

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLAN AND PROFILE OF
SCHOOL STREET

IN THE TOWN OF
MANSFIELD
BRISTOL COUNTY

FEDERAL AID PROJECT NO. CMQ/STP-0035(063)X

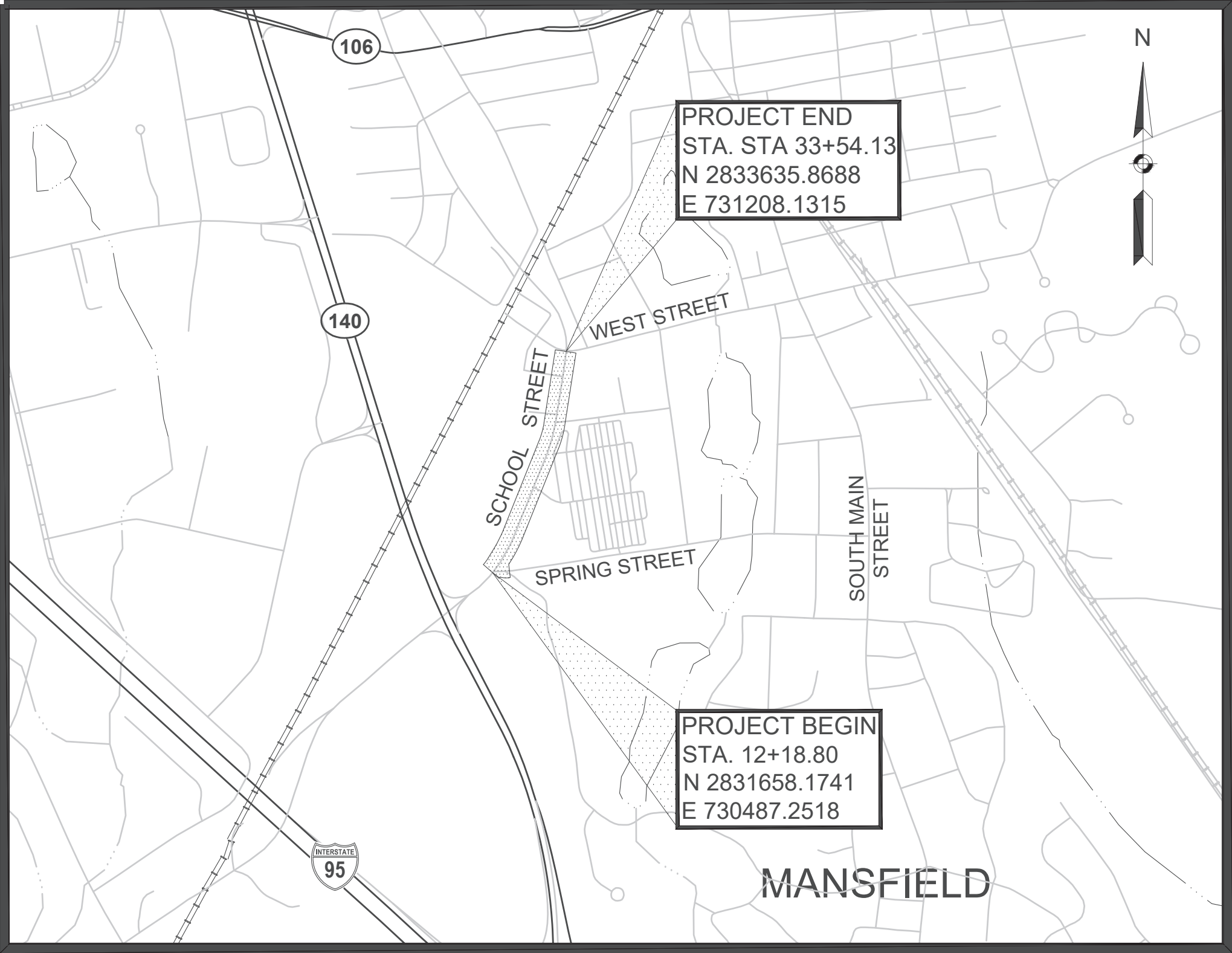
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	1	73
PROJECT FILE NO. 609255			

TITLE SHEET & INDEX

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

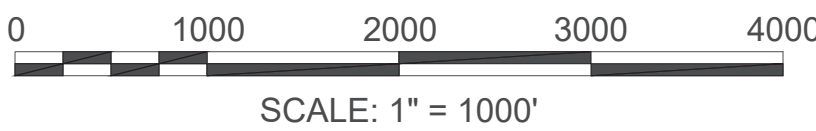
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DESIGN DESIGNATION (SCHOOL STREET)

DESIGN SPEED	35 MPH
ADT (2019)	13,400
ADT (2029)	14,100
K	0.10%
D	59% SB
T (PEAK HOUR)	4.4%
T (AVERAGE DAY)	2.6%
DHV	1,400
DDHV	880
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL



LENGTH OF PROJECT = 2,135.33 FEET = 0.404 MILES

Russell, Gregory

120 Front Street
Suite 500
Worcester, MA 01604
508.752.1001

DATE	DESCRIPTION	REV #
APPROVED		
Carrie Lavallee, P.E.	Carrie Lavallee, P.E. 2025.06.05 08:25:28 -04'00"	06/05/2025
CHIEF ENGINEER		DATE

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		GRANITE BOUND / DRILL HOLE
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		EROSION AND SEDIMENTATION CONTROL
		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

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CONTROLLER PHASE
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		QUADRUPOLE WIRE LOOP DETECTOR
		BICYCLE WIRE LOOP DETECTOR, TYPE B-2
		VIDEO DETECTION CAMERA
		SINGLE POINT VIDEO DETECTION CAMERA
		VIDEO DETECTION ZONE
		APS PEDESTRIAN PUSH BUTTON, SIGN AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD, WITH/WITHOUT BACKPLATE
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED, WITH/WITHOUT BACKPLATE
		FLASHING BEACON, WITH/WITHOUT BACKPLATE
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		SIGNAL POST AND BASE
		MAST ARM, SHAFT AND BASE
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		OVERHEAD SIGN
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE - SD2.022 (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		YIELD LINE TRIANGLES - WHITE
		STOP LINE - WHITE, 12" WIDTH
		CROSSWALK-WHITE, WIDTH AS NOTED
		SOLID WHITE LINE, 6" WIDTH
		SOLID YELLOW LINE, 6" WIDTH
		SOLID WHITE CHANNELIZATION LINE, 12" WIDTH UNLESS OTHERWISE NOTED
		SOLID YELLOW CHANNELICATION LINE, 12" WIDTH UNLESS OTHERWISE NOTED
		BROKEN WHITE LINE, 6" WIDTH, 10' LINE W/30' GAPS
		BROKEN YELLOW LINE, 6" WIDTH, 10' LINE W/30' GAPS
		DOTTED WHITE LINE, 6" WIDTH, LENGTH AND SPACING AS NOTED
		WIDE DOTTED WHITE LINE, 12" WIDTH, LENGTH AND SPACING AS NOTED
		WIDE DOTTED WHITE LINE, 12" WIDTH, LENGTH AND SPACING AS NOTED
		DOTTED YELLOW LINE, 6" WIDTH, LENGTH AND SPACING AS NOTED
		DOTTED WHITE LINE EXTENSION, 6" WIDTH, 2' LINE W/6' GAPS
		DOTTED YELLOW LINE EXTENSION, 6" WIDTH, 2' LINE W/6' GAPS
		DOUBLE WHITE LINE, 6" WIDTH
		DOUBLE YELLOW LINE, 6" WIDTH
		BICYCLE LANE WORD, SYMBOL AND/OR ARROW - WHITE
		SHARED LANE - WHITE

ABBREVIATIONS

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

MANSFIELD
SCHOOL STREET

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LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

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

TRAFFIC SIGNAL

CAB.	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY DON'T WALK
FDW	FLASHING DON'T WALK
FR	FLASHING CIRCULAR RED
← FR →	FLASHING RED LEFT ARROW
→ FR →	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
← FY →	FLASHING YELLOW LEFT ARROW
→ FY →	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
← G →	STEADY GREEN LEFT ARROW
→ G →	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
↑ G	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
← R →	STEADY RED LEFT ARROW
→ R →	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALK
Y	STEADY CIRCULAR YELLOW
← Y →	STEADY YELLOW LEFT ARROW
→ Y →	STEADY YELLOW RIGHT ARROW
APS	ACCESSIBLE PEDESTRIAN SYSTEM

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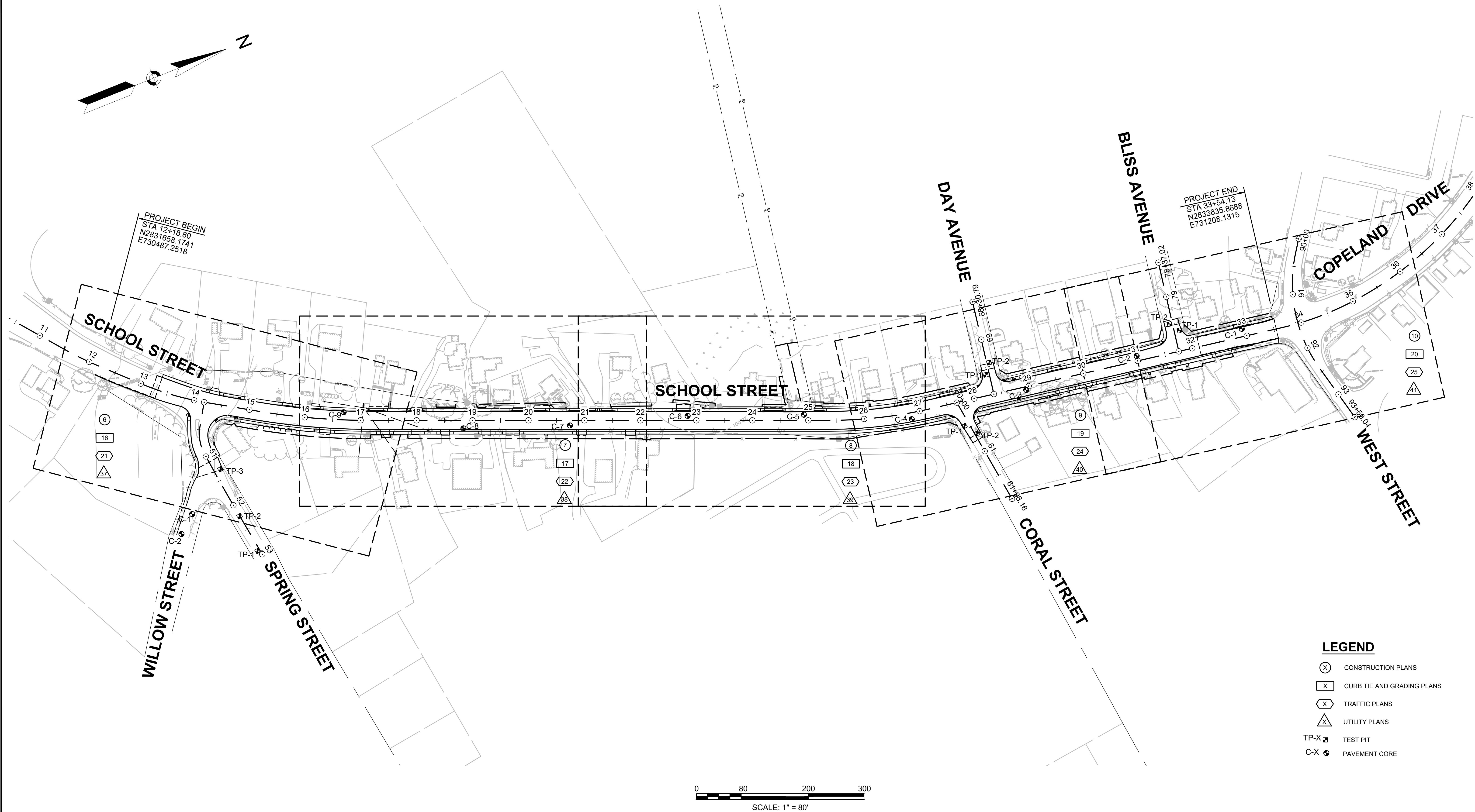
GENERAL NOTES

GENERAL NOTES:

1. THE SURVEY BASE PLAN WAS PREPARED BY SITE DESIGN ENGINEERING, LLC IN JANUARY, 2020, AND SUPPLEMENTED BY VHB IN FEBRUARY 2021.
2. THE HORIZONTAL CONTROL IS BASED ON THE MASSACHUSETTS MAINLAND STATE PLANE COORDINATE SYSTEM AND THE NATIONAL GEODETIC SURVEY (NAD83). ALL ELEVATION IS US FEET, REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88).
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND GRADES IN THE FIELD BEFORE COMMENCING WORK AND PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
4. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT DIGSAFE TO REQUEST EXISTING UTILITY MARKOUT IN THE FIELD AT (888) DIG-SAFE.
5. 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.
6. THE CONTRACTOR SHALL VERIFY BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH PROPOSED CONDUIT AND SIGNAL EQUIPMENT. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER.
7. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
8. THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE AND SEWER STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES AND BOXES TO THE PROPOSED FINISH SURFACE GRADE. REQUIRED NEW MASONRY SHALL BE CLAY BRICK.
9. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
10. EXISTING UTILITY POLES WILL BE RELOCATED BY OTHERS IF REQUIRED.
11. TREES AND SHRUBS WITHIN THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
12. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
13. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
14. JOINTS BETWEEN NEW ASPHALT CONCRETE ROADWAY PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH HMA JOINT SEALANT.
15. AFTER MILLING OPERATIONS AND PRIOR TO PAVING THE SUPERPAVE INTERMEDIATE OR SURFACES COURSES THE ENGINEER SHALL EVALUATE THE MILLED SURFACE AND SHALL APPLY THE APPROPRIATE REPAIR METHOD IF REQUIRED.
16. EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
17. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
18. DISPOSAL OF ALL SURPLUS MATERIAL SHALL BE AS APPROVED BY THE ENGINEER AND OWNER.
19. LATERAL DRAIN PIPES SHALL BE INSTALLED WITH A PITCH OF 0.01 FOOT PER FOOT (MINIMUM) UNLESS NOTED OTHERWISE ON THE PLANS.
20. IF SUITABLE, EXISTING GRANITE CURB & EDGING SHALL BE RE-USED IN THE PROPOSED WORK, EXCEPT CURVED STONES OF A DIFFERENT RADIUS THAN PROPOSED CURB.
21. PROPOSED BOUNDS SHALL BE PLACED BY A LICENSED PROFESSIONAL SURVEYOR. THE CONTRACTOR SHALL EXERCISE DUE CARE WHEN WORKING AROUND ALL PROPERTY BOUNDS WHICH ARE TO REMAIN. SHOULD ANY DAMAGE TO A BOUND RESULT FROM THE ACTIONS OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE THE BOUND REPLACED AND/OR REALIGNED BY A LICENSED PROFESSIONAL SURVEYOR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.

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KEY PLAN



PAVEMENT NOTES

MANSFIELD SCHOOL STREET			
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TYPICAL SECTIONS

PROPOSED FULL DEPTH PAVEMENT

SURFACE: 2" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER
INTERMEDIATE: 3" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER
BASE COURSE: 4" DENSE GRADED CRUSHED STONE OVER
++ SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED PAVEMENT MICROMILLING AND OVERLAY

SURFACE: 2" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5)
MILLING: 2" PAVEMENT MICROMILLING VARIABLE DEPTH TO MEET PROPOSED GRADING

PROPOSED CEMENT CONCRETE WALK

SURFACE: 4" CEMENT CONCRETE
AIR ENTRAINED 4000 PSI, ¾", 610 OVER
++ SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE PEDESTRIAN CURB RAMP

SURFACE: 4" CEMENT CONCRETE
AIR ENTRAINED 4000 PSI, ¾", 610 OVER
SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE DRIVEWAY

SURFACE: 6" CEMENT CONCRETE
AIR ENTRAINED 4000 PSI, ¾", 610 OVER
++ SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED STAMPED CEMENT CONCRETE WALK

SURFACE: 4" CEMENT CONCRETE
AIR ENTRAINED 4000 PSI
¾", 610 (COLOR/STAMPED)
6"X6", W1.4xW1.4 WELDED WIRE MESH
++ SUBBASE: 8" GRAVEL BORROW, TYPE B

PROPOSED GRAVEL DRIVEWAY

SURFACE: 8" GRAVEL BORROW (TYPE b)

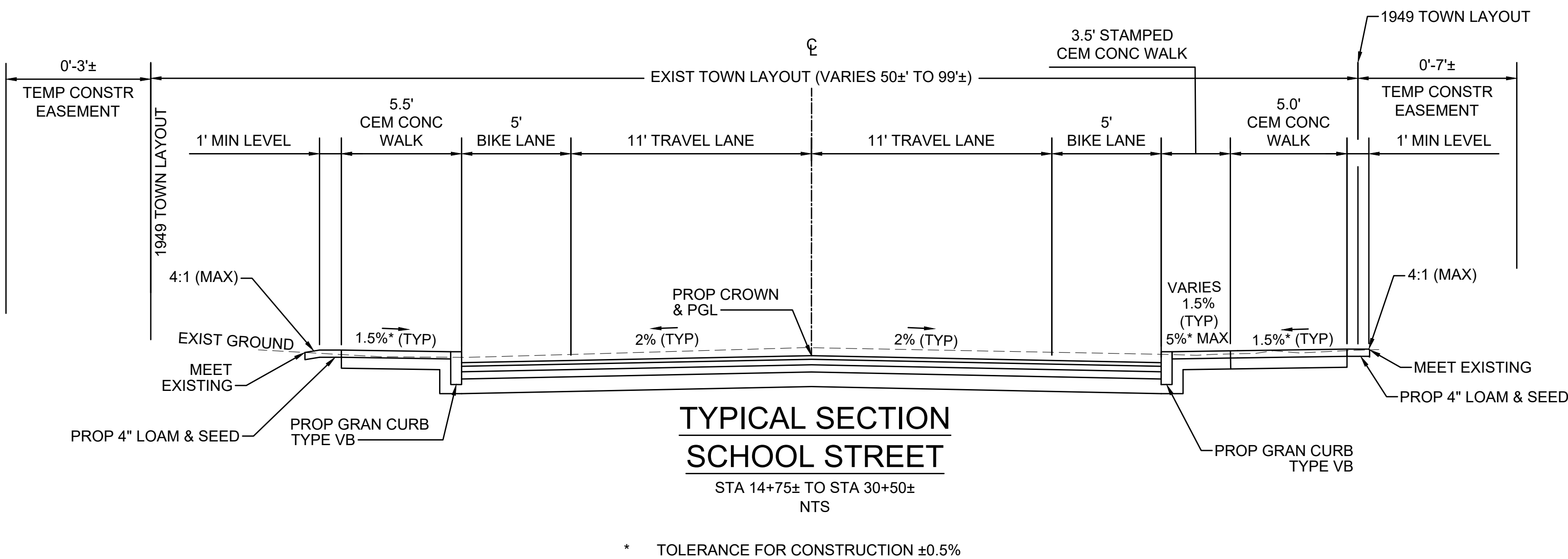
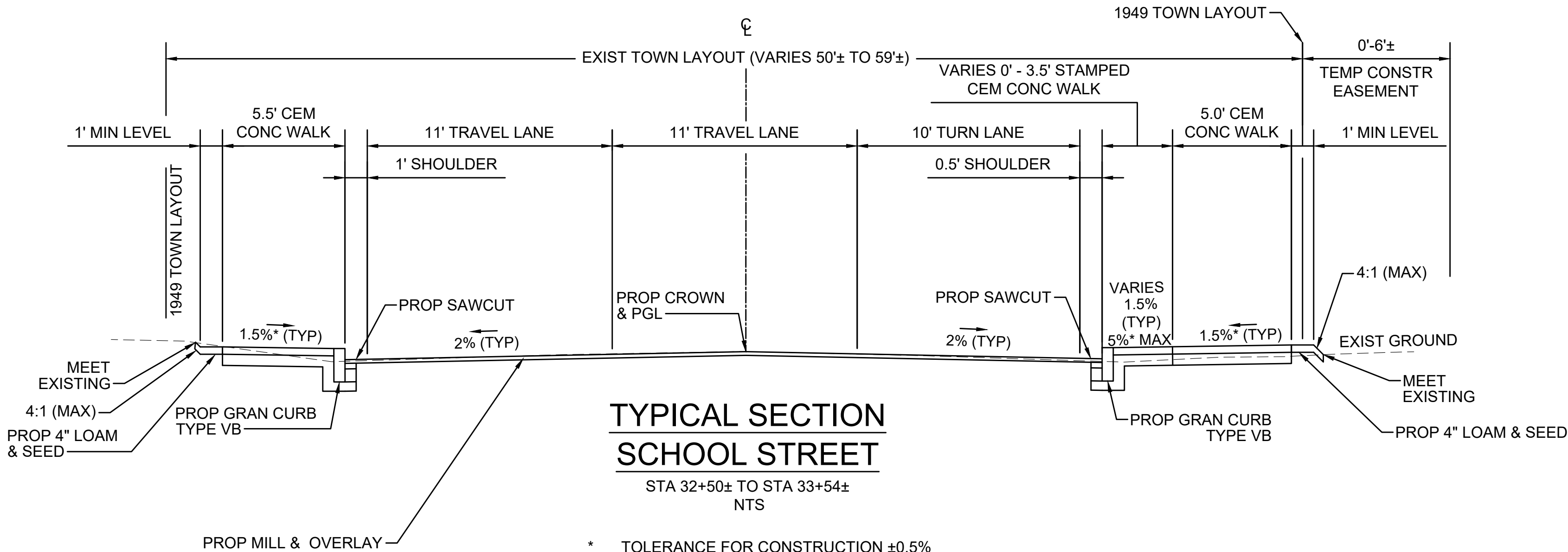
PROPOSED HOT MIX ASPHALT DRIVEWAY

SURFACE: 1½" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) OVER
INTERMEDIATE: 2½" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5) OVER
++ SUBBASE: 8" GRAVEL BORROW, TYPE B

++ WHERE EXISTING GRAVEL IS FOUND TO BE SUITABLE, THE EXISTING GRAVEL MAY BE USED IN PROPOSED SUBBASE, AFTER APPROVAL BY THE ENGINEER.

GENERAL NOTES:

- ALL HOT MIX ASPHALT PAVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 450 QUALITY ASSURANCE FOR HMA.
- ASPHALT EMULSION FOR TACK COAT (ITEM 452.) SHALL BE SPRAY APPLIED FOR DOUBLE OVERLAP COVERAGE AT 0.08 GALLONS PER SQUARE YARD OVER MILLED SURFACES AND 0.07 GALLONS PER SQUARE YARD OVER SMOOTH SURFACES.
- HMA JOINT ADHESIVE (ITEM 453.) SHALL BE APPLIED IN SURFACE COURSE AT ALL VERTICAL COLD JOINTS PRIOR TO HMA PAVING.
- ALL HOT MIX ASPHALT WALKS AND DRIVEWAYS SHALL BE ESTIMATED AND PAID FOR UNDER ITEM 702 OF STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
- SURFACE PAVING TO BE COMPLETED AT THE END OF THE PROJECT AND AS DIRECTED WHEN IT CAN BE PLACED IN ITS ENTIRETY.

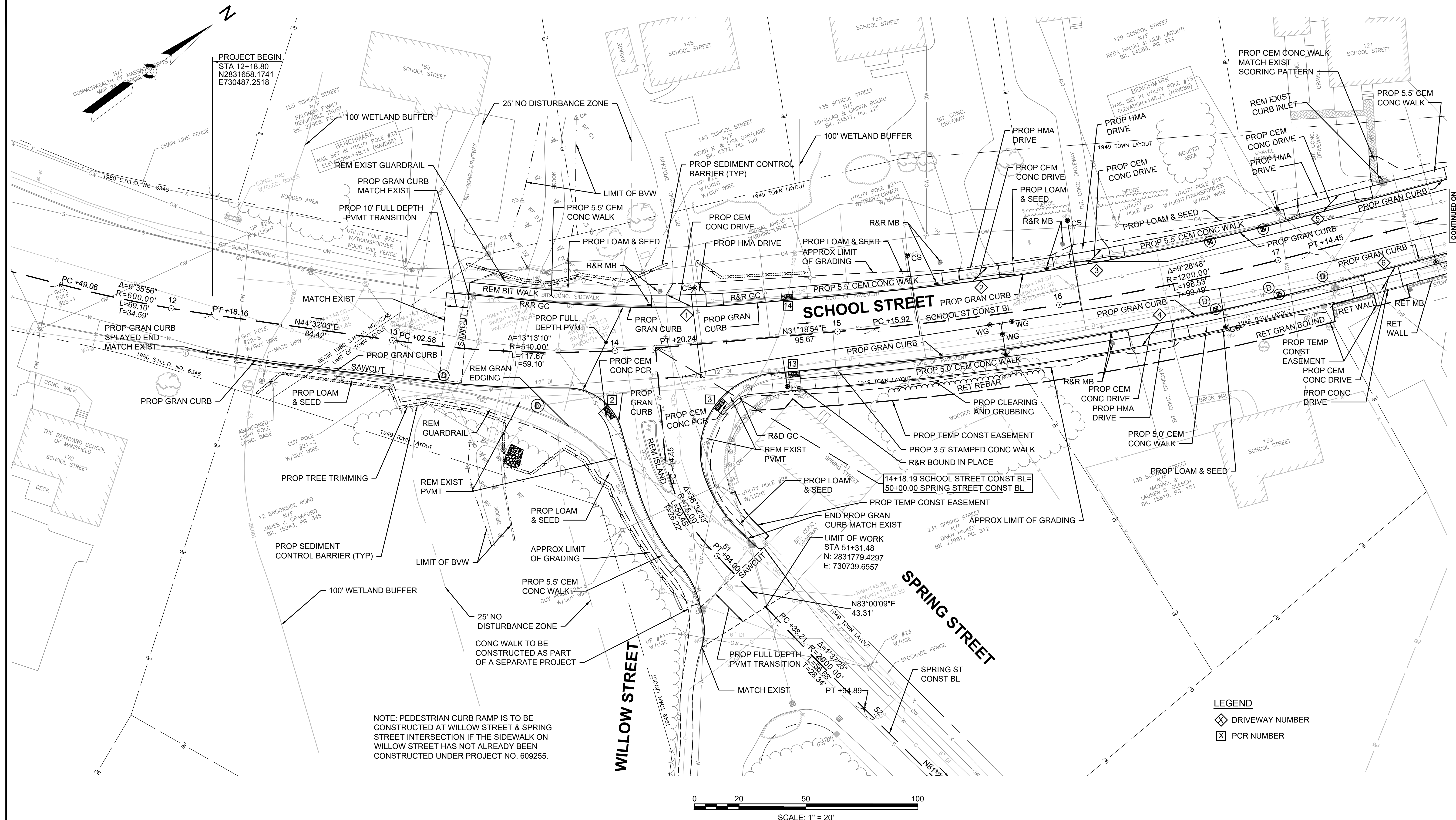


DRAINAGE DETAILS

SEE SHEET 37

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CONSTRUCTION PLANS



FOR PROFILE:
SEE SHEET NO. 11

NONE

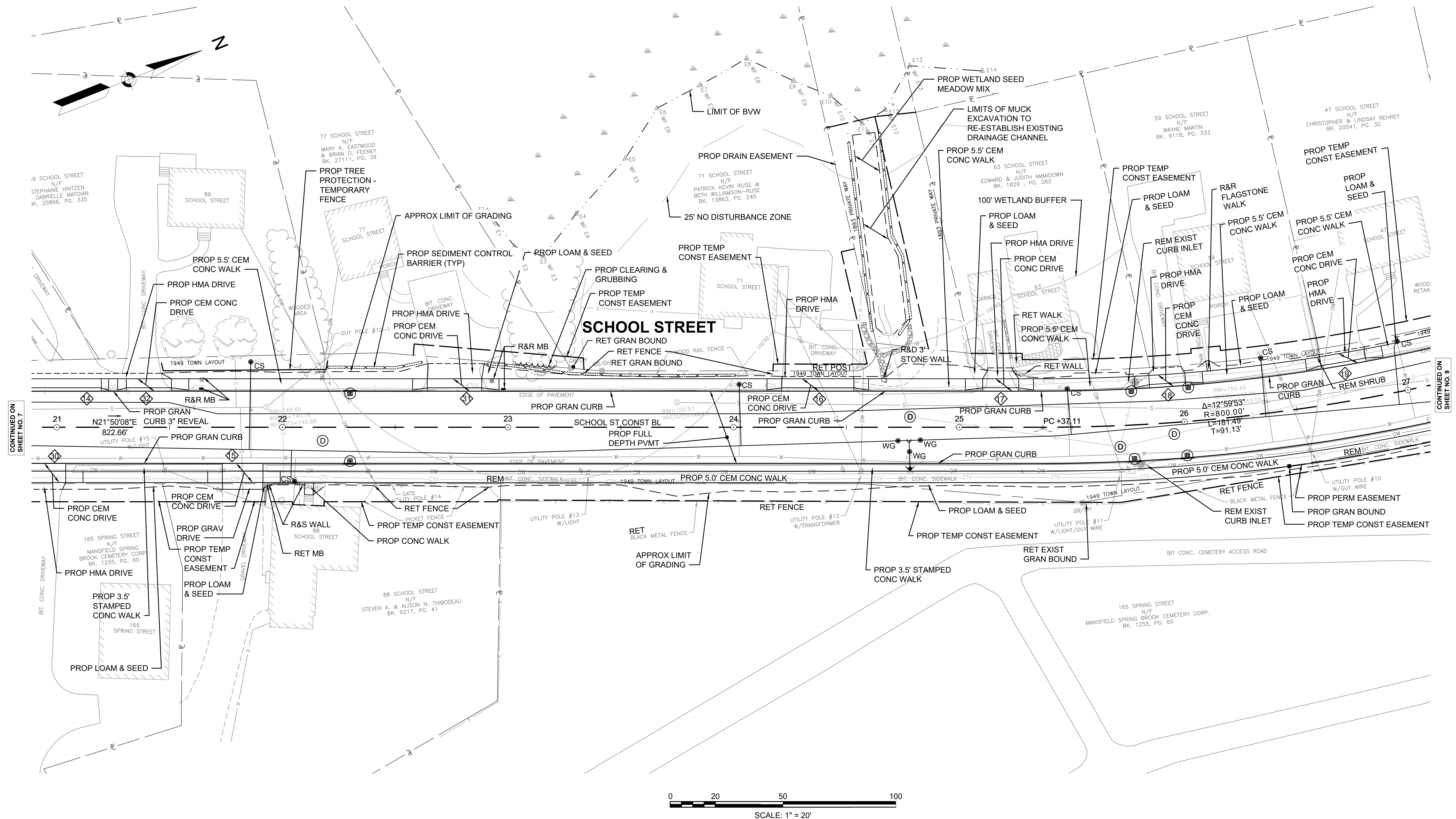
NONE

SEE SHEET 39

SEE SHEET 39

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FOR PROFILE:
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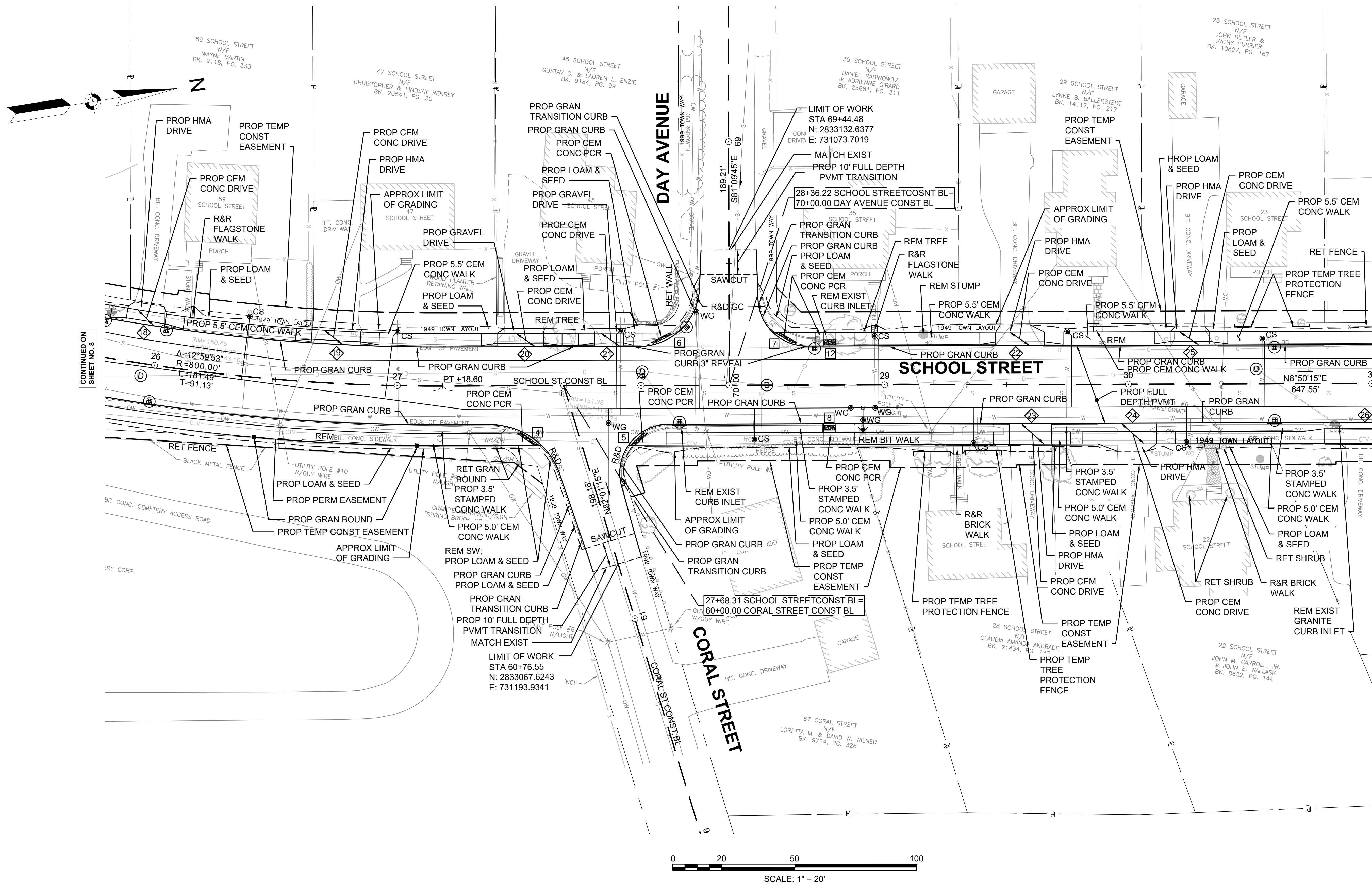


DRAINAGE DETAILS

SEE SHEET 40

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FOR PROFILE:
SEE SHEET NO. 14



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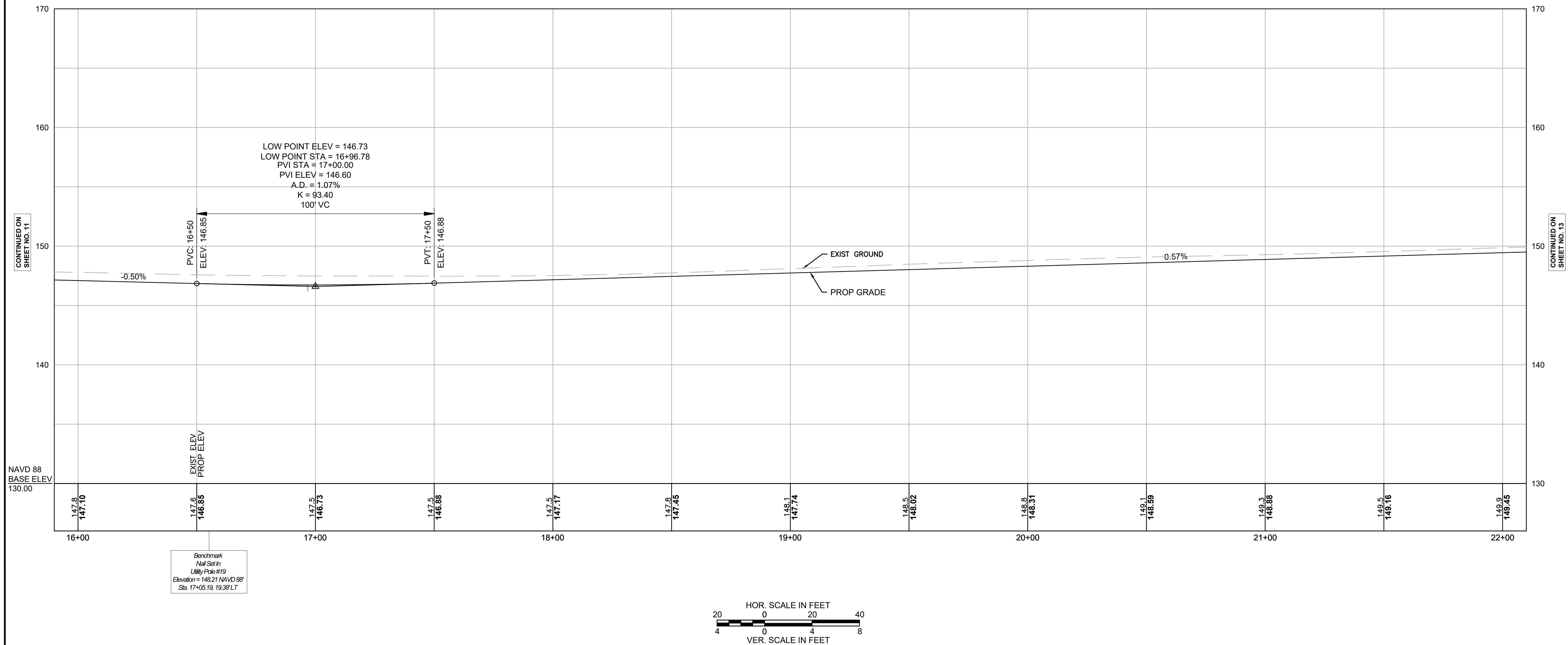
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FOR CONSTRUCTION PLAN:
SEE SHEET NO. 6

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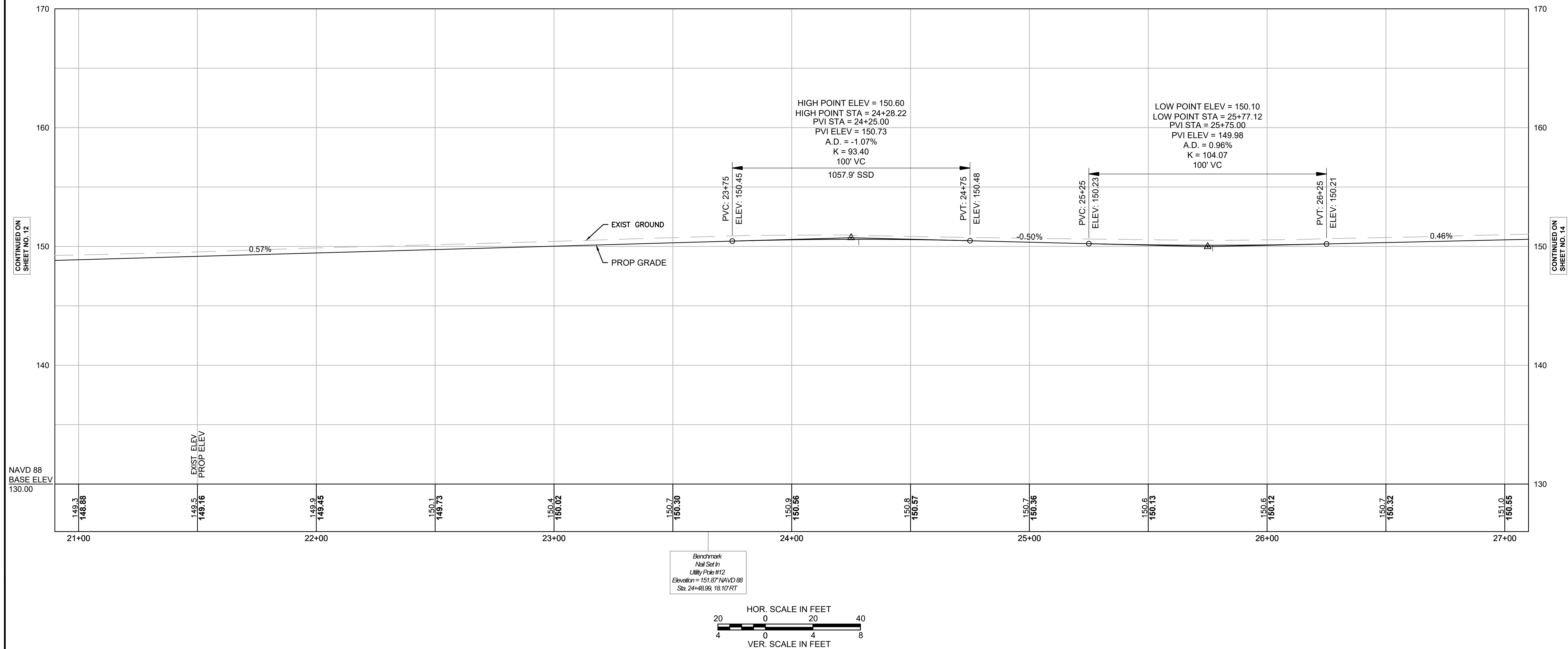
PROFILES



FOR CONSTRUCTION PLAN:
SEE SHEET NO. 7

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	13	73
PROJECT FILE NO. 609255			

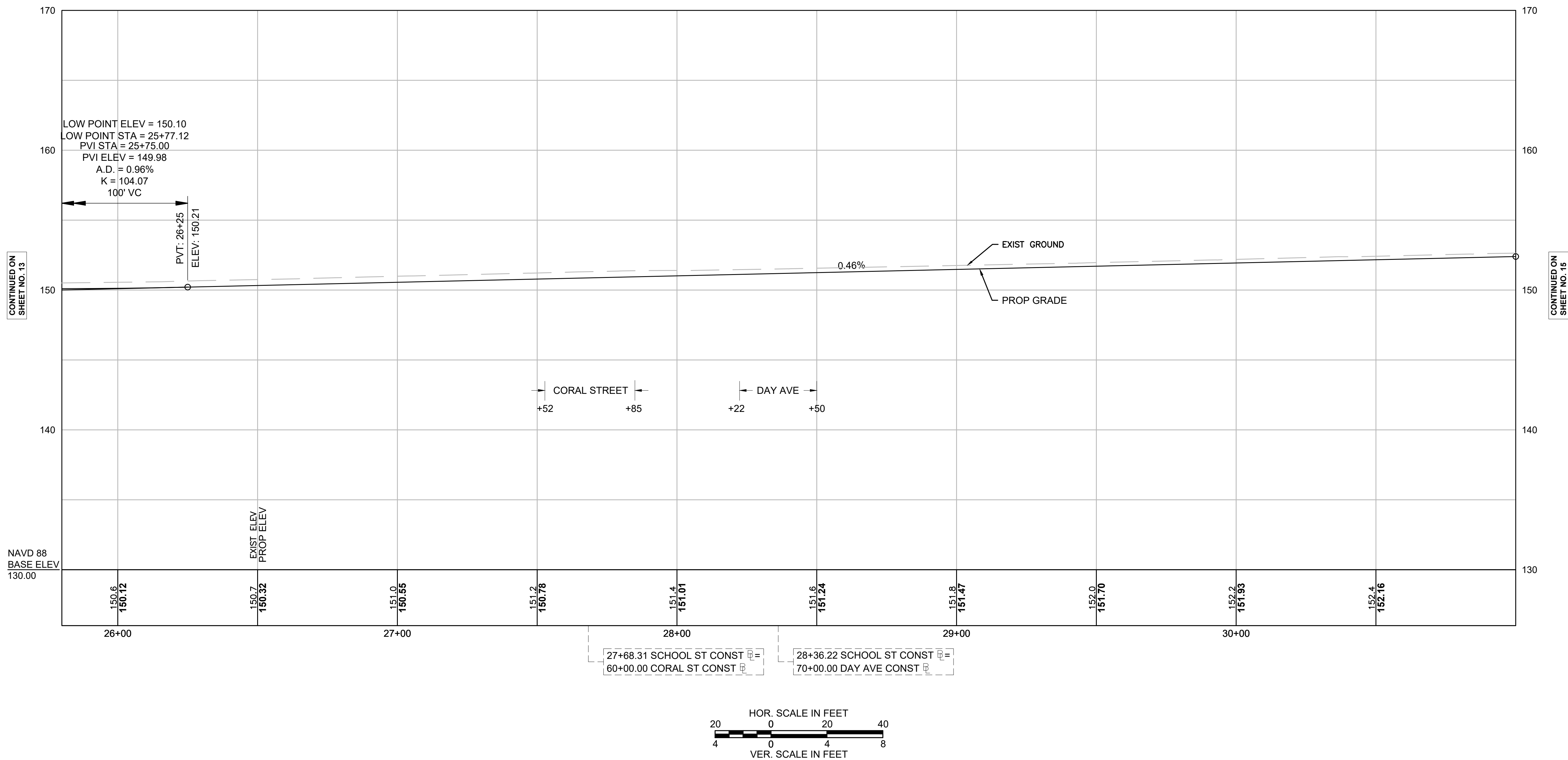
PROFILES



FOR CONSTRUCTION PLAN:
SEE SHEET NO. 8

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	14	73
PROJECT FILE NO. 609255			

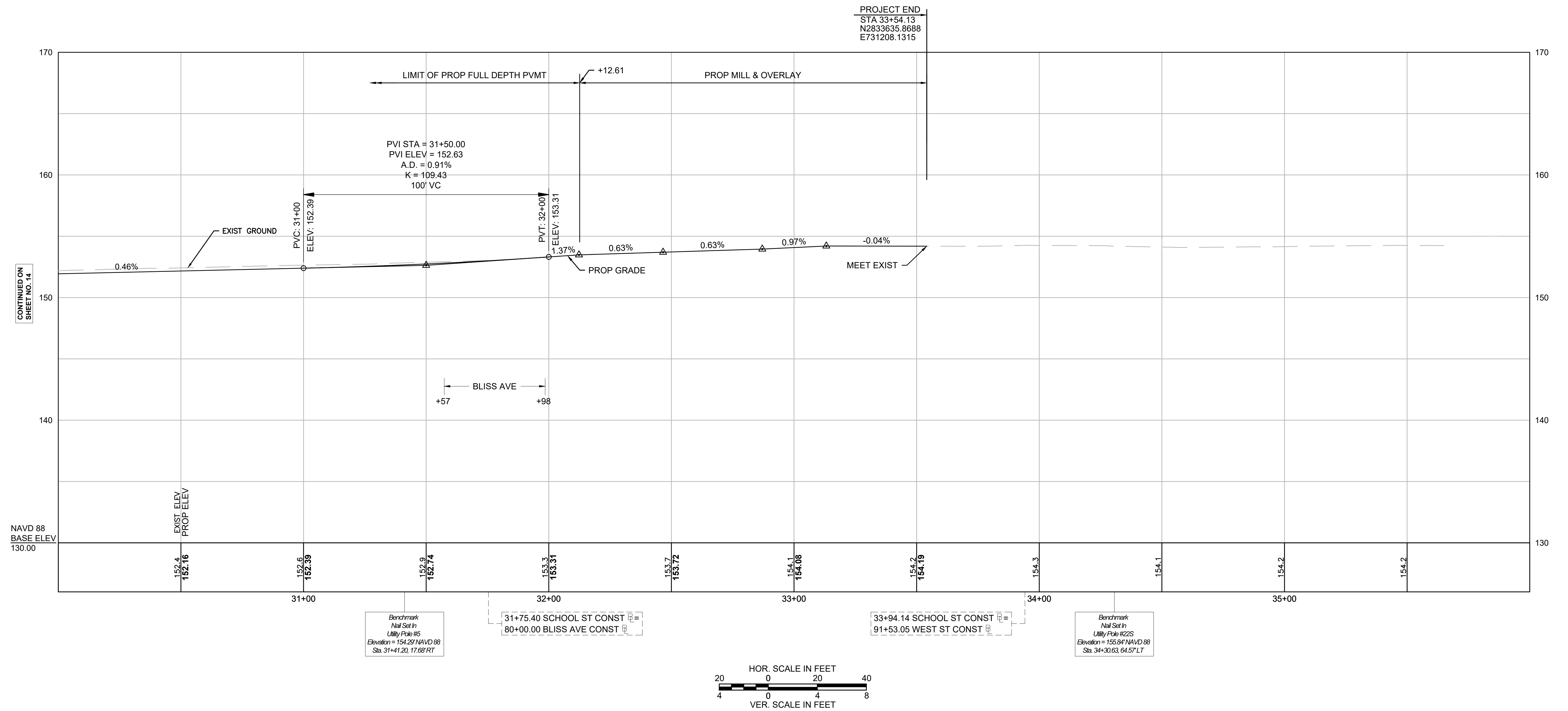
PROFILES



FOR CONSTRUCTION PLAN:
SEE SHEET NO. 9

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	15	73
PROJECT FILE NO. 609255			

PROFILES



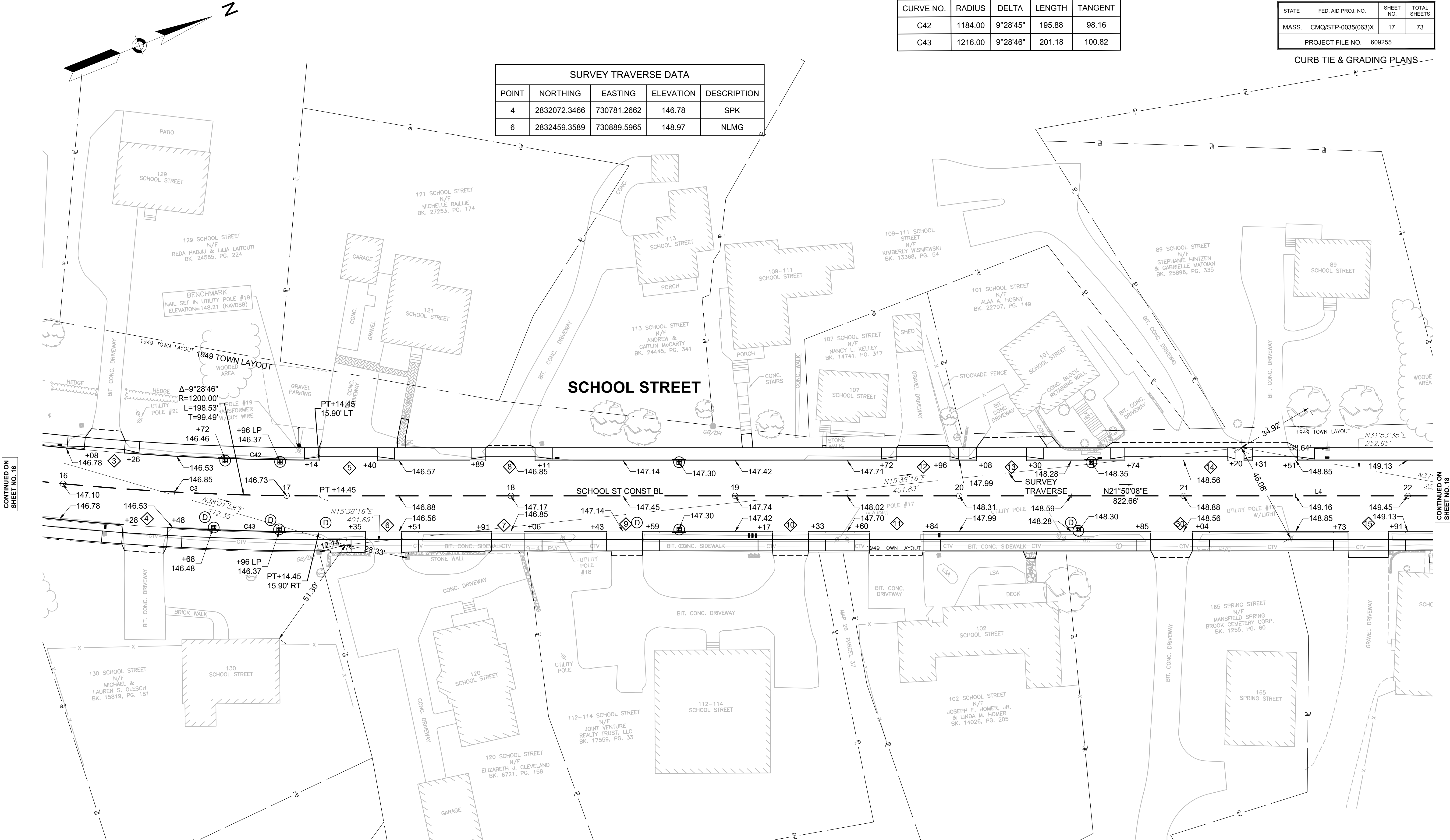
FOR CONSTRUCTION PLAN:
SEE SHEET NO. 10

CURVE TABLE				
CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C42	1184.00	9°28'45"	195.88	98.16
C43	1216.00	9°28'46"	201.18	100.82

