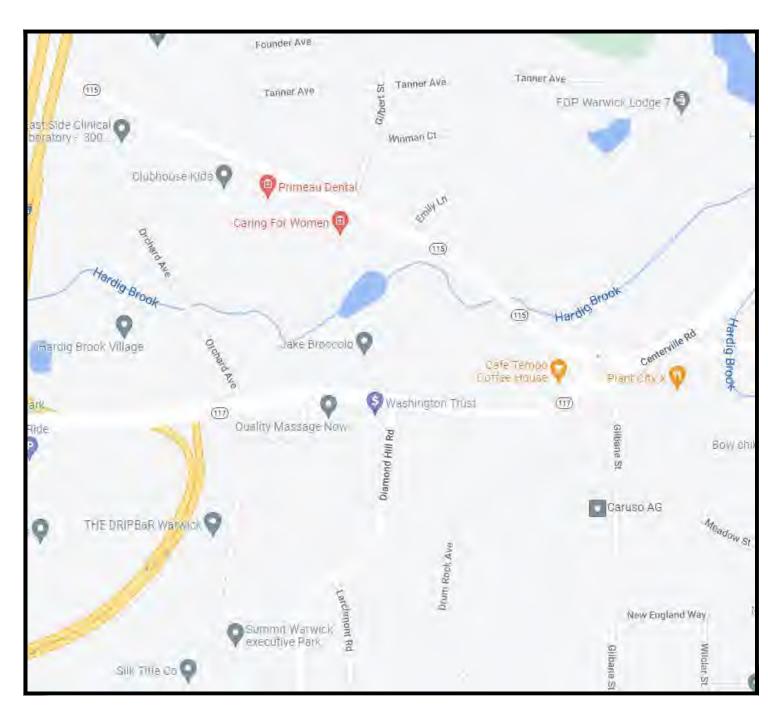
# MAJOR LAND DEVELOPMENT PRELIMINARY PLAN SUBMISSION

FOR

# CENTERVILLE ROAD DEVELOPMENT PHASE I



 $\frac{LOCUS\;MAP}{\text{not to scale}}$ 

**A.P. 246, LOTS 246, 247, 250, 251 & 257**203 CENTERVILLE ROAD
WARWICK, RHODE ISLAND

APPLICANT:

CENTERVILLE ASSOCIATES 164 CENTERVILLE ROAD (Rte. 117) WARWICK, RHODE ISLAND 02886

PREPARED BY:



GAROFALO & ASSOCIATES, INC.
CIVIL & STRUCTURAL ENGINEERS\SURVEYORS
LAND PLANNERS\ENVIRONMENTAL SCIENTISTS
P.O. BOX 6145 PROVIDENCE, R.I. 02940
1-401-273-6000

AND



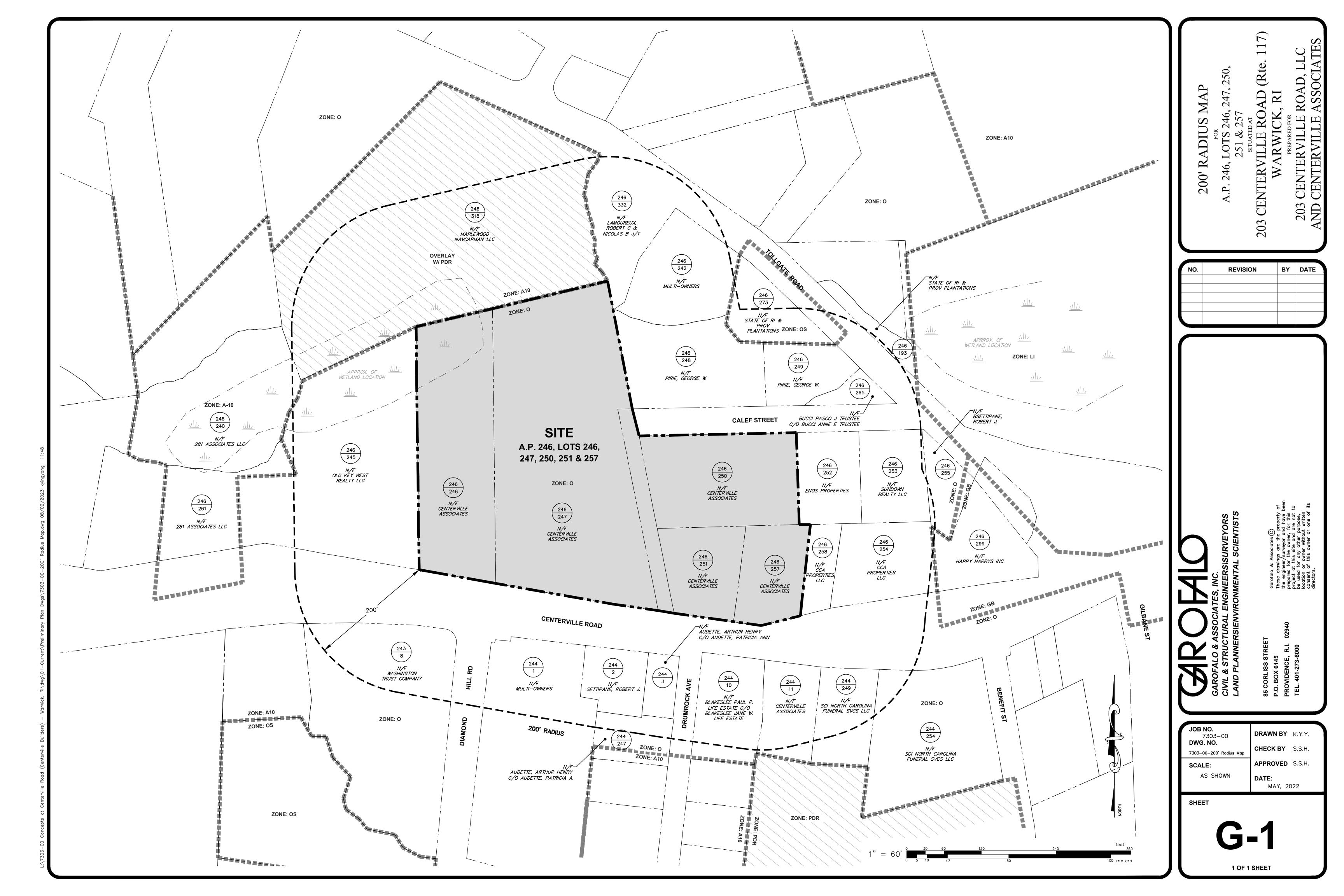
ARCHITECT
OF
RECORD
BRADY HARDING

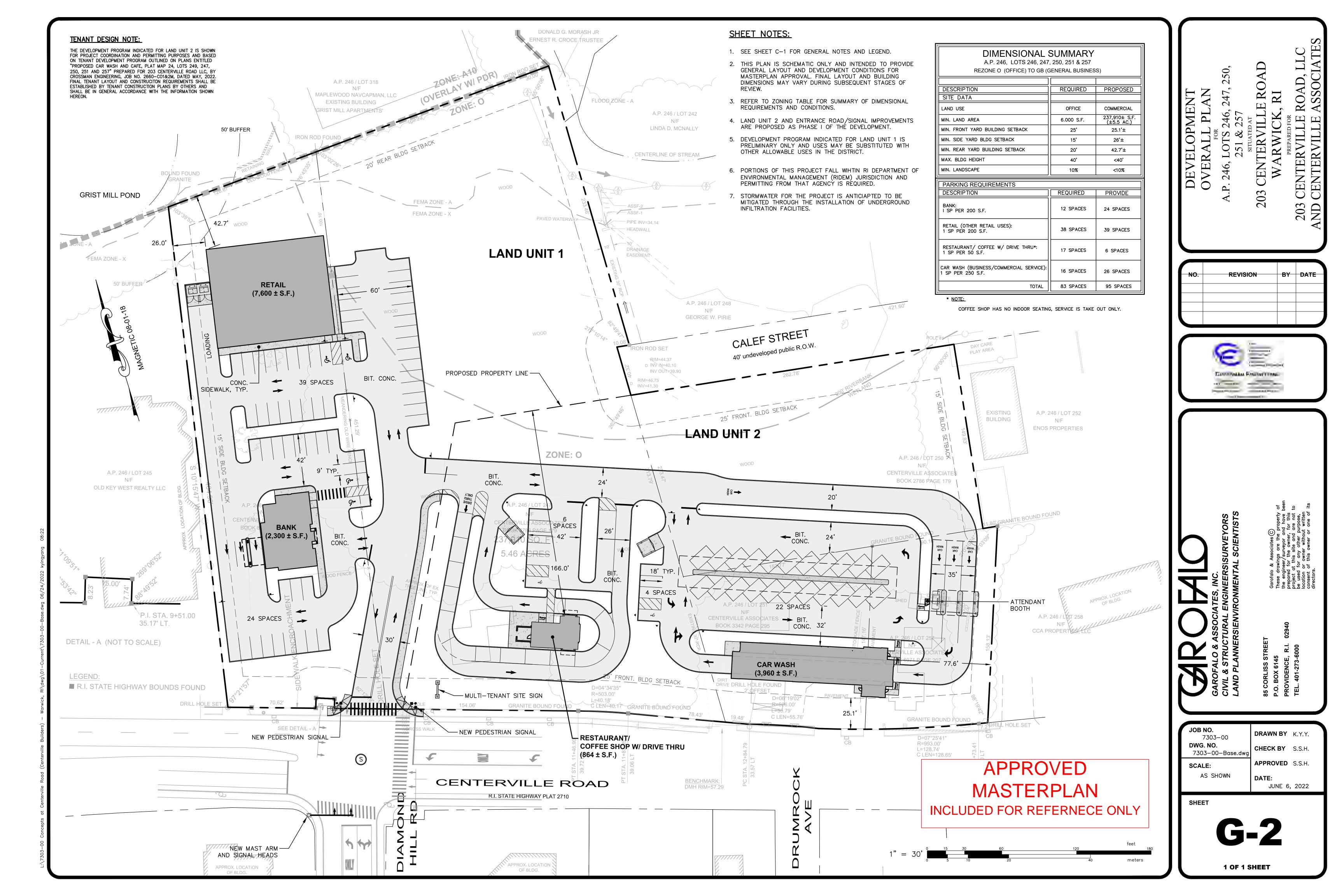
3601 Rigby Rd., Suite 300 Miamisburg, OH 45342 Phone: 937.435.8584 Fax: 888.208.4826

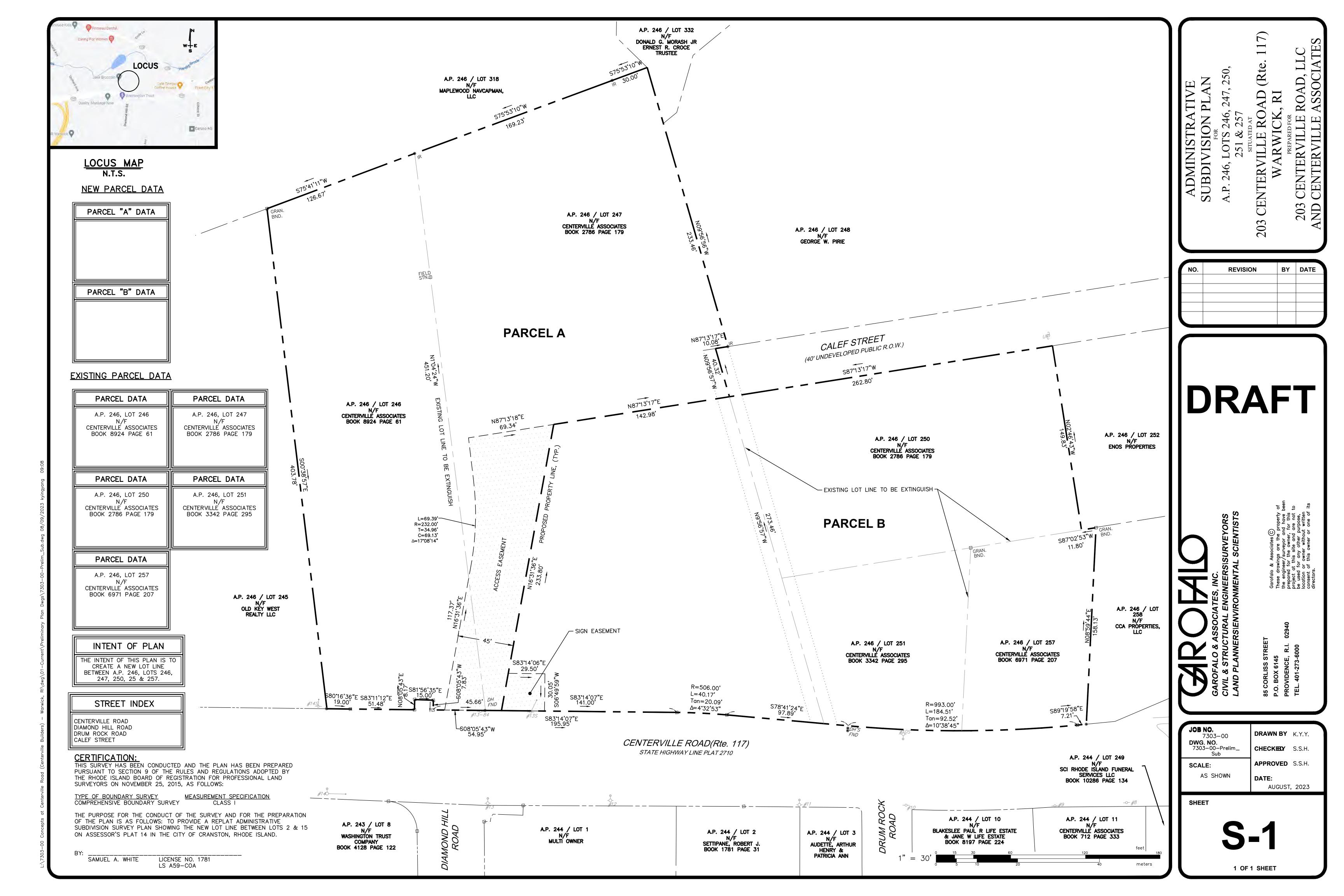
JOB NO. 7303-00 DATE: FEBRUARY, 2023 (REV: SEPTEMBER 22, 2023)

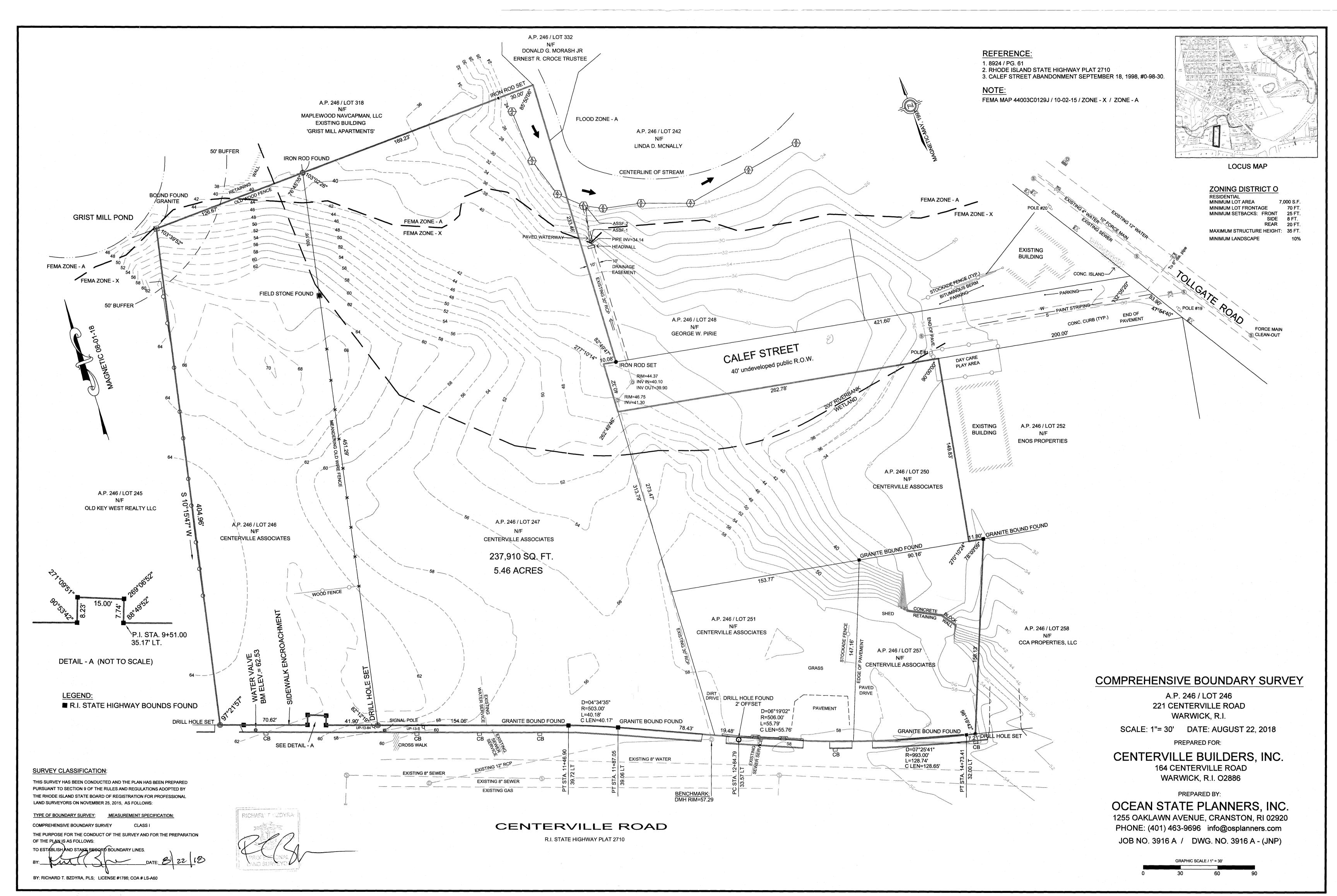
COVER SHEET  PLANS:  200' RADIUS MAP APPROVED MASTER PLAN ADMINISTRATIVE SUBDIVISION COMPREHENSIVE BOUNDARY SURVEY  SITE PLANS: GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	7/20/2023 3/14/2023 9/11/2023
200' RADIUS MAP APPROVED MASTER PLAN ADMINISTRATIVE SUBDIVISION COMPREHENSIVE BOUNDARY SURVEY  SITE PLANS: GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
APPROVED MASTER PLAN ADMINISTRATIVE SUBDIVISION COMPREHENSIVE BOUNDARY SURVEY  SITE PLANS: GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
ADMINISTRATIVE SUBDIVISION COMPREHENSIVE BOUNDARY SURVEY  SITE PLANS: GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
SITE PLANS: GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
SITE PLANS: GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
GENERAL NOTES & LEGEND SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
SITE LAYOUT PLAN GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
GRADING, DRAINAGE & UTILITY PLAN SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	3/14/2023 9/11/2023
SOIL EROSION & SEDIMENT CONTROL PLAN TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	9/11/2023
TRAFFIC SIGNAL PLAN CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	
CONSTRUCTION DETAILS - 1 CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	
CONSTRUCTION DETAILS - 2 CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	9/22/2023
CONSTRUCTION DETAILS - 3 CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	9/22/2023
CONSTRUCTION DETAILS - 4 CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	9/22/2023
CONSTRUCTION DETAILS - 5  CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	9/22/2023
CAR WASH AND CAFE PLANS: COVER GENERAL NOTE AND LEGEND AERIAL MAP	9/22/2023
COVER GENERAL NOTE AND LEGEND AERIAL MAP	
COVER GENERAL NOTE AND LEGEND AERIAL MAP	
AERIAL MAP	
AERIAL MAP	
200' RADIUS MAP	
EXISTING CONDITIONS PLAN NO.1	
EXISTING CONDITIONS PLAN NO.2	
SITE LAYOUT PLAN	
GRADING AND DRAINAGE PLAN	
UTILITY PLAN	
SOIL EROSION CONTROL PLAN	
MISCELLANEOUS DETAIL PLAN NO.1	
MISCELLANEOUS DETAIL PLAN NO.2	
MISCELLANEOUS DETAIL PLAN NO.3	
MISCELLANEOUS DETAIL PLAN NO.4	
MISCELLANEOUS DETAIL PLAN NO.5	
LIGHTING PLAN	
LANDSCAPE PLAN	9/20/2023
LANDSCAPE DETAIL PLAN	
SNOW STOCKPILE EXHIBIT	
EXTERIOR ELEVATIONS	
	MISCELLANEOUS DETAIL PLAN NO.1 MISCELLANEOUS DETAIL PLAN NO.2 MISCELLANEOUS DETAIL PLAN NO.3 MISCELLANEOUS DETAIL PLAN NO.4 MISCELLANEOUS DETAIL PLAN NO.5 LIGHTING PLAN LANDSCAPE PLAN LANDSCAPE DETAIL PLAN SNOW STOCKPILE EXHIBIT

09-11-23









- SITEWORK CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL APPROVALS HAVE BEEN SECURED. REQUIRED PERMITS/APPROVALS FOR THE PROJECT INCLUDE BUT NOT LIMITED TO THE FOLLOWING: WARWICK MAJOR LAND DEVELOPMENT APPROVAL, RIDOT PHYSICAL ALTERNATION PERMIT, RIDEM STORMWATER CONSTRUCTION PERMIT AND WATER QUALITY CERTIFICATION, WARWICK WATER DEPARTMENT CONNECTION PERMIT & WARWICK SEWER AUTHORITY (WSA) CONNECTION PERMIT.
- ALL IMPROVEMENTS INDICATED HEREON MUST COMPLY WITH THE 'AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG). NOTE THAT THE DETAIL CONTAINED WITHIN THIS PLAN MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS, RAMPS AND SPACES TO COMPLY WITH THE ADAAG REQUIREMENTS BUT THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS THESE STANDARDS.
- THE CONTRACTOR MUST RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR IN THE STATE OF RHODE ISLAND TO LAYOUT ON THE GROUND ALL NEW ELEMENTS OF WORK. IF ANY WORK IS INSTALLED PRIOR TO THE ABOVE REQUIREMENT AND IF ANY WORK IS NOT SATISFACTORY TO THE ENGINEER, THE CONTRACTOR MUST REPLACE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS. OMISSIONS OR DISCREPANCIES BEFORE COMMENCING, INSTALLING OR PROCEEDING WITH WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER NECESSARY MEASURES NEEDED TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING UNDERGROUND UTILITIES AND FACILITIES ON THE DRAWINGS; HOWEVER, THE INFORMATION SHOWN IS FOR THE CONTRACTORS CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION, VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIALS. THE CONTRACTOR MUST CONTACT THE LOCAL UTILITY COMPANIES FOR EXACT LOCATION OF UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE START OF ANY WORK. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
- THE CONTRACTOR MUST NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITIES IN THE AREA OF PROPOSED CONSTRUCTION. EXCAVATION OR BLASTING AT LEAST THREE WORKING DAYS. BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION, EXCAVATION OR BLASTING. ALL WATER, SEWER, GAS AND ALL OTHER UTILITIES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR THE CITY OF WARWICK AND THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION. THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, AS AMENDED, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF, AS IF ATTACHED HERETO.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY PAVEMENT, DRIVEWAYS, SIDEWALKS, WALL, CURBS, ETC. DAMAGED DURING CONSTRUCTION WITH MATCHING MATERIALS.
- 10. THE CONTRACTOR AGREES THAT HE WILL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE PROJECT SITE CONDITIONS THROUGHOUT CONSTRUCTION. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONJUNCTION WITH THE PERFORMANCE OF WORK ON THIS
- . ALL MATERIALS USED FOR CONSTRUCTION MUST BE NEW AND FREE OF DEFECTS. USED OR SALVAGED MATERIAL WILL NOT BE ALLOWED UNLESS WRITTEN APPROVAL FROM THE OWNER IS OBTAINED BY THE
- 12. AT ALL TIMES THE CONTRACTOR MUST MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS. (I.E. IN TIMES OF RAIN OR SNOW, ROADS MUST ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CRUSHED STONE BASE, ETC.). WIDTH OF EMERGENCY VEHICLE ACCESS MUST BE A MINIMUM OF 20 FEET WIDE. ACCESS TO BUILDINGS THAT HAVE A FIRE SPRINKLER SYSTEM OR STANDPIPE MUST BE WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTION (FDC). NFPA 1141 3-1.
- 13. NECESSARY BARRICADES, LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAYBE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC MUST BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION BY THE CONTRACTOR.
- 14. ALL RI HIGHWAY BOUNDS AND PERMANENT SURVEY MARKERS SHALL BE PROTECTED THROUGHOUT
- 15. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 INCLUDING ALL REVISIONS.
- 16. REFER TO ARCHITECTURAL, STRUCTURAL, AND MECHANICAL PLANS FOR ALL BUILDING INFORMATION.
- 17. ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED ON THE SITE PLAN.
- 18. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR IS REQUIRED TO DEVELOP AND IMPLEMENT A PLAN FOR THE TEMPORARY CONTROL OF VEHICULAR AND PEDESTRIAN TRAFFIC FOR WORK WITHIN PUBLIC STREET RIGHT-OF-WAY AT THE SITE EGRESS. CONTRACTOR SHALL OBTAIN APPROVAL OF SAID PLAN FROM APPROPRIATE STATE AND COMMUNITY PUBLIC SAFETY OFFICIALS.
- 19. WHEN IT IS NECESSARY TO CLOSE OFF A STREET, THE FIRE DEPARTMENT AND POLICE DEPARTMENT SHALL BE NOTIFIED BY THE CONTRACTOR.
- 20. PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION. SHOP DRAWINGS OF PRECAST STRUCTURES SHALL BE REVIEWED BY THE ENGINEER AND APPROVED BEFORE USE.
- 21. IF ANY EXISTING STRUCTURES AND/OR UTILITIES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, EITHER ON THE PROJECT SITE, ADJACEN'T PROPERTIES, OR WITHIN STATE RIGHT-OF-WAY, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.

#### PLAN REFERENCES

- THE EXISTING CONDITIONS INDICATED ARE BASED ON PLAN ENTITLED "COMPREHENSIVE BOUNDARY SURVEY, AP 246/LOT 246, 221 CENTERVILLE ROAD, WARWICK, RI", PREPARED FOR CENTERVILLE BUILDERS, INC. BY OCEAN STATE PLANNERS, INC., JOB NO. 3916A, DWG 3916A-JNP, DATED AUGUST 22, 2018.
- THE EXISTING CONDITIONS HAVE BEEN SUPPLEMENTED BY FIELD SURVEY PERFORMED ON JULY, 2022, DATA OBTAINED FROM GIS SOURCES AND RECORD INFORMATION. HORIZONTAL DATUM: RHODE ISLAND STATE PLANE - NAD 83
- THE DEVELOPMENT PROGRAM INDICATED FOR LAND UNIT 2 IS BASED ON PLANS ENTITLED "PROPOSED CAR WASH AND CAFE, PLAT MAP 24, LOTS 249, 247, 250, 251 AND 257" PREPARED FOR 203 CENTERVILLE ROAD LLC, BY CROSSMAN ENGINEERING, JOB NO. 2660-CO1&2M, DATED MAY, 2022.

#### **GENERAL UTILITY NOTES:**

- THE CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND ALL LOCAL AUTHORITIES & UTILITY COMPANIES TO VERIFY LOCATIONS OF UTILITIES WITHIN THE AREA 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES. LOCATION AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, LOCATE AND PROTECT EXISTING UTILITIES IN THE FIELD WHETHER OR NOT SHOWN ON THE DRAWINGS.
- ALL WORK SHALL BE IN COMPLETE ACCORDANCE WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER. THE CONTRACTOR SHALL REFER TO THE WARWICK WATER DEPARTMENT RULES & REGULÁTIONS FOR THE SERVICE INSTALLATION & EXTENSION REQUIREMENTS OF WATER LINES.
- THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE OF CURBING, PAVING AND COMPACTED SUBGRADE, THE CONTRACTOR SHALL NOTIFY THE TOWN ENGINEER & ALL LOCAL UTILITY COMPANIES 48 HOURS BEFORE EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS DISCOVERED IN THE PLANS.
- BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREA. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- 5. THE CONTRACTOR SHALL REMOVE ANY ABANDONED FOUNDATIONS, UTILITY STRUCTURES, BURIED DEBRIS ETC. WHICH INTERFERE WITH THE INSTALLATION OF THE UTILITY WORK. ALL SUCH STRUCTURES SHALL BE COMPLETELY REMOVED AND THE EXCAVATED AREA SHALL BE BACKFILLED WITH COMPACTED GRAVEL IN 6" LIFTS TO 95% COMPACTION TO 6" BELOW THE BOTTOM OF THE UTILITY AND PIPE.
- COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THE THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED ONE FOOT IN COMPACTED FILL THICKNESS. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF PROJECT APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 7. ALL PIPING LAYOUT INDICATED ON THESE PLANS IS DIAGRAMMATIC ONLY AND DOES NOT SHOW ALL THE REQUIRED FITTINGS FOR PROPER ALIGNMENT. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS TO OBTAIN PROPER ALIGNMENT AND FOR EXISTING UTILITY CONNECTIONS BASED UPON FIELD CONDITIONS.
- 8. IF DURING EXCAVATION THE TRENCH WIDTH EXCEEDS THE SUM OF THE PIPE O.D. PLUS 2'-0", PLACE AND COMPACT THE FILL TO 12" ABOVE THE PIPE AND RE-EXCAVATE TO REQUIRED GRADE.
- 9. DOMESTIC AND FIRE PROTECTION WATER SERVICE IS PROVIDED TO THE PROPERTY BY THE WARWICK WATER DEPARTMENT. THE ONSITE WATER SYSTEM ON THE PROPERTY IS PRIVATE WATER PIPING AND SHALL BE (AWWA C901) DR9 POLYETHYLENE OR TYPE k COPPER FOR 2" SERVICES OR SMALLER, OR CLASS 52 DOUBLE CEMENT LINED DUCTILE IRON PIPE WITH TYTON JOINTS FOR 4" SERVICES OR LARGER. ALL BENDS, TEES ETC. SHALL BE JOINT RESTRAINED BY THE USE OF CONCRETE THRUST BLOCKS AND "MEG-A-LUG". ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE WARWICK WATER DEPARTMENT REGULATIONS, STANDARDS AND SPECIFICATIONS. NOTIFICATION SHALL BE PROVIDED TO SAID AUTHORITIES AT LEAST 72 HOURS PRIOR TO INITIATING CONSTRUCTION.
- 10. GATE VALVES SHALL BE CAST IRON BODY BRONZE MOUNTED, COMPLETE WITH ROAD BOX AND SHALL CONFORM TO THE WARWICK WATER DEPARTMENT REGULATIONS, STANDARDS AND SPECIFICATIONS.
- 11. ALL FIRE AND PLUMBING FIXTURES MUST CONFORM TO LOCAL SPECIFICATIONS AND AS STIPULATED BY THE LOCAL FIRE MARSHALL AND/OR THE BUILDING OFFICIAL.
- 12. ALL SANITARY SEWER MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE INSTALLATION AND TESTING OF SANITARY SEWERS SHALL CONFORM TO THE WARWICK SEWER AUTHORITY (WSA) REGULATIONS, STANDARDS AND SPECIFICATIONS. ALL SEWER SYSTEM COMPONENTS MUST BE TESTED, CLEANED AND AS-BUILT INFORMATION MUST BE SUBMITTED TO THE CITY OF WARWICK AND APPROVED, PRIOR TO ISSUANCE OF A PERMIT TO CONNECT TO PUBLIC SEWER SYSTEM.
- 13. SANITARY SEWER MAINS AND SERVICES SHALL BE SDR-35 (ASTM D-3034) PVC SEWER PIPE WITH PUSH ON RUBBER RING JOINTS UNLESS NOTED OTHERWISE. CLEANOUTS SHALL BE INSTALLED AT BUILDING FACE (REFER PLUMBING PLANS FOR ALL WORK WITHIN 5' OF THE BUILDING). NEOPRENE COUPLINGS WITH STAINLESS STEEL BAND AND SHEER RINGS SHALL BE REQUIRED FOR JOINING DIFFERENT TYPES OF SANITARY SEWER PIPES.
- 14. SEWER LINES SHALL BE INSTALLED AT A MINIMUM 10 FOOT HORIZONTAL SEPARATION FROM ANY PROPOSED OR EXISTING WATER LINE.
- 15. WHENEVER SEWER LINES MUST CROSS WATER LINES, THE SEWER SHALL BE INSTALLED SO THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHERE 18 INCH VERTICAL SEPARATION & 10 FOOT HORIZONTAL SEPARATION CAN NOT BE MET AT WATER AND SEWER CROSSINGS, THE SEWER PIPE SHALL BE ENCASED IN CONCRETE OR BE EITHER DUCTILE IRON OR C900 BLUE BRUTE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF CROSSING.
- 16. WHENEVER NEW SEWER LINES CONNECT TO EXISTING SEWER MANHOLES THE CONTRACTOR SHALL REBUILD THE EXISTING SEWER MANHOLE CHANNEL TO ACCOMMODATE THE NEW CONNECTION.
- 17. STORM DRAINS 12" AND OVER SHALL BE SMOOTH INTERIOR WALL AND EXTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE CAPABLE OF WITHSTANDING (H-20) LOAD UNLESS NOTED OTHERWISE. PIPE SHALL BE JOINED USING BELL & SPIGOT JOINTS MEETING OR EXCEED ASTM F2648. THE JOINT SHALL BE SOIL-TIGHT AND GASKETS SHALL MEET OR EXCEED ASTM F477. HDPE PIPE SHALL BE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS INC. (ADS). HANCOR PIPE OR LANE PIPE. ALL STORM DRAINAGE PIPING SHALL BE LAID ON A SMOOTH CONTINUOUS GRADE WITH NO VISIBLE BENDS AT THE JOINTS. WHERE INDICATED ON DRAWINGS REINFORCED CONCRETE PIPE (RCP) PIPE SHALL BE CLASS III RCP WITH "O" RING GASKET JOINTS
- 18. GAS SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE UTILITY INSTALLATIONS AS REQUIRED TO ENSURE ADEQUATE GAS SERVICE IS PROVIDED AND SHALL BE RESPONSIBLE FOR ALL INSTALLATION PROCEDURES (TRENCHING, LAYING PIPE, ETC.) AS ARE REQUIRED BY THE GAS COMPANY FOR COMPLETE AND IN PLACE CONSTRUCTION.
- 19. ELECTRIC SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS. ELECTRIC SERVICE AND TRANSFORMER PAD SHALL CONFORM TO THE REQUIREMENTS OF THE ELECTRIC COMPANY. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ADEQUATE ELECTRIC SERVICE IS PROVIDED AND SHALL BE RESPONSIBLE FOR ALL INSTALLATION PROCEDURES (TRENCHING, LAYING PIPE, ETC.) AS ARE REQUIRED BY THE ELECTRIC COMPANY FOR COMPLETE AND IN PLACE CONSTRUCTION. REFER TO ELECTRICAL DRAWINGS FOR DETAILS ON ALL UNDERGROUND ELECTRIC.
- 20. TEL/CABLE SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ADEQUATE UTILITY SERVICE IS PROVIDED AND SHALL BE RESPONSIBLE FOR ALL INSTALLATION PROCEDURES (TRENCHING, LAYING PIPE ETC.) AS IS REQUIRED BY THE LOCAL UTILITY CO. FOR COMPLETE AND IN PLACE CONSTRUCTION. REFER TO ELECTRICAL DRAWINGS FOR ALL UNDERGROUND ELECTRIC.
- 21. SITE LIGHTING ELEMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL PROVIDE A PHOTOMETRICS PLAN TO THE CITY OF WARWICK PRIOR TO CONSTRUCTION. THE PLAN SHALL MEET THE APPLICABLE REQUIREMENTS OF THE CITY OF WARWICK. SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE INSTALLATION OF LIGHT POLE BASES IN LOCATIONS INDICATED. REFER TO SITE LIGHTING PLANS FOR INSTALLATION REQUIREMENTS.
- 22. WHENEVER UTILITIES ARE TO BE INSTALLED WITHIN THE SANDY LANE RIGHT OF WAY, THE TRENCH MUST BE BACKFILLED WITH FLOWABLE FILL. ALL AREAS OF ROADWAY PAVEMENT DISTURBED DURING CONSTRUCTION SHALL BE RE-PAVED PER THE CITY OF WARWICK AND STATE STANDARDS AND SPECIFICATIONS.

#### **GENERAL DRAINAGE & GRADING NOTES:**

- THE MAXIMUM RUNNING SLOPE ALONG ANY SIDEWALK SHALL BE 5%. THE MAXIMUM CROSS SLOPE ACROSS ANY SIDEWALK SHALL BE 2%. A MINIMUM 5'x5' LANDING SHALL BE PROVIDED IN FRONT OF ALL BUILDING ENTRANCES.
- ALL ADAAG PARKING SAPCES AND LOADING SPACES SHALL BE 2% MAXIMUM SLOPE IN ANY DIRECTION.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED
- 4. ALL GRATES AND COVERS IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 3" ABOVE FINISH GRADE.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH THE CITY OF PROVIDENCE SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.

#### STORMWATER SYSTEM MAINTENANCE NOTES:

THE DRAINAGE SYSTEMS ARE TO BE MONITORED THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD BY THE CONTRACTOR. UPON COMPLETION OF THE PROJECT THE CONTRACTOR MUST DO A FINAL FULL MAINTENANCE & CLEAN UP OF THE STORMWATER MANAGEMENT SYSTEM AND THE SITE. UPON COMPLETION OF THE CONTRACTOR'S FINAL MAINTENANCE & CLEAN UP OF THE PROJECT. MONITORING OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF THE OWNER.

CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS: (RESPONSIBILITY OF CONTRACTOR)

- MONITOR SILT BARRIER ON A WEEKLY BASIS AND AFTER EVERY RAIN STORM EVENT AND REPAIR OR REPLACE ANY DAMAGED AREAS IMMEDIATELY. IMMEDIATELY CLEAN THE SILT BARRIER IF SIX INCHES OR MORE OF SEDIMENT HAS ACCUMULATED ON THE HAYBALE & SILT BARRIER.
- PARKING LOTS, PUBLIC & PRIVATE ROADWAYS AND GUTTERS SHALL BE SWEPT CLEAN OF ALL SEDIMENT & DEBRIS. SWEEPING & REMOVAL OF DEBRIS SHALL BE PERFORMED ON A WEEKLY BASIS AT A MINIMUM.
- ALL CATCH BASINS SHALL BE INSTALLED AS DETAILED AND INSPECTED AFTER EVERY RAIN STORM EVENT IMMEDIATELY CLEAN THE CATCH BASIN SUMP IF TWO FEET OR MORE OF SEDIMENT HAS ACCUMULATED WITHIN THE CATCH BASIN.
- DRAIN MANHOLES SHALL BE INSTALLED AS DETAILED AND INSPECTED AFTER EVERY RAIN STORM EVENT IMMEDIATELY CLEAN THE DRAIN MANHOLE IF ANY SEDIMENT HAS ACCUMULATED WITHIN THE DRAIN MANHOLE.
- NO CONSRUCTION RUNOFF SHALL BE DIRECTED TO STORMWATER BMPS UNTIL UPGRADIENT AREAS ARE STABILIZED.

