



Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists



February 23, 2022

Barbara McMillan, Chair
Portsmouth Conservation Commission
1 Junkins Ave, 3rd Floor
Portsmouth, NH 03801

**RE: Conservation Commission Submission for Wetland CUP & Rev 4 Plans
325 Little Harbor Road, Portsmouth, NH – Tax Map 205 Lot 2
Project #47099.01**

Dear Ms. McMillan:

On behalf of our client, ADL 325 Little Harbor Road Trust, please find the recently updated plans, including revised utility design as part of the Wetland Conditional Use Permit (CUP) submission relative to the above-referenced project. The following materials have been submitted via ViewPoint and hard copies are also included in this submission:

- **Wetland CUP Application (10 copies);**
- **Land Management Plan (10 copies); and**
- **Site Development Plans entitled “Site Development Plans, Tax Map 205 Lot 2, Lady Isle Site Renovations, 325 Little Harbor Road, Portsmouth New Hampshire”, prepared by TFMoran, Inc., dated September 29, 2021, revised February 18, 2022 (1 copy at 22”x34”and 9 copies at 11”x17”).**

This project was reviewed by the Conservation Commission and approved in November 2021, however, will be returning to Conservation Commission for review since recent utility-related revisions to the original submission in September 2021. Also, although TAC review is not required for Single Family Residential Homes, we agreed to attend TAC, at the request of the Planning Department and DPW, to provide further details of the proposed utilities. These revised plans detail the utility runs to and from the island and their connection with utilities in Little Harbor Road and Sagamore Avenue.

Project Description

The project includes the replacement of a single-family residence on 325 Little Harbor Road. The existing property is approximately 12.3 acres and currently contains a 2-story house, guest cottage, carriage house, barn, horse barn, horse paddock, and shed. The site is an island within the Rural Zoning District and surrounded by the Piscataqua River.

Renovations are proposed within a previously disturbed area and will replace existing structures. The remaining half of the island, which is wooded, will be maintained or enhanced with natural vegetation.

TFMoran, Inc.
48 Constitution Drive, Bedford, NH 03110
T(603) 472-4488 www.tfmoran.com



TFMoran, Inc. Seacoast Division
170 Commerce Way–Suite 102, Portsmouth, NH 03801
T(603) 431-2222



**Conservation Commission Submission for Wetland CUP & Rev 4 Plans
325 Little Harbor Road, Portsmouth, NH – Tax Map 205 Lot 2**

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No adverse impact on the wetland functional values of the site or surrounding properties are proposed. A Land Management Plan has been developed for the entire island to remove existing invasive species and restore the area, including the Buffer, with native species that will benefit the ecosystem around the Piscataqua River and enhance the existing ecology.

The project does not propose any permanent wetland impacts, only Tidal Wetland Buffer Impacts on the previously developed uplands of the island. Temporary impacts are proposed within the Tidal Piscataqua River to remove existing utilities, install utilities suspended beneath the bridge, and for temporary bridge reinforcement to allow construction vehicles to access the site.

The purpose of this proposal is to demolish the existing house, carriage house, and paddock and to construct a 2-story single-family home, garage, pool, pool cabana, playground, and utility connections via Little Harbor Road; renovate an existing barn and guest cottage; and replace an existing shed and barn with a new shed and barn. Associated improvements include and are not limited to access, grading, stormwater management systems, utilities, and landscaping. The project proposes a 6,227 SF main, housing footprint and total 34,700 SF of impervious area (7%) upon the island within the HOT (Highest Observable Tide) line. There is approximately 195,656 SF (58%) of impact area proposed within the 100' Tidal Wetland Buffer Zone of the island. Below is a table comparing existing and proposed coverages within both the Tidal Wetland Buffer Zone and Total Upland Area, within the lot area upon the island only:

TABLE 1 COVERAGE AREA (SF)				
	Existing		Proposed	
	Tidal Wetland Buffer Zone	Total Island Area	Tidal Wetland Buffer Zone	Total Island Area
Impervious Area	27,123 (8.0%)	51,371 (10.2%)	25,217 (7.5%)	34,700 (6.8%)
Permeable Area	754 (0.3%)	754 (0.1%)	8,144 (2.4%)	13,224 (2.6%)
Grass/Landscape Area	176,413 (52.3%)	245,920 (48.4%)	166,530 (49.4%)	254,665 (50.2%)
Natural Woodland Area	132,911 (39.4%)	209,400 (41.3%)	137,310 (42.5%)	204,856 (40.4%)
Total Area	337,201	507,445	337,201	507,445
Impact Area			195,656 (58.0%)	289,971 (57.1%)

Approximately half of the development is proposed within the 100' Tidal Wetland Buffer. The remaining half of the island is proposed to be left in its natural woodland state. Most of the impact area is in order to convert areas from pavement and grass, using mechanized equipment, to open space, such as landscape areas or drought-tolerant lawn, with the goal of establishing more vegetation. Alterations of woodland will occur only to the extent necessary to achieve construction goals.

The existing wetland buffer contains 132,911 SF (40%) of natural woodland area and will be enhanced to provide a total of 137,310 SF, accounting for 43% of the Buffer Zone. There will also be maintained landscaping added within the Buffer Zone, contributing 48,191 SF of landscape or meadow area that may have previously been grass or impervious surface, accounting for 14% of the Buffer Zone. All proposed landscape areas propose native vegetation within the Buffer. The combined woodland, lawn, landscaped, and permeable area accounts for 92% of the Buffer Area, permitting approximately 8% of the Buffer as impervious, primarily from roofs and the sea wall. The project includes a net removal of



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16,671 SF of impervious surfaces, resulting in a net loss of impervious surface within a jurisdictional wetland buffer.

Utility Design

The existing utilities serving the residential island include water from Little Harbor Road via the Belle Isle Road, septic system, and overhead electric from Pleasant Point to the island. The intent is to remove the existing water, which is undersized for the proposed improvements and freezes likely due to improper insulation and burial depth. The septic system will be decommissioned and removed. Pending coordination with Eversource, the overhead electric utilities may be removed via Pleasant Point and replaced with underground.

All proposed utilities will be located along the existing driveway easement of Belle Isle Road, including 4" C900 PVC water service, 1.25" SDR 11 HDPE force main, 2" gas service, and underground electric/communication in 3" SCH40 PVC conduits. The utilities will conform to Portsmouth DPW and state standards. Proposed gas and sewer main utilities are available in Sagamore Avenue, and these services will be installed in either side of the grassed shoulder of Little Harbor Road. All impacts within the right of ways will be restored to original conditions.

Review and Approval

The project has been reviewed by TAC. The project will also be reviewed by Planning Board, NHDES Wetlands Bureau, NHDES Shoreland Program, NHDES Alteration of Terrain (AoT) Bureau, NH Fish & Game, NHDES Wastewater Bureau, and EPA's NOI for Construction General Permit.

We appreciate your consideration of these matters and look forward to presenting this project to you at the March 9th Conservation Commission Meeting.

Respectfully,
TFMoran, Inc.

Corey Colwell, LLC
Division Manager | Vice President

Hannah Giovannucci, PE
Civil Project Manager

JCC/heg

- cc: Anthony Dilorenzo, ADL 325 Little Harbor Road Trust (via e-mail)
Jim Youngblood, Youngblood Builders (via jim@youngbloodbuilders.com)
Bernie Lee, Severino Construction (via blee@severinotrucking.com)
Mickey Benson, GPSchafer (via mbenson@gpschafer.com)
Matthew Cunningham, MCLD (via matthew@matthew-cunningham.com)
Stephen Roberts, Hoefle, Phoenix, Gormley & Roberts (via sroberts@hpgrlaw.com)

2/23/2022

Conservation Commission & Planning Board Submission for Wetland CUP

Please revise the following to the form:

Land Use Application

LU-22-23

Your Submission

Attachments

Guests (0)

- Preliminary Application Review
- Land Use Permit -- Planning Department Review and Fee Calculation
- Application Permit Fee
 - Land Use Code Review
 - Conservation Commission Review
 - Planning Board Conditional Use Permit (Wetlands) Approval
 - Land Use Conditions of Approval Review
 - Building Permit Issued

Your submission

Submitted Feb 15, 2022 at 4:45pm

Contact Information

Corey Colwell

Email address

ccolwell@tfmoran.com

Phone Number

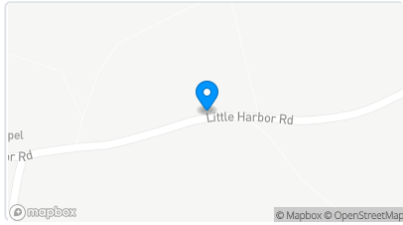
603-431-2222

Mailing Address

170 Commerce Way , Portsmouth, NH 03801

Location

325 LITTLE HARBOR RD
Portsmouth, NH 03801



Applicant Information

Please indicate your relationship to this project * 

B. Property Owner's Representative

Alternative Project Address

Alternative Project Address 

--

Project Type

Addition or Renovation: any project (commercial or residential) that includes an ADDITION to an existing structure or a NEW structure on a property that already has structure(s) on it



New Construction: any project (commercial or residential) that involves adding a NEW structure on a parcel that is currently VACANT. If there are any existing structures on the property (even if you are planning to remove them), you should select Addition and Renovation above

--

Minor Renovation: for projects in the Historic District only that involve a minor exterior renovation or alteration that does not include a building addition or construction of a new structure

--

Home Occupation: residential home occupation established in an existing residential dwelling unit and regulated by the Zoning Ordinance. Home Occupations are not allowed in the following Zoning Districts: Waterfront Business, Office Research, Industrial, or Waterfront Industrial

--

New Use/Change in Use: for a change of land use or an expansion to an existing use (e.g. addition of dwelling units) that includes no exterior work or site modifications

--

Temporary Structure / Use: only for temporary uses (e.g. tents, exhibits, events)

--

Demolition Only: only applicable for demolition projects that do not involve any other construction, renovation, or site work

--

Subdivision or Lot Line Revision: for projects which involved a subdivision of land or an adjustment to an existing lot line

--

Other Site Alteration requiring Site Plan Review Approval and/or Wetland Conditional Use Permit Approval

--

Sign: Only applies to signs requiring approval from a land use board (e.g. Historic Commission, Zoning Board of Adjustment)

--

Request for Extension of Previously Granted Land Use Approval

--

Appeal of an Administrative Decision or Request for Equitable Waiver

--

Zoning Information

Base Zoning District

Rural Residential (R)

Base Zoning District 2 

--

Historic District

--

Flood Plain District



Downtown Overlay District

--

Osprey Landing Overlay District

--

Airport Approach Overlay District

--

Waterfront Use Overlay District

--

North End Incentive Overlay District

--

West End Incentive Overlay District

--

Highway Noise Overlay District

--

Application Type

Lot Line Revision (Planning Board)

--

Subdivision (Planning Board)

--

Amended Subdivision or Lot Line Revision Approval

--

Wetland Conditional Use Permit (Planning Board)



Amended Wetland Conditional Use Permit (Planning Board)



Uncheck please?

Accessory Dwelling Unit / Garden Cottage Conditional Use Permit (Planning Board)

--

Site Plan Review (Planning Board)

--

Amended Site Plan Review

--

Other Conditional Use Permit (Planning Board)

--

Variance (Zoning Board of Adjustment)

--

Special Exception (Zoning Board of Adjustment)

--

Historic District Certificate of Approval (Historic District Commission)

--

Request for Extension of Previously Approved Application 

--

Appeal of Administrative Decision 

--

Equitable Waiver

--

Project Description

Lot Area (s.f.)

535,990

Lot Area Source

--

Detailed Description of Proposed Work *

Replace an existing residential home; remove carriage house and paddock, construct new garage, pool, pool cabana, playground, utility connections; renovate existing barn and guest cottage, and replace existing shed and barn. Associated improvements include and are not limited to access, grading, stormwater management systems, utilities, and landscaping improvements.

Brief Description of Existing Land Use *

Residential

Land Use Application Fee Calculation

Area of disturbance in wetland or wetland buffer (s.f.)

--


Existing Buildings/Structures

Building / Structure Description	Total Gross Floor Area (s.f.)	Area of Footprint (s.f.)	...
Residential Home	4,180	4,201	...
Guest Cottage	2,056	1,300	...
Barn	3,800	2,130	...
Carriage House	1,982	1,982	...
Horse Shed	467	467	...
Shed	48	48	...

Existing Yards, Coverage, Parking, and Wetlands

Principal Front Yard / Building Setback (ft) 

--

Secondary Front Yard / Building Setback (ft) 

--

Rear Yard / Building Setback (ft) ?

--

Right Side Yard / Building Setback (ft) ?

--

Left Side Yard / Building Setback (ft) ?

--

Total # of Residential Units

2

Number of Parking Spaces

--

Number of Loading Spaces

--

Area of Surface Parking & Driveways (sq ft) ?

22,378 — 29,732

Other Impervious Surface Area (sq ft) ?

21,718 — 21,639

Is all or a portion of the property located in the wetland area and/or within 100' of the wetland boundary? ?



Proposed Building/Structures (REQUIRED)

Building / Structure Description	Total Gross Floor Area (sq ft)	Area of Footprint (s.f.)	...
Residential House	10,766	6,227	...
Garage	2,212	1,475	...
Guest Cottage	1,320	660	...
Pool Cabana	368	368	...
Shed	384	384	...
Barn	3,882	2,806	...

Building / Structure Description	Total Gross Floor Area (sq ft)	Area of Footprint (s.f.)	...
Barn	722	722	...

Additional Proposed Building Information

Number of new hotel rooms

--

Total New Restaurant Use Gross Floor Area

--

Proposed Yards, Coverage, Parking and Wetlands (REQUIRED)

Principal Front Yard / Building Setback (ft) ?

--

Secondary Front Yard / Building Setback (ft) ?

--

Rear Yard / Building Setback (ft) ?

--

Right Side Yard / Building Setback (ft) ?

--

Left Side Yard / Building Setback (ft) ?

--

Total # of Residential Units ?

--

Number of Parking Spaces ?

--

Number of Loading Spaces ?

--

Area of Surface Parking & Driveways (sq ft) ?

17,154 — 15,860

Other Impervious Surface Area (sq ft) ?

30,641 — 31,894

Are you proposing to do any work in the wetland area or within 100' of the wetland boundary? ?

--

Wetland Conditional Use Permit -- Impacted Jurisdictional Areas

Inland Wetland

--

Tidal Wetland

Inland Wetland Buffer

Tidal Wetland Buffer

Vernal Pool

--

Wetland or Wetland Buffer Activity

Total Area of Inland Wetland (both on and off the parcel) (Sq.Ft.)

4532

Total Area of Vernal Pool (both on and off the parcel) (Sq.Ft.)

--

Distance of proposed structure or activity to edge of wetland (ft.):

0

Wetland Buffer Total Area on Lot (Sq.Ft.)

46,415

Wetland Buffer Area to be Disturbed (Sq.Ft.)

--

Inland Wetland Total Area on Lot (Sq.Ft.)

0

Inland Wetland Area to be Disturbed (Sq.Ft.)

--

Vernal Pool Total Area on Lot (Sq.Ft.)

--

Vernal Pool Area to be Disturbed (Sq.Ft.)

--

Tidal Wetland Total Area on Lot (Sq.Ft.)

389,213

Tidal Wetland Area to be Disturbed (Sq.Ft.)

195,656

Review by Independent Certified Wetland Scientist

I have read and understand the above information. I will pay any additional fees due as required.

--

Project Representatives

Relationship to Project	If you selected "Other", please state relationship to project.	Full Name (First and Last) ...
Engineer	--	Hannah Giovannucci ...

Plan Submission


I understand that this application will not be considered complete until I have provided the required plans and any additional submission requirements. I also understand that any hard copies as required by the Planning Department are required to be submitted prior to the application deadline. (You will be prompted at the next screen to upload your plans.) *



I have reviewed the application requirements provided on the Planning Department's web page -- www.cityofportsmouth.com/planportsmouth/land-use-applications-forms-and-fees. *



Acknowledgement

I hereby certify that as the applicant for permit, I am * 

Other

If you selected "Other" above, please explain your relationship to this project. Owner authorization is required.

Civil Engineer

I certify that the information given is true and correct to the best of my knowledge. *



I understand that I am responsible for paying any applicable application fees and that I will be invoiced separately for legal and abutter notification costs as well. *



Is this property under condominium ownership? 

--

I understand that it is the obligation of the applicant to submit adequate documents, plans, and exhibits to demonstrate compliance with the Zoning Ordinance. *



By signing below, I agree that this is equivalent to a handwritten signature and is binding for all purposes related to this transaction. *

 Hannah Giovannucci
Feb 15, 2022

INTERNAL USE -- Land Use Approvals

Historic District Commission

--

HDC Approval Granted

--

Zoning Board of Adjustment

--

BOA Approval Granted

--

Zoning Relief Required

--

Conservation Commission Review

--

Conservation Commission Review Completed

--

Conditional Use Permit (Wetlands)

--

Wetland CUP Granted

--

Conditional Use Permit (Other)

--

Other CUP Granted

--

Prelim. Concept. Consultation

--

Prelim. Concept. Consultation Completed

--

Design Review Phase

--

Design Review Phase Completed

--

Subdivision / Lot Line Revision

--

Subdivision / Lot Line Revision Granted

--

Site Plan Review

--

Site Plan Review Granted

--

Technical Advisory Committee Review

--

TAC Review Completed

--

Internal consistency review required 

--

Certificate of Use Required

--

Stipulations

--

Additional Planning Department Comments

--

Your Profile

[Your Records \(/dashboard/records\)](/dashboard/records)

Resources

[Search for Records \(/search\)](/search)

[Claim a Record \(/claimRecord\)](/claimRecord)

[Employee Login \(https://portsmouthnh.viewpointcloud.io\)](https://portsmouthnh.viewpointcloud.io)

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Land Management Plan

A Narrative for Invasive Plant Management
and Native Plant Restoration

325 Little Harbor Road, Portsmouth, NE

Fall 2021



PARTERRE
ECOLOGICAL

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Introduction and Primary Goals

The Dilorenzo residence is located at 325 Little Harbor Road in Portsmouth. The 11-acre island lies near the mouth of the Piscataqua River and the majority of the site is within the 100' tidal river buffer. An inventory of existing native and invasive plant species can be found in this plan.

The primary goal of this plan is to seek approval from the Portsmouth Conservation Commission to offset home construction and landscape improvements within the 100' Tidal buffer. We propose to remove invasive species on site and to restore the area with native species that will benefit the ecosystem around Piscataqua Rive and reduce further incursion of invasive species on the island. An inventory of existing native and invasive plant species can be found in this plan.

We propose removing invasive species by low-impact manual hand methods and cut & dab herbicide application by licensed applicators. All invasive species greater than 1" in caliper will be cut and dabbed with herbicide to reduce the chance of erosion along the banks. All existing erosion will be stabilize and any soil disturbed during planting will be stabilized and seeded with native wildflower mix. Techniques are outlined in the report. After removal of invasive species we will restore with native shrubs and perennials that will help prevent resurgence of the invasive plants and enhance the existing ecology.



A mass of invasive Multiflora Rose along the edges of the horse paddock with maturing Black Swallowwort pods hanging from the stem. The majority of the western portion of the island is healthy pine/oak forest, but invasives are dense in areas with historically high disturbance. We propose managing all invasive species and replacing with native alternatives.



325 Little Harbor Road Invasive Plant Inventory

Mature invasive species have developed isolated populations along the tidal river buffer and threaten to spread into an otherwise healthy native ecosystem. We propose controlling invasive plant species that have developed self sustaining populations on the Dilorenzo's property and restoring with native species. The physiology of the invasive plants has enabled them to out compete the native plant community and compromise the ecological value of the native plant community. The dominant invasive plants, including Multiflora Rose and Barberry, disrupt the formation of a native understory by filling ecological niches and resisting any browsing by native species. A very small Japanese Knotweed population exists near the southwestern corner of the paddock. It can spread quickly in coastal areas and should be managed before it can establish itself. All invasive perennials and shrubs with viable fruit will be removed from the site. Poison Ivy is a native species with valuable ecological benefits. We propose control the and areas of human traffic.

Invasive Plant Species Identified:

Acer platanoides, Norway Maple
Alliaria petiolata, Garlic Mustard
Berberis thunbergii, Japanese Barberry
Celastrus orbiculatus, Asiatic Bittersweet
Cynanchum louiseae, Black Swallowwort
Elaeagnus umbellata, Autumn Olive
Fallopia japonica, Japanese Knotweed
Frangula alnus, Glossy Buckthorn
Lonicera morrowii, Morrow's Honeysuckle
Rhamnus cathartica, Common Buckthorn
Rosa multiflora, Multiflora Rose

**** Likely Invasive Plant Species Identified:***

Artemisia vulgaris, Mugwort
Deutzia scabra, Fuzzy Deutzia
Ligustrum vulgaris, Common Privet
Rhodotypos scandens, Jetbead
Vitus sp., Grape (Native but control)

* While not listed as an Invasive Species by ISC (New Hampshire Invasive Species Committee) these species can dominate the shrub layer and crowd out native trees and shrubs. We recommend removal of along with listed invasive plant species in wetland buffers and replace with native shrubs and trees.



Black Swallowwort releasing seedheads in the paddock. The majority of this area is a healthy goldenrod/blackberry meadow with patches of Milkweed, but Black Swallowwort can establish itself quickly and releases compounds in the soil to limit its competitor. Without intervention there will likely be a large infestation.





**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 4/1/2019
Data updated 7/17/2019

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.



 Property area





NOTES:

1. THE PLANNING IS BASED ON THE DATA PROVIDED BY THE CLIENT AND THE INFORMATION AVAILABLE TO THE DESIGNER.
2. THE PLANNING IS BASED ON THE DATA PROVIDED BY THE CLIENT AND THE INFORMATION AVAILABLE TO THE DESIGNER.
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20. THE PLANNING IS BASED ON THE DATA PROVIDED BY THE CLIENT AND THE INFORMATION AVAILABLE TO THE DESIGNER.

PLAN REFERENCES:

- 1. SITE PLAN
- 2. LANDSCAPE ARCHITECTURE
- 3. CIVIL ENGINEERING
- 4. ELECTRICAL ENGINEERING
- 5. MECHANICAL ENGINEERING
- 6. PLUMBING ENGINEERING
- 7. STRUCTURAL ENGINEERING
- 8. TRAFFIC ENGINEERING
- 9. ENVIRONMENTAL ENGINEERING
- 10. GEOTECHNICAL ENGINEERING
- 11. ARCHITECTURAL INTERIORS
- 12. ARCHITECTURAL EXTERIORS
- 13. ARCHITECTURAL FURNITURE
- 14. ARCHITECTURAL LIGHTING
- 15. ARCHITECTURAL SCHEDULES
- 16. ARCHITECTURAL SPECIFICATIONS
- 17. ARCHITECTURAL CONTRACTS
- 18. ARCHITECTURAL AGREEMENTS
- 19. ARCHITECTURAL ORDERS
- 20. ARCHITECTURAL NOTICES

LEGEND:

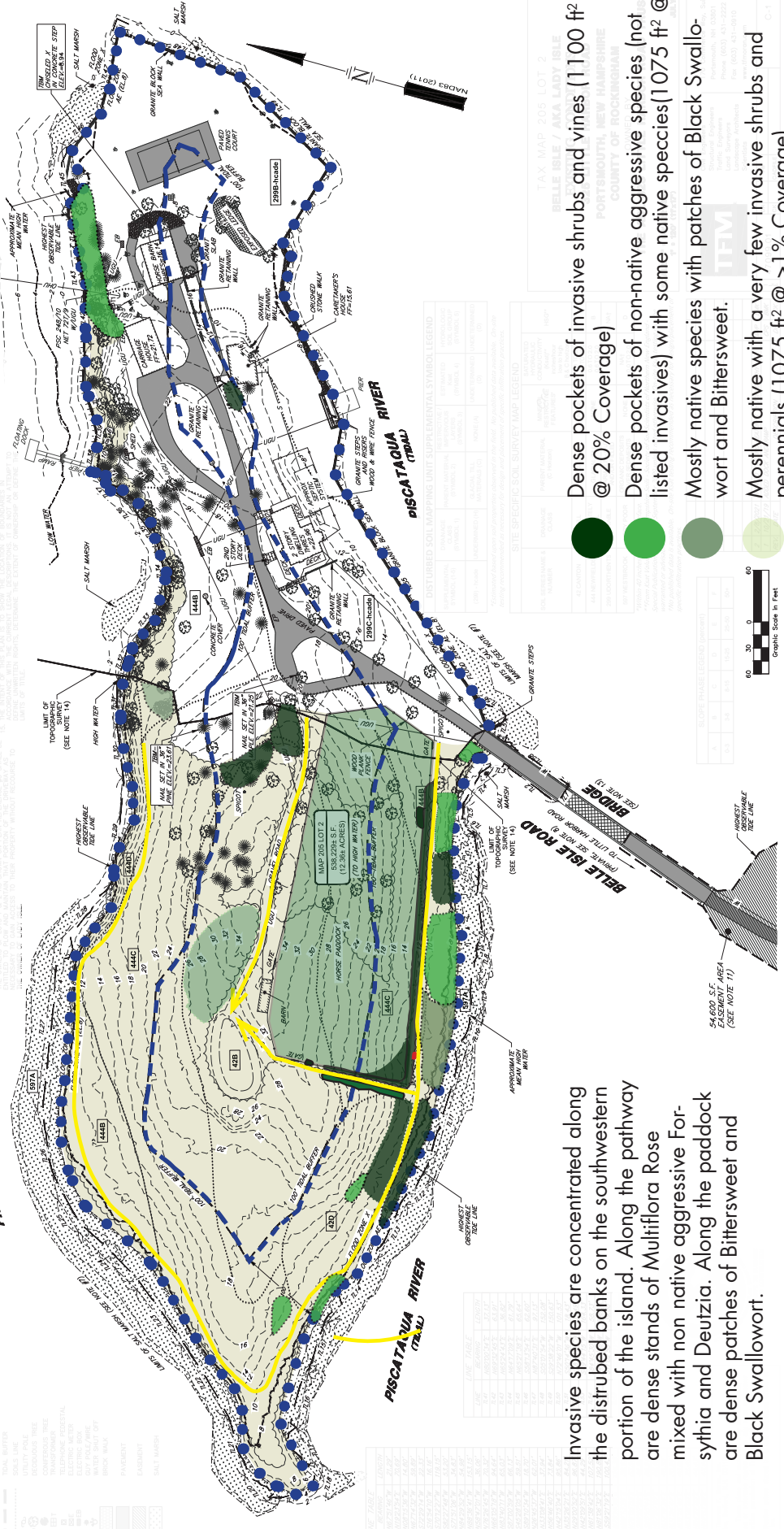
- 1. EXISTING
- 2. PROPOSED
- 3. TO BE DEMOLISHED
- 4. TO BE CONSERVED
- 5. TO BE RESTORED
- 6. TO BE REPLACED
- 7. TO BE MAINTAINED
- 8. TO BE MONITORED
- 9. TO BE RESEARCHED
- 10. TO BE EVALUATED
- 11. TO BE TESTED
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- 13. TO BE CONFIRMED
- 14. TO BE VALIDATED
- 15. TO BE AUTHORIZED
- 16. TO BE APPROVED
- 17. TO BE ACCEPTED
- 18. TO BE ENDORSED
- 19. TO BE RECOMMENDED
- 20. TO BE ADVISED

LEGEND:

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- 20. TO BE ADVISED



- Dense pockets of invasive shrubs and vines (1100 ft² @ 20% Coverage)
- Dense pockets of non-native aggressive species (not listed invasives) with some native species (1075 ft² @ 20% Coverage)
- Mostly native species with patches of Black Swallowwort and Bittersweet.
- Mostly native with a very few invasive shrubs and perennials (1075 ft² @ >1% Coverage)
- Japanese Knotweed (20 ft²)
- Wetland Buffer
- Highest Observable tide line
- Existing Pathways

Invasive species are concentrated along the disturbed banks on the southwestern portion of the island. Along the pathway are dense stands of Multiflora Rose mixed with non native aggressive Forsythia and Deutzia. Along the paddock are dense patches of Bittersweet and Black Swallowwort.



