MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	01	115
	PROJECT FILE NO.	609440	

TITLE SHEET & INDEX

PLAN AND PROFILE OF

INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

IN THE TOWN OF

ABINGTON

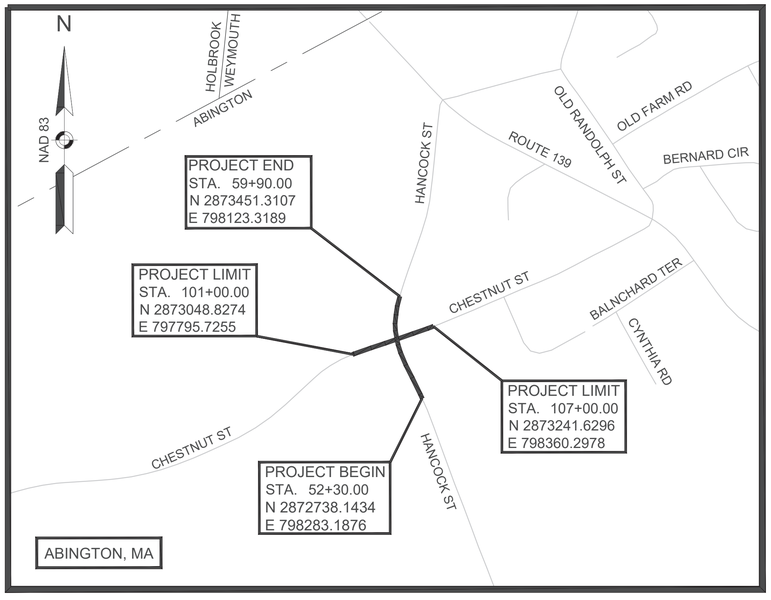
PLYMOUTH COUNTY

FEDERAL AID PROJECT NO.STP-0035(067)X

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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0 500 1000 1500 2000

SCALE: 1" = 500'

LENGTH OF PROJECT
HANCOCK STREET = 760.00 FEET = 0.144 MILES
CHESTNUT STREET = 600.00 FEET = 0.114 MILES

DESIGN DESIGNATION	HANCOCK STREET	CHESTNUT STREET
DESIGN SPEED	25 MPH	25 MPH
ADT (2020)	6,988	9,090
ADT (2040)	7,721	10,044
K	10.2%	8.7%
D	53% SB	50% WB
T (PEAK HOUR)	2.2%	3.4%
T (AVERAGE DAY)	0.9%	1.8%
DHV	747	827
DDHV	399	417
FUNCTIONAL CLASSIFICATION	URBAN COLLECTOR	URBAN COLLECTOR

COMMONWEALTH OF MASSACHUSETTS
BENNY L. HUNG
CIVIL
No. 46122
REGISTERED PROFESSIONAL ENGINEER

Benny Hung Digitally signed by Benny Hung Date: 2026.04.06 17:50:14 -04'00'

APEX.
APEX COMPANIES, LLC
1900 CROWN COLONY DR.
SUITE 402,
QUINCY, MA 02169

DATE	DESCRIPTION	REV #

massDOT
Massachusetts Department of Transportation
Highway Division

APPROVED

Carrie Lavallee, P.E. Digitally signed by Carrie Lavallee, P.E. Date: 2026.04.30 09:53:51 -04'00'

04/30/2026

CHIEF ENGINEER **DATE**

609440_HD(TITLE).DWG Plotted on 2-Apr-2026 5:01 PM

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
JB	JB	JERSEY BARRIER
CB	CB	CATCH BASIN
		CATCH BASIN CURB INLET
FP	FP	FLAG POLE
GP	GP	GAS PUMP
MB	MB	MAIL BOX
		POST SQUARE
		POST CIRCULAR
WELL	WELL	WELL
EHH	EHH	ELECTRIC HANDHOLE
		FENCE GATE POST
GG	GG	GAS GATE
BHL #	BHL #	BORING HOLE
MW #	MW #	MONITORING WELL
TP #	TP #	TEST PIT
		HYDRANT
		LIGHT POLE
CO.BD.		COUNTY BOUND
		GPS POINT
C	C	CABLE MANHOLE
D	D	DRAINAGE MANHOLE
E	E	ELECTRIC MANHOLE
G	G	GAS MANHOLE
M	M	MISC MANHOLE
S	S	SEWER MANHOLE
T	T	TELEPHONE MANHOLE
W	W	WATER MANHOLE
MHB	MHB	MASSACHUSETTS HIGHWAY BOUND
MON		MONUMENT
SB		STONE BOUND
TB		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
TPL or GUY	TPL or GUY	TROLLEY POLE OR GUY POLE
HTP		TRANSMISSION POLE
UFB	UFB	UTILITY POLE W/ FIREBOX
UPDL	UPDL	UTILITY POLE WITH DOUBLE LIGHT
ULT	ULT	UTILITY POLE W / 1 LIGHT
UPL	UPL	UTILITY POLE
		BUSH
SIZE & TYPE		TREE
		STUMP
		SWAMP / MARSH
WG	WG	WATER GATE
PM	PM	PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
100 99		CONTOURS (ON-THE-GROUND SURVEY DATA)
100 99		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
x	x	CHAIN LINK OR METAL FENCE
		WOOD FENCE
		SEDIMENT CONTROL BARRIER
		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
1	1	CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
RRSG	RRSG	RAILROAD SIGNAL
OR		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
	20'	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
	20'	MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
ONLY	ONLY	LEGEND "ONLY" - WHITE
	SL	STOP LINE
	CW	CROSSWALK
	SWL	SOLID WHITE LINE
	SYL	SOLID YELLOW LINE
	BWL	BROKEN WHITE LINE (10' LINE SEGMENT WITH 30' GAPS)
	BYL	BROKEN YELLOW LINE (10' LINE SEGMENT WITH 30' GAPS)
	DWL	DOTTED WHITE LINE (3' LINE SEGMENT WITH 9' GAPS)
	DYL	DOTTED YELLOW LINE (3' LINE SEGMENT WITH 9' GAPS)
	DWLEx	DOTTED WHITE LINE EXTENSION (2' LINE SEGMENT WITH 6' GAPS)
	DYLEx	DOTTED YELLOW LINE EXTENSION (2' LINE SEGMENT WITH 6' GAPS)
	DWREL	12" WIDE DOTTED WHITE ROUNDABOUT ENTRY LINE (2' LINE SEGMENT WITH 2' GAPS)
	DBWL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

UTILITY COLOR GUIDE

UTILITY	LINE COLOR	EXISTING	PROPOSED
ELECTRIC	RED		
GAS-OIL-STEAM	BROWN		
COMMUNICATION / CATV	ORANGE		
TEMPORARY WATER	BLUE		
PERMANENT WATER	BLUE		
SEWER	GREEN		
DRAINAGE	TRADITIONAL GRAYSCALE		

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	FORCE MAIN
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GR	GRAVITY MAIN
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
N.T.S.	NOT TO SCALE
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

ABINGTON
INTERSECTION IMPROVEMENTS AT
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PROJECT FILE NO.	609440		

LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

GENERAL

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

TRAFFIC SIGNAL ABBREVIATIONS

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

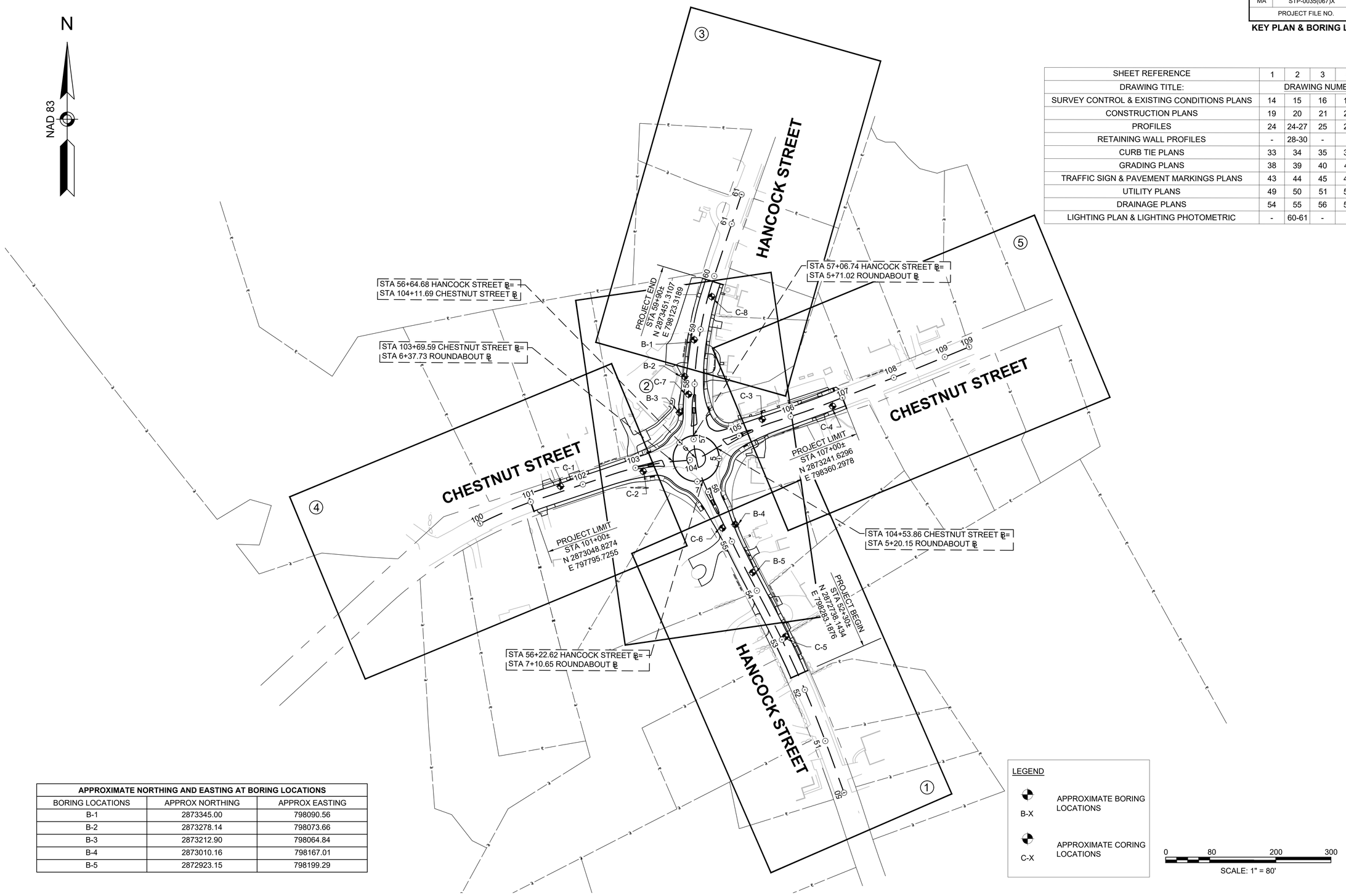
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ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	03	115
	PROJECT FILE NO. 609440		

KEY PLAN & BORING LOCATIONS

SHEET REFERENCE	1	2	3	4	5
DRAWING TITLE:	DRAWING NUMBER:				
SURVEY CONTROL & EXISTING CONDITIONS PLANS	14	15	16	17	18
CONSTRUCTION PLANS	19	20	21	22	23
PROFILES	24	24-27	25	26	27
RETAINING WALL PROFILES	-	28-30	-	-	-
CURB TIE PLANS	33	34	35	36	37
GRADING PLANS	38	39	40	41	42
TRAFFIC SIGN & PAVEMENT MARKINGS PLANS	43	44	45	46	47
UTILITY PLANS	49	50	51	52	53
DRAINAGE PLANS	54	55	56	57	59
LIGHTING PLAN & LIGHTING PHOTOMETRIC	-	60-61	-	-	-



APPROXIMATE NORTHING AND EASTING AT BORING LOCATIONS		
BORING LOCATIONS	APPROX NORTHING	APPROX EASTING
B-1	2873345.00	798090.56
B-2	2873278.14	798073.66
B-3	2873212.90	798064.84
B-4	2873010.16	798167.01
B-5	2872923.15	798199.29

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ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	04	115
	PROJECT FILE NO. 609440		

GENERAL NOTES & BORING LOGS - 01

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SURVEY NOTES:

1. THE BOUNDARY, RIGHT-OF-WAY AND TOPOGRAPHIC INFORMATION ALONG HANCOCK STREET AND ITS INTERSECTION WITH CHESTNUT STREET SHOWN HEREIN IS BASED ON AN ON-THE-GROUND SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES, INC. IN MARCH 2017. ADDITIONAL SURVEY WAS PERFORMED BY LANDTECH CONSULTANTS, INC. BETWEEN DECEMBER 2019 AND JANUARY 2020 AND INCORPORATED INTO THE BASE PLAN. FURTHER ADDITIONAL SURVEY WAS PERFORMED BY JC ENGINEERING, INC. IN JANUARY 2025 AND INCORPORATED INTO THE BASE PLAN.
2. BEARINGS AND DISTANCES AND THE COORDINATES THEY ARE BASED ON SHOWN ON THIS PLAN ARE IN U.S. SURVEY FEET IN THE MA. STATE PLANE COORDINATE SYSTEM REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), CORS ADJUSTMENT (NA2011/GEOID 12A) AS DETERMINED BY GPS OBSERVATIONS PERFORMED IN NOVEMBER OF 2016 UTILIZING MAINE TECHNICAL SOURCE RTK GPS NETWORK.
3. THE VERTICAL DATUM FOR THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), CORS ADJUSTMENT (NA2011/GEOID 12A) AS DETERMINED BY REDUNDANT GPS OBSERVATIONS PERFORMED IN NOVEMBER OF 2016 UTILIZING THE MAINE TECHNICAL SOURCE RTK GPS NETWORK.
4. THE ACCURACY OF MEASURED PIPE INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER CONDITIONS.
5. SUBSURFACE UTILITY INFORMATION SHOWN HEREIN IS APPROXIMATE AND IS BASED ON A COMPILATION OF RECORD INFORMATION AND OBSERVABLE EVIDENCE. A SUBSURFACE INVESTIGATION WAS NOT PERFORMED.
6. WETLAND RESOURCE AREAS SHOWN HEREON IS BASED ON FIELD DELINEATION PERFORMED BY PINEBROOK CONSULTING ON DECEMBER 15, 2023.

GENERAL CONSTRUCTION NOTES:

1. CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE FOLLOWING: THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 2024, AS AMENDED, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS (AS RELATES TO TRAFFIC STANDARD DETAILS ONLY), THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH LATEST REVISIONS AND MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.
2. IT IS THE INTENT OF THE DESIGN TO PROVIDE A MINIMUM CONSTRUCTED SIDEWALK WIDTH FOR A PATH OF TRAVEL PAST ALL OBSTRUCTIONS OF 4'-0" CLEARANCE FOR HANDICAP ACCESSIBILITY (IN ACCORDANCE WITH THE LATEST A.D.A. AND MAAB REQUIREMENTS). THE CONTRACTOR SHALL VERIFY THAT ALL POTENTIAL OBSTRUCTIONS HAVE BEEN ADDRESSED IN THE PLANS, INCLUDING BUT NOT LIMITED TO FOUNDATIONS, SIGNS, MAILBOXES, UTILITY POLES, AND HYDRANTS SO THEY ARE LOCATED TO PROVIDE THIS MINIMUM PATH OF TRAVEL CLEARANCE AND A MINIMUM 18" TYPICAL CLEARANCE TO THE FACE OF CURB OR 12" MIN. CLEARANCE WHERE 18" IS NOT FEASIBLE OR PRACTICAL. NO UTILITY POLES OR OBSTRUCTIONS ARE PERMITTED WITHIN PEDESTRIAN CURB RAMPS.
3. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED HEREIN USING NEW MATERIALS OR WHERE APPLICABLE, REUSING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R). ALL OTHER MATERIALS SHALL BE "REMOVED AND DISCARDED" (R&D) OR DISPOSED OF OFF SITE WITH THE EXCEPTION OF MATERIALS LABELED AS "REMOVED AND STACKED" (R&S) WHICH SHALL BE TRANSPORTED AND STACKED AT A LOCATION DESIGNATED BY THE TOWN AND/OR ENGINEER.
4. MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES INCLUDING POLICE DETAILS AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE ENGINEER.
5. THE CONTRACTOR SHALL NOT STORE ANY APPARATUS, MATERIALS, SUPPLIES, OR EQUIPMENT ON DRAINAGE STRUCTURES, PRIVATE PROPERTY OR WITHIN 100 FEET OF WETLANDS, UNLESS DIRECTED TO DO SO BY THE CONTRACT DOCUMENTS.
6. ALL EXISTING CONDITIONS SHOWN ARE APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. PRIOR TO THE START CONSTRUCTION, CONTRACTOR SHALL VERIFY THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
7. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS INDICATED ON THE DRAWINGS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE TOWN, AND "DIGSAFE" (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK IN PREVIOUSLY UNALTERED AREAS TO REQUEST THE EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR MUST RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD-LOCATED UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY OR INACCURATELY SHOWN. THE CONTRACTOR MUST MAINTAIN ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
8. THE CONTRACTOR SHALL COORDINATE ALL ARRANGEMENTS FOR THE ALTERATION AND/OR ADJUSTMENT OF ELECTRIC, TELEPHONE, GAS AND ANY OTHER PRIVATE UTILITY.
9. SHOULD AN EXISTING UTILITY BE FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK, THE LOCATION, SIZE AND TYPE SHALL BE ACCURATELY DETERMINED WITHOUT DELAY, BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE TOWN AND/OR ENGINEER FOR RESOLUTION OF THE CONFLICT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING OR REMODELING ALL DRAINAGE, WATER, OR SEWER STRUCTURES TO THE FINISHED ELEVATION, WITHIN THE LIMITS OF THE PROJECT, UNLESS OTHERWISE NOTED.
11. THE CONTRACTOR SHALL PERFORM TEST PITS AT LOCATIONS SHOWN ON PLANS AND AS DIRECTED BY THE TOWN AND/OR ENGINEER AT THE START OF THE PROJECT TO DETERMINE ANY POTENTIAL UTILITY CONFLICT IN ADVANCE SO ANY CONFLICT CAN BE RESOLVED IN TIME WITH THE TOWN AND/OR ENGINEER FOR ALTERNATIVES.
12. ALL WORK TO COMPLETE THIS PROJECT AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
13. THE CONTRACTOR MUST MAINTAIN ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS RELATED TO THE REPAIR OF UTILITIES. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES MUST BE DONE BY HAND.
14. COORDINATE ALL TRENCHING WORK WITHIN ROADWAYS WITH THE PROPER LOCAL & STATE AGENCY. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY INCLUDING ANY LOCAL AND/OR STATE PERMITS REQUIRED FOR THE TRENCH WORK. IF THIS WORK IS REQUIRED TO OCCUR OUTSIDE THE AGREED UPON HOURS OF OPERATION FOR THE FACILITY, THE CONTRACTOR MUST PLAN ACCORDINGLY.
15. INSTALL ALL UTILITY TRENCH WORK PRIOR TO INSTALLING NEW PAVEMENT AS INDICATED ON THE DRAWINGS.

GENERAL NOTES CONTINUED:

16. IMPORT ONLY CLEAN MATERIAL. MATERIAL FROM AN EXISTING OR FORMER 21E SITE AS DEFINED BY THE MASSACHUSETTS CONTINGENCY PLAN 310 CMR 40.0000 WILL NOT BE ACCEPTED .
17. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH AND MAINTAIN ALL CONTROL POINTS AND BENCHMARKS DURING CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS. COORDINATE WITH THE ENGINEER THE LOCATION OF ALL CONTROL POINTS AND BENCHMARKS.
18. SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION MUST BE PROVIDED BY THE CONTRACTOR AND PERFORMED BY A MASSACHUSETTS' REGISTERED PROFESSIONAL LAND SURVEYOR. AS INCIDENTAL TO THIS PROJECT THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE SURVEYOR FOR ALL SITE SURVEY WORK.
19. MAINTAIN ALL GRADE STAKES SET BY THE SURVEYOR. GRADE STAKES ARE TO REMAIN UNTIL A FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY THE ENGINEER. RE-STAKING OF PREVIOUSLY SURVEYED SITE FEATURES IS THE RESPONSIBILITY (INCLUDING COST) OF THE CONTRACTOR.
20. PROVIDE ALL CONSTRUCTION SERVICE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
21. COLLECT SOLID WASTES AND STORE IN A SECURED DUMPSTER. THE DUMPSTER MUST MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
22. REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. PROMPTLY REMOVE ALL DEMOLITION DEBRIS FROM THE SITE TO AN APPROVED DUMP SITE.
23. ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
24. DO NOT WASH ANY CONCRETE TRUCKS ONSITE. REMOVE BY HAND ANY CEMENT OR CONCRETE DEBRIS LEFT IN THE DISTURBED AREA.
25. BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOULDERS ONSITE IS PROHIBITED.
26. IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED.
27. AT THE END OF CONSTRUCTION, REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE PERFORM A THOROUGH INSPECTION OF THE WORK PERIMETER. COLLECT AND REMOVE ALL MATERIALS AND BLOWN OR WATER CARRIED DEBRIS FROM THE SITE.
28. THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AND/ORDERLY PASSAGE OF VEHICULAR AND PEDESTRIAN TRAFFIC IN AREAS UNDER CONSTRUCTION.
29. SHOP DRAWINGS OF ALL CASTINGS, PRECAST CONCRETE STRUCTURES, PIPE AND MANUFACTURED COMPONENTS SHALL BE SUBMITTED FOR APPROVAL BEFORE ORDERING.
30. ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING MARKINGS AT THE LIMITS OF WORK.
31. DETECTABLE WARNING PANELS SHALL BE INSTALLED ON ALL PEDESTRIAN CURB RAMPS AND SHALL COMPLY WITH CONSTRUCTION STANDARD E 107.6.5. PAYMENT FOR DETECTABLE WARNING PANELS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE PEDESTRIAN CURB RAMPS OR SIDEWALKS IN WHICH THEY ARE BEING INSTALLED. THE COLOR OF DETECTABLE WARNING PANELS SHALL BE AT THE DIRECTION OF THE TOWN AND/OR ENGINEER.
32. SEE SIGNS AND PAVEMENT MARKING PLANS FOR PROPOSED SIGNS AND DISPOSITION OF THE EXISTING SIGNS WITHIN THE PROJECT LIMITS OR AS DIRECTED BY THE TOWN AND/OR ENGINEER.
33. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS SHALL PREVAIL. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
34. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE CONTRACTOR SHALL RESTORE ALL PUBLIC AND PRIVATE PROPERTY TO ITS PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE TOWN.
35. THE CONTRACTOR SHALL RESTORE ALL PUBLIC AND PRIVATE PROPERTY TO ITS PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE TOWN .
36. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO THE RESPECTIVE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
37. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURE CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY AND THE TOWN AND/OR ENGINEER.
38. THE CONTRACTOR SHALL TAKE SPECIAL CARE NOT TO DAMAGE EXISTING VEGETATION, GRASS, WALLS, FENCES, MAILBOXES, SIGNS, ETC. WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED. CONTRACTOR SHALL REPLACE AT NO COST TO OWNER, ALL DAMAGED ITEMS.
39. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE TOWN AND/OR ENGINEER.
40. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A TELEPHONE NUMBER WHERE THE CONTRACTOR CAN BE REACHED 24 HOURS A DAY, 7 DAYS A WEEK.
41. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED COORDINATED WITH, AND ACCEPTABLE TO THE TOWN AND/OR ENGINEER. THE CONTRACTOR SHALL LIMIT ACTIVITIES TO THESE AREAS.
42. THE CONTRACTOR SHALL BE REQUIRED TO TEMPORARILY PAVE ALL DISTURBED TRAVEL WAYS, SIDEWALKS & DRIVEWAYS NOT UNDER CONSTRUCTION OR IF LEFT DURING NON WORKING HOURS AND AS REQUIRED BY THE TOWN AND/OR ENGINEER.
43. DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY 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 CONSTRUCTIBILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED. ANY FIELD ADJUSTMENTS TO LINE AND GRADE UP TO A DEPTH OF 5 FEET SHALL BE INCLUDED IN THE COST OF THE PIPE. PIPE EXCAVATION GREATER THAN 5 FEET WILL BE PAID UNDER CLASS B TRENCH EXCAVATION.

STORMWATER FACILITY OPERATION & MAINTENANCE:

THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES AS OUTLINED BELOW UNTIL SUCH TIME THAT THE ROADWAYS AND ASSOCIATED UTILITIES ARE ACCEPTED BY THE OWNER AND THE ENGINEER.

1. INSPECT AND RESTORE/CLEAN ALL FACILITIES (INLETS, MANHOLES, INFILTRATION BASINS, ETC.) OF SEDIMENT AND DEBRIS PRIOR TO THE OWNER'S ACCEPTANCE.
2. REMOVE AND DISPOSE ALL SEDIMENT AND DEBRIS AT A PRE-APPROVED LOCATION AS APPROVED BY THE TOWN AND/OR ENGINEER.
3. REFER TO THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR ADDITIONAL INFORMATION PERTAINING TO STORMWATER FACILITY OPERATION AND MAINTENANCE REQUIREMENTS. MAINTAIN A WORKING COPY OF THE SWPPP ON SITE AT ALL TIMES.
4. INSPECT AFTER EVERY MAJOR RAINFALL EVENT FOR THE ENTIRE DURATION OF THE CONSTRUCTION PROJECT AND THE FIRST 3 MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND CONSTRUCTION.
5. MAINTENANCE REQUIRED FOR DRAINAGE STRUCTURES (INLETS, MANHOLES & CATCH BASINS): ALL DRAINAGE STRUCTURES WILL BE INSPECTED BY THE CONTRACTOR TO MONITOR FOR PROPER OPERATION, COLLECTION OF LITTER OR TRASH, AND STRUCTURAL DETERIORATION. THE BASINS WILL BE CLEANED OF SEDIMENT (INCLUDING SUMPS) AS NECESSARY, AND REPAIRED WHEN REQUIRED.

EROSION & SEDIMENT CONTROL (ESC) NOTES:

1. THE CONTRACTOR SHALL DESIGNATE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS AND IMPLEMENTATION OF ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
2. INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES AS INDICATED ON DRAWINGS IN CONSULTATION WITH THE ENGINEER BEFORE ANY CONSTRUCTION ACTIVITIES BEGIN. INSPECT, MAINTAIN, REPAIR AND REPLACE EROSION CONTROL MEASURES, AS NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. THE SITE PERIMETER EROSION CONTROLS ARE THE DESIGNATED LIMIT OF WORK. INFORM ALL PERSONNEL WORKING ON THE PROJECT SITE THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION PERIOD.
3. KEEP THE LIMIT OF CLEARING, GRADING AND DISTURBANCES TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL. IF TREES ARE TO BE CUT, CLEAR AND GRUB ONLY THOSE AREAS WHICH ARE ACTIVELY UNDER CONSTRUCTION. PROPERLY INSTALL THE SEDIMENTATION CONTROLS PRIOR TO BEGINNING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK.
4. MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH LEAVE LARGE DISTURBED AREAS UNSTABILIZED. IF INCLEMENT WEATHER IS PREDICTED, USE BEST PROFESSIONAL JUDGEMENT AND GOOD CONSTRUCTION PRACTICES WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND ENSURE THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERLY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
5. INSPECT EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZED SLOPES ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT OF .25 INCH OR GREATER. REPAIR IDENTIFIED PROBLEMS WITHIN 24 HOURS TO ENSURE EROSION AND SEDIMENT CONTROLS ARE IN GOOD WORKING ORDER. RESET OR REPLACE MATERIALS AS REQUIRED.
6. SURROUND THE PERIMETER OF SOIL STOCKPILES WITH SILT SOCK, SILT FENCE, STRAWBALES, OR A COMBINATION OF SILT FENCE WITH STRAWBALE, AS DETERMINED NECESSARY.
7. DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED, REINFORCE TEMPORARY AREAS HAVING A SLOPE GREATER THAN 4:1 WITH EROSION BLANKETS OR APPROVED EQUAL UNTIL THE SITE IS PROPERLY STABILIZED. TEMPORARY SWALES MAY ALSO BE REQUIRED IF DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER.
8. INSTALL A CATCH BASIN SILT SACK OR APPROVED EQUIVALENT IN EACH EXISTING CATCH BASIN RECEIVING RUNOFF FROM THE SITE. UPON THE INSTALLATION OF EACH CATCH BASIN, INSTALL SILT SACK OR APPROVED EQUIVALENT. INSPECT SILT SACKS, AFTER EACH SIGNIFICANT STORM EVENT AND REMOVE AND EMPTY AS NEEDED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
9. SMALL SEDIMENTATION BASINS MAY BE CONSTRUCTED ON AN AS-NEEDED BASIS DURING CONSTRUCTION TO AID IN THE CAPTURE OF SITE RUNOFF AND SEDIMENT. IT WILL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR, IN CONSULTATION WITH THE ENGINEER, TO SIZE AND CREATE THESE BASINS IN APPROPRIATE LOCATIONS.
10. CONTAIN ALL SEDIMENT ON SITE. SWEEP ALL EXITS FROM THE SITE AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. SWEEP PAVED AREAS AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS ACCUMULATED DURING SITE CONSTRUCTION.
11. REMOVE ACCUMULATED SEDIMENT FROM ALL TEMPORARY PRACTICES AND DISPOSE OF IN A PRE-APPROVED LOCATION.
12. TO ENSURE ALL EROSION AND SEDIMENTATION CONTROL DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER, PROVIDE ON SITE,OR MAKE READILY AVAILABLE, THE NECESSARY EQUIPMENT AND SITE PERSONNEL DURING CONSTRUCTION HOURS FOR THE DURATION OF THE PROJECT. IF SITE WORK IS SUSPENDED DURING THE WINTER MONTHS THE CONTRACTOR MUST CONTINUE TO PROVIDE PERSONNEL AND EQUIPMENT ON SITE OR READILY AVAILABLE .
13. CONTROL DUST BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	05	115
	PROJECT FILE NO.	609440	

GENERAL NOTES & BORING LOGS - 02

APPROX BORING LOCATION
B-1
N: 2873344.9952
E: 798090.5576

BORING LOG

Project: Abington Roundabout Borings
Location: Abington Roundabout
Client: Town of Abington
Driller: Northern Drilling
Drilling Methods: Direct Push Intermittent Split-Spoon Sampling
Weather: 20-30°F, Cloudy
Performed By: RH Date: 2/2/2024
Checked By: AO Date: 6/4/2024

See attached figure

Boring Locus Map

B-1
Location: Next to Parking Lot
Approx. Ground Elevation:
Approx. Groundwater Elevation: N/M
Date/Time of Groundwater Elevation:
Datum: WGS 84
Project No. R274-1904.00

Depth (feet)	Sample No.	Blows per 6-inch	Rec./ Pen.	Soil Description	Stratum Change	Note No.
1	S1 (0-2')	16 17 8 4	18"/24"	0-6" PAVEMENT 6"-2' Black SAND and GRAVEL. Sands are medium coarse and loose.	PAVEMENT SAND and GRAVEL	
2						
3	S2 (2-4')			2-4' Medium coarse SAND, loose. @4' Refusal encountered.	SAND	
4						
	BORING TERMINATED AT REFUSAL ENCOUNTERED AT 4' BELOW GROUND SURFACE					
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

NOTES:

LEGEND

S - Split Spoon Sample	O/A - Sample Collected Off the Augers	
UT - Undisturbed Tube Sample		
Trace - Approximately 0 to 10%	Some - Approximately 20 to 35%	
Little - Approximately 10 to 20%	And - Approximately 35 to 50%	
0-10 Coarse Soil N Value - Loose	30-50 Coarse Soil N Value - Dense	
10-30 Coarse Soil N Value - Medium Dense	>50 Coarse Soil N Value - Very Dense	
0-4 Fine Soil N Value - Soft	8-15 Fine Soil N Value - Stiff	>30 Fine Soil N Value - Hard
4-8 Fine Soil N Value - Medium Stiff	15-30 Fine Soil N Value - Very Stiff	

BORING LOGS

APPROX BORING LOCATION
B-2
N: 2873278.1373
E: 798073.6623

BORING LOG

Project: Abington Roundabout Borings
Location: Abington Roundabout
Client: Town of Abington
Driller: Northern Drilling
Drilling Methods: Direct Push Intermittent Split-Spoon Sampling
Weather: 20-30°F, Cloudy
Performed By: RH Date: 2/2/2024
Checked By: AO Date: 6/4/2024

See attached figure

Boring Locus Map

B-2
Location: Next to Parking Lot
Approx. Ground Elevation:
Approx. Groundwater Elevation: N/M
Date/Time of Groundwater Elevation:
Datum: WGS 84
Project No. R274-1904.00

Depth (feet)	Sample No.	Blows per 6-inch	Rec./ Pen.	Soil Description	Stratum Change	Note No.
1	S1 (0-2')	12 11 9 8	7"/24"	0-2" PAVEMENT 2"-2' Fine to coarse SAND some gravel, loose.	PAVEMENT SAND	
2						
3						
4						
5						
6	S2 (5-7')	6 17 21 24	16"/24"	5'-7' Fine sandy silty, very dense.	Sandy SILT	
7						
8						
9						
10						
11	S3 (10-12')		18"/24"	10-12' Fine sandy silt, very dense.		
12			6"/6"	12-12.5' Clay, medium stiff, very dense.	CLAY	
	BORING TERMINATED AT REFUSAL ENCOUNTERED AT 12.5' BELOW GROUND SURFACE					
14						
15						
16						
17						
18						
19						
20						
21						
22						

NOTES:

LEGEND

S - Split Spoon Sample	O/A - Sample Collected Off the Augers	
UT - Undisturbed Tube Sample		
Trace - Approximately 0 to 10%	Some - Approximately 20 to 35%	
Little - Approximately 10 to 20%	And - Approximately 35 to 50%	
0-10 Coarse Soil N Value - Loose	30-50 Coarse Soil N Value - Dense	
10-30 Coarse Soil N Value - Medium Dense	>50 Coarse Soil N Value - Very Dense	
0-4 Fine Soil N Value - Soft	8-15 Fine Soil N Value - Stiff	>30 Fine Soil N Value - Hard
4-8 Fine Soil N Value - Medium Stiff	15-30 Fine Soil N Value - Very Stiff	

BORING LOGS

APPROX BORING LOCATION
B-3
N: 2873212.8956
E: 798064.8386

BORING LOG

Project: Abington Roundabout Borings
Location: Abington Roundabout
Client: Town of Abington
Driller: Northern Drilling
Drilling Methods: , Direct Push Intermittent Split-Spoon Sampling
Weather: 20-30°F, Cloudy
Performed By: RH Date: 2/2/2024
Checked By: AO Date: 6/4/2024

See attached figure

Boring Locus Map

B-3
Location: Grass Strip
Approx. Ground Elevation:
Approx. Groundwater Elevation: N/M
Date/Time of Groundwater Elevation:
Datum: WGS 84
Project No. R274-1904.00

Depth (feet)	Sample No.	Blows per 6-inch	Rec./ Pen.	Soil Description	Stratum Change	Note No.
1	S1 (0-2')	5 11 42 22	7"/24"	0-2" ASPHAULT 2"-2' Gravel and coarse SAND, loose.	PAVEMENT SAND/GRAVEL	
2						
3						
4						
5	S2 (5-7')			5-5.75' Medium to coarse sand with gravel, loose.	SAND	1
	BORING TERMINATED AT REFUSAL ENCOUNTERED AT 5.75' BELOW GROUND SURFACE					
6						
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17						
18						
19						
20						
21						
22						

NOTES:

1. Sample collected of ledge refusal at 5.75', designated as AB-3 (10-12')

LEGEND

S - Split Spoon Sample	O/A - Sample Collected Off the Augers	
UT - Undisturbed Tube Sample		
Trace - Approximately 0 to 10%	Some - Approximately 20 to 35%	
Little - Approximately 10 to 20%	And - Approximately 35 to 50%	
0-10 Coarse Soil N Value - Loose	30-50 Coarse Soil N Value - Dense	
10-30 Coarse Soil N Value - Medium Dense	>50 Coarse Soil N Value - Very Dense	
0-4 Fine Soil N Value - Soft	8-15 Fine Soil N Value - Stiff	>30 Fine Soil N Value - Hard
4-8 Fine Soil N Value - Medium Stiff	15-30 Fine Soil N Value - Very Stiff	

BORING LOGS

BORING NOTES:

1. LOCATION OF BORINGS SHOWN ON THE PLAN THUS:
2. BORINGS ARE TAKEN FOR PURPOSE OF DESIGN AND SHOW CONDITIONS AT BORING POINTS ONLY, BUT DO NOT NECESSARILY SHOW THE NATURE OF THE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION.
3. WATER LEVELS SHOWN ON THE BORING LOGS WERE OBSERVED AT THE TIME OF TAKING BORINGS AND DO NOT NECESSARILY SHOW THE TRUE GROUND WATER LEVEL.
4. FIGURES IN COLUMNS INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE A 1 3/8" I.D. SPLIT SPOON SAMPLER 6" USING A 140 POUND WEIGHT FALLING 30".
5. BORING SAMPLES ARE STORED AT A STORAGE FACILITY LOCATED ON ROUTE 114 (219 WINTHROP AVE.) IN LAWRENCE, MA. THE CONTRACTOR MAY EXAMINE THE SOIL AND ROCK SAMPLES BY CONTACTING THE MASSDOT GEOTECHNICAL SECTION AT 10 PARK PLAZA, BOSTON, MA.
6. ALL BORINGS WERE MADE IN FEBRUARY 2024.
7. BORINGS WERE MADE BY THIELSCH ENGINEERING, INC. (195 FRANCES AVENUE, CRANSTON, RI 02910)
8. THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS USED THROUGHOUT.

609440_HDI(NOTES).DWG Plotted on 12-Jan-2026 6:10 PM

609440_HD\NOTES.DWG Plotted on 12-Jan-2026 6:11 PM

APPROX BORING LOCATION
B-4
N: 2873010.1588
E: 798167.0145

BORING LOG

Project:	Abington Roundabout Borings		**B-4**
Location:	Abington Roundabout		Location: 825 DWY
Client:	Town of Abington		Approx. Ground Elevation:
Driller:	Northern Drilling	See attached figure	Approx. Groundwater Elevation: N/M
Drilling Methods:	Direct Push Intermittent Split-Spoon Sampling		Date/Time of Groundwater Elevation:
Weather:	20-30°F, Cloudy		Datum: WGS 84
Performed By:	RH Date: 2/2/2024		Project No. R274-1904.00
Checked By:	AO Date: 6/4/2024	Boring Locus Map	

Depth (feet)	Sample No.	Blows per 6-inch	Rec./ Pen.	Soil Description	Stratum Change	Note No.
1	S1 (0.5-2.5')	18 17 27 29	20"/24"	0-6" PAVEMENT 6"-2.5' Coarse SAND with gravel, very loose.	PAVEMENT SAND	
2						
3						
4						1
	BORING TERMINATED AT REFUSAL ENCOUNTERED AT 4' BELOW GROUND SURFACE					
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

NOTES:

1. Sample collected of ledge refusal at 4', designated as AB-4 (5-7')

LEGEND

S - Split Spoon Sample	O/A - Sample Collected Off the Augers	
UT - Undisturbed Tube Sample		
Trace - Approximately 0 to 10%	Some - Approximately 20 to 35%	
Little - Approximately 10 to 20%	And - Approximately 35 to 50%	
0-10 Coarse Soil N Value - Loose	30-50 Coarse Soil N Value - Dense	
10-30 Coarse Soil N Value - Medium Dense	>50 Coarse Soil N Value - Very Dense	
0-4 Fine Soil N Value - Soft	8-15 Fine Soil N Value - Stiff	>30 Fine Soil N Value - Hard
4-8 Fine Soil N Value - Medium Stiff	15-30 Fine Soil N Value - Very Stiff	

APPROX BORING LOCATION
B-5
N: 2872923.1499
E: 798199.2852

BORING LOG

Project:	Abington Roundabout Borings		**B-5**
Location:	Abington Roundabout		Location: 825 Wall
Client:	Town of Abington		Approx. Ground Elevation:
Driller:	Northern Drilling	See attached figure	Approx. Groundwater Elevation: N/M
Drilling Methods:	Direct Push Intermittent Split-Spoon Sampling		Date/Time of Groundwater Elevation:
Weather:	20-30°F, Cloudy		Datum: WGS 84
Performed By:	RH Date: 2/2/2024		Project No. R274-1904.00
Checked By:	AO Date: 6/4/2024	Boring Locus Map	

Depth (feet)	Sample No.	Blows per 6-inch	Rec./ Pen.	Soil Description	Stratum Change	Note No.
1	S1 (0.5-2.5')	21 38 33 34	16"/30	0-6" PAVEMENT 6"-2.5' Medium to Coarse SAND, loose.	PAVEMENT SAND	
2						
3						
4						1
	BORING TERMINATED AT REFUSAL ENCOUNTERED AT 4' BELOW GROUND SURFACE					
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

NOTES:

1. Sample collected of ledge refusal at 4', designated as AB-5 (5-7')

LEGEND

S - Split Spoon Sample	O/A - Sample Collected Off the Augers	
UT - Undisturbed Tube Sample		
Trace - Approximately 0 to 10%	Some - Approximately 20 to 35%	
Little - Approximately 10 to 20%	And - Approximately 35 to 50%	
0-10 Coarse Soil N Value - Loose	30-50 Coarse Soil N Value - Dense	
10-30 Coarse Soil N Value - Medium Dense	>50 Coarse Soil N Value - Very Dense	
0-4 Fine Soil N Value - Soft	8-15 Fine Soil N Value - Stiff	>30 Fine Soil N Value - Hard
4-8 Fine Soil N Value - Medium Stiff	15-30 Fine Soil N Value - Very Stiff	

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	07	115
	PROJECT FILE NO. 609440		

GENERAL NOTES & BORING LOGS - 04

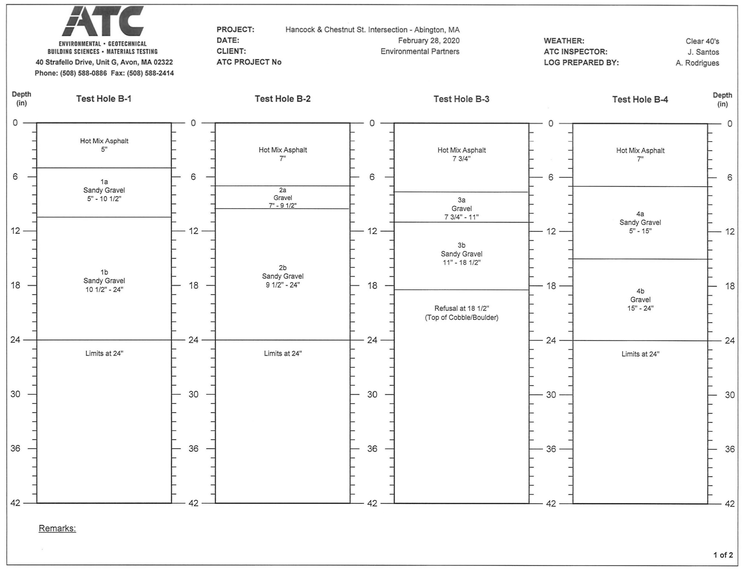
APPROX PAVEMENT
CORE LOCATIONS:

TEST HOLE B-1 (KEY PLAN C-1)
N:2873077.5362
E:797849.5500

TEST HOLE B-2 (KEY PLAN C-2)
N:2873105.5362
E:797999.5500

TEST HOLE B-3 (KEY PLAN C-3)
N:2873201.5362
E:798215.0500

TEST HOLE B-4 (KEY PLAN C-4)
N:2873226.0362
E:798342.5500



PAVEMENT CORE REPORTS

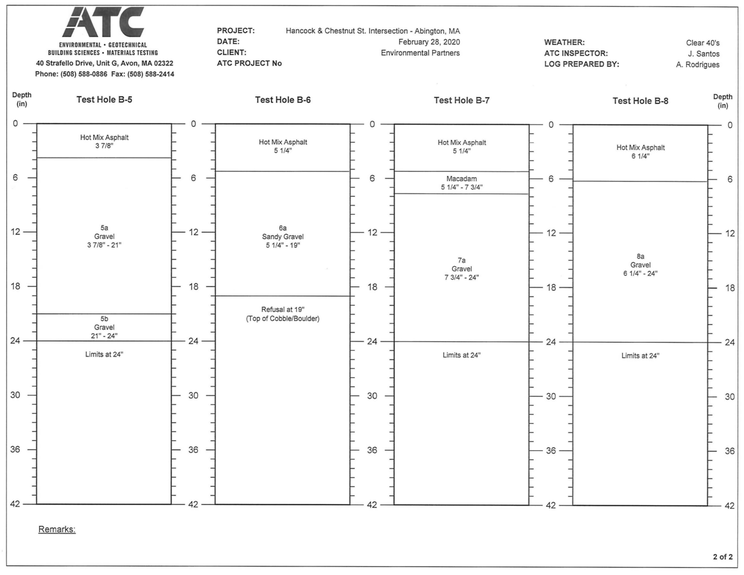
APPROX PAVEMENT
CORE LOCATIONS:

TEST HOLE B-5 (KEY PLAN C-5)
N:2872807.0362
E:798259.5500

TEST HOLE B-6 (KEY PLAN C-6)
N:2873003.5362
E:798144.0500

TEST HOLE B-7 (KEY PLAN C-7)
N:2873246.0362
E:798081.0500

TEST HOLE B-8 (KEY PLAN C-8)
N:2873423.5362
E:798122.0500



PAVEMENT CORE REPORTS

ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTI

Sample Description

Sample No.	Description	Source
1a	Sandy Gravel	Core Test Hole #1 5"-10 1/2"
1b	Sandy Gravel	Core Test Hole #1 10 1/2"-24"
2a	Gravel	Core Test Hole #2 7"-9 1/2"
2b	Sandy Gravel	Core Test Hole #2 9 1/2"-24"
3a	Gravel	Core Test Hole #3 7 3/4"-11"
3b	Sandy Gravel	Core Test Hole #3 11"-18 1/2"
4a	Sandy Gravel	Core Test Hole #4 5"-15"
4b	Gravel	Core Test Hole #4 15"-24"
5a	Gravel	Core Test Hole #5 3 7/8"-21"
6a	Sandy Gravel	Core Test Hole #6 5 1/4"-19"
7a	Gravel	Core Test Hole #7 7 3/4"-24"
8a	Gravel	Core Test Hole #8 6 1/4"-24"

ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTI

Washed Sieve Analysis
(% passing by weight)

Sieve Size (mm)	1a	1b	2a	2b	3a	3b
3" (75.0)		100		100		100
2 (50.0)		95		94		95
1 1/2 (37.5)	100	94	100	92	100	93
1 (25.0)	99	90	85	84	90	87
3/4 (19.0)	96	85	71	78	75	82
1/2 (12.5)	83	78	49	70	47	72
3/8 (9.5)	76	75	41	65	37	66
#4 (4.75)	64	67	30	56	28	55
10 (2.00)	49	57	22	47	20	45
20 (.850)	36	45	16	37	14	35
40 (.425)	24	30	11	26	10	25
50 (.300)	20	24	9	21	9	21
80 (.180)	14	16	7	15	7	15
200 (.075)	8.9	9.3	4.3	8.9	4.7	9.8

Sieve Size (mm)	4a	4b	5a	6a	7a	8a
4" (100.0)		100				
3 (75.0)		84		100	100	100
2 (50.0)		82		98	97	84
1 1/2 (37.5)	100	79		97	74	74
1 (25.0)	96	73	100	96	62	57
3/4 (19.0)	90	69	99	95	56	51
1/2 (12.5)	76	61	83	86	46	40
3/8 (9.5)	69	56	70	77	42	35
#4 (4.75)	57	48	47	59	34	29
10 (2.00)	42	37	33	43	26	23
20 (.850)	27	27	22	30	18	17
40 (.425)	16	17	13	19	11	10
50 (.300)	11	13	10	15	8	8
80 (.180)	7	8	7	10	6	5
200 (.075)	4.6	3.7	3.5	4.1	3.4	2.5

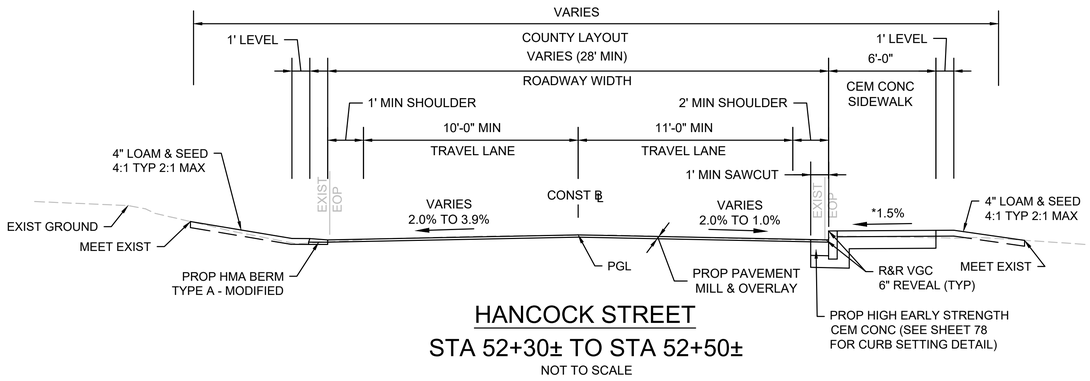
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ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

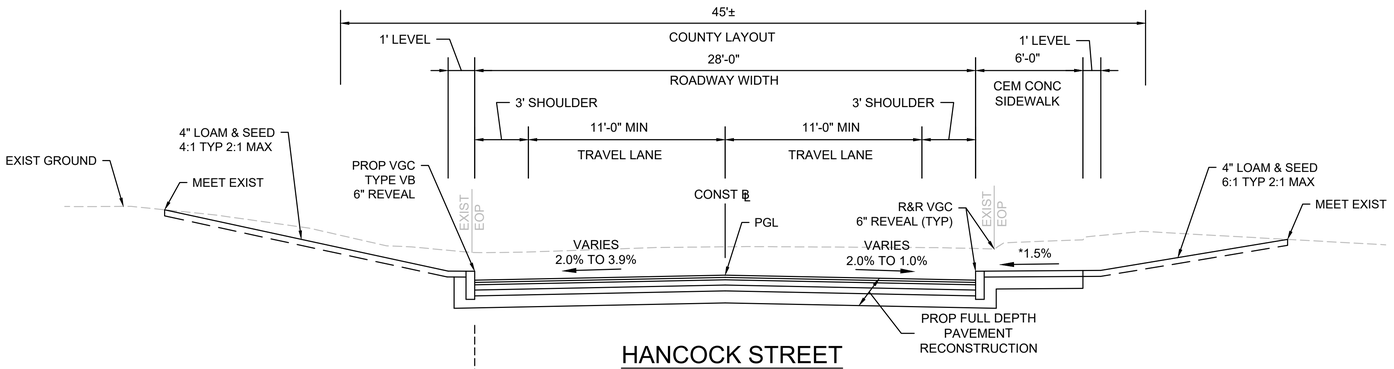
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	08	115
PROJECT FILE NO.	609440		

TYPICAL SECTIONS - 01

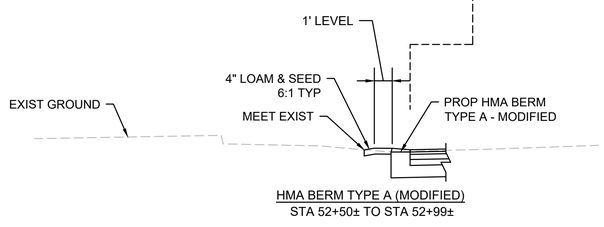
609440_HD(TYP).DWG Plotted on 9-Jan-2026 1:40 PM



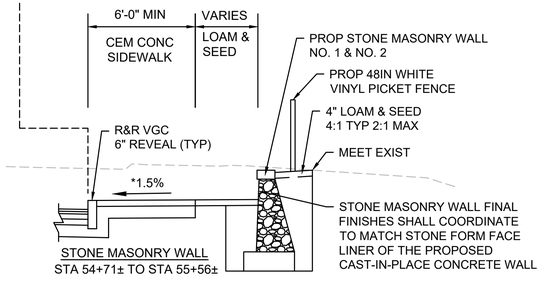
HANCOCK STREET
STA 52+30± TO STA 52+50±
NOT TO SCALE



HANCOCK STREET
STA 52+50± TO STA 55+56±
NOT TO SCALE



HMA BERM TYPE A (MODIFIED)
STA 52+50± TO STA 52+99±



STONE MASONRY WALL
STA 54+71± TO STA 55+56±

PAVEMENT NOTES

PROPOSED PAVEMENT MILLING & OVERLAY

SURFACE: 1.75" SUPERPAVE SURFACE COURSE (SSC 12.5) OVER ASPHALT EMULSION FOR TACK COAT (RS-1H) @ 0.08 GAL/SY OVER

** LEVELING: VARIABLE DEPTH AS DIRECTED OVER (MINIMUM 1.5" AND MAXIMUM 2.75")

MILLING: VARIABLE DEPTH PAVEMENT MILLING

PROPOSED FULL DEPTH PAVEMENT RECONSTRUCTION / WIDENING GREATER THAN OR EQUAL TO 4 FT

SURFACE: 1.75" SUPERPAVE SURFACE COURSE (SSC 12.5) OVER ASPHALT EMULSION FOR TACK COAT (RS-1H) @ 0.07 GAL/SY OVER

INTERMEDIATE: 1.75" SUPERPAVE INTERMEDIATE COURSE (SIC 12.5) OVER ASPHALT EMULSION FOR TACK COAT (RS-1H) @ 0.07 GAL/SY OVER

BASE: 3.75" SUPERPAVE BASE COURSE (SBC 37.5) OVER

SUBBASE: 4" DENSE GRADE CRUSHED STONE OVER 8" GRAVEL BORROW (TYPE b)

PROPOSED CEMENT CONCRETE DRIVEWAY

SURFACE 6" CEMENT CONCRETE OVER

SUBBASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED CEMENT CONCRETE TRUCK APRON

SURFACE: 9" STAMPED COLORED CONCRETE 4000 PSI, 0.75", 610, AIR-ENTRAINED WITH PENETRATE SEALER OVER

SUBBASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED CEMENT CONCRETE SIDEWALK, SPLITTER ISLANDS, AND PEDESTRIAN CURB RAMP

SURFACE: 4" CEMENT CONCRETE OVER

SUBBASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED HOT MIX ASPHALT DRIVEWAY

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC 9.5) OVER 2.5" SUPERPAVE INTERMEDIATE COURSE (SIC 12.5)

SUBBASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED HOT MIX ASPHALT LEVEL AREA IN FRONT OF WALLS

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC 9.5) OVER 2.5" SUPERPAVE INTERMEDIATE COURSE (SIC 12.5)

SUBBASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED LOAM & SEED

SURFACE: 4" LOAM BORROW

SUBBASE: VARIABLE DEPTH SUITABLE EXCAVATED MATERIAL OR ORDINARY BORROW (AS DIRECTED BY THE TOWN AND/OR ENGINEER)

NOTES:
1. ALL SAWCUTS INCLUDING THOSE IN DRIVEWAYS SHALL BE SEALED WITH A HMA JOINT SEALER (REFER TO MASSDOT STANDARD SPECIFICATIONS SUBSECTION 450.49).
2. DURING EXCAVATION, MATERIALS DEEMED BY THE TOWN AND OR ENGINEER TO BE SUITABLE WILL BE RETAINED OR USED AS ORDINARY BORROW FOR FILL AREAS. ANY UNSUITABLE SOILS AS DETERMINED BY THE TOWN AND OR ENGINEER SHALL BE REMOVED AND REPLACED WITH SUITABLE SUBBASE AS IDENTIFIED ABOVE.
3. ORDINARY BORROW SHALL ONLY BE USED WHEN NO SUITABLE EXCAVATED MATERIAL CAN BE UTILIZED AS APPROVED BY THE TOWN AND/OR ENGINEER.

* 0.5%± CONSTRUCTION TOLERANCE
** LEVELING COURSE TO BE PAID FOR UNDER ITEM 450.53 SUPERPAVE LEVELING COURSE - 12.5 (SLC 12.5) AT THE DIRECTION OF THE TOWN AND OR ENGINEER

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

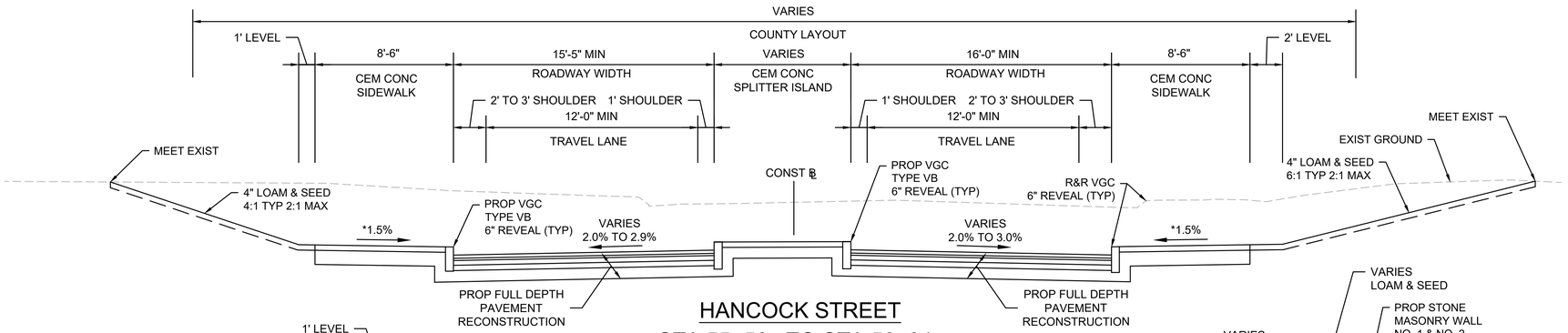
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	09	115
PROJECT FILE NO.	609440		

TYPICAL SECTIONS - 02

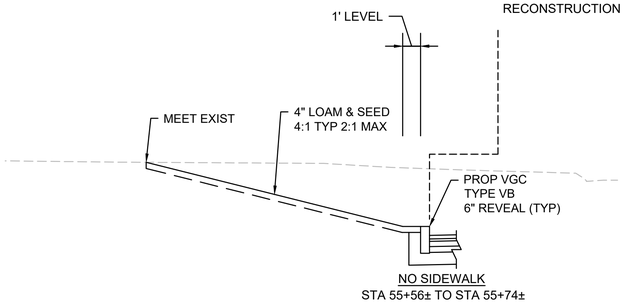
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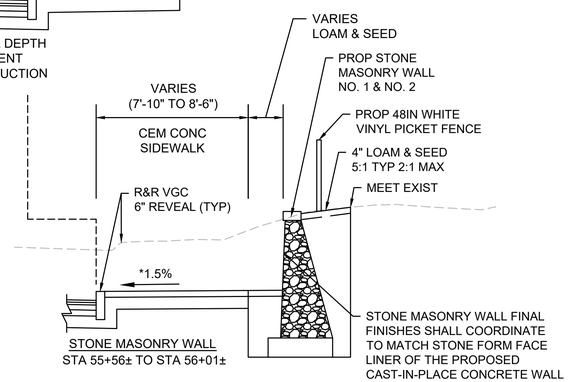
SEE PAVEMENT NOTES

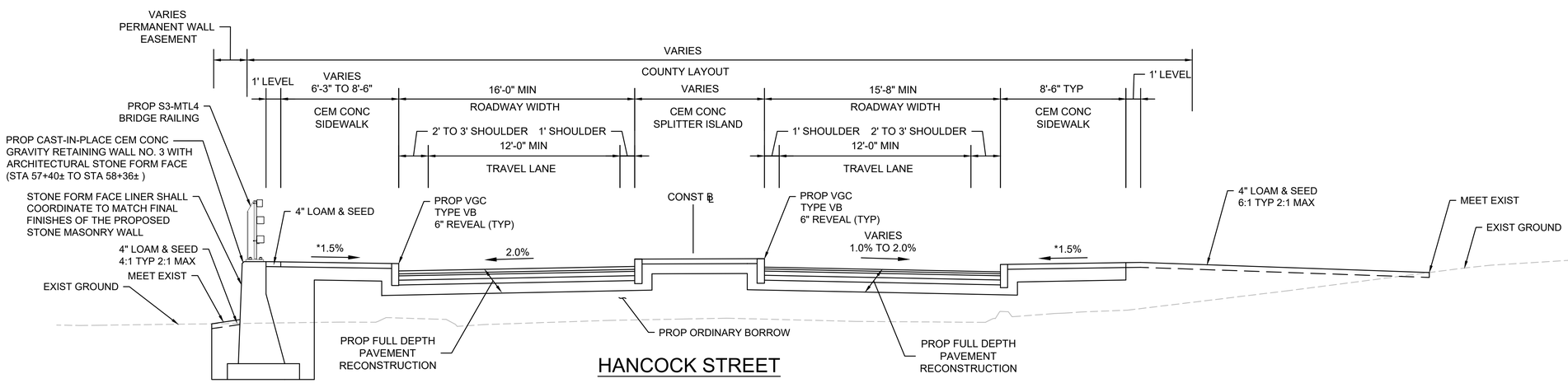
* 0.5%± CONSTRUCTION TOLERANCE



HANCOCK STREET
STA 55+56± TO STA 56+04±
NOT TO SCALE







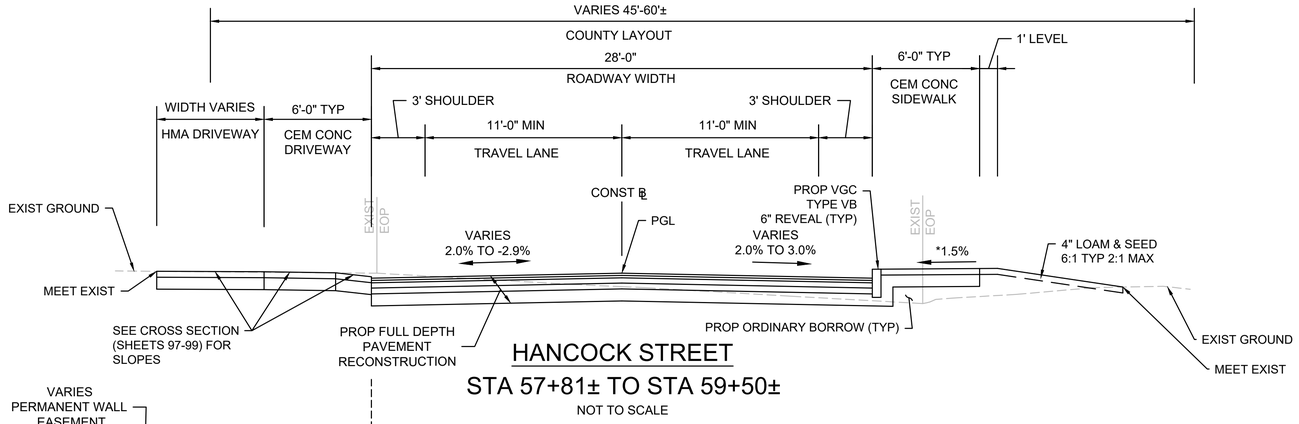
HANCOCK STREET
STA 57+25± TO STA 57+81±
NOT TO SCALE

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

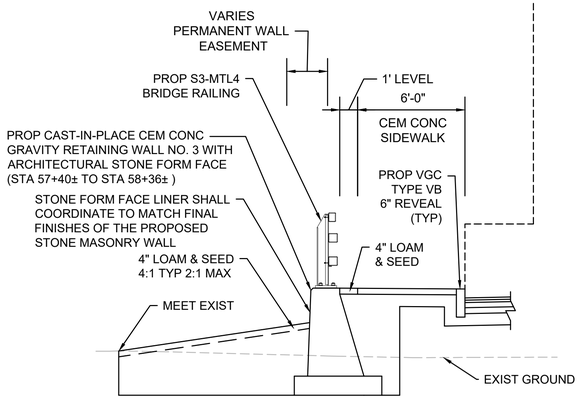
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	10	115
PROJECT FILE NO.	609440		

TYPICAL SECTIONS - 03

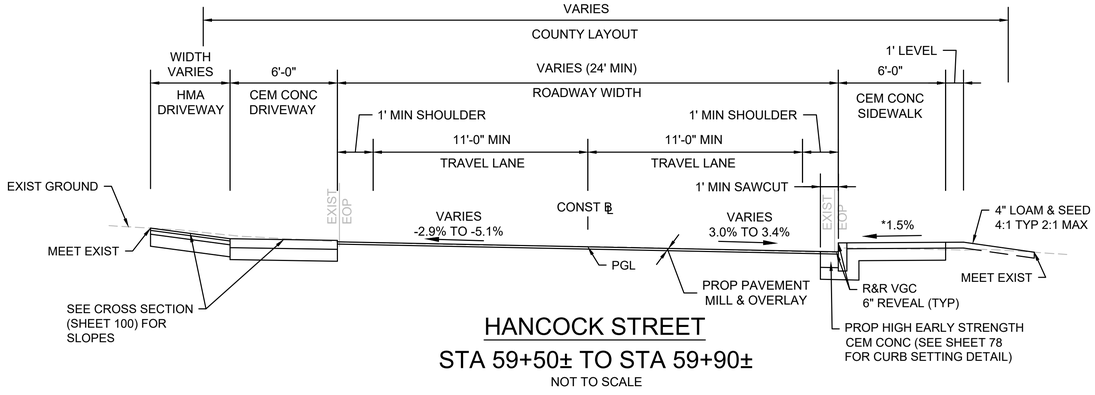
609440_HD(TYP).DWG Plotted on 9-Jan-2026 1:41 PM



HANCOCK STREET
STA 57+81± TO STA 59+50±
NOT TO SCALE



GRAVITY RETAINING WALL WITH BRIDGE RAILING
STA 57+81± TO STA 58+36±



HANCOCK STREET
STA 59+50± TO STA 59+90±
NOT TO SCALE

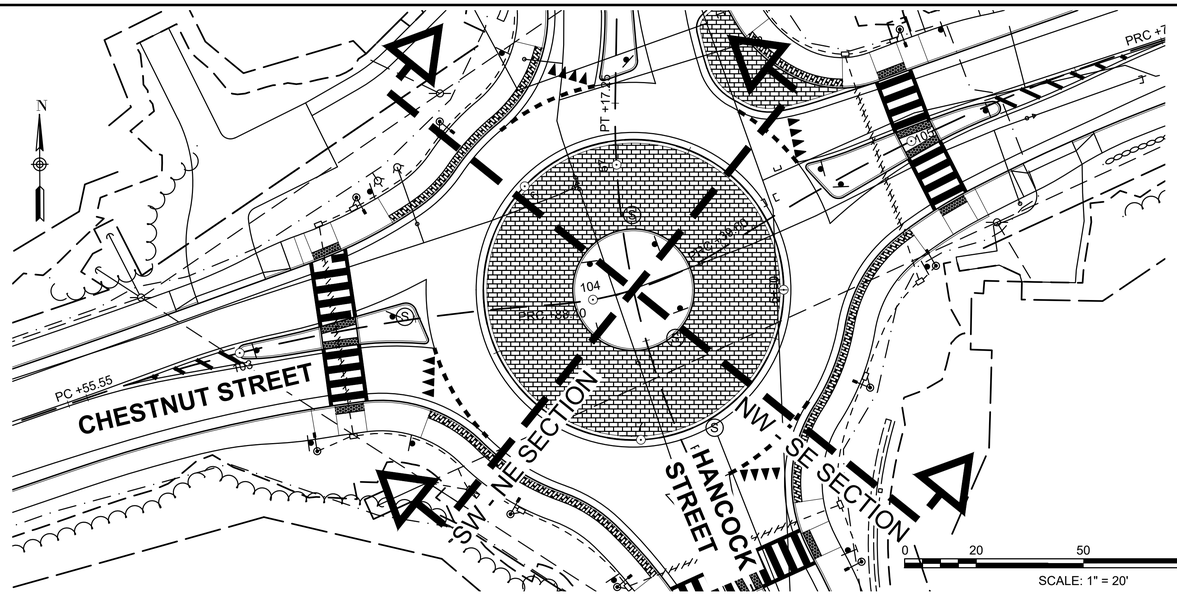
SEE PAVEMENT NOTES

* 0.5%± CONSTRUCTION TOLERANCE

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	11	115
PROJECT FILE NO.	609440		

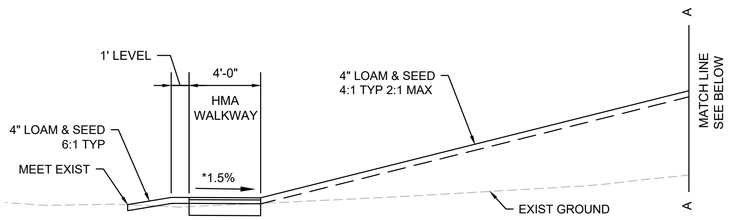
TYPICAL SECTIONS - 04

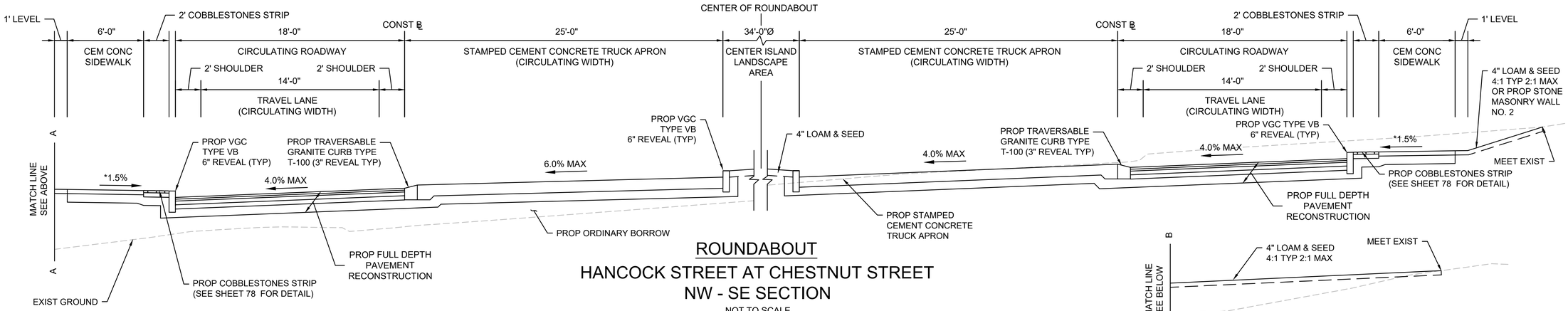


KEY MAP

SEE PAVEMENT NOTES

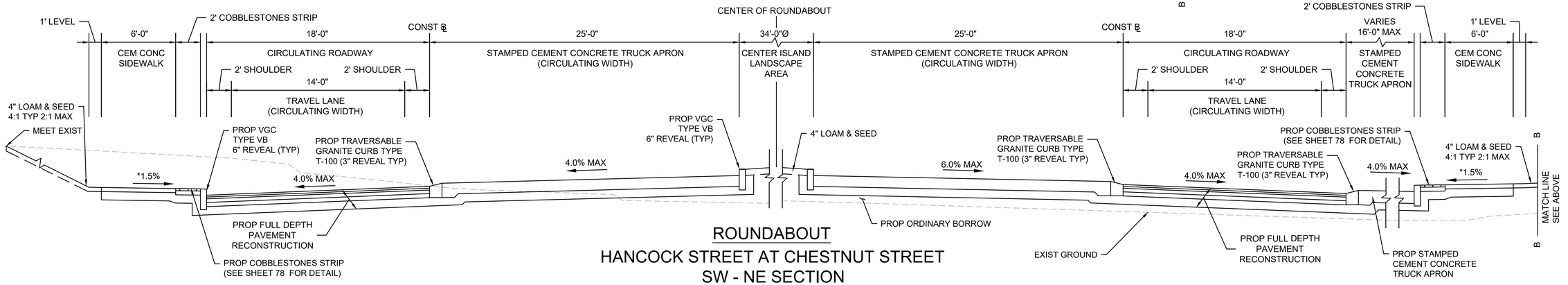
* 0.5%± CONSTRUCTION TOLERANCE





ROUNDABOUT
HANCOCK STREET AT CHESTNUT STREET
NW - SE SECTION

NOT TO SCALE



ROUNDABOUT
HANCOCK STREET AT CHESTNUT STREET
SW - NE SECTION

NOT TO SCALE

609440_HD(TYP).DWG Plotted on 9-Jan-2026 1:42 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

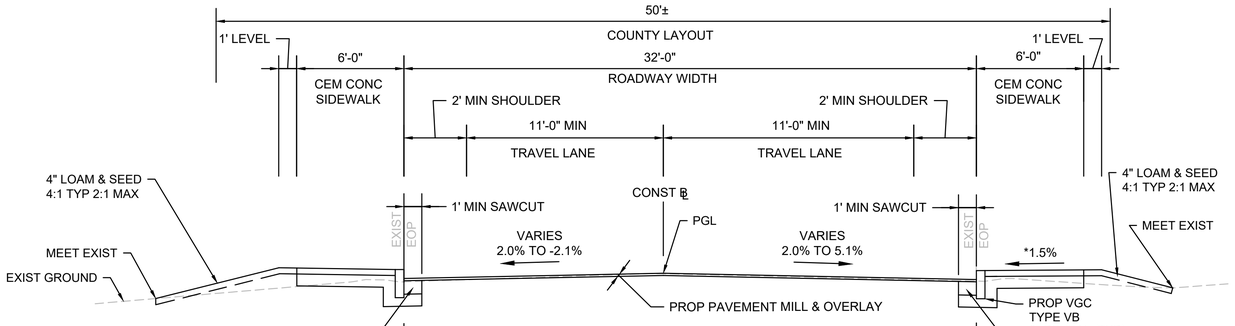
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	12	115
PROJECT FILE NO.	609440		

