

Project: Esplanade Curtain Wall Repairs **Date:** November 20, 2018
RE: Addendum #1
of Pages: 4

The following information is provided in response to specific questions received by BPCA in connection with the Esplanade Curtain Wall Repairs Project RFP. The submitted questions were either posed at the pre-proposal conference held on November 8, 2018 or received in writing by close of business on November 14, 2018.

Questions: (Answers to all question are shown in italics immediately after the question.):

- 1) Is there a designated contractor staging/laydown area? Or do we need to perform majority of work from the water (with exceptions of the expansion joints)?

RESPONSE: *There is no designated staging/laydown area. A small portion of the Esplanade may be used for this purpose. The Proposer should submit a requested staging plan with its Proposal.*

- 2) Is night time work allowed? So as to avoid some heavy wave action from ferry vessels?

RESPONSE: *There will be no night time work allowed.*

- 3) Are there any specs or sheet of general notes? Are work permits required?

RESPONSE: *Contractor is expected to use the products in the notes, or an approved equal. Alternate products must meet or exceed those specified in the drawings. A Battery Park City Authority work permit is required.*

- 4) The drawings indicate under Deficiency Code “E” – Repair Detail B/S-204. I don’t see any drawing sheet S-204.

RESPONSE: *As per contract drawings; Deficiency code “E” should refer to B/S-300. Code “B” should refer to A/S-300, C/S-300, D/S-300, and E/S-300.*

- 5) Under the Repair Notes on each sheet it lists: Expansion Joint A...are their different types of expansion joint (A, B, C)?

RESPONSE: *No, “A” is just the first sub-item under note 1. For example, Hairline Cracks have both “A” and “B”.*

- 6) Is there a detail available regarding the existing expansion joints?

RESPONSE: *A detail of the existing joint is not available. The expectation for the repair is to remove existing joint and replace with a new 2” x 4” joint per the notes. Joints are vertical and span the entire height of the curtain wall (14’) and are approximately 2” wide and 1’3” deep. This is illustrated in the attached section included as a response to number 7.*

- 7) The Vertical Wall Spall Repair doesn't show where MLLW or MHW, are the repairs in the tidal zone? Can the engineer provide a cross-section of the curtain wall?

RESPONSE: *See attached typical section of the curtain wall. While some repairs are above mean high water (MHW), a portion of the repairs are in the tidal zone and a portion are below mean low water (MLW).*

- 8) What is the required lap splice length for steel placement? The drawing simply lists "Lap Slice length typical each side", but the detail is listed as "Not To Scale"

RESPONSE: *Lap splice length shall be in accordance with ACI 318-99. Prior to patching the spalled area, the engineer and contractor will inspect the spliced reinforcement.*

- 9) What is the size of rebar? I don't see this information anywhere.

RESPONSE: *Contractor must verify rebar size in field and match the new rebar size to the existing.*

By signing the line below, I am acknowledging that all pages of the addendum has been received reviewed and understood, and will be incorporated into the bid price submitted. This document must be attached to the proposal for consideration.