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	17	73
PROJECT FILE NO. 609255			

CURB TIE & GRADING PLANS

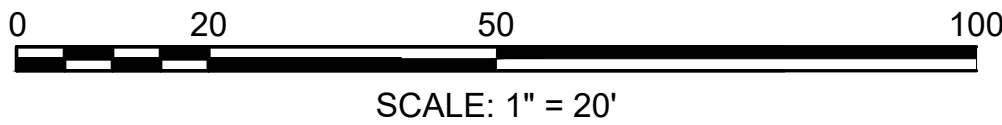
SURVEY TRAVERSE DATA				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
4	2832072.3466	730781.2662	146.78	SPK
6	2832459.3589	730889.5965	148.97	NLMG



CONTINUED ON
SHEET NO. 16

CONTINUED ON
SHEET NO. 18

SCHOOL STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C3	15+15.92	2831892.2395	730667.8915	R= 1200.00' Δ= 9°28'46" L=198.53' T=99.49'		17+14.45	2832069.5956	730756.6093
L4	17+14.45	2832069.5956	730756.6093		N21°50'08"E 822.66'	25+37.11	2832833.2317	731062.5932

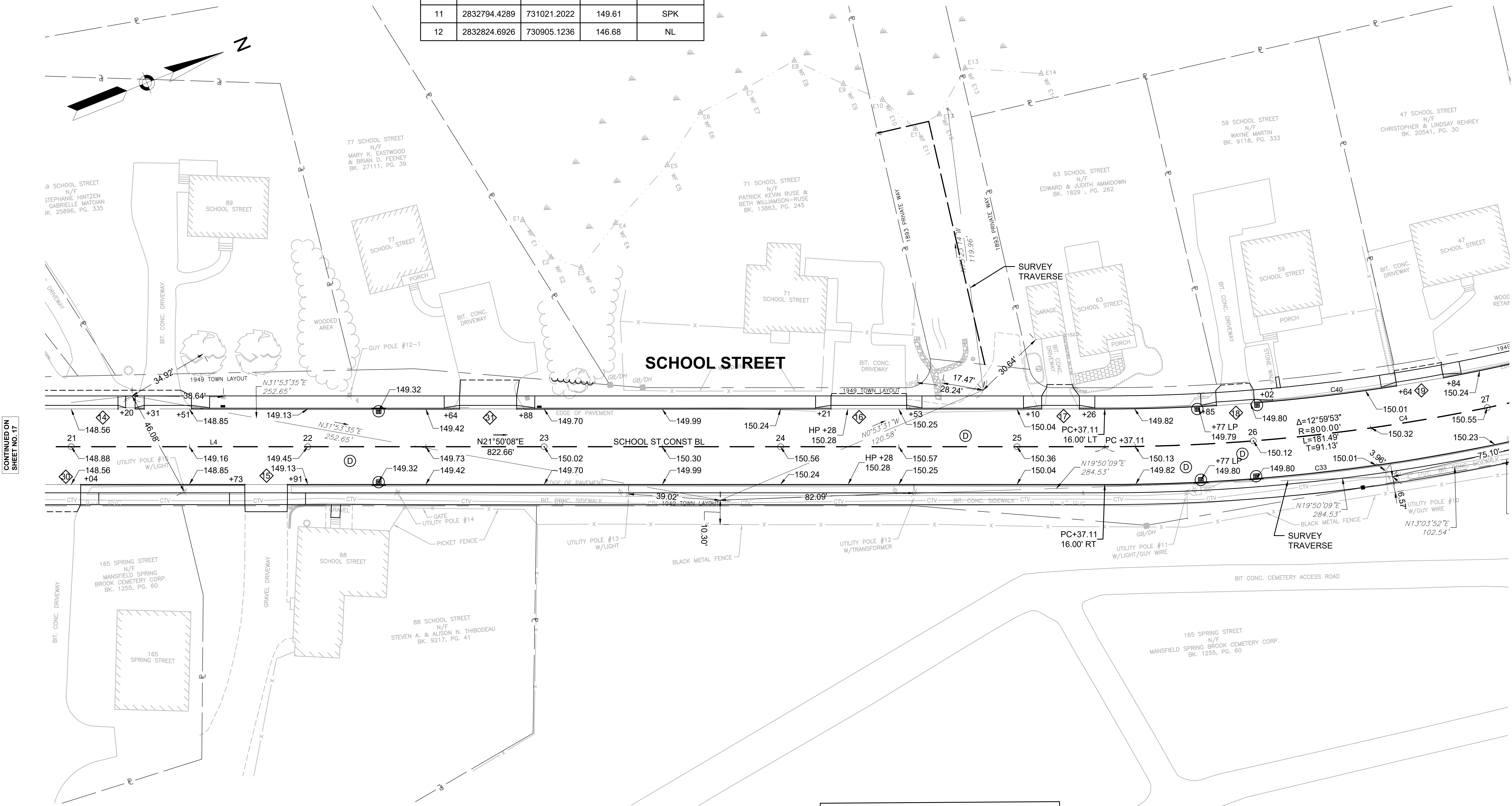


- LEGEND**
- ⬢ DRIVEWAY NUMBER
 - ✕ PCR NUMBER

SURVEY TRAVERSE DATA				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	2832459.3589	730889.5965	148.97	NLMG
7	2832673.8666	731023.0794	150.84	NLMG
8	2832941.5124	731119.6265	151.07	NLMG
11	2832794.4289	731021.2022	149.61	SPK
12	2832824.6926	730905.1236	146.68	NL

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	18	73
PROJECT FILE NO. 609255			

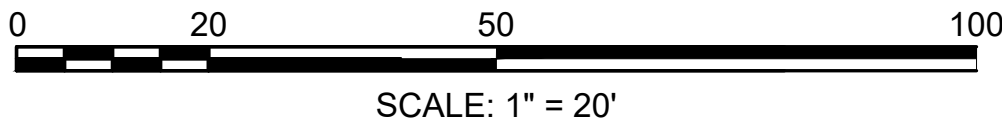
CURB TIE & GRADING PLANS



CONTINUED ON
SHEET NO. 17

CONTINUED ON
SHEET NO. 19

SCHOOL STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L4	17+14.45	2832069.5956	730756.6093		N21°50'08"E 822.66'	25+37.11	2832833.2317	731062.5932
C4	25+37.11	2832833.2317	731062.5932	R=800.00' Δ=12°59'53" L=181.49' T=91.13'		27+18.60	2833007.8807	731110.4918



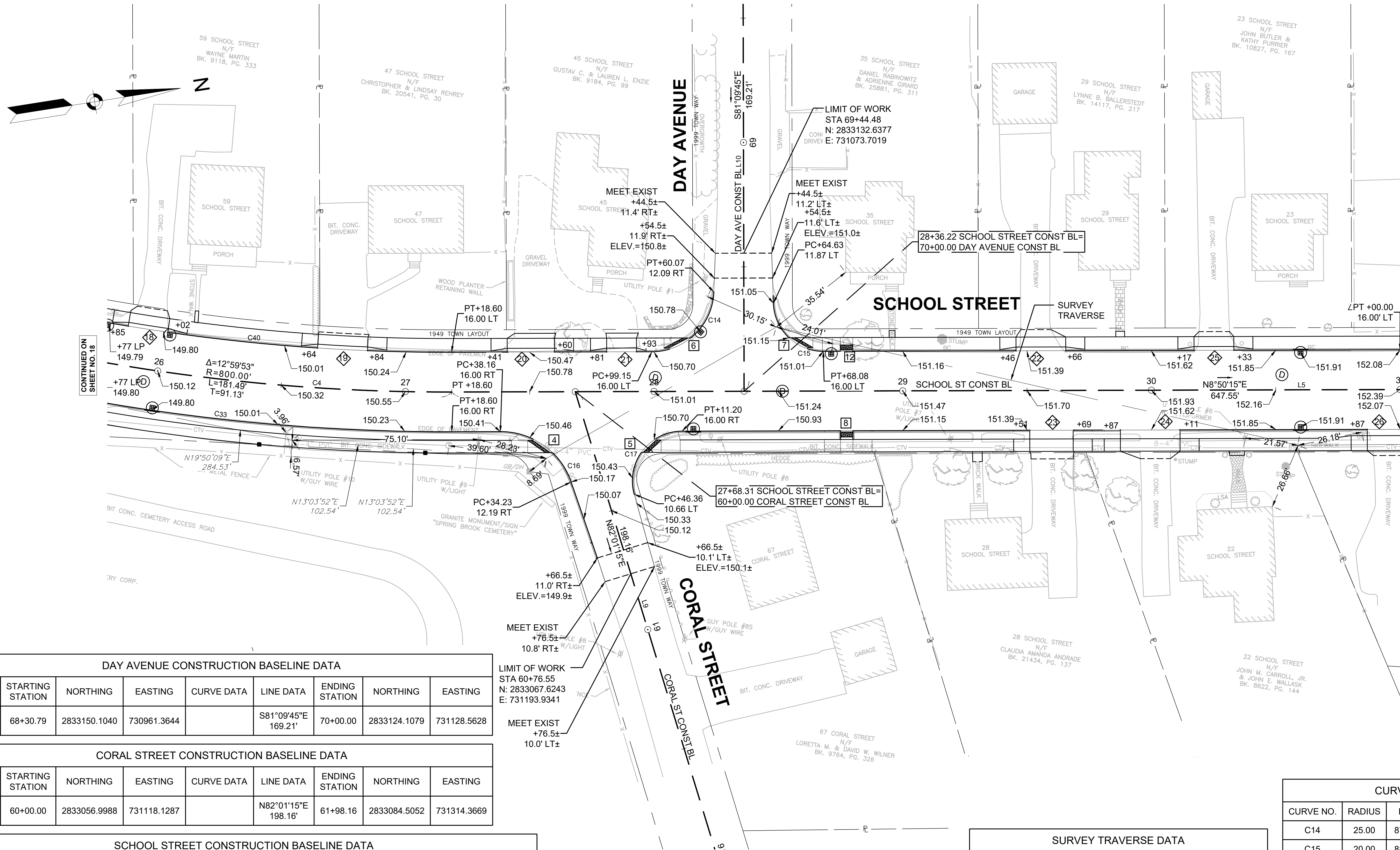
CURVE TABLE				
CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C33	816.00	12°59'53"	185.12	92.96
C40	784.00	12°59'53"	177.86	89.31

LEGEND

- ◇ DRIVEWAY NUMBER
- ⊗ PCR NUMBER

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035/063X	19	73
PROJECT FILE NO. 609255			

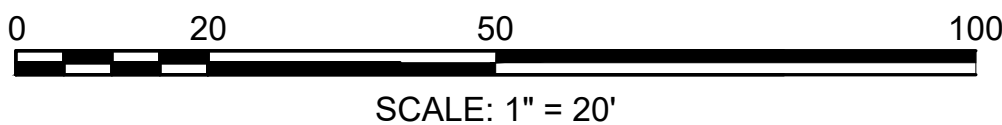
CURB TIE & GRADING PLANS



DAY AVENUE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L10	68+30.79	2833150.1040	730961.3644		S81°09'45"E 169.21'	70+00.00	2833124.1079	731128.5628

CORAL STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L9	60+00.00	2833056.9988	731118.1287		N82°01'15"E 198.16'	61+98.16	2833084.5052	731314.3669

SCHOOL STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C4	25+37.11	2832833.2317	731062.5932	R=800.00' Δ=12°59'53" L=181.49' T=91.13'		27+18.60	2833007.8807	731110.4918
L5	27+18.60	2833007.8807	731110.4918		N8°50'15"E 647.55'	33+66.15	2833647.7446	731209.9779



SURVEY TRAVERSE DATA				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
8	2832941.5124	731119.6265	151.07	NLMG
9	2833041.3982	731142.8052	151.18	NLMG
10	2833140.9157	731105.0776	151.20	NLMG
13	2833340.7521	731184.8185	152.39	NLMG

CURVE TABLE				
CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C14	25.00	87°33'07"	38.20	23.95
C15	20.00	88°11'20"	30.78	19.38
C16	30.00	71°07'12"	37.24	21.45
C17	20.00	105°20'18"	36.77	26.22
C33	816.00	12°59'53"	185.12	92.96
C40	784.00	12°59'53"	177.86	89.31

LEGEND

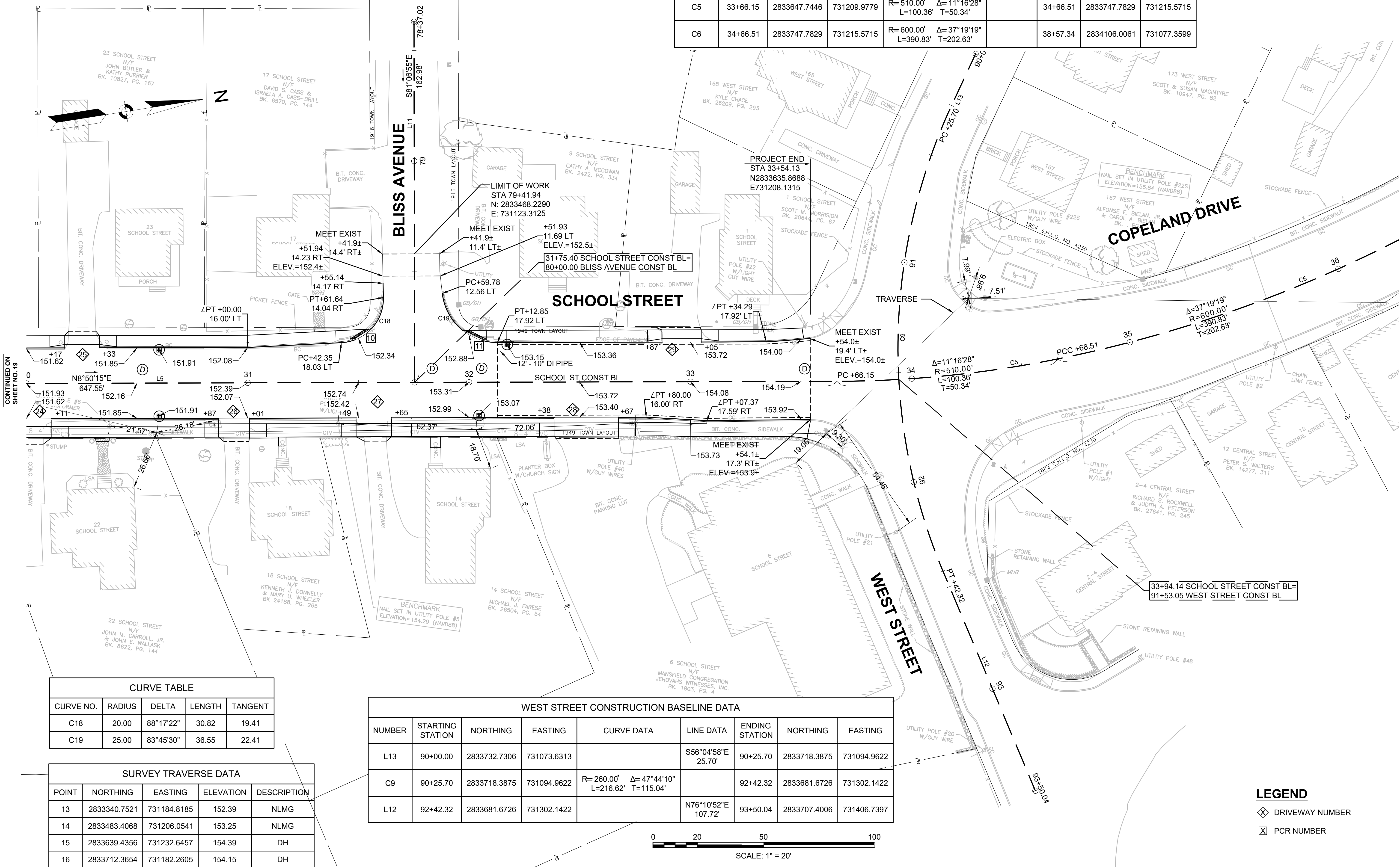
- DRIVEWAY NUMBER
- PCR NUMBER

BLISS AVENUE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L11	78+37.02	2833484.4345	731019.6467		S81°06'55"E 162.98'	80+00.00	2833459.2623	731180.6727

SCHOOL STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L5	27+18.60	2833007.8807	731110.4918		N8°50'15"E 647.55'	33+66.15	2833647.7446	731209.9779
C5	33+66.15	2833647.7446	731209.9779	R=510.00' Δ=11°16'28" L=100.36' T=50.34'		34+66.51	2833747.7829	731215.5715
C6	34+66.51	2833747.7829	731215.5715	R=600.00' Δ=37°19'19" L=390.83' T=202.63'		38+57.34	2834106.0061	731077.3599

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	20	73
PROJECT FILE NO. 609255			

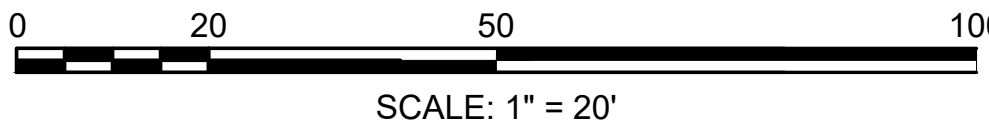
CURB TIE & GRADING PLANS



CURVE TABLE				
CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C18	20.00	88°17'22"	30.82	19.41
C19	25.00	83°45'30"	36.55	22.41

SURVEY TRAVERSE DATA				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
13	2833340.7521	731184.8185	152.39	NLMG
14	2833483.4068	731206.0541	153.25	NLMG
15	2833639.4356	731232.6457	154.39	DH
16	2833712.3654	731182.2605	154.15	DH

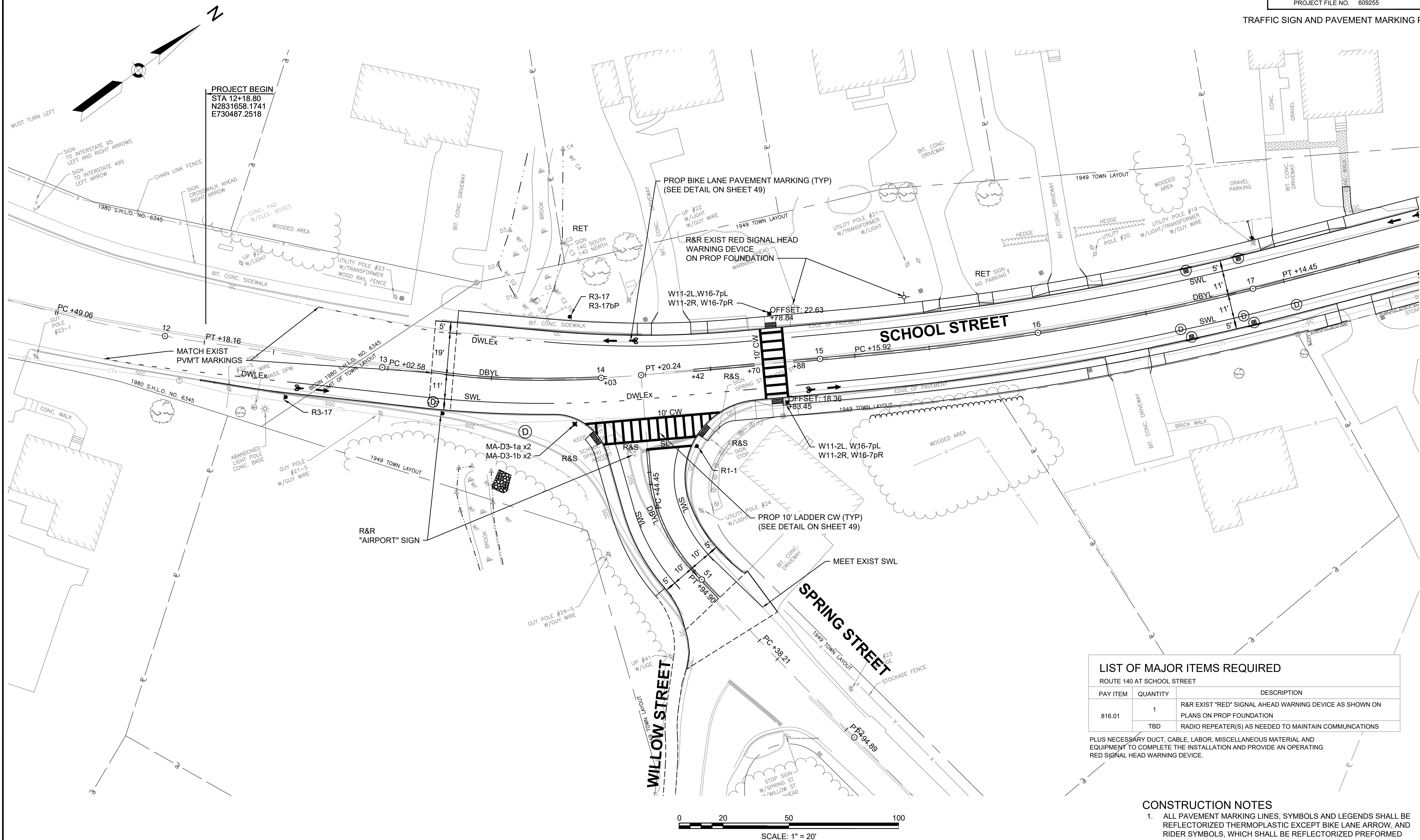
WEST STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L13	90+00.00	2833732.7306	731073.6313		S56°04'58"E 25.70'	90+25.70	2833718.3875	731094.9622
C9	90+25.70	2833718.3875	731094.9622	R=260.00' Δ=47°44'10" L=216.62' T=115.04'		92+42.32	2833681.6726	731302.1422
L12	92+42.32	2833681.6726	731302.1422		N76°10'52"E 107.72'	93+50.04	2833707.4006	731406.7397



- LEGEND**
- ◇ DRIVEWAY NUMBER
 - ⊠ PCR NUMBER

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	21	73
PROJECT FILE NO. 609255			

TRAFFIC SIGN AND PAVEMENT MARKING PLANS



LIST OF MAJOR ITEMS REQUIRED		
ROUTE 140 AT SCHOOL STREET		
PAY ITEM	QUANTITY	DESCRIPTION
816.01	1	R&R EXIST "RED" SIGNAL AHEAD WARNING DEVICE AS SHOWN ON PLANS ON PROP FOUNDATION
	TBD	RADIO REPEATER(S) AS NEEDED TO MAINTAIN COMMUNICATIONS

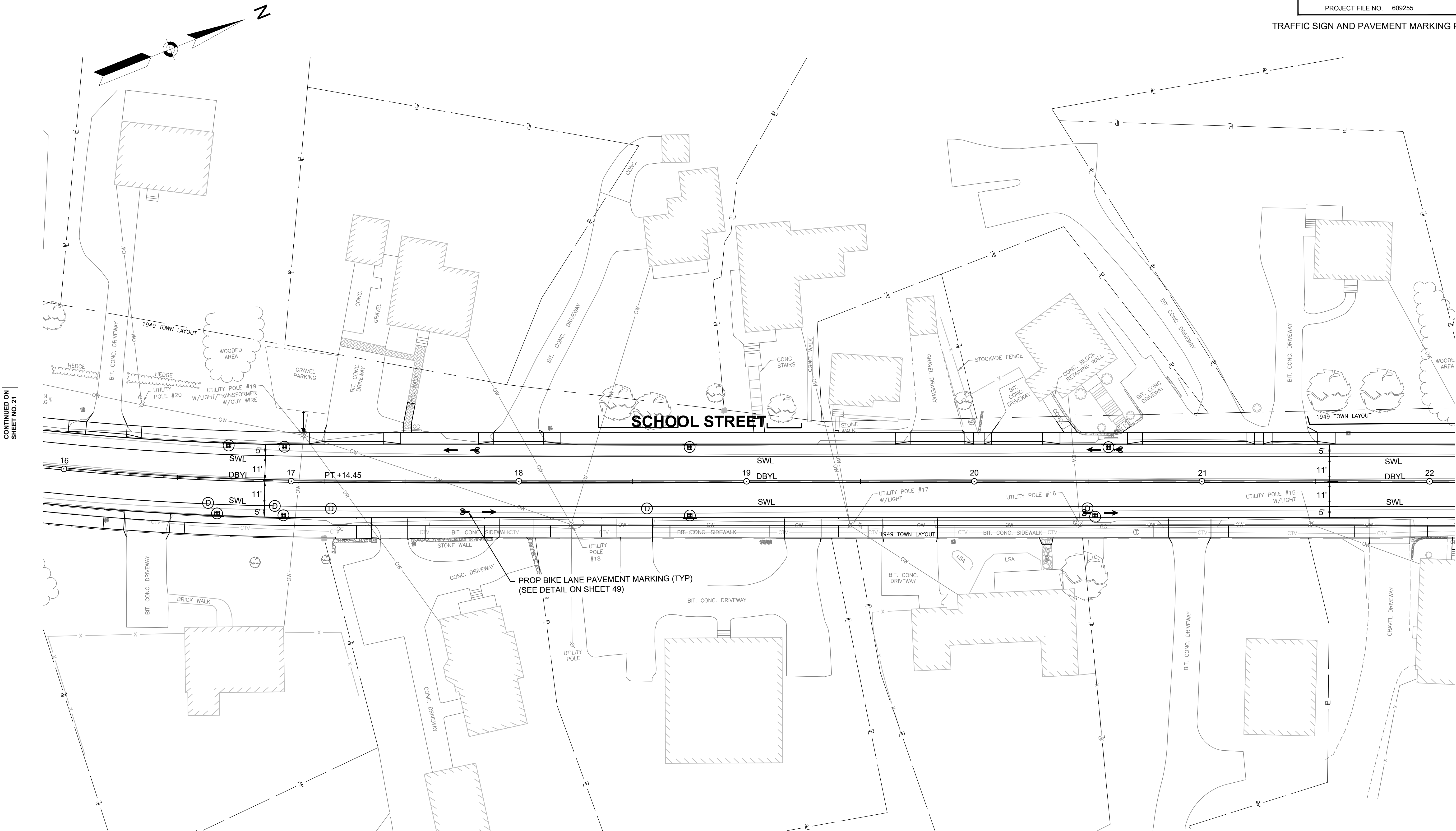
PLUS NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION AND PROVIDE AN OPERATING RED SIGNAL HEAD WARNING DEVICE.

- CONSTRUCTION NOTES
- ALL PAVEMENT MARKING LINES, SYMBOLS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC EXCEPT BIKE LANE ARROW, AND RIDER SYMBOLS, WHICH SHALL BE REFLECTORIZED PREFORMED THERMOPLASTIC.
 - WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
 - RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.

MANSFIELD
SCHOOL STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	22	73
PROJECT FILE NO. 609255			

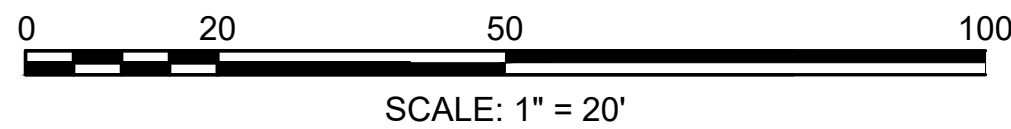
TRAFFIC SIGN AND PAVEMENT MARKING PLANS



CONTINUED ON
SHEET NO. 21

CONTINUED ON
SHEET NO. 23

PROP BIKE LANE PAVEMENT MARKING (TYP)
(SEE DETAIL ON SHEET 49)

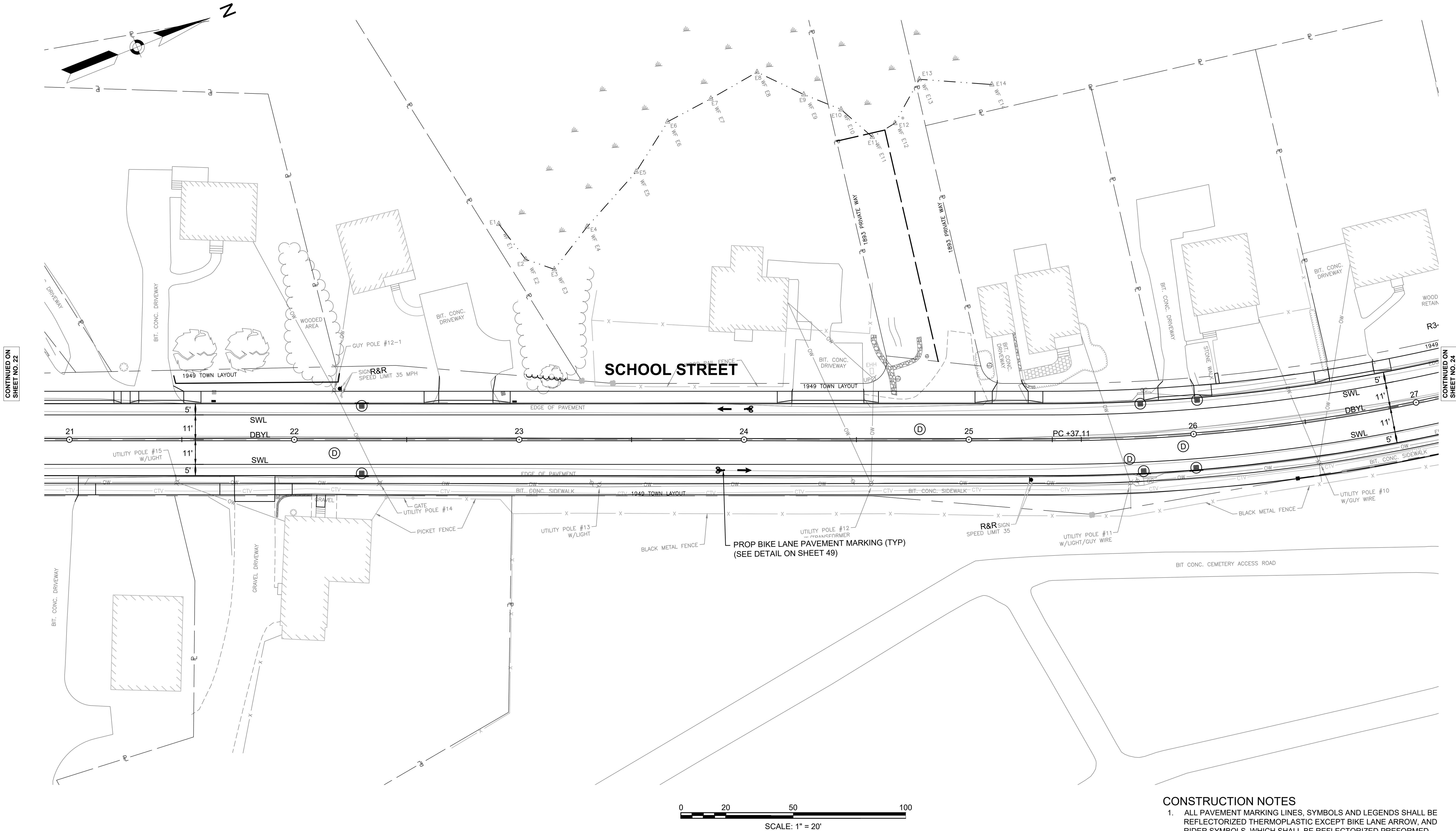


CONSTRUCTION NOTES

1. ALL PAVEMENT MARKING LINES, SYMBOLS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC EXCEPT BIKE LANE ARROW, AND RIDER SYMBOLS, WHICH SHALL BE REFLECTORIZED PREFORMED THERMOPLASTIC.
2. WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
3. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.

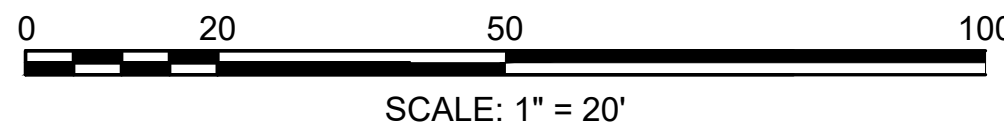
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	23	73
PROJECT FILE NO. 609255			

TRAFFIC SIGN AND PAVEMENT MARKING PLANS



CONTINUED ON
SHEET NO. 22

CONTINUED ON
SHEET NO. 24

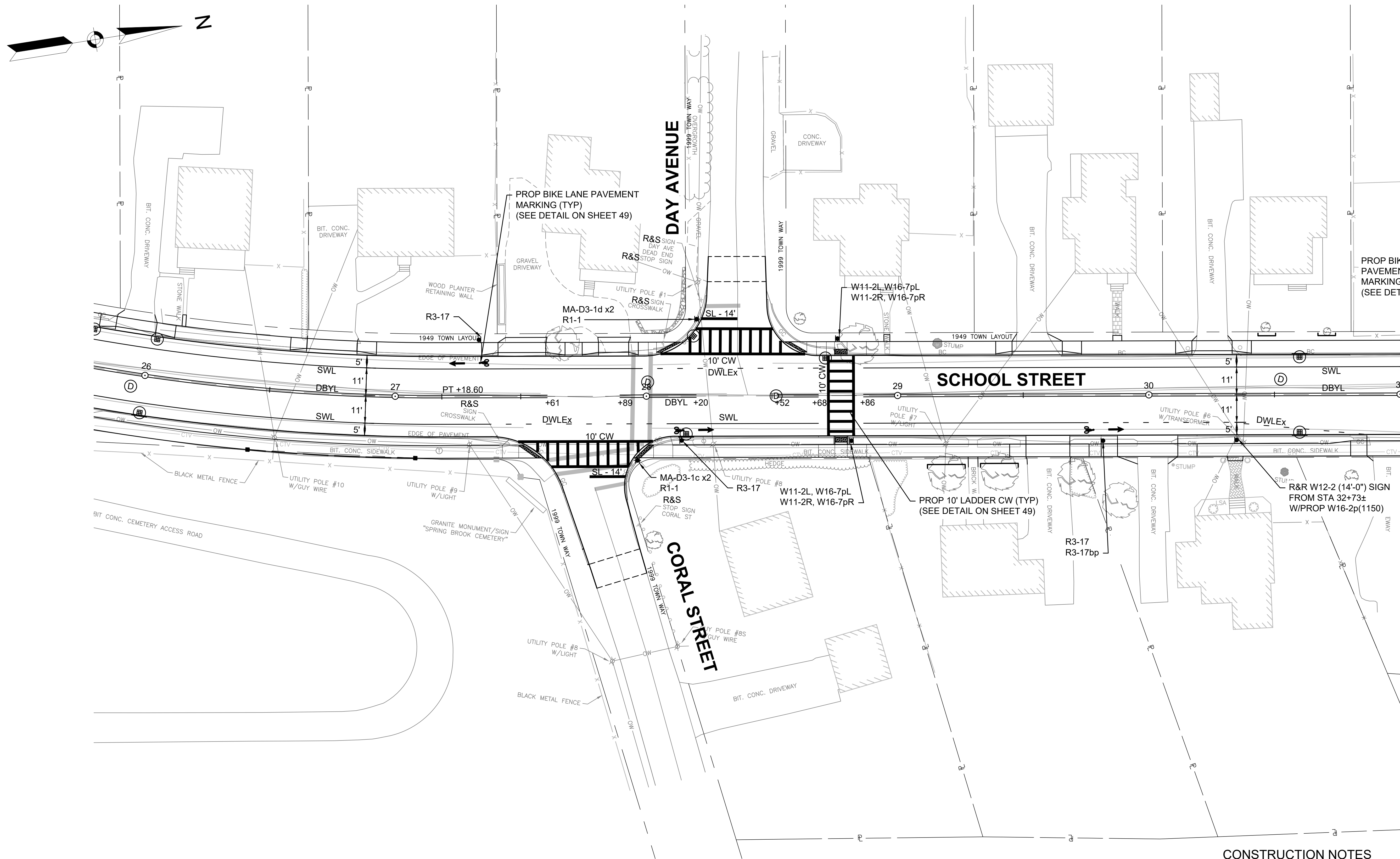


- CONSTRUCTION NOTES**
1. ALL PAVEMENT MARKING LINES, SYMBOLS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC EXCEPT BIKE LANE ARROW, AND RIDER SYMBOLS, WHICH SHALL BE REFLECTORIZED PREFORMED THERMOPLASTIC.
 2. WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
 3. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.

MANSFIELD
SCHOOL STREET

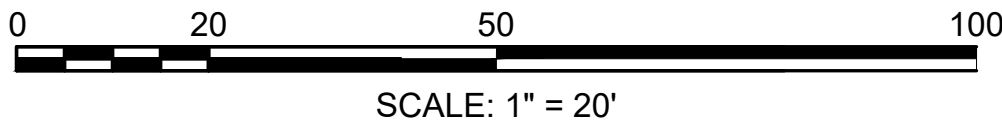
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	24	73
PROJECT FILE NO. 609255			

TRAFFIC SIGN AND PAVEMENT MARKING PLANS



CONSTRUCTION NOTES

1. ALL PAVEMENT MARKING LINES, SYMBOLS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC EXCEPT BIKE LANE ARROW, AND RIDER SYMBOLS, WHICH SHALL BE REFLECTORIZED PREFORMED THERMOPLASTIC.
2. WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
3. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.

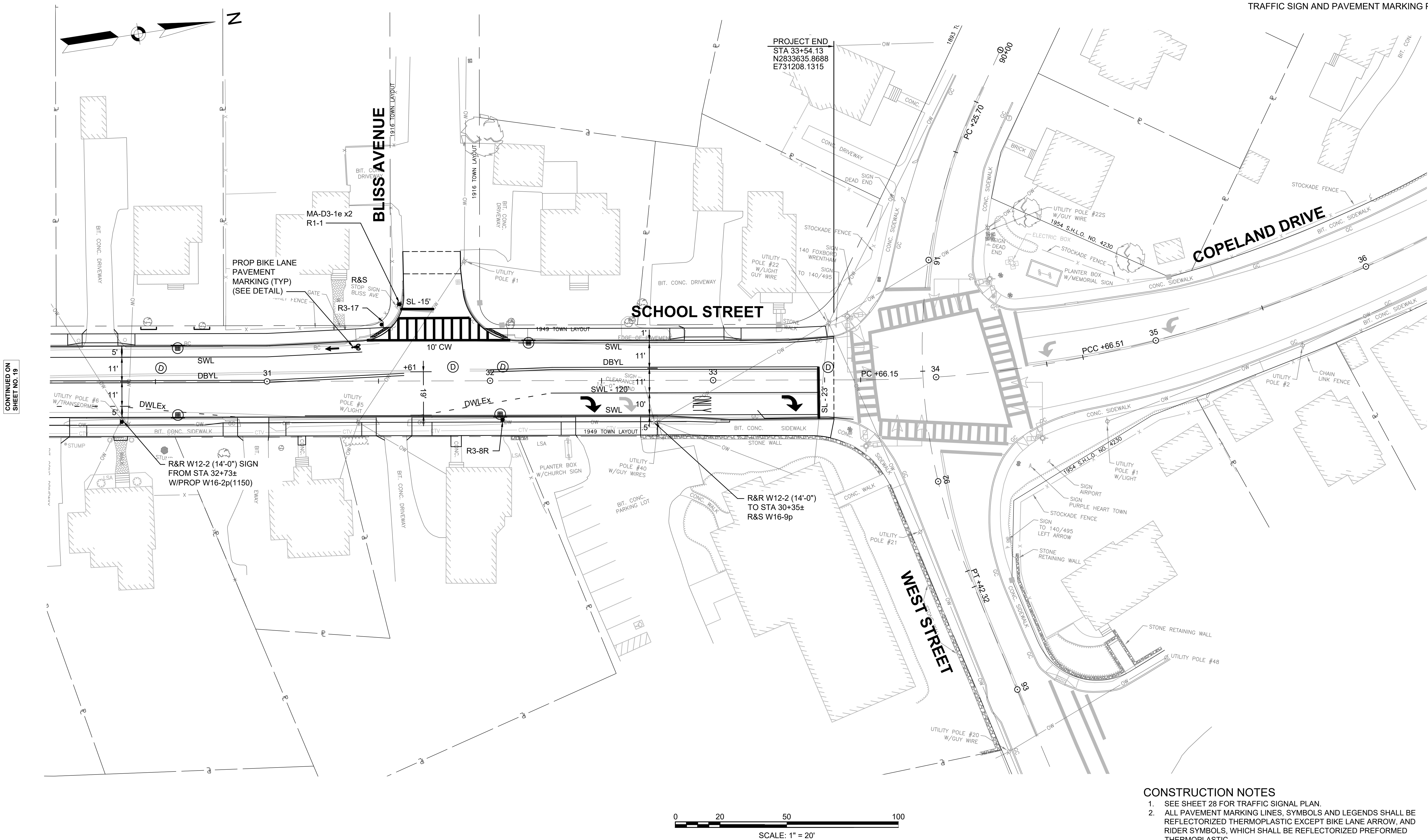


CONTINUED ON
SHEET NO. 23

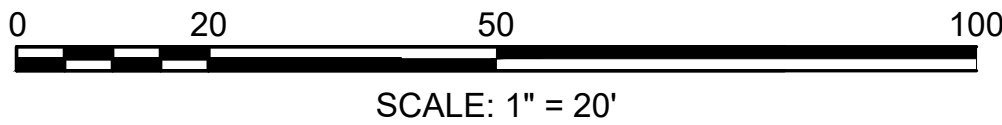
CONTINUED ON
SHEET NO. 25

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	25	73
PROJECT FILE NO. 609255			

TRAFFIC SIGN AND PAVEMENT MARKING PLANS

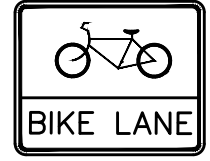


- CONSTRUCTION NOTES
- SEE SHEET 28 FOR TRAFFIC SIGNAL PLAN.
 - ALL PAVEMENT MARKING LINES, SYMBOLS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC EXCEPT BIKE LANE ARROW, AND RIDER SYMBOLS, WHICH SHALL BE REFLECTORIZED PREFORMED THERMOPLASTIC.
 - WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
 - RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.



CONTINUED ON
SHEET NO. 19

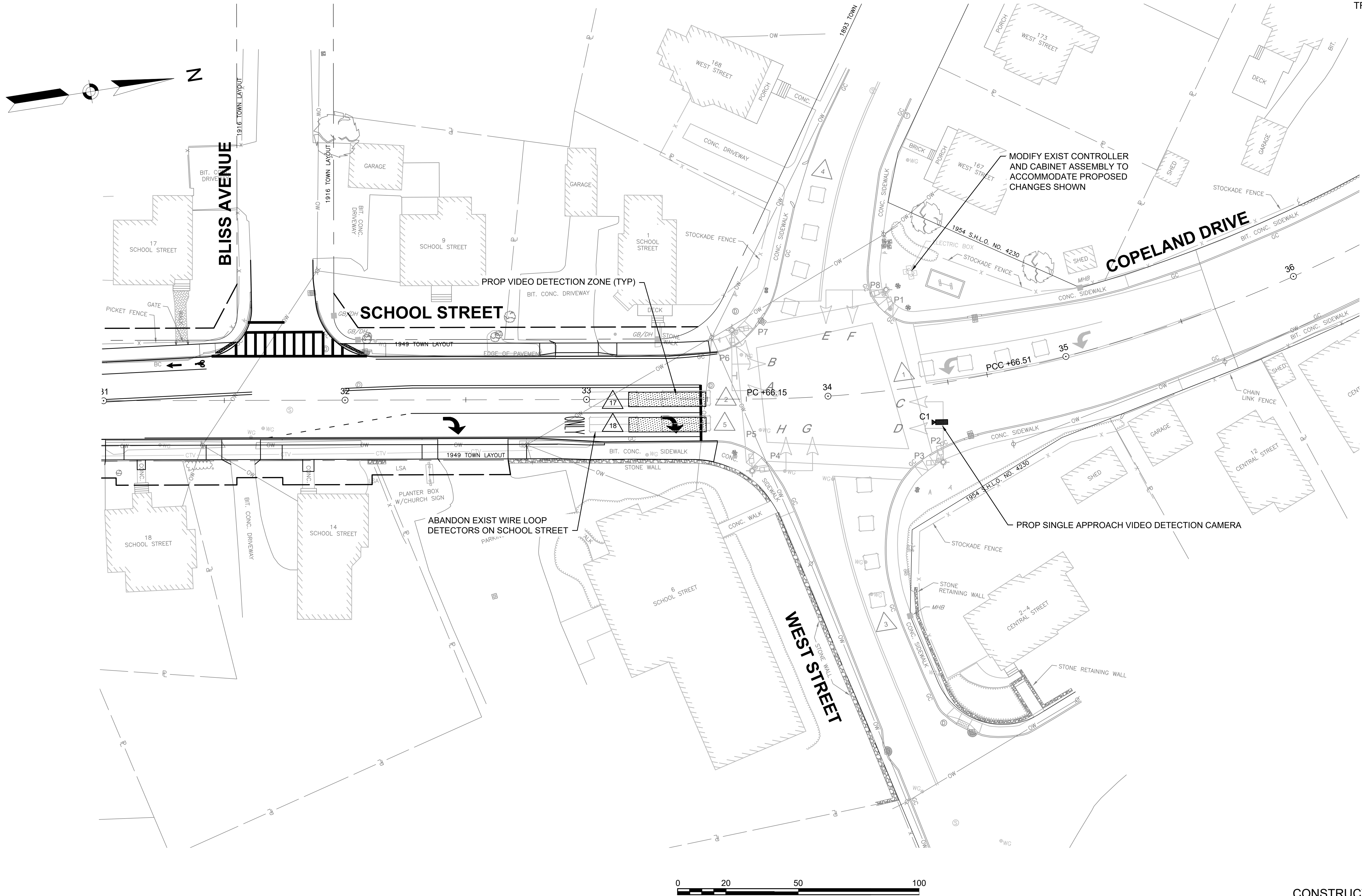
TRAFFIC SIGN SUMMARY

TRAFFIC SIGN SUMMARY													
IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND	BORDER			
R1-1	30"	30"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			4	RED	WHITE	WHITE	P5-4	6.25	25.00
R3-8R	36"	30"					1	WHITE	BLACK	BLACK	P5-1	7.50	7.50
R3-17	24"	18"					6	BLACK --- WHITE	WHITE --- BLACK	WHITE --- BLACK	P5-6	5.00	30.00
R3-17bP	24"	9"					2	WHITE	BLACK	BLACK	2 MTD W/R3-17	2.50	5.00
W11-2L	30"	30"					4	FLUOR- ESCENT YELLOW/ GREEN	BLACK	BLACK	P5-4	6.25	25.00
W11-2R	30"	30"					4	FLUOR- ESCENT YELLOW/ GREEN	BLACK	BLACK	MTD B2B W/ W11-2L	6.25	25.00
W16-2P (1150)	24"	18"					1	YELLOW	BLACK	BLACK	1 MTD W/ W12-2(14'-0")	3.00	3.00
W16-7pL	21"	15"					4	FLUOR- ESCENT YELLOW/ GREEN	BLACK	BLACK	4 MTD W/ W11-2L	2.00	8.00
W16-7pR	21"	15"					4	FLUOR- ESCENT YELLOW/ GREEN	BLACK	BLACK	4 MTD W/ W11-2R	2.00	8.00
MA-D3-1a	36"	12"		SEE LAYOUT ON SHEET 27			2	GREEN	WHITE	WHITE	P5-1 1 MTD W/ MA-D3-1a	PAID UNDER ITEM 874.	
MA-D3-1b	36"	12"		SEE LAYOUT ON SHEET 27			2	GREEN	WHITE	WHITE	2 MTD W/ MA-D3-1a	PAID UNDER ITEM 874.	
MA-D3-1c	30"	12"		SEE LAYOUT ON SHEET 27			2	GREEN	WHITE	WHITE	2 MTD W/ R1-1	PAID UNDER ITEM 874.	
MA-D3-1d	33"	12"		SEE LAYOUT ON SHEET 27			2	GREEN	WHITE	WHITE	2 MTD W/ R1-1	PAID UNDER ITEM 874.	
MA-D3-1e	33"	12"		SEE LAYOUT ON SHEET 27			2	GREEN	WHITE	WHITE	2 MTD W/ R1-1	PAID UNDER ITEM 874.	

NOTES:
1. HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION" FOR TEXT DIMENSIONS, AS AMENDED; THE 1990 MASS DPW STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR MOUNTING REQUIREMENTS; AND THE 2020 MASSDOT STANDARD SIGN BOOK, AS AMENDED.
2. STREET NAME SIGNS MA-D3-1A THRU MA-D3-1E SHALL BE SINGLE SIDED AND MOUNTED ON EITHER SIDE OF THE POST.

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	28	73
PROJECT FILE NO. 609255			

TRAFFIC SIGNAL PLANS



- CONSTRUCTION NOTES
1. SEE SHEET 29 FOR TRAFFIC SIGNAL DATA.
 2. RETAIN ALL EXISTING TS EQUIPMENT AND ALL TS CONDUIT UNLESS OTHERWISE NOTED.
 3. SEE SHEET 25 FOR SIGNAGE AND PAVEMENT MARKINGS.

TRAFFIC SIGNAL PLANS

SEQUENCE & TIMING NOTES:

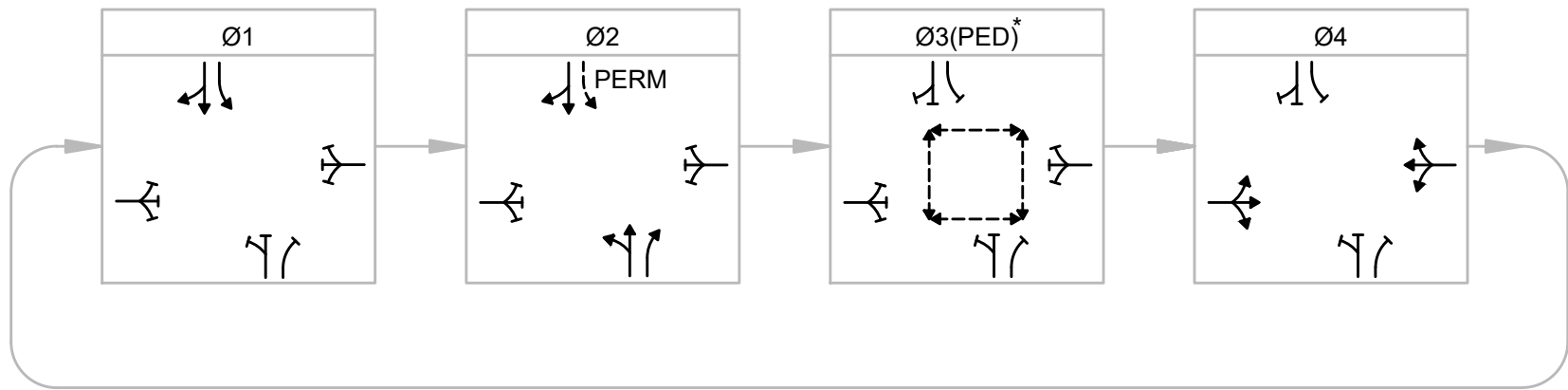
1. IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT WILL NOT CHANGE DURING THE CLEARANCE INTERVAL.
2. THE RIGHT OF WAY MAY BE ASSIGNED TO ANY PHASE OR ANY COMBINATION OF NON-CONFLICTING PHASES.
3. IF CALLS EXIST ON ALL PHASES, THE ASSIGNMENT OF RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE PREFERENTIAL PHASE SEQUENCE.
4. IF THE ASSIGNED RIGHT-OF-WAY FOR ANY TRAFFIC MOVEMENT IS TO CHANGE DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATION FOR THAT MOVEMENT WILL DISPLAY THE APPROPRIATE CLEARANCE INTERVALS.

EXISTING/ PROPOSED SEQUENCE AND TIMING FOR FULLY ACTUATED CONTROL (ISOLATED)

APPROACH	DIRECTION	HOUSING	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	FLASH		
COPELAND DRIVE	SB	A			R	G	Y	R	R	R	R	R	R	R																FY		
COPELAND DRIVE	SB	B	G	Y	R	G	Y	R	R	R	R	R	R	R																FY		
SCHOOL STREET	NB	C,D	R	R	R	G	Y	R	R	R	R	R	R	R																FY		
WEST STREET	WB	E,F	R	R	R	R	R	R	R	R	R	G	Y	R																FR		
WEST STREET	EB	G,H	R	R	R	R	R	R	R	R	R	G	Y	R																FR		
PEDESTRIAN X-ING	ALL	P1-P8	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW																OUT		
TIMING IN SECONDS																																
MINIMUM GREEN (INITIAL)			5			5						5																		CONFLICT FLASH OPERATION ONLY		
PASSAGE TIME (VEHICLE)			4			4					4																					
MAXIMUM 1			12			15					30																					
MAXIMUM 2			12			15					30																					
DYNAMIC MAXIMUM 3																																
MAXIMUM STEP																																
YELLOW CLEARANCE				3			3			3			3		1																	
RED CLEARANCE					1			1				4																				
PEDESTRIAN WALK									7																							
PEDESTRIAN CLEARANCE											8																					
DETECTOR MEMORY			NON-LOCK			NON-LOCK			LOCK			NON-LOCK																				
RECALL			OFF			MIN			OFF			OFF																				

- NOTES:
1. AUTOMATIC FLASHING OPERATION PER M.U.T.C.D.
2. * UPON PEDESTRIAN PUSH BUTTON ACTUATION
3. PERM = PERMISSIVE
4. MAXIMUM 1 = NORMAL OPERATION
5. MAXIMUM 2 = NOT USED
6. STOP AND GO OPERATION FOR 24 HOURS PER DAY. FLASHING OPERATION FOR EMERGENCY ONLY.

