

June 24, 2019

Boston Conservation Commission C/O Amelia Croteau, Executive Secretary 1 City Hall Square, Room 709 Boston, MA 02201

Subject: United States Postal Service - Boston VMF

135 A Street

Boston, Massachusetts 02210

Pavement Improvements (USPS Project Number B71689)

Massachusetts Wetlands Protection Act - Request for Determination of

Applicability

Dear Commission Members:

The United States Postal Service (USPS) is proposing to conduct pavement improvements (resurfacing of existing parking lots and laneways) at its Boston Vehicle Maintenance Facility (VMF), located at the above-referenced address. On behalf of the USPS and in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00 / M.G.L. c. 131, §40), Gordon R. Archibald, Inc. (GRA) is hereby submitting a *Request for Determination of Applicability* (RDA) to the Boston Conservation Commission for review. The following materials constitute the RDA submission:

- One (1) original and two (2) copies of the signed Request for Determination of Applicability (WPA Form 1);
- One (1) full-size copy and two (2) reduced-size (11"x17") copies of the 30% Project Plans (10 Sheets) dated 6-24-19; and
- Two (2) copies of the *Project Description* report, including maps, photographs, and other supporting documentation.

Concurrent with this submission, one (1) complete set of the application materials listed above has been transmitted to the MassDEP Northeast Region Office in accordance with filing requirements.

June 24, 2019 Page 2 of 2

We trust that this submission package is complete for consideration during the next scheduled Conservation Commission meeting date of July 10, 2019. Should you have any questions or require additional information, please call us at your earliest convenience.

Sincerely,

GORDON R. ARCHIBALD, INC.

Kevin M. Nagle, P.E. Senior Civil Engineer

cc: MassDEP Northeast Region Office, Wilmington, MA (w/ enclosures)

Christopher DeFilippo, McKinnell, McKinnell & Taylor, Inc. (w/ enclosures)

Steven D. Overko, USPS Facilities (w/ enclosures)

F:\FILES\WORDPRO\1816 - USPS - Boston VMF\Wetlands RDA\RDA Trans Cover Letter 6_24_2019.docx



Massachusetts Department of Environmental ProtectionBureau of Resource Protection - Wetlands

Boston City/Town

WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your

cursor - do not use the return





1.	Applicant:		
	USPS Facilities - Northeast Repairs & Alterations	Steven D Ov	verko@usps.gov
	Name	E-Mail Address	
	955 Goffs Falls Road		
	Mailing Address		
	Manchester	NH	03103-9997
	City/Town	State	Zip Code
	603-644-4176		р
	Phone Number	Fax Number (if	applicable)
2.	Representative (if any):		
	Gordon R. Archibald, Inc.		
	Firm		
	Todd Ravenelle, P.E.	travenelle@	graengs.com
	Contact Name	E-Mail Address	
		L Mail Addicso	•
	200 Main Street Mailing Address		
		DI	22222
	Pawtucket City/Farmer	RI	02860 7:5 Code
	City/Town	State	Zip Code
	401-726-4084	401-728-153	
	Phone Number	Fax Number (if	applicable)
B. 1.	 Conservation Commission a. whether the area depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act. b. whether the boundaries of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated. c. whether the work depicted on plan(s) referenced below is subject to the Wetlands Protection Act. d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any municipal wetlands ordinance or bylaw of: City of Boston 		
	Name of Municipality e whether the following scope of alternatives is adec	guate for work in the	e Riverfront Area as
 e. whether the following scope of alternatives is adequate for work in the Riverfront Area as depicted on referenced plan(s). 		o ravolnone / nou do	

wpaform1.doc Page 1 of 4



Massachusetts Department of Environmental ProtectionBureau of Resource Protection - Wetlands

Boston City/Town

WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description

Boston City/Town	attached			
N/A Assessors Map/Plat Number b. Area Description (use additional paper, if necessary): U.S. Postal Service maintenance facility - vehicle parking areas and access aisles (see	attached			
Assessors Map/Plat Number b. Area Description (use additional paper, if necessary): U.S. Postal Service maintenance facility - vehicle parking areas and access aisles (see	attached			
b. Area Description (use additional paper, if necessary):U.S. Postal Service maintenance facility - vehicle parking areas and access aisles (see	attached			
U.S. Postal Service maintenance facility - vehicle parking areas and access aisles (see	attached			
, , , , , , , , , , , , , , , , , , ,	attached			
	U.S. Postal Service maintenance facility - vehicle parking areas and access aisles (see attached Project Description)			
c. Plan and/or Map Reference(s):				
Pavement Improvements, Boston VMF, 135 A Street, Boston, MA 02210, 6-24-	2019			
30% Submission Date Prepared by McKinnell McKinnell & Taylor Inc. and				
Title Date				
Gordon R. Archibald, Inc.(10 sheets)				
Title				
2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary	٠١٠			
Resurfacing and restriping of postal vehicle parking areas (see attached Project Description)				

wpaform1.doc Page 2 of 4



Massachusetts Department of Environmental ProtectionBureau of Resource Protection - Wetlands

Boston City/Town

WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

fro	Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant om having to file a Notice of Intent for all or part of the described work (use additional paper, if ecessary).
re	ne nature and scope project activities on USPS property are materially identical to the pair/resurfacing/reclamation of existing roadways within the right-of-way, which is considered to be "minor activity" under 310 CMR 10.02(2)(b)2.
a. Ri	If this application is a Request for Determination of Scope of Alternatives for work in the iverfront Area, indicate the one classification below that best describes the project.
	Single family house on a lot recorded on or before 8/1/96
	Single family house on a lot recorded after 8/1/96
	Expansion of an existing structure on a lot recorded after 8/1/96
	Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
	New agriculture or aquaculture project
	Public project where funds were appropriated prior to 8/7/96
	Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
	Residential subdivision; institutional, industrial, or commercial project
	Municipal project
	District, county, state, or federal government project
	Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.
	Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification bove (use additional paper and/or attach appropriate documents, if necessary.)
N	/A

wpaform1.doc Page 3 of 4



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Name and address of the property owner:

1

Boston City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

USPS Facilities - Northeast Repairs & Alterations C/O Steven D. Overko, Architect/Engineer Name 955 Goffs Falls Road Mailing Address Manchester City/Town NH 03103-9997 Zip Code State

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations. Digitally signed by Steven D Overko

	Date: 2019.06.17 10:49:30 -04'00'	6/17/19	
Signature of Applicant		Date	
		6724/19	
Signature of Representative (if any		Date	

Page 4 of 4 wpaform1.doc

BOSTON CONSERVATION COMMISSION

AND THE

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

MASSACHUSETTS WETLANDS PROTECTION ACT

REQUEST FOR DETERMINATION OF APPLICABILITY

PROJECT DESCRIPTION

FOR PROPOSED

PAVEMENT IMPROVEMENTS

AT THE

UNITED STATES POSTAL SERVICE
Boston VMF
135 A Street
Boston, Massachusetts 02210

Prepared by:

GORDON R. ARCHIBALD, INC. 200 Main Street Pawtucket, RI 02860

June 2019



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3.	Proposed Action	4
4.	Anticipated Impacts & Resource Protection	5

ATTACHMENTS

- A. Project Location Map (USGS, 1" = 1,500')
- B. Vicinity Map (1" = 400')
- C. FEMA Flood Hazard Zone Map (FIRMette)

APPLICATION MATERIALS BOUND SEPARATELY

- MassDEP WPA Form 1 Request for Determination of Applicability
- Site Plans: Pavement Improvements, Boston VMF, 135 A Street, Boston, Massachusetts 02210, 30% Submission prepared for the United States Postal Service Facilities Service Office by McKinnell, McKinnell, & Taylor Inc. and Gordon R. Archibald, Inc., 6-24-2019 (10 sheets)

F:\FILES\WORDPRO\1816 - USPS - Boston VMF\Wetlands RDA\Project Description for RDA June 2019.doc

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1. Project Purpose and Description

The United States Postal Service (USPS, Owner and Applicant) is proposing to conduct pavement resurfacing operations at its Boston Vehicle Maintenance Facility (VMF), located at 135 A Street in the City of Boston, Massachusetts. The location of the existing facility in the South Boston area is shown of the Project Location Map provided as Attachment A to this report.

The purpose of the proposed project is to restore the asphalt paved surfaces surrounding the VMF facility to a state of good repair. Due to the age and deteriorated condition of pavements within the parking areas flanking the VMF building, the USPS is proposing to resurface these lots with new bituminous asphalt base and surface courses, including full-depth pavement reclamation, trimming and fine grading, adjustment of drainage and other utility structures to grade, and pavement striping. No changes to the impervious surface cover of the site are proposed, and all existing drainage patterns will be maintained under post-development conditions.

As the area of the proposed work is in the general vicinity of Boston Harbor, it is understood that Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) may be applicable to the proposed project. Accordingly, Gordon R. Archibald, Inc. (GRA) is submitting herewith a Request for Determination of Applicability (RDA) to the Boston Conservation Commission on behalf of the USPS. Full- and reduced-scale site plans depicting the proposed work are provided along with the signed application, this Project Description, and other required documentation. Given the project's location, the limited nature of the work, and negligible potential for adverse impacts to natural resources, it is requested that the Boston Conservation Commission issue a Negative Determination so that the Applicant may proceed with the proposed project.

2. Existing Conditions

The Boston VMF is situated in a largely commercial/industrial area within the Fort Point District of South Boston, just south of the Interstate Route 90 (I-90) tunnel under Boston Harbor and to the immediate west of the Boston Convention and Exhibition Center (see attached Vicinity Map). The VMF property is accessed via a gated entrance off Medallion Avenue and is bound by chain link fencing around its entire perimeter, nearly all of which is protected by vehicular guardrail. As postal vehicle maintenance activities are contained to the service bays of the VMF building, use of paved areas around the facility is limited to vehicular access and parking of postal and employee vehicles (see Photos 1-4 below). The condition of these existing pavements currently ranges from fair to poor, with asphalt surfaces characterized by cracking, potholes, and spot patch applications.

An ancillary USPS parking lot (bound by A Street to the west, West Service Road Connector to the east, and Wormwood Street to the south) is also actively used at this location but is not part of the subject pavement resurfacing project. While previously accessible via the laneway that runs around the south side of the VMF, this lot is now separated from the VMF site by concrete barriers placed to block access.