325 Little Harbor Road
Invasive Plant Images



Japanese Barberry with Deutzia and Black Swallowwort at the edge of the forest



Autumn Olive in the open paddock



Garlic Mustard seedheads with Mugwort on the northern bank



Japanese Barberry with viable fruits



A single small population of Japanese Knotweed on site should be managed as soon as possible



325 Little Harbor Road

Invasive management techniques

We propose a combination of manual hand removal and cut & dab herbicide to control invasive plant species within the identified project areas over a phased time line. Once the initial identified invasive plant species have been removed by manual methods (described below), we propose seeding all exposed soil with native seed blend and begin planting identified tree, shrub and perennial plant species selected from the native plant community list that will increase the density and diversity of the existing wetland buffers.

Manual Hand Removal Methods:

Manual methods of invasive plant management will include hand pulling or cutting. To minimize soil disturbance, shallow-rooted invasive plants less than 1" in caliper will be hand pulled from the soil. Invasive plant species greater than 1" in diameter will be cut. All invasive plant material will be disposed of off site. Manual hand pulling and cutting will remove all invasive plants from the wetland buffer.

Cut and Dab and Foam application: All invasive plant species that have a base greater than 1" in caliper are proposed for herbicide application methods. Although invasive, the root systems of plants greater than 1" in caliper usually have extensive fibrous root systems, providing soil stabilization. So we propose a cut & dab method of application of a Triclopyr based herbicide (Garlon) or Glyphosate based herbicide approved for wetland use (trade name Rodeo) on individual cut stumps. Licensed Pesticide Applicators will complete all aspects of the proposed restoration. For treatment of perennial species that cannot be controlled with cut and dab or by manual methods should be treated by a foam based herbicide that is wiped onto the leaves using a cotton glove. This hyper-specific treatment limits any treatment of non-target plants. No treatment will occur in areas of standing water.



Qualified applicators with necessary Personal Protective Equipment paint the stems of invasive species after cutting



Proposed cut stump treatment (below) using hand tools and applying marking dye to eliminate possibility of treatment of stump twice, or missing stump entirely. (Above) Foam treatment allows highly specific placement of herbicide to remove invasive perennials that limits disturbance and protects surrounding species



325 Little Harbor Road Asiatic Bittersweet ID and Management

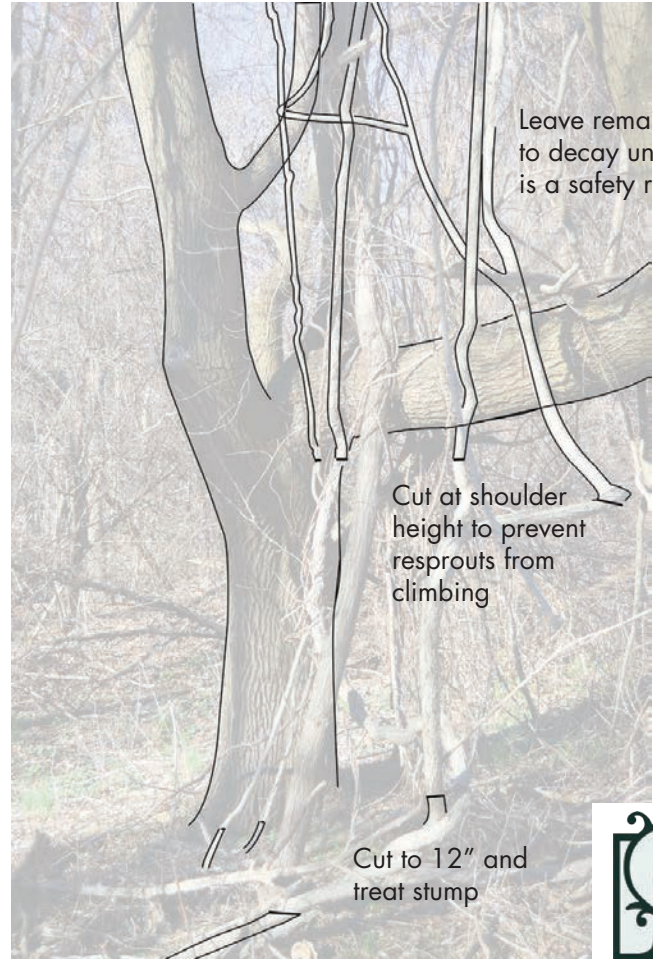
Invasive Bittersweet (*Celastrus orbiculatus*) have the capacity to girdle, weaken, and even kill mature canopy trees. Without some frequency of removal, they will eventually open large holes in the canopy while suppressing saplings from filling the holes. They readily resprout after being cut and can damage the aesthetic and ecological value of meadows.

Mature stems produce thousands of bright red berries that mature in late fall and are spread by birds.

Removing the entire vines from trees is often dangerous and unnecessary (unless it poses safety risk). Our team recommends making cuts at shoulder height followed by a cut at 12" and immediate herbicide treatment. Bittersweet aggressively suckers after cutting so it is important to cut and treat during or after its flowering period (late June to December).



Identification: Alternate, circular light green leaves 2-5 in. long. Distinctive, large light colored vine. Red berries with orange casing appearing in late fall. Seedlings have light green leaves. Deep orange roots.



Leave remainder to decay unless it is a safety risk

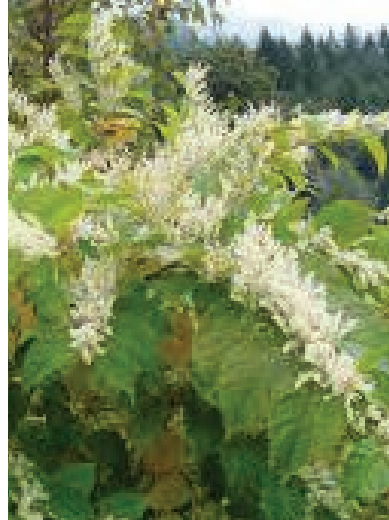
Cut at shoulder height to prevent resprouts from climbing

Cut to 12" and treat stump



325 Little Harbor Road Japanese Knotweed Management

Japanese Knotweed (*Fallopia japonica*) is one of the most difficult invasive species to control. Its main mode of spreading is through cut portions of its rhizomes or stem, which can actively resprout even when 1 inch in length. Growing 10-15' and shading out any competitors, Japanese Knotweed can quickly form a monoculture. It can take 2-5 seasons to fully contain through repeat herbicide treatments. It is at its weakest point during the flowering stage, when nutrients are flowing back into the roots (Aug, Sept.) Unfortunately, taproots can extend over 6' below the ground making organic eradication nearly impossible without excavation. There are two ways to approach treatment.



Identification: Herbaceous perennial, with long heart shaped leaves. Young sprouts can be red, rhubarb in nature. Extensive roots can spread and colonize quickly and can reach 15 ft. at maturity.

1. Cut and treat: For smaller areas, involves cutting the stem between the 1st and 3rd node and adding a 66% solution of Aquaneat (glyphosate), generally 5 oz per treated stem. If density is less than 5 ft per plant treat every third stem. Do this for 2-5 seasons.
2. Cut in May, wipe leaves in fall or apply to stem in fall: In this case, dense stands of Knotweed are mown in end of May so when they regrow they are at hip height by August. They can then be easily wiped with a 6.0% Aquaneat (glyphosate) solution



Japanese Knotweed cut in preparation for a fall herbicide foliar wipe treatment (top left). Treatment of Japanese Knotweed stems using a cut and fill method (above). A combination of cut and fill in the first season and foliar wipe in the second has shown to be effective. Foliar wipe can be accomplished by applying herbicide to a glove and wiping leaves or by utilizing a foaming agent to help herbicide stick to the leaves (left). It is a highly specific treatment with little risk of drift.



Management Calendar for Treatment and Planting

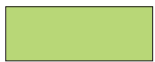
Task	March/ April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
<i>Remove Garlic Mustard and Lesser Celandine seedlings by hand or smothering</i>	Optimal	Optimal	Possible					Possible	Possible
<i>Cutting of Japanese Knotweed</i>	Optimal	Optimal	Possible	Possible	Possible	Possible	Possible	Not optimal	Not optimal
<i>Cut and dab of woody invasive species</i>	Possible	Possible	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
<i>Treatment of Japanese Knotweed</i>					Optimal	Optimal	Possible		
<i>Invasive vine management and cut and dab treatment</i>	Possible	Possible	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
<i>Restoration planting</i>	Optimal	Optimal	Not optimal		Possible	Optimal	Optimal	Possible	
<i>Treatment of Black Swallowwort</i>			Optimal	Optimal	Optimal	Optimal			
<i>Mowing of meadows</i>	Optimal							Optimal	Optimal



Optimal timing and efficiency



Not optimal but mostly effective



Possible, but not ideal



325 Little Harbor Road Native Plant Inventory

Within the tidal river buffer is a diverse native plant community dominated by mature Oaks and White Pines with Chokeberry, Black Cherry, Arrowwood Viburnum, and lowbush Blueberry in the understory. In the sunnier areas is a wet meadow featuring Rough Goldenrod, Alleghaney Blackberry, Sumac, Common Rush and Elderberry. An occupied Belted Kingfisher nest was found during the site visits. We propose utilizing these existing native plant species as indicators of what naturally inhabits this plant community and propose additional planting of these species and diversifying with other native trees, shrubs and perennials.

Native Plant Species Identified:

Acer rubrum, Red Maple
Acer sacharinum, Sugar Maple
Aronia melanocarpa, Black Chokeberry
Betula populifolia, Gray Birch
Betula papyrifera, Paper Birch
Iva frutescens, Bigleaf Marsh-elder
Juncus tenuis, Path Rush
Juniperus virginiana, Eastern Red Cedar
Kalmia latifolia, Mountain Laurel
Myrica pensylvanica, Bayberry
Parthenocissus quinquefolia, Virginia Creeper
Pinus strobus, Eastern White Pine
Prunus serotina, Black Cherry
Prunus virginiana, Chokecherry

Toxicodendron radicans, Poison Ivy
Quercus alba, White Oak
Rosa virginiana, Virginia Rose
Rhus typhina, Staghorn Sumac
Rubus allegheniensis, Allegheny blackberry
Sambucus canadensis, Elderberry
Solidago bicolor, Silverrod
Solidago sempervirens, Sea-side Goldenrod
Solidago rugosa, Rough-leaved Goldenrod
Swida amonum, Silky Dogwood
Tilia americana, American Basswood
Vaccinium corymbosum, High-bush Blueberry
Viburnum dentatum, Arrowwood Viburnum



Silverrod alongside Blue-stem Goldenrod and Carex. sp



Gray Birch along the bank



325 Little Harbor Road
Invasive Plant Images

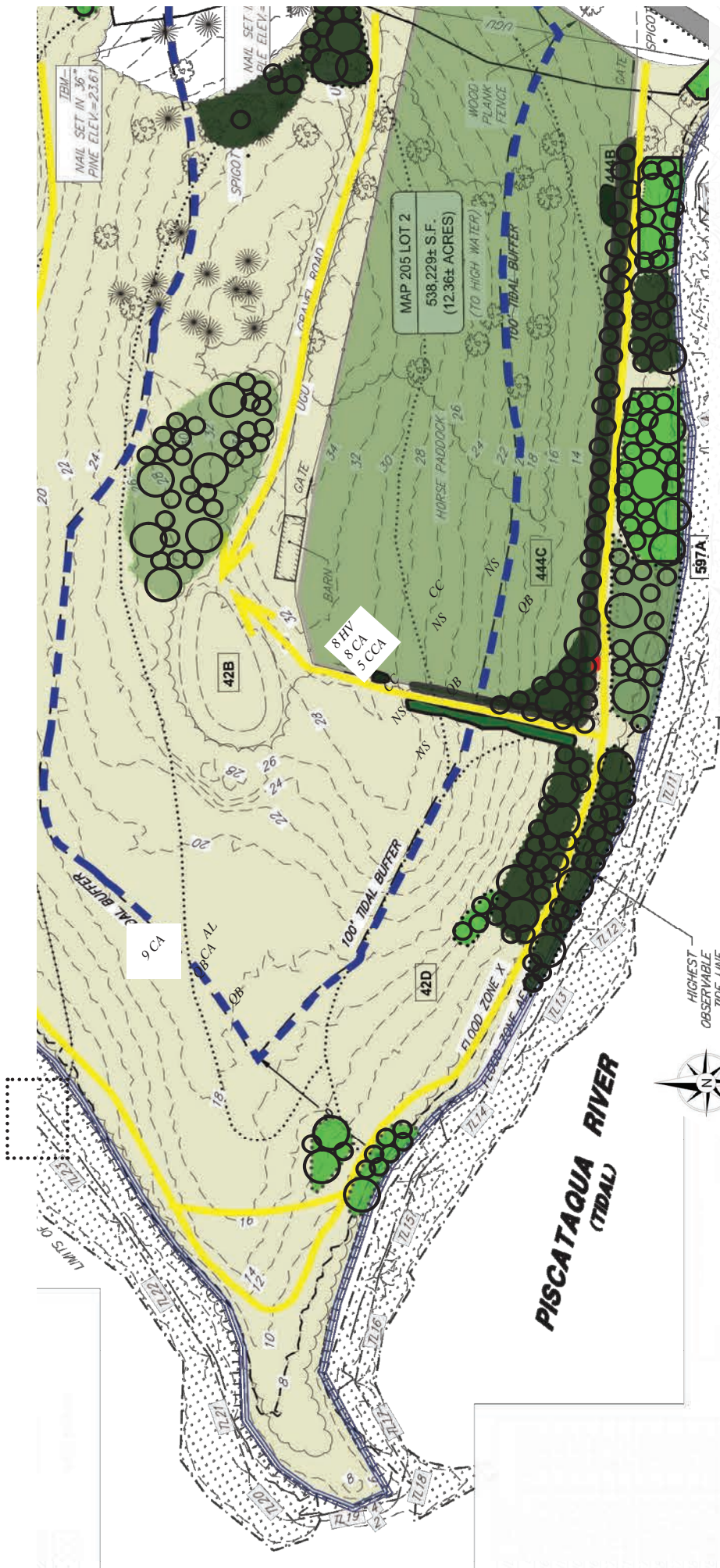


Staghorn Sumac along the banks with Arrowwood Viburnum and Virginia Rose in the foreground



Marsh Elder along with Beechgrass line the western banks of the island





API 1

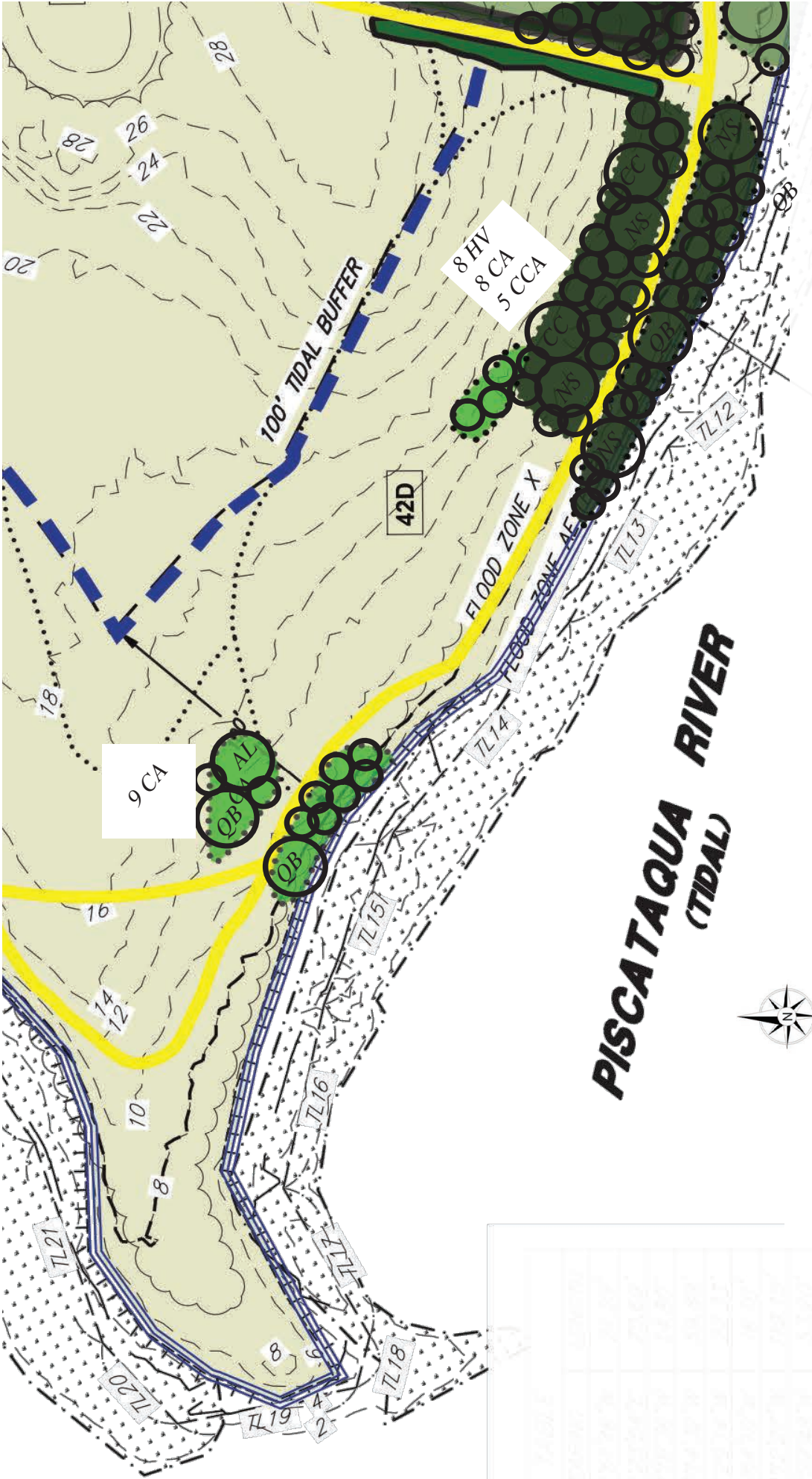
UNIT OF TOPOGRAPHIC SURVEY MAPS (SEE NOTE 1A)

- Wetland Buffer
- Highest Observable tide line
- Existing Pathways



HIGHEST OBSERVABLE TIDE LINE

**PISCATAQUA RIVER
(TIDAL)**

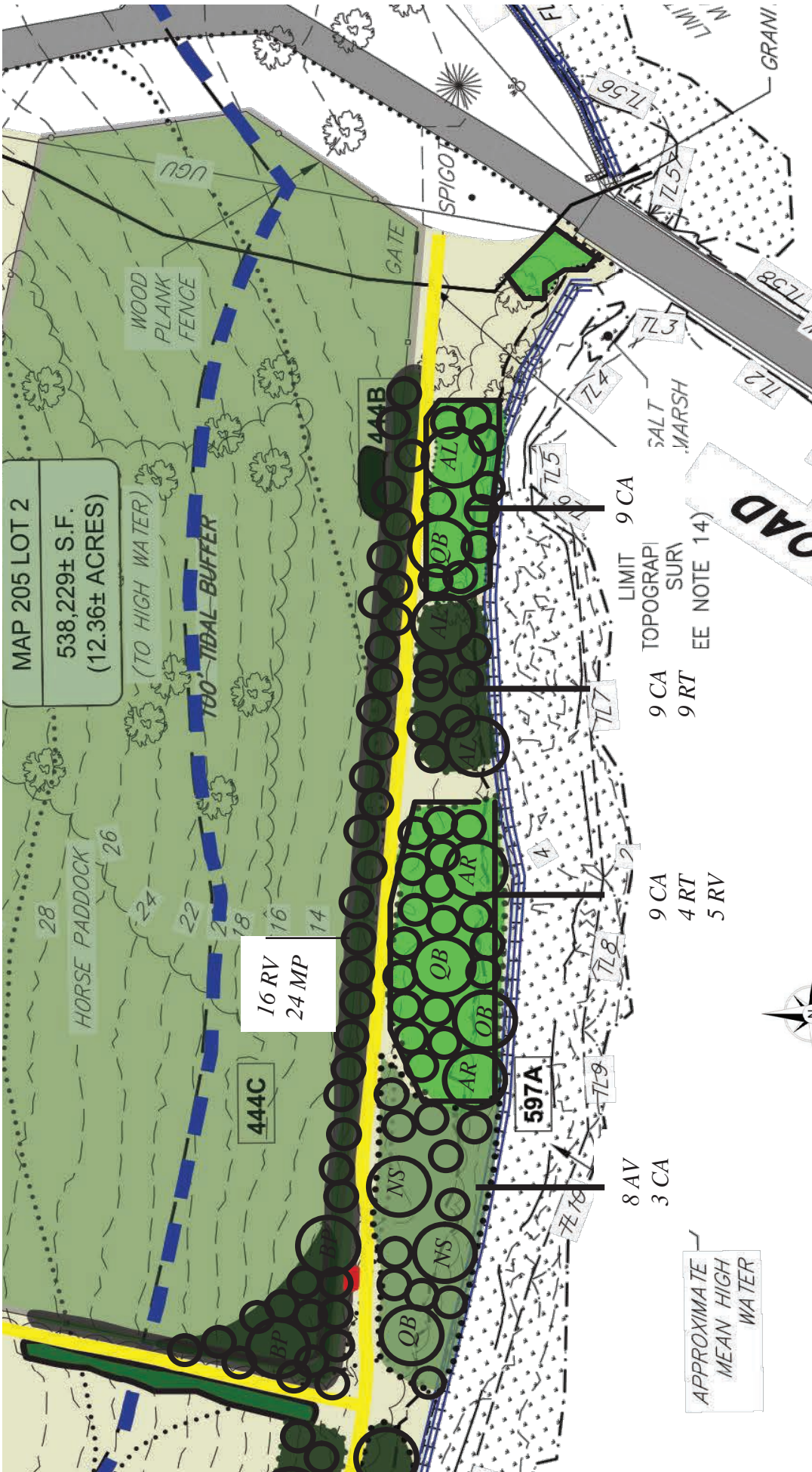


- Wetland Buffer
- ⋯ Highest Observable tide line
- Existing Pathways



Area	Wetland Buffer	Highest Observable tide line	Existing Pathways
TL12	Yes	Yes	Yes
TL13	Yes	Yes	Yes
TL14	Yes	Yes	Yes
TL15	Yes	Yes	Yes
TL16	Yes	Yes	Yes
TL17	Yes	Yes	Yes
TL18	Yes	Yes	Yes
TL19	Yes	Yes	Yes
TL20	Yes	Yes	Yes
TL21	Yes	Yes	Yes

Area	Wetland Buffer	Highest Observable tide line	Existing Pathways
TL12	Yes	Yes	Yes
TL13	Yes	Yes	Yes
TL14	Yes	Yes	Yes
TL15	Yes	Yes	Yes
TL16	Yes	Yes	Yes
TL17	Yes	Yes	Yes
TL18	Yes	Yes	Yes
TL19	Yes	Yes	Yes
TL20	Yes	Yes	Yes
TL21	Yes	Yes	Yes



MAP 205 LOT 2
538,229± S.F.
(12.36± ACRES)

WOOD
PLANK
FENCE

(TO HIGH WATER)

100' TIDAL BUFFER

HORSE PADDOCK

16 RV
24 MP

444C

444B

AL
OB
AL
OB

AR
QB
AR
QB

597A

8 AV
3 CA

9 CA
4 RT
5 RV

9 CA
9 RT

LIMIT 9 CA
TOPOGRAPI
SURI
EE NOTE 14)

SALT
MARSH

BLITZ FENCE ROAD



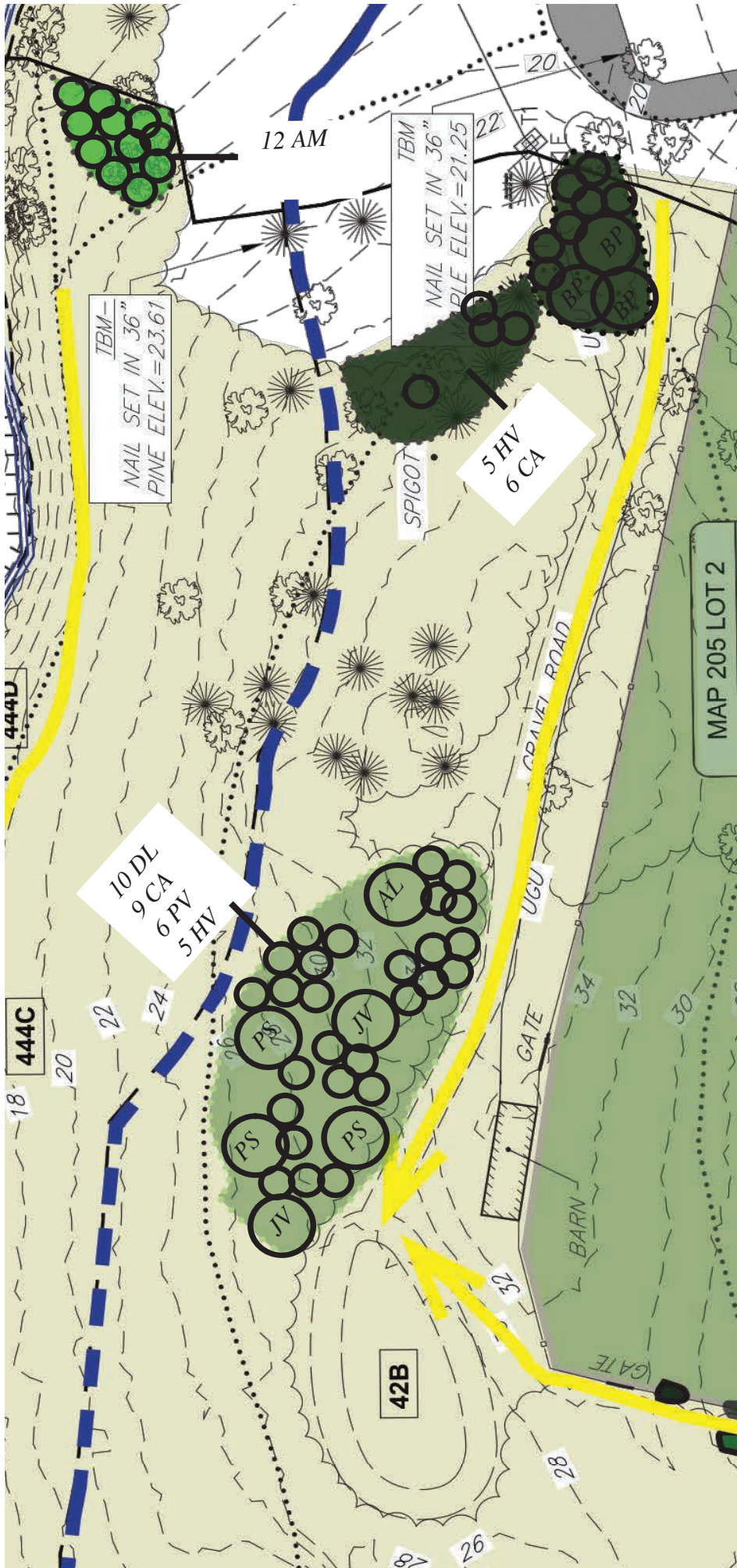
1" = 20'

APPROXIMATE
MEAN HIGH
WATER

- Wetland Buffer
- Highest Observable tide line
- Existing Pathways

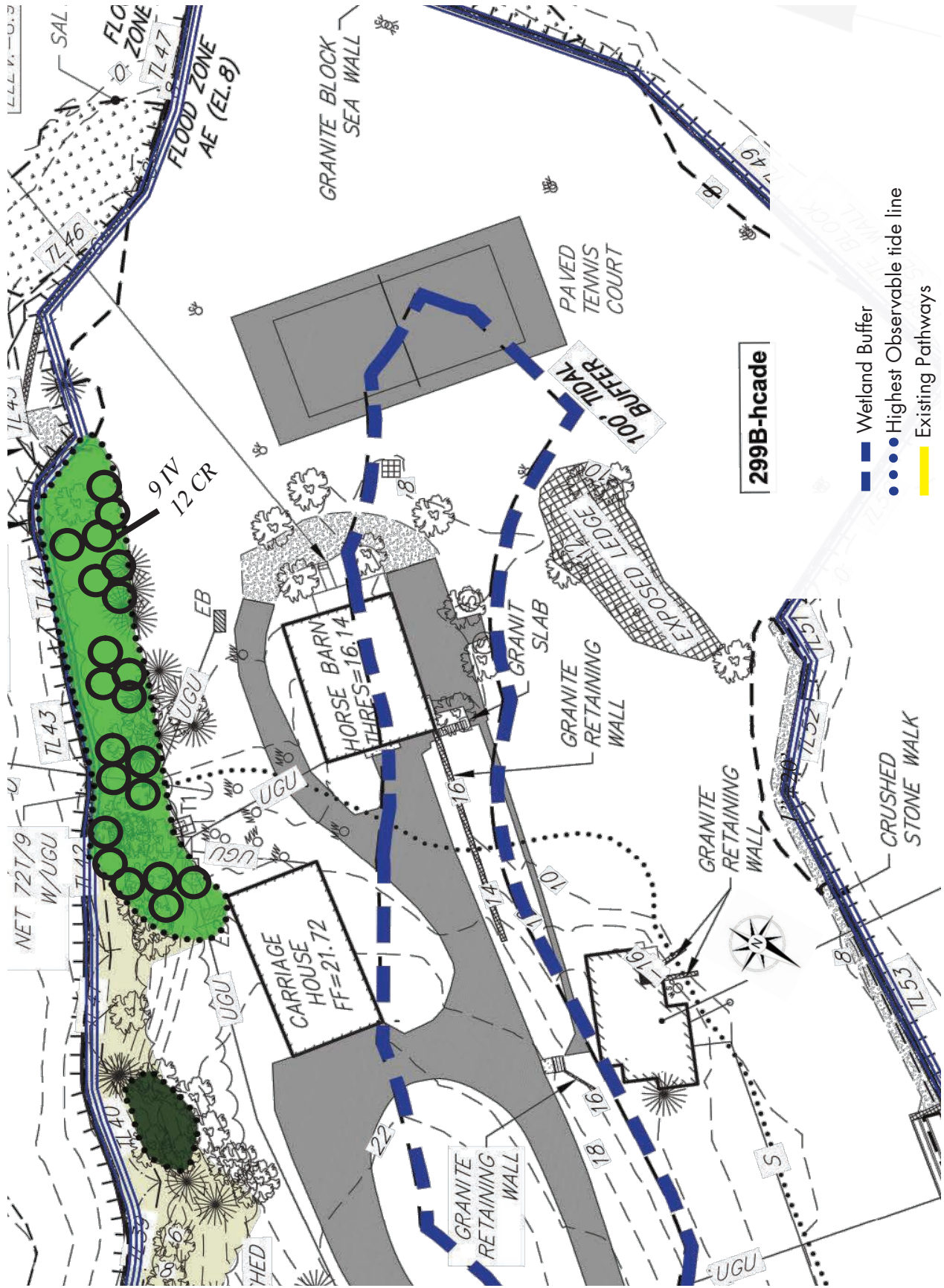
For the planting, we propose restoring a path through the meadow. In areas proposed for planting, we propose mowing and controlling existing vegetation to establish native perennials and add diverse native species with native shrubs and plants.