EXISTING PREFERENTIAL PHASE SEQUENCE



EXISTING SIGNAL HEAD DATA

A	B,C,D,E,G,H	P1 - P8
ALL 12" LENS		

VIDEO DETECTION DATA

DETECTION ZONE	APPROACH/LANE	CAMERA	DELAY /EXT	CALL PHASE
17	SCHOOL ST NB LEFT-THRU LANE	C1	0	Ø2
18	SCHOOL ST NB RIGHT-TURN LANE	C1	5 SEC DELAY	Ø2

- NOTES:
1. DELAY AND EXTENSION TIMINGS SHALL BE PROGRAMMED IN THE CONTROLLER ONLY.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING PROPOSED DETECTION ZONES AS SHOWN ON THE PLANS, AND ADJUSTING/RE-ADJUSTING DETECTION ZONES IN THE PRESENCE OF THE ENGINEER.

EXISTING /PROPOSED DETECTOR DATA

DETECTOR NO.	NO. SECTION/ SIZE	NO. OF TURNS	OPERATIONS	DELAY /EXT	CALL PHASE	LOOP CONNECTION
1	4-6'X6'	3	PRESENCE	0	Ø1	SERIES/ PARALLEL
2	2-6'X20' QUADRUPOLE	2 4 2	PRESENCE	0	Ø2	SERIES
3	4-6'X6'	3	PRESENCE	0	Ø4	SERIES/ PARALLEL
4	4-6'X6'	3	PRESENCE	0	Ø4	SERIES/ PARALLEL
5	2-6'X20' QUADRUPOLE	2 4 2	PRESENCE	0	Ø2	SERIES

NOTE: DELAY AND EXTENSION TIMINGS SHALL BE PROGRAMMED IN THE CONTROLLER ONLY

LIST OF MAJOR ITEMS REQUIRED

WEST STREET AT COPELAND DRIVE/ SCHOOL STREET		
PAY ITEM	QUANTITY	DESCRIPTION
816.02	1	MODIFY EXIST EAGLE EPAC 300 CONTROLLER AND TS 1 CABINET ASSEMBLY TO ACCOMMODATE PROPOSED CHANGES SHOWN
	1	SINGLE APPROACH VIDEO DETECTION CAMERA

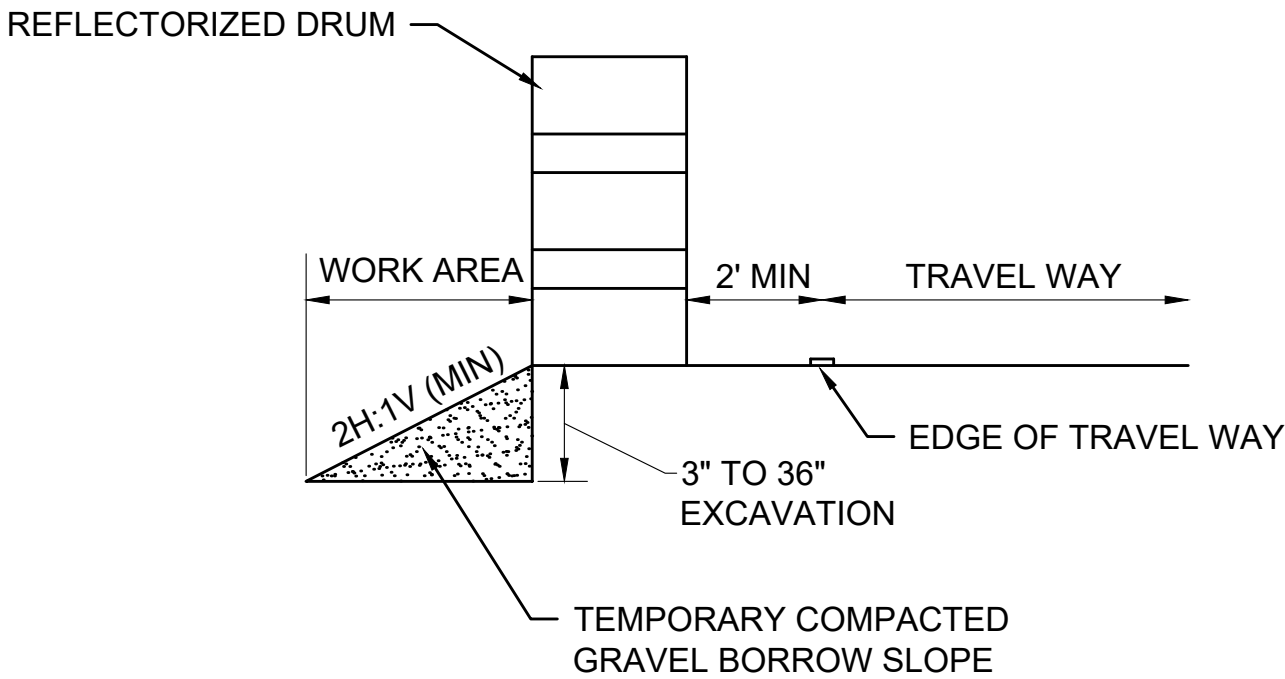
PLUS NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION AND PROVIDE AN OPERATING TRAFFIC SIGNAL SYSTEM.

GENERAL NOTES

- ALL CONSTRUCTION SIGNING, TEMPORARY TRAFFIC CONTROL DEVICES, AND ROADSIDE ELEMENTS SHALL CONFORM WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED, THE MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS, THE LATEST REVISIONS OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, (AASHTO) ROADSIDE DESIGN GUIDE, AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, AND NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 OR THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
- WORK HOURS SHALL BE 7:00AM TO 3:00PM MONDAY THRU FRIDAY UNLESS OTHERWISE APPROVED BY MASSDOT AND THE TOWN OF MANSFIELD. NO WORK IMPACTING THE TRAVEL WAY WILL BE ALLOWED DURING PEAK TRAFFIC PERIODS UNLESS OTHERWISE APPROVED. PEAK PERIODS ARE DEFINED AS MONDAY THRU FRIDAY, 6:00AM TO 9:00AM AND 3:00PM TO 7:00PM.
- NO WORK SHALL OCCUR WITHIN THE PUBLIC WAY THE DAY BEFORE, AFTER OR ON A STATE RECOGNIZED HOLIDAY UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ALL TEMPORARY PEDESTRIAN PATHWAYS SHALL COMPLY FULLY WITH ALL REQUIREMENTS OF THE MUTCD AND ALL APPLICABLE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB) AND AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) REQUIREMENTS AND PUBLIC RIGHTS-OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
- ALL DRUMS OUTSIDE TAPERS SHALL BE SET AT 20' ON CENTER MAX. UNLESS OTHERWISE NOTED OR ADJUSTED BY THE ENGINEER.
- ALL DRUMS SHALL BE APPROXIMATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN SAFE AND REASONABLE ABUTTER ACCESS. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS AND OTHER TRAFFIC CONTROL DEVICES, GRADING AND TEMPORARY PAVEMENT FOR PASSAGE OF PEDESTRIAN, VEHICULAR AND EMERGENCY TRAFFIC THROUGH THE WORK AREAS, BOTH DURING AND AFTER WORKING HOURS, TO MAINTAIN SUCH ACCESS.
- THE FIRST 10 DRUMS OF TAPERS SHALL BE REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS AND SHALL BE OPERATING, AT A MINIMUM, BETWEEN DUSK AND DAWN, WHEN TAPER IS DEPLOYED.
- REFLECTORIZED CONES SHALL BE A MINIMUM OF 36 INCHES IN HEIGHT.
- CONES MAY BE USED IN LIEU OF DRUMS OUTSIDE OF TAPER AREAS.
- THE CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OR RESTRICTION OF ACCESS.
- FOR DROP-OFFS 3" OR LESS WITHIN THE CLEAR ZONE, CONDITION MAY BE MITIGATED WITH W8-9 (LOW SHOULDER) SIGN OR TEMPORARY CHANNELIZATION DEVICES. FOR DROP-OFFS GREATER THAN 3" BUT NO MORE THAN 36", DETERMINE WHETHER IT IS MORE COST EFFECTIVE TO INSTALL BOTH W8-9 SIGN AND TEMPORARY CHANNELIZATION DEVICES IN ACCORDANCE WITH MASSDOT WORK ZONE SAFETY GUIDE OR W8-9 SIGN WITH A 2H:1V (MIN) WEDGE OR TO REMOVE THE HAZARD.
- CONTRACTOR SHALL STAGE WORK SUCH THAT A DROP-OFF OF NO MORE THAN 12" AT THE END OF EACH WORK DAY EXISTS WITHIN THE CLEAR ZONE AT ANY TIME AND ENSURE DROP-OFF IS MITIGATED WITHOUT BARRIER PER NOTE 11.
- CONSTRUCTION CLEAR ZONE SHALL BE IN ACCORDANCE WITH MASSDOT BOSTON TRAFFIC GUIDELINES AS FOLLOWS:
4' IF POSTED SPEED IS LESS THAN 35 MPH
8' IF POSTED SPEED IS 35 MPH
- 11' MINIMUM LANE WIDTHS SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
- TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE COVERED OR REMOVED DURING NON-WORKING HOURS WHEN NOT IN USE.
- SIGNS INSTALLED ON PORTABLE STANDS REQUIRE 12 INCH MINIMUM MOUNTING HEIGHT FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE SIGN.
- SIGNS INSTALLED ON PORTABLE STANDS PLACED AMONG CHANNELIZATION DEVICES REQUIRE A 36 INCH MINIMUM MOUNTING HEIGHT FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE SIGN.
- SIGNS MOUNTED ON POSTS REQUIRE A MINIMUM 84 INCH MOUNTING HEIGHT FROM THE ROADWAY OR SIDEWALK SURFACE TO THE BOTTOM OF THE SIGN. CONTRACTOR SHALL MAINTAIN A MINIMUM SIDEWALK HORIZONTAL CLEAR WIDTH OF 36" AT ALL TIMES.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN NCHRP 350 AND/OR MASH CRASH TESTED SIGN SUPPORTS AND INSTALLED IN ACCORDANCE WITH THE MUTCD. SIGNS SHALL NOT BE MOUNTED TO OR LEANED AGAINST DRUMS OR CONES.
- ARROW BOARD FLASHING CAUTION SHALL FLASH IN FOUR-POINT CAUTION MODE ONLY.
- W21-7 SIGNS SHALL BE INSTALLED IN ADVANCE (100' MIN) OF AREAS WHERE UTILITY CASTINGS HAVE BEEN RAISED IN ADVANCE OF PAVING OPERATIONS OR AS REQUESTED BY THE ENGINEER.
- W8-15 SIGNS SHALL BE INSTALLED IN ADVANCE (100' MIN) OF PAVEMENT MILLING AREAS OR AS REQUESTED BY THE ENGINEER.
- TEMPORARY MARKINGS SHALL BE WATER-BORNE PAINT OR SURFACE-APPLIED REMOVEBLE TAPE, AS APPROVED BY THE ENGINEER.
- ALL TEMPORARY CROSSWALKS AND STOP LINES SHALL BE 12 INCHES WIDE.
- ALL TEMPORARY DOUBLE YELLOW LINES (DBYL) SHALL BE 6 INCHES WIDE.
- W20-1c, MA-R2-10a OR MA-R2-10e SIGNS SHOWN ON ADVANCE SIGN SCHEMATIC ON SHEET 35 MAY BE USED IN LIEU OF THOSE SIGNS SHOWN ON TYPICAL DETAILS ON THE TEMPORARY TRAFFIC CONTROL PLANS IF MINIMUM SIGN SPACING IS MET.
- CONTRACTOR SHALL SECURE WORK AREAS BY APPROPRIATE MEANS, TO PREVENT UNAUTHORIZED ACCESS AT ALL TIMES.
- THERE IS NO DESIGNATED BICYCLE LANE ON THE ROADWAY WITHIN THE PROJECT LIMITS. BICYCLES ARE EXPECTED TO SHARE THE ROAD WITH GENERAL VEHICULAR TRAFFIC.
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE TRANSVERSELY PLACED RUMBLE STRIPS EVENLY SPACED. SPACING SHALL BE 10 FT ON CENTER OR AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL SETUP DAILY WORK ZONES AS NECESSARY FOR FULL DEPTH PAVEMENT CONSTRUCTION. AT THE END OF EACH WORK SHIFT, UNTIL INTERMEDIATE PAVING COURSE IS INSTALLED, CONTRACTOR TO FOLLOW THE BELOW GUIDELINES OR AS DIRECTED BY THE ENGINEER.
A. GRAVEL PAVEMENT COURSE SHALL REMAIN OPEN TO TRAVEL FOR A MAXIMUM OF 10 CALENDAR DAYS PRIOR TO PAVING
B. BASE AND BINDER PAVING COURSES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND PAVEMENT NOTES. IN LOCATIONS WHERE THE ROADWAY IS NARROWED, PAVED ACCESS SHALL BE PROVIDED AT ALL ABUTTING DRIVEWAYS AND PARKING AREAS
C. MAINTAIN ADEQUATE ROADWAY DRAINAGE AT ALL TIMES

SUGGESTED CONSTRUCTION SEQUENCING

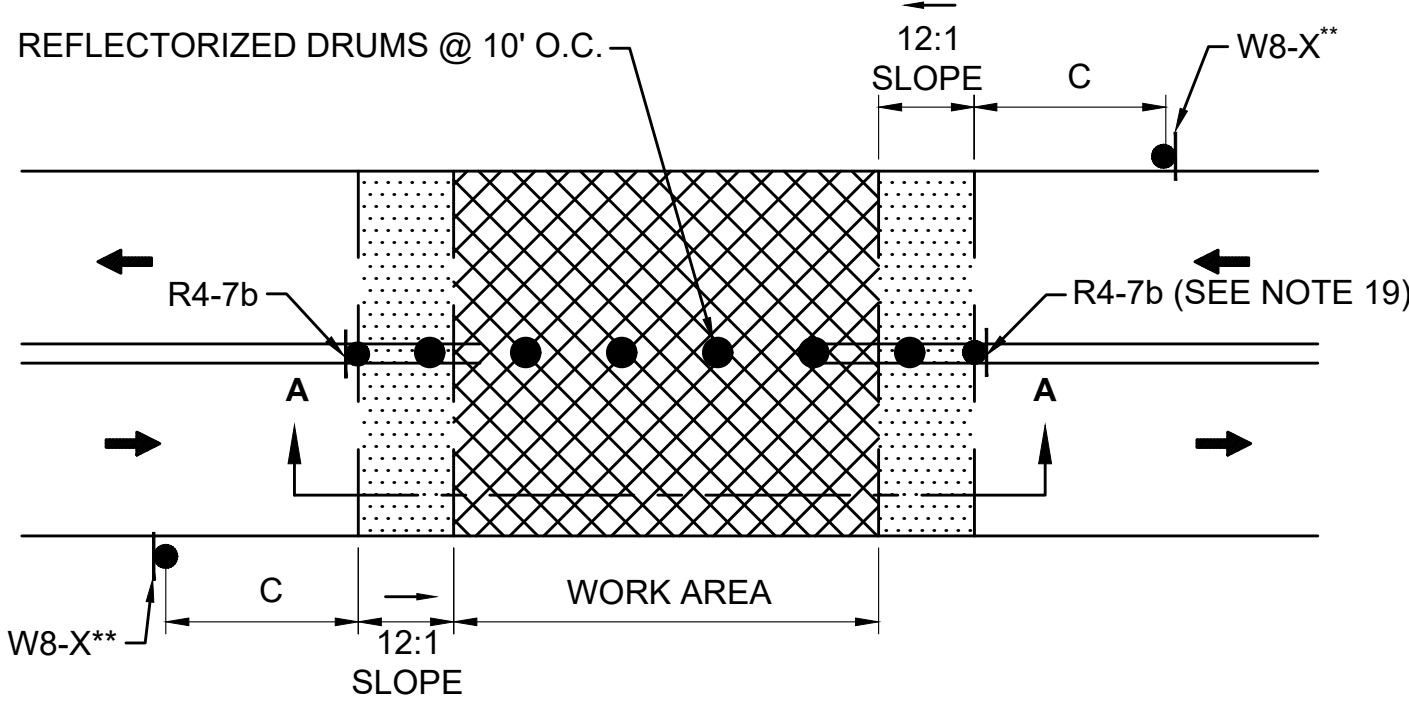
- INSTALL WATER AND GAS UTILITIES.
- INSTALL DRAINAGE STRUCTURES AND PIPES AS NECESSARY.
- WEST SIDE WORK - REMOVE EXISTING PAVEMENT LAYERS AND CONSTRUCT FULL DEPTH PAVEMENT TO INTERMEDIATE COURSE, CURB AND SIDEWALK. MAINTAIN PEDESTRIANS ON THE EXIST EASTERLY SIDEWALK AND DAILY DETOUR NORTHBOUND TRAFFIC DURING WORKING HOURS.
- EAST SIDE WORK - REMOVE EXISTING PAVEMENT LAYERS, AND CONSTRUCT FULL DEPTH PAVEMENT TO INTERMEDIATE COURSE, CURB AND SIDEWALK. MAINTAIN PEDESTRIANS ON THE NEWLY BUILD WESTERLY SIDEWALK AND DAILY DETOUR NORTHBOUND TRAFFIC DURING WORKING HOURS.
- CONSTRUCT FINAL SURFACE COURSE AND INSTALL FINAL SIGNS AND PAVEMENT MARKINGS.



- NOTE:
- CONTRACTOR SHALL INSTALL W8-9 SIGN ON ALL ROADWAYS 350 FEET IN ADVANCE OF THE START OF AND AT REGULAR INTERVALS THROUGHOUT THE DROP-OFF CONDITION.
 - DRUMS MAY BE OMITTED AT THE DISCRETION OF THE RESIDENT ENGINEER WHERE A 2H:1V (MIN) WEDGE IS PROVIDED.

TYPICAL ROADWAY DROP-OFF PROTECTION

SCALE: NTS DWG: TTCP1f DATE: FEB 2025



- NOTES:
- SQUARE OFF THE FULL WIDTH OF THE ROADWAY AT THE END OF WORK DAY.
 - ** CONTRACTOR SHALL INSTALL W8-1 AT LIMIT OF EXCAVATION OR W8-3, W8-8, OR W8-15 SIGN, AS APPROPRIATE, ON ALL ROADWAYS IN ADVANCE OF THE TRANSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

TEMPORARY PAVEMENT TRANSITION

SCALE: NTS

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	30	73
PROJECT FILE NO. 609255			

TEMPORARY TRAFFIC CONTROL PLANS
GENERAL NOTES & LEGEND

LEGEND

	POLICE OFFICER
	TRAFFIC SIGNAL
	REFLECTORIZED DRUM
	REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS (SEE NOTE 7)
	TEMPORARY CONSTRUCTION SIGN
	TRAFFIC CONE
	TYPE III BARRICADE
	ARROW BOARD (AB) (CAUTION)
	TEMPORARY PORTABLE RUMBLE STRIPS
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	WORK AREA (PUBLIC ACCESS RESTRICTED)
	TRANSITION/BUFFER AREAS
	TRAFFIC FLOW
	PEDESTRIAN ROUTE
	CONSTRUCTION FENCE
	TEMPORARY PEDESTRIAN BARRICADE
NTS	NOT TO SCALE
TTCP	TEMPORARY TRAFFIC CONTROL PLAN

ADVANCE SIGN SPACING

ROADWAY	DISTANCE BETWEEN SIGNS (FEET)		
	A	B	C
ROUTE 140, SCHOOL ST, COPELAND DR	350	350	350
ALL OTHER ROADWAYS	100	100	100

BUFFER SPACING

SPEED (MPH)	DISTANCE (FEET)
15	80
20	115
25	155
30	200
35	250

LANE TAPER LENGTH FORMULAS

L= TAPER LENGTH IN FEET	
W= WIDTH OF ROADWAY TO BE SHIFTED OR REDIRECTED IN FEET	
S= POSTED SPEED LIMIT IN MPH	
POSTED SPEED	
40 MPH OR LESS	GREATER THAN 40 MPH
$L = \frac{WS^2}{60}$	L= WS



- SCALE: NTS



- SCALE: NTS



- SCALE: NTS



- SCALE: NTS

PCMS #1 & #2 MESSAGE TEXT

72 HOURS PRIOR
TO START OF WORK

SCHOOL
STREET
WORK

BEGINS
DAY
DATE

DURING
CONSTRUCTION

SCHOOL
STREET
WORK

SEEK
ALT
ROUTE

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	33	73
PROJECT FILE NO. 609255			

DETOUR PLAN - SCHOOL STREET NB
BETWEEN SPRING STREET & CORAL STREET

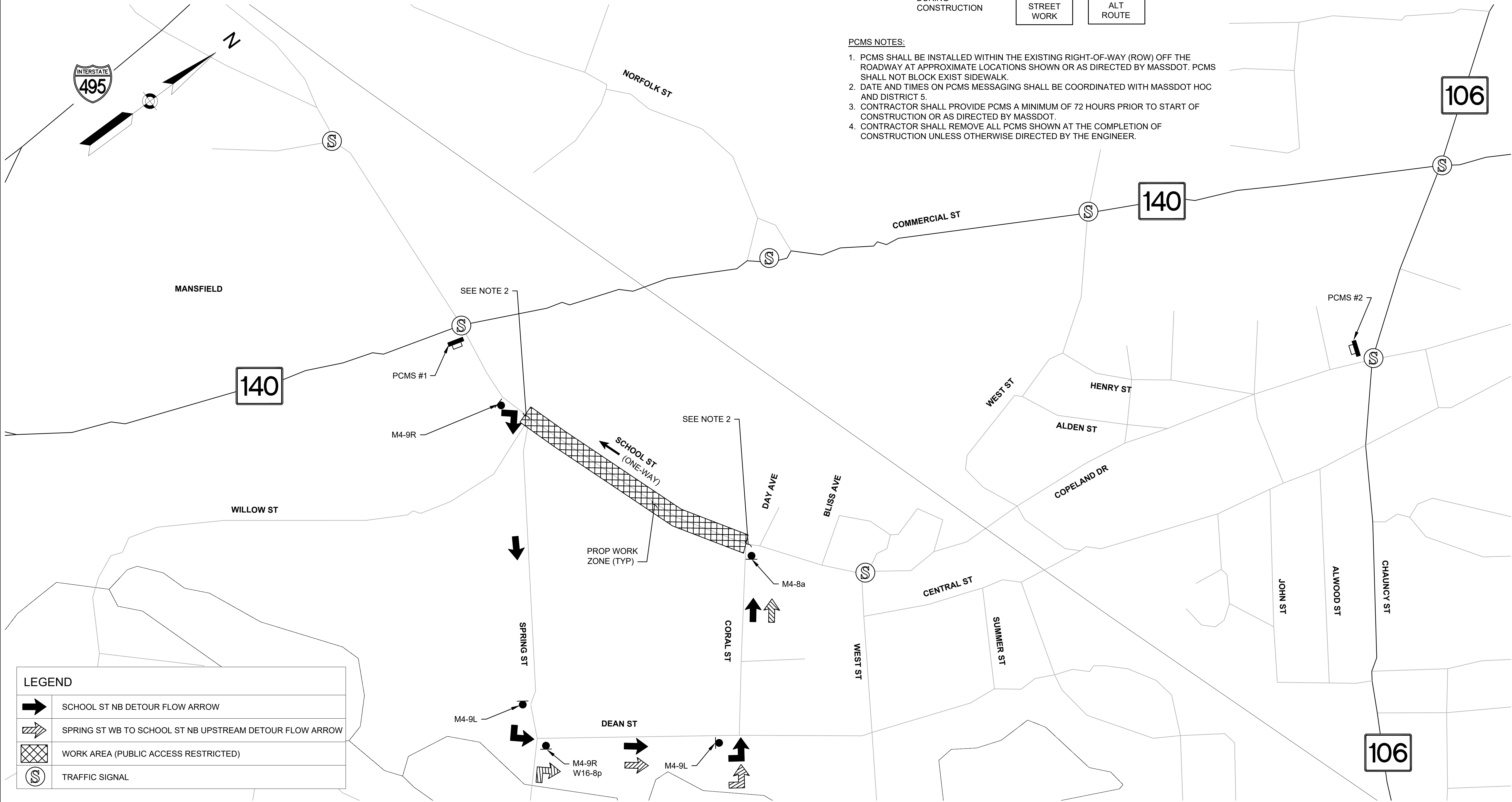
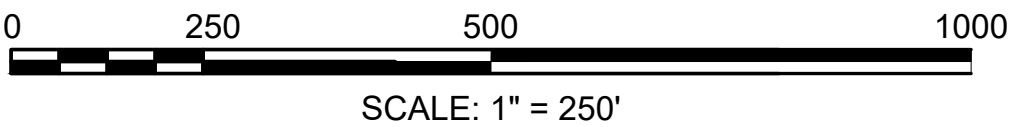
PCMS NOTES:

1. PCMS SHALL BE INSTALLED WITHIN THE EXISTING RIGHT-OF-WAY (ROW) OFF THE ROADWAY AT APPROXIMATE LOCATIONS SHOWN OR AS DIRECTED BY MASSDOT. PCMS SHALL NOT BLOCK EXIST SIDEWALK.
2. DATE AND TIMES ON PCMS MESSAGING SHALL BE COORDINATED WITH MASSDOT HOC AND DISTRICT 5.
3. CONTRACTOR SHALL PROVIDE PCMS A MINIMUM OF 72 HOURS PRIOR TO START OF CONSTRUCTION OR AS DIRECTED BY MASSDOT.
4. CONTRACTOR SHALL REMOVE ALL PCMS SHOWN AT THE COMPLETION OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

LEGEND	
	SCHOOL ST NB DETOUR FLOW ARROW
	SPRING ST WB TO SCHOOL ST NB UPSTREAM DETOUR FLOW ARROW
	WORK AREA (PUBLIC ACCESS RESTRICTED)
	TRAFFIC SIGNAL

NOTES:

1. SEE GENERAL NOTES & LEGEND ON SHEET 30 FOR ADDITIONAL INFORMATION.
2. REFER TO SCHOOL STREET NORTHBOUND ROAD CLOSURE DETAILS ON SHEET 32.
3. CONTRACTOR TO RESTORE TRAFFIC BACK TO ORIGINAL CONDITION AT THE END OF DAY SHIFT.
4. MAINTAIN ONE-WAY ABUTTER ACCESS FOR THE DURATION OF DETOUR SETUP.
5. MAINTAIN EMERGENCY VEHICLE ACCESS AT ALL TIMES AS COORDINATED WITH THE TOWN.



PCMS #1 & #2 MESSAGE TEXT

72 HOURS PRIOR
TO START OF WORK

SCHOOL
STREET
WORK

BEGINS
DAY
DATE

DURING
CONSTRUCTION

SCHOOL
STREET
WORK

SEEK
ALT
ROUTE

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035/(063)X	34	73
PROJECT FILE NO. 609255			

DETOUR PLAN - SCHOOL STREET NB
BETWEEN CORAL STREET & WEST STREET

PCMS NOTES:

1. PCMS SHALL BE INSTALLED WITHIN THE EXISTING RIGHT-OF-WAY (ROW) OFF THE ROADWAY AT APPROXIMATE LOCATIONS SHOWN OR AS DIRECTED BY MASSDOT. PCMS SHALL NOT BLOCK EXIST SIDEWALK.
2. DATE AND TIMES ON PCMS MESSAGING SHALL BE COORDINATED WITH MASSDOT HOC AND DISTRICT 5.
3. CONTRACTOR SHALL PROVIDE PCMS A MINIMUM OF 72 HOURS PRIOR TO START OF CONSTRUCTION OR AS DIRECTED BY MASSDOT.
4. CONTRACTOR SHALL REMOVE ALL PCMS SHOWN AT THE COMPLETION OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

LEGEND

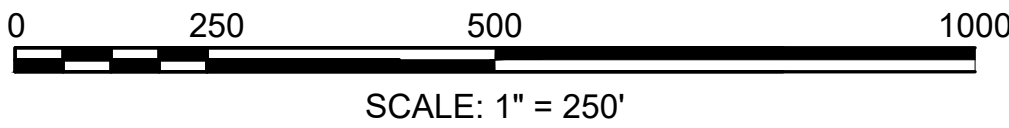
 SCHOOL ST NB DETOUR FLOW ARROW

 WORK AREA (PUBLIC ACCESS RESTRICTED)

 TRAFFIC SIGNAL

NOTES:

1. SEE GENERAL NOTES & LEGEND ON SHEET 30 FOR ADDITIONAL INFORMATION.
2. REFER TO SCHOOL STREET NORTHBOUND ROAD CLOSURE DETAILS ON SHEET 32.
3. CONTRACTOR TO RESTORE TRAFFIC BACK TO ORIGINAL CONDITION AT THE END OF DAY SHIFT.
4. MAINTAIN ONE-WAY ABUTTER ACCESS FOR THE DURATION OF DETOUR SETUP.
5. MAINTAIN EMERGENCY VEHICLE ACCESS AT ALL TIMES AS COORDINATED WITH THE TOWN.



PCMS #1 & #2 MESSAGE TEXT

14 DAYS PRIOR
TO START OF
CONSTRUCTION

SCHOOL
STREET
WORK

BEGINS
DAY
DATE

FOR DURATION OF
CONSTRUCTION

SCHOOL
STREET
WORK

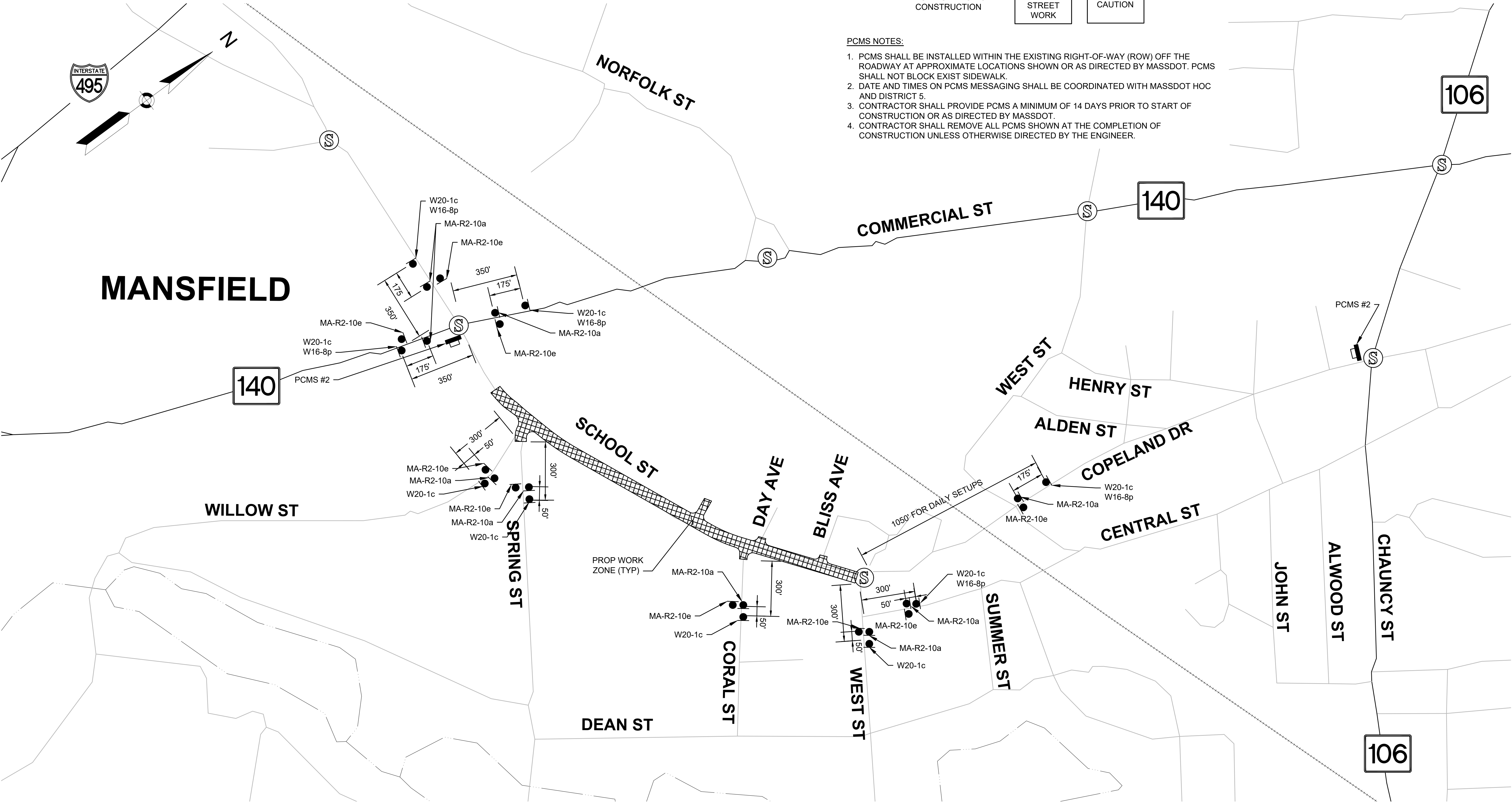
USE
CAUTION

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035/(063)X	35	73
PROJECT FILE NO. 609255			

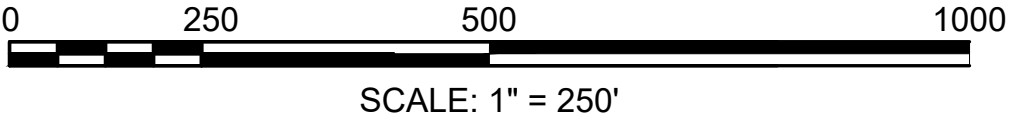
TEMPORARY TRAFFIC CONTROL PLANS
ADVANCE SIGN PLAN

PCMS NOTES:

1. PCMS SHALL BE INSTALLED WITHIN THE EXISTING RIGHT-OF-WAY (ROW) OFF THE ROADWAY AT APPROXIMATE LOCATIONS SHOWN OR AS DIRECTED BY MASSDOT. PCMS SHALL NOT BLOCK EXIST SIDEWALK.
2. DATE AND TIMES ON PCMS MESSAGING SHALL BE COORDINATED WITH MASSDOT HOC AND DISTRICT 5.
3. CONTRACTOR SHALL PROVIDE PCMS A MINIMUM OF 14 DAYS PRIOR TO START OF CONSTRUCTION OR AS DIRECTED BY MASSDOT.
4. CONTRACTOR SHALL REMOVE ALL PCMS SHOWN AT THE COMPLETION OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

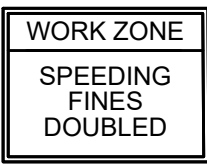
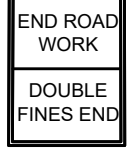
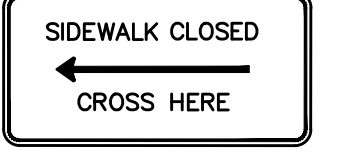
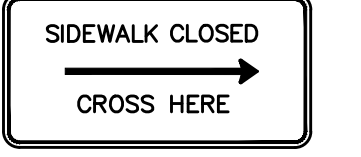
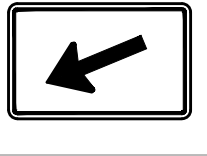


NOTE:
1. SEE GENERAL NOTES & LEGEND ON SHEET 30 FOR ADDITIONAL INFORMATION.

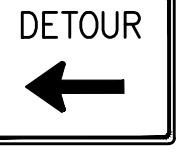
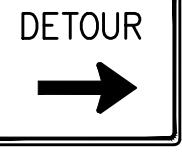
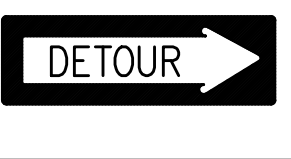


LEGEND	
	WORK AREA (PUBLIC ACCESS RESTRICTED)
	TRAFFIC SIGNAL

TEMPORARY TRAFFIC CONTROL SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			COLOR			UNIT AREA (S.F.)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.	BACK- GROUND	LEGEND	BORDER	
MA-R2-10a	48"	36"		AS PER MASSDOT STANDARD			FLUOR- ESCENT ORANGE	BLACK	BLACK	12.00
MA-R2-10e	36"	48"					WHITE FLUOR- ESCENT ORANGE WHITE	BLACK	BLACK	12.00
R3-1	24"	24"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			WHITE	RED/ BLACK	BLACK	4.00
R3-2	24"	24"					WHITE	RED/ BLACK	BLACK	4.00
R4-7b	24"	30"					WHITE	BLACK	BLACK	5.00
R5-1	30"	30"					WHITE	RED/ WHITE	---	6.25
R9-11L	24"	18"					WHITE	BLACK	BLACK	3.00
R9-11R	24"	18"					WHITE	BLACK	BLACK	3.00
R9-11aL	24"	12"					WHITE	BLACK	BLACK	2.00
R9-11aR	24"	12"					WHITE	BLACK	BLACK	2.00
R11-2	48"	30"					WHITE	BLACK	BLACK	10.00
W8-1	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W8-3	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W8-8	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W8-9	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W8-15	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W11-2	30"	30"					FLUOR- ESCENT YELLOW- GREEN	BLACK	BLACK	6.25
W16-7p(L)	24"	12"					FLUOR- ESCENT YELLOW- GREEN	BLACK	BLACK	2.00
W16-9p	24"	12"					FLUOR- ESCENT YELLOW- GREEN	BLACK	BLACK	2.00

TEMPORARY TRAFFIC CONTROL SIGN SUMMARY (CONTINUED)

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			COLOR			UNIT AREA (S.F.)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.	BACK- GROUND	LEGEND	BORDER	
W20-1c	36"	36"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W20-2c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W21-5aR	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W21-5bR	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W20-3c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W20-4c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
MA-W20-7b	36"	36"		AS PER MASSDOT STANDARD			FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
W21-7	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
MA-W28-1	36"	36"		AS PER MASSDOT STANDARD			FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00
M4-9bL	30"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK	5.00
M4-9bL	30"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK	5.00
M4-9bR	30"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK	5.00
M4-9L	30"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK	5.00
M4-9R	30"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK	5.00
M4-10L	48"	18"					FLUOR- ESCENT ORANGE	BLACK	---	6.00
M4-10R	48"	18"					FLUOR- ESCENT ORANGE	BLACK	---	6.00
W16-8p	30"	8"		4"C	2" 2"	N/A	FLUOR- ESCENT ORANGE	BLACK	BLACK	1.67

- NOTES:
1. HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION" FOR TEXT DIMENSIONS, AS AMENDED; THE 1977 MASSHIGHWAY DEPARTMENT CONSTRUCTION AND TRAFFIC STANDARD DETAILS, AS AMENDED, FOR SIGNS AND SUPPORTS; THE MASSHIGHWAY DEPARTMENT SIGN LISTINGS 1993 EDITION, AS AMENDED; THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR MOUNTING REQUIREMENTS; AND THE 2017 MassDOT STANDARD SIGNS BOOK, AS AMENDED.
2. ALL SIGNS SHOWN GRAPHICALLY FOR INFORMATION ONLY. SIGN VENDOR SHALL FABRICATE ALL SIGNS IN ACCORDANCE WITH THE APPLICABLE STANDARDS.

MANSFIELD
SCHOOL STREET

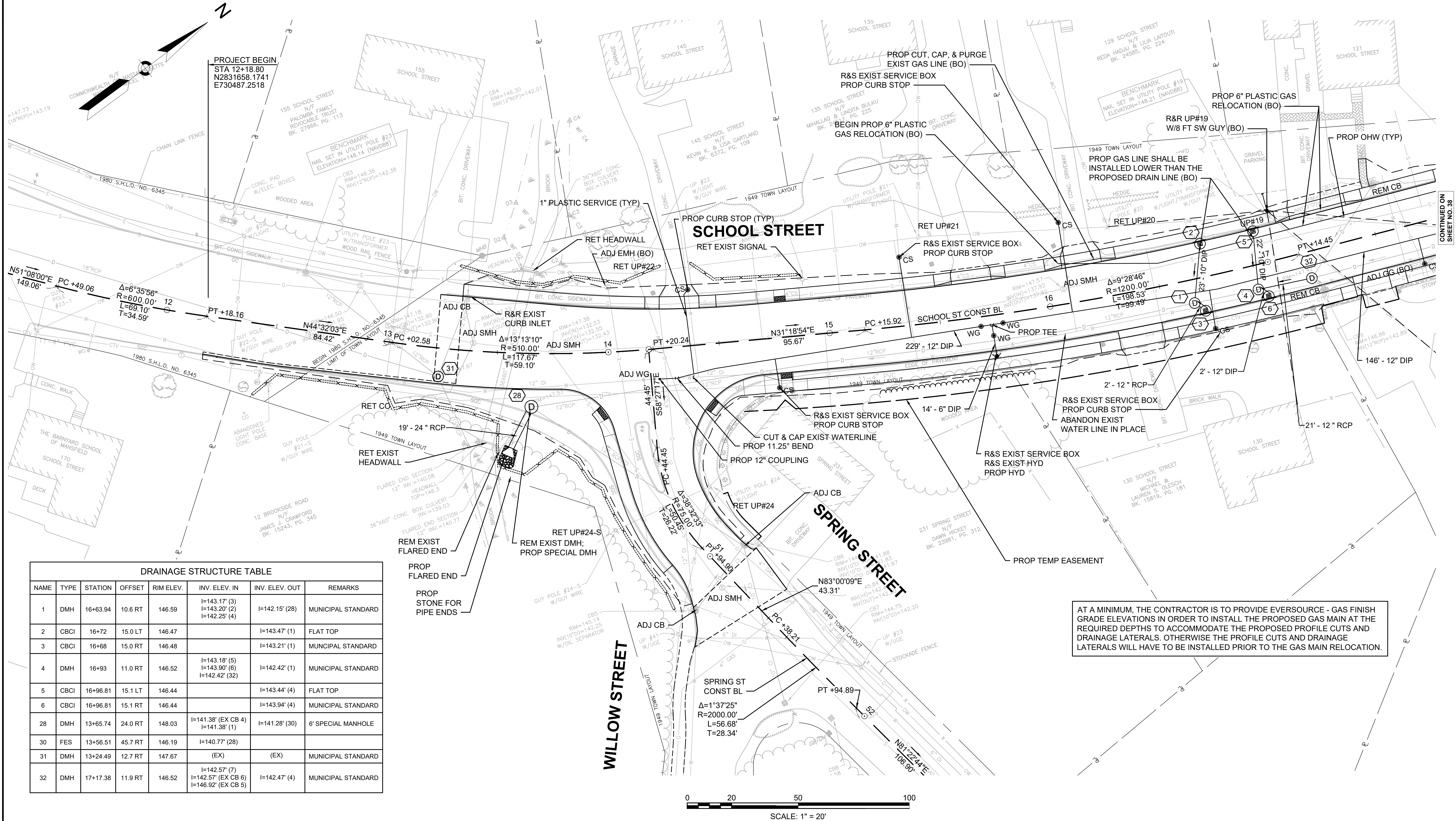
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	36	73

PROJECT FILE NO. 609255

TEMPORARY TRAFFIC CONTROL PLANS
SIGN SUMMARY

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	37	73
PROJECT FILE NO. 609255			

UTILITY PLANS



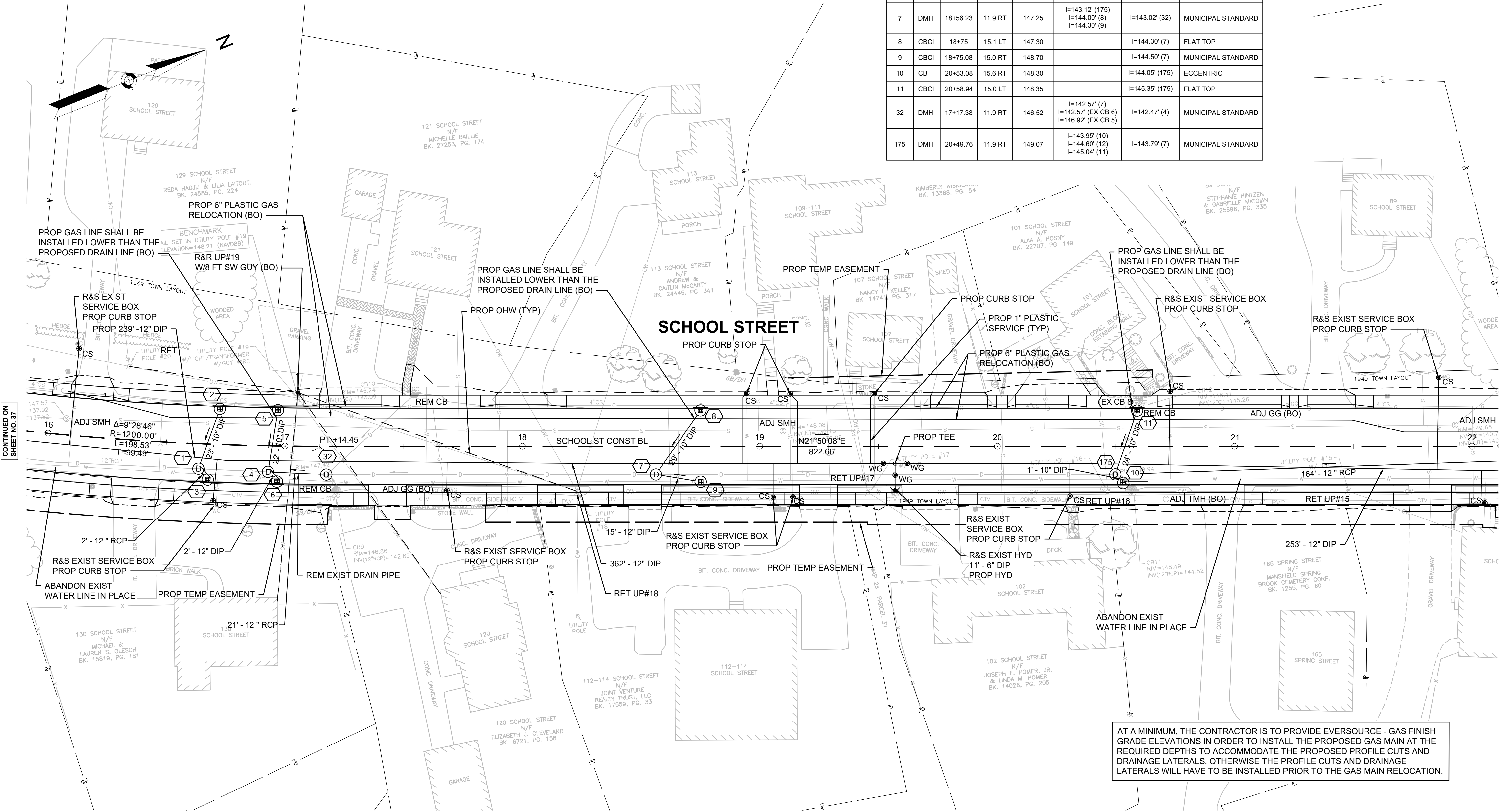
AT A MINIMUM, THE CONTRACTOR IS TO PROVIDE EVERSOURCE - GAS FINISH GRADE ELEVATIONS IN ORDER TO INSTALL THE PROPOSED GAS MAIN AT THE REQUIRED DEPTHS TO ACCOMMODATE THE PROPOSED PROFILE CUTS AND DRAINAGE LATERALS. OTHERWISE THE PROFILE CUTS AND DRAINAGE LATERALS WILL HAVE TO BE INSTALLED PRIOR TO THE GAS MAIN RELOCATION.

CONTINUED ON
SHEET NO. 38

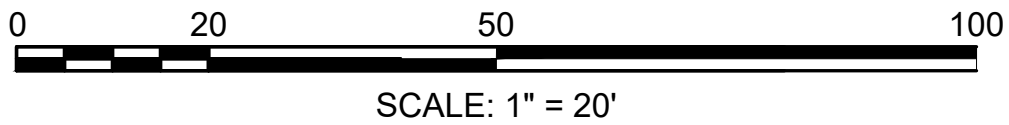
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035/063X	38	73
PROJECT FILE NO. 609255			

UTILITY PLANS

DRAINAGE STRUCTURE TABLE						
NAME	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT
4	DMH	16+93	11.0 RT	146.52	I=143.18' (5) I=143.90' (6) I=142.42' (32)	I=142.42' (1)
5	CBCI	16+96.81	15.1 LT	146.37		I=143.44' (4)
6	CBCI	16+96.81	15.1 RT	146.37		I=143.94' (4)
7	DMH	18+56.23	11.9 RT	147.25	I=143.12' (175) I=144.00' (8) I=144.30' (9)	I=143.02' (32)
8	CBCI	18+75	15.1 LT	147.30		I=144.30' (7)
9	CBCI	18+75.08	15.0 RT	148.70		I=144.50' (7)
10	CB	20+53.08	15.6 RT	148.30		I=144.05' (175)
11	CBCI	20+58.94	15.0 LT	148.35		I=145.35' (175)
32	DMH	17+17.38	11.9 RT	146.52	I=142.57' (7) I=142.57' (EX CB 6) I=146.92' (EX CB 5)	I=142.47' (4)
175	DMH	20+49.76	11.9 RT	149.07	I=143.95' (10) I=144.60' (12) I=145.04' (11)	I=143.79' (7)

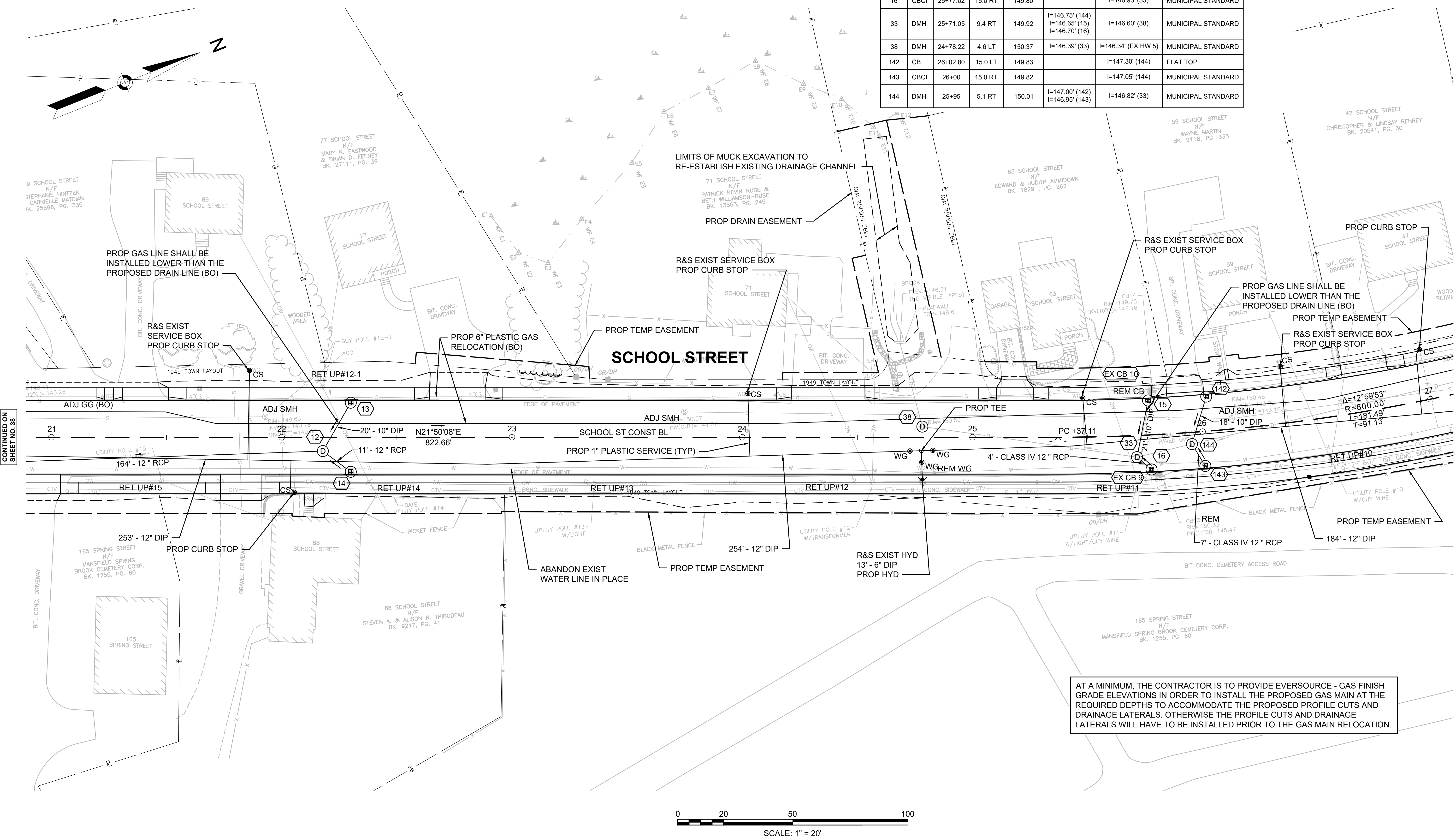


AT A MINIMUM, THE CONTRACTOR IS TO PROVIDE EVERSOURCE - GAS FINISH GRADE ELEVATIONS IN ORDER TO INSTALL THE PROPOSED GAS MAIN AT THE REQUIRED DEPTHS TO ACCOMMODATE THE PROPOSED PROFILE CUTS AND DRAINAGE LATERALS. OTHERWISE THE PROFILE CUTS AND DRAINAGE LATERALS WILL HAVE TO BE INSTALLED PRIOR TO THE GAS MAIN RELOCATION.