Photo 1 – Medallion Avenue entrance looking west from inside VMF Lot (GRA Photo)

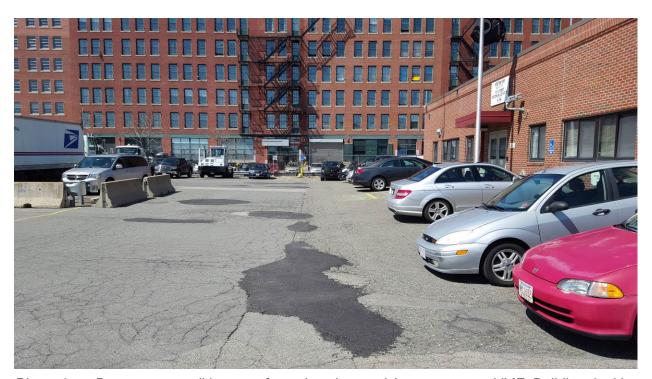


Photo 2 – Pavement conditions at front (southeasterly) entrance to VMF Building looking northwest (GRA Photo)



Photo 3 – Parking and maintenance bay doors along southeasterly side of VMF building looking northeast, with access laneway at right (GRA photo)



Photo 4 – Access laneway along southeasterly side of VMF looking southwest (GRA photo)

Through a review of available geospatial data for the project area (MassGIS, City of Boston), there are no freshwater or coastal wetland features in the immediate vicinity of the proposed project. The nearest coastal feature – Fort Point Channel – is approximately 1,000 feet northwest of the VMF. The entire project area is however located within the 100-year (1% annual chance, Zone AE) flood hazard area established by the Federal Emergency Management Agency (FEMA) – see Attachment C for mapping excerpt.

The paved VMF lots are served by legacy closed drainage systems that collect and convey site runoff off-site. Based on a review of record plans and collected survey data, collected stormwater is released via a storm main that exits the property at the intersection of Medallion Avenue and Binford Street, whereupon flows are presumed to enter the municipal drainage system, continue north/northwest along Binford Street, and release to Fort Point Channel. The USPS currently cleans and maintains existing drainage structures within the VMF property.

3. Proposed Action

Depicted on the attached site plans, the USPS is proposing to resurface approximately 24,000 square yards of existing bituminous pavements at the VMF site, along will removal and replacement of existing reinforced concrete pads. This work will include establishing proper erosion and sediment controls (including installation of inlet protection devices), removal of existing pavements by full-depth reclamation, and placement (including fine grading and compaction) of new hot mix asphalt (HMA) pavement base and surface courses. In addition to the above, existing catch basin inlets will be adjusted to finish grade, cleaned, and retrofitted with oil/debris separator hoods ("Snout" type with bio-skirt) on the outlet pipe.

There will be no change in the area of impervious surface cover upon completion of the project, as the extents of resurfacing will be limited to existing paved surfaces. The new pavement surface will be smooth-finished to match existing grades and all existing drainage structures will remain in place. Consequently, no materials changes to existing drainage patterns or runoff flow rates/volumes will occur as a result of the proposed work. Based on the limited nature and scope of proposed activities, as well as the retrofit improvements that will be installed in drainage inlets across the site, it is understood that MassDEP Stormwater Management Standards for new development are not applicable to the proposed work. Furthermore, as there will be no material changes in grade across the site (no cutting or filling), construction of the proposed pavement improvements will not affect the depths or extents of flood hazard areas.

Since the proposed project involves construction-phase activities with the potential to mobilize pollutants and sediments, appropriate best management practices will be implemented prior to the commencement of work and will be maintained for the duration of construction. All inlets will be provided with filter fabric inlet protection devices, consisting of filter bag inserts ("Silt Sack" or approved equal, see details) installed in all catch basins that receiving runoff from the area to be resurfaced. In the execution of the work, the contractor will be required to adhere to all applicable best management practices as set forth in the latest edition of the *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas* (MA Executive Office of Environmental Affairs, 1997/2003), as well as the erosion and sediment control notes included on the site plans.

4. Anticipated Impacts & Regulatory Applicability

By its nature and location, the proposed project will have negligible potential for impacts to resources regulated under the Massachusetts Wetlands Protection Act, particularly as all work all work will occur over an existing developed area (with no change in impervious cover) that is over 1,000 feet from the nearest natural coastal resource area. Furthermore, the project and its constituent activities are tantamount to the repair/resurfacing/reclamation of existing roadways within the right-of-way, which is considered to be a "minor activity" under the current Wetlands Protection Act Regulations (310 CMR 10.02(2)(b)2).

Consistent with the above-referenced section of the Regulations, all work will be performed "...in a manner so as to reduce the potential for any adverse impacts to the resource area during construction, and with post-construction measures implemented to stabilize any disturbed areas." Proper construction-phase erosion and sediment controls will be installed and maintained for the duration of the project, protecting closed drainage systems and receiving waters from potential short-term impacts. In full consideration of the above, it is requested that the Boston Conservation Commission issue a Negative Determination so that the USPS may complete the proposed pavement improvements at the Boston VMF.

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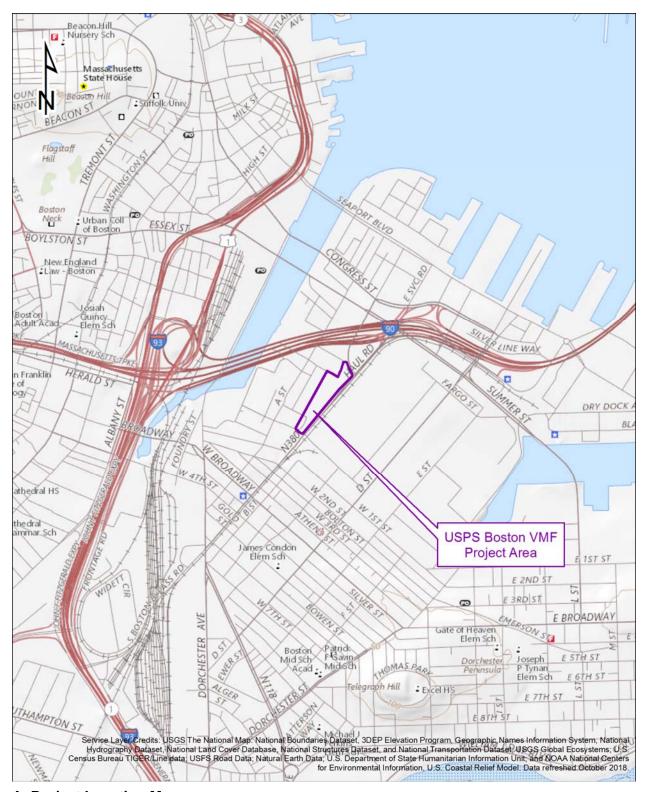
Attachments:

A. Project Location Map (USGS, 1" = 1,500')

B. Vicinity Map (1" = 400')

C. FEMA Flood Hazard Zone Map (FIRMette)

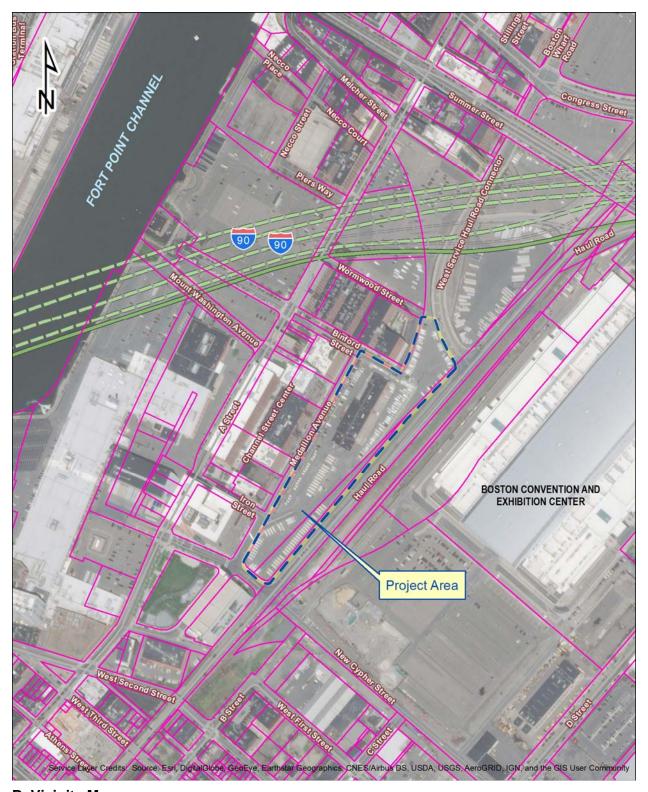
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A. Project Location Map

Scale: 1" = 1,500' • Sources: USGS National Map Service, MassGIS

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B. Vicinity Map

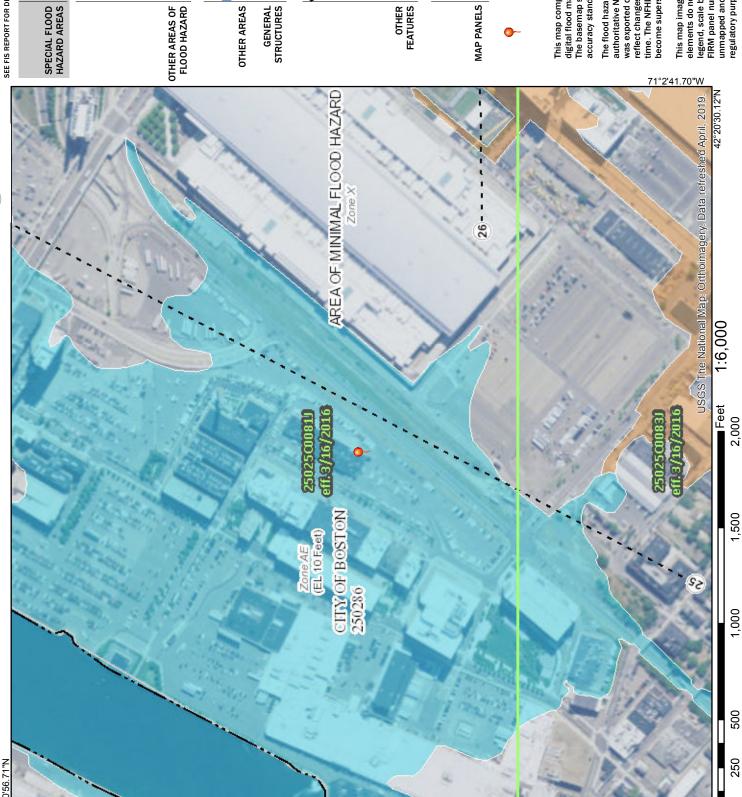
Scale: 1" = 400' • Sources: BostonMaps Open Data (parcel lines - magenta), MassGIS • Note: project area is generalized, see site plans for pavement resurfacing limits

