

SACHEM BROOK OUTFALL REPAIR PROJECT

ISSUED FOR BIDDING

WOLLASTON BEACH

QUINCY, MASSACHUSETTS

April 2015

SHEET NO.	TITLE	LAST REVISED
1	COVER SHEET	04/07/2015
2	NOTES AND LEGEND SHEET	04/07/2015
3	EXISTING CONDITIONS PLAN	04/07/2015
4	LIMITS OF WORK & IMPACTS	04/07/2015
5	LIMITS OF DEMOLITION	04/07/2015
6	PROPOSED CONDITIONS PLAN - PROFILE AND TYPICAL CROSS SECTION	04/07/2015



SCALE: 1:24000
LOCATION PLAN

DEPARTMENT OF PUBLIC WORKS

MAYOR
THOMAS P. KOCH

DANIEL RAYMONDI, COMMISSIONER

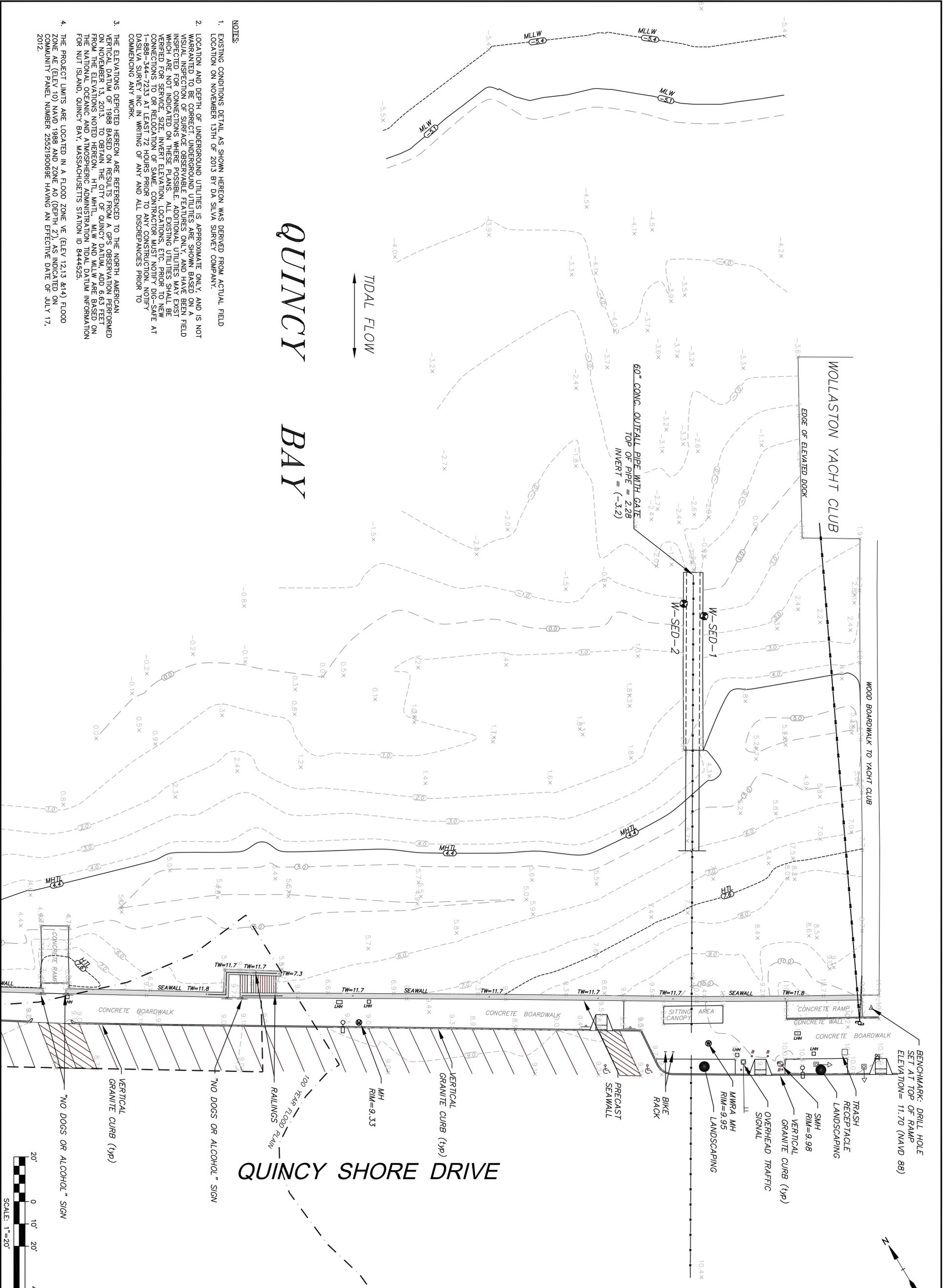
SHAWN HARDY, CITY ENGINEER



Tighe & Bond
Consulting Engineers



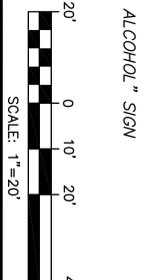
COMPLETE SET 6 SHEETS



QUINCY BAY

QUINCY SHORE DRIVE

- NOTES:**
1. EXISTING CONDITIONS DETAIL AS SHOWN HEREON WAS DERIVED FROM ACTUAL FIELD LOCATION ON NOVEMBER 13TH OF 2013 BY DA SILVA SURVEY COMPANY.
 2. LOCATION AND DEPTH OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY, AND IS NOT WARRANTED TO BE CORRECT. UNDERGROUND UTILITIES ARE SHOWN BASED ON A MISPLACED CONFIDENCE SURVEY OF SERVICE