

State of Rhode Island Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

(401) 783-3370 Fax (401) 783-2069

PUBLIC NOTICE

File Number: 2023-06-045

Date: October 11, 2024

This office has under consideration the application of:

Eugene Cacciola & Pamela Terreri 92 Burnett Road Warwick, RI 02886

for a State of Rhode Island Assent to construct and maintain: a 57ft hybrid shoreline protection facility where the toe of the structure is proposed to be constructed of stone rip rap and the bluff is proposed to be constructed of vegetated coir logs above the existing grade. Approximately 26 yards of fill is proposed in the setback requiring a variance from Redbook Standard 1.1.9(B)(1)

Project Location:	92 Burnett Road
City/Town:	Warwick
Plat/Lot:	Plat 380, lot 108
Waterway:	Narragansett Bay

Plans of the proposed work can be requested at <u>Cstaff1@crmc.ri.gov</u>.

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (with your correct mailing address, e-mail address and valid contact number) and be received at this office on or before <u>November 11, 2024</u>.

Please email your comments/hearing requests to: <u>cstaff1@crmc.ri.gov</u>; or mail via USPS to: Coastal Resources Management Council; O. S. Government Center, 4808 Tower Hill Road, Rm 116; Wakefield, RI 02879.

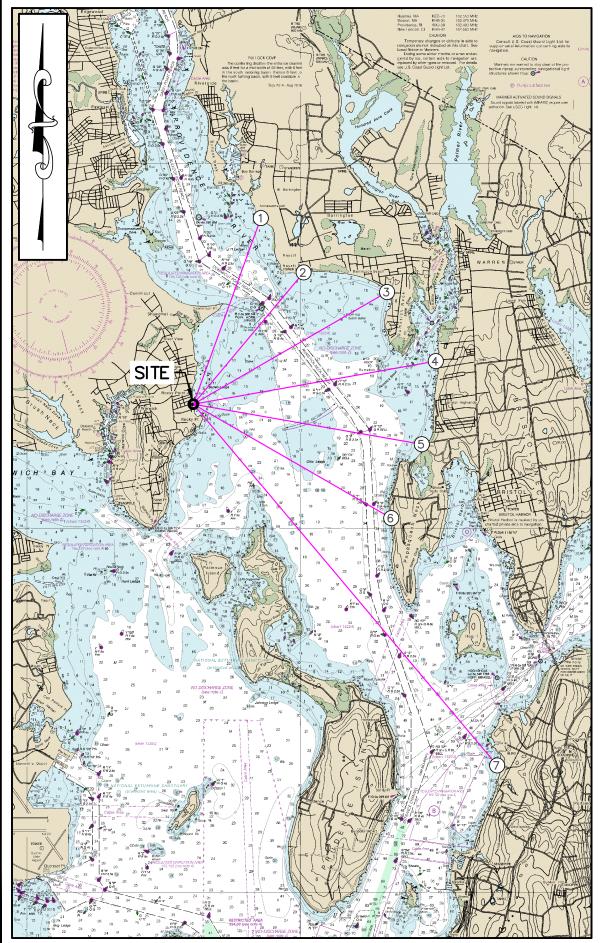


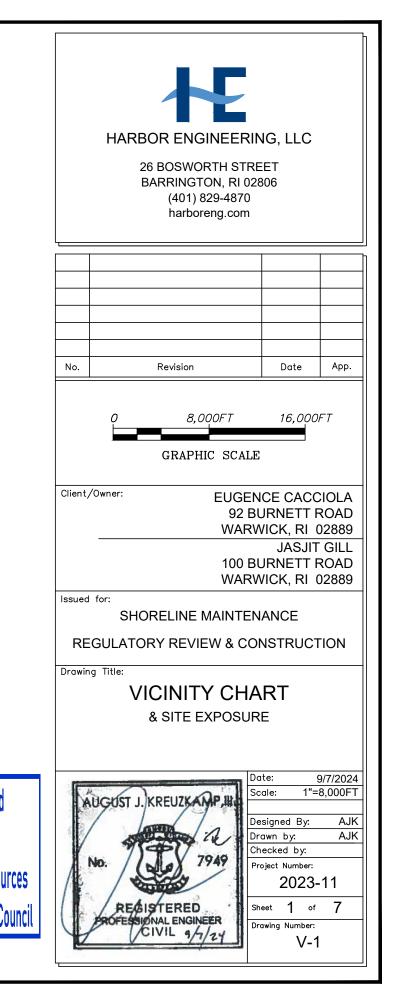
TABLE 1: TIDAL AND STORM SURGE BEN	NCHMARKS
BENCHMARK	ELEVATION (NAVD88)
100 YEAR BASE FLOOD ELEVATION	15.0
100 YEAR STILLWATER ELEVATION	11.7
50 YEAR STILLWATER ELEVATION	9.5
10 YEAR STILLWATER ELEVATION	6.6
MEAN HIGHER HIGH WATER (MHHW)	2.1
MEAN HIGH WATER (MHW)	1.9
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)	0.0
MEAN LOW WATER (MLW)	-2.2
MEAN LOWER LOW WATER (MLLW)	-2.4