- Wetland Buffer
- Highest Observable tide line
- Existing Pathways





299B-hcade

- Wetland Buffer
- Highest Observable tide line
- Existing Pathways



325 Little Harbor Road Native Restoration Strategies

After invasive plant species have been removed from the wetland buffer, the area will be planted with one to five gallon native conservation grade New England native trees, shrubs and perennials from local seed and cutting sources. It is proposed that native plants will have greater than 90% coverage by the conclusion of the 3 year Order of Conditions. Native plants proposed for installation will add diversity of existing native plants, provide habitat and forage for wildlife, and reduce storm water and sediment flow wetland areas. Plants proposed for installation include:

	Quantity	Size	Scientific name	Common name
	4	3-4'	<i>Amelanchier laevis</i>	Shadblow Serviceberry
	2	3-4'	<i>Acer rubrum</i>	Red Maple
	12	3-4'	<i>Aronia melanocarpa</i>	Black Chokecherry
	5	3-4'	<i>Betula papyrifera</i>	Paper Birch
	2	3-4'	<i>Carpinus caroliniana</i>	Ironwood
Within 100'	44	3-4'	<i>Clethra alnifolia</i>	Summersweet
Tidal River	5	3-4'	<i>Cornus amomum</i>	Silky Dogwood
Buffer	12	3-4'	<i>Cornus racemosa</i>	Gray Dogwood
	10	3-4'	<i>Diervilla lonicera</i>	Northern Bush Honeysuckle
	18	3-4'	<i>Hamamelis virginiana</i>	Witchazel
	9	3-4'	<i>Ilex verticillata</i>	Winterberry
	2	3-4'	<i>Juniperus virginiana</i>	Eastern Red Cedar
	24	3-4'	<i>Myrica pennsylvatica</i>	Bayberry
	6	3-4'	<i>Nyssa sylvatica</i>	Black Tupelo
	6	3-4'	<i>Prunus virginiana</i>	Chokecherry
	3	3-4'	<i>Prunus serotina</i>	Black Cherry
	7	3-4'	<i>Quercus bicolor</i>	Swamp White Oak
	9	3-4'	<i>Rhus typhina</i>	Staghorn Sumac
	16	3-4'	<i>Rosa virginiana</i>	Virginia Rose

After planting the conservation grade native shrubs and trees and slope stabilizing perennials, we propose the area be seeded with a custom Dormant seed mix at recommended seeding rates. This dense seed mix will supply a matrix of vegetative growth to cover disturbed soils, and reduce recolonization of invasive plant species. These mixes include:

New England Showy New England Wildflower mix
New England Understory Grass and Forb Mix



325 Little Harbor Road Maintenance Schedule

The recommendations for restoration take into consideration the long term health of the wetland. Once the invasive plant species have been managed in a locus area and any native plants installed, a long-term maintenance plan will be set in motion with the goal of continued control of invasive plant species on site, serve, and sustain native plant populations, and improve the native plant diversity and aesthetic beauty of the wetland.

Fall - Winter 2021

- Complete invasive species management of Buckthorn and woody invasive plant species by cut and dab methods
- Identify and manually hand-pull identified invasive shrubs and vines under 1' in caliper
- Cover all disturbed soil along with native seed mix

Winter 2021-Spring 2022

- Continue utilizing control methods of invasive plant management to exhaust seed bank
- Begin planting native plant species according to approved quantities and varieties
- Monitor plant response and continue hand pulling and herbicide application methods on re sprouting invasive plant species
- Cover exposed soils Conservation seed mix

Summer 2022

- Cut and dab/Foam application to Japanese Knotweed and remaining invasive shrub and tree species
- Continue utilizing control methods of invasive plant management to exhaust seed bank
- Continue planting native plant species according to approved quantities and varieties

Fall 2022 - Summer 2023

- Monitor plant response and continue hand pulling and herbicide application methods on re sprouting invasive plant species
- Followup treatment of Japanese Knotweed (Mowing in spring, treating in fall)
- Cover exposed soils Conservation seed mix
- Monitor native species for plant health

Ongoing Maintenance and Monitoring:

- After the treatments of fall 2023, the management plan should be re-evaluated. If management treatments have been successful, only monitoring and minimal hand removal should be required to keep invasive plant species from being reintroduced. Native trees, shrubs, and herbaceous forbs should dominate the wetland buffer.
- Implementation of the LMP should be completed by qualified professionals including:
 - NH Licensed pesticide applicator
 - Certified Massachusetts/NH Invasive Species Management
 - MCH Massachusetts Certified Horticulturist
- Monitoring reports shall be submitted to conservation at the end of each growing season indicating invasive species management efforts and establishment of the restoration plantings.





Bittersweet

Description:

Celastrus orbiculatus, Asiatic Bittersweet is a deciduous climbing vine common in areas of disturbance in our New England forests. It has glossy, rounded leaves that are alternate with finely toothed margins. The leaves turn yellow in the fall. The fruiting plants produce small greenish flower clusters from leaf axils that mature in fall to produce high numbers of fruiting seed. The seed are noticeably yellow, globular capsules that split open at maturity to reveal red-orange fruiting seeds. Roots are also distinctly orange.



Habitat:

Bittersweet spreads easily into forest edges, woodlands, unmanaged meadows and old fields. Most disturbed sites that are not being actively managed that receive full sun are susceptible. The vine can tolerate shade but is often found in more open, sunny areas.



Management:

Asiatic Bittersweet management is a combination of manual hand pulling with cut & dab herbicide treatments. For established plants, vines should be cut to ground to reduce mass. Persistent root infestations will require repeat cutting and treatments over several seasons. Rake any seeds present, bagging in plastic bags, tying, and disposing of correctly.

Celastrus orbiculatus,
Asiatic Bittersweet





Honeysuckle

Description:

Lonicera morrowii, Morrow's honeysuckles are upright, deciduous shrubs that typically have a multi-stem mounding appearance. Oval leaves are opposite along the stem with smooth edges (no teeth or lobes) and hairy on the underside. Mature stems are often hollow on the interior and peeling on the outer bark. In the spring pairs of fragrant, tubular flowers less than an inch long are borne along the stem in the leaf axils. The fruits are red to orange, and fleshy .



Habitat:

Honeysuckles are relatively shade-intolerant and most often occur in forest edges, abandoned fields, and other open, upland habitats. Woodlands and open meadows, especially those that have been grazed or otherwise disturbed and are left unmanaged are also highly susceptible. Morrow's Honeysuckle have the greatest habitat diversity and are capable of invading wetland edges and other uncommon habitat types.



Management:

Morrow's Honeysuckle management is a combination of mechanical mowing and manual hand pulling with cut and dab herbicide treatments. When feasible, the root system is generally shallow and plants can be uprooted easily. Persistent root re-sprouting may require repeat cutting with herbicide application over several seasons to fully control.

Lonicera morrowii,
Morrow's Honeysuckle





Buckthorn

Description:

Frangula alnus, Glossy Buckthorn is a deciduous shrub that grows up to 20 ft. tall. The oblong leaves are up to 2" long, arranged alternately along the stem and are dark green on the surface, glossy above and slightly pubescent beneath. The leaves turn yellow in the fall, and remain on the plant when most other species have already lost their leaves. The yellow-green flowers are arranged in 1-8 flowered sessile, glabrous umbels. This plant flowers after the leaves expand, from May to September. The fruit ripen from red to black July to August.

Habitat:

Buckthorn thrives in early successional habitat. Abandoned agricultural or pasture lands, an opening in canopy within woodland, or unmanaged meadows are common areas. Buckthorn will also tolerate wetland soils where it can form dense stands that suppress the growth of native plant species. The seed is readily dispersed by birds, and the extended productivity of the fruit into winter allows the plant to be dispersed through the entire season.



Management:

Manual methods of hand-pulling seedlings is recommended. For larger saplings, a 'Weed Wrench' is effective. Mature Buckthorn can also be cut and the stump application of Triclopyr based herbicide. Rake any seeds present, bagging and disposing of correctly.

Frangula alnus,
Glossy buckthorn





Multiflora Rose

Description:

Rosa multiflora, Multiflora Rose is a shrub with arching canes with a mounding shape in the landscape. The leaves are divided into five to eleven sharply toothed leaflets. The base of each leaf stalk has a pair of fringed bracts which is a key identifier of the plant from other wild rose. Beginning in early summer, clusters of showy white flowers appear. The flowers are followed by developing red fruit, or hips, during the summer that remain on the plant through the winter.



Habitat:

Multiflora Rose thrives in early successional habitat. The rose has a wide tolerance for various soil, moisture, and light conditions. It occurs in dense woods, along river banks and roadsides and in open unmanaged fields. It can form a dense understory that suppresses growth of native plant species. The seed is readily dispersed by birds, and the extended productivity of the fruit into winter months allows wide spread distribution of the plant.



Management:

Manual methods of hand-pulling seedlings is effective. For more established shrubs, a combination of pruning to reduce mass followed by cut & dab treatments with a Triclopyr based herbicide is recommended. Persistent root infestations may require repeat cutting over several seasons. Rake any seeds present, bagging and disposing of correctly.

Rosa multiflora,
Multiflora rose



IDENTIFICATION AND QUALIFICATION OF APPLICANT

This plan has been developed by Miles H. Connors, Director of Ecological Services at Parterre Ecological, a division of Parterre Garden Services. Parterre Ecological Services provides Land Management Planning, expert Invasive Plant Management services, Native Plant Restoration strategies, and ongoing Maintenance and Monitoring in natural area restorations.

PLAN AUTHOR AND QUALIFICATIONS

Miles Hilton Connors
Director of Ecological Services
mconnors@parterreecological.com

Parterre Garden Services
67 Smith Place, unit 12A
Cambridge MA 12138

Miles holds an Bachelor of Science degree in Environmental Planning and Policy and Biology, with a Masters of Science in Sustainable Landscape Planning and Design. Miles is also a Massachusetts Certified Horticulturist, holds an Invasive Plant Certification from UMASS Amherst and is a Licensed Pesticide Applicator.

Members of the Parterre Ecological team are licensed Massachusetts Pesticide Applicators, are Massachusetts Certified Horticulturists and hold an Invasive Plant Certification from UMASS Amherst.



Precedent Images of a Restoration Project completed in 2020



1. Existing Conditions - Client under an enforcement order to restore buffer after tree & shrub removal and hydroseeding turf



2. After installation of sediment control, we mechanically mowed area and seeded with New England Conservation and Wildlife Seed Mix



3. Covered exposed loam with straw erosion control blanket: BioNet S75BN and staple into existing slope



4. Layout native plant species suitable for an Oak Hickory Forest plant community



5. Native plant species installed: *Quercus rubra*, *Kalmia latifolia*, *Ostrya virginiana*, *Corylus americana*, *Betula lenta*, *Fagus grandiflora* and *Viburnum acerfolium*



GENERAL INFORMATION

OWNER/APPLICANT

MAP 205 LOT 2
ADL 325 LITTLE HARBOR ROAD TRUST
C/O STEPHEN H ROBERTS, ESQ
TRUSTEE
127 PARROT AVENUE
PORTSMOUTH, NH 03801

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PORTSMOUTH, NH 03801
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BEVERLY ZENDT,
PLANNING DIRECTOR

BUILDING DEPARTMENT
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PORTSMOUTH, NH 03801
603-610-7261
ROBERT MARSILIA,
CHIEF BUILDING INSPECTOR

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PETER RICE,
DIRECTOR OF PUBLIC WORKS

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603-232-8739
TRACY TARR, ASSOCIATE PRINCIPAL

LADY ISLE SITE RENOVATIONS

325 LITTLE HARBOR ROAD
PORTSMOUTH, NEW HAMPSHIRE

SEPTEMBER 29, 2021
REVISED FEBRUARY 18, 2022



NEW HAMPSHIRE FISH AND GAME AOT PERMIT CONDITIONS RELATED TO THREATENED AND ENDANGERED SPECIES

- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: NHB21-3751, LADY ISLE SITE RENOVATIONS. WILDLIFE SPECIES OBSERVATION. PHOTOGRAPHS SHALL BE PROVIDED FOR VERIFICATION AS FEASIBLE; AND
- THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.
- ALL MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS, UTILIZED FOR, BUT NOT LIMITED TO SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, AND INLET PROTECTION, CHECK DAMS, SEDIMENT TRAPS, AND SILT FENCE INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.04, SHALL NOT CONTAIN WELDED PLASTIC, PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH.
- PRIOR TO CONSTRUCTION, MARSH ELDER SHALL BE IDENTIFIED, FLAGGED, AND SURROUNDED WITH ORANGE CONSTRUCTION FENCING WITH YELLOW CAUTION TAPE FOR PROTECTION OF THE SPECIES. DO NOT REMOVE, MOW, TRAMPLE, COVER, OR OTHERWISE HARM THE PLANT. REMOVE FLAGS AND CONSTRUCTION FENCING AND CAUTION TAPE AFTER CONSTRUCTION IS COMPLETED.



MARSH ELDER

NOTES

- SHRUBBY PERENNIAL HERB 2 TO 4 FT TALL, WITH THICKISH, OPPOSITE LEAVES AND SMALL GREENISH-WHITE CAPITULA, EACH WITH 5-6 MINUTE TUBULAR-SHAPED FLOWERS
- EACH CLUMP CONSISTS OF FROM 10 TO 100 OR MORE STEMS FROM A SINGLE WOODY BASE
- OCCURS NEAR THE HIGH TIDE LINE IN A FEW SMALL, SCATTERED POPULATIONS.

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INDEX OF SHEETS

SHEET	SHEET TITLE
C-00	COVER
C-01	NOTES & LEGEND
S-01	EXISTING CONDITIONS PLAN
C-02	NHDES AMENDED SHORELANDS PERMIT IMPACT PLAN
C-03	NHDES AMENDED WETLANDS PERMIT IMPACT PLAN
C-04	WETLAND CONDITIONAL USE PERMIT PLAN
C-05	OVERLAY PLAN
C-06 TO C-07	SITE PREPARATION & DEMOLITION PLAN
C-08 TO C-09	SITE LAYOUT PLAN
C-10	GRADING & DRAINAGE PLAN
C-11 TO C-12	UTILITY PLAN
C-13 TO C-14	DRIVEWAY GRADING & PROFILE
C-15 TO C-17	SEWER PROFILE
C-18	EROSION CONTROL PLAN
C-19	EROSION CONTROL NOTES
C-20 TO C-26	DETAILS

REFERENCE PLANS BY ASSOCIATED PROFESSIONALS

-	FLOOR & EXTERIOR ELEVATIONS PLANS BY G.P. SCHAFER
L1.0 TO L1.4	LANDSCAPE ARCHITECTURE PLANS BY MCLD

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
PORTSMOUTH PLANNING BOARD & CONSERVATION COMMISSION WETLAND CUP	-	-	-
PORTSMOUTH PLANNING BOARD CUP FOR DADU	LU-21-220	1/27/2022	1/27/2023
NH FISH & GAME	-	-	-
NHDES WETLANDS & PERMIT AMENDMENT	2014-02662	2/15/2018	2/15/2023
NHDES SHORELAND & PERMIT AMENDMENT	2017-02665	2/26/2018	2/26/2023
NHDES ALTERATION OF TERRAIN	-	-	-
NHDES SEWER	-	-	-
EPA NPDES ENOI CGP & SWPPP	-	-	-

APPROVED BY THE CITY OF PORTSMOUTH PLANNING BOARD

ON _____
BOARD MEMBER _____ AND
BOARD MEMBER _____

SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
COVER
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS

SEPTEMBER 29, 2021



REV	DATE	DESCRIPTION	DR	CK
4	2/18/2022	REVISED PER NHDES & UTILITIES	HEG	JCC
3	2/15/2022	REVISED PER NHDES & UTILITIES PER TAC	HEG	JCC
2	2/2/2022	REVISED PER NHDES & UPDATE SURVEY/UTILITIES	HEG	JCC
1	11/23/2021	REVISED PER NHDES & PROJECT COORDINATION	HEG	JCC

Seacoast Division		Civil Engineers		170 Commerce Way, Suite 102		
TFM	Structural Engineers	Portsmouth, NH 03801		Phone (603) 431-2222		
	Traffic Engineers	Fax (603) 431-0910		www.tfmoran.com		
	Land Surveyors					
	Landscape Architects					
Scientists						
FILE NO.	47099.01	DR	HEG	FB	-	
		CK	JCC	CADFILE	47099-01_COVER_MAIN	
					C-00	

LEGEND

Table with 2 columns: PROPOSED (line styles) and descriptions (PROPERTY LINE, ZONING LINE, EASEMENT, etc.).

Table with 2 columns: PROPOSED (symbols) and descriptions (CONCRETE, GRAVEL, HEAVY DUTY PAVEMENT, etc.).

GENERAL NOTES

- 1. THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN DETAILED FOR CONSTRUCTION OR BIDDING.
2. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER...
3. THE SITE LAYOUT PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.

GENERAL NOTES (CONTINUED)

- 19. CONTRACTOR'S GENERAL RESPONSIBILITIES (CONTINUED):
O. THIS PROJECT IS SUBJECT TO THE AOT PERMIT LISTED ON THE COVER SHEET. THE CONTRACTOR SHALL CONFORM TO ALL CONDITIONS OF THE PERMIT AND PROVIDE THE FOLLOWING DOCUMENTATION TO OWNER AND ENGINEER:
1) ADVANCE WRITTEN NOTICE AT LEAST ONE WEEK PRIOR TO COMMENCING ANY WORK UNDER THE PERMIT.

GRADING & DRAINAGE NOTES

- 1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.

UTILITY NOTES

- 1. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
2. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

Feb 23, 2022 - 1:59pm F:\MSC Projects\47099-01 - Little Harbor Rd & Gosport Rd - DiLorenzo - 325 Little Harbor Rd\Design\PRODUCTION DRAWINGS\47099-01 - Notes-Legend_Main.dwg

ABBREVIATIONS table with 3 columns: GENERAL, UTILITIES, and other abbreviations (ABAN, AC, ADJ, etc.).

ABBREVIATIONS table with 3 columns: GENERAL, UTILITIES, and other abbreviations (NHFG, NTS, NWA, etc.).

ABBREVIATIONS table with 3 columns: GENERAL, UTILITIES, and other abbreviations (CA/TV, CB, CIP, etc.).

ABBREVIATIONS table with 3 columns: GENERAL, UTILITIES, and other abbreviations (K, L, M, N).

SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
NOTES & LEGEND
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS SEPTEMBER 29, 2021

Table with project details: Seacoast Division, CIVIL ENGINEERS, 170 Commerce Way, Suite 102, Portsmouth, NH 03801.



Table with 5 columns: REV, DATE, DESCRIPTION, DR, CK. Contains revision history.

NOTES

- SEE NOTES ON SHEET C-01.
- NO IMPACTS ARE PROPOSED TO NATURAL GROUND COVERS WITHIN THE WATERFRONT BUFFER. IMPACT ARE ONLY PROPOSED TO EXISTING GRANDFATHERED OPEN AREA.

LEGEND

- HIGHEST OBSERVABLE TIDE LINE (HOTL)
- 100' TIDAL WETLAND BUFFER BOUNDARY
- PROTECTED SHORELAND ZONE BEYOND TBZ
- TEMPORARY IMPACT AREA
- PERMANENT IMPACT AREA
- UNALTERED WOODLAND AREA
- PROPOSED WOODLAND AREA
- LIMIT OF IMPACTS
- PROPOSED TREE (OUTSIDE OF LANDSCAPED AREAS)
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- IMPERVIOUS SURFACE
- PERVIOUS PAVERS
- GRAVEL SURFACE

IMPERVIOUS AREA (PERMITTED)	
TOTAL EXISTING IMPERVIOUS AREA WITHIN 250' PROTECTED SHORELAND	45,095 SF (9.21%) ¹
TOTAL PROPOSED IMPERVIOUS AREA WITHIN 250' PROTECTED SHORELAND	32,884 SF (6.72%) ¹
TOTAL LOT AREA	489,466 SF
TOTAL LAND AREA WITHIN HOTL	496,469 SF

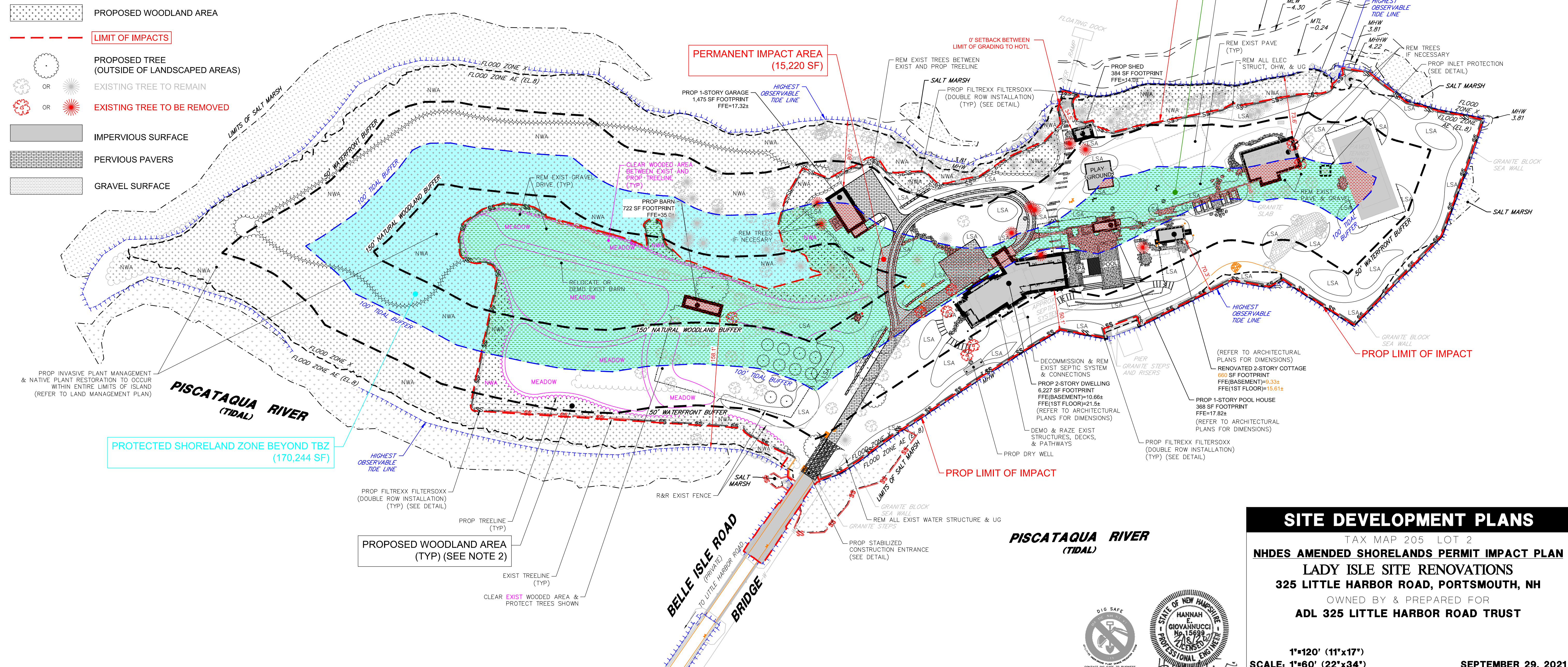
IMPERVIOUS AREA (AMENDED)	
TOTAL EXISTING IMPERVIOUS AREA WITHIN 250' PROTECTED SHORELAND BUFFER	51,371 SF (9.6%) ¹ (10.1%) ²
TOTAL PROPOSED IMPERVIOUS AREA WITHIN 250' PROTECTED SHORELAND BUFFER	34,700 SF (6.5%) ¹ (6.8%) ²
TOTAL LOT AREA	535,990 SF
TOTAL LAND AREA WITHIN HOTL	507,445 SF

NATURAL WOODLAND AREA	
TOTAL AREA OF LOT BETWEEN 50' AND 150' THAT EXISTS AS NATURAL WOODLAND	104,542 SF
TOTAL AREA OF LOT BETWEEN 50' AND 150' OF REFERENCE LINE	259,091 SF
25% X 259,091 SF =	64,773 SF
TOTAL AREA OF NATURAL WOODLAND TO REMAIN UNALTERED	95,173 SF

PROPOSED IMPACT AREA (PERMITTED)	
TOTAL PROPOSED PERMANENT IMPACT AREA WITHIN 100'-250' PROTECTED SHORELAND	40,710 SF
TOTAL PROPOSED TEMPORARY IMPACT AREA WITHIN 100'-250' PROTECTED SHORELAND	0 SF
TOTAL AREA WITHIN 100'-250' PROTECTED SHORELAND	157,507 SF

PROPOSED IMPACT AREA (AMENDED)	
TOTAL PROPOSED PERMANENT IMPACT AREA WITHIN 100'-250' PROTECTED SHORELAND	15,220 SF
TOTAL PROPOSED TEMPORARY IMPACT AREA WITHIN 100'-250' PROTECTED SHORELAND	97,145 SF
TOTAL AREA WITHIN 100'-250' PROTECTED SHORELAND	170,244 SF

- PERCENTAGE IS CALCULATED BASED ON TOTAL LOT AREA, AS IT WAS CALCULATED IN THE ORIGINAL 2018 PERMIT APPLICATION.
- PERCENTAGE IS CALCULATED BASED ON TOTAL LAND AREA WITHIN THE HOTL, AS REQUIRED PER NHDES.



