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249 Vanderbilt Avenue

Norwood, MA 02062

T: 781.278.3700

F: 781.278.5701

F: 781.278.5702

www.gza.com



November 1, 2017

GZA File No: 01.00171521.15

Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup  
Northeast Regional Office  
205B Lowell Street  
Wilmington, Massachusetts 01887

Re: Release Abatement Measure Plan Modification No. 3  
Construction-Related Remediation Activities  
(Former) Everett Staging Yard  
1 Horizon Way  
Everett, Massachusetts  
Release Tracking Number (RTN) 3-13341

To Whom It May Concern:

GZA GeoEnvironmental, Inc. (GZA), on behalf of Wynn MA, LLC (Wynn MA), has prepared this Release Abatement Measure Plan Modification (RAM Plan Modification) to describe Response Actions pursuant to the Massachusetts Contingency Plan (MCP) that will be completed during the construction of the Wynn Boston Harbor (formerly known as the Wynn Resort in Everett) at the former Everett Staging Yard Disposal Site (the Site). This RAM Plan Modification was prepared to address modifications to engineering controls that will be installed to mitigate the potential for future exposure to contaminant-impacted soils on the upland portion of the former Everett Staging Yard disposal area as shown on **Figure 1**. The engineering control modifications included herein have previously been reviewed with the Massachusetts Department of Environmental Protection (MassDEP) Bureau of Waste Site Clean-up (BWSC). In addition, this RAM Plan Modification includes the removal of two (2) Airlogics® perimeter air monitoring stations to reflect the reduction in active remediation areas based on work completed to date.

## EXECUTIVE SUMMARY

Construction activities at the Site are being conducted following the provisions in the RAM Plan previously submitted to MassDEP on May 3, 2016 (the May 3 RAM Plan), the first RAM Plan Modification submitted to MassDEP on November 16, 2016 (Modification No. 1), and the second RAM Plan Modification submitted on February 17, 2017 (Modification No. 2). The May 3 RAM Plan details the Site history, Site releases, Site conditions and surrounding receptors, and RAM implementation. The provisions of the May 3 RAM Plan have been and will continue to stay in effect during subsequent construction activities at the Site with the exception of asbestos in soil management work, which has been and will be performed in accordance with Modifications Nos. 1 and 2. Engineering controls including clean soil cover materials, marker layers, shovel resistant materials, and hardscape materials that will be installed as part of final grading activities at the Site are described as part of this RAM Plan Modification.



As remedial activities involving large-scale soil excavation are substantially complete, this RAM Plan Modification also documents the planned reduction in the number of active perimeter air monitoring stations from four to two.

## **BACKGROUND**

The Site is identified by the MassDEP as Release Tracking Number (RTN) 3-13341. The RAM Project area and Disposal Site Boundaries are shown on **Figure 1**. Portions of this area that will be subject to the provisions of this revised RAM Plan Modification are shown on **Figures 2A through 2F** and **Figure 4**. Please note that some areas outside of the Disposal Site Boundary for the former Everett Staging Yard will include engineering controls as described herein, including the properties identified as 150 Alford Street, 20 Broadway, 38-50 Broadway, and Parcel 1 (former portion of MBTA Facility). Refer to **Figure 1** for these areas.

This RAM Plan Modification has been prepared in accordance with 310 CMR 40.0444 of the MCP, and with the Limitations in **Appendix A**. This RAM Plan Modification will be submitted electronically through the MassDEP eDEP online filing system. A copy of the RAM transmittal form (BWSC-106) is included in **Appendix B**.

Construction activities at the Site have been conducted following provisions in the May 3 RAM Plan as well as Modifications Nos. 1 and 2. The May 3 RAM Plan details the Site history, description of releases, Site conditions and surrounding receptors, and RAM implementation. The provisions of the May 3 RAM Plan and Modifications Nos. 1 and 2 will stay in effect during subsequent construction activities at the Site, but engineering controls to be installed during final grading activities will be modified as described in this RAM Plan Modification.

The Site is a Public Involvement Plan (PIP) site under the MCP. As the modifications listed below do not substantially alter or expand the May 3 RAM Plan, this submittal is not subject to an additional comment period per Section 40.1405(6)(e)(2) of the MCP.

## **PERSON ASSUMING RESPONSIBILITY FOR RAM PLAN MODIFICATION**

The entity assuming responsibility for this RAM Plan Modification No. 3 is Wynn MA, LLC. Contact information for the representative from Wynn MA, LLC is provided below:

Mr. Robert DeSalvio  
President  
Wynn MA, LLC  
101 Station Landing, Suite 2200  
Medford, Massachusetts 02155  
Tel: 857-770-7801

## **RAM MODIFICATION IMPLEMENTATION**

### OBJECTIVES AND SCHEDULE

The objective of this RAM Plan Modification is to update information on the engineering controls that will be implemented to mitigate the potential for future exposure to contaminant-impacted soils at the Site. This RAM Plan Modification also discusses the reduction of perimeter air monitoring stations (from four stations to two stations), which is anticipated to occur in mid-October 2017. This reduction in air monitoring stations is advisable because the bulk of Site excavation work has been completed, and remaining soil excavation activities at the Site are limited in area.



## ENGINEERING CONTROLS

The proposed final surface of the Site consists of the following types of materials, depending on the proposed uses of specific areas: bituminous concrete, concrete, artificial turf, and landscaping materials. Engineering controls to be employed include soil and clean fill material of varying thicknesses, high visibility marker layers, shovel-resistant layers, and expanded polystyrene block (EPS block) material. A summary of these areas, including proposed site development over the In-Situ Stabilization Area (ISS Area) and the final surface material is described below. Please also refer to the attached **Figure 3** entitled “Clean Soil Cover Options” dated September 2017 for cross-section details of the clean soil cover materials.

- **Roadways for vehicular traffic:** Finish material will be a minimum of 7 inches of bituminous concrete underlain by 12 inches of imported base course soils underlain by high visibility marker geotextile fabric (Detail B).
- **Sidewalks, walkways, and harborwalk for pedestrian traffic:** Finish material will be a minimum of 5 inches of concrete underlain by 8 inches of imported base course soils and 10 inches of clean granular soils underlain by high visibility marker geotextile fabric (Detail B). Some walkways (including the harborwalk) will consist of a minimum 3-inch brick asphaltic bedding material underlain by 3 inches of bituminous pavement and 18 inches of imported base course material.
- **Synthetic turf areas for public use/pedestrian traffic:** Finish material will be artificial turf underlain by a minimum 18 inches of imported turf support soils underlain by a high visibility, high durability geotextile fabric (Detail A). In areas where ISS materials are below artificial turf, the turf support soils will be a minimum of 24 inches thick and will be underlain by a high visibility polyethylene sheeting to promote collection and drainage of irrigation/precipitation water. For this area, the artificial turf has been determined by MassDEP to meet the requirements of a shovel-resistant layer.
- **Landscape areas:** Finish material will be natural grass and/or other landscape materials (mulch, stone, etc.) with shrubs/trees. Some areas may include a minimum of 18 inches of soil/stone below finished grade underlain by a shovel-resistant geotextile material (Detail D). Other areas will have a minimum of 24 inches of soil/stone below finish grade underlain by a high visibility geosynthetic fabric (Detail C).
- **Landscape areas over ISS Area:** Finish material will be natural grass and/or other landscape materials (mulch, stone, etc.) with shrubs/trees. Where landscape areas are present over the ISS, there will be a minimum of 24 inches of soil/stone below finish grade underlain by a high visibility polyethylene layer to promote the collection and drainage of irrigation/precipitation water (Detail J).
- **EPS Foam Block areas:** Finish materials will be natural grass and/or other landscape materials, concrete, or bituminous concrete. EPS Foam Block will be installed at a minimum thickness of 2.5 feet directly below the finish surface materials. The EPS Foam Block has been approved as a “marker layer” in and of itself if clean soils are placed over the EPS Foam Block (Detail E). If on-Site soils are used for some portion of the fill over the EPS Foam Block, then the cross-sections described as Detail F, Detail G, Detail H, and Detail I, as shown on **Figure 3**, will apply.

## ENGINEERING CONTROL MATERIALS

Engineering control materials including surface materials, support materials, marker layers, shovel-resistant layers, and EPS Foam Block are described below. Marker and/or shovel-resistant materials are not proposed within the building limits, as materials below the building floor slabs are considered inaccessible. Please note that paved and landscape areas



that are part of the Service Road portion of the site north of the site property limits do not require marker layers because installed utilities were backfilled with clean, off-Site fill material and contaminant concentrations in soil below landscape areas do not pose an exposure risk.

#### Pavement/Bituminous Concrete

Pavement for roadways will consist of a minimum 7 inches of bituminous concrete consisting of a 5-inch thick binder course and a 2-inch thick finish course. This material will be underlain by a minimum of 12 inches of imported, clean, base course soils. In some locations, EPS foam block and associated soils above the block for buoyancy will be installed below the base course soils. Marker layers will be installed below base course soils as described above and on **Figures 2A through 2F**.

#### Sidewalk/Walkways

Sidewalks and walkways around the Site will consist of a minimum of 5 inches of concrete underlain by a minimum of 8 inches of imported, clean, base course soils and 10 inches of clean granular soil. In some locations, EPS foam block and associated soils above the block for buoyancy will be installed below the base course soils. Marker layers will be installed below base course soils as described above and on **Figures 2A through 2F**.

#### Synthetic Turf Areas

The event lawn area (and other locations outside of the ISS area) will consist of a shovel-resistant layer of artificial turf underlain by 18 inches of artificial turf support soil (clean, imported granular fill material) underlain by high visibility marker layer geotextile material (Mirafi FW700). The high visibility marker layer will be placed directly over on-Site soils. Where synthetic turf is installed over the ISS area, the turf will be underlain by a minimum of 24 inches of artificial turf support soil underlain by high visibility polyethylene sheeting placed directly over on-Site/ISS materials.

#### Landscape Areas

Landscape areas will be finished with either natural grass or other landscape materials (mulch, stone, etc.). Regardless of the finish material, imported clean soil or other aggregate material will be installed to a minimum of 18 inches below grade. A shovel-resistant geosynthetic material (Mirafi RS380i) will be placed directly over on-Site soils and below the imported clean materials.

In areas where greater than 2 feet of clean imported soil will be placed over on-Site soils, a high-visibility marker layer (Geotex 401 OR) will be installed over on-Site soils. This cover system will be implemented in areas where larger plantings (bushes and trees) that require 2 feet or more of vegetative support soil will be installed. In areas where landscape features require excavation into ISS materials, the marker layer will consist of Stego Wrap Class A Vapor Retarder polyethylene sheeting.

#### EPS Foam Block

EPS foam block (ShelterFoam Type XIV manufactured by Shelter Enterprises, Inc.) will be installed in lieu of soils in areas where increases in site grade would cause settlement of underlying organic soils and clays. EPS foam block is currently proposed in some areas of the Site (primarily the south east and east portions) below pavement, concrete, and landscape areas. EPS foam block with thicknesses varying from 2.5 to 12.5 feet will be installed below the finish materials in these areas. Three to five feet of soil/material is required over the EPS foam block for resistance against buoyancy. In addition, where EPS foam block is used in the access road area, an HDPE geomembrane will be placed over the blocks. Accordingly,





no marker or shovel resistant materials are proposed in the EPS Foam Block areas unless on-Site soils are used as part of the three to five feet of cover material described above. Refer to Details E through I on **Figure 3** for proposed EPS Foam Block clean cover sections.

