

LETTER OF TRANSMITTAL



Attn: Juliet Walker, Planning Director
Date: 11/07/2018
Project: Portsmouth Senior Activity Center

Project No: 17002

Transmittal(s): **Site Plan Application and Supporting Documents for Planning Board Approval**

Transmittal Delivery: Mail Email Courier Other

Document(s): Drawing(s) Specification(s) Report(s) Other

List of Items Transmitted:

No. Copies	Doc Control Number	Rev.	Description
1			Application Package
10			Primer Technical Memo (Project Summary)
10			Site Plan Set – four (4) 22"x34", six (6) 11"x17"
10			Full Stormwater Report

Transmittal Status:

Returned For Your Use As Requested
 For Review & Comment For Bids For Construction
 Other (See Comments)

Comments:

The following documents are presented in support of a Site Plan Application for the adaptive reuse of Doble USARC for the Portsmouth Senior Activity Center.

CITY OF PORTSMOUTH NEW HAMPSHIRE

SITE REVIEW APPLICATION

Building Permit Application Number _____

Case Number _____

Fee _____

Map 174 Lot 15 Zone M,GRA Wetlands: Inland None Coastal None Lot Area 3.49 acres

Date of Approvals (Indicate if Pending)

Conservation Commission _____ Conditional Use _____ Board of Adjustment _____

Historic District Commission _____ Subdivision _____ Other _____

Street Address 125 Cottage Street Portsmouth, NH 03801

Description of Project including all use(s) _____

Renovations for adaptive reuse of former U.S. Army Reserve Center into Senior Activity Center. Addition of a new entry at the front elevation. Modernization of building systems and new driveway construction for accessibility improvements.

Building(s) Footprint Existing: 12,700 ft² Proposed Tot.: 12,850 ft² Gross Floor Area Existing: 12,700 ft² Proposed Tot.: 12,850 ft² #of Stories 1

of Dwelling Units 0 Number of Parking Spaces: Existing 100 +/- Proposed 111

Print Information Below

Property Owner's Name City of Portsmouth

Street Address 1 Junkins Avenue City/Town Portsmouth State NH Zip 03801

603-431-2000

Telephone # _____ Cell Phone # _____ Fax # _____ Email Address _____

Print Information Below

Applicant's / Developer's Name David Moore

Street Address 1 Junkins Avenue City/Town Portsmouth State NH Zip 03801

603-610-7226 dmoore@cityofportsmouth.com

Telephone # _____ Cell Phone # _____ Fax # _____ Email Address _____

Print Information Below (Include Additional Contact Information on Next Page)

Check One: Owner's Attorney Applicant's Attorney Engineer Surveyor Other If other, state relationship _____

Representative's Name Tim Nichols, PE

Street Address 13 Water Street City/Town Newmarket State NH Zip 03857

603-200-0096 603-479-9705 tim@aecgr.com

Telephone # _____ Cell Phone # _____ Fax # _____ Email Address _____

I hereby apply for Site Review and acknowledge that I will comply with all the ordinances and any stipulations of the Site Review Committee of the City of Portsmouth in the development and construction of this project.

Owner's Signature _____ City of Portsmouth _____ 11/08/2018
Print Owner's Name _____ Date _____

NA _____ David Moore _____ 11/08/2018
Applicant's/Developer's Signature _____ Print Applicant's/Developer's Name _____ Date _____

Print Information Below

Check One: Owner's Attorney Applicant's Attorney Engineer Surveyor Other If other, state relationship _____

Representative's Name _____

Street Address _____ City/Town _____ State _____ Zip _____

Telephone # _____ Cell Phone # _____ Fax # _____ Email Address _____

Print Information Below

Check One: Owner's Attorney Applicant's Attorney Engineer Surveyor Other If other, state relationship _____

Representative's Name _____

Street Address _____ City/Town _____ State _____ Zip _____

Telephone # _____ Cell Phone # _____ Fax # _____ Email Address _____

Print Information Below

Check One: Owner's Attorney Applicant's Attorney Engineer Surveyor Other If other, state relationship _____

Representative's Name _____

Street Address _____ City/Town _____ State _____ Zip _____

Telephone # _____ Cell Phone # _____ Fax # _____ Email Address _____

Attachments

The following materials must be submitted to the Planning Department along with the completed Application Form:

- Site Plan Application Checklist
- Ten (10) stamped and folded copies of the site plan – four (4) full-size (22" x 34") and six (6) reduced (11" x 17")
- Digital copy of any plans and/or exhibits (in PDF format)
- Application Fee (City property)
- Any required State or Federal Permits (NA)



City of Portsmouth, New Hampshire

Site Plan Application Checklist

This site plan application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan review regulations for full details.

Applicant Responsibilities (Section 2.5.2): Applicable fees are due upon application submittal along with required attachments. The application shall be complete as submitted and provide adequate information for evaluation of the proposed site development. Waiver requests must be submitted in writing with appropriate justification.

Name of Owner/Applicant: _____ Date Submitted: _____

Phone Number: _____ E-mail: _____

Site Address: _____ Map: _____ Lot: _____

Zoning District: _____ Lot area: _____ sq. ft.

Application Requirements			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	Fully executed and signed Application form. (2.5.2.3)		N/A
<input type="checkbox"/>	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. (2.5.2.8)		N/A

Site Plan Review Application Required Information			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	Statement that lists and describes "green" building components and systems. (2.5.3.1A)		
<input type="checkbox"/>	Gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. (2.5.3.1B)		N/A
<input type="checkbox"/>	Tax map and lot number, and current zoning of all parcels under Site Plan Review. (2.5.3.1C)		N/A
<input type="checkbox"/>	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. (2.5.3.1D)		N/A

Site Plan Review Application Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. (2.5.3.1E)		N/A
<input type="checkbox"/>	Names, addresses and telephone numbers of all professionals involved in the site plan design. (2.5.3.1F)		N/A
<input type="checkbox"/>	List of reference plans. (2.5.3.1G)		N/A
<input type="checkbox"/>	List of names and contact information of all public or private utilities servicing the site. (2.5.3.1H)		N/A

Site Plan Specifications

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director. Submittals shall be a minimum of 11 inches by 17 inches as specified by Planning Dept. staff. (2.5.4.1A)	Required on all plan sheets	N/A
<input type="checkbox"/>	Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. (2.5.4.1B)	Required on all plan sheets	N/A
<input type="checkbox"/>	GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. (2.5.4.1C)	Required on all plan sheets	N/A
<input type="checkbox"/>	Plans shall be drawn to scale. (2.5.4.1D)	Required on all plan sheets	N/A
<input type="checkbox"/>	Plans shall be prepared and stamped by a NH licensed civil engineer. (2.5.4.1D)	Required on all plan sheets	N/A
<input type="checkbox"/>	Wetlands shall be delineated by a NH certified wetlands scientist. (2.5.4.1E)		N/A
<input type="checkbox"/>	Title (name of development project), north point, scale, legend. (2.5.4.2A)	Required on all plan sheets	N/A
<input type="checkbox"/>	Date plans first submitted, date and explanation of revisions. (2.5.4.2B)	Required on all plan sheets	N/A
<input type="checkbox"/>	Individual plan sheet title that clearly describes the information that is displayed. (2.5.4.2C)	Required on all plan sheets	N/A

Site Plan Specifications

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	Source and date of data displayed on the plan. (2.5.4.2D)	Required on all plan sheets	N/A
<input type="checkbox"/>	A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." (2.5.4.2E)	Required on all plan sheets	N/A
<input type="checkbox"/>	Plan sheets submitted for recording shall include the following notes: <ul style="list-style-type: none"> a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds." b. "All improvements shown on this Site Plan shall be constructed and maintained in accordance with the Plan by the property owner and all future property owners. No changes shall be made to this Site Plan without the express approval of the Portsmouth Planning Director." (2.13.3)		N/A
<input type="checkbox"/>	Plan sheets showing landscaping and screening shall also include the following additional notes: <ul style="list-style-type: none"> a. "The property owner and all future property owners shall be responsible for the maintenance, repair and replacement of all required screening and landscape materials." b. "All required plant materials shall be tended and maintained in a healthy growing condition, replaced when necessary, and kept free of refuse and debris. All required fences and walls shall be maintained in good repair." c. "The property owner shall be responsible to remove and replace dead or diseased plant materials immediately with the same type, size and quantity of plant materials as originally installed, unless alternative plantings are requested, justified and approved by the Planning Board or Planning Director." (2.13.4)		N/A

Site Plan Specifications – Required Exhibits and Data

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
	1. Existing Conditions: (2.5.4.3A)		
<input type="checkbox"/>	a. Surveyed plan of site showing existing natural and built features;		
<input type="checkbox"/>	b. Zoning boundaries;		
<input type="checkbox"/>	c. Dimensional Regulations;		
<input type="checkbox"/>	d. Wetland delineation, wetland function and value assessment;		
<input type="checkbox"/>	e. SFHA, 100-year flood elevation line and BFE data.		
	2. Buildings and Structures: (2.5.4.3B)		
<input type="checkbox"/>	a. Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation;		
<input type="checkbox"/>	b. Elevations: Height, massing, placement, materials, lighting, façade treatments;		
<input type="checkbox"/>	c. Total Floor Area;		
<input type="checkbox"/>	d. Number of Usable Floors;		
<input type="checkbox"/>	e. Gross floor area by floor and use.		
	3. Access and Circulation: (2.5.4.3C)		
<input type="checkbox"/>	a. Location/width of access ways within site;		
<input type="checkbox"/>	b. Location of curbing, right of ways, edge of pavement and sidewalks;		
<input type="checkbox"/>	c. Location, type, size and design of traffic signing (pavement markings);		
<input type="checkbox"/>	d. Names/layout of existing abutting streets;		
<input type="checkbox"/>	e. Driveway curb cuts for abutting prop. and public roads;		
<input type="checkbox"/>	f. If subdivision; Names of all roads, right of way lines and easements noted;		
<input type="checkbox"/>	g. AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC).		
	4. Parking and Loading: (2.5.4.3D)		
<input type="checkbox"/>	a. Location of off street parking/loading areas, landscaped areas/buffers;		
<input type="checkbox"/>	b. Parking Calculations (# required and the # provided).		
	5. Water Infrastructure: (2.5.4.3E)		
<input type="checkbox"/>	a. Size, type and location of water mains, shut-offs, hydrants & Engineering data;		
<input type="checkbox"/>	b. Location of wells and monitoring wells (include protective radii).		
	6. Sewer Infrastructure: (2.5.4.3F)		
<input type="checkbox"/>	a. Size, type and location of sanitary sewage facilities & Engineering data.		
	7. Utilities: (2.5.4.3G)		
<input type="checkbox"/>	a. The size, type and location of all above & below ground utilities;		
<input type="checkbox"/>	b. Size type and location of generator pads, transformers and other fixtures.		

Site Plan Specifications – Required Exhibits and Data

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	8. Solid Waste Facilities: (2.5.4.3H)		
<input type="checkbox"/>	a. The size, type and location of solid waste facilities.		
<input type="checkbox"/>	9. Storm water Management: (2.5.4.3I)		
<input type="checkbox"/>	a. The location, elevation and layout of all storm-water drainage.		
<input type="checkbox"/>	10. Outdoor Lighting: (2.5.4.3J)		
<input type="checkbox"/>	a. Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and; b. photometric plan.		
<input type="checkbox"/>	11. Indicate where dark sky friendly lighting measures have been implemented. (10.1)		
<input type="checkbox"/>	12. Landscaping: (2.5.4.3K)		
<input type="checkbox"/>	a. Identify all undisturbed area, existing vegetation and that which is to be retained;		
<input type="checkbox"/>	b. Location of any irrigation system and water source.		
<input type="checkbox"/>	13. Contours and Elevation: (2.5.4.3L)		
<input type="checkbox"/>	a. Existing/Proposed contours (2 foot minimum) and finished grade elevations.		
<input type="checkbox"/>	14. Open Space: (2.5.4.3M)		
<input type="checkbox"/>	a. Type, extent and location of all existing/proposed open space.		
<input type="checkbox"/>	15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)		
<input type="checkbox"/>	16. Location of snow storage areas and/or off-site snow removal. (2.5.4.3O)		
<input type="checkbox"/>	17. Character/Civic District (All following information shall be included): (2.5.4.3Q)		
<input type="checkbox"/>	a. Applicable Building Height (10.5A21.20 & 10.5A43.30);	A-100	
<input type="checkbox"/>	b. Applicable Special Requirements (10.5A21.30);	NA	
<input type="checkbox"/>	c. Proposed building form/type (10.5A43);	NA	
<input type="checkbox"/>	d. Proposed community space (10.5A46).	NA	

Other Required Information			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	Traffic Impact Study or Trip Generation Report, as required. <i>(Four (4) hardcopies of the full study/report and Six (6) summaries to be submitted with the Site Plan Application) (3.2.1-2)</i>		
<input type="checkbox"/>	Indicate where Low Impact Development Design practices have been incorporated. (7.1)		
<input type="checkbox"/>	Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. (7.3.1)		
<input type="checkbox"/>	Indicate where measures to minimize impervious surfaces have been implemented. (7.4.3)		
<input type="checkbox"/>	Calculation of the maximum effective impervious surface as a percentage of the site. (7.4.3.2)		
<input type="checkbox"/>	Stormwater Management and Erosion Control Plan. <i>(Four (4) hardcopies of the full plan/report and Six (6) summaries to be submitted with the Site Plan Application) (7.4.4.1)</i>		

Final Site Plan Approval Required Information			
<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	All local approvals, permits, easements and licenses required, including but not limited to: <ul style="list-style-type: none"> a. Waivers; b. Driveway permits; c. Special exceptions; d. Variances granted; e. Easements; f. Licenses. (2.5.3.2A)		
<input type="checkbox"/>	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: <ul style="list-style-type: none"> a. Calculations relating to stormwater runoff; b. Information on composition and quantity of water demand and wastewater generated; c. Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls; d. Estimates of traffic generation and counts pre- and post-construction; e. Estimates of noise generation; f. A Stormwater Management and Erosion Control Plan; g. Endangered species and archaeological / historical studies; h. Wetland and water body (coastal and inland) delineations; i. Environmental impact studies. (2.5.3.2B)		

Final Site Plan Approval Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site. (2.5.3.2D)		
<input type="checkbox"/>	A list of any required state and federal permit applications required for the project and the status of same. (2.5.3.2E)		

Applicant's Signature: _____ **Date:** _____

PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE STREET | PORTSMOUTH, NH

SHEET LIST

CIVIL DRAWINGS	
SHEET NO.	SHEET TITLE
1 OF 1	PLAN OF LAND
1 OF 1	TOPOGRAPHIC PLAN
C-1.0	GENERAL NOTES AND EROSION CONTROL NOTES
C-2.0	SITE DEMOLITION PLAN
C-3.0	SITE PLAN
C-4.0	PAVEMENT DEMOLITION & CONSTRUCTION PLAN
C-5.0	SITE UTILITIES PLAN
C-6.0	SITE GRADING PLAN
C-6.1	SITE GRADING PLAN
C-7.0	STORMWATER PLAN
C-8.0	LANDSCAPING PLAN
C-9.0	PHOTOMETRIC PLAN
C-10.0	DETAILS SHEET
C-10.1	DETAILS SHEET
C-10.2	DETAILS SHEET
C-10.3	DETAILS SHEET

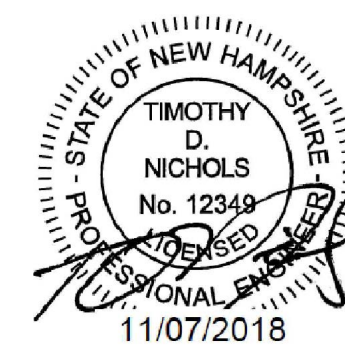
ELECTRICAL DRAWINGS	
SHEET NO.	SHEET TITLE
E-1.0	ELECTRICAL GENERAL NOTES
E-2.0	EXISTING ELECTRICAL DIAGRAM
E-2.1	EXISTING MAIN DISTRIBUTION PANELBOARD DIAGRAM
E-2.2	EXISTING RM2 PANELBOARD DIAGRAM
E-2.3	EXISTING BOILER RM AND KITCHEN PANELBOARD DIAGRAM
E-2.4	EXISTING CORRIDOR AND ASSEMBLY PANELBOARD DIAGRAM
E-2.5	ELECTRICAL DEMOLITION PLAN
E-2.6	MOP AND SERVICE FEEDER DEMOLITION
E-3.0	BRANCH WIRING NEW WORK PLAN
E-3.1	NEW MAIN DISTRIBUTION PANELBOARD DIAGRAM
E-3.2	NEW ELECTRICAL SYSTEM DIAGRAM
E-3.3	MDP AND SERVICE FEEDER NEW WORK
E-4.0	EMERGENCY LIGHTING/EXIT SIGN NEW WORK PLAN
E-4.1	STANDBY GENERATOR NEW WORK
E-5.0	FIRE ALARM SYSTEM NEW WORK
E-5.1	FIRE ALARM SYSTEM SCHEDULE
E-6.0	SECURITY SYSTEM CONCEPTUAL PLAN

ARCHITECTURAL DRAWINGS	
SHEET NO.	SHEET TITLE
A100	NOTES AND SYMBOLS
D101	DEMOLITION PLAN
A201	FLOOR PLAN
A301	REFLECTED CEILING PLAN
A401	EXTERIOR ELEVATIONS
A601	ADDITION - ENLARGED PLANS
A602	ADDITION - SECTIONS AND DETAILS
A701	INTERIOR ELEVATIONS
A702	INTERIOR ELEVATIONS
A703	BATH INTERIOR ELEVATIONS
A801	DOOR AND WINDOW SCHEDULE
A802	DOOR AND WINDOW DETAILS
A803	PARTITION TYPES AND DETAILS
A901	FINISH PLAN AND SCHEDULE
A902	FINISH PLAN AND SCHEDULE

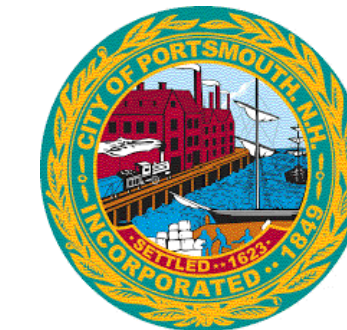
MECHANICAL DRAWINGS	
SHEET NO.	SHEET TITLE
M-1.0	GENERAL NOTES
M-2.0	MECHANICAL DEMOLITION PLAN
M-3.0	HVAC DUCTING PLAN-MAIN WEST
M-3.1	HVAC DUCTING PLAN-MAIN EAST
M-3.2	HVAC DUCTING PLAN-ASSEMBLY HALL
M-4.0	HVAC DUCT ELEVATIONS
M-4.1	HVAC DUCT ELEVATIONS
M-4.2	HVAC DUCT ELEVATIONS
M-5.0	HYDRONIC DISTRIBUTION PLAN-MAIN WEST
M-5.1	HYDRONIC DISTRIBUTION PLAN-MAIN EAST
M-6.0	VRF SYSTEMS
M-7.0	VRF CONTROLS SYSTEM
M-7.1	SEQUENCE OF OPERATIONS
M-8.0	DETAILS
M-8.1	DETAILS
M-9.0	SCHEDULES
M-9.1	SCHEDULES
M-10.0	CONCEPTUAL FIRE SPRINKLER PLAN

STRUCTURAL DRAWINGS	
SHEET NO.	SHEET TITLE
S1.0A	GENERAL NOTES
S1.0B	GENERAL NOTES
S1.1	VESTIBULE FOUNDATION PLAN
S1.2	EXISTING ROOF/VESTIBULE ROOF FRAMING PLAN
S1.3	CANOPY FRAMING PLAN
S2.1	TYPICAL FOUNDATION DETAILS
S2.2	FOUNDATION SECTIONS AND DETAILS
S2.3	FOUNDATION SECTIONS AND DETAILS
S3.1	TYPICAL FRAMING DETAILS
S3.2	FRAMING SECTIONS AND DETAILS
S3.3	FRAMING SECTIONS AND DETAILS

PLUMBING DRAWINGS	
SHEET NO.	SHEET TITLE
P-1.0	GENERAL NOTES
P-2.0	PLUMBING DEMOLITION PLAN
P-3.0	NEW SANITARY DRAIN PLUMBING PLAN
P-3.1	NEW DOMESTIC SUPPLY PLUMBING PLAN
P-4.0	DETAILS



OWNER
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801
cityofportsmouth.com | 603-431-2000



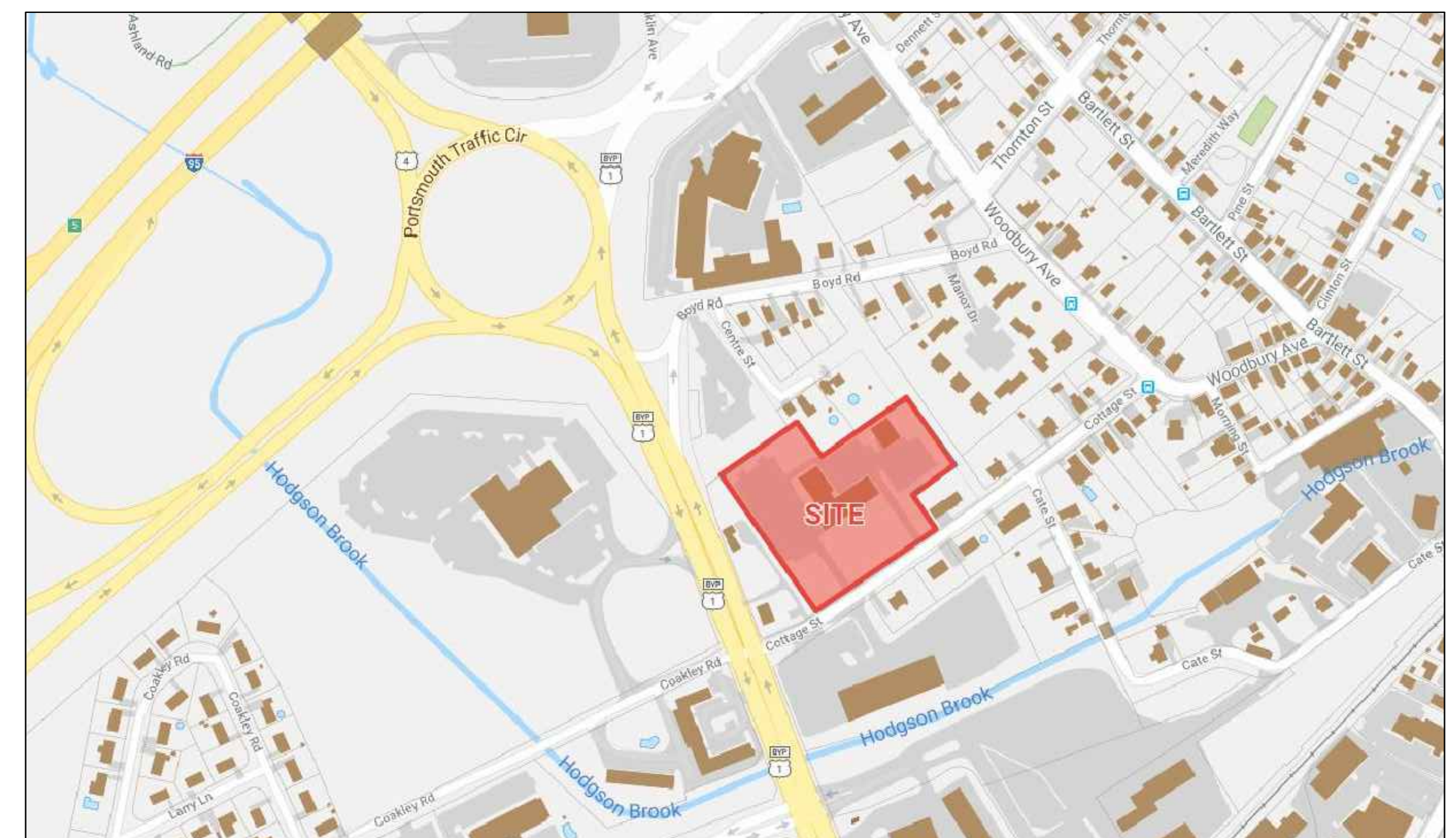
ENGINEER
AECm Architects-Engineers
13 Water Street
Newmarket, NH 03857
aecgr.com | 603-217-2805



ARCHITECT
Manypenny-Murphy Architecture
96 Penhallow Street
Portsmouth, NH 03801
manypennymurphy.com | 603-319-8199

MANYPENNY | MURPHY ARCHITECTURE

STRUCTURAL
Becker Structural Engineers
75 York Street
Portland, ME 04101
beckerstructural.com | 207-879-1838



SITE LOCUS MAP

PROJECT NO.: 17002
DATE ISSUED: 11/07/2018

NOTES:

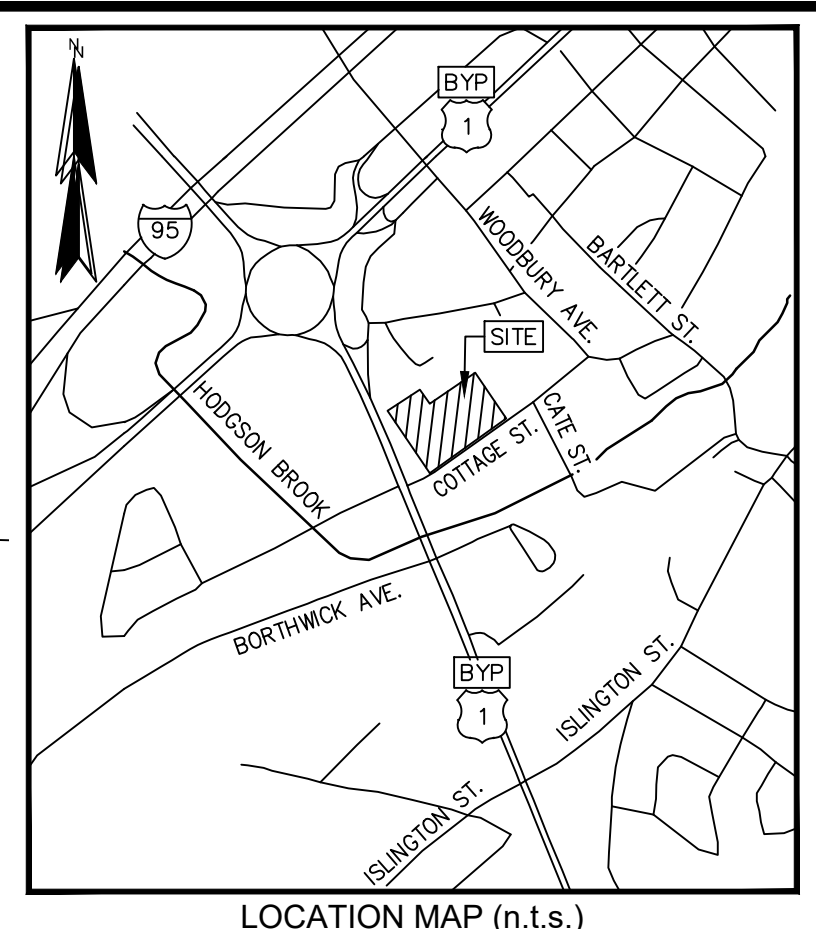
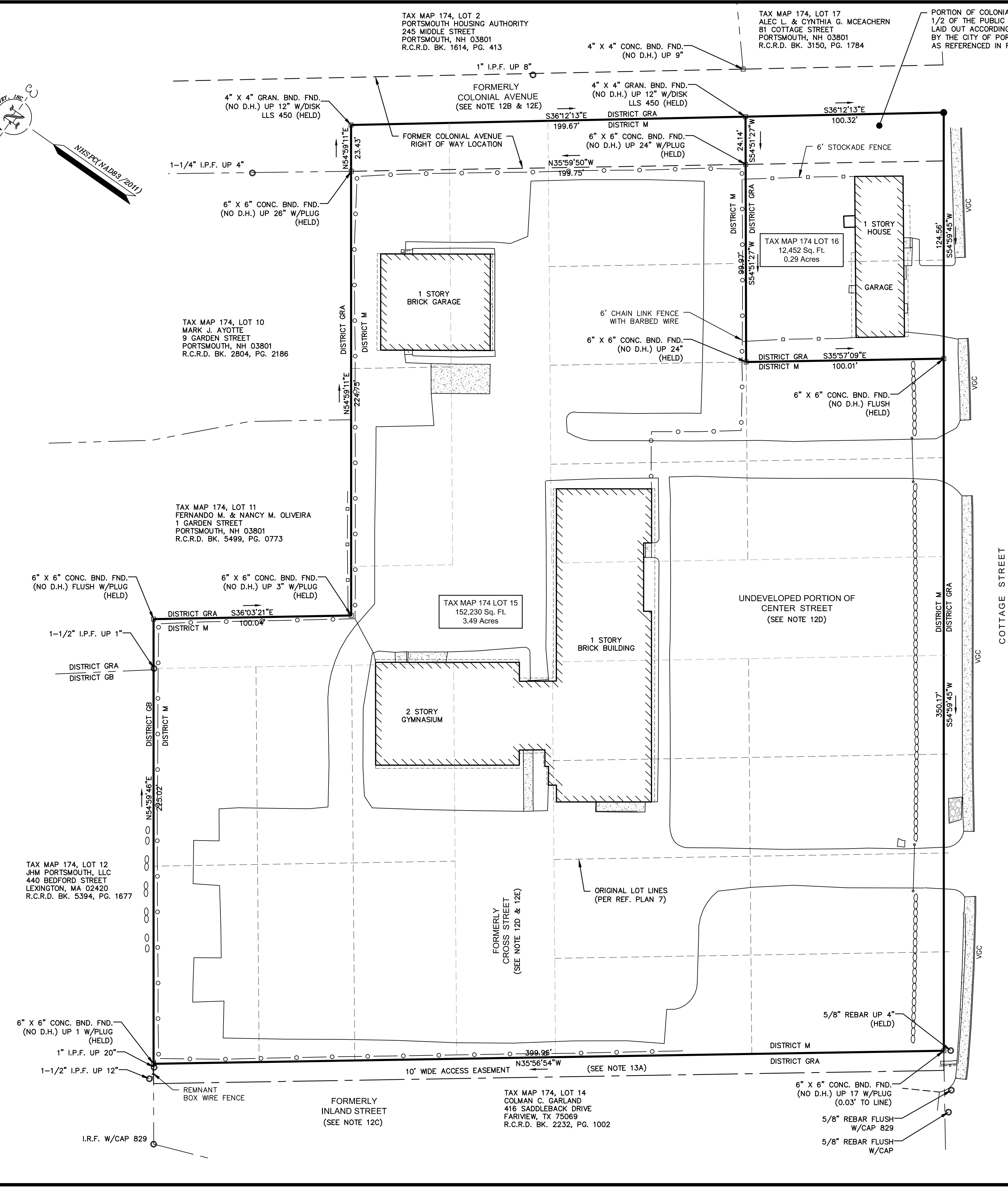
- REFERENCE: TAX MAP 174, LOTS 15 & 16
- PARCEL AREA: TAX MAP 174, LOT 15 152,230 SQ. FT. OR 3.49 AC.
TAX MAP 174, LOT 16 12,452 SQ. FT. OR 0.29 AC.
- OWNER OF RECORD:
TAX MAP 174, LOT 15
UNITED STATES OF AMERICA
125 COTTAGE STREET
1800 PENNSYLVANIA AVENUE
WASHINGTON, DC 20004
R.C.R.D. BK. 1434, PG. 51
R.C.R.D. BK. 1434, PG. 52
R.C.R.D. BK. 1419, PG. 77
R.C.R.D. BK. 1407, PG. 13
R.C.R.D. BK. 1407, PG. 14
TAX MAP 174, LOT 16
CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, NH 03801
R.C.R.D. BK. 5594, PG. 20
- DISTRICT: LOT 15 - M, MUNICIPAL LOT 16 - GRA, GENERAL RESIDENCE A DIMENSIONAL REQUIREMENTS:
PER SECTION 10.560 OF THE CITY OF PORTSMOUTH ZONING ORDINANCE: LOTS AND BUILDINGS IN THE MUNICIPAL DISTRICT ARE EXEMPT FROM ALL DIMENSIONAL AND INTENSITY REGULATIONS.
GRA
MIN. LOT AREA 7,500 sq.ft.
MIN. FRONTAGE 100 ft.
MIN. DEPTH 70 ft.
MIN. FRONT SETBACK 15 ft.
MIN. SIDE SETBACK 10 ft.
MIN. REAR SETBACK 20 ft.
MAX. BUILDING HEIGHT 35 ft. (SLOPED ROOF)
30 ft. (FLAT ROOF)
MAX. BUILDING COVERAGE 25 %
ZONING INFORMATION LISTED HEREON IS BASED ON THE CITY OF PORTSMOUTH ZONING ORDINANCE AS AMENDED JANUARY 9, 2017 AS AVAILABLE ON THE CITY WEBSITE ON MARCH 28, 2017. ADDITIONAL REGULATIONS APPLY, AND REFERENCE IS HEREBY MADE TO THE EFFECTIVE ZONING ORDINANCE. THE LAND OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE MUNICIPAL, STATE AND FEDERAL REGULATIONS.
- FIELD SURVEY PERFORMED BY E.J.S. & S.J.H. DURING MARCH 2017 USING A TRIMBLE S6 TOTAL STATION WITH A TRIMBLE TSC3 DATA COLLECTOR AND A SOKKIA B21 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- VERTICAL DATUM IS BASED ON NGVD29 PER DISK V 28 1942 ELEV. 25.59.
- FLOOD HAZARD ZONE: "X", PER FIRM MAP 330150259E, DATED 05/17/05.
- THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT LEGAL DESCRIPTION, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.
- DUE TO THE COMPLEXITY OF RESEARCHING ROAD RECORDS AS A RESULT OF INCOMPLETE, UNORGANIZED, INCONCLUSIVE, OBLITERATED, OR LOST DOCUMENTS, THERE IS AN INHERENT UNCERTAINTY INVOLVED WHEN ATTEMPTING TO DETERMINE THE LOCATION AND WIDTH OF A ROADWAY RIGHT OF WAY. THE EXTENT OF (THE ROAD(S)) AS DEPICTED HEREON IS/ARE BASED ON RESEARCH CONDUCTED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- FINAL MONUMENTATION MAY BE DIFFERENT THAN THE PROPOSED MONUMENTATION SHOWN HEREON, DUE TO THE FACT THAT SITE CONDITIONS WILL DICTATE THE ACTUAL LOCATION AND TYPE OF MONUMENTS INSTALLED IN THE FIELD. PLEASE REFER TO EITHER THE "MONUMENTATION LOCATION PLAN" TO BE RECORDED OR CONTACT DOUCET SURVEY, INC. FOR CLARIFICATION OF MONUMENTS SET. (A RECORDED PLAN WILL BE PRODUCED AT THE DISCRETION OF DOUCET SURVEY, INC.).
- RIGHT OF WAYS
A. COTTAGE STREET IS A 50' WIDE RIGHT OF WAY PER R.C.R.D. PLAN #223.
B. COLONIAL AVENUE IS AN 50' WIDE UNDEVELOPED RIGHT OF WAY. THE EASTERLY BOUNDARY LINE OF THE SUBJECT PARCELS EXTENDS TO THE CENTER LINE OF THE UNDEVELOPED ROAD. CROSSING AND UNWRITTEN RIGHTS MAY STILL EXIST.
C. TITLE TO LAND THAT WAS FORMERLY KNOWN AS INLAND STREET WAS OBTAINED BY JANE GARLAND PER SUPERIOR COURT DECREE DESCRIBED IN R.C.R.D. BOOK 2232, PAGE 1002.
D. CROSS STREET AND A PORTION OF CENTER STREET ARE UNDEVELOPED STREETS THAT RUN THROUGH THE SUBJECT PARCEL. CROSSING AND UNWRITTEN RIGHTS MAY EXIST.
E. A SEARCH OF THE CITY OF PORTSMOUTH ROAD INDEX TURNED UP NO EVIDENCE THAT COLONIAL AVENUE OR CROSS STREET ARE CITY ROADS AND THAT THERE WAS EVER ANY INDICATION THAT EITHER WAS AN ACCEPTED CITY ROAD/STREET.
- THE SUBJECT PARCEL IS SUBJECT TO OR IN BENEFIT OF THE FOLLOWING EASEMENTS:
A. 10' WIDE ACCESS EASEMENT IN FAVOR OF TAX MAP 174, LOT 15, PER R.C.R.D. BOOK 2232, PAGE 1640.

- REFERENCE PLANS:
- "BOUNDARY SURVEY USARC 99TH RSC EAST PREPARED FOR UNITED STATES OF AMERICA", BY YORK LAND SERVICES, LLC, DATED AUGUST 27, 2009, R.C.R.D. PLAN D-36061.
 - "LOT LINE ADJUSTMENT, 1 & 9 GARDEN STREET PORTSMOUTH, NH, MARK J. AYOTTE & CAROL A. BURNS", BY JAMES VERRA AND ASSOCIATES, INC., DATED OCTOBER 28, 2002, R.C.R.D. PLAN D-30687.
 - "ALTA/ACSM LAND TITLE SURVEY IN PORTSMOUTH, NH FOR JHM PORTSMOUTH, LLC", BY ROBER SURVEY, R.C.R.D. PLAN D-38205.
 - "STANDARD PROPERTY SURVEY AND PROPOSED SIDEWALK EASEMENT FOR THE CITY OF PORTSMOUTH, FOR PROPERTY AT 185 COTTAGE STREET OWNED BY COLMAN C. GARLAND", BY EASTERLY SURVEYING, INC., DATED NOVEMBER 30, 2012, R.C.R.D. PLAN D-38017.
 - "STANDARD BOUNDARY SURVEY AND SUBDIVISION PLAN OF LAND, LOT 8, TAX MAP 173, 160 COTTAGE STREET PORTSMOUTH, NH", BY CIVILWORKS ENGINEERS & SURVEYORS, R.C.R.D. PLAN D-28981.
 - "SPADEA LOTS GARDEN STREET & CENTRE STREET", BY JOHN W. DURGIN CIVIL ENGINEERS, DATED NOVEMBER 1950, R.C.R.D. PLAN #01676.
 - "PLAN OF A LOT OF LAND BELONGING TO FRANK JONES", DATED JULY 1901, R.C.R.D. PLAN 223.

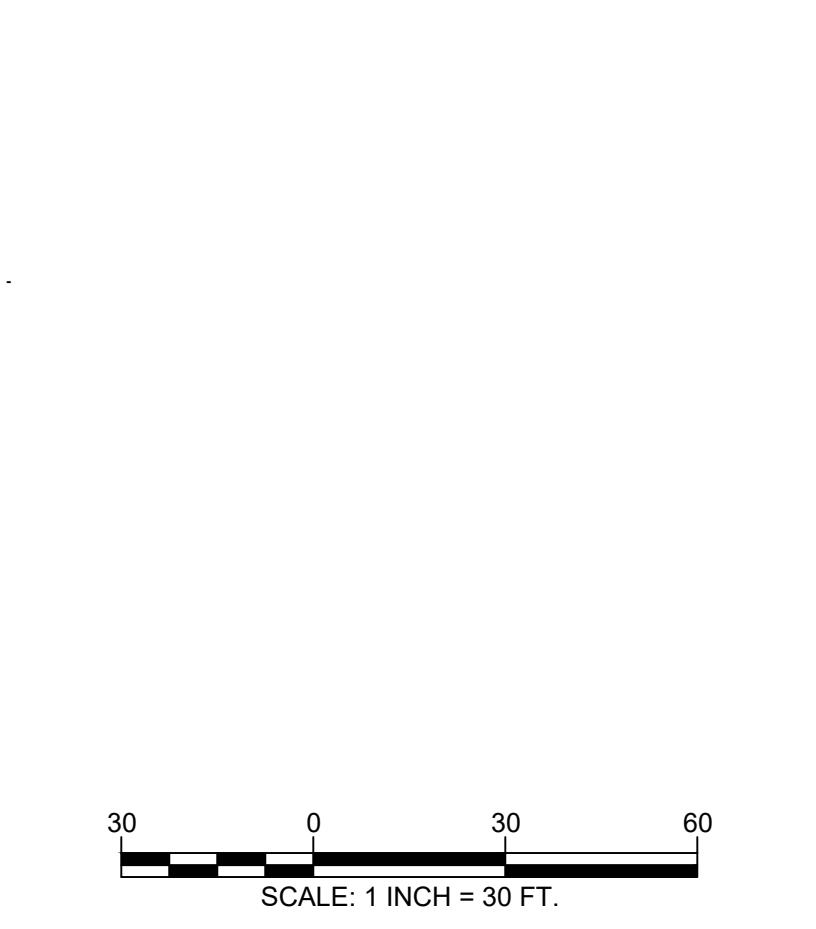
I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE (NH RSA TITLE LXIV) AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY ME OR BY THOSE UNDER MY DIRECT SUPERVISION AND FALLS UNDER THE URBAN SURVEY CLASSIFICATION OF THE NH CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. I CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. RANDOM TRAVERSE SURVEY BY TOTAL STATION, WITH A PRECISION GREATER THAN 1:15,000.

_____. L.L.S. #989
_____. DATE

THE CERTIFICATIONS SHOWN HEREON ARE INTENDED TO MEET REGISTRY OF DEED REQUIREMENTS AND ARE NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.



- LEGEND
- LOT LINE
 - RIGHT OF WAY LINE
 - EXISTING EASEMENT LINE
 - APPROXIMATE ABUTTERS LOT LINE
 - STONE WALL
 - REMANANT STONE WALL
 - STOCKADE FENCE
 - CHAIN LINK FENCE
 - CONCRETE
 - VERTICAL GRANITE CURB
 - BOUND FOUND
 - DRILL HOLE FOUND
 - IRON PIPE/ROD FOUND
 - 5/8" REBAR W/D CAP TO BE SET
 - BOUND FOUND
 - DRILL HOLE
 - IRON PIPE FOUND
 - IRON ROD FOUND
 - CONCRETE
 - GRANITE



PLAN OF LAND
FOR
AECm, LLC
OF
TAX MAP 174, LOTS 15 & 16
COTTAGE STREET
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

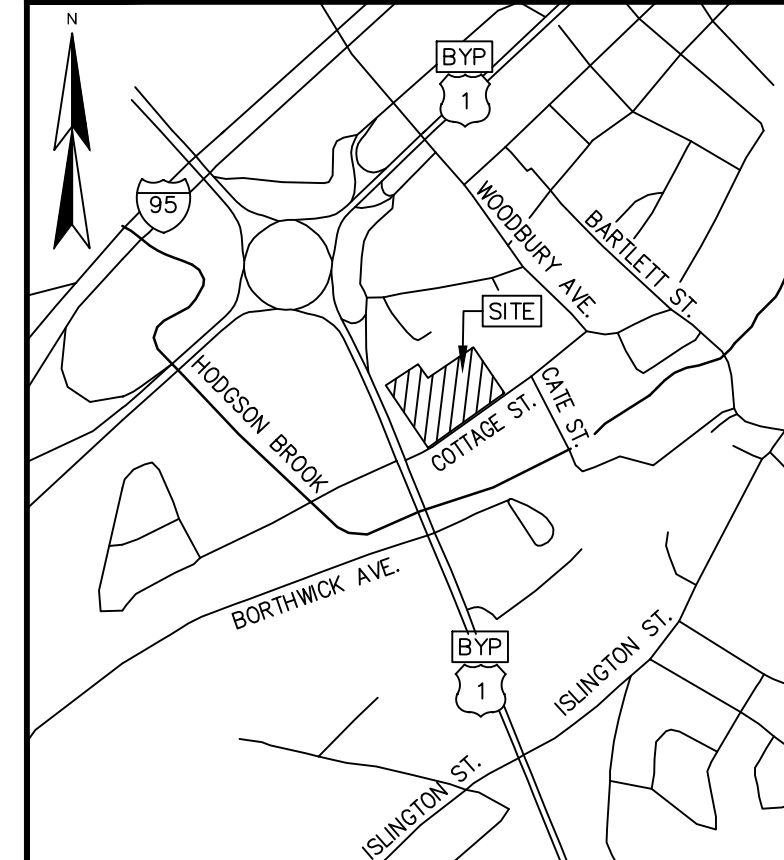
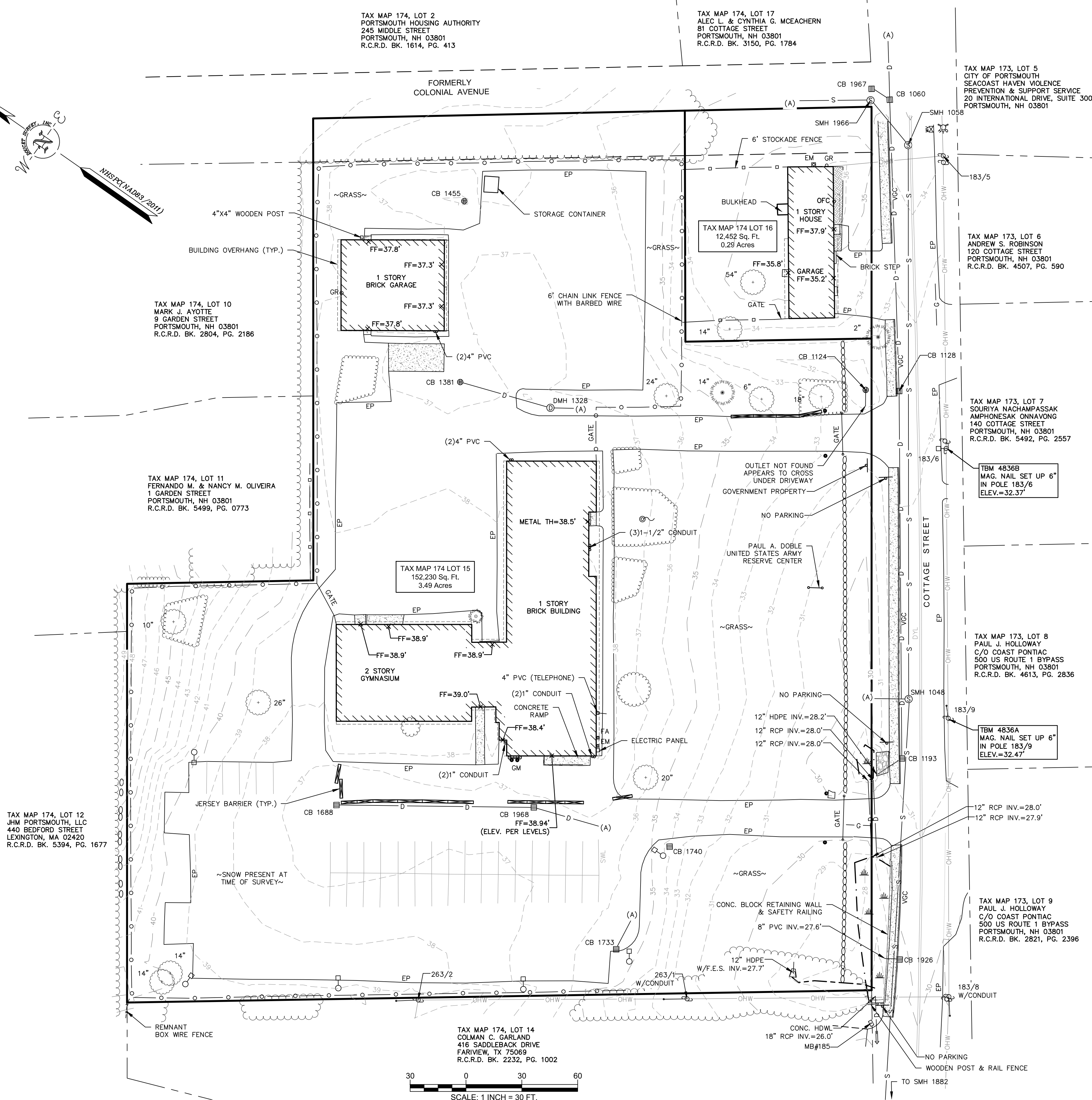
DRAWN BY: M.T.L.	DATE: MARCH 2017
CHECKED BY: M.W.F.	DRAWING NO.: 4836A
JOB NO.: 4836	SHEET 1 OF 1

DOUCET SURVEY
 Serving Your Professional Surveying & Mapping Needs
 102 Kent Place, Newmarket, NH 03857 (603) 659-6560
 2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4060
 10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005
 http://www.doucetsurvey.com

NOTES:

- REFERENCE: TAX MAP 174, LOTS 15 & 16
- OWNER OF RECORD:
 TAX MAP 174, LOT 15
 UNITED STATES OF AMERICA
 125 COTTAGE STREET
 1600 PENNSYLVANIA AVENUE
 WASHINGTON, DC 20004
 R.C.R.D. BK. 1434, PG. 51
 R.C.R.D. BK. 1434, PG. 52
 R.C.R.D. BK. 1419, PG. 77
 R.C.R.D. BK. 1407, PG. 13
 R.C.R.D. BK. 1407, PG. 14
 TAX MAP 174, LOT 16
 CITY OF PORTSMOUTH
 1 JUNKINS AVENUE
 PORTSMOUTH, NH 03801
 R.C.R.D. BK. 5594, PG. 20
- FIELD SURVEY PERFORMED BY E.J.S. & S.J.H. DURING MARCH 2017 USING A TRIMBLE S6 TOTAL STATION WITH A TRIMBLE TS03 DATA COLLECTOR AND A SOKKIA B21 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- VERTICAL DATUM IS BASED ON NGVD29 PER DISK V 28 1942 ELEV. 25.59.
- FLOOD HAZARD ZONE: "X", PER FIRM MAP 330150259E, DATED 05/17/05.
- PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 1' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY, INC. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVABLE PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
- ALL ELECTRIC, GAS, TEL. WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
- WETLANDS WERE NOT DELINEATED ON THIS SITE. OBSERVED EDGE OF WATER SHOWN IS BASED ON AN APPROXIMATE LOCATION BY DOUCET SURVEY.
- THIS SURVEY WAS PERFORMED IN WINTER CONDITIONS WITH SNOW COVER ON THE GROUND. A SITE CHECK IS RECOMMENDED IN THE SPRING IN ORDER TO ENSURE THE COMPLETENESS/ACCURACY OF THE INFORMATION SHOWN HEREON.