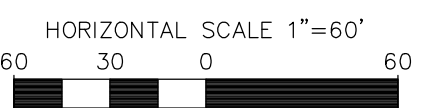
SITE DEVELOPMENT PLANS
 TAX MAP 205 LOT 2
NHDES AMENDED SHORELANDS PERMIT IMPACT PLAN
LADY ISLE SITE RENOVATIONS
 325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=120' (11"x17")
 SCALE: 1"=60' (22"x34")

SEPTEMBER 29, 2021



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47099.01 DR HEG FB
 CK JCC CADFILE 47099-01_NHDES-SHORE_MAIN C-02

Feb 23, 2022 - 2:21pm F:\MISC Projects\47099 - Little Harbor Rd - Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Rd\Design\PRODUCTION DRAWING\47099-01_NHDES-Shore_Main.dwg

NOTES

- SEE NOTES ON SHEET C-01.
- THE PROPOSED LIMIT OF IMPACT INCLUDES THE LIMIT OF GRADING AND OTHER AREAS WHICH WILL BE LANDSCAPED WITH MECHANIZED EQUIPMENT, PER THE LANDSCAPE ARCHITECTURE PLANS.

LEGEND

--- HIGHEST OBSERVABLE TIDE LINE (HOTL)
 --- 100' TIDAL WETLAND BUFFER BOUNDARY

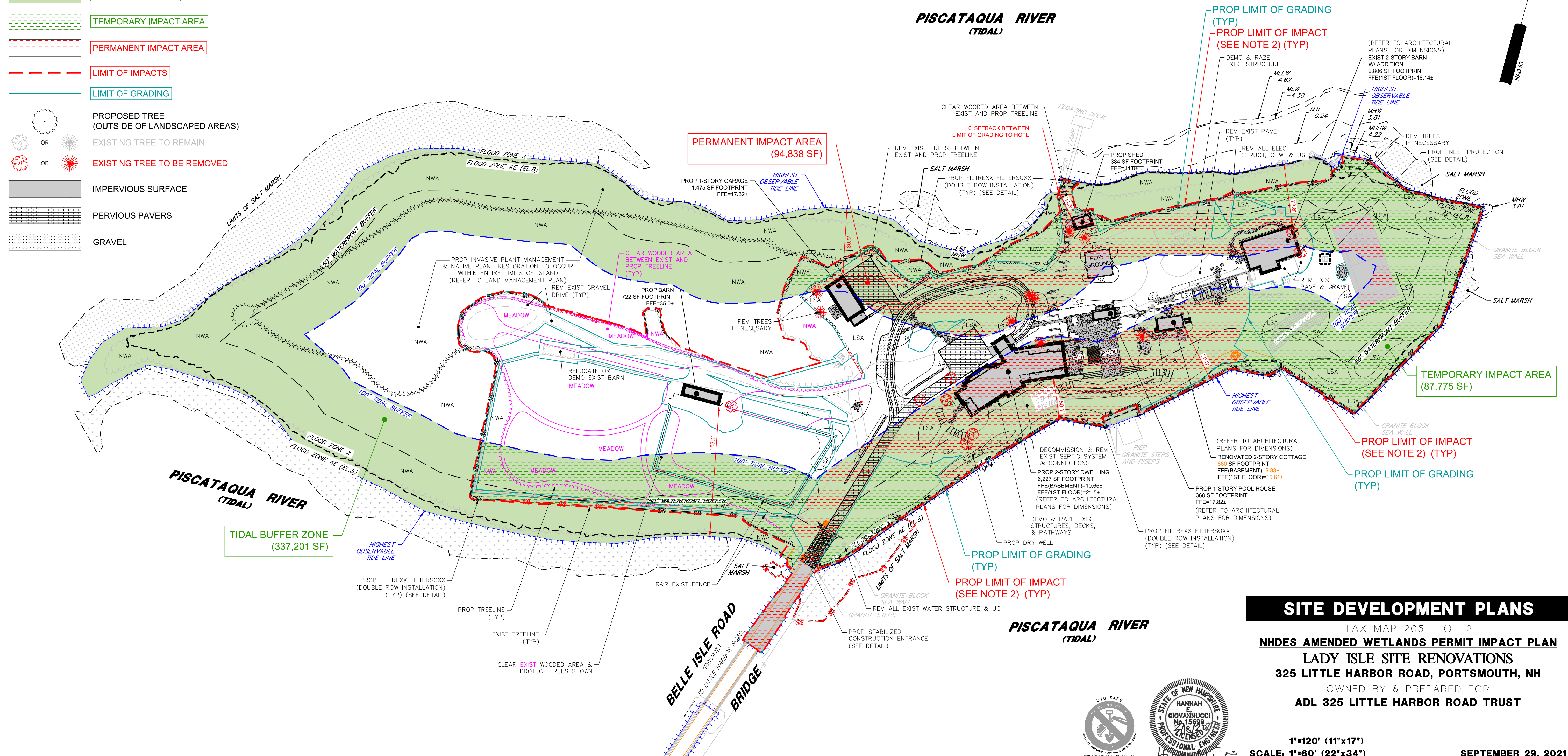
- TIDAL BUFFER ZONE
- TEMPORARY IMPACT AREA
- PERMANENT IMPACT AREA
- LIMIT OF IMPACTS
- LIMIT OF GRADING

- PROPOSED TREE (OUTSIDE OF LANDSCAPED AREAS)
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED

- IMPERVIOUS SURFACE
- PERVIOUS PAVERS
- GRAVEL

PROPOSED IMPACT AREA (PERMITTED)	
TOTAL PROPOSED PERMANENT IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE	149,508 SF
TOTAL PROPOSED TEMPORARY IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE	4,995 SF
TOTAL IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE	154,503 SF
MAXIMUM ALLOWED TOTAL IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE (154,503 SF)+(154,503 SF X 20%)	185,404 SF

PROPOSED IMPACT AREA (AMENDED)	
TOTAL PROPOSED PERMANENT IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE	94,838 SF
TOTAL PROPOSED TEMPORARY IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE	87,775 SF
TOTAL PROPOSED IMPACT AREA WITHIN 100' TIDAL BUFFER ZONE	182,613 SF



SITE DEVELOPMENT PLANS
 TAX MAP 205 LOT 2
NHDES AMENDED WETLANDS PERMIT IMPACT PLAN
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=120' (11"x17")
SCALE: 1"=60' (22"x34") **SEPTEMBER 29, 2021**



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Feb 23, 2022 - 2:26pm F:\MISC Projects\47099-01 - Portsmouth Rd & Gosport Rd - Little Harbor Rd - Little Harbor Rd Design\PRODUCTION DRAWINGS\47099-01_NHDES Wet_Main.dwg

HORIZONTAL SCALE 1"=60'
 60 30 0 60

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47099.01 DR HEG FB
 CK JCC CADFILE 47099-01_NHDES WET_MAIN C-03

NOTES

1. SEE NOTES ON SHEET C-01.

LEGEND

- HIGHEST OBSERVABLE TIDE LINE (HOTL)
- 100' TIDAL WETLAND BUFFER BOUNDARY
- TIDAL BUFFER ZONE
- IMPACT AREA
- TEMPORARY IMPACT AREA
- LIMIT OF IMPACTS
- IMPERVIOUS SURFACE
- PERVIOUS PAVERS
- GRAVEL SURFACE

PROPOSED IMPERVIOUS AREA (LADY ISLE ONLY)		
	TIDAL WETLAND BUFFER ZONE	TOTAL ISLAND AREA*
TOTAL IMPERVIOUS AREA	27,123 SF (8.0%)	51,371 SF (10.2%)
TOTAL PERMEABLE AREA	754 SF (0.3%)	754 SF (0.1%)
PROPOSED VEGETATED AREA (LADY ISLE ONLY)		
TOTAL GRASS/LANDSCAPE AREA	176,413 SF (52.3%)	245,920 SF (48.4%)
TOTAL NATURAL WOODLAND AREA	132,911 SF (39.4%)	209,400 SF (41.3%)
TOTAL AREA (LADY ISLE ONLY)		
TOTAL	337,201 SF	507,445 SF

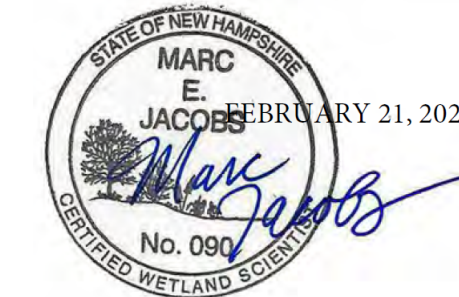
*TOTAL ISLAND AREA INCLUDES THE TOTAL LAND UPON LADY ISLE WITHIN HIGHEST OBSERVABLE TIDE LINE (HOTL), INCLUDING THE ADJACENT BRIDGE APPROACH.

PROPOSED IMPERVIOUS AREA (LADY ISLE ONLY)		
	TIDAL WETLAND BUFFER ZONE	TOTAL ISLAND AREA*
TOTAL IMPERVIOUS AREA	25,217 SF (7.5%)	34,700 SF (6.8%)
TOTAL PERMEABLE AREA	8,144 SF (2.4%)	13,224 SF (2.6%)
PROPOSED VEGETATED AREA (LADY ISLE ONLY)		
TOTAL GRASS AREA	118,339 SF (35.1%)	156,880 SF (30.9%)
TOTAL LANDSCAPE/MEADOW AREA	48,191 SF (14.3%)	97,785 SF (19.3%)
TOTAL NATURAL WOODLAND AREA	137,310 SF (40.7%)	204,856 SF (40.4%)
TOTAL AREA (LADY ISLE ONLY)		
TOTAL	337,201 SF	507,445 SF

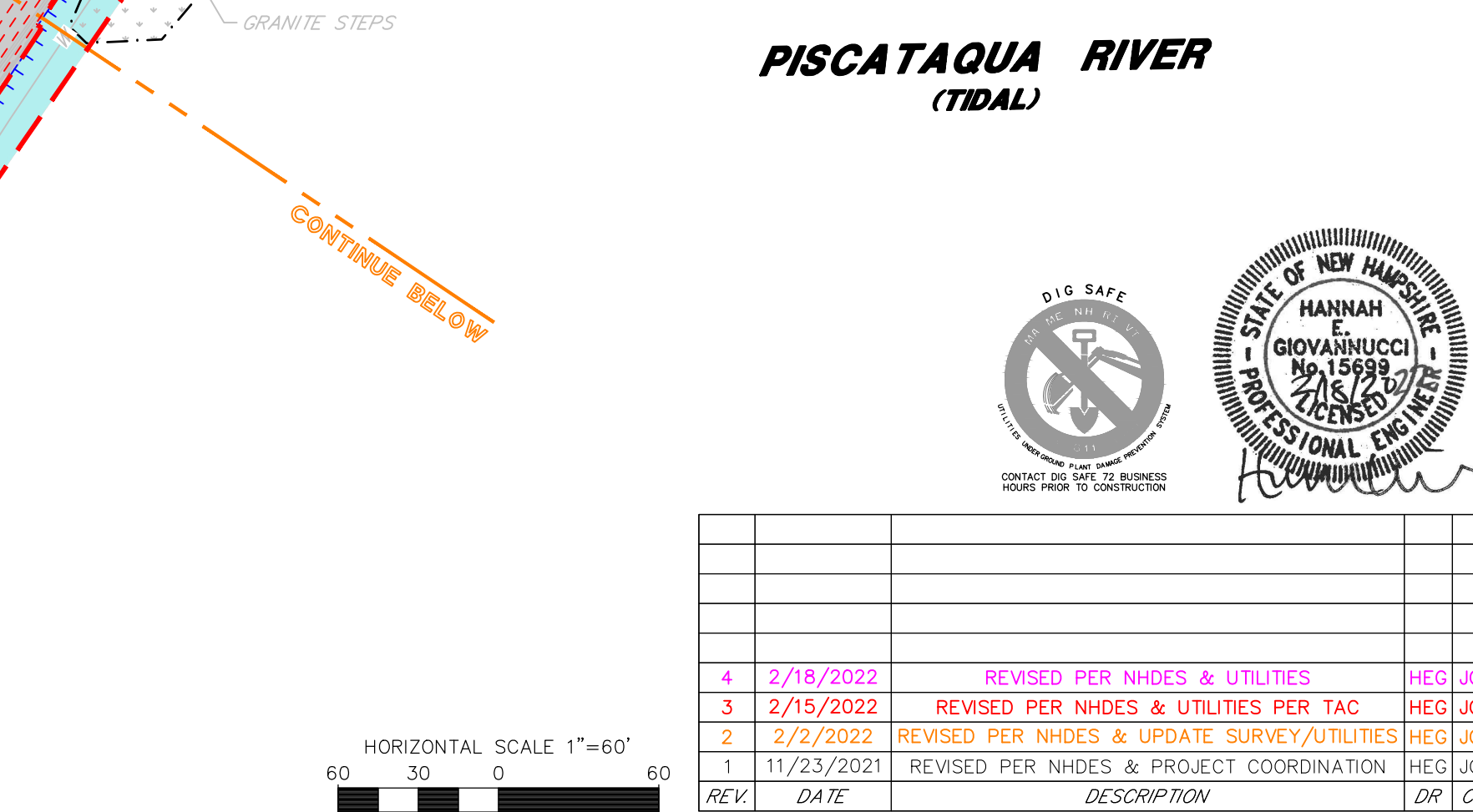
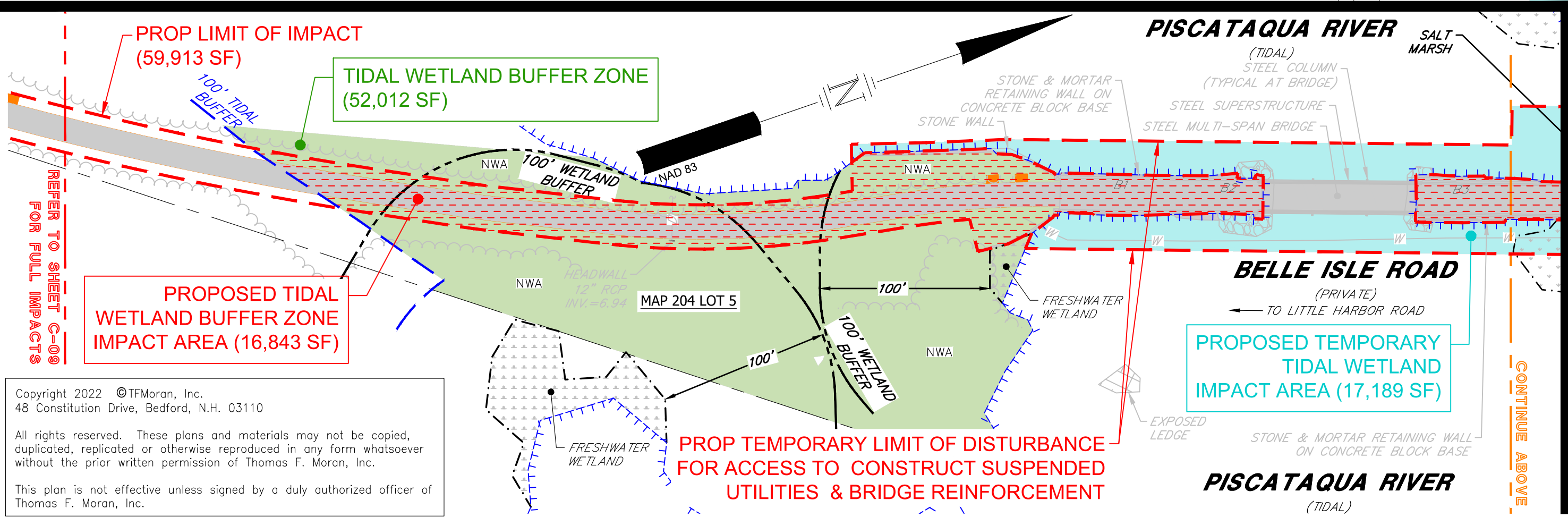
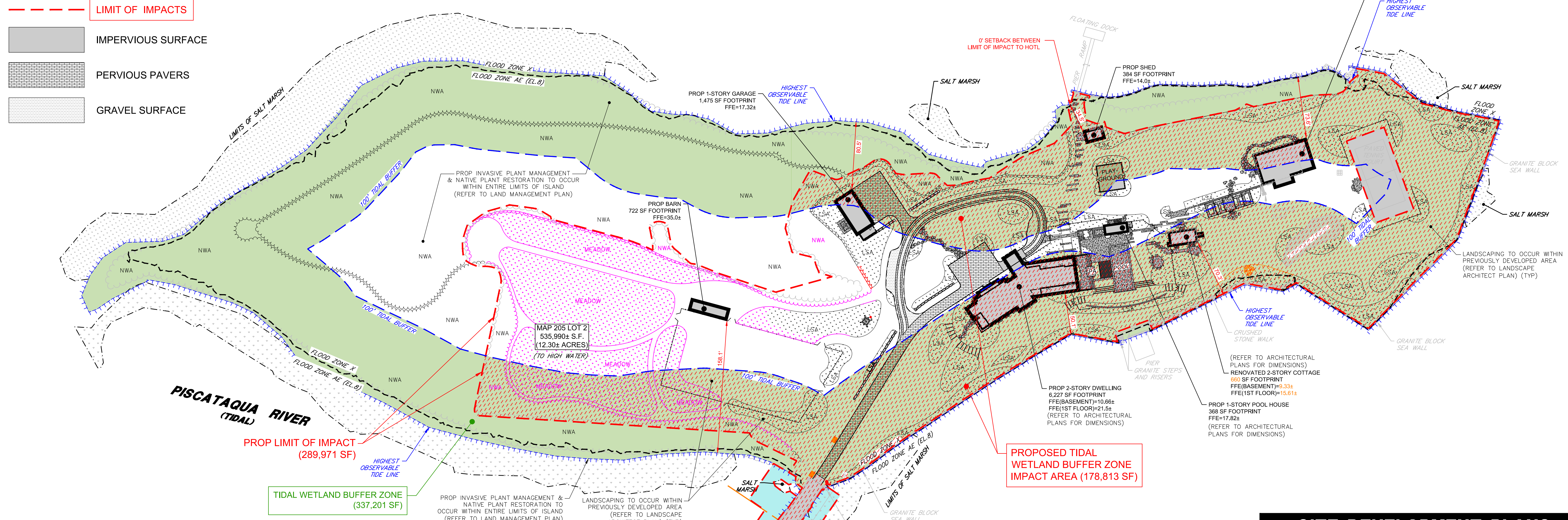
PROPOSED IMPACT AREA (ALL IMPROVEMENTS)			
	TIDAL WETLAND BUFFER ZONE	TOTAL LAND AREA	TIDAL WETLAND AREA
TOTAL LAND IMPACT AREA	195,656 SF	349,884 SF	
TOTAL WETLAND TEMPORARY IMPACT AREA			17,189 SF

WETLAND SCIENTIST NOTE

HIGHEST OBSERVABLE TIDE LINE (HOTL) AND SALT MARSH WERE DELINEATED BY MARC JACOBS, CERTIFIED WETLAND SCIENTIST 090, ON MAY 24, 2019. SALT MARSH WAS DELINEATED BASED UPON THE EXTENT OF ROOTED EMERGENT SALT-TOLERANT VEGETATION OBSERVED DURING LOW TIDE. HOTL WAS DELINEATED BASED UPON THE CODE OF ADMINISTRATIVE RULES, NH DEPARTMENT OF ENVIRONMENTAL SERVICES - WETLANDS BUREAU - ENV WT 100-900, ESPECIALLY ENV-WT 101.49. COPIES OF SITE PLANS WHICH DEPICT THE DELINEATION THAT HAVE BEEN REVIEWED BY THE WETLAND SCIENTIST ARE INDIVIDUALLY STAMPED, SIGNED AND DATED. THIS NOTE HAS BEEN CUSTOMIZED FOR THIS PROJECT.



PISCATAQUA RIVER (TIDAL)



SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
WETLAND CONDITIONAL USE PERMIT PLAN
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=120' (11"x17")
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SEPTEMBER 29, 2021

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47099.01 DR HEG FB
 CK JCC CADFILE 47099-01_WETLAND CUP

C-04

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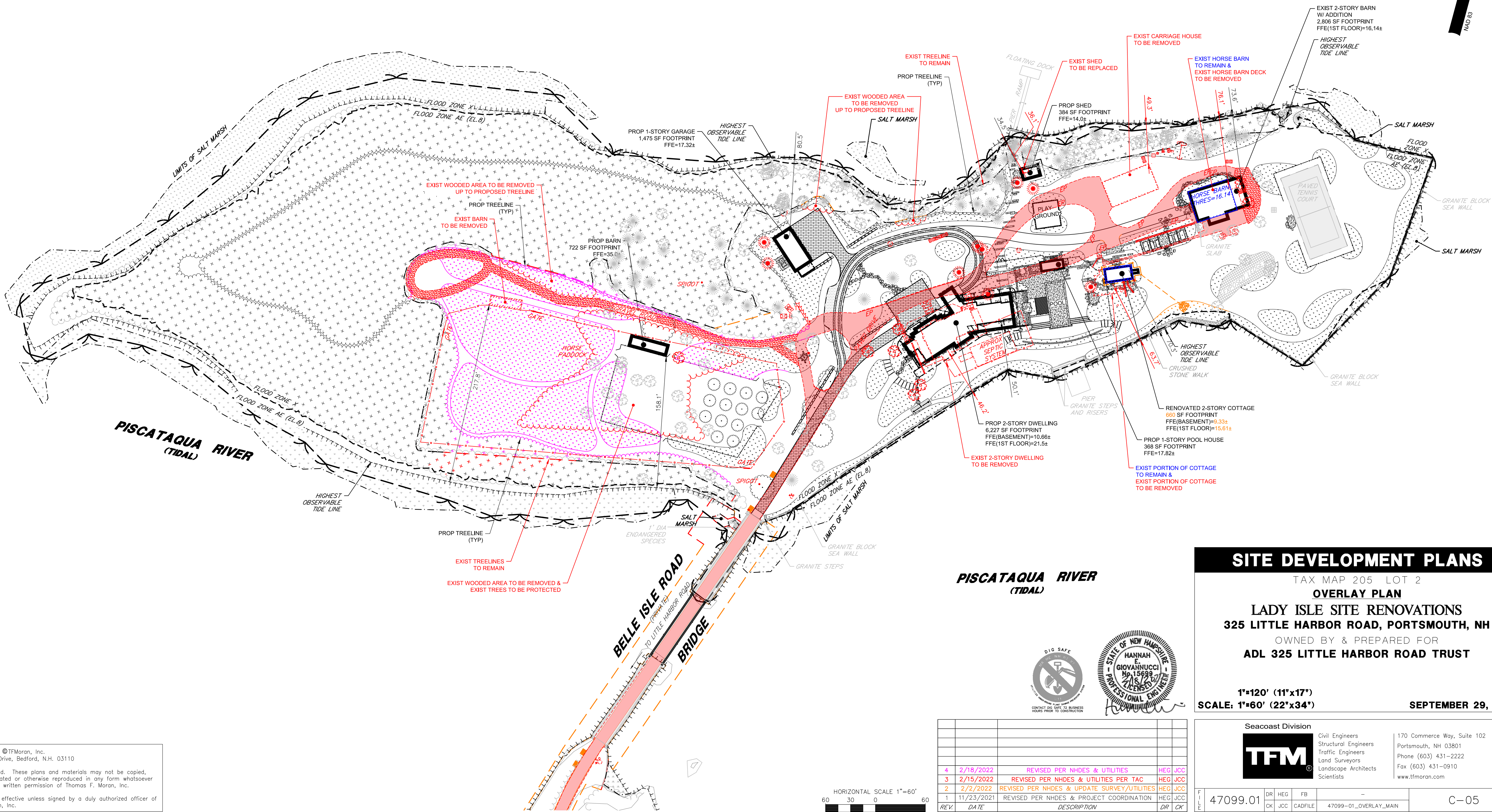
NOTES

1. SEE NOTES ON SHEET C-01.

LEGEND

- EXISTING FEATURES TO REMAIN
- EXISTING BUILDING TO REMAIN
- EXISTING FEATURES TO BE REMOVED
- PROPOSED FEATURES

PISCATAQUA RIVER (TIDAL)



PISCATAQUA RIVER (TIDAL)

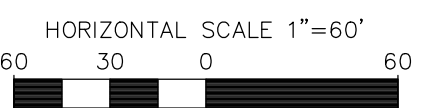
SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
OVERLAY PLAN
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
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 CK JCC CADFILE 47099-01_OVERLAY_MAIN C-05

Feb 23, 2022 - 2:04pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - Overlay_Main.dwg

CONSTRUCTION SEQUENCE NOTES

TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.

MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.

THE CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN 5 ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME.

THE PROJECT SHALL BE MANAGED SO THAT IT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARG 3800 RELATIVE TO INVASIVE SPECIES.

DO NOT TRAFFIC EXPOSED SOIL SURFACE OF INFILTRATION SYSTEMS WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO STORMWATER BMP'S. STORMWATER RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.

CONSTRUCTION SEQUENCE NOTES (CONTINUED)

DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

AFTER THE INFILTRATION SYSTEM IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE THE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.

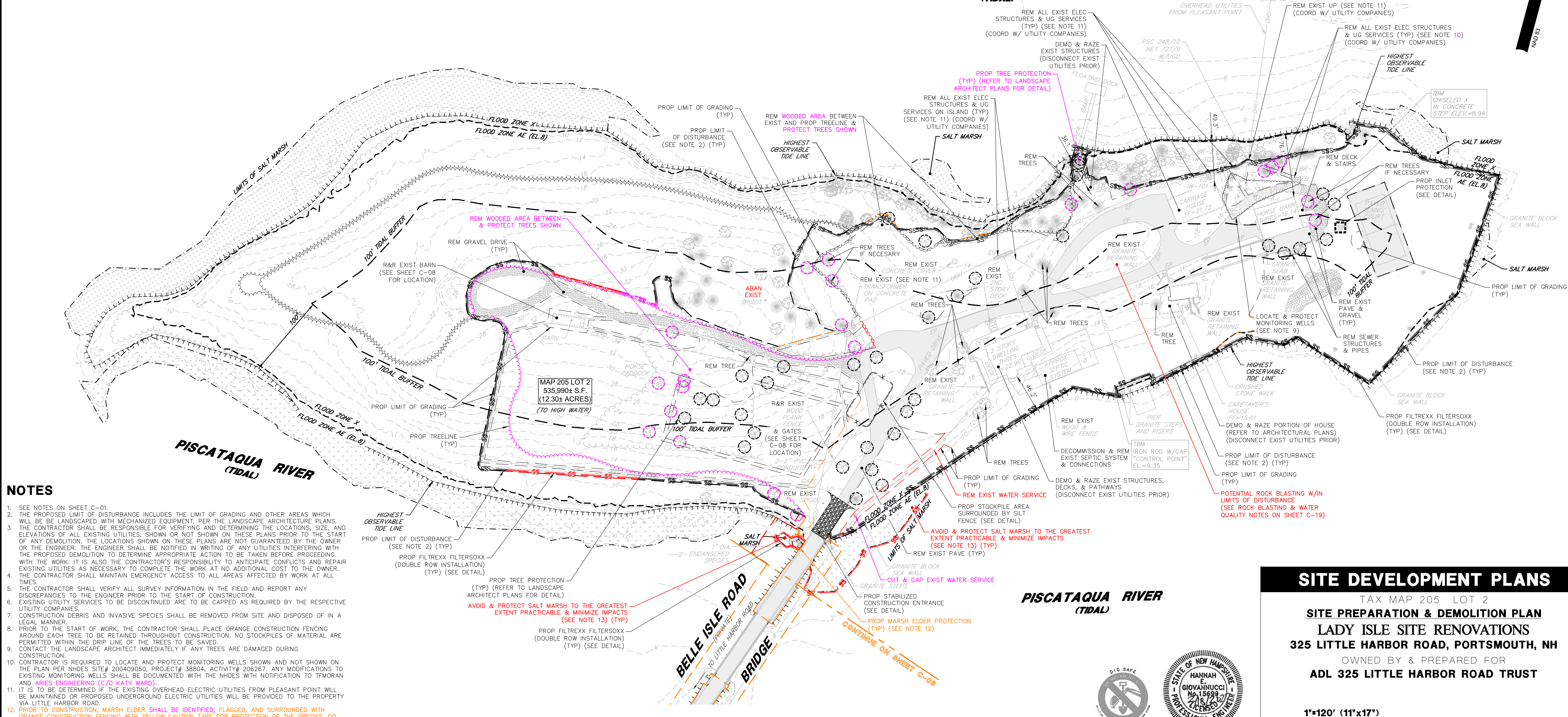
1. NOTIFY EASEMENT OWNERS PRIOR TO COMMENCEMENT OF WORK.
2. INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. STORMWATER TREATMENT PONDS AND SWALES SHALL BE INSTALLED BEFORE ROUGH GRADING OF THE SITE.
4. DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. (TEMPORARY SEED MIXTURE OF WINTER RYE APPLIED AT A RATE OF 2.5 LBS/1000 SF SHALL BE USED).
5. CONDUCT MAJOR EARTHWORK, INCLUDING CLEARING AND GRUBBING, WITHIN THE LIMITS OF WORK. ALL CUT AND FILL SLOPES SHALL BE SEED WITHIN 72 HOURS AFTER GRADING.
6. ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT BARRIER SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
7. CONSTRUCT BUILDING PAD AND COMMENCE NEW BUILDING CONSTRUCTION.
8. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.
9. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.

