



Technical Memorandum

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Prepared for: AVX Corporation

Project Title: Aerovox Remedy Design Build

Project No.: 155041

Technical Memorandum

Subject: Aerovox Year 2 Modifications and Information Transmittal

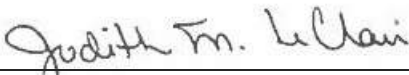
Date: March 16, 2022

To: New Bedford Conservation Commission

From: Marilyn Wade, P.E., LSP

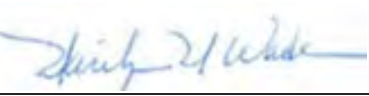
Copy to: Brandy Bossle, Kyocera-AVX Components Corporation

Prepared by:



Judith M. LeClair, Asst. Project Manager

Reviewed by:



Marilyn Wade, P.E., LSP

Limitations:

This document was prepared solely for AVX Corporation in accordance with professional standards at the time the services were performed and in accordance with the contract between AVX Corporation and Brown and Caldwell dated August 20, 2020. This document is governed by the specific scope of work authorized by AVX Corporation; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by AVX Corporation and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

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Section 1: Introduction

A Notice of Intent (NOI) was submitted to the New Bedford Conservation Commission (Commission) in December 2020 by AVX Corporation (AVX) for the Comprehensive Response Actions (CRAs) associated with the Former Aerovox Facility Disposal Site (the Site), identified as Release Tracking Number 4-0601 by the Massachusetts Department of Environmental Protection (MassDEP). The Former Aerovox Facility is located at 740 Belleville Avenue, and includes the Former Aerovox Property (Aerovox), the southern abutting property at 700 Belleville Avenue (Titleist), and the northern abutting property at 744 Belleville Avenue (Precix). Together, there are four identified Operable Units (OUs) for the Site, including: OU1 – Titleist; OU2 – Precix; OU3 – Aerovox Overburden Soils and Groundwater; and OU4 – Aerovox Bedrock Groundwater.

The CRAs for the OUs include the following:

- **OU1:** The current and future risk associated with polychlorinated biphenyls (PCBs) in the uncapped soils between the ground surface and an identified peat layer on the east end of the Titleist property (OU1);
- **OU2:** Potential foreseeable future vapor intrusion risk associated with chlorinated volatile organic compounds (CVOCs) contaminated groundwater in shallow overburden in Graham Street adjacent to the Precix building (OU2);
- **OU3:** Potential future contact with overburden soil above upper concentration limits (UCLs), migration of deep overburden groundwater contamination to the river and migration of contamination to the river through on-Site storm sewers (collectively, OU3); and
- **OU4:** Migration of bedrock contamination (including zones of contamination above the UCLs) across the east half of the property to the river (OU4).

This Technical Memorandum (TM) serves to notify the Commission that the Year 2 mobilization of Brown and Caldwell (BC) and BC's Site work subcontractor, Forgen, will occur on March 21, 2022. In addition, this TM includes a minor modification of the Year 2 effort to adjust existing tasks based on data and experiences from Year 1 and transmits additional approval and permit information applicable to the Year 2 work.

Section 2: Year 2 Minor Modification Background

2.1 Extension of OU3 – Area A North

During the Year 1 removal of excavation sheet pile from Areas A, B, C, D, and I, BC observed the excavation support sheets for evidence of highly impacted soil or non-aqueous phase liquid (NAPL) as required by the MassDEP Conditional Approval for Year 1 activities. Sheet piles along the west and north sides of Area A were removed on July 26 and 27, 2021. Observations of material adhered to the sheets that formed the north wall of Area A upon removal indicated that soils remaining outside the sheets were contaminated based on visual and olfactory observations, as well as limited photoionization detector (PID) headspace readings. Sheens were observed on some of the northern sheet pile after removal. As the area immediately north was unpaved, additional soil borings were advanced to assess the soil PCB concentrations and to evaluate whether a cap of this area would be required, whether the Activity and Use Limitation (AUL) for the Precix property would need to be extended to reach a condition of No Significant Risk, or whether additional soils removal would be required.

Seven soil borings, identified as PR-1 through PR-7, were advanced on November 23-24, 2021. Borings PR-1, PR-2, and PR-3 were drilled directly north of an existing well triplet (GZ/MW-103), and borings PR-4,



PR-5, PR-6, and PR-7 were advanced in the unpaved area directly north of Area A and east-southeast of the GZ/MW-103 well triplet, as depicted in Attachment A. The samples were submitted for PCB analysis. The data indicates that soils collected from PR-1 through PR-3, below an existing asphalt paved area between the Precix building and the Acushnet River, exceed 1 milligram per kilogram (mg/kg) but are below the MassDEP UCL of 100 mg/kg. Analytical data for soil samples collected from PR-4 through PR-7 indicated that PCB concentrations in one or more samples collected from each of these four borings exceed the PCB UCL.

2.2 Additional Storm Sewer Line Replacement

The MCP Phase IV Plan as provided in the NOI included replacement of the majority of the storm sewer lines within the Aerovox property with the exception of the north-south line connecting one manhole and two catch basins to the trunk line in Hadley Street, i.e., the MH-04/CB-01/CB-09 line, which was previously slated to be cleaned and lined. Stormwater sampling data provided by U.S. Environmental Protection Agency (EPA) has subsequently indicated PCB impacts in catch basin CB-09. As such, it is more prudent to replace, rather than line this section.

2.3 OU1 – Titleist Property

As part of the New England District of the U.S. Army Corps of Engineers (ACOE) review of the Pre-construction Notification for General Permit 17 (Cleanup of Hazardous and Toxic Wastes) for the Aerovox Remedy Implementation, ACOE requested a modification to the planting restoration plan for the Titleist (OU1) work and restoration monitoring. Specifically, ACOE requested that swamp rose (*Rosa palustris*) be replaced by the Virginia Rose (*Rosa virginiana*).

Section 3: Description of Modification

3.1 Extension of OU3 – Area A North Excavation

Based on the analytical data and the proximity to the EPA's planned intertidal shoreline activities, the area in a polygon shaped area surrounding PR-4 through PR-7 and North of Area A, identified as "Area A North" will require excavation. The southward limit of the Area A North excavation area will be the northern boundary of Area A; the west limit will be the North-South alignment of end of Graham Street former fence parallel to the Acushnet River to the west; the northward limit will be the alignment of the existing fence at the end of Graham Street and perpendicular to the Acushnet River, and the eastern limit will follow the Mean High Water Line (MHWL). Soils will be excavated to the bottom of the peat layer, which is approximately 7 to 11 feet below ground surface (bgs). This area is approximately 675 square feet in area.

Area A North will be excavated using methods similar to those used for Area A. Erosion controls will be installed prior to construction. Sheet pile will be driven along the perimeter of Area A North as shown on, Construction Drawing C-323 in Attachment B. The excavation will be dewatered as needed to facilitate excavation of the impacted soil. Excavated soils will be amended with Portland Cement to decrease water content and shipped for off-Site disposal. Clean fill, either from the former Aerovox foundation footprint or imported from off-Site, will be used to backfill the excavation. Area A North will be restored to original surface grade, which will include layers of both 1-inch minus gravel and 6-inch minus stone riprap. The gravel and riprap layers will serve to attenuate the velocity of surface water runoff from Graham Street prior to discharge into the Acushnet River.



Additionally, the updated asphalt cap planned for Graham Street will be extended to the north in the asphalt paved area between the east end of the Precix building and the existing fence running north-south and parallel to the Acushnet River to the northern extent of Site-related soil impacts with PCB concentrations equal to or greater than 1 mg/kg will be modified to meet the EPA Toxic Substances Control Act (TSCA) approval requirements. Note that at present, the cap will be extended northward to at least cover the area between the end of Graham Street and PR-1, but additional investigation will be undertaken to evaluate the final northward extent of the cap.

3.2 Additional Storm Sewer Line Replacement

Stormwater Infrastructure Restoration of the MH-04/CB-01/CB-09 line has been adjusted to removal and replace rather than clean and line. Scope of work to include surveying and utility locating of impacted area, removal of existing infrastructure, including catch basins and manholes, replacement with 12-inch high density polyethylene (HDPE) piping and two new catch basins and one manhole, permitting and regulatory requirements associated with the replacement, and backfill of the trench. Any repairs made to concrete walkway or asphalt within Hadley Street shall be repaired in kind. These revisions are captured in revised Drawing C-309 which has been included in Attachment B.

3.3 Updated Planting Plan

See Attachment B, revision to construction Drawing C-205, for revisions to the planting plan requested by the ACOE as part of their permit approval.

Section 4: Year 2 Permits, Licenses and Approvals

The Year 1 permits, licenses, and approvals (Approvals) were previously submitted to the Commission. Many of those approvals included the work completed in Year 1, as well as the work to be completed in Year 2. Several Approvals for Year 2 have been received ahead of mobilization, including the following:

- MassDEP Partial Phase IV Remedy Implementation Plan Conditional Approval
- TSCA Second Supplement to TSCA Determination
- ACOE, Authorization for Coverage under General Permit 17
- MassDEP, Issuance of Chapter 91 Waterways Permit

The MassDEP Conditional Approval for Year 2 activities outlined in the Remedial Implementation Plan was provided to Kyocera AVX Components Corporation (formerly, AVX Corporation or AVX) on December 8, 2021. The Year 2 Approval provided conditional approval of the balance of remedial construction activities included in the Phase IV Remedial Implementation Plan. Two appendices contained in the Remedial Implementation Plan, the Long-Term Maintenance and Monitoring Plan and Adaptive Site Management Plan, were not approved pending a two-year monitoring period following completion of the remedy construction; however, these plans have no impact on construction of Year 2 remedy components. MassDEP is requiring a risk assessment for soils in Hadley Street. A copy of this Approval is included in Attachment C.

The original TSCA Determination for the property was prepared by the EPA TSCA Coordinator for the Aerovox Site as part of the 2010 agreements between the involved parties. Upon completion of the Phase II Comprehensive Site Assessment and Phase III Remedial Action Plan, EPA indicated that a TSCA Modification would be required to implement the OU1 through OU4 selected remedies. The first Supplement to the TSCA Determination, for Year 1 and OU3/OU4 was issued on March 29, 2021. BC submitted a TSCA Modification request for OU1 and OU2 on December 15, 2021. On December 29, 2021, AVX received the Second TSCA



Determination Supplement from the EPA Region 1 TSCA Coordinator, which covers the Year 2 remedial implementation activities. A copy of the second TSCA Supplement is included in Attachment C.

BC submitted Pre-construction Notification for General Permit 17 (Cleanup of Hazardous and Toxic Wastes) to the ACOE for implementation of the Aerovox remedy, as indicated above. Coverage under this permit was approved by ACOE on February 28, 2022. The permit contains special conditions which require restoration in accordance with the restoration plan for OU-1 (Construction Drawing 205), pre- and post-construction monitoring of the salt marsh to be performed by a certified wetland scientist, with post-construction monitoring immediately after restoration and then biannually in spring and fall in years 1, 2, 3, and 5 and reporting to agencies after each post-construction monitoring event. The post-construction monitoring includes provisions for invasive species removal and control. The post-construction monitoring required by the ACOE permit is consistent with the Order of Conditions requirements and a single maintenance and monitoring program will be implemented to satisfy both. A copy of the ACOE Approval correspondence is included in Attachment C.

Section 5: Conclusions

As described above, modifications provided in this document are required as a result of normal construction, lessons learned from implementing the Year 1 work, and permit requirements issued after obtaining the Order of Conditions. In all cases, the changes are consistent with the previously submitted MCP Phase IV plans and do not represent a material difference from the original documents provided in the original NOI.



Attachment A: Area A North Figure



A-1



NOTES:
Aerial photograph source: Google Earth Pro.

AREA A STEP OUT BORING LOCATION PLAN

Former Aerovox Facility
New Bedford, MA
RTN 4-0601

Project No. 155041

Date 1-4-2021



Attachment B: Revised Construction Drawings

Revised Drawing C-205; Titleist Shoreline Restoration Planting Plan
Revised Drawing C-309; Aerovox Storm Sewer Modifications Plan
New Drawing C-323; Aerovox Area A-North Excavation Plan



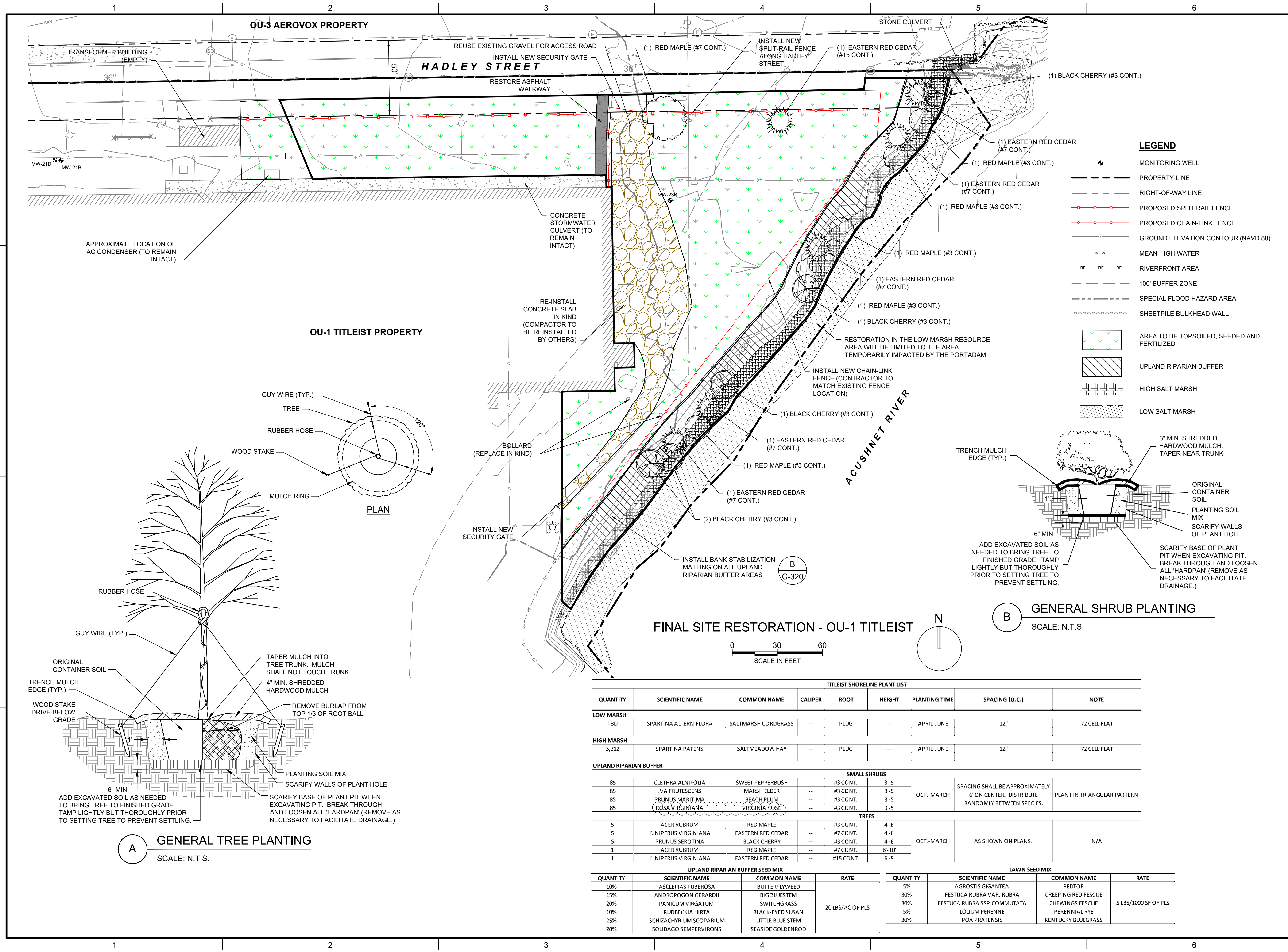
B-1

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP
2	2/25/21	ISSUED IN RESPONSE TO PERMITTING PROCESS
3	5/7/21	ISSUED FOR CONSTRUCTION
4	2/14/22	REVISED PLANT LIST

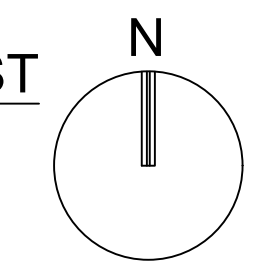
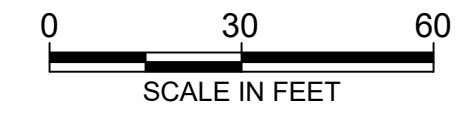
LINE IS 2 INCHES AT FULL SIZE

DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: B. NASH
APPROVED: M. WADE
FILENAME: C-205.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

CIVIL
TITLEIST SHORELINE RESTORATION PLANTING PLAN
DRAWING NUMBER
C-205
SHEET NUMBER
14 OF 47



FINAL SITE RESTORATION - OU-1 TITLEIST



TITLEIST SHORELINE PLANT LIST								
QUANTITY	SCIENTIFIC NAME	COMMON NAME	CALIPER	ROOT	HEIGHT	PLANTING TIME	SPACING (O.C.)	NOTE
LOW MARSH								
TBD	SPARTINA ALTERNIFLORA	SALTMARSH CORDGRASS	--	PLUG	--	APRIL-JUNE	12"	72 CELL FLAT
HIGH MARSH								
3,312	SPARTINA PATENS	SALTMEADOW HAY	--	PLUG	--	APRIL-JUNE	12"	72 CELL FLAT
UPLAND RIPARIAN BUFFER								
SMALL SHRUBS								
85	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	--	#3 CONT.	3'-5'	OCT.-MARCH	SPACING SHALL BE APPROXIMATELY 6' ON CENTER. DISTRIBUTE RANDOMLY BETWEEN SPECIES.	PLANT IN TRIANGULAR PATTERN
85	IVA FRUTESCENS	MARSH ELDER	--	#3 CONT.	3'-5'			
85	PRUNUS MARITIMA	BEACH PLUM	--	#3 CONT.	3'-5'			
85	ROSA VIRGINIANA	VIRGINIA ROSE	--	#3 CONT.	3'-5'			
TREES								
5	ACER RUBRUM	RED MAPLE	--	#3 CONT.	4'-6'	OCT.-MARCH	AS SHOWN ON PLANS.	N/A
5	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	--	#7 CONT.	4'-6'			
5	PRUNUS SEROTINA	BLACK CHERRY	--	#3 CONT.	4'-6'			
1	ACER RUBRUM	RED MAPLE	--	#7 CONT.	8'-10'			
1	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	--	#15 CONT.	6'-8'			
UPLAND RIPARIAN BUFFER SEED MIX								
QUANTITY	SCIENTIFIC NAME	COMMON NAME	RATE					
10%	ASCLEPIAS TUBEROSA	BUTTERFLYWEED	20 LBS/AC OF PLS					
15%	ANDROPOGON GERARDII	BIG BLUESTEM						
20%	PANICUM VIRGATUM	SWITCHGRASS						
10%	RUDBECKIA HIRTA	BLACK-EYED SUSAN						
25%	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUE STEM						
20%	SOLIDAGO SEMPERVIVONS	SEASIDE GOLDENROD						
LAWN SEED MIX								
QUANTITY	SCIENTIFIC NAME	COMMON NAME	RATE					
5%	AGROSTIS GIGANTEA	REDTOP	5 LBS/1000 SF OF PLS					
30%	FESTUCA RUBRA VAR. RUBRA	CREeping RED FESCUE						
30%	FESTUCA RUBRA SSP. COMMUTATA	CHEWINGS FESCUE						
5%	LOLIUM PERENNE	PERENNIAL RYE						
30%	POA PRATENSIS	KENTUCKY BLUEGRASS						

A GENERAL TREE PLANTING
SCALE: N.T.S.

B GENERAL SHRUB PLANTING
SCALE: N.T.S.

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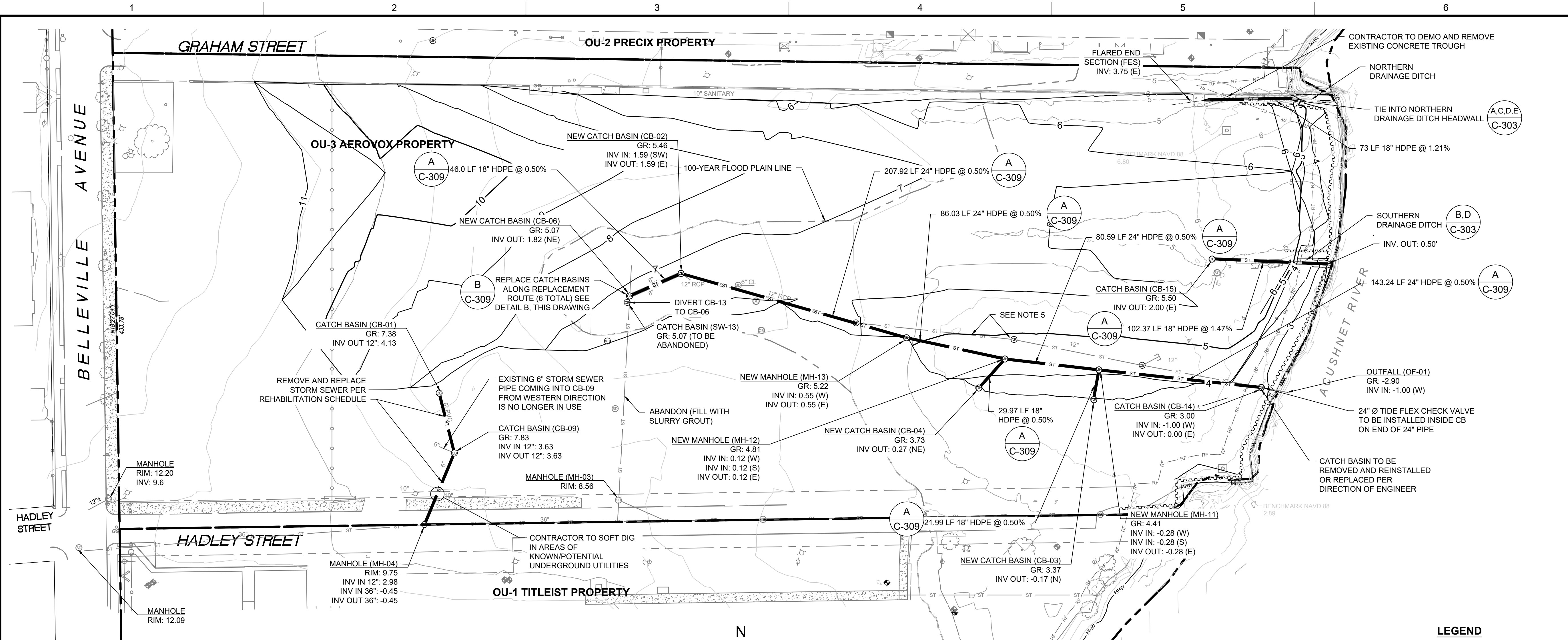
ALAN R. KIRSCHNER
 MA PROFESSIONAL ENGINEER
 LIC NO. MA 32770

FORMER AEROVOX FACILITY
 740 BELLEVILLE AVENUE
 NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP
2	4/7/21	REVISIONS IN RESPONSE TO USEPA COMMENTS
3	5/7/21	ISSUED FOR CONSTRUCTION
4	7/19/21	MODIFICATIONS OF DRAWINGS C-303, C-315 THROUGH C-319 FOR REVISED MDP PERMIT SUBMITTAL
5	9/7/21	REVISE NORTH DRAINAGE DITCH HEADWALL PLAN
6	3/10/22	REVISE CB-01 TO MH-04 TO BE REPLACED

DESIGNED: J. SPADT / B. PAULSEN
 DRAWN: A. SANTIAGO
 CHECKED: K. DYSON
 CHECKED: D. VARJABEDIAN
 APPROVED: M. WADE

CIVIL
 AEROVOX STORM SEWER MODIFICATIONS PLAN
 DRAWING NUMBER
C-309
 SHEET NUMBER
 24 OF 47



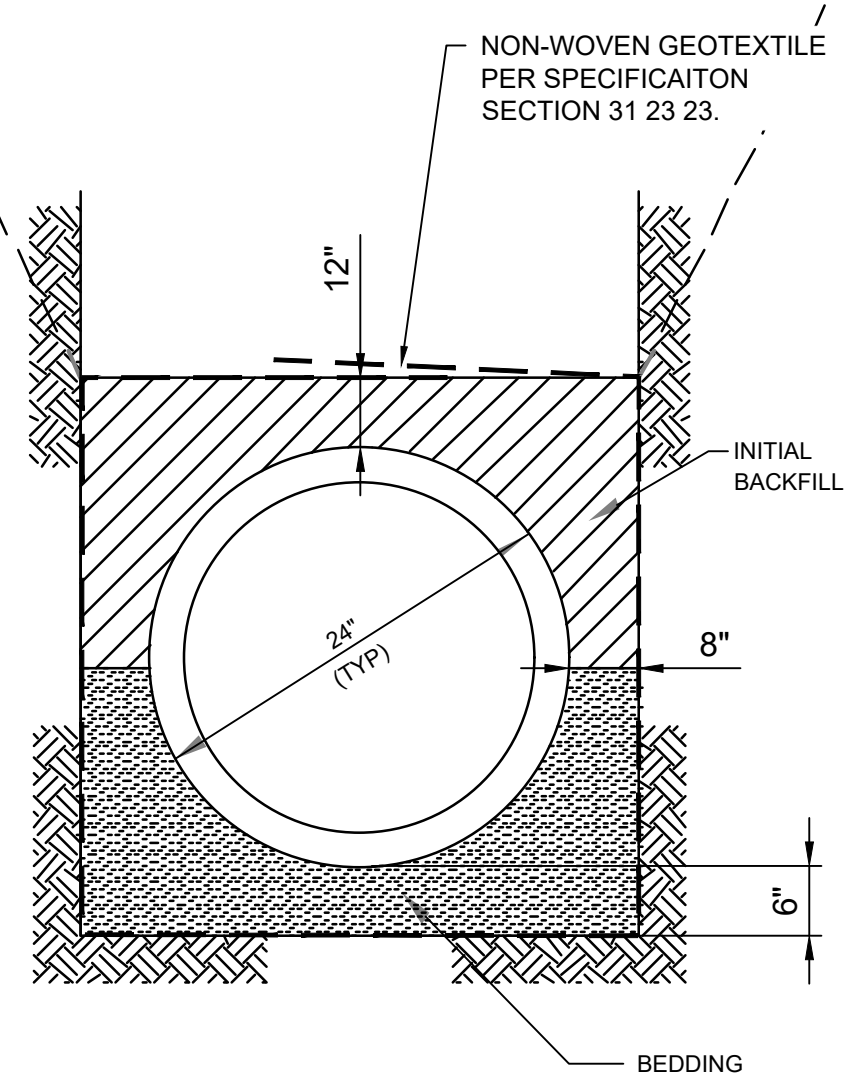
1 STORM SEWER MODIFICATIONS

SCALE 1" = 50'

REACH	EXISTING NOMINAL PIPE DIAMETER	NEW PIPE DIAMETER	APPROXIMATE LENGTH (LF)	MATERIAL
CB-09 -- CB-01	8	12	55	HDPE
CB-09 -- MH-04	6	12	66	HDPE
CB-02 -- CB-06	12	18	46	HDPE
MH-13 -- CB-02	N/A	24	208	HDPE
MH-12 -- MH-13	N/A	24	86	HDPE
MH-11 -- MH-12	N/A	24	81	HDPE
CB-14 -- MH-11	N/A	24	143	HDPE

CB / MH	NORTHING	EASTING
CB-01	2706754.883	814801.13
CB-02	2706863.815	815021.4637
CB-03	2706748.821	815397.6175
CB-04	2706759.467	815292.8219
CB-06	2706843.334	814974.558
CB-09	2706700.255	814814.9582
CB-10	2707023.971	815536.1332
CB-14	2706759.963	815550.2004
CB-15	2706876.914	815505.2791
MH-03	2706657.326	814964.4051
MH-04	2706634.997	814787.6723
MH-11	2706776.013	815402.2093
MH-12	2706785.948	815316.5873
MH-13	2706805.23	815227.0062

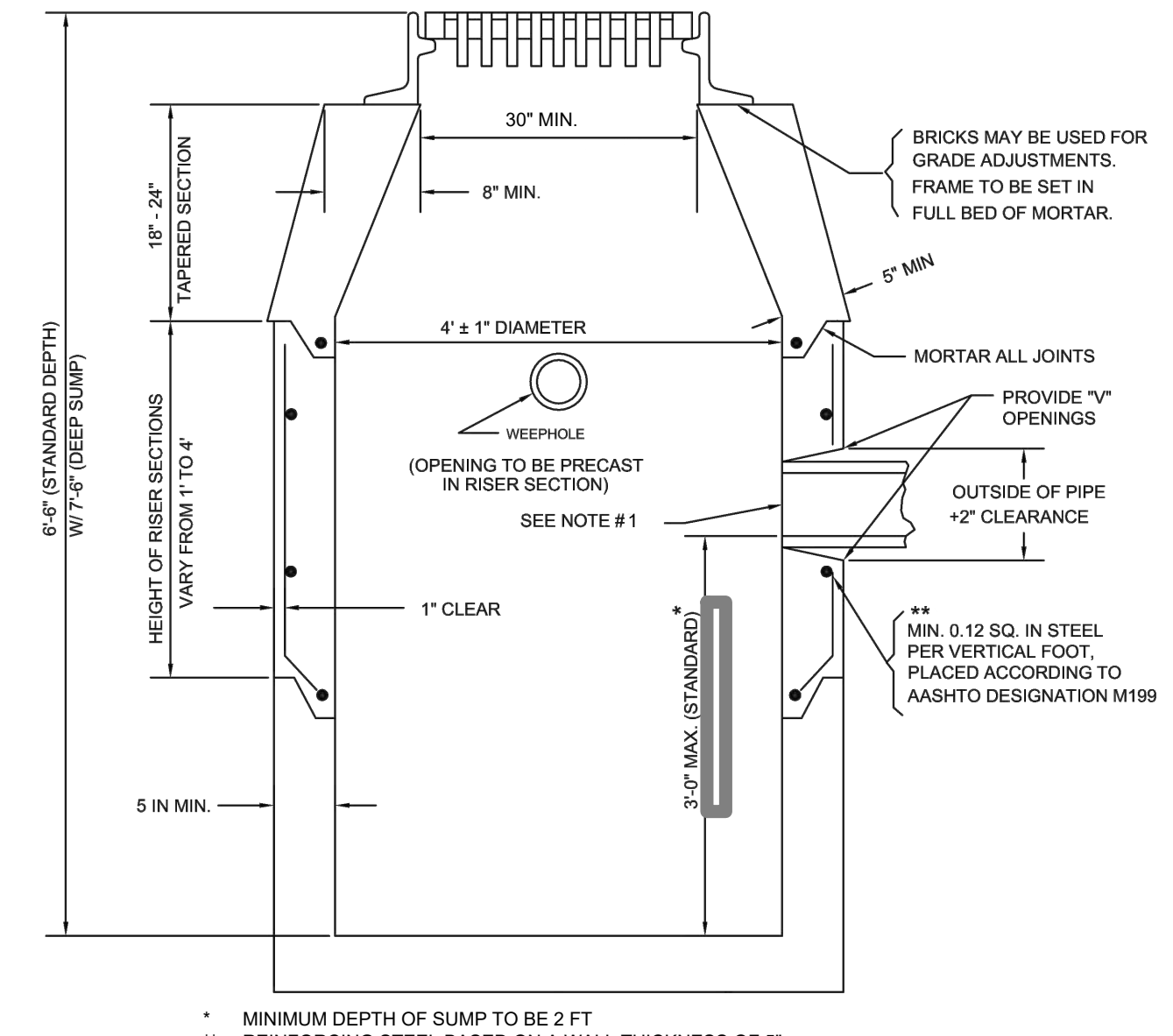
SEGMENTS MODIFIED TO BE REMOVED AND REPLACED WITH NEW HDPE PIPE



- NOTES:**
- BEDDING AND INITIAL BACKFILL: SEE SPECIFICATION SECTION 31 23 00.
 - SUBSEQUENT BACKFILL: SEE SPECIFICATION SECTION 31 23 00.

