

# First Church Roxbury John Eliot Square

Amend Application 19.688.122 to include drainage work including installation of bio-retention area.

# BLC questions to address

1. BLC Request: Native archaeological sites shall be marked off and avoided/protected.
2. What is width and depth of the 8" SRD35 pipe trench that extends from the northern parking area to the Bio Retention area?
3. What is width and depth of the 6" SRD35 pipe trench that extends from the southwest corner of the church to the Bio Retention area?
4. Describe the ground impacts of the bio-retention area.
5. How do the pipes from the eastern portion of the site tie into the bio retention area and terminate?
6. What ground impacts are associated with the stone swale and what protections will be taken?
7. Confirm ADA compliant ramp in Contemplative Garden, will not be removing soils from the site.

## Native archaeological sites shall be marked off and avoided/protected.

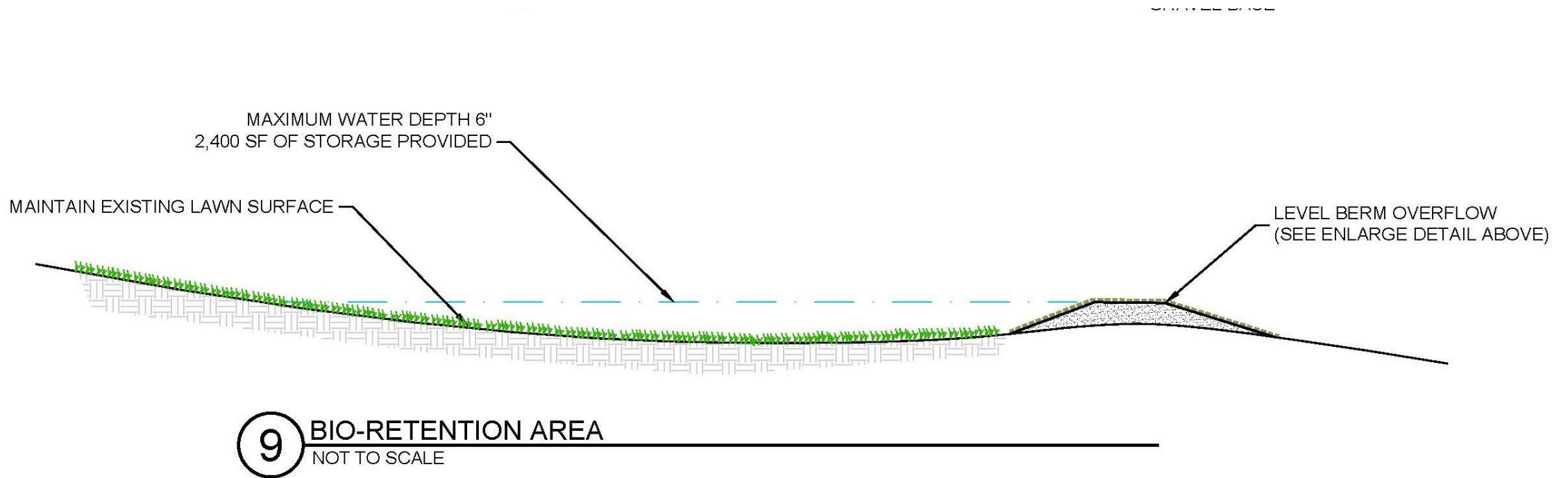
- Project is largely a fill or capping effort with minimal cutting or removal of soil from site.
- All soils excavated will be placed back into the area they were removed from or immediate adjacent areas.
- Straw wattles and orange construction fence will be placed around tree roots zones and sensitive archaeological areas during construction and these areas will be off limits to vehicles, equipment and material storage. Small crew size and no personal vehicles of construction personnel on site will also minimize site disruption.
- Project to use structural soils and dense grade stone pack as the final layer in the defined work zones. This will create a clear boundary between the new soils and the historic soils preserving the historic soil profile.

What are the width and depth of pipe trenches that extend from the North and South sides of the Meeting House to the bio-retention area?

Drainage pipe trenches will average 24"- 36" deep and 12"- 18" wide. Redesign will allow the drainage pipes to either terminate *outside* Meetinghouse Hill III entirely, or will limit excavation to less than 6 inches deep within this protected area. The 6" SDR35 drain will terminate outside Meetinghouse Hill III. The 8" SDR35 drain pipe extends only 12 feet into Meetinghouse Hill III and requires *less than 6"* excavation to install the pipe and the splash pad within this protected area. See updated BWSC site plan.