STRUCTURE TABLE	
DRAINAGE	CB 1740
CB 1060	RIM ELEV.=33.5'
RIM ELEV.=34.8'	(WATER) ELEV.=28'
(1128) 12" HDPE INV.=30.8'	(SILT) ELEV.=24.9'
(1967) 8" HDPE INV.=30.7'	NO PIPES VISIBLE
(A) 12" HDPE INV.=30.7'	
	CB 1926
CB 1124	RIM ELEV.=29.7'
RIM ELEV.=31.0'	(A) 8" PVC INV.=27.9'
(A) 12" RCP INV.=28.1'	
	CB 1967
CB 1128	RIM ELEV.=34.2'
RIM ELEV.=32.4'	(1060) 8" HDPE INV.=31.9'
(1060) 12" HDPE INV.=29.0'	
(1193) 12" HDPE INV.=28.9'	CB 1968
	RIM ELEV.=36.6'
CB 1193	(1688) 12" PVC INV.=31.0'
RIM ELEV.=31.2'	(A) 12" PVC INV.=N/A HOODED
(1128) 12" HDPE INV.=28.5'	(WATER) ELEV.=31.0'
(1974) 12" HDPE INV.=28.4'	(SILT) ELEV.=28.1'
	SEWER
DMH 1328	SMH 1048
RIM ELEV.=37.3'	RIM ELEV.=31.6'
(1381) 12" RCP INV.=30.7'	(1058) 8" CLAY INV.=24.7'
(A) 15" RCP INV.=30.4'	(A) 8" CLAY INV.=25.3'
	(1882) 8" CLAY INV.=24.8'
CB 1381	
RIM ELEV.=36'	SMH 1058
RUSTED SHUT	RIM ELEV.=34.6'
(1328) 12" RCP INV.=N/A	(1966) 8" CLAY INV.=28.0'
(SUMP) ELEV.=31.2'	(1048) 8" ASB INV.=27.7'
	SMH 1882
CB 1455	RIM ELEV.=35.5'
RIM ELEV.=35.5'	RIM ELEV.=29.8'
RUSTED SHUT	(1048) 8" CLAY INV.=21.1' (DROP INLET)
(WATER) ELEV.=31.8'	
(SILT) ELEV.=31.7'	SMH 1966
	RIM ELEV.=34.5'
CB 1688	RIM ELEV.=36.2'
RIM ELEV.=36.2'	(1058) 8" ASB INV.=28.2'
(1968) 12" PVC INV.=N/A HOODED	(A) 8" ASB INV.=28.1'
(WATER) ELEV.=32.5'	
(SILT) ELEV.=29.7'	ONLY 1 PIPE VISIBLE
	CB 1733
CB 1733	RIM ELEV.=35.2'
RIM ELEV.=35.2'	(A) 12" PVC INV.=31.5'
(WATER) ELEV.=31.5'	(SILT) ELEV.=29.4'



- LEGEND**
- LOT LINE
 - RIGHT OF WAY LINE
 - APPROXIMATE ABUTTERS LOT LINE
 - STONE WALL
 - REMNANT STONE WALL
 - STOCKADE FENCE
 - CHAIN LINK FENCE
 - OVERHEAD WIRE
 - SEWER LINE
 - DRAIN LINE
 - GAS LINE
 - MAJOR CONTOUR LINE
 - MINOR CONTOUR LINE
 - TREE LINE
 - SHRUB LINE
 - OBSERVED EDGE OF WATER (SEE NOTE 11)
 - STREAM
 - CONCRETE
 - LANDSCAPED AREA
 - UTILITY POLE
 - UTILITY POLE & GUY WIRE
 - UTILITY POLE W/ LIGHT
 - LIGHT POLE (ONE ARM)
 - SIGN
 - BOUND FOUND
 - DRILL HOLE FOUND
 - IRON PIPE/ROD FOUND
 - BOLLARD
 - FIRE HYDRANT
 - WATER GATE VALVE
 - GAS REGULATOR
 - CATCH BASIN
 - DRAIN MANHOLE
 - FLARED END SECTION
 - SEWER MANHOLE
 - WETLAND AREA
 - FLAG POLE
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - TYP.
 - D.H.F.
 - I.P.F.
 - CONC.
 - FF
 - TH
 - EP
 - VGC
 - DYL
 - SWL
 - EM
 - GM
 - FA

TOPOGRAPHIC PLAN
 FOR
 AECm, LLC
 OF
 TAX MAP 174, LOTS 15 & 16
 COTTAGE STREET
 PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY:	M.T.L.	DATE:	MARCH 2017
CHECKED BY:	M.W.F.	DRAWING NO.:	4836A
JOB NO.:	4836	SHEET	1 OF 1

DOUCET SURVEY
 Saving Your Professional Surveying & Mapping Needs
 102 Kent Place, Newmarket, NH 03857 (603) 659-6560
 2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4060
 10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005
 http://www.doucetsurvey.com

PROJECT NAME AND LOCATION

PORTSMOUTH SENIOR ACTIVITY CENTER 43° 4'15.94"N
126 COTTAGE ST. 70°46'40.85"W
PORTSMOUTH, NH 03801

DESCRIPTION

THE PROJECT CONSISTS OF THE ADAPTIVE REUSE OF THE FORMER DOBLE ARMOY. THE PROJECT ENTAILS UPGRADES OF ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE CIVIL SYSTEMS.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 25,260 SQ. FT.

SOIL CHARACTERISTICS

BASED ON THE NRCS SOIL SURVEY FOR ROCKINGHAM COUNTY THE SOILS CONSISTS OF "URBAN LAND-CANTON COMPLEX".

NAME OF RECEIVING WATERS

THE STORM WATER RUNOFF WILL FLOW VIA A CLOSED DRAINAGE SYSTEM TO ONE OF TWO EXISTING OUTFALLS NORTH MILL POND.

SEQUENCE

- CUT AND CLEAR TREES.
 - CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
 - NEW CONSTRUCTION.
 - DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE.
 - CONTROL OF DUST.
 - CONSTRUCTION ACCESS.
 - PROXIMITY OF CONSTRUCTION SITE TO RECEIVING WATERS.
 - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING.
 - ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION, PERCOLATION, AND SEDIMENTATION BASINS TO BE STABILIZED USING VEGETATIVE AND NON-STRUCTURAL BMPs PRIOR TO DIRECTING RUNOFF TO THEM.
 - CLEAR AND DISPOSE OF DEBRIS.
 - CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
 - GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREAS SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION.
 - BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDDED AND MULCHED IMMEDIATELY AFTER CONSTRUCTION.
 - DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
 - FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
 - INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
 - COMPLETE PERMANENT SEEDING AND LANDSCAPING.
 - REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.
- NOTE: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.

EROSION CONTROL NOTES

- ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
- PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
- CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT SACKS AND SILT SOCKS, AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
- SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- PERMETER CONTROLS INCLUDING SILT FENCES, HAY BALE BARRIERS, AND/OR SILT SOCKS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND FERTILIZER.
- INSPECT ALL INLET PROTECTION AND PERMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

- THIS PROJECT DOES NOT EXCEED ONE (1) ACRE OF DISTURBANCE AND DOES NOT REQUIRE A SWPPP.
 - THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT.
 - OBSERVATIONS OF THE PROJECT FOR COMPLIANCE SHALL BE MADE AT LEAST ONCE A WEEK OR WITH 24 HOURS OF STORM 0.25 INCHES OR GREATER.
 - AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR.
 - A REPRESENTATIVE OF THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES.
 - IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

STABILIZATION

- AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COARSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED.

- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- WINTER STABILIZATION PRACTICES:
 - ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHOR NETTING, ELSEWHERE.
 - ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.
 - AFTER NOVEMBER 15TH, INCOMPLETE ROAD SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
 - TEMPORARY SEEDING.
 - MULCHING.
- WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THESE AREAS, SILT FENCES AND HAY BALE BARRIERS AND ANY EARTHDIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- DURING CONSTRUCTION, RUN OFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUN OFF FROM THE SITE WILL BE FILTERED THROUGH HAY BALE BARRIERS AND SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15TH.

DUST CONTROL

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST THROUGHOUT THE CONSTRUCTION PERIOD.
- DUST CONTROL METHODS SHALL INCLUDE BUT ARE NOT LIMITED TO, SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
- DUST CONTROL MEASURES SHALL BE UTILIZED TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ADJUTING AREAS.

STOCK PILES

- LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
- ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
- PERMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
- PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.
- CONTRACTOR SHALL NOT TRANSPORT ANY LOAM OR OTHER SOILS FROM THE SITE WITHOUT OWNER AUTHORIZATION.

VEGETATION

- TEMPORARY GRASS COVER:
 - SEEDBED PREPARATION: APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE.
 - SEEDING:
 - UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE.
 - WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
 - APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
 - MAINTENANCE: TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE, AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMNS, ETC.).
- VEGETATIVE PRACTICE:
 - FOR PERMANENT MEASURES AND PLANTINGS.
 - LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
 - FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZE APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER.
 - SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH.
 - SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE.
 - THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT ERODING THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RE-SEEDDED, AND ALL NOXIOUS WEEDS REMOVED.
 - THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDDED AREAS UNTIL ACCEPTED BY THE OWNER.
 - A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

SEEDING RATE	
CREeping RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE

- | | |
|--------|------------|
| REDTOP | 2 LBS/ACRE |
|--------|------------|
- IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15TH. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
 - DORMANT SEEDING (SEPTEMBER 1TH TO FIRST SNOWFALL): FOLLOW PERMANENT MEASURES FOR SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE INCORPORATING WINTER RYE AT THE RATE INDICATED. RATE: APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA

- THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE.
 - THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY.
 - IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.
 - CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS.
 - INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES

- DISCHARGES FROM FIRE-FIGHTING ACTIVITIES.
- FIRE HYDRANT FLUSHING.
- WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED.
- WATER USED TO CONTROL DUST.
- POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHING.
- ROUTINE EXTERNAL BUILDING WASH DOWN - NO DETERGENTS.
- UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE.
- FOUNDATION OR FOOTING DRAINS - NOT CONTAMINATED.
- UNCONTAMINATED EXCAVATION DEWATERING.
- LANDSCAPE IRRIGATION.

WASTE DISPOSAL

- WASTE MATERIALS:
 - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER.
 - NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE.
 - ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
- HAZARDOUS WASTE:
 - ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER.
 - SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
- SANITARY WASTE:
 - ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION

- CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
- THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
 - GOOD HOUSEKEEPING: THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:
 - ONLY SUFFICIENT AMOUNTS OF PRODUCTS REQUIRED SHALL BE STORED ON SITE.
 - ALL MATERIALS STORED ON SITE SHALL BE IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CLOSURE.
 - MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
 - THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
 - SUBSTANCES SHALL NOT BE MIXED UNLESS RECOMMENDED BY THE MANUFACTURER.
 - CONTAINERS SHALL BE EMPTY PRIOR TO DISPOSAL.
 - HAZARDOUS PRODUCTS: THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
 - PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
 - ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
 - SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
 - PRODUCT SPECIFICATION PRACTICES: THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
 - PETROLEUM PRODUCTS:
 - ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE.
 - PETROLEUM PRODUCTS SHALL BE STORED IN ORIGINAL MANUFACTURER LABELED CONTAINERS AND SEALED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
 - FERTILIZERS:
 - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS.
 - ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER.
 - STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
 - PAINTS:
 - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.
 - EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM.

- EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
- SPILL CONTROL PRACTICES: IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
 - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
 - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGES, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
 - ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
 - THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
 - SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED.
 - THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
 - VEHICLE FUELING AND MAINTENANCE PRACTICE:
 - CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY.
 - CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY.
 - IF POSSIBLE, THE CONTRACTOR SHALL KEEP AREA COVERED.
 - CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.
 - THE CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.
 - VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE.
 - CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

ADA COMPLIANCE

- PARKING:
 - PARALLEL PARKING SPOTS SHALL BE NO LESS THAN 8.5 FEET IN WIDTH AND 20 FEET IN DEPTH. MINIMUM WIDTH OF A CORRESPONDING 1-WAY TRAFFIC AND 2-WAY TRAFFIC SHALL BE 14 FEET AND 24 FEET RESPECTIVELY.
 - 45° PARKING SPOTS SHALL BE NO LESS THAN 8.5 FEET IN WIDTH AND 19 FEET IN DEPTH. MINIMUM WIDTH OF A CORRESPONDING 1-WAY TRAFFIC AND 2-WAY TRAFFIC SHALL BE 16 FEET AND 24 FEET RESPECTIVELY.
 - 90° PARKING SPOTS SHALL BE NO LESS THAN 8.5 FEET IN WIDTH AND 19 FEET IN DEPTH. MINIMUM WIDTH OF A CORRESPONDING 1-WAY TRAFFIC AND 2-WAY TRAFFIC SHALL BE 24 FEET.
- PEDESTRIAN CIRCULATION:
 - A MINIMUM 5-FOOT WIDE PEDESTRIAN PATH SHALL BE PROVIDED.
 - SIDEWALKS AND PEDESTRIAN PATHWAYS LONGER THAN 500 FEET SHALL PROVIDE AREAS FOR STANDING AND SITTING AND MAY INCLUDE PEDESTRIAN AMENITIES SUCH AS BENCHES, TABLES, SHADE TREES OR GRASSY AREAS.
 - SUCH PEDESTRIAN AREAS SHALL BE A MINIMUM OF 100 SQUARE FEET IN AREA AND SHALL BE PROVIDED AT REGULAR INTERVALS OF 300 FEET ALONG THE SIDEWALK OR PEDESTRIAN PATHWAY.

GENERAL NOTES

- STANDARD CONSTRUCTION WORK PERIOD IS MONDAY THROUGH FRIDAY FROM 0700 TO 1800. CONTRACTOR SHALL REQUEST AUTHORIZATION FROM CITY FOR WORK OUTSIDE OF THIS PERIOD AT LEAST 72 HOURS IN ADVANCE.
- PLANS HAVE BEEN COMPILED FROM EXISTING RECORD PLANS, ON-SITE FIELD SURVEY AND OBSERVATION.
- UNLESS OTHERWISE NOTED, ALL EXISTING FEATURES DESIGNATED ON THE PLANS TO REMAIN INCLUDING, BUT NOT LIMITED TO, TREES, SIGNS, SIGN POSTS, CURBS, SIDEWALKS AND BACK OF SIDEWALK FEATURES WILL BE VERIFIED, LOCATED, AND PROTECTED DURING ALL PHASES OF CONSTRUCTION. ALL WORK SHALL COMPLY WITH CITY OF PORTSMOUTH STANDARDS.
- NEW WHEELCHAIR RAMPS AND ACCESSIBLE FEATURES WILL BE PROVIDED WHERE REQUIRED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION OF THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS AND ALL ADDENDA ISSUED THERE AFTER.
- SURVEY CONTROL BOUNDS AND STREET LINE MONUMENTATION SHALL NOT BE DISTURBED DURING THE COURSE OF WORK AND SHALL BE PROTECTED. SHOULD ANY BOUND BE DISTURBED, THE CONTRACTOR WILL BE REQUIRED TO HIRE, AT HIS OWN EXPENSE, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEW HAMPSHIRE TO REPLACE AND OR RESET THE BOUND TO ITS ORIGINAL POSITION.
- SALVAGED ITEMS AS NOTED ARE TO BECOME THE PROPERTY OF THE CITY OF PORTSMOUTH.
- FEATURES MAY BE SHOWN WITHIN THE LIMIT OF WORK THAT ARE NOT EXPLICITLY CALLED OUT FOR REMOVAL OR DEMOLITION. DEMOLISH ALL FEATURES WITHIN THE LIMIT OF WORK REQUIRED TO DISTURBE THE WORK OF THE PROJECT.
- PREVENT ANY DISTURBANCE OR DAMAGE TO ADJACENT PROPERTIES.
- CONTRACTOR SHALL REPORT ALL SPILLS AND LEAKS OF OIL OR OTHER HAZARDOUS SUBSTANCES (IE OIL, ANTIFREEZE, CHEMICALS, ETC.) OCCURRING DURING THE PERFORMANCE OF THIS CONTRACT IMMEDIATELY UPON DISCOVERY, REGARDLESS OF THE QUANTITY. CALL THE FIRE DEPARTMENT TO REPORT THE SPILL. THE CITY OF PORTSMOUTH RESERVES THE RIGHT TO CLEAN UP, PACKAGE AND DISPOSE OF CONTRACTOR SPILLS OCCURRING ON THE SITE, AND BILL SUCH COSTS TO THE CONTRACTOR.

- IF ADDITIONAL MATERIAL, NOT INDICATED, THAT MAY BE HAZARDOUS TO HUMAN HEALTH UPON DISTURBANCE DURING CONSTRUCTION OPERATIONS IS ENCOUNTERED, STOP THAT PORTION OF WORK AND NOTIFY THE CITY OF PORTSMOUTH AND DPW IMMEDIATELY.

AS BUILT NOTES

- CHANGES FROM THE CONTRACT PLANS WHICH ARE MADE IN THE WORK OR ADDITIONAL INFORMATION WHICH MIGHT BE UNCOVERED IN THE COURSE OF CONSTRUCTION MUST BE ACCURATELY AND NEATLY RECORDED AS THEY OCCUR BY MEANS OF DETAILS AND NOTES. THE CONTRACTOR SHALL PREPARE AND PROVIDE TO THE CITY OF PORTSMOUTH WORKING RECORD (AS-BUILT) DRAWINGS AFTER THE COMPLETION OF EACH DEFINABLE FEATURE OF WORK AS LISTED IN THE CONTRACTOR QUALITY CONTROL PLAN (FOUNDATIONS, UNDERGROUND UTILITIES, STRUCTURAL STEEL, ETC., AS APPROPRIATE FOR THE PROJECT). IF THE CONTRACTOR FAILS TO MAINTAIN THE WORKING AND FINAL RECORD DRAWINGS AS SPECIFIED HEREIN, THE CITY OF PORTSMOUTH MAY DEDUCT FROM THE MONTHLY PROGRESS PAYMENT AN AMOUNT REPRESENTING THE ESTIMATED COST OF MAINTAINING THE RECORD DRAWINGS. THIS MONTHLY DEDUCTION WILL CONTINUE UNTIL AN AGREEMENT CAN BE REACHED BETWEEN THE CITY OF PORTSMOUTH AND THE CONTRACTOR REGARDING THE ACCURACY AND COMPLETENESS OF UPDATED DRAWINGS. THE CONTRACTOR SHALL SHOW ON THE WORKING AND FINAL RECORD DRAWINGS, BUT NOT LIMITED TO, THE FOLLOWING INFORMATION:
 - THE ACTUAL LOCATION (ELEVATION AND HORIZONTAL COORDINATES), MATERIALS AND SIZES OF ALL SUB-SURFACE UTILITY LINES. IN ORDER THAT THE LOCATION OF THESE LINES AND APPURTENANCES MAY BE DETERMINED IN THE EVENT THE SURFACE OPENINGS OR INDICATORS BECOME COVERED OVER OR OBSCURED, SHOW BY OFFSET DIMENSIONS TO TWO PERMANENTLY FIXED SURFACE FEATURES THE END OF EACH RUN INCLUDING EACH CHANGE IN DIRECTION ON THE RECORD DRAWINGS. HORIZONTAL COORDINATES BASED ON THE SHIPYARD DATUM. LOCATE VALVES, FITTINGS, SPLICE BOXES AND SIMILAR APPURTENANCES BY DIMENSIONING ALONG THE UTILITY RUN FROM A REFERENCE POINT. ALSO, RECORD THE DEPTH BELOW THE SURFACE OF EACH RUN OF PIPE, FITTINGS, VALVES, ETC.
 - THE LOCATION AND DIMENSIONS OF ANY CHANGES WITHIN THE BUILDING STRUCTURE.
 - CORRECT GRADE, ELEVATIONS, CROSS SECTION, OR ALIGNMENT OF ROADS, EARTHWORK, STRUCTURES OR EXISTING AND NEW UTILITIES IF ANY CHANGES WERE MADE FROM CONTRACT PLANS.
 - CHANGES IN DETAILS OF DESIGN OR ADDITIONAL INFORMATION OBTAINED FROM WORKING DRAWINGS SPECIFIED TO BE PREPARED AND/OR FURNISHED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO FABRICATION, ERECTION, INSTALLATION PLANS AND PLACING DETAILS, PIPE SIZES, INSULATION MATERIAL, DIMENSIONS OF EQUIPMENT FOUNDATIONS, ETC.
 - THE TOPOGRAPHY, INVERT ELEVATIONS AND GRADES OF DRAINAGE INSTALLED OR AFFECTED AS PART OF THE PROJECT CONSTRUCTION.
 - CHANGES OR MODIFICATIONS WHICH RESULT FROM THE FINAL INSPECTION.
 - WHERE CONTRACT DRAWINGS OR SPECIFICATIONS PRESENT OPTIONS, SHOW ONLY THE OPTION SELECTED FOR CONSTRUCTION ON THE FINAL AS-BUILT PRINTS.
 - SYSTEMS DESIGNED OR ENHANCED BY THE CONTRACTOR, SUCH AS HVAC CONTROLS, FIRE ALARM, FIRE SPRINKLER, AND IRRIGATION SYSTEMS.
 - WHERE UTILITY LOCATIONS DIFFER FROM THOSE IDENTIFIED ON THE PLANS.

CONSTRUCTION NOTES

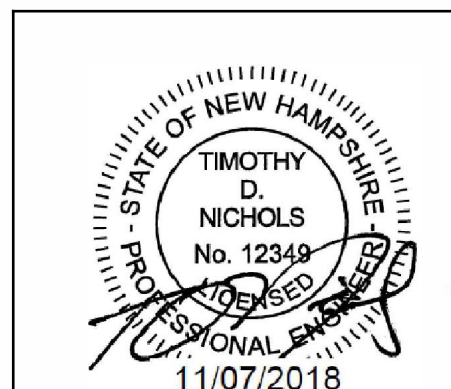
- THE CONTRACTOR SHALL COORDINATE MATERIAL STORAGE AND LAYDOWN AREAS WITH THE CITY OF PORTSMOUTH DPW.
- ALL CONSTRUCTION MATERIALS SHALL BE TRANSPORTED TO AND FROM THE SITE IN COVERED VEHICLES. THE CONTRACTOR SHALL MAINTAIN AND SWEEP PAVEMENT AREAS AND ADJACENT STREETS AS NECESSARY TO KEEP ALL AREAS CLEAN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE CITY OF PORTSMOUTH DURING THE PROCESS OF THE WORK.
- THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SEQUENCING PLAN FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOR MAINTAINING SECURITY AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE O.S.H.A. REGULATIONS AND SAFETY REQUIREMENTS. MA
- ALL CONSTRUCTION SIGNS SHALL BE DESIGNED TO WITHSTAND 50MPH WINDS VELOCITY WINDS AND BE PREPARED BY A PROFESSIONAL SIGN COMPANY WITH A MINIMUM OF THREE (3) YEARS EXPERIENCE.
- WHERE CONTRACTOR REMOVES EXISTING SITE FEATURES THAT ARE TO REMAIN, TO FACILITATE INSTALLATION OF NEW WORK FOR THIS PROJECT, CONTRACTOR SHALL REPLACE THE EXISTING SITE FEATURES AT CONTRACTORS EXPENSE.
- THE CONSTRUCTION LIMIT LINE SHOWN ON DRAWING IS AN APPROXIMATION OF THE CONSTRUCTION LIMITS. THE CITY OF PORTSMOUTH MAY MODIFY THIS LINE TO ACCOMMODATE THE EFFICIENCY OF CONSTRUCTION PROJECT.

TREE PLANTING NOTES

- ALL PLANTING HOLES SHALL BE DUG BY HAND- NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINE IS USED TO DIG IN ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF THE ROOT BALL.
- ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.
- THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE PRESENT.
- THE ROOT COLLAR OF THE TREE SHALL BE 2'-3" ABOVE GRADE OF PLANTING HOLE FOR FINISHED DEPTH.
- ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW PLANTING BEDS ARE BEING CREATED.
- ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND ALL LIFTS SHALL BE WATERED SO THE PLANTING WILL BE SET AND FREE OF AIR POKETS- NO EXCEPTIONS.
- AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.
- 2'-3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA.
- AT THE TIME THE PLANTING IS COMPLETE THE PLANTING SHALL RECEIVE ADDITIONAL WATER TO ENSURE COMPLETE HYDRATION OF THE ROOTS, BACKFILL MATERIAL AND MULCH LAYER.
- STAKES AND GUYS SHALL BE USED WHERE APPROPRIATE AND/OR NECESSARY. GUY MATERIAL SHALL BE NON-DAMAGING TO THE TREE.
- ALL PLANTING STOCK SHALL BE SPECIMEN QUALITY, FREE OF DEFECTS, AND DISEASE OR INJURY. THE CITY OF PORTSMOUTH, NH RESERVES THE RIGHT TO REFUSE/REJECT ANY PLANT MATERIAL OR PLANTING ACTION THAT FAILS TO MEET THE STANDARDS SET FORTH IN THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING AND/OR THE CITY OF PORTSMOUTH, NH PLANTING REQUIREMENTS.
- CONTRACTOR TO HAVE CERTIFIED ARBORIST EVALUATE ALL TREES (ON PROPERTY AND EXTENDING OVER THE PROPERTY BOUNDARY). ARBORIST SHALL PRUNE ALL LIMBS TO IMPROVE TREE HEALTH AND TO PREVENT DAMAGE TO FENCING, STRUCTURES, AND LIGHT POLES. ARBORIST SHALL REMOVE ANY DISEASED OR DYING TREES AND SHRUBS



13 WATER ST NEWMARKET NH
(603) 200-0096 AECGR.COM



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST.
PORTSMOUTH, NH 03801

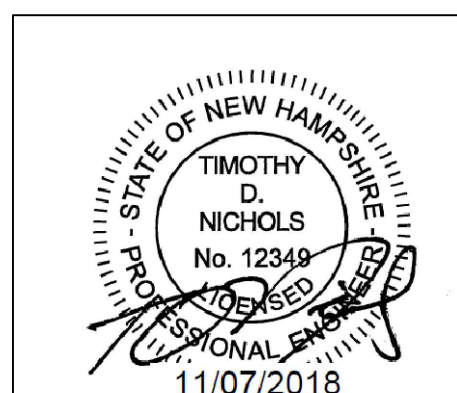
REVISIONS		
No.	DESCRIPTION	DATE

GENERAL NOTES AND EROSION CONTROL NOTES

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	NO SCALE
DRAWN BY:	ND
REVIEWED BY:	TDN

C-1.0

PROJECT PHASE:
APPROVAL



PRELIMINARY
NOT FOR CONSTRUCTION

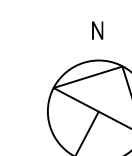
CITY OF PORTSMOUTH

PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS

No.	DESCRIPTION	DATE

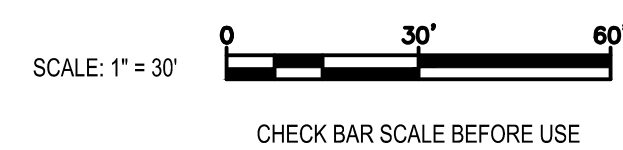
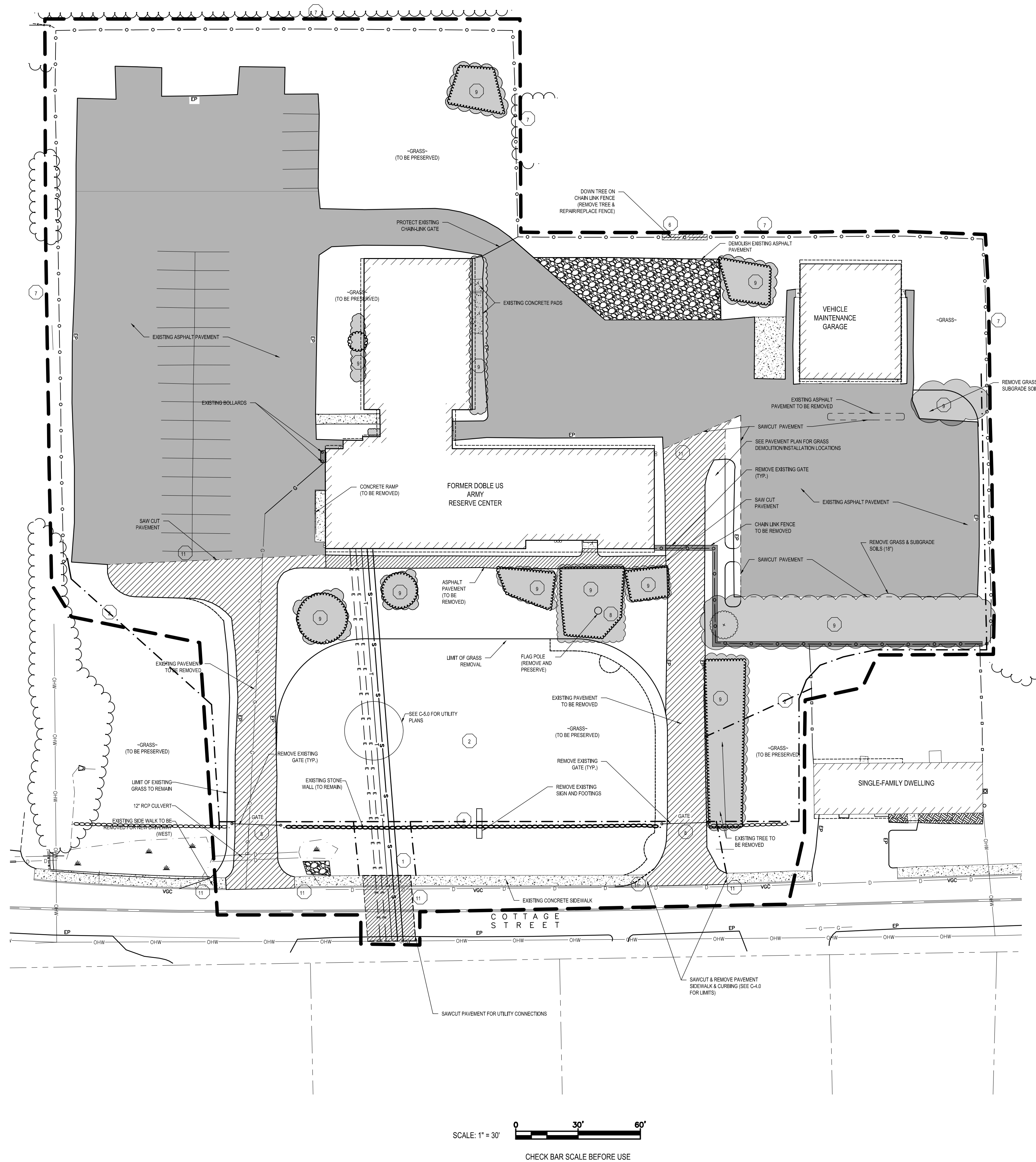


SITE DEMOLITION PLAN

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	1"=30'
DRAWN BY:	ND
REVIEWED BY:	TDN

C-2.0

PROJECT PHASE:
APPROVAL

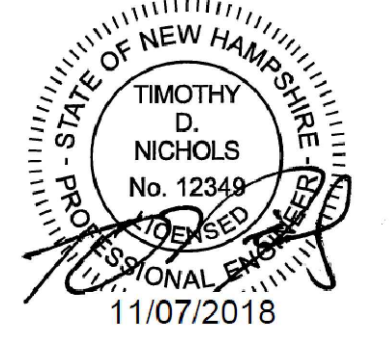


○ SITE DEMOLITION NOTES

- ① CONTRACTOR SHALL COMPLETE SUBSURFACE UTILITY LOCATING AND MARKING (DIGSAFE) PRIOR TO COMMENCING INTRUSIVE WORK.
- ② ALL EROSION AND SEDIMENT PREVENTION CONTROLS SHALL BE ERECTED PRIOR TO COMMENCING WORK. CONTROLS SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE COURSE OF WORK.
- ③ CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING ADJACENT STRUCTURES, PROPERTY, OR FEATURES THROUGHOUT THE COURSE OF WORK. ALL DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION.
- ④ UNLESS DIRECTED OTHERWISE BY THE CITY'S AGENT, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL, TRANSPORTATION, AND DISPOSAL OF ALL IDENTIFIED DEMOLITION ITEMS.
- ⑤ VERIFY DISPOSITION OF ALL SITE DEMOLITION ITEMS WITH THE CITY'S AGENT. IF THE CITY DOES NOT TAKE POSSESSION OF THE ITEMS, CONTRACTOR SHALL REMOVE FROM THE SITE AND PROPERLY DISPOSE OF SUCH. SITE ITEMS INCLUDE BUT ARE NOT LIMITED TO:
 - 5.1. FLAG POLE
 - 5.2. METAL DRIVEWAY GATES
 - 5.3. SIGNAGE AND PLACARDS
- ⑥ REPAIR DAMAGED SECTIONS OF CHAIN-LINK FENCING.
- ⑦ REMOVE ALL BARBED WIRE STRANDS AND SUPPORT ARMS FROM CHAIN-LINK FENCING.
- ⑧ REMOVE ALL BELOW-GRADE STRUCTURES ASSOCIATED WITH DEMOLITION ITEMS INCLUDING BUT NOT LIMITED TO FOOTINGS, SLABS, VAULTS, PIPING, CONDUIT, AND WIRING.
- ⑨ REMOVE ALL GRASS, TREES, AND SHRUBS AS INDICATED ON THIS PLAN. ALL LIMBS AND CHIPS SHALL BE REMOVED FROM THE SITE. STUMPS SHALL BE REMOVED.
- ⑩ REMOVE VEGETATION FROM CRACKS IN EXISTING ASPHALT PAVED AREAS IDENTIFIED FOR REPAIRS.
- ⑪ ALL SECTIONS OF ASPHALT PAVEMENT REMOVAL SHALL BE SAWCUT. CUTS SHALL BE NEAT AND LINEAR AND EXPOSED EDGES OF PAVEMENT SHALL BE PROTECTED.
- ⑫ REMOVE EXISTING GRASS & SUBBASE SOILS TO ACCOMMODATE 12" OF NEW AGGREGATE SUBBASE

LEGEND

- VEGETATION TO BE REMOVED
- EXISTING ASPHALT PAVEMENT
- ASPHALT PAVEMENT TO BE REMOVED
- CHAIN LINK FENCE TO BE REPAIRED OR REPLACED
- SILT SOCK
- EXISTING CHAIN LINK FENCE WITH BARBED WIRE
- CHAIN LINK FENCE TO BE REMOVED
- LIMIT OF WORK
- EXISTING STONE WALL



PRELIMINARY
NOT FOR CONSTRUCTION

CITY OF PORTSMOUTH

PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

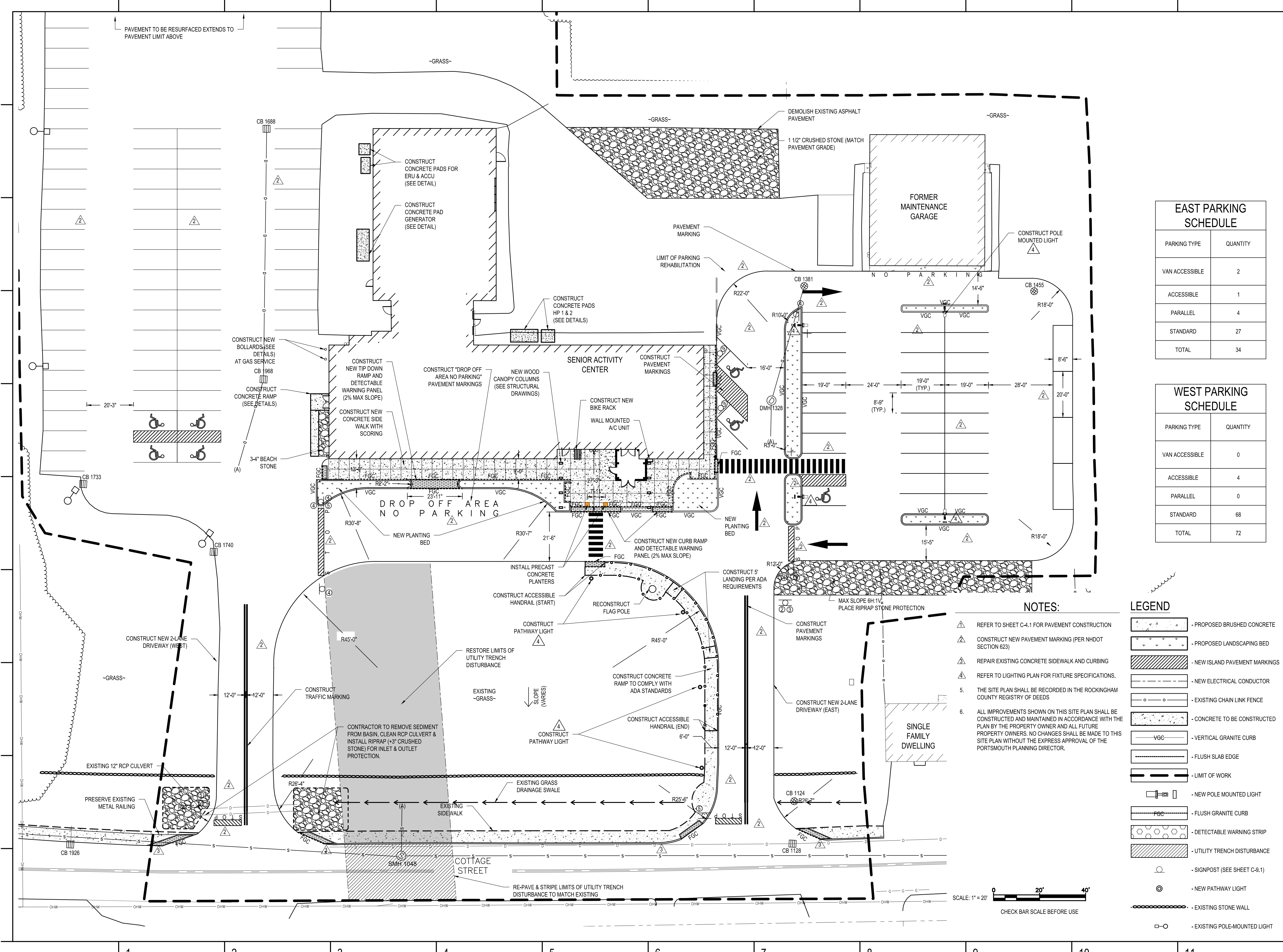


SITE PLAN

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	1"=20'
DRAWN BY:	ND
REVIEWED BY:	TDN

C-3.0

PROJECT PHASE:
APPROVAL



EAST PARKING SCHEDULE

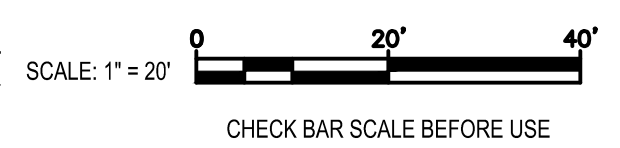
PARKING TYPE	QUANTITY
VAN ACCESSIBLE	2
ACCESSIBLE	1
PARALLEL	4
STANDARD	27
TOTAL	34

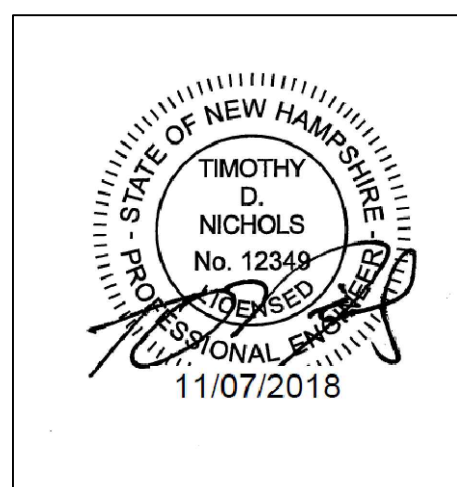
WEST PARKING SCHEDULE

PARKING TYPE	QUANTITY
VAN ACCESSIBLE	0
ACCESSIBLE	4
PARALLEL	0
STANDARD	68
TOTAL	72

- NOTES:**
- REFER TO SHEET C-4.1 FOR PAVEMENT CONSTRUCTION
 - CONSTRUCT NEW PAVEMENT MARKING (PER NHDOT SECTION 623)
 - REPAIR EXISTING CONCRETE SIDEWALK AND CURBING
 - REFER TO LIGHTING PLAN FOR FIXTURE SPECIFICATIONS.
 - THE SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS
 - ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.

- LEGEND**
- PROPOSED BRUSHED CONCRETE
 - PROPOSED LANDSCAPING BED
 - NEW ISLAND PAVEMENT MARKINGS
 - NEW ELECTRICAL CONDUCTOR
 - EXISTING CHAIN LINK FENCE
 - CONCRETE TO BE CONSTRUCTED
 - VERTICAL GRANITE CURB
 - FLUSH SLAB EDGE
 - LIMIT OF WORK
 - NEW POLE MOUNTED LIGHT
 - FLUSH GRANITE CURB
 - DETECTABLE WARNING STRIP
 - UTILITY TRENCH DISTURBANCE
 - SIGNPOST (SEE SHEET C-9.1)
 - NEW PATHWAY LIGHT
 - EXISTING STONE WALL
 - EXISTING POLE-MOUNTED LIGHT





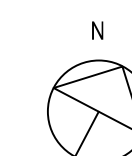
**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

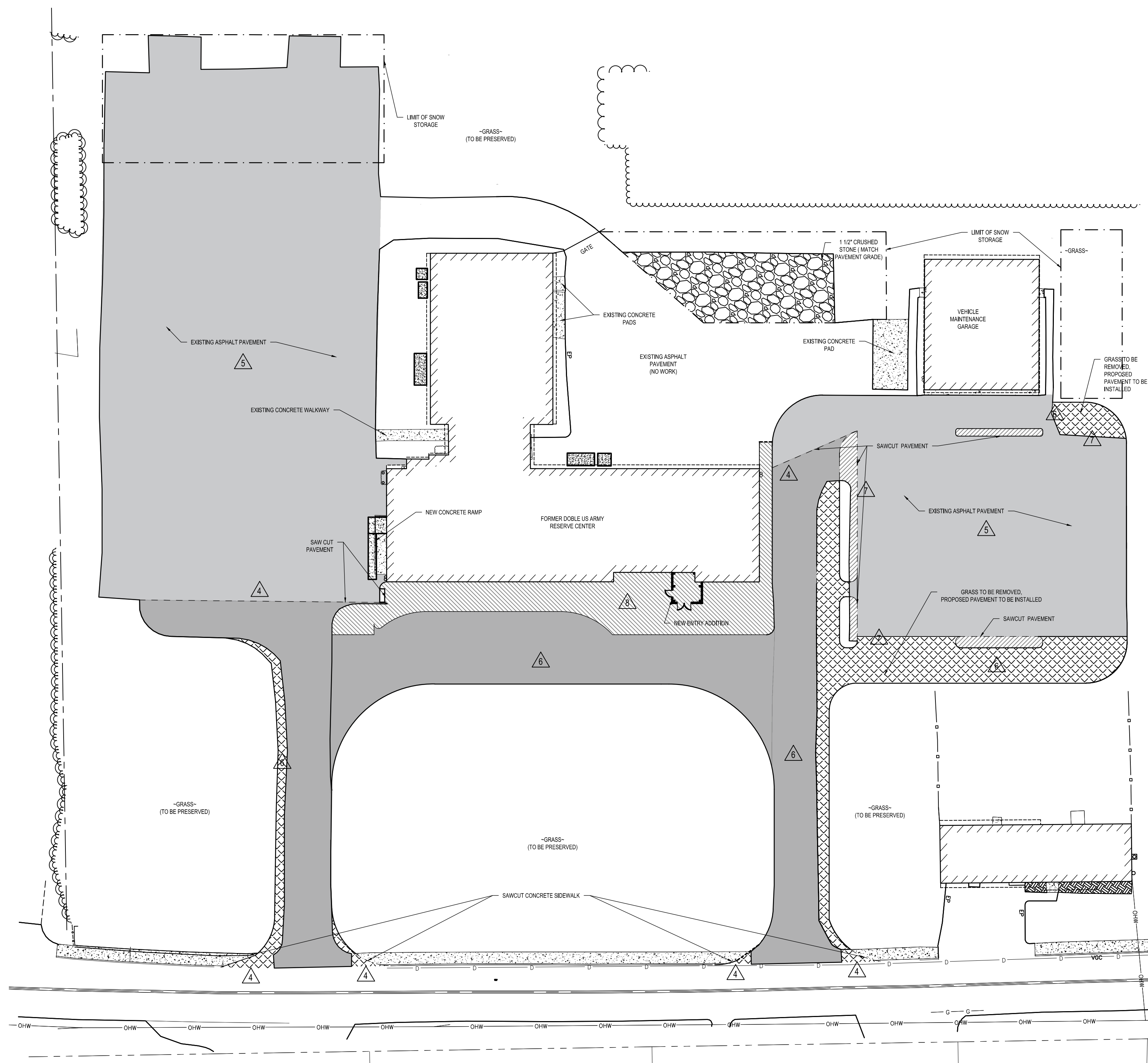


**PAVEMENT DEMOLITION &
CONSTRUCTION PLAN**

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	1"=30'
DRAWN BY:	ND
REVIEWED BY:	TDN

C-4.0

PROJECT PHASE:
APPROVAL



NEW CONSTRUCTION NOTES

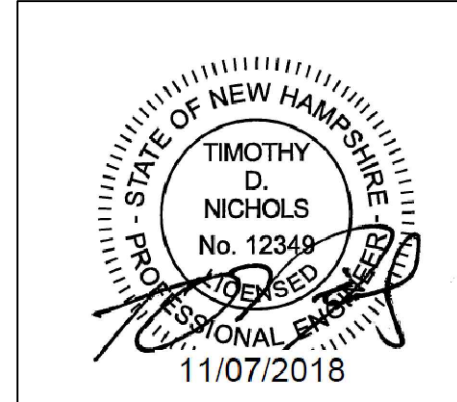
- 1. ALL EROSION AND SEDIMENT PREVENTION CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING WORK. CONTROLS SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE COURSE OF WORK.
- 2. CONTRACTOR SHALL COMPLETE SUBSURFACE UTILITY LOCATING AND MARKING (DIGSAFE) PRIOR TO COMMENCING INTRUSIVE WORK.
- 3. CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING ADJACENT STRUCTURES, PROPERTY, OR FEATURES THROUGHOUT THE COURSE OF WORK. ALL DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION.
- 4. ALL SECTIONS OF ASPHALT PAVEMENT REMOVAL SHALL BE SAWCUT. CUTS SHALL BE NEAT AND LINEAR AND EXPOSED EDGES OF PAVEMENT SHALL BE PROTECTED.
- 5. REPAIR EXISTING ASPHALT PAVEMENT:
 - 5.1. REMOVE VEGETATION & CLEAN/PREP CRACKS.
 - 5.2. FILL EXISTING CRACKS
 - 5.3. APPLY ASPHALT SEAL COAT
- 6. CONSTRUCT NEW ASPHALT PAVEMENT:
 - 6.1. DEMOLISH EXISTING PAVEMENT, OR, REMOVE VEGETATION.
 - 6.2. REPLACE 18" OF SUBGRADE SOIL W/ SPECIFIED SUBBASE
 - 6.3. CONSTRUCT 3.5" NEW ASPHALT PAVEMENT
- 7. SAWCUT EXISTING ASPHALT PAVEMENT EDGE TO MATCH NEW PAVEMENT.
- 8. REMOVE ASPHALT SIDEWALK, CONCRETE SLABS, VEGETATION, AND SUBGRADE SOILS. PLACE NEW COMPACTED BASE AND CONCRETE WALKWAYS AND PLANTING BEDS.

