

ROGER WILLIAMS DRIVE NORTH KINGSTOWN, RHODE ISLAND SHORELINE ADAPTATION INVENTORY AND DESIGN PROJECT

60% DESIGN PLANS NOVEMBER 2021

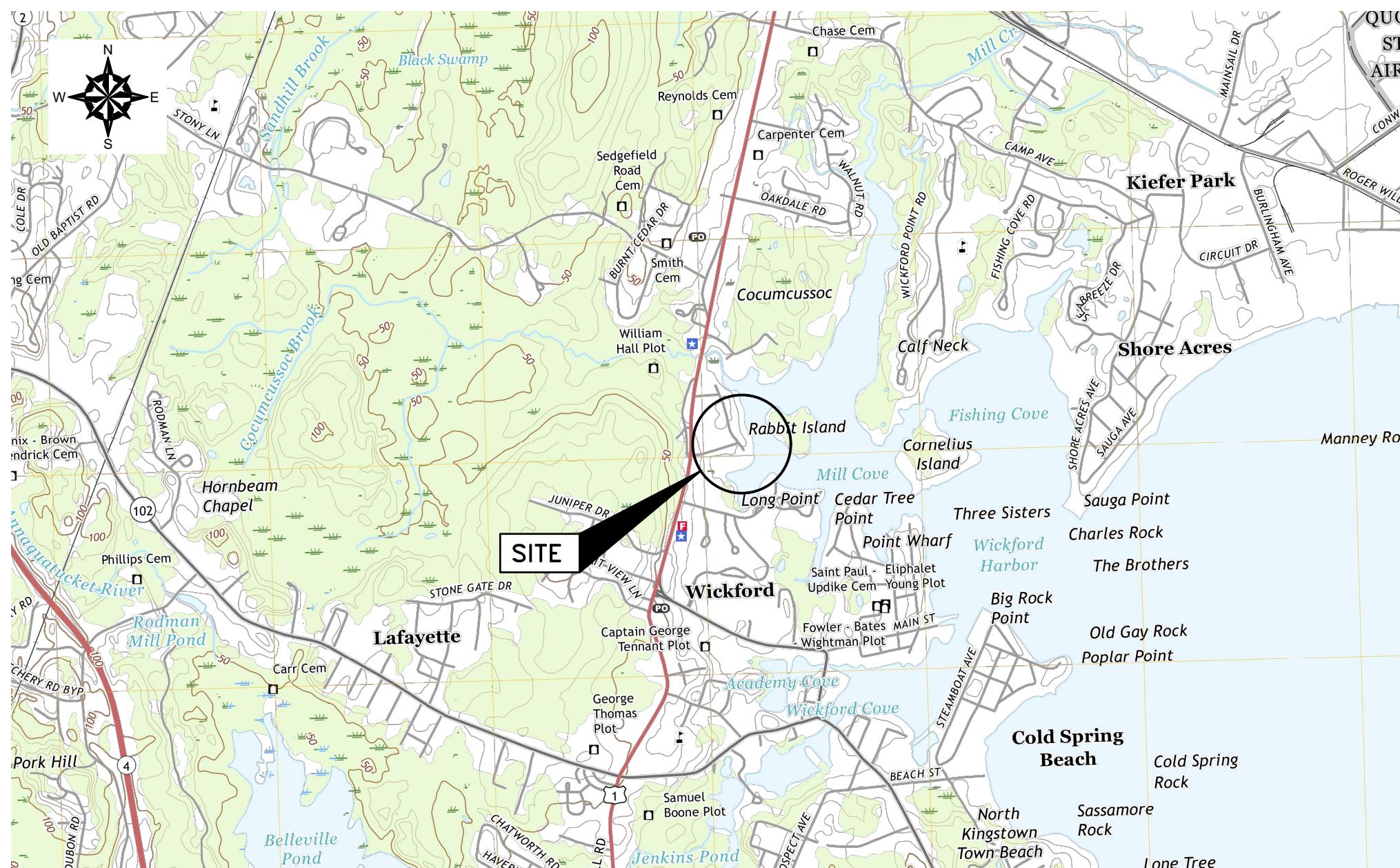
REVISION
AUGUST 1, 2023
NK DPW (ALPS)

PREPARED FOR:

**COASTAL RESOURCES
MANAGEMENT COUNCIL**

PREPARED BY:

 **GZA** GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com



PROJECT LOCUS MAP

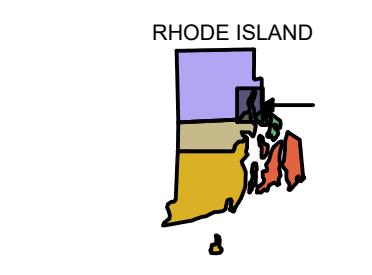
SOURCE: USGSSTORE.GOV

0 1000' 2000' 4000' 6000'
SCALE: 1 INCH = 2000 FEET

BASE MAP FROM THE FOLLOWING USGS QUADRANGLE MAP:
PROVIDENCE, RI (2018), EAST PROVIDENCE, RI (2018)

DIGITAL TOPOGRAPHIC MAPS PROVIDED BY USGSSTORE.GOV.

CONTOUR ELEVATIONS REFERENCE NAVD 88,
CONTOURS ARE SHOWN IN FEET AT 10 FOOT INTERVALS



P.E. STAMP:
PERMITTING SET NOT FOR CONSTRUCTION

GENERAL NOTES:

- THE SITE IS LOCATED IN THE TOWN OF NORTH KINGSTOWN ROGER WILLIAMS DRIVE RIGHT OF WAY.
- THE PROJECT PROPOSES A DISTURBANCE AREA OF APPROXIMATELY $0.04 \pm$ ACRES.
- THE SITE IS LOCATED WITHIN ZONE AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44009C0104J, REVISED OCTOBER 16, 2013.
- ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.** AREAS THAT THE 1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD) IS THE FLOOD THAT HAS A 1% CHANCE OF BEING EQUALLED OR EXCEEDED IN ANY GIVEN YEAR. BASE FLOOD ELEVATIONS FOR THESE AREAS HAVE BEEN DETERMINED.
- THIS DRAWING SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X). THE CURRENT AND UP TO DATE RIDOT STANDARD DETAILS ARE AVAILABLE ONLINE AT: [HTTP://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP](http://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP)
- THIS PLAN DEPICTS A CLASS IV BOUNDARY. THIS PLAN HAS BEEN PREPARED FROM COMPILED INFORMATION SUCH AS ASSESSORS MAPS, TAX MAPS, DEEDS, TOWN/CITY GEOGRAPHICAL INFORMATION SYSTEM (GIS) DATA OR OTHER REFERENCE PLANS. THIS CLASS IV BOUNDARY IS SUBJECT TO CHANGES FROM AN ACCURATE BOUNDARY SURVEY COMPLETED BY A RI REGISTERED LAND SURVEYOR. THIS PLAN IS NOT TO BE CONSTRUED AS A CLASS I BOUNDARY RETRACEMENT SURVEY PLAN AND IS NOT SUITABLE FOR RECORDING AS A CLASS I STANDARD SURVEY PLAN.
- CONTOUR DATA T-4 TOPOGRAPHICAL SURVEY STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS; SAID DATA IS BASED ON ELEVATION INFORMATION THAT WAS COLLECTED WITH AIRBORNE LIDAR TECHNOLOGY FOR THE ENTIRE AREA OF RHODE ISLAND BETWEEN APRIL 22 AND MAY 6, 2011 AS PART OF THE NORTHEAST LIDAR PROJECT. THIS DATA'S POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED BY GZA AND IS SUBJECT TO CHANGES AN AUTHORITATIVE FIELD SURVEY MAY DISCLOSE.
- ALL ELEVATIONS SHOWN ON PLANS ARE IN U.S. FEET AND REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- ALL EXISTING UTILITIES SHOWN HERE ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO GZA AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFOREMENTIONED REFERENCES AND ARE APPROXIMATE ONLY. PRIOR TO PERFORMING ANY GROUND DISTURBING ACTIVITIES, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHOULD BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES DETERMINED IN THE FIELD. CALL THE DIG SAFE® (811 OR 888-344-723) PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THESE PLANS OR DETAILED BY DIG SAFE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHOULD VERIFY ALL EXISTING CONDITIONS, ELEVATIONS AND DIMENSIONS IN THE FIELD BEFORE ORDERING ANY MATERIAL, COMMENCING ANY FABRICATION OR PERFORMING ANY WORK. THE CONTRACTOR MUST NOTIFY THE TOWN, IN WRITING, OF ANY CONDITIONS, ELEVATIONS OR DIMENSIONS THAT VARY FROM THOSE SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION.
- THIS DATA WAS CREATED FOR INFORMATIONAL PLANNING AND GUIDANCE USE ONLY. THEY ARE A GENERAL REFERENCE, NOT A LEGALLY AUTHORITATIVE SOURCE FOR THE LOCATION OF NATURAL OR MANMADE FEATURES. PROPER INTERPRETATION OF THESE DATA MAY REQUIRE THE ASSISTANCE OF APPROPRIATE PROFESSIONAL SERVICES. THE CARTOGRAPHIC REPRESENTATIONS DEPICTED HAVE NOT BEEN VERIFIED BY A RI REGISTERED PROFESSIONAL LAND SURVEYOR AND ARE NOT INTENDED TO BE USED IN PLACE OF A SURVEY.