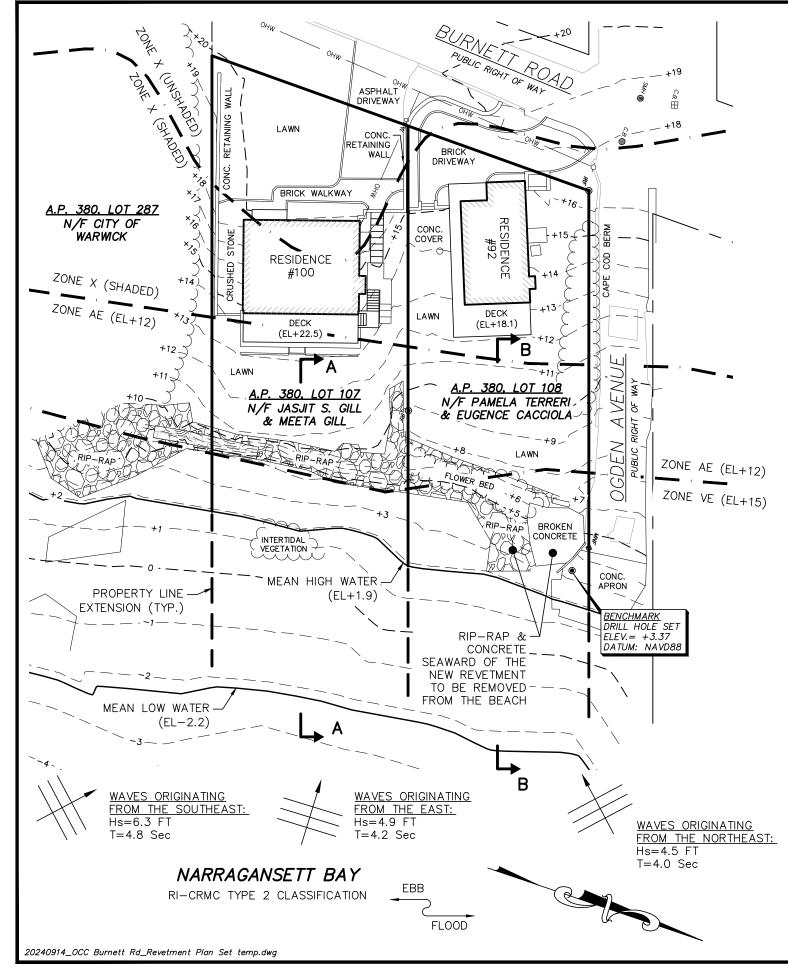
CHART & BENCHMARK NOTES:

- NAVIGATION CHART PRESENTED HEREIN WAS OBTAINED FROM NOAA CHART #13221 FOR NARRAGANSETT BAY INCLUDING NEWPORT HARBOR. SOUNDINGS INCLUDED ON THE CHART REFER TO MEAN LOWER LOW WATER (MLLW) DATUM.
- 2. STILLWATER LEVEL (SWL) ELEVATIONS WERE OBTAINED FROM FLOOD INSURANCE STUDY (FIS) FOR KENT COUNTY DATED APRIL 2020. SWL ELEVATIONS DO NOT INCLUDE WAVE ACTION.
- 3. THE BASE FLOOD ELEVATION, WHICH INCLUDES STORM SURGE AND ASSOCIATED WAVE ACTION, WAS OBTAINED FROM THE FLOOD INSURANCE RATE MAP (FIRM) #44003C0161H PREPARED BY FEMA DATED 9/18/2013.
- 4. TIDAL BENCHMARKS PROVIDED ABOVE WERE ESTABLISHED USING NOAA'S ONLINE VERTICAL DATUM TRANSFORMATION TOOL.

TA	TABLE 2: SITE EXPOSURE			
	ANGLE	FE1	ГСН	
		FEET	MILES	
1	20	16500	3.1	
2	40	14320	2.7	
3	60	18650	3.5	
4	80	20520	3.9	
5	100	19330	3.7	
6	120	19030	3.6	
7	140	39340	7.5	