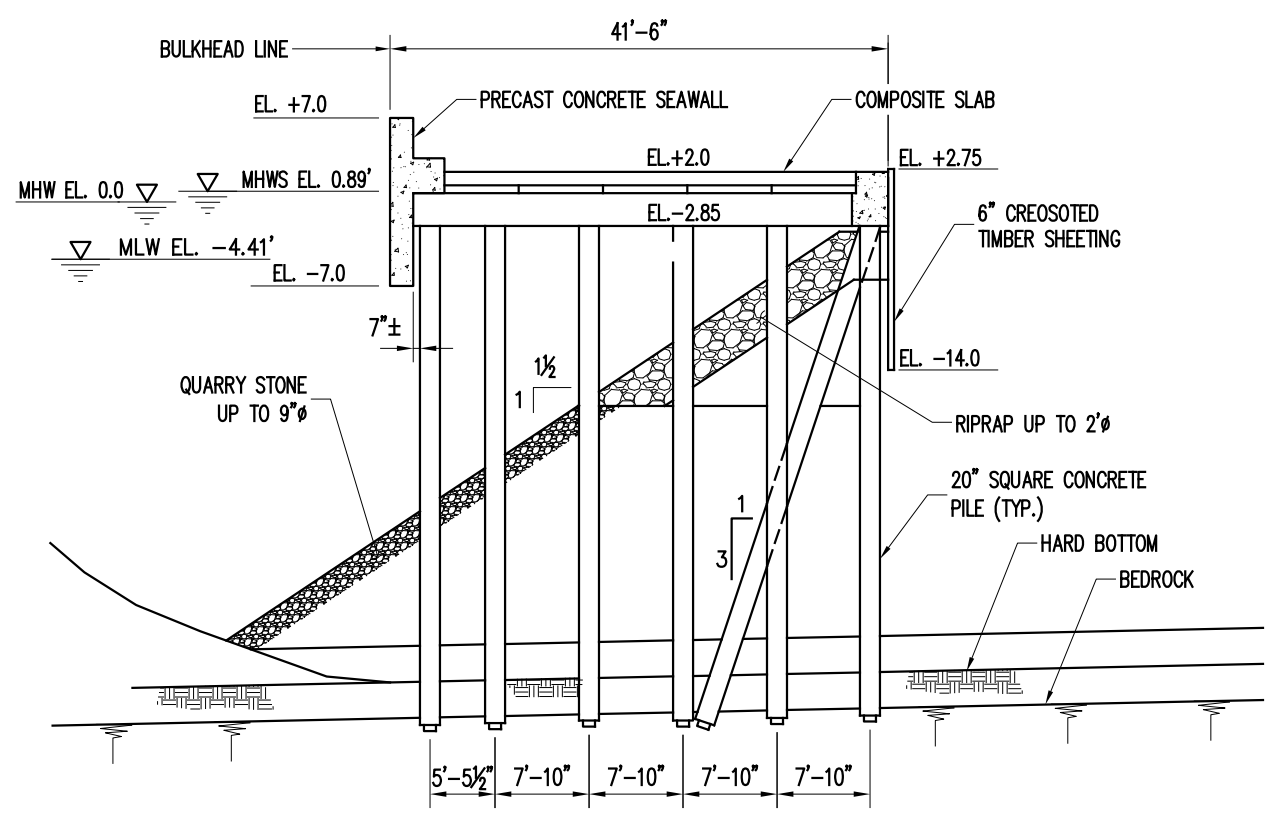
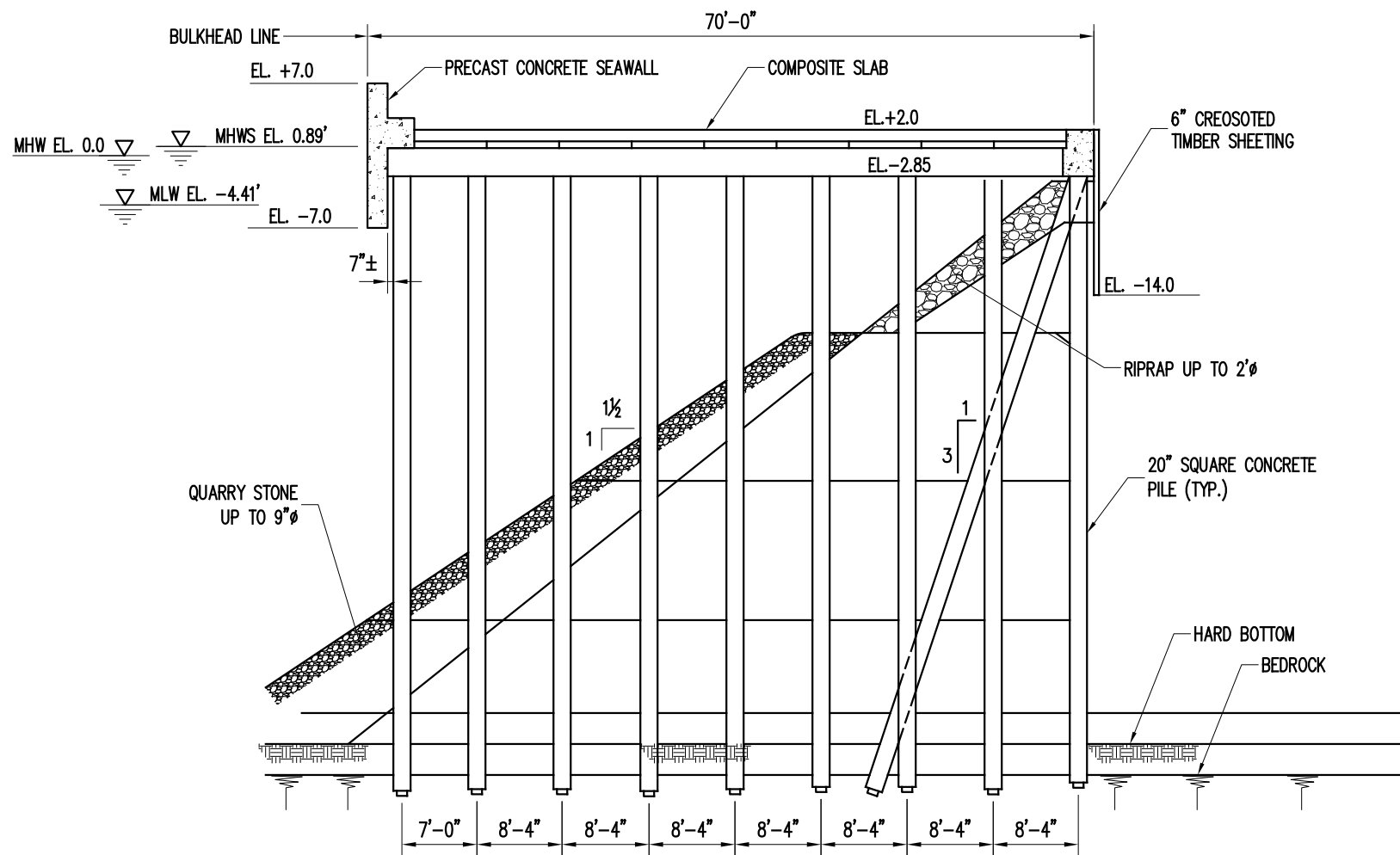
Print Name