Please refer to the attached **Figures 2A** through **2F** for the locations where the cross-sections described on **Figure 3** will be implemented. Applicable sections on **Figure 3** are referenced by letter designation on **Figures 2A through 2F**. Please refer to **Appendix C** for manufacturer information and lab testing data on the above-described marker layer and shovel-resistant materials.

#### PERIMETER AIR MONITORING MODIFICATIONS

Currently, perimeter air monitoring for total dust is performed using four Airlogics® stations located around the perimeter of the Site as Shown on **Figure 4**. Remediation activities in the northern, western, and eastern portions of the building area are substantially complete. As a result, air monitoring stations 1 and 2 will be demobilized from the Site; stations 3 and 4 will be shifted as shown on **Figure 4** to provide dust monitoring in the southern peninsula and southeast portions of the Site, where remediation activities and/or soil management work will continue. It is anticipated that air monitoring stations 1 and 2 will be removed from the Site on or about October 15, 2017.

Should future activities (either additional remediation activities, soil management, and/or other construction activities related to remediation work) have the potential to cause dust propagation outside of the areas where perimeter dust monitoring is being performed, existing stations will either be relocated to monitor those areas or an additional station(s) will be returned to the Site.

#### LSP SEAL AND SIGNATURE (310 CMR 40.0444(1)(G))

The seal and signature of the Licensed Site Professional (LSP) for this revised RAM Plan Modification (Lawrence Feldman, LSP #8107) are provided on the attached transmittal form in **Appendix B**.

If you should require any further information concerning the planned RAM activities, please do not hesitate to contact the undersigned at (781) 278-3700.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Matthew M. Smith  
Associate Principal

David E. Leone  
Consultant/Reviewer

Lawrence Feldman, LSP  
Senior Principal



Attachments:

Figure 1	Disposal Area Upland Portion
Figure 2A	Clean Cover Layout Plan
Figure 2B	Clean Cover Layout Plan
Figure 2C	Clean Cover Layout Plan
Figure 2D	Clean Cover Layout Plan
Figure 2E	Clean Cover Layout Plan
Figure 2F	Clean Cover Layout Plan
Figure 3	Clean Soil Cover Options
Figure 4	Air logics© Station Locations
Appendix A	Limitations
Appendix B	Transmittal Forms BWSC106
Appendix C	Material Information and Testing Data- Marker Layers



## FIGURES



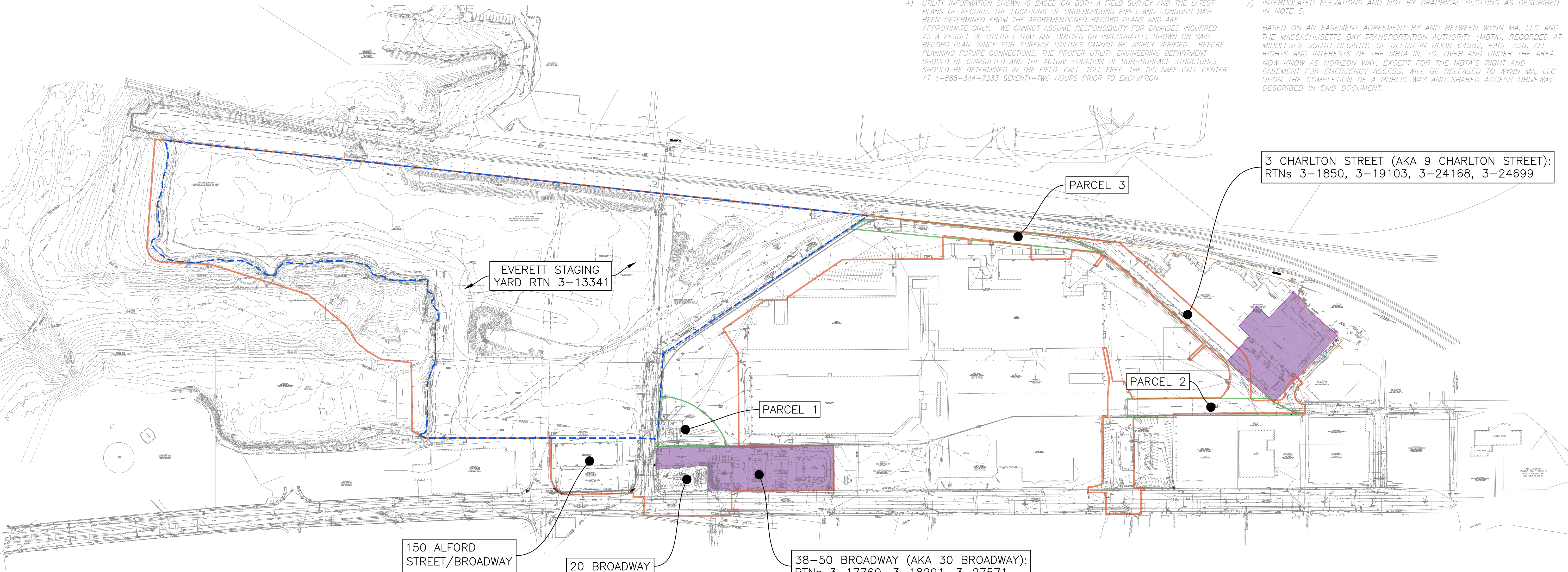
NOTES:

- 1) ELEVATIONS ESTABLISHED BY GPS.  
TEMPORARY BENCH MARKS SET:  
TBM-1, X-CUT ON SOUTHERLY MOST FLANGE BOLT OF A HYDRANT, LOCATED AT THE INTERSECTION OF THE NORTHWESTERLY SIDELINE OF ALFORD STREET AND THE SOUTHWESTERLY SIDELINE OF HORIZON WAY (A.K.A CHEMICAL LANE). AS SHOWN HEREON. ELEVATION = 13.38  
TBM-2, SPIKE SET, 1 FOOT ABOVE GRADE IN UTILITY POLE, ON THE NORTHEASTERLY SIDE OF HORIZON WAY (A.K.A. CHEMICAL LANE) APPROXIMATELY 135 FEET FROM THE NORTHWESTERLY SIDELINE OF BROADWAY. AS SHOWN HEREON. ELEVATION = 12.54
- 2) ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 3) CONTOUR INTERVAL EQUALS ONE (1) FOOT.
- 4) UTILITY INFORMATION SHOWN IS BASED ON BOTH A FIELD SURVEY AND THE LATEST PLANS OF RECORD. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE FOREMENTIONED RECORD PLANS AND ARE APPROXIMATE ONLY. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLAN, SINCE SUB-SURFACE UTILITIES CANNOT BE VISIBLY VERIFIED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUB-SURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL, TOLL FREE, THE DIG SAFE CALL CENTER AT 1-888-344-7233 SEVENTY-TWO HOURS PRIOR TO EXCAVATION.

- 5) BY GRAPHICAL PLOTTING ONLY, THE PROPERTIES SHOWN HEREON LIE WITHIN A ZONE "AE", AN AREA WITHIN THE 1% ANNUAL CHANCE FLOOD WITH BASE FLOOD ELEVATIONS DETERMINED; A ZONE "X" (SHADED), AN AREA WITHIN THE 0.2% ANNUAL CHANCE FLOOD; AND ZONE "X" (UNSHADED), AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD, AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR SUFFOLK COUNTY, MASSACHUSETTS, MAP NUMBER 25025C0014G, AND COMMUNITY PANEL NUMBER 250286, HAVING AN EFFECTIVE DATE OF SEPTEMBER 25, 2009 AND FLOOD INSURANCE RATE MAP FOR MIDDLESEX COUNTY, MASSACHUSETTS, MAP NUMBER 25017C0439E, AND COMMUNITY PANEL NUMBER 250192, HAVING AN EFFECTIVE DATE OF JUNE 4, 2010.

- 6) BASE FLOOD ELEVATION 9 (NAVD88), ZONE AE, IS SHOWN HEREON VIA INTERPOLATED ELEVATIONS AND NOT BY GRAPHICAL PLOTTING AS DESCRIBED IN NOTE 5.

BASED ON AN EASEMENT AGREEMENT BY AND BETWEEN WYNN MA, LLC AND THE MASSACHUSETTS BAY TRANSPORTATION AUTHORITY (MBTA), RECORDED AT MIDDLESEX SOUTH REGISTRY OF DEEDS IN BOOK 64987, PAGE 336; ALL RIGHTS AND INTERESTS OF THE MBTA IN, TO, OVER AND UNDER THE AREA NOW KNOWN AS HORIZON WAY, EXCEPT FOR THE MBTA'S RIGHT AND EASEMENT FOR EMERGENCY ACCESS, WILL BE RELEASED TO WYNN MA, LLC UPON THE COMPLETION OF A PUBLIC WAY AND SHARED ACCESS DRIVEWAY DESCRIBED IN SAID DOCUMENT.



LEGEND

- ⊙ SEWER MANHOLE  
⊙ DRAIN MANHOLE  
⊙ ELECTRIC MANHOLE  
⊙ TELEPHONE MANHOLE  
⊙ CABLE TV MANHOLE  
⊙ HYDRANT  
⊙ WATER SHUT OFF  
⊙ GAS SHUT OFF  
⊙ CATCH BASIN  
⊙ GUY WIRE  
⊙ UTILITY POLE  
⊙ LIGHT POLE  
⊙ ELECTRIC HANDHOLE  
⊙ SIGN  
⊙ FIRE ALARM  
⊙ OBSERVATION WELL  
⊙ GATE POST  
■ BOUND FOUND  
SB BOUND  
CB CONCRETE BOUND  
Z INDICATES COMMON OWNERSHIP  
♿ HANDICAP RAMP
- FND FOUND  
± MORE OR LESS  
DH DRILL HOLE  
VGC VERTICAL GRANITE CURB  
CLF CHAIN LINK FENCE  
BIT BITUMINOUS  
CONC CONCRETE  
NVP AND VISIBLE PIPES  
RAILROAD TRACKS  
GUARD RAIL  
-X-X- METAL FENCE  
-S- SEWER  
-D- DRAIN  
-W- WATER  
-G- GAS  
-OHW- OVERHEAD WIRES  
-V-V-V- RETAINING WALL

LEGEND

- 
- AUL AREA (APPROXIMATE)
- 
- UPLAND PORTION OF FORMER EVERETT STAGING YARD DISPOSAL SITE BOUNDARY (RTN 3-13341)
- 
- RAM PROJECT AREA BOUNDARY

NOTES:

1. AULs ARE SHOWN ONLY ON PROPERTIES WITHIN RAM BOUNDARIES; ADDITIONAL AULs EXIST IN THE VICINITY.
2. BASE PLAN FROM FELDMAN PROFESSIONAL LAND SURVEYORS PLAN TITLED "EXISTING CONDITIONS PLAN, BROADWAY (ROUTE 99), EVERETT, MASS." DATED MARCH 20, 2015.