TYPICAL SECTIONS - 05

609440_HD(TYP).DWG Plotted on 9-Jan-2026 1:44 PM

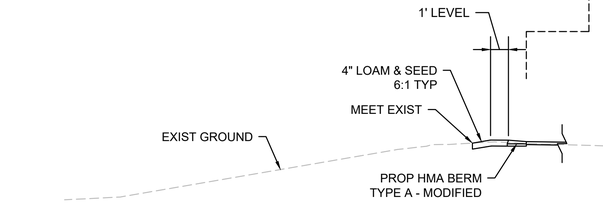
SEE PAVEMENT NOTES

* 0.5%± CONSTRUCTION TOLERANCE

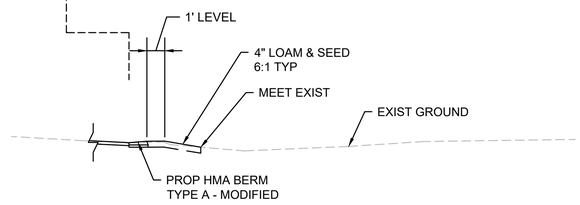


CHESTNUT STREET
STA 101+00± TO STA 101+75±
STA 106+70± TO STA 107+00±

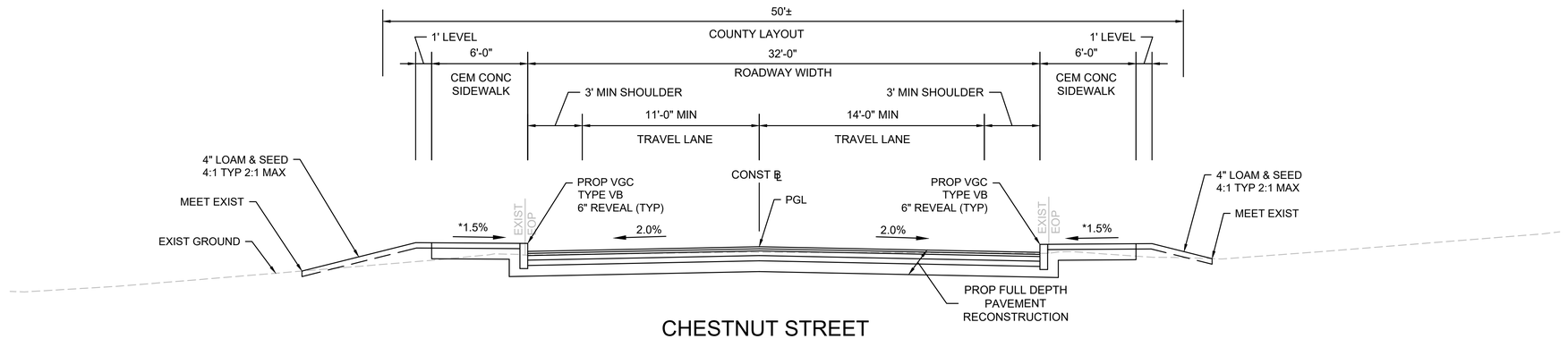
NOT TO SCALE



HMA BERM TYPE A (MODIFIED)
STA 101+00± TO STA 101+30±



HMA BERM TYPE A (MODIFIED)
STA 101+00± TO STA 101+06±



CHESTNUT STREET
STA 101+75± TO STA 103+00±

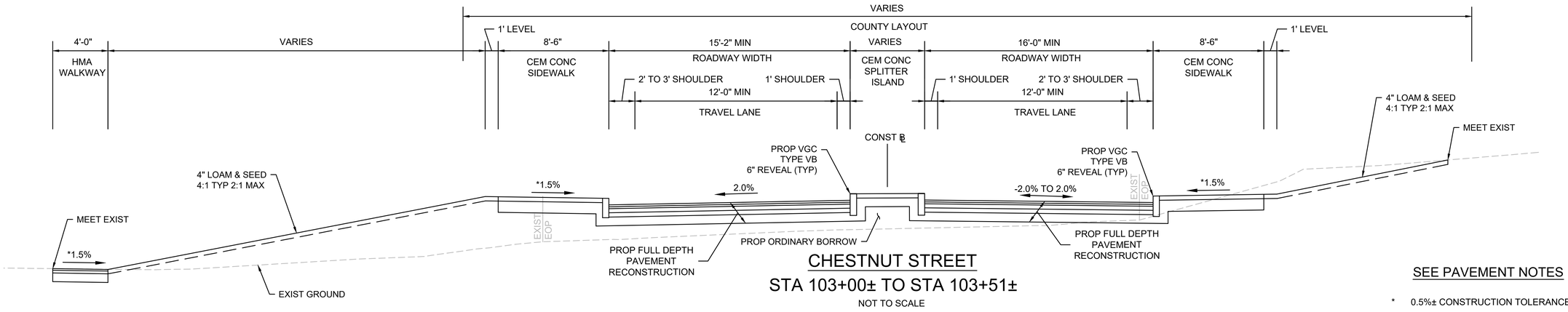
NOT TO SCALE

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	13	115
	PROJECT FILE NO.	609440	

TYPICAL SECTIONS - 06

609440_HD(TYP).DWG Plotted on 9-Jan-2026 1:44 PM

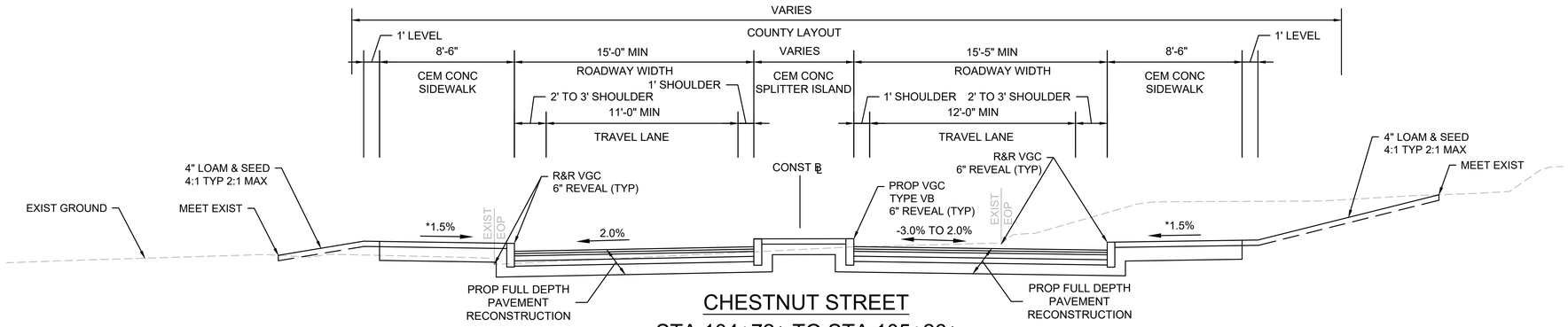


CHESTNUT STREET
STA 103+00± TO STA 103+51±

NOT TO SCALE

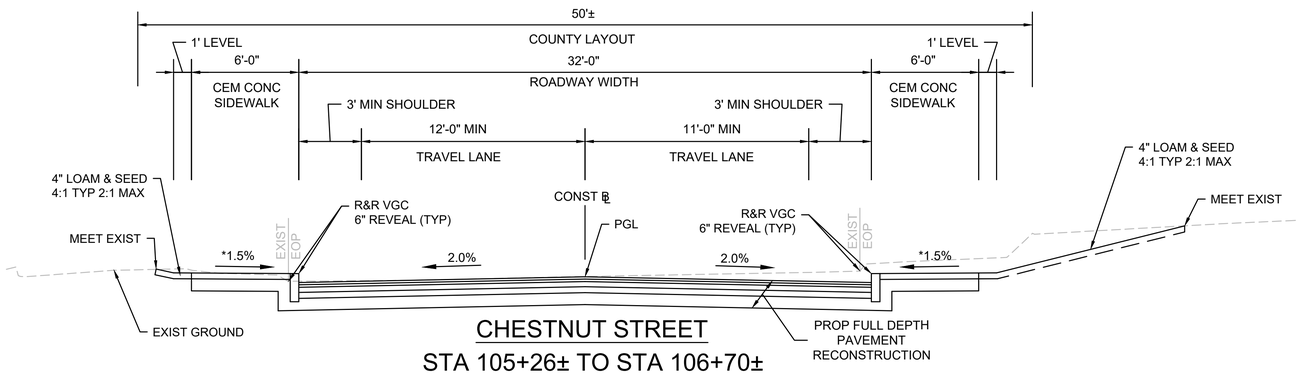
SEE PAVEMENT NOTES

* 0.5%± CONSTRUCTION TOLERANCE



CHESTNUT STREET
STA 104+72± TO STA 105+26±

NOT TO SCALE



CHESTNUT STREET
STA 105+26± TO STA 106+70±

NOT TO SCALE

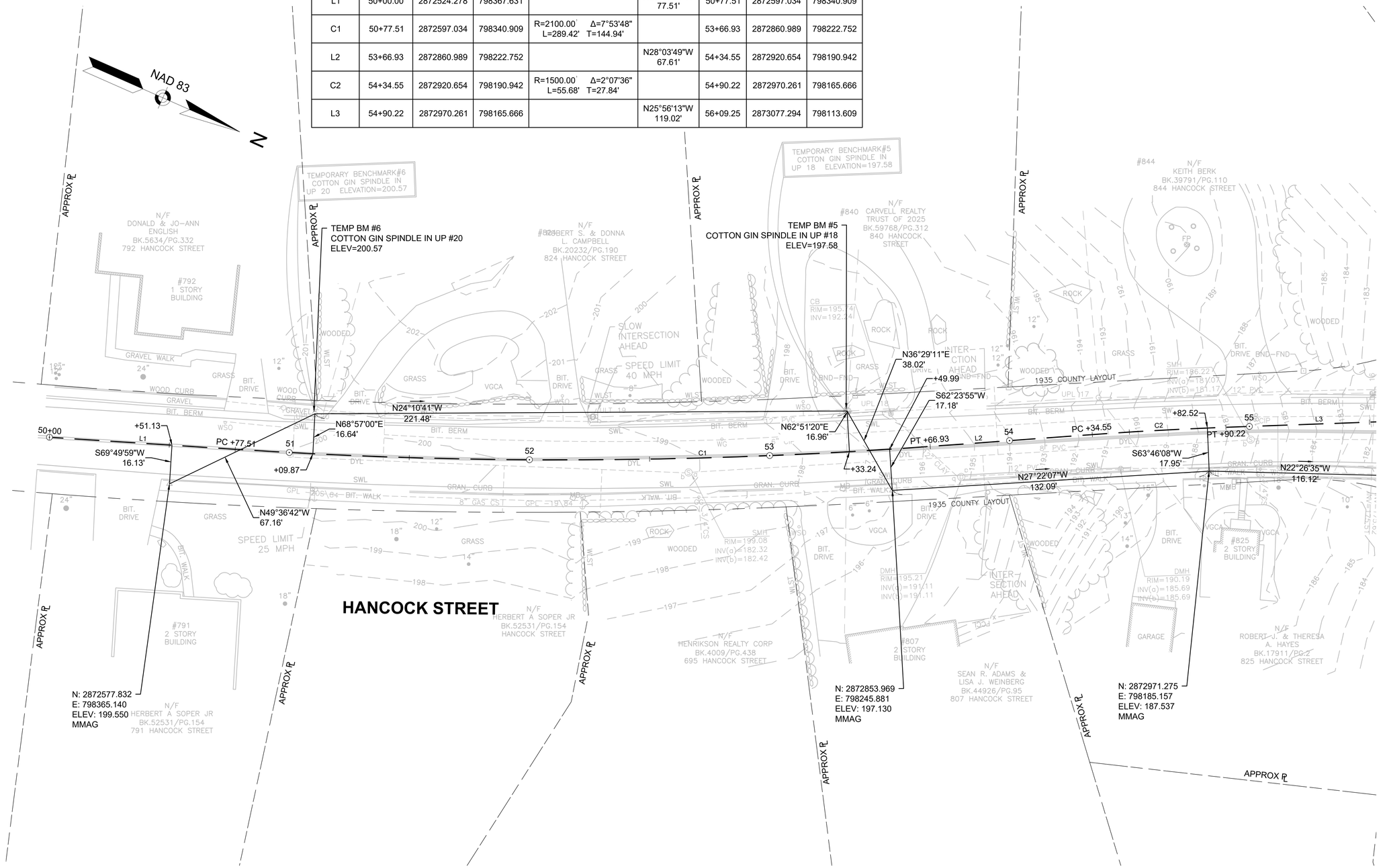
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	14	115
PROJECT FILE NO.	609440		

SURVEY CONTROL & EXISTING CONDITIONS PLANS - 01

609440_HD(SV).DWG Plotted on 9-Jan-2026 1:46 PM

HANCOCK STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	50+00.00	2872524.278	798367.631		N20°10'01"W 77.51'	50+77.51	2872597.034	798340.909
C1	50+77.51	2872597.034	798340.909	R=2100.00' Δ=7°53'48" L=289.42' T=144.94'		53+66.93	2872860.989	798222.752
L2	53+66.93	2872860.989	798222.752		N28°03'49"W 67.61'	54+34.55	2872920.654	798190.942
C2	54+34.55	2872920.654	798190.942	R=1500.00' Δ=2°07'36" L=55.68' T=27.84'		54+90.22	2872970.261	798165.666
L3	54+90.22	2872970.261	798165.666		N25°56'13"W 119.02'	56+09.25	2873077.294	798113.609



CONTINUED ON SHEET NO. 15

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	15	115
PROJECT FILE NO.	609440		

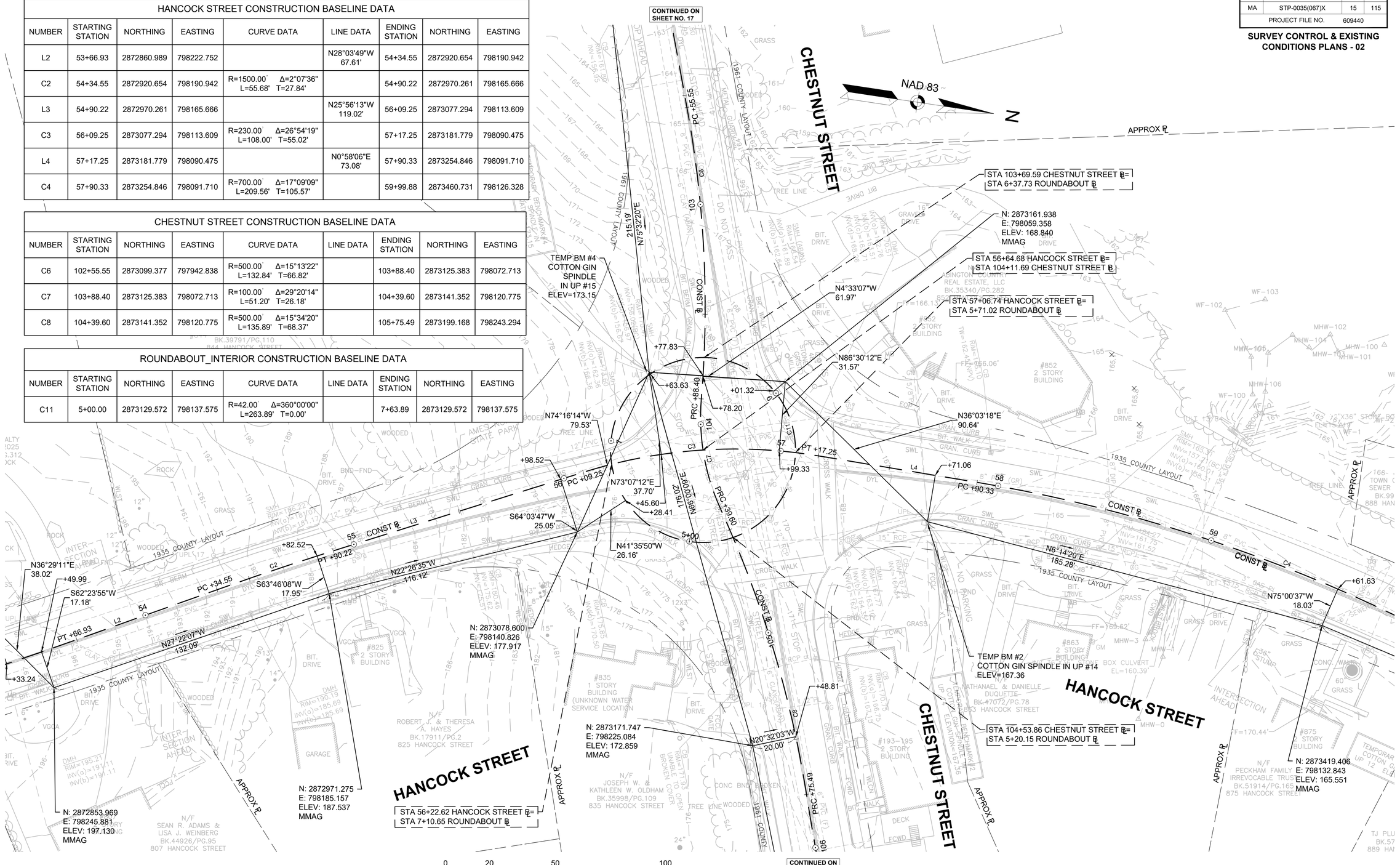
SURVEY CONTROL & EXISTING CONDITIONS PLANS - 02

609440_HD(SV).DWG Plotted on 9-Jan-2026 1:46 PM

HANCOCK STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L2	53+66.93	2872860.989	798222.752		N28°03'49"W 67.61'	54+34.55	2872920.654	798190.942
C2	54+34.55	2872920.654	798190.942	R=1500.00' Δ=2°07'36" L=55.68' T=27.84'		54+90.22	2872970.261	798165.666
L3	54+90.22	2872970.261	798165.666		N25°56'13"W 119.02'	56+09.25	2873077.294	798113.609
C3	56+09.25	2873077.294	798113.609	R=230.00' Δ=26°54'19" L=108.00' T=55.02'		57+17.25	2873181.779	798090.475
L4	57+17.25	2873181.779	798090.475		N0°58'06"E 73.08'	57+90.33	2873254.846	798091.710
C4	57+90.33	2873254.846	798091.710	R=700.00' Δ=17°09'09" L=209.56' T=105.57'		59+99.88	2873460.731	798126.328

CHESTNUT STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C6	102+55.55	2873099.377	797942.838	R=500.00' Δ=15°13'22" L=132.84' T=66.82'		103+88.40	2873125.383	798072.713
C7	103+88.40	2873125.383	798072.713	R=100.00' Δ=29°20'14" L=51.20' T=26.18'		104+39.60	2873141.352	798120.775
C8	104+39.60	2873141.352	798120.775	R=500.00' Δ=15°34'20" L=135.89' T=68.37'		105+75.49	2873199.168	798243.294

ROUNDABOUT_INTERIOR CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C11	5+00.00	2873129.572	798137.575	R=42.00' Δ=360°00'00" L=263.89' T=0.00'		7+63.89	2873129.572	798137.575

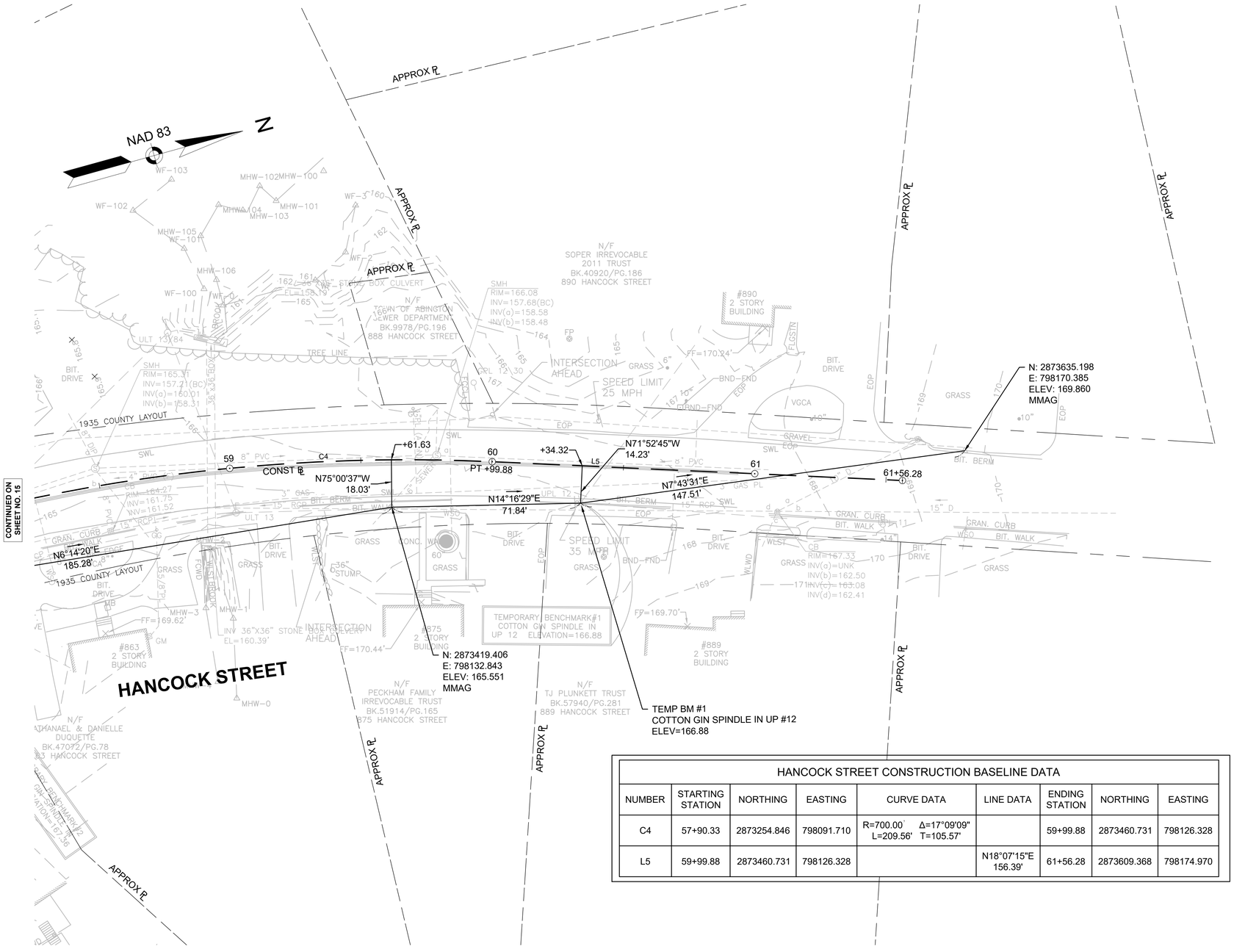


ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	16	115
	PROJECT FILE NO.	609440	

SURVEY CONTROL & EXISTING CONDITIONS PLANS - 03

609440_HD(SV).DWG Plotted on 9-Jan-2026 1:47 PM



HANCOCK STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C4	57+90.33	2873254.846	798091.710	R=700.00' Δ=17°09'09" L=209.56' T=105.57'		59+99.88	2873460.731	798126.328
L5	59+99.88	2873460.731	798126.328		N18°07'15"E 156.39'	61+56.28	2873609.368	798174.970

0 20 50 100

SCALE: 1" = 20'

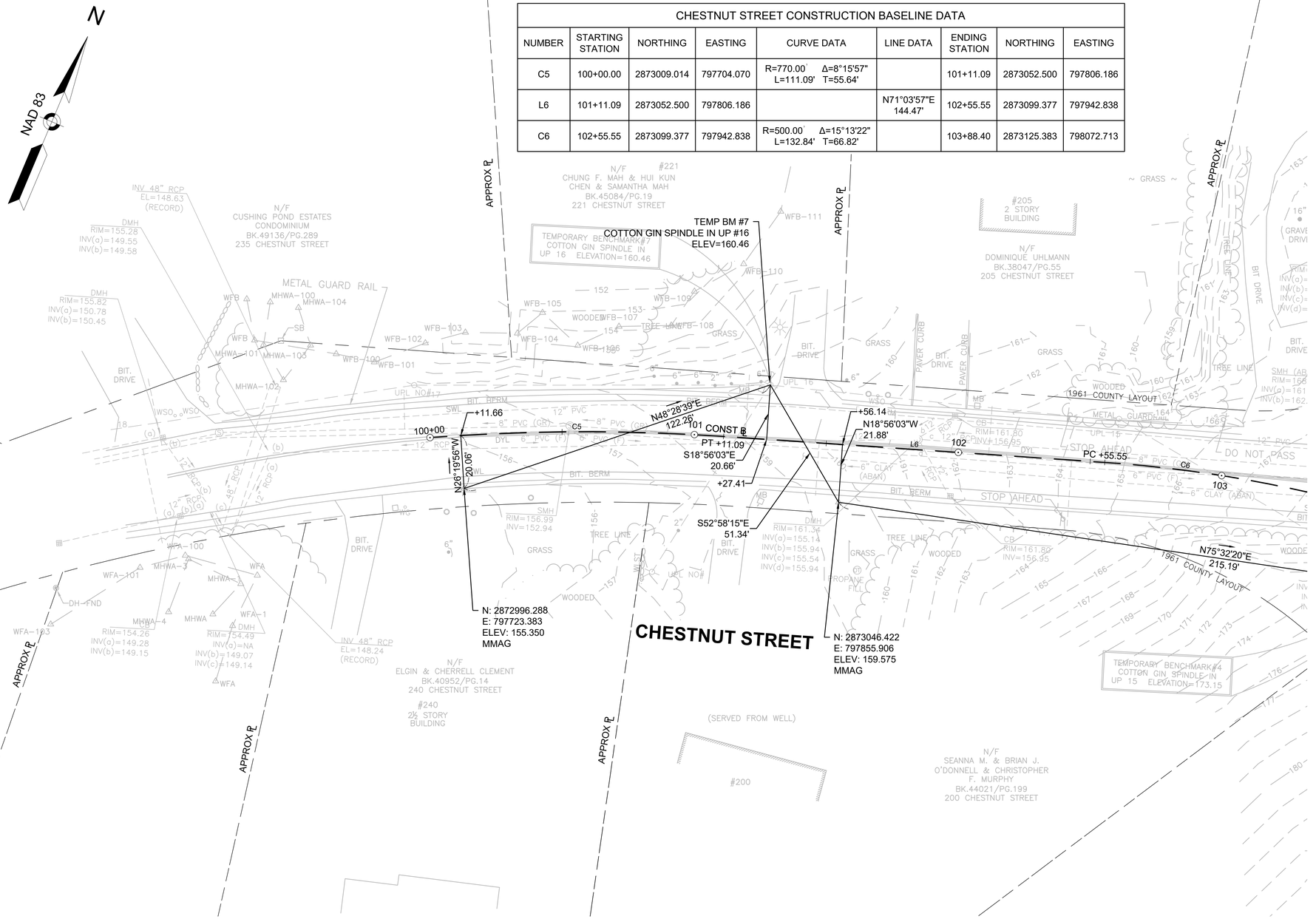
ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	17	115
	PROJECT FILE NO. 609440		

SURVEY CONTROL & EXISTING CONDITIONS PLANS - 04

609440_HD(SV).DWG Plotted on 9-Jan-2026 1:48 PM

CHESTNUT STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C5	100+00.00	2873009.014	797704.070	R=770.00' Δ=8°15'57" L=111.09' T=55.64'		101+11.09	2873052.500	797806.186
L6	101+11.09	2873052.500	797806.186		N71°03'57"E 144.47'	102+55.55	2873099.377	797942.838
C6	102+55.55	2873099.377	797942.838	R=500.00' Δ=15°13'22" L=132.84' T=66.82'		103+88.40	2873125.383	798072.713



CONTINUED ON SHEET NO.15

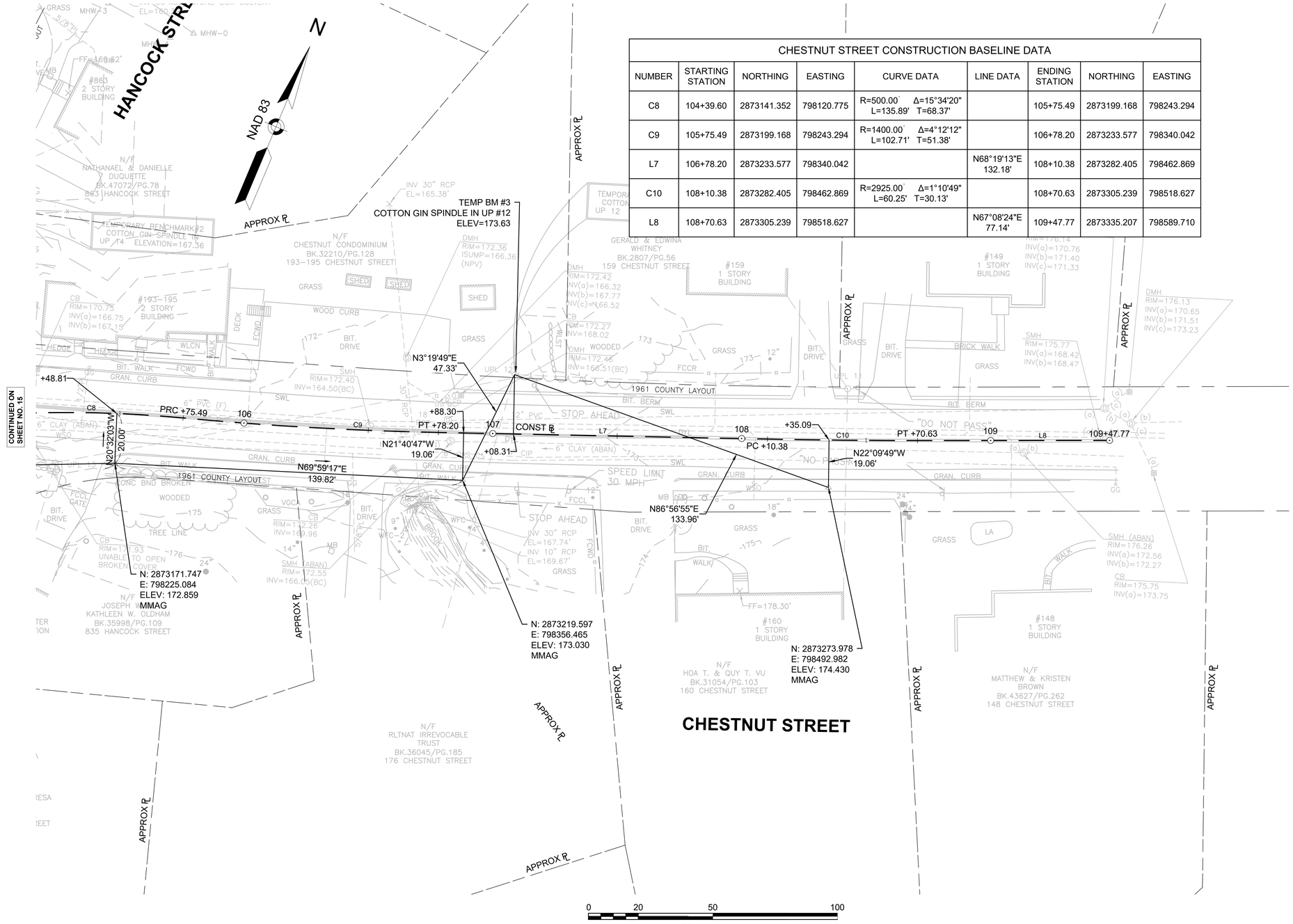
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	18	115
PROJECT FILE NO.	609440		

SURVEY CONTROL & EXISTING CONDITIONS PLANS - 05

609440_HD(SV).DWG Plotted on 9-Jan-2026 1:49 PM

CHESTNUT STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C8	104+39.60	2873141.352	798120.775	R=500.00' Δ=15°34'20" L=135.89' T=68.37'		105+75.49	2873199.168	798243.294
C9	105+75.49	2873199.168	798243.294	R=1400.00' Δ=4°12'12" L=102.71' T=51.38'		106+78.20	2873233.577	798340.042
L7	106+78.20	2873233.577	798340.042		N68°19'13"E 132.18'	108+10.38	2873282.405	798462.869
C10	108+10.38	2873282.405	798462.869	R=2925.00' Δ=1°10'49" L=60.25' T=30.13'		108+70.63	2873305.239	798518.627
L8	108+70.63	2873305.239	798518.627		N67°08'24"E 77.14'	109+47.77	2873335.207	798589.710



ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	19	115
PROJECT FILE NO.	609440		

CONSTRUCTION PLANS - 01

609440_HD(CP).DWG Plotted on 21-Apr-2026 6:08 PM

HIGHWAY GUARD DETAILS

NONE

STREET LIGHTING DETAILS

NONE

WATER SUPPLY ALTERATIONS

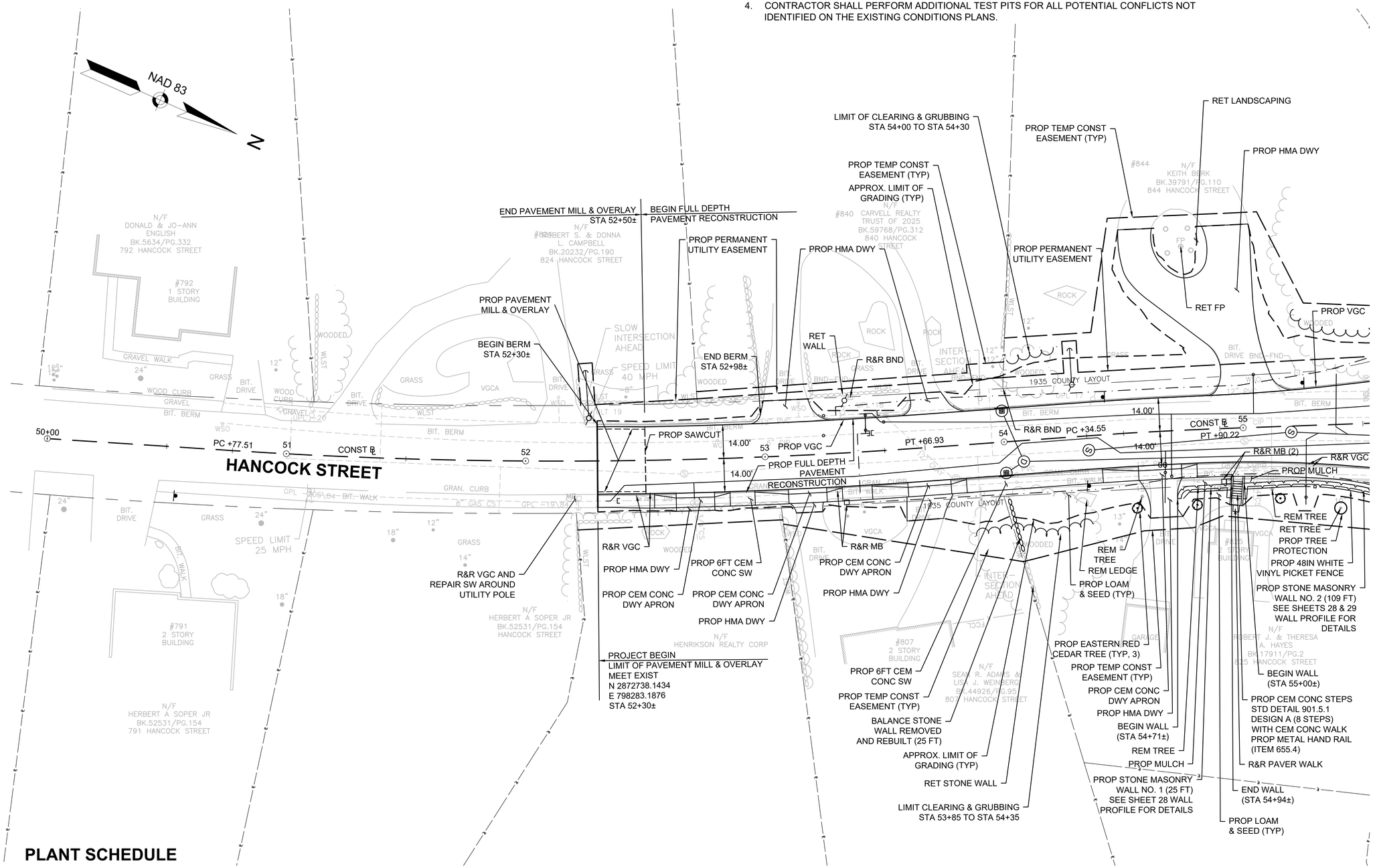
SEE SHEET 49

DRAINAGE DETAILS

SEE SHEET 54 & 59

NOTES:

1. REMOVE AND DISCARD ALL EXISTING CURVED VERTICAL GRANITE CURB UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.
2. ALL PROPOSED VERTICAL STRAIGHT AND CURVED GRANITE CURB SHALL BE TYPE VB.
3. ALL EXISTING STRAIGHT VERTICAL GRANITE CURB SHALL BE REMOVED AND RESET THROUGHOUT PROJECT. GRANITE CURB FOUND NOT TO BE SUITABLE FOR REUSE SHALL BE REPLACED WITH STRAIGHT VERTICAL GRANITE CURB TYPE VB AT THE DIRECTION OF THE ENGINEER.
4. CONTRACTOR SHALL PERFORM ADDITIONAL TEST PITS FOR ALL POTENTIAL CONFLICTS NOT IDENTIFIED ON THE EXISTING CONDITIONS PLANS.



PLANT SCHEDULE

SYMB.	QUANT.	BOTANICAL NAME	COMMON NAME	NURSERY SIZE	REMARK
LARGE TREES					
JV	3	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	2-2.5" CAL. - 7' - 8' HT	3 ON LAWN (#825 HANCOCK STREET)

0 20 50 100

SCALE: 1" = 20'

FOR PROFILE:
SEE SHEET NO. 24

FOR PCR & DWY NOS:
SEE SHEET NO 33

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	20	115
PROJECT FILE NO.	609440		

CONSTRUCTION PLANS - 02

HIGHWAY GUARD DETAILS

STA. 57+40± LT (PRECAST HIGHWAY GUARDRAIL TRANSITION)
STA. 57+47± TO STA. 58+30± LT (BRIDGE RAILING, S3-MTL4)
STA. 58+37± LT (PRECAST HIGHWAY GUARDRAIL TRANSITION)

STREET LIGHTING DETAILS

SEE SHEET 60

WATER SUPPLY ALTERATIONS

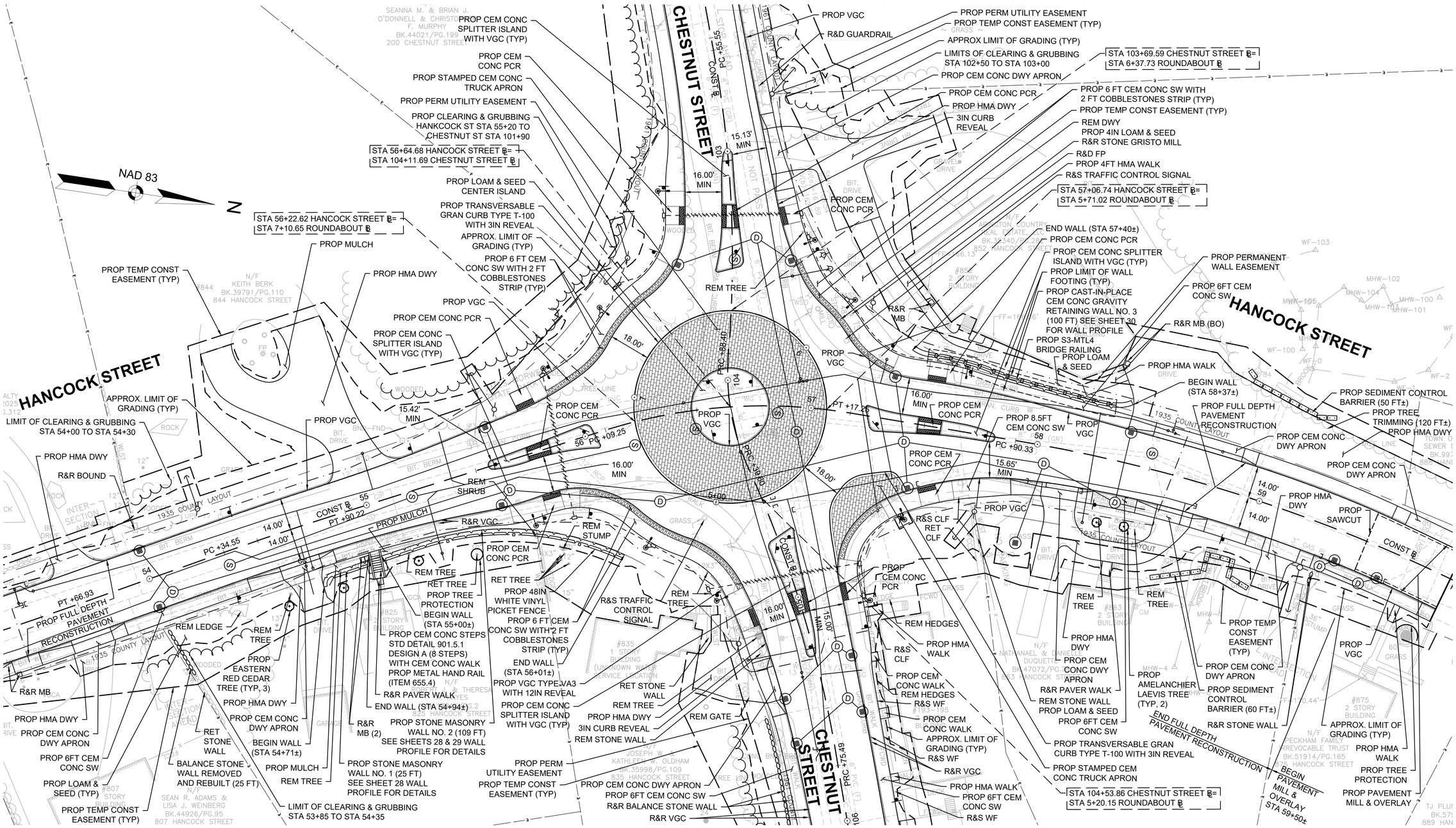
SEE SHEET 50

DRAINAGE DETAILS

SEE SHEET 55 & 59

NOTES:
1. REMOVE AND DISCARD ALL EXISTING CURVED VERTICAL GRANITE CURB UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.
2. ALL PROPOSED VERTICAL STRAIGHT AND CURVED GRANITE CURB SHALL BE TYPE VB.
3. ALL EXISTING STRAIGHT VERTICAL GRANITE CURB SHALL BE REMOVED AND RESET THROUGHOUT PROJECT. GRANITE CURB FOUND NOT TO BE SUITABLE FOR REUSE SHALL BE REPLACED WITH STRAIGHT VERTICAL GRANITE CURB TYPE VB AT THE DIRECTION OF THE ENGINEER.
4. CONTRACTOR SHALL PERFORM ADDITIONAL TEST PITS FOR ALL POTENTIAL CONFLICTS NOT IDENTIFIED ON THE EXISTING CONDITIONS PLANS.

CONTINUED ON SHEET NO. 22


NAD 83
N
CHESTNUT STREET
HANCOCK STREET
HANCOCK STREET
CHESTNUT STREET
PROP CEM CONC SPLITTER ISLAND WITH VGC (TYP)
PROP CEM CONC PCR
PROP STAMPED CEM CONC TRUCK APRON
PROP PERM UTILITY EASEMENT
PROP CLEARING & GRUBBING HANKCOCK ST STA 55+20 TO CHESTNUT ST STA 101+90
STA 56+64.68 HANCOCK STREET ℄= STA 104+11.69 CHESTNUT STREET ℄
PROP LOAM & SEED CENTER ISLAND
PROP TRANSVERSABLE GRAN CURB TYPE T-100 WITH 3IN REVEAL
APPROX. LIMIT OF GRADING (TYP)
PROP 6 FT CEM CONC SW WITH 2 FT COBBLESTONES STRIP (TYP)
STA 56+22.62 HANCOCK STREET ℄= STA 7+10.65 ROUNDABOUT ℄
PROP MULCH
PROP TEMP CONST EASEMENT (TYP)
PROP HMA DWY
PROP VGC
PROP CEM CONC PCR
PROP CEM CONC SPLITTER ISLAND WITH VGC (TYP)
APPROX. LIMIT OF GRADING (TYP)
LIMIT OF CLEARING & GRUBBING STA 54+00 TO STA 54+30
PROP HMA DWY
R&R BOUND
PROP VGC
PROP CEM CONC PCR
REM SHRUB
PROP MULCH
R&R VGC
REM STUMP
PROP CEM CONC PCR
REM TREE
RET TREE
PROP TREE PROTECTION
BEGIN WALL (STA 55+00±)
PROP CEM CONC STEPS STD DETAIL 901.5.1 DESIGN A (8 STEPS) WITH CEM CONC WALK PROP METAL HAND RAIL (ITEM 655.4)
R&R PAVER WALK
END WALL (STA 54+94±)
PROP STONE MASONRY WALL NO. 2 (109 FT) SEE SHEETS 28 & 29 WALL PROFILE FOR DETAILS
PROP STONE MASONRY WALL NO. 1 (25 FT) SEE SHEET 28 WALL PROFILE FOR DETAILS
PROP 48IN WHITE VINYL PICKET FENCE
PROP 6 FT CEM CONC SW WITH 2 FT COBBLESTONES STRIP (TYP)
END WALL (STA 56+01±)
PROP VGC TYPE VA3 WITH 12IN REVEAL
PROP CEM CONC SPLITTER ISLAND WITH VGC (TYP)
R&S TRAFFIC CONTROL SIGNAL
REM TREE
RET STONE WALL
REM TREE
PROP HMA DWY
3IN CURB REVEAL
REM STONE WALL
REM GATE
PROP PERM UTILITY EASEMENT
PROP TEMP CONST EASEMENT (TYP)
PROP CEM CONC DWY APRON
PROP 6FT CEM CONC SW
R&R BALANCE STONE WALL
R&R VGC
PROP TEMP CONST EASEMENT (TYP)
PROP FULL DEPTH PAVEMENT RECONSTRUCTION
REM LEDGE
REM TREE
PROP EASTERN RED CEDAR TREE (TYP, 3)
PROP HMA DWY
PROP CEM CONC DWY APRON
BEGIN WALL (STA 54+71±)
PROP MULCH
REM TREE
R&R MB (2)
RET STONE WALL
BALANCE STONE WALL REMOVED AND REBUILT (25 FT)
PROP LOAM & SEED (TYP)
PROP TEMP CONST EASEMENT (TYP)
LIMIT OF CLEARING & GRUBBING STA 53+85 TO STA 54+35
R&R MB
PROP HMA DWY
PROP CEM CONC DWY APRON
PROP 6FT CEM CONC SW
PROP VGC
PROP CEM CONC PCR
PROP CEM CONC SPLITTER ISLAND WITH VGC (TYP)
REM TREE
PROP HMA DWY
PROP 6 FT CEM CONC SW WITH 2 FT COBBLESTONES STRIP (TYP)
APPROX. LIMIT OF GRADING (TYP)
PROP TRANSVERSABLE GRAN CURB TYPE T-100 WITH 3IN REVEAL
PROP STAMPED CEM CONC TRUCK APRON
PROP 6FT CEM CONC SW
R&R BALANCE STONE WALL
R&R VGC
PROP CEM CONC DWY APRON
PROP 6FT CEM CONC SW
R&S WF
PROP VGC
R&R MB
REM TREE
PROP CEM CONC PCR
PROP HMA DWY
3IN CURB REVEAL
PROP 4FT HMA WALK
R&S TRAFFIC CONTROL SIGNAL
STA 57+06.74 HANCOCK STREET ℄= STA 5+71.02 ROUNDABOUT ℄
END WALL (STA 57+40±)
PROP CEM CONC PCR
PROP CEM CONC SPLITTER ISLAND WITH VGC (TYP)
PROP LIMIT OF WALL FOOTING (TYP)
PROP CAST-IN-PLACE CEM CONC GRAVITY RETAINING WALL NO. 3 (100 FT) SEE SHEET 30 FOR WALL PROFILE
PROP S3-MTL4 BRIDGE RAILING
PROP LOAM & SEED
PROP HMA WALK
BEGIN WALL (STA 58+37±)
PROP FULL DEPTH PAVEMENT RECONSTRUCTION
PROP CEM CONC DWY APRON
PROP CEM CONC PCR
PROP 8.5FT CEM CONC SW
PROP VGC
PROP CEM CONC PCR
PROP VGC
R&R MB (BO)
PROP PERMANENT WALL EASEMENT
PROP 6FT CEM CONC SW
PROP SEDIMENT CONTROL BARRIER (50 FT±)
PROP TREE TRIMMING (120 FT±)
PROP HMA DWY
PROP CEM CONC DWY APRON
STA 103+69.59 CHESTNUT STREET ℄= STA 6+37.73 ROUNDABOUT ℄
PROP 6 FT CEM CONC SW WITH 2 FT COBBLESTONES STRIP (TYP)
PROP TEMP CONST EASEMENT (TYP)
REM DWY
PROP 4IN LOAM & SEED
R&R STONE GRISTO MILL
R&D FP
PROP 4FT HMA WALK
R&S TRAFFIC CONTROL SIGNAL
PROP VGC
R&R CLF RET CLF
PROP CEM CONC PCR
REM HEDGES
PROP HMA WALK
R&S CLF
PROP CEM CONC WALK
REM HEDGES
R&S WF
PROP CEM CONC APPROX. LIMIT OF GRADING (TYP)
R&S WF
R&R VGC
PROP HMA WALK
PROP 6FT CEM CONC SW
R&S WF
PROP HMA DWY
PROP CEM CONC DWY APRON
R&R PAVER WALK
REM STONE WALL
PROP LOAM & SEED
PROP 6FT CEM CONC SW
PROP AMELANCHIER LAEVIS TREE (TYP, 2)
PROP TEMP CONST EASEMENT (TYP)
PROP CEM CONC DWY APRON
PROP SEDIMENT CONTROL BARRIER (60 FT±)
R&R STONE WALL
END FULL DEPTH PAVEMENT RECONSTRUCTION
BEGIN PAVEMENT MILL & OVERLAY STA 59+50±
STA 104+53.86 CHESTNUT STREET ℄= STA 5+20.15 ROUNDABOUT ℄
PROP SAWCUT
PROP HMA DWY
PROP VGC
APPROX. LIMIT OF GRADING (TYP)
PROP HMA WALK
PROP TREE PROTECTION
PROP PAVEMENT MILL & OVERLAY
PROP PERMANENT WALL EASEMENT
PROP 6FT CEM CONC SW
R&R MB (BO)
PROP S3-MTL4 BRIDGE RAILING
PROP LOAM & SEED
PROP HMA WALK
BEGIN WALL (STA 58+37±)
PROP FULL DEPTH PAVEMENT RECONSTRUCTION
PROP CEM CONC DWY APRON
PROP CEM CONC PCR
PROP 8.5FT CEM CONC SW
PROP VGC
PROP CEM CONC PCR
PROP VGC
PROP SEDIMENT CONTROL BARRIER (50 FT±)
PROP TREE TRIMMING (120 FT±)
PROP HMA DWY
PROP CEM CONC DWY APRON
STA 103+69.59 CHESTNUT STREET ℄= STA 6+37.73 ROUNDABOUT ℄
PROP 6 FT CEM CONC SW WITH 2 FT COBBLESTONES STRIP (TYP)
PROP TEMP CONST EASEMENT (TYP)
REM DWY
PROP 4IN LOAM & SEED
R&R STONE GRISTO MILL
R&D FP
PROP 4FT HMA WALK
R&S TRAFFIC CONTROL SIGNAL
STA 57+06.74 HANCOCK STREET ℄= STA 5+71.02 ROUNDABOUT ℄
END WALL (STA 57+40±)
PROP CEM CONC PCR
PROP CEM CONC SPLITTER ISLAND WITH VGC (TYP)
PROP LIMIT OF WALL FOOTING (TYP)
PROP CAST-IN-PLACE CEM CONC GRAVITY RETAINING WALL NO. 3 (100 FT) SEE SHEET 30 FOR WALL PROFILE
PROP S3-MTL4 BRIDGE RAILING
PROP LOAM & SEED
PROP HMA WALK
BEGIN WALL (STA 58+37±)
PROP FULL DEPTH PAVEMENT RECONSTRUCTION
PROP CEM CONC DWY APRON
PROP CEM CONC PCR
PROP 8.5FT CEM CONC SW
PROP VGC
PROP CEM CONC PCR
PROP VGC
PROP SEDIMENT CONTROL BARRIER (50 FT±)
PROP TREE TRIMMING (120 FT±)
PROP HMA DWY
PROP CEM CONC DWY APRON
PROP 6FT CEM CONC SW
R&R MB (BO)
PROP PERMANENT WALL EASEMENT

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	21	115
PROJECT FILE NO.	609440		

CONSTRUCTION PLANS - 03

HIGHWAY GUARD DETAILS

NONE

STREET LIGHTING DETAILS

NONE

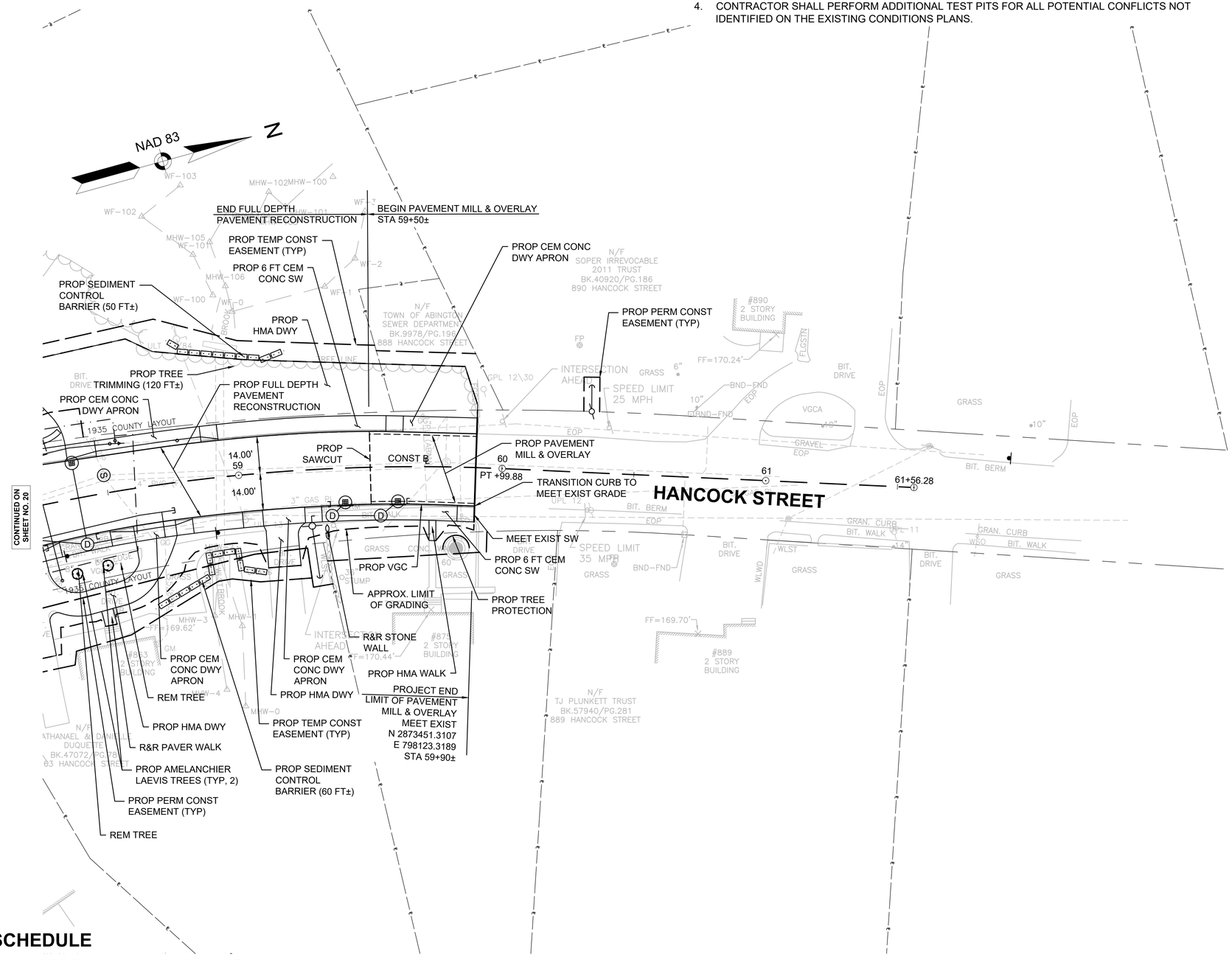
WATER SUPPLY ALTERATIONS

SEE SHEET 51

DRAINAGE DETAILS

SEE SHEET 56 & 59

NOTES:
1. REMOVE AND DISCARD ALL EXISTING CURVED VERTICAL GRANITE CURB UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.
2. ALL PROPOSED VERTICAL STRAIGHT AND CURVED GRANITE CURB SHALL BE TYPE VB.
3. ALL EXISTING STRAIGHT VERTICAL GRANITE CURB SHALL BE REMOVED AND RESET THROUGHOUT PROJECT. GRANITE CURB FOUND NOT TO BE SUITABLE FOR REUSE SHALL BE REPLACED WITH STRAIGHT VERTICAL GRANITE CURB TYPE VB AT THE DIRECTION OF THE ENGINEER.
4. CONTRACTOR SHALL PERFORM ADDITIONAL TEST PITS FOR ALL POTENTIAL CONFLICTS NOT IDENTIFIED ON THE EXISTING CONDITIONS PLANS.



PLANT SCHEDULE

SYMB.	QUANT.	BOTANICAL NAME	COMMON NAME	NURSERY SIZE	REMARK
LARGE TREES					
AL	2	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	2-2.5" CAL. - 7' - 8' HT	2 ON LAWN (#863 HANCOCK STREET)

0 20 50 100

SCALE: 1" = 20'

FOR PROFILE:
SEE SHEET NO. 25
FOR PCR & DWY NOS:
SEE SHEET NO 35

609440_HD(CP).DWG Plotted on 21-Apr-2026 6:11 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	22	115
PROJECT FILE NO.	609440		

CONSTRUCTION PLANS - 04

HIGHWAY GUARD DETAILS

NONE

STREET LIGHTING DETAILS

NONE

WATER SUPPLY ALTERATIONS

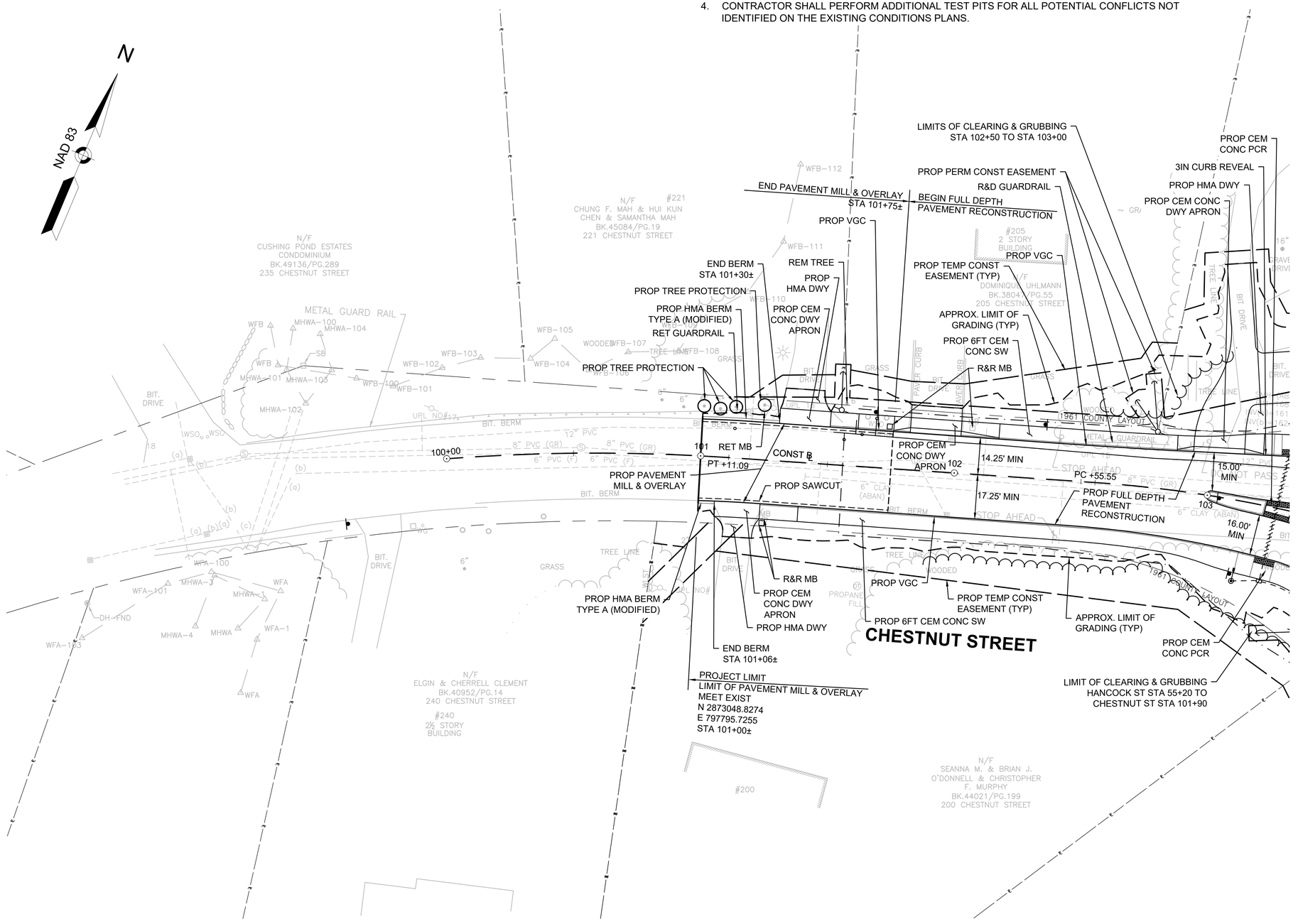
SEE SHEET 52

DRAINAGE DETAILS

SEE SHEET 57 & 59

NOTES:

1. REMOVE AND DISCARD ALL EXISTING CURVED VERTICAL GRANITE CURB UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.
2. ALL PROPOSED VERTICAL STRAIGHT AND CURVED GRANITE CURB SHALL BE TYPE VB.
3. ALL EXISTING STRAIGHT VERTICAL GRANITE CURB SHALL BE REMOVED AND RESET THROUGHOUT PROJECT. GRANITE CURB FOUND NOT TO BE SUITABLE FOR REUSE SHALL BE REPLACED WITH STRAIGHT VERTICAL GRANITE CURB TYPE VB AT THE DIRECTION OF THE ENGINEER.
4. CONTRACTOR SHALL PERFORM ADDITIONAL TEST PITS FOR ALL POTENTIAL CONFLICTS NOT IDENTIFIED ON THE EXISTING CONDITIONS PLANS.



FOR PROFILE:
SEE SHEET NO. 26

FOR PCR & DWY NOS:
SEE SHEET NO 36

609440_HD(CP).DWG Plotted on 21-Apr-2026 6:12 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	23	115
PROJECT FILE NO.	609440		

CONSTRUCTION PLANS - 05

HIGHWAY GUARD DETAILS

NONE

STREET LIGHTING DETAILS

NONE

WATER SUPPLY ALTERATIONS

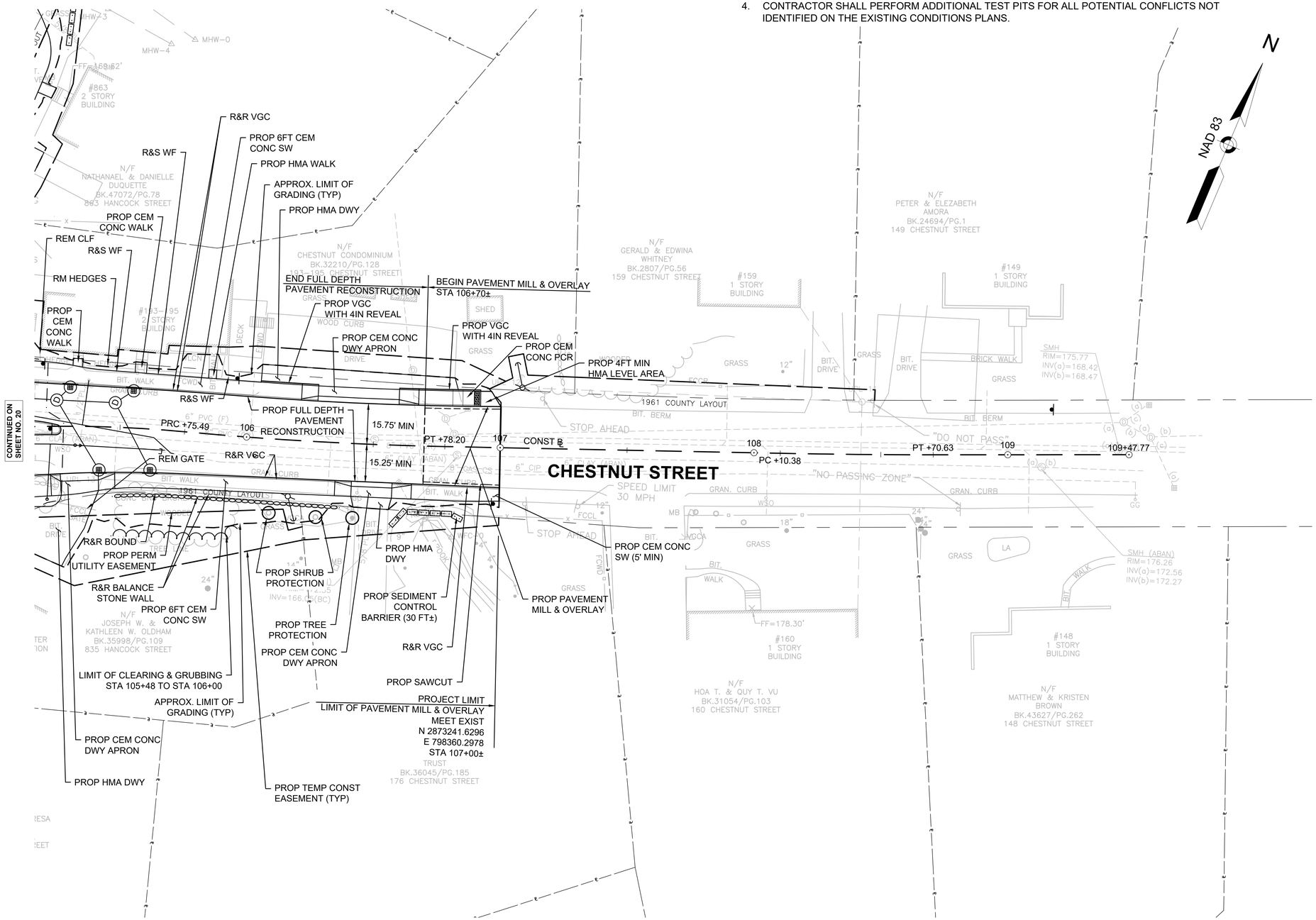
SEE SHEET 53

DRAINAGE DETAILS

SEE SHEET 58 & 59

NOTES:

1. REMOVE AND DISCARD ALL EXISTING CURVED VERTICAL GRANITE CURB UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.
2. ALL PROPOSED VERTICAL STRAIGHT AND CURVED GRANITE CURB SHALL BE TYPE VB.
3. ALL EXISTING STRAIGHT VERTICAL GRANITE CURB SHALL BE REMOVED AND RESET THROUGHOUT PROJECT. GRANITE CURB FOUND NOT TO BE SUITABLE FOR REUSE SHALL BE REPLACED WITH STRAIGHT VERTICAL GRANITE CURB TYPE VB AT THE DIRECTION OF THE ENGINEER.
4. CONTRACTOR SHALL PERFORM ADDITIONAL TEST PITS FOR ALL POTENTIAL CONFLICTS NOT IDENTIFIED ON THE EXISTING CONDITIONS PLANS.