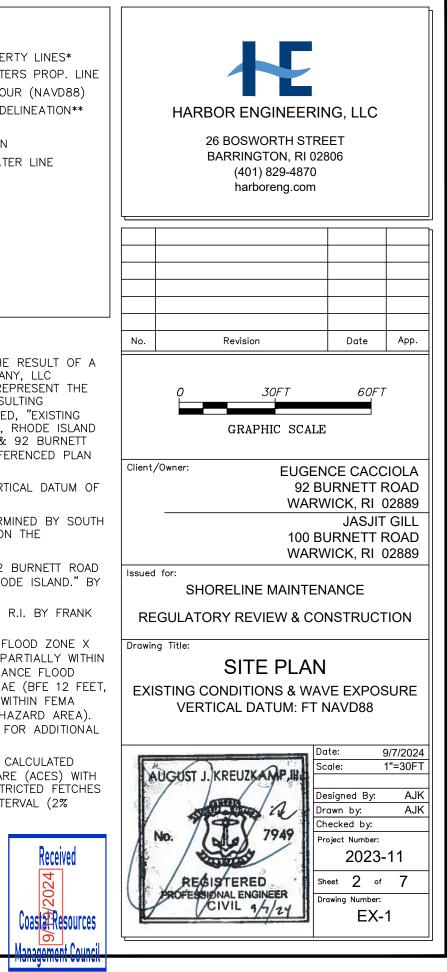
<u>LEGEND</u>

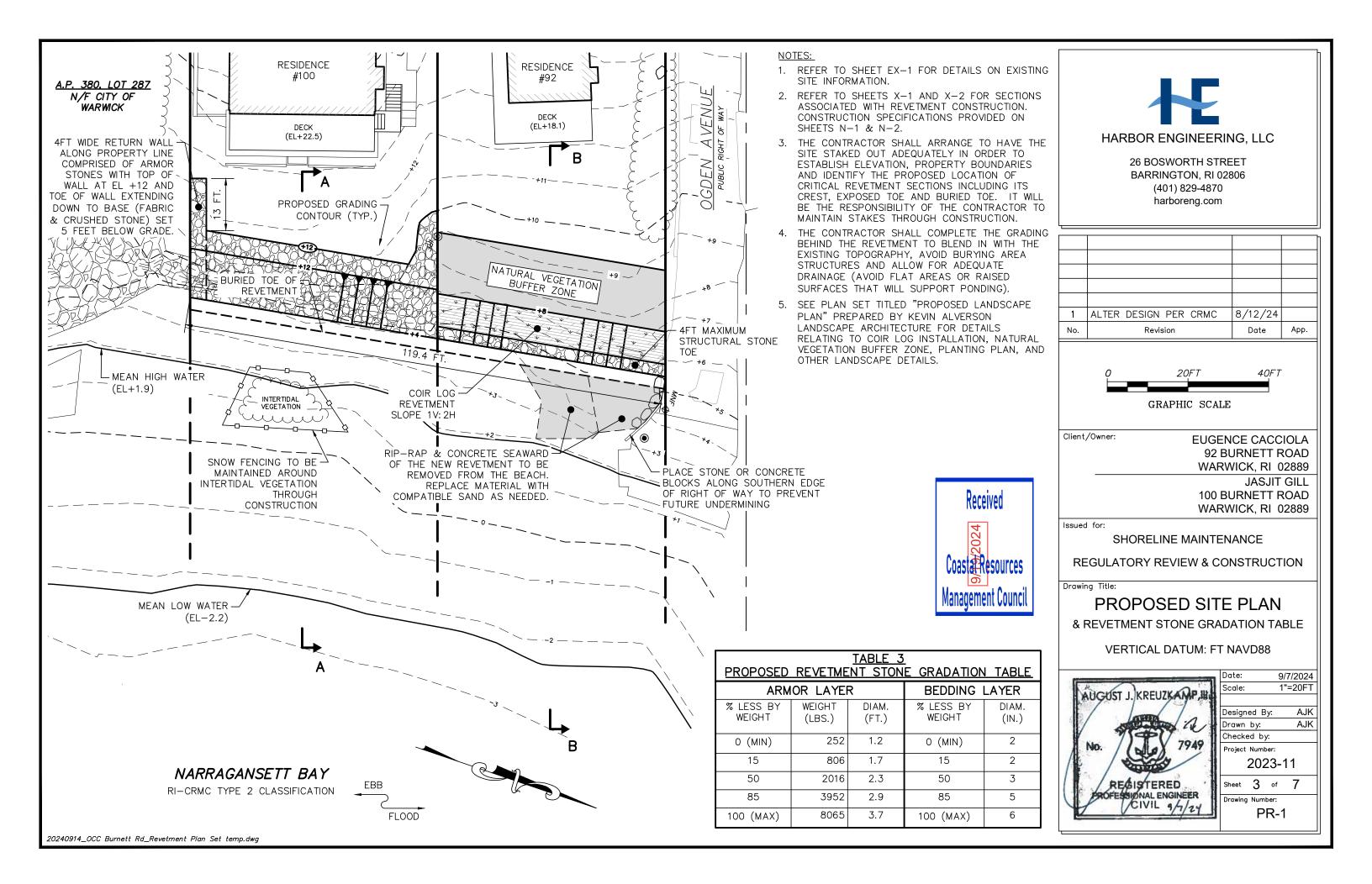
	7. — — — –
	они ———
$\frown \frown \frown \frown \frown \frown$	$\gamma \gamma $
	-0-
	🕲 SMH
	() IRF
	⊕ MNF
* SEE NO	⊕ MNF