A STORM PIPE REPLACEMENT DETAIL

NOT TO SCALE



- NOTES:**
- FACE OF PIPE FLUSH OR NOT TO PROJECT MORE THAN 4" FROM FACE OF WALL ALONG CENTERLINE OF PIPE.
 - FOR DESCRIPTION, MATERIALS, AND CONSTRUCTION METHOD, SEE STANDARD SPECIFICATIONS.
 - ALL CONCRETE TO BE AIR ENTRAINED.

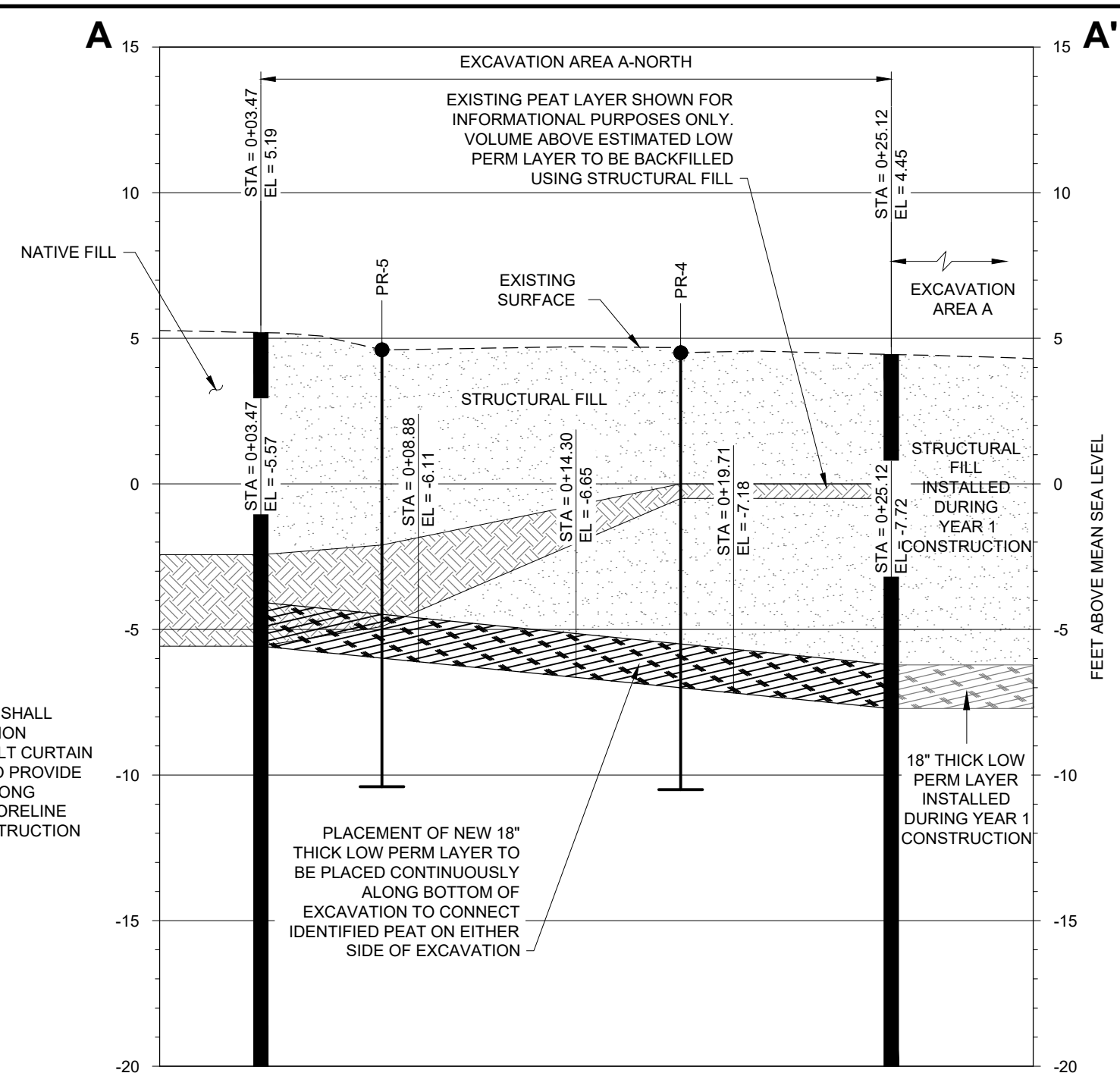
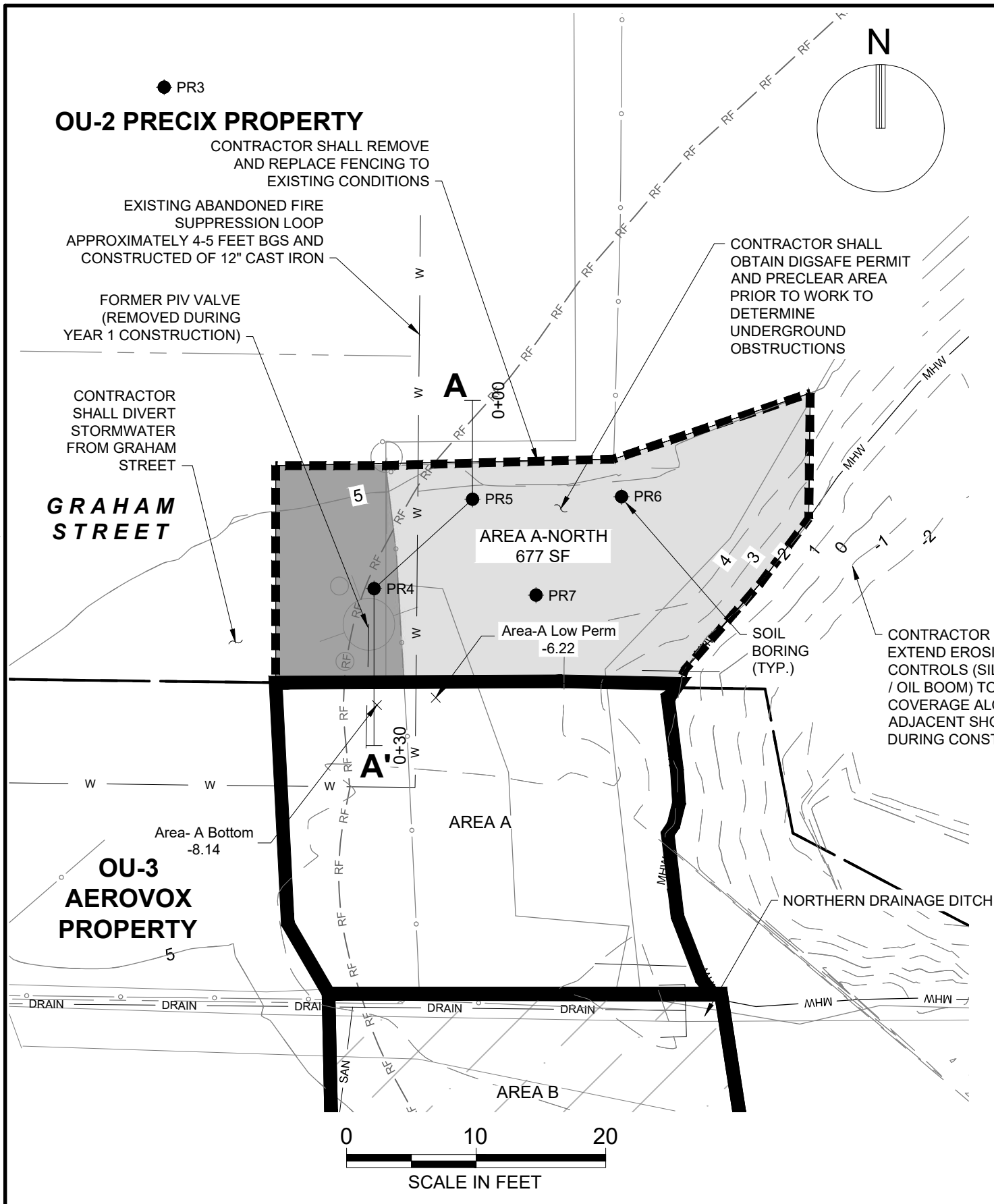
B CATCH BASIN / MANHOLE DETAIL

NOT TO SCALE

- LEGEND**
- GROUND ELEVATION CONTOUR (NAVD 88)
 - SHEETPILE BULKHEAD WALL
 - EXISTING STORM SEWER
 - STORM SEWER TO BE CIPP REHABILITATED OR REPLACED
 - CATCH BASIN
 - STORM MANHOLE

- NOTES:**
- SITE BOUNDARY SHOWN IS AS DEPICTED ON EXHIBIT 3, COOPERATION & SETTLEMENT AGREEMENT, AEROVOX PROPERTY.
 - BASED ON FIGURE FROM DEPARTMENT OF ARMY NEW ENGLAND DISTRICT CORPS OF ENGINEERS, DATED DECEMBER 2009, CURRENT RTN SITE BOUNDARY EXTENDS BEYOND AEROVOX PROPERTY.
 - ALL INVERTS SHOWN ARE FOR PIPES. ALL SUMPS SHALL BE 2'-0" BELOW PIPE INVERTS.
 - ANY STORM SEWER MODIFICATIONS BEYOND THE EXTENT OF THE SHEETPILE BULKHEAD WALL IS ASSUMED TO BE DONE BY OTHERS.
 - EXISTING STORM SEWER PIPE SHALL BE DEMOLISHED WHERE IN CONFLICT WITH PROPOSED STORM SEWER SYSTEM INSTALLATION. ALL OTHER PIPE SHALL BE FILLED WITH FLOWABLE FILL AND ABANDONED IN PLACE. ALL EXISTING CATCH BASINS AND MANHOLES SHALL BE DEMOLISHED DOWN TO TWO FEET BELOW EXISTING SURFACE. HOLES DRILLED THROUGH THE BASE SLAB CONCRETE AT 6" ON CENTER AND FILLED WITH CRUSHED STONE AND ABANDONED BENEATH.

Path: C:\bcpw\10126076 File Name: Area-A_north-Profile Plot Date: March 4, 2022 4:06 PM Cadd User: Alan Santiago



RESTORATION LEGEND

- PAVEMENT RESTORATION
- LANDSCAPE RESTORATION

NOTE

- AREA A-NORTH IS AN EXTENSION OF AREA A, TO BE EXCAVATED, BACKFILLED AND RESTORED IN ACCORDANCE WITH ALL CONTRACT PLANS AND SPECIFICATIONS FOR WORK IN AREA A.



SCALE: AS SHOWN
 155041
 DATE: March 4, 2022

AEROVOX AREA A-NORTH EXCAVATION PLAN AND CROSS-SECTION

FIGURE
C-323

Attachment C: Regulatory Approvals

MassDEP Partial Phase IV Remedy Implementation Plan Conditional Approval
Toxic Substances Control Act Second Supplement to TSCA Determination
Army Corps of Engineers, Authorization for Coverage under General Permit 17
MassDEP, Issuance of Chapter 91 Waterways Permit





Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

December 8, 2021

Kyocera AVX Components Corporation
Attn: Mr. Evan Slavitt, Esq.
1 AVX Boulevard
Fountain Inn, SC 29644

RE: **NEW BEDFORD- BWSC**
Release Tracking Number: **4-0000601**
Former Aerovox Facility
740 Belleville Avenue
**PARTIAL PHASE IV REMEDY
IMPLEMENTATION PLAN
CONDITIONAL APPROVAL
INTERIM DEADLINES
00011541**

Dear Mr. Slavitt:

Through Massachusetts General Laws Chapter 21E (Chapter 21E) and the Massachusetts Contingency Plan (310 CMR 40.0000 – the MCP), the Massachusetts Department of Environmental Protection (MassDEP or the Department) is currently regulating historic releases of oil and hazardous material (OHM) that have occurred at the former Aerovox, Inc. (Aerovox) property located at 740 Belleville Avenue, New Bedford (the Property). The Site, as defined in the Administrative Consent Order (ACO-SE-09-3P-016 or the ACO) signed by MassDEP, the Massachusetts Attorney General's Office, and you (when used in this letter, "you" and "your" refer to AVX Corporation (AVX)) on June 3, 2010, has been assigned Release Tracking Number (RTN) 4-0000601. AVX has been identified as a Potentially Responsible Party (PRP) for the Site and is conducting response actions under Chapter 21E, the MCP, and the ACO.

Paragraph 12 of the ACO established deadlines for completing Comprehensive Response Actions (CRAs). Pursuant to Paragraph 14, these deadlines are dependent on AVX's receipt of MassDEP's written approval of each prior submittal. Paragraphs 14(a)-(c) of the ACO specify that MassDEP will provide AVX with a written approval, conditional approval, deficiency, or denial for each submittal.

BACKGROUND

In August 2016, AVX and Brown & Caldwell (B&C – AVX's consultant) submitted a Phase III Remedial Action Plan (Phase III RAP) to MassDEP. On February 10, 2017, MassDEP issued a conditional approval letter, and as a result, AVX submitted a Revised Phase III RAP on June 29, 2017. A meeting was held on January 25, 2018, among representatives from the City of New Bedford (the owner of the Property where the former Aerovox property is located), the United States Environmental Protection Agency (EPA) Superfund office

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

and the EPA's Toxic Substances Control Act (TSCA) program, B&C, AVX, Nutter McClennan & Fish (Nutter – AVX's legal counsel) and MassDEP to discuss technical issues pertaining to the revised Phase III RAP. On August 17, 2018, MassDEP issued a conditional approval letter of the revised Phase III RAP. On February 1, 2019, AVX submitted an "Addendum to the Phase III Remedial Action Plan" (Phase III Addendum) in response to MassDEP's conditional approval letter.

On July 26, 2019, MassDEP issued its Conditional Approval of both AVX's Revised Phase III RAP, and AVX's Phase III Addendum. AVX then timely submitted a Phase IV Remedy Implementation Plan (Phase IV RIP) on July 10, 2020.

PHASE IV EVALUATION

The Performance Standards for a Phase IV RIP, as described in 310 CMR 40.0872, state that the Phase IV shall: (1) implement CRAs selected in the Phase III; (2) ensure that the information, plans and reports related to the design, construction, and implementation of the selected remedial alternative are sufficiently developed and documented to support the implementation of the Comprehensive Remedial Alternative; (3) ensure that following implementation, the CRAs meet design and performance specifications; (4) meet the Response Action Performance Standards (RAPS) for the design, construction and implementation of the CRAs as described in 310 CMR 40.0191; and (5) conform with all applicable requirements and deadlines.

In evaluating whether the Phase IV RIP meets these standards, MassDEP reviewed and considered the following: AVX's Phase IV RIP dated July 10, 2020, MassDEP's Revised Phase III Determination letter dated July 26, 2019, AVX's Revised Phase III Addendum dated January 2019, AVX's Revised Phase III RAP submitted on June 29, 2017, the 2010 ACO and associated agreements with the City of New Bedford (City) and the U.S. EPA, information from Immediate Response Action (IRA) Status Reports, Release Abatement Measure (RAM) Status Reports, comments submitted by the City and EPA, and meetings between AVX, EPA and the City.

PARTIAL CONDITIONAL APPROVAL

On February 18, 2021, MassDEP issued a partial conditional approval for the Phase IV RIP's "Year One" construction work. This document is referred to as the "First Partial Phase IV Conditional Approval" or the "Year One Letter".

Now MassDEP hereby issues this second and final partial conditional approval letter ("Second Partial Phase IV Conditional Approval" or "Year Two Letter") to allow the commencement of "Year Two" construction work as well as specific inspections and monitoring activities associated with the Preliminary Monitoring and Maintenance Plan (MMP). To clarify, and as further explained in this letter, MassDEP does not yet approve those provisions of the Phase IV RIP which apply *after* AVX has submitted a Remedy Operation Status (ROS) Submittal or Permanent Solution Statement (PSS). Accordingly, MassDEP only partially approves the MMP, and MassDEP does not yet approve the Adaptive Site Management (ASM) Plan. Any work, monitoring, or inspections not specifically approved herein shall not be undertaken until MassDEP provides written approval thereof.

Unless stated otherwise, this Year Two Letter confirms that AVX has satisfied the conditions set forth in MassDEP's Phase III Conditional Approval.

PHASE IV STATUS REPORTS, INTERIM DEADLINES

Pursuant to 310 CMR 40.0877(3) MassDEP is requiring that Phase IV Status Reports continue to be submitted on the **15th of every month** during construction activities as noted in the Year One Letter. These deadlines constitute Interim Deadlines established pursuant to 310 CMR 40.0167.

If you have any questions regarding this letter, please contact Angela Gallagher at (508) 946-2790 or at angela.gallagher@mass.gov.

Sincerely,

John Handrahan

John T. Handrahan
Acting Deputy Regional Director
Bureau of Waste Site Cleanup

H/AF/AG

Attachments:

1. General Comments and Conditions
2. Comments and Conditions for Year Two Construction
 - OU1 – Excavation of Soil on Titleist Excavation
 - OU2 – Response Actions Conducted at Precix, Inc.
 - OU3/OU4 – Soil Consolidation on Aerovox Property
 - OU2, OU3 and OU4 – Comments and Conditional Approval of Certain Post-Construction Monitoring Activities and Monitoring and Maintenance Plan (MMP)

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ec: City of New Bedford
Mayor's Office
Health Department
Environmental Stewardship

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P.C.

GENERAL COMMENTS AND CONDITIONS

1. **Completion of Review.** By this Year Two Letter, MassDEP is conditionally approving the balance of the remedy construction activities in AVX's Phase IV RIP, such that MassDEP has completed its review of the Phase IV pursuant to Paragraph 14(a) of the June 10, 2010 ACO.
2. **Maintenance and Monitoring Plan (MMP):** MassDEP is not approving the proposed MMP, which is equivalent to the Operations, Maintenance and Monitoring (OMM) Plan required by 310 CMR 40.0874(3)(d), until a Phase IV Completion Statement is submitted, and until a ROS Submittal or PSS that documents that each of the performance standards described in 310 CMR 40.0893(2) and 40.1004, respectively, have been met. Therefore, MassDEP only approves the inspection and/or monitoring protocols set forth in the Phase IV RIP and MMP that apply to the time period immediately following the completion of remedy construction. This monitoring program shall be continued until MassDEP has completed its review of AVX's ROS Submittal or PSS.
3. **Adaptive Site Management (ASM) Plan:** This Year Two Letter does not approve the Phase IV RIP - Appendix E (ASM Plan). Upon completion of the post-construction monitoring and after a thorough evaluation of the data, a revised long-term OMM Plan shall be included with the ROS Submittal or PSS for MassDEP approval.

MassDEP continues to support the concept of ASM at this Site and takes this opportunity to state that given that the Site cleanup relies on the proper functioning of several remedial components in a dynamic, water-front environment, MassDEP can only be assured that a Condition of No Significant Risk will exist at this Site for any foreseeable period of time if these remedial components are periodically monitored, evaluated, and, if necessary, modified. See M.G.L. c. 21E, § 3A; and 310 CMR 40.0190(6), 40.0191(1), 40.1004, 40.1005, & 40.1067.

The ASM Plan States, "At the conclusion of the first two years after remedy construction, a Periodic Evaluation meeting will be held with MassDEP, the City and EPA to discuss the remedy performance and outcomes, including placing the site in Remedy Operation Status, and/or the filing of a full or partial Permanent Solution." MassDEP agrees that the parties should meet at that time. As for "remedy performance and outcomes," MassDEP will consider the requirements in the MCP and comments from the City and EPA.

4. **Construction Schedule and Storm Water System Repairs:** In the next appropriate Phase IV Status Report, AVX shall provide an updated construction schedule that specifies that storm water *repairs* will be the final work completed prior to closure of the site for Year One construction. The October 19, 2021 weekly construction status meeting notes state that AVX will fully *replace* the storm water system in Year Two due to the Permeable Reactive Barrier (PRB) construction being moved to Year Two. An updated construction schedule shall be provided to MassDEP and included in the last Phase IV Status report (due on or before December 15, 2021) to confirm that the temporary storm water sewer *repairs* will be completed (or, if appropriate, have been completed) before the 2021/2022 winter season and that complete storm sewer replacement (or lining) will be conducted as one of the final tasks at the end of Year Two.
5. **Administrative Consent Order (ACO) Amendment:** MassDEP notes that the ACO requires amending given that AVX will not be able to meet the current 700-day deadline in Paragraph 12(e) of the ACO. Paragraph 12(e) requires that AVX simultaneously submit a Phase IV Final Inspection Report, Phase IV

Completion Statement, and an ROS or PSS within approximately two years of this Year Two Letter. However, AVX's Phase IV Plan calls for two years of construction, followed by the filing of a Phase IV Completion Statement, *followed by another two years of monitoring* to demonstrate that the selected remedy was adequately designed in accordance with 310 CMR 40.0870 to achieve ROS or a Permanent Solution.

Accordingly, AVX and MassDEP shall, within sixty **(60) days of the issuance of this Year Two Letter**, enter into an ACO Amendment to reasonably modify this 700-day deadline. MassDEP suggests that the parties establish separate deadlines for a Phase IV Completion Statement and the ROS Submittal or PSS. Additionally, the ACO Amendment should specify that AVX must submit Phase V Status Reports between the filing of its Phase IV Completion Statement and MassDEP's approval of the ROS Submittal or PSS.

It is MassDEP's intention that the ACO shall not be amended in any manner inconsistent with Paragraphs V.F and VI.A of the Cooperation and Settlement Agreement entered into between AVX and the City on March 16, 2010, in which it was agreed that the City shall not be deemed responsible for the Site until MassDEP provides notice of completion for the ROS Submittal or the PSS in accordance with Paragraph 14(f) of the ACO.

6. **Status Reports:**

- a. Pursuant to 310 CMR 40.0877, and as described in MassDEP's first Phase IV Partial Conditional Approval Letter dated February 18, 2021, MassDEP continues to require that Phase IV Status Reports be submitted on the **15th of every month** during active construction until AVX files its Phase IV Completion Statement. MassDEP acknowledges that these status reports will cease temporarily after completion of Year One activities and restart when Year Two activities begin.
 - b. Pursuant to 310 CMR 40.0892, between the time when AVX files its Phase IV Completion Statement and when MassDEP approves the ROS Submittal or PSS, AVX shall submit status reports **quarterly**, with the first status report due on or before the **15th of the month** following the first set of analytical data received under the MMP or OMM. AVX shall continue to submit quarterly monitoring reports until MassDEP approves modifications that AVX might propose in a ROS Submittal or other Status Report with supporting data.
7. If Site conditions encountered during remedy implementation are significantly different than anticipated in the Phase IV, AVX shall consult with MassDEP prior to submitting a Phase IV Modification.
 8. All monitoring wells that will not be retained after construction shall be decommissioned pursuant to Section 4.6 in MassDEP's Standard References for Monitoring Wells (Policy WSC-310-91).
 9. Remediation Waste must be managed appropriately pursuant to 310 CMR 40.0030.
 10. As stated in the first Phase IV Partial Conditional Approval Letter, no provision of the MCP shall be construed to relieve AVX from complying with all applicable federal, state, or local laws.

11. Pursuant to Paragraphs 14(d) & (f) of the ACO, before one or more Activity and Use Limitations (AULs) are recorded for portions of the Disposal Site, (as "Disposal Site" is defined in the MCP), MassDEP must review and approve the conditions established in the AULs for conformance with the MCP and this Year Two Letter.
12. Pursuant to Paragraph 14(e) of the ACO, MassDEP must review Financial Assurance Mechanism (FAM) documents. See Paragraph 71.
13. All **bolded deadlines** in this Year Two Letter constitute Interim Deadlines under 310 CMR 40.0167.

COMMENTS AND CONDITIONAL APPROVAL FOR YEAR TWO CONSTRUCTION
of
OU1 – Excavation of Soil on Titleist
and
OU2 – Response Actions conducted at Precix, Inc.
and
OU3/OU4 – Soil Consolidation/In-Situ Chemical Oxidation on Aerovox Property

Comments relative to all OUs:

14. The Phase IV RIP proposed the following actions in Year Two:

- Excavation and backfilling of soil from the Aerovox building foundation footprint (OU3) and stockpiling for backfilling of Titleist excavation (OU1);
- Excavation of contaminated soil from the Titleist property and consolidation on the Aerovox property (OU1 and OU3);
- Installation of permanent soil vapor monitoring points in the Precix building (OU2);
- Injection of In-Situ Chemical Oxidation (ISCO) pursuant to Appendix G - Plan for Application of Remedial Additives (OU3 and OU4);
- Final grading of consolidated soil at Aerovox property (OU3);
- Construction of engineered barrier and direct contact barriers over contaminated soil at the Aerovox property (OU3); and
- Record Activity and Use Limitations and Groundwater Restriction (OU2, OU3, OU4).

MassDEP also refers to Construction Drawing C-103 of the Phase IV RIP for additional representation of Year Two activities.

15. This Year Two Letter approves the construction and activities enumerated above, subject to the conditions expressed herein.

16. AVX may initiate Year Two activities upon receipt of this partial conditional approval letter.

Comments relative to the Excavation/Consolidation of Soil from the Titleist Property (OU1):

17. Except as stated below, the Phase IV RIP sufficiently addresses MassDEP's July 26, 2019 Conditional Approval of the revised Phase III (2019 Phase III Determination) pertaining to OU1 and OU3.
18. AVX's Phase IV RIP states that the purpose of the OU1 work is to "reduce PCB concentrations in OU1 Site soil...to...preclude an AUL." In order to do so, appropriate confirmatory sampling of the bottom of the excavation areas must be completed to demonstrate that PCB concentrations do not exceed 1 mg/kg. Also see Paragraph 23.
19. MassDEP acknowledges that side-wall sampling within the excavation areas will be conducted as described in Section 3.1 of Appendix L (OU1 Sampling and Analysis Plan).

MassDEP has previously stated that the presence of PCB-contaminated soil on the western side of OU1 south of the Titleist Building is not consistent with the Conceptual Site Model (CSM) for the Aerovox Site (i.e., PCB-contaminated soil from the Aerovox property deposited on the Titleist property by overland flow) and therefore it was determined that this contamination is not part of the Aerovox Site designated by Release Tracking Number 4-0000601. On December 20, 2018, MassDEP issued Notices of Responsibility (NORs) to AVX and to The Acushnet Company establishing a separate Release Tracking Number (4-0027583) under which the PCBs outside of OU1 would be addressed. In 2020, MassDEP administratively linked RTN 4-0027583 with the Aerovox RTN, and AVX invoked Dispute Resolution pursuant to the ACO. That Dispute Resolution process remains ongoing, and MassDEP intends to work with AVX to complete that process within a reasonable time after the issuance of this Year Two Letter.

20. The PIV RIP states that the area surrounding the storm water line in Hadley Street (a private right of way half-owned by The Acushnet Company (Titleist)) will contain PCB concentrations greater than 1 mg/kg. An AUL will be required for the portion of Hadley Street owned by Titleist.
21. MassDEP is aware that AVX's Licensed Site Professional (LSP) has been in contact with emergency personnel for the City of New Bedford and is working together to ensure the safety of all construction activities, including the Titleist building, especially regarding piping associated with the fire suppression system.
22. **MassDEP approves the Excavation/Consolidation of Soil from the Titleist Property (OU1) subject to the following conditions:**
23. If AVX intends to ensure that PCB concentrations in OU1 Site soil are reduced such that no AUL would be placed on OU1, MassDEP requires that AVX conduct confirmatory bottom sampling within each excavation area such that a final Exposure Point Concentration (EPC) is developed that confirms that an AUL will not be required. In the next appropriate Phase IV Status Report, AVX shall revise its bottom sampling regimen in Appendix L (OU1 Sampling and Analysis Plan) to explain how AVX will develop this EPC.
24. AVX shall provide MassDEP the results of the post-excavation sampling in the Phase IV Status Report immediately following receipt and data qualification of those samples.