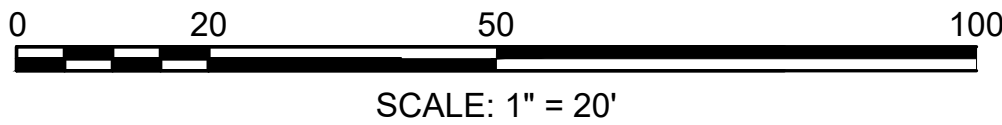


DRAINAGE STRUCTURE TABLE							
NAME	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
12	DMH	22+17.88	6.0 RT	149.43	I=146.17' (13) I=146.17' (14)	I=146.07' (175)	MUNICIPAL STANDARD
13	CBCI	22+30	15.0 LT	149.32		I=146.31' (12)	FLAT TOP
14	CBCI	22+30	15.0 RT	149.32		I=146.32' (12)	MUNICIPAL STANDARD
15	CB	25+77	15.0 LT	149.80		I=146.80' (33)	FLAT TOP
16	CBCI	25+77.02	15.0 RT	149.80		I=146.93' (33)	MUNICIPAL STANDARD
33	DMH	25+71.05	9.4 RT	149.92	I=146.75' (144) I=146.65' (15) I=146.70' (16)	I=146.60' (38)	MUNICIPAL STANDARD
38	DMH	24+78.22	4.6 LT	150.37	I=146.39' (33)	I=146.34' (EX HW 5)	MUNICIPAL STANDARD
142	CB	26+02.80	15.0 LT	149.83		I=147.30' (144)	FLAT TOP
143	CBCI	26+00	15.0 RT	149.82		I=147.05' (144)	MUNICIPAL STANDARD
144	DMH	25+95	5.1 RT	150.01	I=147.00' (142) I=146.95' (143)	I=146.82' (33)	MUNICIPAL STANDARD

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	39	73
PROJECT FILE NO. 609255			
UTILITY PLANS			



AT A MINIMUM, THE CONTRACTOR IS TO PROVIDE EVERSOURCE - GAS FINISH GRADE ELEVATIONS IN ORDER TO INSTALL THE PROPOSED GAS MAIN AT THE REQUIRED DEPTHS TO ACCOMMODATE THE PROPOSED PROFILE CUTS AND DRAINAGE LATERALS. OTHERWISE THE PROFILE CUTS AND DRAINAGE LATERALS WILL HAVE TO BE INSTALLED PRIOR TO THE GAS MAIN RELOCATION.

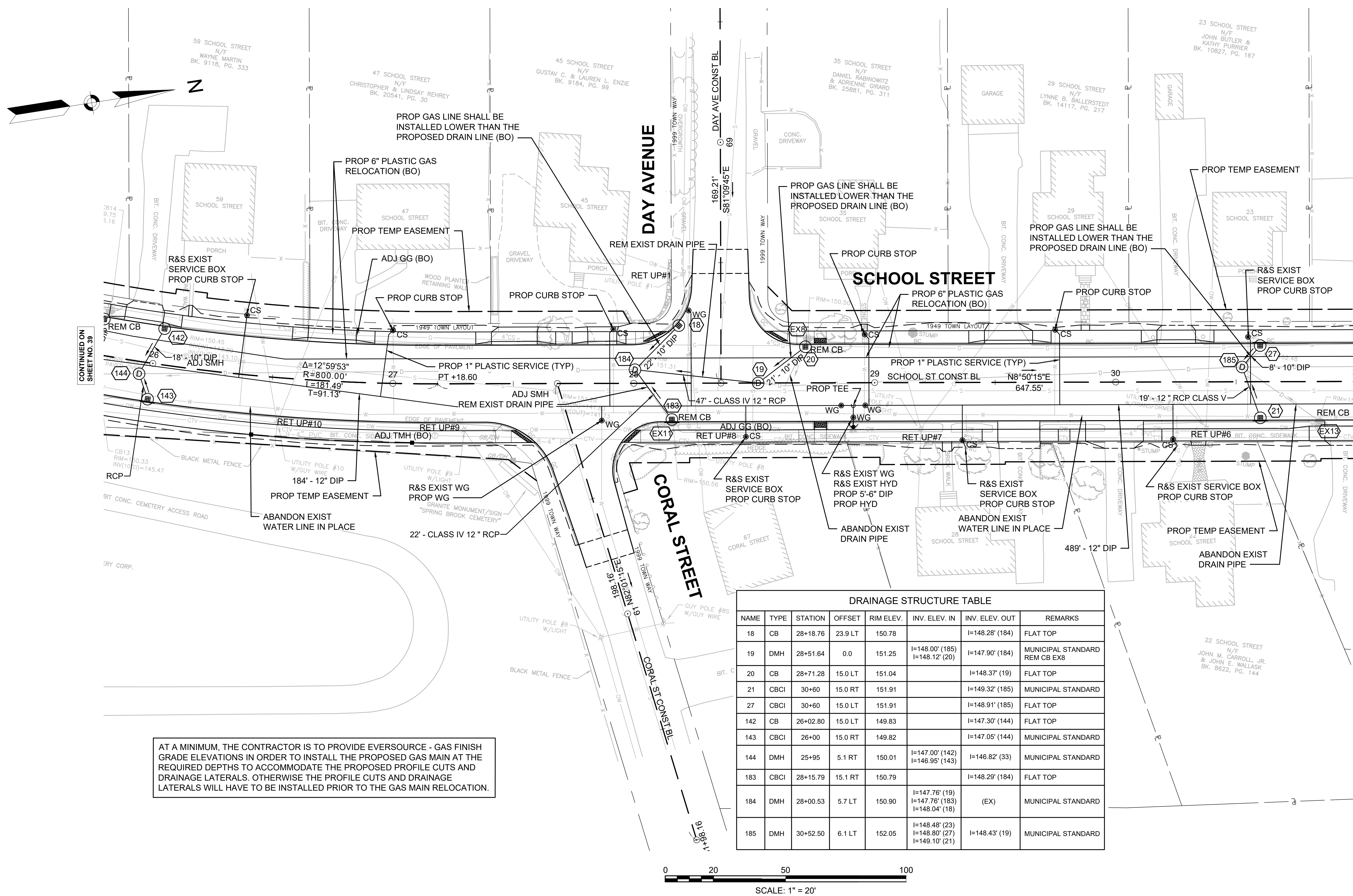


CONTINUED ON
SHEET NO. 38

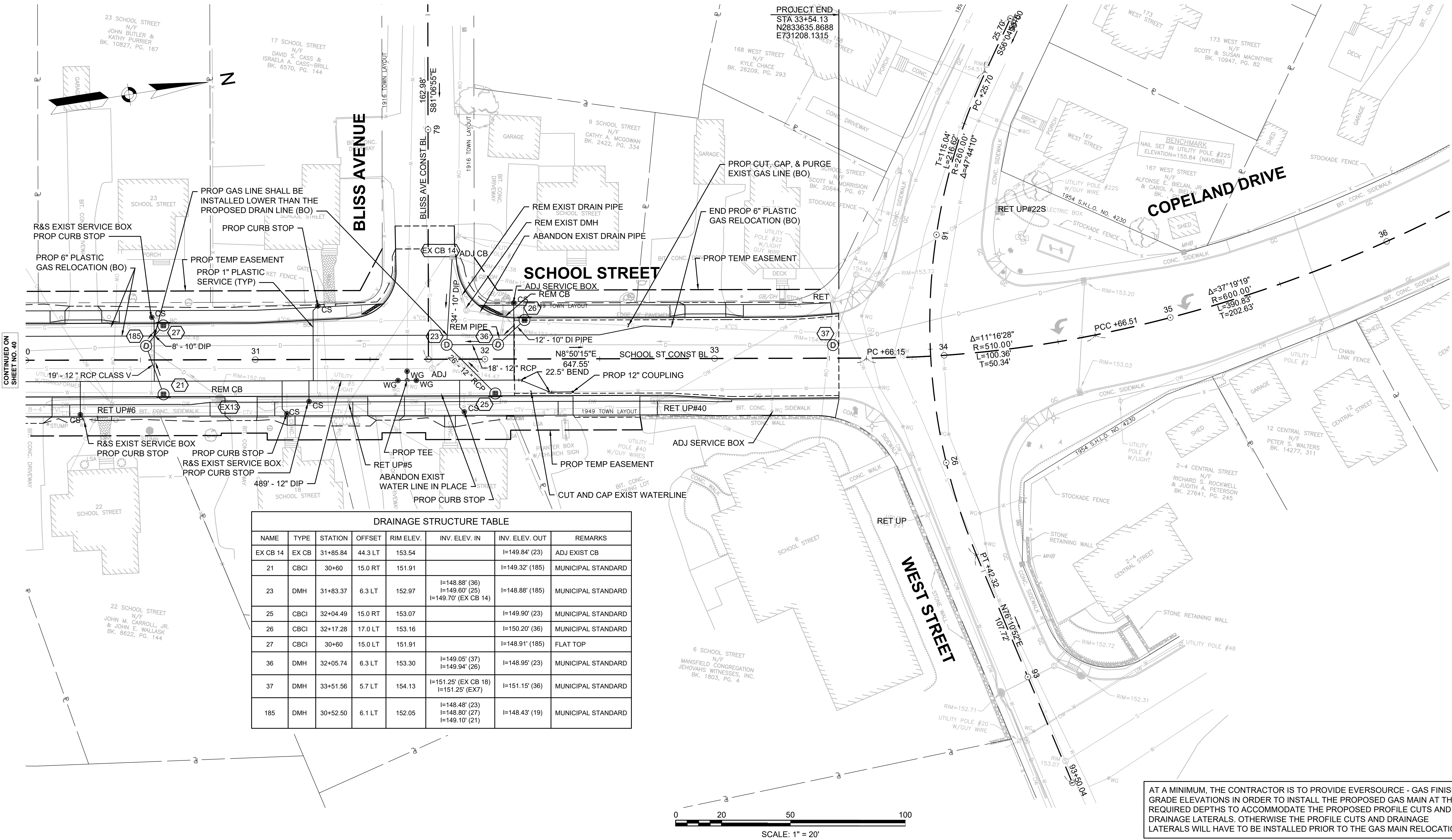
CONTINUED ON
SHEET NO. 40

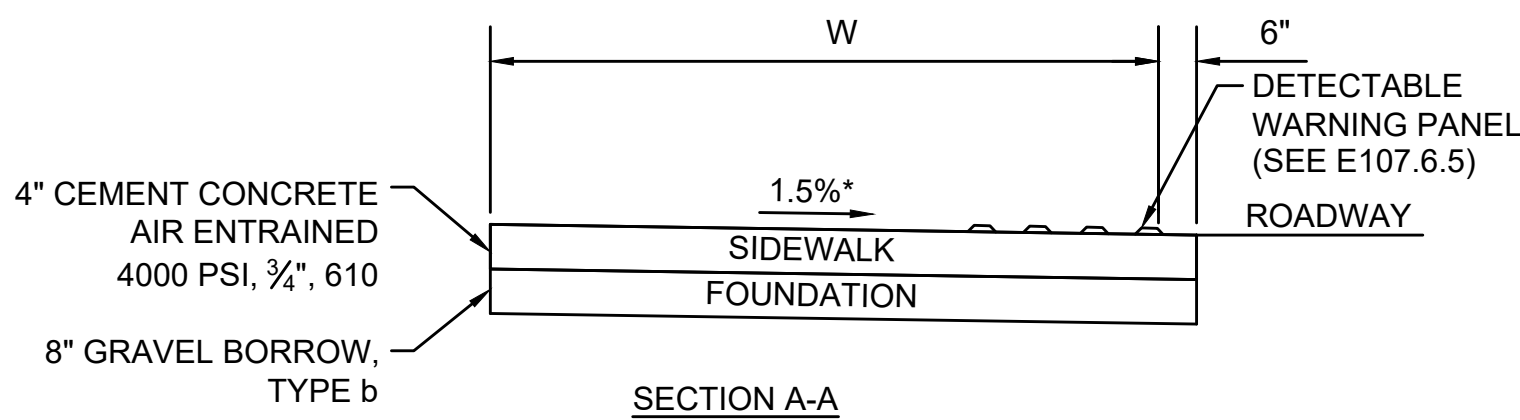
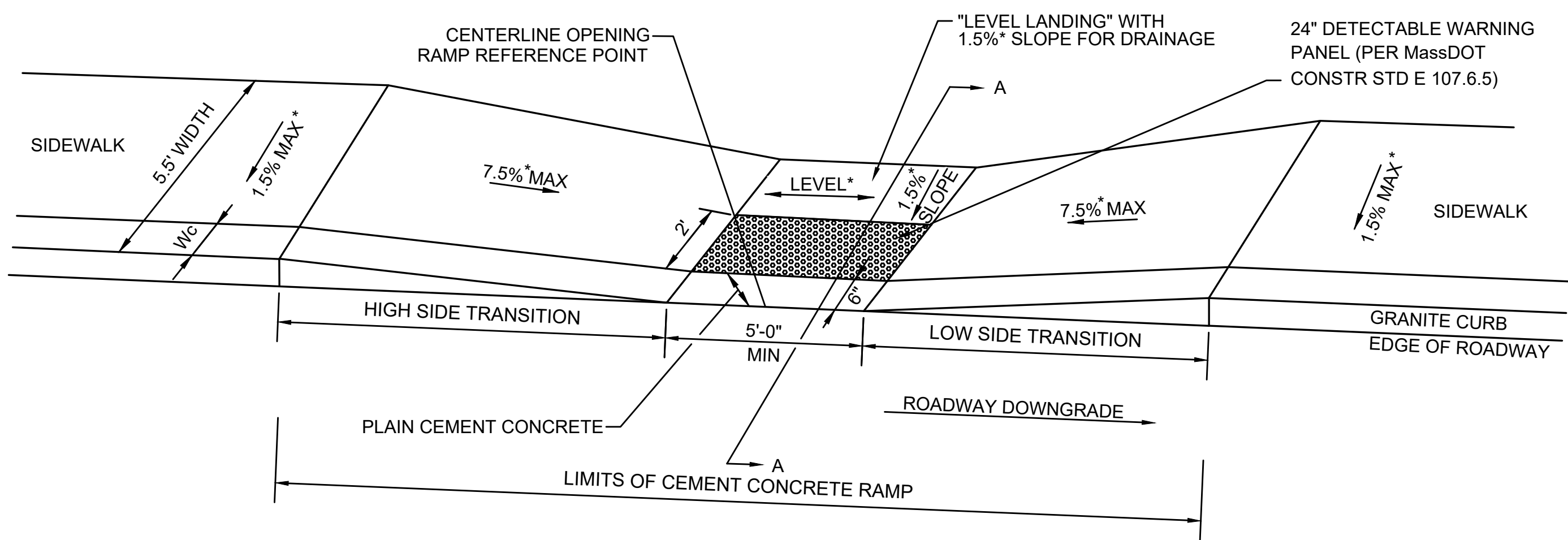
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	40	73
PROJECT FILE NO. 609255			

UTILITY PLANS



AT A MINIMUM, THE CONTRACTOR IS TO PROVIDE EVERSOURCE - GAS FINISH GRADE ELEVATIONS IN ORDER TO INSTALL THE PROPOSED GAS MAIN AT THE REQUIRED DEPTHS TO ACCOMMODATE THE PROPOSED PROFILE CUTS AND DRAINAGE LATERALS. OTHERWISE THE PROFILE CUTS AND DRAINAGE LATERALS WILL HAVE TO BE INSTALLED PRIOR TO THE GAS MAIN RELOCATION.

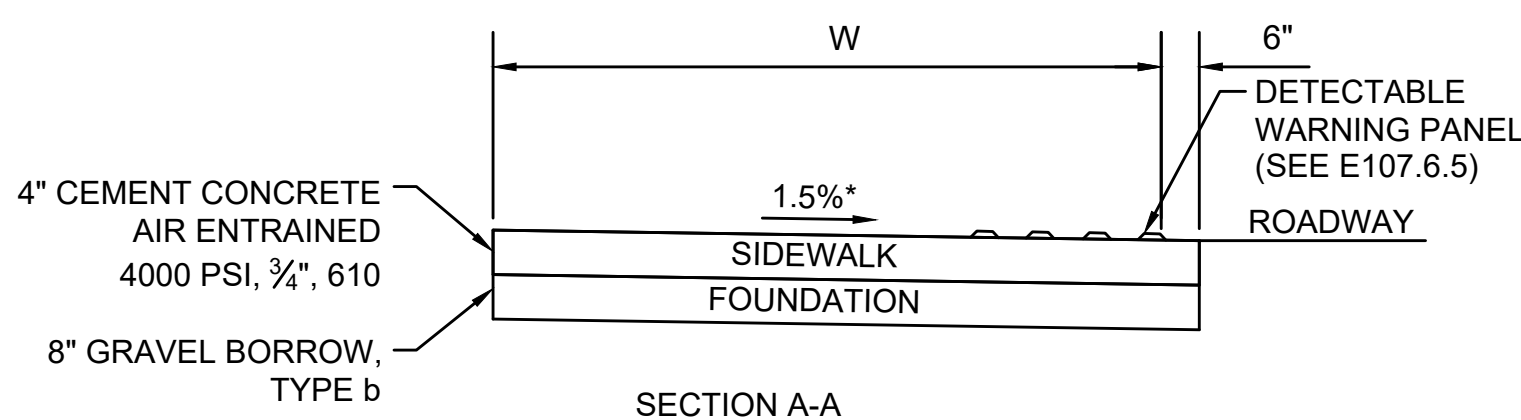
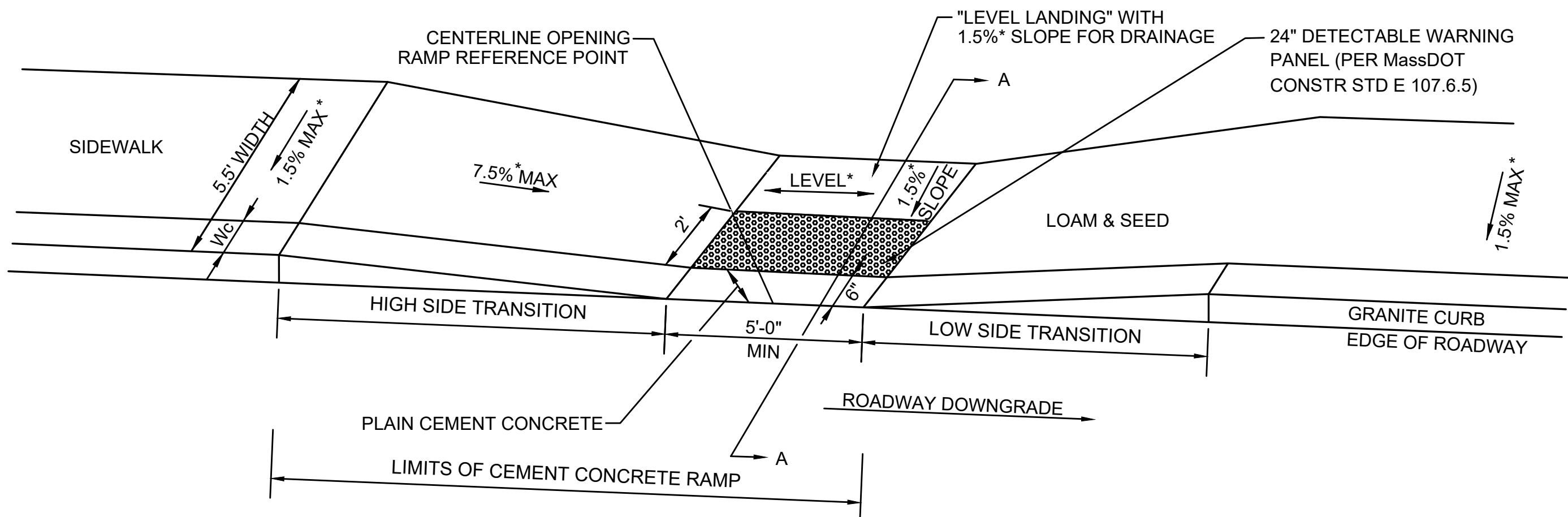




* TOLERANCE FOR CONSTRUCTION ±0.5%

PEDESTRIAN CURB RAMP ON NARROW SIDEWALK WITH DETECTABLE WARNING PANEL (E 107.2.1)

SCALE: N.T.S.



* TOLERANCE FOR CONSTRUCTION ±0.5%

PEDESTRIAN CURB RAMP ON NARROW SIDEWALK WITH DETECTABLE WARNING PANEL - LEFT TRANSITION ONLY

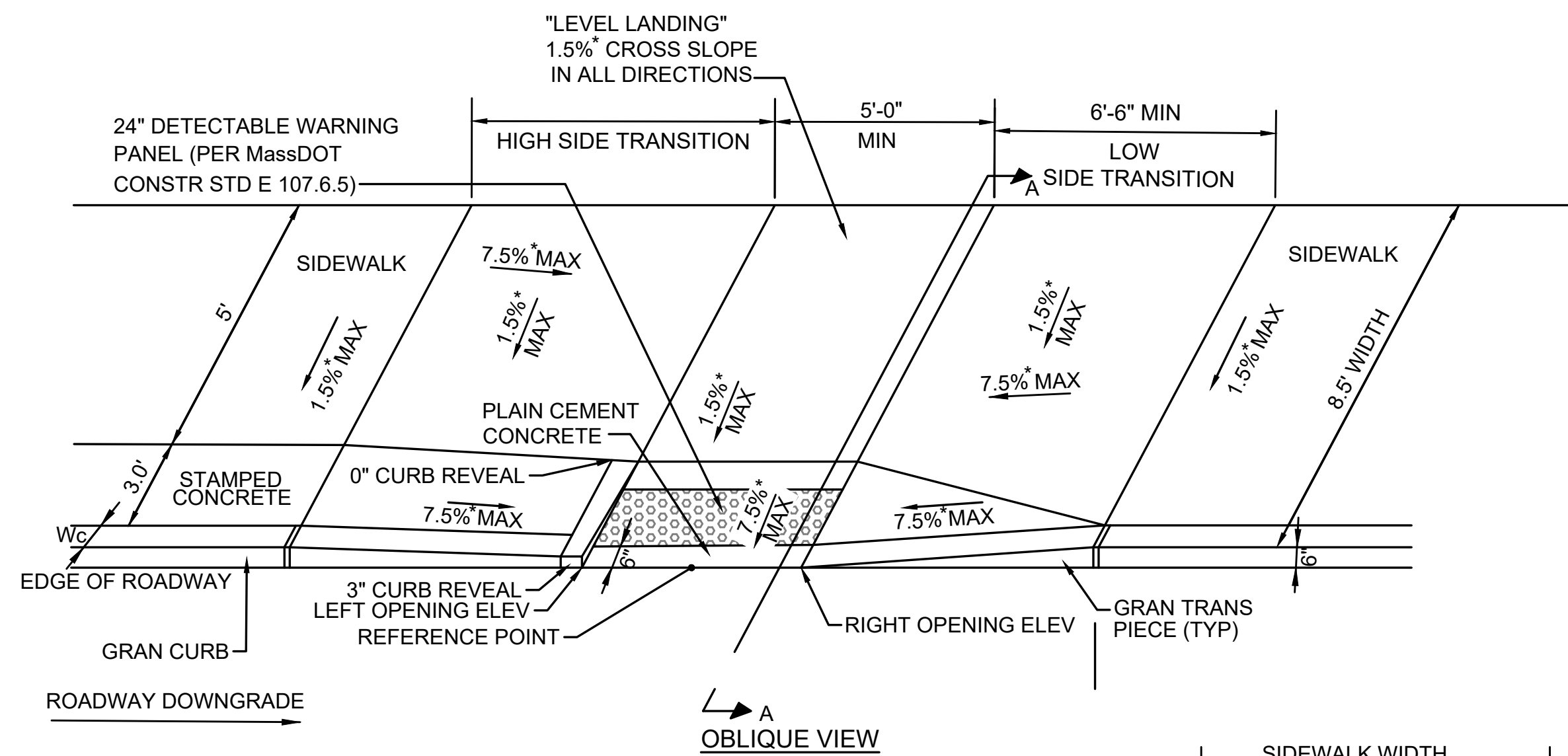
SCALE: N.T.S.

PEDESTRIAN CURB RAMP DATA										
NO.	LOCATION (REF. POINT)	SIDEWALK WIDTH	RAMP OPENING	ROADWAY GUTTER	LEFT SIDE		RIGHT SIDE		Ø OPENING ELEVATION	COMMENTS
					REVEAL	TRANS	REVEAL	TRANS		
2	50+26 21.8' RT	5.5'	6.4'	-0.80%	6"	6'-6"	6"	6'-6"	147.09	
3	50+27 25.4' LT	5.5'	5.9'	-2.53%	6"	11'-0"	6"	6'-6"	147.10	

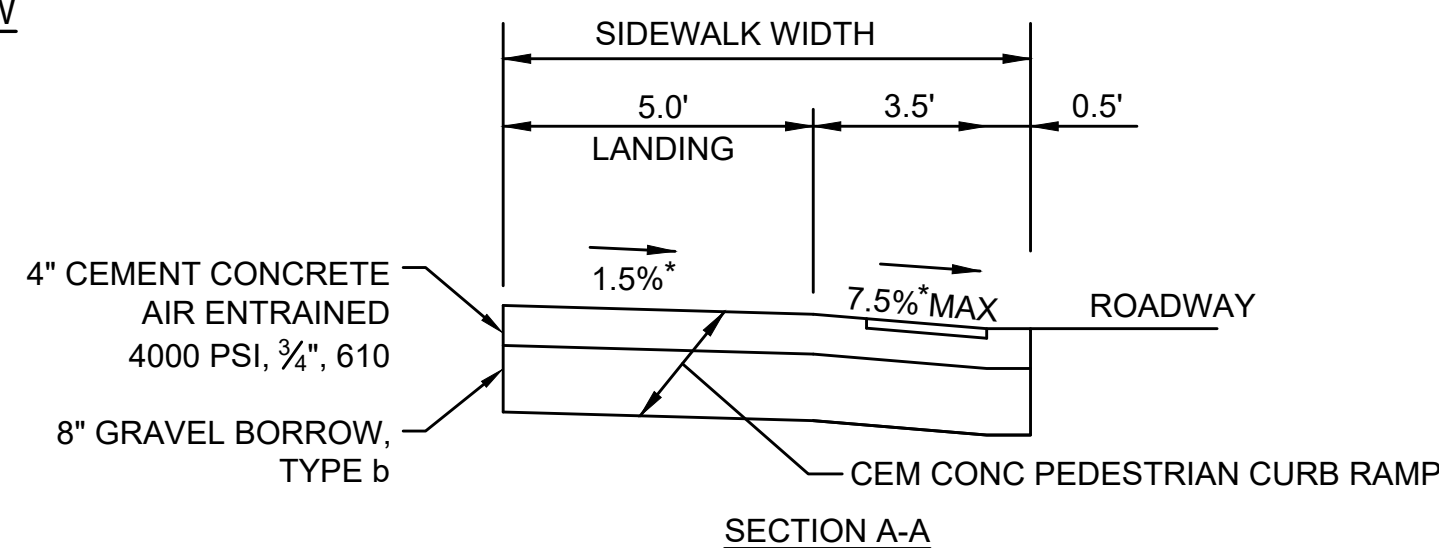
- NOTE:
- ROADWAY GUTTER SLOPES ARE IN THE DIRECTION OF THE BASELINE.
 - TOLERANCE FOR CONSTRUCTION ±0.5%.

PEDESTRIAN CURB RAMP DATA										
NO.	LOCATION (REF. POINT)	SIDEWALK WIDTH	RAMP OPENING	ROADWAY GUTTER	LEFT SIDE		RIGHT SIDE		Ø OPENING ELEVATION	COMMENTS
					REVEAL	TRANS	REVEAL	TRANS		
12	28+77 19.6' LT	5.5'	5.0'	+0.46%	3"	3'-3"	6"	7'-8"	150.72	3" REVEAL LT SIDE
14	14+79 16.0' LT	5.5'	5.0'	-0.25%	6"	6'-6"	6"	7'-8"	147.33	

- NOTE:
- ROADWAY GUTTER SLOPES ARE IN THE DIRECTION OF THE SCHOOL STREET BASELINE.
 - TOLERANCE FOR CONSTRUCTION ±0.5%.



* TOLERANCE FOR CONSTRUCTION ±0.5%



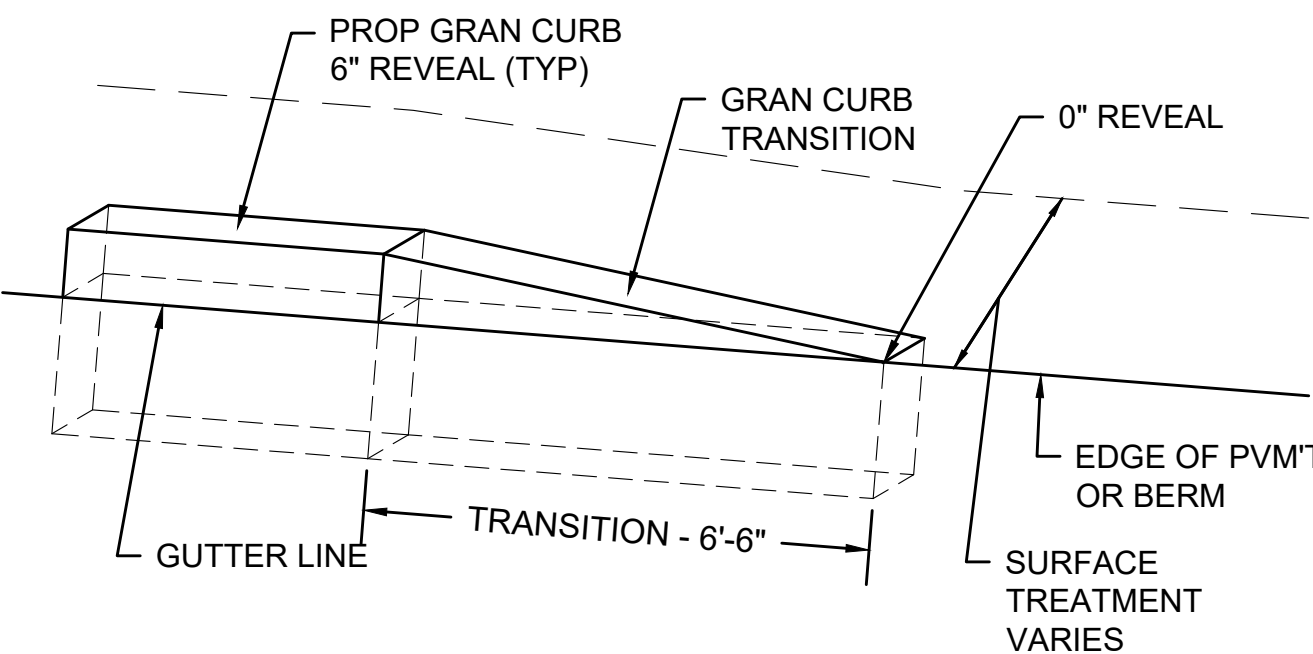
* TOLERANCE FOR CONSTRUCTION ±0.5%

PEDESTRIAN CURB RAMPS LESS THAN 12'-4" SIDEWALK WITH CURB ONE SIDE

SCALE: N.T.S.

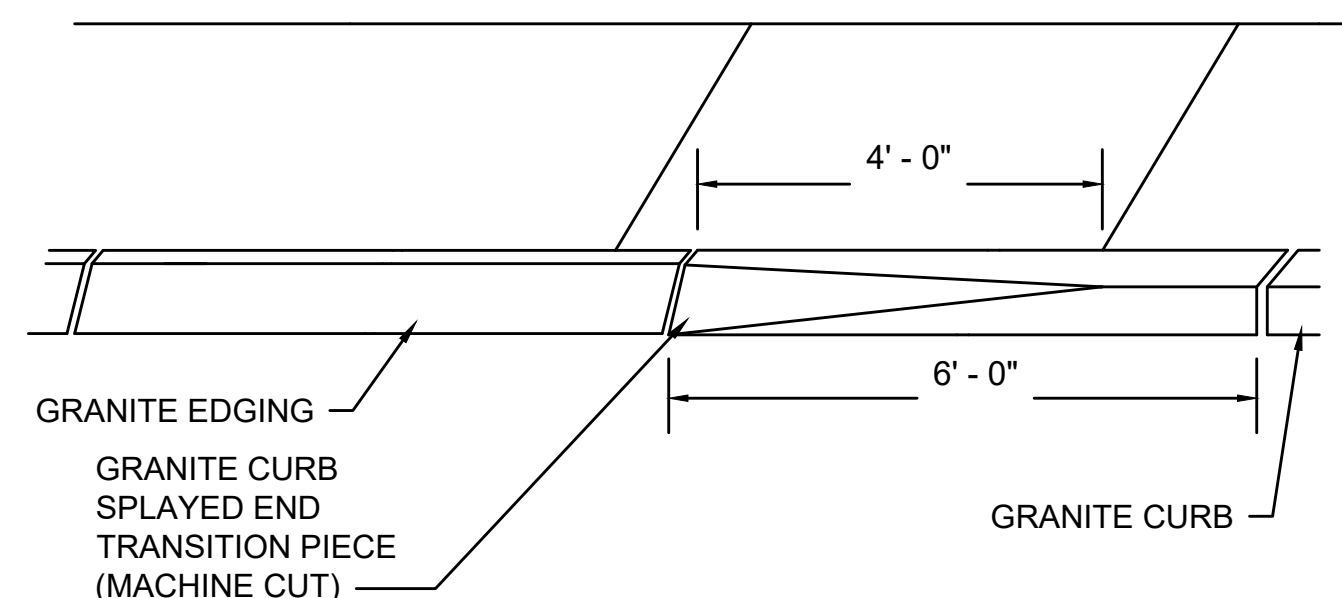
PEDESTRIAN CURB RAMP DATA												
NO.	LOCATION (REF POINT)	RAMP WIDTH	RAMP LENGTH	LEFT SIDE				RIGHT SIDE				OPENING ELEV
				SIDEWALK WIDTH	ROADWAY GUTTER	REVEAL	TRANS	SIDEWALK WIDTH	ROADWAY GUTTER	REVEAL	TRANS	
13	14+79 16.0' RT	5'-0"	3'-6"	5'-0"	0.46%	6"	7'-8"	8'-0"	-0.32%	6"	6'-6"	147.35

- NOTE:
- ROADWAY GUTTER SLOPES ARE IN THE DIRECTION OF THE BASELINE.
 - TOLERANCE FOR CONSTRUCTION ±0.5%.



GRANITE CURB TRANSITION PIECE

SCALE: N.T.S.



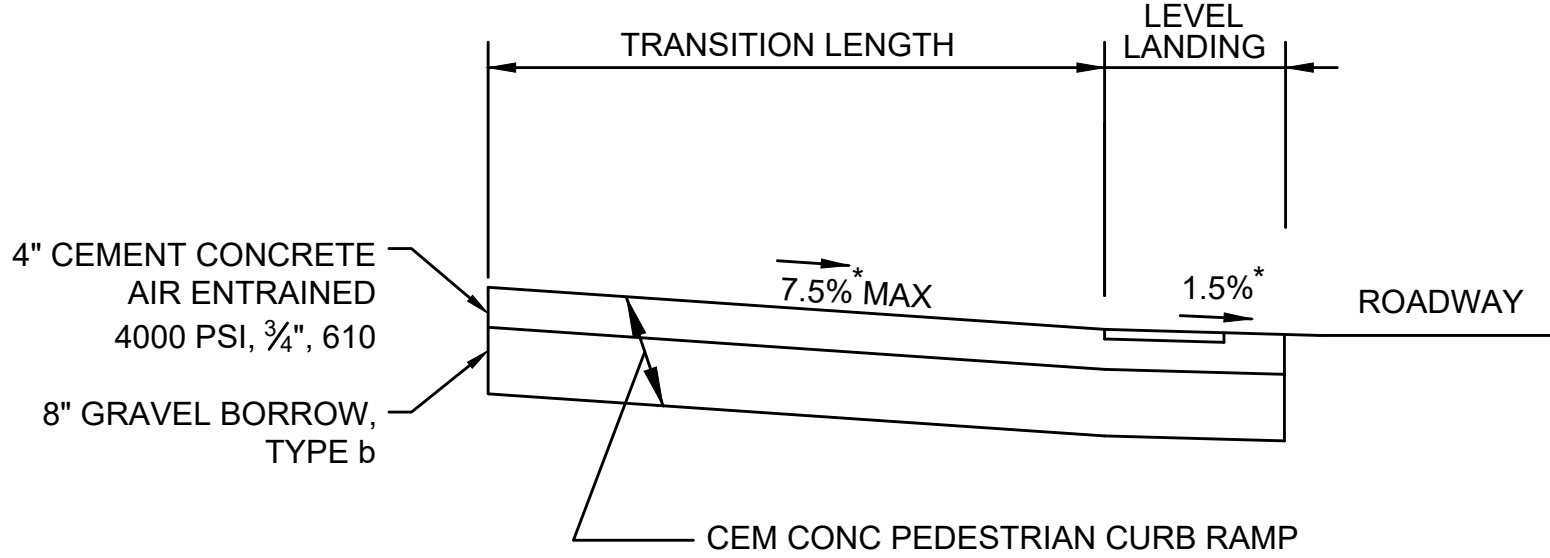
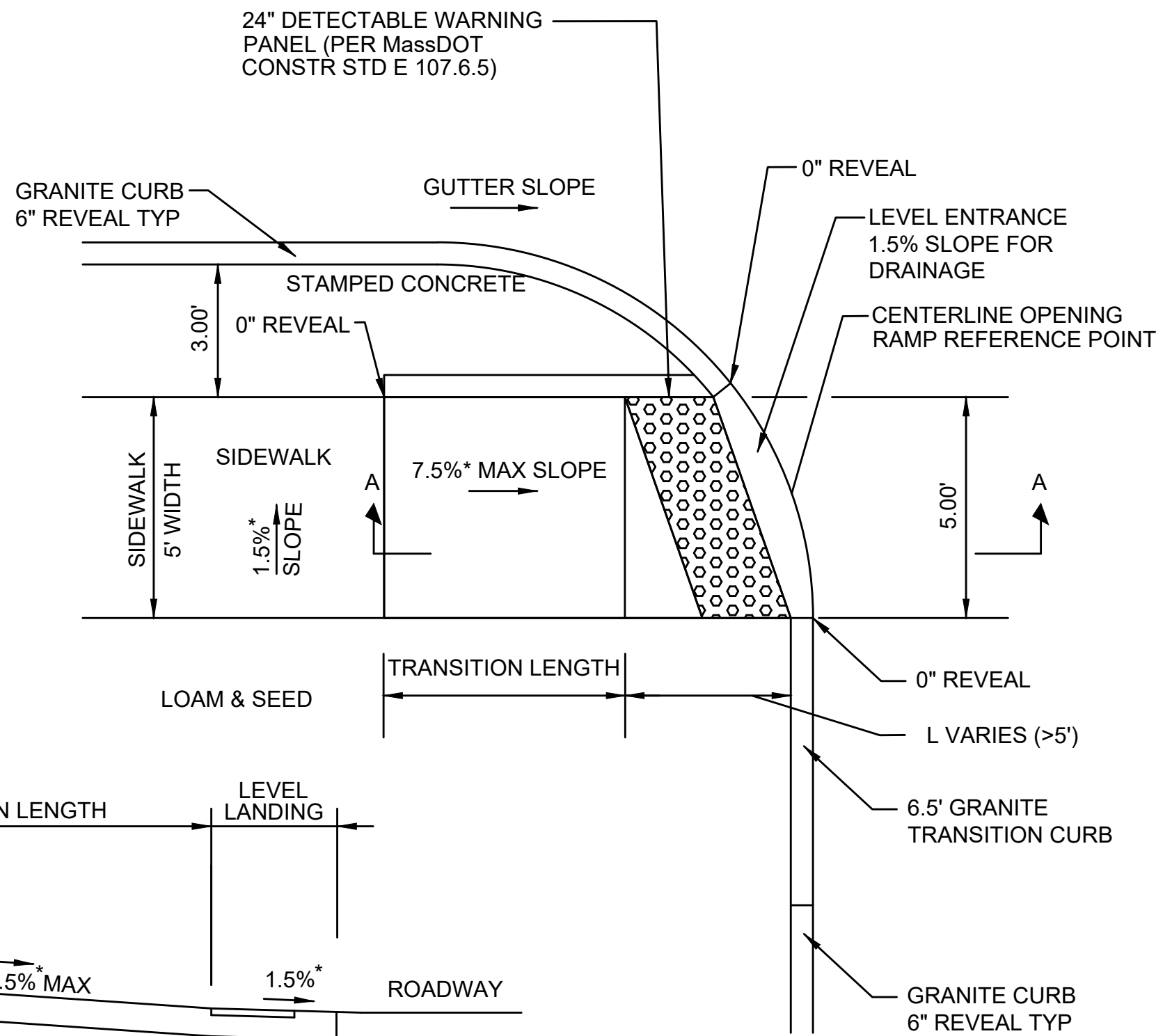
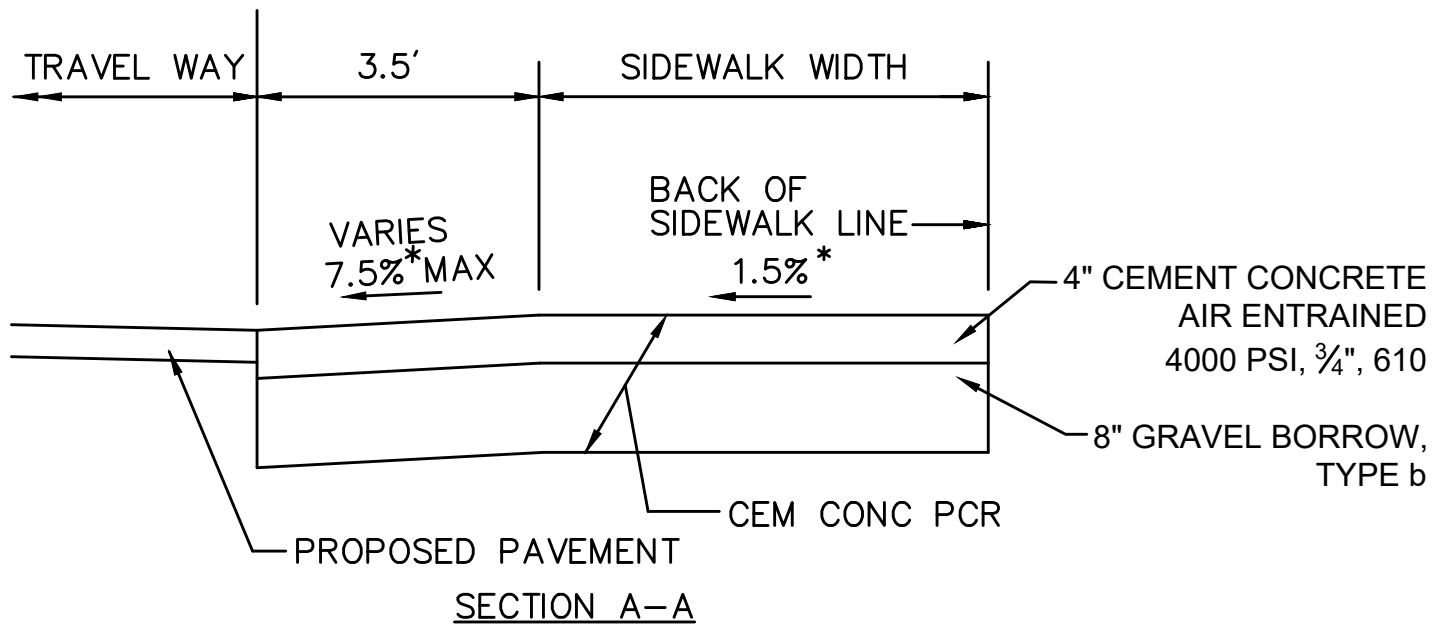
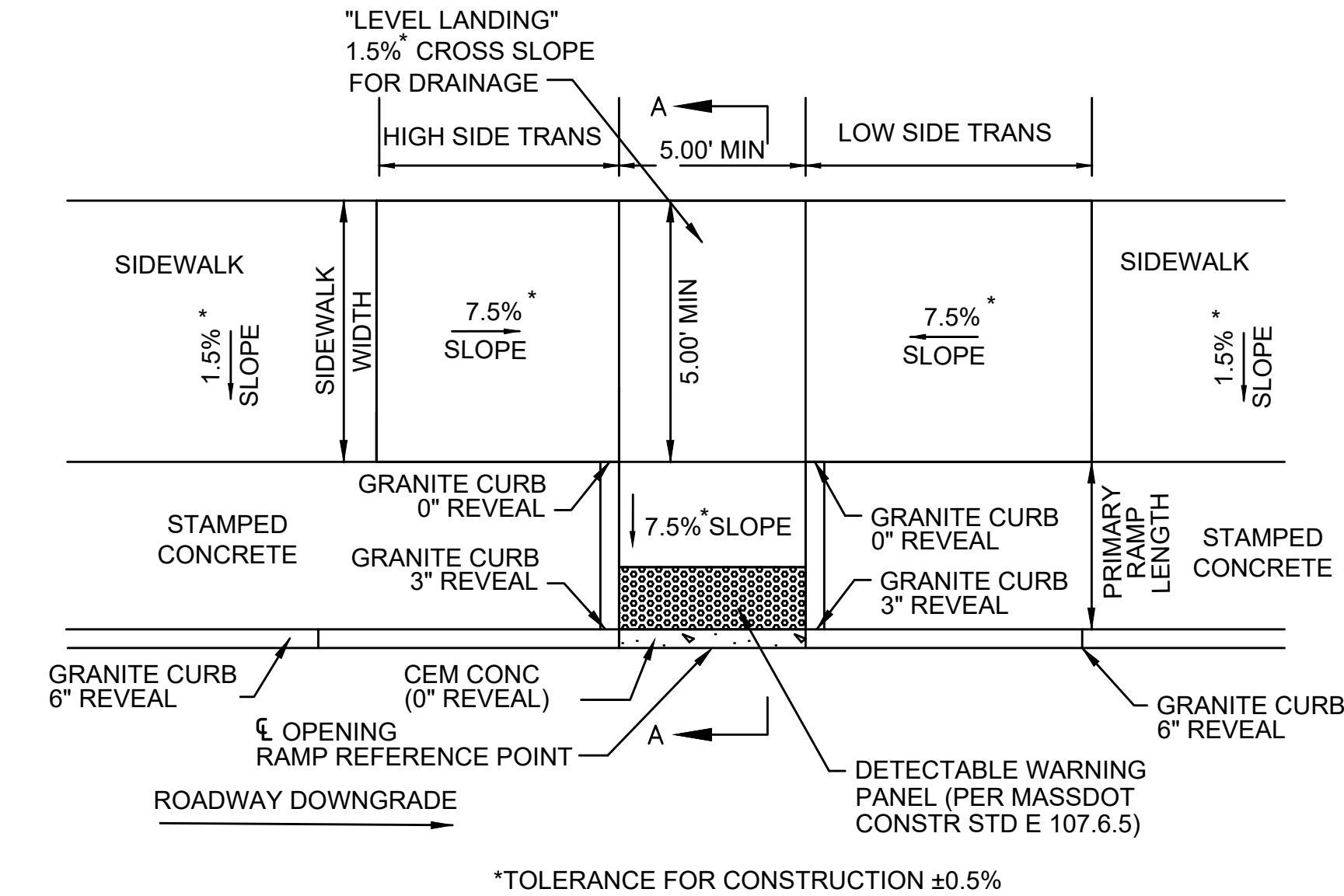
GRANITE CURB TRANSITION TO EDGING

SCALE: N.T.S.

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	42	73
PROJECT FILE NO. 609255			
CONSTRUCTION DETAILS			

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	43	73
PROJECT FILE NO. 609255			

CONSTRUCTION DETAILS



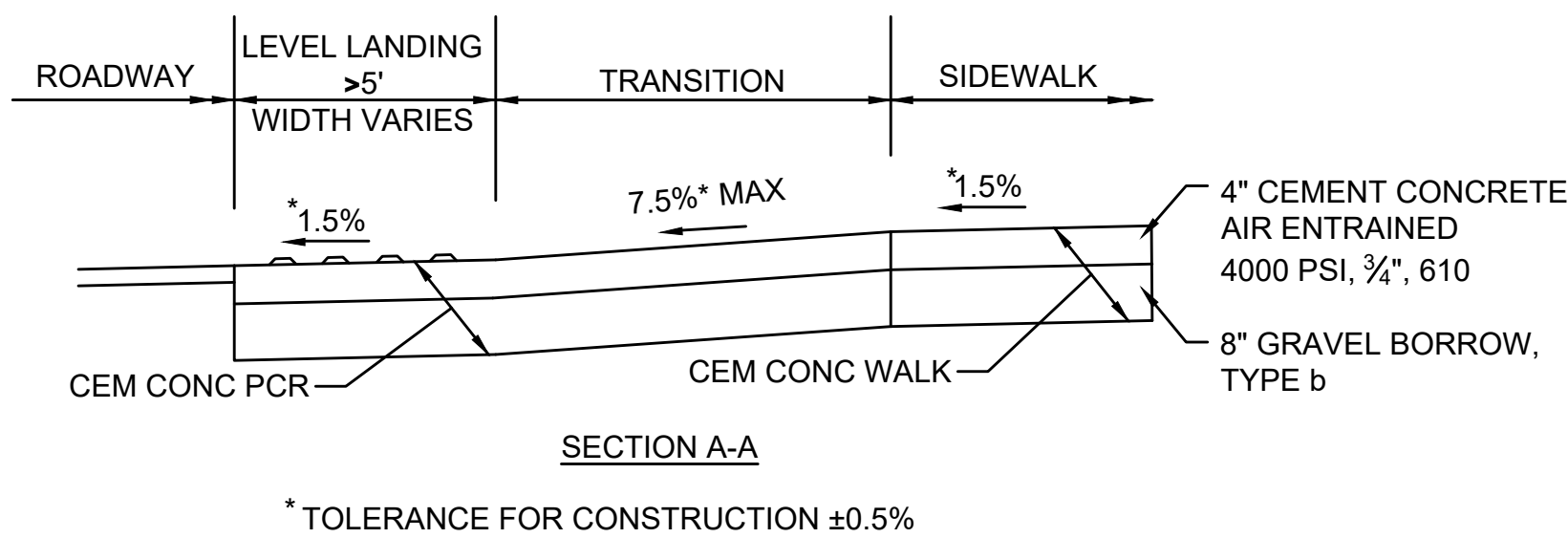
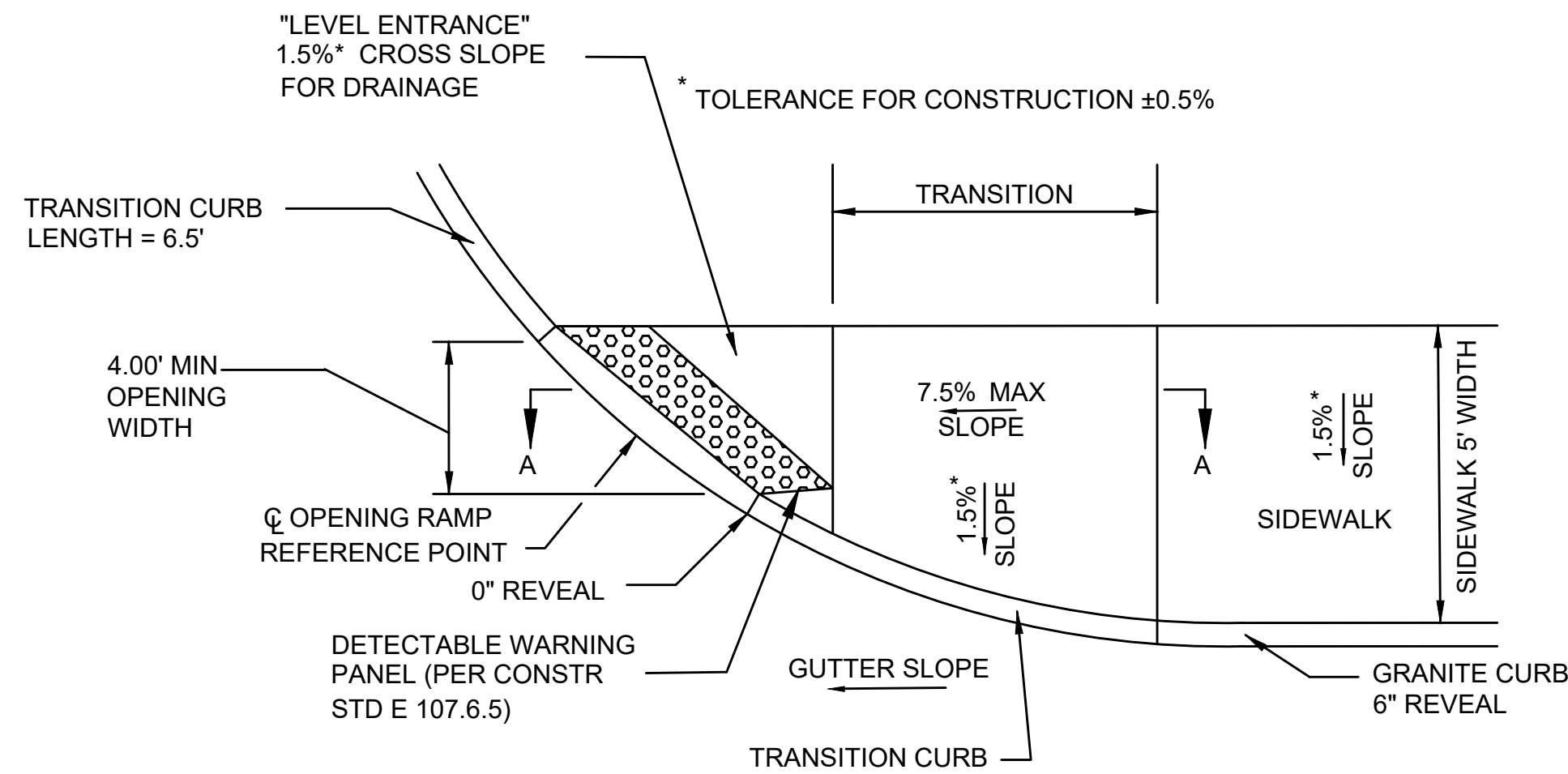
*TOLERANCE FOR CONSTRUCTION ±0.5%

SECTION A-A

PEDESTRIAN CURB RAMP FOR ONE CONTINUOUS DIRECTION OF PEDESTRIAN
SCALE: N.T.S.