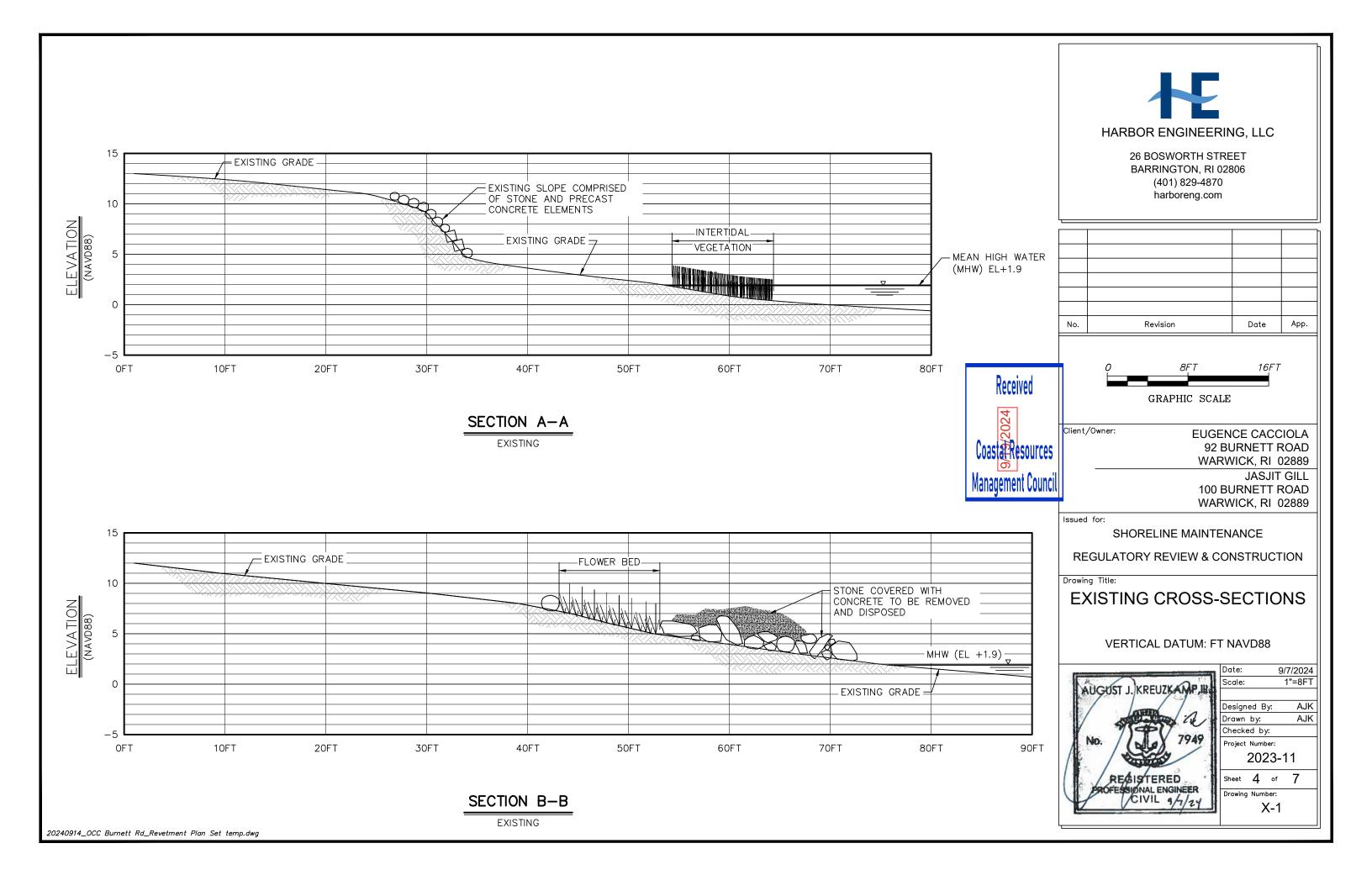
APPROXIMATE PROPERTY LINES* APPROXIMATE ABUTTERS PROP. LINE TOPOGRAPHIC CONTOUR (NAVD88) FEMA FLOOD ZONE DELINEATION** OVERHEAD WIRE EDGE OF VEGETATION MEAN HIGH/LOW WATER LINE CATCH BASIN(S) UTILITY POLE SEWER MANHOLE IRON ROD FOUND "MAG" NAIL FOUND

