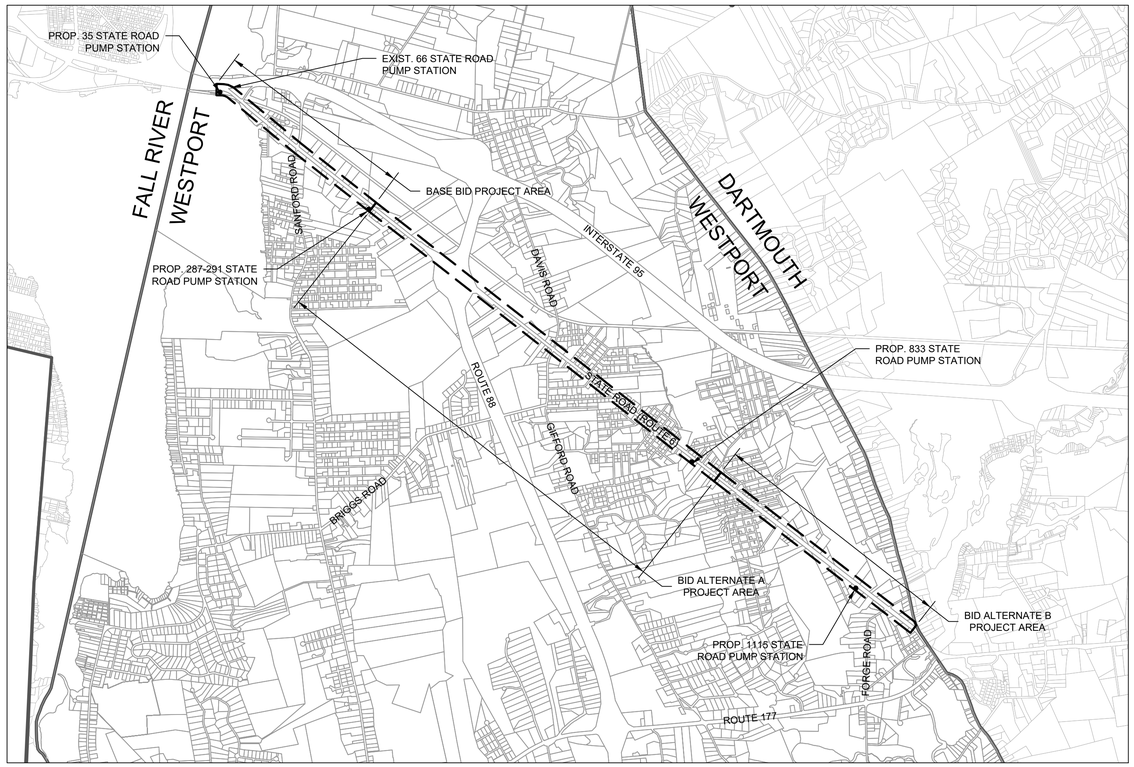
TOWN OF WESTPORT, MA
ROUTE 6 SEWER AND WATER EXTENSIONS

MARCH 2024



PLAN
SCALE: 1" = 2,000'

TOWN ADMINISTRATOR

JAMES K. HARTNETT

COMMONWEALTH OF MASSACHUSETTS
MARK THOMPSON
No. 39088
REGISTERED PROFESSIONAL ENGINEER

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NOTE:
LEGEND AND ABBREVIATIONS, NOTES, DETAILS (G-106 THROUGH G-111), AND TRAFFIC MANAGEMENT PLAN SHEETS APPLY TO BASE BID, BID ALTERNATE A AND BID ALTERNATE B.

Sheet List Table - Bid Alternate A

Sheet Number	Sheet Title
G-201	COVER
G-202	INDEX PLAN I
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C-201	PLAN AND PROFILE STA 100+00 TO 104+50
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C-210	PLAN AND PROFILE STA 140+50 TO 145+00
C-211	PLAN AND PROFILE STA 145+00 TO 149+50
C-212	PLAN AND PROFILE STA 149+50 TO 154+00
C-213	PLAN AND PROFILE STA 154+00 TO 158+50
C-214	PLAN AND PROFILE STA 158+50 TO 163+00
C-215	PLAN AND PROFILE STA 163+00 TO 167+50
C-216	PLAN AND PROFILE STA 167+50 TO 172+00
C-217	PLAN AND PROFILE STA 172+00 TO 176+50
C-218	PLAN AND PROFILE STA 176+50 TO 181+00
C-219	PLAN AND PROFILE STA 181+00 TO 185+50
C-220	PLAN AND PROFILE STA 185+50 TO 190+00
C-221	PLAN AND PROFILE STA 190+00 TO 194+50
C-222	PLAN AND PROFILE STA 194+50 TO 199+00
C-223	PLAN AND PROFILE STA 199+00 TO 203+50
C-224	PLAN AND PROFILE STA 203+50 TO 208+00
C-225	PLAN AND PROFILE STA 208+00 TO 212+50
C-226	PLAN AND PROFILE STA 212+50 TO 217+00
C-227	833 STATE ROAD PUMP STATION SITE PLAN
C-228	833 STATE ROAD PUMP STATION PLAN AND SECTION
C-229	PAVING PLAN STA 100+00 TO 157+50
C-230	PAVING PLAN STA 157+50 TO 217+00

Sheet List Table - Bid Alternate B

Sheet Number	Sheet Title
G-301	COVER
G-302	INDEX PLAN
C-301	PLAN AND PROFILE STA 300+00 TO 304+50
C-302	PLAN AND PROFILE STA 304+50 TO 309+00
C-303	PLAN AND PROFILE STA 309+00 TO 313+50
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C-308	PLAN AND PROFILE STA 331+50 TO 336+00
C-309	PLAN AND PROFILE STA 336+00 TO 340+50
C-310	PLAN AND PROFILE STA 340+50 TO 345+00
C-311	PLAN AND PROFILE STA 345+00 TO 349+50
C-312	PLAN AND PROFILE STA 349+50 TO 354+00
C-313	PLAN AND PROFILE STA 354+00 TO 358+50
C-314	PLAN AND PROFILE STA 358+50 TO 363+00
C-315	PLAN AND PROFILE STA 363+00 TO 367+50
C-316	1115 STATE ROAD PUMP STATION SITE PLAN
C-317	1115 STATE ROAD PUMP STATION PLAN AND SECTION
C-318	PAVING PLAN STA 0+00 TO 367+50

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

SHEET LIST

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

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SHEET 2 of 85

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EXISTING

ABBREVIATIONS

AC	ASBESTOS CEMENT
BD	BOUND
℄	BASELINE
BFZN	BUFFER ZONE
BLDG	BUILDING
BVW	BORDERING VEGETATED WETLAND
CB	CATCH BASIN
CI	CAST IRON
℄	CENTER LINE
CLF	CHAIN LINK FENCE
CMH	CABLE MANHOLE
CO BD	COUNTY BOUND
COMM	COMMUNICATION CONDUIT
CONC	CONCRETE
CW	CROSSWALK
DMH	DRAIN MANHOLE
DBYL	DOUBLE YELLOW LINE
EL	ELEVATION
EM	ELECTRIC METER
EMH	ELECTRIC MANHOLE
EP	EDGE OF PAVEMENT
FCOT	FENCE – OTHER MATERIAL
GC	GRANITE CURB
GRAV	GRAVEL
GRL	GUARDRAIL
HMA	HOT MIX ASPHALT
HMA DW	HMA DRWAY
HYD	HYDRANT
IP	IRON PIPE
LSA	LANDSCAPED AREA
MAG	MAG NAIL
MH	MANHOLE
MP CS	MEDIUM PRESSURE COATED STEEL
NDZ	NO DISTURB ZONE (LOCAL)
℄	PROPERTY LINE
RCP	REINFORCED CONC. PIPE
REC	RECORD
RET WALL	RETAINING WALL
RFA	RIVERFRONT AREA
RPN	RIPARIAN
SGC	SLOPED GRANITE CURB
SWL	SOLID WHITE LINE
SYL	SOLID YELLOW LINE
SBDH	STONE BOUND WITH DRILL HOLE
TYP	TYPICAL
WDF	WOOD FENCE
WP	WARNING PANEL
WRA	WETLAND RESOURCE AREA
WS	WELDED STEEL

LINETYPE LEGEND

- CONTOUR MAJOR (150)
- CONTOUR MINOR (149)
- EXISTING STATE HIGHWAY LAYOUT
- EXISTING TOWN LAYOUT
- EXISTING TOWN LINE
- PROPERTY LINE
- COMMON OWNER PROPERTY LINE (Z)
- EXISTING EASEMENT
- EXISTING RAILRD SIDELINE
- SURVEY TRAVERSE LINE
- UNDERGROUND CABLE TV (CATV)
- UNDERGROUND DRAIN LINE (D)
- UNDERGROUND ELECTRIC (E)
- OVERHEAD WIRE (OHW)
- UNDERGROUND GAS LINE (G)
- UNDERGROUND SEWER LINE (S)
- UNDERGROUND TELE. LINE (T)
- UNDERGROUND WATER LINE (W)
- TREELINE
- WETLAND BOUNDARY
- 100-FOOT WETLAND BUFFER
- FEMA 100-YEAR FLOOD BOUNDARY
- EXISTING ABANDONED WATER AQUEDUCT

LEGEND

BHL #	BORE HOLE
	BUSH
BM #	BENCHMARK
BLDR	BOULDER
	BOUND (CONC, STONE, LAND COURT, ETC.)
C	CABLE MANHOLE
CB	CATCH BASIN – SQUARE
CB	CATCH BASIN – D-FRAME
CB	CATCH BASIN – ROUND
DSK	DISK (CA/T, USC&GS, LAND COURT, ETC.)
DH	DRILL HOLE
D	DRAIN MANHOLE
EHH	ELECTRIC HANDHOLE
E	ELECTRIC MANHOLE
EM	ELECTRIC METER
EPLP	ESCUTCHEON PIN IN LEAD PLUG
FA	FIRE ALARM PEDESTAL
FB	FLASHING BEACON
FES	FLARED END SECTION
FP	FLAG POLE
GF	GAS FILL
GG	GAS GATE
GM	GAS METER
GP	GAS PUMP
G	GAS MANHOLE
GPL	GUY POLE
	HANDICAP SYMBOL
	GUY WIRE ANCHOR
HTP	HIGH TENSION POWER POLE
	FIRE HYDRANT
IP	IRON PIPE
	LIGHT POLE
	LIGHT POLE DOUBLE LIGHT
MAG	MAG NAIL
MB	MAIL BOX
MHB	MASSACHUSETTS HIGHWAY BOUND
MW	MONITORING WELL
OIL	OIL FILL
M	OTHER MANHOLE
PB	PULL BOX
PED	PEDESTRIAN SYMBOL
	PHOTO CONTROL – H&V
	PHOTO CONTROL – V ONLY

PK	PK NAIL
PM	PARKING METER
POST	CIRCULAR POST
POST	SQUARE POST
RB	REBAR/IRON PIN
RRS	RAILRD SPIKE
RRSG	RAILRD SIGNAL
RRSW	RAILRD SWITCH
#	RESOURCE AREA DELINEATION FLAG
SPR	SPRINKLER HEAD
SN	STAKE AND NAIL
SP	STAND PIPE
S	SEWER MANHOLE
ST	STEAM MANHOLE
	STUMP
TB	TOWN LINE BOUND (CORNER)
TCB	TRAFFIC SIGNAL CONTROL CABINET
T	TELEPHONE MANHOLE
T-BOX	TELEPHONE PULL BOX
TFMR	TRANSFORMER
TLRS	TOWN LINE RD STONE
TPIT #	TEST PIT
TPL	TROLLEY POLE
	TRAVERSE POINT
22"	TREE
TS	TRAFFIC SIGNAL
TS	TRAFFIC SIGNAL MAST ARM/SPAN WIRE POLE
	SIGN
	SIGN – DOUBLE POST
UFB#	UTILITY POLE W/FIRE PULL BOX
ULT#	UTILITY POLE W/LIGHT
UPDL#	UTILITY POLE W/DOUBLE LIGHT
UPL#	UTILITY POLE
VP	VENT PIPE
W	WATER MANHOLE
WG	WATER GATE
WM	WATER METER
WSO	WATER SHUTOFF
WELL	WELL (POTABLE)
WF #	WETLAND FLAG

# N: #' E: #' EL: #' TYPE	SURVEY BENCHMARK

PROPOSED

LEGEND

- PROPOSED GRAVITY SEWER, DRAIN OR FORCE MAIN (EQUAL TO OR LARGER THAN 8" DIAMETER)
- PROPOSED GRAVITY SEWER (SMALLER THAN 8" DIAMETER) (S S S)
- PROPOSED FORCE MAIN (SMALLER THAN 8" DIAMETER) (FM FM)
- PROPOSED WATER MAIN, WATER SERVICE OR HYDRANT LATERAL (W W W)
- PROPOSED REMOVAL OF EXISTING ABANDONED WATER AQUEDUCT
- PROPOSED EROSION/SEDIMENTATION CONTROL
- PROPOSED EASEMENT
- PROPOSED CHAIN LINK FENCE
- PROPOSED SEWER ALIGNMENT (5+00)
- PROPOSED HYDRANT
- PROPOSED WATER MAIN TEE
- PROPOSED WATER MAIN GATE VALVE
- PROPOSED WATER MAIN BEND
- PROPOSED WATER MAIN AIR RELEASE VALVE
- PROPOSED PRECAST CONCRETE PRESSURE REDUCING VALVE VAULT
- PROPOSED PRECAST CONCRETE PRESSURE FLOW METER VAULT
- BORING LOCATIONS (MONITORING WELLS DESIGNATED BY MW) (B-##)
- PROPOSED DRAIN CATCH BASIN
- PROPOSED SEWER OR DRAIN MANHOLE
- PROPOSED PREFABRICATED SEWER PUMP STATION WITH WET WELL AND ACCESS PLATFORM
- PROPOSED TEST PIT
- PROPOSED GENERATOR ON CONCRETE PAD WITH ACCESS STEPS
- PROPOSED ELECTRICAL CONTROLS AND EQUIPMENT CABINETS ON CONCRETE PAD WITH ACCESS STEPS

ABBREVIATIONS

APPROX.	APPROXIMATE
CONC.	CONCRETE
Ø	DIAMETER
DI	DUCTILE IRON
EL	ELEVATION
EXIST.	EXISTING
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
L	LEFT
LPS	LOW PRESSURE SEWER
MH	MANHOLE
MAX.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
OFF	OFFSET
PVC	POLYVINYL CHLORIDE
PROP.	PROPOSED
R	RIGHT
RCP	REINFORCED CONCRETE PIPE
SDR	STANDARD DIMENSIONAL RATIO
STA	STATION
TELECOM	TELECOMMUNICATION

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G-103

SHEET 3 of 85

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GENERAL NOTES

1. THE UTILITY INFORMATION SHOWN WAS COMPILED BASED ON AVAILABLE RECORD INFORMATION, THE MASSDOT TOPOGRAPHIC SURVEY OF RTE 6 AND WSP SURVEY AROUND THE EXISTING WHITE'S PUMP STATION. THE LOCATIONS OF UNDERGROUND UTILITIES HAVE BEEN ESTABLISHED FROM SURFACE FEATURES OBSERVED ON RECORD PLANS AND THE COMPILED SURFACE EVIDENCE COLLECTED FROM THE MASSDOT SURVEY. THE LOCATION OF UNDERGROUND STRUCTURES ARE APPROXIMATE ONLY AND MAY VARY FROM THE LOCATIONS SHOWN HEREON. ADDITIONAL UNDERGROUND UTILITIES AND/OR STRUCTURES MAY BE ENCOUNTERED. SIZE, MATERIAL, AND LOCATION OF EXISTING UTILITIES IN PROJECT VICINITY SHALL BE FIELD VERIFIED BY THE CONTRACTOR. RECORD DRAWINGS PREPARED BY THE CONTRACTOR FOR THIS PROJECT SHALL INCLUDE THIS FIELD VERIFIED INFORMATION. THE TOWN ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE EXISTING UTILITY INFORMATION.
2. VERIZON DIRECT BURIED CABLE EXIST WITHIN THE MASSDOT SURVEY, HOWEVER, THE LOCATIONS OF SUCH CABLES HAVE NOT BEEN PROVIDED BY VERIZON OR LOCATED IN THE FIELD,
3. 100 YEAR FLOOD ZONES HAVE BEEN ADDED TO THE MASSDOT TOPOGRAPHICAL SURVEY BASED ON THEIR GIS LOCATIONS. FLOOD ZONES ARE AS SHOWN ON THE FEMA FIRM 25005C0361G HAVING AN EFFECTIVE DATE OF JULY 6, 2021. WETLANDS WERE DELINEATED BY MCCUE ENVIRONMENTAL IN FEBRUARY 2022 AND LOCATED BY WSP IN MARCH 2022. ADDITIONALLY, APPROXIMATE WETLAND BOUNDARIES WERE ADDED TO THE PLANS AT 260 STATE ROAD AND WEST OF 227 STATE ROAD BASED ON INFORMATION PROVIDED BY THE TOWN'S CONSERVATION COMMISSION. A 100-FOOT BUFFER ZONE BOUNDARY IS SHOWN ON THE PLANS EXTENDING HORIZONTALLY OUTWARD FROM EACH WETLAND BOUNDARY.
4. THE HORIZONTAL COORDINATE SYSTEM IS BASED UPON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM - MAINLAND ZONE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) (2011), EPOCH 2019.00, ESTABLISHED BY MASSDOT IN OCTOBER 2020. ELEVATIONS SHOWN REFLECT NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) AS ESTABLISHED BY MASSDOT IN OCTOBER 2020 APPLYING THE GEOID 18 MODEL.
5. ELEVATION CONTOURS WERE GENERATED FROM THE MASSDOT TOPOGRAPHICAL SURVEY OF RTE 6 PLANS. MASSDOT TOPOGRAPHIC SURVEY WAS COMPLETED USING MOBILE LIDAR SURVEY & SUPPLEMENTED WITH A CONVENTIONAL TOTAL STATION TOPOGRAPHICAL SURVEY BY GREENMAN-PEDERSEN, INC. (GPI).
6. WSP SURVEY WAS PREPARED BY ON THE GROUNDS FIELD SURVEY IN MARCH 2022. PROPERTY LINES AND LAYOUT LINES SHOWN ARE BASED ON RECORD DEEDS, PLANS, AND TOWN ASSESSOR'S MAPS FROM THE BRISTOL COUNTY REGISTRY OF DEEDS AND TOWN ASSESSOR'S AND ENGINEERING DEPARTMENTS.
7. PRE-CONSTRUCTION SURVEYS SHALL BE COMPLETED FOR ANY BLASTING WORK FOR EXTERIOR AREAS OF THE ADJACENT STRUCTURES, BUILDINGS, AND AREAS AFFECTED BY THE WORK. SURVEY SHALL BE PERFORMED BY AN INDEPENDENT CONSULTANT NOT LESS THAN FOUR WEEKS PRIOR TO CONSTRUCTION ACTIVITIES. COSTS SHALL BE INCIDENTAL TO CONTRACTOR'S OVERALL BID.
8. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES INCLUDING STOCKPILING AND STORAGE OF MATERIALS AND VEHICLES TO THE BOUNDARY OF THE PROJECT LIMIT. IF CHANGES TO THESE LIMITS MUST BE MADE TO ACCOMMODATE PROPOSED WORK, CONTRACTOR MUST RECEIVE PRIOR OWNER APPROVAL.
9. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AND CONCRETE BARRIERS TO SHIELD OPEN EXCAVATIONS FROM VEHICLES AND PASSERSBY.
10. CONTRACTOR IS REQUIRED TO COORDINATE WITH THE POLICE AND FIRE DEPARTMENTS IN ORDER TO MAINTAIN EMERGENCY VEHICLE ACCESS THROUGHOUT PROJECT DURATION.
11. CONTRACTOR SHALL REMOVE AND REPLACE SIDEWALKS, DRIVEWAYS, AND BIT. CONC. BERMS, AND RESET GRANITE CURB WHERE NECESSARY TO CONSTRUCT THE PROPOSED ITEMS OF WORK, AT HIS OR HER COST.
12. EXISTING UTILITY POLES THAT FALL WITHIN 5FEET OF THE PROPOSED EDGE OF EXCAVATION SHALL BE SUPPORTED BY THE UTILITY OWNER DURING EXCAVATION OF THE TRENCH. CONTRACTOR SHALL COORDINATE SUPPORT AND BE RESPONSIBLE FOR COSTS AND FEES.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING TEST PITS TO LOCATE AND CONFIRM UTILITY SIZING AND MATERIAL AT ALL LOCATIONS, AND FOR LOCATING POTENTIAL UTILITY CONFLICTS. TEST PITS SHALL BE PERFORMED WELL IN ADVANCE OF CONSTRUCTION OPERATIONS SO THAT ANY CHANGES IN ALIGNMENT AND/OR GRADE OF THE PROPOSED WORK OR UTILITY LOCATIONS MAY BE DETERMINED.
14. WHERE EXISTING GAS, ELECTRIC AND TELECOM UTILITIES CROSS THE PROPOSED TRENCH LIMITS, CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER TO SUPPORT AND BE RESPONSIBLE FOR COSTS AND FEES. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING THE EXISTING UTILITY IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS.
15. WHERE TEMPORARY OR PERMANENT UTILITY RELOCATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE TOWN 14 DAYS IN ADVANCE OF CONSTRUCTION AND SHALL COORDINATE THE NEW WORK WITH THE UTILITY RELOCATION.
16. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY SEWER, WATER OR DRAIN PIPING, OR STRUCTURE HE OR SHE DAMAGES. ALL COSTS OF REPLACEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. INTERMEDIATE COUPLINGS SHALL BE ALLOWED ON A TEMPORARY BASIS ONLY.
17. PRIOR TO BEGINNING WORK, CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL CONDITIONS TO THE ENGINEER.
18. CONSTRUCTION TRAILER(S), STOCKPILING LOCATIONS, AND EQUIPMENT STORAGE AREAS ARE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE COORDINATED WITH THE OWNER.
19. THE CONTRACTOR SHALL CALL DIG-SAFE AT 1-888-344-7233 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION, INCLUDING TEST PITS, TO LOCATE UNDERGROUND UTILITIES IN THE FIELD AND NOTIFY UTILITIES OF CONSTRUCTION.
20. UPON COMPLETION OF THE WORK, ALL DISTURBED AREAS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.
21. FENCES, WALLS, LANDSCAPING, TREES AND BUSHES ARE NOT ALL SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE EXTRA CARE TO PRESERVE SUCH EXISTING FEATURES AT ALL TIMES DURING CONSTRUCTION PER THE SPECIFICATIONS. ALL EXISTING FEATURES IN CONFLICT WITH PROPOSED WORK SHALL BE RELOCATED OR REPLACED AS INDICATED ON THE CONTRACT DRAWINGS OR AS DIRECTED BY THE ENGINEER. ALL EXISTING FEATURES AND ALL ADJACENT AREAS DAMAGED, DESTROYED OR DISTURBED SHALL BE REPAIRED OR REPLACED. PAYMENT FOR THIS WORK IS TO BE INCLUDED IN THE GENERAL COST OF THE CONTRACT.
22. DRAIN AND CULVERT CROSSINGS SHALL BE PROTECTED AND KEPT IN WORKING ORDER THROUGHOUT CONSTRUCTION. DIVERSION OF THE STREAM OR TEMPORARY RELOCATION OF THE CULVERT IS NOT ALLOWED.
23. THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AND ORDERLY PASSAGE OF PEDESTRIANS AND VEHICLES AT ALL TIMES IN AREAS UNDER CONSTRUCTION.
24. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND A SEWER, OR APPURTENANCE THERETO WHICH WOULD PERMIT THE PASSAGE OF ANY WASTEWATER OR POLLUTED WATER SUPPLY.
25. ALL EXCAVATIONS SHALL BE COMPLETELY CLOSED AT THE END OF EACH WORKING DAY BY BACKFILLING AND TEMPORARY PAVING OR BY COVERING WITH STEEL PLATES WHEN APPROVED BY THE OWNER.
26. LANDSCAPED AREAS, FEATURES, AND PLANTINGS THAT ARE IMPACTED BY THE PROPOSED WORK SHALL BE REMOVED AND RESET TO MATCH THE EXISTING CONDITIONS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
27. THE CONTRACTOR SHALL TAKE CARE NOT TO DISTURB ANY PROPERTY BOUNDS OR LAYOUT BOUNDS. ANY BOUNDS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF MASSACHUSETTS AT NO ADDITIONAL COST TO THE TOWN.
28. RETAIN EXISTING CASTINGS, HYDRANTS AND BOLLARDS WITHIN THE LIMITS OF WORK.
29. THE CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR TO LAYOUT AND STAKE ALL OFF ROAD PIPELINES AND EASEMENTS.
30. ALL DISTURBED TRAFFIC MARKINGS ARE TO BE REPLACED BY THE CONTRACTOR AND SHALL MATCH EXISTING.
31. CONTRACTOR SHALL SEQUENCE THE INSTALLATION OF SEWER, STORM DRAIN, AND WATER MAIN MAINLINES AND SERVICES SUCH THAT RECENTLY INSTALLED INFRASTRUCTURE IS PROTECTED AND UNDERMINING OF PIPES IS AVOIDED.
32. THE OWNER RESERVES THE RIGHT TO ELIMINATE ANY PORTION OF THE CONTRACT AT ANY TIME. FINAL PAYMENT WILL BE MADE BASED UPON ACTUAL QUANTITIES AT THE BID UNIT PRICE. NO CLAIM WILL BE ALLOWED FOR ADDITIONAL COMPENSATION OR ANTICIPATED PROFIT ON ITEMS THAT HAVE BEEN DECREASED OR ELIMINATED.
33. THE ORIGINAL ROUTE 6 ROADWAY CONSTRUCTION CONSISTED OF TWO 10' WIDE LANES OF 8" THICK REINFORCED CONCRETE SLAB AT GRADE IN BOTH TRAVEL DIRECTIONS. REFER TO REINFORCED CONCRETE SLAB DETAIL FROM RECORDS ON SHEET C-120. THE ORIGINAL 8" THICK REINFORCED CONCRETE ROADWAY STILL EXISTS WITHIN THE PROJECT AREA AND HAS BEEN PAVED OVER WITH ASPHALT. EXISTING CRACKS IN THE SURFACE ASPHALT ARE VISIBLE AT REGULAR INTERVALS RUNNING PERPENDICULAR TO THE DIRECTION OF ROADWAY TRAFFIC. THESE CRACKS ARE SUSPECTED TO COINCIDE WITH THE EDGES OF THE CONCRETE SLABS UNDERNEATH THE SURFACE ASPHALT. SMALL PORTIONS OF THE ORIGINAL REINFORCED CONCRETE ROADWAY HAVE LIKELY BEEN REMOVED PREVIOUSLY TO INSTALL UTILITIES CROSSING THE ROADWAY INCLUDING WATER, DRAIN, GAS, AND TELECOM UTILITIES. REINFORCED CONCRETE ROADWAY SHALL BE REMOVED AND REPLACED WITH PAVEMENT AS DETAILED ON SHEETS G-106, C-120, C-229, C-230 AND C-318.
34. THE EXISTING ABANDONED WATER AQUEDUCT PIPELINE SHOWN ON THE PLANS IS OWNED BY THE CITY OF FALL RIVER. THE LOCATION OF THE AQUEDUCT IS SHOWN ON THE PLANS APPROXIMATELY BASED ON RECORDS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY THE LOCATION OF THE AQUEDUCT IN THE FIELD.

SOIL AND EROSION CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENT CONTROL DEVICES AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
2. STOCKPILED MATERIALS SHALL BE LOCATED AND MAINTAINED SO AS TO MINIMIZE THE POTENTIAL FOR EROSION.
3. SILT SACKS SHALL BE FURNISHED, INSTALLED AND MAINTAINED ALL CATCH BASINS WITHIN THE PROJECT AREA. THROUGHOUT PROJECT DURATION, DEBRIS COLLECTED IN SILT SACKS SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE ON A WEEKLY BASIS OR MORE FREQUENTLY IF NECESSARY TO MAINTAIN FLOW THROUGH THE SILK SACKS. UPON COMPLETION OF THE PROJECT AND AS DIRECTED BY THE ENGINEER, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING OF THE SILT SACKS AND DEBRIS OFF-SITE.
4. SEDIMENTATION BARRIERS SHALL BE FURNISHED, INSTALLED, AND MAINTAINED ALONG ALL WETLAND CORRIDORS ADJACENT TO PROJECT ACTIVITIES WHERE THE CONSTRUCTION IS NOT SEPARATED FROM THE WETLAND BY CURBING.
5. CONTRACTOR SHALL STOCKPILE SUFFICIENT SOIL EROSION AND SEDIMENT CONTROL MATERIALS ON SITE TO REPAIR ANY AND ALL DAMAGE TO SOIL EROSION AND SEDIMENT CONTROL MEASURES.

GEOTECHNICAL NOTES

1. BORINGS WERE ADVANCED AS A PART OF THIS DESIGN BY NEW ENGLAND BORING CONTRACTORS IN FEBRUARY AND MARCH 2022. BORING LOCATIONS SHOWN ON PLANS WERE MEASURED FROM EXISTING SITE FEATURES OR GPS COORDINATES AND ARE CONSIDERED APPROXIMATE.
2. BORINGS INDICATE APPROXIMATE SUBSURFACE CONDITIONS AT THE LOCATION OF THE BORING ONLY. SUBSURFACE CONDITIONS ENCOUNTERED DURING CONSTRUCTION MAY VARY FROM THOSE SHOWN IN THE BORING LOGS. GROUNDWATER LEVELS INDICATED IN THE BORING LOGS ARE THOSE EXISTING AT THE TIME OF DRILLING AND MAY NOT REPRESENT PERMANENT GROUNDWATER LEVELS. FOR BORING LOGS AND BORING LOCATION PLANS, SEE THE APPENDIX TO THE SPECIFICATIONS.
3. MONITORING WELLS WERE INSTALLED AT BORING LOCATIONS B-10, B-14, B-32 AND B-112. SEE TABLE BELOW FOR GROUNDWATER DEPTHS MEASURED AT MONITORING WELLS AND DATE OF MEASUREMENT.

BORING NUMBER	GROUNDWATER DEPTH, 04/13/2022 (FT)	GROUNDWATER DEPTH, 05/03/2022 (FT)	GROUNDWATER DEPTH, 08/11/2022 (FT)	GROUNDWATER DEPTH, 11/16/2023 (FT)
B-10	4.2	4.2	NO READING	4.6
B-14	4.3	4.3	NO READING	NO READING
B-32	8	8.3	9.6	NO READING
B-112	NO READING	NO READING	4.2	4

SEWER AND STORM DRAIN INSTALLATION NOTES

1. WHEREVER FEASIBLE, SEWERS SHALL BE LAID AT A MINIMUM OF 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. WHEN THIS REQUIREMENT CANNOT BE MET, THE SEWER SHOULD BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN.
2. WHENEVER SEWERS MUST CROSS UNDER WATER MAINS, THE SEWER SHOULD BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHEN THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHOULD BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10'-0" ON EITHER SIDE OF THE SEWER. WHERE A WATER MAIN CROSSES THE SEWER, ONE FULL LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. THE WATER MAIN SHALL BE CONSTRUCTED WITH MECHANICAL-JOINT, DOUBLE CEMENT-LINED DUCTILE IRON PIPE. JOINTS FOR BOTH SEWER AND WATER MAIN SHALL BE RESTRAINED. PIPES SHALL BE PRESSURE TESTED TO 150 PSI TO ENSURE WATER TIGHTNESS.
3. ALL EXISTING SEWER SERVICES AND EXISTING SEWER PUMP STATION SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PREPARE A CONSTRUCTION SEQUENCE PLAN TO ENSURE THAT ALL SEWER CUSTOMERS HAVE CONTINUOUS SEWER SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AS NECESSARY TO COORDINATE CONSTRUCTION DURING LOW FLOW TIMES. CONTRACTOR IS RESPONSIBLE FOR ALL BYPASS PUMPING TO MAINTAIN CONTINUOUS SERVICE. CONTRACTOR SHALL SET UP BYPASS PUMPING PIPING TO ALLOW PROPERTY OWNER ACCESS TO THEIR DRIVEWAYS. CONSTRUCTION SEQUENCE AND BYPASS PUMPING PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY EXCAVATION.
4. DEWATERING IS REQUIRED DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR APPROVAL AS SPECIFIED.
5. SUPPORT OF EXCAVATION IS REQUIRED DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A SUPPORT OF EXCAVATION PLAN TO THE ENGINEER FOR APPROVAL AS SPECIFIED.
6. THE CONTRACTOR SHALL MATCH EXISTING GRADING. ANY CHANGES IN GRADING, WHICH WOULD RESULT IN AN INCREASE OF STORMWATER RUNOFF TO THE DRAINAGE SYSTEM, SHALL NOT BE PERMITTED.
7. ALL NEW AND RECONNECTED GRAVITY SANITARY SEWER SERVICES SHALL BE MIN. 6" PVC OR SHALL MATCH THE EXISTING SERVICE SIZE. WHERE THE EXISTING SERVICE IS 5" OR SMALLER, CONTRACTOR SHALL TRANSITION TO 6" PVC. REMOVE AND DISPOSE OF SECTIONS OF SERVICES REPLACED. CONTRACTOR SHALL PROVIDE APPROPRIATE FITTINGS WHERE NECESSARY.
8. PROPOSED SEWER SERVICE SIZES AND LOCATIONS SHOWN ON PLANS MAY BE ADJUSTED DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND INDIVIDUAL PROPERTY OWNERS DURING CONSTRUCTION TO DETERMINE FINAL SIZING AND LOCATIONS. CONTRACTOR SHALL ADJUST SERVICE LOCATIONS IN THE FIELD AS NEEDED TO MINIMIZE THE REMOVAL OF THE EXISTING CONCRETE SLAB ROADWAY UNDERNEATH THE SURFACE ASPHALT. WHERE FEASIBLE, CONTRACTOR SHALL ALIGN SERVICES WITH THE EDGES OF THE EXISTING CONCRETE ROADWAY SLABS AND AVOID LEAVING SMALL SECTIONS OF FLOATING CONCRETE SLABS DISCONNECTED FROM THE ORIGINAL CONCRETE SLAB.
9. ALL GRAVITY SEWER STUBS EXTENDED INTO SIDE STREETS ARE TO EXTEND APPROXIMATELY 10 FEET PAST THE MASSDOT STATE HIGHWAY LIMIT AND SHALL BE 8-INCH CAPPED PVC INSTALLED AT 0.0044 SLOPE UNLESS NOTED OTHERWISE.
10. ALL CATCH BASIN REPLACEMENTS IN THE MASSDOT STATE HIGHWAY LAYOUT SHALL BE INSTALLED PER MASSDOT CONSTRUCTION STANDARD DETAILS FOR PRECAST CONCRETE CATCH BASIN, CATCH BASIN FRAME AND CATCH BASIN FRAME. REFER TO MASSDOT CONSTRUCTION STANDARD DETAILS DRAWINGS E 201.4.0, E 201.6.0 AND E 201.7.0.

WATER MAIN INSTALLATION NOTES

1. ALL WATER LINES INSTALLED UNDER THIS CONTRACT SHALL BE AT A DEPTH OF NO LESS THAN 4.5 FEET AS MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED GRADE, UNLESS SPECIFICALLY IDENTIFIED OR APPROVED BY THE OWNER.
2. ALL MECHANICAL JOINT FITTINGS, HYDRANTS, VALVES, AND PIPE JOINTS SHALL BE RESTRAINED AS SPECIFIED IN SECTION 02615.
3. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND A SEWER, OR APPURTENANCE THERETO WHICH WOULD PERMIT THE PASSAGE OF ANY WASTEWATER OR POLLUTED WATER SUPPLY.
4. WATER GATE VALVE BOXES AND WATER SERVICE BOXES SHALL BE ADJUSTED TO MATCH THE LINE AND GRADE OF THE FINISHED SURFACE DURING TEMPORARY AND FINAL PAVING AS DIRECTED BY THE ENGINEER.
5. ALL WATER SERVICES TO BE 1" COPPER UNLESS NOTED OTHERWISE. PROPOSED WATER SERVICE SIZES AND LOCATIONS SHOWN ON PLANS MAY BE ADJUSTED DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND INDIVIDUAL PROPERTY OWNERS DURING CONSTRUCTION TO DETERMINE FINAL SIZING AND LOCATIONS. CONTRACTOR SHALL ADJUST SERVICE LOCATIONS IN THE FIELD AS NEEDED TO MINIMIZE THE REMOVAL OF THE EXISTING CONCRETE SLAB ROADWAY UNDERNEATH THE SURFACE ASPHALT. WHERE FEASIBLE, CONTRACTOR SHALL ALIGN SERVICES WITH THE EDGES OF THE EXISTING CONCRETE ROADWAY SLABS AND AVOID LEAVING SMALL SECTIONS OF FLOATING CONCRETE SLABS DISCONNECTED FROM THE ORIGINAL CONCRETE SLAB.
6. ALL WATER MAIN DISINFECTION PROCEDURES SHALL BE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS. REFER TO SPECIFICATION SECTION 02675.
7. CONTRACTOR SHALL VERIFY SUBSURFACE SEWER AND DRAIN INVERTS AND EXISTING UTILITY DEPTHS AND ADJUST WATER MAIN BURY DEPTHS TO CLEAR EXISTING UTILITIES WITH AT LEAST THE MINIMUM SEPARATION SPECIFIED. FITTINGS AND MECHANICAL JOINT RESTRAINTS USED FOR CLEARING DRAINS OR OTHER OBSTACLES SHALL BE PAID FOR WHEN NECESSARY UNDER THE APPROPRIATE BID ITEMS.
8. WHENEVER WATER MAINS MUST CROSS SEWERS, THE WATER MAIN SHALL BE LAID OUT AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18-INCHES BELOW THE INVERT OF THE WATER MAIN. ONE FULL LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHEN IT IS IMPOSSIBLE TO OBTAIN 18-INCHES VERTICAL SEPARATION OVER A SEWER MAIN AS STIPULATED ABOVE, THE WATER MAIN SHALL BE WRAPPED IN 8 MIL POLY WRAP FOR 10 FEET ON EITHER SIDE OF THE CROSSING, AND CONCRETE ENCASED PER THE UTILITY CROSSING DETAIL.
9. THE CONTRACTOR SHALL RESTRAIN ALL COUPLING CONNECTIONS TO EXISTING DI WATER MAIN.
10. CONTRACTOR SHALL COORDINATE WITH THE TOWN OF WESTPORT WATER DIVISION FOR OPENING AND CLOSING OF EXISTING WATER VALVES.
11. ALL WATER MAIN STUBS EXTENDED INTO SIDE STREETS ARE TO EXTEND APPROXIMATELY 15 FEET PAST THE MASSDOT STATE HIGHWAY LIMIT AND SHALL BE CAPPED DI UNLESS NOTED OTHERWISE.

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

NOTES

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

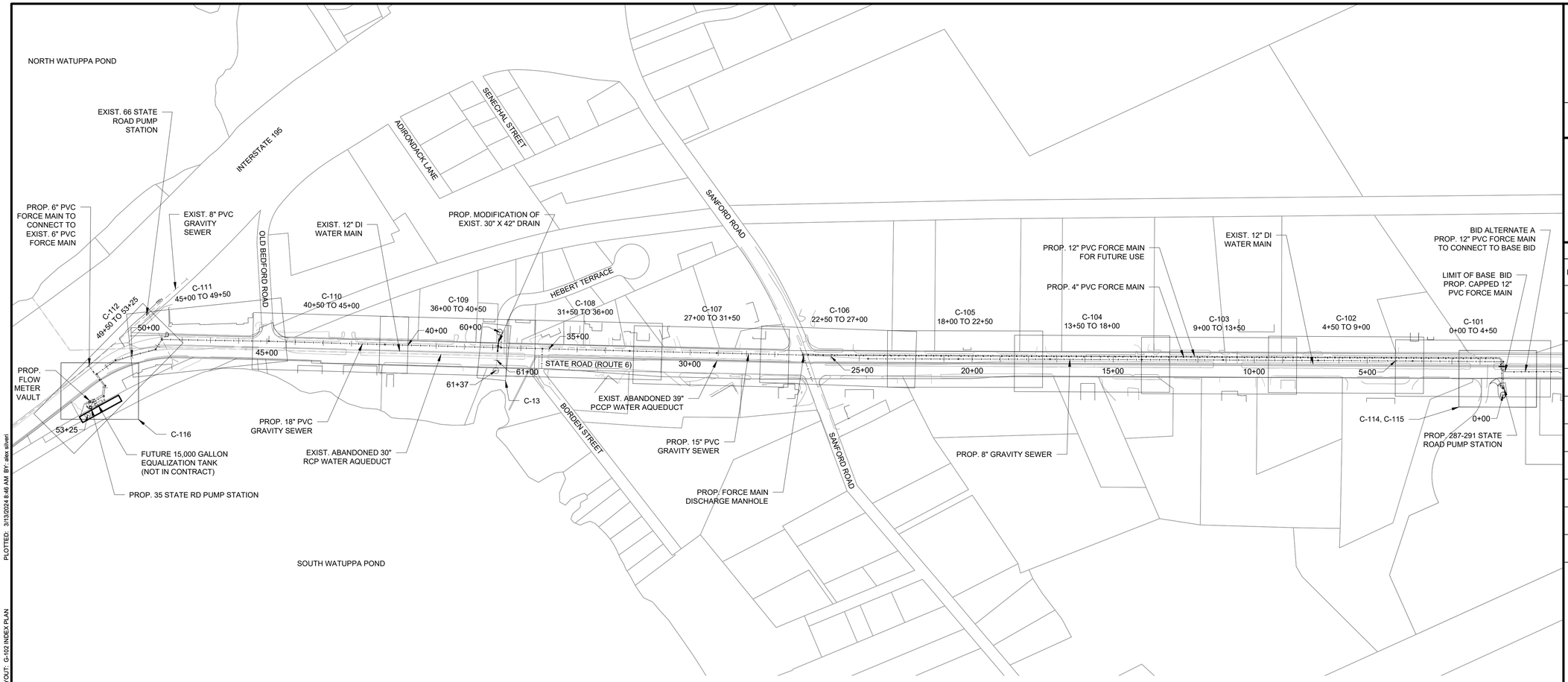
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

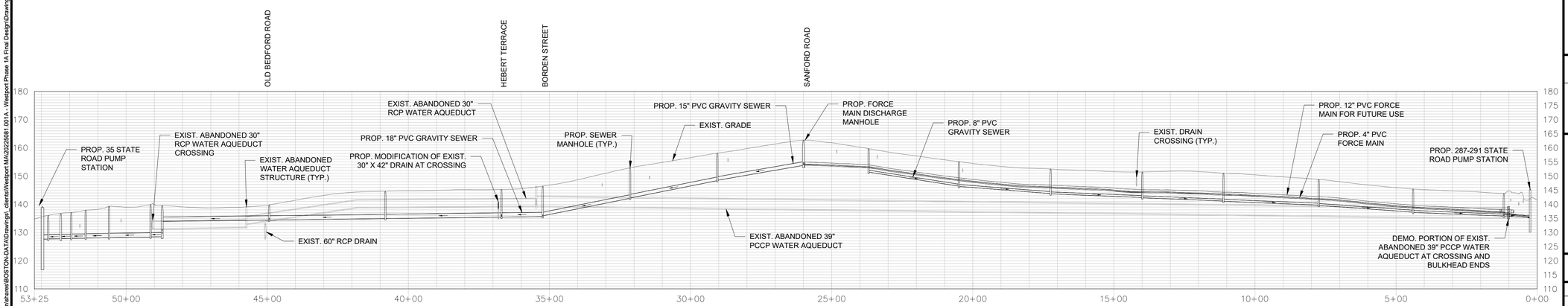
PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

G-104

PLOTTED: 3/13/2024 8:42 AM BY: dtex silvoni
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\G-Notes\Legend.dwg LAYOUT: G-104 NOTES



PLAN
SCALE: 1" = 200'



PROFILE
HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1"=20'

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SCALE VERIFICATION

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IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 200 400
SCALE: 1" = 200' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

INDEX PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	RA
CHECKED BY	DTP
APPROVED BY	MT

G-105

SHEET 5 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\G-Index Plan.dwg LAYOUT: G-102 INDEX PLAN
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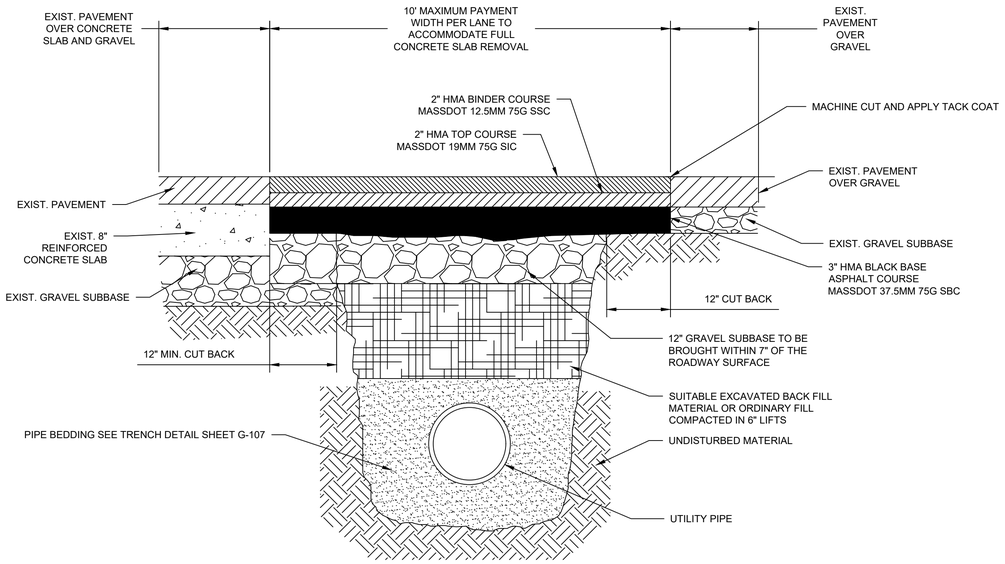
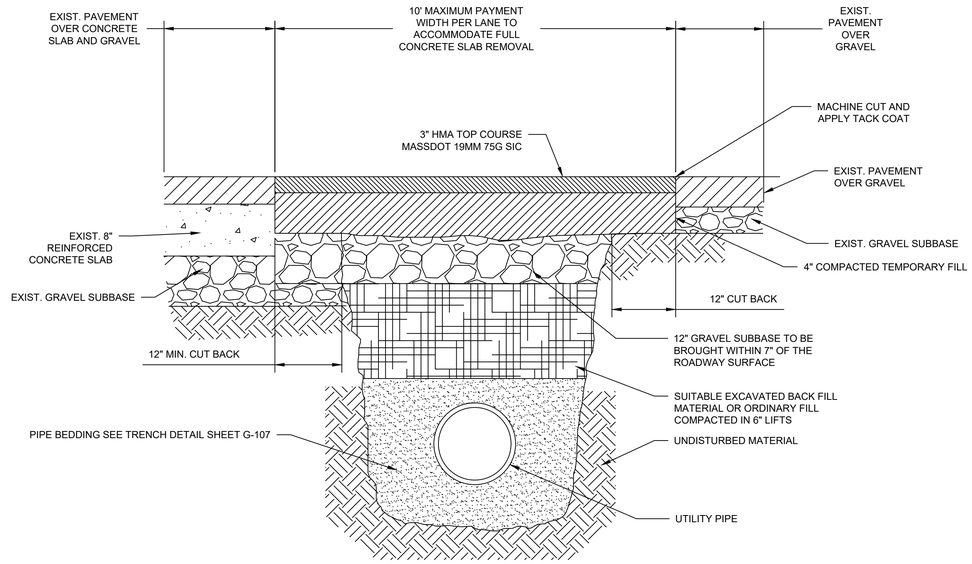


STATE ROAD MAINLINE SEWER PERMANENT PAVEMENT DETAIL

SCALE: N.T.S.

NOTES:

1. MAX. PERMANENT PAVING PAY LIMIT SHALL BE UP TO 10' WHERE CONCRETE SLAB IS REMOVED, OR 20' WHERE 2 CONCRETE SLABS ARE REMOVED.

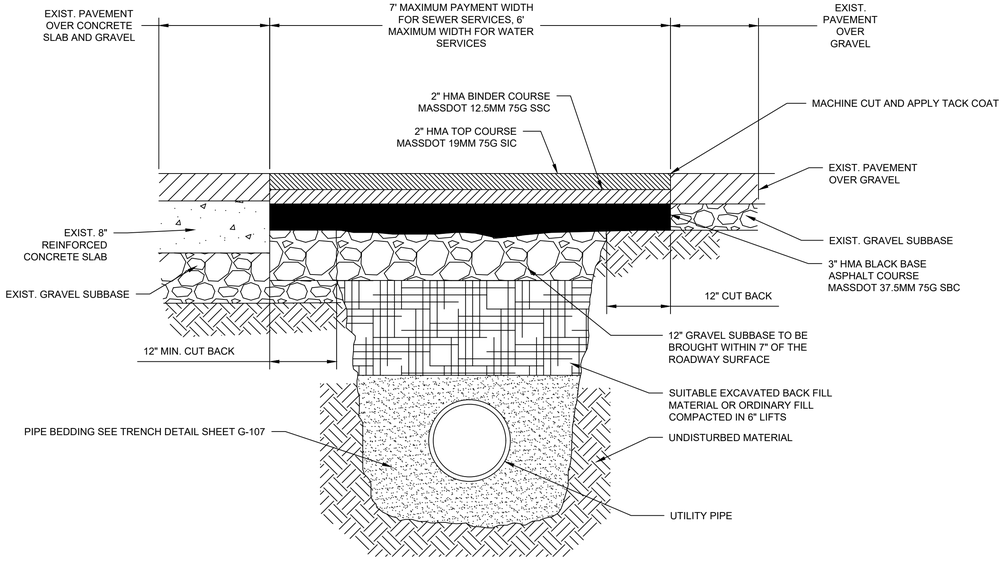


STATE ROAD MAINLINE SEWER TEMPORARY PAVEMENT DETAIL

SCALE: N.T.S.

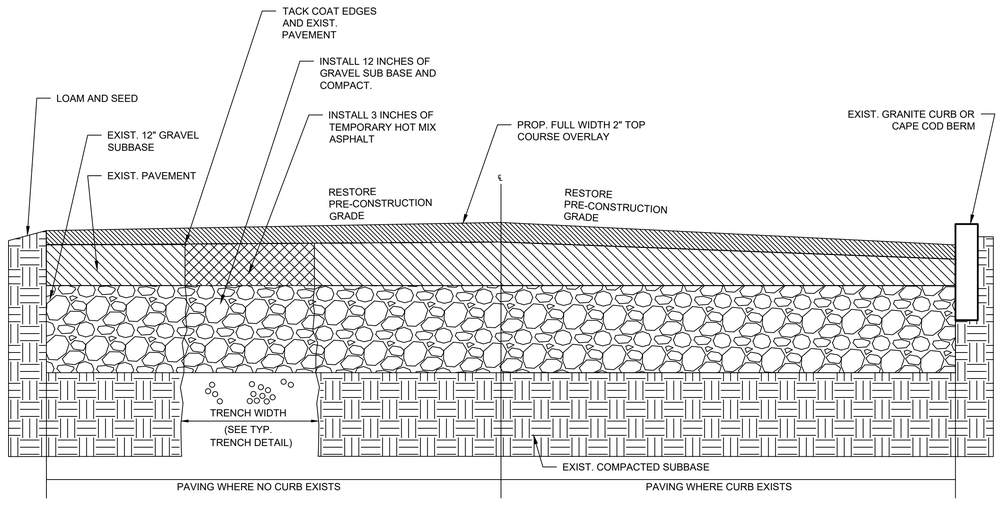
NOTES:

1. MAX. TEMPORARY PAVING PAY LIMIT SHALL BE UP TO 10' WHERE CONCRETE SLAB IS REMOVED, OR 20' WHERE 2 CONCRETE SLABS ARE REMOVED.



STATE ROAD SERVICE AND SIDE STREET CONECTION PERMANENT PAVEMENT DETAIL

SCALE: N.T.S.



TYPICAL TOWN ROAD PERMANENT PAVEMENT DETAIL

SCALE: N.T.S.

NOTES:

1. PAVING ON SIDE STREET PIPE EXTENSIONS IS TO EXTEND 5 FEET BEYOND THE END OF TRENCHES.

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ORIGINAL DRAWING SIZE IS 22 x 34

DETAILS I

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
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APPROVED BY	MT

G-106

SHEET 6 of 85

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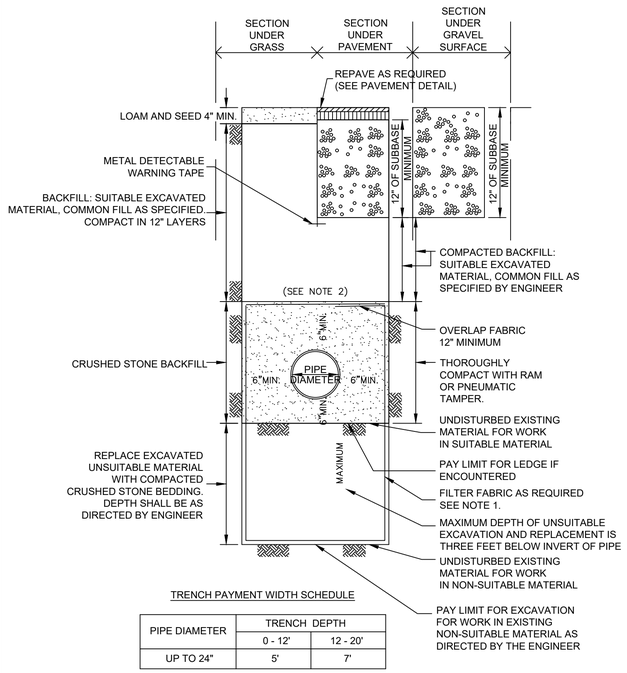
PLOTTED: 3/13/2024 8:47 AM BY: alex oliveri



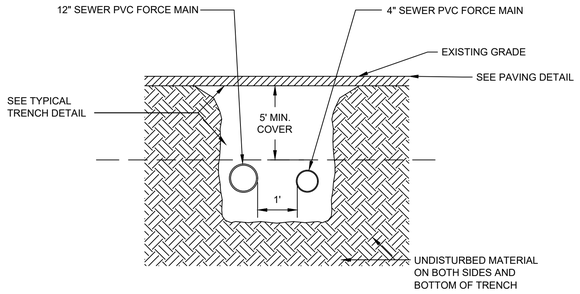
TRENCH PAYMENT WIDTH SCHEDULE

PIPE DIAMETER	TRENCH DEPTH	
	0 - 12'	12 - 20'
UP TO 24"	5'	7'

1. BEDDING SHALL BE WRAPPED WITH FILTER FABRIC IN LOCATIONS WHERE EXISTING SOIL IS CONSIDERED NON-SUITABLE BY THE ENGINEER (INCLUDING PEAT).
2. TRENCH PAYMENT WIDTH FOR MULTIPLE PIPES IN THE SAME TRENCH WILL BE INCREASED BY PIPE DIAMETER PLUS A MAXIMUM OF 1'-0" HORIZONTAL SEPARATION AS MEASURED BETWEEN EACH PIPE.
3. UNSUITABLE MATERIAL AND LEDGE/ROCK PAYMENT WIDTH SCHEDULE IS THE SAME AS TRENCH PAYMENT WIDTH SCHEDULE
4. CONCRETE PAVEMENT IS TO BE SAWCUT PRIOR TO EXCAVATION
5. SEE PAVING DETAILS FOR PAYMENT LIMITS WITH CONCRETE SLAB.

TYPICAL TRENCH DETAIL

SCALE: N.T.S.



SHARED TRENCH DETAIL

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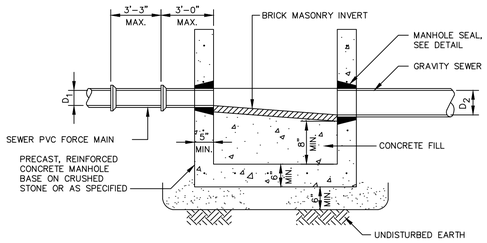
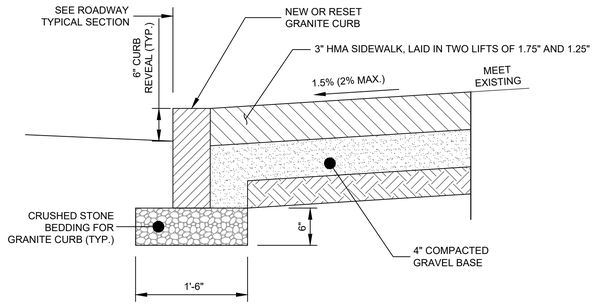


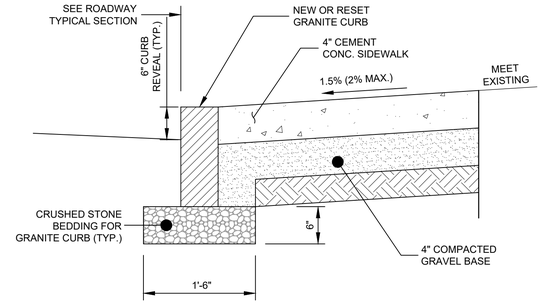
FORCE MAIN DISCHARGE DETAIL

N.T.S.



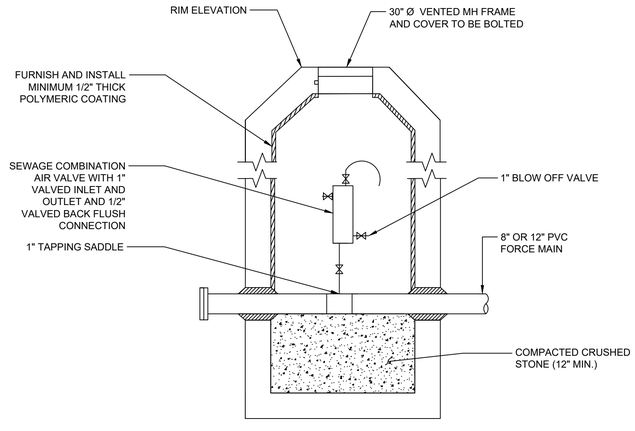
4" HMA SIDEWALK

SCALE: N.T.S.



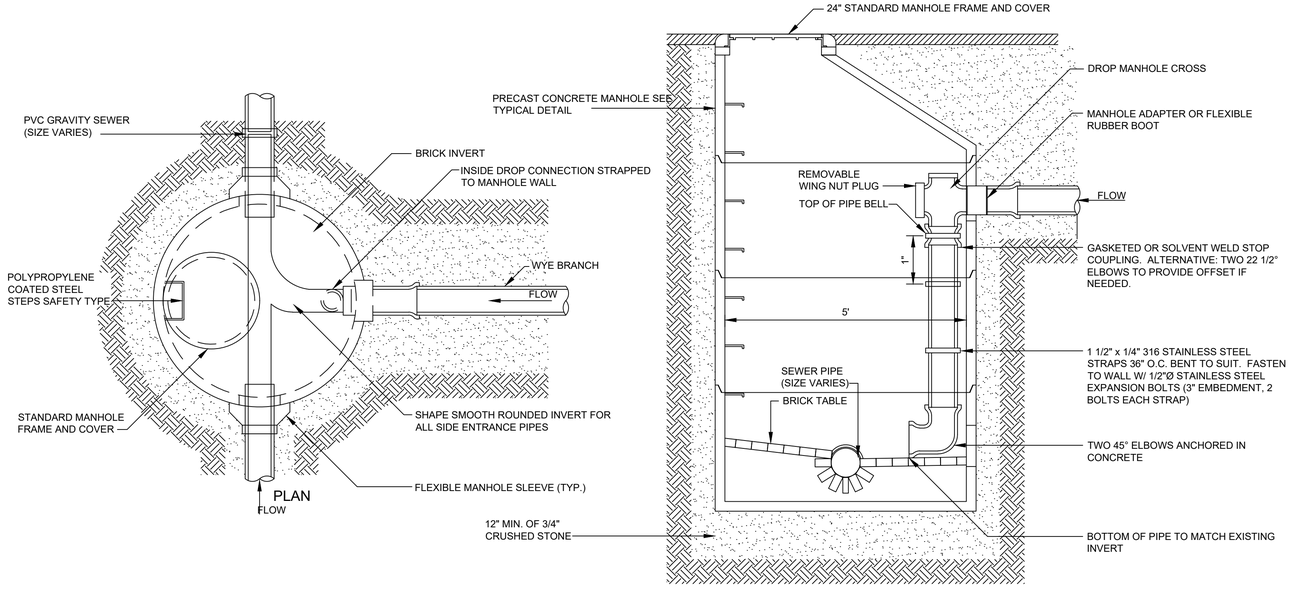
4" CEMENT CONCRETE SIDEWALK

SCALE: N.T.S.



TYPICAL AIR RELEASE VALVE AND 5' MANHOLE

SCALE: N.T.S.



INTERIOR DROP SANITARY MANHOLE

SCALE: N.T.S.

NOTE:

DROP MANHOLES SHALL BE USED WHEN ENTRANCE PIPE INVERTS ARE 2' OR GREATER THAN MANHOLE INVERT.

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

DETAILS II

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

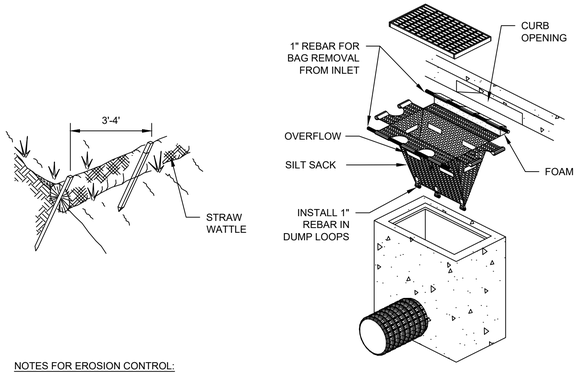
100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

G-107

SHEET 7 of 85

PLOTTED: 3/13/2024 8:47 AM BY: alex oliveri
CAD FILE: \\kleinfelder.com\share\BOSTON-DATA\Drawings_clients\Westport MA\20230896.001A - Phase 1C Final Design\Drawings\Production Drawings\C-38 TRAFFIC MANAGEMENT PLAN.dwg LAYOUT: C-232 DETAILS II

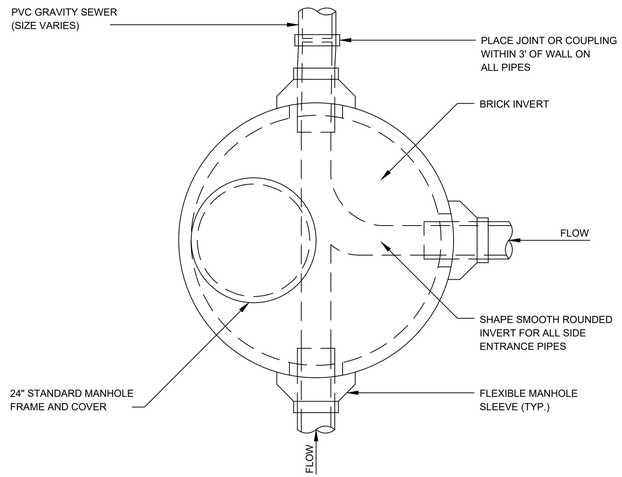


NOTES FOR EROSION CONTROL:

1. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP, DUG ON CONTOUR. RUNOFF SHALL NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.
2. STRAW WATTLES SHALL BE PLACED ALONG SLOPE CONTOURS.
3. ADJACENT WATTLES SHALL TIGHTLY ABUT.
4. CONTRACTOR SHALL REMOVE SEDIMENT AS NECESSARY TO MAINTAIN LEVEL BELOW OVERFLOW HOLES IN SILT SACK.
5. SILT SACK SHALL BE USED ON ALL EXISTING CATCH BASINS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SEDIMENTATION BARRIERS THROUGHOUT THE DURATION OF THE PROJECT.
7. CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF SEDIMENT AS REQUIRED.
8. CONTRACTOR SHALL REMOVE SILT SACKS AND STRAW WATTLES AND LEGALLY DISPOSE OF THEM OFF-SITE, UPON COMPLETION OF THE PROJECT AND AS REQUIRED.

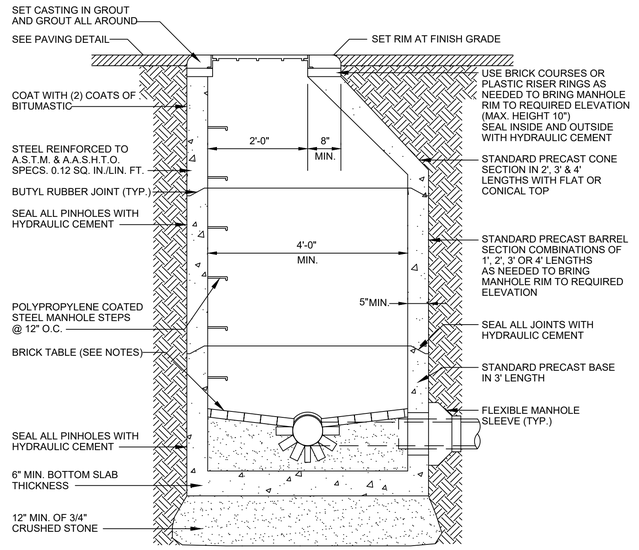
TYPICAL STRAW WATTLE AND SILT SACK DETAIL

SCALE: N.T.S.



TYPICAL MANHOLE (PLAN)

SCALE: N.T.S.

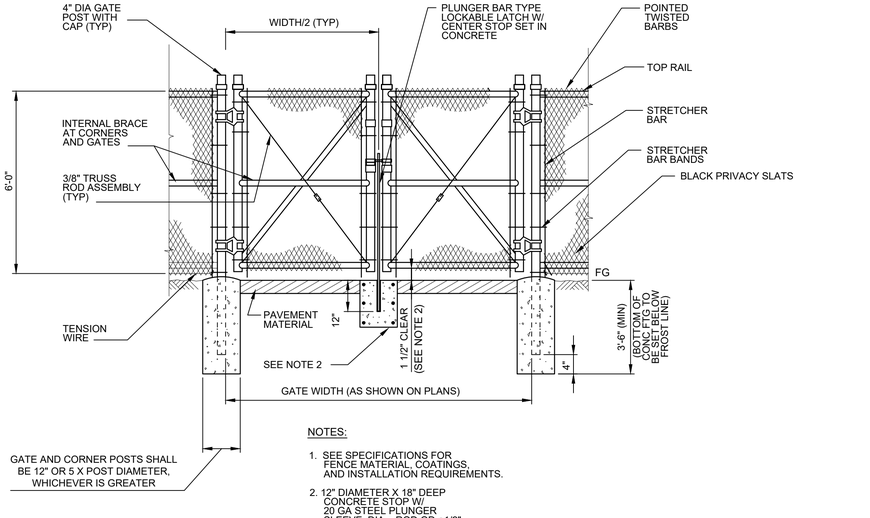


NOTES:

1. INNER EDGE OF BRICK TABLE TO BE AT ELEVATION OF CROWN OF TOP OF PIPE. TABLE TO SLOPE AT 1" PER 1' TO INSIDE OF MANHOLE BASE.
2. TYPICAL SANITARY MANHOLE TO BE 4 FOOT DIAMETER.
3. DROP MANHOLE TO BE 5 FOOT DIAMETER.

TYPICAL MANHOLE (ELEVATION)

SCALE: N.T.S.

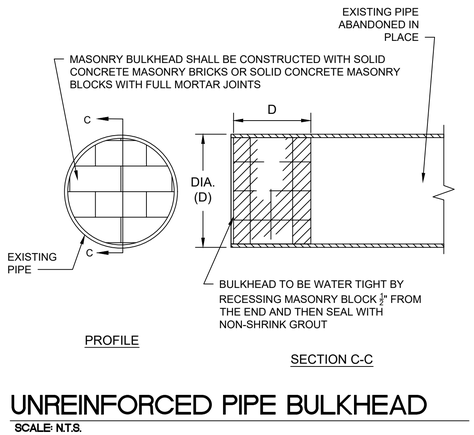


NOTES:

1. SEE SPECIFICATIONS FOR FENCE MATERIAL, COATINGS, AND INSTALLATION REQUIREMENTS.
2. 12" DIAMETER X 18" DEEP CONCRETE STOP W/ 20 GA STEEL PLUNGER SLEEVE, DIA = ROD OD +1/2".

CHAIN LINK FENCE AND DOUBLE LEAF GATE

SCALE: N.T.S.

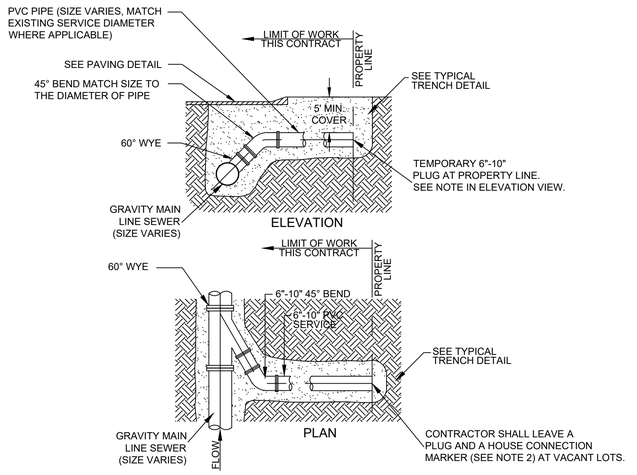


PROFILE

SECTION C-C

UNREINFORCED PIPE BULKHEAD

SCALE: N.T.S.



NOTES:

1. SERVICE PIPE SIZES AND DEPTHS VARY. REPLACE EXISTING SERVICE DIAMETER WHERE APPLICABLE. 6" SERVICE PIPES SHALL BE MINIMUM 0.5% SLOPE.
2. HOUSE CONNECTION MARKER TO BE A 6"X6"X1/4" STEEL PLATE WELDED TO A 1'-6" X1/2"Ø STEEL ROD.

TYPICAL SEWER SERVICE CONNECTION

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DETAILS III

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

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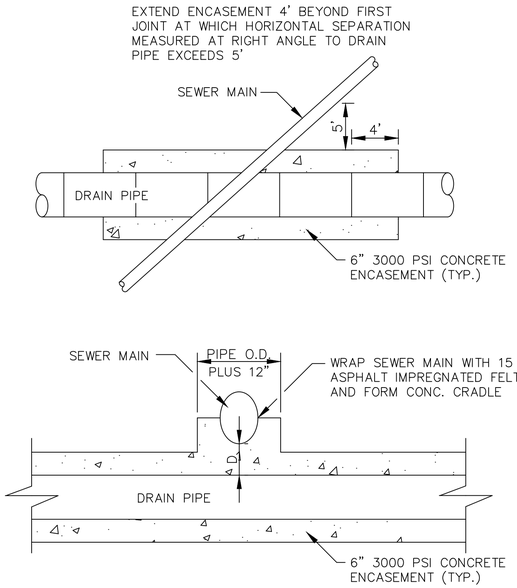
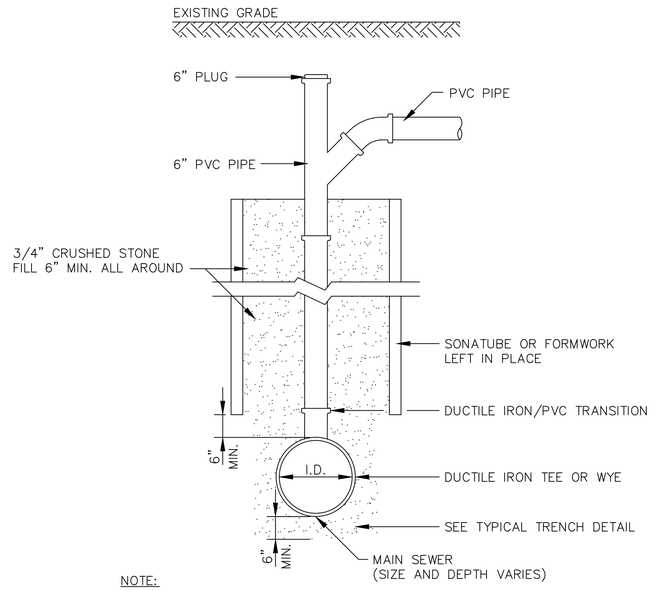
CAD FILE: \\eainfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20220988.001A - Phase 1C Final Design\Drawings\Production Drawings\C-36 TRAFFIC MANAGEMENT PLAN.dwg LAYOUT: C-233 DETAILS III



DRAIN CROSSING DETAIL

N.T.S.

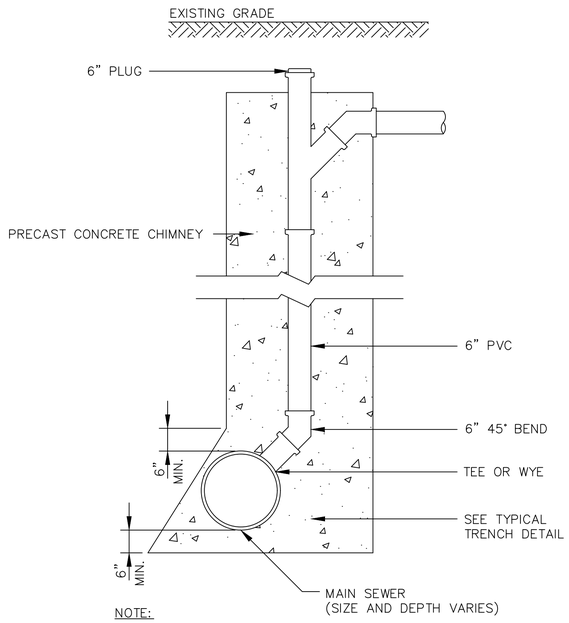


NOTE:

CHIMNEYS ARE ONLY TO BE USED WHERE THE MAIN LINE INVERT IS GREATER THAN 12 FEET DEEP.

CHIMNEY SEWER CONNECTION DETAIL

N.T.S.

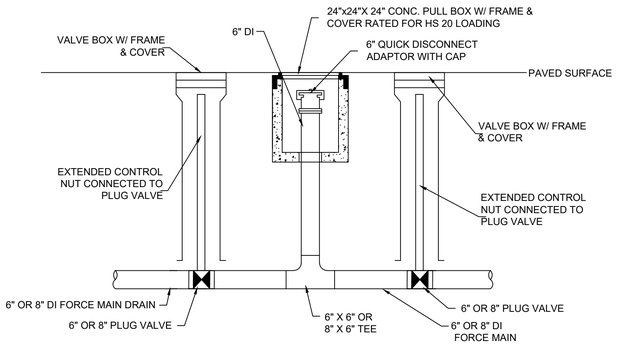


NOTE:

CHIMNEYS ARE ONLY TO BE USED WHERE THE MAIN LINE INVERT IS GREATER THAN 12 FEET DEEP.

PRE-CAST CHIMNEY SEWER CONNECTION DETAIL

N.T.S.



PUMP STATION HANDHOLE ELEVATION

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DETAILS IV

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

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APPROVED BY	MT

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SHEET 9 of 85

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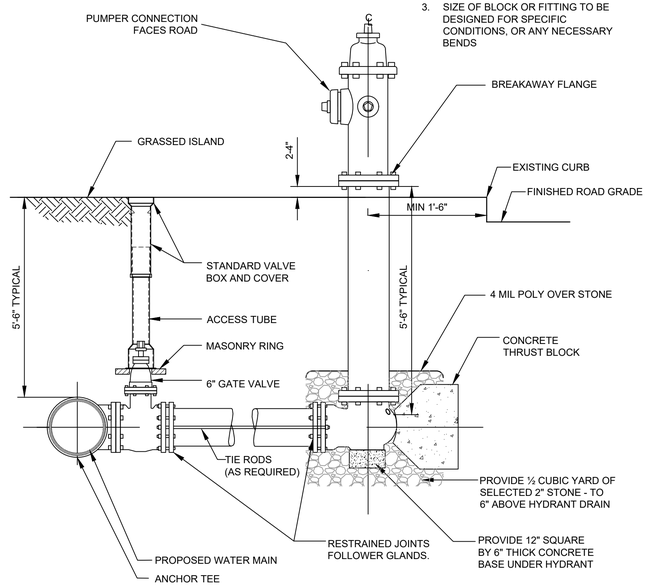
PLOTTED: 3/13/2024 8:47 AM BY: alex oliveri

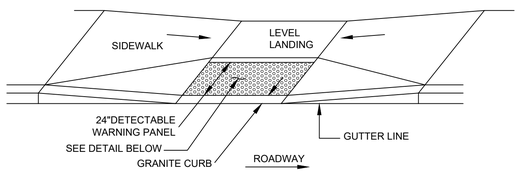
NOTES:

1. CONCRETE THRUST BLOCK TO BE USED ONLY WHERE IT WILL BEAR ON UNDISTURBED EARTH
2. USE RESTRAINED JOINT FOLLOWER GLANDS, OR TIE RODS WHERE CONCRETE THRUST BLOCK IS UNACCEPTABLE
3. SIZE OF BLOCK OR FITTING TO BE DESIGNED FOR SPECIFIC CONDITIONS, OR ANY NECESSARY BENDS

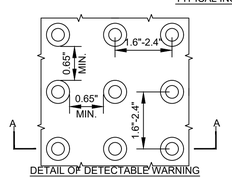


TYPICAL HYDRANT

SCALE: N.T.S.



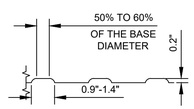
TYPICAL INSTALLATION



DETAIL OF DETECTABLE WARNING PANEL

PEDESTRIAN RAMPS TRANSITION LENGTH	
ROADWAY PROFILE GRADE	HIGH SIDE TRANSITION
0%	6'-6"
0% to 1%	7'-8"
1% to 2%	9'-0"
2% to 3%	11'-0"
3% to 4%	14'-0"
4% and above	15'-0" MAX.

TABLE A



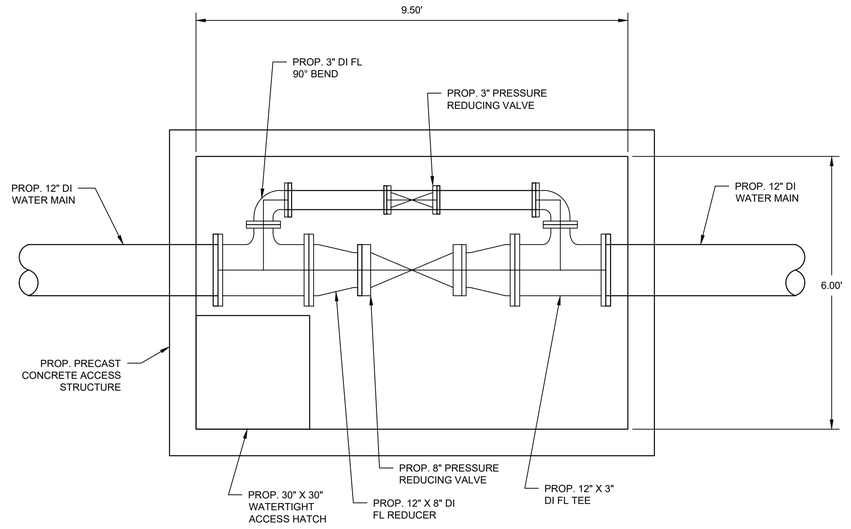
SECTION A-A

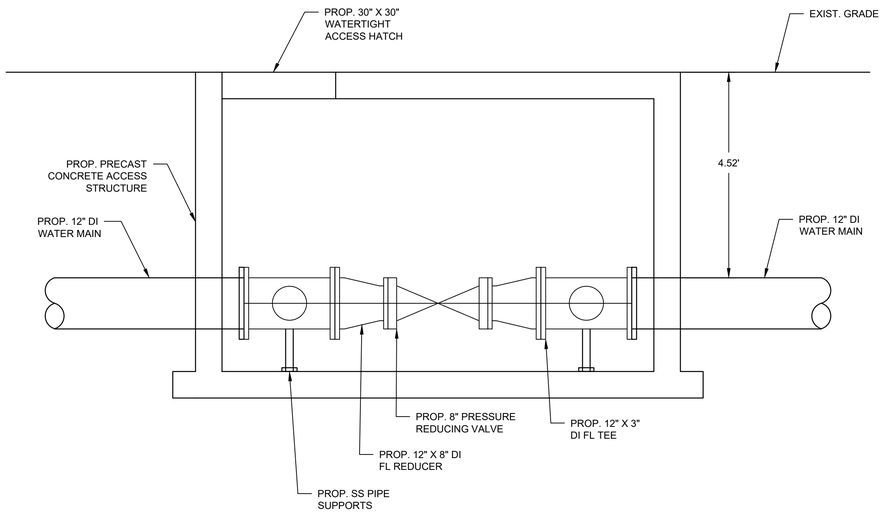
NOTES:

1. DETECTABLE WARNING PANELS MAY BE PRECAST CONCRETE OR CAST IN PLACE CONCRETE OR OTHER SUITABLE MATERIAL PERMANENTLY APPLIED TO THE RAMP. DETECTABLE WARNING SURFACE SHALL VISUALLY CONTRAST WITH ADJACENT WALKING SURFACES (LIGHT-ON-DARK OR DARK-ON LIGHT).
2. THE HIGH SIDE TRANSITION LENGTH SHOWN IN TABLE A IS BASED ON A DESIGN SLOPE OF 7.5% AND A CURB REVEAL OF 6".

DETECTABLE WARNING PAD

SCALE: N.T.S.





PRESSURE REDUCING VALVE ACCESS STRUCTURE

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DETAILS V

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

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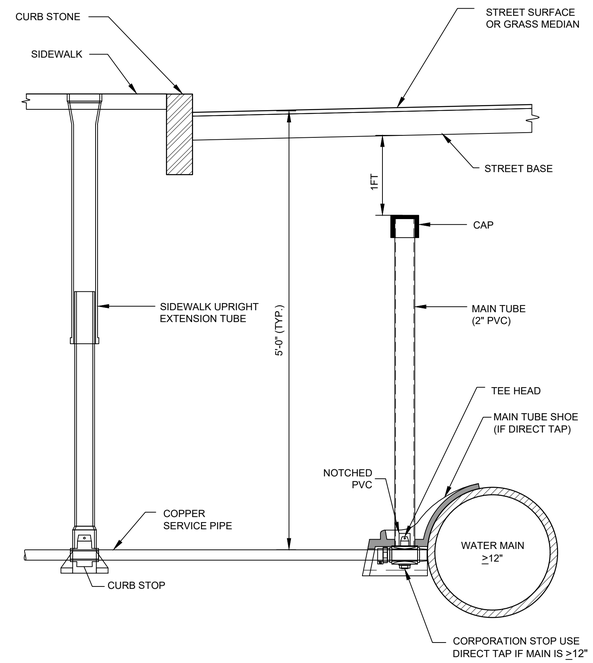
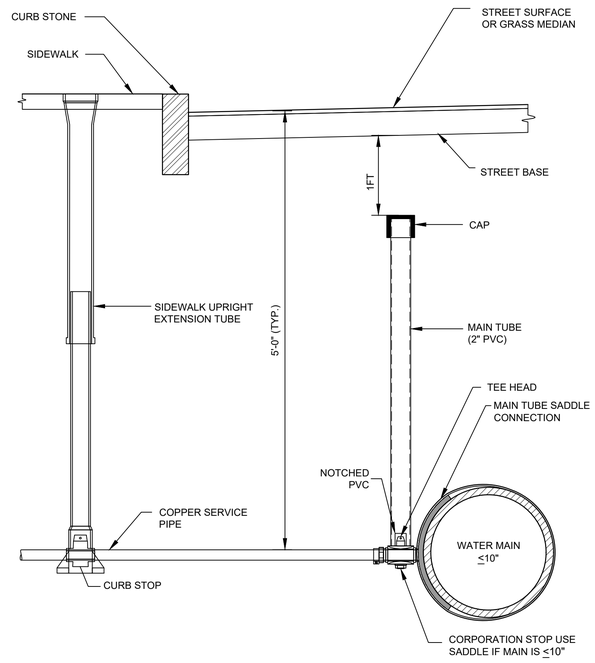
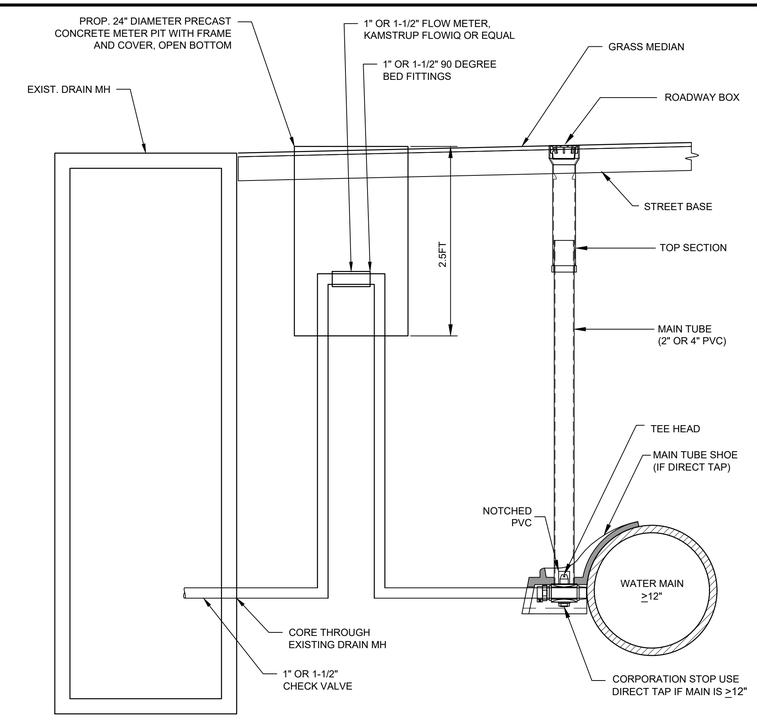


WATER CONNECTION (3/4" AND 1")

SCALE: N.T.S.