PEDESTRIAN CURB RAMP DATA								
NO.	LOCATION (REF. POINT)	SIDEWALK WIDTH	RAMP OPENING	ROADWAY GUTTER	REVEAL	TRANS	Ø OPENING ELEVATION	COMMENTS
4	27+55 21.5' RT	5.0'	5'	+0.46%	6"	6'-6"	150.35	
5	27+97 21.5' RT	5.0'	5'	+0.46%	6"	7'-8"	150.59	

- NOTE:
- ROADWAY GUTTER SLOPES ARE IN THE DIRECTION OF THE BASELINE.
 - TOLERANCE FOR CONSTRUCTION ±0.5%.



*TOLERANCE FOR CONSTRUCTION ±0.5%

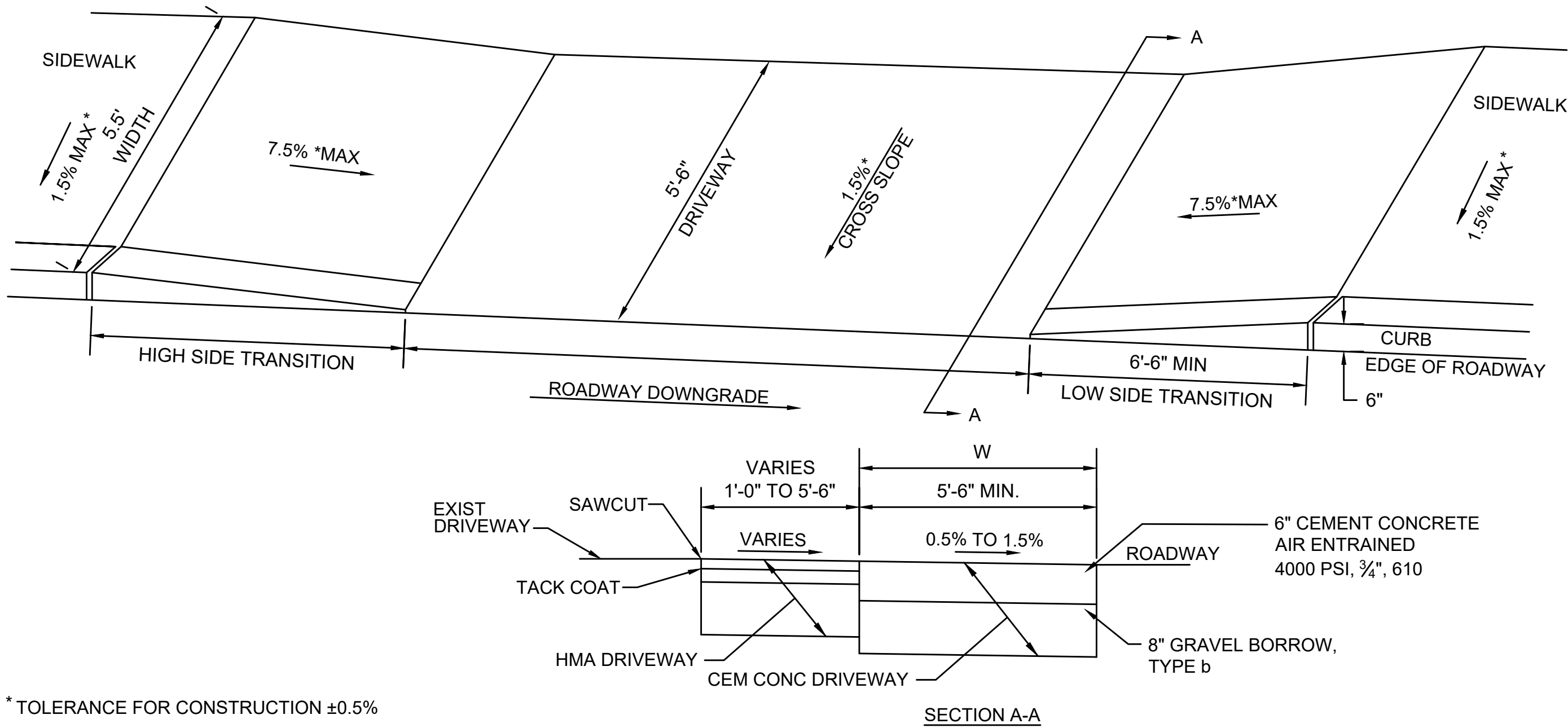
PEDESTRIAN CURB RAMP FOR ONE CONTINUOUS DIRECTION OF PEDESTRIAN TRAVEL (E 107.6.0)

SCALE: N.T.S.

PEDESTRIAN CURB RAMP DATA								
NO.	LOCATION (REF. POINT)	SIDEWALK WIDTH	RAMP OPENING	ROADWAY GUTTER	REVEAL	TRANS	Ø OPENING ELEVATION	COMMENTS
6	28+10.72 18.84' LT	5.0'	4.0'	+0.46%	3"	3'-3"	150.75	3" REVEAL LT SIDE
7	28+57.78 18.85' LT	5.0'	4.0'	+0.46%	3"	3'-10"	151.06	3" REVEAL RT SIDE
10	31+52.48 21.36' LT	5.0'	4.0'	+0.79%	6"	6'-6"	152.37	
11	32+01.26 20.76' LT	5.0'	4.0'	+1.37%	6"	9'-0"	152.88	



DRIVEWAY RAMP DATA									
NUMBER	STATION & OFFSET	SIDEWALK WIDTH	LEFT SIDE		RIGHT SIDE		DRIVEWAY OPENING WIDTH	DRIVEWAY APRON SLOPE	COMMENTS
			ROADWAY GUTTER	TRANSITION LENGTH	ROADWAY GUTTER	TRANSITION LENGTH			
4	16+38 16.00' RT	5.0'	-0.50%	6'-6"	-0.50%	7'-8"	20.0'	10.0%	
6	17+43 16.00' RT	5.0'	+0.57%	7'-8"	0.42%	6'-6"	16.0'	9.5%	
7	17+99 16.00' RT	5.0'	+0.57%	7'-8"	+0.57%	6'-6"	14.8'	8.5%	
9	18+51 16.00' RT	5.0'	+0.57%	7'-8"	+0.57%	6'-6"	16.0'	5.0%	
10	19+25 16.00' RT	5.0'	+0.57%	7'-8"	+0.57%	6'-6"	16.0'	5.0%	
11	19+72 16.00' RT	5.0'	+0.57%	7'-8"	+0.57%	6'-6"	24.0'	5.0%	
15	21+82 16.00' RT	5.0'	+0.57%	7'-8"	+0.57%	6'-6"	18.0'	10.0%	
23	29+60 16.00' RT	5.0'	+0.46%	7'-8"	+0.46%	6'-6"	17.5'	5.0%	
24	30+01 16.00' RT	5.0'	+0.46%	7'-8"	+0.46%	6'-6"	17.0'	5.0%	
26	30+94 16.00' RT	5.0'	+0.57%	7'-8"	+0.46%	6'-6"	14.0'	5.0%	
27	31+57 16.00' RT	5.0'	+1.09%	9'-0"	0.88%	6'-6"	16.0'	5.0%	
28	32+53 16.00' RT	5.0'	+0.63%	7'-8"	0.63%	6'-6"	29.1'	5.0%	
30	20+95 16.00' RT	5.0'	+0.57%	7'-8"	+0.57%	6'-6"	18.5'	5.0%	

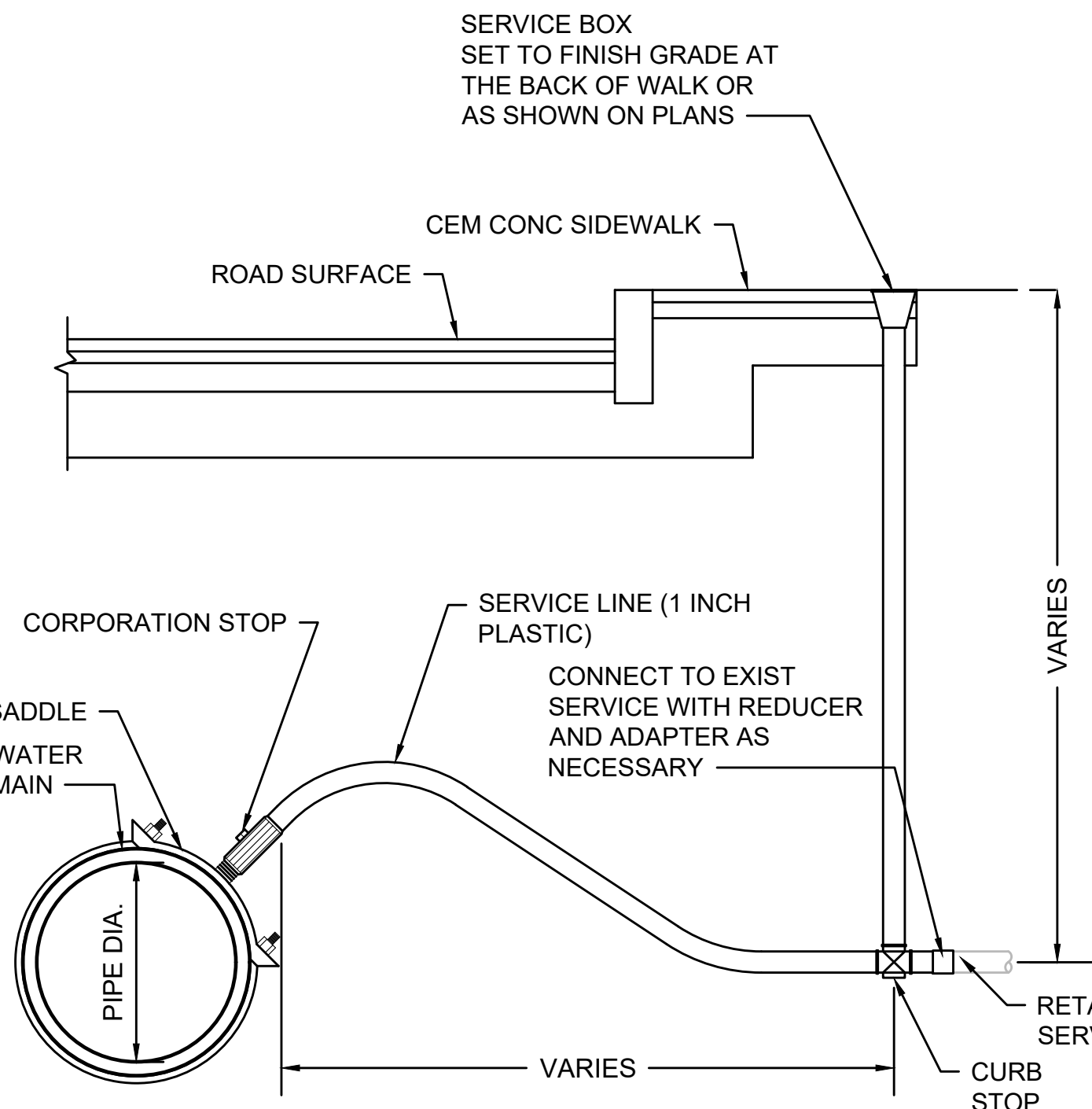


SIDEWALK THROUGH DRIVEWAYS WITHOUT CURB RETURNS (E 107.7.0)
SCALE: N.T.S.

			DRIVEWAY RAMP DATA						
NUMBER	STATION & OFFSET	SIDEWALK WIDTH	LEFT SIDE		RIGHT SIDE		DRIVEWAY OPENING WIDTH	DRIVEWAY APRON SLOPE	COMMENTS
			ROADWAY GUTTER	TRANSITION LENGTH	ROADWAY GUTTER	TRANSITION LENGTH			
1	14+34 17.02' LT	5.5'	+0.33%	6'-6"	+0.06%	7'-8"	18.0'	1.5%	
17	25+18 16.00' LT	5.5'	-0.50%	7'-8"	-0.42%	6'-6"	16.0'	0.5%	

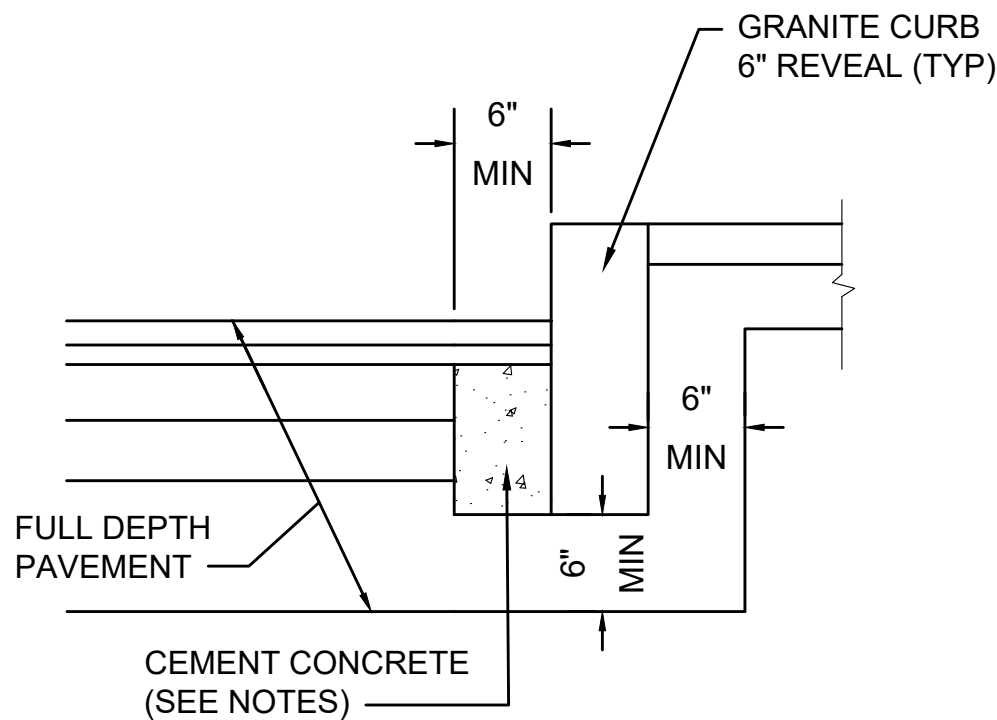
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	46	73
PROJECT FILE NO. 609255			

CONSTRUCTION DETAILS



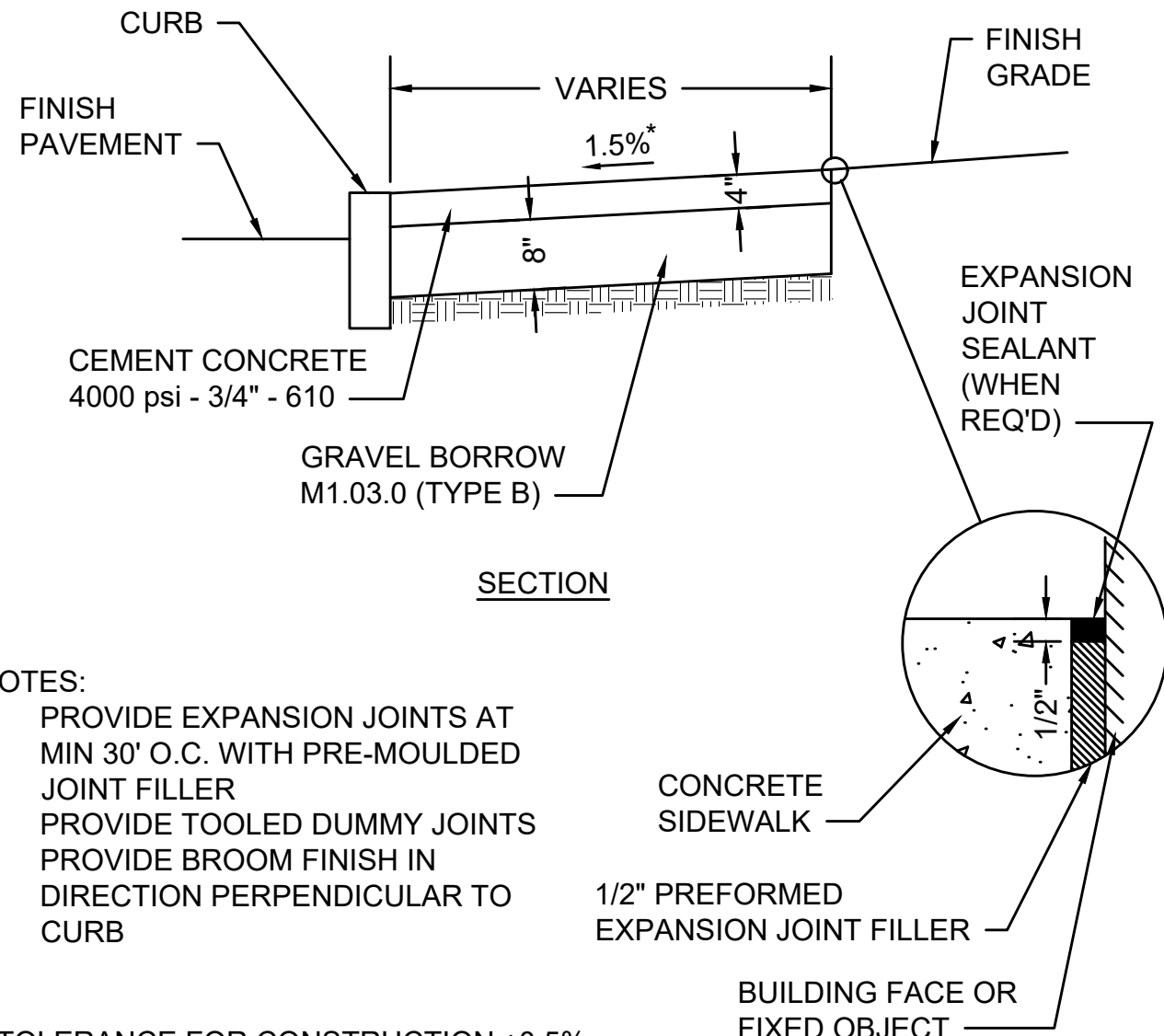
NOTES

1. INSTALLATIONS SHALL CONFORM WITH MANSFIELD WATER DISTRICT SPECIFICATIONS AND STANDARDS.



NOTES

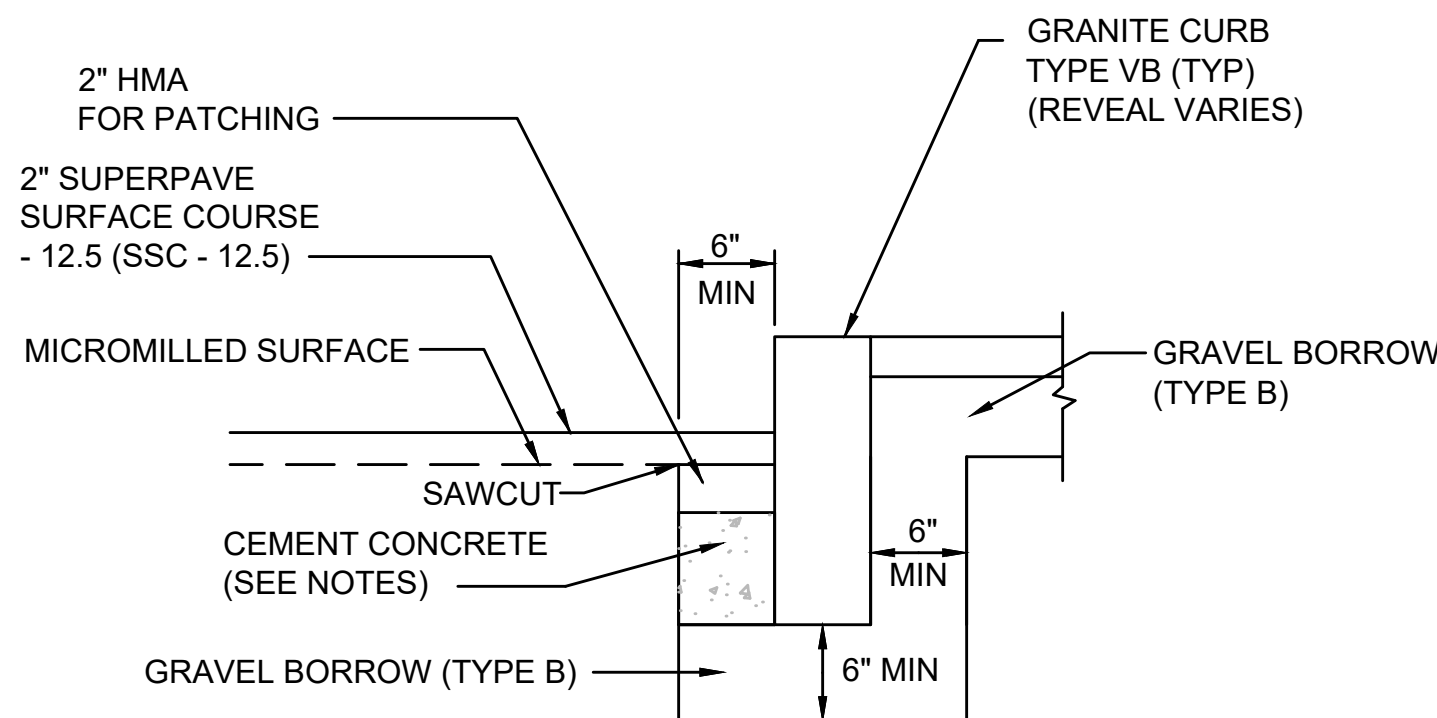
1. TO BE PLACED IF CURB IS INSTALLED AFTER HOT MIX ASPHALT
2. CONCRETE SHALL BE INCLUDED IN PRICE BID FOR GRANITE CURB
3. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED. ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.



NOTES

1. PROVIDE EXPANSION JOINTS AT MIN 30' O.C. WITH PRE-MOULDED JOINT FILLER
2. PROVIDE TOOLED DUMMY JOINTS
3. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB

* TOLERANCE FOR CONSTRUCTION $\pm 0.5\%$



NOTES

1. CONCRETE SHALL BE INCLUDED IN PRICE BID FOR GRANITE CURB.
2. SAWCUT 6" FROM CURB LINE AND REMOVE EXISTING PAVEMENT AND GRAVEL. REPLACE WITH CEMENT CONCRETE.
3. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED. ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.

WATER SERVICE

SCALE: N.T.S.

GRANITE CURB IN FULL DEPTH PAVEMENT

SCALE: N.T.S.

CEMENT CONCRETE SIDEWALK

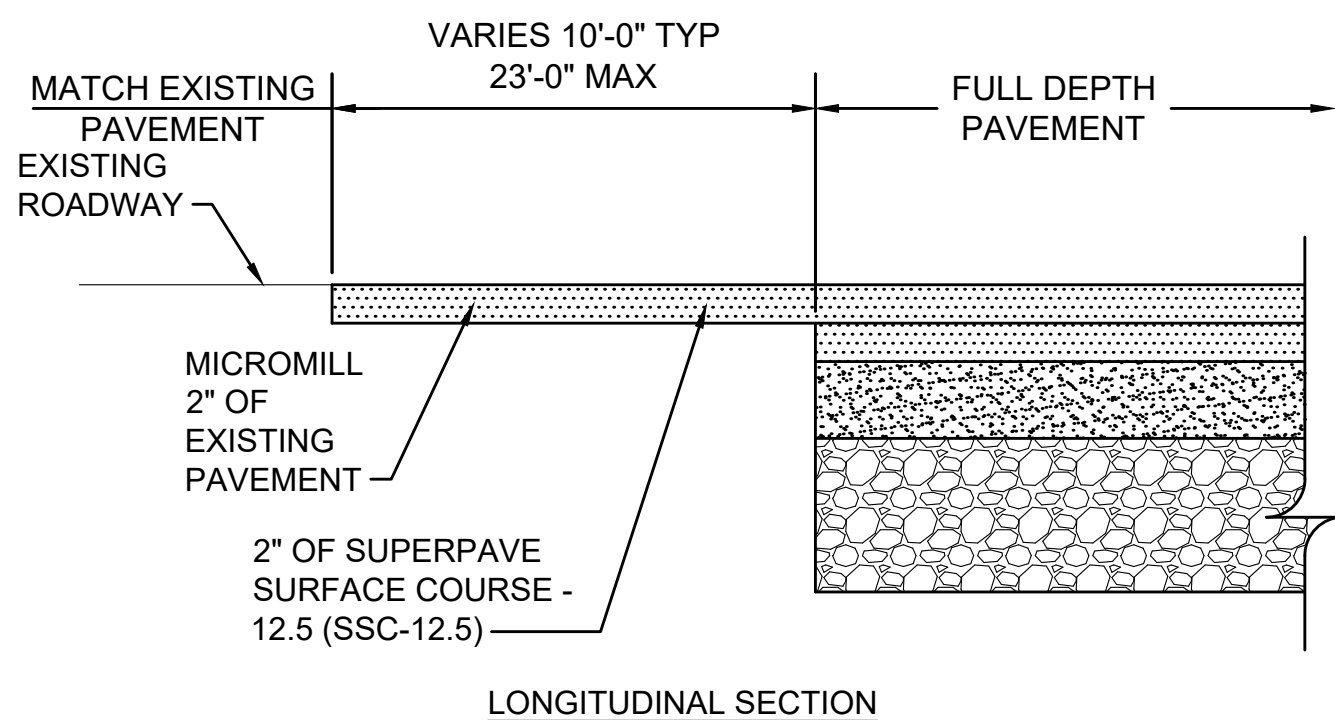
SCALE: N.T.S.

DWG: WALK-01

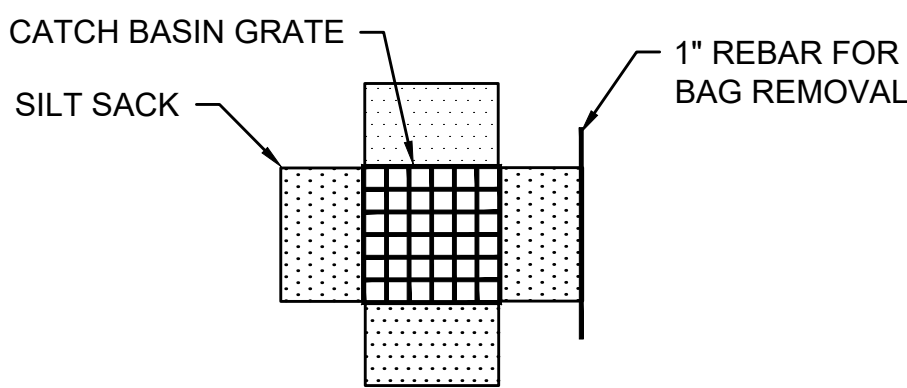
DATE: MARCH 2013

GRANITE CURB IN PAVEMENT MILL AND OVERLAY

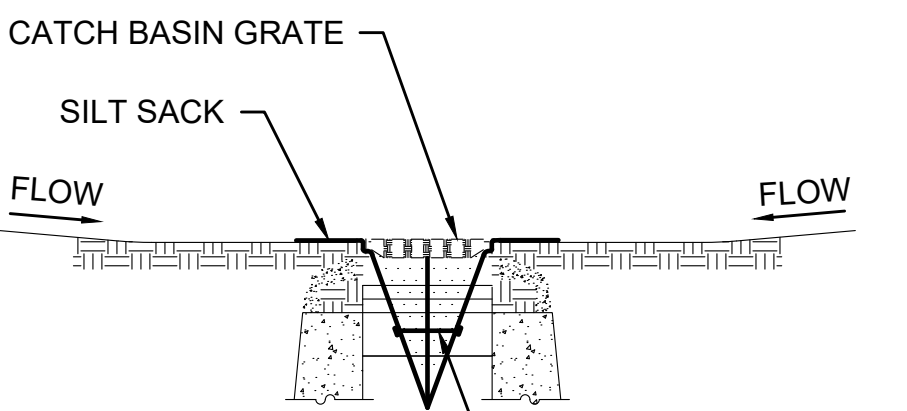
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LONGITUDINAL SECTION



PLAN VIEW



SECTION VIEW

NOTES

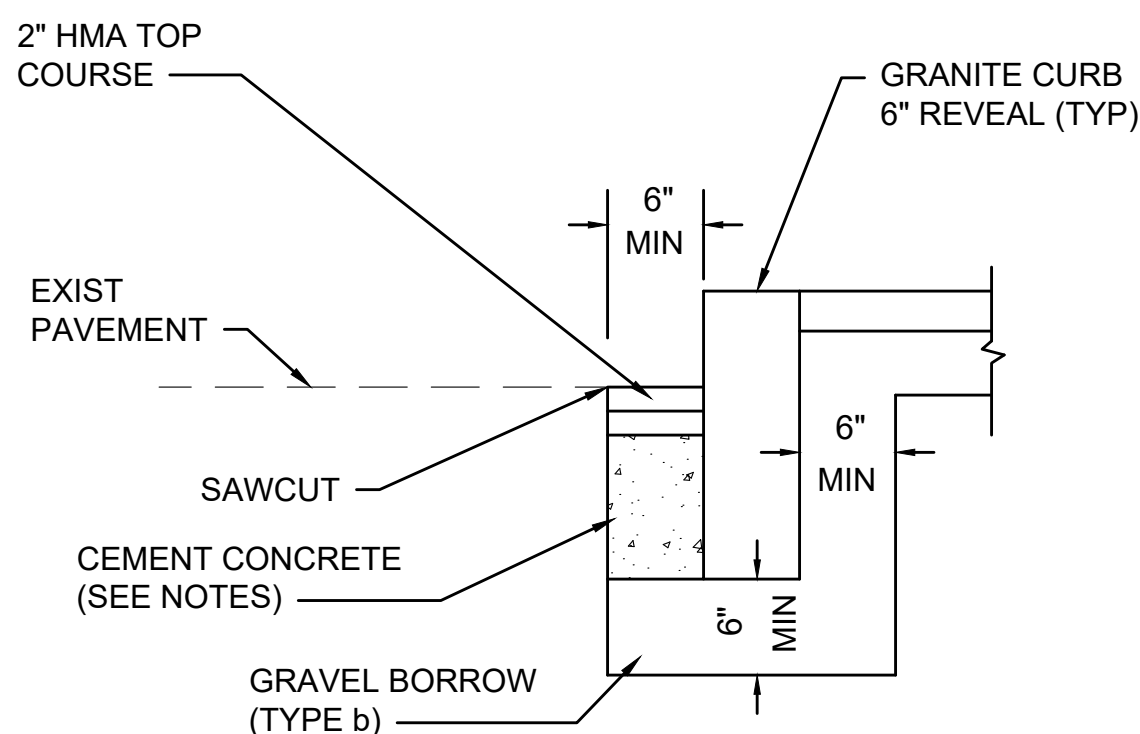
1. INSTALL SILT SACK IN EXISTING CATCH BASINS, BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL BINDER COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. GRATE TO BE PLACED OVER SILT SACK.
3. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED

INLET PROTECTION - SILT SACK
IN CATCH BASIN

SCALE: N.T.S.

FULL DEPTH PAVEMENT TRANSITION

SCALE: N.T.S.

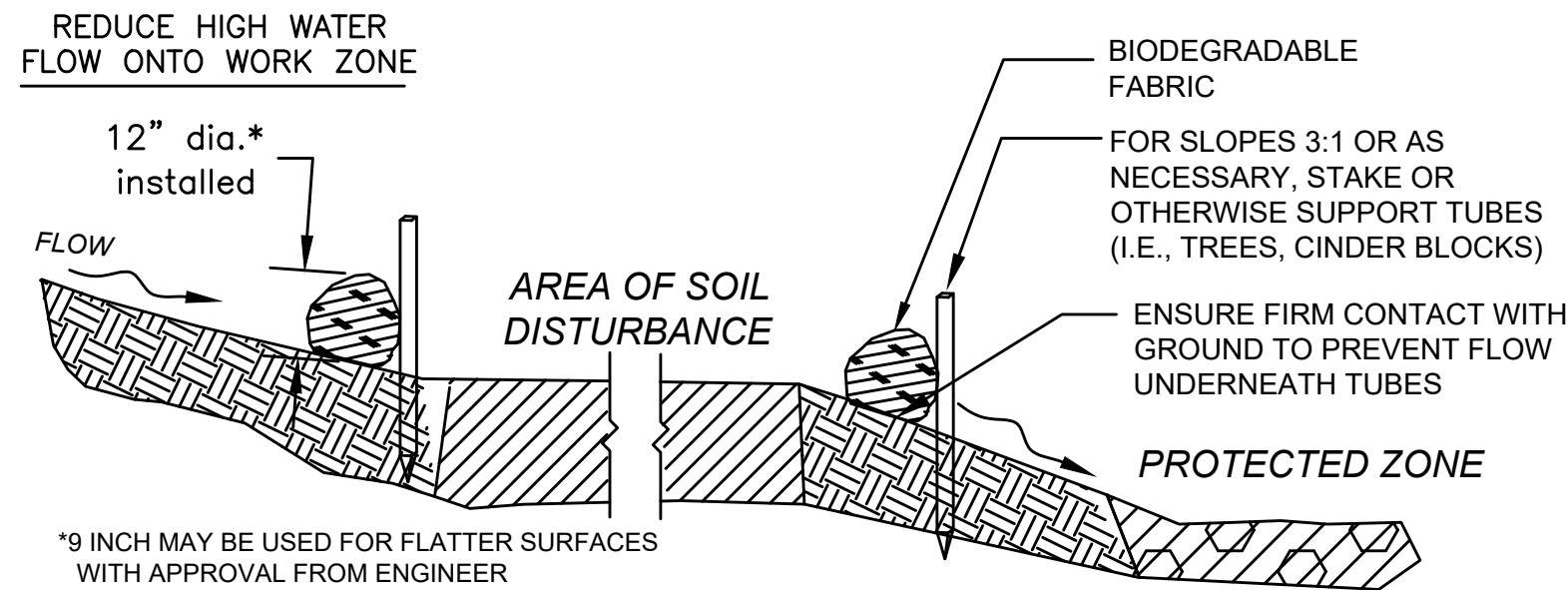


NOTES

1. CONCRETE SHALL BE INCLUDED IN PRICE BID FOR GRANITE CURB.
2. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED. ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.

GRANITE CURB IN EXISTING PAVEMENT

SCALE: N.T.S.

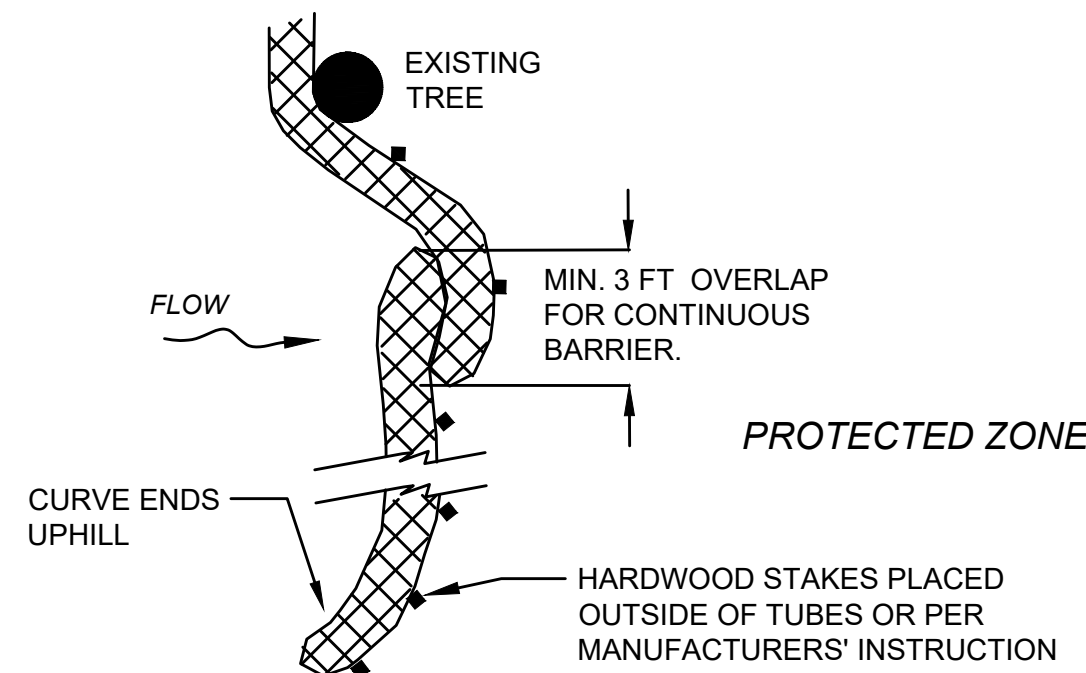


*9 INCH MAY BE USED FOR FLATTER SURFACES WITH APPROVAL FROM ENGINEER

SECTION

SEDIMENT BARRIER - COMPOST FILTER TUBE

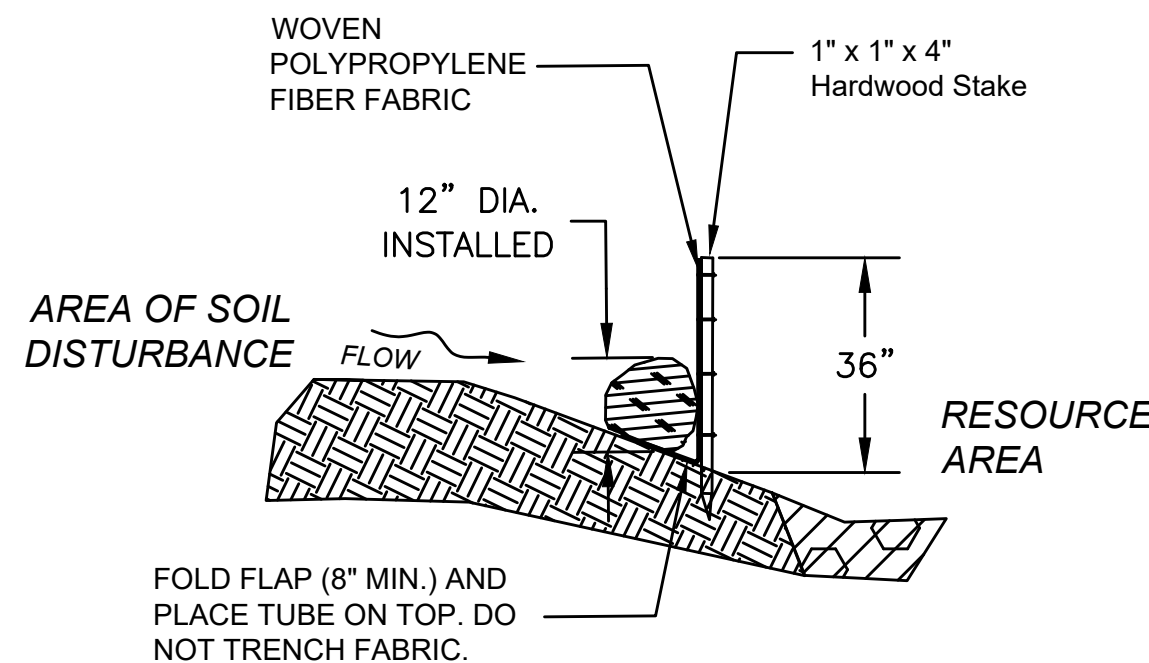
NOT TO SCALE



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

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

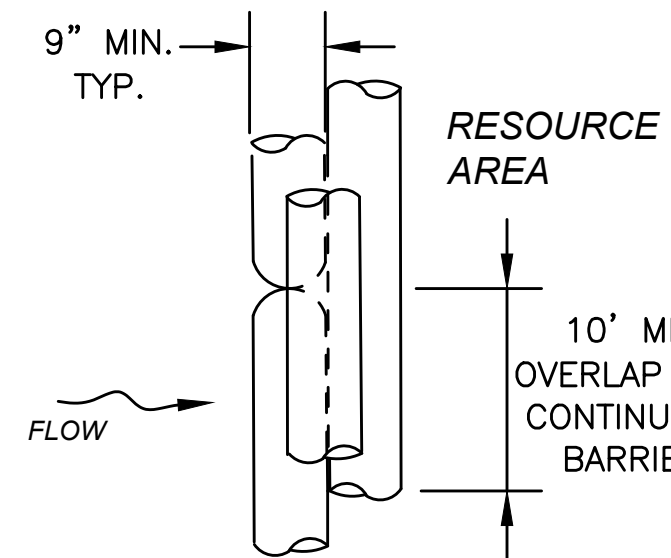
PLAN VIEW



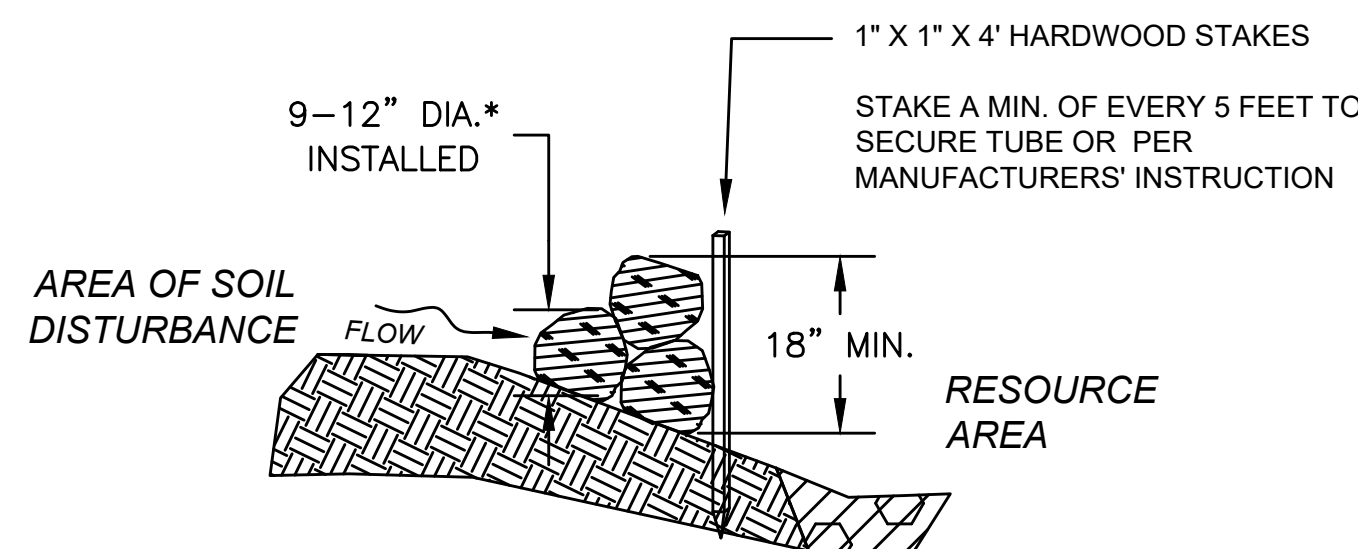
SECTION

COMPOST FILTER TUBE & SILT FENCE

NOT TO SCALE



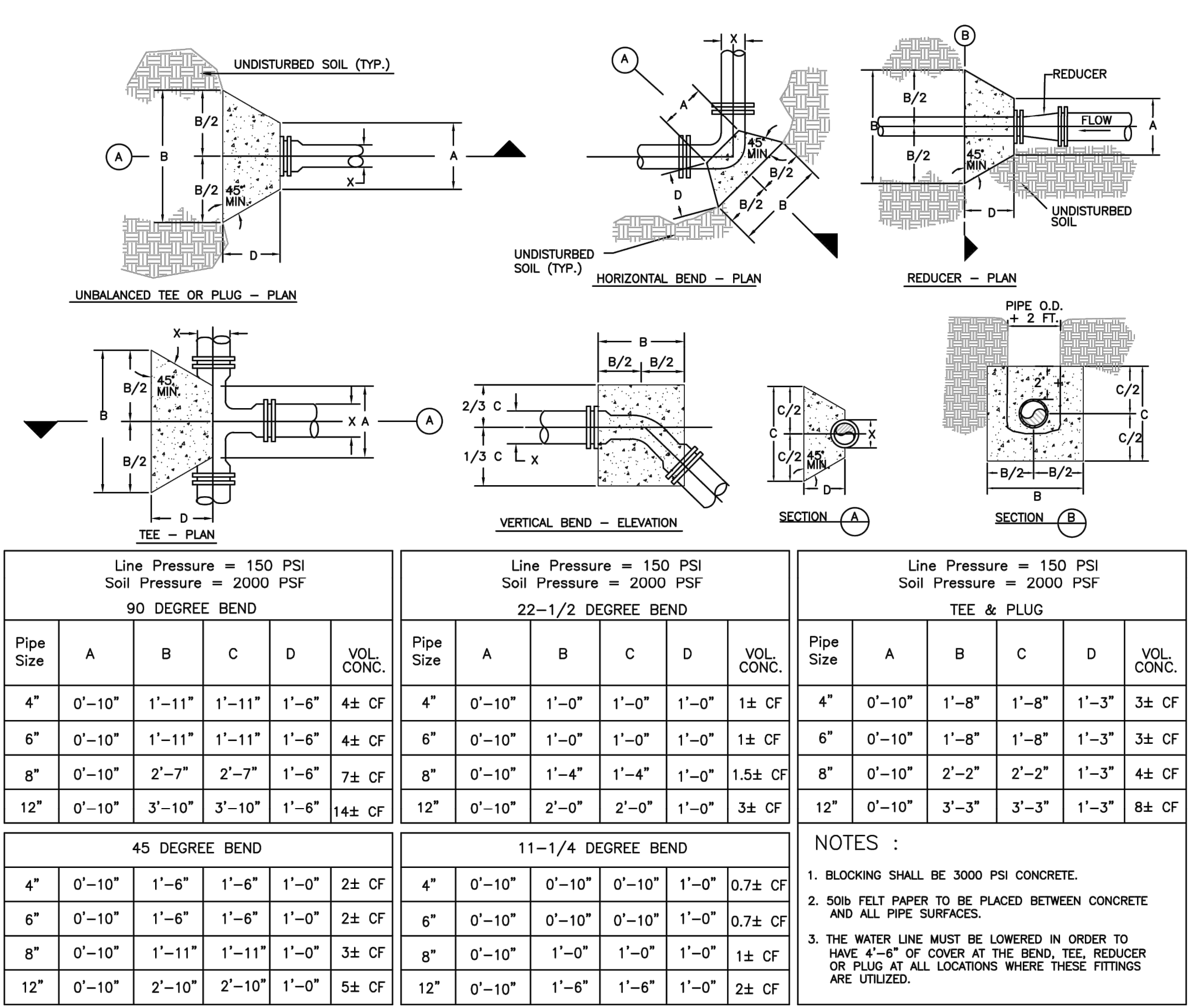
PLAN VIEW



SECTION

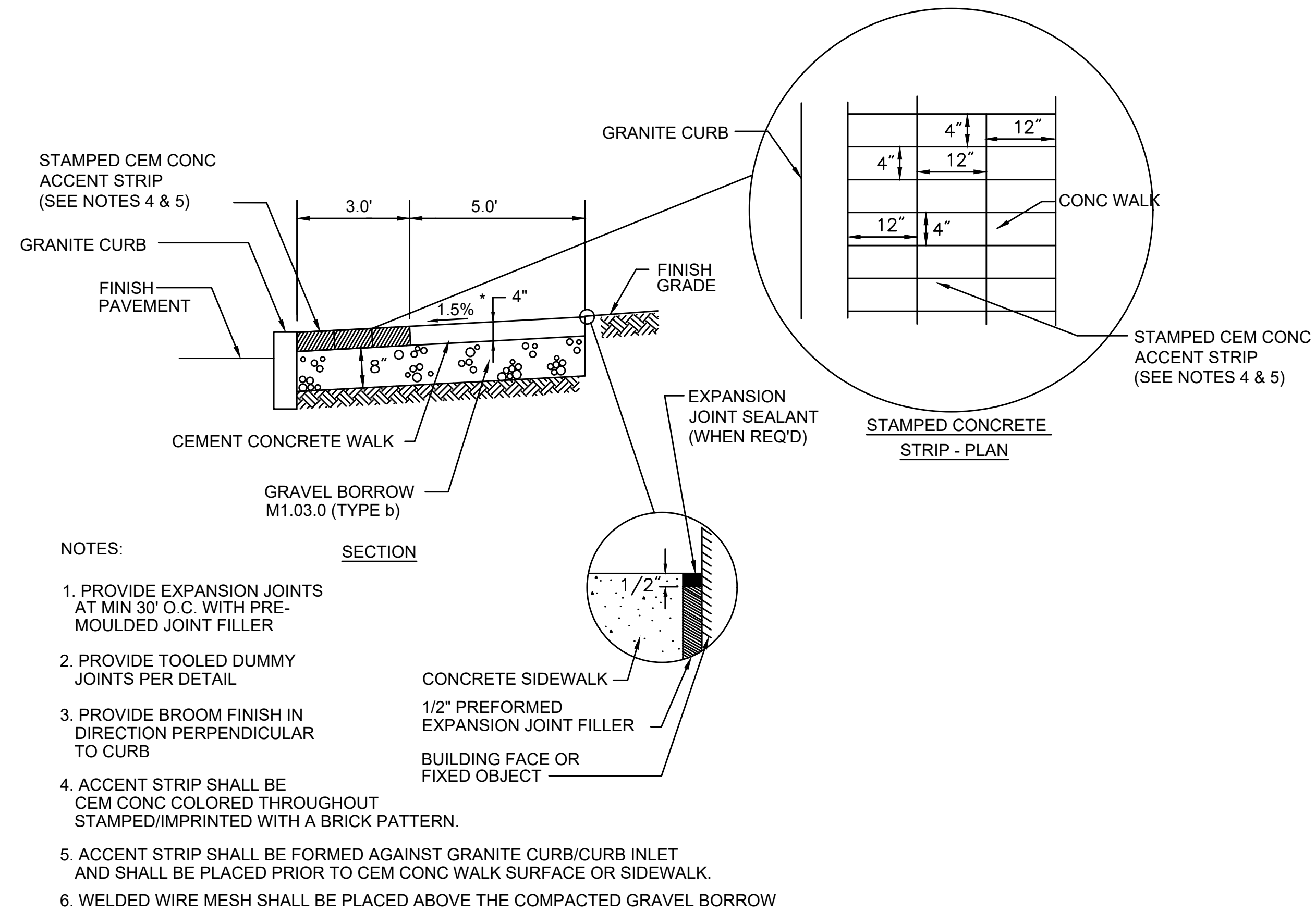
COMPOST FILTER TUBE BERM (SLOPES 2:1 OR STEEPER)

NOT TO SCALE



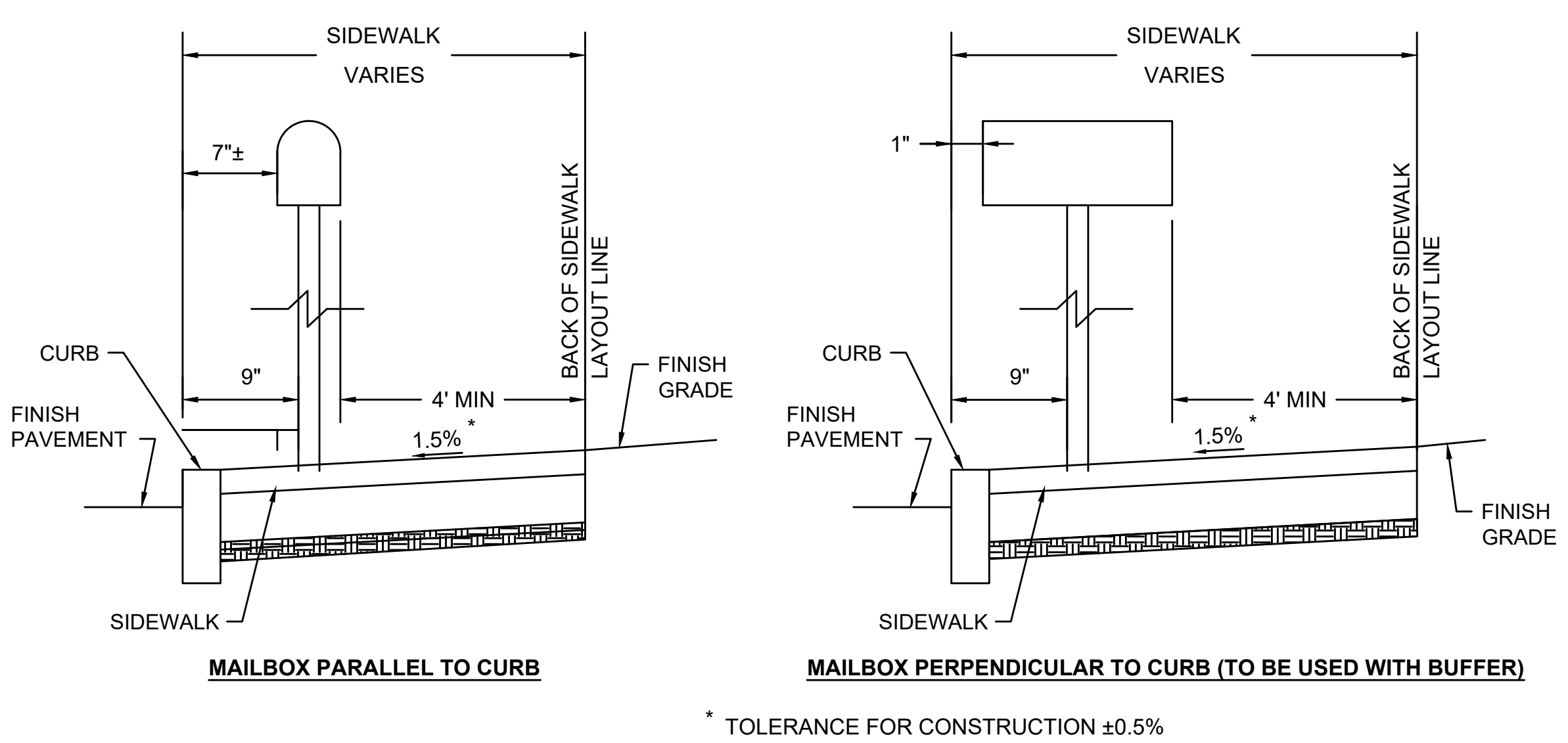
THRUST BLOCK

SCALE: NTS



CEMENT CONCRETE SIDEWALK WITH STAMPED CONCRETE STRIP

SCALE: NTS

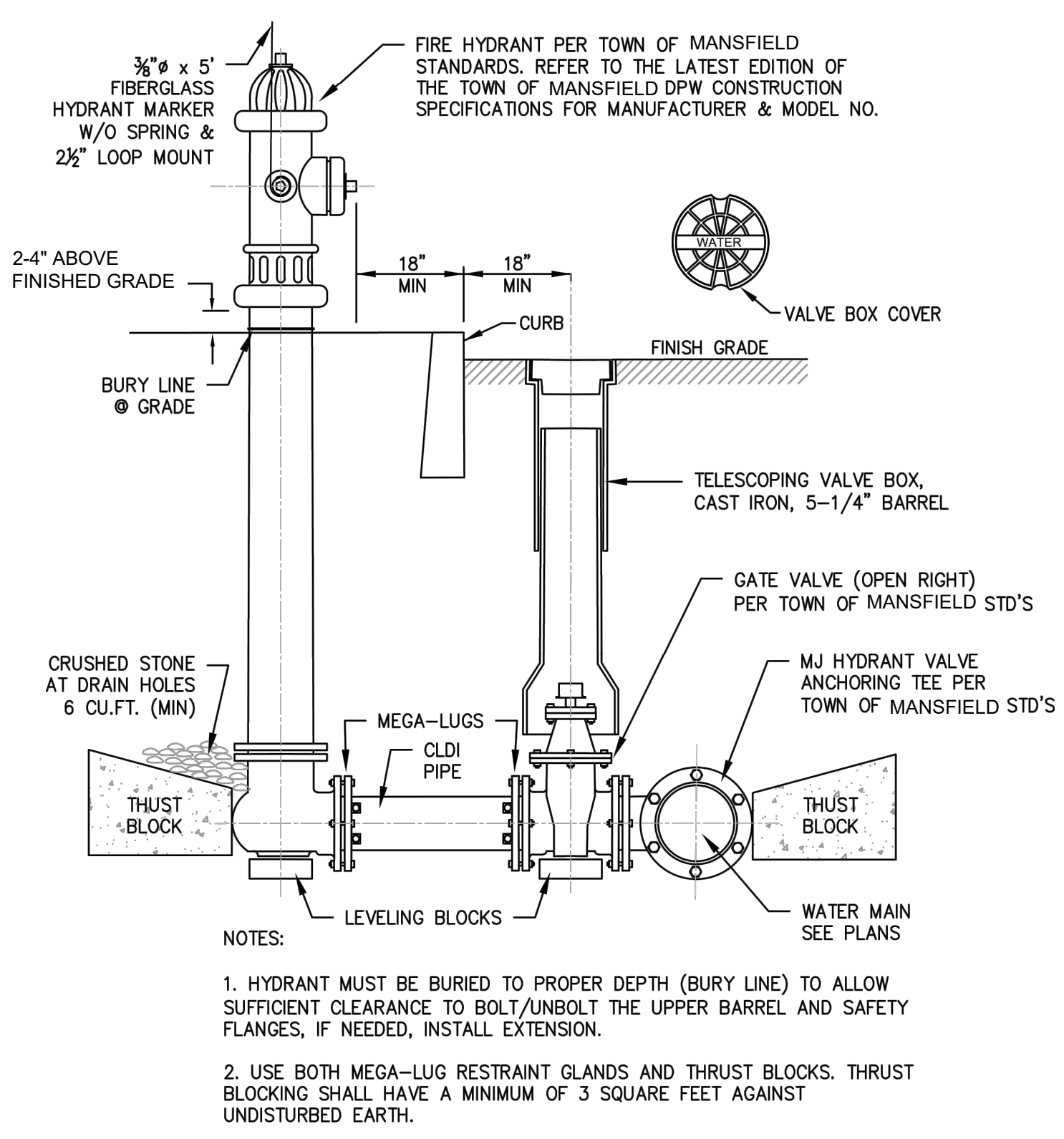


SIDEWALK CLEARANCE MAILBOXES AND PAPER TUBES

SCALE: N.T.S.