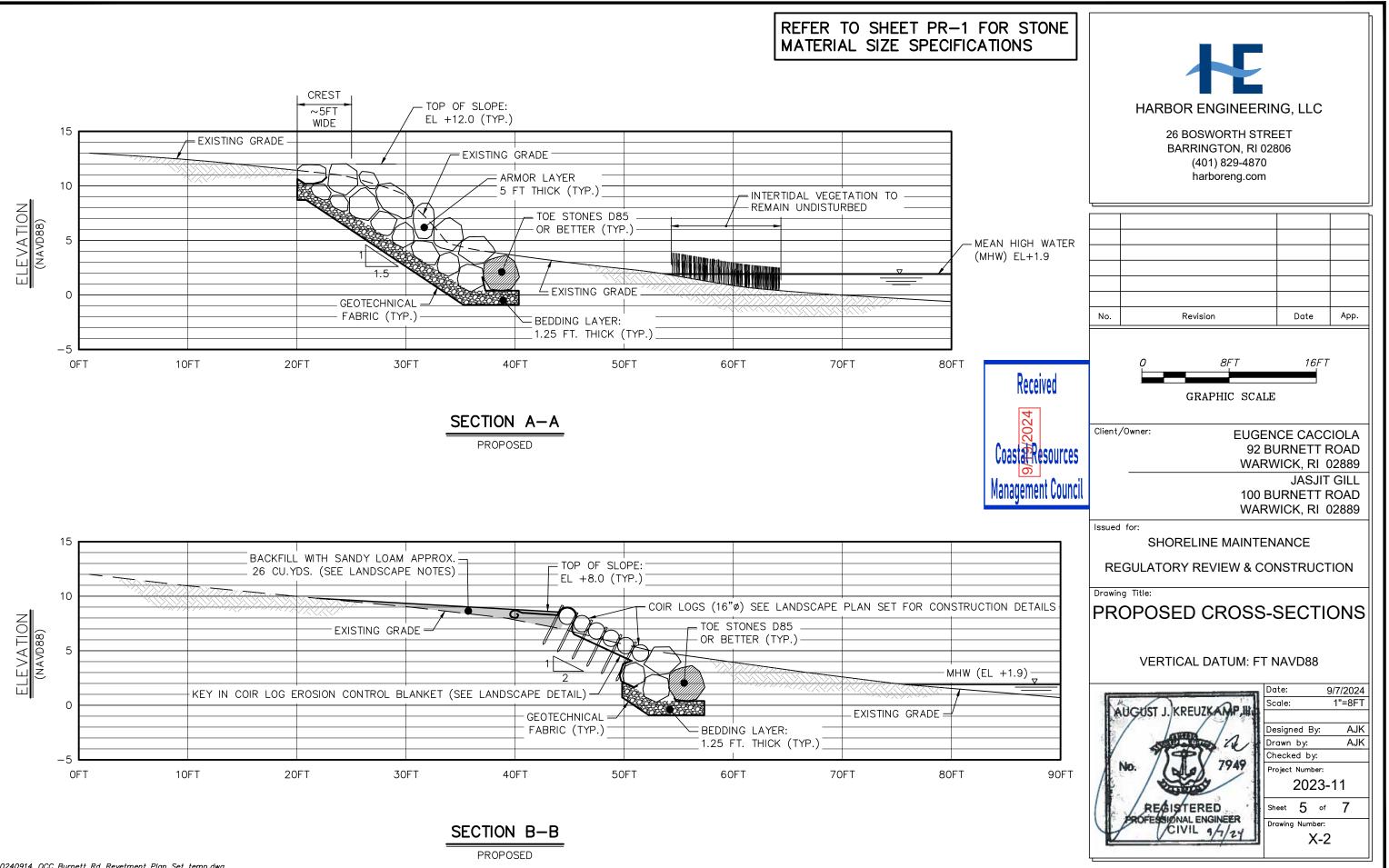
SITE PLAN NOTES:

- 1. THE SITE INFORMATION PRESENTED HEREIN IS THE RESULT OF A FIELD SURVEY BY SOUTH COUNTY SURVEY COMPANY, LLC PERFORMED AUGUST 28, 2023 AND CAN ONLY REPRESENT THE CONDITIONS OF THE SITE AT THAT TIME. THE RESULTING LINEWORK WAS PROVIDED IN THE SITE PLAN TITLED, "EXISTING CONDITIONS SITE PLAN IN THE CITY OF WARWICK, RHODE ISLAND A.P. 307, LOTS 107 & 108 100 BURNETT RD. & 92 BURNETT RD." DATED NOVEMBER 29, 2023. REFER TO REFERENCED PLAN FOR ADDITIONAL INFORMATION.
- 2. ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 3. PROPERTY BOUNDARIES SHOWN WERE NOT DETERMINED BY SOUTH COUNTY SURVEY BUT WERE REPLICATED BASED ON THE FOLLOWING REFERENCES:
- 3.1. 92 BURNETT RD: "SURVEY PLAN SHOWING 92 BURNETT ROAD ASSESSORS MAP 380 LOT 108 WARWICK, RHODE ISLAND." BY FLYNN SURVEYS, INC.
- 3.2. 100 BURNETT RD: "SEA-VIEW PLAT WARWICK, R.I. BY FRANK E. WATERMAN, FEB. 1903"
- 4. SUBJECT PARCELS LAY PARTIALLY WITHIN FEMA FLOOD ZONE X UNSHADED (AREA OF MINIMAL FLOOD HAZARD), PARTIALLY WITHIN FEMA FLOOD ZONE X SHADED (0.2% ANNUAL CHANCE FLOOD HAZARD), PARTIALLY WITHIN FEMA FLOOD ZONE AE (BFE 12 FEET, SPECIAL FLOOD HAZARD AREA) AND PARTIALLY WITHIN FEMA FLOOD ZONE VE (BFE 15 FEET, SPECIAL FLOOD HAZARD AREA). SEE PANEL 44003C0153H EFFECTIVE 9/18/2013 FOR ADDITIONAL INFORMATION.
- 5. THE PROPERTIES OF THE INCIDENT WAVES WERE CALCULATED USING AUTOMATED COASTAL ENGINEERING SOFTWARE (ACES) WITH CONSIDERATION OF THE LOCAL DEEP WATER RESTRICTED FETCHES ASSOCIATED WITH THE 50-YEAR RECURRENCE INTERVAL (2% ANNUAL RECURRENCE).