LEGEND

- EXISTING VEGETATED AREA TO BE REPLACED W/ FULL DEPTH ASPHALT PAVEMENT
- EXISTING ASPHALT PAVEMENT TO BE RECONDITIONED/REPAIRED
- NEW FULL DEPTH ASPHALT PAVEMENT
- LIMIT OF PAVEMENT SAWCUT
- EXISTING ASPHALT PAVEMENT TO BE REMOVED
- NEW CONCRETE WALKWAYS AND PLANTING BEDS



A
B
C
D
E
F
G
H
I
J



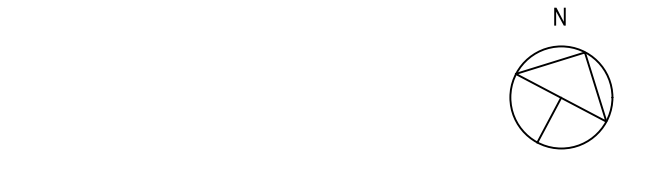
**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

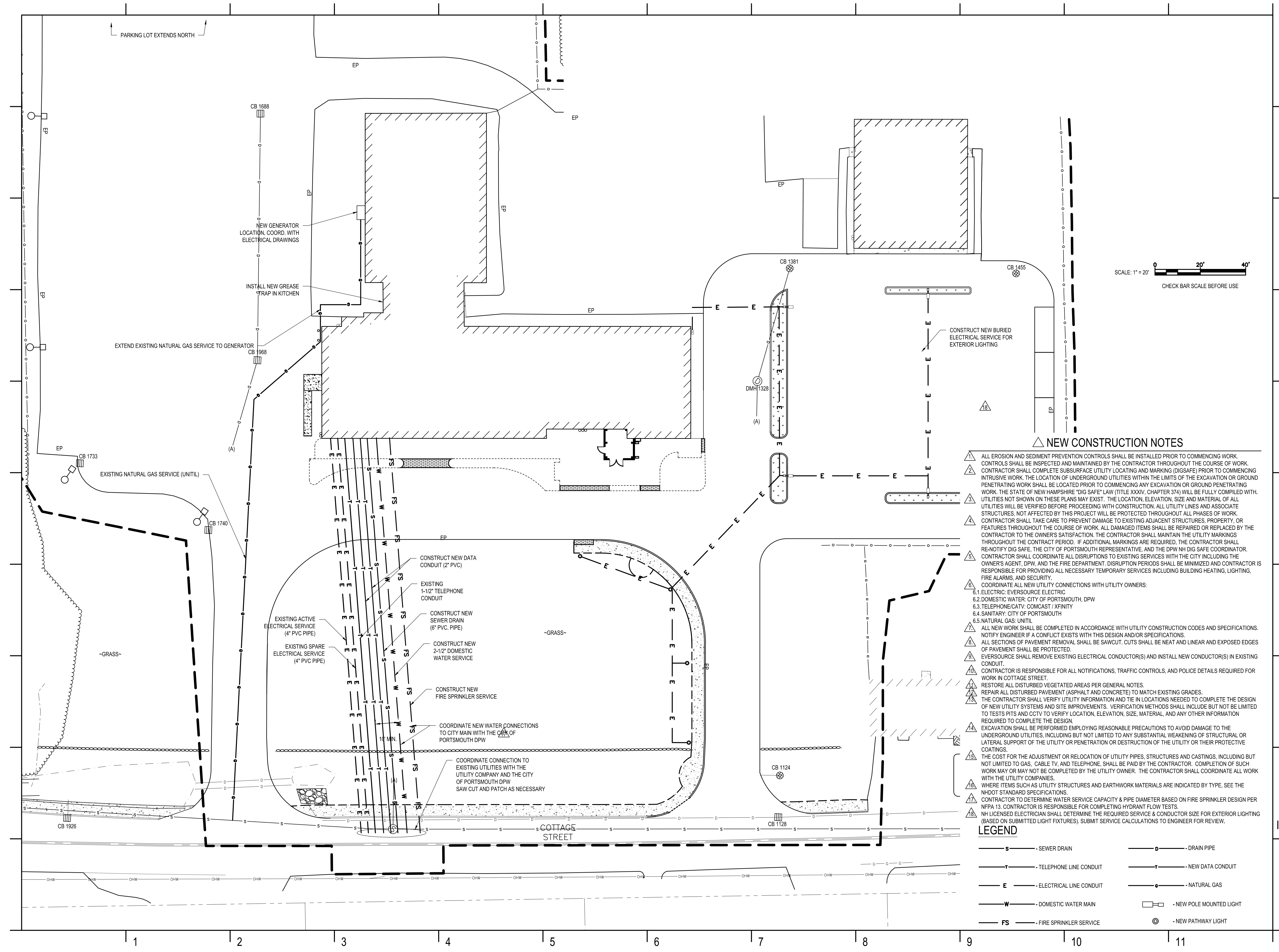


SITE UTILITIES PLAN

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	1"=20'
DRAWN BY:	ND
REVIEWED BY:	TDN

C-5.0

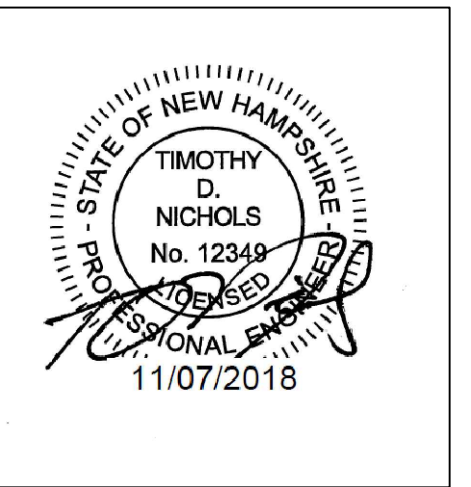
PROJECT PHASE:
APPROVAL



- NEW CONSTRUCTION NOTES**
- 1. ALL EROSION AND SEDIMENT PREVENTION CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING WORK. CONTROLS SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE COURSE OF WORK.
 - 2. CONTRACTOR SHALL COMPLETE SUBSURFACE UTILITY LOCATING AND MARKING (DIGSAFE) PRIOR TO COMMENCING INTRUSIVE WORK. THE LOCATION OF UNDERGROUND UTILITIES WITHIN THE LIMITS OF THE EXCAVATION OR GROUND PENETRATING WORK SHALL BE LOCATED PRIOR TO COMMENCING ANY EXCAVATION OR GROUND PENETRATING WORK. THE STATE OF NEW HAMPSHIRE "DIG SAFE" LAW (TITLE XXXIV, CHAPTER 374) WILL BE FULLY COMPLIED WITH. UTILITIES NOT SHOWN ON THESE PLANS MAY EXIST. THE LOCATION, ELEVATION, SIZE AND MATERIAL OF ALL UTILITIES WILL BE VERIFIED BEFORE PROCEEDING WITH CONSTRUCTION. ALL UTILITY LINES AND ASSOCIATE STRUCTURES, NOT AFFECTED BY THIS PROJECT WILL BE PROTECTED THROUGHOUT ALL PHASES OF WORK.
 - 3. CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING ADJACENT STRUCTURES, PROPERTY, OR FEATURES THROUGHOUT THE COURSE OF WORK. ALL DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION. THE CONTRACTOR SHALL MAINTAIN THE UTILITY MARKINGS THROUGHOUT THE CONTRACT PERIOD. IF ADDITIONAL MARKINGS ARE REQUIRED, THE CONTRACTOR SHALL RE-NOTIFY DIG SAFE, THE CITY OF PORTSMOUTH REPRESENTATIVE, AND THE DPW NH DIG SAFE COORDINATOR.
 - 4. CONTRACTOR SHALL COORDINATE ALL DISRUPTIONS TO EXISTING SERVICES WITH THE CITY INCLUDING THE OWNER'S AGENT, DPW, AND THE FIRE DEPARTMENT. DISRUPTION PERIODS SHALL BE MINIMIZED AND CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SERVICES INCLUDING BUILDING HEATING, LIGHTING, FIRE ALARMS, AND SECURITY.
 - 5. COORDINATE ALL NEW UTILITY CONNECTIONS WITH UTILITY OWNERS:
 - 6.1. ELECTRIC: EVERSOURCE ELECTRIC
 - 6.2. DOMESTIC WATER: CITY OF PORTSMOUTH, DPW
 - 6.3. TELEPHONE/CATV: COMCAST / XFINITY
 - 6.4. SANITARY: CITY OF PORTSMOUTH
 - 6.5. NATURAL GAS: UNITIL
 - 7. ALL NEW WORK SHALL BE COMPLETED IN ACCORDANCE WITH UTILITY CONSTRUCTION CODES AND SPECIFICATIONS. NOTIFY ENGINEER IF A CONFLICT EXISTS WITH THIS DESIGN AND/OR SPECIFICATIONS.
 - 8. ALL SECTIONS OF PAVEMENT REMOVAL SHALL BE SAWCUT. CUTS SHALL BE NEAT AND LINEAR AND EXPOSED EDGES OF PAVEMENT SHALL BE PROTECTED.
 - 9. EVERSOURCE SHALL REMOVE EXISTING ELECTRICAL CONDUCTOR(S) AND INSTALL NEW CONDUCTOR(S) IN EXISTING CONDUIT.
 - 10. CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS, TRAFFIC CONTROLS, AND POLICE DETAILS REQUIRED FOR WORK IN COTTAGE STREET.
 - 11. RESTORE ALL DISTURBED VEGETATED AREAS PER GENERAL NOTES.
 - 12. REPAIR ALL DISTURBED PAVEMENT (ASPHALT AND CONCRETE) TO MATCH EXISTING GRADES.
 - 13. THE CONTRACTOR SHALL VERIFY UTILITY INFORMATION AND TIE IN LOCATIONS NEEDED TO COMPLETE THE DESIGN OF NEW UTILITY SYSTEMS AND SITE IMPROVEMENTS. VERIFICATION METHODS SHALL INCLUDE BUT NOT BE LIMITED TO TESTS PITS AND CCTV TO VERIFY LOCATION, ELEVATION, SIZE, MATERIAL, AND ANY OTHER INFORMATION REQUIRED TO COMPLETE THE DESIGN.
 - 14. EXCAVATION SHALL BE PERFORMED EMPLOYING REASONABLE PRECAUTIONS TO AVOID DAMAGE TO THE UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO ANY SUBSTANTIAL WEAKENING OF STRUCTURAL OR LATERAL SUPPORT OF THE UTILITY OR PENETRATION OR DESTRUCTION OF THE UTILITY OR THEIR PROTECTIVE COATINGS.
 - 15. THE COST FOR THE ADJUSTMENT OR RELOCATION OF UTILITY PIPES, STRUCTURES AND CASTINGS, INCLUDING BUT NOT LIMITED TO GAS, CABLE TV, AND TELEPHONE, SHALL BE PAID BY THE CONTRACTOR. COMPLETION OF SUCH WORK MAY OR MAY NOT BE COMPLETED BY THE UTILITY OWNER. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE UTILITY COMPANIES.
 - 16. WHERE ITEMS SUCH AS UTILITY STRUCTURES AND EARTHWORK MATERIALS ARE INDICATED BY TYPE, SEE THE NHDOT STANDARD SPECIFICATIONS.
 - 17. CONTRACTOR TO DETERMINE WATER SERVICE CAPACITY & PIPE DIAMETER BASED ON FIRE SPRINKLER DESIGN PER NFPA 13. CONTRACTOR IS RESPONSIBLE FOR COMPLETING HYDRANT FLOW TESTS.
 - 18. LICENSED ELECTRICIAN SHALL DETERMINE THE REQUIRED SERVICE & CONDUCTOR SIZE FOR EXTERIOR LIGHTING (BASED ON SUBMITTED LIGHT FIXTURES). SUBMIT SERVICE CALCULATIONS TO ENGINEER FOR REVIEW.

LEGEND

- SEWER DRAIN	- DRAIN PIPE
- TELEPHONE LINE CONDUIT	- NEW DATA CONDUIT
- ELECTRICAL LINE CONDUIT	- NATURAL GAS
- DOMESTIC WATER MAIN	- NEW POLE MOUNTED LIGHT
- FIRE SPRINKLER SERVICE	- NEW PATHWAY LIGHT



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

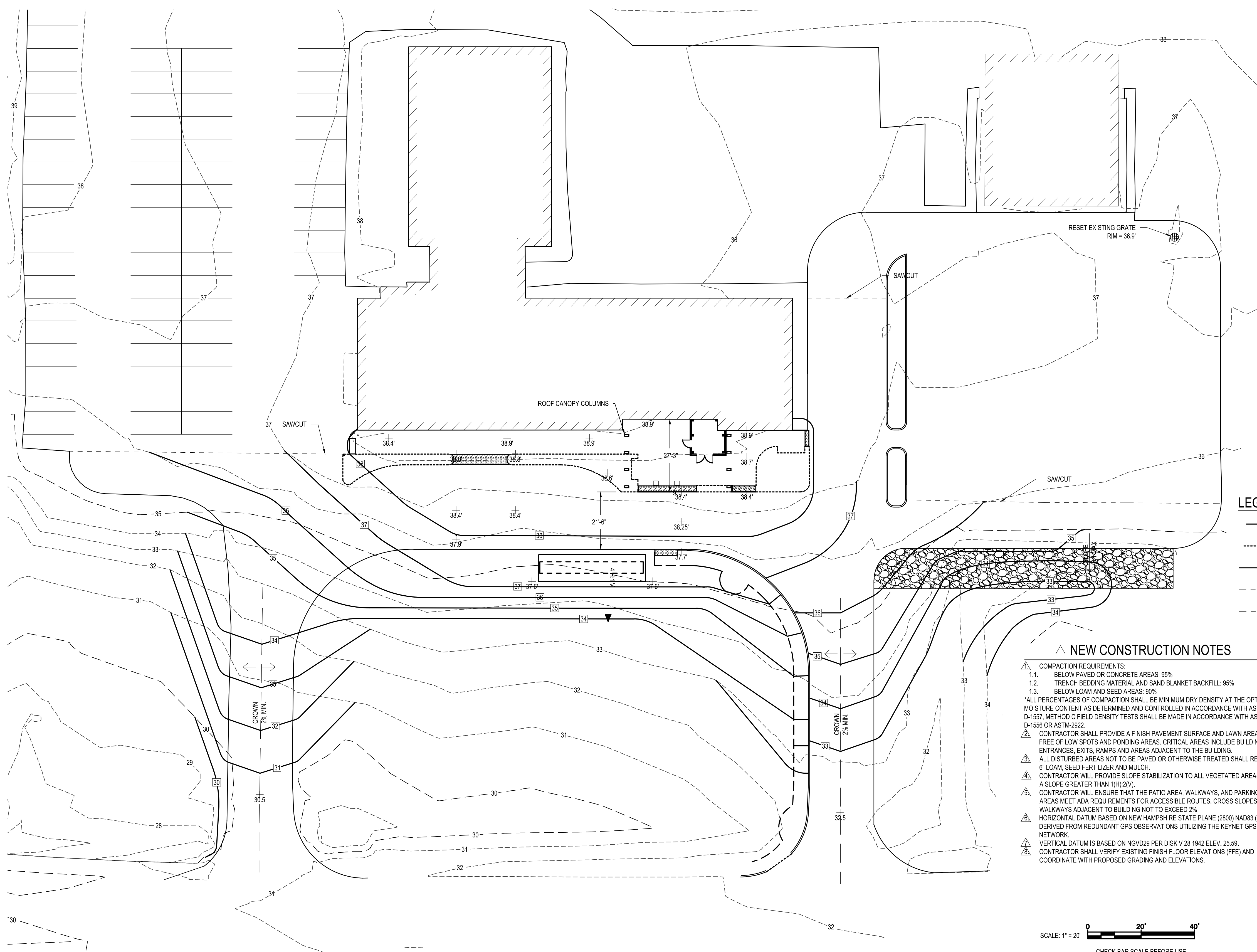


SITE GRADING PLAN

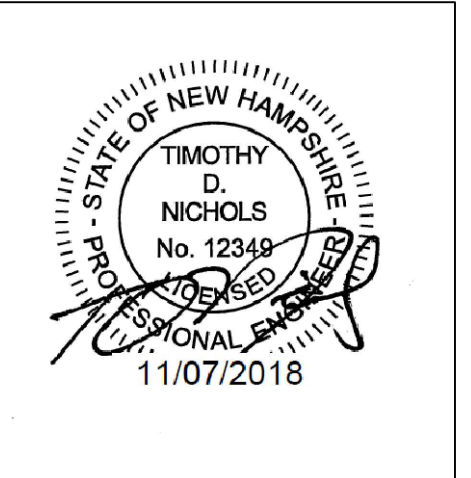
PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	ND
REVIEWED BY:	TDN

C-6.0

PROJECT PHASE:
APPROVAL



A GRADING PLAN
1"=20'



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

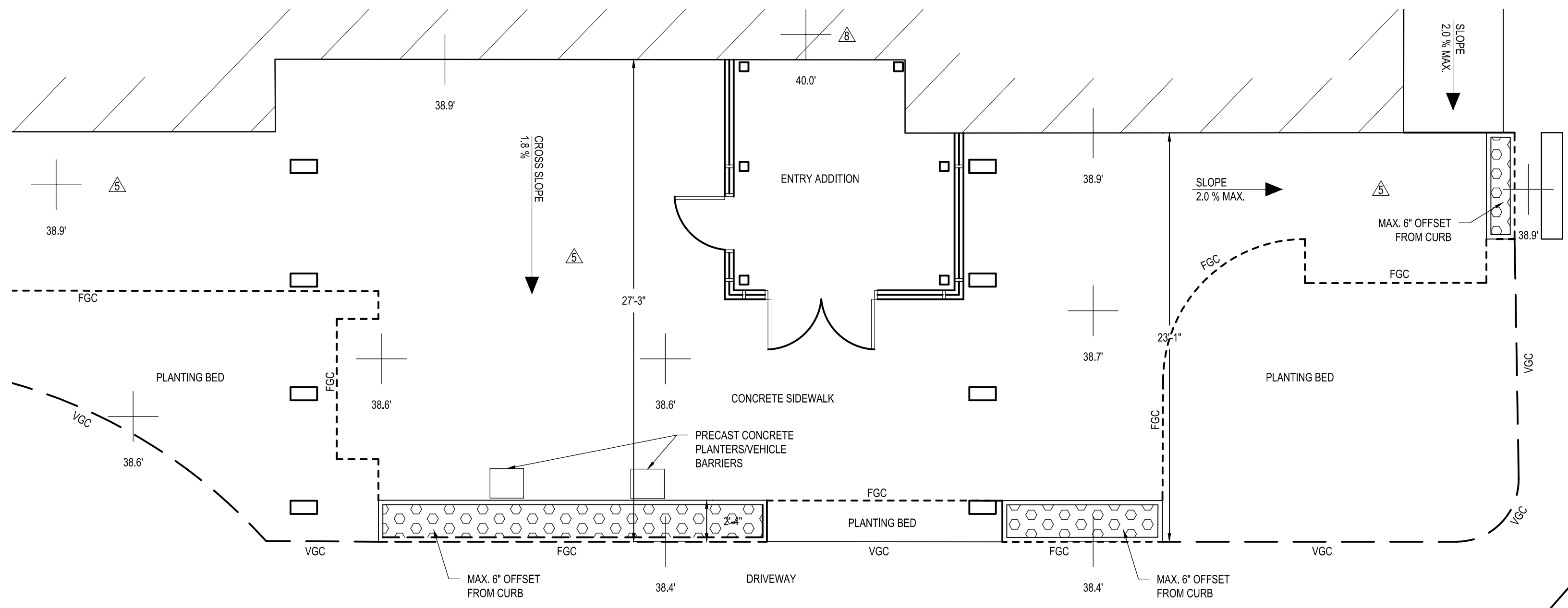


SITE GRADING PLAN

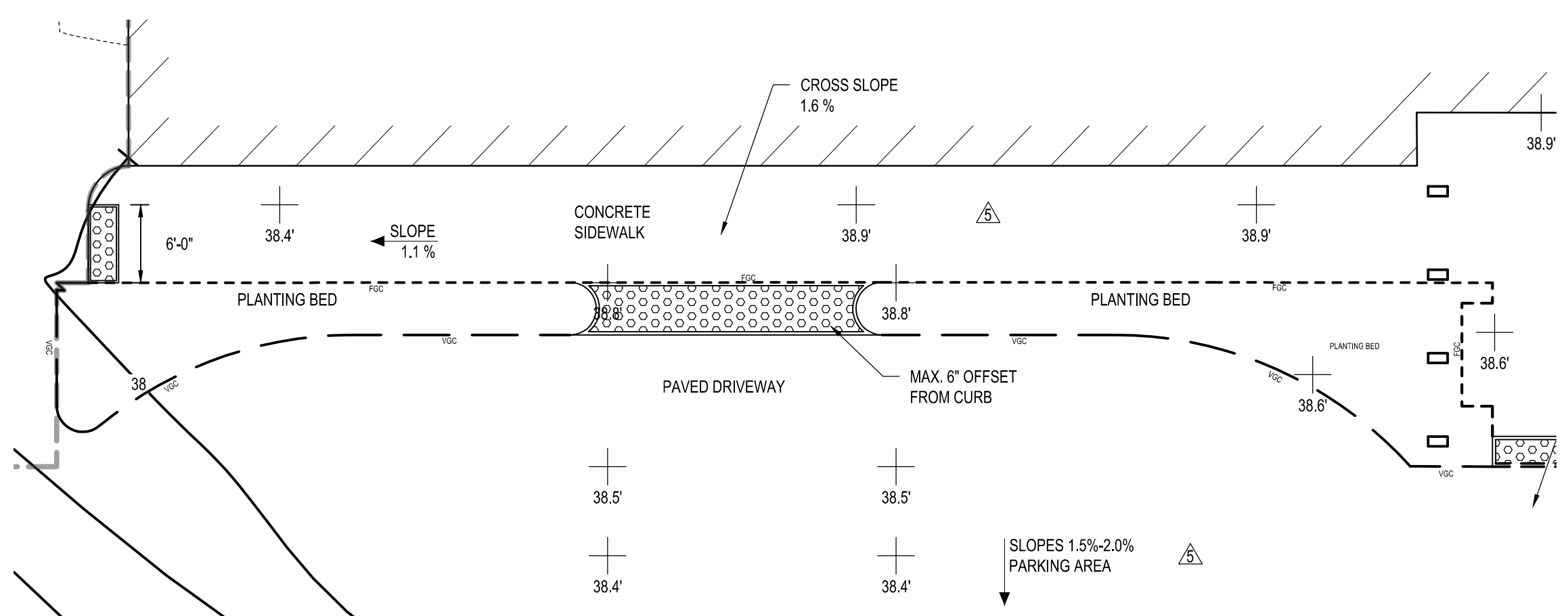
PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	ND
REVIEWED BY:	TDN

C-6.1

PROJECT PHASE:
APPROVAL



A PATIO/WALKWAY GRADING PLAN
SCALE: 1" = 5'
CHECK BAR SCALE BEFORE USE



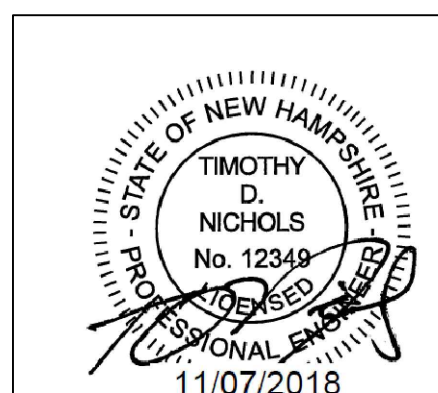
B WALKWAY AND DRIVEWAY GRADING PLAN
SCALE: 1" = 10'
CHECK BAR SCALE BEFORE USE

NEW CONSTRUCTION NOTES

- ▲ COMPACTION REQUIREMENTS:
 - 1.1. BELOW PAVED OR CONCRETE AREAS: 95%
 - 1.2. TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL: 95%
 - 1.3. BELOW LOAM AND SEED AREAS: 90%
- *ALL PERCENTAGES OF COMPACTION SHALL BE MINIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557. METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
- ▲ CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND AREAS ADJACENT TO THE BUILDING.
- ▲ ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
- ▲ CONTRACTOR WILL PROVIDE SLOPE STABILIZATION TO ALL VEGETATED AREAS WITH A SLOPE GREATER THAN 1(H):2(V).
- ▲ CONTRACTOR WILL ENSURE THAT THE PATIO AREA, WALKWAYS, AND PARKING AREAS MEET ADA REQUIREMENTS FOR ACCESSIBLE ROUTES. CROSS SLOPES ON WALKWAYS ADJACENT TO BUILDING NOT TO EXCEED 2%.
- ▲ HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE (2800) NAD83 (2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- ▲ VERTICAL DATUM IS BASED ON NGVD29 PER DISK V 28 1942 ELEV. 25.59.
- ▲ CONTRACTOR SHALL VERIFY EXISTING FINISH FLOOR ELEVATIONS (FFE) AND COORDINATE WITH PROPOSED GRADING AND ELEVATIONS.

LEGEND

- VERTICAL GRANITE CURB
- FLUSH SLAB EDGE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- DETECTABLE WARNING STRIP



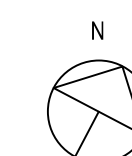
**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

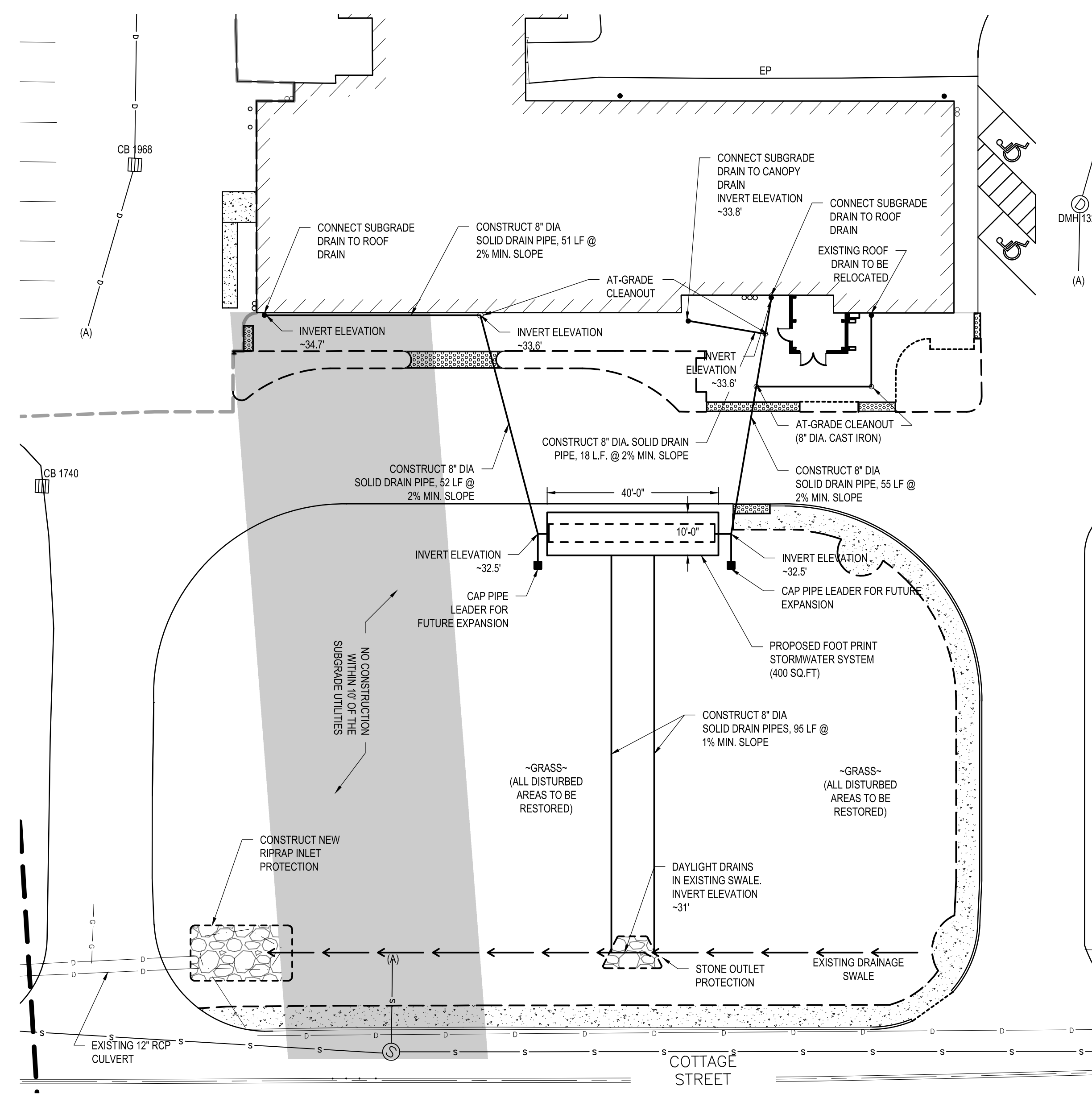


STORMWATER PLAN

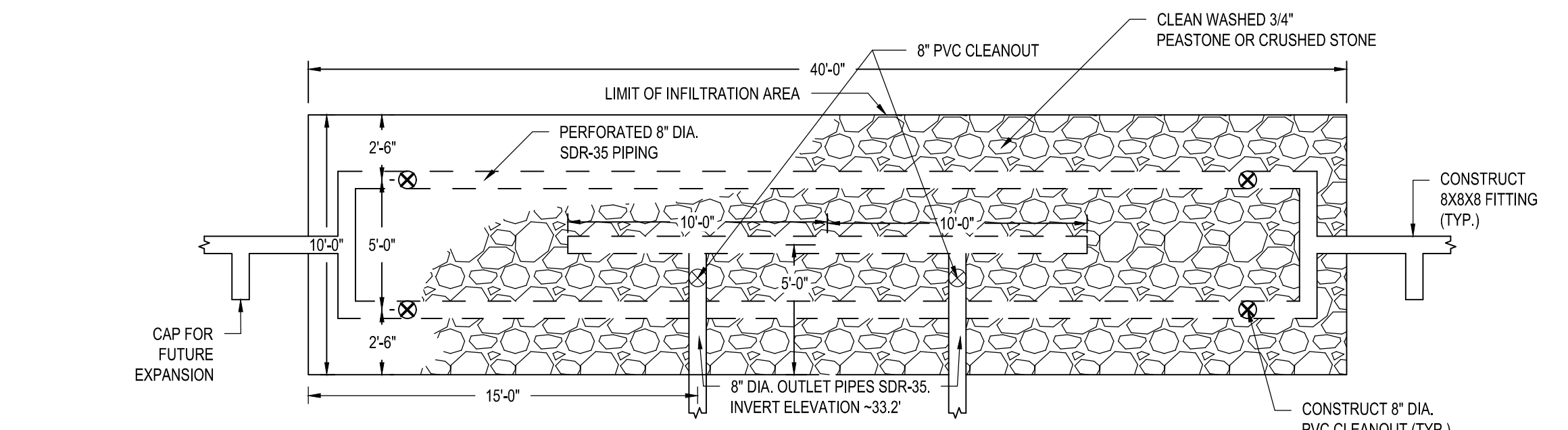
PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	ND
REVIEWED BY:	TDN

C-7.0

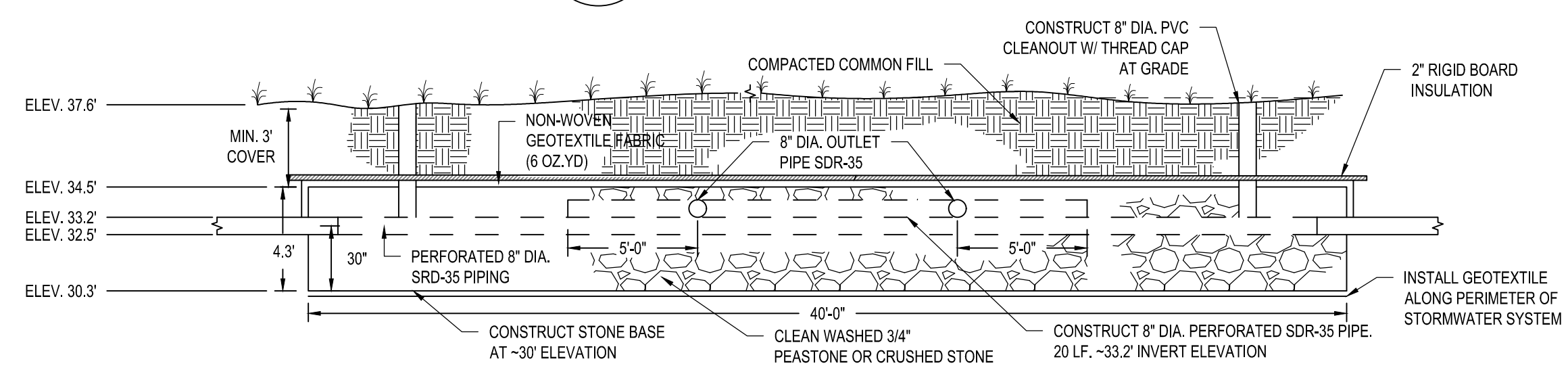
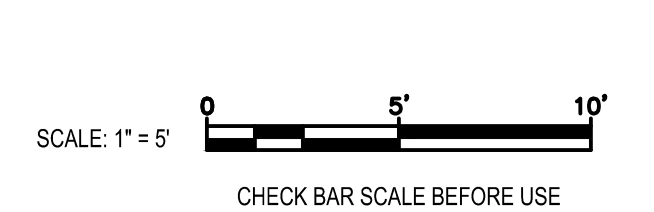
APPROVAL



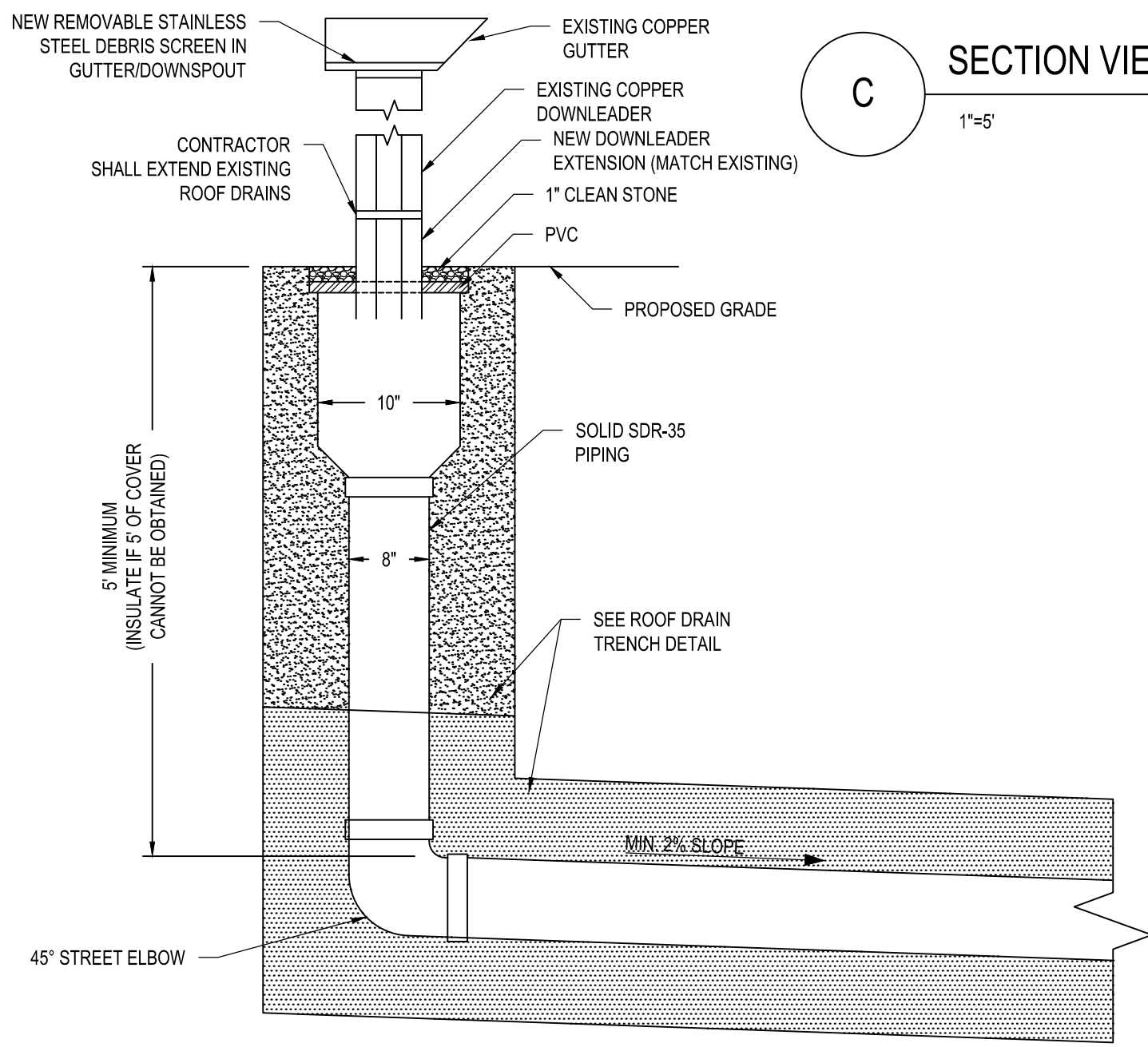
A STORMWATER INFILTRATION SYSTEM
1"=20'



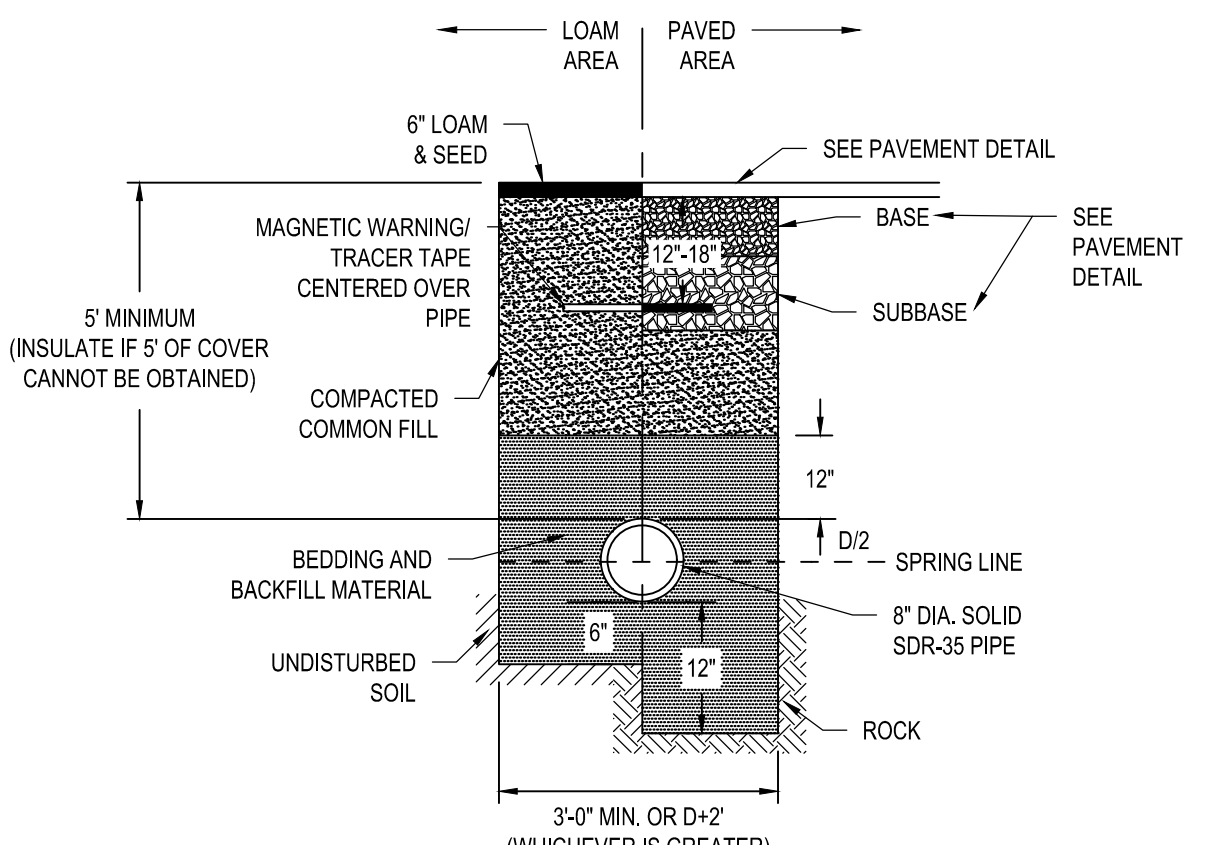
B PLAN VIEW (TOP VIEW)
1"=5'



C SECTION VIEW
1"=5'



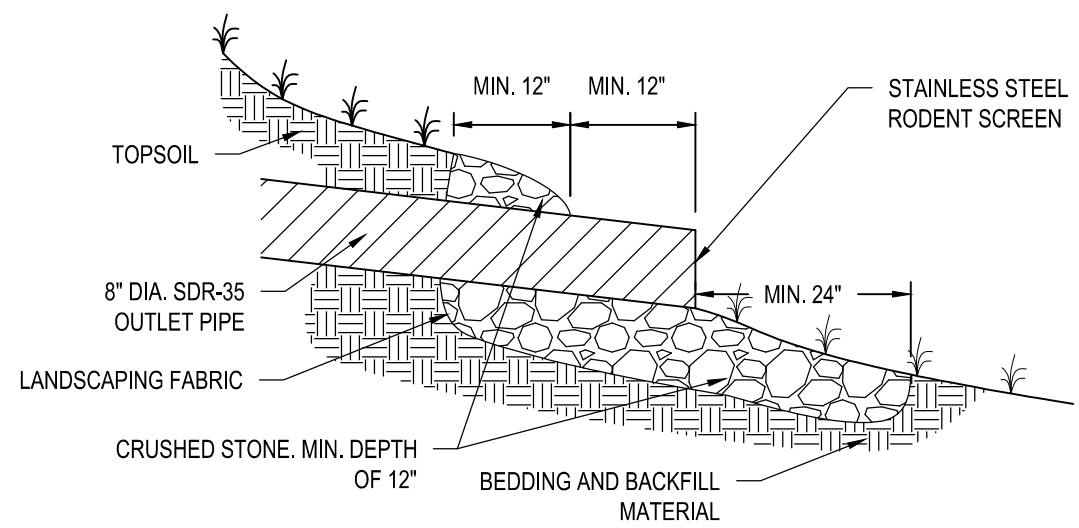
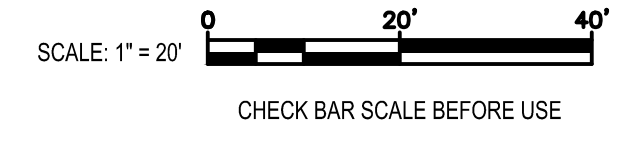
E SUBGRADE ROOF DRAIN DETAIL
NOT TO SCALE



D ROOF DRAIN TRENCH DETAIL
NOT TO SCALE

NEW CONSTRUCTION NOTES

1. ALL EROSION AND SEDIMENT PREVENTION CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING WORK. CONTROLS SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE COURSE OF WORK.
2. CONTRACTOR SHALL COMPLETE SUBSURFACE UTILITY LOCATING AND MARKING (DIGSAFE) PRIOR TO COMMENCING INTRUSIVE WORK. THE LOCATION OF UNDERGROUND UTILITIES WITHIN THE LIMITS OF THE EXCAVATION OR GROUND PENETRATING WORK SHALL BE LOCATED PRIOR TO COMMENCING ANY EXCAVATION OR GROUND PENETRATING WORK. THE STATE OF NEW HAMPSHIRE "DIG SAFE" LAW (TITLE XXXIV, CHAPTER 374) WILL BE FULLY COMPLIED WITH. CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING ADJACENT STRUCTURES, PROPERTY, OR FEATURES THROUGHOUT THE COURSE OF WORK. ALL DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION. THE CONTRACTOR SHALL MAINTAIN THE UTILITY MARKINGS THROUGHOUT THE CONTRACT PERIOD. IF ADDITIONAL MARKINGS ARE REQUIRED, THE CONTRACTOR SHALL RE-NOTIFY DIG SAFE, THE CITY OF PORTSMOUTH REPRESENTATIVE, AND THE DPW NH DIG SAFE COORDINATOR.
3. CONTRACTOR SHALL COORDINATE ALL DISRUPTIONS TO EXISTING SERVICES WITH THE CITY INCLUDING THE OWNER'S AGENT, DPW, AND THE FIRE DEPARTMENT. DISRUPTION PERIODS SHALL BE MINIMIZED AND CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SERVICES INCLUDING BUILDING HEATING, LIGHTING, FIRE ALARMS, AND SECURITY.
4. CONTRACTOR WILL INSTALL SUBGRADE STORM WATER DRAINAGE WHERE SPECIFIED LEADING TO THE STORM WATER INFILTRATION SYSTEM.
5. CONTRACTOR SHALL CONFIRM LOCATION OF SEWER PIPE. IMMEDIATELY NOTIFY ENGINEER OF ANY CONFLICTS WITH THE INSTALLATION OF NEW DRAINAGE PIPE.
6. CONTRACTOR SHALL VERIFY ALL STORMWATER INVERT GRADES AND COORDINATE WITH SITE GRADES. MAINTAIN MINIMUM PIPE SLOPE AND COVER.