DWG: WALK-05

DATE: JUNE 2018

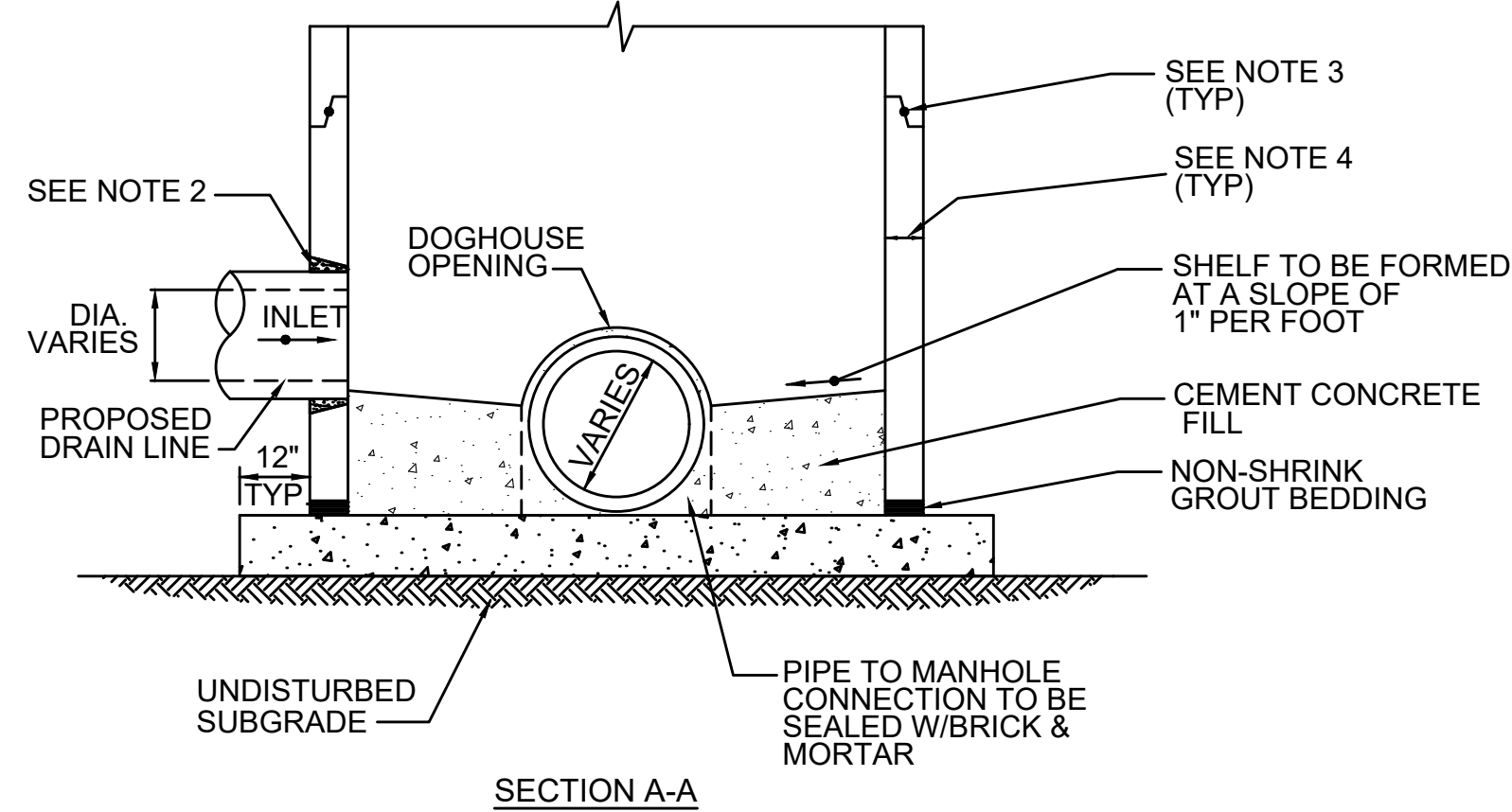
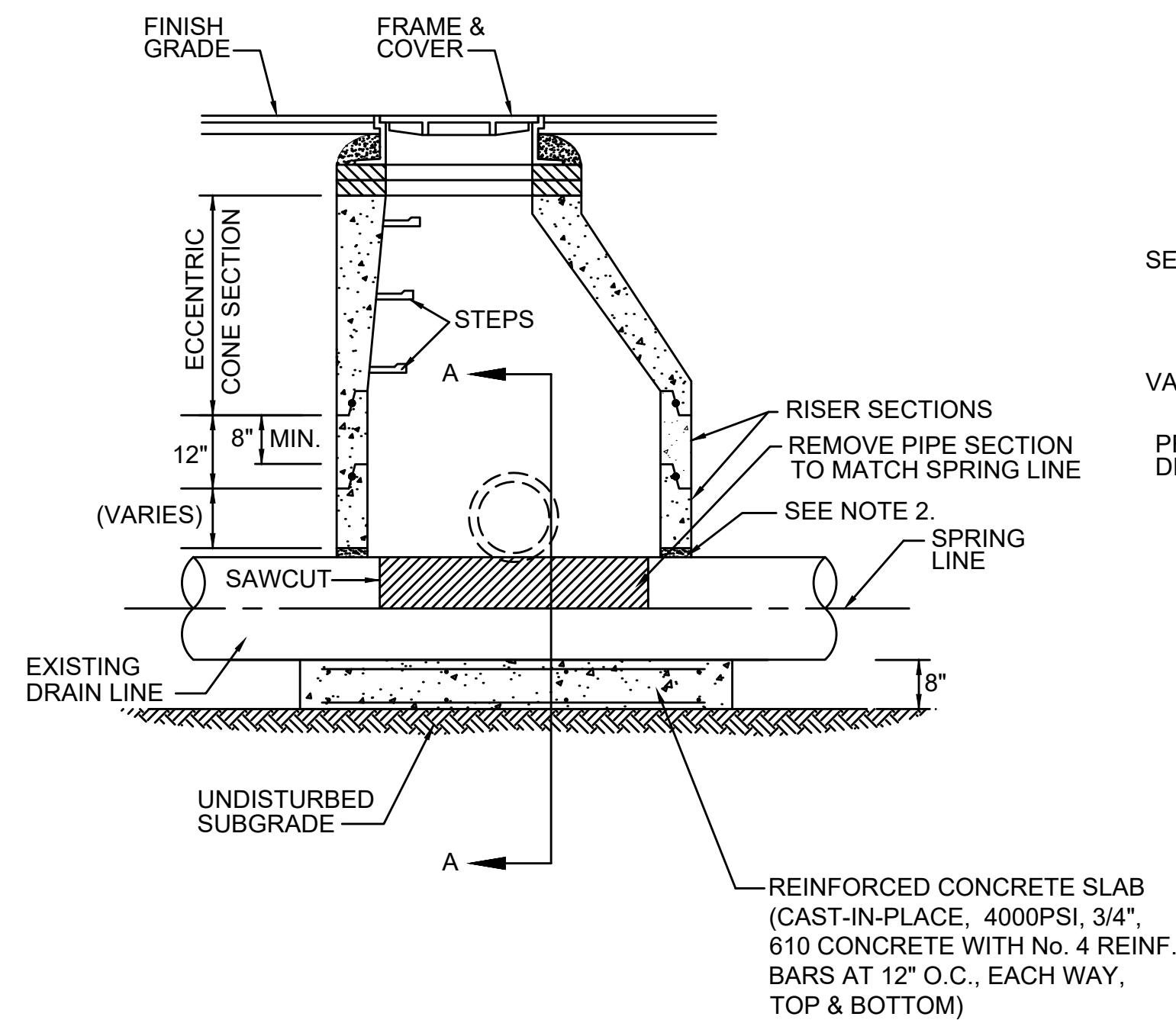


PROPOSED HYDRANT

SCALE: NTS

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	47	73
PROJECT FILE NO. 609255			
CONSTRUCTION DETAILS			

- MINIMUM CLEAR PATH ON ALL SIDEWALK SHALL BE 48" EXCLUDING THE CURB. THE CLEAR PATH SHALL BE MEASURED TO FIRST VERTICAL FACE ENCOUNTERED ON THE MAILBOX OR PAPER TUBE (INCLUDING ALL PROTRUSIONS LESS THAN 6'-8" IN HEIGHT).
- CONTRACTOR SHALL VERIFY LOCATION OF ALL MAILBOXES AND PAPER TUBES TO BE SET WITHIN THE SIDEWALK PRIOR TO FINAL PLACEMENT TO PROVIDE A MINIMUM CLEAR PATH OF 48". CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY LOCATION THAT CANNOT MEET THE CLEARANCE REQUIREMENTS.
- REFER TO MASSDOT STANDARD DETAIL E 504.1.0 FOR ADDITIONAL INFORMATION.

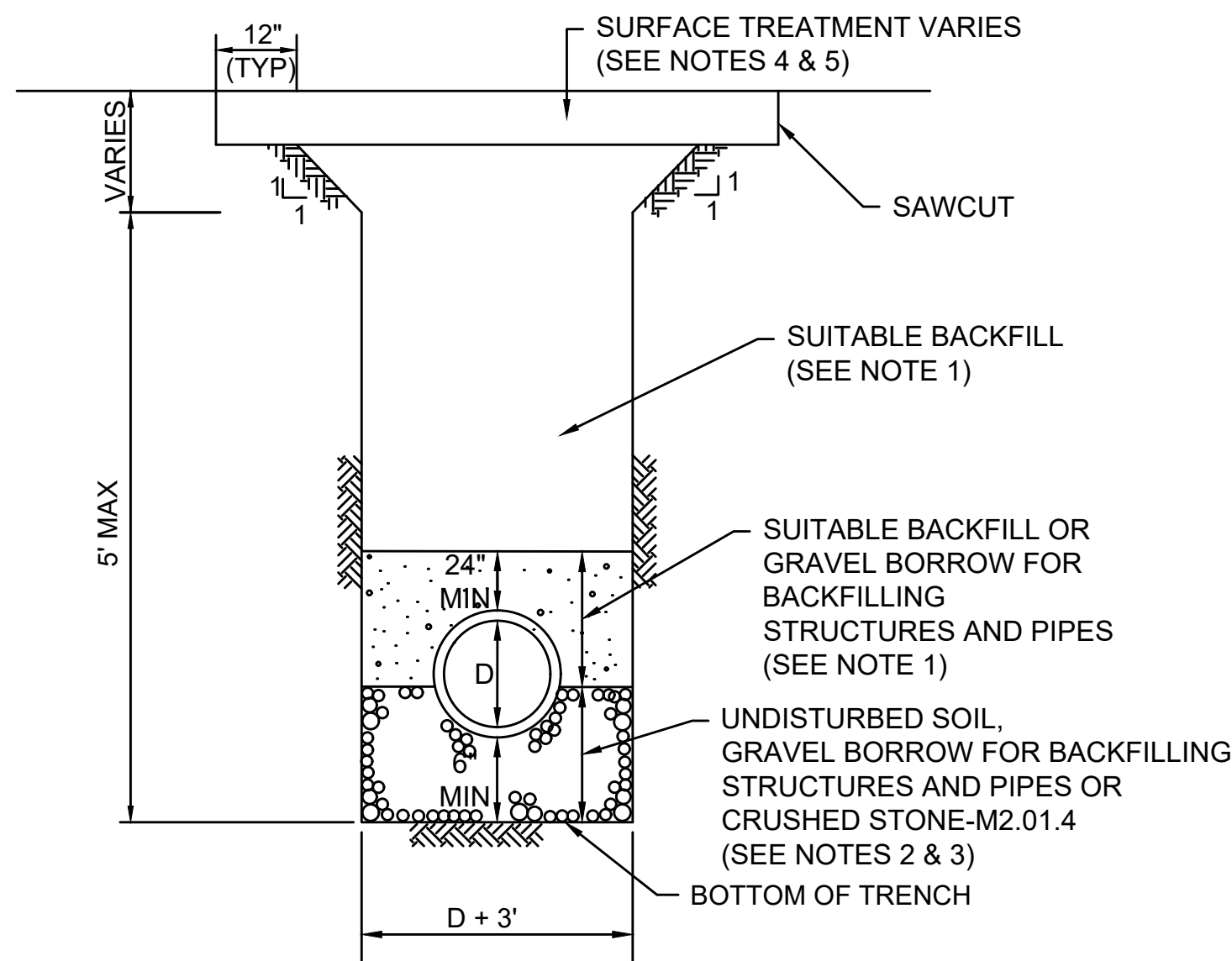


NOTES:

- STRUCTURE SHALL BE DESIGNED FOR HS-20 LOADING.
- PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- FOR MANHOLES OVER 9' IN DEPTH, WALL THICKNESS SHALL BE 6" MIN. FOR MANHOLES 9' OR LESS IN DEPTH, WALL THICKNESS SHALL BE 5" MIN.

DRAIN MANHOLE OVER EXISTING PIPE

SCALE: NTS



NOTES:

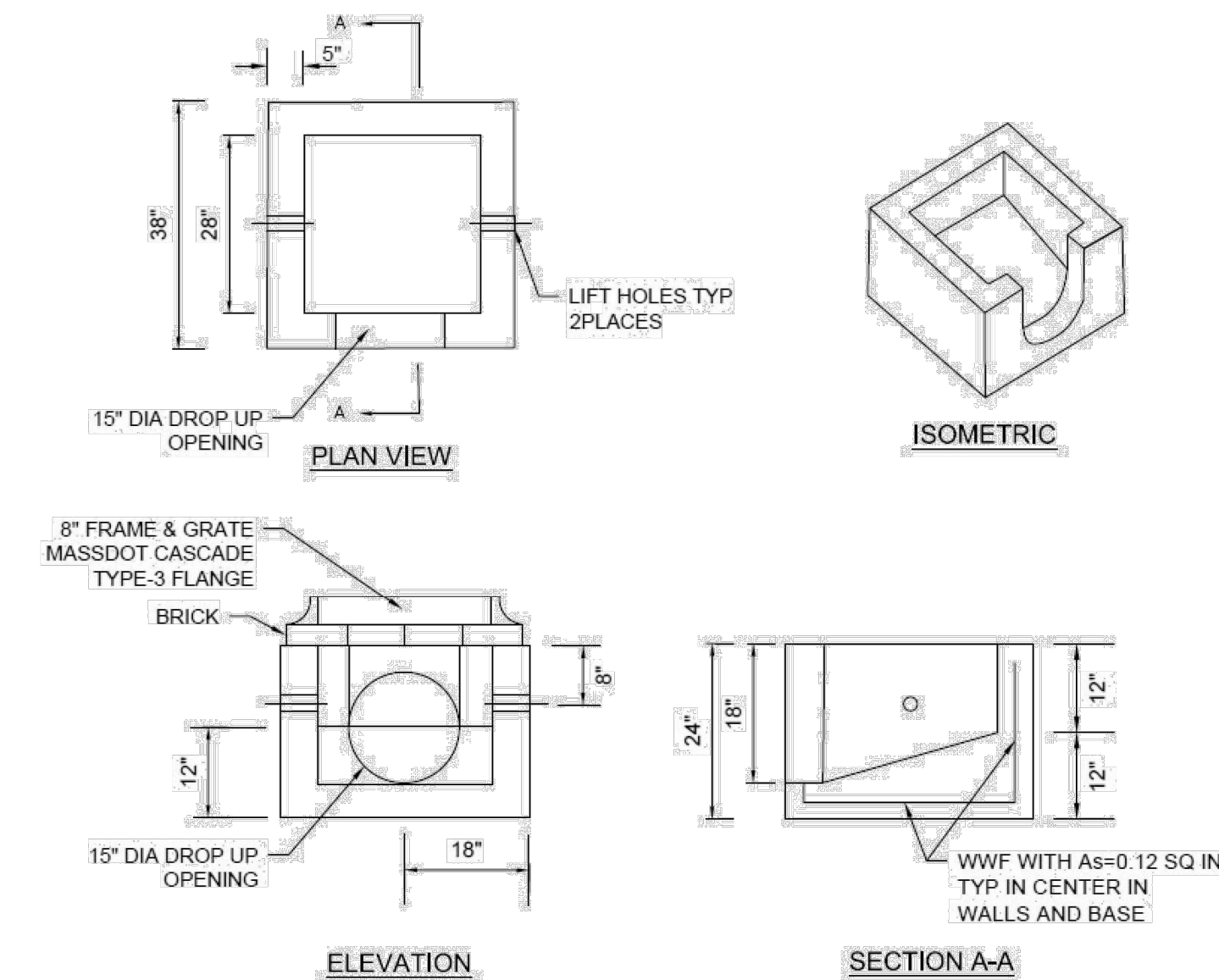
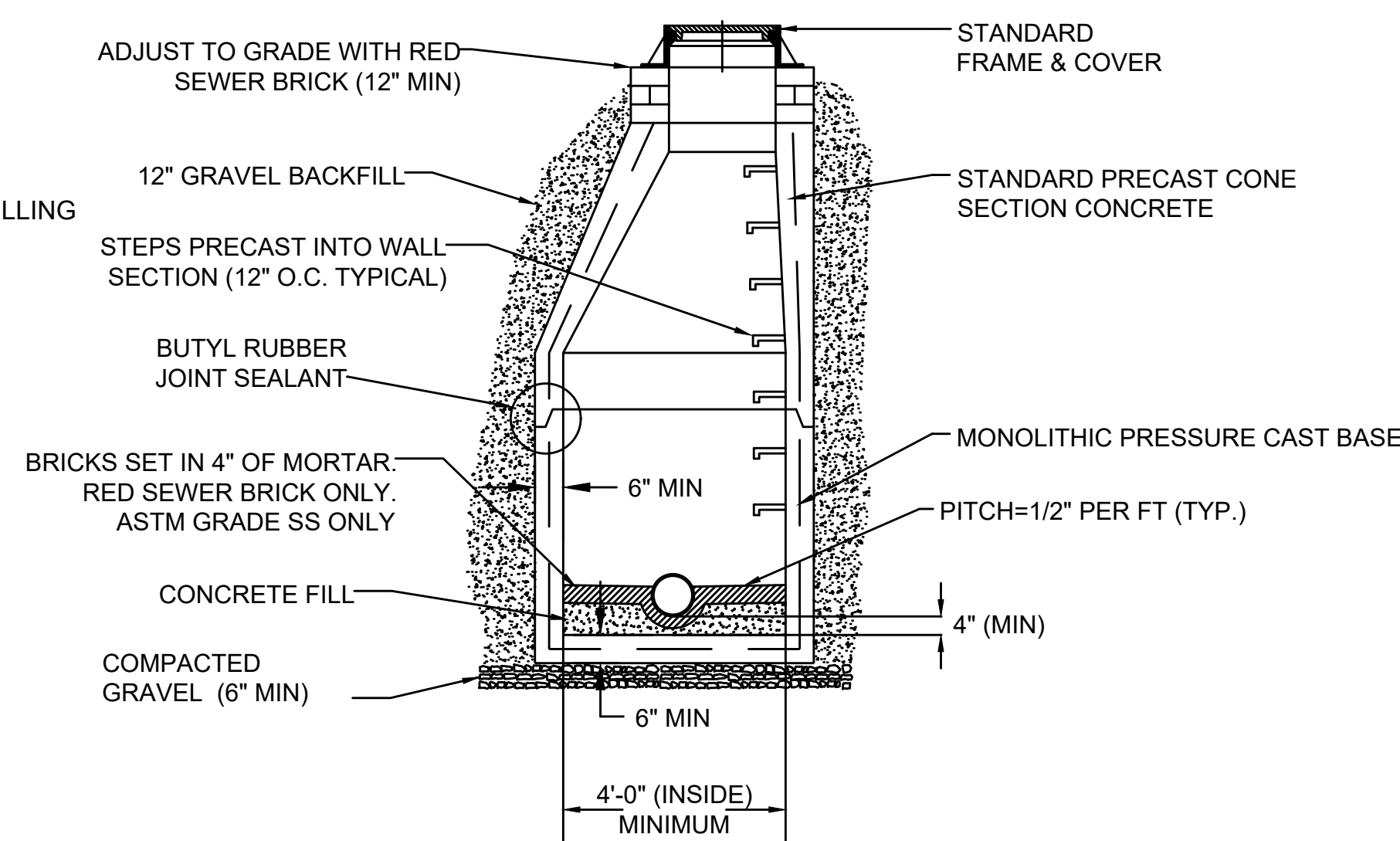
- EXISTING MATERIAL OBTAINED FROM EXCAVATION THAT IS DETERMINED TO BE SUITABLE AND APPROVED BY THE ENGINEER SHALL BE USED. STONES LARGER THAN 6" SHALL NOT BE USED. BACKFILL SHALL BE PLACED IN 6" MAX LIFTS AND COMPACTED. BACKFILL PLACED WITH 24" ABOVE THE PIPE SHALL CONTAIN NO STONES LARGER THAN 3".
- SOFT OR UNSUITABLE MATERIAL EXISTING BELOW THE BEDDING GRADE SHALL BE REMOVED AS DIRECTED. REPLACEMENT GRAVEL BORROW, TYPE C OR CRUSHED STONE SHALL BE COMPACTED.
- CRUSHED STONE TO BE USED DURING WET CONDITIONS AS DIRECTED BY THE ENGINEER.
- IN AREAS OF FULL DEPTH PAVEMENT, CONTINUE SUITABLE BACKFILL. IF OPEN TO VEHICLE TRAFFIC, USE TEMPORARY ASPHALT PATCHING (ITEM 472.) PLACED IN 2.5" LIFTS (5" MIN)
- IN AREAS OF MICROMILL & OVERLAY, PAVEMENT SHALL BE PLACED AS FOLLOWS: 2" SUPERPAVE SURFACE COURSE- 12.5 (SSC - 12.5) OVER 3" OF HMA FOR PATCHING (ITEM 451.)
- THIS DETAIL ASSUMES FULL DEPTH PAVEMENT IS CONSTRUCTED AFTER PIPE IS INSTALLED.
- FOR WATER PIPE TRENCHES, SEE TOWN OF MANSFIELD WATER SPECIFICATIONS.

TRENCH DETAIL

SCALE: NTS

MANHOLE

SCALE: NTS



NOTES:

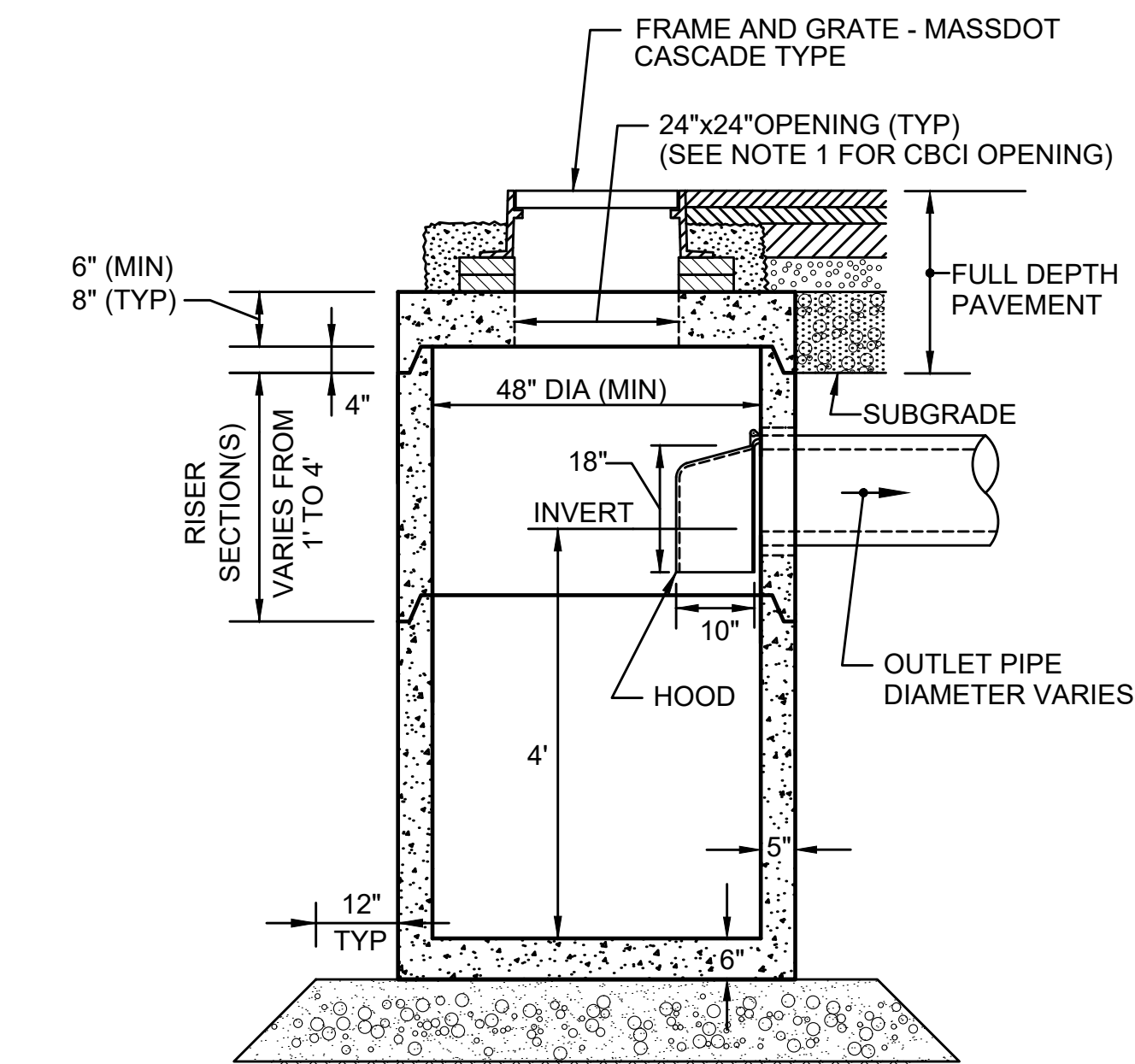
- DESIGNED FOR AASHTO HS25-44 LOADING.
- CONCRETE STRENGTH $f_c=4000$ PSI
- REINFORCING STEEL ASTM A185 (wvf) $f_y=60,000$ PSI
- CURB INLETS ARE REQUIRED WHEN GUTTER INLETS ARE INSTALLED AGAINST CURBING.

SPECIAL GUTTER INLET

NOT TO SCALE

SPECIAL GUTTER INLET

SCALE: NTS

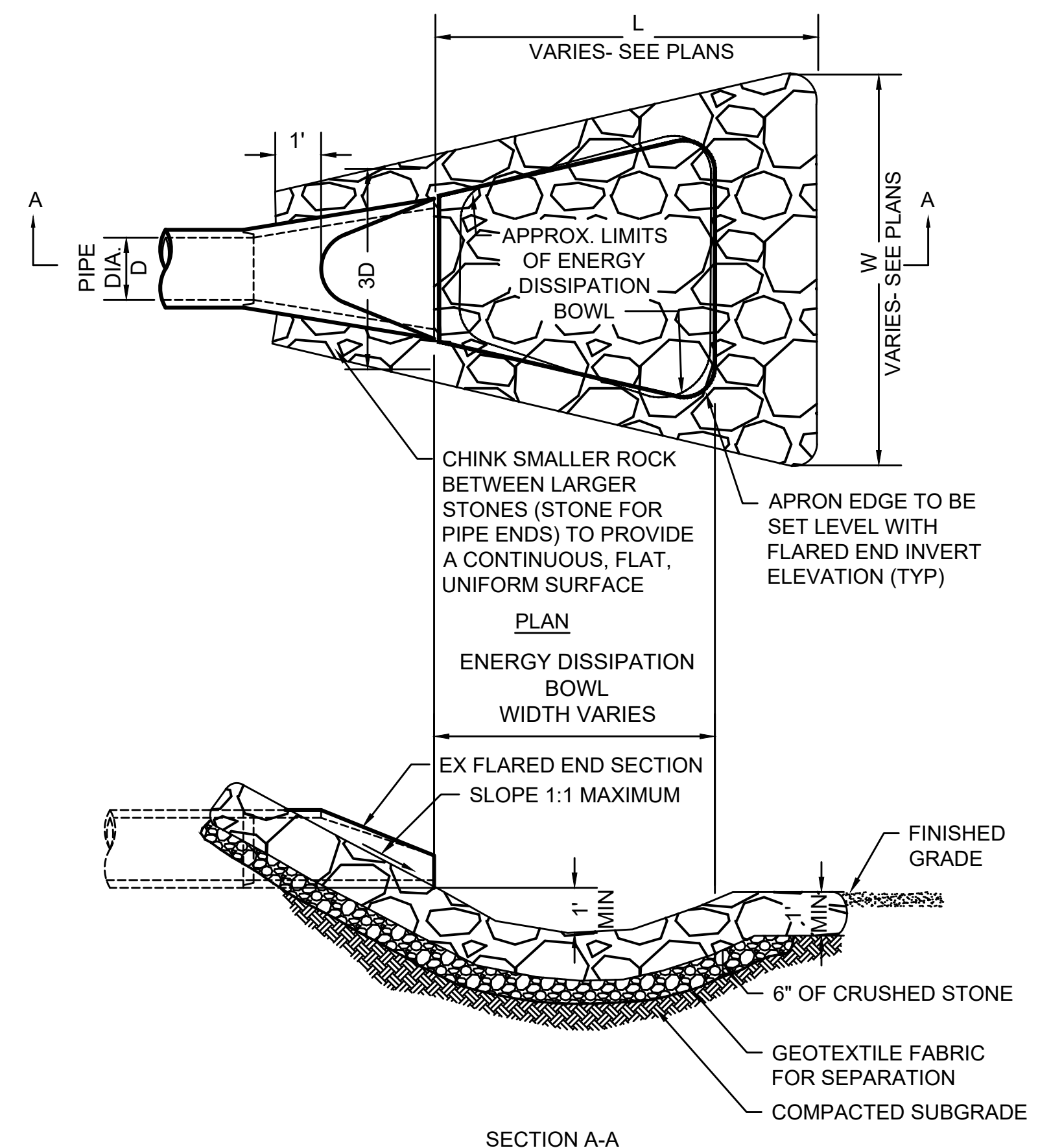


NOTES:

- TOP SLAB FOR CBCI SHALL HAVE 24"x 27" RECTANGULAR OPENING.
- 6" MINIMUM SPACE FROM TOP OF KNOCKOUT TO BOTTOM OF ROOF SLAB JOINT REQUIRED WHEN USING HOODS.
- ALL SECTIONS SHALL BE RATED FOR HS-20 LOADING.

CATCH BASIN WITH HOOD

SCALE: NTS



SECTION A-A

FLARED END SECTION (FES) WITH STONE FOR PIPE ENDS

SCALE: N.T.S.

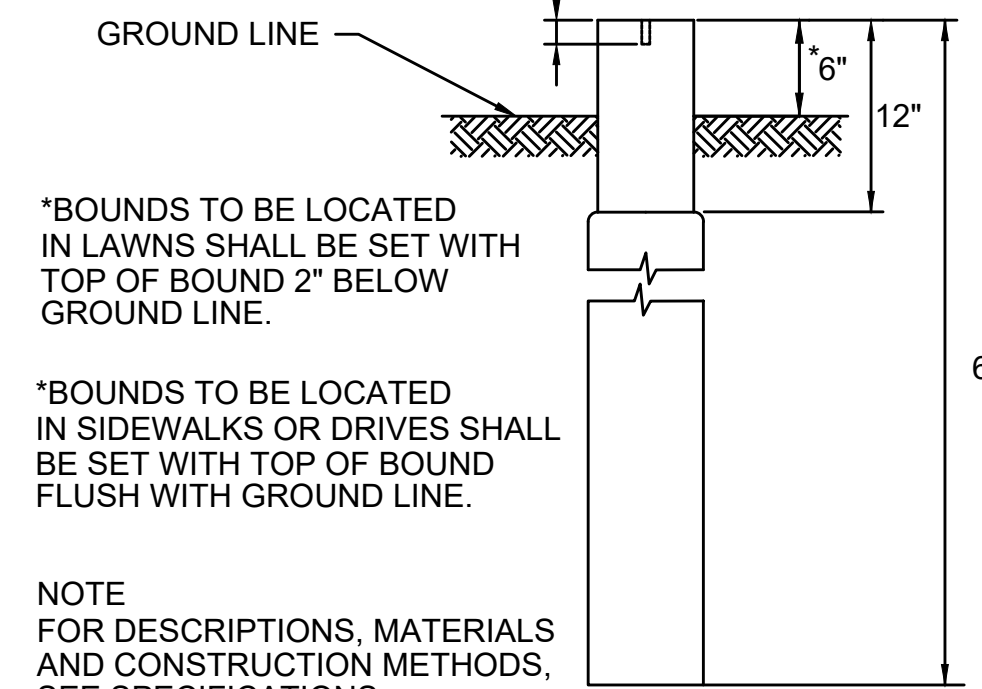
SOURCE: VHB

DATE: AUGUST 7 2015

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	48	73
PROJECT FILE NO. 609255			

CONSTRUCTION DETAILS

1/2" DIAM HOLE IN CENTER OF TOP, 1-1/2" DEEP; FLARED AT BOTTOM; RAMMED WITH LEAD ROPE



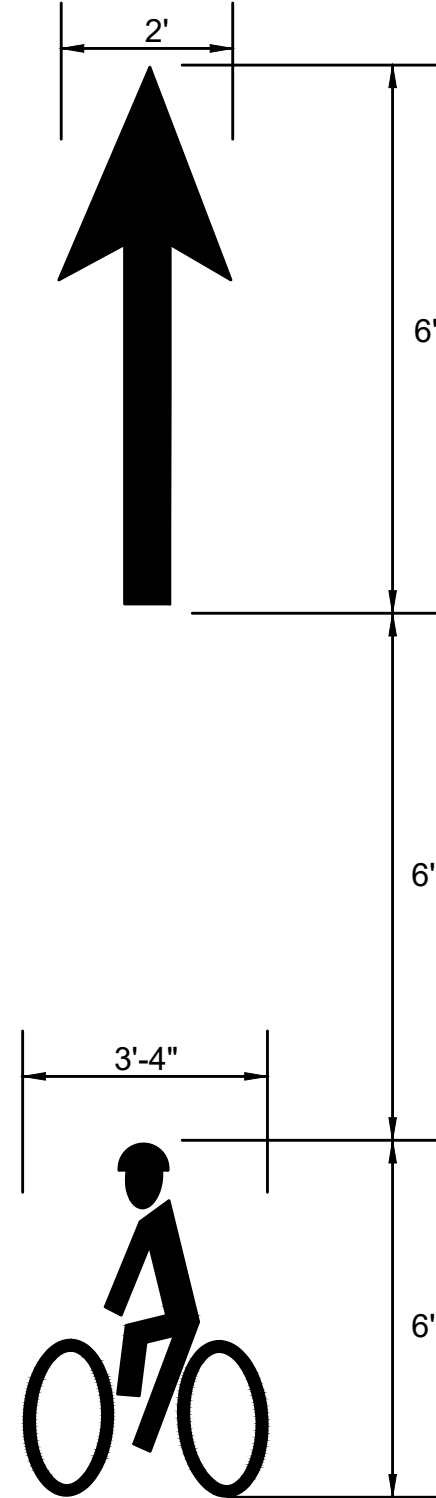
*BOUNDS TO BE LOCATED IN LAWNS SHALL BE SET WITH TOP OF BOUND 2" BELOW GROUND LINE.

*BOUNDS TO BE LOCATED IN SIDEWALKS OR DRIVES SHALL BE SET WITH TOP OF BOUND FLUSH WITH GROUND LINE.

NOTE FOR DESCRIPTIONS, MATERIALS AND CONSTRUCTION METHODS, SEE SPECIFICATIONS.

MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	49	73
PROJECT FILE NO. 609255			

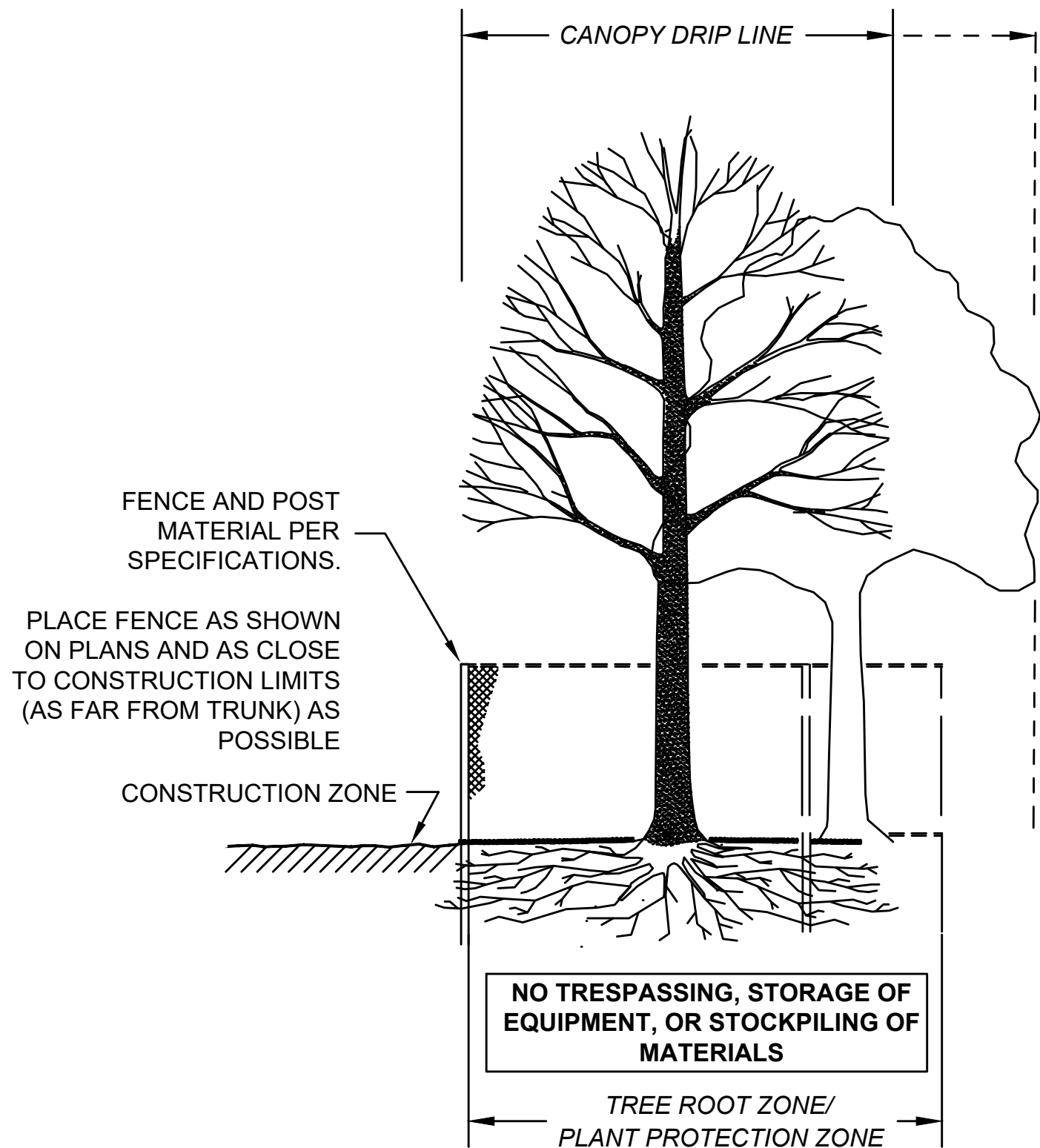
CONSTRUCTION DETAILS



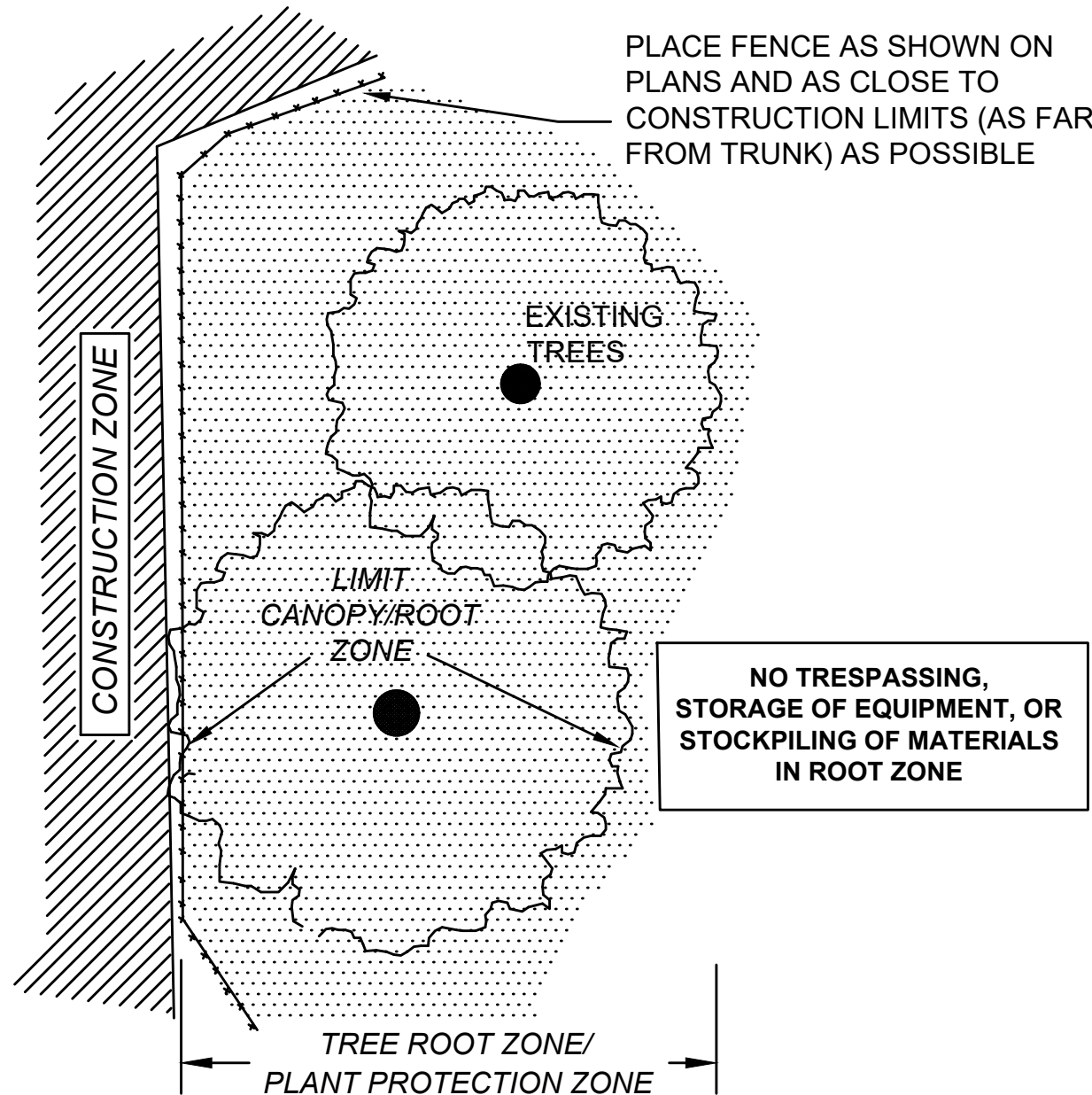
- NOTES:
- SEE MUTCD FIGURE 9C-6 FOR MORE INFORMATION.
 - BIKE LANE MARKINGS SHALL BE REFLECTORIZED PREFORMED THERMOPLASTIC.