20240914_OCC Burnett Rd_Revetment Plan Set temp.dwg

DESCRIPTION OF WORK:

THE WORK COVERED UNDER THESE CONTRACT DOCUMENTS, INCLUDING THE DRAWINGS, GENERAL NOTES, AND SPECIFICATIONS AND ALL AMENDMENTS, CONSISTS OF PROVIDING ALL PLANT, LABOR, SUPERVISION, EQUIPMENT, APPURTENANCES AND MATERIALS AND IN PERFORMING ALL OPERATIONS IN CONNECTION WITH AT LEAST, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING ITEMS:

- 1. INSTALLATION OF SNOW FENCE AROUND INTERTIDAL VEGETATION.
- 2. DEMOLITION OF EXISTING SHORELINE STRUCTURE. STONE MATERIAL CAN BE REUSED FOR BEDDING STONE, ARMOR STONE OR BACKFILL DEPENDING ON SIZE. ALL CONCRETE MATERIAL TO BE REMOVED.
- 3. INSTALLATION OF NEW REVETMENT
- 4. BACKFILL AND RE-GRADE ALONG BACKSIDE OF THE REVETMENT.
- 5. IMPORT AND PLACE COMPATIBLE SAND AT NORTH END OF SHORELINE WHERE CONCRETE AND STONE IS REMOVED.

GENERAL NOTES:

- 1. DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, SHALL REMAIN THE PROPERTY OF HARBOR ENGINEERING, LLC. DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR OTHER PROJECTS OR PURPOSES OR BY ANY OTHER PARTIES THAN THOSE AUTHORIZED BY CONTRACT WITHOUT THE SPECIFIC WRITTEN AUTHORIZATION OF HARBOR ENGINEERING, LLC. THE USE OF THIS DOCUMENT IS CONTINGENT UPON PAYMENT TO HARBOR ENGINEERING, LLC. FOR SERVICES RENDERED. NON-PAYMENT SHALL GIVE HARBOR ENGINEERING, LLC. THE AUTHORITY TO BAR DOCUMENT USE BY ANY AND ALL PARTIES.
- 2. ALL WORK SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS AS SHOWN IN THESE PLANS AND SPECIFICATIONS.
- 3. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE PRIOR TO SUBMITTING A BID FOR THE PROJECT.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING ALL ELEMENTS OF THE PROJECT IN CONFORMANCE WITH THESE PLANS AND SPECIFICATIONS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT THE CONDITIONS SHOWN HEREIN ARE AS THEY APPEAR ON-SITE AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES IN DIMENSIONS AND/ OR SITE CONDITIONS. THE CONTRACTOR SHALL NOT BEGIN ORDERING MATERIALS, FABRICATION OR INSTALLATION FOR ANY SUCH AFFECTED AREA UNTIL THE DISCREPANCY HAS BEEN RESOLVED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. IF ANY MODIFICATIONS ARE REQUIRED IN ANY ELEMENT, THE CONTRACTOR SHALL SUBMIT PROPOSED CHANGES IN WRITING TO THE ENGINEER FOR REVIEW.
- 5. ALL WORK SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND STATUTES AND THE REQUIREMENTS AND CONDITIONS OF ALL REGULATORY PERMITS ISSUED FOR THE WORK. CONTRACTOR SHALL BE FAMILIAR WITH THE RI COASTAL RESOURCES MANAGEMENT PROGRAM (RICRMP) AND MAINTAIN COPIES OF FEDERAL, STATE AND LOCAL REGULATORY PERMITS ON SITE THROUGHOUT CONSTRUCTION.
- 6. ALL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED. METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE OSHA CODE, THE RHODE ISLAND STATE BUILDING CODE, AND THE REFERENCED STANDARDS INCLUDED THEREIN THAT ARE APPLICABLE TO THIS PROJECT.
- 7. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT REGULATORY PERMITS AND ALL CONDITIONS OF THOSE PERMITS. THE CONTRACTOR IS ADVISED THAT THE REGULATORY PERMITS FOR THIS PROJECT MAY CONTAIN ADDITIONAL REQUIREMENTS THAT, AFTER ANY ADDENDUM, SUPERSEDE THE DRAWING NOTES. THE CONTRACTOR IS FURTHER ADVISED THAT IN THE CASE OF ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS FOUND BEFORE CONSTRUCTION, THE FINAL DECISION AS TO WHAT INFORMATION TAKES PRECEDENCE WILL BE MADE BY THE ENGINEER OF RECORD ON THE BASIS OF THAT INTENT.
- 8. ALL COMPONENTS SHALL BE INSTALLED PER EACH MANUFACTURER'S SPECIFICATIONS AND/OR STANDARD INDUSTRY PRACTICE AS APPLICABLE.
- 9. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE SURVEY BENCHMARKS ESTABLISHED ON SITE.
- 10. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES A SET OF RECORD DRAWINGS AND

SPECIFICATIONS DURING THE PROGRESSION OF THE PROJECT. RECORD DRAWINGS SHALL BE UPDATED ON A DAILY BASIS AND SHALL BE SUBMITTED TO THE ENGINEER AT THE COMPLETION OF CONSTRUCTION.