POST CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS: (RESPONSIBILITY OF OWNER)

CLEAN THE DRAIN MANHOLE IF ANY SEDIMENT HAS ACCUMULATED.

- PARKING LOTS, ROADS AND ALL ACCESS WAYS AND GUTTERS MUST BE SWEPT CLEAN OF ALL SEDIMENT AND DEBRIS ON BI-ANNUAL BASIS IN SPRING AND FALL OF EACH YEAR OR AS NECESSARY.
- ALL CATCH BASINS MUST BE INSPECTED AND MAINTAINED ON A BI-ANNUAL BASIS IN MARCH AND OCTOBER OF EACH YEAR. CATCH BASINS MUST BE INSPECTED TO ENSURE THEY HAVE ADEQUATE SUMP CAPACITY, FRAMES AND GRATES ARE NOT DAMAGED, AND OIL/WATER SEPARATING DEVICES ARE IN PLACE, CATCH BASIN SUMPS ARE TO BE CLEANED OUT DURING BI-ANNUAL INSPECTIONS IN MARCH AND OCTOBER OF EACH YEAR. IMMEDIATELY CLEAN THE CATCH BASIN SUMP IF TWO FEET OR MORE OF SEDIMENT HAS ACCUMULATED WITHIN THE CATCH BASIN.
- DRAIN MANHOLES: ALL DRAIN MANHOLES MUST BE INSPECTED AND MAINTAINED ON A BI-ANNUAL BASIS IN MARCH AND OCTOBER OF EACH YEAR, DRAIN MANHOLES MUST BE INSPECTED TO ENSURE FRAMES AND COVERS ARE NOT DAMAGED AND NO BLOCKAGES HAVE OCCURRED WITHIN THE MANHOLE. DRAIN MANHOLES ARE TO BE CLEANED OUT DURING BI-ANNUAL INSPECTIONS IN MARCH AND OCTOBER OF EACH YEAR. IMMEDIATELY
- 4. STORMWATER MANAGEMENT FACILITIES REFER TO OPERATIONS AND MAINTENANCE PLAN UNDER SEPARATE COVER.

#### INFILTRATION AREA CONSTRUCTION PROTECTION

FOR THE LONG-TERM FUNCTION OF THE INFILTRATING SYSTEMS. CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES

- 1. THE INFILTRATION AREAS SHALL NOT BE USED AS A CONSTRUCTION SEDIMENTATION SYSTEM.
- 2. CONSTRUCTION EQUIPMENT, VEHICULAR TRAFFIC, PARKING OF VEHICLES, AND STOCKPILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THE INFILTRATION AREA UNTIL INSTALLATION IS COMPLETED. THE SUBGRADE BENEATH THE SYSTEM SHALL NOT BE COMPACTED.
- 3. EXCAVATION FOR CONSTRUCTION OF THE INFILTRATION AREAS SHALL BE PERFORMED MANUALLY OR BY HYDRAULIC EXCAVATOR OR SOME OTHER SIMILAR MEANS TO ENSURE THAT THE EQUIPMENT IS NOT IN DIRECT CONTACT WITH THE NATURAL INFILTRATION EARTH MATERIAL AND DOES NOT CAUSE COMPACTION OF THE MATERIAL AND THE ENTIRE AREA IS TO BE SCARIFIED PRIOR TO INSTALLATION.
- 4. THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AND EROSION CONTROLS AROUND THE PERIMETER OF THE INFILTRATION AREA TO PREVENT THE USE OF THIS AREA FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES OF THE AREA. THIS FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.

#### SITE LEGEND

**EXISTING** 

-----OHW -----

\_\_---

\_\_\_\_\_ S \_\_\_\_

----- SL -----

\_\_\_\_\_ T \_\_\_\_

\_\_\_\_ W \_\_\_\_

\_ \_ - - 64 - - - - - -

 $\times 64.0$ 

 $\times$  64.0(BC)

 $\times$  64.5(TC)

64.5(BW)

64.5(TW)

☐ CB

CTB ⊳

☐ CB(DG)

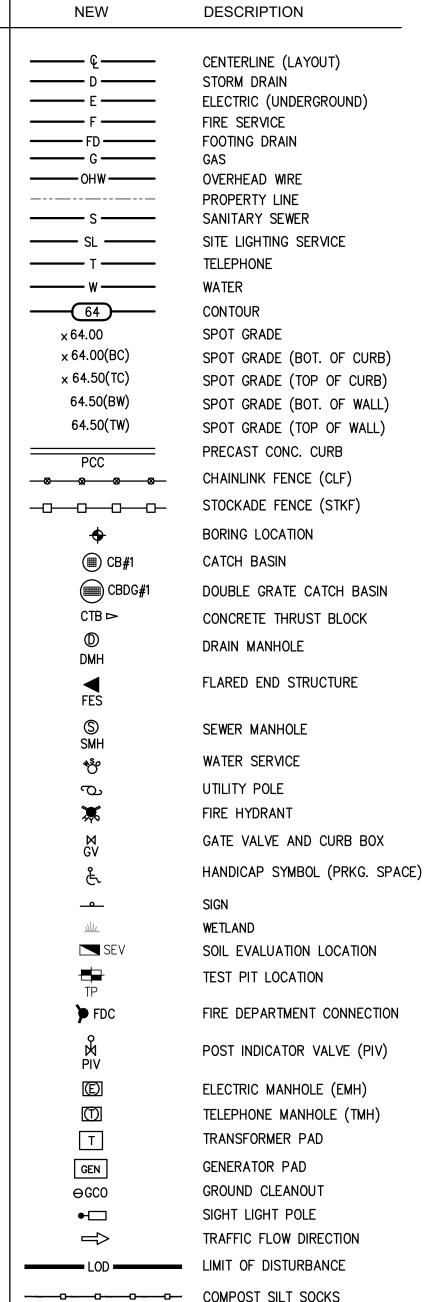
SEV

GEN

 $\ominus$  GCO

☆ LP

 $\longrightarrow$ 



# 山

2 H

NO. BY DATE REVISION

 $\simeq$ 

ISSUED FOR PERMIT

of bee to its

erty ave this not se, itten e of

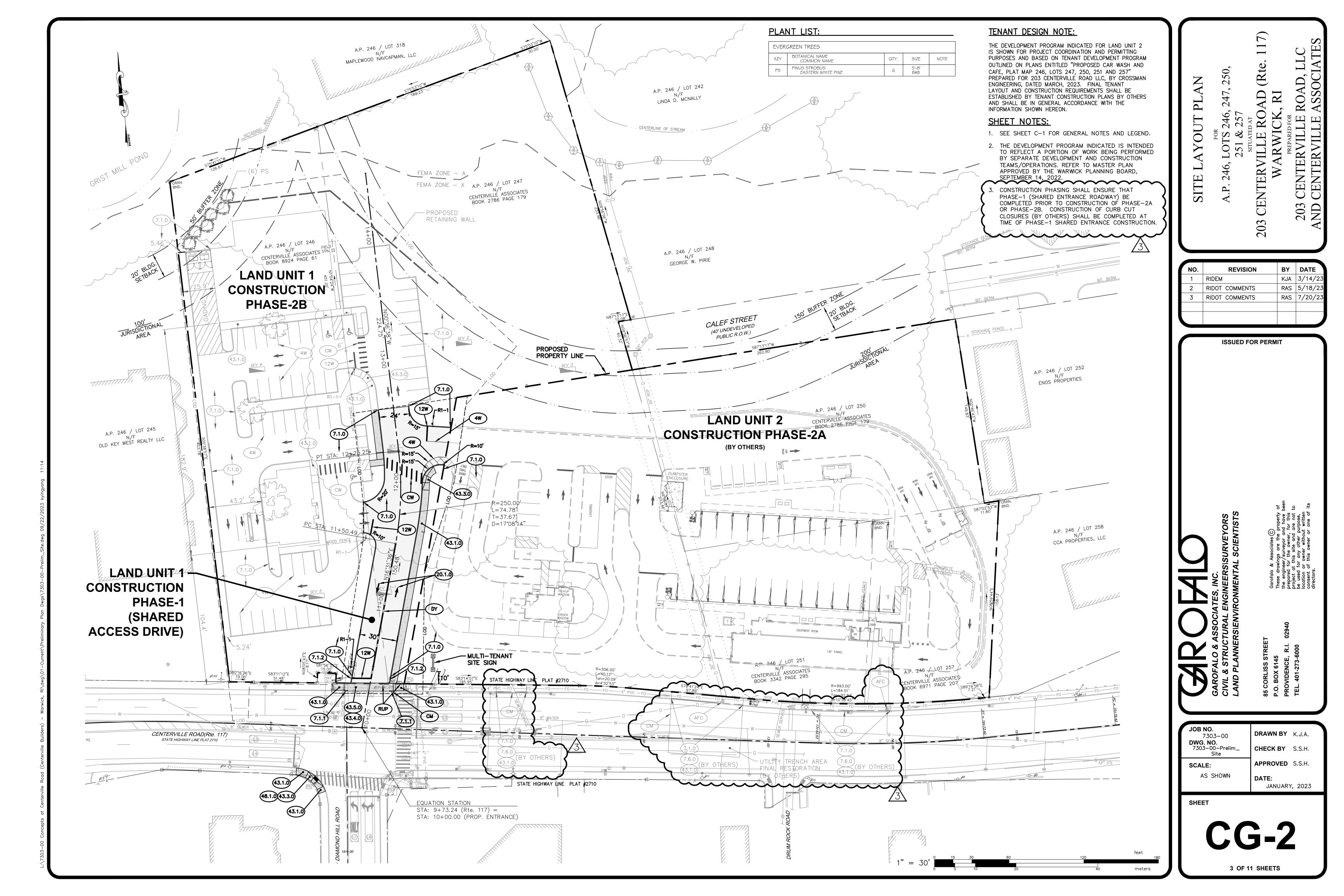
PAVEMENT SAWCUT & MATCH TO EXISTING RIDOT STD DETAIL REFERENCE

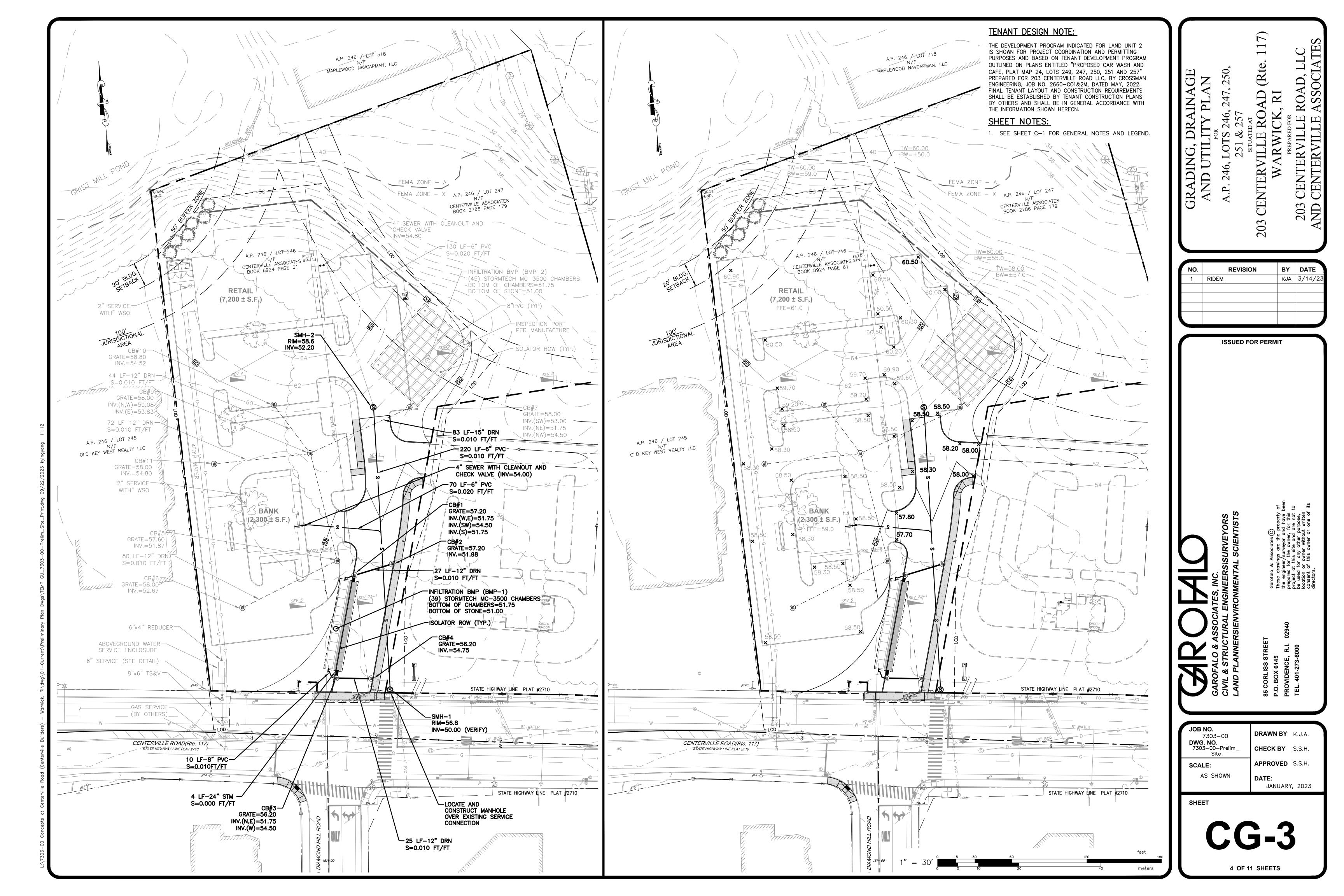
#### **ABBREVIATIONS**

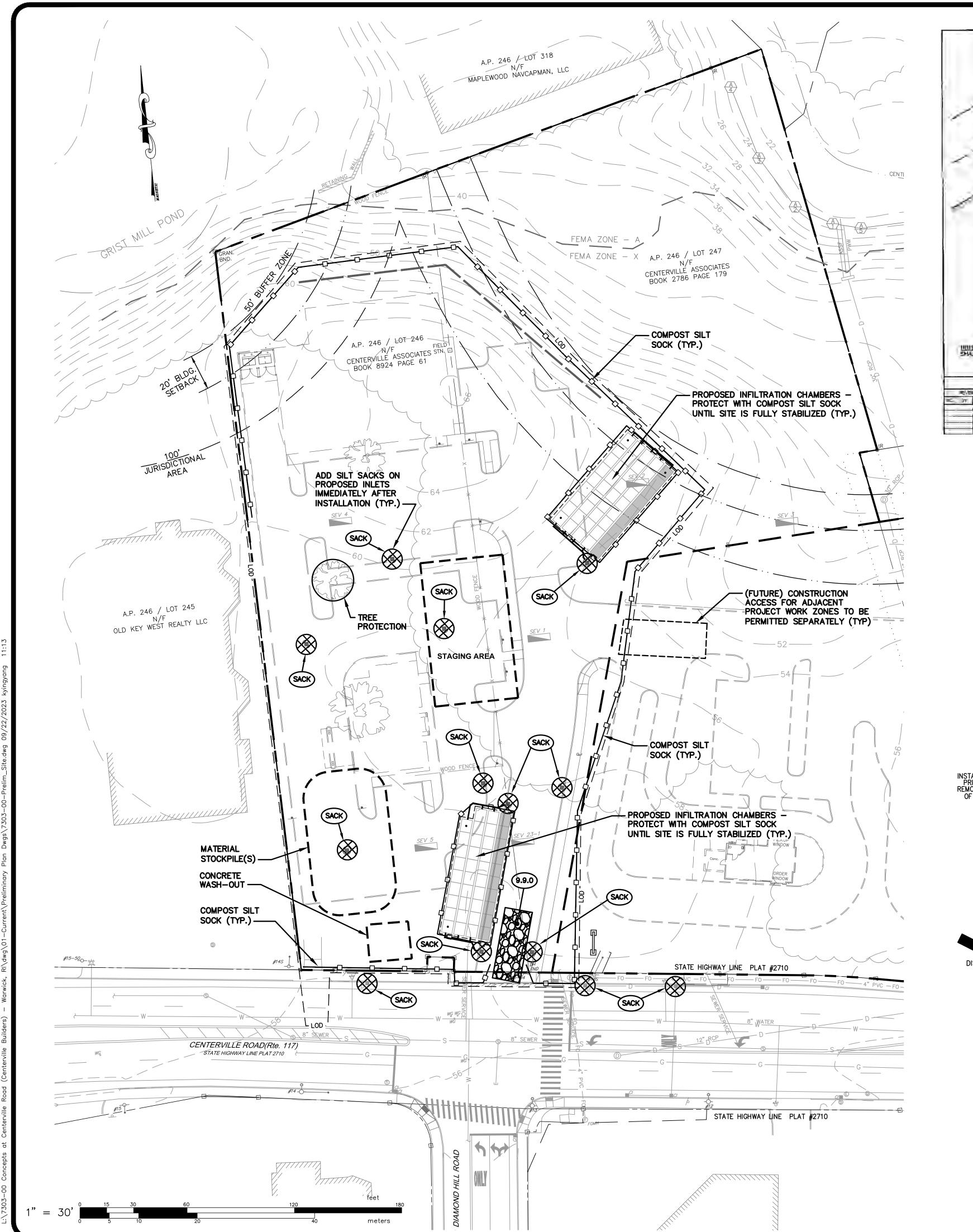
(x.x.x)

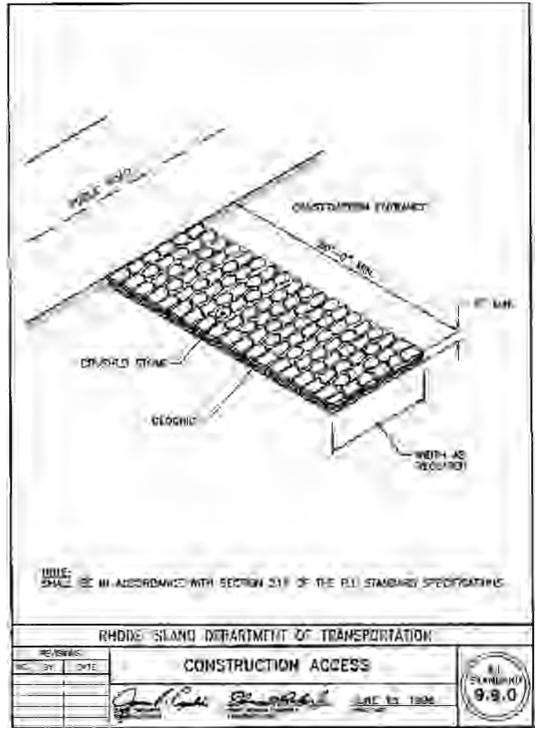
CI CLDI CLF CTE D.I.	CAST IRON PIPE CEMENT LINED DUCTILE IRON PIPE CHAINLINK FENCE POINT OF CONNECTION TO EXISTING DUCTILE IRON PIPE
ESHWT	ESTIMATED SEASONAL HIGH WATER TABLE
ETR	EXISTING TO REMAIN
EX.	EXISTING
F&I	FURNISH AND INSTALL
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV.	INVERT ELEVATION
MTE	MATCH TO EXISTING
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
VIF	VERIFY IN FIELD
WQS	WATER QUALITY STRUCTURE

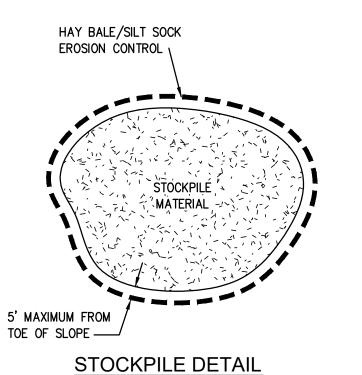
JOB NO. **DRAWN BY** K.J.A. 7303-00 DWG. NO. CHECK BY S.S.H. 303-00-Prelim\_Cover & Note APPROVED S.S.H. SCALE: AS SHOWN DATE: JANUARY, 2023 SHEET

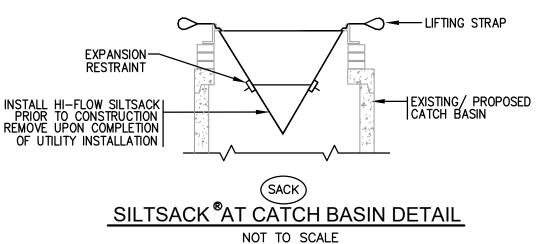




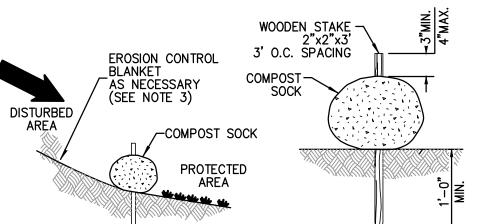








NOT TO SCALE



- NOTES:
  1. COMPOST SOCK SHALL BE INSTALLED PER MANUFACTURERS
  RECOMMENDATIONS. COMPOST SOCK SHALL BE A MINIMUM OF 8"
  IN DIAMETER.
- 2. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
- 3. WHEN PLACING COMPOST SOCK ON SLOPES, USE EROSION CONTROL BLANKET IF SPECIFIED ON PLANS.
- 4. ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND
- ALONG CONTOUR LINES.
- 5. REMOVE SEDIMENT FROM THE UP SLOPE SIDE OF THE COMPOST SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE COMPOST SOCK.
- 6. WHERE COMPOST SOCK IS INSTALLED ON PAVEMENT SHALL BE ADEQUATELY HIGH AT 8'-0" O.C. MIN.

COMPOST SILT SOCK DETAIL

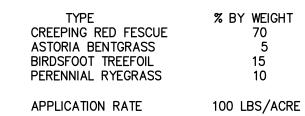
NOT TO SCALE

#### TENANT DESIGN NOTE:

THE DEVELOPMENT PROGRAM INDICATED FOR LAND UNIT 2 IS SHOWN FOR PROJECT COORDINATION AND PERMITTING PURPOSES AND BASED ON TENANT DEVELOPMENT PROGRAM OUTLINED ON PLANS ENTITLED "PROPOSED CAR WASH AND CAFE, PLAT MAP 24, LOTS 249, 247, 250, 251 AND 257" PREPARED FOR 203 CENTERVILLE ROAD LLC, BY CROSSMAN ENGINEERING, JOB NO. 2660—CO1&2M, DATED MAY, 2022. FINAL TENANT LAYOUT AND CONSTRUCTION REQUIREMENTS SHALL BE ESTABLISHED BY TENANT CONSTRUCTION PLANS BY OTHERS AND SHALL BE IN GENERAL ACCORDANCE WITH THE INFORMATION SHOWN HEREON.

#### EROSION CONTROL & SOIL STABILIZATION PROGRAM:

- 1. DENUDED SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME.
- 2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
- 3. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- 4. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 2000 LBS/ACRE.
- 5. ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- 6. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS.
- 7. THE SEED MIX SHALL BE INOCULATED WITHIN TWENTY FOUR (24) HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- 8. THE DESIGN MIX FOR TEMPORARY EROSION CONTROL AND SOIL STABILIZATION SHALL BE COMPRISED OF THE FOLLOWING:



LIMING AND FERTILIZING AS REQUIRED TO COMPLIMENT OR UPGRADE EXISTING CONDITIONS.

- 9. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE (1) YEAR, AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
- 10. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
- 11. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
- 12. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS OR FLOOD PLAINS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%) AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED AND COMPLETELY ENCIRCLED WITH A CONTINUOUS LINE OF STAKED HAYBALES AND/OR SILTFENCE. (SEE DETAIL)
- 13. ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

#### SEQUENCE AND STAGING OF LAND

#### DISTURBING ACTIVITIES:

- 1. SURVEY AND STAKE THE DRAINAGE STRUCTURES, LIMIT OF WORK AND SEDIMENTATION BARRIERS.
- 2. PLACE SEDIMENTATION BARRIERS (SILT SOCK) AS SHOWN ON THE PLANS AND STAKED OUT IN THE FIELD. IN NO CASE IS THE LIMIT OF WORK TO EXTEND BEYOND THE SEDIMENTATION BARRIERS.
- 3. BEGIN GRADING AND DRAINAGE WORK (CLEARING AND GRUBBING, EXCAVATING AND GRADING, ETC.). TOP SOIL TO BE STRIPPED AND STOCKPILED IN APPROVED AREAS. THE STOCKPILES ARE TO BE PROTECTED BY A ROW OF SEDIMENTATION BARRIER AND COVERED OR TEMPORARILY SEEDED.
- 4. INSTALL DRAINAGE SYSTEM. INSTALL SEDIMENT PROTECTION IMMEDIATELY AFTER INSTALLATION.
- 5. COMPLETE SITE GRADING.
- 6. INSTALL BMPS IN ACCORDANCE WITH PLANS. SEDIMENT CONTROLS SHALL BE MAINTAINED AT THE BMP STRUCTURES UNTIL THE BINDER COURSE OF PAVEMENT IS INSTALLED AND DISTURBED AREAS ARE STABILIZED WITH VEGETATION.
- 7. COMPLETE LANDSCAPING AND PERMANENT STABILIZATION. SWEEP THE ROADWAY AREAS TO REMOVE ALL SEDIMENTS.
- 8. FLUSH AND/OR REPAIR DRAINAGE AREAS AS NEEDED.
- 9. REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOLLOWING VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS.

#### SEDIMENTATION CONTROL PROGRAM:

- 1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY SEDIMENTS FROM ENTERING THE STATE HIGHWAY OR ADJOINING PROPERTIES.
- 2. BANKS OR SLOPES OVER 5% SHALL BE SEEDED AS SOON AS POSSIBLE AND SHALL BE PROTECTED WITH A HAY, STRAW OR FIBER MULCH.
- 3. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- 4. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
- 5. CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOW.
- 6. ADDITIONAL SILT SOCKS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.

**ISSUED FOR PERMIT** 

**REVISION** 

BY DATE

NO.

ialo & Associates (C)
drawings are the property of
migineer/surveyor and have been
red for the owner, for this
ct at this site and are not to
sed for any other purpose,
on or owner without written
ent of this owner or one of its

R.I. 02940 prep

85 CORLISS STREET P.O. BOX 6145 PROVIDENCE, R.I. (

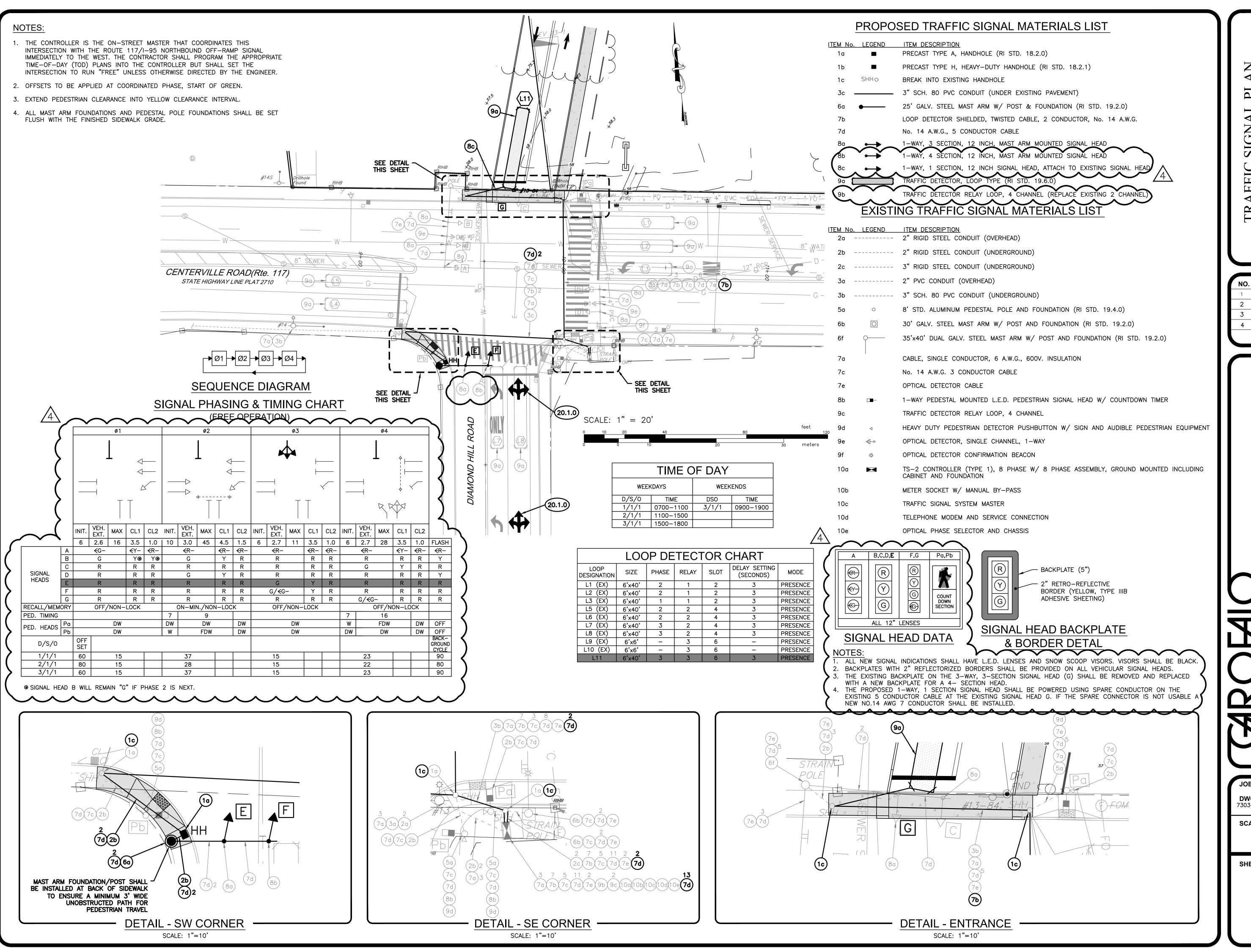
JOB NO. 7303-00	DRAWN BY	K.J.A.
DWG. NO. 7303-00-Prelim_ Site	CHECK BY	S.S.H.
SCALE:	APPROVED	S.S.H.
AS SHOWN	DATE:	

DATE:

JANUARY, 2023

CHEET

CG-4



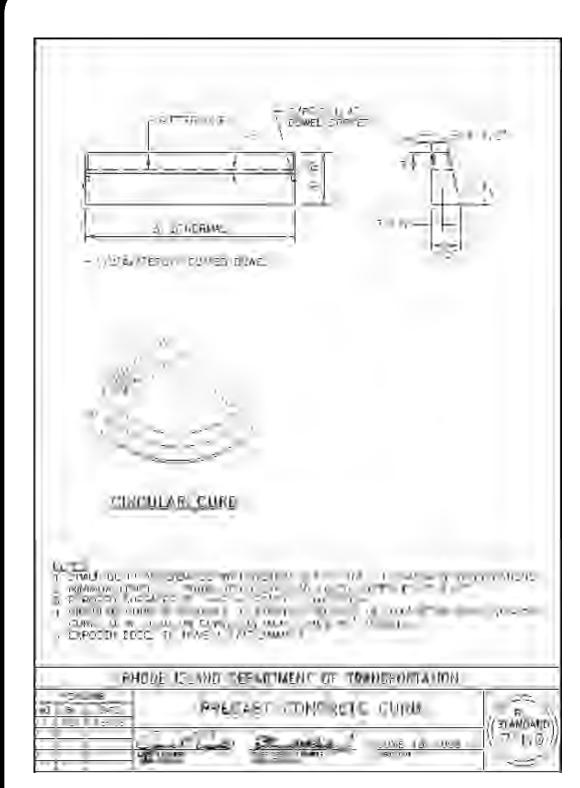
Ю.	REVISION	BY	DATE
1	draftPER PLANNING	KYY	08/02/22
2	RIDOT COMMENTS	RAS	5/10/23
3	RIDOT COMMENTS	RAS	7/20/23
4	PER CROSSMAN COMMENTS	KYY	09/11/23

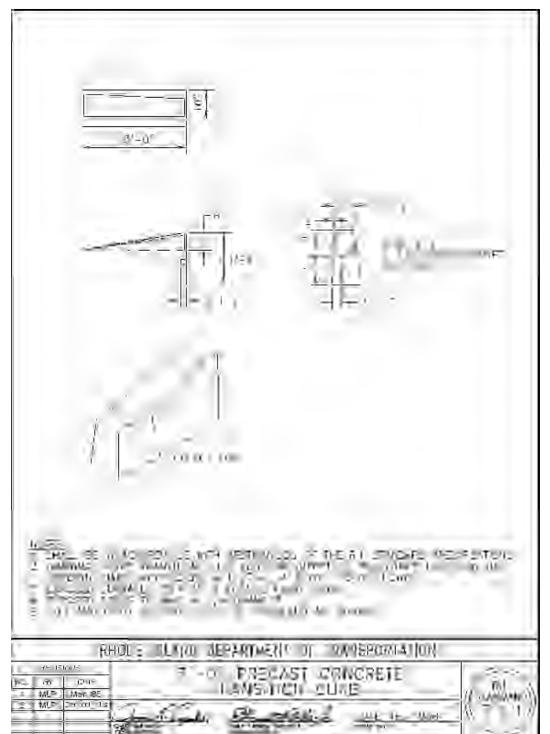
**ISSUED FOR PERMIT** 

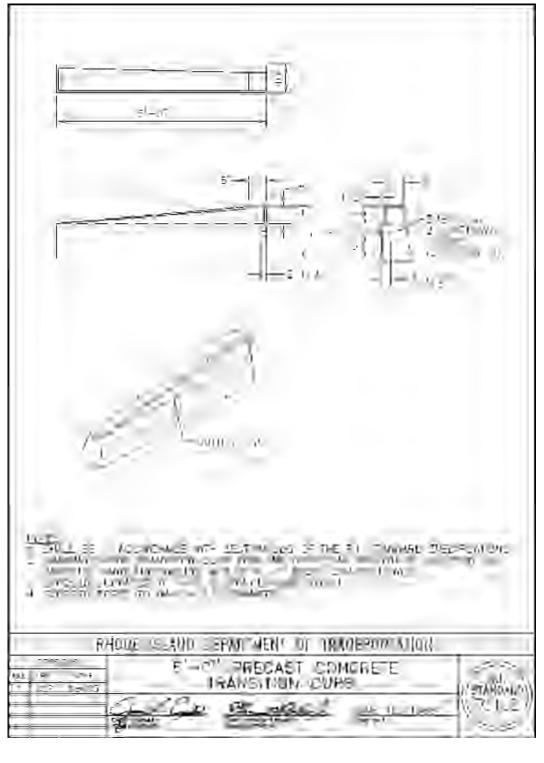
of to to

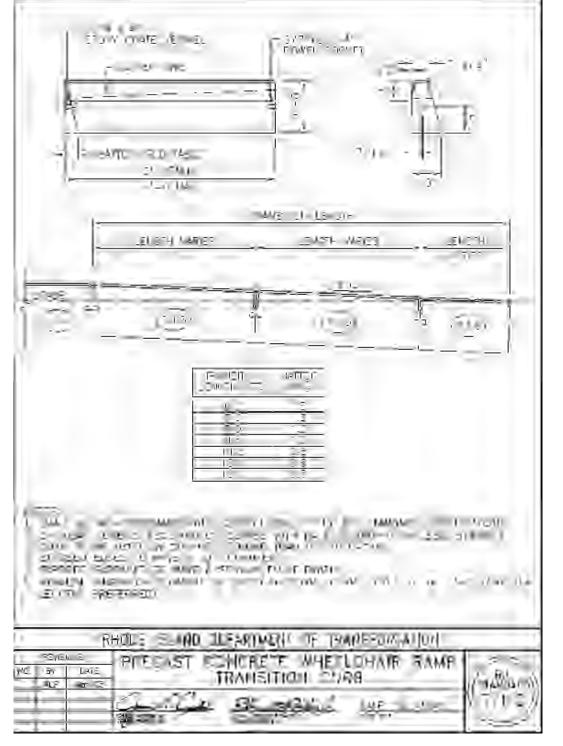
JOB NO. DRAWN BY K.J.A. 7303-00 DWG. NO. 7303-00-Prelim\_Signal | CHECK BY S.S.H. APPROVED S.S.H. SCALE: AS SHOWN DATE: JANUARY, 2023

