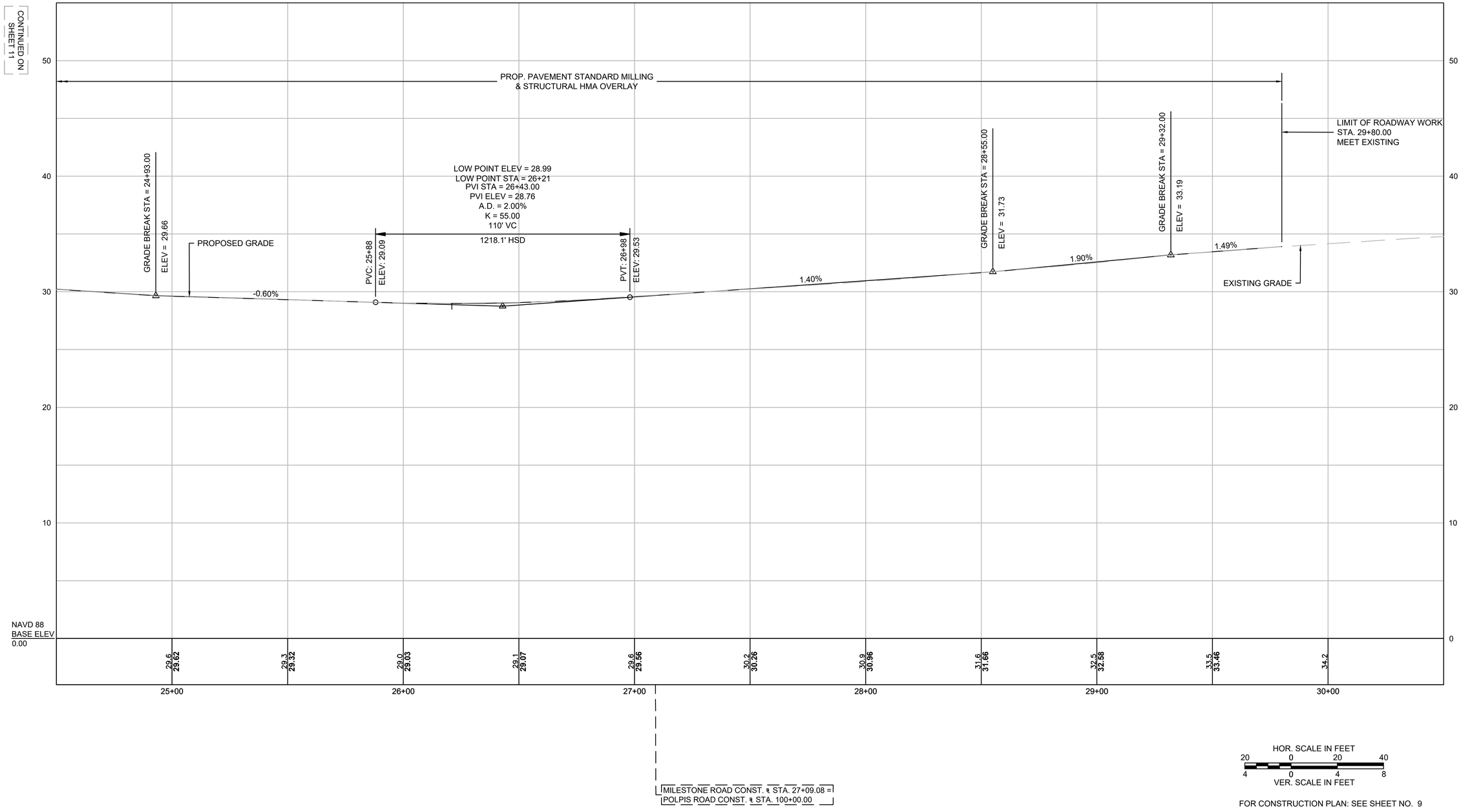
NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	12	50
	PROJECT FILE NO. 613129		

CONSTRUCTION PROFILES

613129_HD (PR).DWG Plotted on 23-May-2024 4:17 PM

MILESTONE ROAD



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

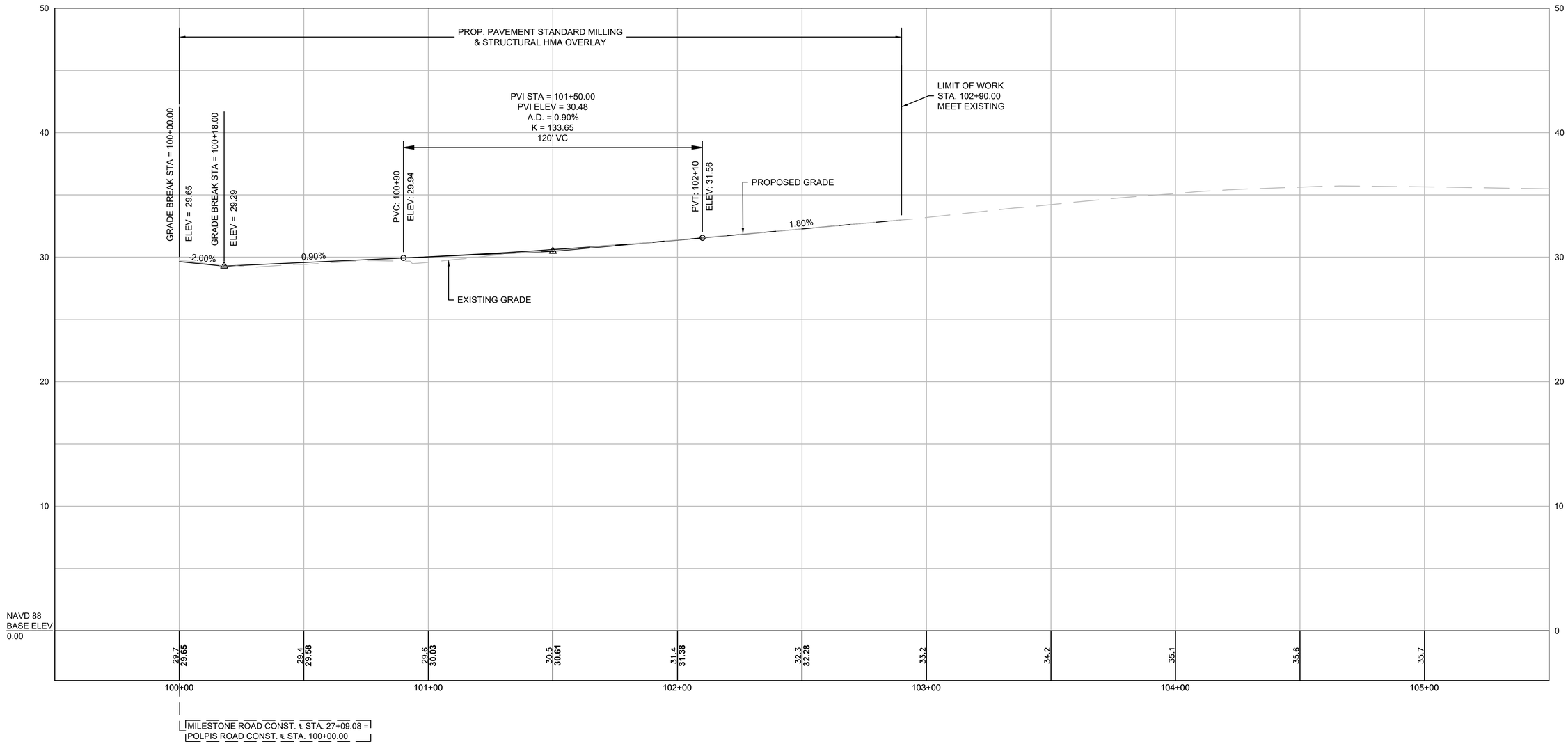
FOR CONSTRUCTION PLAN: SEE SHEET NO. 9

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	13	50
PROJECT FILE NO.	613129		

CONSTRUCTION PROFILES

POLPIS ROAD



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

FOR CONSTRUCTION PLAN: SEE SHEET NO. 9

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	14	50
PROJECT FILE NO.	613129		

CURB TIE & GRADING PLANS

613129_HD (CT_GR).DWG Plotted on 23-May-2024 4:18 PM

N

CHATHAM ROAD

MILESTONE ROAD

MONOMOY ROAD

#4 MONOMOY ROAD
APN 55-67-0
FOUR MONOMOY NOMINEE TRUST
CERT. 23971

#1 CHATHAM ROAD
APN 54-48-0
DAVID S. & ENIC M. WISE
CERT. 22208

#8 MILESTONE ROAD
APN 54-47-0
8 MILESTONE ROAD REALTY TRUST
CERT. 22628

#1 MONOMOY ROAD
APN 55-68-0
MEDIA ONE OF MASSACHUSETTS INC
CERT. 18477

#5 CHATHAM ROAD
APN 54-132-0
GARRETT S. & JILL B. PRITCHARD
CERT. 25974

#16E MILESTONE ROAD
APN 54-130-4
MADAKET REALTY LLC
CERT. U42123

1891 COUNTY LAYOUT

APPROX. COUNTY LAYOUT

1894 SHLO NO. 7

CURVE TABLE			
CURVE #	DELTA	RADIUS	LENGTH
C1	2°26'47"	213.00	9.09

BEGIN PROJECT
STA. 18+65.00
MEET EXISTING
N99017.9772
E1754412.1664

S88°02'44"E
996.91'

PI +96.91

S89°15'43"E
112.18'

PROP. CONST. ℄ & PGL

PI +09.09

S89°30'05"E
1063.79'

LIMIT OF ROADWAY WORK
STA. 22+70.00
MEET EXISTING

POT
+70.00
9.86' LT

POT
+70.00
11.10' RT

PT
+21.14
13.00'

PC C1 PT
18.00'
+44.93
17.81'
+35.84

RIM 31.03
RIM 30.88
RIM 30.97

CONTINUED ON SHEET 15

MATCHLINE

0 20 50 100
SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	15	50
	PROJECT FILE NO.	613129	

CURB TIE & GRADING PLANS

Plotted on 23-May-2024 4:18 PM

613129_HD (CT_GR).DWG

CURVE TABLE

CURVE #	DELTA	RADIUS	LENGTH
C2	1°15'03"	213.00	4.65
C3	89°18'59"	45.00	70.15
C4	116°23'55"	50.00	101.58
C5	22°06'48"	110.00	42.46
C6	55°16'20"	99.50	95.99

N
POLPIS ROAD
MILESTONE ROAD
CONTINUED ON SHEET 14
CONTINUED ON SHEET 16
MATCHLINE
MATCH LINE
#11 CHATHAM ROAD APN 54-186-0 ROBERT H. & JUDITH A. BRUST CERT. 24700
#4 POLPIS ROAD APN 54-187-0 VON KAMPEN NOMINEE TRUST CERT. 22232
#2 POLPIS ROAD APN 54-128-0 JUNE E. LIFE JOHNSEN ESTATE CERT. 20086
1 POLPIS ROAD APN 54-121 N/F ISLAND LUMBER HOLDING COMPANY CERT. 5489, LCC 34603A BOOK 1321, PAGE 211 PLAN NO. 35 OF 2011
LIMIT OF WORK STA. 102+90.00 MEET EXISTING
LIMIT OF ROADWAY WORK STA. 29+80.00 MEET EXISTING
PROP. CROWN LINE
PROP. GUTTER LINE
PROP. CONST. ℄ & PGL
N53°38'23"E 264.42'
N50°59'12"E 110.25'
S89°30'05"E 1063.79'
N0°29'32"E 58.53'
L=46.30' R=1000.00'
L=70.50' R=80.00'
15' BIKE PATH EASEMENT BK/PG 1321/211
1964 TOWN LAYOUT
1894 SHLO NO. 7
APPROX. COUNTY LAYOUT
MILESTONE ROAD CONST. ℄ STA. 27+09.08 = POLPIS ROAD CONST. ℄ STA. 100+00.00
SCALE: 1" = 20'
0 20 50 100

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	16	50
PROJECT FILE NO.	613129		

CURB TIE & GRADING PLANS

613129_HD (CT_GR).DWG Plotted on 23-May-2024 4:18 PM

N

CONTINUED ON SHEET 15

1 POLPIS ROAD
APN 54-121
N/F
ISLAND LUMBER HOLDING COMPANY
CERT. 5489, LCC 34603A
BOOK 1321, PAGE 211
PLAN NO. 35 OF 2011

POLPIS BIKE PATH

MATCH LINE

15 BIKE PATH EASEMENT
BK/PG 1321/211

45 BIKE PATH EASEMENT
BK/PG 1321/211

1894 SHLO NO. 12

1894 SHLO NO. 7

BUSHES

WOOD FENCE

WOOD POST

BIT

BIT WALK

CCB

EP

EM HEM H

35.81 36.52 37.91 38.61 39.31 39.96 40.38 40.60
35.66 36.37 37.07 37.76 38.46 39.16 39.81 40.23 40.45

31 32 33 34 35 36

S89°30'05"E 1063.79'

PROP. CONST. ℄ & PGL

PI +72.88

S89°30'34"E 691.94'

END PROJECT
STA. 35+05.00
MEET EXISTING
N98999.9333
E1756052.0278

MILESTONE ROAD

0 20 50 100
SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	17	50
	PROJECT FILE NO.	613129	

DRAINAGE & UTILITY PLANS

Plotted on 23-May-2024 4:19 PM
613129_HD (DU).DWG

GENERAL NOTES:

1. SUBSURFACE UTILITY INFORMATION SHOWN HEREIN IS PROVIDED BY GREENMAN-PEDERSEN, INC. (GPI). GPI CONDUCTED QUALITY LEVEL B UTILITY INVESTIGATIONS IN OCTOBER 2023 IN ACCORDANCE WITH CI/ASCE/USEI/CI 38-22. GPI IDENTIFIED UNDERGROUND UTILITY LOCATIONS FOR CABLE TV, ELECTRIC, GAS, COMMUNICATIONS, AND WATER MAINS. ALL SUCH INFORMATION SHOWN HAS BEEN LABELED AS "QLB". DRAINAGE INFORMATION WAS OBTAINED FROM SURFACE EVIDENCE AND SUPPLEMENTED WITH RECORD UTILITY INFORMATION WHERE AVAILABLE. DRAINAGE INFORMATION IS IN COMPLIANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION UTILITY DATA QUALITY LEVEL D. ANY INFORMATION DEPICTED ON RECORD PLANS THAT WAS NOT OBSERVED IN THE FIELD AND SHOWN ON THESE PLANS IS BASED UPON RECORD LOCATION AND HAS BEEN LABELED AS "QLD".
2. EXISTING UNDERGROUND UTILITIES SHALL BE RETAINED UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL EXCAVATE TEST PITS IN AREAS OF POTENTIAL UTILITY CONFLICTS AND RELAY INFORMATION TO THE ENGINEER PRIOR TO COMMENCEMENT OF UTILITY WORK.
4. ALL RIM ELEVATIONS SHOWN ON THE DRAINAGE & UTILITY PLANS ARE LOCATED AT THE CENTER OF THE GRATE.
5. ALL DRAINAGE PIPES SHALL BE CLASS V REINFORCED CONCRETE PIPE UNLESS NOTED OTHERWISE.

CONTINUED ON SHEET 18

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	18	50
PROJECT FILE NO.	613129		

DRAINAGE & UTILITY PLANS

613129_HD (DU).DWG Plotted on 23-May-2024 4:19 PM

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-101	MILESTONE ROAD	23+67 13.03' (LT)	RIM = 31.03	12" RCP OUT = 27.53	
CB-100	MILESTONE ROAD	23+70 14.02' (RT)	RIM = 30.97	12" RCP OUT = 27.47	
DMH-102	MILESTONE ROAD	23+86 8.49' (RT)	RIM = 30.88	12" RCP IN (CB-101) = 27.28 12" RCP IN (CB-100) = 27.28 12" RCP OUT = 27.18	
DMH-121	MILESTONE ROAD	25+51 11.00' (RT)	RIM = 29.09	12" RCP IN (DMH-102) = 24.99 18" RCP IN (DMH-105) = 24.49 18" RCP OUT = 24.49	
FES-100	MILESTONE ROAD	25+52 44.32' (RT)		18" RCP IN (DMH-121) = 24.24	
DMH-105	MILESTONE ROAD	25+93 10.00' (RT)	RIM = 28.87	18" RCP IN (DMH-120) = 24.78 12" RCP IN (CB-104) = 24.88 12" RCP IN (CB-103) = 24.88 18" RCP OUT = 24.68	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
DMH-108	MILESTONE ROAD	29+00 6.08' (RT)	RIM = 32.46	12" RCP IN (CB-106) = 28.19 12" RCP IN (CB-107) = 28.19 12" RCP OUT = 28.09	
CB-107	MILESTONE ROAD	29+09 12.04' (RT)	RIM = 32.50	12" RCP OUT = 28.22	
CB-106	MILESTONE ROAD	29+30 10.72' (LT)	RIM = 32.92	12" RCP OUT = 28.82	ECCENTRIC
DMH-116	POLPIS ROAD	100+41 6.60' (LT)	RIM = 29.38	12" RCP IN (DMH-113) = 25.50 12" RCP IN (CB-115) = 25.50 12" RCP IN (CB-114) = 25.50 15" RCP OUT = 25.50	
CB-114	POLPIS ROAD	100+49 23.63' (RT)	RIM = 29.12	12" RCP OUT = 25.62	
CB-115	POLPIS ROAD	100+50 26.83' (LT)	RIM = 29.09	12" RCP OUT = 25.59	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
DMH-113	POLPIS ROAD	100+96 18.26' (LT)	RIM = 29.62	12" RCP IN (DMH-112) = 26.13 12" RCP OUT = 26.03	
DMH-112	POLPIS ROAD	102+09 2.26' (LT)	RIM = 31.49	12" RCP IN (CB-110) = 27.92 12" RCP IN (CB-111) = 27.39 12" RCP OUT = 27.29	
CB-111	POLPIS ROAD	102+14 16.22' (LT)	RIM = 31.31	12" RCP OUT = 27.55	
CB-110	POLPIS ROAD	102+18 12.00' (RT)	RIM = 31.45	12" RCP OUT = 28.09	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-104	MILESTONE ROAD	25+96 16.41' (RT)	RIM = 28.72	12" RCP OUT = 24.91	ECCENTRIC
CB-103	MILESTONE ROAD	25+96 17.00' (LT)	RIM = 28.71	12" RCP OUT = 25.12	
DMH-120	MILESTONE ROAD	26+19 10.00' (RT)	RIM = 28.79	15" RCP IN (DMH-117) = 24.89 12" RCP IN (CB-118) = 24.89 12" RCP IN (CB-119) = 24.89 18" RCP OUT = 24.89	
CB-118	MILESTONE ROAD	26+21 17.00' (LT)	RIM = 28.65	12" RCP OUT = 25.09	
CB-119	MILESTONE ROAD	26+22 16.40' (RT)	RIM = 28.66	12" RCP OUT = 24.92	ECCENTRIC
DMH-117	MILESTONE ROAD	26+78 11.00' (RT)	RIM = 29.07	15" RCP IN (DMH-116) = 25.17 12" RCP IN (DMH-108) = 25.27 15" RCP OUT = 25.17	

CONTINUED ON SHEET 17

CONTINUED ON SHEET 19

N

MATCHLINE

MATCHLINE

LIMIT OF WORK
STA. 102+90.00
MEET EXISTING

LIMIT OF ROADWAY WORK
STA. 29+80.00
MEET EXISTING

POLPIS ROAD

MILESTONE ROAD

N53°38'24"E
264.42'

PROP. 24" x 36" HH W/
(2) 10'-4" TELE. CONDUIT - TYPE NM, B.O.

ADJ. WM
ADJ. WSO

REM. T-BOX, B.O.

PROP. CB-111

PROP. 11'-12" RCP

PROP. DMH-112
ADJ. WM

PROP. 2-4" TELE.
CONDUIT - TYPE NM

N50°58'12"E
110.25'

L=46.30'
R=1000.00'

PC +39.28

PROP. CB-110

PROP. WATER MAIN
RELOCATION
PROP. 20'-10" DIP W/
(4) 45° BENDS

PROP. 13'-12" RCP

PROP. DMH-113
RET. ULT #30-2

PROP. 24" x 36" HH W/
(2) 10'-4" TELE. CONDUIT - TYPE NM, B.O.

PROP. 116'-12" RCP

PROP. CONST. ℄ & PGL

PT +29.03

PROP. MASONRY
PLUG (TYP.)

PROP. OVERHEAD
WIRES, B.O. (TYP.)

R&R UPL #30-1, B.O.

(ADJ., B.O.)

(ADJ. TMH, B.O.)

RET. LP

RET. HYD.

ADJ. WG

PROP. DMH-116
(RET.) 2" DI WATER

PROP. 18'-12" RCP

PROP. CB-115

PROP. 58'-12" RCP

L=70.50'
R=80.00'

N0°29'32"E
68.53'

REM.
PIPE

PROP. WATER MAIN RELOCATION
PROP. 16'-12" DIP W/ (4) 45° VERTICAL BENDS

PROP. CB-114

PROP. 27'-12" RCP

PROP. CB-118

PROP. (2) 10'-4" TELE.
CONDUIT TYPE NM, B.O.

PROP. CB-103

PROP. 23'-12" RCP

PROP. DMH-121

PROP. DMH-105

PROP. 38'-18" RCP

PROP. 161'-12" RCP

PROP.
DMH-120

ABAN. PIPE

PROP. 3'-12" RCP

PROP. 56'-15" RCP

PROP. 53'-15" RCP

PROP. 23'-12" RCP

S89°30'05"E
1063.79'

PROP. CONST. ℄ & PGL

PROP. 218'-12" RCP

PROP. DMH-108

PROP. 30'-12" RCP

PROP. 6'-12" RCP

S89°30'05"E
1063.79'

PROP. CB-106

PROP. CB-107

PROP. 3'-12" RCP

PROP. CB-104

PROP. CB-119

PROP. 21'-18" RCP

REM. CB
REM. PIPE

PROP. DMH-117

PROP. 32'
18" RCP

PROP. FES-100
INV(in)=24.24 (DMH-121)

RET. UPL #69

PROP. 2-4"
PVC SWEEPS
(48° RADIUS)

PROP. 1-4" PVC
SWEEP (36" RADIUS)

PROP. 2-4" TELE.
CONDUIT - TYPE NM

PROP. SWEEP
(48° RADIUS) (TYP.)

PROP. SEDIMENT FOREBAY
(SEE SHEET 20 FOR DETAILS)
BOTTOM ELEV. = 23.50

PROP. 1-4" CATV
CONDUIT - TYPE NM

MILESTONE ROAD CONST. ℄ STA. 27+09.08 =
POLPIS ROAD CONST. ℄ STA. 100+00.00

PROP. INFILTRATION BASIN
(SEE SHEET 20 FOR DETAILS)
BOTTOM ELEV. = 22.50

PROP. 24" x 36" HH W/ (2) 10'-4"
TELE. CONDUIT - TYPE NM, B.O.

PROP. 1-4" PVC
SWEEP (36" RADIUS)

PROP. 2-5" ELEC.
CONDUIT - TYPE NM

APPROXIMATE LIMITS OF ZONE I
WELLHEAD AREA

15' BIKE PATH EASEMENT
BK/PG 1321/211

1964 TOWN LAYOUT

1894 SHLO NO. 7

(REM.) CB RIM=27.47 I=24.9 (12"RCP)

(REM.) CB RIM=28.48 I(A,B,C)=24.7

(REM.) CB RIM=28.69 I=24.8

(REM.) CB RIM=28.66 I=24.56

(REM.) CB RIM=29.42 I=24.62

(REM.) CB RIM=28.77 I=24.8

(REM.) DMH RIM=33.76'

0 20 50 100

SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	19	50
PROJECT FILE NO.	613129		

DRAINAGE & UTILITY PLANS

613129_HD (DU).DWG Plotted on 23-May-2024 4:19 PM

N

CONTINUED ON SHEET 18

MATCHLINE

15' BIKE PATH EASEMENT
BK/PG 1321/211

1894 SHLO NO. 7

R&R HYDRANT;
PROP. 17'- 6" DI WATER PIPE

ADJ. WG

RET. LP

POLPIS BIKE PATH

WOOD FENCE

BUSHES

31 — S89°30'05"E 1063.79' — PI +72.88 — 32 — PROP. CONST. ℄ & PGL — 33 — 34 — S89°30'34"E 691.94" — 35 — 36

CCB

(ABAN., B.O.)