FEATURES ONLY, AND HAVE BEEN FIELD INSPECTED FOR LOCATION HEREON. WHERE POSSIBLE, ALL EXISTING UTILITIES SHALL BE VERIFIED FOR SERVICE SIZE, INVERT ELEVATION, LOCATIONS, ETC. PRIOR TO NEW CONNECTIONS TO OR RELOCATION OF SAME. CONTRACTOR MUST NOTIFY DIG-SAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION. NOTIFY DASILVA SURVEY INC IN WRITING OF ANY AND ALL DISCREPANCIES PRIOR TO COMMENCING ANY WORK.
 3. THE ELEVATIONS DEPICTED HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 BASED ON RESULTS FROM A GPS OBSERVATION PERFORMED ON NOVEMBER 13, 2013. TO OBTAIN THE CITY OF QUINCY DATUM, ADD 6.63 FEET FROM THE ELEVATIONS NOTED HEREON. HTL, MHTL, MLW AND MLLW ARE BASED ON THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION TIDAL DATUM INFORMATION FOR NUT ISLAND, QUINCY BAY, MASSACHUSETTS STATION ID 8444525.
 4. THE PROJECT LIMITS ARE LOCATED IN A FLOOD ZONE VE (ELEV 12.13 & 14) FLOOD ZONE AE (ELEV 10) NAVD 1988 AND ZONE AO (DEPTH 2"), AS INDICATED ON COMMUNITY PANEL NUMBER 2552190069E HAVING AN EFFECTIVE DATE OF JULY 17, 2012.