25. The AUL to be implemented for Hadley Street cannot prohibit emergency utility repair pursuant to 310 CMR 40.0923(2). A risk characterization that incorporates assumptions for emergency utility workers should be completed and presented in the AUL. If the risk characterization cannot demonstrate a level of No Significant Risk to utility workers undertaking emergency repair, additional remediation may be necessary and shall be described in a Phase IV Modification.

Furthermore, because a portion of Hadley Street is owned by The Acushnet Company, The Acushnet Company will have to agree to and sign the AUL required to achieve a Permanent Solution for this portion of the Disposal Site.

Comments relative to the Installation of Permanent Sub-Slab Soil Gas Monitoring Points in the Precix Building (OU2):

26. OU2 concerns the potential vapor intrusion pathway for the Precix property, where trichloroethylene (TCE) and perchloroethylene (PCE) are present in both indoor air and sub-slab soil gas beneath the Precix building. The sub-slab soil gas concentrations were elevated above the MassDEP screening values but are not greater than the MassDEP Imminent Hazard (IH) values. AVX has planned to install additional soil vapor monitoring points and to monitor groundwater, soil gas, and indoor air. The remedial objectives include decreasing the concentrations of chlorinated volatile organic compounds (CVOC) migrating through groundwater to the Precix property, which would result in a decrease in CVOC soil gas concentrations. An AUL will be filed for the Precix property to restrict future residential use.
27. While OU2 only includes the Precix building and not the area east of the building, some analytical data indicates the presence of PCBs in soil at concentrations that exceed applicable standards east of the Precix building. Depending on concentrations and depths of the soil, including the locations where contamination is found to be present (e.g., underneath rip rap), excavation may be completed or an engineered barrier or a direct contact cap may be required on certain portions of the Precix property thereby requiring an AUL.
28. **MassDEP approves the Installation of Permanent Sub-Slab Soil Gas Monitoring Points in the Precix Building (OU2) with no conditions.**

Comments relative to the construction of the cap and engineered barrier on the Aerovox property (OU3 and OU4):

29. The purpose of the asphalt cap and engineered barrier is to control and prevent access to soils contaminated with PCBs as well as to minimize infiltration of surface water and potential discharge of PCB-contaminated groundwater and stormwater to the Acushnet River.
30. The engineered barrier will be constructed over portions of the consolidation cell that are expected to be filled with soil concentrations exceeding the Upper Concentration Limit (UCL) of 100 mg/kg for PCBs. The asphalt (direct contact) cap will be constructed over soil that contains concentrations exceeding MCP Method 1 S-1 Soil Standards but below UCLs.
31. **MassDEP approves the construction of the engineered barrier and direct contact cap with no conditions.**

Comments relative to the use of in-situ chemical oxidation (ISCO) in groundwater at the Aerovox property (OU3 and OU4):

32. Modified Fenton's Reagent will be injected into the groundwater in the overburden aquifer upgradient of the PRB with the intent to reduce the average concentration of CVOCs, therefore potentially reducing the mobility of PCBs and extending the life of the PRB media.
33. Sodium persulfate will be added to the groundwater in the shallow bedrock aquifer in the northeast corner of the Aerovox property with the intent to reduce the concentrations of CVOCs to below UCLs.
34. Sodium permanganate will be injected to the groundwater in the deep bedrock aquifer in the northeast corner of the Aerovox property with the intent to reduce concentrations of CVOCs to below UCLs.
35. **MassDEP approves the use of ISCO for the groundwater at the Aerovox property (OU3 and OU4) without conditions, provided that the groundwater monitoring conducted before, during and after the injection of the ISCO reagents shall conform with the requirements of 310 CMR 40.0046.**

COMMENTS AND CONDITIONAL APPROVAL
of
CERTAIN POST-CONSTRUCTION MONITORING ACTIVITIES
and
MONITORING AND MAINTENANCE PLAN (MMP)
at
OU2 – Precix Property
and
OU3/OU4 – Aerovox Property

General comment:

36. Section 4 of the Preliminary Monitoring and Maintenance Plan (MMP – Appendix D of the Phase IV RIP) describes the proposed near-term and the long-term monitoring programs. This letter provides input regarding the near-term MMP, which shall begin immediately after construction is complete. MassDEP will comment and approve the long-term monitoring plan, which shall be included in the ROS Submittal or PSS, in a separate approval letter.

Comments relative to Precix Soil Gas (OU2):

37. AVX's MMP states the following:

- a. Sub-slab soil gas and indoor air samples will be collected semi-annually during winter and summer until a reduction in sub-slab soil gas samples to below the Industrial/commercial screening values as specified in MassDEP's 2016 Vapor Intrusion Guidance document are achieved.
- b. Groundwater sampling will be completed semi-annually until groundwater concentrations are below Method 1 GW-2 Standards and the plume of dissolved CVOCs in the groundwater is stable or contracting.

38. MassDEP approves the MMP for OU2 subject to the following conditions:

39. Inspections to evaluate the conditions of the permanent soil-vapor points and foundation slab shall be completed when soil vapor sampling is conducted. The condition of the soil vapor points and foundation slab shall be documented in the next Status Reports prepared after the sampling/inspection is completed. That status report shall include an evaluation as to whether repairs or replacements are necessary. Any repairs/replacements shall be documented in the appropriate reports after completion of the repairs/replacements.

40. MassDEP approves the MMP for the Precix sub-slab soil gas (OU2), but only insofar as stated in General Comment/Condition 2. MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal or PSS.

Comments relative to the monitoring of the hydraulic barriers and groundwater in the overburden aquifer:

41. The purpose of the hydraulic barriers is to contain groundwater impacted with PCBs and CVOCs along the north and south boundaries of the Aerovox property and allow for a funneling of groundwater through the PRB. MassDEP previously approved the installation/construction of the hydraulic barriers and the PRB in its Year One Letter. This letter addresses the MMP as it pertains to the hydraulic barriers.
42. The MMP for the hydraulic barriers consists of quarterly groundwater monitoring during Years One and Two, then semi-annually thereafter until a decreasing trend in the concentrations of PCBs and CVOCs in the groundwater downgradient of the hydraulic barriers can be demonstrated.
43. **MassDEP approves the MMP for the hydraulic barriers subject to the following conditions.**
44. Given that groundwater in the shallow and deep overburden aquifers on the Titleist property will not be monitored, AVX shall, with MassDEP's prior approval, install two (2) additional monitoring wells on either side of the far eastern portion of the southern hydraulic barrier at locations and depth to be determined in consultation with MassDEP. These wells will allow for evaluation of whether the southern hydraulic barrier is effective in preventing flow of contaminated groundwater from the Aerovox property to the Titleist property.
45. The groundwater monitoring associated with the potential vapor intrusion pathway evaluation at the Precix property shall also include the monitoring wells used to evaluate the effectiveness of the northern hydraulic barrier as described in Table 2, Appendix D "Preliminary Monitoring and Maintenance Plan". This is to evaluate whether the hydraulic barriers are successfully preventing migration of contaminants to the Precix property that may contribute to vapor intrusion.
46. The western terminus of the northern hydraulic barrier is located in line with the center of the consolidation cell that will contain soil impacted with PCBs greater than UCLs. Given the higher concentrations of PCBs in this portion of the cell and its proximity to the western terminus of the northern hydraulic barrier, AVX shall sample monitoring well MW-4S on a quarterly basis and analyze the groundwater sample(s) for PCBs and CVOCs.
47. **MassDEP approves the MMP for the hydraulic barriers along the north and south property boundaries of the Aerovox property (OU3), but only insofar as stated in General Comment/Condition 2. MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal or PSS.**

Comments relative to monitoring groundwater associated with the PRB and ISCO in Deep Overburden Aquifer Upgradient of the PRB:

48. The purpose of the PRB is to treat CVOCs and capture PCBs in groundwater in the overburden aquifer thereby preventing the migration of these contaminants to the Acushnet River. MassDEP previously approved the construction of the PRB in the First Partial Conditional Approval Letter.
49. Section 4.2.1 of the MMP states that monitoring of wells upgradient of the PRB will take place quarterly during Years One and Two, then semi-annually thereafter until a decreasing or stable trend is observed. Note that General Comment/Condition 2 prohibits AVX from moving into semi-annual monitoring until further steps are achieved.
50. **MassDEP approves the MMP for the PRB, subject to the following conditions:**
51. AVX shall use the hydraulic head, contaminant concentration data from the monitoring wells, and any other appropriate data to evaluate whether contamination is circumventing the PRB. The information shall be presented in the appropriate status reports for MassDEP's review.
52. Information relating to this PRB evaluation shall be submitted as part of the Status Reports for the Site. These Status Reports shall include an evaluation of the PRB efficacy; vertical and horizontal groundwater flow and hydraulic conductivity based on the data obtained during each monitoring period.
53. MassDEP also notes the importance of understanding whether the PRB is functioning as intended and understanding the longevity of the PRB. The ROS Submittal or PSS shall include this evaluation, which shall include metrics relevant to any observed or anticipated degradation of the PRB.
54. **MassDEP approves the MMP for the PRB, but only insofar as stated in General Comment/Condition 2. MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal or PSS.**

Comments relative to monitoring of ISCO Upgradient of the PRB:

55. The purpose of ISCO upgradient of the PRB is to reduce the average concentration of CVOCs in the groundwater from the deep overburden aquifer, reduce the mobility of PCBs and extend the life of the PRB media.
56. According to the MMP, monitoring of wells upgradient of the PRB will take place quarterly for the first two (2) years, and semi-annually thereafter until a decreasing trend of COCs is observed. Note that General Comment/Condition 2 prohibits AVX from moving into semi-annual monitoring until further steps are achieved.
57. **MassDEP approves the MMP for the ISCO in deep overburden groundwater upgradient of the PRB, but only insofar as stated in General Comment/Condition 2. MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal or PSS.**

Comments relative to the monitoring of ISCO injected into groundwater in the shallow bedrock aquifer at the Northeast Corner of the Aerovox property (OU4):

58. According to the MMP, groundwater in shallow bedrock post-ISCO will be analyzed quarterly for the first two (2) years and then semi-annually until average concentrations of PCBs and CVOCs in the groundwater show a decreasing or stable trend and are below the UCLs. Once that goal has been reached, monitoring will continue every five (5) years under the TSCA program. Note that General Comment/Condition 2 prohibits AVX from moving into semi-annual monitoring until further steps are achieved.

59. **MassDEP approves the MMP for ISCO in shallow bedrock groundwater, but only insofar as stated in General Comment/Condition 2. MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal, or Permanent Solution Statement.**

Comments relative to the monitoring of ISCO injected into groundwater in the deep bedrock aquifer at the Northeast Corner of the Aerovox property (OU4):

60. The Phase IV RIP states that the objective of injecting ISCO to the deep bedrock aquifer in the northeast corner of the Site is to reduce concentrations of CVOCs in groundwater from the deep bedrock aquifer to below UCLs.
61. The Phase IV RIP states that the deep bedrock area will be monitored quarterly for the first two (2) years and then semi-annually until average concentrations of PCBs and CVOCs in the groundwater show a decreasing or stable trend and are below the UCLs. Note that General Comment/Condition 2 prohibits AVX from moving into semi-annual monitoring until further steps are achieved.
62. **MassDEP conditionally approves ISCO in deep bedrock groundwater subject to the following conditions:**
 63. Consistent with the requirement stated in the Year One letter to further evaluate the subsurface surrounding the ISCO pilot study area surrounding MW-26B, AVX has expressed its intent to install one (1) additional bedrock monitoring well in this area. The Phase IV Status report received on May 17, 2021, describes the installation of this new well and also provides a modified MMP to include monitoring of additional bedrock monitoring wells in this area.
 64. If in the first two (2) years of monitoring the sodium permanganate is found to be consumed such that remaining reagent(s) is no longer useful, additional injections shall be completed.
 65. **MassDEP approves the MMP for the ISCO in deep bedrock groundwater, but only insofar as stated in General Comment/Condition 2. MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal or PSS.**

Comments relative to the Asphalt Cap and Engineered Barrier at the Aerovox property (OU3, including a portion of the Precix property as discussed in Paragraph 27, and OU4):

66. The purpose of the asphalt cap and engineered barrier is to control and prevent access to soils contaminated with PCBs as well as to minimize infiltration of surface water and potential discharge of PCB-contaminated groundwater and stormwater to the Acushnet River.
67. The Phase IV MMP states that during the first two (2) years post-construction, the engineered barrier and asphalt cap on the Aerovox property (and including the portion of the Precix property) and within Hadley Street will be inspected twice per year. Information gathered during the inspections will be used to develop the maintenance plan for that year.
68. The Phase IV RIP included the form *Engineered Barrier and/or Cap Inspection Form* as Attachment B to the MMP.
69. **MassDEP approves the Cap and Engineered Barrier, but only insofar as stated in General Comment/Condition 2, in addition to the following conditions and considerations:**
 70. AVX stated in its November 19, 2020 response to EPA's comments dated October 14, 2020 (TSCA Cmt. 13.a) that a revision to the Phase IV RIP, Appendix D, Section 5.3, will be submitted to reflect a catastrophic failure of the asphalt cap and not just the engineered barrier. This revision shall be submitted in a Phase IV Status Report **no later than June 30, 2022.**
 71. Paragraph 14(e) of the ACO directs MassDEP to review and identify any deficiencies in AVX's Financial Assurance Mechanism (FAM) for the engineered barrier. Furthermore, MassDEP's July 2019 Revised Phase III Determination Letter, at Paragraph 3 on page 12, directed AVX to document in the Phase IV RIP "how the FAM will be implemented".

MassDEP is requiring AVX to submit a DRAFT FAM prepared in accordance with 310 CMR 30.905 & 30.906 **at the time AVX submits its Phase IV Completion Statement** (see 310 CMR 40.0996(5)(a)(7)). Although MassDEP understands that the FAM cannot be finalized until the long-term MMP and ASM Plan are approved at a later date by MassDEP, MassDEP notes that early submittal would facilitate MassDEP's timely review and compliance assistance, if necessary.
 72. Paragraph 14(d) of the ACO directs MassDEP to review and identify any deficiencies in the AUL. AVX may elect to submit a draft AUL such that MassDEP can have the benefit of advanced review and compliance assistance, if necessary. MassDEP expects that such draft AUL will account for requirements under the MMP and the ASM Plan, both of which shall be subject to a later MassDEP letter. MassDEP will make itself available for meetings to facilitate early communication and compliance assistance.
 73. **MassDEP reserves the review and approval of the long-term monitoring and maintenance of this remedial component upon its review of AVX's ROS Submittal or PSS.**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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TRANSMITTED BY ELECTRONIC MAIL

December 29, 2021

Evan Slavitt, Esq.
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Re: Aerovox Property, New Bedford: Second Supplement to the 2009 TSCA Determination
Massachusetts c.21E RTN No. 4-0000601

Dear Mr. Slavitt:

The enclosed *Second Supplement to the 2009 TSCA Determination for Aerovox Property OU-1 Through OU-4 Year 2 Work*, provides approval under TSCA and 40 C.F.R. § 761.61(c) for the Operable Units ("OUs") 1 through 4 Year 2 Work to be completed under the Phase IV Remedy Implementation Plan ("Phase IV RIP") and the Massachusetts Department of Environmental Protection Partial Conditional Approval, dated December 8, 2021. Separate risk-based approvals are also being issued to The Acushnet Company and Acushnet Rubber Company, Inc. d/b/a Precix for the Titleist and Precix properties, respectively. EPA approvals under TSCA are required for AVX to implement the full remedy as the Phase IV RIP encompasses measures that were not contemplated or approved in the EPA 2009 TSCA Determination.

Please direct technical questions and correspondence regarding this matter to:

David Dickerson, EPA Remedial Project Manager
dave.dickerson@epa.gov
617.918.1329

Please direct any legal questions to:

Man Chak Ng, Senior Enforcement Counsel
Ng.manchak@epa.gov
617.918.1785

Respectfully,

Kimberly N Tisa
Kimberly N. Tisa, PCB Coordinator
Land, Chemicals and Redevelopment Division

Cc: Matthew Snell, Esq., Nutter McClennen & Fish (msnell@nutter.com)
Bonni Kaufman, Esq., Holland & Knight LLP (bonni.kaufman@hklaw.com)
William Frye, The Acushnet Company (Bill_Frye@AcushnetGolf.com)
William Clark, Acushnet Rubber Company Inc. d/b/a Precix (bclark@precixinc.com)
Marilyn Wade, Brown & Caldwell (mwade@brwncald.com)
Dave Dickerson, EPA (dickerson.dave@epa.gov)
Man Chak Ng, EPA (ng.manchak@epa.gov)
Angela Gallagher, MassDEP (angela.gallagher@state.ma.us) Andrew
W. Fowler, Esq., MassDEP (andrew.fowler@state.ma.us)
Michele Paul, City of New Bedford ([michele.paul@newbedford-
ma.gov](mailto:michele.paul@newbedford-ma.gov))
File

Second Supplement to 2009 TSCA Determination for Aerovox Property OU-1 Through OU-4 Year 2 Work

The former Aerovox facility property, located at 740 Belleville Avenue in New Bedford, Massachusetts (Aerovox Property, Aerovox Site, or Site), is contaminated with levels of polychlorinated biphenyls (PCBs) that are regulated for cleanup under the Toxic Substances Control Act (TSCA) and its implementing regulations at 40 C.F.R. Part 761. The United States Environmental Protection Agency, Region 1 (EPA) and AVX Corporation (“AVX”, now KYOCERA AVX Components Corporation) entered into an Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action (NTCRA) for the Site, CERCLA Docket No. 01-2010-0017, dated March 25, 2010 (the “2010 Settlement Agreement”). The 2010 Settlement Agreement attached and incorporated an Action Memorandum issued by EPA on January 27, 2010 as Appendix A. Such Action Memorandum included a TSCA determination by EPA, dated December 24, 2009, as the Action Memorandum’s Appendix C, that the NTCRA for the Site would not pose an unreasonable risk of injury to health or the environment, consistent with 40 C.F.R. § 761.61(c) (2009 TSCA Determination and Aerovox Site boundary; **see Attachments 1 and 2**).

AVX is responsible for conducting response actions under TSCA and Massachusetts General Laws Chapter 21E (Chapter 21E), the Massachusetts Contingency Plan (MCP), and the Massachusetts Department of Environmental Protection (MassDEP) Administrative Consent Order of June 3, 2010 (2010 ACO) for the MCP Disposal Site under Release Tracking Number (RTN) 4-0000601. The MCP Disposal Site includes the Aerovox Property, portions of the Precix Property at 744 Belleville Avenue, and portions of the Titleist Property at 700 Belleville Avenue. Completion of the work required under the 2010 Settlement Agreement triggered further work under the 2010 ACO in accordance with Chapter 21E.

AVX completed a Comprehensive Phase II and submitted a Revised Phase III Remedial Action Plan (RAP) dated June 29, 2017 and Phase III Addendum dated January 2019 to MassDEP. MassDEP issued a Conditional Approval of the Phase III RAP on July 26, 2019, which among other things required AVX to submit a Phase IV Remedy Implementation Plan (Phase IV RIP) for the MCP Disposal Site.

On February 18, 2021, MassDEP issued a Partial Phase IV RIP Conditional Approval covering work on Operable Units (OUs) 3 and 4 in Year 1 (OU-3 and OU-4 Year 1 Work). OU-3 comprises the soil, overburden groundwater and storm sewers at the Aerovox Property, and OU-4 comprises bedrock groundwater at the Aerovox Property. The OU-3 and OU-4 Year 1 Work involved the disposal of PCBs at portions of the MCP Disposal Site in ways not addressed by the 2009 TSCA Determination. On March 24, 2021, EPA issued a Supplement to the TSCA Determination covering work on OUs 3 and 4 in Year 1 (**see Attachment 3**).

On December 8, 2021, MassDEP issued a Partial Phase IV RIP Conditional Approval (December 2021 MassDEP Partial Conditional Approval, **see Attachment 4**) covering remedy construction work on OUs 1 through 4 in Year 2 (Year 2 Work), which includes:

- Excavation and backfilling of clean soil from the former Aerovox building foundation footprint (OU-3) and stockpiling for backfilling of excavation areas;
- Excavation of PCB-contaminated soil on the Titleist property and consolidation onto the Aerovox property within the foundation footprint (OU-1 and OU-3);
- Installation of permanent soil vapor monitoring points in the Precix building (OU-2);
- In-place management of PCB-contaminated soil located within Graham Street (OU-2);
- Completion of ISCO injections on the Aerovox property (OU-3 and OU-4);
- Final grading of consolidated soil on the Aerovox property (OU-3);
- Construction of an engineered barrier and direct contact barriers over contaminated soil on the Aerovox property (OU-3, **see Attachment 5**);
- Repair and restoration of the existing caps, as necessary (OU-1, OU-2, and OU-3); and,
- Record Activity and Use Limitation and Groundwater Restriction for Aerovox property, the Titleist Property and the Precix Property (OU-1, OU-2, OU-3, and OU-4) to document any use restrictions and long-term conditions and requirements that may apply to the properties based on contaminant concentrations remaining.

The December 2021 MassDEP Partial Conditional Approval also approved certain “near-term” inspection and monitoring activities associated with the Preliminary Monitoring and Maintenance Plan (MMP). In its December 2021 Partial Conditional Approval, MassDEP did not approve those provisions of the Phase IV RIP which apply after AVX has submitted a Remedy Operation Status submittal or Permanent Solution Statement (i.e., long-term monitoring plan). The long-term monitoring plan will require MassDEP approval.

Certain activities to be conducted by AVX during the Year 2 Work, such as excavation of PCB-contaminated soil from the Titleist property and re-location of the *PCB remediation waste* (40 C.F.R. § 761.3) into the consolidation cells on the Aerovox property, are not authorized under 40 C.F.R. Part 761 unless approved by EPA. These activities were not addressed by the 2009 TSCA Determination as they were not yet contemplated. EPA has determined that this second supplement to the 2009 TSCA Determination is required to address whether the Year 2 Work would present an unreasonable risk of injury to health or the environment under 40 C.F.R. § 761.61(c). AVX submitted a TSCA Determination Modification Application dated March 18, 2021 and Addendum dated December 15, 2021 (together “TSCA Modification Application”) to address PCB contamination on the Aerovox, Titleist and Precix properties.

EPA has reviewed the December 2021 MassDEP Partial Conditional Approval for Year 2 Work and the July 10, 2020 Phase IV RIP to the extent it includes the Year 2 Work involving the management of regulated PCB-contaminated material under TSCA and 40 C.F.R. Part 761. Consistent with 40 C.F.R. § 761.61(c), I have determined that the Year 2 Work will not pose an unreasonable risk of injury to health or the environment provided the following conditions are met:

1. This Second Supplement only addresses the activities described for the Year 2 Work to the extent identified in the December 2021 MassDEP Partial Conditional Approval.
2. This Second Supplement does not address PCB contamination located to the east of the Precix property building and at the end of Graham Street where additional investigation and remedial measures will be required. AVX shall be required to complete investigations within these areas and submit its plan to EPA to address PCB contamination located within this area in accordance with 40 C.F.R. Part 761 and the MCP.
3. In the event that AVX identifies other areas of PCB contamination not previously identified or known, such as dense non-aqueous phase liquid (DNAPL) during Year 2 Work, AVX shall notify the EPA TSCA Program via telephone and email as soon as possible after identification, but no later than midnight of the day of such identification. If DNAPL is identified, AVX shall take all necessary measures to contain the DNAPL and to prevent releases to the Acushnet River. Notification to EPA shall be directed to:

David Dickerson, EPA Remedial Project Manager
dickerson.dave@epa.gov
617.918.1329 (phone)

4. All reports submitted to MassDEP, including Status Reports, shall be provided to EPA by email to dickerson.dave@epa.gov.
5. AVX shall comply with 40 C.F.R. Part 761, the 2009 TSCA Determination, the Supplement to the TSCA Determination, and this Second Supplement to the 2009 TSCA Determination, in all activities at the Aerovox Property, including in the decontamination, marking, storage, handling, and disposal of PCB waste generated during any work on the Aerovox Property, the Titleist Property and the Precix Property.
6. Any proposed modification(s) in the plan, specifications, drawings, or information pertaining to the Year 2 Work, as described in the Phase IV RIP and the December 2021 MassDEP Partial Conditional Approval, and which are the subject of this Second Supplement to the 2009 TSCA Determination, may require changes to this Supplement or a new TSCA determination from EPA.

This Second Supplement to the 2009 TSCA Determination applies only to the Year 2 Work to be conducted on the Aerovox Property, the Titleist Property, and the Precix Property as shown on **Attachment 6**.

Except as otherwise provided by this Second Supplement, all terms and conditions specified in the 2009 TSCA Determination and Supplement to the TSCA Determination remain in effect.

Failure to comply with the conditions specified herein may constitute a violation of the requirement in 40 C.F.R. § 761.50(a) to store or dispose of PCB waste in accordance with 40 C.F.R. Part 761 Subpart D.

EPA may modify, suspend or revoke this Second Supplement to the 2009 TSCA Determination if EPA determines that the disposal of PCBs is not protective and poses an unreasonable risk of injury to health or the environment. Such determination may be based on changes in Site conditions or use, new information/new conditions, including the discovery of new or additional PCB contamination, or information indicating that PCB releases from the Aerovox Property are not adequately controlled.

NANCY
BARMAKIAN

Digitally signed by NANCY
BARMAKIAN
Date: 2021.12.29 14:35:00 -05'00'

Nancy Barmakian, Director
Land, Chemicals and Redevelopment Division
EPA Region 1

Attachment 1: Non-Time Critical Removal Action, Final TSCA Determination Action Memorandum – Appendix C (3 pages)

Attachment 2: Aerovox Property or “Site,” as depicted in Appendix C of the 2010 Settlement Agreement (1 page)

Attachment 3: Supplement to the TSCA Determination for Aerovox Property OU3 and OU4 Year 1 Work, March 24, 2021 (19 pages)

Attachment 4: MassDEP Partial Phase IV Remedy Implementation Plan Conditional Approval Interim Deadlines, December 8, 2021 (20 pages)

Attachment 5: Engineered and Direct Contact Barriers Plan (2 pages)

Attachment 6: Regulatory and Investigation Boundary Lines, revised Oct 2021 (1 page)

the 1990s, the number of people with a mental health problem has increased in the UK (Mental Health Act 1983, 1990).

There is a growing awareness of the need to improve the lives of people with mental health problems. The Department of Health (1999) has set out a strategy for mental health care in the UK. The strategy is based on the following principles:

• People with mental health problems should be treated as individuals, with their own needs and wishes.

• People with mental health problems should be given the opportunity to participate in decisions about their care and treatment.

• People with mental health problems should be given the opportunity to live in their own homes.

• People with mental health problems should be given the opportunity to work and to contribute to society.

• People with mental health problems should be given the opportunity to live a full and active life.

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DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

February 28, 2022

Regulatory Division
File No. NAE-2021-00281

Evan Slavitt
AVX Corporation
1 AVX Boulevard
Fountain Inn, South Carolina 29644
(via email: evan.slavitt@kyocera-avx.com)

Dear Mr. Slavitt:

We have reviewed your application to perform work in waters and wetlands below the high tide line of the Acushnet River on property at 700 Belleville Avenue in New Bedford, Massachusetts. This project is adjacent to and associated with the non-jurisdictional remedial work at 740 Belleville Avenue. You propose to temporarily impact 4,323 square feet of brackish wetlands via excavation and removal of PCB-laden soils and backfilling with clean soils. You also propose to temporarily install sheet pile at the MHW line and a cofferdam to limit impacts to the Acushnet River from the remediation work. This will temporarily impact up to 6,000 square feet of salt marsh. The work will be performed in accordance with the enclosed plans titled "SITE PLANS TO ACCOMPANY NOTICE OF INTENT FORMER AEROVOX FACILITY 740 BELLEVILLE AVENUE NEW BEDFORD, MASSACHUSETTS", on sixteen sheets.

Based on the information that you have provided, we verify that the activity is authorized under General Permit # 17 of the enclosed April 16, 2018 Federal permit known as the Massachusetts General Permits (GPs).

Please review the enclosed GPs carefully, including the general conditions beginning on page 19, to be sure that you and whoever does the work understand its requirements. A copy of the GPs and this verification letter shall be available at the project site throughout the time the work is underway. Performing work within our jurisdiction that is not specifically authorized by this determination or failing to comply with any special condition(s) provided below or all of the terms and conditions of the GPs may subject you to the enforcement provisions of our regulations. You must perform this work in compliance with the terms and conditions of the GPs and also in compliance with the following special conditions:

1. You must maintain the activity authorized herein in good condition and in conformance with the terms and conditions of this authorization. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 37 on page 32 of the GPs. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer,

you must obtain a modification of this authorization from this office, which may require restoration of the area.

2. Following the installation of the temporary cofferdam and once the remedial work begins, liquid from construction dewatering will not be discharged to the harbor but will be pumped to an onsite wastewater treatment system and then discharged to the sanitary sewer in accordance with an industrial pretreatment permit issued by the City of New Bedford.

3. Once the work has been completed, the cofferdam and sheet pile wall will be removed and all temporarily impacted wetlands will be restored to their original condition. After the contaminated soils are removed from the high marsh area, clean soils will be placed to the same elevation as the original wetland elevation. High marsh, salt marsh, and upland buffer plantings will be installed in accordance with the enclosed Titleist Shoreline Restoration Planting Plan, which has a final revised date of 2/14/22.

4. Pre-construction monitoring of the salt marsh will be performed so that impacts from the temporary sheeting, cofferdam placement and partial dewatering can be assessed. The pre-construction monitoring will be performed by a certified wetland scientist and will consist of the following measures:

- Establishing a visual monitoring station every 25 feet along the top of bank.
- Recording the latitude and longitude of each station such that the stations can be re-established for post-construction monitoring.
- Performing one baseline visual monitoring and photographic documentation event of the low and high salt marsh vegetation and site conditions prior to installation of the sheet pile wall and cofferdam.

5. Post-construction monitoring will be performed by a certified wetland scientist immediately following restoration activities and then biannually in the spring and fall in years 1, 2, 3, and 5. The photo documentation stations from the pre-construction monitoring will be re-established following construction. The purpose of the monitoring will be to evaluate the success of vegetation re-establishment and to quantify the presence of invasive species within the restoration areas. If during the monitoring period, the EPA commences remediation activities along the shoreline as part of its overall harbor remediation project, the permittee will inform the Corps and monitoring of the areas to be disturbed by EPA's work will cease.