DIRECT BURIED ELEC–NGRID

(RET.)

BIT WALK

CATV

PROP. 2-5" ELEC. CONDUIT - TYPE NM

PROP. (2) 10'-5" ELEC. CONDUIT - TYPE NM, B.O.

MILESTONE ROAD

RET. LP

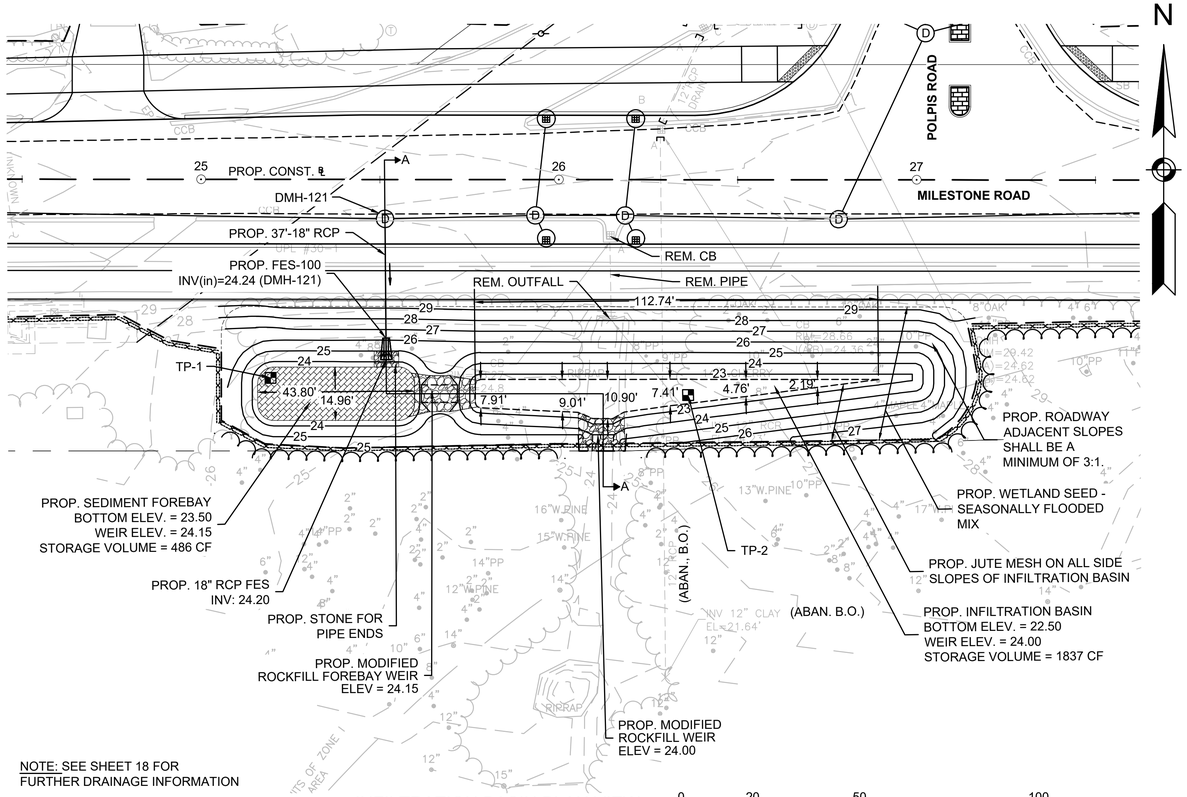
END PROJECT
STA. 35+05.00
MEET EXISTING
N98999.9333
E1756052.0278

0 20 50 100
SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	20	50
PROJECT FILE NO.	613129		

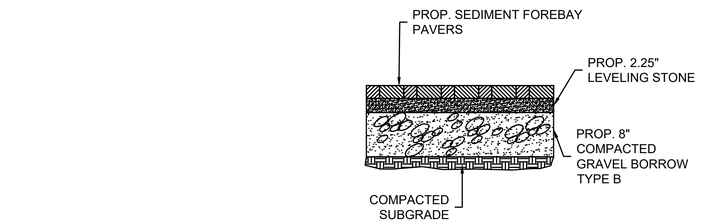
DRAINAGE DETAILS



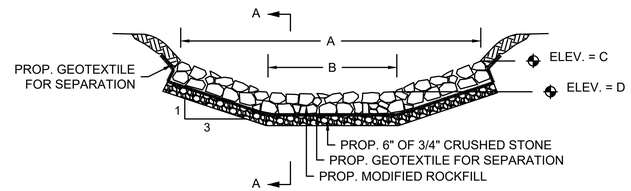
NOTE: SEE SHEET 18 FOR FURTHER DRAINAGE INFORMATION

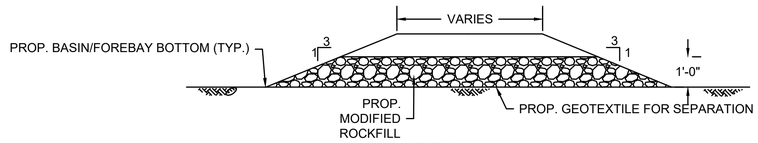
INFILTRATION BASIN PLAN VIEW
1" = 20'

SCALE: 1" = 20'



BOTTOM OF SEDIMENT FOREBAY

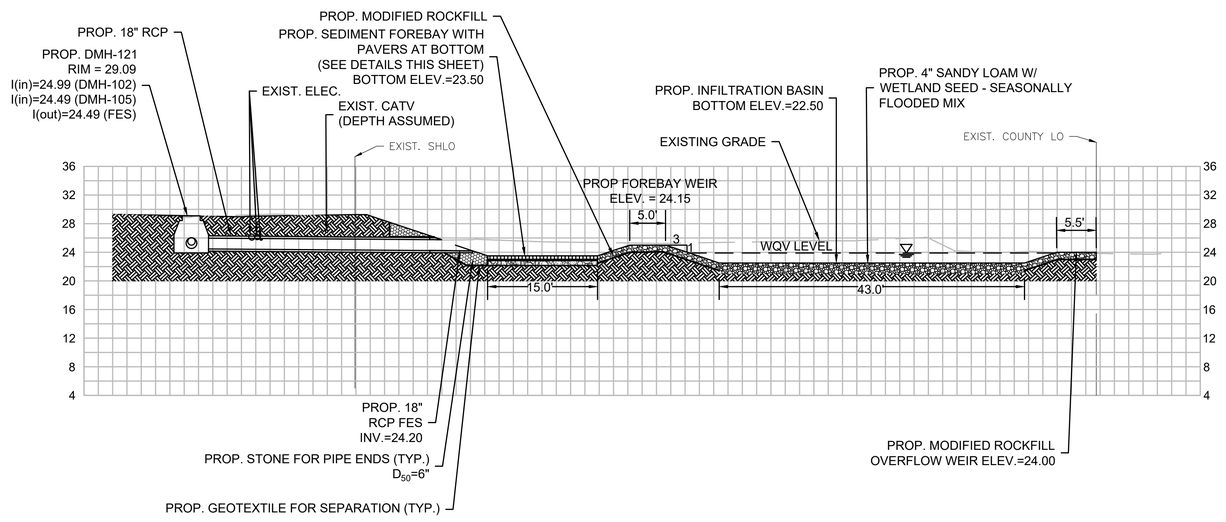




SECTION A-A

WEIR DESIGN TABLE				
	A	B	C	D
FOREBAY	10'-0"	5'-0"	25.00	24.15
INFILTRATION BASIN	10'-0"	5'-5"	25.00	24.00

MODIFIED ROCKFILL FOREBAY WEIR
NTS



INFILTRATION BASIN PROFILE VIEW (SECTION A-A)
1"=10'

AREAS			
	TOTAL AREA (SF)	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)
POST-DEVELOPMENT	61,525	51,110	27,549
PRE-DEVELOPMENT	43,457	31,609	11,848
DIFFERENCE IN IMPERVIOUS AREA		19,501	

DESIGN DATA

WATER QUALITY VOLUME:

ADDED IMPERVIOUS AREA (Aimp) = 19,501 SQUARE FEET
WATER QUALITY DEPTH = 1 INCH
WATER QUALITY VOLUME (WQV) = (19,501) * (1/12) = 1,625 CUBIC FEET

SEDIMENT FOREBAY VOLUME:

SEDIMENT DEPTH = 0.1 INCH
SEDIMENT FOREBAY VOLUME = (51,110) * (0.1/12) = 426 CUBIC FEET

DESIGN STORAGE VOLUMES			
	VOLUME REQUIRED (CF)	VOLUME PROVIDED (CF)	WEIR ELEVATION
WATER QUALITY VOLUME (WQV)	1625	1837	24.00
SEDIMENT FOREBAY VOLUME	426	486	24.15

613129_HD (SW).DWG Plotted on 23-May-2024 4:20 PM

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	21	50
PROJECT FILE NO.	613129		

TRAFFIC SIGN & PAVEMENT MARKING PLANS

613129_HD (TSPM).DWG Plotted on 23-May-2024 4:20 PM

N

CHATHAM ROAD

MONOMOY ROAD

MILESTONE ROAD

#4 MONOMOY ROAD
APN 55-67-0
FOUR MONOMOY NOMINEE TRUST
CERT. 23971

#1 CHATHAM ROAD
APN 54-48-0
DAVID S. & ENIC M. WISE
CERT. 22208

#8 MILESTONE ROAD
APN 54-47-0
8 MILESTONE ROAD REALTY TRUST
CERT. 22628

#1 MONOMOY ROAD
APN 55-68-0
MEDIA ONE OF MASSACHUSETTS INC
CERT. 18477

#5 CHATHAM ROAD
APN 54-132-0
GARRETT S. & JILL B. PRITCHARD
CERT. 25974

#16E MILESTONE ROAD
APN 54-130-4
MADAKET REALTY LLC
CERT. U42123

CONTINUED ON SHEET 22

MATCHLINE

BEGIN PROJECT
STA. 18+65.00
MEET EXISTING
N99017.9772
E1754412.1664

19 S88°02'44"E 996.91'

PI +96.91

20 S89°15'43"E 112.18'

PROP. CONST. ℄ & PGL

21 PI +09.09

22 EXIST. DBYL S89°30'05"E 1063.79'

EXIST. SWL

23 DBYL (400')

24 DWLEx (192')

SWL (370')

SWL (710')

LIMIT OF ROADWAY WORK
STA. 22+70.00
MEET EXISTING

PROP. TWO-WAY YELLOW REFLECTORIZED SLOTTED PAVEMENT MARKER @ 40' O.C. (TYP.)

(R&R) BIKE AND PED CROSSING SYMBOL; AHEAD

(R&R) "SPEED REDUCTION SIGN 25 MPH"

(RET.) "SPEED LIMIT 30"

ROAD ENTERING FROM LEFT SYMBOL (RET.)

1891 COUNTY LAYOUT

APPROX. COUNTY LAYOUT

1894 SHLO NO. 7

BIT WALK

SHELLS

CRUSHED SHELLS

0 20 50 100

SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	22	50
PROJECT FILE NO.	613129		

TRAFFIC SIGN & PAVEMENT MARKING PLANS

613129_HD (TSPM).DWG Plotted on 23-May-2024 4:20 PM

N

CONTINUED ON SHEET 21

MATCHLINE

#2 POLPIS ROAD
APN 54-128-0
JUNE E. LIFE JOHNSEN ESTATE
CERT. 20086

#4 POLPIS ROAD
APN 54-187-0
VON KAMPEN NOMINEE TRUST
CERT. 22232

#11 CHATHAM ROAD
APN 54-186-0
ROBERT H. & JUDITH A. BRUST
CERT. 24700

1 POLPIS ROAD
APN 54-121
N/F
ISLAND LUMBER HOLDING COMPANY
CERT. 5489, LCC 34603A
BOOK 1321, PAGE 211
PLAN NO. 35 OF 2011

POLPIS ROAD
1964 TOWN LAYOUT

MILESTONE ROAD
APPROX. COUNTY LAYOUT

(R&R) HOSPITAL SYMBOL;
(R&S) DIAGONAL RIGHT ARROW

(R&R) POLPIS-WAUWINET QUIDNET SYMBOL

(R&S) "STOP"

(R&S) "MILESTONE RD"

(R&R) "MILESTONE RD"

"STOP AHEAD" (RET.)

"YIELD" (R&S)

ROAD ENTERING AHEAD SYMBOL (RET.)

"POLPIS BIKE PATH 1000" (RET.)

(RET.) "SPEED LIMIT 35"; "NO PASSING ZONE"; "NO PARKING EITHER SIDE"

R3-8c

M6-1R

R1-1

R3-7L

W1-7

PC +39.28

PT +85.58

PT +29.03

PC +58.53

L=46.30' R=1000.00'

T=70.50' R=60.00'

N53°38'23"E 264.42'

N0°29'32"E 58.53'

S89°30'05"E 1063.79'

100+00 PROP. CONST. ℄ & PGL

MILESTONE ROAD CONST. ℄ STA. 27+09.08 =
POLPIS ROAD CONST. ℄ STA. 100+00.00

SWL (270')
SWL (100')
SWL (370')
SWL (125')
SWL (710')
SWL (145')
DBYL (280')
DBYL (240')
DBYL (95') 101
DBYL (90')
DBYL (400')
DWLEx (192')
DBYL (155')
DBYL (155')
DBYL (70')
SYL (15')
SYL (15')
SYL (15')
EXIST SWL
EXIST. DBYL
EXIST. SWL

12' CW

PROP. ONE-WAY WHITE REFLECTORIZED SLOTTED PAVEMENT MARKER @ 40' O.C. (TYP.)

PROP. ONE-WAY YELLOW REFLECTORIZED SLOTTED PAVEMENT MARKER @ 40' O.C. (TYP.)

PROP. TWO-WAY YELLOW REFLECTORIZED SLOTTED PAVEMENT MARKER @ 40' O.C. (TYP.)

LIMIT OF WORK
STA. 102+90.00
MEET EXISTING

LIMIT OF ROADWAY WORK
STA. 29+80.00
MEET EXISTING

CONTINUED ON SHEET 23

MATCHLINE

0 20 50 100
SCALE: 1" = 20'

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	23	50
PROJECT FILE NO.	613129		

TRAFFIC SIGN & PAVEMENT MARKING PLANS

613129_HD (TSPM).DWG Plotted on 23-May-2024 4:20 PM

N

CONTINUED ON SHEET 22

1 POLPIS ROAD
APN 54-121
N/F
ISLAND LUMBER HOLDING COMPANY
CERT. 5489, LCC 34603A
BOOK 1321, PAGE 211
PLAN NO. 35 OF 2011

POLPIS BIKE PATH

MILESTONE ROAD

MATCHLINE

15 BIKE PATH EASEMENT
BK/PG 1321/211

45 BIKE PATH EASEMENT
BK/PG 1321/211

BIKE CROSSING SYMBOL (RET.)

"STOP" (RET.)

"YIELD HERE TO PEDESTRIAN" (RET.)

BUSHES

WOOD FENCE

1894 SHLO NO. 7

EXIST. SWL

EXIST. DBYL

CCB

BIT

BIT WALK

EMH EMH

31 S89°30'05"E 1063.79'

PI +72.88

32 PROP. CONST. & PGL

33

34 S89°30'34"E 691.94'

35

36

END PROJECT
STA. 35+05.00
MEET EXISTING
N98999.9333
E1756052.0278

(RET.) BIKE AND PED CROSSING SYMBOL; AHEAD

YIELD HERE TO PEDESTRIAN (LEFT) (RET.)

BIKE CROSSING SYMBOL (RET.)

POLPIS BIKE PATH SYMBOL (RET.)

"STOP" (RET.)

(RET.) "SPEED LIMIT 45 MPH"

0 20 50 100
SCALE: 1" = 20'

APPROX. COUNTY LAYOUT

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	24	50
PROJECT FILE NO.	613129		

TRAFFIC SIGN SUMMARY SHEET

NOTES:

1. ALL WARNING, REGULATORY AND ROUTE MARKERS SHALL BE FABRICATED WITH HIGH INTENSITY ENCAPSULATED LENS REFLECTIVE SHEETING (SEE SECTION M9.30.0) TYPE III OR IV.
2. ALL SIGNS NOTED AS "(R&R)" SHALL BE MOUNTED ON NEW 4"x4" WOOD POST PER THE TOWN OF NANTUCKET'S STANDARDS.
3. QUANTITIES OF SIGNS AND POSTS SHOWN ON THIS SHEET MAY DIFFER FROM THE TRAFFIC SIGN & PAVEMENT MARKING PLANS. WHERE DIFFERENCES OCCUR, THE TRAFFIC SIGN & PAVEMENT MARKING PLANS SHALL PREVAIL.

IDENTIFI-CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			4X4 POST NUMBER REQUIRED	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER			
R1-1	30"	30"		MUTCD STANDARD		1	RED	WHITE	WHITE	1	6.25	6.25
R3-7L	30"	30"		MUTCD STANDARD		1	WHITE	BLACK	BLACK	1	6.25	6.25
R3-8c	30"	30"		MUTCD STANDARD		1	WHITE	BLACK	BLACK	1	6.25	6.25
W1-7	48"	24"		MUTCD STANDARD		1	YELLOW	BLACK	BLACK	MNT. w/ EXIST. D3-1A	8.00	8.00
M6-1R	21"	15"		MUTCD STANDARD		1	BLUE	WHITE	WHITE	MNT. w/ EXIST. D9-2	2.19	2.19

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	25	50
PROJECT FILE NO.	613129		

TRAFFIC LEGEND ABBREVIATIONS & NOTES

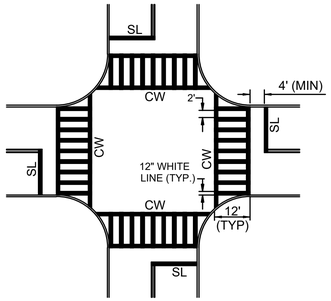
PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
ONLY	ONLY	LEGEND "ONLY" - WHITE
	SL	STOP LINE (12" WHITE)
	CW	CROSSWALK (12" OR 24")
	SWL	SOLID WHITE LINE (6" OR 12")
	SYL	SOLID YELLOW LINE (6" OR 12")
	BWL *	BROKEN WHITE LINE (6")
	BYL *	BROKEN YELLOW LINE (6")
	DWL ***	DOTTED WHITE LINE (6")
	DYL ***	DOTTED YELLOW LINE (6")
	DWLEx **	DOTTED WHITE LINE EXTENSION (6")
	DYLEx **	DOTTED YELLOW LINE EXTENSION (6")
	DBWL *	DOUBLE WHITE LINE (6")
	DBYL *	DOUBLE YELLOW LINE (6")

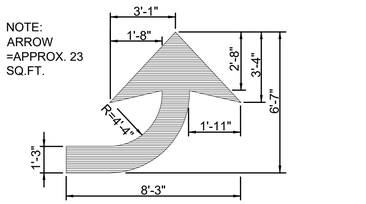
* BROKEN WHITE/YELLOW LINES TO BE 10' IN LENGTH WITH 30' GAP (TYP.) (BYL ON SHARED USE PATH TO BE 3' IN LENGTH WITH 9' GAP)
** DWLEx AND DYLEx LINES TO BE 2' IN LENGTH WITH 6' GAP (TYP.)
*** DWL AND DYL LINES TO BE 3' IN LENGTH WITH 9' GAP (TYP.) (IF WIDE LINE IS SPECIFIED, THE WIDTH SHALL BE 12")

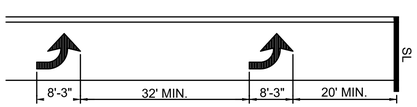
GENERAL NOTES

1. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS NOTED OTHERWISE.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.

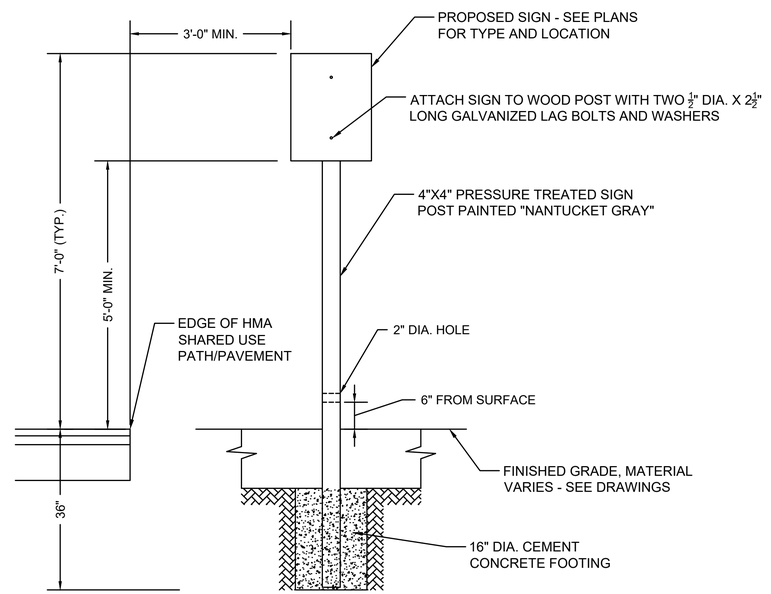


TYPICAL CROSSWALK MARKINGS
NOT TO SCALE





ARROW DETAIL
NOT TO SCALE



NOTES:

1. MAKE POSTS BREAKAWAY BY ADDING A 2" DIAMETER DRILL HOLE 6" ABOVE THE GROUND SURFACE IN THE BASE OF THE POST.

TRAFFIC SIGN INSTALLATION
NOT TO SCALE

TRAFFIC MANAGEMENT NOTES

GENERAL

1. ALL TRAFFIC MANAGEMENT AND WORK ZONE TRAFFIC CONTROL MEASURES SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), MASSDOT - HIGHWAY DIVISION'S "STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS", THE STANDARD SPECIFICATIONS, AND THE FOLLOWING NOTES.

2. THE TEMPORARY TRAFFIC CONTROL PLANS CONTAINED HEREIN ARE GIVEN AS A GUIDE FOR TYPICAL WORK ZONE TRAFFIC CONTROL APPLICATIONS FOR THE TYPES OF WORK ANTICIPATED FOR THIS PROJECT. THEY ARE NOT INTENDED TO COVER ALL POSSIBLE CONSTRUCTION OPERATIONS WHICH THE CONTRACTOR MAY CHOOSE TO EMPLOY. WORK ZONE TRAFFIC CONTROL FOR OTHER CONSTRUCTION OPERATIONS OR OTHER TRAFFIC SITUATIONS IF APPLICABLE SHALL BE IN ACCORDANCE WITH THE REFERENCES LISTED IN NOTE NO. 1 AND AS APPROVED OR DIRECTED BY THE ENGINEER.

3. WITH THE EXCEPTION OF THE PERMANENT LANE CLOSURES REQUIRED FOR STAGED CONSTRUCTION, LANE RESTRICTIONS MAY NOT REMAIN OVERNIGHT OR DURING NON-WORKING HOURS. AFTER EACH WORKING DAY, TRAFFIC CONTROL DEVICES THAT ARE NOT REQUIRED SHALL BE MOVED OFF THE ROADWAY OR FULL DEPTH CONSTRUCTION AREA AND PLACED SO AS NOT TO IMPEDE PEDESTRIAN AREAS, ABUTTER ACCESS OR CAUSE CONFUSION TO MOTORISTS. IN CERTAIN CIRCUMSTANCES, AND ONLY WITH THE APPROVAL OF MASSDOT AND THE ENGINEER, LANE RESTRICTIONS MAY REMAIN OVERNIGHT.