- 11. THE CONTRACTOR SHALL SAFEGUARD AND PROTECT ALL EXCAVATIONS.
- 12. DAMAGE TO ANY PROPERTY, PRIVATE OR OF PUBLIC TRUST, OCCURRING DURING THE CONSTRUCTION BY THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING, CUTTING, & CAPPING EXISTING UTILITIES BEFORE CONSTRUCTION AND FOR PROPERLY REINSTALLING UTILITIES AFTER CONSTRUCTION.

DEMOLITION

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LIMIT THE AMOUNT OF EXPOSED SHORELINE DURING CONSTRUCTION IN ORDER TO MINIMIZE THE CHANCE OF SHORELINE RECESSION SHOULD A STORM EVEN OCCUR DURING CONSTRUCTION. IN SUCH A CASE THE CONTRACTOR SHALL TEMPORARILY PLACE STONE MATERIAL ALONG ANY/ALL EXPOSED SHORELINE SHOULD A SIGNIFICANT STORM EVENT OCCUR.
- 2. CONTRACTOR SHALL INSTALL AND MAINTAIN SNOW FENCING TO PROTECT INTERTIDAL VEGETATION THROUGH CONSTRUCTION AND INSTALL PROPER SEDIMENT/EROSION AS REQUIRED TO MANAGE STOCKPILED SOILS ON SITE ABOVE MEAN HIGH WATER.
- 3. EXCESS SOILS/FILL AND DEMOLISHED MATERIAL SHALL BECOME THE PROPERTY OF TH CONTRACTOR AND SHALL BE COMPLETELY REMOVED FROM THE JOB SITE AND DISPOSED OF IN A SAFE AND LEGAL MANNER.
- 4. CONTRACTOR SHALL MAKE AVAILABLE A DETAILED DISPOSAL PLAN THAT INCLUDES THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE DISPOSAL SITE; AND A SIGNED MANIFEST AND DISPOSAL TICKET(S) THAT SUBSTANTIATE APPROVED DISPOSAL OF MATERIAL REMOVED FROM SITE.

BACKFILLING

- MATERIALS THAT DO NOT COMPLY WITH THE REQUIREMENTS FOR SATISFACTORY MATERIALS SHALL BE DEEMED UNSATISFACTORY. UNSATISFACTORY MATERIALS ALSO INCLUDE MAN-MADE FILLS, TRASH, REFUSE, OR BACKFILLS FROM PREVIOUS CONSTRUCTION. UNSATISFACTORY MATERIAL ALSO INCLUDES MATERIAL CLASSIFIED A' SATISFACTORY THAT CONTAINS ROOT AND OTHER ORGANIC MATTER, FROZEN MATERIAL, AND STONES LARGER THAN 3 INCHES.
- 2. UNSATISFACTORY MATERIALS REMOVED FROM EXCAVATIONS SHALL BE DISPOSED OF IN DESIGNATED WASTE DISPOSAL OR SPOIL AREAS.
- 3. SATISFACTORY MATERIALS SHALL COMPRISE ANY MATERIALS CLASSIFIED BY ASTM D 2487 AS GW, GP, GM, GP-GM, GW-GM, GC, GP-GC, GM-GC, SW AND SP. SATISFACTORY MATERIALS SHALL BE USED IN BRINGING FILLS AND BACKFILLS TO THE LINES AND GRADES INDICATED AND FOR REPLACING UNSATISFACTORY MATERIALS.
- 4. SATISFACTORY MATERIAL REMOVED FROM EXCAVATIONS SHALL BE USED, INSOFAR AS PRACTICAL, IN THE CONSTRUCTION OF FILLS, EMBANKMENTS, SUBGRADES, SHOULDERS BEDDING (AS BACKFILL), AND FOR SIMILAR PURPOSES.
- 5. SATISFACTORY MATERIALS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS, OR 6 INCHES WHEN HAND-OPERATED COMPACTORS ARE USED. BACKFILL SHALL NOT FALL BELOW 95% OF ITS DENSITY AT OPTIMUM MOISTURE CONTENT.
- 6. DEGREE OF COMPACTION IS EXPRESSED AS A PERCENTAGE OF THE MAXIMUM DENSITY OBTAINED BY THE TEST PROCEDURE PRESENTED IN ASTM D 1557, ABBREVIATED AS PERCENT LABORATORY MAXIMUM DENSITY.
- 7. GROUNDWATER FLOWING TOWARD OR INTO EXCAVATIONS SHALL BE CONTROLLED TO PREVENT SLOUGHING OF EXCAVATION SLOPES AND WALLS, BOILS, UPLIFT AND HEAVE IN THE EXCAVATION AND TO ELIMINATE INTERFERENCE WITH ORDERLY PROGRESS OF CONSTRUCTION.