F OUTLET INVERT (SECTION VIEW)
NOT TO SCALE

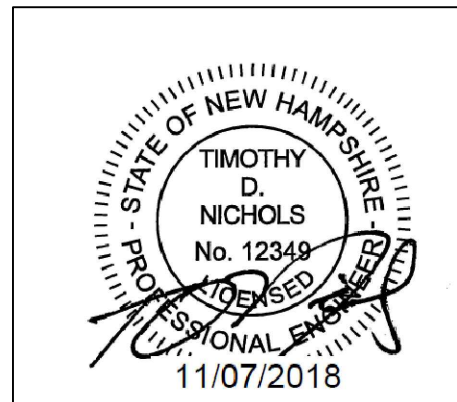
SENIOR ACTIVITY CENTER, PORTSMOUTH NH

Planting Schedule

Symbol	Scientific Name	Common Name	Size	Spacing	quantities	Zone	height	spread
Trees								
TA	TAXODIUM distichum 'Shawnee Brave'	Shawnee Brave Bald Cypress	3-3.5' cal.	see plan	1	4	50-60'	15-20'
GY	GYMNOCLADUS dioicus 'Espresso'	Kentucky Coffee Tree	2-2.5' cal.	see plan	2	3	50'	35'
Shrubs								
HA	HAMAMELIS x vernalis	Vernal Witchhazel	3-4' ht	see plan	see plans	4	6-10'	8-10'
COC	CORNUS sericea 'Cardinal'	Dogwood, Cardinal Red Osier	3-4' ht	see plan	see plans	3	8-10'	8-10'
ILV	ILEX verticillata 'Red Sprite' (female)	Winterberry 'Red Sprite'	3-4' ht	see plan	see plans	3	3-4'	3-4'
ILM	ILEX verticillata 'Jim Dandy' (male)	Winterberry	3-4' ht	see plan	see plans	3	4-5'	5-6'
Ornamental Grasses								
CAL	CALAMAGROSTIS acutiflora 'Karl Foerster'	Feather Reed Grass	1 gal.	18" o.c.	see plans	5	3-5'	1-2.5'
CCO	CAREX comosa	Long hair Sedge	1 gal.	18" o.c.	see plans	3	2-4'	2-
CCR	CAREX crinita	Fringed Sedge	1 gal.	18" o.c.	see plans	3	2-3'	1'-2'
DEC	DESCHAMPSIA cespitosa 'Northern Lights'	Tufted Hair Grass	4" pot	12" o.c.	see plans	4	1'	1'
PEA	PENISETUM alopecuroides 'hameln'	Fountain Grass	4" pot	18" o.c.	see plans	3 to 9	1.5'-2.5'	1.5'-2.5'
SCS	SCHIZACHYRIUM scoparium	Little bluestem	1 gal.	18" o.c.	see plans	3	1'-3"	1'-3"



13 WATER ST NEWMARKET NH
(603) 200-0096 AECGR.COM



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

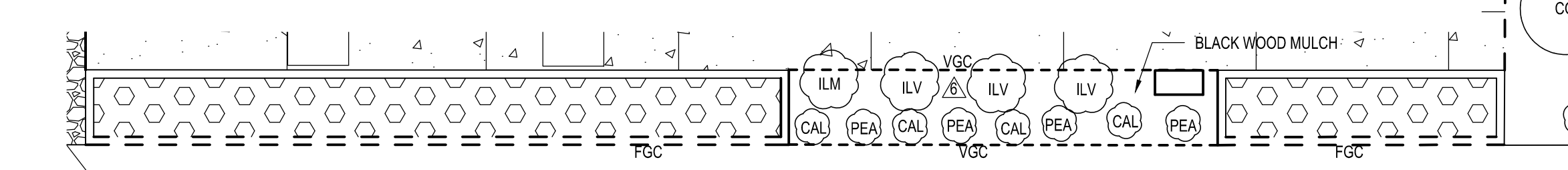
125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

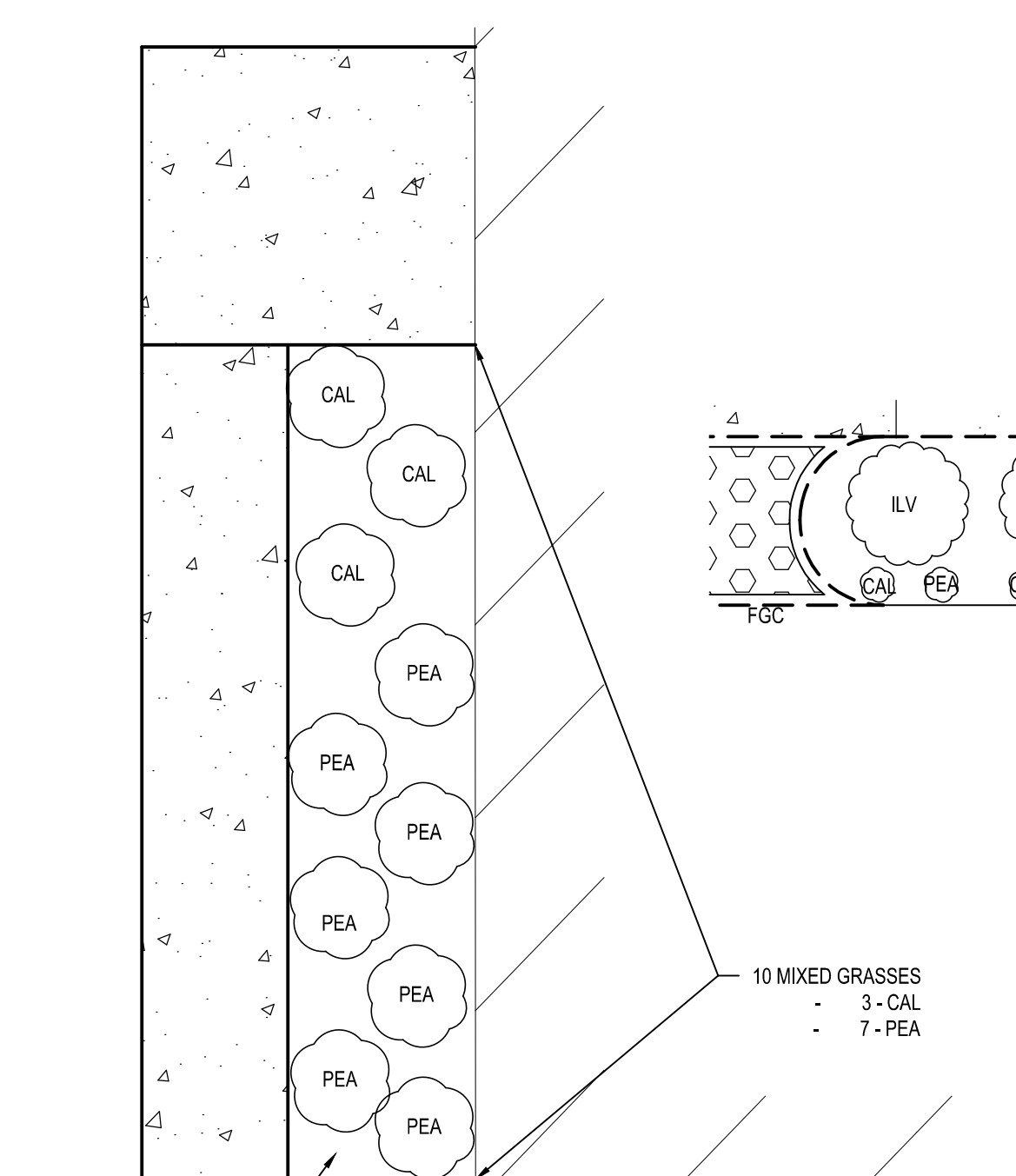
LANDSCAPING PLAN

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	ND
REVIEWED BY:	TDN

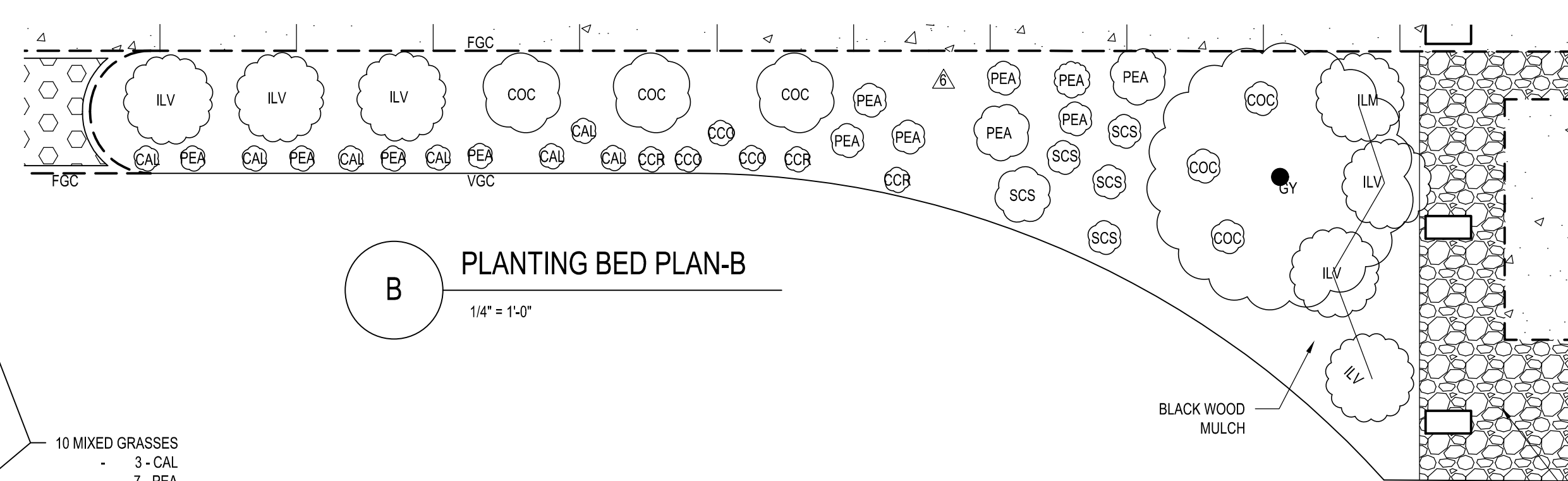
C-8.0
PROJECT PHASE:
APPROVAL



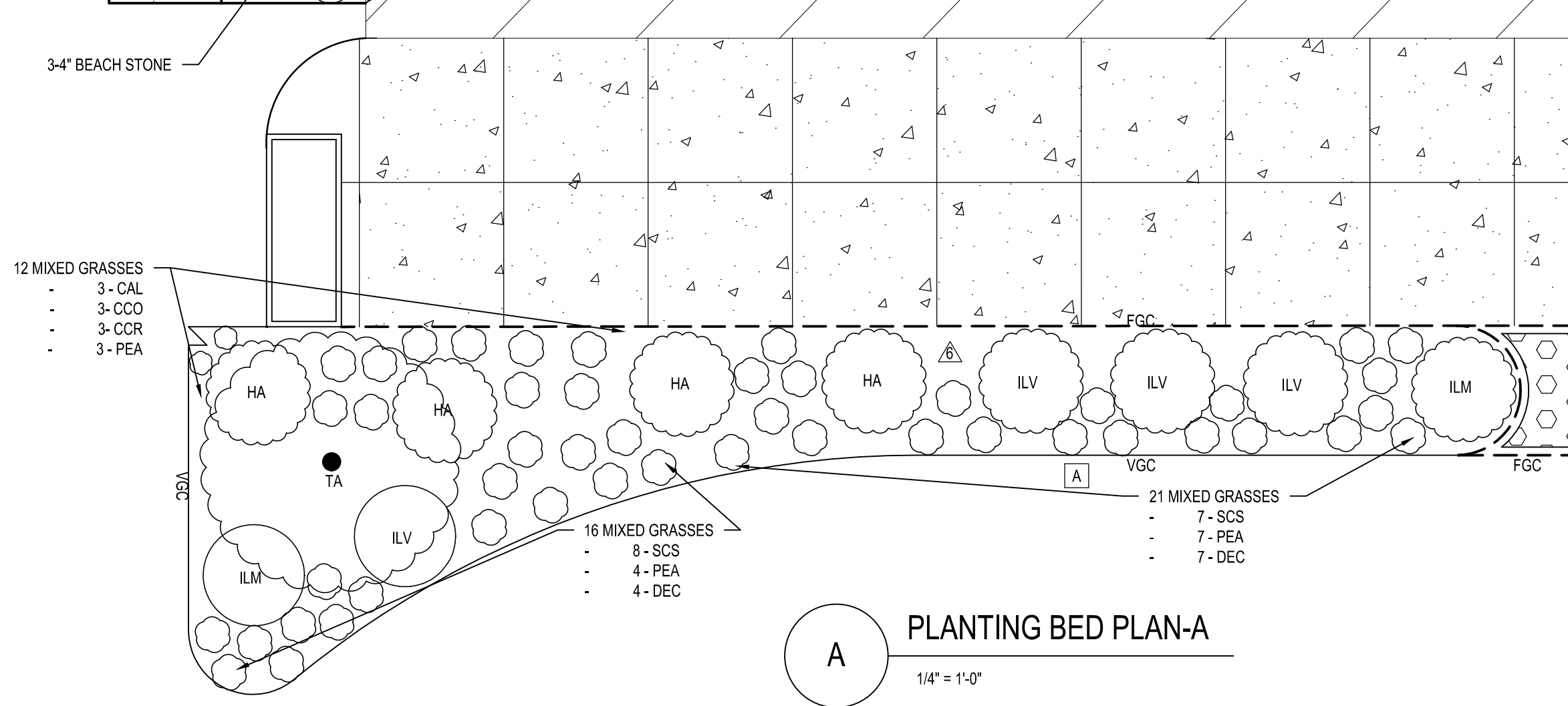
C PLANTING BED PLAN-C
1/4" = 1'-0"



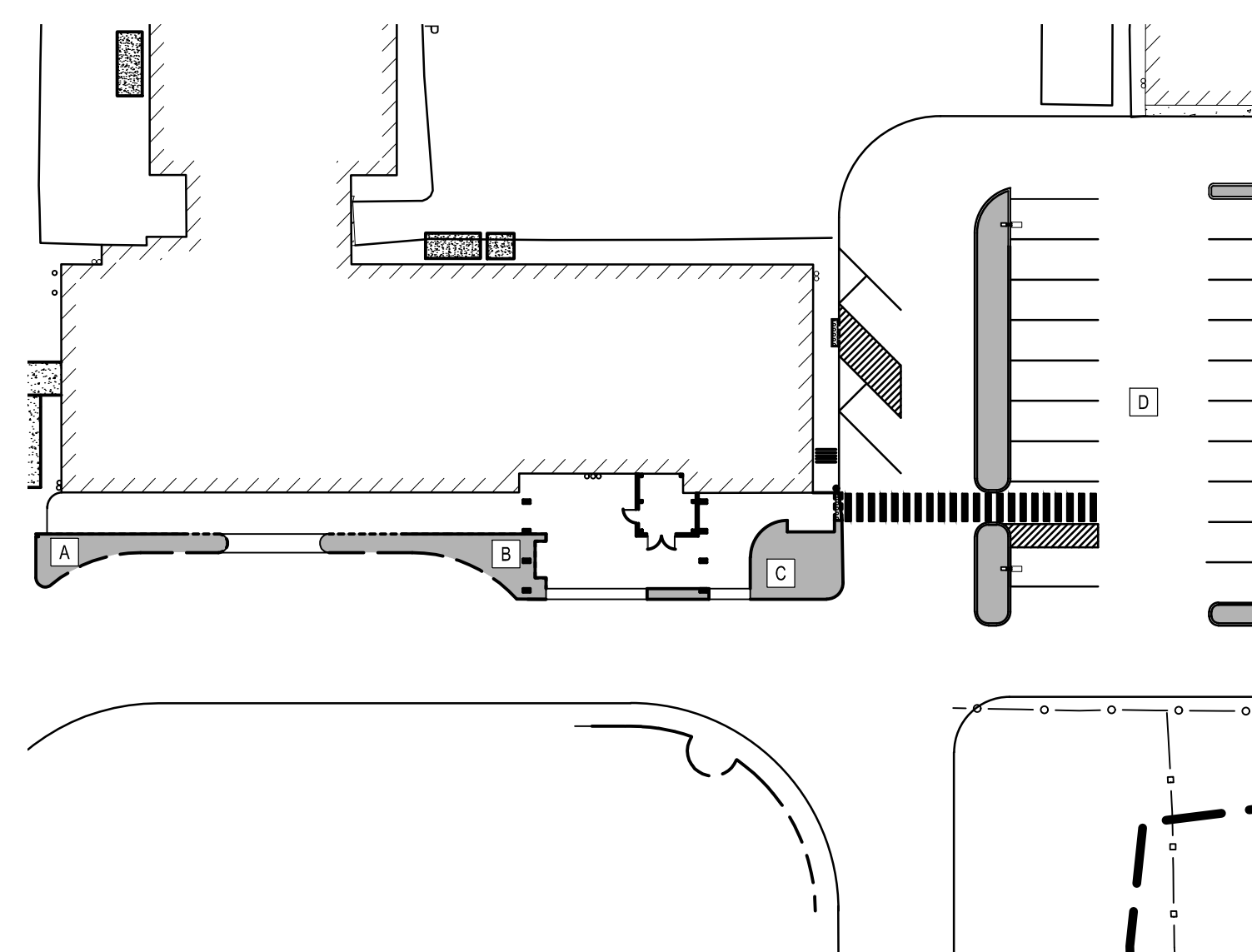
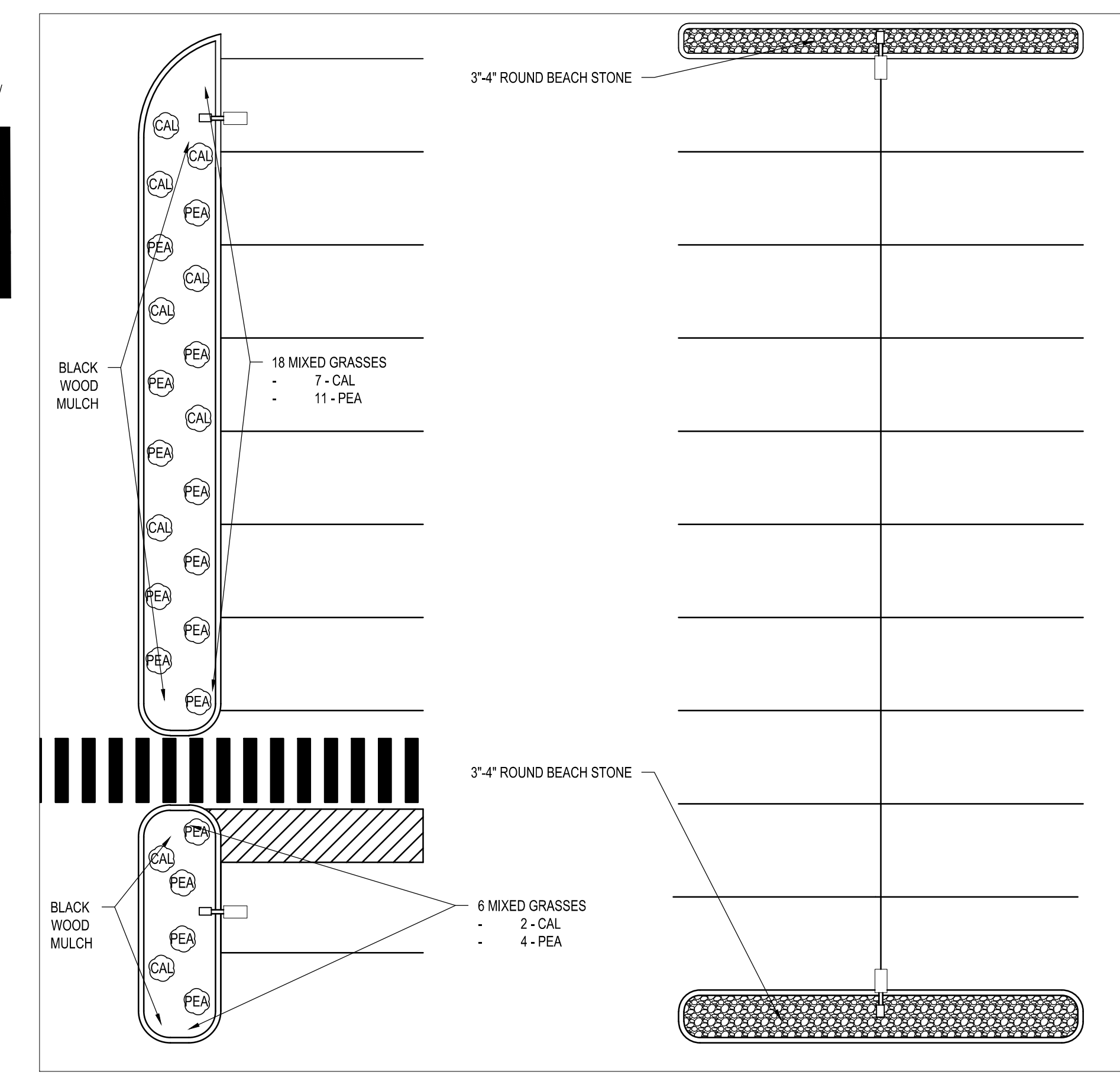
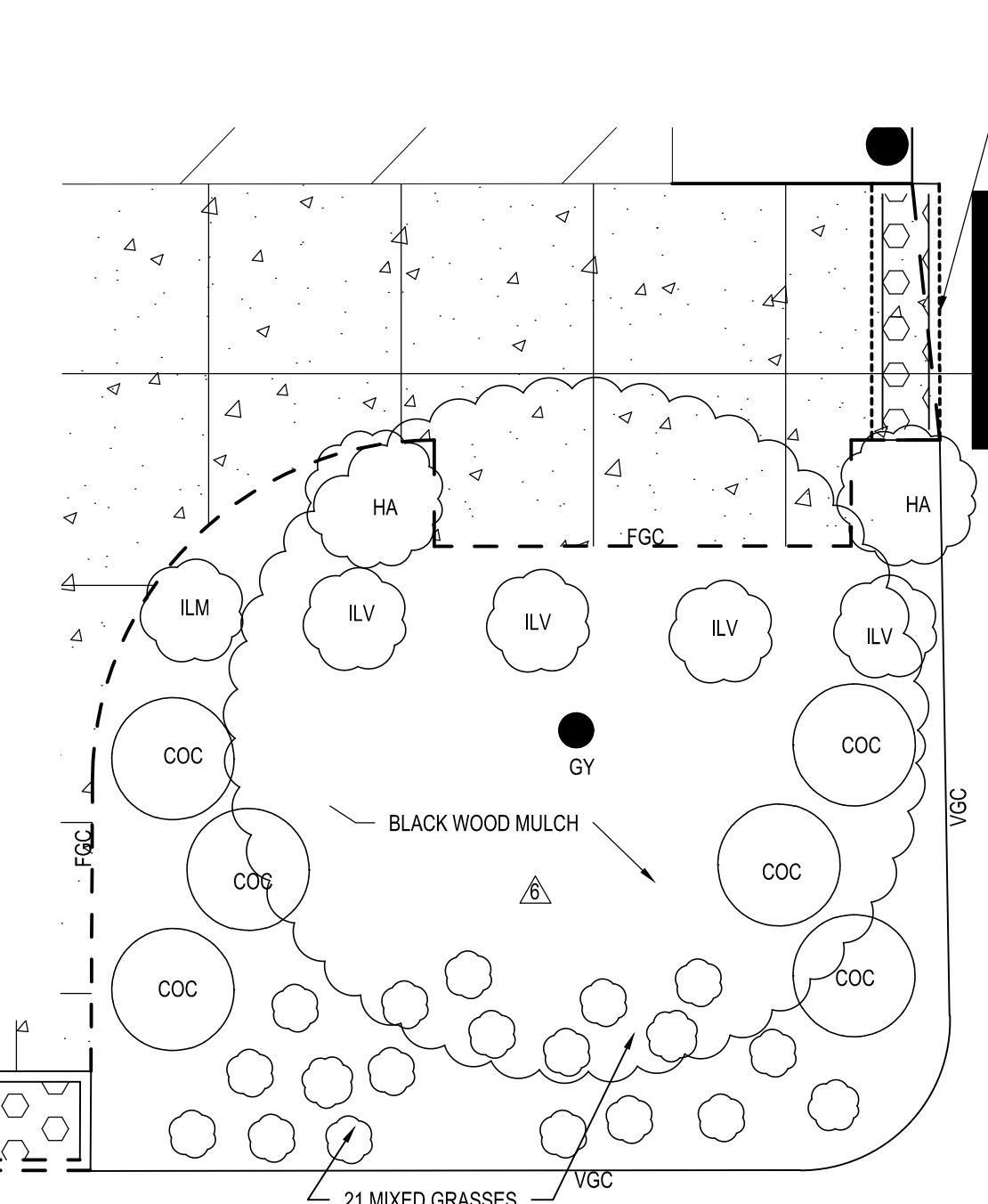
B PLANTING BED PLAN-B
1/4" = 1'-0"



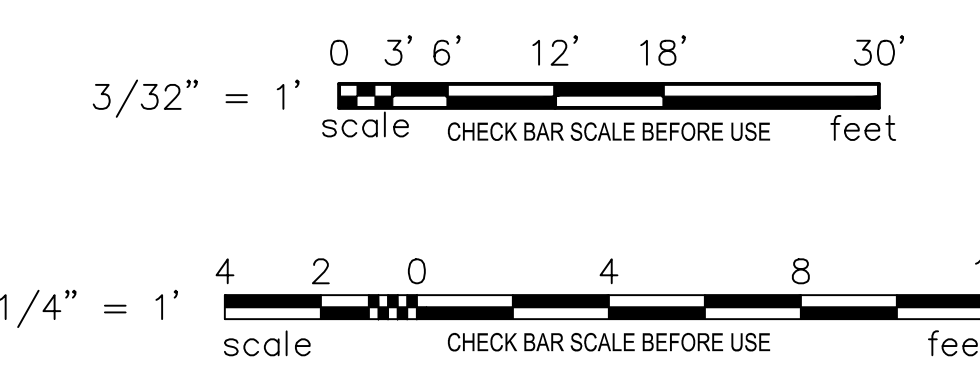
D PLANTING BED PLAN-D
3/32" = 1'-0"



A PLANTING BED PLAN-A
1/4" = 1'-0"



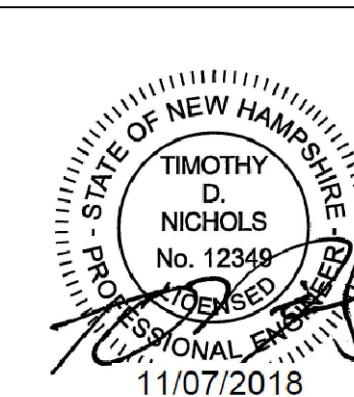
- NOTES:**
- ALL PLANTINGS SHALL BE INSTALLED PER NURSERY INSTRUCTIONS.
 - ALL PLANTINGS SHALL FOLLOW THE PLANTING SPECIFICATIONS SET FORTH BY THE CITY OF PORTSMOUTH PUBLIC WORKS DEPARTMENT.
 - CONTRACTOR SHALL WARRANTY ALL PLANTINGS FOR 1-YEAR FROM INSTALLATION DATE.
 - CONTRACTOR SHALL SUBMIT GRASS SEED MIXTURE FOR ENGINEER APPROVAL.
 - CONTRACTOR SHALL FOLLOW ALL STANDARDS IN CITY OF PORTSMOUTH PLANTING SPECIFICATIONS.
 - REFER TO GENERAL NOTES FOR SHRUB & TREE PLANTING REQUIREMENTS (SHEET C-1.0)
 - CONTRACTOR TO HAVE CERTIFIED ARBORIST EVALUATE ALL TREES (ON PROPERTY AND EXTENDING OVER THE PROPERTY BOUNDARY). ARBORIST SHALL PRUNE ALL LIMBS TO IMPROVE TREE HEALTH AND TO PREVENT DAMAGE TO FENCING, STRUCTURES, AND LIGHT POLES. ARBORIST SHALL REMOVE ANY DISEASED OR DYING TREES AND SHRUBS.
 - THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR AND REPLACEMENT OF ALL REQUIRED SCREENING AND LANDSCAPE MATERIALS.
 - ALL REQUIRED PLANT MATERIALS SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION, REPLACED WHEN NECESSARY, AND KEPT FREE OF REFUSE AND DEBRIS. ALL REQUIRED FENCES AND WALLS SHALL BE MAINTAINED IN GOOD REPAIR.
 - THE PROPERTY OWNER SHALL BE RESPONSIBLE TO REMOVE AND REPLACE DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY WITH THE SAME TYPE, SIZE AND QUANTITY OF PLANT MATERIALS AS ORIGINALLY INSTALLED, UNLESS ALTERNATIVE PLANTINGS ARE REQUESTED, JUSTIFIED AND APPROVED BY THE PLANNING BOARD OR PLANNING DIRECTOR.



- LEGEND**
- DETECTABLE WARNING STRIP
 - PROPOSED BRUSHED FINISHED CONCRETE
 - PROPOSED NEW PAVEMENT
 - VERTICAL GRANITE CURB
 - FLUSH SLAB EDGE
 - NEW PLANTING

1 2 3 4 5 6 7 8 9 10 11 12

A
B
C
D
E
F
G
H
I
J



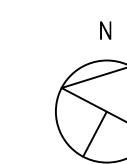
**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE



LIGHTING PLAN

PROJECT NO.: 17002
DATE ISSUED: 11/07/2018
SCALE: 1"=30'
DRAWN BY: ND
REVIEWED BY: TDN

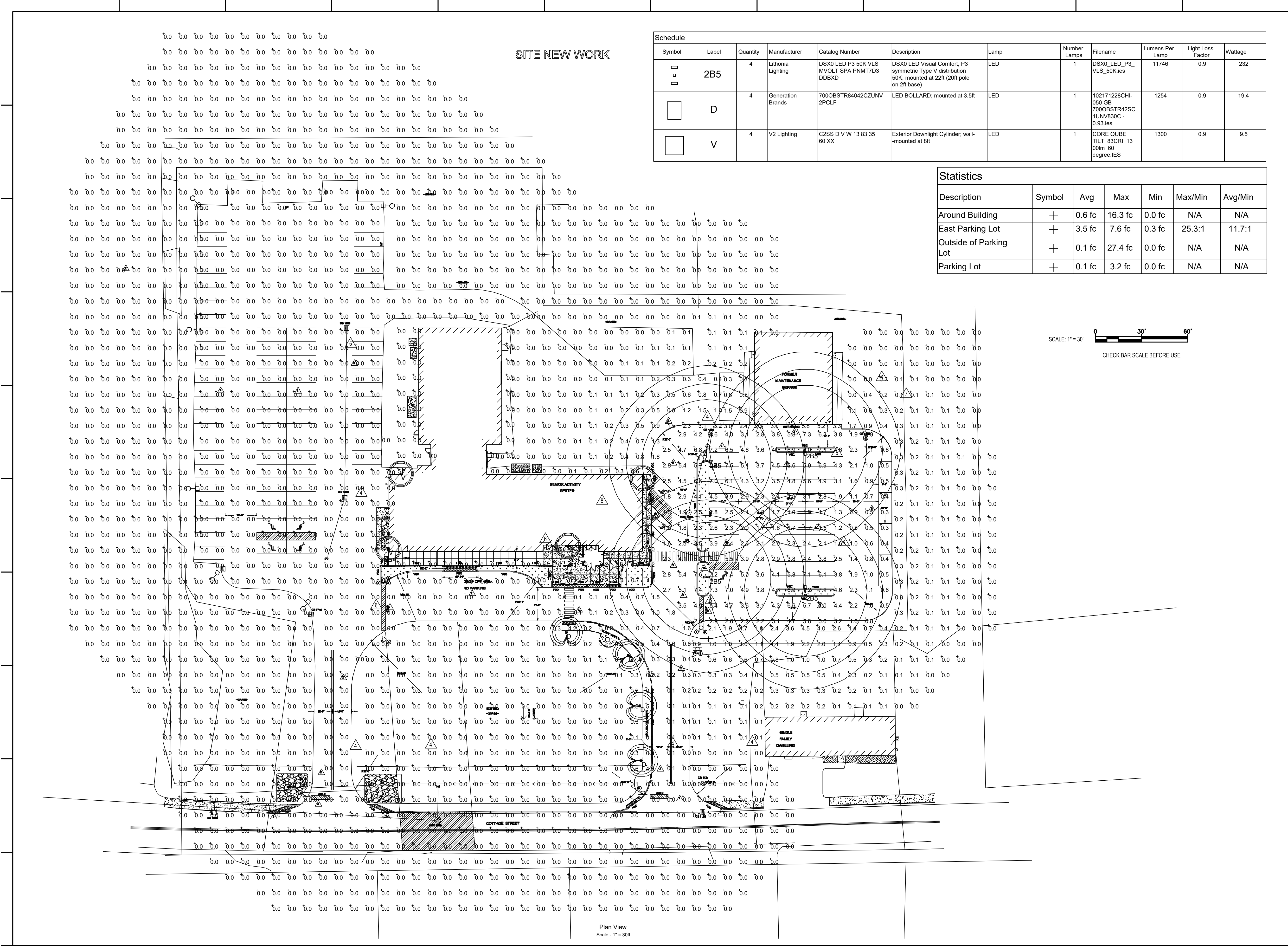
C-9.0

PROJECT PHASE:
APPROVAL

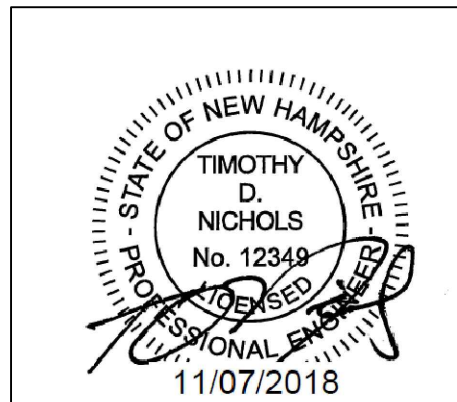
Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
□	2B5	4	Lithonia Lighting	DSX0 LED P3 50K VLS MVOLT SPA PNMT7D3 DDBXD	DSX0 LED Visual Comfort, P3 symmetric Type V distribution 50K; mounted at 22ft (20ft pole on 2ft base)	LED	1	DSX0_LED_P3_VLS_50K.ies	11746	0.9	232
□	D	4	Generation Brands	700OBSTR4042CZUNV 2PCLF	LED BOLLARD; mounted at 3.5ft	LED	1	102171228CHI-050 GB 700OBSTR42SC 1UNV830C - 0.93.ies	1254	0.9	19.4
□	V	4	V2 Lighting	C2SS D V W 13 83 35 60 XX	Exterior Downlight Cylinder; wall-mounted at 8ft	LED	1	CORE QUBE TILT_83CRI_13 00lm_60 degree.IES	1300	0.9	9.5

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Around Building	+	0.6 fc	16.3 fc	0.0 fc	N/A	N/A
East Parking Lot	+	3.5 fc	7.6 fc	0.3 fc	25.3:1	11.7:1
Outside of Parking Lot	+	0.1 fc	27.4 fc	0.0 fc	N/A	N/A
Parking Lot	+	0.1 fc	3.2 fc	0.0 fc	N/A	N/A

SCALE: 1" = 30'
CHECK BAR SCALE BEFORE USE



Plan View
Scale: 1" = 30ft



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

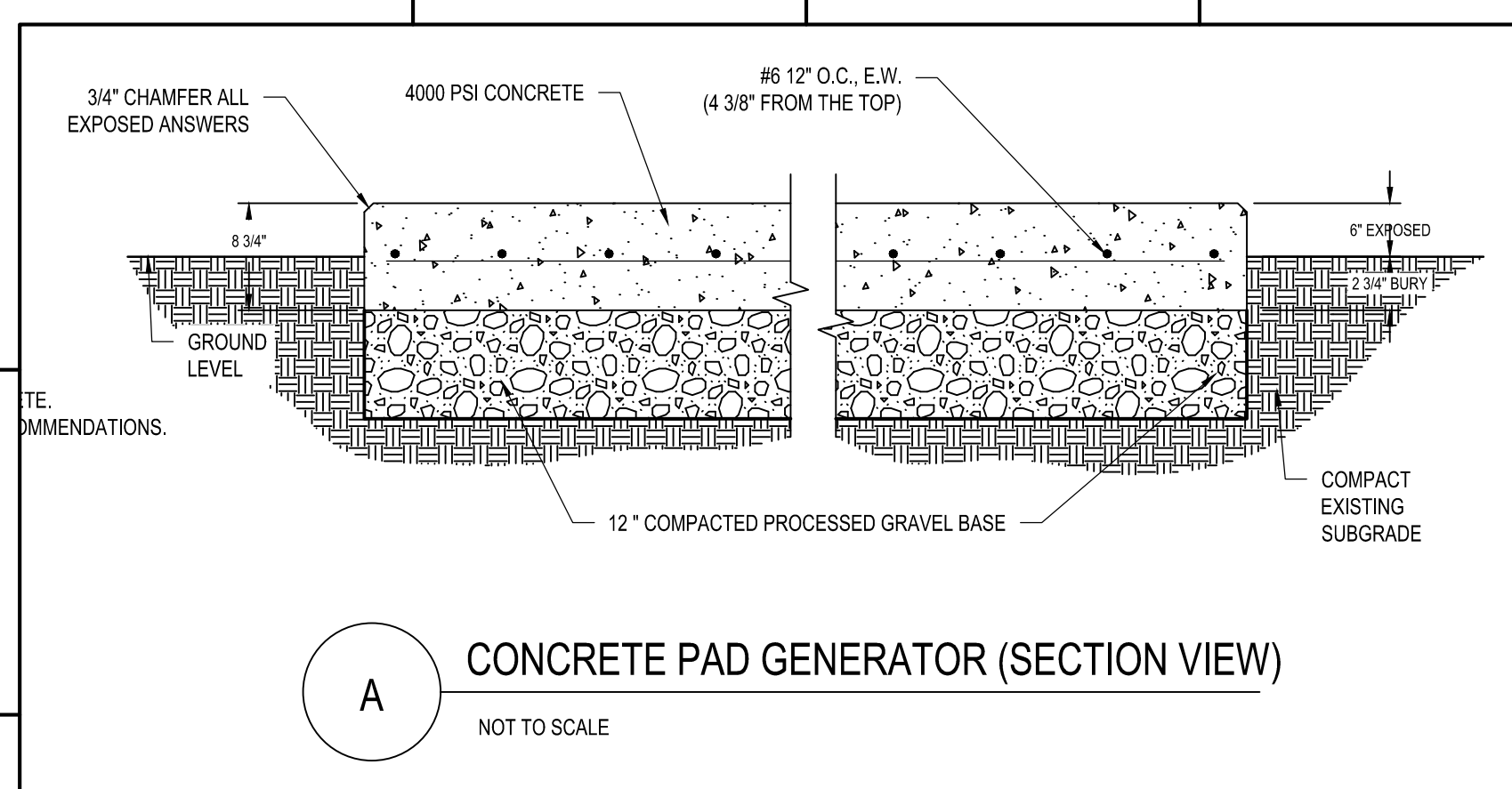
REVISIONS		
No.	DESCRIPTION	DATE

DETAILS SHEET

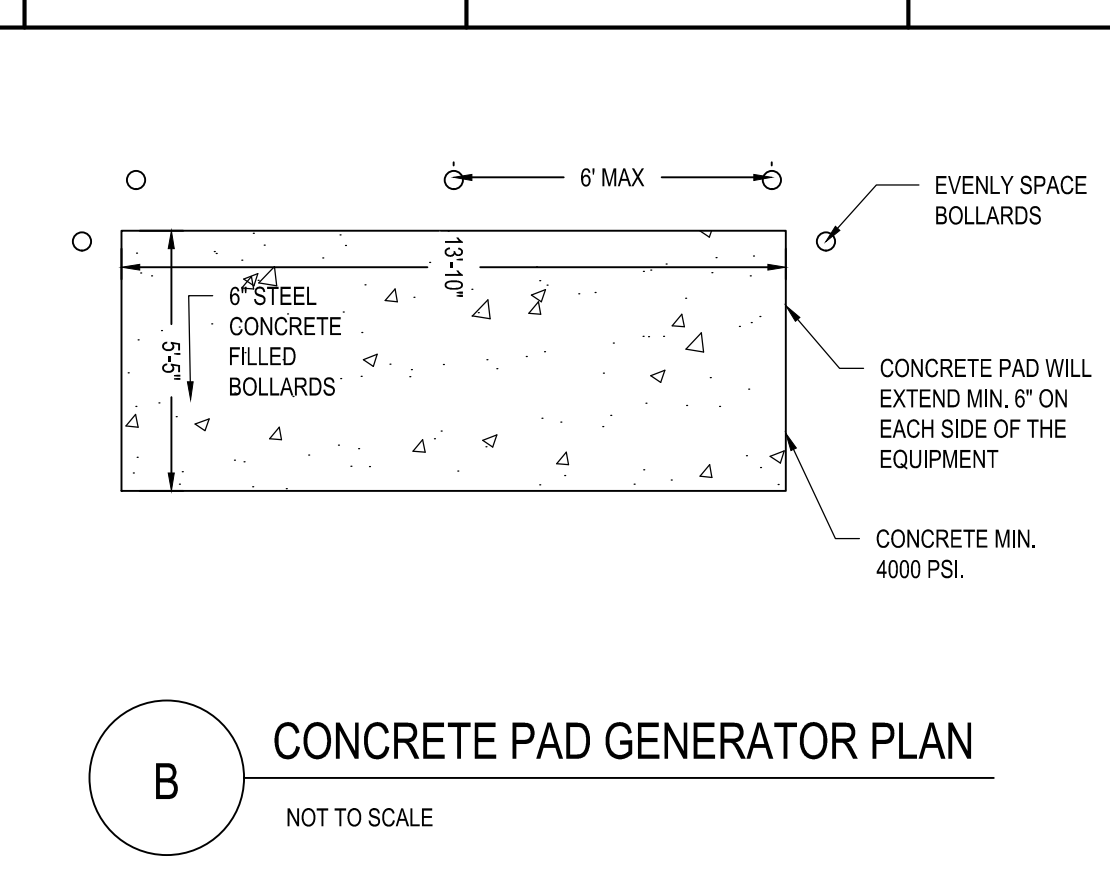
PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	SJC
REVIEWED BY:	TDN

C-10.0

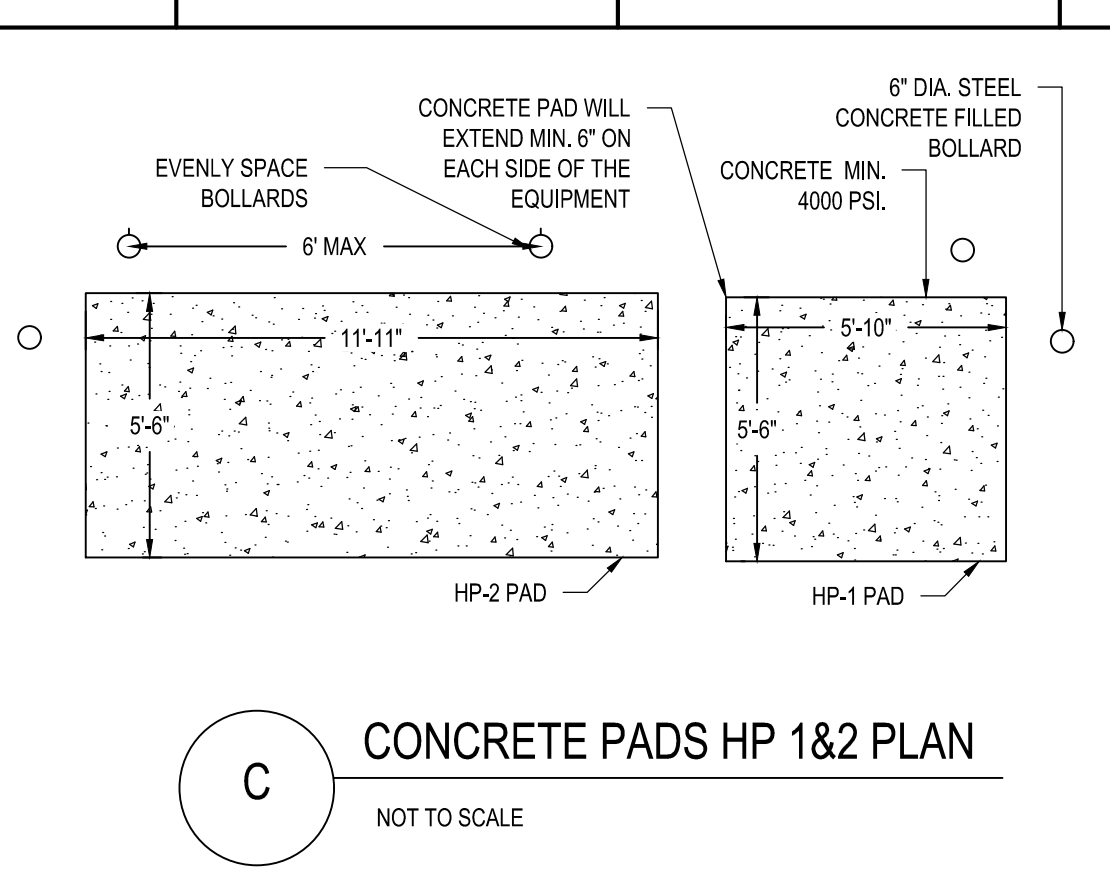
PROJECT PHASE:
APPROVAL



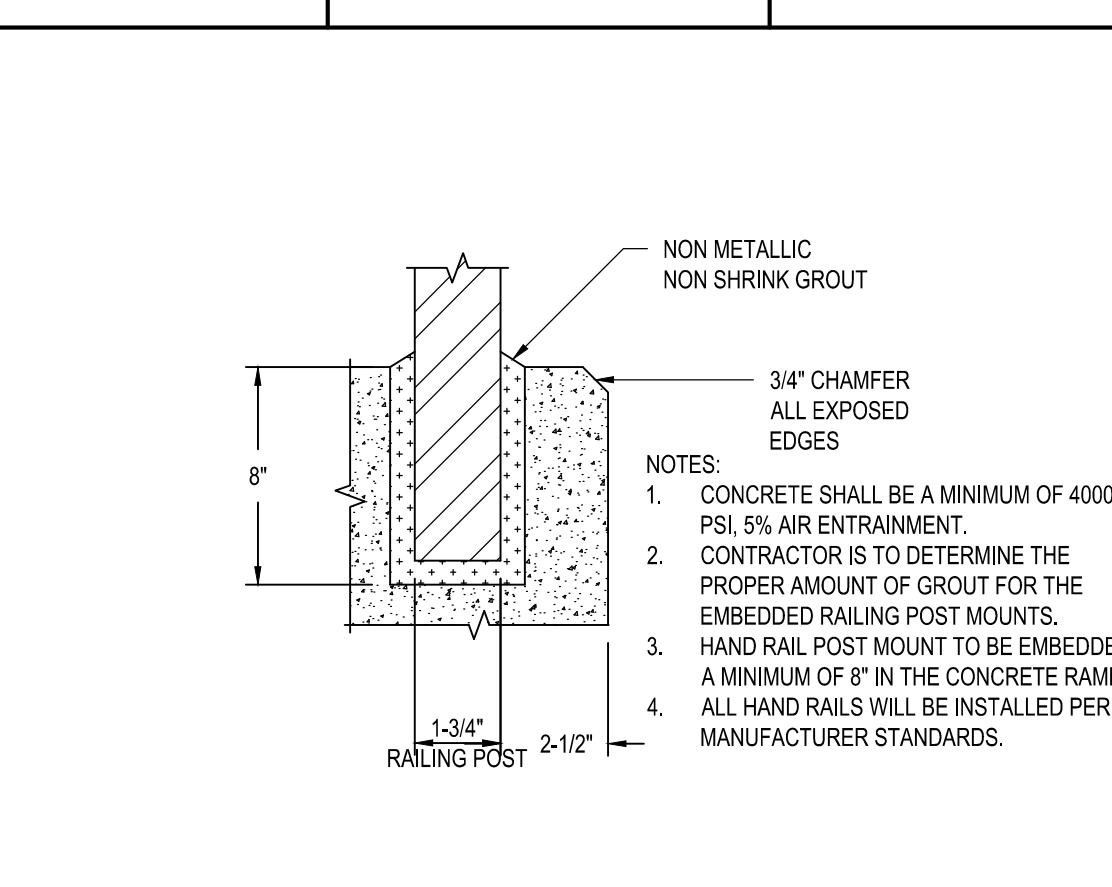
A CONCRETE PAD GENERATOR (SECTION VIEW)
NOT TO SCALE



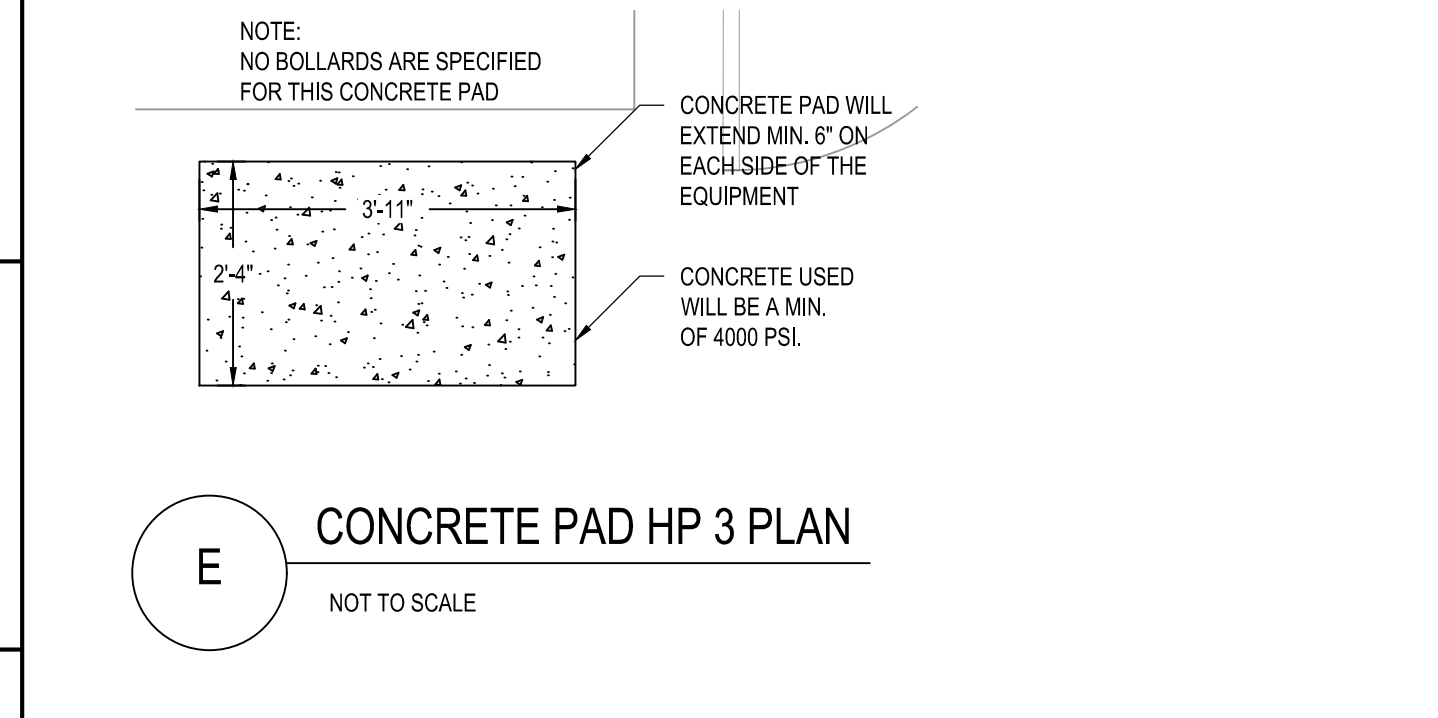
B CONCRETE PAD GENERATOR PLAN
NOT TO SCALE



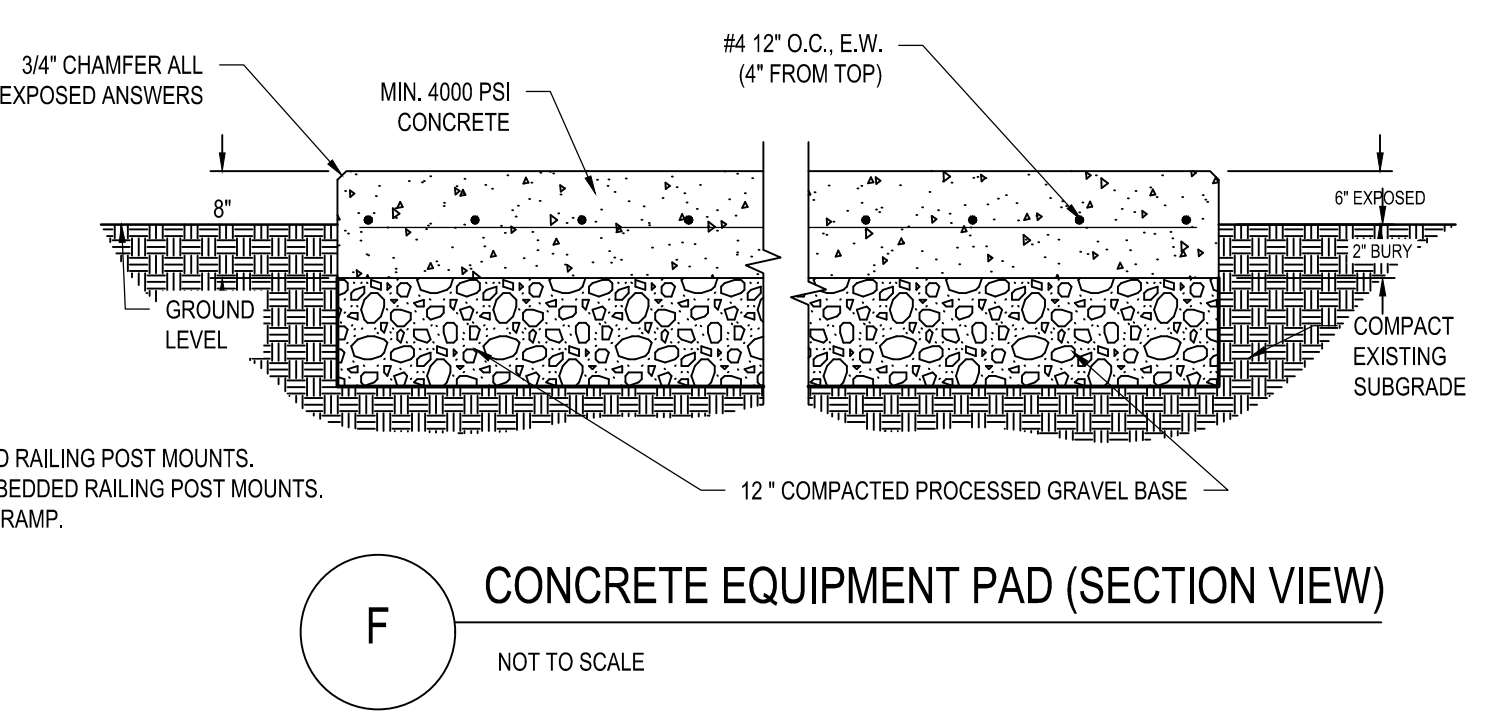
C CONCRETE PADS HP 1&2 PLAN
NOT TO SCALE