4. CONTRACTOR SHALL PROVIDE A SAFE TEMPORARY PEDESTRIAN ACCESS WHERE EXISTING SIDEWALKS OR OTHER PEDESTRIAN AREAS ARE AFFECTED BY CONSTRUCTION WORK. CONTRACTOR SHALL PROVIDE RAMPS AND RAILINGS IN ACCORDANCE WITH ADA/AAB ACCESSIBILITY REQUIREMENTS FROM THE LATEST MASSDOT TTCP TEMPLATES. CONTRACTOR 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.

5. PLACE ALL CONSTRUCTION SIGNING, TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS FOR EACH PHASE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

6. ONE (1) THRU TRAVEL LANE HAVING A MINIMUM WIDTH OF 11'-0" MUST BE PROVIDED FOR BOTH DIRECTIONS (LANE MAY BE SHARED AND DIRECTION OF TRAVEL TO ALTERNATE UNDER POLICE OFFICER OR FLAGGER CONTROL) DURING ALL PHASES OF CONSTRUCTION AS SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MINIMUM LANE WIDTH IS MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.

7. WHEN WORK INFRINGES UPON THE TRAVELED WAY, WORK SHALL BE RESTRICTED TO OFF-PEAK HOURS ONLY (NORMALLY 9:00am TO 3:00pm, MONDAY TO FRIDAY). THE CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF ROAD CLOSURE.

8. NO WORK IS TO BE PERFORMED BETWEEN MEMORIAL DAY AND LABOR DAY, WITHOUT PRIOR WRITTEN APPROVAL OF THE DISTRICT HIGHWAY DIRECTOR AND THE TOWN.

9. TAPER LENGTH FORMULAE FOR CHANNELIZATION DEVICES: ENGLISH UNITS:
   L = WxS FOR SPEED EQUAL TO OR GREATER THAN 45 M.P.H.
   L = WS² /60 FOR SPEED EQUAL TO OR LESS THAN 40 M.P.H.
   WHERE: L = MIN. LENGTH OF TAPER, S = POSTED SPEED, W = OFFSET WIDTH.

10. ADVISORY SPEED LIMIT, IF USED, SHALL BE SET IN THE FIELD BY THE ENGINEER. W13-1P PLATES SHALL BE USED WHERE APPROPRIATE.

11. FLASHING ARROW PANEL SHALL BE SET IN "ARROW MODE" WHEN USED FOR ACTUAL LANE CLOSURES ONLY. FOR SHOULDER CLOSURES, BULBS TO BE ILLUMINATED IN A NON-DIRECTIONAL CAUTION CONFIGURATION TO AVOID UNNECESSARY LANE SHIFTS.

12. DISTANCES SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLANS ARE A GUIDE ONLY, AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.

13. THE FIRST TEN (10) REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING WARNING LIGHTS.

GRADE DIFFERENCES

14. WHERE THERE IS A LONGITUDINAL DIFFERENCE IN ELEVATION BETWEEN EXISTING PAVEMENT AND ADJACENT TRAVEL SURFACE (UNDER REPAIR OR RECONSTRUCTION), THE CONTRACTOR SHALL PATCH A TEMPORARY HMA WEDGE WITH A 12:1 (OR FLATTER) SLOPE FOR SMOOTH TRANSITION. (SEE DETAIL ON SHEET 27).

15. CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS.

16. CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 4" DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT 4:1 SLOPE AND WILL ALSO REQUIRE DELINEATION BY USE OF DRUMS.

17. A MINIMUM SLOPE OF 4:1 MUST BE MAINTAINED AFTER WORKING HOURS DURING SUBBASE AND BASE COURSE INSTALLATION ALONG EDGE OF THE TRAVELWAY (SEE DETAIL ON SHEET 27). A MAXIMUM SLOPE OF 8:1 MUST BE MAINTAINED ON ALL ABUTTER ACCESS DRIVES AND A MAXIMUM SLOPE OF 12:1 MUST BE MAINTAINED ON ALL SIDEWALKS.

CONSTRUCTION SIGNING

18. ALL CONSTRUCTION SIGNS SHALL BE BLACK LEGEND ON A REFLECTORIZED FLUORESCENT ORANGE BACKGROUND UNLESS OTHERWISE NOTED.

19. CONSTRUCTION SIGNING SHOWN ON THE ADVANCE WARNING SIGN PLAN SHALL ONLY BE USED WHEN WORK IS BEING DONE WHICH RESTRICTS TRAFFIC.

20. STANDARD ORANGE OR FLUORESCENT RED-ORANGE FLAGS (16"x16" MIN.) MAY BE ATTACHED TWO (2) EACH ON ALL ADVANCE WARNING SIGNS. FLAGS SHALL NOT INTERFERE WITH A CLEAR VIEW OF THE SIGN FACE. IF USED, THE COST FOR THE FLAGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SIGNS WITH NO ADDITIONAL PAYMENT.

21. EXISTING GUIDE SIGNS SHALL BE TEMPORARILY RESET AS DIRECTED BY THE ENGINEER.

22. ALL SIGNS, INCLUDING EXISTING, THAT ARE NOT REPRESENTATIVE OF ACTUAL WORK CONDITIONS SHALL BE EITHER COVERED OR REMOVED WHEN NOT APPLICABLE.

23. IF USED, ALL W20-4 AND W20-5 SIGNS SHALL BE TAKEN DOWN OR COVERED AT THE CLOSE OF EACH DAY UNLESS LANE RESTRICTIONS ARE PERMITTED TO REMAIN OVERNIGHT IN ACCORDANCE WITH NOTE NO. 3 ABOVE.

24. USE MA-W20-7b OR W20-7 SIGNS ONLY WHILE POLICE OR FLAGGERS ARE DIRECTING TRAFFIC. THEY SHALL BE TAKEN DOWN OR COVERED AT THE CLOSE OF EACH DAY OR WHEN NOT IN USE.

25. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD MASH CRASH TESTED SUPPORT. THEY SHALL BE TAKEN DOWN OR COVERED AT THE CLOSE OF EACH DAY OR WHEN NOT IN USE.

PAVEMENT MARKINGS

26. PAVEMENT MARKINGS WHICH ARE NO LONGER APPLICABLE SHALL BE REMOVED. APPLY TEMPORARY MARKINGS WHERE SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLANS.

27. ON PROJECTS WHERE PAVEMENT OVERLAY IS NOT DESIGNATED, EXISTING PAVEMENT MARKINGS WHICH ARE IN CONFLICT WITH TEMPORARY TRAFFIC CONTROLS SHOULD BE COVERED TEMPORARILY WITH BLACKOUT TAPE, AS DIRECTED BY THE ENGINEER, FOR THE FULL DURATION OF THE PHASE IN PROGRESS. TEMPORARY PAINTED OR REMOVABLE TAPE MARKINGS SHALL BE USED AS NECESSARY FOR ALL PHASES OF CONSTRUCTION.

CHANNELIZATION

28. THE MAXIMUM SPACING BETWEEN CHANNELIZATION DEVICES (DRUMS OR CONES) SHALL BE APPROXIMATELY EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE FIRST TEN DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING LIGHTS.

29. REFLECTORIZED CONES SHALL BE 36" HIGH.

30. ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT, INCLUDING BUT NOT NECESSARILY LIMITED TO, TEMPORARY IMPACT ATTENUATORS, PLASTIC DRUMS, AND SIGNS AND SIGN SUPPORTS (ON OR NEAR THE TRAVELED WAY) MUST PASS THE CRITERIA SET FORTH IN THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). IF THEY DO NOT MEET THESE CRITERIA, THEY MUST BE REMOVED FROM THE PROJECT.

SUGGESTED WORK ZONE WARNING SIGN SPACING

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

Based on: Table 6B-1 MUTCD latest edition

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

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

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT.

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

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

TRAFFIC MANAGEMENT LEGEND

- WORK AREA
- SIGN
- DIRECTION OF TRAVEL
- REFLECTORIZED DRUM OR CONE
- A — REFLECTORIZED DRUM WITH TYPE `A' FLASHING WARNING LIGHT
- P — POLICE OFFICER
- PORTABLE TYPE III BARRICADE (4' WIDE, MIN.)
- FLASHING ARROW BOARD (30"x 60" STD. SIZE WITH 13 LAMPS, MIN.)
- TEMPORARY PRECAST CONCRETE BARRIER WITH TEMPORARY FENCE & WHITE REFLECTORS
- TEMPORARY IMPACT ATTENUATOR
- PAVEMENT MARKINGS TO COVER OR REMOVE (SEE PAVEMENT MARKINGS NOTES)
- PORTABLE CHANGEABLE MESSAGE SIGN
- MOVABLE IMPACT ATTENUATOR

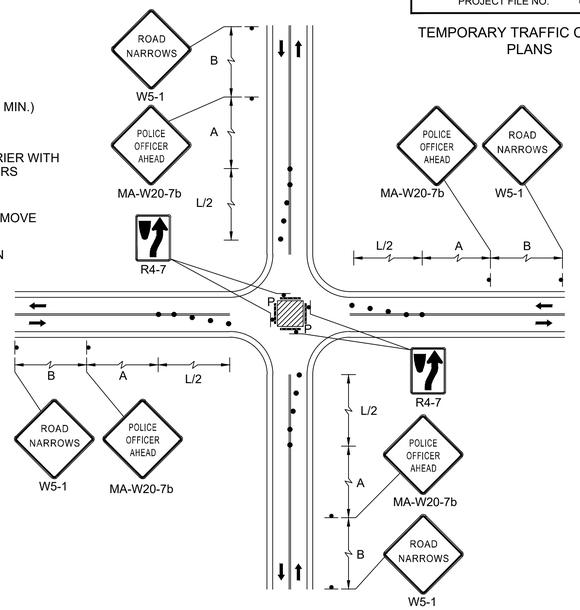
BUFFER SPACING	
SPEED* (MPH)	DISTANCE (FT)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

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

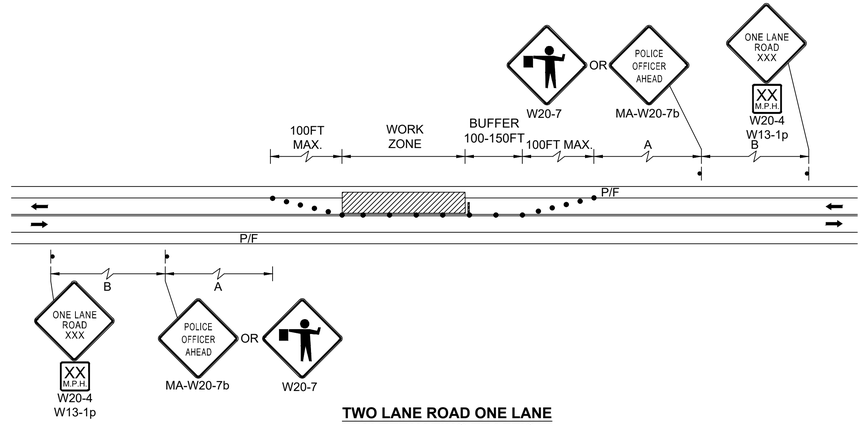
NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	26	50
PROJECT FILE NO.	613129		

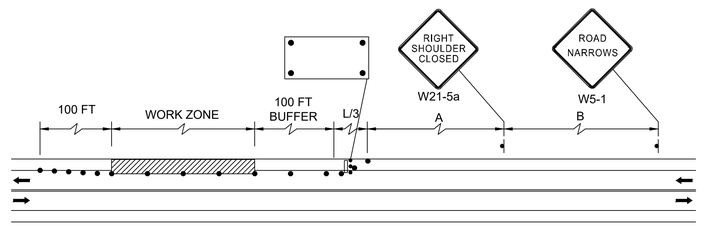
TEMPORARY TRAFFIC CONTROL PLANS



SINGLE LANE APPROACH CENTER CLOSURE
NOT TO SCALE



TWO LANE ROAD ONE LANE ALTERNATING TRAFFIC
NOT TO SCALE



TWO LANE ROAD SHOULDER CLOSED
NOT TO SCALE

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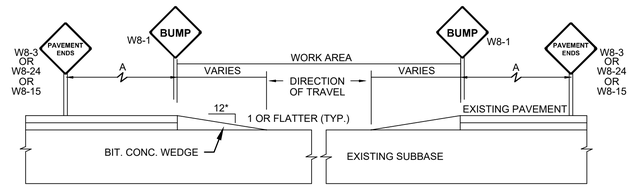
NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

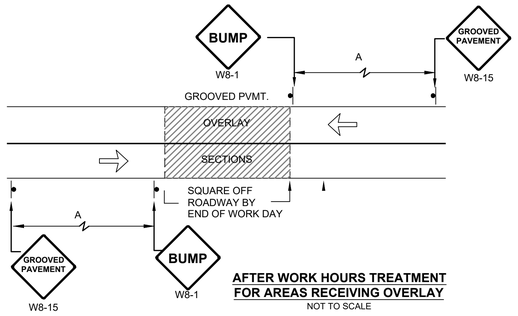
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	27	50
PROJECT FILE NO.	613129		

TEMPORARY TRAFFIC CONTROL PLANS

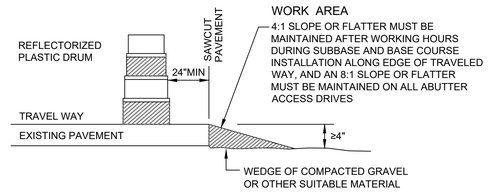
613129_HD (TTCP).DWG Plotted on 23-May-2024 4:21 PM



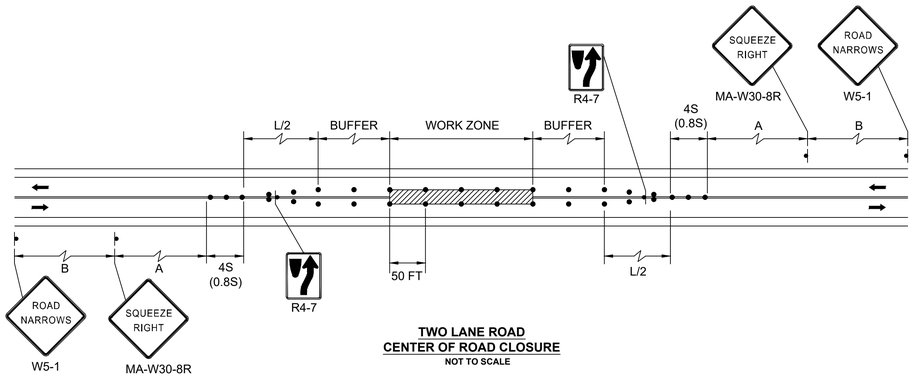
TEMPORARY RAMP
NOT TO SCALE



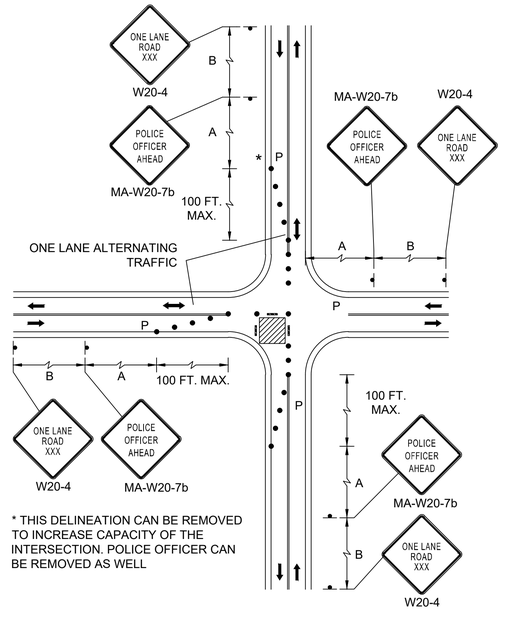
AFTER WORK HOURS TREATMENT FOR AREAS RECEIVING OVERLAY
NOT TO SCALE



AFTER WORK HOURS TREATMENT FOR LATERAL SLOPING
NOT TO SCALE



TWO LANE ROAD CENTER OF ROAD CLOSURE
NOT TO SCALE

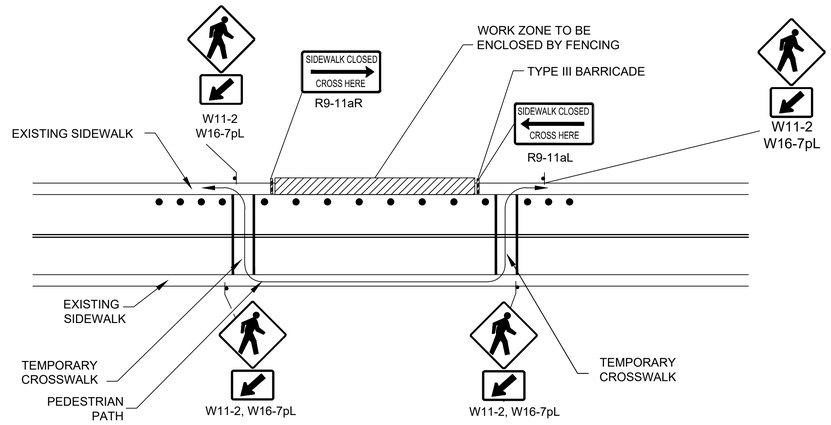


SINGLE LANE APPROACH ONE QUADRANT CLOSURE
NOT TO SCALE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	28	50
PROJECT FILE NO.	613129		

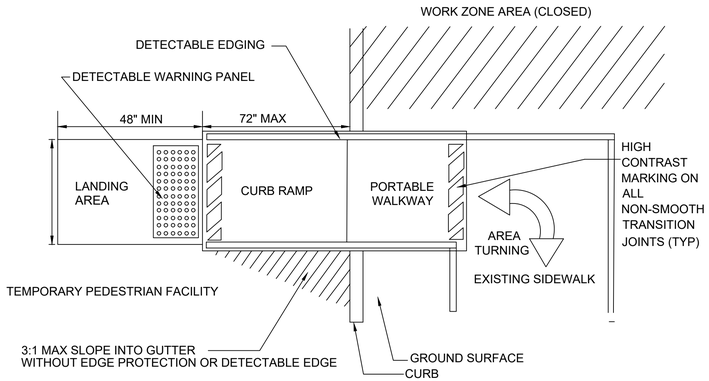
TEMPORARY TRAFFIC CONTROL PLANS

613129_HD (TTCP).DWG Plotted on 23-May-2024 4:21 PM



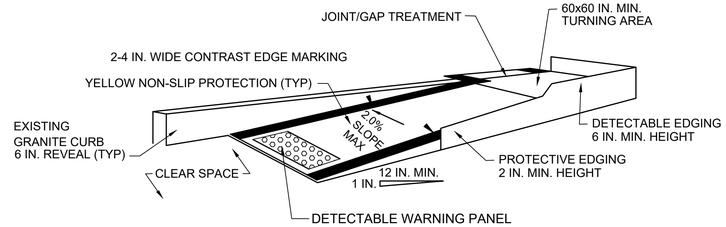
NOTES
1. ADDITIONAL ADVANCE WARNING MAY BE NECESSARY.
2. CONTROLS ONLY FOR PEDESTRIAN TRAFFIC ARE SHOWN. VEHICULAR TRAFFIC SHOULD BE HANDLED AS SHOWN ELSEWHERE.
3. STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.
4. BYPASS IS TO BE USED IN CONJUCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING CONSTRUCTION STAGING, AS DIRECTED BY THE ENGINEER.
5. THE SIDEWALK SHOULD BE A MINIMUM OF 4 FEET WIDE. IF THIS WALKWAY EXCEEDS 200 FEET THEN A 5 FOOT X 5 FOOT PASSING ZONE IS REQUIRED.

PEDESTRIAN BYPASS
NOT TO SCALE

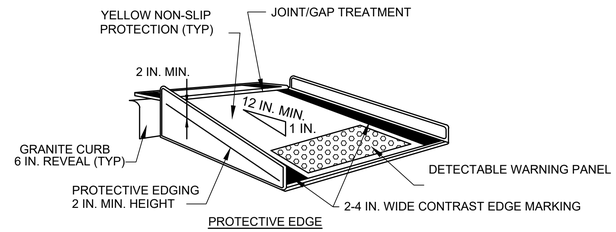


TEMPORARY CURB RAMP-TYPE 2 (PED-2)

PEDESTRIAN DETAILS
NOT TO SCALE



TEMPORARY CURB RAMP-PARALLEL TO CURB
NOT TO SCALE

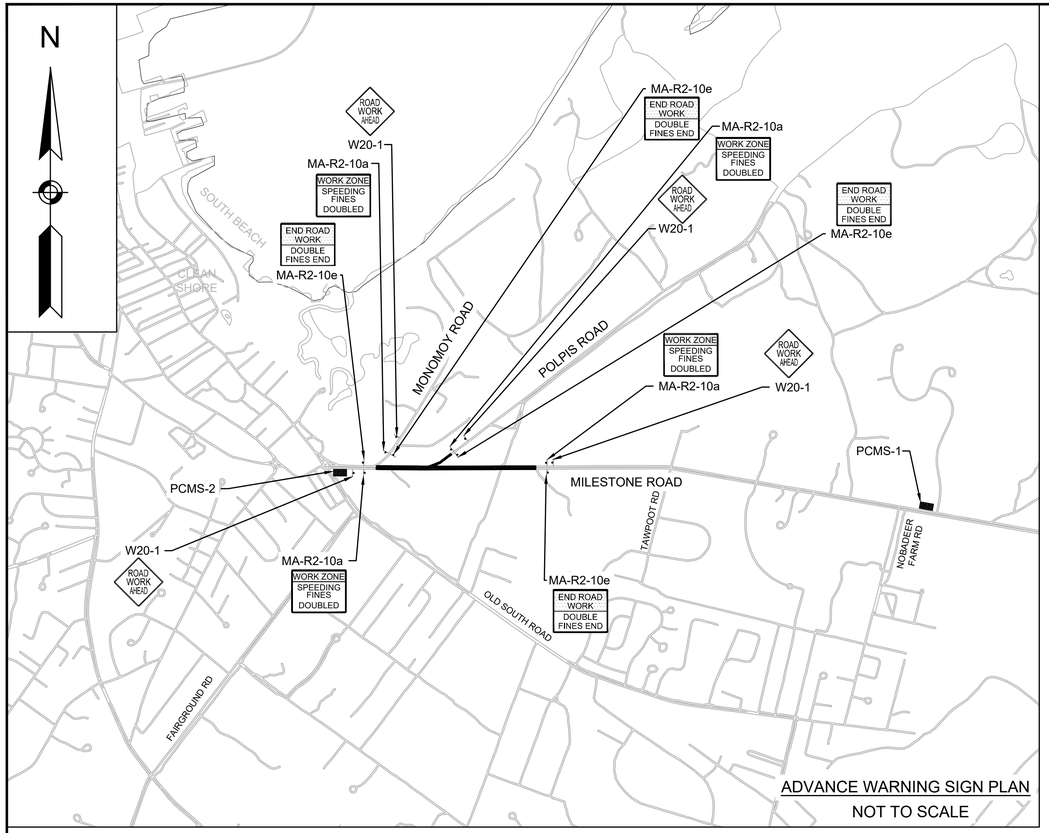


PROTECTIVE EDGE

TEMPORARY CURB RAMP-PERPENDICULAR TO CURB (PED-1)
NOT TO SCALE

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOP STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.
10. IF A TEMPORARY PEDESTRIAN RAMP LEADS TO A CROSSWALK, THEN A DETECTABLE WARNING PAD MUST BE ADHERED TO THE BASE OF THE RAMP. IF IT LEADS TO A PROTECTED PEDESTRIAN BYPASS THAT DOES NOT CONFLICT WITH VEHICULAR TRAFFIC, THEN A PAD SHALL NOT BE INSTALLED ON THE RAMP.