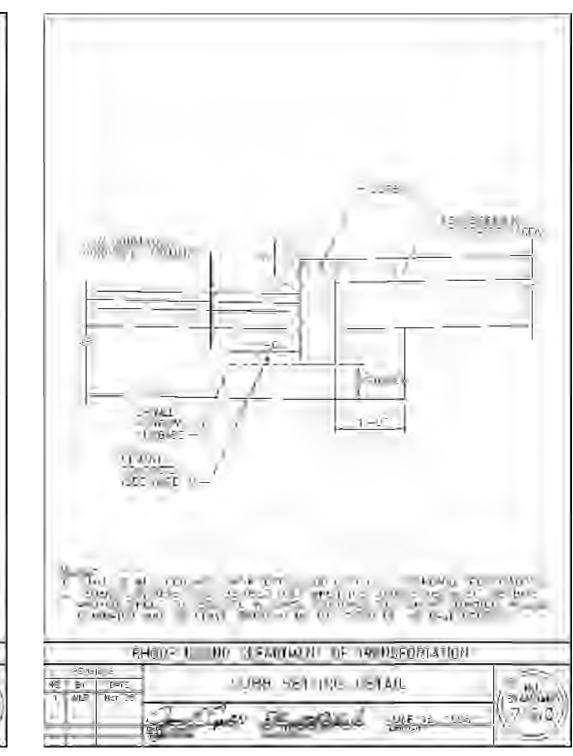
**CG-5** 

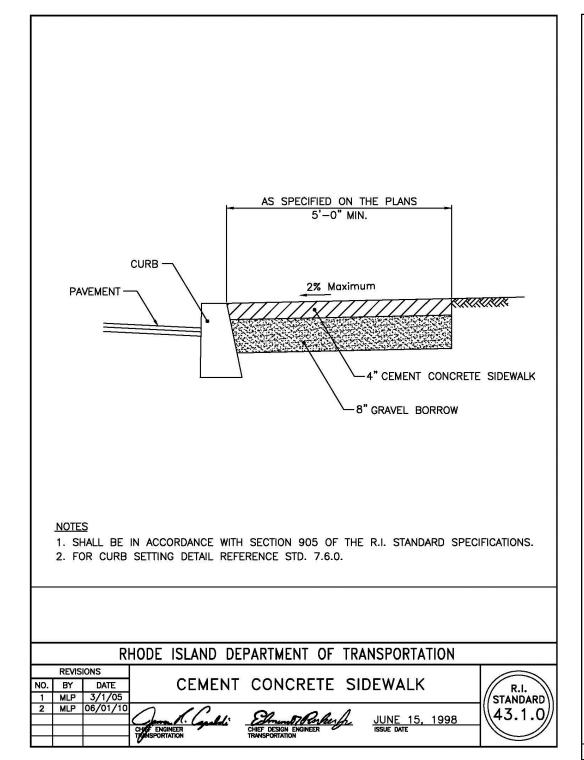


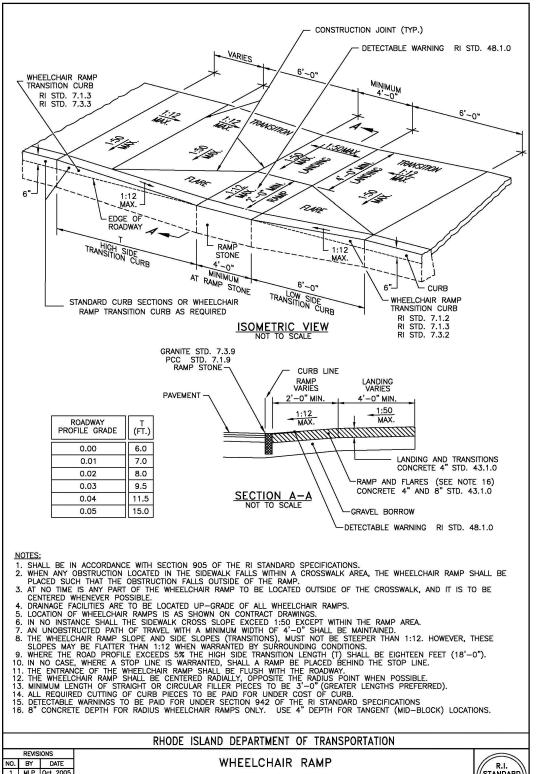


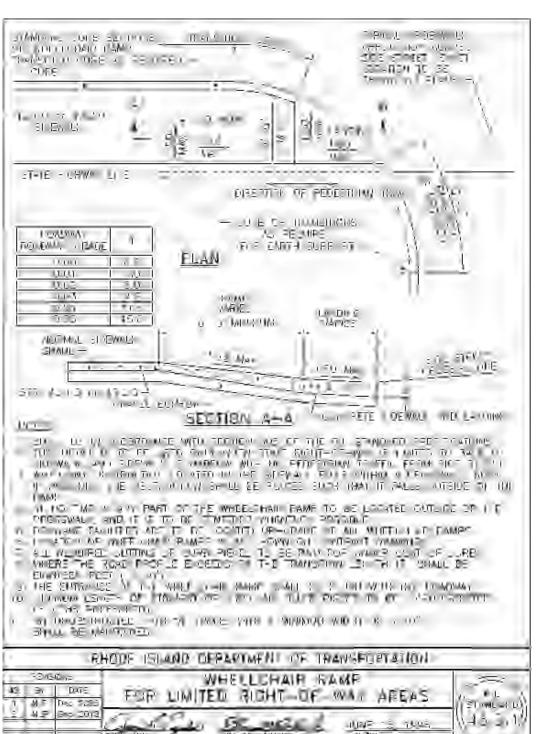


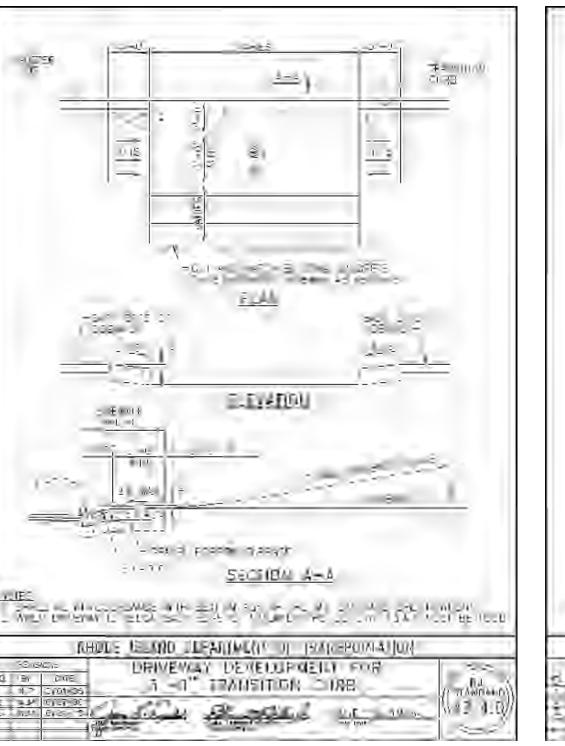


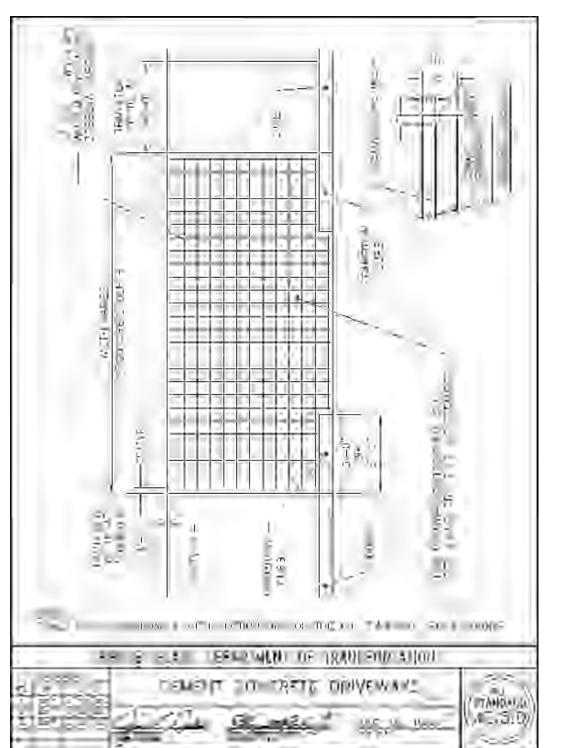


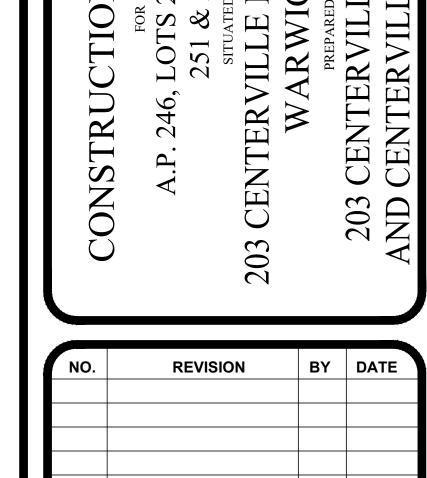












**ISSUED FOR PERMIT** 

RI

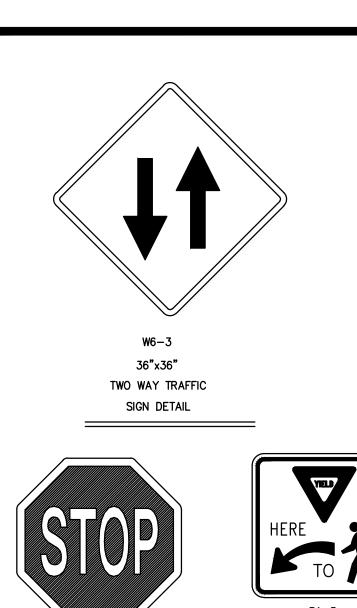


	-
JOB NO. 7303-00	DRAWN BY K.J.A.
<b>DWG. NO.</b> 7303-00-Prelim_Det	CHECK BY S.S.H.
SCALE:	APPROVED S.S.H.
AS SHOWN	DATE: JANUARY, 2023

7 OF 11 SHEETS

CG-6

43.3.0 JUNE 15, 1998 ISSUE DATE

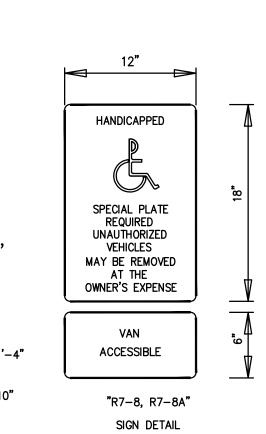


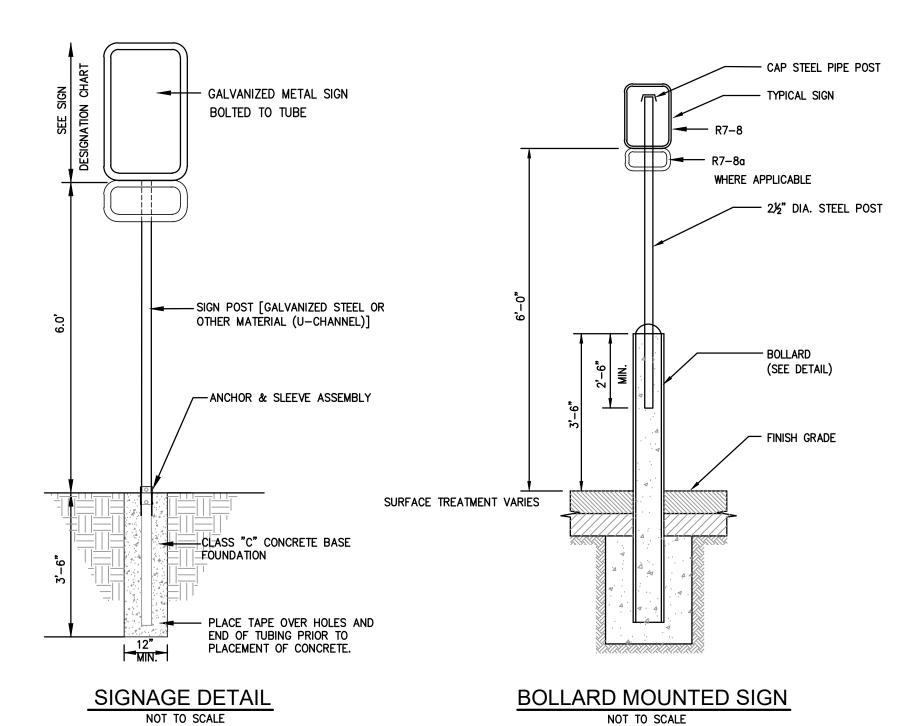
SIGN DETAIL

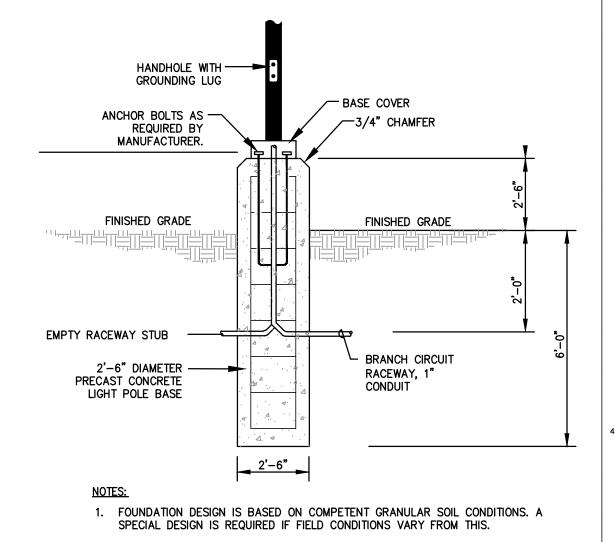




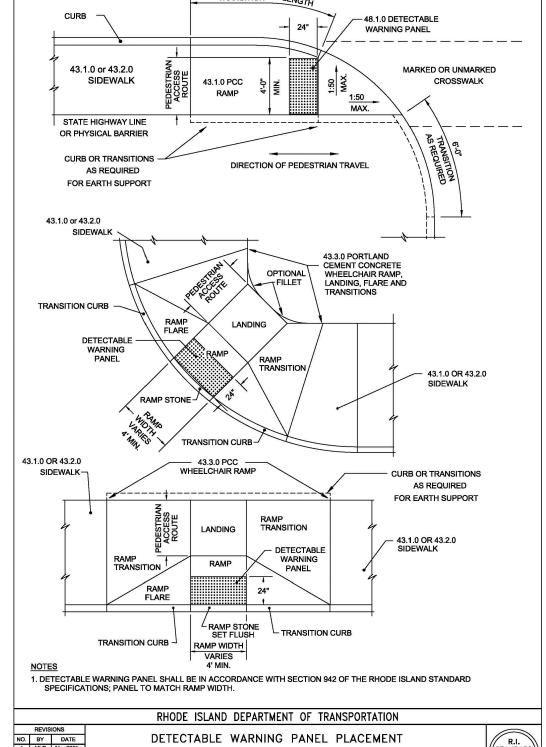


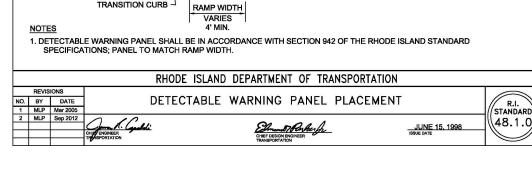


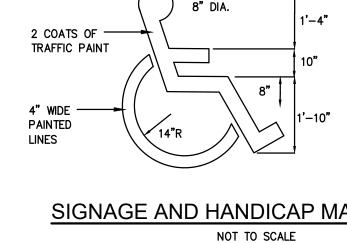


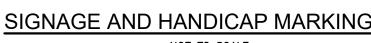


2. FOOTING DESIGN SHALL BE BASED ON LIGHT FIXTURE SUBMITTED FOR APPROVAL DURING CONSTRUCTION. LIGHTING POLE BASE DETAIL

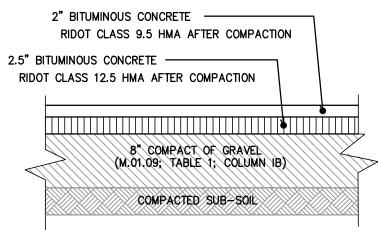




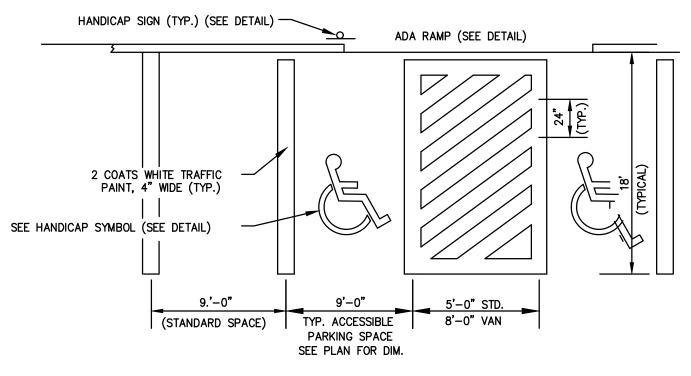


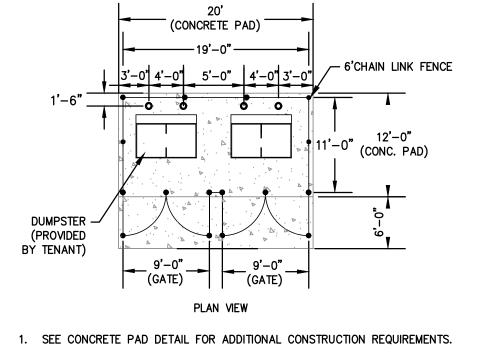


SIGN DETAIL

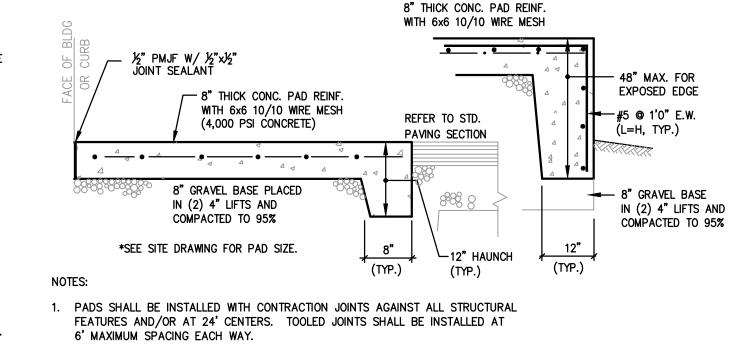


BITUMINOUS CONCRETE PAVEMENT

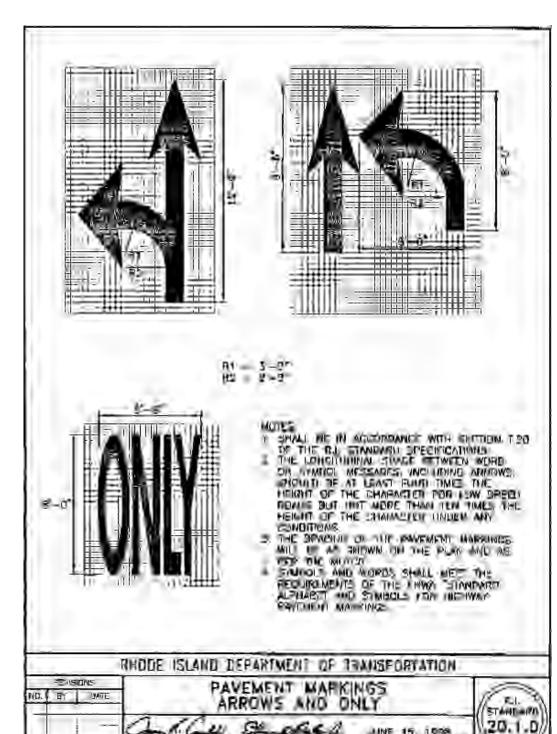


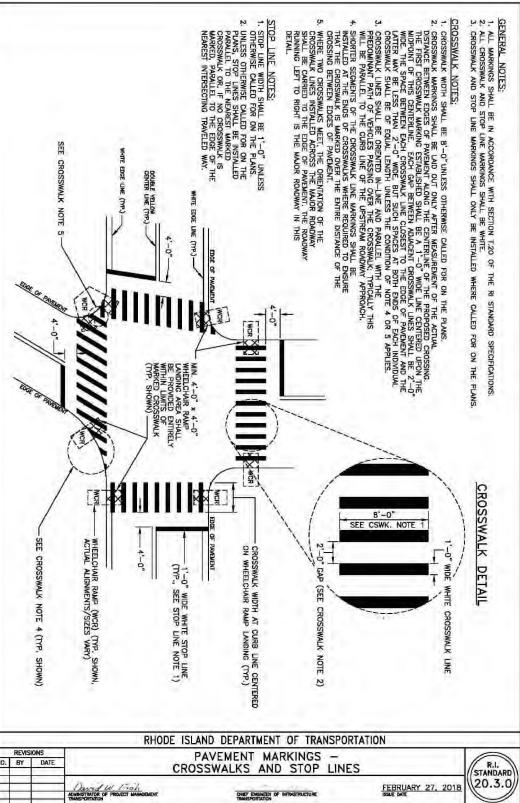


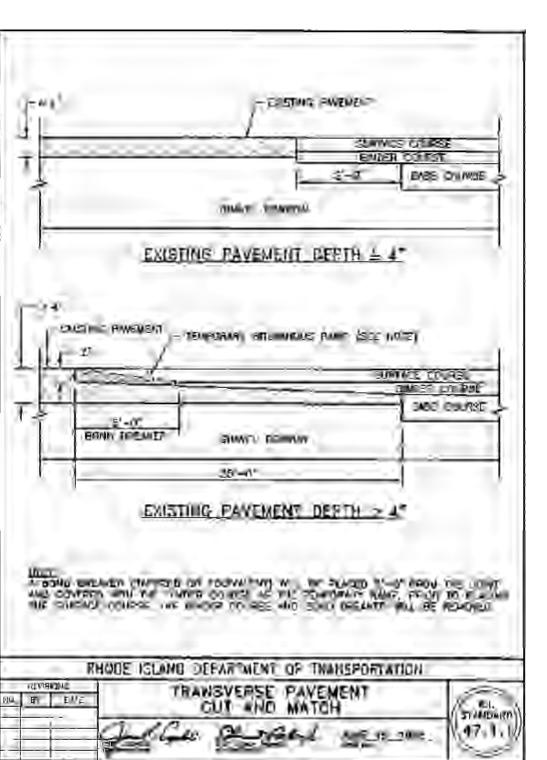
**DUMPSTER ENCLOSURE** 

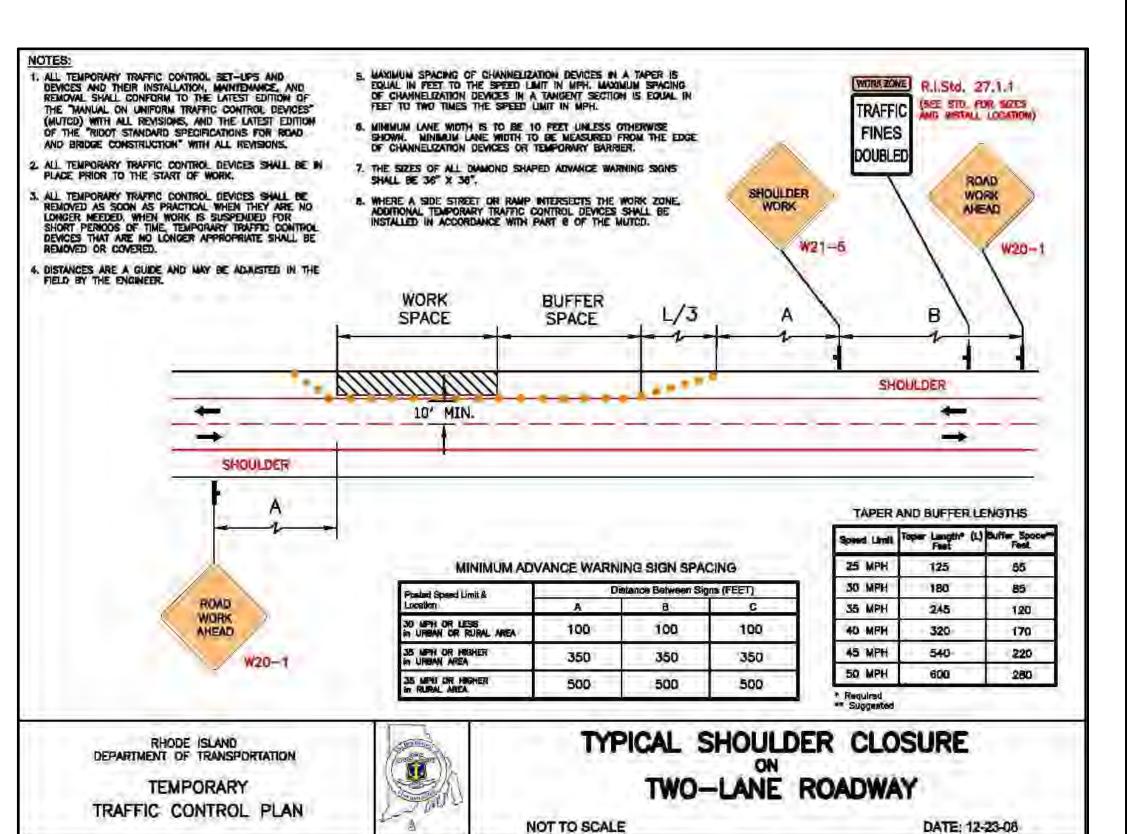


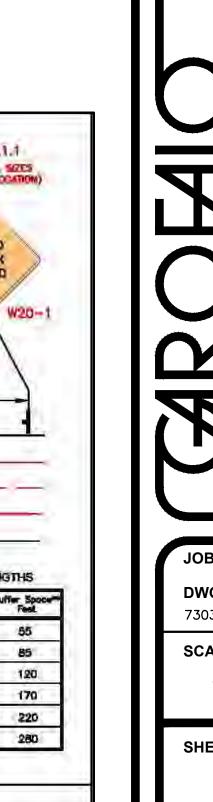
DUMPSTER PADS NOT TO SCALE











CENTER

REVISION

**ISSUED FOR PERMIT** 

NO.

0

BY DATE

of bee to its

<b>B NO.</b> 7303-00	DRAWN BY	K.J.A.
<b>/G. NO.</b> 03-00-Prelim_Det	CHECK BY	S.S.H.
ALE:	APPROVED	S.S.H.
AS SHOWN	DATE:	

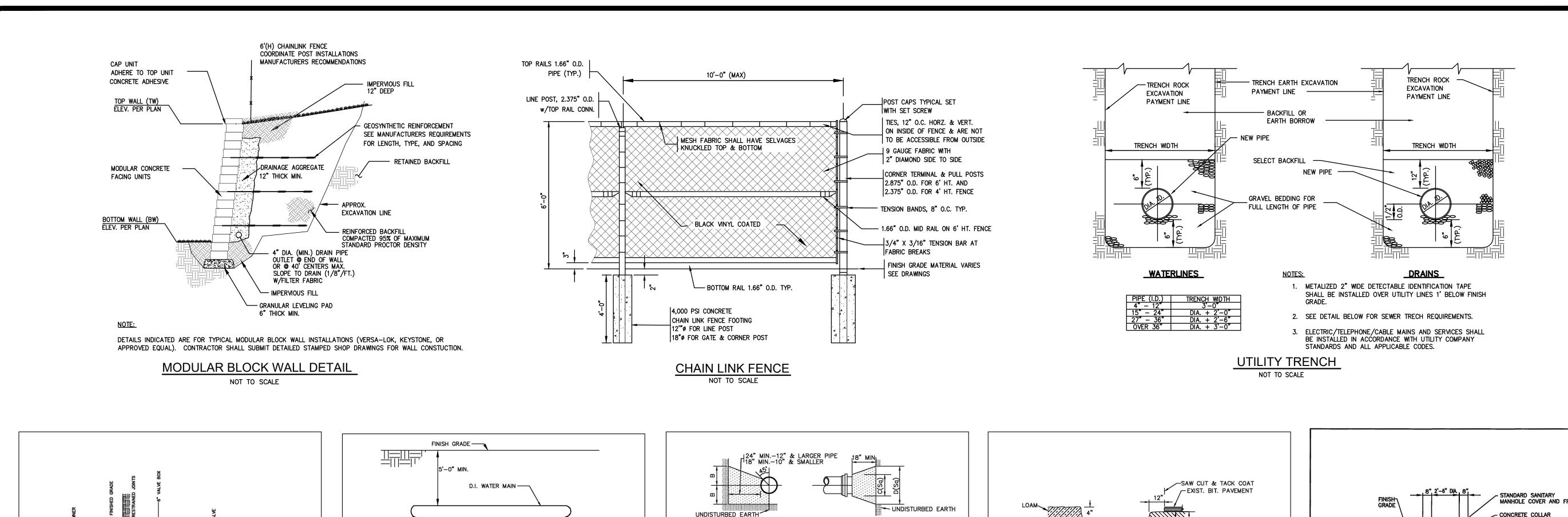
JANUARY, 2023

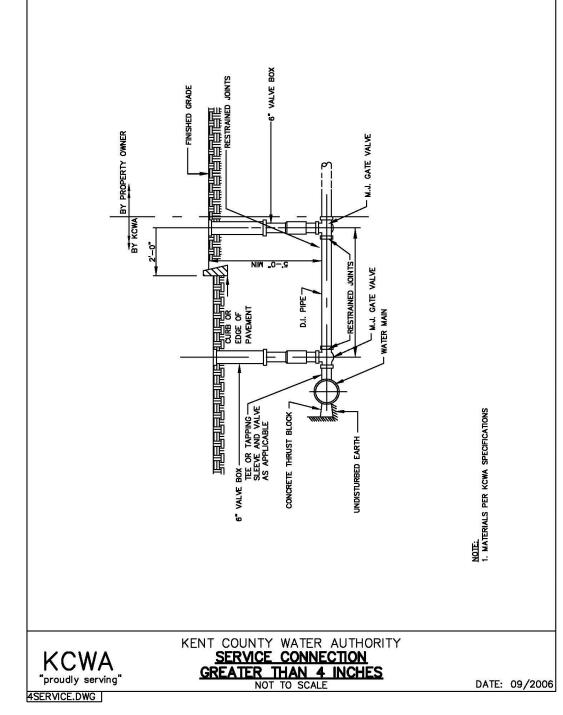
SHEET

8 OF 11 SHEETS

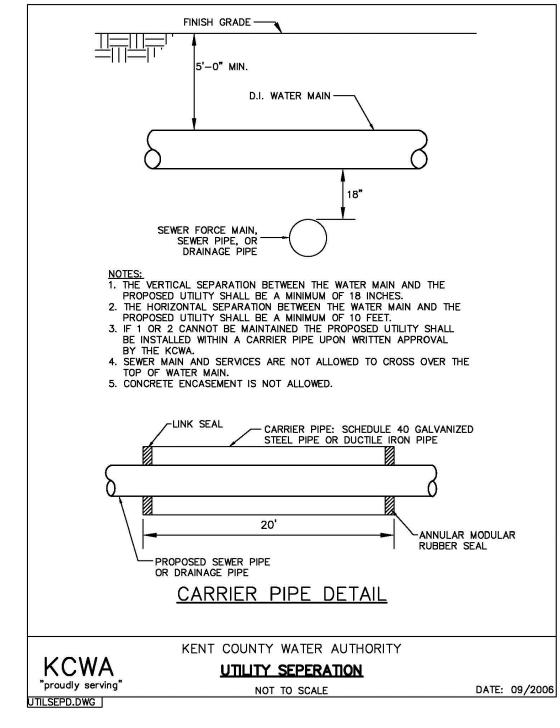
**CG-7** 

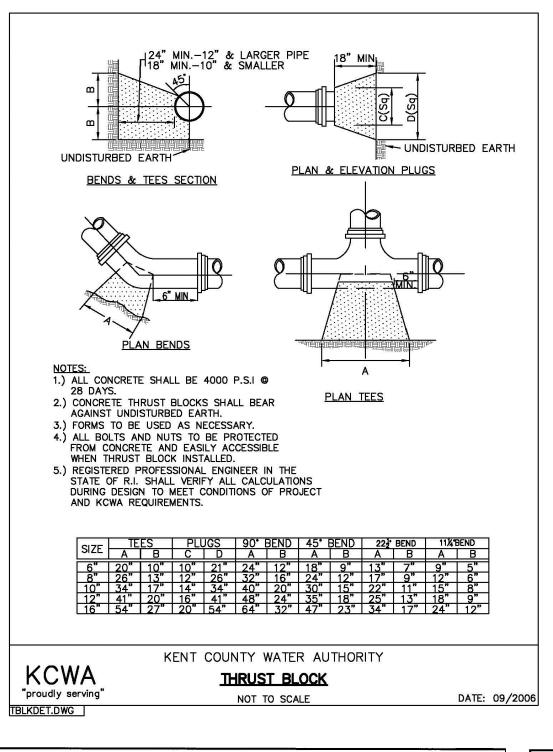
NOT TO SCALE PARKING SPACE STRIPING NOT TO SCALE

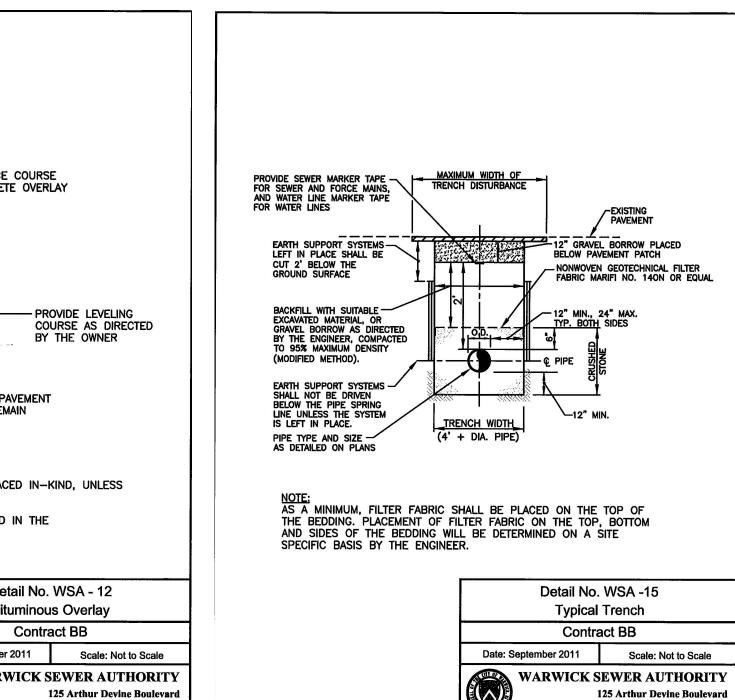


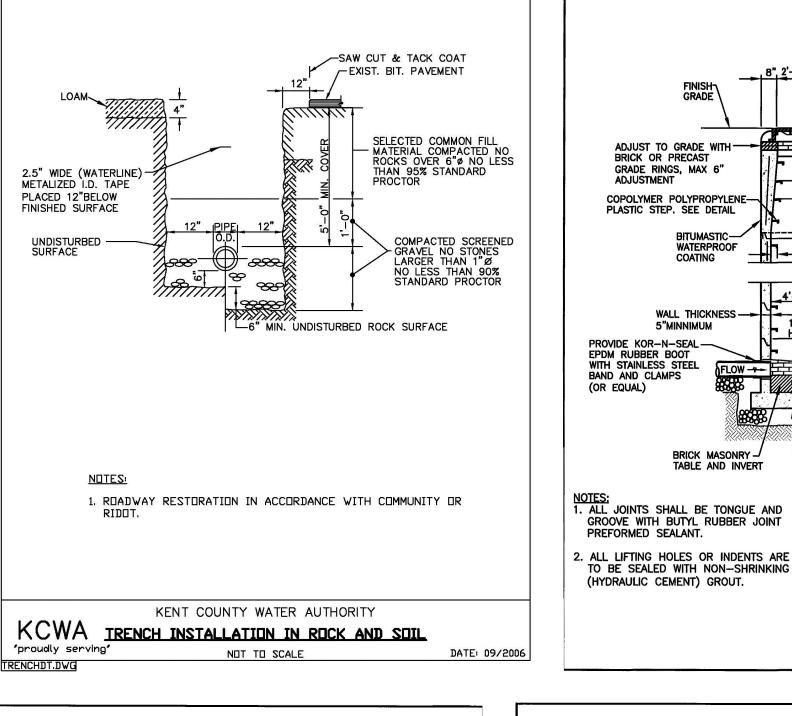


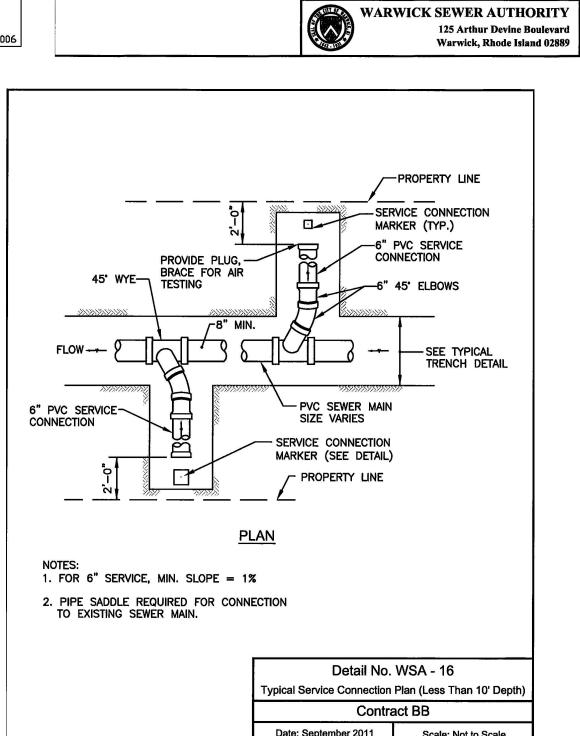
\_ 6" FLAT FACE LETTER (FLUSH)



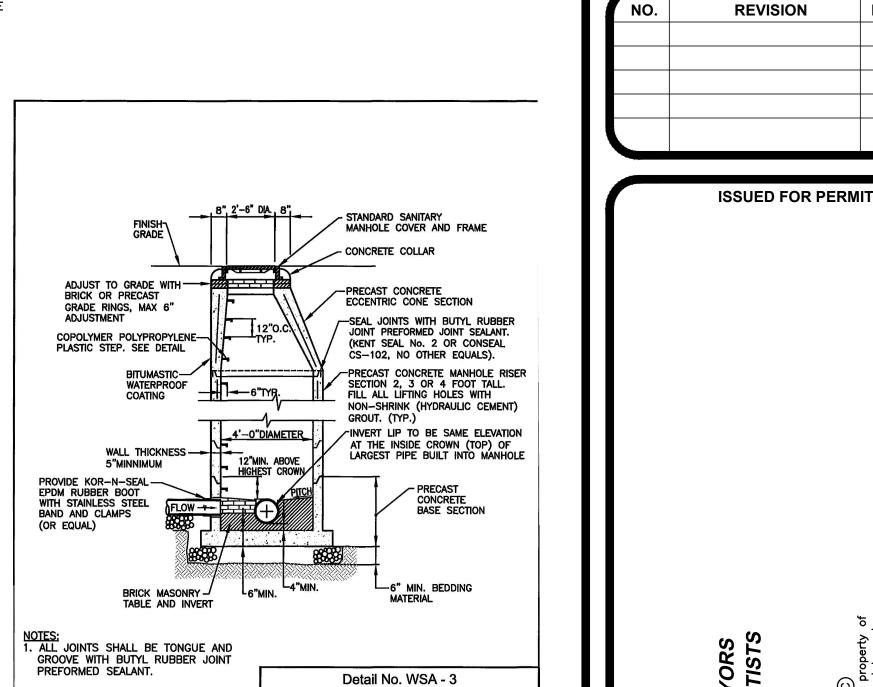








(HYDRAULIC CEMENT) GROUT.