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National Flood Hazard Layer FIRMette

W"81.91'E°17





Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

With BFE or Depth Zone AE, AO, AH, VE, AR

Without Base Flood Elevation (BFE)

0.2% Annual Chance Flood Hazard, Areas depth less than one foot or with drainage areas of less than one square mile zone x of 1% annual chance flood with average Regulatory Floodway

Future Conditions 1% Annual

Area with Reduced Flood Risk due to Chance Flood Hazard Zone X Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

NO SCREEN Area of Minimal Flood Hazard Zone X **Effective LOMRs**

Area of Undetermined Flood Hazard Zone D

Channel, Culvert, or Storm Sewer

GENERAL ----- Channel, Culvert, or Storn STRUCTURES | 1111111 Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Base Flood Elevation Line (BFE) Coastal Transect

Jurisdiction Boundary

Coastal Transect Baseline

Hydrographic Feature

Digital Data Available

No Digital Data Available

Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of The basemap shown complies with FEMA's basemap digital flood maps if it is not void as described below accuracy standards

authoritative NFHL web services provided by FEMA. This map reflect changes or amendments subsequent to this date and was exported on 6/18/2019 at 8:18:57 AM and does not time. The NFHL and effective information may change or The flood hazard information is derived directly from the become superseded by new data over time. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

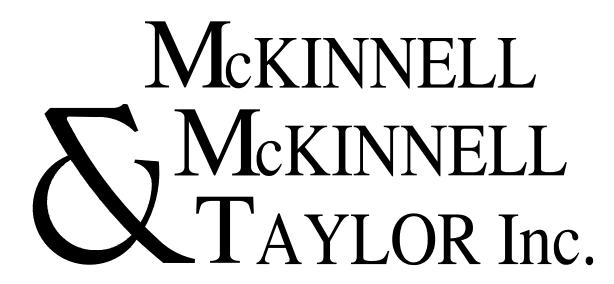
VEHICLE MAINTENANCE FACILITY 135 A STREET BOSTON, MA 02210-9998



FACILITIES - NORTHEAST R&A

6 GRIFFIN ROAD WINDSOR, CT 06006 - 0300

A/E FIRM

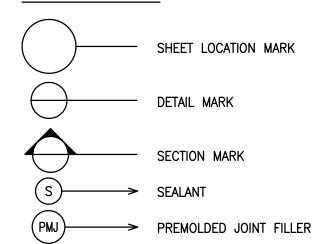


ARCHITECTS · ENGINEERS · PLANNERS POST OFFICE BOX 336 164 WASHINGTON STREET NORWELL, MA 02061 (781) 878-6223 (781) 878-8920

GENERAL NOTES

- 1. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE U.S.P.S TO MAINTAIN CUSTOMER ACCESS AT ALL TIMES.
- 2. ALL WORK BEING PERFORMED SHALL NOT IN ANY WAY INTERFERE WITH THE REGULAR OPERATION OF THE U.S.P.S. FACILITY. SECURITY SHALL BE MAINTAINED AT ALL TIMES.
- 3. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE FACILITY FOR ACCESS TO AND FROM THE FACILITY.
- 4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD BEFORE BEGINNING ANY WORK OR PURCHASING ANY MATERIAL OR EQUIPMENT.
- 5. THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS BEFORE SUBMITTING THEIR OFFER. NO EXTRA WILL BE ALLOWED FOR FAILURE TO COMPLY WITH THE ABOVE.
- 6. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT / ENGINEER OF ANY EXISTING CONDITION DISCOVERED DURING DEMOLITION THAT WILL INTERFERE WITH THE NEW WORK.

LEGEND



ABBREVIATIONS

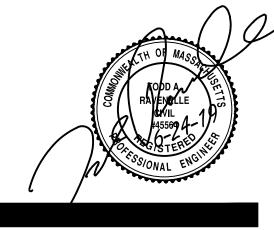
&	AND	MATL.	MATERIAL
@	AT	MAX.	MAXIMUM
DIA	DIAMETER	MFGR.	MANUFACTURER
	ABOVE FINISHED FLOOR	MIN.	
	ALUMINUM	M.O.	MASONRY OPENING
	AMERICAN NATIONAL STANDARDS INSTITUTE	MOD	MODIFIED
ADDDOV	ADDDOVIMATE ADDDOVIMATELY	MOD MTD	MOUNTED
APPROX.	APPROXIMATE, APPROXIMATELY		
B.O.	BOILOW OF	NO	NILIMOED
BD.	BOARD	NO.	NOT ADDITOADIE
BRG.	BEARING	N/A	METAL NUMBER NOT APPLICABLE ON CENTER
CCTV	CLOSED-CIRCUIT TELEVISION	0.0.	ON CENTER
Q.	CENTERI INF	O.D.	OUISIDE DIAMETER
ČLG.	CELLING	OPP.	
	BOTTOM OF BOARD BEARING CLOSED—CIRCUIT TELEVISION CENTERLINE CEILING CLEAR	P. LAM.	PLASTIC LAMINATE
	CONORETE MACONEY LINE	PART.	PARTITION, PARTIAL
CMU	CONCRETE MASONRY UNIT	PBSM	
COL.	COLUMN	PLYWD.	
COLS.	COLUMNS	P.O.	POST OFFICE
CONC.	CONCRETE		
CONT.	CONTINUOUS	P.O.S.	POINT OF SALE
C.O.	CONTRACTING OFFICER	PTD	PAINTED
D.S.	DOWNSPOUT	PL	PLATE
D.S. DIA.	DIAMETER	RECEP.	RECEPTACLE
		REF.	REFER, REFERENCE
DISP.	DISPLAY OR DISPENSER	REF. REQ'D	REQUIRED
DTL.	DETAIL	R.O.	ROUGH OPENING
E.W.C.	ELECTRICAL WATER COOLER ELECTRIC, ELECTRICAL FOLIAL	\$0 FT	SQUARE FEET
ELEC.	ELECTRIC, ELECTRICAL		SQUARE INCHES
EQ. EXP	EQUAL EXPANSION	SCW	
EXP	EXPANSION		
EXT.	EXTERIOR	5.5.	STAINLESS STEEL
F.E.	FIRE EXTINGUISHER	SHT.	SHEET
FF	FACTORY FINISH	SHTS.	SHEETS
FIN.	FINISH(ED)	SIM.	SIMILAR
F.O.	FACE OF	SPECS	SPECIFICATIONS
GA.	GAUGE	STL.	STEEL
			TONGUE AND GROOVE
G.C.	GENERAL CONTRACTOR	TELE.	TELEPHONE
GYP.	GYPSUM	THICK	THICKNESS
Н	HIGH		THRESHOLD
HB.	HOSE BIBB		
HDW	HARDWARE	T.O.	TOP OF
HGT.	HEIGHT	TYP	TYPICAL
НМ	HOLLOW METAL	U.O.N.	UNLESS OTHERWISE NOTED
HT.	HEIGHT	USPS	UNITED STATES POSTAL SERVICE
I.D.	INSIDE DIAMETER	VCT	VINYL COMPOSITION TILE
		VIF	VERIFY IN FIELD
i.e.	THAT IS	w.	WIDE
INSUL.	INSULATION	W/	WITH
INT	INTERIOR		
IRT	INTEGRATED RETAIL TERMINAL	WD	WOOD
J <u>A</u> N.	JANITOR	WWF	WELDED WIRE FABRIC
JŢ.	JOINT		
LB	POUND		