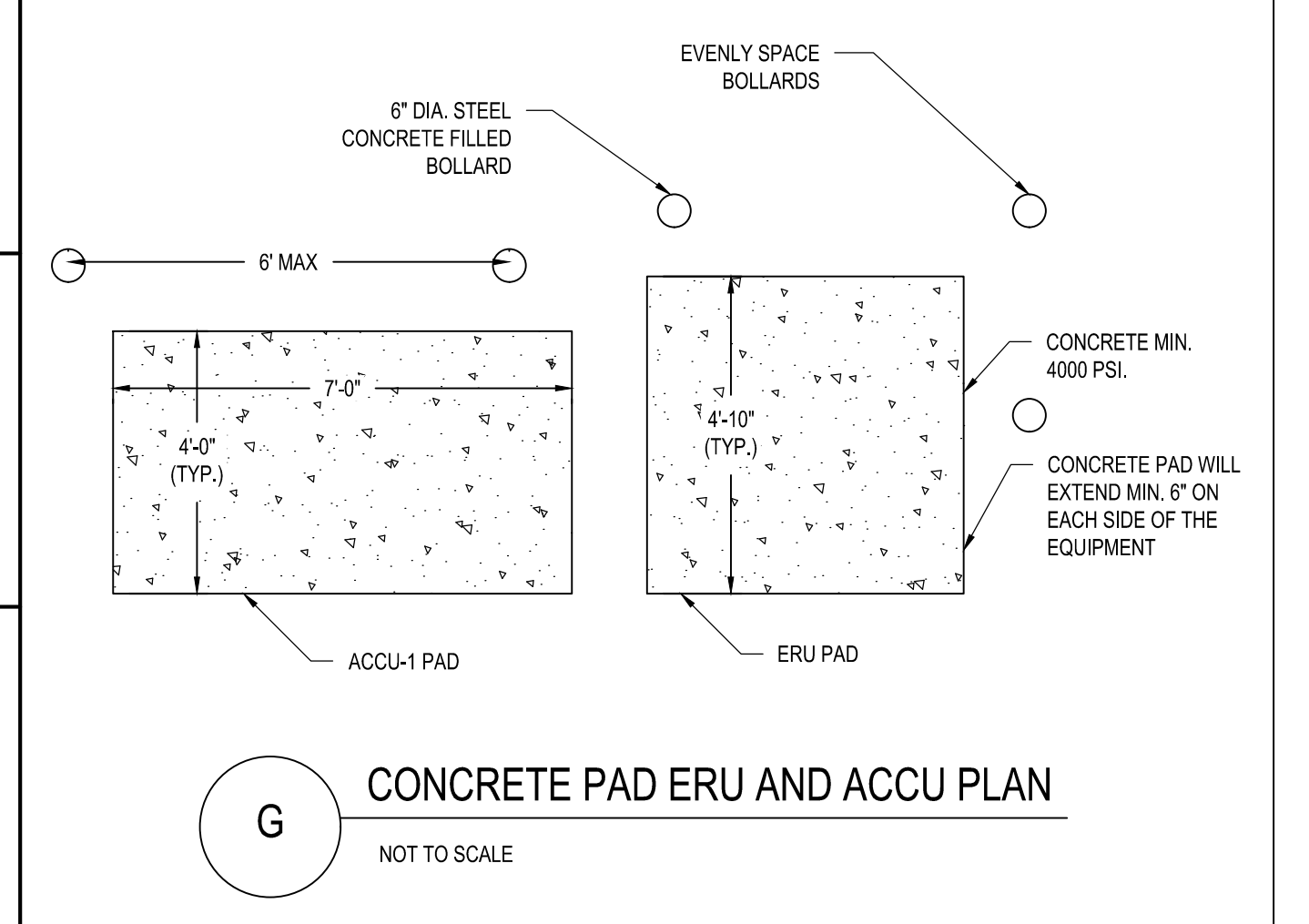
D HAND RAIL POST DETAIL
NOT TO SCALE



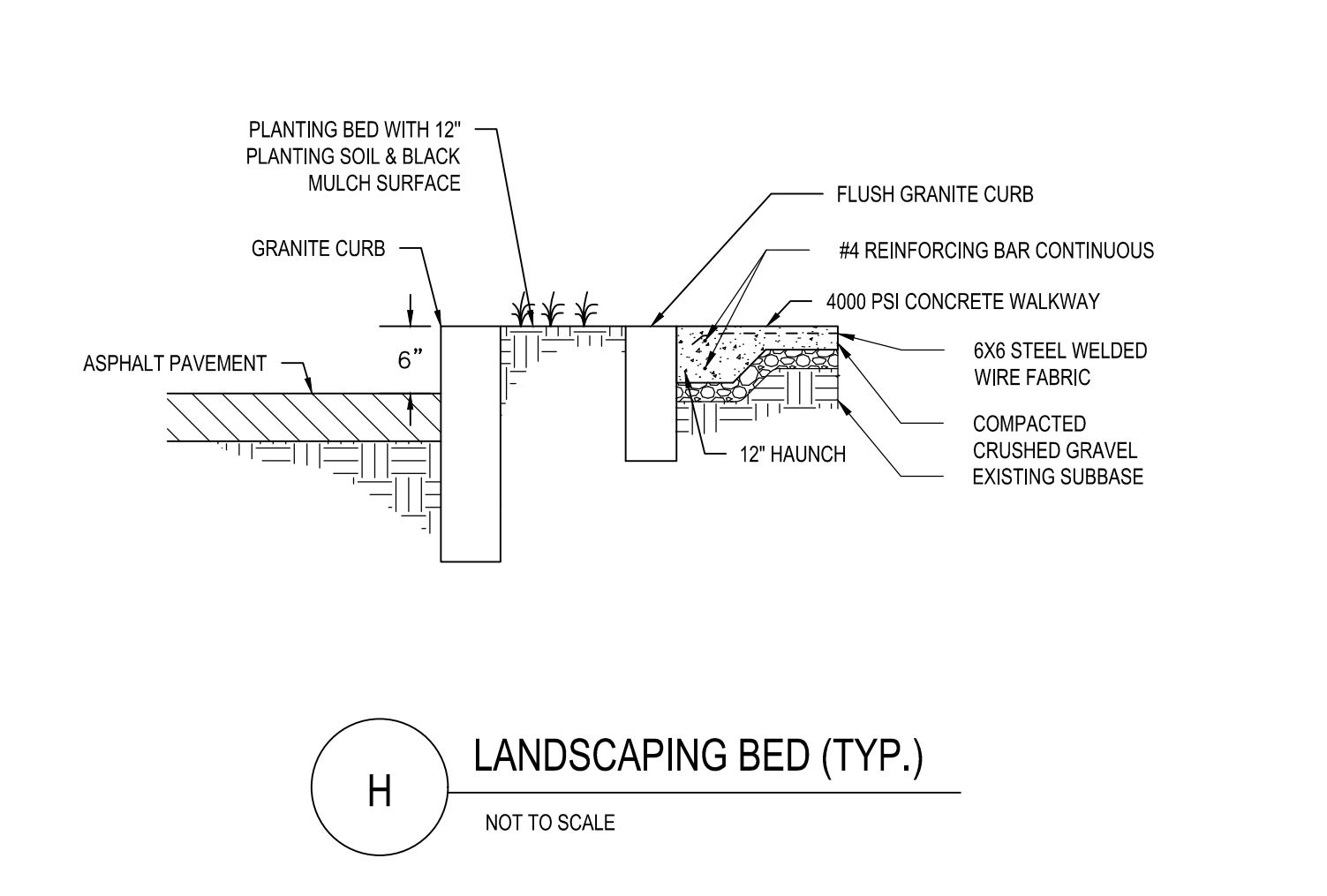
E CONCRETE PAD HP 3 PLAN
NOT TO SCALE



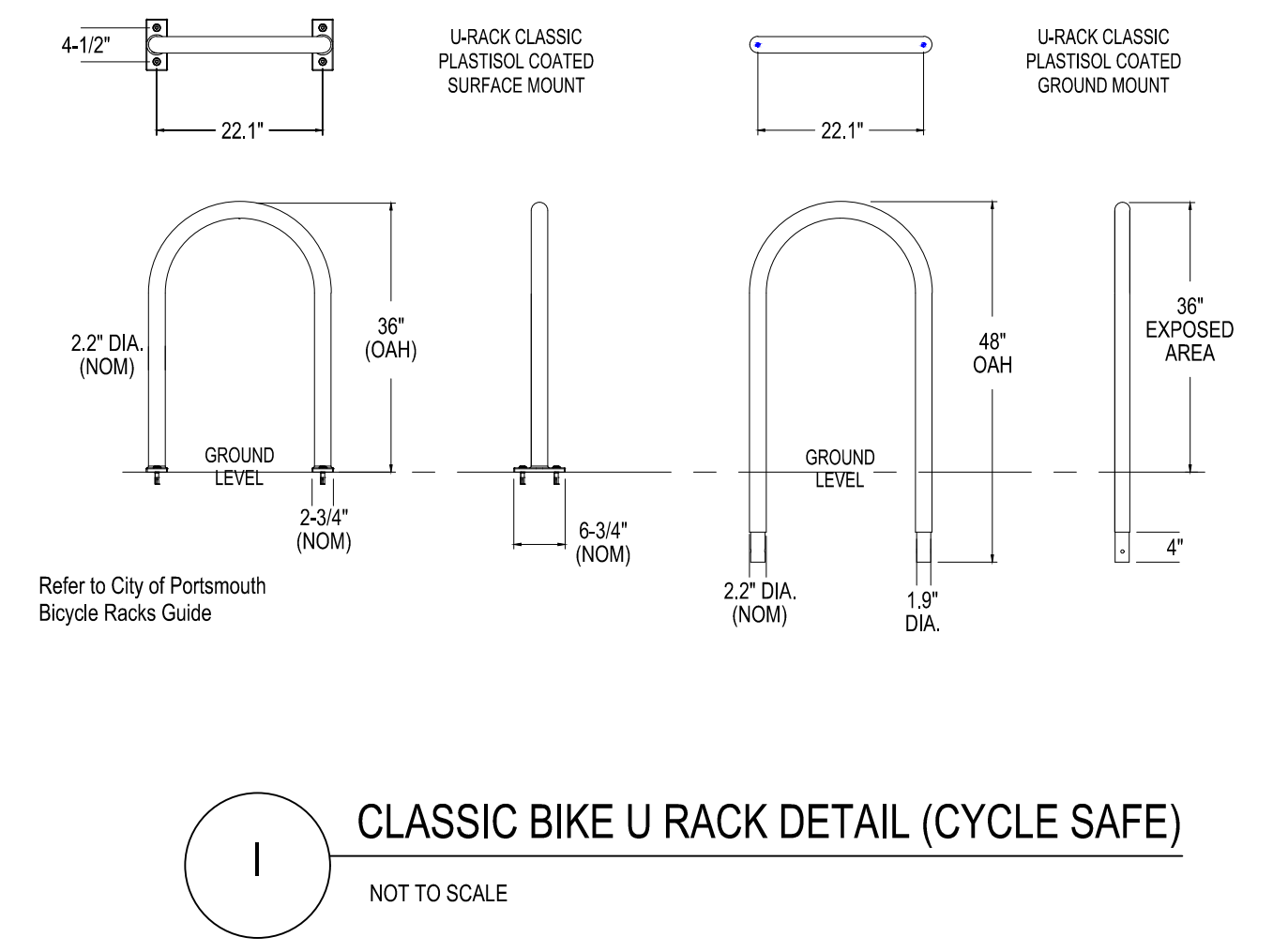
F CONCRETE EQUIPMENT PAD (SECTION VIEW)
NOT TO SCALE



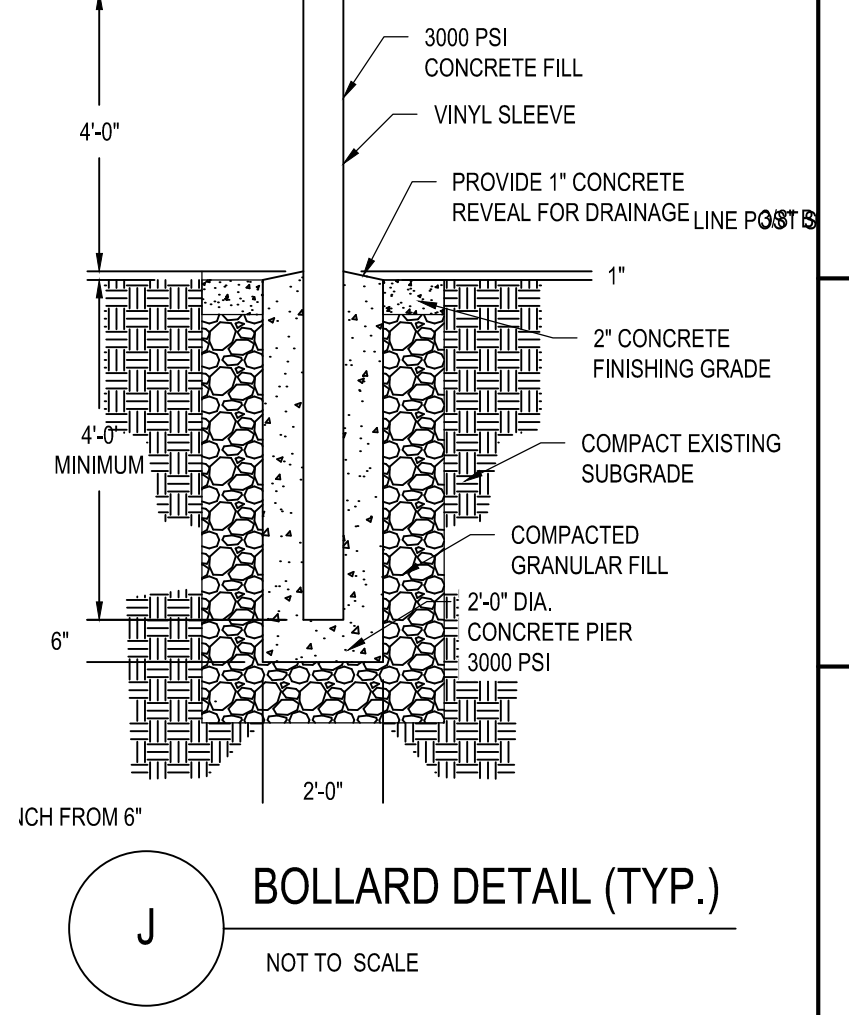
G CONCRETE PAD ERU AND ACCU PLAN
NOT TO SCALE



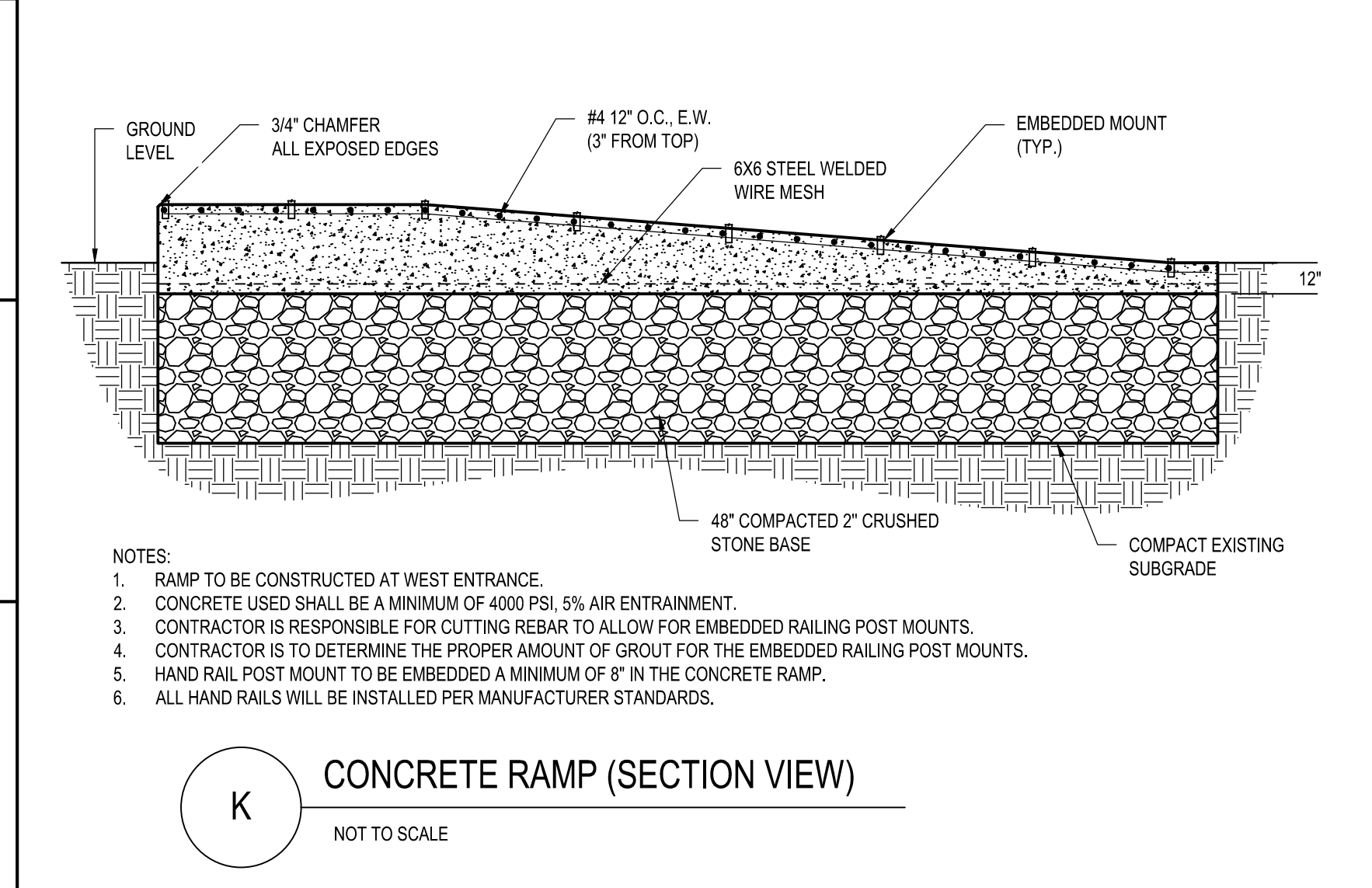
H LANDSCAPING BED (TYP.)
NOT TO SCALE



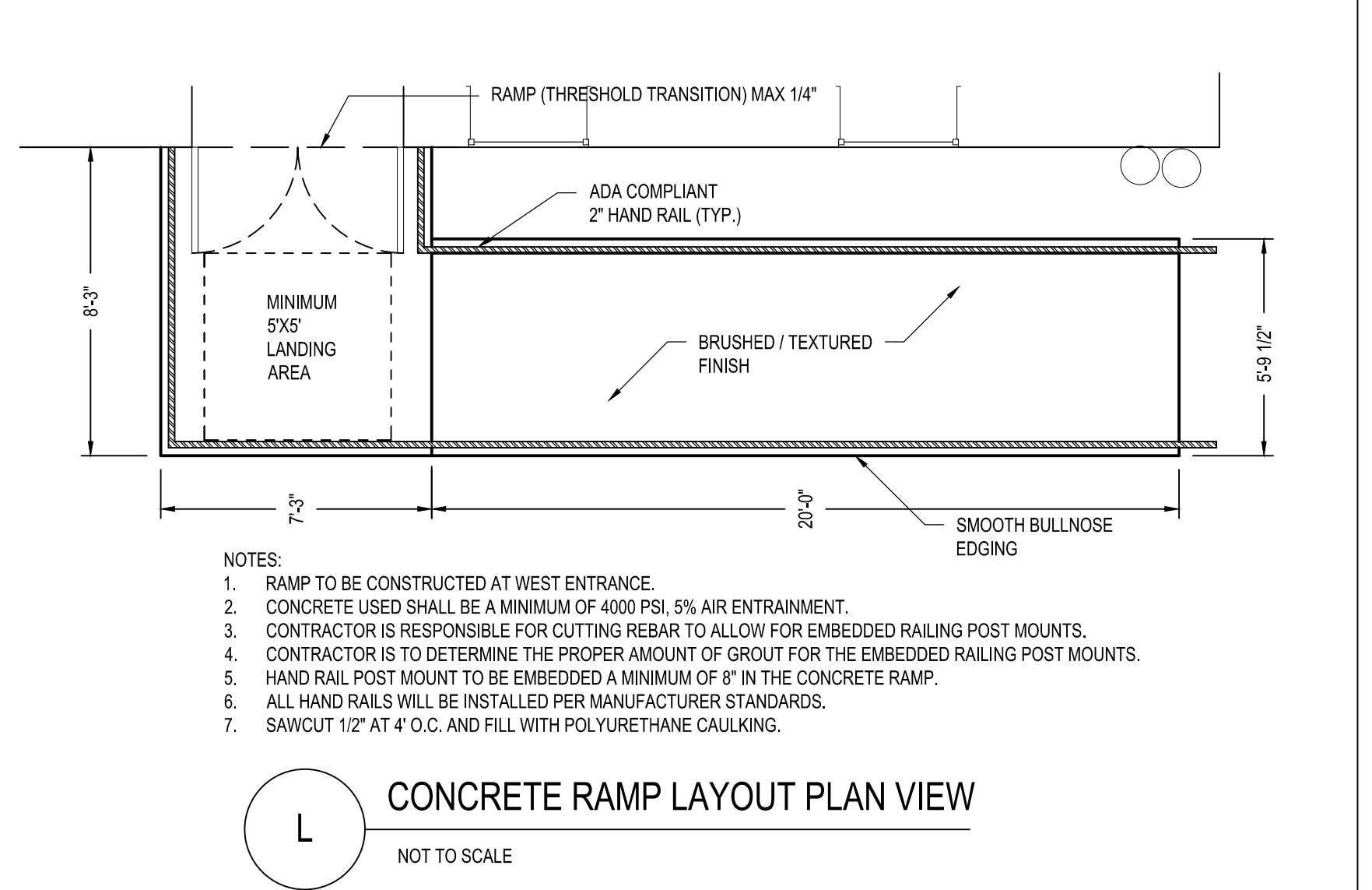
I CLASSIC BIKE U RACK DETAIL (CYCLE SAFE)
NOT TO SCALE



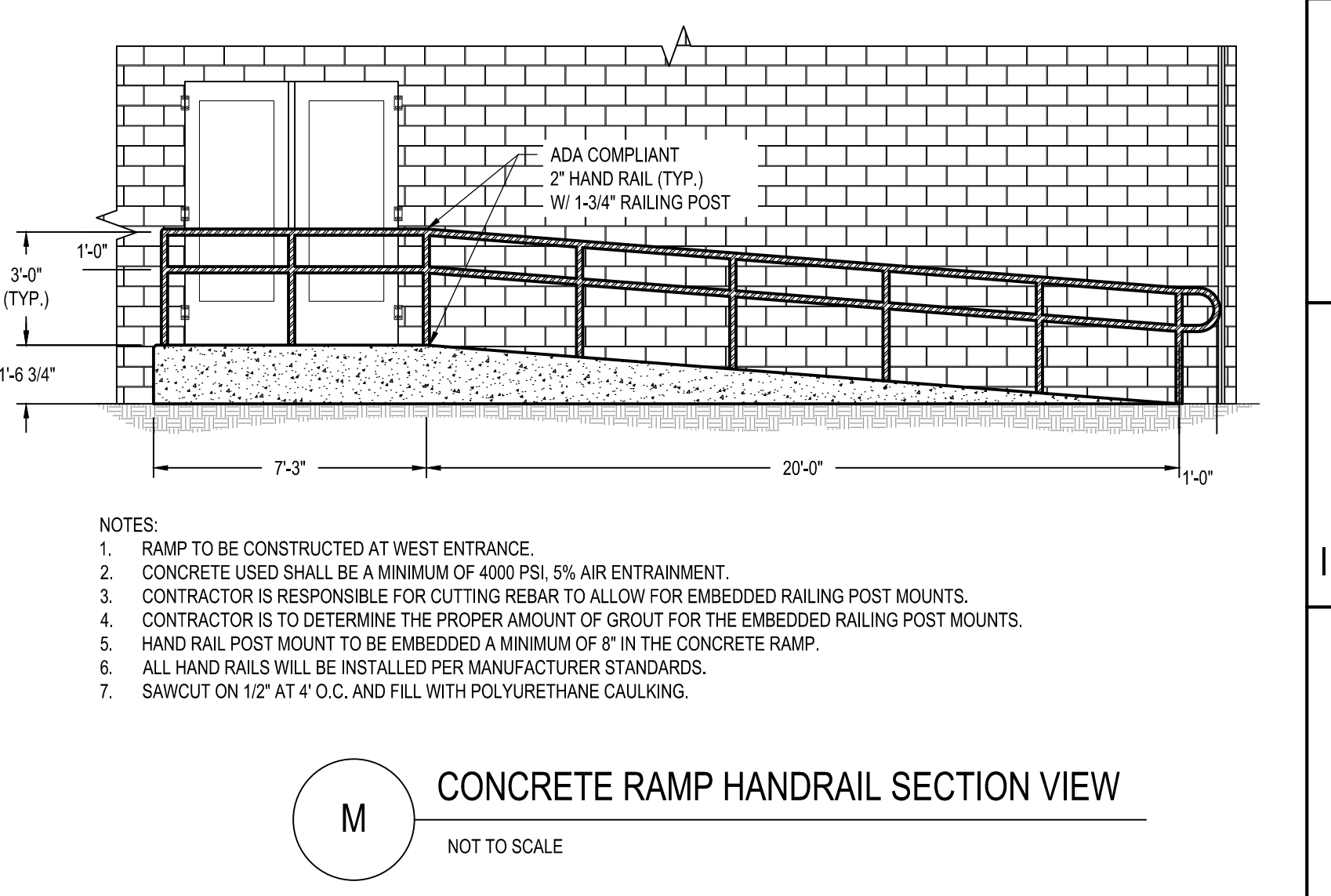
J BOLLARD DETAIL (TYP.)
NOT TO SCALE



K CONCRETE RAMP (SECTION VIEW)
NOT TO SCALE



L CONCRETE RAMP LAYOUT PLAN VIEW
NOT TO SCALE

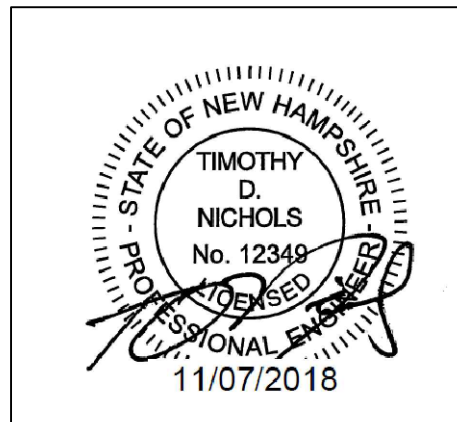


M CONCRETE RAMP HANDRAIL SECTION VIEW
NOT TO SCALE

- NOTES:
- RAMP TO BE CONSTRUCTED AT WEST ENTRANCE.
 - CONCRETE USED SHALL BE A MINIMUM OF 4000 PSI, 5% AIR ENTRAINMENT.
 - CONTRACTOR IS RESPONSIBLE FOR CUTTING REBAR TO ALLOW FOR EMBEDDED RAILING POST MOUNTS.
 - CONTRACTOR IS TO DETERMINE THE PROPER AMOUNT OF GROUT FOR THE EMBEDDED RAILING POST MOUNTS.
 - HAND RAIL POST MOUNT TO BE EMBEDDED A MINIMUM OF 8" IN THE CONCRETE RAMP.
 - ALL HAND RAILS WILL BE INSTALLED PER MANUFACTURER STANDARDS.

- NOTES:
- RAMP TO BE CONSTRUCTED AT WEST ENTRANCE.
 - CONCRETE USED SHALL BE A MINIMUM OF 4000 PSI, 5% AIR ENTRAINMENT.
 - CONTRACTOR IS RESPONSIBLE FOR CUTTING REBAR TO ALLOW FOR EMBEDDED RAILING POST MOUNTS.
 - CONTRACTOR IS TO DETERMINE THE PROPER AMOUNT OF GROUT FOR THE EMBEDDED RAILING POST MOUNTS.
 - HAND RAIL POST MOUNT TO BE EMBEDDED A MINIMUM OF 8" IN THE CONCRETE RAMP.
 - ALL HAND RAILS WILL BE INSTALLED PER MANUFACTURER STANDARDS.
 - SAWCUT 1/2" AT 4' O.C. AND FILL WITH POLYURETHANE CAULKING.

- NOTES:
- RAMP TO BE CONSTRUCTED AT WEST ENTRANCE.
 - CONCRETE USED SHALL BE A MINIMUM OF 4000 PSI, 5% AIR ENTRAINMENT.
 - CONTRACTOR IS RESPONSIBLE FOR CUTTING REBAR TO ALLOW FOR EMBEDDED RAILING POST MOUNTS.
 - CONTRACTOR IS TO DETERMINE THE PROPER AMOUNT OF GROUT FOR THE EMBEDDED RAILING POST MOUNTS.
 - HAND RAIL POST MOUNT TO BE EMBEDDED A MINIMUM OF 8" IN THE CONCRETE RAMP.
 - ALL HAND RAILS WILL BE INSTALLED PER MANUFACTURER STANDARDS.
 - SAWCUT ON 1/2" AT 4' O.C. AND FILL WITH POLYURETHANE CAULKING.



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

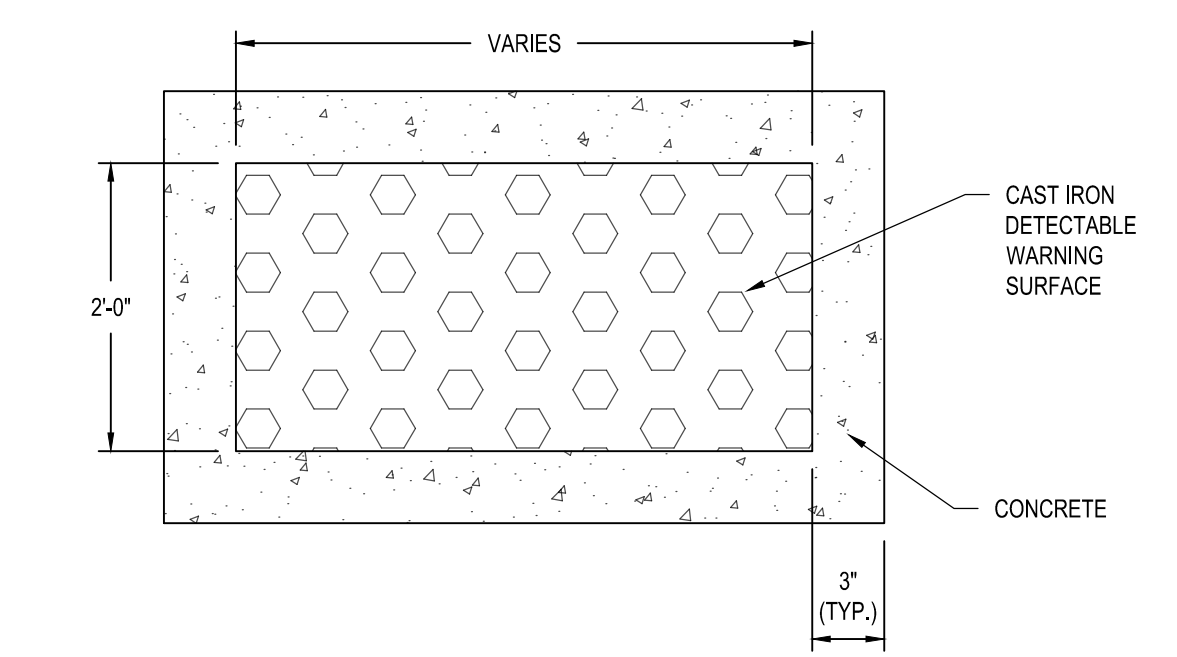
REVISIONS		
No.	DESCRIPTION	DATE

DETAILS SHEET

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	SJC
REVIEWED BY:	TDN

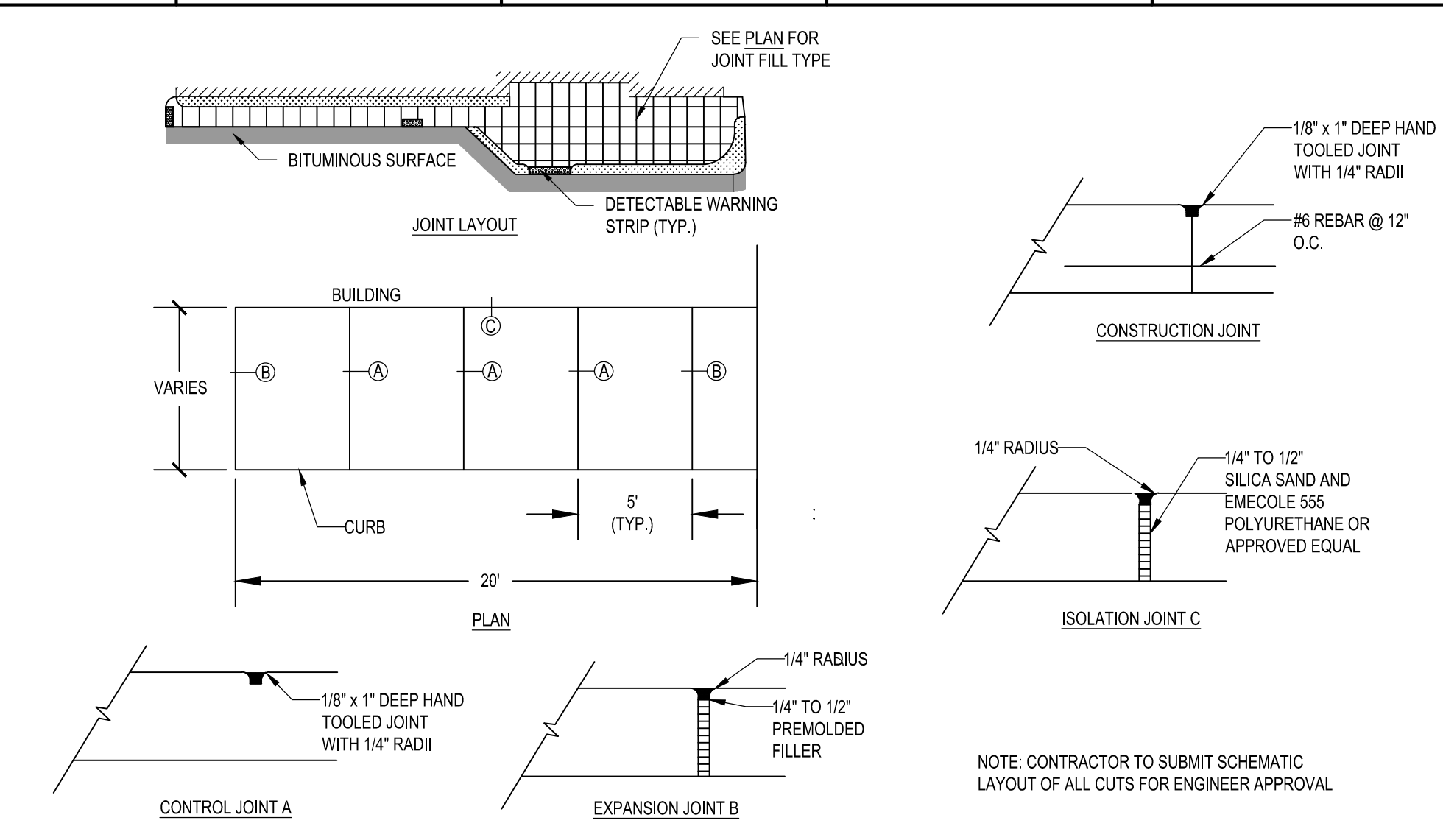
C-10.1

PROJECT PHASE:
APPROVAL

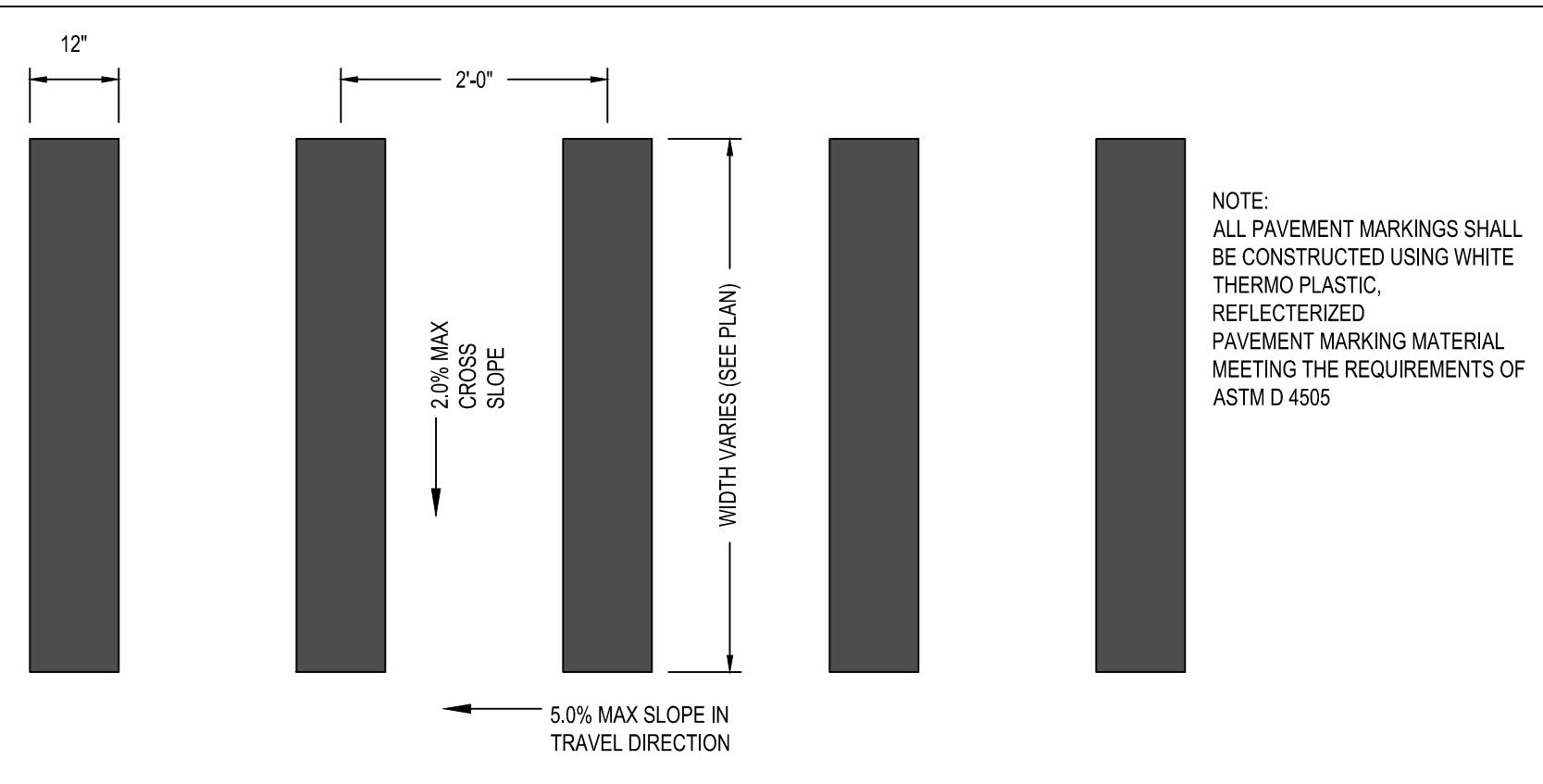


NOTES:
1. DETECTABLE WARNING SURFACE SHALL BE 2'X3' CAST IRON PANEL SET IN CONCRETE.
2. DETECTABLE WARNING SURFACE SHALL BE INSTALLED PER MANUFACTURE'S RECOMMENDATIONS.

A CAST IRON DETECTABLE WARNING SURFACE
NOT TO SCALE

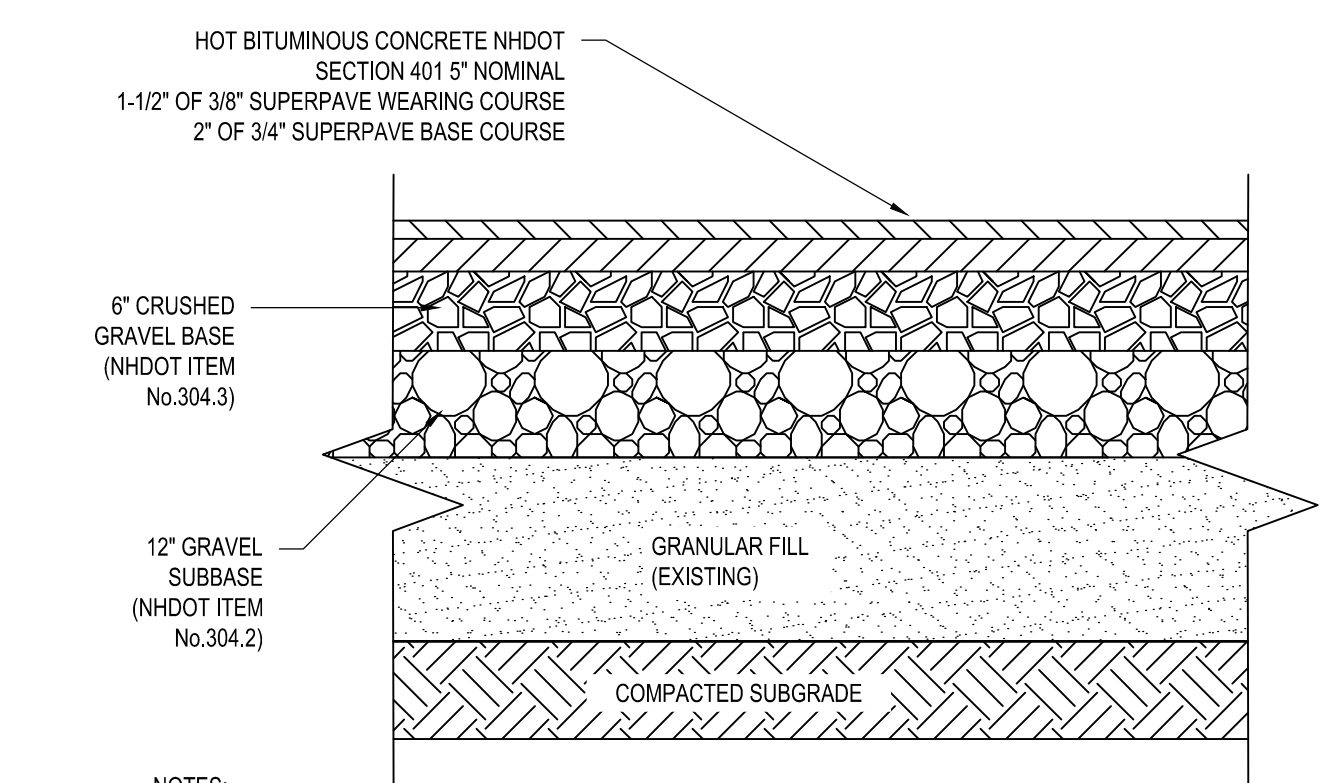


B CONCRETE SIDEWALK
NOT TO SCALE



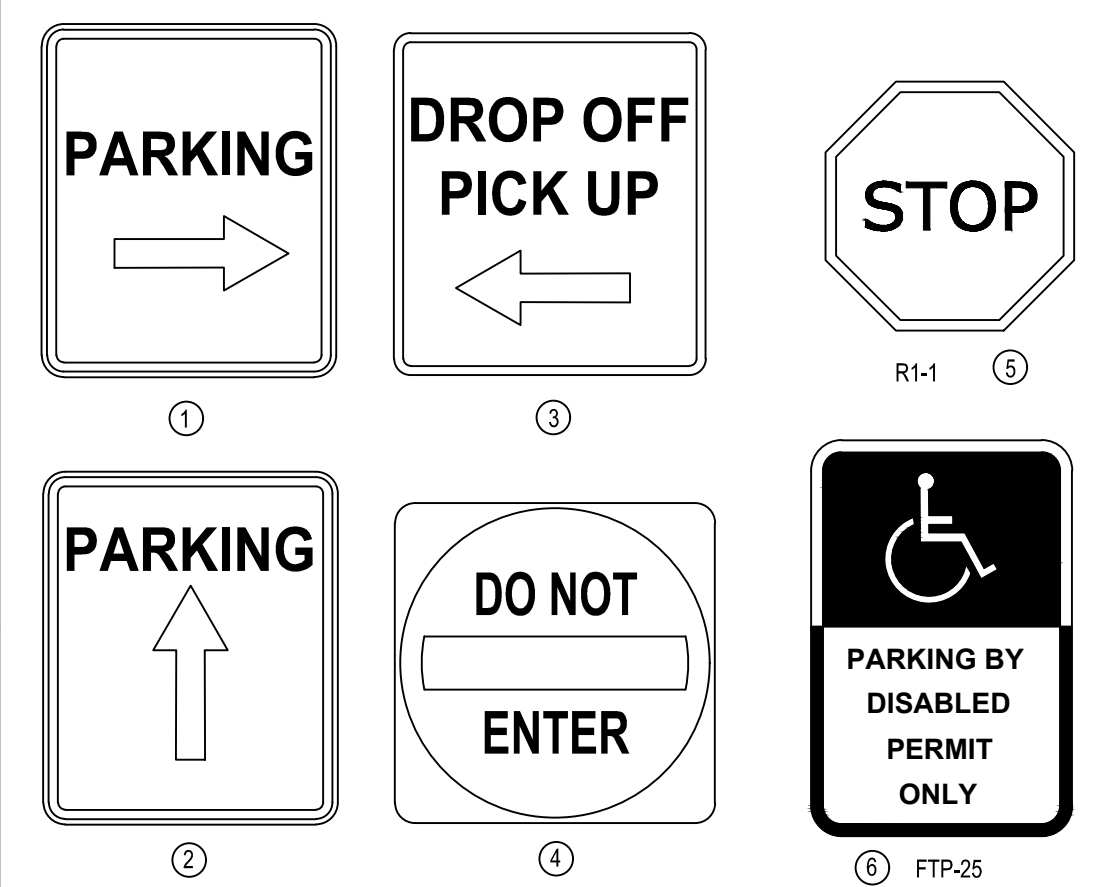
D CROSSWALK PLAN
NOT TO SCALE

NHDOT ITEM No. 304.2 (GRAVEL)		NHDOT ITEM No. 304.3 (CRUSHED GRAVEL)	
SIEVE SIZE	% PASSING	SIEVE SIZE	% PASSING
0-6"	100	0-3"	100
#4	25-70	0-2"	95-100
#200	0-12	0-1"	55-85
		#4	27-52
		#200	0-12



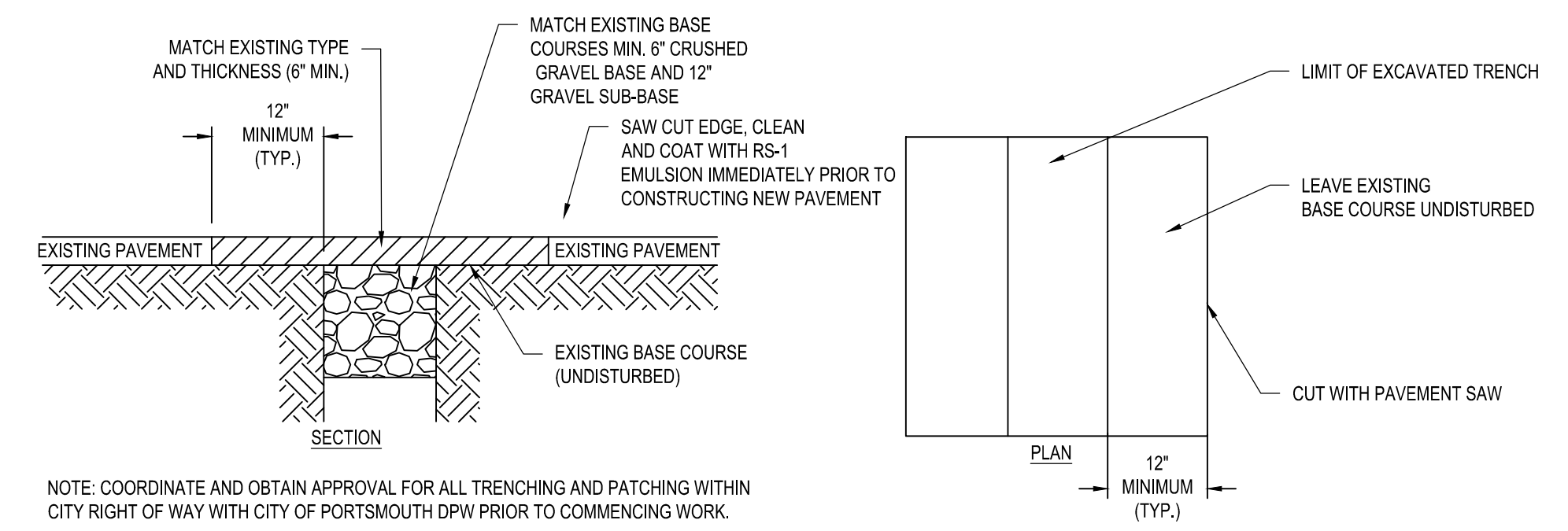
NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
4. REFER TO SITE SPECIFICATIONS FOR ASPHALT MIX DESIGN.
5. INSTALL GEOTEXTILE MARKER/SEPARATING BARRIER BETWEEN ALL CLEAN IMPORTS SOILS AND SUBGRADE SOILS (BASE AND SIDEWALLS), WITH THE EXCEPTION OF CLEAN NATIVE SOILS.