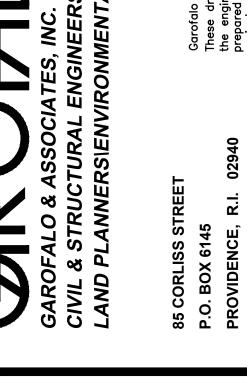


Sanitary Manhole

Contract BB

Scale: Not to Scale

Date: September 2011



RI

ER

BY DATE

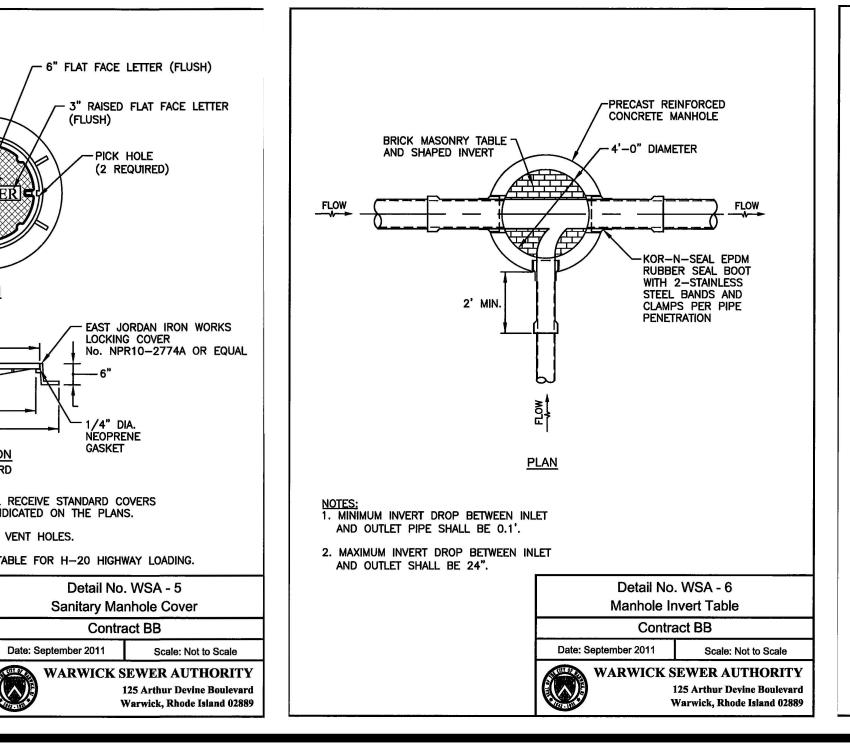
of bee to its

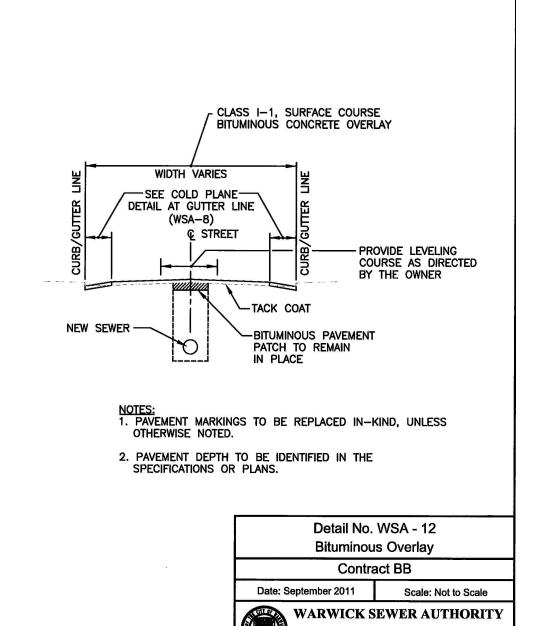
JOB NO. 7303-00	DRAWN BY K.J.A.
DWG. NO. 7303-00-Prelim_Det	CHECK BY S.S.H.
SCALE:	APPROVED S.S.H.
AS SHOWN	DATE: JANUARY, 2023

CG-8

9 OF 11 SHEETS

Prelimino	3" RAISED FLAT FACE LETTER (FLUSH)
RI\dwg\01-Current\Preliminc	PICK HOLE (2 REQUIRED)
Warwick,	PLAN
(Centerville Builders) —	32" EAST JORDAN IRON WORKS LOCKING COVER No. NPR10-2774A OR EQU 6" 6" 1/4" DIA. NEOPRENE GASKET STANDARD
Centerville Road	NOTES:  1. ALL MANHOLES SHALL RECEIVE STANDARD COVERS UNLESS OTHERWISE INDICATED ON THE PLANS.
at Cente	2. COVERS TO HAVE NO VENT HOLES.  3. COVER MUST BE SUITABLE FOR H—20 HIGHWAY LOADING.
Concepts	Detail No. WSA - 5 Sanitary Manhole Cover
Con	Contract BB

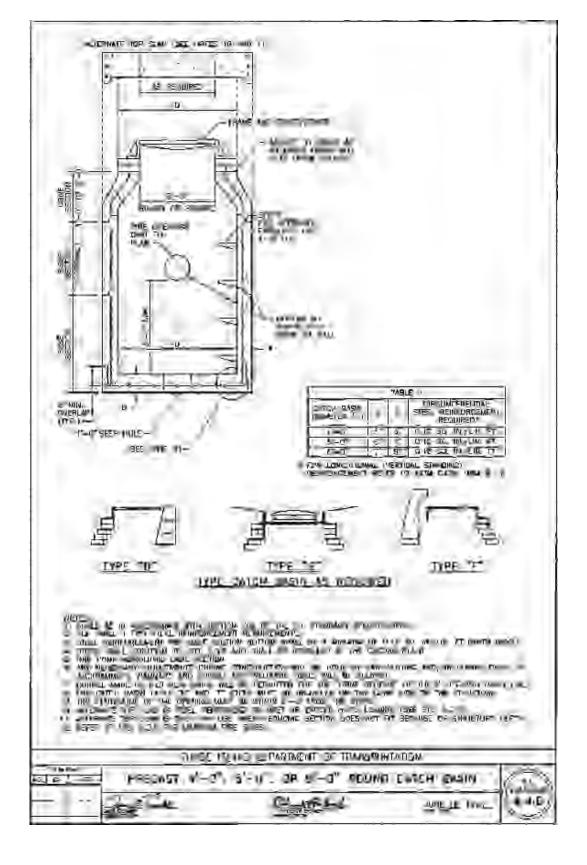


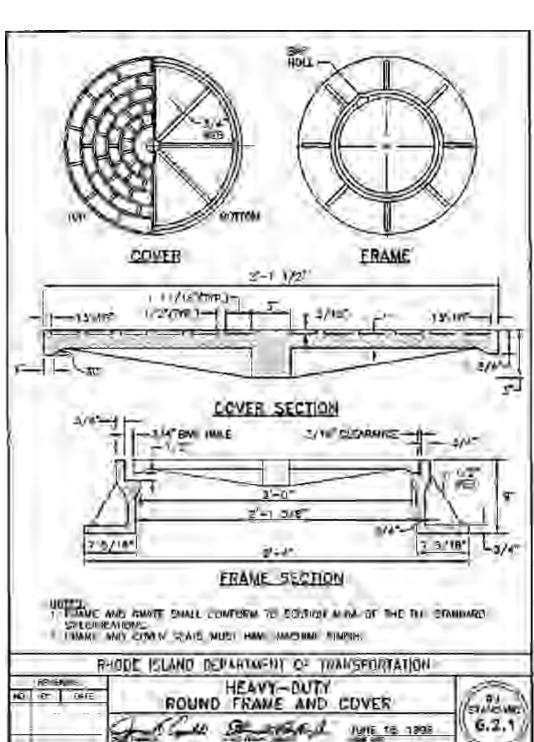


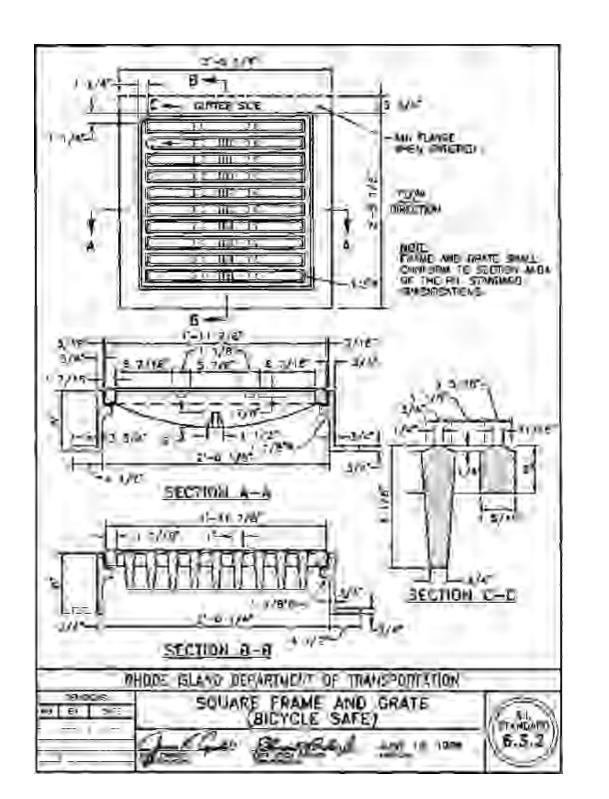
Warwick, Rhode Island 02889

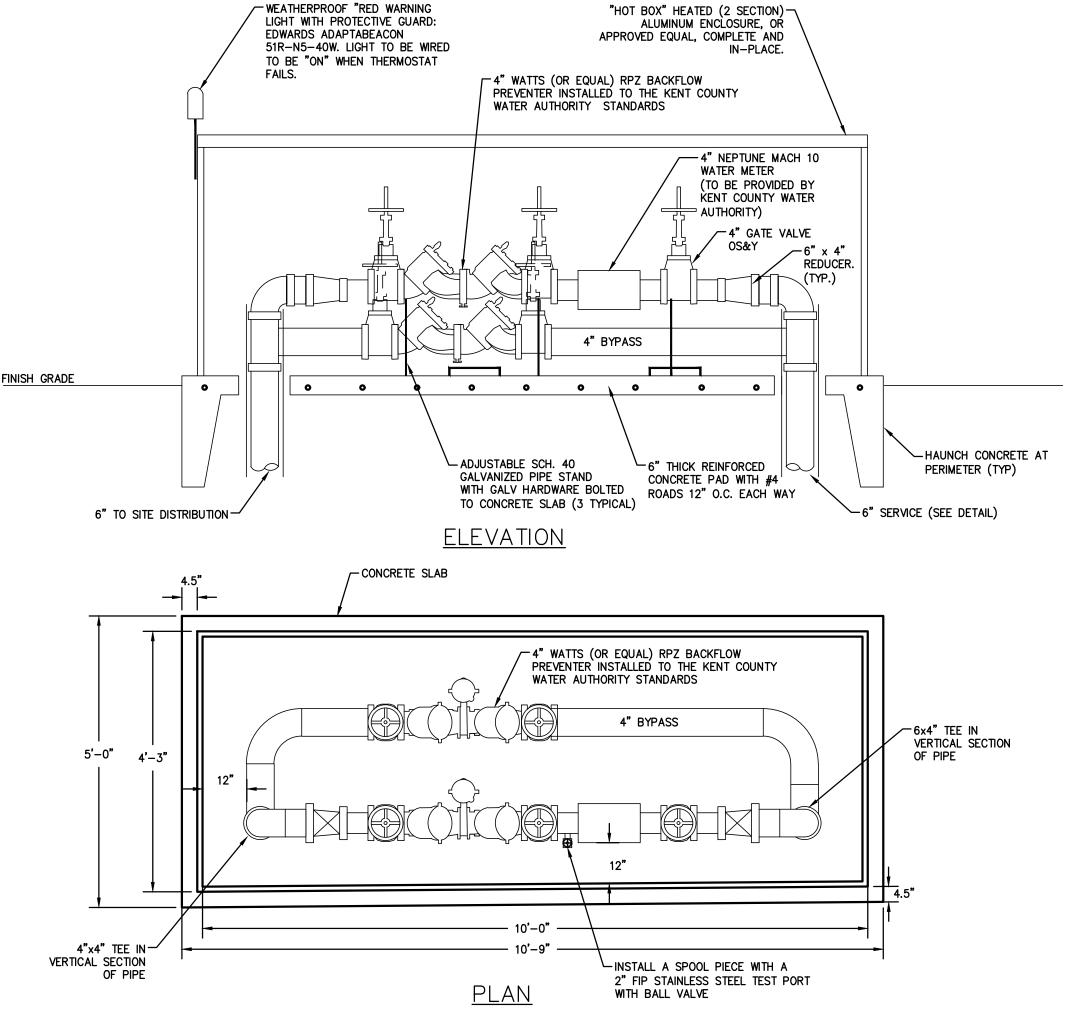
Warwick, Rhode Island 02889

Date: September 2011 Scale: Not to Scale WARWICK SEWER AUTHORITY 125 Arthur Devine Boulevard Warwick, Rhode Island 02889



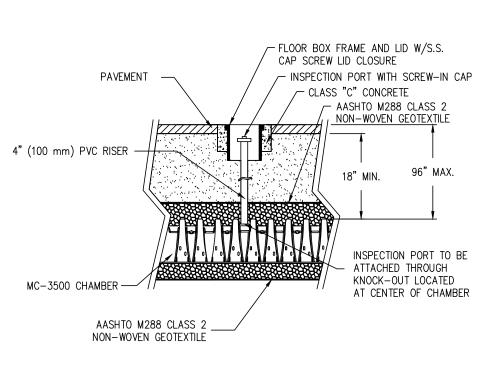






- 1. CONTRACTOR SHALL INSTALL ALL FITTINGS, METERS, BACKFLOW PREVENTORS, PIPES AND APPURTENANCES IN ACCORDANCE WITH THE KENT COUNTY WATER AUTHORITY REQUIREMENTS. THE THE KENT COUNTY WATER AUTHORITY SHALL BE NOTIFIED PRIOR TO ORDERING FOR CONFIRMATION SUITABILITY OF ALL EQUIPMENT MANUFACTURERS/MODELS UTILIZED.
- 2. CONTRACTOR SHALL VERIFY ALL INDICATED DIMENSIONS ARE ADEQUATE. FINAL EQUIPMENT SELECTION AND SHALL MODIFY CONFIGURATION AS REQUIRED FOR COMPLETE AND IN-PLACE CONSTRUCTION.
- 3. CONTRACTOR SHALL INSTALL A STRAINER PRIOR TO THE BACKFLOW PREVENTERS IF RECOMMENDED BY SELECTED MANUFACTURER.

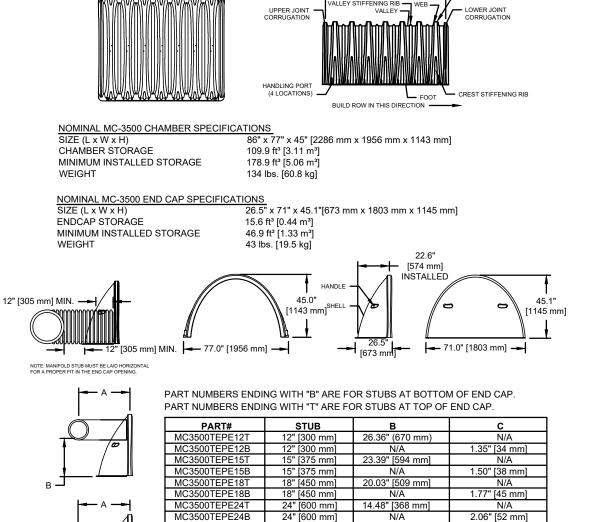
WATER SERVICE ENCLOSURE



#### STORMTECH CHAMBER SYSTEMS **INSPECTION PORT DETAIL** NOT TO SCALE

90.0" [2286 mm] ——

- 86.0" [2184 mm] INSTALLED



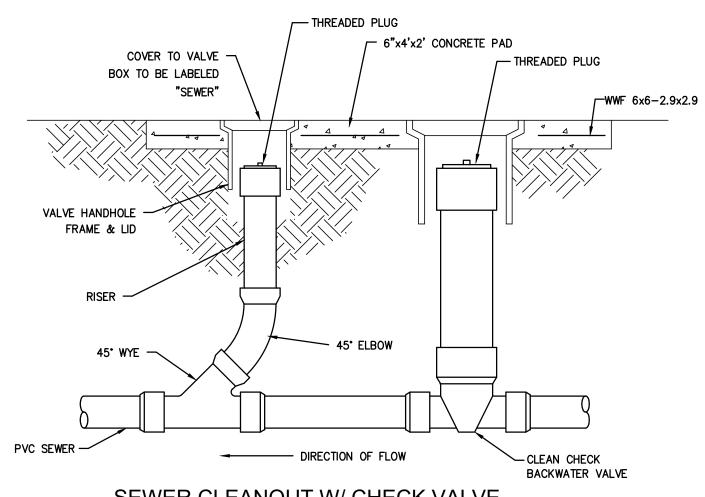
CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST.

INVENTORIED MANIFOLDS INCLUDE 12" - 24" SIZE ON SIZE AND

MC-3500 TECHNICAL SPECIFICATIONS

15" THROUGH 48" ECCENTRIC MANIFOLDS.

NOT TO SCALE

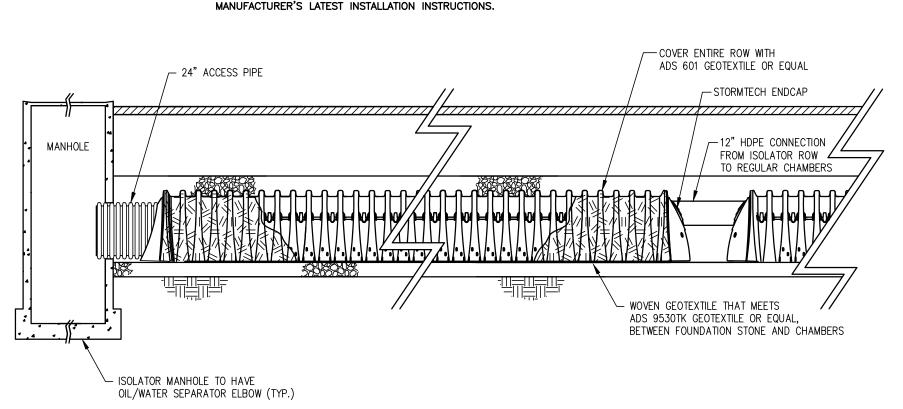


### SEWER CLEANOUT W/ CHECK VALVE

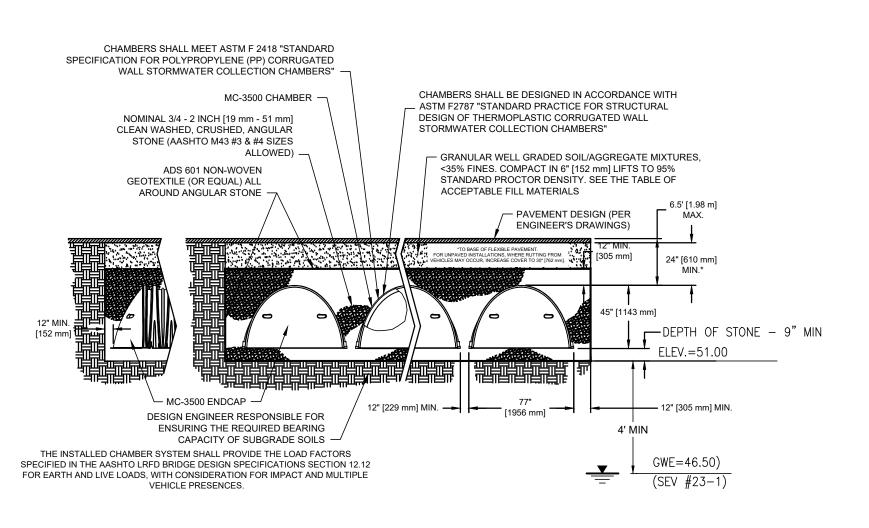
NOT TO SCALE

#### STORMWATER CHAMBER SPECIFICATIONS

- 1. CHAMBERS SHALL BE STORMTECH MC-3500, OR APPROVED EQUAL.
- CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT—MODIFIED POLYPROPYLENE COPOLYMERS.
- 3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS
- 4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- 5. CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F 2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL
- 7. ONLY CHAMBERS THAT ARE APPROVED BY THE ENGINEER WILL BE ALLOWED. THE CONTRACTOR SHALL SUBMIT (3 SETS) OF THE FOLLOWING TO THE ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
  - a. A STRUCTURAL EVALUATION BY A REGISTERED STRUCTURAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE
  - b. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL
- 8. THE INSTALLATION OF CHAMBERS SHALL BE IN ACCORDANCE WITH THE



#### ISOLATOR CHAMBER ROW DETAIL NOT TO SCALE



#### MC-3500 TYP CROSS SECTION

NOT TO SCALE

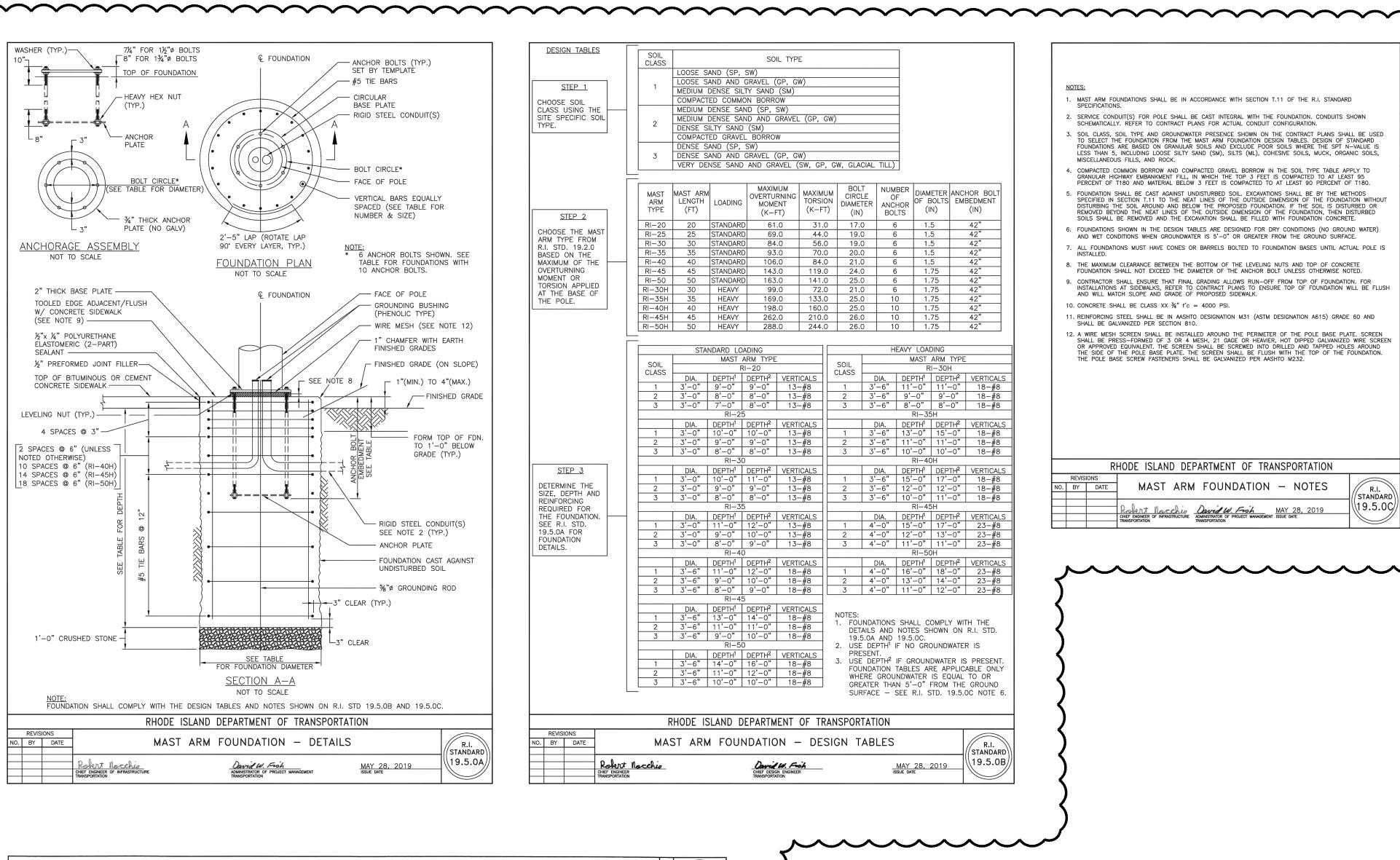
NO.

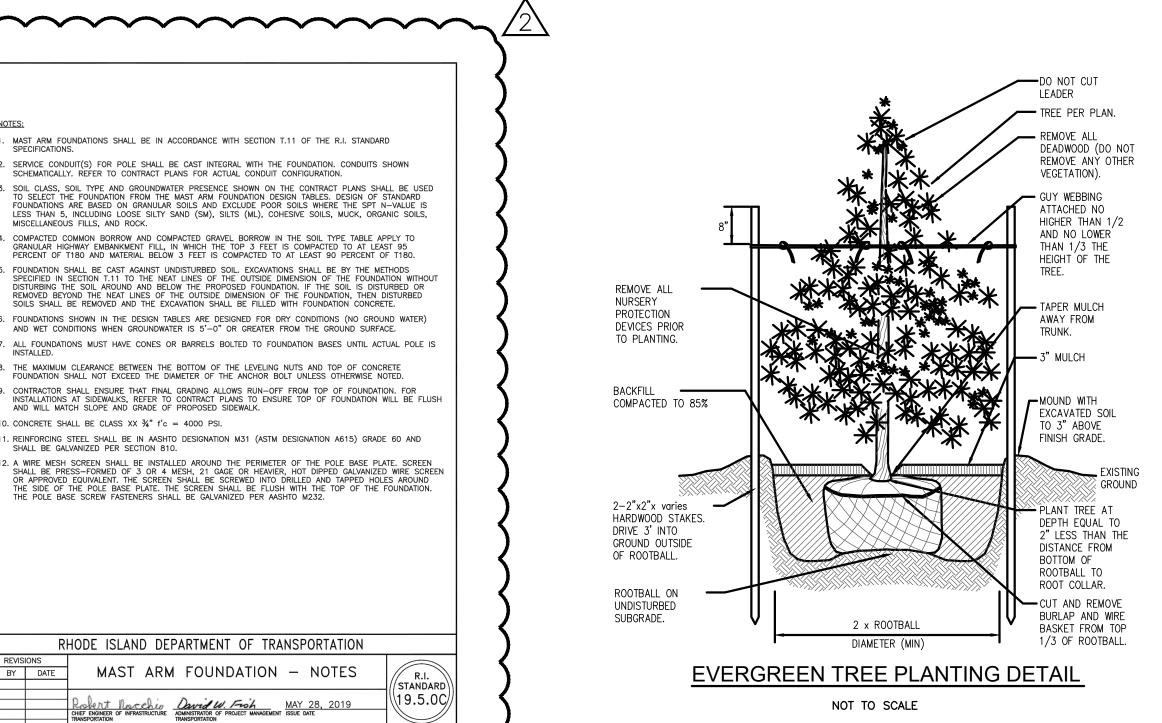
BY DATE REVISION

R

**ISSUED FOR PERMIT** 

JOB NO. **DRAWN BY** K.J.A. 7303-00 DWG. NO. **CHECK BY** S.S.H. 7303-00-Prelim\_Det APPROVED S.S.H. SCALE: AS SHOWN DATE: JANUARY, 2023





BY DATE NO. REVISION RIDEM KJA |3/14/2 RIDOT COMMENTS RAS |5/18/2 ADDED SITE SIGNAGE KYY |9/22/2

TER

203

 $\mathbf{0}$ 

ISSUED FOR PERMIT

to be to

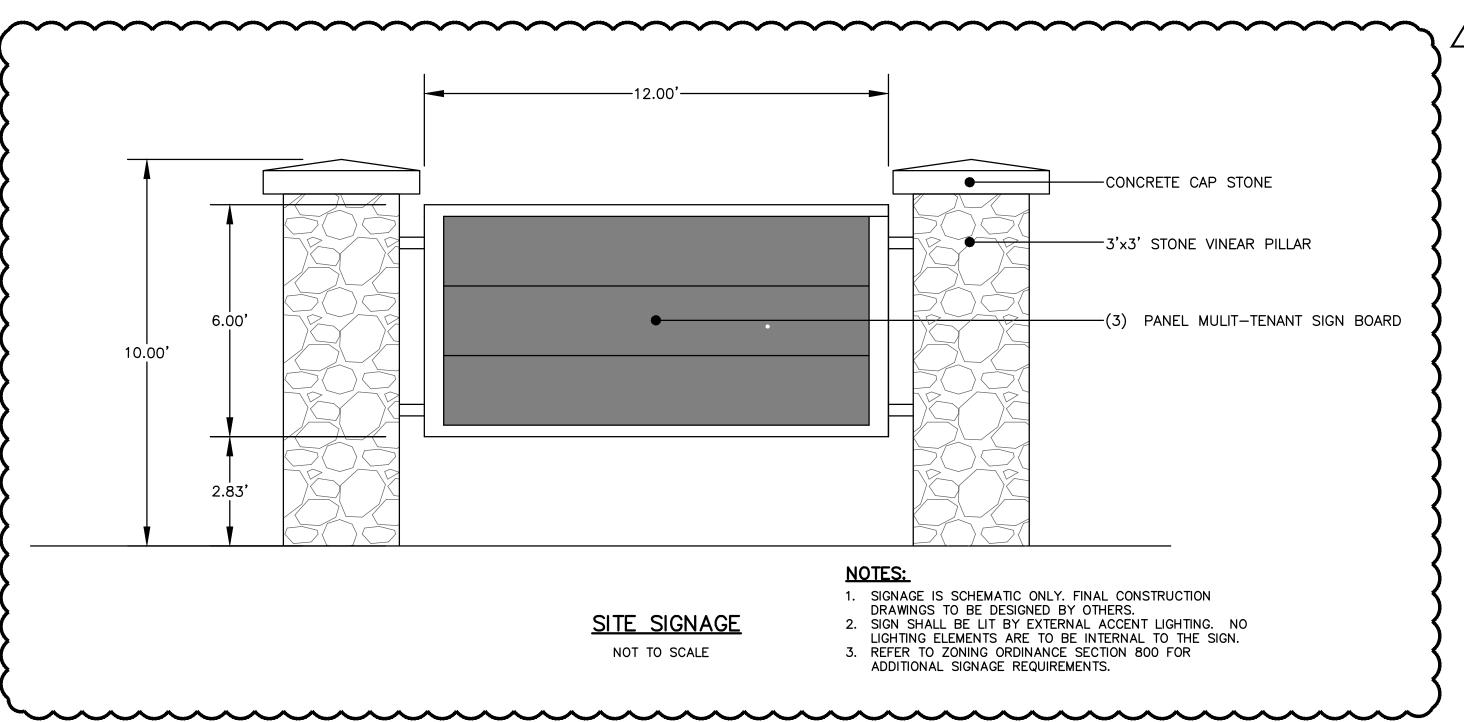
**DRAWN BY** K.J.A. **CHECK BY** S.S.H.

JOB NO. 7303-00 DWG. NO. 7303-00-Prelim\_Det **APPROVED** S.S.H. SCALE: AS SHOWN

DATE: JANUARY, 2023

SHEET

11 OF 11 SHEETS



MAST ARM FOUNDATIONS SHALL BE IN ACCORDANCE WITH SECTION T.11 OF THE R.I. STANDARD

. SERVICE CONDUIT(S) FOR POLE SHALL BE CAST INTEGRAL WITH THE FOUNDATION. CONDUITS SHOWN SCHEMATICALLY. REFER TO CONTRACT PLANS FOR ACTUAL CONDUIT CONFIGURATION.

5. SOIL CLASS, SOIL TYPE AND GROUNDWATER PRESENCE SHOWN ON THE CONTRACT PLANS SHALL BE USED TO SELECT THE FOUNDATION FROM THE MAST ARM FOUNDATION DESIGN TABLES. DESIGN OF STANDARD FOUNDATIONS ARE BASED ON GRANULAR SOILS AND EXCLUDE POOR SOILS WHERE THE SPT N-VALUE IS LESS THAN 5, INCLUDING LOOSE SILTY SAND (SM), SILTS (ML), COHESIVE SOILS, MUCK, ORGANIC SOILS, MISCELLA BASEOUS ETLIS AND POOR

I. COMPACTED COMMON BORROW AND COMPACTED GRAVEL BORROW IN THE SOIL TYPE TABLE APPLY TO GRANULAR HIGHWAY EMBANKMENT FILL, IN WHICH THE TOP 3 FEET IS COMPACTED TO AT LEAST 95 PERCENT OF T180 AND MATERIAL BELOW 3 FEET IS COMPACTED TO AT LEAST 90 PERCENT OF T180.

5. FOUNDATION SHALL BE CAST AGAINST UNDISTURBED SOIL. EXCAVATIONS SHALL BE BY THE METHODS SPECIFIED IN SECTION T.11 TO THE NEAT LINES OF THE OUTSIDE DIMENSION OF THE FOUNDATION WITHOUT DISTURBING THE SOIL AROUND AND BELOW THE PROPOSED FOUNDATION. IF THE SOIL IS DISTURBED OR REMOVED BEYOND THE NEAT LINES OF THE OUTSIDE DIMENSION OF THE FOUNDATION, THEN DISTURBED SOILS SHALL BE REMOVED AND THE EXCAVATION SHALL BE FILLED WITH FOUNDATION CONCRETE.

. FOUNDATIONS SHOWN IN THE DESIGN TABLES ARE DESIGNED FOR DRY CONDITIONS (NO GROUND WATER)

. ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS

AND WET CONDITIONS WHEN GROUNDWATER IS 5'-0" OR GREATER FROM THE GROUND SURFACE.

THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND TOP OF CONCRETE FOUNDATION SHALL NOT EXCEED THE DIAMETER OF THE ANCHOR BOLT UNLESS OTHERWISE NOTED.

11. REINFORCING STEEL SHALL BE IN AASHTO DESIGNATION M31 (ASTM DESIGNATION A615) GRADE 60 AND SHALL BE GALVANIZED PER SECTION 810.