6. Invasive species control will occur within the high marsh, salt marsh, and upland buffer planting zones at least annually over the course of the monitoring period. Invasive species will be removed and disposed of in a manner that prevents their spread.

7. The performance standards for the wetland restoration area include the following:

- 85% plant survival and/or 85% colonization by native wetland plants.
- <15% cover by invasive plant species.
- Removal of invasive species when encountered within the restoration area.

8. If the performance standards are not on track toward being met within two years, the permittee will develop an adaptive management plan. This plan will be submitted to our office for approval prior to implementation.

9. Monitoring reports will be submitted to the following agencies immediately following restoration activities and then annually in Years 1, 2, 3, and 5:

- Ruthann Brien, USACE, ruthann.a.brien@usace.army.mil
- Bob Boeri, CZM, robert.boeri@state.ma.us
- MA DMF, dmf.envreview-south@state.ma.us
- Ed Reiner, EPA, reiner.ed@epa.gov
- Rachel Croy, croy.rachel@epa.gov
- Kaitlyn Shaw, kaitlyn.shaw@noaa.gov

10. Each monitoring report will contain the following elements:

- An estimate of plant survival in the high marsh, low marsh, and upland buffer planting zones.
- An estimate of the types and percent cover of invasive species within the planting zones.
- Measures taken since the last report to remove/control invasive species.
- Photographs taken from each monitoring station.

11. You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated starting date. You must complete and return the enclosed Compliance Certification form to this office within 30 days of project completion to indicate that the work was performed in accordance with the permit conditions.

This authorization expires on April 5, 2023. You must commence or be under contract to commence the work authorized herein by April 5, 2023, and complete the work by April 5, 2024. If not, you must contact this office to determine the need for further authorization before beginning or continuing the activity. We recommend that you contact us *before* this authorization expires to discuss reissuance. Please contact us immediately if you change the plans or construction methods for work within our jurisdiction. We must approve any changes before you undertake them.

This authorization does not obviate the need to obtain other Federal, State, or local authorizations required by law.

Your project is located within or may affect resources within the coastal zone. The Massachusetts Office of Coastal Zone Management (CZM) has already determined that no further Federal Consistency Review is required.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at

<https://regulatory.ops.usace.army.mil/customer-service-survey>.

Please contact Ruthann Brien of my staff at (978) 318-8054 or by email at ruthann.a.brien@usace.army.mil if you have any questions.

Sincerely,

Paul Maniccia

Paul M. Maniccia
Chief, Permits & Enforcement Branch
Regulatory Division

Enclosures

cc:

Marilyn Wade, Brown and Caldwell, mwade@brwncald.com

Ed Reiner, U.S. EPA, Region 1, Boston, Massachusetts, reiner.ed@epa.gov

Rachel Croy, U.S. EPA, Region 1, Boston, Massachusetts, croy.rachel@epa.gov

Kaitlyn Shaw, NMFS, Gloucester, MA; kaitlyn.shaw@noaa.gov

David Simmons, USFWS; david_simmons@fws.gov

Robert Boeri, CZM, robert.boeri@mass.gov

Daniel Gilmore, Wetlands and Waterways, daniel.gilmore@mass.gov

David Robinson, MBUAR, david.s.robinson@mass.gov

New Bedford Conservation Commission, sarah.porter@newbedford-ma.gov



US Army Corps
of Engineers®
New England District

WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before work begins)

EMAIL TO: ruthann.a.brien@usace.army.mil and cenae-r@usace.army.mil; or

MAIL TO: Ruthann Brien
Regulatory Division
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Also, if the work is in the Massachusetts Coastal Zone (<https://www.mass.gov/service-details/czm-regions-coastal-communities-and-coastal-zone-boundary>), email this form to robert.boeri@mass.gov or mail it to: The Massachusetts Office of Coastal Zone Management, Project Review Coordinator, Suite 800, 251 Causeway Street, Boston, MA 02114.

Corps of Engineers Permit No. NAE-2021-00281 was issued to **AVX Corporation**. This work is located in the Acushnet River and authorized wetland remediation work.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Phone & email: () _____ () _____

Proposed Work Dates: Start: _____ Finish: _____

Permittee/Agent Signature: _____ Date: _____

Printed Name: _____ Title: _____

Date Permit Issued: February 28, 2022 Date Permit Expires: April 5, 2023

FOR USE BY THE CORPS OF ENGINEERS

PM: Brien Submittals Required: _____

Inspection Recommendation: _____



**US Army Corps
of Engineers**®
New England District

COMPLIANCE CERTIFICATION FORM

(Minimum Notice: Permittee must sign and return notification within one month of the completion of work.)

Permit Number: NAE-2021-00281

Project Manager: Ruthann Brien

Name of Permittee: AVX Corporation

Permit Issuance Date: Feb. 28, 2022

Please sign this certification and return it to our office upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

```

*****
* E-MAIL TO: cenae-r@usace.army.mil; or *
* * *
* MAIL TO: Permits and Enforcement Branch A *
* U.S. Army Corps of Engineers, New England District *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *
*****

```

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

() _____
Telephone Number

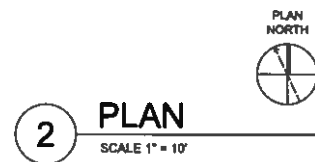
() _____
Telephone Number

CROSS REFERENCING SYSTEM

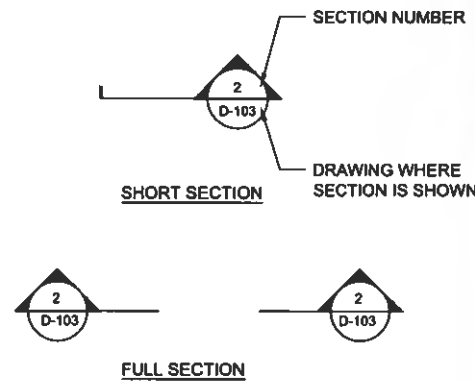
LEGEND

GENERAL NOTES

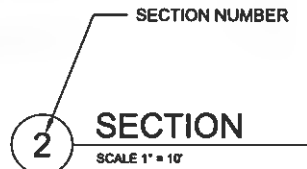
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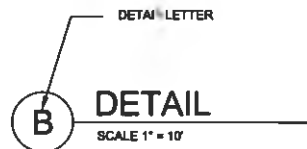
2. SECTION CUTS:



3. SECTIONS TITLES:

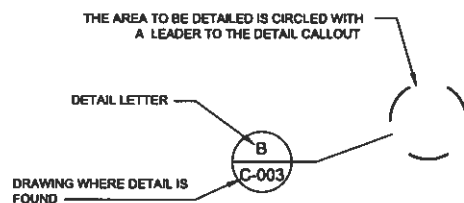


4. DETAIL TITLES:



5. DETAIL CALLOUT:

A. BY CALLOUT



B. BY NOTE: "SEE DETAIL D-105"

- B IS DETAIL REFERENCE LETTER
- D-105 IS DRAWING WHERE DETAIL IS SHOWN

- PROPOSED PRB MONITORING WELL
- ⊠ PROPOSED DEEP BEDROCK INJECTION WELL (ISCO)
- ⊠ PROPOSED DEEP BEDROCK EXTRACTION WELL (ISCO)
- DEEP BEDROCK MONITORING WELL (ISCO)
- PROPOSED OVERBURDEN MONITORING WELL (ISCO)
- ⊠ PROPOSED SHALLOW BEDROCK EXTRACTION WELL (ISCO)
- ⊠ PROPOSED SHALLOW BEDROCK INJECTION WELL (ISCO)
- PROPOSED SHALLOW BEDROCK MONITORING WELL (ISCO)
- EXISTING MONITORING WELL
- EXISTING RECOVERY WELL
- ⊠ SOIL GAS VAPOR SAMPLING LOCATION
- - - - - PROPERTY LINE
- - - - - RIGHT-OF-WAY LINE
- - - - - SPLIT RAIL FENCE
- - - - - CHAIN-LINK FENCE
- - - - - GROUND ELEVATION CONTOUR (NAVD 88)
- — — MEAN HIGH WATER
- - - - - RIVERFRONT AREA
- — — ENGINEERED BARRIER
- — — DIRECT CONTACT BARRIER
- ■ ■ ■ ■ PERMEABLE REACTIVE BARRIER (PRB)
- ■ ■ ■ ■ HYDRAULIC BARRIER (HB)
- ■ ■ ■ ■ EXTENT OF OVERBURDEN ISCO AREA
- ■ ■ ■ ■ APPROXIMATE OPERABLE UNIT BOUNDARY
- - - - - 100' BUFFER ZONE
- - - - - SHEETPILE BULKHEAD WALL
- — — UNKNOWN UTILITY
- — — WATER UTILITY
- — — STORM SEWER
- — — SANITARY SEWER
- — — GAS LINE
- — — UNDERGROUND ELECTRIC
- — — OVERHEAD ELECTRIC WIRE
- CATCH BASIN
- STORM MANHOLE
- SANITARY SEWER MANHOLE
- ELECTRIC MANHOLE
- WATER MANHOLE
- UNIDENTIFIED MANHOLE
- HYDRANT
- ▨▨▨▨▨▨▨▨▨▨ EXISTING BUILDING
- TREE

- DESIGN DRAWINGS PREPARED IN ACCORDANCE WITH BC'S PHASE III REMEDIAL ACTION PLAN WHICH WAS PREPARED AND SUBMITTED TO THE MASSDEP IN JUNE 2017. THE DESIGN PROVIDED HEREIN PREPARED IN ACCORDANCE WITH THE MASSDEP CONDITIONAL APPROVAL LETTER DATED JULY 2019.
- THE AEROVOX PROPERTY IS CURRENTLY A VACANT, ASPHALT CAPPED PARKING LOT. THE LAND SURROUNDING THE PROPERTY IS USED INDUSTRIALLY TO THE SOUTH (TITLEIST) AND NORTH (PRECIX), AND RESIDENTIALLY TO THE WEST ACROSS BELLEVILLE AVENUE. THE ACUSHNET RIVER IS IMMEDIATELY EAST OF THE SITE. THE ACUSHNET RIVER AND THE AREA BELOW MHW EAST OF THE SITE IS BY DEFINITION THE NEW BEDFORD HARBOR SUPERFUND SITE, WHICH IS SEPARATE AND DISTINCT FROM THE DISPOSAL SITE THAT IS THE SUBJECT OF THIS COMPREHENSIVE REMEDIAL ACTION.
- DESIGN INCLUDES EXCAVATION AND REMOVAL OF SOILS, TRANSPORTATION AND EITHER OFF SITE DISPOSAL OR ON SITE CONSOLIDATION OF PCB-IMPACTED SOILS ON AEROVOX PROPERTY, INSTALLATION OF A VERTICAL HYDRAULIC BARRIER ALONG THE NORTHERN AND SOUTHERN ENDS OF A PERMEABLE REACTIVE BARRIER ALONG THE EASTERN PROPERTY BOUNDARY, IN SITU CHEMICAL OXIDATION GROUNDWATER TREATMENT IN OVERBURDEN AND BEDROCK, AND GRADING AND CAPPING THE PROPERTY WITH AN ENGINEERED BARRIER OR DIRECT CONTACT ASPHALT CAP.

WORK SEQUENCE NOTES

- PLAN AND SCHEDULE WORK ACTIVITIES TO BE LIMITED TO ALLOWABLE WORKING HOURS PER CITY OF NEW BEDFORD ORDINANCES OR OTHER CITY REQUIREMENTS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE REQUESTED IN ADVANCE (MIN. 2 DAYS) AND APPROVED IN WRITING BY ENGINEER.
- WORK SEQUENCE SHALL BE PLANNED AND IMPLEMENTED TO MINIMIZE ACTIVE WORK AND OPEN EXCAVATIONS DURING HIGH TIDE CYCLES TO THE EXTENT PRACTICABLE.
- DURATION OF CONSTRUCTION IS EXPECTED TO SPAN OVER TWO YEARS, WORKING MARCH TO OCTOBER. UNLESS OTHERWISE REQUESTED IN ADVANCE (MIN. 2 DAYS) AND APPROVED IN WRITING BY ENGINEER WATERFRONT WORK DURING PERIGEEAN SPRING TIDE CYCLES (KING TIDES) IS NOT ALLOWED.
- CALL DIG SAFE A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS AND LEGAL HOLIDAYS) IN ADVANCE AND CITY OF NEW BEDFORD SUFFICIENTLY IN ADVANCE OF PERFORMING WORK AS TO NOT ADVERSELY AFFECT THE WORK SCHEDULE.

WORK PROTECTION NOTES

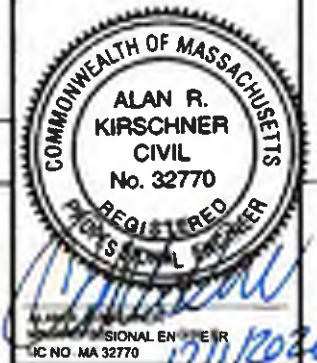
- PROTECT STRUCTURES, UTILITIES AND OTHER FACILITIES INDICATED TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH OPERATIONS.
- PROTECT BENCH MARKS, SURVEY CONTROL POINTS, EXISTING STRUCTURES, AND FEATURES FROM DISTURBANCE BY EQUIPMENT AND VEHICULAR TRAFFIC

GENERAL REFERENCES

- UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND/OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO BROWN AND CALDWELL. THE EXISTENCE, SIZE, TYPE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CONTACT DIG-SAFE PRIOR TO ANY EXCAVATION 1-800-322-4844.
- BASEMAP FEATURES, TAKEN FROM AECOM, PHASE II COMPREHENSIVE SITE ASSESSMENT, DATED SEPTEMBER 2015, AND EXISTING CONDITIONS ASSESSORS MAP 112 LOTS 88 & 252 NEW BEDFORD, MASSACHUSETTS BY FARLAND CORPORATION, DATED OCTOBER 2, 2019. ALL TOPOGRAPHICAL DATA CONVERTED FROM NGVD29 TO NAVD88.
- TOPOGRAPHIC SURFACE DATA AND 100' WETLANDS BUFFER TAKEN FROM "EXISTING CONDITIONS 740 BELLEVILLE AVENUE - ASSESSORS MAP 112 LOTS 88 & 252, NEW BEDFORD, MASSACHUSETTS" BY FARLAND CORPORATION, DATED OCTOBER 2, 2019.

Brown and Caldwell

BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS



FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/19/20	ISSUED TO MASSDEP

LINE IS 2 INCHES AT FULL SIZE

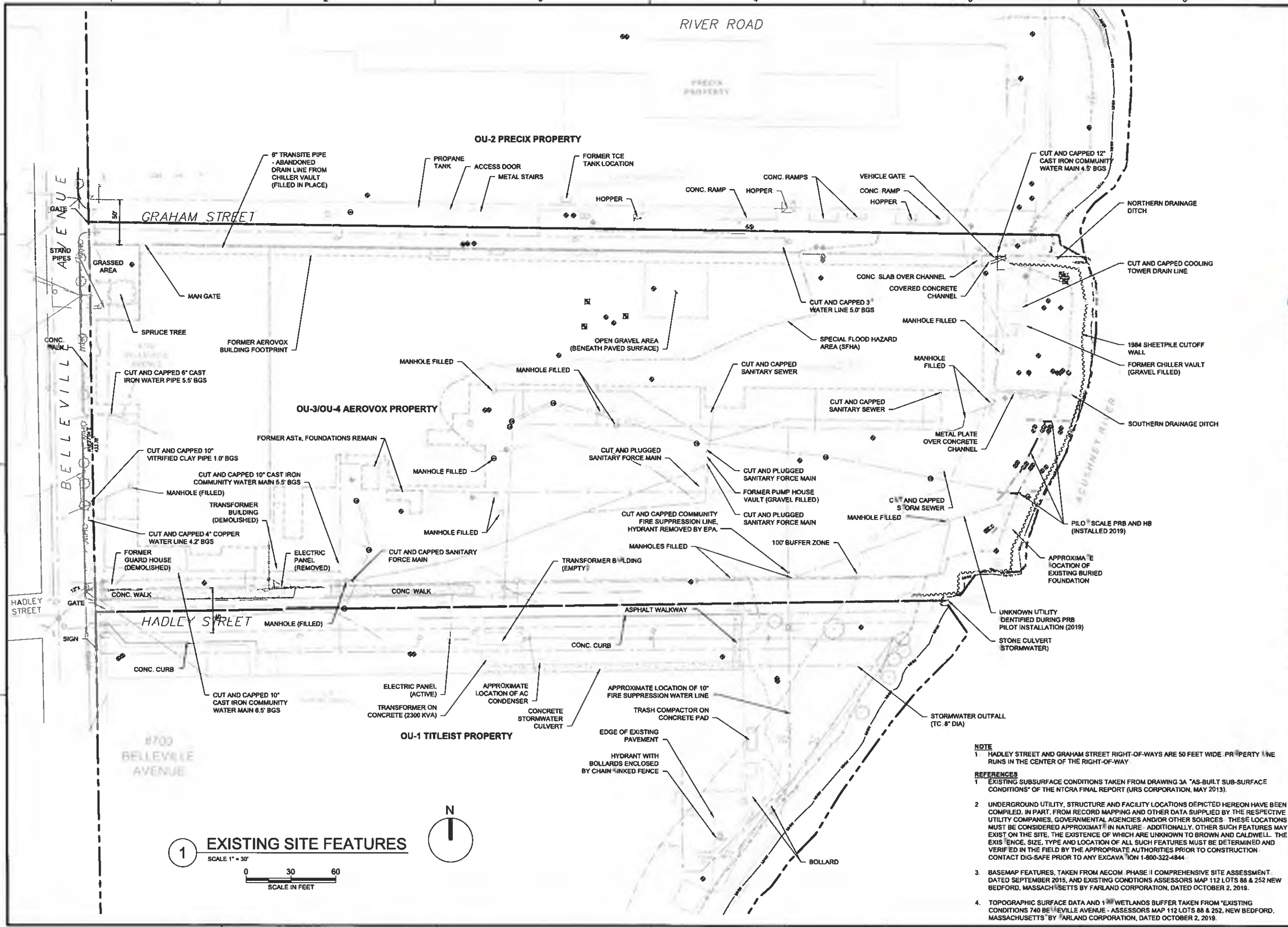
DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: K. DYSON
CHECKED:
APPROVED: M. WADE
FILENAME: G-001.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER:

GENERAL
GENERAL NOTES, SYMBOLS AND LEGEND

DRAWING NUMBER
G-001
SHEET NUMBER
2 OF 42

P:\K:\C:\USERS\SANTIAGO\LOCAL\BENTLEY\PROJECTS\WORKING\BRWNCALD-PW-BENTLEY\COM_BROWNANDCALDWELL\BRWNCALD-PW-01\SANTIAGO\BRWNCALD-COM\0128073 FILENAME: G-001.DWG PLOT DATE: 7/10/2020 10:53 AM CAD USER: ALAN SANTIAGO

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1 EXISTING SITE FEATURES
SCALE 1" = 30'
SCALE IN FEET

- NOTE**
1 HADLEY STREET AND GRAHAM STREET RIGHT-OF-WAYS ARE 50 FEET WIDE. PROPERTY LINE RUNS IN THE CENTER OF THE RIGHT-OF-WAY.
- REFERENCES**
1 EXISTING SUBSURFACE CONDITIONS TAKEN FROM DRAWING 3A "AS-BUILT SUB-SURFACE CONDITIONS" OF THE NTCRA FINAL REPORT (URS CORPORATION, MAY 2013).
2 UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND/OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO BROWN AND CALDWELL. THE EXISTENCE, SIZE, TYPE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CONTACT DIG-SAFE PRIOR TO ANY EXCAVATION 1-800-322-4844.
3 BASEMAP FEATURES, TAKEN FROM AECOM PHASE II COMPREHENSIVE SITE ASSESSMENT DATED SEPTEMBER 2015, AND EXISTING CONDITIONS ASSESSORS MAP 112 LOTS 88 & 252 NEW BEDFORD, MASSACHUSETTS BY FARLAND CORPORATION, DATED OCTOBER 2, 2019.
4 TOPOGRAPHIC SURFACE DATA AND 100' WETLANDS BUFFER TAKEN FROM "EXISTING CONDITIONS 740 BELLEVILLE AVENUE - ASSESSORS MAP 112 LOTS 88 & 252, NEW BEDFORD, MASSACHUSETTS" BY FARLAND CORPORATION, DATED OCTOBER 2, 2019.

Brown and Caldwell
BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS



ALAN R. KIRSCHNER
REGISTERED PROFESSIONAL ENGINEER
LIC NO. MA 32770
12-1-2020

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS	
REV	DESCRIPTION
1	7/10/20 ISSUED TO MASSDEP

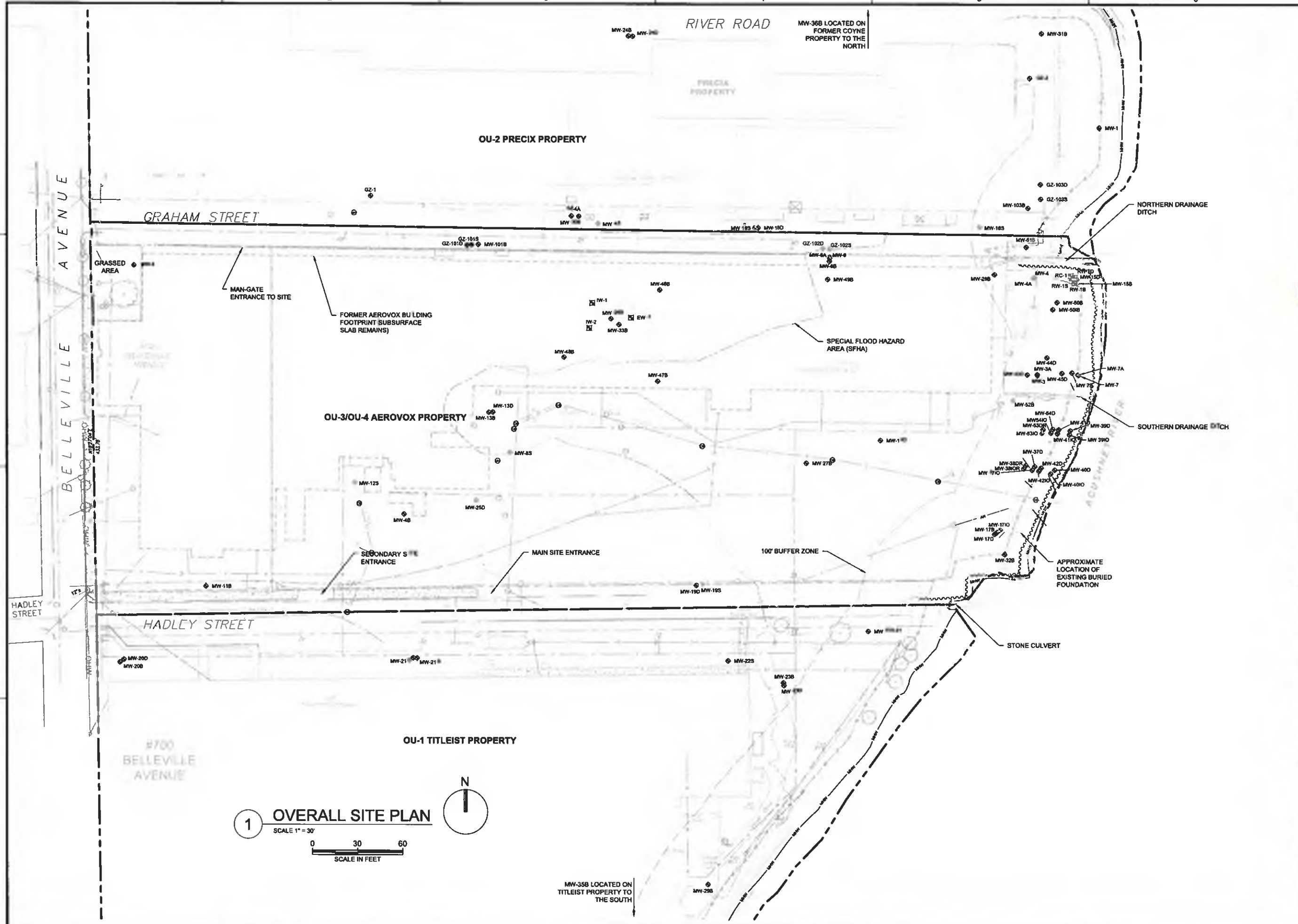
LINE IS 2 INCHES AT FULL SIZE

DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: K. DYSON
CHECKED:
APPROVED: M. WADE
FILENAME: C-100.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER:

CIVIL
EXISTING SITE FEATURES

DRAWING NUMBER
C-100
SHEET NUMBER
1 OF 42

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1 OVERALL SITE PLAN
 SCALE 1" = 30'
 0 30 60
 SCALE IN FEET

Brown AND Caldwell
 BROWN AND CALDWELL
 101 INDUSTRIAL PARK ROAD, SUITE 208
 TAUNTON, MASSACHUSETTS



ALAN R. KIRSCHNER
 MA PROFESSIONAL ENGINEER
 LIC NO. MA 32770

12/1/2020

FORMER AEROVOX FACILITY
 740 BELLEVILLE AVENUE
 NEW BEDFORD, MA

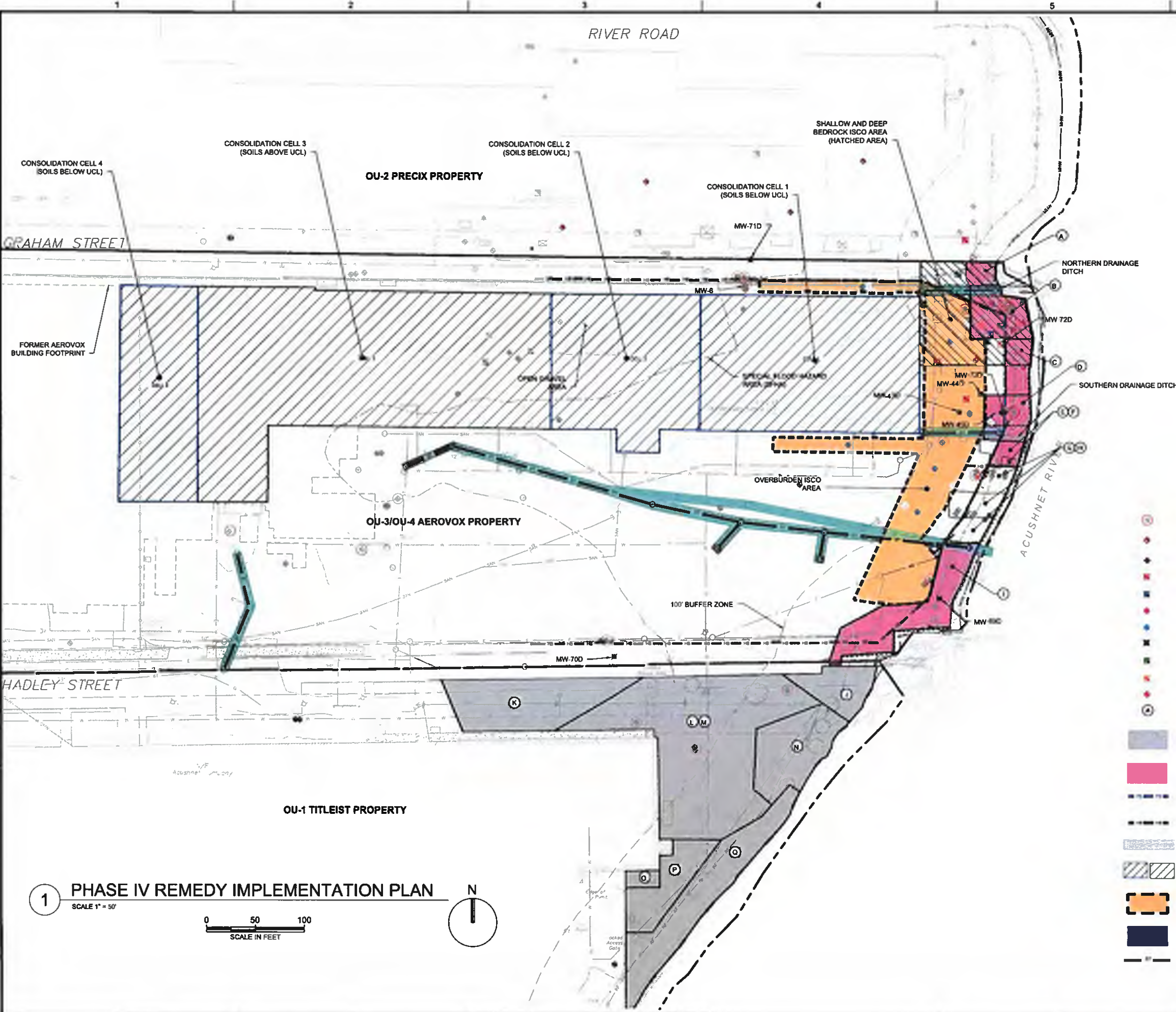
REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

LINE IS 2 INCHES AT FULL SIZE
 DESIGNED: J. SPADT
 DRAWN: A. SANTIAGO
 CHECKED: K. DYSON
 APPROVED: M. WADE
 FILENAME: C-101.DWG
 BC PROJECT NUMBER: 155041
 CLIENT PROJECT NUMBER:

CIVIL
OVERALL SITE PLAN

DRAWING NUMBER
C-101
 SHEET NUMBER
 4 OF 42

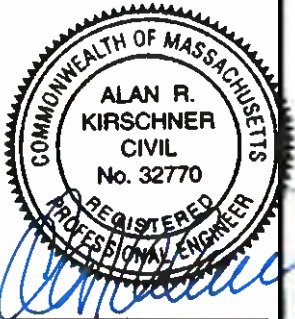
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- LEGEND**
- EXISTING WELL TO BE ABANDONED / NOT REPLACED
 - PROPOSED SUB-SLAB SOIL VAPOR POINT/INDOOR AIR SAMPLE LOCATION (4 TOTAL WELLS)
 - PROPOSED PRB MONITORING WELL
 - PROPOSED DEEP BEDROCK INJECTION WELL (ISCO)
 - PROPOSED DEEP BEDROCK EXTRACTION WELL (ISCO)
 - DEEP BEDROCK MONITORING WELL (ISCO)
 - PROPOSED OVERBURDEN MONITORING WELL (ISCO)
 - PROPOSED HYDRAULIC BARRIER MONITORING WELL
 - PROPOSED SHALLOW BEDROCK EXTRACTION WELL (ISCO)
 - PROPOSED SHALLOW BEDROCK INJECTION WELL (ISCO)
 - PROPOSED SHALLOW BEDROCK MONITORING WELL (ISCO)
 - EXCAVATION AREA D
 - TITLEIST EXCAVATION AREAS C-201 THROUGH C-204
 - AEROVOX EXCAVATION AREAS C-301 THROUGH C-303
 - AEROVOX PERMEABLE REACTIVE BARRIER C-304 AND C-305
 - AEROVOX HYDRAULIC BARRIER WALLS (C-306 THROUGH C-308)
 - AEROVOX STORM SEWER MODIFICATIONS (C-309)
 - AEROVOX CONSOLIDATION CELLS (C-310 THROUGH C-312)
 - AEROVOX OVERBURDEN ISCO AREA (C-401)
 - AEROVOX SHALLOW AND DEEP BEDROCK ISCO AREAS (C-402 AND C-403)
 - STORM SEWER TO BE CIPP REHABILITATED OR REPLACED

1 PHASE IV REMEDY IMPLEMENTATION PLAN
 SCALE 1" = 50'
 0 50 100
 SCALE IN FEET

Brown and Caldwell
 BROWN AND CALDWELL
 101 INDUSTRIAL PARK ROAD, SUITE 205
 TAUNTON, MASSACHUSETTS



ALAN R. KIRSCHNER
 MA PROFESSIONAL ENGINEER
 LIC NO. MA 32770
 12/1/2020

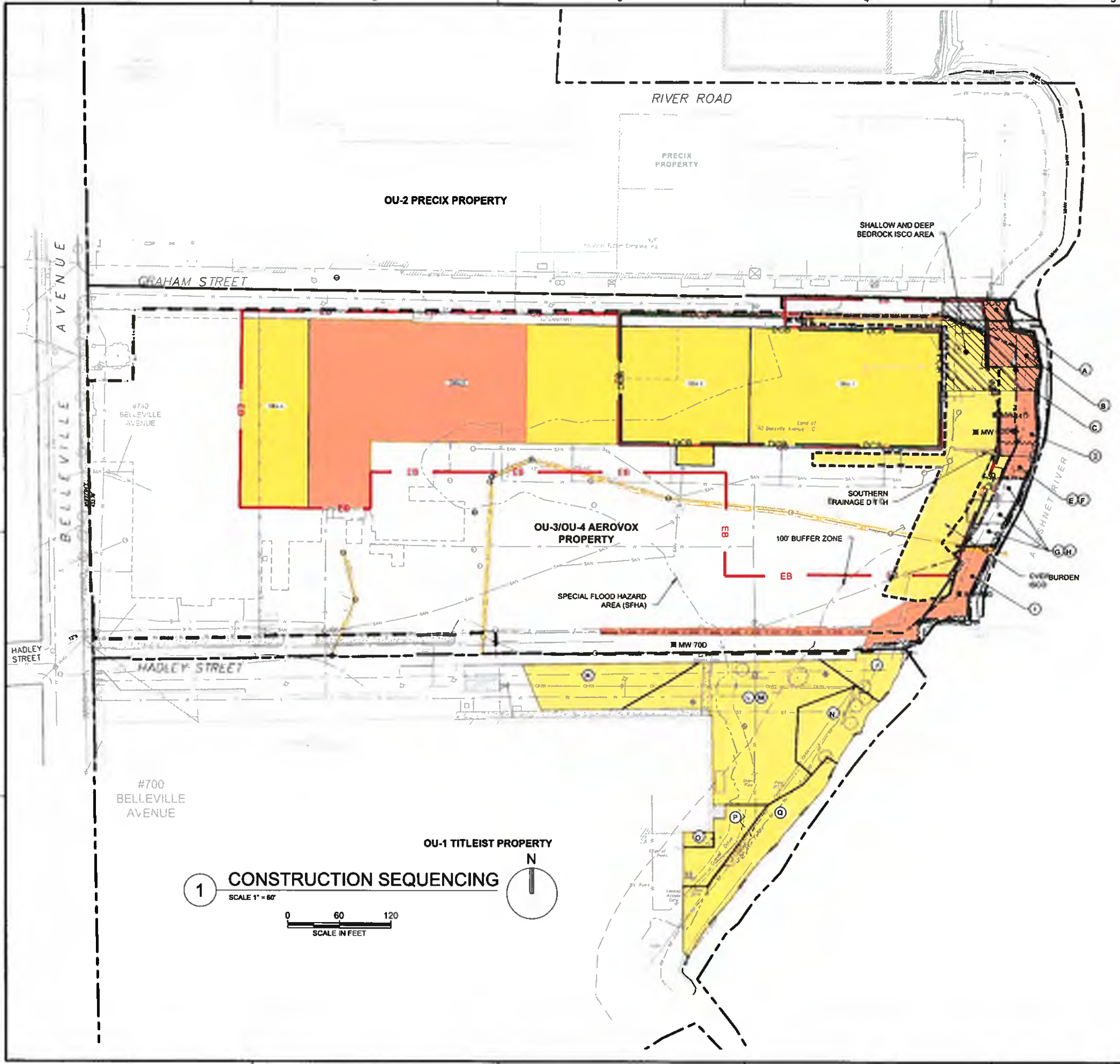
FORMER AEROVOX FACILITY
 740 BELLEVILLE AVENUE
 NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

LINE IS 2 INCHES
 AT FULL SIZE
 DESIGNED: J. SPADT
 DRAWN: A. SANTIAGO
 CHECKED: K. DYSON
 CHECKED:
 APPROVED: M. WADE
 FILENAME
 C-102.DWG
 BC PROJECT NUMBER
 155041
 CLIENT PROJECT NUMBER

CIVIL
SUMMARY OF PHASE IV REMEDY IMPLEMENTATION PLAN
 DRAWING NUMBER
C-102
 SHEET NUMBER
 5 OF 42

Path: C:\USERS\SANTIAGO\APPDATA\LOCAL\BENTLEY\PROJECTS\WORKING\DRAWING\BRWNCALD-PW-BENTLEY.COM - BRWNCALD-PW-A15ASANTIAGO@BRWNCALD.COM\DWG126076 - FILENAME: C-103.DWG - PLOT DATE: 7/10/2020 10:07 AM - CAD USER: ALAN SANTIAGO



CONSTRUCTION SEQUENCING	
TIME	ACTION
JULY 2020	PHASE IV RIP SUBMITTAL TO MASS DEP
NOVEMBER 2020	MASSDEP APPROVAL OF PHASE IV RIP
SPRING 2021	MOBILIZE FOR YEAR 1 CONSTRUCTION, INSTALL SHORELINE PROTECTION. ESTABLISH INFRASTRUCTURE TO START EXCAVATIONS OF AREAS A, B, AND D. TRANSPORT SOIL TO TWSCA TEST FOR RCRA. T&D OFFSITE WHEN POSSIBLE. OPEN CONSOLIDATION CELL 3 AND USE TO BACKFILL. AS SPACE BECOMES AVAILABLE IN CELL 3, FILL WITH EXCAVATED SOIL FROM C, E, F, AND I.
SUMMER 2021	COMPLETE EXCAVATION, INSTALL PERMEABLE REACTIVE BARRIER AND HYDRAULIC BARRIER, RESTORE AND SECURE SHORELINE
FALL 2021	COMPLETE INTERIM GRADING AND TEMPORARY CAPPING OF CONSOLIDATION CELL. COMPLETE INSTALLATION OF MONITORING WELLS FOR ISCO AND PRB. COMPLETE INSTALLATION OF INJECTION AND EXTRACTION WELLS.
SPRING 2022	COMPLETE 1ST ROUND ISCO, BEGIN MONITORING, MOBILIZE FOR YEAR 2 CONSTRUCTION, OPEN CONSOLIDATION CELL AND STOCKPILE CLEAN FILL.
SUMMER 2022	INSTALL TITLEIST SHORELINE PROTECTION AND SHORING AND COMPLETE EXCAVATION OF TITLEIST SOIL. CONSOLIDATION BACK ON AEROVOX IN CELLS 1, 2 AND 4.
FALL 2022	COMPLETE FINAL GRADING AND ENGINEERED BARRIER INSTALLATION, LINE OR REPLACE STORMWATER SYSTEM. INSTALL LONG TERM MONITORING NETWORK.
WINTER 2023	BEGIN 2 YEAR PERFORMANCE MONITORING PERIOD.

- LEGEND**
- ENGINEERED BARRIER
 - DIRECT CONTACT BARRIER
 - YEAR 1 (FALL 2020 TO FALL 2021)
 - YEAR 2 (SPRING 2022 TO WINTER 2023)

1 CONSTRUCTION SEQUENCING
SCALE 1" = 60'

0 60 120
SCALE IN FEET

Brown and Caldwell
BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 208
TAUNTON, MASSACHUSETTS

ALAN R. KIRSCHNER
MA PROFESSIONAL ENGINEER
LICENSE NO. MA 32770

12/11/2020

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: K. DYSON
CHECKED:
APPROVED: M. WADE

FILENAME: C-103.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER:

CIVIL

PROPOSED CONSTRUCTION SEQUENCING

DRAWING NUMBER
C-103
SHEET NUMBER
6 OF 42



BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS

ALAN R. KIRSCHNER
MA PROFESSIONAL ENGINEER
LIC NO. MA 32770

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

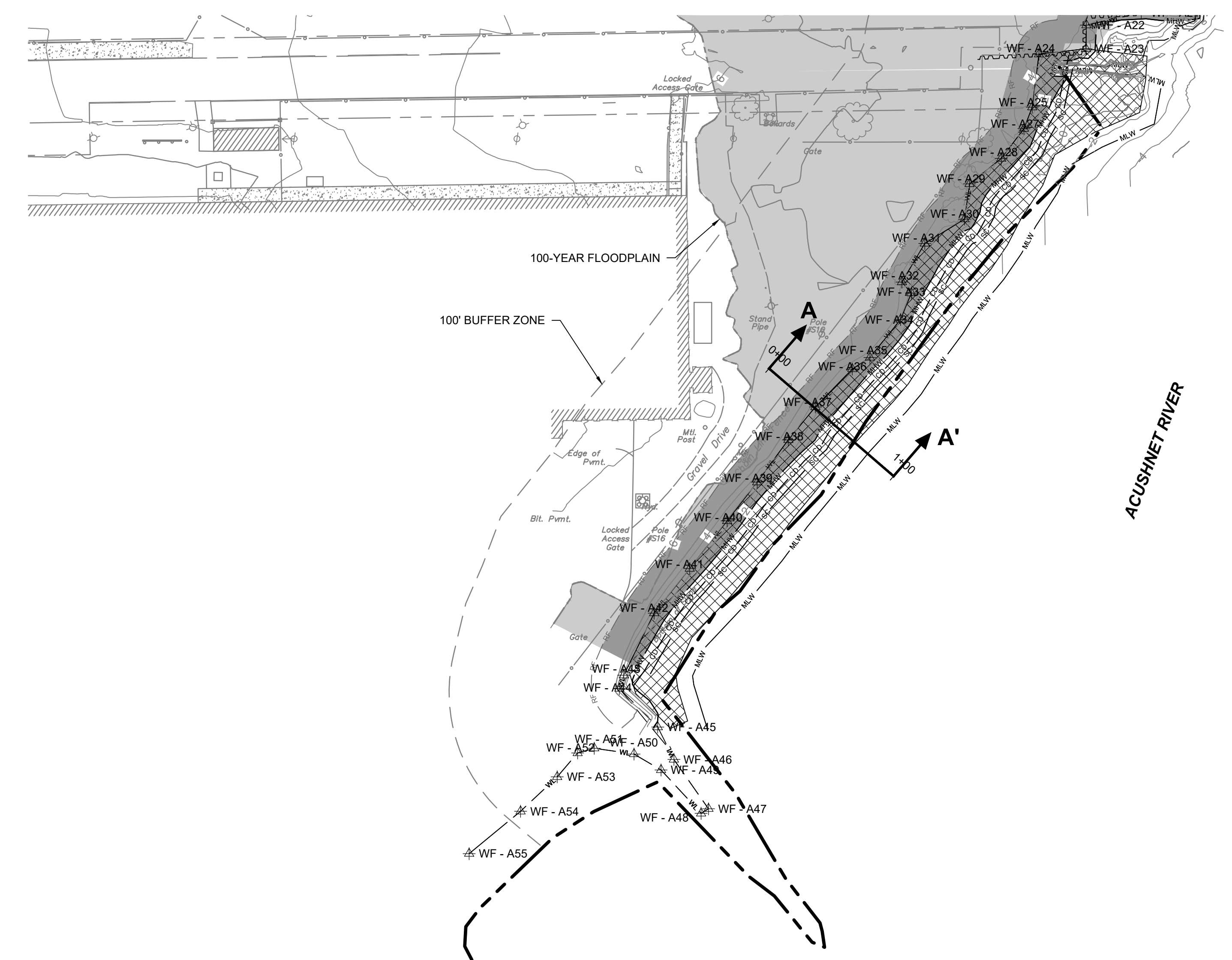
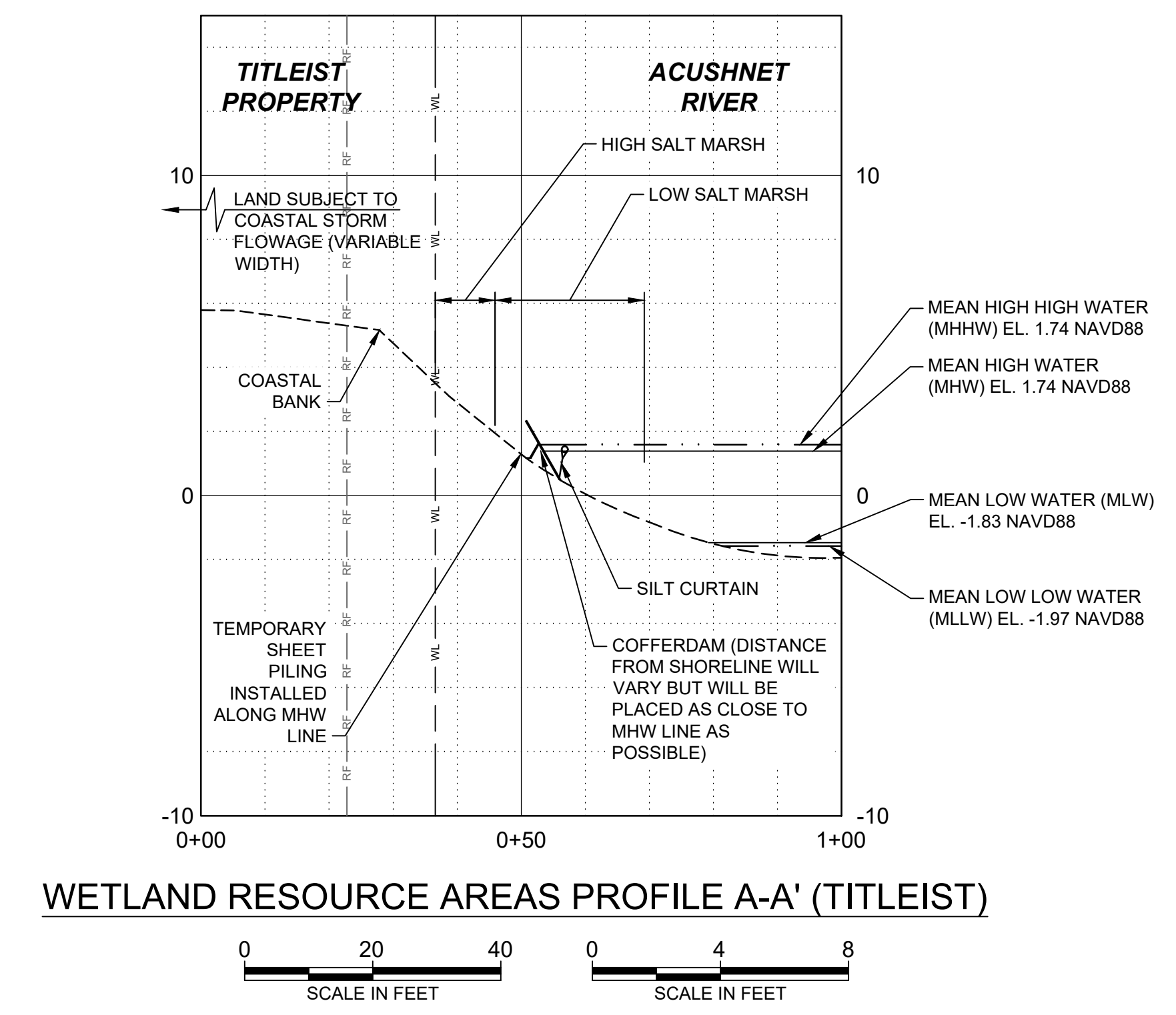
REVISIONS		
REV	DATE	DESCRIPTION
1	2/25/21	ISSUED IN RESPONSE TO PERMITTING PROCESS
2	5/7/21	ISSUED FOR CONSTRUCTION

LINE IS 2 INCHES AT FULL SIZE

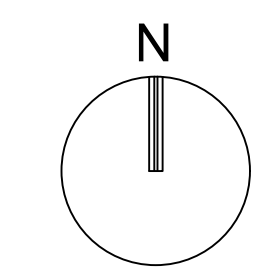
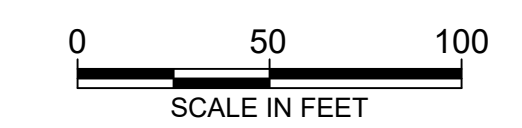
DESIGNED: E. WILSON
DRAWN: A. SANTIAGO
CHECKED: J. LECLAIR
CHECKED:
APPROVED: M. WADE
FILENAME: C-104_USACOE.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

CIVIL
WETLAND RESOURCE AREAS PROFILES

DRAWING NUMBER
C-104
SHEET NUMBER
7 OF 46



WETLAND RESOURCE AREAS PROFILES



- NOTE:**
- WETLAND DELINEATION PERFORMED ON SEPTEMBER 17, 2020 BY SCOTT M. MORRISON, PWS OF ECOTEC, INC. (508-752-9666).
 - LOCATION OF COFFERDAM AND SILT CURTAIN IS SUBJECT TO CHANGE BASED ON SITE TOPOGRAPHY DURING CONSTRUCTION.

LEGEND

HORIZONTAL	VERTICAL
--- PROPERTY LINE	sc --- EXTENT OF SILT CURTAIN
- - - RIGHT-OF-WAY LINE	- - - 100' BUFFER ZONE
o - o SPLIT RAIL FENCE	- - - SHEETPILE BULKHEAD WALL (EXISTING)
- - - CHAIN-LINK FENCE	█ LAND SUBJECT TO COASTAL STORM FLOWAGE
- - - GROUND ELEVATION CONTOUR (NAVD 88)	█ RIVERFRONT AREA
WF - A20 WETLANDS FLAG	▨ SALT MARSH
- - - WETLANDS LINE / HIGH TIDE LINE	
--- MHW MEAN HIGH WATER (NAVD88 EL. 1.74 FT) (ON THE TITLEIST PROPERTY, SHEET PILING WILL BE INSTALLED ALONG THE MHW LINE)	
--- MLW MEAN LOW WATER (NAVD88 EL. -1.83 FT)	
- RF - RIVERFRONT AREA	
- CD - COFFERDAM	

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Path: C:\USERS\ASANTIAGO\LOCALBENTLEYPROJECTS\WORKINGDIR\BRWNCALD-PW-BENTLEY.COM_BRWNCALD-PW-01\ASANTIAGO@BRWNCALD.COM\DWG C-201.DWG PLOT DATE: 7/10/2020 10:28 AM CAD USER: ALAN SANTIAGO



BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS

ALAN R. KIRSCHNER
MA PROFESSIONAL ENGINEER
LIC NO. MA 32770

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS

REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: K. DYSON
CHECKED:
APPROVED: M. WADE
FILENAME: C-201.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

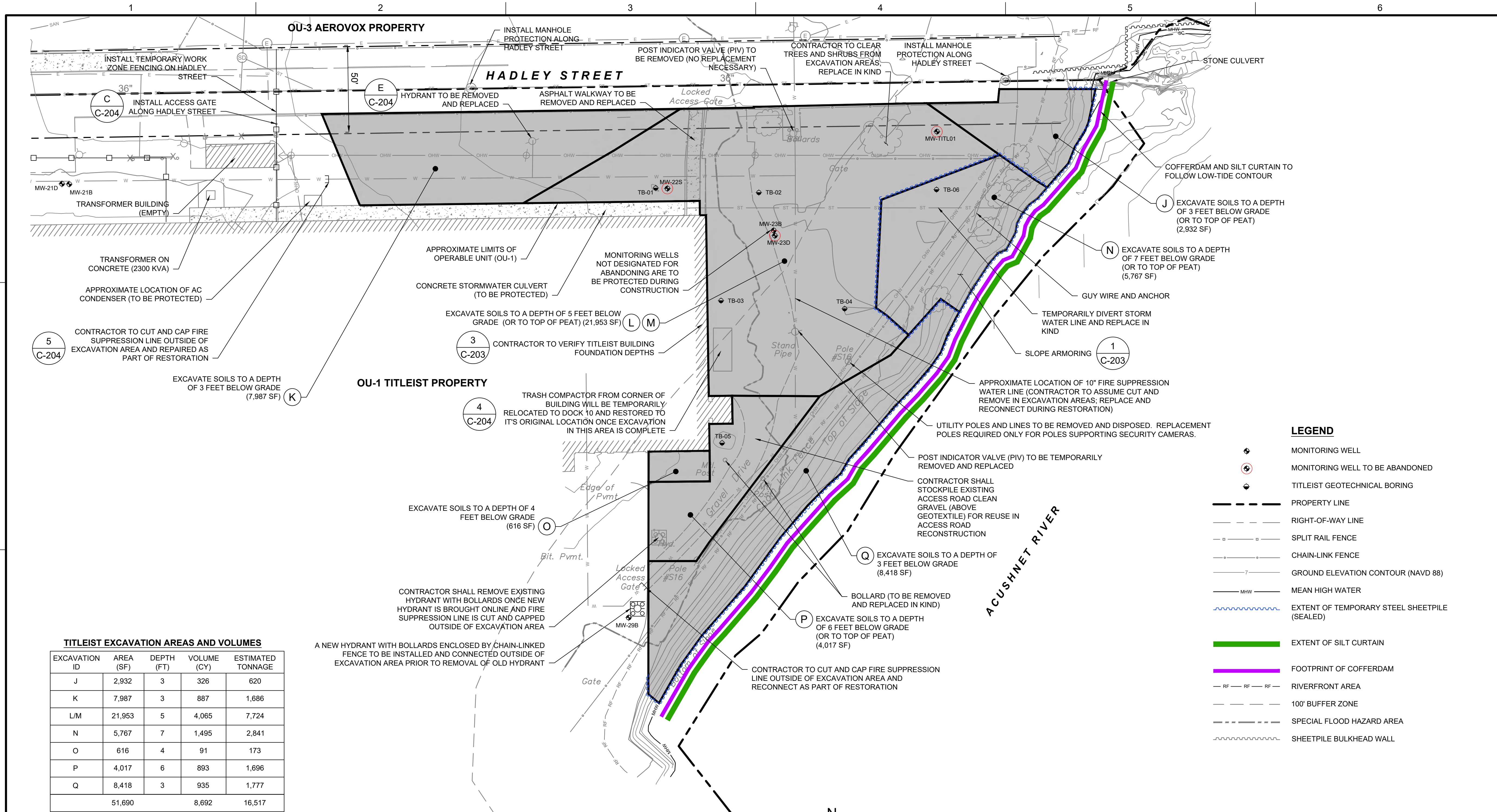
CIVIL

TITLEIST EXCAVATION PLAN

DRAWING NUMBER

C-201

SHEET NUMBER
8 OF 42



TITLEIST EXCAVATION AREAS AND VOLUMES

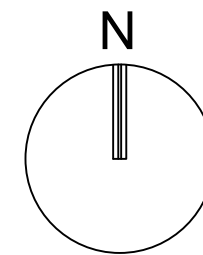
EXCAVATION ID	AREA (SF)	DEPTH (FT)	VOLUME (CY)	ESTIMATED TONNAGE
J	2,932	3	326	620
K	7,987	3	887	1,686
L/M	21,953	5	4,065	7,724
N	5,767	7	1,495	2,841
O	616	4	91	173
P	4,017	6	893	1,696
Q	8,418	3	935	1,777
	51,690		8,692	16,517

NOTES:

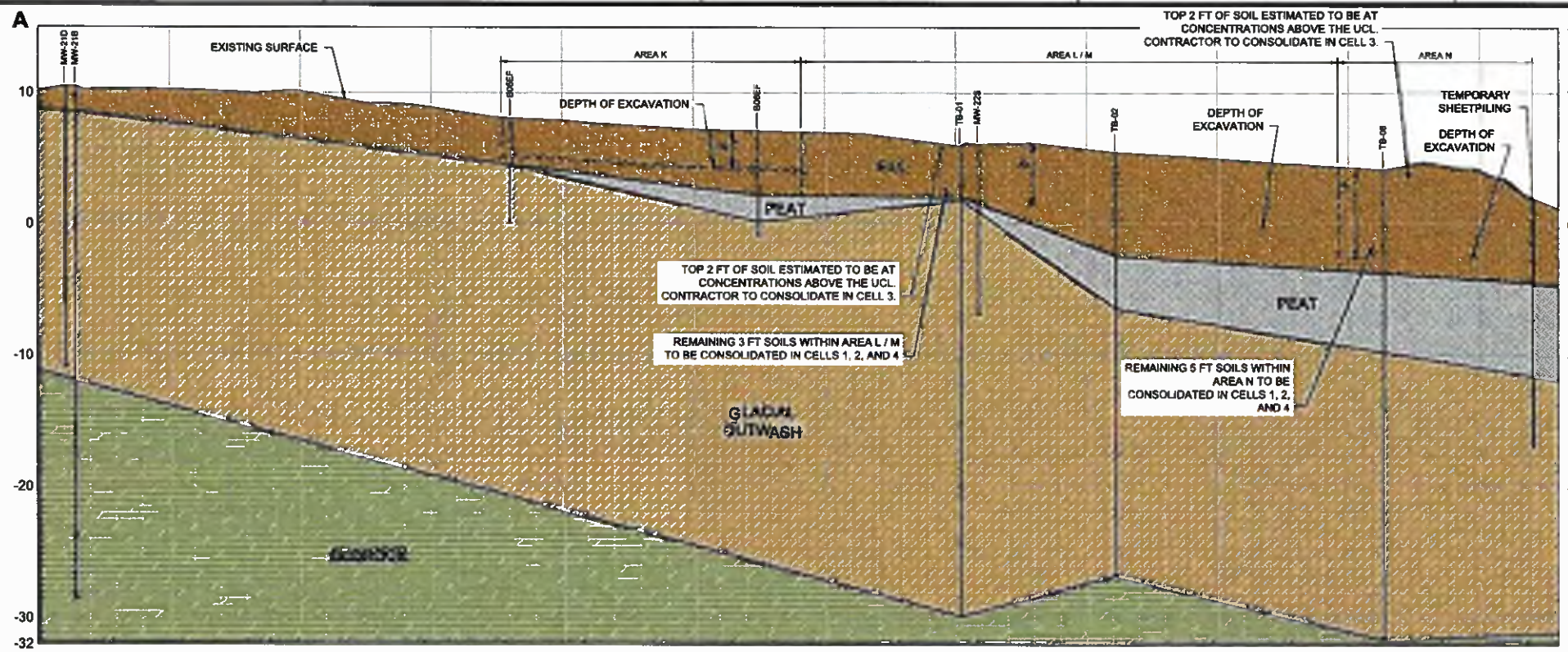
- LAYOUTS AND DISPOSITION OF EXCAVATION AREAS (SHADED IN GREY) TAKEN FROM THE "ADDENDUM" TO THE PHASE III REMEDIAL ACTION PLAN (BC, 2019) APPROVED BY MASSDEP JULY 2019.
- VOLUMES ARE ESTIMATED BASED ON DIMENSIONS AS SHOWN AND DO NOT INCLUDE VOLUMES CAUSED BY SWELLING, SLUMPING OR THE ADDITION OF SOIL STABILIZING AGENTS.
- AREAS L/M AND N ASSUME THE TOP 2 FEET ARE CONSOLIDATED INTO CELL 3. AREA P ASSUMES THE TOP 3 FEET ARE CONSOLIDATED INTO CELL 3. THE REMAINDER SOILS ARE PLACED WITHIN CELLS 1, 2, AND 4.