CONSTRUCTION SEQUENCE NOTES (CONTINUED)

10. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH.
11. PERFORM EARTHWORK NECESSARY TO ESTABLISH ROUGH GRADING AROUND PARKING FIELDS AND ACCESS DRIVES. MANAGE EXPOSED SOIL SURFACES TO AVOID TRANSPORTING SEDIMENTS INTO WETLANDS. PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. INSTALL SUBSURFACE UTILITIES (WATER, SEWER, GAS, ELECTRIC, COMMUNICATIONS, DRAINAGE, DRAINAGE FACILITIES, ETC.).
13. CONSTRUCT PROPOSED ROADWAY, RAIN GARDENS, GRAVEL WETLANDS AND DRAINAGE SWALES. ALL DITCHES, SWALES, AND GRAVEL WETLANDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
14. COMPLETE BUILDING AND ALL OFF-SITE IMPROVEMENTS.
15. COMPLETE SEEDING AND MULCHING. SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED, OR DRAGGED TO ASSURE SEED/SOIL CONTACT.
16. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
17. DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS, AND SUMPS, DRAIN PIPES AND DITCHES, CURB LINES, ALONG SILT BARRIERS, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
18. SEE WINTER CONSTRUCTION SEQUENCE FOR WORK CONDUCTED AFTER OCTOBER 15TH.

CONSTRUCTION SEQUENCE NOTES (FOR ALTERATION OF TERRAIN)

1. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO BMP'S DURING ANY STAGE OF CONSTRUCTION.
2. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
3. AFTER INFILTRATION SYSTEMS ARE EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
4. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED, IF NECESSARY, AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.



NOTES

1. SEE NOTES ON SHEET C-01.
2. THE PROPOSED LIMIT OF DISTURBANCE INCLUDES THE LIMIT OF GRADING AND OTHER AREAS WHICH WILL BE LANDSCAPED WITH MECHANIZED EQUIPMENT, PER THE LANDSCAPE ARCHITECTURE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATIONS, SIZE, AND ELEVATIONS OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY DEMOLITION. THE LOCATIONS SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED DEMOLITION TO DETERMINE APPROPRIATE ACTION TO BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
4. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
5. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
6. CONSTRUCTION DEBRIS AND INVASIVE SPECIES SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
7. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL PLACE ORANGE CONSTRUCTION FENCING AROUND EACH TREE TO BE RETAINED THROUGHOUT CONSTRUCTION. NO STOCKPILES OF MATERIAL ARE PERMITTED WITHIN THE DRIP LINE OF THE TREES TO BE SAVED.
8. CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY TREES ARE DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR IS REQUIRED TO LOCATE AND PROTECT MONITORING WELLS SHOWN AND NOT SHOWN ON THE PLAN PER NHDES SITE# 200409050, PROJECT# 38804, ACTIVITY# 206267. ANY MODIFICATIONS TO EXISTING MONITORING WELLS SHALL BE DOCUMENTED WITH THE NHDES WITH NOTIFICATION TO TFMORAN AND ARIES ENGINEERING (C/O KATY WARD).
10. IT IS TO BE DETERMINED IF THE EXISTING OVERHEAD ELECTRIC UTILITIES FROM PLEASANT POINT WILL BE MAINTAINED OR PROPOSED UNDERGROUND ELECTRIC UTILITIES WILL BE PROVIDED TO THE PROPERTY VIA LITTLE HARBOR ROAD.
11. PRIOR TO CONSTRUCTION, MARSH ELDER SHALL BE IDENTIFIED, FLAGGED, AND SURROUNDED WITH ORANGE CONSTRUCTION FENCING WITH YELLOW CAUTION TAPE FOR PROTECTION OF THE SPECIES. DO NOT REMOVE, MOW, TRAMPLE, COVER, OR OTHERWISE HARM THE PLANT. REMOVE FLAGS AND CONSTRUCTION FENCING AND CAUTION TAPE AFTER CONSTRUCTION IS COMPLETED.
12. TO THE GREATEST EXTENT PRACTICABLE, IMPACTS TO THE SALT MARSH SHALL BE MINIMIZED. EROSION CONTROLS SHALL BE INSTALLED, MONITORED, AND ADJUSTED AS REQUIRED THROUGHOUT THE DURATION OF THE PROJECT. UPON COMPLETION, DISTURBED AREAS SHALL BE REPLANTED WITH PLUGS OF SALT MARSH CORDGRASS (SPARTINA ALTERNIFLORA).

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SITE DEVELOPMENT PLANS
TAX MAP 205 LOT 2
SITE PREPARATION & DEMOLITION PLAN
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=120' (11"x17")
SCALE: 1"=60' (22"x34")

SEPTEMBER 29, 2021



REV	DATE	DESCRIPTION	DR	CK
4	2/18/2022	REVISED PER NHDES & UTILITIES	HEG	JCC
3	2/15/2022	REVISED PER NHDES & UTILITIES PER TAC	HEG	JCC
2	2/2/2022	REVISED PER NHDES & UPDATE SURVEY/UTILITIES	HEG	JCC
1	11/23/2021	REVISED PER NHDES & PROJECT COORDINATION	HEG	JCC

Seacoast Division

TFM

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

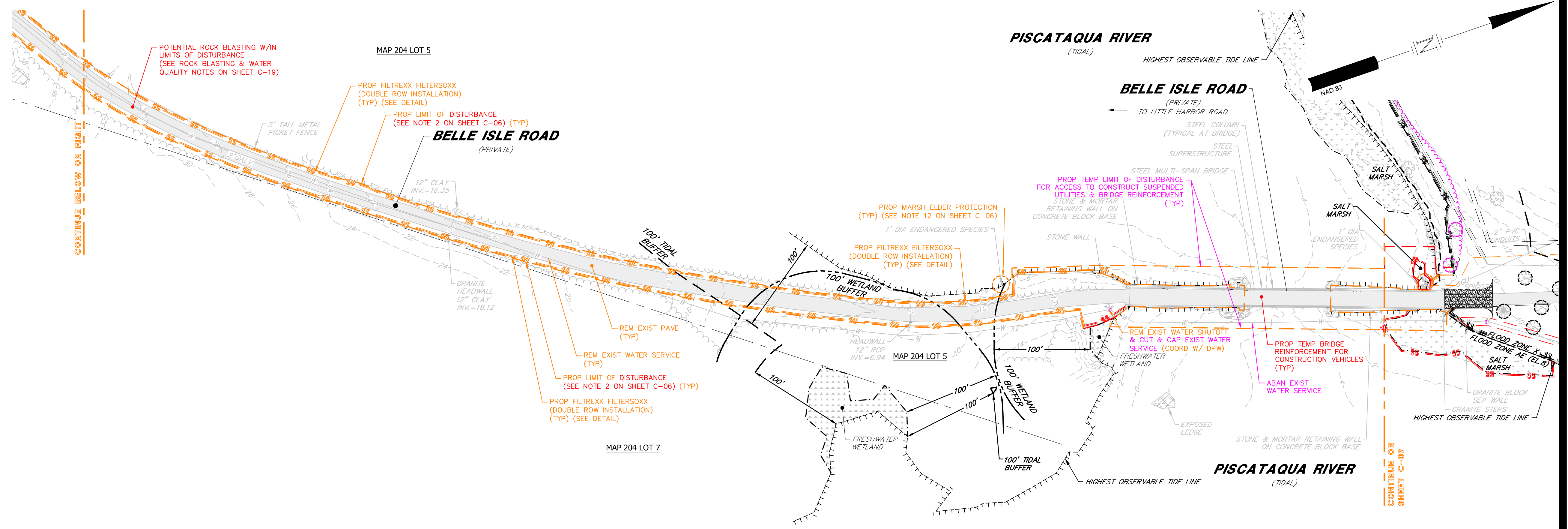
47099.01 DR HEG FB
CK JCC CADFILE 47099-01_SITE_PREP_MAIN

C-06

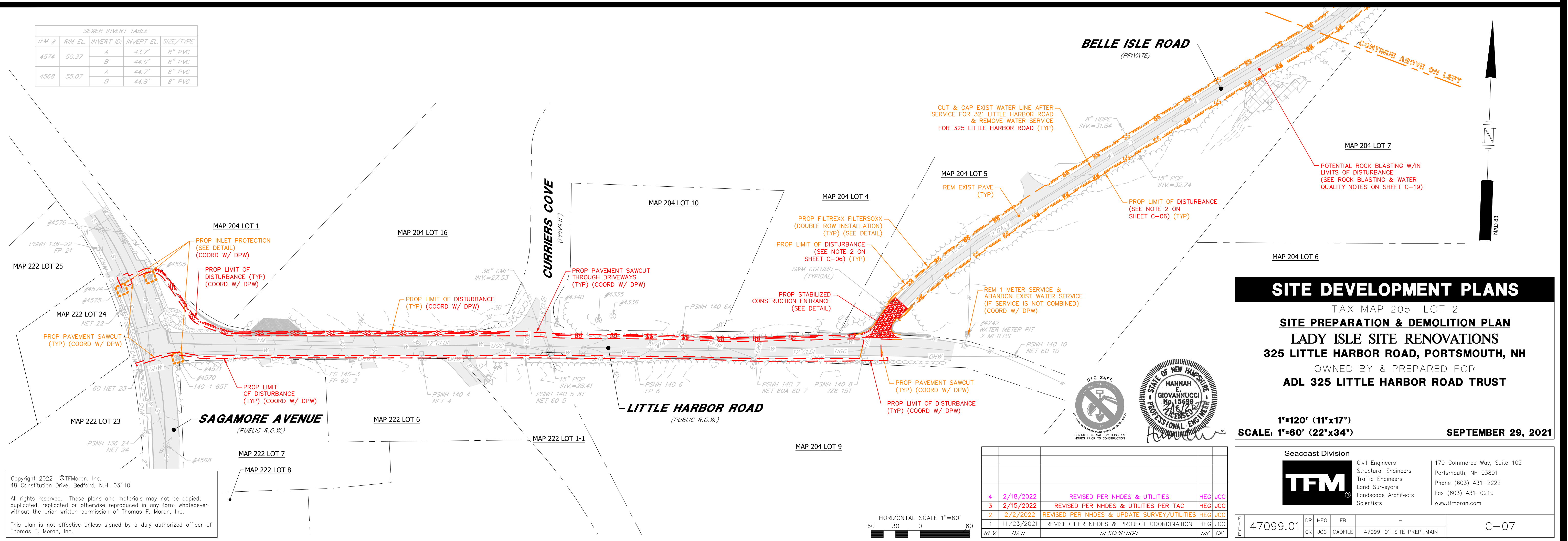
Feb 23, 2022 - 2:05pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Little Harbor Rd Design\PRODUCTION DRAWINGS\47099-01_Site Prep_Main.dwg

NOTES

1. SEE NOTES ON SHEET C-01 & C-06.



SEWER INVERT TABLE				
TFM #	RIM EL.	INVERT ID.	INVERT EL.	SIZE/TYPE
4574	50.37	A	43.7'	8" PVC
		B	44.0'	8" PVC
4568	55.07	A	44.7'	8" PVC
		B	44.8'	8" PVC



SITE DEVELOPMENT PLANS

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47099.01 DR HEG FB
 CK JCC CADFILE 47099-01_SITE_PREP_MAIN C-07

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SITE DATA

OWNER OF RECORD OF MAP 205 LOT 2: THE ADL 325 LITTLE HARBOR ROAD TRUST
STEPHEN H. ROBERTS ESQ., TRUSTEE
127 PARROTT AVENUE
PORTSMOUTH, NH 03801

DEED REFERENCE TO PARCEL IS BK 5959 PG 1244
AREA OF PARCEL = 535,990± SF OR 12.30± ACRES

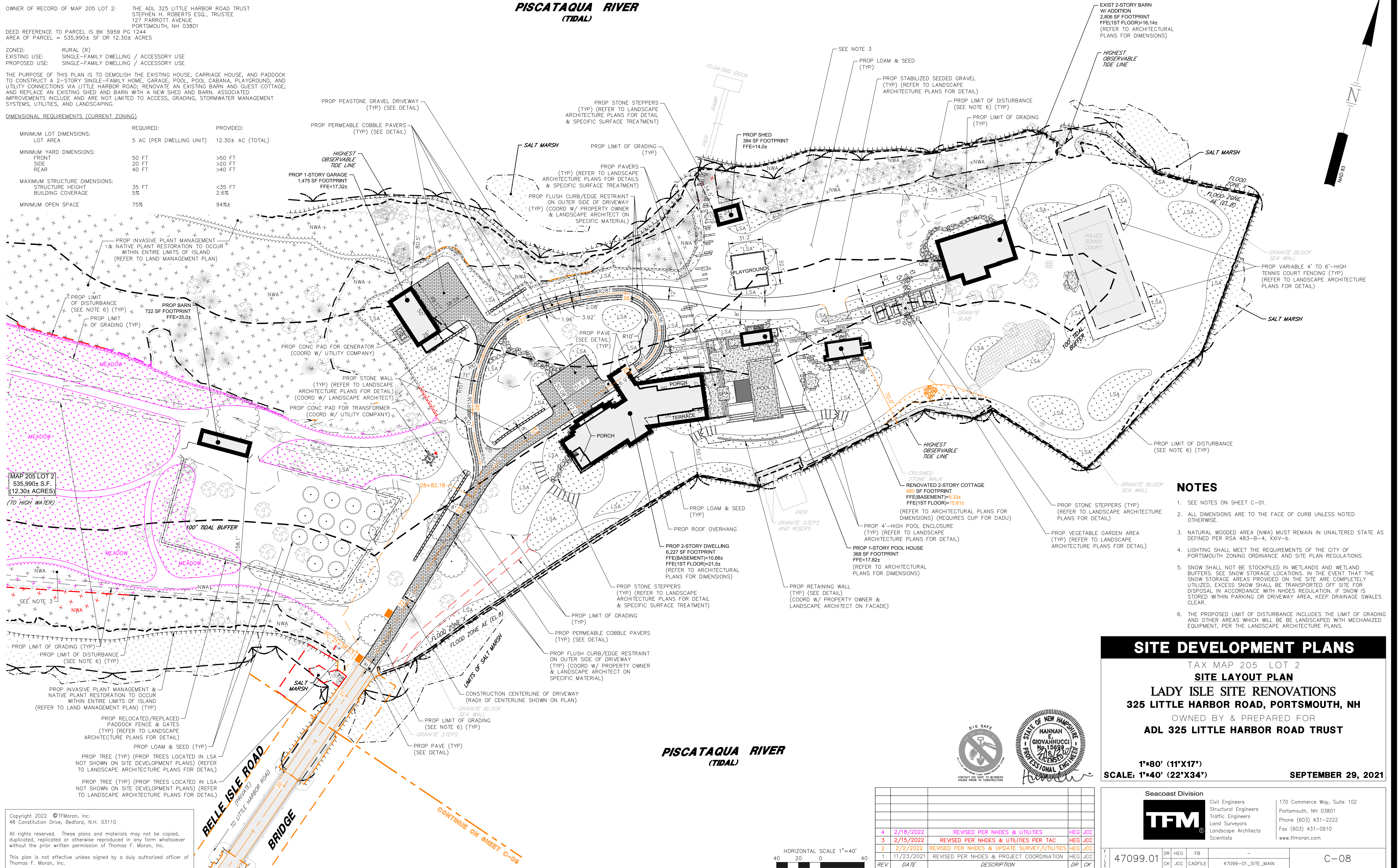
ZONED: RURAL (R)
EXISTING USE: SINGLE-FAMILY DWELLING / ACCESSORY USE
PROPOSED USE: SINGLE-FAMILY DWELLING / ACCESSORY USE

THE PURPOSE OF THIS PLAN IS TO DEMOLISH THE EXISTING HOUSE, CARRIAGE HOUSE, AND PADDOCK TO CONSTRUCT A 2-STORY SINGLE-FAMILY HOME, GARAGE, POOL, POOL CABANA, PLAYGROUND, AND UTILITY CONNECTIONS VIA LITTLE HARBOR ROAD; RENOVATE AN EXISTING BARN AND GUEST COTTAGE; AND REPLACE AN EXISTING SHED AND BARN WITH A NEW SHED AND BARN. ASSOCIATED IMPROVEMENTS INCLUDE AND ARE NOT LIMITED TO ACCESS, GRADING, STORMWATER MANAGEMENT SYSTEMS, UTILITIES, AND LANDSCAPING.

DIMENSIONAL REQUIREMENTS (CURRENT ZONING)

MINIMUM LOT DIMENSIONS:	REQUIRED:	PROVIDED:
LOT AREA	5 AC (PER DWELLING UNIT)	12.30± AC (TOTAL)
MINIMUM YARD DIMENSIONS:		
FRONT	50 FT	>50 FT
SIDE	20 FT	>20 FT
REAR	40 FT	>40 FT
MAXIMUM STRUCTURE DIMENSIONS:		
STRUCTURE HEIGHT	35 FT	<35 FT
BUILDING COVERAGE	5%	2.6%
MINIMUM OPEN SPACE	75%	94%±

**PISCATAQUA RIVER
(TIDAL)**



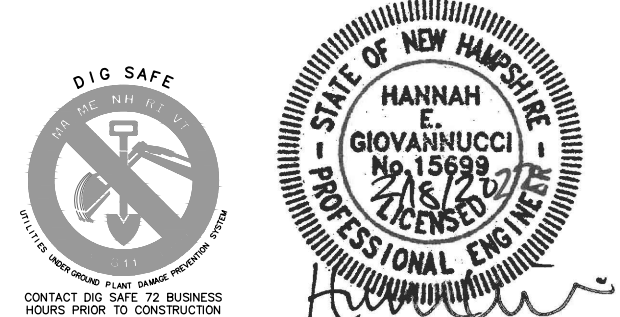
NOTES

- SEE NOTES ON SHEET C-01.
- ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.
- NATURAL WOODED AREA (NWA) MUST REMAIN IN UNALTERED STATE AS DEFINED PER RSA 483-B-4, XXIV-B.
- LIGHTING SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH ZONING ORDINANCE AND SITE PLAN REGULATIONS.
- SNOW SHALL NOT BE STOCKPILED IN WETLANDS AND WETLAND BUFFERS. SEE SNOW STORAGE LOCATIONS. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH NHDES REGULATION. IF SNOW IS STORED WITHIN PARKING OR DRIVEWAY AREA, KEEP DRAINAGE SWALES CLEAR.
- THE PROPOSED LIMIT OF DISTURBANCE INCLUDES THE LIMIT OF GRADING AND OTHER AREAS WHICH WILL BE LANDSCAPED WITH MECHANIZED EQUIPMENT, PER THE LANDSCAPE ARCHITECTURE PLANS.

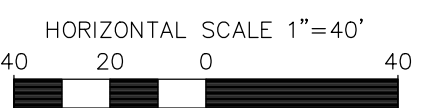
SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
SITE LAYOUT PLAN
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=80' (11"X17')
SCALE: 1"=40' (22"X34') **SEPTEMBER 29, 2021**



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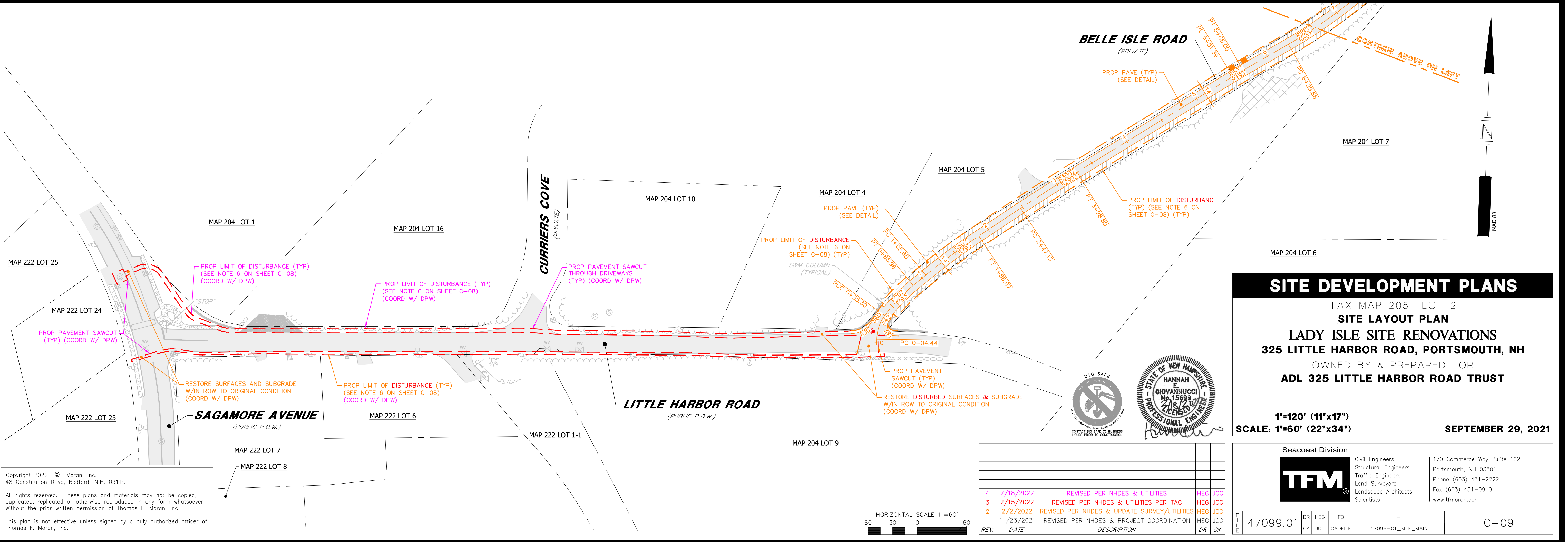
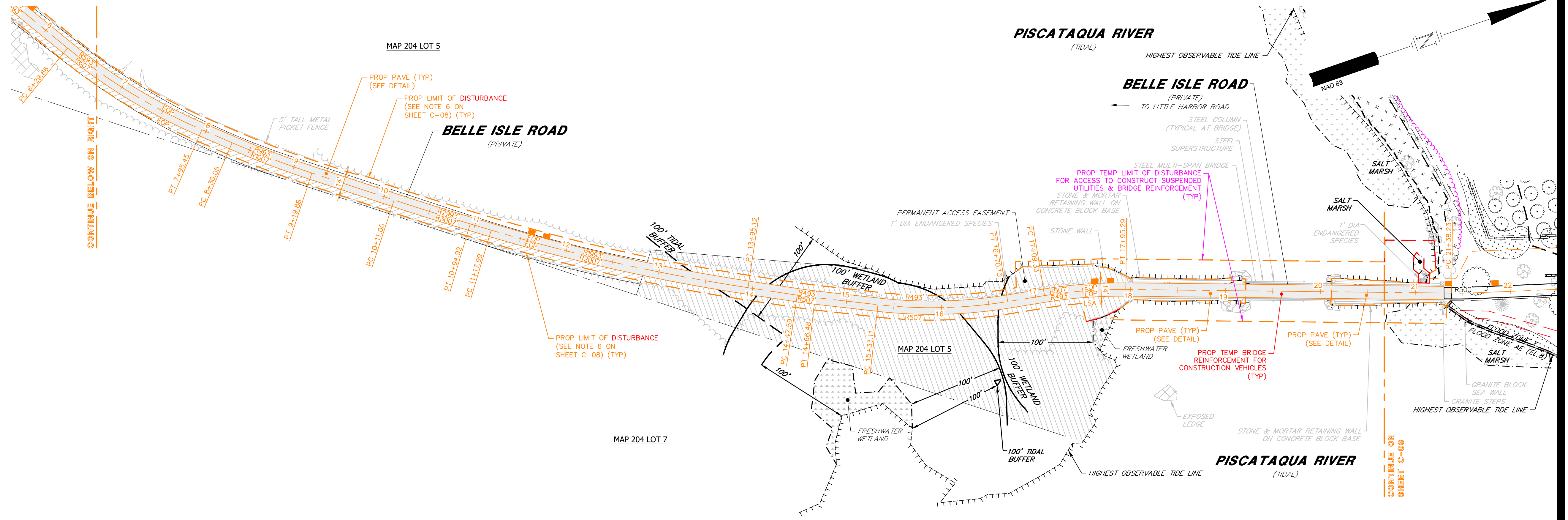
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NOTES

1. SEE NOTES ON SHEET C-01 AND C-08.

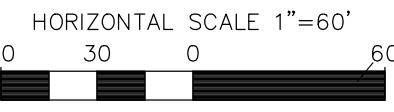


SITE DEVELOPMENT PLANS
 TAX MAP 205 LOT 2
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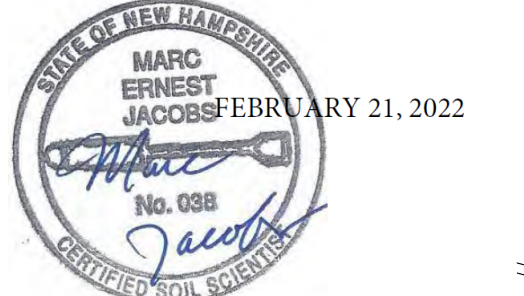
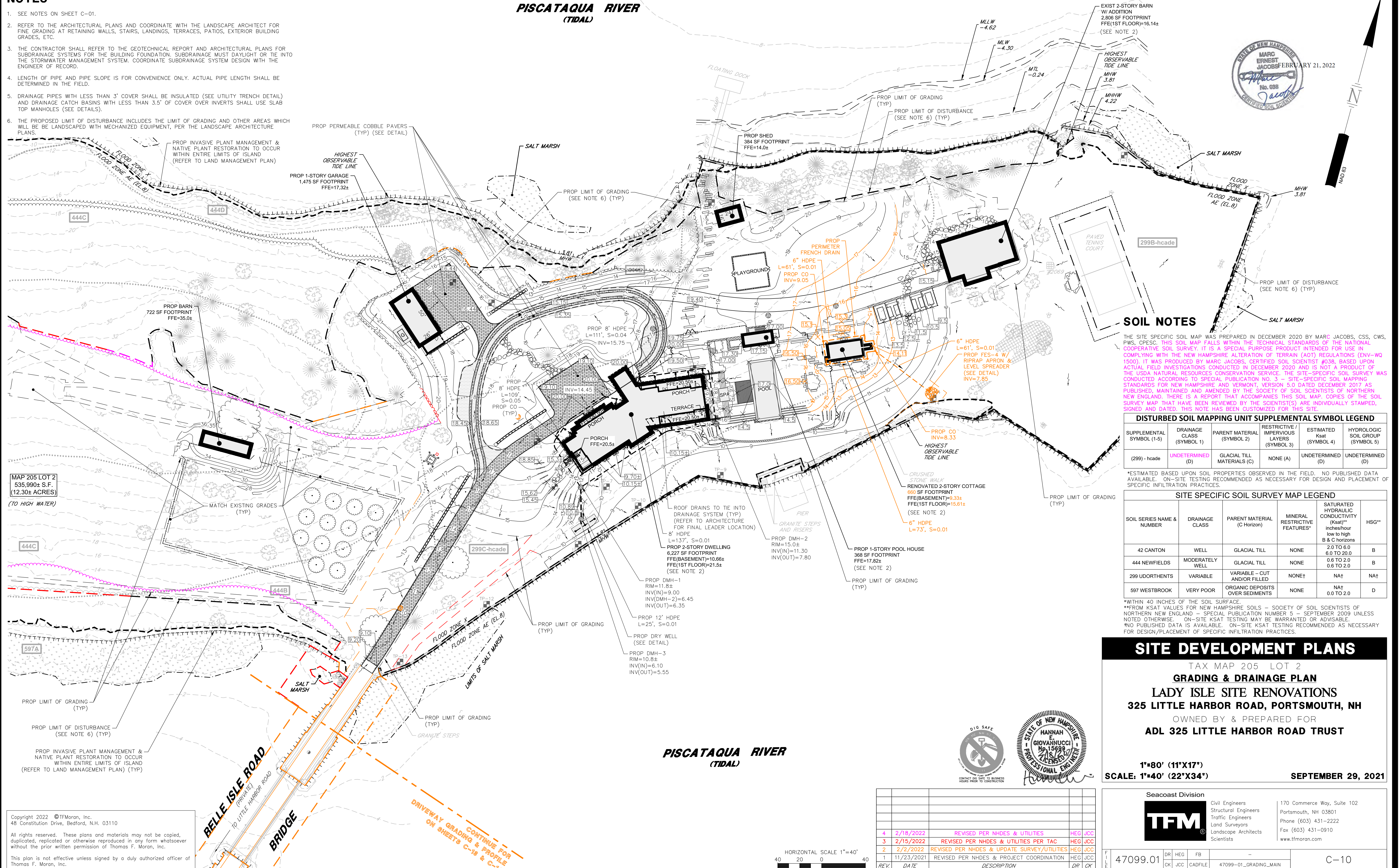
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 www.tfmoran.com

47099.01 DR HEG FB CK JCC CADFILE 47099-01_SITE_MAIN C-09

NOTES

- SEE NOTES ON SHEET C-01.
- REFER TO THE ARCHITECTURAL PLANS AND COORDINATE WITH THE LANDSCAPE ARCHITECT FOR FINE GRADING AT RETAINING WALLS, STAIRS, LANDINGS, TERRACES, PATIOS, EXTERIOR BUILDING GRADES, ETC.
- THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT AND ARCHITECTURAL PLANS FOR SUBDRAINAGE SYSTEMS FOR THE BUILDING FOUNDATION. SUBDRAINAGE MUST DAYLIGHT OR TIE INTO THE STORMWATER MANAGEMENT SYSTEM. COORDINATE SUBDRAINAGE SYSTEM DESIGN WITH THE ENGINEER OF RECORD.
- LENGTH OF PIPE AND PIPE SLOPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
- DRAINAGE PIPES WITH LESS THAN 3' COVER SHALL BE INSULATED (SEE UTILITY TRENCH DETAIL) AND DRAINAGE CATCH BASINS WITH LESS THAN 3.5' OF COVER OVER INVERTS SHALL USE SLAB TOP MANHOLES (SEE DETAILS).
- THE PROPOSED LIMIT OF DISTURBANCE INCLUDES THE LIMIT OF GRADING AND OTHER AREAS WHICH WILL BE LANDSCAPED WITH MECHANIZED EQUIPMENT, PER THE LANDSCAPE ARCHITECTURE PLANS.