0 20 50 100

SCALE: 1" = 20'

FOR PROFILE:
SEE SHEET NO. 27

FOR PCR & DWY NOS:
SEE SHEET NO 37

609440_HD(CP).DWG Plotted on 21-Apr-2026 6:12 PM

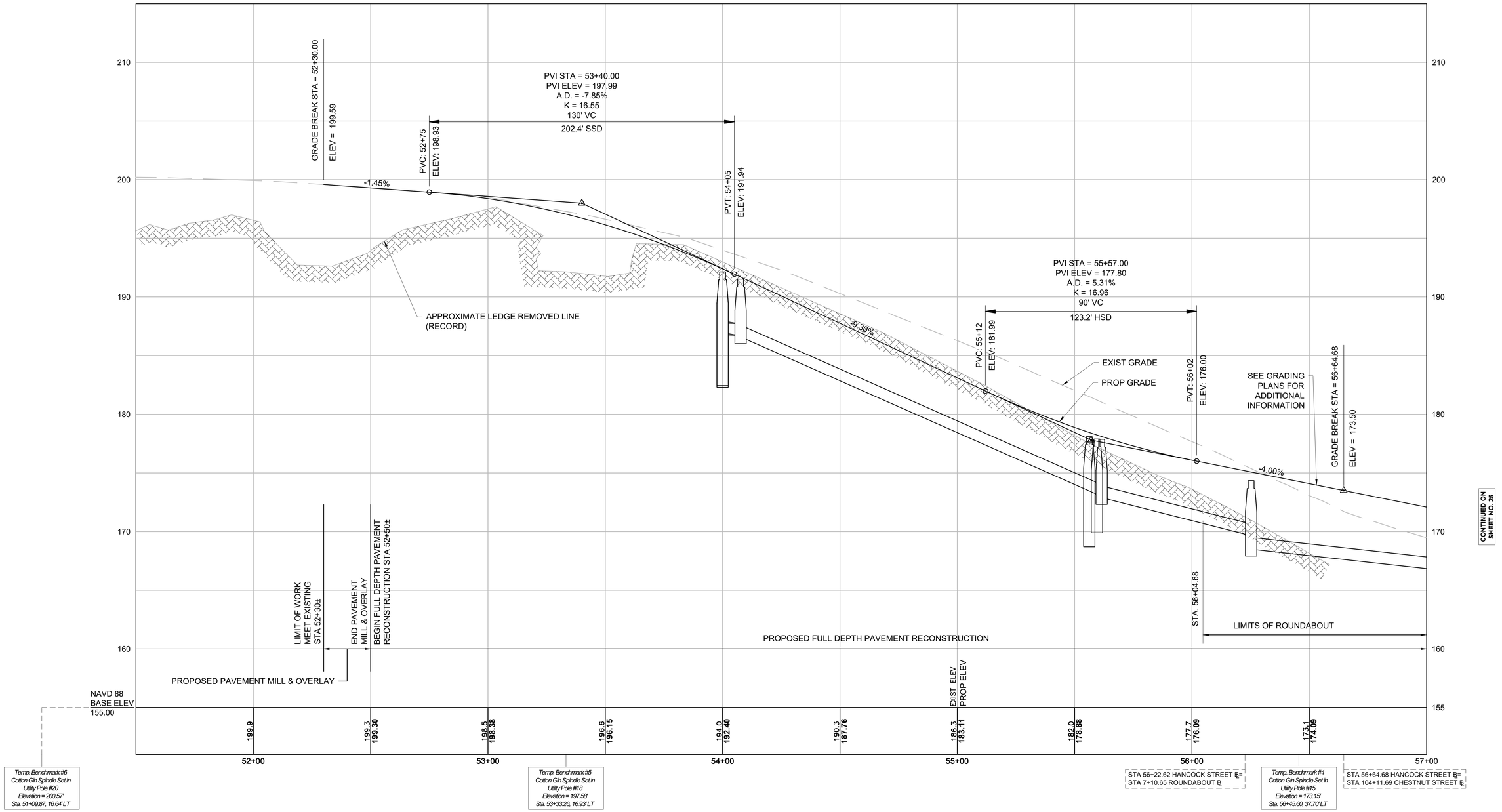
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	24	115
PROJECT FILE NO.	609440		

PROFILES - 01

609440_HD(PR).DWG Plotted on 9-Jan-2026 1:59 PM

HANCOCK STREET



CONTINUED ON SHEET NO. 25

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

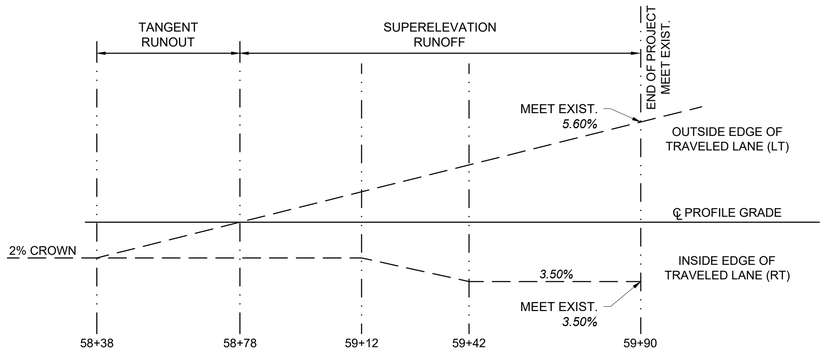
FOR CONSTRUCTION PLANS:
SEE SHEET NOS. 19-20

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	25	115
PROJECT FILE NO.	609440		

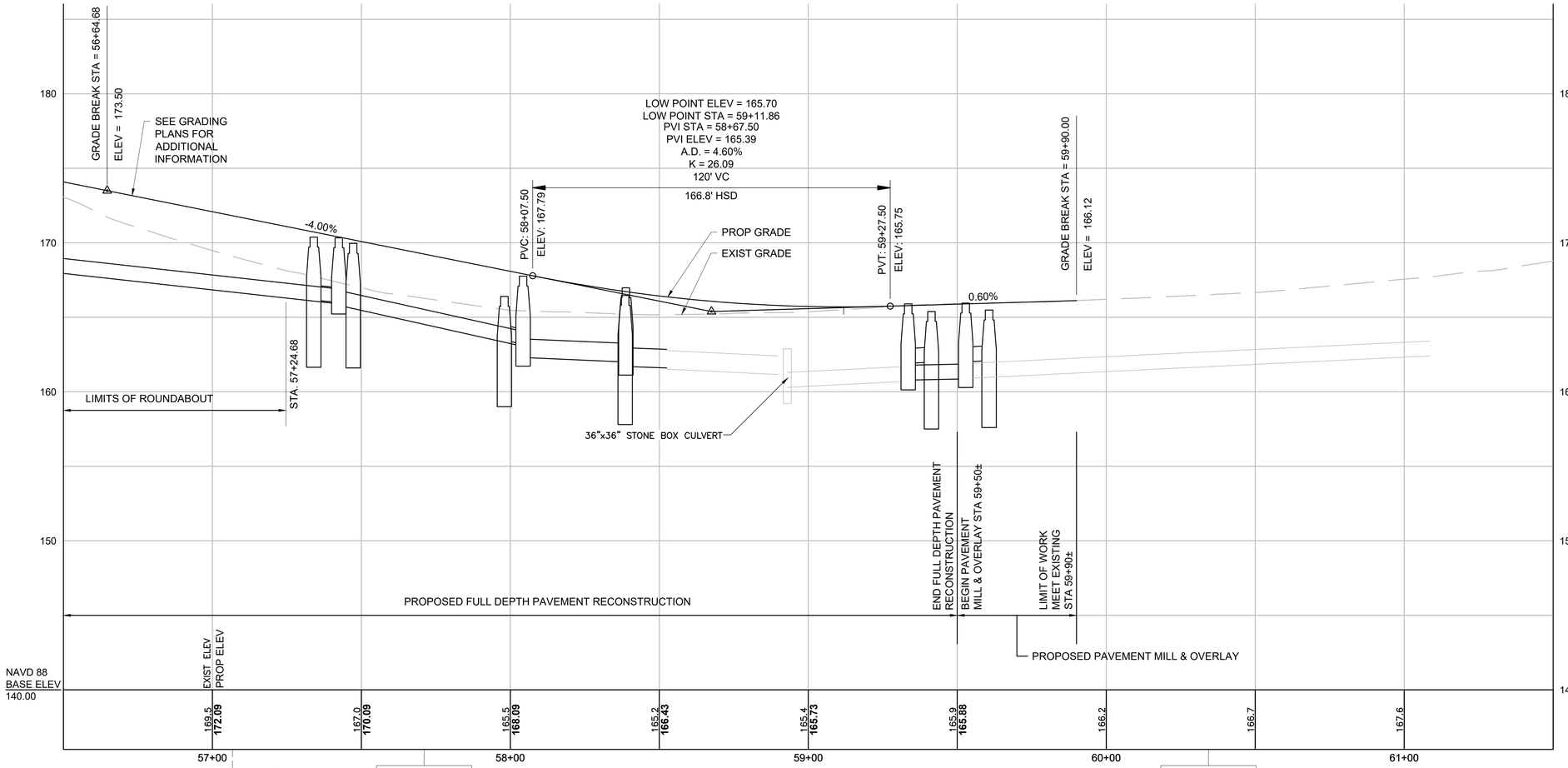
PROFILES - 02

609440_HD(PRJ).DWG Plotted on 9-Jan-2026 2:00 PM



BANKING DIAGRAM (HANCOCK STREET)
NOT TO SCALE

HANCOCK STREET



FOR CONSTRUCTION PLANS:
SEE SHEET NOS. 20-21

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

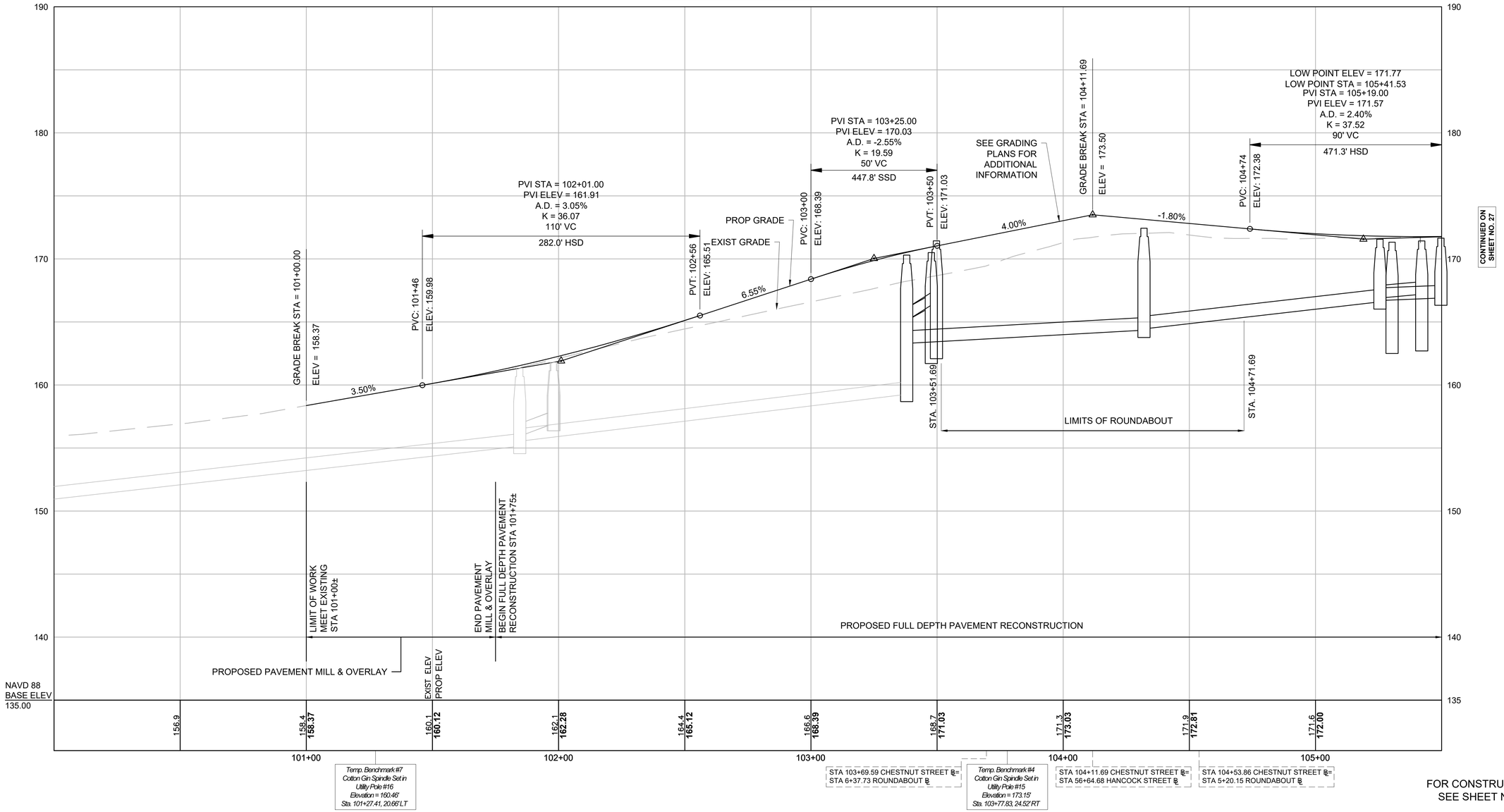
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	26	115
	PROJECT FILE NO.	609440	

PROFILES - 03

609440_HD(PRJ).DWG Plotted on 9-Jan-2026 2:02 PM

CHESTNUT STREET

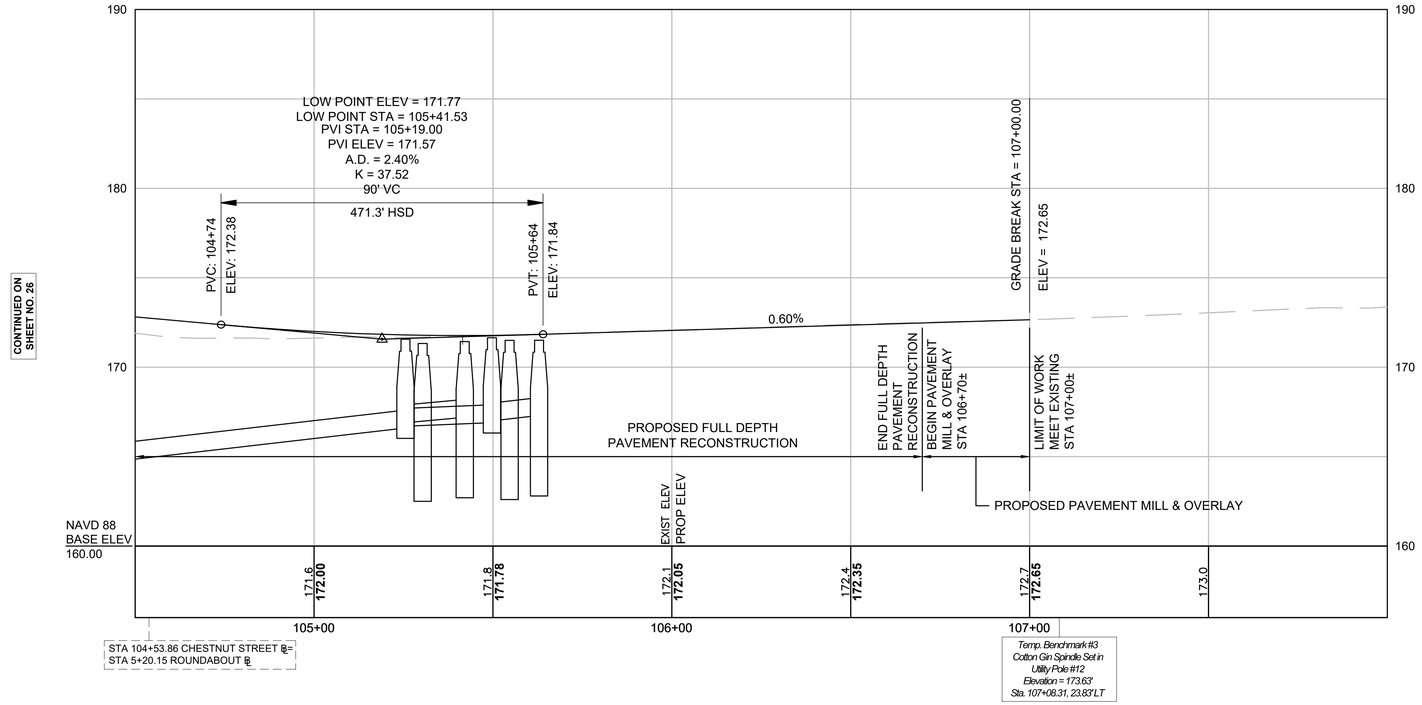


CONTINUED ON SHEET NO. 27

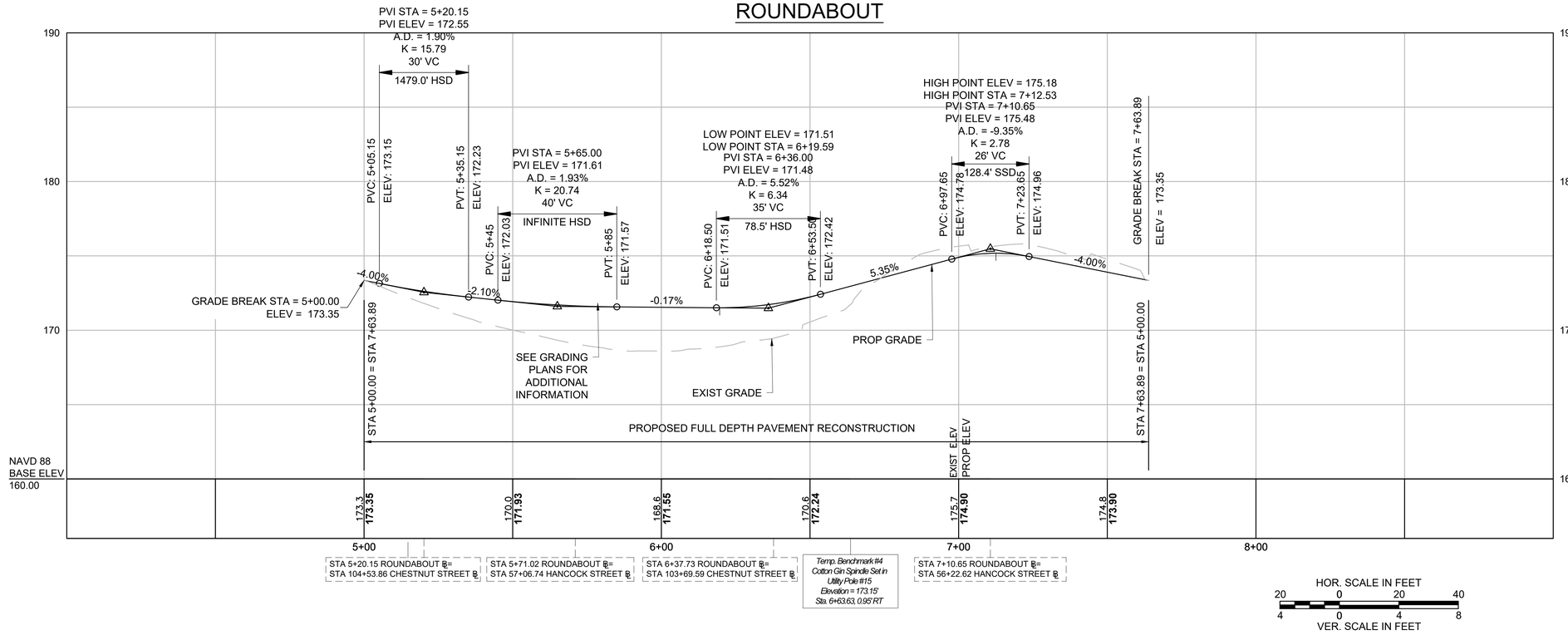
FOR CONSTRUCTION PLANS:
SEE SHEET NOS. 20 & 22

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

CHESTNUT STREET



ROUNDABOUT



FOR CONSTRUCTION PLANS:
SEE SHEET NOS. 20 & 23

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

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	27	115
PROJECT FILE NO.	609440		

PROFILES - 04

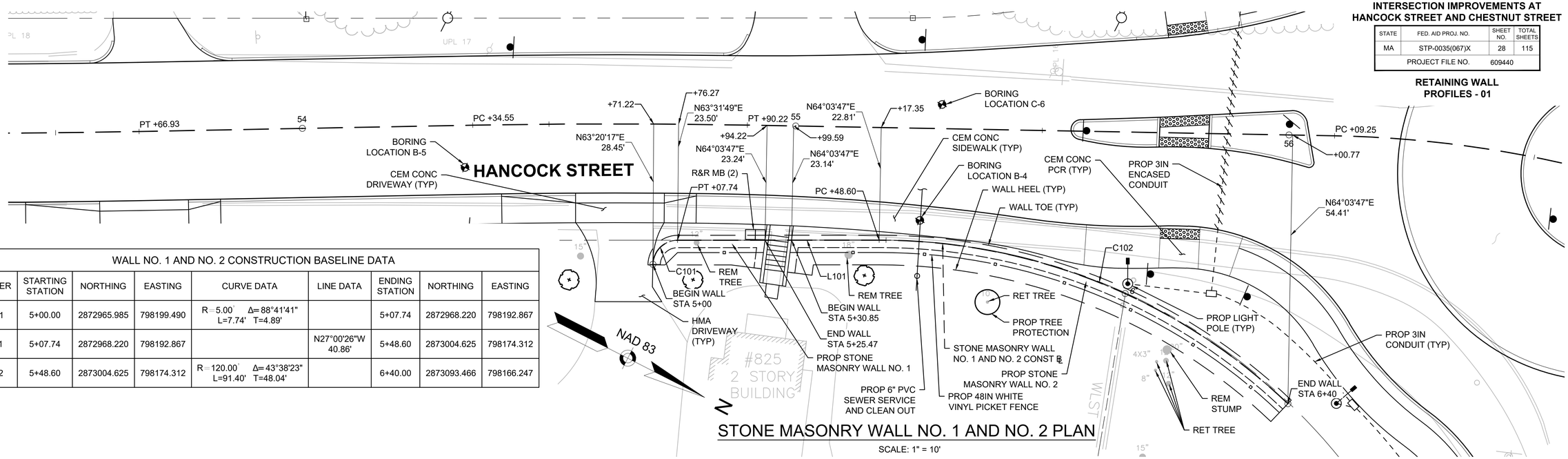
609440_HD(PRJ).DWG Plotted on 9-Jan-2026 2:03 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	28	115
PROJECT FILE NO.	609440		

RETAINING WALL PROFILES - 01

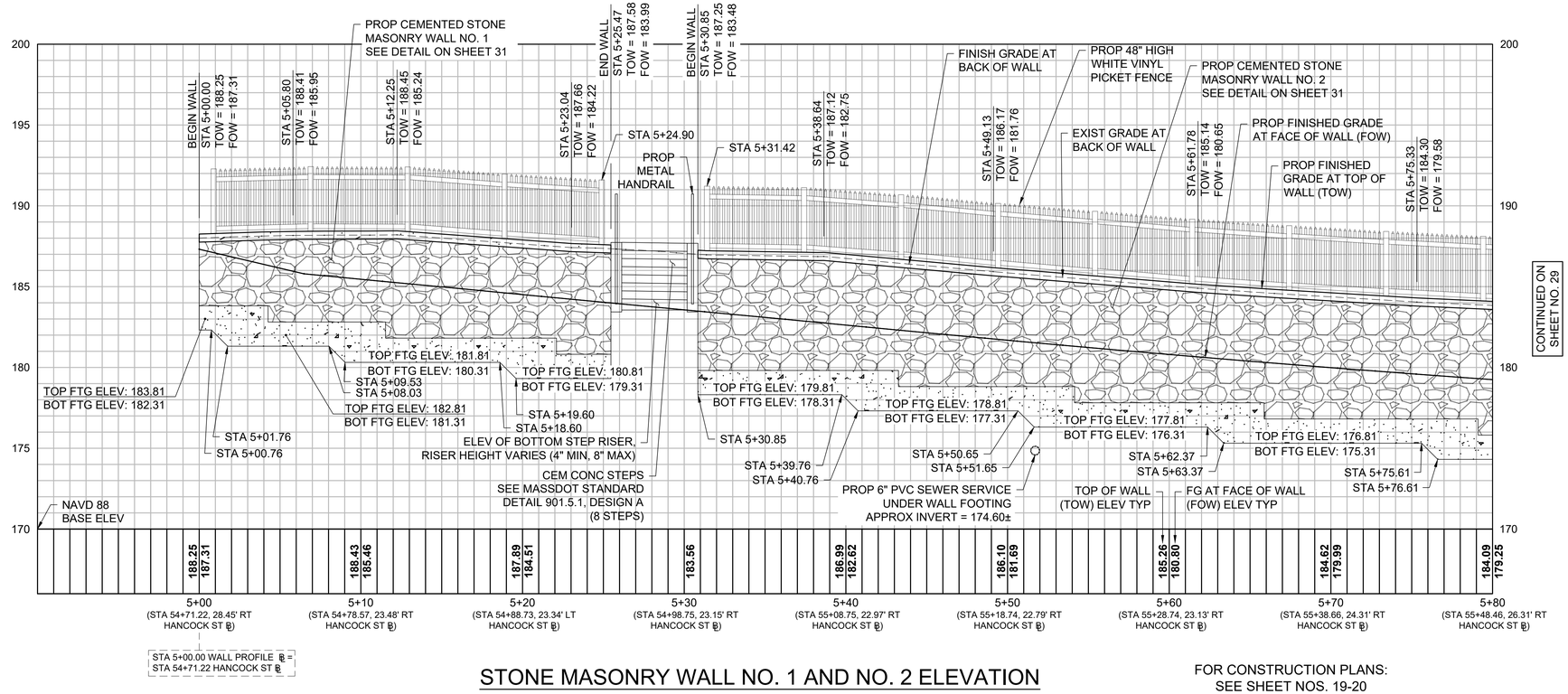
609440_HD(PR_WALL).DWG Plotted on 9-Jan-2026 4:08 PM



STONE MASONRY WALL NO. 1 AND NO. 2 PLAN

SCALE: 1" = 10'

WALL NO. 1 AND NO. 2 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C101	5+00.00	2872965.985	798199.490	R=5.00' Δ=88°41'41" L=7.74' T=4.89'		5+07.74	2872968.220	798192.867
L101	5+07.74	2872968.220	798192.867		N27°00'26"W 40.86'	5+48.60	2873004.625	798174.312
C102	5+48.60	2873004.625	798174.312	R=120.00' Δ=43°38'23" L=91.40' T=48.04'		6+40.00	2873093.466	798166.247



STONE MASONRY WALL NO. 1 AND NO. 2 ELEVATION

SCALE: SEE BELOW

FOR CONSTRUCTION PLANS: SEE SHEET NOS. 19-20

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

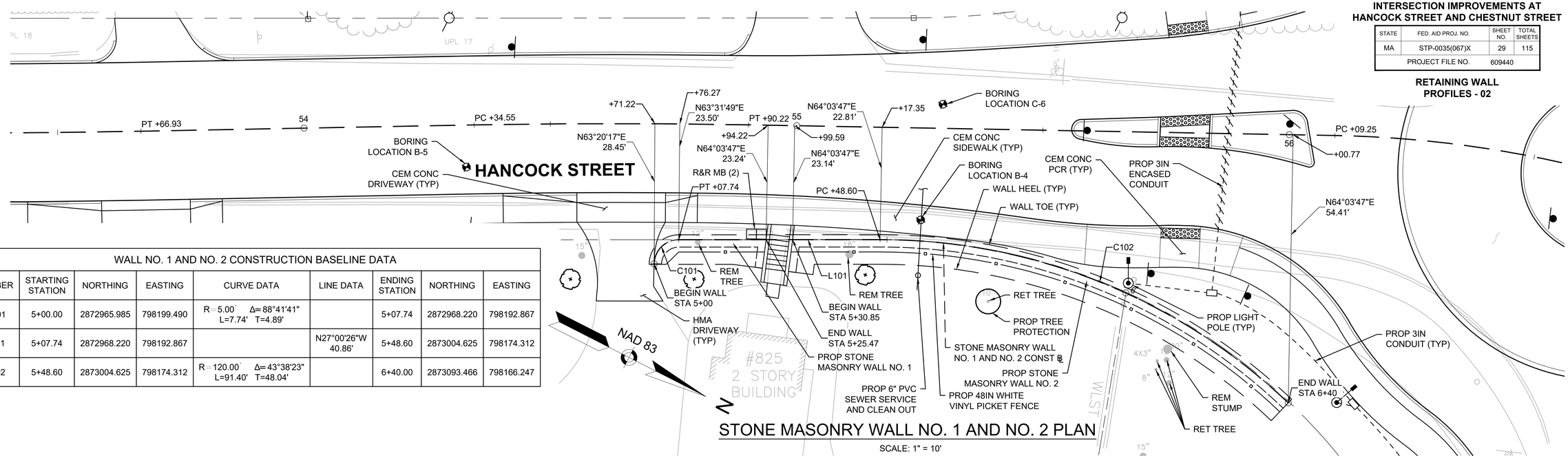
NOTES
1. TOW ELEVATIONS REPRESENT TOP OF COPING. FOW ELEVATIONS REPRESENT FINISHED GRADE AT FRONT FACE OF WALL.
2. SEE FOOTING STEP DETAIL ON SHEET 32.

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	29	115
PROJECT FILE NO.	609440		

RETAINING WALL PROFILES - 02

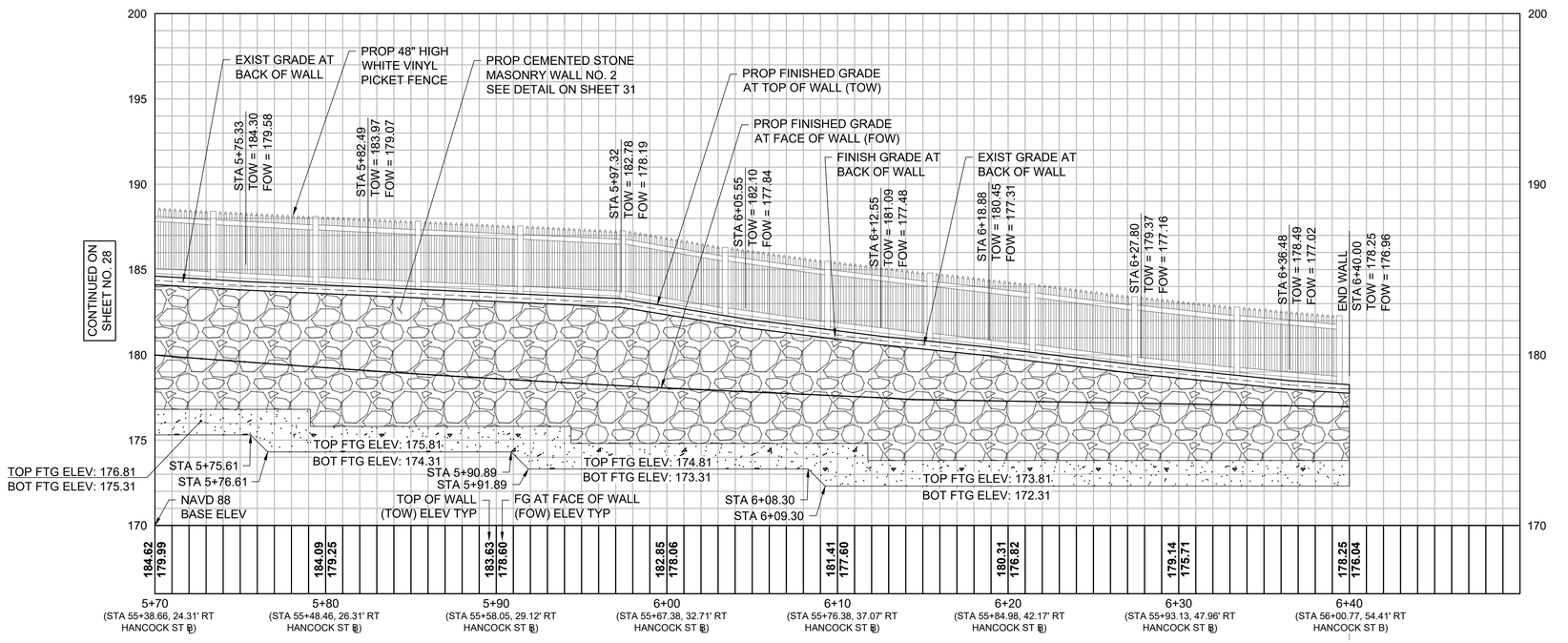
609440_HD\PR_WALL).DWG Plotted on 9-Jan-2026 4:08 PM



STONE MASONRY WALL NO. 1 AND NO. 2 PLAN

SCALE: 1" = 10'

WALL NO. 1 AND NO. 2 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C101	5+00.00	2872965.985	798199.490	R=5.00' Δ=88°41'41" L=7.74' T=4.89'		5+07.74	2872968.220	798192.867
L101	5+07.74	2872968.220	798192.867		N27°00'26"W 40.86'	5+48.60	2873004.625	798174.312
C102	5+48.60	2873004.625	798174.312	R=120.00' Δ=43°38'23" L=91.40' T=48.04'		6+40.00	2873093.466	798166.247



STONE MASONRY WALL NO. 2 ELEVATION

SCALE: SEE BELOW

FOR CONSTRUCTION PLANS: SEE SHEET NOS. 19-20

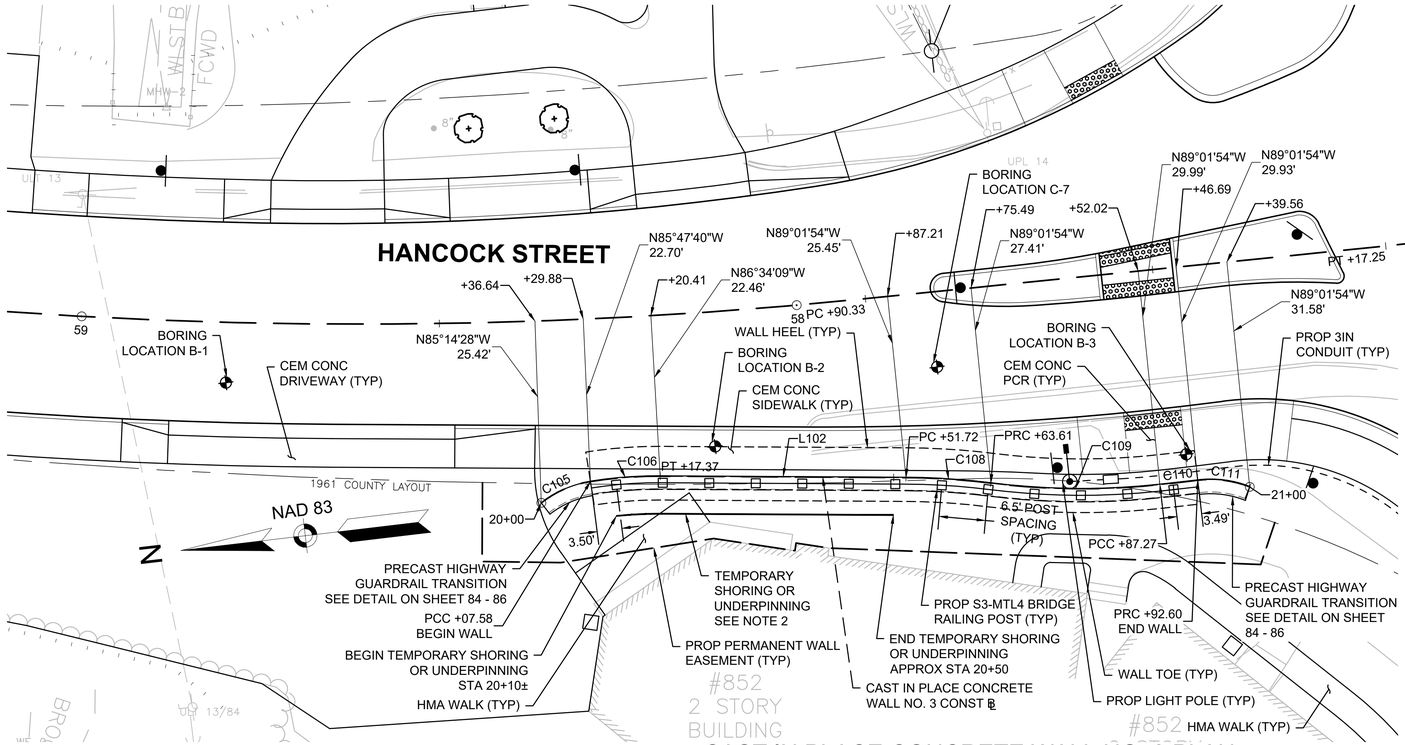
HOR. SCALE IN FEET
4 0 4 8
VER. SCALE IN FEET
4 0 4 8

NOTES
1. TOW ELEVATIONS REPRESENT TOP OF COPING. FOW ELEVATIONS REPRESENT FINISHED GRADE AT FRONT FACE OF WALL.
2. SEE FOOTING STEP DETAIL ON SHEET 32.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	30	115
PROJECT FILE NO.	609440		

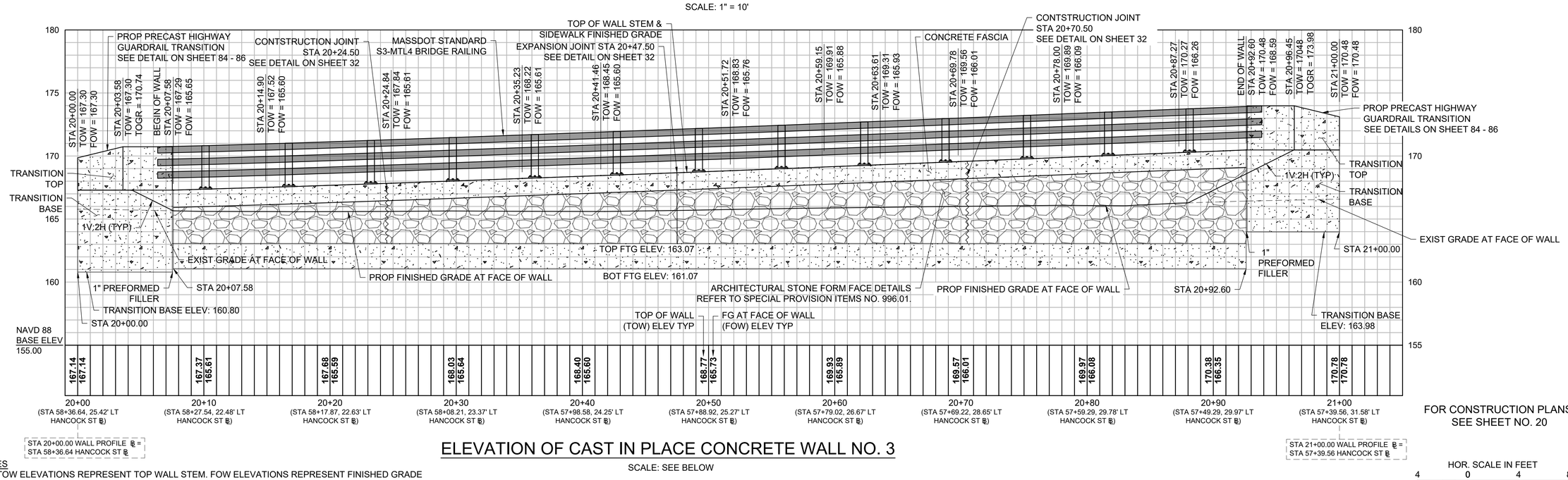
RETAINING WALL PROFILES - 03



WALL NO. 3 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C105	20+00.00	2873303.198	798068.692	R=15.00' Δ=28°57'18" L=7.58' T=3.87'		20+07.58	2873296.016	798070.853
C106	20+07.58	2873296.016	798070.853	R=60.00' Δ=9°20'40" L=9.79' T=4.90'		20+17.37	2873286.250	798070.443
L102	20+17.37	2873286.250	798070.443		S7°04'33"W 34.35'	20+51.72	2873252.162	798066.212
C108	20+51.72	2873252.162	798066.212	R=100.00' Δ=6°48'45" L=11.89' T=5.95'		20+63.61	2873240.477	798064.050
C109	20+63.61	2873240.477	798064.050	R=102.00' Δ=13°17'37" L=23.67' T=11.89'		20+87.27	2873217.053	798061.074
C110	20+87.27	2873217.053	798061.074	R=426.50' Δ=0°42'59" L=5.33' T=2.67'		20+92.60	2873211.721	798061.052
C111	20+92.60	2873211.721	798061.052	R=15.00' Δ=28°15'12" L=7.40' T=3.78'		21+00.00	2873204.616	798059.280

CAST IN PLACE CONCRETE WALL NO. 3 PLAN

SCALE: 1" = 10'



ELEVATION OF CAST IN PLACE CONCRETE WALL NO. 3

SCALE: SEE BELOW

FOR CONSTRUCTION PLANS: SEE SHEET NO. 20

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

NOTES
1. TOW ELEVATIONS REPRESENT TOP WALL STEM. FOW ELEVATIONS REPRESENT FINISHED GRADE AT FRONT FACE OF WALL. TOGR ELEVATIONS REPRESENT TOP OF GUARDRAIL TREANSITION.
2. THE CONTRACTOR SHALL DESIGN AND PROVIDE TEMPORARY SHORING OR UNDERPINNING FOR TEMPORARY EXCAVATION IN ACCORDANCE WITH OSHA, STATE, AND LOCAL REQUIREMENTS.

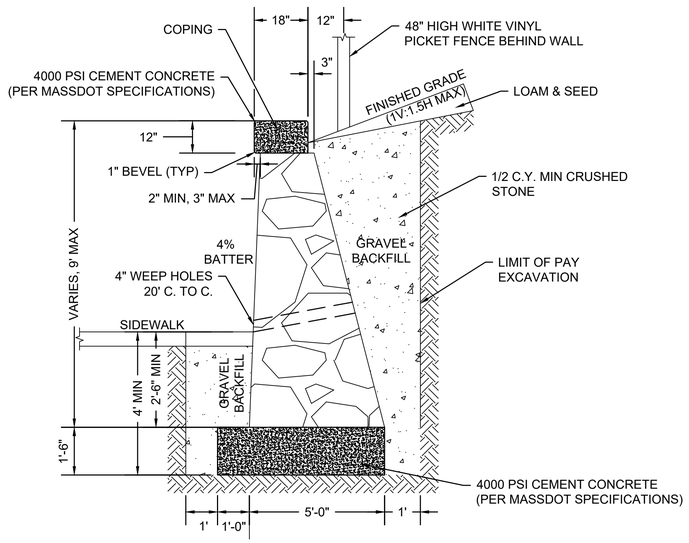
609440_HD(PR_WALL).DWG Plotted on 9-Jan-2026 4:11 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	31	115
PROJECT FILE NO.	609440		

RETAINING WALL DETAILS - 01

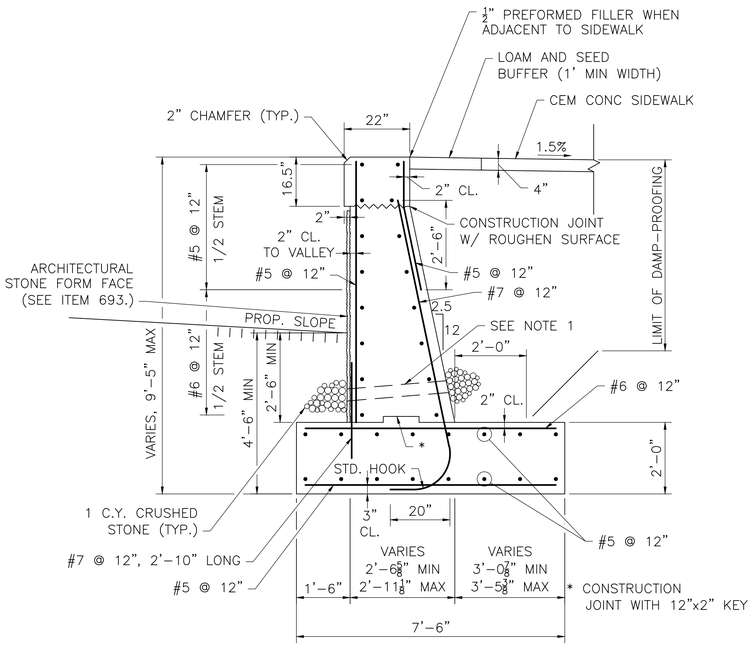
609440_HD(WALL_DET).DWG Plotted on 9-Jan-2026 2:08 PM



NOTES:
1. ALL DIMENSIONS SHOWN ARE MINIMUM UNLESS OTHERWISE NOTED.

CEMENTED STONE MASONRY WALL DETAIL (WALL NO. 1 AND NO. 2)

STA 54+71 TO STA 54+94 & STA 55+00 TO STA 56+01
NOT TO SCALE



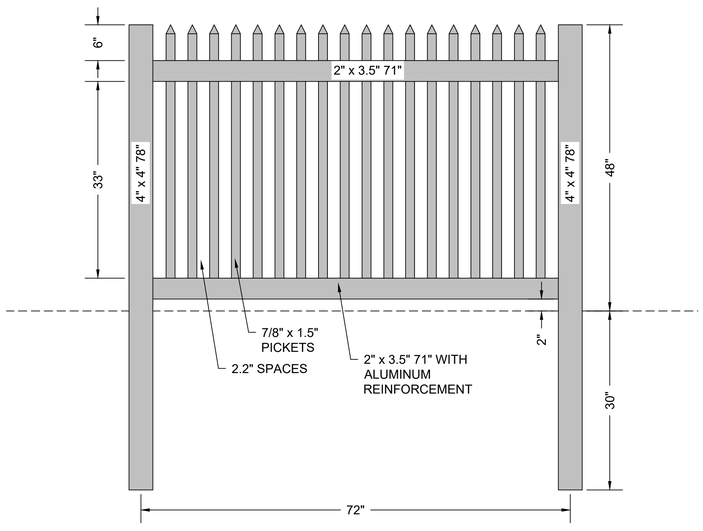
CAST IN-PLACE CEMENT CONCRETE RETAINING WALL DETAIL (WALL NO. 3)

STA 57+39 TO STA 58+37
SCALE: ½" = 1'-0"

NOTES:
1. 4" Ø WEEP HOLES 10'-0" O.C. LOCATED 12" ABOVE THE HEEL OF THE FOOTING SLOPING 1" PER FOOT TOWARDS THE FRONT FACE. PROVIDE 1 CUBIC YARD OF CRUSHED STONE AT EACH END OF WEEP HOLE.
2. ALL CONCRETE SHALL BE 5000 PSI HP CONCRETE.
3. FACTORED BEARING PRESSURE PER AASHTO LRFD BRDIGE DESIGN SPECIFICATIONS:
   STRENGTH I LIMIT STATE
   FACTORED BEARING PRESSURE = 1.85 KSF
4. FACTORED BEARING RESISTANCE = 6.1 KSF FOR THE STRENGTH I LIMIT STATE AND IS THE PRODUCT OF THE NOMINAL BEARING RESISTANCE OF 13.55 KSF AND A RESISTANCE FACTOR OF 0.45.
5. REFER TO GEOTECHNICAL RETAINING WALL RECOMMENDATIONS MEMORANDUM PREPARED BY PBS DATED DECEMBER 2025 FOR BEARING RESISTANCE.
6. ALL REINFORCING STEEL SHALL BE EXPOXY COATED AND CONFORM TO AASHTO M 31 GRADE 60.
7. THIS WALL HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION, DATED 2020.
8. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 GRADE 60. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS, ALL BARS SHALL BE LAPPED AS FOLLOWS:

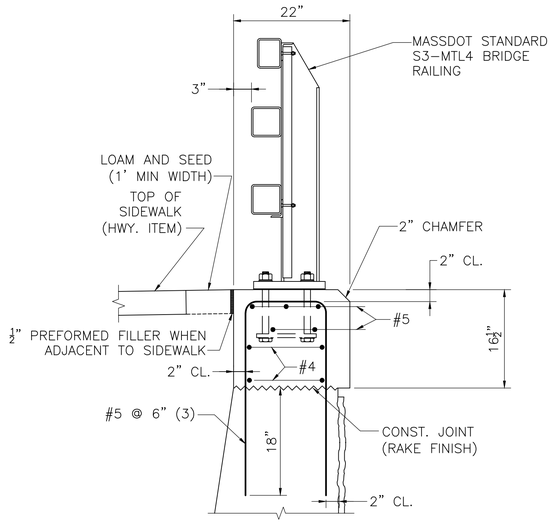
MODIFICATION CONDITION	#4 BARS	#5 BARS	#6 BARS
1. NONE	16"	17"	21"
2. 12" OF CONCRETE BELOW BAR	18"	22"	27"
3. EPOXY COATED BARS, COVER < $3d_b$ OR CLEAR SPACING < $6d_b$	21"	26"	31"
4. COATED BARS, ALL OTHER CASES	17"	21"	25"
5. CONDITION 2. AND 3.	23"	29"	35"
6. CONDITION 2. AND 4.	21"	27"	32"

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



48" VINYL PICKET FENCE

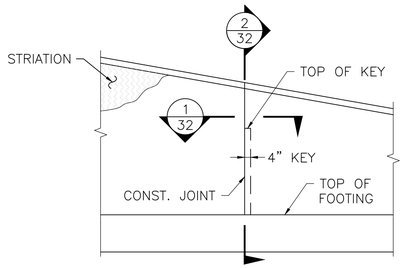
NOT TO SCALE



S3-MTL4 RAILING POST ATTATCHMENT

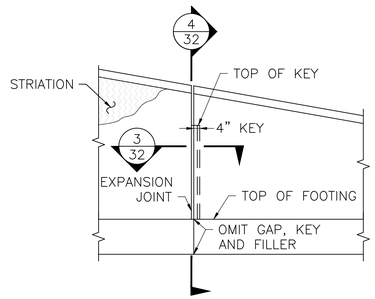
SCALE: 1" = 1'-0"

609440_HD\WALL_DET\.DWG Plotted on 9-Jan-2026 4:12 PM



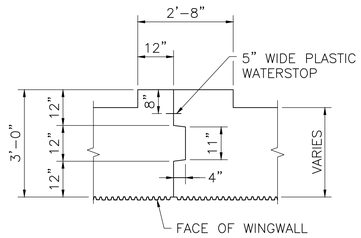
WINGWALL ELEVATION

SCALE: $\frac{1}{2}$" = 1'–0"



WINGWALL ELEVATION

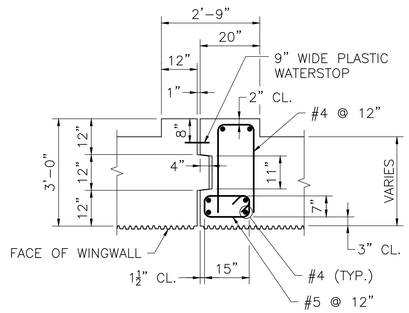
SCALE: $\frac{1}{4}$" = 1'–0"



SECTION 1/32

SCALE: $\frac{1}{2}$" = 1'–0"

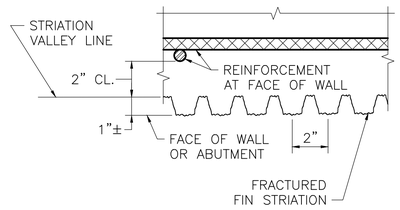
CONSTRUCTION JOINT DETAILS



SECTION 3/32

SCALE: $\frac{1}{2}$" = 1'–0"

EXPANSION JOINT DETAILS

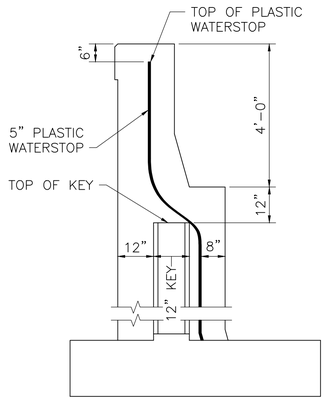


NOTES:

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

TYPICAL STRIATION DETAIL

SCALE: 3" = 1'–0"



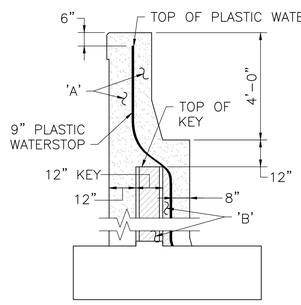
NOTE:

REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.

SECTION 2/32

SCALE: $\frac{1}{2}$" = 1'–0"

VERTICAL SECTION THROUGH CONSTRUCTION JOINT



CANTILEVER WINGWALL

NOTES:

1. LONGITUDINAL REINFORCEMENT SHALL END 2" CLEAR OF EXPANSION JOINT.
2. 'A' – PREFORMED FILLER (IN ACCORDANCE WITH M9.14.0).
   'B' – PREFORMED FILLER (IN ACCORDANCE WITH M3.05.5).
3. FILLER MATERIAL SHALL BE FASTENED SECURELY TO ONE SIDE OF JOINT.

SECTION 4/32

SCALE: $\frac{3}{8}$" = 1'–0"

VERTICAL SECTION THROUGH EXPANSION JOINT

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	33	115
PROJECT FILE NO.	609440		

CURB TIE PLANS - 01

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

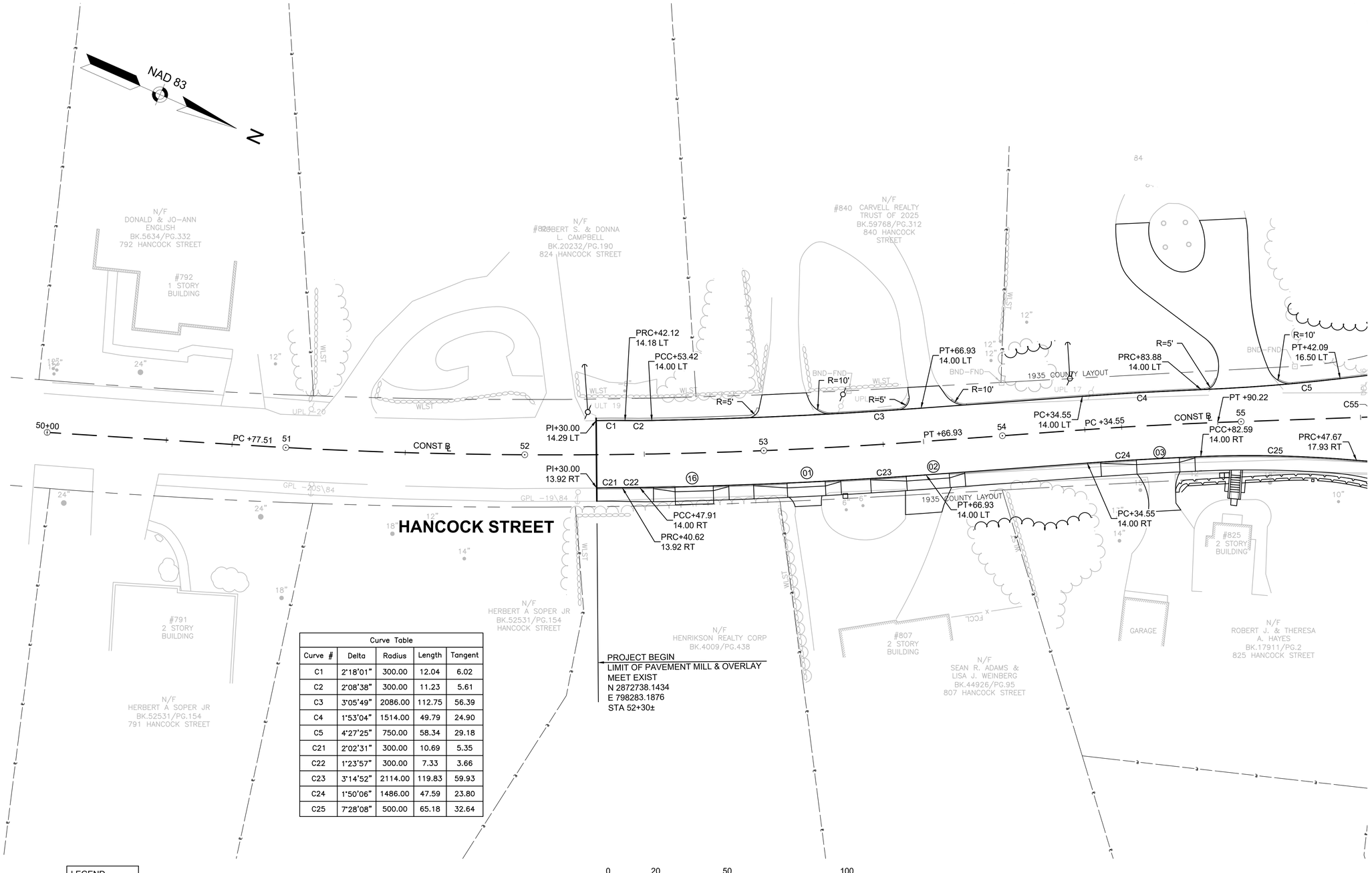
NONE

WATER SUPPLY ALTERATIONS

SEE SHEET 38

DRAINAGE DETAILS

SEE SHEET 38



Curve Table				
Curve #	Delta	Radius	Length	Tangent
C1	2°18'01"	300.00	12.04	6.02
C2	2°08'38"	300.00	11.23	5.61
C3	3°05'49"	2086.00	112.75	56.39
C4	1°53'04"	1514.00	49.79	24.90
C5	4°27'25"	750.00	58.34	29.18
C21	2°02'31"	300.00	10.69	5.35
C22	1°23'57"	300.00	7.33	3.66
C23	3°14'52"	2114.00	119.83	59.93
C24	1°50'06"	1486.00	47.59	23.80
C25	7°28'08"	500.00	65.18	32.64

LEGEND

(##) PCR #

[##] DWY #

609440_HD(CT).DWG Plotted on 25-Feb-2026 6:03 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	34	115
PROJECT FILE NO.	609440		

CURB TIE PLANS - 02

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

SEE SHEET 39

DRAINAGE DETAILS

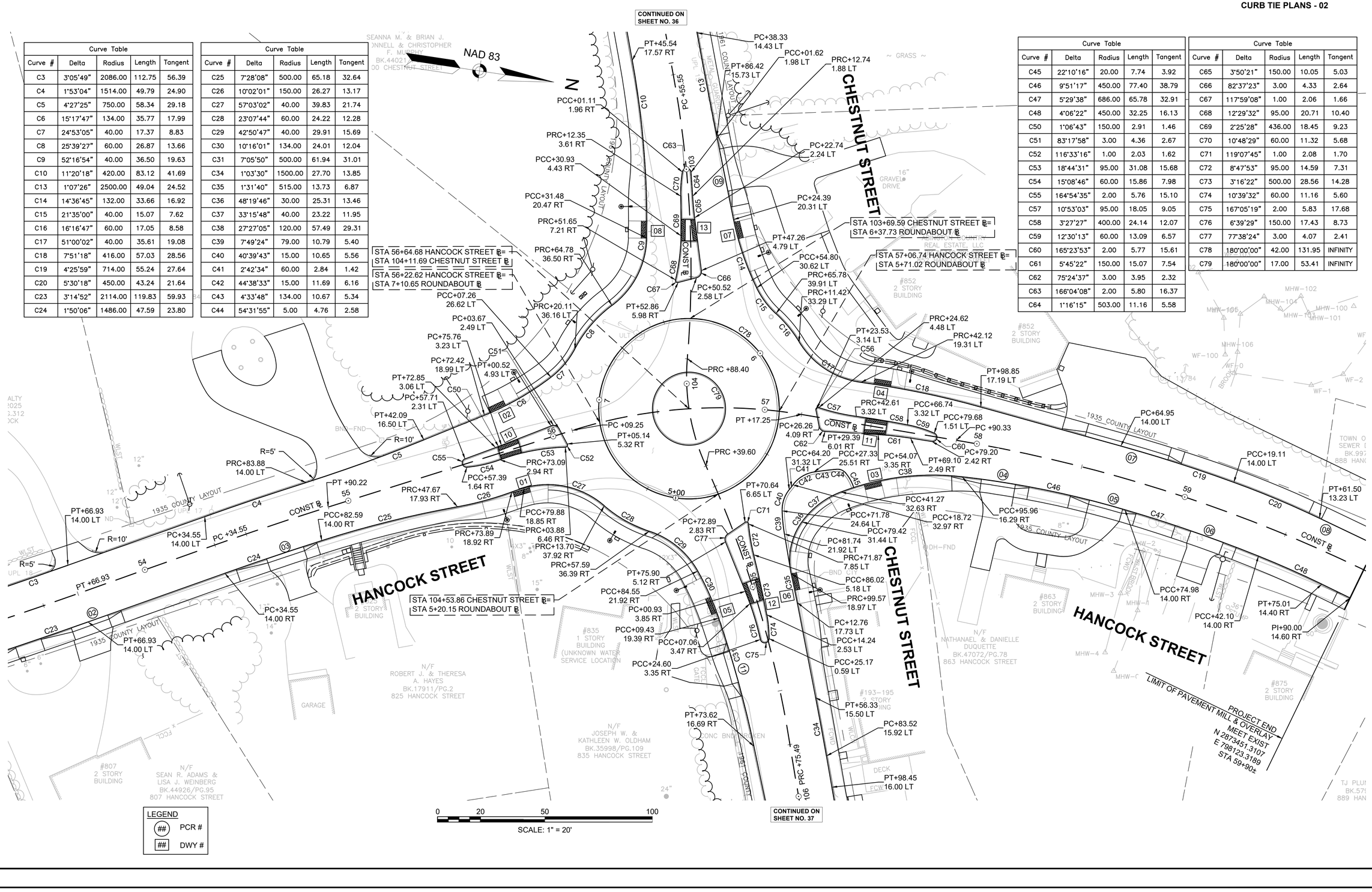
SEE SHEET 39

Curve Table				
Curve #	Delta	Radius	Length	Tangent
C3	3°05'49"	2086.00	112.75	56.39
C4	1°53'04"	1514.00	49.79	24.90
C5	4°27'25"	750.00	58.34	29.18
C6	15°17'47"	134.00	35.77	17.99
C7	24°53'05"	40.00	17.37	8.83
C8	25°39'27"	60.00	26.87	13.66
C9	52°16'54"	40.00	36.50	19.63
C10	11°20'18"	420.00	83.12	41.69
C13	1°07'26"	2500.00	49.04	24.52
C14	14°36'45"	132.00	33.66	16.92
C15	21°35'00"	40.00	15.07	7.62
C16	16°16'47"	60.00	17.05	8.58
C17	51°00'02"	40.00	35.61	19.08
C18	7°51'18"	416.00	57.03	28.56
C19	4°25'59"	714.00	55.24	27.64
C20	5°30'18"	450.00	43.24	21.64
C23	3°14'52"	2114.00	119.83	59.93
C24	1°50'06"	1486.00	47.59	23.80

Curve Table				
Curve #	Delta	Radius	Length	Tangent
C25	7°28'08"	500.00	65.18	32.64
C26	10°02'01"	150.00	26.27	13.17
C27	57°03'02"	40.00	39.83	21.74
C28	23°07'44"	60.00	24.22	12.28
C29	42°50'47"	40.00	29.91	15.69
C30	10°16'01"	134.00	24.01	12.04
C31	7°05'50"	500.00	61.94	31.01
C34	1°03'30"	1500.00	27.70	13.85
C35	1°31'40"	515.00	13.73	6.87
C36	48°19'46"	30.00	25.31	13.46
C37	33°15'48"	40.00	23.22	11.95
C38	27°27'05"	120.00	57.49	29.31
C39	7°49'24"	79.00	10.79	5.40
C40	40°39'43"	15.00	10.65	5.56
C41	2°42'34"	60.00	2.84	1.42
C42	44°38'33"	15.00	11.69	6.16
C43	4°33'48"	134.00	10.67	5.34
C44	54°31'55"	5.00	4.76	2.58

Curve Table				
Curve #	Delta	Radius	Length	Tangent
C45	22°10'16"	20.00	7.74	3.92
C46	9°51'17"	450.00	77.40	38.79
C47	5°29'38"	686.00	65.78	32.91
C48	4°06'22"	450.00	32.25	16.13
C50	1°06'43"	150.00	2.91	1.46
C51	83°17'58"	3.00	4.36	2.67
C52	116°33'16"	1.00	2.03	1.62
C53	18°44'31"	95.00	31.08	15.68
C54	15°08'46"	60.00	15.86	7.98
C55	164°54'35"	2.00	5.76	15.10
C57	10°53'03"	95.00	18.05	9.05
C58	3°27'27"	400.00	24.14	12.07
C59	12°30'13"	60.00	13.09	6.57
C60	165°23'53"	2.00	5.77	15.61
C61	5°45'22"	150.00	15.07	7.54
C62	75°24'37"	3.00	3.95	2.32
C63	166°04'08"	2.00	5.80	16.37
C64	1°16'15"	503.00	11.16	5.58

Curve Table				
Curve #	Delta	Radius	Length	Tangent
C65	3°50'21"	150.00	10.05	5.03
C66	82°37'23"	3.00	4.33	2.64
C67	117°59'08"	1.00	2.06	1.66
C68	12°29'32"	95.00	20.71	10.40
C69	2°25'28"	436.00	18.45	9.23
C70	10°48'29"	60.00	11.32	5.68
C71	119°07'45"	1.00	2.08	1.70
C72	8°47'53"	95.00	14.59	7.31
C73	3°16'22"	500.00	28.56	14.28
C74	10°39'32"	60.00	11.16	5.60
C75	167°05'19"	2.00	5.83	17.68
C76	6°39'29"	150.00	17.43	8.73
C77	77°38'24"	3.00	4.07	2.41
C78	180°00'00"	42.00	131.95	INFINITY
C79	180°00'00"	17.00	53.41	INFINITY



609440_HD(CT).DWG Plotted on 9-Jan-2026 2:11 PM

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

SEE SHEET 40

DRAINAGE DETAILS

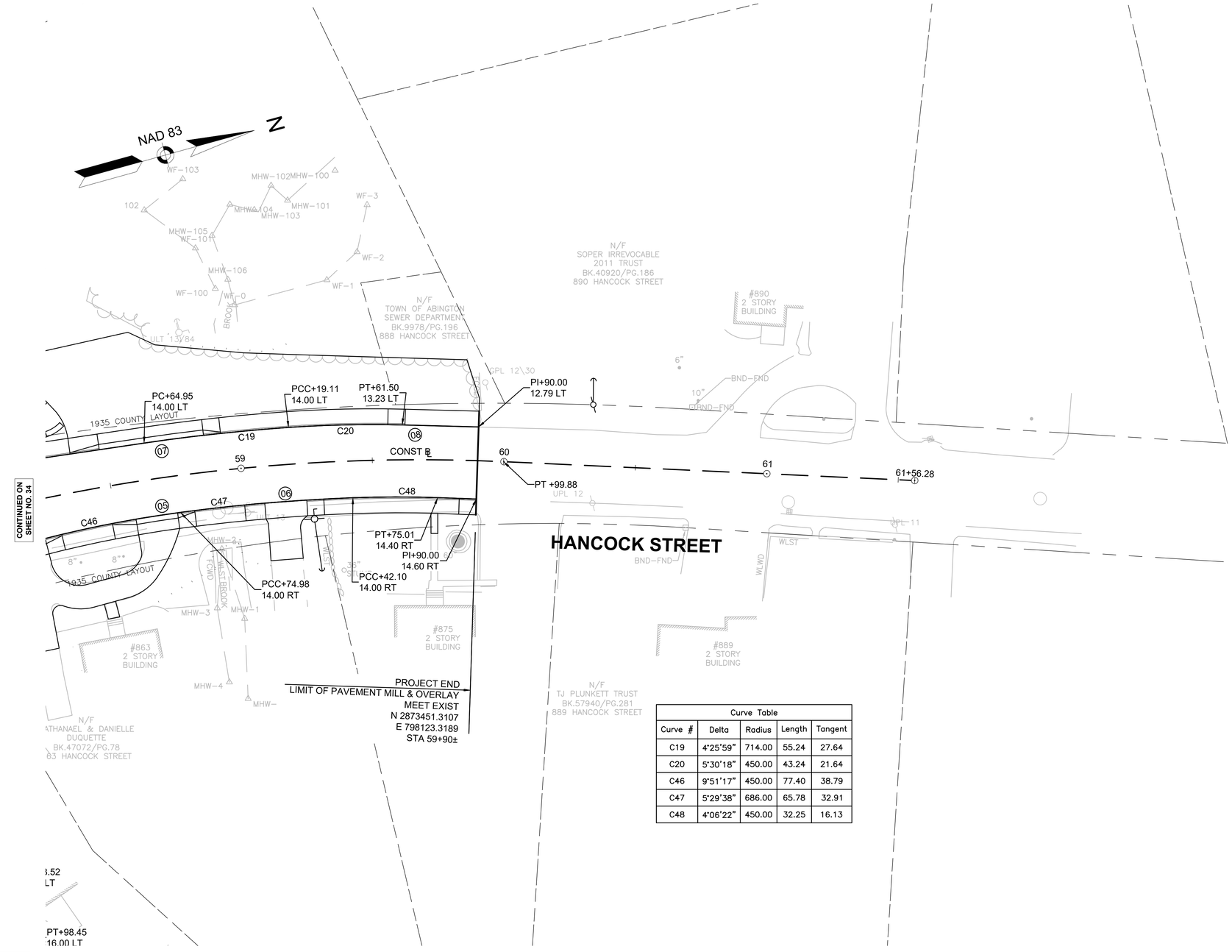
SEE SHEET 40

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	35	115
PROJECT FILE NO.	609440		

CURB TIE PLANS - 03

609440_HD(CT).DWG Plotted on 9-Jan-2026 2:11 PM



Curve Table				
Curve #	Delta	Radius	Length	Tangent
C19	4°25'59"	714.00	55.24	27.64
C20	5°30'18"	450.00	43.24	21.64
C46	9°51'17"	450.00	77.40	38.79
C47	5°29'38"	686.00	65.78	32.91
C48	4°06'22"	450.00	32.25	16.13

LEGEND
(##) PCR #
[##] DWY #

0 20 50 100
SCALE: 1" = 20'

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	36	115
PROJECT FILE NO.	609440		

CURB TIE PLANS - 04

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

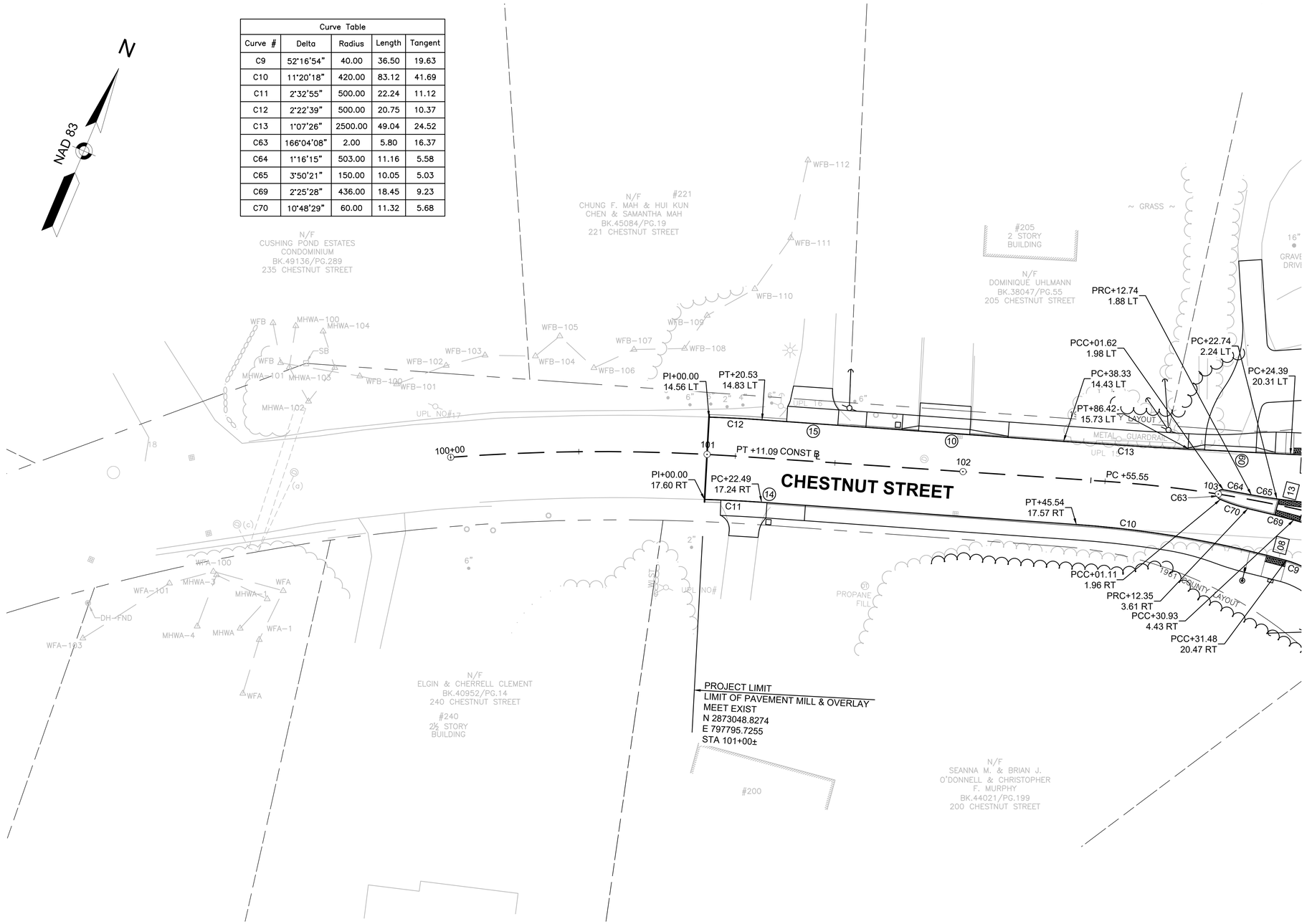
WATER SUPPLY ALTERATIONS

SEE SHEET 41

DRAINAGE DETAILS

SEE SHEET 41

Curve Table				
Curve #	Delta	Radius	Length	Tangent
C9	52°16'54"	40.00	36.50	19.63
C10	11°20'18"	420.00	83.12	41.69
C11	2°32'55"	500.00	22.24	11.12
C12	2°22'39"	500.00	20.75	10.37
C13	1°07'26"	2500.00	49.04	24.52
C63	166°04'08"	2.00	5.80	16.37
C64	1°16'15"	503.00	11.16	5.58
C65	3°50'21"	150.00	10.05	5.03
C69	2°25'28"	436.00	18.45	9.23
C70	10°48'29"	60.00	11.32	5.68



LEGEND

(##) PCR #

[##] DWY #

0 20 50 100

SCALE: 1" = 20'

609440_HD(CT).DWG Plotted on 9-Jan-2026 2:12 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	37	115
PROJECT FILE NO.	609440		

CURB TIE PLANS - 05

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

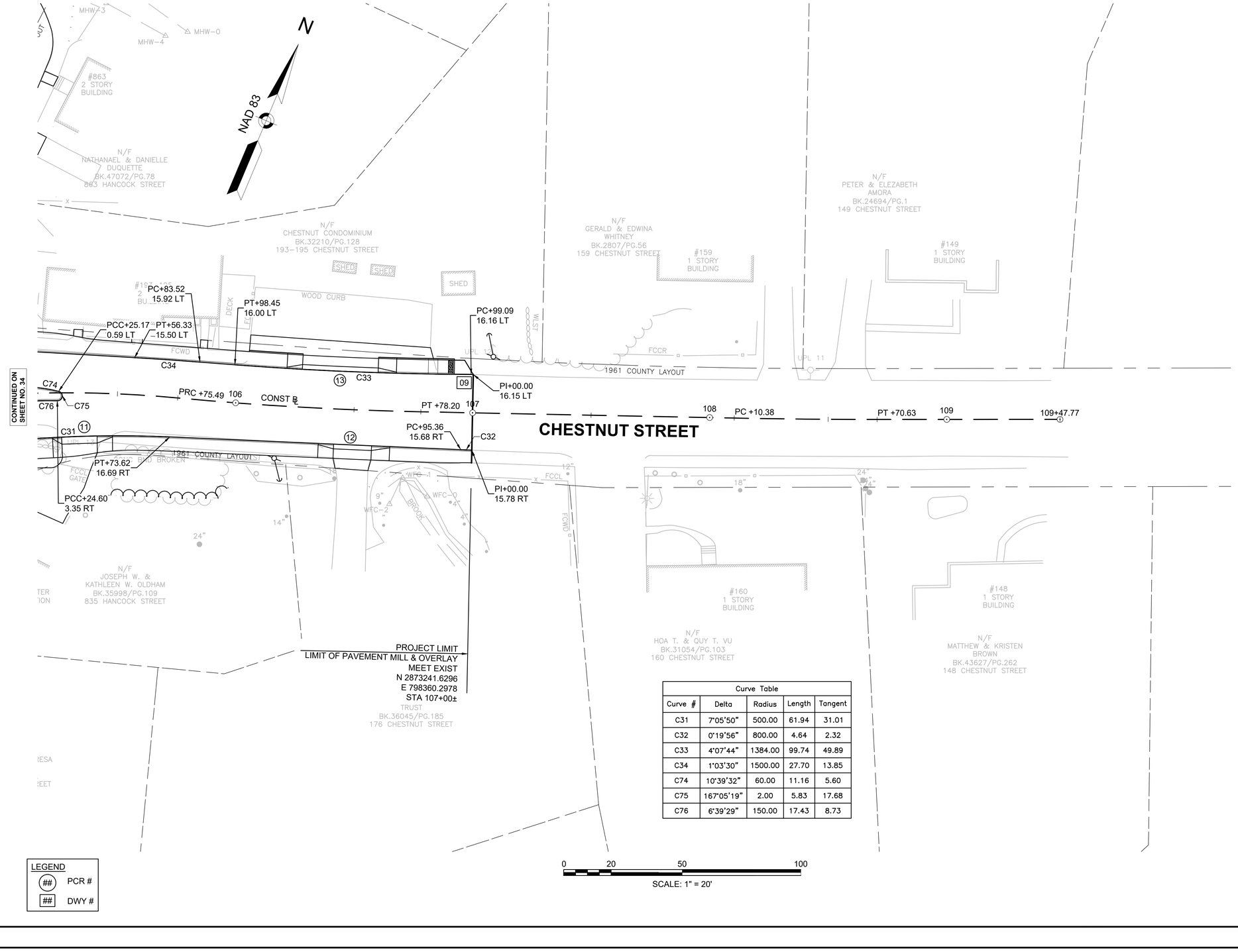
NONE

WATER SUPPLY ALTERATIONS

SEE SHEET 42

DRAINAGE DETAILS

SEE SHEET 42



Curve Table				
Curve #	Delta	Radius	Length	Tangent
C31	7°05'50"	500.00	61.94	31.01
C32	0°19'56"	800.00	4.64	2.32
C33	4°07'44"	1384.00	99.74	49.89
C34	1°03'30"	1500.00	27.70	13.85
C74	10°39'32"	60.00	11.16	5.60
C75	167°05'19"	2.00	5.83	17.68
C76	6°39'29"	150.00	17.43	8.73

LEGEND
(##) PCR #
[##] DWY #

0 20 50 100
SCALE: 1" = 20'

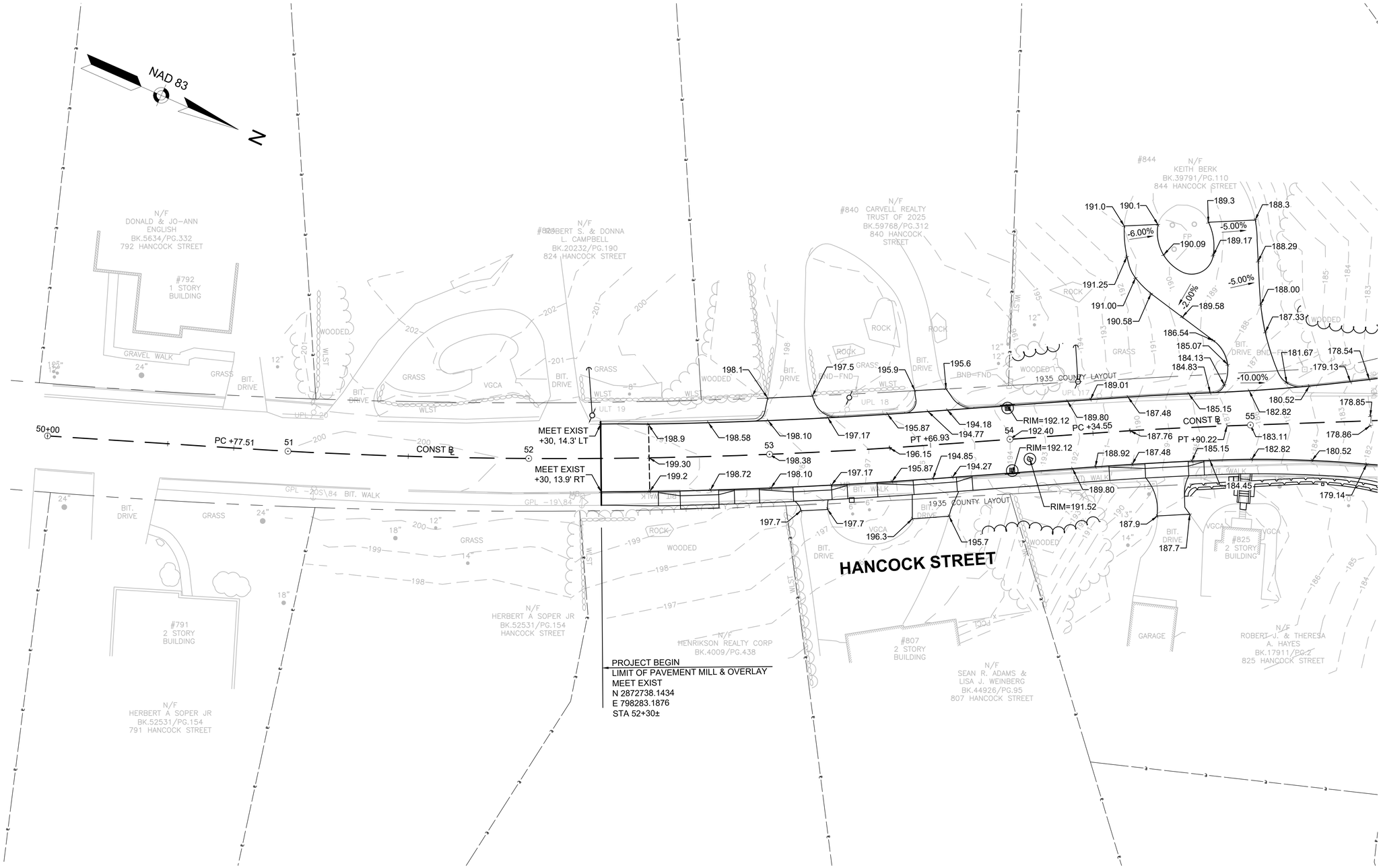
609440_HD(CT).DWG Plotted on 9-Jan-2026 2:12 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	38	115
PROJECT FILE NO.	609440		