City of Quincy
Sachem Brook
Outfall Repair
Project
 Quincy, Massachusetts

City of Quincy
 JENNIFER CHRISTY
 CIVIL ENGINEER
 No. 47880
 PROFESSIONAL SEAL

COMMISSION OF REGISTERED PROFESSIONALS
 DANIELA MURPHY
 CIVIL ENGINEER
 No. 58262
 PROFESSIONAL SEAL

4-8-15

Mark	Date	Description
A	12/14	Issued for Permit
B	3/15	Issued for Bidding

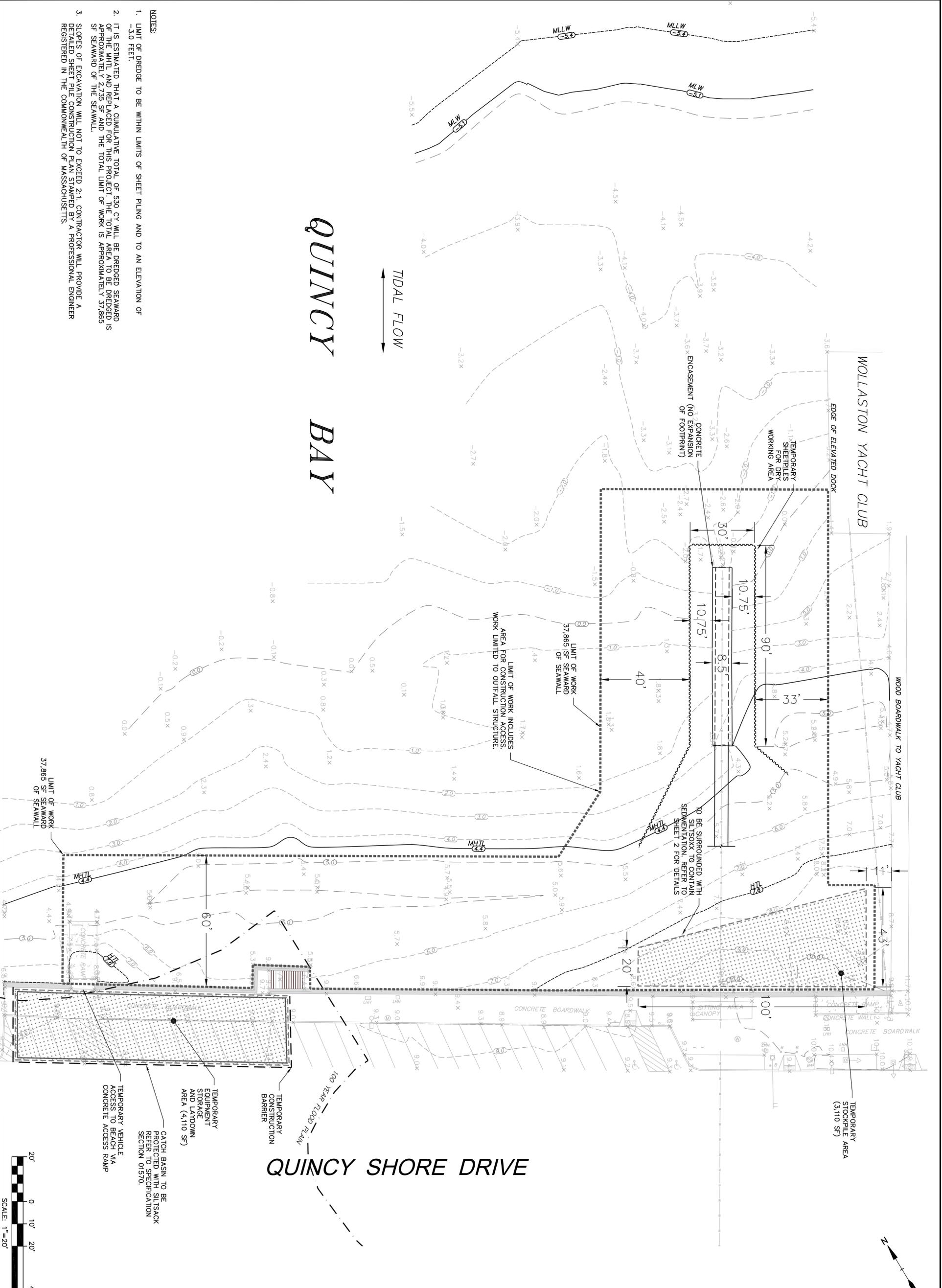
PROJECT NO: 00032
 DRAWN BY: Shelding DGM
 CHECKED: JEC
 APPROVED BY: DAM

EXISTING CONDITIONS PLAN

SCALE: 1"=20'

SHEET 3

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 Consulting Engineers
 www.tighebond.com

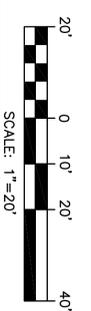


- NOTES:**
1. LIMIT OF DREDGE TO BE WITHIN LIMITS OF SHEET PILING AND TO AN ELEVATION OF -3.0 FEET.
 2. IT IS ESTIMATED THAT A CUMULATIVE TOTAL OF 530 CY WILL BE DREDGED SEAWARD OF THE MHL AND REPLACED FOR THIS PROJECT. THE TOTAL AREA TO BE DREDGED IS APPROXIMATELY 2,735 SF AND THE TOTAL LIMIT OF WORK IS APPROXIMATELY 37,865 SF SEAWARD OF THE SEAWALL.
 3. SLOPES OF EXCAVATION WILL NOT TO EXCEED 2:1. CONTRACTOR WILL PROVIDE A DETAILED SHEET PILE CONSTRUCTION PLAN STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS.