ADVANCE WARNING SIGN PLAN

NOT TO SCALE

PORTABLE CHANGEABLE MESSAGE SIGNS

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE 11TH EDITION OF THE MUTCD AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE LOCATION AND USE OF THE PCMS SHALL BE DETERMINED DURING THE PRE-CONSTRUCTION MEETING. ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE SUGGESTED MESSAGE TWO WEEKS IN ADVANCE AND DURING CONSTRUCTION SHOULD READ AS FOLLOWS:

	TWO WEEKS PRIOR	DURING CONSTRUCTION
(MESSAGE 1)	MILE STONE RD ROAD WORK	MILE STONE RD ROAD WORK
(MESSAGE 2)	BEGINS XXX XX (blank)	SEEK ALT ROUTE

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	29	50
PROJECT FILE NO.	613129		

TEMPORARY TRAFFIC CONTROL PLANS

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
MA-R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED	MASSDOT STANDARD		4	FLUORESCENT ORANGE / WHITE	BLACK	BLACK	12.00	48.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END	MASSDOT STANDARD		4	FLUORESCENT ORANGE / WHITE	BLACK	BLACK	12.00	48.00
R4-7	24"	30"		MUTCD STANDARD		3	WHITE	BLACK	BLACK	5.00	15.00
W5-1	36"	36"	ROAD NARROWS			3	FLUORESCENT ORANGE	BLACK	BLACK	9.00	27.00
W8-1	30"	30"	BUMP			2	FLUORESCENT ORANGE	BLACK	BLACK	6.25	12.50
W8-3	36"	36"	PAVEMENT ENDS			2	FLUORESCENT ORANGE	BLACK	BLACK	9.00	18.00
W8-15	30"	30"	GROOVED PAVEMENT			2	FLUORESCENT ORANGE	BLACK	BLACK	6.25	12.50
W8-24	36"	36"	STEEL PLATE ON PAVEMENT			2	FLUORESCENT ORANGE	BLACK	BLACK	9.00	18.00
W13-1P	18"	18"	XX M.P.H.			2	FLUORESCENT ORANGE	BLACK	BLACK	2.25	4.50
W20-1	36"	36"	ROAD WORK AHEAD			4	FLUORESCENT ORANGE	BLACK	BLACK	9.00	36.00
W20-4	36"	36"	ONE LANE ROAD XX FT			4	FLUORESCENT ORANGE	BLACK	BLACK	9.00	36.00
W20-7	36"	36"				2	FLUORESCENT ORANGE	BLACK	BLACK	9.00	18.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD	MASSDOT STANDARD		3	FLUORESCENT ORANGE	BLACK	BLACK	9.00	27.00
W21-5a	36"	36"	RIGHT SHOULDER CLOSED	MUTCD STANDARD		1	FLUORESCENT ORANGE	BLACK	BLACK	9.00	9.00
MA-W30-8R	36"	36"	SQUEEZE RIGHT	MUTCD STANDARD		2	FLUORESCENT ORANGE	BLACK	BLACK	9.00	18.00

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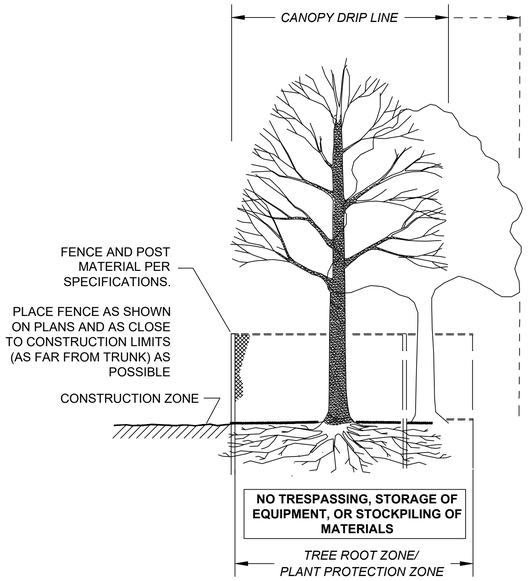
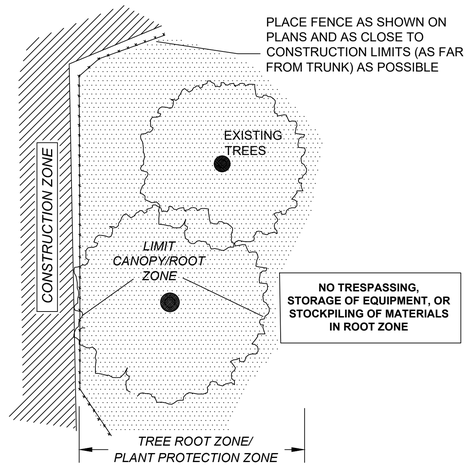
NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	30	50
PROJECT FILE NO.	613129		

CONSTRUCTION DETAILS



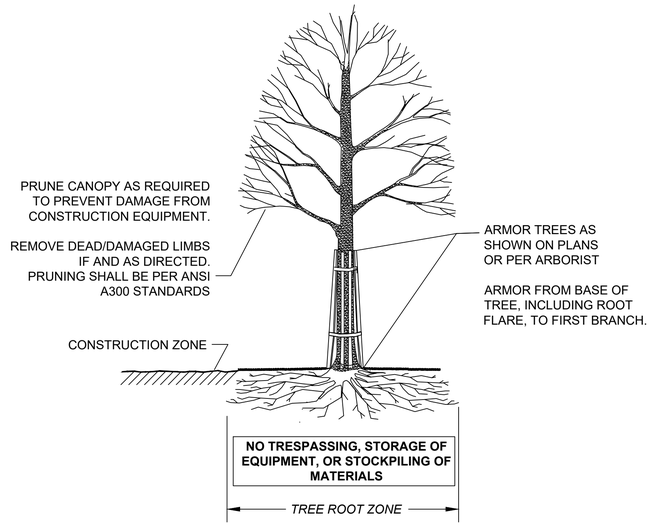
SECTION - FENCE PROTECTION OF ROOT ZONE



PLAN VIEW - FENCE PROTECTION OF ROOT ZONE

TREE PROTECTION - ROOT ZONE

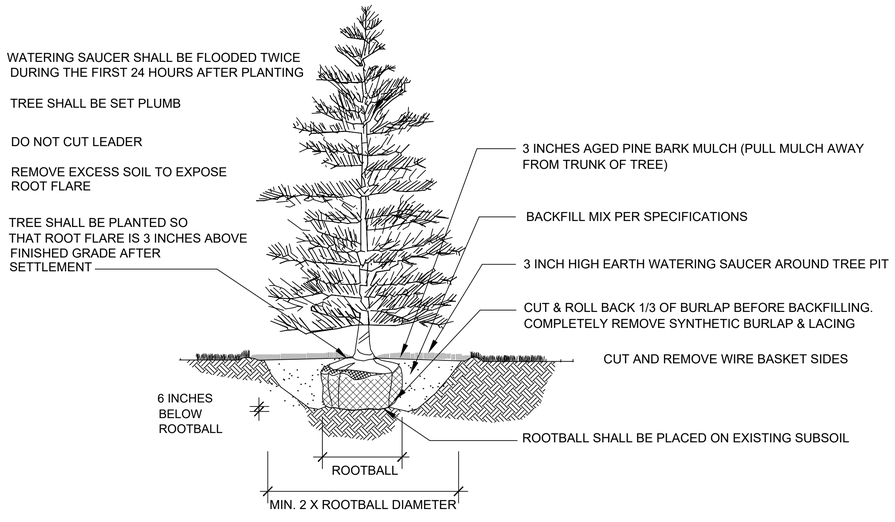
NOT TO SCALE



SECTION - TRUNK ARMORING & PRUNING

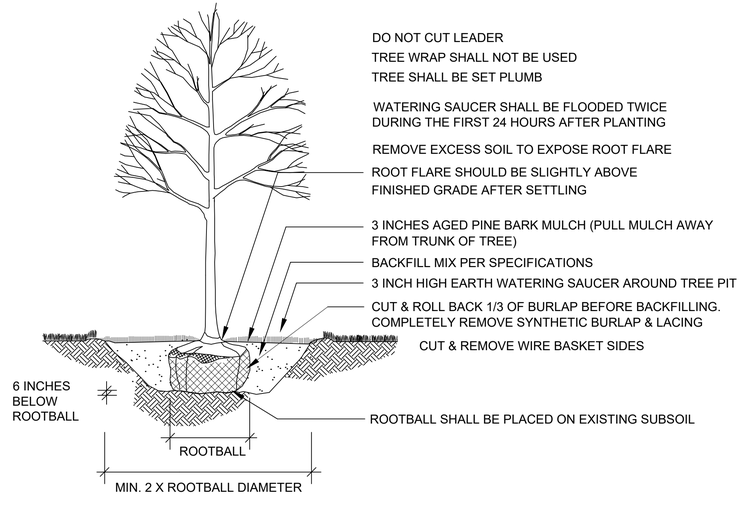
TREE PROTECTION - TRUNK

NOT TO SCALE



EVERGREEN TREE PLANTING

NOT TO SCALE



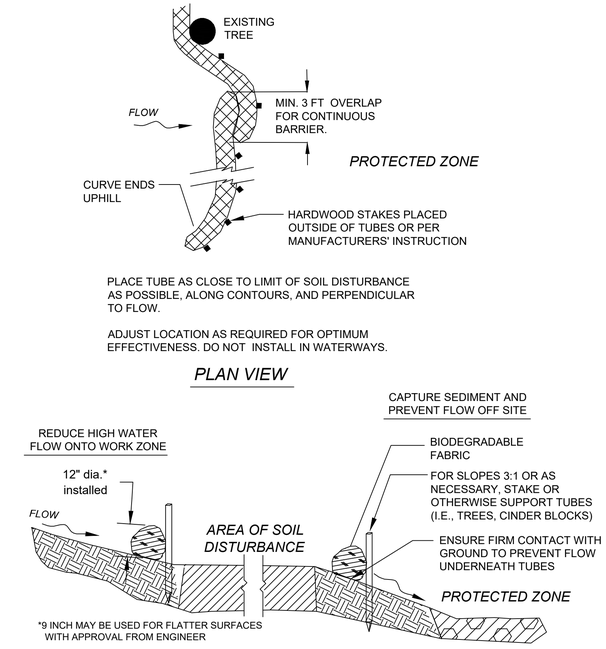
DECIDUOUS TREE PLANTING

NOT TO SCALE

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

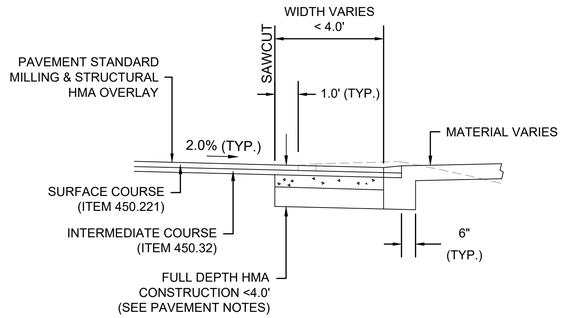
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	31	50
	PROJECT FILE NO. 613129		

CONSTRUCTION DETAILS



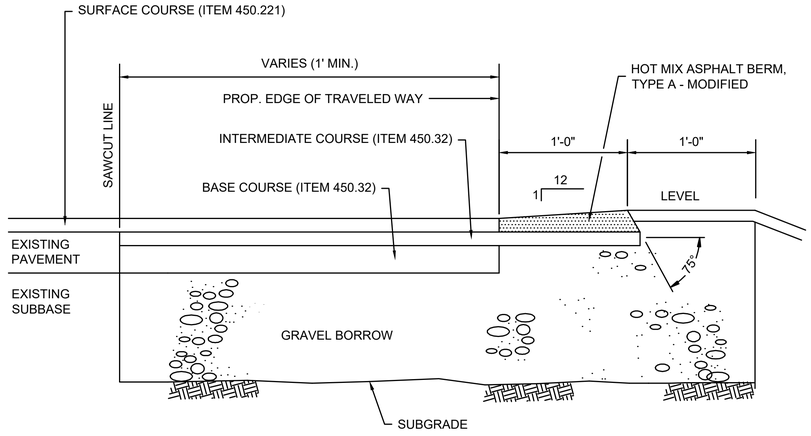
SEDIMENT CONTROL BARRIER

NOT TO SCALE



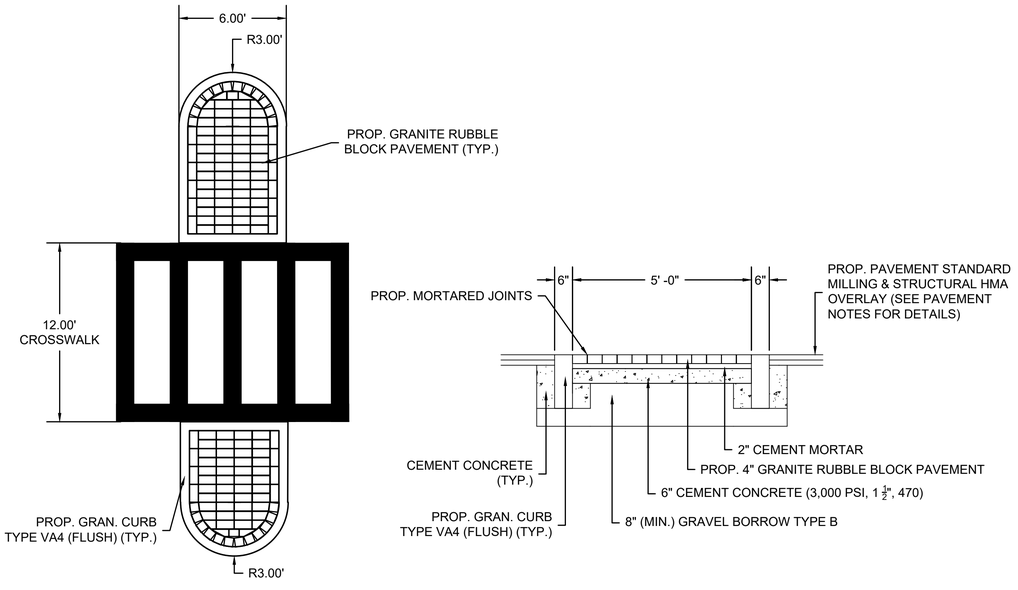
TYPICAL SECTION: ROADWAY WIDENING <4 FEET

NOT TO SCALE



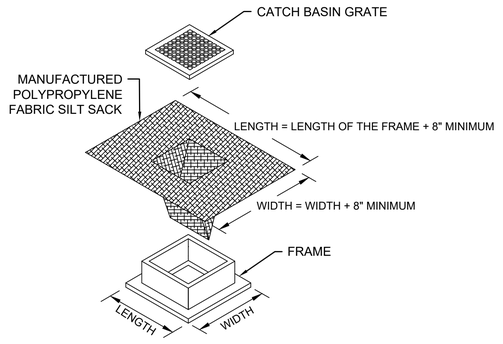
EXISTING HMA BERM REPLACEMENT

NOT TO SCALE



GRANITE RUBBLE BLOCK PAVEMENT DETAIL

NOT TO SCALE



NOTES:

1. LENGTH AND WIDTH OF POLYPROPYLENE FABRIC MUST EXCEED EXISTING CATCH BASIN FRAME DIMENSIONS BY A MINIMUM OF 8".
2. REMOVE CATCH BASIN GRATE AND INSTALL POLYPROPYLENE FABRIC OVER CATCH BASIN FRAME. REPLACE CATCH BASIN GRATE TO SECURE POLYPROPYLENE FABRIC IN PLACE.
3. FOR USE ON ALL EXISTING CATCH BASINS WITHIN THE PROJECT LIMITS AND PROPOSED CATCH BASINS THAT ARE IN OPERATION DURING CONSTRUCTION.

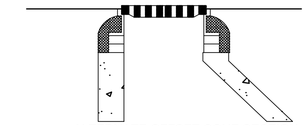
INLET SEDIMENT CONTROL DEVICE

NOT TO SCALE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	32	50
PROJECT FILE NO.	613129		

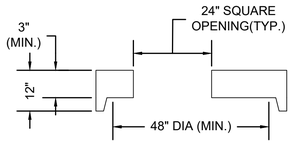
CONSTRUCTION DETAILS

613129_HD (CD).DWG Plotted on 23-May-2024 4:21 PM

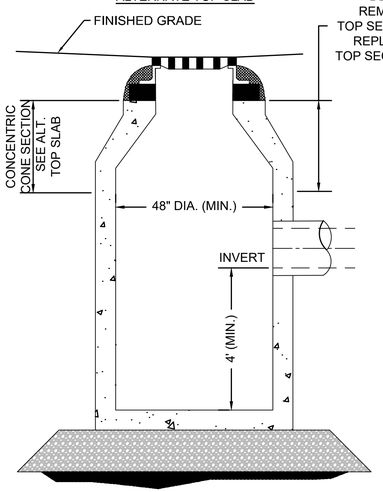


NOTES:

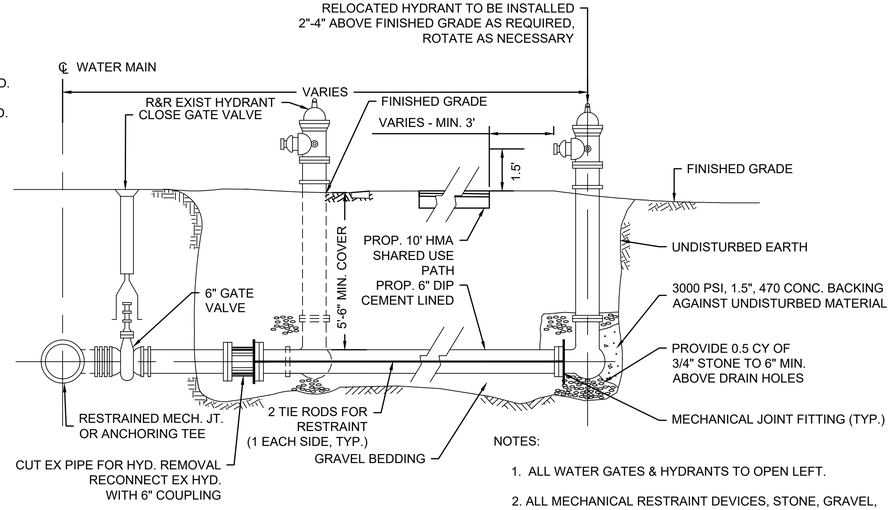
1. BASED ON ACTUAL FIELD CONDITIONS; THE CONTRACTOR SHALL DETERMINE WHICH STYLE OF TOP SECTION SHOULD BE USED.



ALTERNATE TOP SLAB



CATCH BASIN
NOT TO SCALE



NOTES:

1. ALL WATER GATES & HYDRANTS TO OPEN LEFT.

2. ALL MECHANICAL RESTRAINT DEVICES, STONE, GRAVEL, ETC. NECESSARY TO INSTALL OR REMOVE AND RESET HYDRANTS ARE INCIDENTAL TO ITEM 376.2.

HYDRANT DETAIL
NOT TO SCALE

THRUST BEARING REQUIREMENTS

PIPE SIZE	MINIMUM BEARING AREA AGAINST UNDISTURBED SOIL (SQUARE FEET)					
	90° BEND	45° BEND	22.5° BEND	11.25° BEND	TEE	CAP
6"	4.0	3.0	2.0	1.0	3.0	3.0
8"	7.0	4.0	2.0	1.0	5.0	5.0
12"	16.0	10.0	5.0	3.0	11.0	11.0
14"	22.0	12.0	5.0	3.0	16.0	16.0
16"	29.0	17.0	8.0	5.0	21.0	21.0
18"	36.0	20.0	10.0	5.0	26.0	26.0
20"	45.0	24.0	13.0	7.0	32.0	32.0
24"	64.0	35.0	18.0	9.0	46.0	46.0

NOTES:

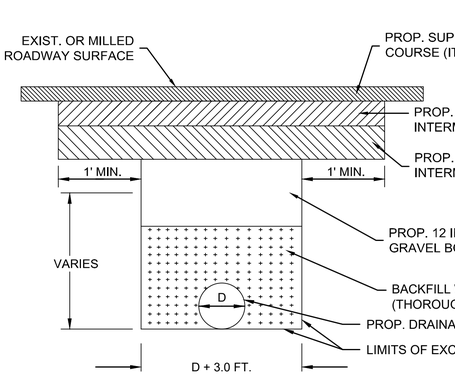
1. FIGURES SHOWN REPRESENT THE MINIMUM BEARING AREA REQUIRED IN SQUARE FEET.
2. BEARING AREAS SHOWN ARE BASED ON SANDY SOILS AT 200 PSF AND MAX. HYDROSTATIC PRESSURE OF 200 PSI.
3. ALL FITTINGS SHALL BE ANCHORED BY MECHANICAL MEANS AND BY CONCRETE THRUST BLOCKS, REQUIRED BY THE TOWN OR AS NOTED ON THE CONTRACT PLANS.
4. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF THE FITTING.
5. ALL DI PIPE & FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
6. THRUST BLOCKS SHALL BE 3000 PSI CONCRETE & SHALL HAVE A MINIMUM THICKNESS OF 12".
7. NO JOINTS SHALL BE COVERED WITH CONCRETE.
8. THRUST BLOCK DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. ADDITIONAL RESTRAINT MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER.
9. WHEN REQUIRED, THREADED RODS SHALL BE ANSI A242 FY50 WITH NUTS TO MATCH AWWA C111. THREADED RODS TO BE FIELD COATED WITH PAINT.

REQUIRED LENGTH OF RESTRAINED JOINTS FROM FITTINGS (FEET)

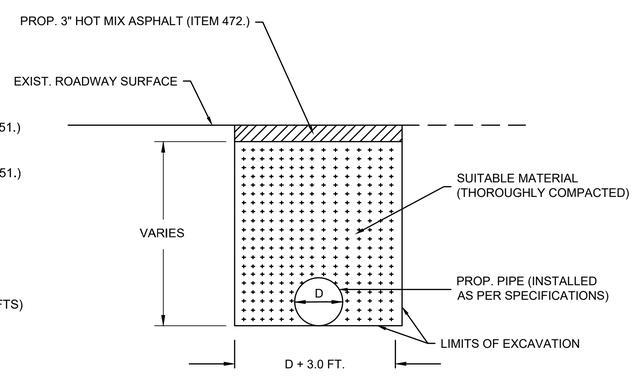
PIPE SIZE	90° BEND	45° BEND OR WYE BRANCH	22 1/2° BEND	11 1/4° BEND	PLUG OR CAP	TEE (BRANCH)
6"	25 (30.5)	10.5 (12.5)	5 (6)	2.5 (3)	43 (64)	34 (51)
8"	33 (40)	13.5 (16.5)	6.5 (8)	3 (4)	55 (82)	47 (70)
10"	40 (48.5)	16.5 (20)	8 (9.5)	4 (5)	67 (100)	58 (87)
12"	47 (56.5)	19.5 (23.5)	9.5 (11.5)	4.5 (5.5)	79 (118)	70 (105)
16"	59.5 (72)	24.5 (30)	12 (14.5)	6 (7)	101 (152)	92 (139)
20"	72 (86.5)	30 (36)	14.5 (17)	7 (8.5)	123 (184)	114 (171)
24"	84 (100)	35 (41)	16.5 (20)	8 (10)	144 (216)	134 (202)
30"	100 (120)	41 (50)	20 (24)	10 (12)	174 (261)	165 (247)

NOTES:
1. RESTRAINED LENGTHS LISTED IN PARENTHESES ARE FOR PIPE WRAPPED IN POLYETHYLENE. THE OTHER ASSOCIATED LENGTHS ARE FOR PLAIN UNWRAPPED DUCTILE IRON PIPE.

2. THE CONTRACTOR SHALL USE THIS TABLE IN CONJUNCTION WITH THE APPROPRIATE PIPE SPECIFICATION SECTION.



PERMANENT PATCH
(IN AREAS OF MILLING AND PAVEMENT OVERLAY)



TEMPORARY TRENCH REPAIR
(IN AREAS OF FULL DEPTH HMA CONSTRUCTION)
NOT TO SCALE

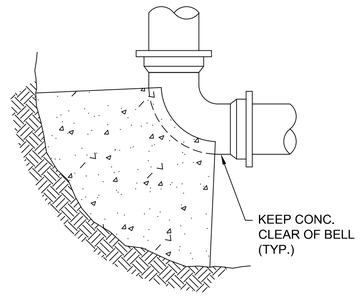
NOTES:

1. PLACE TACK COAT BETWEEN ALL HMA COURSES AND SAWCUT SURFACES PRIOR TO PLACING HMA. SEE PAVEMENT NOTES-FULL DEPTH HMA CONSTRUCTION FOR DEPTH OF HMA.