G TYPICAL PAVEMENT SECTION
NOT TO SCALE



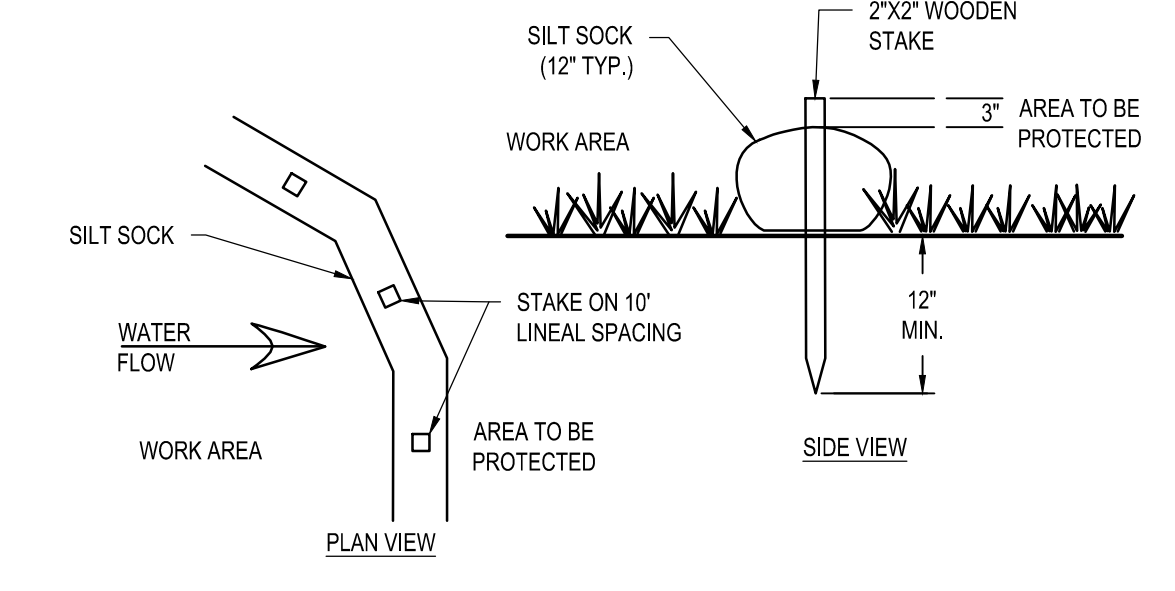
NOTE: ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST ADDITION. (MUTCD)
POST: SCHEDULE 40 GALVANIZED STEEL PIPE (OUTSIDE DIA. = 2.375")
FINISHED: POST TO BE POWDER COATED GLASS BLACK
LENGTH: AS REQUIRED BY MUTCD
WEIGHT PER LINEAR FOOT: 2.5LBS (MIN.)
HOLES: 3/8" DIAMETER (AS REQUIRED)
STEEL SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070-1080)

E TRAFFIC SIGNAGE AND POST DETAILS
NOT TO SCALE



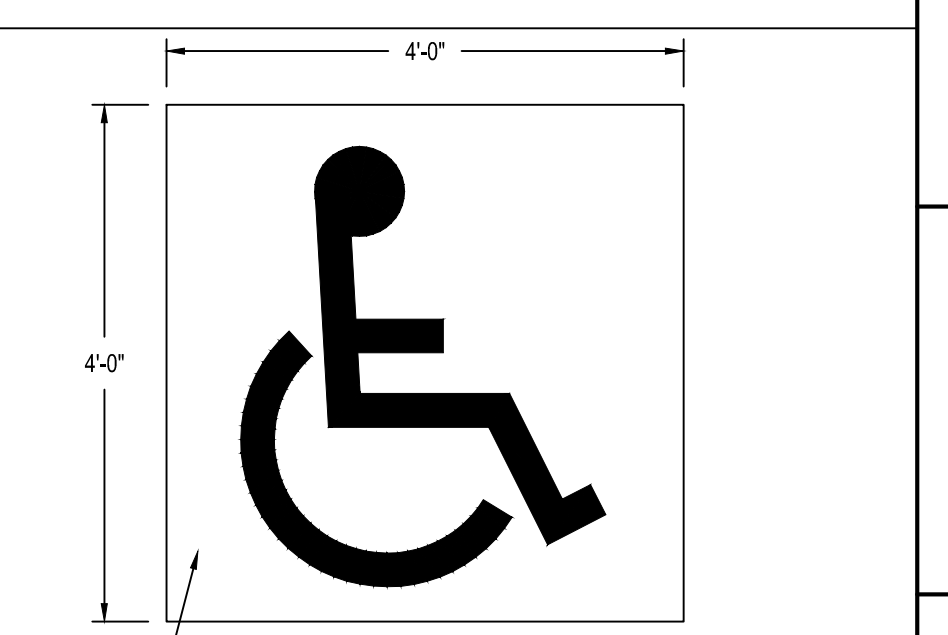
NOTE: COORDINATE AND OBTAIN APPROVAL FOR ALL TRENCHING AND PATCHING WITHIN CITY RIGHT OF WAY WITH CITY OF PORTSMOUTH DPW PRIOR TO COMMENCING WORK.

H PAVEMENT TRENCH PATCH
NOT TO SCALE

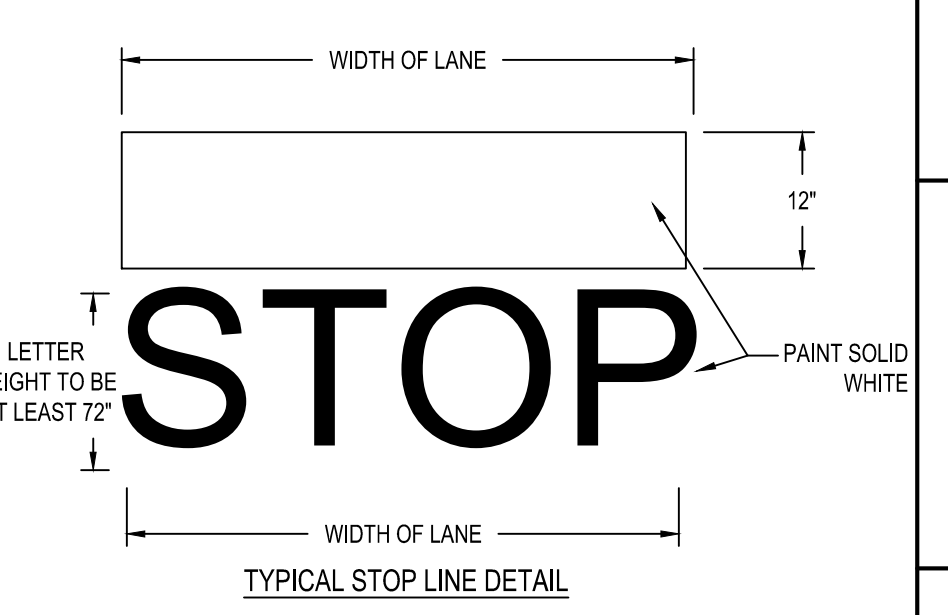


NOTES:
1. SILT SOCK SHALL BE SILT SOCK BY FILTREXX OR APPROVED EQUAL.
2. CONTRACTOR SHALL MAINTAIN SILT SOCKS THROUGHOUT THE COURSE OF WORK.

I SILT SOCK
NOT TO SCALE



WHITE PAVEMENT MARKING ON BLUE BACKGROUND PER INTERNATIONAL SYMBOL OF ACCESSIBILITY PROPORTIONS. 36"-42" SYMBOL HEIGHT.



F PAVEMENT MARKING DETAILS
NOT TO SCALE



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH

**PORTSMOUTH
SENIOR ACTIVITY
CENTER**

125 COTTAGE ST.
PORTSMOUTH, NH 03801

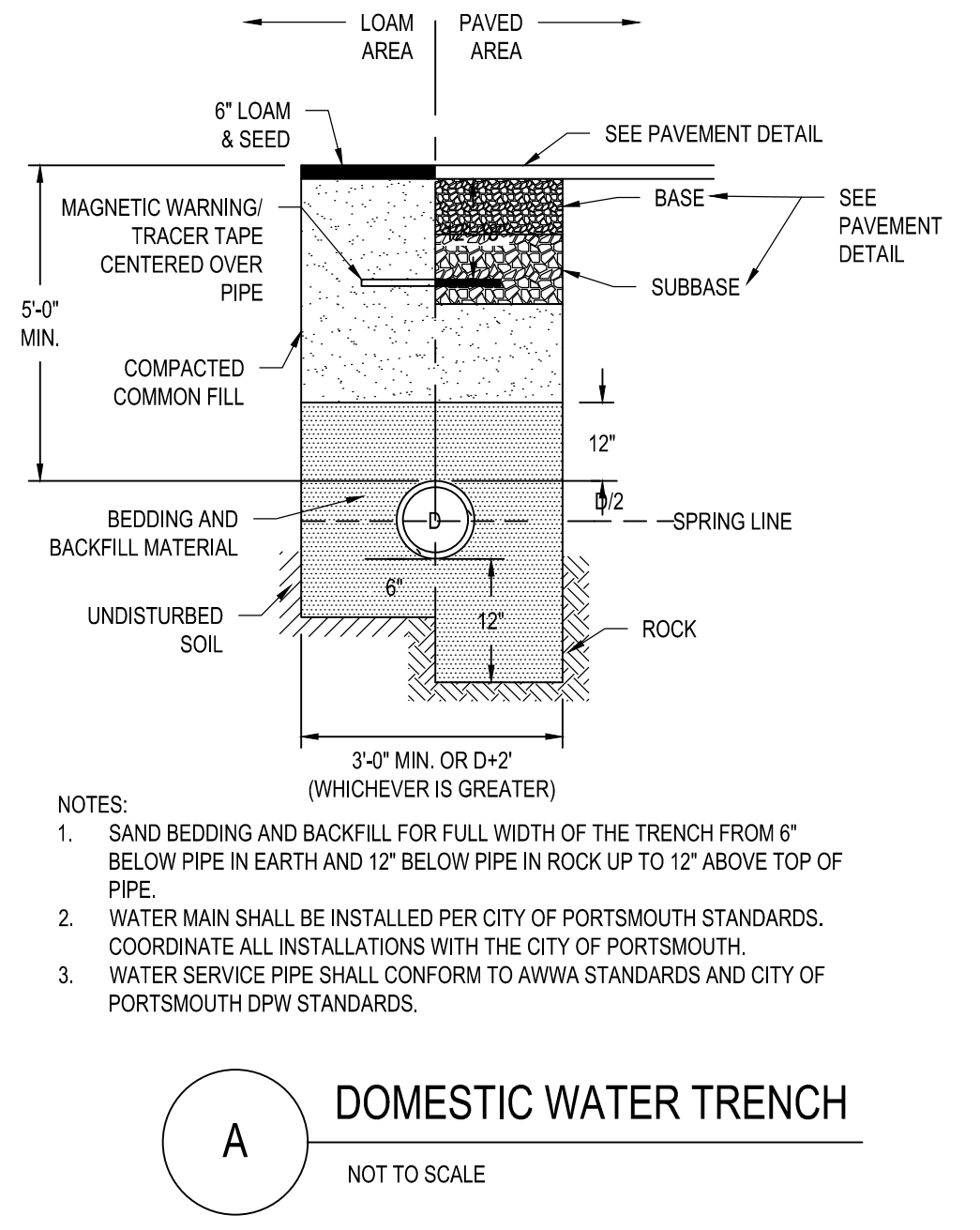
REVISIONS		
No.	DESCRIPTION	DATE

DETAILS SHEET

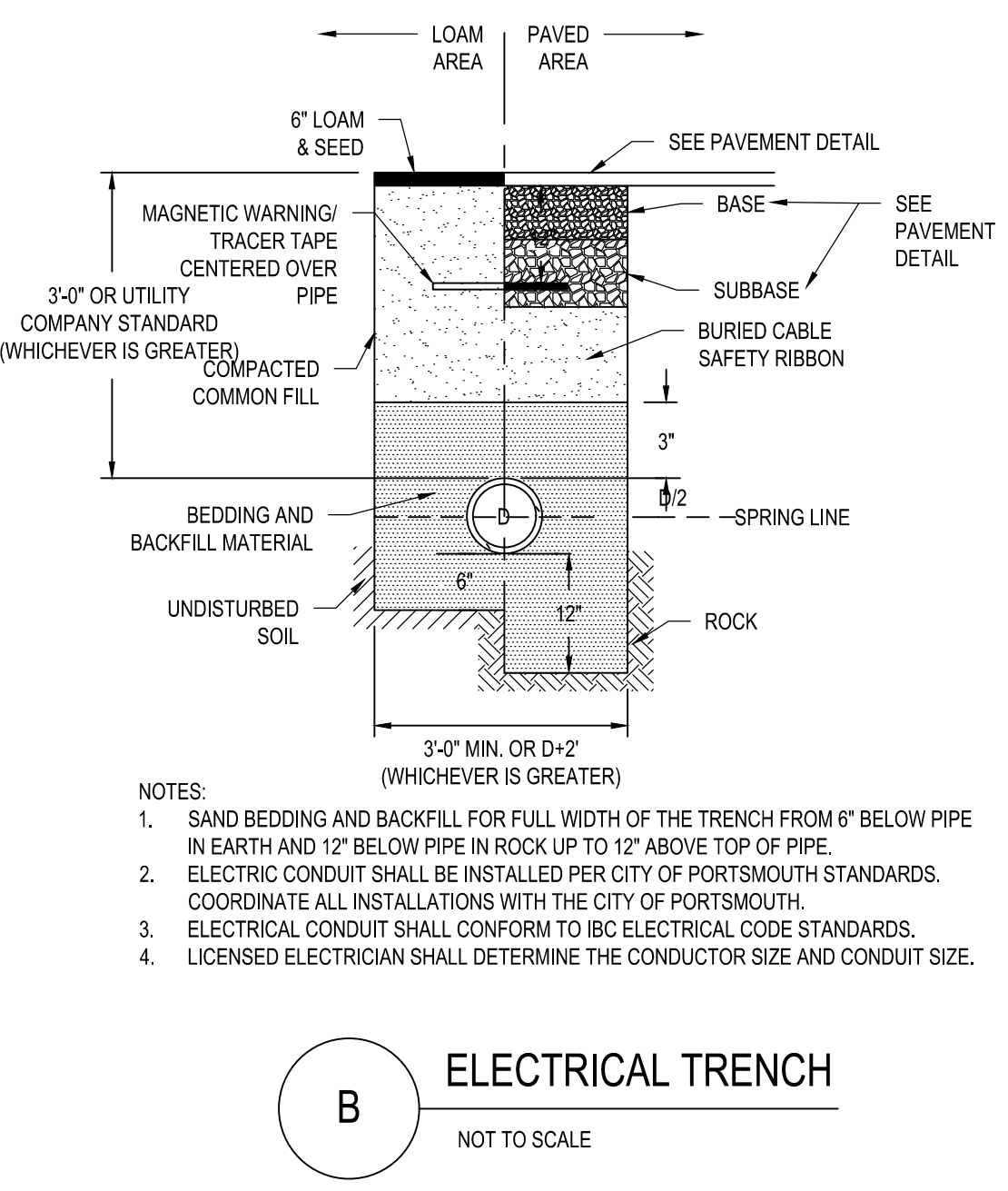
PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS NOTED
DRAWN BY:	SJC
REVIEWED BY:	TDN

C-10.2

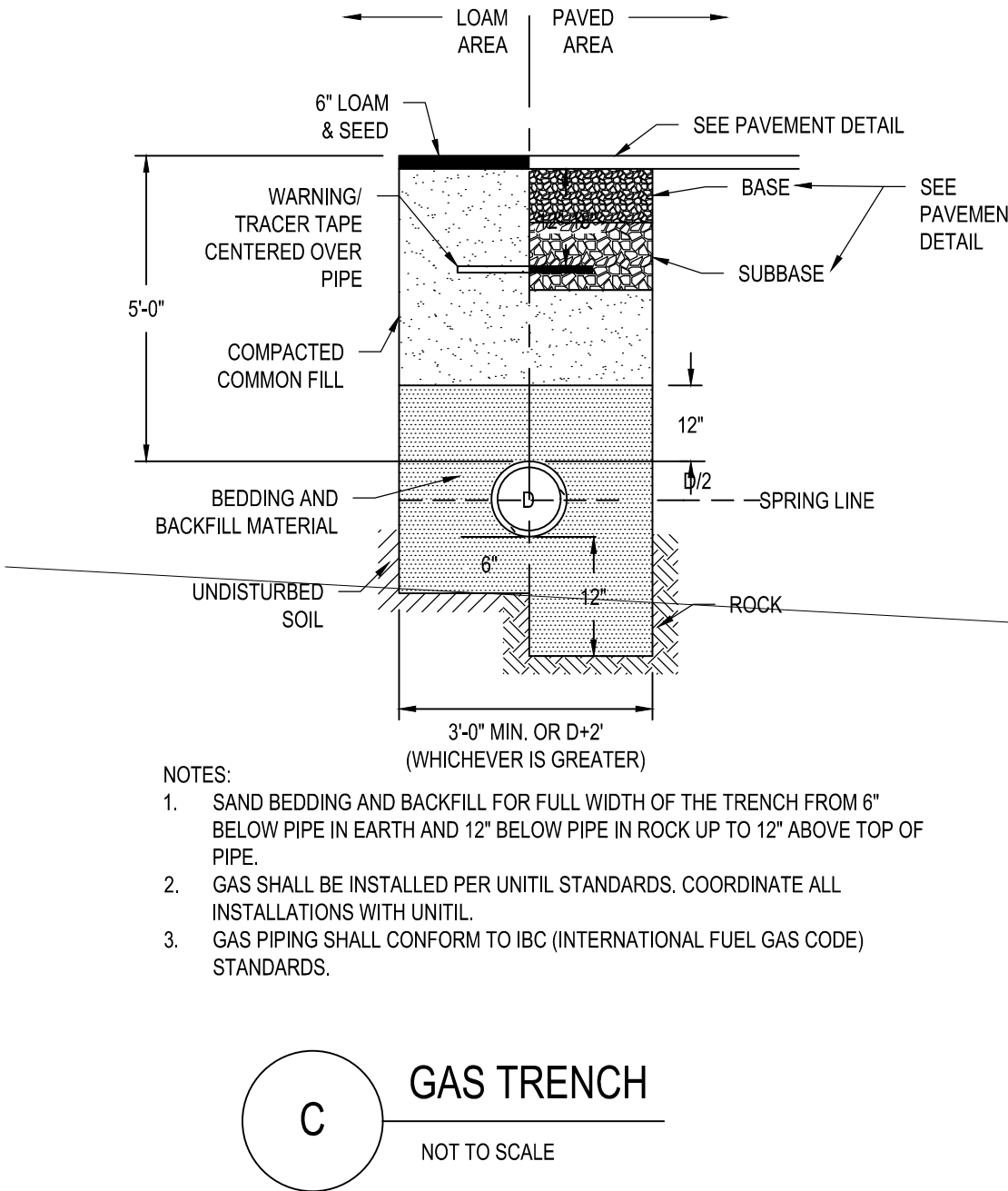
PROJECT PHASE:
APPROVAL



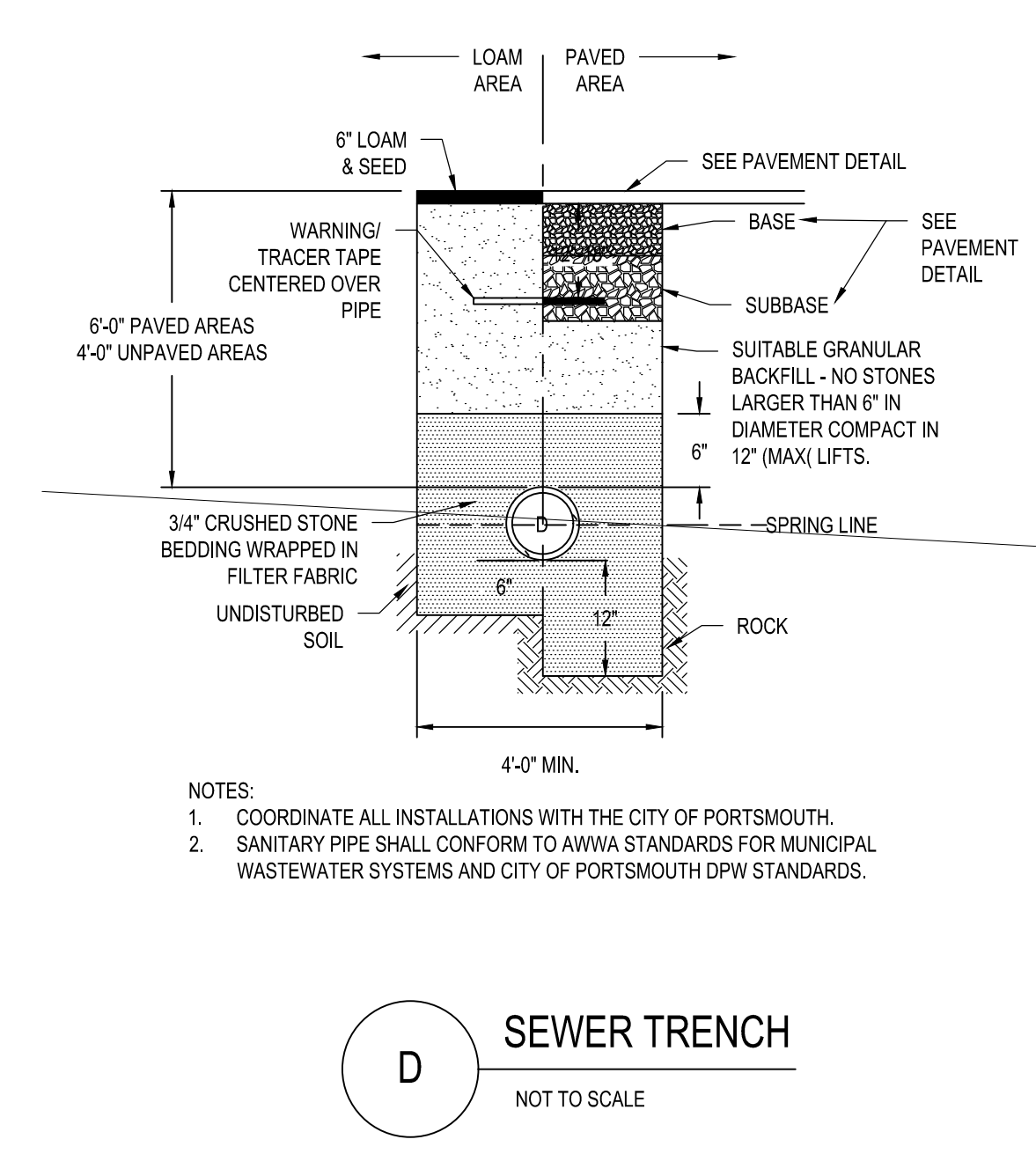
A DOMESTIC WATER TRENCH
NOT TO SCALE



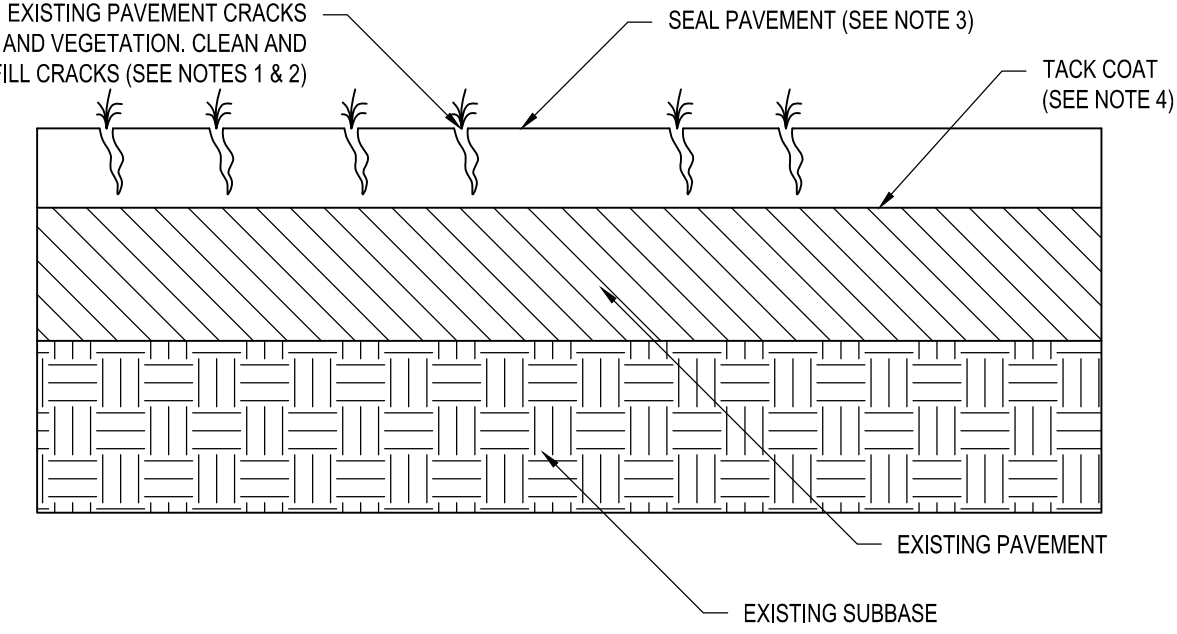
B ELECTRICAL TRENCH
NOT TO SCALE



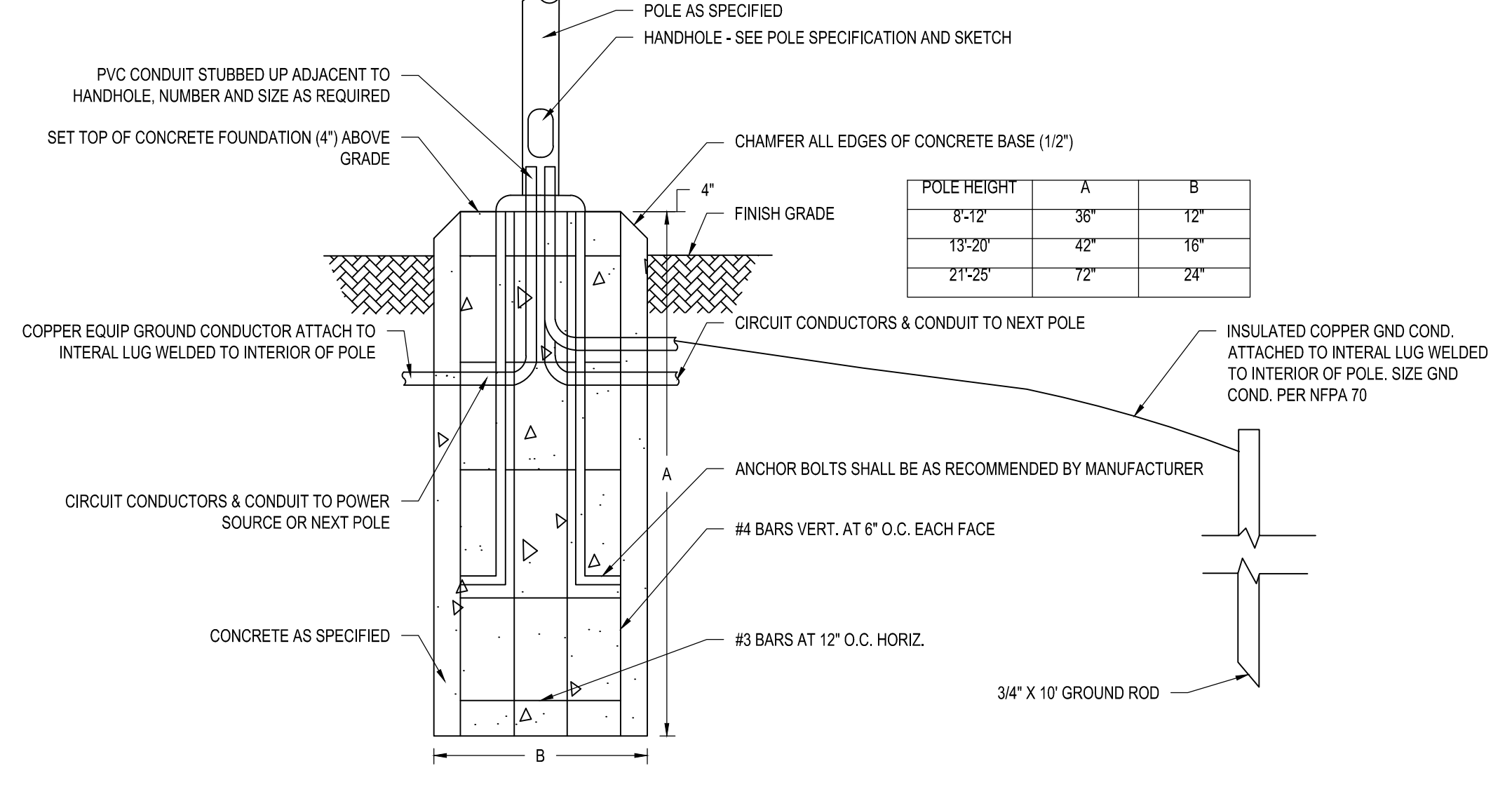
C GAS TRENCH
NOT TO SCALE



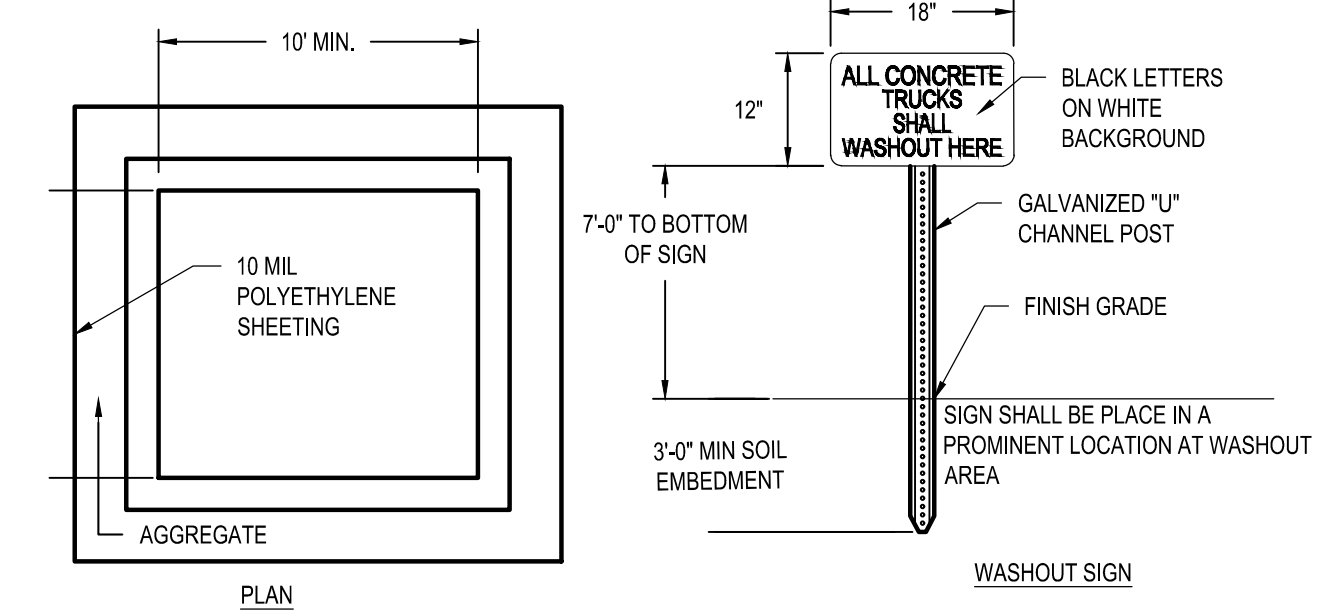
D SEWER TRENCH
NOT TO SCALE



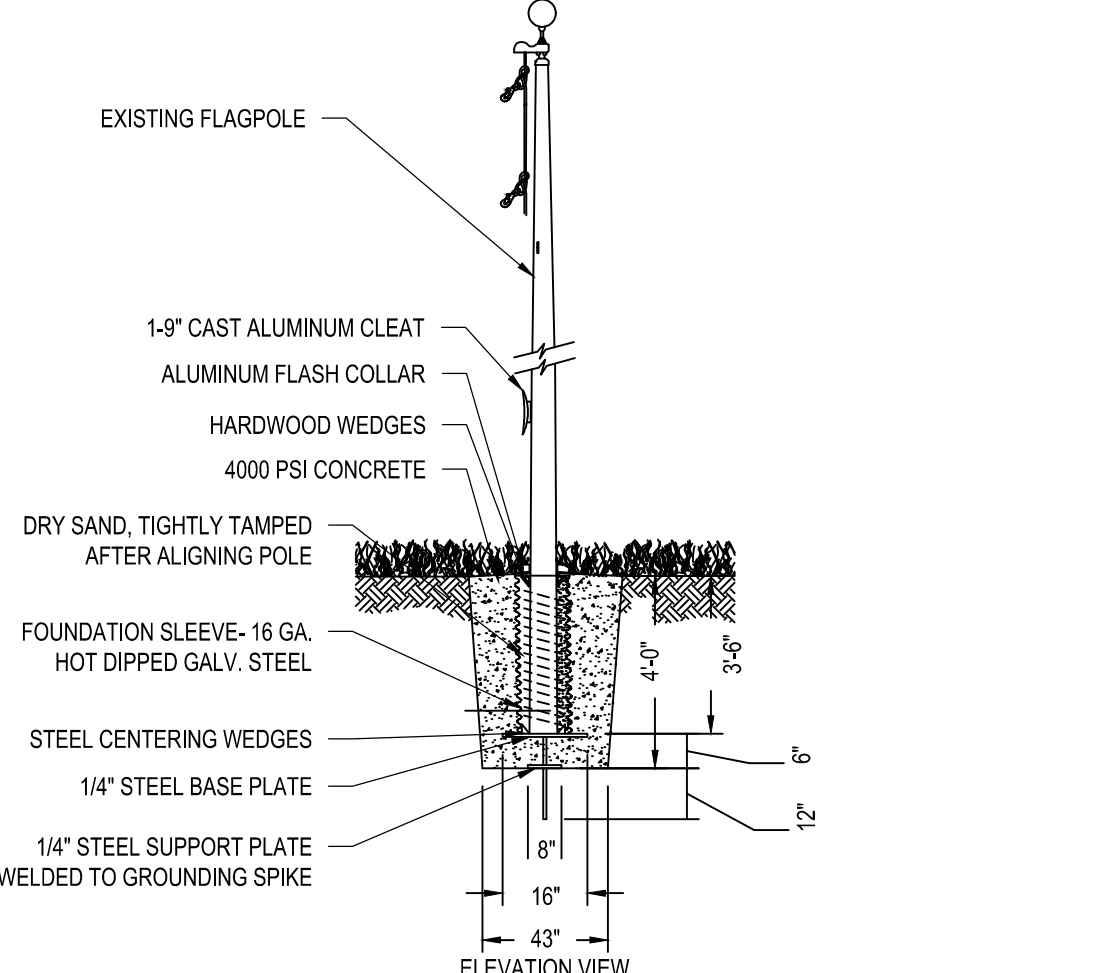
F TYPICAL PAVEMENT REPAIR SECTION
NOT TO SCALE



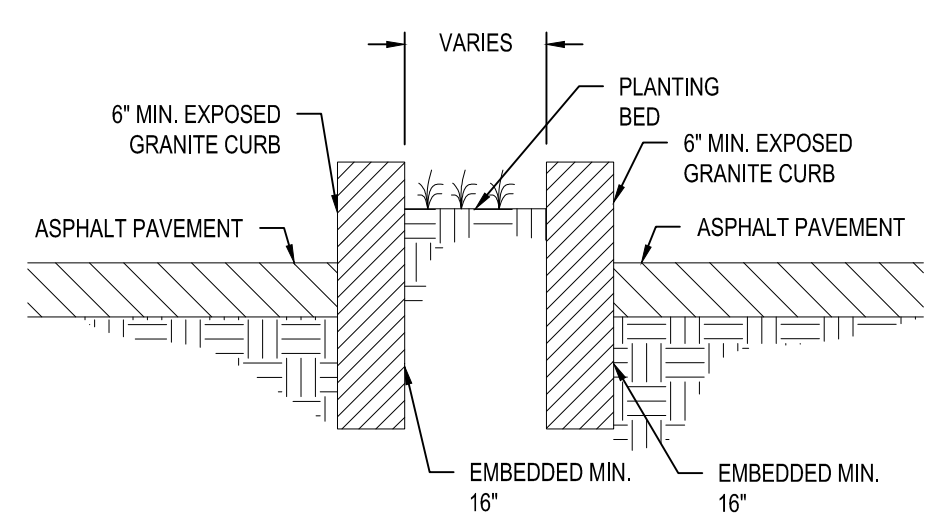
G LIGHT POLE BASE
NOT TO SCALE



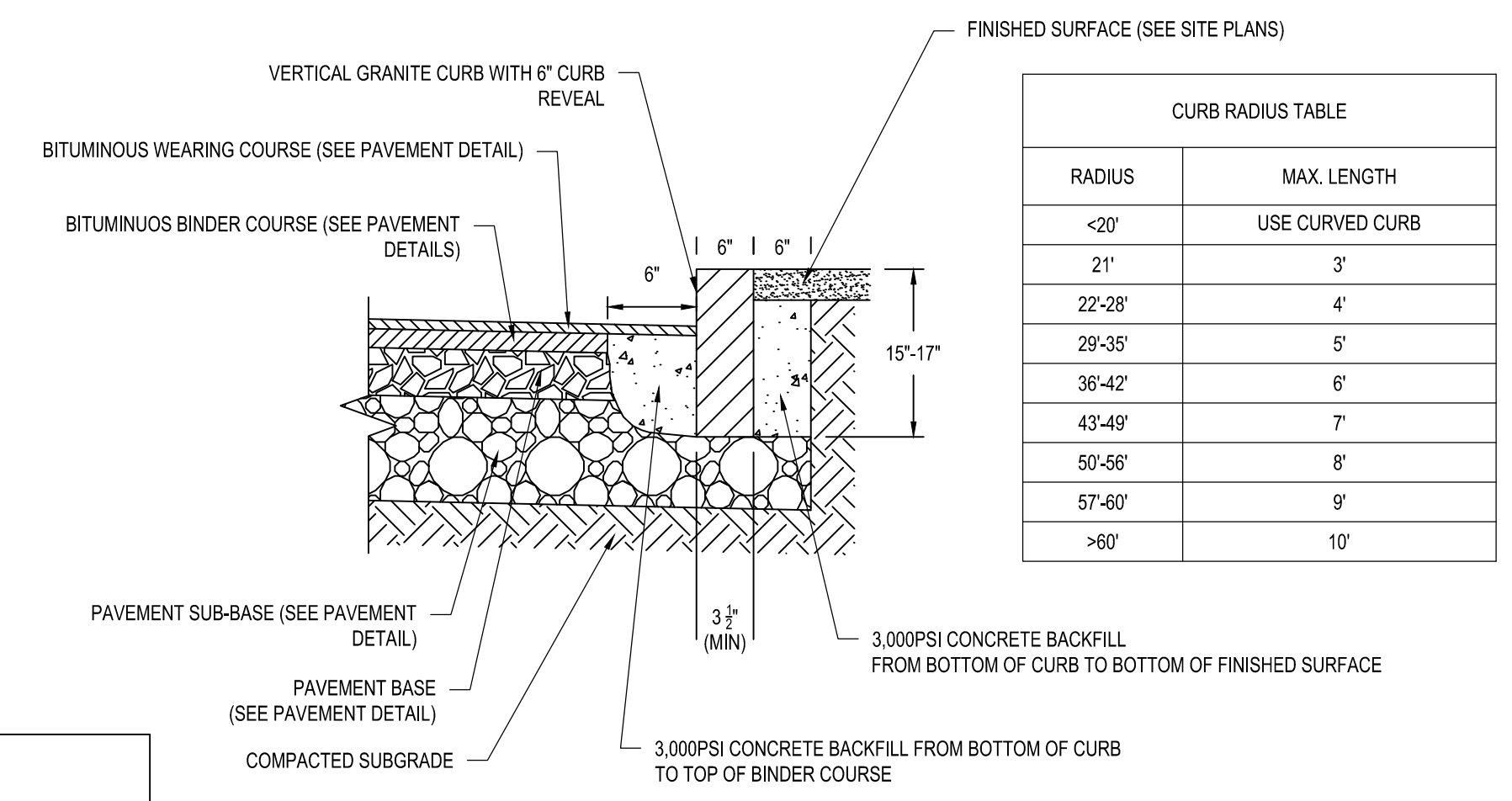
H CONCRETE WASHOUT AREA
NOT TO SCALE



I FLAGPOLE FOOTING
NOT TO SCALE



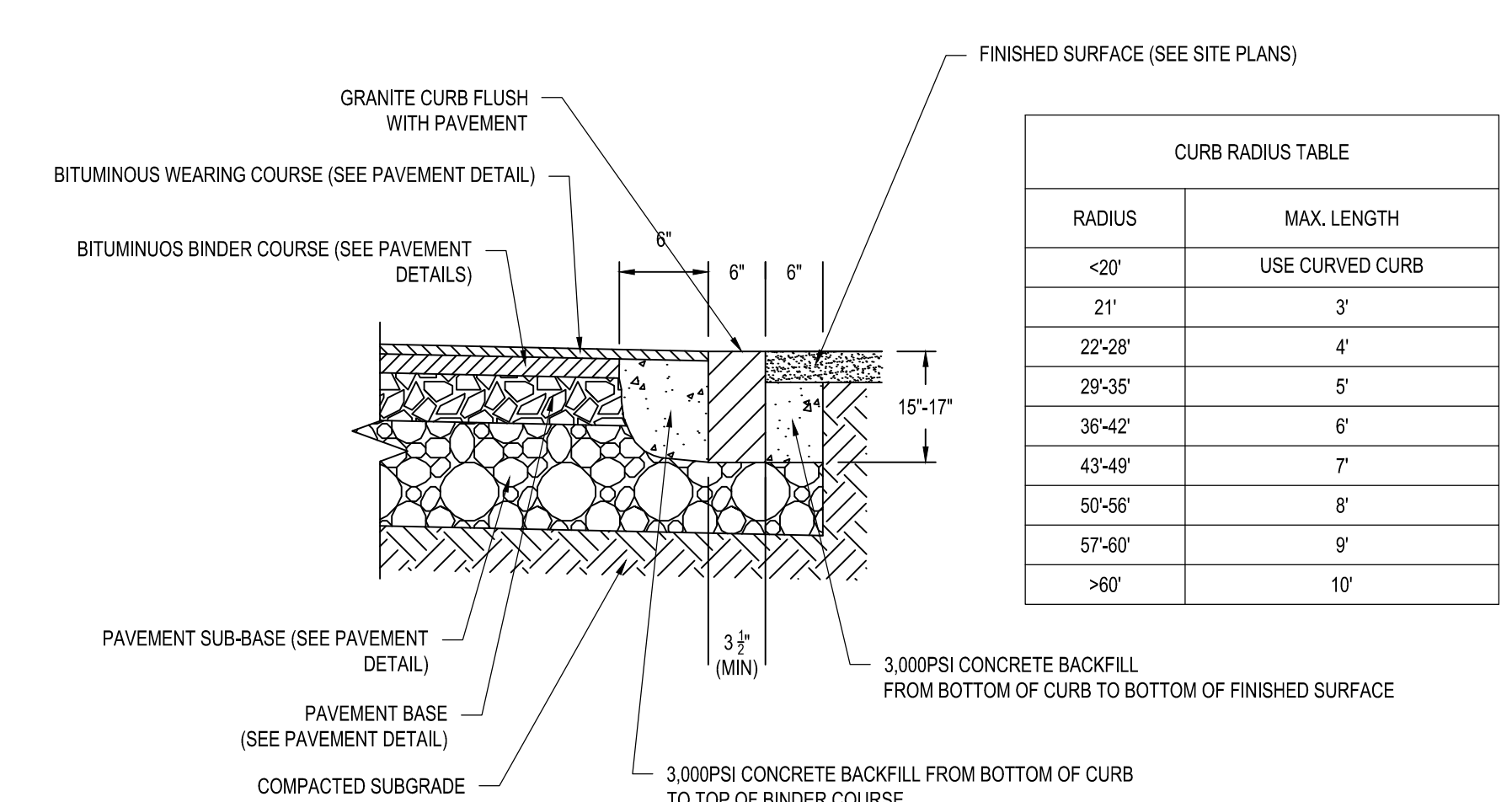
A LANDSCAPING ISLAND WITH GRANITE CURBS
NOT TO SCALE



RADIUS	MAX. LENGTH
<20'	USE CURVED CURB
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
>60'	10'

- NOTES:
- SEE SITE PLAN(S) FOR LIMITS OF VERTICAL GRANITE CURB (VGC).
 - ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
 - MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
 - MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
 - MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
 - ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS.
 - JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OD 1/2" AND SHALL BE MORTARED.
 - INSTALL GEOTEXTILE MARKER/SEPARATING BARRIER BETWEEN ALL CLEAN IMPORTED SOILS AND SUBGRADE SOILS (BASE AND SIDEWALLS), WITH THE EXCEPTION OF CLEAN NATIVE SOILS.

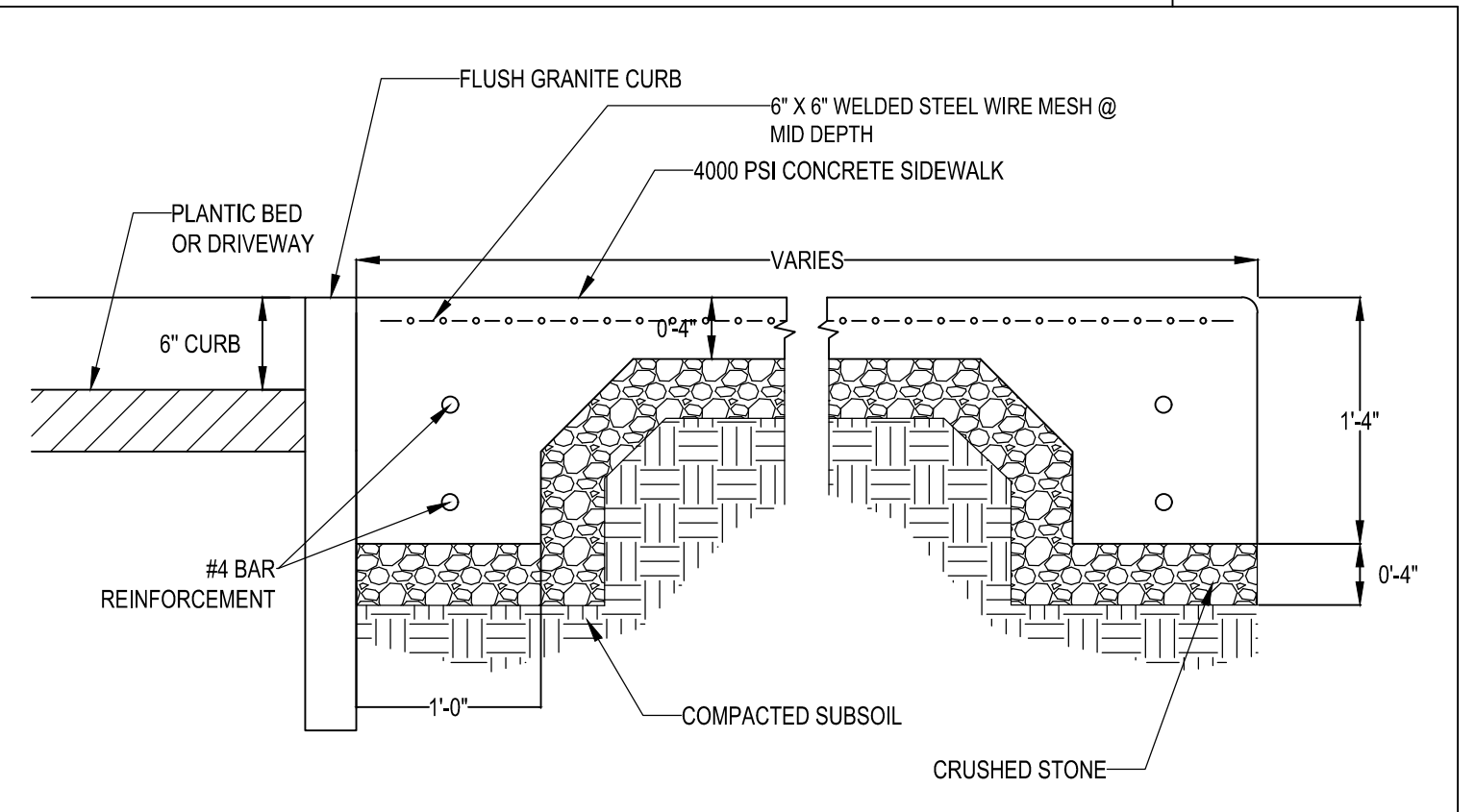
B VERTICAL GRANITE CURB DETAIL
NOT TO SCALE



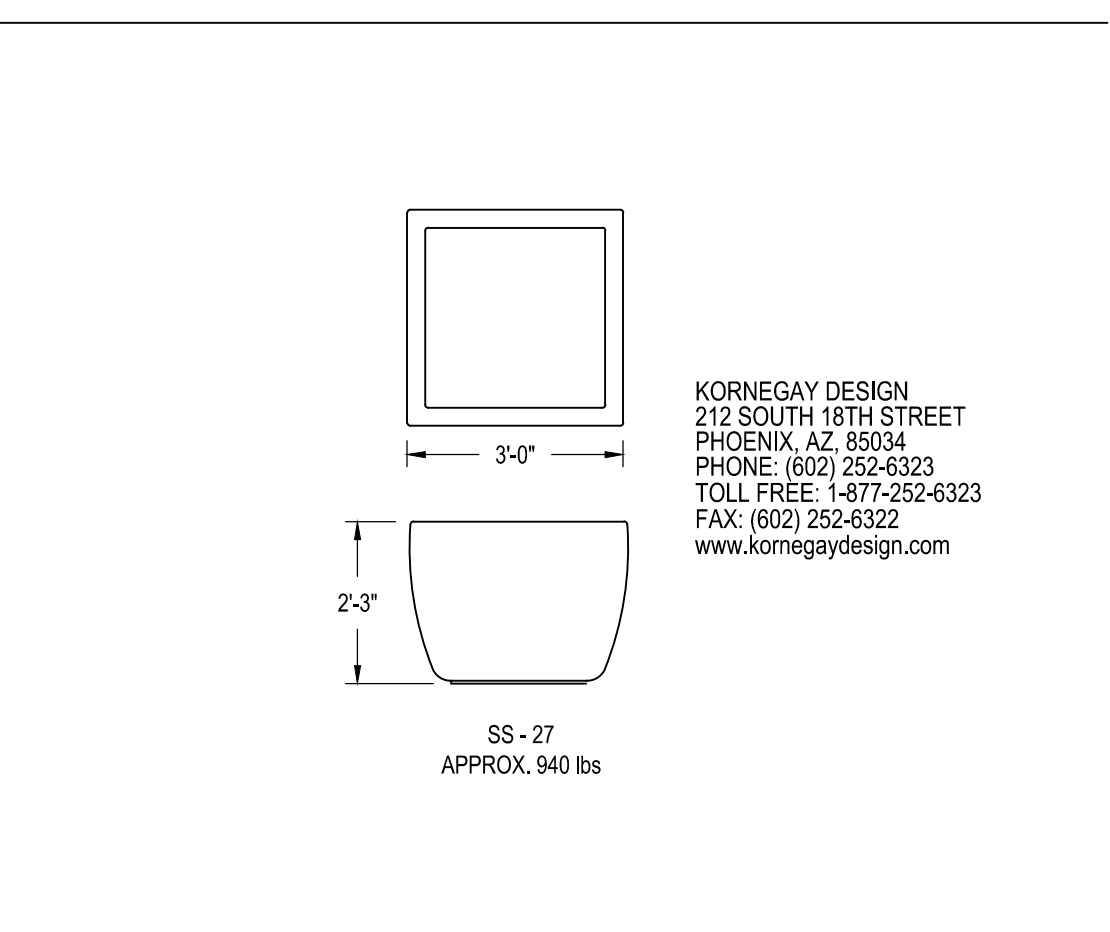
RADIUS	MAX. LENGTH
<20'	USE CURVED CURB
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
>60'	10'

- NOTES:
- SEE SITE PLAN(S) FOR LIMITS OF FLUSH GRANITE CURB (VGC).
 - ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
 - MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
 - MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
 - MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
 - ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS.
 - JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OD 1/2" AND SHALL BE MORTARED.
 - INSTALL GEOTEXTILE MARKER/SEPARATING BARRIER BETWEEN ALL CLEAN IMPORTED SOILS AND SUBGRADE SOILS (BASE AND SIDEWALLS), WITH THE EXCEPTION OF CLEAN NATIVE SOILS.