GRADING PLANS - 01

609440_HD(GR).DWG Plotted on 25-Feb-2026 6:04 PM



PROJECT BEGIN
LIMIT OF PAVEMENT MILL & OVERLAY
MEET EXIST
N 2872738.1434
E 798283.1876
STA 52+30±

0 20 50 100
SCALE: 1" = 20'

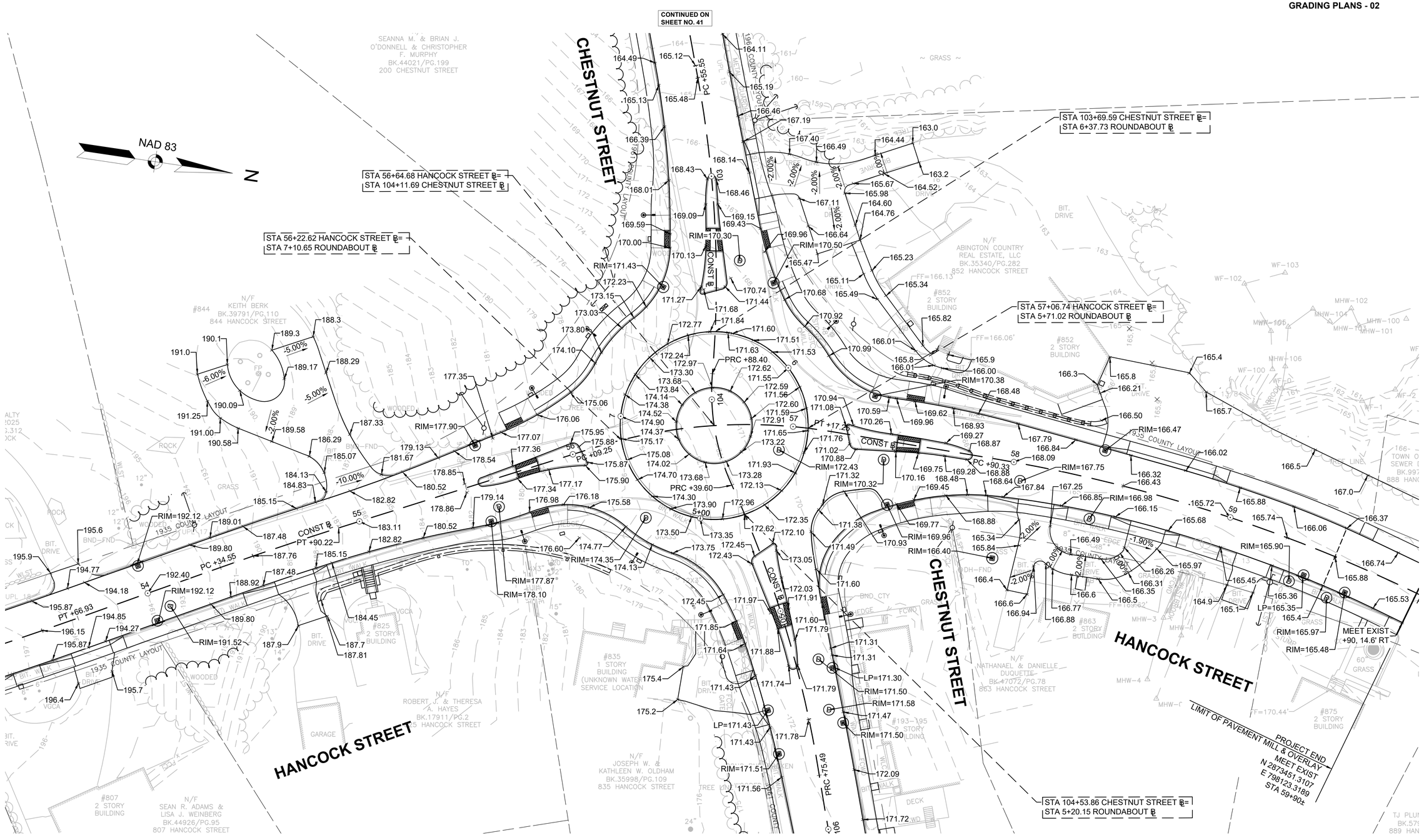
LEGEND:
XX.XX PROP BOTTOM OF CURB/GUTTER SPOT ELEVATION
XX.X EXISTING SPOT ELEVATION

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	39	115
	PROJECT FILE NO. 609440		

GRADING PLANS - 02

609440_HD(GR).DWG Plotted on 9-Jan-2026 2:16 PM



0 20 50 100

SCALE: 1" = 20'

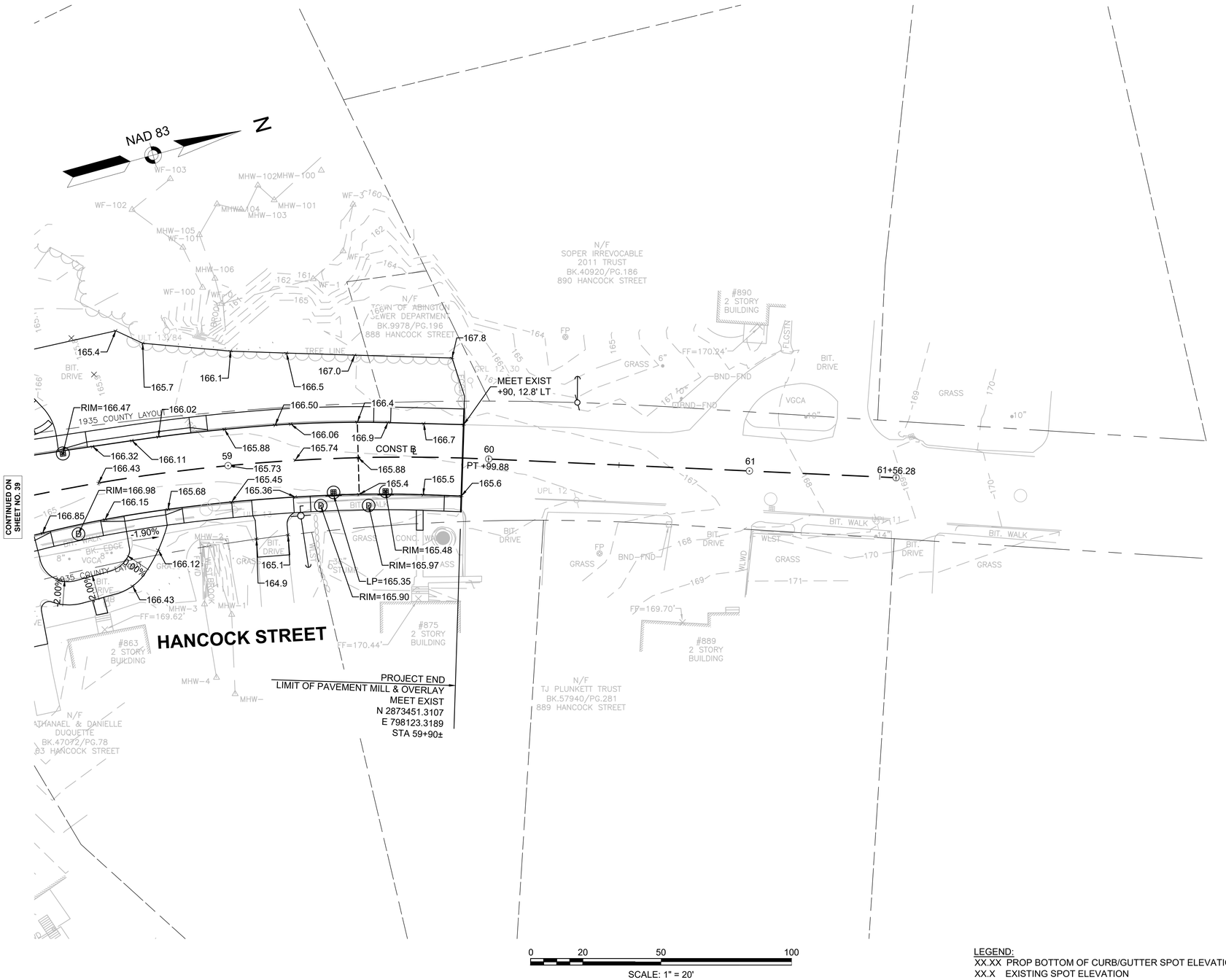
LEGEND:
XX.XX PROP BOTTOM OF CURB/GUTTER SPOT ELEVATION
XX.X EXISTING SPOT ELEVATION

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	40	115
PROJECT FILE NO.	609440		

GRADING PLANS - 03

609440_HD(GR).DWG Plotted on 9-Jan-2026 2:17 PM



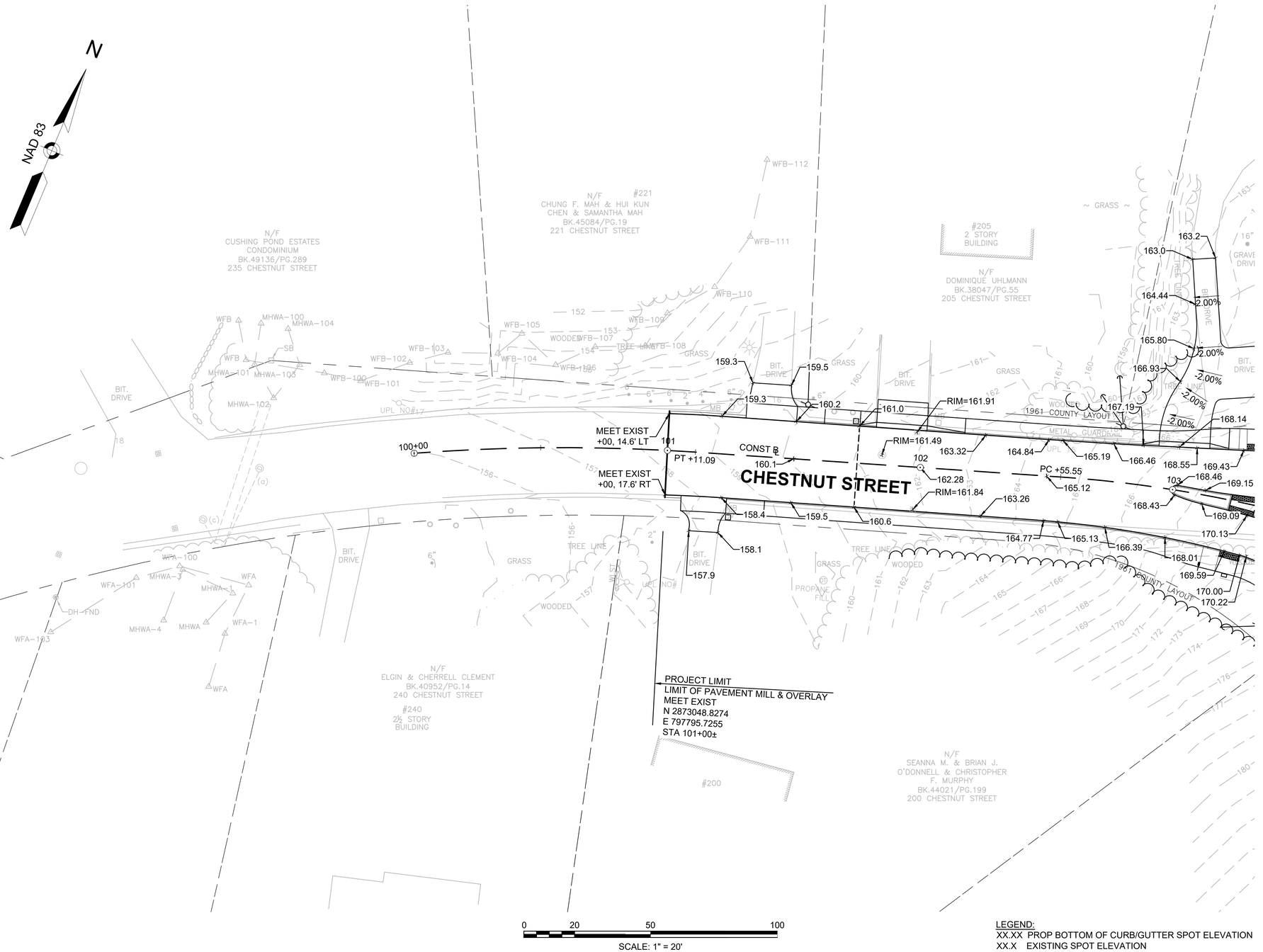
LEGEND:
XX.XX PROP BOTTOM OF CURB/GUTTER SPOT ELEVATION
XX.X EXISTING SPOT ELEVATION

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	41	115
	PROJECT FILE NO.	609440	

GRADING PLANS - 04

609440_HD(GR).DWG Plotted on 9-Jan-2026 2:18 PM



0 20 50 100

SCALE: 1" = 20'

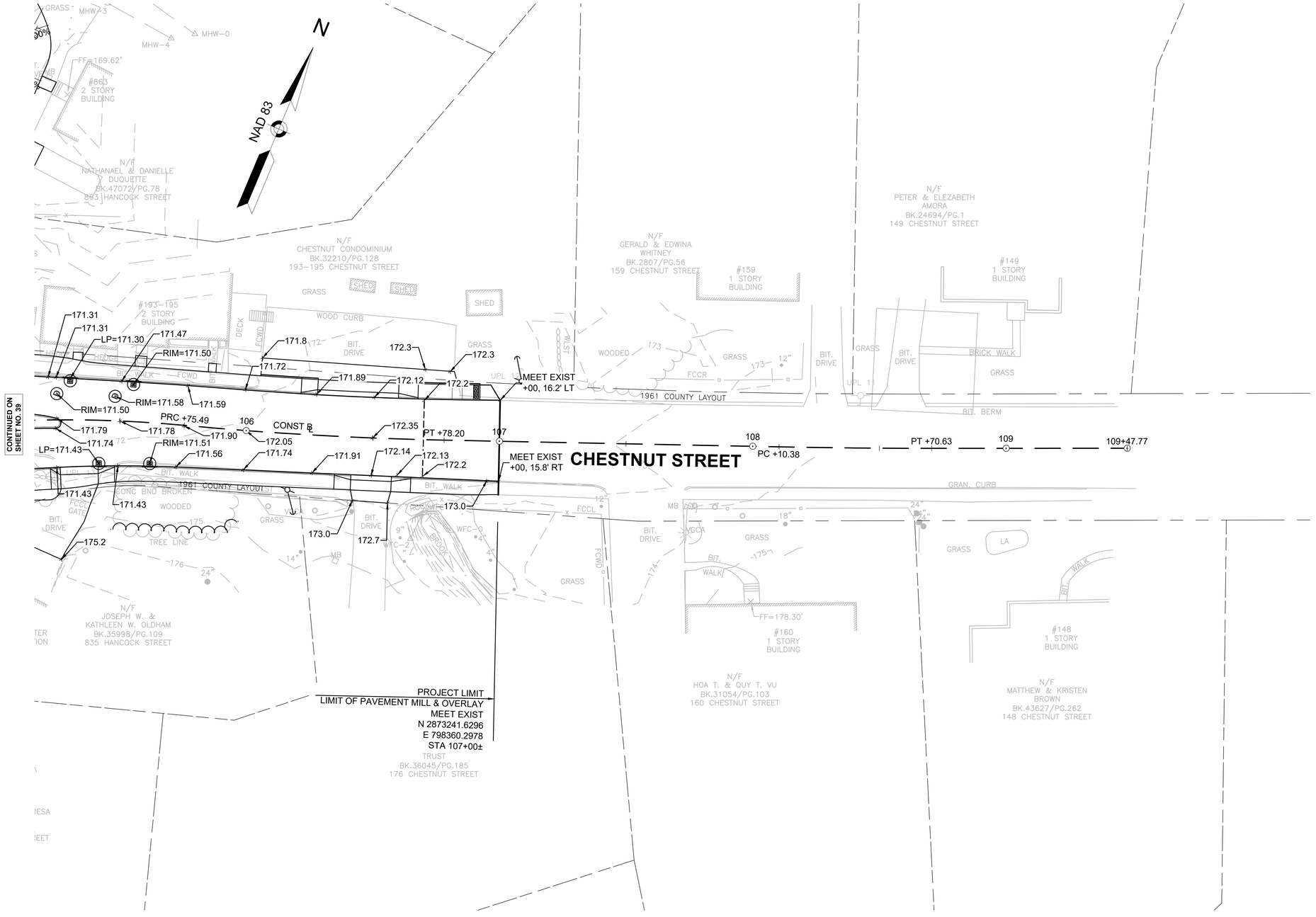
LEGEND:
XX.XX PROP BOTTOM OF CURB/GUTTER SPOT ELEVATION
XX.X EXISTING SPOT ELEVATION

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	42	115
PROJECT FILE NO.	609440		

GRADING PLANS - 05

609440_HD(GR).DWG Plotted on 9-Jan-2026 2:19 PM



0 20 50 100

SCALE: 1" = 20'

LEGEND:
XX.XX PROP BOTTOM OF CURB/GUTTER SPOT ELEVATION
XX.X EXISTING SPOT ELEVATION

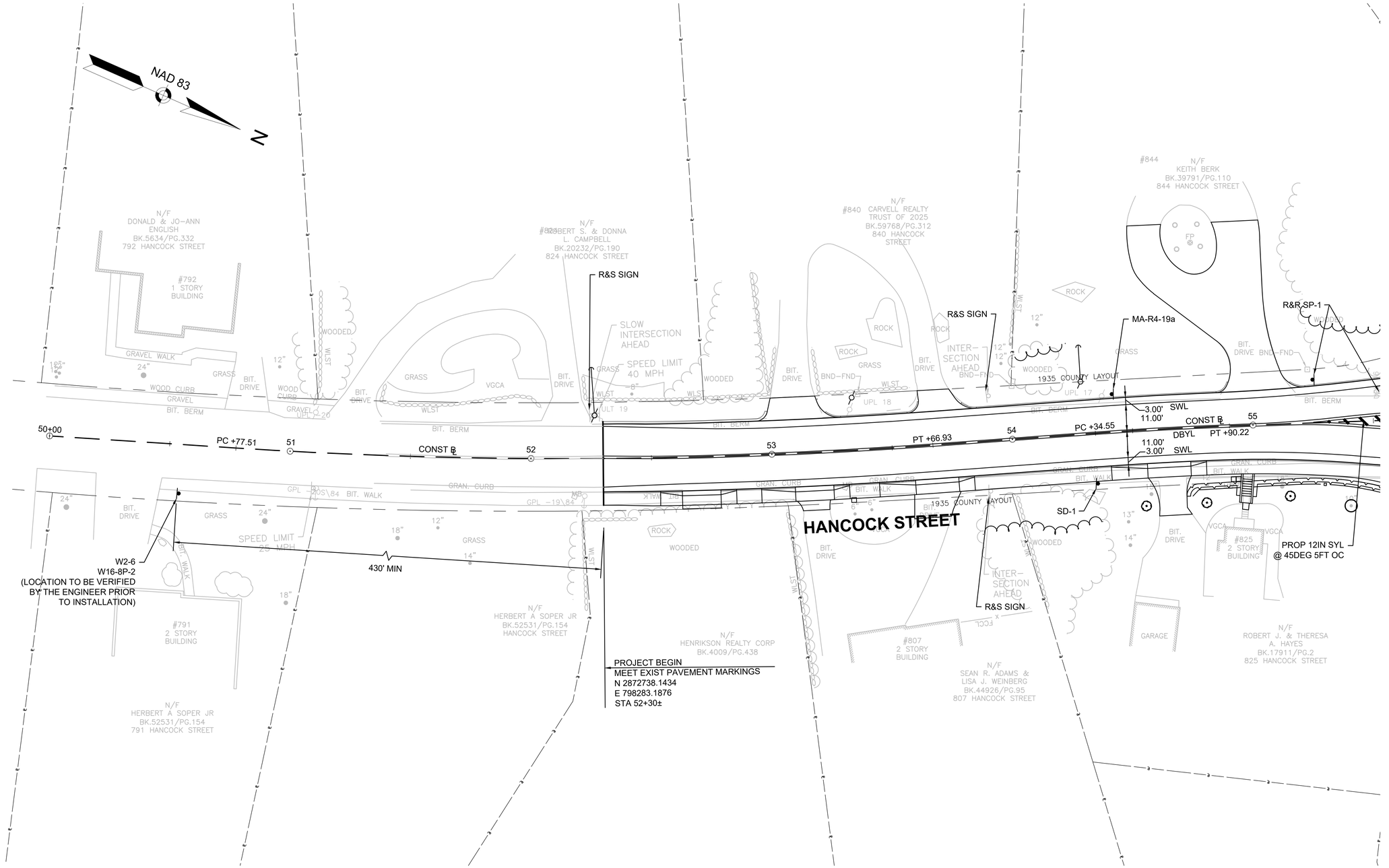
NOTES:
1. ALL NEW PAVEMENT MARKINGS SHALL BE REFLECTORIZED THERMOPLASTIC.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING PAVEMENT MARKINGS AT LIMITS OF WORK.
3. RETAIN ALL EXISTING SIGNS WITHIN PROJECT LIMITS UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER.
4. THE PLACEMENT OF ALL PROPOSED SIGNS SHALL MEET THE REQUIREMENTS OF THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 2A-2(C) OR LATEST, AND SHALL PROVIDE ADA MINIMUM PATH FOR TRAVEL CLEARANCE.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	43	115
PROJECT FILE NO.	609440		

TRAFFIC SIGN & PAVEMENT MARKING PLANS - 01

609440_HD(TR).DWG Plotted on 25-Feb-2026 6:07 PM



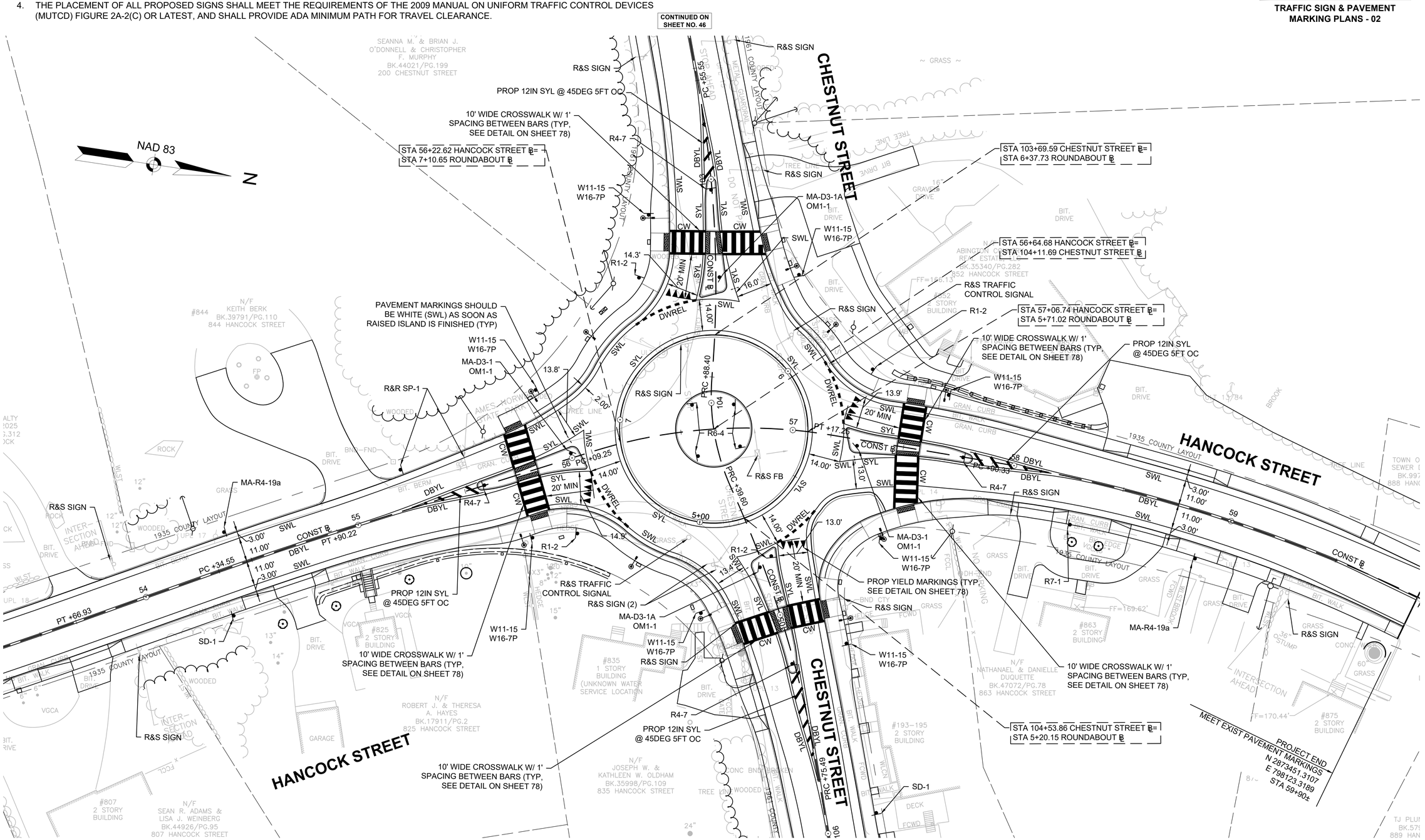
CONTINUED ON SHEET NO. 44

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	44	115
PROJECT FILE NO.	609440		

TRAFFIC SIGN & PAVEMENT MARKING PLANS - 02

NOTES:
1. ALL NEW PAVEMENT MARKINGS SHALL BE REFLECTORIZED THERMOPLASTIC.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING PAVEMENT MARKINGS AT LIMITS OF WORK.
3. RETAIN ALL EXISTING SIGNS WITHIN PROJECT LIMITS UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER.
4. THE PLACEMENT OF ALL PROPOSED SIGNS SHALL MEET THE REQUIREMENTS OF THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 2A-2(C) OR LATEST, AND SHALL PROVIDE ADA MINIMUM PATH FOR TRAVEL CLEARANCE.



609440_HD(TR).DWG Plotted on 9-Jan-2026 2:21 PM

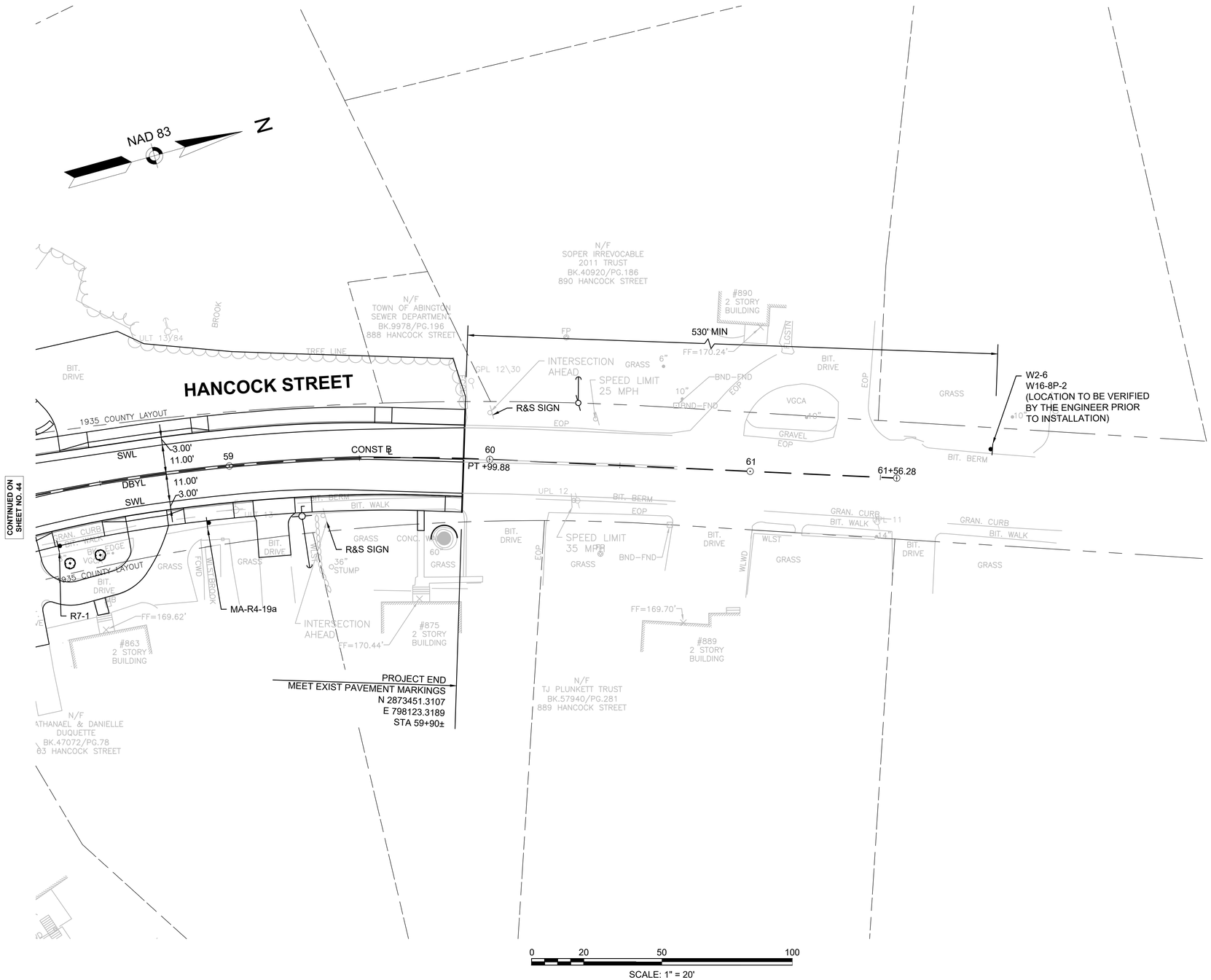
NOTES:
1. ALL NEW PAVEMENT MARKINGS SHALL BE REFLECTORIZED THERMOPLASTIC.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING PAVEMENT MARKINGS AT LIMITS OF WORK.
3. RETAIN ALL EXISTING SIGNS WITHIN PROJECT LIMITS UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE TOWN ENGINEER.
4. THE PLACEMENT OF ALL PROPOSED SIGNS SHALL MEET THE REQUIREMENTS OF THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 2A-2(C) OR LATEST, AND SHALL PROVIDE ADA MINIMUM PATH FOR TRAVEL CLEARANCE.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	45	115
PROJECT FILE NO.	609440		

TRAFFIC SIGN & PAVEMENT MARKING PLANS - 03

609440_HD(TR).DWG Plotted on 9-Jan-2026 2:22 PM



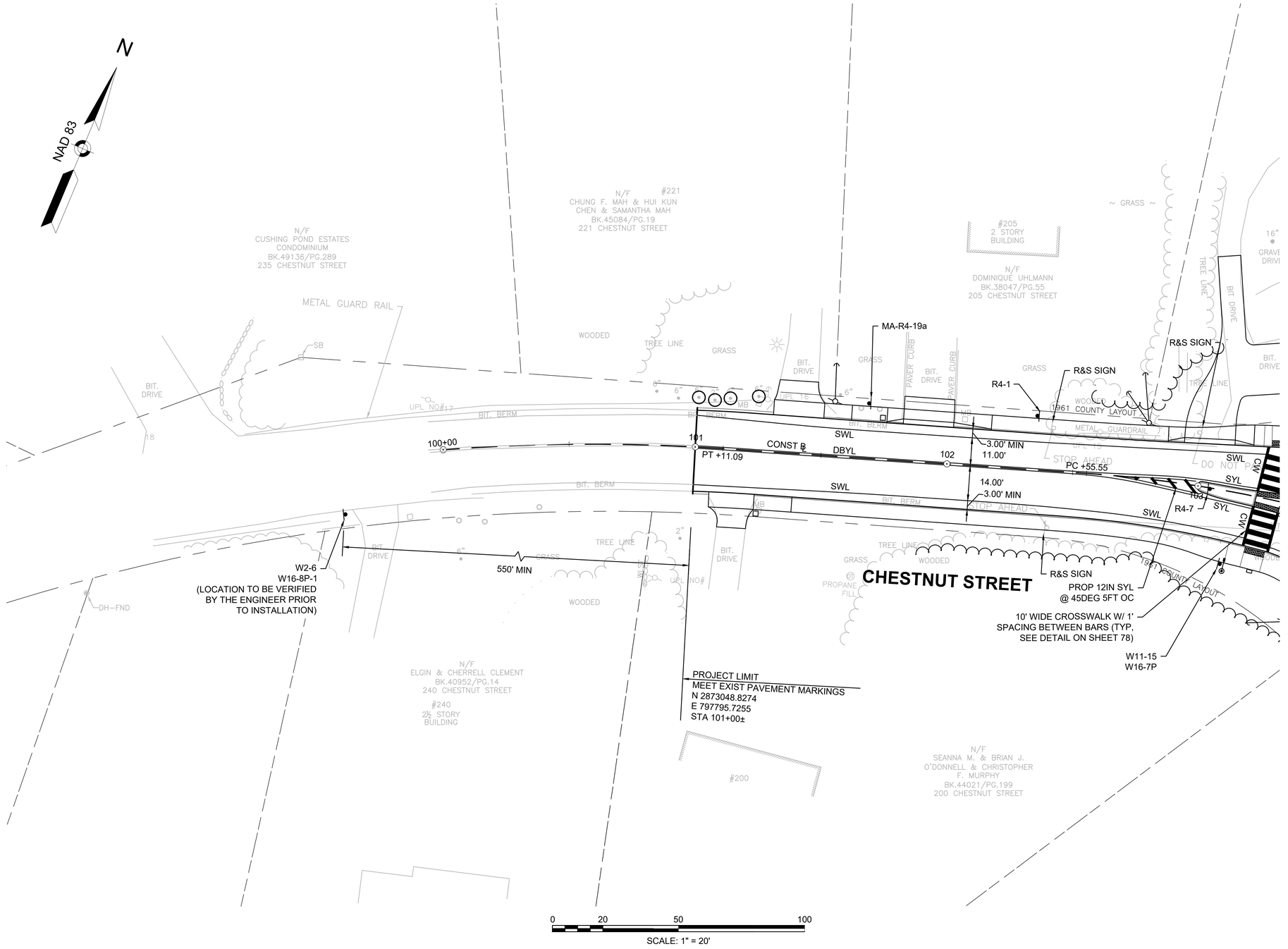
NOTES:
1. ALL NEW PAVEMENT MARKINGS SHALL BE REFLECTORIZED THERMOPLASTIC.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING PAVEMENT MARKINGS AT LIMITS OF WORK.
3. RETAIN ALL EXISTING SIGNS WITHIN PROJECT LIMITS UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER.
4. THE PLACEMENT OF ALL PROPOSED SIGNS SHALL MEET THE REQUIREMENTS OF THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 2A-2(C) OR LATEST, AND SHALL PROVIDE ADA MINIMUM PATH FOR TRAVEL CLEARANCE.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	46	115
PROJECT FILE NO.	609440		

TRAFFIC SIGN & PAVEMENT MARKING PLANS - 04

609440_HD(TR).DWG Plotted on 9-Jan-2026 2:23 PM

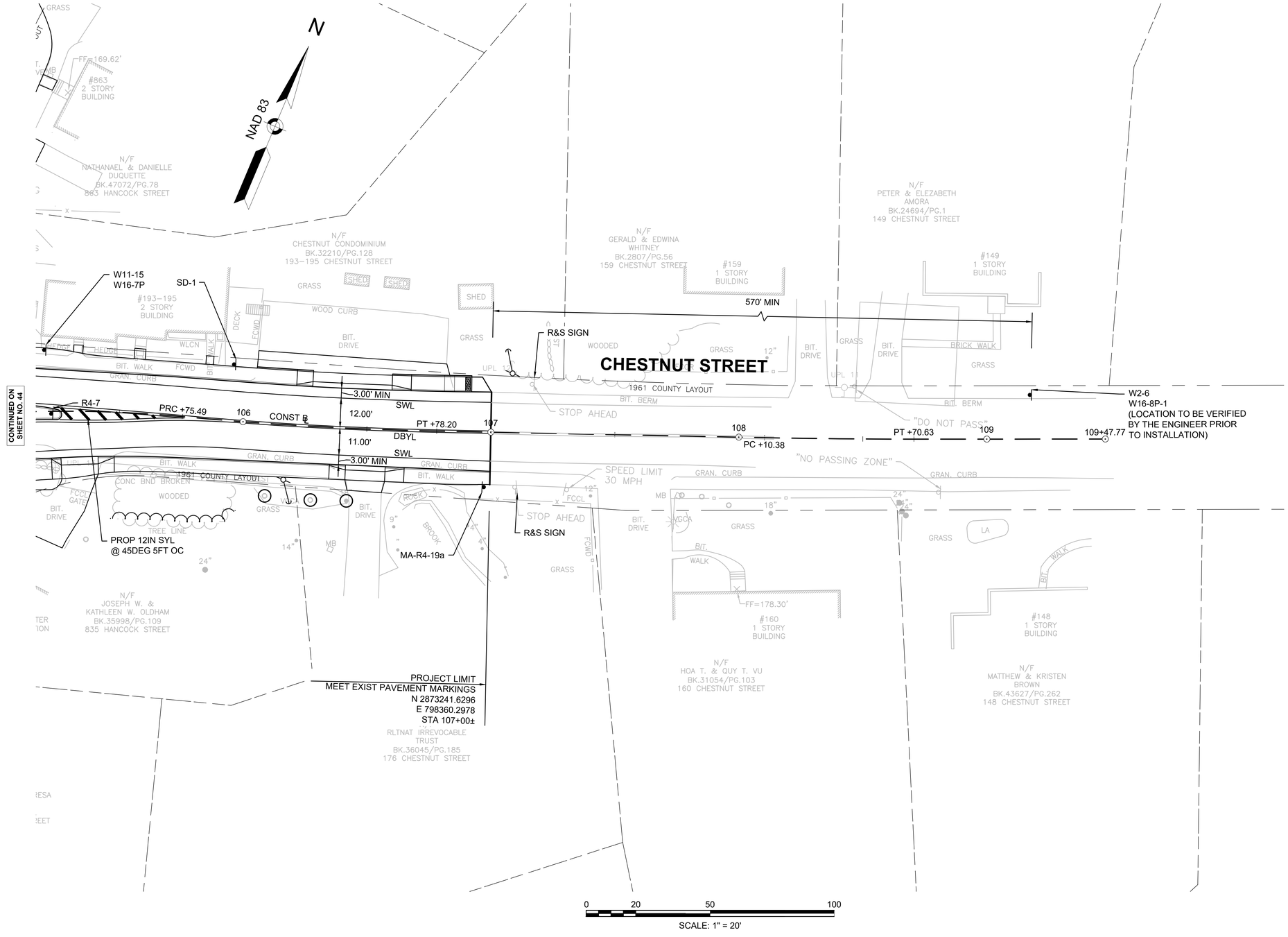


ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	47	115
PROJECT FILE NO.	609440		

TRAFFIC SIGN & PAVEMENT MARKING PLANS - 05

NOTES:
1. ALL NEW PAVEMENT MARKINGS SHALL BE REFLECTORIZED THERMOPLASTIC.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING PAVEMENT MARKINGS AT LIMITS OF WORK.
3. RETAIN ALL EXISTING SIGNS WITHIN PROJECT LIMITS UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER.
4. THE PLACEMENT OF ALL PROPOSED SIGNS SHALL MEET THE REQUIREMENTS OF THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 2A-2(C) OR LATEST, AND SHALL PROVIDE ADA MINIMUM PATH FOR TRAVEL CLEARANCE.



609440_HD(TR).DWG Plotted on 9-Jan-2026 2:24 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	48	115
PROJECT FILE NO.	609440		

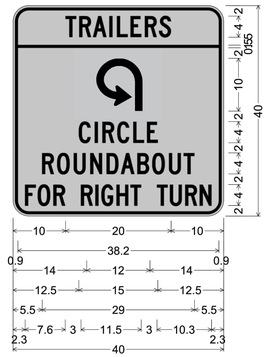
TRAFFIC SIGN SUMMARY

609440_HD(SIGNS).DWG Plotted on 9-Jan-2026 2:24 PM

TRAFFIC SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN (INCHES) WIDTH	HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	VERTICAL SPACING	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	LEGEND	BORDER	POST SIZE AND NUMBER REQUIRED	UNIT AREA IN SQUARE FEET	TOTAL AREA IN SQUARE FEET
MA-D3-1	45	12	Hancock St	6D / 4D	3.00 3.00	4	GREEN	WHITE	WHITE	P5 (2 POSTS REQUIRED); MOUNT BACK TO BACK (4)	EACH (PAY UNDER ITEM 874.)	
MA-D3-1A	51	12	Chestnut St	6D / 4D	3.00 3.00	4	GREEN	WHITE	WHITE	P5 (2 POSTS REQUIRED); MOUNT BACK TO BACK (4)	EACH (PAY UNDER ITEM 874.)	
OM1-1	18	18		MUTCD STANDARD		4	YELLOW	YELLOW	N/A	MOUNT WITH MA-D3-1 (2); WITH MA-D3-1A (2)	2.25	9.00
R1-2	36	36	YIELD			4	WHITE	RED	WHITE	P5 (4)	4.50	18.00
R4-1	24	30	DO NOT PASS			1	WHITE	BLACK	BLACK	P5 (1)	5.00	5.00
R4-7	24	30				4	WHITE	BLACK	BLACK	P5 (4)	5.00	20.00
MA-R4-19a	36	30	MOTORISTS GIVE 4 FT TO PASS	MASSDOT STANDARD		4	WHITE	BLACK	BLACK	P5 (4)	7.50	30.00
R6-4	30	24		MUTCD STANDARD		4	WHITE	BLACK	N/A	P5 (4)	5.00	20.00
R7-1	12	18	NO PARKING ANY TIME			1	WHITE	RED	RED	P5 (1)	1.50	1.50
SD-1	30	40	TRAILERS CIRCLE ROUNDABOUT FOR RIGHT TURN	LETTER HEIGHT: 4"	VERTICAL SPACING: 2"	ARROW SIZE: 10"	2	YELLOW	BLACK	BLACK	P5 (2)	8.33	16.66
W2-6	36	36		MUTCD STANDARD		4	YELLOW	BLACK	BLACK	P5 (4)	9.00	36.00
W11-15	30	30				8	FLUORESCENT YELLOW GREEN	BLACK	BLACK	P5 (8)	6.25	50.00
W16-7P	24	12				8	FLUORESCENT YELLOW GREEN	BLACK	BLACK	MOUNT WITH W11-15 (8)	2.00	16.00
W16-8P-1	28	8	Hancock St			2	YELLOW	BLACK	BLACK	MOUNT WITH W2-6 (2)	1.56	3.12
W16-8P-2	30	8	Chestnut St			2	YELLOW	BLACK	BLACK	MOUNT WITH W2-6 (2)	1.68	3.36
SP-1 R&R	N/A	N/A	"AMES NORWELL STATE PARK"	N/A		1		N/A		P5 (1)	N/A	N/A

NOTES:
1. SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 EDITION WITH LATEST REVISIONS AND MASSACHUSETTS AMENDMENTS FOR LATEST SPECIFICATIONS ON TEXT DIMENSIONS AND COLOR.
2. HIGH INTENSITY ENCAPSULATED LENS REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE 1990 MDPW "STANDARD DRAWINGS FOR SIGNS AND SUPPORTS", AND ALL AMENDMENTS WILL GOVERN.
3. ALL STREET NAME (MA-D3-X) SIGNS SHALL BE PRINTED ON ONE SIDE AND MOUNTED BACK TO BACK.



3.0" Radius, 0.5" Border, 0.4" Indent, Black on Yellow;
"TRAILERS", C 2K;
90 Deg Advance Turn Arrow 12.0" X 10.0";
"CIRCLE", C 2K;
"ROUNDABOUT", C 2K;
"FOR RIGHT TURN", C 2K 75% spacing;
Table of distances between letter and object lefts

| | | | |

WATER SUPPLY ALTERATIONS

SEE BELOW

DRAINAGE DETAILS

SEE SHEET 54 & 59

WATER MAIN SEQUENCE OF WORK NOTES:

1. INSTALL ALL TEMPORARY WATER PIPE SHALLOW BURIED WHEN CROSSING DRIVEWAYS AND CROSSING ROADS. OTHERWISE, PIPE SHALL BE ABOVE GRADE.
2. COMPLETE WATER QUALITY AND PRESSURE TEST OF TEMPORARY PIPE.
3. INSTALL BOTH HYDRANTS ON CHESTNUT STREET.
4. COMPLETE 6" WM INTERCONNECTIONS ON NORTH HANCOCK STREET AND EAST CHESTNUT STREET.
5. COMPLETE INTERCONNECTION TO 12" WM ON SOUTH HANCOCK STREET AND WEST CHESTNUT STREET DURING ONE SHUTDOWN AT NIGHT (9PM TO 5AM).
6. EXISTING WATER MAINS SHALL BE REMOVED IN THE AREAS WHERE THE PROPOSED SYSTEM IS SHOWN ON TOP OF THE EXISTING MAIN.
7. COMPLETE INSTALLATION OF NEW WATER MAINS.
8. COMPLETE WATER QUALITY AND PRESSURE TESTS OF NEW WATER MAINS.
9. OPEN VALVES TO DIRECT FLOW INTO NEW WATER MAINS.
10. TRANSITION WATER SERVICES TO NEW WATER MAINS.
11. CLOSE VALVES TO TEMPORARY WATER MAIN INTERCONNECTIONS AND DISCONNECT TEMPORARY WATER MAINS FROM HYDRANTS.
12. REMOVE ALL TEMPORARY WATER MAIN PIPING.

NOTES:

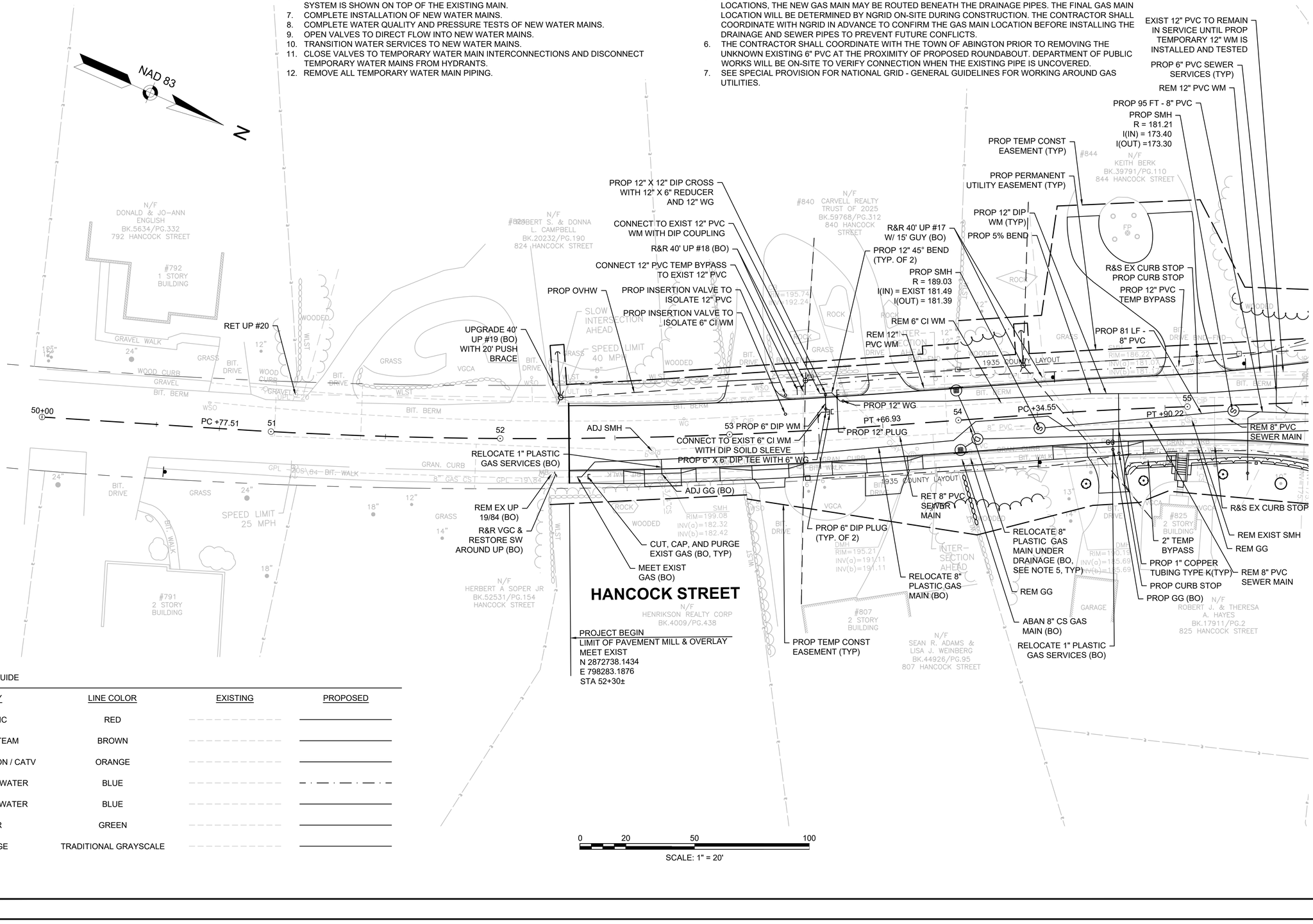
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7. SEE SPECIAL PROVISION FOR NATIONAL GRID - GENERAL GUIDELINES FOR WORKING AROUND GAS UTILITIES.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	49	115
PROJECT FILE NO.	609440		

UTILITY PLANS - 01

609440_UT.DWG Plotted on 21-Apr-2026 5:39 PM



CONTINUED ON SHEET NO. 50

UTILITY COLOR GUIDE

UTILITY	LINE COLOR	EXISTING	PROPOSED
ELECTRIC	RED	- - - - - - - -	————
GAS-OIL-STEAM	BROWN	- - - - - - - -	————
COMMUNICATION / CATV	ORANGE	- - - - - - - -	————
TEMPORARY WATER	BLUE	- - - - - - - -	- · - · - · -
PERMANENT WATER	BLUE	- - - - - - - -	————
SEWER	GREEN	- - - - - - - -	————
DRAINAGE	TRADITIONAL GRAYSCALE	- - - - - - - -	————

WATER SUPPLY ALTERATIONS

SEE BELOW

DRAINAGE DETAILS

SEE SHEET 55 & 59

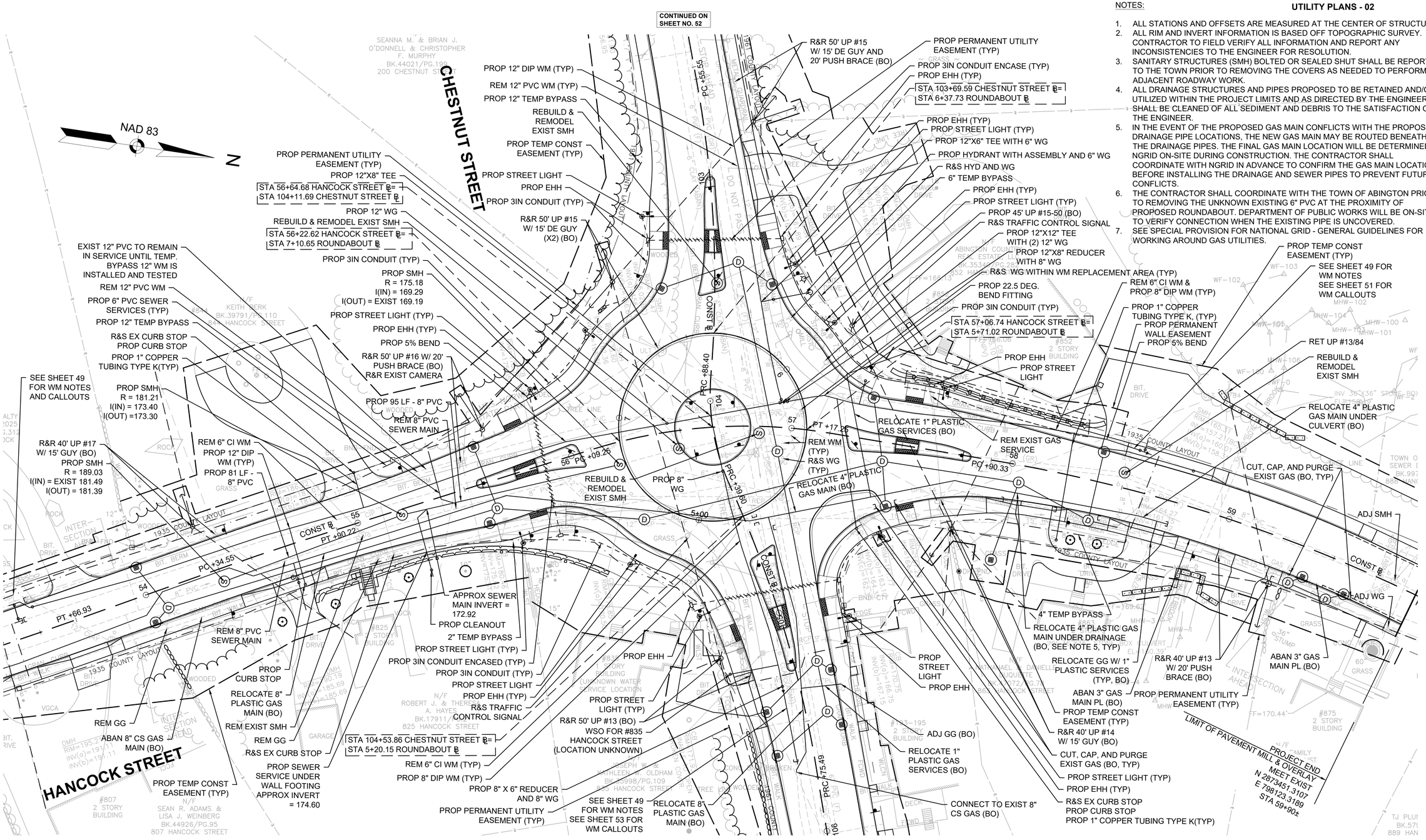
ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	50	115
	PROJECT FILE NO.	609440	

UTILITY PLANS - 02

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609440_UT.DWG Plotted on 21-Apr-2026 5:41 PM

WATER SUPPLY ALTERATIONS

SEE BELOW

DRAINAGE DETAILS

SEE SHEET 56 & 59

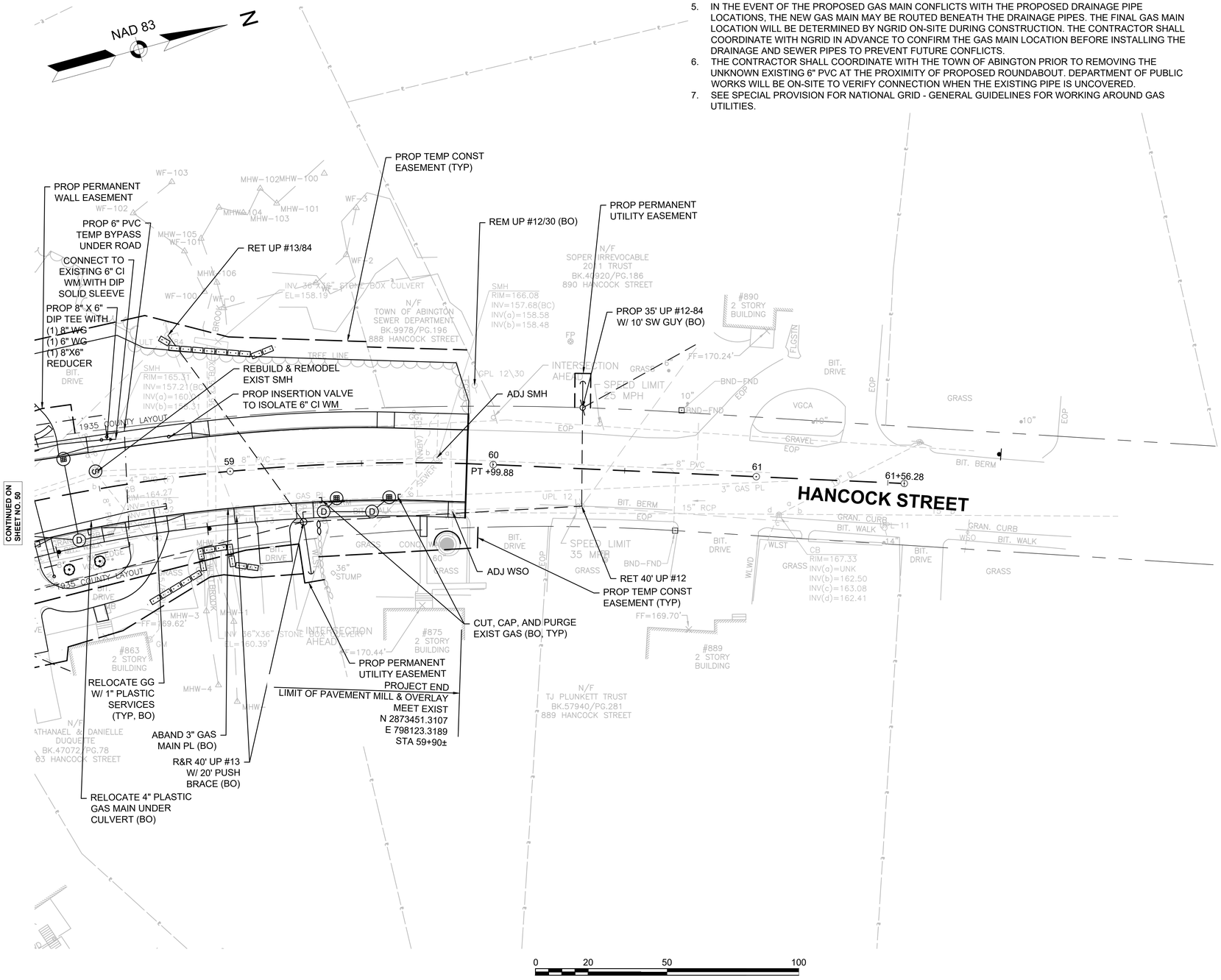
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ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	51	115
PROJECT FILE NO.	609440		

UTILITY PLANS - 03



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ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	52	115
PROJECT FILE NO.	609440		

UTILITY PLANS - 04

WATER SUPPLY ALTERATIONS

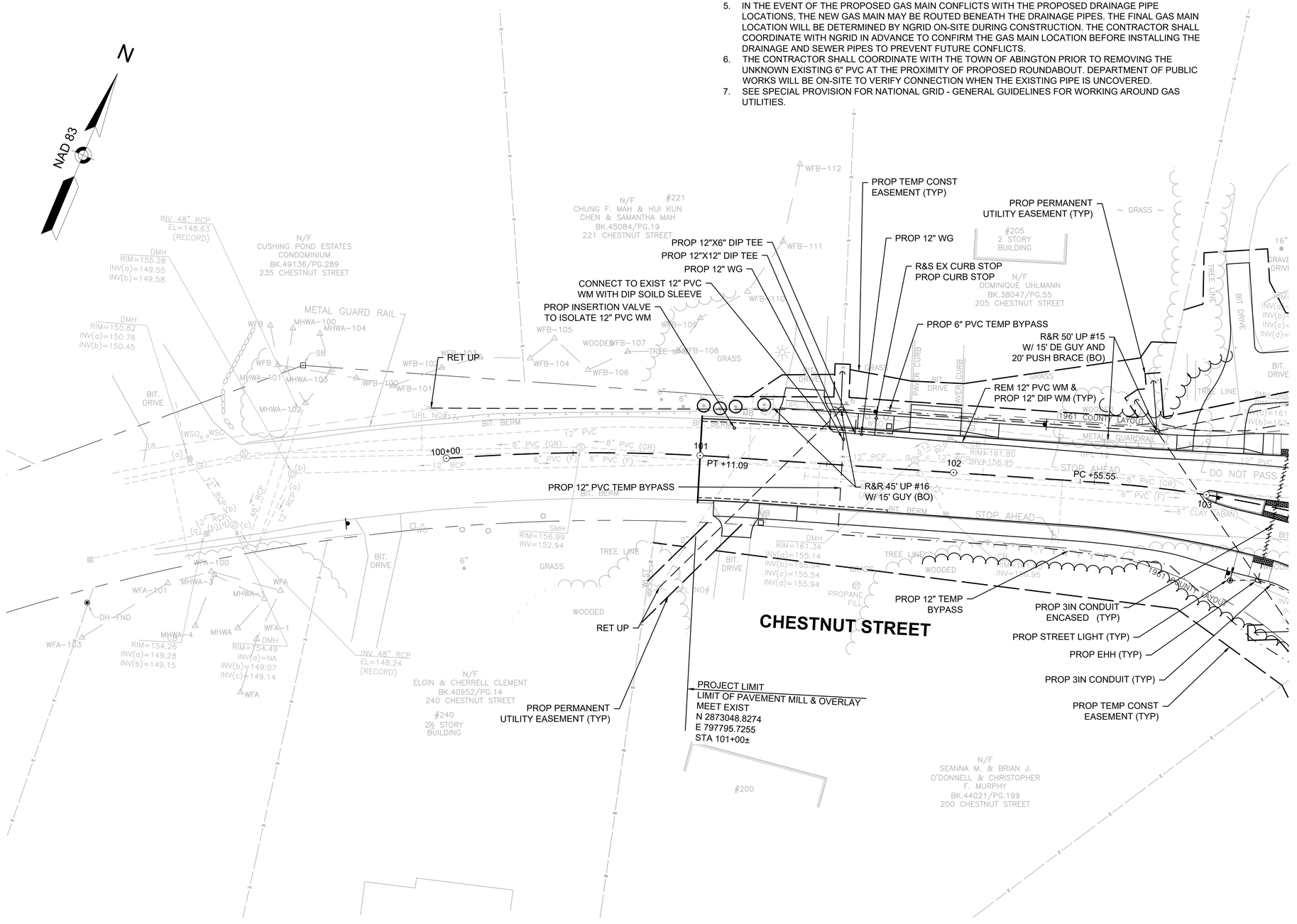
SEE BELOW

DRAINAGE DETAILS

SEE SHEET 57 & 59

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609440_UT.DWG Plotted on 21-Apr-2026 5:43 PM

WATER SUPPLY ALTERATIONS

SEE BELOW

DRAINAGE DETAILS

SEE SHEET 58 & 59

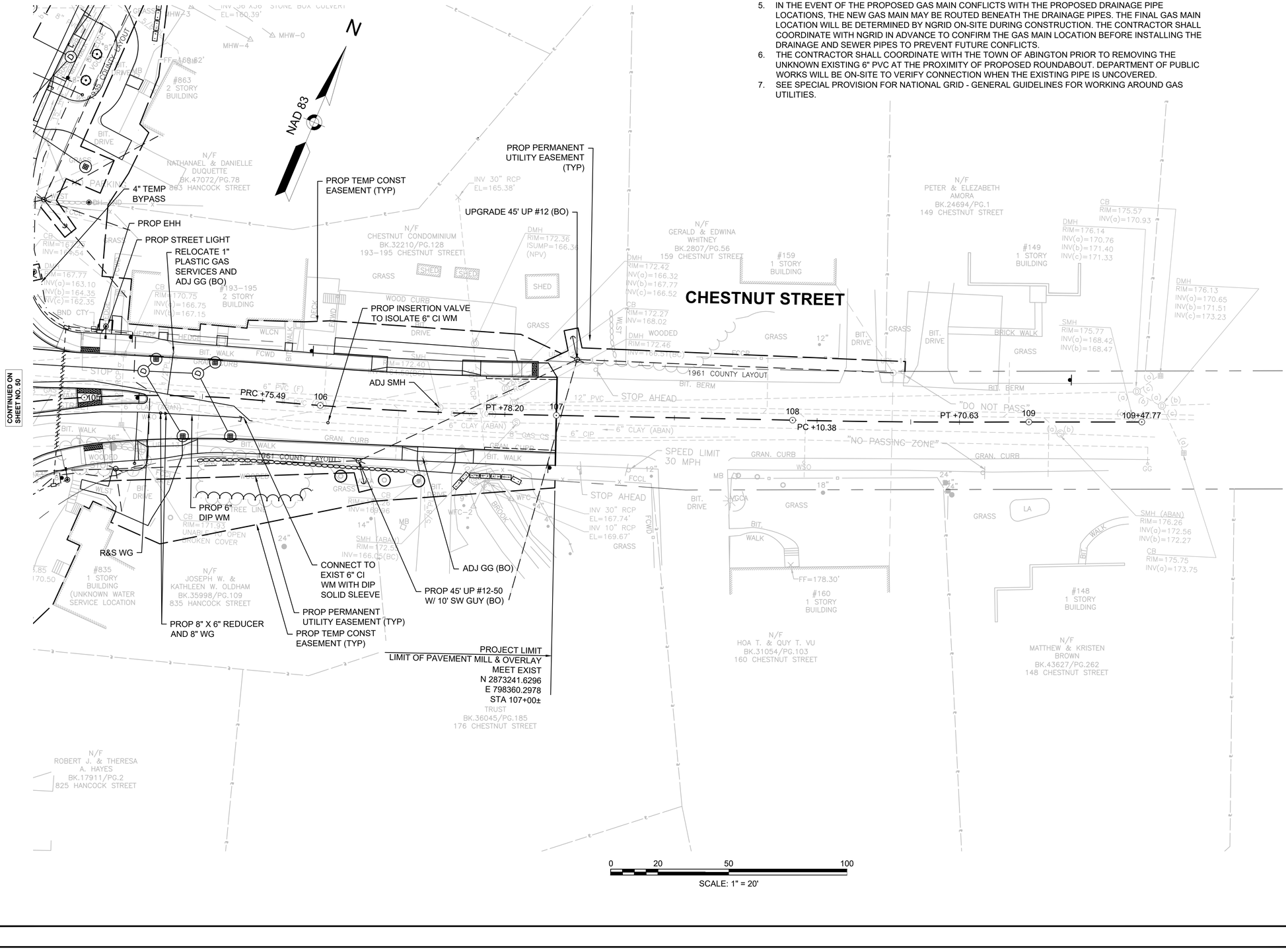
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ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	53	115
PROJECT FILE NO.	609440		

UTILITY PLANS - 05



609440_UT.DWG Plotted on 21-Apr-2026 5:43 PM

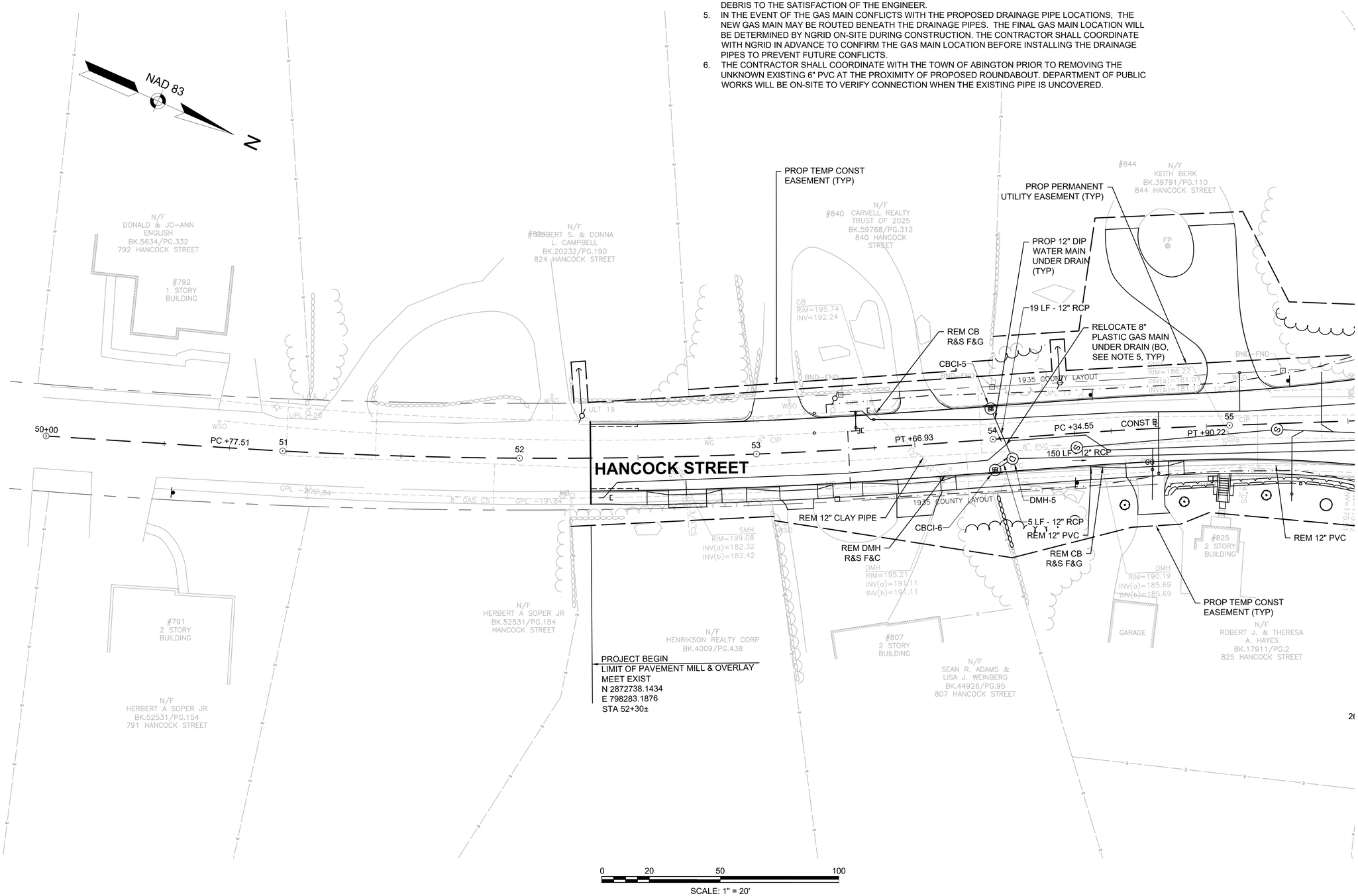
ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	54	115
PROJECT FILE NO.	609440		

DRAINAGE PLANS - 01

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CONTINUED ON SHEET NO. 55

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ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	55	115
PROJECT FILE NO.	609440		

DRAINAGE PLANS - 02

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CONTINUED ON SHEET NO. 57

NAD 83 N

SEANNA M. & BRIAN J. O'DONNELL & CHRISTOPHER F. MURPHY BK.44021/PG.199 200 CHESTNUT STREET

PROP PERMANENT UTILITY EASEMENT (TYP)

STA 103+69.59 CHESTNUT STREET ℄= STA 6+37.73 ROUNDABOUT ℄

PROP TEMP CONST EASEMENT (TYP)

PROP PERMANENT UTILITY EASEMENT (TYP)

STA 56+64.68 HANCOCK STREET ℄= STA 104+11.69 CHESTNUT STREET ℄

STA 56+22.62 HANCOCK STREET ℄= STA 7+10.65 ROUNDABOUT ℄

PC +55.55

1935 COUNTY LAYOUT

DMH-1

14 LF - 12" RCP

CB-1

CB-2

32 LF - 12" RCP

CONST ℄

N/F KEITH BERK BK.39791/PG.110 844 HANCOCK STREET #844

REM CB R&S F&G

25 LF - 12" DIP

PRC +88.40

REM 12" RCP

82 LF - 12" RCP

CBCI-7

N/F ABINGTON COUNTRY REAL ESTATE BK.41072/PG.278 863 HANCOCK STREET #863

PROP TEMP CONST EASEMENT (TYP)

PROP PERMANENT WALL EASEMENT

STA 57+06.74 HANCOCK STREET ℄= STA 5+71.02 ROUNDABOUT ℄

PROP 12" DIP WATER MAIN UNDER DRAIN (TYP)

REM CB R&S F&G

27 LF - 12" RCP

RELOCATE 4" PLASTIC GAS MAIN UNDER DRAIN (BO, SEE NOTE 5, TYP)

25 LF - 12" RCP

CB-3

#852 2 STORY BUILDING

DMH-8

DMH-9

CB-6

REM CB R&S F&G

1935 COUNTY LAYOUT

RELOCATE 8" PLASTIC GAS MAIN UNDER DRAIN (BO, SEE NOTE 5, TYP)

19 LF - 12" RCP

PROP 12" DIP WATER MAIN UNDER DRAIN (TYP)

REM CB R&S F&G

CBCI-5

CONST ℄

PT +90.22

56

PC +09.25

REM 12" RCP

62 LF - 12" RCP

REM CB R&S F&G

REM 12" RCP

PT +17.26

57

REM EXIST 6" PVC (SEE NOTE 6)

PRC +39.60

106 LF - 12" DIP

DMH-2

58 LF - 12" RCP

PC +90.33

58

REM 15" RCP

REM 12" RCP

REM CB R&S F&G

RELOCATE 4" PLASTIC GAS MAIN UNDER CULVERT (BO)