LAYOUT AND MATERIALS:

- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE DETAIL SHEETS, MANUFACTURERS' LITERATURES, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED MATERIALS SHOULD BE REFERRED TO FOR LAYOUT OF PROJECT FEATURES.
- ELECTRONIC VERSIONS OF THE PLANS, SPECIFICATIONS AND DATA FILES WHICH ARE OBTAINED FROM THE DESIGNER SHOULD NOT BE SOLELY BE RELIED UPON FOR CONSTRUCTION. STAMPED PAPER COPIES SUPPLIED AS PART OF CONTRACT DOCUMENTS SHOULD BE UTILIZED TO VERIFY LOCATION.
- ANY PROPRIETARY PRODUCT(S) REFERENCED IN THIS PLAN SET ARE REPRESENTATIVE OF THE MINIMUM DESIGN REQUIREMENTS IT IS PURPOSED TO SERVE. ALTERNATIVES TO ANY PROPRIETARY PRODUCT(S) MAY BE SUBMITTED TO THE ENGINEER OF RECORD AND THE TOWN FOR CONSIDERATION. THESE MUST BE ACCOMPANIED BY APPROPRIATE SPECIFICATION SHEETS / ANY DESIGN CALCULATIONS THAT DEMONSTRATE THE ALTERNATIVE(S) MEET THE MINIMUM DESIGN PARAMETERS OF THE PRODUCT SHOWN ON THE PLANS. NO ALTERNATIVES MAY BE USED WITHOUT WRITTEN PERMISSION OF THE ENGINEER OF RECORD OR THE TOWN.
- THIS PLAN MAY REFERENCE AND / OR INCLUDE REPRODUCTIONS OF PROPRIETARY PRODUCTS / DETAILS BY OTHERS, AND / OR THEIR ASSOCIATED SPECIFICATIONS. ANY REFERENCED OR REPRODUCED PROPRIETARY PRODUCT OR DETAIL BY OTHERS THAT IS SHOWN ON THIS GZA DRAWING SET IS STRICTLY FOR INFORMATIONAL PURPOSES ONLY. GZA DOES NOT WARRANT ANY PROPRIETARY PRODUCTS, DETAILS BY OTHERS OR THEIR RESPECTIVE DESIGN. ANY GZA DRAWING WHICH MAY INCLUDE PROPRIETARY PRODUCT(S) OR DETAIL(S) BY OTHERS (EITHER IMPLIED OR EXPLICITLY) AND IS BEARING THE STAMP OF A GZA PROFESSIONAL ENGINEER, SAID STAMP DOES NOT EXTEND TO ANY PORTION OF THE PROPRIETARY PRODUCT(S) OR DETAIL(S) BY OTHERS OR ITS DESIGN.

SOIL EROSION AND SEDIMENT CONTROL NOTES:

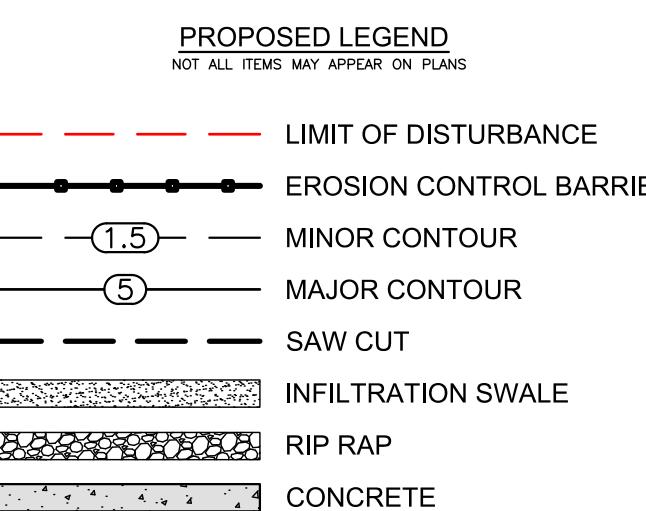
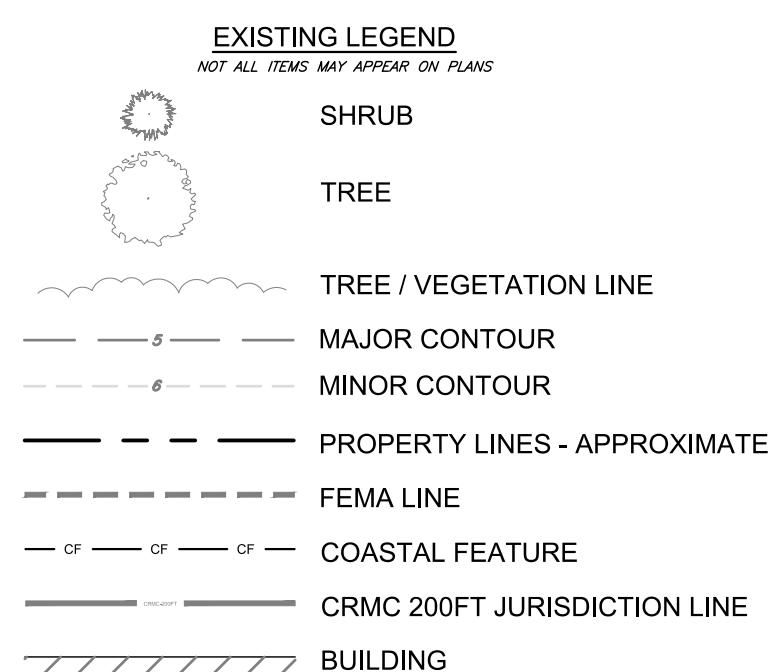
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL (SESC).
- ALL EROSION, RUNOFF AND SEDIMENT CONTROL MEASURES TO BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (RISESC), LATEST EDITION AND WITH REGULATIONS / ORDINANCES OF LOCAL AUTHORITIES HAVING JURISDICTION.
- NOTE THE SOIL EROSION AND SEDIMENT CONTROL SHOWN ON THESE PLANS ARE THE MINIMUM QUANTITY / TYPE OF EROSION CONTROL DEVICES AND MATERIALS DEEMED REQUIRED BY GZA TO MEET THE OBJECTIVES OF THE RISESC HANDBOOK. ADDITIONAL MEASURES / ALTERNATIVE CONFIGURATIONS MAY BE REQUIRED IN ORDER TO MEET THE RISESC HANDBOOK BASED ON FACTORS INCLUDING (BUT NOT LIMITED TO) SITE PARAMETERS, WEATHER EVENTS, INSPECTIONS AND UNIQUE FEATURES. THE SESC WILL CONTINUE TO EVOLVE THROUGHOUT CONSTRUCTION.
- ALL SOIL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED PRIOR TO THE START OF THE WORK, ARE TO BE MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS FULLY STABILIZED.
- IF DISPOSAL OF MATERIALS FROM AN EROSION EVENT DURING CONSTRUCTION IS NEEDED, ANY MATERIAL WHICH MAY NEED TO BE DISPOSED OF OFF SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH FEDERAL, STATE, LOCAL REGULATIONS AND CONTRACT DOCUMENTS.
- SWEEPING AT THE SITE CONSTRUCTION ENTRANCE TO OCCUR DAILY DURING PROJECT DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENT ON ADJACENT STREETS.
- IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS MUST BE RESTORED TO MATCH THE DESIGN PLANS OR THE PRE CONSTRUCTION CONDITION.

DEMOLITION NOTES:

- ALL FEDERAL, STATE AND MUNICIPAL APPROVALS ARE TO BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE FROM VISIBLE INFORMATION, FIELD SURVEY, DRAWING FROM OTHERS, AND DATA PROVIDED TO GZA. THESE LOCATIONS ARE CONSIDERED APPROXIMATE AND HAVE NOT BEEN FIELD VERIFIED. THE DRAWINGS MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMprise ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE DRAWINGS DO NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
- PRE-MARK WORK AREA AND CALL DIG SAFE® (811 OR 888-344-723) TO NOTIFY MEMBER UTILITIES. PRIOR TO NOTIFYING DIG SAFE®, THE EXCAVATIONS MUST BE PRE-MARKED WITH WHITE PAINT. HAVE THE SITE MARKED AND DIG SAFE® NOTIFIED AT LEAST FIVE DAYS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION OR DEMOLITION. THE CONTRACTOR SHALL COORDINATE ALL UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY REPRESENTATIVES.
- CHECK AND VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, BEFORE BEGINNING WORK. PRECAUTIONS TO PROTECT ALL UNDERGROUND UTILITIES DURING EXCAVATION AT THE SITE ARE TO BE TAKEN.
- EXERCISE ALL NECESSARY CARE TO PREVENT ANY DAMAGE TO UTILITIES, EXISTING STRUCTURES OR NEW STRUCTURES. IF THE CONTRACTOR DAMAGES UTILITIES, EXISTING STRUCTURES OR NEW STRUCTURES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY OWNER AND ENGINEER. THE CONTRACTOR MUST RESTORE THE DAMAGES AT NO ADDITIONAL COST TO OWNER.
- ALL TYPES OF WASTE GENERATED AT THE SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH FEDERAL, STATE, LOCAL REGULATIONS AND CONTRACT DOCUMENTS.
- THE CONTRACTOR MUST NOTIFY THE ENGINEER AND THE TOWN WHEN UNANTICIPATED OR APPARENTLY DANGEROUS CONDITIONS ARE UNCOVERED DURING CONSTRUCTION OR DEMOLITION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE ERECTION TO ENSURE THE SAFETY OF THE SITE AND RESPECTIVE COMPONENTS DURING DEMOLITION AND CONSTRUCTION. THIS MAY INCLUDE THE ADDITION OF NECESSARY SHORING AND TEMPORARY BRACING.

ABBREVIATIONS AND ACRONYMS

NOT ALL ITEMS WILL APPEAR ON PLAN					
AP	ASSESSOR'S PLAT / MAP	FES	FLARED END SECTION	PVC	POLYVINYL CHLORIDE
ADA	AMERICANS WITH DISABILITY ACT	GWT	GROUND WATER TABLE	R	RADIUS
BIT	BITUMINOUS	HASP	HEALTH AND SAFETY PLAN	R&D	REMOVE AND DISPOSE
BC	BOTTOM OF CURB	HDPE	HIGH-DENSITY POLYETHYLENE	RCP	REINFORCED CONCRETE PIPE
BW	FINISHED GRADE AT BOTTOM OF WALL	INV	INVERT	ROW	RIGHT OF WAY
CB	CATCH BASIN	LF	LINEAR FEET	S	SLOPE
CIP	CAST IRON PIPE	LOD	LIMIT OF DISTURBANCE	SD	SUBDRAIN
CMP	CORRUGATED METAL PIPE	MAX	MAXIMUM	SESC	SOIL EROSION AND SEDIMENT CONTROL
CLF	CHAIN LINK FENCE	MAP	ASSESSOR'S PLAT OR MAP	SF	SQUARE FOOT
CO	CLEAN OUT	MHHW	MEAN HIGH, HIGHWATER	SMH	SEWER MANHOLE
CONC	CONCRETE	MHW	MEAN HIGH WATER	STA	STATION
DCB	DOUBLE CATCH BASIN	MIN	MINIMUM	TC	TO OF CURB
DIA	DIAMETER	MLLW	MEAN LOW, LOWWATER	TD	TRENCH TRAIN
DMH	DRAINAGE MANHOLE	MLW	MEAN LOW WATER	TW	TOP OF WALL (FINISHED GRADE)
EL	ELEVATION	N/F	NOW OR FORMERLY	TYP	TYPICAL
EOP	EDGE OF PAVEMENT	OHW	OVERHEAD WIRE	UP	UTILITY POLE
EX	EXISTING	PR	PROPOSED		



2	NK DPW REVISIONS	ALPS	08-01-2023
1	60% DESIGN PLANS	MSC	10-1-21
NO.	ISSUE/DESCRIPTION	BY	DATE

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ROGER WILLIAMS DRIVE

NOTES AND LEGEND

PREPARED BY: **GZA** GeoEnvironmental, Inc.
Engineers and Scientists
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PREPARED FOR: COASTAL RESOURCES
MANAGEMENT COUNCIL

PROJ MGR: RAD | REVIEWED BY: RAD | CHECKED BY: TRG
DESIGNED BY: MSC | DRAWN BY: SB | SCALE: AS NOTED
DATE: NOVEMBER 2021 | PROJECT NO. 34826.00 | REVISION NO. 0

DRAWING 2
SHEET NO. 2 OF 4

**PERMITTING SET
NOT FOR CONSTRUCTION**