BLOW OFF CONNECTION (1" AND 1-1/2")

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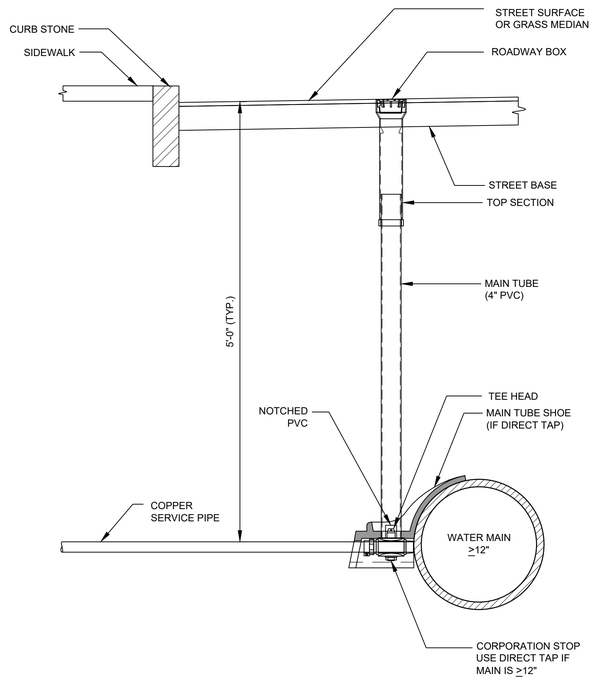
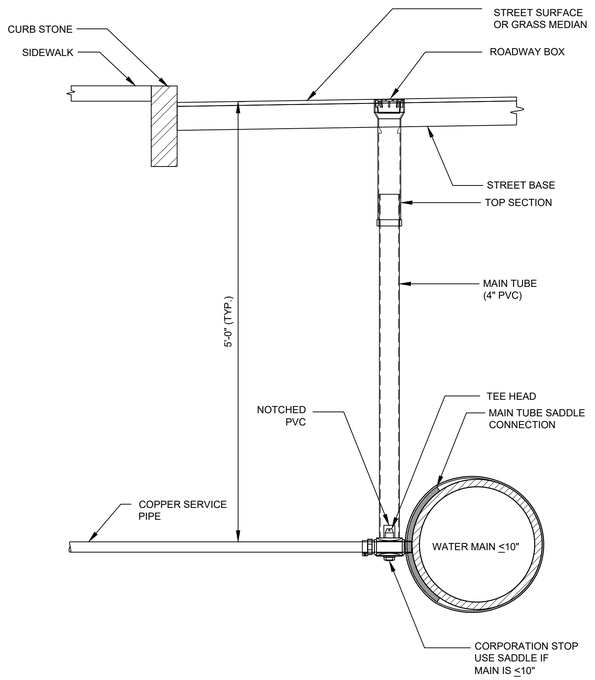
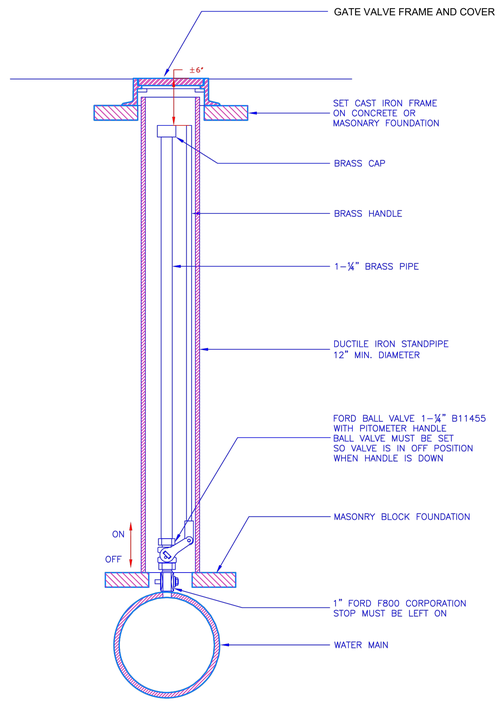


WATER CONNECTION (1-1/2" AND 2")

SCALE: N.T.S.





MANUAL AIR RELEASE VALVE

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DETAILS VI

ROUTE 6 SEWER AND
WATER EXTENSIONS
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CONSTRUCTION SIGN LEGEND

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS LETTER HEIGHT	TEXT DIMENSIONS VERTICAL SPACING	TEXT DIMENSIONS ARROW	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER
W20-4	36"	36"	ONE LANE ROAD AHEAD	MUTCD STANDARD DETAIL			ORANGE	BLACK	BLACK
MA-W20-7b	36"	36"	SQUEEZE RIGHT AHEAD				ORANGE	BLACK	BLACK
W20-1a	36"	36"	ROAD WORK AHEAD				ORANGE	BLACK	BLACK
W8-24	36"	36"	FUEL PUMP 500 FT				ORANGE	BLACK	BLACK
MA-R2-10a	48"	60"	WORK ZONE SPEEDING FINES DOUBLED				ORANGE /WHITE	BLACK	BLACK
MA-R2-10e	36"	18"	END ROAD WORK DOUBLE FINES END				ORANGE /WHITE	BLACK	BLACK
W5-1	36"	36"	ROAD NARROWS				ORANGE	BLACK	BLACK
W1-4L	36"	36"					ORANGE	BLACK	BLACK
W1-4R	36"	36"					ORANGE	BLACK	BLACK
R9-11aR	24"	12"	SIDEWALK CLOSED AHEAD CROSS HERE				WHITE	BLACK	BLUE
R9-11aL	24"	12"	SIDEWALK CLOSED AHEAD CROSS HERE				WHITE	BLACK	BLUE
R4-7	24"	30"	KEEP RIGHT				WHITE	BLACK	BLACK
W11-2	36"	36"					YELLOW	BLACK	BLACK
W16-7pL	24"	12"					YELLOW	BLACK	BLACK
W30-8R	36"	36"	SQUEEZE RIGHT				ORANGE	BLACK	BLACK
W13-1P	18"	18"	XX MPH				ORANGE	BLACK	BLACK
R3-7L	30"	30"	LEFT LANE MUST TURN LEFT				WHITE	BLACK	BLACK
R3-7R	18"	18"	RIGHT LANE MUST TURN RIGHT				WHITE	BLACK	BLACK
W4-7L	36"	36"	LANE ENDS MERGE LEFT				ORANGE	BLACK	BLACK
W12-1	36"	36""					ORANGE	BLACK	BLACK
W9-3	36"	36"	RIGHT LANE ENDS				ORANGE	BLACK	BLACK
W20-7	36"	36"					ORANGE	BLACK	BLACK
R11-2	24"	18"	ROAD CLOSED				ORANGE	BLACK	BLACK
W1-6	24"	12"					ORANGE	BLACK	BLACK
W21-10	36"	36"	BICYCLE MAY USE LANE				ORANGE	BLACK	BLACK
W21-5a	36"	36"	BIKES MAY USE FULL LANE				ORANGE	BLACK	BLACK
W21-5b	36"	36"	SHARE THE ROAD BICYCLE MAY USE LANE				ORANGE	BLACK	BLACK
W1-4bR	36"	36"					ORANGE	BLACK	BLACK
W1-4bL	36"	36"					ORANGE	BLACK	BLACK

MASSDOT NOTES FOR STATE ROADS:

REFER TO FIGURES IN THE MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS (SEE APPENDICES).

MASSDOT STANDARD SIGN MA-R2-10a SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED IN THE NOTES ON FIGURE GEN-2.

THE LENGTH OF THE BUFFER ZONES IS DETERMINED BY THE STOPPING SIGHT DISTANCE WHICH IS DEPENDENT ON THE SPEED OF THE ROADWAY AS NOTED ON FIGURE GEN-4 AND LISTED ON FIGURE GEN-2.

TRAFFIC MANAGEMENT GENERAL NOTES:

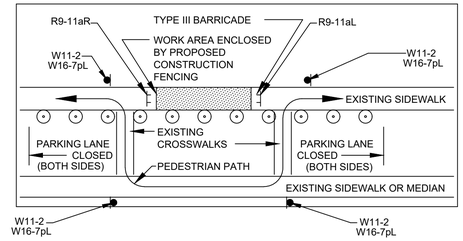
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D).
2. ALL SIGN LOCATIONS ON PLANS ARE SHOWN SCHEMATICALLY. FINAL LOCATIONS SHALL BE DETERMINED BASED ON ACTUAL FIELD CONDITIONS AND TOWN APPROVAL.
3. ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE PROVIDED UPON THE ENGINEER OR OWNER'S REQUEST.
4. ALL TEMPORARY SIGNAGE AND TRAFFIC CONTROL DEVICES SHALL BE PROPERLY SECURED.
5. THE FIRST TEN (10) PLASTIC DRUMS OF A TAPER SHALL BE EQUIPPED WITH SEQUENTIAL FLASHING LIGHTS. SEE PAGE 2 FROM THE MASSDOT WORK ZONE SAFETY FLIPBOOK IN THE SPECIFICATIONS APPENDICES. ALL DRUMS SHALL BE SET @ 5' O.C. MAX. UNLESS OTHERWISE NOTED OR ADJUSTED BY THE ENGINEER OR OWNER.
6. TEMPORARY TRAFFIC LANES WITHIN THE WORK ZONE SHALL BE A MINIMUM WIDTH OF 11 FEET.
7. NON-ESSENTIAL TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED DURING NON-WORK HOURS.
8. ALL TRAVEL WAYS SHALL BE PROTECTED FROM DUST AND CONSTRUCTION DEBRIS AT ALL TIMES.
9. VEHICULAR AND PEDESTRIAN SHALL BE ALLOWED ACCESS TO PRIVATE PROPERTY AT ALL TIMES DURING CONSTRUCTION.
10. CONSTRUCTION WORK ZONE SHALL BE STAGED AS TO ALLOW FOR CONTINUOUS ACCESS AT DRIVE ENTRANCES AND TO MINIMIZE DETOURS TO WESTPORT ROADS.
11. SAFE PEDESTRIAN WALKWAYS AND ACCESS TO LOCAL BUSINESSES AND RESIDENCES SHALL BE PROVIDED. PUBLIC WALKWAYS SHALL REMAIN OPEN AND ACCESSIBLE UNLESS OTHERWISE DIRECTED BY TOWN.
12. ALL EXISTING PEDESTRIAN CROSSINGS SHALL BE MAINTAINED. ALTERNATIVE CROSSINGS SHALL BE PROVIDED WHEN EXISTING CROSSINGS ARE DISRUPTED BY CONSTRUCTION ACTIVITY. TEMPORARY LOCATIONS, SAFETY SIGNAGE AND SAFETY CONTROLS SHALL BE APPROVED BY THE ENGINEER OR OWNER PRIOR TO IMPLEMENTATION.
13. THE TOWN OF WESTPORT POLICE DETAILS SHALL BE SCHEDULED AND COORDINATED BY THE CONTRACTOR TO MAINTAIN THE SAFETY OF PEDESTRIAN AND VEHICULAR TRAFFIC.
14. DETOURS SHALL ONLY BE ALLOWED AS INDICATED OR AS APPROVED BY THE TOWN OF WESTPORT AND MASSDOT.
15. PARKING SHALL BE RESTRICTED WITHIN WORK ZONES, AND BUFFER AND TAPER LENGTHS. CONTRACTOR AND ENGINEER TO COORDINATE NO PARKING RESTRICTIONS WITH THE TOWN OF WESTPORT.
16. THE CONTRACTOR SHALL NOT BE PERMITTED TO STARTUP OR OPERATE EQUIPMENT BEFORE OR AFTER ESTABLISHED WORKING HOURS OF 7:00 AM TO 4:00 PM, MONDAY THROUGH FRIDAY WITHOUT WRITTEN APPROVAL OF THE OWNER, UNLESS OTHERWISE NOTED.
17. CONTRACTOR SHALL ADHERE TO THE MASSDOT ACCESS PERMIT REQUIREMENTS FOR WORK WITHIN STATE ROADWAYS. REFER TO SECTION 01200 AND THE CONTRACT APPENDICES.
18. VARIABLE MESSAGE BOARDS (VMBS) SHOULD BE USED IN ADVANCE OF ALL UTILITY MAIN WORK.

BICYCLE TRAFFIC NOTES:

1. BICYCLE TRAFFIC SHALL BE ACCOMMODATED ON ALL PUBLIC STREETS EITHER WITHIN BICYCLE LANES WHERE EXISTING OR IN VEHICULAR TRAVEL LANES.
2. WHERE BICYCLE LANES ARE NOT PRESENT, PROVIDE A SHARED VEHICLE LANE AS WIDE AS PHYSICALLY FEASIBLE.
3. WHEN TRAVEL LANES ARE RESTRICTED TO LESS THAN 14-FEET IN WIDTH WARNING SIGNAGE (W11-1/W16-1 COMBINATION - BICYCLE WARNING SYMBOL WITH SHARE THE ROAD PLAQUE) SHALL BE PLACED WARNING MOTOR VEHICLE OPERATORS OF THE PRESENCE OF BICYCLES IN THE ROADWAY.
4. IF THE DISRUPTION OCCURS IN A BICYCLE LANES OVER A SHORT DISTANCE (APPROXIMATELY 500 FEET OR LESS), BICYCLISTS SHOULD BE ROUTED TO SHARE A MOTOR VEHICLE LANE.
5. ON PROJECTS WHERE THE DISRUPTION OCCURS OVER A LONGER DISTANCE (MORE THAN 500 FEET), AND ON BUSY ROADWAYS, A TEMPORARY BICYCLE LANE OR WIDE OUTSIDE LANE (AT LEAST 14 FOOT WIDE) SHOULD BE PROVIDED. IF THAT IS NOT FEASIBLE, PROVIDE ACCESS, INCLUDING RAMPS IF NECESSARY, FOR BICYCLISTS TO HAVE THE OPTION OF USING SIDEWALKS, EXCEPT WITHIN ZONES WHERE SIDEWALK BICYCLE RIDING IS PROHIBITED BY THE TOWN.
6. DEBRIS SHOULD BE SWEPT TO MAINTAIN A REASONABLY CLEAR RIDING SURFACE IN THE BICYCLE LANES OR, WHERE THERE ARE NO BICYCLE LANES, THE OUTER 5 OR 6 FEET OF ROADWAY. PROMPTLY REMOVE GRAVEL, DEBRIS, LITTER, SAND, STONE, AND OTHER OBSTRUCTIONS FROM BICYCLE LANES AND TRAVEL LANES.
7. ADVANCE CONSTRUCTION SIGNS SHALL NOT BE PLACED IN BICYCLE LANES AND SHALL NOT OTHERWISE OBSTRUCT BICYCLISTS' PATH.
8. TEMPORARY RAMPS FOR SITE ACCESS RAMPS. THE CREATION OF RAMPS IN THE ROADWAY IS NOT PERMITTED UNLESS BEING CREATED IN AN AREA THAT IS OTHERWISE USED BY ON-STREET PARKING.

TO BE USED IN CONJUNCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING CONSTRUCTION STAGING AND AS DIRECTED BY THE ENGINEER OR OWNER.

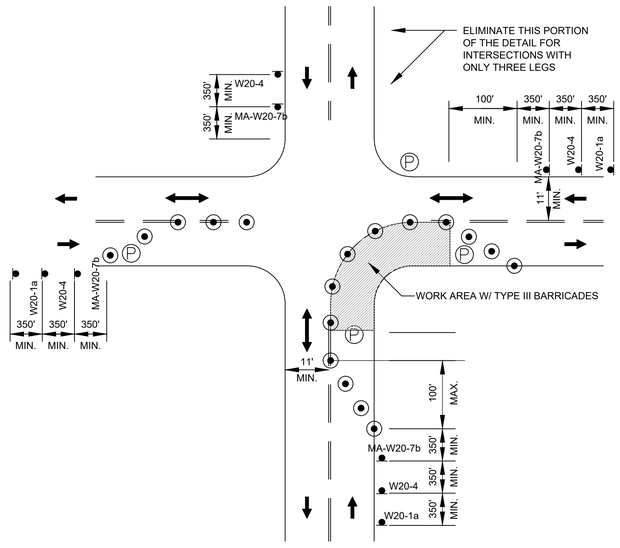
TYPE II
N.T.S.



PEDESTRIAN BYPASS NOTES:

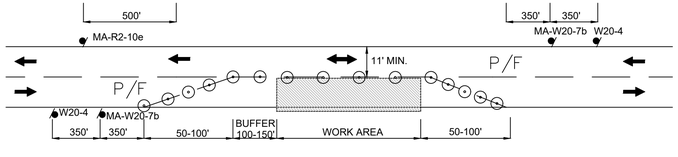
1. ADDITIONAL ADVANCE WARNING MAY BE REQUIRED BY THE ENGINEER OR OWNER.
2. CONTROLS FOR PEDESTRIAN TRAFFIC ONLY, ARE SHOWN. VEHICULAR TRAFFIC SHALL BE MAINTAINED AS DETAILED ELSEWHERE.
3. STREET LIGHTING SHALL BE CONSIDERED WHEN LOCATING CONTROL DEVICES.
4. ⟷ DIRECTION OF PEDESTRIAN TRAVEL.
5. PEDESTRIAN PATHS SHALL BE MINIMUM 48" WIDE AND ADA ACCESSIBLE.

PEDESTRIAN BYPASS DETAIL T-1

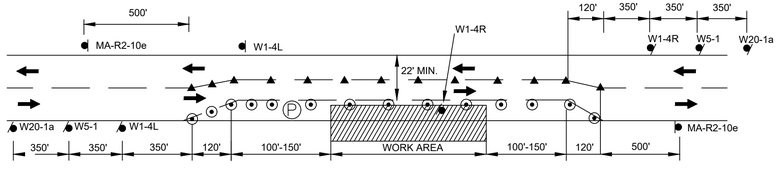


NOTES:
1. ADVANCE WARNING SIGN PLACEMENT TO BE ADJUSTED AS NECESSARY AND APROVED BY THE ENGINEER OR OWNER.
2. ALL DRUMS AND CONES TO BE SPACED @ 10' O.C.

ONE LANE BIDIRECTIONAL TRAFFIC AT INTERSECTIONS T-2



TYPICAL TWO-WAY ALTERNATING TRAFFIC T-3



TYPICAL TWO-WAY STREET LANE SHIFT T-4

TMP LEGEND

- PROPOSED WORK ZONE
- SINGLE LANE UNIDIRECTIONAL TRAFFIC
- SINGLE LANE BIDIRECTIONAL TRAFFIC
- TRAFFIC BARREL/DRUM
- TRAFFIC MANAGEMENT SIGN DURING CONSTRUCTION
- TRAFFIC CONE
- POLICE DETAIL
- TRUCK MOUNTED ATTENUATOR

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 — 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

TRAFFIC MANAGEMENT PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

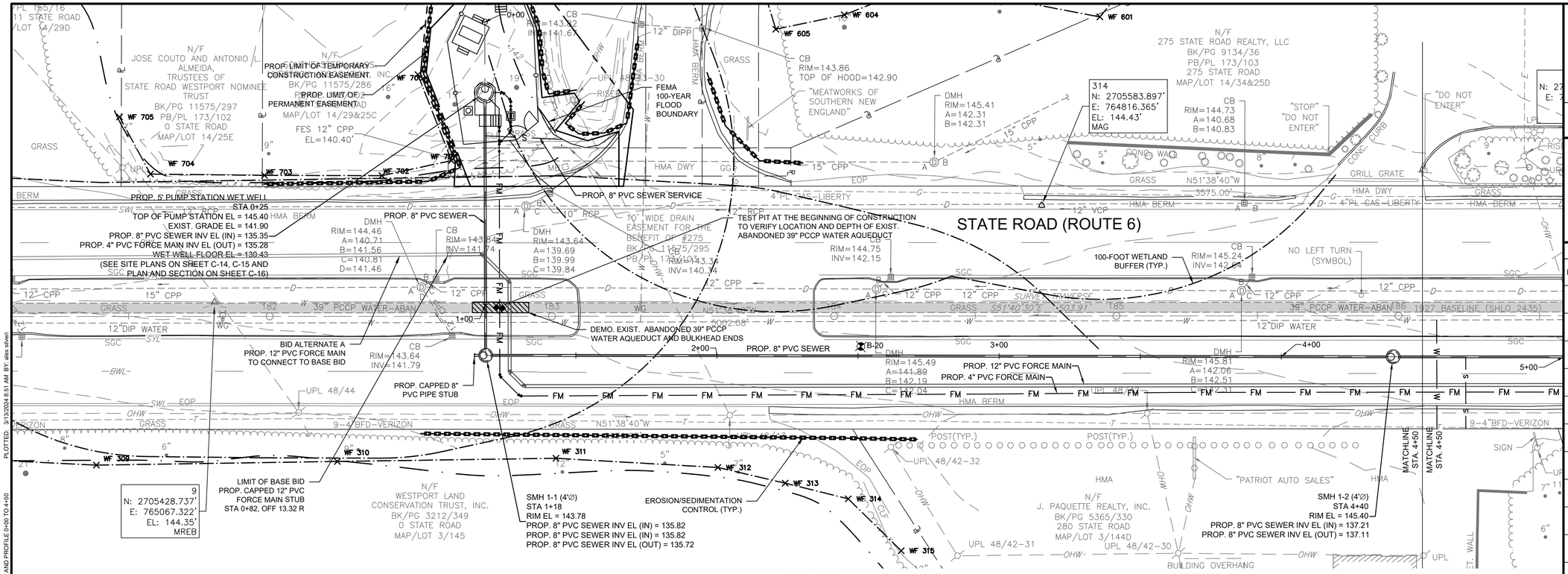
100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MJT

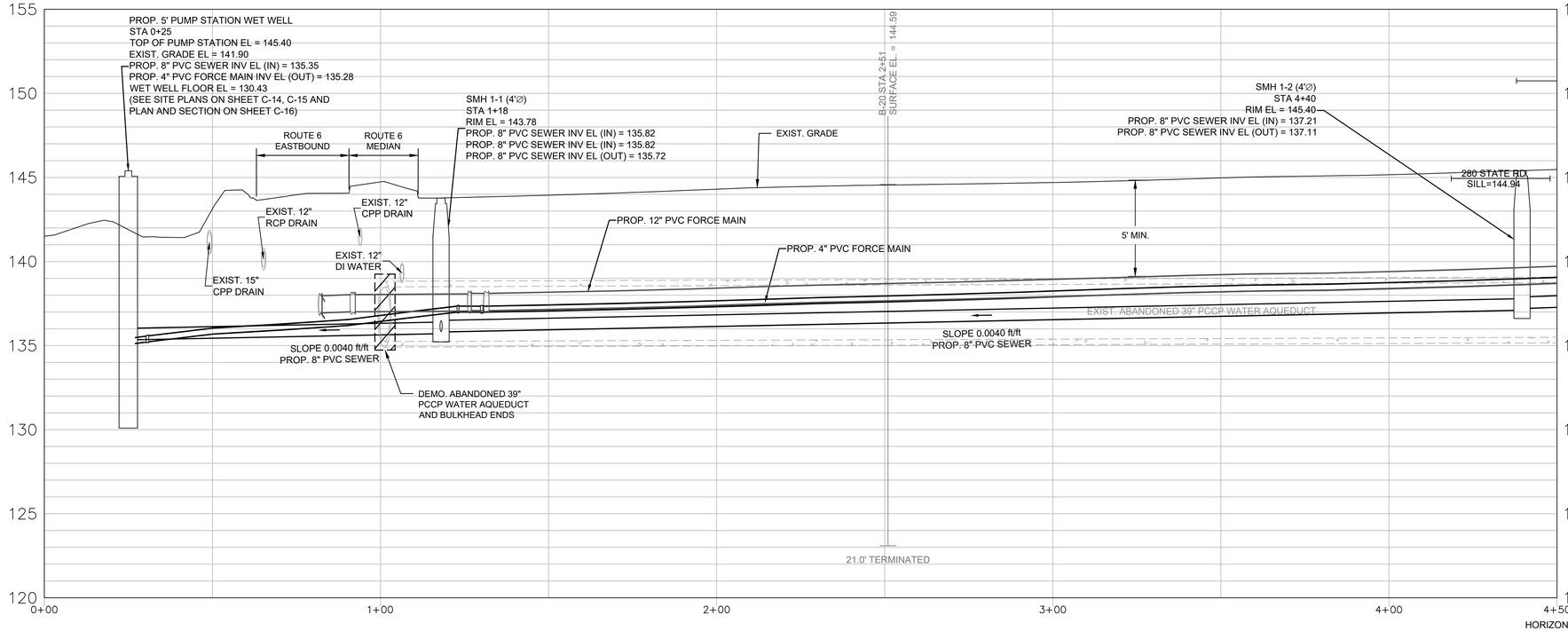
G-112

SHEET 12 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Details.dwg LAYOUT: C-121 TRAFFIC MANAGEMENT PLAN
PLOTTED: 3/13/2024 8:48 AM BY: alex olivet



PLAN
SCALE: 1" = 20'



NOTE:
1. SILL ELEVATION OF 287 STATE ROAD (MEATWORKS) IS APPROXIMATELY ELEVATION 160. SILL ELEVATION OF 291 STATE ROAD IS APPROXIMATELY ELEVATION 149.58.

PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 0+00 TO 4+50

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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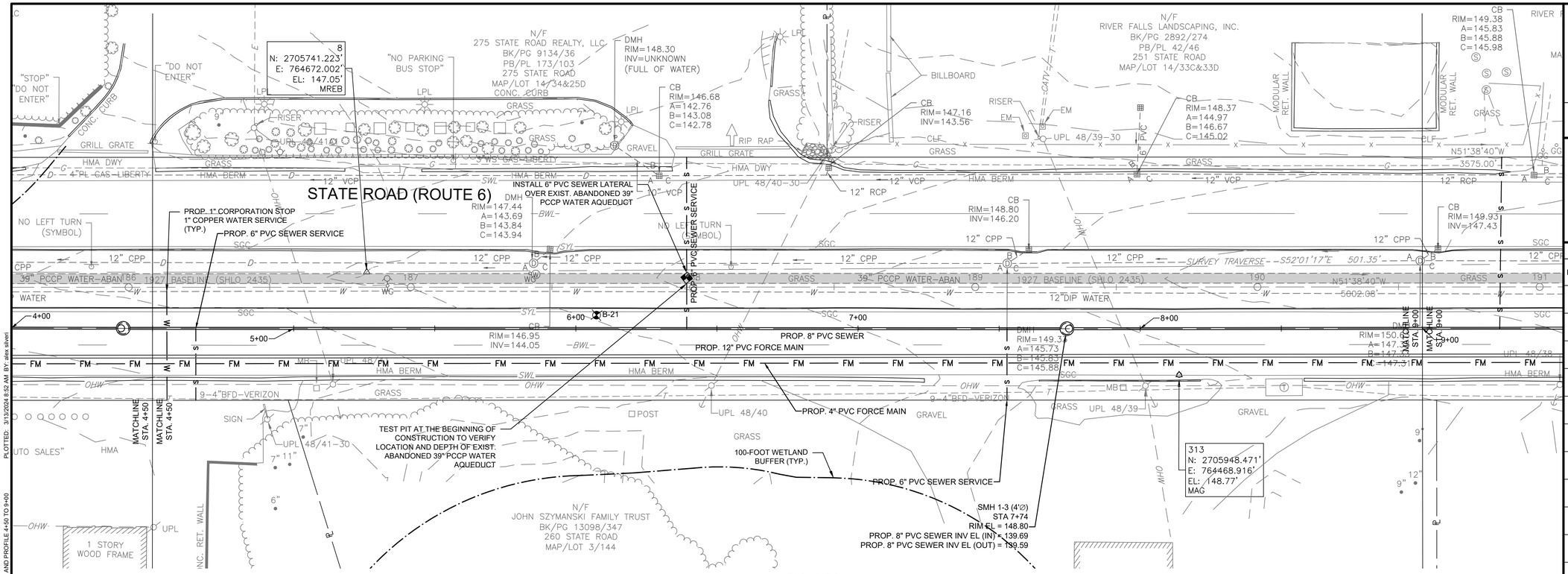
CHECKED BY	DTP
APPROVED BY	MT

C-101

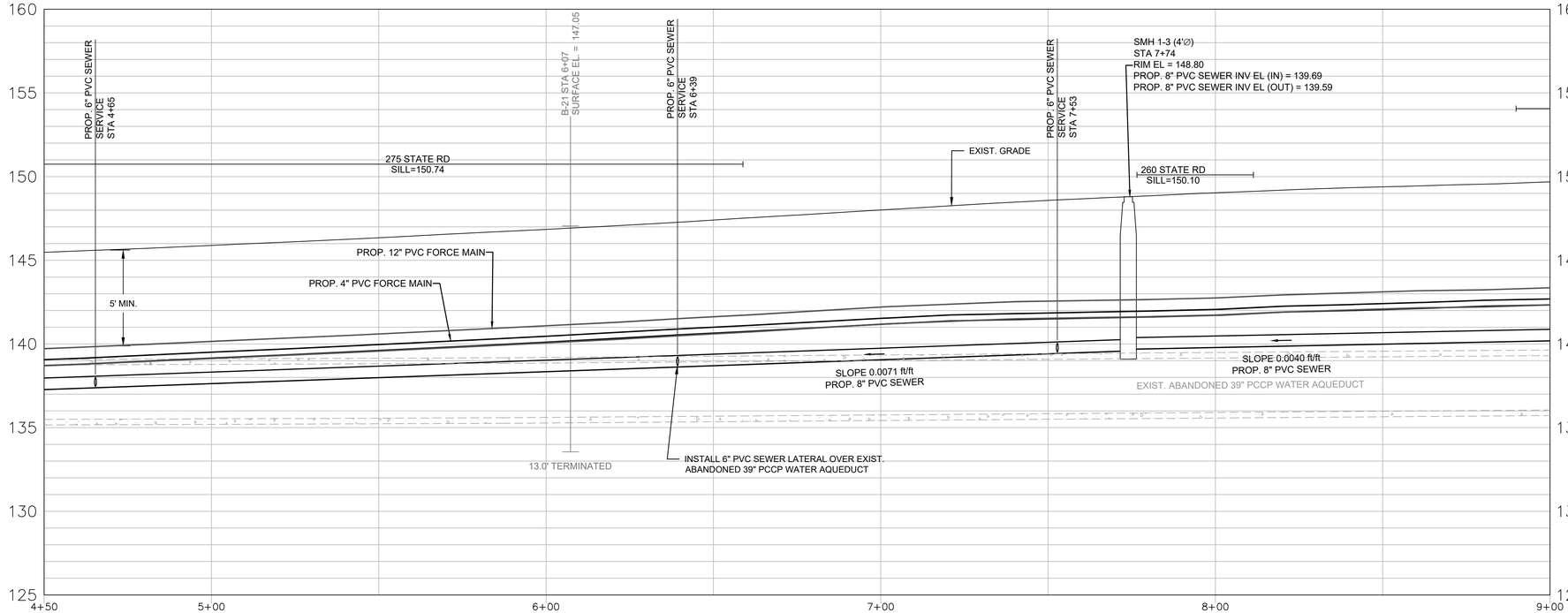
SHEET 13 of 85

PLOTTED: 3/13/2024 8:51 AM BY: alex silvert
CAD FILE: I:\site\feller.com\shared\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Rt6Phase1A\PlanProfileRevised.dwg LAYOUT: C-101 PLAN AND PROFILE 0+00 TO 4+50



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

NOTE:
1. APPROXIMATE WETLAND BOUNDARIES WERE ADDED TO THE PLANS AT 260 STATE ROAD BASED ON INFORMATION PROVIDED BY THE TOWN'S CONSERVATION COMMISSION. A 100-FOOT BUFFER ZONE BOUNDARY IS SHOWN ON THE PLANS EXTENDING HORIZONTALLY OUTWARD FROM EACH WETLAND BOUNDARY.

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 4+50 TO 9+00

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
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DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-102

SHEET 14 of 85

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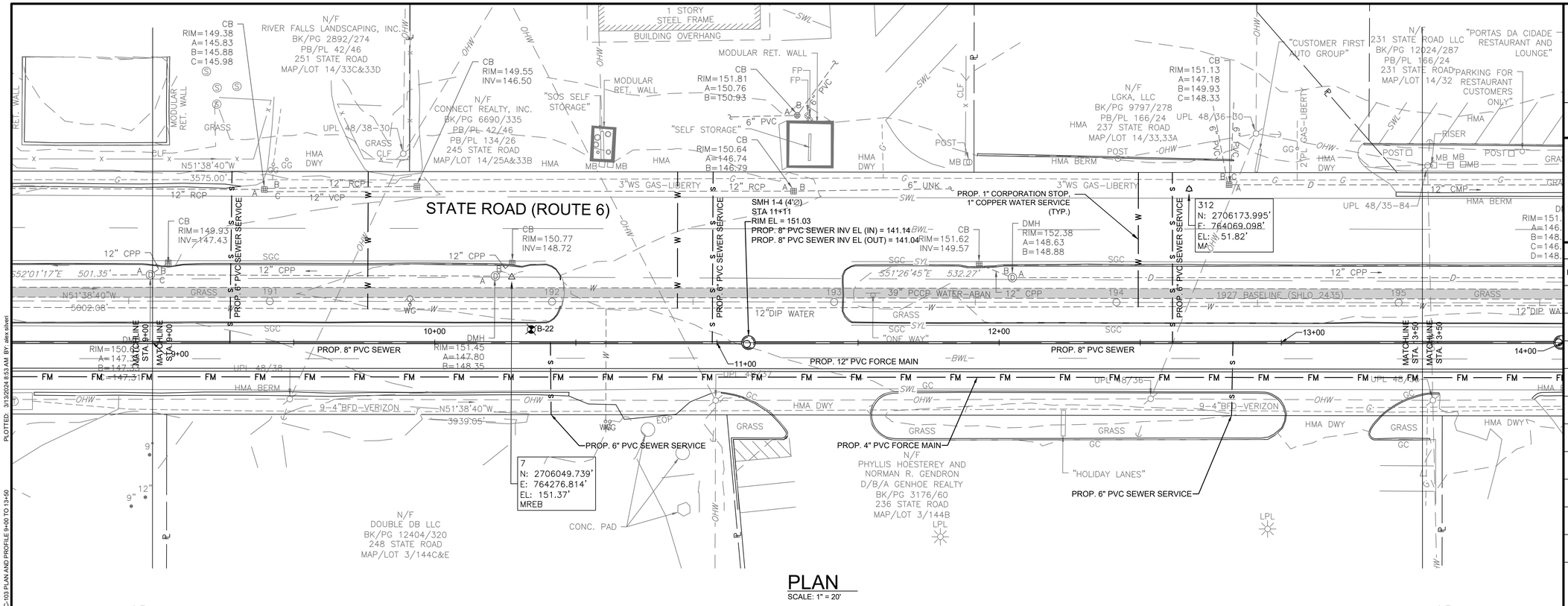
PLOTTED: 3/13/2024 8:52 AM BY: alex.silvert



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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 9+00 TO 13+50

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-103

SHEET 15 of 85

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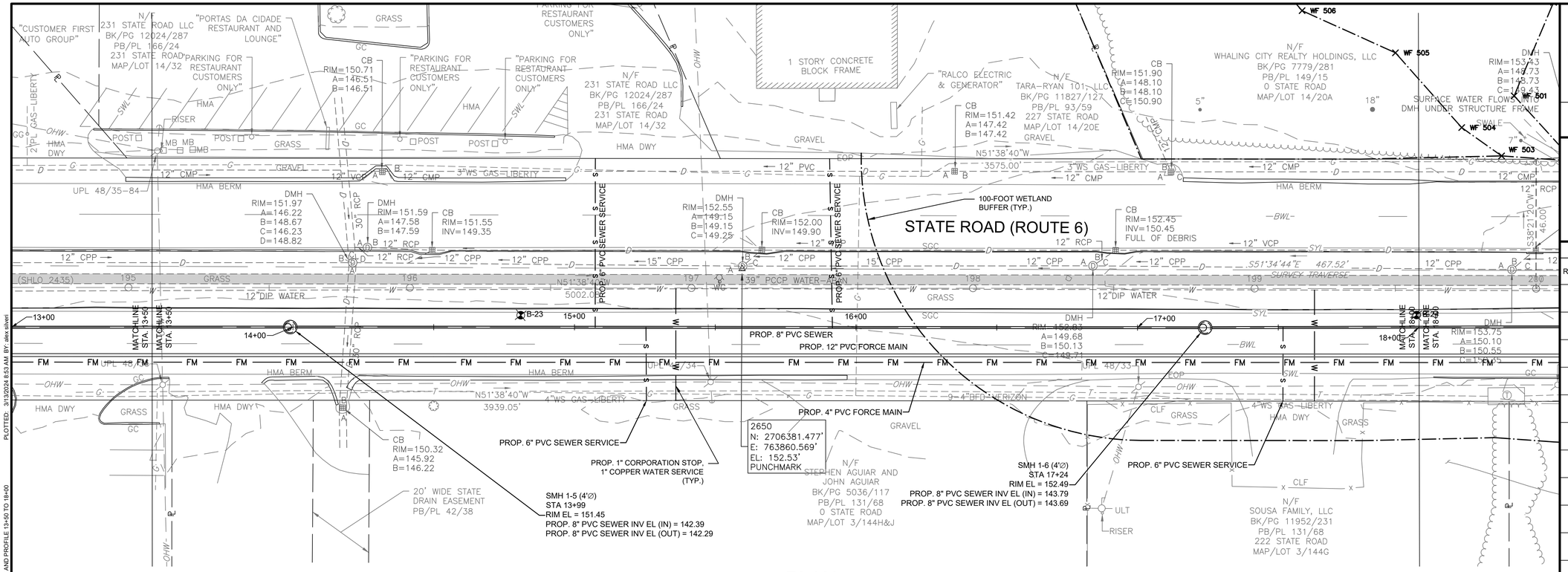
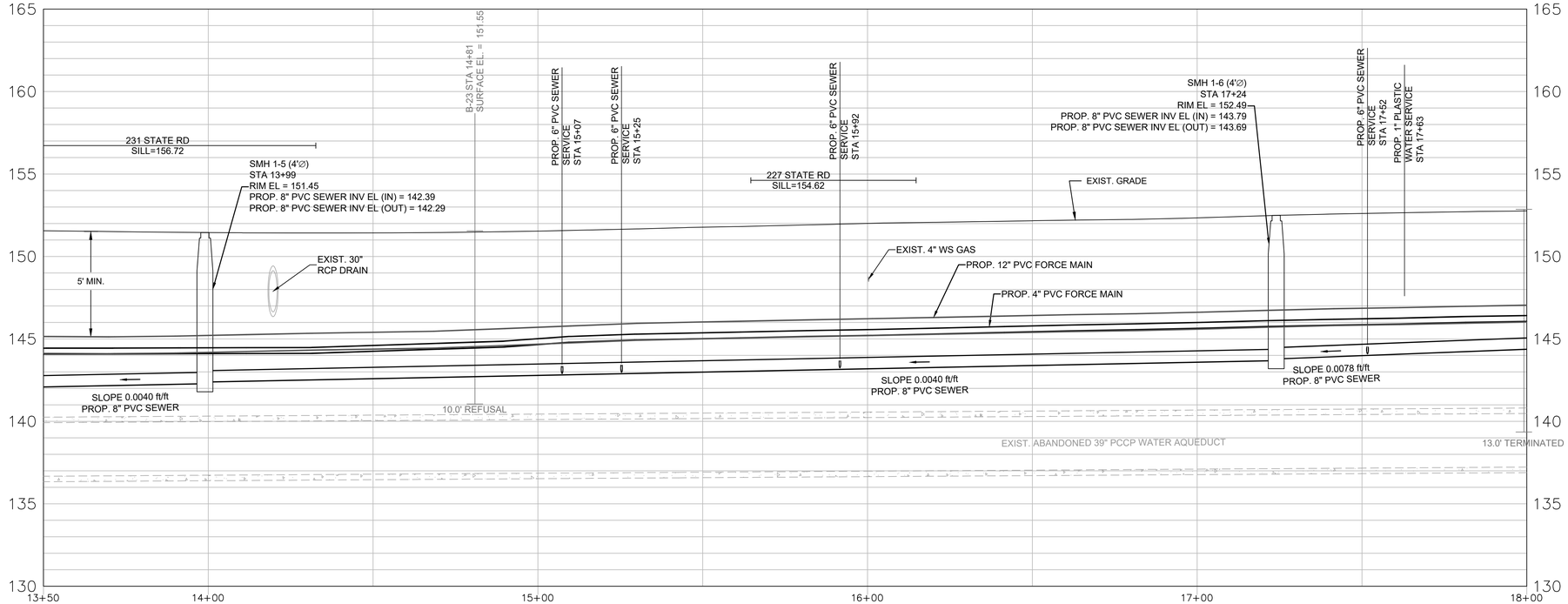
PLOTTED: 3/13/2024 8:53 AM BY: alex oliveri



PLAN

SCALE: 1" = 20'



NOTE:
1. APPROXIMATE WETLAND BOUNDARIES WERE ADDED TO THE PLANS WEST OF 227 STATE ROAD BASED ON INFORMATION PROVIDED BY THE TOWN'S CONSERVATION COMMISSION. A 100-FOOT BUFFER ZONE BOUNDARY IS SHOWN ON THE PLANS EXTENDING HORIZONTALLY OUTWARD FROM EACH WETLAND BOUNDARY.

PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40
4 2 0 4 8

VERTICAL SCALE: 1"=4'

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 13+50 TO 18+00

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

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WESTPORT, MA 02790

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DRAWN BY	AS
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APPROVED BY	MT

C-104

SHEET 16 of 85

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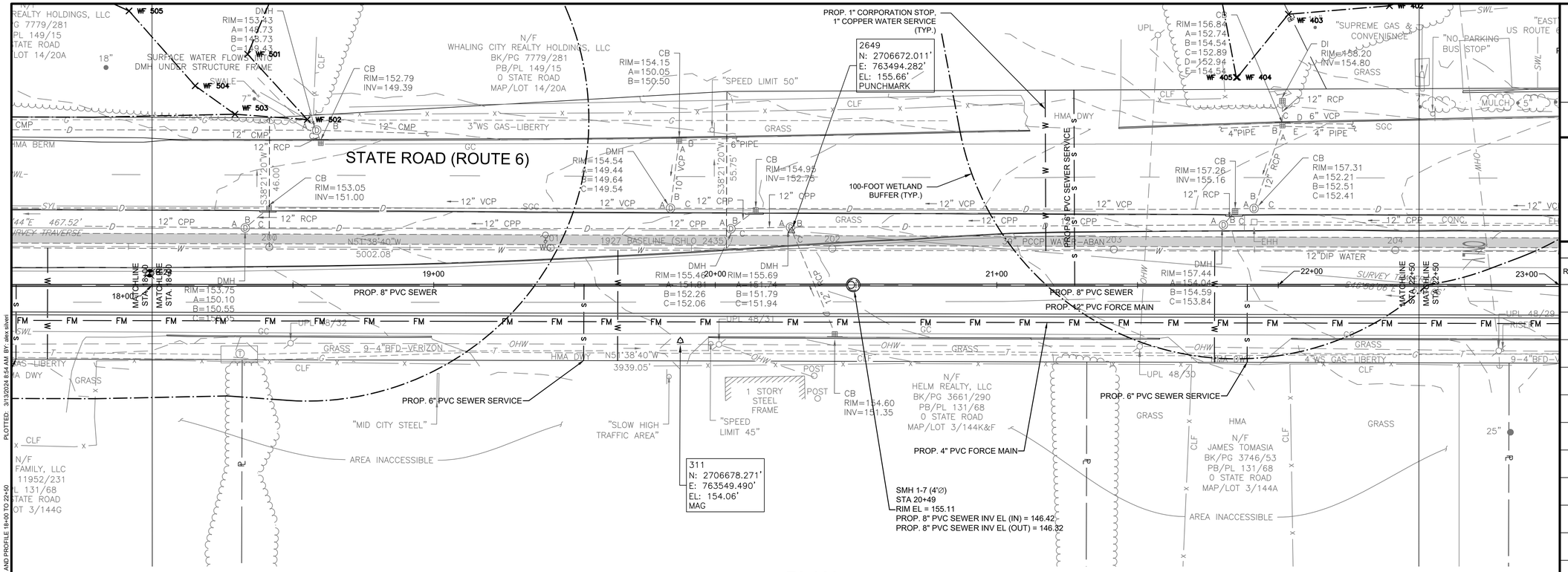
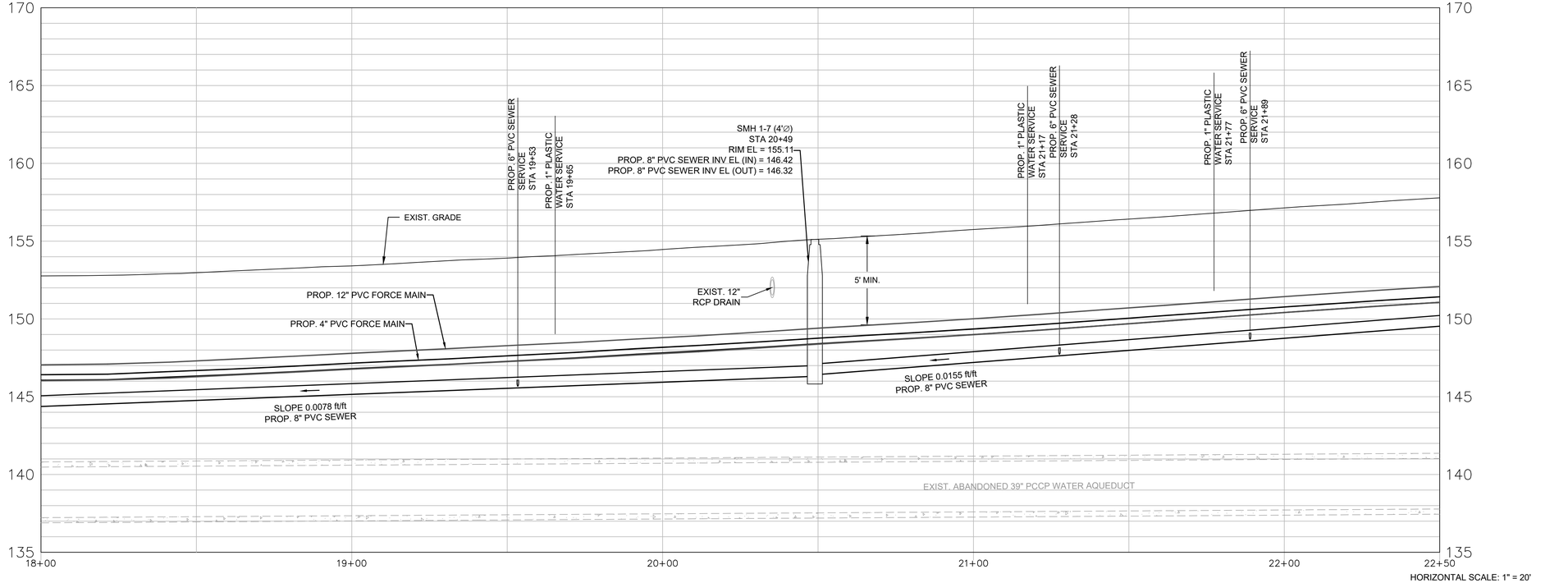
PLOTTED: 3/13/2024 8:53 AM BY: alex.silveri



PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 18+00 TO 22+50

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

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WESTPORT, MA 02790

100% DESIGN

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DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-105

SHEET 17 of 85

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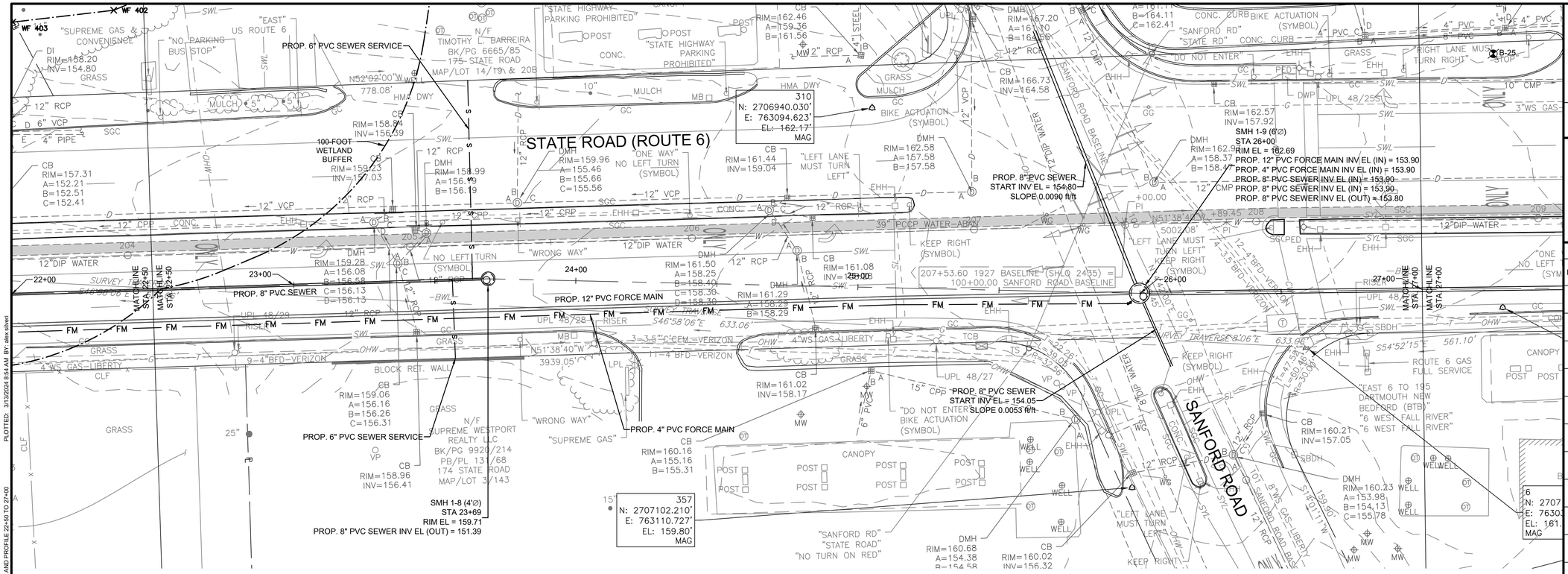
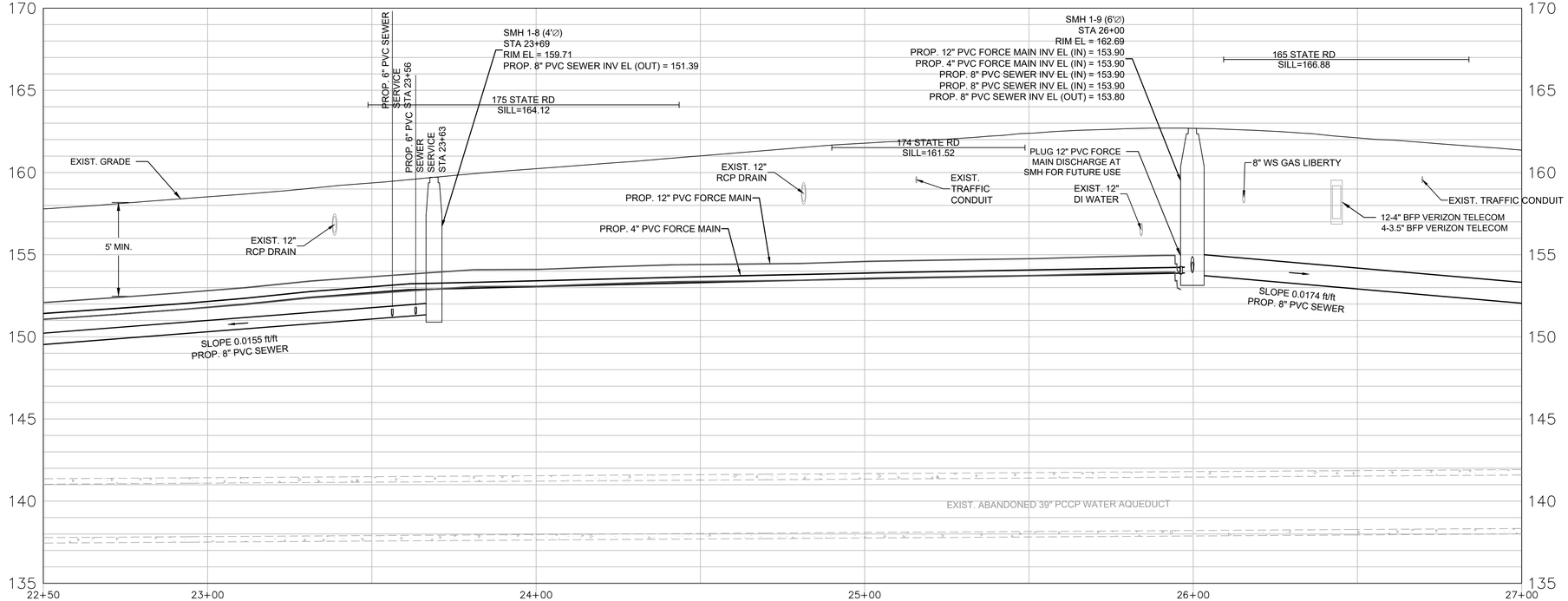


PLAN

SCALE: 1" = 20'

NOTE: REMOVE AND REPLACE TRAFFIC LOOP WIRING.



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1"=4'

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 22+50 TO 27+00

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

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C-106

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PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40
4 2 0 4 8

VERTICAL SCALE: 1"=4'

PLAN

SCALE: 1" = 20'

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 27+00 TO 31+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

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WESTPORT, MA 02790

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C-107

SHEET 19 of 85

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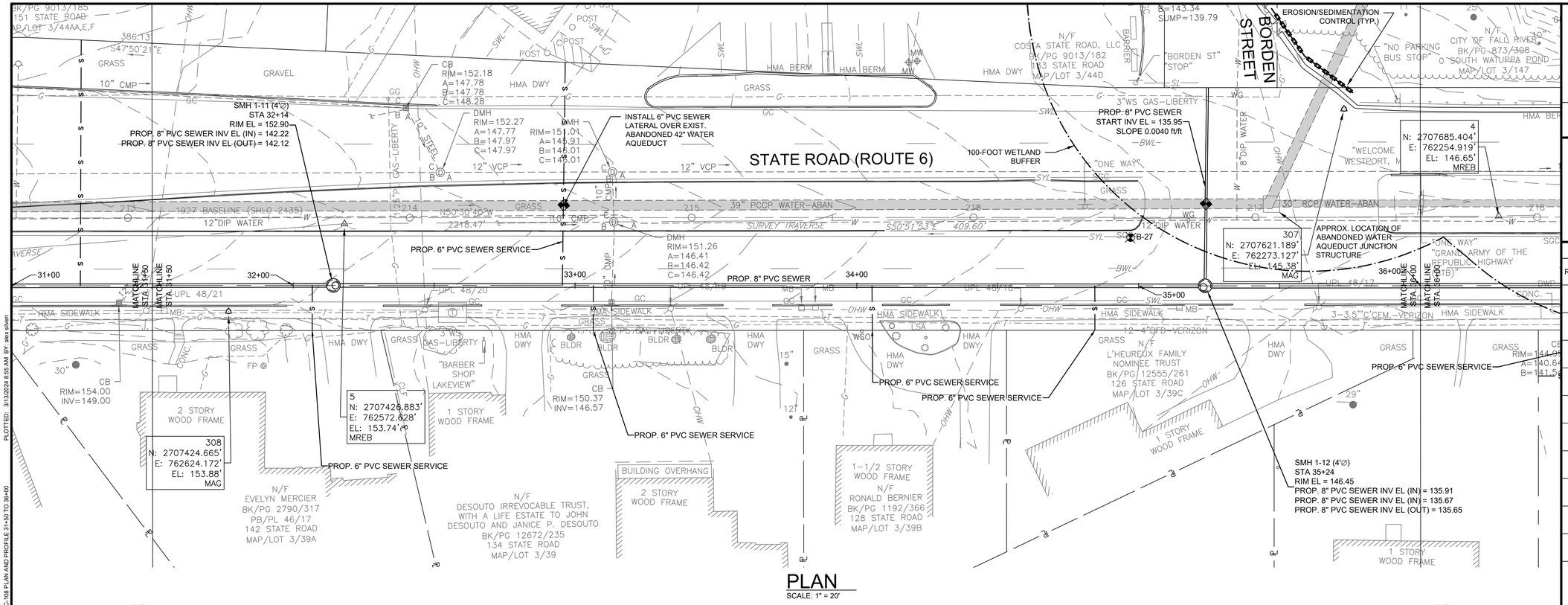
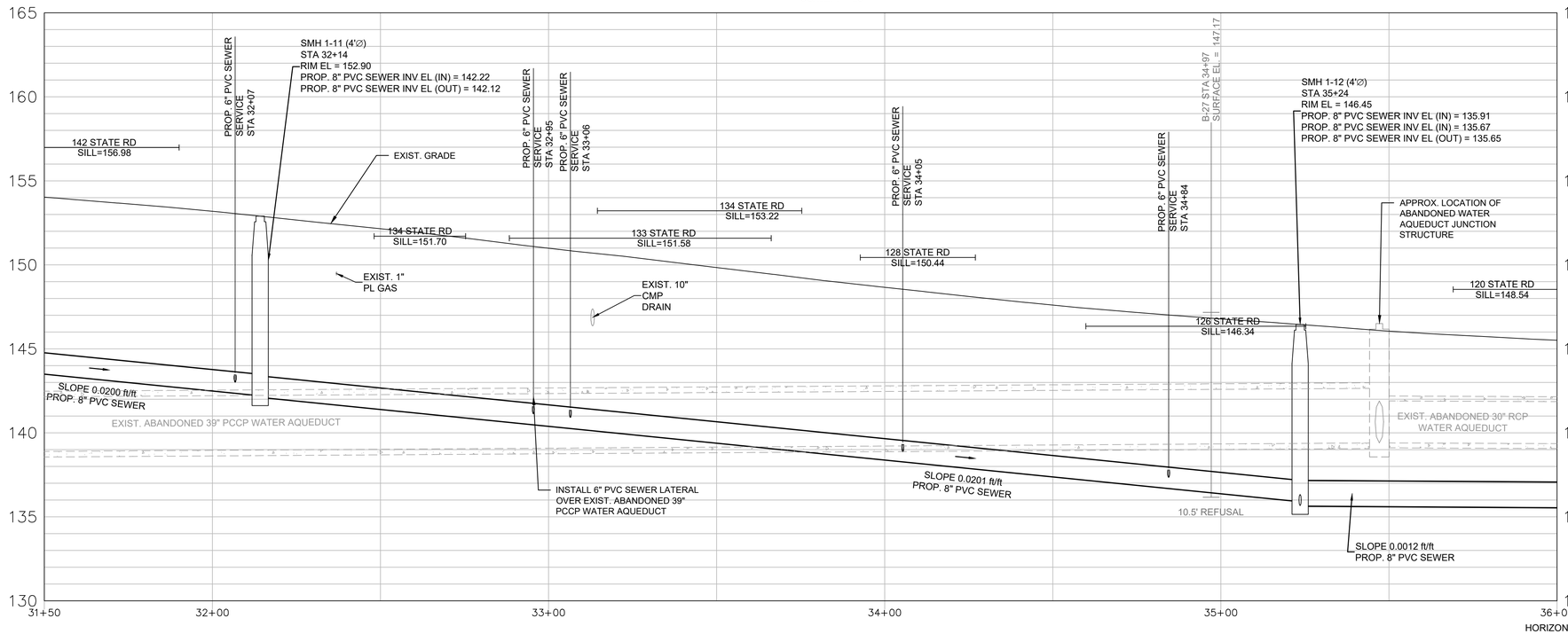
PLOTTED: 3/13/2024 8:59 AM BY: alex.oliveri





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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 31+50 TO 36+00

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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ISSUE DATE	03/13/24
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DESIGNED BY	AS
DRAWN BY	AS
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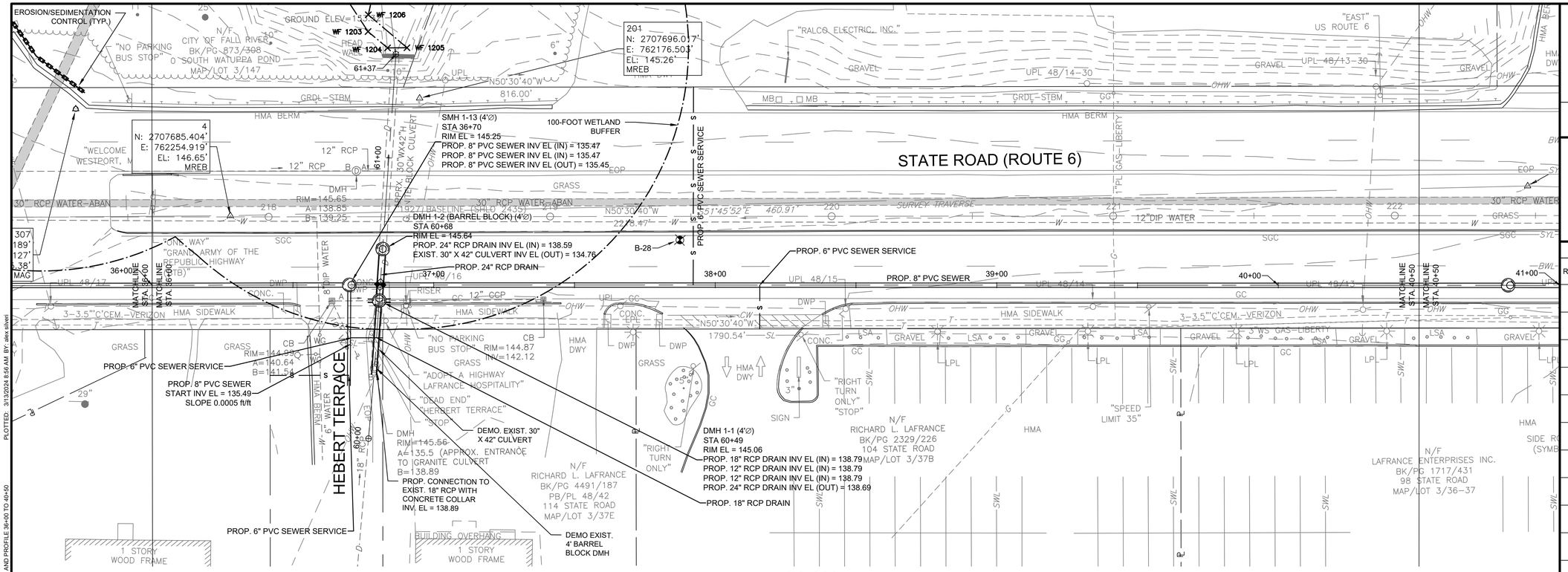
APPROVED BY	MT

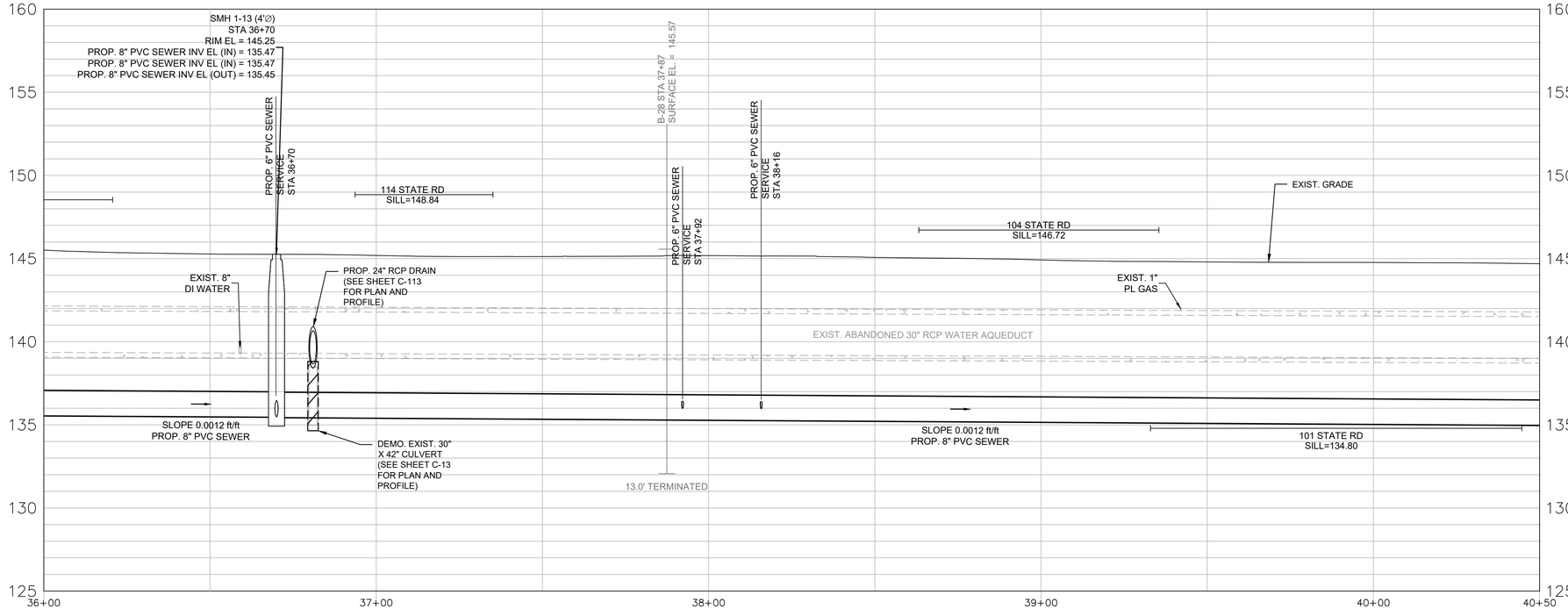
C-108

SHEET 20 of 85

CAD FILE: \\data\kleinfelder.com\shared\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-108\Phase1A\PlanProfileRevised.dwg LAYOUT: C-108 PLAN AND PROFILE 31+50 TO 36+00
PLOTTED: 3/13/2024 8:55 AM BY: alex.silvert



PLAN
SCALE: 1" = 20'



NOTE:
1. REFER TO SHEET C-12 FOR HEBERT TERRACE DRAIN MODIFICATION PLAN AND PROFILE.

PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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REVISIONS

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SCALE VERIFICATION

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0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 36+00 TO 40+50

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

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DRAWN BY	AS
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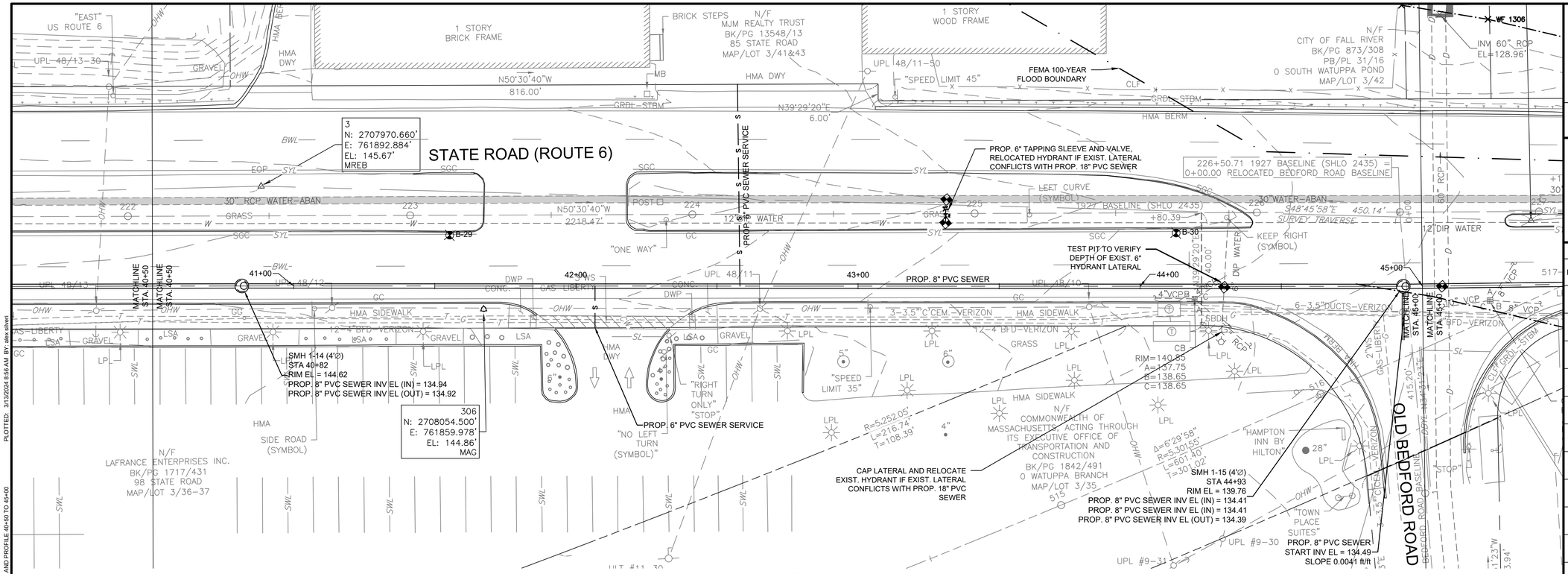
APPROVED BY	MT

C-109

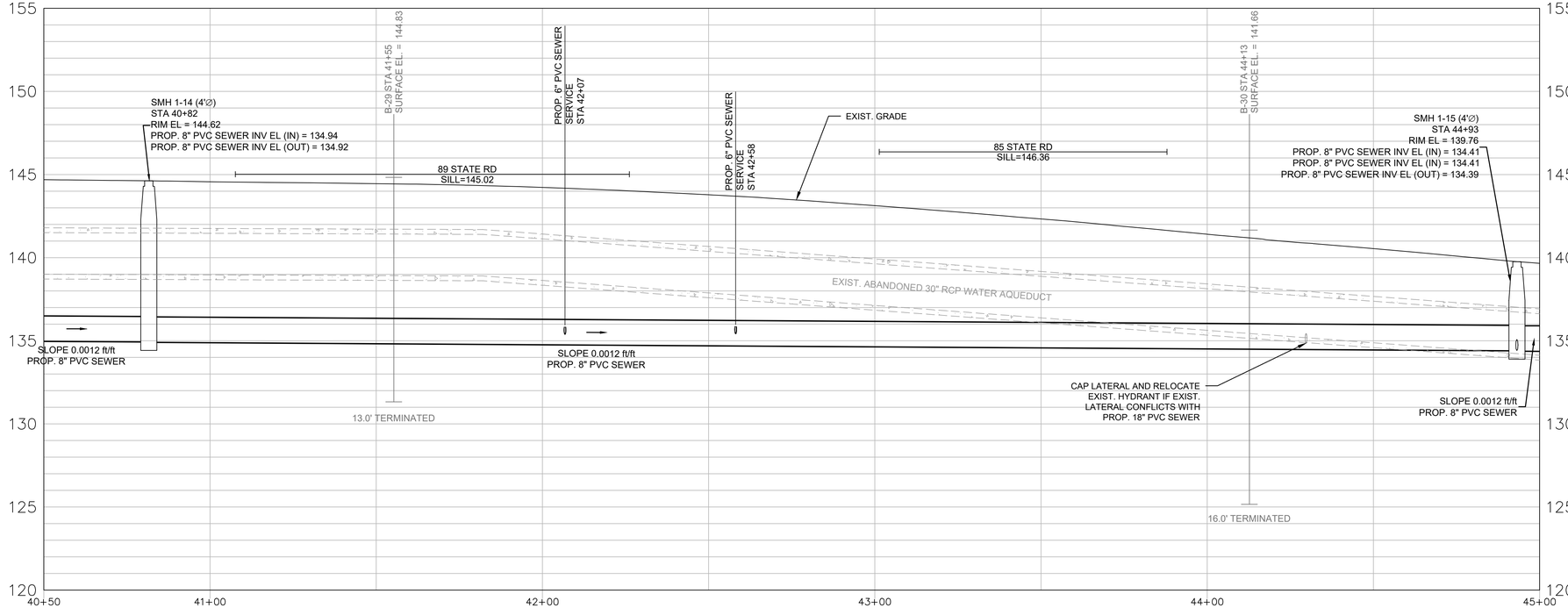
SHEET 21 of 85

CAD FILE: \\datafiledor.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Rt6Phase1A\PlanProfileRevised.dwg LAYOUT: C-109 PLAN AND PROFILE 36+00 TO 40+50
PLOTTED: 3/13/2024 8:59 AM BY: alex.oliveri



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 40+50 TO 45+00

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

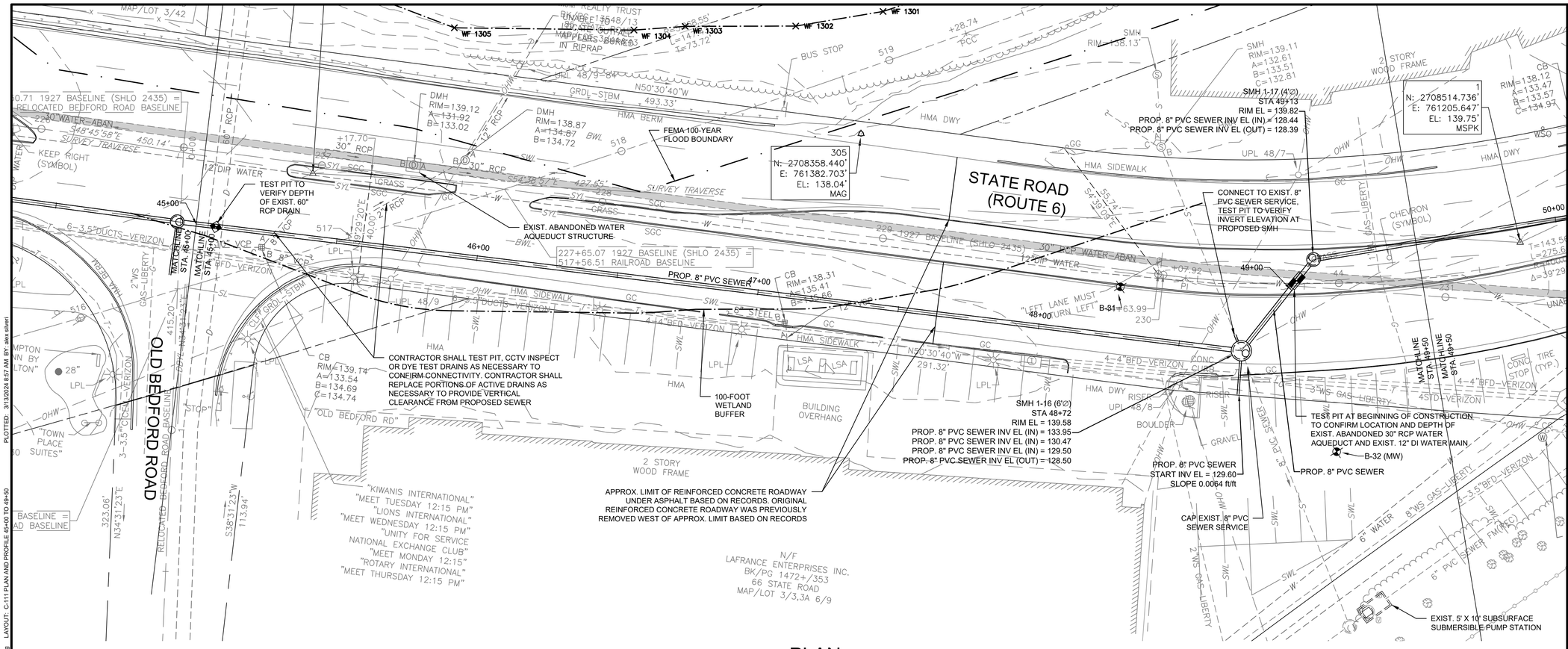
100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-110

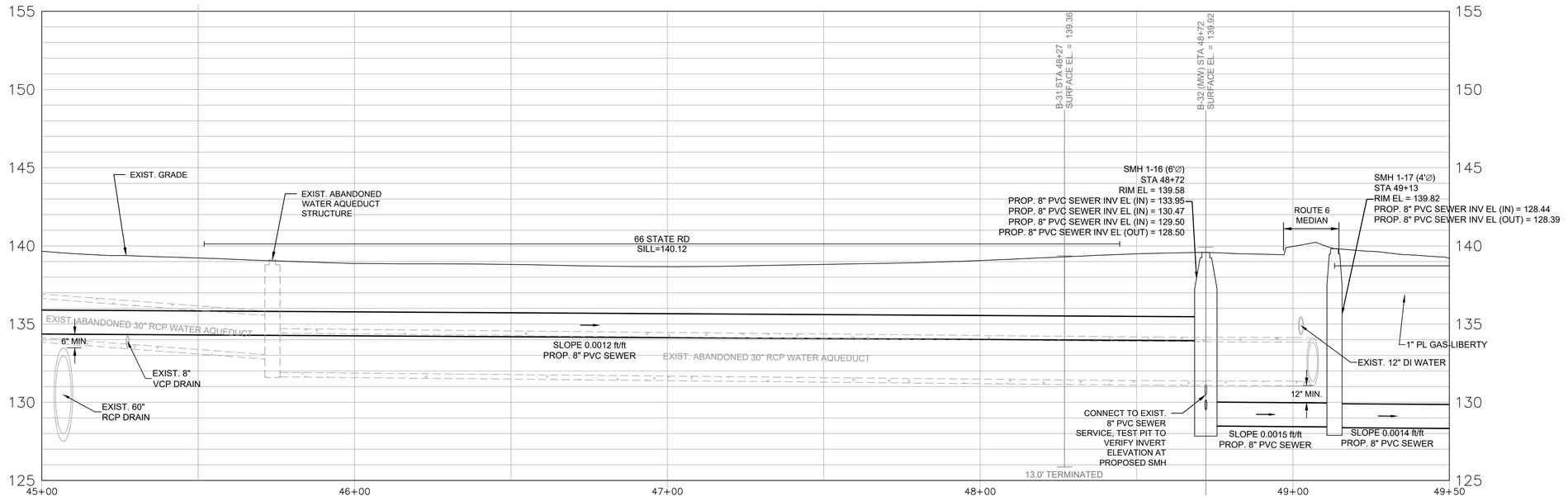
SHEET 22 of 85

PLOTTED: 3/13/2024 8:59 AM BY: alex.silvieri
CAD FILE: \\kleinfelder.com\shared\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-R&Phase1A\Plan&ProfileRevised.dwg LAYOUT: C-110 PLAN AND PROFILE 40+50 TO 45+00



PLAN

SCALE: 1" = 20'



HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1"=4'

NOTE:
1. ALL EXISTING SEWER SERVICES AND EXISTING WHITE'S PUMP STATION (250 GPM CAPACITY) SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PREPARE A CONSTRUCTION SEQUENCE PLAN TO ENSURE THAT ALL SEWER CUSTOMERS HAVE CONTINUOUS SEWER SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AS NECESSARY TO COORDINATE CONSTRUCTION DURING LOW FLOW TIMES. CONTRACTOR IS RESPONSIBLE FOR ALL BYPASS PUMPING TO MAINTAIN CONTINUOUS SERVICE. CONTRACTOR SHALL SET UP BYPASS PUMPING PIPING TO ALLOW PROPERTY OWNER ACCESS TO THEIR DRIVEWAYS. CONSTRUCTION SEQUENCE AND BYPASS PUMPING PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY EXCAVATION.

PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 — 20 — 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 45+00 TO 49+50

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
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APPROVED BY	MT

C-111

SHEET 23 of 85

PLOTTED: 3/13/2024 8:57 AM BY: alex.oliveri
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PLOTTED: 3/13/2024 8:57 AM BY: alex.olivieri
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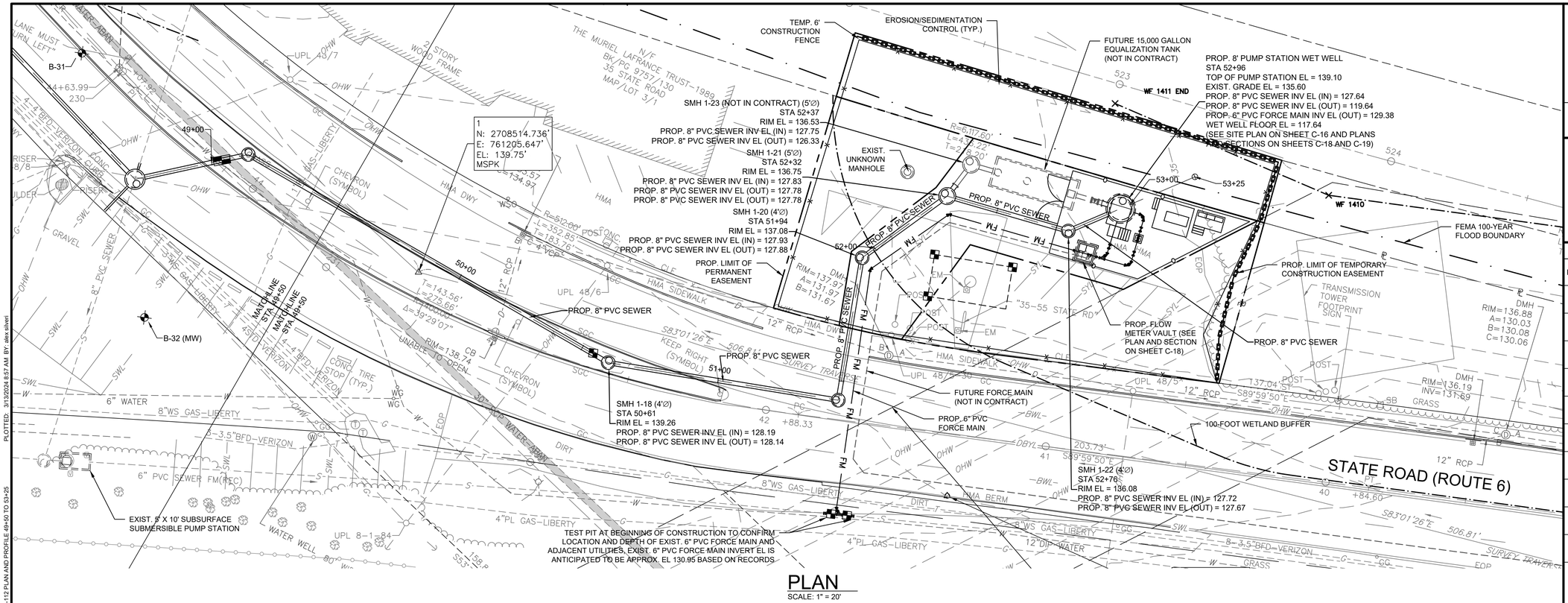

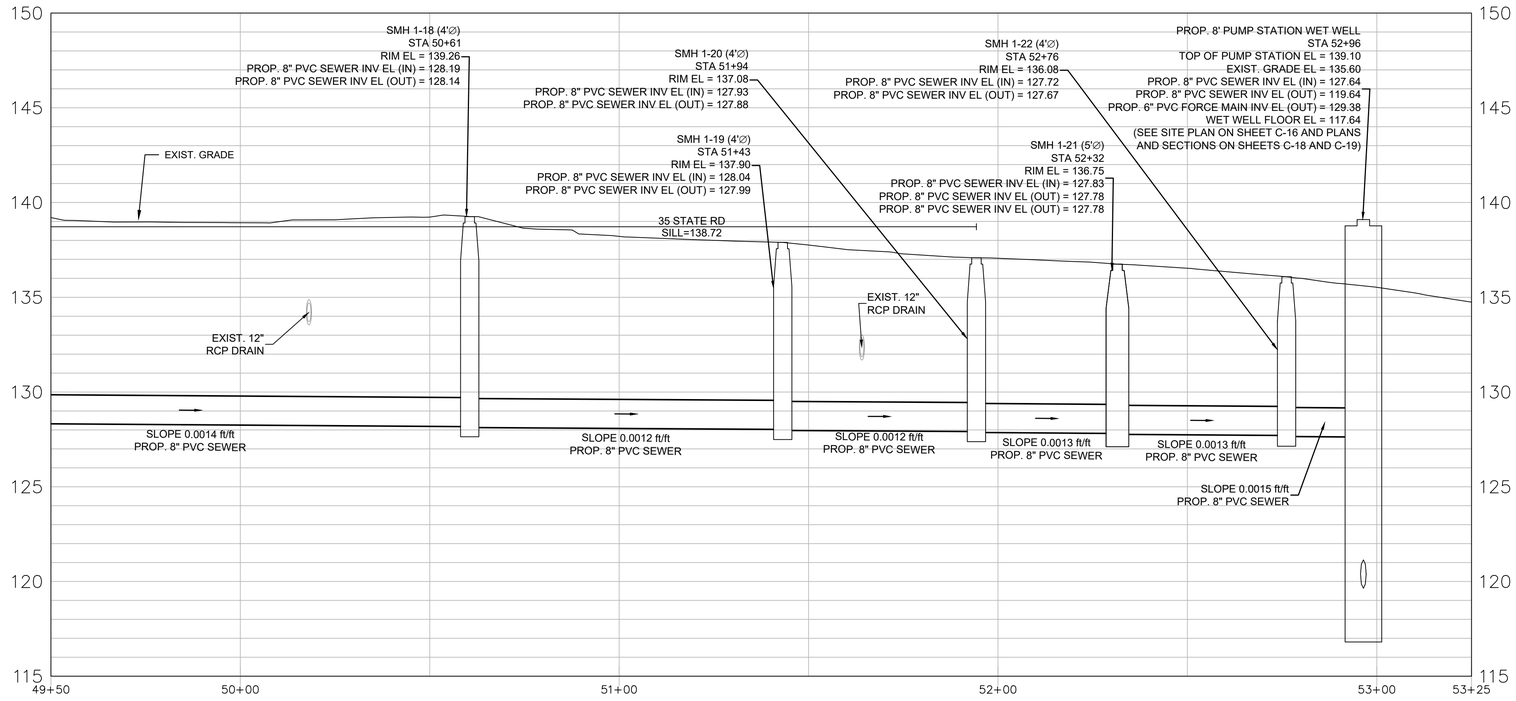

PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
4 2 0 4 8
VERTICAL SCALE: 1"=4'

NOTE:
1. ALL EXISTING SEWER SERVICES AND EXISTING WHITE'S PUMP STATION (250 GPM CAPACITY) SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PREPARE A CONSTRUCTION SEQUENCE PLAN TO ENSURE THAT ALL SEWER CUSTOMERS HAVE CONTINUOUS SEWER SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS AS NECESSARY TO COORDINATE CONSTRUCTION DURING LOW FLOW TIMES. CONTRACTOR IS RESPONSIBLE FOR ALL BYPASS PUMPING TO MAINTAIN CONTINUOUS SERVICE. CONTRACTOR SHALL SET UP BYPASS PUMPING PIPING TO ALLOW PROPERTY OWNER ACCESS TO THEIR DRIVEWAYS. CONSTRUCTION SEQUENCE AND BYPASS PUMPING PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY EXCAVATION.