1 EXCAVATION LAYOUT - OU-1 TITLEIST

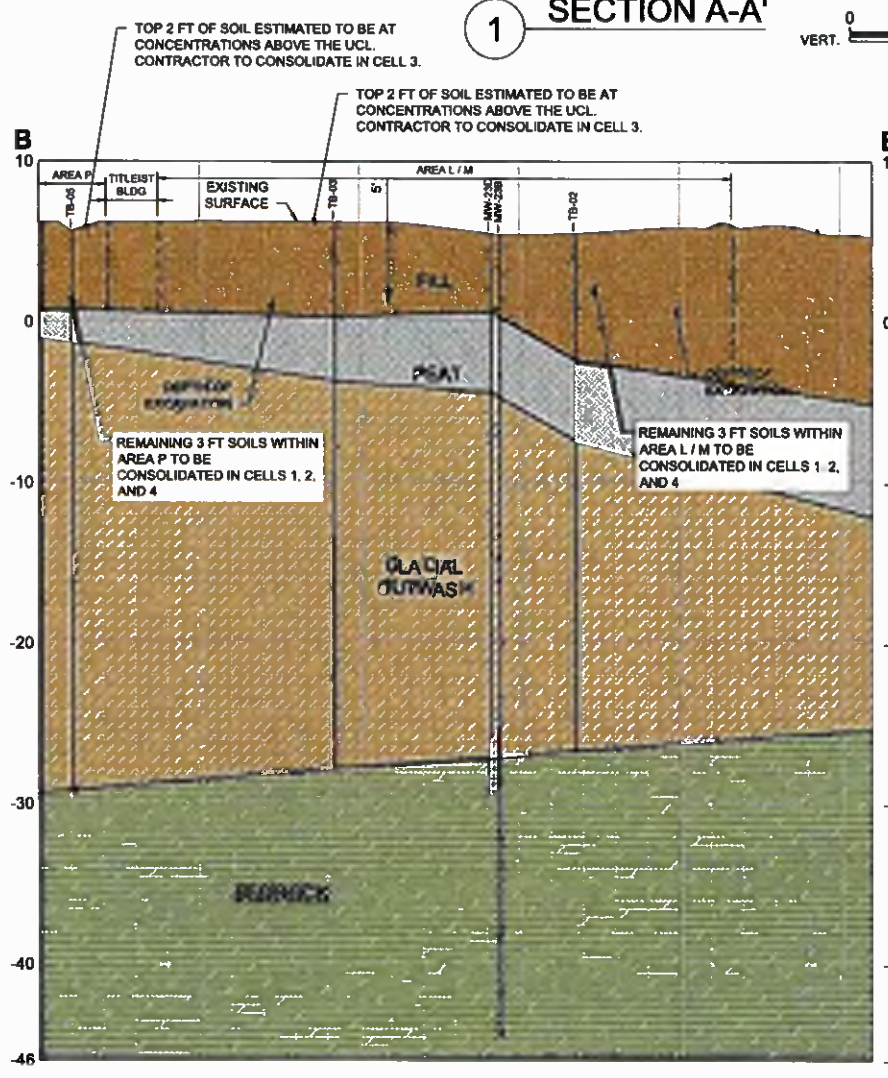
SCALE 1" = 30'



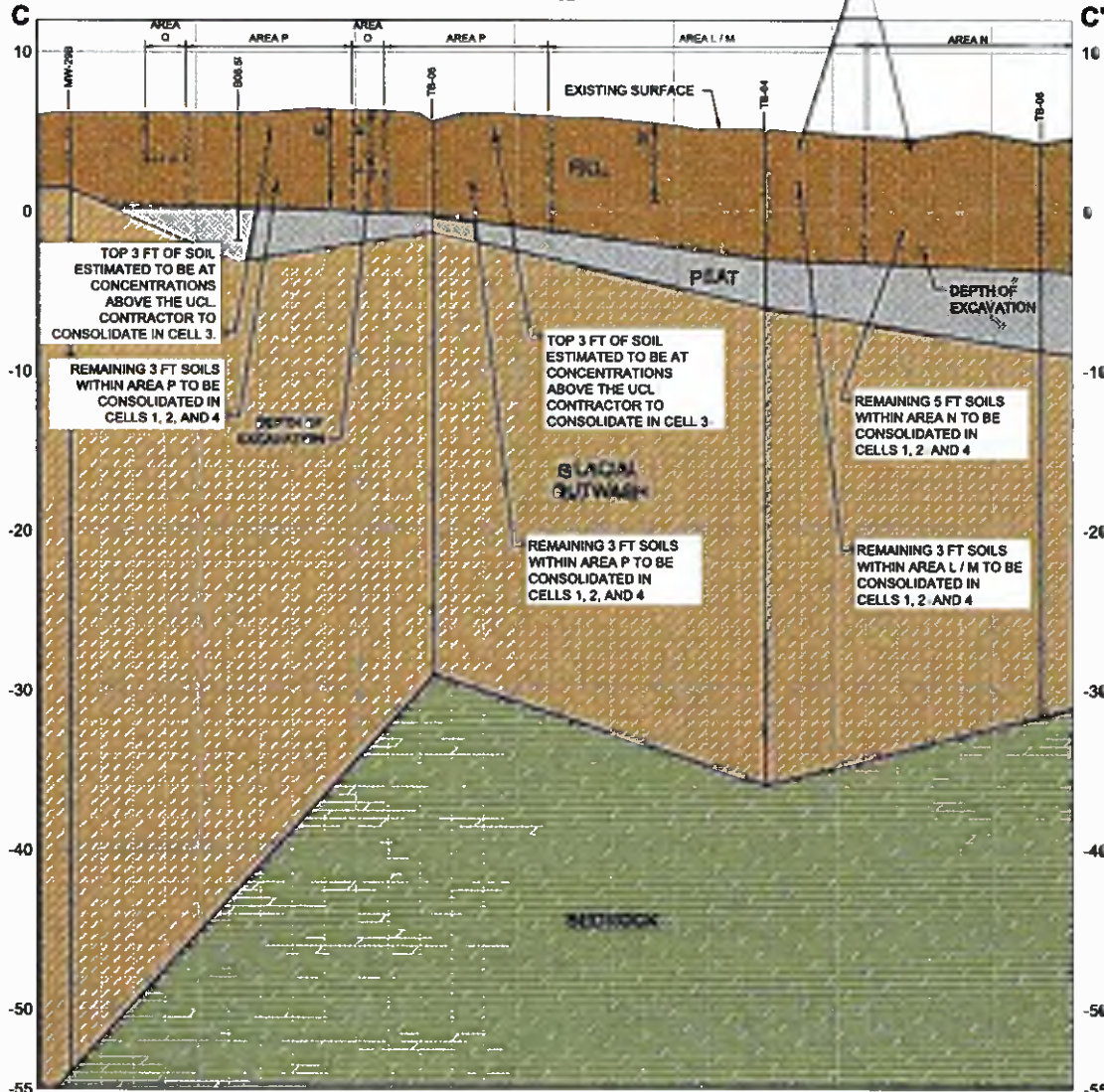
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1 SECTION A-A'

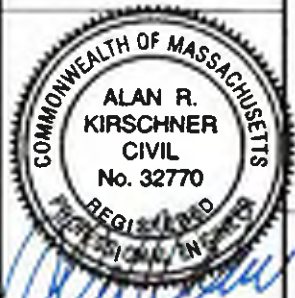


2 SECTION B-B'



3 SECTION C-C'

Brown and Caldwell
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 101 INDUSTRIAL PARK ROAD, SUITE 205
 TAUNTON, MASSACHUSETTS



ALAN R. KIRSCHNER
 MA PROFESSIONAL ENGINEER
 LIC NO. MA 32770
 12/1/2020

FORMER AEROVOX FACILITY
 740 BELLEVILLE AVENUE
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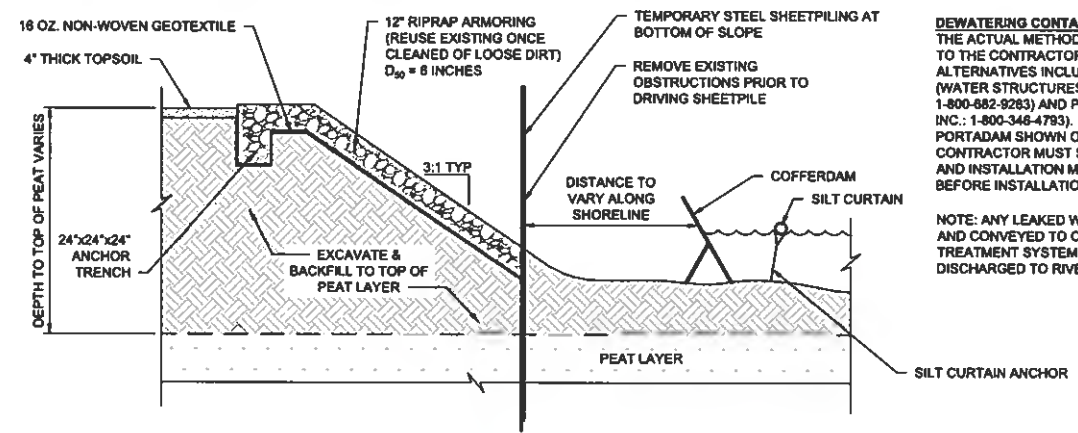
REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

DESIGNED: J SPADT
 DRAWN: A. SANTIAGO
 CHECKED: K. DYSON
 APPROVED: M. WADE
 FILENAME: C-202.DWG
 PROJECT NUMBER: 155041
 SHEET PROJECT NUMBER: 8 OF 12

CIVIL
TITLEIST EXCAVATION CROSS-SECTIONS

DRAWING NUMBER: **C-202**
 SHEET NUMBER: **8 OF 12**

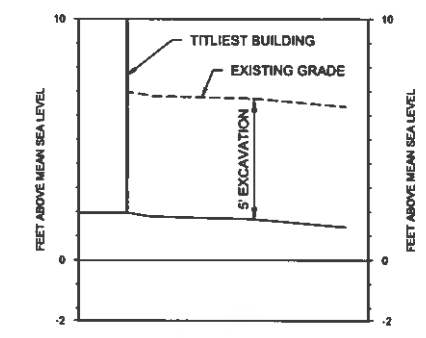
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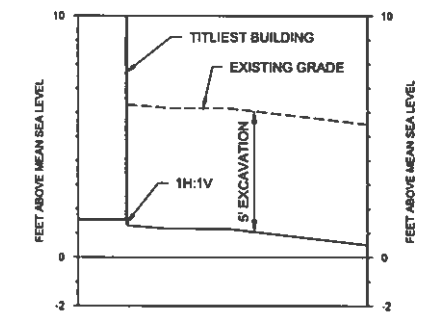
DEWATERING CONTAINMENT AT RIVER'S EDGE
 THE ACTUAL METHOD FOR CONTAINMENT IS UP TO THE CONTRACTOR. TWO RECOMMENDED ALTERNATIVES INCLUDE THE AQUADAM (WATER STRUCTURES UNLIMITED: 1-800-682-9283) AND PORTADAM (PORTADAM, INC.: 1-800-348-4793). EXAMPLE DETAIL OF PORTADAM SHOWN ON THIS SHEET. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND INSTALLATION METHODS FOR REVIEW BEFORE INSTALLATION.

NOTE: ANY LEAKED WATER TO BE COLLECTED AND CONVEYED TO ON-SITE GROUNDWATER TREATMENT SYSTEM BEFORE BEING DISCHARGED TO RIVER.

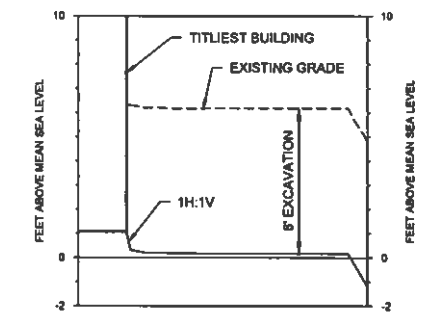
A EXCAVATION CROSS SECTION AND ARMORING DETAIL
 SCALE NOT TO SCALE



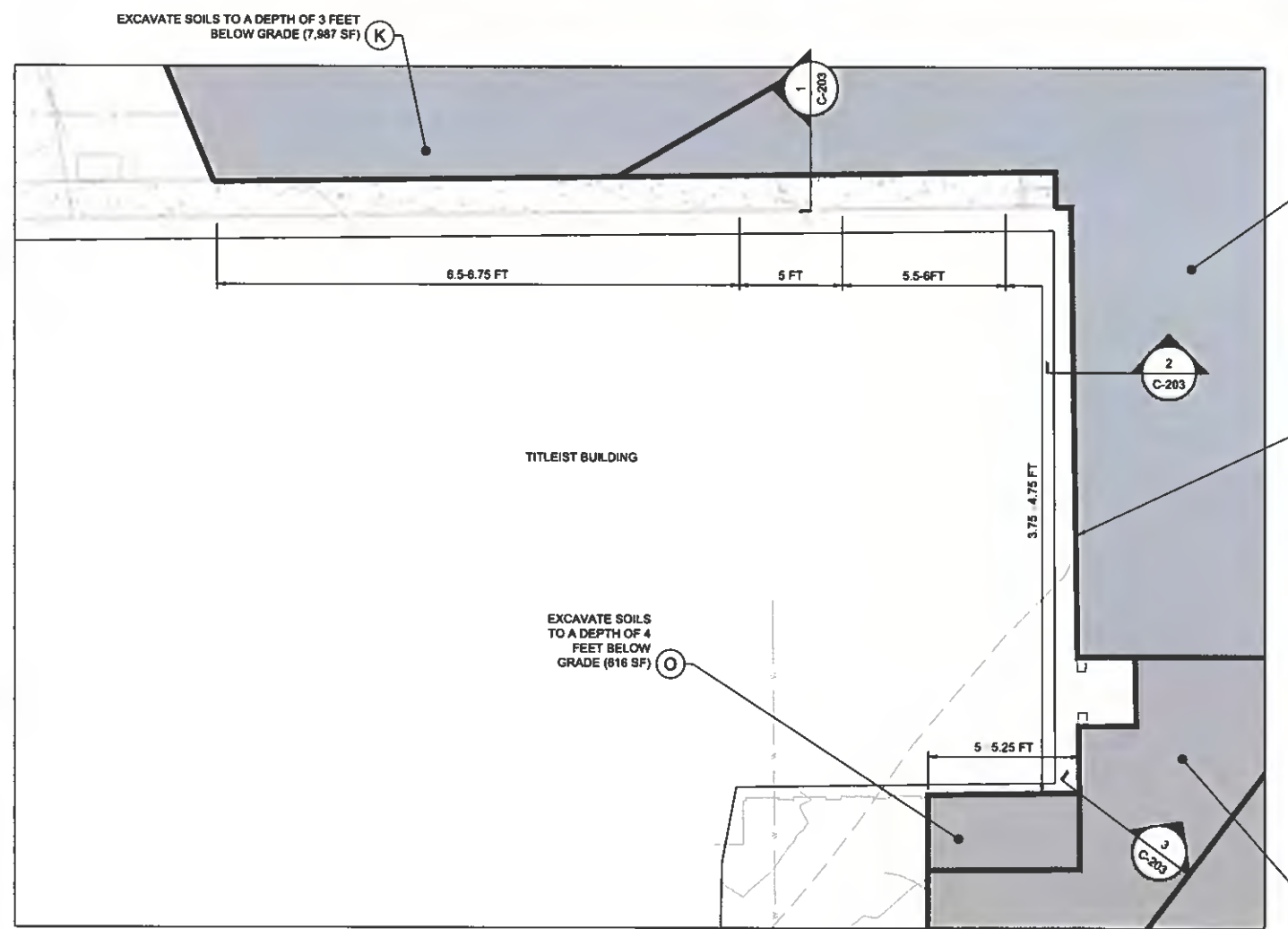
1 SECTION
 SCALE 1" = 20'



2 SECTION
 SCALE 1" = 20'



3 SECTION
 SCALE 1" = 20'



B TITLEIST BUILDING FOUNDATION DEPTHS (ESTIMATED)
 SCALE 1" = 20'



Brown and Caldwell
 BROWN AND CALDWELL
 101 INDUSTRIAL PARK ROAD, SUITE 208
 TAUNTON, MASSACHUSETTS



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REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

DESIGNED: J. SPADT
 DRAWN: A. SANTIAGO
 CHECKED: K. DYSON
 APPROVED: M. WADE
 FILENAME: C-203.DWG
 BC PROJECT NUMBER: 155041
 CLIENT PROJECT NUMBER: ---

CIVIL
 TITLEIST EXCAVATION DETAILS

DRAWING NUMBER: C-203
 SHEET NUMBER: 10 OF 42



BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS

ALAN R. KIRSCHNER
MA PROFESSIONAL ENGINEER
LIC NO. MA 32770

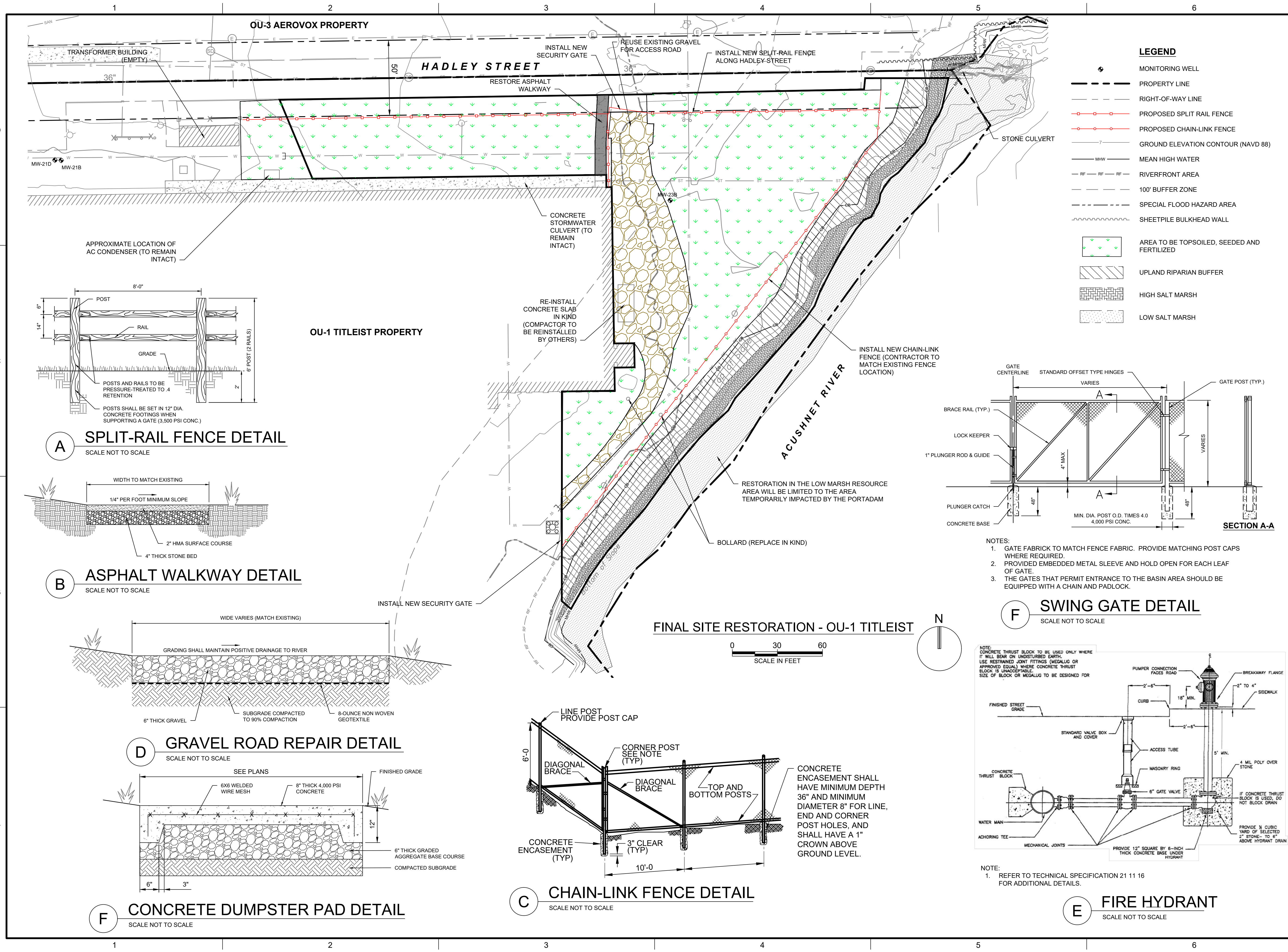
FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: K. DYSON
APPROVED: M. WADE
FILENAME: C-204.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

CIVIL
TITLEIST FINAL SITE RESTORATION PLAN AND DETAILS

DRAWING NUMBER
C-204
SHEET NUMBER
11 OF 42



Path: C:\USERS\ASANTIAGO\BPC\W0128076 FILENAME: C-204.DWG PLOT DATE: 2/19/2021 2:21 PM CAD USER: ALAN SANTIAGO



BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS

ALAN R. KIRSCHNER
MA PROFESSIONAL ENGINEER
LIC NO. MA 32770

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP
2	2/25/21	ISSUED IN RESPONSE TO PERMITTING PROCESS
3	5/7/21	ISSUED FOR CONSTRUCTION
4	2/14/22	REVISED PLANT LIST

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: B. NASH
APPROVED: M. WADE
FILENAME: C-205.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

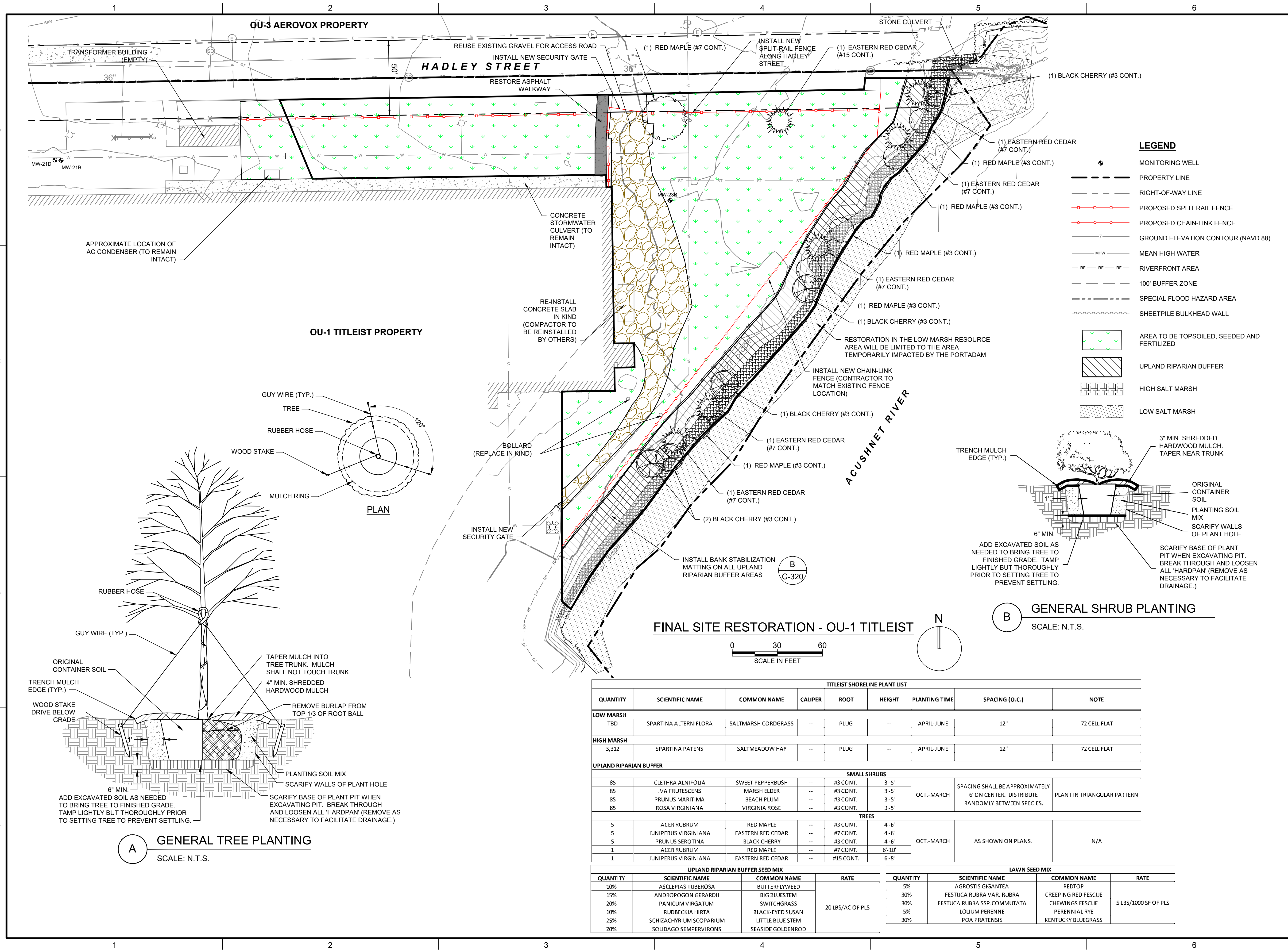
CIVIL

TITLEIST SHORELINE RESTORATION PLANTING PLAN

DRAWING NUMBER

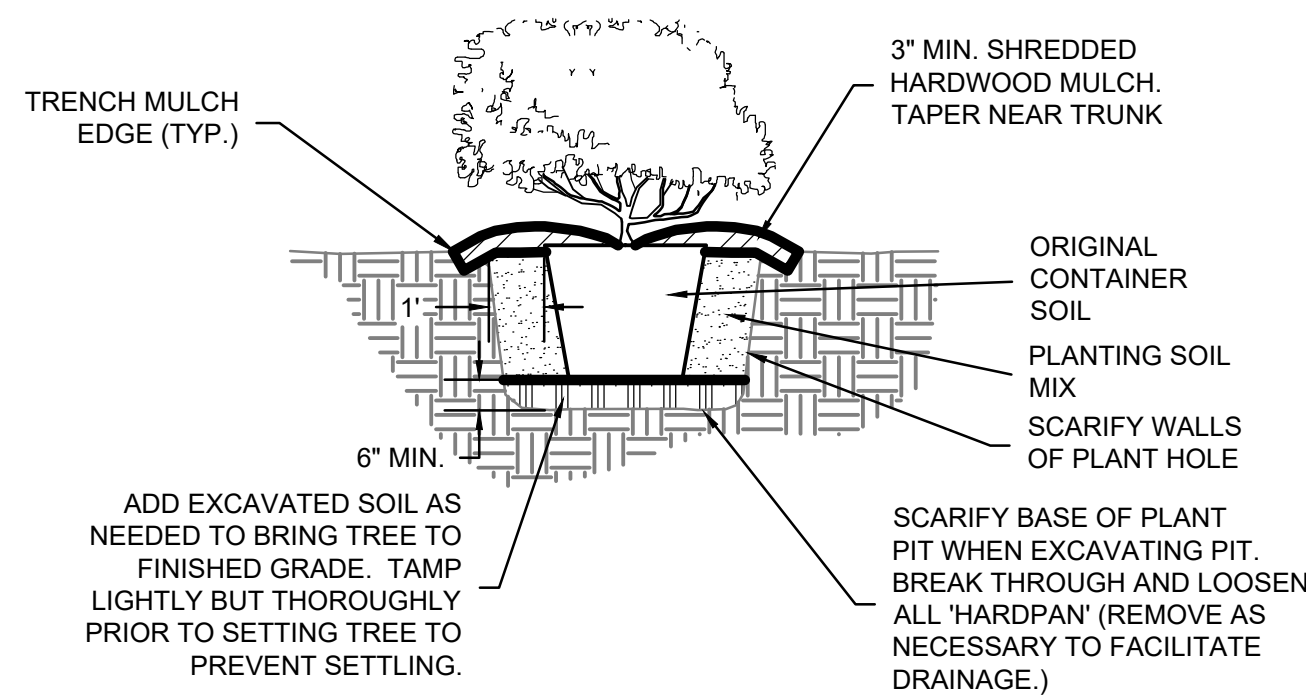
C-205

SHEET NUMBER
14 OF 47



LEGEND

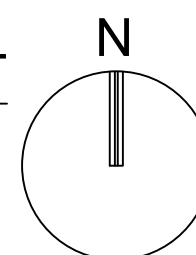
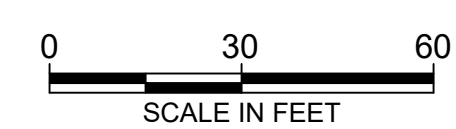
- MONITORING WELL
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- PROPOSED SPLIT RAIL FENCE
- PROPOSED CHAIN-LINK FENCE
- GROUND ELEVATION CONTOUR (NAVD 88)
- MEAN HIGH WATER
- RIVERFRONT AREA
- 100' BUFFER ZONE
- SPECIAL FLOOD HAZARD AREA
- SHEETPILE BULKHEAD WALL
- AREA TO BE TOPSOILED, SEEDED AND FERTILIZED
- UPLAND RIPARIAN BUFFER
- HIGH SALT MARSH
- LOW SALT MARSH



B GENERAL SHRUB PLANTING

SCALE: N.T.S.