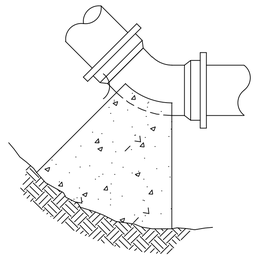
2. IF UNSUITABLE MATERIAL IS ENCOUNTERED AS DETERMINED BY THE ENGINEER, ADDITIONAL BEDDING SHALL BE PAID FOR UNDER ITEM 156.

3. INTERMEDIATE COURSE SHALL BE PLACED UP TO EXISTING PAVEMENT SURFACE AND THEN MILLED AS PART OF OVERALL MILLING OPERATION.

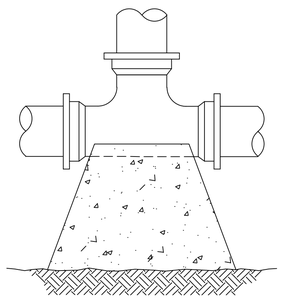
DRAINAGE TRENCH DETAIL
NOT TO SCALE



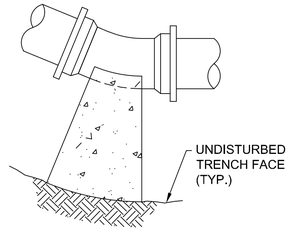
90° BEND



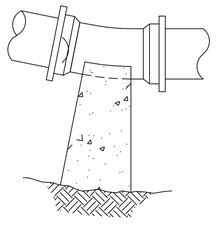
45° BEND



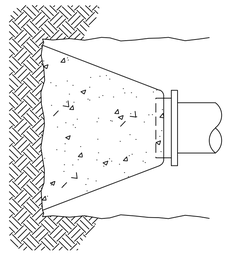
TEE



22.5° BEND



11.25° BEND



CAP

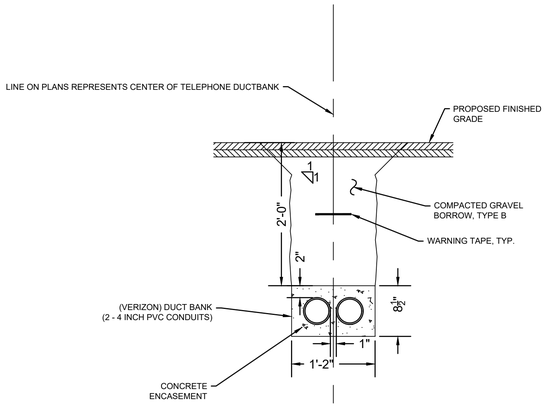
THRUST BLOCK DETAIL
NOT TO SCALE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	33	50
PROJECT FILE NO.	613129		

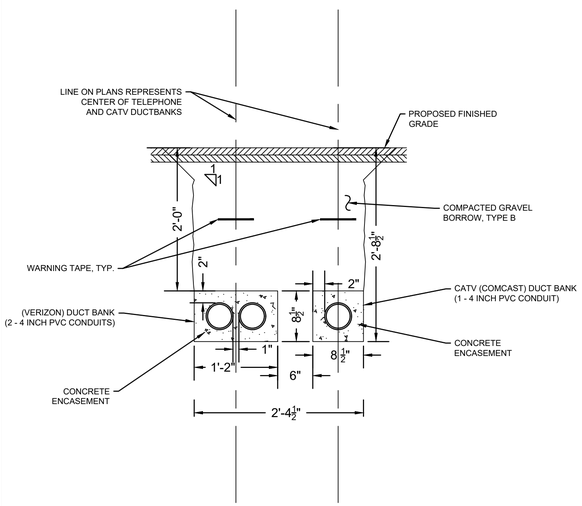
CONSTRUCTION DETAILS

UTILITY TRENCH NOTES:

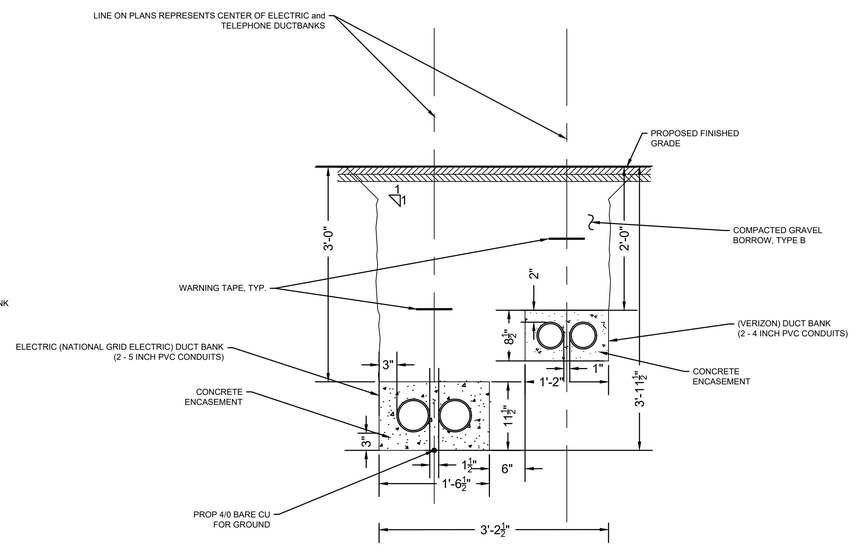
1. ALL CONSTRUCTION OF DUCT BANKS INCLUDING TRENCH, EXCAVATION, AND BACKFILL SHALL CONFORM TO UTILITY DETAILS AND SPECIFICATIONS.
2. FOR ALL DUCTS USE SCHEDULE 40 CONDUITS ENCASED IN 2,500 PSI, 3/8 INCH, 520 CEMENT CONCRETE CONCRETE. USE PLASTIC SPACERS TO MAINTAIN CONDUIT SPACING. SPACERS SHALL MEET UTILITY SPECIFICATIONS FOR DESIGN AND SPACING.
3. ALL TRENCH EXCAVATION ACTIVITIES SHALL COMPLY WITH ALL APPROPRIATE OSHA STANDARDS.
4. EACH DUCT BANK SHALL HAVE ASSOCIATED WARNING TAPE INSTALLED. ELECTRIC DUCT BANKS WILL HAVE 6 INCH, COLOR RED, DETECTABLE METALLIC WARNING TAPE PLACED 12 INCHES ABOVE CONCRETE ENCASEMENT. TELEPHONE DUCT BANKS WILL HAVE 6 INCH, COLOR ORANGE, DETECTABLE METALLIC WARNING TAPE PLACED 12 INCHES ABOVE EACH CONCRETE ENCASEMENT.
5. A UTILITY COMPANY REPRESENTATIVE FROM NATIONAL GRID ELECTRIC SHALL BE PRESENT FOR ALL ELECTRICAL CONDUIT INSTALLED.
6. A UTILITY COMPANY REPRESENTATIVE FROM VERIZON SHALL BE PRESENT FOR ALL TELEPHONE CONDUIT INSTALLED.
7. A UTILITY COMPANY REPRESENTATIVE FROM COMCAST SHALL BE PRESENT FOR ALL CATV CONDUIT INSTALLED.
8. A MINIMUM OF 12 INCHES OF SEPARATION IS REQUIRED FOR CROSSINGS WITH GAS, WATER, SEWER AND DRAINAGE.
9. CONDUITS SHALL BE BLOWN CLEAN USING COMPRESSED AIR. RUN MANDREL THRU EACH CONDUIT TO CONFIRM VIABLE PATHWAY.
10. WOVEN POLYESTER MULE TAPE WITH MINIMUM STRENGTH OF 2500 LB TENSILE STRENGTH TO BE INSTALLED WITHIN EACH CONDUIT.



TELEPHONE TRENCH
NOT TO SCALE



TELEPHONE & CATV TRENCH
NOT TO SCALE



ELECTRIC TELEPHONE TRENCH
NOT TO SCALE

National Grid / Supplement to Specifications for Electrical Installations / ESB 759B July 2010

17.0 Riser Pole

The *Company* shall designate conduit riser locations on the pole. All primary risers shall be Galvanized Steel, this includes the 90 degree sweep. Per NESC all steel risers must be bonded 6" down from top of riser and the bond must be at least 8' high from finished grade.

The *Customer* is responsible for providing and installing the bond clamps and the tap. The *Company* will make the bond connection from that riser bond tap to the ground system on the pole. Spare riser sweep shall be bonded also. Riser sweep in Direct Buried applications shall be concrete encased. Approved materials reference is located on page 54.

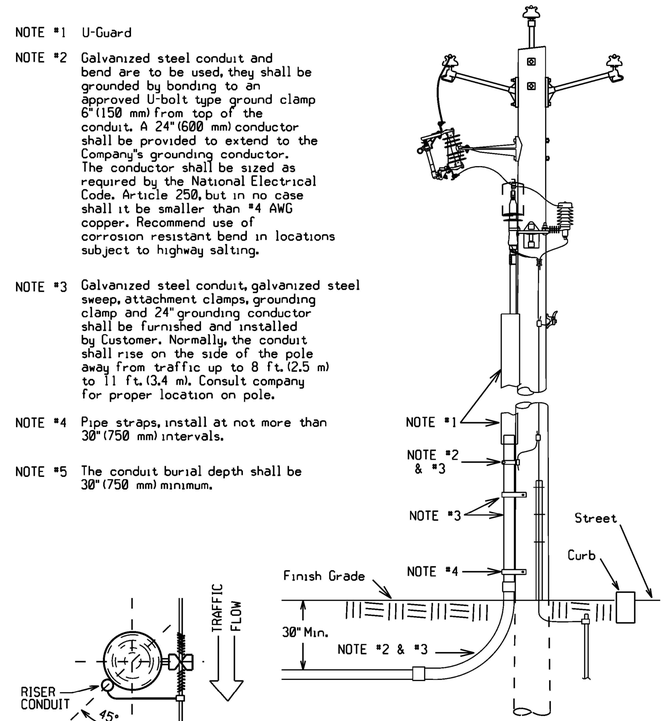
NOTE #1 U-Guard

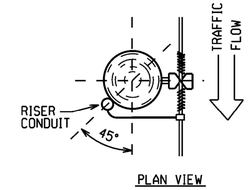
NOTE #2 Galvanized steel conduit and bend are to be used, they shall be grounded by bonding to an approved U-bolt type ground clamp 6" (150 mm) from top of the conduit. A 24" (600 mm) conductor shall be provided to extend to the Company's grounding conductor. The conductor shall be sized as required by the National Electrical Code. Article 250, but in no case shall it be smaller than #4 AWG copper. Recommend use of corrosion resistant bend in locations subject to highway salting.

NOTE #3 Galvanized steel conduit, galvanized steel sweep, attachment clamps, grounding clamp and 24" grounding conductor shall be furnished and installed by Customer. Normally, the conduit shall rise on the side of the pole away from traffic up to 8 ft. (2.5 m) to 11 ft. (3.4 m). Consult company for proper location on pole.

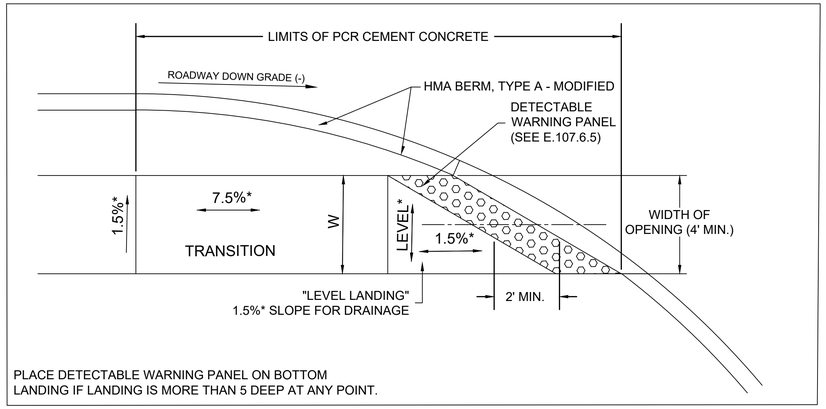
NOTE #4 Pipe straps, install at not more than 30" (750 mm) intervals.

NOTE #5 The conduit burial depth shall be 30" (750 mm) minimum.





PLAN VIEW

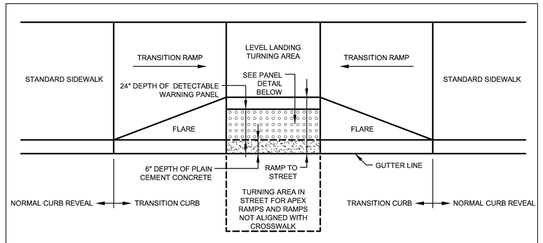


LEGEND

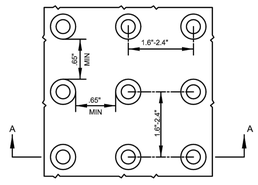
W = SIDEWALK WIDTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%
HMA = HOT MIX ASPHALT

PCR #	RAMP REFERENCE POINT			WIDTH OF SIDEWALK (W)	WIDTH OF OPENING	ROADWAY GUTTER SLOPE	TRANSITION LENGTH***
1	MILESTONE ROAD	18+75	26.18' LT	10.00'	10.00'	2.61%	10'-0"
2	MILESTONE ROAD	26+70	32.21' LT	10.00'	10.00'	0.87%	10'-0"
3	MILESTONE ROAD	27+47	32.29' LT	10.00'	10.00'	0.97%	10'-0"
*** AS VIEWED FROM PROPOSED CONSTRUCTION BASELINE							

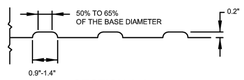
PEDESTRIAN AND BICYCLIST CROSSING FOR ONE CONTINUOUS DIRECTION OF TRAVEL



TYPICAL INSTALLATION



DETAIL OF DETECTABLE WARNING PANEL



SECTION A-A

NOTE:

PANELS MAY BE CONCRETE PRECAST OR CAST IN PLACE OR OTHER SUITABLE MATERIAL PERMANENTLY APPLIED TO THE RAMP. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

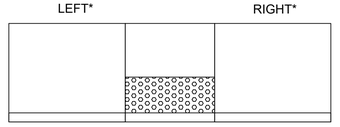
DETECTABLE WARNING PANEL FOR WHEELCHAIR RAMPS AND STANDARD RAMP TERMINOLOGY

ROADWAY PROFILE GRADE	* HIGH SIDE TRANSITION LENGTH
%	ENGLISH UNITS
=0%	6'-6"
>0% TO 1%	7'-8"
>1% TO 2%	9'-0"
>2% TO 3%	11'-0"
>3% TO 4%	14'-0"
>4% TO 5%	15'-0" Max

NOTE:

* BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".

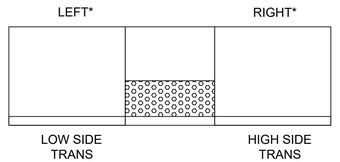
NEGATIVE SLOPE (-)



ROADWAY DOWNGRADE

* AS VIEWED FROM CONSTRUCTION BASELINE

POSITIVE SLOPE (+)

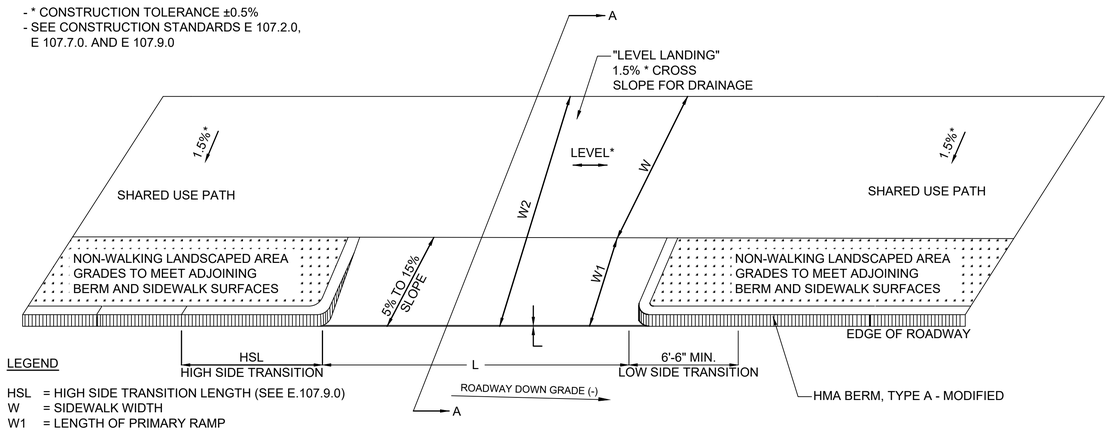


ROADWAY DOWNGRADE

* AS VIEWED FROM CONSTRUCTION BASELINE

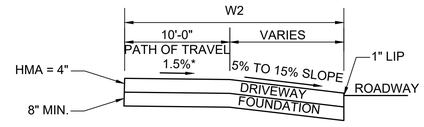
NOTES:

- * CONSTRUCTION TOLERANCE ±0.5%
- SEE CONSTRUCTION STANDARDS E 107.2.0, E 107.7.0. AND E 107.9.0



LEGEND

HSL = HIGH SIDE TRANSITION LENGTH (SEE E.107.9.0)
W = SIDEWALK WIDTH
W1 = LENGTH OF PRIMARY RAMP
* = TOLERANCE FOR CONSTRUCTION ±0.5%
HMA = HOT MIX ASPHALT



SECTION A-A

DWY #	RAMP REFERENCE POINT			LENGTH OF PRIMARY RAMP (W1)	WIDTH OF DRIVEWAY (L)	DEPTH OF TRAVEL PATH (W)	ROADWAY GUTTER SLOPE	TRANSITION LENGTH***	
	BASELINE	STATION	OFFSET					LEFT SIDE	RIGHT SIDE
1	MILESTONE ROAD	21+19	10.49' LT	11'-0"	20'-0"	10'-0"	1.80%	NA	NA
2	MILESTONE ROAD	23+96	12.70' LT	8'-10"	20'-0"	10'-0"	-1.30%	NA	NA
3	MILESTONE ROAD	24+76	14.50' LT	7'-0"	20'-0"	10'-0"	-1.30%	NA	NA
*** AS VIEWED FROM PROPOSED CONSTRUCTION BASELINE									
SHARED USE PATH AT DRIVEWAYS SEPARATED BY CURB RETURNS									

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	34	50
PROJECT FILE NO.	613129		

PEDESTRIAN CURB RAMP & DRIVEWAY DETAILS

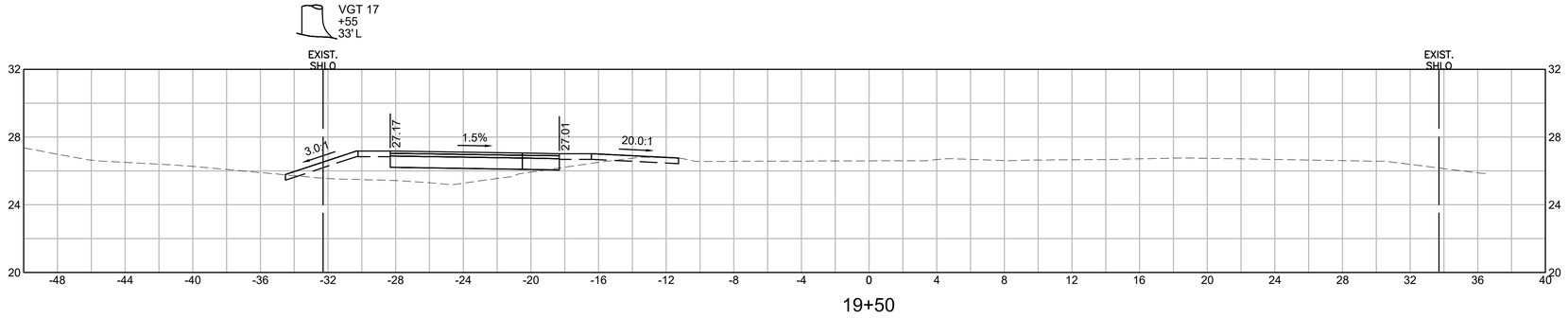
613129_HD (PCR).DWG Plotted on 23-May-2024 4:21 PM

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	35	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD

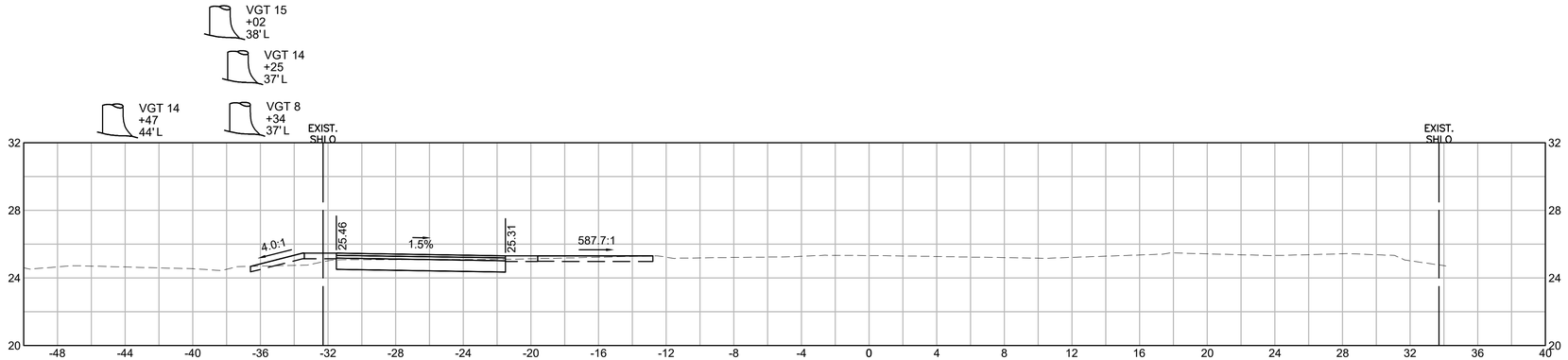
613129_HD (XS).DWG Plotted on 23-May-2024 4:22 PM



19+50

CUT = 1.05 s.f.

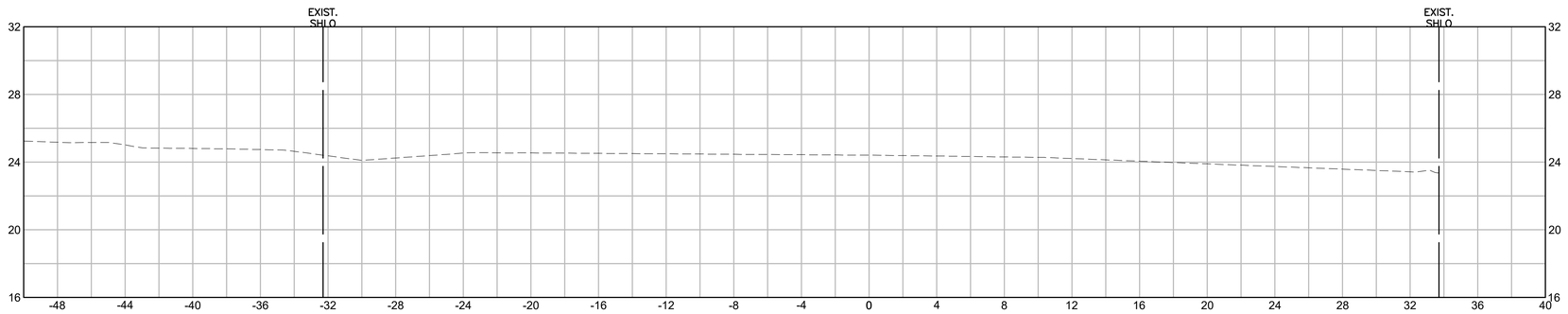
FILL = 11.98 s.f.