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SCALE VERIFICATION

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0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 49+50 TO 53+25

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
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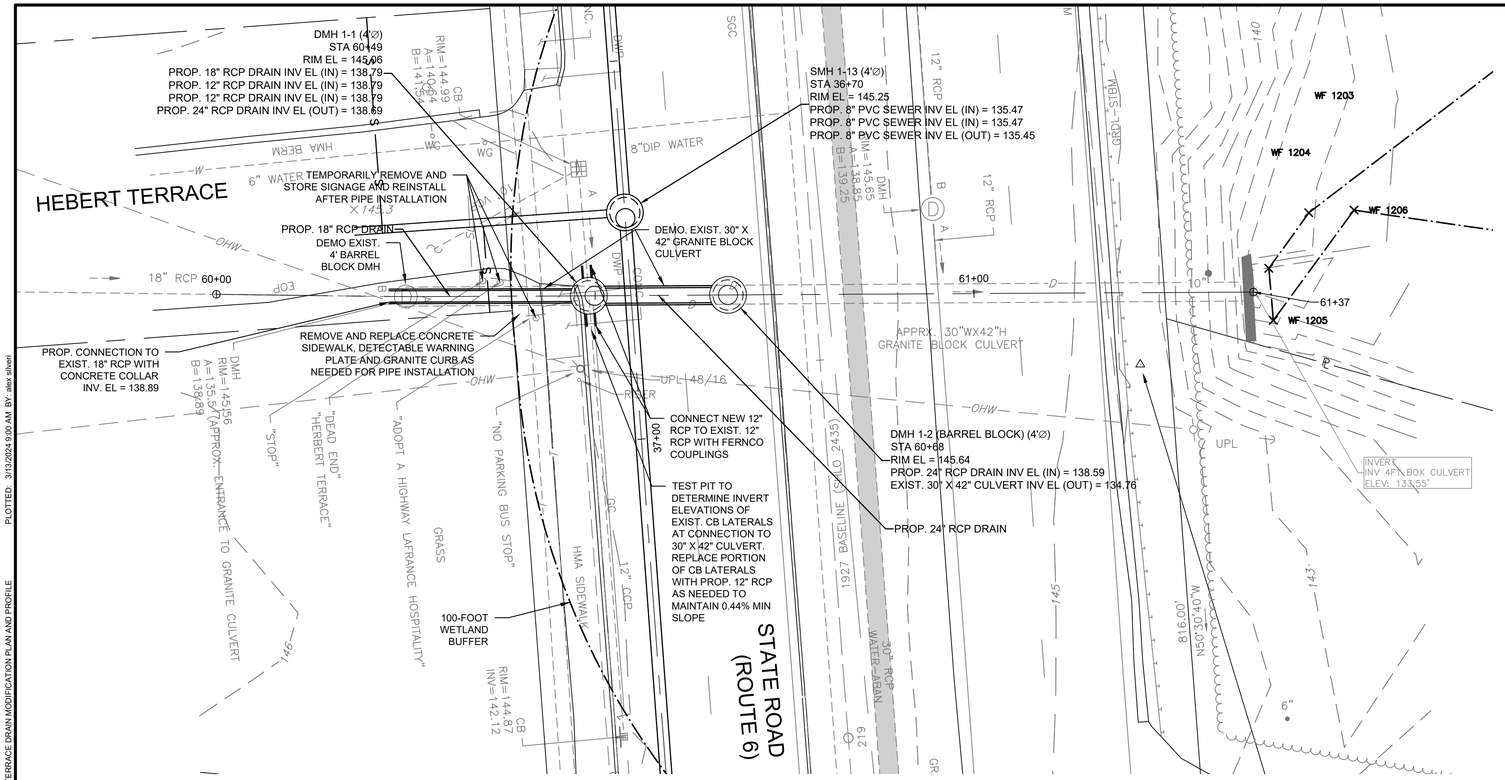
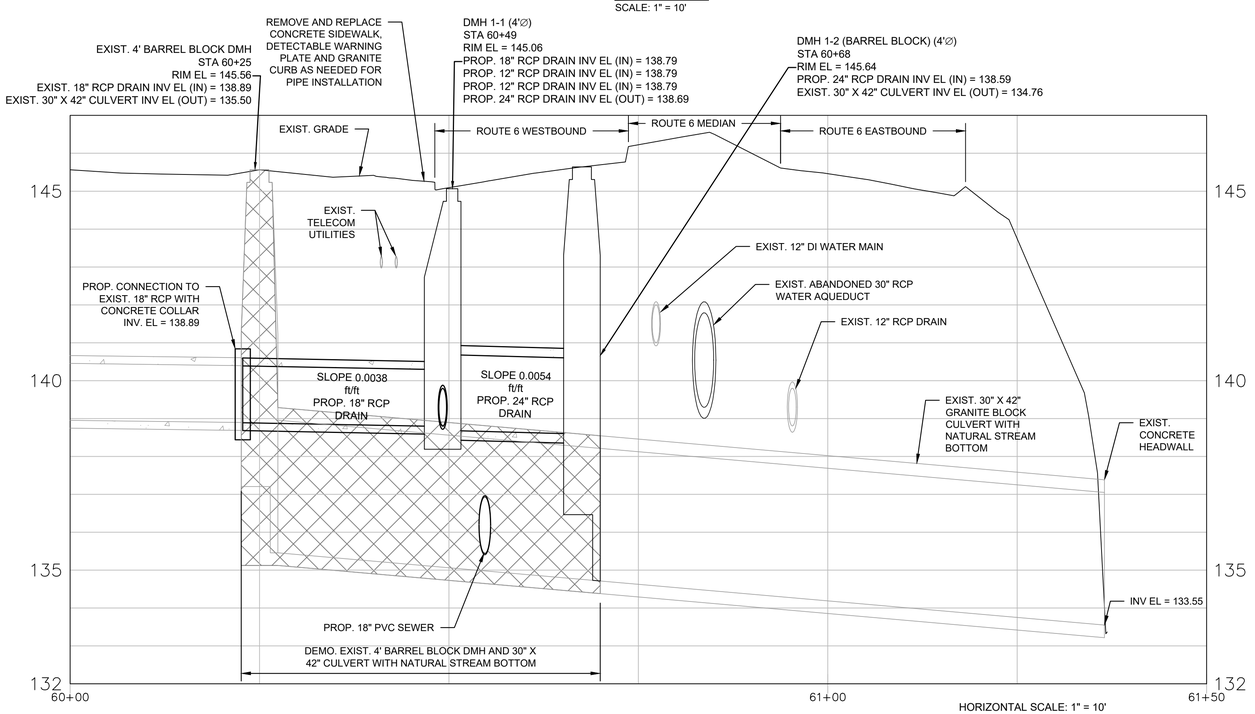
C-112



PLAN
SCALE: 1" = 10'



PROFILE
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1"=2'

HORIZONTAL SCALE: 1" = 10'
10 5 0 10 20
2 1 0 2 4
VERTICAL SCALE: 1"=2'

EXIST. 4' BARREL BLOCK DMH
C-113 SCALE: NTS

EXIST. 30" X 42" CULVERT WITH NATURAL STREAM BOTTOM
C-113 SCALE: NTS

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0 10 20
SCALE: 1" = 10' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

HEBERT TERRACE DRAIN MODIFICATION PLAN AND PROFILE

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
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APPROVED BY	MT

C-113

SHEET 25 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081 01\A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-HebertDrainModification.dwg LAYOUT: C-113 HEBERT TERRACE DRAIN MODIFICATION PLAN AND PROFILE PLOTTED: 3/13/2024 9:00 AM BY: alex oliveri

NOTES:
1. PROPOSED FENCED AREA AND DRIVEWAY TO BE PAVED WITH 2" BASE AND 2" TOP COURSE ON 6" GRAVEL BASE.
2. CONTRACTOR SHALL INSTALL PROP. SEWER AND FORCE MAIN PIPES STUBS AND CAPS TO ALLOW FOR FUTURE UPGRADES AND EXTENSIONS OF THE SEWER SYSTEM.
3. LOAM AND SEED NON-PAVED DISTURBED AREAS.
4. LOCATION AND SIZE OF SEWER SERVICE CONNECTION TO 287 STATE ROAD SHALL BE COORDINATED WITH THE OWNER.
5. REFER TO SHEET C-1 FOR PROPOSED SEWER PLAN AND PROFILE.

PROP. LIMIT OF WORK FOR PUMP STATION LUMP SUM BID ITEM AND LIMIT OF TEMPORARY CONSTRUCTION EASEMENT
100-YEAR FEMA FLOOD BOUNDARY
EROSION AND SEDIMENTATION CONTROL
PROP. 6' HIGH CHAIN LINK FENCE ENCLOSURE WITH BLACK PRIVACY SLATS
PROP. LIMIT OF PERMANENT ACCESS AND UTILITY EASEMENT
PROP. ELECTRICAL CONTROLS AND EQUIPMENT ENCLOSURES ON CONCRETE PAD WITH ACCESS STEPS, TOP OF CONCRETE EL 144.00
PROP. GENERATOR ON CONCRETE PAD WITH ACCESS STEPS, TOP OF CONCRETE EL 143.25
PROP. PREFABRICATED PUMP STATION ENCLOSURE WITH 6' WET WELL
STA 0+25
TOP OF PUMP STATION ENCLOSURE EL = 145.40
EXIST. GRADE EL = 141.90
PROP. 8" PVC GRAVITY INV EL (IN) = 135.35
PROP. 4" PVC FORCE MAIN INV EL (OUT) = 135.28
BOTTOM OF WET WELL EL = 130.43
(SEE PLAN AND SECTION ON SHEET C-117)
PROP. ODOR CONTROL DRUM SCRUBBER ON CONCRETE PAD
REMOVE TREE
PROP. ALUMINUM STEPS AND PLATFORM FOR PUMP STATION ACCESS
PROTECT EXISTING DRAINAGE DETENTION AREA
REMOVE TREE
PROP. 4" DI MJ 45° BEND (TYP.)
PROP. 4" DI MJ PLUG VALVE (TYP.)
PROP. HANDHOLE FOR TEMPORARY BYPASS
MEATWORKS DRIVEWAY (287 STATE ROAD)
SUPPORT AND PROTECT EXISTING UTILITY POLE
PROP. PVC SEWER SERVICE
PROP. DRIVEWAY TO MEET EXIST. ASPHALT BERM
RELOCATE EXISTING MAILBOX
DEMO. EXIST. CHAIN LINK FENCE
PROP. 4" X 4" DI MJ WYE
PROP. 4" DI TO PVC TRANSITION COUPLING
10' WIDE DRAIN EASEMENT FOR THE BENEFIT OF #275 BK/PG 11575/295 PB/PL 173/103
SUPPORT AND PROTECT EXISTING DRAIN
100-FOOT WETLAND BUFFER
TEST PIT AT BEGINNING OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF EXIST. ABANDONED 39" PCCP WATER AQUEDUCT
DEMO. EXIST. ABANDONED 39" PCCP WATER AQUEDUCT AND BULKHEAD ENDS
BID ALTERNATE A
PROP. 12" PVC FORCE MAIN TO CONNECT TO BASE BID
LIMIT OF BASE BID
PROP. 12" PVC FORCE MAIN PIPE STUB AND CAP
PROP. 8" PVC SEWER PIPE STUB AND CAP
SMH 1-1 (4'Ø)
STA 1+18
RIM EL = 143.78
PROP. 8" PVC SEWER INV EL (IN) = 135.82
PROP. 8" PVC SEWER INV EL (IN) = 135.82
PROP. 8" PVC SEWER INV EL (OUT) = 135.72
PROP. 12" DI MJ 45° BEND (TYP.)
PROP. 4" DI MJ 45° BEND (TYP.)
PROP. 4" PVC FORCE MAIN
PROP. 8" PVC SEWER

N/F JOSE COUTO AND ANTONIO L. ALMEIDA, TRUSTEES OF STATE ROAD WESTPORT NOMINEE TRUST BK/PG 11575/297 PB/PL 173/102 0 STATE ROAD MAP/LOT 14/25E

N/F SOUTHEASTERN MASS. LIVESTOCK ASSOCIATION, INC. BK/PG 11575/286 PB/PL 173/102 287 STATE ROAD MAP/LOT 14/29&25C

40' WIDE ACCESS EASEMENT BK/PG 11575/297 PB/PL 173/102

N/F JOSE COUTO AND ANTONIO L. ALMEIDA, TRUSTEES OF STATE ROAD WESTPORT NOMINEE TRUST BK/PG 11575/297 PB/PL 173/102 0 STATE ROAD MAP/LOT 14/25E

STATE ROAD (ROUTE 6)

DMH RIM=144.26 A=140.46 B=140.51 C=140.51
CB RIM=143.82 INV=141.67
FES 12" CPP EL=140.40'
DMH RIM=143.64 A=139.69 B=139.99 C=139.84
CB RIM=143.34 INV=140.34
FES 15" RCP EL=141.64'
DMH RIM=144.46 A=140.71 B=141.56 C=140.81 D=141.46
CB RIM=143.84 INV=141.74
CB RIM=143.64 INV=141.79
CB RIM=144.75 INV=142.15
DMH RIM=145.49 A=141.89 B=142.19 C=142.04

WF 700 WF 701 WF 702 WF 703 WF 704 WF 604 WF 605 WF 606 WF 310 WF 311

N51°38'40"W 5002.08'
N51°38'40"W 1939.05'

PLAN
SCALE: 1" = 10'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 10 20
SCALE: 1" = 10' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

287-291 STATE ROAD PUMP STATION SITE PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-114

SHEET 26 of 85

CAD FILE: I:\wienfelder.com\shares\BOSTON\DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase IA Final Design\Drawings\Production Drawings\C-PumpStationSitePlan.dwg LAYOUT: C-114 287-291 STATE ROAD PUMP STATION SITE PLAN
PLOTTED: 3/13/2024 9:02 AM BY: alex.oliveri

NOTES:
1. PROPOSED FENCED AREA AND DRIVEWAY TO BE PAVED WITH 2" BASE AND 2" TOP COURSE ON 6" GRAVEL BASE.
2. CONTRACTOR SHALL INSTALL PROP. SEWER AND FORCE MAIN PIPES STUBS AND CAPS TO ALLOW FOR FUTURE UPGRADES AND EXTENSIONS OF THE SEWER SYSTEM.
3. LOAM AND SEED NON-PAVED DISTURBED AREAS.
4. LOCATION AND SIZE OF SEWER SERVICE CONNECTION TO 287 STATE ROAD SHALL BE COORDINATED WITH THE OWNER.
5. REFER TO SHEET C-1 FOR PROPOSED SEWER PLAN AND PROFILE.
6. PROPOSED ACCESS DRIVEWAY SLOPE SHALL NOT EXCEED 8% SLOPE.

PROP. LIMIT OF WORK FOR PUMP STATION LUMP SUM BID ITEM AND LIMIT OF TEMPORARY CONSTRUCTION EASEMENT
100-YEAR FEMA FLOOD BOUNDARY
EROSION AND SEDIMENTATION CONTROL
PROP. 6' HIGH CHAIN LINK FENCE ENCLOSURE WITH BLACK PRIVACY SLATS
PROP. LIMIT OF PERMANENT ACCESS AND UTILITY EASEMENT
PROP. ELECTRICAL CONTROLS AND EQUIPMENT ENCLOSURES ON CONCRETE PAD WITH ACCESS STEPS, TOP OF CONCRETE EL 144.00
PROP. GENERATOR ON CONCRETE PAD WITH ACCESS STEPS, TOP OF CONCRETE EL 143.25
PROP. APROX. LIMIT OF GRADING
REMOVE TREE
REMOVE TREE
PROTECT EXISTING DRAINAGE DETENTION AREA
MEATWORKS DRIVEWAY (287 STATE ROAD)
SUPPORT AND PROTECT EXISTING UTILITY POLE
PROP. DRIVEWAY TO MEET EXIST. ASPHALT BERM
RELOCATE EXISTING MAILBOX
DEMO. EXIST. CHAIN LINK FENCE
10' WIDE DRAIN EASEMENT FOR THE BENEFIT OF #275 BK/PG 11575/295 PB/PL 173/103
SUPPORT AND PROTECT EXISTING DRAIN
40' WIDE ACCESS EASEMENT BK/PG 11575/297 PB/PL 173/102
100-FOOT WETLAND BUFFER
BID ALTERNATE A PROP. 12" PVC FORCE MAIN TO CONNECT TO BASE BID
LIMIT OF BASE BID PROP. 12" PVC FORCE MAIN PIPE STUB AND CAP
PROP. 8" PVC SEWER
PROP. 8" PVC SEWER
SMH 1-1 (4'∅)
STA 1+18
RIM EL = 143.78
PROP. 8" PVC SEWER INV EL (IN) = 135.82
PROP. 8" PVC SEWER INV EL (IN) = 135.82
PROP. 8" PVC SEWER INV EL (OUT) = 135.72

N/F JOSE COUTO AND ANTONIO L. ALMEIDA, TRUSTEES OF STATE ROAD WESTPORT NOMINEE TRUST BK/PG 11575/297 PB/PL 173/102 0 STATE ROAD MAP/LOT 14/25E

N/F SOUTHEASTERN MASS. LIVESTOCK ASSOCIATION, INC. BK/PG 11575/286 PB/PL 173/102 287 STATE ROAD MAP/LOT 14/29&25C

N/F JOSE COUTO AND ANTONIO L. ALMEIDA, TRUSTEES OF STATE ROAD WESTPORT NOMINEE TRUST BK/PG 11575/297 PB/PL 173/102 0 STATE ROAD MAP/LOT 14/25E

DMH RIM=144.26 A=140.46 B=140.51 C=140.51
CB RIM=143.82 INV=141.67
DMH RIM=143.64 A=139.69 B=139.99 C=139.84
FES 12" CPP EL=140.40'
DMH RIM=144.46 A=140.71 B=141.56 C=140.81 D=141.46
CB RIM=143.84 INV=141.74
CB RIM=143.64 INV=141.79
FES 15" RCP EL=141.64'
CB RIM=144.75 INV=142.15
DMH RIM=145.49 A=141.89 B=142.19 C=142.04

WF 700 WF 701 WF 702 WF 703 WF 704 WF 604 WF 605 WF 606 WF 310 WF 311

STATE ROAD (ROUTE 6)

N51°38'40"W 5002.05'
N51°38'40"W 3939.05'

PLAN
SCALE: 1" = 10'

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SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 10 20
SCALE: 1" = 10' SCALE IN FEET
ORIGINAL DRAWING SIZE IS 22 x 34

287-291 STATE ROAD PUMP STATION SITE GRADING

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-115

SHEET 27 of 85

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NOTES:

1. AREA INSIDE PERMANENT FENCE TO BE PAVED WITH 2" BASE AND 2" TOP COURSE ON 6" GRAVEL BASE.
2. FINISHED GRADE SHALL MATCH EXISTING GRADE.
3. CONTRACTOR SHALL PROVIDE SUPPORT OF EXCAVATION TO PROTECT THE EXISTING BILLBOARD FOUNDATION IN ACCORDANCE WITH SPECIFICATION SECTION 02160.
4. CONTRACTOR SHALL INSTALL PROP. SEWER AND FORCE MAIN PIPES STUBS AND CAPS TO ALLOW FOR FUTURE UPGRADES AND EXTENSIONS OF THE SEWER SYSTEM.
5. TO CONNECT TO THE EXISTING FORCE MAIN, CONTRACTOR SHALL COORDINATE TEMPORARY SHUTDOWN OF EXISTING FORCE MAIN WITH THE OWNERS OF THE EXISTING WHITE'S OF WESTPORT AND MARTINE STREET PUMP STATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 02761.
6. LAND ACQUISITION AREA OUTSIDE THE SITE FENCE (1,288 SQUARE FEET) SHALL BE AVAILABLE TO THE 35 STATE ROAD OWNER FOR THE PURPOSE OF VEHICLE PARKING AND TEMPORARY VEHICLE ACCESS. THE 35 STATE ROAD OWNER SHALL MAINTAIN CLEAR, CONTINUOUS VEHICLE ACCESS TO THE SITE FENCE GATES AND THE PUMP STATION AREA WITHIN THE SITE FENCE.
5. REFER TO SHEET C-12 FOR PROPOSED SEWER PLAN AND PROFILE.

PROP. 8' PUMP STATION WET WELL
STA 53+08
TOP OF PUMP STATION ENCLOSURE EL = 139.10
RIM EL = 135.60
PROP. 18" PVC SEWER INV EL (IN) = 127.64
PROP. 18" PVC SEWER INV EL (IN) = 119.64
PROP. 6" PVC FORCE MAIN INV EL (OUT) = 129.38
BOTTOM OF WET WELL EL =117.64
(SEE PLAN AND SECTION ON SHEETS C-118 AND C-119)

WF 1411 END

PROP. 6' HIGH CHAIN LINK FENCE WITH BLACK PRIVACY SLATS

PROP. ELECTRICAL CONTROLS AND EQUIPMENT CABINET ON CONCRETE SLAB WITH ACCESS STEPS, TOP OF CONCRETE EL 137.00

PROP. 18" PVC SEWER PIPE STUB AND CAP

PROP. 8" PVC SEWER

SMH 1-22 (4'Ø)
STA 52+76
RIM EL = 136.08
PROP. 8" PVC SEWER INV EL (IN) = 127.72
PROP. 8" PVC SEWER INV EL (OUT) = 127.67

FUTURE 18" PLUG VALVE (NOT IN CONTRACT)

FUTURE 18" PVC SEWER (NOT IN CONTRACT)

PROP. GENERATOR ON CONCRETE PAD WITH ACCESS STEPS, TOP OF CONCRETE EL 136.75

PROP. LIMIT OF RIGHT OF ACCESS 3,236 SQUARE FEET

PROP. 16' FENCE GATE

PROP. 6" DI MJ PLUG VALVE (TYP.)

PROP. HANDHOLE FOR TEMPORARY BYPASS CONNECTION

EROSION AND SEDIMENTATION CONTROL

FUTURE 15,000 GALLON EQUALIZATION TANK (NOT IN CONTRACT)
RIM EL = 136.00±

FUTURE 18" PVC SEWER (NOT IN CONTRACT)

SMH 1-23 (NOT IN CONTRACT) (5'Ø)
STA 52+37
RIM EL = 136.53
PROP. 8" PVC SEWER INV EL (IN) = 127.75
PROP. 8" PVC SEWER INV EL (OUT) = 126.33

PROP. ALUMINUM STEPS AND PLATFORM FOR PUMP STATION ACCESS

TEMP. 6' CONSTRUCTION FENCE

FUTURE 18" PVC SEWER (NOT IN CONTRACT)

PROP. 8" PVC SEWER

PROP. 6" X 6" DI MJ WYE

PROP. 18" PVC SEWER PIPE STUB AND CAP

100 YEAR FEMA FLOOD BOUNDARY

PROP. 6" DI TO PVC TRANSITION COULPING

PROP. FLOW METER VAULT (SEE PLAN AND SECTIONS ON SHEET C-18)

100-FOOT WETLAND BUFFER

DEMOLISH EXIST. UNKNOWN MANHOLE

PROP. 8" DI FORCE MAIN PIPE STUB AND CAP

"35-50 STATE RD"

EXIST. MONTAUP ELECTRIC COMPANY EASEMENT, APPROX. 2,180 SQAURE FEET

SMH 1-21 (5'Ø)
STA 52+32
RIM EL = 136.75
PROP. 8" PVC SEWER INV EL (IN) = 127.83
PROP. 8" PVC SEWER INV EL (OUT) = 127.78
PROP. 8" PVC SEWER INV EL (OUT) = 127.78

PROP. LIMIT OF PERMANENT ACCESS AND UTILITY EASEMENT

PROP. 6" DI MJ 45° BEND (TYP.)

APPROX. LIMIT OF EXIST. BILLBOARD OVERHEAD

TEST PIT TO VERIFY LOCATION AND DEPTH OF EXIST. BILLBOARD FOUNDATION

APPROX. LIMIT OF EXIST. BILLBOARD FOUNDATION

SMH 1-20 (4'Ø)
STA 51+94
RIM EL = 137.08
PROP. 8" PVC SEWER INV EL (IN) = 127.93
PROP. 8" PVC SEWER INV EL (OUT) = 127.88

PROP. 6" PVC FORCE MAIN

PROP. LIMIT OF WORK FOR PUMP STATION LUMP SUM BID ITEM AND LIMIT OF TEMPORARY CONSTRUCTION EASEMENT

FUTURE PVC FORCE MAIN (NOT IN CONTRACT)

SMH 1-19 (4'Ø)
STA 51+43
RIM EL = 137.90
PROP. 8" PVC SEWER INV EL (IN) = 128.04
PROP. 8" PVC SEWER INV EL (OUT) = 127.99

80' WIDE MONTAUP ELECTRIC COMPANY EASEMENT

TEST PIT AT BEGINNING OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF EXIST. 6" PVC FORCE MAIN, LOCATE ADJACENT UTILITIES (TYP.) EXIST. 6" PVC FORCE MAIN INVERT ELEVATION IS ANTICIPATED TO BE APPROXIMATELY EL 130.95 BASED ON RECORDS.

PROP. 6" X 6" DI MJ WYE AND 6" COUPLING CONNECTIONS TO CONNECT PROP. 6" PVC FORCE MAIN TO EXIST. 6" PVC FORCE MAIN

N/F
COMMONWEALTH OF MASSACHUSETTS, ACTING THROUGH ITS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
BK/PG 1842/491
0 WATUPPA BRANCH
MAP/LOT 3/35

N/F
THE MURIEL LAFRANCE TRUST-1989
BK/PG 9757/130
35 STATE ROAD
MAP/LOT 3/1

STATE ROAD (ROUTE 6)

PLAN
SCALE: 1" = 10'

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 — 10 — 20
SCALE: 1" = 10' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

35 STATE ROAD PUMP STATION SITE PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

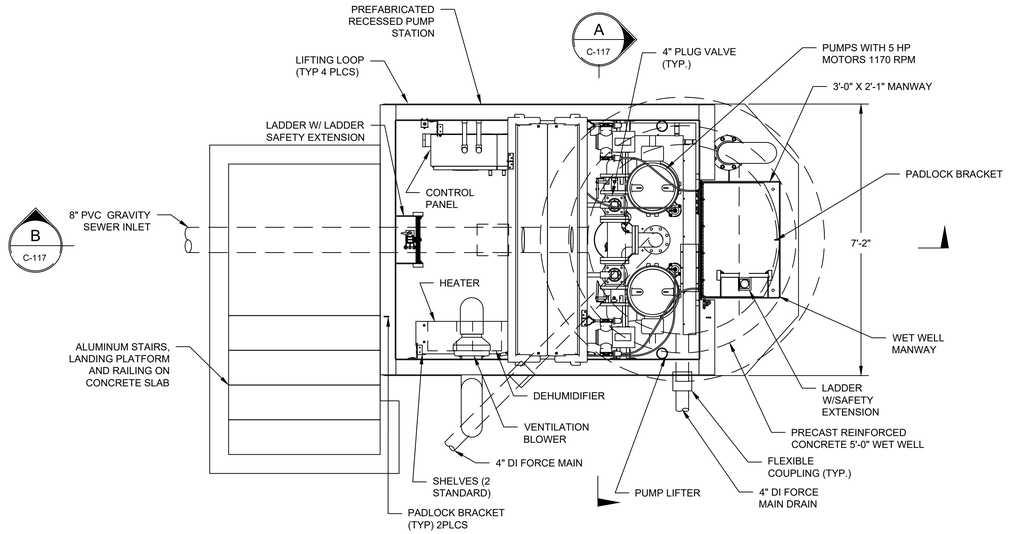
100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-116

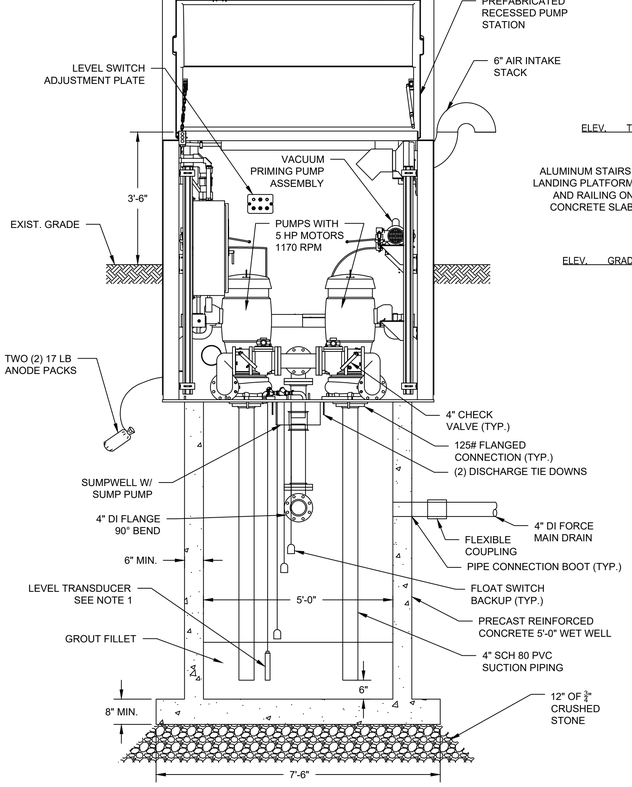
SHEET 28 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-PumpStationSitePlan.dwg LAYOUT: C-116 35 STATE ROAD PUMP STATION SITE PLAN PLOTTED: 3/13/2024 9:03 AM BY: alex silveri



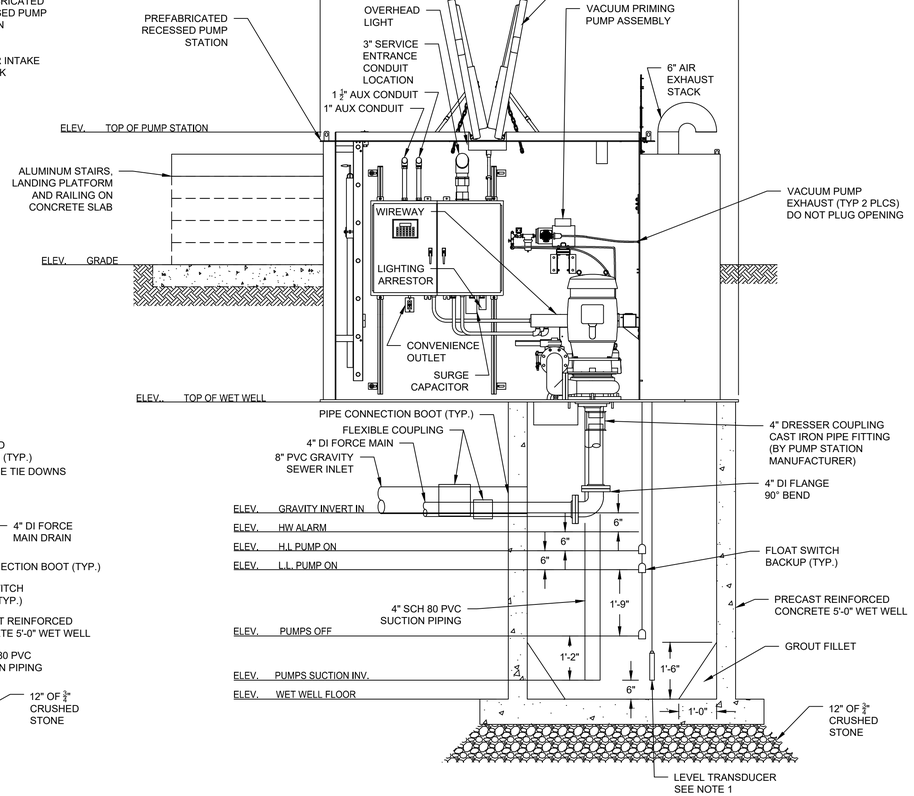
PLAN

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



A SECTION

C-117 SCALE: 1/2" = 1'-0"



B SECTION

C-117 SCALE: 1/2" = 1'-0"

NOTES:

1. TRANSDUCER INCLUDED AS PART OF THE PRIMARY CONTROL SYSTEM. FLOAT SWITCHES WILL SERVE AS THE BACK-UP SYSTEM IF PRIMARY LEVEL CONTROL SYSTEM FAIL.
2. INTERIOR HEAD CLEARANCE 6'-7" MIN.
3. SUBGRADE UNDER STATION BASEPLATE SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT UNDER ENTIRE BASEPLATE.
4. BOLT PUMP STATION ENCLOSURE TO WET WELL PER MANUFACTURER'S RECOMMENDATIONS WITH STAINLESS STEEL HARDWARE.

Parameter	Meatworks Pump Station
Pump Station Type	Recessed wet well mounted
Pump Priming Type	Vacuum Primed
Design Flow (gpm)	125
Total Dynamic Head (feet)	43.87
Force Main Discharge Invert Elev. (ft, NAVD 88)	153.90
Top of Pump Enclosure Elev. (ft, NAVD 88)	145.40
Grade Elev. (ft, NAVD 88)	141.90
Top of Wet Well (ft, NAVD 88)	138.30
Force Main Invert Out Elev. (ft, NAVD 88)	135.28
Gravity Invert In Elev. (ft, NAVD 88)	135.35
High Water Alarm Elev. (ft, NAVD 88)	134.85
High Level Pump On Elev. (ft, NAVD 88)	134.35
Low Level Pump On Elev. (ft, NAVD 88)	133.85
Pump Off Elev. (ft, NAVD 88)	132.10
Low Water Alarm Elev. (ft, NAVD 88)	131.60
Pump Suction Invert Elev. (ft, NAVD 88)	130.93
Wet Well Floor Elev. (ft, NAVD 88)	130.43

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 1.5 3 4.5 6

SCALE IN FEET
SCALE: 1/2" = 1'-0"
ORIGINAL DRAWING SIZE IS 22 x 34

287-291 STATE ROAD PUMP STATION PLAN AND SECTION

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

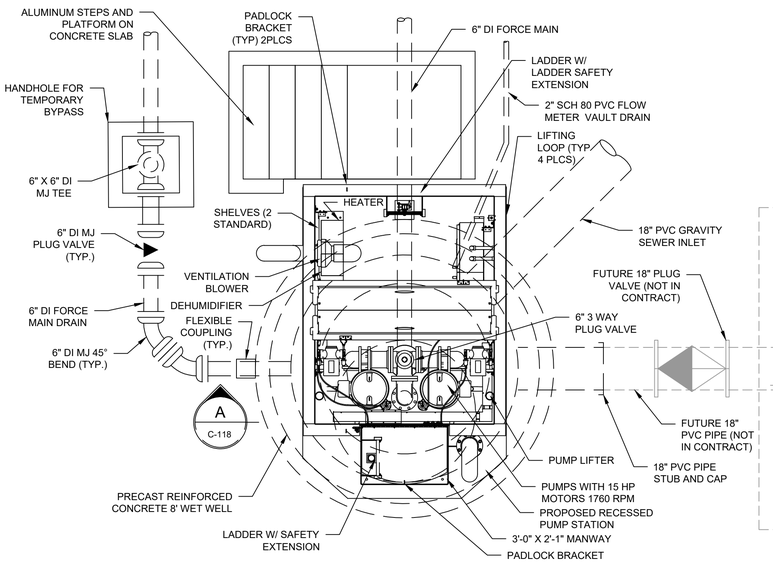
100% DESIGN

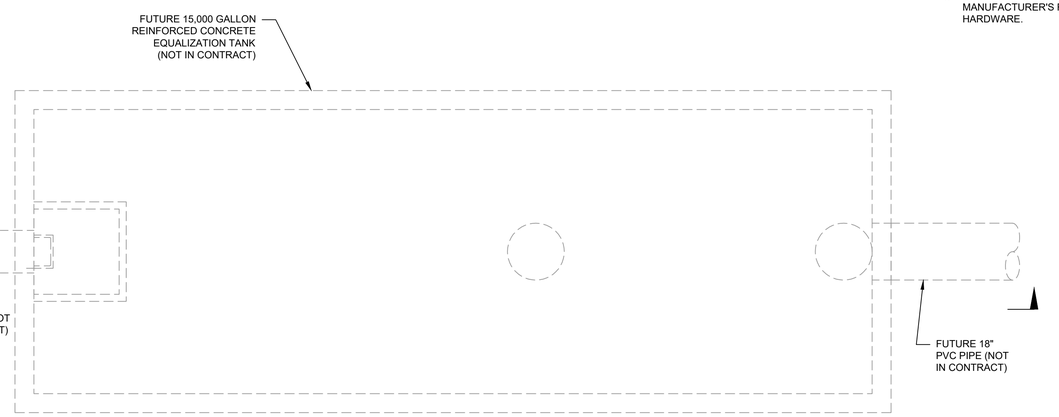
PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-117

SHEET 29 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081 (01A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Prog\PumpStation\PlanSection.dwg LAYOUT: C-16 PLOTTED: 3/13/2024 9:04 AM BY: alex silvert



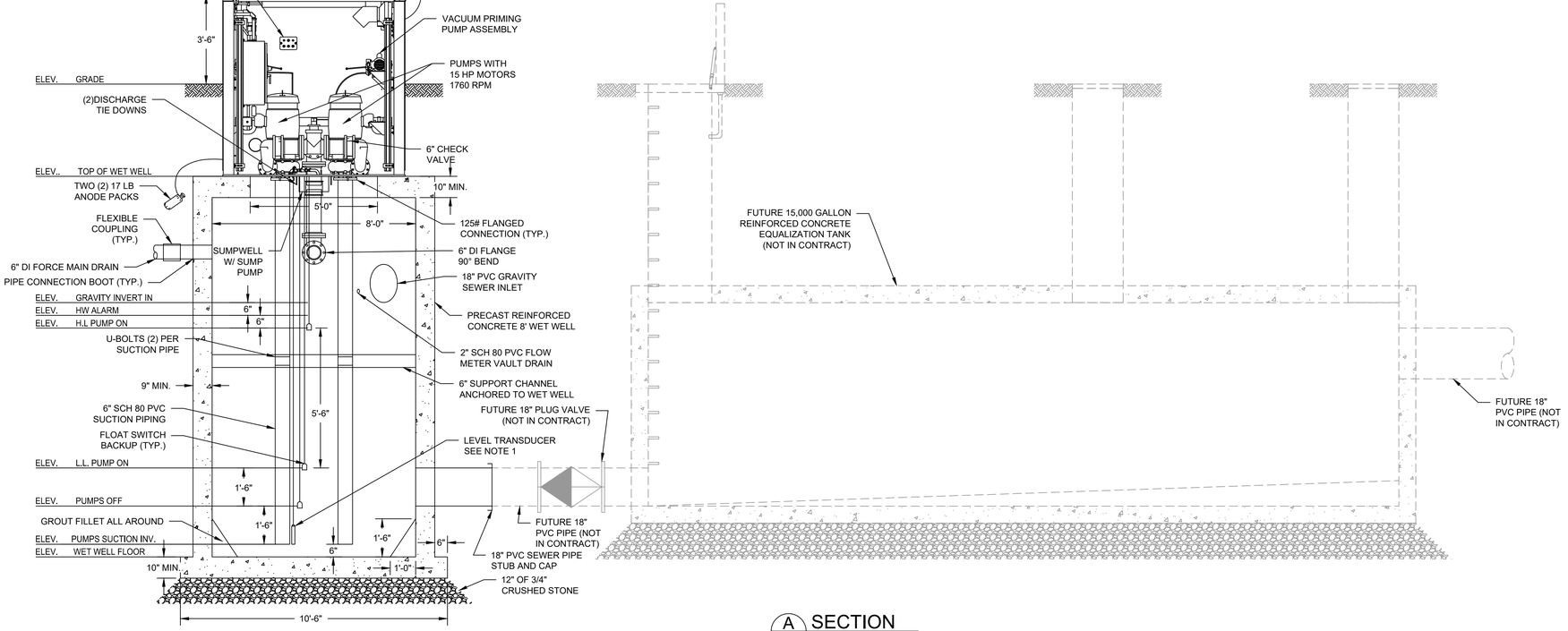


PLAN
SCALE: 3/8" = 1'-0"

NOTES:

1. TRANSDUCER INCLUDED AS PART OF THE PRIMARY CONTROL SYSTEM. FLOAT SWITCHES WILL SERVE AS THE BACK-UP SYSTEM IF PRIMARY LEVEL CONTROL SYSTEM FAIL.
2. INTERIOR HEAD CLEARANCE 6'-7" MIN.
3. SUBGRADE UNDER STATION BASEPLATE SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT UNDER ENTIRE BASEPLATE.
4. BOLT PUMP STATION ENCLOSURE TO WET WELL PER MANUFACTURER'S RECOMMENDATIONS WITH STAINLESS STEEL HARDWARE.

Parameter	35 State Road
Pump Station Type	Recessed wet well mounted
Pump Priming Type	Vacuum Primed
Design Flow (gpm)	265
Total Dynamic Head (feet)	83.65
Force Main Discharge Invert Elev. (ft, NAVD 88)	166.80
Top of Pump Enclosure Elev. (ft, NAVD 88)	139.10
Grade Elev. (ft, NAVD 88)	135.60
Top of Wet Well (ft, NAVD 88)	132.00
Force Main Invert Out Elev. (ft, NAVD 88)	129.38
Gravity Invert In Elev. (ft, NAVD 88)	127.64
High Water Alarm Elev. (ft, NAVD 88)	127.14
High Level Pump On Elev. (ft, NAVD 88)	126.64
Low Level Pump On Elev. (ft, NAVD 88)	121.14
Pump Off Elev. (ft, NAVD 88)	119.64
Low Water Alarm Elev. (ft, NAVD 88)	119.14
Pump Suction Invert Elev. (ft, NAVD 88)	118.14
Wet Well Floor Elev. (ft, NAVD 88)	117.64



A C-118 SECTION
SCALE: 3/8" = 1'-0"

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 2 4 6 8

SCALE IN FEET
SCALE: 3/8" = 1'-0"
ORIGINAL DRAWING SIZE IS 22 x 34

35 STATE ROAD PUMP STATION PLAN AND SECTION I

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

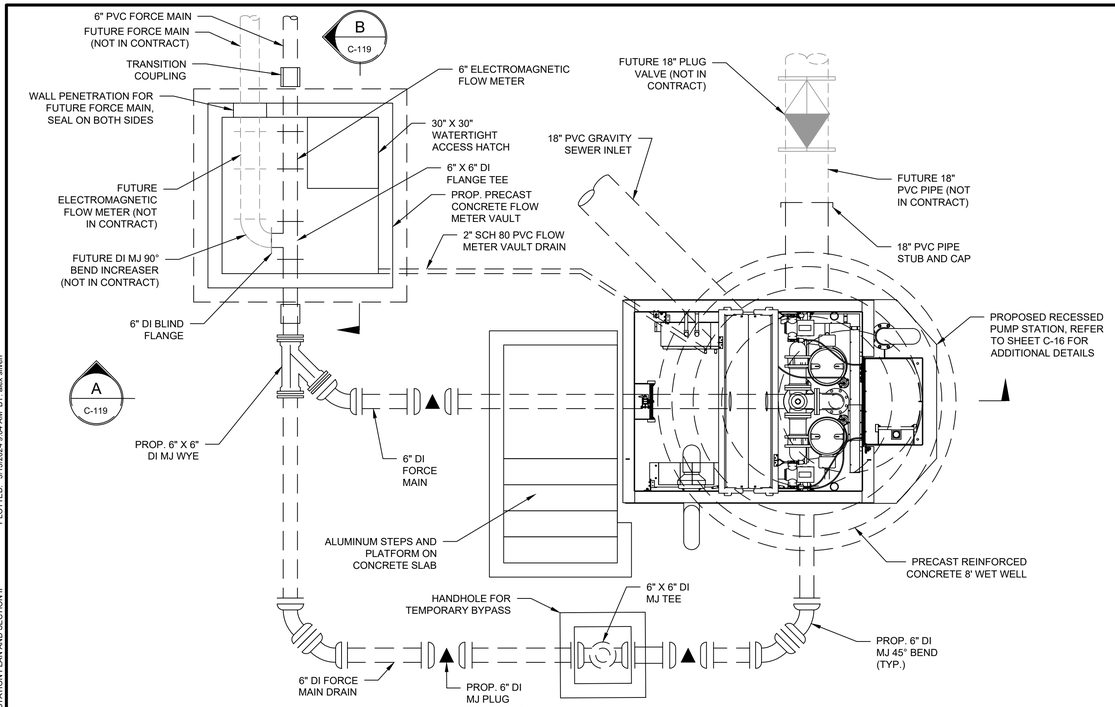
100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

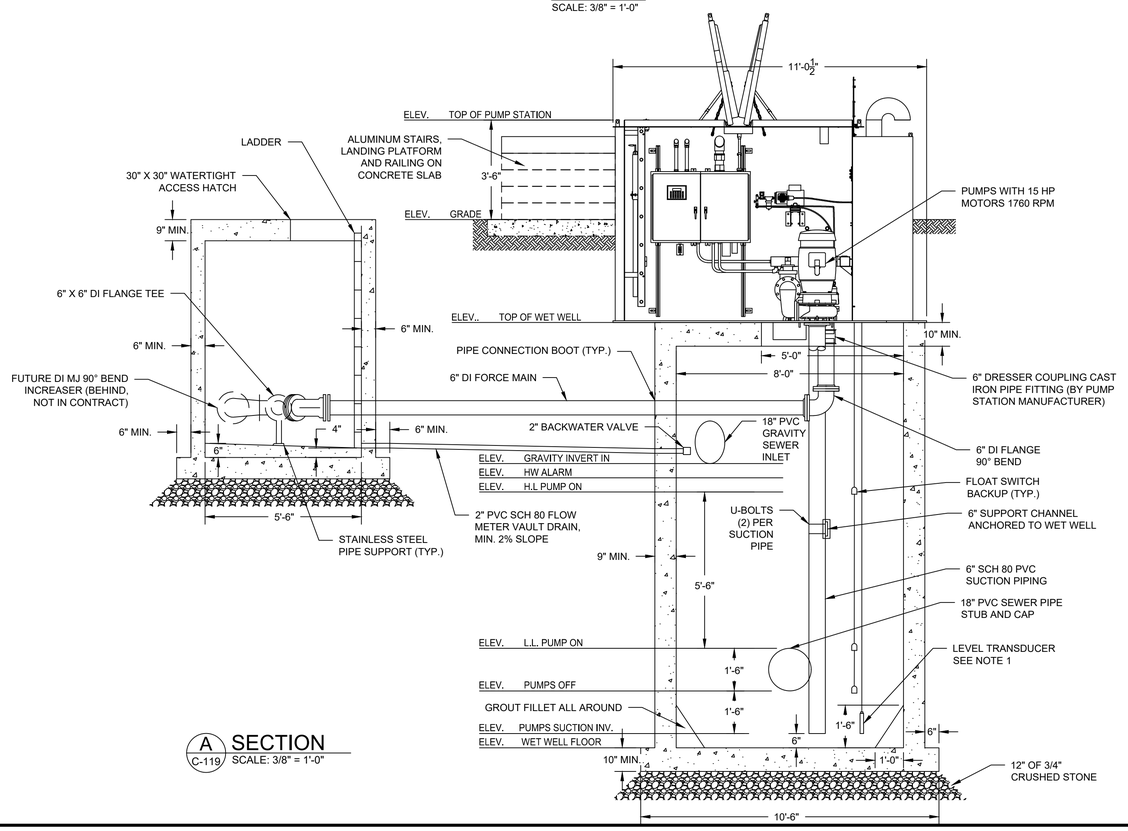
C-118

SHEET 30 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Prog\PumpStationPlanSection.dwg LAYOUT: C-118 35 STATE ROAD PUMP STATION PLAN AND SECTION I
PLOTTED: 3/13/2024 9:04 AM BY: alex oliveri



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



A C-119 SECTION
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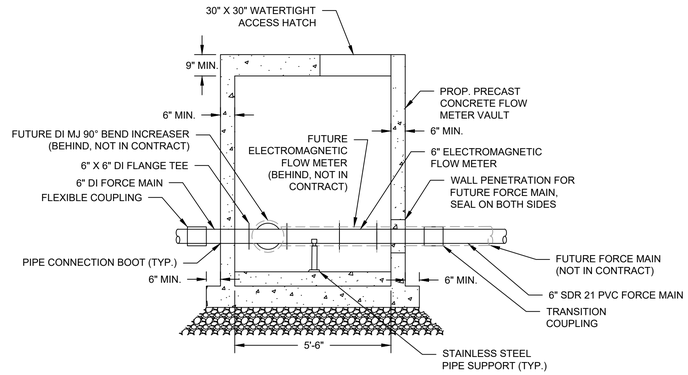

B C-119 SECTION
SCALE: 3/8" = 1'-0"

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		DWN	APP	

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 2 4 6 8

SCALE IN FEET
SCALE: 3/8" = 1'-0"
ORIGINAL DRAWING SIZE IS 22 x 34

35 STATE ROAD PUMP STATION PLAN AND SECTION II

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

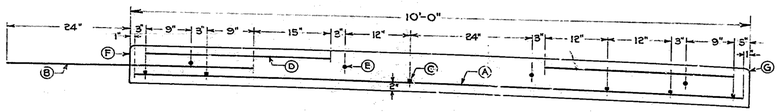
100% DESIGN

PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-119

SHEET 31 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Prop\PumpStationPlanSection.dwg LAYOUT: C-119 35 STATE ROAD PUMP STATION PLAN AND SECTION II PLOTTED: 3/13/2024 9:04 AM BY: alex oliveri



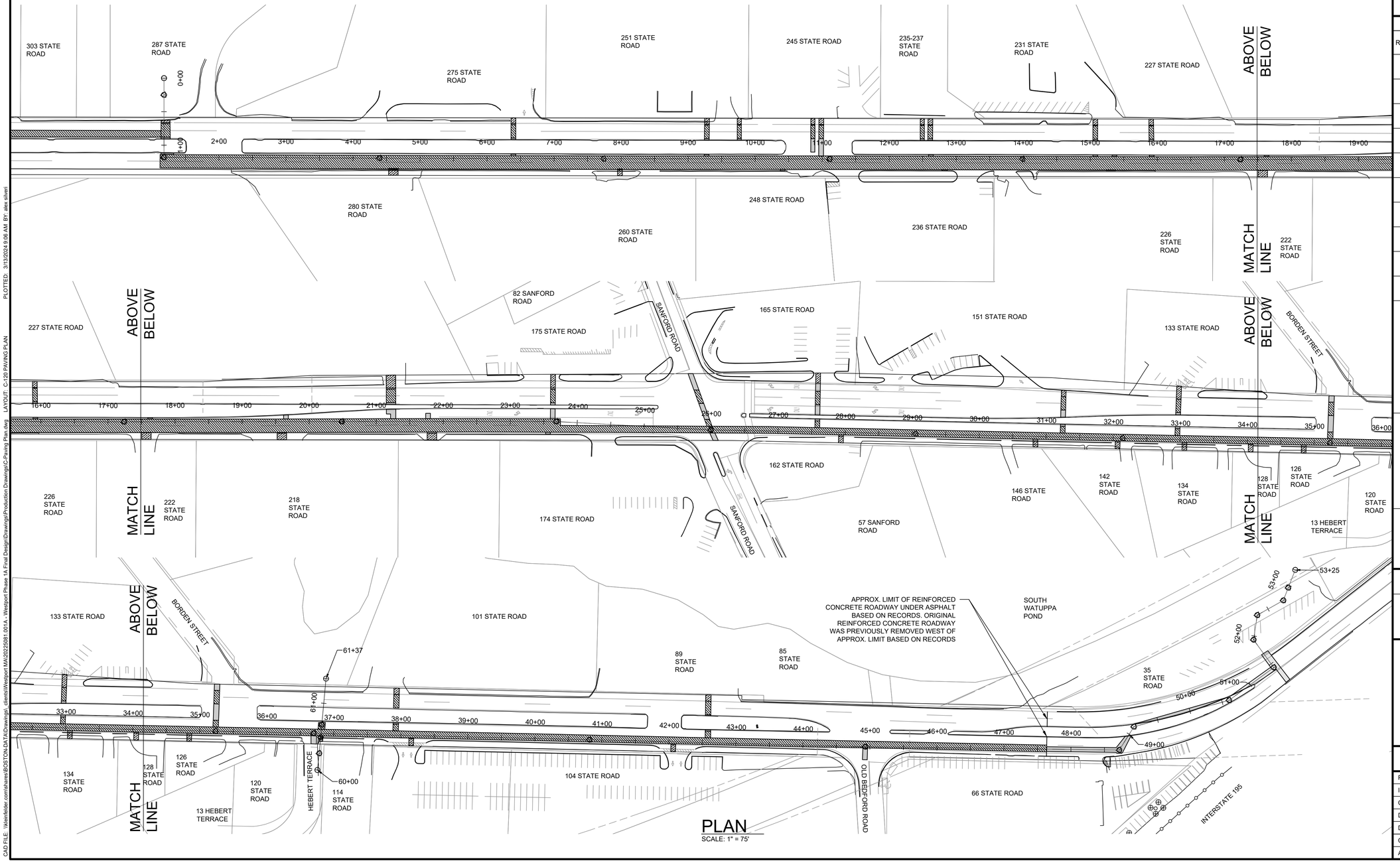
EXISTING CONCRETE ROADWAY SECTION FROM RECORDS
NTS

Ⓐ TRANSVERSE RODS 2'-0" C.TO C. BEGINNING 3" FROM THE END OF SLAB
Ⓑ DOWELS DEFORMED BARS 5' C.TO C.
Ⓒ LONGITUDINAL RODS TO BE AT LEAST 8' LONG AND LAP 12"
Ⓓ DEFORMED BARS 6' LONG PLACED AT SLAB CORNERS
Ⓔ PLAIN DOWELS 4' LONG ONE END FIXED REMAINDER PAINTED
Ⓕ WHEN BUILT ONE HALF AT A TIME FACE OF SECTION FIRST BUILT TO BE PAINTED WITH BITUMINOUS MATERIAL
WHEN BUILT FULL WIDTH IN ONE OPERATION A LONGITUDINAL JOINT SHALL BE PLACED IN CENTER OF CONCRETE SECTION
ALL REINFORCING WITH THE EXCEPTION OF DOWELS FOR TRANSVERSE JOINTS TO BE DEFORMED STEEL RODS
ALL REINFORCING TO BE OF 0.25 "SECTIONAL AREA
Ⓖ 3/4" RADIUS

LEGEND

- PROPOSED CONCRETE SLAB REMOVAL, TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED HMA SIDEWALK (3") OR DRIVEWAY (4") PAVING RESTORATION

NOTES
1. THE ORIGINAL ROUTE 6 ROADWAY CONSTRUCTION CONSISTED OF TWO 10' WIDE LANES OF 8" THICK REINFORCED CONCRETE SLAB AT GRADE IN BOTH TRAVEL DIRECTIONS. REFER TO REINFORCED CONCRETE SLAB DETAIL ON SHEET C-19. THE ORIGINAL 8" THICK REINFORCED CONCRETE ROADWAY STILL EXISTS WITHIN THE PROJECT AREA AND HAS BEEN PAVED OVER WITH ASPHALT. EXISTING CRACKS IN THE SURFACE ASPHALT ARE VISIBLE AT REGULAR INTERVALS RUNNING PERPENDICULAR TO THE DIRECTION OF ROADWAY TRAFFIC. THESE CRACKS ARE SUSPECTED TO COINCIDE WITH THE EDGES OF THE CONCRETE SLABS UNDERNEATH THE SURFACE ASPHALT. SMALL PORTIONS OF THE ORIGINAL REINFORCED CONCRETE ROADWAY HAVE LIKELY BEEN REMOVED PREVIOUSLY TO INSTALL UTILITIES CROSSING THE ROADWAY INCLUDING WATER, DRAIN, GAS, AND TELECOM UTILITIES. REINFORCED CONCRETE ROADWAY SHALL BE REMOVED AND REPLACED WITH PAVEMENT AS DETAILED ON SHEETS C-19 AND C-20.
2. CONTRACTOR SHALL ADJUST PROPOSED SEWER AND WATER SERVICE LOCATIONS IN THE FIELD AS NEEDED TO MINIMIZE THE REMOVAL OF THE EXISTING CONCRETE SLAB ROADWAY UNDERNEATH THE SURFACE ASPHALT. WHERE FEASIBLE, CONTRACTOR SHALL ALIGN SERVICES WITH THE EDGES OF THE EXISTING CONCRETE ROADWAY SLABS AND AVOID LEAVING SMALL SECTIONS OF FLOATING CONCRETE SLABS DISCONNECTED FROM THE ORIGINAL CONCRETE SLAB.



PLAN
SCALE: 1" = 75'

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SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 75 150
SCALE: 1" = 75' SCALE IN FEET
ORIGINAL DRAWING SIZE IS 22 x 34

PAVING PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

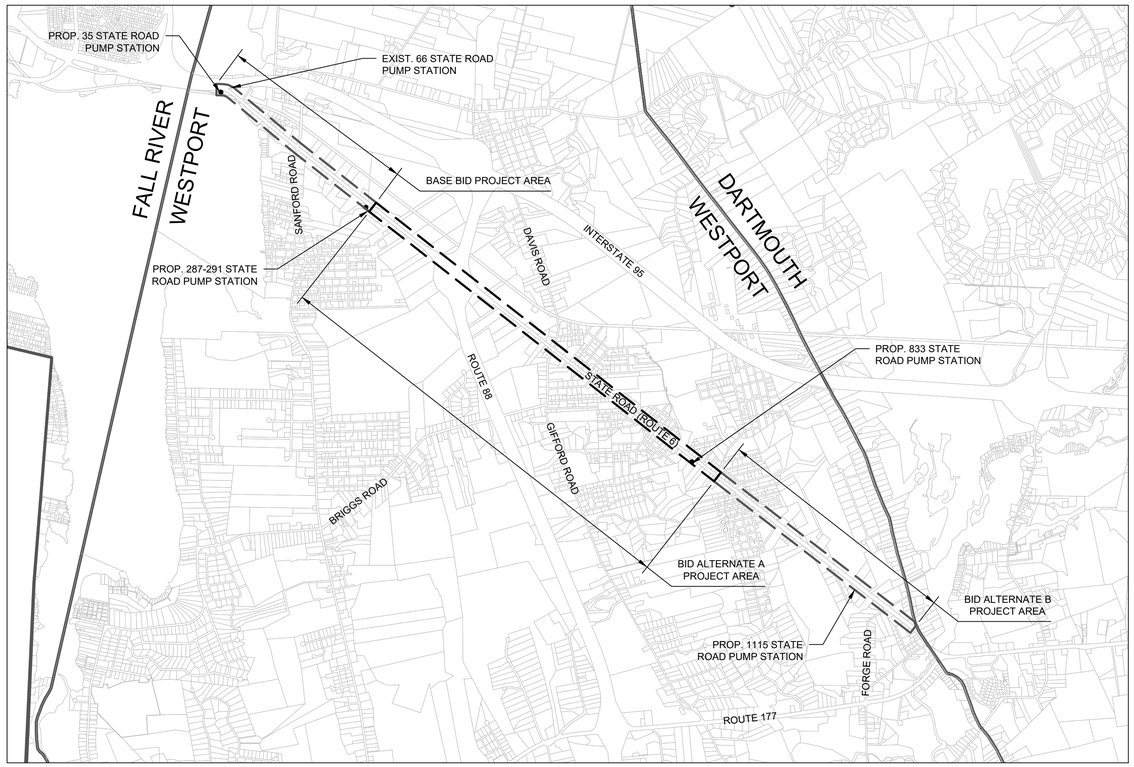
PROJECT NO.	20225081
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-120

SHEET 32 of 85

CAD FILE: \\atenfelder.com\shares\BOSTON\DATA\Drawings_clients\Westport MA\20225081.001A - Westport Phase 1A Final Design\Drawings\Production Drawings\C-Paving Plan.dwg LAYOUT: C-120 PAVING PLAN PLOTTED: 3/13/2024 9:06 AM BY: alex silvert

TOWN OF WESTPORT, MA
ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE A
MARCH 2024



PLAN
SCALE: 1" = 2,000'

TOWN ADMINISTRATOR

JAMES K. HARTNETT

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PLOTTED: 3/13/2024 12:17 PM BY: alex.olivieri
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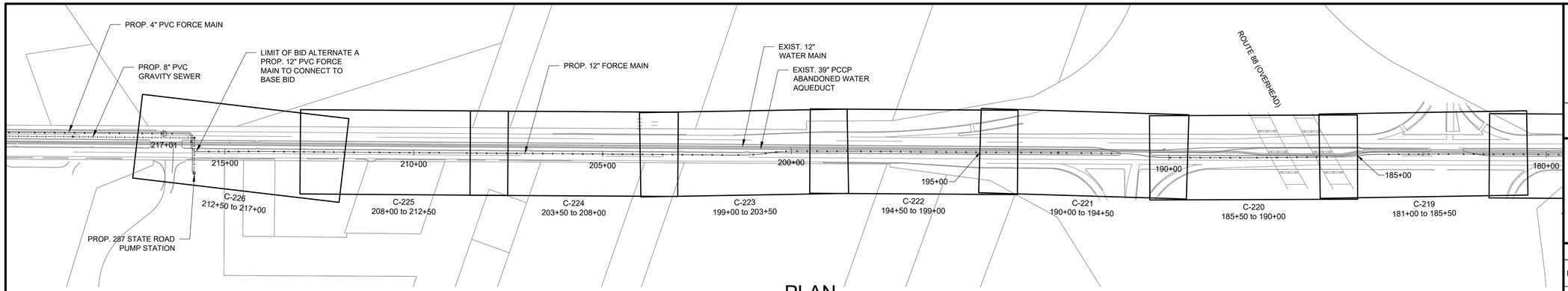
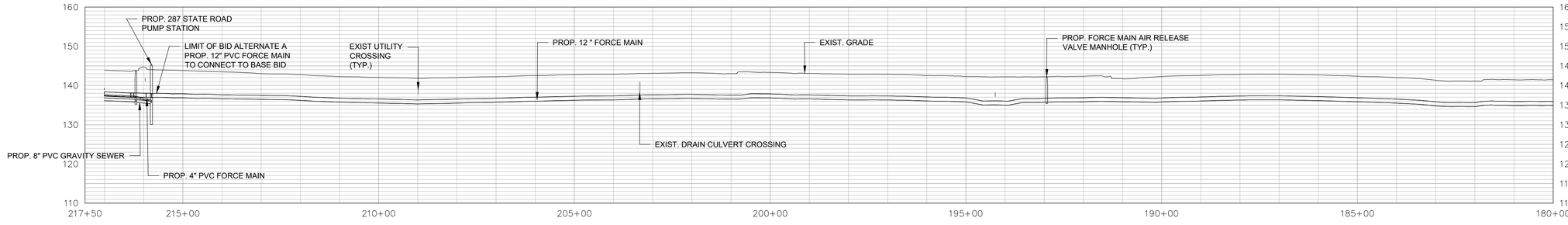


PLAN

SCALE: 1" = 150'



PROFILE

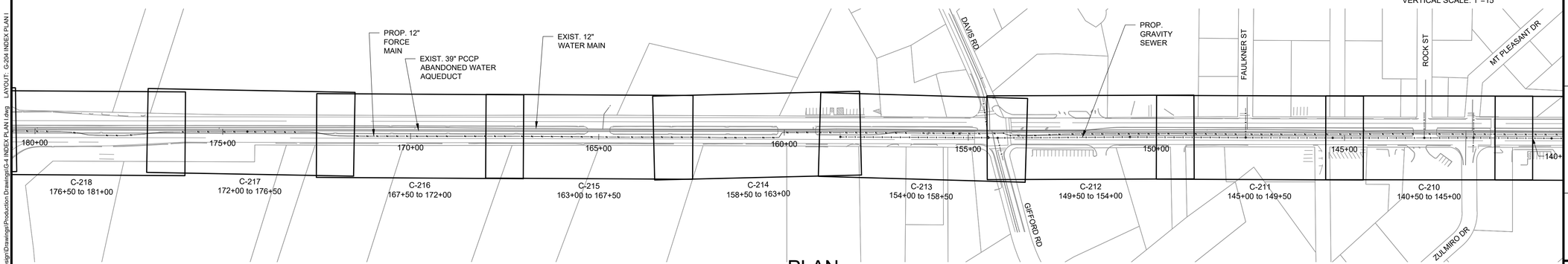
HORIZONTAL SCALE: 1" = 150'
VERTICAL SCALE: 1"=15'

HORIZONTAL SCALE: 1" = 150'

150 75 0 150 300

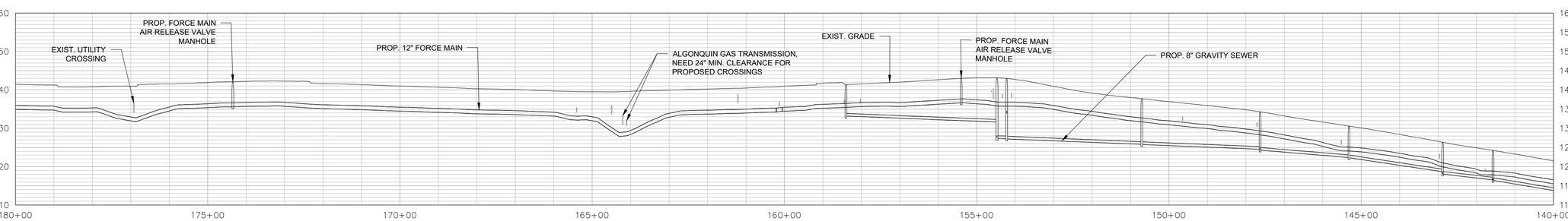
30 15 0 30 60

VERTICAL SCALE: 1"=15'



PLAN

SCALE: 1" = 150'



PROFILE

HORIZONTAL SCALE: 1" = 150'
VERTICAL SCALE: 1"=15'

HORIZONTAL SCALE: 1" = 150'

150 75 0 150 300

30 15 0 30 60

VERTICAL SCALE: 1"=15'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 150 300

SCALE: 1" = 150' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

INDEX PLAN I

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

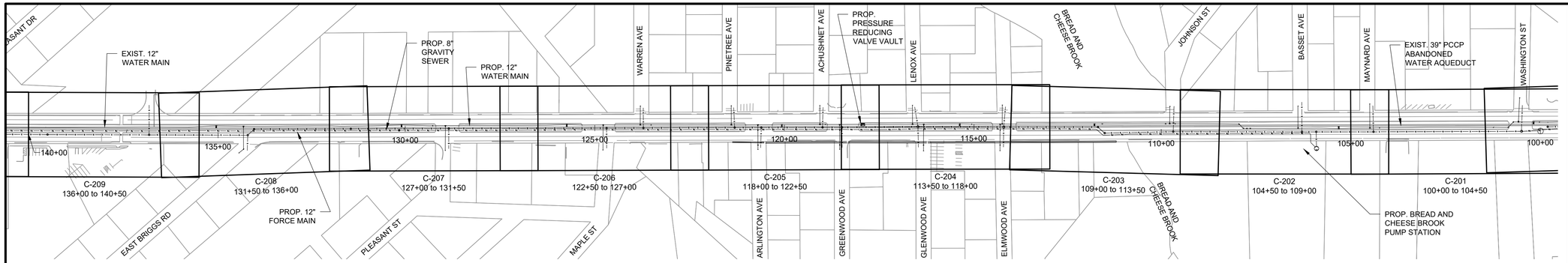
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO. 20230698.001A	
ISSUE DATE	03/08/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

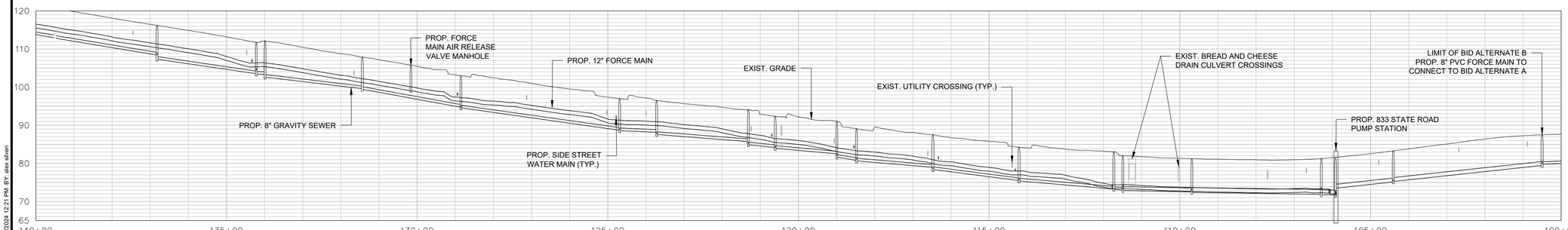
G-202

PLOTTED: 3/13/2024 12:21 PM BY: alex silveri
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\G-4 INDEX PLAN I.dwg LAYOUT: G-204 INDEX PLAN I



PLAN

SCALE: 1" = 150'



PROFILE

HORIZONTAL SCALE: 1" = 150'
VERTICAL SCALE: 1"=15'

HORIZONTAL SCALE: 1" = 150'

150 75 0 150 300

30 15 0 30 60

VERTICAL SCALE: 1"=15'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 150 300

SCALE: 1" = 150' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

INDEX PLAN II

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

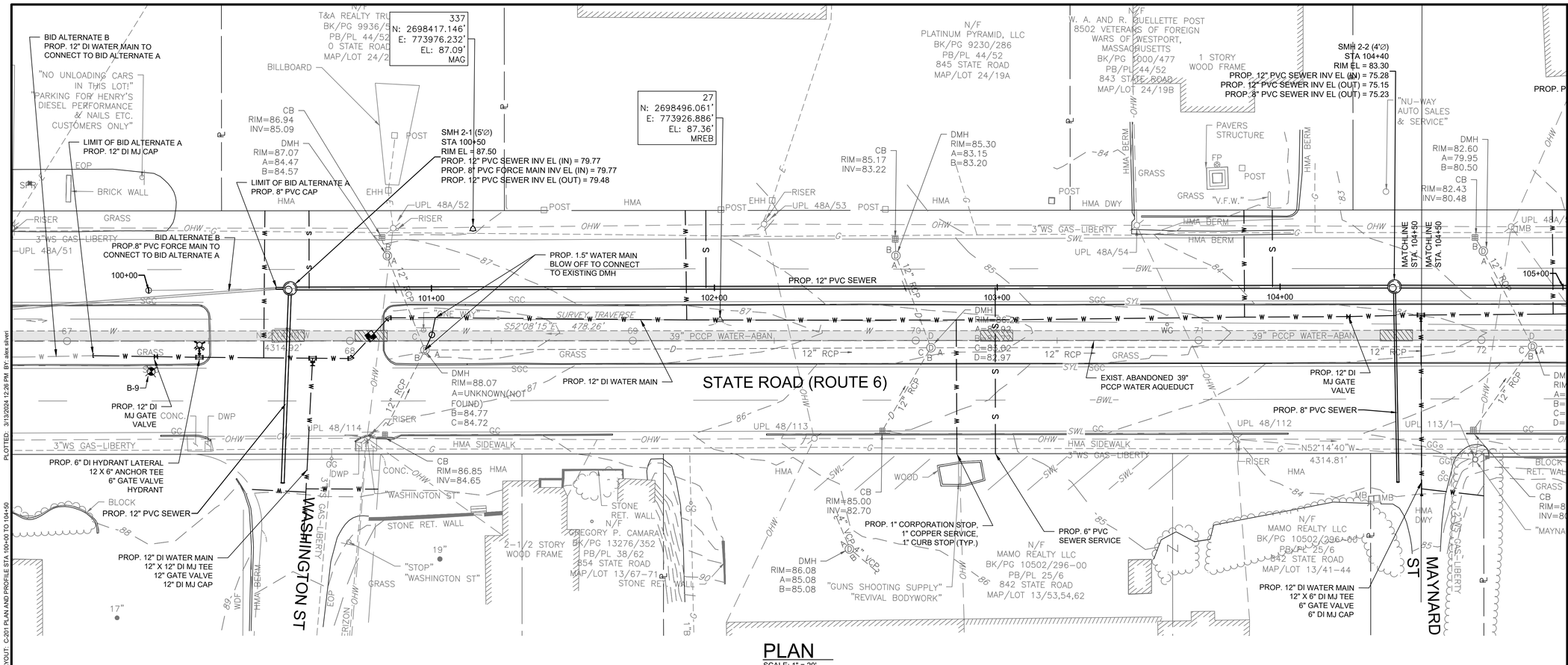
100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/08/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

G-203

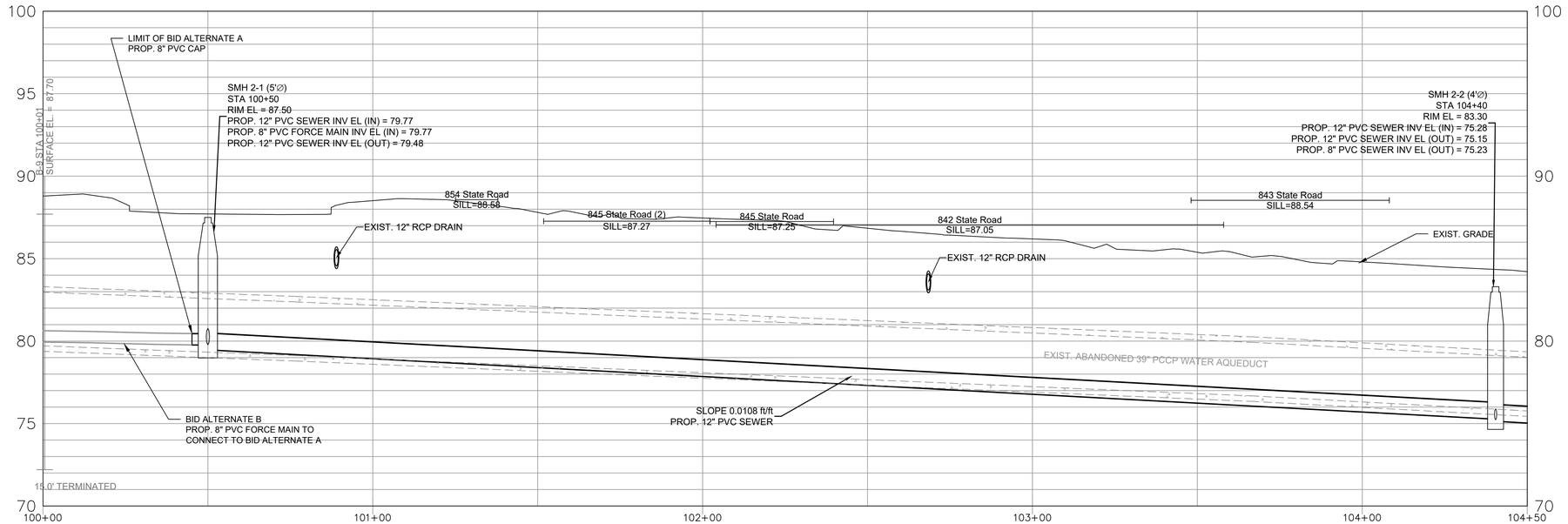
SHEET 35 of 85

PLOTTED: 3/13/2024 12:21 PM BY: alex silvert
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\G-4 INDEX PLAN I.dwg LAYOUT: G-205 INDEX PLAN II



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 100+00 TO 104+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	RG
CHECKED BY	DTP
APPROVED BY	MT

C-201

SHEET 36 of 85

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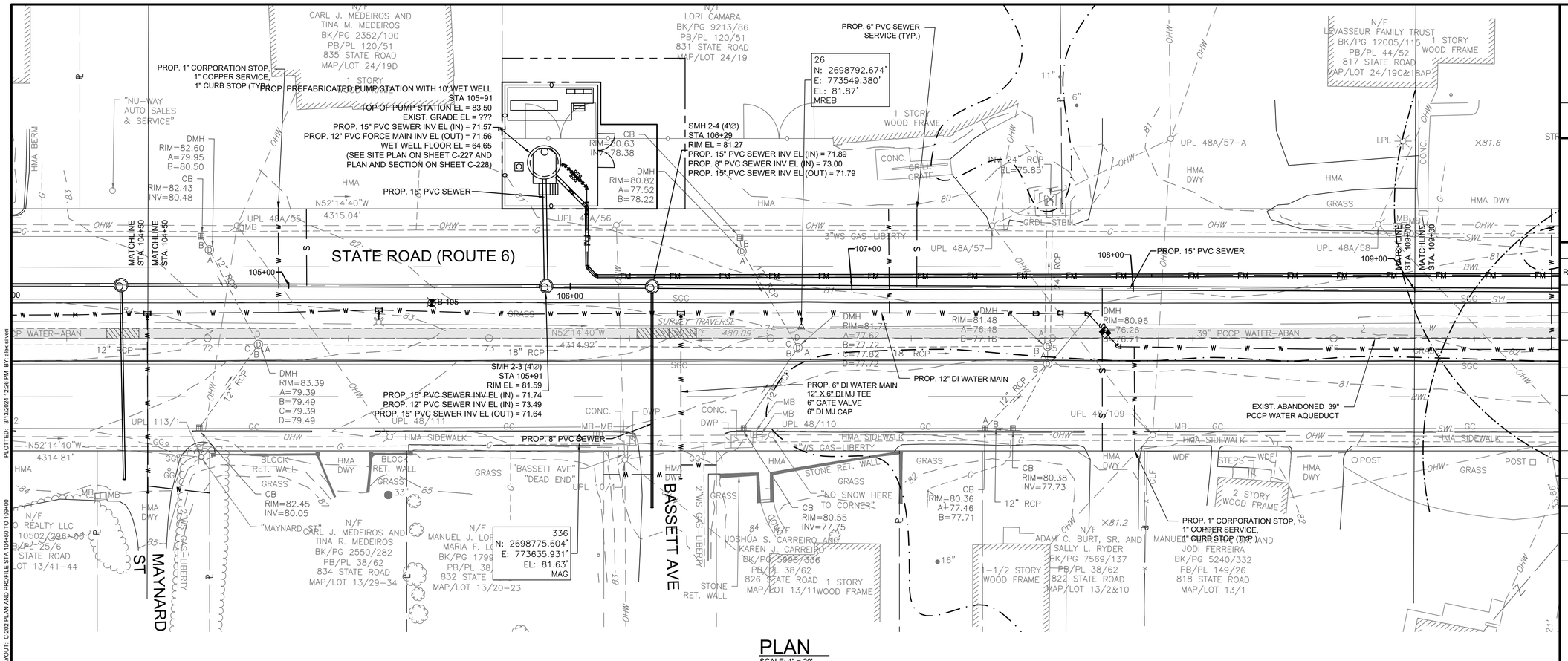

PLAN

SCALE: 1" = 20'

PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 104+50 TO 109+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-202

SHEET 37 of 85

PLOTTED: 3/13/2024 12:28 PM BY: alex.silveri
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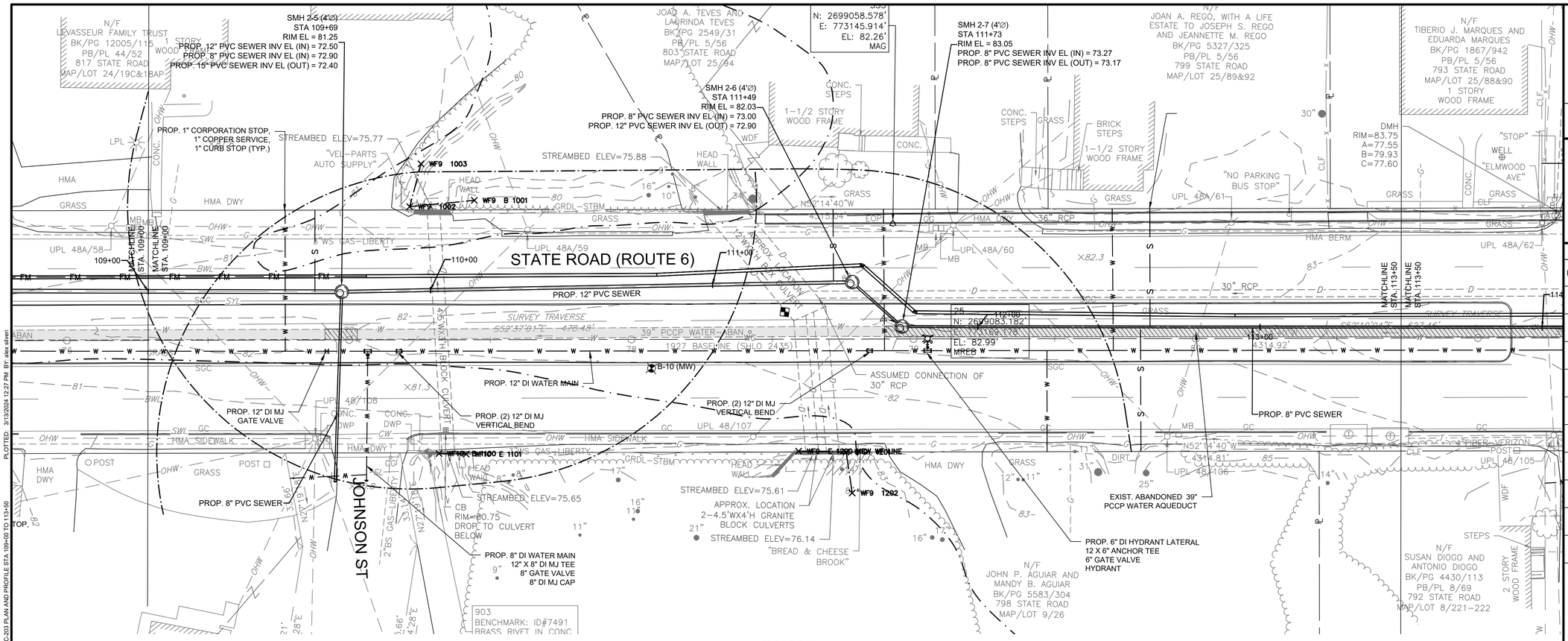
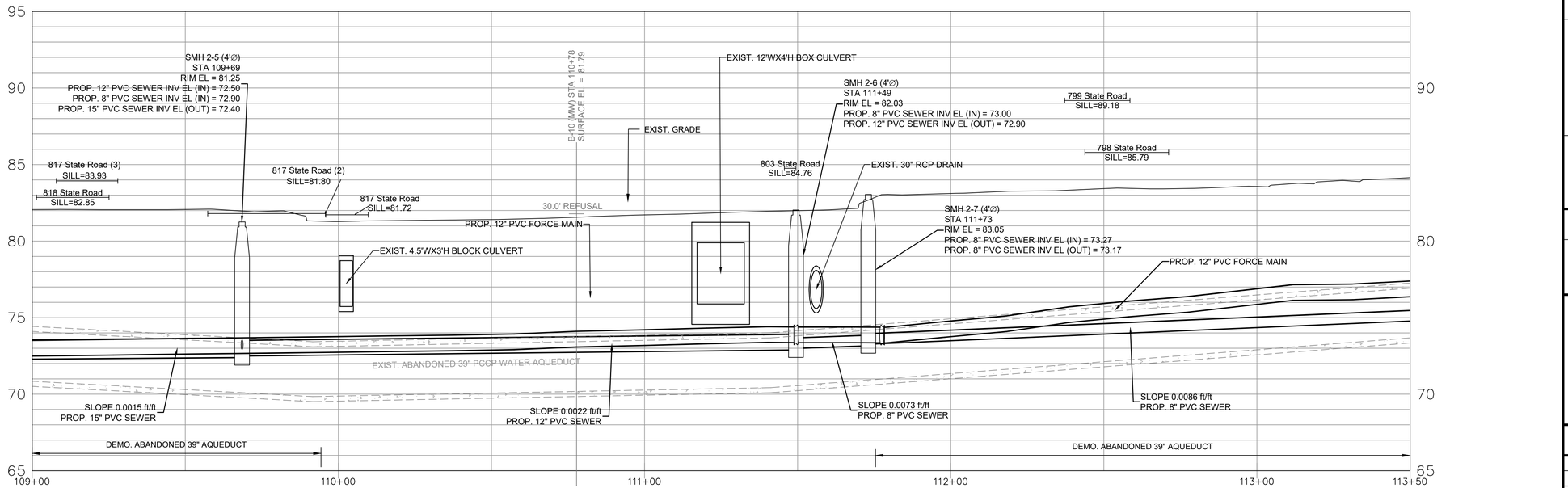


PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40

VERTICAL SCALE: 1"=4'
4 2 0 4 8

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 109+00 TO 11350

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

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PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-203

SHEET 38 of 85

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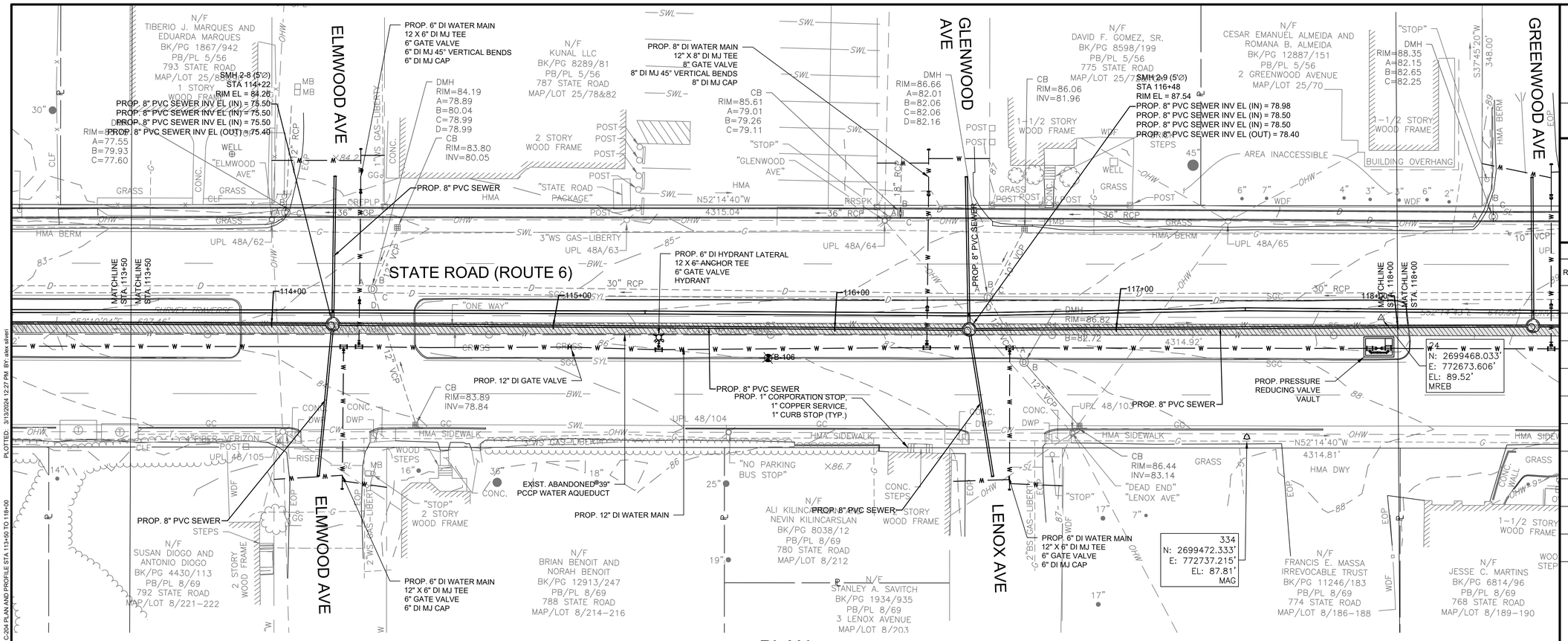
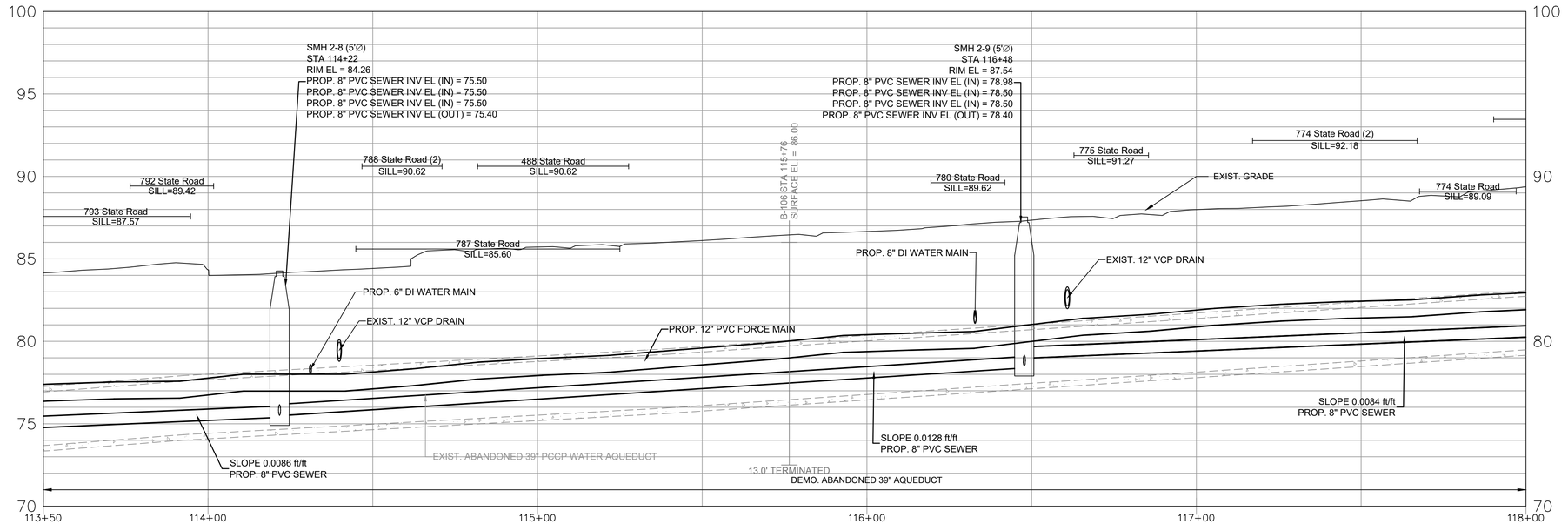