BIKE LANE PAVEMENT MARKINGS

SCALE: N.T.S. DWG: PM-11 DATE: NOV 2015



SECTION - FENCE PROTECTION OF ROOT ZONE

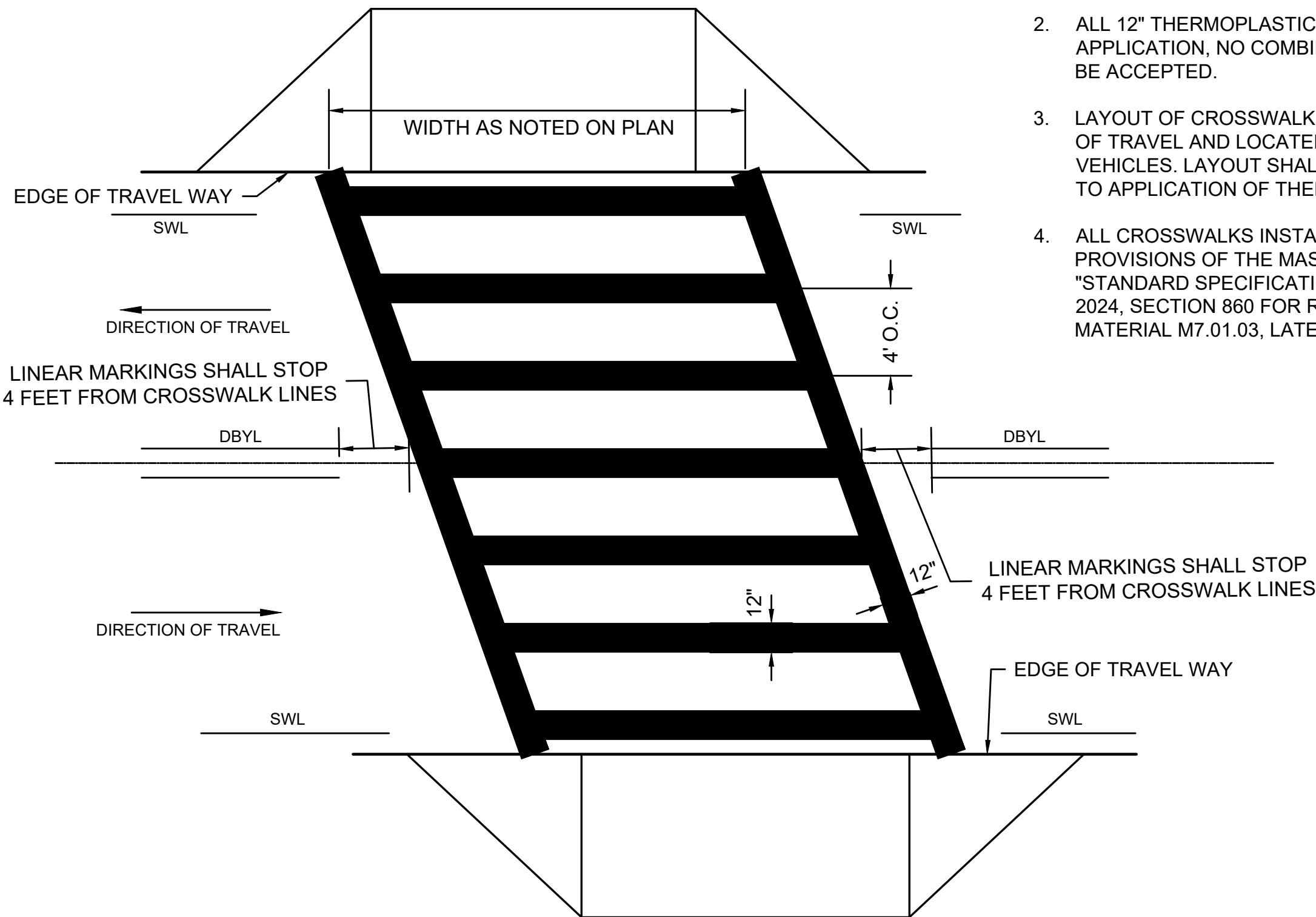


PLAN VIEW - FENCE PROTECTION OF ROOT ZONE

TREE PROTECTION - ROOT ZONE

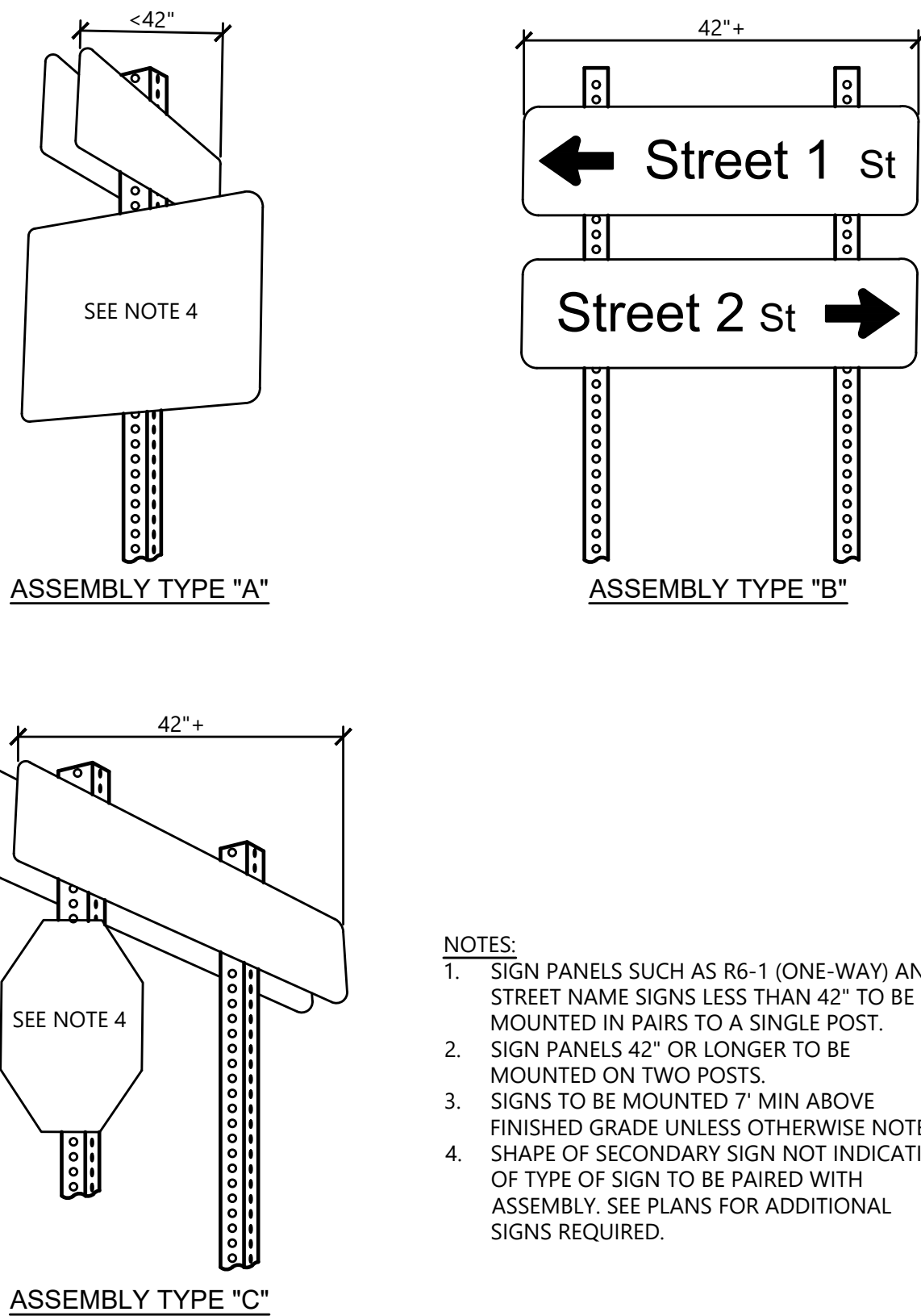
NOT TO SCALE

- NOTES:
- ALL EXISTING CROSSWALK MARKINGS SHALL BE FULLY ERADICATED BY APPROVED METHOD PRIOR TO THE APPLICATION OF PROPOSED MARKINGS.
 - ALL 12" THERMOPLASTIC LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (e.g., TWO - 6" LINES) WILL BE ACCEPTED.
 - LAYOUT OF CROSSWALKS SHALL BE ORIENTATED IN THE DIRECTION OF TRAVEL AND LOCATED OUTSIDE OF THE WHEEL PATH OF VEHICLES. LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO APPLICATION OF THERMOPLASTIC.
 - ALL CROSSWALKS INSTALLED SHALL CONFORM TO THE RELEVANT PROVISIONS OF THE MASSACHUSETTS HIGHWAY DEPARTMENT "STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGES" DATED 2024, SECTION 860 FOR REFLECTORIZED LINE (THERMO-PLASTIC) & MATERIAL M7.01.03, LATEST REVISIONS.



LADDER STYLE CROSSWALK - 12" WIDE LINES

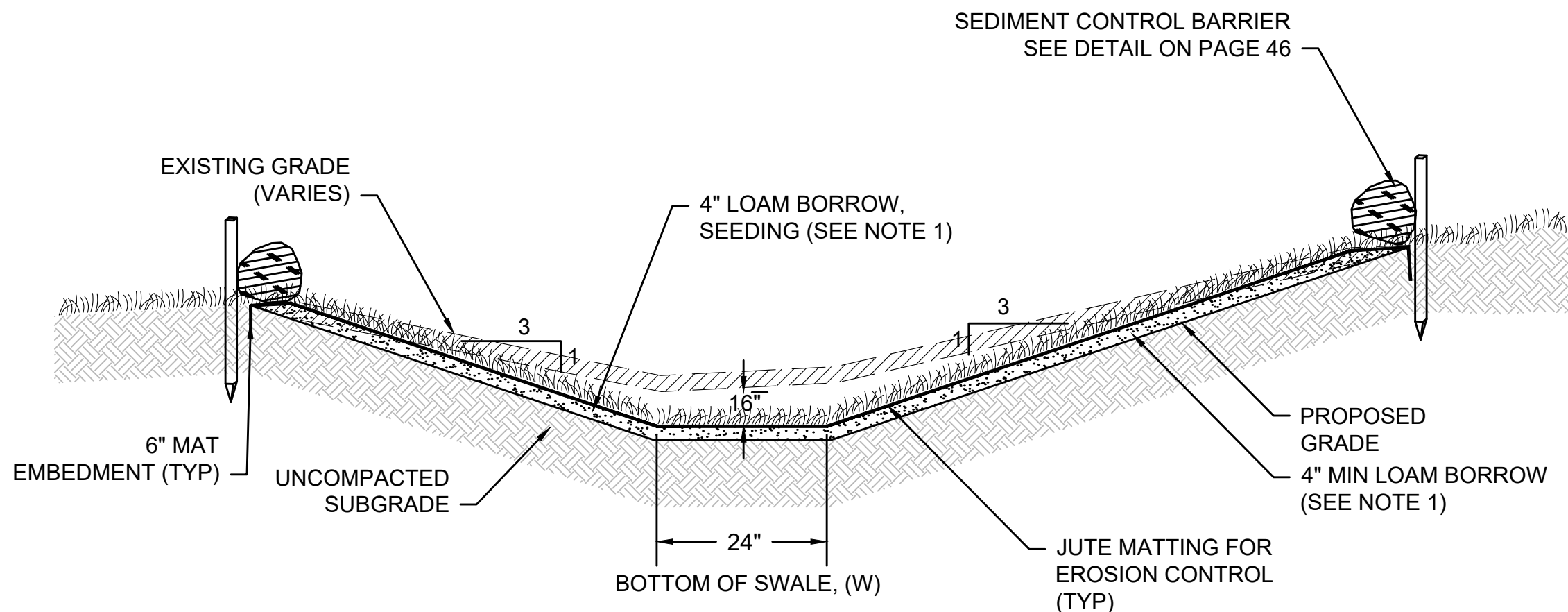
SCALE: N.T.S. DWG: PM-27 DATE: NOVEMBER 2022



- NOTES:
- SIGN PANELS SUCH AS R6-1 (ONE-WAY) AND STREET NAME SIGNS LESS THAN 42" TO BE MOUNTED IN PAIRS TO A SINGLE POST.
 - SIGN PANELS 42" OR LONGER TO BE MOUNTED ON TWO POSTS.
 - SIGNS TO BE MOUNTED 7" MIN ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED.
 - SHAPE OF SECONDARY SIGN NOT INDICATIVE OF TYPE OF SIGN TO BE PAIRED WITH ASSEMBLY. SEE PLANS FOR ADDITIONAL SIGNS REQUIRED.

MULTIPLE SIGN MOUNTING DETAIL

SCALE: N.T.S. DWG: PM-36 DATE: JANUARY 2025



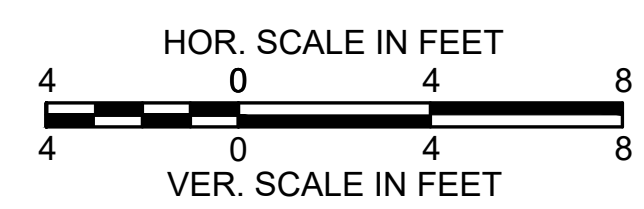
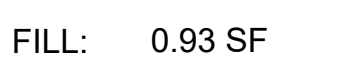
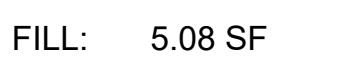
- NOTES:
- PLACE LOAM BORROW TO A MINIMUM DEPTH OF 4". SEEDED WITH ITEM 765.551 WETLAND SEED - FACW MEADOW MIX

DRAINAGE CHANNEL EXCAVATION

SCALE: N.T.S. SOURCE: VHB

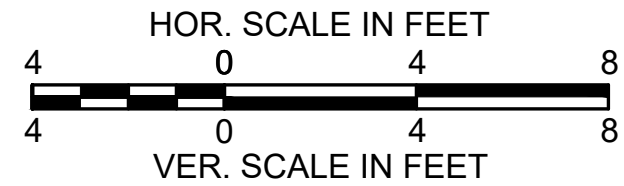
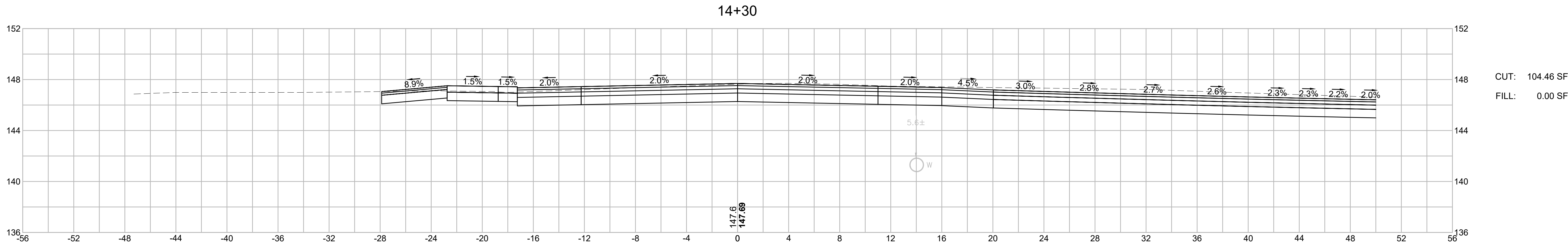
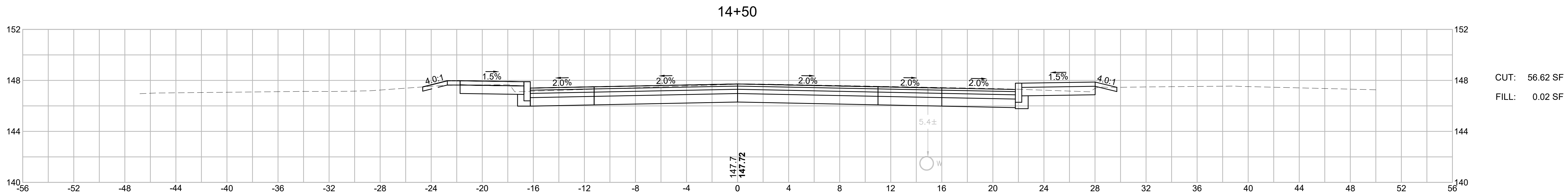
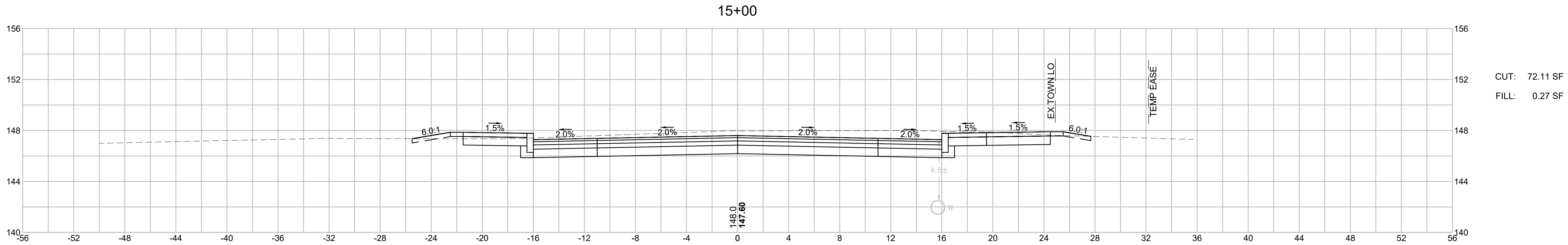
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	50	73
PROJECT FILE NO. 609255			

SUPERELEVATION
PC STA 13+02.58
PT STA 14+20.24
R= 510'
BANK = 1.1%



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	51	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

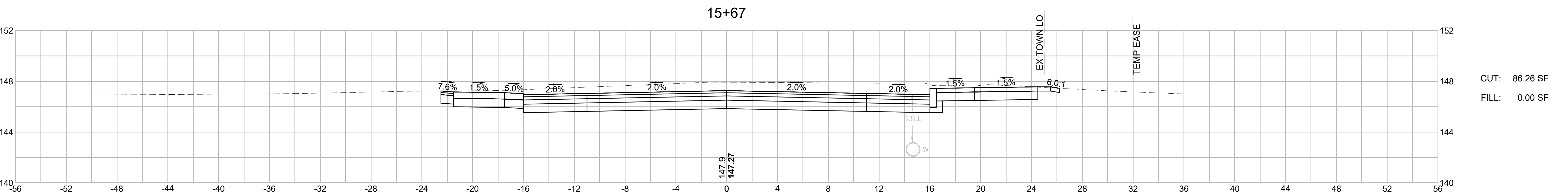


STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	52	73
PROJECT FILE NO. 609255			

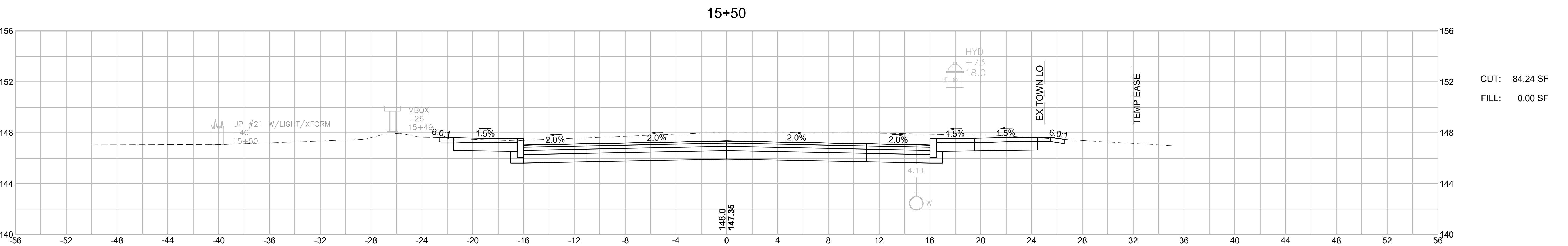
Profile view of a road section. The horizontal axis represents stationing from -56 to 56, with a central point at 0. The vertical axis represents elevation in feet, ranging from 140 to 156. The profile shows a road with a centerline elevation of 147.10 at station 0. The road has a 2.0% grade on both sides of the centerline. The cross-slopes are 6.0:1 on the left and 6.0:1 on the right. The road is flanked by a 3.75' wide area (W) on the right. The profile includes a 'TEMP EASE' section on the right side. The road is labeled 'EX TOWN LO' on the right side. The profile also shows a 'MBOX' at station 21 (16+20) and a 'MBOX' at station 27 (16+06). The profile is labeled '16+00' at the top center.

CUT: 87.45 SF
FILL: 0.00 SF

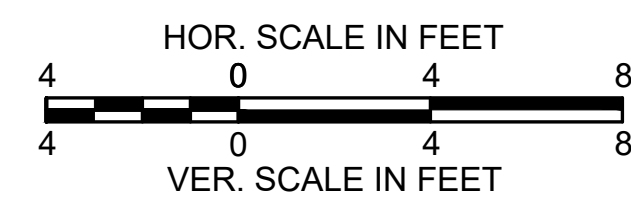
FILL: 0.00 SF



FILL: 0.00 SF



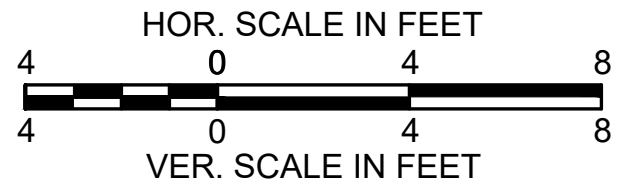
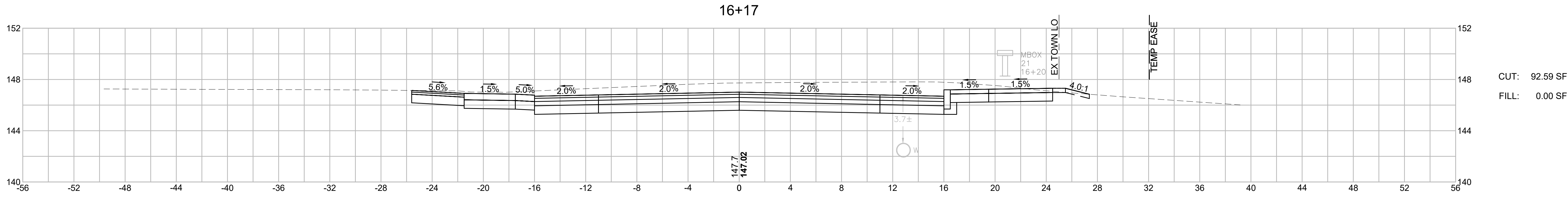
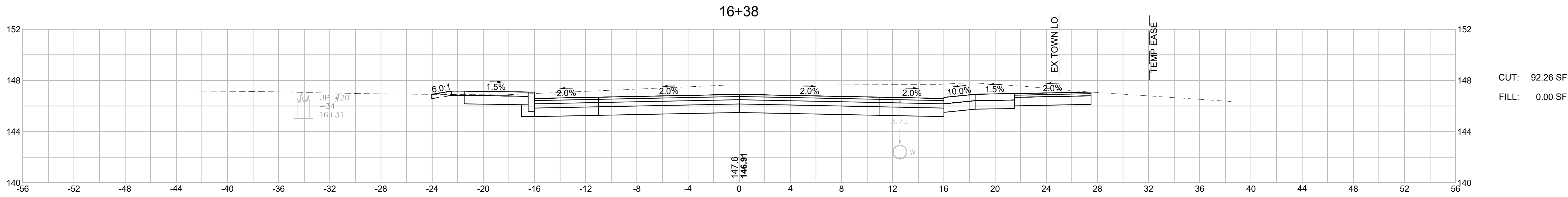
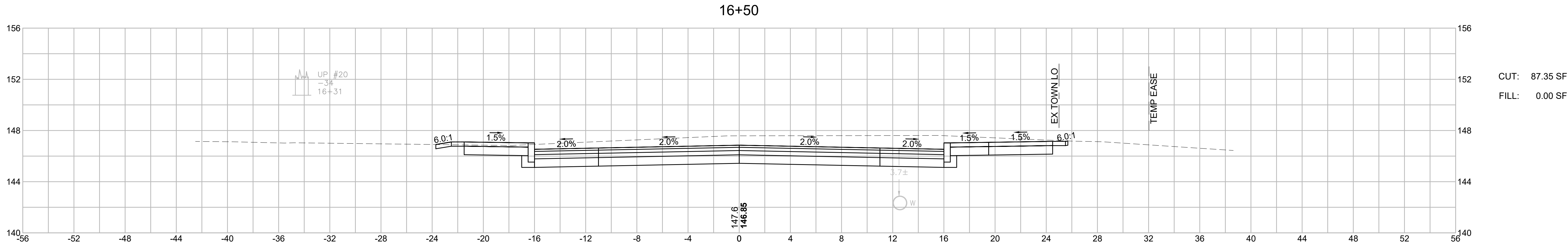
FILL: 0.00 SF

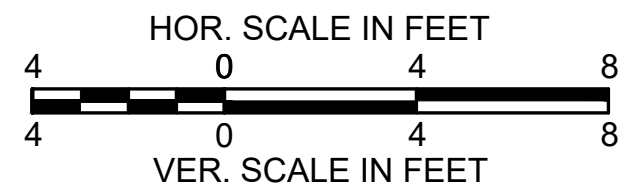
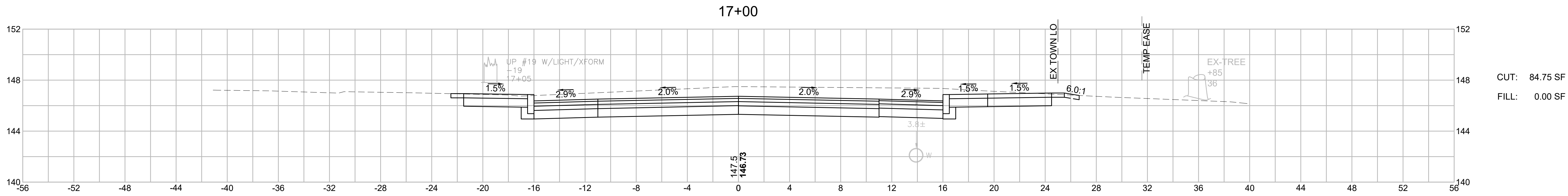
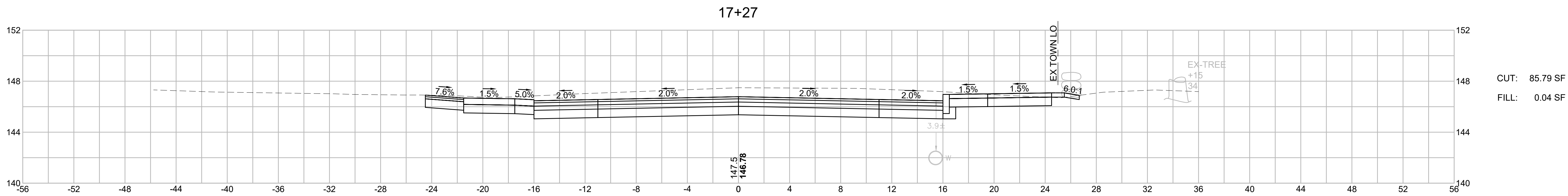
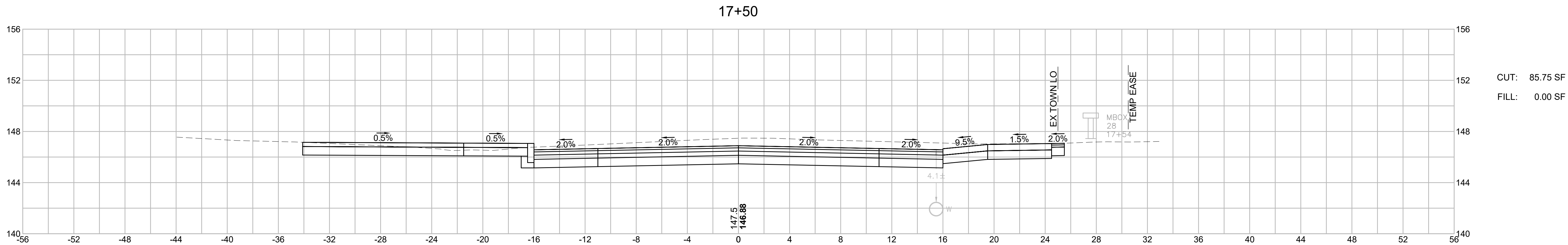


MANSFIELD
SCHOOL STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	53	73
PROJECT FILE NO. 609255			

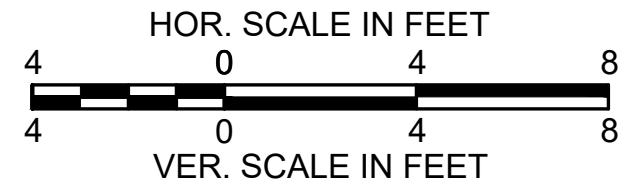
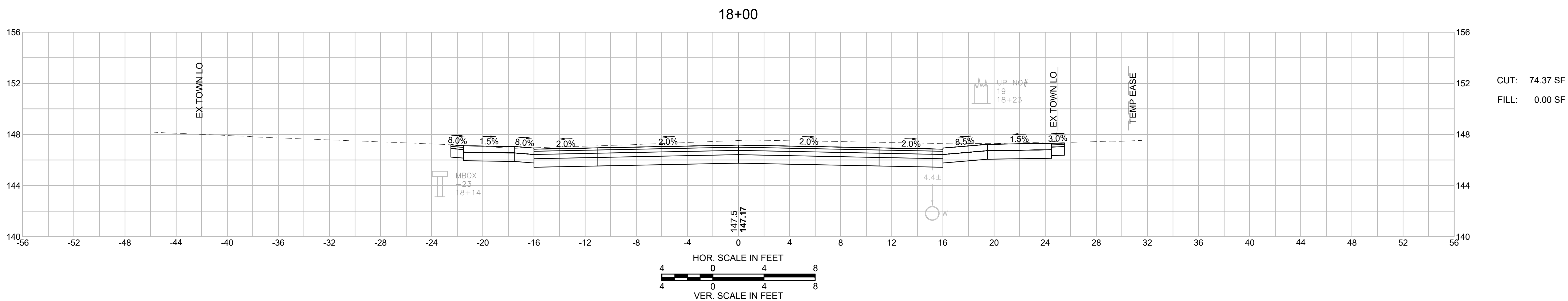
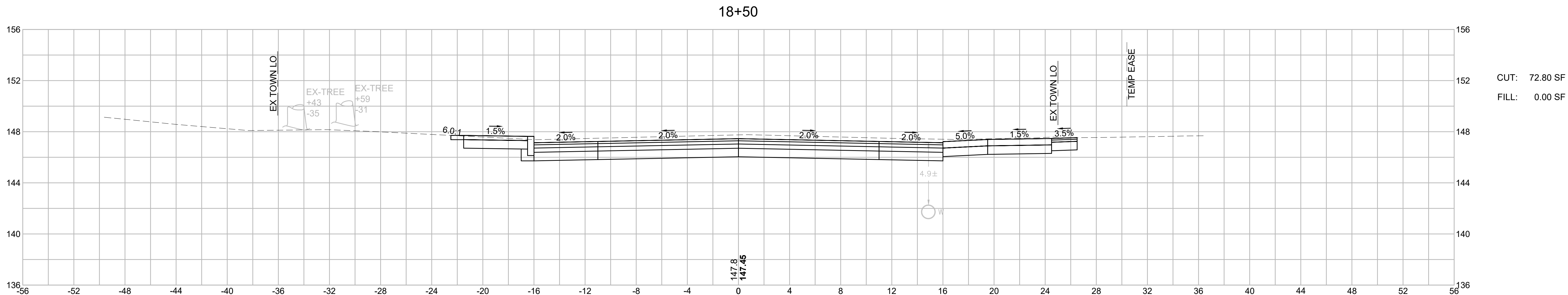
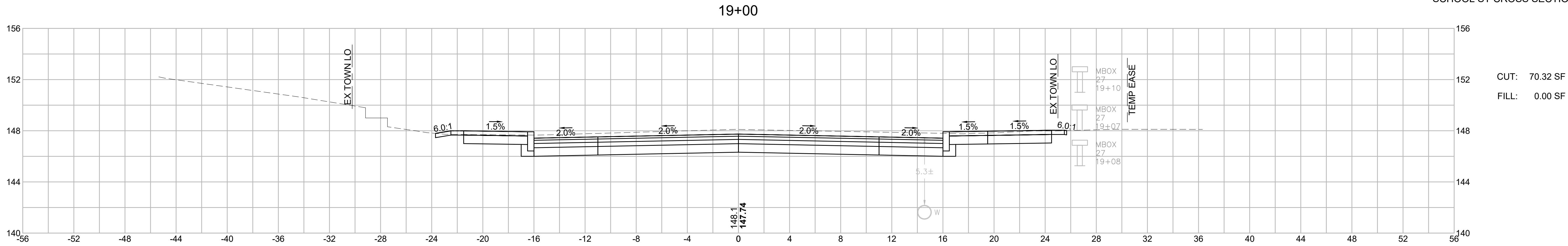
SCHOOL ST CROSS SECTIONS





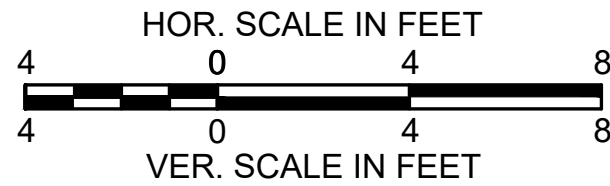
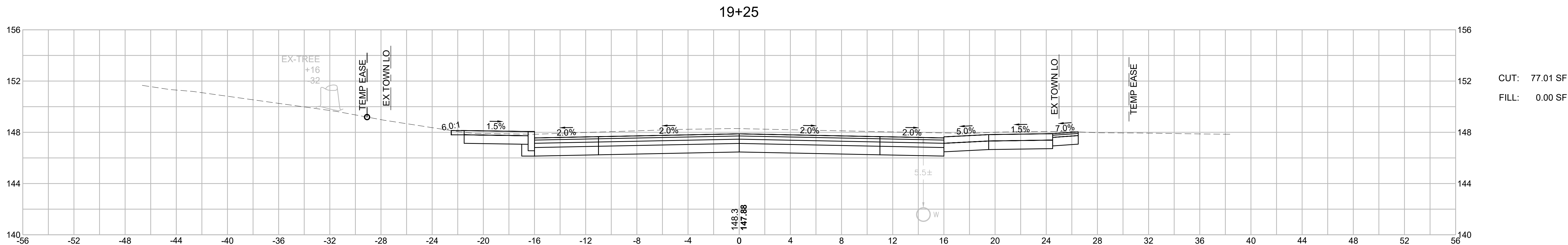
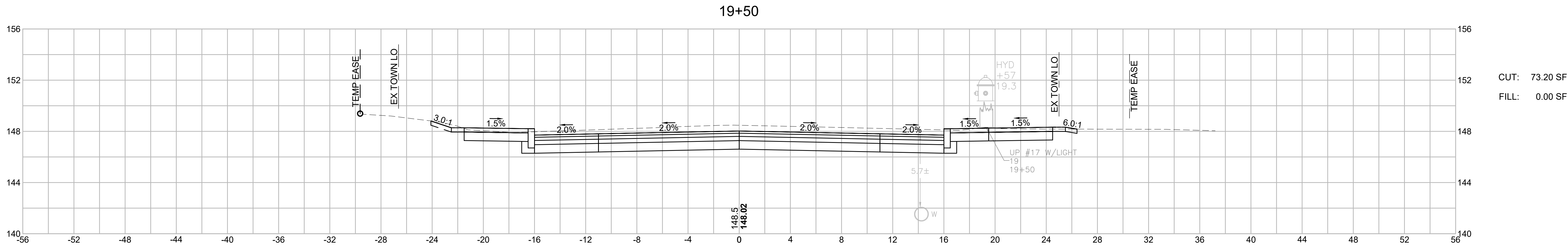
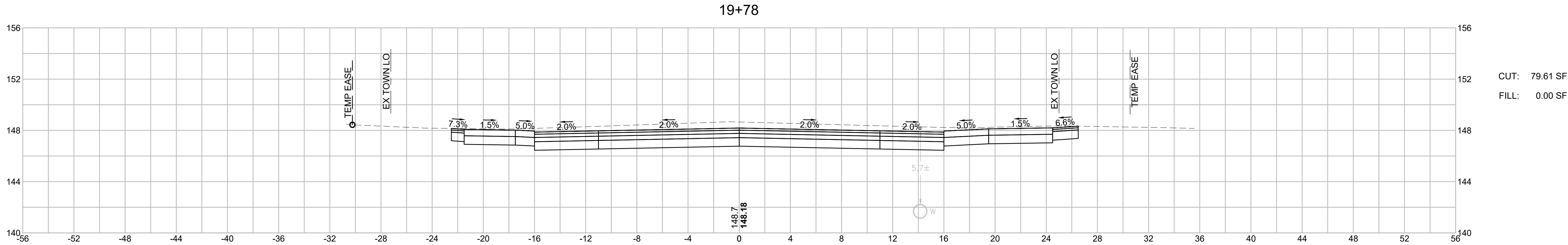
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	55	73
PROJECT FILE NO. 609255			

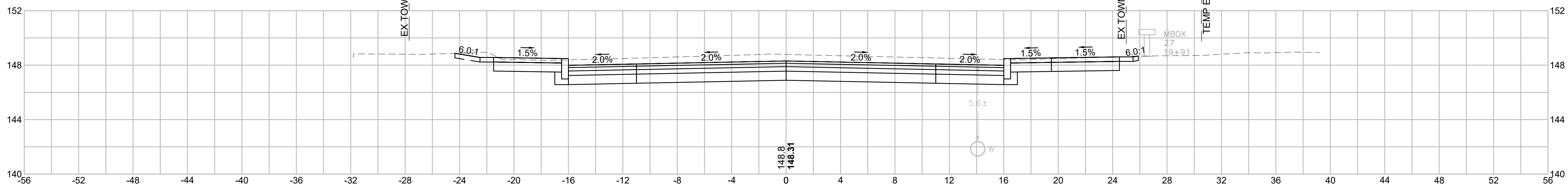
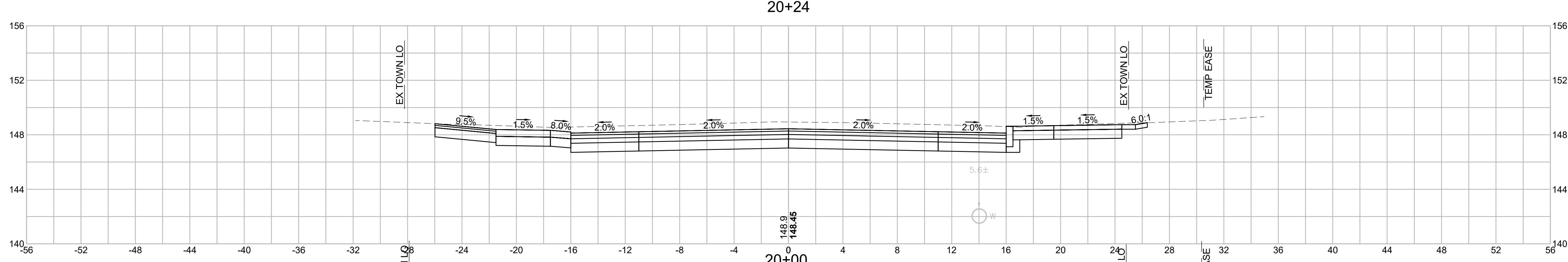
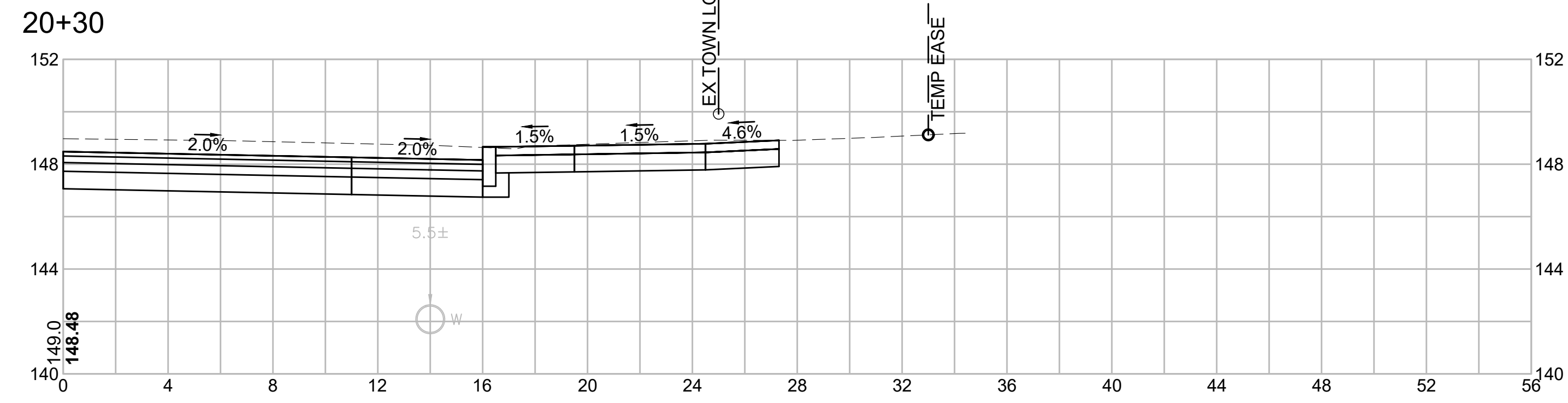
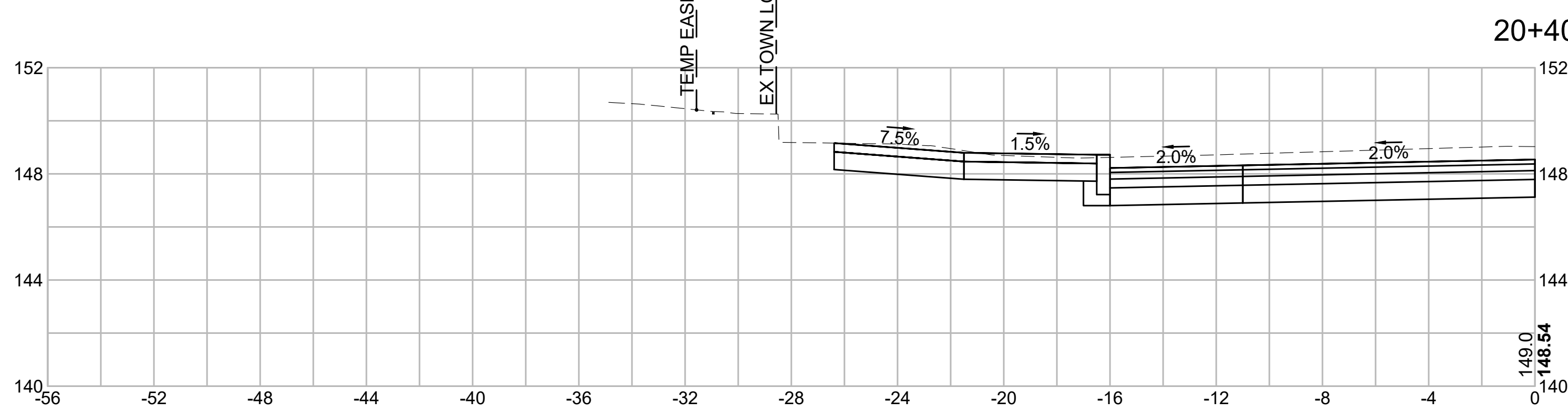
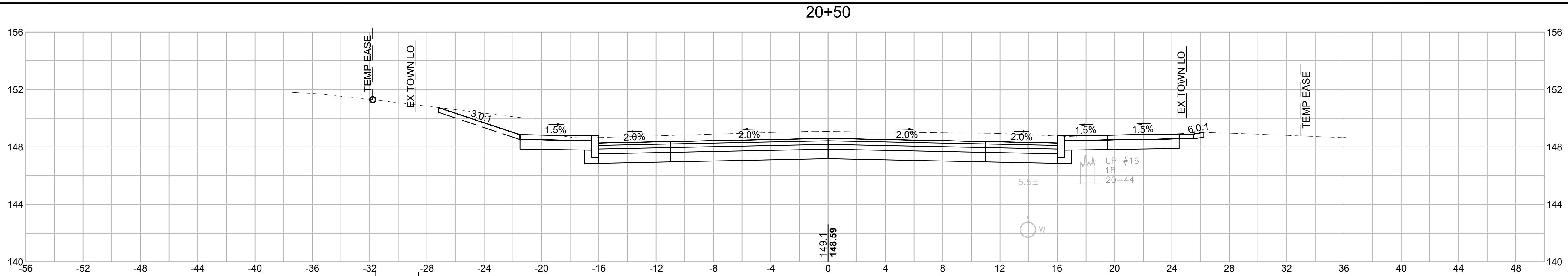
SCHOOL ST CROSS SECTIONS



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	56	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS





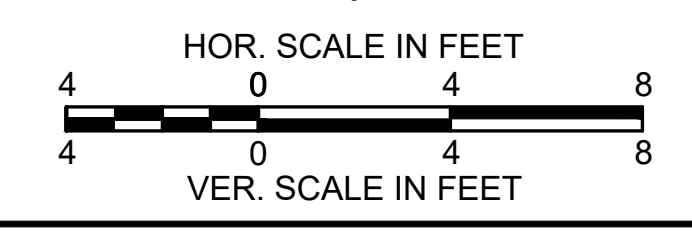
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	57	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

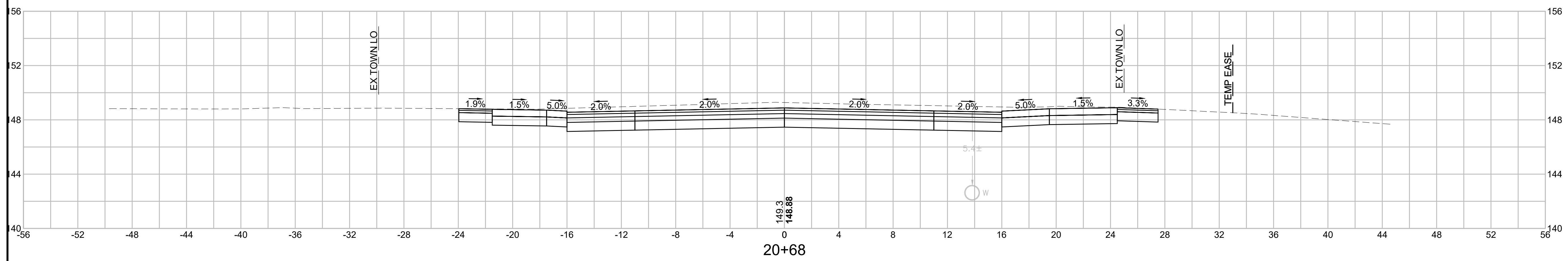
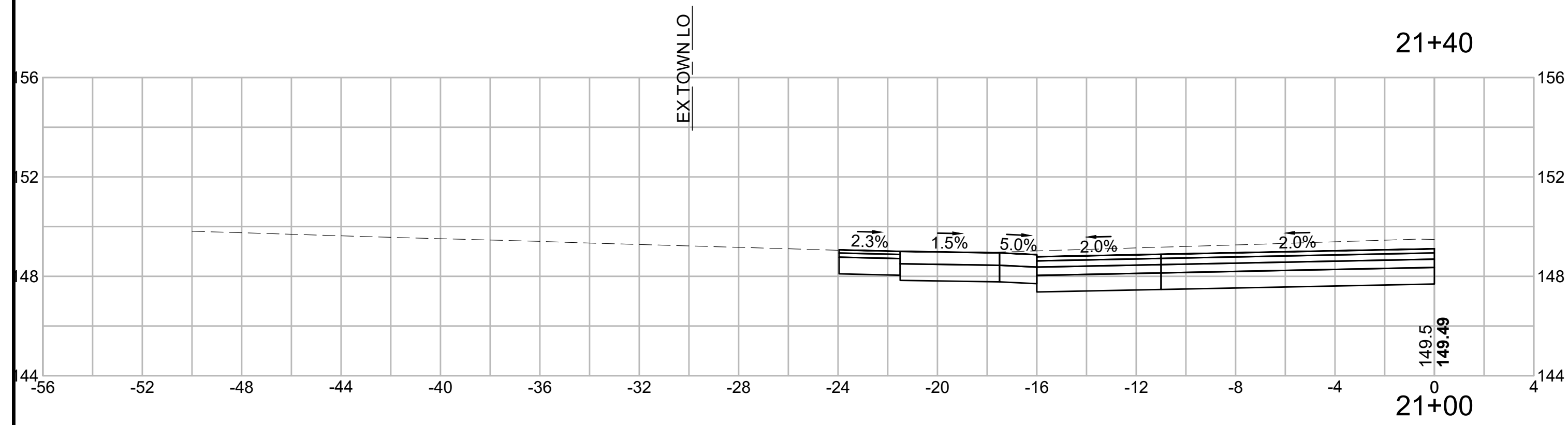
CUT: 76.24 SF
FILL: 0.00 SF

CUT: 84.36 SF
FILL: 0.00 SF

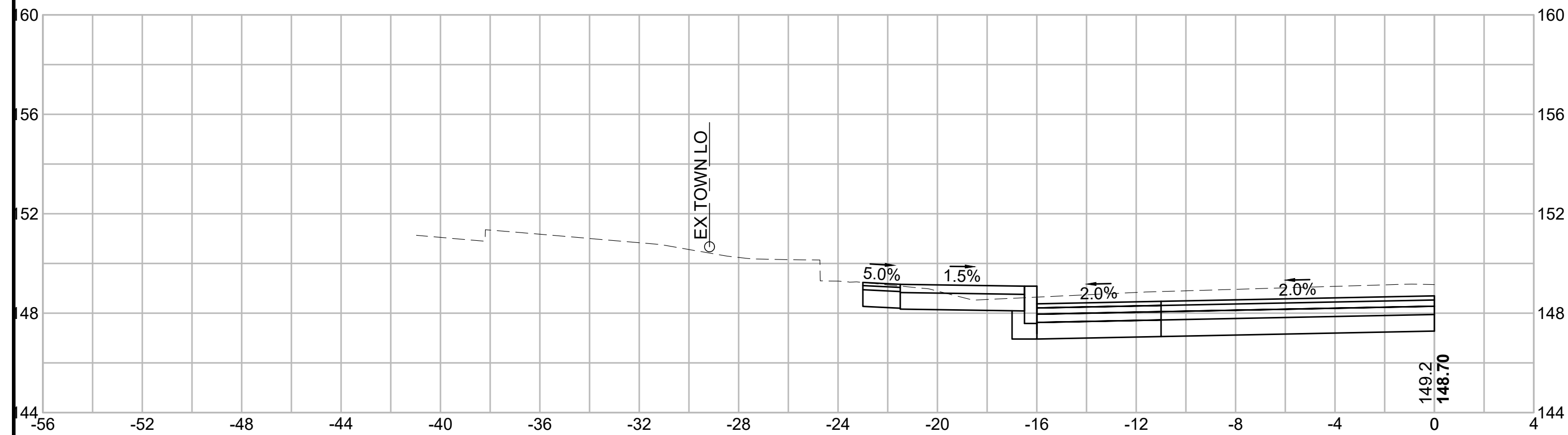
CUT: 76.50 SF
FILL: 0.00 SF



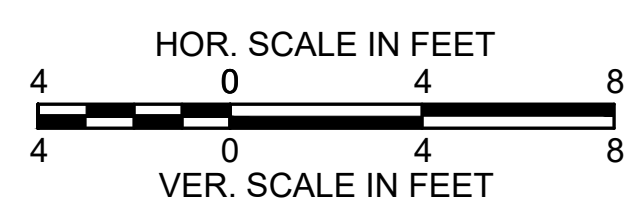
FILL: 0.00 SF



FILL: 0.00 SF

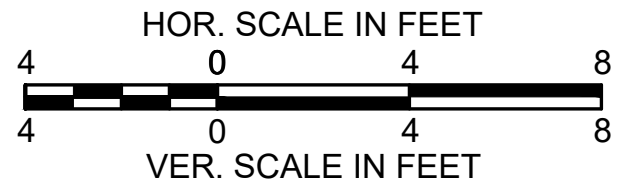
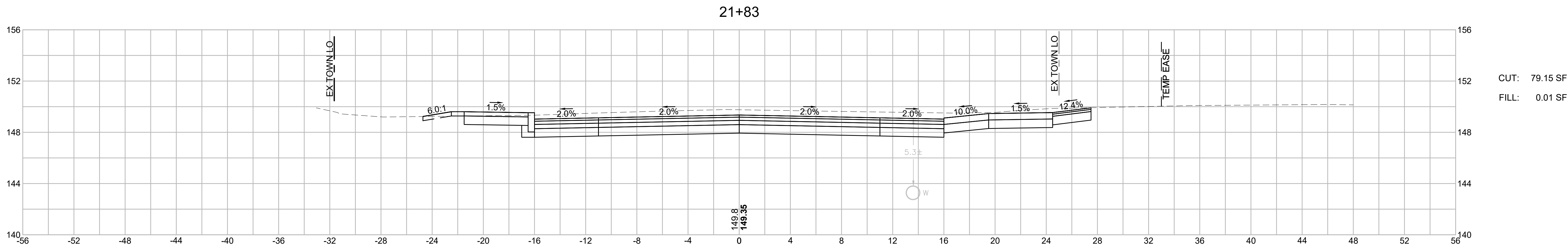
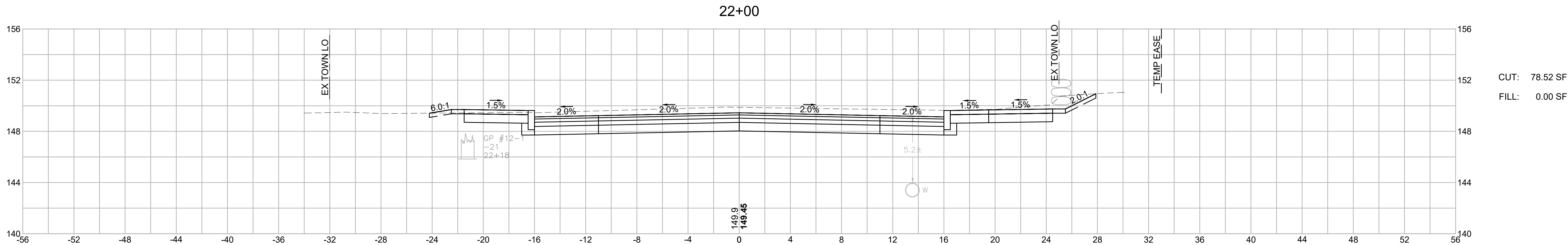
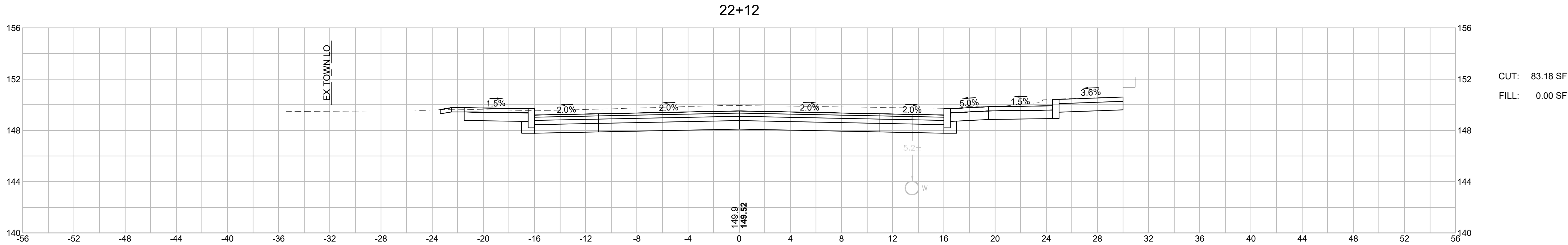