**PISCATAQUA RIVER
(TIDAL)**



SOIL NOTES

THE SITE SPECIFIC SOIL MAP WAS PREPARED IN DECEMBER 2020 BY MARC JACOBS, CSS, CWS, PWS, CPESC. THIS SOIL MAP FALLS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT INTENDED FOR USE IN COMPLYING WITH THE NEW HAMPSHIRE ALTERATION OF TERRAIN (AOT) REGULATIONS (ENV-NH 1500). IT WAS PRODUCED BY MARC JACOBS, CERTIFIED SOIL SCIENTIST #038, BASED UPON ACTUAL FIELD INVESTIGATIONS CONDUCTED IN DECEMBER 2020 AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THE SITE-SPECIFIC SOIL SURVEY WAS CONDUCTED ACCORDING TO SPECIAL PUBLICATION NO. 3 - SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT, VERSION 5.0 DATED DECEMBER 2017 AS PUBLISHED, MAINTAINED AND AMENDED BY THE SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND. THERE IS A REPORT THAT ACCOMPANIES THIS SOIL MAP. COPIES OF THE SOIL SURVEY MAP THAT HAVE BEEN REVIEWED BY THE SCIENTIST(S) ARE INDIVIDUALLY STAMPED, SIGNED AND DATED. THIS NOTE HAS BEEN CUSTOMIZED FOR THIS SITE.

DISTURBED SOIL MAPPING UNIT SUPPLEMENTAL SYMBOL LEGEND

SUPPLEMENTAL SYMBOL (1-5)	DRAINAGE CLASS (SYMBOL 1)	PARENT MATERIAL (SYMBOL 2)	RESTRICTIVE/IMPERVIOUS LAYERS (SYMBOL 3)	ESTIMATED Ksat (SYMBOL 4)	HYDROLOGIC SOIL GROUP (SYMBOL 5)
(299) - hcade	UNDETERMINED (D)	GLACIAL TILL MATERIALS (C)	NONE (A)	UNDETERMINED (D)	UNDETERMINED (D)

*ESTIMATED BASED UPON SOIL PROPERTIES OBSERVED IN THE FIELD. NO PUBLISHED DATA AVAILABLE. ON-SITE TESTING RECOMMENDED AS NECESSARY FOR DESIGN AND PLACEMENT OF SPECIFIC INFILTRATION PRACTICES.

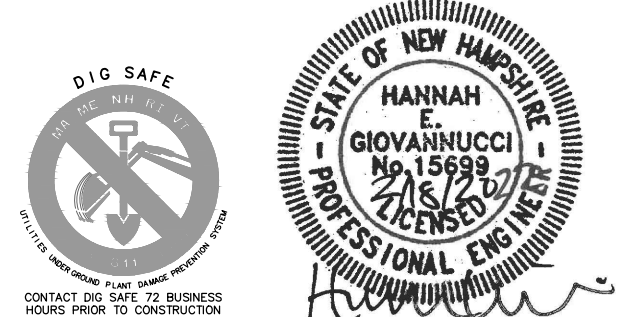
SITE SPECIFIC SOIL SURVEY MAP LEGEND

SOIL SERIES NAME & NUMBER	DRAINAGE CLASS	PARENT MATERIAL (C Horizon)	MINERAL RESTRICTIVE FEATURES*	SATURATED HYDRAULIC CONDUCTIVITY (Ksat)** inches/hour low to high B & C horizons	HSG**
42 CANTON	WELL	GLACIAL TILL	NONE	2.0 TO 6.0	B
444 NEWFIELDS	MODERATELY WELL	GLACIAL TILL	NONE	6.0 TO 20.0	B
299 UDORTHENTS	VARIABLE	VARIABLE - CUT AND/OR FILLED	NONE†	0.6 TO 2.0	NA†
597 WESTBROOK	VERY POOR	ORGANIC DEPOSITS OVER SEDIMENTS	NONE	NA†	D

*WITHIN 40 INCHES OF THE SOIL SURFACE.
**FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS - SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND - SPECIAL PUBLICATION NUMBER 5 - SEPTEMBER 2009 UNLESS NOTED OTHERWISE. ON-SITE KSAT TESTING MAY BE WARRANTED OR ADVISABLE.
†NO PUBLISHED DATA IS AVAILABLE. ON-SITE KSAT TESTING RECOMMENDED AS NECESSARY FOR DESIGN/PLACEMENT OF SPECIFIC INFILTRATION PRACTICES.

SITE DEVELOPMENT PLANS
TAX MAP 205 LOT 2
GRADING & DRAINAGE PLAN
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=80' (11'X17')
SCALE: 1"=40' (22'X34') **SEPTEMBER 29, 2021**



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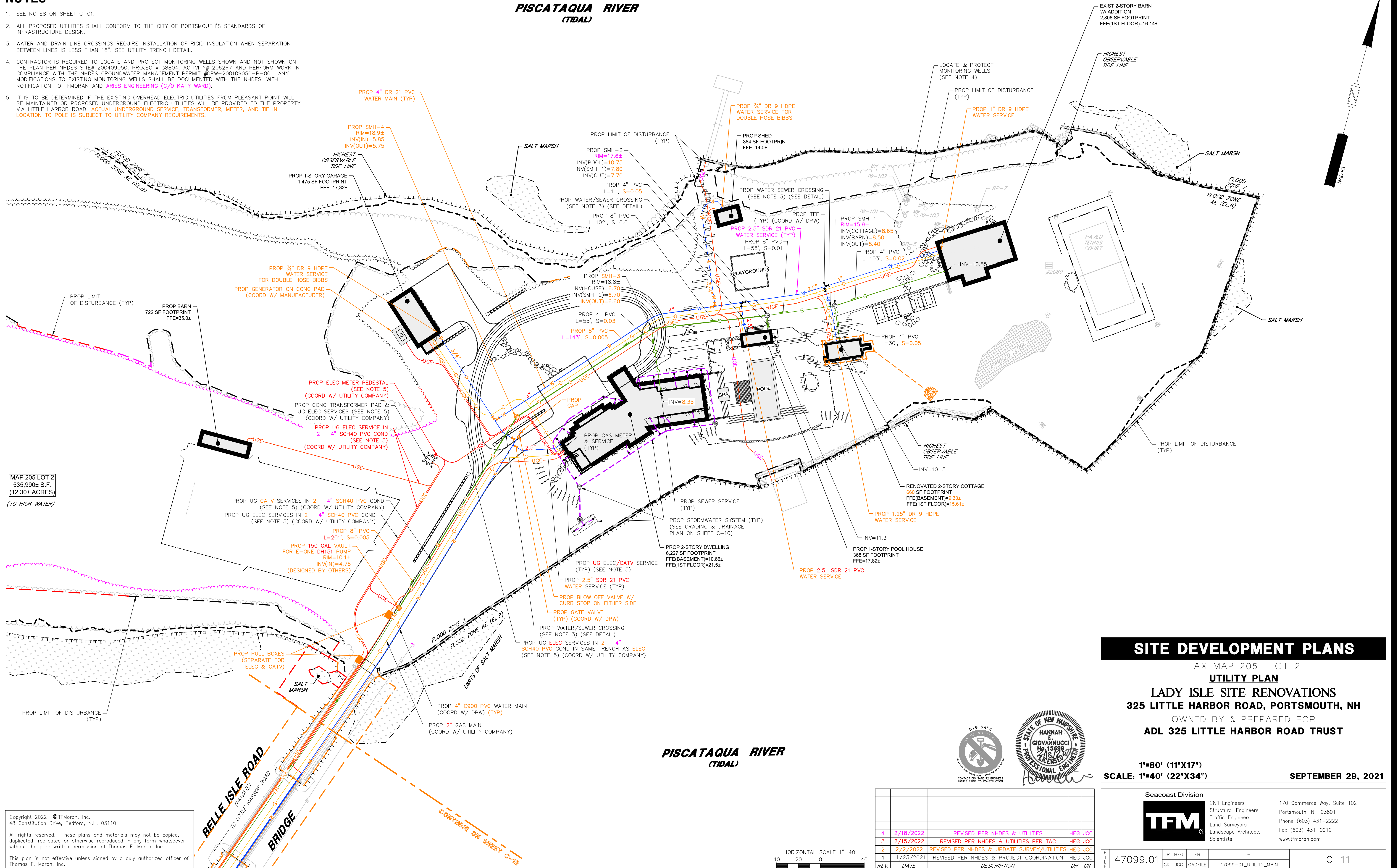
BELLE ISLE ROAD
TO LITTLE HARBOR ROAD
BRIDGE

DRIVEWAY GRADING & PROFILE
ON SHEETS C-19 & C-18
CONTINUE FOR

NOTES

- SEE NOTES ON SHEET C-01.
- ALL PROPOSED UTILITIES SHALL CONFORM TO THE CITY OF PORTSMOUTH'S STANDARDS OF INFRASTRUCTURE DESIGN.
- WATER AND DRAIN LINE CROSSINGS REQUIRE INSTALLATION OF RIGID INSULATION WHEN SEPARATION BETWEEN LINES IS LESS THAN 18". SEE UTILITY TRENCH DETAIL.
- CONTRACTOR IS REQUIRED TO LOCATE AND PROTECT MONITORING WELLS SHOWN AND NOT SHOWN ON THE PLAN PER NHDES SITE# 200409050, PROJECT# 38804, ACTIVITY# 206267 AND PERFORM WORK IN COMPLIANCE WITH THE NHDES GROUNDWATER MANAGEMENT PERMIT #GPW-200109050-P-001. ANY MODIFICATIONS TO EXISTING MONITORING WELLS SHALL BE DOCUMENTED WITH THE NHDES, WITH NOTIFICATION TO TFMORAN AND ARIES ENGINEERING (C/O KATY WARD).
- IT IS TO BE DETERMINED IF THE EXISTING OVERHEAD ELECTRIC UTILITIES FROM PLEASANT POINT WILL BE MAINTAINED OR PROPOSED UNDERGROUND ELECTRIC UTILITIES WILL BE PROVIDED TO THE PROPERTY VIA LITTLE HARBOR ROAD. ACTUAL UNDERGROUND SERVICE, TRANSFORMER, METER, AND TIE IN LOCATION TO POLE IS SUBJECT TO UTILITY COMPANY REQUIREMENTS.

**PISCATAQUA RIVER
(TIDAL)**



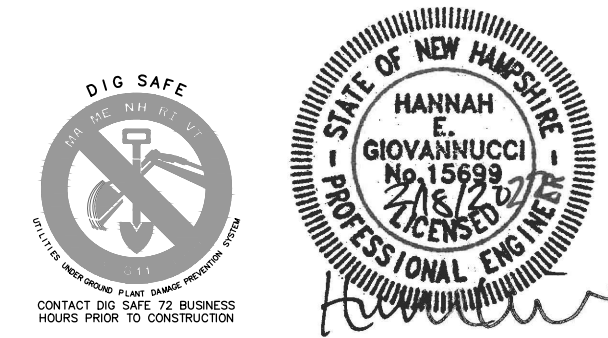
MAP 205 LOT 2
535,990± S.F.
(12.30± ACRES)
(TO HIGH WATER)

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1"=80' (11"X17')
SCALE: 1"=40' (22"X34') **SEPTEMBER 29, 2021**



HORIZONTAL SCALE 1"=40'
40 20 0 40

REV	DATE	DESCRIPTION	DR	CK
4	2/18/2022	REVISED PER NHDES & UTILITIES	HEG	JCC
3	2/15/2022	REVISED PER NHDES & UTILITIES PER TAC	HEG	JCC
2	2/2/2022	REVISED PER NHDES & UPDATE SURVEY/UTILITIES	HEG	JCC
1	11/23/2021	REVISED PER NHDES & PROJECT COORDINATION	HEG	JCC

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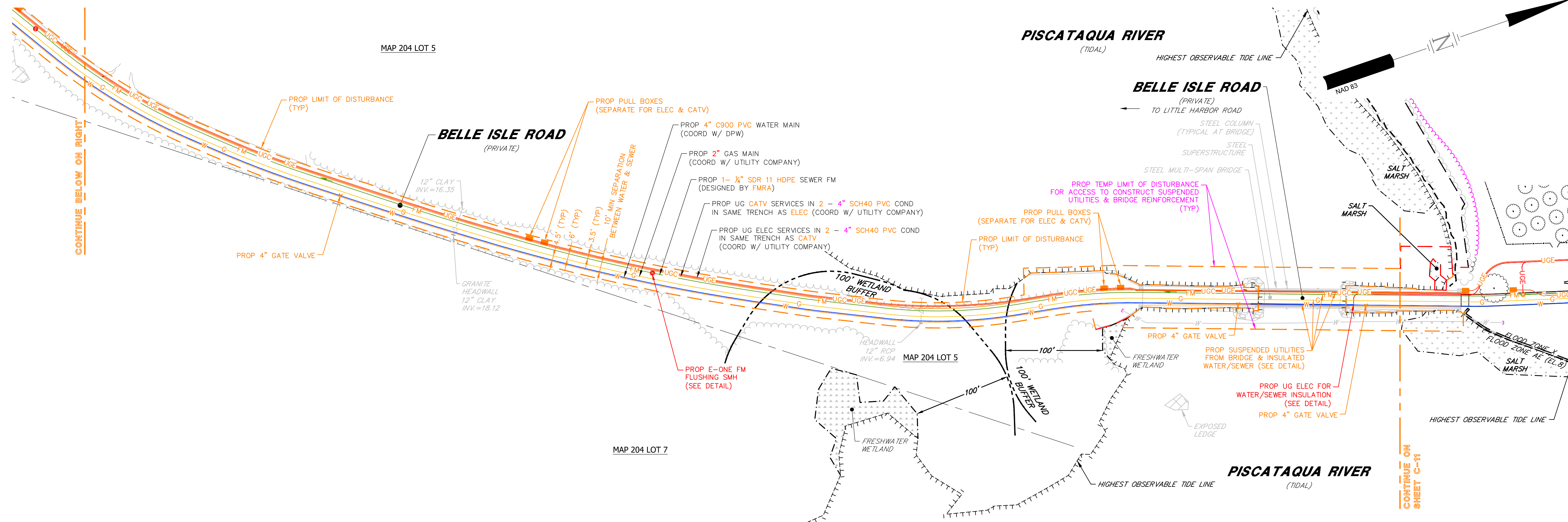
170 Commerce Way, Suite 102
Portsmouth, NH 03801
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47099.01 DR HEG FB
CK JCC CADFILE 47099-01_UTILITY_MAIN C-11

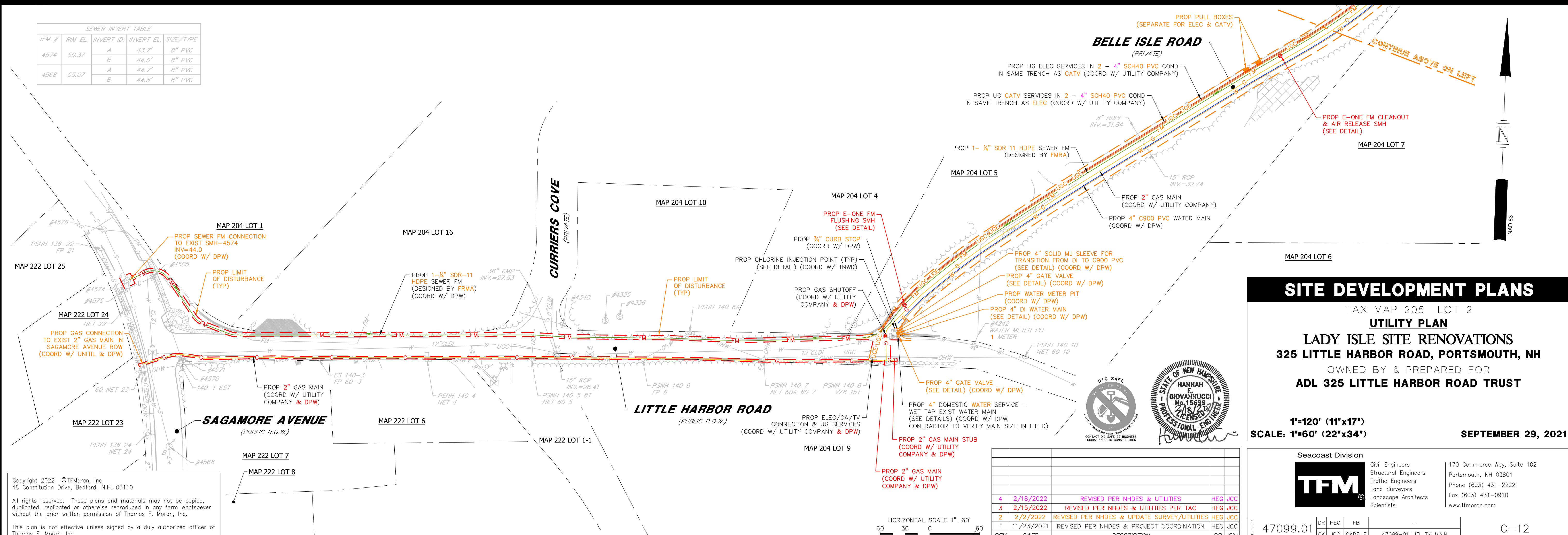
Feb 23, 2022 - 2:06pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Rd\Design\PRODUCTION DRAWINGS\47099-01_Utility_Main.dwg

NOTES

1. SEE NOTES ON SHEET C-01 & C-12.



TFM #	RIM EL.	INVERT ID.	INVERT EL.	SIZE/TYP
4574	50.37	A	43.7'	8" PVC
		B	44.0'	8" PVC
4568	55.07	A	44.7'	8" PVC
		B	44.8'	8" PVC

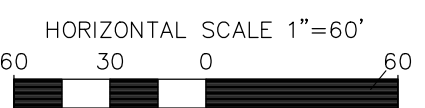


SITE DEVELOPMENT PLANS
 TAX MAP 205 LOT 2
UTILITY PLAN
LADY ISLE SITE RENOVATIONS
 325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=120' (11"x17")
SCALE: 1"=60' (22"x34") **SEPTEMBER 29, 2021**



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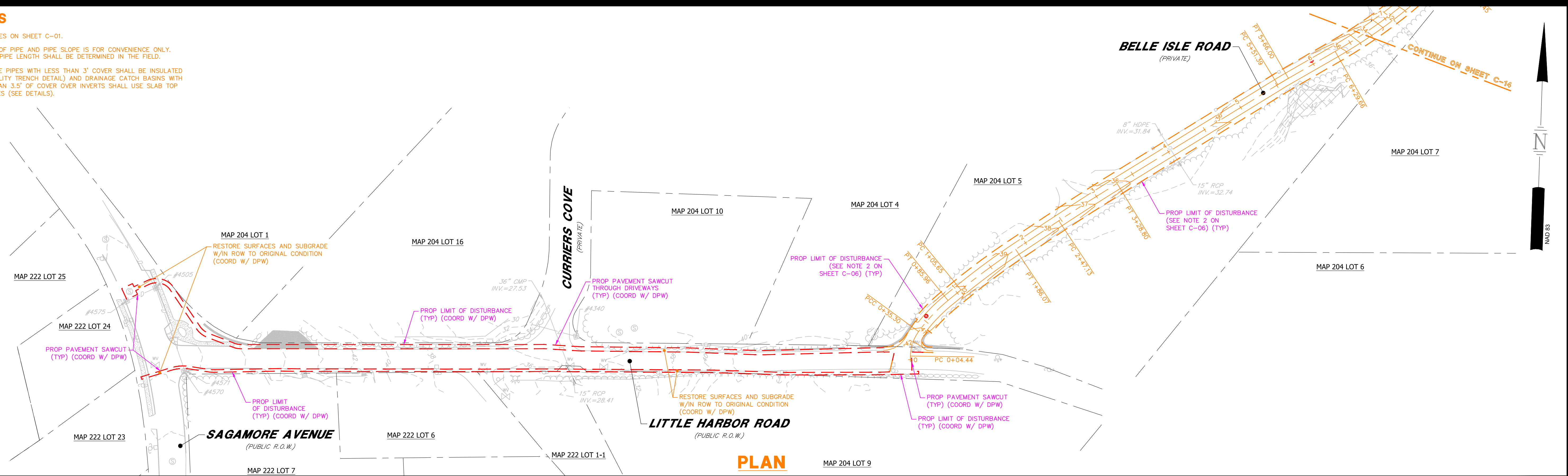
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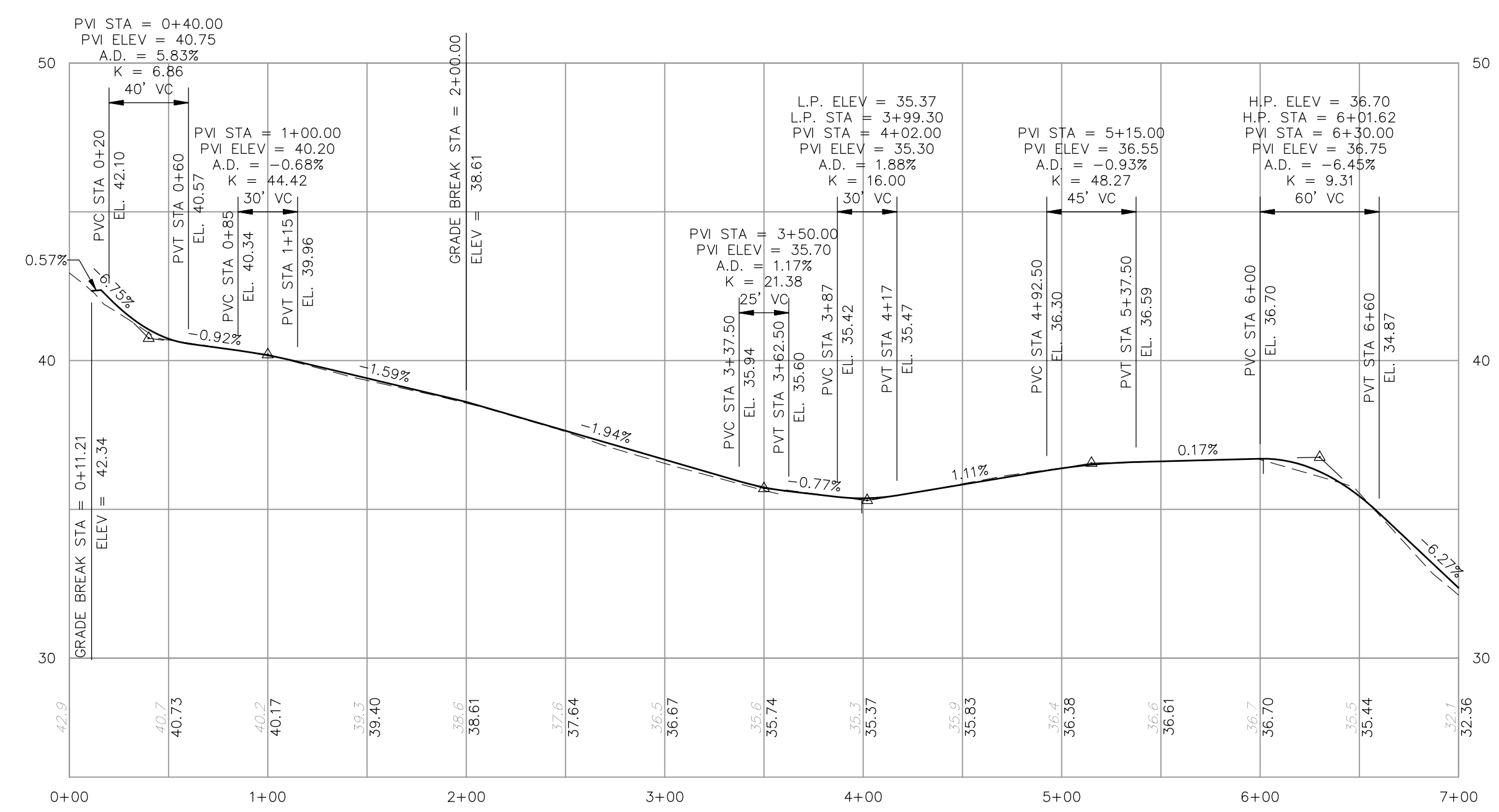
47099.01 DR HEG FB
 CK JCC CADFILE 47099-01_UTILITY_MAIN C-12

NOTES

- SEE NOTES ON SHEET C-01.
- LENGTH OF PIPE AND PIPE SLOPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
- DRAINAGE PIPES WITH LESS THAN 3' COVER SHALL BE INSULATED (SEE UTILITY TRENCH DETAIL) AND DRAINAGE CATCH BASINS WITH LESS THAN 3.5' OF COVER OVER INVERTS SHALL USE SLAB TOP MANHOLES (SEE DETAILS).