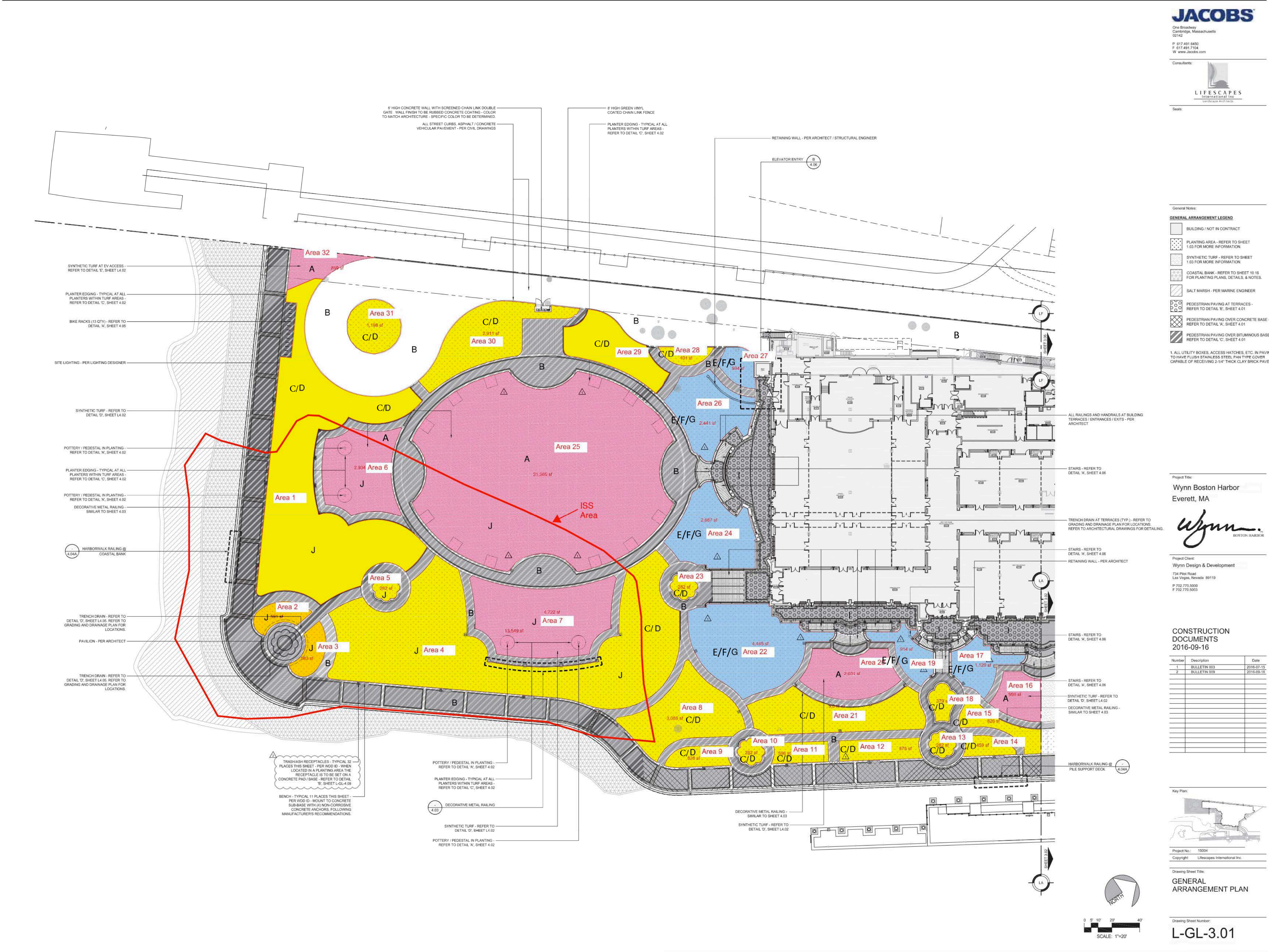
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WYNN EVERETT  
1 HORIZON WAY  
EVERETT, MASSACHUSETTS

UPLAND DISPOSAL AREA LIMITS

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR:  WYNN MA, LLC	
PROJ MGR: DEL	REVIEWED BY: AJR	CHECKED BY: LF	FIGURE <b>1</b>
DESIGNED BY: VKR	DRAWN BY: JJZ	SCALE: AS SHOWN	
DATE: OCTOBER, 2017	PROJECT NO. 01.0171521.15	REVISION NO.	

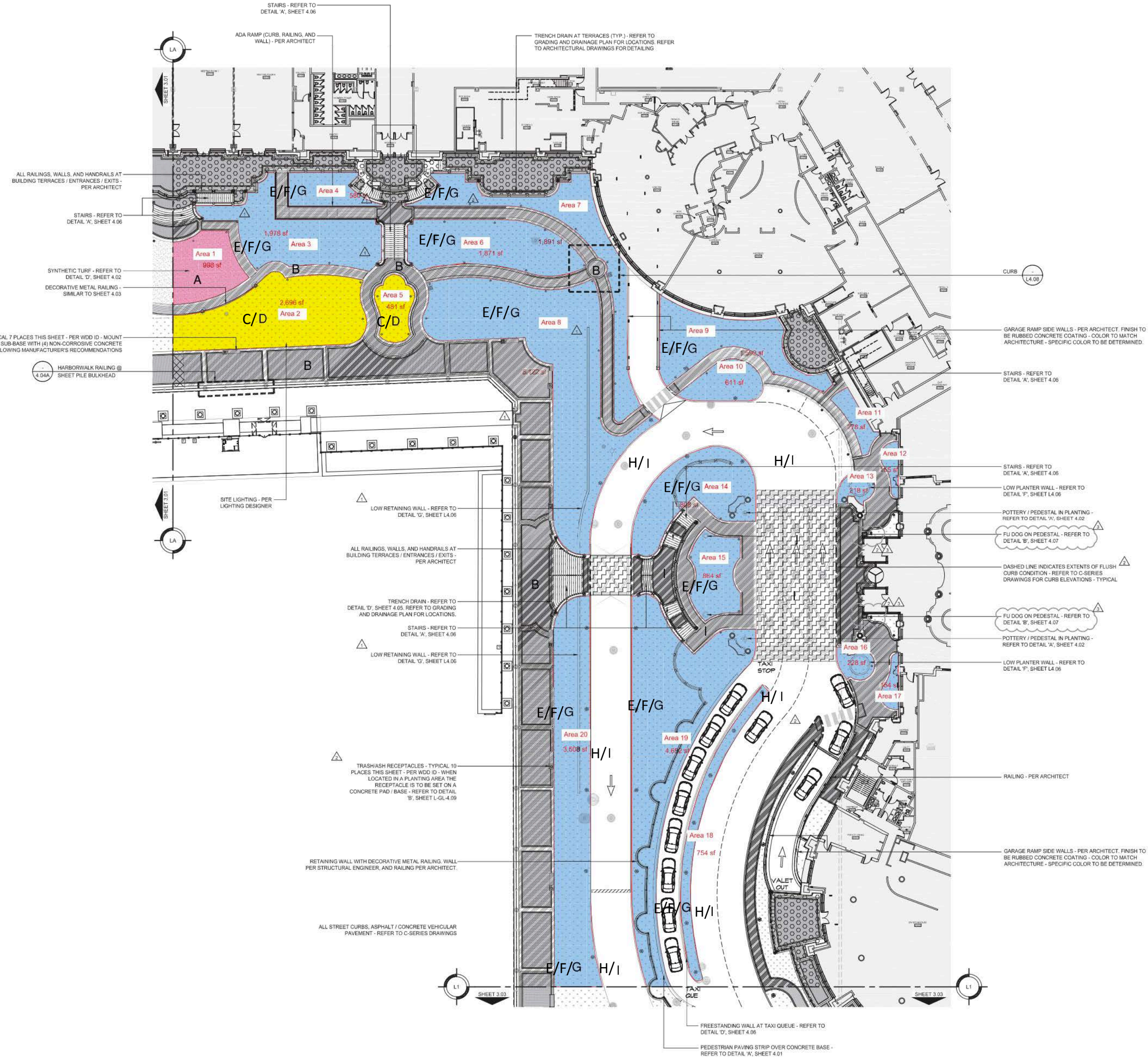




REFERENCE NOTES:  
1. GENERAL ARRANGEMENT PLAN SHEET L-GL-3.01 THROUGH L-GL-3.04 FROM SUFFOLK CONSTRUCTION WERE PROVIDED TO GZA ON SEPTEMBER 15, 2017

NO.	ISSUE/DESCRIPTION	BY	DATE
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WYNN BOSTON HARBOR 1 HORIZON WAY EVERETT, MASSACHUSETTS			
CLEAN COVER LAYOUT PLAN			
PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: WYNN MA, LLC	
PROJ MGR: DEL	DESIGNED BY: MMS	CHECKED BY: LF	FIGURE 2A
DATE: SEPT 27, 2017	DRAWN BY: JJZ	SCALE: AS SHOWN	
	PROJECT NO. 01.0171521.52	REVISION NO.	





**JACOBS**  
One Brattle Street  
Cambridge, Massachusetts 02139  
P: 617.451.6400  
F: 617.451.7104  
W: www.jacobs.com

Consultants:  
**LIFESCAPES**  
International Inc.  
Landscape Architecture  
Seals:

- General Notes:
- GENERAL ARRANGEMENT LEGEND**
- BUILDING / NOT IN CONTRACT
  - PLANTING AREA - REFER TO SHEET 1.03 FOR MORE INFORMATION
  - SYNTHETIC TURF - REFER TO SHEET 1.03 FOR MORE INFORMATION
  - PEDESTRIAN PAVING AT TERRACES - REFER TO DETAIL 'X', SHEET 4.01
  - PEDESTRIAN PAVING OVER CONCRETE BASE - REFER TO DETAIL 'A', SHEET 4.01
  - PEDESTRIAN PAVING OVER ASPHALT BASE - REFER TO DETAIL 'C', SHEET 4.01
  - VEHICULAR PAVING OVER CONCRETE BASE - REFER TO DETAIL 'D', SHEET 4.01
1. ALL UTILITY BOXES, ACCESS HATCHES, ETC. IN PAVING TO HAVE FLUSH STAINLESS STEEL PAN TYPE COVER CAPABLE OF RECEIVING 1/4" THICK CLAY BRICK PAVERS.

Project Title:  
**Wynn Boston Harbor**  
Everett, MA

*Wynn*  
BOSTON HARBOR

Project Client:  
**Wynn Design & Development**  
734 West Road  
Las Vegas, Nevada 89119  
P: 702.770.9000  
F: 702.770.9003

**CONSTRUCTION DOCUMENTS**  
2016-09-16

Number	Description	Date
1	BULLETIN 000	2016-09-16
2	BULLETIN 000	2016-09-16
3	BULLETIN 007	2016-11-16

Key Plan:

Project No.: 15004  
Copyright: Lifescapes International Inc.