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 113+50 TO 118+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

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C-204

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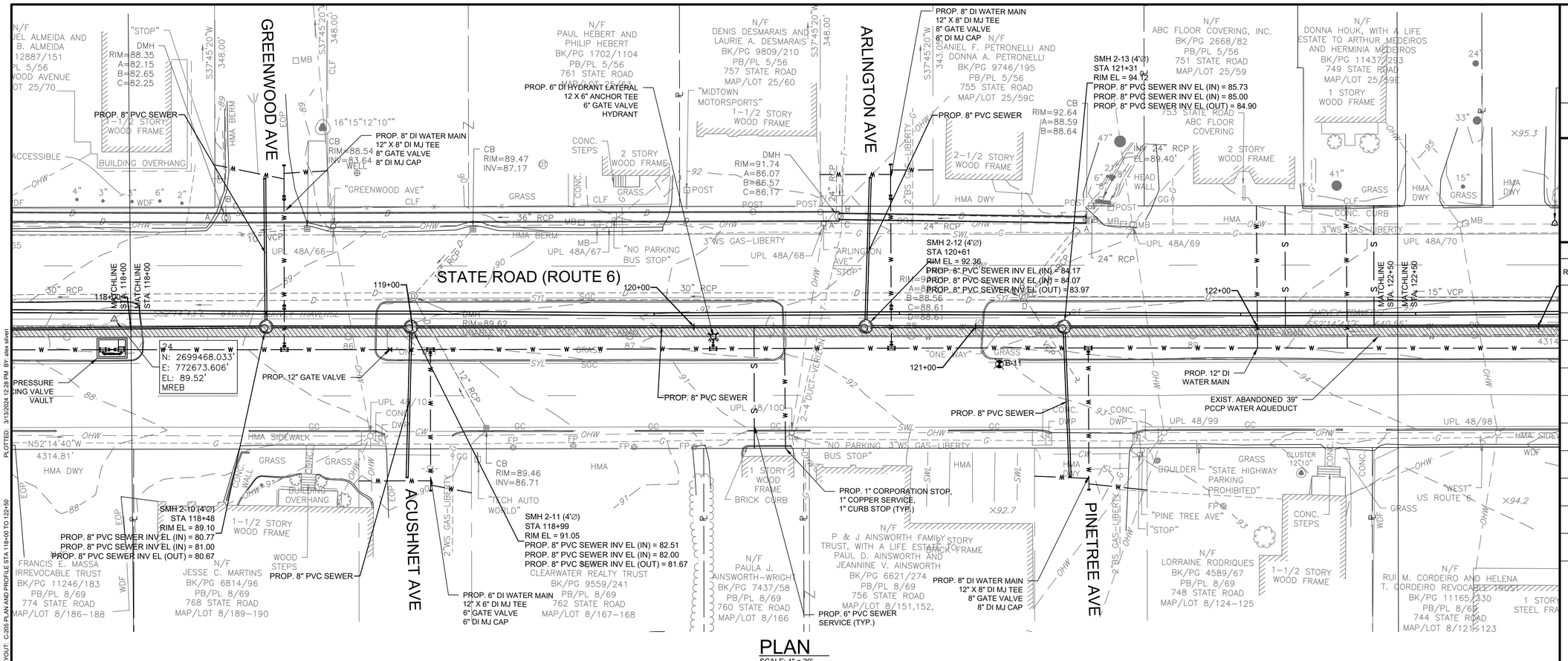
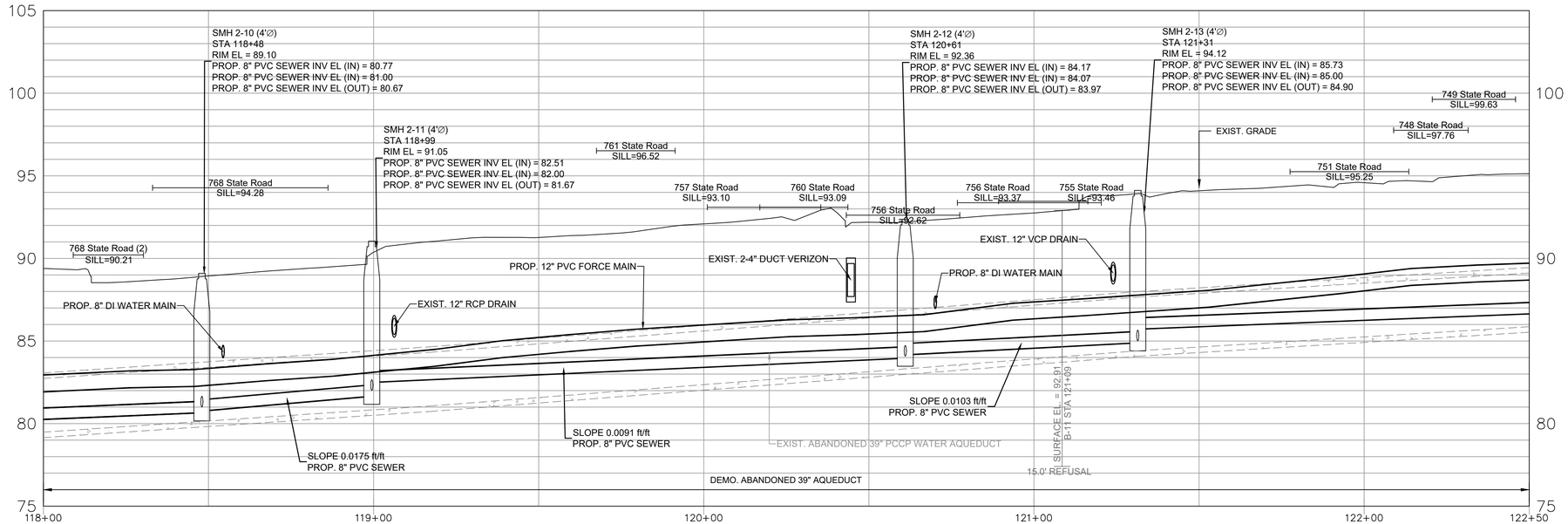


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 118+00 TO 122+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

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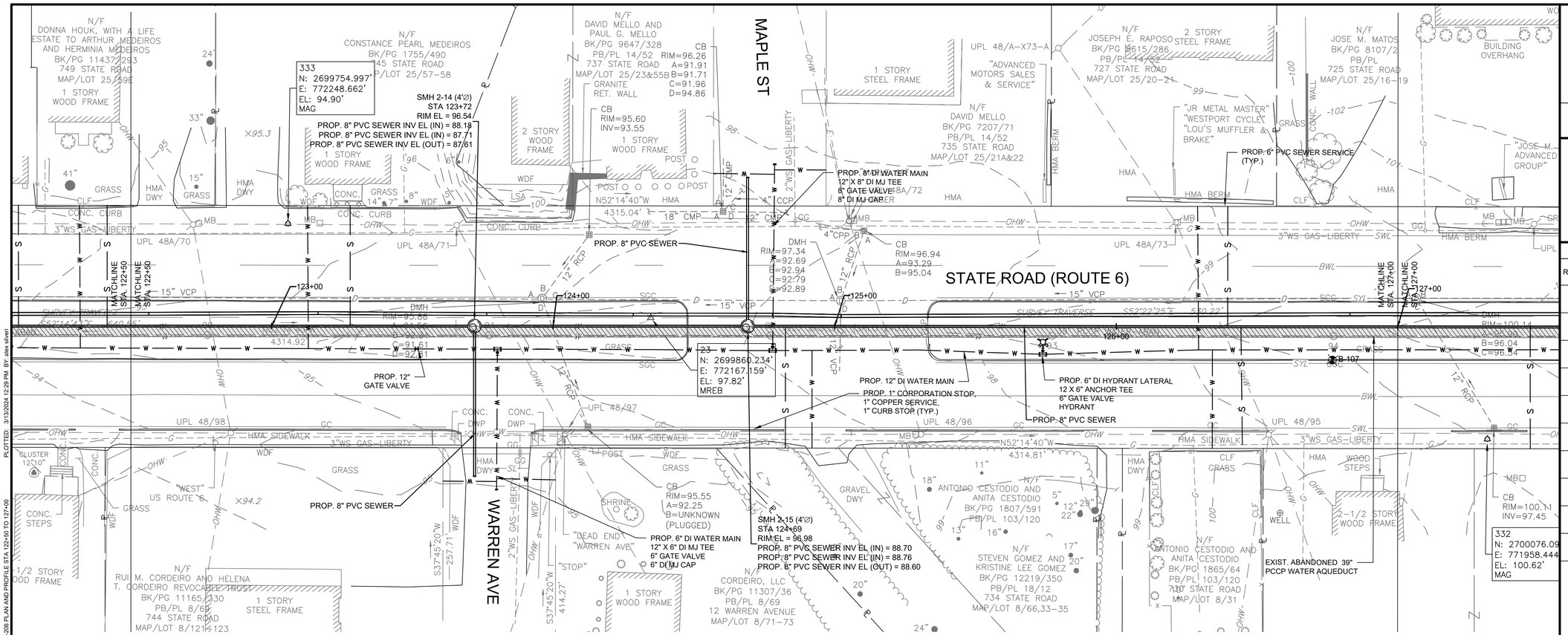
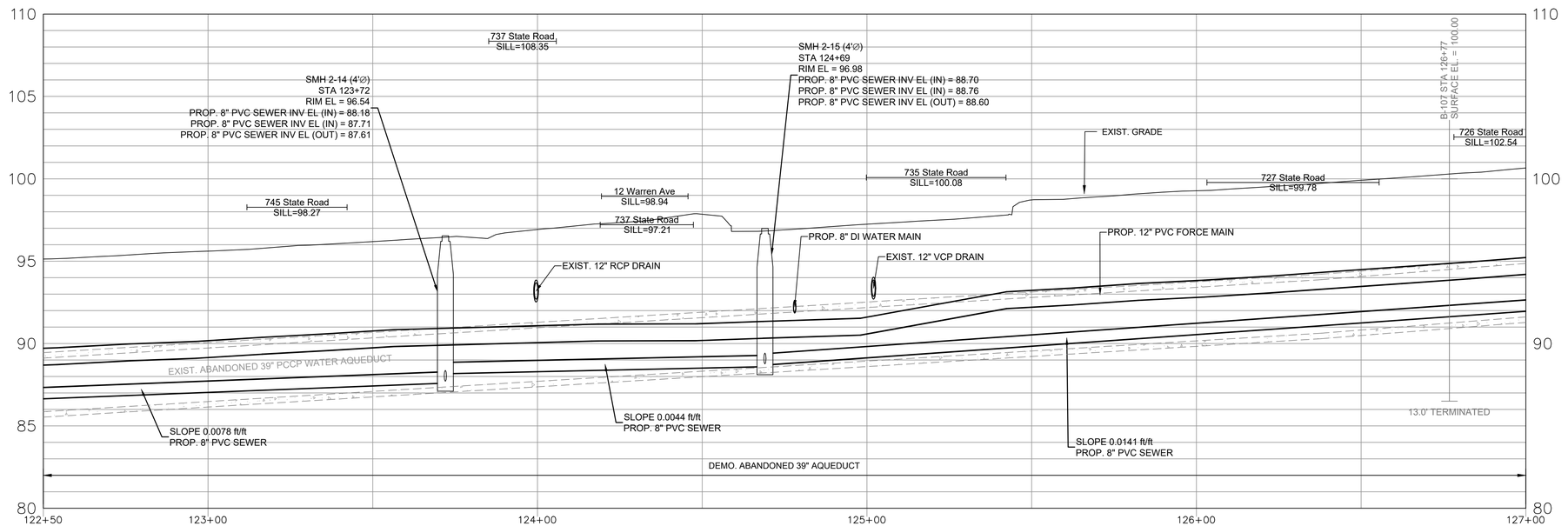


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 122+50 TO 127+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

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WESTPORT, MA 02790

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DESIGNED BY	AS
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CHECKED BY	DTP
APPROVED BY	MT

C-206

SHEET 41 of 85

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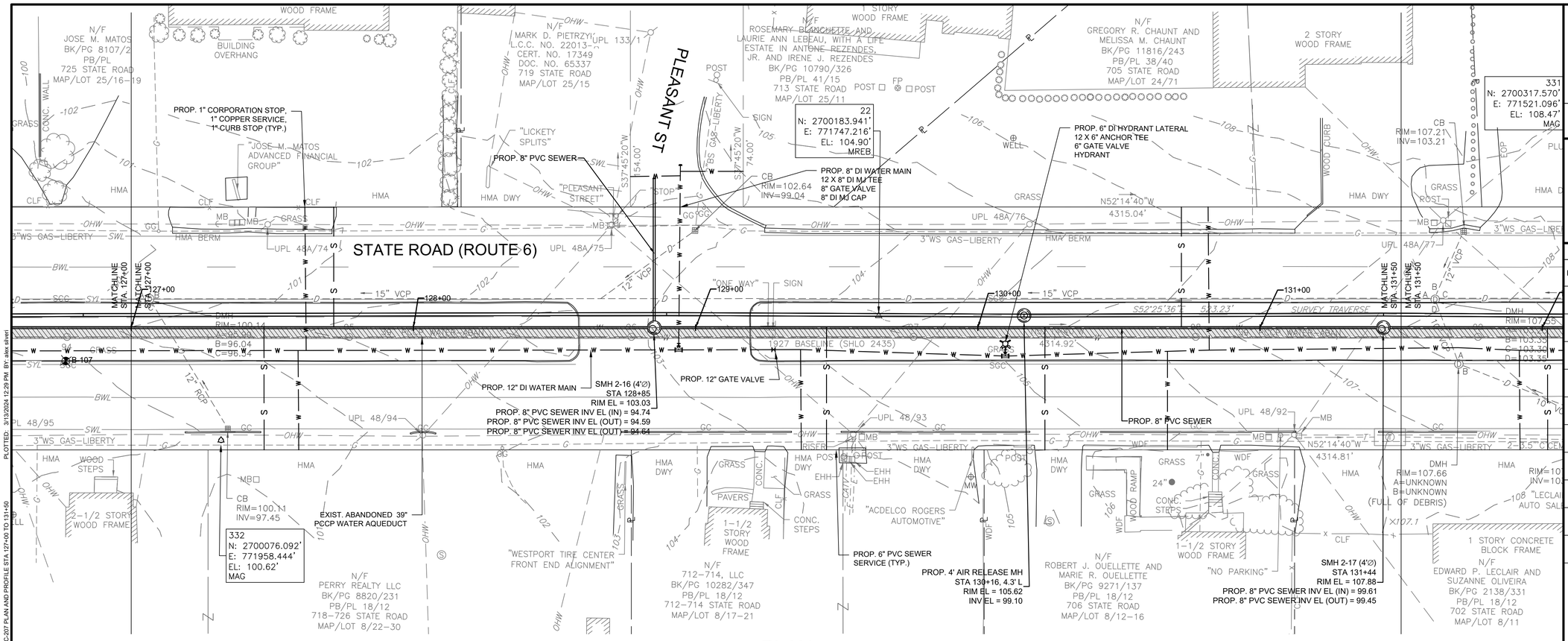
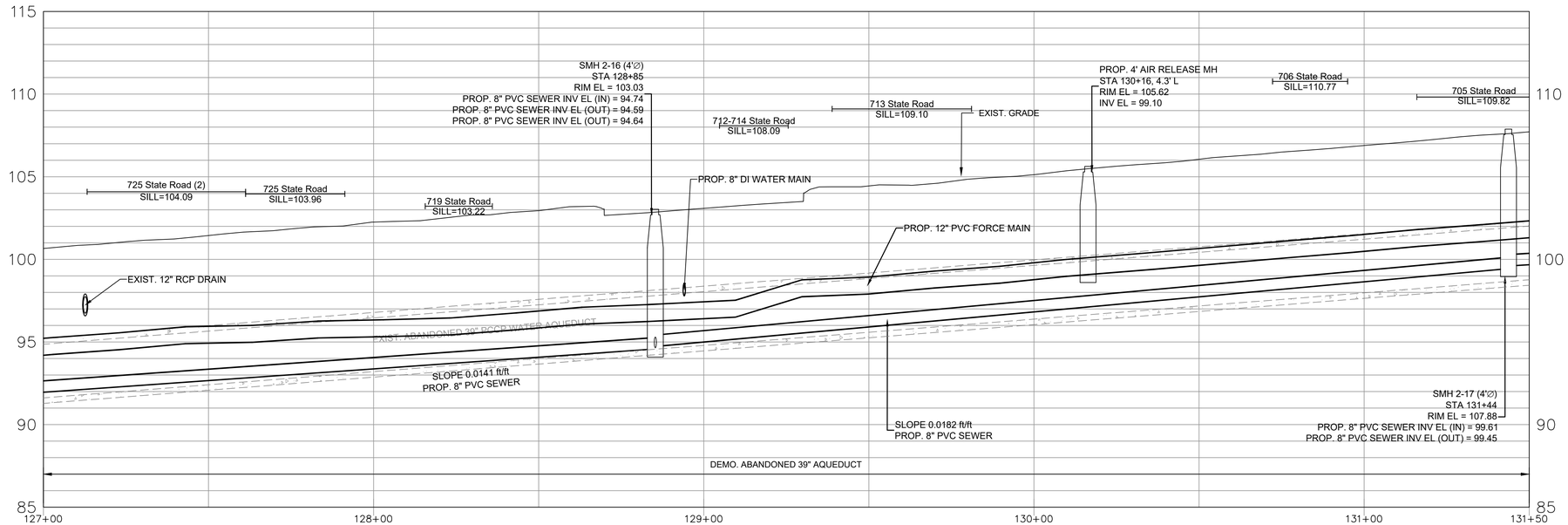
PLOTTED: 3/13/2024 12:29 PM BY: alex silvert



PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 127+00 TO 131+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

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PROJECT NO.	20230698.001A
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CHECKED BY	DTP
APPROVED BY	MT

C-207

SHEET 42 of 85

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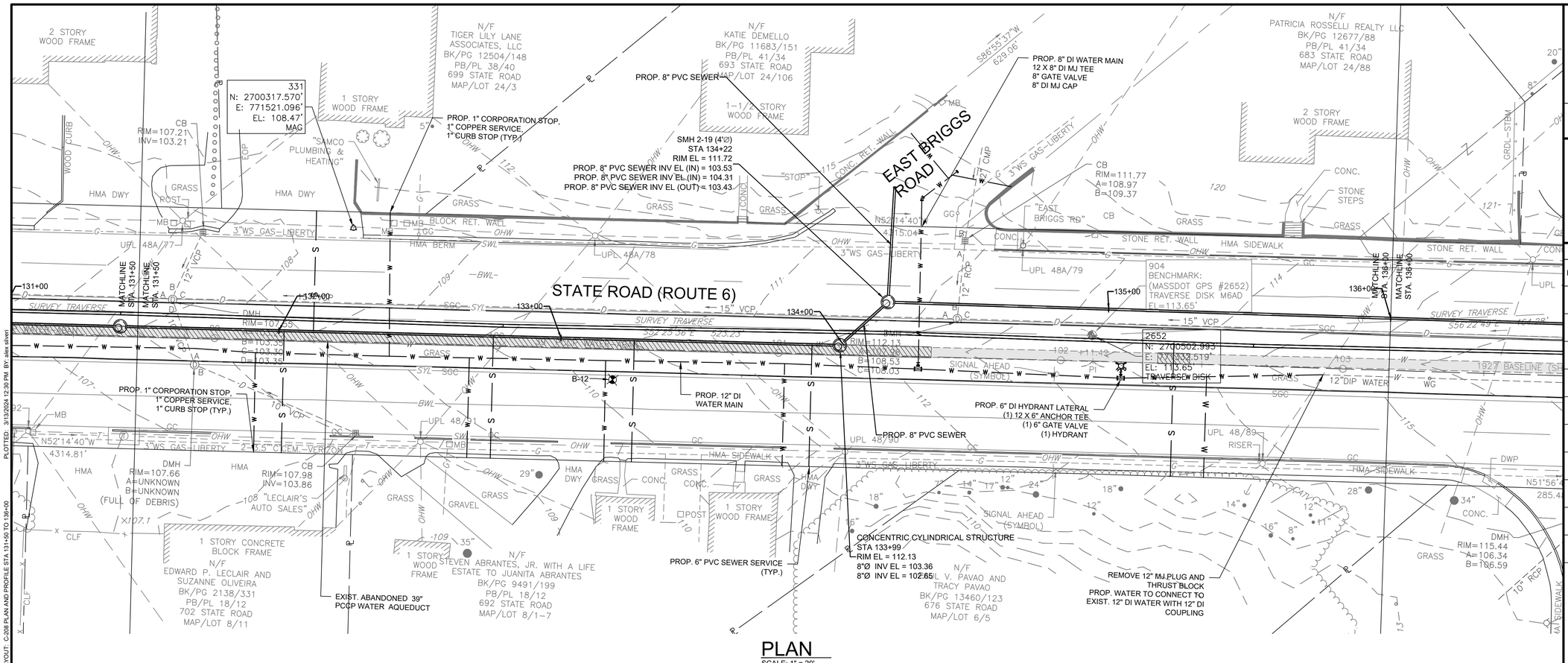
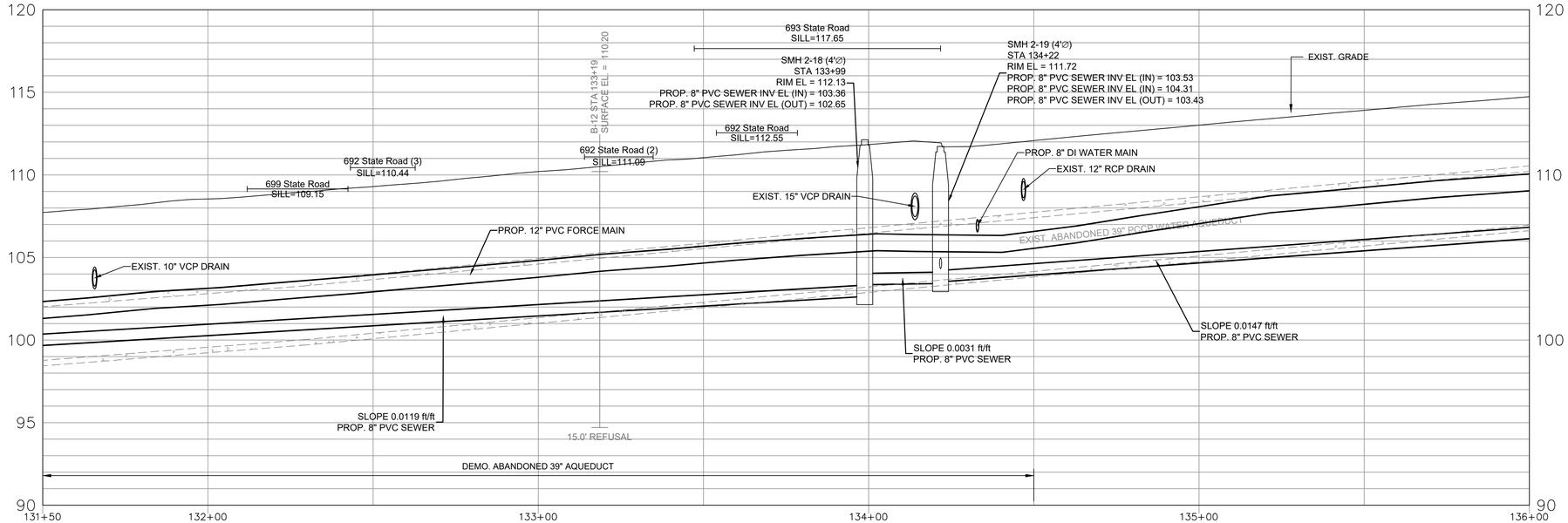


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 131+50 TO 136+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-208

SHEET 43 of 85

PLOTTED: 3/13/2024 12:30 PM BY: alex silveri
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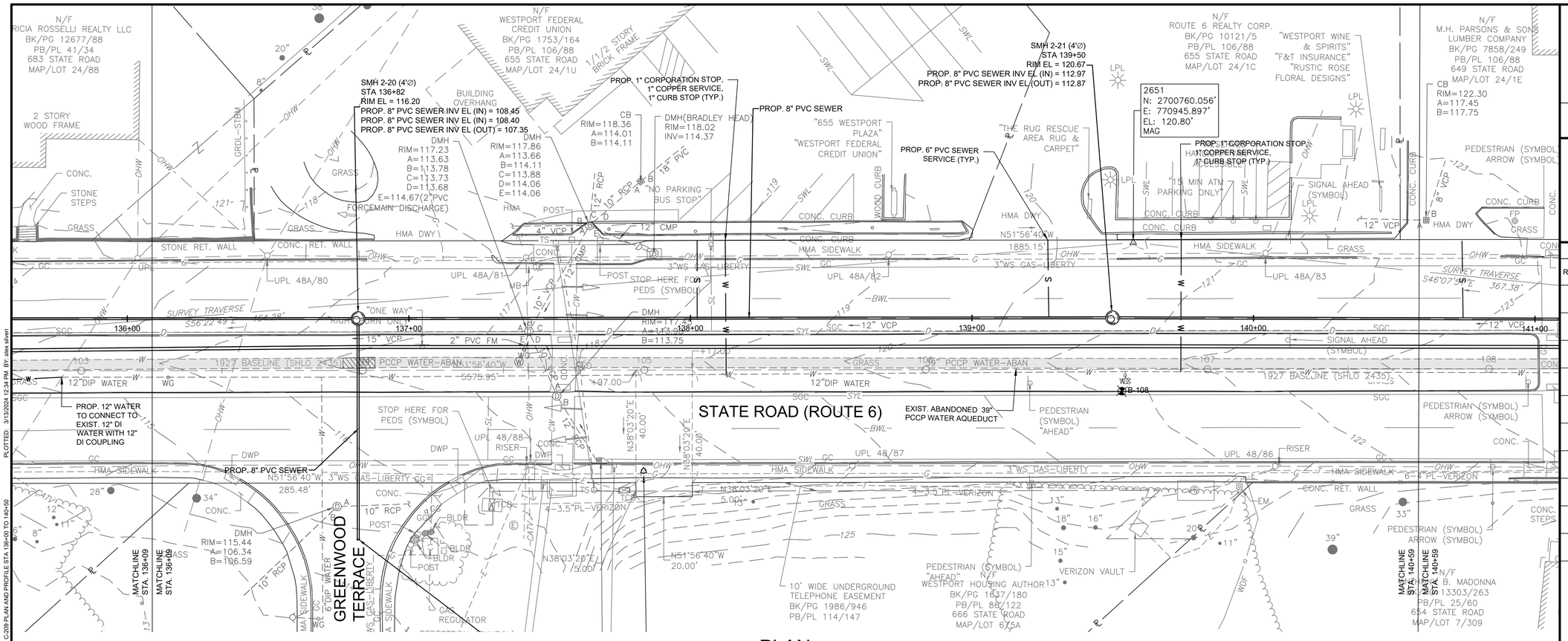
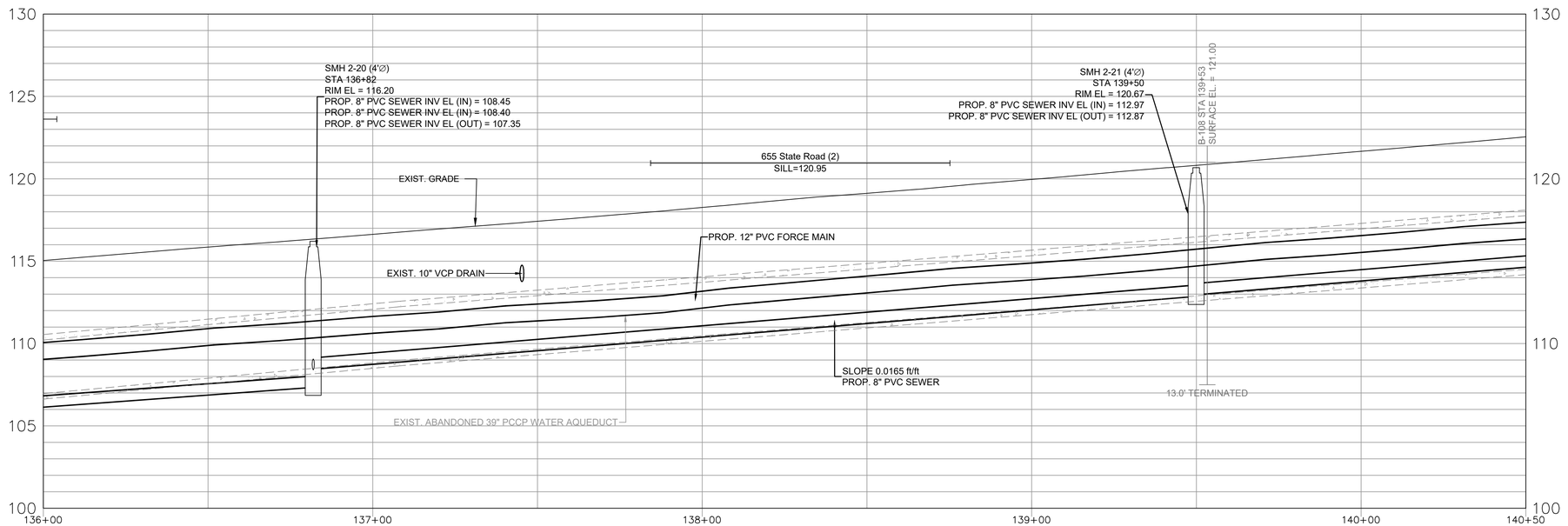


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE 136+00 TO 140+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

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WESTPORT, MA 02790

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PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-209

SHEET 44 of 85

PLOTTED: 3/13/2024 12:34 PM BY: alex silveri

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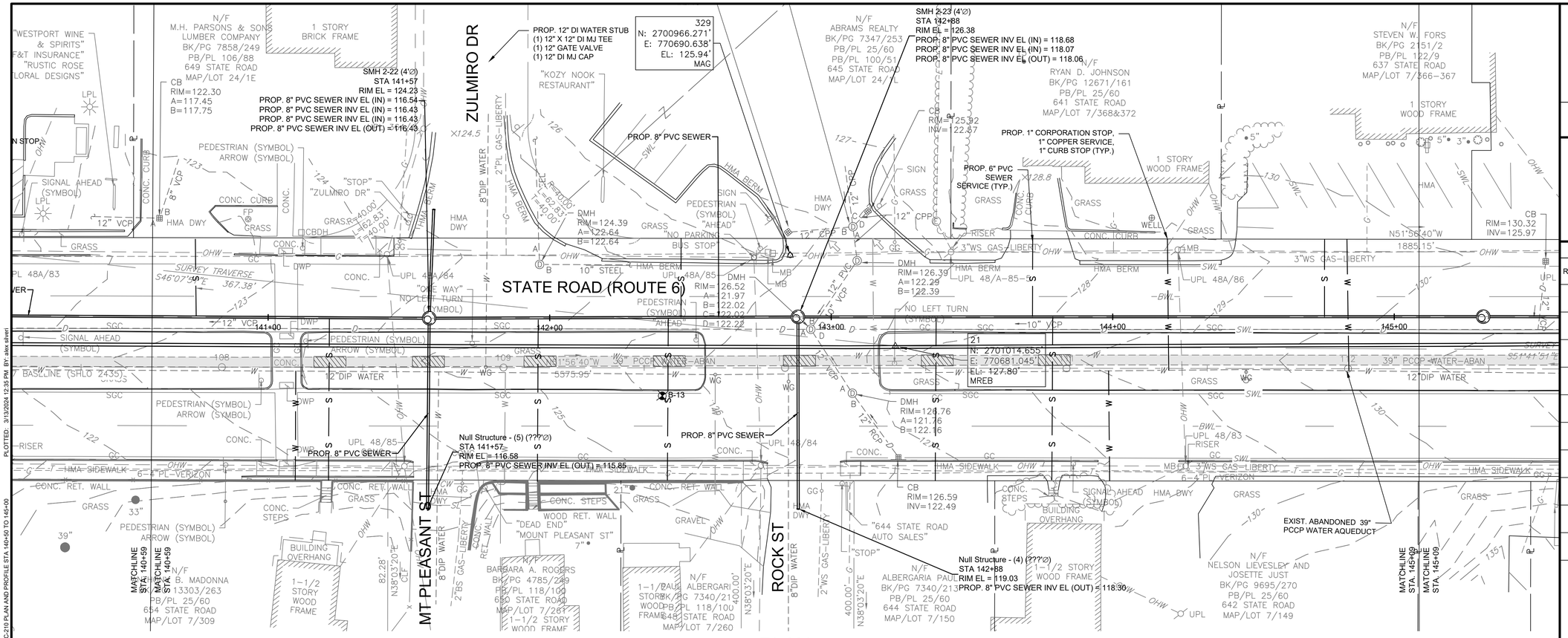
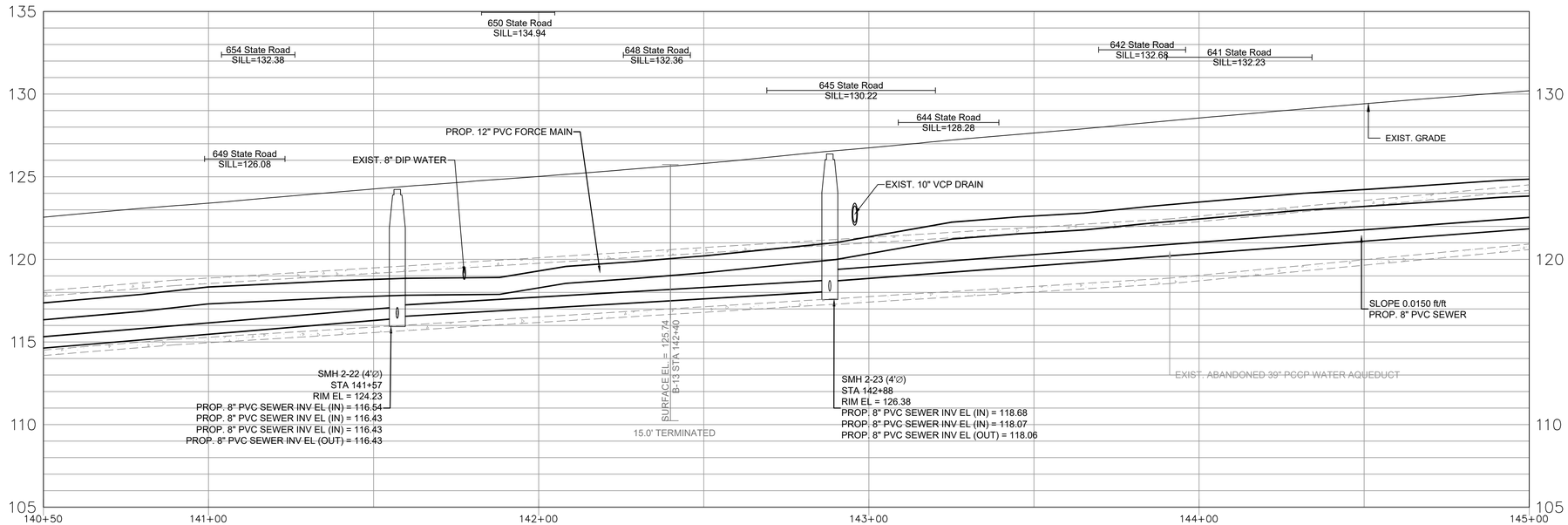


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 140+50 TO 145+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

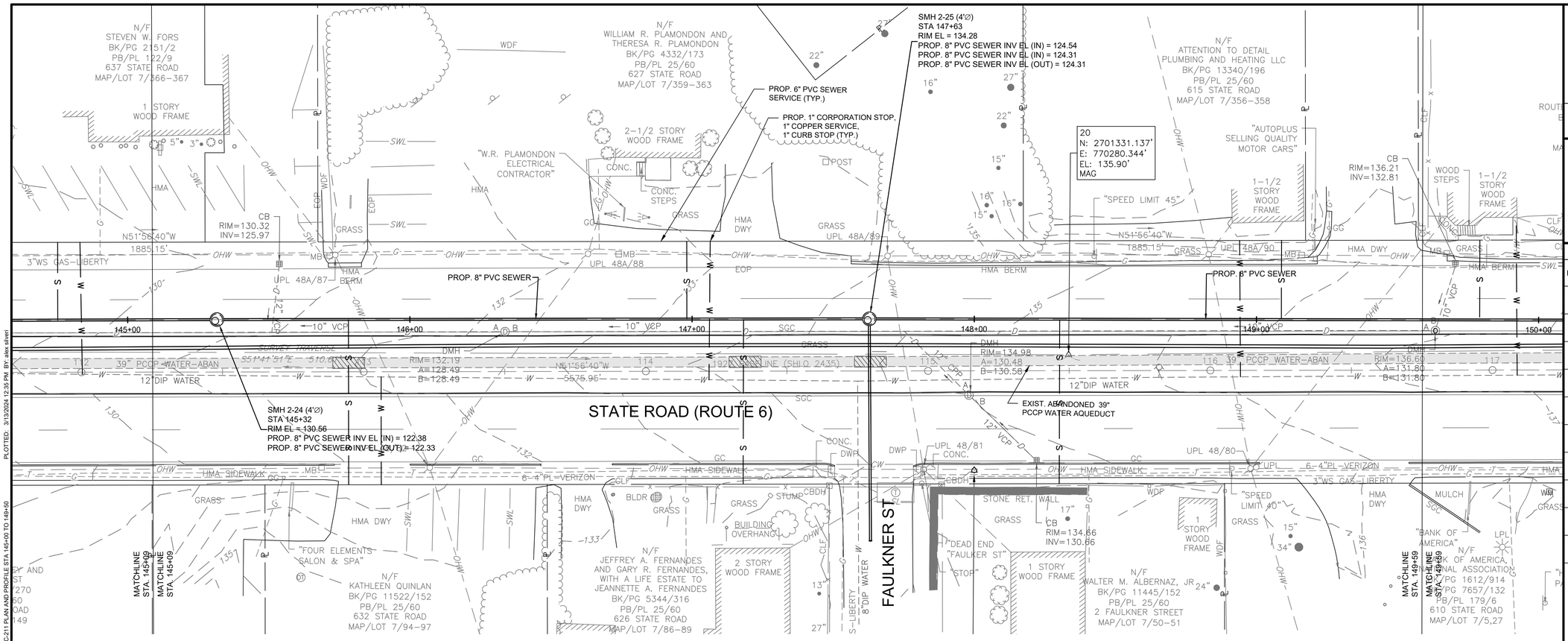
100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-210

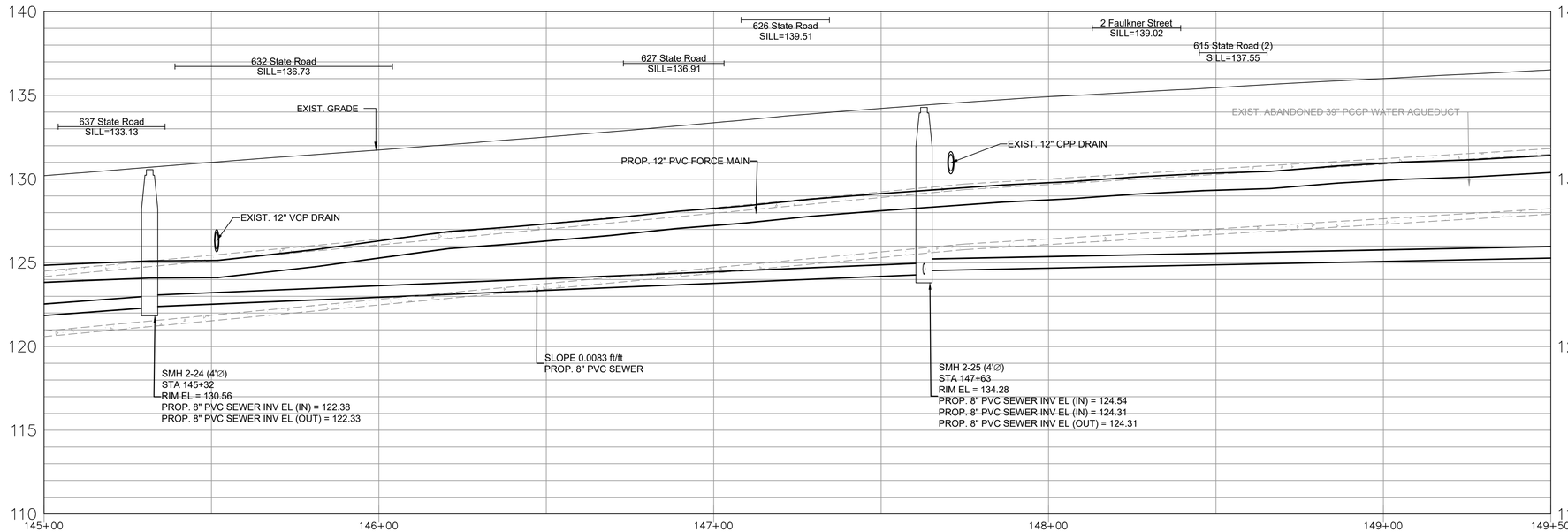
SHEET 45 of 85

PLOTTED: 3/13/2024 12:38 PM BY: alex alvord
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\WFG - PR GRAVITY 1C-1 - (2).dwg LAYOUT: C-210 PLAN AND PROFILE STA 140+50 TO 145+00



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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Boston, MA 02108
Phone: 617-497-7800
www.kleinfelder.com

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 145+00 TO 149+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
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DESIGNED BY	AS
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APPROVED BY	MT

C-211

SHEET 46 of 85

PLOTTED: 3/13/2024 12:35 PM BY: alex alveri
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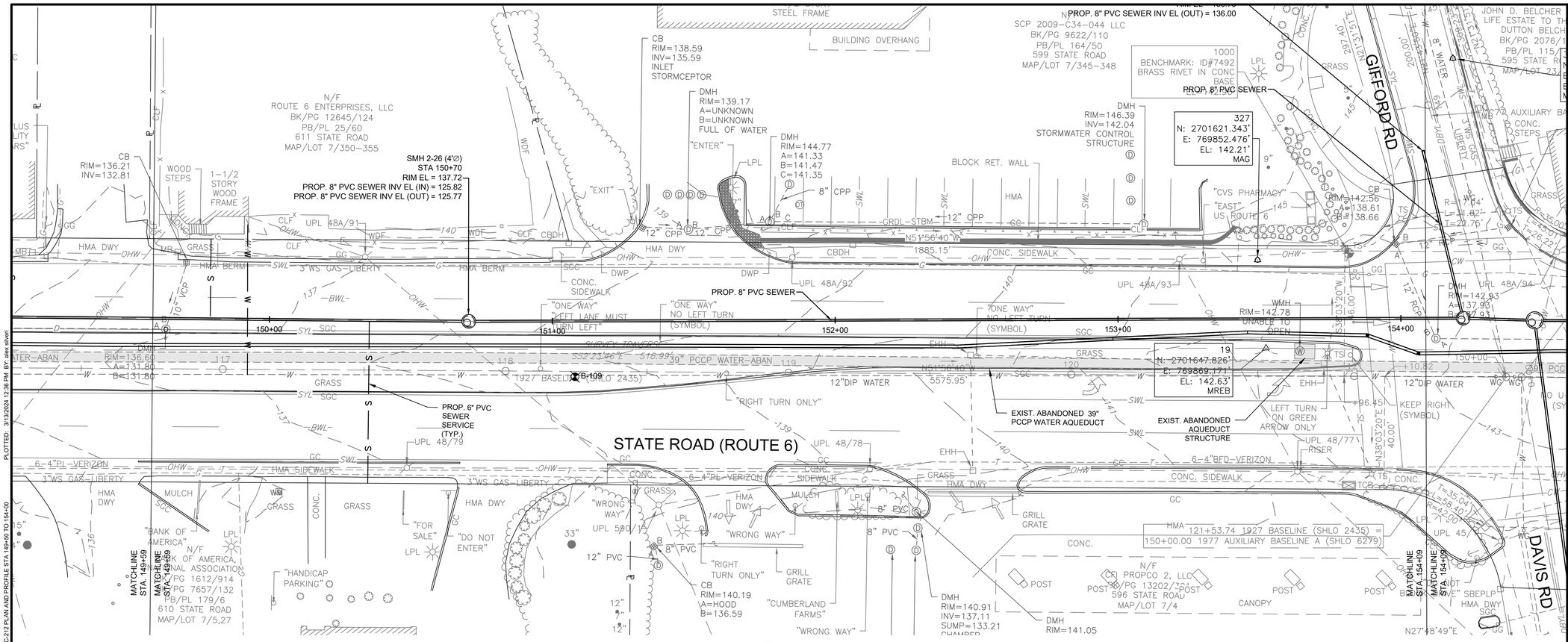
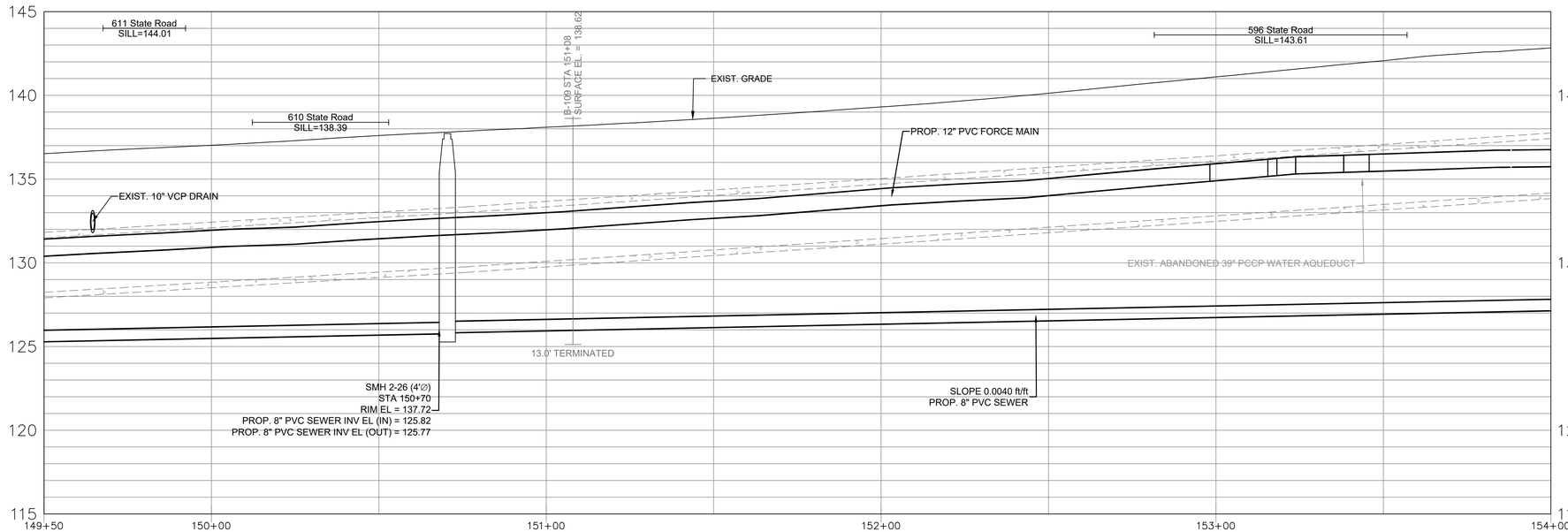


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 149+50 TO 154+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-212

SHEET 47 of 85

PLOTTED: 3/13/2024 12:36 PM BY: alex silveri
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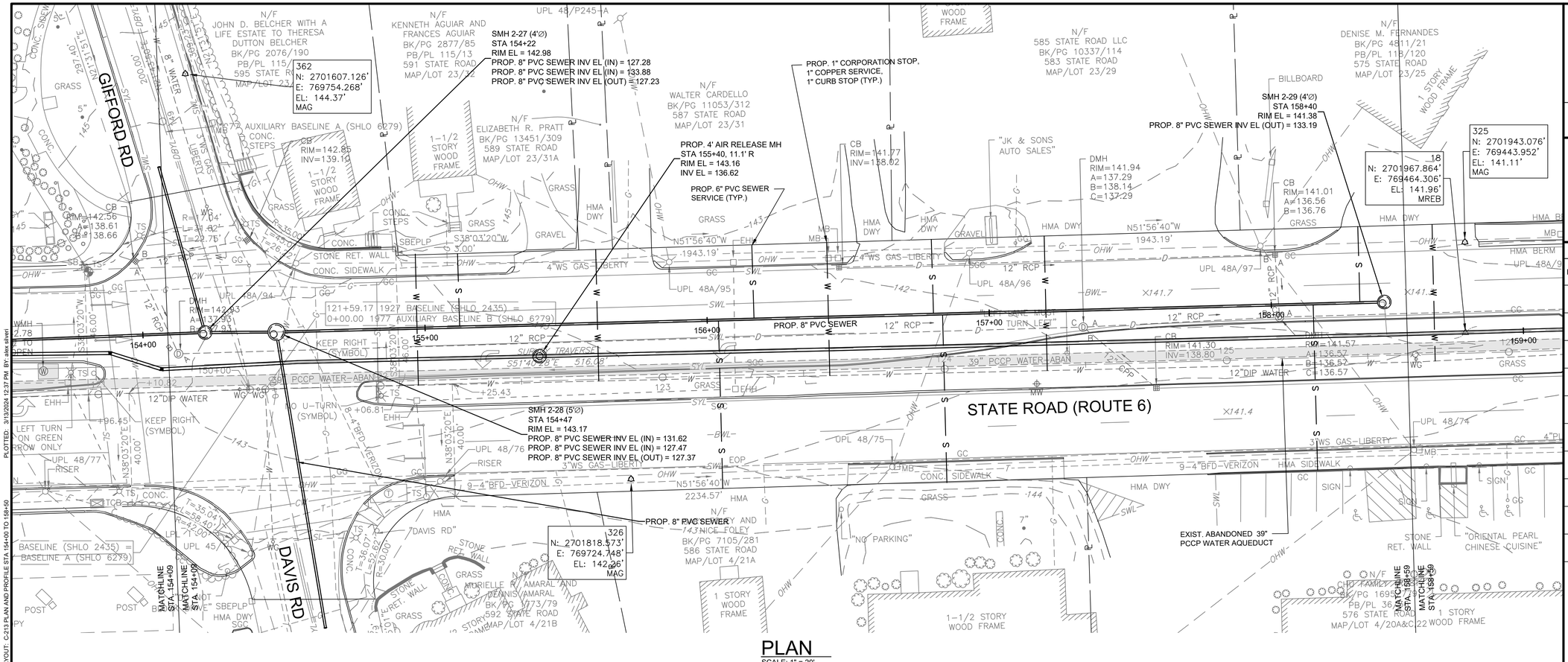
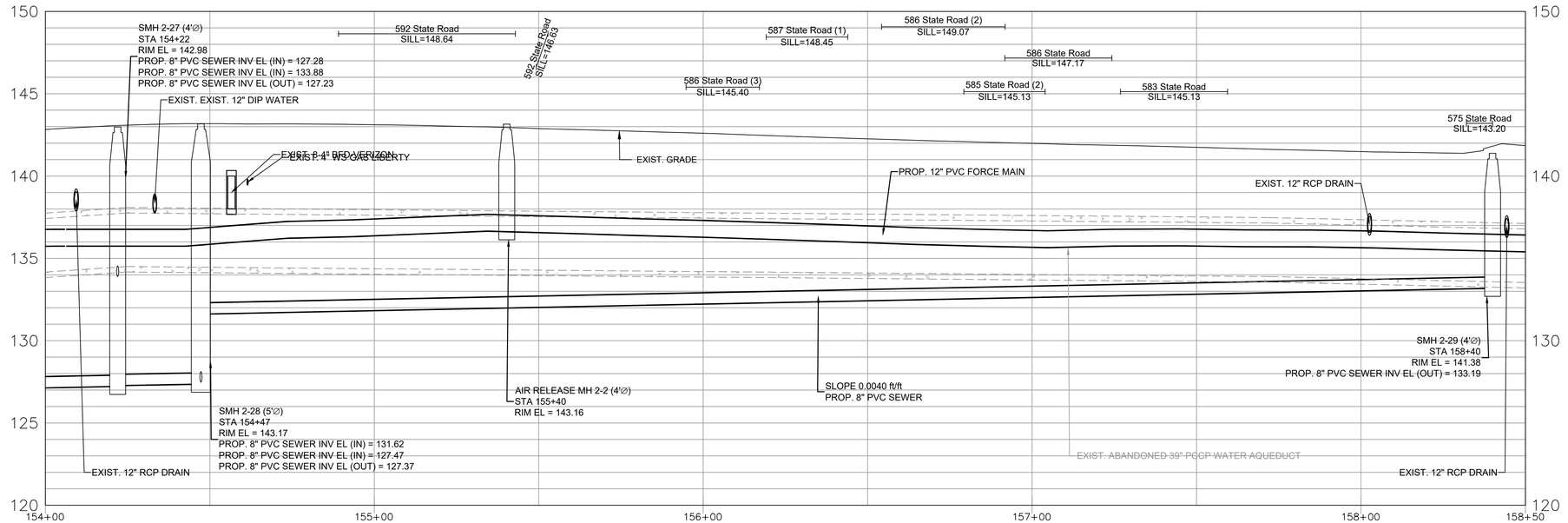


PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 154+00 TO 158+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

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DRAWN BY	JL
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APPROVED BY	MT

C-213

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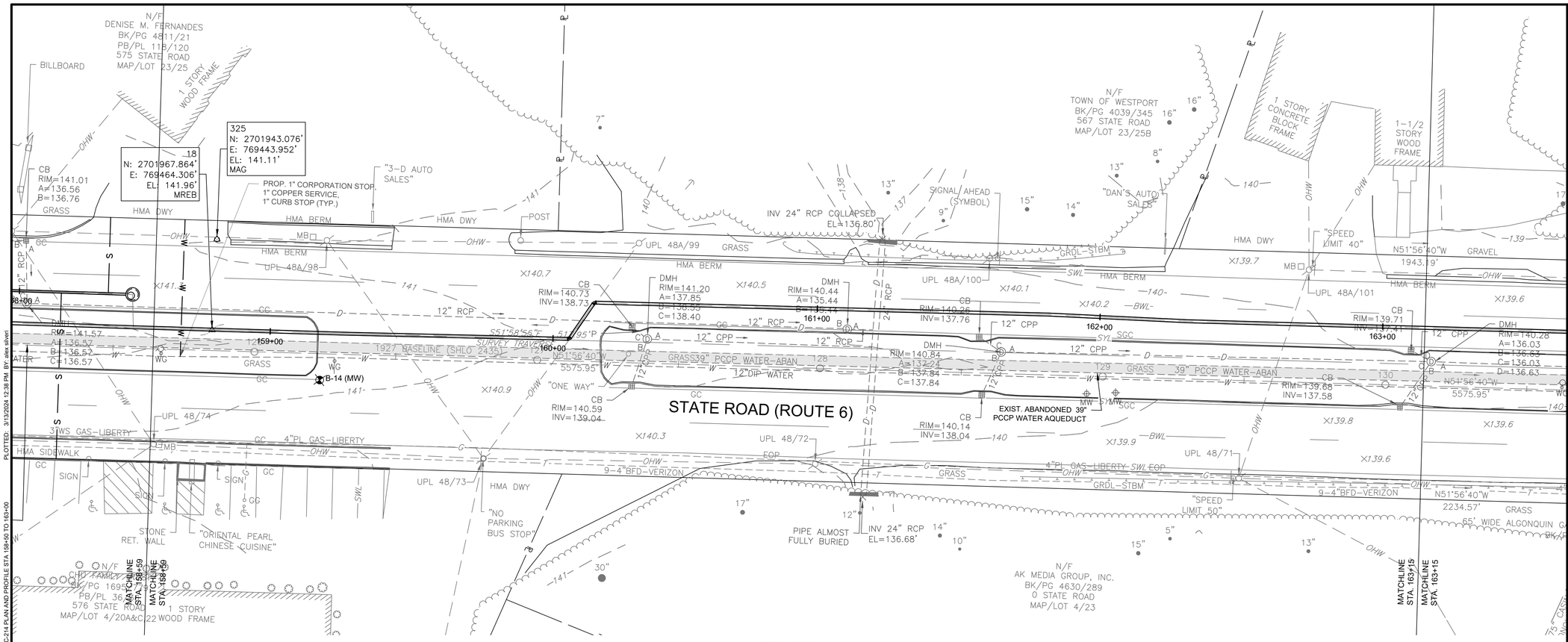
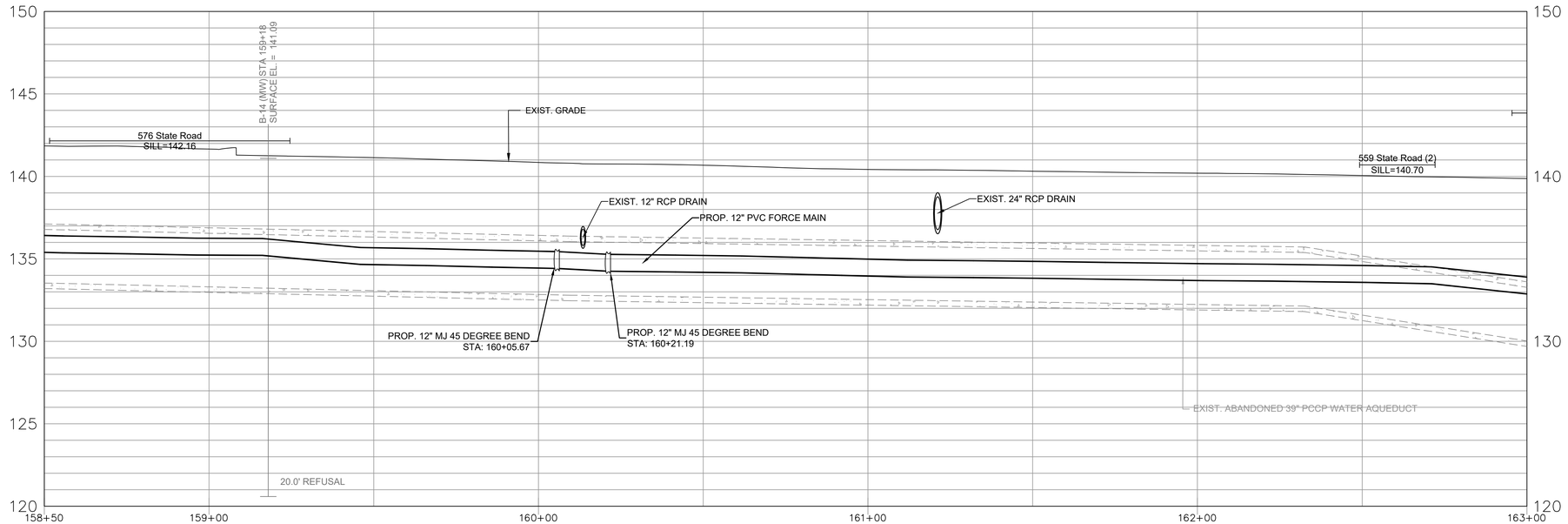
PLOTTED: 3/13/2024 12:38 PM BY: alex silveri



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 158+50 TO 163+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

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WESTPORT, MA 02790

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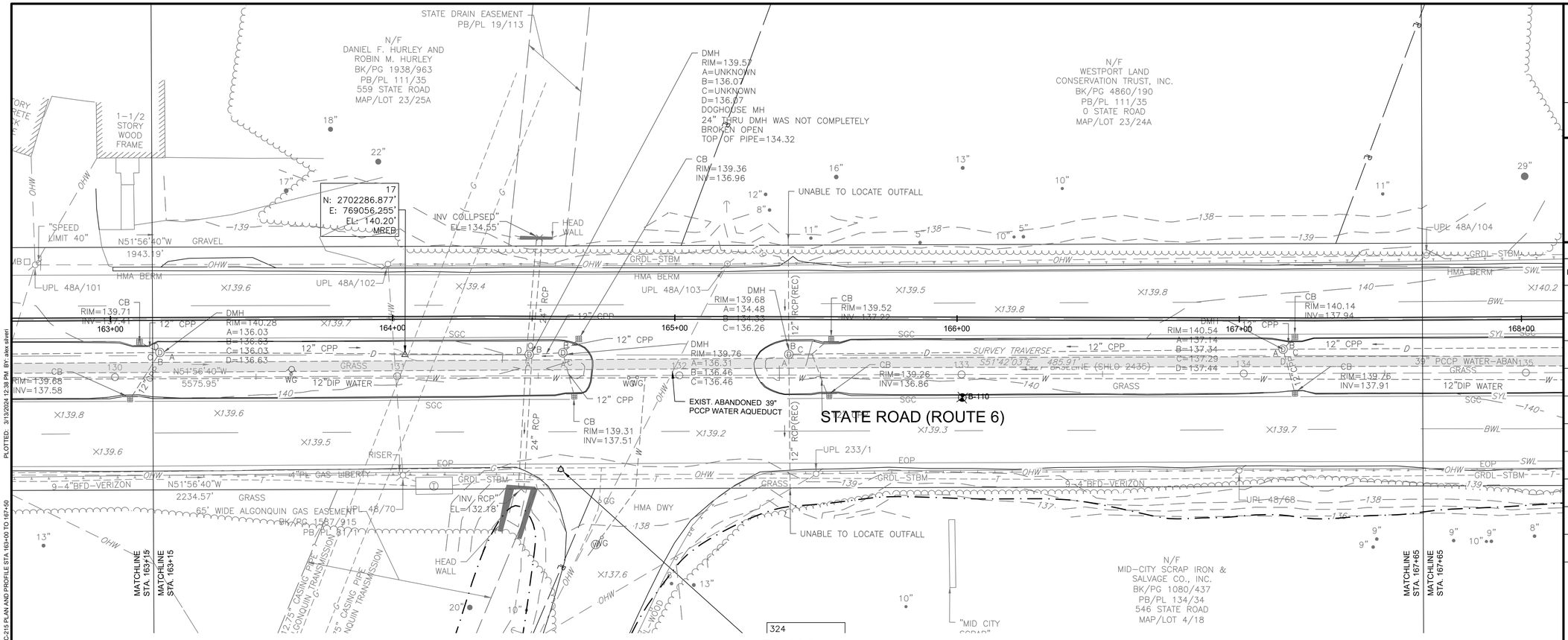
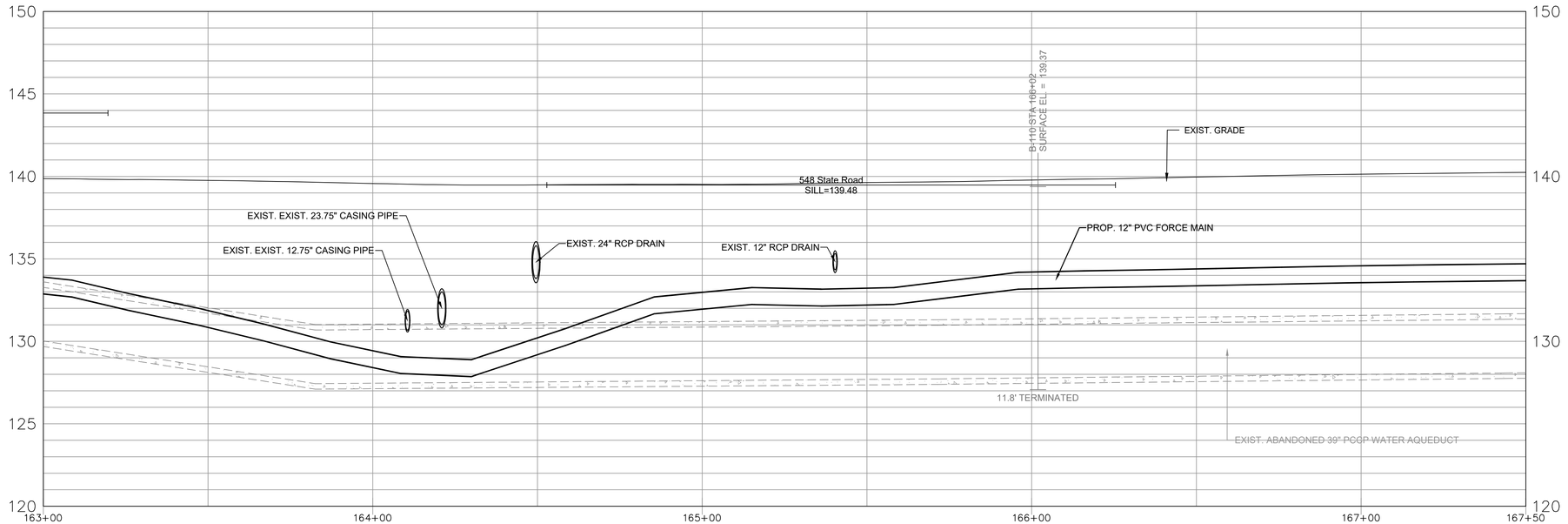
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-214



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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SCALE VERIFICATION

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 163+00 TO 167+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-215

SHEET 50 of 85

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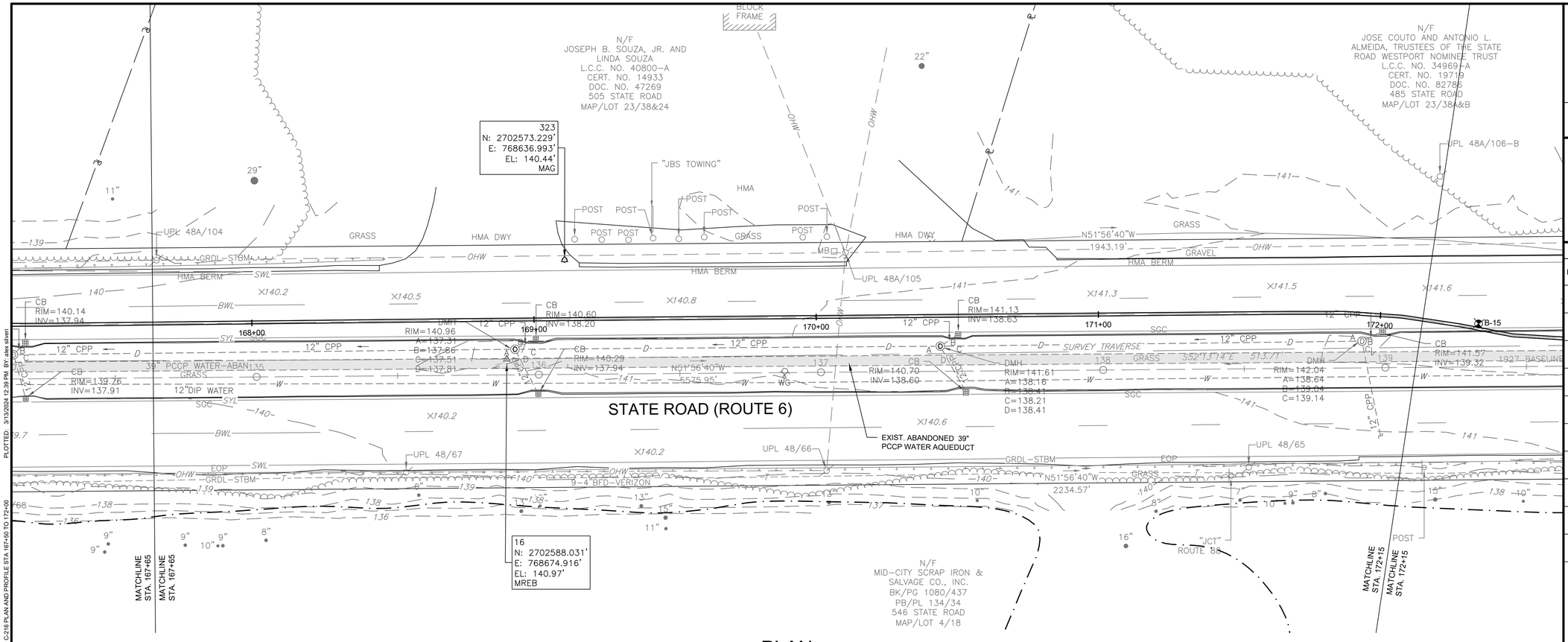
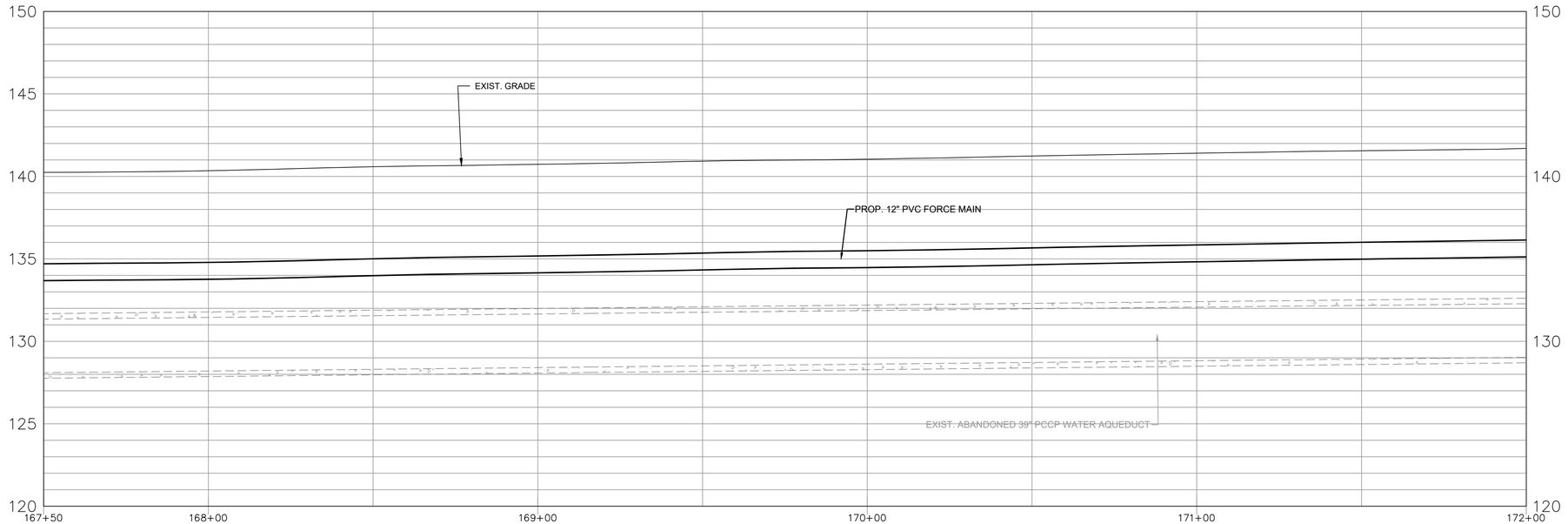


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REVISIONS

REV	DESCRIPTION	DSN / DWN	CHK / APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 167+50 TO 172+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-216

SHEET 51 of 85

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N/F
JOSE COUTO AND ANTONIO L. ALMEIDA, TRUSTEES OF THE STATE ROAD WESTPORT NOMINEE TRUST
L.C.C. NO. 34969-A
CERT. NO. 19719
DOC. NO. 82786
485 STATE ROAD
MAP/LOT 23/38A&B

2 STORY STEEL FRAME BUILDING OVERHANG

N/F
ALYMERE, L.L.C.
BK/PG 7112/261
479 STATE ROAD
MAP/LOT 23/23

AIR RELEASE MH 2-3
STA 174+35
RIM EL = 142.12
INV EL = 135.62

322
N: 2702941.524'
E: 768164.310'
EL: 141.29'
MAG

15
N: 2702902.739'
E: 768268.895'
EL: 142.40'
MREB

PROP. 12" PVC FORCE MAIN

STATE ROAD (ROUTE 6)

1927 BASELINE (SHLO 2435)

SURVEY TRAVERSE

39" PCCP WATER-ABAN

12"DIP WATER

EXIST. ABANDONED 39" PCCP WATER AQUEDUCT

"88 NORTH TO 195 NEXT RIGHT"
"88 SOUTH HORSENECK BEACH"

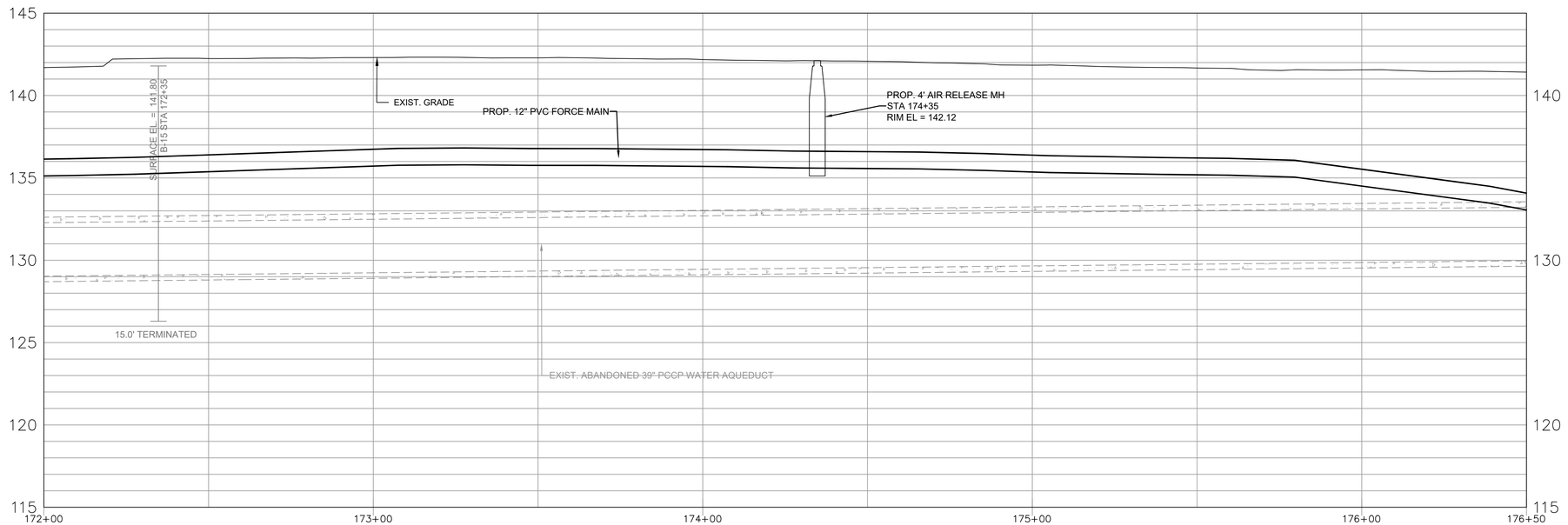
N/F
MID-CITY SCRAP IRON & SALVAGE CO., INC.
BK/PG 1080/437
PB/PL 134/34
546 STATE ROAD
MAP/LOT 4/18

MATCHLINE STA. 172+00

MATCHLINE STA. 176+50

PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 172+00 TO 176+50

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-217

SHEET 52 of 85

PLOTTED: 3/13/2024 12:43 PM BY: alex.silvert

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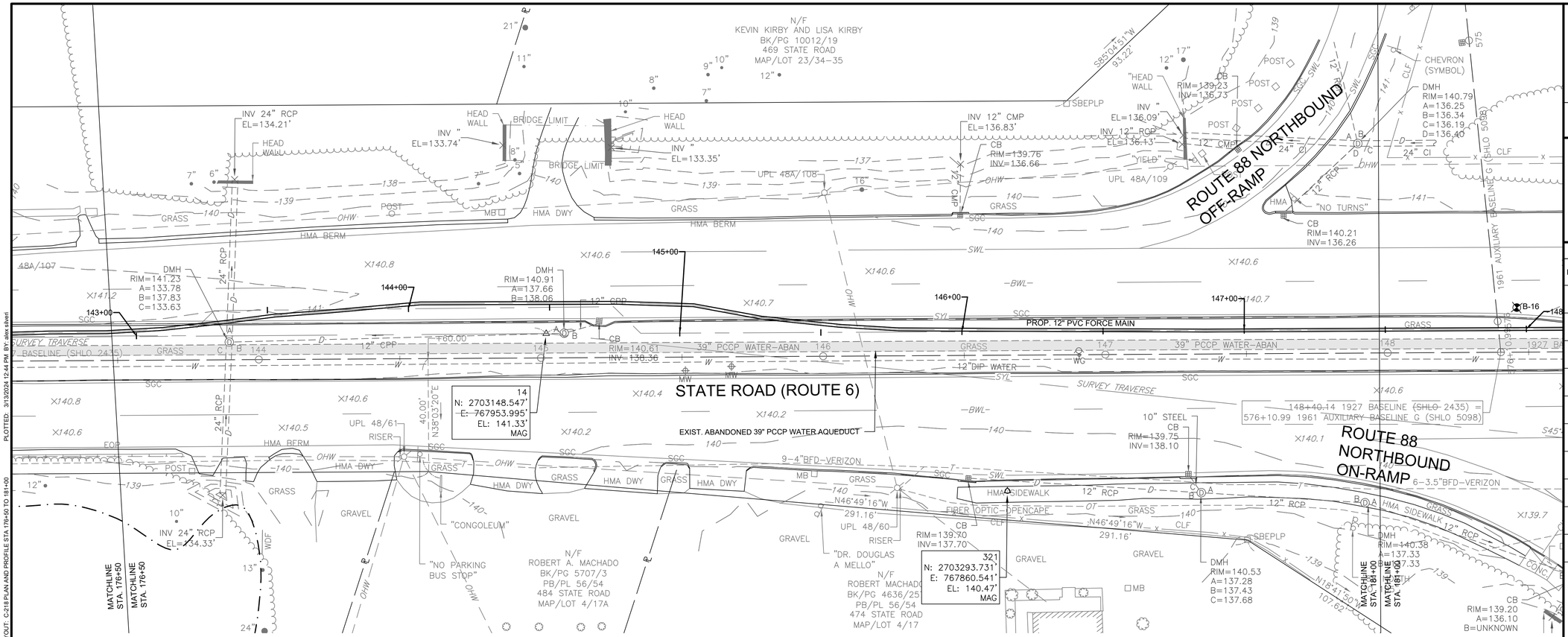
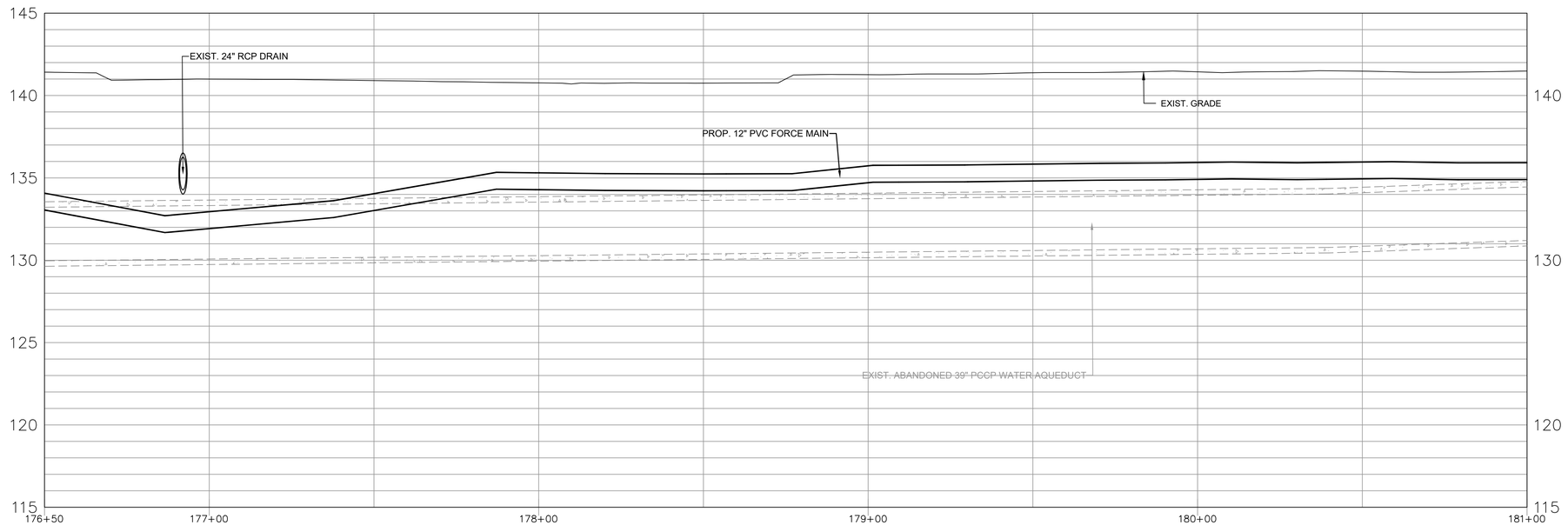


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 176+50 TO 181+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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ISSUE DATE	03/13/24
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DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-218

SHEET 53 of 85

PLOTTED: 3/13/2024 12:44 PM BY: alex silvert
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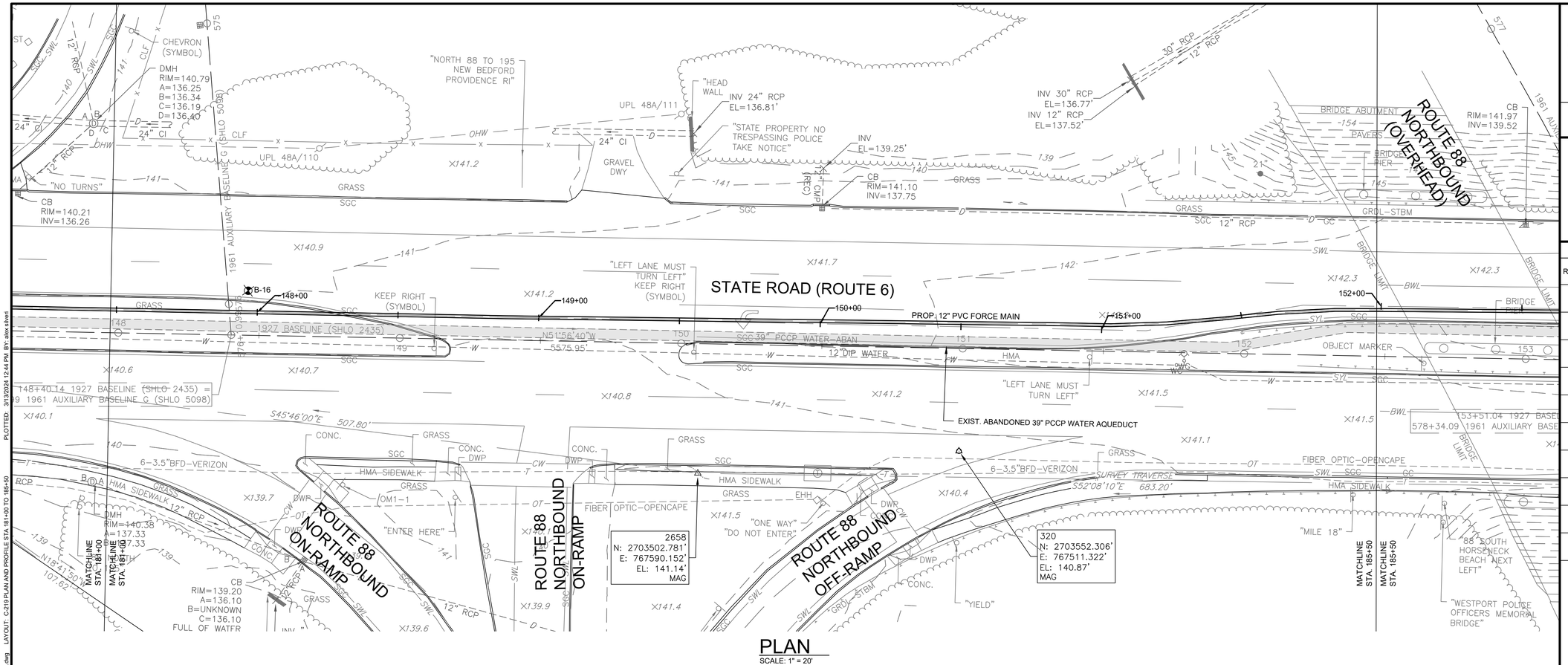