Signature

Date

Number of pages received: _____ <fill in>

Distributed to: All present and all prospective Proposers



A TYPICAL EXISTING ESPLANADE SECTION
S-6.0

0 16' 32'
1/16" = 1'-0"

NOTE:
SUBSURFACE PROFILE TAKEN FROM AS-BUILT "BATTERY PARK CITY"
DRAWINGS DEVELOPED BY MUESER, RUTLEDGE, WENTWORTH, AND JOHNSTON
CONSULTING ENGINEERS, DATED JUNE 17, 1974.

B TYPICAL EXISTING ESPLANADE SECTION
S-6.0

0 16' 32'
1/16" = 1'-0"

NOTE:
SUBSURFACE PROFILE TAKEN FROM AS-BUILT "BATTERY PARK CITY"
DRAWINGS DEVELOPED BY MUESER, RUTLEDGE, WENTWORTH, AND JOHNSTON
CONSULTING ENGINEERS, DATED JUNE 17, 1974.

DEC PERMIT
SUBMISSION

PROJECT NO.	140950.32
SCALE	AS NOTED
DATE	3/30/2018
DRAWN BY	RRR
CHECKED BY	CPP
DRAWING NO.	S-6.0
	7 OF 8 SHEETS

McLaren ENGINEERING GROUP
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BATTERY PARK CITY
ESPLANADE REPAIRS
NEW YORK
NEW YORK

EXISTING SECTION

FILE NAME: P:\Proj\140950.32\10_Dwg\140950.32\10_Dwg\140950.32-6 section and details 11x17.dwg PLOT TIME: Wed, 28 Mar 2018 - 3:44pm LAST SAVE: Wed, 28 Mar 2018 - 3:33pm BY: eahlu