Drawing Sheet Title:  
**GENERAL ARRANGEMENT PLAN**

Drawing Sheet Number:  
**L-GL-3.02**

REFERENCE NOTES:  
1. GENERAL ARRANGEMENT PLAN SHEET L-GL-3.01 THROUGH L-GL-3.04 FROM SUFFOLK CONSTRUCTION WERE PROVIDED TO GZA ON SEPTEMBER 15, 2017

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<b>WYNN BOSTON HARBOR</b> <b>1 HORIZON WAY</b> <b>EVERETT, MASSACHUSETTS</b>			
<b>CLEAN COVER LAYOUT PLAN</b>			
PREPARED BY: <b>GZA GeoEnvironmental, Inc.</b> Engineers and Scientists www.gza.com		PREPARED FOR: <b>WYNN MA, LLC</b>	
PROJ MGR: DEL	REVIEWED BY: MMS	CHECKED BY: LF	FIGURE <b>2B</b> SHEET NO.
DESIGNED BY: MMS	DRAWN BY: JJZ	SCALE: AS SHOWN	
DATE: SEPT 27, 2017	PROJECT NO. 01.0171521.52	REVISION NO.	






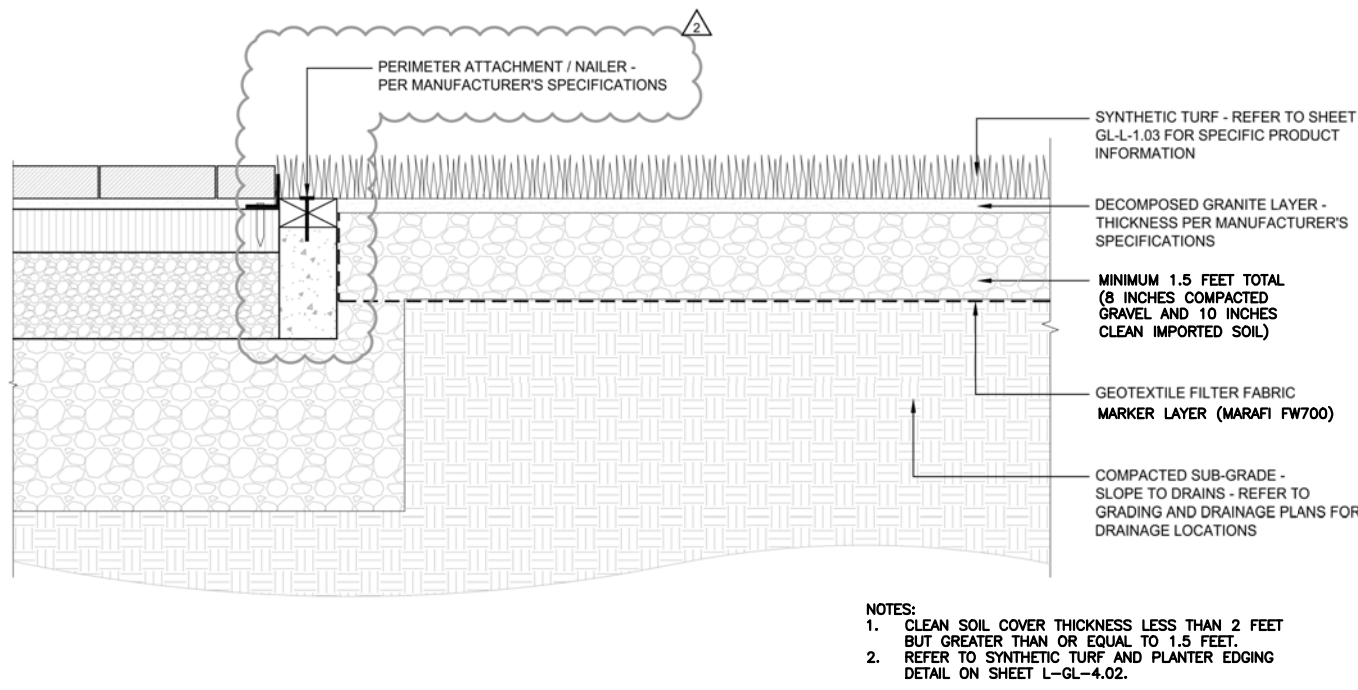
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WYNN BOSTON HARBOR 1 HORIZON WAY EVERETT, MASSACHUSETTS			
CLEAN COVER LAYOUT PLAN			
PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: WYNN MA, LLC	
PROJ MGR: DEL	REVIEWED BY: MMS	CHECKED BY: LF	FIGURE <b>2C</b> SHEET NO.
DESIGNED BY: MMS	DRAWN BY: JJZ	SCALE: AS SHOWN	
DATE: SEPT 27, 2017	PROJECT NO. 01.0171521.52	REVISION NO.	

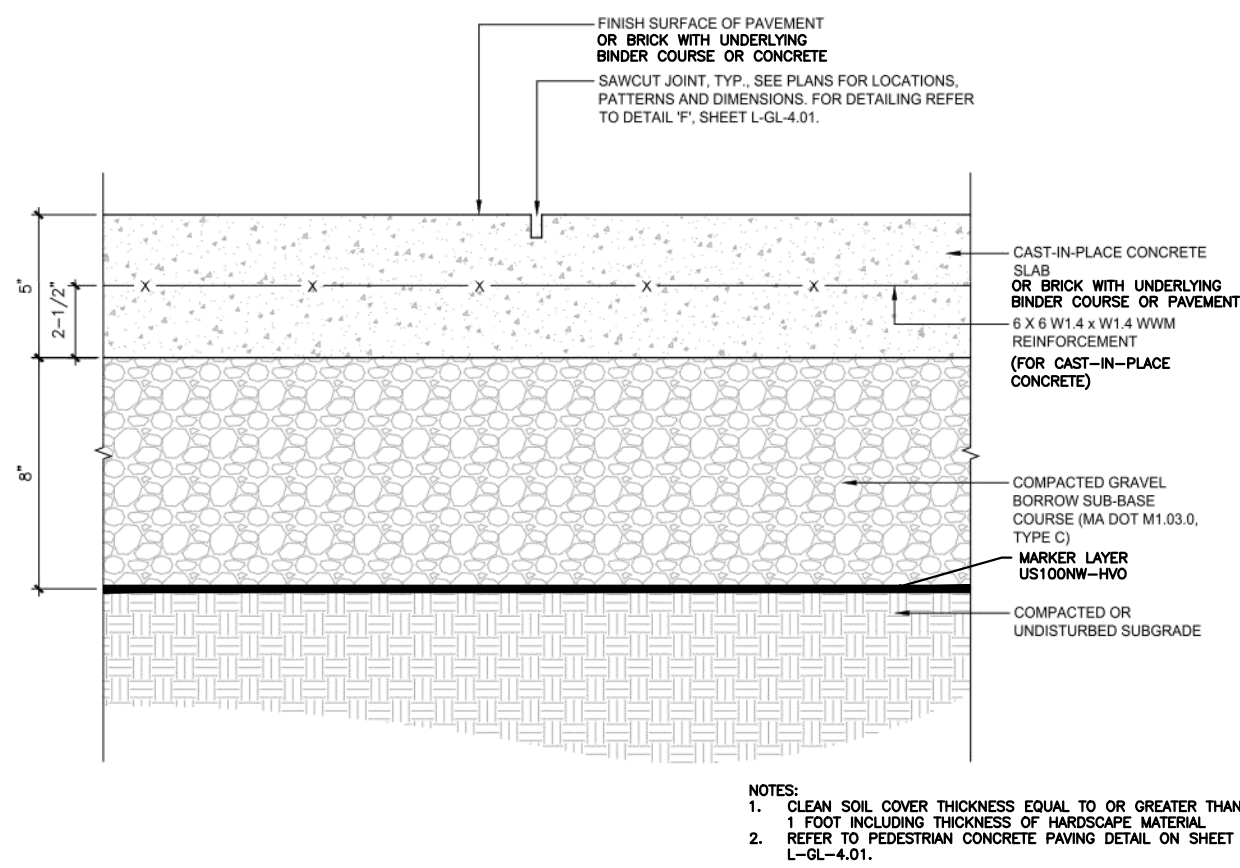


PREPARED BY:  <b>GZA GeoEnvironmental, Inc.</b> Engineers and Scientists <a href="http://www.gza.com">www.gza.com</a>		PREPARED FOR:  WYNN MA, LLC	
PROJ MGR: DEL DESIGNED BY: MMS DATE: SEPT 27, 2017	REVIEWED BY: MMS DRAWN BY: JUZ PROJECT NO. 01.0171521.52	CHECKED BY: LF SCALE: AS SHOWN REVISION NO.	FIGURE <b>2D</b> SHEET NO.