MATERIAL

MACHINE

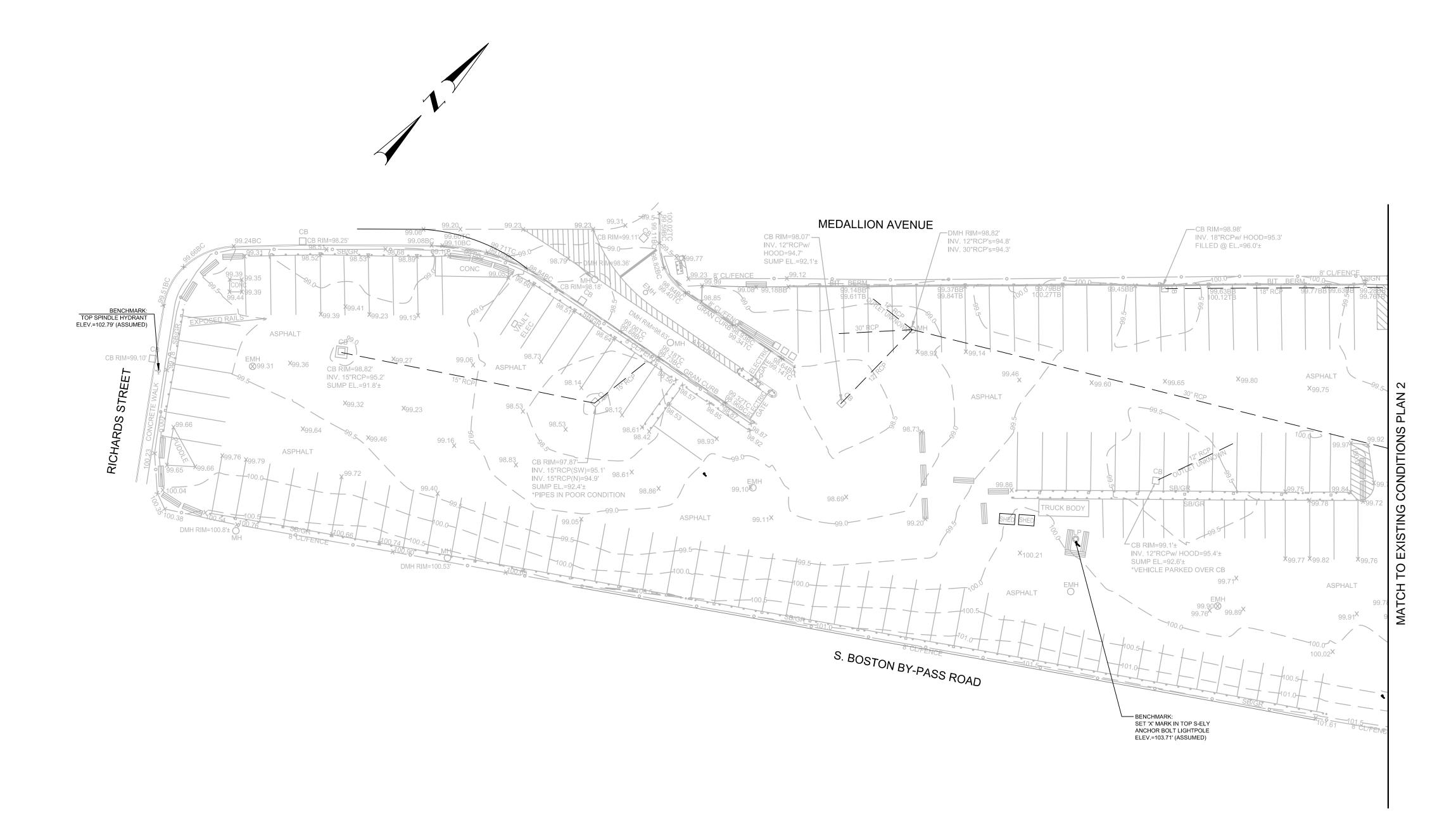
INDEX OF DRAWINGS

T1.01	TITLE SHEET
C1.01	EXISTING CONDITIONS PLAN 1
C1.02	EXISTING CONDITIONS PLAN 2
C1.03	GENERAL PLAN 1
C1.04	GENERAL PLAN 2
C1.05	GRADING & DRAINAGE PLAN 1
C1.06	GRADING & DRAINAGE PLAN 2
C1.07	NOTES AND LEGEND
C1.08	DETAILS 1
C1.09	DETAILS 2



Gordon R. Archibald, Inc. Civil and Environmental Engineers

Gordon R. Archibald, Inc.
Civil and Environmental Engineers
Pawtucket, Rhode Island



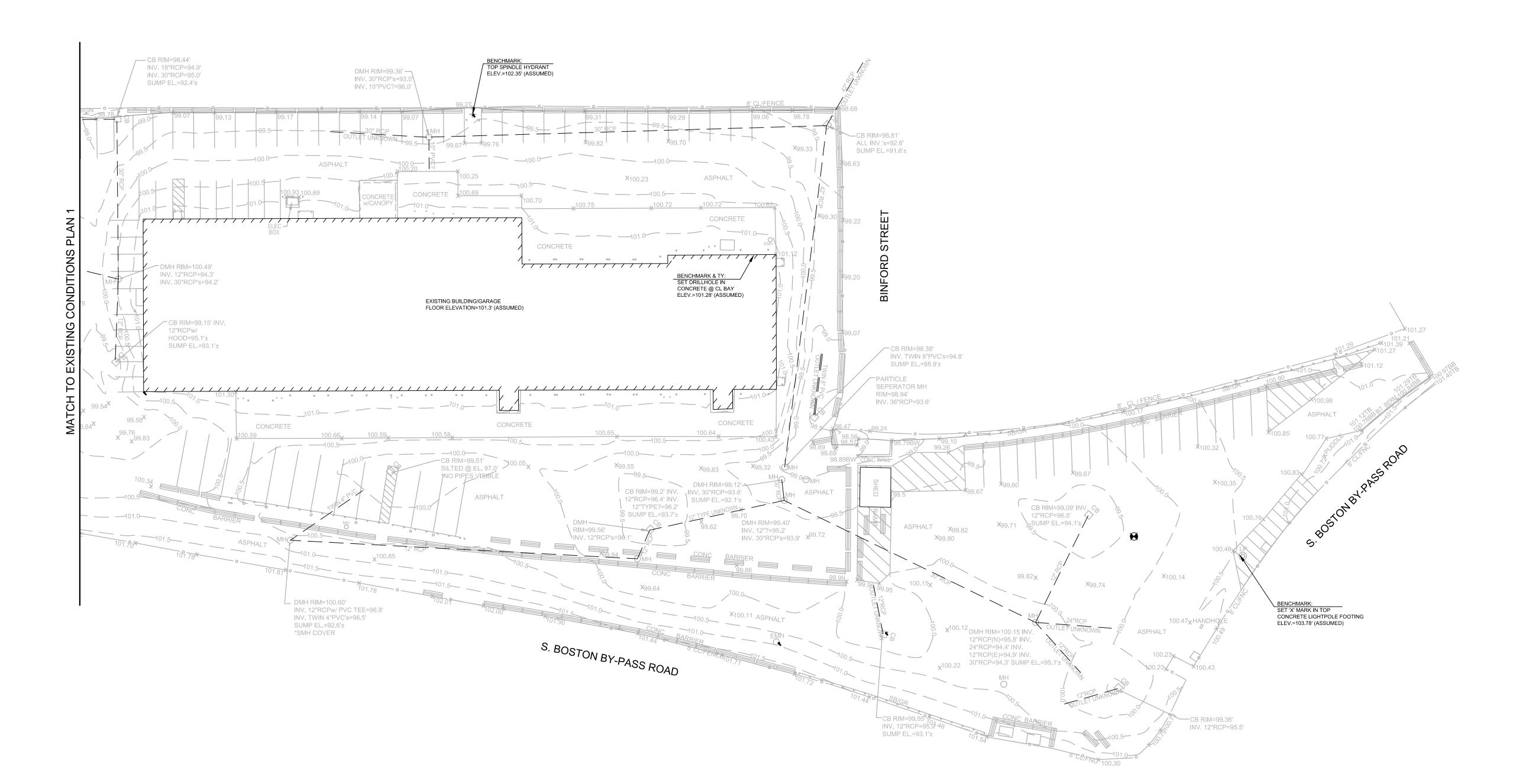
<u>LEGEND</u>

	EXISTING CONCRETE BARRIER
8' GL/FENCE	EXISTING 8' HIGH CHAIN LINK FENCE
<u>SB/GR</u>	EXISTING STEEL BEAM GUARDRAIL
 99.5	EXISTING CONTOUR
а	EXISTING ELECTRIC PEDESTAL
30" RCP	EXISTING DRAINAGE PIPE



Civil and Environmental Engineers

Pawtucket, Rhode Island

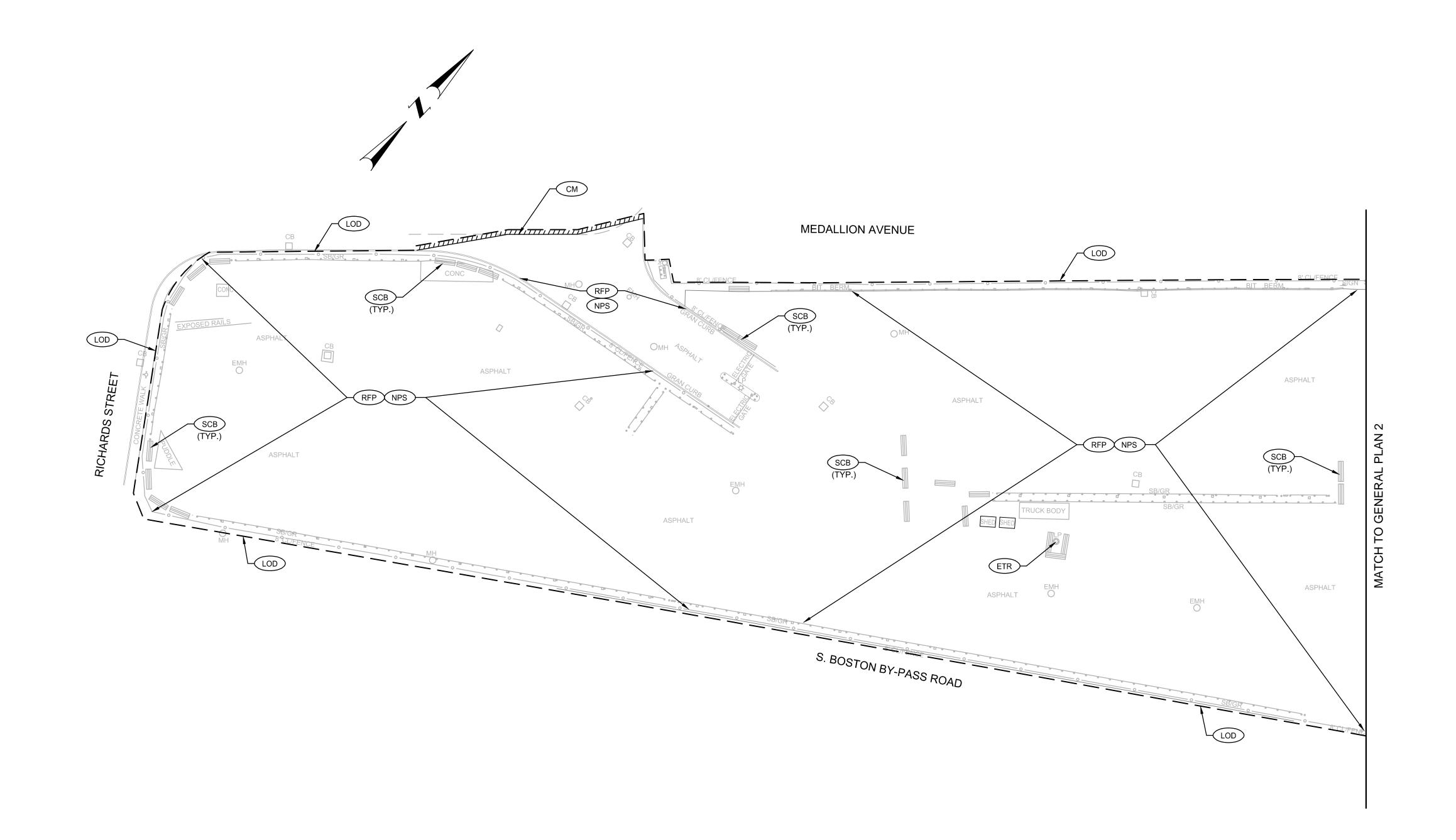


EXISTING CONCRETE BARRIER 8' GL/FENCE EXISTING 8' HIGH CHAIN LINK FENCE EXISTING STEEL BEAM GUARDRAIL EXISTING CONTOUR EXISTING ELECTRIC PEDESTAL