QUINCY BAY

TIDAL FLOW

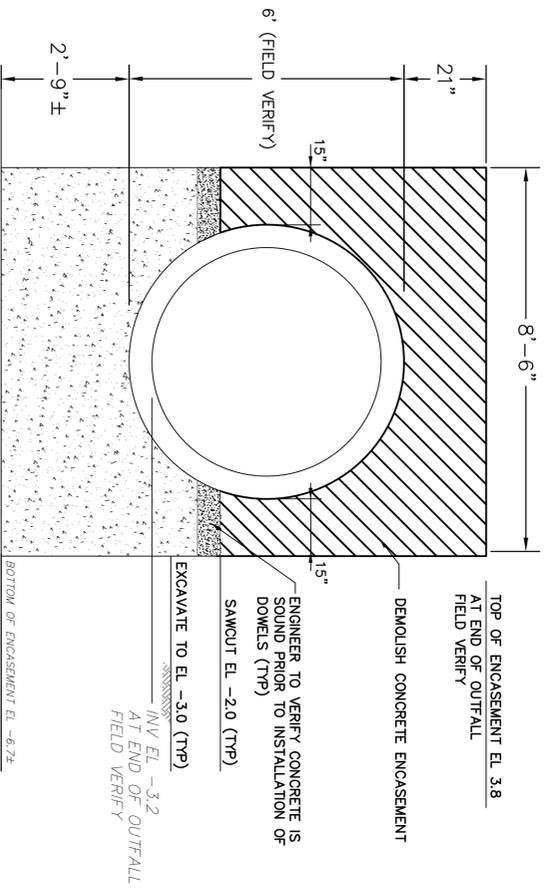
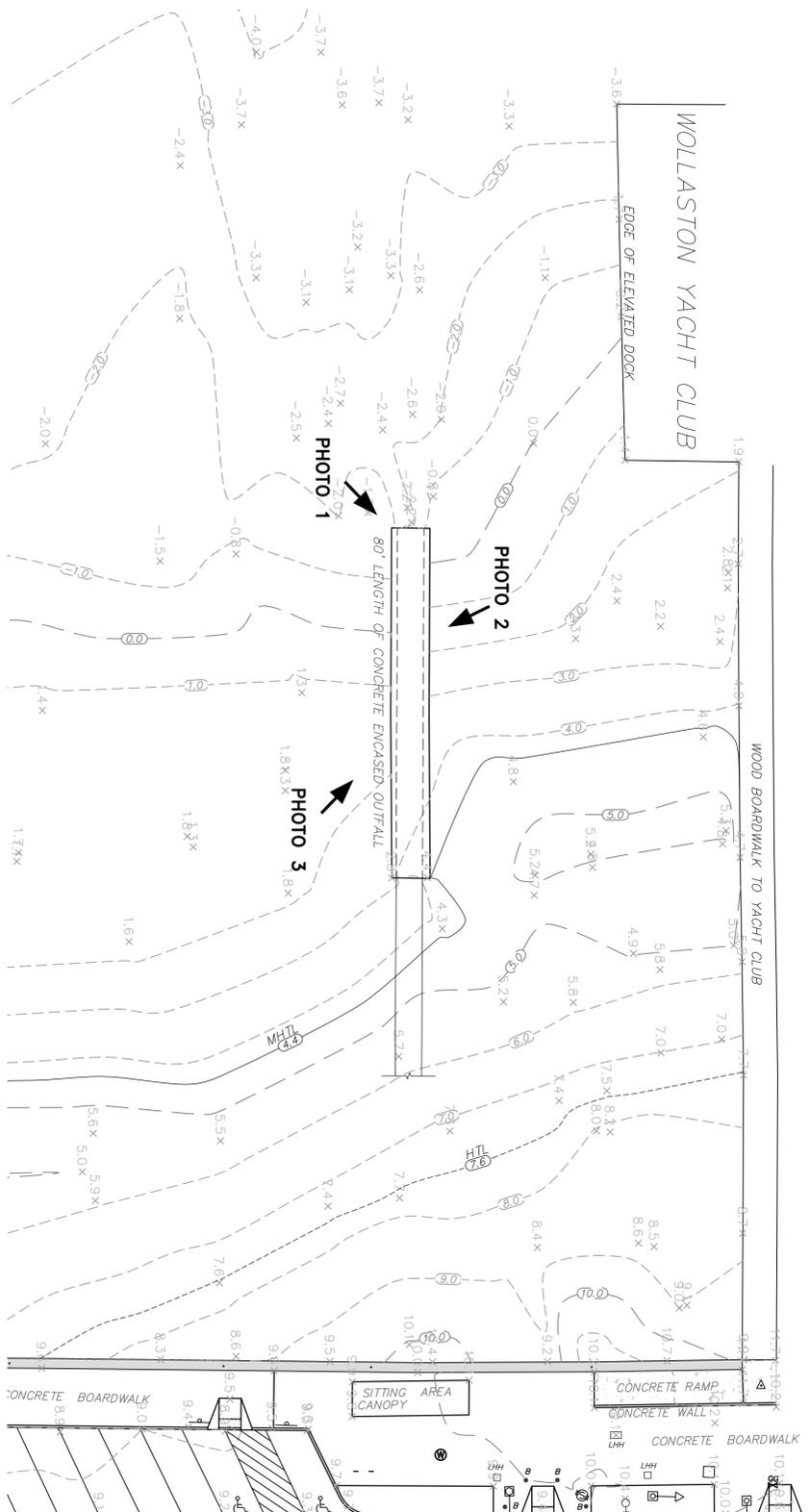
QUINCY SHORE DRIVE