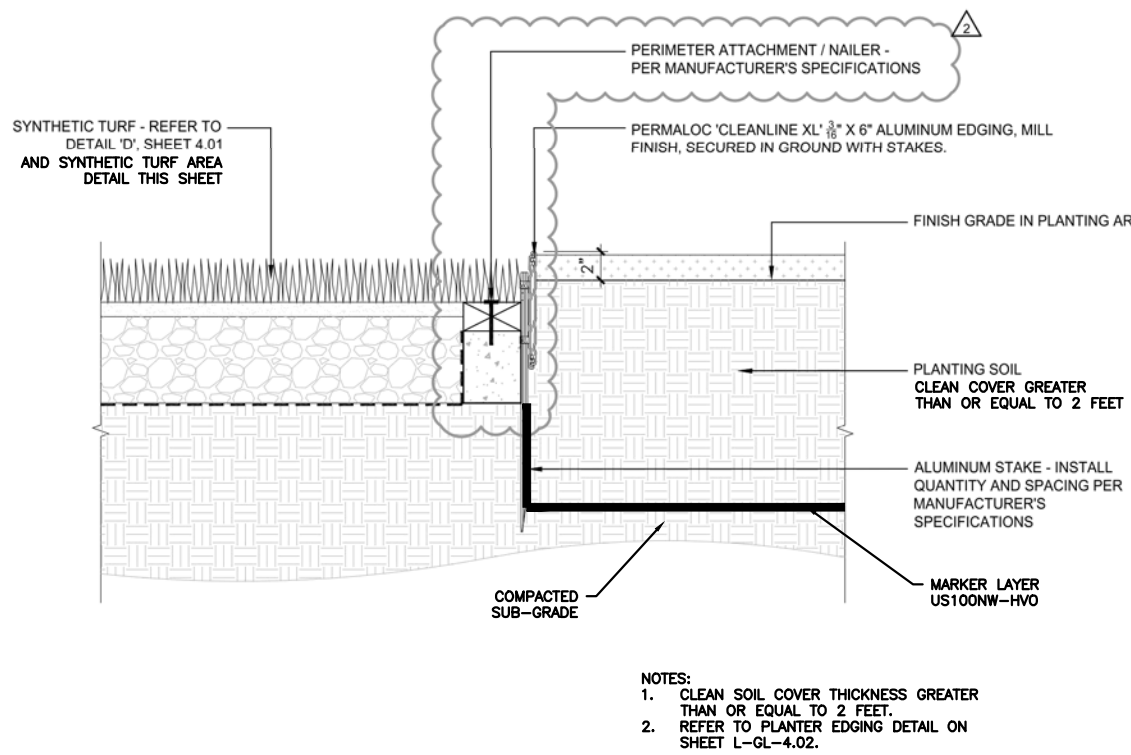




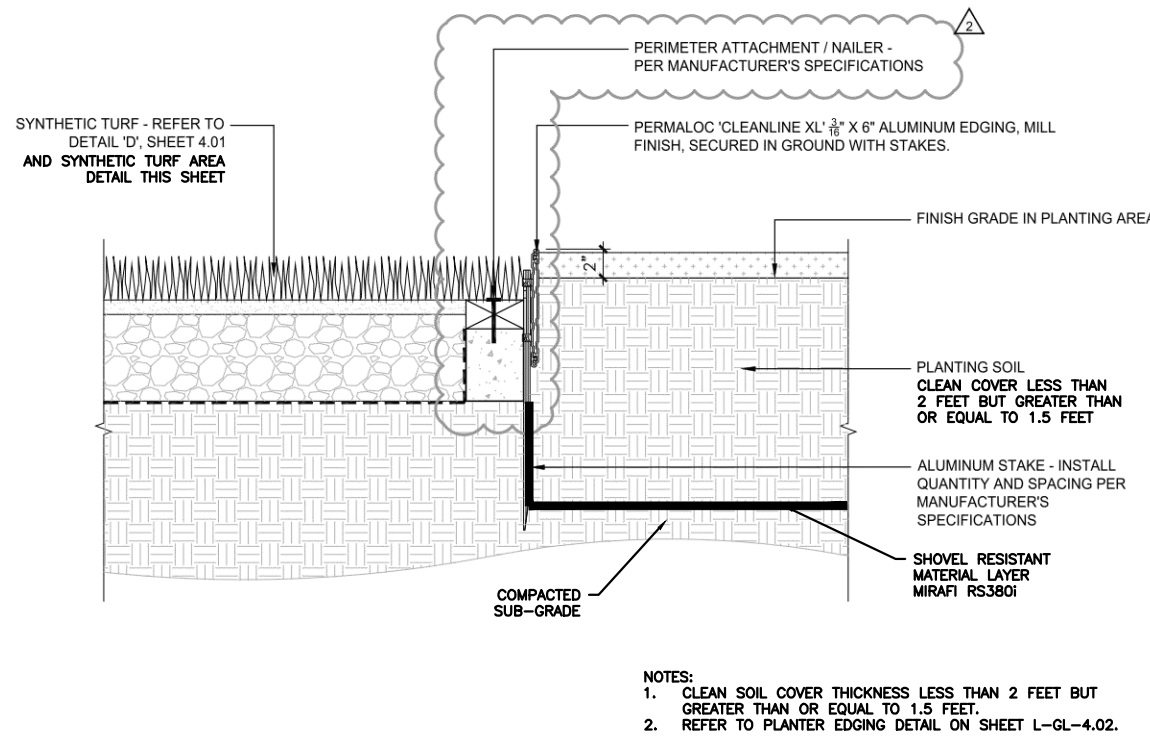
DETAIL A  
SYNTHETIC TURF AREA  
SCALE: N.T.S.



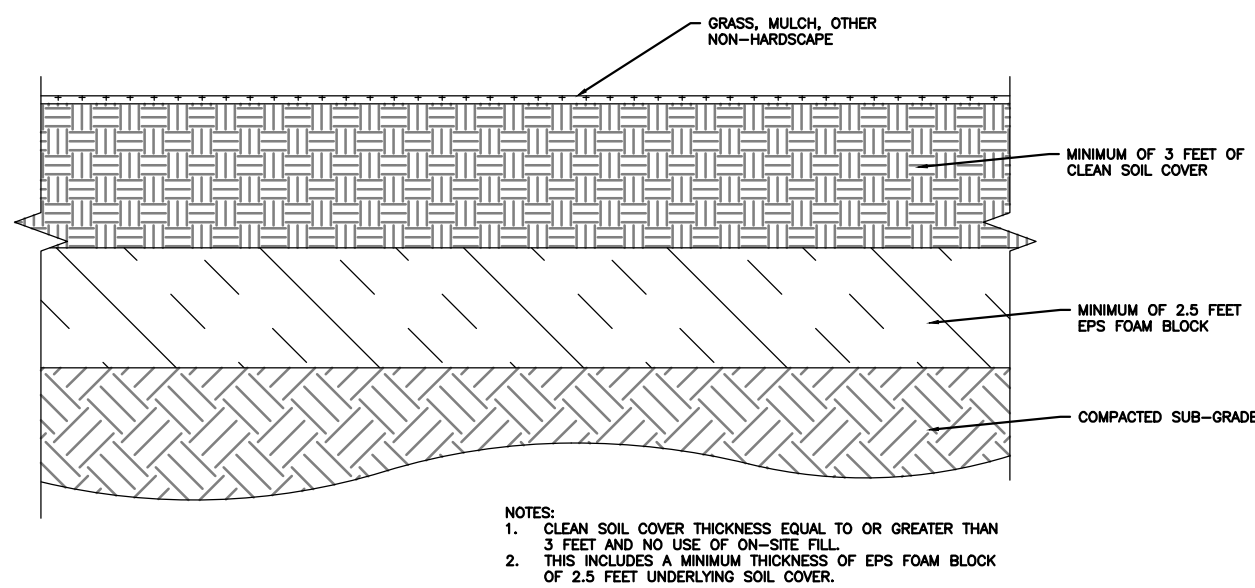
DETAIL B  
TYPICAL HARDSCAPE SECTION  
(PAVEMENT, BRICK WITH UNDERLYING  
BINDER COURSE, & CONCRETE)  
SCALE: N.T.S.



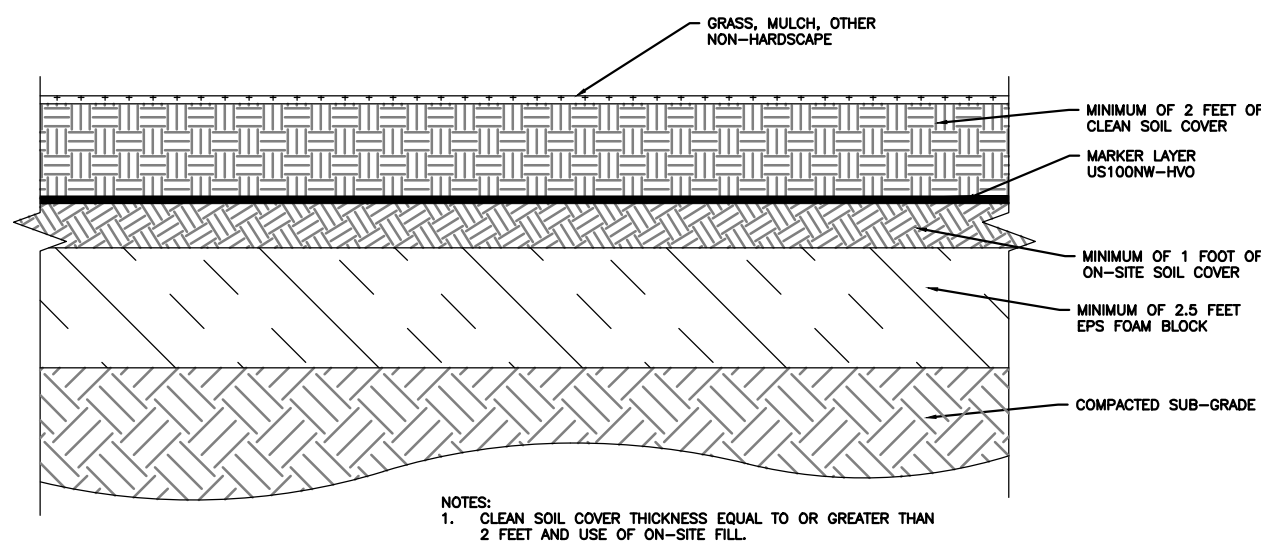
DETAIL C  
LANDSCAPE AREA AT PLANTER EDGING  
SCALE: N.T.S.



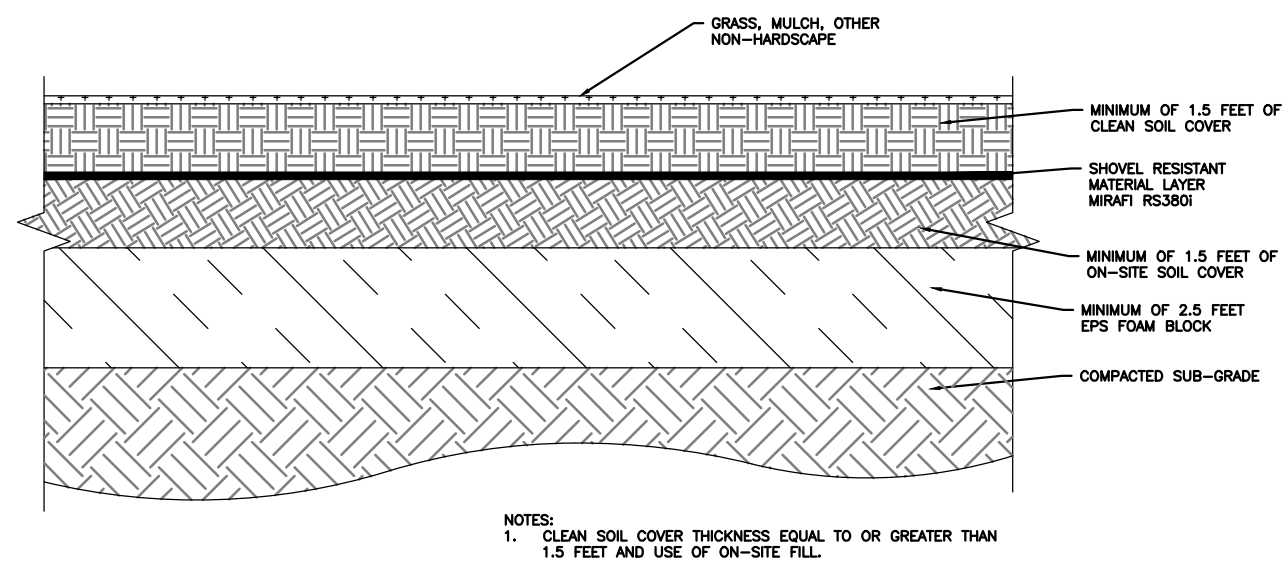
DETAIL D  
LANDSCAPE AREA AT PLANTER EDGING  
SCALE: N.T.S.