____ 30" RCP ___ EXISTING DRAINAGE PIPE

1.03

Gordon R. Archibald, Inc.
Civil and Environmental Engineers
Pawtucket, Rhode Island

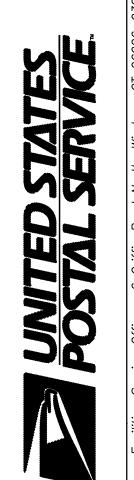


CFS ---



.04

Gordon R. Archibald, Inc.
Civil and Environmental Engineers
Pawtucket, Rhode Island



30% SUBMISSION (NOT FOR CONSTRUCTION) 06-24-19

RIM 98.40
CCB CBP AFG
OD SOS BS

ASPHALT

ABM RIM 100.40

CB RIM=98.98'
INV. 18"RCPw/ HOOD=95.3'
FILLED @ EL.=96.0'±

RIM 98.00

AFG CBP CCB

BS SOS

CFP-

LOD

AFG CBP CCB

BS SOS

AFC CMH

CB RII

INV. 1

HOOE

SUMF

RIM 97.80

AFG CBP CCB

BS SOS FM

99.10

MEDALLION AVENUE

RIM 98.0
AFG CBP CCB
BS SOS

DMH RIM=98.82' INV. 12"RCP's=94.8' INV. 30"RCP's=94.3'

ASPHALT

RIM 98.0 AFG

BS CBP EMI

SOS CCB

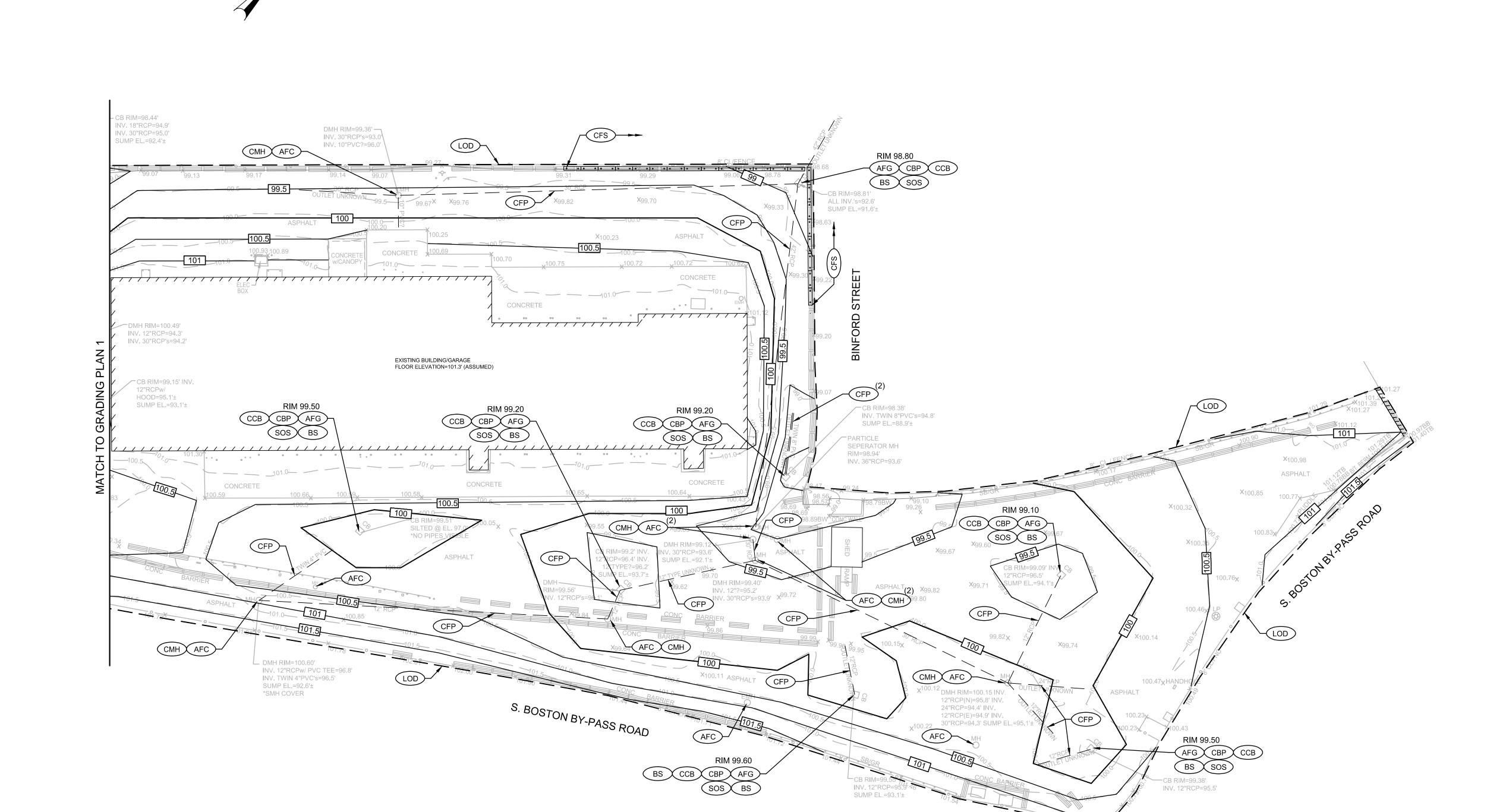
_AFC

1.05

Gordon R. Archibald, Inc.
Civil and Environmental Engineers
Pawtucket, Rhode Island

90.





- . THE PROJECT LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING (THROUGH PROVISION AND PLACEMENT OF LOAM AND SEED) ANY UNPAVED AREAS OUTSIDE OF THE PROJECT LIMITS OF DISTURBANCE IMPACTED BY CONSTRUCTION OPERATIONS. ANY REQUIRED RESTORATION OUTSIDE THE PROJECT LIMITS OF DISTURBANCE SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER AND AT THE CONTRACTOR'S EXPENSE.
- ANY DAMAGE CAUSED BY THE CONTRACTOR TO EXISTING CURBING, SIDEWALKS, PAVEMENTS, FENCES, OR OTHER SITE FEATURES TO REMAIN IN PLACE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCESS EXCAVATED PAVEMENTS, CURBING, SIDEWALKS, CURB STOPS, AND OTHER CONSTRUCTION WASTE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS.
- . THE CONTRACTOR SHALL MAINTAIN ALL EXCAVATION IN A DRY CONDITION. NO SEPARATE PAYMENT OR ALLOWANCE SHALL BE MADE FOR DEWATERING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENTS FROM DEWATERING OPERATION DISCHARGES THROUGH THE USE OF STILLING BASINS, FILTER FABRIC DEVICES. AND/OR OTHER SUITABLE MEANS AS APPROVED BY THE ENGINEER.
- FILL REQUIRED FOR EMBANKMENTS SHALL CONFORM TO THE REQUIREMENTS FOR ORDINARY BORROW SET FORTH IN SUBSECTION M1.01.0 OF THE MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
- B. THE CONTRACTOR SHALL PROVIDE CONTINUOUS DUST CONTROL (USING WATER AND/OR CALCIUM CHLORIDE OR OTHER APPROVED METHODS) FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS AND SURFACES OF BACK FILLED TRENCHES, IN ACCORDANCE WITH THE MASSDOT STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
- 9. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED NOTICES AND COMPLY WITH ALL PERMITS, LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN AND SPECIFIED IN THE CONTRACT DOCUMENTS.
- 10. EXISTING UTILITIES HAVE BEEN PLOTTED FROM BEST AVAILABLE DATA AND ARE APPROXIMATE ONLY. IN ACCORDANCE WITH CURRENT STATE "DIG SAFE" LAWS AND RULES, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE SYSTEM ELEMENTS AND UTILITIES (BOTH UNDERGROUND AND OVERHEAD) BEFORE ANY EXCAVATION MAY COMMENCE. THE CONTRACTOR IS ADVISED THAT (A) NOT ALL UTILITY PROVIDERS SUBSCRIBE TO THE DIG SAFE PROGRAM, AND (B) IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL POTENTIALLY AFFECTED UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO THE COMMENCEMENT OF WORK. EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY MUNICIPAL, STATE OR FEDERAL AGENCY OR AUTHORITY HAVING JURISDICTION OVER THE WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD OR UNMARKED UTILITIES (AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY) SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 11. THE CONTRACTOR IS ADVISED THAT WORK UNDER EXISTING OVERHEAD UTILITIES IS REQUIRED, AND THAT MINIMUM CLEARANCES SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. THIS MAY REQUIRE SPECIAL MEANS AND METHODS IN ORDER TO PROPERLY COMPLETE THE WORK. SHOULD THE CONTRACTOR ELECT TO RELOCATE EXISTING OVERHEAD UTILITIES. THEN THE CONTRACTOR SHALL CONDUCT ALL COORDINATION WITH THE AFFECTED UTILITY COMPANIES AND BEAR ALL COSTS ASSOCIATED WITH UTILITY RELOCATIONS NOT INCLUDED IN THE CONTRACT.
- 12. PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED OR REMOVED. ANY VARIATION FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, WHEREUPON WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.
- 13. ALL EXISTING PIPE, SUBSURFACE STRUCTURES, PAVEMENTS, EXCESS EXCAVATED MATERIALS AND MISCELLANEOUS MATERIALS REMOVED IN THE COURSE OF UTILITY WORK (INSTALLATION OF DRAINAGE, WATER AND SEWER PIPING, ETC.) SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AT AN OFFSITE LOCATION.
- 14. WHERE UNDERGROUND UTILITY CROSSINGS ARE REQUIRED, AT LEAST TWO (2) TEST PITS SHALL BE DUG TO DETERMINE THE LOCATION/DEPTH AND MATERIAL OF THE EXISTING
- 15. UTILITY SERVICES TO EXISTING BUILDINGS AND FACILITIES SHALL BE MAINTAINED AT ALL TIMES FOR THE DURATION OF CONSTRUCTION.
- 16. THE CONTRACTOR SHALL ADJUST ALL UTILITY BOXES, FRAMES, AND COVERS AS REQUIRED TO MATCH FINISH GRADE.
- 17. THE CONTRACTOR SHALL NOTIFY DIG-SAFE AND THE OWNER A MINIMUM OF 72 HOURS PRIOR TO COMMENCING WORK.
- 18. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR LOCATING ANY ON-SITE UTILITIES INCLUDING UNDERGROUND ELECTRICAL LIGHTING CONDUIT.
- 19. ANY UTILITY TO BE ABANDONED SHALL BE CAPPED.
- 20. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT AND THE WATER DEPARTMENT.