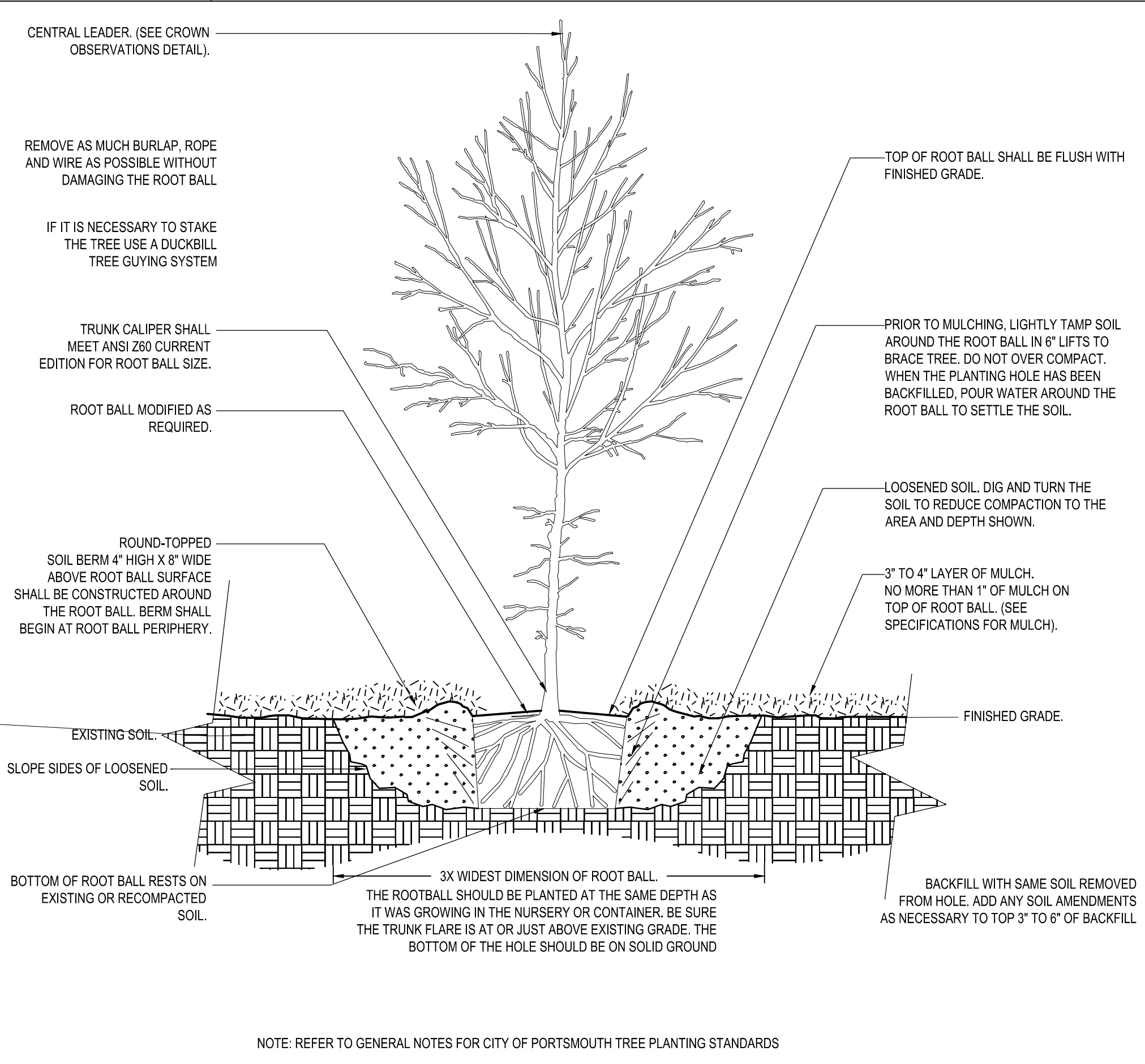
C FLUSH GRANITE CURB DETAIL
NOT TO SCALE



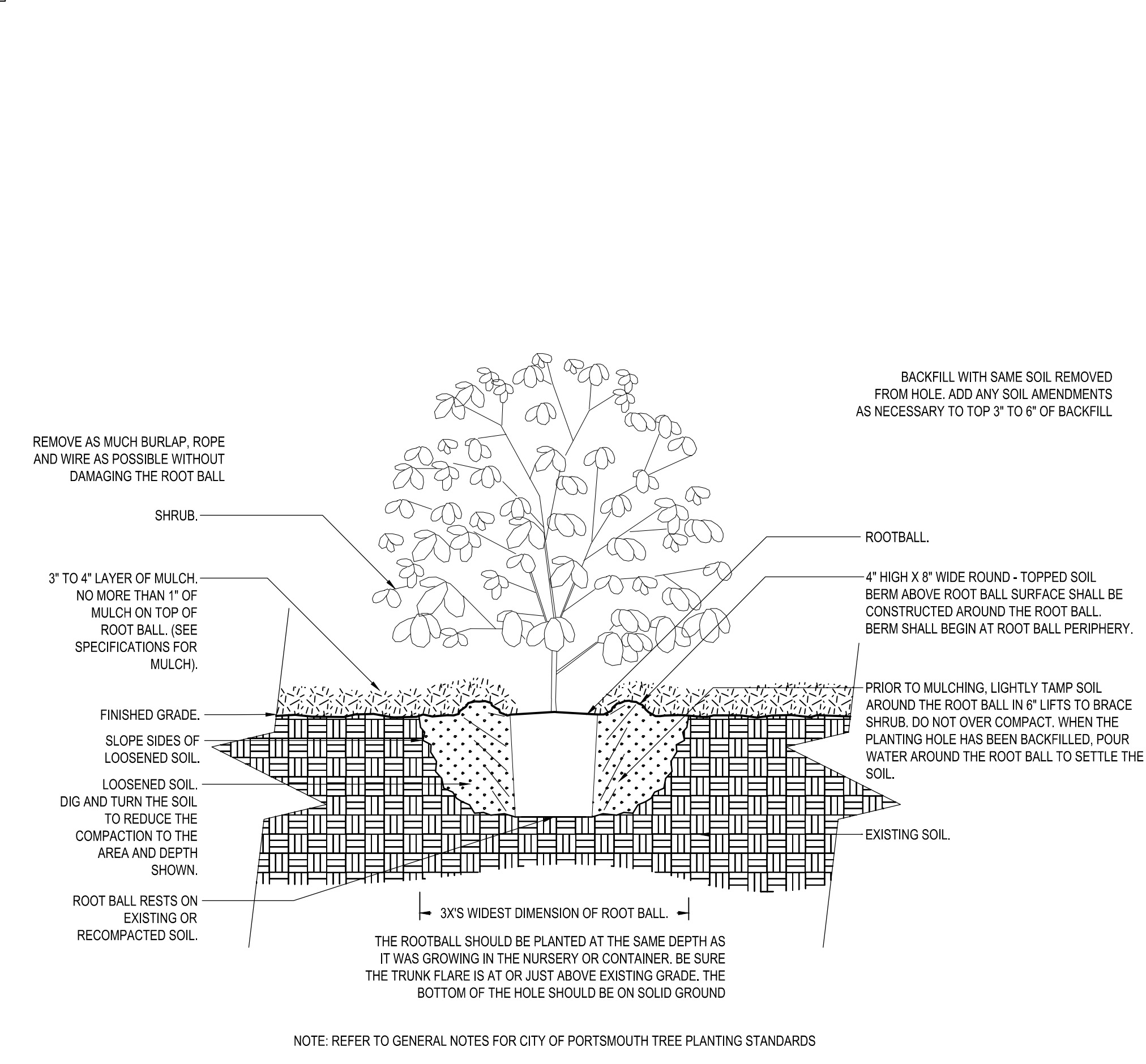
B CONCRETE SIDEWALK
NOT TO SCALE



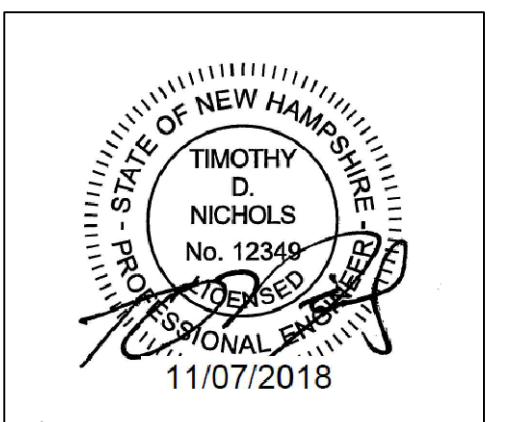
F PRECAST CONCRETE PLANTER DETAIL
NOT TO SCALE



D TREE PLANTING DETAIL (TYP.)
NOT TO SCALE



E SHRUB PLANTING DETAIL (TYP.)
NOT TO SCALE



**PRELIMINARY
NOT FOR CONSTRUCTION**

CITY OF PORTSMOUTH
PORTSMOUTH SENIOR ACTIVITY CENTER
125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE

DETAILS SHEET

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	AS SHOWN
DRAWN BY:	SJC
REVIEWED BY:	TDN

C-10.3
PROJECT PHASE: **APPROVAL**

CODE COMPLIANCE REVIEW

STATE BUILDING CODE 2009 INTERNATIONAL BUILDING CODE (IBC2009)	LIFE SAFETY CODE NATIONAL FIRE PROTECTION AGENCY LIFE SAFETY CODE 2015 (NFPA 101 2015)	STATE ENERGY CODE 2009 INTERNATIONAL ENERGY CONSERVATION CODE (IECC2009)
---	---	---

GENERAL PROJECT DESCRIPTION:

THE PROPOSED PROJECT IS FOR THE RENOVATION OF A SINGLE-STORY MASONRY BUILDING, WHICH WAS BUILT AND USED AS AN US ARMY RESERVE CENTER. THE PROPOSED BUILDING USE WILL BE A SENIOR CENTER BUT MAINTAIN THE SAME USE TYPES INCLUDING: ASSEMBLY, BUSINESS AND STORAGE.

BUILDING DATA

EXISTING BUILDING FOOTPRINT:	11,500 SQ. FT.	
PROPOSED ADDITIONAL FOOTPRINT:	175 SQ. FT.	
BUILDING HEIGHT:	APPROXIMATELY 18'-0"	
NUMBER OF STORIES ABOVE GRADE:	1	
CONSTRUCTION TYPE:	TYPE III B (IBC)	602.5, IBC2009
SPRINKLER SYSTEM:	FULLY SPRINKLERED	NFPA 101, 30.3.5
OCCUPANCY:	MIXED	NFPA 6.1.14.3
	ASSEMBLY (A) AND	310.1, IBC2009
	BUSINESS (B) AND STORAGE (U)	310.1, IBC2009
ACCESSORY USES:	NONE	
SEPARATED USES:	NONE	
NEARBY BUILDINGS WITHIN 30'-0":	NONE	

EGRESS

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT:

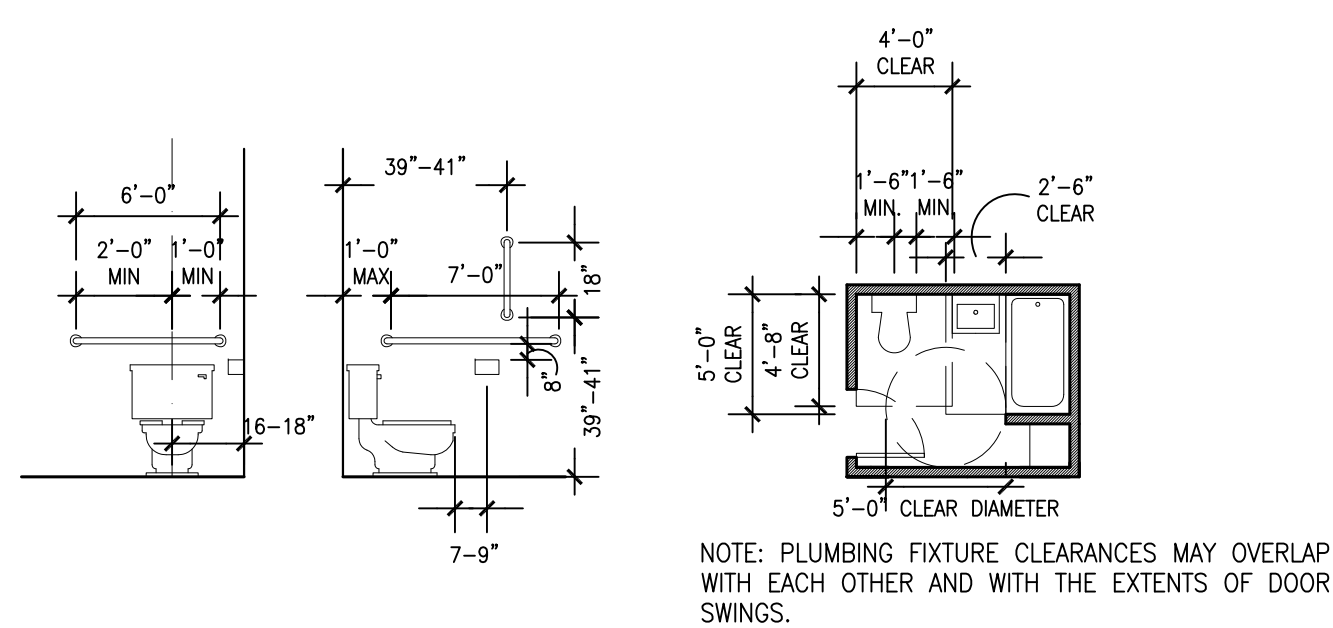
ASSEMBLY AREA (A)		
OCCUPANT LOAD (1/15 SF - NET)	221	303.1, IBC2009 TABLE 1004.1.1, IBC2009
ACTIVITY ROOM A/B (A)		
OCCUPANT LOAD (1/15 SF - NET)	75	303.1, IBC2009 TABLE 1004.1.1, IBC2009
BUSINESS (B)		
OCCUPANT LOAD (1/100 SF - GROSS)	60	311.3, IBC2009 TABLE 1004.1.1, IBC2009
TOTAL BUILDING OCCUPANCY:	356	
MINIMUM NUMBER OF EXITS:	2	1021.2, IBC2009
TRAVEL DISTANCE TO EXIT:	300 FT WITH SPRINKLER SYSTEM	38.2.6.1, NFPA2006
MINIMUM EGRESS WIDTH:	.27/PERSON	TABLE 1006.1, IBC2009
CLEAR DOOR WIDTH:	32" MINIMUM	TABLE 1008.1.1, IBC2009

PLUMBING REQUIREMENTS

MINIMUM NUMBER OF WATER CLOSETS:	4 - FEMALE; 3 - MALE	TABLE 2902.1, IBC2009
MINIMUM NUMBER OF LAVATORIES:	2 - FEMALE; 2 - MALE	TABLE 2902.1, IBC2009
MINIMUM NUMBER OF BATHTUBS/SHOWERS:	NOT REQUIRED	TABLE 2902.1, IBC2009
MINIMUM NUMBER OF DRINKING FOUNTAINS:	1	TABLE 2902.1, IBC2009
MINIMUM NUMBER OF SERVICE SINKS:	1	TABLE 2902.1, IBC2009

FIRE RATINGS (TYPE III B CONSTRUCTION)

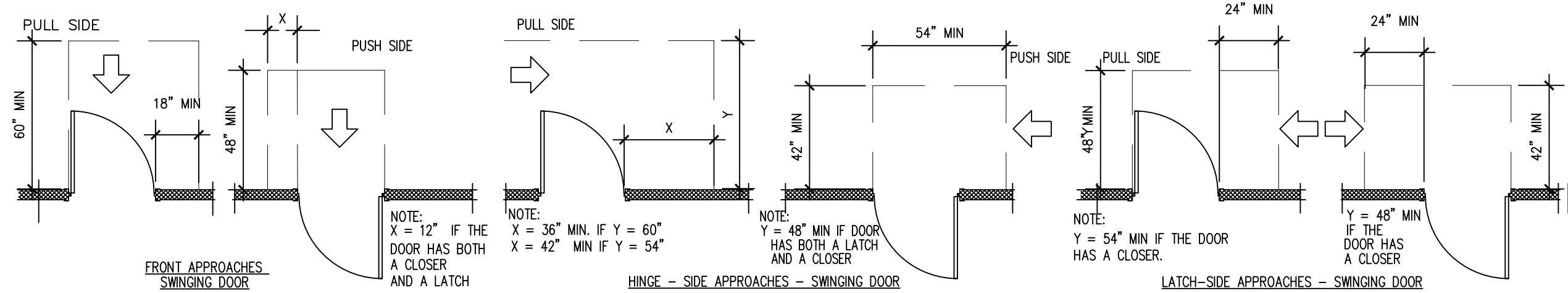
EXTERIOR BEARING WALLS:	2 HOURS	TABLE 601, IBC2009
INTERIOR BEARING WALLS:	0 HOURS	TABLE 601, IBC2009
NON-BEARING INTERIOR WALLS:	0 HOURS	TABLE 601, IBC2009
FLOOR CONSTRUCTION:	0 HOURS	TABLE 601, IBC2009
ROOF CONSTRUCTION:	0 HOURS	TABLE 601, IBC2009
STRUCTURAL FRAME:	0 HOURS	TABLE 601, IBC2009



NOTE: PLUMBING FIXTURE CLEARANCES MAY OVERLAP WITH EACH OTHER AND WITH THE EXTENTS OF DOOR SWINGS.

TYPICAL MOUNTING HEIGHTS & CLEARANCES

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



MANEUVERING CLEARANCES AT DOORS

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

GRAPHIC SYMBOLS

- CENTER LINE
- GRID LINE
- HIDDEN OR REFLECTED LINE

- (EXT.) EXISTING DOOR TO REMAIN
- (#) NEW DOOR NUMBER
- (X-Y) CEILING HEIGHT
- (#) REVISION NUMBER
- (#) DRAWING KEY NOTE
- (#) PARTITION TYPE
- WEIGHT ROOM
[005] ROOM NAME & # DESIGNATION
- (5) WINDOW TYPE

- (#) SECT. # SECTION/ELEV. KEY
- (#) SHEET #
- (#) ELEV. # ELEVATION KEY
- (#) SHEET #
- (#) DTL. # DETAIL KEY
- (#) SHEET #
- (#) DETAIL KEY
- (#) ELEVATION OF GRADE OR SURFACE LOCATION

- [] NOT IN CONTRACT
- [] NEW PARTITION
- [] EXISTING PARTITION
- [] CONCRETE
- [] STEEL
- [] GLASS
- [] FINISHED WOOD
- [] ROUGH WOOD
- [] PLYWOOD
- [] GYPSUM WALLBOARD
- [] RIGID INSULATION
- [] BATT INSULATION
- [] RAINTSCREEN DRAINAGE MAT
- [] INSULATED SHEATHING SYSTEM

ABBREVIATIONS

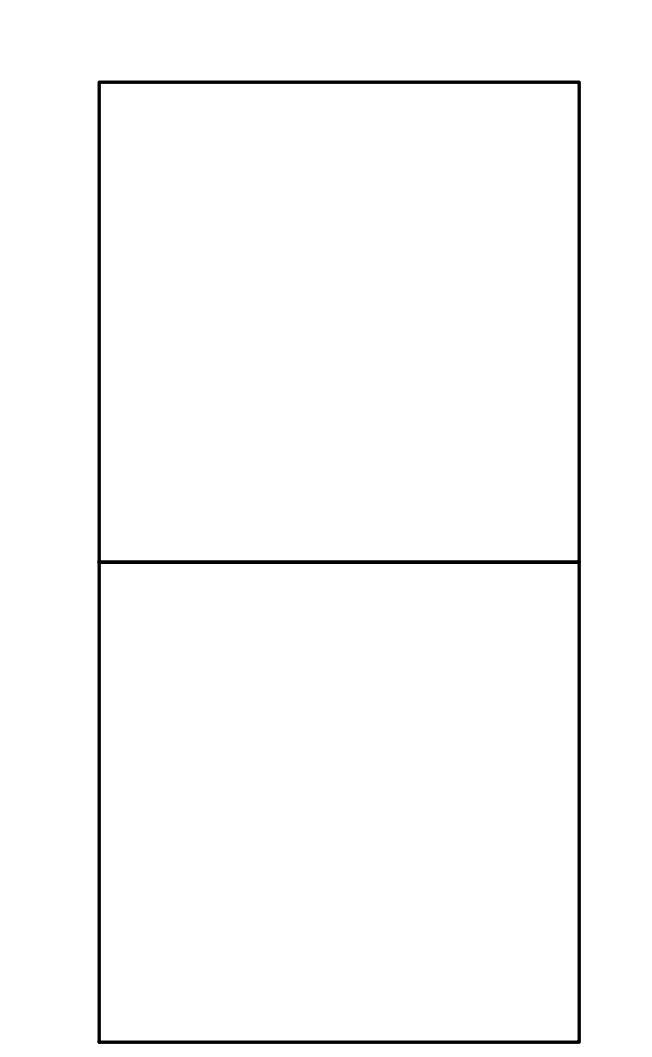
ABV.	ABOVE	P.C.	PIPE CHASE
A/C	AIR CONDITIONER	PCB	POLYCHLORINATED BIPHENYLS
ACM	ASBESTOS CONTAINING MATERIAL	P.C. CONC.	PRECAST CONCRETE
ACT	ACOUSTIC CEILING TILE	PERF.	PERFORATED
AD	AREA DRAIN	P.I.P. CONC.	POURED-IN-PLACE CONCRETE
ADJ.	ADJACENT	PL.	PLATE
A.F.F.	ABOVE FINISH FLOOR	PLAST.	PLASTER
ALUM.	ALUMINUM	PTD	PAINTED
AP	APARTMENT PANEL	PORT.	PORTLAND
BD	BOARD	R	RISER
BITUM	BITUMINOUS	RA, R	RADIUS
B + J	BRICKS PLUS JOINTS	RAD.	RADIATION
BLDG	BUILDING	R.C.	REFUSE CHUTE
BM	BEAM	R.D.	ROOF DRAIN
BSMT	BASEMENT	REF.	REFRIGERATOR
		REG.	REGISTER
		REQ'D	REQUIRED
CAB.	CABINET	REINF.	REINFORCED
C. TO C.	CENTER TO CENTER	RES.	RESILIENT
CEM.	CEMENT	RET.	RETURN
CER. T.	CERAMIC TILE	REV.	REVISED OR REVISION
C.I.	CAST IRON	R.H.	RIGHT HAND
CL.	CLOSET	RM.	ROOM
CLG	CEILING	R.O.	ROUGH OPENING
CLG. HT.	CEILING HEIGHT		
COL.	COLUMN	S.	SOUTH
CONC.	CONCRETE	SECT.	SECTION
CONSTR.	CONSTRUCTION	SIM.	SIMILAR
CONTR.	CONTRACT OR CONTRACTOR	SL.	SLIDING
CONT.	CONTINUOUS	SPEC.	SPECIFICATION(S)
		S.S.	STAINLESS STEEL
DEMO.	DEMOLITION	STL.	STEEL
DEPT.	DEPARTMENT	SURF.	SURFACE
D.A.	DROPPED ARCH	T	TREAD
D.F.	DRINKING FOUNTAIN	THRU	THROUGH
D.H.	DOUBLE HUNG	THK	THICK
DIAM.	DIAMETER	T.O.	TOP OF
DIM.	DIMENSION	T.S.	TOP OF SLAB
DN	DOWN	T.ST.	TOP OF STEEL
DWG.	DRAWING	T.W.	TOP OF WALL
		TYP.	TYPICAL
E.	EAST	U.O.N.	UNLESS OTHERWISE NOTED
EL.	ELEVATION	V.C.T.	VINYL COMPOSITION FLOOR TILE
ELEC.	ELECTRIC	VEST.	VESTIBULE
ELEV.	ELEVATOR	V.E.J.	VERTICAL EXPANSION JOINT
E.P.	ELECTRICAL PANEL	VERT.	VERTICAL
EQ.	EQUAL		
E.W.	EACH WAY	W.	WEST
E.W.C.	ELECTRIC WATER COOLER	W/	WITH
EXH.	EXHAUST	W/O	WITHOUT
EXIST./EXT'G.	EXISTING	W/O WALLBD.	WALLBOARD
EXP.	EXPOSED	W.C.	WATER CLOSET
EXPAN.	EXPANSION	WD	WOOD
EXT.	EXISTING TO REMAIN	W.D.	WINDOW DIMENSION
		WIND.	WINDOW
F.D.	FLOOR DRAIN	W.P.	WATERPROOF
F.F. EL.	FINISH FLOOR ELEVATION		
FIN.	FLOOR		
FL.	FLOOR		
FL. REG.	FUSIBLE LINK REGISTER		
FLSHG.	FLASHING		
F.P.	FIREPROOF		
FPSC	FIREPROOF SELF-CLOSING		
FTG	FOOTING		
GA.	GAUGE		
GALV.	GALVANIZED		
G.C.	GENERAL CONTRACTOR		
GL.	GLASS		
GR.	GRADE		
OWB	GYPSUM WALLBOARD		
H.B.	HOSE BIBB		
HDW.	HARDWARE		
H.E.J.	HORIZONTAL EXPANSION JOINT		
H.M.	HOLLOW METAL		
HOR.	HORIZONTAL		
HR.	HEIGHT		
HT.	HEATING		
HTG.	HEATING, VENTILATING, AIR-CONDITIONING		
HVAC			
I.D.	INSIDE DIAMETER		
INR	IMPACT NOISE RESISTANCE		
INSUL.	INSULATION		
INT.	INTERIOR		
JAN. CL., J.C.	JANITOR'S CLOSET		
KTTE.	KITCHENETTE		
L	LEADER, OR (METAL) ANGLE		
LAV.	LAVATORY		
LH	LEFT HAND		
LIN.	LINEN CLOSET		
LTL	LINTEL		
MAX. MECH.	MAXIMUM MECHANICAL		
MH	MANHOLE		
MIN.	MINIMUM		
M.L.	MICROLAM		
M.O.	MASONRY OPENING		
M.R.	MOISTURE RESISTANT		
MTD	MOUNTED		
MTL.	METAL		
N.	NORTH		
N.I.C.	NOT IN CONTRACT		
NO.	NUMBER		
NOM.	NOMINAL		
N.T.S.	NOT TO SCALE		
O.C.	ON CENTER		
O.D.	OUTSIDE DIAMETER		
O.H.	OVERHEAD		
OPG	OPENING		
OPH	OPPOSITE HAND		

ABBREVIATIONS (continued)

RA, R	RADIATION	S.	SOUTH
RAD.	RADIATION	SECT.	SECTION
R.C.	REFUSE CHUTE	SIM.	SIMILAR
R.D.	ROOF DRAIN	SL.	SLIDING
REF.	REFRIGERATOR	SPEC.	SPECIFICATION(S)
REG.	REGISTER	S.S.	STAINLESS STEEL
REQ'D	REQUIRED	STL.	STEEL
		SURF.	SURFACE
		T	TREAD
		THRU	THROUGH
		THK	THICK
		T.O.	TOP OF
		T.S.	TOP OF SLAB
		T.ST.	TOP OF STEEL
		T.W.	TOP OF WALL
		TYP.	TYPICAL
		U.O.N.	UNLESS OTHERWISE NOTED
		V.C.T.	VINYL COMPOSITION FLOOR TILE
		VEST.	VESTIBULE
		V.E.J.	VERTICAL EXPANSION JOINT
		VERT.	VERTICAL
		W.	WEST
		W/	WITH
		W/O	WITHOUT
		W/O WALLBD.	WALLBOARD
		W.C.	WATER CLOSET
		WD	WOOD
		W.D.	WINDOW DIMENSION
		WIND.	WINDOW
		W.P.	WATERPROOF

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CODES, RULES, REGULATIONS AND ORDINANCES. SHOULD THE DRAWINGS CONFLICT WITH THESE, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER.
2. ALL WORK SHALL BE PERFORMED BY CONTRACTORS LICENSED TO DO THEIR TRADES IN THE STATE OF NEW HAMPSHIRE.
3. ALL WALLS, ROOFS, FLOORS AND SLABS AS PART OF THE EXTERIOR THERMAL ENVELOPE SHALL BE INSULATED IN ACCORDANCE WITH APPLICABLE ENERGY CONSERVATION CODES.
4. WORK SHALL INCLUDE ALL ITEMS, BUILDING AND SITE, AS INDICATED IN THIS SET OF CONTRACT DOCUMENTS UNLESS OTHERWISE STATED.
5. ALL DIMENSIONS MEASURED FROM FINISHED FACE UNLESS OTHERWISE NOTED.
6. DRAWINGS SHALL NOT BE SCALED. WRITTEN DIMENSIONS GOVERN CONSTRUCTION AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER FOR CLARIFICATION.
7. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS TO BE VERIFIED BY THE CONTRACTOR AND REVIEWED BY THE ARCHITECT OR ENGINEER PRIOR TO CONSTRUCTION.
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR DEPOSITS AND FEES PERTAINING TO SITE UTILITIES AND PERMITTING.
9. THE GENERAL CONTRACTOR SHALL CREATE AND MAINTAIN ON SITE AN "AS BUILT" RECORD SET OF DRAWINGS. ALL DEVIATIONS FROM THE PERMIT SET OF DRAWINGS SHALL BE ACCURATELY REPRESENTED ON THE "AS BUILT" DRAWINGS WHEN THEY ARE MADE. UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL CERTIFY THE "AS BUILT" RECORD SET AND SUBMIT TO THE ARCHITECT.
10. UPON COMPLETION OF CONSTRUCTION THE GENERAL CONTRACTOR SHALL PROVIDE THE OWNER WITH ALL MATERIALS PERTAINING TO OPERATION AND MAINTENANCE OF THE BUILDING SUCH AS MATERIALS SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, EQUIPMENT WARRANTIES, AND MANUALS.
11. ALL CONSTRUCTION MATERIALS SHALL BE NEW AND BEAR THE MARK OF THE UNDERWRITER WHERE APPLICABLE.
12. PROVIDE WATER RESISTANT GYPSUM BOARD UNDER ALL TUB AND SHOWER ENCLOSURES AND AT ADJACENT WALLS UP TO 7'-0".
13. SUBSTITUTIONS FOR PROPRIETARY PRODUCTS LISTED IN DRAWINGS AND SPECIFICATIONS SHALL BE APPROVED AFTER REVIEW BY OWNER AND ARCHITECT. SUBSTITUTIONS SHALL BE COMPARABLE TO OR EXCEED THE PERFORMANCE LEVEL OF THE SPECIFIED ITEMS.
14. PROVIDE FIRE BLOCKING IN CONCEALED CAVITIES IN STUD WALLS, PARTITIONS, AND FURRED SPACES IN FLOORS AND CEILINGS.
15. THE GENERAL CONTRACTOR SHALL UPHOLD A STRICT NO-SMOKING POLICY THROUGHOUT THE CONSTRUCTION SITE AT ALL TIMES.
16. THE GENERAL CONTRACTOR SHALL REMOVE ANY DEBRIS FROM THE PROJECT PREMISES AND LEAVE THE SITE BROOM CLEAN. AT THE END OF CONSTRUCTION WINDOWS SHALL BE THOROUGHLY CLEANED INSIDE AND OUTSIDE. MARKS SHALL BE REMOVED FROM ALL FINISHED SURFACES AS WELL AS EXCESS DUST.
17. THE GENERAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF AT LEAST ONE YEAR FROM THE DATE OF COMPLETION UNLESS STATED OTHERWISE IN THE CONSTRUCTION DOCUMENTS. DEFECTS SHALL BE ADDRESSED IN A TIMELY MANNER WITHOUT ADDITIONAL CHARGE.



CLIENT

PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST.
PORTSMOUTH, NH

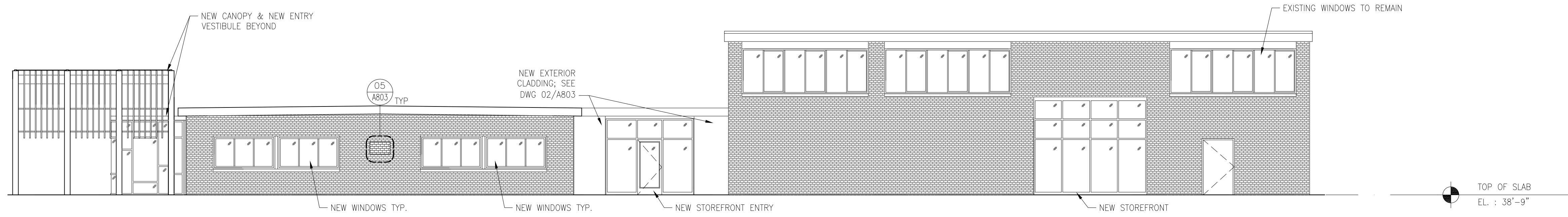
REVISIONS		
No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	ISSUED FOR BID	10/02/2018

NOTES & SYMBOLS

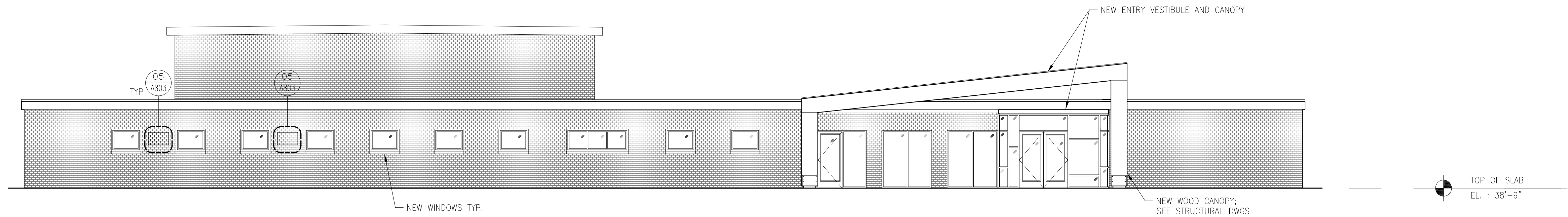
PROJECT NO.:	PROJECT#
DATE ISSUED:	02/23/2018
SCALE:	
DRAWN BY:	ECC
REVIEWED BY:	BPM

A100

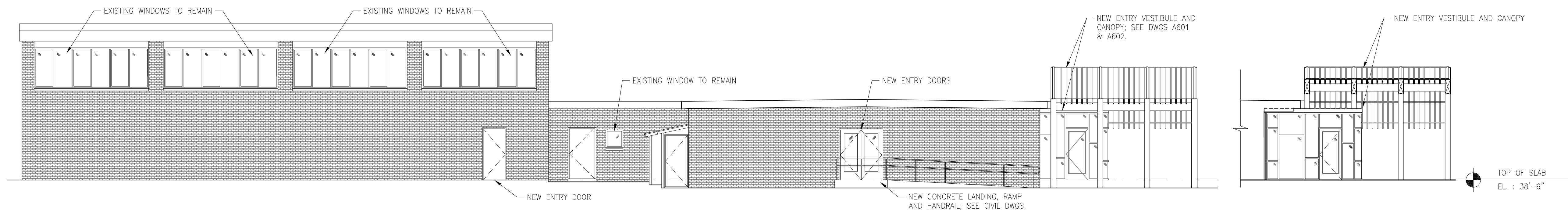
PROJECT PHASE:
FOR CONSTRUCTION



03 EXTERIOR ELEVATION - EAST
 SCALE 1/8" = 1'-0"

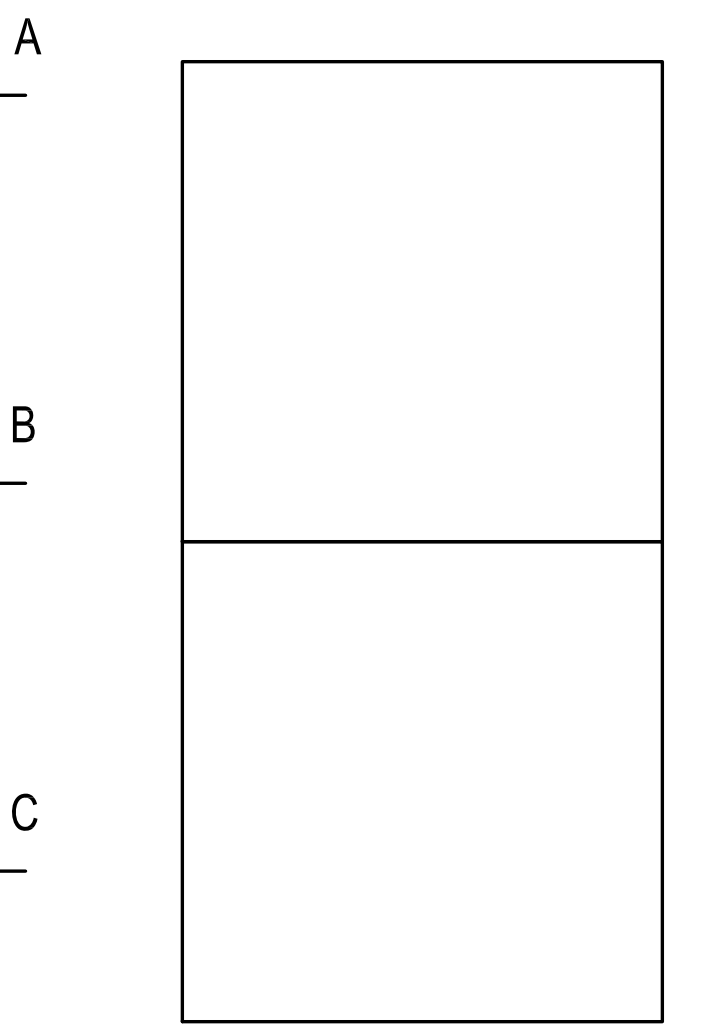


02 EXTERIOR ELEVATION - SOUTH
 SCALE 1/8" = 1'-0"



01B EXTERIOR ELEVATION - WEST
 SCALE 1/8" = 1'-0"

01A EXTERIOR ELEVATION - WEST
 SCALE 1/8" = 1'-0"



A
B
C
D
E
F
G
H
I
J

CLIENT

PORTSMOUTH
 SENIOR ACTIVITY
 CENTER

125 COTTAGE ST.
 PORTSMOUTH, NH

REVISIONS		
No.	DESCRIPTION	DATE
1	75% SUBMISSION	12/15/2017
2	95% SUBMISSION	01/12/2018
3	100% SUBMISSION	02/23/2018
4	ISSUED FOR BID	10/02/2018

EXTERIOR ELEVATIONS

PROJECT NO.:	PROJECT#
DATE ISSUED:	02/23/2018
SCALE:	
DRAWN BY:	ECC
REVIEWED BY:	BPM

A401

PROJECT PHASE:
 FOR CONSTRUCTION

1 2 3 4 5 6 7 8 9 10 11

TECHNICAL MEMORANDUM



To: City of Portsmouth Technical Advisory Committee

From: AECm, Newmarket NH

Date: 11/07/2018

Subject: Portsmouth Senior Activity Center Stormwater Report

Description of Project

The former Lt. Paul A. Doble U.S. Army Reserve Center is sited on a 3.49-acre lot that includes two (2) permanent structures and two (2) parking lot areas. The proposed initial phase of redevelopment includes readapting the existing building to support the Senior Activity Center's programs. The existing main building will be renovated, and a new entryway will be constructed in the front of the building. Due to these major renovations, a new proposed stormwater system is included in the scope of work. The proposed stormwater system will use underground storage and infiltration to help control runoff during peak rainfall events. All design considerations for the new stormwater system were checked for compliance with the City of Portsmouth Site Plan Review Regulations.

Doucet Survey of Newmarket, NH completed a topographic survey under subcontract to AECm to determine existing topography, identify property boundaries, and identify notable site features. The survey plan indicates that the topography of the site generally slopes northwest to southwest from the rear of the building towards Cottage Street. According to the NRCS Web Soil Survey search results for Rockingham County, the site soils are categorized as Urban land – Canton complex, with a slope ranging between 3 and 15 percent (%). This report is included in the Reference Materials.

Drainage Analysis

Calculation Methods

Per NHDES stormwater requirements, design storms of 2-years, 10-years, 25-years, and 50-years were analyzed for a 24-hour duration period. Rainfall amounts for each storm event were taken from the Northeast Regional Climate Center Extreme Precipitation Tables, which are included in the Reference Materials. The storm pattern selected for the analysis was Type III. The HydroCAD® 10.00-22 software package was utilized in order to estimate the peak runoff rates for each design storm. Only on-site watersheds were analyzed; offsite runoff was not considered. Each area of the watershed was given a specific curve number based on existing and proposed conditions. The TR-55 method was used to calculate the time of concentration for both the existing and proposed sites.

Pre-Development Conditions

For the analysis of the pre-development conditions (using HydroCAD), the site was treated as a single subcatchment. All drainage from the site flows into the existing swale running parallel to Cottage Street, where it continues to flow westward until it enters the City storm drain located offsite. Runoff was measured from the most hydrologically distant point in the watershed, to the northeast of the existing east parking lot, with a starting elevation of approximately 38.75 feet. Runoff was modelled to follow the existing topography of the site before eventually entering the swale. The water then flows west through a 12-inch RCP culvert under the east driveway, re-entering the swale on the other side. Water is then discharged from the swale into another existing 12-inch RCP culvert located under the west driveway. Immediately west of the property boundary, the water enters a larger 18-inch City storm drain.



Post-Development Conditions

For the analysis of post-development conditions, the watershed from the pre-existing conditions was divided up into four (4) distinct subcatchments. Subcatchment S1 represents all runoff that does **not** drain into the new proposed stormwater system. The flow path follows the topography of the proposed site and enters the swale at approximately the same point it does for the existing site. The topography and flow path for the post-development site are different from that of the pre-development site, due to proposed construction and a change in total impervious surface. Much like the pre-development conditions, runoff flows west through the existing swale towards the City storm drain located further west along Cottage Street.

Subcatchments RD1, CD1, and RD2 represent all runoff that drains into the new proposed stormwater system. This runoff primarily stems from the existing roof and the new proposed canopy of the main building. New concrete sidewalks and embedded planting beds also contribute to the runoff entering the stormwater system, as well as new asphalt pavement. Approximately 2,149 square-feet of existing asphalt will be demolished in the rear of the building and replaced with 1-1/2-inch crushed stone, effectively reducing runoff in the rear of the main building. A more comprehensive explanation of how this runoff is collected by the new system is presented in the stormwater treatment section of this report.

Peak Flow Rates

The following table summarizes the estimated peak runoff rates for the pre-development and post-development conditions. The post-development peak flow rates are slightly higher by an average of 3% than the pre-development peak flow rates. This is primarily due to the increase in impervious area and the size of the underground storage and infiltration basin.

Event	Peak Flow Rates (cfs)	
	Pre-Development	Post-Development
2-Year Storm	4.73	4.97
10-Year Storm	7.67	7.95
25-Year Storm	10.65	10.84
50-Year Storm	13.64	13.81

Groundwater Recharge

Per the City of Portsmouth Site Review Regulations, the proposed stormwater system is designed to store and infiltrate runoff associated with the new construction. Water infiltrates through the perforated piping of the system into a 3/4-inch stone bed and surrounding soil. The net increase in impervious area with all proposed renovations is estimated to be 9,583 square-feet, or approximately 0.22 acres. The site has been rated a "low runoff" class according to the NRCS Soil Survey Data, and the hydrologic soil group A has been assumed for this runoff analysis. Based on completed test pits, the soil type was determined to be a silty gravelly sand mix. This soil type is consistent with the NRCS Soil Survey Data description of hydrologic soil group A.

The proposed stormwater infiltration system will allow infiltration to occur on-site, as per the Portsmouth Site Review Regulations. A design infiltration rate of 2.00 inches per hour was selected based on the aforementioned soil conditions and the September, 2009 publication of *Ksat Values for New Hampshire Soils*, published by the Society of Soil Scientists of Northern New England.



Stormwater Treatment

The proposed stormwater system was designed to meet the stormwater treatment requirements set forth by the City of Portsmouth Site Review Regulations.

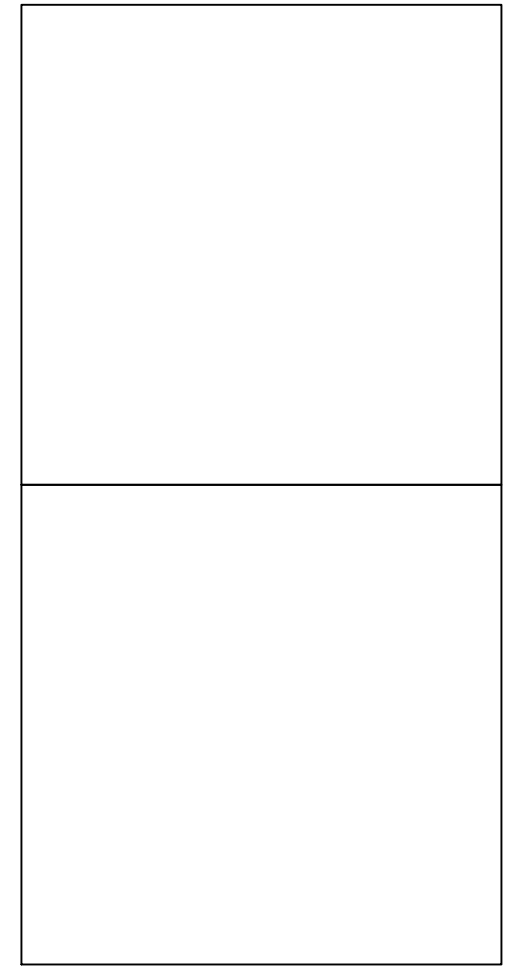
The proposed stormwater system will collect stormwater through 8-inch perforated SDR-35 pipes that connect the subgrade drains. These subgrade drains service the down leaders from both the existing roof and proposed canopy. 8-inch cast-iron cleanouts will be installed in several locations for maintenance and cleaning. Two (2) pipe leaders will be capped for potential future expansion of the system. Water that cannot be infiltrated during saturated conditions will be discharged through two (2) 8-inch pipes into the existing swale running parallel to Cottage Street. Once water has entered the swale, it flows from east to west to an off-site City storm drain.

Summary

The peak runoff rates for the existing site will be increased slightly as a result of the proposed new work. While the post-development site has a larger impervious area than the existing site, much of this new impervious surface will be treated by the new proposed stormwater system. The increase in impervious surface was limited due to the removal of a large patch of existing asphalt in the rear of the building, which was replaced with 1-1/2-inch stone. This system will also provide sufficient stormwater treatment as per the City of Portsmouth Site Review Regulations, and the requirements set forth by the New Hampshire Stormwater Manual.