5 LF - 12" DIP

CBCI-9

CONST ℄

59

PC +34.55

150 LF - 12" RCP

54

PT +66.93

CBCI-8

REM 12" PVC

DMH-7

REM CB R&S F&G

DMH-6

3 LF - 12" RCP (CONTROLLED LOW-STRENGTH MATERIAL FOR BACKFILL)

REM CB R&S F&G

REM 12" PVC

DMH-5

5 LF - 12" RCP

CBCI-6

REM 12" CLAY PIPE

REM DMH R&S F&C

PROP TEMP CONST EASEMENT (TYP)

PROP 12" DIP WATER MAIN UNDER DRAIN (TYP)

STA 104+53.86 CHESTNUT STREET ℄= STA 5+20.15 ROUNDABOUT ℄

N/F UNKNOWN WATER SERVICE LOCATION

N/F ROBERT J. & THERESA A. HAYES BK.17911/PG.2 825 HANCOCK STREET

CUT, CAP, AND PURGE EXIST GAS (BO, TYP)

PROP PERMANENT UTILITY EASEMENT (TYP)

REM DMH R&S F&C

REM CB R&S F&G

92 LF - 12" RCP

26 LF - 12" RCP

DMH-3

CB-7

21 LF - 12" RCP

CBCI-4

22 LF - 12" RCP

DMH-4

PRC +75.49

106

16 LF - 12" RCP

CB-4

REM DMH R&S F&C

CB-5

REM 12" RCP

92 LF - 12" DIP

REM CB R&S F&G

REM 12" RCP

CBCI-1

5 LF - 12" RCP (CONTROLLED LOW-STRENGTH MATERIAL FOR BACKFILL)

6 LF - 12" RCP

CBCI-2

CUT, CAP, AND PURGE EXIST GAS (BO, TYP)

RELOCATE 4" PLASTIC GAS MAIN UNDER DRAIN (BO, SEE NOTE 5, TYP)

CUT, CAP, AND PURGE EXIST GAS (BO, TYP)

RELOCATE 4" PLASTIC GAS MAIN UNDER DRAIN (BO, SEE NOTE 5, TYP)

PROP TEMP CONST EASEMENT (TYP)

N/F NATHANIEL & DANIELLE DUQUETTE BK.41072/PG.278 863 HANCOCK STREET

#863 2 STORY BUILDING

INV 36"X36" STONE BOX CULVERT EL=160.29

DMH-10

PROP PERMANENT UTILITY EASEMENT (TYP)

9 LF - 15" RCP CONNECT TO EXIST. 15" PIPE

DMH-11

5 LF - 12" DIP (CONTROLLED LOW-STRENGTH MATERIAL FOR BACKFILL)

15 LF - 12" RCP

CBCI-10

DMH-12

LIMIT OF PAVEMENT MILL & OVERLAY

PROJECT END MEET EXIST N 2873451.3107 E 798123.3189 STA 59+90±

N/F FAMILY TRUST

#807 2 STORY BUILDING

N/F SEAN R. ADAMS & LISA J. WEINBERG BK.44926/PG.95 807 HANCOCK STREET

N/F JOSEPH W. & KATHLEEN W. OLDHAM BK.35998/PG.109 835 HANCOCK STREET

0 20 50 100

SCALE: 1" = 20'

CONTINUED ON SHEET NO. 54

CONTINUED ON SHEET NO. 58

CONTINUED ON SHEET NO. 56

609440_UT_DRAIN.DWG Plotted on 22-Apr-2026 3:25 PM

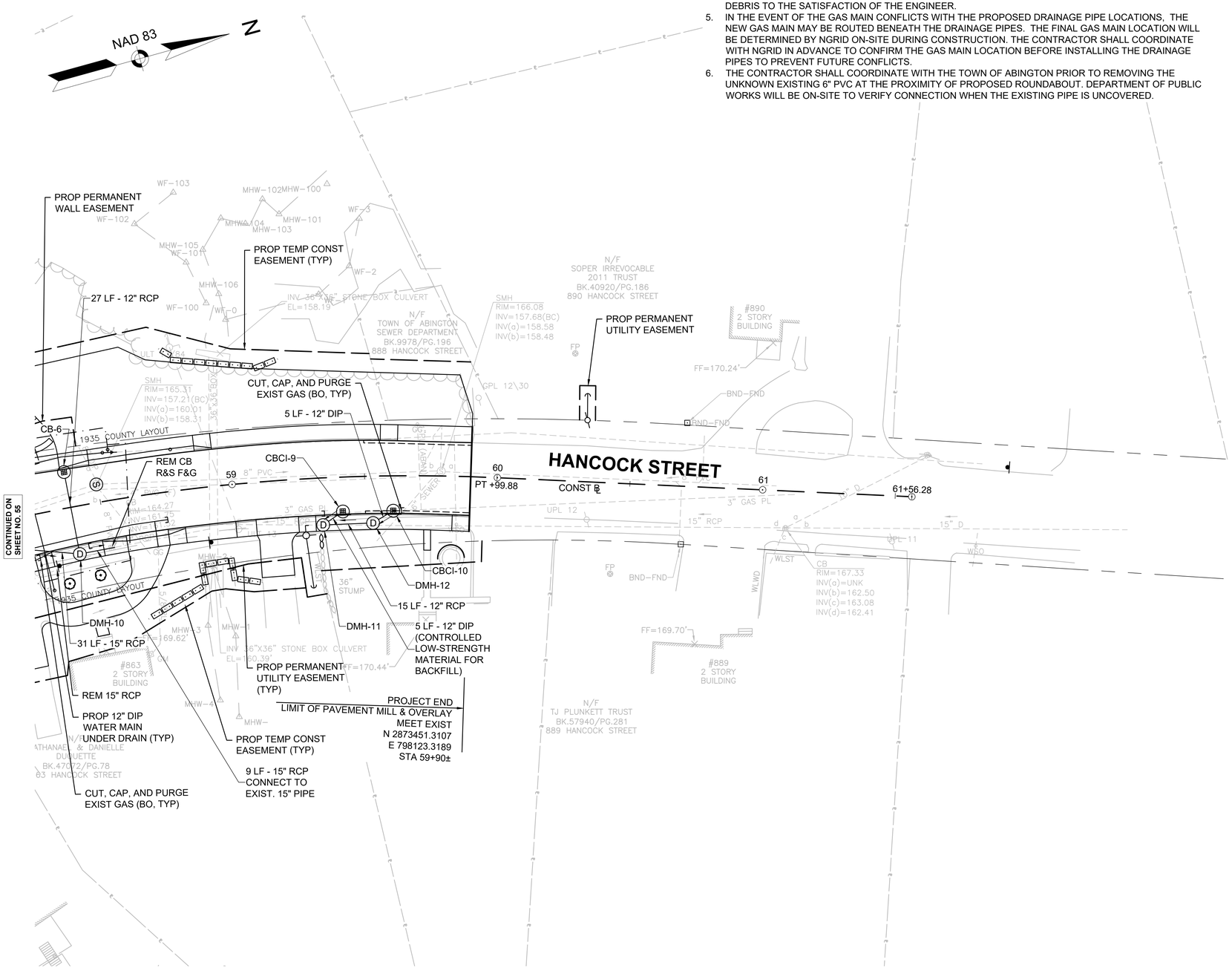
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	56	115
PROJECT FILE NO.	609440		

DRAINAGE PLANS - 03

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609440_UT_DRAIN.DWG Plotted on 22-Apr-2026 3:25 PM

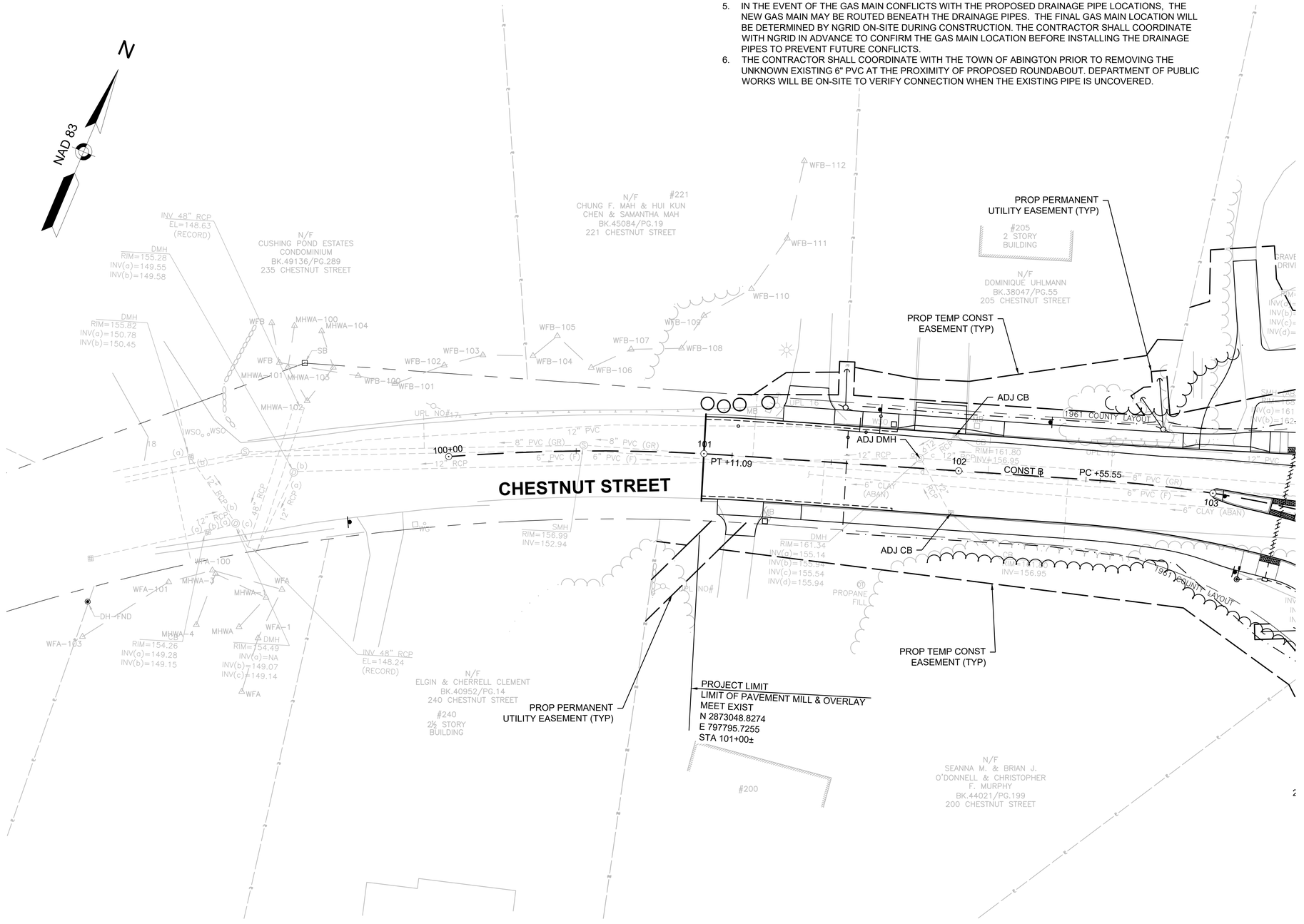
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	57	115
PROJECT FILE NO.	609440		

DRAINAGE PLANS - 04

NOTES:

1. ALL STATIONS AND OFFSETS ARE MEASURED AT THE CENTER OF STRUCTURES.
2. ALL RIM AND INVERT INFORMATION IS BASED OFF TOPOGRAPHIC SURVEY. CONTRACTOR TO FIELD VERIFY ALL INFORMATION AND REPORT ANY INCONSISTENCIES TO THE ENGINEER FOR RESOLUTION.
3. SANITARY STRUCTURES (SMH) BOLTED OR SEALED SHUT SHALL BE REPORTED TO THE TOWN PRIOR TO REMOVING THE COVERS AS NEEDED TO PERFORM ADJACENT ROADWAY WORK.
4. ALL DRAINAGE STRUCTURES AND PIPES PROPOSED TO BE RETAINED AND/OR UTILIZED WITHIN THE PROJECT LIMITS AND AS DIRECTED BY THE ENGINEER SHALL BE CLEANED OF ALL SEDIMENT AND DEBRIS TO THE SATISFACTION OF THE ENGINEER.
5. IN THE EVENT OF THE GAS MAIN CONFLICTS WITH THE PROPOSED DRAINAGE PIPE LOCATIONS, THE NEW GAS MAIN MAY BE ROUTED BENEATH THE DRAINAGE PIPES. THE FINAL GAS MAIN LOCATION WILL BE DETERMINED BY NGRID ON-SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH NGRID IN ADVANCE TO CONFIRM THE GAS MAIN LOCATION BEFORE INSTALLING THE DRAINAGE PIPES TO PREVENT FUTURE CONFLICTS.
6. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN OF ABINGTON PRIOR TO REMOVING THE UNKNOWN EXISTING 6" PVC AT THE PROXIMITY OF PROPOSED ROUNDABOUT. DEPARTMENT OF PUBLIC WORKS WILL BE ON-SITE TO VERIFY CONNECTION WHEN THE EXISTING PIPE IS UNCOVERED.



0 20 50 100

SCALE: 1" = 20'

609440_UT_DRAIN.DWG Plotted on 22-Apr-2026 3:26 PM

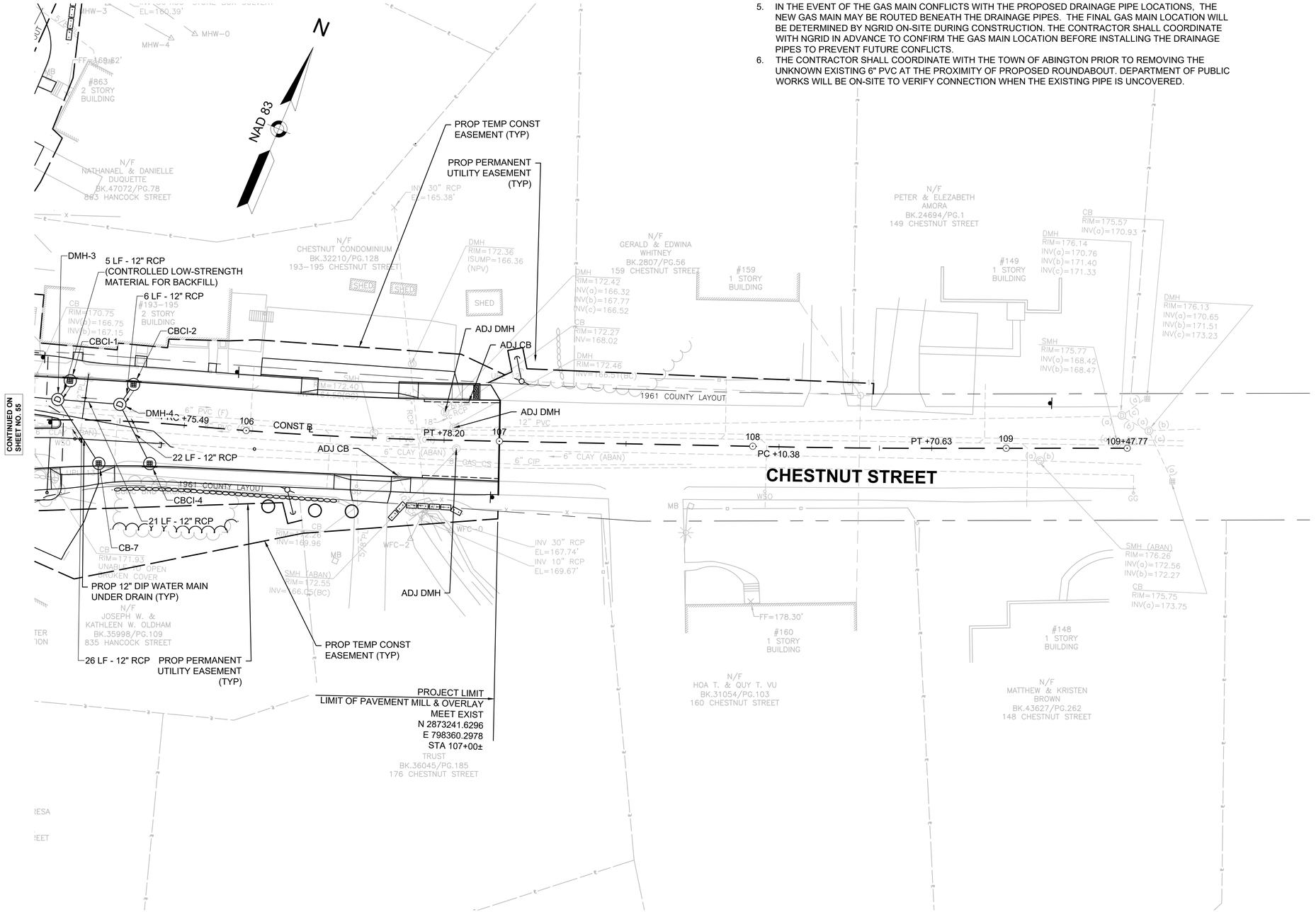
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	58	115
PROJECT FILE NO.	609440		

DRAINAGE PLANS - 05

NOTES:

1. ALL STATIONS AND OFFSETS ARE MEASURED AT THE CENTER OF STRUCTURES.
2. ALL RIM AND INVERT INFORMATION IS BASED OFF TOPOGRAPHIC SURVEY. CONTRACTOR TO FIELD VERIFY ALL INFORMATION AND REPORT ANY INCONSISTENCIES TO THE ENGINEER FOR RESOLUTION.
3. SANITARY STRUCTURES (SMH) BOLTED OR SEALED SHUT SHALL BE REPORTED TO THE TOWN PRIOR TO REMOVING THE COVERS AS NEEDED TO PERFORM ADJACENT ROADWAY WORK.
4. ALL DRAINAGE STRUCTURES AND PIPES PROPOSED TO BE RETAINED AND/OR UTILIZED WITHIN THE PROJECT LIMITS AND AS DIRECTED BY THE ENGINEER SHALL BE CLEANED OF ALL SEDIMENT AND DEBRIS TO THE SATISFACTION OF THE ENGINEER.
5. IN THE EVENT OF THE GAS MAIN CONFLICTS WITH THE PROPOSED DRAINAGE PIPE LOCATIONS, THE NEW GAS MAIN MAY BE ROUTED BENEATH THE DRAINAGE PIPES. THE FINAL GAS MAIN LOCATION WILL BE DETERMINED BY NGRID ON-SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH NGRID IN ADVANCE TO CONFIRM THE GAS MAIN LOCATION BEFORE INSTALLING THE DRAINAGE PIPES TO PREVENT FUTURE CONFLICTS.
6. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN OF ABINGTON PRIOR TO REMOVING THE UNKNOWN EXISTING 6" PVC AT THE PROXIMITY OF PROPOSED ROUNDABOUT. DEPARTMENT OF PUBLIC WORKS WILL BE ON-SITE TO VERIFY CONNECTION WHEN THE EXISTING PIPE IS UNCOVERED.



0 20 50 100

SCALE: 1" = 20'

609440_UT_DRAIN.DWG Plotted on 22-Apr-2026 3:26 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	59	115
PROJECT FILE NO.	609440		

DRAINAGE PLANS - 06

609440_UT_DRAIN.DWG Plotted on 22-Apr-2026 3:27 PM

DRAINAGE STRUCTURE TABLE

NAME/TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
CB-1	103+49.76	23.8 RT	171.43		I=166.59' (DMH-1)	EX-CB
CB-2	103+47.74	25.6 LT	170.50		I=166.20' (DMH-1)	EX-CB
CB-3	57+34.01	18.9 LT	170.38		I=166.15' (DMH-8)	CB
CB-4	57+47.24	28.2 RT	169.96		I=166.10' (DMH-8)	CB
CB-5	57+98	44.0 RT	166.40		I=163.50' (DMH-9)	CB
CB-6	58+38.56	13.5 LT	166.47		I=162.30' (DMH-10)	CB
CB-7	105+42.12	17.0 RT	171.43		I=167.20' (DMH-3)	CB
CBCI-1	105+30.35	15.4 LT	171.33		I=167.00' (DMH-3)	CB
CBCI-2	105+54.63	14.6 LT	171.50		I=167.10' (DMH-4)	CB
CBCI-4	105+62.88	16.2 RT	171.51		I=167.30' (DMH-4)	CB
CBCI-5	53+99.99	13.0 LT	192.14		I=186.95' (DMH-5)	CB
CBCI-6	53+99.98	13.0 RT	192.14		I=186.80' (DMH-5)	CB
CBCI-7	55+59.51	16.9 LT	177.90		I=174.40' (DMH-6)	CB
CBCI-8	55+56.25	17.7 RT	178.10		I=173.20' (DMH-6)	CB
CBCI-9	59+41.32	13.0 RT	165.39		I=162.00' (DMH-11)	CB
CBCI-10	59+60.68	13.1 RT	165.49		I=162.10' (DMH-12)	CB
DMH-1	103+37.95	10.6 LT	170.30	I=163.30' (DMH-2) I=165.10' (CB-1) I=165.10' (CB-2)	I=159.26' (EX-DMH 3)	DMH
DMH-2	104+32.04	25.5 LT	172.43	I=164.45' (DMH-3)	I=164.35' (DMH-1)	DMH
DMH-3	105+25.55	8.0 LT	171.56	I=166.90' (CB-7) I=166.70' (DMH-4) I=166.90' (CBCI-1)	I=166.60' (DMH-2)	DMH
DMH-4	105+49.73	6.5 LT	171.65	I=167.00' (CBCI-2) I=167.00' (CBCI-4)	I=166.90' (DMH-3)	DMH

DRAINAGE STRUCTURE TABLE

NAME/TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
DMH-5	54+07.65	8.8 RT	191.52	I=186.70' (CBCI-5) I=186.70' (CBCI-6)	I=186.60' (DMH-6)	DMH
DMH-6	55+61.51	12.5 RT	177.87	I=173.00' (DMH-5) I=174.10' (CBCI-7) I=173.10' (CBCI-8)	I=172.90' (DMH-7)	DMH
DMH-7	56+25.19	36.4 RT	174.35	I=169.65' (DMH-6)	I=168.50' (DMH-8)	DMH
DMH-8	57+42.42	8.6 RT	170.33	I=166.00' (CB-3) I=166.00' (CB-4) I=165.90' (DMH-7)	I=165.80' (DMH-9)	DMH
DMH-9	58+04.26	7.7 RT	167.76	I=163.05' (DMH-8) I=163.15' (CB-5)	I=162.30' (DMH-10)	DMH
DMH-10	58+38.78	17.9 RT	166.98	I=162.00' (DMH-9) I=162.00' (CB-6)	I=161.70' (15" RCP)	DMH
DMH-11	59+33.54	17.7 RT	165.90	I=161.90' (CBCI-9) I=160.79' (DMH-12)	I=160.71' (CULVERT)	DMH
DMH-12	59+52.84	17.6 RT	165.95	I=162.00' (CBCI-10) I=160.90' (EX-DMH 7)	I=160.86' (DMH-11)	DMH

ABINGTON
CHESTNUT ST/NORTH QUINCY ST
INTERSECTION IMPROVEMENTS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	60	115
	PROJECT FILE NO.	609440	

LIGHTING PLAN

POLE HEIGHT
POLE NO.
VOLTAGE/PHASE
LAMP TYPE
ARM TYPE
STATION

12	16	IV
120/1Ø		1
LED		9236
BISHOP		
120+122		
120+122		

DISTRIBUTION
CKT NUMBER
LUMEN
OFFSET

609440_HDLIGHTING.DWG Plotted on 12-Jan-2026 6:32 PM

SEANNA M. & BRIAN J. O'DONNELL & CHRISTOPHER F. MURPHY BK.44021/PG.199 200 CHESTNUT STREET

CHESTNUT STREET

PROP FULL DEPTH PAVEMENT RECONSTRUCTION

PC +55.55

1961 COUNTY LAYOUT

METAL GUIDERAIL

2@3"C CONCRETE ENCASED SEE TRENCH ASPHALT DETAIL ON SHEET 63 FOR ALL PAVEMENT CROSSINGS (TYP)

PROP. LIGHTING HANDHOLE (TYP)

3	18	IV
120/1Ø		1
LED		9236
BISHOP		
103 + 17		
31 R		

3"C, 4#6, 1#6G LC1-1,2

PROP SERVICE CONNECTION FROM UP #15 TO LIGHTING LOAD CENTER

PROP UP #15

2-3"C, 3#1, 1#6G

LIGHTING CONTROL CABINET

3"C, 8#6, 1#6G LC1-1,2,5,6

1	18	IV
120/1Ø		1
LED		9236
BISHOP		
55 + 92		
34 L		

2	18	IV
120/1Ø		2
LED		9236
BISHOP)		
103 + 70		
37 R		

3"C, 4#6, 1#6G LC1-1,2

3"C, 4#6, 1#6G LC1-1,2

4	18	IV
120/1Ø		2
LED		9236
BISHOP		
103 + 40		
36 L		

5	18	IV
120/1Ø		1
LED		9236
BISHOP		
103 + 66		
54 L		

PROP UP (TYP)

3"C, 2#6, 1#6G LC1-2

6	18	IV
120/1Ø		2
LED		9236
BISHOP		
57 + 65		
28 L		

N/F KEITH BERK #844 BK.39791/PG.110 844 HANCOCK STREET

N/F ABINGTON COUNTRY REAL ESTATE, LLC BK.35340/PG.282 852 HANCOCK STREET

GRAVEL DRIVE

#852 2 STORY BUILDING

PROP UP #16

3"C, 8#6, 1#6G LC1-1,2,5,6

PC +09.25

2"C, 2#10, 1#10G (TYPICAL FROM HH TO LP)

PC +90.33

PT +17.26

1935 COUNTY LAYOUT

HANCOCK STREET

HANCOCK STREET

PT +66.93

PC +34.55

PT +90.22

1935 COUNTY LAYOUT

2@3"C CONCRETE ENCASED SEE TRENCH ASPHALT DETAIL ON SHEET 63 FOR ALL PAVEMENT CROSSINGS (TYP)

11	18	IV
120/1Ø		5
LED		9236
BISHOP		
55 + 67		
30 R		

3"C, 4#6, 1#6G LC1-5,6

10	18	IV
120/1Ø		6
LED		9236
BISHOP		
104 + 47		
35 R		

3"C, 4#6, 1#6G LC1-5,6

9	18	IV
120/1Ø		5
LED		9236
BISHOP		
105 + 1		
35 R		

2@3"C, 4#6, 1#6G (1-SPARE) LC1-5,6

2"C, 2#10, 1#10G (TYPICAL FROM HH TO LP)

7	18	IV
120/1Ø		5
LED		9236
BISHOP		
57 + 31		
42 L		

3"C, 2#6, 1#6G LC1-5

8	18	IV
120/1Ø		6
LED		9236
BISHOP		
105 + 2		
30 L		

2@3"C CONCRETE ENCASED SEE TRENCH ASPHALT DETAIL ON SHEET 63 FOR ALL PAVEMENT CROSSINGS (TYP)

PRC +75.49

N/F L REALTY OF 2025 58/PG.312 HANCOCK REET

#807 2 STORY BUILDING

N/F SEAN R. ADAMS & LISA J. WEINBERG

#825 2 STORY BUILDING

N/F ROBERT J. & THERESA A. HAYES BK.17911/PG.2 825 HANCOCK STREET

GARAGE

#835 1 STORY BUILDING (UNKNOWN SERVICE LOC

KATHLEEN W. OLDHAM BK.35998/PG.109 835 HANCOCK STREET

#863 2 STORY BUILDING

N/F NATHANAEL & DANIELLE DUQUETTE BK.47072/PG.78 863 HANCOCK STREET

#193-195 2 STORY BUILDING

DECK

#875 2 STORY BUILDING

N/F PECKHAM FAMILY IRREVOCABLE TRUST BK.51914/PG.165 875 HANCOCK STREET

36" STUMP

MHW-0 MHW-1 MHW-2 MHW-3 MHW-4 MHW-100 MHW-101 MHW-102 MHW-103 MHW-104 MHW-105 MHW-106

WF-0 WF-1 WF-2 WF-3 WF-100 WF-101 WF-102 WF-103

N/F TOWN OF A SEWER DEF BK.9978/ 888 HANCOC

N/F TJ PLUNKE BK.5794C

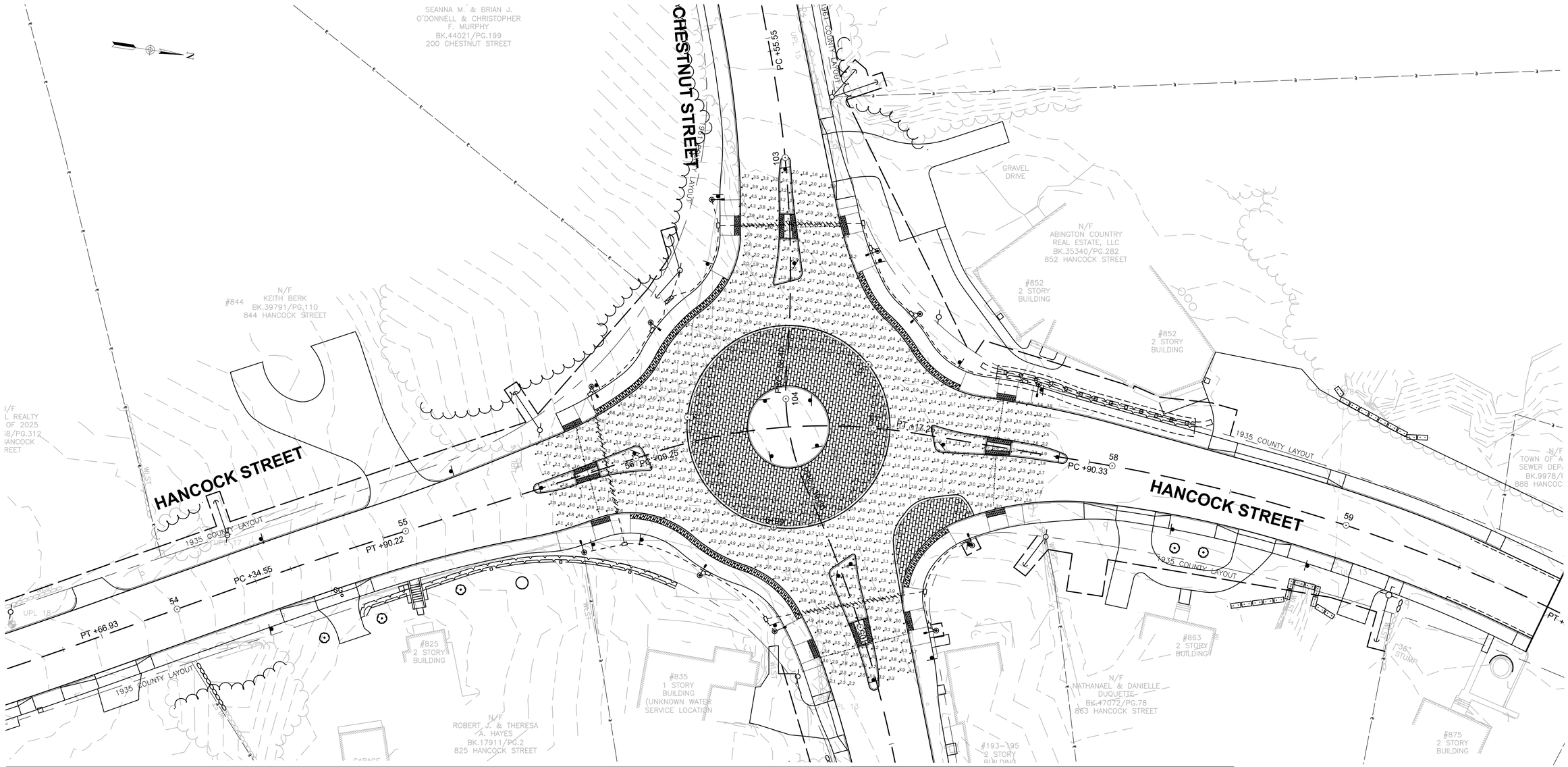
0 20 50 100

SCALE: 1" = 20'

ABINGTON
CHESTNUT ST/NORTH QUINCY ST
INTERSECTION IMPROVEMENTS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	61	115
	PROJECT FILE NO. 609440		

LIGHTING PHOTOMETRIC



Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
○	A		11	AMERLUX LLC	DPM-xD.3M.T4.30.600M	Formed black aluminum housing, clear on board optic enclos ure	1	9236	0.85	70

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
CHESTNUT N 2 CROSSWALK	+	3.4 fc	6.5 fc	1.6 fc	4.1:1	2.1:1
CHESTNUT N 1 CROSSWALK	+	4.3 fc	7.9 fc	2.1 fc	3.8:1	2.0:1
CHESTNUT S 1 CROSSWALK	+	4.6 fc	8.1 fc	1.9 fc	4.3:1	2.4:1
CHESTNUT S 2 CROSSWALK	+	4.3 fc	8.0 fc	2.1 fc	3.8:1	2.0:1
HANCOCK E 1 CROSSWALK	+	3.4 fc	5.9 fc	1.3 fc	4.5:1	2.6:1
HANCOCK E 2 CROSSWALK	+	4.6 fc	8.4 fc	2.2 fc	3.8:1	2.1:1
HANCOCK W 1 CROSSWALK	+	4.1 fc	6.5 fc	2.2 fc	3.0:1	1.9:1
HANCOCK W 2 CROSSWALK	+	4.5 fc	7.6 fc	2.1 fc	3.6:1	2.1:1
ROTARY	+	2.5 fc	5.4 fc	0.7 fc	7.7:1	3.6:1

0 20 50 100
SCALE: 1" = 20'

609440_HDL(LIGHTING).DWG Plotted on 12-Jan-2026 6:42 PM

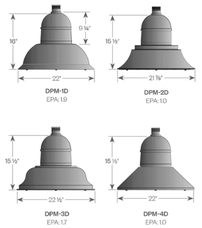
DPM

Downlight Pendant-Medium
22" LED Luminate



PROJECT:

TYPE:



5 year limited warranty · Powder Coated Tough · Certain Restrictions Apply

amerlux
A Delta Group Company

Downlight Pendant-Medium 22"

Features

Improved performance, directional control, and efficacy allows this newest generation of the DPM to accommodate needs in the strictest environments. Multiple shade styles make this luminaire suitable for a wide variety of decorative applications, and the improved optics allow it to be used where Dark Sky luminaire requirements are in place.

Product Overview

Wattage:	43W, 49W, 63W, 70W, 79W, 92W
Lumen Output :	13,626 lm (92W, T3, 4000K)
Color Temp:	3000K*, 4000K
Dimming:	0-10V dimming

*IDA Dark Sky approved in 3000K only

Installation:
The luminaire will mount to the bracket. Post top luminaire brackets will mount to a 4" OD post or tenon with (6) 5/16" stainless steel set screws. Wall bracket models have four 3/8" holes for mounting (wall mount hardware is not included).

Construction:
- Cast aluminum housing
- Spun aluminum shade

Optics:
The luminaire utilizes IP66 sealed optical modules consisting of a high performance LED board with an acrylic (TIR) lens to deliver maximum spacing and uniformity. A choice of Type II, Type III, Type IV, or Type V, IES distributions are available with the scalability to meet application criteria. Custom configurations available.

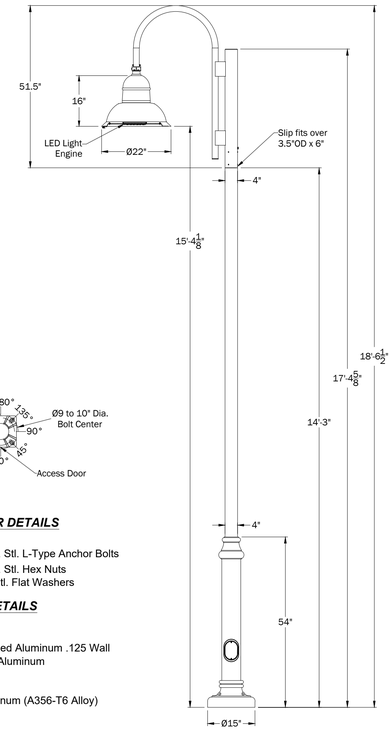
Driver:
Convection cooled driver with electronic constant current operation with over voltage and short circuit protection. Automatic voltage sensing for 120V to 277V input, 0-10V dimming.

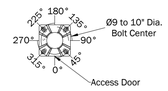
Finish:
Durable thermoset polyester powder coat finish in the following:
- Satin Black (**BLK**)
- Classic Bronze (**CLB**)
- Gloss Textured Bronze (**GBZ**)
- Green (**GRN**)
- Gloss Textured Black (**GTB**)
- Textured Black (**TBK**)
- Gloss Textured Green (**TGR**)

Accessories
- Backlight Shield
- Wireless control option

ETL listed, suitable for wet locations.

Amerlux reserves the right to change details that do not affect overall function and performance.
Amerlux®, LLC - 178 Bauer Drive, Oakland, NJ 07436 - P: 973-882-5010 F: 973-882-2805 - amerlux.com





ANCHOR DETAILS

(4) ¾" Galv. Stl. L-Type Anchor Bolts
(8) ¾" Galv. Stl. Hex Nuts
(8) Galv. Stl. Flat Washers

POLE DETAILS

Shaft
Ø4" Extruded Aluminum .125 Wall
#6063-T6 Aluminum

Base
Cast Aluminum (A356-T6 Alloy)

amerlux
A brand of Delta

PART STRING
EDR-9214-AP7204-14'-3"-BLK-3.5"x6" TENON
EDR-9214-PT41R-3.5" I.D.-BLK
DPM-1D-3M-T5-30-600M-BLK

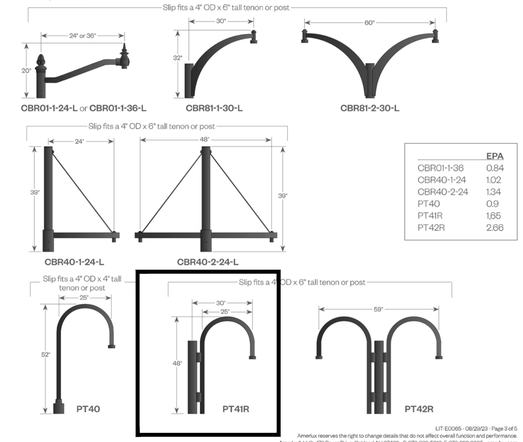
FINISH
- ● BLK Satin black
- ○ CLB Classic bronze
- ○ GBZ Gloss textured bronze
- ○ GRN Green
- ○ GTB Gloss textured black
- ○ TBK Textured black
- ○ CSTM Custom consult factory

POLYESTER POWDER COAT

VOLTAGE
- ○ 120
- ○ 208
- ○ 240
- ○ 277
- ○ 480
- ● 120-277V
- ○ [ ]

LIGHT SOURCE
- ● LED — 3000K-600mA
- ○ HPS
- ○ MH

Mounting Options



	EPA
CBR01-1-36	0.84
CBR40-1-24	1.02
CBR40-2-24	1.34
PT40	0.9
PT41R	1.85
PT42R	2.66

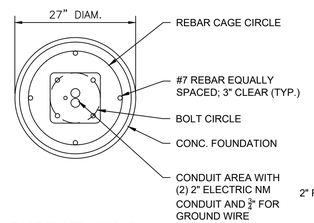
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ABINGTON
CHESTNUT ST/NORTH QUINCY ST
INTERSECTION IMPROVEMENTS

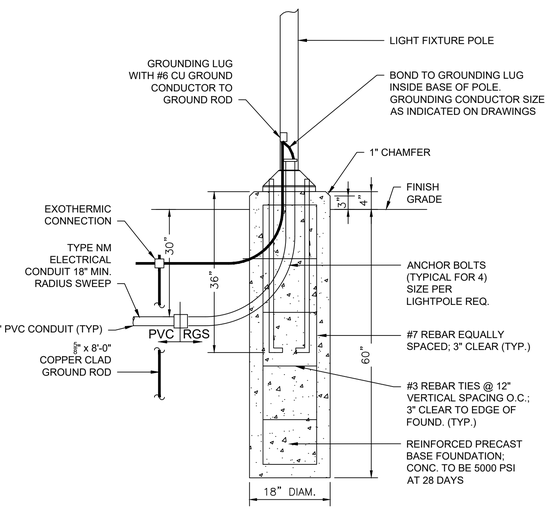
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	62	115
	PROJECT FILE NO.	609440	

LIGHTING DETAILS

609440_HDL(LIGHTING).DWG Plotted on 12-Jan-2026 6:46 PM



BASE PLATE LAYOUT

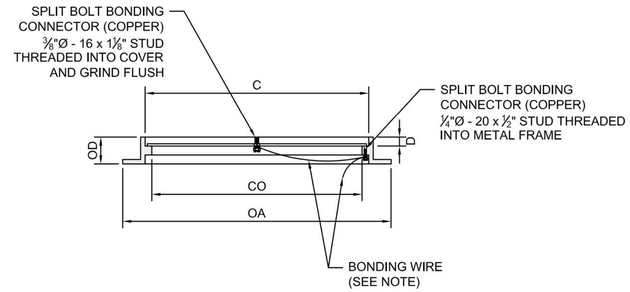


RAISED FOUNDATION

LIGHT POLE FOUNDATION NOTES:
1. BOLT PATTERN SHOWN IS TYPICAL AND NOT FOR CONSTRUCTION CONTRACTOR TO PROVIDE BOLT PATTERN DETAILS BASED ON SELECTED MANUFACTURER.
2. PROVIDE REBAR DETAIL FROM PRECAST CONCRETE VENDOR FOR APPROVAL.
3. CONDUIT LOCATIONS SHOWN ARE TYPICAL.

LIGHT POLE FOUNDATION DETAIL

NOT TO SCALE



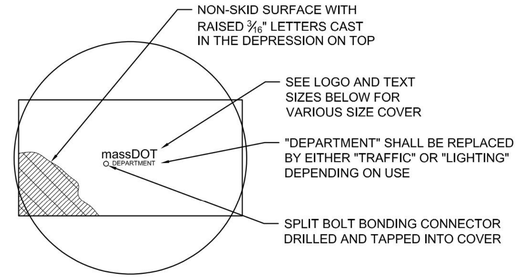
SIZE OF COVER	COVER DEPTH	OVERALL DEPTH	CLEAR OPENING	OVERALL	APPROX. WEIGHT	STANDARD DRAWING
C	D	OD	CO	OA	W	W
12" x 12"	1"	3½"	10½" x 10½"	17¼" x 17¼"	82 LB.	SD2-031
23" x 8"	1"	2½"	21½" x 6½"	28 ½" x 13 ¾"	106 LB.	SD2-030
24¾" x 12¾"	1½"	3"	24" x 12"	29¾" x 17¾"	159 LB.	SD2-022
24" x 24"	1"	3"	22" x 22"	28½" x 28½"	190 LB.	SD2-023
26"	1⅛"	8⅛"	24"	34"	475 LB.	SD2-024

NOTES:

ATTACH 3 FEET OF #8 CU BONDING WIRE FROM SPLIT BOLT BONDING CONNECTOR IN COVER AND FRAME. PROVIDE SUFFICIENT LENGTH OF #8 CU BONDING WIRE FROM SPLIT BOLT BONDING CONNECTOR IN FRAME TO THE HANDHOLE GROUND ROD AND EQUIPMENT GROUNDING CONDUCTOR FOR LIGHTING SYSTEM.

ELECTRIC HANDHOLE FRAME AND COVER DETAIL

N.T.S.



NOTES:

1. LOGO AND TEXT SHALL BE CENTERED WITHIN THE COVER.
2. LOGO AND TEXT SHALL BE RAISED 3/16" INCHES FROM THE COVER SURFACE.
3. LOGO AND TEXT SHALL BE ITALICIZED AND SHALL UTILIZE THE "ERAS DEMI" STYLE FONT.

SIZE OF COVER	MASSDOT LOGO	DEPARTMENT TEXT SIZE	STANDARD DRAWING
12" x 12"	9" WIDE x 1 5/16" HIGH	TRAFFIC: 4½" WIDE x ¾" HIGH LIGHTING: 5 ¼" WIDE x ¾" HIGH	SD2-031
23" x 8"	16½" WIDE x 2½" HIGH	TRAFFIC: 4½" WIDE x ¾" HIGH LIGHTING: 5 ¼" WIDE x ¾" HIGH	SD2-030
24"X 13"	16½" WIDE x 2½" HIGH	TRAFFIC: 6" WIDE x 1" HIGH LIGHTING: 7" WIDE x 1" HIGH	SD2-022
24" X 24"	16½" WIDE x 2½" HIGH	TRAFFIC: 6" WIDE x 1" HIGH LIGHTING: 7" WIDE x 1" HIGH	SD2-023
26"	16½" WIDE x 2½" HIGH	TRAFFIC: 6" WIDE x 1" HIGH LIGHTING: 7" WIDE x 1" HIGH	SD2-024

MASSDOT LOGO FOR ELECTRIC HANDHOLE

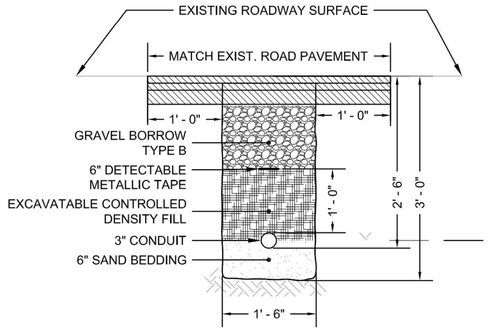
N.T.S.

ABINGTON
CHESTNUT ST/NORTH QUINCY ST
INTERSECTION IMPROVEMENTS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	63	115
PROJECT FILE NO.	609440		

LIGHTING DETAILS

609440_HDLIGHTING).DWG Plotted on 12-Jan-2026 6:46 PM

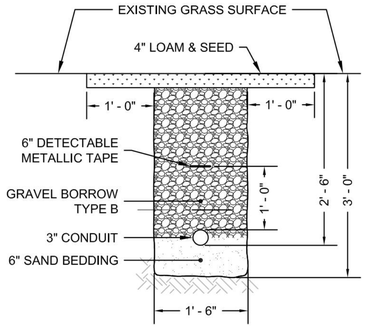


NOTES:

1. CONDUIT SHALL BE SCHEDULE 80 ELECTRICAL CONDUIT TYPE NM-PLASTIC (UL), WITH PULL ROPE.
2. CONTROL DENSITY FILL SHALL MEET THE REQUIREMENTS OF SUBSECTION M.4.08.0.
3. WARNING TAPE COLOR SHALL BE PER APWA STANDARDS.
4. WHEN 2-3" CONDUITS ARE SPECIFIED USE PLASTIC SPACERS 4' O.C. TO MAINTAIN A 3" CONDUIT SPACING.

CONDUIT CROSSING ROADWAY

NOT TO SCALE

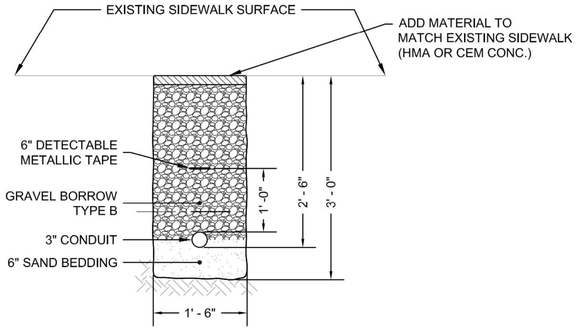


NOTES:

1. CONDUIT SHALL BE SCHEDULE 80 ELECTRICAL CONDUIT TYPE NM-PLASTIC (UL), WITH PULL ROPE.
2. WARNING TAPE COLOR SHALL BE PER APWA STANDARDS.
3. WHEN 2-3" CONDUITS ARE SPECIFIED USE PLASTIC SPACERS 4' O.C. TO MAINTAIN A 3" CONDUIT SPACING.

CONDUIT UNDER GRASS

NOT TO SCALE



NOTES:

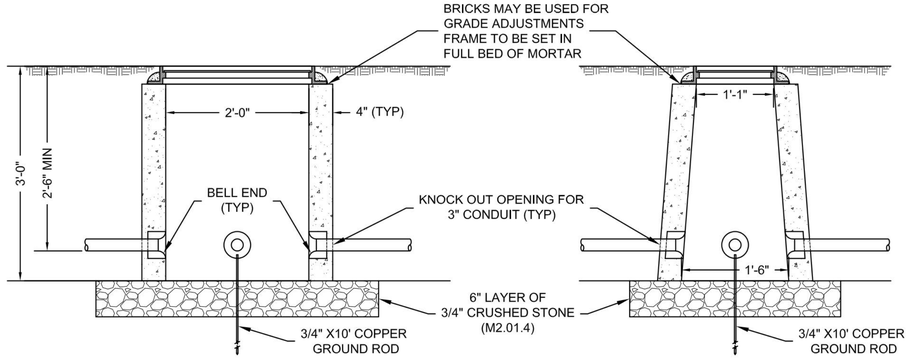
1. CONDUIT SHALL BE SCHEDULE 80 ELECTRICAL CONDUIT TYPE NM-PLASTIC (UL), WITH PULL ROPE.
2. WARNING TAPE COLOR SHALL BE PER APWA STANDARDS.
3. WHEN 2-3" CONDUITS ARE SPECIFIED USE PLASTIC SPACERS 4' O.C. TO MAINTAIN A 3" CONDUIT SPACING.

CONDUIT UNDER SIDEWALK

NOT TO SCALE

GENERAL NOTES:

1. A MINIMUM OF 12 INCHES OF SEPARATION IS REQUIRED FOR CROSSINGS WITH GAS, WATER, SEWER AND DRAINAGE.
2. CONDUITS SHALL BE BLOWN CLEAN USING COMPRESSED AIR. RUN MANDREL THRU EACH CONDUIT TO CONFIRM VIABLE PATHWAY.
3. WOVEN POLYESTER MULE TAPE WITH MINIMUM STRENGTH OF 2500 LB TENSILE STRENGTH TO BE INSTALLED WITHIN EACH CONDUIT.



24 IN X 13 IN X 36 IN ELECTRIC HANDHOLE (SD2-022)

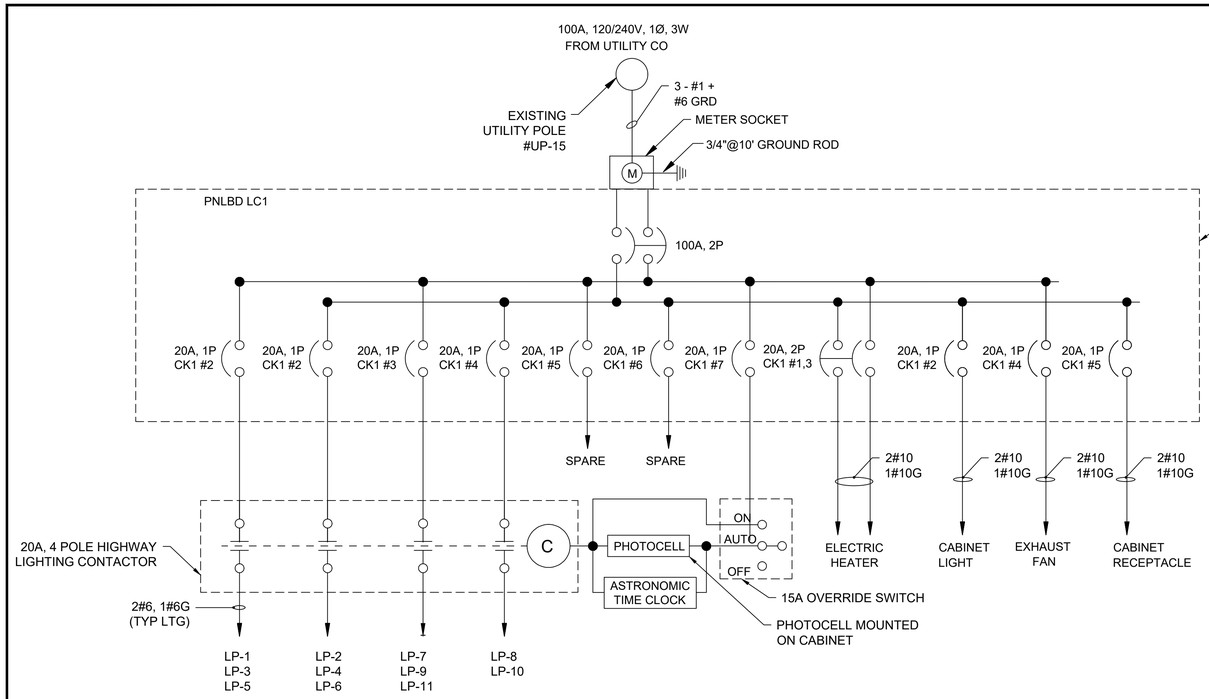
N.T.S.

ABINGTON
CHESTNUT ST/NORTH QUINCY ST
INTERSECTION IMPROVEMENTS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	64	115
PROJECT FILE NO.	609440		

LIGHTING DETAILS

609440_HD(LIGHTING).DWG Plotted on 9-Jan-2026 2:53 PM

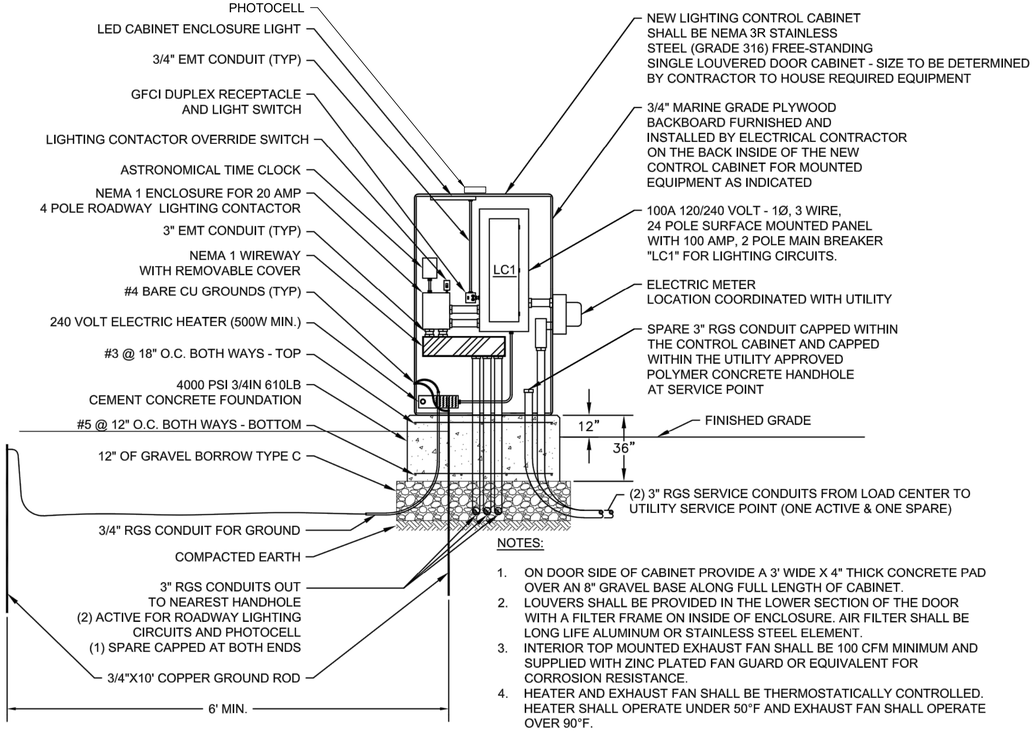


IMPORTANT NOTE:
NATIONAL GRID WO # 31109278
CONTRACTOR SHALL CONTACT NATIONAL GRID TO FURNISH AND INSTALL AN ELECTRIC SERVICE TO THE NEW LIGHTING CONTROL CABINET. CONTRACTOR SHALL COMPLETE ELECTRICAL SERVICE INSTALLATION FROM NATIONAL GRID UTILITY POLE. ALL WORK SHALL BE AN ACCORDANCE WITH NATIONAL GRID STANDARDS AND SPECIFICATIONS

ADDITIONAL NOTES:
1. CIRCUITS #13-24 ARE SPARE AND ARE NOT SHOWN FOR CLARITY.
2. ALL WIRES SHALL BE RATED FOR DIRECT BURIAL UTILIZING TYPE RHW-2 / USE-2 (COPPER) WITHIN THE CONDUIT SYSTEM TO PROVIDE INCREASED DURABILITY.

LIGHTING CONTROL CABINET WIRING DIAGRAM

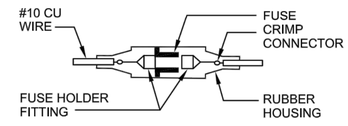
NOT TO SCALE



NOTES:
1. ON DOOR SIDE OF CABINET PROVIDE A 3' WIDE X 4" THICK CONCRETE PAD OVER AN 8" GRAVEL BASE ALONG FULL LENGTH OF CABINET.
2. LOUVERS SHALL BE PROVIDED IN THE LOWER SECTION OF THE DOOR WITH A FILTER FRAME ON INSIDE OF ENCLOSURE. AIR FILTER SHALL BE LONG LIFE ALUMINUM OR STAINLESS STEEL ELEMENT.
3. INTERIOR TOP MOUNTED EXHAUST FAN SHALL BE 100 CFM MINIMUM AND SUPPLIED WITH ZINC PLATED FAN GUARD OR EQUIVALENT FOR CORROSION RESISTANCE.
4. HEATER AND EXHAUST FAN SHALL BE THERMOSTATICALLY CONTROLLED. HEATER SHALL OPERATE UNDER 50°F AND EXHAUST FAN SHALL OPERATE OVER 90°F.

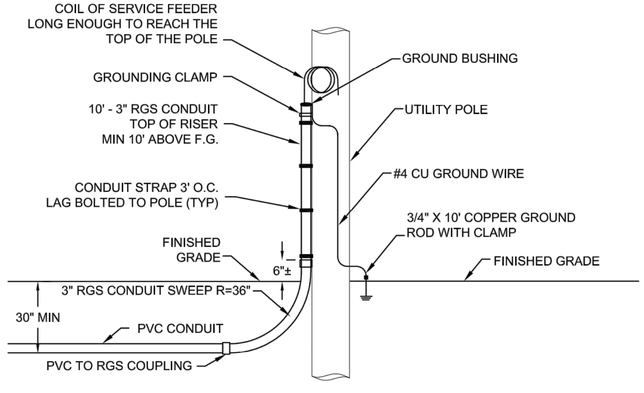
SINGLE PHASE HIGHWAY LIGHTING LOAD CENTER

NOT TO SCALE



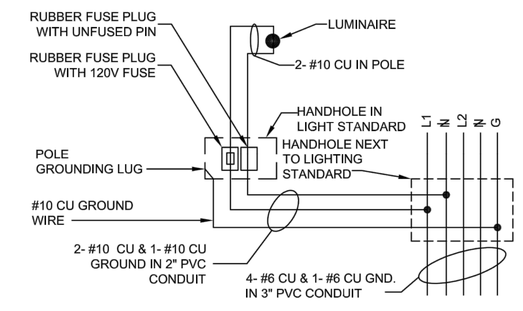
FUSE DETAIL FOR LUMINAIRE

NOT TO SCALE



SINGLE PHASE POLE RISER DETAIL

NOT TO SCALE



WIRING DIAGRAM FOR HIGHWAY LIGHTING LUMINAIRE

NOT TO SCALE

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

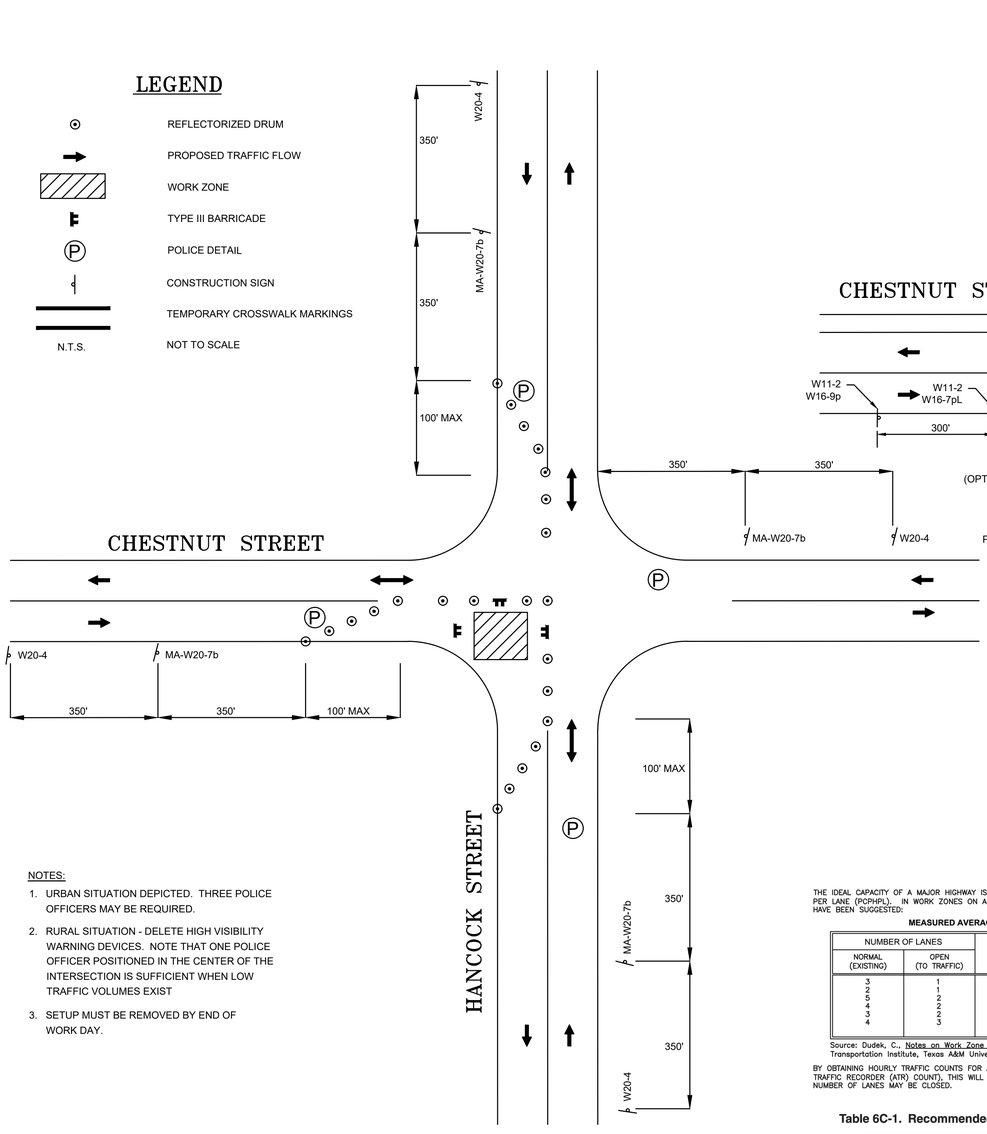
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	65	115
	PROJECT FILE NO.	609440	

TEMPORARY TRAFFIC CONTROL PLANS - 01

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 2:55 PM

LEGEND

- REFLECTORIZED DRUM
- PROPOSED TRAFFIC FLOW
- WORK ZONE
- TYPE III BARRICADE
- POLICE DETAIL
- CONSTRUCTION SIGN
- TEMPORARY CROSSWALK MARKINGS
- N.T.S. — NOT TO SCALE

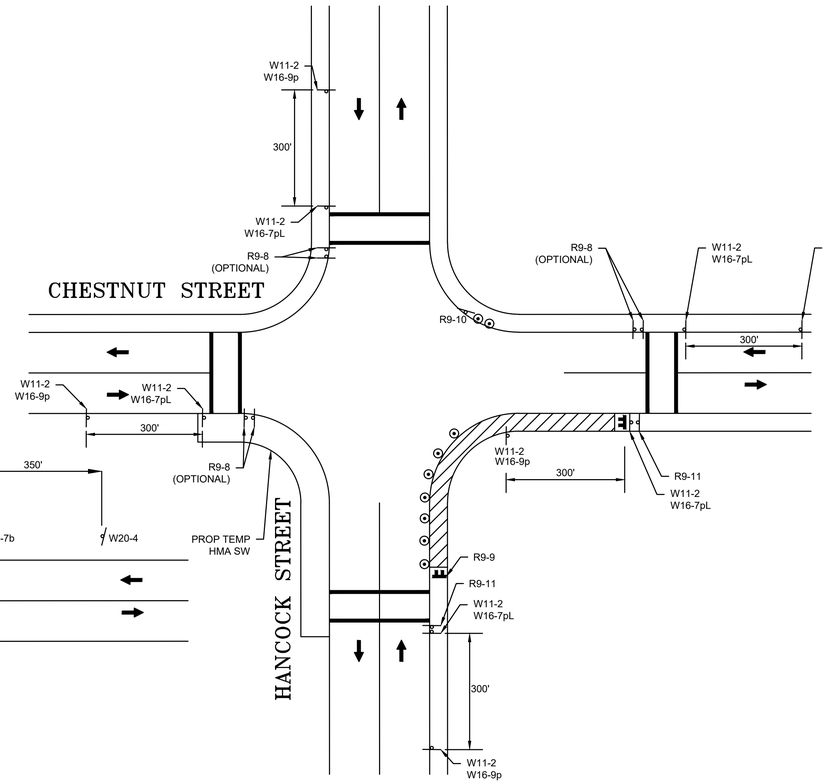


TYPICAL MOVABLE WORK AREA
"OPERATIONAL" (DAY-TO-DAY) PLAN

NOT TO SCALE

NOTES:

1. URBAN SITUATION DEPICTED. THREE POLICE OFFICERS MAY BE REQUIRED.
2. RURAL SITUATION - DELETE HIGH VISIBILITY WARNING DEVICES. NOTE THAT ONE POLICE OFFICER POSITIONED IN THE CENTER OF THE INTERSECTION IS SUFFICIENT WHEN LOW TRAFFIC VOLUMES EXIST
3. SETUP MUST BE REMOVED BY END OF WORK DAY.



PEDESTRIAN DETOUR PLAN

NOT TO SCALE

GENERAL NOTES

1. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL CONFORM WITH PART 6 OF THE LATEST EDITION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)
2. ALL DRUMS SHALL BE SET @ 25' O.C. MAX. UNLESS OTHERWISE NOTED OR ADJUSTED BY THE ENGINEER.
3. ALL DRUMS SHALL BE APPROPRIATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES. 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 WORK HOURS, TO MAINTAIN SUCH ACCESS.
4. ALL DISTANCE MAY BE ADJUSTED TO FIT FIELD CONDITIONS, AS DIRECTED BY THE TOWN AND/OR ENGINEER. HOWEVER MINIMUM DISTANCES, WHERE INDICATED SHALL BE MAINTAINED.
5. THE CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
6. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ABINGTON POLICE, FIRE, AND DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS IN ADVANCE OF LANE CLOSURES.
7. A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
8. DETOURS FOR ONE LANE CLOSURES FOR TRAVELWAY SURFACE RESTORATION WORK ONLY (I.E. PAVEMENT MILL AND OVERLAY). EXCEPTIONS MAY BE MADE FOR MAJOR INTERSECTION WORK, BUT MUST BE APPROVED IN WRITING BY THE RESIDENT ENGINEER AND COORDINATED WITH THE APPROPRIATE LOCAL AUTHORITIES.
9. GRADE SEPARATIONS IN EXCESS OF 2 INCHES DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF DRUMS.
10. EXCAVATION EDGES IN EXCESS OF 4 INCHES DEEP SHALL BE PROTECTED DURING NON-WORKING HOURS BY BACKFILLING WITH A WEDGE OF GRAVEL OR SOIL COMPACTED TO A 4:1 SLOPE.
11. REMOVE EXISTING PAVEMENT MARKINGS AND PROVIDE TEMPORARY PAVEMENT MARKINGS AS APPLICABLE TO EACH PHASE OF THE CONSTRUCTION AS DIRECTED BY THE TOWN AND/OR ENGINEER. 10' MINIMUM TRAVEL LANE WIDTHS SHALL BE PROVIDED DURING CONSTRUCTION.
12. NONESSENTIAL TEMPORARY CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED DURING NON-WORKING HOURS.
13. THE GENERAL SEQUENCE OF WORK IS DEPENDENT UPON THE REMOVAL AND RELOCATION OF THE EXISTING UTILITY POLES AND WIRES THAT ARE FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK, BY THE UTILITY COMPANIES. THE CONTRACTOR SHALL SCHEDULE THE WORK IN EACH AREA TO COORDINATE WITH THE POLE RELOCATION WORK.
14. ADVISORY SPEED PLATES (W13-1) SHALL BE USED IF APPROPRIATE AND AS DIRECTED BY THE ENGINEER.
15. ANY LANE CLOUSURE WORK MUST BE PERFORMED BETWEEN THE HOURS OF 9:00 AM - 3:30 PM ONLY, EXCEPTION FOR A SHORT PERIOD OF TIME AS APPROVED BY THE TOWN AND/OR ENGINEER. WORKING BEYOND THESE HOURS OR OVER THE WEEKEND MUST BE APPROVED BY THE TOWN AND/OR ENGINEER.
16. CEMENT CONCRETE BARRIERS TO BE USED AS NEEDED AND DIRECTED BY THE TOWN AND/OR ENGINEER.
17. ALL TEMPORARY TRAFFIC CONTROL WORK FOR SIDEWALK CLOSURE AND PEDESTRIAN DETOUR SHALL CONFORM TO THE LATEST EDITION OF THE MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS FIGURE PED-1 TO FIGURE PED-7.

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

MEASURED AVERAGE WORK ZONE CAPACITIES

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

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

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

Table 6C-1. Recommended Advance Warning Sign Minimum Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by the highway agency
** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

SOURCE: TABLE 6C-1 2009 MUTCD

Table 6C-2. Stopping Sight Distance as a Function of Speed

Speed*	Distance
20 mph	115 feet
25 mph	155 feet
30 mph	200 feet
35 mph	250 feet
40 mph	305 feet
45 mph	360 feet
50 mph	425 feet
55 mph	495 feet
60 mph	570 feet
65 mph	645 feet
70 mph	730 feet
75 mph	820 feet

* Posted speed, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed

SOURCE: TABLE 6C-2 2009 MUTCD

Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length
Merging Taper	at least L
Shifting Taper	at least 0.5 L
Shoulder Taper	at least 0.33 L
One-Lane, Two-Way Traffic Taper	50 feet minimum, 100 feet maximum
Downstream Taper	50 feet minimum, 100 feet maximum

Note: Use Table 6C-4 to calculate L

SOURCE: TABLE 6C-3 2009 MUTCD

Table 6C-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

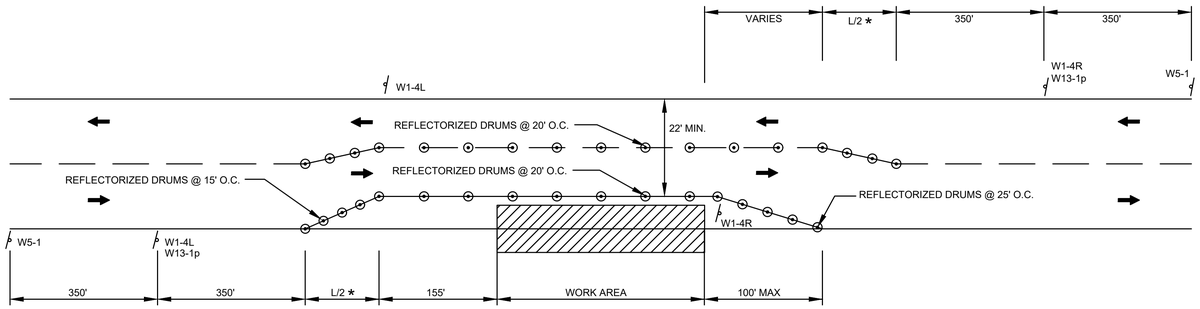
SOURCE: TABLE 6C-4 2009 MUTCD

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	66	115
	PROJECT FILE NO.	609440	

TEMPORARY TRAFFIC CONTROL PLANS - 02

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 2:56 PM

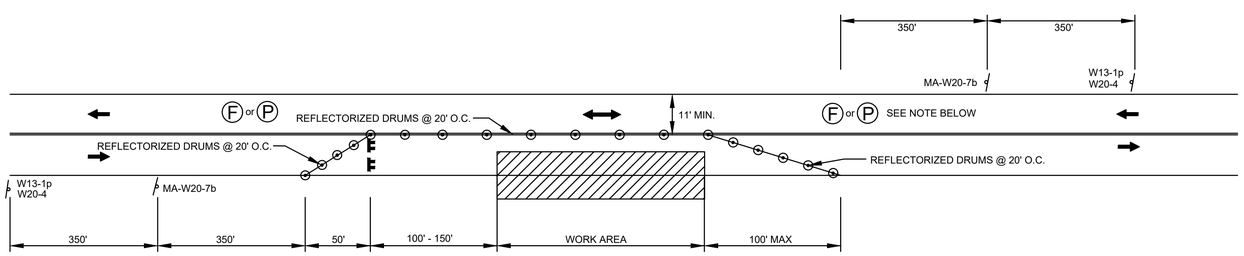


TYPICAL TWO WAY STREET LANE SHIFT

NOT TO SCALE

* $L=\frac{WS^2}{60}$

L=TAPER LENGTH
W=WIDTH OF ROADWAY TO BE SHIFTED OR REDIRECTED
S=POSTED SPEED LIMIT



NOTES:

1. WORK THAT WILL DISRUPT EXISTING TRAFFIC PATTERNS WITHIN THE EXISTING ROADWAYS (LANE REDUCTION, ETC.) SHALL ONLY BE DONE DURING OFF PEAK HOURS. NUMBERS AND LOCATION OF POLICE DETAILS FOR WORK ZONE AND/OR DETOUR MANAGEMENT SHALL BE DETERMINED BY THE RESIDENT ENGINEER ON A CASE BY CASE BASIS, AS WORK PROGRESSES.
2. TEMPORARY LANE CLOSURES SHOWN ARE FOR ROADWAY CONSTRUCTION. ALL DRUMS AND SIGNS ARE SHOWN AS THEY SHOULD APPEAR DURING THE WORKING DAY, OR WHILE OPERATING IN THE WORK ZONE. FOR WORK ON OPPOSITE SIDES OF ROADWAY, REVERSE ALL SIGNING, DRUMS, AND TAPER LENGTHS.