WARNING - IT IS A VIOLATION OF NEW YORK STATE EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

GENERAL PROCEDURE

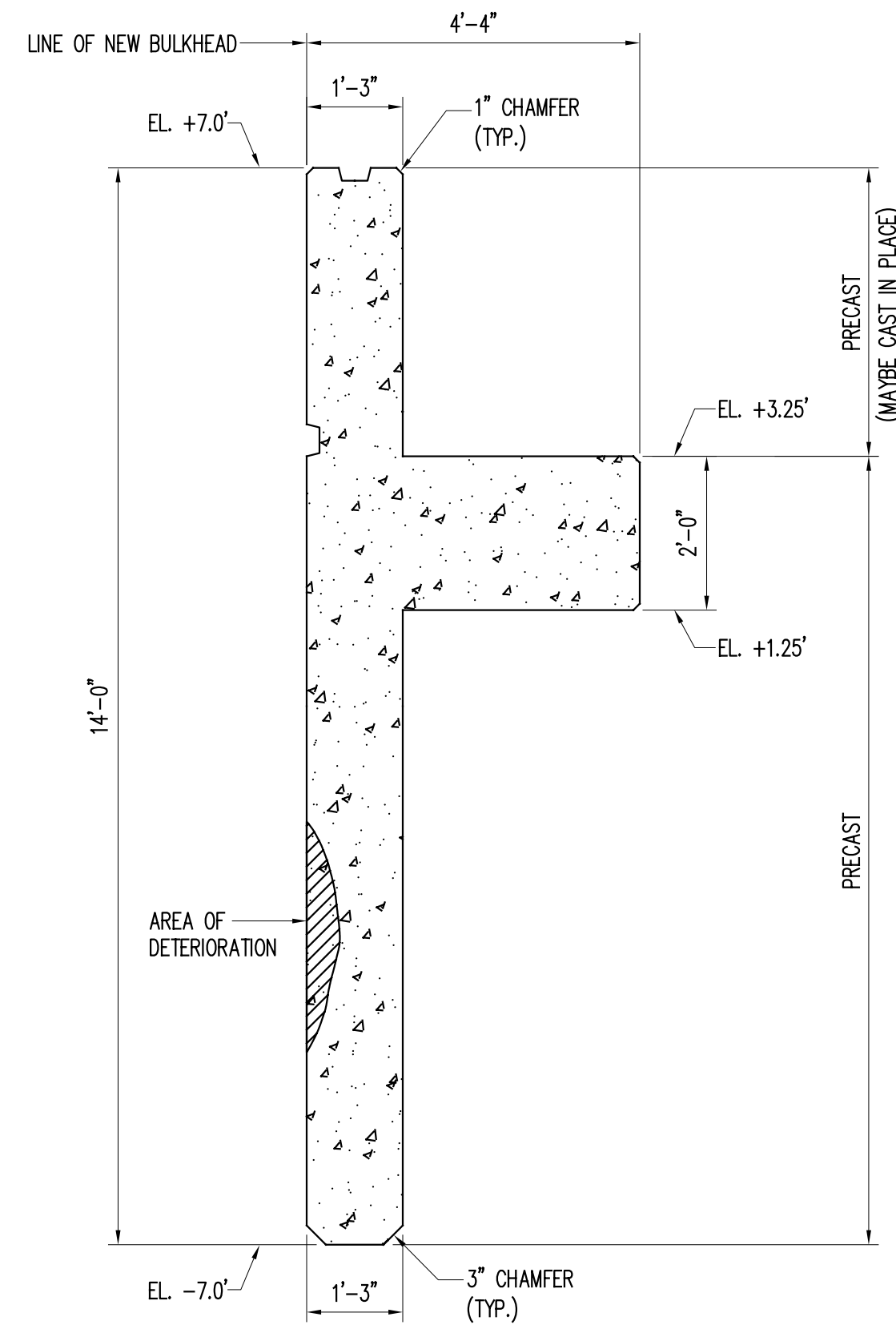
1. CONTRACTOR SHALL DEVELOP A CONSTRUCTION SCHEDULE WITH THE ENGINEER AND OWNER.
2. CONTRACTOR WILL ERECT ANY REQUIRED STAGING AND WILL DETERMINE AND MARK DEFICIENCIES TO BE REPAIRED.
3. ENGINEER WILL INSPECT TO ENSURE NO DETECTABLE DEFICIENCIES HAVE BEEN MISSED AND THAT AN APPROPRIATE AREA AROUND EACH DEFICIENCY HAS BEEN MARKED FOR REMOVAL.
4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED TO SUPPORT EXISTING STRUCTURE DURING REPAIR PROCEDURES.
5. CONTRACTOR SHALL REMOVE DEFICIENT CONCRETE AND OTHER DEFICIENT MATERIALS ACCORDING TO DRAWINGS AND SPECIFICATIONS.
6. THE CONTRACTOR SHALL REMOVE DEBRIS FROM THE PROJECT SITE DAILY. DO NOT ALLOW ACCUMULATIONS IN OR NEAR THE SITE AND PREVENT THE SPREAD OF DUST AND DEBRIS INTO THE SURROUNDING AREA.
7. ENGINEER WILL INSPECT TO ENSURE THAT SUFFICIENT MATERIAL HAS BEEN REMOVED AND THAT REPAIR WORK MAY PROCEED.
8. CONTRACTOR WILL MAKE REPAIRS ACCORDING TO DRAWINGS AND SPECIFICATIONS.
9. ENGINEER WILL INSPECT TO ENSURE THAT ALL REPAIRS HAVE BEEN SATISFACTORILY COMPLETED.
10. THE CONTRACTOR WILL PREPARE "AS BUILT" DRAWINGS FOR THE OWNER.
11. CONTRACTOR WILL REMOVE ANY STAGING.