FINAL SITE RESTORATION - OU-1 TITLEIST



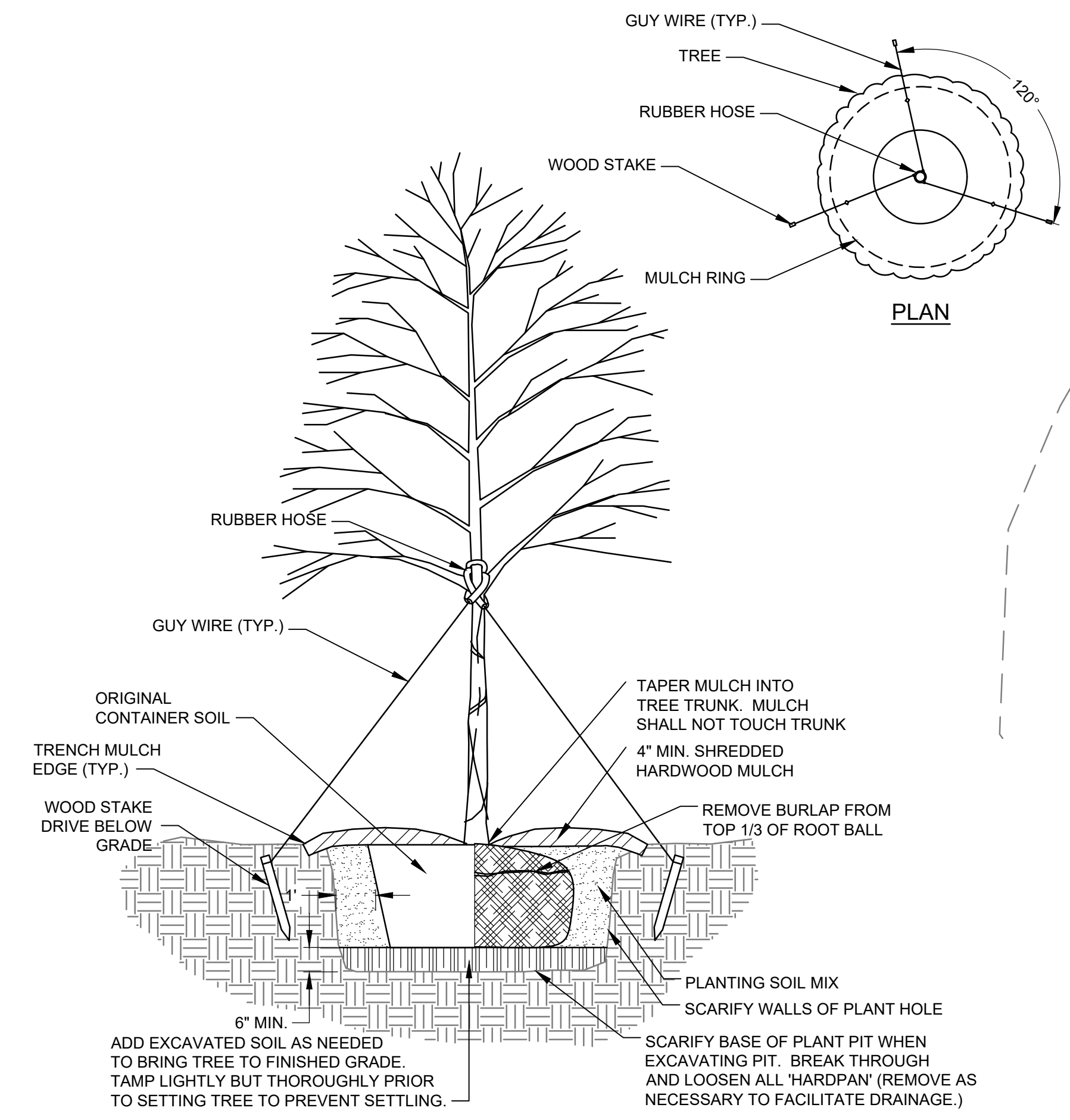
TITLEIST SHORELINE PLANT LIST								
QUANTITY	SCIENTIFIC NAME	COMMON NAME	CALIPER	ROOT	HEIGHT	PLANTING TIME	SPACING (O.C.)	NOTE
LOW MARSH								
TBD	SPARTINA ALTERNIFLORA	SALTMARSH CORDGRASS	--	PLUG	--	APRIL-JUNE	12"	72 CELL FLAT
HIGH MARSH								
3,312	SPARTINA PATENS	SALTMEADOW HAY	--	PLUG	--	APRIL-JUNE	12"	72 CELL FLAT
UPLAND RIPARIAN BUFFER								
SMALL SHRUBS								
85	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	--	#3 CONT.	3'-5'	OCT.-MARCH	SPACING SHALL BE APPROXIMATELY 6' ON CENTER. DISTRIBUTE RANDOMLY BETWEEN SPECIES.	PLANT IN TRIANGULAR PATTERN
85	IVA FRUTESCENS	MARSH ELDER	--	#3 CONT.	3'-5'			
85	PRUNUS MARITIMA	BEACH PLUM	--	#3 CONT.	3'-5'			
85	ROSA VIRGINIANA	VIRGINIA ROSE	--	#3 CONT.	3'-5'			
TREES								
5	ACER RUBRUM	RED MAPLE	--	#3 CONT.	4'-6'	OCT.-MARCH	AS SHOWN ON PLANS.	N/A
5	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	--	#7 CONT.	4'-6'			
5	PRUNUS SEROTINA	BLACK CHERRY	--	#3 CONT.	4'-6'			
1	ACER RUBRUM	RED MAPLE	--	#7 CONT.	8'-10'			
1	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	--	#15 CONT.	6'-8'			

UPLAND RIPARIAN BUFFER SEED MIX			
QUANTITY	SCIENTIFIC NAME	COMMON NAME	RATE
10%	ASCLEPIAS TUBEROSA	BUTTERFLYWEED	20 LBS/AC OF PLS
15%	ANDROPOGON GERARDII	BIG BLUESTEM	
20%	PANICUM VIRGATUM	SWITCHGRASS	
10%	RUDBECKIA HIRTA	BLACK-EYED SUSAN	
25%	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUE STEM	
20%	SOLIDAGO SEMPERVIVONS	SEASIDE GOLDENROD	

LAWN SEED MIX			
QUANTITY	SCIENTIFIC NAME	COMMON NAME	RATE
5%	AGROSTIS GIGANTEA	REDTOP	5 LBS/1000 SF OF PLS
30%	FESTUCA RUBRA VAR. RUBRA	CREEPING RED FESCUE	
30%	FESTUCA RUBRA SSP. COMMUTATA	CHEWINGS FESCUE	
5%	LOLIUM PERENNE	PERENNIAL RYE	
30%	POA PRATENSIS	KENTUCKY BLUEGRASS	

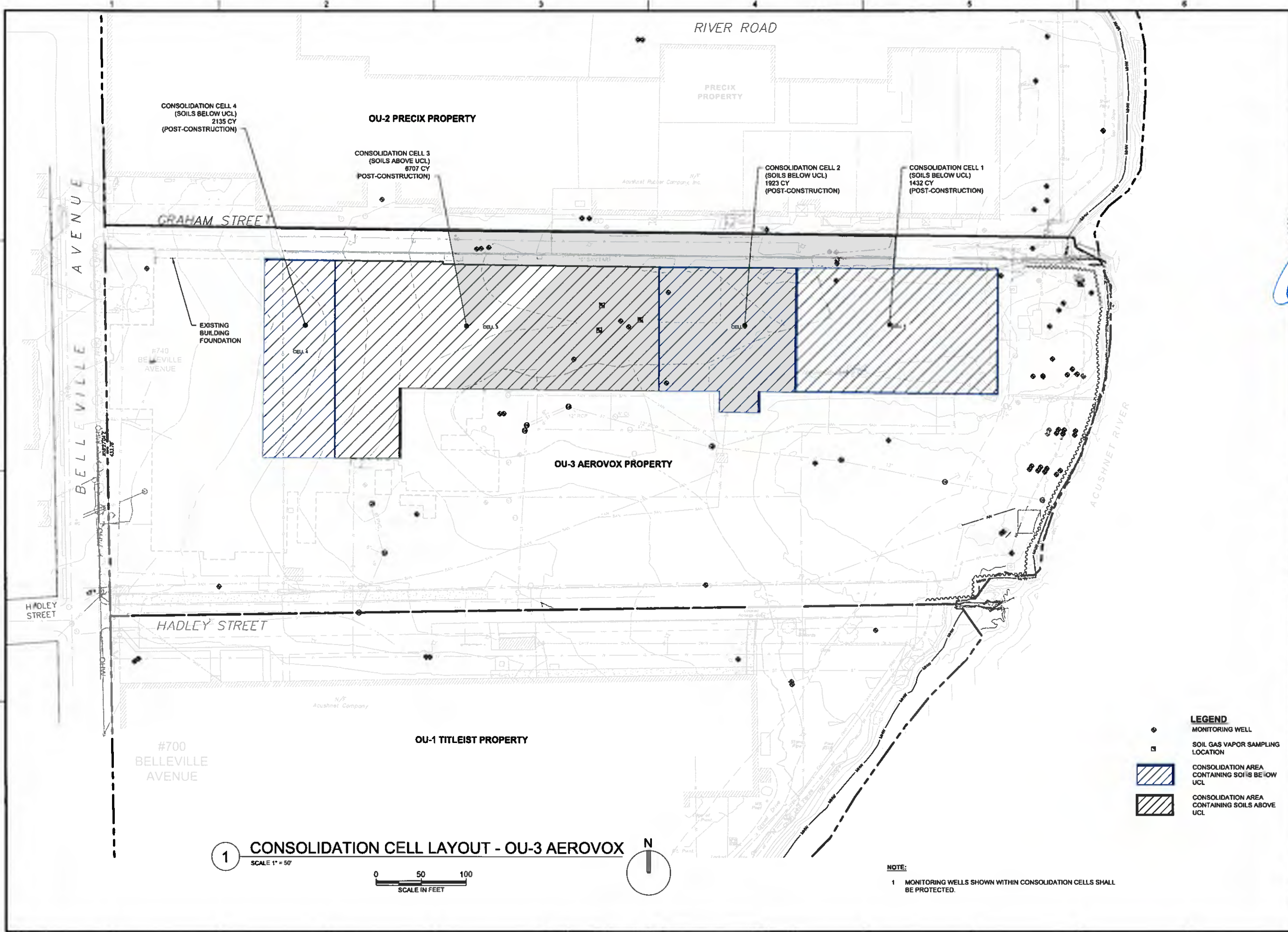
A GENERAL TREE PLANTING

SCALE: N.T.S.

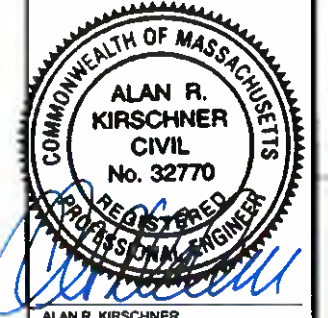


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BROWN AND CALDWELL
101 INDUSTRIAL PARK ROAD, SUITE 205
TAUNTON, MASSACHUSETTS



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LIC NO. MA 32770

12/1/2020

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSOEP

LINE IS 2 INCHES AT FULL SIZE

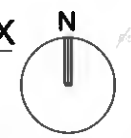
DESIGNED: J. SPADT
DRAWN: A. SANTIAGO
CHECKED: K. DYSON
APPROVED: M. WADE

FILENAME: C-310.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

CIVIL
AEROVOX CONSOLIDATION CELL LAYOUT

DRAWING NUMBER: C-310
SHEET NUMBER: 22 OF 42

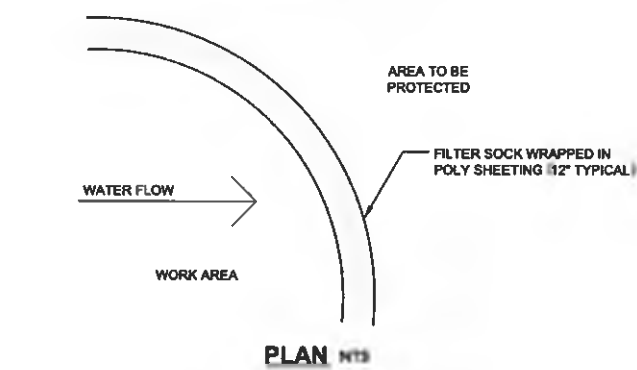
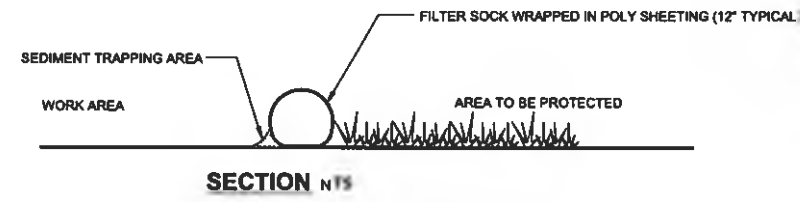
1 CONSOLIDATION CELL LAYOUT - OU-3 AEROVOX
SCALE 1" = 50'



NOTE:
1 MONITORING WELLS SHOWN WITHIN CONSOLIDATION CELLS SHALL BE PROTECTED.

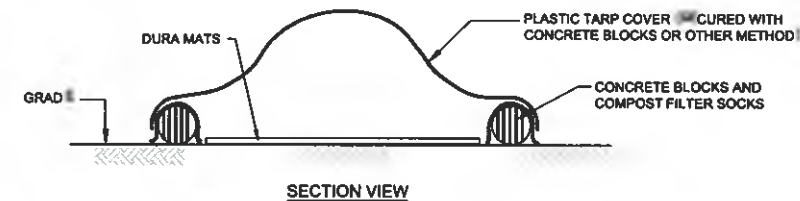
- LEGEND**
- ◆ MONITORING WELL
 - SOIL GAS VAPOR SAMPLING LOCATION
 - ▨ CONSOLIDATION AREA CONTAINING SOILS BELOW UCL
 - ▩ CONSOLIDATION AREA CONTAINING SOILS ABOVE UCL

P:\C:\USERS\ASANTIAGO\APPDATA\LOCAL\BENTLEY\PROJECT\WORKING\BRWNCALD-PW-BENTLEY.COM - BRWNCALD-PW-01\ASANTIAGO@BRWNCALD.COM\DWG C-503.DWG PLOT DATE: 7/10/2020 12:37 PM CAD USER: ALAN SANTIAGO



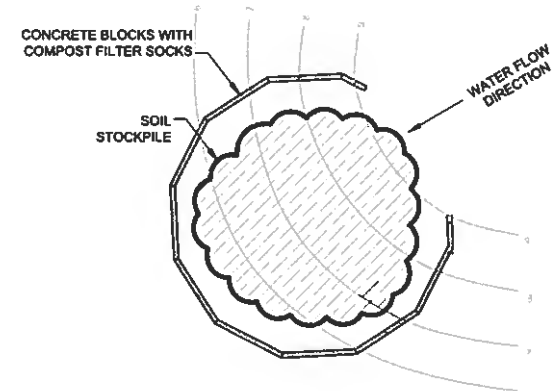
COMPOST FILTER SOCK SEDIMENT BARRIER NOTE
 1 COMPOST FILTER SOCKS WRAPPED IN POLY SHEETING USED AS SEDIMENT BARRIER IN AREAS WHERE THE ASPHALT CAP IS LEFT INTACT (E.G. AROUND IMPORTED FILL STOCKPILES) SHALL BE PLACED ON TOP OF ASPHALT AND BALLASTED WITH SANDBAGS OR BY OTHER MEANS. SANDBAGS TO BE PLACED EVERY 10 FEET

1 COMPOST FILTER SOCK SEDIMENT BARRIER DETAIL
 NOT TO SCALE

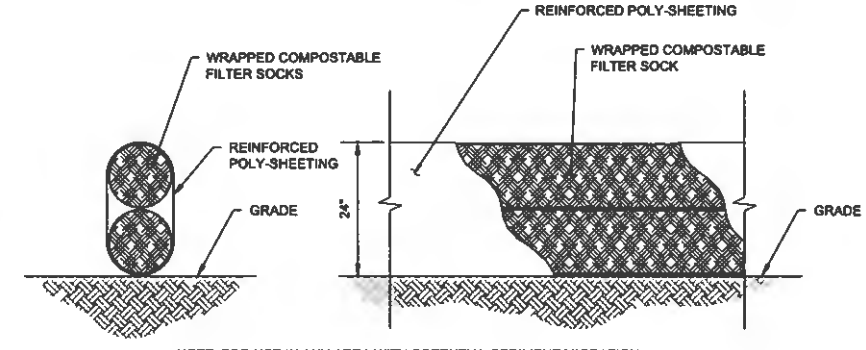


5 TYPICAL CLEAN MATERIAL STOCKPILE
 NOT TO SCALE

NOTE
 1 CLEAN IMPORTED MATERIALS SHALL BE STAGED ON DURA MATS TO PROTECT HAC AND SHALL BE LOCATED OUTSIDE OF THE 100' BUFFER ZONE C-005 THROUGH C-008

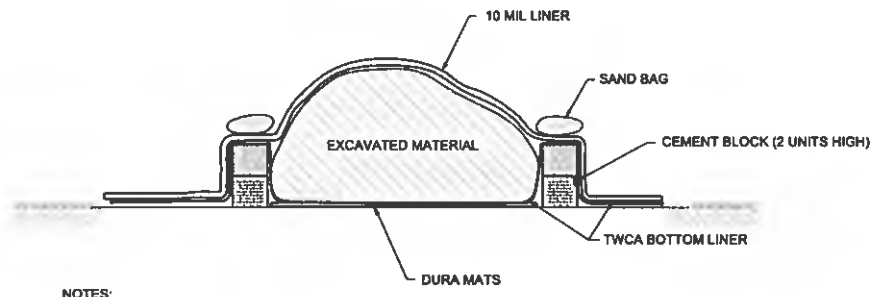


6 EROSION CONTROL AT STOCKPILE AREA
 SCALE N.T.S.



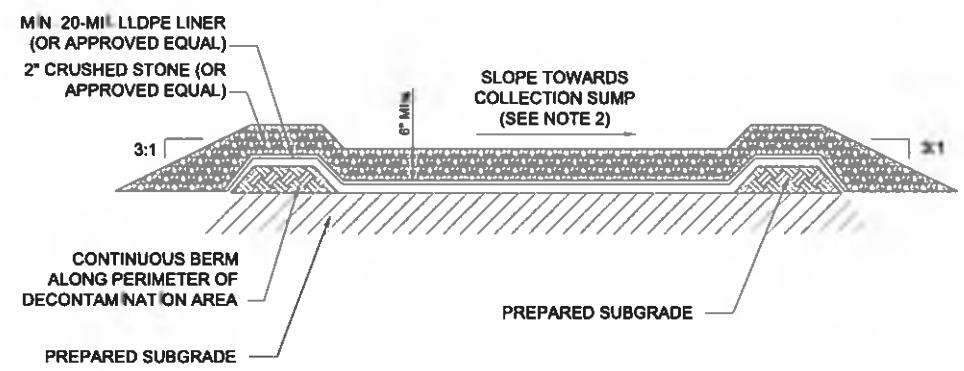
NOTE: FOR USE IN ANY AREA WITH POTENTIAL SEDIMENT MIGRATION.

4 COMPOSTABLE FILTER SOCKS
 SCALE: N.T.S.



NOTES:
 1. CEMENT BLOCKS WILL BE PLACED IN A MANNER THAT PREVENTS SEDIMENT AND SOIL IN CONTACT WITH WASTE MATERIAL FROM SPILLING OUT THE TWCA.
 2. WASTE MATERIAL WILL BE COVERED SECURELY (FROM RAIN AND WIND DISTURBANCES) WITH A LINER AT THE END OF EACH WORK DAY.
 3. WASTE MATERIAL WILL BE PLACED IN A MANNER WHICH WHEN COVERED WITH LINER, WILL PREVENT POOLING OF RAINWATER.
 4. THE LOCATION OF THE CEMENT BLOCKS WILL BE ADJUSTED BASED ON THE VOLUME OF WASTE MATERIAL TO PREVENT SAGGING OF THE LINER.
 5. SAND BAGS WILL BE PLACED ON TOP OF THE LINER (COVER) TO KEEP THE LINER TAUT AND IN A MANNER WHICH PROMOTES DRAINAGE OFF OF THE LINER AND AWAY FROM THE TWCA.
 6. CONTRACTOR SHALL INSPECT, MONITOR, AND MAINTAIN TWCA BERMS AND LINER THROUGHOUT CONSTRUCTION ACTIVITIES.

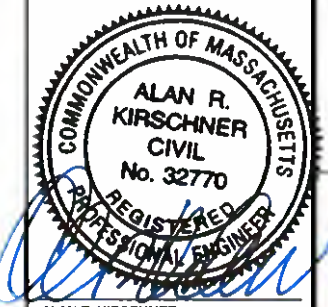
8 TEMPORARY WASTE CONTAINMENT AREA (TWCA) CROSS-SECTION
 SCALE: N.T.S.



7 DECONTAMINATION AREA CROSS SECTION
 NOT TO SCALE

DECONTAMINATION AREA NOTES:
 1. CONSTRUCT AND MAINTAIN DECONTAMINATION AREA THROUGHOUT CONSTRUCTION.
 2. DECONTAMINATION WATER SHALL BE DIRECTED TOWARDS A SUMP, COLLECTED AND TRANSFERRED TO ON-SITE WASTE WATER STAGING AREA. DECONTAMINATION WATER TO BE PRE-TREATED AND DISCHARGED IN ACCORDANCE WITH SPECIFICATIONS

Brown AND Caldwell
 BROWN AND CALDWELL
 101 INDUSTRIAL PARK ROAD, SUITE 206
 TAUNTON, MASSACHUSETTS



ALAN R. KIRSCHNER
 MA PROFESSIONAL ENGINEER
 LIC NO. MA 32770

12/1/2020

FORMER AEROVOX FACILITY
 740 BELLEVILLE AVENUE
 NEW BEDFORD, MA

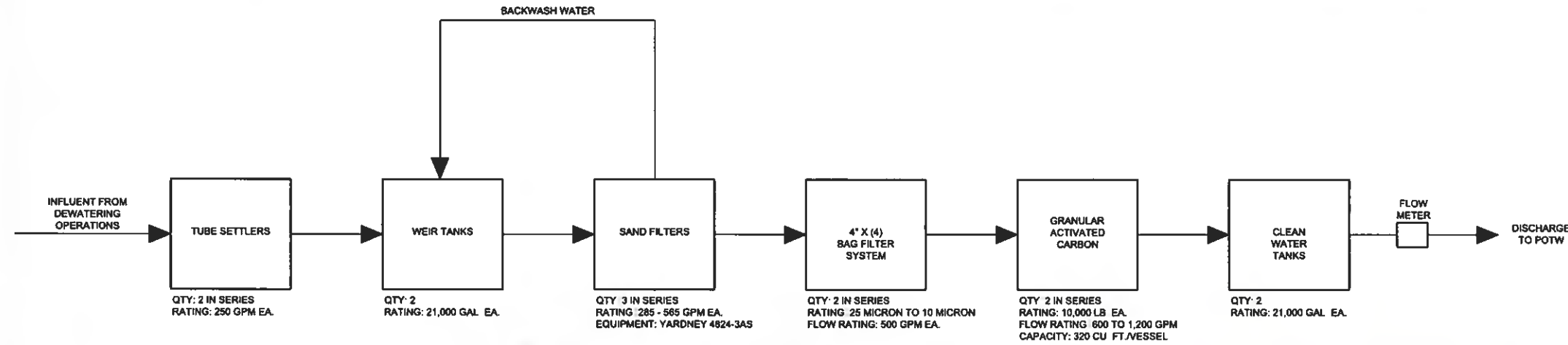
REVISIONS		
REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

DESIGNED: J. SPADT
 DRAWN: A. SANTIAGO
 CHECKED: K. DYSON
 CHECKED:
 APPROVED: M. WADE
 FILENAME: C-503.DWG
 BC PROJECT NUMBER: 155041
 CLIENT PROJECT NUMBER: _____

CIVIL
GENERAL EROSION AND SEDIMENT CONTROL DETAILS

DRAWING NUMBER
C-503
 SHEET NUMBER
 41 OF 42

P:\C:\USERS\ALAN SANTIAIGO\LOCALBENTLEYPROJECT\WORKING\BRWNCALD-PW-101-DWG FILENAME: D-101.DWG PLOT DATE: 7/10/2020 2:22 PM CAD USER: ALAN SANTIAIGO

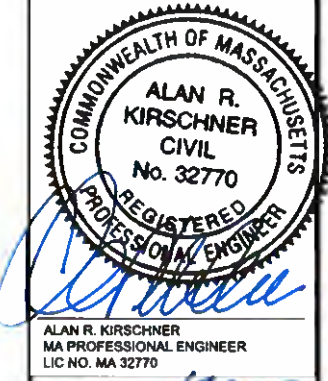


1 PROCESS BLOCK FLOW DIAGRAM
SCALE NOT TO SCALE

- CONTRACTOR NOTES:**
- FORGEN SHALL CONFORM TO 31.23.19 FOR ALL TECHNICAL SPECIFICATIONS PERTAINING TO THE DEWATERING SYSTEM.
 - PERFORM WORK IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS AND STANDARDS.
 - PROVIDE AND MAINTAIN PROPER AND SATISFACTORY MEANS AND DEVICES FOR THE REMOVAL OF WATER WITHIN THE EXCAVATION AREA. FORGEN SHALL REMOVE SUCH WATER AS IT MAY COLLECT, IN SUCH A MANNER AS SHALL NOT INTERFERE WITH THE EXECUTION OF THE WORK.
 - WATER PUMPED FROM THE EXCAVATION AREA SHALL BE HANDLED IN A SATISFACTORY MANNER APPROVED BY THE ENGINEER AND WITHOUT INJURY TO THE PROPERTY. THE WORK UNDER CONSTRUCTION OR TO PAVEMENT ROADS AND WATER COURSES. WATER SHALL BE COLLECTED, TREATED, CONVEYED, STORED, AND DISPOSED IN ACCORDANCE WITH THIS SPECIFICATION.
 - FORGEN ASSUMES SOLE RESPONSIBILITY FOR DEWATERING SYSTEMS AND DISPOSAL FOR LOSS OR DAMAGE RESULTING FROM PARTIAL OR COMPLETE FAILURE OF PROTECTIVE MEASURES AND SETTLEMENT OR RESISTANT DAMAGE CAUSED BY GROUND WATER CONTROL OPERATIONS.
 - DESIGN THE DEWATERING SYSTEM TO LOWER WATER TABLE TO ELEVATION NECESSARY PERFORM SO EXCAVATION AND BACKFILLING WITHOUT SURCHARGING OR OVERFLOWING THE PERIMETER SHEETPILE WALLS, AND TO PREVENT INFILTRATION OF SOIL FROM BENEATH SHEETPILES.
 - EFFLUENT FROM THE WATER TREATMENT SYSTEM SHALL BE DISCHARGED TO THE CITY OF NEW BEDFORD SANITARY SEWER IN ACCORDANCE WITH DISCHARGE PERMIT LIMITS AND SEWER ORDINANCE REQUIREMENTS. REFER TO A/D-101 FOR A LIST OF DETECTED PARAMETERS IN SAMPLES OF DEWATERING WATER COLLECTED IN AUGUST 2019. ANTICIPATED PERMIT LIMITS, PER THE CITY OF NEW BEDFORD SEWER ORDINANCE ARE ALSO LISTED.
 - THE WATER TREATMENT SYSTEM, INCLUDING THE SANITARY SEWER CONNECTION, SHALL BE OPERATED AND MAINTAINED BY A PROPERLY LICENSED OPERATOR IN ACCORDANCE WITH DISCHARGE PERMIT AND CITY OF NEW BEDFORD SEWER ORDINANCE REQUIREMENTS AND THE REQUIREMENTS OF THE MCP. THIS INCLUDES BUT IS NOT LIMITED TO MAINTENANCE, PROCESS MONITORING, INSTRUMENT CALIBRATION, RECORDKEEPING, OPERATOR ATTENDANCE REQUIREMENTS, AND ACCESS TO CITY PERSONNEL FOR INSPECTION.
 - DISCHARGE PERMIT COMPLIANCE SAMPLING, INCLUDING EFFLUENT SAMPLE COLLECTION AND ANALYSIS, AND MCP REQUIRED INSPECTIONS BY A LICENSED OPERATOR WILL BE CONDUCTED BY THE ENGINEER.
 - NOTE THAT THE MASSDEP ORDER OF CONDITIONS INCLUDES SPECIFIC REQUIREMENTS FOR PROTECTION OF EXCAVATION FROM UNSATURATED...

Parameter	Units	Limits	Influent Sample ID 1 (COMP 1)	Influent Sample ID 2 (COMP 2)	Influent Sample ID 3 (RGP-COMP 1)	Influent Sample ID 4 (RGP-COMP 2)
Ammonia	mg/l	1.4	ND	ND	ND	ND
Asbestos	mg/l	0.4	ND	0.008	0.0076	0.0033
Boron	mg/l	7	ND	ND	ND	ND
Copper	mg/l	2.3	ND	ND	0.0056	0.0042
Cyanide	mg/l	1.9	0.009	0.009	0.006	0.006
Lead	mg/l	0.8	ND	ND	ND	ND
Manganese	mg/l	0.01	ND	ND	ND	ND
Nickel	mg/l	2	0.644	0.731	1.495	1.453
Silver	mg/l	1.2	ND	ND	ND	ND
Zinc	mg/l	4.2	0.295	0.915	0.5966	0.3894
Antimony	mg/l	8.6	ND	ND	ND	ND
Barium	mg/l	4	ND	ND	ND	ND
Bile (pesticide)	mg/l	0.1	ND	ND	ND	ND
BTC (pesticide)	mg/l	0.02	ND	ND	ND	ND
Di (2-ethylhexylphthalate)	mg/l	0.18	ND	ND	ND	ND
Chlordane	mg/l	0.001	ND	ND	ND	ND
Chlorobenzene	mg/l	0.02	ND	ND	ND	ND
Endrin	mg/l	0.003	ND	ND	ND	ND
Fluorobenzene	mg/l	1.1	ND	ND	0.0011	0.00065
Heptachlorocyclopentadiene	mg/l	0.5	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/l	0.52	ND	ND	ND	ND
PCBs	mg/l	0.005	0.386 (Aroclor 1242), 0.121 (Aroclor 1254)	0.396 (Aroclor 1242), 0.121 (Aroclor 1254)	1.130 (Aroclor 1242), 0.404 (Aroclor 1254)	0.680 (Aroclor 1242), 2.010 (Aroclor 1254)
Perfluorobenzene	mg/l	2.5	ND	ND	ND	ND
Phenol	mg/l	1.5	ND	ND	ND	ND
Phenylacetone	mg/l	0.37	ND	ND	ND	ND
Propylene glycol	mg/l	0.005	ND	ND	ND	ND
Trans Dieldrin	mg/l	100	ND	7.9	ND	ND
Chlorobenzene	mg/l		0.17	0.17	ND	ND
Diethylstilbestrol	mg/l		0.054	0.046	0.08	0.082
Dichlorodiphenylmethane	mg/l		0.69	1.3	1.5	1.3
1,2,4-Trichlorobenzene	mg/l		0.024	0.021	ND	ND
1,2-Dichlorobenzene	mg/l		ND	ND	2.4	2.4
1,4-Dichlorobenzene	mg/l		ND	ND	0.00043	0.0004
1,2-Dichloroethane	mg/l		ND	ND	0.0049	0.0034
1,1,1-Trichloroethane	mg/l		ND	ND	0.00047	0.00023
1,1,2-Trichloroethane	mg/l		ND	ND	0.00036	0.00018
1,1,1,2-Tetrachloroethane	mg/l		ND	ND	0.00086	0.00033
1,1,2,2-Tetrachloroethane	mg/l		ND	ND	0.0002	0.0002
1,1,1,3-Tetrachloroethane	mg/l		ND	ND	0.00032	0.00026
1,1,2,2,3-Pentachloroethane	mg/l		ND	ND	0.00016	0.00013
1,1,1,2,2-Pentachloroethane	mg/l		ND	ND	0.0003	0.00014
1,1,1,2,2,3-Hexachloroethane	mg/l		ND	ND	0.00017	0.00014
1,1,1,2,2,4-Hexachloroethane	mg/l		ND	ND	0.00046	0.00031
1,1,1,2,2,4,5-Heptachloroethane	mg/l		ND	ND	0.00032	0.00016
1,1,1,2,2,4,5,6-Octachloroethane	mg/l		ND	ND	0.0008	0.00047
1,1,1,2,2,4,5,6-Octachlorocyclopentadiene	mg/l		ND	ND	2.31	2.32
1,1,1,2,2,4,5,6-Octachlorobenzene	mg/l		ND	ND	29.9	29.7
1,1,1,2,2,4,5,6-Octachlorocyclohexane	mg/l		ND	ND	1.859	1.766

Brown AND Caldwell
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LIC NO. MA 32770

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

REVISIONS

REV	DATE	DESCRIPTION
1	7/10/20	ISSUED TO MASSDEP

DESIGNED: J. SPADT
DRAWN: A. SANTIAIGO
CHECKED: K. DYSON
CHECKED: S. GIESE
APPROVED: M. WADE

FILENAME: D-101.DWG
BC PROJECT NUMBER: 155041
CLIENT PROJECT NUMBER: ---

PROCESS
EXCAVATION DEWATERING SYSTEM PROCESS FLOW DIAGRAM
DRAWING NUMBER: **D-101**
SHEET NUMBER: 42 OF 42

the 1990s, the number of people with a mental health problem has increased in the UK (Mental Health Act 1983, 1990).