TYPICAL TWO WAY STREET LANE CLOSURE

NOT TO SCALE

LEGEND

⊙	REFLECTORIZED DRUM
➡	PROPOSED TRAFFIC FLOW
▨	WORK ZONE
⊢	TYPE III BARRICADE
Ⓟ	POLICE DETAIL
Ⓕ	POLICE DETAIL
∤	CONSTRUCTION SIGN
N.T.S.	NOT TO SCALE

TEMPORARY TRAFFIC CONTROL SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN (INCHES) WIDTH	HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	VERTICAL SPACING	COLOR BACKGROUND	LEGEND	BORDER	UNIT AREA IN SQUARE FEET
R1-2	36	36	YIELD	MUTCD STANDARD		WHITE	RED	WHITE	4.50
R4-7	24	30				WHITE	BLACK	BLACK	5.00
R6-4	30	24				WHITE	BLACK	N/A	5.00
R9-8	36	18	PEDESTRIAN CROSSWALK			WHITE	BLACK	BLACK	4.50
R9-9	24	12	SIDEWALK CLOSED			WHITE	BLACK	BLACK	2.00
R9-10	24	12	BRIDGE CLOSED USE OTHER SIDE			WHITE	BLACK	BLACK	2.00
R9-11	24	18	BRIDGE CLOSED AHEAD USE OTHER SIDE			WHITE	BLACK	BLACK	3.00
W1-4L	36	36				FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W1-4R	36	36				FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W2-6	36	36				FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W5-1	36	36	ROAD NARROWS			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W8-1	36	36	BUMP			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W8-3	36	36	PAVEMENT ENDS			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W11-2	30	30				FLOUR-ESCENT YELLOW GREEN	BLACK	BLACK	6.25
W13-1p	18	18	25 MPH			FLOUR-ESCENT ORANGE	BLACK	BLACK	2.25
W16-7pL	24	18				FLOUR-ESCENT YELLOW GREEN	BLACK	BLACK	3.00
W16-8p-1	28	8	Hancock St			FLOUR-ESCENT ORANGE	BLACK	BLACK	1.56
W16-8p-2	30	8	Chestnut St			FLOUR-ESCENT ORANGE	BLACK	BLACK	1.68
W16-9p	24	18	AHEAD			FLOUR-ESCENT YELLOW GREEN	BLACK	BLACK	3.00
W20-1	36	36	ROAD WORK AHEAD			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W20-2	36	36	DETOUR AHEAD	MUTCD STANDARD		FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W20-4	36	36	ONE LANE ROAD AHEAD			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
W23-2	36	36	NEW TRAFFIC PATTERN AHEAD			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
M4-8a	24	18	END DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	3.00
M4-9L	30	24	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	5.00
M4-9AL	30	24	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	5.00
M4-9R	30	24	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	5.00
M4-9AR	30	24	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	5.00
M4-9V	30	30	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	6.25
M4-10L	48	18	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	6.00
M4-10R	48	18	DETOUR			FLOUR-ESCENT ORANGE	BLACK	BLACK	6.00
R11-2	48	30	ROAD CLOSED			WHITE	BLACK	BLACK	10.00
R11-4	60	30	ROAD CLOSED TO THRU TRAFFIC			WHITE	BLACK	BLACK	12.50
MA-R2-10a	48	36	WORK ZONE SPEEDING FINES DOUBLED	MASSDOT STANDARD		ORANGE WHITE	BLACK	BLACK	3.75
MA-R2-10e	36	48	END ROAD WORK DOUBLE FINES END			ORANGE WHITE	BLACK	BLACK	3.75
MA-W20-7b	36	36	POLICE DETAIL AHEAD			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00
MA-W30-8R	36	36	SQUEEZE RIGHT			FLOUR-ESCENT ORANGE	BLACK	BLACK	9.00

NOTE:

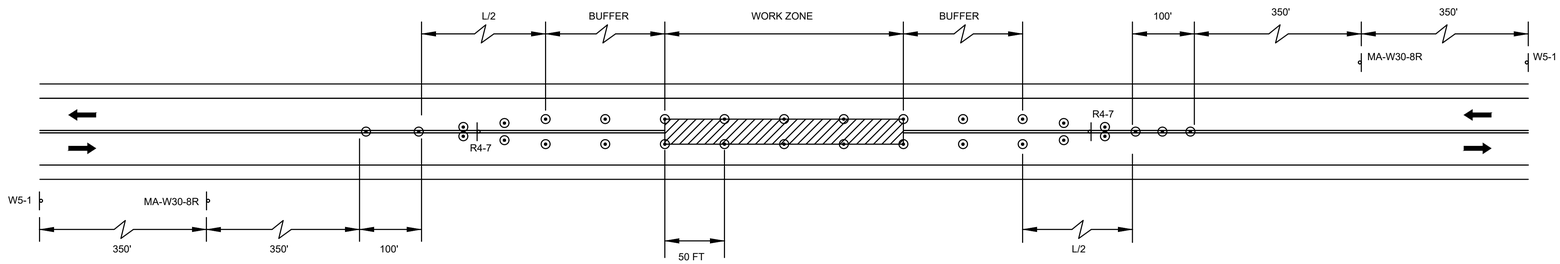
REFER TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "MASSACHUSETTS AMENDMENTS TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", AND "MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL DEVICES" (LATEST EDITIONS).

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	67	115
PROJECT FILE NO.	609440		

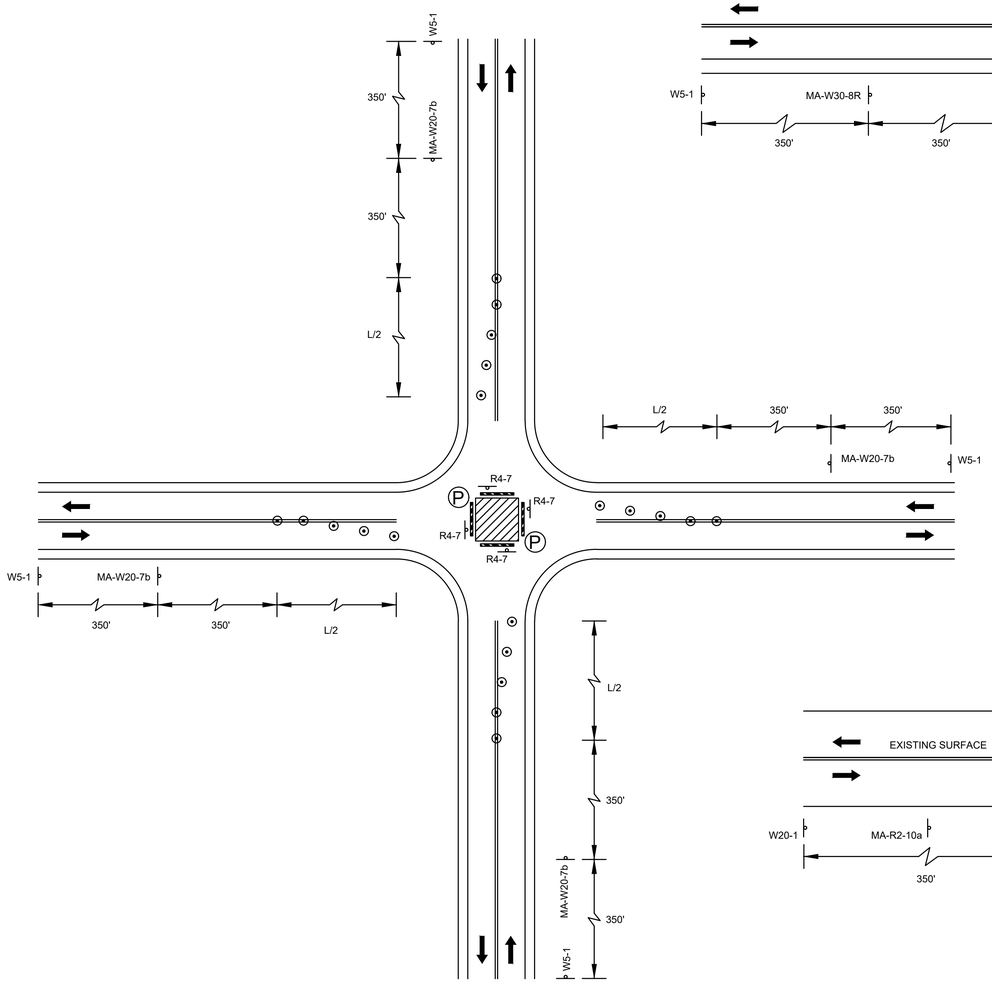
TEMPORARY TRAFFIC CONTROL PLANS - 03

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 2:57 PM



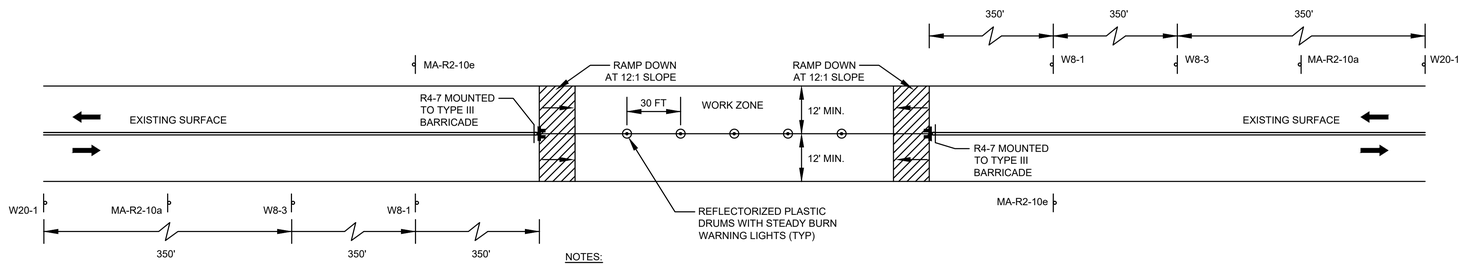
TWO LANE ROAD CENTER OF ROAD CLOSURE

NOT TO SCALE



SINGLE LANE APPROACH CENTER CLOSURE

NOT TO SCALE



NOTES:

1. SEE WORKZONE DISTANCES DETAIL FOR SIGNAGE SPACING, TAPER LENGTHS, AND BUFFER SPACE LENGTHS.
2. USE A MINIMUM LANE WIDTH OF 10 FEET.

FULL DEPTH RECONSTRUCTION
(CONSTRUCTION NOT IN PROGRESS)

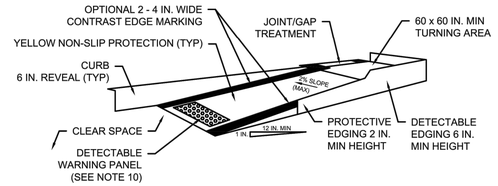
NOT TO SCALE

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

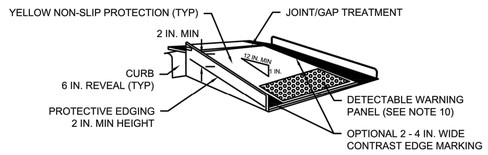
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	68	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 04

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 2:58 PM



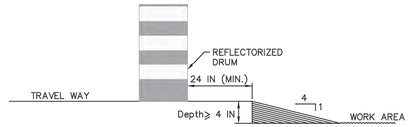
TEMPORARY CURB RAMP-PARALLEL TO CURB



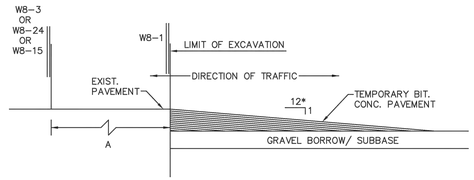
TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

NOTES:

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

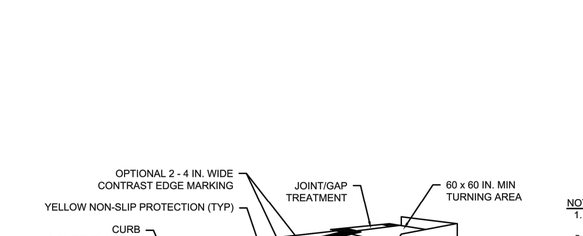


LATERAL DROP-OFF DETAIL
NOT TO SCALE



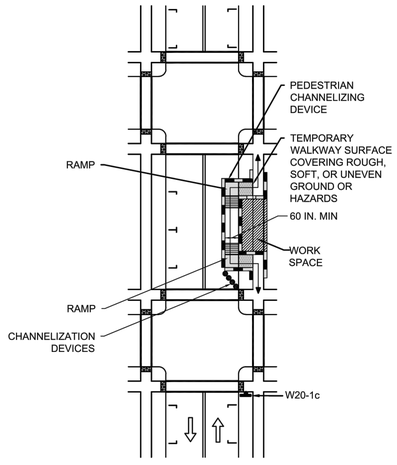
LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE

* – INCREASE SLOPE RATIO FOR HIGHER SPEEDS

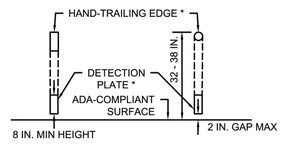


TEMPORARY CURB RAMP

* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.
*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.



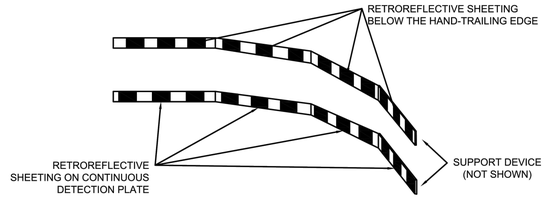
SIDEWALK DIVERSION



CROSS SECTION VIEW

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

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



ISOMETRIC VIEW

IOTES:

1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	69	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 05

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NAD 83

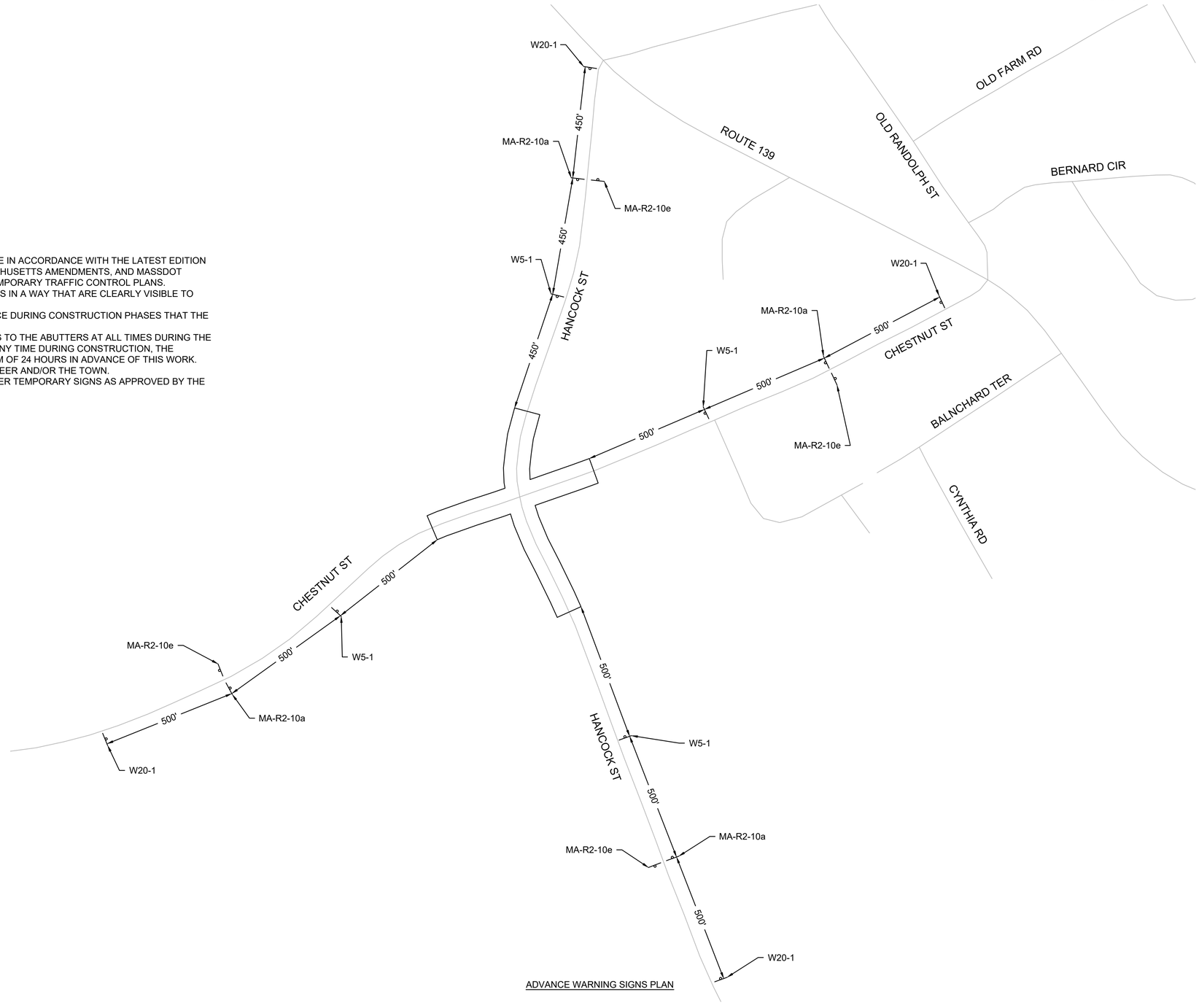
LEGEND

PROJECT AREA

CONSTRUCTION SIGN

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND WORK ZONE SET-UPS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WITH MASSACHUSETTS AMENDMENTS, AND MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS.
2. ALL SIGNS SHALL BE MOUNTED ON SUITABLE TEMPORARY SUPPORTS IN A WAY THAT ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC.
3. SIGNS ON EVERY INTERSECTION APPROACH SHALL ONLY BE IN PLACE DURING CONSTRUCTION PHASES THAT THE CORRESPONDING APPROACH IS OPEN TO TRAFFIC.
4. THE CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN ACCESS TO THE ABUTTERS AT ALL TIMES DURING THE CONSTRUCTION OPERATIONS. IF ACCESS WILL BE RESTRICTED AT ANY TIME DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE NOTICE TO THE ABUTTERS A MINIMUM OF 24 HOURS IN ADVANCE OF THIS WORK. THESE NOTICES REQUIRE REVIEW AND APPROVAL FROM THE ENGINEER AND/OR THE TOWN.
4. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.



ADVANCE WARNING SIGNS PLAN

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ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	70	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 06

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CONSTRUCTION PHASE 1 DETOUR PLAN

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND WORK ZONE SET-UPS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WITH MASSACHUSETTS AMENDMENTS, AND MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS.
2. ALL SIGNS SHALL BE MOUNTED ON SUITABLE TEMPORARY SUPPORTS IN A WAY THAT ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC.
3. SIGNS ON EVERY INTERSECTION APPROACH SHALL ONLY BE IN PLACE DURING CONSTRUCTION PHASES THAT THE CORRESPONDING APPROACH IS OPEN TO TRAFFIC.
4. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

LEGEND

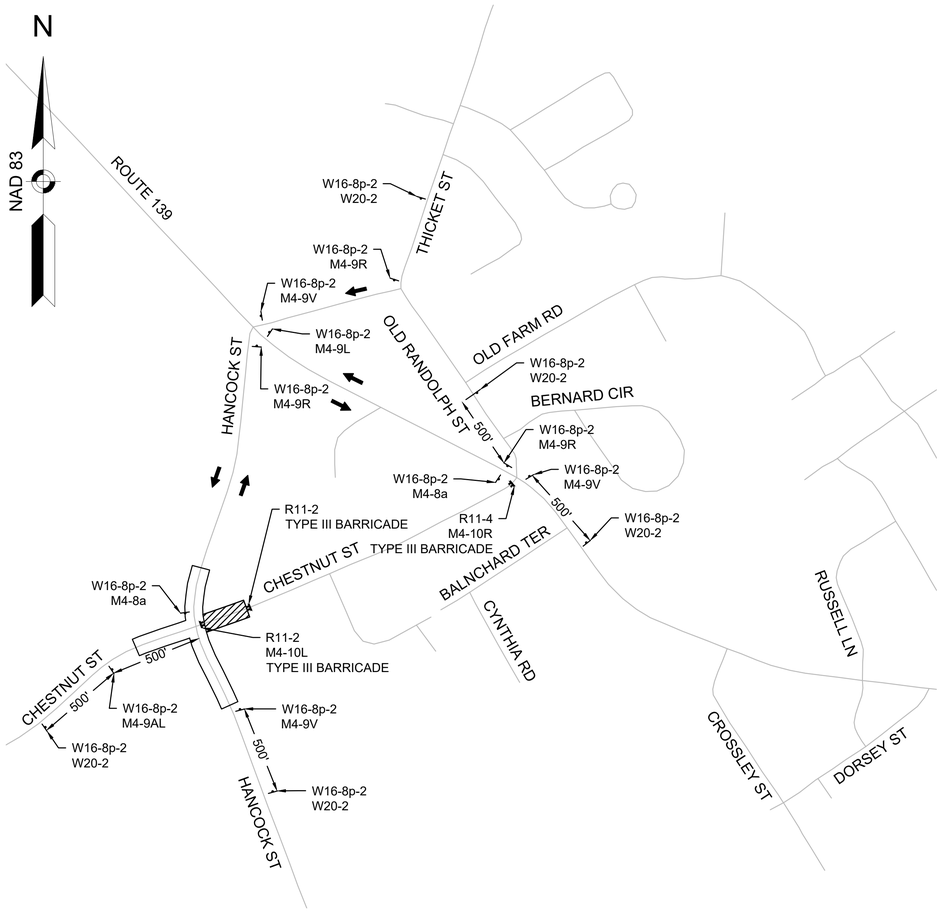
- PROPOSED TRAFFIC FLOW
- PROJECT AREA
- WORK ZONE
- TYPE III BARRICADE
- CONSTRUCTION SIGN

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	71	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 07

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 2:59 PM



CONSTRUCTION PHASE 2 DETOUR PLAN



CONSTRUCTION PHASE 3 DETOUR PLAN

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND WORK ZONE SET-UPS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WITH MASSACHUSETTS AMENDMENTS, AND MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS.
2. ALL SIGNS SHALL BE MOUNTED ON SUITABLE TEMPORARY SUPPORTS IN A WAY THAT ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC.
3. SIGNS ON EVERY INTERSECTION APPROACH SHALL ONLY BE IN PLACE DURING CONSTRUCTION PHASES THAT THE CORRESPONDING APPROACH IS OPEN TO TRAFFIC.
4. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

LEGEND

- PROPOSED TRAFFIC FLOW
- PROJECT AREA
- WORK ZONE
- TYPE III BARRICADE
- CONSTRUCTION SIGN

NOTES:

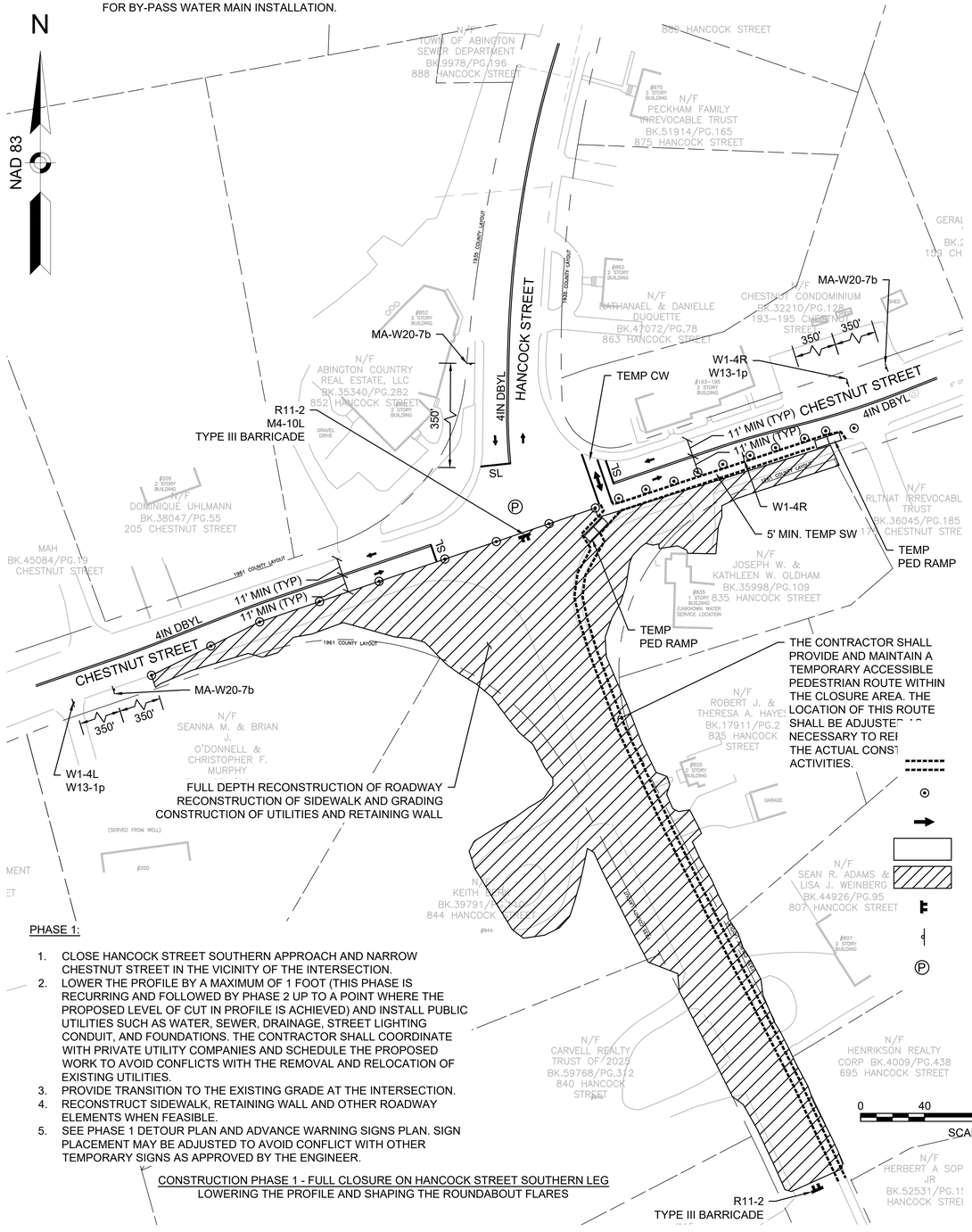
1. CONSTRUCTION PHASES 1 TO 5 ARE RECURRING AND HAPPEN IN SEQUENCE FOR MULTIPLE ITERATIONS TO ALLOW FOR GRADUAL AND PROPER GRADING AT THE INTERSECTION AND ON INTERSECTION APPROACHES UNTIL THE PROPOSED PROFILE GRADE IS ACHIEVED.
2. THE CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN ACCESS TO THE ABUTTERS AT ALL TIMES DURING THE CONSTRUCTION OPERATIONS. IF ACCESS WILL BE RESTRICTED AT ANY TIME DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE NOTICE TO THE ABUTTERS A MINIMUM OF 24 HOURS IN ADVANCE OF THIS WORK. THESE NOTICES REQUIRE REVIEW AND APPROVAL FROM THE ENGINEER AND/OR THE TOWN.
3. THE CONTRACTOR SHOULD BE FOLLOW TWO WAY STREET LANE SHIFT OR TWO WAY STREET LANE CLOSURE DETAILS FOR BY-PASS WATER MAIN INSTALLATION.
4. CONTRACTOR SHALL UTILIZE CHANNELIZING DEVICES, TEMPORARY CURB RAMPS, AND OTHER APPROVED TEMPORARY TRAFFIC CONTROL DEVICES TO PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME.
5. ALL ROADWAYS SHALL BE REOPENED TO TWO WAY TRAFFIC AFTER CONSTRUCTION HOURS.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	72	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 08

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 3:00 PM



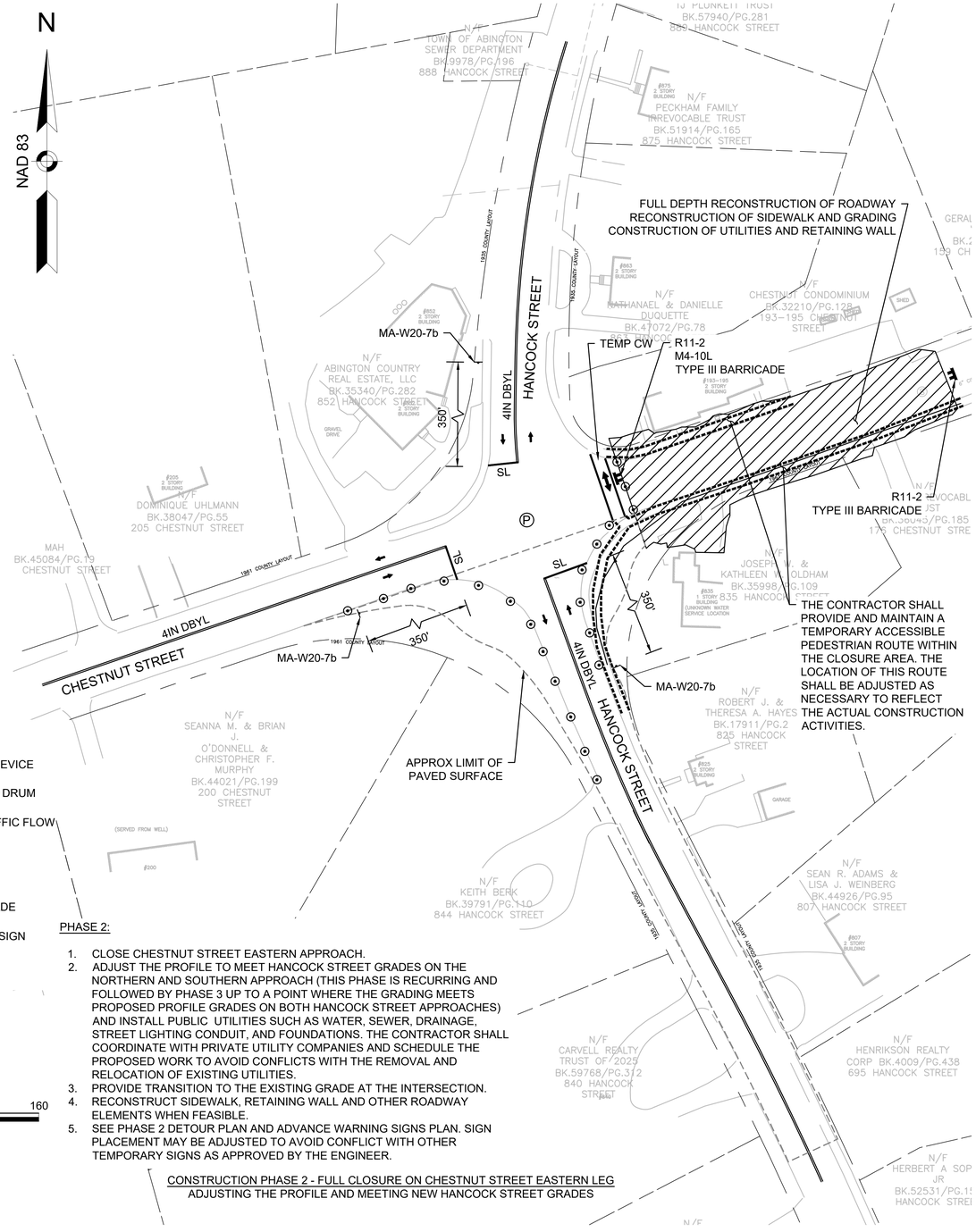
LEGEND

- CHANNELIZING DEVICE
- REFLECTORIZED DRUM
- PROPOSED TRAFFIC FLOW
- PROJECT AREA
- WORK ZONE
- TYPE III BARRICADE
- CONSTRUCTION SIGN
- POLICE DETAIL

PHASE 1:

1. CLOSE HANCOCK STREET SOUTHERN APPROACH AND NARROW CHESTNUT STREET IN THE VICINITY OF THE INTERSECTION.
2. LOWER THE PROFILE BY A MAXIMUM OF 1 FOOT (THIS PHASE IS RECURRING AND FOLLOWED BY PHASE 2 UP TO A POINT WHERE THE PROPOSED LEVEL OF CUT IN PROFILE IS ACHIEVED) AND INSTALL PUBLIC UTILITIES SUCH AS WATER, SEWER, DRAINAGE, STREET LIGHTING CONDUIT, AND FOUNDATIONS. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES AND SCHEDULE THE PROPOSED WORK TO AVOID CONFLICTS WITH THE REMOVAL AND RELOCATION OF EXISTING UTILITIES.
3. PROVIDE TRANSITION TO THE EXISTING GRADE AT THE INTERSECTION.
4. RECONSTRUCT SIDEWALK, RETAINING WALL AND OTHER ROADWAY ELEMENTS WHEN FEASIBLE.
5. SEE PHASE 1 DETOUR PLAN AND ADVANCE WARNING SIGNS PLAN. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 1 - FULL CLOSURE ON HANCOCK STREET SOUTHERN LEG
LOWERING THE PROFILE AND SHAPING THE ROUNDABOUT FLARES



PHASE 2:

1. CLOSE CHESTNUT STREET EASTERN APPROACH.
2. ADJUST THE PROFILE TO MEET HANCOCK STREET GRADES ON THE NORTHERN AND SOUTHERN APPROACH (THIS PHASE IS RECURRING AND FOLLOWED BY PHASE 3 UP TO A POINT WHERE THE GRADING MEETS PROPOSED PROFILE GRADES ON BOTH HANCOCK STREET APPROACHES) AND INSTALL PUBLIC UTILITIES SUCH AS WATER, SEWER, DRAINAGE, STREET LIGHTING CONDUIT, AND FOUNDATIONS. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES AND SCHEDULE THE PROPOSED WORK TO AVOID CONFLICTS WITH THE REMOVAL AND RELOCATION OF EXISTING UTILITIES.
3. PROVIDE TRANSITION TO THE EXISTING GRADE AT THE INTERSECTION.
4. RECONSTRUCT SIDEWALK, RETAINING WALL AND OTHER ROADWAY ELEMENTS WHEN FEASIBLE.
5. SEE PHASE 2 DETOUR PLAN AND ADVANCE WARNING SIGNS PLAN. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 2 - FULL CLOSURE ON CHESTNUT STREET EASTERN LEG
ADJUSTING THE PROFILE AND MEETING NEW HANCOCK STREET GRADES

NOTES:

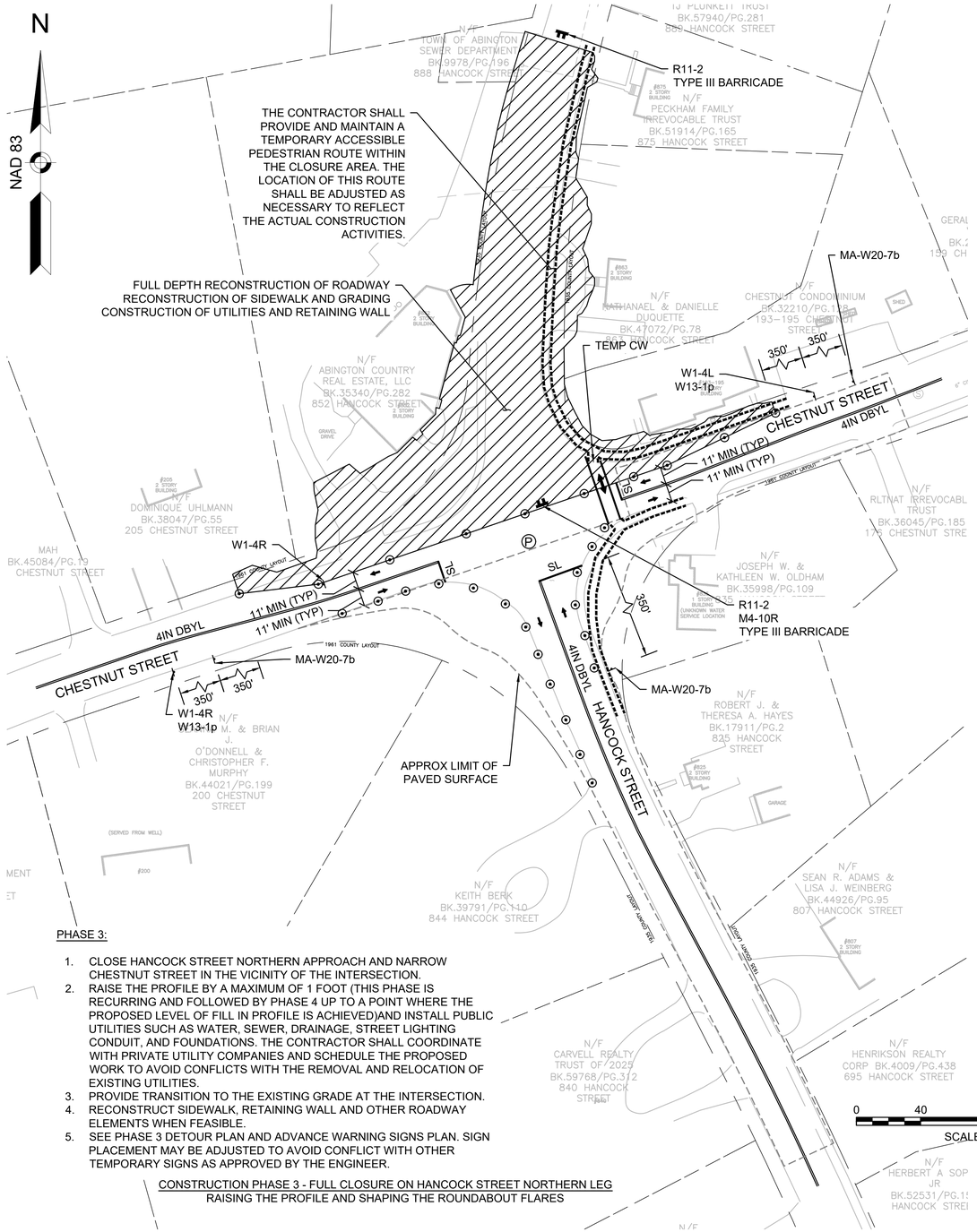
1. CONTRACTOR SHALL UTILIZE CHANNELIZING DEVICES, TEMPORARY CURB RAMPS, AND OTHER APPROVED TEMPORARY TRAFFIC CONTROL DEVICES TO PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME.
2. ALL ROADWAYS SHALL BE REOPENED TO TWO WAY TRAFFIC AFTER CONSTRUCTION HOURS.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	73	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 09

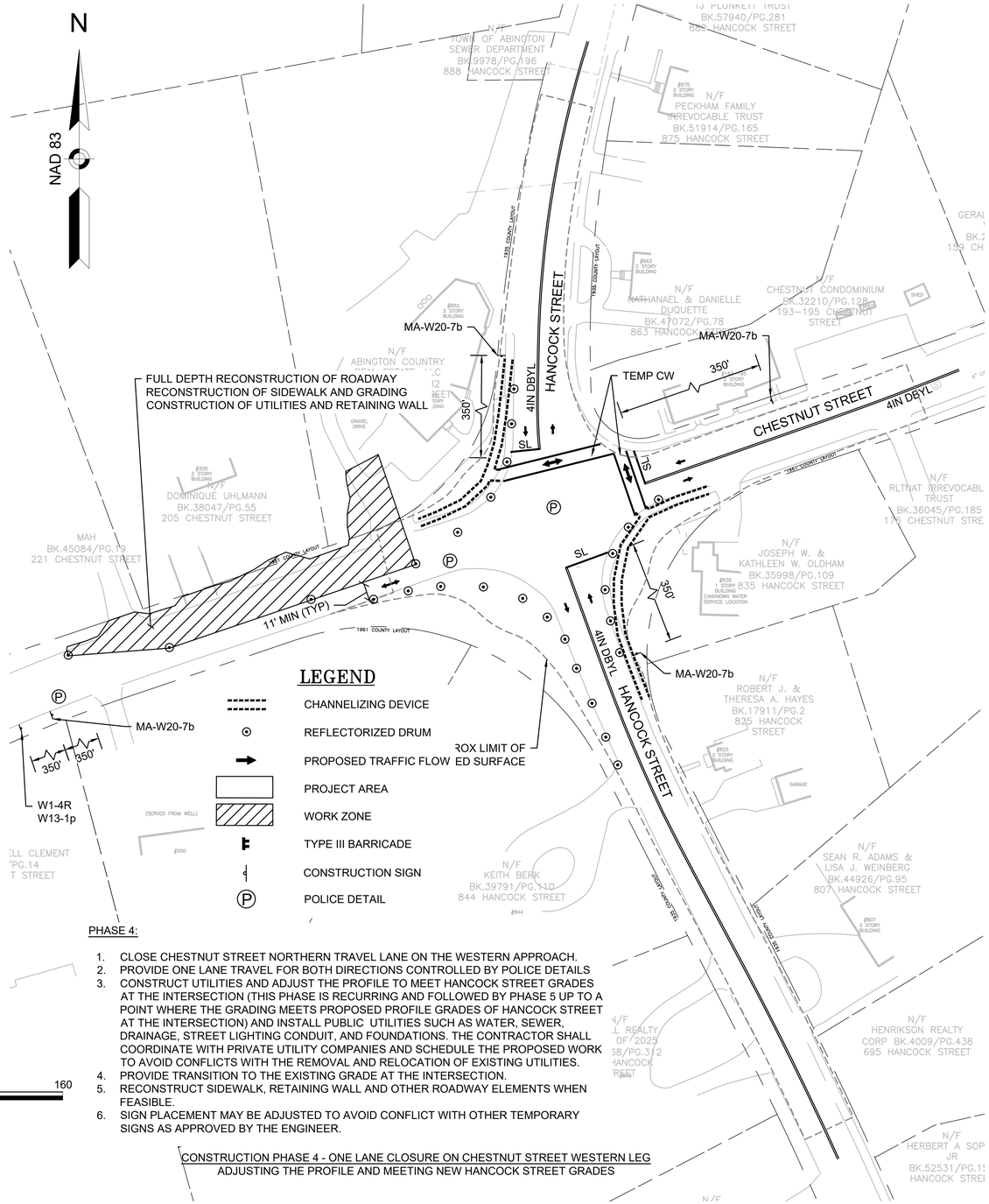
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PHASE 3:

1. CLOSE HANCOCK STREET NORTHERN APPROACH AND NARROW CHESTNUT STREET IN THE VICINITY OF THE INTERSECTION.
2. RAISE THE PROFILE BY A MAXIMUM OF 1 FOOT (THIS PHASE IS RECURRING AND FOLLOWED BY PHASE 4 UP TO A POINT WHERE THE PROPOSED LEVEL OF FILL IN PROFILE IS ACHIEVED)AND INSTALL PUBLIC UTILITIES SUCH AS WATER, SEWER, DRAINAGE, STREET LIGHTING CONDUIT, AND FOUNDATIONS. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES AND SCHEDULE THE PROPOSED WORK TO AVOID CONFLICTS WITH THE REMOVAL AND RELOCATION OF EXISTING UTILITIES.
3. PROVIDE TRANSITION TO THE EXISTING GRADE AT THE INTERSECTION.
4. RECONSTRUCT SIDEWALK, RETAINING WALL AND OTHER ROADWAY ELEMENTS WHEN FEASIBLE.
5. SEE PHASE 3 DETOUR PLAN AND ADVANCE WARNING SIGNS PLAN. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 3 - FULL CLOSURE ON HANCOCK STREET NORTHERN LEG
RAISING THE PROFILE AND SHAPING THE ROUNDABOUT FLARES



LEGEND

- CHANNELIZING DEVICE
- REFLECTORIZED DRUM
- PROPOSED TRAFFIC FLOW
- PROJECT AREA
- WORK ZONE
- TYPE III BARRICADE
- CONSTRUCTION SIGN
- POLICE DETAIL

PHASE 4:

1. CLOSE CHESTNUT STREET NORTHERN TRAVEL LANE ON THE WESTERN APPROACH.
2. PROVIDE ONE LANE TRAVEL FOR BOTH DIRECTIONS CONTROLLED BY POLICE DETAILS
3. CONSTRUCT UTILITIES AND ADJUST THE PROFILE TO MEET HANCOCK STREET GRADES AT THE INTERSECTION (THIS PHASE IS RECURRING AND FOLLOWED BY PHASE 5 UP TO A POINT WHERE THE GRADING MEETS PROPOSED PROFILE GRADES OF HANCOCK STREET AT THE INTERSECTION) AND INSTALL PUBLIC UTILITIES SUCH AS WATER, SEWER, DRAINAGE, STREET LIGHTING CONDUIT, AND FOUNDATIONS. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES AND SCHEDULE THE PROPOSED WORK TO AVOID CONFLICTS WITH THE REMOVAL AND RELOCATION OF EXISTING UTILITIES.
4. PROVIDE TRANSITION TO THE EXISTING GRADE AT THE INTERSECTION.
5. RECONSTRUCT SIDEWALK, RETAINING WALL AND OTHER ROADWAY ELEMENTS WHEN FEASIBLE.
6. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 4 - ONE LANE CLOSURE ON CHESTNUT STREET WESTERN LEG
ADJUSTING THE PROFILE AND MEETING NEW HANCOCK STREET GRADES

NOTES:

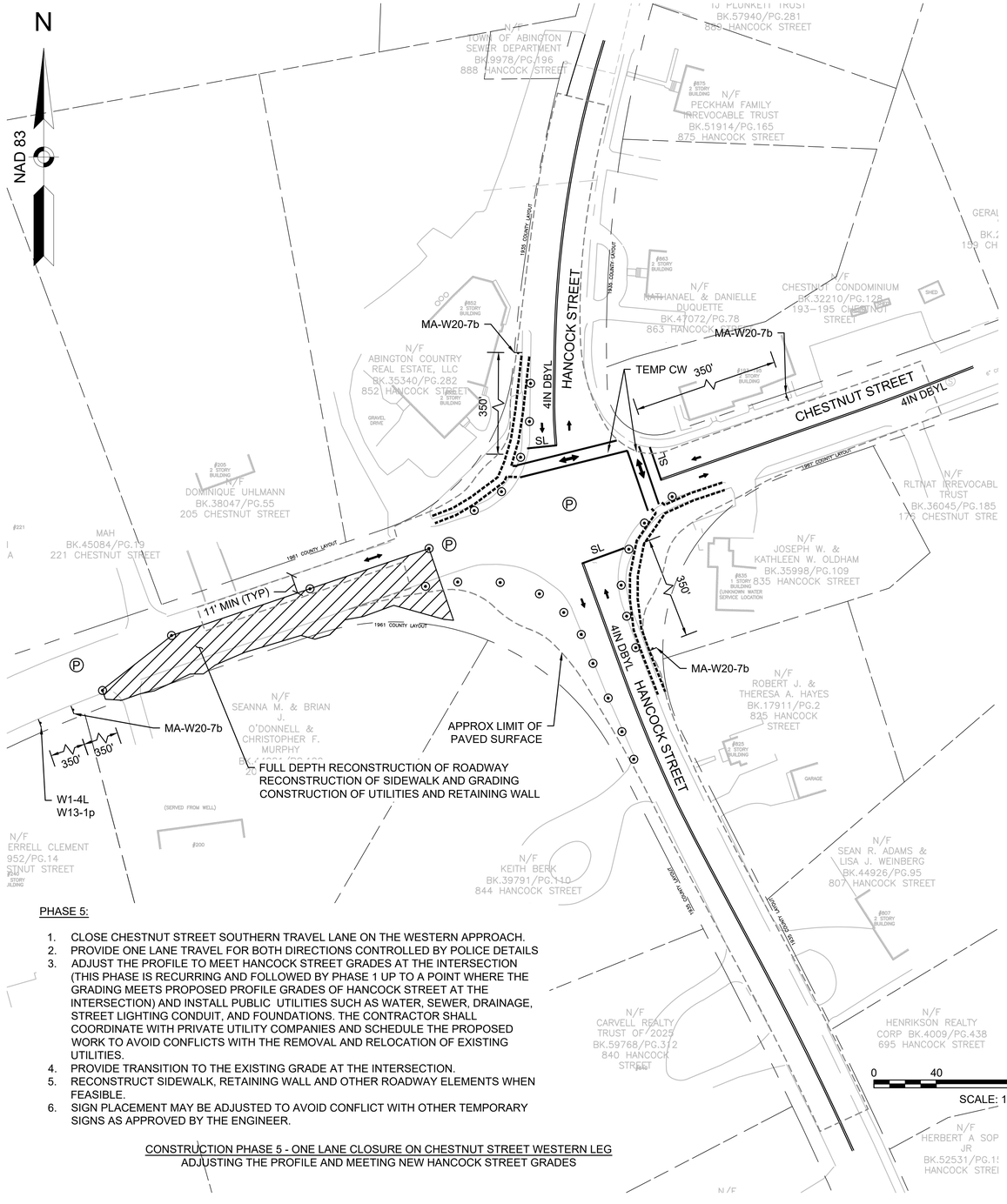
1. CONTRACTOR SHALL UTILIZE CHANNELIZING DEVICES, TEMPORARY CURB RAMPS, AND OTHER APPROVED TEMPORARY TRAFFIC CONTROL DEVICES TO PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME.
2. ALL ROADWAYS SHALL BE REOPENED TO TWO WAY TRAFFIC AFTER CONSTRUCTION HOURS.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	74	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 10

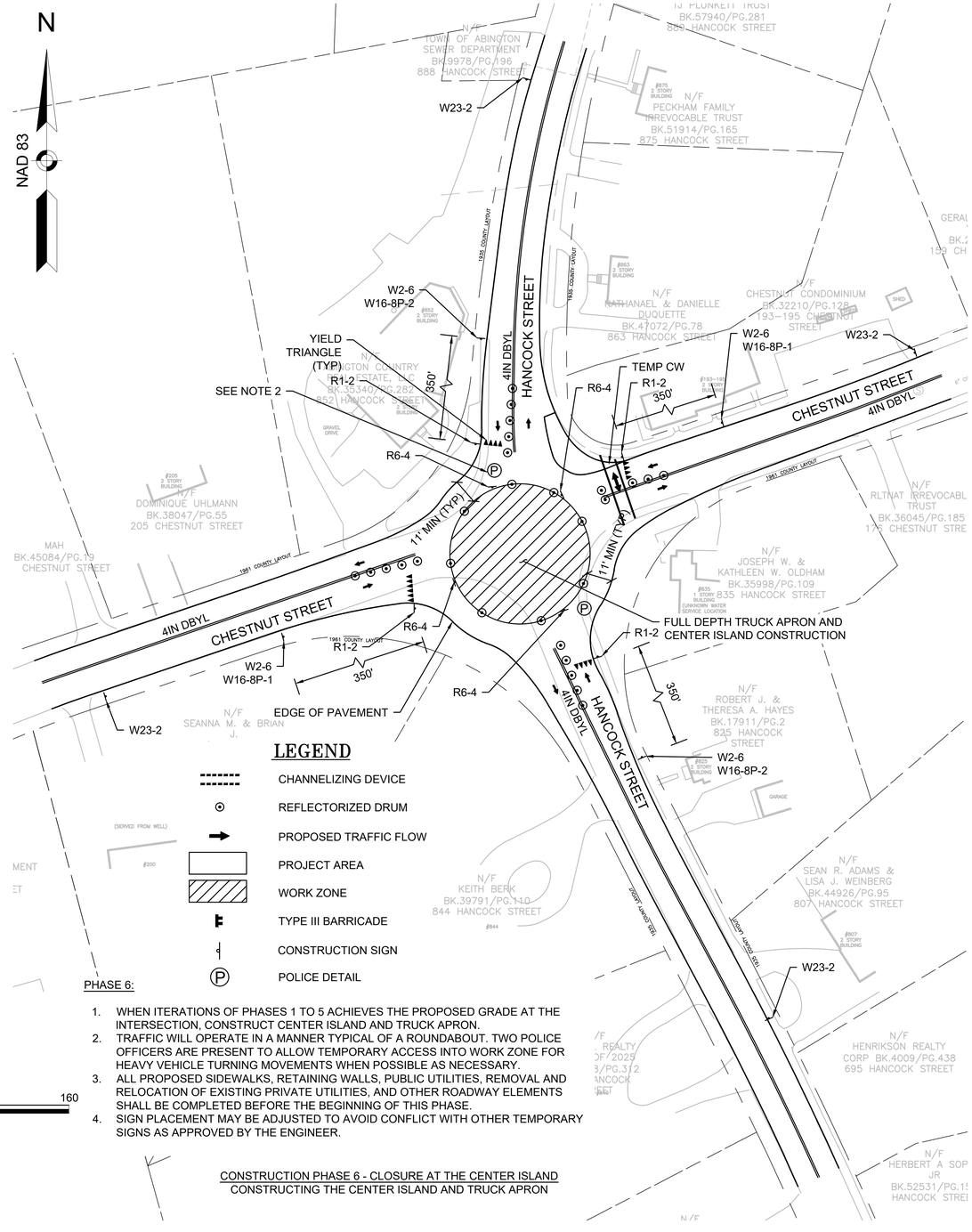
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PHASE 5:

1. CLOSE CHESTNUT STREET SOUTHERN TRAVEL LANE ON THE WESTERN APPROACH.
2. PROVIDE ONE LANE TRAVEL FOR BOTH DIRECTIONS CONTROLLED BY POLICE DETAILS
3. ADJUST THE PROFILE TO MEET HANCOCK STREET GRADES AT THE INTERSECTION (THIS PHASE IS RECURRING AND FOLLOWED BY PHASE 1 UP TO A POINT WHERE THE GRADING MEETS PROPOSED PROFILE GRADES OF HANCOCK STREET AT THE INTERSECTION) AND INSTALL PUBLIC UTILITIES SUCH AS WATER, SEWER, DRAINAGE, STREET LIGHTING CONDUIT, AND FOUNDATIONS. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES AND SCHEDULE THE PROPOSED WORK TO AVOID CONFLICTS WITH THE REMOVAL AND RELOCATION OF EXISTING UTILITIES.
4. PROVIDE TRANSITION TO THE EXISTING GRADE AT THE INTERSECTION.
5. RECONSTRUCT SIDEWALK, RETAINING WALL AND OTHER ROADWAY ELEMENTS WHEN FEASIBLE.
6. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 5 - ONE LANE CLOSURE ON CHESTNUT STREET WESTERN LEG
ADJUSTING THE PROFILE AND MEETING NEW HANCOCK STREET GRADES



LEGEND

- CHANNELIZING DEVICE
- REFLECTORIZED DRUM
- PROPOSED TRAFFIC FLOW
- PROJECT AREA
- WORK ZONE
- TYPE III BARRICADE
- CONSTRUCTION SIGN
- POLICE DETAIL

PHASE 6:

1. WHEN ITERATIONS OF PHASES 1 TO 5 ACHIEVES THE PROPOSED GRADE AT THE INTERSECTION, CONSTRUCT CENTER ISLAND AND TRUCK APRON.
2. TRAFFIC WILL OPERATE IN A MANNER TYPICAL OF A ROUNDABOUT. TWO POLICE OFFICERS ARE PRESENT TO ALLOW TEMPORARY ACCESS INTO WORK ZONE FOR HEAVY VEHICLE TURNING MOVEMENTS WHEN POSSIBLE AS NECESSARY.
3. ALL PROPOSED SIDEWALKS, RETAINING WALLS, PUBLIC UTILITIES, REMOVAL AND RELOCATION OF EXISTING PRIVATE UTILITIES, AND OTHER ROADWAY ELEMENTS SHALL BE COMPLETED BEFORE THE BEGINNING OF THIS PHASE.
4. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 6 - CLOSURE AT THE CENTER ISLAND
CONSTRUCTING THE CENTER ISLAND AND TRUCK APRON

NOTES:

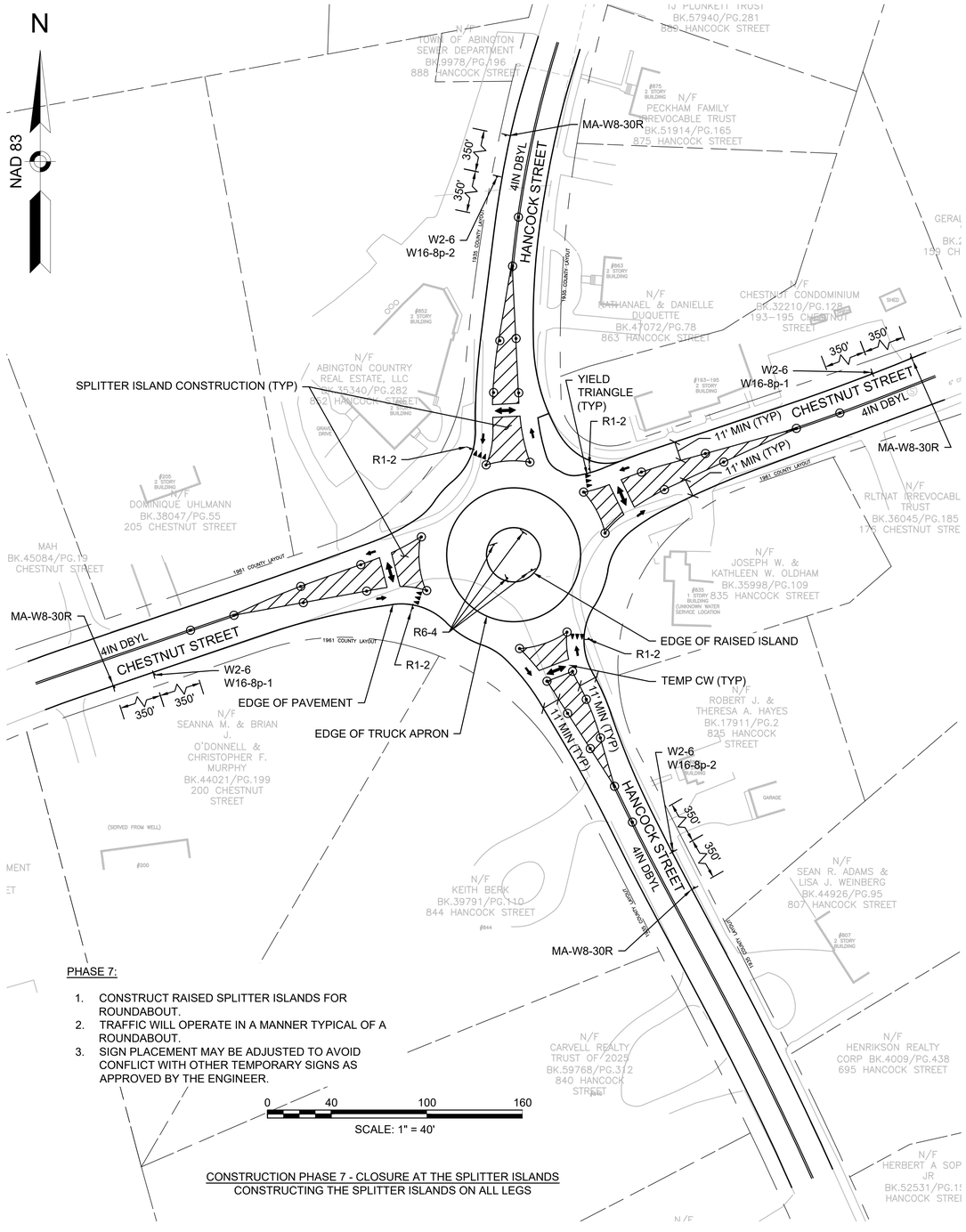
1. CONTRACTOR SHALL UTILIZE CHANNELIZING DEVICES, TEMPORARY CURB RAMPS, AND OTHER APPROVED TEMPORARY TRAFFIC CONTROL DEVICES TO PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME.
2. ALL ROADWAYS SHALL BE REOPENED TO TWO WAY TRAFFIC AFTER CONSTRUCTION HOURS.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	75	115
PROJECT FILE NO.	609440		

TEMPORARY TRAFFIC CONTROL PLANS - 11

609440_HD(TTCP).DWG Plotted on 9-Jan-2026 3:02 PM



PHASE 7:

1. CONSTRUCT RAISED SPLITTER ISLANDS FOR ROUNDABOUT.
2. TRAFFIC WILL OPERATE IN A MANNER TYPICAL OF A ROUNDABOUT.
3. SIGN PLACEMENT MAY BE ADJUSTED TO AVOID CONFLICT WITH OTHER TEMPORARY SIGNS AS APPROVED BY THE ENGINEER.

CONSTRUCTION PHASE 7 - CLOSURE AT THE SPLITTER ISLANDS
CONSTRUCTING THE SPLITTER ISLANDS ON ALL LEGS

LEGEND

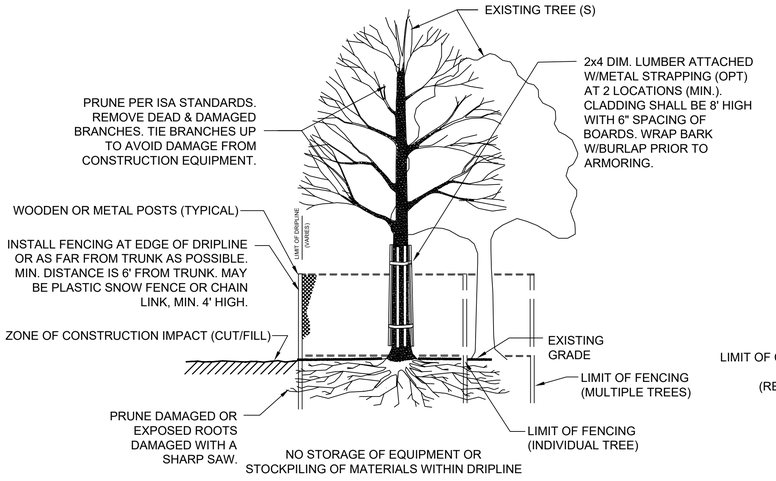
- CHANNELIZING DEVICE
- REFLECTORIZED DRUM
- PROPOSED TRAFFIC FLOW
- PROJECT AREA
- WORK ZONE
- TYPE III BARRICADE
- CONSTRUCTION SIGN
- POLICE DETAIL

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

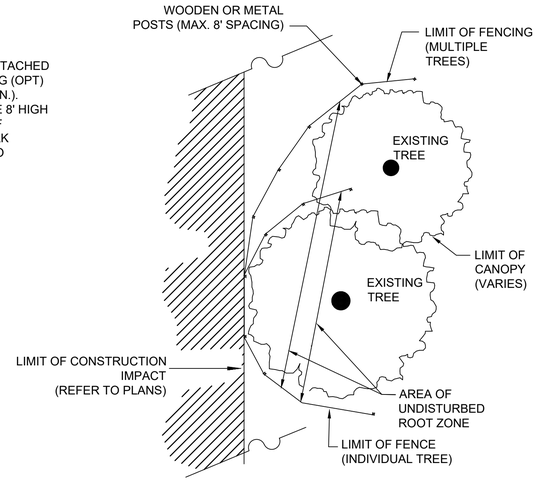
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	76	115
PROJECT FILE NO.	609440		

CONSTRUCTION DETAILS - 01

609440_HD(CD).DWG Plotted on 21-Apr-2026 5:29 PM



SECTION VIEW



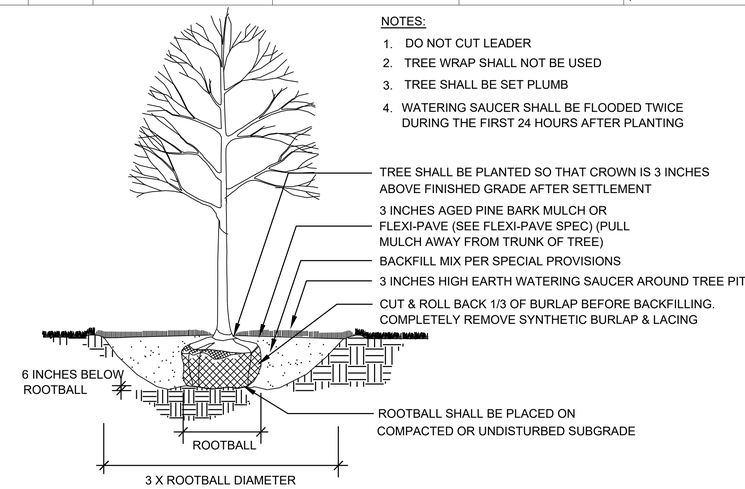
PLAN VIEW

TREE PROTECTION DETAIL

N.T.S.

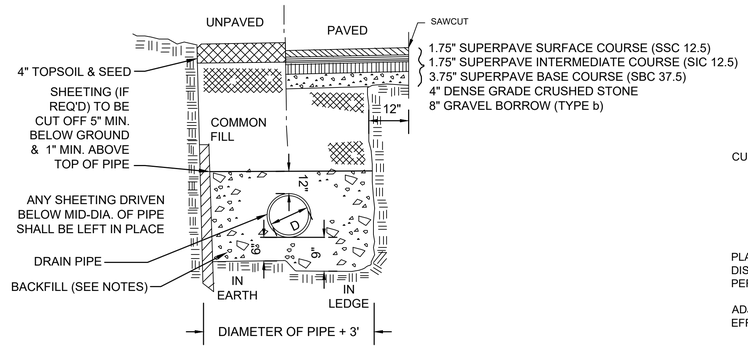
MASTER PLANT LIST

SYMB.	QUANT.	BOTANICAL NAME	COMMON NAME	NURSERY SIZE	REMARK
LARGE TREES					
JV	3	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	2-2.5" CAL. - 7' - 8' HT	3 ON LAWN (#825 HANCOCK STREET)
AL	2	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	2-2.5" CAL. - 7' - 8' HT	2 ON LAWN (#863 HANCOCK STREET)



TREE PLANTING DETAIL

N.T.S

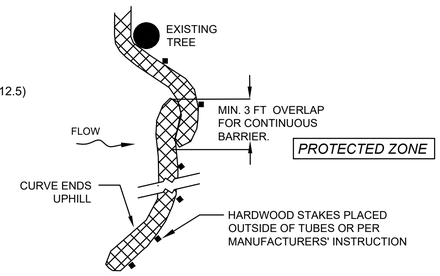


NOTES:

- ALL TRENCH CONSTRUCTION TO CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
- COMPACT FILL AND TAMP PIPE TO 95% MAX. DENSITY UNLESS OTHERWISE SPECIFIED.
- COMMON FILL MATERIAL TO CONSIST OF GRANULAR MATERIAL CONTAINING NO STONES LARGER THAN 6" IN GREATEST DIMENSION.
- BACKFILL WITH GRAVEL BORROW THOROUGHLY COMPACTED IN 6" LIFTS FOR PERMANENT TRENCH PATCH AND PAID FOR UNDER ITEM 151.2 GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES.
- PROVIDE CRUSHED STONE BEDDING TO MID PIPE DIAMETER WHERE GROUNDWATER IS ENCOUNTERED AS DIRECTED BY THE ENGINEER. CRUSHED STONE SHALL BE PAID UNDER ITEM 156.
- REMOVE UNSUITABLE MATERIAL BELOW GRADE IF ENCOUNTERED, TO SUITABLE DEPTHS AS DIRECTED BY ENGINEER AND REPLACE WITH CLEAN GRANULAR FILL.
- PAYMENT FOR HMA TRENCH PATCHING SHALL BE PAID FOR UNDER ITEM 451. HMA FOR PATCHING (FOR PERMANENT PATCH) AND ITEM 472. TEMPORARY ASPHALT PATCHING (FOR TEMPORARY PATCH).

PERMANENT TRENCH PATCH

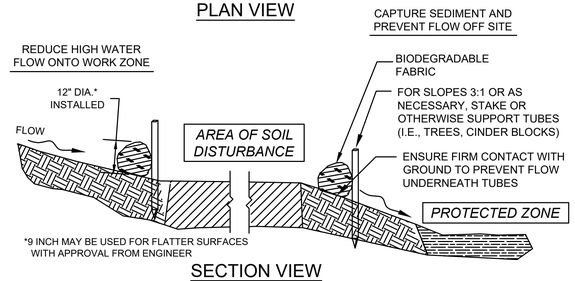
N.T.S.



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.

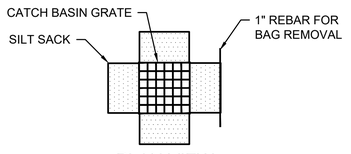
PLAN VIEW



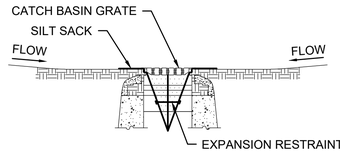
SECTION VIEW

SEDIMENT CONTROL BARRIER

N.T.S.



PLAN VIEW



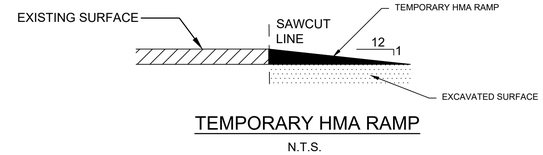
SECTION VIEW

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

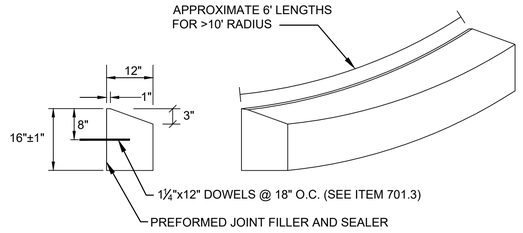
INLET PROTECTION SILT SACK IN CATCH BASIN WITH CURB INLET

N.T.S.



TEMPORARY HMA RAMP

N.T.S.



GRANITE CURB-TRAVERSABLE TYPE-100 (CURVED)

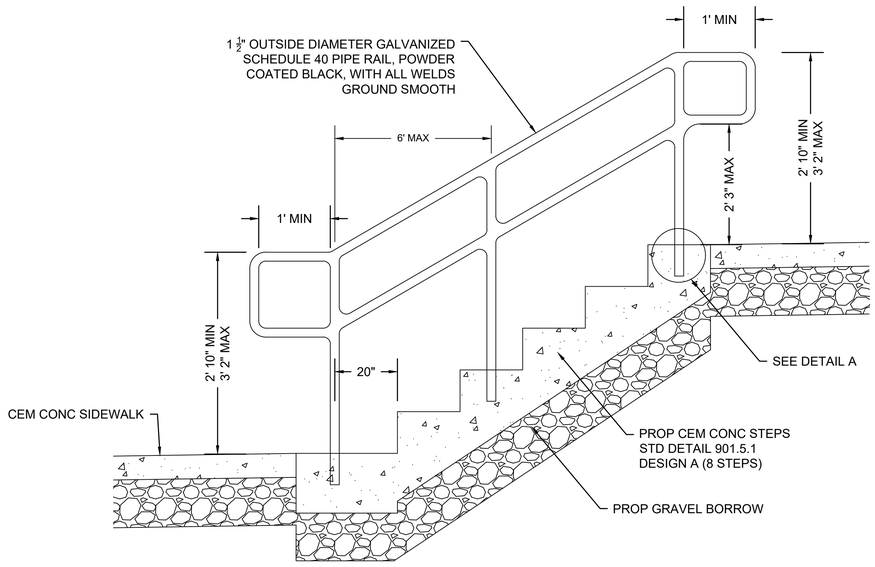
N.T.S.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	77	115
PROJECT FILE NO.	609440		

CONSTRUCTION DETAILS - 02

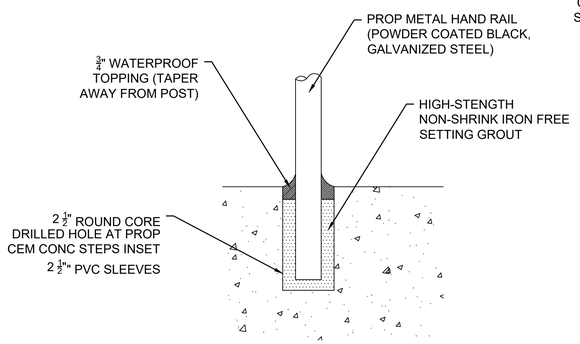
609440_HD(CD).DWG Plotted on 9-Jan-2026 3:05 PM



METAL HAND RAIL DETAIL (ITEM 655.4)

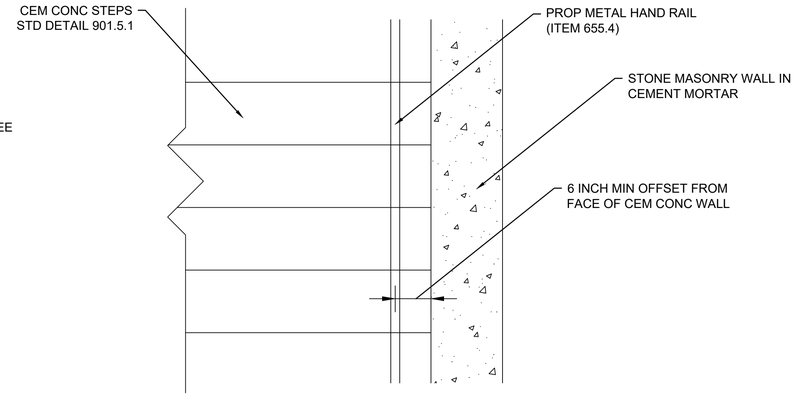
N.T.S.

NOTE: THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STEEL POSTS AND HANDRAILS ELEMENTS INCLUDING A LAYOUT FOR REVIEW AND APPROVAL.



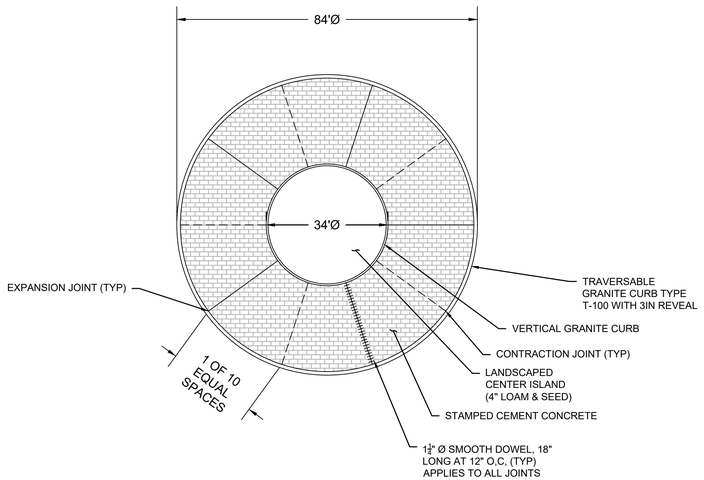
DETAIL A

N.T.S.



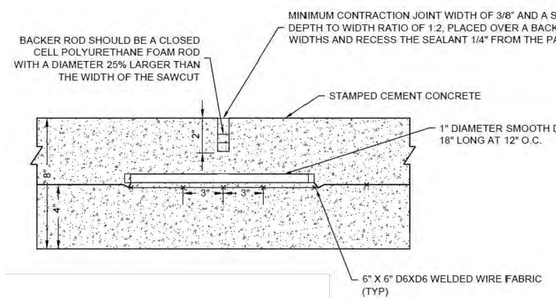
METAL HAND RAIL PLAN VIEW

N.T.S.