REPAIR PROCEDURE FOR CONCRETE PATCHING

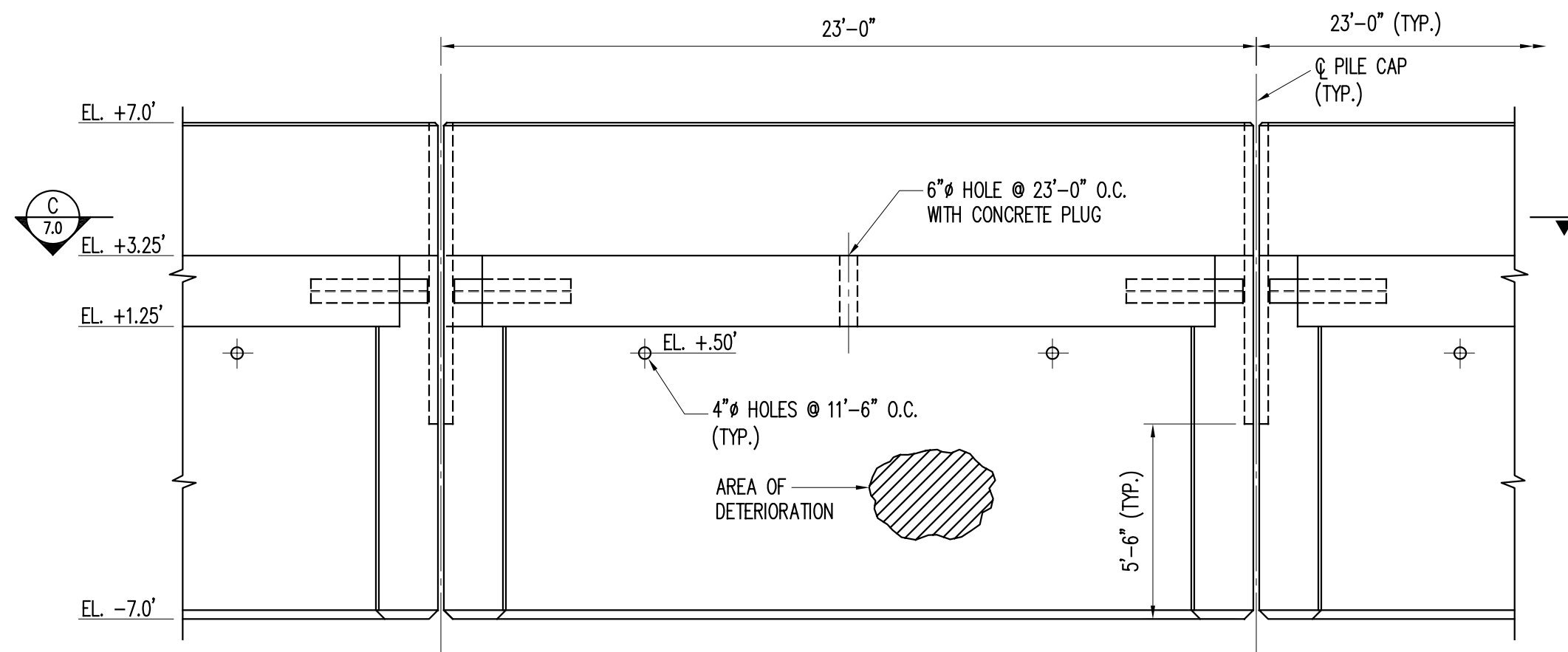
1. CONCRETE PATCHING SHALL BE USED AT ALL AREAS OF SPALLED AND/OR DELAMINATED CONCRETE.
2. SHORE AREAS WHERE THE DETERIORATED AREA IS LARGE AND/OR CORROSION OF REBAR IS EXTENSIVE AS DIRECTED BY ENGINEER.
3. REMOVE ALL DETERIORATED CONCRETE TO SOUND CONCRETE AND ANY CONCRETE WHICH IS SUPPORTING ACTIVE CORROSION OR CAPABLE OF SUPPORTING CORROSION. CUT CONCRETE AT RIGHT ANGLE TO THE CONCRETE SURFACE. AVOID CUTTING REINFORCING STEEL. REMOVE CONCRETE IN A RECTANGULAR AREA. AVOID FEATHER EDGES. REMOVE CONCRETE A MINIMUM OF 3/4" OR 2" BEYOND THE CORRODED SECTION OF REINFORCING BARS. SELECT PROPER TOOLS THAT WILL NOT DAMAGE SOUND CONCRETE AND REINFORCING BARS. AFTER BULK REMOVAL AND EDGE CONDITIONING, UNDERCUT REBAR BY 3/4 INCH IF THE BAR IS EXPOSED MORE THAN 50% OF ITS CIRCUMFERENCE AFTER CHIPPING. THE CONTRACTOR SHALL NOT USE POWER TOOLS TO REMOVE CONCRETE ADHERED TO EXPOSED REINFORCING STEEL.
4. CLEAN CONCRETE AND REINFORCING STEEL. BEFORE PROCEEDING WITH REPAIRS, A THOROUGH VISUAL INSPECTION SHALL BE CONDUCTED BY THE ENGINEER AND CONTRACTOR TO UNCOVER ANY AREAS NEEDING ADDITIONAL PREPARATION AND MEASURE THE SPALLED AREA FOR PAYMENT.
5. WHEN A REBAR HAS LOST MORE THAN 20% OF ITS ORIGINAL SECTION, NEW REINFORCEMENT MAY HAVE TO BE ADDED AS DIRECTED BY THE ENGINEER. A NEW BAR WILL BE MECHANICALLY SPLICED OR WELDED TO THE OLD BAR OR PLACED PARALLEL TO IT WITH A LAP BEYOND THE AFFECTED LENGTH IN ACCORDANCE WITH ACI 318-99. PRIOR TO PATCHING THE SPALLED AREA, THE ENGINEER AND CONTRACTOR WILL INSPECT THE SPLICED REINFORCING AND MEASURE THE REINFORCING FOR PAYMENT.
6. INSTALL PROTECTIVE COATING AND CONCRETE BONDING AGENT ON REINFORCING BARS AND CONCRETE (SIKA ARMATEC 110, OR ENGINEER APPROVED EQUIVALENT).
7. INSTALL REPAIR MATERIAL INTO FORMWORK, OR BY HAND-TROWELING.
 - a. PREPARE CONCRETE SURFACE IN ACCORDANCE WITH ACCEPTED REPAIR MATERIAL MANUFACTURER'S RECOMMENDATION. USE AN EPOXY RESIN/ PORTLAND CEMENT BONDING AGENT (SIKA ARMATEC 110, OR ENGINEER APPROVED EQUIVALENT) TO ALL CONCRETE PATCH REPAIR AREAS ABOVE MEAN LOW WATER.
 - b. MIX REPAIR MATERIAL: SIKATOP 123 PLUS OR ENGINEER APPROVED EQUIVALENT.
 - c. SCRUB MORTAR INTO SUBSTRATE, FILLING ALL PORES AND VOIDS. FILL THE VOID WITH MORTAR STARTING AT THE EDGE OF REPAIR AND WORKING TOWARD THE CENTER. WORK IN LIFTS OF 1-1/2" MAXIMUM THICKNESS. SCRUB MORTAR INTO SCORED SURFACE OF PRECEDING LIFT.
8. FORMED REPAIRS:
 - a. INSTALL FORMS AS REQUIRED. PROVIDE 3 INCHES MINIMUM CLEAR COVER. PROVIDE GROUT AND AIR PORTS AS REQUIRED TO ENSURE THAT VOIDS ARE FILLED. GROUT AND AIR PORTS SHALL BE SPACED AT A MAXIMUM OF 3 FEET APART HORIZONTALLY.
 - b. BELOW MEAN LOW WATER, APPLY SIKA MONOTOP 611 (OR ENGINEER APPROVED EQUIVALENT) WITH AGGREGATE AND SIKAMENT 100SC ANTI-WASHOUT (OR ENGINEER APPROVED EQUIVALENT).
 - c. ABOVE MEAN LOW WATER, APPLY SIKATOP 111 PLUS (OR ENGINEER APPROVED EQUIVALENT) OR SIKA MONOTOP 611 (OR ENGINEER APPROVED EQUIVALENT).
 - d. FORMWORK SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS.
 - e. FINISH REPAIRED SURFACE TO MATCH EXISTING.
 - f. CURE REPAIR AREAS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