There is a growing awareness of the need to improve the lives of people with mental health problems. The Department of Health (1999) has set out a vision of a new mental health system, which will be based on the following principles:

- People with mental health problems should be treated as individuals, with their own needs and wishes.
- People with mental health problems should be given the opportunity to participate in decisions about their care and treatment.
- People with mental health problems should be given the opportunity to live in their own homes and communities.

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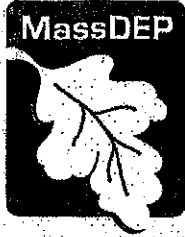
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Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-948-2700

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

PERMIT NO. 15398

Name and Address of Permittee:

AVX Corporation
c/o Brown and Caldwell
1 Tech Drive, Suite 310
Andover, MA 01810
Attn: Marilyn Wade, P.E., LSP

ISSUED: FEB 10 2022
EXPIRES: AUG 10 2022

Permission is hereby given by the Department of Environmental Protection to: install temporary sheet piling and a cofferdam along the Titleist property shoreline within historically filled tidelands. Once installed, approximately 4,010 cubic yards of contaminated soils will be removed and replaced with clean fill upgradient of the MHW shoreline pursuant to M.G.L. Chapter 91 and Regulations 310 CMR 9.00. This work is proposed pursuant to the Phase IV Remedy Implementation Plan of the Massachusetts Contingency Plan.

All work authorized herein shall be in the location shown and to the dimensions and depths indicated in the permit plan titled: "AVX Corporation for the temporary installation of sheet piling and a cofferdam at the Titleist property as part of the F/Aerovox Facility Contaminated Material Remediation Project at 700 Belleville Avenue, New Bedford, dated April 1, 2021 (5 sheets)."

STANDARD WATERWAYS PERMIT CONDITIONS

1. Acceptance of this Waterways Permit shall constitute an agreement by the Permittee to conform to all terms and conditions stated herein.
2. This Waterways Permit is issued upon the express condition that any and all other applicable authorizations necessitated due to the provisions hereof shall be secured by the Permittee prior to the

3. This Waterways Permit shall be revocable by the Department for noncompliance with the terms and conditions set forth herein. This Permit may be revoked after the Department has given written notice of the alleged noncompliance to the Permittee, or his/her agent, and those persons who have filed a written request, with the Department, for such notice and has afforded the Permittee a reasonable opportunity to correct said noncompliance. Failure to correct said noncompliance after the issuance of a written notice by the Department shall render this Waterways Permit void.

4. This Waterways Permit is issued subject to all applicable federal, state, county, and municipal laws, ordinances, by-laws, and regulations, including but not limited to, a valid Order of Conditions issued pursuant to the Wetlands Protection Act, M.G.L. Chapter 131, s.40. In particular, this issuance is subject to the provisions of Sections 52 to 56, inclusive of Chapter 91 of the General Law and its Regulations 310 CMR 9.40(5), which provides, in part, that the transportation and dumping of dredge material shall be done under the supervision of the Department, and, when required, the Permittee shall provide at his/her expense a dredge inspector approved by the Department.

~~5. This Waterways Permit is issued upon the express condition that dredging and transportation and disposal of dredge material shall be in strict conformance with the Water Quality Certification issued by the Department of Environmental Protection.~~

~~6. All subsequent maintenance dredging and transportation and disposal of this dredge material, during the term of this Permit, shall conform to all standards and conditions applied to the original dredging operation performed under this Permit.~~

~~7. After completion of the work authorized, the Permittee shall furnish to the Department a suitable plan showing the depths at mean low water over the area dredged. Dredging under this Permit shall be conducted so as to cause no unnecessary obstruction of the free passage of vessels, and care shall be taken to cause no shoaling. If, however, any shoaling is caused, the Permittee shall, at his/her expense, remove the shoal areas. The Permittee shall pay all costs of supervision, and if at any time the Department deems necessary a survey or surveys of the area dredged, the Permittee shall pay all costs associated with such work. Nothing in this Permit shall be construed to impair the legal rights of any persons, or to authorize dredging on land not owned by the Permittee without consent of the owner(s) of such property.~~

8. The Permittee shall assume and pay all claims and demands arising in any manner from the work authorized herein, and shall save harmless and indemnify the Commonwealth of Massachusetts, its officers, employees, and agents from all claims, audits, damages, costs and expenses incurred by reason thereof.


~~9. The Permittee shall, at least three days prior to the commencement of any dredging in tide water, give written notice to the Department of the time, location and amount of the proposed work.~~

10. Whosoever violates any provisions of this Permit shall be subject to a fine of \$25,000 per day for each day such violation occurs or continues, or by imprisonment for not more than one year, or both such fine and imprisonment; or shall be subject to civil penalty not to exceed \$25,000 per day for each day such violation occurs or continues.

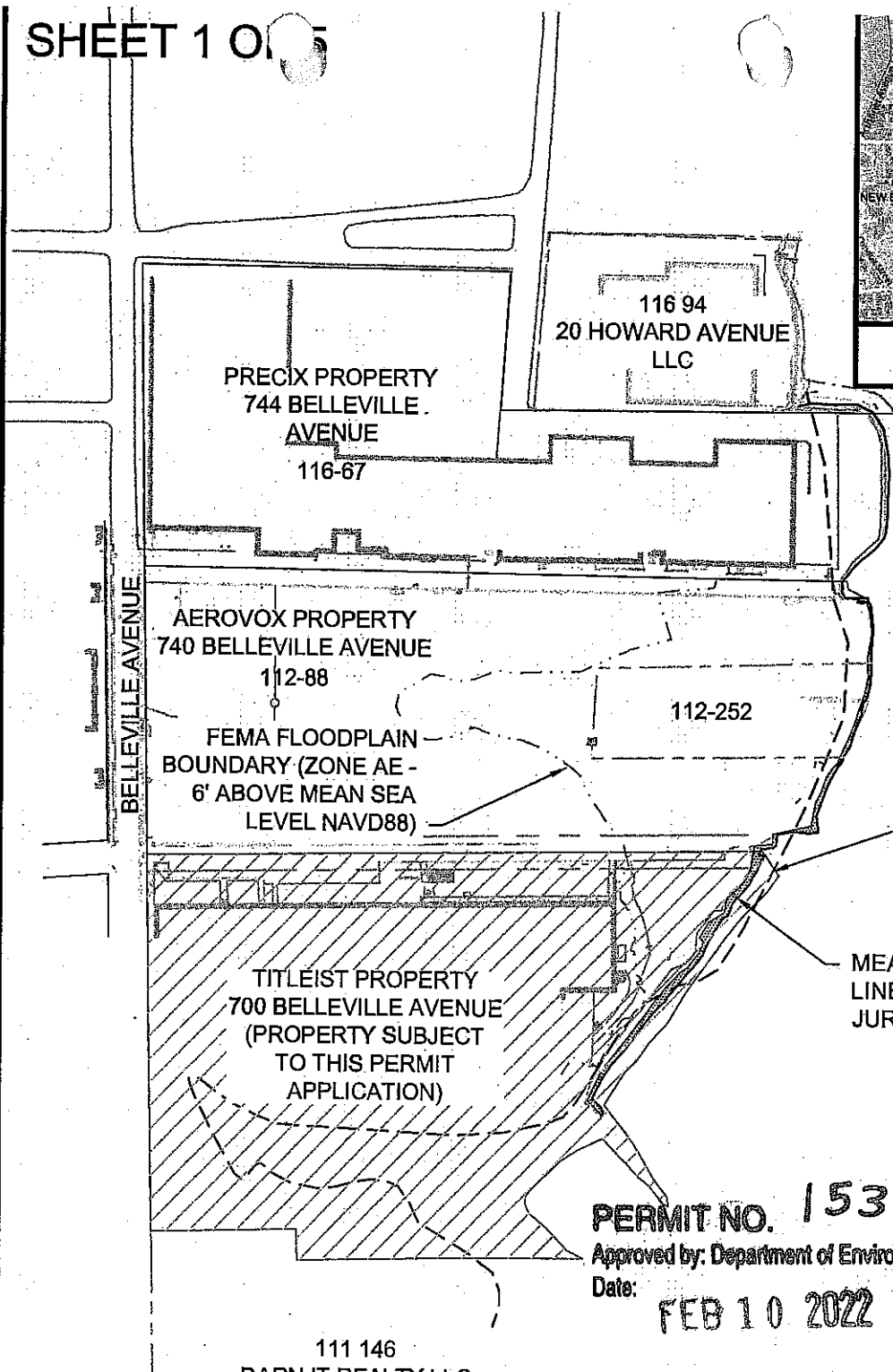
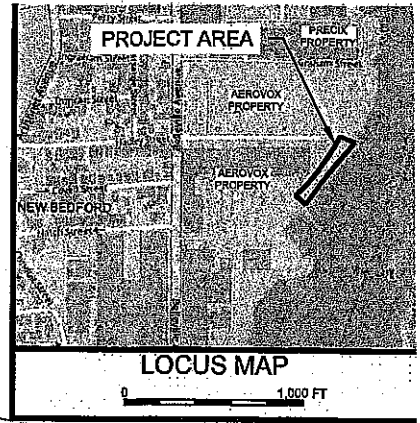
SPECIAL WATERWAYS PERMIT CONDITIONS

1. All work authorized herein shall be done as outlined in the Phase IV Remedy Implementation Plan under the Massachusetts Contingency Plan.
2. This Term of this Permit shall be valid for six (6) months from the date of issuance.
3. Within thirty (30) days of the completion of the project, the sheet piling and cofferdam shall be removed and stored outside of any geographical areas subject to Chapter 91 jurisdiction.

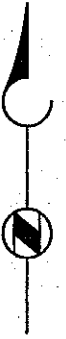
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Program Chief, Wetlands and Waterways



ACUSHNET RIVER



HISTORICAL HIGH WATER LINE (CHAPTER 91 JURISDICTION)

MEAN HIGH WATER LINE (CHAPTER 91 JURISDICTION)

PERMIT NO. 15398

Approved by: Department of Environmental Protection

Date: FEB 10 2022

W21-5942

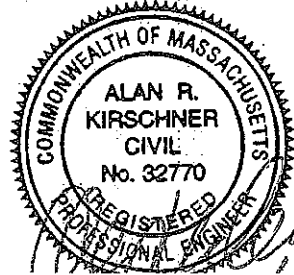
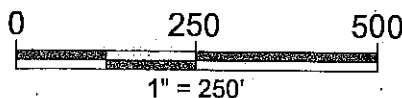
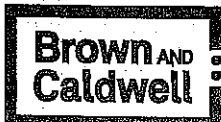
REFERENCE NOTE

- 1. HORIZONTAL DATUM IS NAD83 STATE PLANE MASSACHUSETTS MAINLAND. VERTICAL DATUM IS NAVD88.
- 2. FEMA FLOOD INSURANCE RATE MAP NUMBER 25005C0391G, EFFECTIVE JULY 16, 2014

LEGEND

133-415584 PARCEL ID (TYP.)

AVX CORPORATION FOR THE TEMPORARY INSTALLATION OF SHEET PILING AND A COFFERDAM AT THE TITLEIST PROPERTY AS PART OF THE F/AEROVOX FACILITY CONTAMINATED MATERIAL REMEDIATION PROJECT AT 700 BELLEVILLE AVENUE, NEW BEDFORD - APRIL 1, 2021



Handwritten signature and date: 1/27/2021

SHEET 2 OF 5

PRECIX PROPERTY
744 BELLEVILLE AVENUE

CONTAMINATED SOIL EXCAVATION
FOOTPRINT (BELOW HISTORIC HIGH WATER
LINE AND ABOVE MEAN HIGH WATER LINE)

ACUSHNET
RIVER

FEMA FLOODPLAIN
BOUNDARY (ZONE AE -
6' ABOVE MEAN SEA
LEVEL NAVD88)

(EARTH WORK ON THE AEROVOX
PROPERTY IS APPROVED UNDER A MINOR
MODIFICATION ISSUED FEBRUARY 16, 2021)

SEE SHEET
3 OF 4 FOR
SHORELINE
DETAIL

AEROVOX
PROPERTY
740
BELLEVILLE
AVENUE

PERMIT NO. 15398

Approved by: Department of Environmental Protection

Date:

FEB 10 2022

SALT MARSH (OUTSIDE
JURISDICTIONAL AREA)

HISTORIC HIGH WATER
LINE (CHAPTER 91
JURISDICTION)

EXISTING AEROVOX
PROPERTY SHEET PILING

±550' TO
OPPOSITE
SHORELINE

MEAN HIGH WATER
LINE (CHAPTER 91
JURISDICTION)

PROPOSED TEMPORARY
SHEET PILING (TITLEIST
PROPERTY)

SEE SHEET 3 OF 4 FOR
SHORELINE
DETAIL

TITLEIST PROPERTY
700 BELLEVILLE AVENUE

PROPERTY LINE

SALT MARSH (INSIDE
JURISDICTIONAL AREA)

HISTORIC HIGH WATER

(EARTH WORK IN THIS AREA
APPROVED UNDER A MINOR
MODIFICATION ISSUED
FEBRUARY 16, 2021)

MEAN HIGH WATER LINE

MEAN LOW WATER LINE

SHEET PILING

PROPOSED WORK
INCLUDES TEMPORARY
INSTALLATION OF
COFFER DAM AND
SHEET PILING

CD — CD — COFFERDAM

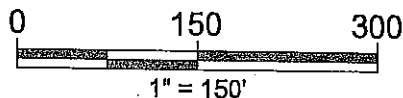
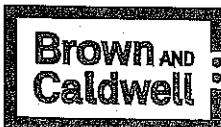
SC — SC — SILT CURTAIN

REFERENCE NOTE

1. HORIZONTAL DATUM IS NAD83 STATE PLANE MASSACHUSETTS MAINLAND. VERTICAL DATUM IS NAVD88.
2. FEMA FLOOD INSURANCE RATE MAP NUMBER 25005C0391G, EFFECTIVE JULY 16, 2014

AVX CORPORATION FOR THE TEMPORARY
INSTALLATION OF SHEET PILING AND A COFFERDAM AT
THE TITLEIST PROPERTY AS PART OF THE F/AEROVOX
FACILITY CONTAMINATED MATERIAL REMEDIATION
PROJECT AT 700 BELLEVILLE AVENUE, NEW BEDFORD -

APRIL 1, 2021



Handwritten signature and date: 4/27/2021

AEROVOX PROPERTY

ACUSHNET RIVER

EARTH WORK ON THE AEROVOX PROPERTY IS APPROVED UNDER A MINOR MODIFICATION ISSUED FEBRUARY 16, 2021

SEE SHEET 4 OF 5
PERMIT NO. 15398
 Approved by: Department of Environmental Protection
 Date: FEB 10 2022

PROPOSED WORK (SUBJECT TO THIS PERMIT APPLICATION) ON THE TITLEIST PROPERTY INCLUDES TEMPORARY INSTALLATION OF A COFFER DAM AND SHEET PILING

TITLEIST PROPERTY

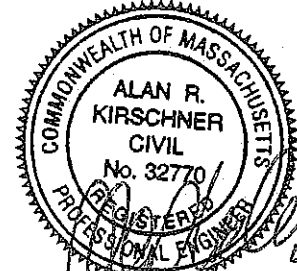
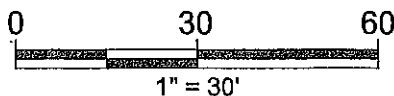
SEE SHEET 4 OF 5

FEMA FLOODPLAIN BOUNDARY (ZONE AE - 6' ABOVE MEAN SEA LEVEL NAVD88)

ACUSHNET RIVER

- HISTORIC HIGH WATER
- MEAN HIGH WATER LINE
- MEAN LOW WATER LINE
- ~~~~~ SHEET PILING
- CD --- COFFERDAM
- SC --- SILT CURTAIN

AVX CORPORATION FOR THE TEMPORARY INSTALLATION OF SHEET PILING AND A COFFERDAM AT THE TITLEIST PROPERTY AS PART OF THE F/AEROVOX FACILITY CONTAMINATED MATERIAL REMEDIATION PROJECT AT 700 BELLEVILLE AVENUE, NEW BEDFORD - APRIL 1, 2021

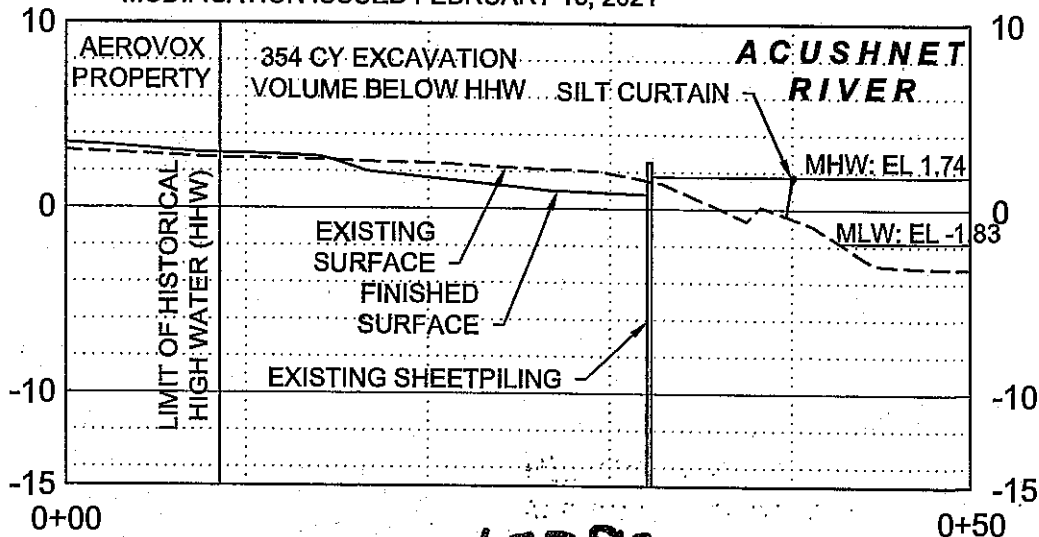


4/27/2021

A

A'

EARTH WORK ON THE AEROVOX
PROPERTY IS APPROVED UNDER A MINOR
MODIFICATION ISSUED FEBRUARY 16, 2021



PERMIT NO. 15398

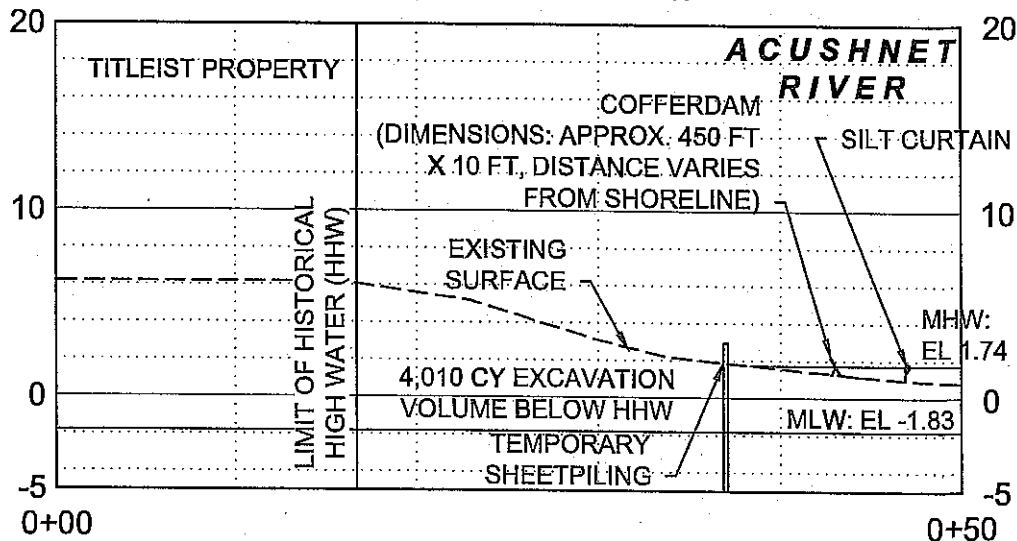
Approved by: Department of Environmental Protection

Date: **FEB 10 2022**

B

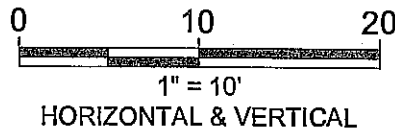
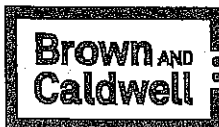
B'

PROPOSED WORK (SUBJECT TO THIS PERMIT APPLICATION) ON
THE TITLEIST PROPERTY INCLUDES TEMPORARY INSTALLATION
OF A COFFER DAM AND SHEET PILING



EARTH WORK ON THE TITLEIST PROPERTY IS APPROVED UNDER
A MINOR MODIFICATION ISSUED FEBRUARY 16, 2021

AVX CORPORATION FOR THE TEMPORARY
INSTALLATION OF SHEET PILING AND A COFFERDAM AT
THE TITLEIST PROPERTY AS PART OF THE F/AEROVOX
FACILITY CONTAMINATED MATERIAL REMEDIATION
PROJECT AT 700 BELLEVILLE AVENUE, NEW BEDFORD -
APRIL 1, 2021



(EARTH WORK ON THE AEROVOX PROPERTY IS APPROVED UNDER A MINOR MODIFICATION ISSUED FEBRUARY 16, 2021)

AEROVOX PROPERTY

PERMIT NO.

15398

Approved by: Department of Environmental Protection

Date: FEB 10 2022

EXISTING LICENSES:

No. 4064 (1916)

No. 4065 (1916)

TITLEIST PROPERTY

(EARTH WORK IN THIS AREA APPROVED UNDER A MINOR MODIFICATION ISSUED FEBRUARY 16, 2021)

PROPOSED WORK INCLUDES TEMPORARY INSTALLATION OF COFFER DAM AND SHEET PILING

EXISTING LICENSES:

No. 3130 (1906)

No. 3485 (1910)

ACUSHNET RIVER

OVERALL EXCAVATION AREAS

EXCAVATION AREAS BELOW HHW (Ch91 JURISDICTION)

BEDROCK ISCO AREA

PROPERTY LINE

HISTORIC HIGH WATER

MEAN HIGH WATER LINE

SHEET PILING

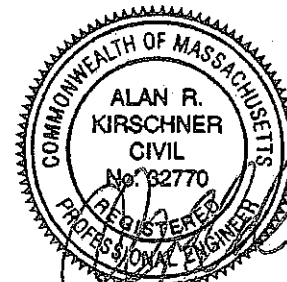
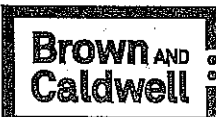
CD COFFERDAM

SC SILT CURTAIN

REFERENCE NOTE

1. HORIZONTAL DATUM IS NAD83 STATE PLANE MASSACHUSETTS MAINLAND. VERTICAL DATUM IS NAVD88.
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AVX CORPORATION FOR THE TEMPORARY INSTALLATION OF SHEET PILING AND A COFFERDAM AT THE TITLEIST PROPERTY AS PART OF THE F/AEROVOX FACILITY CONTAMINATED MATERIAL REMEDIATION PROJECT AT 700 BELLEVILLE AVENUE, NEW BEDFORD - APRIL 1, 2021



Handwritten signature and date: 4/27/2021



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
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Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

AVX Corporation
c/o Brown and Caldwell
1 Tech Drive, Suite 310
Andover, MA 01810
Attn: Marilyn Wade, P.E., LSP

FEB 10 2022

RE: ISSUANCE OF CHAPTER 91 WATERWAYS PERMIT

Waterways Application No. W21-5942, Permit No. 15398

AVX Corporation, New Bedford Harbor, 700 & 740 Belleville Avenue, New Bedford

Dear Sir or Madam:

Following an in-depth review of the referenced file and pursuant to M.G.L. Chapter 91 and Regulations 310 CMR 9.00, the Department of Environmental Protection has approved the attached permit authorizing you to install temporary sheet piling and a cofferdam along the Titleist shoreline, within filled tidelands. The work will allow replacement of contaminated soil with clean fill, upgradient of the MHW shoreline. This work is proposed under the Phase IV Remedy Implementation Plan under the Massachusetts Contingency Plan.

This Permit is not final until all administrative appeal periods from this Permit have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed. The appeal period is for twenty-one (21) days. No work shall be undertaken until the Permit has become final.

NOTICE OF APPEAL RIGHTS

Who has the right to appeal?

The following persons shall have the right to an adjudicatory hearing concerning this decision by the Department to grant or deny a license or permit, in accordance with 310 CMR 9.17(1): (a) an applicant who has demonstrated property rights in the lands in question, or which is a public agency; (b) any person aggrieved by the decision of the Department to grant a license or permit who has submitted written comments within the public comment period; (c) ten (10) residents of the Commonwealth who, pursuant to M.G.L. c. 30A, § 10A, have submitted comments within the public comment period with at least 5 of the 10 residents residing in the municipality(s) in which the license or permitted activity is located. The appeal shall clearly and specifically state the facts and grounds for the appeal and the relief sought, and each appealing resident shall file an affidavit stating the intent to be part of the group and to be represented by its authorized representative; (d) the municipal official in the affected municipality who has submitted written comments within the public comment period; and (e) CZM, for any project identified in 310 CMR 9.13(2) (a) for CZM participation or, in an Ocean Sanctuary, if it has filed a notice of participation within the public comment period.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

Waterways Application No. W21-5942, Permit No. 15398

AVX Corporation, New Bedford Harbor, 700 & 740 Belleville Avenue, New Bedford

How can I request an adjudicatory hearing?

A person requesting an adjudicatory hearing must submit a "Notice of Claim" to the Department, with a copy of the MassDEP Transmittal Form and including the detail specified below, within twenty-one (21) days of the date of issuance of this decision. The MassDEP Fee Transmittal Form is available at the following website: <http://www.mass.gov/eea/docs/dep/service/adr/adjherfm.doc>. The Notice of Claim must be made in writing and sent by certified mail or hand delivery to:

Case Administrator
MassDEP
One Winter Street, 2nd Floor
Boston, MA 02108

A copy of the complete Notice of Claim must be sent at the same time by certified mail or hand delivery to: (1) the applicant, (2) the municipal official of the city or town where the project is located, and (3) the issuing office of the MassDEP, which in this case is located at:

MassDEP Waterways Regulation Program
20 Riverside Drive
Lakeville, MA 02347

The MassDEP Fee Transmittal Form and a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Mass. Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 4062
Boston, Massachusetts 02211

What information must be included in the hearing request?

Pursuant to 310 CMR 9.17(3), any Notice of Claim requesting an adjudicatory hearing must include the following information:

- (a) the MassDEP Waterways Application File Number;
- (b) the complete name, address, fax number and telephone number of the applicant;
- (c) the address of the project;
- (d) the complete name, address, fax number, and telephone number of the party filing the request and, if represented by counsel, the name, address, fax number, and phone number of the attorney;
- (e) if claiming to be a person aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found in 310 CMR 9.02;
- (f) a clear statement that a formal adjudicatory hearing is being requested;
- (g) a clear statement of the facts which are the grounds for the proceedings, the specific objections to the MassDEP's written decision, and the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written decision; and
- (h) a statement that a copy of the request has been sent to: the applicant and the municipal official of the city or town where the project is located.

RE: ISSUANCE OF CHAPTER 91 WATERWAYS PERMIT

Page 3

Waterways Application No. W21-5942, Permit No. 15398

AVX Corporation, New Bedford Harbor, 700 & 740 Belleville Avenue, New Bedford

Dismissal of request

The request for appeal will be dismissed if the filing fee is not paid, unless the appellant is exempt or is granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Please note that the Department may revoke this permit for non-compliance with the terms and conditions set forth. Therefore, it is recommended that you contact the Department prior to performing any alterations or use modifications for review and, if necessary, approval pursuant to M.G.L. Chapter 91.

Please feel free to contact Carlos T. B. Fragata of the Waterways Regulation Program, at (508) 946-2873, or by e-mail at Carlos.Fragata@mass.gov, if you have any questions pertaining to this Waterways Permit.

Very truly yours,



Daniel F. Gilmore, Chief
Wetlands and Waterways Program

DFG/cf

cc: Office of Coastal Zone Management
Daniel J. Padien, Waterways Section Chief, DEP-Boston
New Bedford Harbormaster
New Bedford Conservation Commission

Enclosure(s) Waterways Permit No. 15398