12. A WIRE MESH SCREEN SHALL BE INSTALLED AROUND THE PERIMETER OF THE POLE BASE PLATE. SCREEN SHALL BE PRESS—FORMED OF 3 OR 4 MESH, 21 GAGE OR HEAVIER, HOT DIPPED GALVANIZED WIRE SCREEN OR APPROVED EQUIVALENT. THE SCREEN SHALL BE SCREWED INTO DRILLED AND TAPPED HOLES AROUND THE SIDE OF THE POLE BASE PLATE. THE SCREEN SHALL BE FLUSH WITH THE TOP OF THE FOUNDATION. THE POLE BASE SCREW FASTENERS SHALL BE GALVANIZED PER AASHTO M232.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

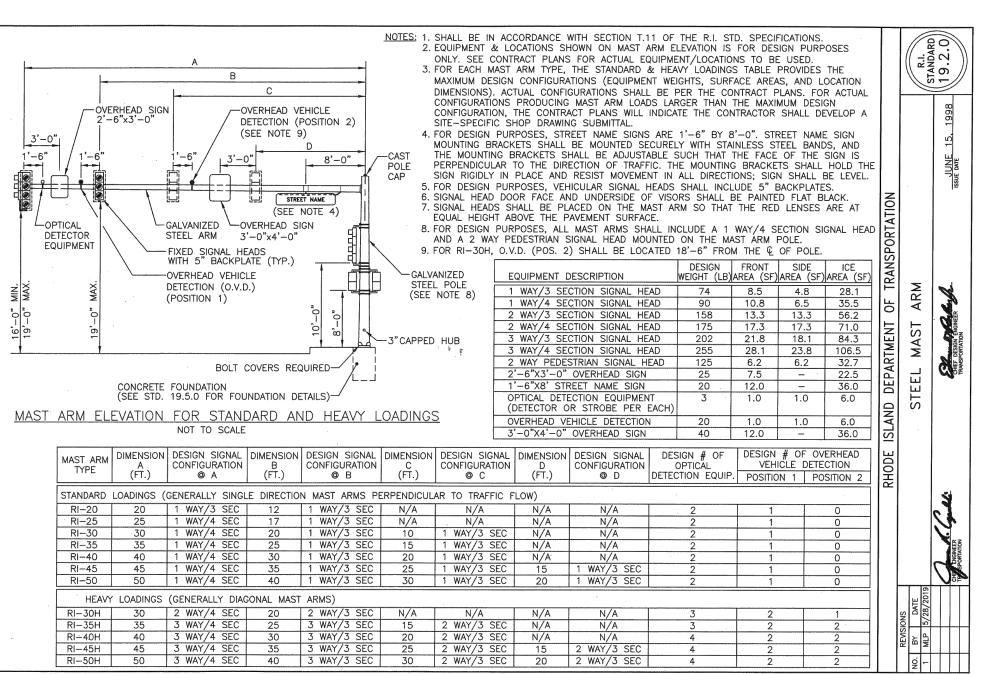
CHIEF ENGINEER OF INFRASTRUCTURE ADMINISTRATOR OF PROJECT MANAGEMENT ISSUE DATE TRANSPORTATION

MAST ARM FOUNDATION - NOTES

STANDARD

\19.5.0C

10. CONCRETE SHALL BE CLASS XX 3/4" f'c = 4000 PSI.



## SITE PLAN SET

FOR

# PROPOSED CAR WASH and CAFE

PLAT MAP 246, LOTS 247, 250, 251 and 257 **ZONING DISTRICT: GB** GENERAL BUSINESS DISTRICT 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

#### PREPARED FOR:

203 CENTERVILLE ROAD, LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

#### **ENGINEERS and LAND SURVEYORS**



### CROSSMAN ENGINEERING

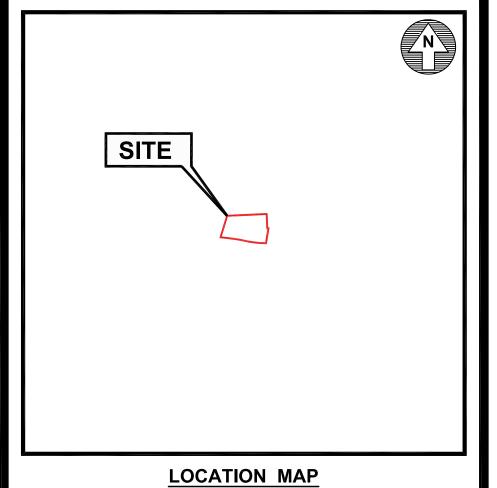
Rhode Island 151 Centerville Road Warwick, RI 02886 Phone: (401) 738-5660 103 Commonwealth Avenue North Attleboro, MA 02763 Phone: (508) 695-1700

Email: cei@crossmaneng.com

**MARCH 2023** SHEET 1 of 18

#### OWNER/APPLICANT:

**CENTERVILLE ASSOCIATES 164 CENTERVILLE ROAD** WARWICK, RI 02886



#### INDEX OF DRAWINGS

<b>DRAWING No.</b>	<u>PLAN</u>	
C1	<b>GENERAL NOTES and LEGEND</b>	
C2	AERIAL MAP	
C3	RADIUS MAP	
C4.1	<b>EXISTING CONDITIONS PLAN No. 1</b>	
C4.2	<b>EXISTING CONDITIONS PLAN No. 2</b>	
C5	SITE LAYOUT PLAN	
C6	GRADING and DRAINAGE PLAN	
<b>C</b> 7	UTILITY PLAN	
C8	SOIL EROSION CONTROL PLAN	
C9	MISCELLANEOUS DETAIL PLAN No. 1	
C10	MISCELLANEOUS DETAIL PLAN No. 2	
C11	MISCELLANEOUS DETAIL PLAN No. 3	
C12	MISCELLANEOUS DETAIL PLAN No. 4	
C13	MISCELLANEOUS DETAIL PLAN No. 5	
E1	SITE LIGHTING PLAN	
L1	LANDSCAPE PLAN	
L2	LANDSCAPE DETAIL PLAN	

#### **REVISIONS**

No.	DESCRIPTION	DATE
1	UTILITIES	07/19/23
1		

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN

#### **GENERAL NOTES**

- 1. ALL EXISTING UTILITIES HAVE BEEN PLOTTED BASED UPON BEST AVAILABLE INFORMATION AND REPRESENT APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES, BOTH UNDERGROUND AND OVERHEAD, BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH "DIG SAFE PROGRAM LAW" ENACTED BY THE RHODE ISLAND LEGISLATURE AND BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY MUNICIPALITY, STATE OR FEDERAL AGENCY THAT MAY APPLY. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. A MINIMUM ADVANCE NOTICE OF 72 HOURS IS REQUIRED PRIOR TO START OF CONSTRUCTION.
- 2. SPECIFICATIONS TO GOVERN THIS PROJECT ARE R.I.D.O.T. STANDARD INSTALLATION, SPECIFICATIONS AND DETAILS. FOR ALL EXCAVATION, PLACEMENT OF FILL, PIPE BITUMINOUS PAVEMENT, CUTTING INTO CATCHBASIN/MANHOLES, CONCRETE AND SAWCUTTING, THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2018 EDITION, WITH LATEST REVISIONS UNLESS OTHERWISE SHOWN ON PLANS. THE "METHOD OF MEASUREMENT" AND "BASIS OF PAYMENT" ARE NOT APPLICABLE.
- 3. THE CONTRACTOR MUST VERIFY PRIOR TO CONSTRUCTION THAT ALL REQUIRED AUTHORIZATION TO PERFORM WORK HAS BEEN OBTAINED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION OPERATIONS INCLUDING ALL ACTIONS OR OMISSIONS OF ANY SUBCONTRACTORS, AGENTS OR EMPLOYEES. THE CONTRACTOR MUST ENSURE THAT THE CONDITIONS OF ALL PERMITS, SPECIFICATIONS AND FEDERAL, STATE AND LOCAL REGULATIONS ARE STRICTLY ENFORCED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ASPECTS OF ON—SITE SAFETY INCLUDING ANY DAMAGE TO EXISTING STRUCTURES.
- 4. WORK SHOWN ON THE PLANS FOR WHICH THERE ARE NO PARTICULAR DETAILS, SPECIFICATIONS OR PAYMENT ITEM DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING THE WORK. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE CONTRACT DOCUMENTS AND PLANS AND INSPECT THE SITE. THE BID PRICE SHALL INCLUDE ALL SERVICES AND MATERIALS NECESSARY TO COMPLETE THE PROJECT. ANY CHANGES TO THE PROJECT OR THE INSTALLATION OF AN ITEM FOR WHICH NO PARTICULAR DETAIL OR SPECIFICATION WAS PROVIDED MUST BE REVIEWED BY AND MUST BE ACCEPTABLE TO THE ENGINEER.
- 5. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY WORK
- 6. ALL DISTURBED AREAS SHALL BE REPLACED IN KIND UNLESS OTHERWISE SHOWN OR OTHERWISE INSTRUCTED IN WRITING BY THE OWNER.
- 7. CONTRACTOR SHALL EXCAVATE TEST PITS TO CONFIRM UTILITY LOCATIONS/ELEVATIONS AT POTENTIAL CONFLICT POINTS (UTILITY/DRAIN CROSSINGS).
- 8. THE CONTRACTOR SHALL USE CARE WHEN WORKING NEAR UTILITY POLES AND WIRING SO AS TO NOT DISTURB ELECTRICAL/TELEPHONE/CABLE SERVICE TO THE CUSTOMERS. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN THESE SERVICES AT ALL TIMES.
- 9. THE CONTRACTOR SHALL, AT NO ADDITIONAL EXPENSE, BRACE UTILITY POLES IF REQUIRED, AND REPAIR ANY DAMAGE TO EXISTING UTILITIES, SIDEWALKS, GUARDRAILS, CURBS, PAVING, SHRUBS, TREES, STONE WALLS, LAWNS, ETC.
- 10. CHANGE ORDERS MAY ONLY BE APPROVED FOR PAYMENT BY THE OWNER.
- 11. ALL OPEN EXCAVATIONS SHALL BE ADEQUATELY SAFEGUARDED BY PROVIDING TEMPORARY BARRICADES, CAUTION SIGNS, LIGHTS AND OTHER MEANS TO PREVENT ACCIDENTS TO PERSONS AND DAMAGE TO PROPERTY. THE CONTRACTOR SHALL AT NO ADDITIONAL EXPENSE TO THE OWNER, PROVIDE SUITABLE AND SAFE CONDITIONS AT ALL AREAS OF THE WORK SITE AND SHALL PROVIDE SAFE VEHICULAR AND PEDESTRIAN ACCESS AROUND ALL WORK AREAS.
- 12. CONTRACTOR SHALL PROVIDE, AT NO ADDITIONAL EXPENSE, ADEQUATE EROSION CONTROL, FRAC TANKS OR SEDIMENTATION CONTROLS SUBJECT TO THE APPROVAL OF THE CONSERVATION COMMISSION FOR THE DISCHARGE OF ANY TRENCH DEWATERING.
- 13. ALL STRUCTURES AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE TOWN OF CUMBERLAND DEPARTMENT OF PUBLIC WORKS. ALL EXCAVATION, BACKFILL AND RESTORATION WORK SHALL MEET THE CITY'S SPECIFICATIONS.
- 14. THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEM FOUND WHICH DOES NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.
- 15. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO REMOVAL AND/OR INSTALLATION OF UTILITIES ON SITE. THE COORDINATION IS NECESSARY FOR THE ENGINEER TO SCHEDULE SITE INSPECTIONS. INSTALLATIONS PERFORMED WITHOUT INSPECTIONS BY THE ENGINEER MAY WARRANT COMPLETE REMOVAL AND REINSTALLATION AT THE CONTRACTOR'S SOLE EXPENSE.
- 16. THE CONTRACTOR IS REQUIRED TO MAINTAIN DETAILED AS—BUILT INFORMATION FOR ALL UTILITY INSTALLATIONS. AS—BUILT INFORMATION MUST INCLUDE MATERIAL LIST, PIPE DEPTH AND SWING TIE LOCATIONS (2 MINIMUM) FROM NEW PIPE TO BUILDING CORNERS. ALL PIPE BEND/ELBOW LOCATIONS SHALL BE DIMENSIONED. FINAL PAYMENT WILL NOT BE MADE UNTIL SUITABLE AS—BUILT DATA IS PROVIDED.
- 17. AS-BUILT AUTOCAD FILES AND HARD COPY PLANS SHALL BE PROVIDED UPON COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE FOR THIS INFORMATION. FINAL PAYMENT TO CONTRACTOR SHALL NOT BE PROVIDED UNTIL ACCEPTABLE AUTOCAD FILES OF THE AS-BUILTS ARE SUBMITTED AND APPROVED BY THE OWNER.

#### FLOOD ZONE NOTE

THE PROPOSED SITE IS LOCATED WITHIN FLOOD ZONE X, AREAS TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP, KENT COUNTY, RHODE ISLAND (ALL JURISDICTIONS), PANEL 129 OF 251, MAP NUMBER 44003C0129J, MAP REVISED OCTOBER 2, 2015.

#### PROPOSED PAVEMENT STRUCTURE

#### PARKING SPACES

1 1/2" BITUMINOUS CONCRETE SURFACE COURSE, CLASS I-1 2 1/2" BITUMINOUS CONCRETE BASE COURSE 12" GRAVEL BASE

#### STANDARD NOTES

- 1. ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CULVERTS, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 2. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED BY THE CONTRACTOR.
- 4. ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS.
- 5. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, 2" MULCH IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED.
- 6. CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- 8. NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING OPERATIONS.
- 10. ALL EMBANKMENTS AND TRENCH BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED.

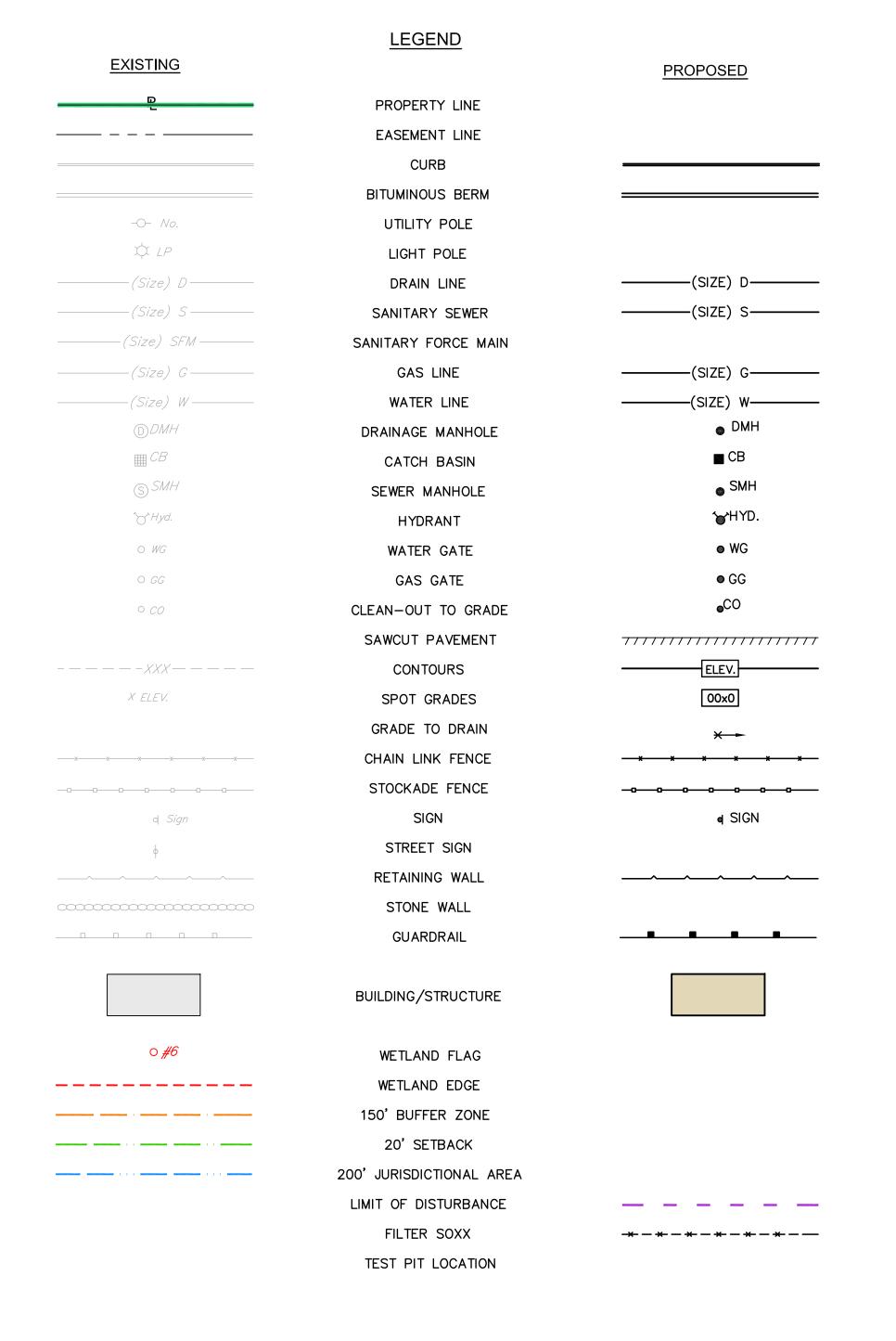
#### MAINTENANCE AND PROTECTION OF TRAFFIC NOTES

BROKEN DOWN AT THE END OF THE WORKDAY.

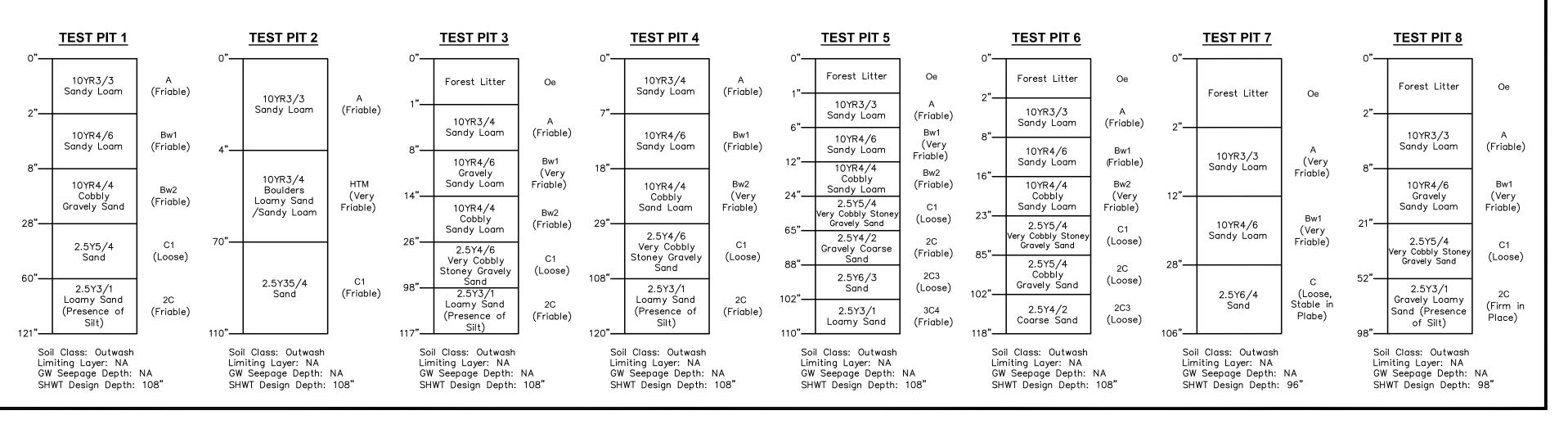
- 1. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
- 2. ALL SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE STATE D.O.T. STANDARD SPECIFICATIONS, LATEST
- 3. THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO
- 4. ADVANCE FLAGPERSON SIGNS SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.

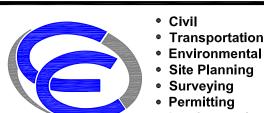
THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.

- 5. POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET—UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET—UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY
- 6. TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."
- 7. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR SHOULDERS.
- 8. TEMPORARY CONSTRUCTION SIGNS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC, AND SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER APPROPRIATE.
- 9. THE INTENDED VEHICLE PATHS THROUGH EACH WORK ZONE SHALL BE CLEARLY MARKED AT ALL TIMES.



SOIL EVALUATION DATA
SOIL EVALUATIONS WERE CONDUCTED BY BRIAN KING ON DECEMBER 21, 2022





Phone (401) 738-5660

• Landscape Architecture

Crossman Engineering

Phone (508) 695-1700

Rhode Island Massachusetts

151 Centerville Road Warwick, RI 02886 North Attleboro, MA 02763

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING.

KEY PLAN

PROPOSED

PLAT MAP 246
LOTS 247, 250, 251 and 257
ZONING DISTRICT:GB
GENERAL BUSINESS DISTRICT
181 CENTERVILLE ROAD
WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD SUITE 2100 BOSTON. MA 02135-1023

DRAWING TITLE:

GENERAL NOTES and LEGEND

DATE:	SCALE:	
MARCH 2023	NO SCALE	
DWG. NAME:		
2668-C01-	-NOTE-R1.dwg	

REVISIONS ∧		
NUMBER	REMARKS	DATE
1	UTILITIES	7/19/23

DRAWING NUMBER

SHEET: 2 OF: 18





Site Planning

SurveyingPermitting Landscape Architecture

#### Crossman Engineering

Rhode Island
151 Centerville Road
Warwick, RI 02886
Phone (401) 738-5660

Massachusetts
103 Commonwealth Avenue
North Attleboro, MA 02763
Phone (508) 695-1700

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING.

KEY PLAN

PROJECT TITLE:

#### PROPOSED CAR WASH and CAFE

PLAT MAP 246 LOTS 247, 250, 251 and 257 ZONING DISTRICT:GB **GENERAL BUSINESS DISTRICT** 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD SUITE 2100 BOSTON, MA 02135-1023

DRAWING TITLE:

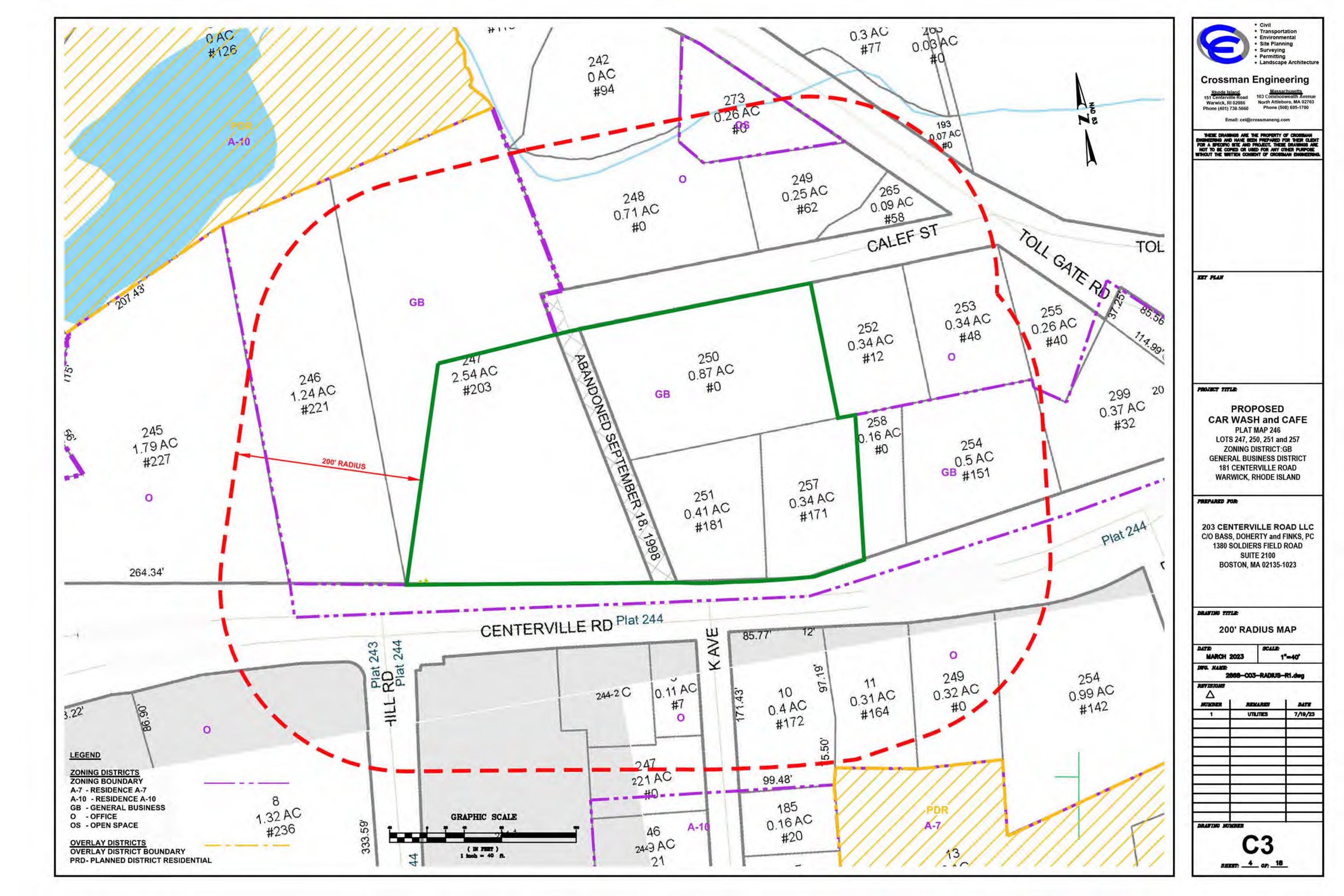
### **AERIAL MAP**

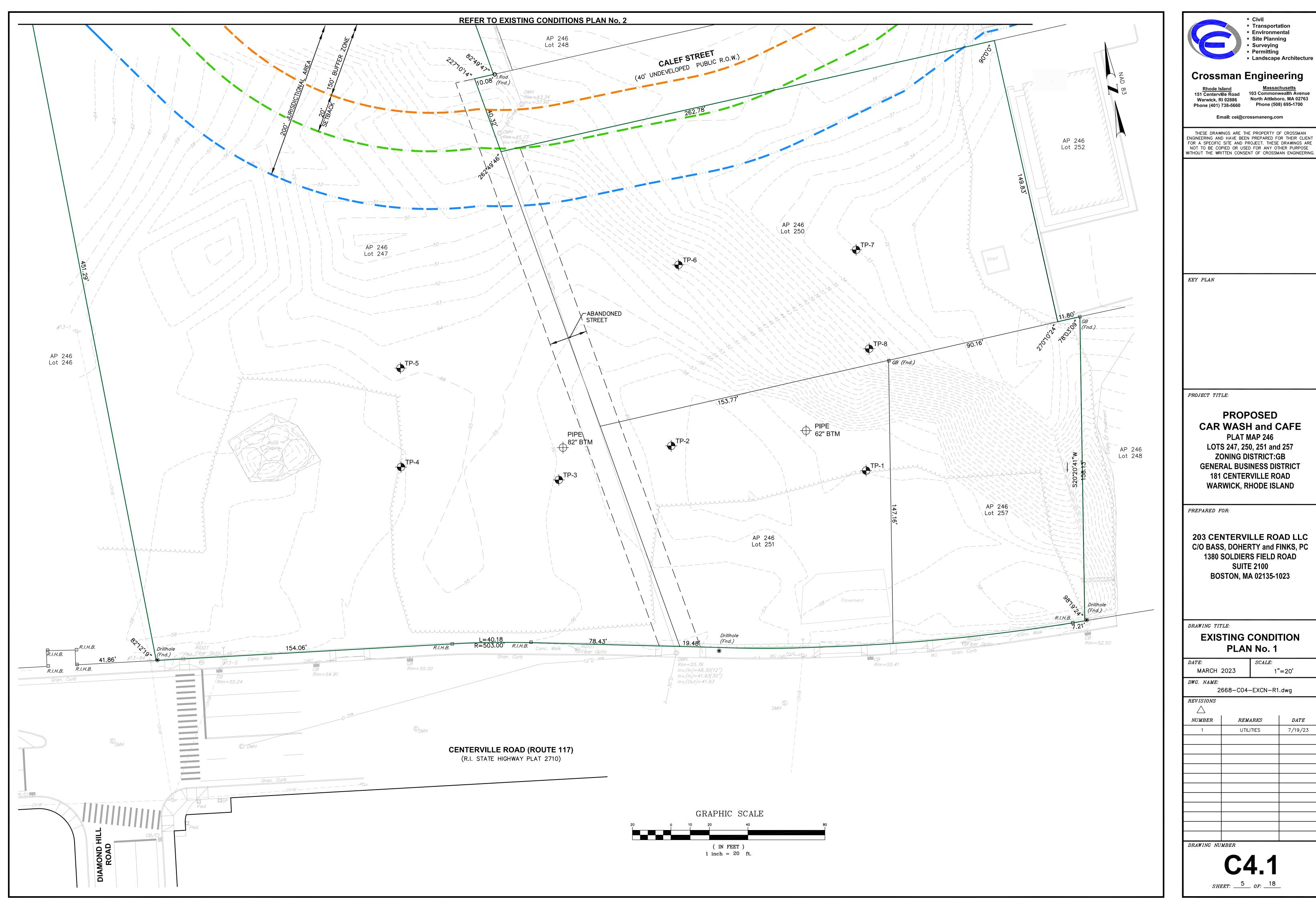
SCALE:

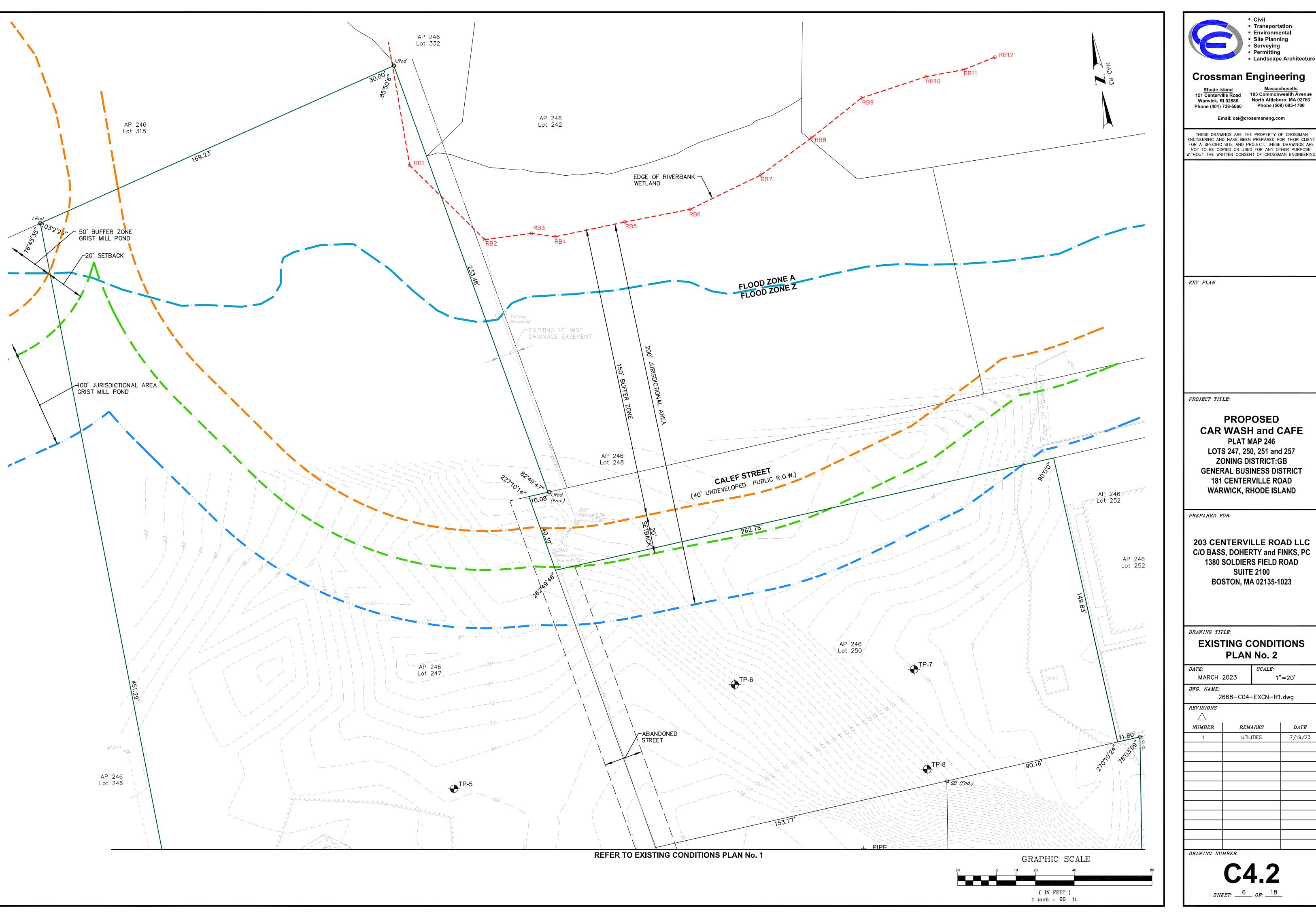
MARCH 2	023	1"=40'
DWG. NAME: 26	68-C02-AERIAL-	-R1.dwg
REVISIONS		
NUMBER	REMARKS	DATE
1	UTILITIES	7/19/23
		-

DRAWING NUMBER

SHEET: 3 OF: 18







Civil Transportation Environmental Site Planning

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING.

**PROPOSED** CAR WASH and CAFE

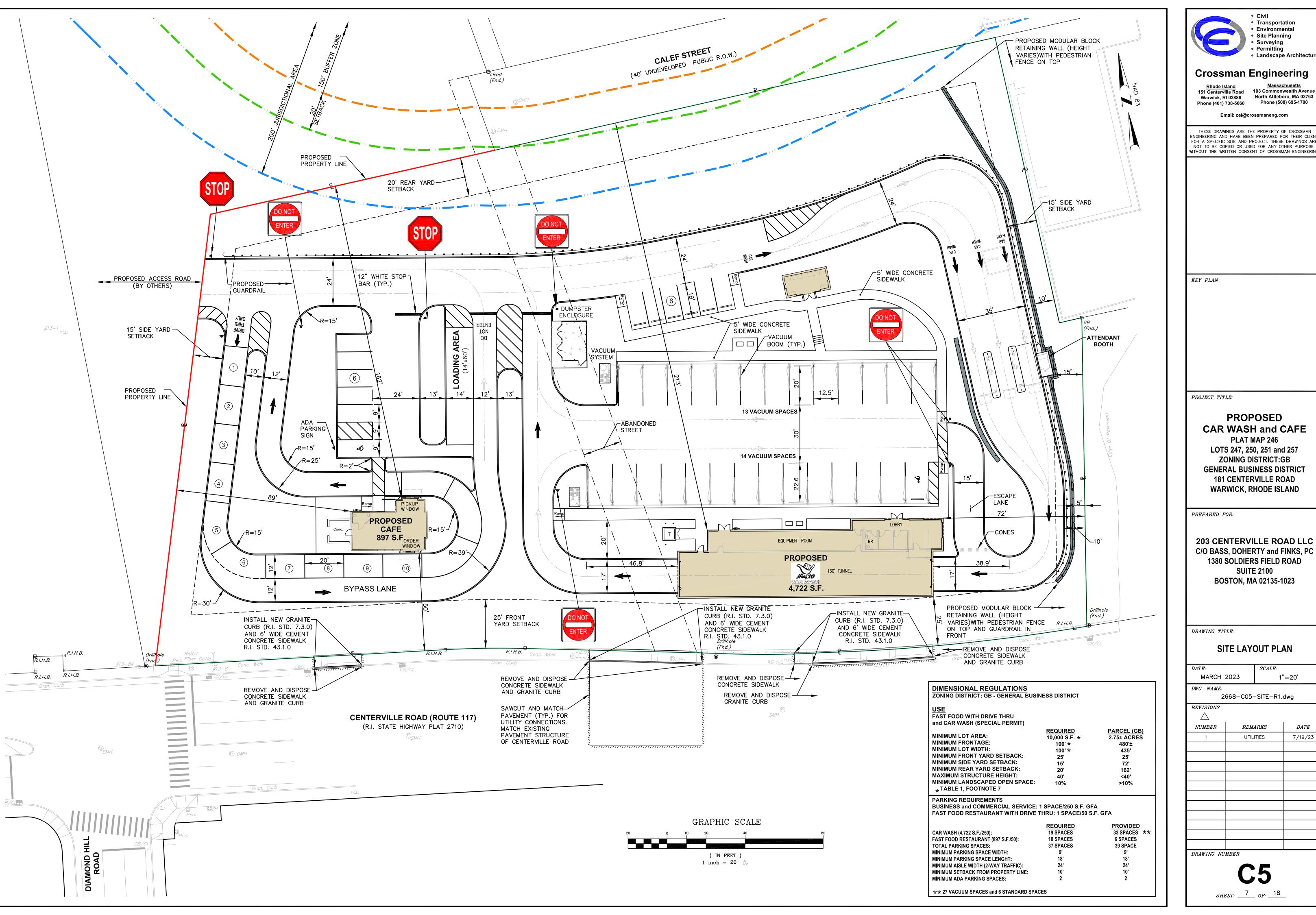
LOTS 247, 250, 251 and 257 **ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT** 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

#### **EXISTING CONDITIONS** PLAN No. 2

1"=20' 2668-C04-EXCN-R1.dwg

NUMBER	REMARKS	DATE
1	UTILITIES	7/19/23
•		



Surveying Permitting Landscape Architecture

#### Crossman Engineering

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING

#### **PROPOSED CAR WASH and CAFE**

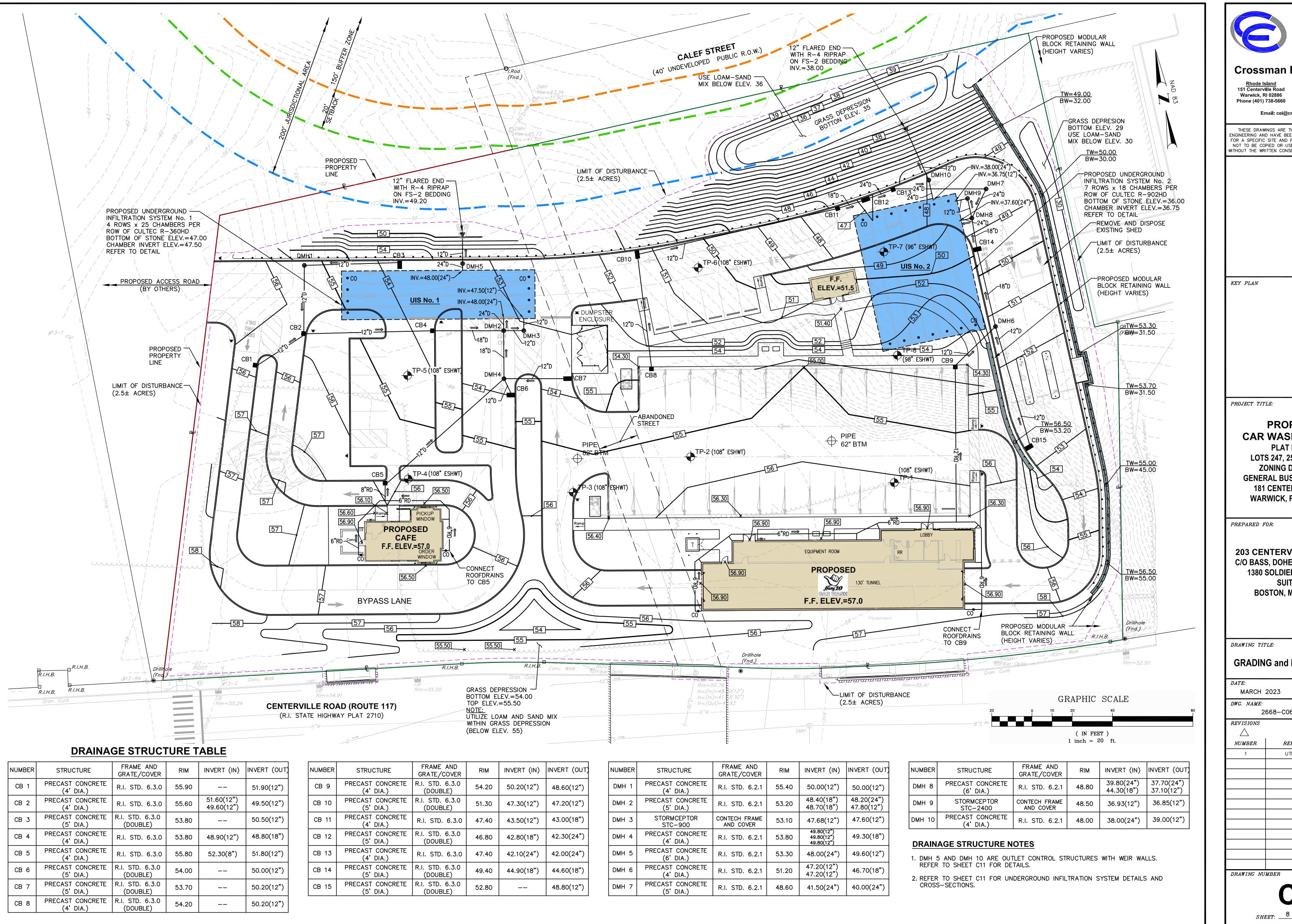
LOTS 247, 250, 251 and 257 **ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT** 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

#### SITE LAYOUT PLAN

1"=20' 2668-C05-SITE-R1.dwg

> REMARKSDATE7/19/23 UTILITIES



Civil Transportation Environmental Site Planning Surveying Permitting

Crossman Engineering

Rhode Island Massachusetts
151 Centerville Road 103 Commonwealth Avenue Warwick, RI 02886 North Attleboro, MA 02763 Phone (508) 695-1700

Landscape Architecture

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIEN' FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING

**PROPOSED CAR WASH and CAFE** PLAT MAP 246

LOTS 247, 250, 251 and 257 **ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT** 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

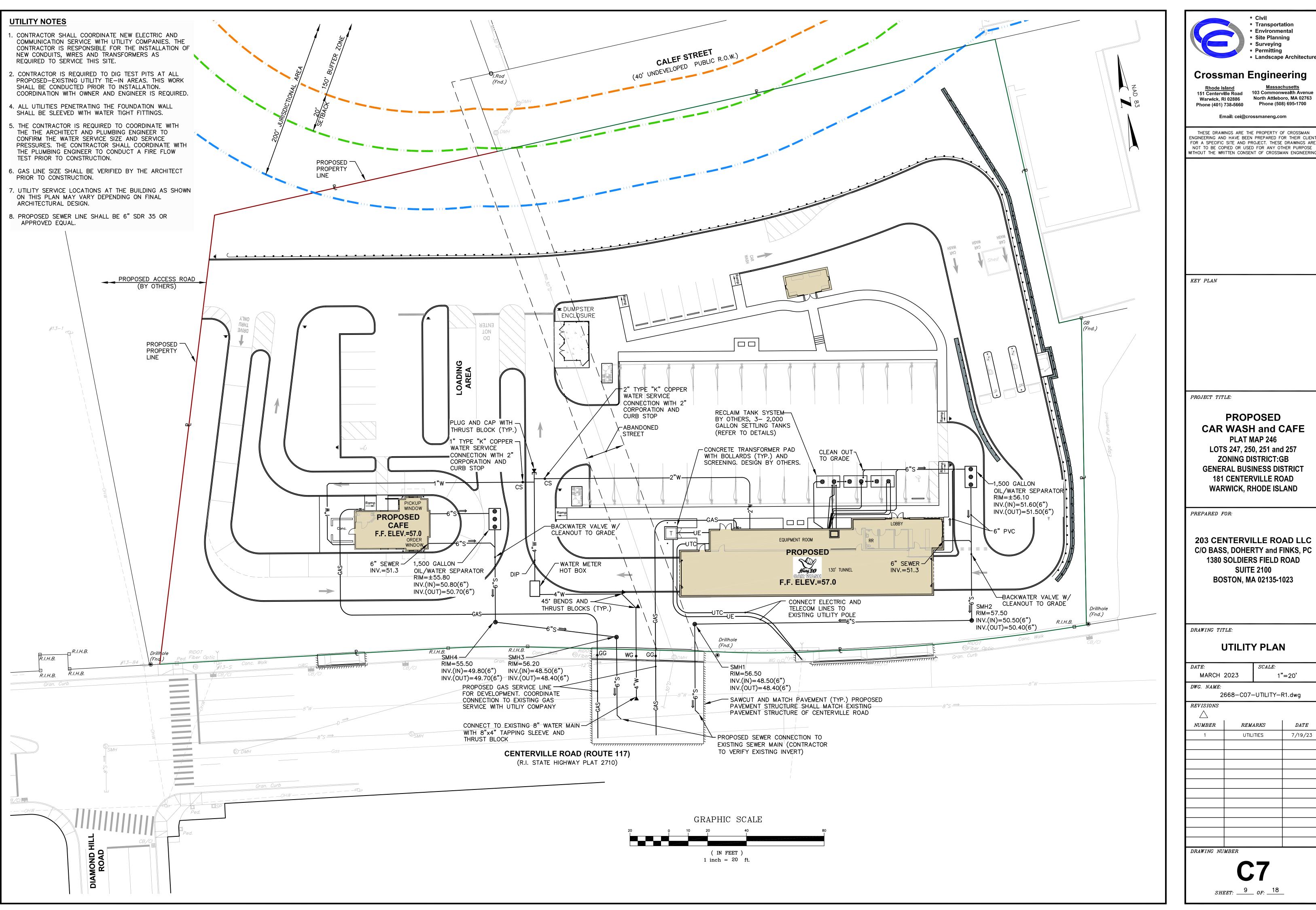
GRADING and DRAINAGE PLAN

1"=20' MARCH 2023 DWG. NAME:

2668-C06-GRADE-R1.dwg

UMBER	REMARKS	DATE
1	UTILITIES	7/19/23

DRAWING NUMBER



 Site Planning Surveying Permitting

**Crossman Engineering** 

Phone (508) 695-1700

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING

**PROPOSED CAR WASH and CAFE** PLAT MAP 246

LOTS 247, 250, 251 and 257 **ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT** 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

**UTILITY PLAN** 

1"=20'

DATE7/19/23 UTILITIES

SHEET: 9 OF: 18

#### **EROSION CONTROL AND SOIL STABILIZATION PROGRAM**

- . EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM, ADJACENT PROPERTY, AND ROADWAYS.
- 2. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH PROTECTIVE COVERS, SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE OWNER.
- 3. HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 3,000-4,000 LBS/ACRE.
- 4. STOCKPILES SHALL HAVE NO SLOPE STEEPER THAN 2:1 AND SHALL BE SURROUNDED BY FILTER SOXX, STAKED HAY BALES OR SILT FENCING.
- 5. STOCKPILES EXPOSED FOR EXCESSIVE PERIODS SHALL RECEIVE TEMPORARY TREATMENT CONSISTING OF HAY, STRAW OR FIBER MATTING.
- 6. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE AS NEEDED
- . ADDITIONAL HAY BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER, OWNER, MUNICIPAL REPRESENTATIVES OR LOCAL D.O.T.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL AT NO ADDITIONAL COST TO THE OWNER.
- 9. ALL CATCH BASINS ADJACENT TO THE CONSTRUCTION AREA SHALL BE PROTECTED BY
- 10. ALL PROPOSED CATCH BASINS SHALL BE PROTECTED BY STAKED HAY BALES, SILT FENCING OR SILT SACKS.
- 11. THE FILTREXX FILTER SOXX MAY BE INSTALLED ON THE EXISTING PAVEMENT /IMPERVIOUS AREAS WITH OUT STAKES. CONTRACTOR SHALL INSPECT DAILY, IF SOIL ÉROSION OR SEDIMENT IS OBSERVED IN THESE AREAS, THE CONTRACTOR SHALL RELOCATE OR INSTALL ADDITIONAL FILTREXX FILTER SOXX IN LOCATIONS THAT CAN BE STAKED. THIS WORK IS INCLUDED IN THE PROJECT SCOPE.
- 12. SILT FENCE OR STAKED HAYBALES MAY BE USED IN LIEU OF FILTREXX FILTER SOXX.
- 13. AN ALTERNATE COMPOST SOCK OR STRAW WATTLE PRODUCT MAY BE USED IN LIEU OF FILTREXX FILTER SOCK UPON APPROVAL OF THE ENGINEER.