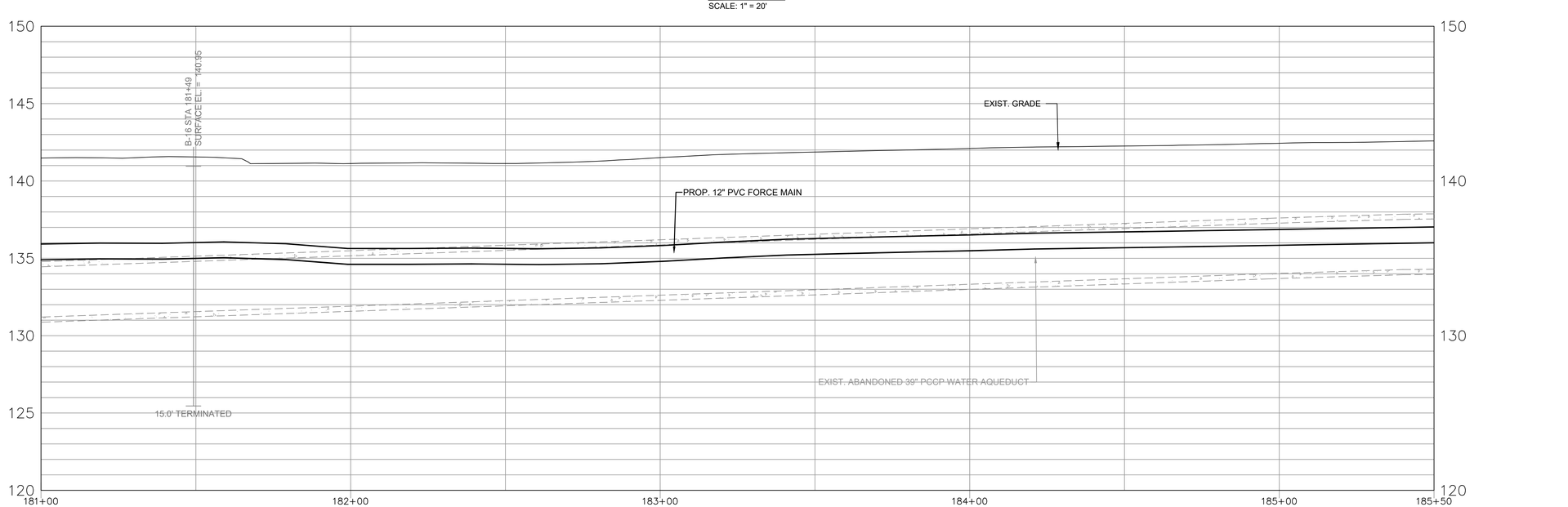

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 181+00 TO 185+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

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APPROVED BY	MT

C-219

SHEET 54 of 85

PLOTTED: 3/13/2024 12:44 PM BY: alex.silveri
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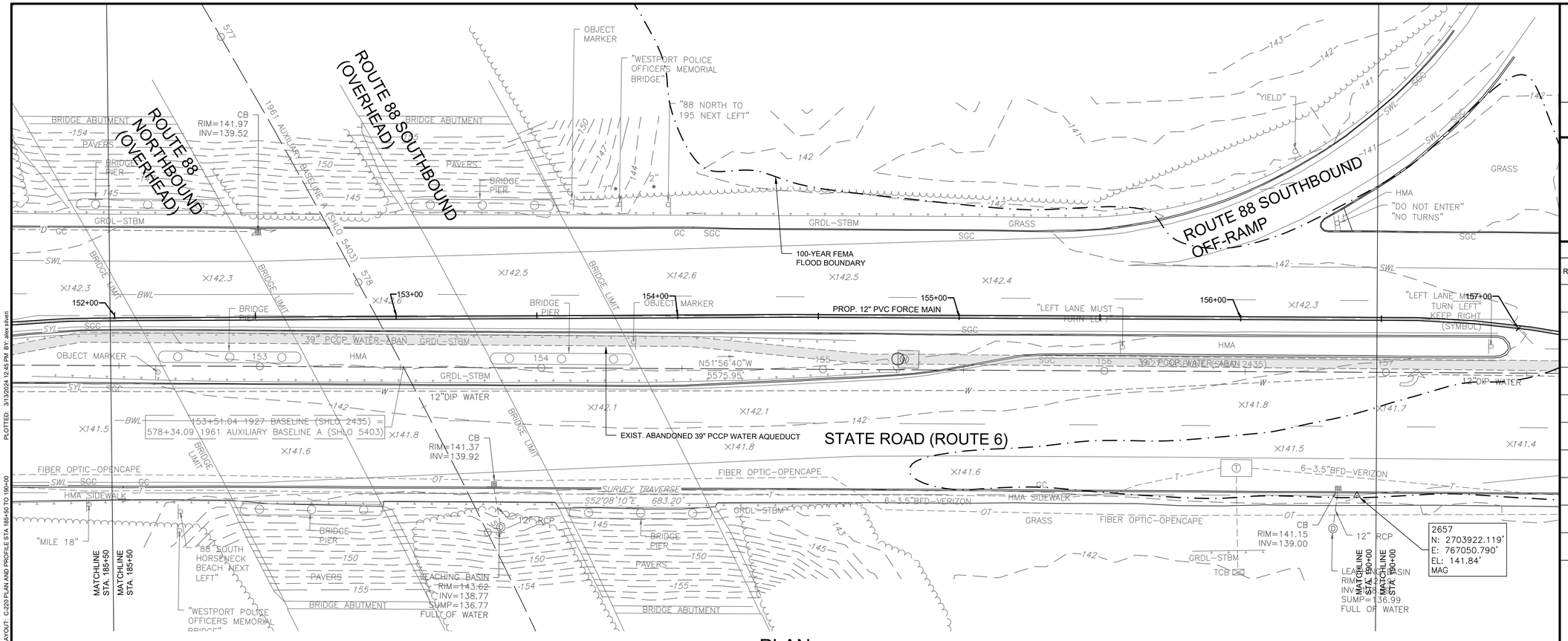
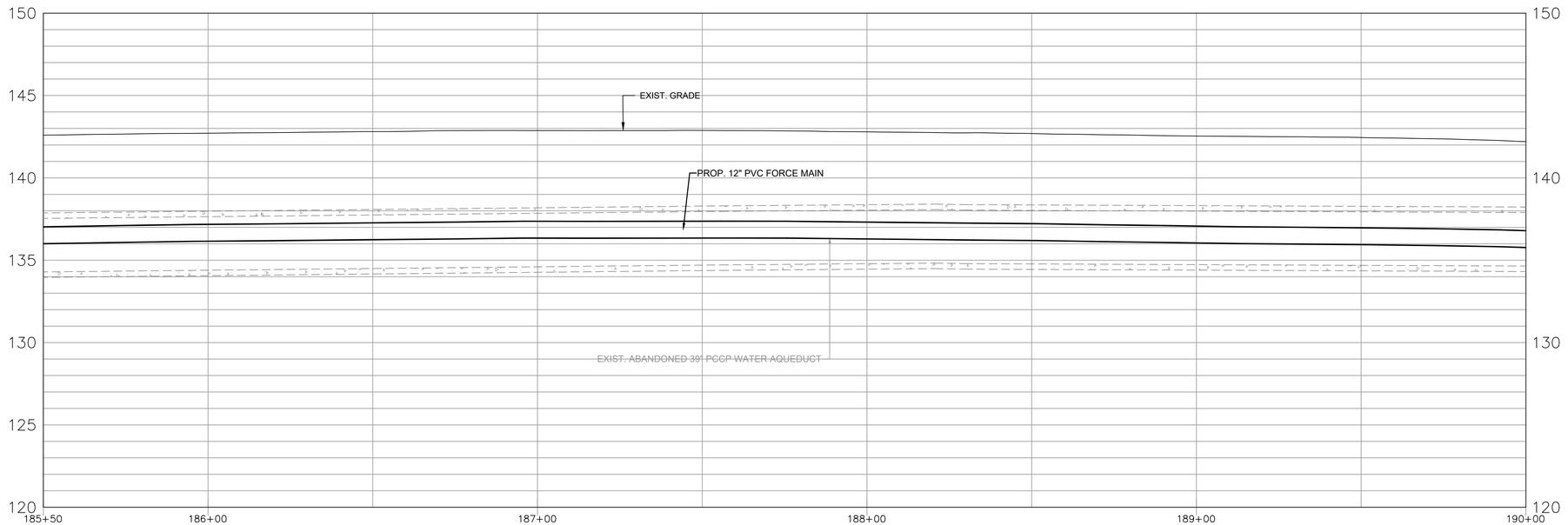


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 185+50 TO 190+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

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C-220

SHEET 55 of 85

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CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase IC Final Design\Drawings\Production Drawings\WFG - PR-GRAVITY-1C-1 - 03_recover.dwg LAYOUT: C-221 PLAN AND PROFILE STA 190+00 TO 194+50
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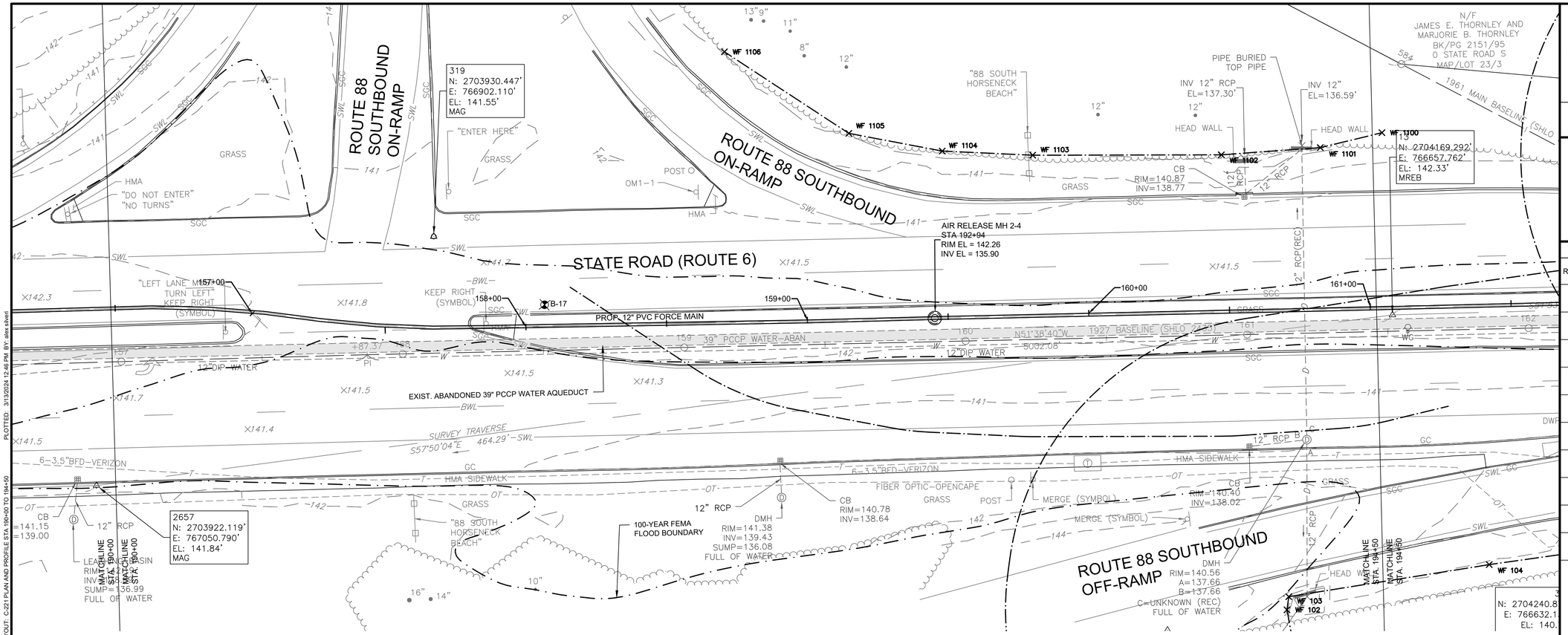
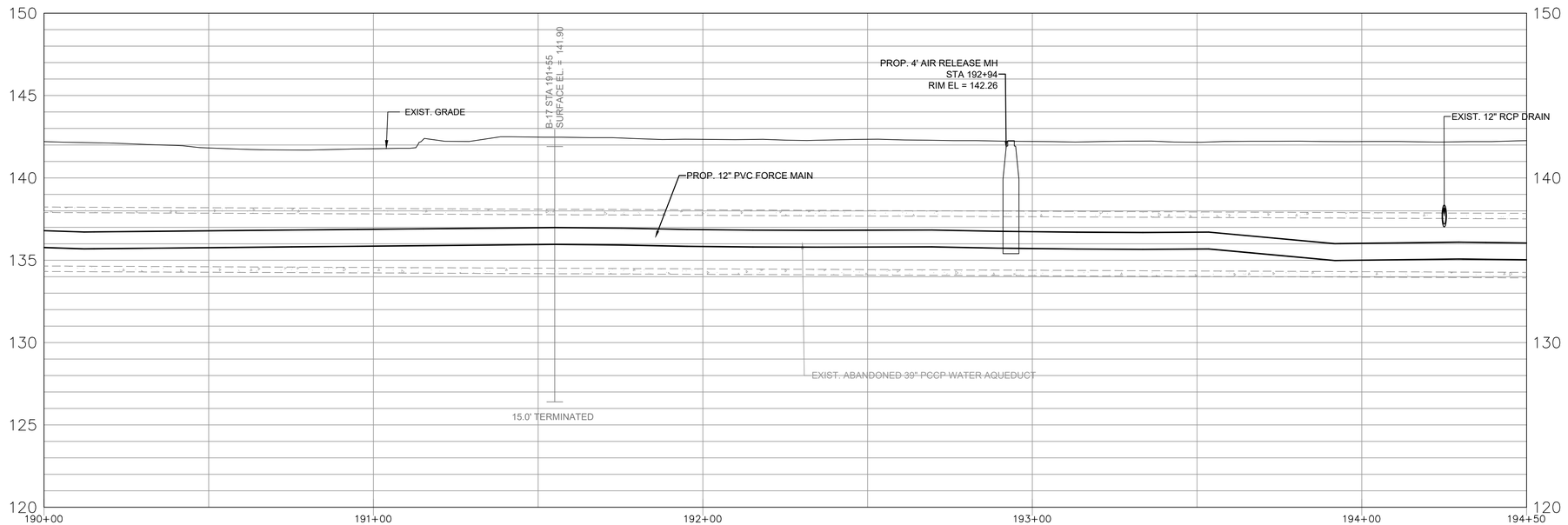


PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 190+00 TO 194+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

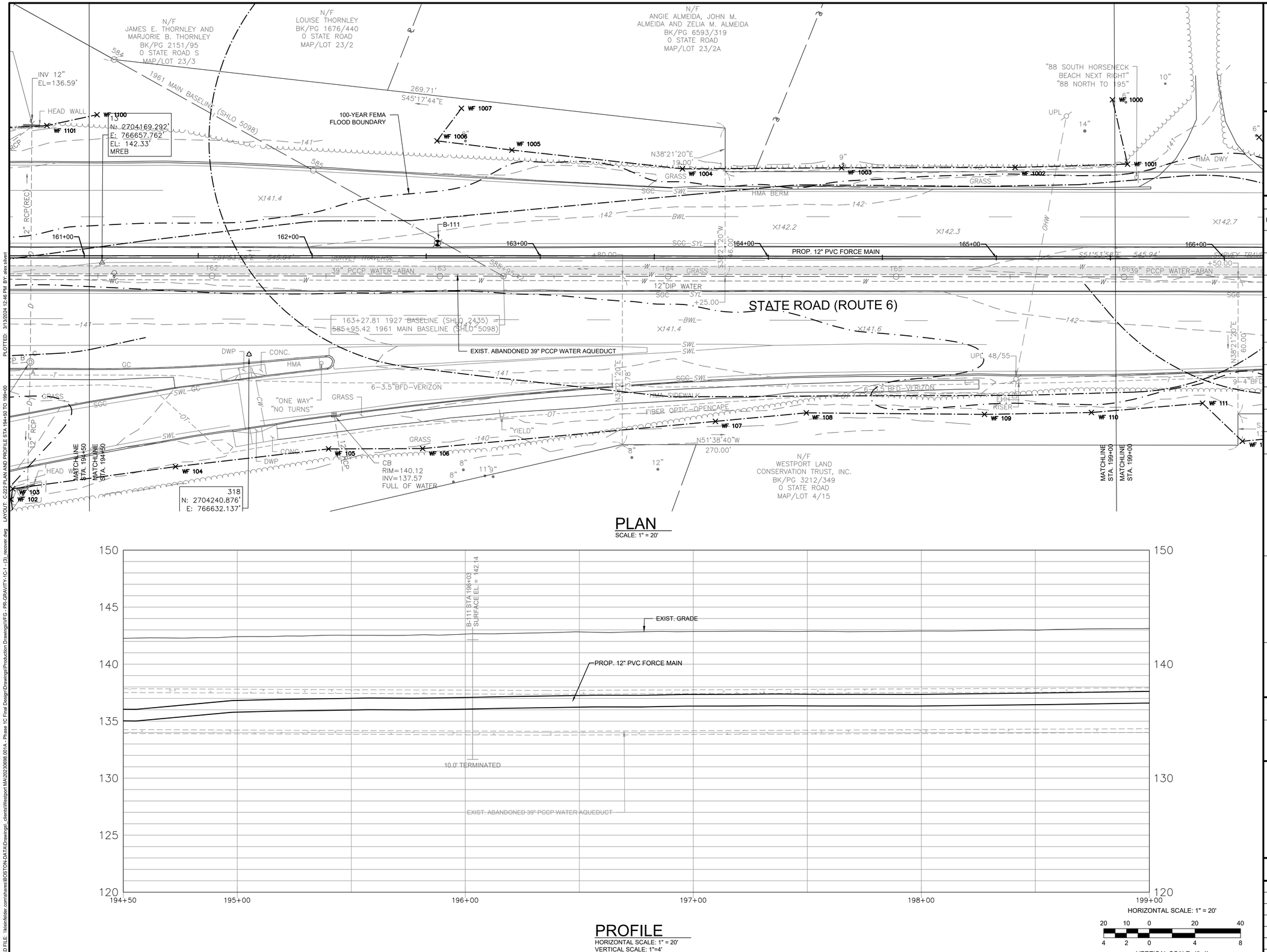
TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-221



PLAN
SCALE: 1" = 20'

PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
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0 20 40
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ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 194+50 TO 199+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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DRAWN BY	JL
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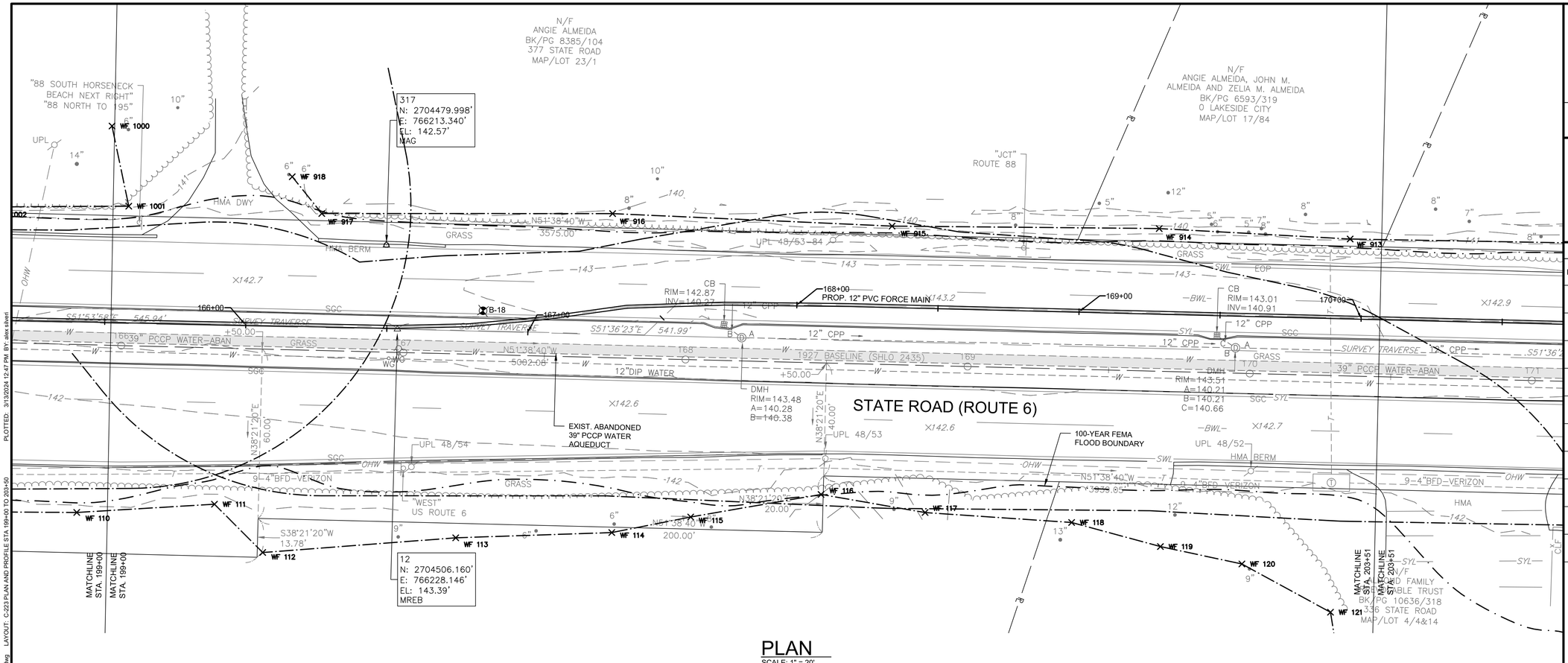
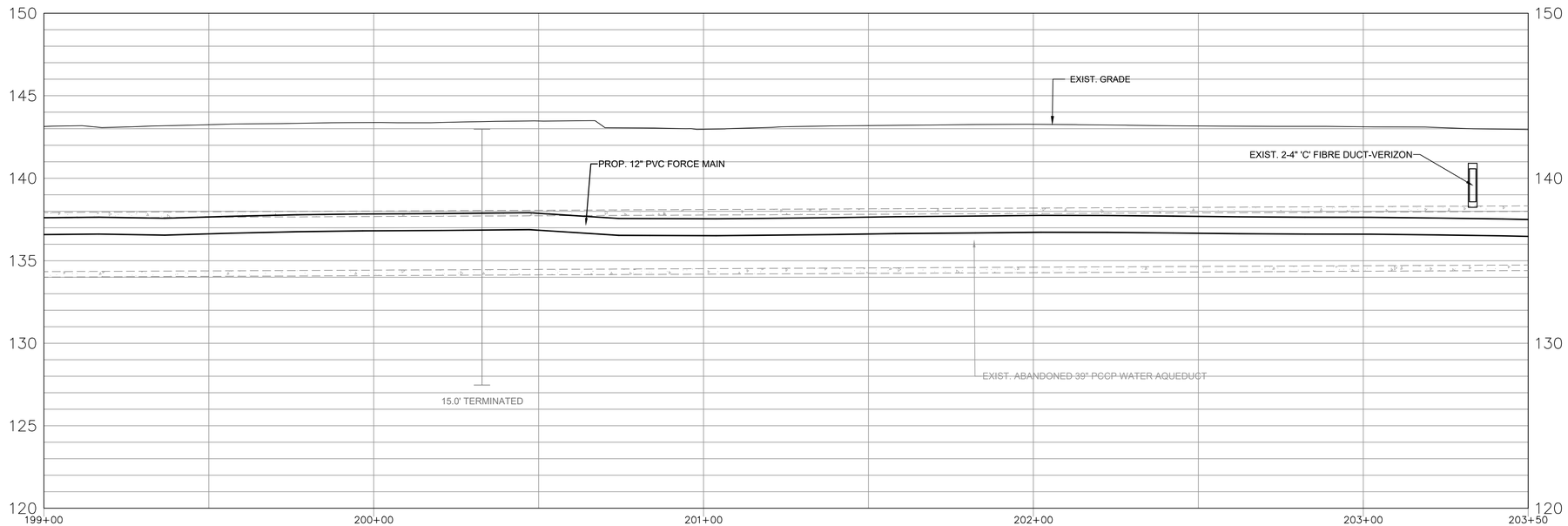
APPROVED BY	MT

C-222



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\WFG - PR-GRAVITY-1C-1 - 0) _recover.dwg LAYOUT: C-223 PLAN AND PROFILE STA 199+00 TO 203+50

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PLAN AND PROFILE STA 199+00 TO 203+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

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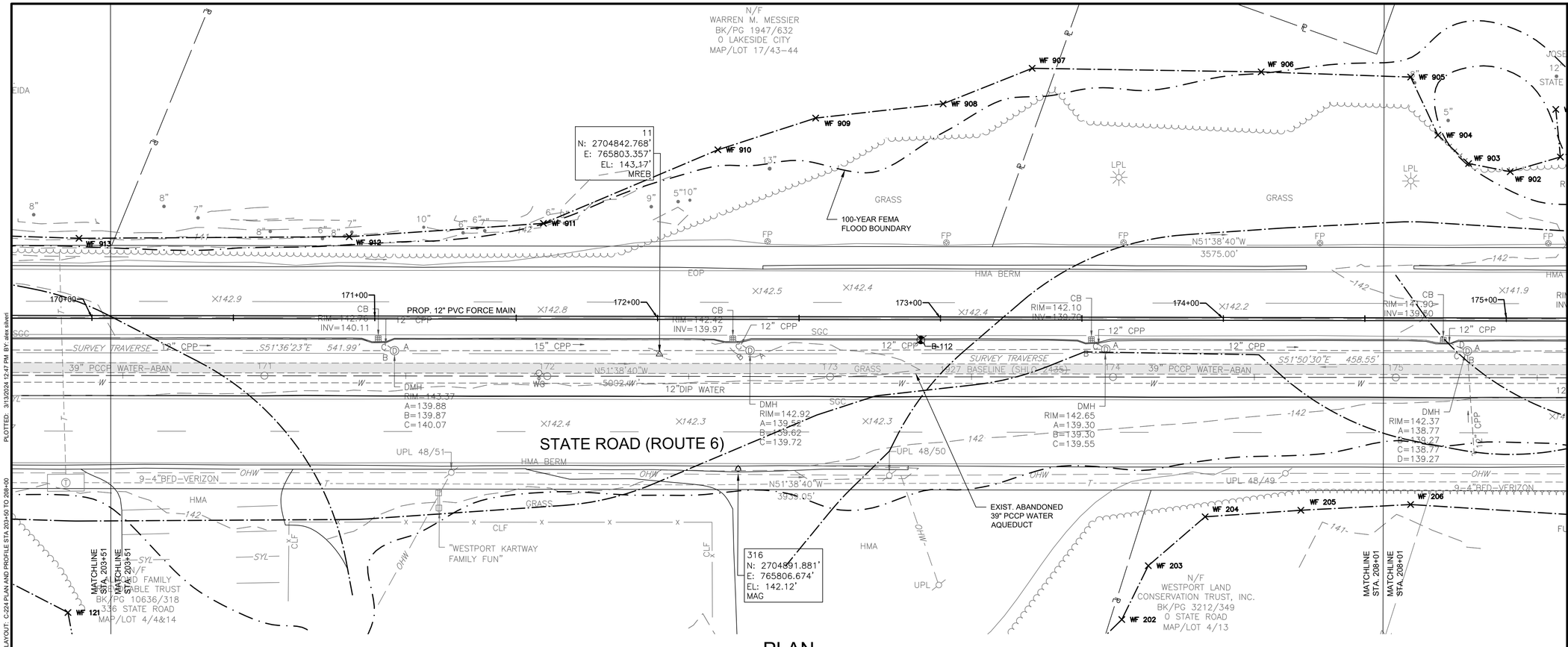
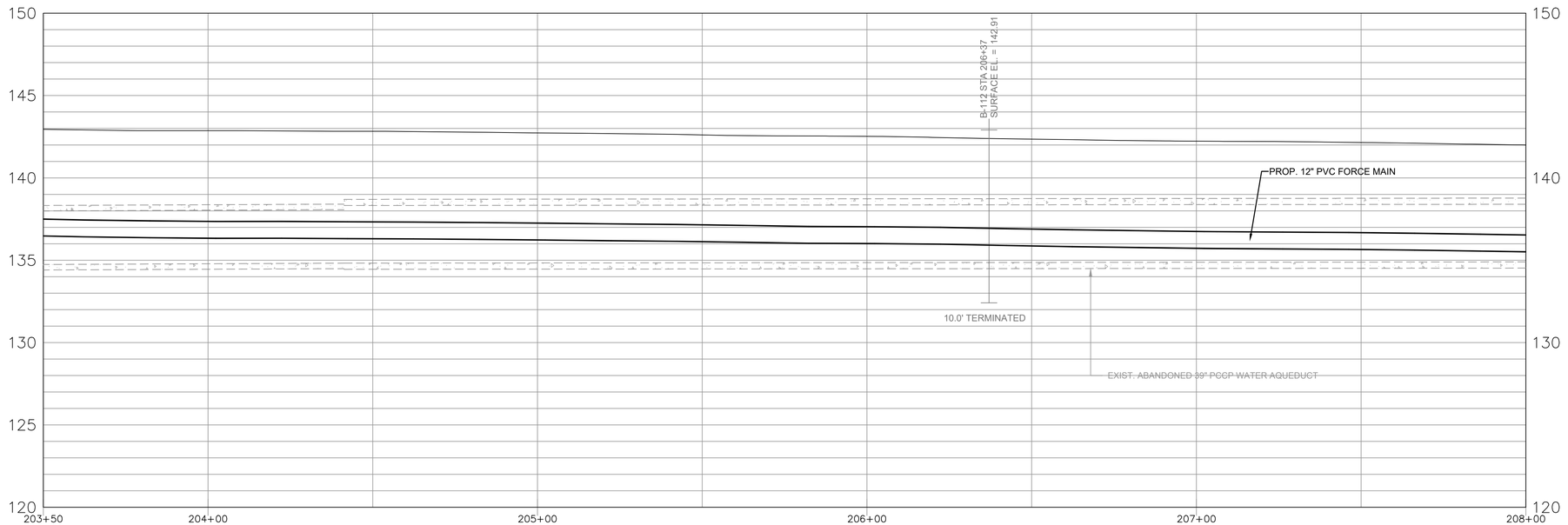
APPROVED BY	MT

C-223



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

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ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 203+50 TO 208+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

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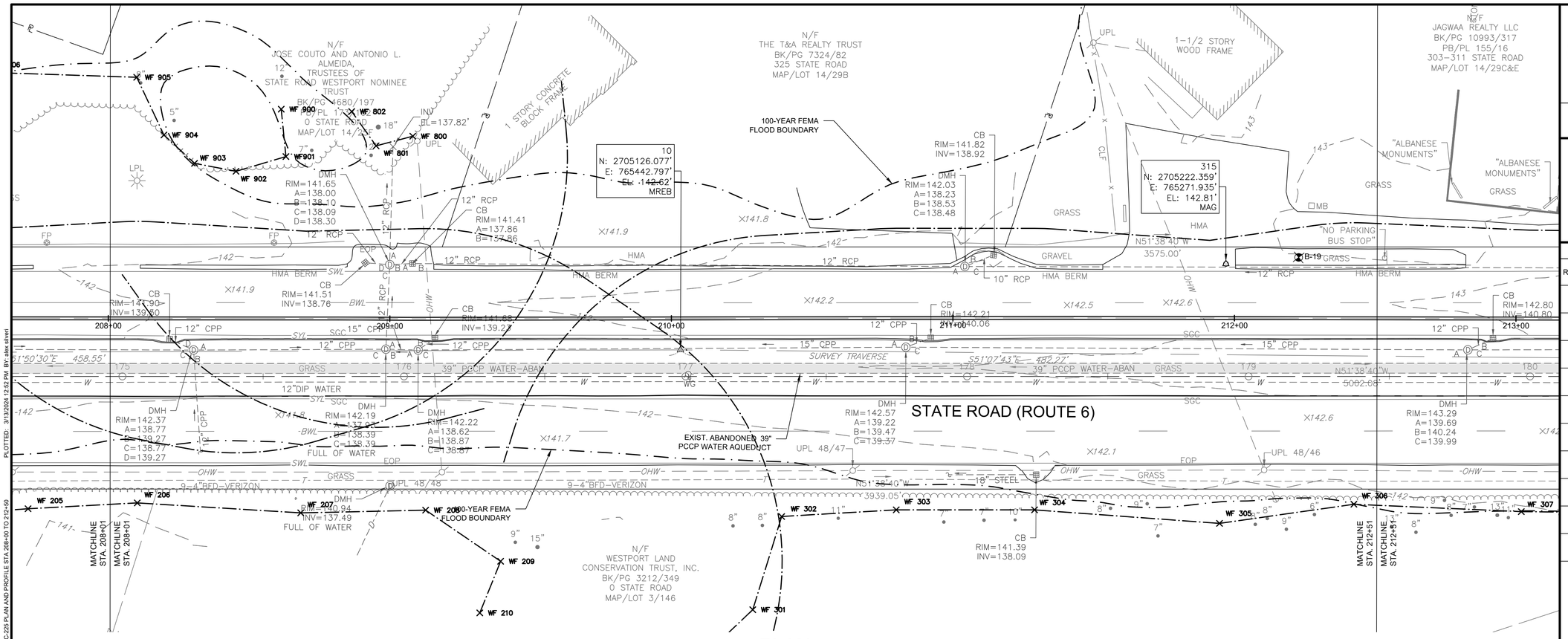
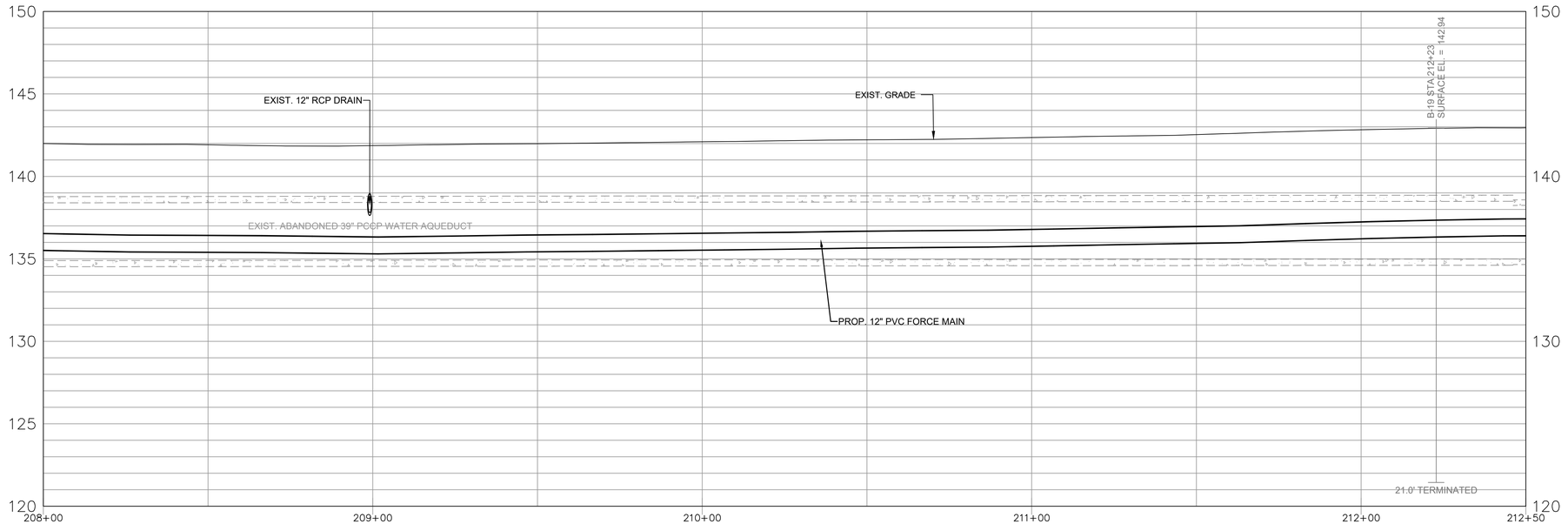


PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
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VERTICAL SCALE: 1"=4'
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PLAN AND PROFILE STA 208+00 TO 212+50

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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ISSUE DATE	03/13/24
CURRENT REVISION	100%
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CHECKED BY	DTP
APPROVED BY	MT

C-225

SHEET 60 of 85

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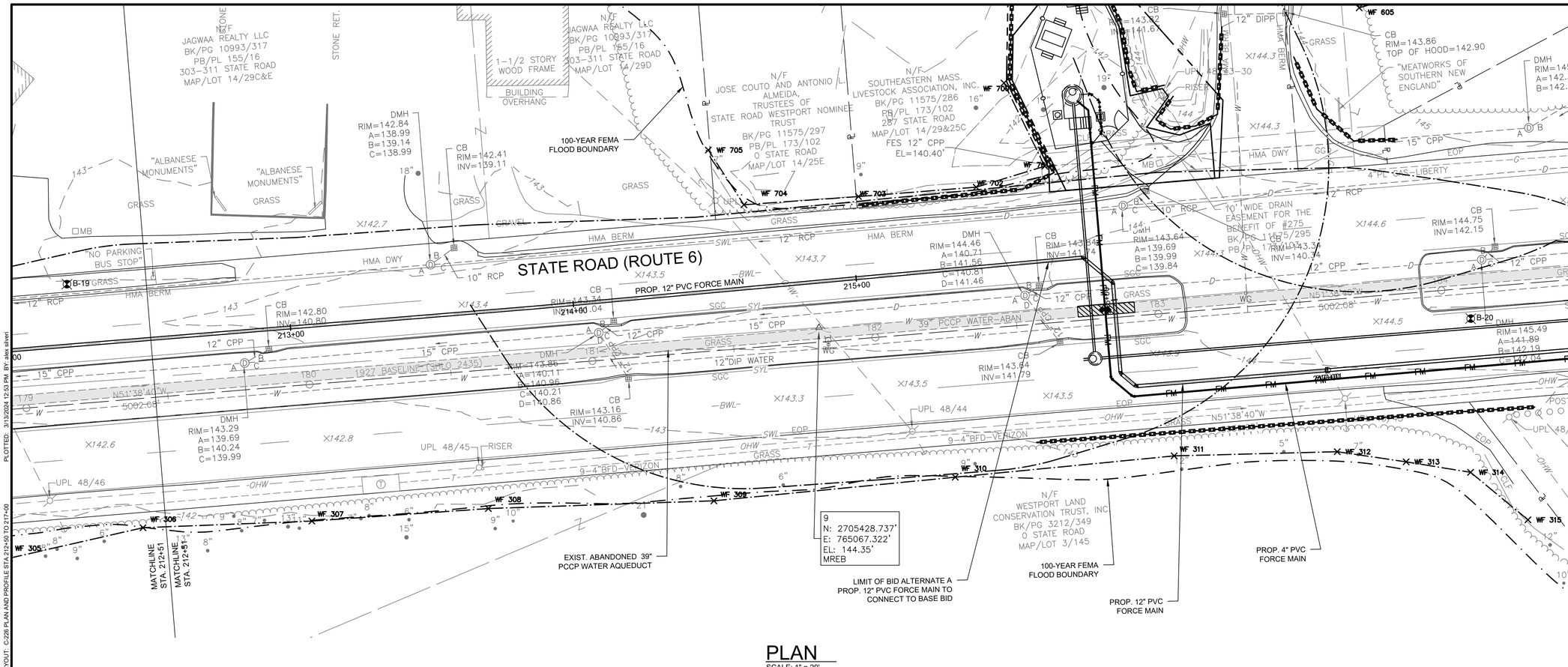
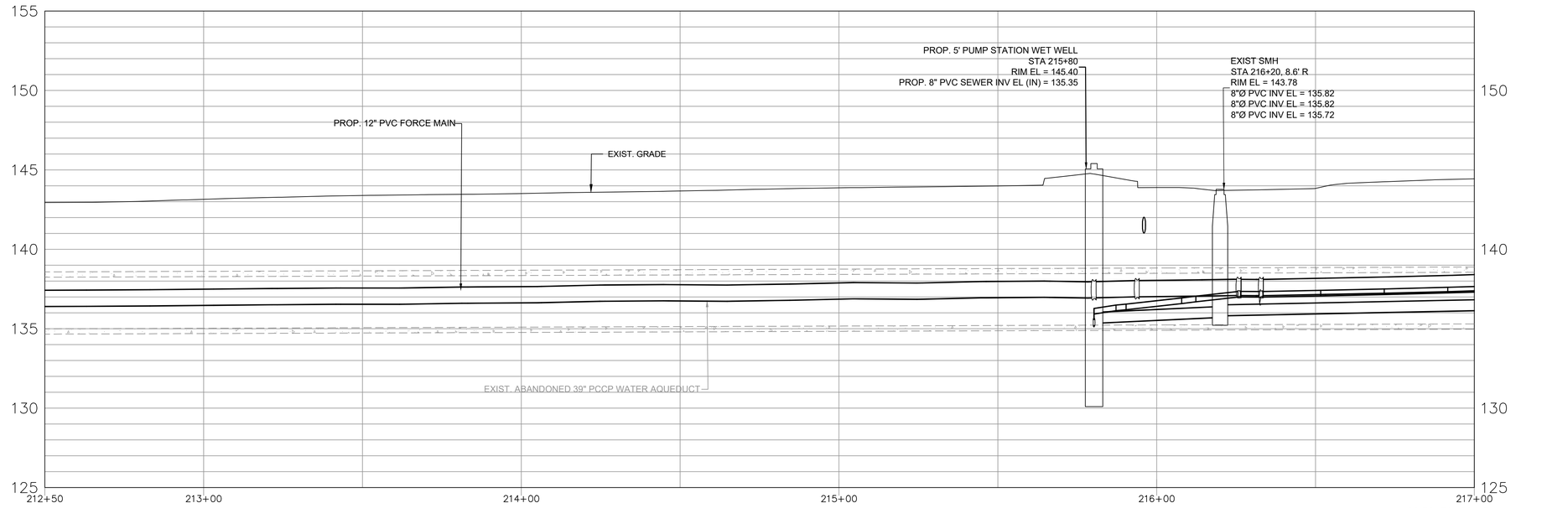


PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
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PLAN AND PROFILE STA 212+50 TO 217+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

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DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-226

N/F
CARL J. MEDEIROS AND
TINA M. MEDEIROS
BK/PG 2352/100
PB/PL 120/51
835 STATE ROAD
MAP/LOT 24/19D

1 STORY
WOOD FRAME

PROP. GENERATOR ON
CONCRETE PAD, TOP OF
CONCRETE EL 82.00

PROP. 8" DI MJ
45° BEND (TYP.)

PROP. 12' WIDE CHAIN
LINK FENCE GATE

PROP. ELECTRICAL CONTROLS
AND EQUIPMENT ENCLOSURES
ON CONCRETE PAD, TOP OF
CONCRETE EL 82.00

N/F
LORI CAMARA
BK/PG 9213/86
PB/PL 120/51
831 STATE ROAD
MAP/LOT 24/19

PROP. LIMIT OF WORK FOR TEMPORARY PUMP
STATION LUMP SUM BID ITEM AND LIMIT OF
TEMPORARY CONSTRUCTION EASEMENT
1,303 SQUARE FEET

PROP. LIMIT OF
PERMANENT ACCESS
AND UTILITY EASEMENT
2,175 SQUARE FEET

EXIST. FENCE WITH
ACCESS GATES

26
N: 2698792.674'
E: 773549.380'
EL: 81.87'
MREB

NOTES:
1. PROPOSED FENCED AREA AND DRIVEWAY TO BE PAVED WITH 2" BASE AND 2" TOP COURSE ON 6" GRAVEL BASE.
2. PROPOSED GRADE SHALL MATCH EXISTING GRADE.

100-YEAR FEMA
FLOOD BOUNDARY

PROP. PREFABRICATED PUMP STATION WITH 10' WET WELL
STA 105+91
TOP OF PUMP STATION EL = 83.50
EXIST. GRADE EL = 80.87±
PROP. 15" PVC SEWER INV EL (IN) = 71.57
PROP. 12" PVC FORCE MAIN INV EL (OUT) = 71.60
WET WELL FLOOR EL = 64.65
(SEE PLAN AND SECTION ON SHEET C-227)

33'

43'

CB
RIM=80.63
INV=78.38

DMH
RIM=80.62
A=77.52
B=78.22

PROP. HANDHOLE
FOR TEMPORARY
BYPASS

PROP. ODOR CONTROL
DRUB SCRUBBER ON
CONCRETE PAD, TOP OF
CONCRETE EL 82.00

PROP. 8" DI MJ
PLUG VALVE
(TYP.)

PROP. 8" X 8" DI
MJ WYE (TYP.)

PROP. 8" X 12" DI
MJ INCREASER

1 STORY
WOOD FRAME

CONC.
GRILL
GRATE

INV 24" RCP
EL=75.85'

HMA

N52°14'40"W
4315.04'

UPL 48A/56

UPL 48A/57

3"WS GAS-LIBERTY

PROP. 6' HIGH CHAIN LINK
FENCE ENCLOSURE WITH
BLACK PRIVACY SLATS

PROP. ALUMINUM STEPS
AND PLATFORM FOR PUMP
STATION ACCESS

PROP. 15" PVC SEWER

PROP. 12" PVC
FORCE MAIN

STATE ROAD (ROUTE 6)

105+00

106+00

107+00

B-105

PROP. 15" PVC SEWER

SURVEY TRAVERSE
S1°50'34"E 480.09'

N52°14'40"W
4314.92'

18" RCP

SMH 2-3 (4'∅)
STA 105+91
RIM EL = 81.59
PROP. 15" PVC SEWER INV EL (IN) = 71.74
PROP. 12" PVC SEWER INV EL (IN) = 73.49
PROP. 15" PVC SEWER INV EL (OUT) = 71.64

SMH 2-4 (4'∅)
STA 106+29
RIM EL = 81.27
PROP. 15" PVC SEWER INV EL (IN) = 71.89
PROP. 8" PVC SEWER INV EL (IN) = 73.00
PROP. 15" PVC SEWER INV EL (OUT) = 71.79

PROP. 8" PVC SEWER

PROP. 12" DI
WATER MAIN

DMH
RIM=81.72
A=77.62
B=77.72
C=77.82
D=77.72

DMH
RIM=81.48
A=76.48
B=77.18

12" RCP

CONC.
DWP
MB
MB

UPL 48/111

UPL 48/110

HMA SIDEWALK

3"WS GAS-LIBERTY

HMA
DWY

BLOCK
RET. WALL

GRASS

"BASSETT AVE"
"DEAD END"

UPL 10/1

BASSETT
AVENUE

STONE RET. WALL

"NO SNOW HERE TO CORNER"

CB
RIM=80.55
INV=77.75

CB
RIM=80.36
A=77.46
B=77.71

CB
RIM=80.38
INV=77.73

12" RCP

PLAN
SCALE: 1" = 10'

PLOTTED: 3/13/2024 12:55 PM BY: alex silvert

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\C-227 PUMP STATION SITE PLAN.dwg LAYOUT: C-227 833 STATE ROAD PUMP STATION SITE PLAN

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SCALE VERIFICATION

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 10 20
SCALE: 1" = 10' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

833 STATE ROAD PUMP STATION SITE PLAN

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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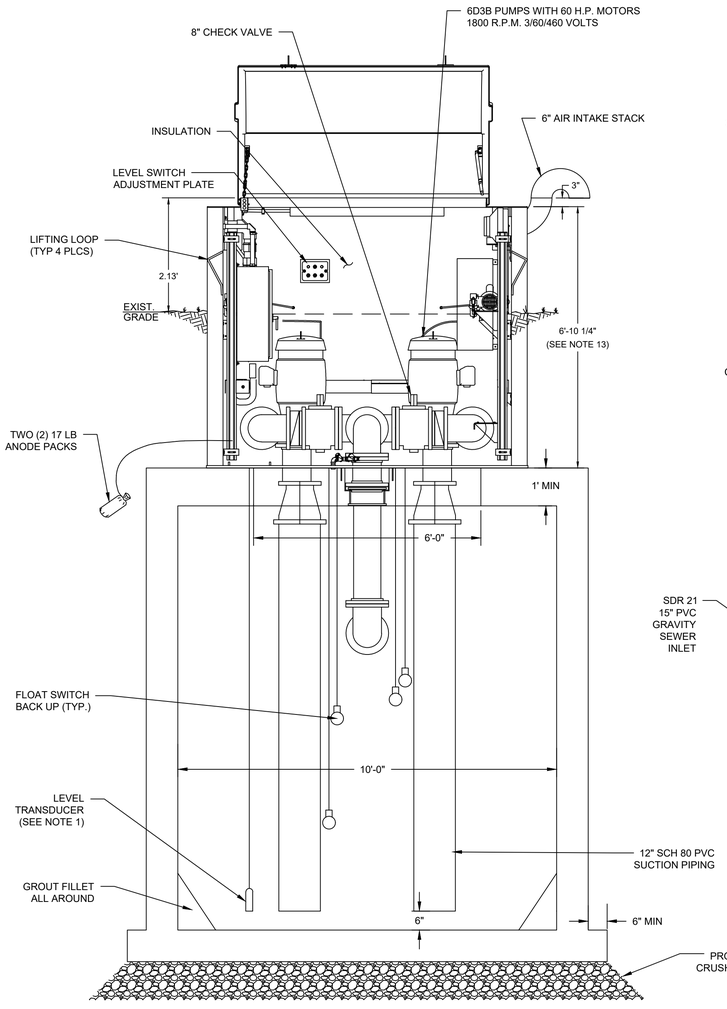
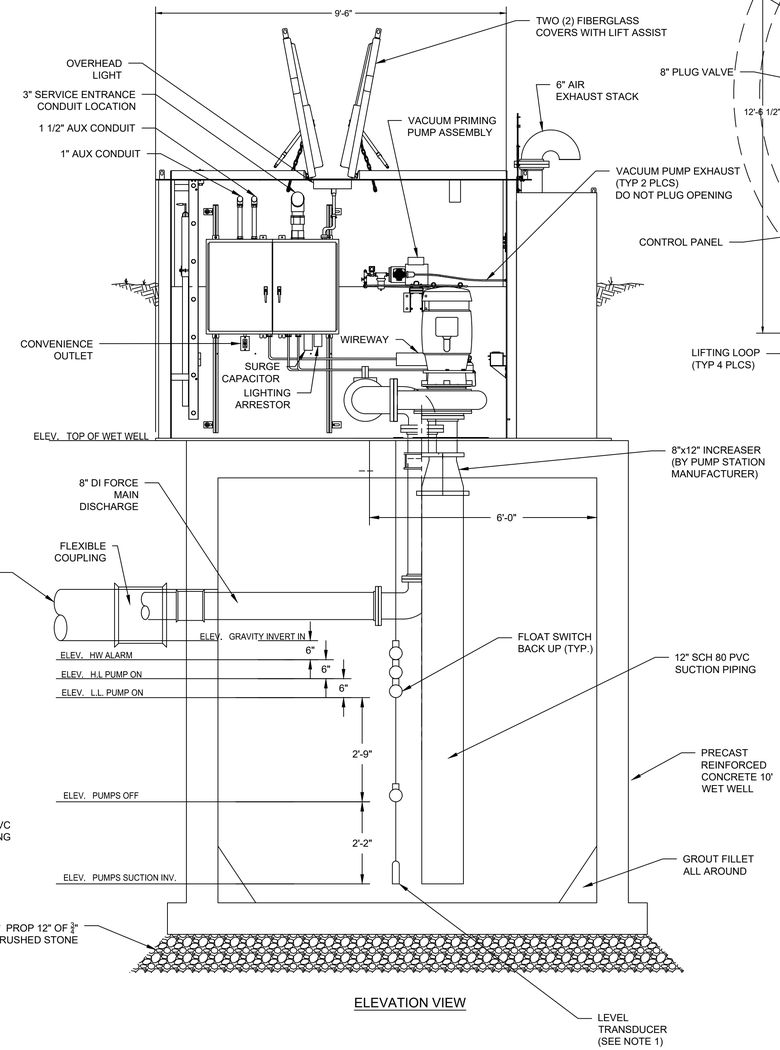
APPROVED BY	MT

C-227

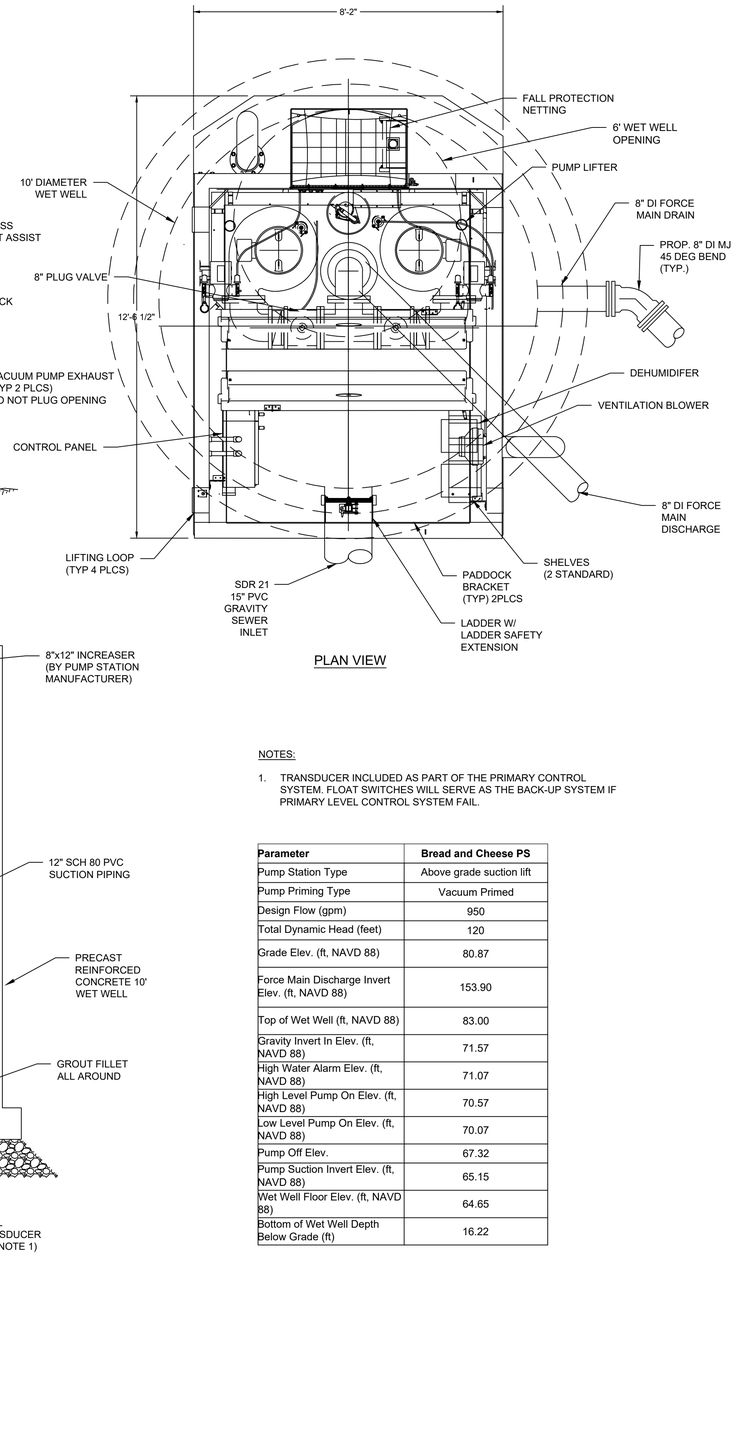
SHEET 62 of 85



ELEVATION VIEW



ELEVATION VIEW



PLAN VIEW

NOTES:

1. TRANSDUCER INCLUDED AS PART OF THE PRIMARY CONTROL SYSTEM. FLOAT SWITCHES WILL SERVE AS THE BACK-UP SYSTEM IF PRIMARY LEVEL CONTROL SYSTEM FAIL.

Parameter	Bread and Cheese PS
Pump Station Type	Above grade suction lift
Pump Priming Type	Vacuum Primed
Design Flow (gpm)	950
Total Dynamic Head (feet)	120
Grade Elev. (ft, NAVD 88)	80.87
Force Main Discharge Invert Elev. (ft, NAVD 88)	153.90
Top of Wet Well (ft, NAVD 88)	83.00
Gravity Invert In Elev. (ft, NAVD 88)	71.57
High Water Alarm Elev. (ft, NAVD 88)	71.07
High Level Pump On Elev. (ft, NAVD 88)	70.57
Low Level Pump On Elev. (ft, NAVD 88)	70.07
Pump Off Elev.	67.32
Pump Suction Invert Elev. (ft, NAVD 88)	65.15
Wet Well Floor Elev. (ft, NAVD 88)	64.65
Bottom of Wet Well Depth Below Grade (ft)	16.22

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 1.5 3 4.5 6

SCALE IN FEET
SCALE: 1/2" = 1'-0"
ORIGINAL DRAWING SIZE IS 22 x 34

833 STATE ROAD PUMP STATION PLAN AND SECTION

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

816 MAIN ROAD
WESTPORT, MA 02790

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C-228

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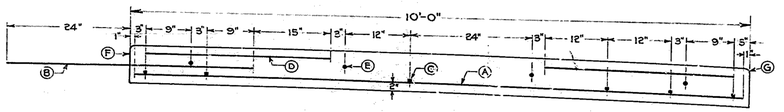


EXISTING CONCRETE ROADWAY SECTION FROM RECORDS
NTS

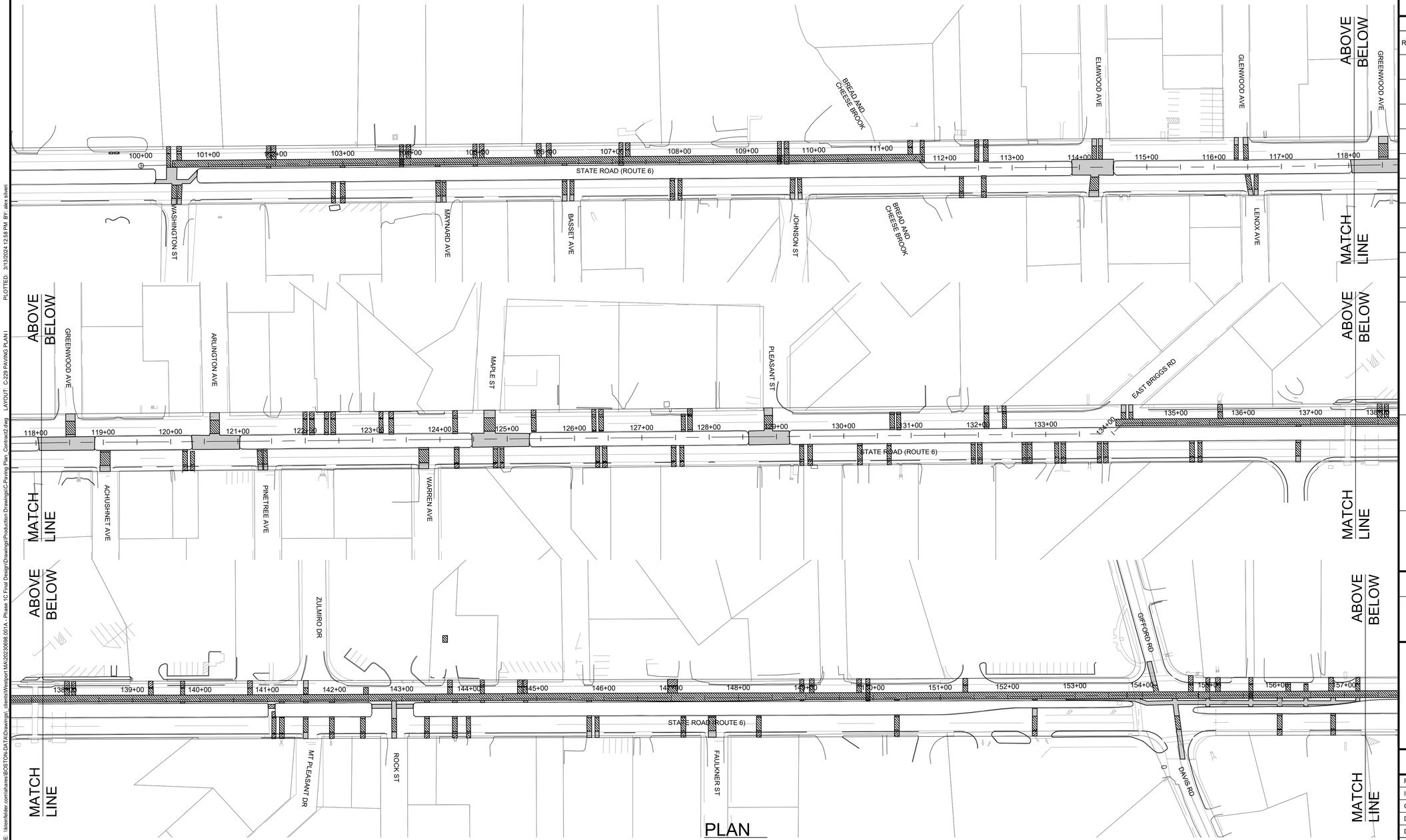
Ⓐ TRANSVERSE RODS 2'-0" C.TO C. BEGINNING 3" FROM THE END OF SLAB
Ⓑ DOWELS DEFORMED BARS 5' C.TO C.
Ⓒ LONGITUDINAL RODS TO BE AT LEAST 8' LONG AND LAP 12"
Ⓓ DEFORMED BARS 6' LONG PLACED AT SLAB CORNERS
Ⓔ PLAIN DOWELS 4' LONG ONE END FIXED REMAINDER PAINTED
Ⓕ WHEN BUILT ONE HALF AT A TIME FACE OF SECTION FIRST BUILT TO BE PAINTED WITH BITUMINOUS MATERIAL
WHEN BUILT FULL WIDTH IN ONE OPERATION A LONGITUDINAL JOINT SHALL BE PLACED IN CENTER OF CONCRETE SECTION
ALL REINFORCING WITH THE EXCEPTION OF DOWELS FOR TRANSVERSE JOINTS TO BE DEFORMED STEEL RODS
ALL REINFORCING TO BE OF 0.25 "SECTIONAL AREA
Ⓖ 3/4" RADIUS

LEGEND

- PROPOSED CONCRETE SLAB REMOVAL, TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED HMA SIDEWALK (3") OR DRIVEWAY (4") PAVING RESTORATION

NOTES

1. THE ORIGINAL ROUTE 6 ROADWAY CONSTRUCTION CONSISTED OF TWO 10' WIDE LANES OF 8" THICK REINFORCED CONCRETE SLAB AT GRADE IN BOTH TRAVEL DIRECTIONS. REFER TO REINFORCED CONCRETE SLAB DETAIL ON SHEET C-19. THE ORIGINAL 8" THICK REINFORCED CONCRETE ROADWAY STILL EXISTS WITHIN THE PROJECT AREA AND HAS BEEN PAVED OVER WITH ASPHALT. EXISTING CRACKS IN THE SURFACE ASPHALT ARE VISIBLE AT REGULAR INTERVALS RUNNING PERPENDICULAR TO THE DIRECTION OF ROADWAY TRAFFIC. THESE CRACKS ARE SUSPECTED TO COINCIDE WITH THE EDGES OF THE CONCRETE SLABS UNDERNEATH THE SURFACE ASPHALT. SMALL PORTIONS OF THE ORIGINAL REINFORCED CONCRETE ROADWAY HAVE LIKELY BEEN REMOVED PREVIOUSLY TO INSTALL UTILITIES CROSSING THE ROADWAY INCLUDING WATER, DRAIN, GAS, AND TELECOM UTILITIES. REINFORCED CONCRETE ROADWAY SHALL BE REMOVED AND REPLACED WITH PAVEMENT AS DETAILED ON SHEETS C-19 AND C-20.
2. CONTRACTOR SHALL ADJUST PROPOSED SEWER AND WATER SERVICE LOCATIONS IN THE FIELD AS NEEDED TO MINIMIZE THE REMOVAL OF THE EXISTING CONCRETE SLAB ROADWAY UNDERNEATH THE SURFACE ASPHALT. WHERE FEASIBLE, CONTRACTOR SHALL ALIGN SERVICES WITH THE EDGES OF THE EXISTING CONCRETE ROADWAY SLABS AND AVOID LEAVING SMALL SECTIONS OF FLOATING CONCRETE SLABS DISCONNECTED FROM THE ORIGINAL CONCRETE SLAB.



PLAN
SCALE: 1" = 75'

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REVISIONS

REV	DESCRIPTION	DSN / DWN	CHK / APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 — 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 — 75 — 150
SCALE: 1" = 75' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PAVING PLAN STA 100+00 TO 157+50

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

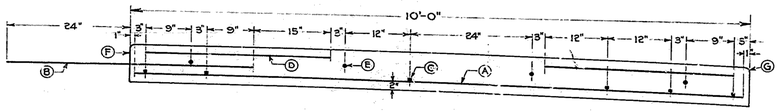
100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	AS
CHECKED BY	DTP
APPROVED BY	MT

C-229

SHEET 64 of 85

CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\C-Paving Plan_Contract2.dwg LAYOUT: C-229 PAVING PLAN I PLOTTED: 3/13/2024 12:58 PM BY: alex oliveri



EXISTING CONCRETE ROADWAY SECTION FROM RECORDS
NTS

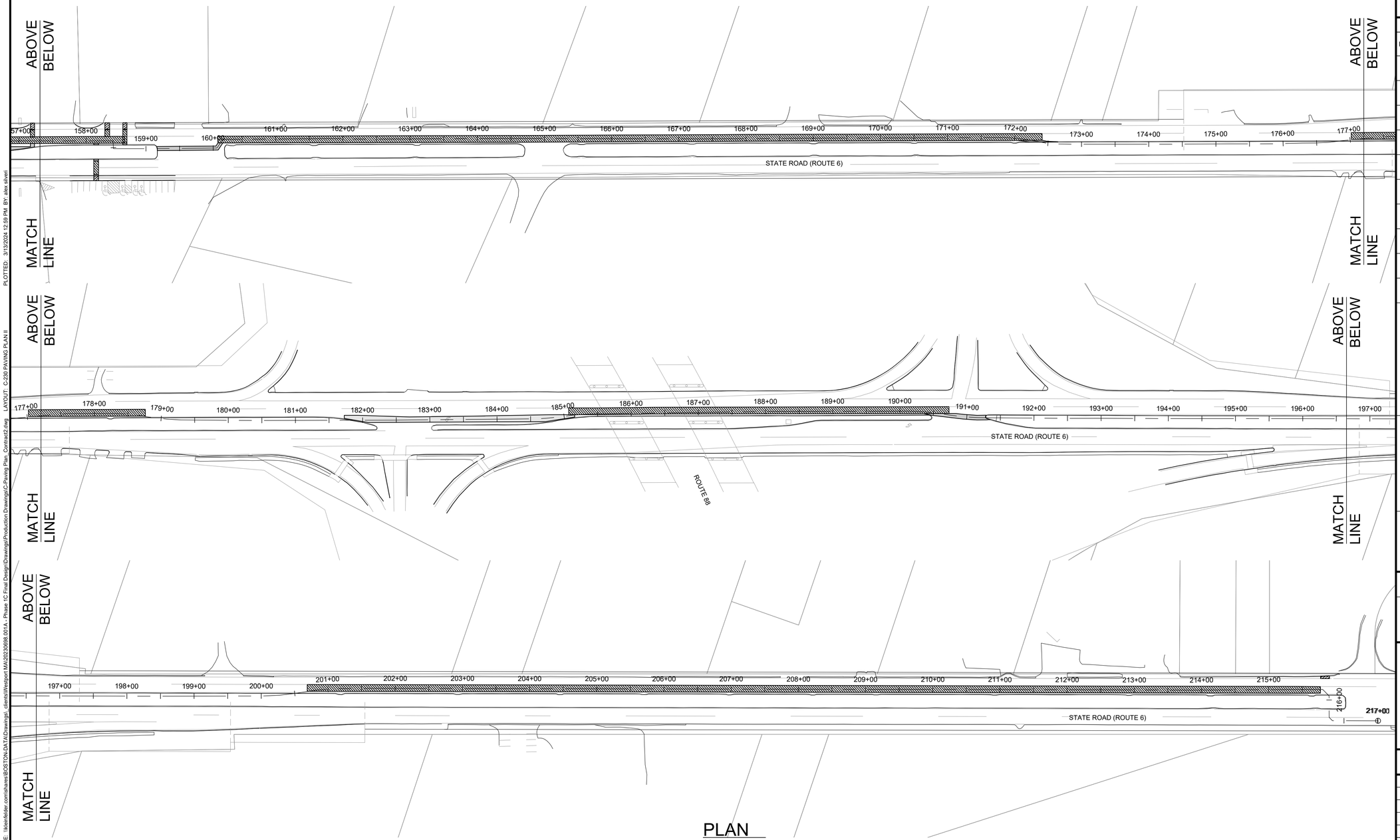
Ⓐ TRANSVERSE RODS 2'-0" C.TO C. BEGINNING 3" FROM THE END OF SLAB
Ⓑ DOWELS DEFORMED BARS 5' C.TO C.
Ⓒ LONGITUDINAL RODS TO BE AT LEAST 8' LONG AND LAP 12"
Ⓓ DEFORMED BARS 6' LONG PLACED AT SLAB CORNERS
Ⓔ PLAIN DOWELS 4' LONG ONE END FIXED REMAINDER PAINTED
Ⓕ WHEN BUILT ONE HALF AT A TIME FACE OF SECTION FIRST BUILT TO BE PAINTED WITH BITUMINOUS MATERIAL
WHEN BUILT FULL WIDTH IN ONE OPERATION A LONGITUDINAL JOINT SHALL BE PLACED IN CENTER OF CONCRETE SECTION
ALL REINFORCING WITH THE EXCEPTION OF DOWELS FOR TRANSVERSE JOINTS TO BE DEFORMED STEEL RODS
ALL REINFORCING TO BE OF 0.25** SECTIONAL AREA
Ⓖ 3/4" RADIUS

LEGEND

- PROPOSED CONCRETE SLAB REMOVAL, TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED HMA SIDEWALK (3") OR DRIVEWAY (4") PAVING RESTORATION

NOTES

1. THE ORIGINAL ROUTE 6 ROADWAY CONSTRUCTION CONSISTED OF TWO 10' WIDE LANES OF 8" THICK REINFORCED CONCRETE SLAB AT GRADE IN BOTH TRAVEL DIRECTIONS. REFER TO REINFORCED CONCRETE SLAB DETAIL ON SHEET C-19. THE ORIGINAL 8" THICK REINFORCED CONCRETE ROADWAY STILL EXISTS WITHIN THE PROJECT AREA AND HAS BEEN PAVED OVER WITH ASPHALT. EXISTING CRACKS IN THE SURFACE ASPHALT ARE VISIBLE AT REGULAR INTERVALS RUNNING PERPENDICULAR TO THE DIRECTION OF ROADWAY TRAFFIC. THESE CRACKS ARE SUSPECTED TO COINCIDE WITH THE EDGES OF THE CONCRETE SLABS UNDERNEATH THE SURFACE ASPHALT. SMALL PORTIONS OF THE ORIGINAL REINFORCED CONCRETE ROADWAY HAVE LIKELY BEEN REMOVED PREVIOUSLY TO INSTALL UTILITIES CROSSING THE ROADWAY INCLUDING WATER, DRAIN, GAS, AND TELECOM UTILITIES. REINFORCED CONCRETE ROADWAY SHALL BE REMOVED AND REPLACED WITH PAVEMENT AS DETAILED ON SHEETS C-19 AND C-20.
2. CONTRACTOR SHALL ADJUST PROPOSED SEWER AND WATER SERVICE LOCATIONS IN THE FIELD AS NEEDED TO MINIMIZE THE REMOVAL OF THE EXISTING CONCRETE SLAB ROADWAY UNDERNEATH THE SURFACE ASPHALT. WHERE FEASIBLE, CONTRACTOR SHALL ALIGN SERVICES WITH THE EDGES OF THE EXISTING CONCRETE ROADWAY SLABS AND AVOID LEAVING SMALL SECTIONS OF FLOATING CONCRETE SLABS DISCONNECTED FROM THE ORIGINAL CONCRETE SLAB.



PLAN
SCALE: 1" = 75'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 — 75 — 150
SCALE: 1" = 75' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PAVING PLAN STA 157+50 TO 217+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

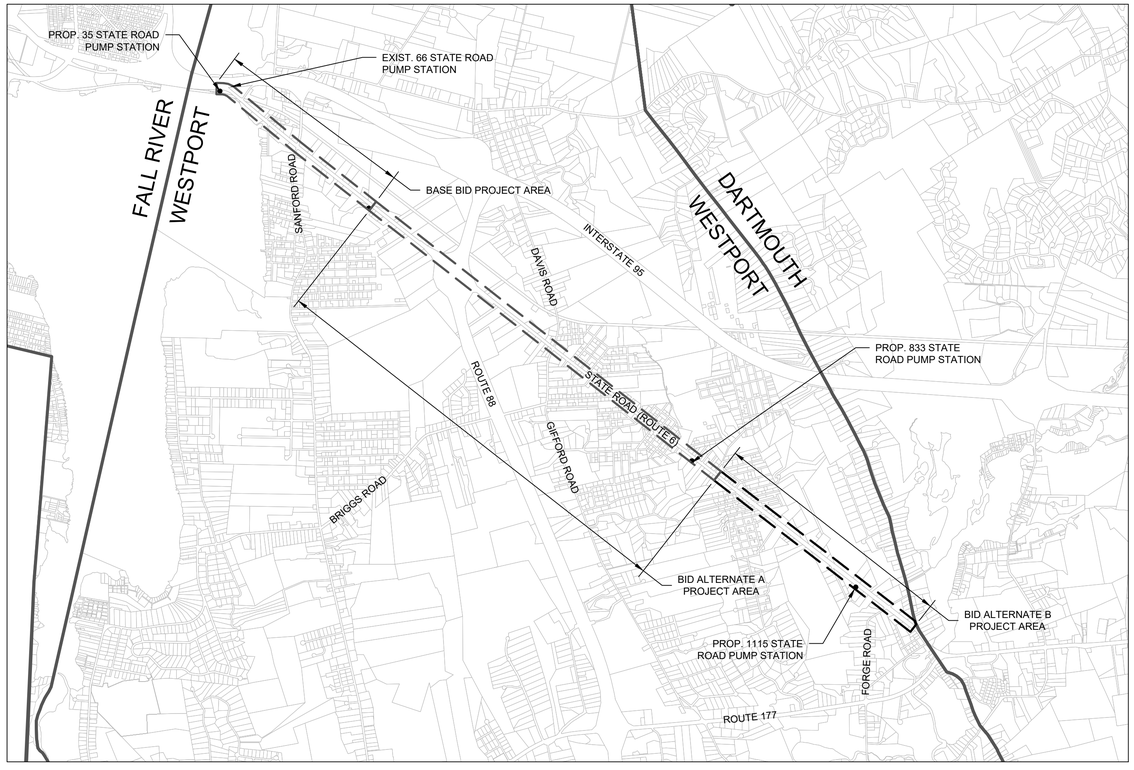
PROJECT NO.	20230698.001A
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-230

SHEET 65 of 85

PLOTTED: 3/13/2024 12:59 PM BY: alex silvert
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\C-Paving Plan_Contract2.dwg LAYOUT: C-230 PAVING PLAN II

TOWN OF WESTPORT, MA
ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B
MARCH 2024



PLAN
SCALE: 1" = 2,000'

TOWN ADMINISTRATOR

JAMES K. HARTNETT

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PLOTTED: 3/13/2024 1:03 PM BY: alex.olivieri
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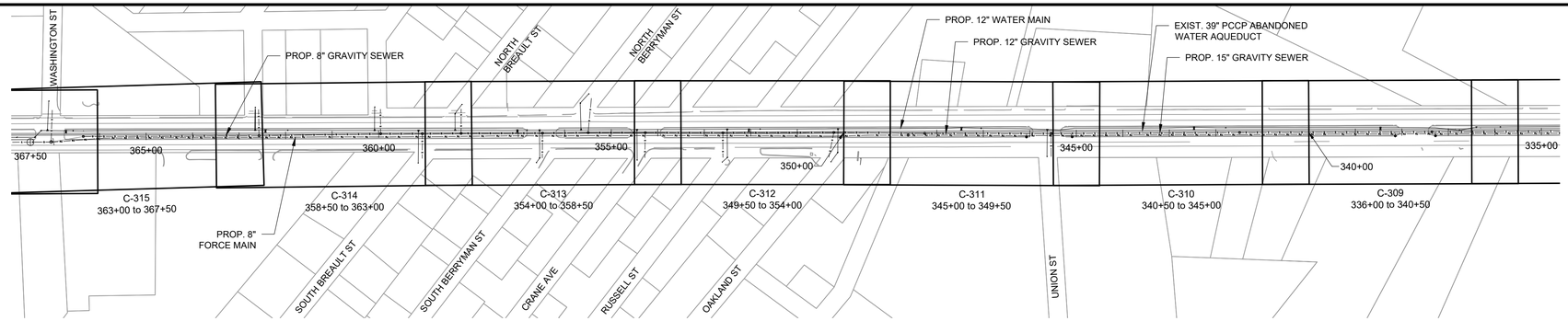
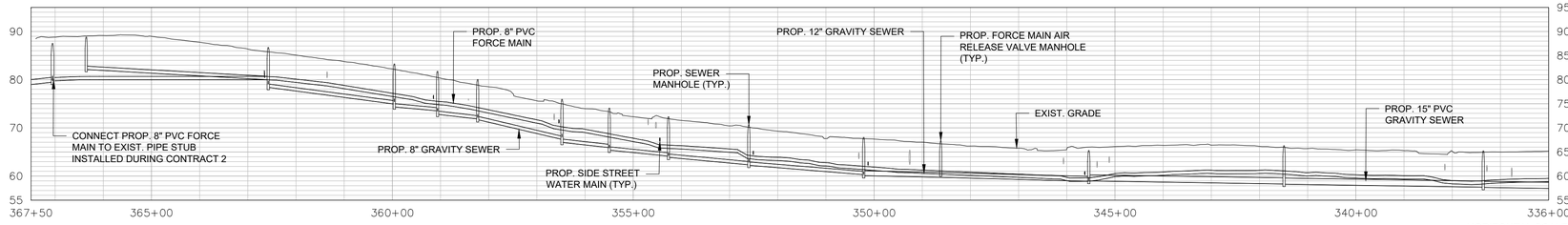


PLAN
SCALE: 1" = 150'



PROFILE
HORIZONTAL SCALE: 1" = 150'
VERTICAL SCALE: 1"=15'

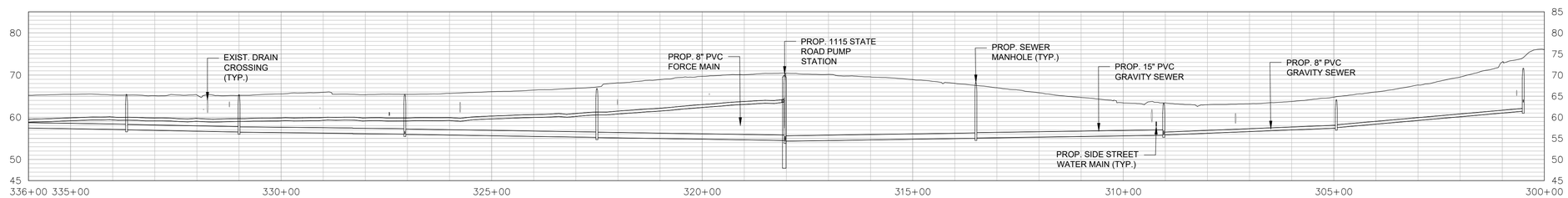
HORIZONTAL SCALE: 1" = 150'

150 75 0 150 300

30 15 0 30 60

VERTICAL SCALE: 1"=15'

PLAN
SCALE: 1" = 150'



PROFILE
HORIZONTAL SCALE: 1" = 150'
VERTICAL SCALE: 1"=15'

HORIZONTAL SCALE: 1" = 150'

150 75 0 150 300

30 15 0 30 60

VERTICAL SCALE: 1"=15'

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 150 300

SCALE: 1" = 150' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

INDEX PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

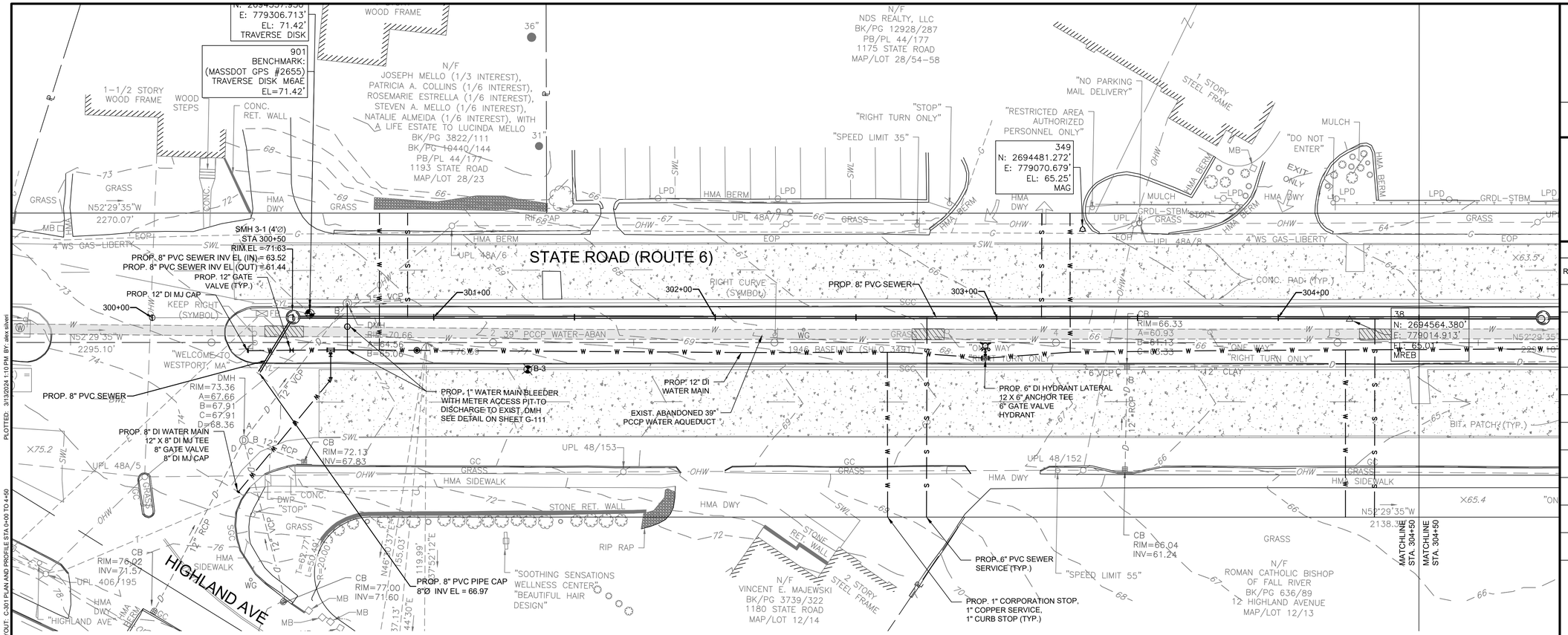
100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

G-302

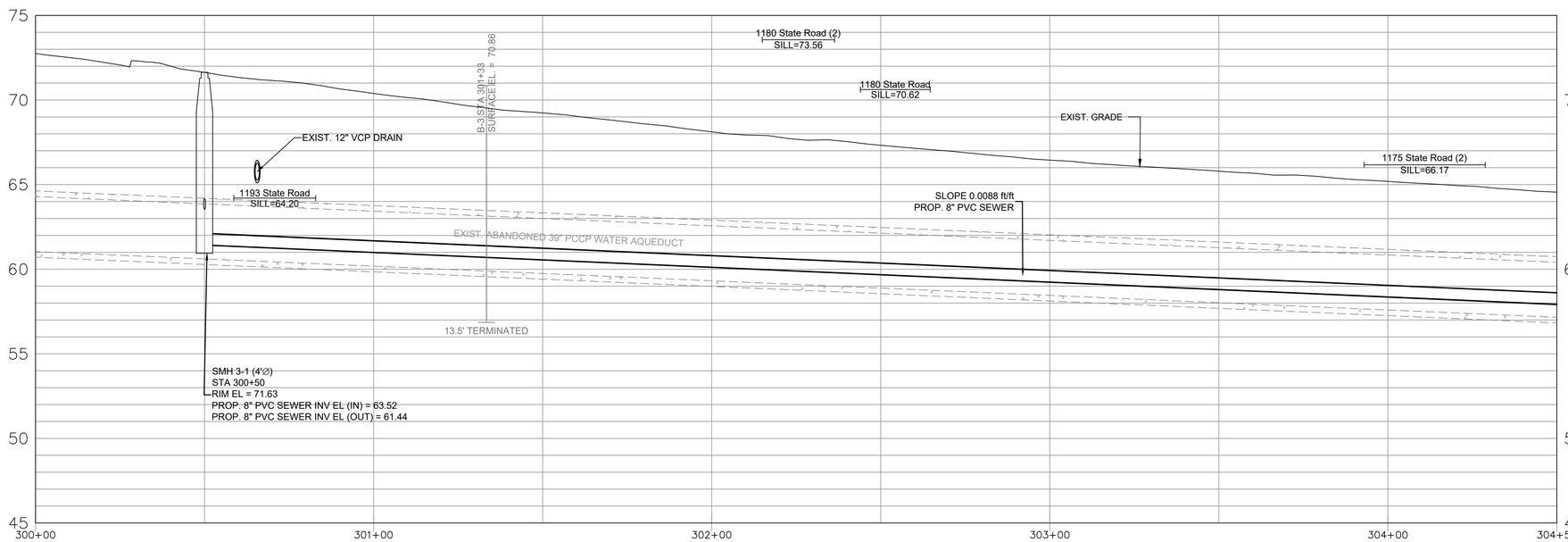
SHEET 67 of 85

PLOTTED: 3/13/2024 1:07 PM BY: alex.silvert
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\G-4 INDEX PLAN\.dwg LAYOUT: G-304 INDEX PLAN



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 300+00 TO 304+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

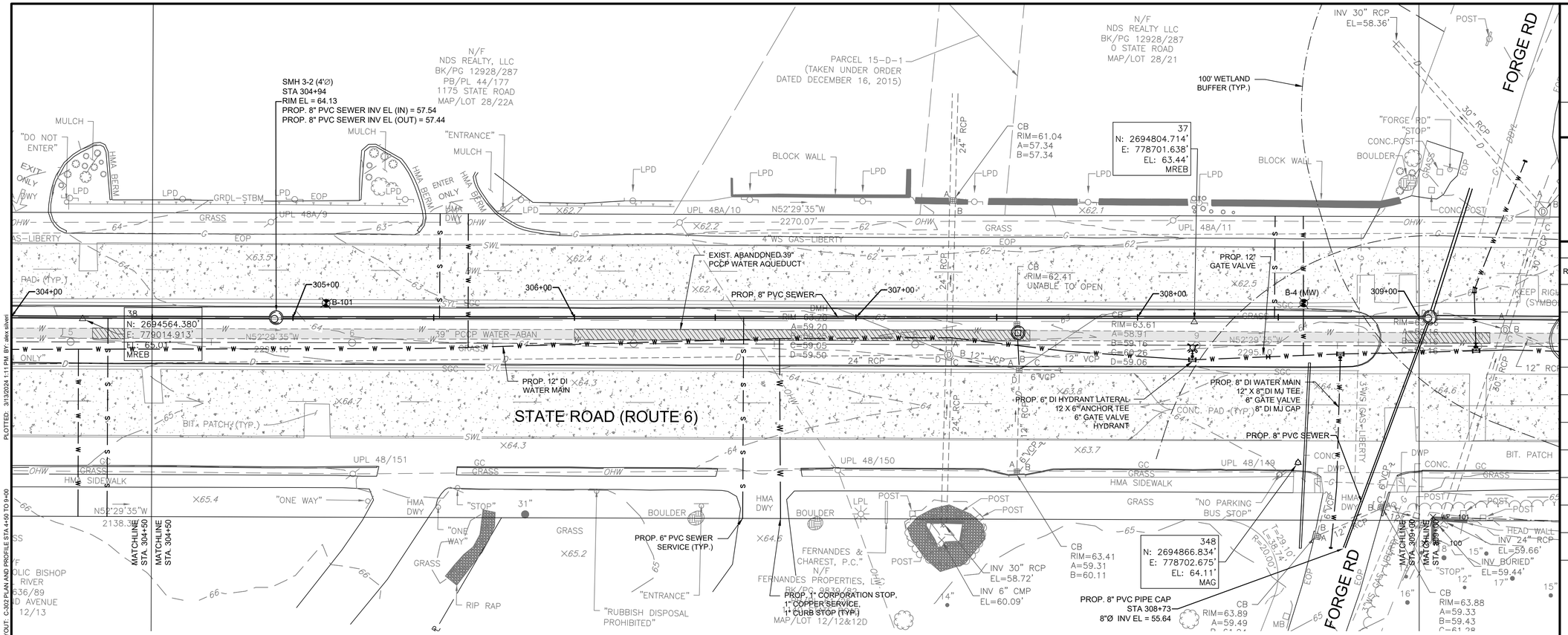
100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-301