PLAN



BELLE ISLE ROAD PROFILE

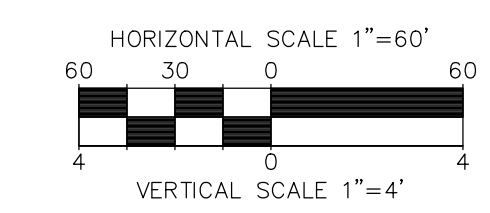
SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
DRIVEWAY GRADING & PROFILE
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

1"=120' (11"x17")
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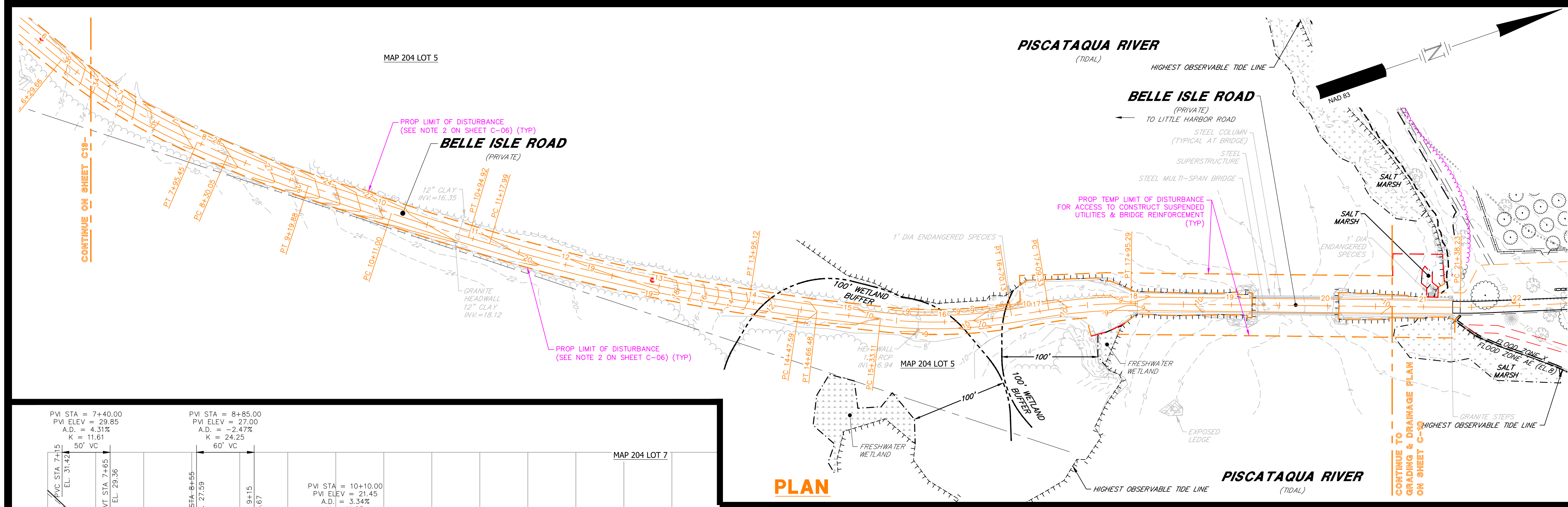
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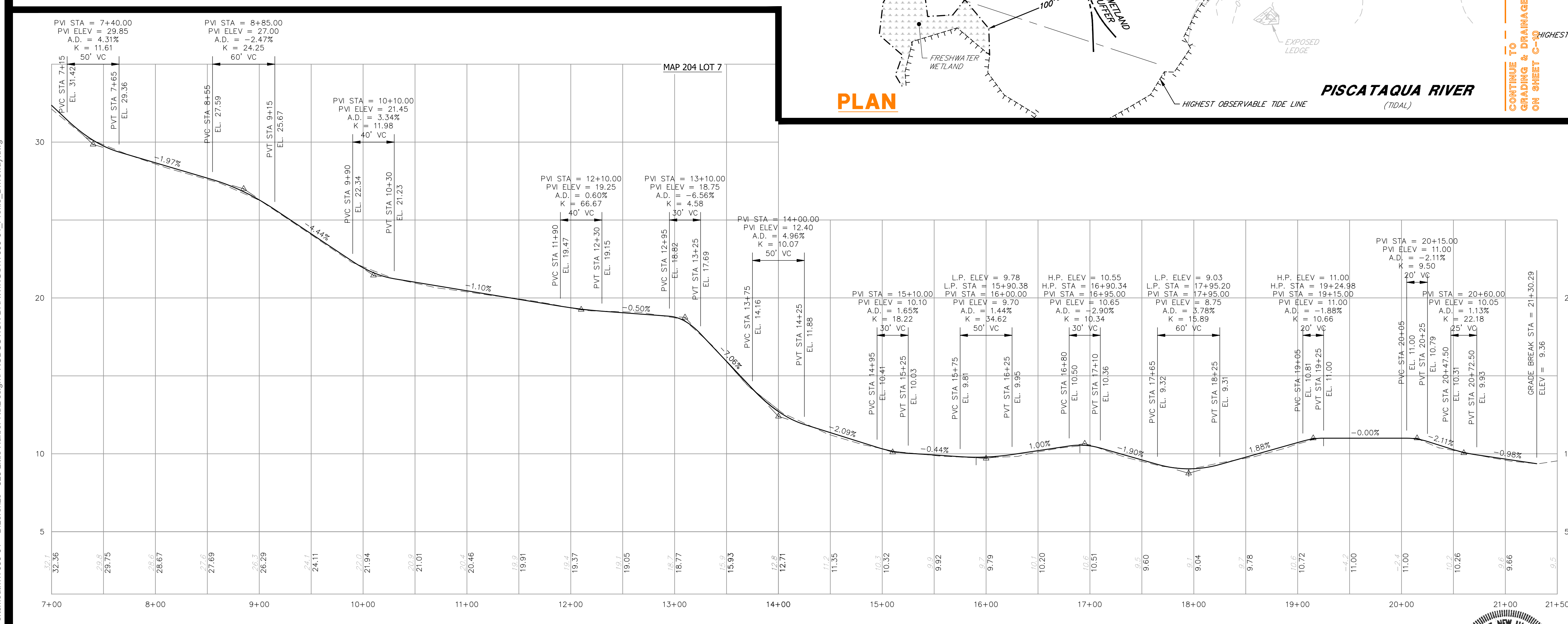
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C-13

Feb 23, 2022 - 2:10pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Road\PRODUCTION DRAWINGS\47099-01_Profile_Driveway.dwg



- NOTES**
- SEE NOTES ON SHEET C-01.
 - LENGTH OF PIPE AND PIPE SLOPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
 - DRAINAGE PIPES WITH LESS THAN 3' COVER SHALL BE INSULATED (SEE UTILITY TRENCH DETAIL) AND DRAINAGE CATCH BASINS WITH LESS THAN 3.5' OF COVER OVER INVERTS SHALL USE SLAB TOP MANHOLES (SEE DETAILS).



BELLE ISLE ROAD PROFILE

SITE DEVELOPMENT PLANS

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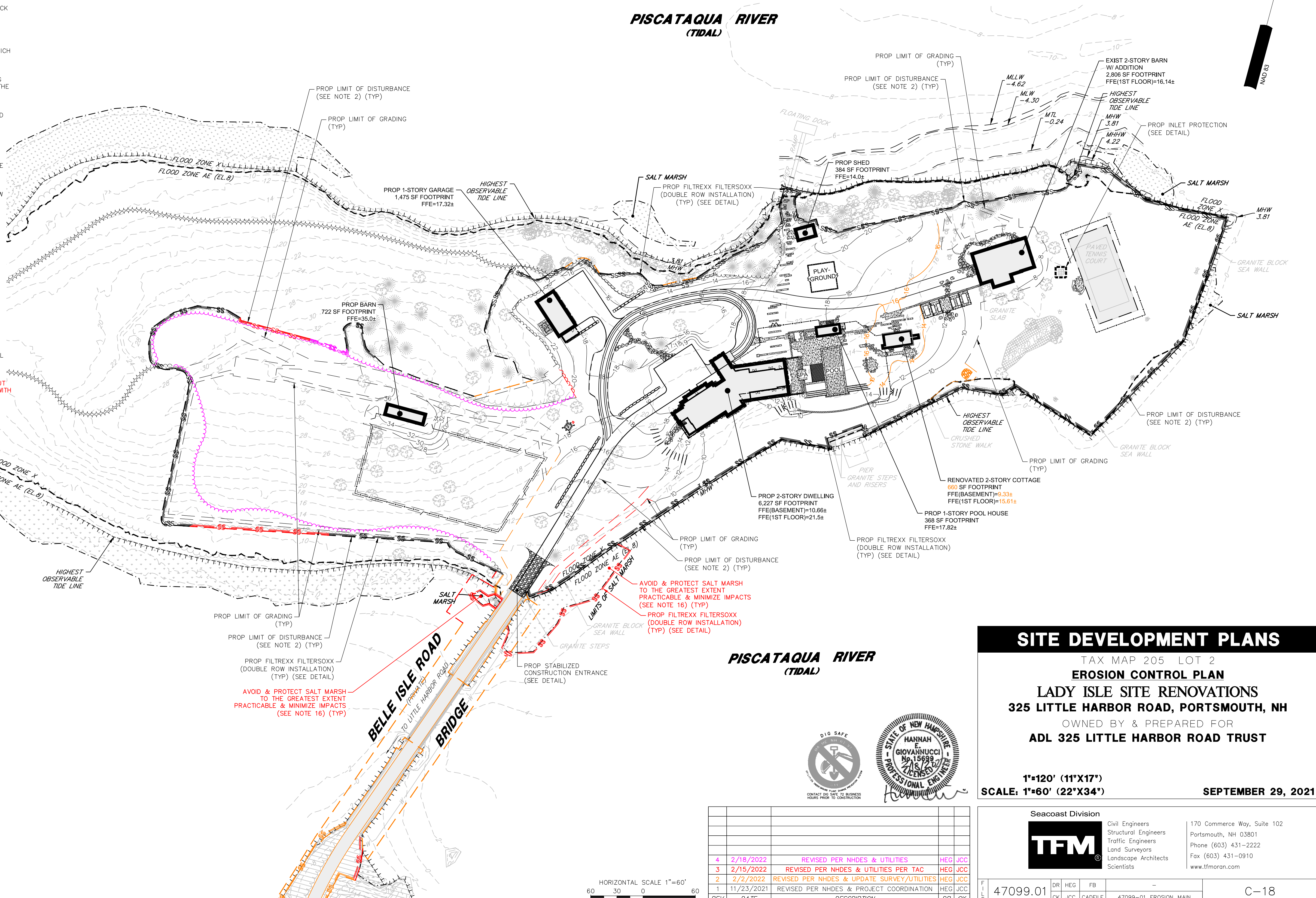
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NOTES

- SEE NOTES ON SHEET C-01, EROSION CONTROL NOTES ON SHEET C-19, EROSION CONTROL DETAILS ON SHEET C-20, AND THE APPROVED SWPPP, AS APPLICABLE.
- THE PROPOSED LIMIT OF DISTURBANCE INCLUDES THE LIMIT OF GRADING AND OTHER AREAS WHICH WILL BE LANDSCAPED WITH MECHANIZED EQUIPMENT, PER THE LANDSCAPE ARCHITECTURE PLANS.
- INSTALL SILT BARRIER ALONG THE PERIMETER OF THE AREA TO BE DISTURBED AS FIRST ORDER OF WORK.
- PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
- DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
- THE SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION IF THE DISTURBANCE EXCEEDS ONE ACRE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITEE IS RESPONSIBLE FOR, OR ANOTHER OPERATOR/PERMITEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
- CONSTRUCT JUTE MATTING ON ALL SLOPES STEEPER THAN 3:1, DISTURBED AREAS SLOPING TOWARDS WETLANDS AND ALL LOCATIONS SHOWN ON PLAN.
- INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN STORM OF 0.10" OR GREATER. REPAIR/MODIFY SILT BARRIER AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
- PROVIDE SILT BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
- ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, ARE 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 RIP RAP HAS BEEN INSTALLED
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
- THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS NEEDED.
- TO THE GREATEST EXTENT PRACTICABLE, IMPACTS TO THE SALT MARSH SHALL BE MINIMIZED. EROSION CONTROLS SHALL BE INSTALLED, MONITORED, AND ADJUSTED AS REQUIRED THROUGHOUT THE DURATION OF THE PROJECT. UPON COMPLETION, DISTURBED AREAS SHALL BE REPLANTED WITH PLUGS OF SALT MARSH CORDGRASS (SPARTINA ALTERNIFLORA).



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 TAX MAP 205 LOT 2
EROSION CONTROL PLAN
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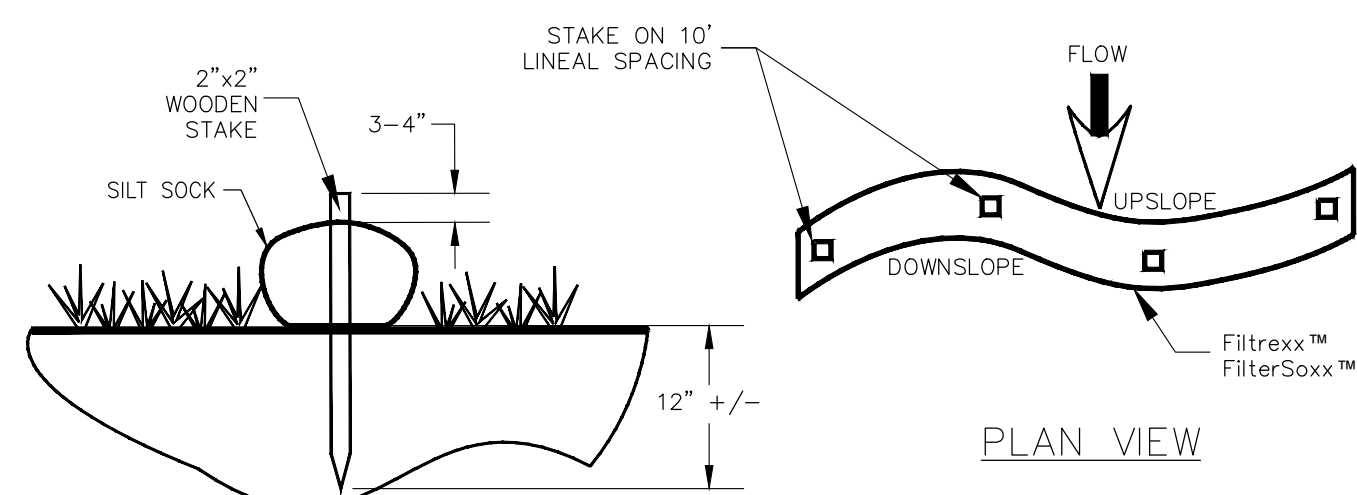
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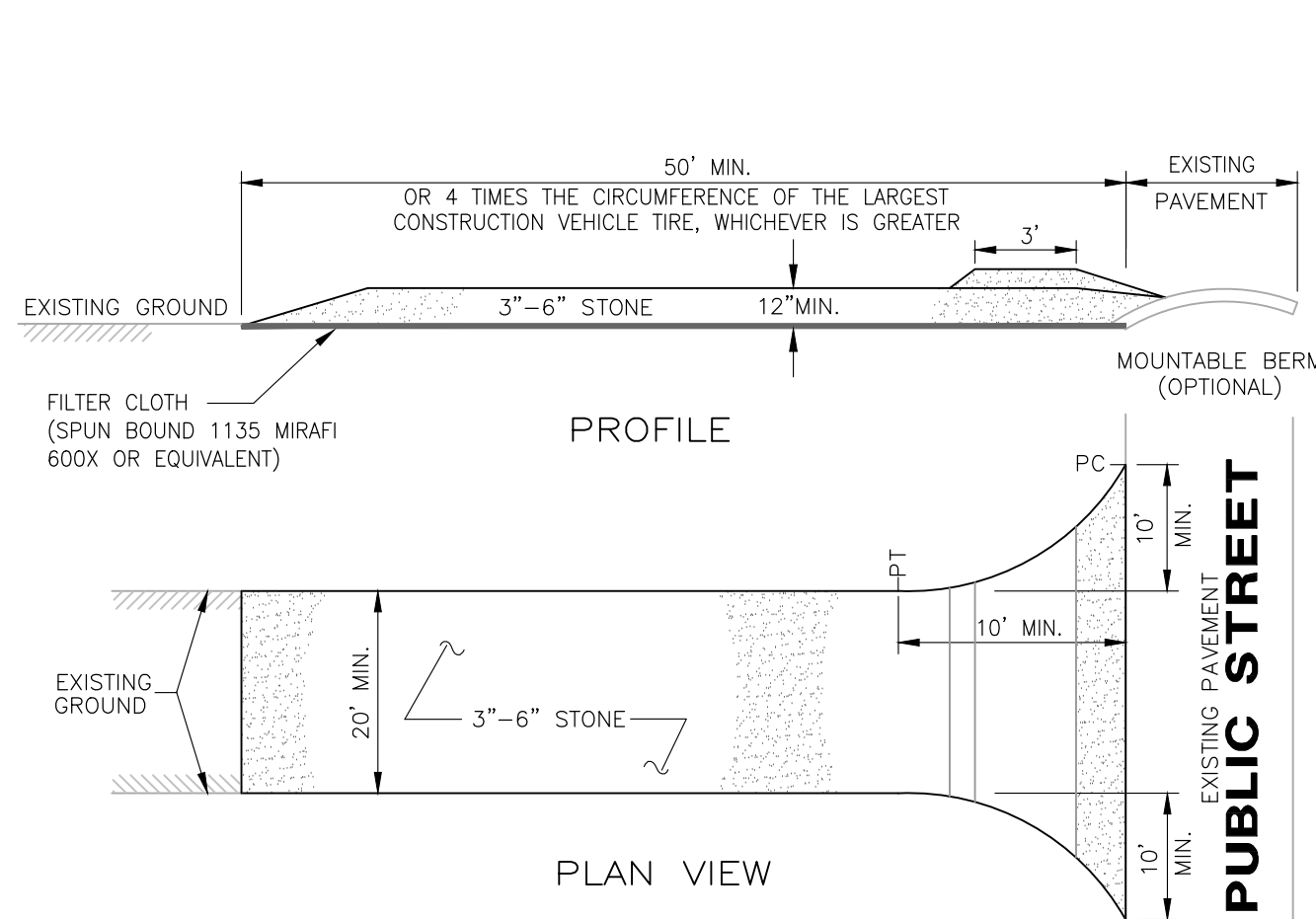
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- NOTES:
1. SILT SOCK SHALL BE FILTREXX™ SILT SOCK™ NATURAL ORIGINAL OR APPROVED EQUIVALENT.
 2. ALL MATERIAL AND SIZES TO MEET FILTREXX SPECIFICATIONS.
 3. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
 4. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.

FILTREXX™ FILTERSOXX™ STAKING

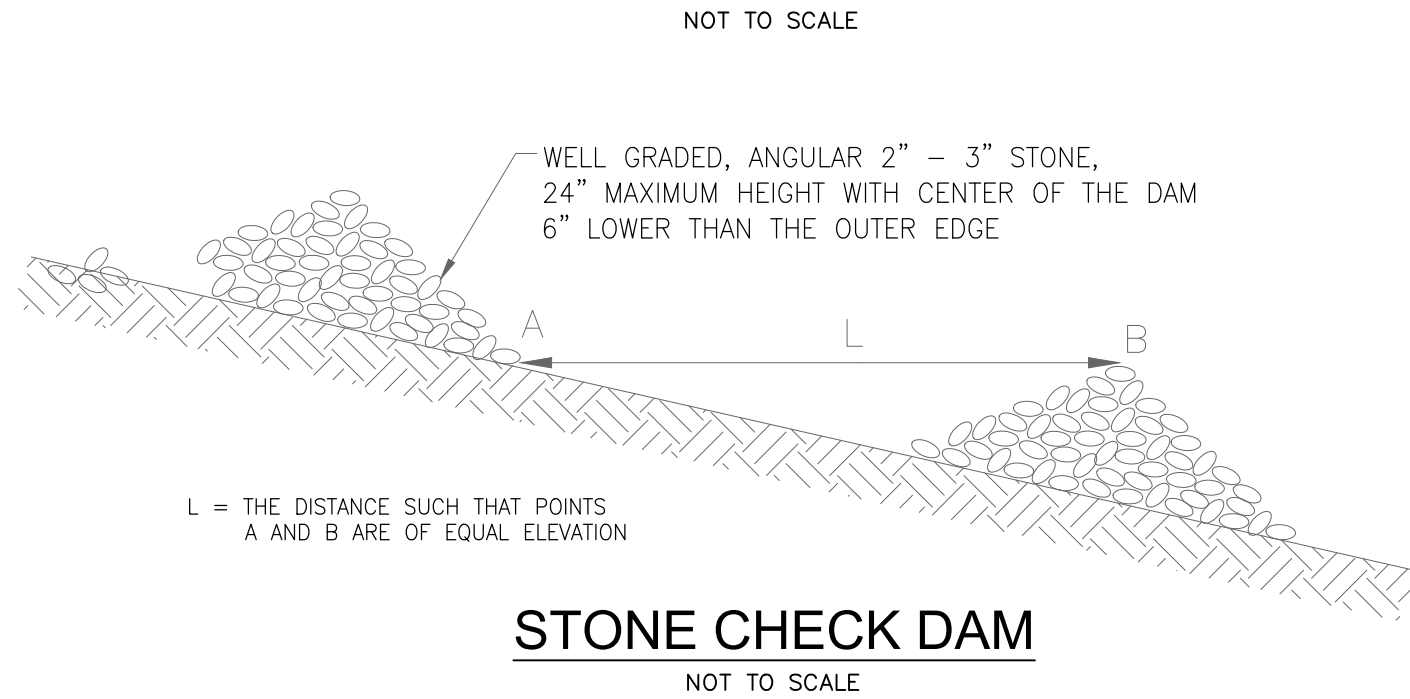
NOT TO SCALE



- NOTES:
1. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
 2. WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 4. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

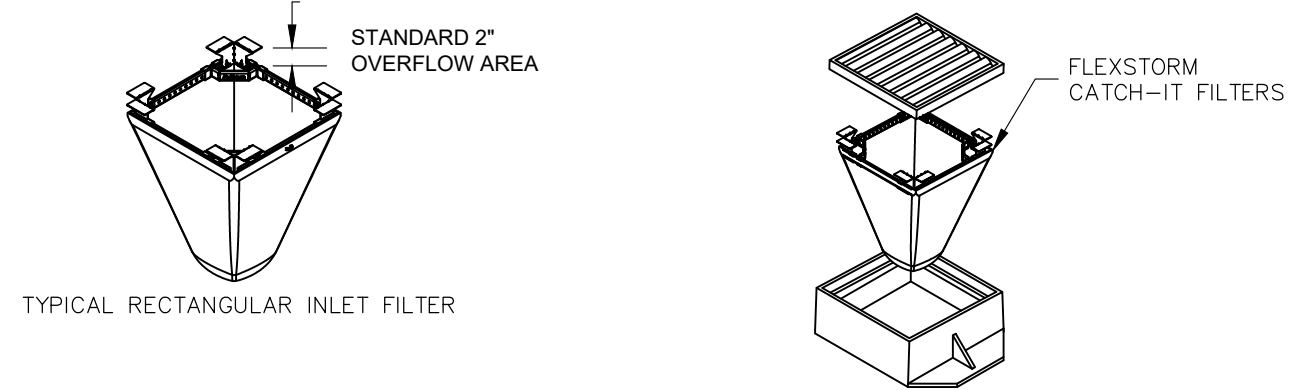
STABILIZED CONSTRUCTION ENTRANCE

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STONE CHECK DAM

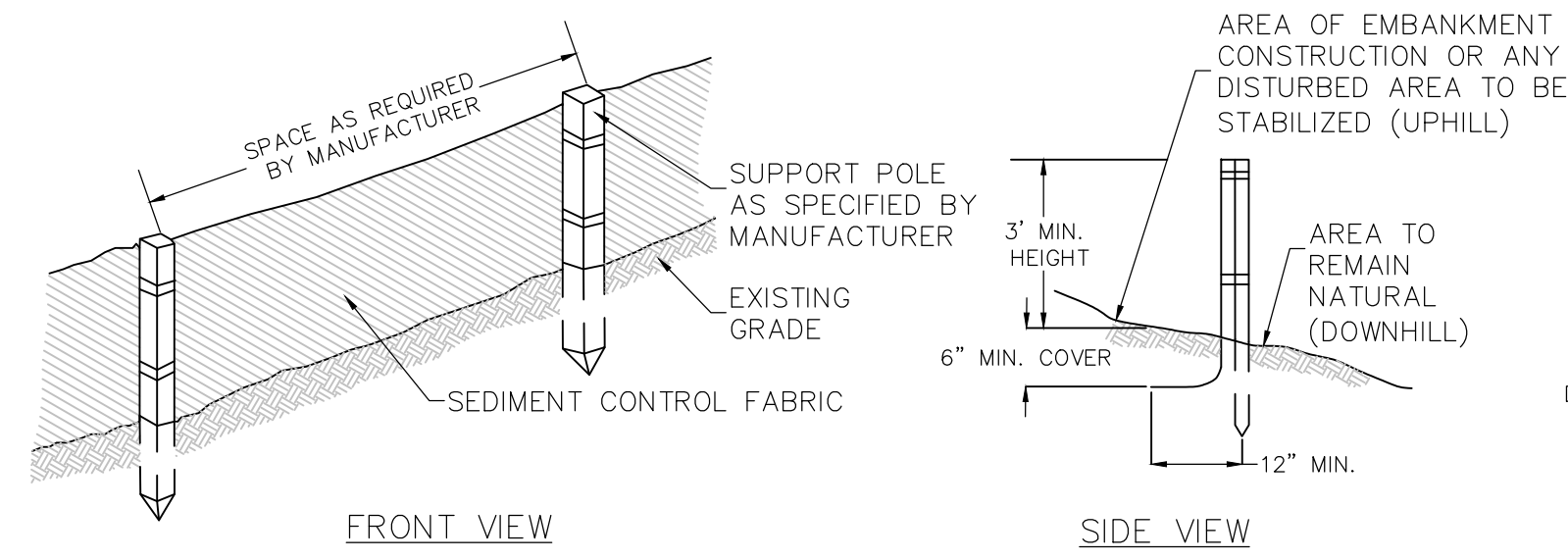
NOT TO SCALE



- NOTES:
1. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
 2. INSPECTION SHOULD OCCUR FOLLOWING ANY RAIN EVENT > 1/2".
 3. EMPTY THE SEDIMENT BAG PER MANUFACTURER'S SPECIFICATIONS.
 4. REMOVED CAKED ON SILT FROM SEDIMENT BAG AND FLUSH WITH MEDIUM SPRAY WITH OPTIMAL FILTRATION.
 5. REPLACE BAG IF TORN OR PUNCTURED TO > 1/2" DIAMETER ON LOWER HALF OF BAG.
- ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC. A DIVISION OF ADS, INC. WWW.INLETFILTERS.COM (866) 287-8655 INFO@INLETFILTERS.COM

INLET PROTECTION

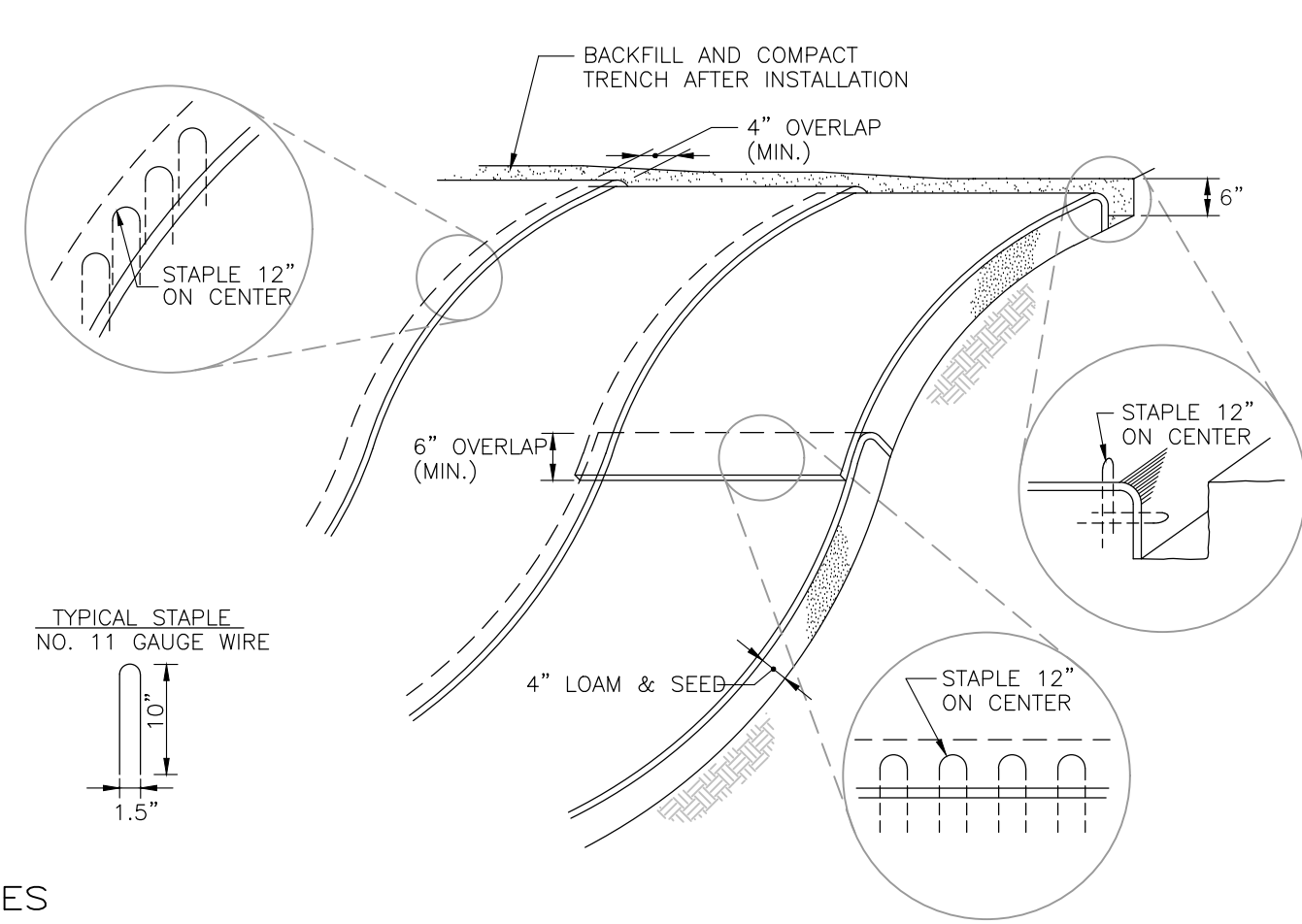
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- NOTES:
1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PRACTICE FOR SILT FENCES, OF THE NEW HAMPSHIRE STORMWATER MANUAL, DECEMBER 2008.
 2. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES.
 3. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS.
 4. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 16 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.
 5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE WITH RECOMMENDATIONS.
 6. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXPOSE TO A MINIMUM OF 8 INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED INTO EXISTING TREES.
 7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
 8. FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
 9. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 10. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 11. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
 12. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDDED.