#### **INSPECTION/MAINTENANCE NOTES**

SILT SACKS.

- . PRIOR TO COMMENCING GRUBBING OPERATIONS AND EARTHWORK, FILTERSOXX SHALL BE PLACED INSIDE SAWCUT EDGE AND ALONG THE DOWNGRADIENT LIMIT OF DISTURBANCE TO PREVENT SEDIMENT FROM ENTERING EXISTING ROADWAY DRAINAGE SYSTEM, AND ABUTTING PROPERTIES AND THE CONTRACTOR SHALL INSTALL DRIPLINE TREE PROTECTION DEVICES ALONG THE PROPOSED TREELINE/EXISTING TREES TO REMAIN.
- 2. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM.
- 3. ALL DISTURBED AREAS WHICH BECOME SUBJECT TO EROSIVE TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION — SUCH AS
- 4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.
- 5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT / REPLACE DAILY DURING CONSTRUCTION, FOLLOWING RAINFALL AND WEEKLY DURING NON CONSTRUCTION PERIODS.
- 6. ADDITIONAL FILTERSOXX OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- 7. THE LATEST VERSION OF THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE R.I. STATE CONSERVATION COMMITTEE, MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL AND FOR THE ENTIRE PROJECT DURATION, INCLUDING TEMPORARY SHUT—DOWN PERIODS, MUST MONITOR AND REPAIR, AS NEEDED, ALL SLOPES TO ENSURE A STABLE PRODUCT

#### **DUST CONTROL NOTES**

- ON AN AS-NEEDED BASIS OR AS DIRECTED BY THE TOWN, RIDEM OR OWNER. THE CONTRACTOR SHALL UTILIZE ONE OF THE FOLLOWING METHODS TO CONTROL DUST:
- A. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
  - B. CALCIUM CHLORIDE SHOULD BE EITHER LOOSE DRY GRANULES OR
  - FLAKE FINE ENOUGH TO FEED THROUGH A SPREADER AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.
- THE METHODS SHOULD BE REPEATED AS NEEDED, AND SPECIAL ATTENTION MUST BE GIVEN TO THE ACCESS DRIVES.

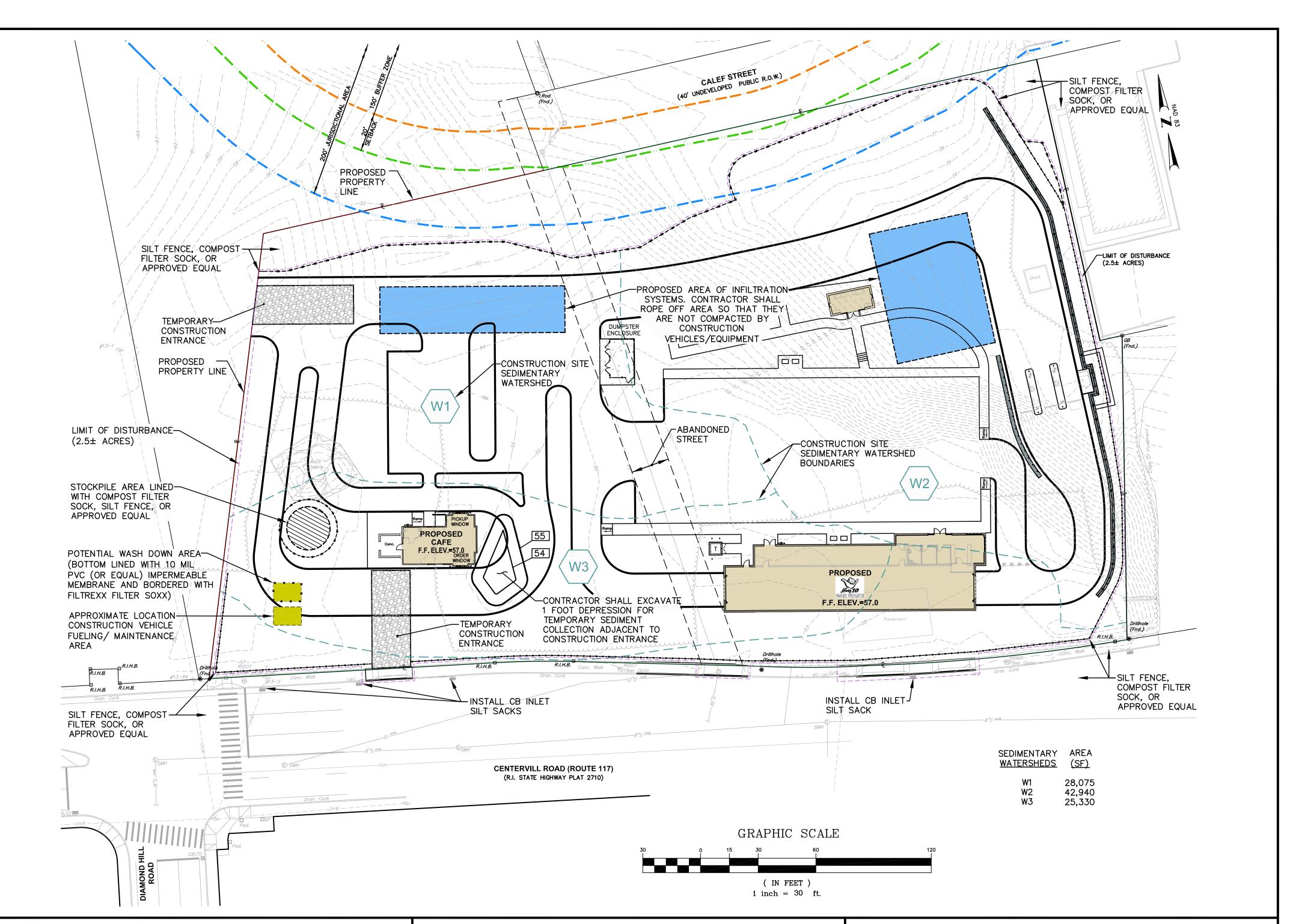
#### **GENERAL PROJECT WIDE NOTES**

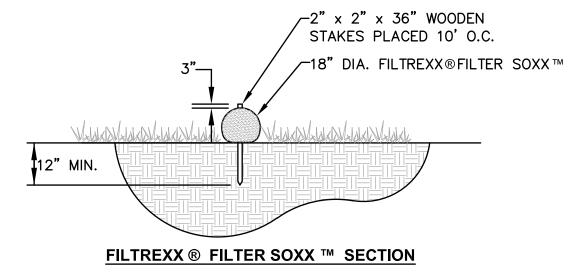
- CONTRACTOR SHALL OBTAIN A SOIL EROSION AND SEDIMENT CONTROL PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY WORK ONSITE; SOIL EROSION AND SEDIMENT CONTROL MEASURES MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION.
- 2. CONTRACTOR SHALL INSTALL TEMPORARY MEASURES SUCH AS; FIBER MATTING, CRUSHED STONE, HAY OR STRAW IN AREAS WHERE SLOPES OR STABILIZATION HAS FAILED.
- 3. IF SEDIMENT IS TRACKED OR ERODED INTO THE ROADWAY, THE CONTRACTOR WILL BE REQUIRED TO SWEEP DAILY AND TO INSTALL SILT SACK OR APPROVED EQUAL UNDER ADJACENT EXISTING CATCH BASIN GRATES. REMOVE AFTER CONSTRUCTION.
- 4. FILTER SOXX (OR SILT FENCE OR STAKED HAYBALES) SHALL BE INSTALLED AROUND THE PERIMETER OF THE AREA TO BE DISTURBED BY CONSTRUCTION. ADDITIONAL APPLICATIONS OF THESE CONTROLS MEASURES MAY BE REQUIRED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL INSPECT THE SITE AT A MINIMUM OF ONCE PER WEEK OR WITHIN 24 HOURS AFTER A STORM EVENT.
- 5. IF EROSION OR EROSIVE TENDENCIES ARE APPARENT ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO INSTALL ADDITIONAL CONSTRUCTION BMP'S SUCH AS SAND BAGS AS DIRECTED BY THE TOWN OR ENGINEER DURING CONSTRUCTION.
- 6. IF SEDIMENT OR DEBRIS IS TRACKED ONTO EXISTING PAVED AREAS ADJACENT TO THE CONSTRUCTION AREA, THE CONTRACTOR IS REQUIRED TO SWEEP THE PAVEMENT ON A DAILY BASIS. THE AREA SHALL BE INSPECTED DAILY.
- 7. THE CONTRACTOR IS RESPONSIBLE TO KEEP THE SITE CLEAN OF TRASH. RECOMMENDED DAILY PATROL OF THE CONSTRUCTION SHOULD BE CONDUCTED TO PICK-UP TRASH. THE OPERATOR SHALL REQUIRE THE CONTRACTOR TO HAVE PORTABLE SANITARY FACILITIES OF SITE. ROUTINE CLEANING AND WASTE DISPOSAL OF THESE PORTABLE SANITARY FACILITIES

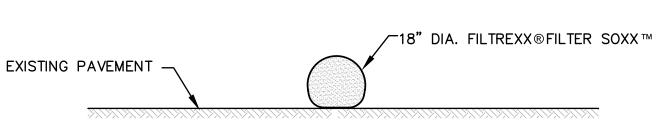
#### **FILTREXX SOXX NOTE**

IS REQUIRED.

CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE FILTREXX PRODUCTS AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR TO PLACEMENT.



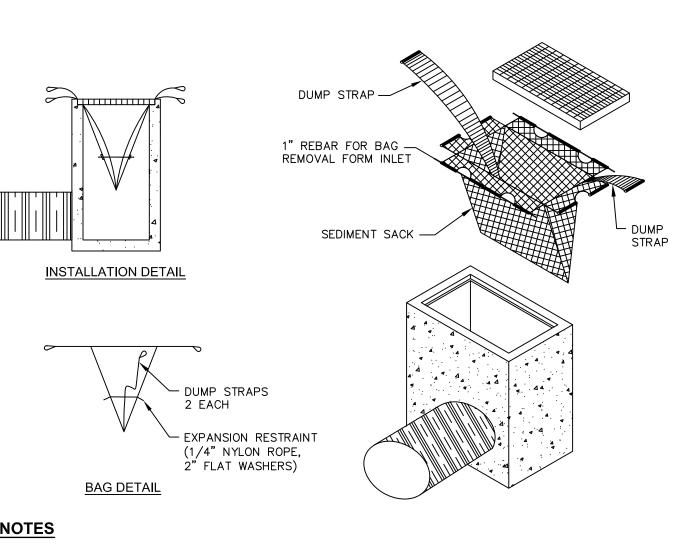




#### FILTREXX ® FILTER SOXX ™ PAVEMENT OPTION

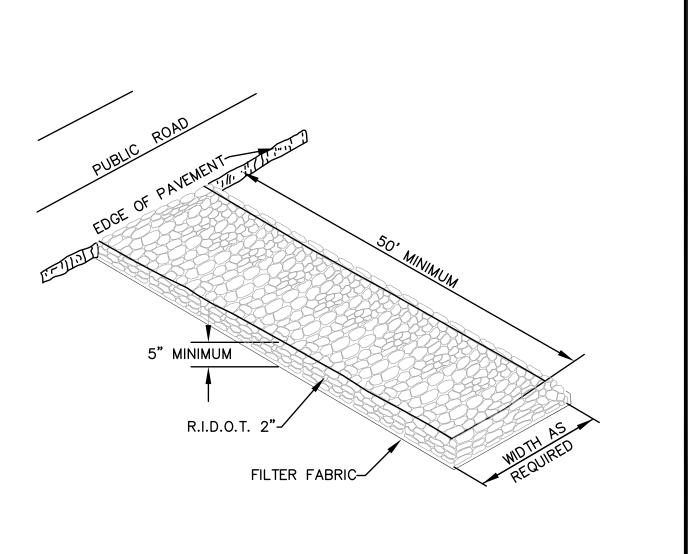
- 1. FILTREXX FILTER SOXX MAY BE USED IN LIEU OF SILT FENCE.
- 2. CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE FILTREXX PRODUCTS AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR
- 3. ALL MATERIAL SHALL MEET FILTREXX SPECIFICATIONS.
- 4. COMPOST MATERIAL TO BE DISPERSED ON SITE AS DETERMINED BY ENGINEER.

FILTREXX® FILTER SOXX ™ DETAIL NOT TO SCALE



- . INSTALL SILT SACK AT CATCH BASINS IN VICINITY OF CONSTRUCTION.
- 2. CONTRACTOR SHALL SUBMIT SILT SACK PRODUCT TO ENGINEER FOR APPROVAL.

TYPICAL SILT SACK DETAIL NOT TO SCALE



CONSTRUCTION ENTRANCE DETAIL NOT TO SCALE



Surveying Permitting Landscape Architectur

 Transportation • Environmental

Site Planning

Civil

#### **Crossman Engineering**

Warwick, RI 02886 Phone (401) 738-5660

North Attleboro, MA 02763 Phone (508) 695-1700

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS AF NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERIN

KEY PLAN

PROJECT TITLE:

**PROPOSED CAR WASH and CAFE** PLAT MAP 246

LOTS 247, 250, 251 and 257 ZONING DISTRICT:GB **GENERAL BUSINESS DISTRICT** 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

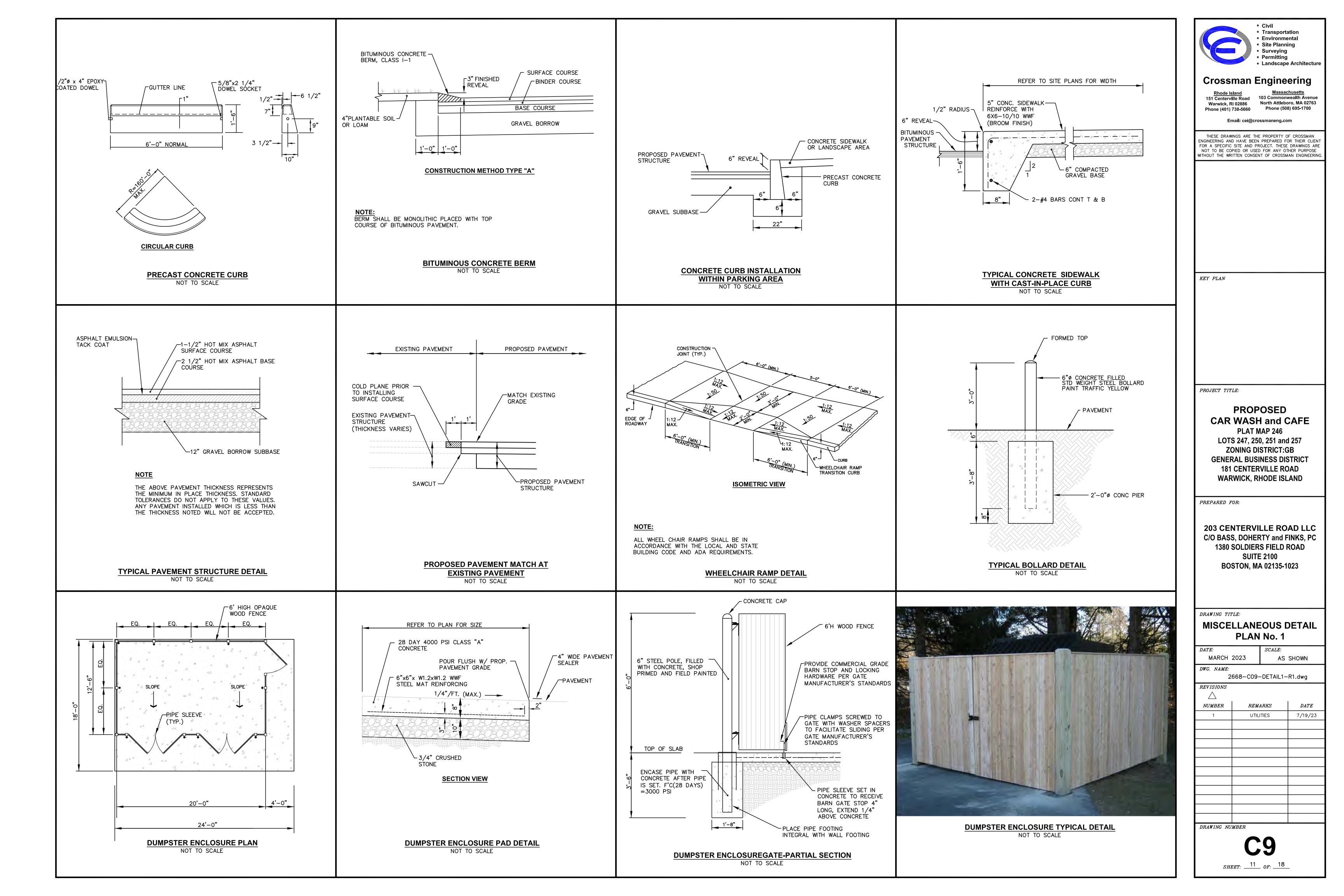
DRAWING TITLE:

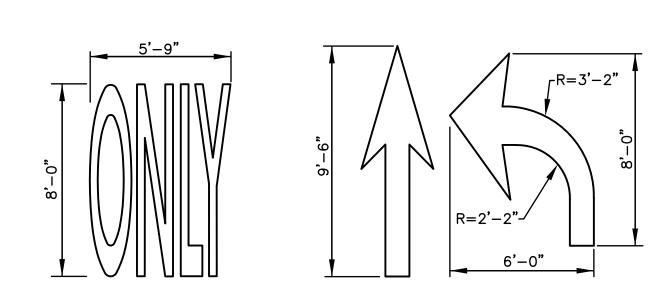
MARCH 2023

#### SOIL EROSION CONTROL PLAN

G. NAME:		
2	668-C08-S0IL-R1.	dwg
VISIONS		
UMBER	REMARKS	DATE
1	UTILITIES	7/19/23
AWING NU	MBER	

1"=30'





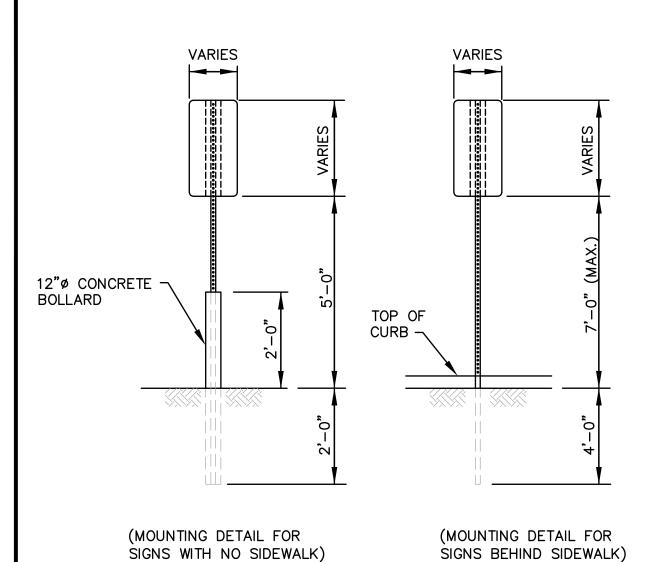
#### NOTES

- 1. THE LONGITUDINAL SPACE BETWEEN LINES OR SYMBOL MESSAGES, INCLUDING ARROWS, SHOULD BE AT LEAST FOUR TIMES THE HEIGHT OF THE CHARACTER FOR LOW SPEED ROADS BUT NOT MORE THAN TEN TIMES THE HEIGHT OF THE CHARACTER UNDER ANY CONDITIONS.
- 2. THE SPACING OF THE PAVEMENT MARKINGS WILL BE AS SHOWN ON THE PLAN AND AS PER THE MUTCD.
- 3. SYMBOLS AND WORDS SHALL MEET THE REQUIREMENTS OF THE FHWA "STANDARD ALPHABET AND SYMBOLS FOR HIGHWAY PAVEMENT MARKINGS.

CURB -

PAVEMENT -

#### PAVEMENT MARKING DETAIL NOT TO SCALE

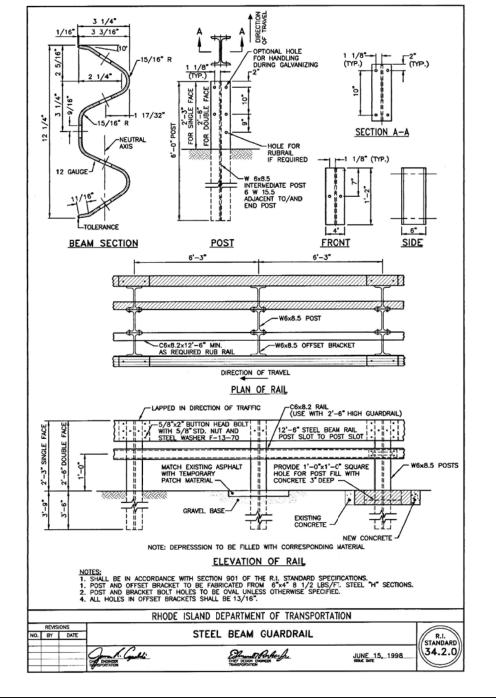


#### SIGN MOUNTING DETAIL NOT TO SCALE

#### HANDHOLE WITH BOND ~ -BASE COVER ~CHAMFER 24" DIAMETER -CONCRETE BASE ANCHOR BOLTS. SIZE AND QTY. -GRADE TO MATCH POLE PROVIDED -BOLT CIRCLE TO MATCH POLE GALVANIZED RIGID~ PROVIDED. STEEL CONDUIT VC CONDUIT -POLE BASE AS REQUIRED STEEL TO PVO ADAPTER PLAN VIEW NOT TO SCALE 4#4 RODS --1/2" x 10'-0" LONG COPPERWELD GROUND ROD.

TYPICAL POLE BASE DETAIL NOT TO SCALE

#### /6' HIGH PEDESTRIAN FENCE DETAIL IS A VISUAL DEPICTION, -GUARDRAIL FINAL DESIGN BY OTHERS. CAP WITH PRECAST HOLES -ROADWAY OR PARKING LOT 1" THICK BOND MOMENT SLAB **BREAKER** MODULAR BLOCK RETAINING WALL, DESIGN BY OTHERS

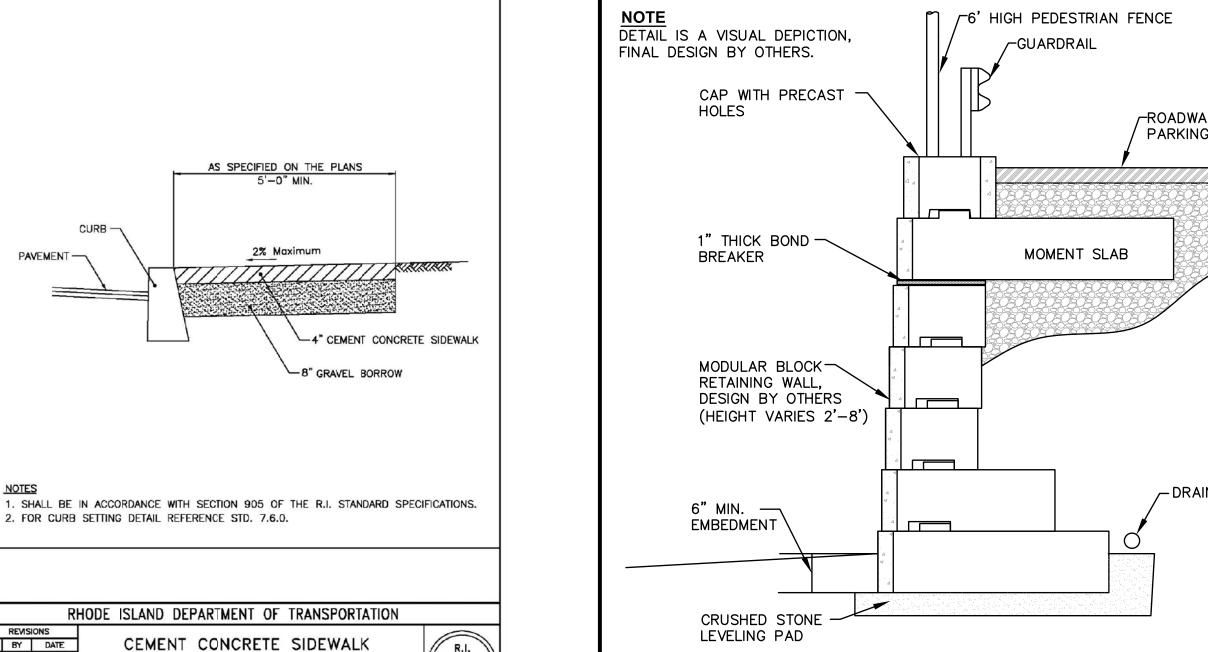


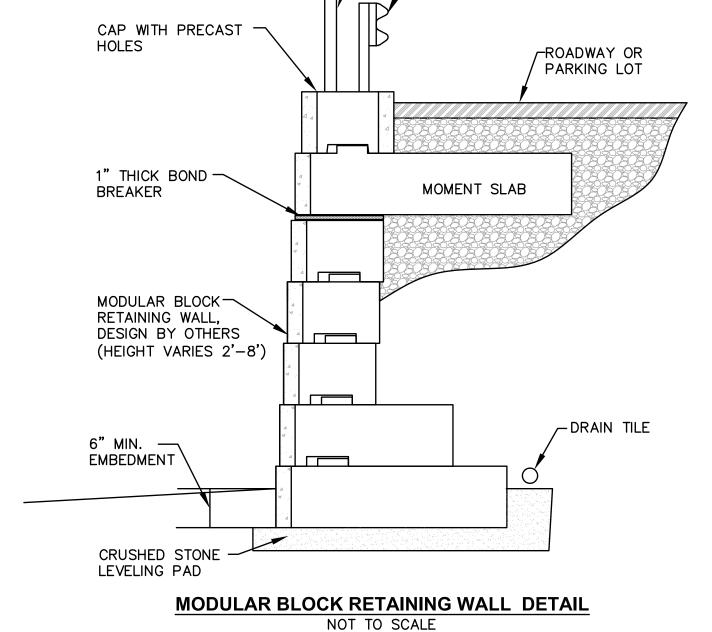
#### **DRAINAGE NOTES**

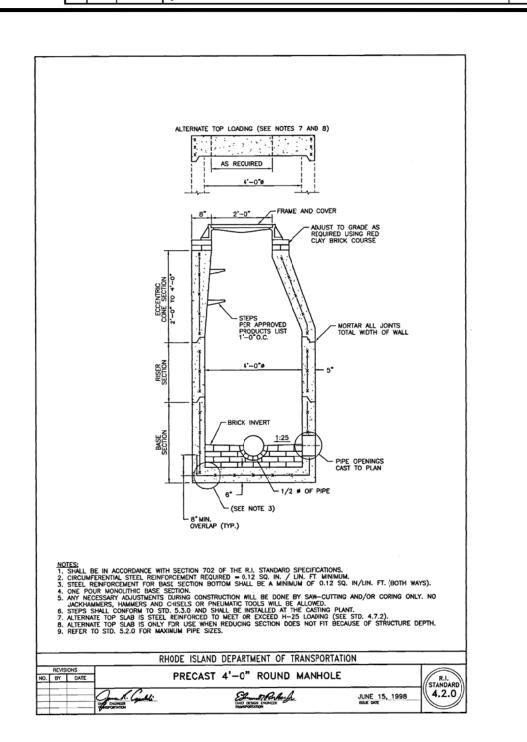
- 1. CONTRACTOR TO VERIFY THAT ALL STRUCTURES ARE COMPATIBLE WITH FRAME AND GRATE/COVER.
- 2. CONTRACTOR IS RESPONSIBLE TO PROVIDE SHOP DRAWINGS AND SPECIFICATIONS FOR ALL DRAINAGE RELATED ITEMS FOR REVIEW AND APPROVAL BY THE ENGINEER. PRIOR TO ORDERING. CONCRETE MANUFACTURER SHALL REVIEW RIM TO TOP OF PIPE ELEVATIONS AND PROVIDE SPECIFIC DETAILS.
- 3. ALL STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
- 4. ALL CATCH BASINS SHALL BE PRECAST CONCRETE WATER TIGHT STRUCTURES (NO WEEP HOLES) AND SHALL HAVE A 4' SUMP.
- 5. CATCH BASINS SHALL BE RI STD. 4.4.0- PRECAST (DIAMETER AS NOTED IN TABLE) ROUND CATCH BASIN WITH RI STD. 6.3.0-SQUARE FRAME AND GRATE. MANHOLES SHALL BE RI STD. 4.2.0-PRECAST 4'-0" ROUND MANHOLE WITH RI STD. 6.2.1-HEAVY DUTY ROUND FRAME AND COVER.
- 6. UNLESS OTHERWISE NOTED, ALL SOLID DRAINAGE PIPE SHALL BE ADS N-12 HDPE OR APPROVED EQUAL. PIPE BEDDING SHALL BE IN CRUSHED STONE OR GRAVEL BORROW COMPACTED TO 95% DRY DENSITY (MODIFIED PROCTOR METHOD). ADS PIPE SHALL BE INSTALLED ACCORDING TO MANUFACTURERS' REQUIREMENTS. PIPES SHALL BE INSTALLED WITH CLAY TRENCH DAMS EVERY 50' (MINIMUM 1 PER PIPE).
- 7. ALL ROOF DRAINS SHALL BE INSTALLED AT A 1.0% MINIMUM SLOPE.
- 8. CONTRACTOR MAY NEED TO RELOCATE PIPE TO AVOID CONFLICTS WITH EXISTING UTILITIES. COORDINATE RELOCATION WITH ENGINEER. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR DAMAGE TO EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE TO INCLUDE ALL WORK NECESSARY TO INSTALL THIS PIPE.
- 9. THE CONTRACTOR SHALL PROVIDE AS-BUILT PLANS OF THE DRAINAGE SYSTEM (PIPE INVERTS, STRUCTURE LOCATIONS AND GRADES.)

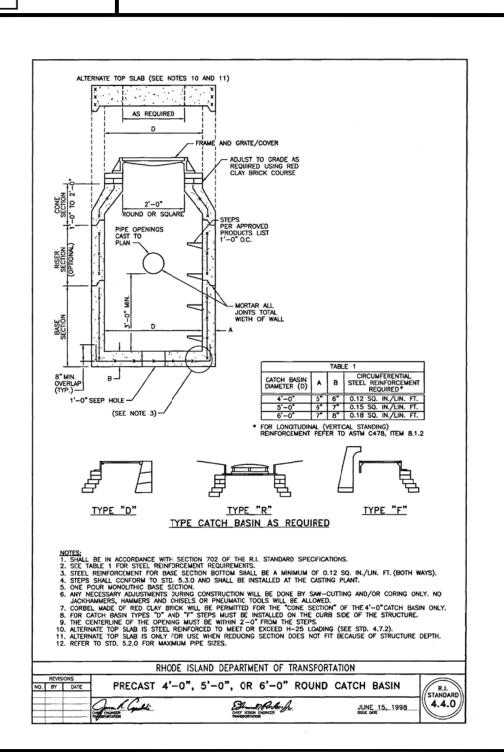
#### **INFILTRATION SYSTEM CONSTRUCTION NOTE**

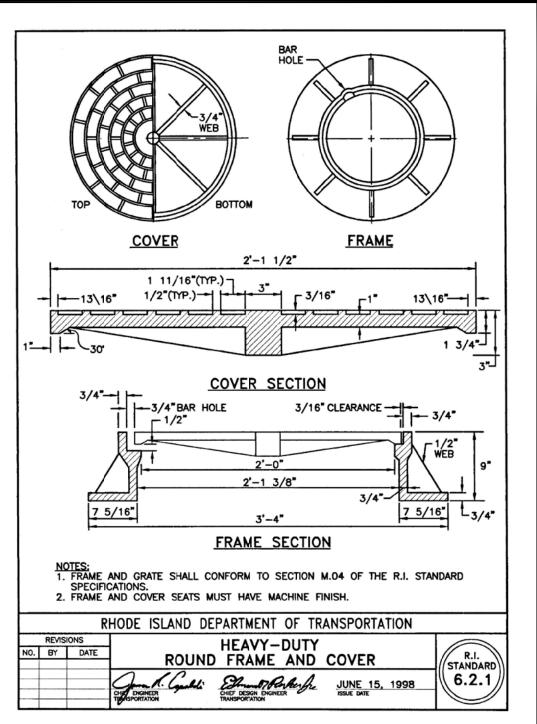
- 1. WITHIN THE INFILTRATION SYSTEM, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SUBSOIL AREAS (A AND B HORIZONS) AND ANY EXISTING SOILS THAT YIELD A PERMEABILITY RATE <8.27 INCHES/HOUR. CONTRACTOR SHALL COORDINATE A BOTTOM BED INSPECTION WITH OWNER AND ENGINEER. IF NECESSARY THE AREA SHALL BE PREPARED WITH SAND FILL SOIL MEETING THE MEDIA REQUIREMENTS OF SAND FILTERS, AS DESCRIBED IN THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, LATEST EDITION. THE DEPTH OF EXISTING SOIL REMOVAL SHALL BE VERIFIED BY THE ENGINEER. PLACEMENT OF THE SAND FILL (ASTM C-33 SAND), SHALL BE USED TO BRING THE BOTTOM OF BASIN TO THE DESIGN ELEVATIONS.
- 2. INFILTRATION SYSTEM CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. LATEST EDITION. AFTER CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE FINAL INSPECTIONS WITH THE OWNER.
- 3. THE CONTRACTOR IS REQUIRED TO SUBMIT A LIST OF MATERIALS, GRADATIONS AND THE NAME AND ADDRESS OF THE SUPPLIERS TO THE ENGINEER FOR APPROVAL PRIOR TO BRINGING MATERIAL ON SITE. MATERIAL CERTIFICATIONS SHALL ALSO BE REQUIRED FOR REVIEW AND APPROVAL.
- 4. THE CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE ABOVE REFERENCED MANUAL. THE MANUAL CAN BE FOUND AT: http://www.dem.ri.gov/pubs/regs/regs/water/swmanual15.pdf
- 5. GREAT CARE MUST BE TAKEN TO PREVENT THE INFILTRATION AREA FROM COMPACTION; BY MARKING OFF THE INFILTRATION UNDERGROUND SYSTEM LOCATION BEFORE THE START OF CONSTRUCTION, AND BY CONNECTING UPSTREAM DRAINAGE AREAS ONLY AFTER CONSTRUCTION IS COMPLETE AND THE CONTRIBUTING AREA IS STABILIZED.
- 6. IF LARGE ROCKS OR BOULDERS ARE FOUND WITHIN 36" BELOW THE INFILTRATION SYSTEMS, OR WITHIN A 10' PERIMETER AROUND SYSTEM, THE CONTRACTOR SHALL REMOVE THE ROCKS/BOULDERS AND REPLACE WILL GRAVEL BORROW. CONTRACTOR SHALL COORDINATE WITH ENGINEER.
- 6. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR THE MATERIALS TO BE USED IN THE UNDERGROUND INFILTRATION SYSTEMS TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SHOP DRAWINGS MUST VERIFY THAT THE PIPES CAN SUPPORT H-20 LOADING WITH THE SYSTEM SPECIFIC COVER.
- 7. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH A CULTEC REPRESENTATIVE FOR INSTALLATION SPECIFICATIONS AND

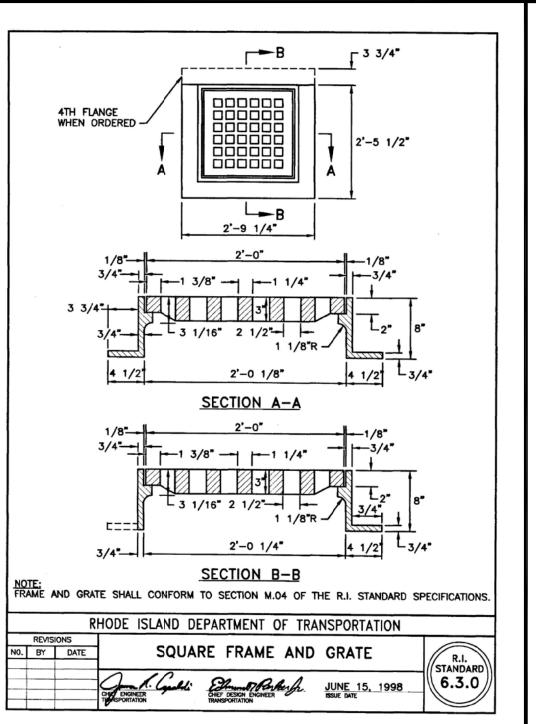


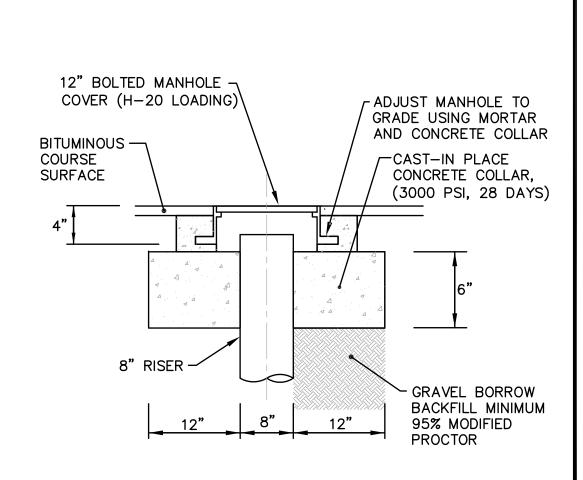












CONCRETE COLLAR IS NOT REQUIRED IN LANDSCAPE AREAS.