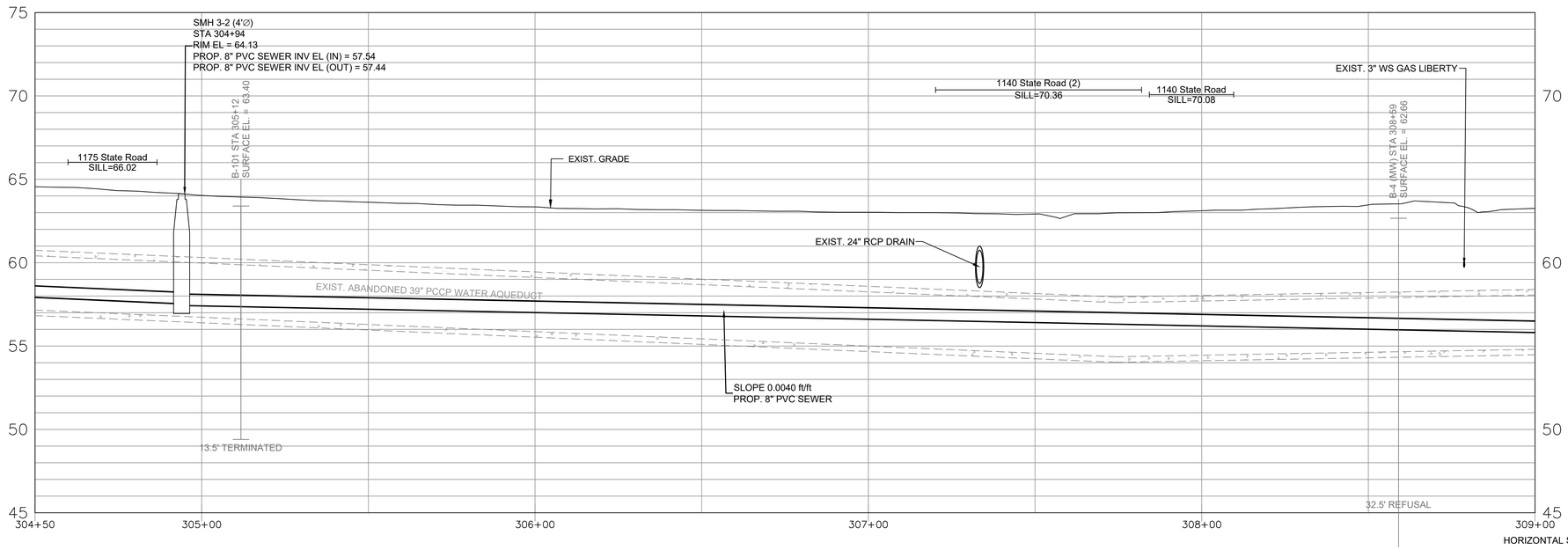
SHEET 68 of 85

PLOTTED: 3/13/2024 1:10 PM BY: alex.olivieri
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\FFG - PR-GRAVITY-1C2 - (1)_recover.dwg LAYOUT: C-301 PLAN AND PROFILE STA 0+00 TO 4+50



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 304+50 TO 309+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-302

SHEET 69 of 85

PLOTTED: 3/13/2024 1:11 PM BY: alex.silvert
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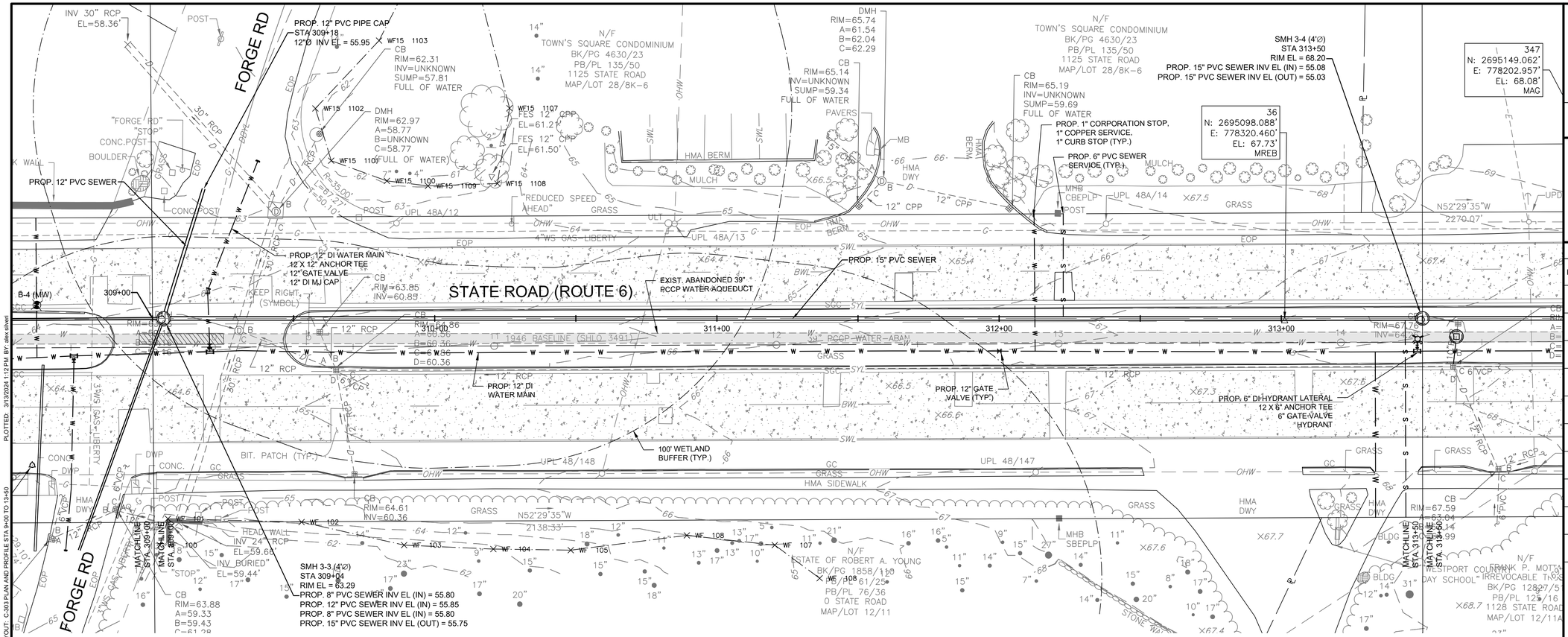
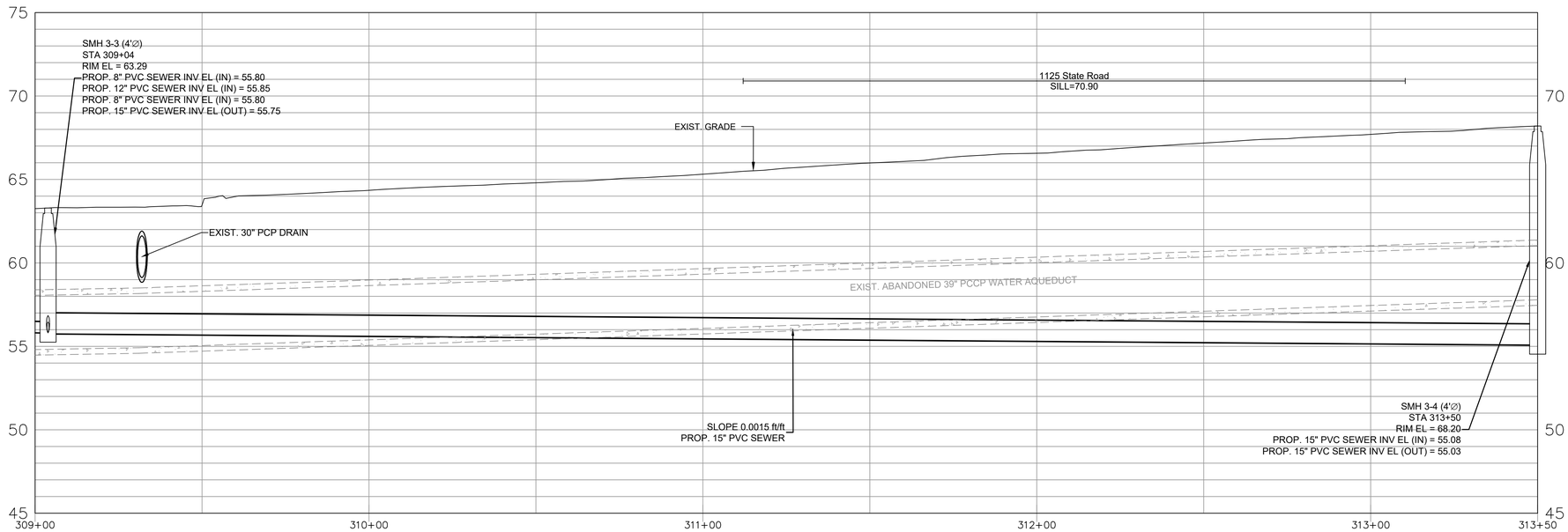


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 309+00 TO 313+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-303

SHEET 70 of 85

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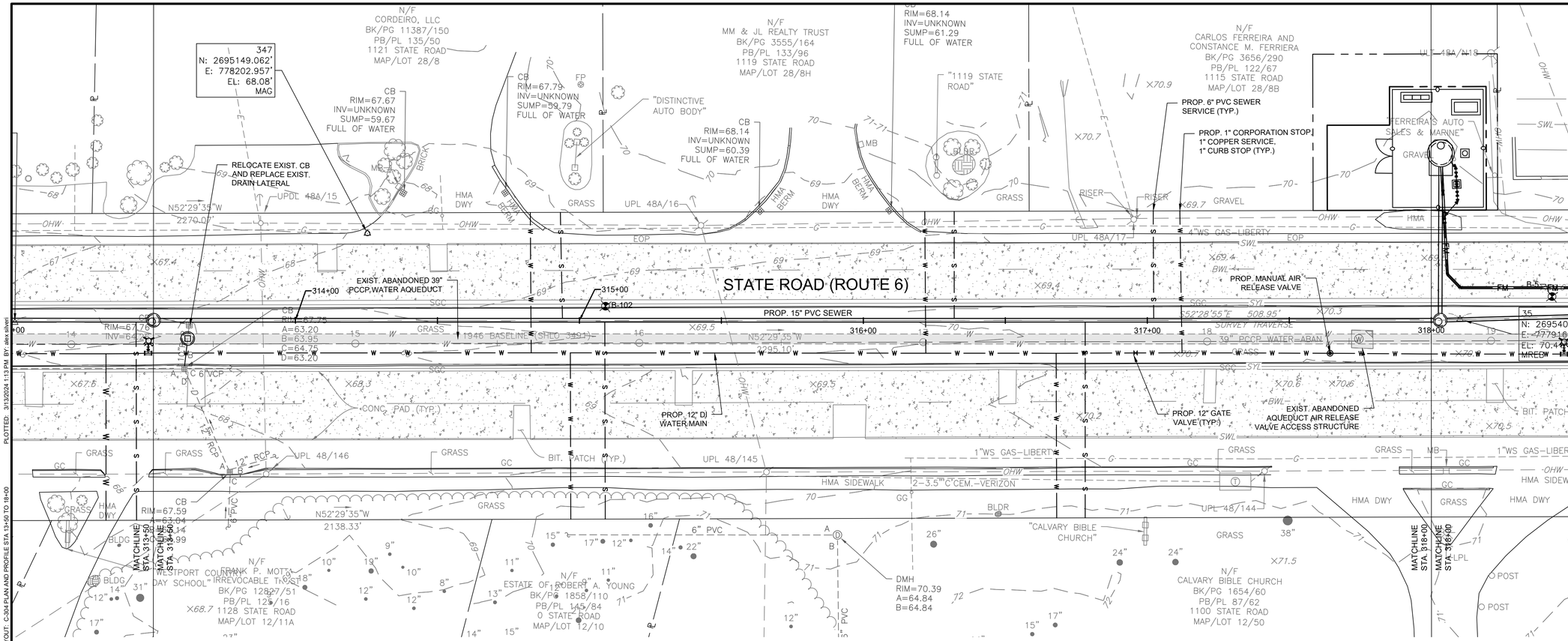
PLOTTED: 3/13/2024 1:13 PM BY: alex oliveri



PLAN
SCALE: 1" = 20'

PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

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REVISIONS

REV	DESCRIPTION	DSN / DWN	CHK / APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 313+50 TO 318+00

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

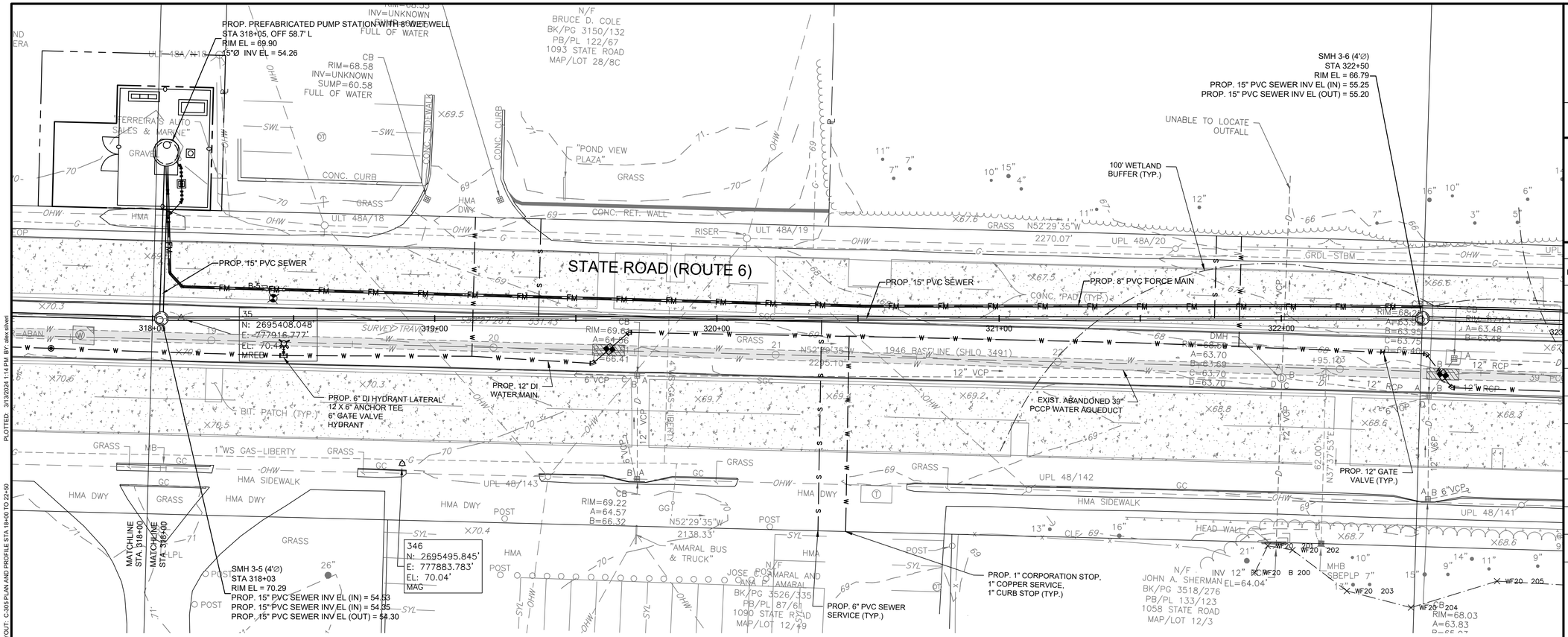
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

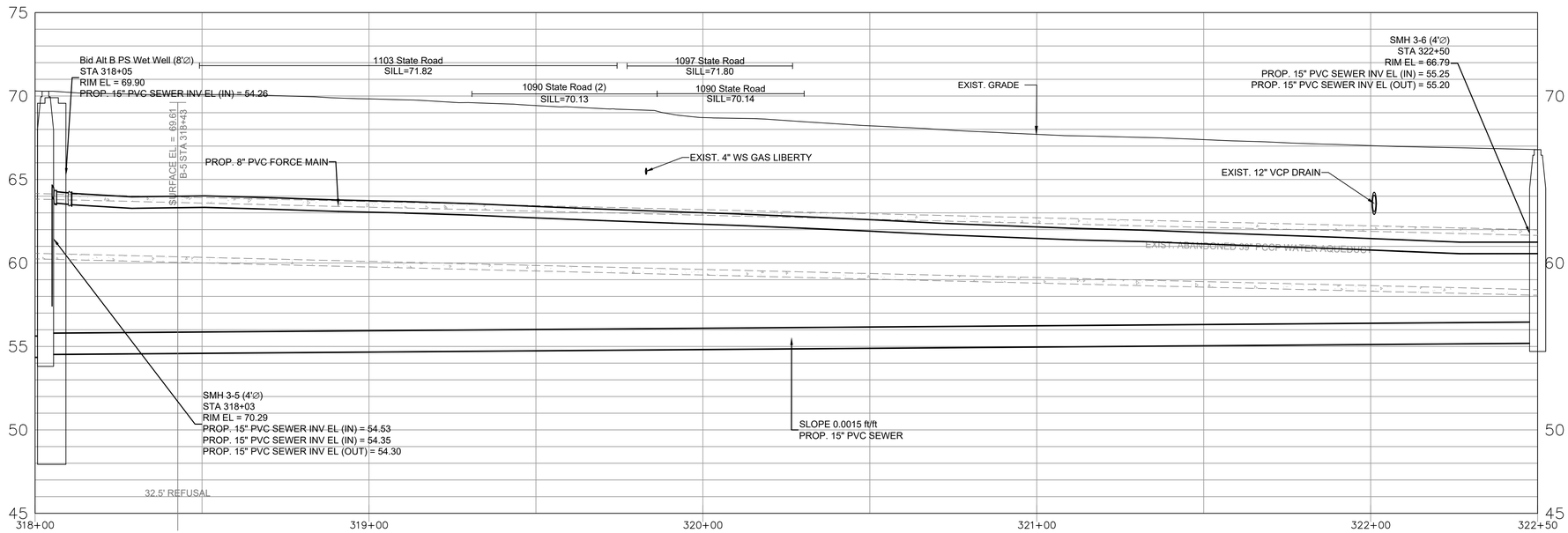
C-304

SHEET 71 of 85



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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Phone: 617-497-7800
www.kleinfelder.com

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 318+00 TO 322+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-305

SHEET 72 of 85

PLOTTED: 3/13/2024 1:14 PM BY: alex oliveri
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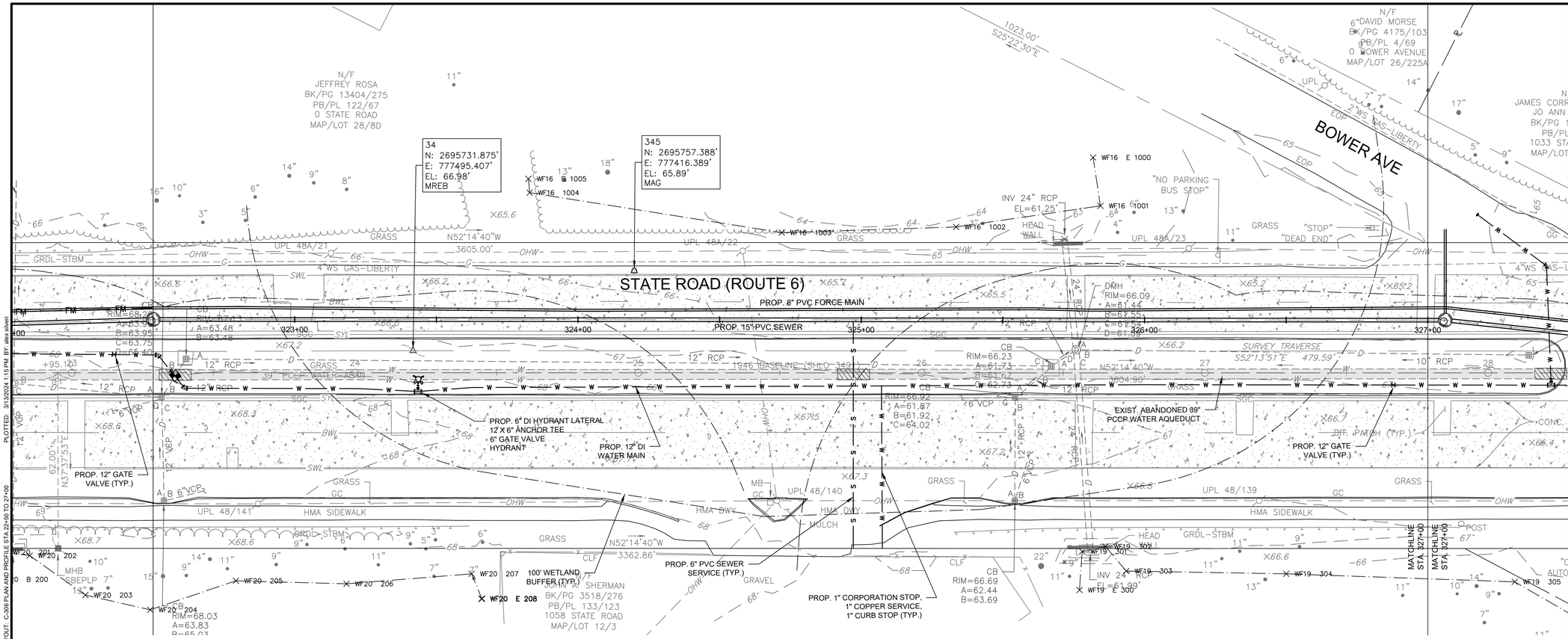
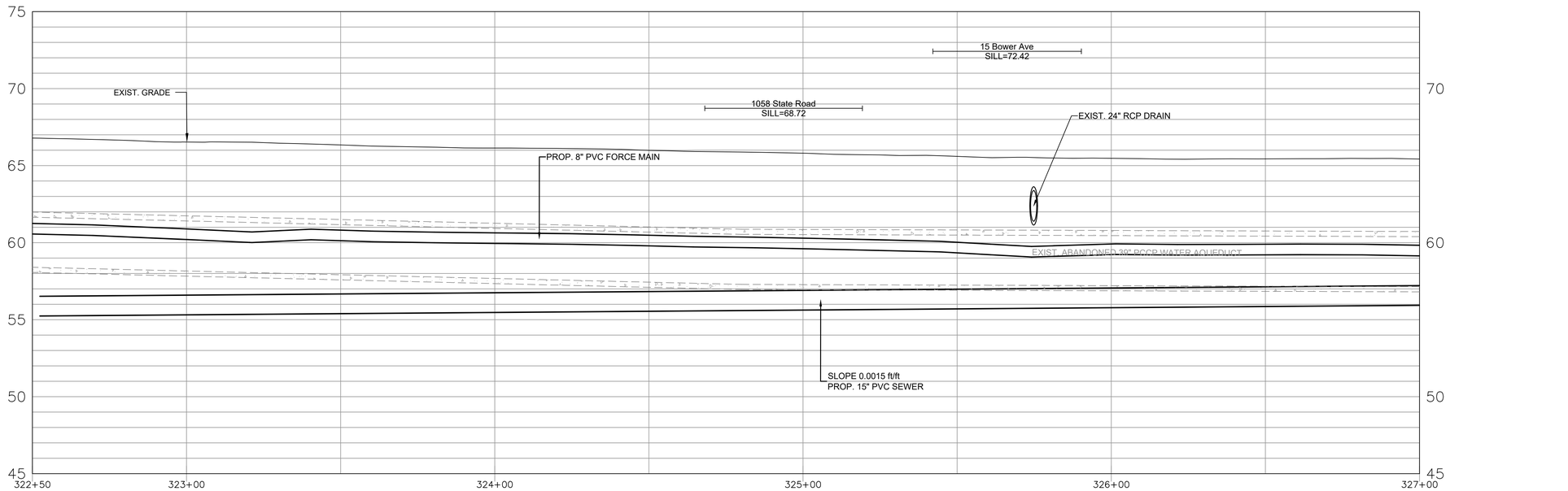
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\WFG - PR-GRAVITY-1C2 - (1)_recover.dwg LAYOUT: C-306 PLAN AND PROFILE STA 22+50 TO 27+00
PLOTTED: 3/13/2024 1:15 PM BY: alex.oliveri



PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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Phone: 617-497-7800
www.kleinfelder.com

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 322+50 TO 327+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

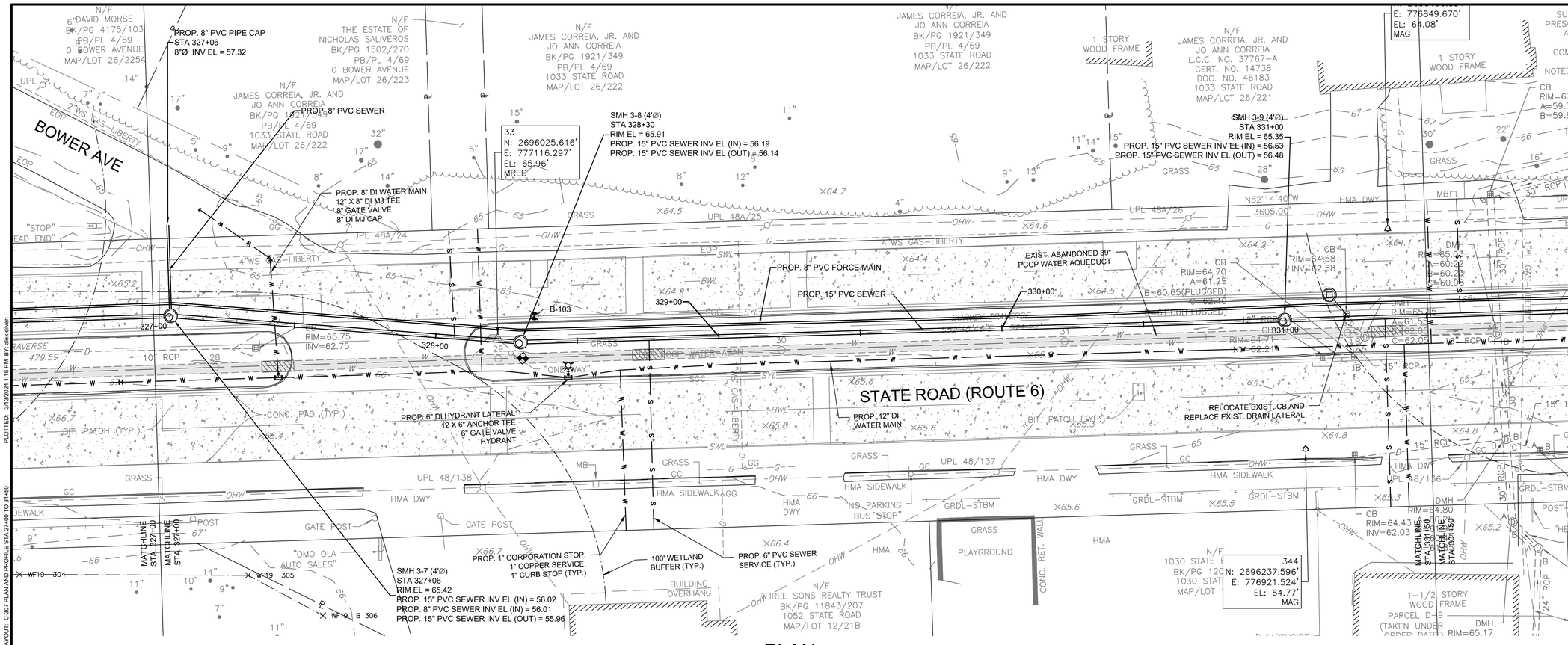
TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

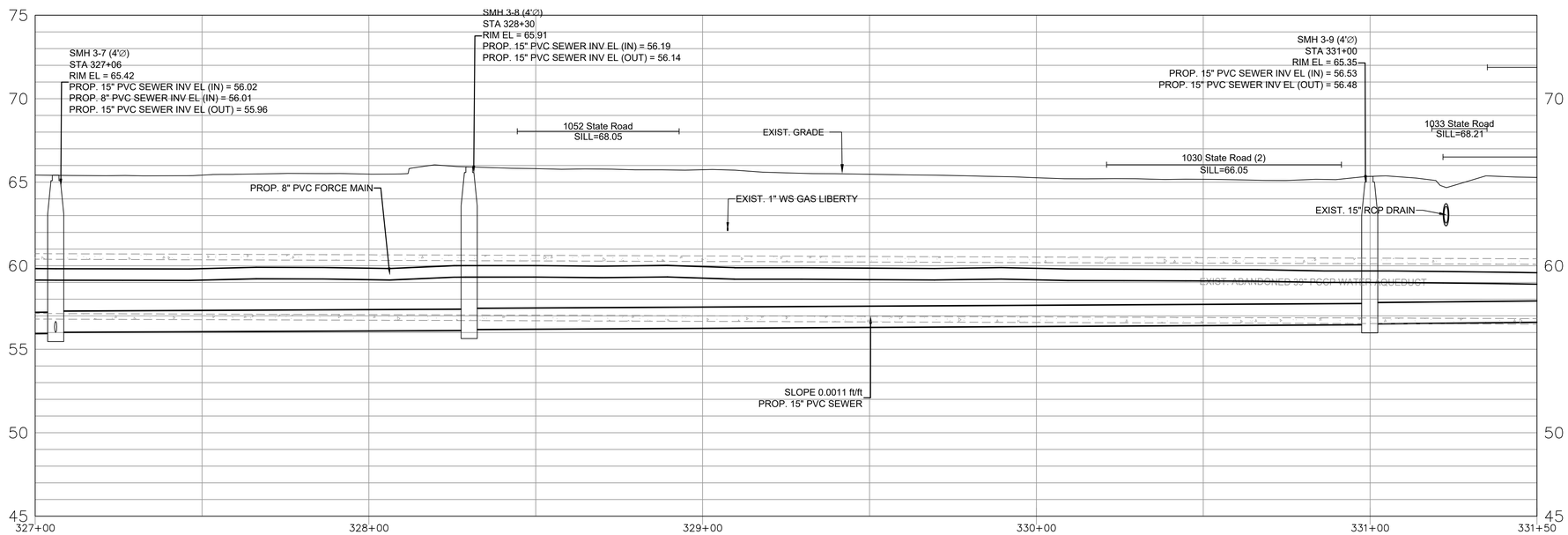
PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-306



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 327+00 TO 331+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-307

SHEET 74 of 85

PLOTTED: 3/13/2024 1:16 PM BY: alex oliveri

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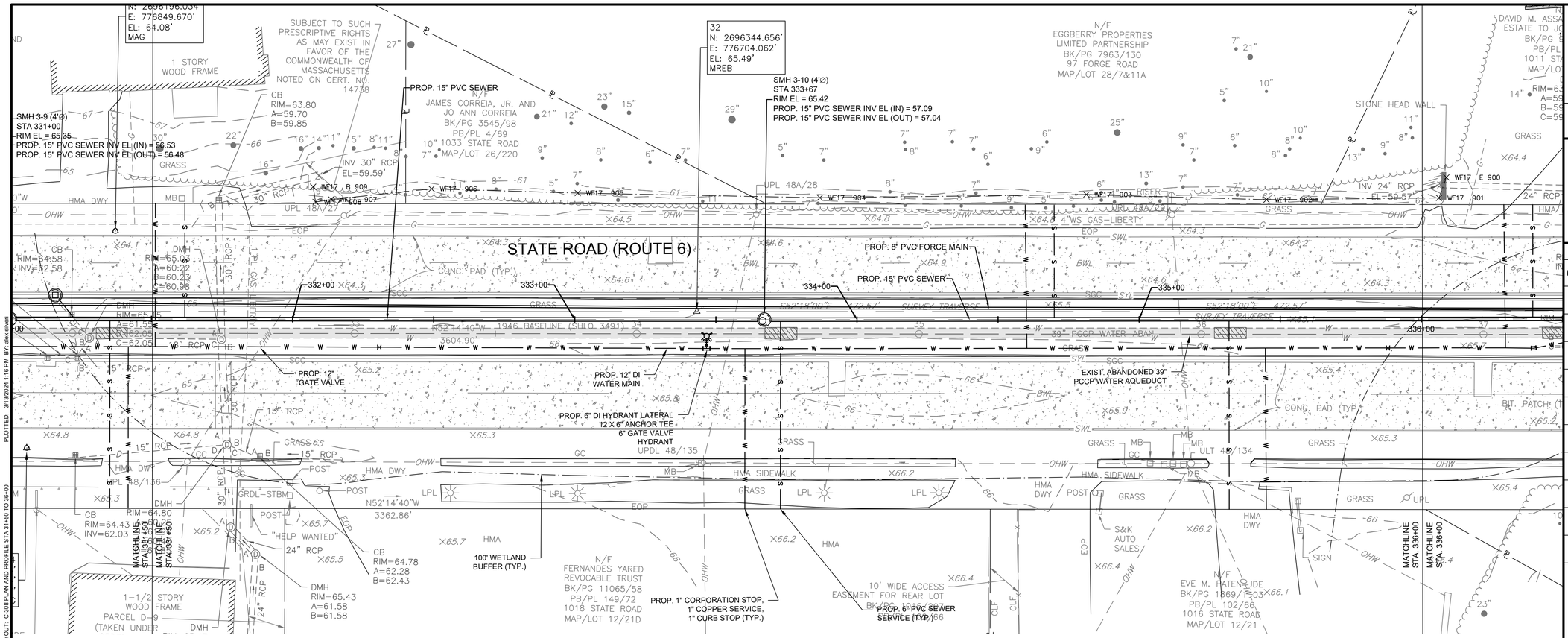
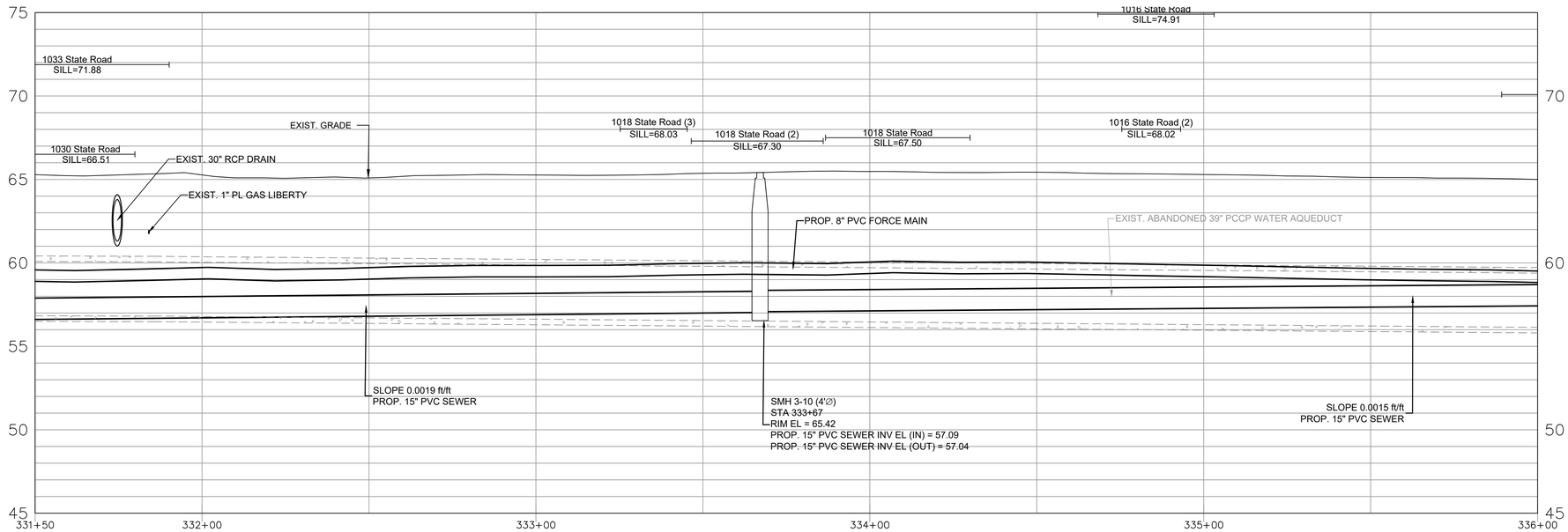


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 331+50 TO 336+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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CHECKED BY	DTP
APPROVED BY	MT

C-308

SHEET 75 of 85

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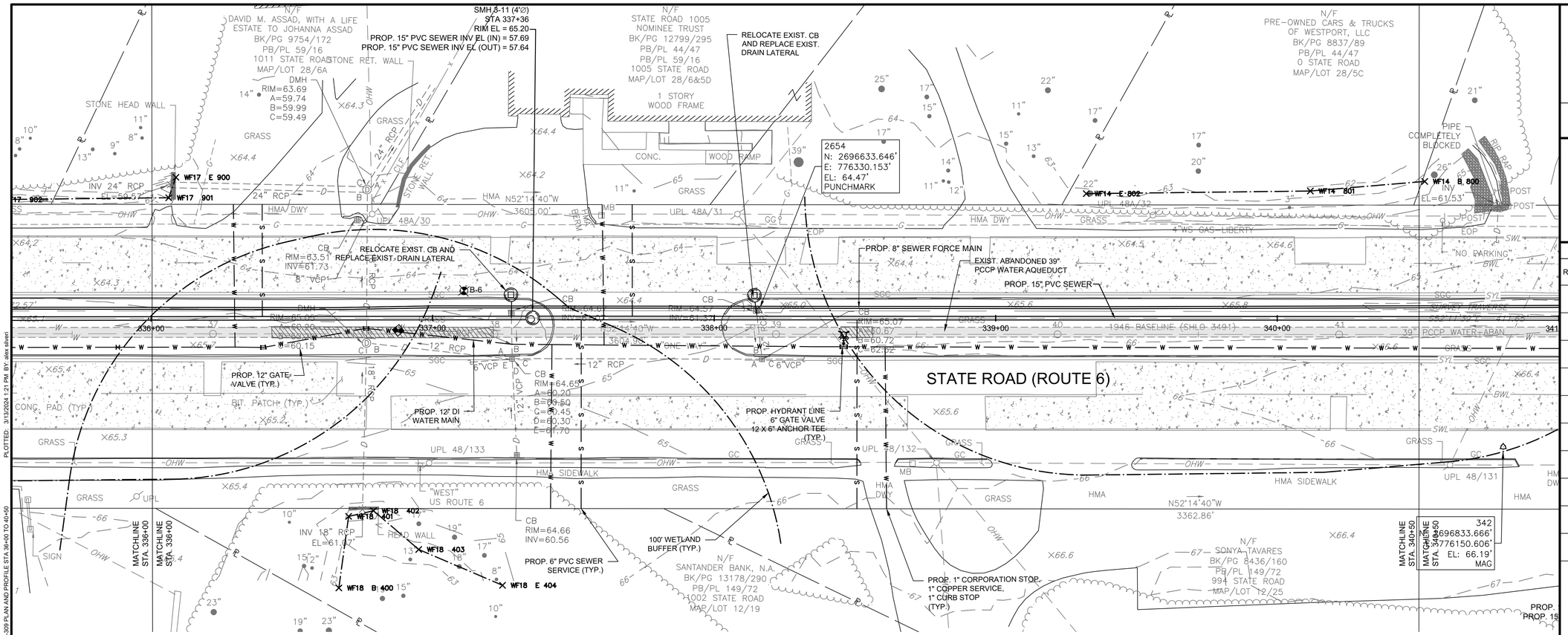
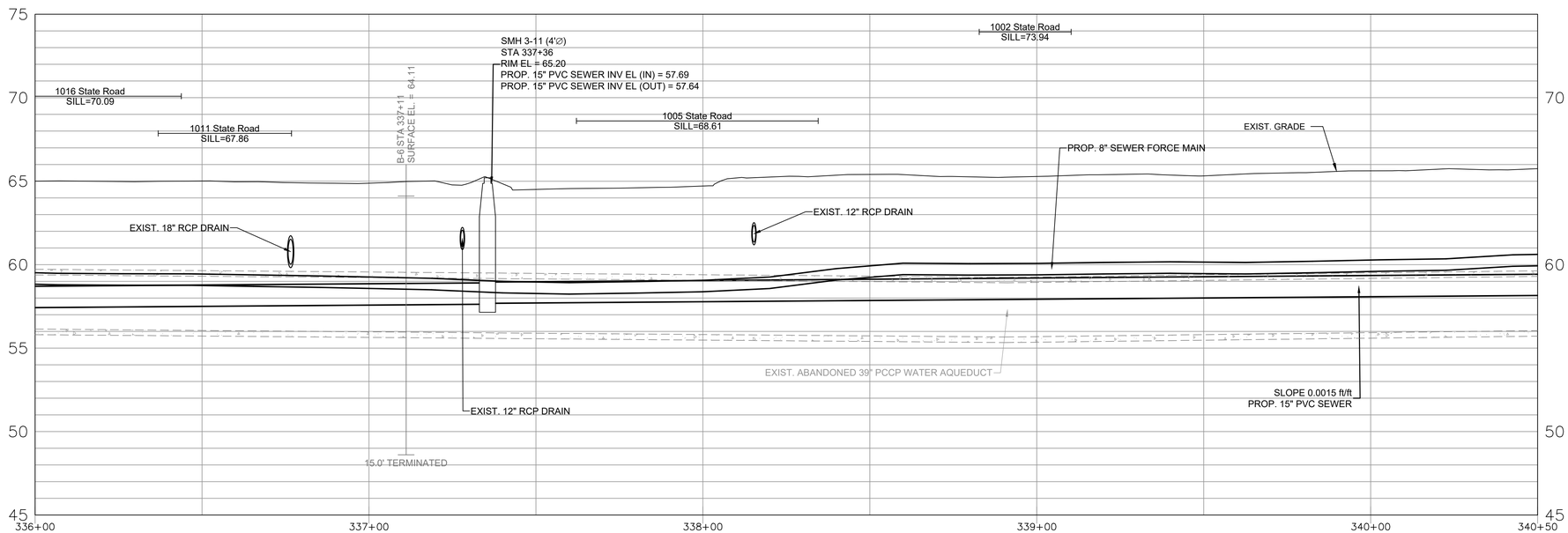


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

4 2 0 4 8

VERTICAL SCALE: 1"=4'

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0 1"

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0 20 40

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ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 336+00 TO 340+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-309

SHEET 76 of 85

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PLOTTED: 3/13/2024 1:21 PM BY: alex silvert

N/F
OWNED CARS & TRUCKS
OF WESTPORT, LLC
BK/PG 8837/89
PB/PL 44/47
0 STATE ROAD
MAP/LOT 28/5C

2 STORY
WOOD FRAME

N/F
LE A. GAUDREAU AND
RACHEL A. GOUDREAU
BK/PG 7419/315
PB/PL 44/47
985 STATE ROAD
MAP/LOT 28/5B

N/F
OWNED CARS & TRUCKS
OF WESTPORT, LLC
BK/PG 8837/89
PB/PL 44/47
983 STATE ROAD
MAP/LOT 28/5A

N/F
RUI M. CORDEIRO AND
HELENA T. CORDEIRO
REVOCABLE TRUST
BK/PG 11165/330
0 STATE ROAD
MAP/LOT 24/33

EL: 64.52
MAG

BENCHMARK: 902
BRASS RIVET IN CONC
HEADWALL
EL=63.46'

RELOCATE EXIST. CB AND
REPLACE EXIST. DRAIN LATERAL

EXIST. ABANDONED 39"
PCCP WATER AQUEDUCT

PROP. 1" CORPORATION STOP.
1" COPPER SERVICE.
1" CURB STOP
(TYP.)

PROP. 6" PVC SEWER SERVICE (TYP.)

100' WETLAND
BUFFER (TYP.)

"MIKE'S AUTO
USED TOYOTA
SALES"

PIPE
COMPLETELY
BLOCKED

RIP RAP

STONE WALL

GRASS

INV
EL=61.53'

POST

"NO PARKING"

EOP

HMA

MB

BLDR

GRAVEL

LPL

UPL 48A/33

UPL 48A/34

UPL 48A/35

UPL 48A/36

4"WS GAS—LIBERTY

PROP. 8" SEWER FORCE MAIN

BIT. PATCH (TYP.)

STATE ROAD (ROUTE 6)

SURVEY TRAVERSE

2653
N: 2696885.983'
E: 776004.909'
EL: 66.06'
REBAR

SIGN
(BTR)

BASELINE 344+00 3491

N52°14'40"W
3605.00'

N52°14'40"W
3604.90'

N52°14'40"W
3362.86'

CB
RIM=65.94
INV=62.94

INV 12" RCP
EL=61.22

HEAD
WALL

CB-7

RIM=66.04
A=63.29
B=63.29
C=62.99

12" RCP B

6" PCP B

12" RCP A

12" RCP C

12" RCP D

PCCP WATER ABAN

39"

GRASS

GC

SGC

SWL

BWL

OHW

CONC. PAD (TYP.)

PROP. 12" DI MJ
GATE VALVE

PROP. 12" DI
WATER MAIN

PROP. 15" PVC SEWER

UPL 48/130

UPL 48/129

UPL 48/131

HMA SIDEWALK

HMA DWY

HMA BERM

MBMB

LITTERING
PROHIBITED

SBEPLP

UPOST

MATCHLINE
STA. 340+50

342
696833.666'
776150.606'
EL: 66.19'
MAG

SMH 3-12 (4'∅)
STA 341+49
RIM EL = 66.29
PROP. 15" PVC SEWER INV EL (IN) = 58.36
PROP. 15" PVC SEWER INV EL (OUT) = 58.31

N/F
SONYA TAVARES
BK/PG 8436/160
PB/PL 149/72
994 STATE ROAD
MAP/LOT 12/25

PROP. 6" DI HYDRANT LINE
6" GATE VALVE
12 X 6" ANCHOR TEE
(TYP.)

N/F
MESSIER REAL ESTATE LLC
BK/PG 13363/167
PB/PL 133/114
972 STATE ROAD
MAP/LOT 12/24

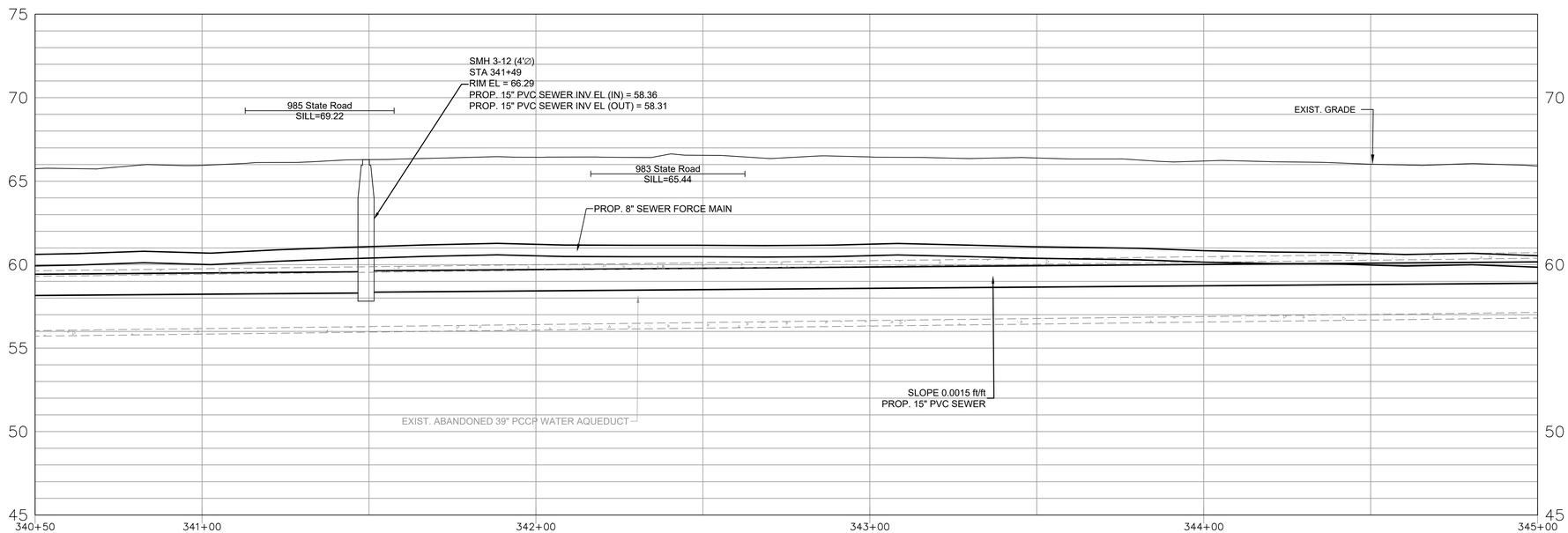
STEPS

MATCHLINE
STA. 345+00

"MESSIER
MOTORS"

PROP.
(1

PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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PLOTTED: 3/13/2024 1:21 PM BY: alex allnerl

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REVISIONS

REV	DESCRIPTION	DSN / DWN	CHK / APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 340+50 TO 345+00

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

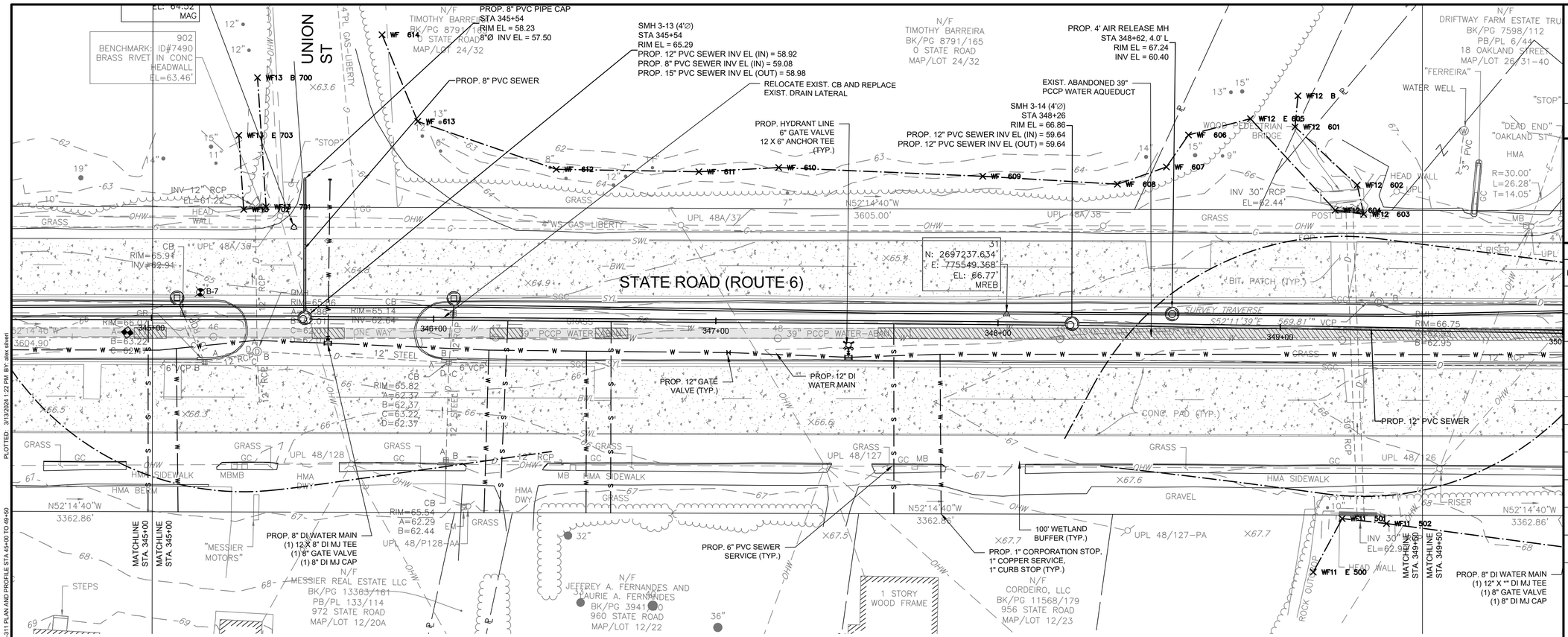
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

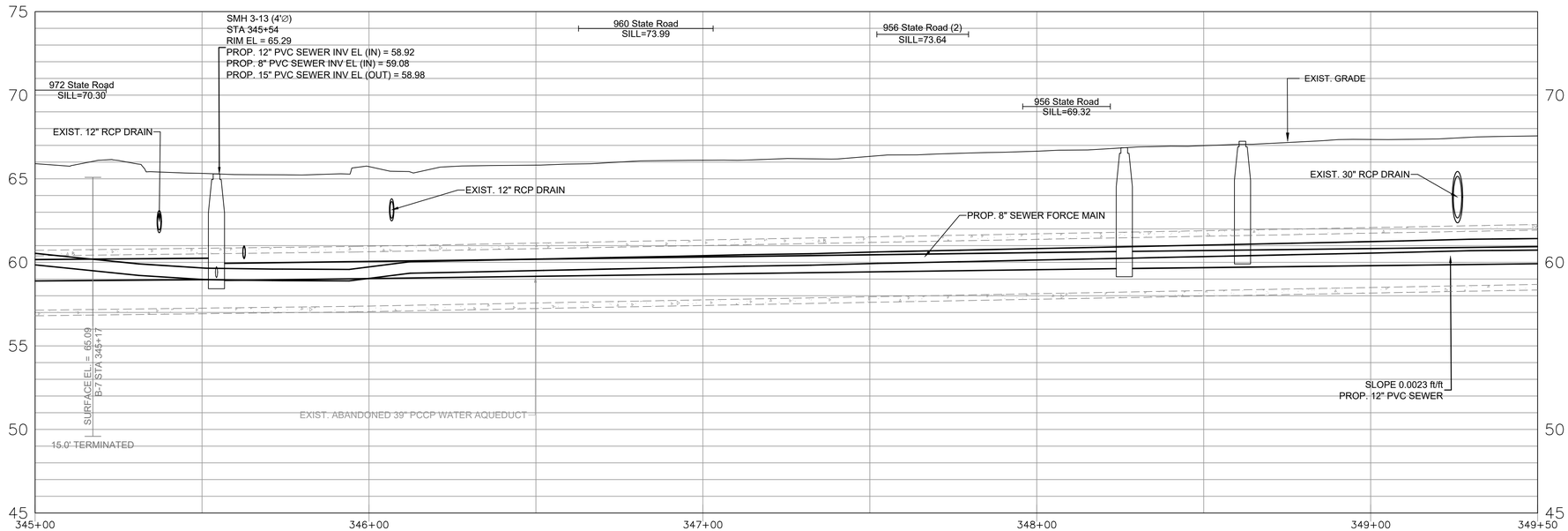
C-310

SHEET 77 of 85



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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0 1"

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0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 345+00 TO 349+50

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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APPROVED BY	MT

C-311

SHEET 78 of 85

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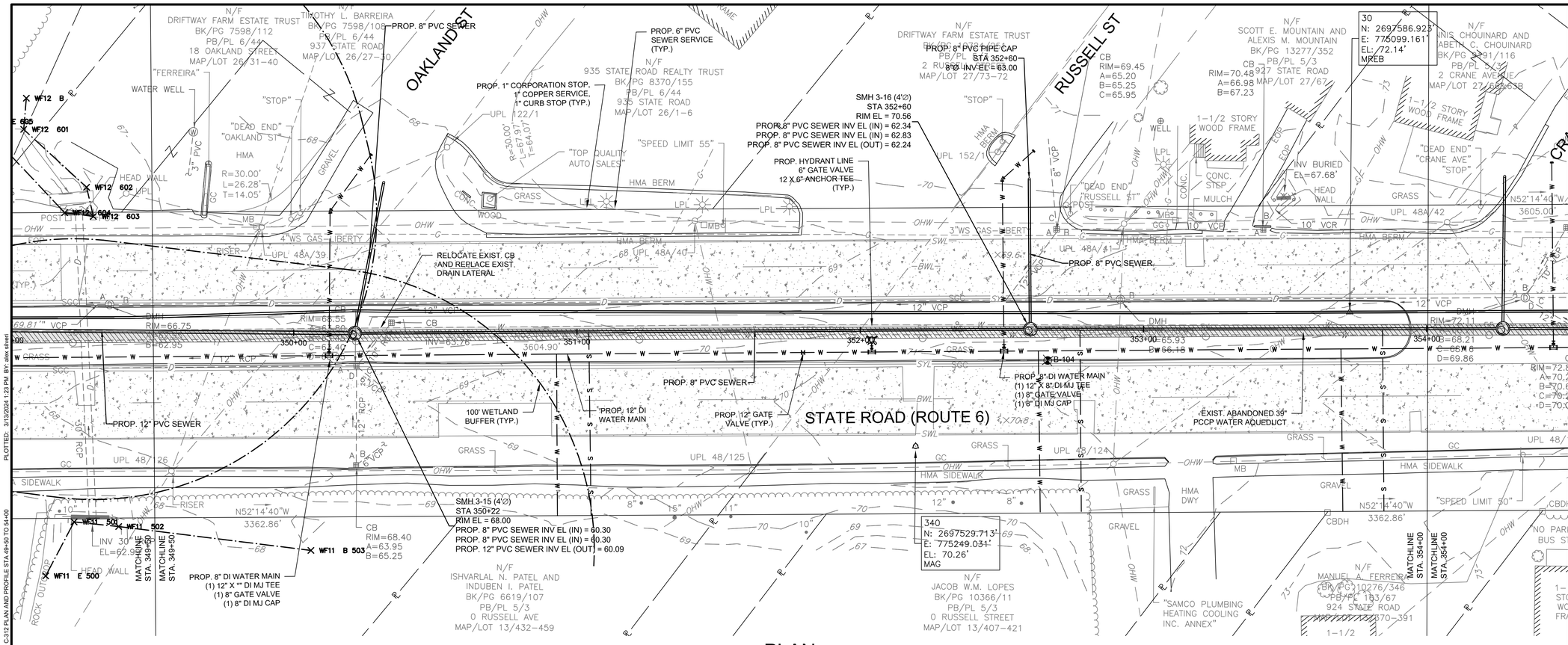
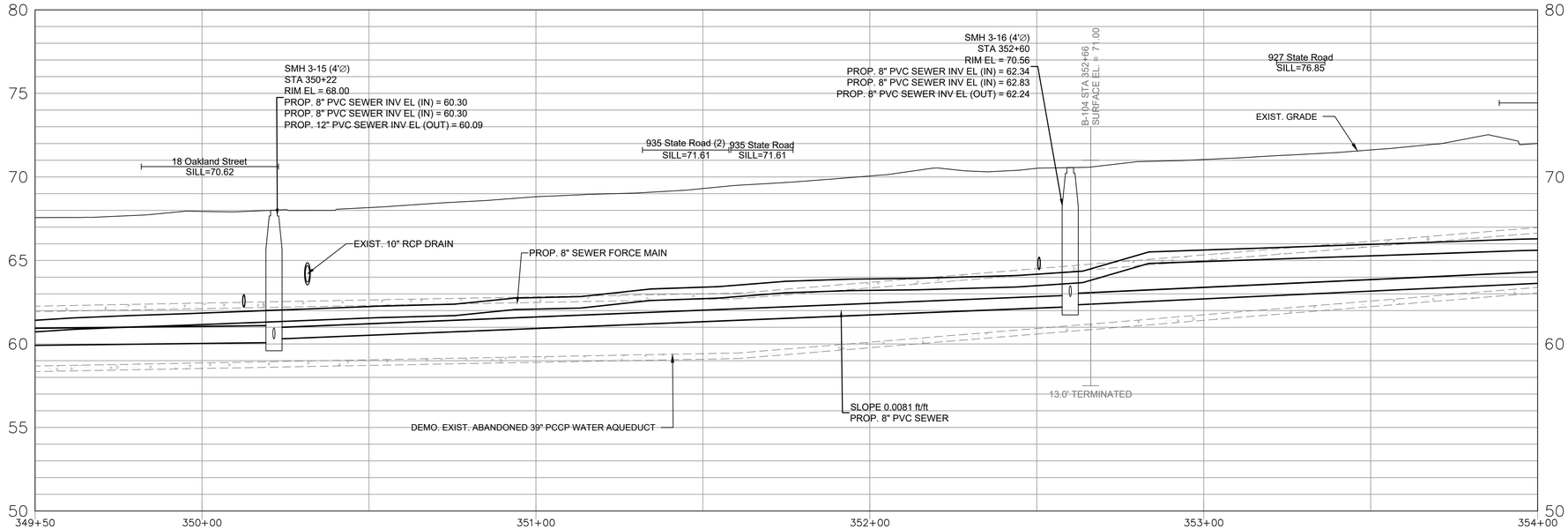
PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'



HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 349+50 TO 354+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-312

SHEET 79 of 85

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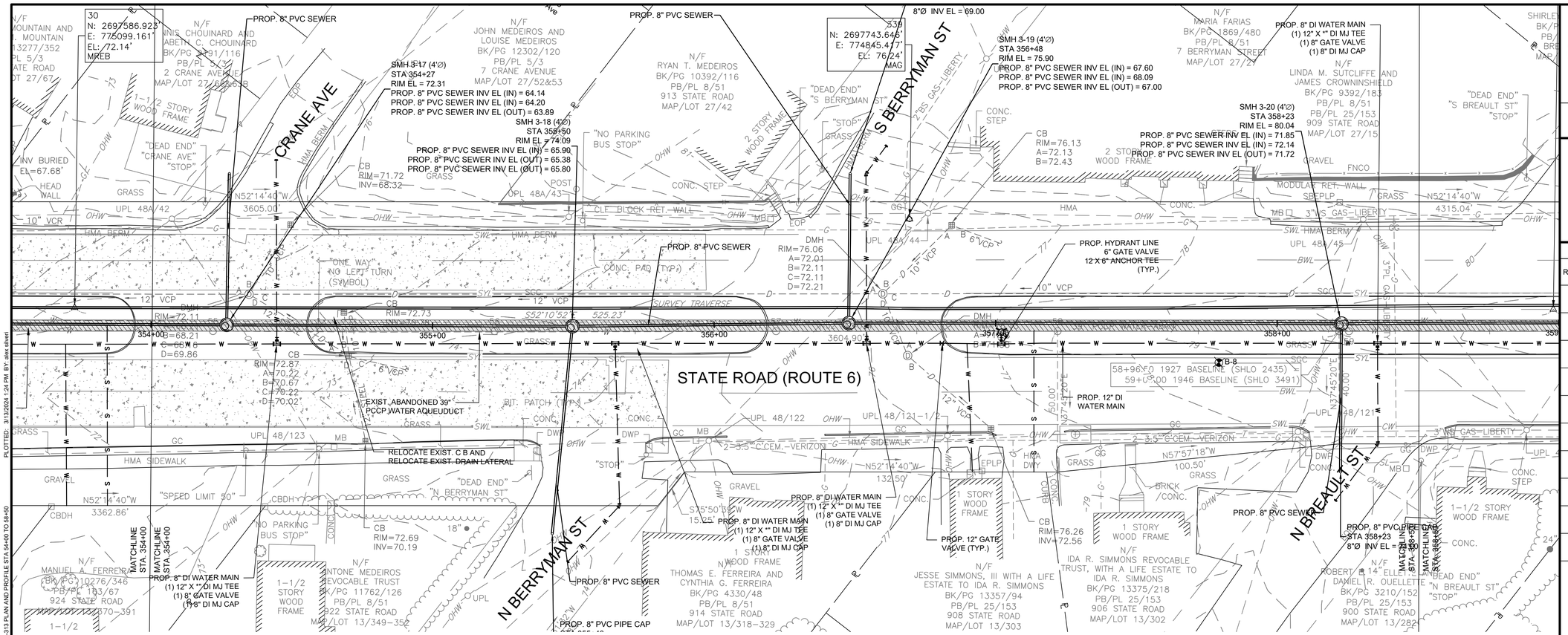
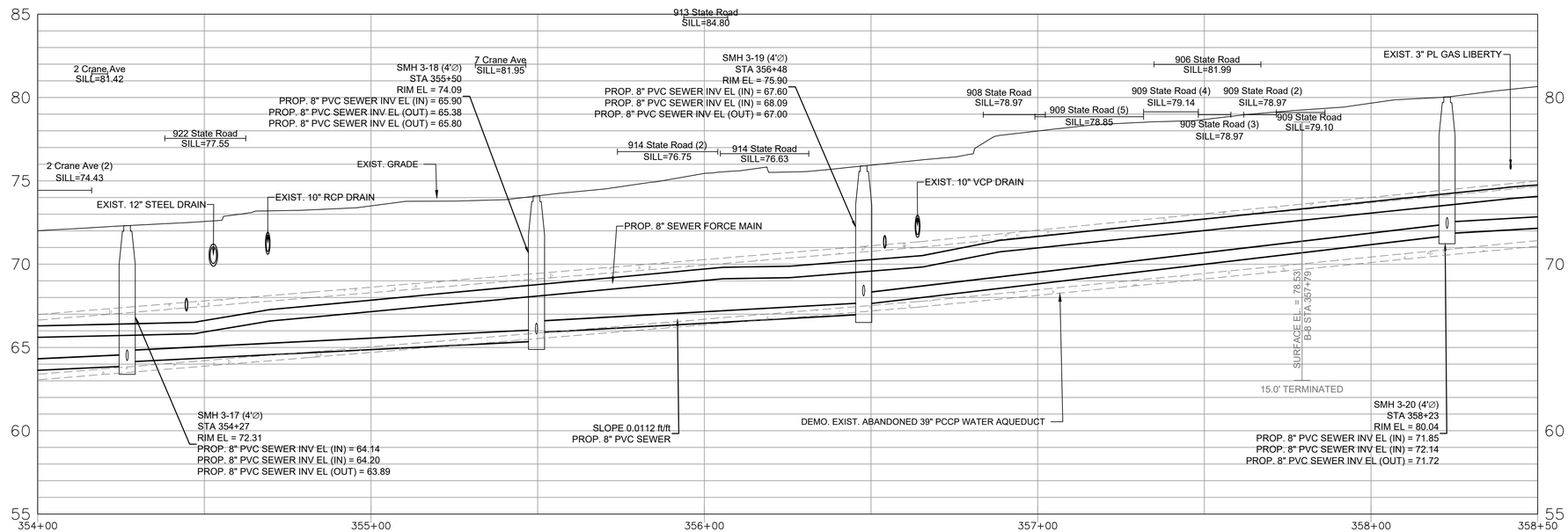
PLOTTED: 3/13/2024 1:23 PM BY: alex.silvert



PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 354+00 TO 358+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

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CHECKED BY	DTP
APPROVED BY	MT

C-313

SHEET 80 of 85

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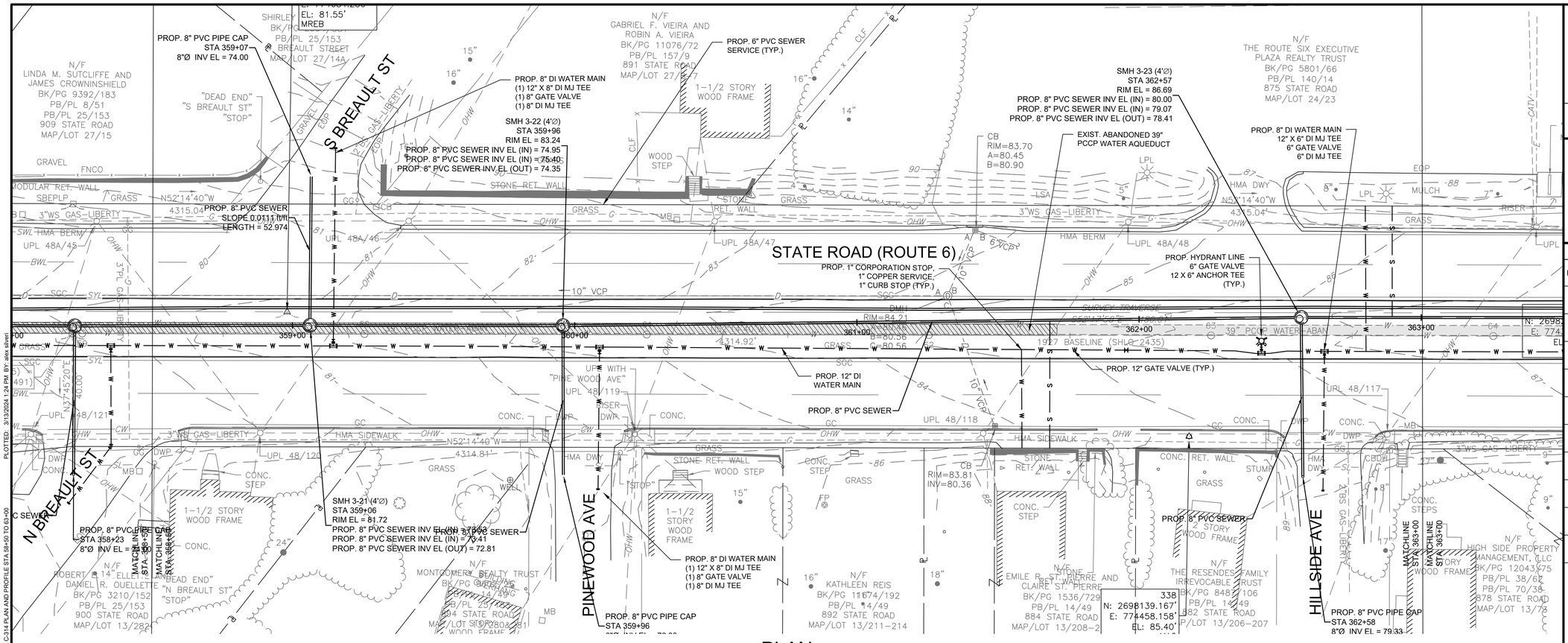
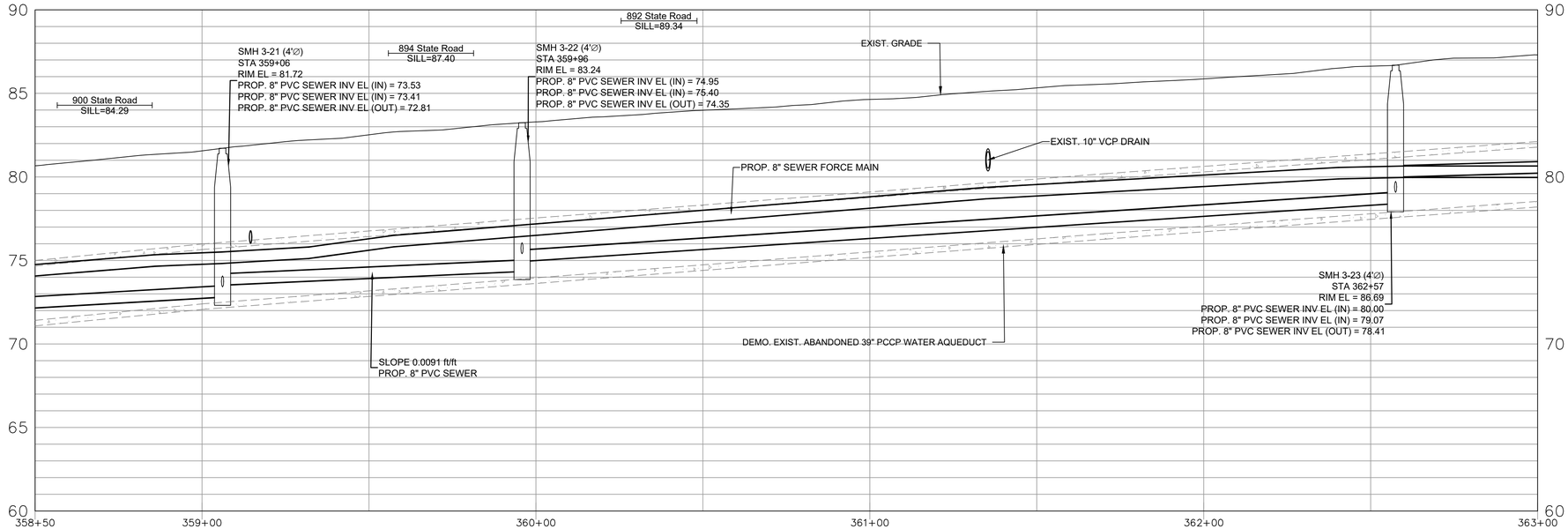


PLAN

SCALE: 1" = 20'



PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'

20 10 0 20 40

VERTICAL SCALE: 1"=4'

4 2 0 4 8

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0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40

SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 358+50 TO 363+00

ROUTE 6 SEWER AND WATER EXTENSIONS BID ALTERNATE B

TOWN OF WESTPORT, MA

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WESTPORT, MA 02790

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APPROVED BY	MT

C-314

SHEET 81 of 85

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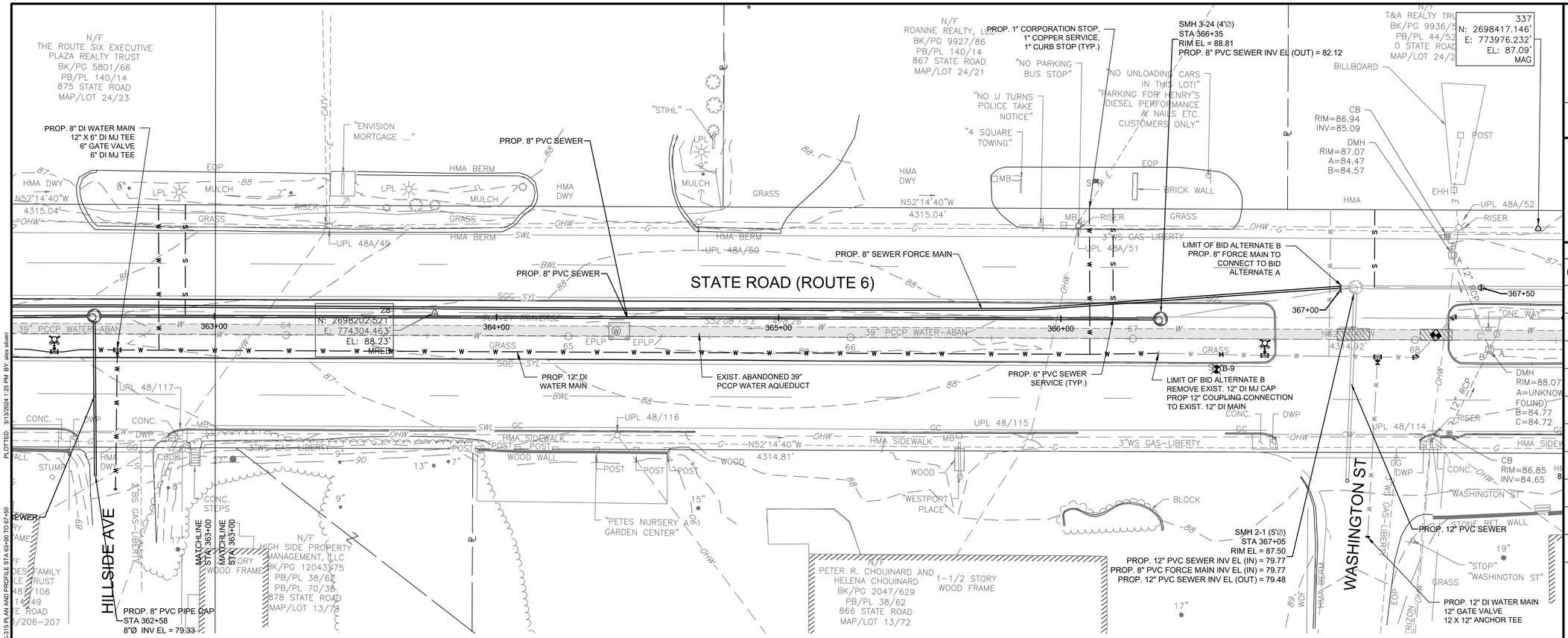
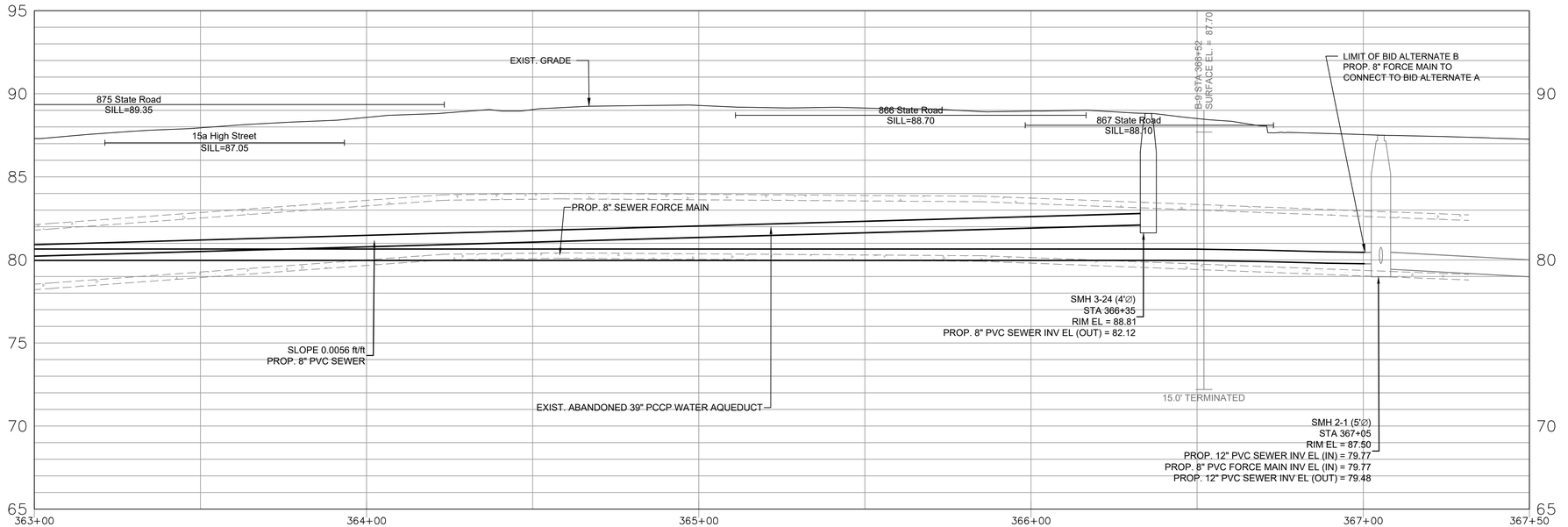
PLOTTED: 3/13/2024 1:24 PM BY: alex silvert



PLAN
SCALE: 1" = 20'



PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1"=4'

HORIZONTAL SCALE: 1" = 20'
20 10 0 20 40
VERTICAL SCALE: 1"=4'
4 2 0 4 8

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PLAN AND PROFILE STA 363+00 TO 367+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-315

SHEET 82 of 85

PLOTTED: 3/13/2024 1:25 PM BY: alex silvert
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NOTES:
1. PROPOSED FENCED AREA AND DRIVEWAY TO BE PAVED WITH 2" BASE AND 2" TOP COURSE ON 6" GRAVEL BASE.
2. PROPOSED GRADE SHALL MATCH EXISTING GRADE.

N/F
CARLOS FERREIRA AND
CONSTANCE M. FERRIERA
BK/PG 3656/290
PB/PL 122/67
1115 STATE ROAD
MAP/LOT 28/8B

PROP. ELECTRICAL CONTROLS AND EQUIPMENT ENCLOSURES ON CONCRETE PAD

PROP. GENERATOR ON CONCRETE PAD

PROP. 6' HIGH CHAIN LINK FENCE ENCLOSURE WITH BLACK PRIVACY SLATS

PROP. PREFABRICATED PUMP STATION WITH 8' WET WELL
STA 318+05
TOP OF PUMP STATION EL = 69.90
EXIST. GRADE EL = ???
PROP. 15" PVC SEWER INV EL (IN) = 54.26
PROP. 12" PVC FORCE MAIN INV EL (OUT) = 57.00
WET WELL FLOOR EL = 48.26
(SEE PLAN AND SECTION ON SHEET C-317)

PROP. LIMIT OF PERMANENT ACCESS AND UTILITY EASEMENT 2,139 SQUARE FEET

PROP. 12' WIDE CHAIN LINK FENCE GATE

PROP. LIMIT OF WORK FOR TEMPORARY PUMP STATION LUMP SUM BID ITEM AND LIMIT OF TEMPORARY CONSTRUCTION EASEMENT 1,436 SQUARE FEET

PROP. ODOR CONTROL DRUM SCRUBBER ON CONCRETE PAD

PROP. HANDHOLE FOR TEMPORARY BYPASS

PROP. 6" DI MJ PLUG VALVE (TYP.)

PROP. 6" DI MJ 45° BEND (TYP.)

PROP. 6" X 6" DI MJ WYE

PROP. 6" X 8" DI MJ INCREASER

PROP. 15" PVC SEWER

PROP. 8" PVC FORCE MAIN

PROP. 12" DI WATER MAIN

CB
RIM=68.58
INV=UNKNOWN
SUMP=60.58
FULL OF WATER

N/F
BRUCE D. COLE
BK/PG 3150/132
PB/PL 122/67
1093 STATE ROAD
MAP/LOT 28/8C

"FERREIRA'S AUTO SALES & MARINE"

GRAVEL

HMA

CONC. SIDEWALK

CONC. CURB

GRASS

NMA DWY

ULT 48A/N18

ULT 48A/18

UPL 48A/17

4"WS GAS-LIBERTY

EOP

SWL

OHW

BWL

SGC

SYL

317+00

318+00

319+00

S52°28'55"E 508.95'
"SURVEY TRAVERSE"

S52°27'26"

SURVEY TRAVERSE

35
N: 2695408.048'
E: 777916.777'
EL: 70.41'
MREB

346
N: 2695495.845'
E: 777883.783'
EL: 70.04'
MAG

B-5

SMH 3-5 (4'Ø)
STA 318+03
RIM EL = 70.29
PROP. 15" PVC SEWER INV EL (IN) = 54.53
PROP. 15" PVC SEWER INV EL (IN) = 54.35
PROP. 15" PVC SEWER INV EL (OUT) = 54.30

STATE ROAD (ROUTE 6)

BIT. PATCH (TYP.)

1"WS GAS-LIBERTY

MB

HMA SIDEWALK

HMA DWY

UPL 48/144

"CALVARY BIBLE CHURCH"

39" PCCP
WATER ADAN

38"

24"

26"

LPL

POST

PLAN
SCALE: 1" = 10'

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 — 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 10 20
SCALE: 1" = 10' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

1115 STATE ROAD PUMP STATION SITE PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
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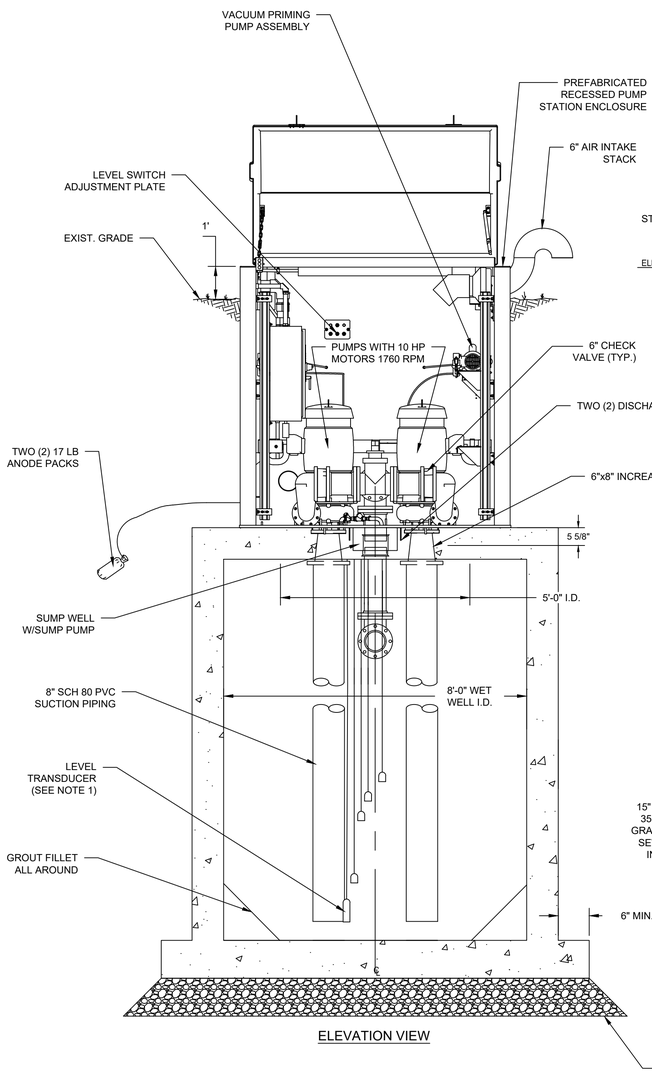
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

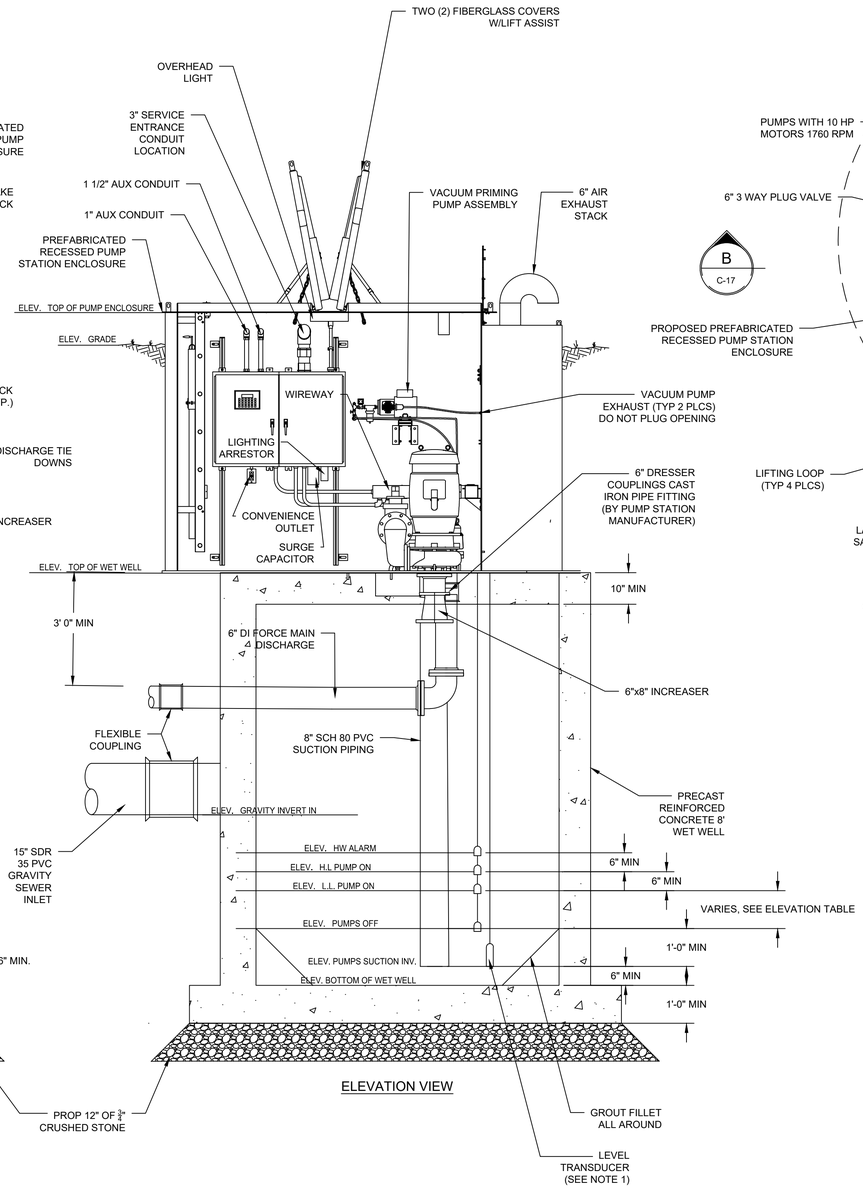
C-316

SHEET 83 of 85

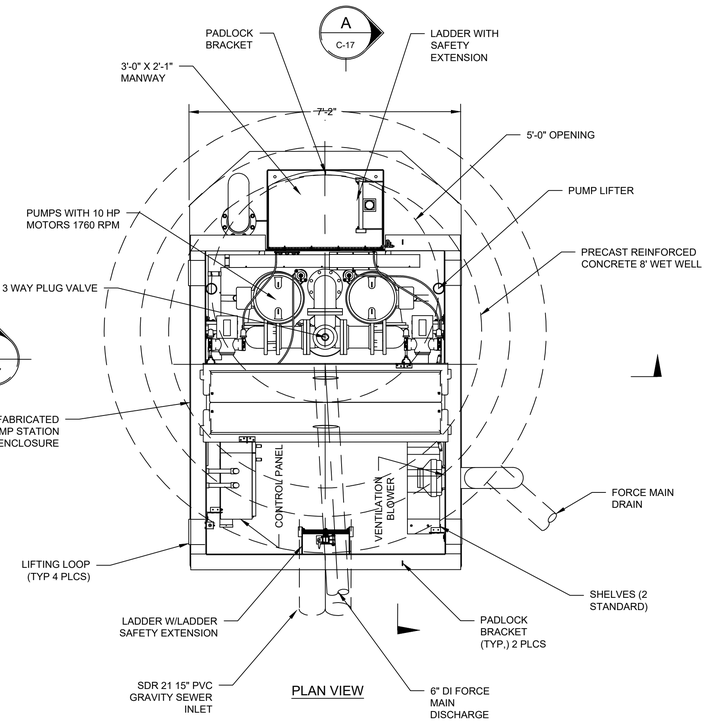
PLOTTED: 3/13/2024 1:28 PM BY: alex.dalveri
LAYOUT: C-316 1115 STATE ROAD PUMP STATION SITE PLAN
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\C-227 PUMP STATION SITE PLAN.dwg



ELEVATION VIEW



ELEVATION VIEW



PLAN VIEW

NOTES:

1. TRANSDUCER INCLUDED AS PART OF THE PRIMARY CONTROL SYSTEM. FLOAT SWITCHES WILL SERVE AS THE BACK-UP SYSTEM IF PRIMARY LEVEL CONTROL SYSTEM FAIL.