S S S S S S S S S S S S S S S S S S S						
IE No. Revision Date App. No. Revision Date App. Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawing Vither REGULATORY REVIEW NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawing Lingther REGULATORY REVIEW No. 2023-11 Sheet 6 of 7 Drawing Number:	<u>-</u> S	HARBOR ENGINEERING, LLC 26 BOSWORTH STREET BARRINGTON, RI 02806 (401) 829-4870				
IE No. Revision Date App. No. Revision Date App. Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawing Vither REGULATORY REVIEW NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawing Lingther REGULATORY REVIEW No. 2023-11 Sheet 6 of 7 Drawing Number:	-	l			1	
No. Revision Date App. Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Indextra Structure Indextra Structure Indextra Structure Example Indextra Structure Indextrow Indextra Structure	-, -,					
No. Revision Date App. Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Indextra Structure Indextra Structure Indextra Structure Example Indextra Structure Indextrow Indextra Structure						
No. Revision Date App. Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Indextra Structure Indextra Structure Indextra Structure Example Indextra Structure Indextrow Indextra Structure						
Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES	IE	No	Revision		Date	App
S 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawn by: Drawn by: Draw					Date	
S 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawn by: Drawn by: Draw	-					
S 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawn by: Drawn by: Draw						
S 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawn by: Drawn by: Draw		Client /Own	er:			
N BARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES NOTES NOTES	S			92 Bl	JRNETT F	ROAD
N 100 BURNETT ROAD WARWICK, RI 02889 Issued for: REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES	~			WARV		
REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES Date: 9/7/2024 Scale: N/A Designed By: AJK Drawn by: AJK Drawn by: AJK Drawn by: AJK Checked by: Project Number: 2023-11 Sheet 6 of 7 Drawing Number:	Ν				JRNETT F	ROAD
NOTES NOTES No. 7949 REGISTERED REGIST	Ĩ					
NOTES	ò,	Drawina Tit	tle:			
No. 7949 REGISTERED				ES		
No. 7949 REGISTERED	ſ					
	es ncil	AUG No.	REGISTERED	Sc De Dr Ch Pr Sh	ale: awn by: lecked by: oject Number: 2023- eet 6 of awing Number:	N/A AJK AJK ·11 7
					IN- I	

<u>RIP RAP NOTES:</u>

- 1. ARMOR & FILTER STONE SHALL BE A DENSE, SOUND GNEISS, DIORITE, OR BASALT, HAVING A MIN. DENSITY OF 165 PCF.
- 2. ARMOR STONES SHOULD BE PLACED SUCH THAT THEY NOT PROTRUDE EXCESSIVELY FROM THE STRUCTURE FACE TO PREVENT EXCESSIVE WAVE ACTION ON INDIVIDUAL STONES. HOWEVER, THE FACE SHOULD NOT BE FLAT AND EXCESSIVELY TIGHT. STONES SHOULD NOT PROTRUDE MORE THAN ONE-FIFTH OF IT'S DIMENSION PERPENDICULAR TO THE STRUCTURE FACE.
- 3. STONES SHOULD BE KEYED AND FITTED, MAXIMIZING CONTACT ON ALL SIDES. THREE POINTS OF CONTACT (MINIMUM) ARE REQUIRED BETWEEN A STONE AND OTHER STONES IN THE SAME LAYER OR WITH OTHER STONES IN THE LAYER AND A STRUCTURE CAP.
- 4. STONE SHALL BE PLACED IN A MANNER SUCH THAT THE LONGITUDINAL AXIS OF EACH STONE IS NORMAL TO THE AXES OF THE STRUCTURE, AND SLOPE DOWNWARD TOWARD THE CENTER OF THE STRUCTURE. ALL CAP STONE SHOULD BE PLACED TOGETHER AS CLOSELY AS PRACTICAL.
- 5. CONTRACTOR SHALL IDENTIFY QUARRY SOURCE FOR ALL STONE MATERIALS FOR ENGINEER TO INSPECT PRIOR TO SHIPMENT TO PROJECT SITE.
- 6. FILTER FABRIC SHALL BE MIRAFI FILTERWEAVE 700. FILTER FABRIC SHALL BE BACK-WRAPPED INTO THE FILTER STONE AT ALL TERMINATIONS.



HARBOR ENGINEERING, LLC

26 BOSWORTH STREET BARRINGTON, RI 02806 (401) 829-4870 harboreng.com

	Revision	Date			
Issuec	Client/Owner: EUGENE CACCIOLA 92 BURNETT ROAD WARWICK, RI 02889 JAS GILL 100 BURNETT ROAD WARWICK, RI 02889 Issued for:				
	REGULATORY REVIEW & CONSTRUCTION Drawing Title: NOTES				
	No. REGISTERED	ate: (cale: esigned By: rawn by: necked by: roject Number: 2023- neet 7 of rawing Number: N-2	7		