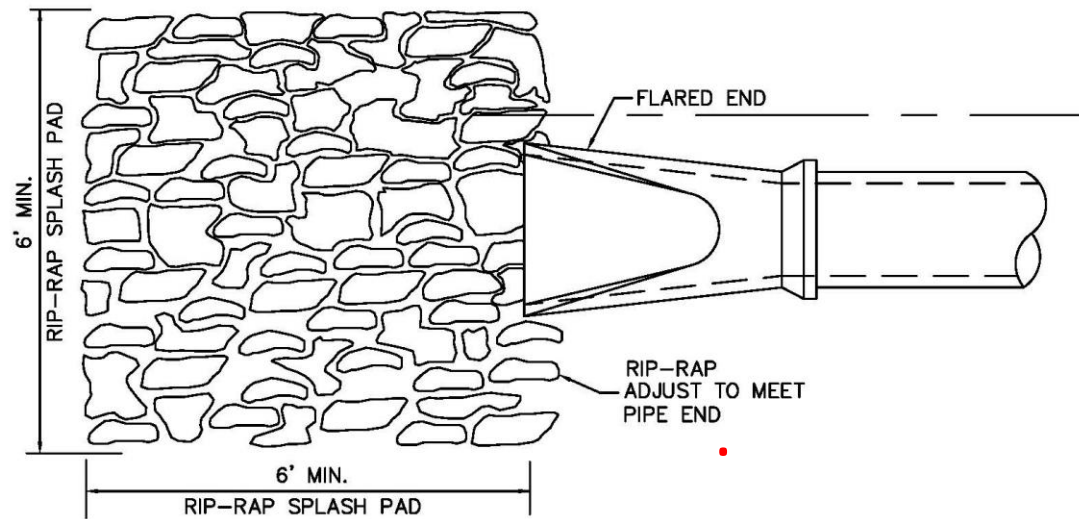
# Describe the ground impacts of the Bio retention area.

There are **no excavations** required throughout the bio-retention area. The berm depicted on the north edge of the bio-retention area only *adds* new soil to create the berm atop the undisturbed existing topsoil. This area currently holds and infiltrates stormwater.



# How do the pipes from the eastern portion of the site tie into the bio-retention area and terminate?

Redesign will allow the drainage pipes to either terminate outside Meetinghouse Hill III (6" SRD35); or require less than 6" excavation within this protected area (8" SRD35). The splash pad requires less than 6" excavation for installation. See the link to the updated BWSC site plan on Slide 9.



## What ground impacts are associated with the stone swale and what protections will be taken?

The stone swale is located *outside* the abutting Meetinghouse Hill III protected area. The ground impacts are minimal requiring an excavation of only 6 inches deep by 48 inches wide. The swale material is 1.5" rounded stone. BWSC requested this swale to ensure stormwater is directed to the bio-retention area.

Confirm ADA compliant ramp in Contemplative Garden, will not be removing soils from the site.

The proposed stone dust walk and brick sitting area will be constructed without more than 12" of excavation within the protected area.