19+00

CUT = 8.76 s.f.

FILL = 0.75 s.f.



18+65

CUT = 0.00 s.f.

FILL = 0.00 s.f.

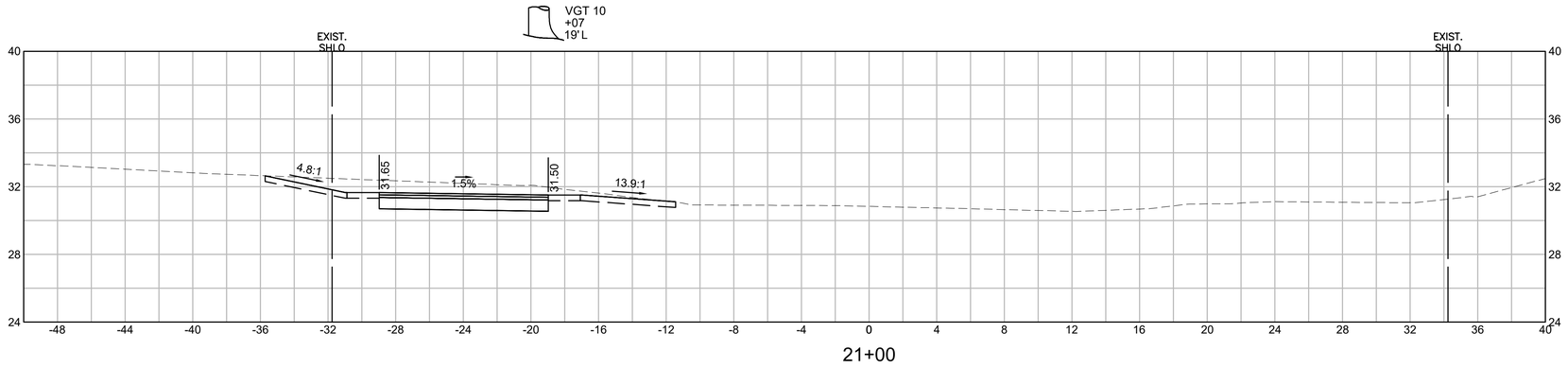
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	36	50
PROJECT FILE NO.	613129		

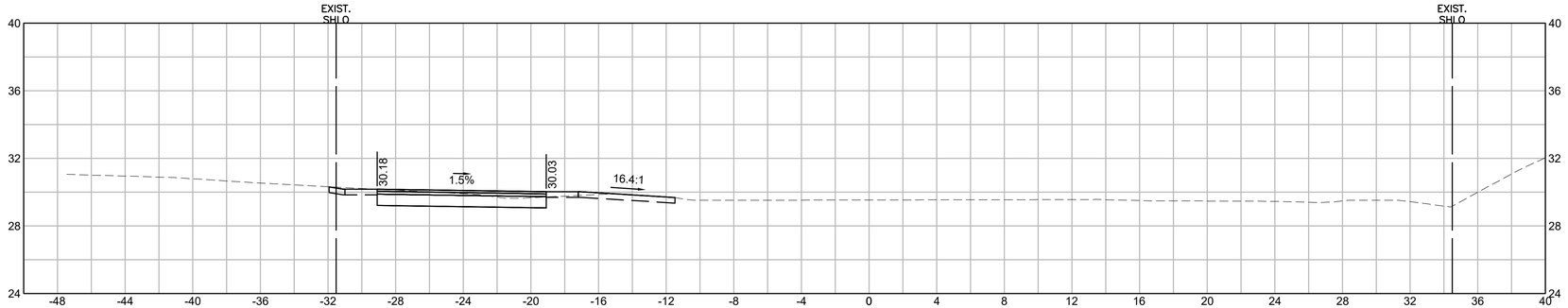
CROSS SECTIONS
MILESTONE ROAD

613129_HD (XS).DWG Plotted on 23-May-2024 4:22 PM



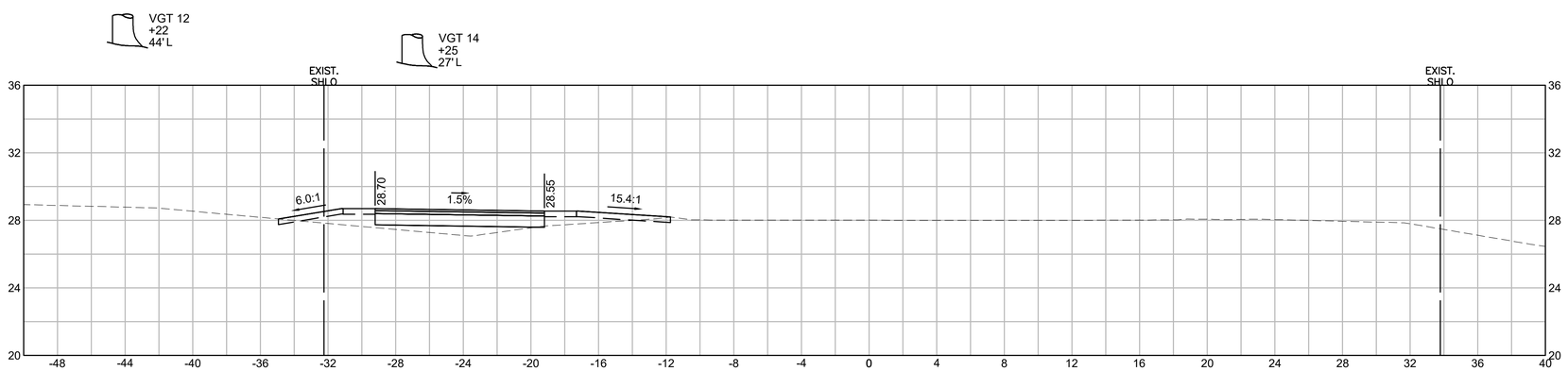
21+00

CUT = 25.21 s.f.
FILL = 0.00 s.f.



20+50

CUT = 10.39 s.f.
FILL = 0.00 s.f.



20+00

CUT = 0.56 s.f.
FILL = 7.17 s.f.

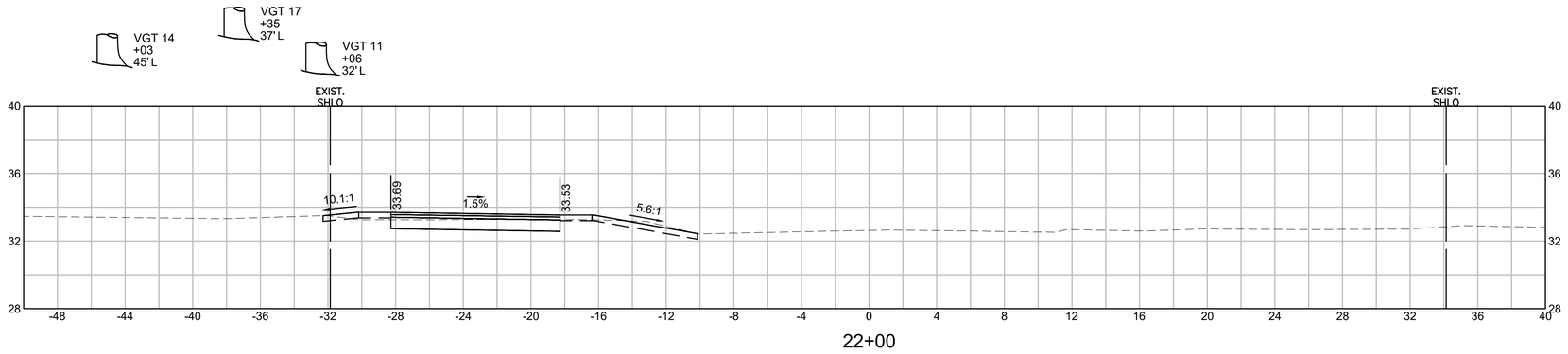
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	37	50
PROJECT FILE NO.	613129		

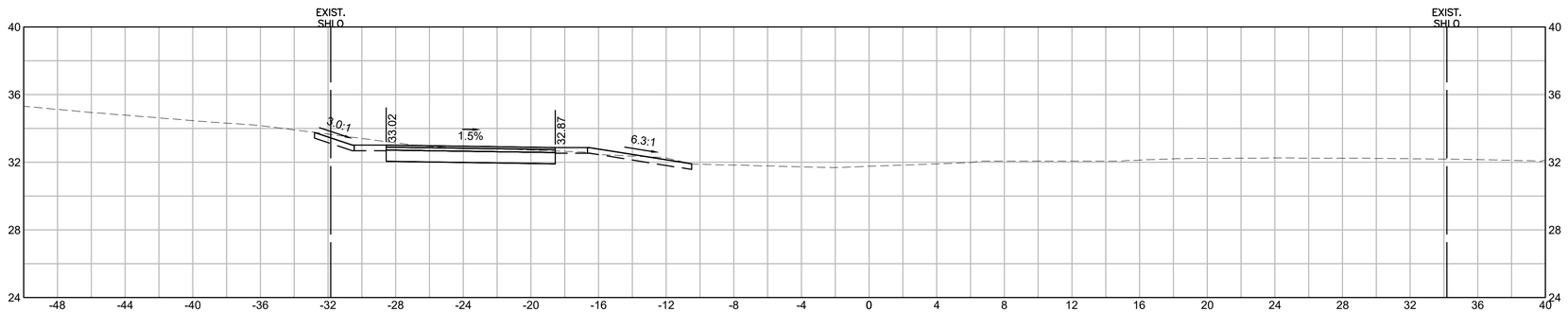
CROSS SECTIONS
MILESTONE ROAD

613129_HD (XS).DWG Plotted on 23-May-2024 4:22 PM



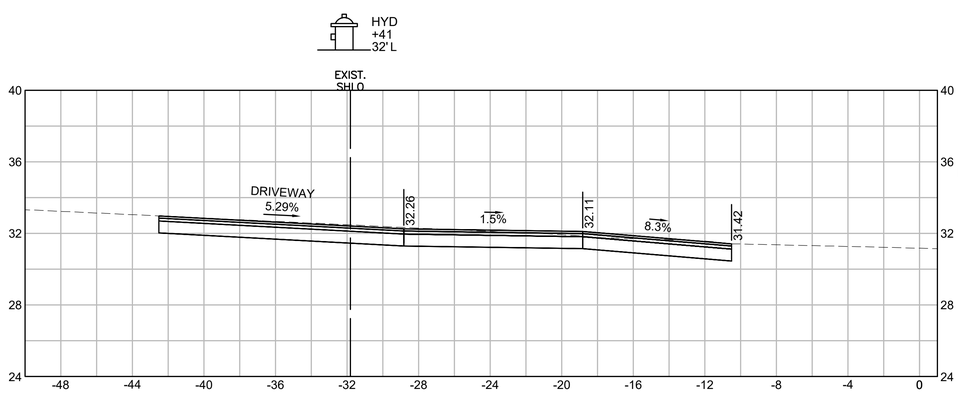
22+00

CUT = 8.64 s.f.
FILL = 0.22 s.f.



21+50

CUT = 13.03 s.f.
FILL = 0.00 s.f.



21+21

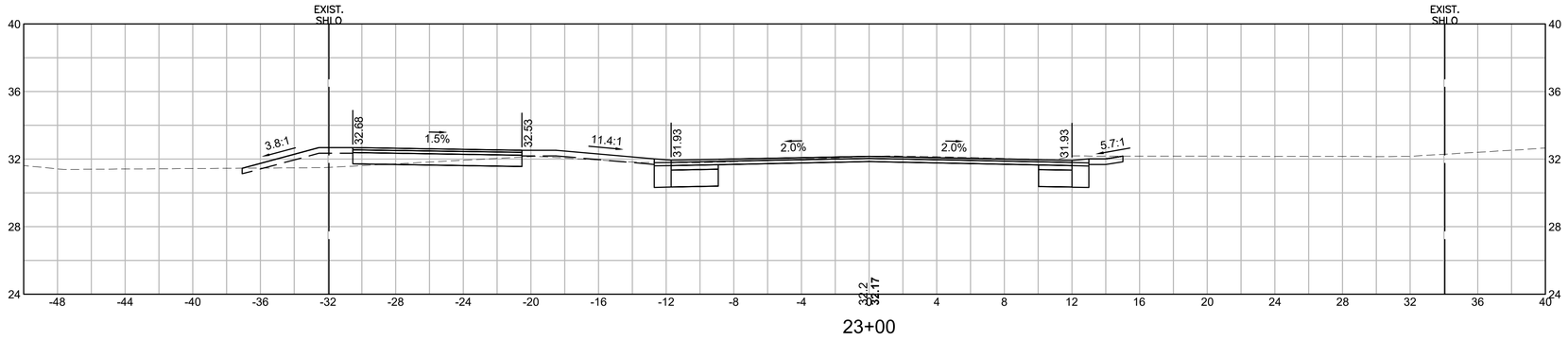
CUT = 15.97 s.f.
FILL = 0.00 s.f.
DW CUT = 13.64 s.f.

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

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	38	50
PROJECT FILE NO.	613129		

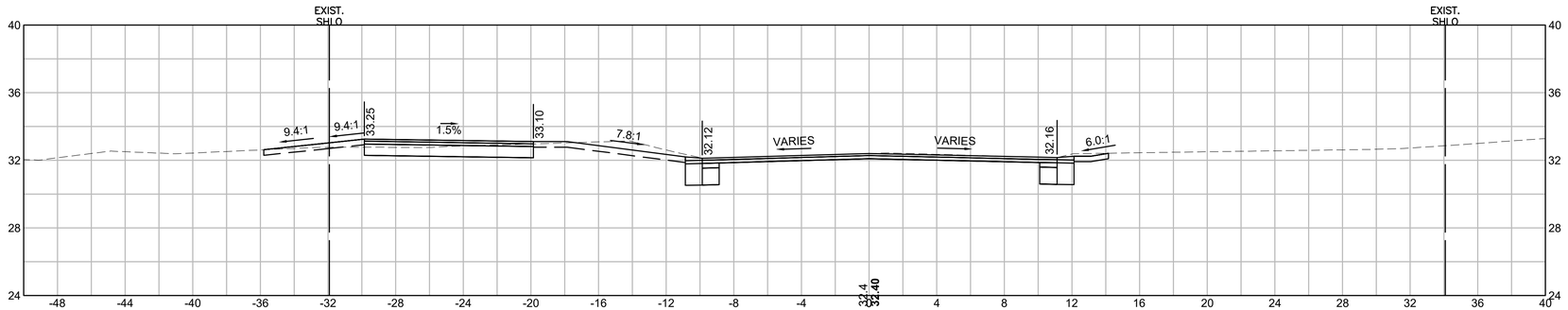
CROSS SECTIONS
MILESTONE ROAD



23+00

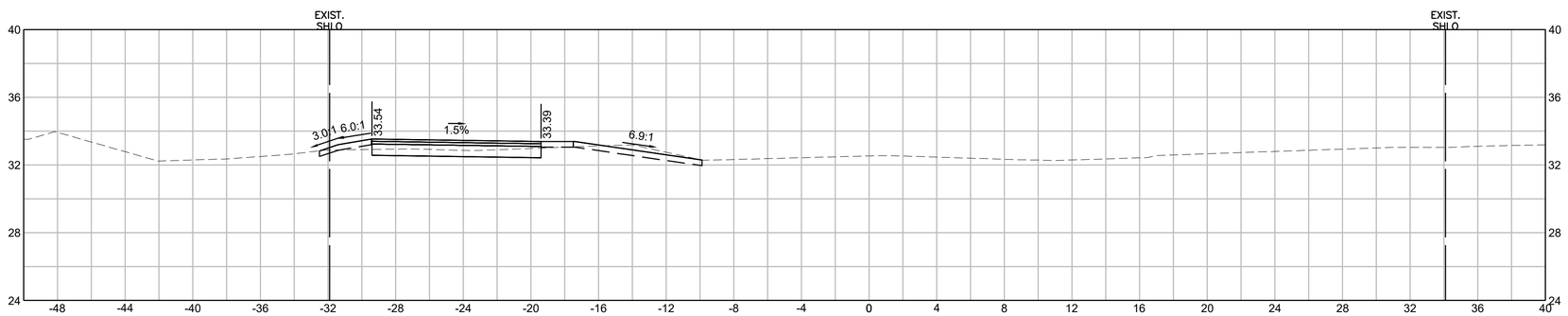
CUT = 14.00 s.f.
FILL = 3.42 s.f.

VGT 11
+73
44'L



22+70

CUT = 19.17 s.f.
FILL = 0.11 s.f.



22+50

CUT = 7.53 s.f.
FILL = 0.30 s.f.

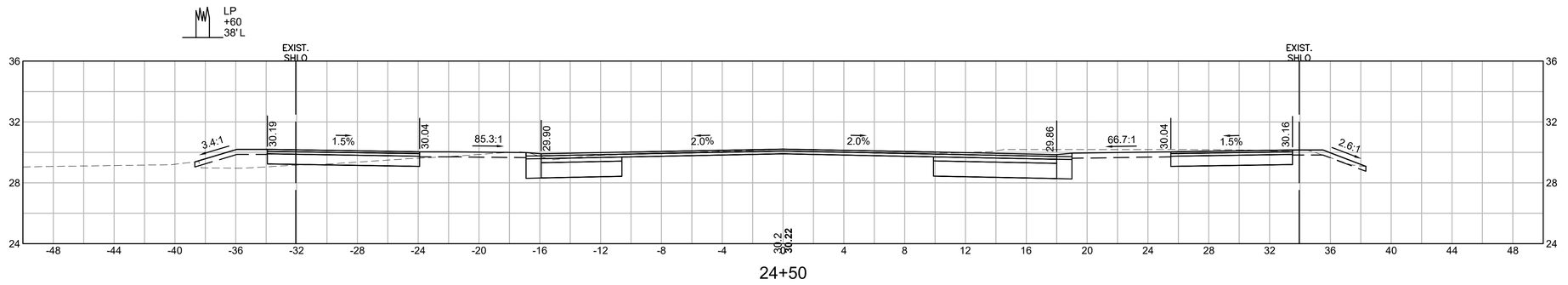
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	39	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD

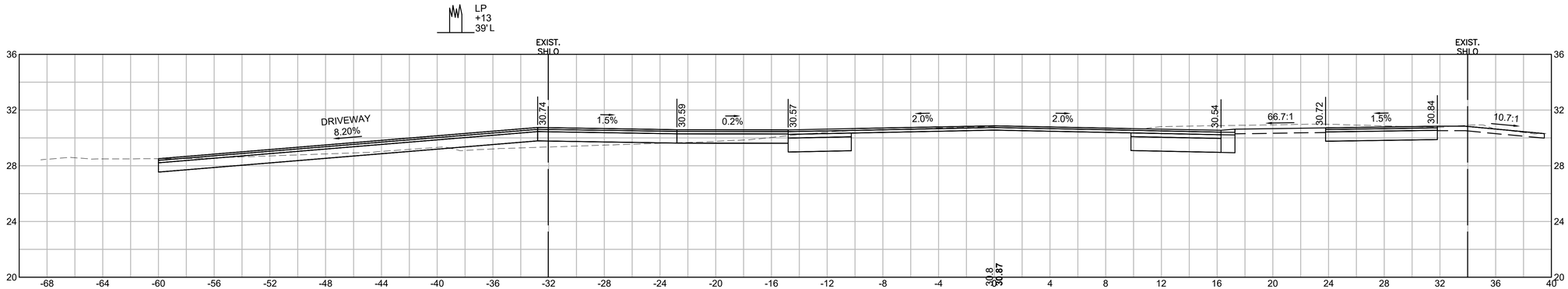
613129_HD (XS).DWG Plotted on 23-May-2024 4:22 PM



CUT = 39.85 s.f.

FILL = 3.33 s.f.

24+50

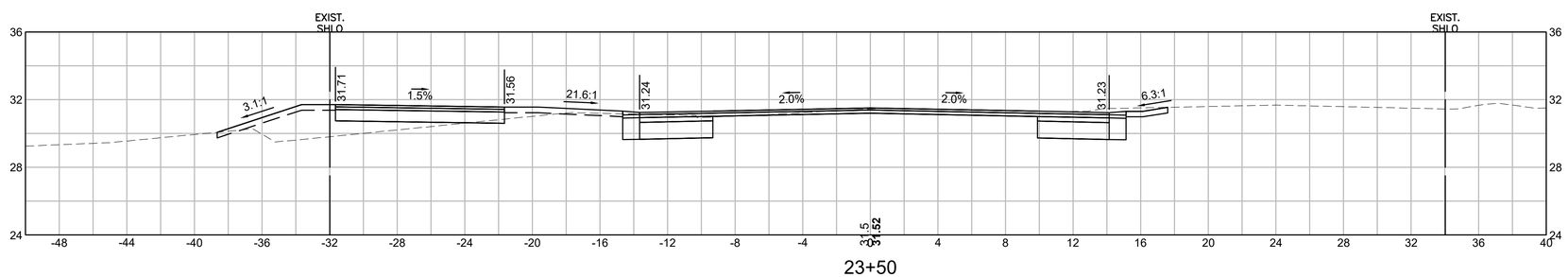


CUT = 36.16 s.f.

FILL = 2.20 s.f.

DW CUT = 8.83 s.f.

24+00



CUT = 18.39 s.f.

FILL = 10.95 s.f.

23+50

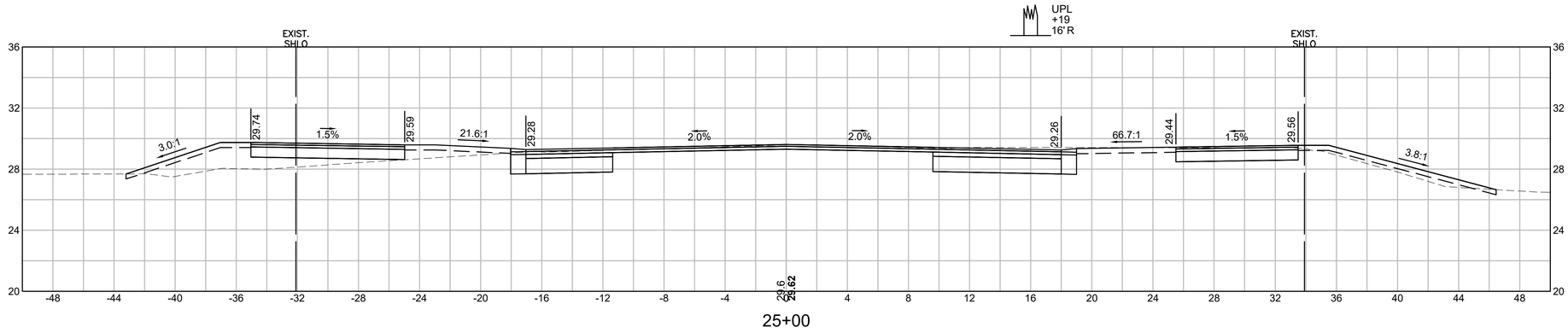
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	40	50
PROJECT FILE NO.	613129		

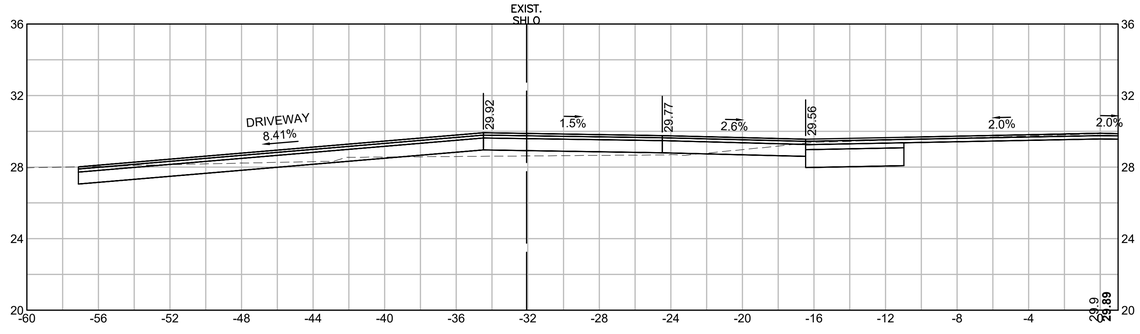
CROSS SECTIONS
MILESTONE ROAD

613129_HD (XS).DWG Plotted on 23-May-2024 4:22 PM



25+00

CUT = 34.70 s.f.
FILL = 15.95 s.f.