EROSION AND SEDIMENT CONTROL NOTES

- 1. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES TO BE EMPLOYED ON THE PROJECT ARE INDICATED ON THE PLANS. CONTROL MEASURES SHALL BE FURNISHED, INSTALLED, MAINTAINED FOR THE DURATION OF CONSTRUCTION, AND SUBSEQUENTLY REMOVED, ALL IN ACCORDANCE WITH THE MASSDOT STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (MASSDEP) "EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS," AND ANY SITE-SPECIFIC EROSION AND SEDIMENT CONTROL / POLLUTION PREVENTION PLAN INCLUDED IN THE CONTRACT
- 2. ALL CLEARING, GRADING AND EARTHWORK ACTIVITIES SHALL REMAIN STRICTLY WITHIN THE LIMITS OF DISTURBANCE (LOD) DEPICTED ON THE PLANS AND SHALL BE RESTRICTED TO ACTIVITIES NECESSARY FOR COMPLETION OF THE WORK. THE CONTRACTOR SHALL ENSURE THAT ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE REMAIN UNDISTURBED AND PROTECTED FROM CONSTRUCTION IMPACTS.
- 3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE MASSDOT STANDARD SPECIFICATIONS, THE MASSDEP EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, AND THE APPLICABLE CONDITIONS OF ANY REGULATORY/ENVIRONMENTAL PERMITS ISSUED FOR THE PROJECT.
- 4. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT LOCATIONS AND AREAS SHOWN ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS; HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION.
- 5. PERIMETER EROSION CONTROL BARRIERS (STAKED COMPOST FILTER SOCK, SILT FENCE, OR OTHER DEVICES AS INDICATED) SHALL BE INSTALLED IN CONTINUOUS UNINTERRUPTED RUNS AT THE LOCATIONS INDICATED ON THE PLANS AND MAINTAINED IN EFFECTIVE CONDITION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH VEGETATION. FOLLOWING SUCCESSFUL STABILIZATION OF DISTURBED AREAS, ALL PERIMETER EROSION CONTROL BARRIERS SHALL BE REMOVED. PRIOR TO REMOVAL OF THE DEVICES, ALL ACCUMULATED SEDIMENT AND DEBRIS TRAPPED BY THE BARRIERS SHALL BE REMOVED AND DISPOSED OF LEGALLY AT A SUITABLE OFFSITE LOCATION.
- 6. THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST ONE (1) FOOT INSIDE OF ALL PERIMETER EROSION CONTROL BARRIERS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR (OR ANY AGENT OF THE CONTRACTOR) SHALL BE IMMEDIATELY REMOVED, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS SUBSEQUENTLY IMPLEMENTED AT NO COST TO THE OWNER.
- 7. UNTIL VEGETATIVE COVER IS ESTABLISHED AND DISTURBED AREAS ARE FULLY STABILIZED, TRAPPED SEDIMENTS SHALL BE PERIODICALLY REMOVED FROM PERIMETER EROSION CONTROL BARRIERS. AT A MINIMUM, MATERIAL SHALL BE REMOVED ONCE THE DEPTH OF ACCUMULATED SEDIMENT REACHES SIX (6) INCHES OR ONE-HALF THE BARRIER HEIGHT, WHICHEVER IS LESS. ALL REMOVED MATERIAL SHALL BE DISPOSED OF LEGALLY AT A SUITABLE OFFSITE LOCATION.
- 8. ALL MATERIAL STOCKPILES SHALL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE (LOD) DEPICTED ON THE PLANS AND SHALL BE SURROUNDED BY A SECURED PERIMETER OF COMPOST FILTER SOCK.
- 9. ALL EXISTING AND CONSTRUCTED DRAINAGE SYSTEM INLETS SHALL BE PROVIDED WITH INLET PROTECTION DEVICES (FILTER BAGS/SILT SACKS, SANDBAGS, WATTLES, ETC.) AS INDICATED ON THE PLANS. ALL INLET PROTECTION DEVICES SHALL BE INSTALLED, MAINTAINED, AND CLEANED FOR THE DURATION OF CONSTRUCTION AND UNTIL ALL STORMWATER CONTROLS ARE FULLY STABILIZED AND ONLINE, AT WHICH TIME THEY SHALL BE REMOVED.
- 10. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- 11. EROSION CONTROL DEVICES SHOULD BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS EXCEEDING ONE HALF INCH (1/2") IN ANY 24-HOUR PERIOD. WHERE AND WHEN REQUIRED, MAINTENANCE AND REPAIRS SHALL BE COMPLETED WITH 24 HOURS OF THE INSPECTION.
- 12. DENUDED/UNVEGETATED SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.
- 13. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15 SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
- 14. TEMPORARY SURFACE STABILIZATION TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS FIBER MESH, EROSION CONTROL BLANKETS, OR OTHER MATTING. THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS DIRECTED BY THE ENGINEER. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3,000-4,000 POUNDS PER ACRE (1.9-2.5 POUNDS PER SQUARE YARD). IF NEEDED, TEMPORARY SEEDING (PROVIDED IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND EROSION AND SEDIMENT CONTROL GUIDANCE) MAY BE EMPLOYED TO FURTHER MINIMIZE EROSION.
- 15. TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE, FREE OF SUBSOIL, STONES, ROCKS, ROOTS, BRUSH, REFUSE, CONSTRUCTION DEBRIS AND OTHER DELETERIOUS MATERIALS AND SHALL CONFORM TO SUBSECTION M1.05.0 OF THE MASSDOT STANDARD SPECIFICATIONS.
- 16. THE SEEDED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- 17. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING AND BE APPLIED AT A SEEDING RATE OF 100 POUNDS

COMPONENT % BY WEIGHT RED FESCUE 70 KENTUCKY BLUEGRASS 15 COLONIAL BENTGRASS 5 PERENNIAL RYEGRASS 10

- 18. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1 JUNE 1 AND AUGUST 15 OCTOBER 15.
- 19. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 14 DAYS OF FINAL GRADING. PLANTING OF GRASS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION.
- 20. THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE (1) CALENDAR YEAR AND SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 21. CONTRACTOR SHALL APPLY CALCIUM CHLORIDE FOR DUST CONTROL AFTER RECLAMATION OPERATIONS AT THE END

CLEANING AND FLUSHING PIPES AND DRAINAGE STRUCTURES NOTES:

- 1. THIS WORK CONSISTS OF CLEANING STORM DRAINS AND DRAINAGE STRUCTURES OF ALL TYPES AND SIZES AS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE
- 2. EQUIPMENT FOR CLEANING PIPE LINES SHALL INCLUDE HOSES, RODDING MACHINES, BALLS, HYDRAULIC CLEANERS, ROOT CUTTERS, SMALL CLAM SHELL BUCKETS, STEEL PORCUPINES, PUMPS, OR OTHER SUITABLE AND APPROVED MEANS.
- 3. WATER USED FOR CLEANING AND FLUSHING DRAINAGE PIPES SHALL BE FRESH AND FREE OF OIL, ACID, SALT, ALKALI, ORGANIC MATTER, OR ANY OTHER DELETERIOUS SUBSTANCES. THE CONTRACTOR SHALL PROVIDE ALL WATER REQUIRED FOR THE CLEANING OPERATION.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER OPERATION OF THE STORM DRAINAGE SYSTEM DURING THE CLEANING OPERATIONS. THE SAFE CONTROL OF STORM FLOWS SHALL BE ACCOMPLISHED BY THE CONTRACTOR SUCH AS TO PRECLUDE ANY INJURY TO PERSONS OR PROPERTY DUE TO FLOODING.
- 5. THE CONTRACTOR SHALL CLEAN AND FLUSH THOSE STORM DRAIN LINES DESIGNATED ON THE PLANS BY USE OF PRESSURE HOSES, SUCTION PUMPS, AND/OR ANY OTHER METHODS REQUIRED TO PERFORM THIS WORK.
- 6. A SUITABLE WEIR OR DAM SHALL BE CONSTRUCTED IN THE NEAREST DOWNSTREAM MANHOLE OR CATCH BASIN IN SUCH A MANNER THAT DEBRIS MATERIAL WILL BE TRAPPED. UNDER NO CIRCUMSTANCES SHALL SUCH MATERIAL BE PASSED ON FROM ONE SECTION TO THE NEXT OR TO THE WETLAND
- 7. EACH MANHOLE OR CATCH BASIN SHALL BE CLEANED INDEPENDENTLY OF OTHER PORTIONS OF THE STORM DRAINAGE SYSTEM.
- 8. DISPOSAL OF ALL MATERIAL COLLECTED SHALL BE DONE IN ACCORDANCE WITH ALL REQUIREMENTS OF APPLICABLE STATE AGENCIES.