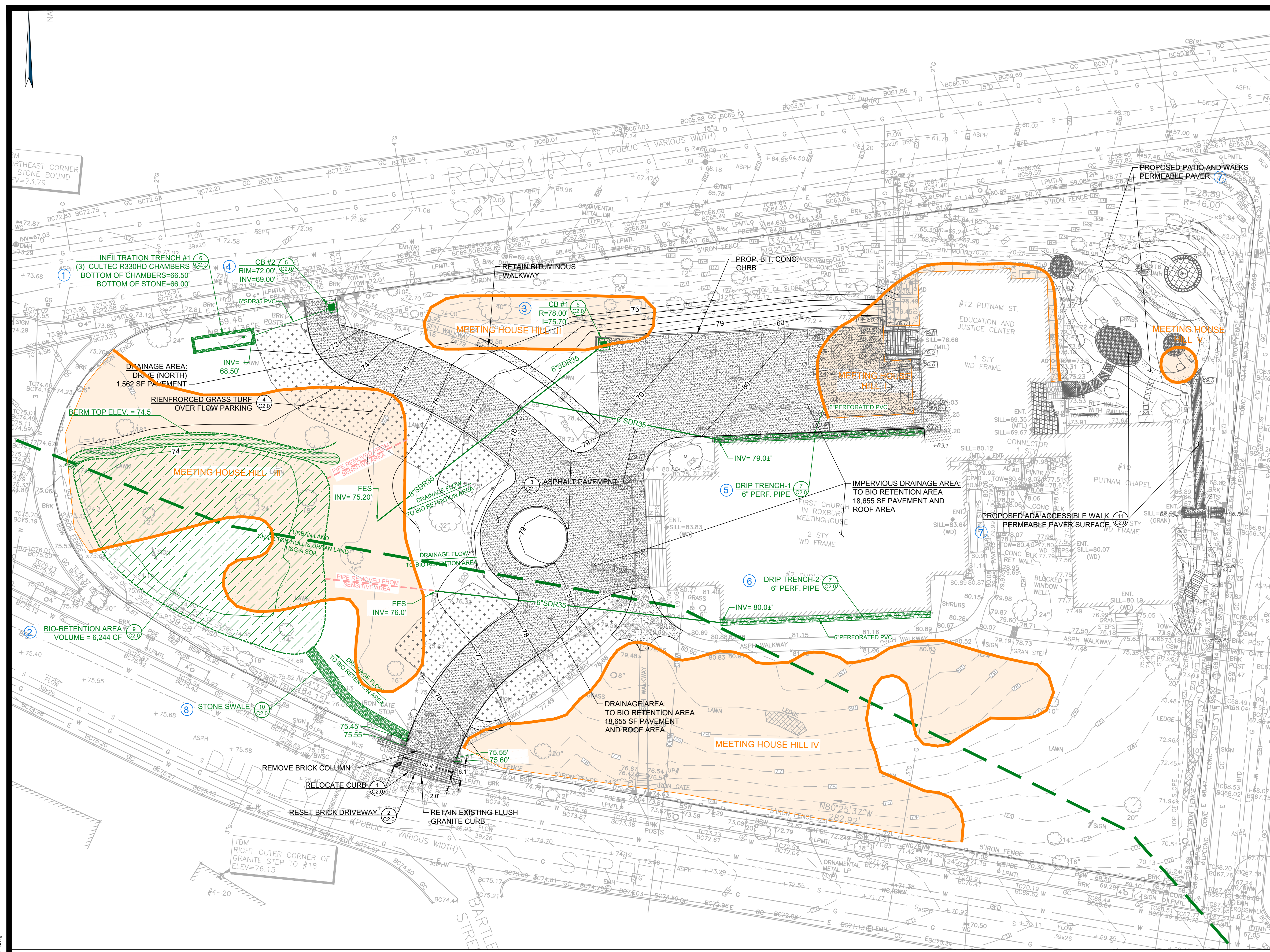
*Archaeological Survey - June 2019*

*Southeast Yard and Garden: Due to the area of preserved Native site, it is recommended that below-ground impacts be avoided that extend deeper than 30 cm (12") in the southeast corner of the zone. The surrounding area does not appear to have archaeological integrity.*



# Updated BWSC plan and Putnam Garden plan supporting steps taken to protect Native artifacts

- [First Church Roxbury - BWSC Plan](#)
- [Putnam Garden for BLC presentation](#)



PARCEL ID #: 0903294000  
LAND USE CODE: E

NORTH

DCI  
Design Consultants Inc.  
Somerville, Newburyport  
www.dci.com

CLIENT:  
WEINMAYER HAY ASSOCIATES  
760 MAIN STREET  
WALTHAM, MA 02451

FOR BWS USE ONLY  
BWS ACCOUNT # 1192249  
COBUS RECORD #1563200156792

**INSPECTION SIGN-OFF SCHEDULE**

| Service Connections                 |                             |                                     |                     |
|-------------------------------------|-----------------------------|-------------------------------------|---------------------|
| To Be Submitted with Proposed Plans |                             | To Be Submitted with As-Built Plans |                     |
| Item No.                            | Description of Service      | Qty                                 | BWSC Inspector/Date |
| 1                                   | Infiltration Trench #1      | 1                                   |                     |
| 2                                   | Bio-retention Area          | 1                                   |                     |
| 3                                   | Catch Basin 1               | 1                                   |                     |
| 4                                   | Catch Basin 2               | 1                                   |                     |
| 5                                   | Drip Trench/Perforated Pipe | 1                                   |                     |
| 6                                   | Drip Trench/Perforated Pipe | 1                                   |                     |
| 7                                   | Permeable areas             | 1                                   |                     |
| 8                                   | Stone Swale                 | 1                                   |                     |