<p>City of Quincy Sachem Brook Outfall Repair Project</p> <p>Quincy, Massachusetts</p>		<p>APPROVED BY: DAM</p> <p>CHECKED: JEC</p> <p>DRAWN BY: DGM</p> <p>FILE: Sled.dwg</p> <p>PROJECT NO.: 00032</p> <p>Mark Date Description</p> <tr> <td>A</td> <td>12/14</td> <td>Issued for Permit</td> </tr> <tr> <td>B</td> <td>3/15</td> <td>Issued for Bidding</td> </tr>	A	12/14	Issued for Permit	B	3/15	Issued for Bidding
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Tighe & Bond
 Consulting Engineers
 www.tighebond.com

APPROVED BY: *Jennie Christy* 4-8-15
 APPROVED BY: *David A. Bond* 4-8-15



DEMOLITION OF CONCRETE ENCASUREMENT OF RCP PIPE
 CROSS-SECTION



CONCRETE PIPE ENCASUREMENT TO BE DEMOLISHED AND REPLACED IN KIND



PHOTO 1



PHOTO 2



PHOTO 3



City of Quincy

Sachem Brook
 Outfall Repair
 Project

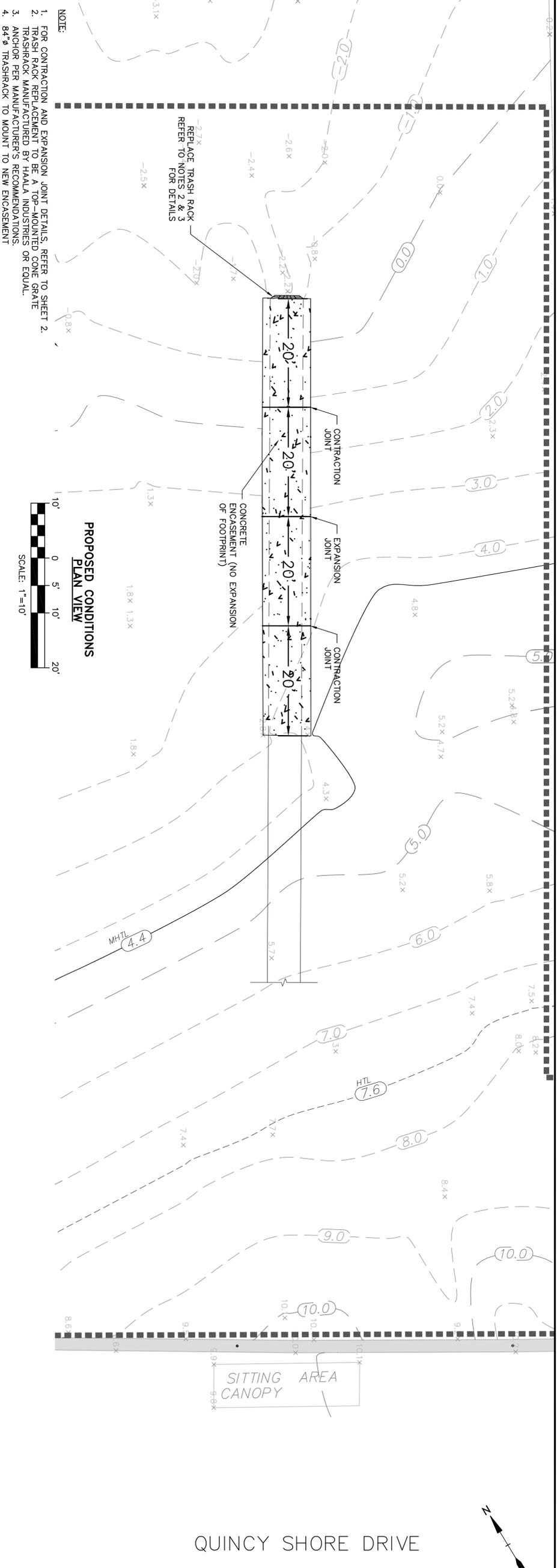
Quincy, Massachusetts

B	3/15 Issued for Bidding
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Mark	Date Description
FILE:	She.dwg
PROJECT NO.:	00032
DRAWN BY:	CFY
CHECKED:	AMR
APPROVED BY:	DAM