Parameter	Forge Rd PS
Pump Station Type	Below grade suction lift
Pump Priming Type	Vacuum Primed
Design Flow (gpm)	470
Total Dynamic Head (ft)	52
Grade Elev. (ft, NAVD 88)	69.90
Force Main Discharge Invert Elev. (ft, NAVD 88)	79.77
Gravity Invert In Elev. (ft, NAVD 88)	54.26
High Water Alarm Elev. (ft, NAVD 88)	53.76
High Level Pump On Elev. (ft, NAVD 88)	53.26
Low Level Pump On Elev. (ft, NAVD 88)	52.76
Pump Off Elev.	50.51
Pump Suction Invert Elev. (ft, NAVD 88)	48.76
Wet Well Floor Elev. (ft, NAVD 88)	48.26

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 1.5 3 4.5 6

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

ORIGINAL DRAWING SIZE IS 22 x 34

1115 STATE ROAD PUMP STATION PLAN AND SECTION

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

816 MAIN ROAD
WESTPORT, MA 02790

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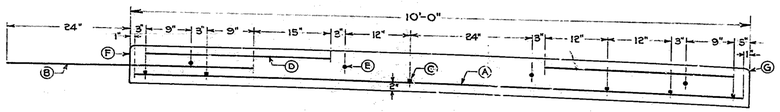
APPROVED BY	MT

C-317

CAD FILE: \\dar\fedex.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\C-Prop\PumpStationPlanSection-1C-2.dwg LAYOUT: C-317 1115 STATE ROAD PUMP STATION PLAN AND SECTION PLOTTED: 3/13/2024 1:28 PM BY: alex silvert



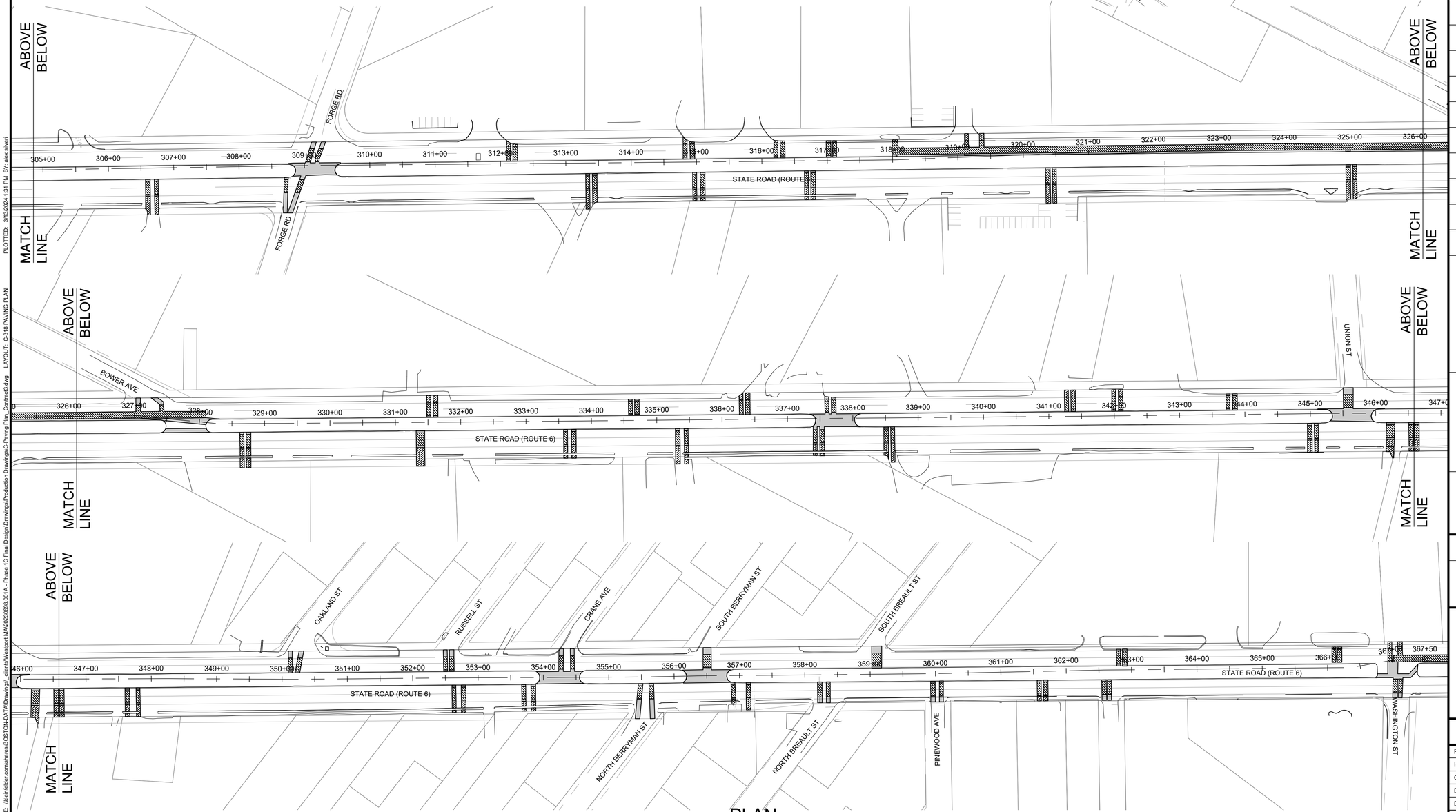
EXISTING CONCRETE ROADWAY SECTION FROM RECORDS
NTS

Ⓐ TRANSVERSE RODS 2'-0" C.TO C. BEGINNING 3" FROM THE END OF SLAB
Ⓑ DOWELS DEFORMED BARS 5' C.-TO C.
Ⓒ LONGITUDINAL RODS TO BE AT LEAST 8' LONG AND LAP 12"
Ⓓ DEFORMED BARS 6' LONG PLACED AT SLAB CORNERS
Ⓔ PLAIN DOWELS 4' LONG ONE END FIXED REMAINDER PAINTED
Ⓕ WHEN BUILT ONE HALF AT A TIME FACE OF SECTION FIRST BUILT TO BE PAINTED WITH BITUMINOUS MATERIAL
WHEN BUILT FULL WIDTH IN ONE OPERATION A LONGITUDINAL JOINT SHALL BE PLACED IN CENTER OF CONCRETE SECTION
ALL REINFORCING WITH THE EXCEPTION OF DOWELS FOR TRANSVERSE JOINTS TO BE DEFORMED STEEL RODS
ALL REINFORCING TO BE OF 0.25"² SECTIONAL AREA
Ⓖ 3/4" RADIUS

NOTES
1. THE ORIGINAL ROUTE 6 ROADWAY CONSTRUCTION CONSISTED OF TWO 10' WIDE LANES OF 8" THICK REINFORCED CONCRETE SLAB AT GRADE IN BOTH TRAVEL DIRECTIONS. REFER TO REINFORCED CONCRETE SLAB DETAIL ON SHEET C-19. THE ORIGINAL 8" THICK REINFORCED CONCRETE ROADWAY STILL EXISTS WITHIN THE PROJECT AREA AND HAS BEEN PAVED OVER WITH ASPHALT. EXISTING CRACKS IN THE SURFACE ASPHALT ARE VISIBLE AT REGULAR INTERVALS RUNNING PERPENDICULAR TO THE DIRECTION OF ROADWAY TRAFFIC. THESE CRACKS ARE SUSPECTED TO COINCIDE WITH THE EDGES OF THE CONCRETE SLABS UNDERNEATH THE SURFACE ASPHALT. SMALL PORTIONS OF THE ORIGINAL REINFORCED CONCRETE ROADWAY HAVE LIKELY BEEN REMOVED PREVIOUSLY TO INSTALL UTILITIES CROSSING THE ROADWAY INCLUDING WATER, DRAIN, GAS, AND TELECOM UTILITIES. REINFORCED CONCRETE ROADWAY SHALL BE REMOVED AND REPLACED WITH PAVEMENT AS DETAILED ON SHEETS C-19 AND C-20.
2. CONTRACTOR SHALL ADJUST PROPOSED SEWER AND WATER SERVICE LOCATIONS IN THE FIELD AS NEEDED TO MINIMIZE THE REMOVAL OF THE EXISTING CONCRETE SLAB ROADWAY UNDERNEATH THE SURFACE ASPHALT. WHERE FEASIBLE, CONTRACTOR SHALL ALIGN SERVICES WITH THE EDGES OF THE EXISTING CONCRETE ROADWAY SLABS AND AVOID LEAVING SMALL SECTIONS OF FLOATING CONCRETE SLABS DISCONNECTED FROM THE ORIGINAL CONCRETE SLAB.

LEGEND

- PROPOSED CONCRETE SLAB REMOVAL, TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED TEMPORARY AND PERMANENT PAVING, AND MILL AND OVERLAY
- PROPOSED HMA SIDEWALK (3") OR DRIVEWAY (4") PAVING RESTORATION



PLAN
SCALE: 1" = 80'

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 — 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 — 80 — 160
SCALE: 1" = 80' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

PAVING PLAN STA 0+00 TO 367+50

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA

816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20230698.001A
ISSUE DATE	03/13/2024
CURRENT REVISION	100%
DESIGNED BY	AS
DRAWN BY	JL
CHECKED BY	DTP
APPROVED BY	MT

C-318

SHEET 85 of 85

PLOTTED: 3/13/2024 1:31 PM BY: alex silvert
CAD FILE: \\kleinfelder.com\shares\BOSTON-DATA\Drawings_clients\Westport MA\20230698.001A - Phase 1C Final Design\Drawings\Production Drawings\C-Paving Plan_Contract3.dwg LAYOUT: C-318 PAVING PLAN

DRAWING LIST

BASE BID	
E-101	ELECTRICAL LEGEND
E-102	ELECTRICAL KEY PLANS & NOTES
E-103	ELECTRICAL 35 STATE ROAD - SITE PLAN
E-104	ELECTRICAL 35 STATE ROAD - SITE PART PLANS
E-105	ELECTRICAL 35 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES
E-106	ELECTRICAL 280 STATE ROAD - SITE PLAN
E-107	ELECTRICAL 280 STATE ROAD - SITE PART PLANS
E-108	ELECTRICAL 280 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES
E-109	ELECTRICAL DETAILS 1
E-110	ELECTRICAL DETAILS 2
E-111	ELECTRICAL DETAILS 3
E-112	ELECTRICAL DETAILS 4
E-113	ELECTRICAL DETAILS 5
BID ALTERNATE A	
E-201	ELECTRICAL 833 STATE ROAD - SITE PLAN
E-202	ELECTRICAL 833 STATE ROAD - SITE PART PLANS
E-203	ELECTRICAL 833 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES
E-204	ELECTRICAL 833 STATE ROAD - DETAILS
BID ALTERNATE B	
E-301	ELECTRICAL 1115 STATE ROAD - SITE PLAN
E-302	ELECTRICAL 1115 STATE ROAD - SITE PART PLANS
E-303	ELECTRICAL 1115 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES
E-304	ELECTRICAL 1115 STATE ROAD - DETAILS

BUILDING GROUNDING GRID LEGEND

- GROUND ROD
- GROUNDING CABLE
- EXOTHERMIC BONDING CONNECTION
- BOLTED BONDING CONNECTION

MOTOR & CONTROLS LEGEND

- 60AS / 50AF — COMBINATION FUSED DISCONNECT MAGNETIC MOTOR STARTER. REFER TO MAGNETIC MOTOR STARTER AND VFD SCHEDULE FOR TYPE, SIZE AND ENCLOSURE
- C — CONTACTOR IN NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED
- CP — EQUIPMENT CONTROL PANEL
- VFD — VARIABLE SPEED DRIVE
- ATS — AUTOMATIC TRANSFER SWITCH
- G — GENERATOR
- 2 — MOTOR, NUMERAL INDICATES HORSEPOWER "2" - INDICATES HORSEPOWER RATING
- 30AS — DISCONNECT SWITCH RATED 30AMP, 3-POLE, IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED "3R" - INDICATES NEMA TYPE 3R ENCLOSURE "2P" - INDICATES 2 POLE SINGLE PHASE DISCONNECT "60AS" - INDICATES 60A SWITCH
- 60AS / 60AF — FUSED DISCONNECT SWITCH, 3-POLE, IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED. "3R" - INDICATES NEMA TYPE 3R ENCLOSURE "60AS" - INDICATES 60AMP SWITCH "50AF" - INDICATES 50AMP FUSES
- 100AF / 90AT / CB — ENCLOSED CIRCUIT BREAKER IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED "100AF" - INDICATES 100AMP, 3-POLE FRAME CIRCUIT BREAKER "90AT" - INDICATES 90AMP TRIP
- FB-4 / 7.5KW — EQUIPMENT TAG, TOP ALPHANUMERIC CORRESPONDS TO EQUIPMENT ID LOWER INDICATES LOAD (KW, HP, ETC.)

BRANCH CIRCUIT & FEEDER LEGEND

- BRANCH CIRCUIT OR FEEDER CONCEALED IN FINISHED AREAS
- BRANCH CIRCUIT OR FEEDER, CONCEALED IN OR UNDER FLOOR SLAB
- BRANCH CIRCUIT OR FEEDER TURNING UP TOWARDS OBSERVER
- BRANCH CIRCUIT OR FEEDER TURNING DOWN AWAY FROM OBSERVER
- CONDUIT STUBBED ABOVE CEILING
- R22A-1,3,5 — BRANCH CIRCUIT HOME RUN TICKS INDICATE QUANTITY OF CONDUCTORS, GROUND CONDUCTORS ARE NOT INDICATED. NO TICKS INDICATES 2#12 & 1#12G IN 3/4"C MINIMUM. R22A-1,3,5 INDICATES PANEL AND CIRCUIT DESIGNATION FROM WHICH HOMERUN SHALL ORIGINATE. EACH CIRCUIT SHALL BE 20A-1P (20AMP SINGLE POLE) UNLESS NOTED OTHERWISE.
- FLEXIBLE CONNECTION TO EQUIPMENT. RACEWAY AND CONDUCTOR RATING TO MATCH ASSOCIATED BRANCH CIRCUIT OR FEEDER

ONE LINE SYMBOLS LEGEND

- DISCONNECT SWITCH, UNFUSED
- XXAS / XXAF — DISCONNECT SWITCH, FUSED "XXAF" INDICATES FUSE RATING "XXAS" INDICATES SWITCH SIZE
- XXAF / XXAT — CIRCUIT BREAKER, FIXED "XXAF" INDICATES FRAME SIZE "XXAT" INDICATES TRIP
- LIGHTNING ARRESTOR
- GROUND CONNECTION
- M — UTILITY METER
- SPD — SURGE PROTECTION DEVICE
- FUSE
- TRANSFORMER
- 3 PHASE, 3 WIRE DELTA CONNECTION
- 3 PHASE, 4 WIRE WYE SOLIDLY GROUNDED
- N / E — AUTOMATIC TRANSFER SWITCH
- R21A — PANELBOARD

POWER DISTRIBUTION

- 208Y/120 VOLT PANELBOARD, SURFACE MOUNTED
- GROUND BAR
- M — UTILITY METER AND SOCKET

SITE LEGEND

- CABLE TO GROUND CONNECTION
- 3/4" x 10'-0" COPPER CLAD GROUND ROD
- CABLE TO CABLE CONNECTION
- GUY — GUY (BY UTILITY)
- EM — ELECTRIC MANHOLE
- EH — ELECTRIC HAND HOLE
- GROUND CABLE
- UES — UNDERGROUND ELECTRIC SECONDARY LINE
- UEC — UNDERGROUND COMMUNICATION/CONTROLS LINE
- UEP — UNDERGROUND ELECTRIC PRIMARY LINE
- OES — OVERHEAD ELECTRIC SECONDARY LINE
- OEP — OVERHEAD ELECTRIC PRIMARY LINE
- UE — UNDERGROUND ELECTRIC
- A / # — UNDERGROUND SECTION, REFER TO SECTION DETAIL "A" INDICATES DETAIL LETTER "#" INDICATES DRAWING NUMBER

ABBREVIATIONS

A/AMP	AMPERE	KWH	KILOWATT HOURS
AC	ALTERNATING CURRENT	LTG	LIGHTING
ADA	AMERICAN WITH DISABILITIES ACT	MCB	MAIN CIRCUIT BREAKER
AF	AMPERE FRAME	MEC	MASSACHUSETTS ELECTRICAL CODE
AFF	ABOVE FINISHED FLOOR	M/G	MOTOR/GENERATOR SET
AFG	ABOVE FINISHED GRADE	MH	MANHOLE
AIC	AMPERE INTERRUPTING CAPACITY	MLO	MAIN LUGS ONLY
AL	ALUMINUM	MTD	MOUNTED
AT	AMPERE TRIP	MTG	MOUNTING
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED CONTACT
AWG	AMERICAN WIRE GAUGE	NEC	NATIONAL ELECTRICAL CODE
B	BURIED	NO	NORMALLY OPEN CONTACT
C	CONDUIT	NTS	NOT TO SCALE
CA	CABLE	#	NUMBER
CATV	CABLE TELEVISION	OPD	OVER CURRENT PROTECTION DEVICE
CCTV	CLOSED CIRCUIT TELEVISION SYSTEM	POS	PROVIDED UNDER OTHER SECTIONS
CB	CIRCUIT BREAKER	PVC	POLYVINYL CHLORIDE
CKT	CIRCUITS	PWR	POWER
CPU	CENTRAL PROCESSING UNIT	RGS	RIGID GALVANIZED STEEL
℄	CENTERLINE	RMS	ROOT MEAN SQUARE VALUE
dB	DECIBEL	RPM	REVOLUTIONS PER MINUTE
DC	DIRECT CURRENT	SN	SOLID NEUTRAL
DWG	DRAWING	SWBD	SWITCHBOARD
EC	ELECTRICAL CONTRACTOR	TB	TERMINAL BLOCK
EMT	ELECTRIC METALLIC TUBING	TEL	TELEPHONE
FDR	FEEDER	TERMN	TERMINAL
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	TSP	TWISTED SHIELDED-PAIR
FREQ	FREQUENCY	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
GEC	GROUNDING ELECTRODE CONDUCTOR	TYP	TYPICAL
GFI	GROUND FAULT INTERRUPTING	UG	UNDERGROUND
GND	GROUND	UNO	UNLESS NOTED OTHERWISE
HH	HANDHOLE	UPS	UNINTERRUPTIBLE POWER SUPPLY
HP	HORSEPOWER	UTP	UNSHIELDED TWISTED-PAIR
HVAC	HEATING, VENTILATING AND AIR CONDITIONING	V	VOLTS
HZ	HERTZ	VA	VOLT-AMPERE
IG	ISOLATED GROUND	VSD	VARIABLE SPEED DRIVE
JB	JUNCTION BOX	W	WATTS
KVA	KILOVOLT-AMPERE	WP	WEATHERPROOF
KW	KILOWATT		

EXISTING EQUIPMENT LEGEND

XM	EXISTING EQUIPMENT TO REMAIN
X	EXISTING EQUIPMENT TO BE REMOVED
XR	EXISTING EQUIPMENT TO BE RELOCATED
XN	NEW LOCATION OF EXISTING RELOCATED EQUIPMENT
NR	EXISTING EQUIPMENT TO BE REMOVED AND NEW EQUIPMENT TO BE INSTALLED ON EXISTING BRANCH/FEEDER
	EXISTING EQUIPMENT FOR INFORMATION ONLY- INDICATED BY SYMBOL WITH LIGHT AND OUT OF FUNCTION LINE TYPE
	EXISTING EQUIPMENT TO BE REWORKED- INDICATED BY SYMBOL WITH DASHED AND IN FUNCTION LINE TYPE

LIGHTING FIXTURE AND SWITCH LEGEND

LW1	LIGHTING FIXTURE WALL MOUNTED 15W, 120V, 600 LUMENS, 4000K, WET LOCATION, LITHONIA OLVTWN OR APPROVED EQUAL.
S WP	SINGLE POLE SWITCH, WEATHERPROOF

HAZARDOUS (CLASSIFIED) LOCATION KEY

ALL WIRING AND EQUIPMENT SHALL COMPLY WITH NEC 500 & 501 REQUIREMENTS.

- CLASS 1, DIVISION 1
- CLASS 1, DIVISION 2
- UNCLASSIFIED

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NV5
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REVISIONS

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SCALE VERIFICATION

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0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL LEGEND

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-101

SHEET of 29

CAD FILE: W:\BLD3\Projects\2022\0220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\0220279 E-101 ELEC LEGEND - BASE.dwg LAYOUT: Work
PLOTTED: 3/8/2024 10:18 AM BY: hamilton whitney

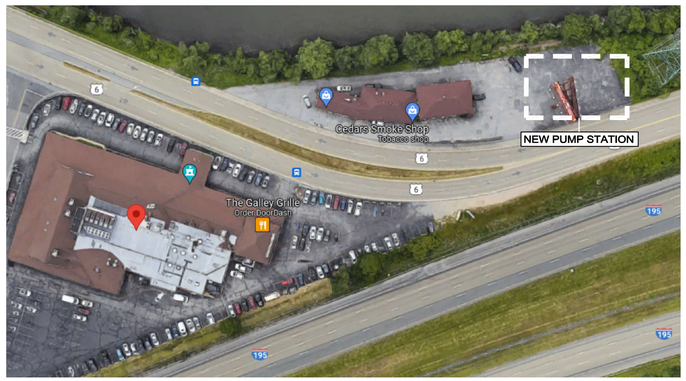
KEY PLAN - BID ALTERNATE A

833 STATE ROAD

KEY PLAN - BID ALTERNATE B

1115 STATE ROAD

KEY PLAN - BASE BID



35 STATE ROAD

287 STATE ROAD

POWER NOTES

1. REFER TO DRAWING E-101 FOR LEGEND, SYMBOLS AND GENERAL NOTES
2. REFER TO CIVIL, MECHANICAL AND INSTRUMENTATION & CONTROL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF DEVICES.
3. CIRCUIT NUMBERS ARE DIAGRAMMATIC. EXACT NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED ON AS-BUILT DOCUMENTATION BY THE ELECTRICAL CONTRACTOR. THE ASSOCIATED CIRCUIT NUMBERS THAT ARE APPLIED TO EACH DEVICE AND PIECE OF EQUIPMENT INFERS INTERCONNECTING BRANCH CIRCUITRY. INTERCONNECTING BRANCH WIRING SHALL BE SIZED EQUAL TO THE HOMERUN UNLESS NOTED OTHERWISE.
4. VOLTAGE DROP HAS BEEN CONSIDERED IN THE DESIGN OF ALL BRANCH CIRCUITRY AND FEEDER SIZES BASED UPON THE ILLUSTRATED EQUIPMENT LAYOUTS AND SHORTEST CONDUCTOR/RACEWAY ROUTING. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS TAKEN THAT WILL INCREASE CONDUCTOR/RACEWAY ROUTING LENGTHS. BRANCH CIRCUITS LONGER THAN 75' FOR 120V FROM PANEL TO LAST OUTLET SHALL BE INCREASED A MINIMUM OF ONE SIZE ABOVE THAT SPECIFIED TO LIMIT VOLTAGE DROP TO LESS THAN 3%. FEEDERS SHALL FOLLOW SIMILAR GUIDELINES AND BE LIMITED TO 2% DROP.
5. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING POWER DEVICES TO REMAIN.
6. PANELBOARDS, TRANSFORMERS AND DISCONNECT SWITCHES SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
7. ALL BRANCH CIRCUITRY SHALL BE INSTALLED IN RIGID STEEL CONDUIT UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL EXPOSED CONDUIT SHALL BE PVC COATED GALVANIZED RIGID STEEL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED ONLY WHERE INDICATED ON DRAWINGS AND IT SHALL NOT TO EXCEED 18" IN LENGTH. ALL PENETRATIONS OF WEATHER TIGHT BOXES SHALL UTILIZE WEATHERPROOF HUBS. ALL CONDUIT SUPPORTS SHALL BE STAINLESS STEEL. ALL FASTENERS, MISCELLANEOUS SUPPORTS (UNISTRUT OR EQUAL) AND HARDWARE UTILIZED FOR THE ELECTRICAL INSTALLATION SHALL BE STAINLESS STEEL.

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REVISIONS

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
KEY PLANS & NOTES

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
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APPROVED BY	KEG

E-102

SHEET of 29

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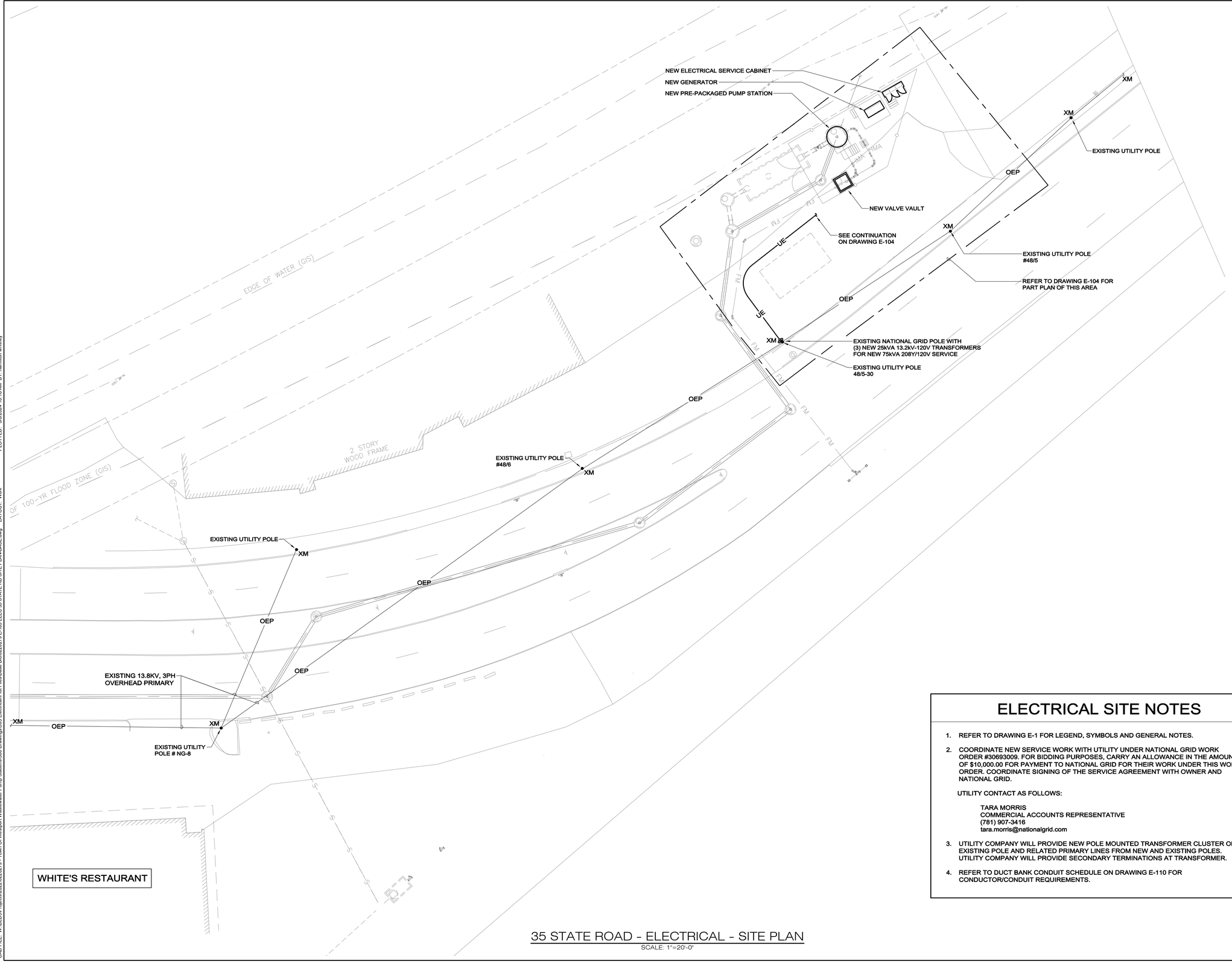

35 STATE ROAD - ELECTRICAL - SITE PLAN

SCALE: 1"=20'-0"

ELECTRICAL SITE NOTES

1. REFER TO DRAWING E-1 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. COORDINATE NEW SERVICE WORK WITH UTILITY UNDER NATIONAL GRID WORK ORDER #30693009. FOR BIDDING PURPOSES, CARRY AN ALLOWANCE IN THE AMOUNT OF $10,000.00 FOR PAYMENT TO NATIONAL GRID FOR THEIR WORK UNDER THIS WORK ORDER. COORDINATE SIGNING OF THE SERVICE AGREEMENT WITH OWNER AND NATIONAL GRID.

   UTILITY CONTACT AS FOLLOWS:

   TARA MORRIS
   COMMERCIAL ACCOUNTS REPRESENTATIVE
   (781) 907-3416
   tara.morris@nationalgrid.com
3. UTILITY COMPANY WILL PROVIDE NEW POLE MOUNTED TRANSFORMER CLUSTER ON EXISTING POLE AND RELATED PRIMARY LINES FROM NEW AND EXISTING POLES. UTILITY COMPANY WILL PROVIDE SECONDARY TERMINATIONS AT TRANSFORMER.
4. REFER TO DUCT BANK CONDUIT SCHEDULE ON DRAWING E-110 FOR CONDUCTOR/CONDUIT REQUIREMENTS.

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0 — 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 — 20 — 40

SCALE: 1" =20 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
35 STATE ROAD - SITE PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA
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816 MAIN ROAD
WESTPORT, MA 02790

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E-103

SHEET of 29

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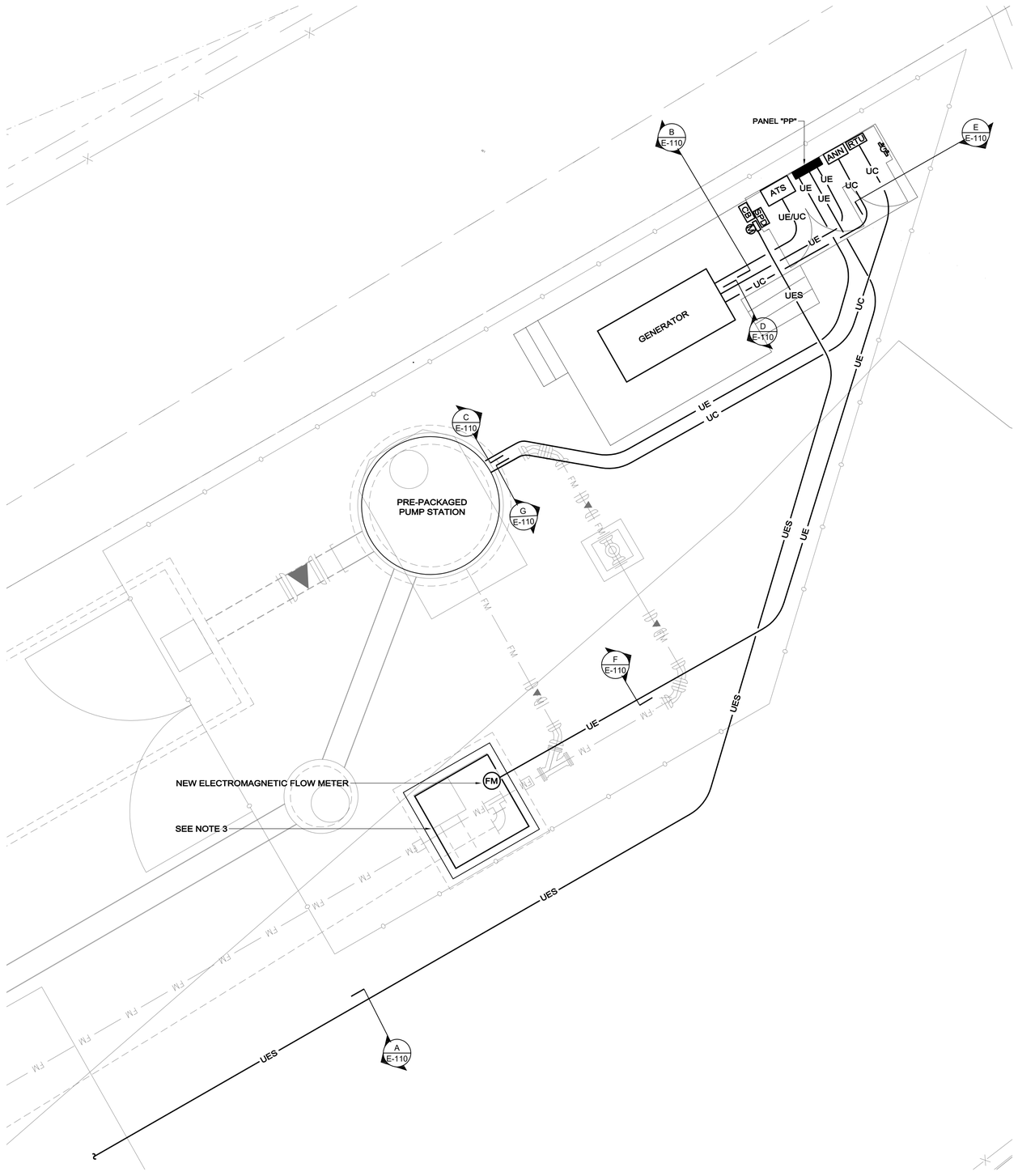
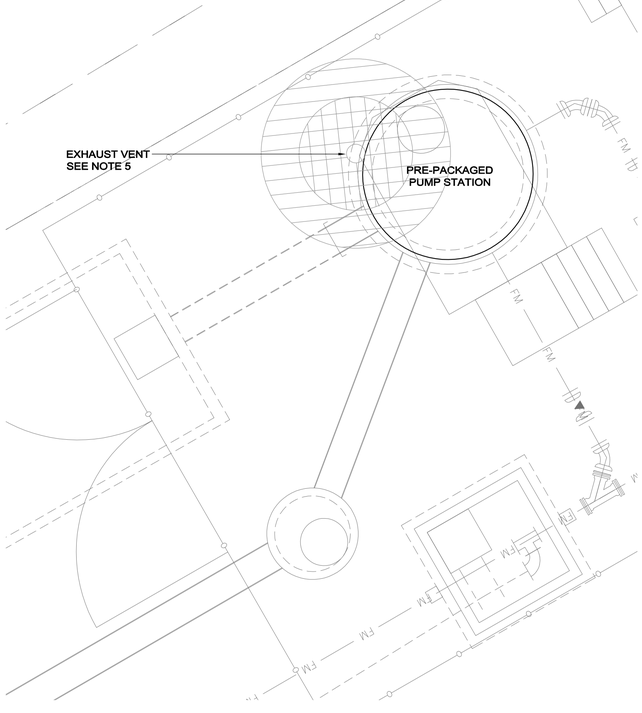


35 STATE ROAD - ELECTRICAL - SITE PART PLAN

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



35 STATE ROAD - ELECTRICAL SITE
HAZARDOUS AREA CLASSIFICATION PART PLAN

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

ELECTRICAL PART PLAN NOTES:

1. REFER TO DRAWING E-101 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. POWER BRANCH CIRCUITRY SHALL BE INSTALLED IN RSC CONDUIT CONTROL CABINET; PVC COATED RSC WHERE RUN EXPOSED ON CABINET EXTERIOR AND IN EXTERIOR VAULTS/MANHOLES.
3. PROVIDE WEATHER TIGHT POLY WATER "FST" FOAM DUCT SEALANT OR APPROVED EQUAL, AT ALL CONDUITS PENETRATING INTO ELECTRICAL SERVICE CABINETS. PROVIDE WEATHER / WATER PROTECTION AS REQUIRED.
4. NEW VALVE VAULT: CLASS 1 / DIVISION 2 RATED.
5. EXHAUST VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING. CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.
6. REFER TO DUCT BANK CONDUIT SCHEDULE ON DRAWING E-110 FOR CONDUCTOR / CONDUIT REQUIREMENTS.

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ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
35 STATE ROAD - SITE PART PLANS

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA
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816 MAIN ROAD
WESTPORT, MA 02790

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PROJECT NO.	20220581
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APPROVED BY	KEG

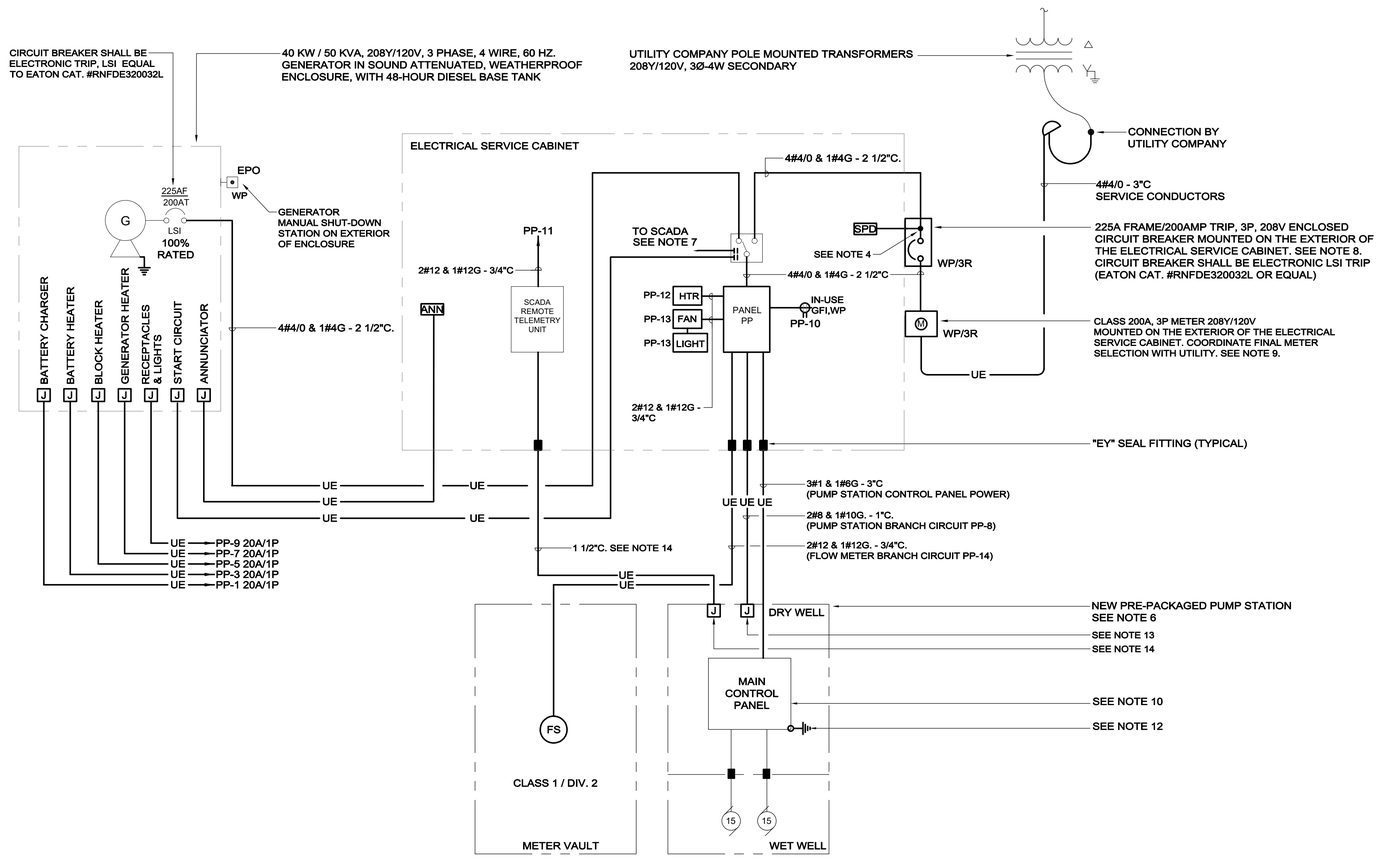
E-104

SHEET of 29

CAD FILE: W:\BLD3\Projects\20220581\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\20220279 E-104 ELEC 35 STATE RD PART PLAN-BASE.dwg LAYOUT: Work
PLOTTED: 3/8/2024 10:17 AM BY: hamilton whitney

ELECTRICAL ONE-LINE NOTES:

1. REFER TO DRAWING E-101 & E-102 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. THIS DRAWING IS INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND REQUIRED INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS, PANEL SCHEDULES FOR COMPLETE LISTING OF LOADS, AND THE SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
3. THE SERVICE AND ALL SEPARATELY DERIVED SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NEC. BOND ALL ELECTRICALLY CONDUCTIVE MATERIALS SUCH AS METAL PIPING SYSTEMS AND STRUCTURAL STEEL TO THE GROUNDING SYSTEM. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
4. SERVICE ENTRANCE SPD (TYPE 1) SHALL HAVE A MAXIMUM SURGE RATING CAPACITY OF 125KA PER MODE (250KA PER PHASE). TVSS SHALL BE INDIVIDUALLY MOUNTED IN A NEMA 1 ENCLOSURE. SPD SHALL BE PROVIDED WITH INTEGRAL OVERCURRENT PROTECTION, INDICATING LAMPS, SURGE COUNTER AND INTEGRAL (THROUGH DOOR) DISCONNECT SWITCH. SPD SHALL BE "400" SERIES AS MANUFACTURED BY ASCO - MODEL #460-120Y-P25ATCE10 OR EQUAL BY LIEBERT ("ACCUVAR" SERIES) OR EATON ("CPS" SERIES) SPD ENCLOSURE DIMENSIONS 12"(w) X 12"(h) X 7"(d).
5. PANELBOARDS AND METER SOCKET ENCLOSURES SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVING, OR MAINTENANCE OF THE EQUIPMENT.
6. PRE-FABRICATED PUMP STATION IS PRE-WIRED BY PUMP STATION MANUFACTURER. PUMP STATION PROVIDED WITH MAIN CONTROL PANEL, POWER RECEPTACLES, PUMP CABLES / CONDUIT, LIGHTNING ARRESTOR / SURGE CAPACITOR, VACUUM PUMP, VENTILATION BLOWER, DE-HUMIDIFIER, FLOAT SWITCHES AND TRANSDUCERS.
7. PROVIDE 2 #14 IN 3/4"C. FROM AUTOMATIC TRANSFER SWITCH TO REMOTE TELEMETRY UNIT (RTU). RTU WILL MONITOR GENERATOR OPERATION UNDER LOSS OF NORMAL/UTILITY POWER AND PROVIDE ALARM NOTIFICATION TO TOWN OF WESTPORT WATER & SEWER DIVISION PERSONNEL. CONTRACTOR SHALL PROGRAM RTU ACCORDINGLY.
8. PROVIDE TERMINAL LUG SET (LOAD SIDE) FOR ABILITY TO SEPARATELY TERMINATE FEEDER CONDUCTORS AND SURGE PROTECTION DEVICE TAP CONDUCTORS.
9. PROVIDE GROUND BAR/LUG KIT IN METER ENCLOSURE TO ACCOMMODATE ALL GROUNDING ELECTRODE CONNECTIONS.
10. MAIN CONTROL PANEL IS PROVIDED WITH PUMP STATION. CONTRACTOR TO TERMINATE FEEDER CONDUCTORS TO PANEL. THE GROUNDING CONDUCTOR SHALL BE BONDED TO THE GROUNDING ELECTRODE CONDUCTOR AT THIS STRUCTURE BY STRUCTURE PROVIDER.
11. ALL OVERCURRENT DEVICES FOR THIS PROJECT SHALL SELECTIVELY COORDINATE IN ACCORDANCE WITH MEC 701.32. IF NECESSARY TO ACHIEVE SELECTIVE COORDINATION, BREAKER TYPES, TRIP TYPES AND RATINGS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
12. PROVIDE GROUNDING CONDUCTOR TO GROUNDING ELECTRODE CONDUCTOR BOND ONLY. NO NEUTRAL TO GROUND BOND.
13. BRANCH CIRCUIT FOR PUMP STATION ENVIRONMENTAL AND CONTROL EQUIPMENT. CONTRACTOR TO PROVIDE BRANCH CIRCUIT TO PUMP STATION FOR EXTENSION BY PUMP STATION MANUFACTURER.
14. PROVIDE 1 1/2"C. FOR PUMP STATION ALARMS / AUXILLARY CABLE USE. CABLES TO BE PROVIDED BY PUMP STATION MANUFACTURER. CONTRACTOR SHALL COORDINATE FINAL ROUTING TO ELECTRICAL SERVICE CABINETS WITH PUMP STATION MANUFACTURER.



35 STATE ROAD - ELECTRICAL ONE-LINE DIAGRAM

SCALE: NONE

35 STATE RD PUMP STATION - PANELBOARD SCHEDULE - PP

PANEL: PP — VOLTS: 208Y/120 — MOUNT: SURFACE — GROUND BUS: Y
MAIN: 225A MLO — AMPS: 225 — AIC: 22,000 — ISOLATED GROUND BUS: N
LOCATION: INSIDE ELECTRICAL SERVICE CABINET — PH/WIRE: 3/4 — 200% NEUTRAL: N

CIR.	AMPS/ POLES	DESCRIPTION OF LOAD	LOAD kVA	LOAD BY PHASE, kVA A	B	C	LOAD kVA	DESCRIPTION OF LOAD	AMPS/ POLES	CIR.
1	20/1	BATTERY CHARGER	0.50	13.30			12.80	PUMP CONTROL PANEL (NOTE 2)	125/3 LSI	2
3	20/1	BATTERY HEATER	0.60		13.40		12.80			4
5	20/1	BLOCK HEATER	0.16			12.96	12.80			6
7	20/1	GENERATOR HEATER	0.20	3.70			3.50	PUMP STATION PANEL G.P.	40/1	8
9	20/1	RECEPTACLES AND LIGHTS	0.28		1.00		0.72	ENCLOSURE INTERIOR RECPS	20/1	10
11	20/1	RTU/CELLUAR DIALER	0.50			1.30	0.80	ENCLOSURE HEATER	20/1	12
13	20/1	ENCLOSURE LIGHTING / FANS	0.5	0.60			0.1	FLOW METER	20/1	14
15	20/1	ODOR CONTROL UNIT	1.50		1.50			SPARE	20/1	16
17	20/1	SPARE				0.00		SPARE	20/1	18
19	20/1	SPARE		0.00				SPARE	20/1	20
21	20/1	SPARE			0.00			SPARE	20/1	22
23	-	SPACE				0.00		SPACE	-	24
25	-	SPACE		0.00				SPACE	-	26
27	-	SPACE			0.00			SPACE	-	28
29	-	SPACE				0.00		SPACE	-	30
		CONNECTED kVA BY PHASE -		17.60	15.90	14.26		TOTAL CONNECTED KVA-	47.76	
								DEMAND FACTOR	1.00	
								TOTAL DEMAND KVA-	47.76	
								TOTAL DEMAND AMPERES-	132.57	

NOTES:
1. UNLESS NOTED OTHERWISE PANELBOARD CIRCUIT BREAKERS SHALL BE EATON "QBHW" SERIES OR EQUAL.
2. EATON MODEL #125A FDE 310+ LSI.

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ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
35 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
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APPROVED BY	KEG

E-105

SHEET of 29

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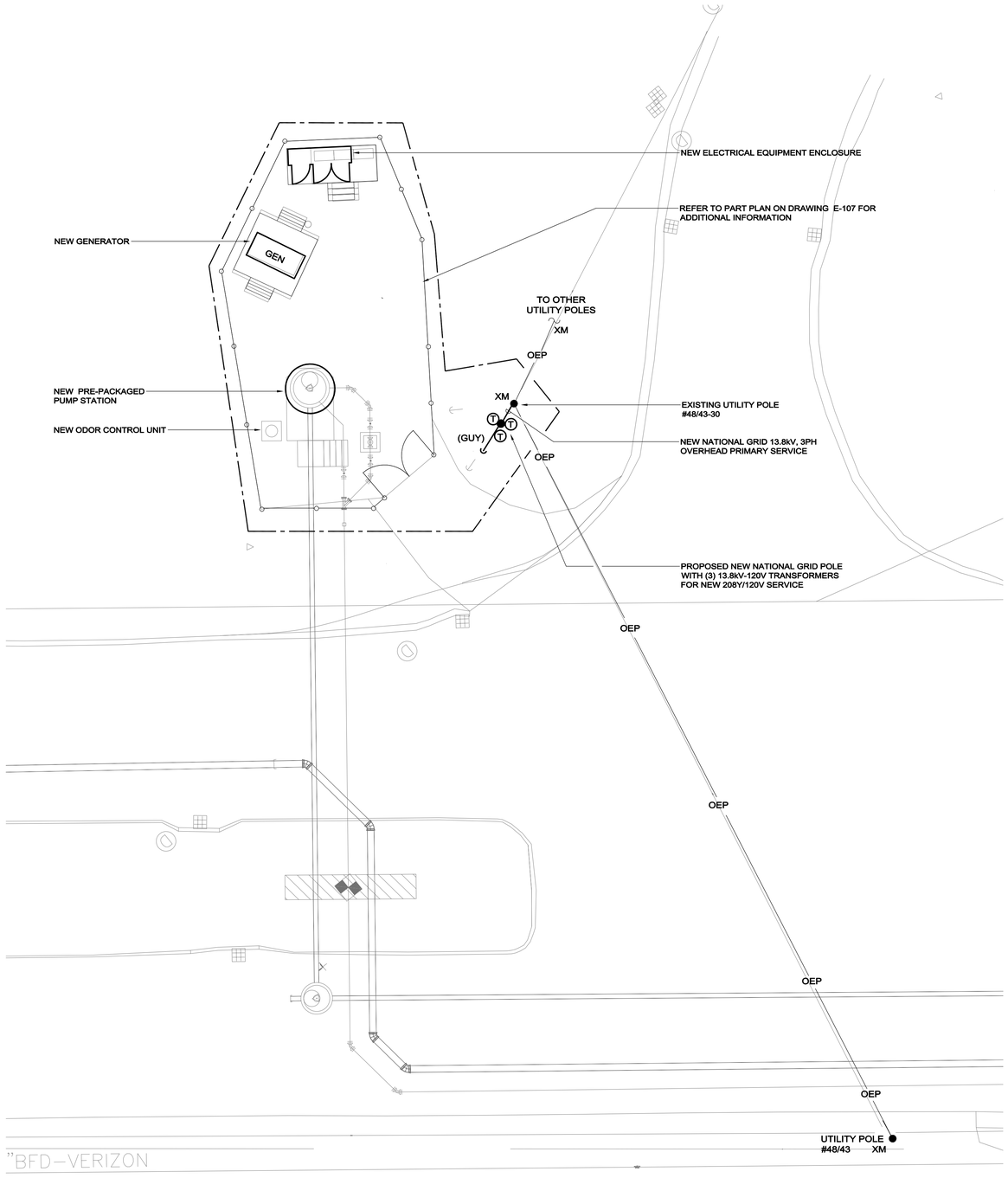

287 STATE ROAD - ELECTRICAL SITE PLAN

SCALE: 1"=10'-0"

ELECTRICAL SITE NOTES

1. REFER TO DRAWING E-101 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. COORDINATE NEW SERVICE WORK WITH UTILITY UNDER NATIONAL GRID WORK ORDER #30692695. FOR BIDDING PURPOSES, CARRY AN ALLOWANCE IN THE AMOUNT OF $10,000.00 FOR PAYMENT TO NATIONAL GRID FOR THEIR WORK UNDER THIS WORK ORDER. COORDINATE SIGNING OF THE SERVICE AGREEMENT WITH OWNER AND NATIONAL GRID.

   UTILITY CONTACT AS FOLLOWS:

   TARA MORRIS
   COMMERCIAL ACCOUNTS REPRESENTATIVE
   (781) 907-3416
   tara.morris@nationalgrid.com
3. UTILITY COMPANY WILL PROVIDE NEW POLE, GUY, POLE MOUNTED TRANSFORMER CLUSTER AND RELATED PRIMARY LINES FROM NEW AND EXISTING POLES. UTILITY COMPANY WILL PROVIDE SECONDARY TERMINATIONS AT TRANSFORMER.
4. REFER TO DUCT BANK CONDUIT SCHEDULE ON DRAWING E-110 FOR CONDUCTOR/CONDUIT REQUIREMENTS.

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0 10 20

SCALE: 1" =10 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
287 STATE ROAD - SITE PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA
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816 MAIN ROAD
WESTPORT, MA 02790

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APPROVED BY	KEG

E-106

SHEET of 29

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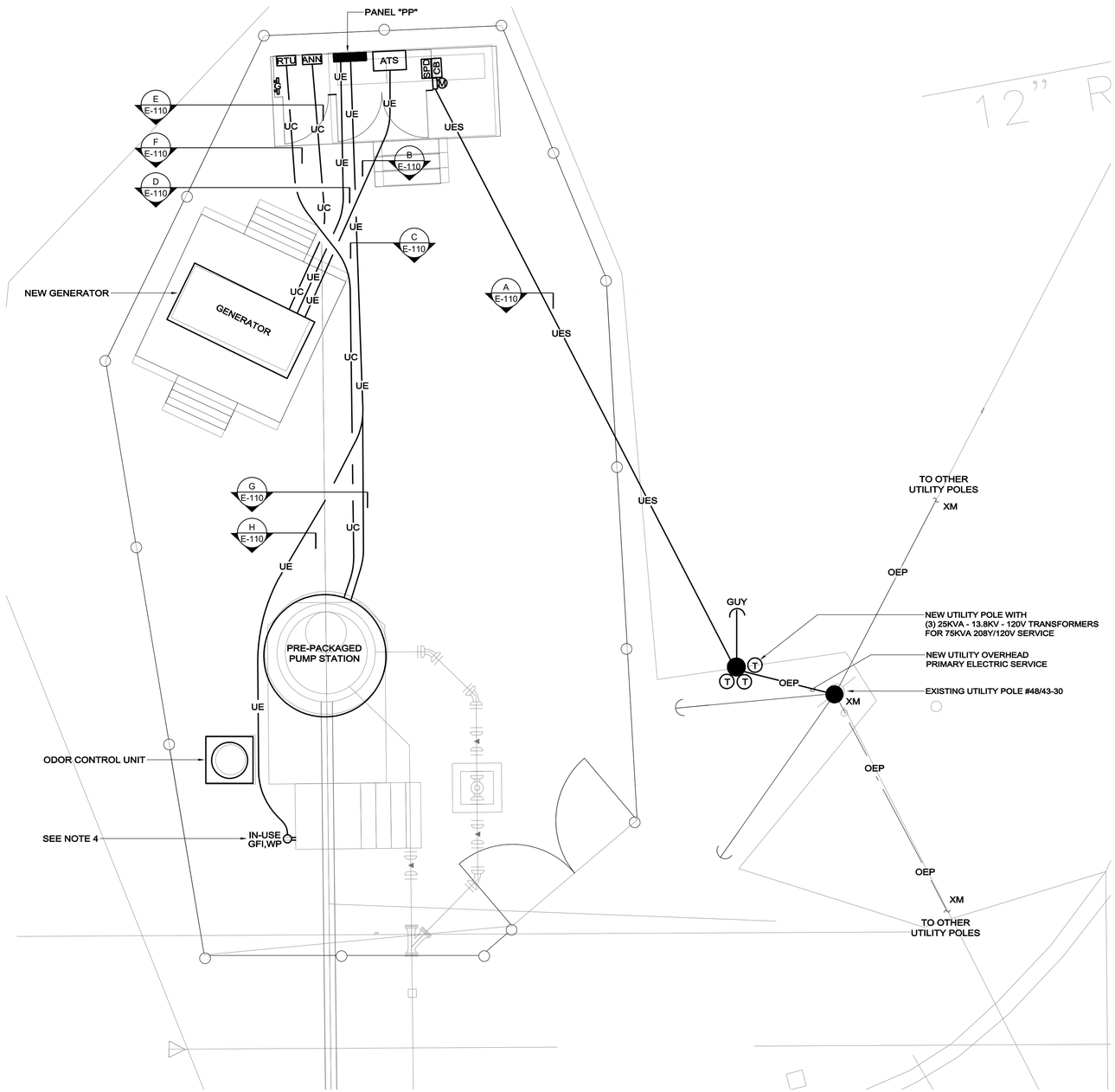
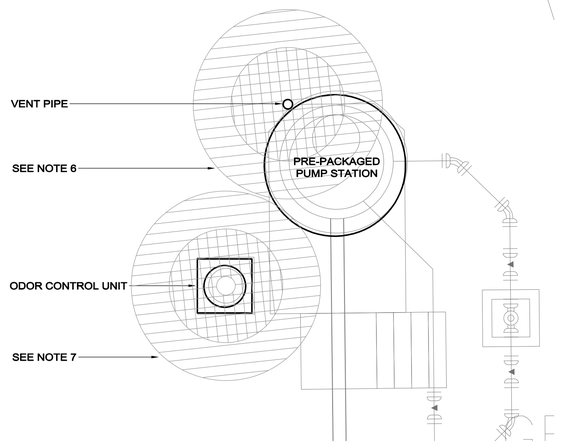


287 STATE ROAD - ELECTRICAL SITE PART PLAN

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

ELECTRICAL PART PLAN NOTES:

1. REFER TO DRAWING E-101 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. POWER BRANCH CIRCUITRY SHALL BE INSTALLED IN RSC CONDUIT CONTROL BUILDING; PVC COATED RSC WHERE RUN EXPOSED ON BUILDING EXTERIOR AND IN EXTERIOR VAULTS/MANHOLES.
3. PROVIDE WEATHER TIGHT POLY WATER "FST" FOAM DUCT SEALANT OR APPROVED EQUAL, AT ALL CONDUITS PENETRATING INTO ELECTRICAL SERVICE CABINETS. PROVIDE WEATHER / WATER PROTECTION AS REQUIRED.
4. RECEPTACLE SERVING ODOR CONTROL UNIT SHALL BE LOCATED OUTSIDE OF CLASSIFIED AREA.
5. REFER TO DUCT BANK CONDUIT SCHEDULES ON DRAWING E-110 FOR CONDUCTOR / CONDUIT REQUIREMENTS.
6. EXHAUST VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING.
   CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.
6. ODOR CONTROL UNIT VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING.
   CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.



287 STATE ROAD - ELECTRICAL SITE
HAZARDOUS AREA CLASSIFICATION PART PLAN

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

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0 10 20

SCALE: 1" =10 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
287 STATE ROAD - SITE PART PLANS

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA
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WESTPORT, MA 02790

100% DESIGN

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DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

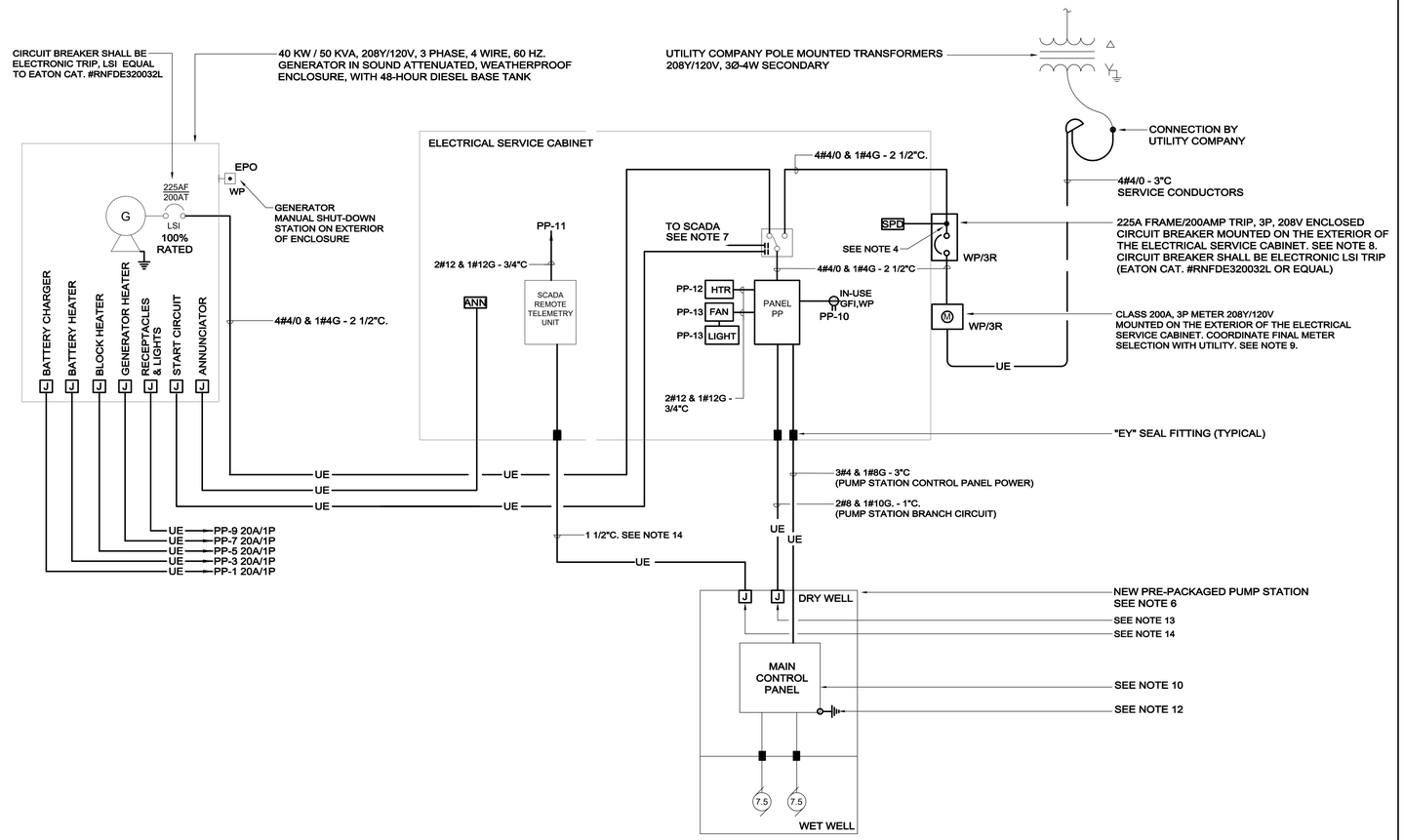
E-107

SHEET of 29

PLOTTED: 3/8/2024 10:15 AM BY: hamilton whitney
CAD FILE: W:\BLD3\Projects\2022\0220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\0220279 E-107 ELEC 287 STATE RD PART PLAN-BASE.dwg LAYOUT: Work

ELECTRICAL ONE-LINE NOTES:

1. REFER TO DRAWING E-101 & E-102 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. THIS DRAWING IS INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND REQUIRED INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS, PANEL SCHEDULES FOR COMPLETE LISTING OF LOADS, AND THE SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
3. THE SERVICE AND ALL SEPARATELY DERIVED SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NEC. BOND ALL ELECTRICALLY CONDUCTIVE MATERIALS SUCH AS METAL PIPING SYSTEMS AND STRUCTURAL STEEL TO THE GROUNDING SYSTEM. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
4. SERVICE ENTRANCE SPD (TYPE 1) SHALL HAVE A MAXIMUM SURGE RATING CAPACITY OF 125KA PER MODE (250KA PER PHASE). TVSS SHALL BE INDIVIDUALLY MOUNTED IN A NEMA 1 ENCLOSURE. SPD SHALL BE PROVIDED WITH INTEGRAL OVERCURRENT PROTECTION, INDICATING LAMPS, SURGE COUNTER AND INTEGRAL (THROUGH DOOR) DISCONNECT SWITCH. SPD SHALL BE "400" SERIES AS MANUFACTURED BY ASCO - MODEL #460-120Y-P25ATCE10 OR EQUAL BY LIEBERT ("ACCUVAR" SERIES) OR EATON ("CPS" SERIES) SPD ENCLOSURE DIMENSIONS 12"(w) X 12"(h) X 7"(d).
5. PANELBOARDS AND METER SOCKET ENCLOSURES SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVING, OR MAINTENANCE OF THE EQUIPMENT.
6. PRE-FABRICATED PUMP STATION IS PRE-WIRED BY PUMP STATION MANUFACTURER. PUMP STATION PROVIDED WITH MAIN CONTROL PANEL, POWER RECEPTACLES, PUMP CABLES / CONDUIT, LIGHTNING ARRESTOR / SURGE CAPACITOR, VACUUM PUMP, VENTILATION BLOWER, DE-HUMIDIFIER, FLOAT SWITCHES AND TRANSDUCERS.
7. PROVIDE 2 #14 IN 3/4"C. FROM AUTOMATIC TRANSFER SWITCH TO REMOTE TELEMETRY UNIT (RTU). RTU WILL MONITOR GENERATOR OPERATION UNDER LOSS OF NORMAL/UTILITY POWER AND PROVIDE ALARM NOTIFICATION TO TOWN OF WESTPORT WATER & SEWER DIVISION PERSONNEL. CONTRACTOR SHALL PROGRAM RTU ACCORDINGLY.
8. PROVIDE TERMINAL LUG SET (LOAD SIDE) FOR ABILITY TO SEPARATELY TERMINATE FEEDER CONDUCTORS AND SURGE PROTECTION DEVICE TAP CONDUCTORS.
9. PROVIDE GROUND BAR/LUG KIT IN METER ENCLOSURE TO ACCOMMODATE ALL GROUNDING ELECTRODE CONNECTIONS.
10. MAIN CONTROL PANEL IS PROVIDED WITH PUMP STATION. CONTRACTOR TO TERMINATE FEEDER CONDUCTORS TO PANEL. THE GROUNDING CONDUCTOR SHALL BE BONDED TO THE GROUNDING ELECTRODE CONDUCTOR AT THIS STRUCTURE BY STRUCTURE PROVIDER.
11. ALL OVERCURRENT DEVICES FOR THIS PROJECT SHALL SELECTIVELY COORDINATE IN ACCORDANCE WITH MEC 701.32. IF NECESSARY TO ACHIEVE SELECTIVE COORDINATION, BREAKER TYPES, TRIP TYPES AND RATINGS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
12. PROVIDE GROUNDING CONDUCTOR TO GROUNDING ELECTRODE CONDUCTOR BOND ONLY. NO NEUTRAL TO GROUND BOND.
13. BRANCH CIRCUIT FOR PUMP STATION ENVIRONMENTAL AND CONTROL EQUIPMENT. CONTRACTOR TO PROVIDE BRANCH CIRCUIT TO PUMP STATION FOR EXTENSION BY PUMP STATION MANUFACTURER.
14. PROVIDE 1 1/2"C. FOR PUMP STATION ALARMS / AUXILLARY CABLE USE. CABLES TO BE PROVIDED BY PUMP STATION MANUFACTURER. CONTRACTOR SHALL COORDINATE FINAL ROUTING TO ELECTRICAL SERVICE CABINETS WITH PUMP STATION MANUFACTURER.



287 STATE ROAD - ELECTRICAL ONE-LINE DIAGRAM

SCALE: NONE

287 STATE RD PUMP STATION - PANELBOARD SCHEDULE - PP

PANEL: PP | VOLTS: 208Y/120 | MOUNT: SURFACE | GROUND BUS: Y
MAIN: 225A MLO | AMPS: 225 | AIC: 22,000 | ISOLATED GROUND BUS: N
LOCATION: INSIDE ELECTRICAL SERVICE CABINET | PH/WIRE: 3/4 | 200% NEUTRAL: N

CIR.	AMPS/ POLES	DESCRIPTION OF LOAD	LOAD kVA	LOAD BY PHASE, kVA A	B	C	LOAD kVA	DESCRIPTION OF LOAD	AMPS/ POLES	CIR.
1	20/1	BATTERY CHARGER	0.50	8.00			7.50	PUMP CONTROL PANEL (NOTE 2)	70/3 LSI	2
3	20/1	BATTERY HEATER	0.60		8.10		7.50			4
5	20/1	BLOCK HEATER	0.16			7.66	7.50			6
7	20/1	GENERATOR HEATER	0.20	3.70			3.50	PUMP STATION PANEL	40/1	8
9	20/1	RECEPTACLES AND LIGHTS	0.28		1.00		0.72	ENCLOSURE INTERIOR RECPS	20/1	10
11	20/1	RTU/CELLUAR DIALER	0.50			1.30	0.80	ENCLOSURE HEATER	20/1	12
13	20/1	ENCLOSURE LIGHTING / FANS	0.50	2.00			1.5	ODOR CONTROL UNIT	20/1	14
15	20/1	SPARE			0.00			SPARE	20/1	16
17	20/1	SPARE				0.00		SPARE	20/1	18
19	20/1	SPARE		0.00				SPARE	20/1	20
21	20/1	SPARE			0.00			SPARE	20/1	22
23	-	SPACE				0.00		SPACE	-	24
25	-	SPACE		0.00				SPACE	-	26
27	-	SPACE			0.00			SPACE	-	28
29	-	SPACE				0.00		SPACE	-	30
		CONNECTED kVA BY PHASE -		13.70	9.10	8.96		TOTAL CONNECTED KVA-	31.76	
								DEMAND FACTOR	1.00	
								TOTAL DEMAND KVA-	31.76	
								TOTAL DEMAND AMPERES-	88.16	

NOTES:
1. UNLESS NOTED OTHERWISE PANELBOARD CIRCUIT BREAKERS SHALL BE EATON "QBHW" SERIES OR EQUAL.
2. EATON MODEL #70A FDE 310+ LSI.

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 10 20

SCALE: 1" =10 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
287 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

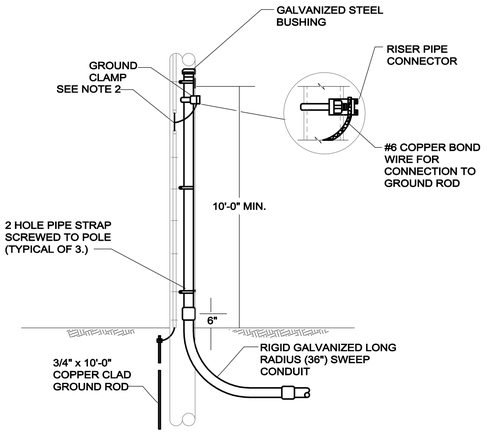
100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-108

SHEET of 29

CAD FILE: W:\BL03\Projects\20220220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\20220279 E-108 ELEC 287 STATE RD SITE PLAN-ONE-LINE DIAGRAM-BASE.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:15 AM BY: hamilton whitney



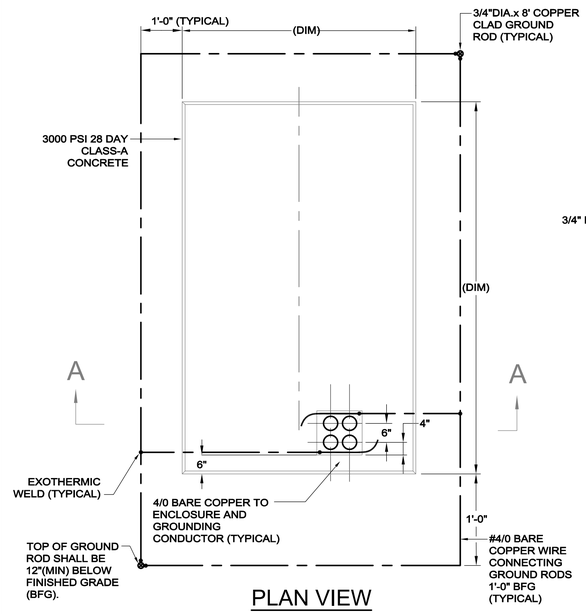
NOTES:
1. RISER PIPES SHALL BE LOCATED ON SIDE TOWARD BUILDING.

2. GROUND METAL RISER PIPE TO ARRESTER GROUND LEAD WHERE AVAILABLE. PROVIDE AND INSTALL A #6 BARE COPPER GROUND WIRE AND MOLDING EXTENDING TO TOP OF STEEL PIPE.

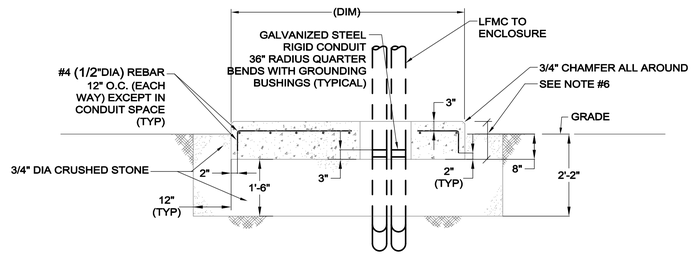
3. GROUND CABLE CONNECTIONS SHALL BE EXOTHERMIC WELD.

4. CAP SPARE RACEWAYS 24" AFG FOR FUTURE USE.

POLE RISER DETAIL



PLAN VIEW



SECTION "A-A"

NOTES:
1. REFER TO EXACT INSTALLATION REQUIREMENTS OF THE GENERATOR AND ASSOCIATED ENCLOSURE MANUFACTURER FOR MODIFICATIONS THAT MAY BE REQUIRED TO THIS PAD LAYOUT. THIS DETAIL IS INTENDED TO ILLUSTRATE GENERAL REQUIREMENTS. PAD TO EXTEND A MINIMUM OF 1'-0" BEYOND ENCLOSURE FOOT PRINT UNLESS INDICATED OTHERWISE ON SITE PLANS. PADS TO BE ELEVATED A MINIMUM OF 1'-6" ABOVE FLOOD PLANE.

2. ALL GROUND GRID CONNECTIONS SHALL BE EXOTHERMIC WELD.

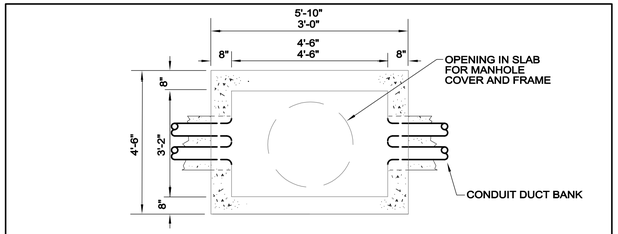
3. CAP ALL CONDUIT ENDS TO PREVENT MOISTURE AND DEBRIS FROM ENTERING CONDUITS PRIOR TO GENERATOR INSTALLATION.

4. CRUSHED STONE SHALL EXTEND TO COVER GROUND AT SPECIFIED 18" DEPTH UNDER ALL AIR INTAKE LOUVER LOCATIONS.

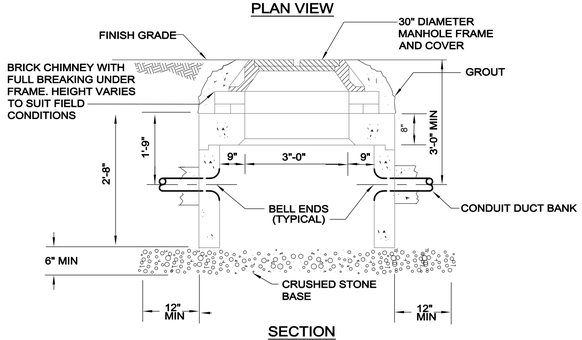
5. EXTEND ALL RACEWAYS WITH LFMC TO GENERATOR ENCLOSURE CABINETS TO PROVIDE A COMPLETE RACEWAY SYSTEM.

6. CONCRETE PAD HEIGHT ABOVE FLOOD PLAIN SHALL BE 2'-0" (MINIMUM). COORDINATE FINAL HEIGHT WITH CIVIL DRAWINGS.

NV5 GENERATOR PAD DETAIL E511



PLAN VIEW



SECTION

NOTES:
1. FRAME AND COVER SHALL BE CAST IRON BY BOSTON FOUNDRY OR EQUAL BY LEBARON OR NEENAH. COVER SHALL BE CAST WITH 1 1/2" HIGH LETTERS IDENTIFYING THE SERVICE (PRIMARY, SECONDARY ELECTRIC OR TELEPHONE).

2. DESIGN LOAD SHALL ACCOMMODATE UP TO AASHTO HS20-44.

3. CONCRETE ENCASED DUCT SHALL BE TIED INTO THE HANDHOLE WALL TO MINIMIZE DIFFERENTIAL SETTLEMENT. REFER TO SPECIFICATION FOR ADDITIONAL INFORMATION.

NV5 TYPICAL PRECAST HANDHOLE DETAIL E506

THREE PHASE DRY TYPE TRANSFORMERS

TAG	T1	T2	T3	T4
RATED KVA	9	15	30	45
PRIMARY AMPS	11	18	36	54
480V OVERCURRENT DEVICE	20A-3P	30A-3P	50A-3P	80A-3P
480V FEEDER	3#12 & 1#12G. IN 3/4"C.	3#10 & 1#10G. IN 3/4"C.	3#6 & 1#10G. IN 1"C.	3#3 & 1#8G. IN 1 1/4"C.
SECONDARY AMPS	25	42	83	125
208/120V OVERCURRENT PROTECTION	30A-3P	50A-3P	100A-3P	150A-3P
208/120V FEEDER	4#10 & 1#8G. IN 3/4"C.	4#6 & 1#8G. IN 1"C.	4#1 & 1#6G. IN 1 1/2"C.	4#2/0 & 1#4G. IN 2"C.
GROUNDING ELECTRODE CONDUCTOR	#8	#8	#6	#4
TAG	T5	T6	T7	T8
RATED KVA	75	112.5	150	225
PRIMARY AMPS	90	135	181	271
480V OVERCURRENT DEVICE	125A-3P	200A-3P	250A-3P	400A-3P
480V FEEDER	3#1 & 1#6G. IN 1 1/2"C.	3#3/0 & 1#6G. IN 2"C.	3#250kcmil & 1#4G. IN 2 1/2"C.	3#500kcmil & 1#3G. IN 3"C.
SECONDARY AMPS	208	313	417	625
208/120V OVERCURRENT PROTECTION	225A-3P	400A-3P	500A-3P	800A-3P
208/120V FEEDER	4#250kcmil & 1#2G. IN 2 1/2"C.	2 SETS OF (4#4/0 & 1#1/0G. IN 2 1/2"C.)	2 SETS OF (4#300kcmil & 1#1/0G. IN 3"C.)	3 SETS OF (4#350kcmil & 1#2/0G. IN 3"C.)
GROUNDING ELECTRODE CONDUCTOR	#2	#1/0	#1/0	#2/0

NOTES:

1. ALL CONDUCTORS ARE COPPER.
2. CONDUCTOR SIZES ARE THE MINIMUM ALLOWED BASED UPON NEC TABLE 310.16 WITH NO GREATER THAN THREE CURRENT CARRYING CONDUCTORS PER RACEWAY IN AN AMBIENT NOT TO EXCEED 30 DEGREES C.
3. RACEWAY SIZES ARE THE MINIMUM ALLOWED BASED UPON NEC TABLES FOR THHN/THWN CONDUCTORS IN EMT, FLEXIBLE METAL CONDUIT OR LIQUIDTIGHT.
4. SECONDARY SUPPLY-SIDE BONDING JUMPERS ARE SIZED IN ACCORDANCE WITH NEC TABLE 250.102(C)(1) AND GROUNDING ELECTRODE CONDUCTORS ARE SIZED IN ACCORDANCE WITH NEC TABLE 250.66 TO ACCOMMODATE REQUIREMENTS IN NEC 250.30 FOR SEPARATELY DERIVED SYSTEMS. BOND THE TRANSFORMER CASE AND THE GROUNDED CONDUCTOR (NEUTRAL) TO THE EQUIPMENT GROUNDING CONDUCTOR AND ALL REQUIRED GROUNDING ELECTRODES.
5. SECONDARY CONDUCTORS SHALL NOT EXCEED 25' FROM THE TRANSFORMER TERMINALS TO THE SECONDARY OVERCURRENT PROTECTION DEVICE IN ACCORDANCE WITH NEC 240.21(C)(6).

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL DETAILS 1

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

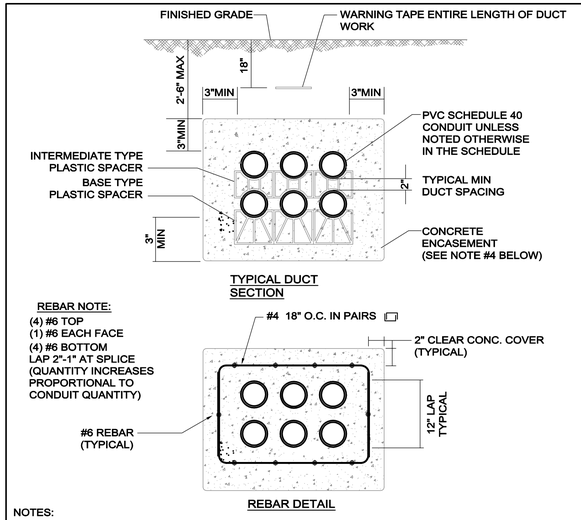
100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-109

SHEET of 29

PLOTTED: 3/8/2024 10:14 AM BY: hamilton whitney
CAD FILE: W:\BLD3\Projects\2022\0220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\0220279 E-109 ELECTRICAL DETAILS-BASE.dwg LAYOUT: Work



TYPICAL DUCT SECTION

REBAR NOTE:
(4) #6 TOP
(1) #6 EACH FACE
(4) #6 BOTTOM
LAP 2"-1" AT SPLICE (QUANTITY INCREASES PROPORTIONAL TO CONDUIT QUANTITY)

REBAR DETAIL

NOTES:

1. THIS DETAIL IS INTENDED TO ILLUSTRATE CONSTRUCTION OF TYPICAL DUCT BANK. REFER TO REFERENCED SECTION FOR QUANTITY AND SIZE OF CONDUIT REQUIRED. DUCT CONSTRUCTION SHALL BE MODIFIED TO ACCOMMODATE REQUIREMENTS ILLUSTRATED IN THE ACTUAL SECTION, UTILIZING THE CRITERIA ESTABLISHED IN THIS DETAIL AND AS WRITTEN IN THE SPECIFICATIONS.

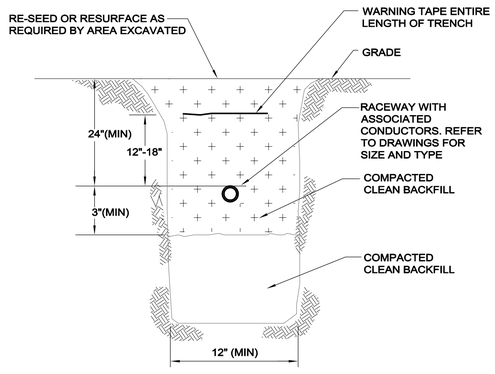
2. REBAR SHALL BE USED FOR ALL DUCT BANKS INSTALLED UNDER TRAVELED WAYS, ROADWAYS, AND TRANSITIONS INTO MANHOLES/HANDHOLES AND FOUNDATIONS. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.

3. WARNING TAPE SHALL BE DETECTABLE TYPE FOIL BACKED 4 MIL POLYETHYLENE WITH FADE RESISTANT "BURIED ELECTRIC LINE BELOW" A MINIMUM OF 12 INCHES ABOVE THE BURIED SERVICE. TAPE SHALL BE EQUAL TO T & B NAF-0705.

4. CONCRETE & REBAR NOT REQUIRED FOR OFF ROAD DUCT BANKS. USE COMPACTED SAND IN ITS PLACE.

TYPICAL ELECTRICAL DUCT DETAIL

** PROVIDE CONCRETE ENCASEMENT WHERE DIRECTED TO BY OWNER **



NOTES:
1. THIS DETAIL IS INTENDED TO ILLUSTRATE REQUIREMENTS WHICH EXCEED THOSE REQUIRED BY NEC TABLE 300-5.