**CLEAN-OUT DETAIL** NOT TO SCALE

Transportation

#### **Crossman Engineering**

Civil

Rhode Island
151 Centerville Road Warwick, RI 02886 Phone (401) 738-5660

103 Commonwealth Avenue North Attleboro, MA 02763 Phone (508) 695-1700

 Environmental Site Planning

Landscape Architecture

Surveying

Permitting

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING

KEY PLAN

PROJECT TITLE:

#### **PROPOSED CAR WASH and CAFE**

PLAT MAP 246 LOTS 247, 250, 251 and 257 ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

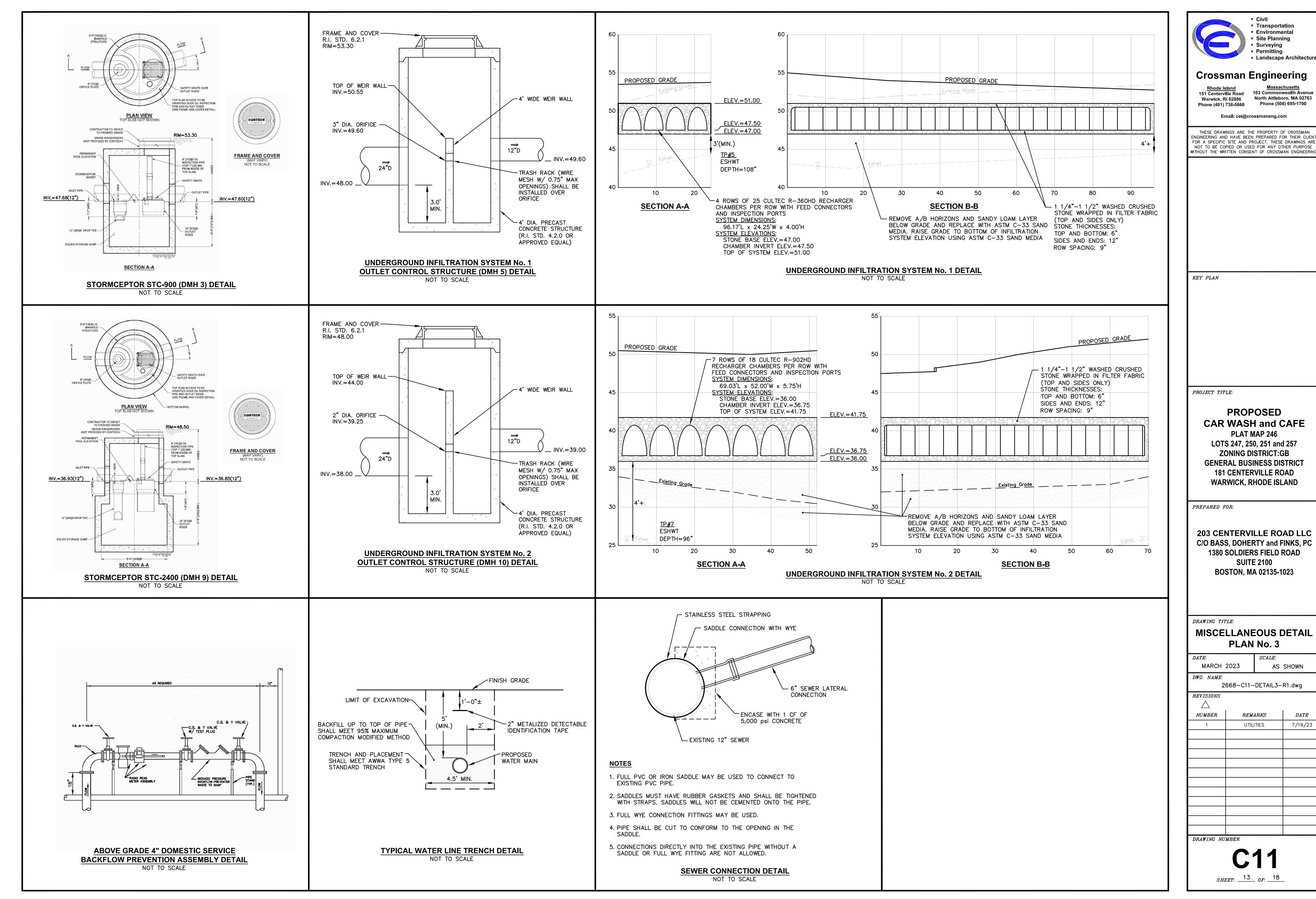
DRAWING TITLE:

MARCH 2023

#### **MISCELLANEOUS DETAIL** PLAN No. 2

AS SHOWN

2668-C10-DETAIL2-R1.dwg REVISIONS NUMBERREMARKS DATEUTILITIES 7/19/23

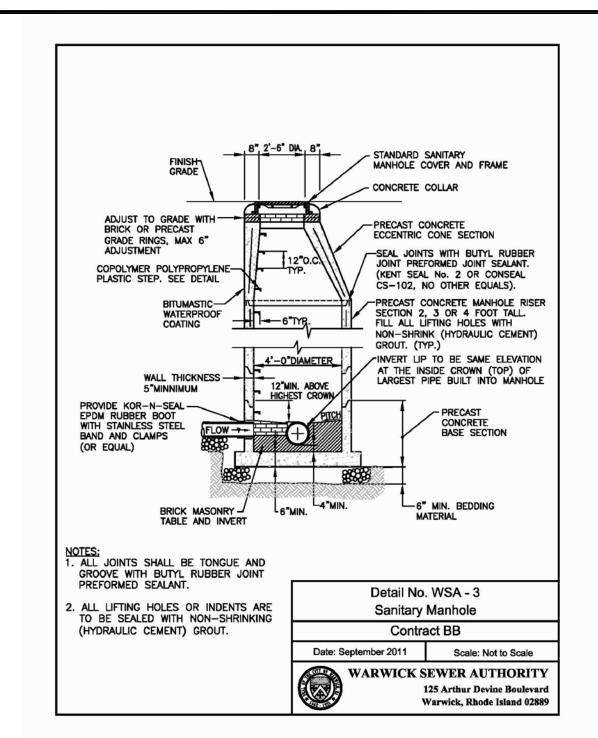


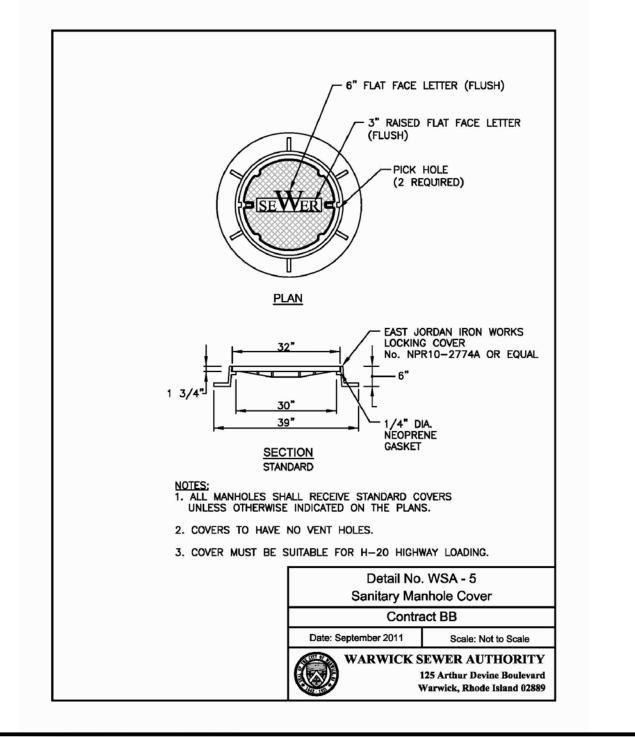
#### **GENERAL SEWER NOTES**

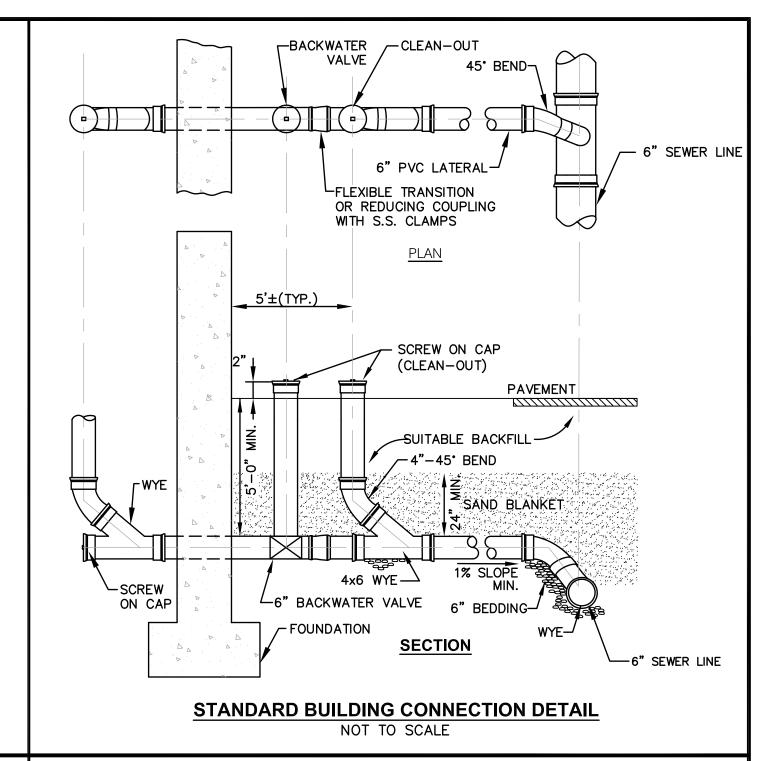
- INSTALLATION OF THE SEWERAGE FACILITIES SHALL BE IN ACCORDANCE WITH THE WARWICK SEWER AUTHORITY SPECIFICATIONS AND REQUIREMENTS.
- . PRIOR TO RECEIVING AUTHORIZATION TO CONSTRUCT, ALL MATERIALS SHALL MEET THE STANDARDS AND RECEIVE THE WRITTEN APPROVAL, BASED ON MANUFACTURER'S DRAWINGS AND OTHER DATA, FROM THE WARWICK SEWER AUTHORITY.
- 3. ALL SEWERAGE FACILITIES SHALL MEET TESTING AND CLEANING REQUIREMENTS PRIOR TO ACCEPTANCE.
- 4. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE AS—BUILT LOCATIONS PRIOR TO PIPE BACKFILL. AS-BUILT DRAWINGS SHALL BE FURNISHED AS A CONDITION FOR ACCEPTANCE OF THE NEW SEWERAGE FACILITIES. PLANS SHALL INCLUDE LOCATION OF WYES.
- 5. NO FLOW WILL BE ACCEPTED UNTIL ALL ABOVE STEPS ARE COMPLETED AND COMPLETION CERTIFICATE IS ISSUED.
- . AFTER THE CONTRACTOR HAS "STAKED OUT" THE FACILITIES TO BE CONSTRUCTED AND HAS THE APPROVED MATERIALS ON THE JOB, THE WARWICK SEWER AUTHORITY SHALL BE NOTIFIED IN ADVANCE OF CONSTRUCTION IN ORDER FOR THEM TO ARRANGE FOR THEIR INSPECTOR. THE NOTIFICATION MUST MEET WARWICK SEWER AUTHORITY REQUIREMENTS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED PLANS AND MATERIALS, STANDARDS AND SPECIAL DETAILS, AND STANDARD SPECIFICATIONS, ANY WORK NOT MEETING THE APPROVED STANDARDS SHALL BE IMMEDIATELY REMOVED AND REPLACED AT THE CONTRACTOR'S
- 8. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES FOR CONSTRUCTION WITHIN THE LIMITS OF WORK AS SHOWN ON THE DRAWINGS.
- 9. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER. ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE LOAMED AND SEEDED.
- 10. LOCATION AND DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES AND NOTIFY THE APPROPRIATE UTILITY AUTHORITIES INCLUDING "DIG-SAFE" PRIOR TO STARTING WORK. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE COST OF REPAIRS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 11. RELATION TO WATER LINES:
- A. HORIZONTAL SEPARATION: WHENEVER POSSIBLE, SEWERS SHOULD BE LAID AT A MINIMUM OF 10 FEET (3.0 m), HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER LINE. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, A SEWER MAY BE LAID CLOSER THAN 10 FEET TO A WATER LINE IF:
- 1. IT IS LAID IN A SEPARATE TRENCH, OR IF
- 2. IT IS LAID IN THE SAME TRENCH WITH THE WATER LINE LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND IF
- 3. IN EITHER CASE THE ELEVATION OF THE TOP (CROWN) OF THE SEWER IS AT LEAST 18 INCHES (46 cm) BELOW THE BOTTOM (INVERT) OF THE WATER LINE.
- B. VERTICAL SEPARATION: WHENEVER A SEWER MUST CROSS UNDER WATER LINES, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES (46 cm) BELOW THE BOTTOM OF THE WATER LINE. WHEN THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER LINE SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR RECONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET (3.0 m) ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER LINE SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.
- C. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL AND/OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER LINE AND SEWER SHALL BE CONSTRUCTED OF MECHANICAL-JOINT CEMENT LINED DUCTILE IRON PIPE OR OTHER EQUIVALENT BASED ON WATER TIGHTNESS AND STRUCTURAL SOUNDNESS. BOTH PIPES SHALL BE PRESSURE TESTED BY AN APPROVED METHOD TO ASSURE WATER TIGHTNESS.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEWATERING REQUIRED IN THE SEWER INSTALLATION.
- 13. THE PROPOSED GRAVITY SANITARY SEWER PIPE SHALL BE PVC ASTM 3034 SDR 35, UNLESS OTHERWISE SHOWN ON PLANS. PIPE SIZE TO MATCH UTILITY PLAN.
- 14. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE ELEVATION OF EXISTING SEWER LINE PRIOR TO INSTALLATION.

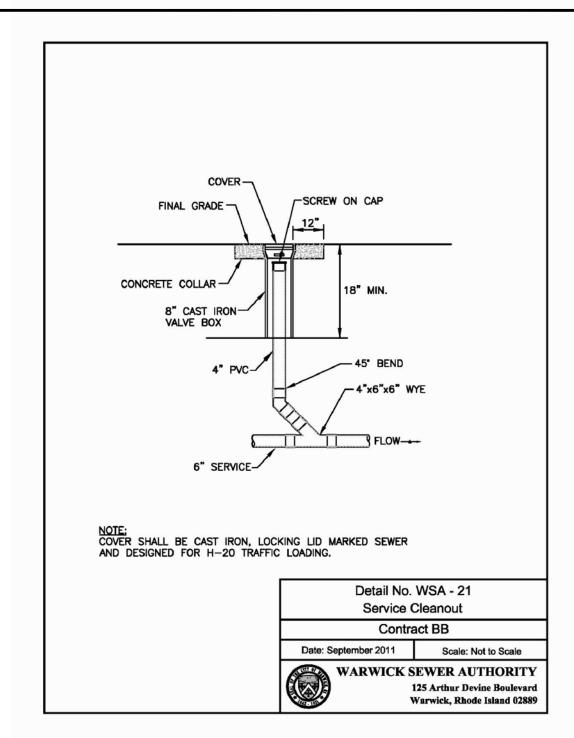
#### **SEWER TRENCH NOTES**

- MINIMUM WIDTH (W) OF TRENCH IS EQUAL TO THE INSIDE DIAMETER OF THE PIPE PLUS 12" EACH SIDE.
- 2. SOIL UNDER CRUSHED STONE FOUNDATION SHALL BE UNDISTURBED AND COMPACTED MATERIAL WITH SEVERAL PASSES OF A VIBRATORY PLATE COMPACTOR TO ATTAIN 95% MAX. DENSITY (MOD. METHOD).
- 3. CRUSHED STONE FOUNDATION 3/4" MAXIMUM SIZE, SHALL BE PLACED 6" UNDER THE PIPE AND UP TO THE PIPE LAID THEREON, CRUSHED STONE PULLED AGAINST THE PIPE SIDES TO FIRMLY HOLD THE PIPE IN PLACE.
- 4. CRUSHED STONE HAUNCHING 3/4" MAXIMUM SIZE SHALL BE BROUGHT LEVEL TO THE TOP OF THE PIPE AND OUT TO THE TRENCH WALL AT THIS ELEVATION FOR ALL PIPE.

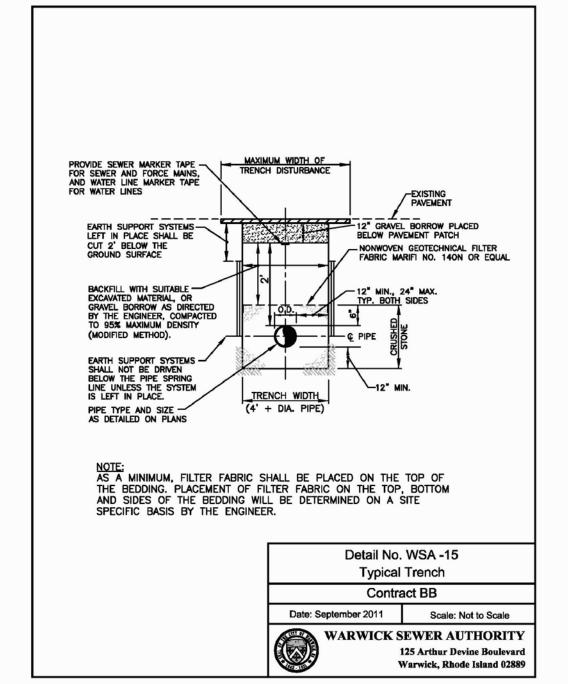


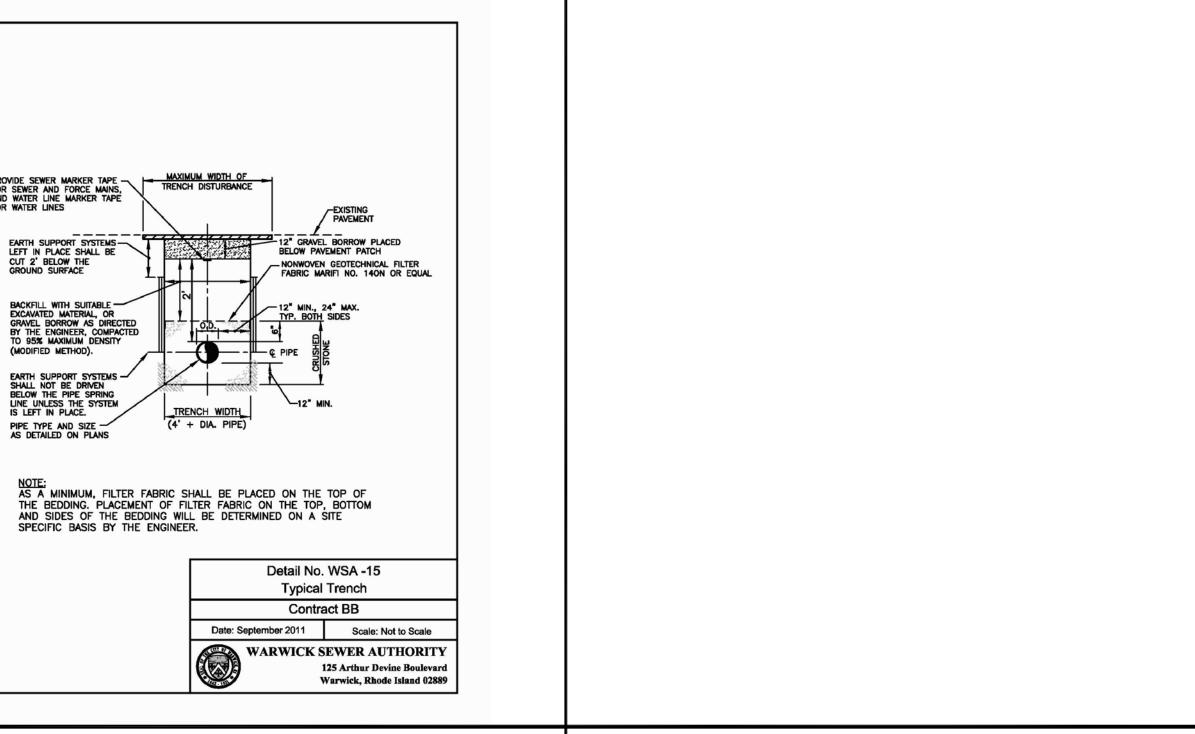






NOT TO SCALE







Crossman Engineering

103 Commonwealth Avenue North Attleboro, MA 02763 Warwick, RI 02886 Phone (401) 738-5660 Phone (508) 695-1700

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIEN' FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING

KEY PLAN

PROJECT TITLE:

**PROPOSED CAR WASH and CAFE** 

PLAT MAP 246 LOTS 247, 250, 251 and 257 ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

DRAWING TITLE:

**MISCELLANEOUS DETAIL** PLAN No. 4

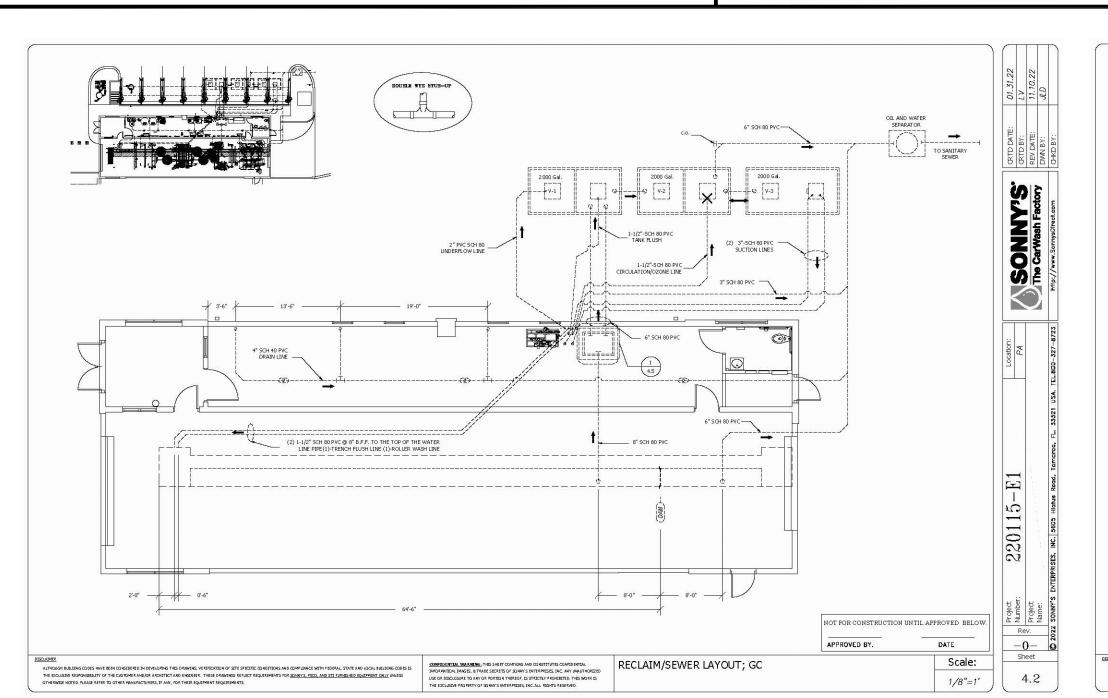
SCALE: MARCH 2023 AS SHOWN DWG. NAME:

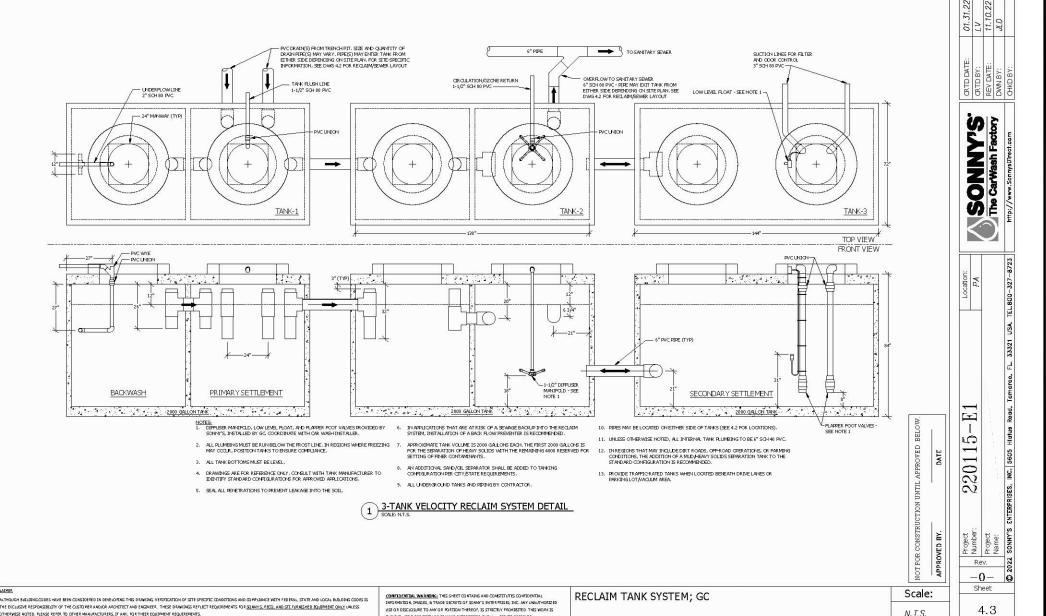
2668-C12-DETAIL4-R1.dwg REVISIONS NUMBER

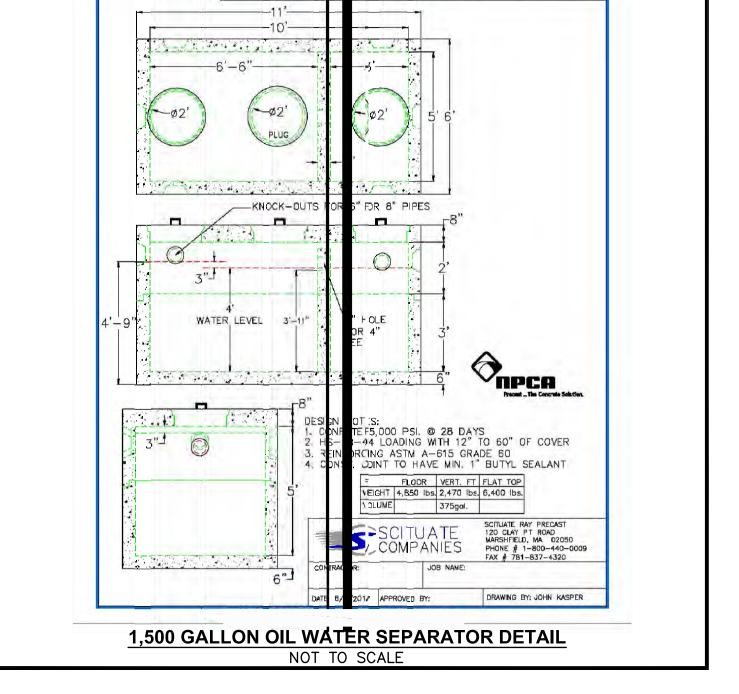
REMARKS DATEUTILITIES 7/19/23

DRAWING NUMBER

SHEET: 14 OF: \_

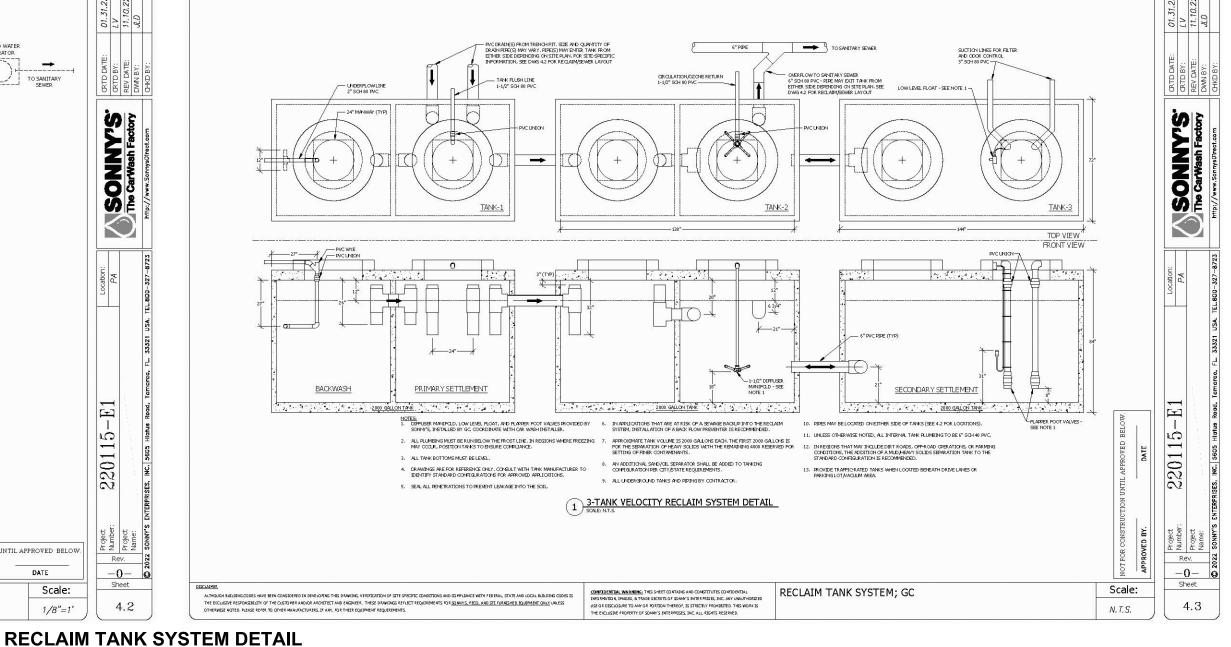


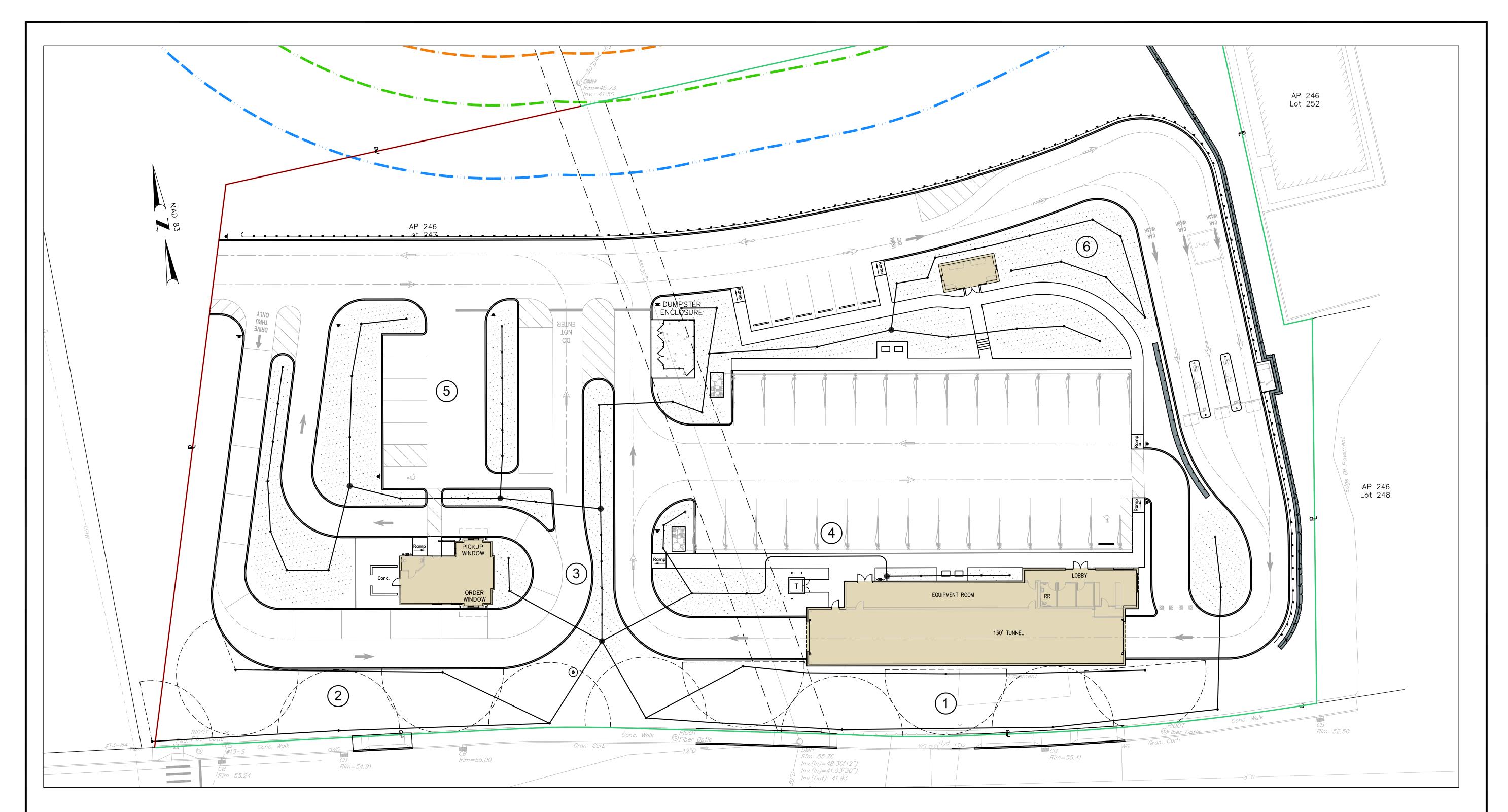




2-COMPARTMENT TANK

1,500



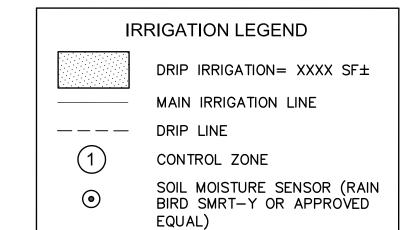


#### **IRRIGATION NOTES**

- DRIP IRRIGATION SHALL BE UTILIZED TO IRRIGATE ALL PLANTING BEDS AND SHRUBBERY.
- 2. TIMERS SHALL BE EMPLOYED AND MAINTAINED TO BE IN COMPLIANCE WITH SECTION 1.7.3 OF THE KENT COUNTY WATER AUTHORITY RULES AND REGULATIONS. TIMERS SHALL BE SET TO ASSURE OVER WATERING DOES NOT OCCUR.
- 3. ALL SYSTEMS SHALL BE FITTED WITH SOIL MOISTURE SENSORS AND RAIN SENSORS THAT PROHIBIT OPERATION OF THE SYSTEM WHEN SOIL MOISTURE CONTENT DOES NOT REQUIRE IT.
- 4. PROPERTY OWNERS SHALL CONDUCT ANNUAL MAINTENANCE THAT ASSURES PROPER ADJUSTMENT AND OPERATION OF THE SYSTEM.
- 5. IRRIGATION SYSTEMS SHALL ONLY BE OPERATED IN ACCORDANCE WITH THE KENT COUNTY WATER AUTHORITY ODD/EVEN OUTDOOR WATER USE POLICY.
- 6. IRRIGATION SYSTEMS SHALL BE SHUT OFF DURING WATER SUPPLY EMERGENCIES AND MORATORIUMS IMPOSED IN CONJUNCTION WITH THE KENT COUNTY WATER AUTHORITY DROUGHT POLICY.
- 7. INSTALL ATMOSPHERIC VACUUM BREAKER (AVB) ON IRRIGATION BRANCH AFTER EACH CONTROL VALVE.