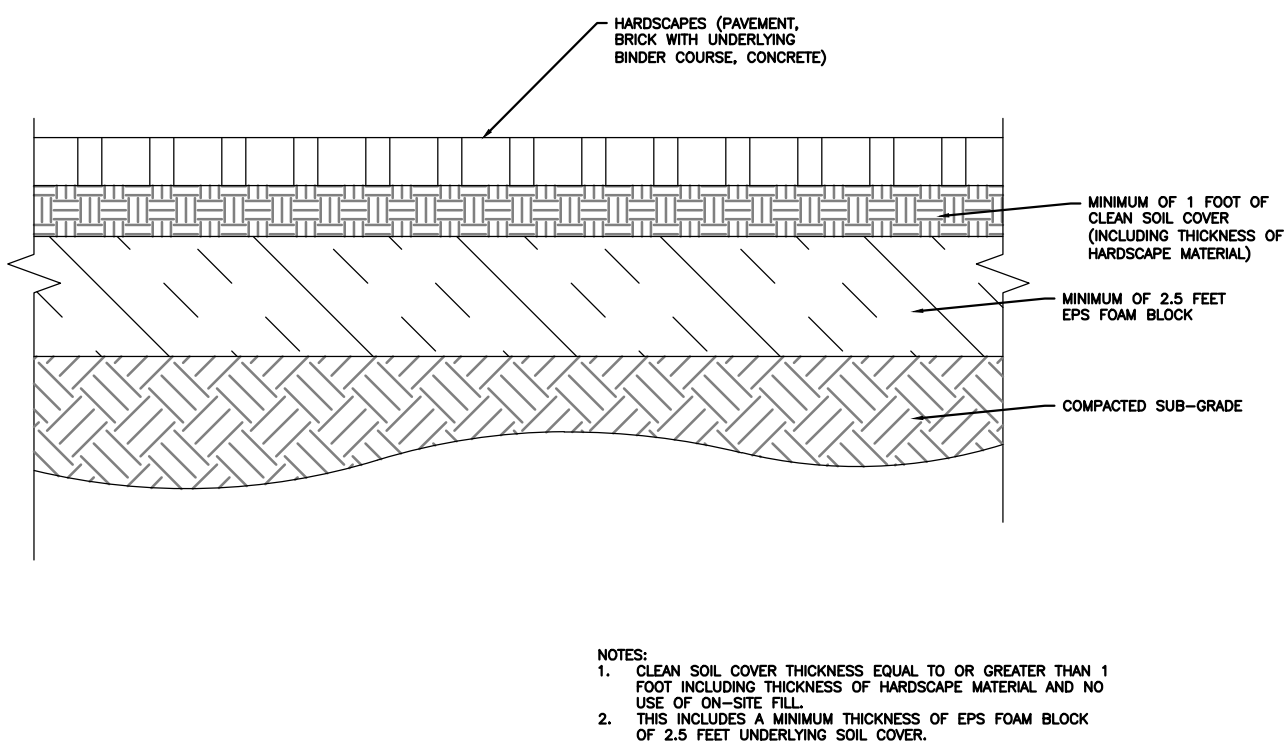
DETAIL E  
EPS FOAM BLOCK  
(GRASS, MULCH, OTHER NON-HARDSCAPE)  
SCALE: N.T.S.



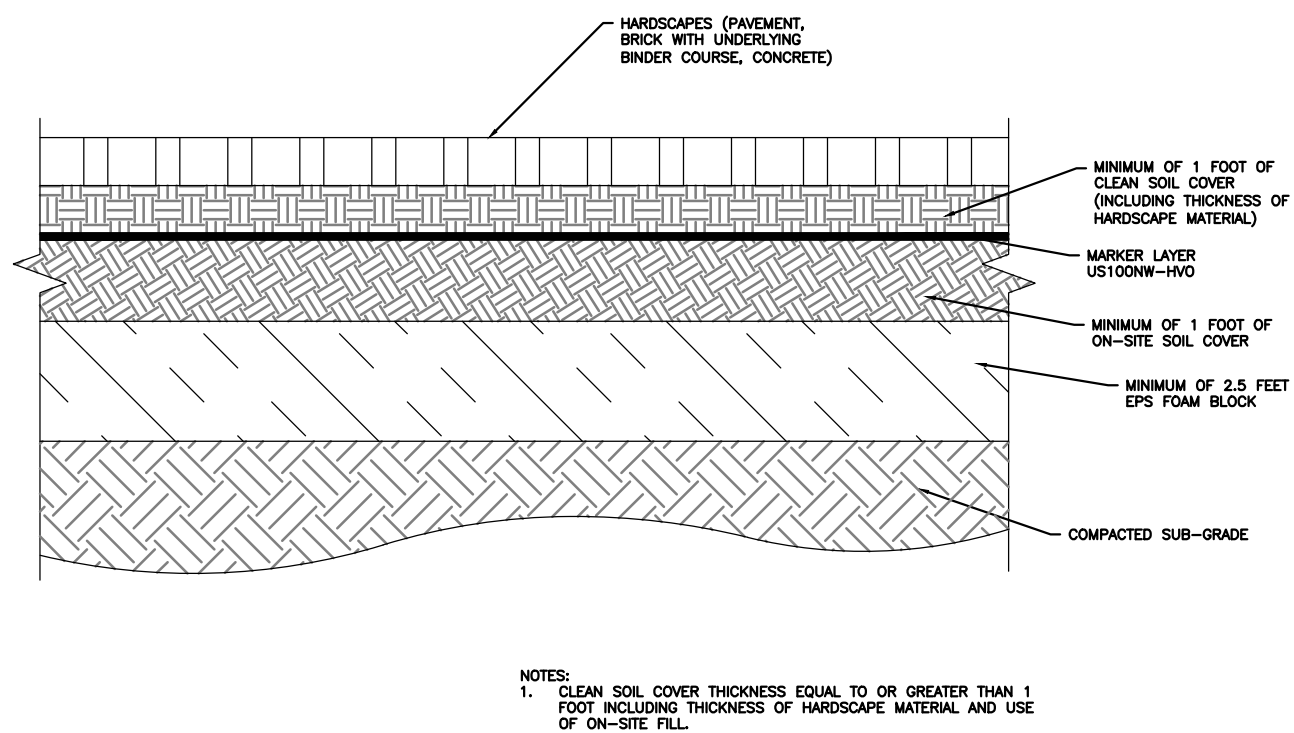
DETAIL F  
EPS FOAM BLOCK  
(GRASS, MULCH, OTHER NON-HARDSCAPE)  
SCALE: N.T.S.



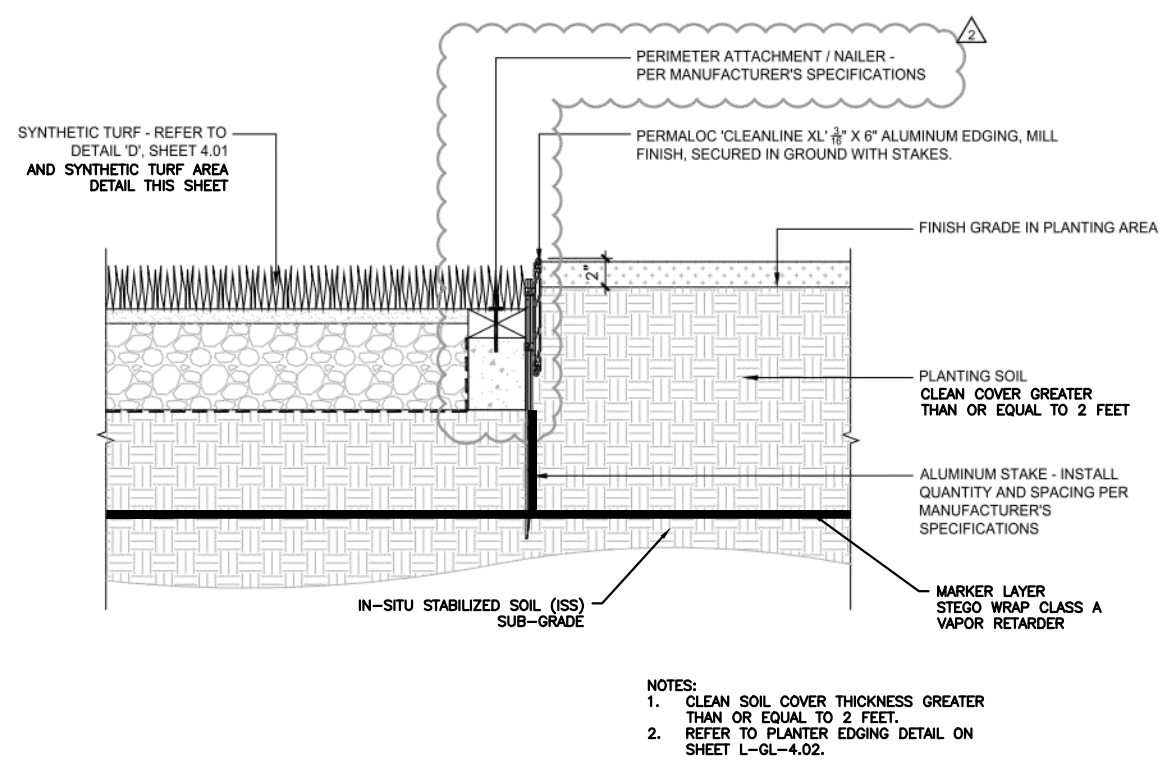
DETAIL G  
EPS FOAM BLOCK  
(GRASS, MULCH, OTHER NON-HARDSCAPE)  
SCALE: N.T.S.



DETAIL H  
EPS FOAM BLOCK AT HARDSCAPES  
(PAVEMENT, BRICK WITH UNDERLYING  
BINDER COURSE, CONCRETE)  
SCALE: N.T.S.



DETAIL I  
EPS FOAM BLOCK AT HARDSCAPES  
(PAVEMENT, BRICK WITH UNDERLYING  
BINDER COURSE, CONCRETE)  
SCALE: N.T.S.



DETAIL J  
LANDSCAPE AREA AT PLANTER EDGING  
(WITH ISS SUBGRADE)  
SCALE: N.T.S.

- REFERENCE NOTES:
- PEDESTRIAN CONCRETE PAVING DETAIL AND PEDESTRIAN PAVING ON ASPHALT BASE DETAIL FROM LIFESCAPES INTERNATIONAL, INC. PLAN NUMBERED L-GL-4.01 TITLED "CONSTRUCTION DETAILS" DATED BULLETIN 017 2016-12-16.
  - SYNTHETIC TURF AND PLANTER EDGING DETAILS FROM LIFESCAPES INTERNATIONAL, INC. PLAN NUMBERED L-GL-4.02 TITLED "CONSTRUCTION DETAILS" DATED BULLETIN 017 2016-12-16.


NO.	ISSUE/DESCRIPTION	BY	DATE
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.			
WYNN BOSTON HARBOR 1 HORIZON WAY EVERETT, MASSACHUSETTS			
CLEAN SOIL COVER OPTIONS			
PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: WYNN MA, LLC	
PROJ MGR: DEL	REVIEWED BY: MMS	CHECKED BY: LF	FIGURE 3
DESIGNED BY: MMS	DRAWN BY: JJZ	SCALE: AS SHOWN	
DATE: OCT 13, 2017	PROJECT NO. 01.0171521.52	REVISION NO.	



© 2016 - GZA GeoEnvironmental, Inc. GZA--\\Branch Offices\\01\\01.0171521.00 Everett Land Development\\Figures and CAD\\Remediation CAD\\RAM CAD for MS\\Clean Cover Options 082517.dwg [FIG 3--AIR MON] September 26, 2017 -- 11:56am joshua.zoll



NOTES:  
1. AIR MONITORING STATIONS 1 AND 2 WILL BE REMOVED ON OR ABOUT OCTOBER 15, 2017.