FILL: 0.01 SF



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	59	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	60	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

CUT: 73.86 SF
FILL: 0.25 SF

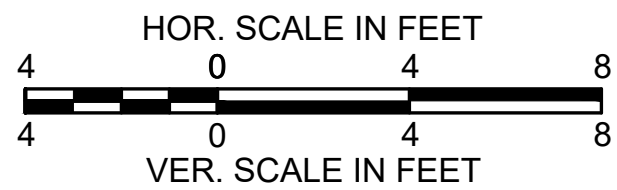
CUT: 79.71 SF
FILL: 0.10 SF

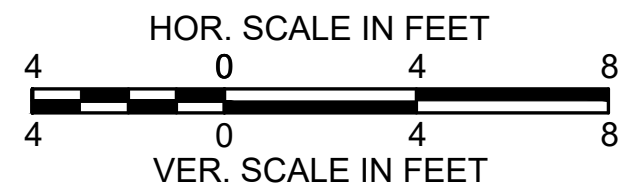
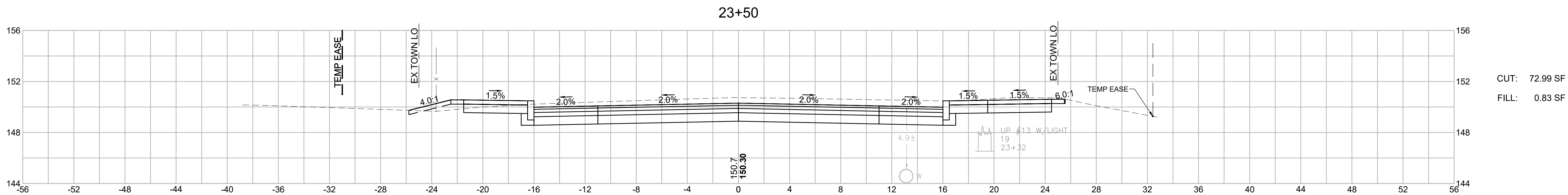
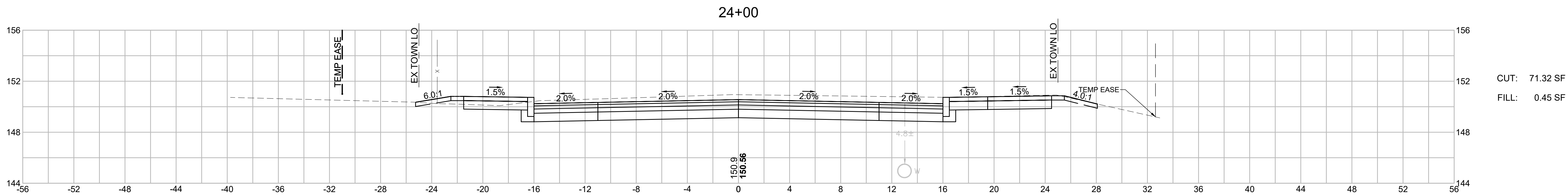
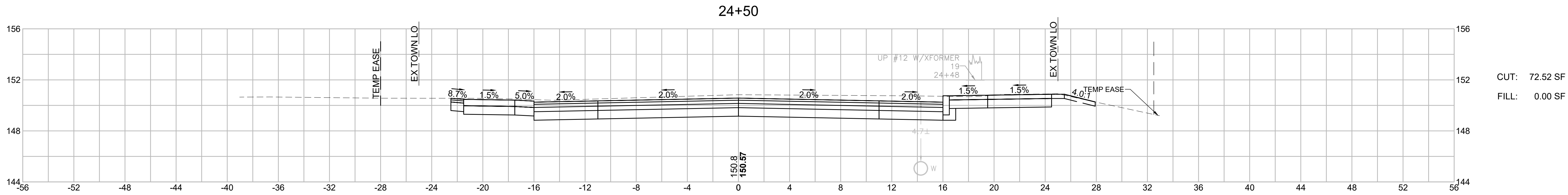
CUT: 76.72 SF
FILL: 0.54 SF

23+00

22+75

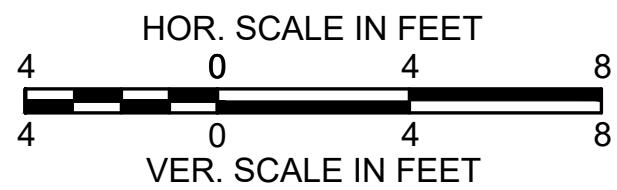
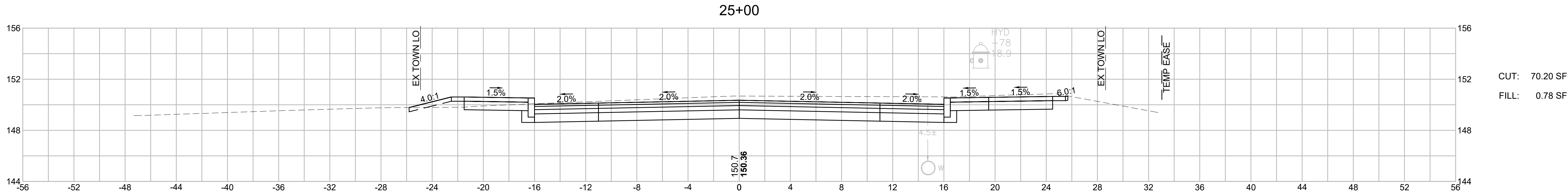
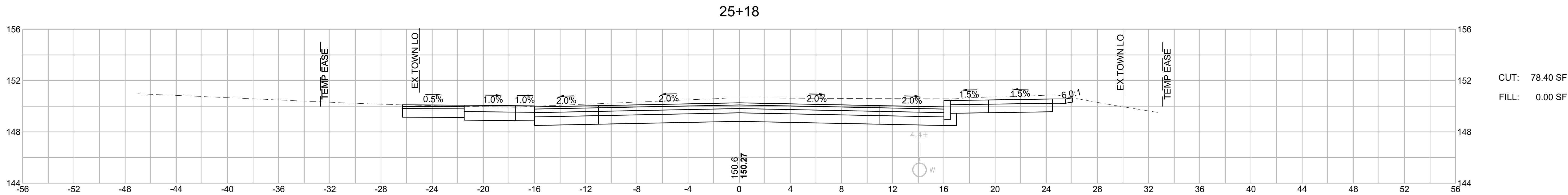
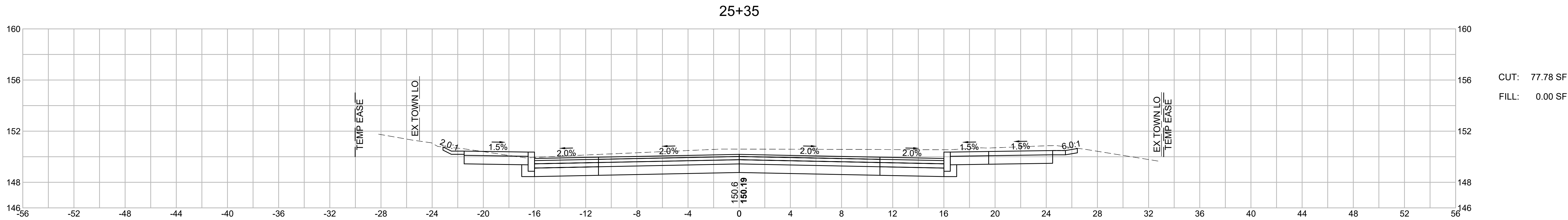
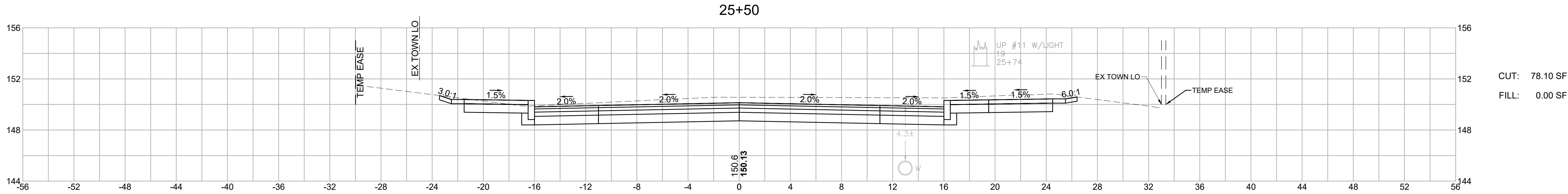
22+50





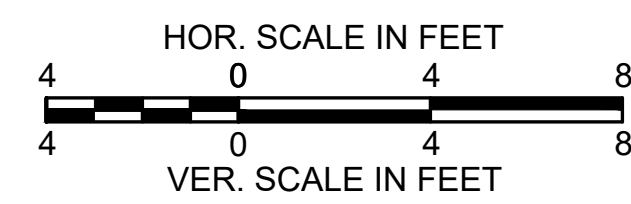
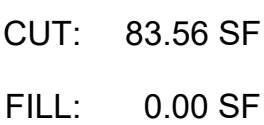
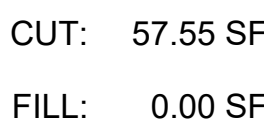
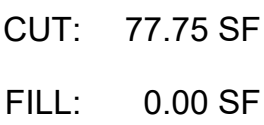
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	62	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	63	73
PROJECT FILE NO. 609255			

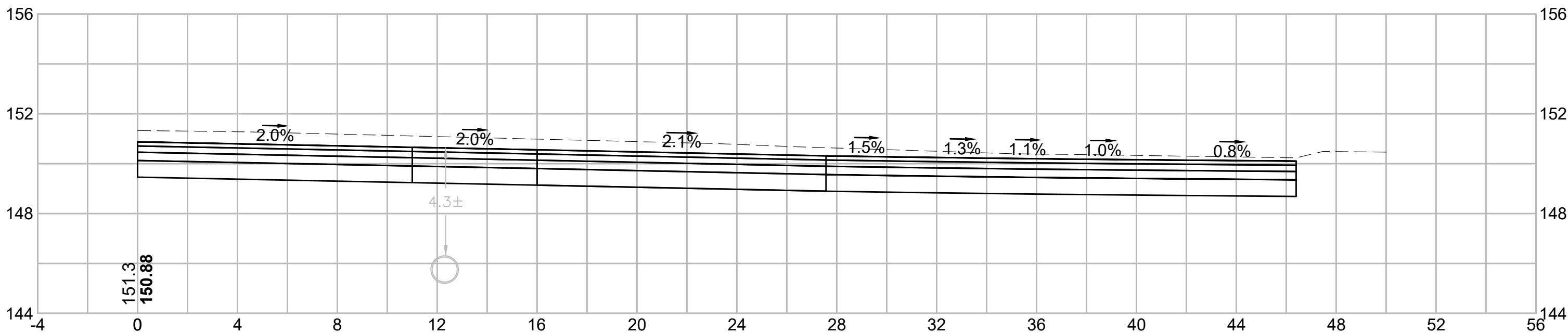
609255_HD(XSEC).DWG Plotted on 23-May-2025 12:58 PM



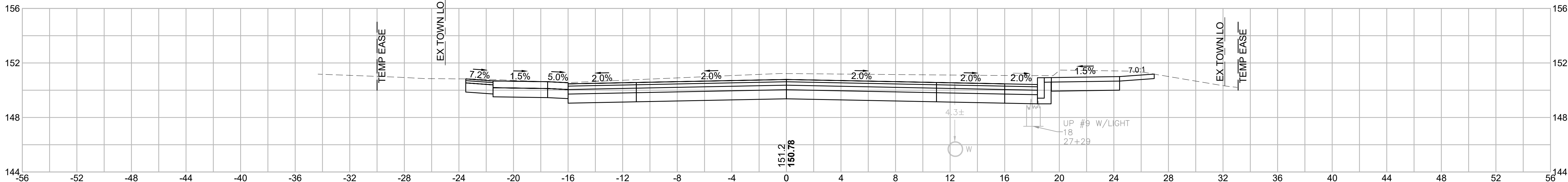
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035/(063)X	64	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

27+70



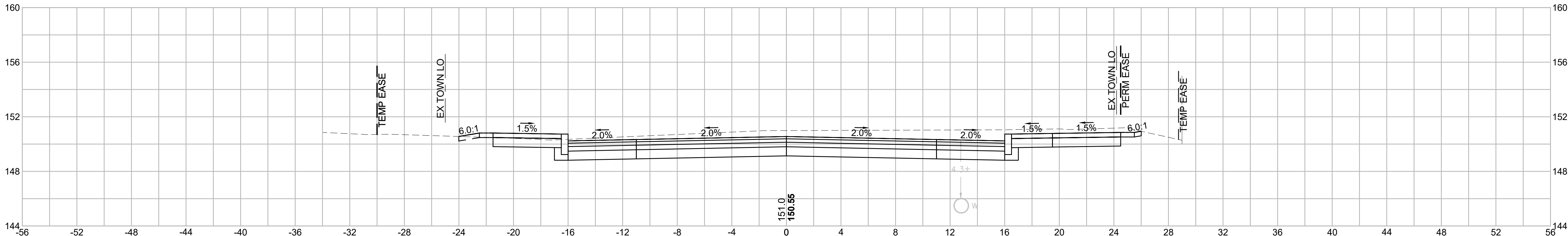
27+50



CUT: 66.77 SF

FILL: 0.00 SF

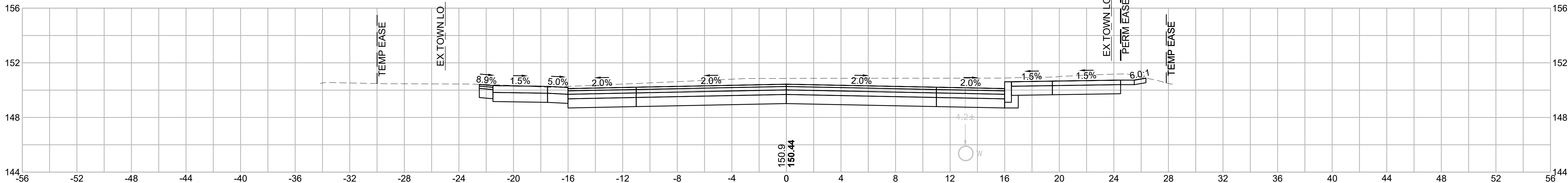
27+00



CUT: 77.57 SF

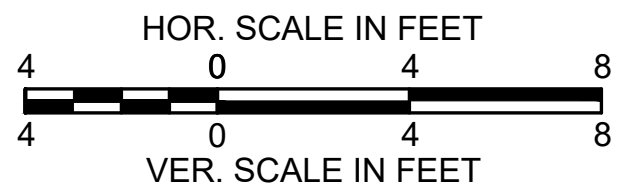
FILL: 0.00 SF

26+74



CUT: 81.33 SF

FILL: 0.00 SF



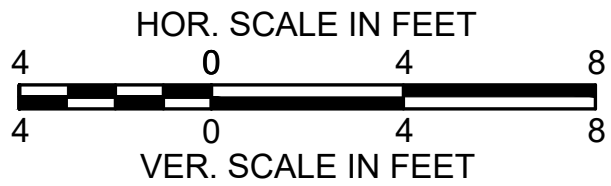
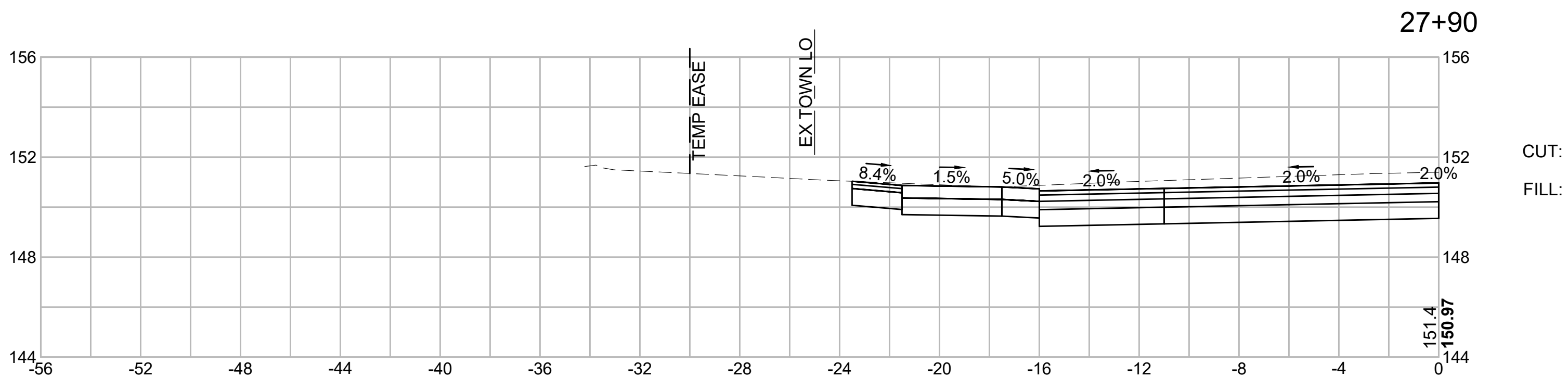
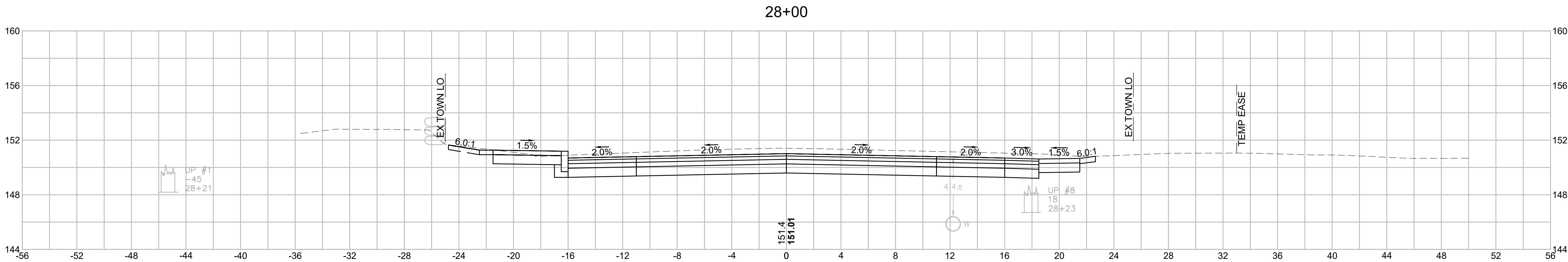
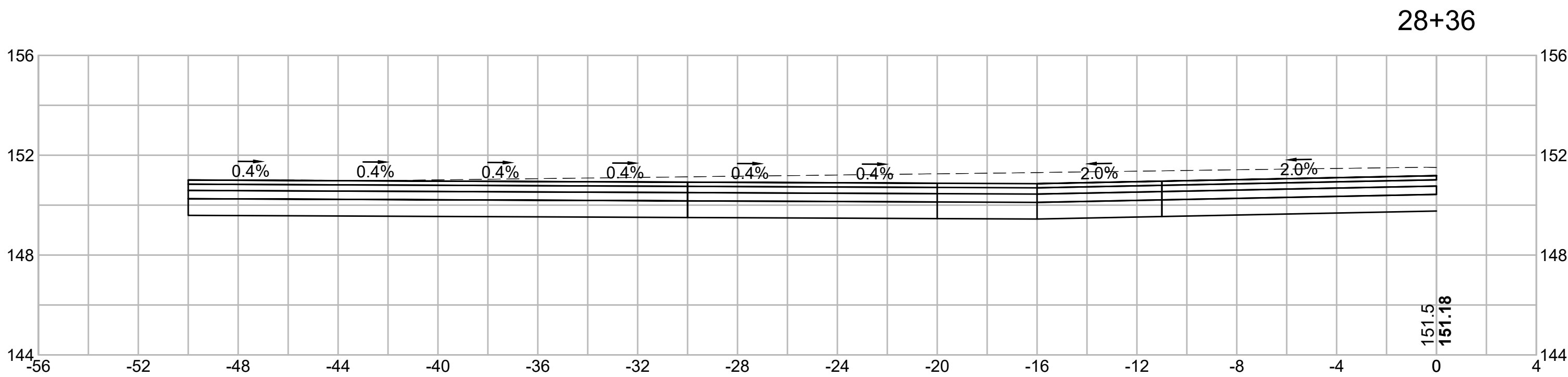
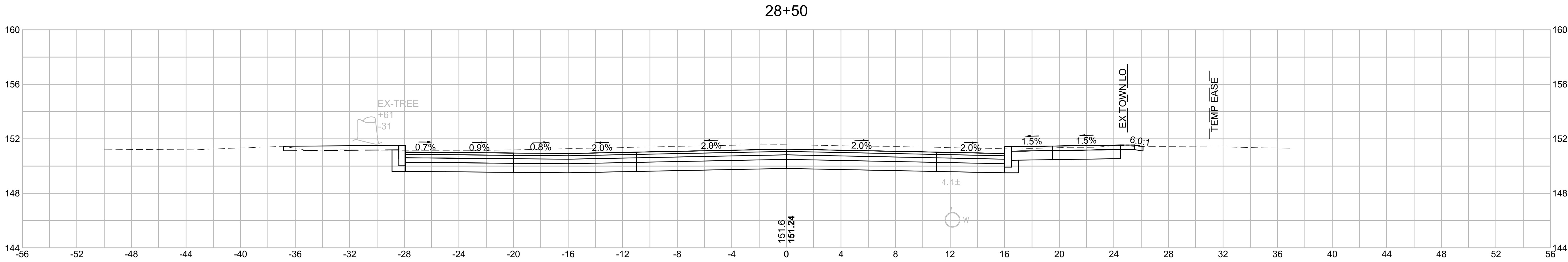
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	65	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

CUT: 112.80 SF
FILL: 0.00 SF

CUT: 66.11 SF
FILL: 0.00 SF

CUT: 55.78 SF
FILL: 0.00 SF



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	66	73
PROJECT FILE NO. 609255			

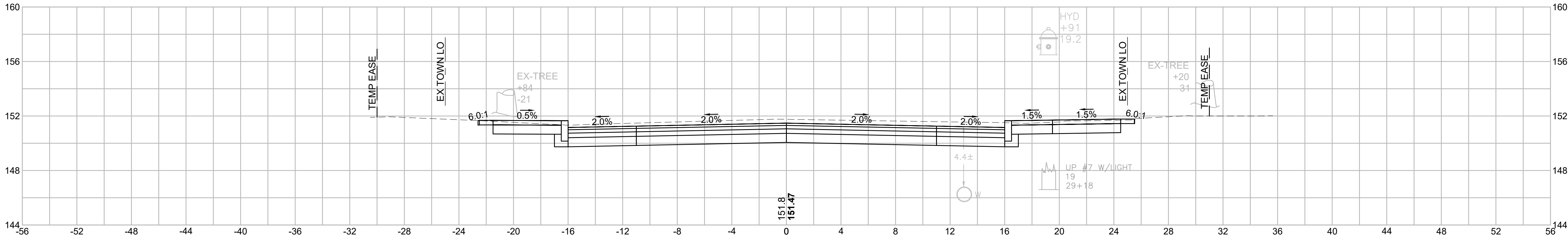
SCHOOL ST CROSS SECTIONS

29+30



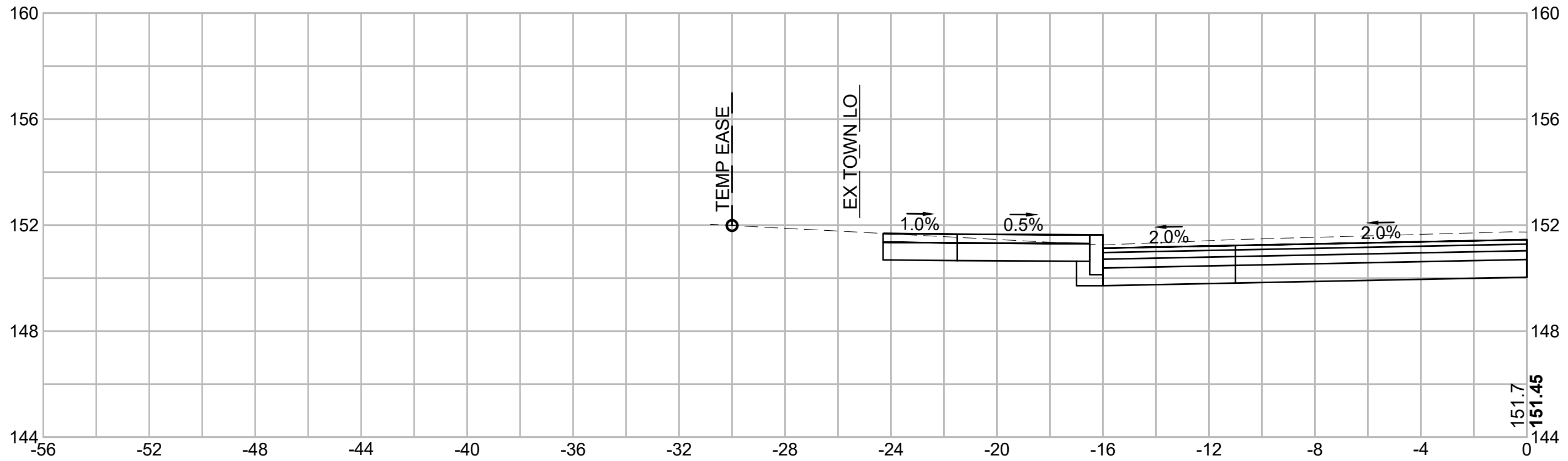
CUT: 56.65 SF
FILL: 0.00 SF

29+00

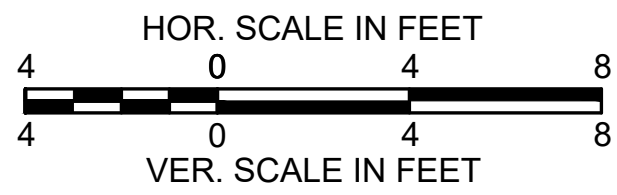


CUT: 68.69 SF
FILL: 0.00 SF

28+95



CUT: 51.34 SF
FILL: 0.00 SF



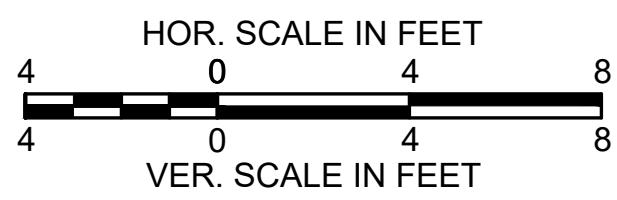
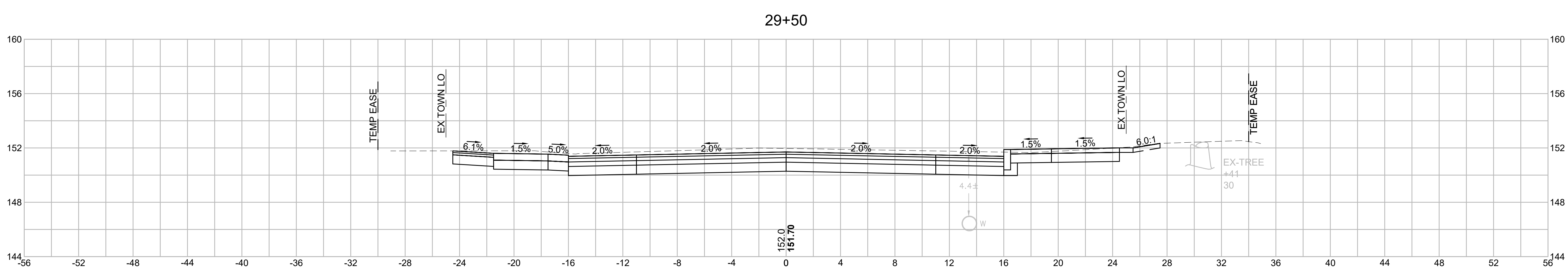
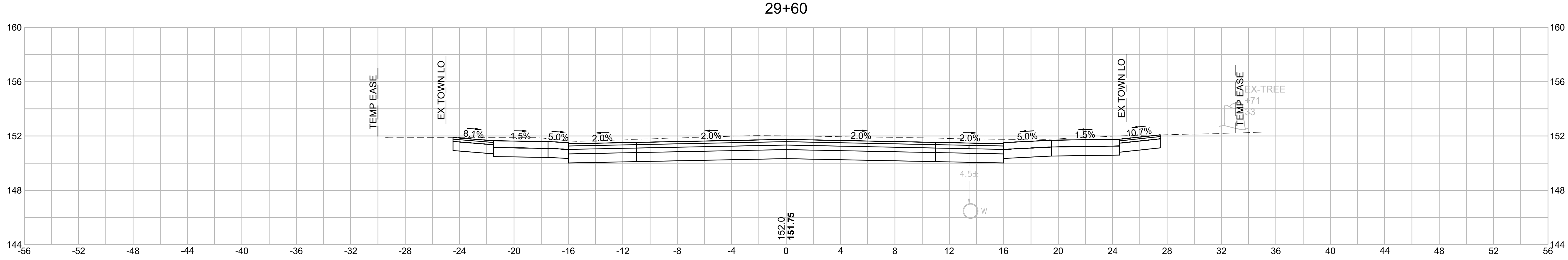
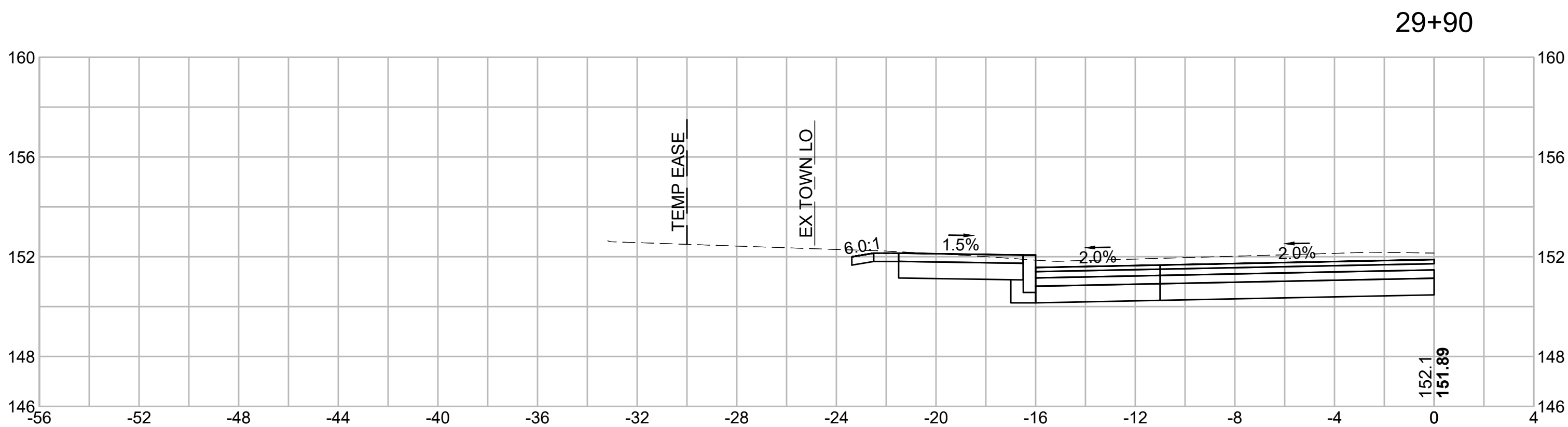
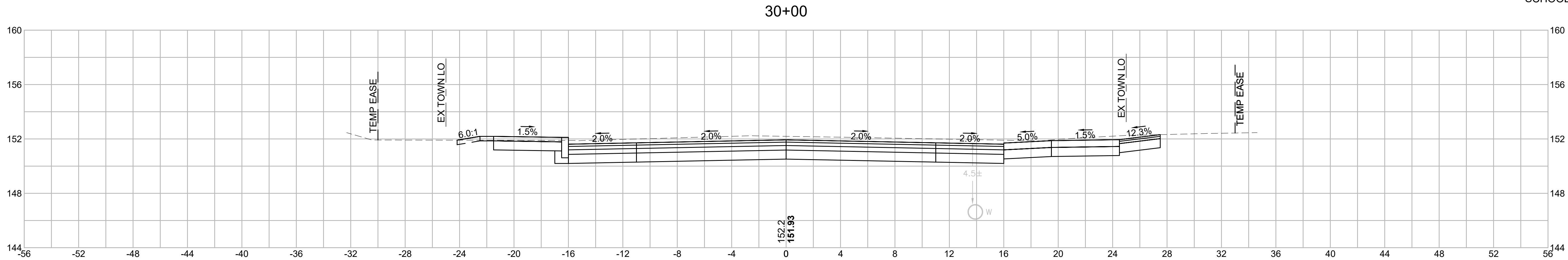
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	67	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

CUT: 74.47 SF
FILL: 0.00 SF

CUT: 79.56 SF
FILL: 0.00 SF

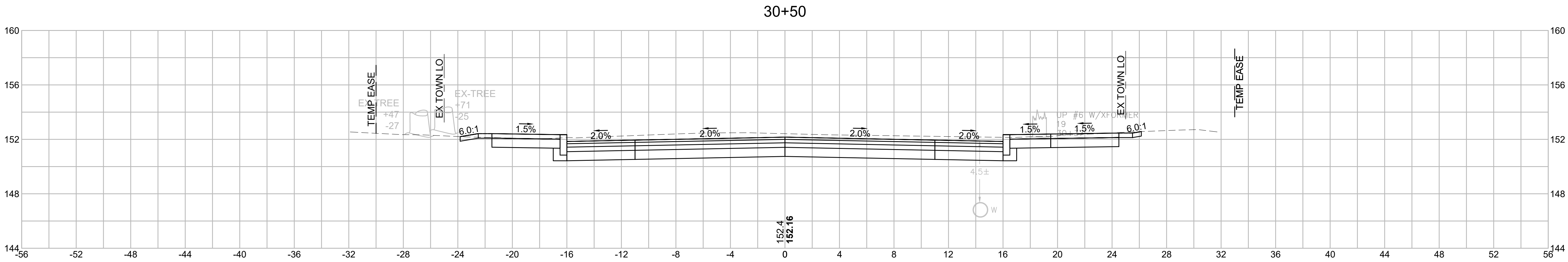
CUT: 73.83 SF
FILL: 0.00 SF



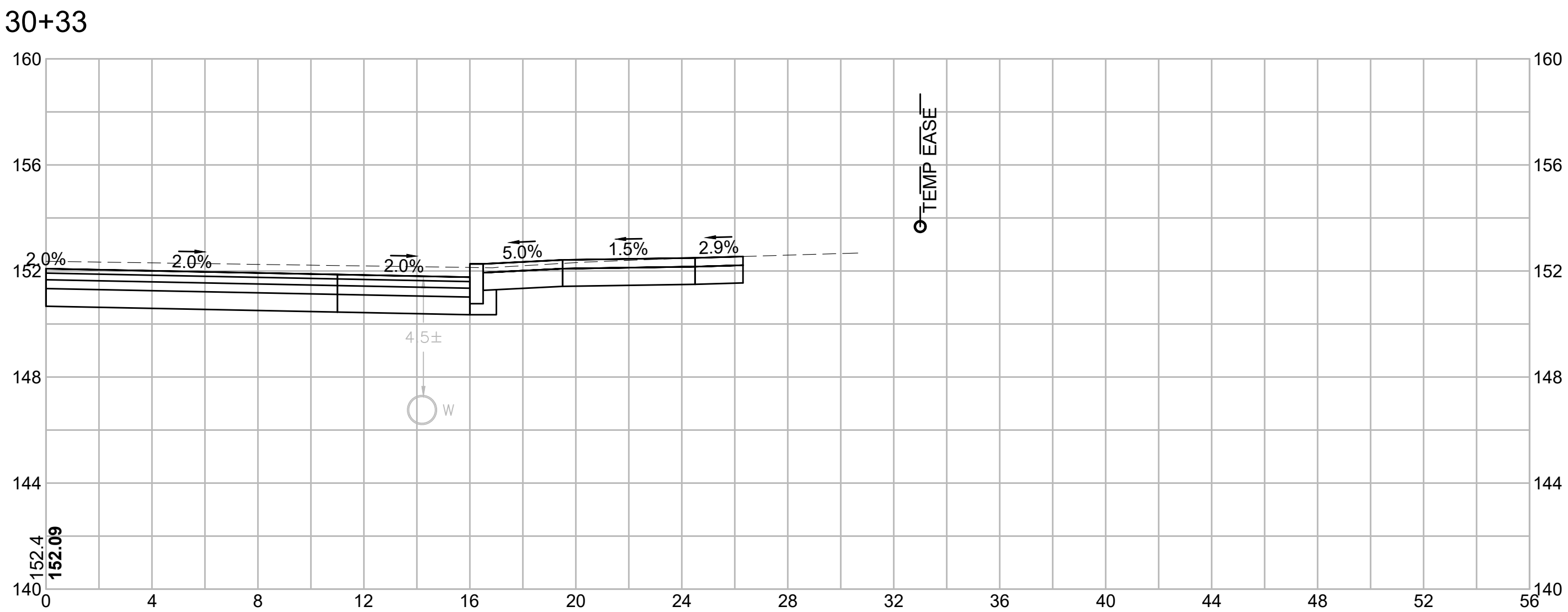
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	68	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

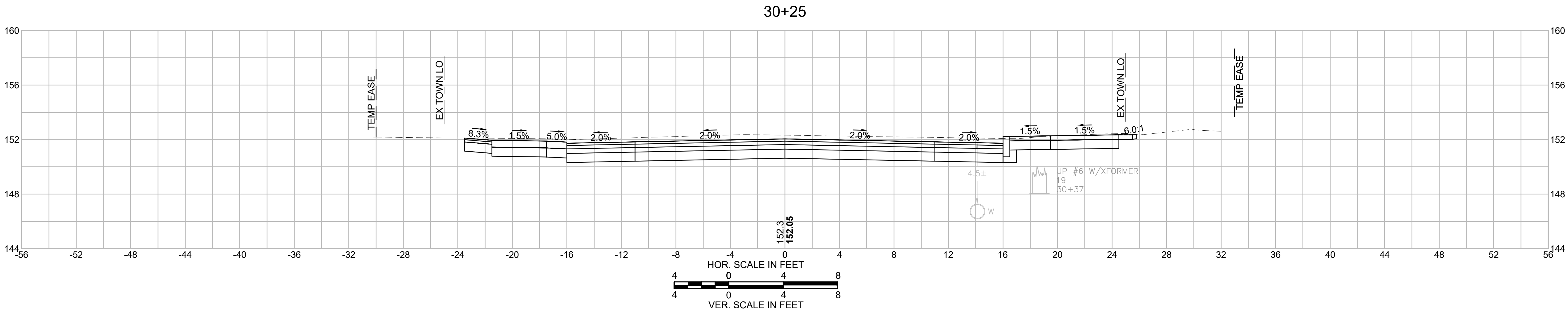
CUT: 69.03 SF
FILL: 0.00 SF



CUT: 55.55 SF
FILL: 0.00 SF

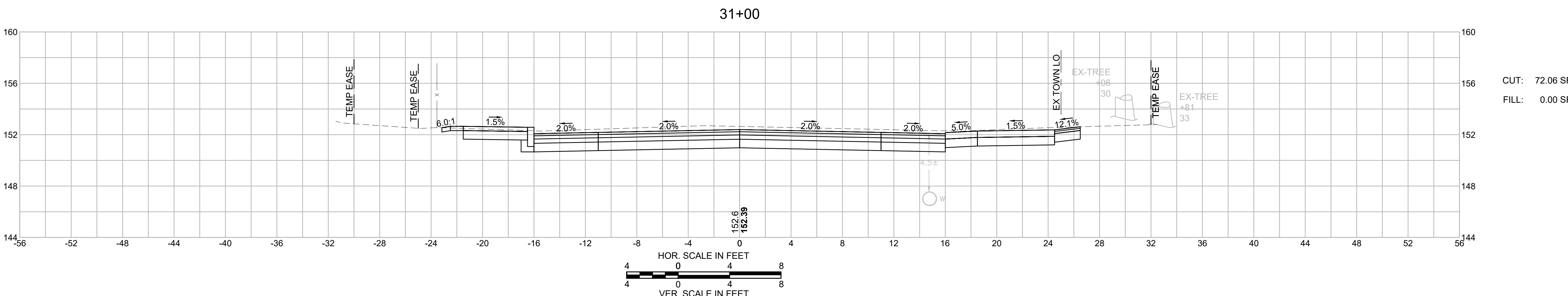
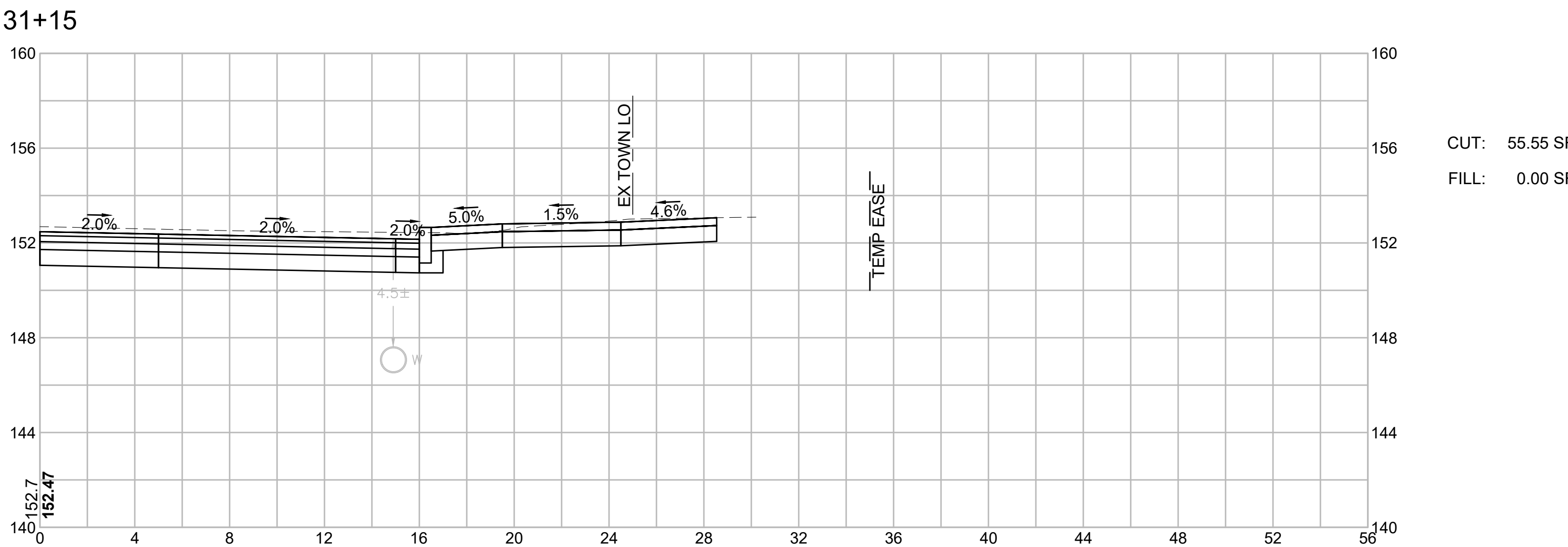
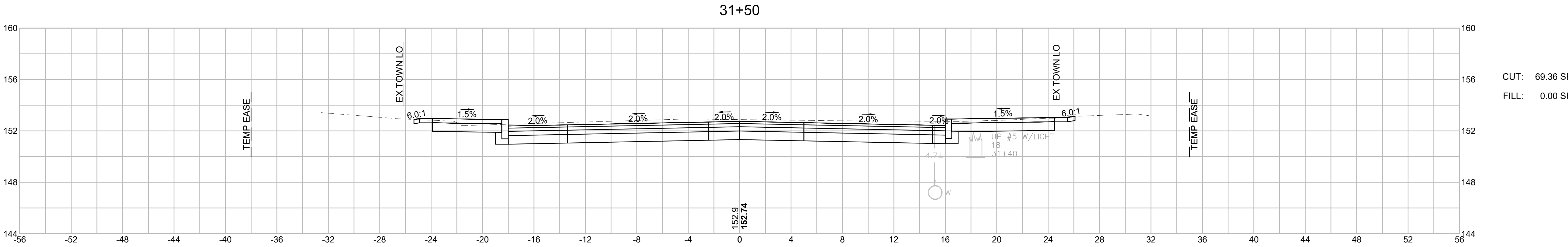


CUT: 73.64 SF
FILL: 0.00 SF



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035/(063)X	69	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS

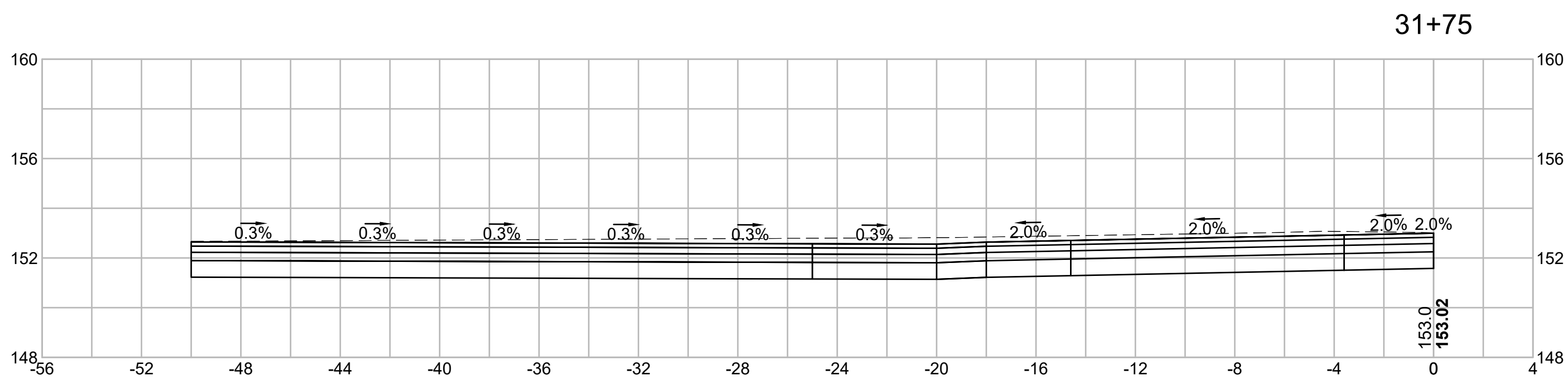


STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	70	73
PROJECT FILE NO. 609255			

[illegible]

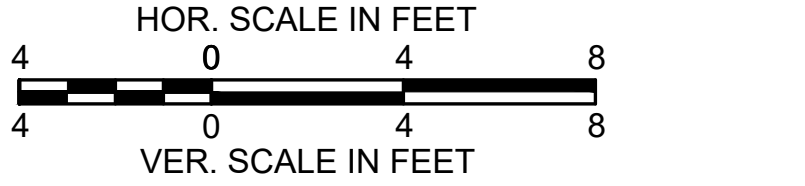
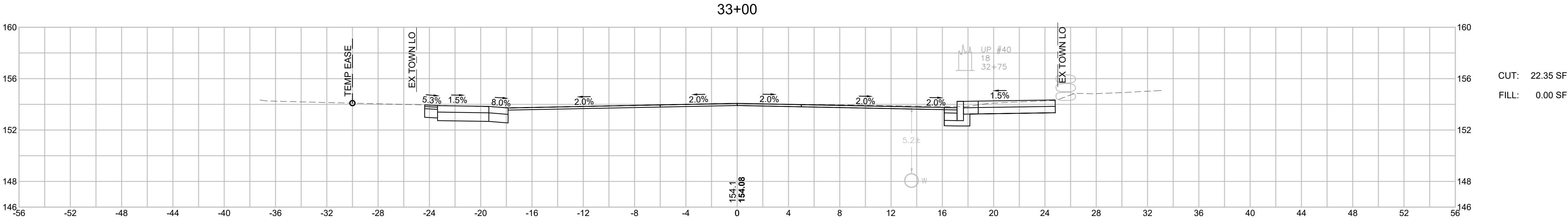
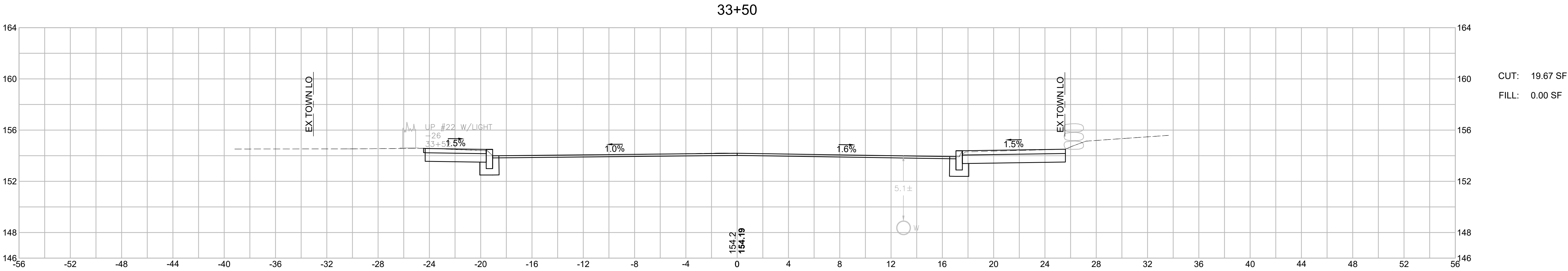
Profile view of a road section. The horizontal axis represents stationing from -56 to 56. The vertical axis represents elevation from 144 to 156. The profile shows a road with a centerline at station 0. The road is labeled "31+85" at the top. The profile includes a vertical curve with a length of 153.1 and a grade of 153.12. The road is shown with a 4.9% slope. The profile is labeled "EX TOWN LO" and "TEMP EASE". The profile shows a road with a centerline at station 0. The road is labeled "31+85" at the top. The profile includes a vertical curve with a length of 153.1 and a grade of 153.12. The road is shown with a 4.9% slope. The profile is labeled "EX TOWN LO" and "TEMP EASE".

CUT: 61.83 SF
FILL: 0.00 SF



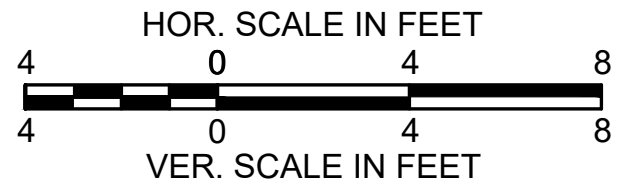
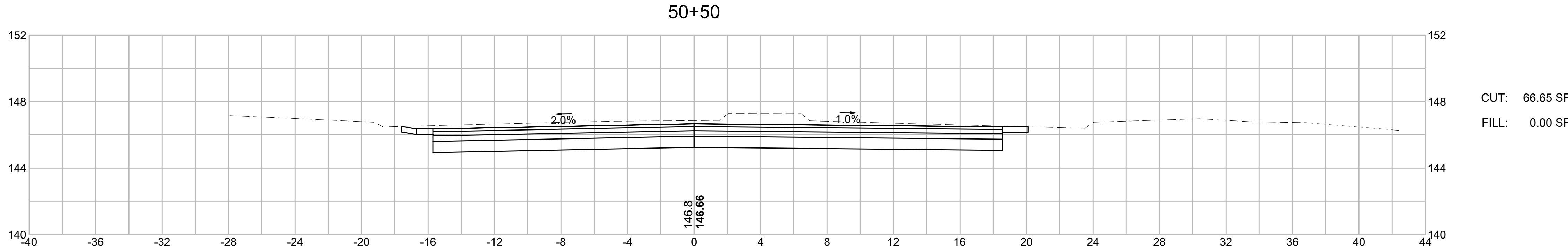
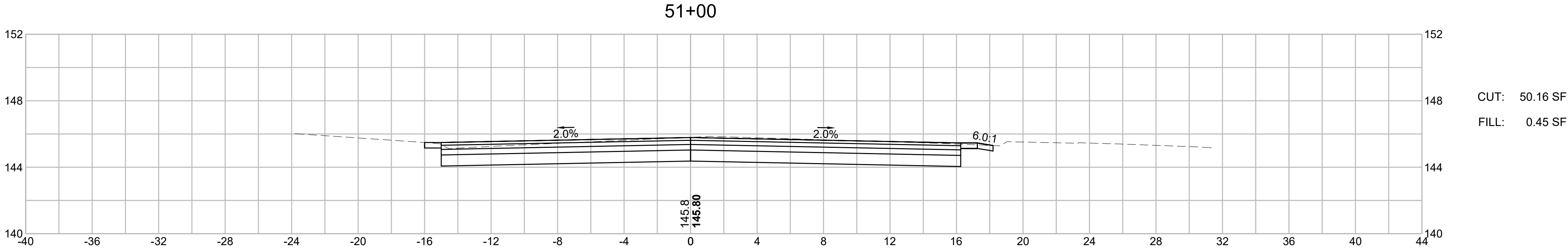
MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	71	73
PROJECT FILE NO. 609255			

SCHOOL ST CROSS SECTIONS



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	72	73
PROJECT FILE NO. 609255			

SPRING ST CROSS SECTIONS



MANSFIELD SCHOOL STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CMQ/STP-0035(063)X	73	73
PROJECT FILE NO. 609255			

SIDE STREETS CROSS SECTIONS