References

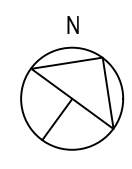
1. HydroCAD ® 10.00 Stormwater Modeling System, by HydroCAD Software Solutions LLC, Chocorua, New Hampshire
2. New Hampshire Stormwater Management Manual, Volume 1, Stormwater and Antidegradation, December 2008
3. New Hampshire Stormwater Management Manual, Volume 2, Post-Construction Best Management Practices Selection & Design, December 2008
4. NRCC Cornell Extreme Precipitation Tables
5. TR-55 Urban Hydrology for Small Watersheds, United States Department of Agriculture, Technical Release 55, June 1986
6. URCS Soil Survey, United States Department of Agriculture and the Natural Resources Service



PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE



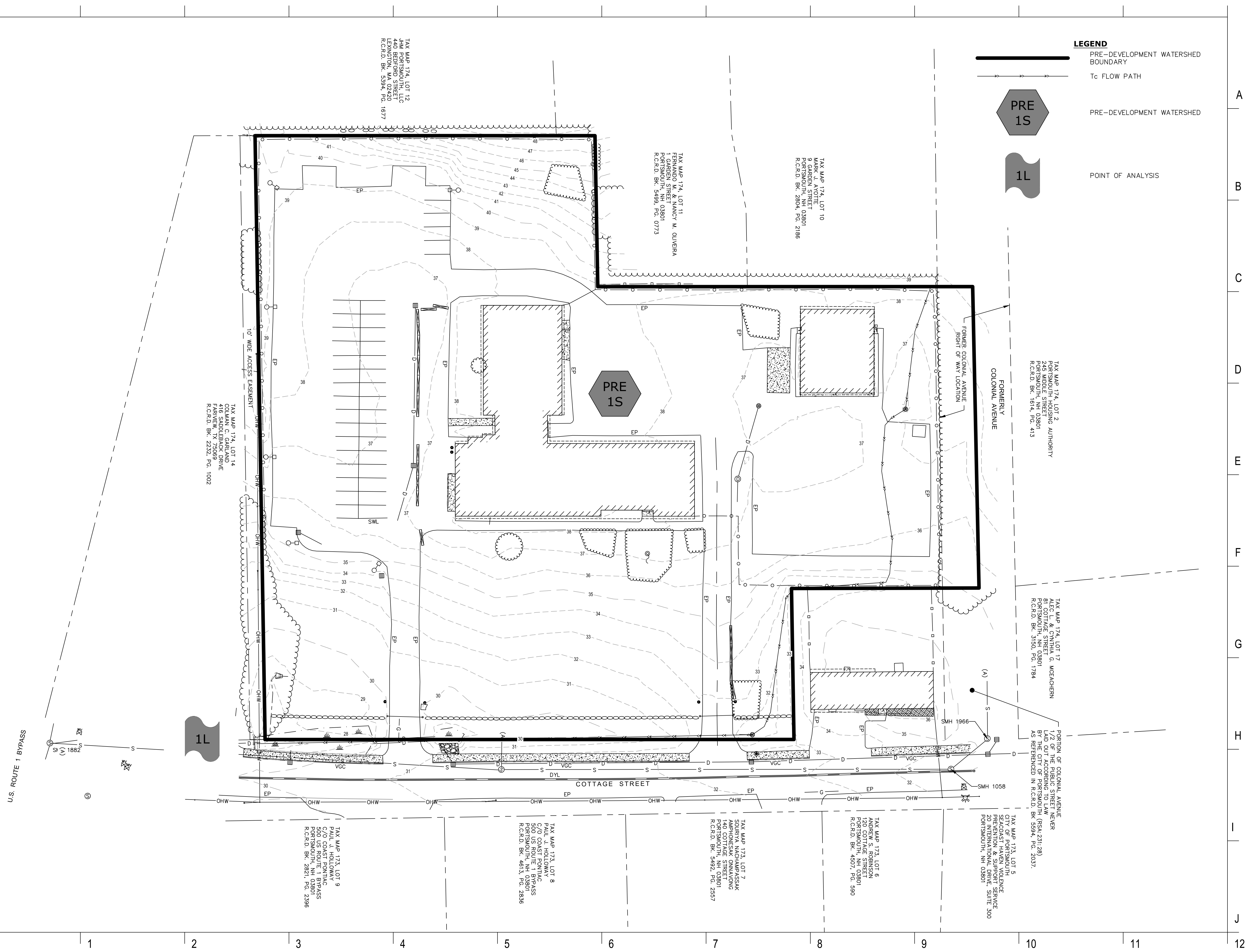
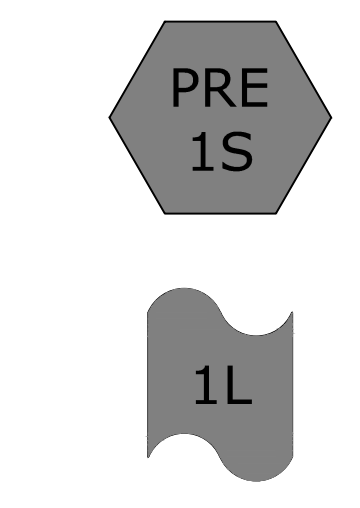
PRE-DEVELOPMENT WATERSHED AREA PLAN

PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	1"=30'
DRAWN BY:	SJC
REVIEWED BY:	BCC

PROJECT PHASE:
NOT FOR CONSTRUCTION

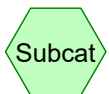
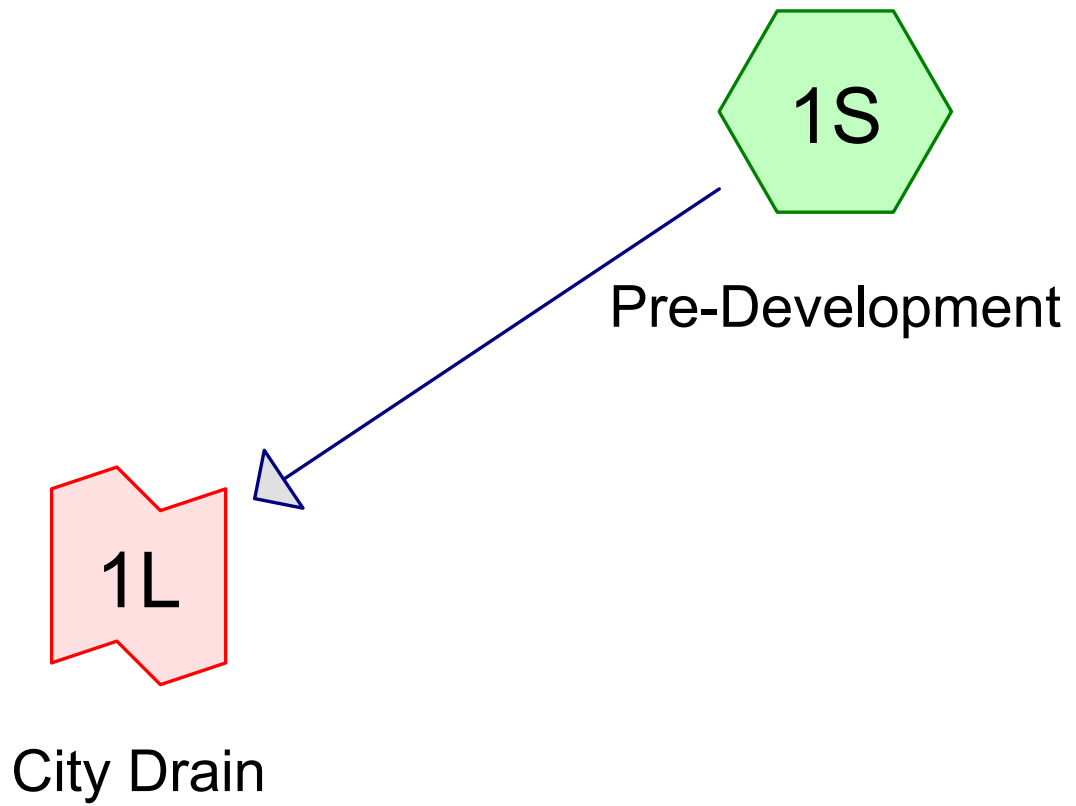
LEGEND

- PRE-DEVELOPMENT WATERSHED BOUNDARY
- Tc FLOW PATH
- PRE-DEVELOPMENT WATERSHED
- POINT OF ANALYSIS



A
B
C
D
E
F
G
H
I
J

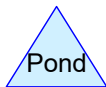
1 2 3 4 5 6 7 8 9 10 11 12



Subcat



Reach



Pond



Link

Routing Diagram for 2018-10-31_Drainage Analysis Pre-Development

Prepared by AECm, Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

2018-10-31_Drainage Analysis Pre-Development

Prepared by AECm

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Printed 11/5/2018

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.720	49	50-75% Grass cover, Fair, HSG A (1S)
1.410	98	Paved parking, HSG A (1S)
0.360	98	Roofs, HSG A (1S)
3.490	74	TOTAL AREA

2018-10-31_Drainage Analysis Pre-Development

Prepared by AECm

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Printed 11/5/2018

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
3.490	HSG A	1S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
3.490		TOTAL AREA

2018-10-31_Drainage Analysis Pre-Development

Type III 24-hr 2-Year Rainfall=3.21"

Prepared by AECm

Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Page 4

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Pre-Development

Runoff Area=152,024 sf 50.72% Impervious Runoff Depth>1.56"
Flow Length=689' Tc=10.4 min CN=WQ Runoff=4.73 cfs 0.454 af

Link 1L: City Drain

Inflow=4.73 cfs 0.454 af
Primary=4.73 cfs 0.454 af

Total Runoff Area = 3.490 ac Runoff Volume = 0.454 af Average Runoff Depth = 1.56"
49.28% Pervious = 1.720 ac 50.72% Impervious = 1.770 ac

2018-10-31_Drainage Analysis Pre-Development

Type III 24-hr 10-Year Rainfall=4.87"

Prepared by AECm

Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Pre-Development

Runoff Area=152,024 sf 50.72% Impervious Runoff Depth>2.64"
Flow Length=689' Tc=10.4 min CN=WQ Runoff=7.67 cfs 0.767 af

Link 1L: City Drain

Inflow=7.67 cfs 0.767 af
Primary=7.67 cfs 0.767 af

Total Runoff Area = 3.490 ac Runoff Volume = 0.767 af Average Runoff Depth = 2.64"
49.28% Pervious = 1.720 ac 50.72% Impervious = 1.770 ac

Summary for Subcatchment 1S: Pre-Development

Runoff = 7.67 cfs @ 12.15 hrs, Volume= 0.767 af, Depth> 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.87"

Area (sf)	CN	Description
74,923	49	50-75% Grass cover, Fair, HSG A
60,548	98	Paved parking, HSG A
871	98	Paved parking, HSG A
15,682	98	Roofs, HSG A
152,024		Weighted Average
74,923		49.28% Pervious Area
77,101		50.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0330	0.20		Sheet Flow, 3.10 Grass: Short n= 0.150 P2= 3.21"
0.6	91	0.0155	2.53		Shallow Concentrated Flow, Segment BC Paved Kv= 20.3 fps
1.3	184	0.0245	2.35		Shallow Concentrated Flow, Segment CD Grassed Waterway Kv= 15.0 fps
1.5	329	0.0120	3.71	1.11	Channel Flow, Segment DE Area= 0.3 sf Perim= 2.1' r= 0.14' n= 0.012 Concrete pipe, finished
10.4	689	Total			

Summary for Link 1L: City Drain

Inflow Area = 3.490 ac, 50.72% Impervious, Inflow Depth > 2.64" for 10-Year event
 Inflow = 7.67 cfs @ 12.15 hrs, Volume= 0.767 af
 Primary = 7.67 cfs @ 12.15 hrs, Volume= 0.767 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

2018-10-31_Drainage Analysis Pre-Development

Type III 24-hr 25-Year Rainfall=6.17"

Prepared by AECm

Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Page 7

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Pre-Development

Runoff Area=152,024 sf 50.72% Impervious Runoff Depth>3.57"
Flow Length=689' Tc=10.4 min CN=WQ Runoff=10.65 cfs 1.039 af

Link 1L: City Drain

Inflow=10.65 cfs 1.039 af
Primary=10.65 cfs 1.039 af

Total Runoff Area = 3.490 ac Runoff Volume = 1.039 af Average Runoff Depth = 3.57"
49.28% Pervious = 1.720 ac 50.72% Impervious = 1.770 ac

2018-10-31_Drainage Analysis Pre-Development

Type III 24-hr 50-Year Rainfall=7.39"

Prepared by AECm

Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Page 8

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Pre-Development

Runoff Area=152,024 sf 50.72% Impervious Runoff Depth>4.50"
Flow Length=689' Tc=10.4 min CN=WQ Runoff=13.64 cfs 1.310 af

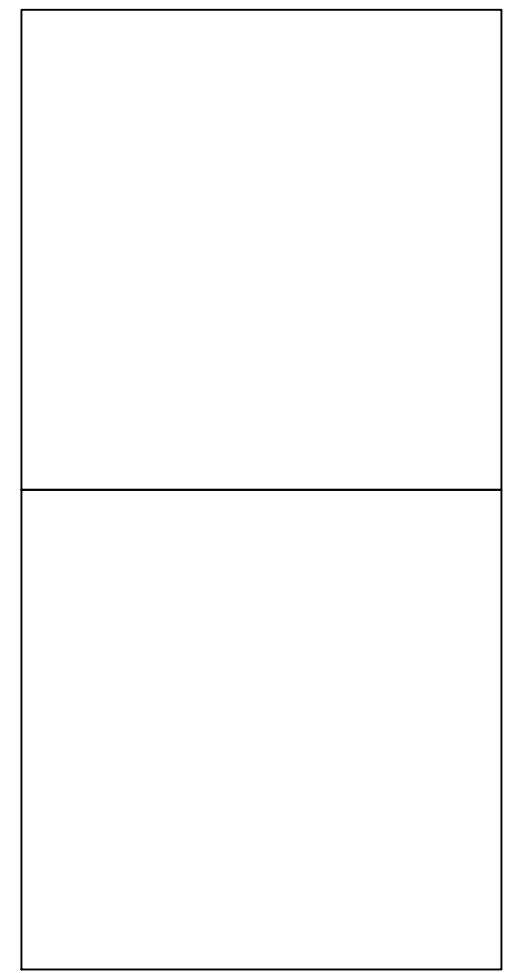
Link 1L: City Drain

Inflow=13.64 cfs 1.310 af
Primary=13.64 cfs 1.310 af

Total Runoff Area = 3.490 ac Runoff Volume = 1.310 af Average Runoff Depth = 4.50"
49.28% Pervious = 1.720 ac 50.72% Impervious = 1.770 ac



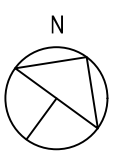
13 WATER ST NEWMARKET NH
(603) 200-0096 AECGR.COM



PORTSMOUTH SENIOR ACTIVITY CENTER

125 COTTAGE ST.
PORTSMOUTH, NH 03801

REVISIONS		
No.	DESCRIPTION	DATE




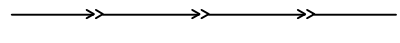

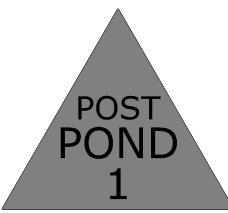
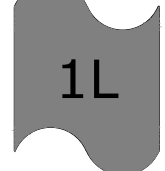
POST-DEVELOPMENT WATERSHED AREA PLAN

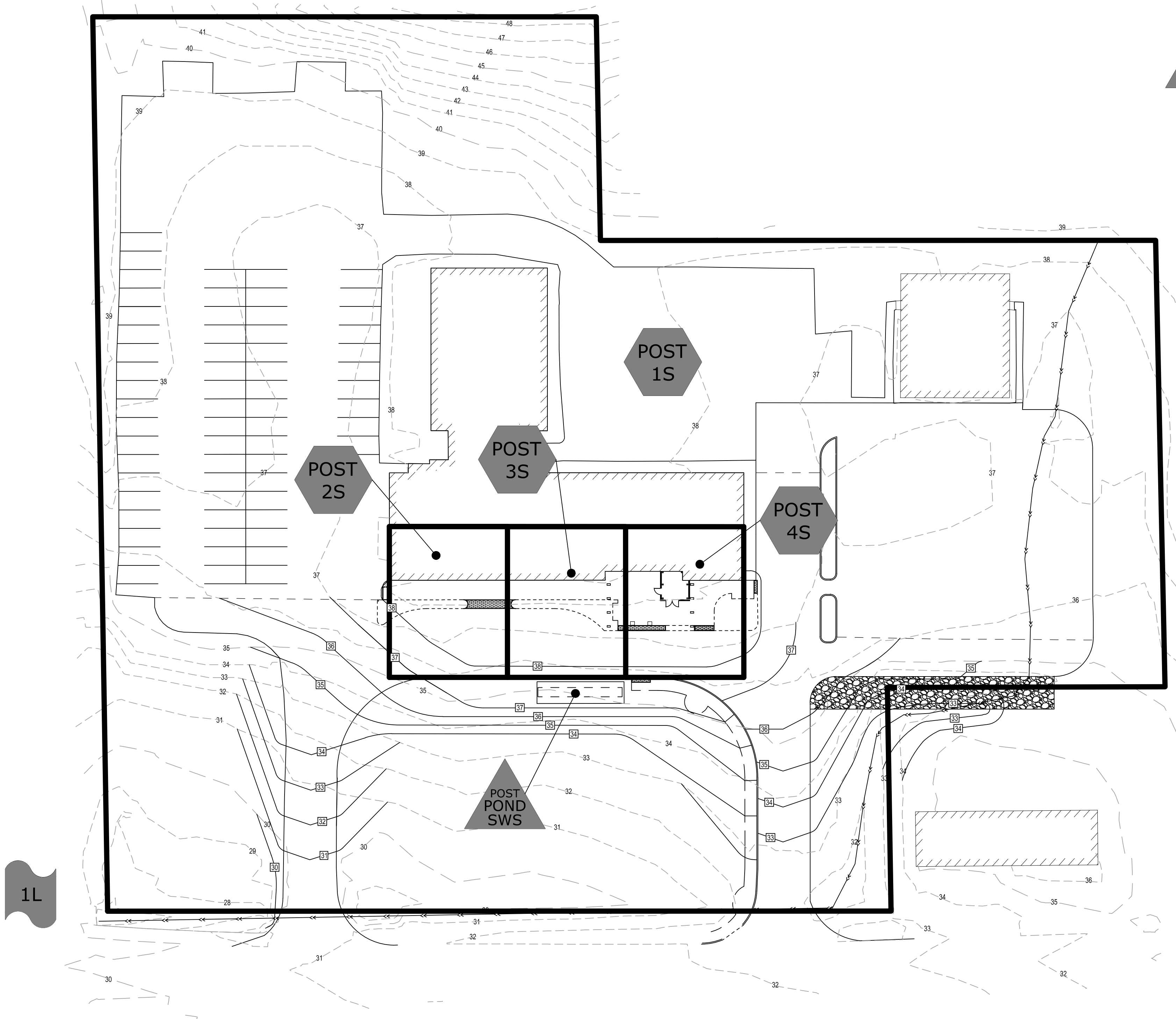
PROJECT NO.:	17002
DATE ISSUED:	11/07/2018
SCALE:	1"=30'
DRAWN BY:	SJC
REVIEWED BY:	BCC

2 of 2

PROJECT PHASE:
NOT FOR CONSTRUCTION

LEGEND

-  POST-DEVELOPMENT WATERSHED BOUNDARY
-  To FLOW PATH
-  POST 1S
POST-DEVELOPMENT WATERSHED
-  POST POND 1
POST-DEVELOPMENT POND
-  1L
POINT OF ANALYSIS

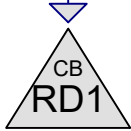


A
B
C
D
E
F
G
H
I
J

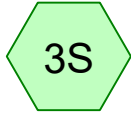
1 2 3 4 5 6 7 8 9 10 11 12



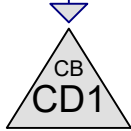
Runoff to RD 1



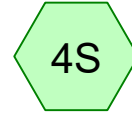
Roof Drain 1



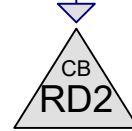
Runoff to CD 1



Canopy Drain



Runoff to RD 2



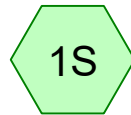
Roof Drain 2



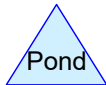
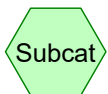
Stormwater System



City Drain



Post-Development



Routing Diagram for 2018-10-31_Drainage Analysis Post-Development

Prepared by AECm, Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

2018-10-31_Drainage Analysis Post-Development

Prepared by AECm

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Printed 11/5/2018

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.502	49	50-75% Grass cover, Fair, HSG A (1S, 2S, 3S, 4S)
1.694	98	Paved parking, HSG A (1S, 2S, 3S, 4S)
0.294	98	Roofs, HSG A (2S, 3S, 4S)
3.490	77	TOTAL AREA

2018-10-31_Drainage Analysis Post-Development

Prepared by AECm

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Printed 11/5/2018

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
3.490	HSG A	1S, 2S, 3S, 4S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
3.490		TOTAL AREA

2018-10-31_Drainage Analysis Post-Development

Type III 24-hr 2-Year Rainfall=3.21"

Prepared by AECm

Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Page 4

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Post-Development Runoff Area=130,724 sf 50.45% Impervious Runoff Depth>1.55"
Flow Length=686' Tc=11.2 min CN=WQ Runoff=3.96 cfs 0.389 af

Subcatchment 2S: Runoff to RD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>2.89"
Flow Length=128' Tc=3.0 min CN=WQ Runoff=0.53 cfs 0.039 af

Subcatchment 3S: Runoff to CD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>2.89"
Flow Length=99' Tc=3.0 min CN=WQ Runoff=0.53 cfs 0.039 af

Subcatchment 4S: Runoff to RD 2 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>2.89"
Flow Length=110' Tc=3.0 min CN=WQ Runoff=0.53 cfs 0.039 af

Pond CD1: Canopy Drain Peak Elev=34.27' Inflow=0.53 cfs 0.039 af
8.0" Round Culvert n=0.013 L=65.0' S=0.0200 '/' Outflow=0.53 cfs 0.039 af

Pond RD1: Roof Drain 1 Peak Elev=35.13' Inflow=0.53 cfs 0.039 af
8.0" Round Culvert n=0.013 L=103.0' S=0.0214 '/' Outflow=0.53 cfs 0.039 af

Pond RD2: Roof Drain 2 Peak Elev=34.10' Inflow=0.53 cfs 0.039 af
8.0" Round Culvert n=0.013 L=55.5' S=0.0198 '/' Outflow=0.53 cfs 0.039 af

Pond SWS: Stormwater System Peak Elev=33.74' Storage=573 cf Inflow=1.60 cfs 0.118 af
Discarded=0.03 cfs 0.042 af Primary=1.53 cfs 0.069 af Outflow=1.56 cfs 0.111 af

Link 1L: City Drain Inflow=4.97 cfs 0.457 af
Primary=4.97 cfs 0.457 af

Total Runoff Area = 3.490 ac Runoff Volume = 0.506 af Average Runoff Depth = 1.74"
43.04% Pervious = 1.502 ac 56.96% Impervious = 1.988 ac

2018-10-31_Drainage Analysis Post-Development Type III 24-hr 10-Year Rainfall=4.87"

Prepared by AECm

Printed 11/5/2018

HydroCAD® 10.00-22 s/n 10647 © 2018 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Post-Development Runoff Area=130,724 sf 50.45% Impervious Runoff Depth>2.63"
Flow Length=686' Tc=11.2 min CN=WQ Runoff=6.43 cfs 0.657 af

Subcatchment 2S: Runoff to RD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>4.51"
Flow Length=128' Tc=3.0 min CN=WQ Runoff=0.82 cfs 0.061 af

Subcatchment 3S: Runoff to CD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>4.51"
Flow Length=99' Tc=3.0 min CN=WQ Runoff=0.82 cfs 0.061 af

Subcatchment 4S: Runoff to RD 2 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>4.51"
Flow Length=110' Tc=3.0 min CN=WQ Runoff=0.82 cfs 0.061 af

Pond CD1: Canopy Drain Peak Elev=34.44' Inflow=0.82 cfs 0.061 af
8.0" Round Culvert n=0.013 L=65.0' S=0.0200 '/ Outflow=0.82 cfs 0.061 af

Pond RD1: Roof Drain 1 Peak Elev=35.27' Inflow=0.82 cfs 0.061 af
8.0" Round Culvert n=0.013 L=103.0' S=0.0214 '/ Outflow=0.82 cfs 0.061 af

Pond RD2: Roof Drain 2 Peak Elev=34.30' Inflow=0.82 cfs 0.061 af
8.0" Round Culvert n=0.013 L=55.5' S=0.0198 '/ Outflow=0.82 cfs 0.061 af

Pond SWS: Stormwater System Peak Elev=34.00' Storage=615 cf Inflow=2.45 cfs 0.184 af
Discarded=0.03 cfs 0.047 af Primary=2.30 cfs 0.127 af Outflow=2.33 cfs 0.174 af

Link 1L: City Drain Inflow=7.95 cfs 0.784 af
Primary=7.95 cfs 0.784 af

Total Runoff Area = 3.490 ac Runoff Volume = 0.840 af Average Runoff Depth = 2.89"
43.04% Pervious = 1.502 ac 56.96% Impervious = 1.988 ac

Summary for Subcatchment 1S: Post-Development

Runoff = 6.43 cfs @ 12.16 hrs, Volume= 0.657 af, Depth> 2.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.87"

Area (sf)	CN	Description
63,293	98	Paved parking, HSG A
64,774	49	50-75% Grass cover, Fair, HSG A
2,657	98	Paved parking, HSG A
130,724		Weighted Average
64,774	49	49.55% Pervious Area
65,950	98	50.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	79	0.0234	0.17		Sheet Flow, Segment AB Grass: Short n= 0.150 P2= 3.21"
0.7	128	0.0230	3.08		Shallow Concentrated Flow, Segment BC Paved Kv= 20.3 fps
1.4	150	0.0150	1.84		Shallow Concentrated Flow, Segment CD Grassed Waterway Kv= 15.0 fps
1.5	329	0.0120	3.71	1.11	Channel Flow, Segment DE Area= 0.3 sf Perim= 2.1' r= 0.14' n= 0.012 Concrete pipe, finished
11.2	686	Total			

Summary for Subcatchment 2S: Runoff to RD 1

Runoff = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af, Depth> 4.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.87"

Area (sf)	CN	Description
1,873	98	Paved parking, HSG A
741	98	Paved parking, HSG A
218	49	50-75% Grass cover, Fair, HSG A
4,269	98	Roofs, HSG A
7,101		Weighted Average
218	49	3.07% Pervious Area
6,883	98	96.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	51	0.0220	6.68	2.33	Pipe Channel, 8" SDR-35 Pipe 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.1	52	0.0210	6.52	2.28	Pipe Channel, 8" SDR-35 Pipe 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.5	25	0.0104	0.80		Sheet Flow, Flow from Roof Smooth surfaces n= 0.011 P2= 3.21"
0.7	128	Total, Increased to minimum Tc = 3.0 min			

Summary for Subcatchment 3S: Runoff to CD 1

Runoff = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af, Depth> 4.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.87"

Area (sf)	CN	Description
1,873	98	Paved parking, HSG A
741	98	Paved parking, HSG A
218	49	50-75% Grass cover, Fair, HSG A
4,269	98	Roofs, HSG A
7,101		Weighted Average
218	49	3.07% Pervious Area
6,883	98	96.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	26	0.0104	0.81		Sheet Flow, Sheet Flow from Roof Smooth surfaces n= 0.011 P2= 3.21"
0.0	18	0.0200	6.36	2.22	Pipe Channel, 8" SDR-35 Pipe 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.1	55	0.0200	6.36	2.22	Pipe Channel, 8" SDR-35 Pipe 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.6	99	Total, Increased to minimum Tc = 3.0 min			

Summary for Subcatchment 4S: Runoff to RD 2

Runoff = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af, Depth> 4.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.87"

Area (sf)	CN	Description
1,873	98	Paved parking, HSG A
741	98	Paved parking, HSG A
218	49	50-75% Grass cover, Fair, HSG A
4,269	98	Roofs, HSG A
7,101		Weighted Average
218	49	3.07% Pervious Area
6,883	98	96.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	55	0.0104	0.94		Sheet Flow, Runoff from Roof Smooth surfaces n= 0.011 P2= 3.21"
0.1	55	0.0200	6.36	2.22	Pipe Channel, 8" SDR-35 Pipe 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
1.1	110	Total, Increased to minimum Tc = 3.0 min			

Summary for Pond CD1: Canopy Drain

Inflow Area = 0.163 ac, 96.93% Impervious, Inflow Depth > 4.51" for 10-Year event
 Inflow = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af
 Outflow = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 34.44' @ 12.06 hrs
 Flood Elev= 38.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	33.80'	8.0" Round Culvert L= 65.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 33.80' / 32.50' S= 0.0200 1' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.68 cfs @ 12.05 hrs HW=34.43' TW=33.98' (Dynamic Tailwater)
 ↑**1=Culvert** (Outlet Controls 0.68 cfs @ 2.58 fps)

Summary for Pond RD1: Roof Drain 1

Inflow Area = 0.163 ac, 96.93% Impervious, Inflow Depth > 4.51" for 10-Year event
 Inflow = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af
 Outflow = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 35.27' @ 12.05 hrs
 Flood Elev= 38.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	34.70'	8.0" Round Culvert

L= 103.0' CMP, end-section conforming to fill, Ke= 0.500
 Inlet / Outlet Invert= 34.70' / 32.50' S= 0.0214 1' Cc= 0.900
 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.80 cfs @ 12.05 hrs HW=35.26' TW=33.98' (Dynamic Tailwater)
 ↑1=Culvert (Inlet Controls 0.80 cfs @ 2.56 fps)

Summary for Pond RD2: Roof Drain 2

Inflow Area = 0.163 ac, 96.93% Impervious, Inflow Depth > 4.51" for 10-Year event
 Inflow = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af
 Outflow = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.82 cfs @ 12.05 hrs, Volume= 0.061 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 34.30' @ 12.07 hrs
 Flood Elev= 38.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	33.60'	8.0" Round Culvert L= 55.5' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 33.60' / 32.50' S= 0.0198 1' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.63 cfs @ 12.05 hrs HW=34.27' TW=33.98' (Dynamic Tailwater)
 ↑1=Culvert (Outlet Controls 0.63 cfs @ 2.22 fps)

Summary for Pond SWS: Stormwater System

Inflow Area = 0.489 ac, 96.93% Impervious, Inflow Depth > 4.51" for 10-Year event
 Inflow = 2.45 cfs @ 12.05 hrs, Volume= 0.184 af
 Outflow = 2.33 cfs @ 12.06 hrs, Volume= 0.174 af, Atten= 5%, Lag= 0.9 min
 Discarded = 0.03 cfs @ 12.06 hrs, Volume= 0.047 af
 Primary = 2.30 cfs @ 12.06 hrs, Volume= 0.127 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 34.00' @ 12.06 hrs Surf.Area= 400 sf Storage= 615 cf
 Flood Elev= 34.60' Surf.Area= 400 sf Storage= 711 cf

Plug-Flow detention time= 53.8 min calculated for 0.173 af (94% of inflow)
 Center-of-Mass det. time= 22.4 min (768.7 - 746.2)

Volume	Invert	Avail.Storage	Storage Description
#1	30.30'	673 cf	Custom Stage Data (Conic) Listed below (Recalc) 1,720 cf Overall - 38 cf Embedded = 1,682 cf x 40.0% Voids
#2	32.50'	31 cf	8.0" Round Pipe Storage Inside #1 L= 89.0'
#3	33.20'	7 cf	8.0" Round Pipe Storage Inside #1 L= 20.0'
		711 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
30.30	400	0	0	400
32.00	400	680	680	521
34.00	400	800	1,480	662
34.60	400	240	1,720	705

Device	Routing	Invert	Outlet Devices
#1	Primary	33.20'	8.0" Round Culvert L= 95.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 33.20' / 31.00' S= 0.0232 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Primary	33.20'	8.0" Round Culvert L= 95.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 33.20' / 31.00' S= 0.0232 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#3	Discarded	30.30'	2.000 in/hr Exfiltration over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.03 cfs @ 12.06 hrs HW=33.98' (Free Discharge)
 ↳ **3=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=2.24 cfs @ 12.06 hrs HW=33.98' TW=0.00' (Dynamic Tailwater)
 ↳ **1=Culvert** (Inlet Controls 1.12 cfs @ 3.21 fps)
 ↳ **2=Culvert** (Inlet Controls 1.12 cfs @ 3.21 fps)

Summary for Link 1L: City Drain

Inflow Area = 3.490 ac, 56.96% Impervious, Inflow Depth > 2.69" for 10-Year event
 Inflow = 7.95 cfs @ 12.12 hrs, Volume= 0.784 af
 Primary = 7.95 cfs @ 12.12 hrs, Volume= 0.784 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Post-Development Runoff Area=130,724 sf 50.45% Impervious Runoff Depth>3.56"
 Flow Length=686' Tc=11.2 min CN=WQ Runoff=8.93 cfs 0.890 af

Subcatchment 2S: Runoff to RD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>5.78"
 Flow Length=128' Tc=3.0 min CN=WQ Runoff=1.04 cfs 0.079 af

Subcatchment 3S: Runoff to CD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>5.78"
 Flow Length=99' Tc=3.0 min CN=WQ Runoff=1.04 cfs 0.079 af

Subcatchment 4S: Runoff to RD 2 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>5.78"
 Flow Length=110' Tc=3.0 min CN=WQ Runoff=1.04 cfs 0.079 af

Pond CD1: Canopy Drain Peak Elev=34.65' Inflow=1.04 cfs 0.079 af
 8.0" Round Culvert n=0.013 L=65.0' S=0.0200 '/' Outflow=1.04 cfs 0.079 af

Pond RD1: Roof Drain 1 Peak Elev=35.41' Inflow=1.04 cfs 0.079 af
 8.0" Round Culvert n=0.013 L=103.0' S=0.0214 '/' Outflow=1.04 cfs 0.079 af

Pond RD2: Roof Drain 2 Peak Elev=34.65' Inflow=1.04 cfs 0.079 af
 8.0" Round Culvert n=0.013 L=55.5' S=0.0198 '/' Outflow=1.04 cfs 0.079 af

Pond SWS: Stormwater System Peak Elev=34.28' Storage=659 cf Inflow=3.12 cfs 0.236 af
 Discarded=0.03 cfs 0.049 af Primary=2.91 cfs 0.176 af Outflow=2.94 cfs 0.225 af

Link 1L: City Drain Inflow=10.84 cfs 1.066 af
 Primary=10.84 cfs 1.066 af

Total Runoff Area = 3.490 ac Runoff Volume = 1.126 af Average Runoff Depth = 3.87"
43.04% Pervious = 1.502 ac 56.96% Impervious = 1.988 ac

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Post-Development Runoff Area=130,724 sf 50.45% Impervious Runoff Depth>4.49"
 Flow Length=686' Tc=11.2 min CN=WQ Runoff=11.45 cfs 1.123 af

Subcatchment 2S: Runoff to RD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>6.98"
 Flow Length=128' Tc=3.0 min CN=WQ Runoff=1.25 cfs 0.095 af

Subcatchment 3S: Runoff to CD 1 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>6.98"
 Flow Length=99' Tc=3.0 min CN=WQ Runoff=1.25 cfs 0.095 af

Subcatchment 4S: Runoff to RD 2 Runoff Area=7,101 sf 96.93% Impervious Runoff Depth>6.98"
 Flow Length=110' Tc=3.0 min CN=WQ Runoff=1.25 cfs 0.095 af

Pond CD1: Canopy Drain Peak Elev=35.18' Inflow=1.25 cfs 0.095 af
 8.0" Round Culvert n=0.013 L=65.0' S=0.0200 '/' Outflow=1.25 cfs 0.095 af

Pond RD1: Roof Drain 1 Peak Elev=35.58' Inflow=1.25 cfs 0.095 af
 8.0" Round Culvert n=0.013 L=103.0' S=0.0214 '/' Outflow=1.25 cfs 0.095 af

Pond RD2: Roof Drain 2 Peak Elev=35.11' Inflow=1.25 cfs 0.095 af
 8.0" Round Culvert n=0.013 L=55.5' S=0.0198 '/' Outflow=1.25 cfs 0.095 af

Pond SWS: Stormwater System Peak Elev=34.59' Storage=709 cf Inflow=3.75 cfs 0.285 af
 Discarded=0.03 cfs 0.050 af Primary=3.46 cfs 0.223 af Outflow=3.49 cfs 0.274 af

Link 1L: City Drain Inflow=13.81 cfs 1.346 af
 Primary=13.81 cfs 1.346 af

Total Runoff Area = 3.490 ac Runoff Volume = 1.407 af Average Runoff Depth = 4.84"
43.04% Pervious = 1.502 ac 56.96% Impervious = 1.988 ac

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New Hampshire
Location	
Longitude	70.778 degrees West
Latitude	43.071 degrees North
Elevation	0 feet
Date/Time	Wed, 31 Oct 2018 09:48:05 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	1yr	0.70	0.98	1.21	1.56	2.03	2.66	2.92	1yr	2.35	2.81	3.22	3.94	4.55	1yr
2yr	0.32	0.50	0.62	0.81	1.02	1.30	2yr	0.88	1.18	1.52	1.94	2.49	3.21	3.57	2yr	2.84	3.43	3.94	4.68	5.33	2yr
5yr	0.37	0.58	0.73	0.97	1.25	1.60	5yr	1.08	1.46	1.88	2.43	3.14	4.07	4.58	5yr	3.60	4.40	5.04	5.93	6.70	5yr
10yr	0.41	0.65	0.82	1.11	1.45	1.89	10yr	1.25	1.72	2.23	2.89	3.75	4.87	5.53	10yr	4.31	5.32	6.08	7.11	7.98	10yr
25yr	0.48	0.76	0.96	1.33	1.77	2.33	25yr	1.53	2.14	2.77	3.62	4.74	6.17	7.10	25yr	5.46	6.83	7.80	9.02	10.05	25yr
50yr	0.53	0.86	1.10	1.53	2.06	2.75	50yr	1.78	2.52	3.28	4.32	5.66	7.39	8.58	50yr	6.54	8.25	9.42	10.81	11.98	50yr
100yr	0.59	0.96	1.24	1.76	2.41	3.24	100yr	2.08	2.97	3.89	5.15	6.76	8.86	10.38	100yr	7.84	9.98	11.37	12.96	14.28	100yr
200yr	0.67	1.10	1.42	2.04	2.81	3.82	200yr	2.43	3.50	4.60	6.11	8.07	10.61	12.55	200yr	9.39	12.07	13.74	15.55	17.04	200yr
500yr	0.79	1.31	1.70	2.47	3.46	4.74	500yr	2.98	4.36	5.74	7.68	10.21	13.49	16.15	500yr	11.94	15.53	17.65	19.78	21.52	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.36	0.44	0.59	0.73	0.89	1yr	0.63	0.87	0.92	1.32	1.67	2.22	2.51	1yr	1.97	2.41	2.86	3.16	3.88	1yr
2yr	0.31	0.49	0.60	0.81	1.00	1.19	2yr	0.86	1.16	1.37	1.82	2.34	3.06	3.45	2yr	2.70	3.32	3.82	4.55	5.08	2yr
5yr	0.35	0.54	0.67	0.92	1.17	1.40	5yr	1.01	1.37	1.61	2.12	2.74	3.79	4.20	5yr	3.36	4.04	4.72	5.54	6.25	5yr
10yr	0.39	0.59	0.73	1.03	1.33	1.60	10yr	1.14	1.56	1.81	2.39	3.06	4.38	4.87	10yr	3.87	4.69	5.45	6.42	7.21	10yr
25yr	0.44	0.67	0.83	1.19	1.56	1.90	25yr	1.35	1.86	2.10	2.76	3.54	4.70	5.91	25yr	4.16	5.69	6.67	7.81	8.70	25yr
50yr	0.48	0.73	0.91	1.31	1.77	2.17	50yr	1.52	2.12	2.35	3.08	3.94	5.31	6.83	50yr	4.70	6.57	7.76	9.07	10.04	50yr
100yr	0.54	0.81	1.02	1.47	2.01	2.47	100yr	1.74	2.42	2.63	3.43	4.37	5.96	7.89	100yr	5.27	7.59	9.02	10.54	11.59	100yr
200yr	0.59	0.89	1.13	1.64	2.28	2.82	200yr	1.97	2.75	2.94	3.80	4.82	6.67	9.12	200yr	5.90	8.77	10.49	12.27	13.41	200yr
500yr	0.69	1.02	1.32	1.91	2.72	3.37	500yr	2.35	3.29	3.41	4.34	5.49	7.75	11.03	500yr	6.86	10.61	12.81	15.02	16.23	500yr

Upper Confidence Limits

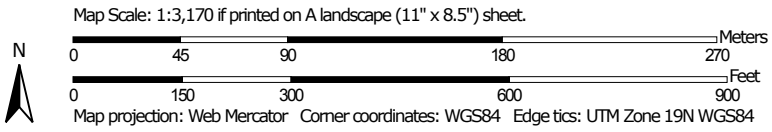
	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.54	0.72	0.89	1.08	1yr	0.77	1.06	1.26	1.74	2.21	2.99	3.15	1yr	2.65	3.03	3.58	4.38	5.05	1yr
2yr	0.34	0.52	0.64	0.86	1.06	1.27	2yr	0.92	1.24	1.48	1.96	2.51	3.43	3.70	2yr	3.03	3.56	4.08	4.83	5.64	2yr
5yr	0.40	0.62	0.76	1.05	1.33	1.62	5yr	1.15	1.58	1.88	2.53	3.25	4.34	4.95	5yr	3.84	4.76	5.37	6.36	7.14	5yr
10yr	0.47	0.72	0.89	1.24	1.61	1.97	10yr	1.39	1.93	2.28	3.10	3.94	5.34	6.19	10yr	4.72	5.95	6.79	7.82	8.74	10yr
25yr	0.57	0.87	1.09	1.55	2.04	2.56	25yr	1.76	2.50	2.95	4.06	5.13	7.81	8.31	25yr	6.91	7.99	9.10	10.31	11.39	25yr
50yr	0.67	1.02	1.27	1.82	2.45	3.12	50yr	2.11	3.05	3.59	4.99	6.29	9.78	10.41	50yr	8.66	10.01	11.37	12.69	13.93	50yr
100yr	0.78	1.19	1.49	2.15	2.94	3.79	100yr	2.54	3.71	4.36	6.14	7.72	12.25	13.04	100yr	10.84	12.54	14.20	15.65	17.05	100yr
200yr	0.92	1.38	1.75	2.53	3.53	4.63	200yr	3.05	4.52	5.32	7.55	9.47	15.38	16.35	200yr	13.61	15.72	17.75	19.28	20.87	200yr
500yr	1.14	1.69	2.18	3.16	4.50	6.00	500yr	3.88	5.87	6.90	9.98	12.44	20.79	22.06	500yr	18.40	21.21	23.87	25.41	27.28	500yr



Soil Map—Rockingham County, New Hampshire




Soil Map may not be valid at this scale.





MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire

Survey Area Data: Version 20, Sep 7, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 26, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	2.9	6.2%
299	Udorthents, smoothed	1.2	2.6%
799	Urban land-Canton complex, 3 to 15 percent slopes	42.7	91.2%
Totals for Area of Interest		46.8	100.0%

Rockingham County, New Hampshire

799—Urban land-Canton complex, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9cq0
Elevation: 0 to 1,000 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 120 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 55 percent
Canton and similar soils: 20 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canton

Setting

Parent material: Till

Typical profile

H1 - 0 to 5 inches: gravelly fine sandy loam
H2 - 5 to 21 inches: gravelly fine sandy loam
H3 - 21 to 60 inches: loamy sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Boxford and eldridge

Percent of map unit: 4 percent

Hydric soil rating: No

Squamscott and scitico

Percent of map unit: 4 percent

Landform: Marine terraces

Hydric soil rating: Yes

Chatfield

Percent of map unit: 4 percent

Hydric soil rating: No

Scituate and newfields

Percent of map unit: 4 percent

Hydric soil rating: No

Walpole

Percent of map unit: 4 percent

Landform: Depressions

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Rockingham County, New Hampshire

Survey Area Data: Version 20, Sep 7, 2018

TECHNICAL MEMO



To: Portsmouth Technical Advisory Committee & Planning Board

From: Tim Nichols, PE

Date: 11/07/2018

Subject: **Adaptive Reuse of Doble USARC – Portsmouth Senior Activity Center**

SITE DESCRIPTION

The former Paul A. Doble U.S. Army Reserve Center (USARC) is located at 125 Cottage Street in Portsmouth's west end neighborhood (Figure 1). Total parcel area is 3.49 acres not including the 0.29 acre City-owned parcel located southeast of the property. It is bounded by commercial and residential developments to the north, Cottage Street to the south, City public housing development to the east, and two residences to the west (abutting State Route 1).

Topographic relief of the site is generally flat and no wetlands exist within or immediately adjacent to the property. Stormwater generally infiltrates on-site through vegetated (grass) surfaces. A shallow, undefined grass swale extending parallel to Cottage Street channels any non-infiltrated surface flows westward eventually draining into a City storm drain system.

The facility was decommissioned by the U.S. Army in 2015 when they relocated to a new facility on West Road in Portsmouth. Since then, the facility has remained vacant. The Army has retained control of the facility including heating, landscaping, and other necessary maintenance and repairs.



Existing site infrastructure includes two buildings, paved driveways and parking areas, and vegetated areas including grass, shrubs, and trees. The single-floor main building (1) is comprised of two sections including the training facility (offices and classrooms) and the high-bay drill hall (2). Located northeast of the main building is a two-bay fleet maintenance facility.



PROGRAM DESCRIPTION

The City of Portsmouth Senior Activity Center provides programs and activities for people ages 50+. The program offers a comprehensive array of activities and services to promote healthy aging. Focusing on Fitness, enrichment, socialization, resources, and entertainment we provide a vibrant hub to gather. Operating under an innovative and inclusive philosophy, the center strives to redefine what aging looks like.

The City of Portsmouth has joined AARP's network of Age-Friendly Communities with the aim of supporting healthy aging and the quality of life for older people in the Seacoast.

The City has taken many steps to increase the level of service for older people in our community. We are currently operating at Community Campus in a 2,400 square foot space and look forward to expanding our services in a larger facility. We currently have a membership of 1,300 individuals.

PROJECT EVOLUTION

For several years the City of Portsmouth has been working with the U.S. Army to acquire ownership of the Doble property. In February of 2015 the Senior Subcommittee endorsed the Doble facility to accommodate Senior Activity programs. Shortly thereafter, the City commissioned AECm to develop several preliminary conceptual plans for redevelopment of the existing buildings and land. Following is a chronological summary of the project evolution:

- **February 2015:** Senior Subcommittee endorses the former Doble facility to accommodate a new Senior Activity Center.
- **March 2015:** Preliminary conceptual plans for near-term and future redevelopment.
- **February 2017:** Phase I construction documents (drawings and specifications) for the Portsmouth Senior Activity Center programs. Related tasks include a facility assessment, program review, schematic design, and design review meetings and presentations with City departments.
- **March 2017:** AECm presented the schematic design to City departments including Planning, Public Works, Recreation, Health, Inspection, and Fire. The need for a primary Emergency Shelter was identified by the City.
- **June 2017:** The City requested a proposal from AECm to incorporate the Emergency Shelter functions into the ongoing Phase I design.
- **July – November 2018:** Design review meetings and workshops with City departments in preparation of TAC and Planning Board reviews.

DESIGN APPROACH

The design objective is to accommodate existing and potential Senior Activities and Programs through adaptive reuse of the existing main building. Design also considers needs for an Emergency Shelter which may be utilized at the City's discretion. Redevelopment of the site infrastructure is necessary to support the building functions and meet occupant needs. The following guiding design standards were considered:

- Programmatic uses and needs.
- Accessibility, waypointing, and circulation.
- Sustainable building practices and low-impact site development.
- Occupant comfort (space conditioning, lighting, finishes, security).
- Preservation of the historic and cultural character (buildings and site features).
- Energy conservation.
- Emergency shelter standards (FEMA / Red Cross).



Future phase development and broader community uses also influenced the design. This includes new building/addition construction, parking, and outdoor features such as gardens, walking trails, and athletic fields/courts.

Major site redevelopment elements associated with this Phase I design include:

- New utility services (water, sanitary, and fire sprinkler).
- New subgrade stormwater infiltration gallery (plumbed to roof downleaders).
- Removal of unnecessary impervious paved surfaces (rear parking lot).
- Rehabilitating existing asphalt-paved parking surfaces.
- Reconstructing / widening the two existing driveways.
- Constructing a new front driveway connector.
- Constructing new concrete walkway and patio space at front entry.
- Constructing a new walkway from Cottage Street to entry.
- Replacing existing wallpack lighting with LED units (dark-sky).
- Installing new pole-mounted LED lights in east parking lot (4).
- Installing new pathway lights along the new front walkway.
- New planting beds and islands with grass, shrubs, and trees.

FUTURE PHASE REDEVELOPMENT

Several site redevelopment concepts were considered during the planning and design processes. Expanding the facility for multi-generation community uses would involve new building construction, additional parking, and creating outdoor spaces.

Major site redevelopment in future phases must consider LID practices. This includes a new on-site stormwater treatment system and natural landscaping features. Additional parking will be required and reconfiguration / relocation of the existing east and west parking lots is expected. The high-bay drill hall may also be replaced with a larger modern facility that accommodates the planned uses.