2. WARNING TAPE SHALL BE DETECTABLE TYPE FOIL BACKED 4MIL POLYETHYLENE WITH FADE RESISTANT "BURIED ELECTRIC LINE BELOW" A MINIMUM OF 18 INCHES ABOVE THE BURIED SERVICE. TAPE SHALL BE EQUAL TO T&B NAF-0708.

3. ALL ROADWAY CROSSING SHALL BE ENCASED WITH A MINIMUM OF 2 INCHES OF CONCRETE (TOP BOTTOM AND SIDES) EXTENDING A MINIMUM OF 2 FEET BEYOND EACH SIDE OF CROSSING.

4. ALL CONDUIT RISERS SHALL UTILIZE LONG RADIUS GALVANIZED RIGID STEEL SWEEPS.

N|V|5 BURIED CONDUIT DETAIL E513

CONCRETE ENCASED (S1, SP3) — SECTION "A-A" N.T.S.
CONCRETE ENCASED (S2, C2) — SECTION "B-B" N.T.S.
CONCRETE ENCASED (S3, S4) — SECTION "C-C" N.T.S.
CONCRETE ENCASED (S5, SP2) — SECTION "D-D" N.T.S.
CONCRETE ENCASED (C1) — SECTION "E-E" N.T.S.
CONCRETE ENCASED (S6, SP1) — SECTION "F-F" N.T.S.
CONCRETE ENCASED (C3) — SECTION "G-G" N.T.S.

NOTES:
1. REFER TO TYPICAL ELECTRICAL DUCT DETAIL THIS SHEET FOR GENERAL CONSTRUCTION REQUIREMENTS.

2. REFER TO THE DUCT BANK CONDUIT SCHEDULE THIS SHEET FOR CONDUIT AND CONDUCTOR REQUIREMENTS ASSOCIATED WITH CONDUIT TAG.

3. PROVIDE CONCRETE ENCASEMENT WHERE DIRECTED TO BY OWNER. SUBJECTED TO VEHICULAR TRAFFIC.

35 STATE RD. ELECTRICAL DUCT SECTIONS

35 STATE RD. DUCT BANK CONDUIT SCHEDULE

TAG	DESCRIPTION	CONDUIT	CONDUCTORS
S1	208V SERVICE ENTRANCE FROM UTILITY TO MAIN DISCONNECT SWITCH	3"	4#4/0
S2	208V FEED FROM GENERATOR TO TRANSFER SWITCH	3"	4#4/0 & 1#4 G.
S3	208V FEED TO MAIN PUMP CONTROL PANEL	3"	3#1 & 1#6 G.
S4	120V FEED TO PUMP STATION ENVIRONMENTAL CTL. EQUIP.	1"	2#8 & 1#10 G.
S5	BATTERY CHARGER BATTERY HEATER BLOCK HEATER GENERATOR HEATER RECEPTACLES AND LIGHTS SPARE (ALL DERATED)	2"	2#10 & 1#10G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 6#10
S6	120V FEED TO FLOW METER	1"	2#12 & 1#12 G.
C1	GENERATOR ANNUNCIATOR WIRING	2"	PER MANUFACTURER'S INSTRUCTIONS
C2	GENERATOR START CIRCUIT	2"	PER MANUFACTURER'S INSTRUCTIONS NOTE 7
C3	PUMP STATION CONTROL / MONITORING	1-1/2"	PER MANUFACTURER'S INSTRUCTIONS,
SP1	SPARE	1"	NOTE 6
SP2	SPARE	2"	NOTE 6
SP3	SPARE	3"	NOTE 6

NOTES:

1. REFER TO DUCT BANK SECTIONS FOR CORRESPONDING CONDUIT AND CONDUCTOR.
2. REFER TO THE TYPICAL DUCTBANK SECTION FOR DETAILS REQUIRED IN THE CONSTRUCTION OF THE DUCT BANK ENVELOPE.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO DUCT BANK REINFORCEMENT REQUIRED UNDER PAVED AREAS INTENDED FOR VEHICULAR TRAFFIC AND AT MANHOLE/BUILDING INTERFACES.
4. ALL CONDUCTORS INSTALLED IN DUCT SHALL BE SUITABLE FOR WET LOCATIONS.
5. ALL SERVICE ENTRANCE AND GENERATOR OUTPUT CONDUCTORS INSTALLED IN DUCT SHALL BE TYPE USE.
6. PROVIDE ALL EMPTY/SPARE CONDUIT WITH NYLON PULL STRING.
7. GENERATOR START CIRCUIT TO ORIGINATE AT AUTOMATIC TRANSFER SWITCH

CONCRETE ENCASED (S1, SP3) — SECTION "A-A" N.T.S.
CONCRETE ENCASED (S2, C2) — SECTION "B-B" N.T.S.
CONCRETE ENCASED (S3, S4, S6) — SECTION "C-C" N.T.S.
CONCRETE ENCASED (S5, SP2) — SECTION "D-D" N.T.S.
CONCRETE ENCASED (C1) — SECTION "E-E" N.T.S.
CONCRETE ENCASED (C3) — SECTION "F-F" N.T.S.
CONCRETE ENCASED (S3, S4) — SECTION "G-G" N.T.S.
CONCRETE ENCASED (S6) — SECTION "H-H" N.T.S.

NOTES:
1. REFER TO TYPICAL ELECTRICAL DUCT DETAIL THIS SHEET FOR GENERAL CONSTRUCTION REQUIREMENTS.

2. REFER TO THE DUCT BANK CONDUIT SCHEDULE THIS SHEET FOR CONDUIT AND CONDUCTOR REQUIREMENTS ASSOCIATED WITH CONDUIT TAG.

3. PROVIDE CONCRETE ENCASEMENT WHERE DIRECTED TO BY OWNER.

287 STATE RD. ELECTRICAL DUCT SECTIONS

287 STATE RD. DUCT BANK CONDUIT SCHEDULE

TAG	DESCRIPTION	CONDUIT	CONDUCTORS
S1	208V SERVICE ENTRANCE FROM UTILITY TO MAIN DISCONNECT SWITCH	3"	4#4/0
S2	208V FEED FROM GENERATOR TO TRANSFER SWITCH	2"	4#4/0 & 1#4 G.
S3	208V FEED TO MAIN PUMP CONTROL PANEL	3"	3#4 & 1#8 G.
S4	120V FEED TO PUMP STATION ENV. & CTL. EQUIP.	1"	2#8 & 1#10 G.
S5	BATTERY CHARGER BATTERY HEATER BLOCK HEATER GENERATOR HEATER RECEPTACLES AND LIGHTS SPARE (ALL DERATED)	2"	2#10 & 1#10G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 6#10
S6	120V FEED TO ODOR CONTROL	1"	2#10 & 1#10 G.
C1	GENERATOR ANNUNCIATOR WIRING	2"	PER MANUFACTURER'S INSTRUCTIONS
C2	GENERATOR START CIRCUIT	2"	PER MANUFACTURER'S INSTRUCTIONS SEE NOTE 7
C3	PUMP STATION CONTROL / MONITORING	1-1/2"	PER MANUFACTURER'S INSTRUCTIONS, NOTE 7
SP1	SPARE	1"	NOTE 6
SP2	SPARE	2"	NOTE 6
SP3	SPARE	3"	NOTE 6

NOTES:

1. REFER TO DUCT BANK SECTIONS FOR CORRESPONDING CONDUIT AND CONDUCTOR.
2. REFER TO THE TYPICAL DUCTBANK SECTION FOR DETAILS REQUIRED IN THE CONSTRUCTION OF THE DUCT BANK ENVELOPE.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO DUCT BANK REINFORCEMENT REQUIRED UNDER PAVED AREAS INTENDED FOR VEHICULAR TRAFFIC AND AT MANHOLE/BUILDING INTERFACES.
4. ALL CONDUCTORS INSTALLED IN DUCT SHALL BE SUITABLE FOR WET LOCATIONS.
5. ALL SERVICE ENTRANCE AND GENERATOR OUTPUT CONDUCTORS INSTALLED IN DUCT SHALL BE TYPE USE.
6. PROVIDE ALL EMPTY/SPARE CONDUIT WITH NYLON PULL STRING.
7. GENERATOR START CIRCUIT TO ORIGINATE AT AUTOMATIC TRANSFER SWITCH.

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THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 — 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL DETAILS 2

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA
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816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-110

SHEET of 29

CAD FILE: W:\BLD3\Projects\2022\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\20220279 E-110 ELECTRICAL DETAILS-BASE.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:14 AM BY: hamilton whitney

GROUNDING CONNECTION DIAGRAM KEY

—G—	GROUNDING ELECTRODE CONDUCTOR RUN IN SCH. 80PVC SIZE PER NEC
—EG—	EQUIPMENT GROUNDING CONDUCTOR RUN WITH PHASE CONDUCTORS
—N—	NEUTRAL CONDUCTOR RUN WITH PHASE CONDUCTORS
—B—	BONDING JUMPER - SIZE PER NEC
—G—⏚	GROUNDING ELECTRODE. REFER TO DETAIL E001 THIS SHEET
	GROUND BAR. SEE DETAIL E004 ON THIS DRAWING. REFER TO FLOOR PLANS FOR LOCATIONS.

GROUNDING CONNECTION DIAGRAM NOTES

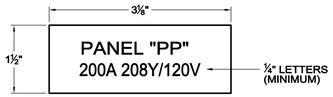
1. PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR ALL FEEDERS & BRANCH CIRCUITS.
2. CONTRACTOR SHALL MAKE ALL INDICATED GROUNDING CONNECTIONS.
3. GROUNDING SHALL COMPLY WITH NEC 250.

! WARNING

ARC FLASH AND SHOCK HAZARD
APPROPRIATE PPE REQUIRED

TYPICAL FLASH PROTECTION WARNING LABEL

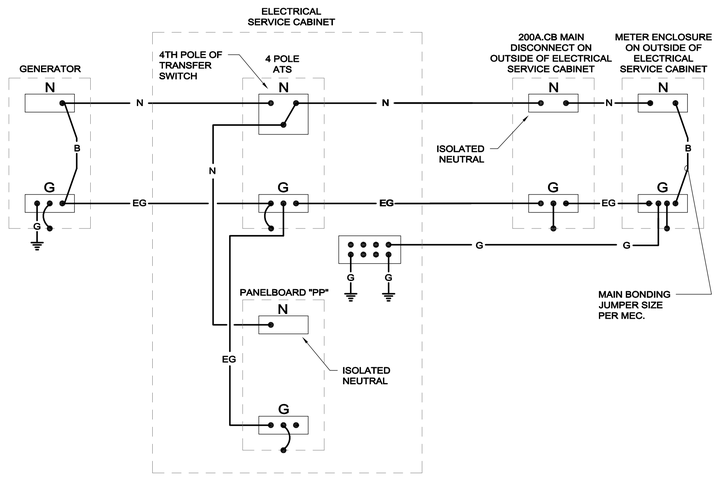
PROVIDE ON METER SOCKET AND PANELBOARD IN ACCORDANCE WITH NEC 110.16.



TYPICAL NAMEPLATE DETAIL
UTILIZE MECHANICAL FASTENERS FOR ALL EXTERIOR LOCATIONS. TYPICAL FOR "SWITCHBOARDS", "PANELBOARDS", "STARTERS", "DISCONNECTS", AND "TRANSFORMERS".

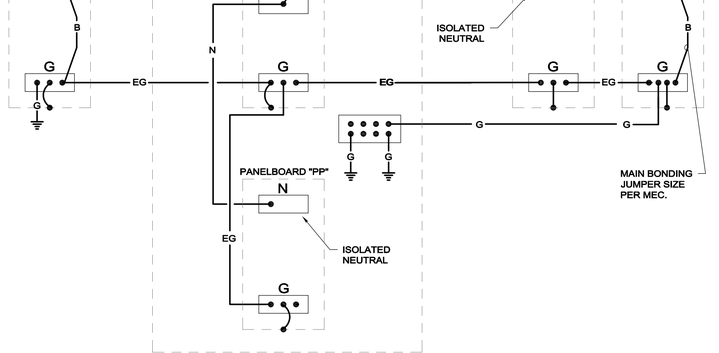
GENERAL NOTES:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL NAMEPLATE REQUIREMENTS.
2. NAMEPLATE TO BE 1/16" THICK PLASTIC WITH WHITE CENTER LAMINATION. FACE SHALL BE BLACK, ENGRAVED LETTERS SHALL BE WHITE.
3. SECURE NAMEPLATE TO SURFACES WITH HIGH STRENGTH ADHESIVE CEMENT.

NV5 TYPICAL NAMEPLATES DETAIL — E303C



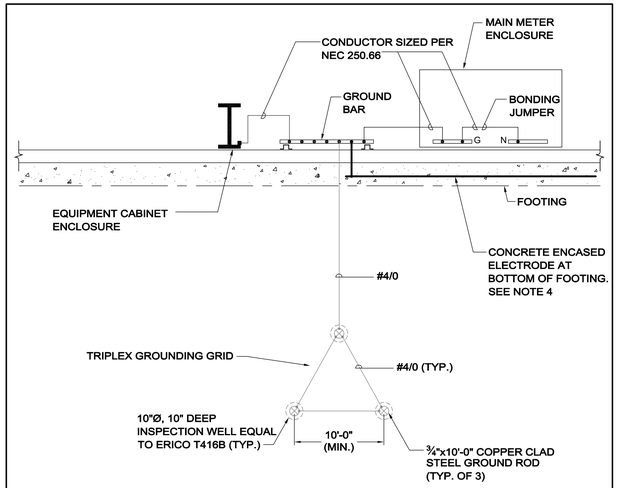
35 STATE RD. GROUNDING CONNECTIONS DIAGRAM

SCALE: N.T.S.



287 STATE RD. GROUNDING CONNECTIONS DIAGRAM

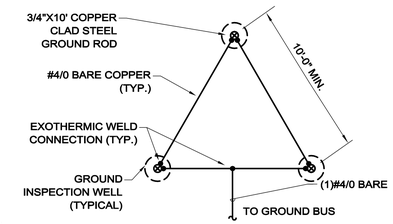
SCALE: N.T.S.



NOTES:

1. THIS DRAWING IS INTENDED TO ILLUSTRATE THE SERVICE GROUNDING REQUIREMENTS. REFER TO NEC ARTICLE 250 FOR ADDITIONAL DETAILS.
2. ALL CONNECTIONS SHALL BE EXOTHERMIC WELDS WITH THE EXCEPTION OF MECHANICAL LUGS IN THE SERVICE ENTRANCE EQUIPMENT.
3. WALL MOUNTED COPPER 4"x12"x¼" GROUND BUS SHALL BE EQUAL TO ERICO EGB-A14412BB.
4. PROVIDE 20' #4 AWG BARE COPPER IN LIEU OF BONDING TO REBAR WHERE 20' OF BARE REBAR IS NOT INSTALLED.

NV5 ELECTRIC SERVICE GROUNDING ELECTRODE DETAIL — E001



NOTES:
1. GROUND RODS SHALL BE CLAD WITH A MINIMUM 10 MIL. COPPER. THE UPPER END OF EACH ROD SHALL BE A MINIMUM OF 6" BELOW FINISHED GRADE.
2. PROVIDE GROUND INSPECTION WELL AT EACH ELECTRODE EQUAL TO ERICO T416B (10"ROUND X 10" DEEP).

NV5 TYPICAL SUPPLEMENTAL ELECTRODE GROUND GRID — E002

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ELECTRICAL DETAILS 3

ROUTE 6 SEWER AND WATER EXTENSIONS BASE BID

TOWN OF WESTPORT, MA
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816 MAIN ROAD
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E-111

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CAD FILE: W:\BLD3\Projects\2022\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Base Bid\20220279 E-111 ELECTRICAL DETAILS-BASE.dwg LAYOUT: Work
PLOTTED: 3/8/2024 10:14 AM BY: hamilton whitney

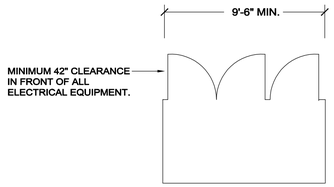
KEYNOTES	
1	ENCLOSURE SHALL BE CUSTOM FABRICATED, LOCKABLE THREE DOOR STAINLESS STEEL FREE STANDING PADMOUNTED VENTILLATED ENCLOSURE AS MANUFACTURED BY HOFFMAN WATERSHED SERIES, MASS ELECTRICAL APPARATUS OR APPROVED EQUAL. ENCLOSURE SHALL BE EQUIPPED WITH EXHAUST FAN AND HEATER AS ILLUSTRATED. CONTRACTOR SHALL CONFIRM EXACT DIMENSIONS OF ENCLOSURE BASED ON ACTUAL EQUIPMENT SIZE AND ENCLOSURE MANUFACTURER'S RECOMMENDATIONS TO ENSURE ALL NEC REQUIRED WORKSPACE CLEARANCES ARE MAINTAINED. PROVIDE DIMENSIONED DRAWING FOR REVIEW BY ENGINEER PRIOR TO PURCHASE. LOCK ASSEMBLY KEYING SHALL BE PROVIDED TO MATCH WESTPORT WATER DEPARTMENT KEYING STANDARD.
2	PROVIDE VAPORTIGHT WEATHERPROOF LED FIXTURE AS MANUFACTURED BY HUBBELL #VW1/VX2-V8LU15L/VCG-15-19WLED OR APPROVED EQUAL.
3	PROVIDE 800W UNIT HEATER WITH INTEGRAL THERMOSTAT.
4	PROVIDE GROUND FAULT DUPLEX RECEPTACLE AND LIGHT SWITCH IN 2-GANG WEATHERPROOF ENCLOSURE.
5	PROVIDE 10" COMPACT COOLING FAN RATED AT 36W/580CFM, 120V, 1PH WITH CORD/PLUG ASSEMBLY AND TEMPERATURE CONTROL SWITCH. PROVIDE FAN BRACKET AND FINGER GUARD/FILTER KIT. FAN SHALL BE MANUFACTURED BY HOFFMAN #A10AXFN-ABRKT10-ASARD10.

NOTES:

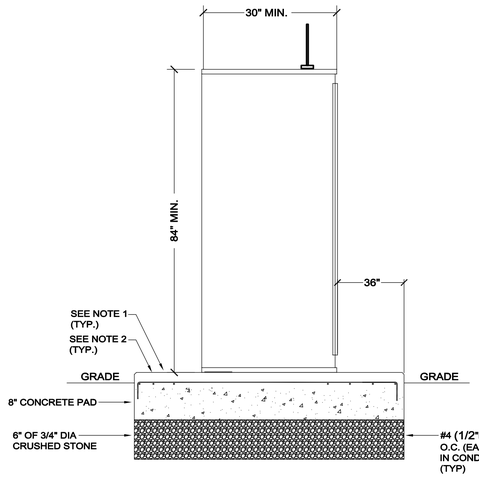
1. CONCRETE FOUNDATION SHOWN DIAGRAMMATIC ONLY. EQUIPMENT PAD SHALL BE MODIFIED TO MEET MANUFACTURERS REQUIRED PAD MOUNTING PATTERN DIMENSIONS.

2. BOTTOM OF SERVICE CABINET SHALL MOUNT FLUSH TO BOTTOM OF CONCRETE PAD (NO GAP BETWEEN CABINET AND PAD).

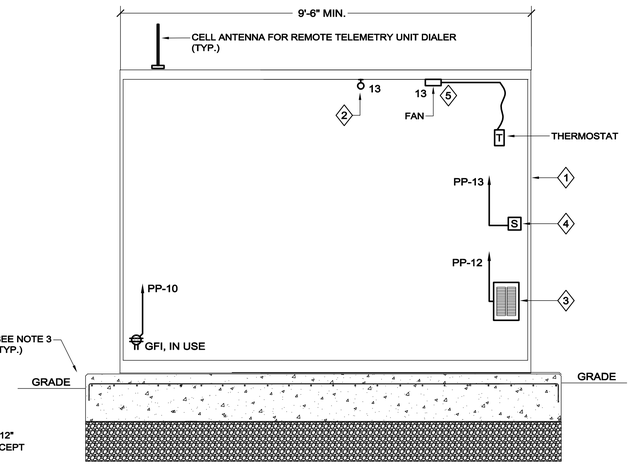
3. CONCRETE PAD HEIGHT ABOVE FLOOD PLAIN SHALL BE 2'-0" (MINIMUM). COORDINATE FINAL HEIGHT WITH CIVIL DRAWINGS.



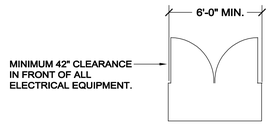
PLAN VIEW
SCALE: NTS



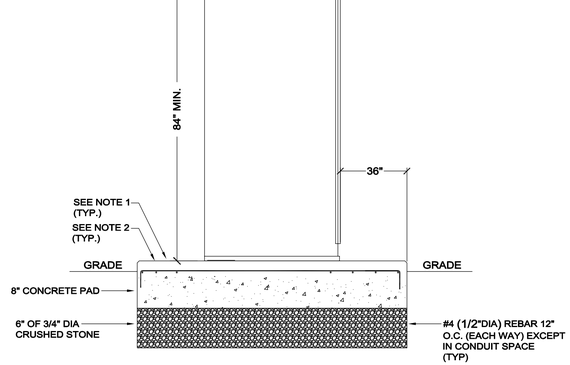
SIDE VIEW
SCALE: NTS



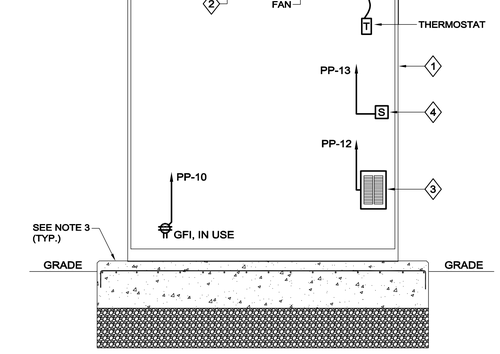
3-DOOR ELECTRICAL ENCLOSURE DETAIL
SCALE: N.T.S.



PLAN VIEW
SCALE: NTS



SIDE VIEW
SCALE: NTS



2-DOOR ELECTRICAL ENCLOSURE DETAIL
SCALE: N.T.S.

ELECTRICAL EQUIPMENT CABINET ENCLOSURE DETAIL

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ELECTRICAL
DETAILS 4

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA
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E-112

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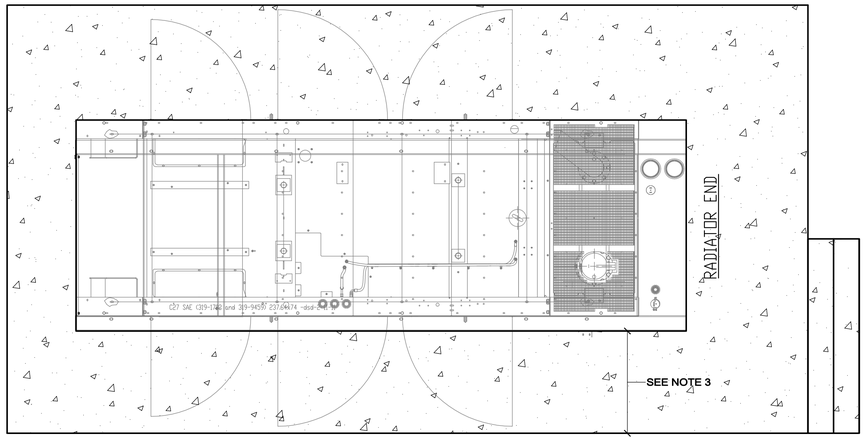

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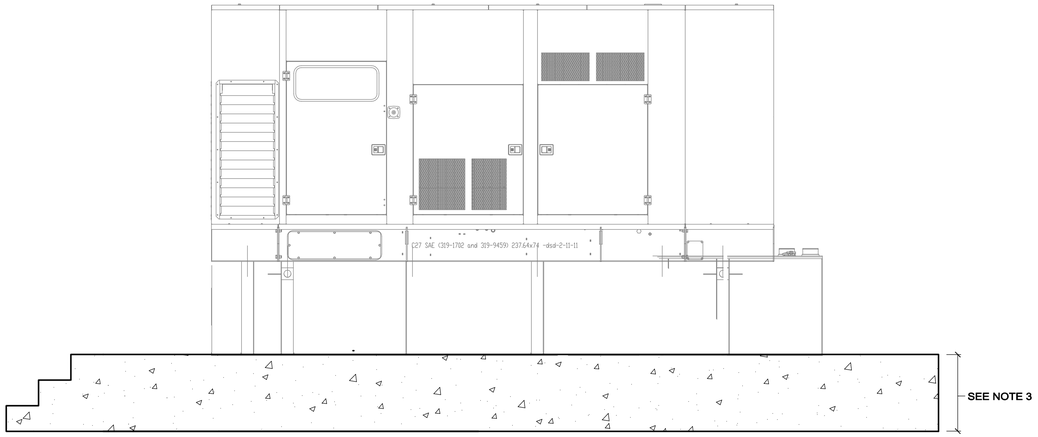

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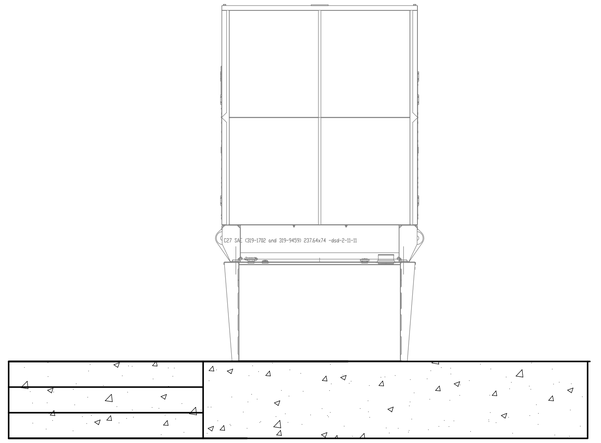

END

NOTES:

1. REFER TO EXACT INSTALLATION REQUIREMENTS OF THE GENERATOR AND ASSOCIATED ENCLOSURE MANUFACTURER FOR MODIFICATIONS THAT MAY BE REQUIRED TO THIS PAD LAYOUT. THIS DETAIL IS INTENDED TO ILLUSTRATE GENERAL REQUIREMENTS.
2. PAD SHALL EXTEND 42" (MINIMUM) FROM EACH SIDE OF THE GENRATOR ENCLOSURE FOR REQUIRED CODE CLEARANCES.
3. CONCRETE PAD HEIGHT ABOVE FLOOD PLAIN SHALL BE 2'-0" (MINIMUM). COORDINATE FINAL HEIGHT WITH CIVIL DRAWINGS.

GENERATOR ENCLOSURE WITH BASE TANK

EP

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ELECTRICAL
DETAILS 5

ROUTE 6 SEWER AND
WATER EXTENSIONS
BASE BID

TOWN OF WESTPORT, MA

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E-113

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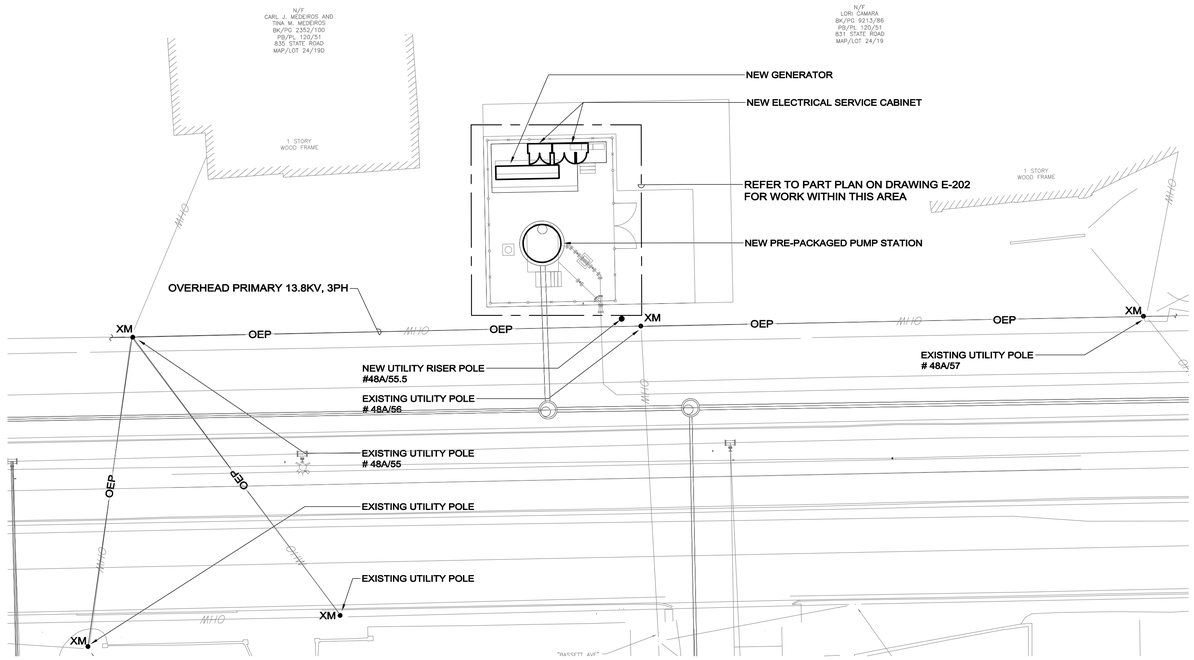
ELECTRICAL SITE NOTES

1. REFER TO DRAWINGS E-101 & E-102 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. COORDINATE NEW SERVICE WORK WITH UTILITY UNDER EVERSOURCE WORK ORDER #10746533. FOR BIDDING PURPOSES, CARRY AN ALLOWANCE IN THE AMOUNT OF $5,000.00 FOR PAYMENT TO EVERSOURCE FOR THEIR WORK UNDER THIS WORK ORDER. COORDINATE SIGNING OF THE SERVICE AGREEMENT WITH OWNER AND EVERSOURCE.

   UTILITY CONTACT AS FOLLOWS:

   BRIAN MELLO
   SENIOR ACCOUNT EXECUTIVE REPRESENTATIVE
   (508) 441-5832
   brian.mello@eversource.com



833 STATE ROAD - ELECTRICAL SITE PLAN

SCALE: 1"=20'-0"

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0 20 40
SCALE: 1" =20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
833 STATE ROAD - SITE PLAN

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA
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E-201

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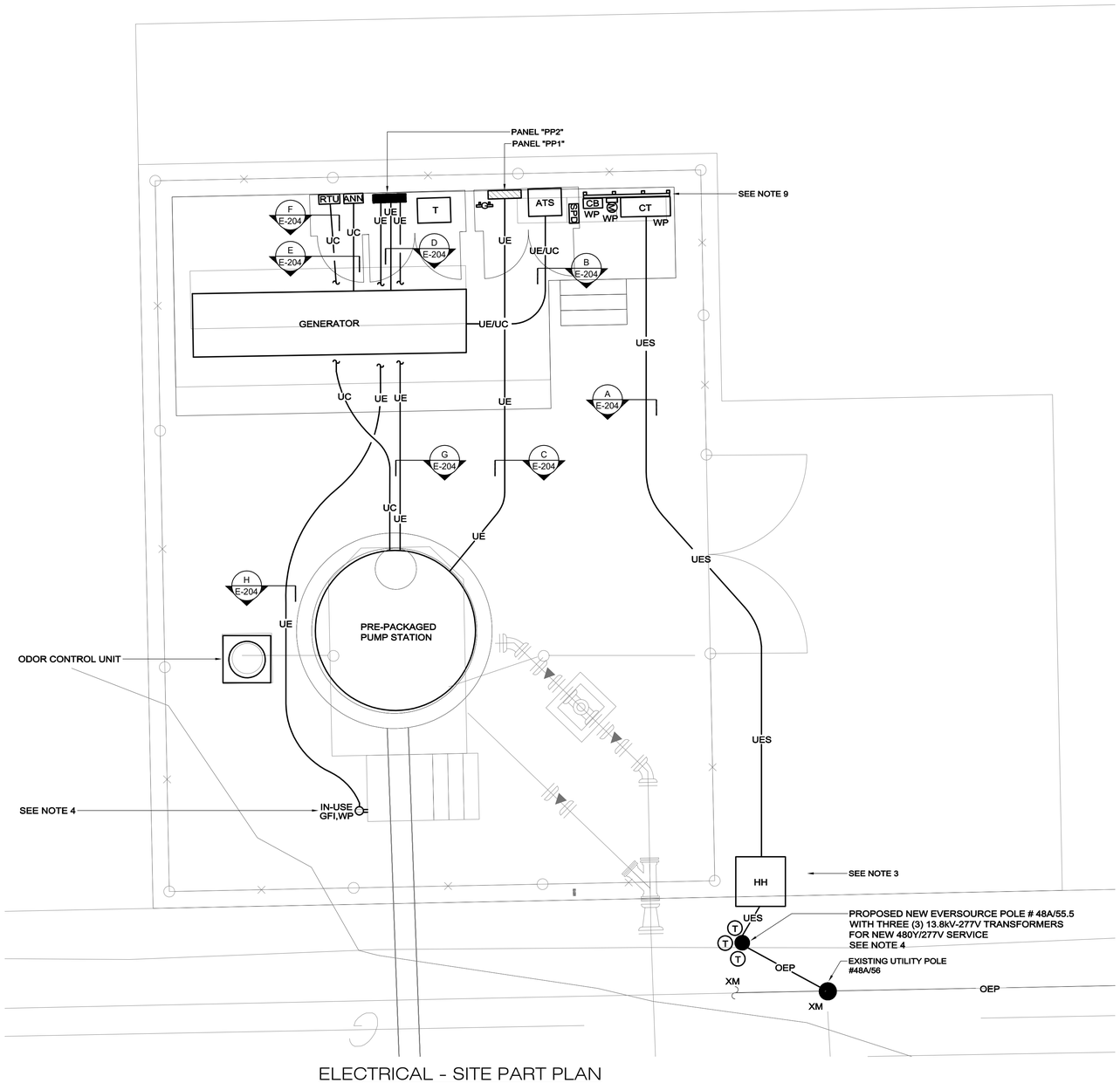
PLOTTED: 3/8/2024 10:23 AM BY: hamilton whitney

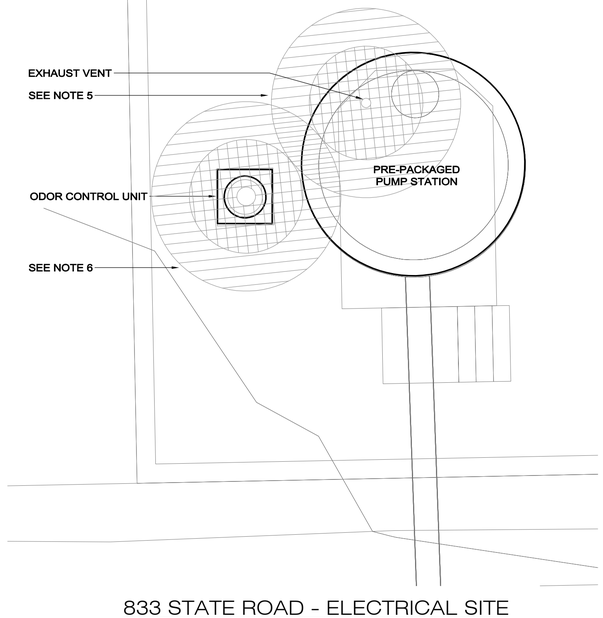


ELECTRICAL - SITE PART PLAN

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

ELECTRICAL SITE NOTES

1. REFER TO DRAWINGS E-101 & E-102 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. REFER TO DUCT BANK CONDUIT SCHEDULE ON DRAWING E-204 FOR CONDUCTOR & CONDUIT REQUIREMENTS.
3. CONTRACTOR TO PROVIDE NEW 3' X 3' X 3' HANDHOLE RATED FOR VEHICULAR TRAFFIC. CONTRACTOR TO PROVIDE RISER CONDUITS (3" MINIMUM) TO NEW POLE AND PROVIDE ENOUGH CONDUCTOR LENGTH FOR POLE TOP. CONNECTIONS BY UTILITY COMPANY.
4. UTILITY COMPANY WILL PROVIDE NEW POLE, GUY, POLE MOUNTED TRANSFORMER CLUSTER AND RELATED PRIMARY LINES FROM NEW AND EXISTING POLES. UTILITY COMPANY WILL PROVIDE SECONDARY TERMINATIONS AT TRANSFORMER.
6. EXHAUST VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING. CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.
6. ODOR CONTROL UNIT VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING. CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.
7. RECEPTACLES SERVING ODOR CONTROL UNIT SHALL BE LOADED OUTSIDE CLASSIFIED AREA.
8. PROVIDE WEATHER TIGHT POLY WATER "FST" FOAM DUCT SEALANT OR APPROVED EQUAL AT ALL CONDUITS PENETRATING INTO ELECTRICAL SERVICE CABINETS. PROVIDE WEATHER / WATER PROTECTION AS REQUIRED.
9. EXTERIOR MAIN CIRCUIT BREAKER, UTILITY CT CABINET AND METER SOCKET SHALL BE MOUNTED TO STAINLESS STEEL UNISTRUT CHANNEL SYSTEM.



833 STATE ROAD - ELECTRICAL SITE
HAZARDOUS AREA CLASSIFICATION PART PLAN

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

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0 — 20 — 40

SCALE: 1" =20 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
833 STATE ROAD - SITE PART PLANS

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA

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E-202

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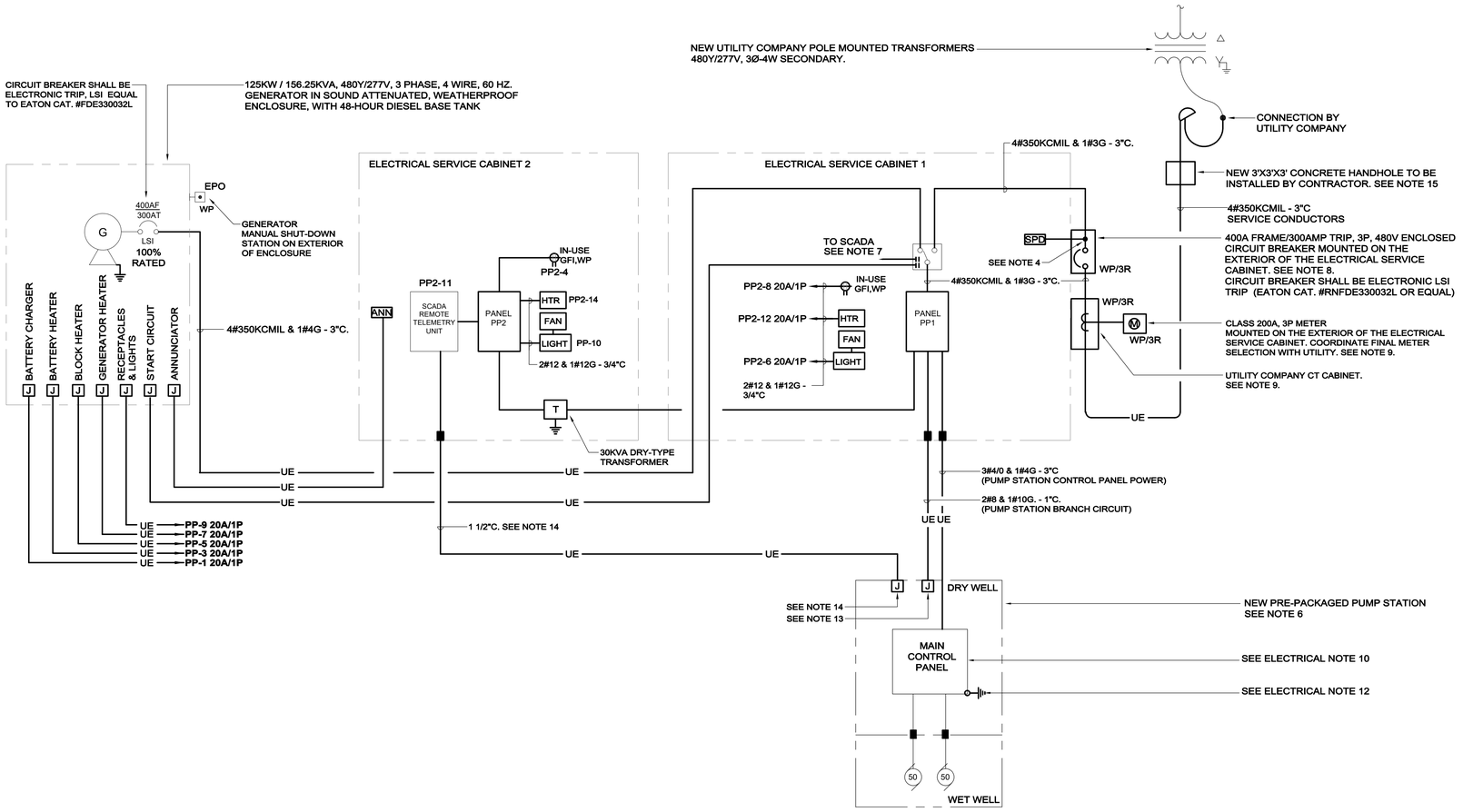
ELECTRICAL ONE-LINE NOTES:

1. REFER TO DRAWINGS E-101 & E-102 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. THIS DRAWING IS INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND REQUIRED INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS, PANEL SCHEDULES FOR COMPLETE LISTING OF LOADS, AND THE SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
3. THE SERVICE AND ALL SEPARATELY DERIVED SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NEC. BOND ALL ELECTRICALLY CONDUCTIVE MATERIALS SUCH AS METAL PIPING SYSTEMS AND STRUCTURAL STEEL TO THE GROUNDING SYSTEM. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
4. SERVICE ENTRANCE SPD (TYPE 1) SHALL HAVE A MAXIMUM SURGE RATING CAPACITY OF 125KA PER MODE (250KA PER PHASE). TVSS SHALL BE INDIVIDUALLY MOUNTED IN A NEMA 1 ENCLOSURE. SPD SHALL BE PROVIDED WITH INTEGRAL OVERCURRENT PROTECTION, INDICATING LAMPS, SURGE COUNTER AND INTEGRAL (THROUGH DOOR) DISCONNECT SWITCH. SPD SHALL BE "400" SERIES AS MANUFACTURED BY ASCO - MODEL #460-120Y-P25ATCE10 OR EQUAL BY LIEBERT ("ACCUVAR" SERIES) OR EATON ("CPS" SERIES) SPD ENCLOSURE DIMENSIONS 12"(w) X 12"(h) X 7"(d).
5. PANELBOARDS AND METER SOCKET ENCLOSURES SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVING, OR MAINTENANCE OF THE EQUIPMENT.
6. PRE-FABRICATED PUMP STATION IS PRE-WIRED BY PUMP STATION MANUFACTURER. PUMP STATION PROVIDED WITH MAIN CONTROL PANEL, POWER RECEPTACLES, PUMP CABLES / CONDUIT, LIGHTING ARRESTOR / SURGE CAPACITOR, VACUUM PUMP, VENTILATION BLOWER, DE-HUMIDIFIER, FLOAT SWITCHES AND TRANSDUCERS.
7. PROVIDE 2 #14 IN 3/4"C. FROM AUTOMATIC TRANSFER SWITCH TO REMOTE TELEMETRY UNIT (RTU). RTU WILL MONITOR GENERATOR OPERATION UNDER LOSS OF NORMAL/UTILITY POWER AND PROVIDE ALARM NOTIFICATION TO TOWN OF WESTPORT WATER & SEWER DIVISION PERSONNEL. CONTRACTOR SHALL PROGRAM RTU ACCORDINGLY.
8. PROVIDE TERMINAL LUG SET (LOAD SIDE) FOR ABILITY TO SEPARATELY TERMINATE FEEDER CONDUCTORS AND SURGE PROTECTION DEVICE TAP CONDUCTORS.
9. PROVIDE GROUND BAR/LUG KIT IN METER ENCLOSURE TO ACCOMMODATE ALL GROUNDING ELECTRODE CONNECTIONS.
10. MAIN CONTROL PANEL IS PROVIDED WITH PUMP STATION. CONTRACTOR TO TERMINATE MOTOR FEEDER CONDUCTORS TO PANEL. THE GROUNDING CONDUCTOR SHALL BE BONDED TO THE GROUNDING ELECTRODE CONDUCTOR AT THIS STRUCTURE BY STRUCTURE PROVIDER.
11. ALL OVERCURRENT DEVICES FOR THIS PROJECT SHALL SELECTIVELY COORDINATE IN ACCORDANCE WITH MEC 701.32. IF NECESSARY TO ACHIEVE SELECTIVE COORDINATION, BREAKER TYPES, TRIP TYPES AND RATINGS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
12. PROVIDE GROUNDING CONDUCTOR TO GROUNDING ELECTRODE CONDUCTOR BOND ONLY. NO NEUTRAL TO GROUND BOND.
13. BRANCH CIRCUIT FOR PUMP STATION ENVIRONMENTAL AND CONTROL EQUIPMENT. CONTRACTOR TO PROVIDE BRANCH CIRCUIT TO PUMP STATION FOR EXTENSION BY PUMP STATION MANUFACTURER.
14. PROVIDE 1 1/2"C. FOR PUMP STATION ALARMS / AUXILLARY CABLE USE. CABLES TO BE PROVIDED BY PUMP STATION MANUFACTURER. CONTRACTOR SHALL COORDINATE FINAL ROUTING TO ELECTRICAL SERVICE CABINETS WITH PUMP STATION MANUFACTURER.
15. PROVIDE 36" X 36" X 36" CONCRETE HANDHOLE (VEHICLE RATED) ASHTO HS20 RATED. CONTRACTOR TO INSTALL RISER CONDUIT AT POLE PER UTILITY COMPANY STANDARDS. CONTRACTOR TO LEAVE ENOUGH CABLE AT POLE LOCATION FOR POLE TOP CONNECTIONS BY UTILITY COMPANY.



833 STATE RD PUMP STATION - PANELBOARD SCHEDULE - DP

PANEL: DP | VOLTS: 480Y/277 | MOUNT: SURFACE | GROUND BUS: Y
MAIN: 400A MLO | AMPS: 400 | AIC: 65,000 | ISOLATED GROUND BUS: N
LOCATION: INSIDE ELECTRICAL SERVICE CABINET | PH/WIRE: 3/4 | SURFACE | 200% NEUTRAL: N

CIR.	AMPS/ POLES	DESCRIPTION OF LOAD	LOAD kVA	LOAD BY PHASE, kVA A	B	C	LOAD kVA	DESCRIPTION OF LOAD	AMPS/ POLES	CIR.
1	50/3	PANEL "PP"	5.72	43.72			38.00	PUMP CONTROL PANEL (NOTE 2)	175/3 LSI	2
3		(VIA 30KVA XFMR)	2.10		40.10		38.00			4
5		(NOTE 3)	1.96			39.96	38.00			6
7	-	SPACE		0.00				SPACE	-	8
9	-	SPACE			0.00			SPACE	-	10
11	-	SPACE				0.00		SPACE	-	12
13	-	SPACE		0.00				SPACE	-	14
15	-	SPACE			0.00			SPACE	-	16
17	-	SPACE				0.00		SPACE	-	18
19	-	SPACE		0.00				SPACE	-	20
21	-	SPACE			0.00			SPACE	-	22
23	-	SPACE				0.00		SPACE	-	24
25	-	SPACE		0.00				SPACE	-	26
27	-	SPACE			0.00			SPACE	-	28
29	-	SPACE				0.00		SPACE	-	30
		CONNECTED kVA BY PHASE -		43.72	40.10	39.96		TOTAL CONNECTED KVA-	123.78	
								DEMAND FACTOR	1.00	
								TOTAL DEMAND KVA-	123.78	
								TOTAL DEMAND AMPERES-	148.89	

NOTES:
1. UNLESS NOTED OTHERWISE PANELBOARD CIRCUIT BREAKERS SHALL BE EATON "QBHW" SERIES OR EQUAL.
2. EATON MODEL #175A FDE 310+ LSI.
3. EATON MODEL # 50A QHBW.

833 STATE RD PUMP STATION - PANELBOARD SCHEDULE - PP

PANEL: PP | VOLTS: 208Y/120 | MOUNT: SURFACE | GROUND BUS: Y
MAIN: 100A MCB SEE NOTE 2 | AMPS: 100 | AIC: 22,000 | ISOLATED GROUND BUS: N
LOCATION: INSIDE ELECTRICAL SERVICE CABINET | PH/WIRE: 3/4 | | 200% NEUTRAL: N

CIR.	AMPS/ POLES	DESCRIPTION OF LOAD	LOAD kVA	LOAD BY PHASE, kVA A	B	C	LOAD kVA	DESCRIPTION OF LOAD	AMPS/ POLES	CIR.
1	20/1	BATTERY CHARGER	0.50	4.00			3.50	PUMP STATION PANEL	40/1	2
3	20/1	BATTERY HEATER	0.60		1.32		0.72	ENCLOSURE INTERIOR RECPS	20/1	4
5	20/1	BLOCK HEATER	0.16			0.66	0.50	ENCLOSURE INTERIOR FAN/LTS	20/1	6
7	20/1	GENERATOR HEATER	0.20	0.92			0.72	ENCLOSURE INTERIOR RECPS	20/1	8
9	20/1	RECEPTACLES AND LIGHTS	0.28		0.78		0.50	ENCLOSURE INTERIOR FAN/LTS	20/1	10
11	20/1	RTU/CELLUAR DIALER	0.50			1.30	0.80	ENCLOSURE HEATER	20/1	12
13	20/1	ODOR CONTROL UNIT		0.80			0.80	ENCLOSURE HEATER	20/1	14
15	20/1	SPARE			0.00			SPARE	20/1	16
17	20/1	SPARE				0.00		SPARE	20/1	18
19	20/1	SPARE		0.00				SPARE	20/1	20
21	-	SPACE			0.00			SPACE	-	22
23	-	SPACE				0.00		SPACE	-	24
25	-	SPACE		0.00				SPACE	-	26
27	-	SPACE			0.00			SPACE	-	28
29	-	SPACE				0.00		SPACE	-	30
		CONNECTED kVA BY PHASE -		5.72	2.10	1.96		TOTAL CONNECTED KVA-	9.78	
								DEMAND FACTOR	1.00	
								TOTAL DEMAND KVA-	9.78	
								TOTAL DEMAND AMPERES-	27.15	

NOTES:
1. UNLESS NOTED OTHERWISE PANELBOARD CIRCUIT BREAKERS SHALL BE EATON "QBHW" SERIES OR EQUAL.
2. EATON MODEL #100A FDE 310+ LSI.

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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
833 STATE ROAD - ONE-LINE DIAGRAM & SCHEDULES

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-203

SHEET of 29

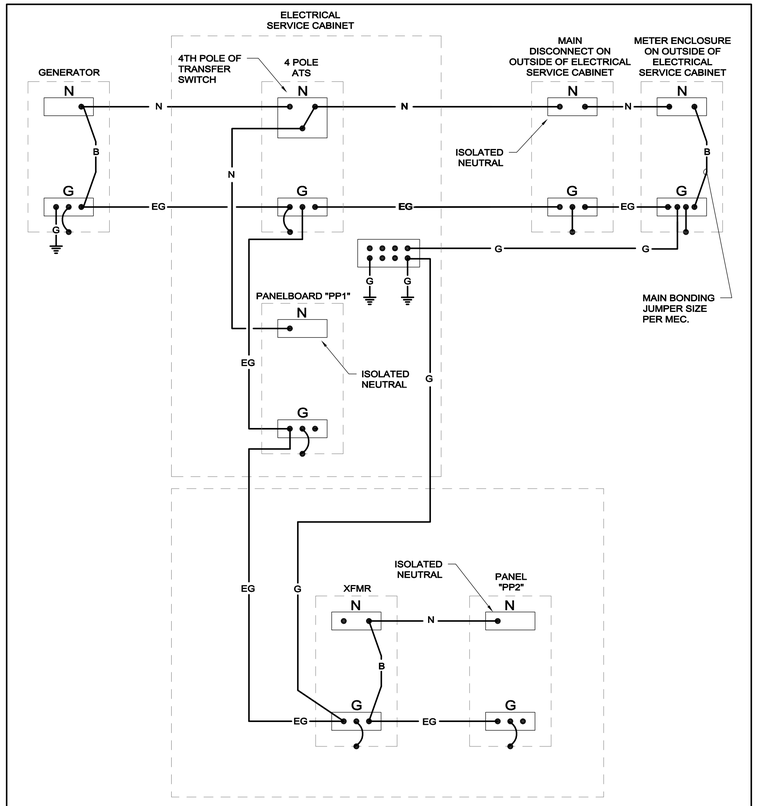
CAD FILE: W:\BLD3\Projects\2022\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Bid Alternate A\20220279 E-203 ELEC 833 STATE RD ONE-LINE DIAGRAM - BID ALT A.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:22 AM BY: hamilton whitney

GROUNDING CONNECTION DIAGRAM KEY

—G—	GROUNDING ELECTRODE CONDUCTOR RUN IN SCH. 80PVC SIZE PER NEC
—EG—	EQUIPMENT GROUNDING CONDUCTOR RUN WITH PHASE CONDUCTORS
—N—	NEUTRAL CONDUCTOR RUN WITH PHASE CONDUCTORS
—B—	BONDING JUMPER - SIZE PER NEC
—G—||—	GROUNDING ELECTRODE. REFER TO DETAIL E001 THIS SHEET
	GROUND BAR. SEE DETAIL E004 ON THIS DRAWING. REFER TO FLOOR PLANS FOR LOCATIONS.

GROUNDING CONNECTION DIAGRAM NOTES

1. PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR ALL FEEDERS & BRANCH CIRCUITS.
2. CONTRACTOR SHALL MAKE ALL INDICATED GROUNDING CONNECTIONS.
3. GROUNDING SHALL COMPLY WITH NEC 250.



833 STATE RD. GROUNDING CONNECTIONS DIAGRAM

SCALE: N.T.S.

CONCRETE ENCASED — S1, SP3 — SECTION "A-A" N.T.S.

CONCRETE ENCASED — S2, C2 — SECTION "B-B" N.T.S.

CONCRETE ENCASED — S3 — SECTION "C-C" N.T.S.

CONCRETE ENCASED — S5, SP2 — SECTION "D-D" N.T.S.

CONCRETE ENCASED — C1 — SECTION "E-E" N.T.S.

CONCRETE ENCASED — C3 — SECTION "F-F" N.T.S.

CONCRETE ENCASED — S4 — SECTION "G-G" N.T.S.

CONCRETE ENCASED — S6 — SECTION "H-H" N.T.S.

NOTES:
1. REFER TO TYPICAL ELECTRICAL DUCT DETAIL THIS SHEET FOR GENERAL CONSTRUCTION REQUIREMENTS.

2. REFER TO THE DUCT BANK CONDUIT SCHEDULE THIS SHEET FOR CONDUIT AND CONDUCTOR REQUIREMENTS ASSOCIATED WITH CONDUIT TAG.

3. PROVIDE CONCRETE ENCASEMENT WHERE DIRECTED TO BY OWNER.

833 STATE RD. ELECTRICAL DUCT SECTIONS

833 STATE RD. DUCT BANK CONDUIT SCHEDULE

TAG	DESCRIPTION	CONDUIT	CONDUCTORS
S1	480V SERVICE ENTRANCE FROM UTILITY TO MAIN DISCONNECT SWITCH	4"	4#600MCM
S2	480V FEED FROM GENERATOR TO TRANSFER SWITCH	4"	4#600MCM & 1#3 G.
S3	480V FEED TO MAIN PUMP CONTROL PANEL	3"	3#4/0 & 1#4 G.
S4	120V FEED TO PUMP STATION ENVIRONMENTAL CTL. EQUIP.	1"	2#8 & 1#10 G.
S5	BATTERY CHARGER BATTERY HEATER BLOCK HEATER GENERATOR HEATER RECEPTACLES AND LIGHTS SPARE (ALL DERATED)	2"	2#10 & 1#10G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 6#10
S6	120V FEED TO ODOR CONTROL UNIT	1"	2#10 & 1#10 G.
C1	GENERATOR ANNUNCIATOR WIRING	2"	PER MANUFACTURER'S INSTRUCTIONS
C2	GENERATOR START CIRCUIT	2"	PER MANUFACTURER'S INSTRUCTIONS SEE NOTE 7
C3	PUMP STATION CONTROL / MONITORING	1-1/2"	PER MANUFACTURER'S INSTRUCTIONS, NOTE 7
SP1	SPARE	1"	NOTE 6
SP2	SPARE	2"	NOTE 6
SP3	SPARE	3"	NOTE 6

NOTES:

1. REFER TO DUCT BANK SECTIONS FOR CORRESPONDING CONDUIT AND CONDUCTOR.
2. REFER TO THE TYPICAL DUCTBANK SECTION FOR DETAILS REQUIRED IN THE CONSTRUCTION OF THE DUCT BANK ENVELOPE.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO DUCT BANK REINFORCEMENT REQUIRED UNDER PAVED AREAS INTENDED FOR VEHICULAR TRAFFIC AND AT MANHOLE/BUILDING INTERFACES.
4. ALL CONDUCTORS INSTALLED IN DUCT SHALL BE SUITABLE FOR WET LOCATIONS.
5. ALL SERVICE ENTRANCE AND GENERATOR OUTPUT CONDUCTORS INSTALLED IN DUCT SHALL BE TYPE USE.
6. PROVIDE ALL EMPTY/SPARE CONDUIT WITH NYLON PULL STRING.
7. GENERATOR START CIRCUIT TO ORIGINATE AT AUTOMATIC TRANSFER SWITCH.

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SCALE VERIFICATION

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ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
833 STATE ROAD - DETAILS

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE A

TOWN OF WESTPORT, MA
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816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-204

SHEET of 29

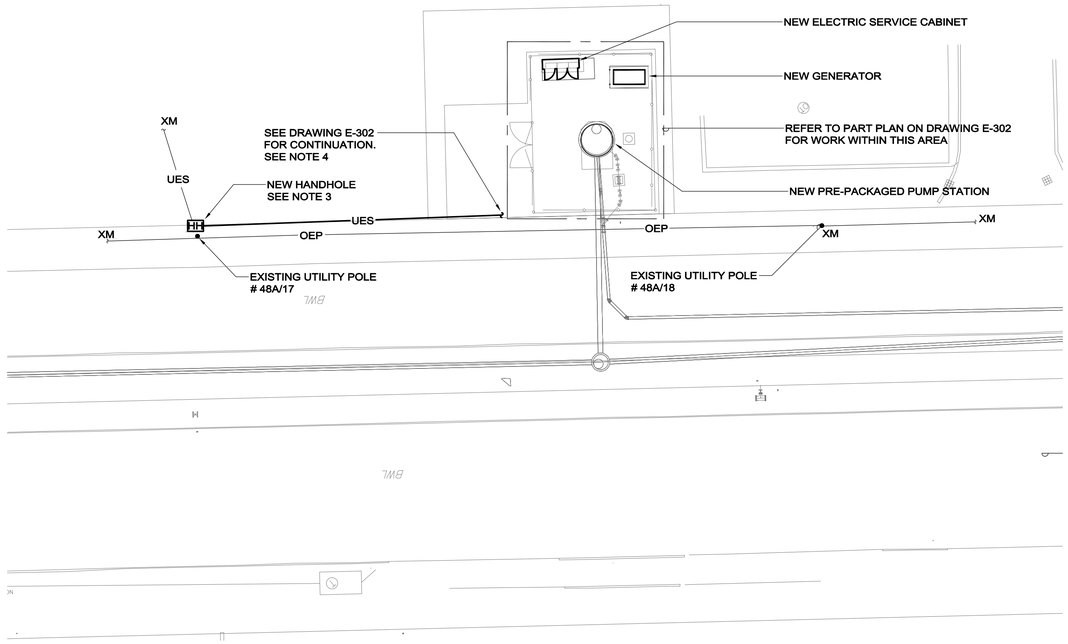
CAD FILE: W:\BLD3\Projects\2022\0220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Bid Alternate A\0220279 E-204 ELEC 833 STATE RD DETAILS - BID ALT A.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:22 AM BY: hamilton whitney

ELECTRICAL SITE NOTES

1. REFER TO DRAWING E-101 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. COORDINATE NEW SERVICE WORK WITH UTILITY UNDER EVERSOURCE WORK ORDER #10746595. FOR BIDDING PURPOSES, CARRY AN ALLOWANCE IN THE AMOUNT OF $5,000.00 FOR PAYMENT TO EVERSOURCE FOR THEIR WORK UNDER THIS WORK ORDER. COORDINATE SIGNING OF THE SERVICE AGREEMENT WITH OWNER AND EVERSOURCE.

   UTILITY CONTACT AS FOLLOWS:

   BRIAN MELLO
   SENIOR ACCOUNT EXECUTIVE REPRESENTATIVE
   (508) 441-5832
   brian.mello@eversource.com
3. UTILITY COMPANY TO PROVIDE NEW 3' X 3' X3' CONCRETE HANDHOLE (VEHICLE RATED) OVER EXISTING UNDER GROUND CONDUIT. UTILITY COMPANY WILL REPLACE CABLE FROM POLE #48/A17 TO NEW HANDHOLE AND CONNECT NEW PUMP STATION SERVICE ENTRANCE CONDUCTORS IN HANDHOLE.
4. ELECTRICAL CONTRACTOR TO PROVIDE UNDERGROUND SECONDARY SERVICE CONDUIT AND WIRE FROM NEW HANDHOLE TO NEW UTILITY METER AT NEW ELECTRICAL SERVICE CABINET.



ELECTRICAL - 1115 STATE ROAD SITE PLAN

SCALE: 1"=20'-0"

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Signed By: #

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SCALE VERIFICATION

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0 20 40

SCALE: 1" =20 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
1115 STATE ROAD - SITE PLAN

ROUTE 6 SEWER AND
WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA
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816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
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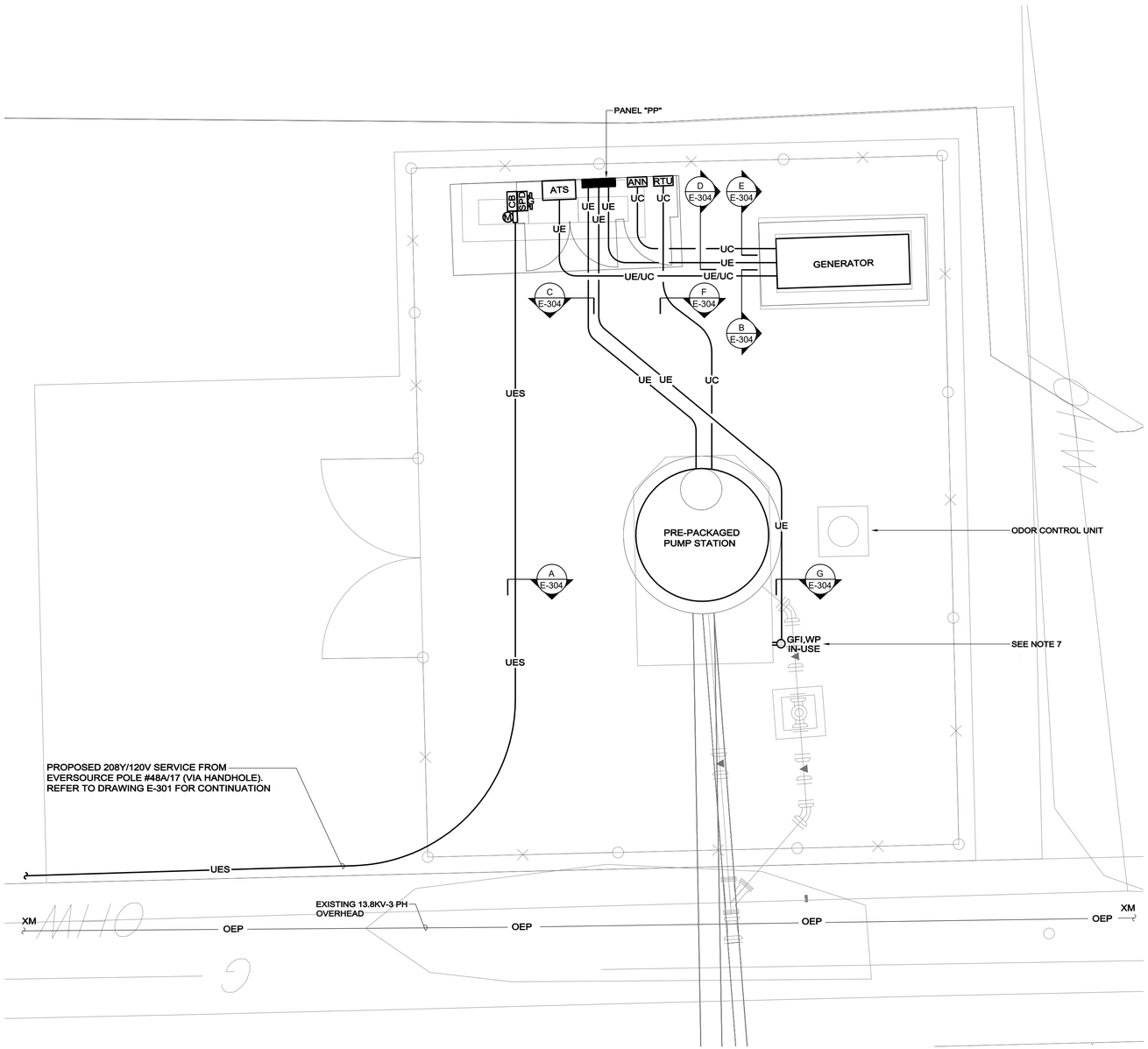
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-301

SHEET of 29

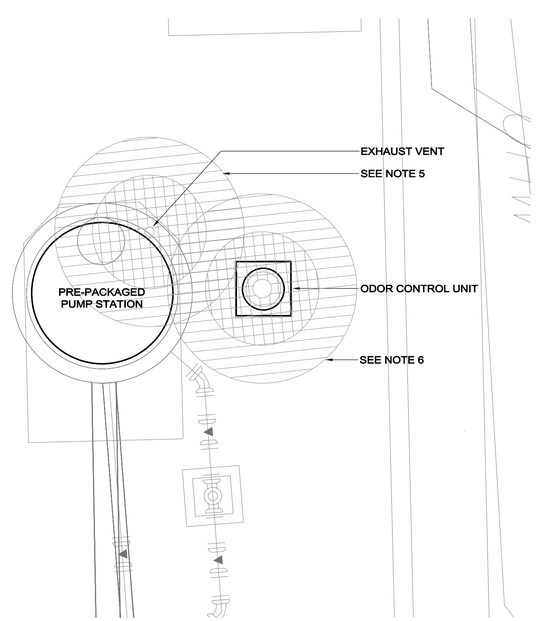
CAD FILE: W:\BLD3\Projects\2022\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Bid Alternate B\20220279 E-301 ELEC 1115 STATE RD SITE PLAN - BID ALT B.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:28 AM BY: hamilton whitney

CAD FILE: W:\BLD3\Projects\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Bid Alternate B\20220279 E-302 ELEC 1115 STATE RD SITE PART PLANS - BID ALT B.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:28 AM BY: hamilton whitney



ELECTRICAL - SITE PART PLAN

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



1115 STATE ROAD - ELECTRICAL SITE HAZARDOUS AREA CLASSIFICATION PART PLAN

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

ELECTRICAL SITE NOTES

1. REFER TO DRAWING E-101 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. PROVIDE WEATHER TIGHT POLY WATER "FST" FOAM DUCT SEALANT OR APPROVED EQUAL, AT ALL CONDUITS PENETRATING INTO ELECTRICAL SERVICE CABINETS. PROVIDE WEATHER / WATER PROTECTION AS REQUIRED.
3. REFER TO DUCT BANK CONDUIT SCHEDULE ON DRAWING E-4 FOR CONDUCTOR/CONDUIT REQUIREMENTS.
4. POWER BRANCH CIRCUITRY SHALL BE INSTALLED IN RSC CONDUIT CONTROL CABINET; PVC COATED RSC WHERE RUN EXPOSED ON CABINET EXTERIOR AND IN EXTERIOR VAULTS/MANHOLES.
5. EXHAUST VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING. CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.
6. ODOR CONTROL UNIT VENT: CLASS 1 / DIVISION 1: 3'-0" RADIUS AROUND VENT OPENING. CLASS 1 / DIVISION 2: 5'-0" RADIUS AROUND VENT OPENING.
7. RECEPTACLE SERVING ODOR CONTROL UNIT SHALL BE LOCATED OUTSIDE CLASSIFIED AREA.

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REVISIONS

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0 20 40

SCALE: 1" =20 ' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
1115 STATE ROAD - SITE PLAN

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA
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WESTPORT, MA 02790

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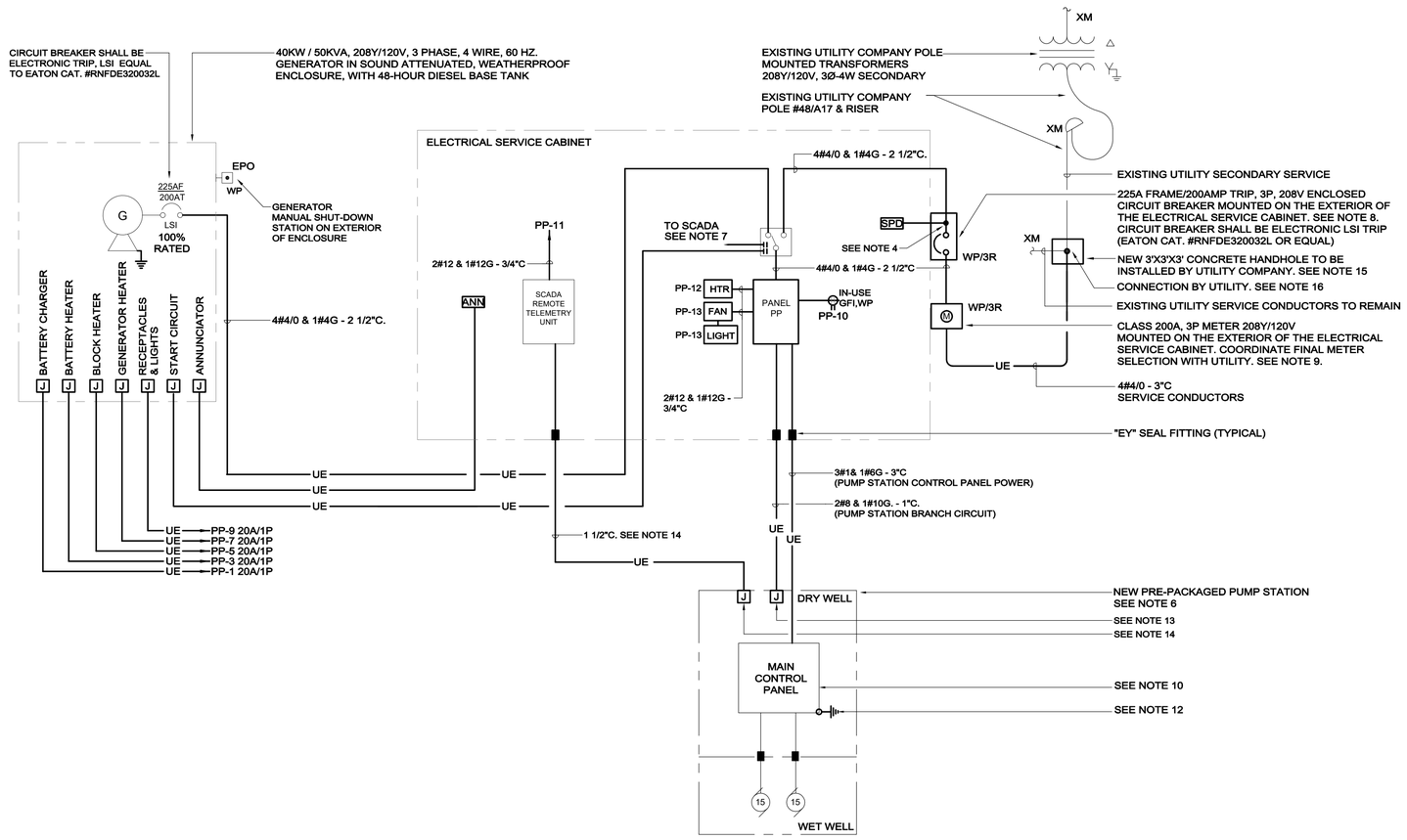
PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-302

SHEET of 29

ELECTRICAL ONE-LINE NOTES:

1. REFER TO DRAWINGS E-101 & E-102 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
2. THIS DRAWING IS INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND REQUIRED INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS, PANEL SCHEDULES FOR COMPLETE LISTING OF LOADS, AND THE SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
3. THE SERVICE AND ALL SEPARATELY DERIVED SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NEC. BOND ALL ELECTRICALLY CONDUCTIVE MATERIALS SUCH AS METAL PIPING SYSTEMS AND STRUCTURAL STEEL TO THE GROUNDING SYSTEM. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
4. SERVICE ENTRANCE SPD (TYPE 1) SHALL HAVE A MAXIMUM SURGE RATING CAPACITY OF 125KA PER MODE (250KA PER PHASE). TVSS SHALL BE INDIVIDUALLY MOUNTED IN A NEMA 1 ENCLOSURE. SPD SHALL BE PROVIDED WITH INTEGRAL OVERCURRENT PROTECTION, INDICATING LAMPS, SURGE COUNTER AND INTEGRAL (THROUGH DOOR) DISCONNECT SWITCH. SPD SHALL BE "400" SERIES AS MANUFACTURED BY ASCO - MODEL #460-120Y-P25ATCE10 OR EQUAL BY LIEBERT ("ACCUVAR" SERIES) OR EATON ("CPS" SERIES) SPD ENCLOSURE DIMENSIONS 12"(w) X 12"(h) X 7"(d).
5. PANELBOARDS AND METER SOCKET ENCLOSURES SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVING, OR MAINTENANCE OF THE EQUIPMENT.
6. PRE-FABRICATED PUMP STATION IS PRE-WIRED BY PUMP STATION MANUFACTURER. PUMP STATION PROVIDED WITH MAIN CONTROL PANEL, POWER RECEPTACLES, PUMP CABLES / CONDUIT, LIGHTNING ARRESTOR / SURGE CAPACITOR, VACUUM PUMP, VENTILATION BLOWER, DE-HUMIDIFIER, FLOAT SWITCHES AND TRANSDUCERS.
7. PROVIDE 2 #14 IN 3/4"C. FROM AUTOMATIC TRANSFER SWITCH TO REMOTE TELEMETRY UNIT (RTU). RTU WILL MONITOR GENERATOR OPERATION UNDER LOSS OF NORMAL/UTILITY POWER AND PROVIDE ALARM NOTIFICATION TO TOWN OF WESTPORT WATER & SEWER DIVISION PERSONNEL. CONTRACTOR SHALL PROGRAM RTU PANEL ACCORDINGLY.
8. PROVIDE TERMINAL LUG SET (LOAD SIDE) FOR ABILITY TO SEPARATELY TERMINATE FEEDER CONDUCTORS AND SURGE PROTECTION DEVICE TAP CONDUCTORS.
9. PROVIDE GROUND BAR/LUG KIT IN METER ENCLOSURE TO ACCOMMODATE ALL GROUNDING ELECTRODE CONNECTIONS.
10. MAIN CONTROL PANEL IS PROVIDED WITH PUMP STATION. CONTRACTOR TO TERMINATE FEEDER CONDUCTORS TO PANEL. THE GROUNDING CONDUCTOR SHALL BE BONDED TO THE GROUNDING ELECTRODE CONDUCTOR AT THIS STRUCTURE BY STRUCTURE PROVIDER.
11. ALL OVERCURRENT DEVICES FOR THIS PROJECT SHALL SELECTIVELY COORDINATE IN ACCORDANCE WITH MEC 701.32. IF NECESSARY TO ACHIEVE SELECTIVE COORDINATION, BREAKER TYPES, TRIP TYPES AND RATINGS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
12. PROVIDE GROUNDING CONDUCTOR TO GROUNDING ELECTRODE CONDUCTOR BOND ONLY. NO NEUTRAL TO GROUND BOND.
13. BRANCH CIRCUIT FOR PUMP STATION ENVIRONMENTAL AND CONTROL EQUIPMENT. CONTRACTOR TO PROVIDE BRANCH CIRCUIT TO PUMP STATION FOR EXTENSION BY PUMP STATION MANUFACTURER.
14. PROVIDE 1 1/2"C. FOR PUMP STATION ALARMS / AUXILLARY CABLE USE. CABLES TO BE PROVIDED BY PUMP STATION MANUFACTURER. CONTRACTOR SHALL COORDINATE FINAL ROUTING TO ELECTRICAL SERVICE CABINET WITH PUMP STATION MANUFACTURER.
15. UTILITY COMPANY TO INSTALL NEW 3' X 3' X 3' CONCRETE HANDHOLE (VEHICLE RATED) ASHTO HS20 RATED OVER EXISTING UTILITY CONDUIT SERVING ADJACENT PROPERTY UTILITY TO REPLACE WIRE FROM EXISTING POLE TO NEW HANDHOLE.
16. UTILITY COMPANY TO PROVIDE SECONDARY CONNECTIONS IN NEW HANDHOLE.



1115 STATE ROAD - ELECTRICAL ONE-LINE DIAGRAM

SCALE: NONE

1115 STATE RD PUMP STATION - PANELBOARD SCHEDULE - PP

PANEL: PP | VOLTS: 208Y/120 | MOUNT: SURFACE | GROUND BUS: Y
MAIN: 225A MLO | AMPS: 225 | AIC: 22,000 | ISOLATED GROUND BUS: N
LOCATION: INSIDE ELECTRICAL SERVICE CABINET | PH/WIRE: 3/4 | 200% NEUTRAL: N

CIR.	AMPS/ POLES	DESCRIPTION OF LOAD	LOAD kVA	LOAD BY PHASE, kVA A	B	C	LOAD kVA	DESCRIPTION OF LOAD	AMPS/ POLES	CIR.
1	20/1	BATTERY CHARGER	0.50	13.30			12.80	PUMP CONTROL PANEL (NOTE 2)	125/3 LSI	2
3	20/1	BATTERY HEATER	0.60		13.40		12.80			4
5	20/1	BLOCK HEATER	0.16			12.96	12.80			6
7	20/1	GENERATOR HEATER	0.20	3.70			3.50	PUMP STATION PANEL	40/1	8
9	20/1	RECEPTACLES AND LIGHTS	0.28		1.00		0.72	ENCLOSURE INTERIOR RECPS	20/1	10
11	20/1	RTU/CELLUAR DIALER	0.50			1.30	0.80	ENCLOSURE HEATER	20/1	12
13	20/1	ENCLOSURE LIGHTING/FAN	0.50	2.00			1.50	ODOR CONTROL UNIT	20/1	14
15	20/1	SPARE			0.00			SPARE	20/1	16
17	20/1	SPARE				0.00		SPARE	20/1	18
19	20/1	SPARE		0.00				SPARE	20/1	20
21	20/1	SPARE			0.00				20/1	22
23	20/1	SPARE				0.00		SPARE	20/1	24
25	20/1	SPARE		0.00				SPARE	20/1	26
27	20/1	SPARE			0.00			SPARE	20/1	28
29	20/1	SPARE				0.00		SPARE	20/1	30
		CONNECTED kVA BY PHASE -		19.00	14.40	14.26		TOTAL CONNECTED kVA-	47.66	
								DEMAND FACTOR	1.00	
								TOTAL DEMAND kVA-	47.66	
								TOTAL DEMAND AMPERES-	132.29	

NOTES:
1. UNLESS NOTED OTHERWISE PANELBOARD CIRCUIT BREAKERS SHALL BE EATON "QBHW" SERIES OR EQUAL.
2. EATON MODEL #125A FDE 310+ LSI.

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380 Russell St. Hadley, MA 01035
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REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE

SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
0 1"
IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

ELECTRICAL
1115 STATE RD - ONE-LINE DIAGRAM & SCHEDULES

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

TOWN OF WESTPORT, MA
---
816 MAIN ROAD
WESTPORT, MA 02790

100% DESIGN

PROJECT NO.	20220581
ISSUE DATE	03/13/24
CURRENT REVISION	100%
DESIGNED BY	KEG
DRAWN BY	HEW
CHECKED BY	KEG
APPROVED BY	KEG

E-303

SHEET of 29

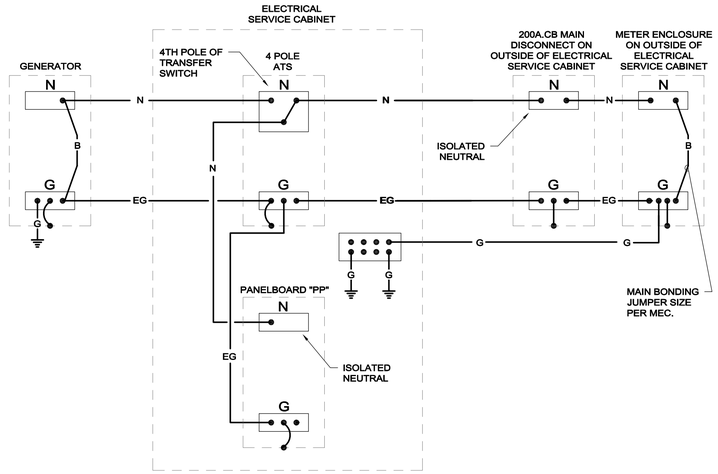
CAD FILE: W:\BLD3\Projects\20220220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Bid Alternate B\20220279 E-303 ELEC 1115 STATE RD ONE-LINE DIAGRAM - BID ALT B.dwg LAYOUT: Work PLOTTED: 3/8/2024 10:27 AM BY: hamilton whitney

GROUNDING CONNECTION DIAGRAM KEY

—G—	GROUNDING ELECTRODE CONDUCTOR RUN IN SCH. 80PVC SIZE PER NEC
—EG—	EQUIPMENT GROUNDING CONDUCTOR RUN WITH PHASE CONDUCTORS
—N—	NEUTRAL CONDUCTOR RUN WITH PHASE CONDUCTORS
—B—	BONDING JUMPER - SIZE PER NEC
—G— ⏚	GROUNDING ELECTRODE. REFER TO DETAIL E001 THIS SHEET
	GROUND BAR. SEE DETAIL E004 ON THIS DRAWING. REFER TO FLOOR PLANS FOR LOCATIONS.

GROUNDING CONNECTION DIAGRAM NOTES

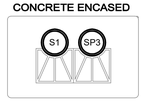
1. PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR ALL FEEDERS & BRANCH CIRCUITS.
2. CONTRACTOR SHALL MAKE ALL INDICATED GROUNDING CONNECTIONS.
3. GROUNDING SHALL COMPLY WITH NEC 250.



1115 STATE RD. GROUNDING CONNECTIONS DIAGRAM

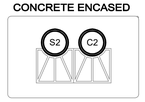
SCALE: N.T.S.

CONCRETE ENCASED



SECTION "A-A"
N.T.S.

CONCRETE ENCASED



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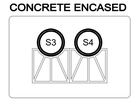
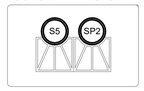
CONCRETE ENCASED



SECTION "C-C"
N.T.S.

CONCRETE ENCASED

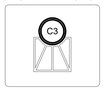


SECTION "D-D"
N.T.S.

CONCRETE ENCASED

SECTION "E-E"
N.T.S.

CONCRETE ENCASED



SECTION "F-F"
N.T.S.

CONCRETE ENCASED

SECTION "G-G"
N.T.S.

NOTES:
1. REFER TO TYPICAL ELECTRICAL DUCT DETAIL THIS SHEET FOR GENERAL CONSTRUCTION REQUIREMENTS.

2. REFER TO THE DUCT BANK CONDUIT SCHEDULE THIS SHEET FOR CONDUIT AND CONDUCTOR REQUIREMENTS ASSOCIATED WITH CONDUIT TAG.

3. PROVIDE CONCRETE ENCASEMENT WHERE DIRECTED TO BY OWNER.

1115 STATE RD. ELECTRICAL DUCT SECTIONS

1115 STATE RD. DUCT BANK CONDUIT SCHEDULE

TAG	DESCRIPTION	CONDUIT	CONDUCTORS
S1	208V SERVICE ENTRANCE FROM UTILITY TO MAIN DISCONNECT SWITCH	3"	4#4/0
S2	208V FEED FROM GENERATOR TO TRANSFER SWITCH	2"	4#2/0 & 1#6 G.
S3	208V FEED TO MAIN PUMP CONTROL PANEL	2"	3#4 & 1#8 G.
S4	120V FEED TO PUMP STATION ENVIRONMENTAL CTL. EQUIP.	1"	2#8 & 1#10 G.
S5	BATTERY CHARGER BATTERY HEATER BLOCK HEATER GENERATOR HEATER RECEPTACLES AND LIGHTS SPARE (ALL DERATED)	2"	2#10 & 1#10G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 2#10 & 1#10 G. 6#10
S6	120V FEED TO ODOR CONTROL	1"	2#10 & 1#10 G.
C1	GENERATOR ANNUNCIATOR WIRING	2"	PER MANUFACTURER'S INSTRUCTIONS
C2	GENERATOR START CIRCUIT	2"	PER MANUFACTURER'S INSTRUCTIONS SEE NOTE 7
C3	PUMP STATION CONTROL / MONITORING	1-1/2"	PER MANUFACTURER'S INSTRUCTIONS, NOTE 7
SP2	SPARE	2"	NOTE 6
SP3	SPARE	3"	NOTE 6

NOTES:

1. REFER TO DUCT BANK SECTIONS FOR CORRESPONDING CONDUIT AND CONDUCTOR.
2. REFER TO THE TYPICAL DUCTBANK SECTION FOR DETAILS REQUIRED IN THE CONSTRUCTION OF THE DUCT BANK ENVELOPE.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO DUCT BANK REINFORCEMENT REQUIRED UNDER PAVED AREAS INTENDED FOR VEHICULAR TRAFFIC AND AT MANHOLE/BUILDING INTERFACES.
4. ALL CONDUCTORS INSTALLED IN DUCT SHALL BE SUITABLE FOR WET LOCATIONS.
5. ALL SERVICE ENTRANCE AND GENERATOR OUTPUT CONDUCTORS INSTALLED IN DUCT SHALL BE TYPE USE.
6. PROVIDE ALL EMPTY/SPARE CONDUIT WITH NYLON PULL STRING.
7. GENERATOR START CIRCUIT TO ORIGINATE AT AUTOMATIC TRANSFER SWITCH.

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ELECTRICAL
1115 STATE RD - DETAILS 3

ROUTE 6 SEWER AND WATER EXTENSIONS
BID ALTERNATE B

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E-304

SHEET of 29

CAD FILE: W:\BLD3\Projects\2022\20220279 - Town Of Westport Wastewater Pump Stations\500 Drawings\505 Electrical\Plot Files\Bid Alternate B\20220279 E-304 ELEC 1115 STATE RD DETAILS - BID ALT B.dwg LAYOUT: Work
PLOTTED: 3/8/2024 10:27 AM BY: hamilton whitney