NO.	ISSUE/DESCRIPTION			BY	DATE					
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.										
WYNN BOSTON HARBOR 1 HORIZON WAY EVERETT, MASSACHUSETTS										
AIRLOGICS STATION LOCATIONS										
PREPARED BY:  GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com				PREPARED FOR:  WYNN MA, LLC						
PROJ MGR:	DEL	REVIEWED BY:	MMS	CHECKED BY:	LF	FIGURE  4				
DESIGNED BY:	MMS	DRAWN BY:	JJZ	SCALE:	AS SHOWN					
DATE:	PROJECT NO.		REVISION NO.							
SEPT 27, 2017		01.0171521.52								





## **APPENDIX A – LIMITATIONS**



## USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

## STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.
4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

## SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

## COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.





## SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.
9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.
10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

## INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

## ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

## ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

## CONCEPTUAL SITE MODEL

14. Our opinions were developed, in part, based upon a comparison of site data to conditions anticipated within our Conceptual Site Model (CSM). The CSM is based on available information, and professional judgment. There are rarely sufficient data to develop a unique CSM. Therefore observations over time, and/or space, may vary from those depicted in the CSM provided in this report. In addition, the CSM should be evaluated and refined (as appropriate) whenever significant new information and/or data is obtained.

## RISK CHARACTERIZATION

15. Our risk evaluation was performed in accordance with generally accepted practices of appropriate Federal and/or state regulatory agencies, and of other consultants undertaking similar studies at the same time, for similar purposes, and under similar circumstances. The findings of the risk evaluation are dependent on the numerous assumptions and uncertainties inherent in the risk characterization process. Sources of the uncertainty may include Site conditions; Site use; the nature, extent, concentration and distribution of contaminants; and the available toxicity and/or health/risk based regulatory information. Consequently, the findings of the risk characterization are not an absolute



characterization of actual risks; but rather serve to highlight potential incremental risks associated with activities indicated in the Report. Actual risks may be other than indicated in the Report.



## **APPENDIX B – TRANSMITTAL FORM BWSC106**



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC 106

RELEASE ABATEMENT MEASURE (RAM)  
TRANSMITTAL FORM

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

A. SITE LOCATION:

1. Site Name/Location Aid: EVERETT STAGING YARD
2. Street Address: 1 HORIZON WAY
3. City/Town: EVERETT 4. Zip Code: 021490000
- ☒ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category.
- ☐ a. Tier I ☐ b. Tier ID ☒ c. Tier II

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial RAM Plan (if previously submitted): 5/3/2016  
(mm/dd/yyyy)
- ☐ 2. Submit an **Initial Release Abatement Measure (RAM) Plan**.
- ☐ a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.
- b. Specify type of permanent structure: (check all that apply) ☐ i. School ☐ ii. Residential ☐ iii. Commercial  
☐ iv. Industrial ☐ v. Other Specify: \_\_\_\_\_
- ☒ 3. Submit a **Modified RAM Plan** of a previously submitted RAM Plan.
- ☐ 4. Submit a **RAM Status Report**.
- ☐ 5. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)
- a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
- b. Frequency of Submittal:
- ☐ i. A Remedial Monitoring Report(s) submitted every six months, concurrent with a RAM Status Report.
- ☐ ii. A Remedial Monitoring Report(s) submitted annually, concurrent with a RAM Status Report.
- c. Number of Remedial Systems and/or Monitoring Programs: \_\_\_\_\_
- A separate BWSC106A, RAM Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.
- ☐ 6. Submit a **RAM Completion Statement**.
- ☐ 7. Submit a **Revised RAM Completion Statement**.
8. Provide Additional RTNs:
- ☒ a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.
- b. Provide the additional Release Tracking Number(s) covered by this RAM Submittal. 3 - 17760 3 - 1850
- ☐ 9. Include in the **RAM Plan** or **Modified RAM Plan** a **Plan for the Application of Remedial Additives** near a sensitive receptor, pursuant to 310 CMR 40.0046(3).

(All sections of this transmittal form must be filled out unless otherwise noted above)



**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC 106**

**RELEASE ABATEMENT MEASURE (RAM)  
TRANSMITTAL FORM**

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

**C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT RAM:**

1. Media Impacted and Receptors Affected: (check all that apply)
- |   |   |   |
|---|---|---|
| <input type="checkbox"/> a. Paved Surface           | <input type="checkbox"/> b. Basement          | <input type="checkbox"/> c. School                    |
| <input type="checkbox"/> d. Public Water Supply     | <input type="checkbox"/> e. Surface Water     | <input type="checkbox"/> f. Zone 2                    |
| <input type="checkbox"/> g. Private Well            | <input type="checkbox"/> h. Residence         | <input checked="" type="checkbox"/> i. Soil           |
| <input checked="" type="checkbox"/> j. Ground Water | <input type="checkbox"/> k. Sediments         | <input type="checkbox"/> l. Wetland                   |
| <input type="checkbox"/> m. Storm Drain             | <input type="checkbox"/> n. Indoor Air        | <input type="checkbox"/> o. Air                       |
| <input type="checkbox"/> p. Soil Gas                | <input type="checkbox"/> q. Sub-Slab Soil Gas | <input type="checkbox"/> r. Critical Exposure Pathway |
| <input type="checkbox"/> s. NAPL                    | <input type="checkbox"/> t. Unknown           |   |
| <input type="checkbox"/> u. Others                  | Specify: _____                                |   |
2. Sources of the Release or TOR: (check all that apply)
- |  |   |                                     |
|--|---|-------------------------------------|
| <input type="checkbox"/> a. Transformer  | <input type="checkbox"/> b. Fuel Tank         | <input type="checkbox"/> c. Pipe    |
| <input type="checkbox"/> d. OHM Delivery | <input type="checkbox"/> e. AST               | <input type="checkbox"/> f. Drums   |
| <input type="checkbox"/> g. Tanker Truck | <input type="checkbox"/> h. Hose              | <input type="checkbox"/> i. Line    |
| <input type="checkbox"/> j. UST          | Describe: _____                               | <input type="checkbox"/> k. Vehicle |
| <input type="checkbox"/> l. Boat/Vessel  |   |                                     |
| <input type="checkbox"/> m. Unknown      | <input checked="" type="checkbox"/> n. Other: | HISTORIC FILL AND MANUFACTURING     |
3. Type of Release or TOR: (check all that apply)
- |  |   |   |                                      |
|--|---|---|--------------------------------------|
| <input type="checkbox"/> a. Dumping      | <input type="checkbox"/> b. Fire              | <input type="checkbox"/> c. AST Removal | <input type="checkbox"/> d. Overfill |
| <input type="checkbox"/> e. Rupture      | <input type="checkbox"/> f. Vehicle Accident  | <input type="checkbox"/> g. Leak        | <input type="checkbox"/> h. Spill    |
| <input type="checkbox"/> i. Test Failure | <input type="checkbox"/> j. TOR Only          |   |                                      |
| <input type="checkbox"/> k. UST Removal  | Describe: _____                               |   |                                      |
| <input type="checkbox"/> l. Unknown      | <input checked="" type="checkbox"/> m. Other: | HISTORIC FILL AND MANUFACTURING         |                                      |
4. Identify Oils and Hazardous Materials Released: (check all that apply)
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> a. Oils         | <input checked="" type="checkbox"/> b. Chlorinated Solvents |
| <input checked="" type="checkbox"/> c. Heavy Metals | <input checked="" type="checkbox"/> d. Others               |
- Specify: PCBS, ASBESTOS-CONTAINING MATERIAL

**D. DESCRIPTION OF RESPONSE ACTIONS:** (check all that apply, for volumes list cumulative amounts)

- |   |   |
|---|---|
| <input type="checkbox"/> 1. Assessment and/or Monitoring Only                 | <input type="checkbox"/> 2. Temporary Covers or Caps                        |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials  | <input type="checkbox"/> 4. Temporary Water Supplies                        |
| <input type="checkbox"/> 5. Structure Venting System/HVAC Modification System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery                          | <input type="checkbox"/> 8. Fencing and Sign Posting                        |
| <input type="checkbox"/> 9. Groundwater Treatment Systems                     | <input type="checkbox"/> 10. Soil Vapor Extraction                          |
| <input type="checkbox"/> 11. Remedial Additives                               | <input type="checkbox"/> 12. Air Sparging                                   |
| <input type="checkbox"/> 13. Active Exposure Pathway Mitigation System        | <input type="checkbox"/> 14. Passive Exposure Pathway Mitigation System     |
| <input type="checkbox"/> 15. Monitored Natural Attenuation                    | <input type="checkbox"/> 16. In-Situ Chemical Oxidation                     |



RELEASE ABATEMENT MEASURE (RAM)  
TRANSMITTAL FORM

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

**D. DESCRIPTION OF RESPONSE ACTIONS (cont.):** (check all that apply, for volumes list cumulative amounts)

☐ 17. Excavation of Contaminated Soils

<input type="checkbox"/> a. Re-use, Recycling or Treatment	<input type="checkbox"/> i. On Site	Estimated volume in cubic yards	_____
	<input type="checkbox"/> ii. Off Site	Estimated volume in cubic yards	_____
iia. Receiving Facility: _____	Town: _____	State: _____	
iib. Receiving Facility: _____	Town: _____	State: _____	
iii. Describe: _____			

<input type="checkbox"/> b. Store	<input type="checkbox"/> i. On Site	Estimated volume in cubic yards	_____
	<input type="checkbox"/> ii. Off Site	Estimated volume in cubic yards	_____
iia. Receiving Facility: _____	Town: _____	State: _____	
iib. Receiving Facility: _____	Town: _____	State: _____	

<input type="checkbox"/> c. Landfill	<input type="checkbox"/> i. Cover	Estimated volume in cubic yards	_____
Receiving Facility: _____	Town: _____	State: _____	
	<input type="checkbox"/> ii. Disposal	Estimated volume in cubic yards	_____
Receiving Facility: _____	Town: _____	State: _____	

☐ 18. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: \_\_\_\_\_

b. Receiving Facility: \_\_\_\_\_ Town: \_\_\_\_\_ State: \_\_\_\_\_

c. Receiving Facility: \_\_\_\_\_ Town: \_\_\_\_\_ State: \_\_\_\_\_

☐ 19. Removal of Other Contaminated Media:

a. Specify Type and Volume: \_\_\_\_\_

b. Receiving Facility: \_\_\_\_\_ Town: \_\_\_\_\_ State: \_\_\_\_\_

c. Receiving Facility: \_\_\_\_\_ Town: \_\_\_\_\_ State: \_\_\_\_\_

☒ 20. Other Response Actions:

Describe: MODIFICATION OF PROPOSED PROTECTIVE SOIL BARRIERS AND CAPS, AND PERIMETER AIR MONITORING

☐ 21. Use of Innovative Technologies:

Describe: \_\_\_\_\_





Massachusetts Department of Environmental Protection  
*Bureau of Waste Site Cleanup*