REINFORCEMENT

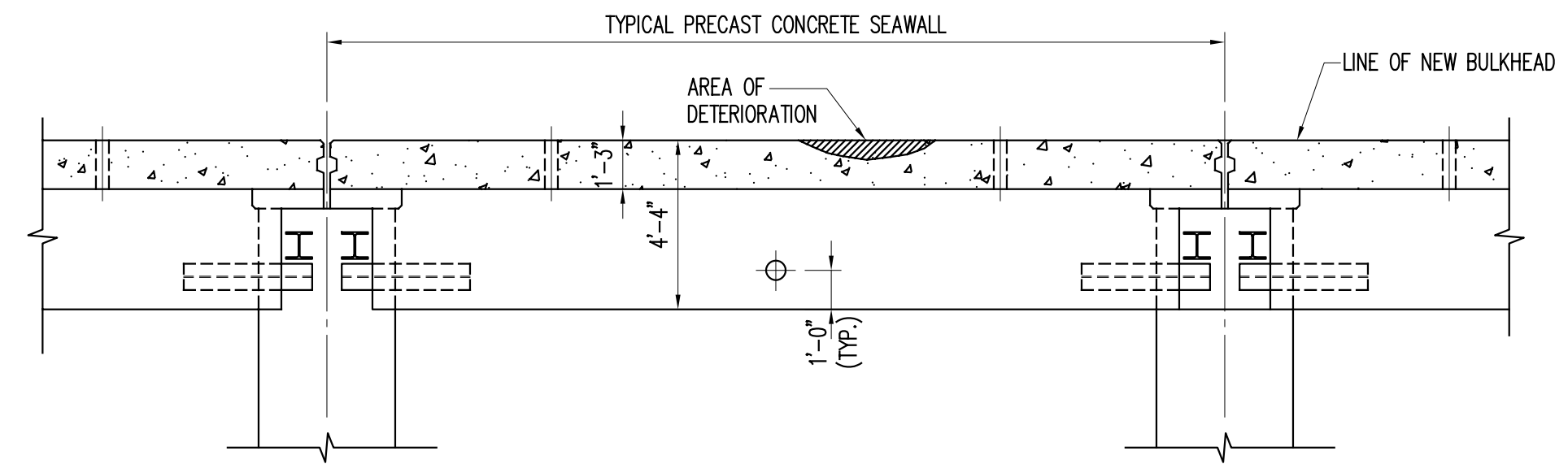
1. WHEN ALL REPAIRS ARE COMPLETED AND APPROVED BY THE ENGINEER, CLEAN ALL CONCRETE SURFACES.
2. FOR CORROSION PROTECTION, APPLY SIKA FERROGARD 903 (OR APPROVED EQUIVALENT) TO ALL CONCRETE SURFACES.