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CUT AND MATCH PROPOSED GRADE PROPOSED SPOT GRADE \times 00.00 FLOW DIRECTION ADJUST BASIN TO MANHOLE

> **BIO-SKIRT** CATCH BASIN INLET PROTECTION

> > LIMIT OF DISTURBANCE

ADJUST FRAME AND COVER

CLEAN CATCH BASIN CLEAN AND FLUSH PIPE

BS
CBP
CCB
CFP
CMH
ETR
LOD
NPS
RD (ITEM)
RFP
SOS
TNP
(201.6.0)
(201.10.0) CLEAN MANHOLE EXISTING TO REMAIN

NEW PAVEMENT STRUCTURE (SEE DETAILS)

REMOVE AND DISPOSE

RECYCLE FLEXIBLE PAVEMENT FOR SUBBASE

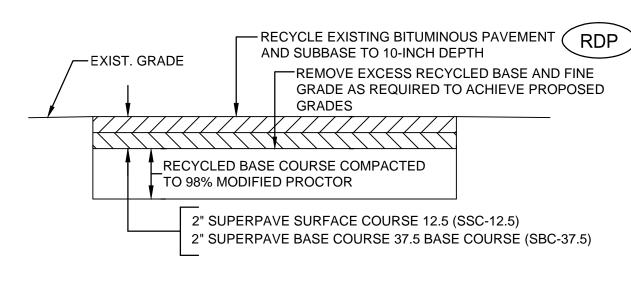
SNOUT OIL & DEBRIS STOP TIE NEW PIPE INTO EXISTING STRUCTURE

CATCH BASIN FRAME MASS STD. 201.6.0 HOOK LOCK BAR GRATE MASS STD. 201.10.0

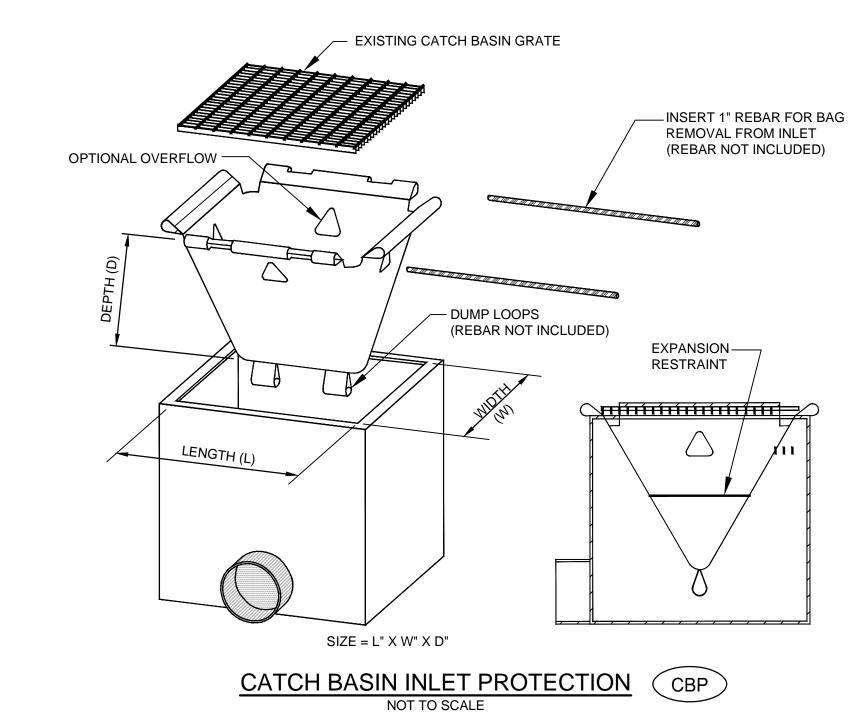
CATCH BASIN HOOD MASS STD. 201.12.0

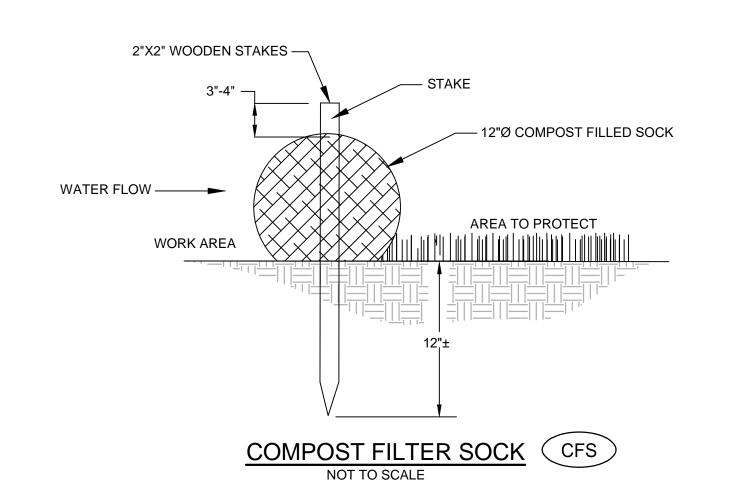
<u>LEGEND</u>

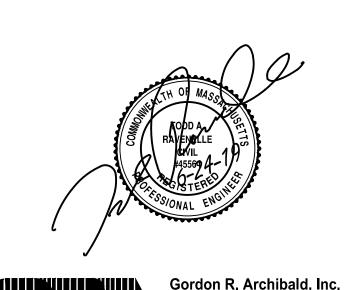
McKINNELL McKINNELL TAYLOR Inc



PAVEMENT STRUCTURE (NPS) NOT TO SCALE







6

20" MIN

BIO-SKIRT ANTI-MICROBIAL TREATED HYDROCARBON ADSORBING SKIRTED BOOM

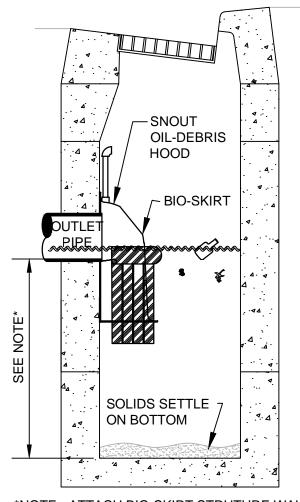
CONFIGURATION DETAIL

SIDE VIEW FRONT VIEW

1. THE SKIRTED BOOM SHALL BE COMPRISED OF AN UPPER BOOM PORTION THAT IS AN ADSORBENT FABRIC COVERED FLOATING BOOM OF 5" MINIMUM DIAMETER WITH AN INTEGRAL LOWER SKIRT PORTION COMPRISED OF FABRIC TENDRILS OF AN 18" MINIMUM LENGTH THAT HANG BENEATH THE BOOM.

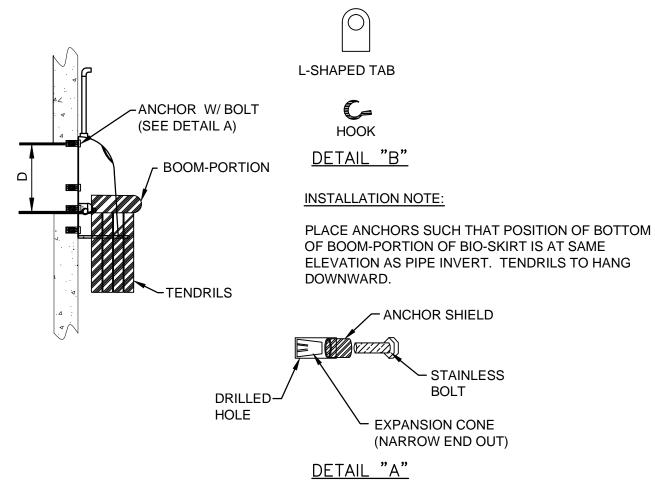
- 2. ALL BOOMS SHALL BE MADE FROM GEO-TEXTILE QUALITY NEEDLE-WOVEN FILTRATION FABRIC MANUFACTURED FROM 100%%% RECYCLED SELECT FIBERS WITH A .125" MINIMUM THICKNESS.
- 3. ALL FABRIC SHALL BE TREATED WITH A COVALENTLY SURFACE BONDED NON-LEACHING ANTIMICROBIAL AGENT AND BOOMS SHALL DISPLAY A TAG INDICATING "ANTIMICROBIAL"
- 4. THE BIO-SKIRT SHALL BE POSITIONED IN FRONT OF THE EXIT PIPE AND SNOUT® OIL-DEBRIS SEPARATOR IF SO EQUIPPED (THE PREFERRED APPLICATION OF THE BIO-SKIRT IS TO BE DEPLOYED WITH THE SNOUT).
- 5. THE SKIRTED BOOM SHALL BE SECURELY ATTACHED TO THE STRUCTURE WALL ON EACH SIDE OF THE EXIT PIPE WITH 3/8" STAINLESS STEEL BOLTS, STAINLESS STEEL TABS, PLASTIC-COMPOSITE HOOKS AND ELASTOMERIC CORD AS FOUND IN MANUFACTURER SUPPLIED IN INSTALLATION KIT.
- 6. FOR APPLICATIONS WHERE MULTIPLE BIO-SKIRTS ARE DEPLOYED TOGETHER FOR LARGER SNOUTS (E.G. ON 24" AND LARGER SNOUTS PER SCHEDULE BELOW*), CONNECT SKIRTS GROMMET TO GROMMET WITH HOOKS AND CORD AS SUPPLIED IN THE INSTALLATION KIT.