24+75

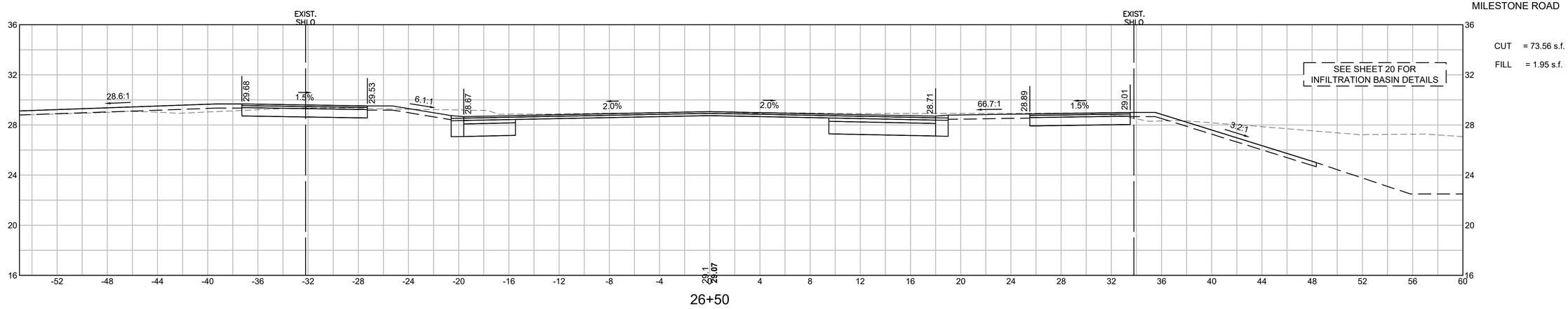
CUT = 9.88 s.f.
FILL = 2.58 s.f.
DW CUT = 7.94 s.f.

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

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

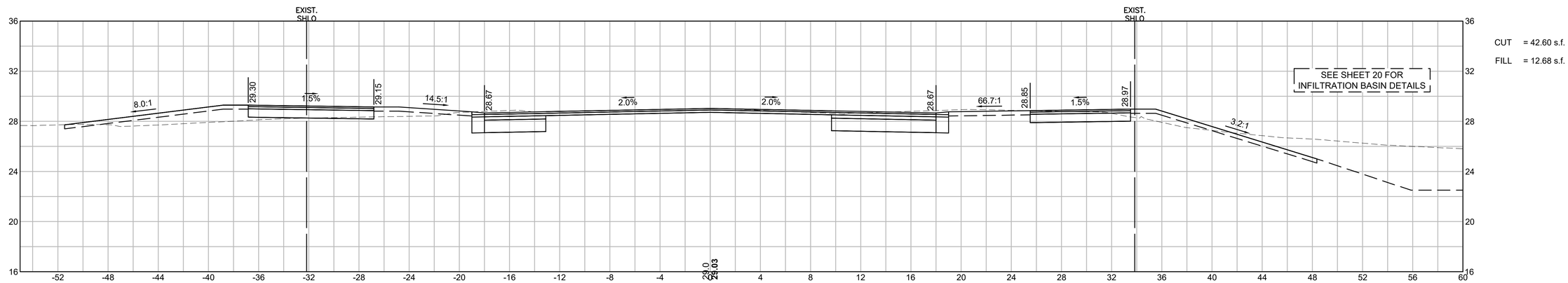
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	41	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD



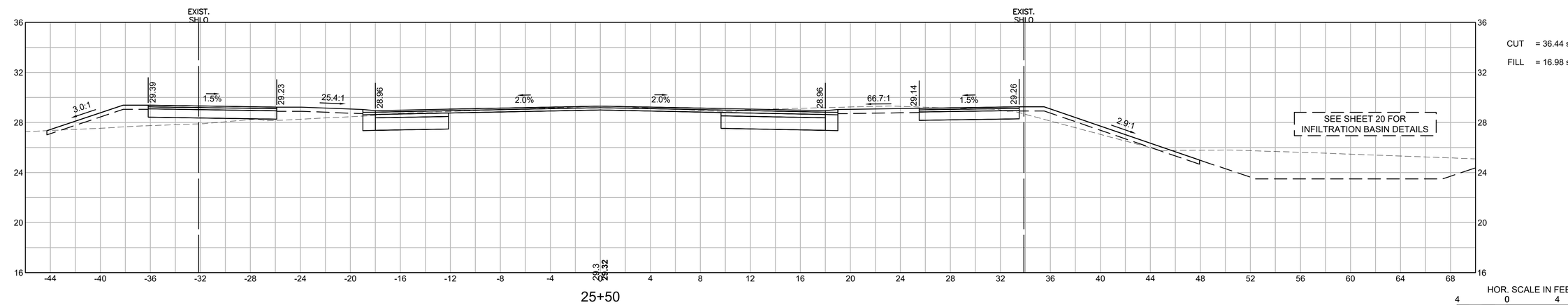
26+50

CUT = 73.56 s.f.
FILL = 1.95 s.f.



26+00

CUT = 42.60 s.f.
FILL = 12.68 s.f.



25+50

CUT = 36.44 s.f.
FILL = 16.98 s.f.

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

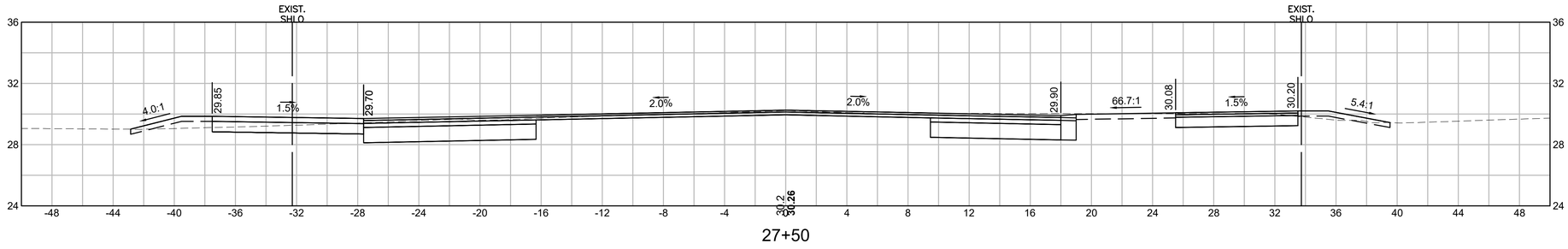
613129_HD (XS).DWG Plotted on 23-May-2024 4:22 PM

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	42	50
PROJECT FILE NO.	613129		

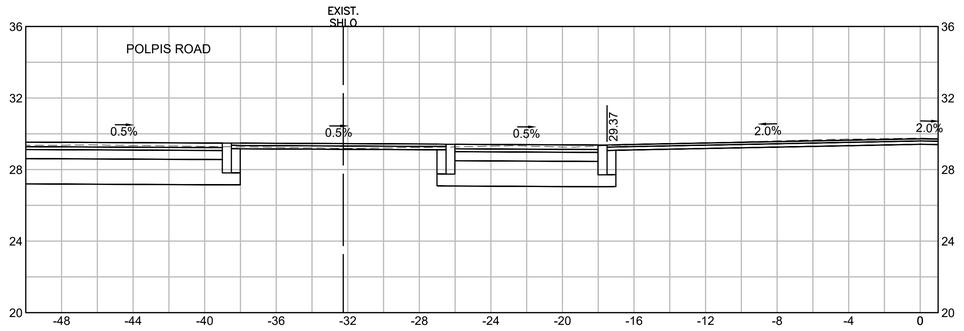
CROSS SECTIONS
MILESTONE ROAD

613129_HD (XS).DWG Plotted on 23-May-2024 4:23 PM



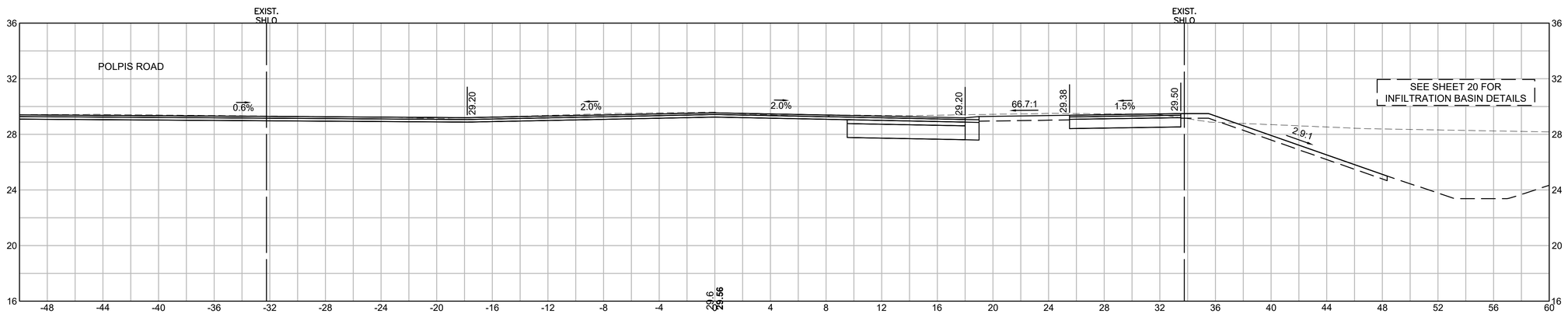
27+50

CUT = 44.81 s.f.
FILL = 1.73 s.f.



27+12

CUT = 39.61 s.f.
FILL = 0.00 s.f.



27+00

CUT = 48.93 s.f.
FILL = 0.36 s.f.

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

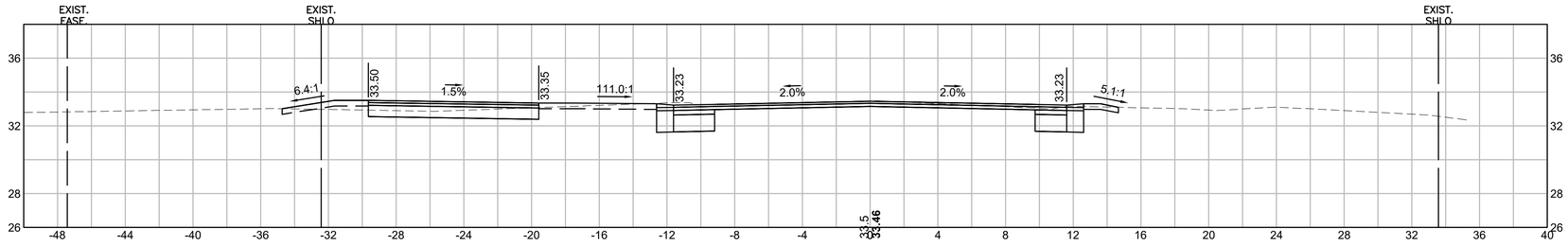
NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	43	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD

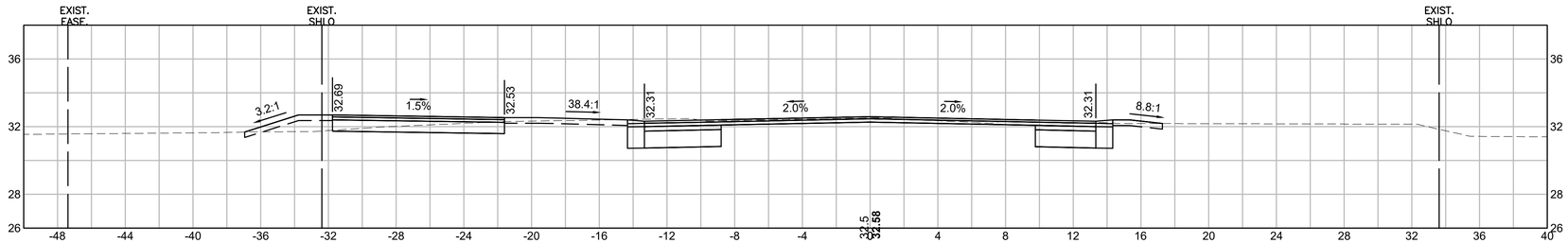
613129_HD (XS).DWG Plotted on 23-May-2024 4:23 PM

VGT 13
+69
35' L



29+50

CUT = 16.77 s.f.
FILL = 0.58 s.f.

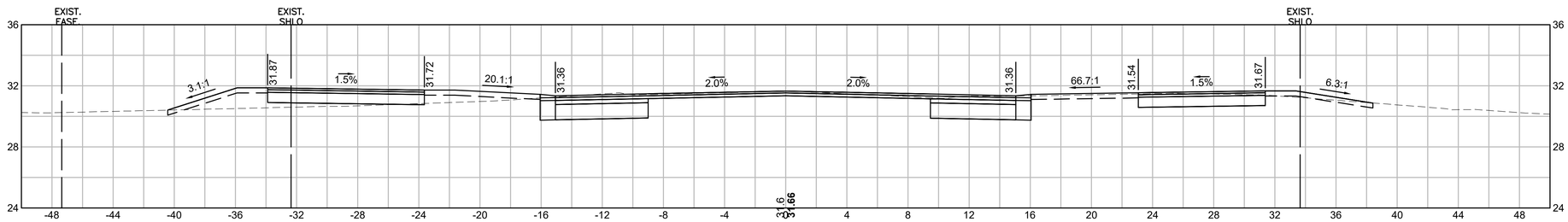


29+00

CUT = 22.20 s.f.
FILL = 1.96 s.f.

VGT 8
+59
31' L

VGT 12
+56
25' L

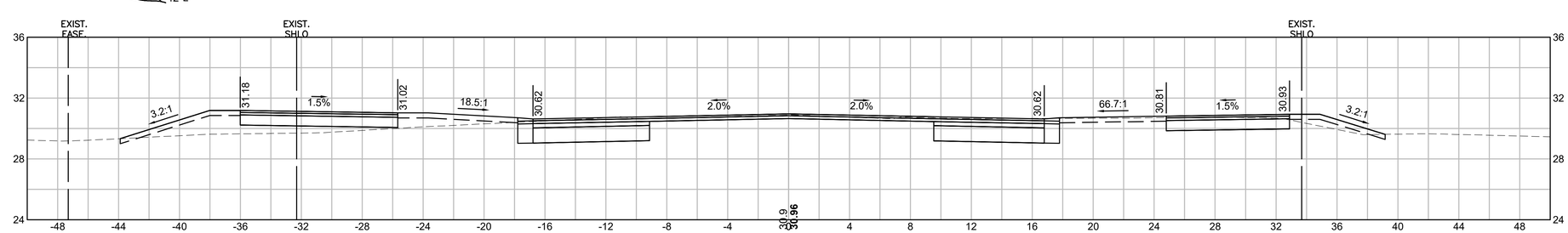


28+50

CUT = 30.43 s.f.
FILL = 7.58 s.f.

VGT 14
+31
42' L

VGT 8
+48
30' L



28+00

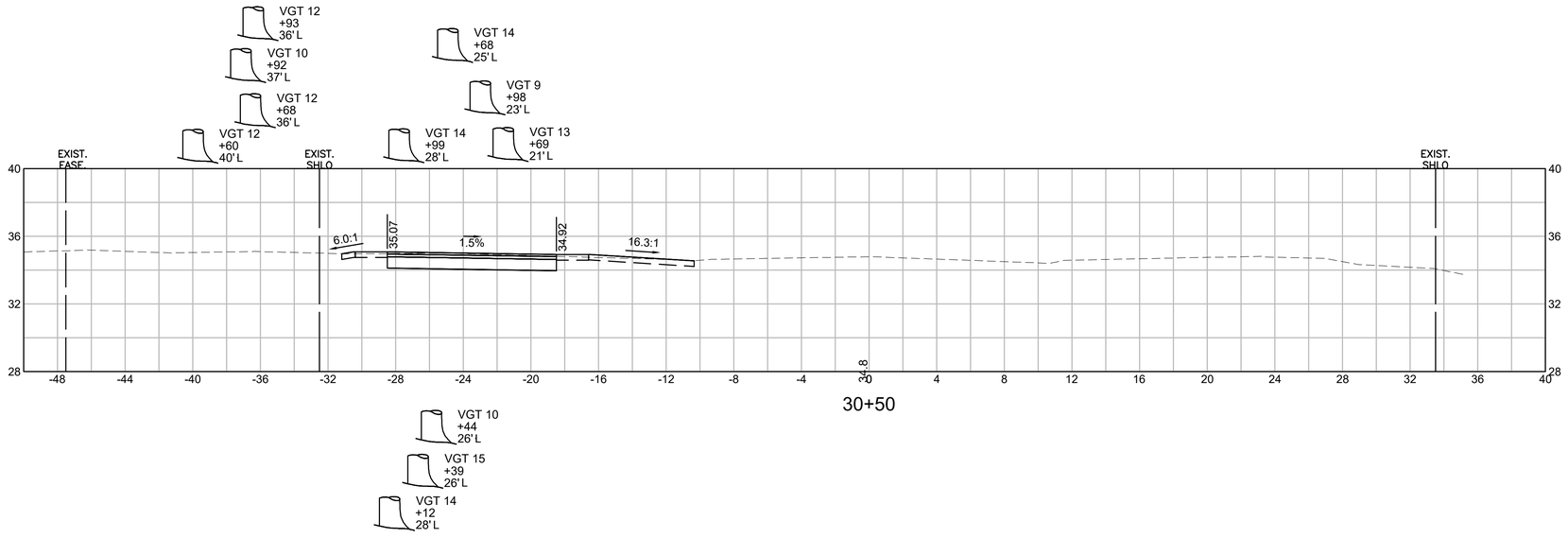
CUT = 34.45 s.f.
FILL = 13.32 s.f.

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

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	44	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD



CUT = 11.57 s.f.
FILL = 0.00 s.f.

CUT = 3.94 s.f.
FILL = 2.35 s.f.

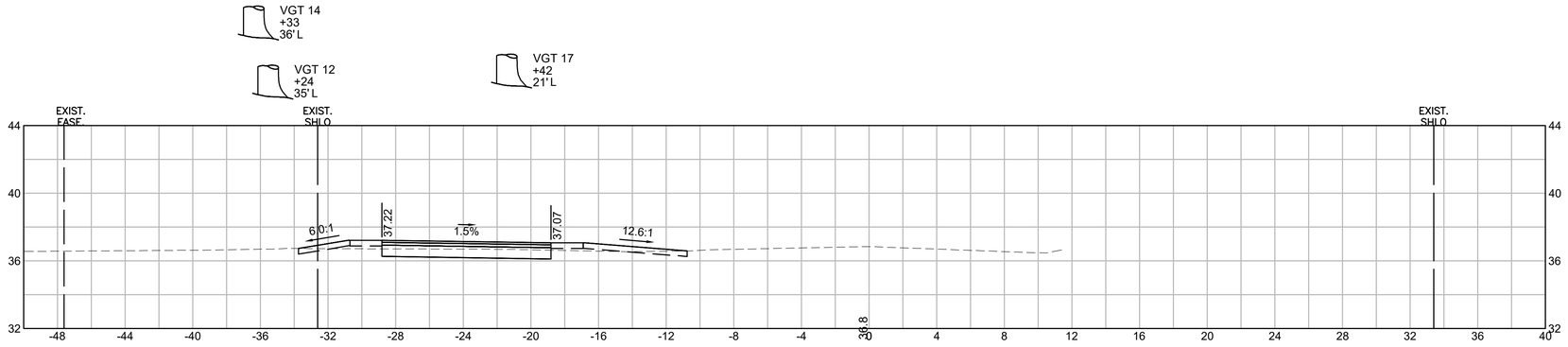
CUT = 12.05 s.f.
FILL = 1.23 s.f.

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

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	45	50
PROJECT FILE NO.	613129		

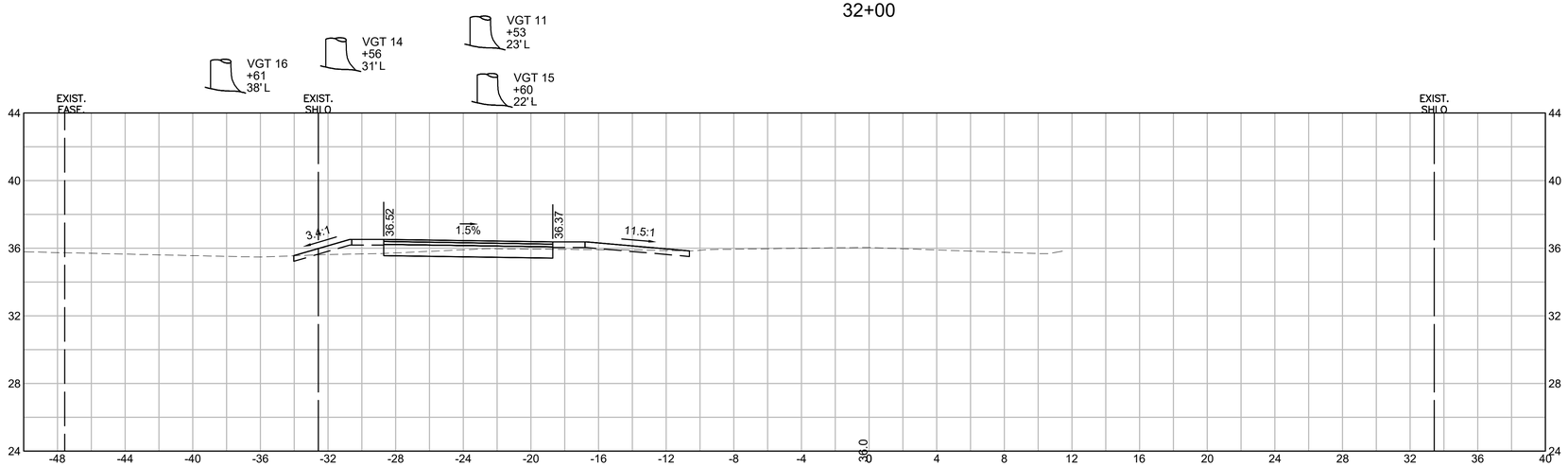
CROSS SECTIONS
MILESTONE ROAD



32+00

CUT = 5.92 s.f.

FILL = 0.86 s.f.



31+50

CUT = 4.92 s.f.

FILL = 1.88 s.f.

31+00

CUT = 10.90 s.f.

FILL = 0.00 s.f.