#### SITE PLAN SCHEMATIC IRRIGATION DETAIL

SCALE: 1"=20'





### Crossman Engineering

Rhode Island
151 Centerville Road
Warwick, RI 02886
Phone (404) 738 5660
Rhope (508) 695-1700

Phone (401) 738-5660 Phone (508) 695-1700

Email: cei@crossmaneng.com

- DDAWINGS ADE THE DDODEDT

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING

KEY PLAN

PROJECT TITLE:

## PROPOSED CAR WASH and CAFE

PLAT MAP 246
LOTS 247, 250, 251 and 257
ZONING DISTRICT:GB
GENERAL BUSINESS DISTRICT
181 CENTERVILLE ROAD
WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD SUITE 2100 BOSTON, MA 02135-1023

DRAWING TITLE:

#### MISCELLANEOUS DETAIL PLAN No. 5

MARCH 2023 1"=20'

DWG. NAME:

2668-C13-DETAIL5-R1.dwg

REVISIONS

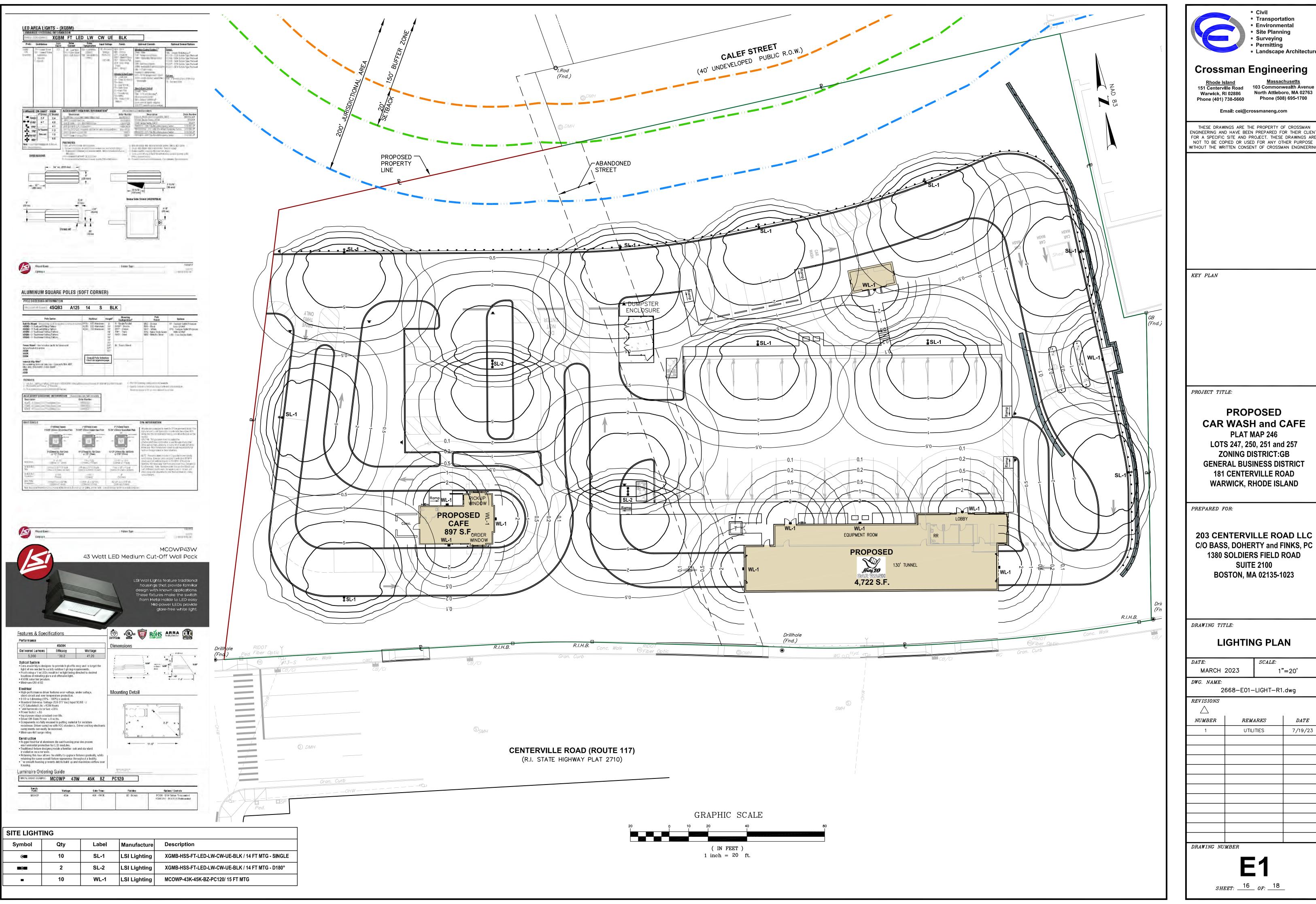
NUMBER REMARKS DATE

1 UTILITIES 7/19/23

DRAWING NUMBER

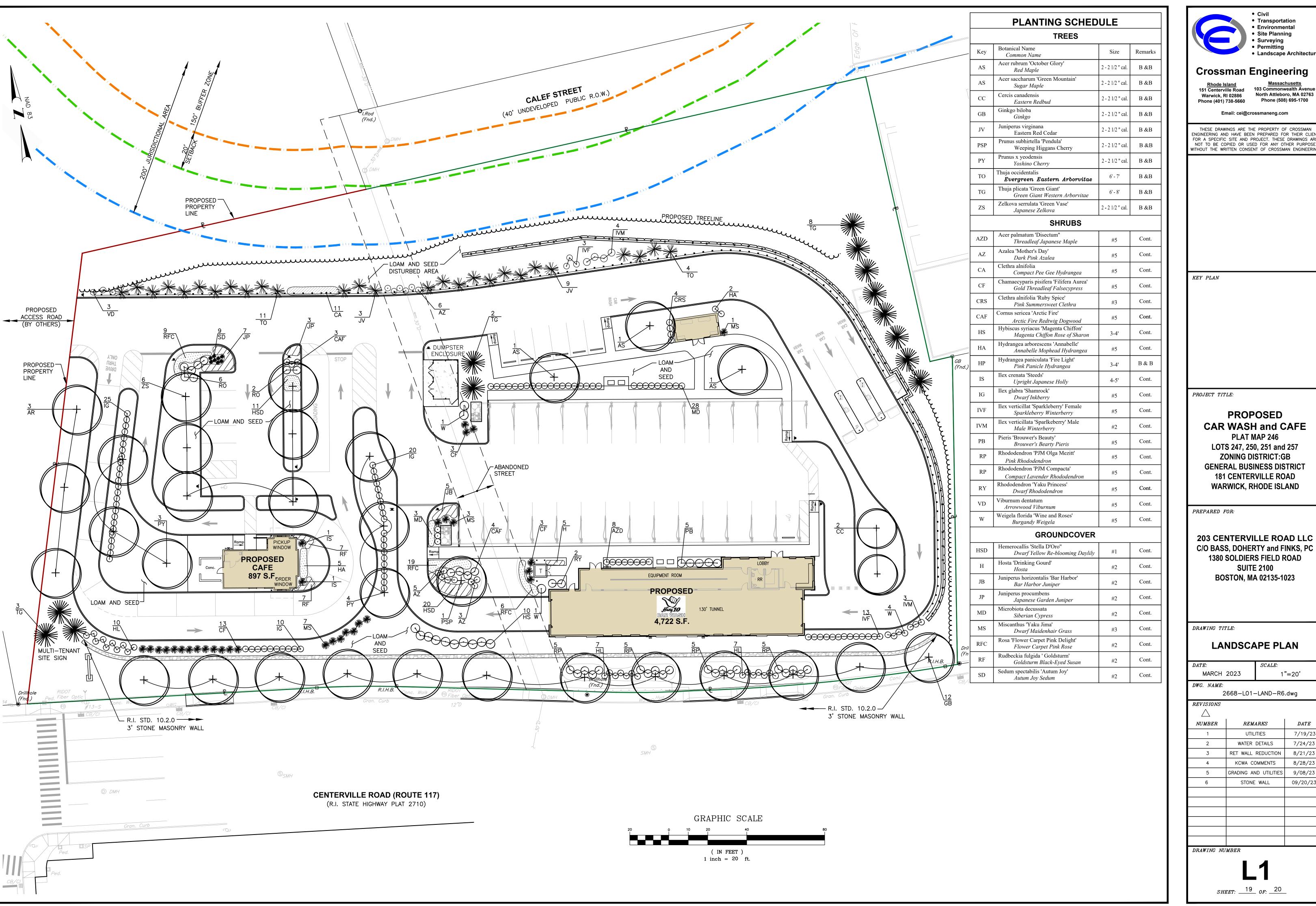
C13

SHEET: 15 OF: 18



THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE

DATE7/19/23





Civil Transportation Environmental Site Planning Surveying Permitting

Crossman Engineering

Phone (401) 738-5660

Warwick, RI 02886 North Attleboro, MA 02763 Phone (508) 695-1700

Landscape Architecture

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN NGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE

**PROPOSED CAR WASH and CAFE** PLAT MAP 246

LOTS 247, 250, 251 and 257 ZONING DISTRICT:GB GENERAL BUSINESS DISTRICT 181 CENTERVILLE ROAD WARWICK, RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON, MA 02135-1023** 

DRAWING TITLE:

#### LANDSCAPE PLAN

MARCH 2023 1"=20'

2668-L01-LAND-R6.dwg

REMARKS

DATE

REVISIONS NUMBER

1	UTILITIES	7/19/23
2	WATER DETAILS	7/24/23
3	RET WALL REDUCTION	8/21/23
4	KCWA COMMENTS	8/28/23
5	GRADING AND UTILITIES	9/08/23
6	STONE WALL	09/20/23

DRAWING NUMBER

SHEET: 19 OF: 20

#### **SEEDING NOTES**

- . LOAM SHALL BE SPREAD TO A MINIMUM DEPTH OF 6" OVER ALL AREAS DESIGNATED ON PLANS.
- 2. SHAPE AND SMOOTH THE SURFACE TO THE LINES AND GRADES AS SHOWN ON PLANS.
- 3. FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN A SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 3 TO 4 INCHES OF THE PLANTING SOIL. APPLY AT THE RATE OF 8 POUNDS PER 1,000 SQUARE FEET AT SEEDING.
- 4. LIME: SPREAD EVENLY AND WORK INTO THE SOIL DURING PREPARATION OF SEED BED. AT THE RATE OF ONE TON PER ACRE. INCORPORATE INTO THE SOIL BY DICING OR OTHER APPROVED METHOD. DISTRIBUTE LIME UNIFORMLY AND WORK INTO TOP 4 INCHES OF TOP SOIL (MINIMUM) AND UNIFORMLY BLEND BY DICING OR ROTOTILLING.
- 5. APPLICATION OF SEED: A.RATE OF APPLICATION OF SEED SHALL BE 8 POUNDS PER 1,000 SQUARE FEET OR AS INDICATED ON PLANS.
- B. SEEDING SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS, AND ONLY DURING THE FOLLOWING DATES: SPRING SEEDING: MARCH 15 TO MAY 31 FALL SEEDING: AUGUST 15 TO OCTOBER 15
- C. THE CONTRACTOR SHALL KEEP ALL SEEDED AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY FOR AN 8 WEEK PERIOD OR UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA. THE CONTRACTOR SHALL ALSO MAINTAIN THESE AREAS IN AN APPROVED CONDITION UNTIL PROVISIONAL ACCEPTANCE.
- D. DURING THIS PERIOD. WATER TURF AS NECESSARY TO MAINTAIN AN ADEQUATE SUPPLY OF MOISTURE WITHIN THE ROOT ZONE. AN ADEQUATE SUPPLY OF MOISTURE IS EQUIVALENT OF ONE INCH OF ABSORBED WATER PER WEEK THAT IS DELIVERED AT WEEKLY INTERVALS IN THE FORM OF NATURAL RAIN OR IS AUGMENTED AS REQUIRED BY PERIODIC WATERING.
- E. OVERSEED WHEN NECESSARY TO PROMOTE GRASS GROWTH.
- F. REPLANT AREAS VOID OF TURF ONE SQUARE FOOT OR LARGER.
- a. SEED <u>ALL</u> AREAS DESIGNATED ON PLAN AS WELL AS <u>ALL</u> DISTURBED EXISTING AREAS WITH THE FOLLOWING SEED MIX:

#### SEED MIX No. 1

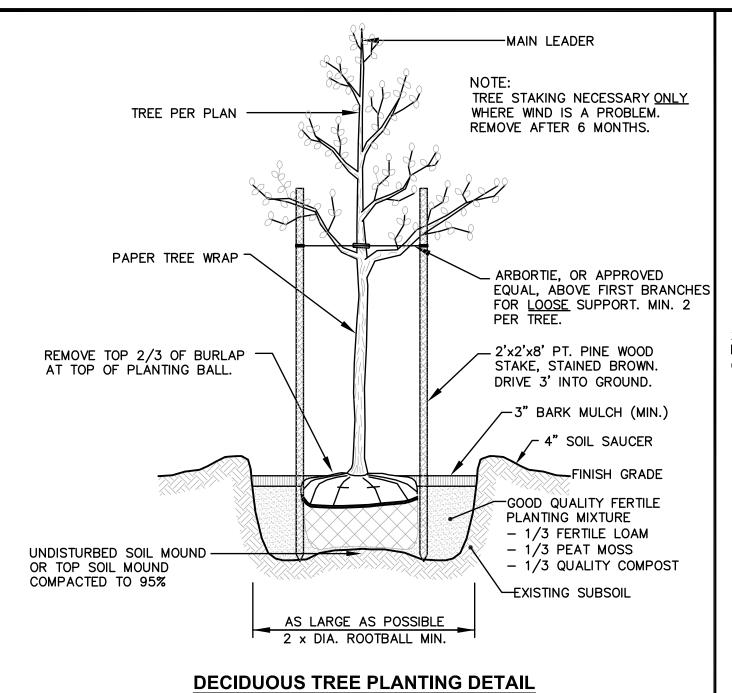
ENDOPHYTE ENCHANCED MIX (MOWED AREAS)

<u>TYPE</u>	<b>BY WEIGHT</b>
IMPROVED PER. RYE	30%
TURF TYPE TALL FESCUE	30%
CHEWINGS FESCUE	30%
KY. BLUEGRASS 98/85	10%

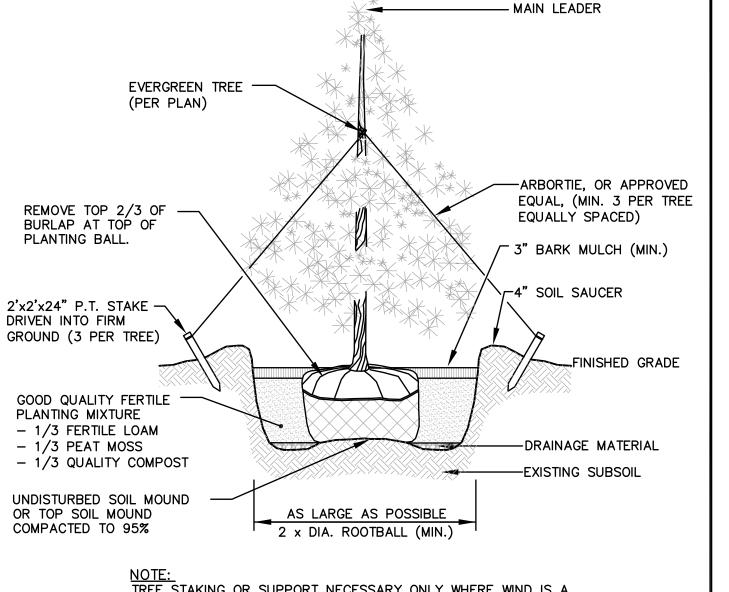
APPLICATION RATE = 200 lbs. / ACRE

#### LANDSCAPE CONSTRUCTION NOTES

- 1. FURNISH AND INSTALL ALL PLANTS SHOWN ON THE DRAWINGS SPECIFIED HEREIN, AND IN THE QUANTITIES LISTED ON THE <u>PLANT LIST.</u> NO SUBSTITUTIONS WILL BE PERMITTED, UNLESS APPROVED BY THE LANDSCAPE ARCHITECT.
- 2.LOAM TO BE SCREENED, GOOD QUALITY, FERTILE, FREE OF WEEDS, STICKS, STONES OVER 3/4". AND ROOTS. SPREAD TO A MINIMUM OF 6" OVER ALL PLANTED AREAS.
- 3.BIO-DETENTION AREAS-PLANTING SOIL AND MULCH: LOAMY SAND TO A SANDY LOAM-80% SAND <20% SILT, <2% CLAY. WELL AGED GRADED COMPOST (25% OF SOIL MIX). WELL AGED, AERATED DARK BROWN HARD-WOOD MULCH (AGED 6 MONTHS).
- 4. NURSERY STOCK SHALL MEET THE STANDARDS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION AS TO GRADING AND QUALITY.
- 5. ONLY NURSERY-GROWN PLANTS, GROWN IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS. WILL BE ACCEPTED.
- 6. CALIPER MEASURMENTS FOR ALL NEW PLANT STOCK SHALL BE TAKEN SIX (6) INCHES ABOVE GRADE FOR TREES UNDER FOUR (4) INCHES AND TWELVE (12) INCHES ABOVE GRADE FOR TREES OVER FOUR (4) INCHES.
- 7. ALL TREES SHALL BE A MINIMUM OF SEVEN (7) FEET ABOVE FINISHED GRADE WHEN TREES ARE LOCATED WITHIN VEHICULAR AND PEDESTRIAN TRAVEL WAYS.
- 8. SET PLANTS PLUMB AND AT A LEVEL THAT AFTER SETTLEMENT THEY BEAR THE SAME RELATION TO THE SURROUNDING GROUND AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. SETTLE BACKFILL MATERIAL FOR PLANTS, THOROUGHLY AND PROPERLY BY FIRMING OR TAMPING. FORM SAUCERS, CAPABLE OF HOLDING WATER ABOUT INDIVIDUAL PLANTS, BY PLACING RIDGES OF PLANTING SOIL AROUND EACH.
- 9. STAKE ALL TREES OVER 5 FEET AS SHOWN ON PLANS. REMOVE STAKES AT THE END OF THE GUARANTEE PERIOD.
- 10. WATERING: WATER ALL PLANTS WITHIN 48 HOURS AFTER PLANTING. IF CONDITIONS WARRANT, AND AS MANY TIMES THEREAFTER TO SUSTAIN HEALTHY CONDITIONS UNTIL LANDSCAPE INSTALLATION IS COMPLETED. SATURATE THE SOIL AROUND EACH PLANT THOROUGHLY AT EACH WATERING.
- 11. PRUNING: PRUNE PLANTS, AS DIRECTED BY OWNER. AT THE PROJECT SITE BEFORE OR IMMEDIATELY AFTER PLANTING IN ACCORDANCE WITH THE BEST HORTICULTURAL PRACTICE. CUT BROKEN, DEAD OR INJURED BRANCHES IMMEDIATELY ABOVE THE STEM COLLAR ON THE TRUNK OR LIMB. PRUNE ALL BROKEN ROOTS ON THE PLANT SIDE OF THE BREAK. PAINT CUTS OVER 3/4" IN DIAMETER WITH TREE WOUND PAINT. PRUNING SHALL NOT DEFORM OR OTHERWISE DESTROY THE TYPICAL SHAPE OR SYMMETRY OF THE PLANT, AND SHALL NOT REDUCE THE HEIGHT BY MORE THAN ONE-THIRD. DO NOT CUT BACK THE LEADER OF THE PLANT UNLESS DIRECTED BY THE LANDSCAPE ARCHITECT.
- 12. FERTILIZING: FERTILIZE SHRUB BEDS WITH 10-10-10 FERTILIZER BROADCAST PER MANUFACTURER'S RATE. APPLY THE FERTILIZER UNIFORMLY TO THE SURFACE BEDS AND WORK INTO THE UPPER TWO INCHES OF SOIL. FERTILIZE INDIVIDUAL TREES AS PER MANUFACTURER'S INSTRUCTIONS. APPLY A SECOND APPLICATION OF FERTILIZER TO ALL PLANT ITEMS AT THE SAME SPECIFIED RATES OVER THE MULCH AT THE END OF A SIX (6) WEEK PERIOD (WITH AVERAGE RAINFALL).
- 13. <u>LIMING:</u> ADD POWDERED LIME EVERY SIX MONTHS OR SLOW RELEASE GRANULAR LIME-AS PER MANUFACTURER'S INSTRUCTION.
- 14. MULCHING: WITHIN A 72 HOUR PERIOD AFTER PLANTING, COVER ALL PLANTED AREAS WITH TREFLAN HERBICIDE OR EQUIVILENT GRANULAR PRE-EMERGENT HERBICIDE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS COVER WITH 3" DEPTH OF NATURAL BROWN SHREDDED BARK MULCH. NO RED OR DYED MULCH IS TO BE USED. MULCH SHOULD BE PULLED ONE INCH AWAY FROM PLANT TRUNK OR STEM, AND NOT ALLOWED TO REST DIRECTLY AGAINST THE TRUNK OR STEM.
- 15. GUARANTEE: ALL PLANTS FURNISHED BY THE CONTRACTOR SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER PRELIMINARY INSPECTION AND SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD. ALL DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED AT ONCE BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER.



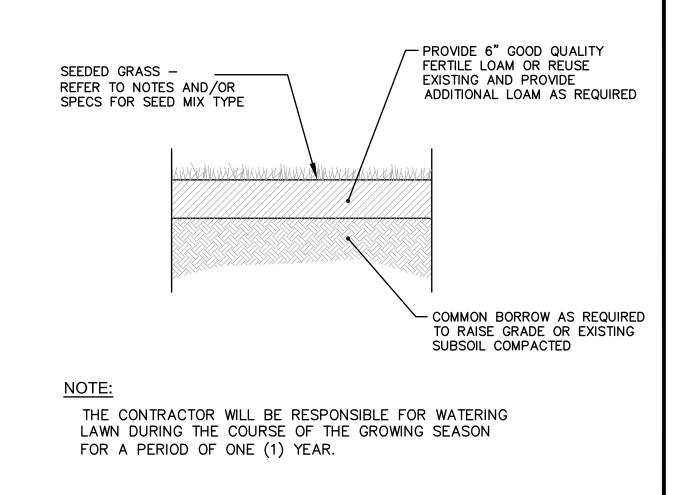
## NOT TO SCALE



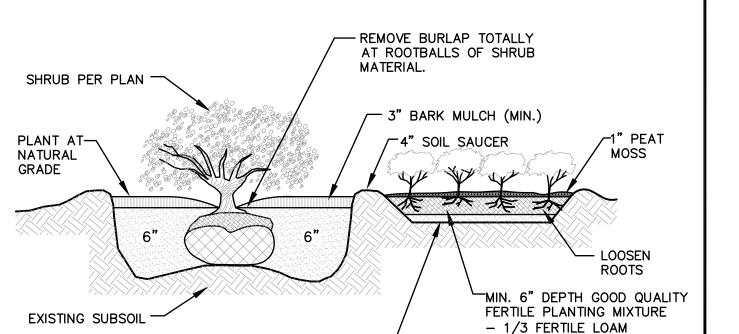
TREE STAKING OR SUPPORT NECESSARY ONLY WHERE WIND IS A PROBLEM, REMOVE AFTER SIX (6) MONTHS.

#### **EVERGREEN TREE PLANTING DETAIL** NOT TO SCALE

NOTE:
CUT APART ROOTBALL WITHOUT SEVERING MAIN ROOTS.



#### LOAM-SEED DETAIL NOT TO SCALE



#### BALL and BURLAP

SCARIFY 2" DEEP -

#### SHRUB and GROUNDCOVER PLANTING DETAIL NOT TO SCALE

- 1/3 PEAT MOSS

- 1/3 QUALITY COMPOST

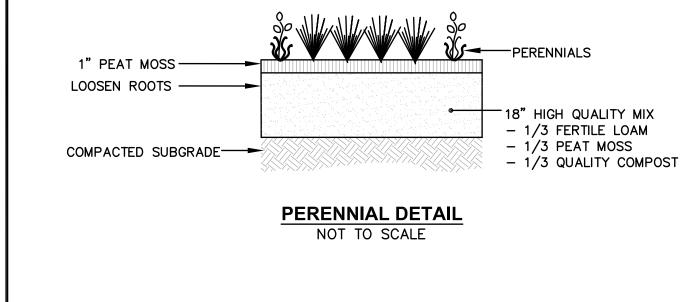
SHRUB PER PLAN 3" BARK MULCH (MIN.) 4" SOIL SAUCER GOOD QUALITY FERTILE PLANTING MIXTURE - 1/3 FERTILE LOAM TOPSOIL SETTING MOUND-- 1/3 PEAT MOSS - 1/3 QUALITY COMPOST -EXISTING SUBSOIL

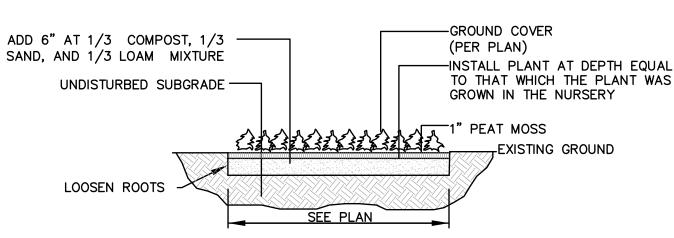
OVER SETTING MOUND. PLANT SHRUBS 1"-2" ABOVE EXISTING GRADE.

**CONTAINER GROWN PLANTING DETAIL** 

NOT TO SCALE

REMOVE CONTAINER AND BUTTERFLY ROOTBALL TO SPREAD ROOTS





PERENNIAL and GROUNDCOVER PLANTING DETAIL NOT TO SCALE



#### **Crossman Engineering**

103 Commonwealth Avenue Warwick, RI 02886 North Attleboro, MA 02763 Phone (508) 695-1700 Phone (401) 738-5660

Email: cei@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT, THESE DRAWINGS AR NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERIN

KEY PLAN

PROJECT TITLE:

### **PROPOSED CAR WASH and CAFE**

PLAT MAP 246 LOTS 247, 250, 251 and 257 **ZONING DISTRICT:GB** GENERAL BUSINESS DISTRICT 181 CENTERVILLE ROAD WARWICK. RHODE ISLAND

PREPARED FOR:

203 CENTERVILLE ROAD LLC C/O BASS, DOHERTY and FINKS, PC 1380 SOLDIERS FIELD ROAD **SUITE 2100 BOSTON. MA 02135-1023** 

DRAWING TITLE:

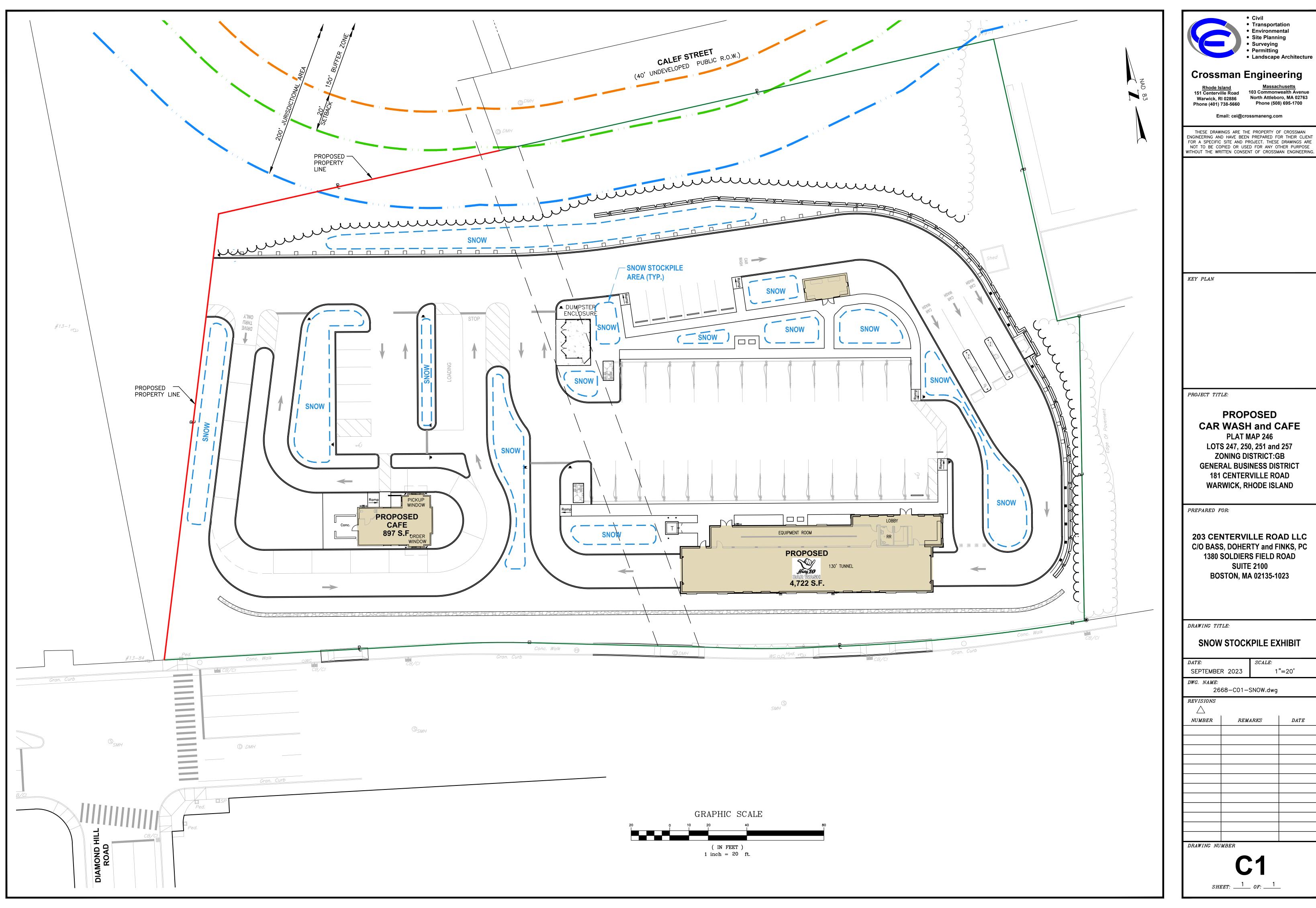
MARCH 2023

#### LANDSCAPE DETAIL PLAN

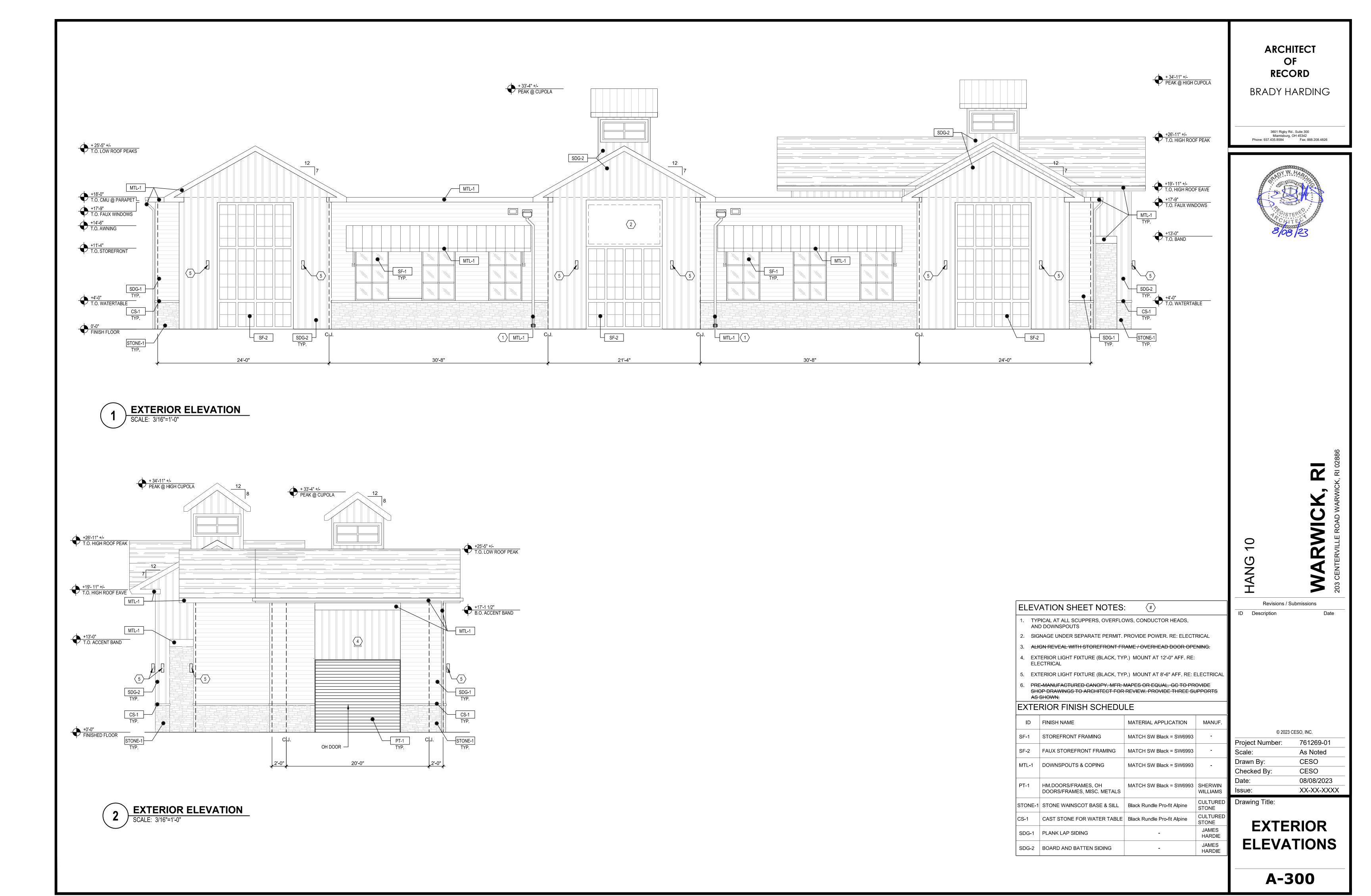
AS SHOWN

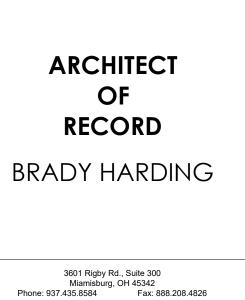
DWG. NAME: 2668-L02-LNDET-R1.dwa REVISIONS NUMBER REMARKS DATEUTILITIES 7/19/23 DRAWING NUMBER

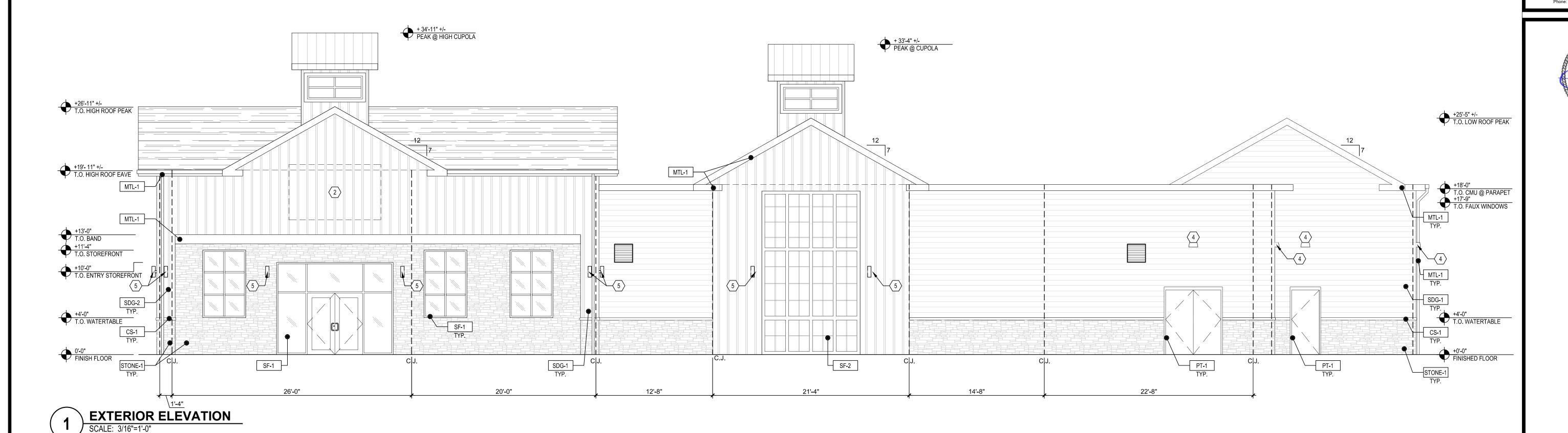
SHEET: 18 OF: 18



DWG. NAME: 2668-C01-SNOW.dwg			
REVISIONS			
NUMBER	REMARKS	DATE	







WARWICK HANG Revisions / Submissions ELEVATION SHEET NOTES: ID Description Date TYPICAL AT ALL SCUPPERS, OVERFLOWS, CONDUCTOR HEADS, SIGNAGE UNDER SEPARATE PERMIT. PROVIDE POWER. RE: ELECTRICAL ALIGN REVEAL WITH STOREFRONT FRAME / OVERHEAD DOOR OPENING. EXTERIOR LIGHT FIXTURE (BLACK, TYP.) MOUNT AT 12'-0" AFF. RE:

PRE-MANUFACTURED CANOPY. MFR: MAPES OR EQUAL. GC TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR REVIEW. PROVIDE THREE SUPPORTS EXTERIOR FINISH SCHEDULE ID FINISH NAME MATERIAL APPLICATION MANUF. SF-1 STOREFRONT FRAMING MATCH SW Black = SW6993 SF-2 FAUX STOREFRONT FRAMING MATCH SW Black = SW6993 MTL-1 DOWNSPOUTS & COPING MATCH SW Black = SW6993 PT-1 HM.DOORS/FRAMES, OH DOORS/FRAMES, MISC. METALS MATCH SW Black = SW6993 | SHERWIN WILLIAMS STONE-1 STONE WAINSCOT BASE & SILL | Black Rundle Pro-fit Alpine STONE CULTURED CAST STONE FOR WATER TABLE | Black Rundle Pro-fit Alpine STONE JAMES HARDIE SDG-1 PLANK LAP SIDING JAMES HARDIE SDG-2 BOARD AND BATTEN SIDING

EXTERIOR LIGHT FIXTURE (BLACK, TYP.) MOUNT AT 8'-6" AFF. RE: ELECTRICAL

AND DOWNSPOUTS

© 2023 CESO, INC. 761269-01 Project Number: Scale: As Noted CESO Drawn By: Checked By: CESO 08/08/2023 Issue: XX-XX-XXXX

Drawing Title:

**EXTERIOR ELEVATIONS** 

A-301