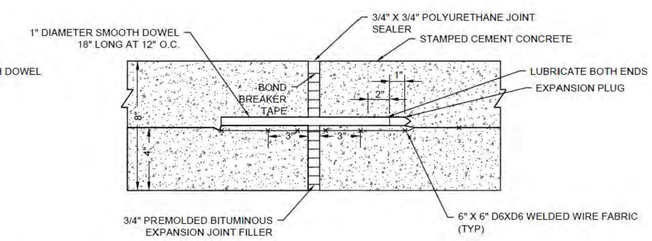
MOUNTABLE TRUCK APRON

N.T.S.



TRUCK APRON CONTRACTION JOINT

N.T.S.



TRUCK APRON EXPANSION JOINT

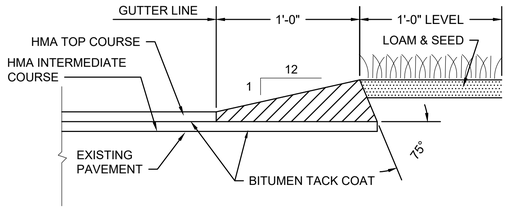
N.T.S.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	78	115
PROJECT FILE NO.	609440		

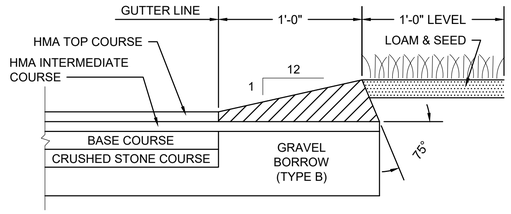
CONSTRUCTION DETAILS - 03

609440_HD(CD).DWG Plotted on 22-Apr-2026 5:14 PM



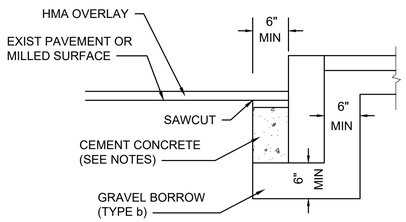
HOT MIX ASPHALT BERM TYPE A - MODIFIED
AT PAVEMENT OVERLAY

N.T.S.



HOT MIX ASPHALT BERM TYPE A - MODIFIED
(USED WITH FULL DEPTH PAVEMENT)

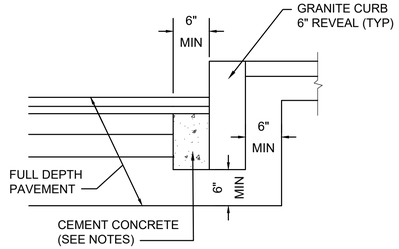
N.T.S.



NOTES:
1. CONCRETE SHALL BE INCIDENTAL TO THE GRANITE CURB ITEMS.
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.

GRANITE CURB IN EXISTING PAVEMENT WITH OVERLAY

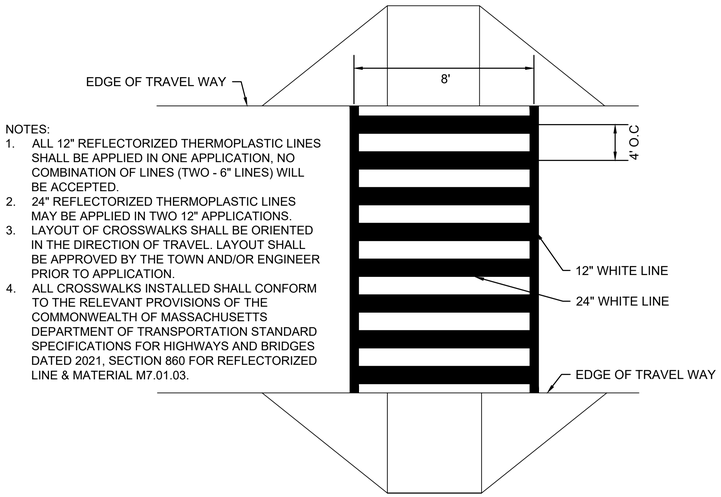
N.T.S.



NOTES:
1. TO BE PLACED IF CURB IS INSTALLED AFTER HOT MIX ASPHALT.
2. CONCRETE SHALL BE INCIDENTAL TO THE GRANITE CURB ITEMS.
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.

GRANITE CURB IN FULL DEPTH PAVEMENT

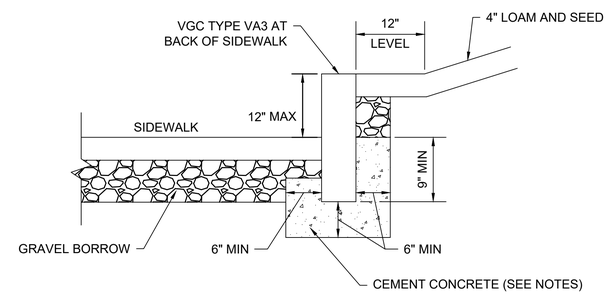
N.T.S.



NOTES:
1. ALL 12" REFLECTORIZED THERMOPLASTIC LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6" LINES) WILL BE ACCEPTED.
2. 24" REFLECTORIZED THERMOPLASTIC LINES MAY BE APPLIED IN TWO 12" APPLICATIONS.
3. LAYOUT OF CROSSWALKS SHALL BE ORIENTED IN THE DIRECTION OF TRAVEL. LAYOUT SHALL BE APPROVED BY THE TOWN AND/OR ENGINEER PRIOR TO APPLICATION.
4. ALL CROSSWALKS INSTALLED SHALL CONFORM TO THE RELEVANT PROVISIONS OF THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 2021, SECTION 860 FOR REFLECTORIZED LINE & MATERIAL M7.01.03.

LADDER STYLE CROSSING

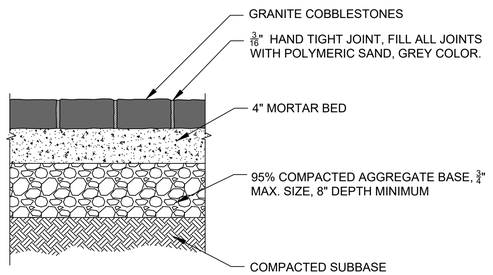
N.T.S.



NOTES:
1. CONCRETE SHALL BE INCIDENTAL TO THE GRANITE CURB ITEMS.
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.

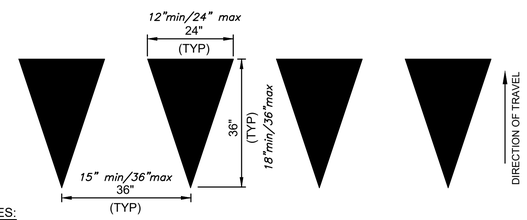
GRANITE CURB TYPE VA3 AT BACK OF SIDEWALK

N.T.S.



COBBLESTONES STRIP

N.T.S.



NOTES:
1. YIELD LINES SHALL CONSIST OF A ROW OF SOLID WHITE TRIANGLES.
2. IF APPLICABLE, YIELD LINES SHALL BE PLACED 4-FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE.
3. IN THE ABSENCE OF A MARKED CROSSWALK, YIELD LINES SHALL BE PLACED AS SHOWN ON THE PLANS.

YIELD LINE TRIANGLES

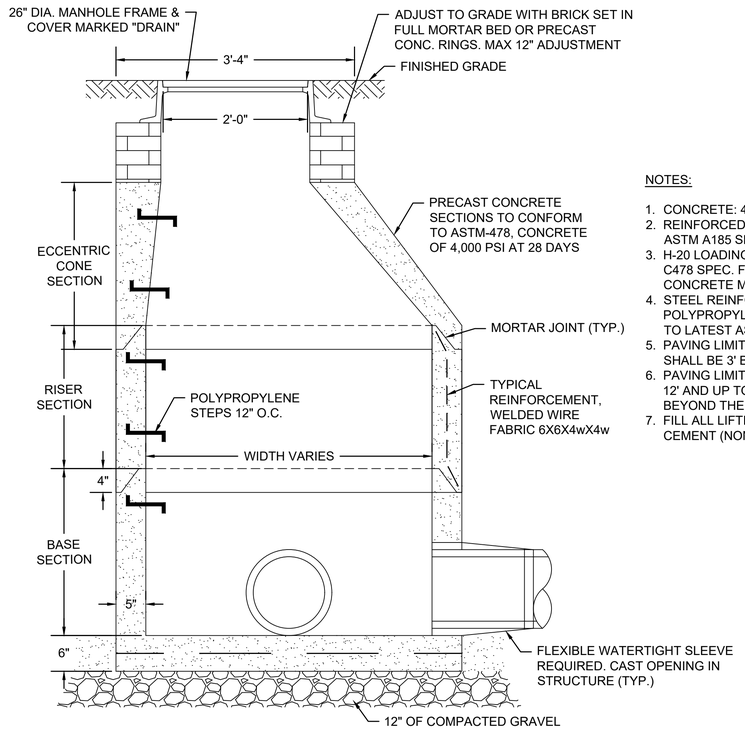
N.T.S.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	79	115
	PROJECT FILE NO. 609440		

CONSTRUCTION DETAILS - 04

609440_HD(CD).DWG Plotted on 22-Apr-2026 3:37 PM



PRECAST CONCRETE DRAIN MANHOLE

NOTES:

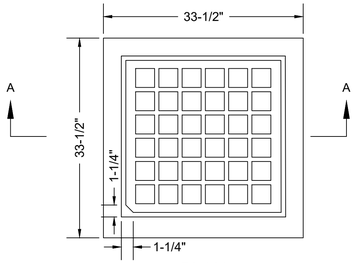
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL TO CONFORM TO LATEST ASTM A185 SPEC.
3. H-20 LOADING PER AASHTO HS-20-44; ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP TO CONFORM TO LATEST ASTM C478 SPEC.
5. PAVING LIMIT FOR MANHOLES 0-12' IN DEPTH SHALL BE 3' BEYOND THE ID OF THE MANHOLE.
6. PAVING LIMIT FOR MANHOLES GREATER THAN 12' AND UP TO 18' IN DEPTH SHALL BE 4' BEYOND THE ID OF THE MANHOLE.
7. FILL ALL LIFTING HOLES WITH HYDRAULIC CEMENT (NON-SHRINK) MORTAR.

ALTERNATIVE ECCENTRIC CONE SECTION

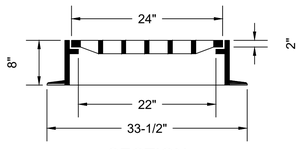
N.T.S.

NOTES:

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



PLAN



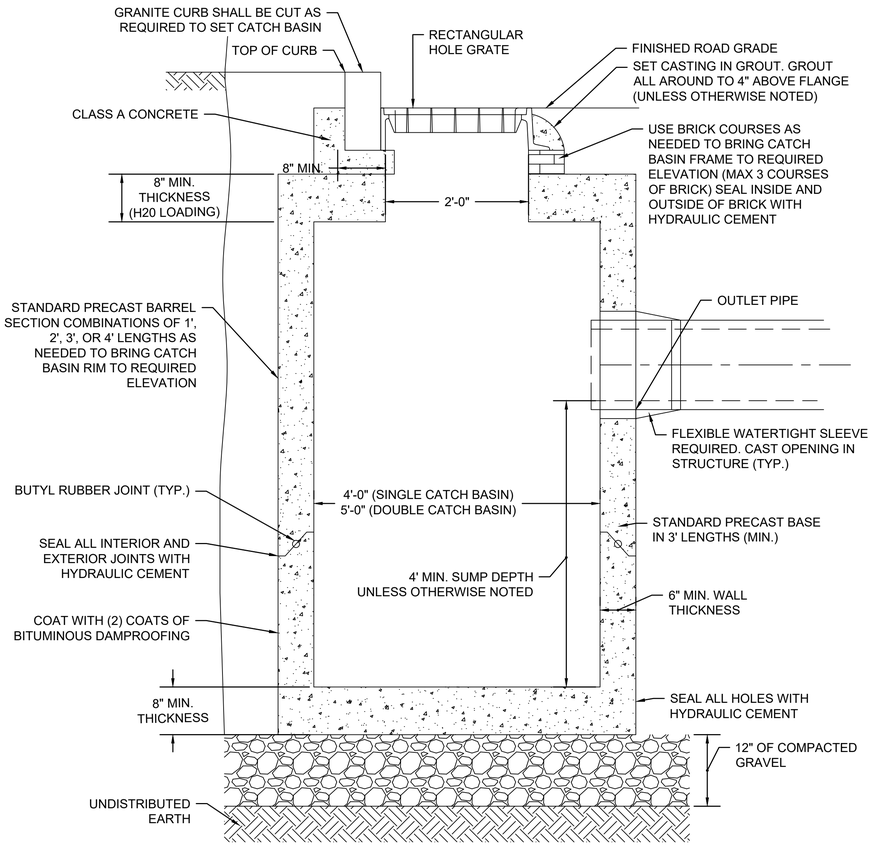
SECTION

MUNICIPAL STANDARD FRAME AND GRATE

N.T.S.

NOTES:

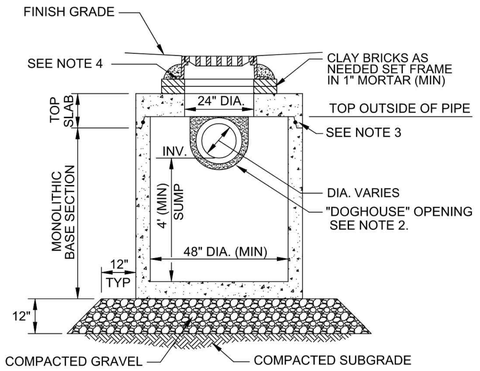
1. FRAME AND GRATE SHALL BE RATED FOR HS-20 LOADING.
2. MIN FRAME WEIGHT:
   4 FLANGE 295 LBS.
   3 FLANGE 265 LBS.
3. USE 3 FLANGE FRAMES AT CURB INLETS.



PRECAST CONCRETE DEEP SUMP SINGLE CATCH BASIN

N.T.S.

609440_HD(CD).DWG Plotted on 9-Jan-2026 3:07 PM

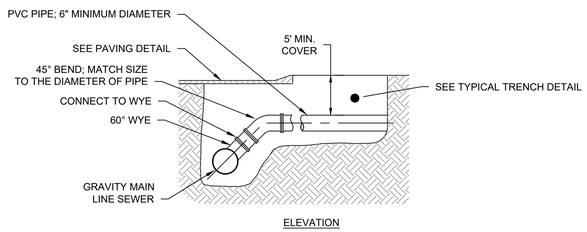


CONSTRUCTION NOTES:

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE (8"DEPTH) SHALL BE SET IN FULL MORTAR BED.
5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

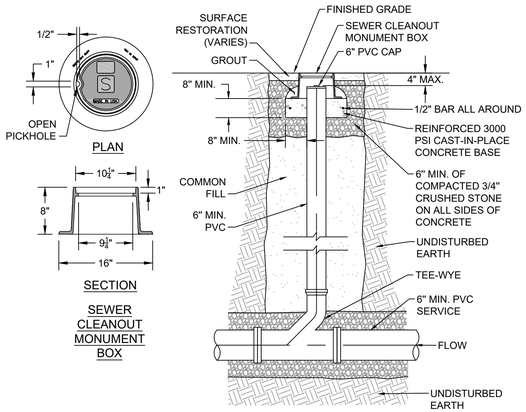
CATCH BASIN SHALLOW COVER (CBSC)

N.T.S.



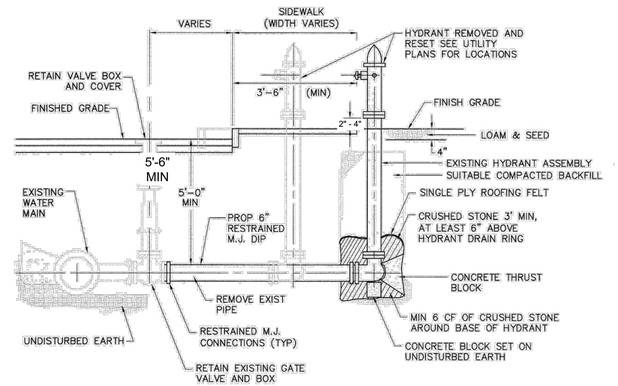
TYPICAL SEWER SERVICE CONNECTION

N.T.S.



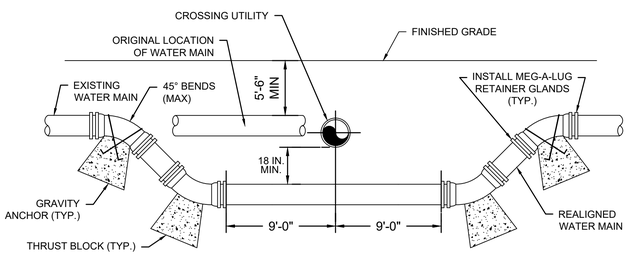
AT-GRADE CLEANOUT

N.T.S.



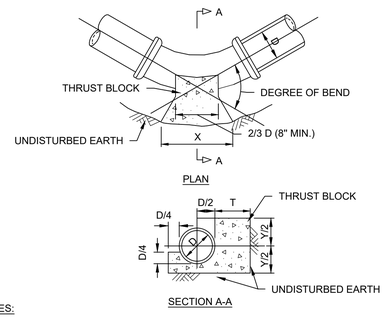
HYDRANT REMOVED AND RESET

N.T.S.



WATERMAIN LOWERING DETAIL

N.T.S.



NOTES:

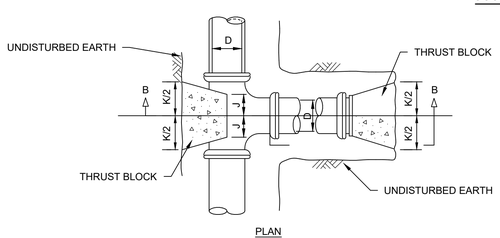
1. ALL CONCRETE SHALL BE 3000 P.S.I. @ 28 DAYS (CLASS "A" CONCRETE)
2. DIMENSIONS SHOWN ARE MINIMUM AND ARE BASED UPON SOIL PRESSURE OF 1500 P.S.F. AND TOTAL PRESSURE OF 250 P.S.I. TOTAL PRESSURE IS WORKING PRESSURE PLUS SURGE PRESSURE.
3. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.

TABLE OF DIMENSIONS

DIMENSION	90° BEND						45° BEND						22 1/2° BEND						11 1/4° BEND					
D (in.)	4	6	8	10	12	14	4	6	8	10	12	14	4	6	8	10	12	14	4	6	8	10	12	14
X (in.)	35	35	50	56	72	80	24	24	35	45	51	60	28	28	30	32	37	42	12	12	19	21	27	33
Y (in.)	20	20	24	32	35	40	16	16	19	21	27	33	13	13	13	16	19	22	8	8	9	12	13	16
T (in.)	11	11	14	16	19	22	11	11	14	16	19	22	11	11	13	16	19	22	11	11	13	16	19	22

CONCRETE THRUST BLOCK DETAIL AT BEND

N.T.S.



NOTES:

1. ALL CONCRETE SHALL BE 3000 PSI @ 28 DAYS (CLASS 'A' CONCRETE).
2. DIMENSIONS SHOWN ARE MINIMUM AND ARE BASED UPON SOIL PRESSURE OF 1500 PSF AND TOTAL PRESSURE OF 250 PSI. TOTAL PRESSURE IS WORKING PRESSURE PLUS SURGE PRESSURE.
3. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.

TABLE OF DIMENSIONS						
D (in)	4	6	8	10	12	14
J (in)	6	6	7	9	10	12
K (in)	16	16	20	26	32	36
L (in)	16	16	21	24	29	34
M (in)	11	11	14	16	19	22

CONCRETE THRUST BLOCK DETAIL AT TEE / PLUG / CAP

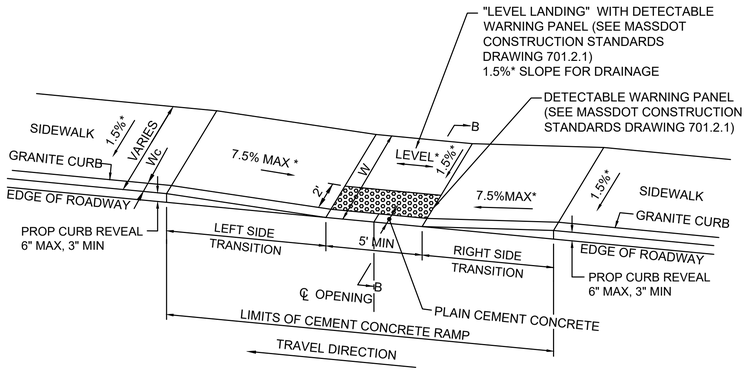
N.T.S.

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	81	115
PROJECT FILE NO.	609440		

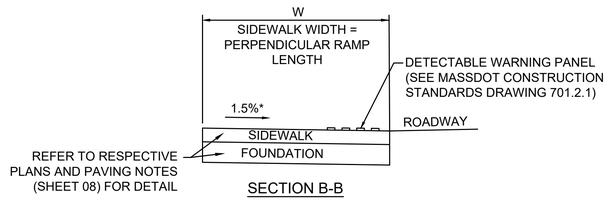
PEDESTRIAN CURB RAMP & DRIVEWAY DETAILS - 01

609440_HD(PED-DW DET).DWG Plotted on 9-Jan-2026 3:07 PM



PEDESTRIAN CURB RAMP

N.T.S.



SECTION B-B

LEGEND:

W SIDEWALK WIDTH

Wc CURB WIDTH

CC CEMENT CONCRETE

* TOLERANCE FOR CONSTRUCTION ±0.5%

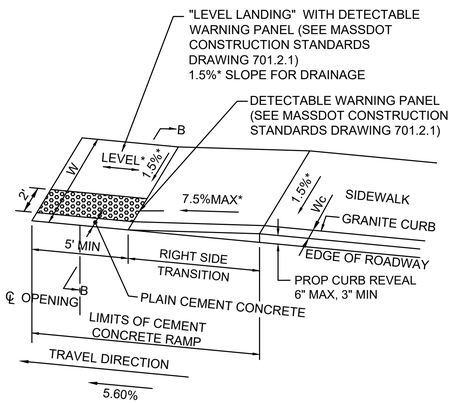
** 3 IN CURB REVEAL

USABLE SIDEWALK WIDTH PER AAB = W - Wc

USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'0"

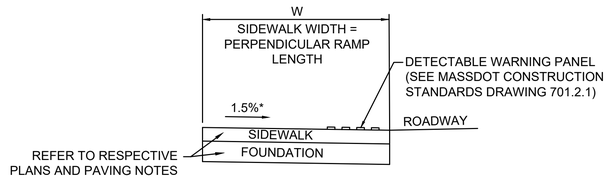
PEDESTRIAN CURB RAMPS WILL BE FITTED WITH DETECTABLE WARNING PANELS (SEE MASSDOT CONSTRUCTION STANDARDS DRAWING 701.2.1)

PCR #	ALIGNMENT	RAMP REFERENCE POINT		WIDTH OF RAMP (MIN 5.00')	SIDEWALK WIDTH (W) (MIN 4.00')	ROADWAY GUTTER SLOPE (±)	TRANSITION LENGTH	
		STATION	OFFSET				LEFT	RIGHT
01	HANCOCK STREET	55+78.26	18.83' RT	8.00'	8.50'	5.40%	6.50'	15.00'
03	HANCOCK STREET	57+54.91	25.53' RT	8.00'	8.50'	4.60%	6.50'	15.00'
04	HANCOCK STREET	57+52.04	19.49' LT	8.00'	8.50'	-4.00%	14.00'	6.50'
05	CHESTNUT STREET	105+02.53	19.78' RT	8.00'	8.50'	1.90%	3.25'**	9.00'
06	CHESTNUT STREET	105+03.40	18.61' LT	8.00'	8.50'	-0.60%	7.67'	6.50'
07	CHESTNUT STREET	103+29.35	21.25' LT	8.00'	8.50'	4.50%	3.25'**	15.00'
08	CHESTNUT STREET	103+27.39	20.29' RT	8.00'	8.50'	-6.40%	15.00'	6.50'



PEDESTRIAN CURB RAMP MODIFIED

N.T.S.



SECTION B-B

LEGEND:

W SIDEWALK WIDTH

Wc CURB WIDTH

CC CEMENT CONCRETE

* TOLERANCE FOR CONSTRUCTION ±0.5%

** 3 IN CURB REVEAL

USABLE SIDEWALK WIDTH PER AAB = W - Wc

USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'0"

PEDESTRIAN CURB RAMPS WILL BE FITTED WITH DETECTABLE WARNING PANELS (SEE MASSDOT CONSTRUCTION STANDARDS DRAWING 701.2.1)

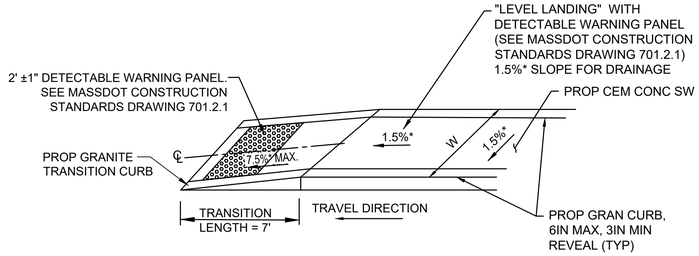
PCR #	ALIGNMENT	RAMP REFERENCE POINT		WIDTH OF RAMP (MIN 5.00')	SIDEWALK WIDTH (W) (MIN 4.00')	ROADWAY GUTTER SLOPE (±)	TRANSITION LENGTH	
		STATION	OFFSET				LEFT	RIGHT
02	HANCOCK STREET	55+79.27	19.73' LT	8.00'	8.50'	-5.60%	N/A	6.50'

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	82	115
PROJECT FILE NO.	609440		

PEDESTRIAN CURB RAMP & DRIVEWAY DETAILS - 02

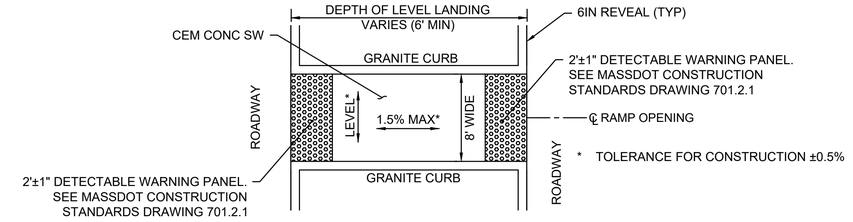
609440_HD(PED-DW DET).DWG Plotted on 9-Jan-2026 3:08 PM



PEDESTRIAN CURB RAMP - CONTINUOUS DIRECTION

N.T.S.

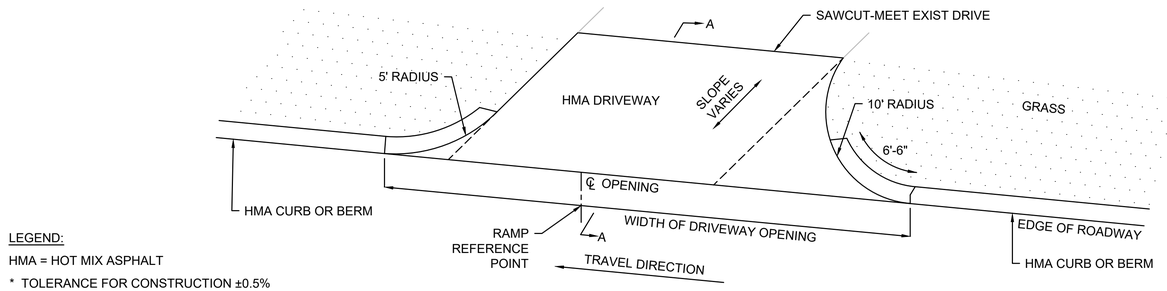
PCR #	ALIGNMENT	RAMP REFERENCE POINT		DEPTH OF LEVEL LANDING	TRANSITION LENGTH	WIDTH OF SIDEWALK (W) (MIN 5.00')	ROADWAY GUTTER SLOPE (±)
		STATION	OFFSET				
09	CHESTNUT STREET	106+91.97	19.32' LT	4.00'	7.00'	6.00'	0.80%



PEDESTRIAN CURB RAMP AT MEDIAN ISLANDS #10-13

N.T.S.

PCR #	ALIGNMENT	RAMP REFERENCE POINT	
		STATION	OFFSET
10	HANCOCK STREET	55+78.74	2.83' RT
11	HANCOCK STREET	57+52.19	3.49' LT
12	CHESTNUT STREET	105+02.33	3.75' RT
13	CHESTNUT STREET	103+28.25	4.31' RT



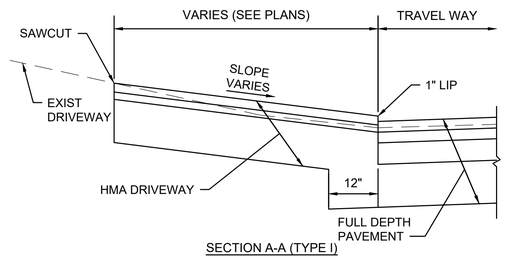
LEGEND:

HMA = HOT MIX ASPHALT

* TOLERANCE FOR CONSTRUCTION ±0.5%

HOT MIX ASPHALT DRIVEWAY

N.T.S.



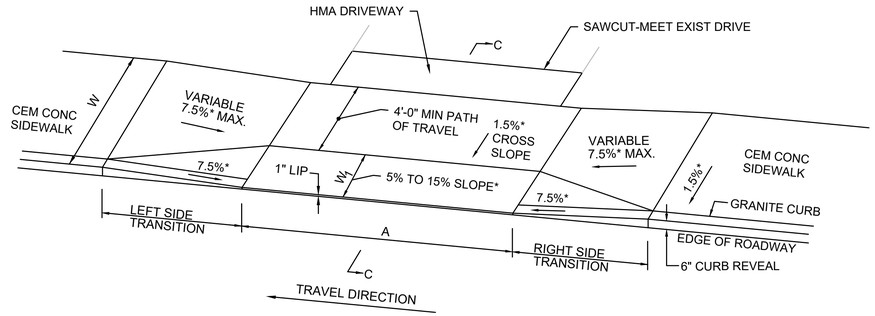
SECTION A-A (TYPE I)

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	83	115
PROJECT FILE NO.	609440		

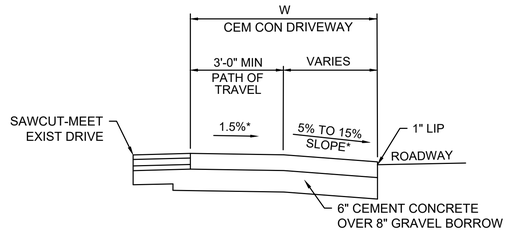
PEDESTRIAN CURB RAMP & DRIVEWAY DETAILS - 03

609440_HD(PED-DW DET).DWG Plotted on 25-Feb-2026 6:13 PM



CEMENT CONCRETE DRIVEWAY TYPE 1

N.T.S.



SECTION C-C

LEGEND:

HSL HIGH SIDE FRONT TRANSITION LENGTH (SEE MASSDOT CONSTRUCTION STANDARDS DRAWING 701.2.8)

W SIDEWALK WIDTH

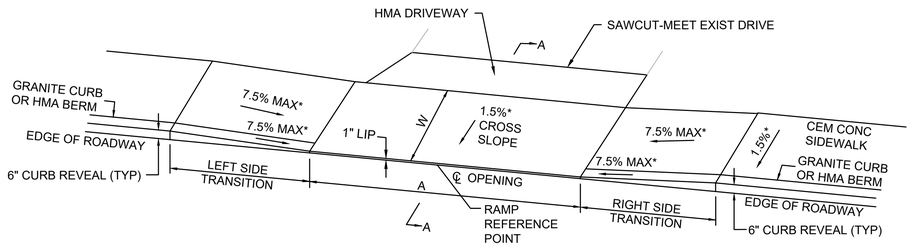
CC CEMENT CONCRETE

HMA HOT MIX ASPHALT

* TOLERANCE FOR CONSTRUCTION ±0.5%

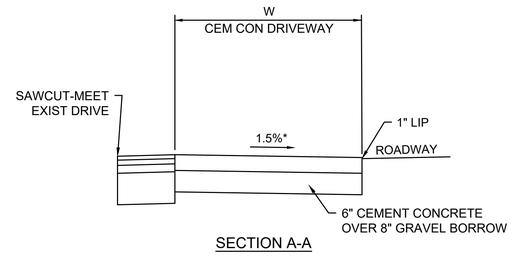
** 3 IN CURB REVEAL

DWY#	ALIGNMENT	DWY REFERENCE POINT		LENGTH OF PRIMARY RAMP (W_1)	PATH OF TRAVEL (MIN 4.00')	SIDEWALK WIDTH (W)	WIDTH OF DRIVEWAY RAMP (A)	ROADWAY GUTTER SLOPE (%)	TRANSITION LENGTH	
		STATION	OFFSET						LEFT	RIGHT
01	HANCOCK STREET	53+17.80	14.00' RT	2.00'	4.00'	6.00'	16.00'	3.90%	6.50'	14.00'
02	HANCOCK STREET	53+67.37	14.00' RT	2.00'	4.00'	6.00'	18.00'	7.10%	6.50'	15.00'
03	HANCOCK STREET	54+64.40	14.00' RT	2.00'	4.00'	6.00'	18.00'	9.40%	6.50'	15.00'
04	HANCOCK STREET	58+13.76	15.37' RT	2.00'	4.00'	6.00'	16.00'	3.80%	6.50'	14.00'
05	HANCOCK STREET	58+66.11	14.00' RT	2.00'	4.00'	6.00'	16.00'	1.80%	6.50'	9.00'
07	HANCOCK STREET	58+67.67	14.00' LT	2.00'	4.00'	6.00'	40.00'	-1.10%	11.00'	6.50'
09	CHESTNUT STREET	103+01.93	17.23' LT	2.00'	4.60'	6.60'	20.00'	5.90%	6.50'	7.50'**
10	CHESTNUT STREET	101+92.46	14.59' LT	2.00'	4.00'	6.00'	20.00'	4.30%	6.50'	15.00'
11	CHESTNUT STREET	105+34.11	18.39' RT	3.00'	5.10'	8.10'	15.00'	0.10%	6.50'	3.83'**
12	CHESTNUT STREET	106+49.87	14.88' RT	2.00'	4.00'	6.00'	16.00'	-0.60%	7.67'	6.50'
13	CHESTNUT STREET	106+43.46	16.09' LT	2.00'	4.00'	6.00'	32.00'	0.62%	6.50'	7.67'
16	HANCOCK STREET	52+70.46	14.00' RT	2.00'	4.00'	6.00'	16.00'	1.72%	6.50'	9.00'



CEMENT CONCRETE DRIVEWAY TYPE 3

N.T.S.



SECTION A-A

LEGEND:

HSL HIGH SIDE FRONT TRANSITION LENGTH (SEE MASSDOT CONSTRUCTION STANDARDS DRAWING 701.2.8)

W SIDEWALK WIDTH

CC CEMENT CONCRETE

HMA HOT MIX ASPHALT

* TOLERANCE FOR CONSTRUCTION ±0.5%

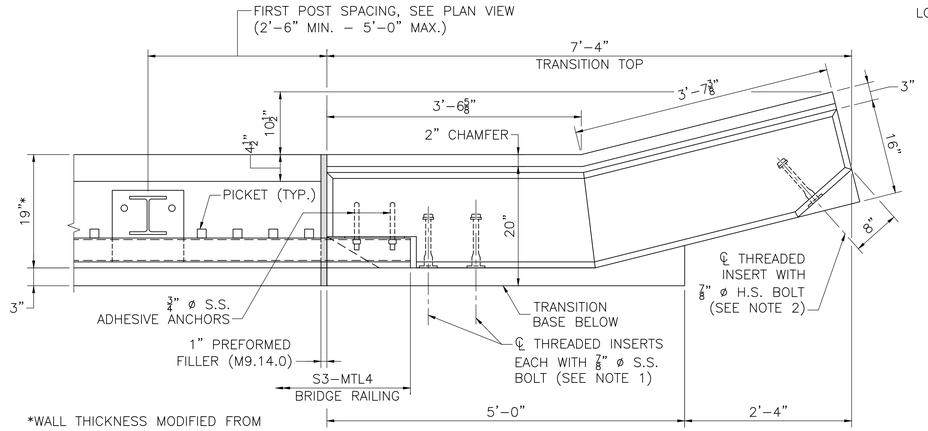
** 3 IN CURB REVEAL

DWY#	ALIGNMENT	DWY REFERENCE POINT		SIDEWALK WIDTH (W)	WIDTH OF DRIVEWAY RAMP (A)	ROADWAY GUTTER SLOPE (%)	TRANSITION LENGTH	
		STATION	OFFSET				LEFT	RIGHT
06	HANCOCK STREET	59+16.43	14.00' RT	6.00'	16.00'	0.30%	6.50'	7.67'
08	HANCOCK STREET	59+76.29	13.00' LT	6.00'	28.00'	1.20%	6.50'	N/A
14	CHESTNUT STREET	101+15.62	17.27' RT	6.00'	18.00'	-4.10%	15.00'	N/A
15	CHESTNUT STREET	101+40.09	14.77' LT	6.00'	20.00'	2.90%	N/A	11.00'

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

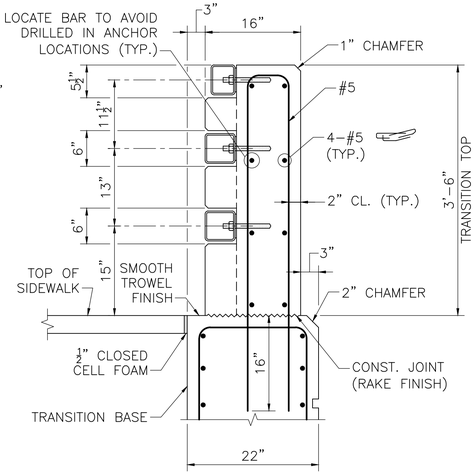
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	84	115
PROJECT FILE NO.	609440		

BRIDGE RAILING DETAILS - 01



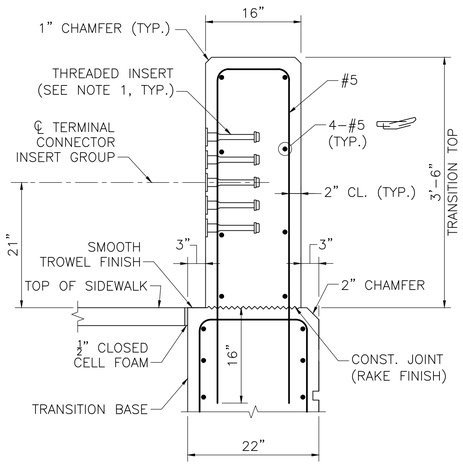
*WALL THICKNESS MODIFIED FROM STANDARD MASSDOT DETAIL TO MATCH PROJECT WALL THICKNESS

PLAN
SCALE: 1" = 1'-0"



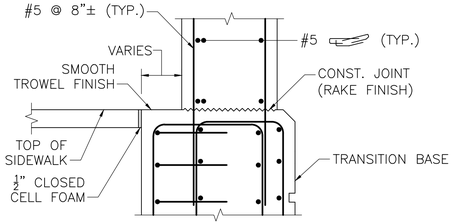
SECTION AT SIDEWALK

SECTION 2
SCALE: 1" = 1'-0" (84)



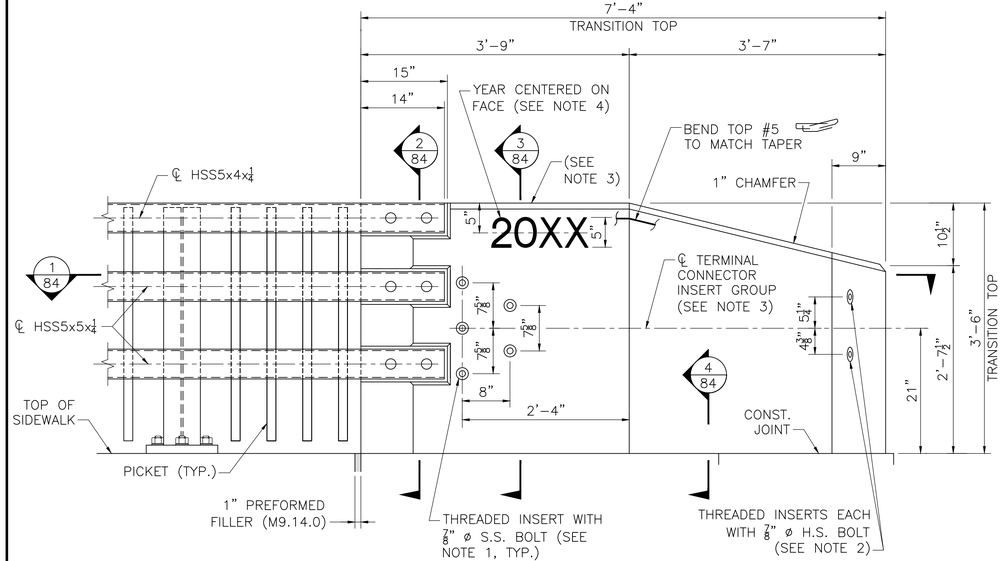
SECTION AT SIDEWALK

SECTION 3
SCALE: 1" = 1'-0" (84)

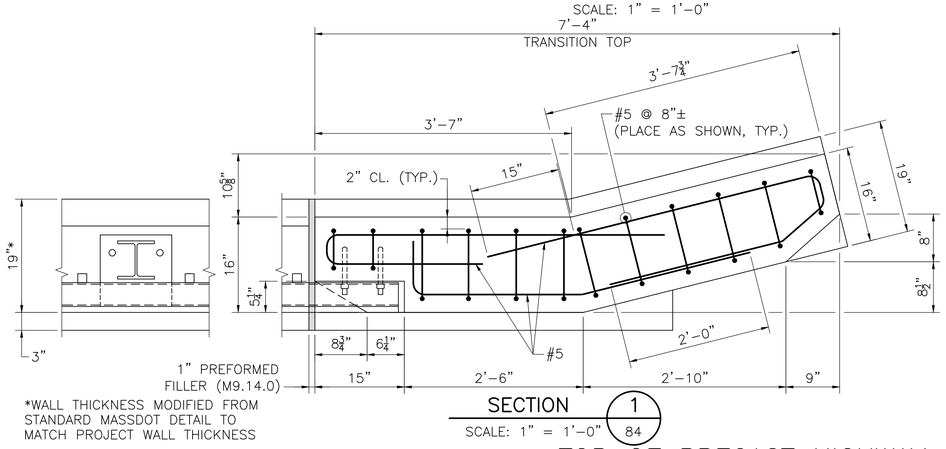


SECTION AT SAFETY CURB

SECTION 4
SCALE: 1" = 1'-0" (84)

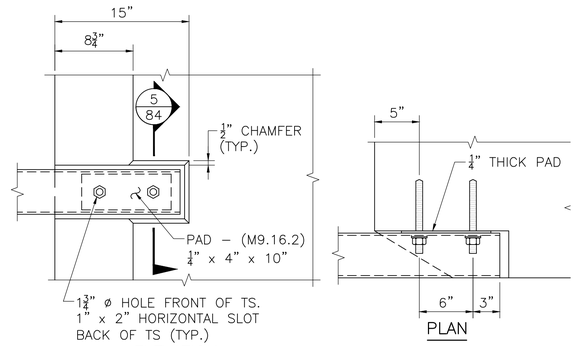


ELEVATION AT SIDEWALK
SCALE: 1" = 1'-0"

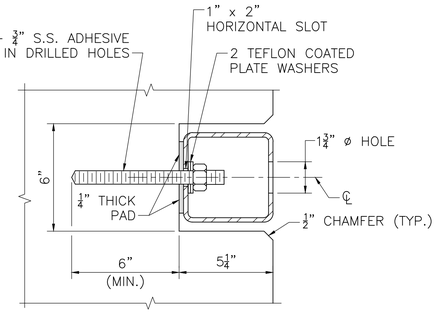


*WALL THICKNESS MODIFIED FROM STANDARD MASSDOT DETAIL TO MATCH PROJECT WALL THICKNESS

SECTION 1
SCALE: 1" = 1'-0" (84)



RAIL ATTACHMENT
NOT TO SCALE



SECTION 5
SCALE: 3" = 1'-0" (84)

NOTES:

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

   FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.
4. USE LATEST CONTRACT COMPLETION YEAR IN EFFECT WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR ALL GUARDRAIL TRANSITIONS.
5. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 HP CEMENT CONCRETE.
6. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.
7. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL CONFORM TO AASHTO M 31 GRADE 60.

TOP OF PRECAST HIGHWAY GUARDRAIL TRANSITION FOR S3-MTL4 RAILING

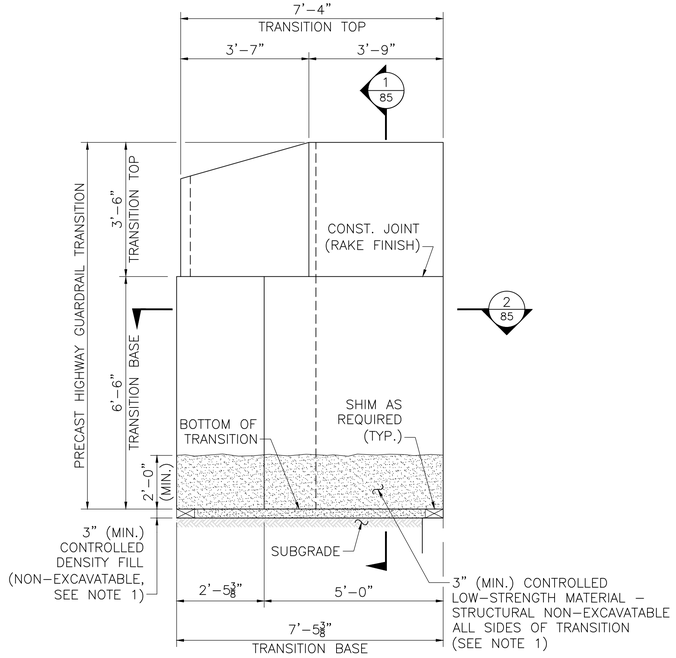
609440_HD(RAILING).DWG Plotted on 9-Jan-2026 3:11 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	85	115
PROJECT FILE NO.	609440		

BRIDGE RAILING DETAILS - 02

609440_HD(RAILING).DWG Plotted on 9-Jan-2026 3:12 PM

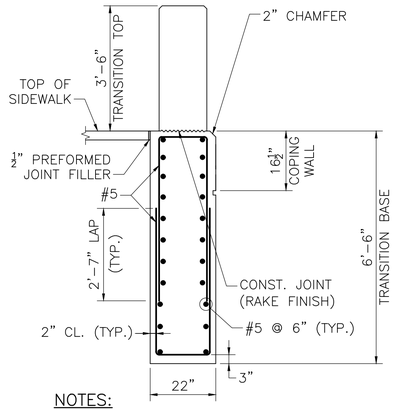


PRECAST GUARDRAIL TRANSITIONS ELEVATION AT SPLAYED WINGWALLS

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

NOTES:

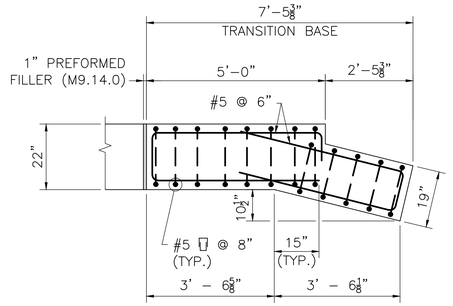
1. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'-0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION.
2. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL GUARDRAIL TRANSITION WITH CONTROLLED LOW-STRENGTH MATERIAL - STRUCTURAL NON-EXCAVATABLE TO THE ELEVATION SHOWN.
3. BACKFILL THE REMAINDER OF EXCAVATION WITH GRAVEL BORROW, WHICH SHALL BE THOROUGHLY COMPACTED IN 12" LIFTS.
4. AFTER CONTROLLED LOW-STRENGTH MATERIAL - STRUCTURAL NON-EXCAVATABLE HAS SET FILL THE GAPS BETWEEN GUARDRAIL TRANSITION AND BLOCK-OUT IN BACKWALL AND ABUTMENT WITH NON-SHRINK GROUT UP TO THE TOP OF BACKWALL.
5. THE REST OF REINFORCEMENT IS NOT SHOWN FOR CLARITY.
6. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL CONFORM TO AASHTO M 31 GRADE 60.



NOTES:

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

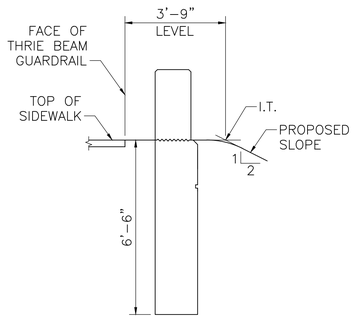
SECTION 1
SCALE: $\frac{1}{2}$" = 1'-0"



NOTE:

WINGWALL REINFORCEMENT AND STRIATIONS NOT SHOWN FOR CLARITY.

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



GRADING FOR S3-MTL4 AT SIDEWALK

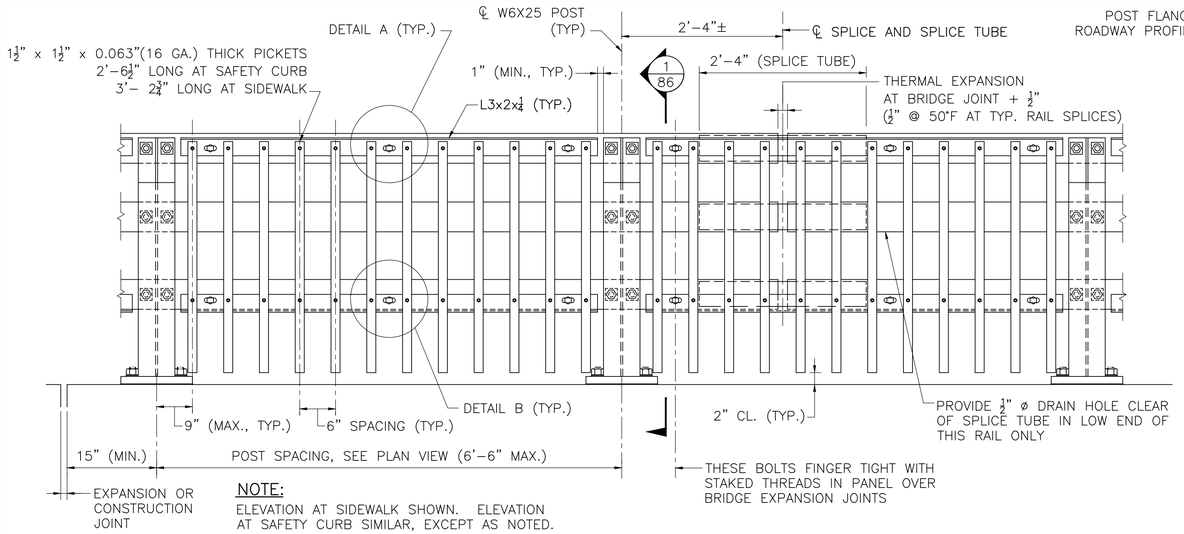
SCALE: $\frac{3}{8}$" = 1'-0"

609440_HD(RAILING).DWG Plotted on 9-Jan-2026 3:12 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT HANCOCK STREET AND CHESTNUT STREET

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MA	STP-0035(067)X	86	115
PROJECT FILE NO.	609440		

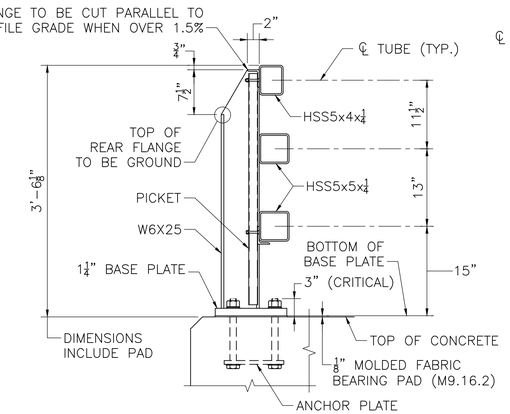
BRIDGE RAILING DETAILS - 03



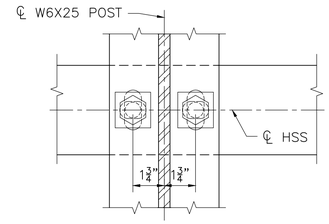
NOTE:
ELEVATION AT SIDEWALK SHOWN. ELEVATION AT SAFETY CURB SIMILAR, EXCEPT AS NOTED.

BRIDGE RAILING ELEVATION

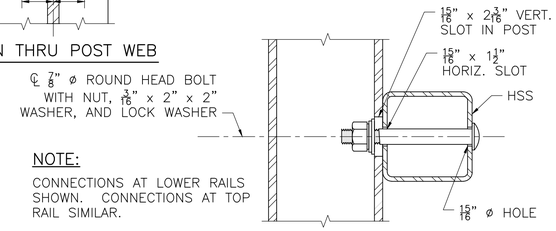
SCALE: 1" = 1'-0"



SECTION 1 / 86
SCALE: 1" = 1'-0"



SECTION THRU POST WEB



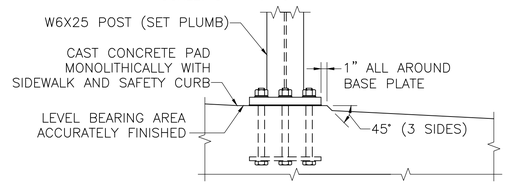
℄ ⅞" ø ROUND HEAD BOLT WITH NUT, 3/16" x 2" x 2" WASHER, AND LOCK WASHER

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

SECTION THRU RAIL

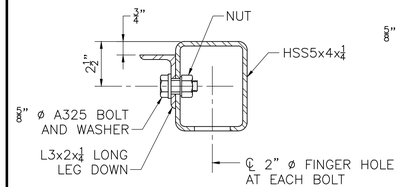
TYPICAL RAIL TO POST CONNECTIONS

SCALE: 3" = 1'-0"

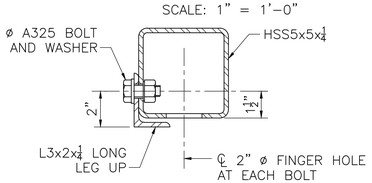


SETTING OF POSTS (PROFILE GRADE OVER 1.5%)

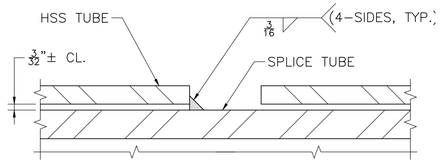
SCALE: 1" = 1'-0"



SECTION 2 / 86

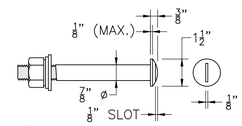


SECTION 4 / 86



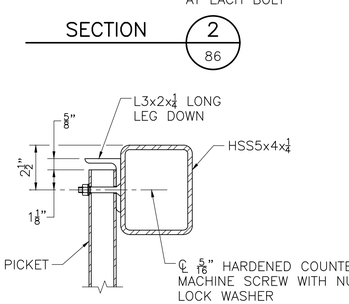
SPLICE DETAIL

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

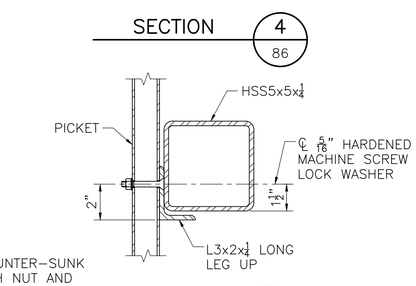


⅞" ø ROUND HEAD BOLT

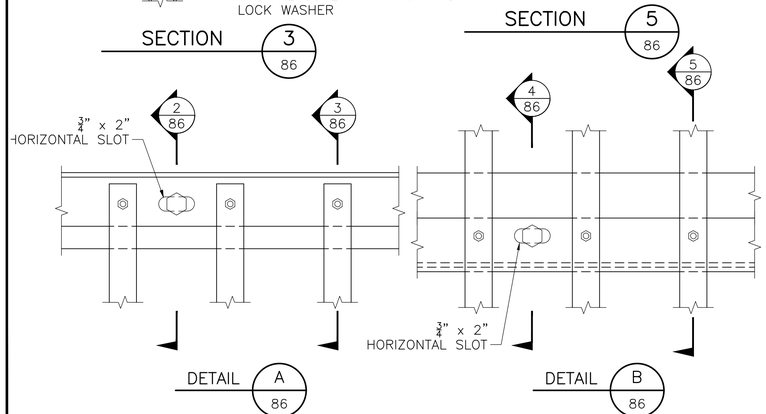
SCALE: 3" = 1'-0"



SECTION 3 / 86

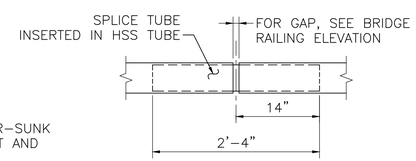


SECTION 5 / 86



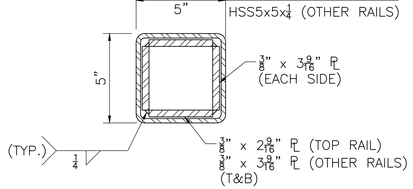
TYPICAL PICKET TO RAIL DETAILS

SCALE: 3" = 1'-0"



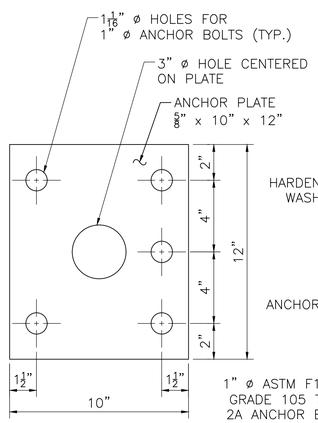
TYPICAL SPLICE

SCALE: 1" = 1'-0"



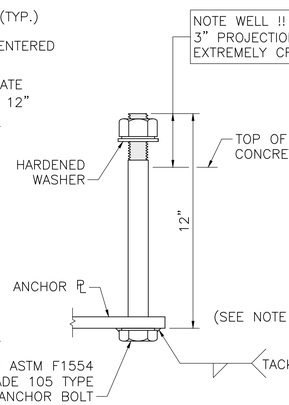
SPLICE TUBE DETAILS

SCALE: 3" = 1'-0"



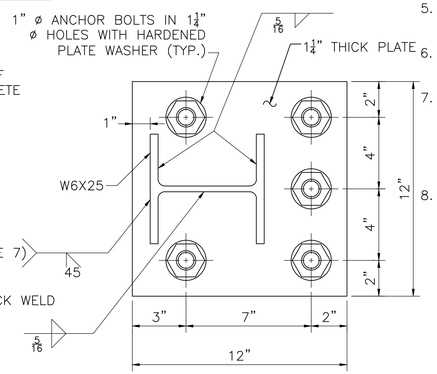
ANCHOR PLATE

SCALE: 3" = 1'-0"



ANCHOR BOLT

SCALE: 3" = 1'-0"



BASE PLATE

SCALE: 3" = 1'-0"

RAILING NOTES:

1. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING (HSS) SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 500 WITH A CERTIFIED Fy = 50 KSI MINIMUM. THE MINIMUM HORIZONTAL BENDING RADII OF THE HSS TUBING SHALL BE 8 FEET. PICKET CARRIER ANGLES, ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 36. PICKET TUBING SHALL CONFORM TO ASTM A 513 WITH Fy = 36 KSI MIN. OR A 500 GRADE B.
2. ALL STEEL (EXCEPT THE ⅝" ANCHOR PLATE AND FASTENERS) SHALL BE GALVANIZED AND PAINTED DARK BRONZE (FEDERAL STD. 595B COLOR NO. 10045). ANCHOR PLATE SHALL BE GALVANIZED ONLY. HEADS OF ⅞" ø ROUND HEAD BOLTS SHALL BE PAINTED TO MATCH RAIL.
3. ANCHOR BOLTS SHALL BE SET WITH TEMPLATES. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN AFTER STEEL IS IN PLACE.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR (4) POSTS WITHOUT SPLICES WHERE POSSIBLE. IN ADDITION SPLICES SHALL ALSO BE LOCATED IN RAILS OVER BRIDGE EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. ALL POSTS TO BE PLUMB WHEN PROFILE GRADE EXCEEDS 1.5%. FOR PROFILE GRADES LESS THAN 1.5%, POSTS SHALL BE SET PERPENDICULAR TO GRADE.
7. POST TO FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING. BEVEL OUTSIDE FLANGES OF POST. FIT POST TO BASE PLATE. WELD 5/16" FILLET ON INSIDE OF FLANGE AND WEB. BACKGOUGE OUTSIDE OF FLANGE TO SOUND METAL. COMPLETE GROOVE WELD WITH MINIMUM OF ⅛" REINFORCEMENT. WELD IS THE SAME ON BOTH FLANGES.
8. ⅞" ø ROUND HEAD BOLTS SHALL CONFORM TO THE CHEMICAL AND PHYSICAL REQUIREMENTS OF ASTM F3125 GRADE 325 TYPE 1 GALVANIZED.

S3-MTL4 BRIDGE RAILING

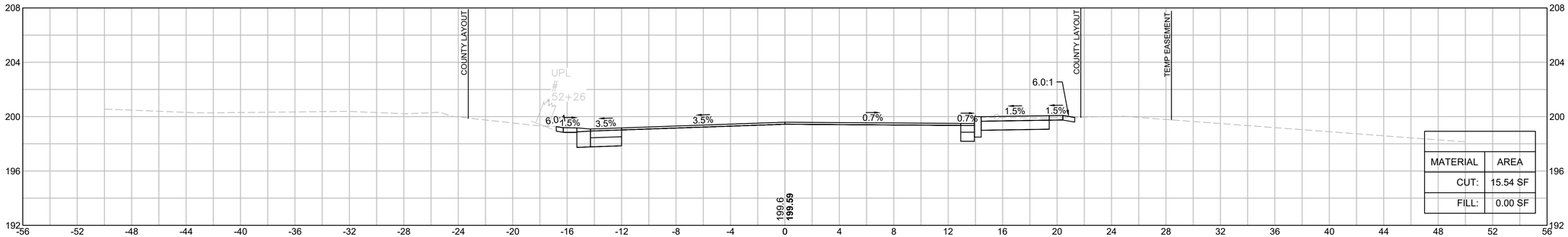
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	87	115
PROJECT FILE NO.	609440		

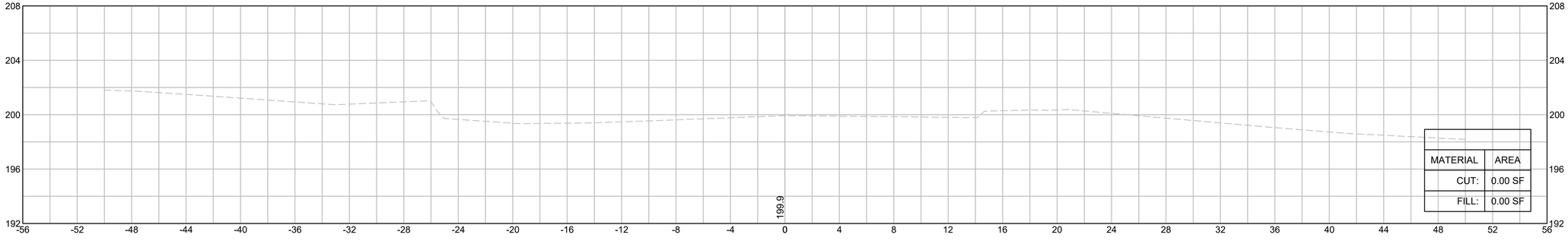
HANCOCK STREET - CROSS SECTIONS - 01

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:16 PM

52+30



52+00



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

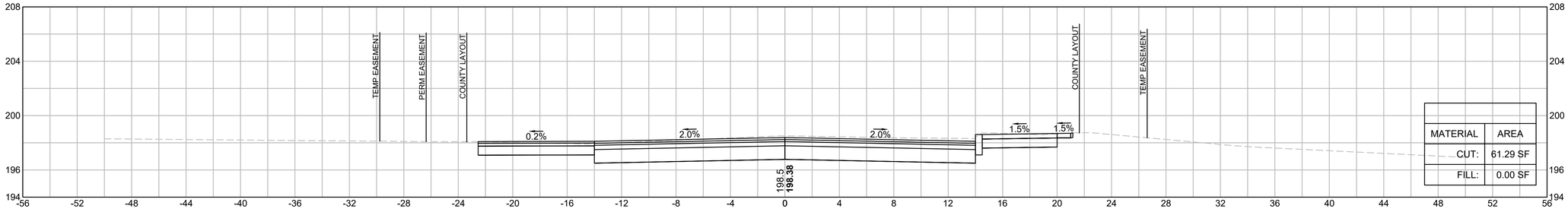
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	88	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 02

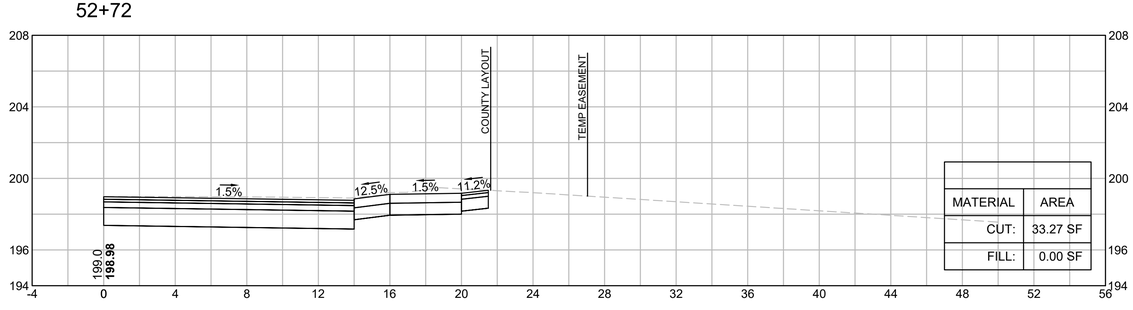
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53+00



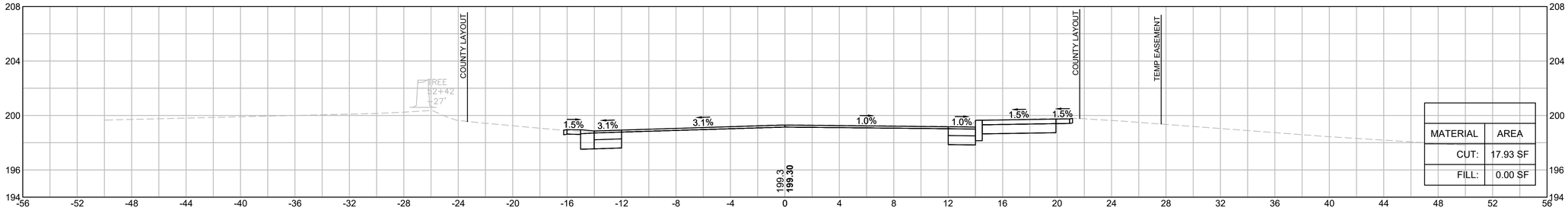
MATERIAL	AREA
CUT:	61.29 SF
FILL:	0.00 SF

52+72



MATERIAL	AREA
CUT:	33.27 SF
FILL:	0.00 SF

52+50



MATERIAL	AREA
CUT:	17.93 SF
FILL:	0.00 SF

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

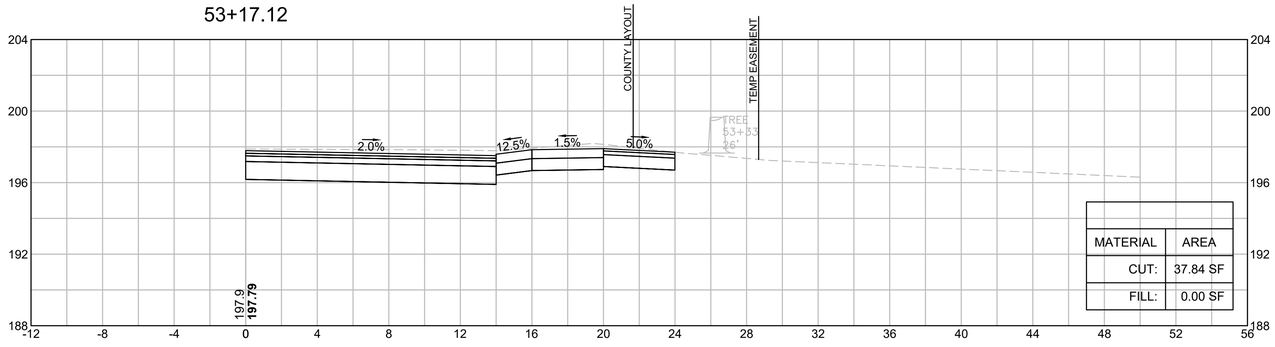
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	89	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 03

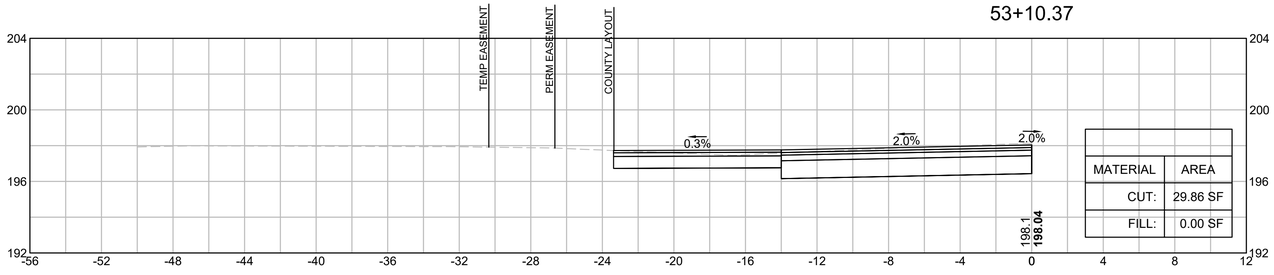
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:17 PM

53+17.12



MATERIAL	AREA
CUT:	37.84 SF
FILL:	0.00 SF

53+10.37



MATERIAL	AREA
CUT:	29.86 SF
FILL:	0.00 SF

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

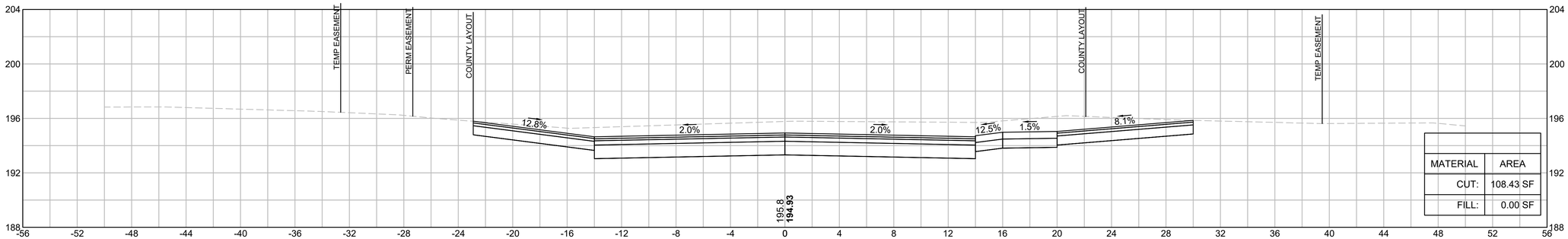
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	90	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 04

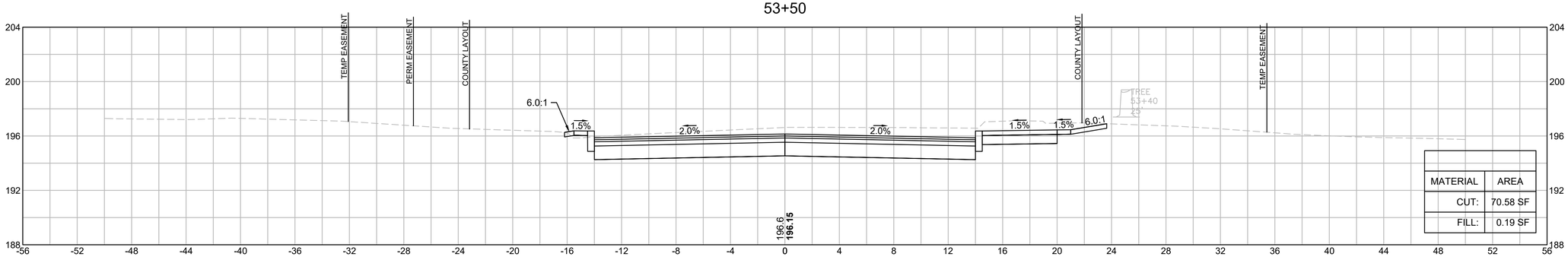
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:18 PM

53+68.63



MATERIAL	AREA
CUT:	108.43 SF
FILL:	0.00 SF

53+50



MATERIAL	AREA
CUT:	70.58 SF
FILL:	0.19 SF

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

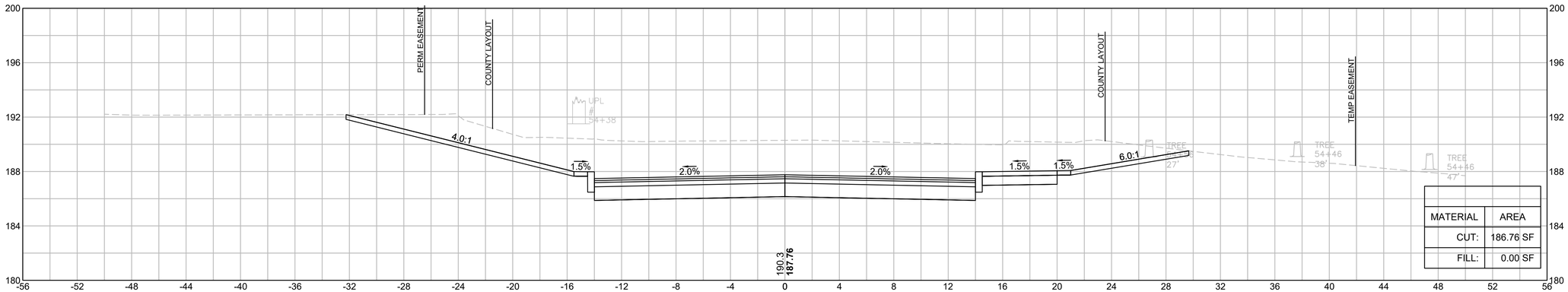
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	91	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 05