TYPICAL DEPLOYMENT SCHEDULE: 12-18" SNOUT- ONE BIO-SKIRT 24-30" SNOUT- TWO BIO-SKIRTS



*NOTE- ATTACH BIO-SKIRT STRUTURE WALL SUCH THAT IT IS APPROXIMATELY AT SAME ELEVATION AS STATIC WATER LEVEL

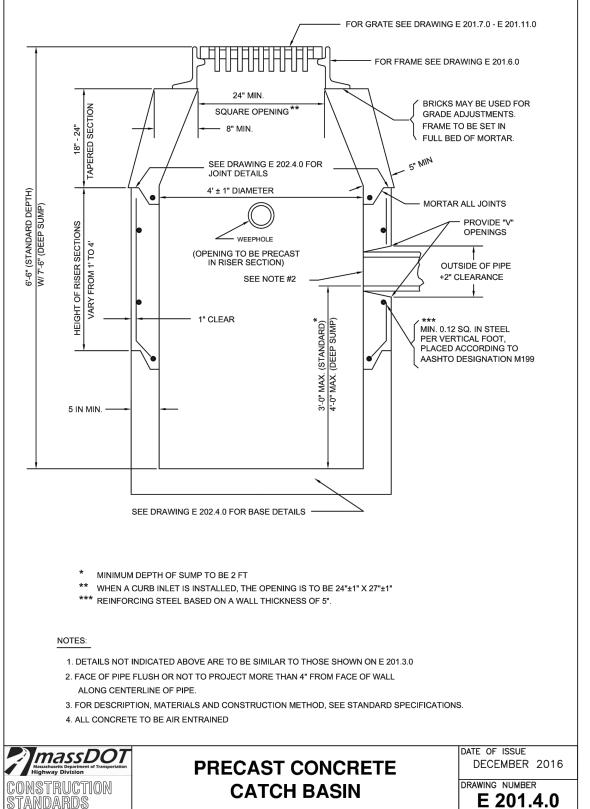
TYPICAL INSTALLATION

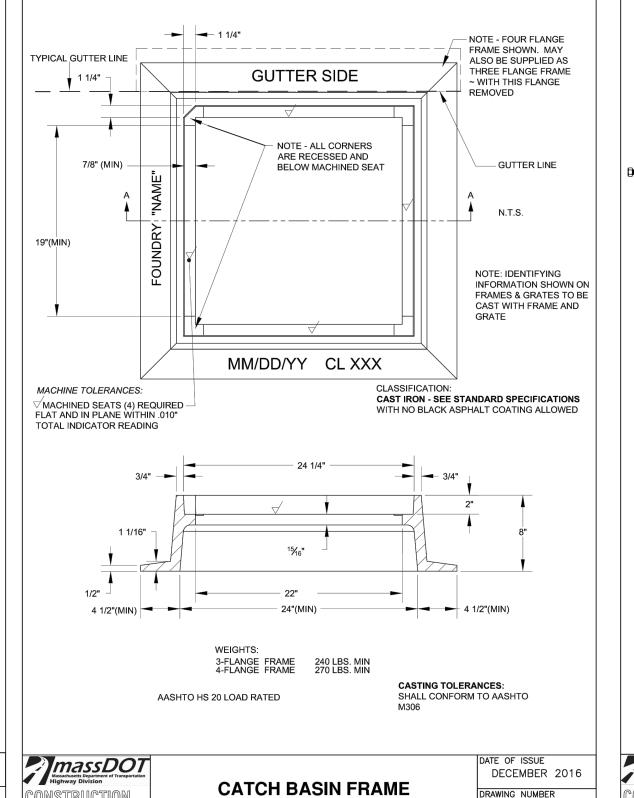


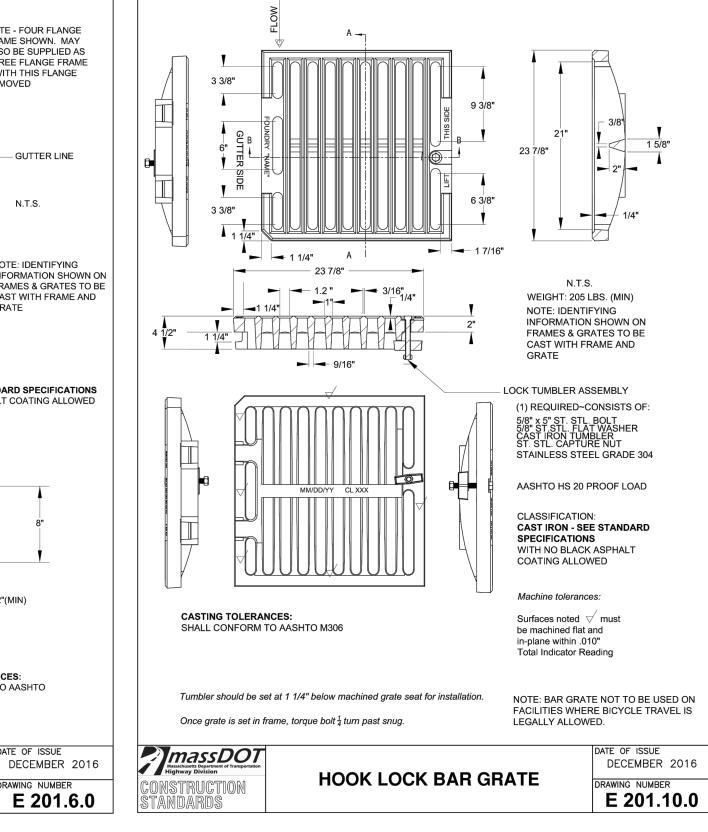
BIO-SKIRT DETAIL BS

NOT TO SCALE

INSTALLATION DETAIL







NEW PAVEMENT OR-

SURFACE COVER (AS NOTED)

BACKFILL WITH _

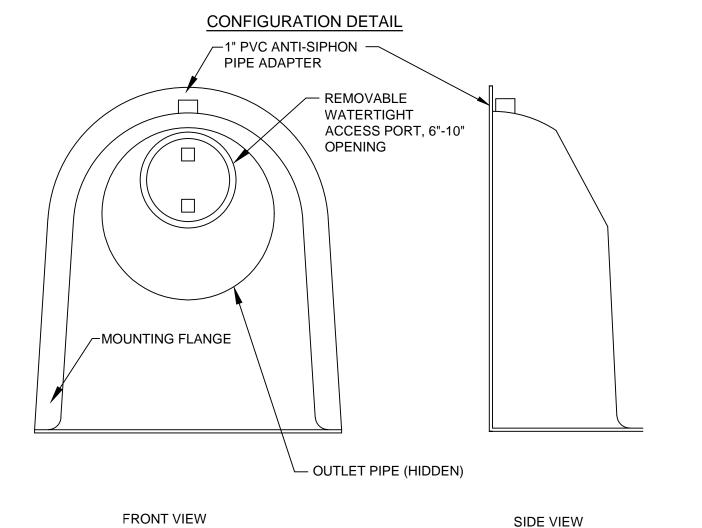
COMPACTED

ORDINARY BORROW

12" GRAVEL BORROW SUBBASE -

GRAVEL BORROW

OVERLAY SURFACE



SNOUT OIL-WATER-DEBRIS SEPARATOR

NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD.

LYME, CT 06371 (860) 434-0277, (860) 434-3195 FAX

TOLL FREE: (800) 504-8008 OR (888) 354-7585 WEB SITE: www.bestmp.com OR PRE-APPROVED EQUAL

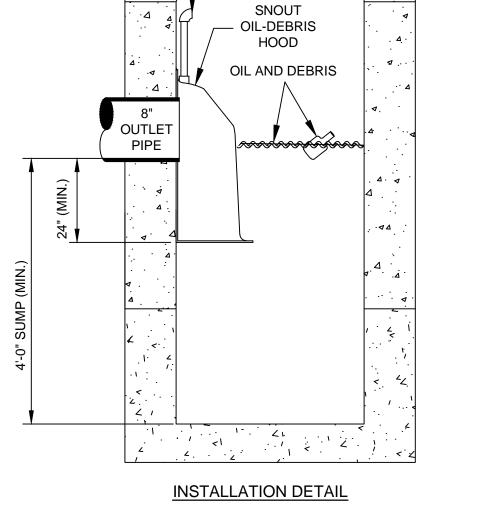
- 2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
- 3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)

4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS

- PER MANUFACTURER'S RECOMMENDATION. 5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 24" BELOW OUTLET INVERT.
- 6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION. 7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED
- 8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8' STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE
- INSTALLATION DETAIL)
- 9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
- INSTALLATION KIT SHALL INCLUDE: A. INSTALLATION INSTRUCTIONS

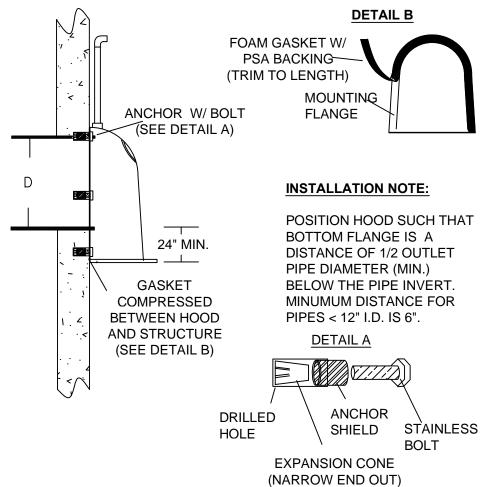
SMOOTH AND FREE OF LOOSE MATERIAL.

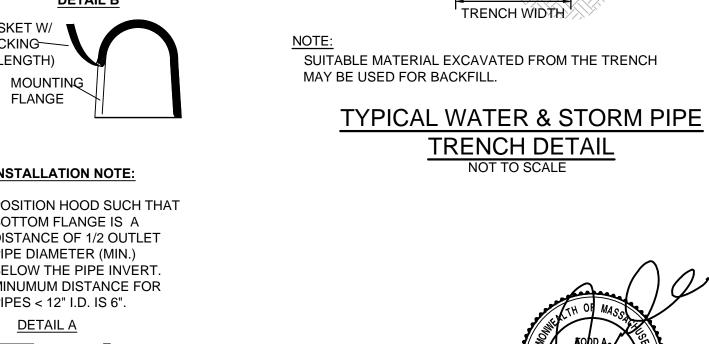
- B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
- C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
- D. 3/8" STAINLESS STEEL BOLTS E. ANCHOR SHIELDS

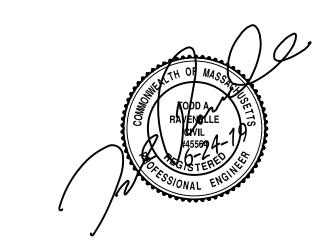


TYPICAL INSTALLATION

-ANTI-SIPHON DEVICE







SET RIM ELEVATION OF NEW

C.B. RIM ELEVATION DETAIL

TRENCH WIDTH

TRENCH DETAIL

– 12"MIN. 18"MAX.,

SIDES

TYP. BOTH

PIPE DIAMETER

C.B.'S AND D.I.'S 0.1 BELOW FINISH PAVEMENT GRADES.

Gordon R. Archibald, Inc. Civil and Environmental Engineers Pawtucket, Rhode Island

SNOUT OIL & DEBRIS STOP NOT TO SCALE