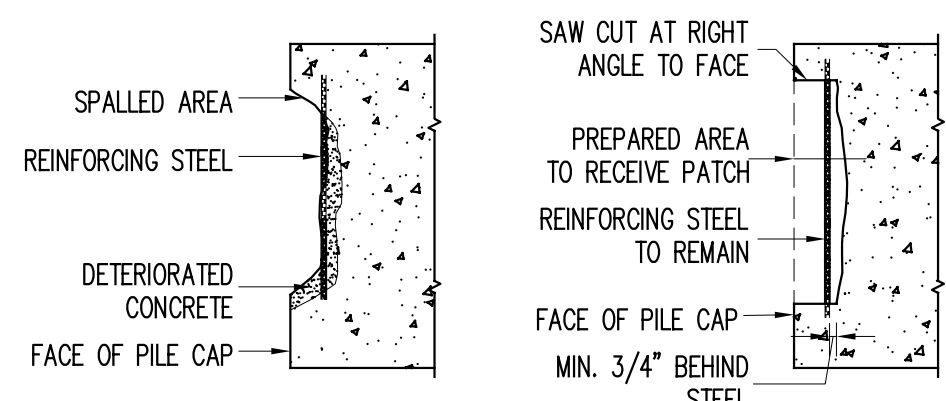
A SKIRT REPAIR DETAIL
SCALE: 1/2"=1'-0"



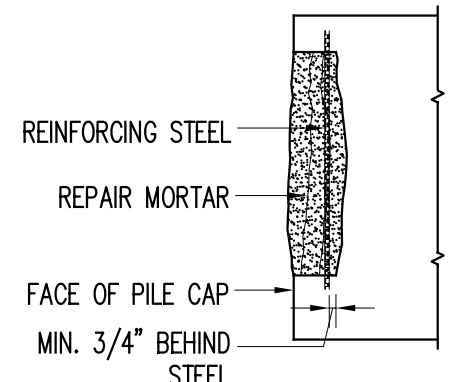
B ELEVATION
SCALE: 1/4"=1'-0"