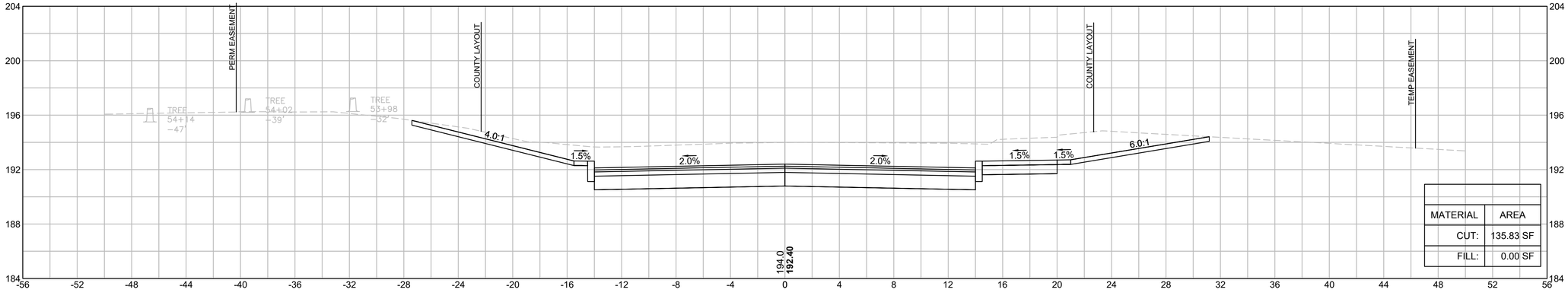
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:18 PM

54+50



MATERIAL	AREA
CUT:	186.76 SF
FILL:	0.00 SF

54+00



MATERIAL	AREA
CUT:	135.83 SF
FILL:	0.00 SF

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

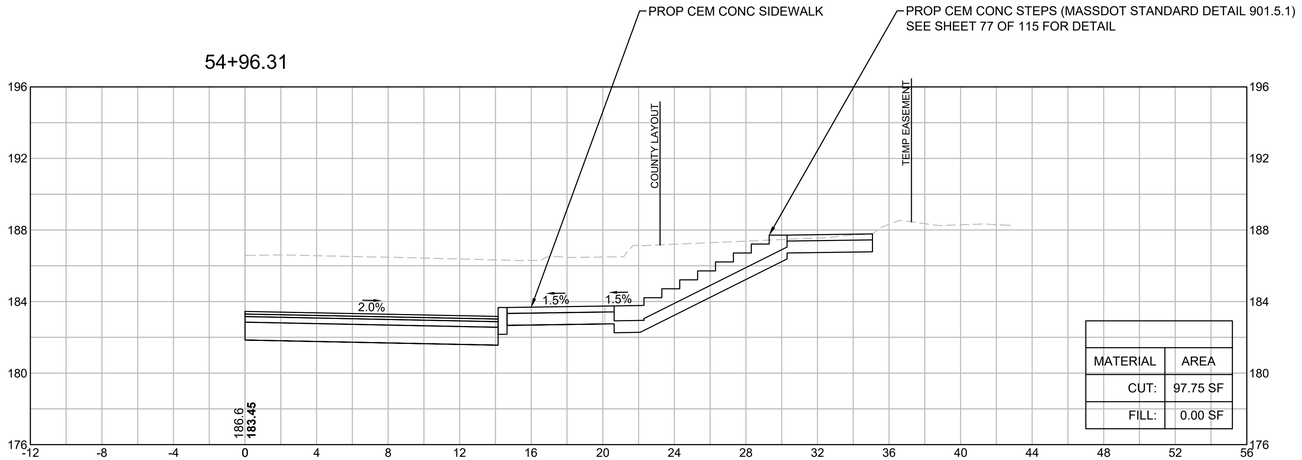
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	92	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 06

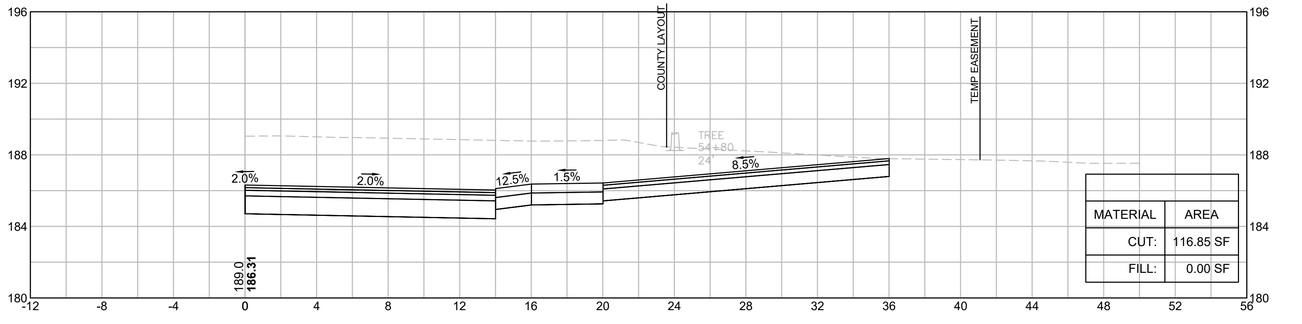
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:19 PM

54+96.31



MATERIAL	AREA
CUT:	97.75 SF
FILL:	0.00 SF

54+65.53



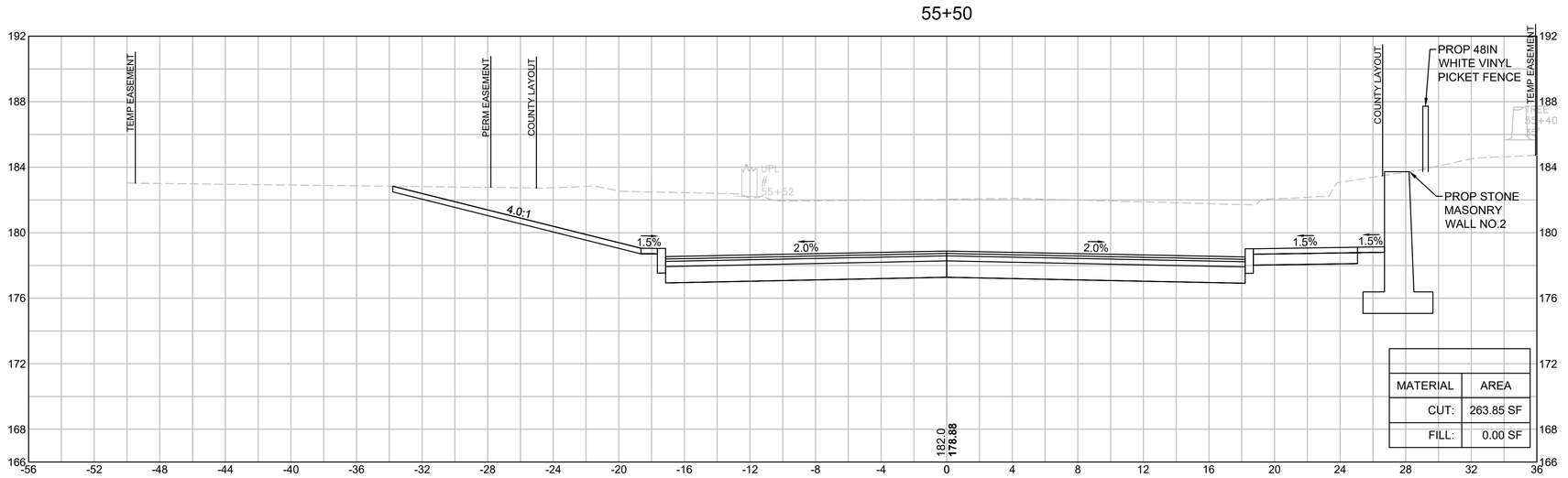
MATERIAL	AREA
CUT:	116.85 SF
FILL:	0.00 SF

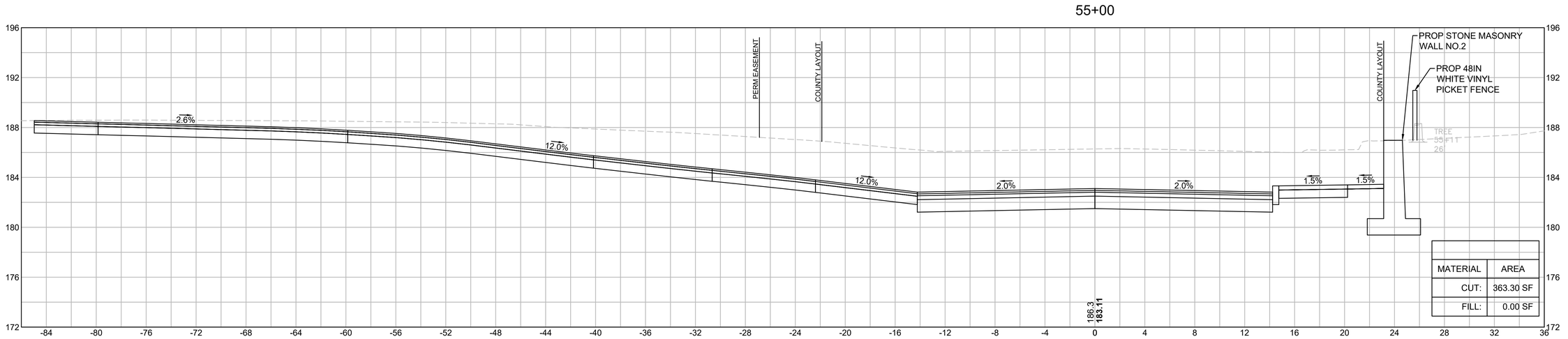
HOR. SCALE IN FEET
20 0 20 40
4 0 4 8
VER. SCALE IN FEET

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	93	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 07





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

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:20 PM

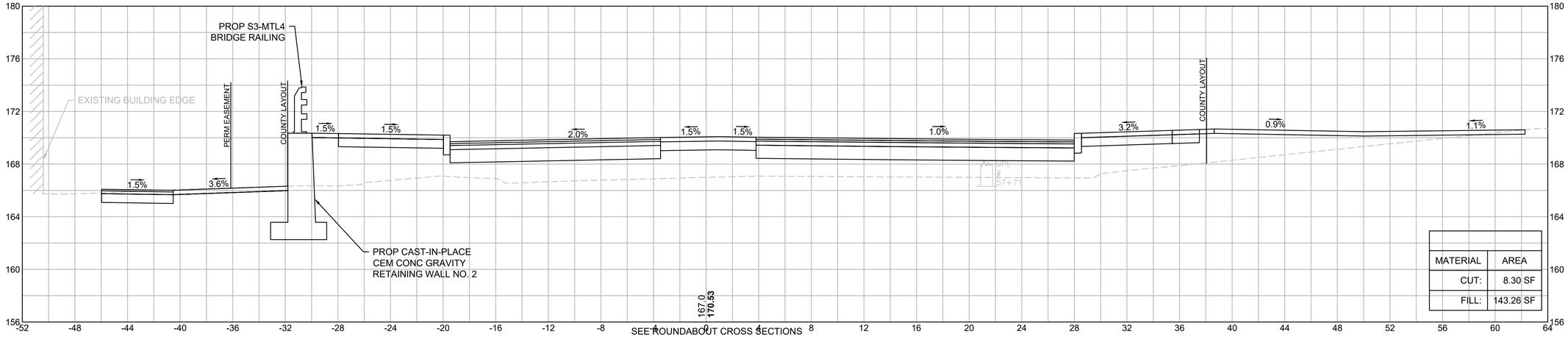
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	94	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 08

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:21 PM

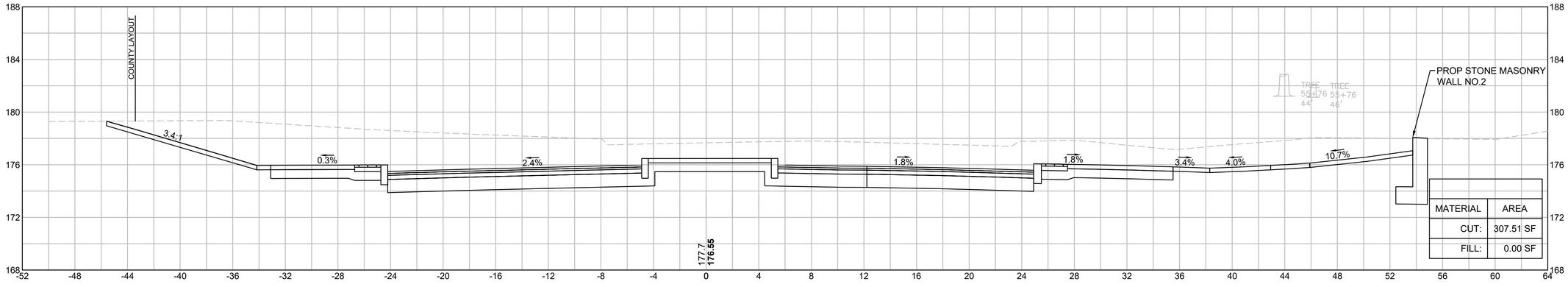
57+50



MATERIAL	AREA
CUT:	8.30 SF
FILL:	143.26 SF

SEE ROUNDABOUT CROSS SECTIONS
BETWEEN STA 56+00 AND STA 57+50
ON SHEETS 112-115

56+00



MATERIAL	AREA
CUT:	307.51 SF
FILL:	0.00 SF

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

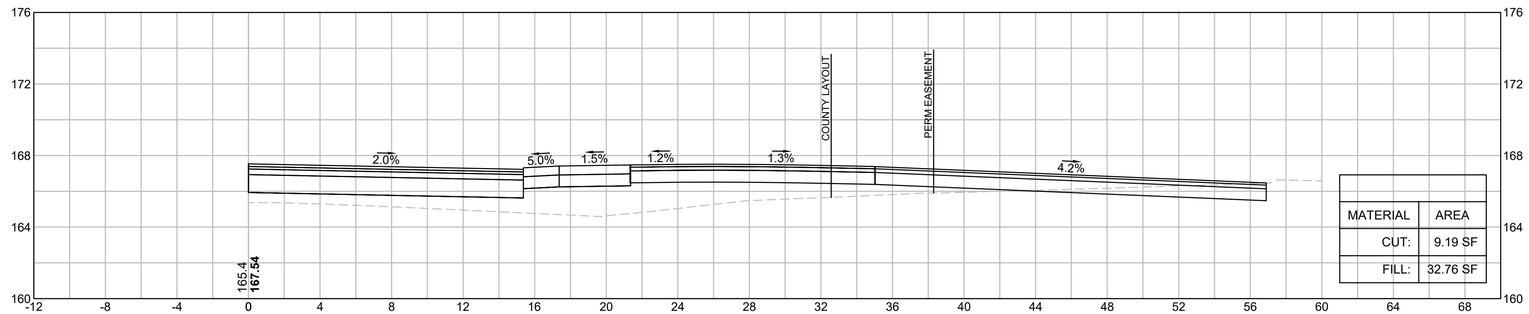
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	95	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 09

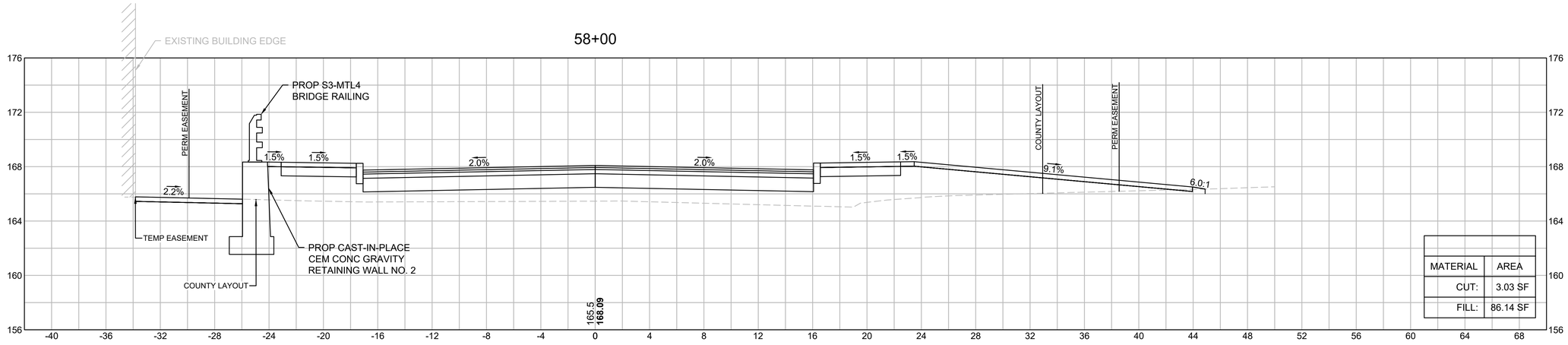
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:22 PM

58+14



MATERIAL	AREA
CUT:	9.19 SF
FILL:	32.76 SF

58+00



MATERIAL	AREA
CUT:	3.03 SF
FILL:	86.14 SF

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

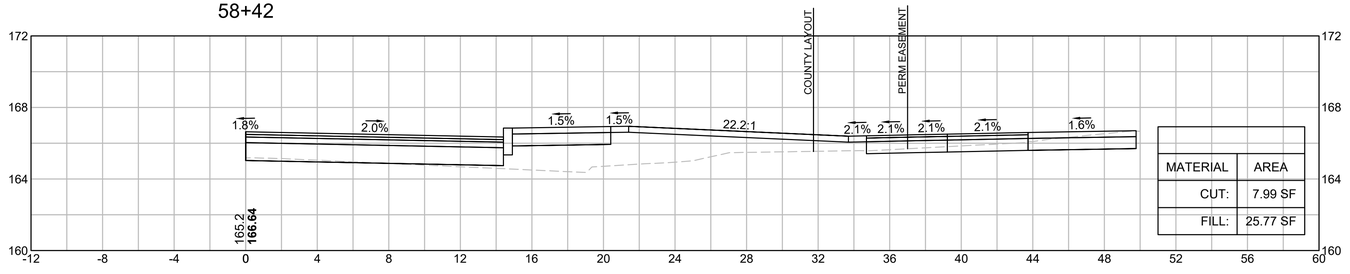
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	96	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 10

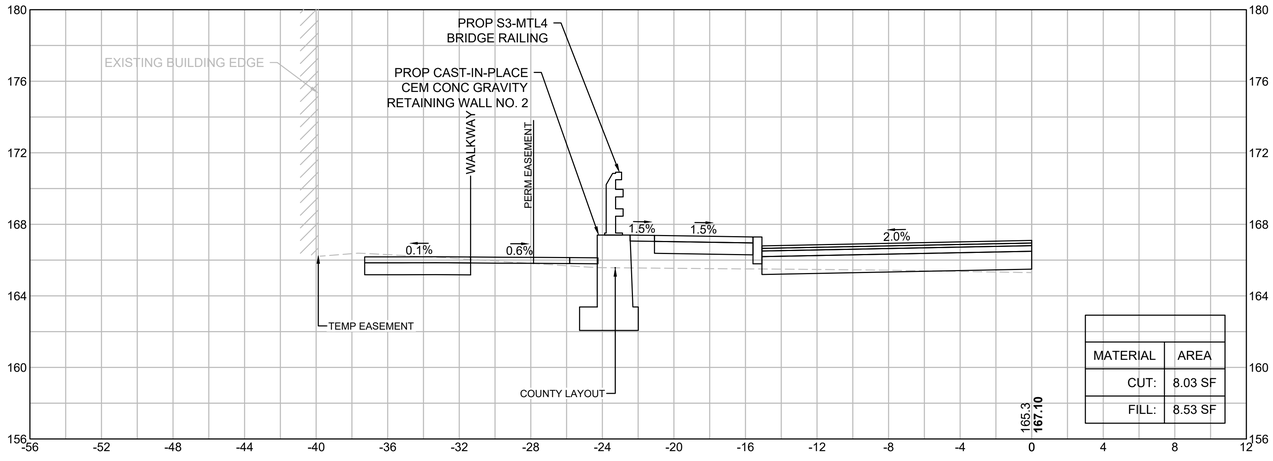
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:57 PM

58+42



MATERIAL	AREA
CUT:	7.99 SF
FILL:	25.77 SF

58+26.41



MATERIAL	AREA
CUT:	8.03 SF
FILL:	8.53 SF

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

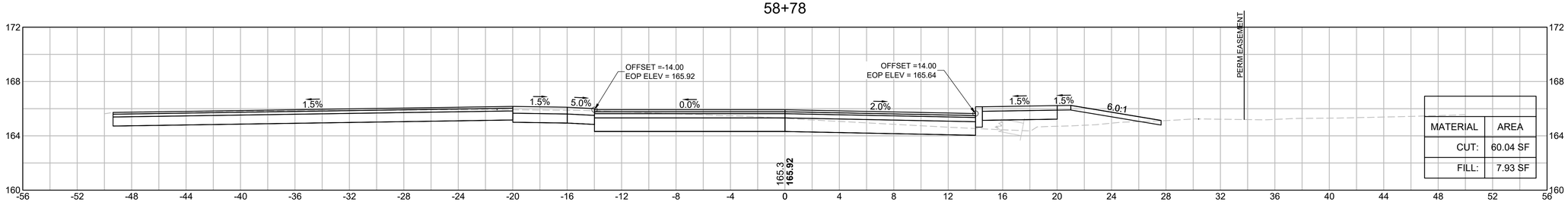
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	97	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 11

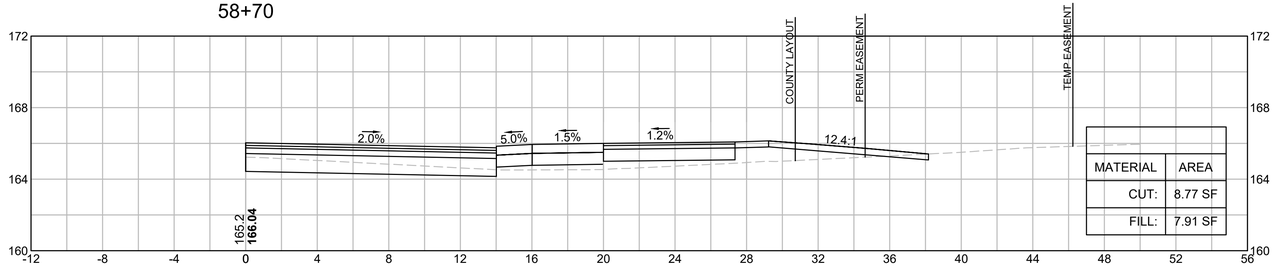
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:23 PM

58+78



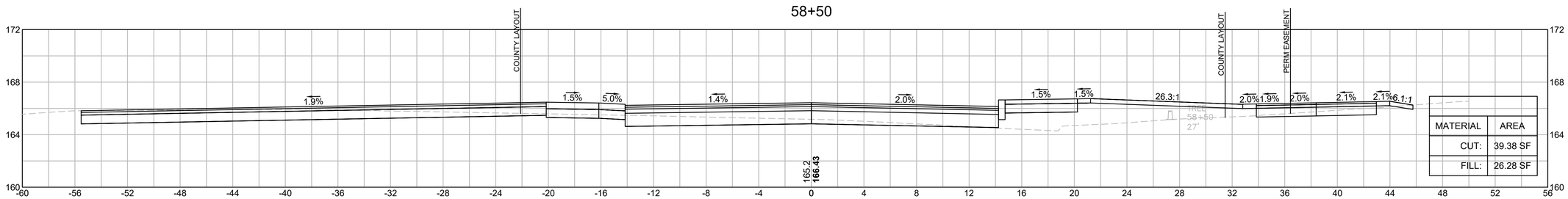
MATERIAL	AREA
CUT:	60.04 SF
FILL:	7.93 SF

58+70



MATERIAL	AREA
CUT:	8.77 SF
FILL:	7.91 SF

58+50



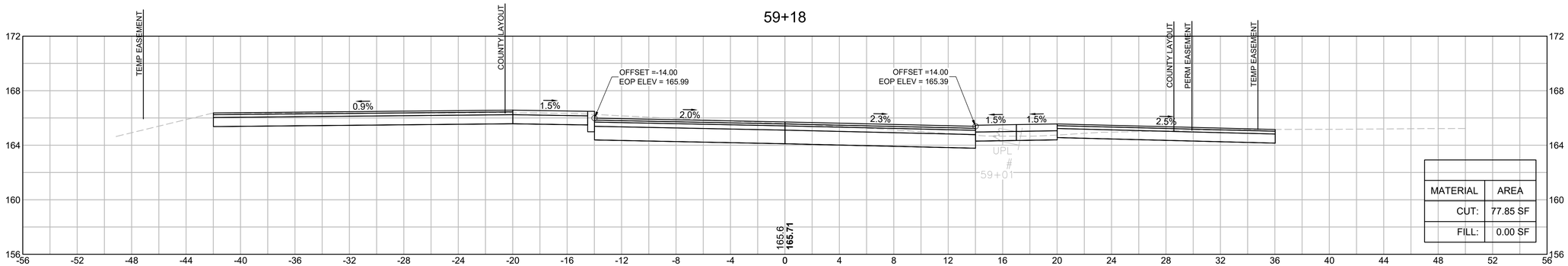
MATERIAL	AREA
CUT:	39.38 SF
FILL:	26.28 SF

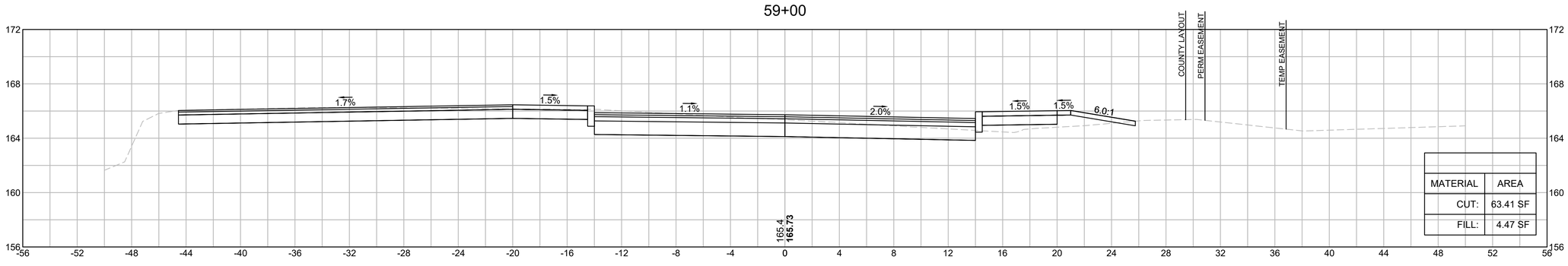
HOR. SCALE IN FEET
20 0 20 40
VER. SCALE IN FEET
4 0 4 8

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	98	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 12





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

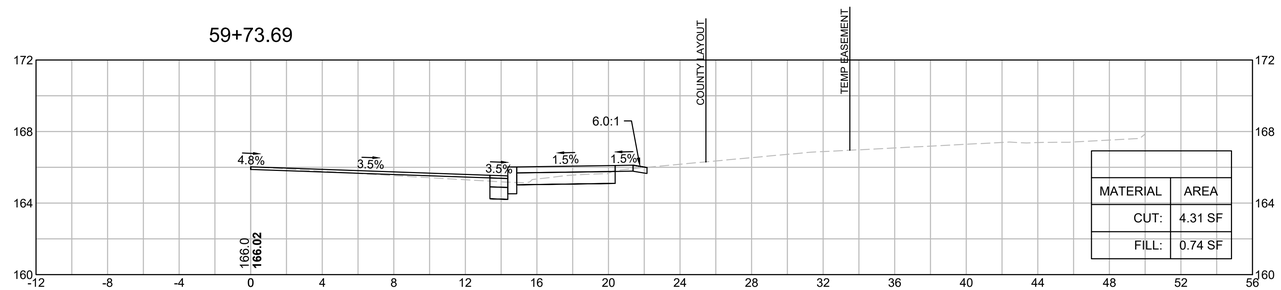
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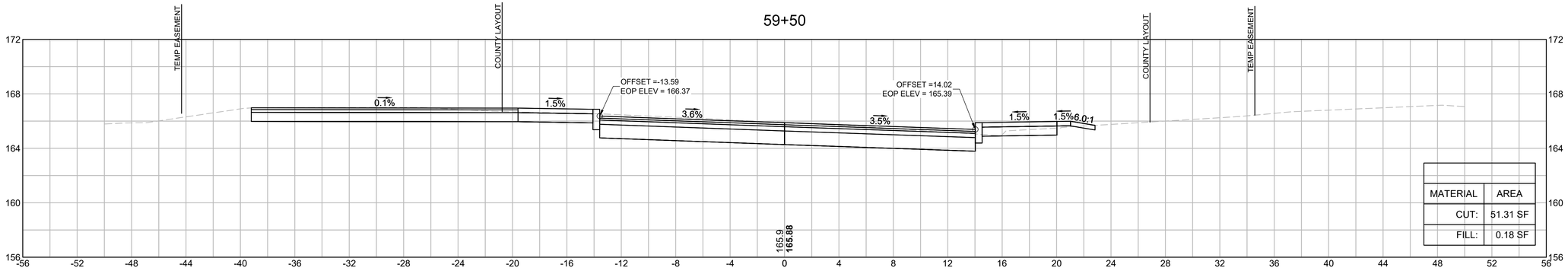
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	99	115
PROJECT FILE NO.	609440		

HANCOCK STREET - CROSS SECTIONS - 13

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:24 PM





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

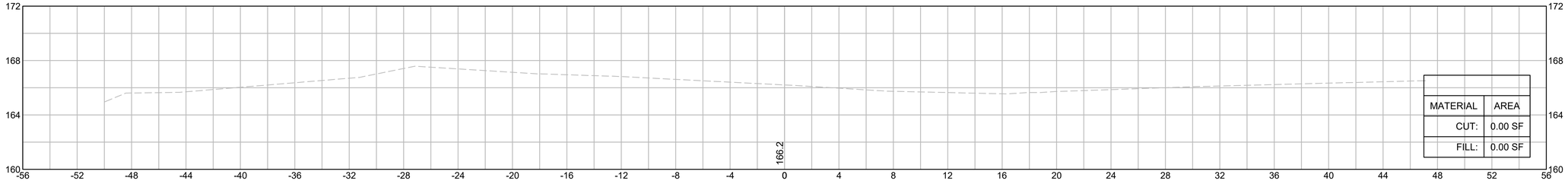
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	100	115
PROJECT FILE NO.	609440		

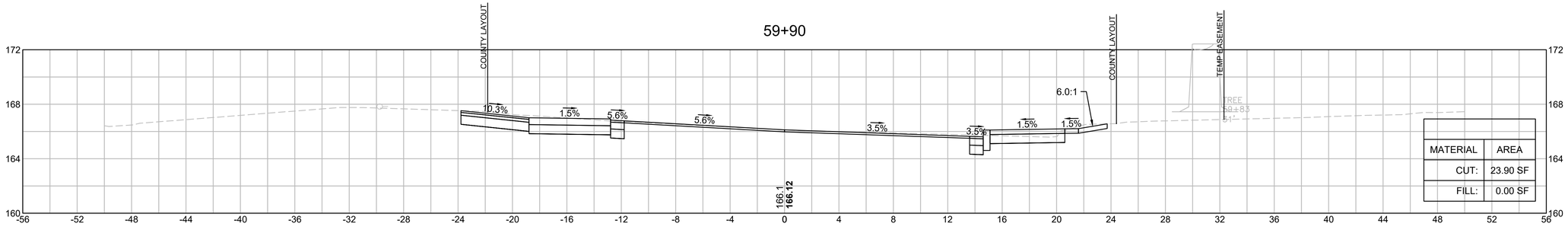
HANCOCK STREET - CROSS SECTIONS - 14

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:25 PM

60+00



59+90



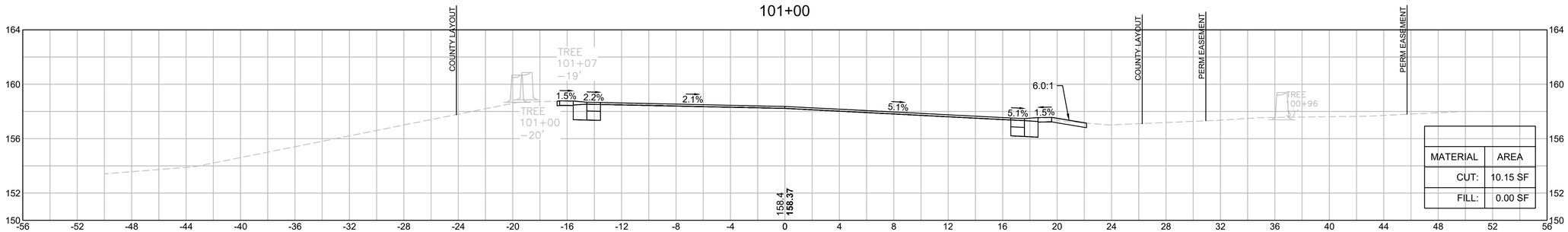
HOR. SCALE IN FEET
20 0 20 40
4 0 4 8
VER. SCALE IN FEET

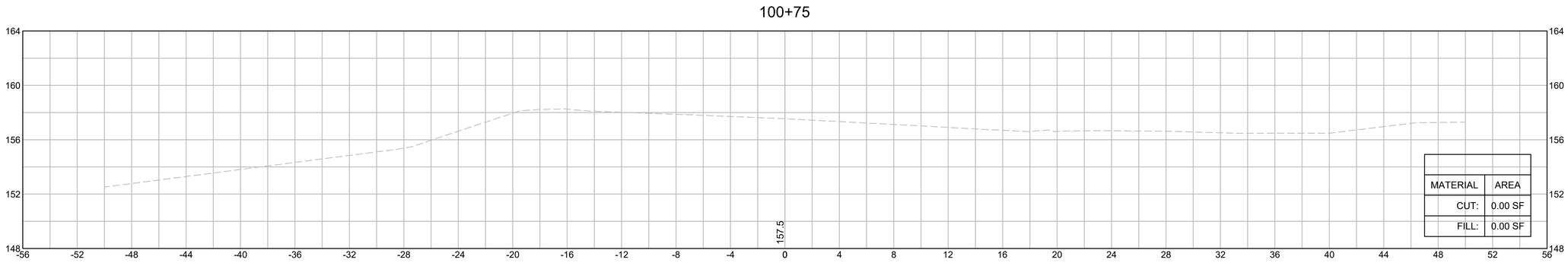
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	101	115
	PROJECT FILE NO. 609440		

CHESTNUT STREET - CROSS SECTIONS - 01

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:27 PM





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

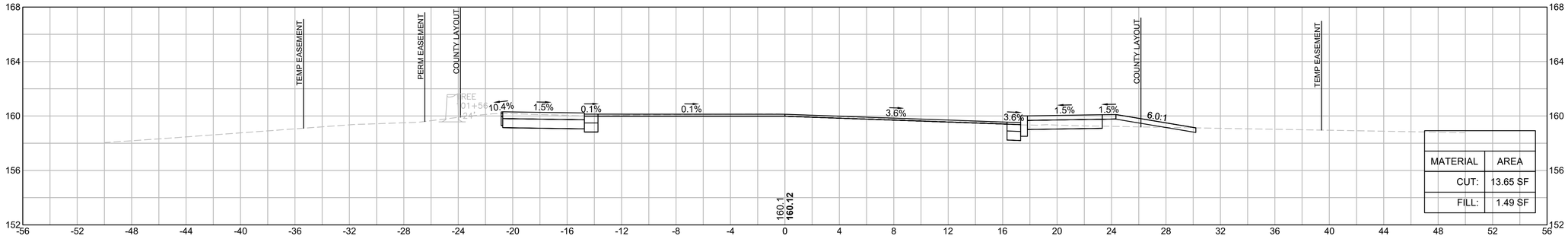
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	102	115
	PROJECT FILE NO. 609440		

CHESTNUT STREET - CROSS SECTIONS - 02

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:27 PM

101+50



MATERIAL	AREA
CUT:	13.65 SF
FILL:	1.49 SF

101+39.75

MATERIAL	AREA
CUT:	15.49 SF
FILL:	0.00 SF

101+14.87

MATERIAL	AREA
CUT:	17.25 SF
FILL:	0.00 SF

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

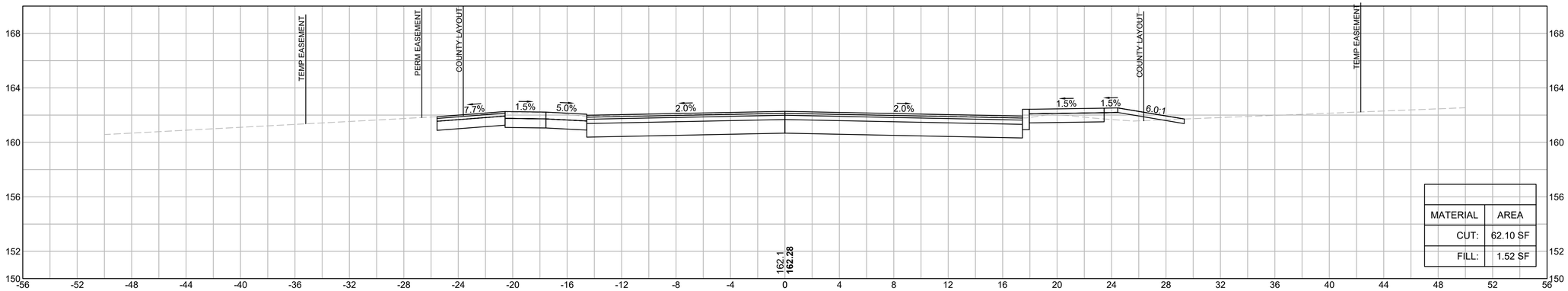
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	103	115
	PROJECT FILE NO. 609440		

CHESTNUT STREET - CROSS SECTIONS - 03

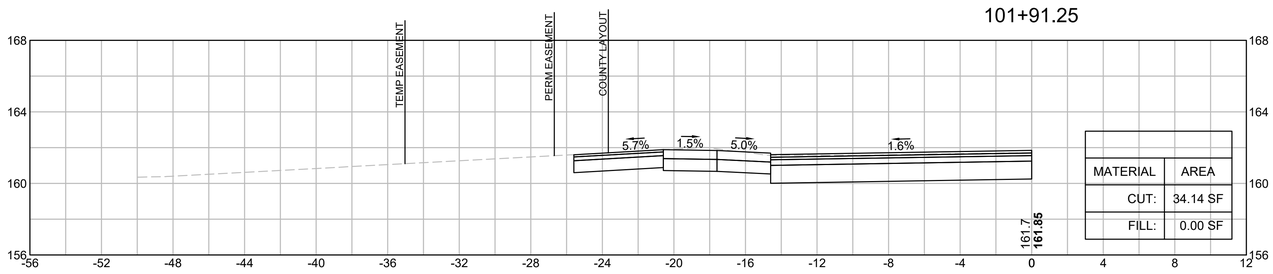
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:28 PM

102+00



MATERIAL	AREA
CUT:	62.10 SF
FILL:	1.52 SF

101+91.25



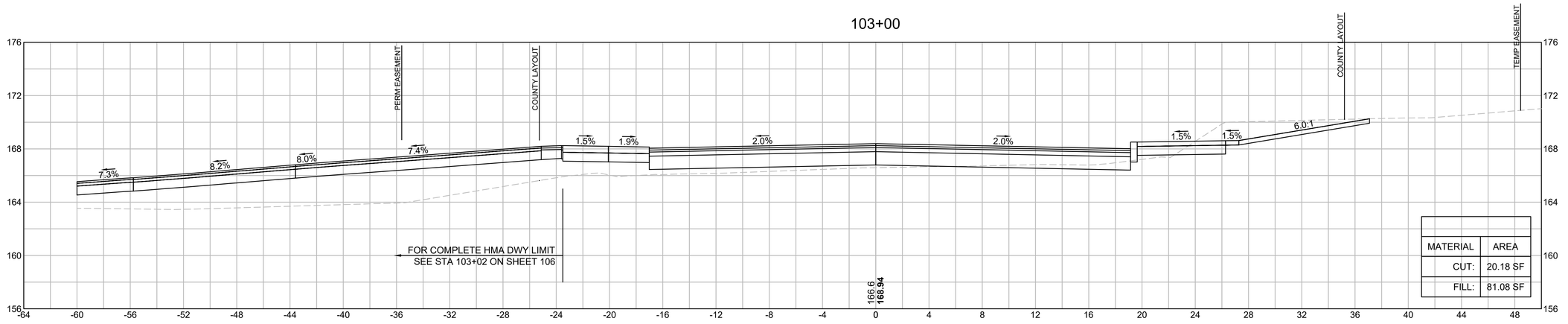
MATERIAL	AREA
CUT:	34.14 SF
FILL:	0.00 SF

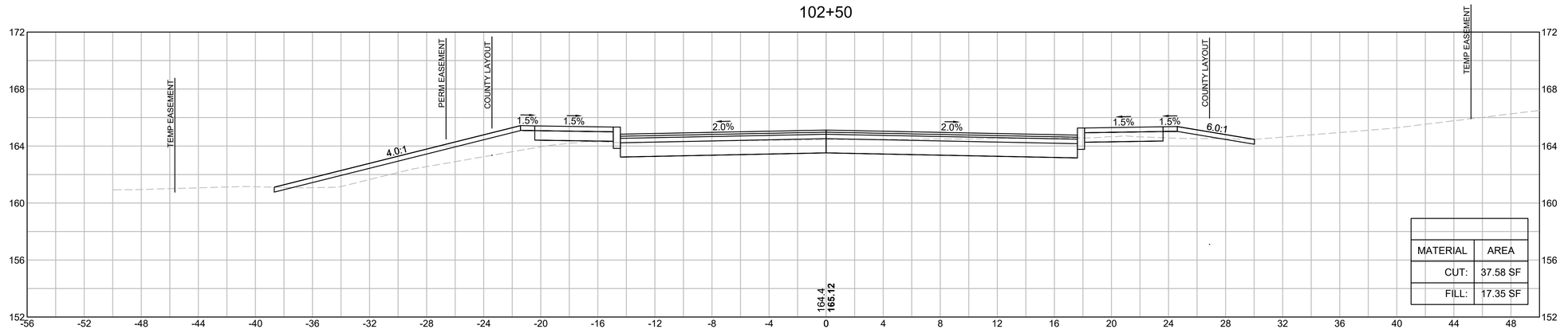
HOR. SCALE IN FEET
20 0 20 40
4 0 4 8
VER. SCALE IN FEET

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	104	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 04





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

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:29 PM

ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

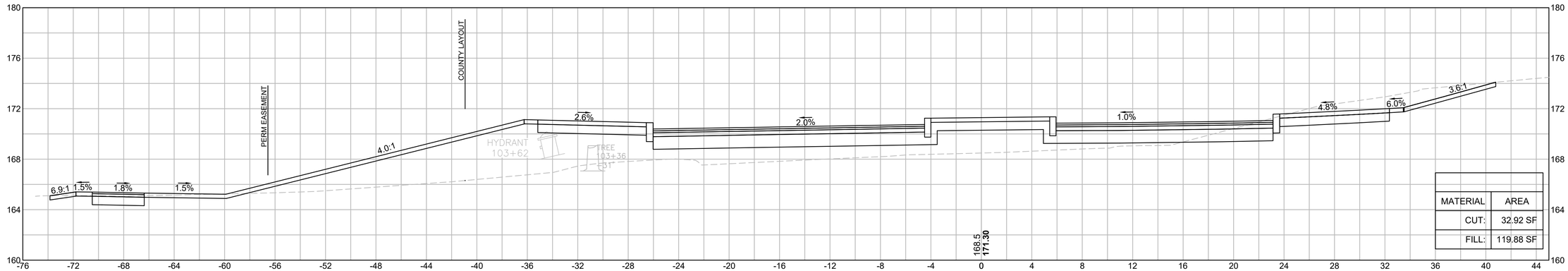
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	105	115
	PROJECT FILE NO.	609440	

CHESTNUT STREET - CROSS SECTIONS - 05

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:30 PM

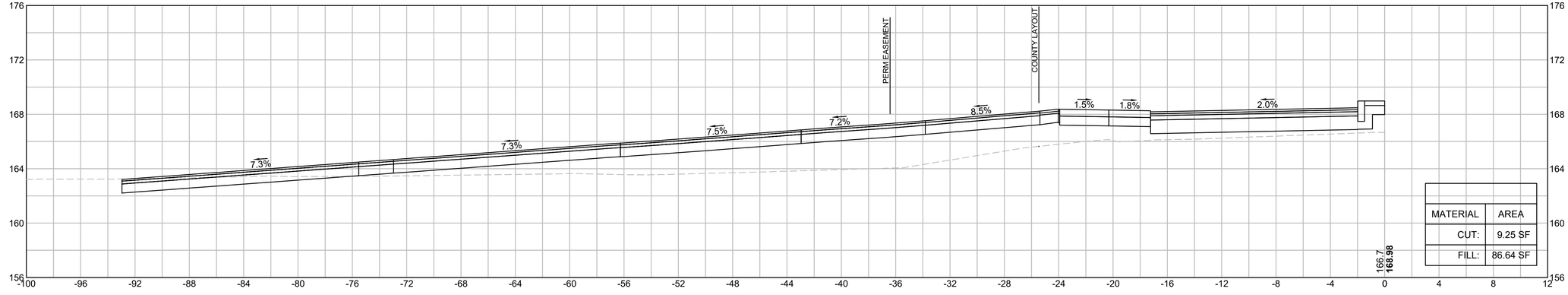
SEE ROUNDABOUT CROSS SECTIONS
BETWEEN STA 103+45 AND STA 105+00
ON SHEETS 112-115

103+45



MATERIAL	AREA
CUT:	32.92 SF
FILL:	119.88 SF

103+02



MATERIAL	AREA
CUT:	9.25 SF
FILL:	86.64 SF

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

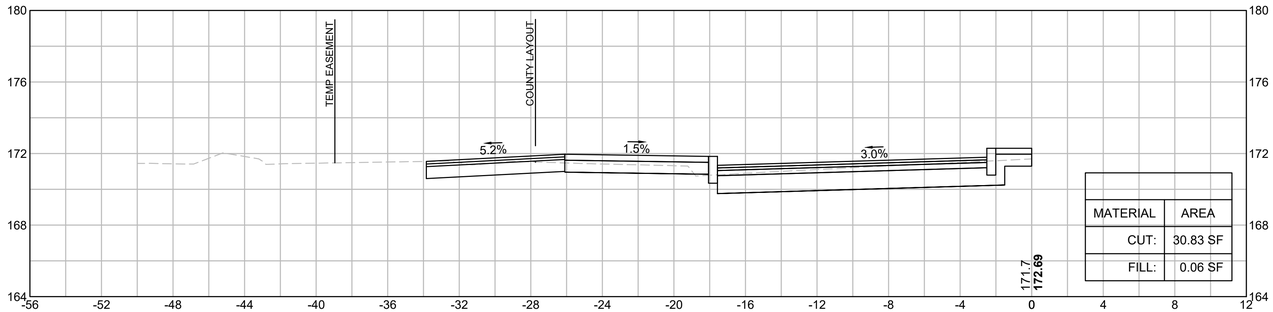
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	106	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 06

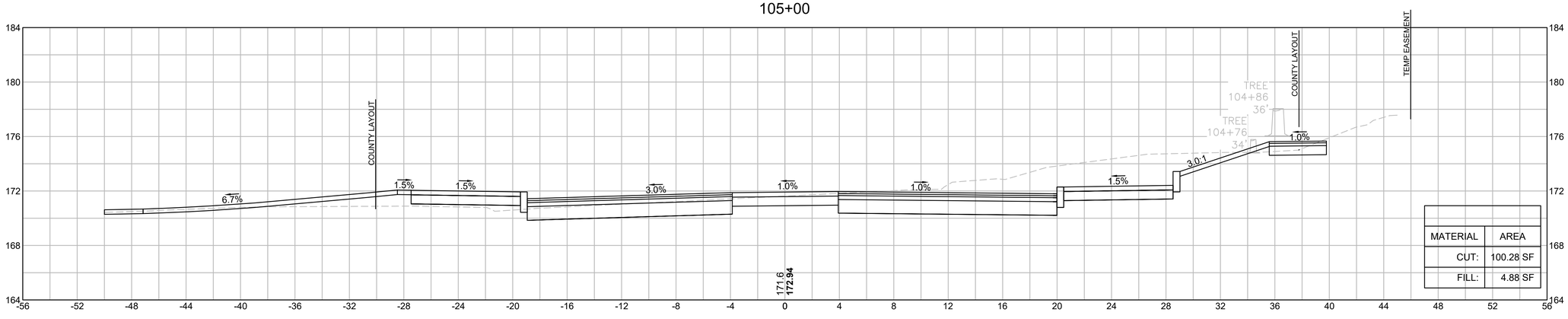
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:30 PM

105+14.50



MATERIAL	AREA
CUT:	30.83 SF
FILL:	0.06 SF

105+00



MATERIAL	AREA
CUT:	100.28 SF
FILL:	4.88 SF

SEE ROUNDABOUT CROSS SECTIONS
BETWEEN STA 103+45 AND STA 105+00
ON SHEETS 112-115

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

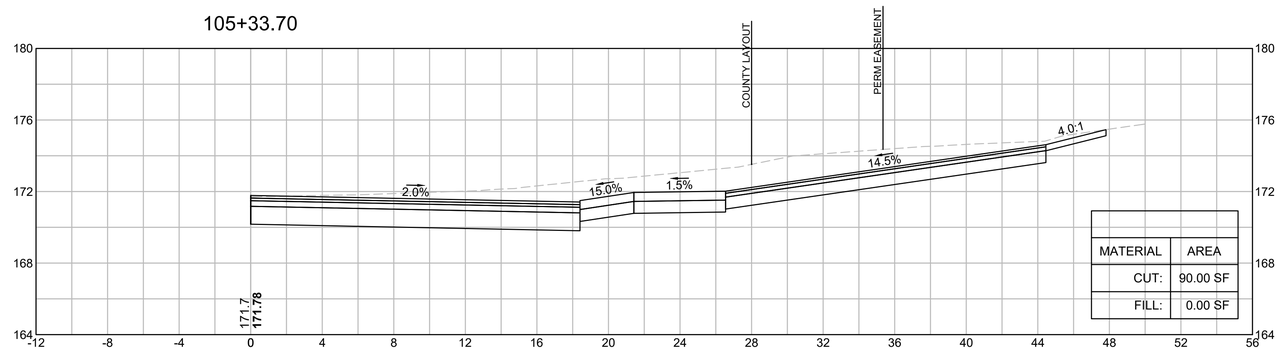
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	107	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 07

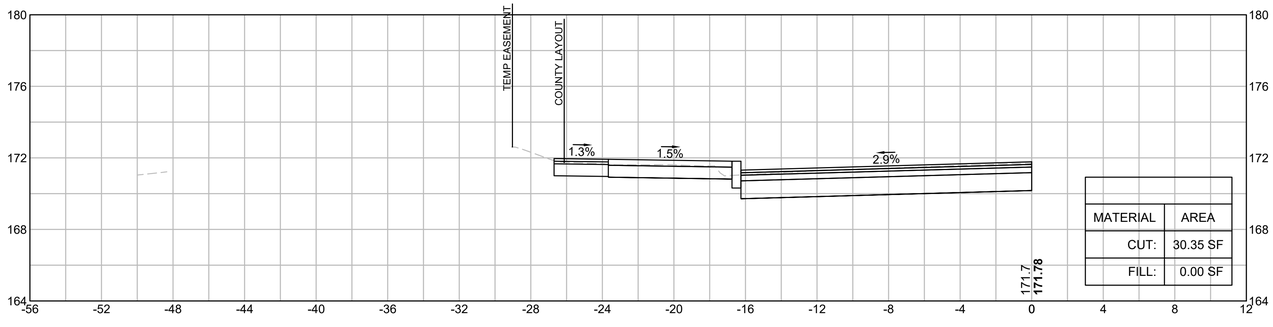
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:31 PM

105+33.70



MATERIAL	AREA
CUT:	90.00 SF
FILL:	0.00 SF

105+33



MATERIAL	AREA
CUT:	30.35 SF
FILL:	0.00 SF

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

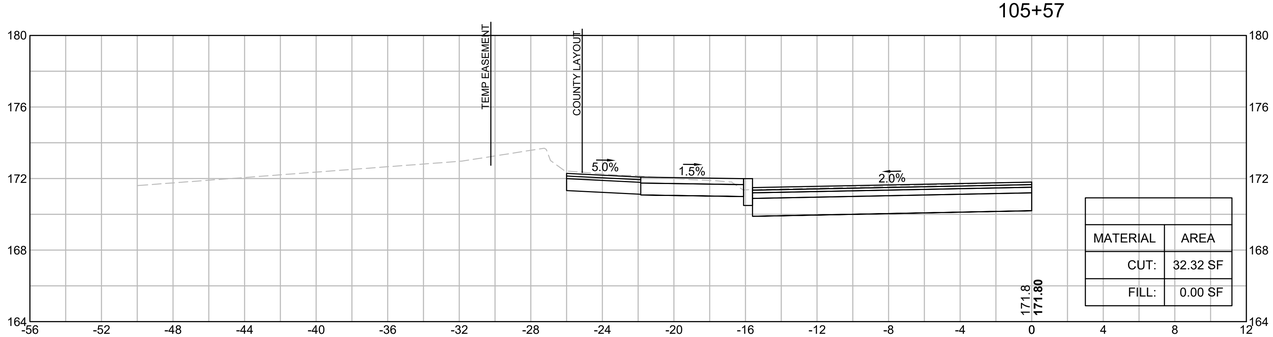
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	108	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 08

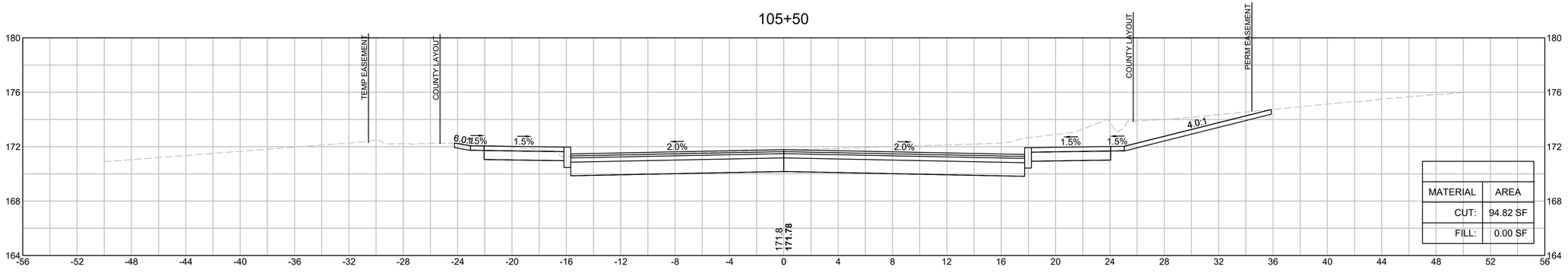
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:32 PM

105+57



MATERIAL	AREA
CUT:	32.32 SF
FILL:	0.00 SF

105+50



MATERIAL	AREA
CUT:	94.82 SF
FILL:	0.00 SF

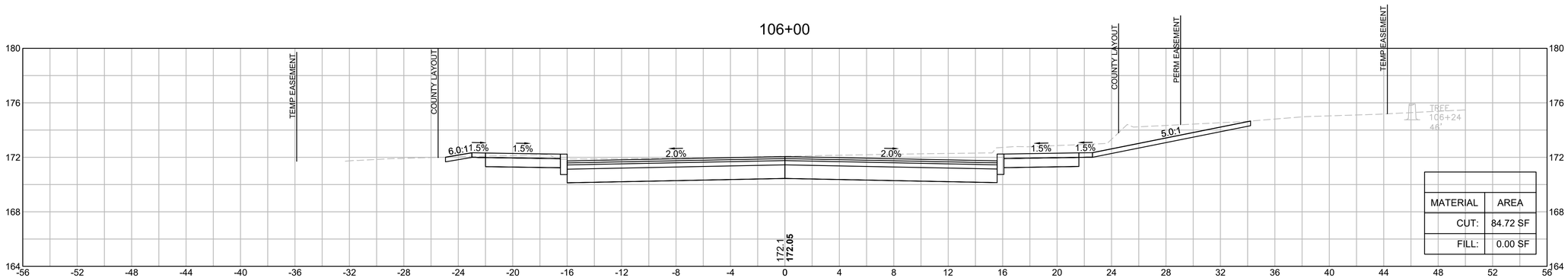
HOR. SCALE IN FEET
20 0 20 40
VER. SCALE IN FEET
4 0 4 8

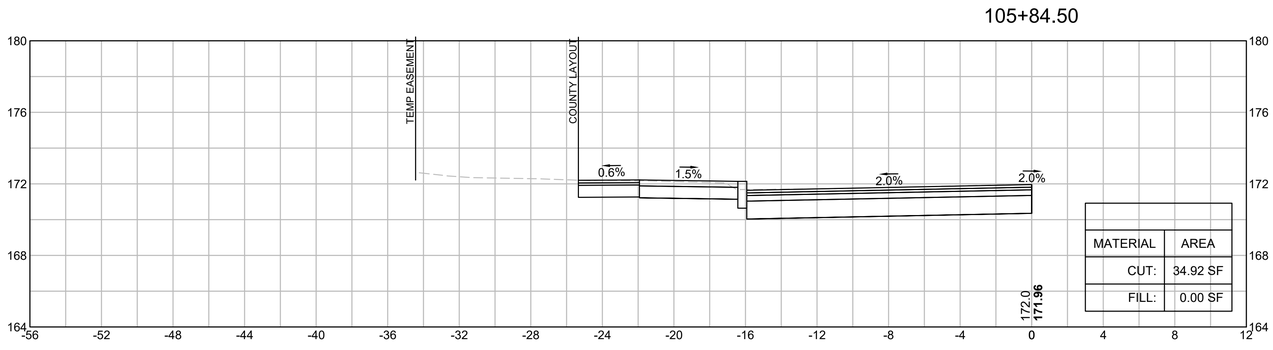
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	109	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 09

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:32 PM





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

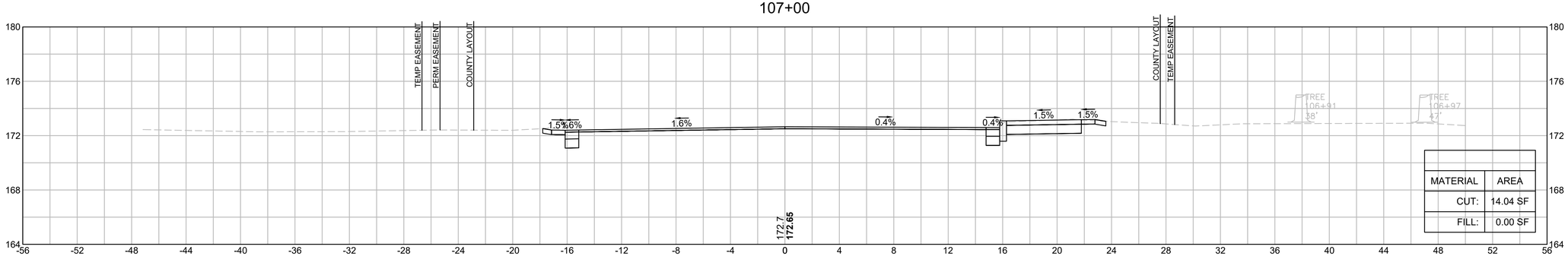
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	110	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 10

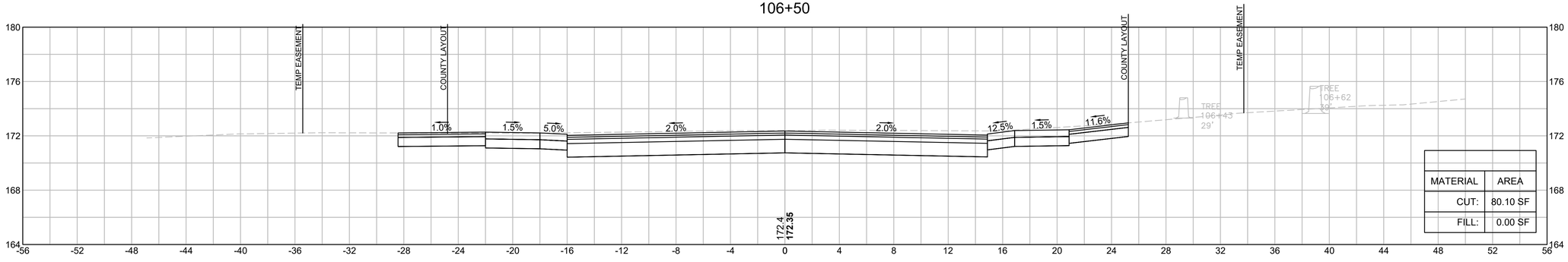
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:33 PM

107+00



MATERIAL	AREA
CUT:	14.04 SF
FILL:	0.00 SF

106+50



MATERIAL	AREA
CUT:	80.10 SF
FILL:	0.00 SF

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

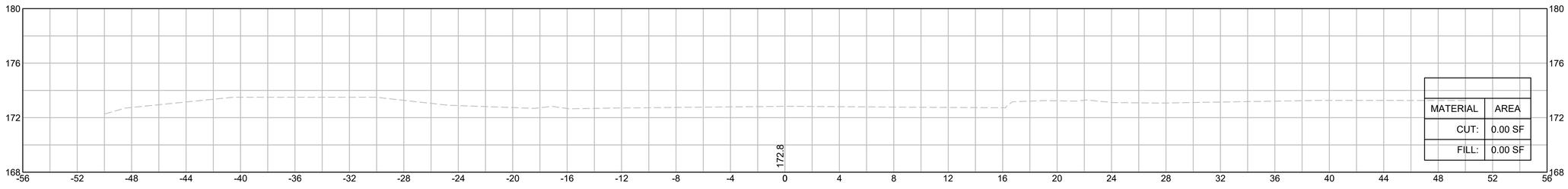
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	111	115
PROJECT FILE NO.	609440		

CHESTNUT STREET - CROSS SECTIONS - 11

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:33 PM

107+25



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

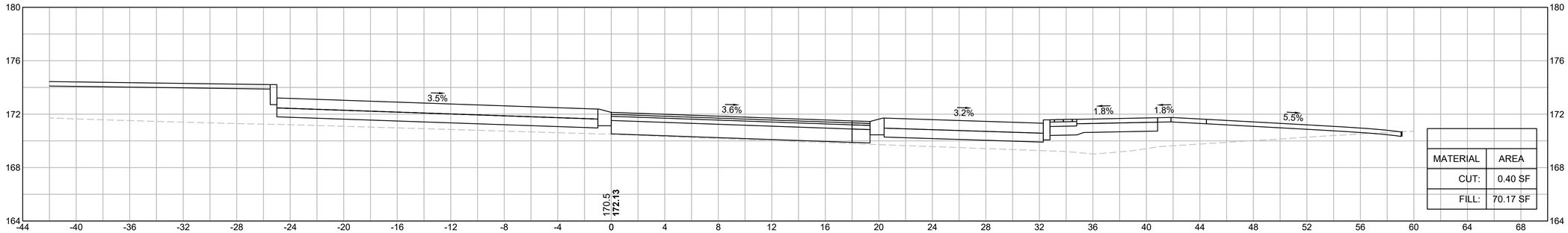
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	112	115
PROJECT FILE NO.	609440		

ROUNDABOUT - CROSS SECTIONS - 01

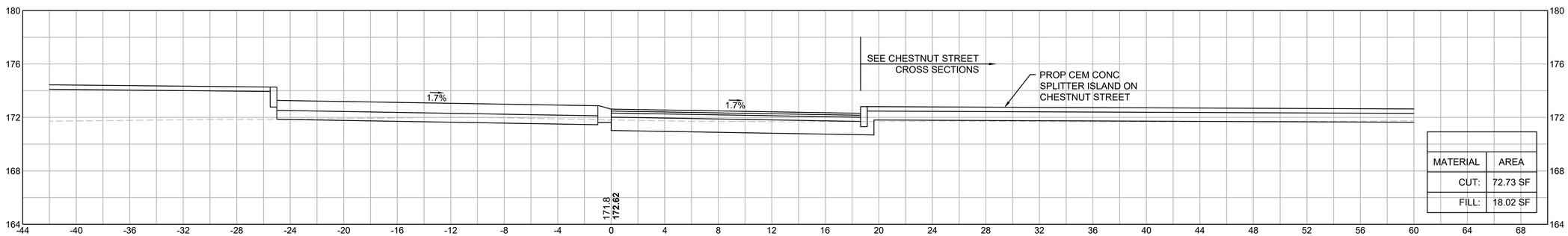
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:34 PM

5+40



MATERIAL	AREA
CUT:	0.40 SF
FILL:	70.17 SF

5+20



MATERIAL	AREA
CUT:	72.73 SF
FILL:	18.02 SF

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

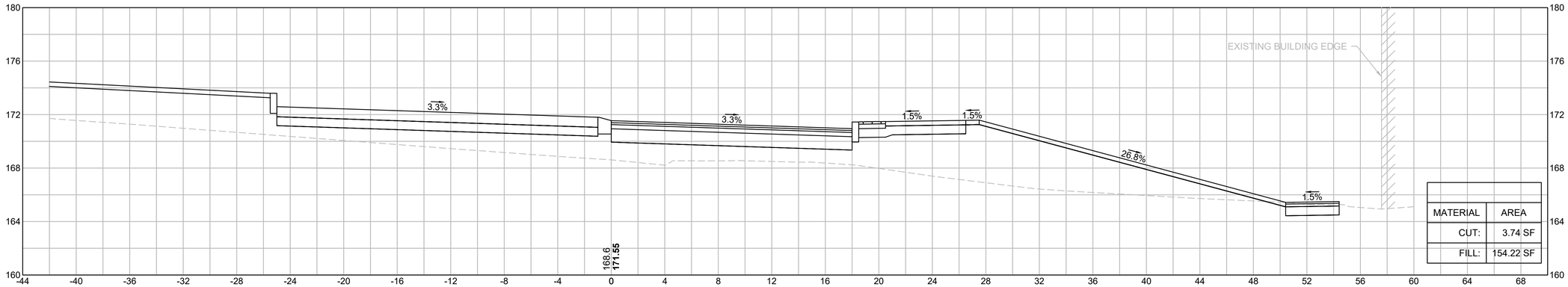
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	113	115
PROJECT FILE NO.	609440		

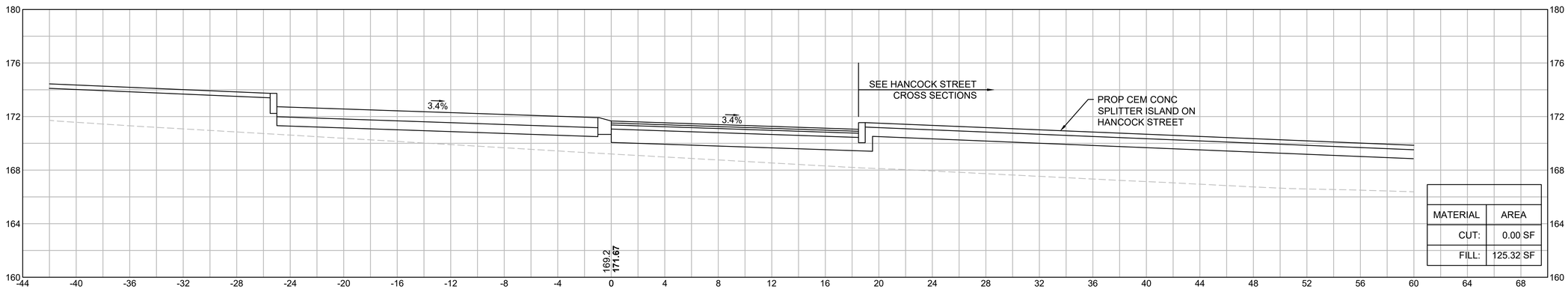
ROUNDABOUT - CROSS SECTIONS - 02

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:35 PM

6+00



5+68



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

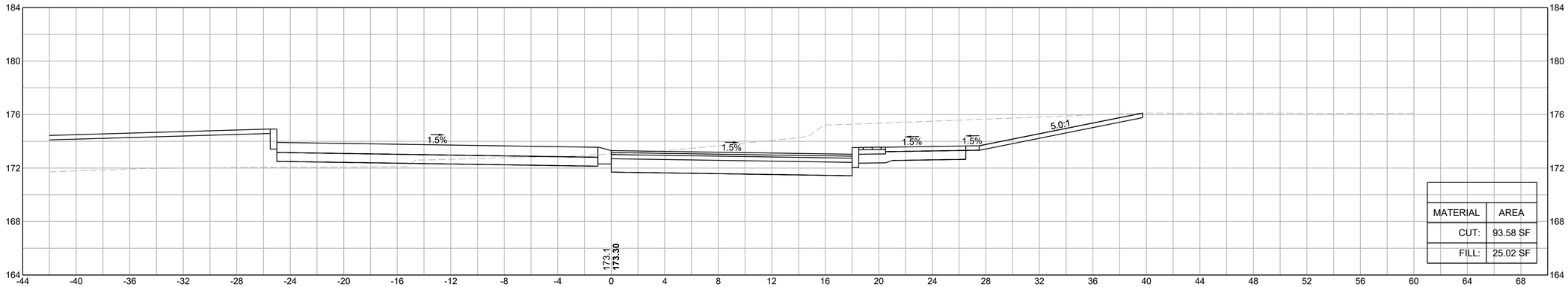
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	114	115
PROJECT FILE NO.	609440		

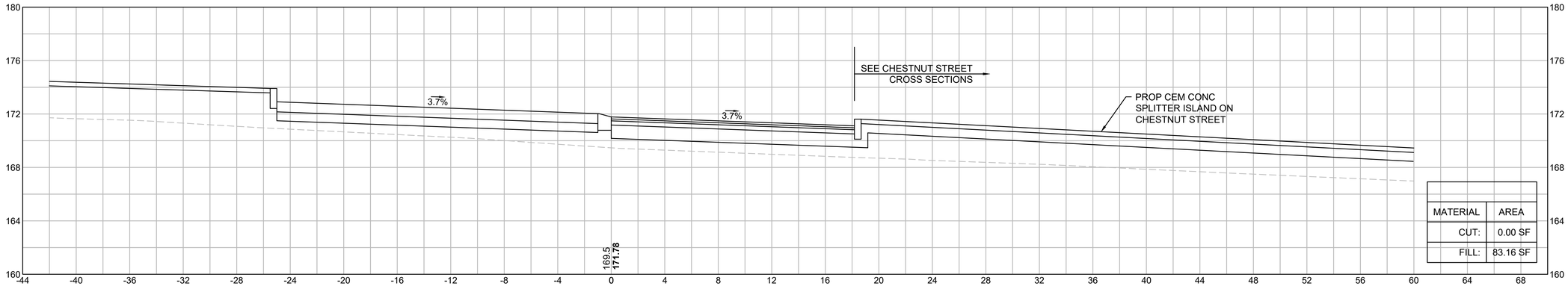
ROUNDABOUT - CROSS SECTIONS - 03

609440_HD(XS).DWG Plotted on 9-Jan-2026 3:35 PM

6+70



6+38



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

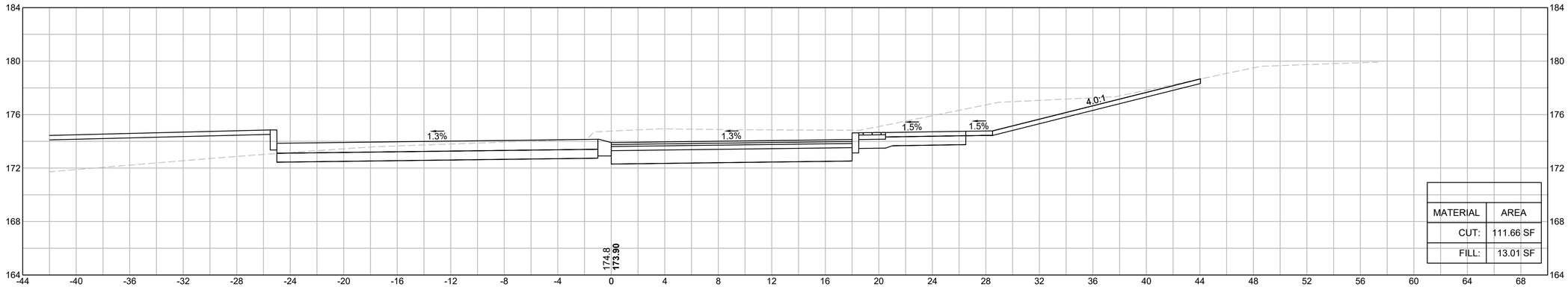
ABINGTON
INTERSECTION IMPROVEMENTS AT
HANCOCK STREET AND CHESTNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP-0035(067)X	115	115
PROJECT FILE NO.	609440		

ROUNDABOUT - CROSS SECTIONS - 04

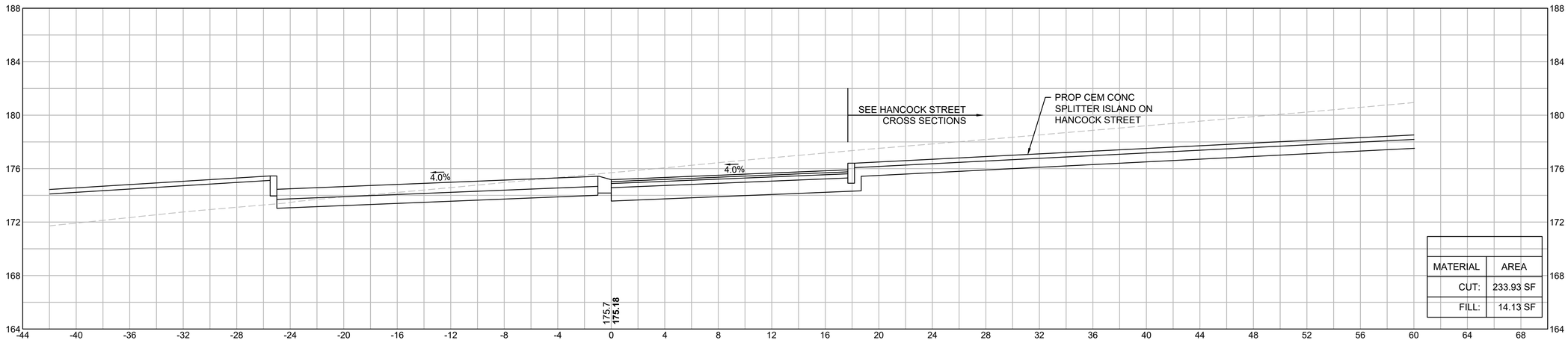
609440_HD(XS).DWG Plotted on 9-Jan-2026 3:36 PM

7+50



MATERIAL	AREA
CUT:	111.66 SF
FILL:	13.01 SF

7+14



MATERIAL	AREA
CUT:	233.93 SF
FILL:	14.13 SF

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