- GENERAL NOTES**
- APPLICANT: UU URBAN MINISTRY (BEN. FRAT.)  
10 PUTNAM STREET  
BOSTON, MA 02119  
MMEARL@UUUM.ORG  
617-318-6010 X202
- BASE PLAN PROVIDED BY WEINMAYER ASSOCIATES, INC., RECEIVED JULY 26, 2019.
  - BOSTON WATER AND SEWER IS NOT PART OF DIG-SAFE. MARKING OF BWS FACILITIES IS PERFORMED BY BWS STAFF. REQUEST FOR MARKINGS MAY BE MADE BY CALLING BWS FIELD SERVICE DEPT. AT 617-989-7248. CONTACT DIG-SAFE AT 1-888-344-7233 AT LEAST 72 HRS (3 BUSINESS DAYS) PRIOR TO EXCAVATION.
  - THE CONTRACTOR SHALL SUPPLY ALL PIPING AND APPURTENANCES FOR THE UTILITY SERVICES UNLESS NOTED OTHERWISE.
  - THE RESPONSIBILITY OF OWNERSHIP AND MAINTENANCE OF THE SEWER, DRAIN AND WATER SERVICE CONNECTIONS ON PRIVATE PROPERTY AND/OR PRIVATE AND PUBLIC WAYS SHALL REMAIN THAT OF THE OWNER.
  - ALL WORK PERFORMED AS PART OF THIS PROJECT SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE BWS, BOSTON DEPT. OF PUBLIC WORKS AND ANY GOVERNING AGENCY WITH AUTHORITY IN THIS AREA. IN CASE OF CONTRADICTION BETWEEN SPECIFICATIONS AND THIS DRAWING SET, BWS STANDARDS SHALL GOVERN.
  - THIS PLAN DOES NOT DEPICT THE EXACT LOCATION AND SIZE OF ALL UTILITIES WHICH MAY PRESENTLY EXIST IN AND AROUND THE SITE LOCUS. CONTRACTOR SHALL NOTIFY PROJECT ARCHITECT IMMEDIATELY IF EXISTING UTILITY PIPE INVERTS ARE FOUND TO BE DIFFERENT THAN THOSE INDICATED IN THIS PLAN.
  - DURING EXCAVATION AND CONSTRUCTION OF PIPES AND STRUCTURES, TRENCHES MUST BE ADEQUATELY BRACED AND PROTECTED AGAINST CAVE-IN.
  - ROUGH CONSTRUCTION CERTIFICATION (FROM ISD) REQUIRED PRIOR TO FILING GSA WITH BWS.
  - ANY EXISTING PORTION OF THE EXISTING SEWER LATERAL WHICH IS TO REMAIN SHALL BE VIDEO INSPECTED. A COPY OF THE INSPECTION SHALL BE SUBMITTED TO BWS PRIOR TO APPROVAL.

**PIPE MATERIALS:**  
DRAINAGE: 6" PVC SDR 35, SLOPE= 1% MIN.

**LOCUS TITLE INFORMATION**  
160 ROXBURY ST UNITARIAN UNIVERSALIST URBAN MINISTRIES  
OWNER: UNKNOWN  
DEED REFERENCE: UNKNOWN  
PLAN REFERENCE: PARCEL ID 0903294000  
ASSESSORS:

**LEGEND**

|   |                       |   |                          |
|---|-----------------------|---|--------------------------|
| ⊞ | CATCHBASIN            | ⊞ | TRAFFIC SIGNAL           |
| ⊞ | DRAIN MANHOLE         | ⊞ | GUY WIRE                 |
| ⊞ | SEWER MANHOLE         | ⊞ | SIGN POLE                |
| ⊞ | ELECTRIC MANHOLE      | ⊞ | MAIL BOX                 |
| ⊞ | TELEPHONE MANHOLE     | ⊞ | BOLLARD                  |
| ⊞ | CABLE TV MANHOLE      | ⊞ | POST                     |
| ⊞ | MISCELLANEOUS MANHOLE | ⊞ | TREE                     |
| ⊞ | ELECTRIC HANDHOLE     | ⊞ | CHAIN LINK FENCE         |
| ⊞ | LIGHTING HANDHOLE     | ⊞ | WOOD POST FENCE          |
| ⊞ | ROOF DRAIN            | ⊞ | INTERMEDIATE CONTOUR     |
| ⊞ | AREA DRAIN            | ⊞ | INDEX CONTOUR            |
| ⊞ | OIL FILL              | ⊞ | SPOT GRADE               |
| ⊞ | HYDRANT               | ⊞ | FINISHED FLOOR ELEVATION |
| ⊞ | WATER GATE            | ⊞ | DOORWAY ELEVATION        |
| ⊞ | WATER SERVICE         | ⊞ | TOP OF CURB ELEVATION    |
| ⊞ | WATER METER           | ⊞ | BOTTOM OF CURB ELEVATION |
| ⊞ | GAS GATE              | ⊞ | TOP STEP ELEVATION       |
| ⊞ | GAS SERVICE           | ⊞ | BOTTOM STEP ELEVATION    |
| ⊞ | LIGHT POLE/LAMP       | ⊞ | WINDOW SILL ELEVATION    |
| ⊞ | UTILITY POLE          |   |                          |

**GROUNDWATER RECHARGE:**  
THE PROPOSED GROUNDWATER RECHARGE SYSTEM IS DESIGNED TO CAPTURE AND INFILTRATE 1" OF RUNOFF FROM THE IDENTIFIED WATERSHED.

**ROOF AND PARKING LOT:**  
18,655 SF X 1" = 1,564 CF

| Volume           | Invert            | Avail. Storage | Storage Description                                 |
|------------------|-------------------|----------------|---|
| #1               | 74.00'            | 2,483 cf       | Custom Stage Data (Irregular) Listed below (Recalc) |
| Elevation (feet) | Surf Area (sq-ft) | Perim. (feet)  | Inc. Store (cubic-feet)                             |
| 74.00            | 4,011             | 240.0          | 0   |
| 74.50            | 5,988             | 300.0          | 2,483   |
|                  |                   |                | 2,483   |
|                  |                   |                | 6,593   |

Device Routing Invert Outlet Devices  
#1 Discarded 74.00' 2,410 in/r Exfiltration over Surface area

**DRIVE (SOUTH):**  
1,562 SF X 1" = 130 CF

| Volume | Invert | Avail. Storage | Storage Description   |
|--------|--------|----------------|---|
| #1A    | 66.00' | 83 cf          | 6.33'W x 17.50'L x 3.54'H Field A                             |
|        |        |                | 393 cf Overall - 115 cf Embedded = 277 cf x 30.0% Voids       |
| #2A    | 66.50' | 115 cf         | Cultec R-330XLHD x2 Inside #1                                 |
|        |        |                | Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf |
|        |        |                | Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap     |
|        |        |                | Row Length Adjustment= +1.50' x 7.45 sf x 1 rows              |
|        |        |                | 199 cf Total Available Storage                                |

PROJECT TEAM

FIRST CHURCH  
2 DUDLEY STREET  
ROXBURY, MA

PROJECT INFO

| REV | DESCRIPTION         | DATE    |
|-----|---------------------|---------|
| 3.  | BLC COMMENTS        | 7/21/20 |
| 2.  | 04/30/20 BWS REVIEW | 5/5/20  |
| 1.  | 10/28/19 BWS REVIEW | 3/30/20 |

STAMP:

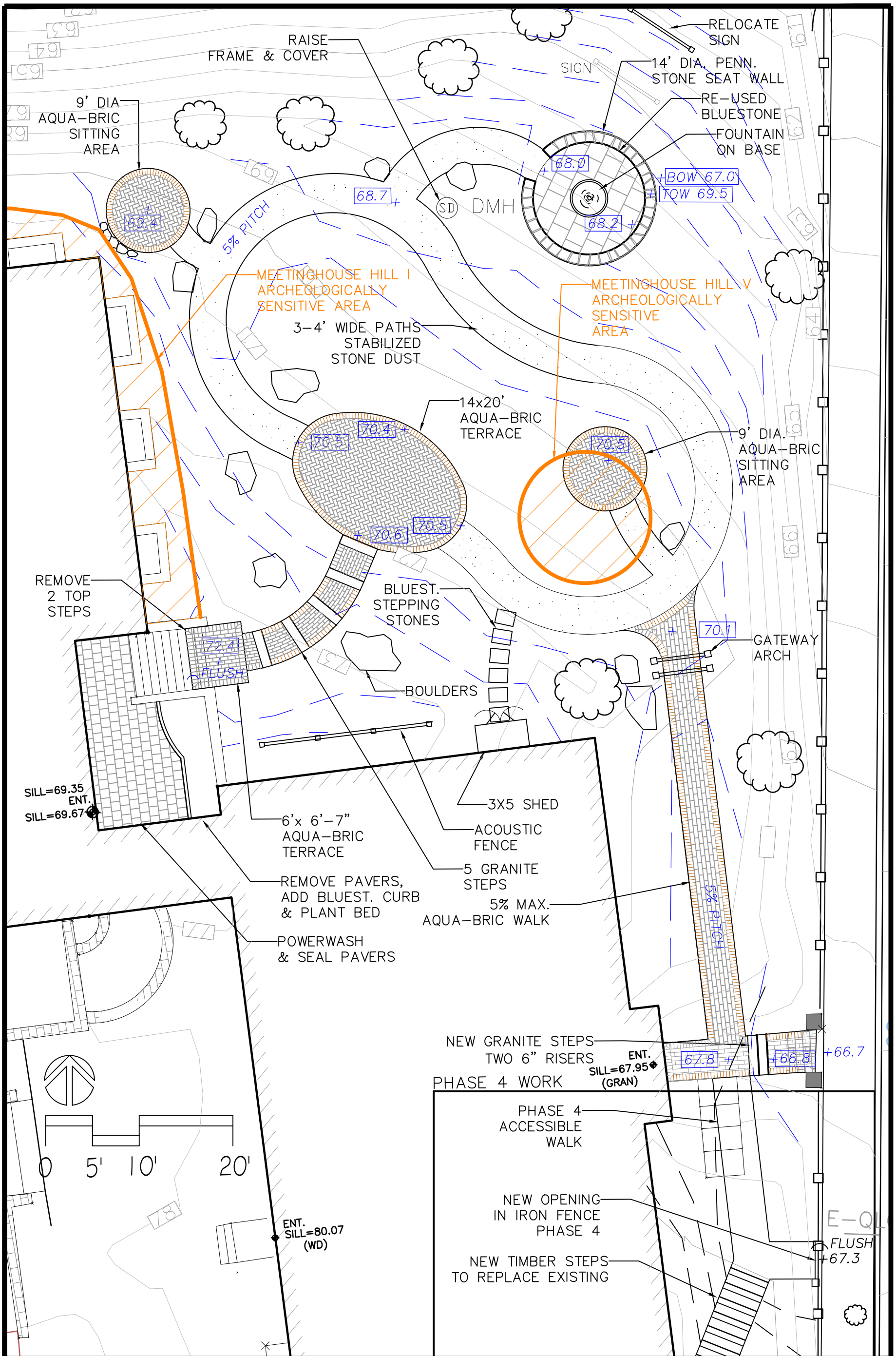
**BWSC SP # 19516**

SHEET NAME:

**C1.0**

SHT NO:  
DR BY: GS  
CHK BY: SS  
PROJ NO: 2019-089  
DATE: OCTOBER 7, 2019  
SCALE: 1" = 10'

P:\2019 Projects\2019-089 2 Dudley Street, Roxbury\DWG\_ENGINEERING\19-089 BWS SP.dwg



1st CHURCH ROXBURY 10 Putnam St., Roxbury, MA  
 UNITARIAN UNIVERSALIST URBAN MINISTRY

WEINMAYR/JAY ASSOCIATES, INC. LANDSCAPE ARCHITECTS  
 760 MAIN ST., WALTHAM, MA 02451 617.957.9733

DATE: 7/21/20  
 SCALE: 1"=10'

MATERIALS  
 & GRADING  
 PLAN

L-1  
 DRAWING NO.