**BWSC 106**

**RELEASE ABATEMENT MEASURE (RAM)  
TRANSMITTAL FORM**

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

**E. LSP SIGNATURE AND STAMP :**

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Status Report** and/or **Remedial Monitoring Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply (ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Completion Statement** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal:

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 8107  
2. First Name: LAWRENCE 3. Last Name: FELDMAN  
4. Telephone: 7812783700 5. Ext.: 6. Email:  
7. Signature:  
8. Date: 9. LSP Stamp:  
(mm/dd/yyyy)





Massachusetts Department of Environmental Protection  
*Bureau of Waste Site Cleanup*

**BWSC 106**

**RELEASE ABATEMENT MEASURE (RAM)  
TRANSMITTAL FORM**

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

**F. PERSON UNDERTAKING RAM:**

1. Check all that apply: ☒ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: WYNN MA LLC
3. Contact First Name: ROBERT 4. Last Name: DESALVIO
5. Street: 101 STATION LANDING 2ND FLOOR 6. Title: PRESIDENT
7. City/Town: MEDFORD 8. State: MA 9. ZIP Code: 021550000
10. Telephone: 8577707801 11. Ext.:  12. Email:

**G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:**

☐ Check here to change relationship

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter  
☒ e. Other RP or PRP Specify: ELIGIBLE OWNER/OPERATOR
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking RAM Specify Relationship:

**H. REQUIRED ATTACHMENT AND SUBMITTALS:**

- ☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC108).
- ☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.
- ☐ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to [bwsc.edep@state.ma.us](mailto:bwsc.edep@state.ma.us).
- ☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.
- ☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

**BWSC 106**

**RELEASE ABATEMENT MEASURE (RAM)  
TRANSMITTAL FORM**

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

**I. CERTIFICATION OF PERSON UNDERTAKING RAM:**

1. I, \_\_\_\_\_, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: \_\_\_\_\_ 3. Title: PRESIDENT  
(Signature)

4. For: WYNN MA LLC 5. Date: \_\_\_\_\_  
(Name of person or entity recorded in Section F) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: \_\_\_\_\_  
8. City/Town: \_\_\_\_\_ 9. State: \_\_\_\_\_ 10. ZIP Code: \_\_\_\_\_  
11. Telephone: \_\_\_\_\_ 12. Ext.: \_\_\_\_\_ 13. Email: \_\_\_\_\_

**YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER  
BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT  
SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM,  
YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE**

Date Stamp (DEP USE ONLY:)





## **APPENDIX C - MATERIAL INFORMATION AND TESTING DATA- GEOSYNTHETICS**

# Mirafi® FW700



Mirafi® FW700 geotextile is composed of high-tenacity monofilament polypropylene yarns, which are woven into a stable network such that the yarns retain their relative position. Mirafi® FW700 geotextile is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP). NTPEP Listed

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	370 (1647)	250 (1113)
Grab Tensile Elongation	ASTM D4632	%	15	15
Trapezoid Tear Strength	ASTM D4533	lbs (N)	100 (445)	60 (267)
CBR Puncture Strength	ASTM D6241	lbs (N)	950 (4228)	
			Minimum Roll Value	
Percent Open Area	COE-02215	%	4	
Permittivity	ASTM D4491	sec <sup>-1</sup>	0.28	
Flow Rate	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	18 (733)	
			Maximum Opening Size	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	70 (0.212)	
			Minimum Test Value	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	90	

Physical Properties	Unit	Roll Size
Roll Dimensions (width x length)	ft (m)	12 x 300 (3.7 x 91)
Roll Area	yd <sup>2</sup> (m <sup>2</sup> )	400 (334)

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365 South Holland Drive  
Pendergrass, GA 30567

Tel 706 693 2226  
Tel 888 795 0808

Fax 706 693 4400  
[www.tencate.com](http://www.tencate.com)

FGS000054  
ETQR35



GAI-LAP-25-97

## Mirafi® RS380i



Mirafi® RS380i is a revolutionary geotextile with orange identification yarns and super high-tenacity polypropylene filaments formed into an innovative weave to provide superior reinforcement strength and soil interaction integrated with high water flow and soil retention capabilities.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program ([GAI-LAP](#)).

Mechanical Properties	Test Method	Unit	Typical Roll Value	Minimum Average Roll Value
Tensile Strength @ 2% strain (MD)	ASTM D4595	lbs/ft (kN/m)	720 (10.5)	600 (8.8)
Tensile Strength at 2% Strain (CD)	ASTM D4595	lbs/ft (kN/m)	1200 (17.5)	1020 (14.9)
Tensile Strength @ 5% strain (MD)	ASTM D4595	lbs/ft (kN/m)	2100 (30.6)	1800 (26.3)
Tensile Strength @ 5% strain (CD)	ASTM D4595	lbs/ft (kN/m)	2580 (37.6)	2256 (32.9)
Flow Rate	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	85 (3463)	75 (3056) <sup>1</sup>
Permittivity	ASTM D4491	sec <sup>-1</sup>	1.2	0.9 <sup>1</sup>
			Typical Roll Value	
Pore Size 0 <sub>95</sub>	ASTM D6767	microns	365	
Pore Size 0 <sub>50</sub>	ASTM D6767	microns	185	
<b>Index Properties</b>			Maximum Opening Size	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	50 (0.30)	40 (0.425)
			Minimum Test Value	
Interaction Coefficient <sup>2</sup>	ASTM D6706	--	0.89	
Factory Sewn Seam	ASTM D4884	lbs/ft (kN/m)	2700 (39.4)	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	90	

<sup>1</sup> Minimum Roll Value

<sup>2</sup> Interaction Coefficient value is for sand or gravel based on testing conducted by SGI Testing Services.

Physical Properties	Unit	Roll Sizes	
Roll Dimensions (width x length)	ft (m)	15 x 300 (4.57 x 91)	17 x 300 (5.2 x 91)
Roll Area	yd <sup>2</sup> (m <sup>2</sup> )	500 (419)	567 (474)

U.S. Patent 8,333,220 and Pending

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# Stego® Wrap Class A Vapor Retarder

STEGO INDUSTRIES, LLC



**Vapor Retarders**  
**07 26 00, 03 30 00**

## 1. Product Name

**Stego Wrap Class A  
Vapor Retarder**

## 2. Manufacturer

Stego Industries, LLC  
216 Avenida Fabricante, Suite 101  
San Clemente, CA 92672  
Sales, Technical Assistance  
Ph: (877) 464-7834  
Fx: (949) 257-4113  
www.stegoindustries.com

## 3. Product Description

USES: Stego Wrap Class A is used as an exceptional vapor retarder.  
COMPOSITION: Stego Wrap Class A is a multi-layer plastic extrusion manufactured with only high grade prime, virgin, polyolefin resins.  
ENVIRONMENTAL FACTORS: Stego Wrap Class A can be used in systems for the control of soil gases (radon, methane), soil poisons (oil by-products) and sulfates.

## 5. Installation

UNDER SLAB: Unroll Stego Wrap Class A over an aggregate, sand or tamped earth base. Overlap all seams a minimum of six inches and tape using Stego Tape or Crete Claw® Tape. All penetrations must be sealed using a combination of Stego Wrap and Stego accessories.

For additional information, please refer to Stego's complete installation instructions.

## 6. Availability & Cost

Stego Wrap Class A is available nationally via building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' sales department.

## 7. Warranty

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control,

Stego Industries does not guarantee results from the use of the information provided and disclaims all liability from any loss or damage. NO WARRANTY, EXPRESS, IMPLIED OR STATUTORY, IS GIVEN AS TO THE MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE WITH RESPECT TO THE PRODUCTS REFERRED TO. Please see [www.stegoindustries.com/legal](http://www.stegoindustries.com/legal).

## 8. Maintenance

None required.

## 9. Technical Services

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries' technical assistance department or via the website.

## 10. Filing Systems

- [www.stegoindustries.com](http://www.stegoindustries.com)
- Buildsite
- 4Specs



## 4. Technical Data

**TABLE 1: PHYSICAL PROPERTIES OF STEGO WRAP CLASS A VAPOR RETARDER**

PROPERTY	TEST	RESULTS
Under Slab Vapor Retarders	ASTM E1745 Class A, B & C – Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	Exceeds Class A, B & C
Water Vapor Permeance	ASTM F1249 – Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.0254 perms
Puncture Resistance	ASTM D1709 – Test Methods for Impact Resistance of Plastic Film by Free-Falling Dart Method	3006 grams
Tensile Strength	ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting	50.60 lbf/in.
Permeance After Conditioning (ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking ASTM E154 Section 11, F1249 – Permeance after heat conditioning ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning ASTM E154 Section 13, F1249 – Permeance after soil organism exposure	0.0258 perms 0.0259 perms 0.0241 perms 0.0245 perms
Thickness		10 mils
Roll Dimensions		14 ft. wide x 210 ft. long or 2,940 ft <sup>2</sup>
Roll Weight		140 lbs.

Note: perm unit = grains/(ft<sup>2</sup> \*hr\* in.Hg)





# US CONSTRUCTION FABRICS LLC

8 Ledge Rd, Windham, NH 03087

(603) 893-5480, Fax (603) 893-2154

[www.usconstructionfabrics.com](http://www.usconstructionfabrics.com)

**CONSTRUCTION FABRICS, LINERS, & ENVIRONMENTAL PRODUCTS**

## GEOTEX<sup>®</sup> 401OR

## Product Data

**GEOTEX<sup>®</sup> 401OR** is a polypropylene, staple fiber, needlepunched nonwoven geotextile produced by Propex, and will meet the following Typical Values when tested in accordance with the methods listed below. The fibers are needed to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to biological and chemical environments normally found in soils.

**GEOTEX 401OR** conforms to the property values listed below<sup>1</sup>. Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

Typical Values<sup>2</sup>

PROPERTY	TEST METHOD	ENGLISH	METRIC
<b>ORIGIN OF MATERIALS</b>			
% U.S. Manufactured Inputs		100%	100%
% U.S. Manufactured		100%	100%
<b>MECHANICAL</b>			
Tensile Strength (Grab)	ASTM D-4632	120 lbs	534 N
Elongation	ASTM D-4632	70%	70%
CBR Puncture	ASTM D-6241	310 lbs	1380 N
Trapezoidal Tear	ASTM D-4533	50 lbs	222 N
<b>HYDRAULIC</b>			
Apparent Opening Size (AOS) <sup>3</sup>	ASTM D-4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D-4491	2.0 sec <sup>-1</sup>	2.0 sec <sup>-1</sup>
Water Flow Rate	ASTM D-4491	150 gpm/ft <sup>2</sup>	6112 l/min/m <sup>2</sup>
<b>ROLL SIZES</b>		15 ft x 360 ft	4.57 m x 109.8 m

### NOTES:

1. The property values listed above are effective 04/2011 and are subject to change without notice.
2. Values shown are in weaker principal direction. All values are typical based on the testing listed in the table.
3. Maximum average roll value.



**Propex Operating Company, LLC** · 6025 Lee Highway, Suite 425 · PO Box 22788 · Chattanooga, TN 37422

ph 423 899 0444 · ph 800 621 1273 · fax 423 899 7619

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