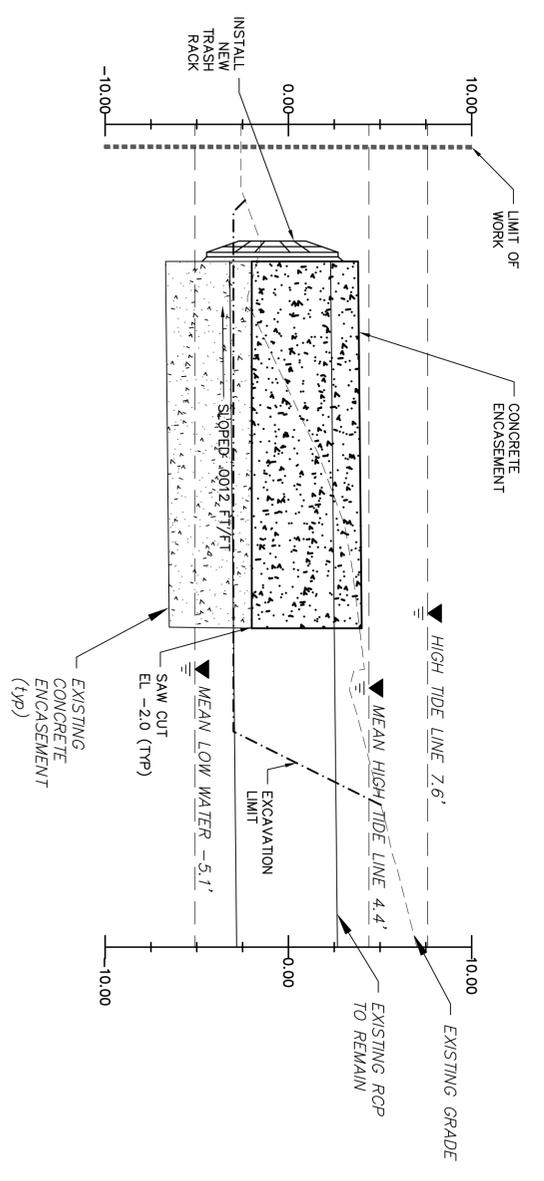
LIMITS OF DEMOLITION

SCALE: AS SHOWN

SHEET 5

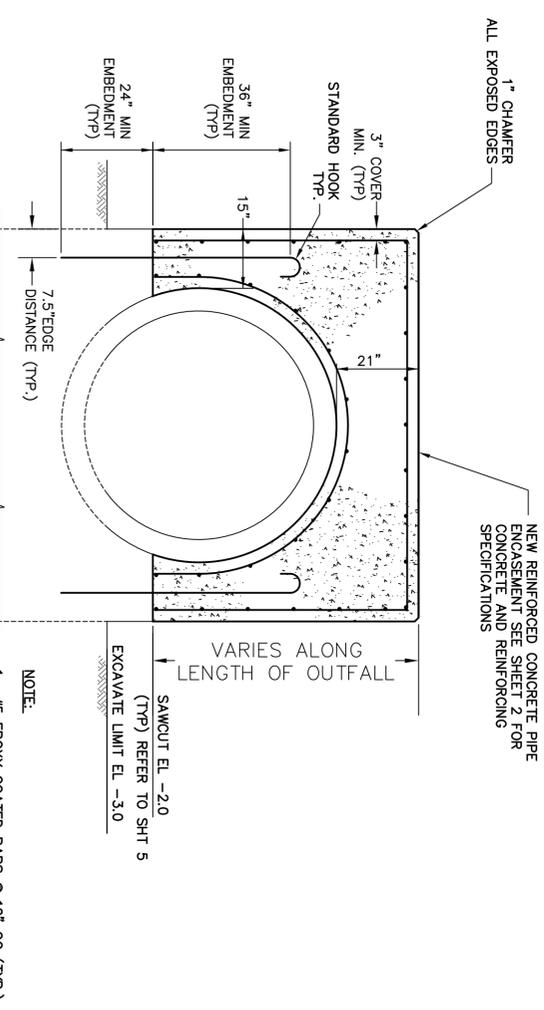
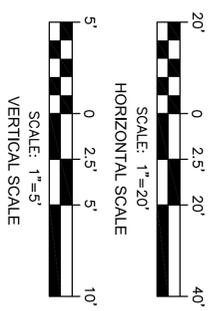


- NOTE:
1. FOR CONTRACTION AND EXPANSION JOINT DETAILS, REFER TO SHEET 2.
 2. TRASH RACK REPLACEMENT TO BE A TOP-MOUNTED CONE GRADE.
 3. ANCHOR PER MANUFACTURER'S RECOMMENDATIONS.
 4. 84" TRASHRACK TO MOUNT TO NEW ENCASEMENT.



- NOTE:
1. LIMIT OF DREDGE TO BE WITHIN LIMITS OF SHEET PILING AND TO AN ELEVATION OF -3.0 FEET.
 2. IT IS ESTIMATED THAT A CUMULATIVE TOTAL OF 530 CY WILL BE DREDGED SEAWARD OF THE MHTL AND REPLACED FOR THIS PROJECT. THE TOTAL AREA TO BE DREDGED IS APPROXIMATELY 2732 SF AND THE TOTAL LIMIT OF WORK IS APPROXIMATELY 57,865 SF SEAWARD OF THE SEAWALL.
 3. CONCRETE ENCASEMENT WILL BE REPLACED IN-KIND AND WILL NOT EXPAND BEYOND EXISTING FOOTPRINT. TRASH RACK WILL BE REPLACED WITH SIMILAR UNIT TO BE APPROVED BY THE ENGINEER.
 4. SLOPES OF THE EXCAVATION NOT TO EXCEED 2:1.

PROFILE CONDITIONS
CROSS-SECTION



- NOTE:
1. #5 EPOXY COATED BARS @ 12" OC (TYP.)
 2. DOWELS BARS INTO EXISTING CONCRETE USING HILTI, HIT-RE 500SD OR EQUAL.

PROPOSED CONCRETE ENCASEMENT OF RCP PIPE
CROSS-SECTION



QUINCY SHORE DRIVE



City of Quincy
 Sachem Brook
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 Project
 Quincy, Massachusetts

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SHEET 6		