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

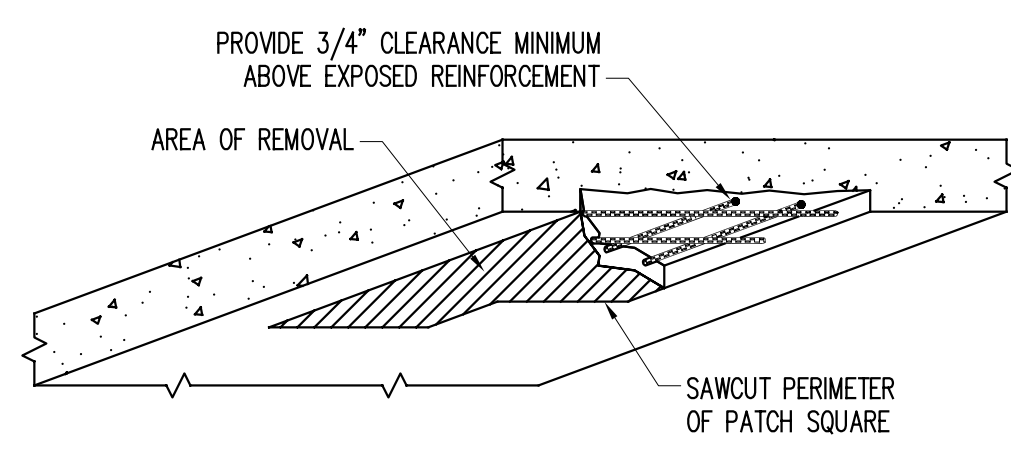


EXISTING CONDITIONS SURFACE PREPARATION

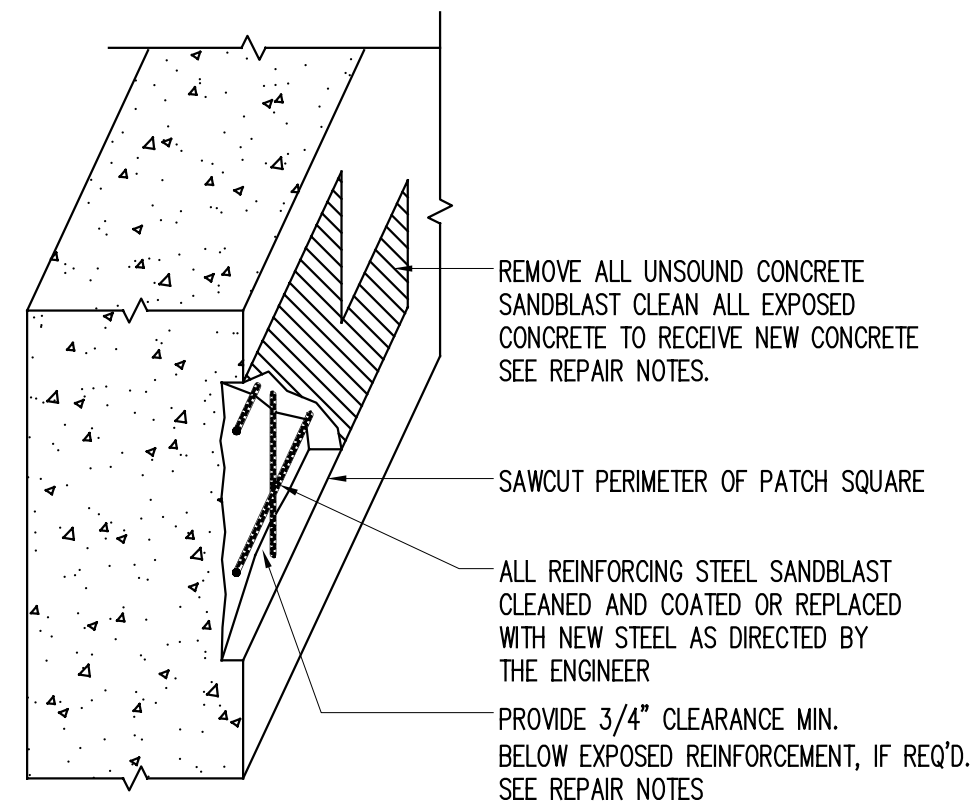


APPLICATION TYPICAL HANDPACKED CONCRETE REPAIR DETAILS

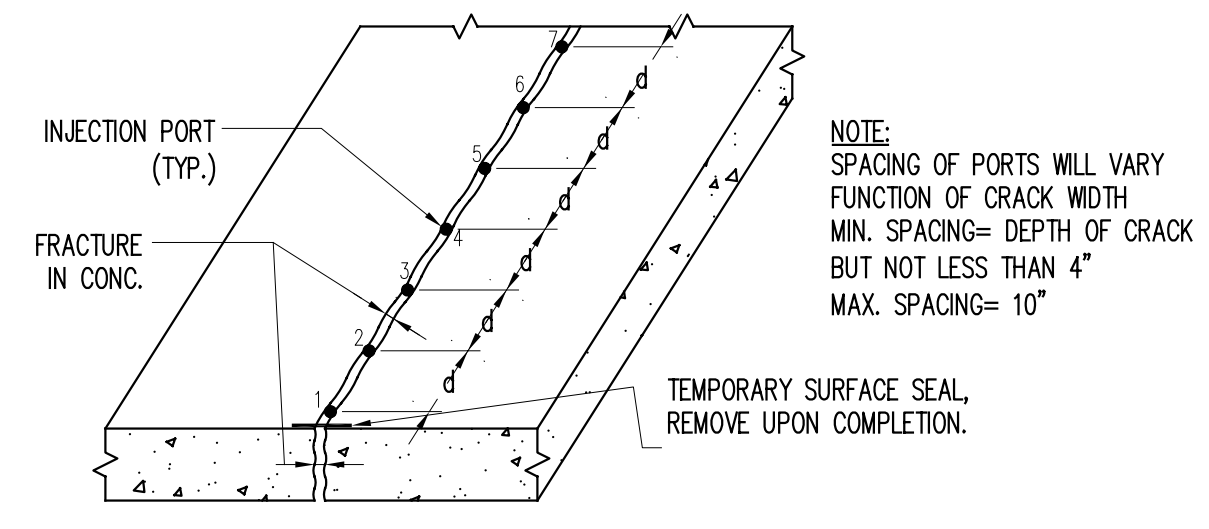
- NOTES:**
1. REMOVE ALL DETERIORATED CONCRETE TO SOLID CONC.
 2. REMOVE TO A MINIMUM 3/4" BEHIND ALL EXPOSED REINFORCEMENT, AND 1" BEYOND CORRODED SECTION OF REINFORCING BAR ALONG LENGTH OF BAR.
 3. SANDBLAST OR WATERBLAST CLEAN ALL REINFORCING STEEL AND CONCRETE.



TYPICAL OVERHEAD REPAIR



TYPICAL BULKHEAD REPAIR DETAIL



TYPE II: CONCRETE REPAIR DETAILS

TYPE I: CONCRETE REPAIR DETAILS

**ISSUED FOR BID
DEC. 15, 2006**

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PROJECT
**BATTERY PARK CITY
ESPLANADE REPAIRS**
NEW YORK
MANHATTAN,

SHEET TITLE
**CONCRETE SEAWALL
SKIRT REPAIR DETAILS**

PROJECT NO. 104382
SCALE AS SHOWN
DATE 12/15/06
DRAWN BY RC
CHECKED BY MM
DRAWING NO.

7.0
OF SHTS

FILE NAME: C:\cadd\04\104382\DWG 7.0.dwg PLOT TIME: Mon, 18 Dec 2006 - 10:42am LAST SAVE: Fri, 15 Dec 2006 - 3:21pm BY: curll