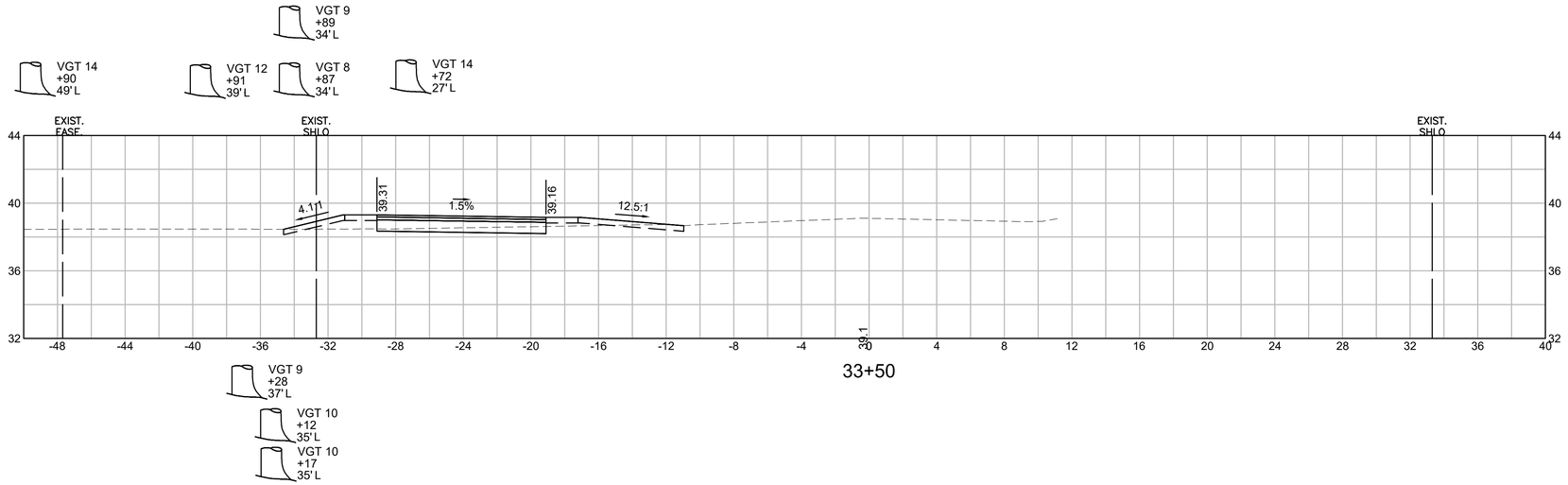
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	46	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD

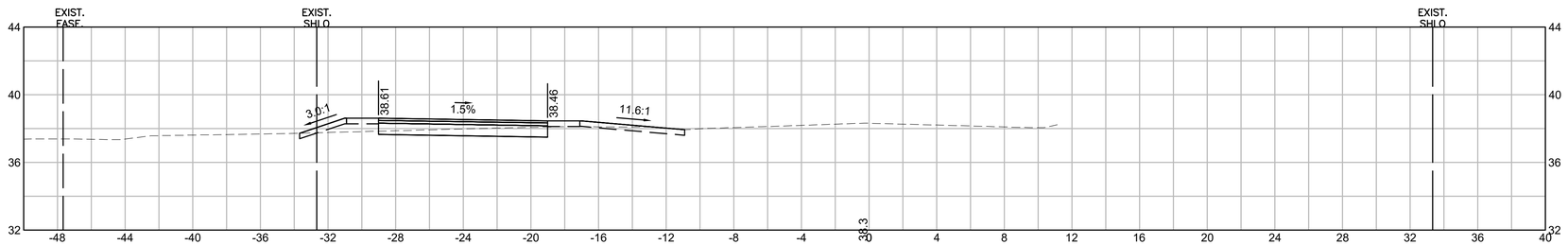
613129_HD (XS).DWG Plotted on 23-May-2024 4:23 PM



33+50

CUT = 3.75 s.f.

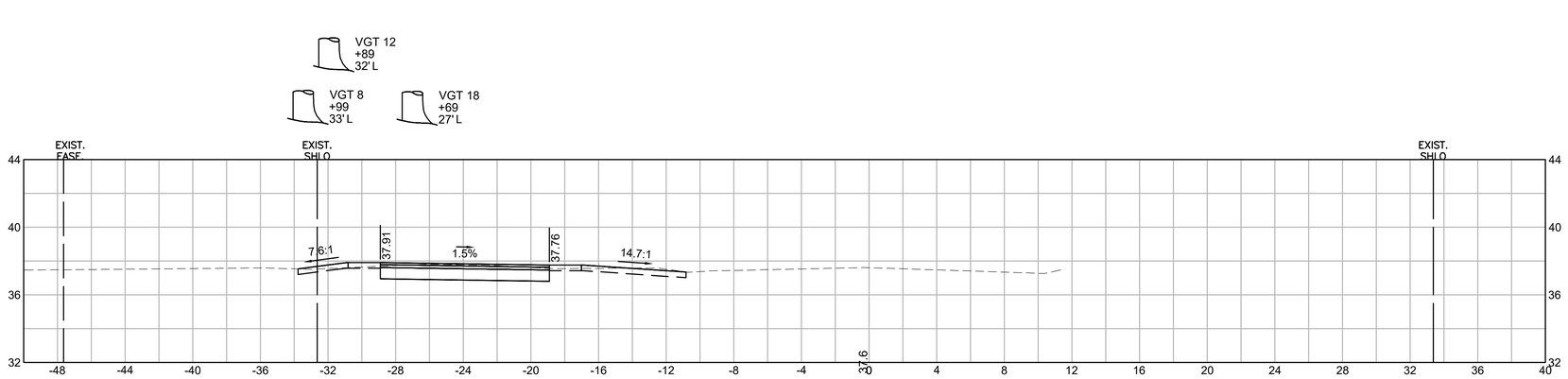
FILL = 2.07 s.f.



33+00

CUT = 5.46 s.f.

FILL = 1.33 s.f.



32+50

CUT = 11.33 s.f.

FILL = 0.00 s.f.

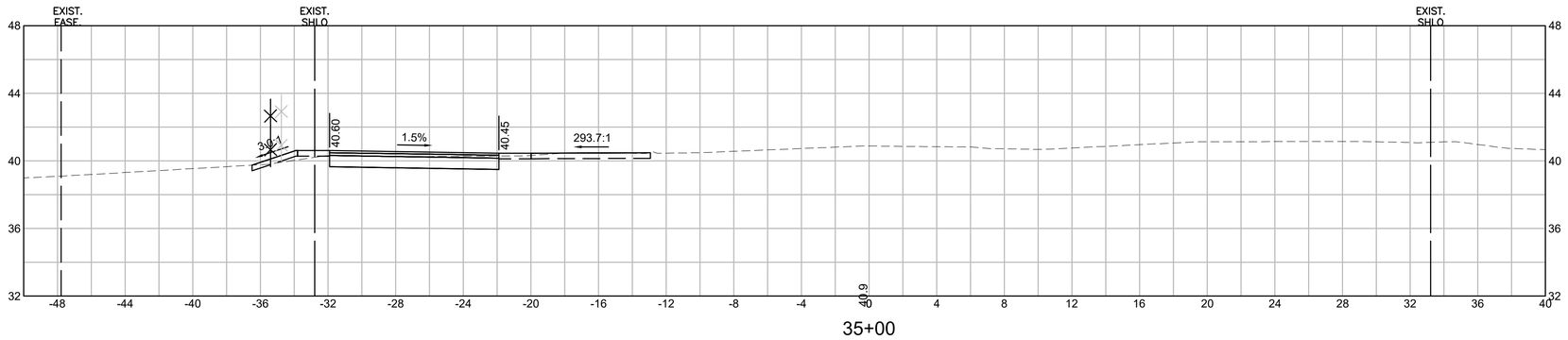
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	47	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
MILESTONE ROAD

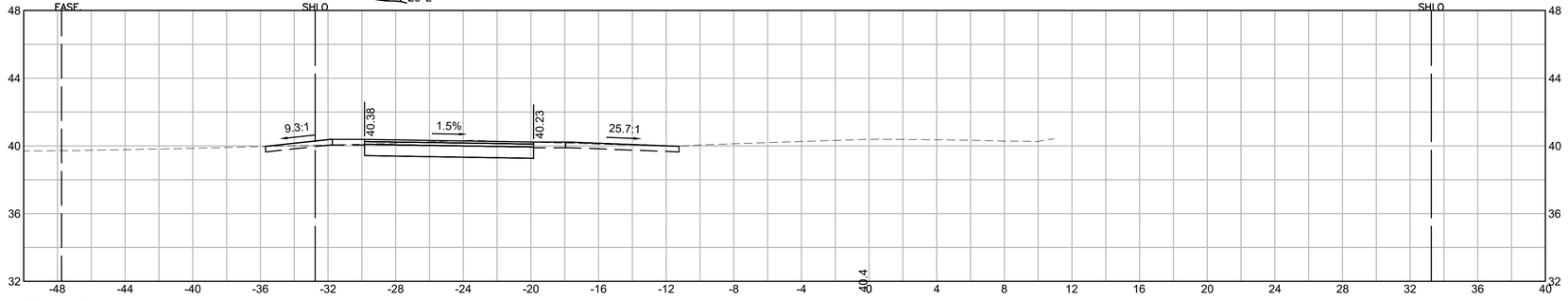
613129_HD (XS).DWG Plotted on 23-May-2024 4:23 PM



35+00

CUT = 9.82 s.f.
FILL = 0.32 s.f.

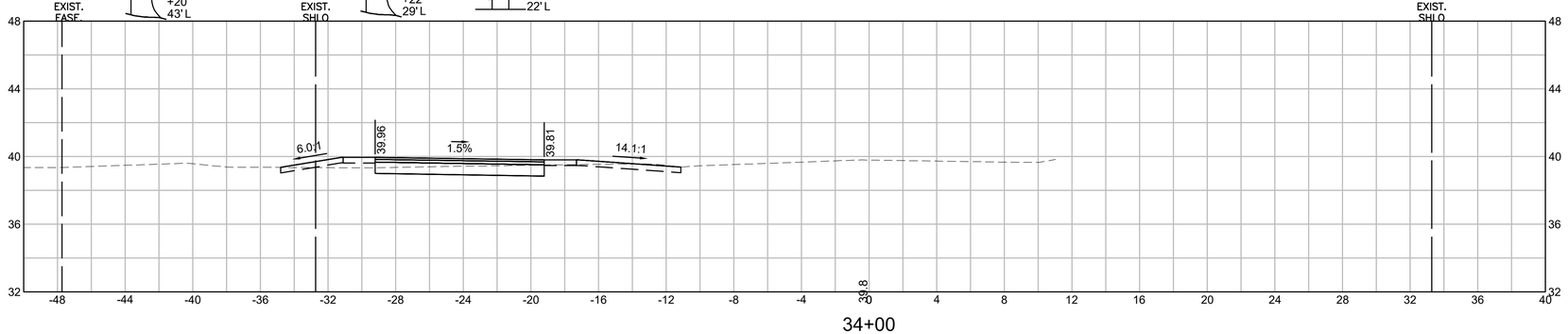
VGT 8 +72 49'L
VGT 10 +88 49'L
VGT 12 +74 45'L
VGT 12 +83 38'L
VGT 18 +58 39'L
VGT 11 +79 29'L



34+50

CUT = 12.12 s.f.
FILL = 0.00 s.f.

VGT 10 +27 49'L
VGT 8 +45 42'L
VGT 18 +37 47'L
VGT 12 +20 43'L
VGT 12 +31 28'L
VGT 14 +47 24'L
VGT 10 +22 29'L
HYD +28 22'L



34+00

CUT = 7.01 s.f.
FILL = 0.81 s.f.

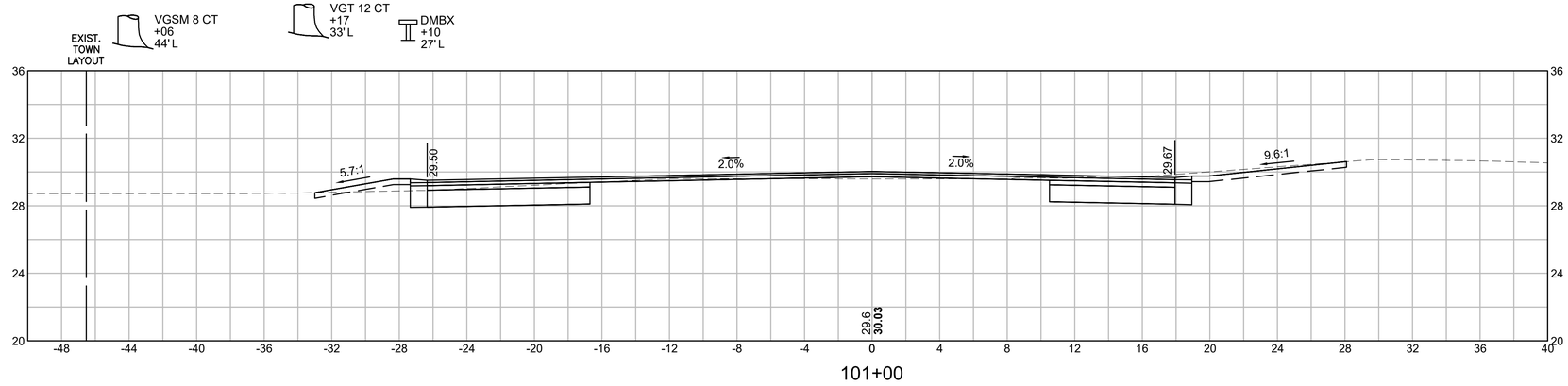
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

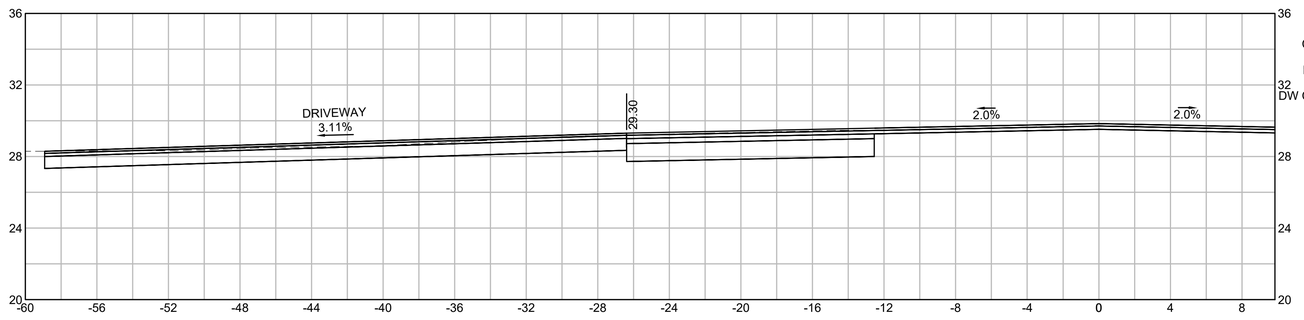
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	48	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
POLPIS ROAD

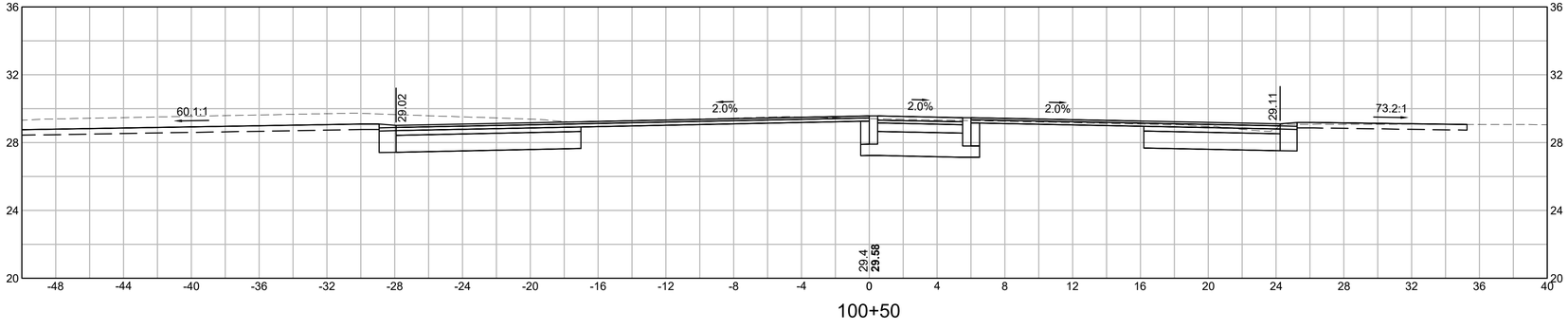
613129_HD (XS).DWG Plotted on 23-May-2024 4:23 PM



CUT = 29.86 s.f.
FILL = 0.86 s.f.



CUT = 20.66 s.f.
FILL = 0.00 s.f.
DW CUT = 33.46 s.f.



CUT = 73.27 s.f.
FILL = 0.00 s.f.

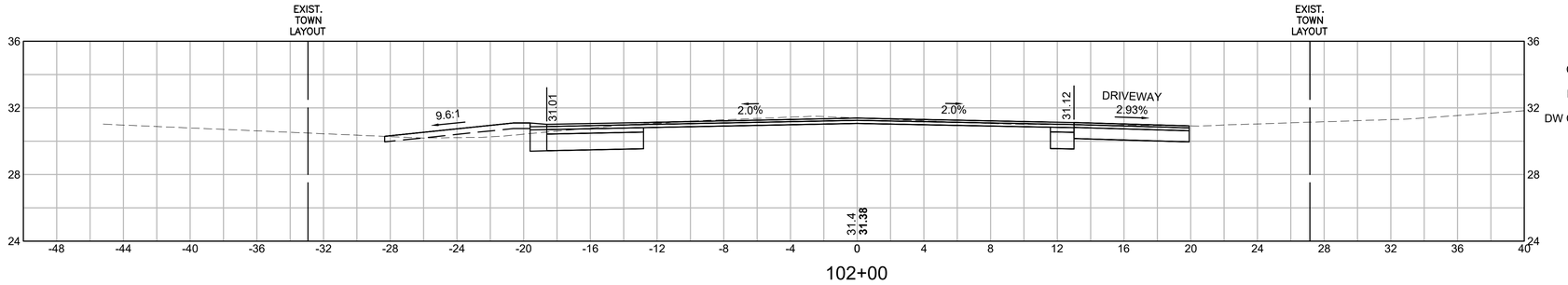
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	49	50
PROJECT FILE NO.	613129		

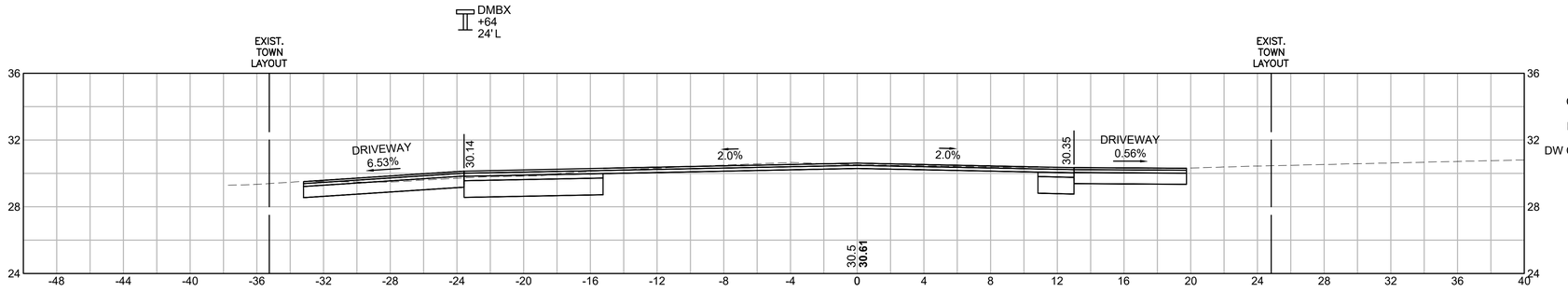
CROSS SECTIONS
POLPIS ROAD

613129_HD (XS).DWG Plotted on 23-May-2024 4:23 PM



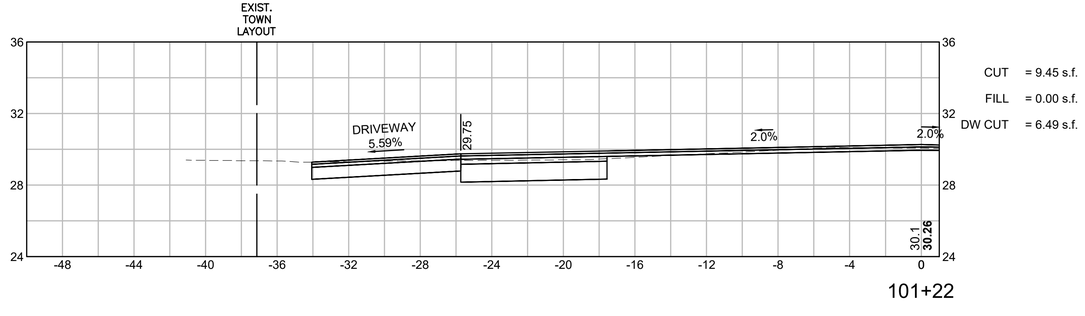
102+00

CUT = 11.21 s.f.
FILL = 1.67 s.f.
DW CUT = 6.15 s.f.



101+50

CUT = 13.98 s.f.
FILL = 0.00 s.f.
DW CUT = 12.85 s.f.



101+22

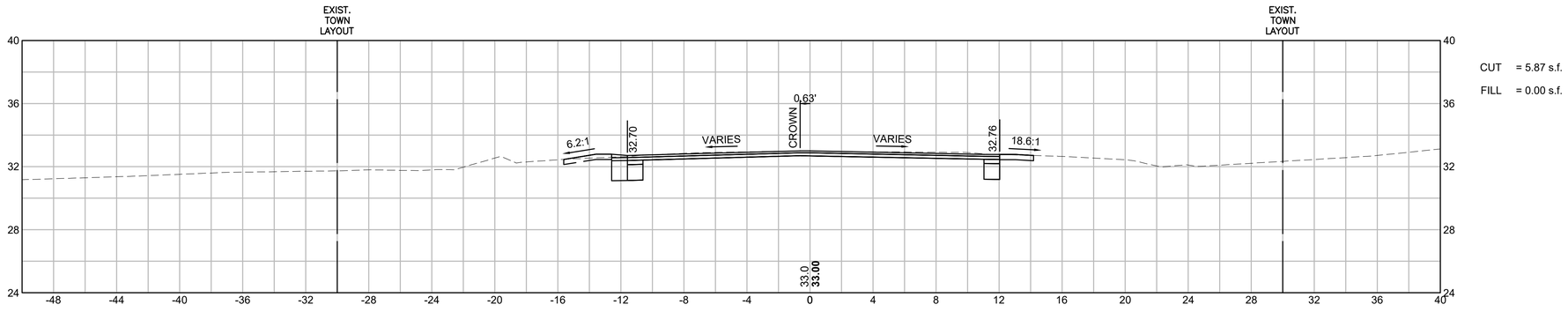
CUT = 9.45 s.f.
FILL = 0.00 s.f.
DW CUT = 6.49 s.f.

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

NANTUCKET
MILESTONE ROAD AT POLPIS ROAD

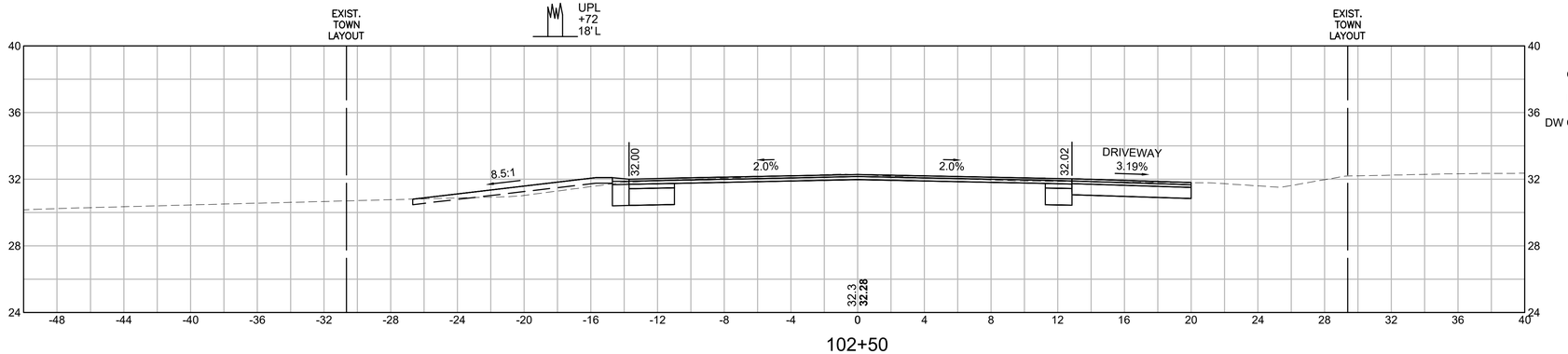
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI(VUS)-003S(749)X	50	50
PROJECT FILE NO.	613129		

CROSS SECTIONS
POLPIS ROAD



CUT = 5.87 s.f.
FILL = 0.00 s.f.

102+90



CUT = 8.16 s.f.
FILL = 1.36 s.f.
DW CUT = 6.26 s.f.

102+50

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