SILT FENCE

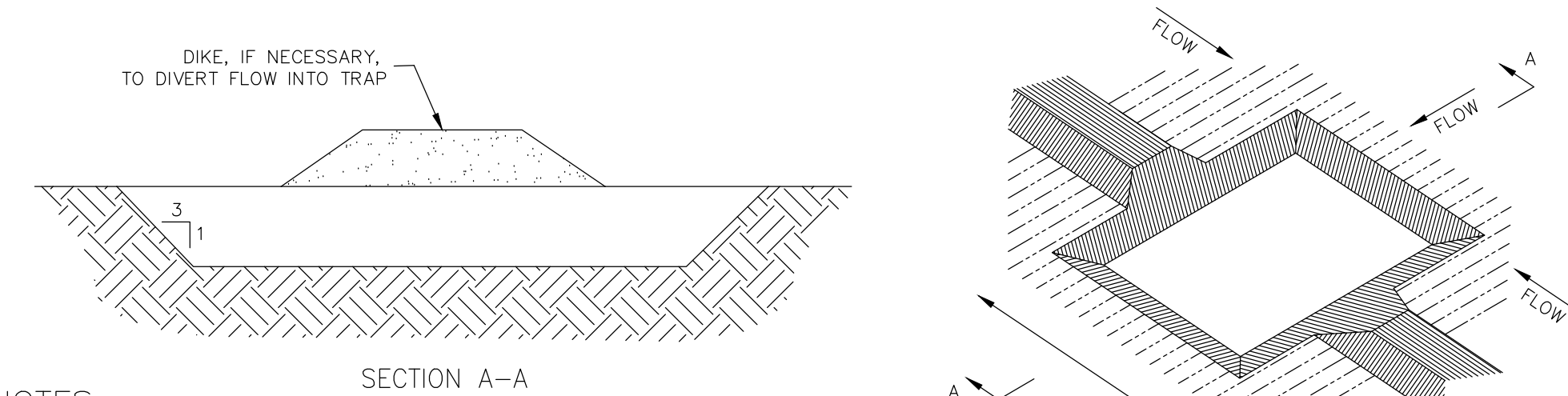
NOT TO SCALE



- NOTES:
1. INSTALL AT DISTURBED LOCATIONS WITH 2:1 SLOPES OR GREATER AND AS INDICATED PER PLANS.
 2. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
 3. ROLL THE BLANKET DOWN THE SLOPE OR SWALE IN THE DIRECTION OF THE WATER FLOW.
 4. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
 5. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
 6. BLANKET SHALL BE NORTH AMERICAN GREEN C125BN, EAST COAST EROSION CONTROL ECC-2B, AMERICAN EXCELSIOR COMPANY CURLEX III FIBRENET, ROLANCA GEONATURAL EROSION & SEDIMENT CONTROL MATTE JUTEMAT OR BIOD-OCF 30, OR APPROVED EQUAL.
 7. BLANKET SHALL BE PLACED WITHIN 24-HRS AFTER SOWING SEE IN THE AREA BEING COVERED

EROSION CONTROL BLANKET

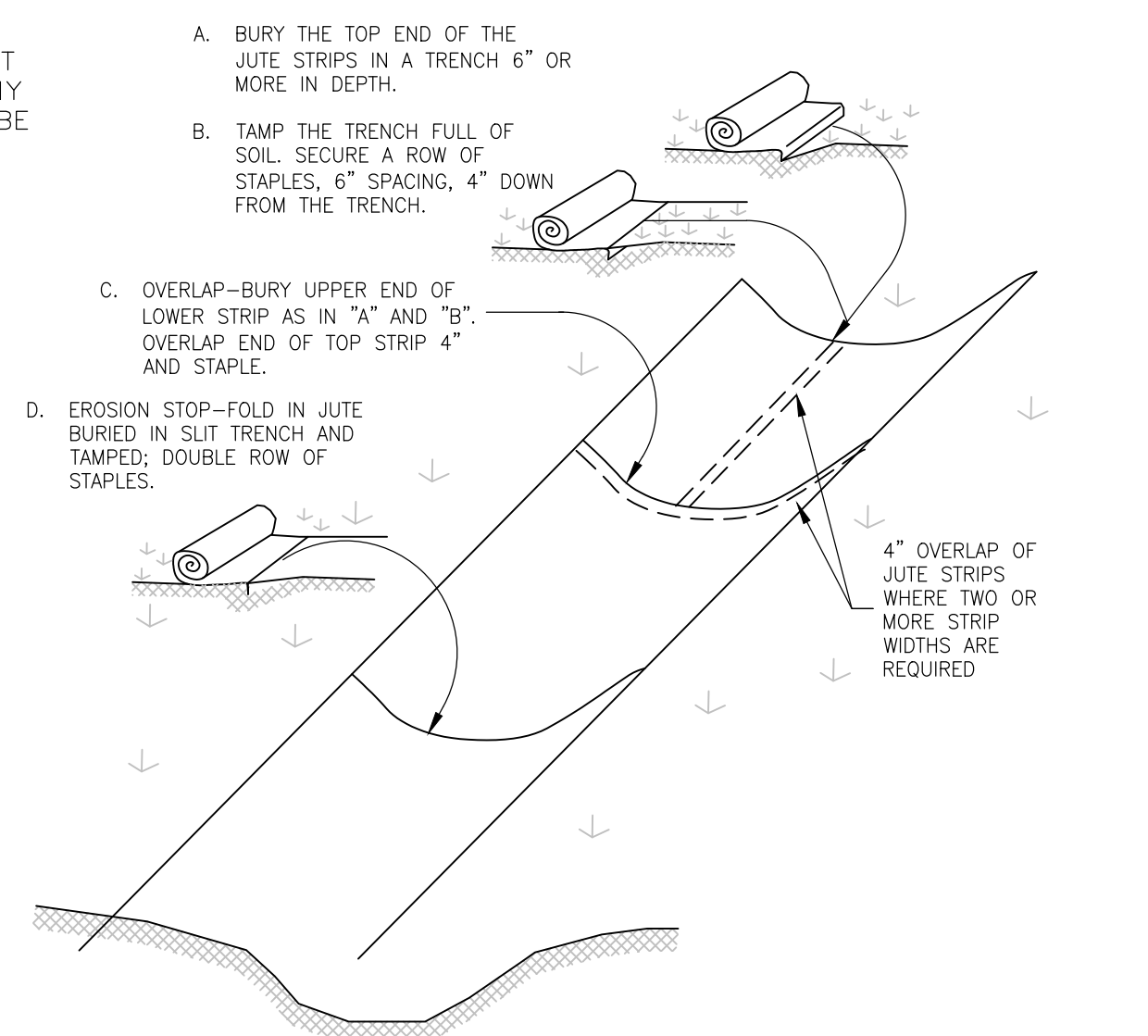
NOT TO SCALE



- NOTES:
1. SEDIMENT TRAP TO BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL BASINS/PONDS ARE STABILIZED. IF IT IS DETERMINED THAT CONSTRUCTION OF A SEDIMENT TRAP IS WARRANTED, CONSULT WITH ENGINEER TO DETERMINE APPROPRIATE NUMBER AND DIMENSIONS.
 2. 3,600 CF OF BASIN STORAGE IS REQUIRED FOR EVERY ACRE OF CONTRIBUTING DRAINAGE AREA.

SEDIMENT TRAP

NOT TO SCALE



- NOTES:
1. MATTING SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, INCLUDING STAPLE PATTERNS.
 2. STAPLES SHALL BE BIODEGRADABLE.

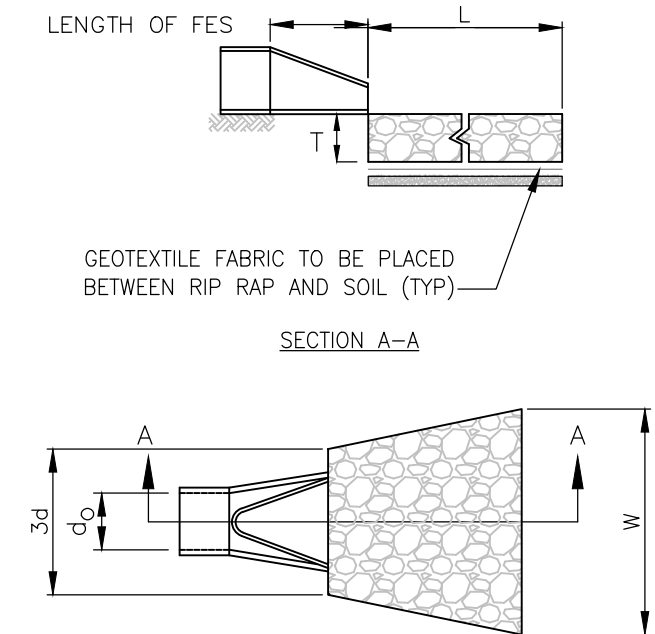
JUTE MATTING

NOT TO SCALE

MAINTENANCE:

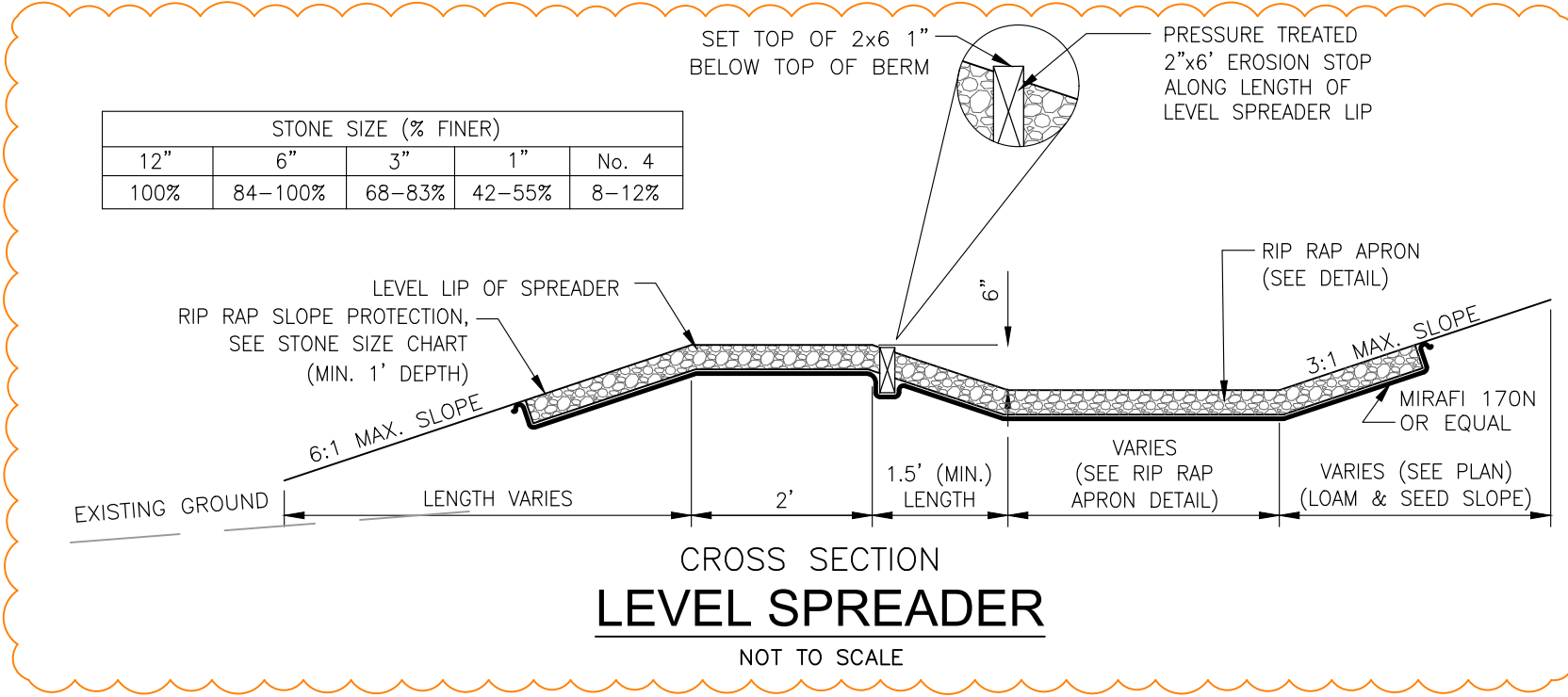
THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TALWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

- CONSTRUCTION SPECIFICATIONS:**
1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
 2. THE ROCK OR GRAVEL USED FOR FILTER OR RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12".
 4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
 5. ADD ANIMAL SCREEN TO FLARED END SECTION OUTLET.



RIP RAP AND FLARED END SECTION WITH OUTLET PROTECTION

NOT TO SCALE



SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
DETAILS
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS SEPTEMBER 29, 2021



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1	11/23/2021	REVISED PER NHDES & PROJECT COORDINATION	HEG	JCC

Seacoast Division
TFM
 Civil Engineers
 Structural Engineers
 Traffic Engineers
 Land Surveyors
 Landscape Architects
 Scientists

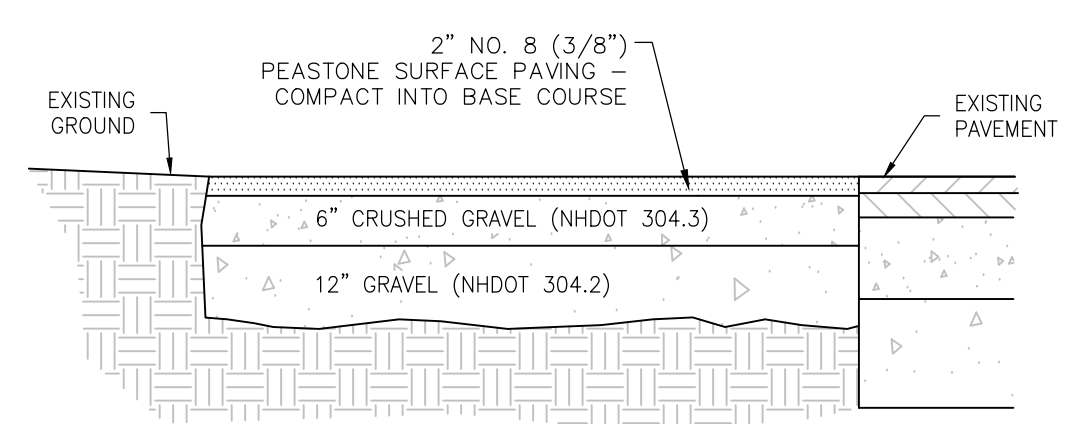
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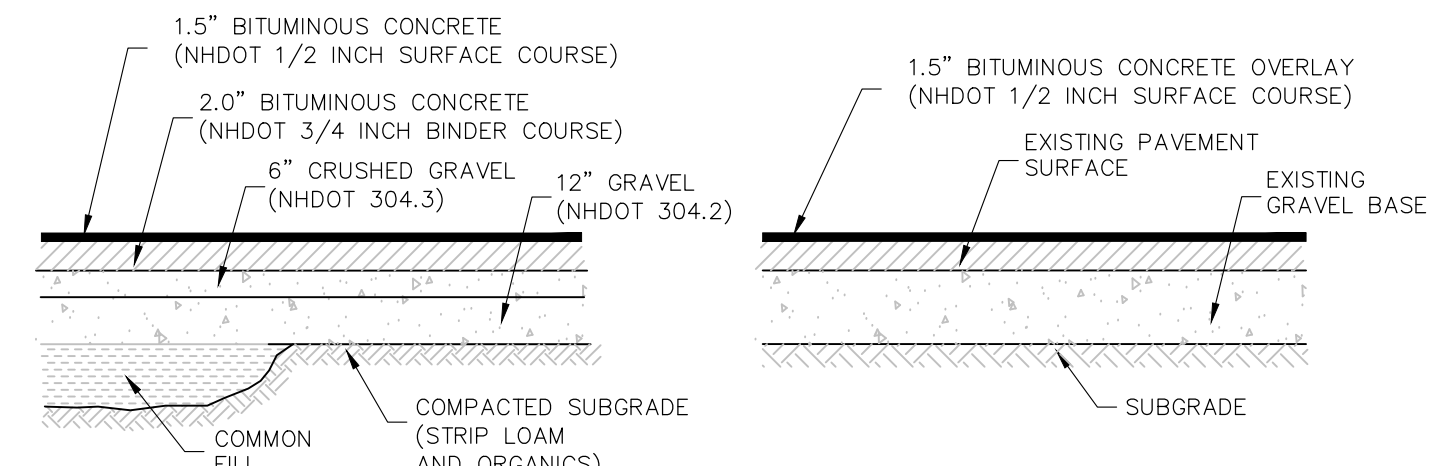
Feb 23, 2022 - 2:12pm F:\MISC Projects\47099 - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Rd\Design\PRODUCTION DRAWINGS\47099-01_Details_Main.dwg

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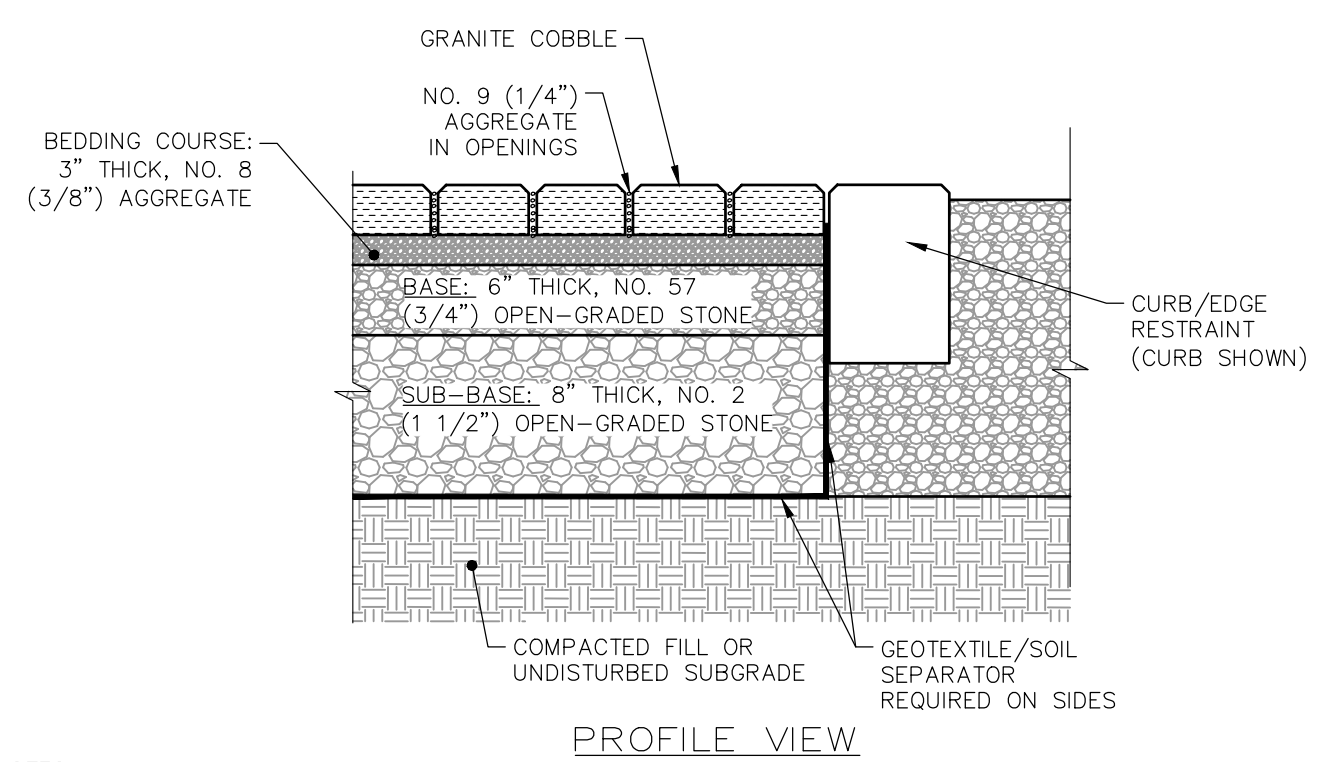
PEASTONE GRAVEL DRIVEWAY
NOT TO SCALE



STANDARD DUTY PAVEMENT **OVERLAY**

- NOTES:**
- SEE GRADING & EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
 - PROVIDE CLEAN BUTT TO EXISTING PAVEMENT— USE TACK COAT. A TACK COAT SHALL ALSO BE PLACED BETWEEN GRAVEL COURSE AND SUCCESSIVE LAYERS OF BITUMINOUS CONCRETE. SPECIFICALLY, A TACK COAT SHALL BE PLACED ATOP THE BINDER COURSE PAVEMENT PRIOR TO PLACING THE WEARING COURSE.
 - REMOVE ALL LOAM AND/OR YIELDING MATERIAL BELOW PAVEMENT.
 - BITUMINOUS MATERIALS SHALL CONFORM TO NHDOT SPECIFICATION SECTION 401.
 - BITUMINOUS CONCRETE SHALL BE COMPACTED TO AT LEAST 92.5% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D2041 OR AASHTO T209. PLACEMENT TEMPERATURES OF BITUMINOUS CONCRETE MIXES, IN GENERAL, RANGE BETWEEN 270 AND 310 DEGREES FAHRENHEIT.
 - PAVEMENT BASE COURSE AGGREGATE SHALL CONFORM TO NHDOT SPECIFICATION SECTION 304, ITEM 304.3 AND COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.
 - PAVEMENT SUBBASE COURSE AGGREGATE AND AGGREGATE FOR SUBGRADE REPAIR AREAS SHALL BE SUITABLE FOR USE AS STRUCTURAL FILL AND BE PROOF ROLLED AND COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY.
 - THE EXPOSED SOIL SUBGRADE SHOULD BE PROOF ROLLED PRIOR TO THE PLACEMENT OF SUBBASE GRAVEL, AND SOFT AREAS SHOULD BE REPAIRED AND REPLACED.
 - ALL PARKING SPACES SHALL BE STANDARD DUTY. ALL OTHER LOCATIONS SHALL BE HEAVY DUTY.

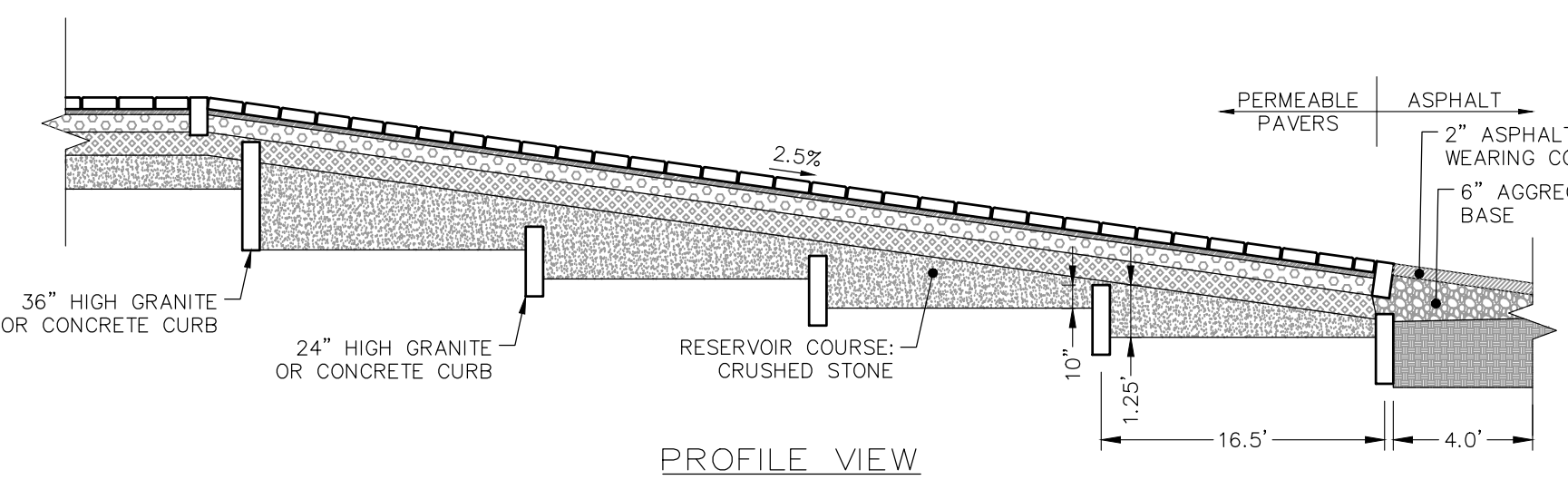
PAVEMENT SECTIONS
NOT TO SCALE



PROFILE VIEW

- NOTES:**
- REFER TO LANDSCAPE ARCHITECTURE FOR ADDITIONAL DETAIL AND SPECIFIC SURFACE TREATMENT.
 - PERMEABLE PAVERS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
 - INSTALLATION OF PERMEABLE PAVER SECTION SHALL BEGIN AT LOWEST GRADE AND END AT HIGHEST GRADE.
- MAINTENANCE:**
- PERMEABLE PAVERS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. PERMEABLE PAVERS FUNCTION AS AN EFFECTIVE STORMWATER TREATMENT SYSTEM AND REMAIN CLOG-FREE FOR YEARS WITH REASONABLE GOOD HOUSEKEEPING PRACTICES.
 - KEEP THE PAVEMENT FREE OF LEAVES, WEEDS, AND SEDIMENT.
 - AVOID THE USE OF SAND IN THE WINTER; IF USED, SPREAD SPARINGLY.
 - PERIODICALLY SWEEP THE OPENINGS TO REMOVE CRUST THAT FORMS ON THE SURFACE. A STIFF BRISTLE BROOM WORKS WELL FOR RESIDENTIAL WALKS AND DRIVEWAYS.
 - IF PUDDLES RESULT FROM CLOGGING, INFILTRATION RATES CAN BE RESTORED TO 100% CAPACITY BY REMOVING THE AGGREGATE FROM THE OPENINGS AND REPLACING IT WITH CLEAN MATERIAL.
 - DO NOT PRESSURE WASH.
 - MINIMIZE APPLICATION OF SALT FOR ICE CONTROL.
 - INSPECT ANNUALLY FOR PAVER DETERIORATION.
 - MONITOR PERIODICALLY TO ENSURE THAT THE PAVERS DRAIN EFFECTIVELY AFTER STORMS.
 - PERIODICALLY ADD JOINT MATERIAL TO REPLACE LOST MATERIAL.
 - MAJOR CLOGGING MAY NECESSITATE REPLACEMENT OF PAVERS AND POSSIBLY FILTER COURSE AND SUB-BASE COURSE.

PERMEABLE PAVER
NOT TO SCALE

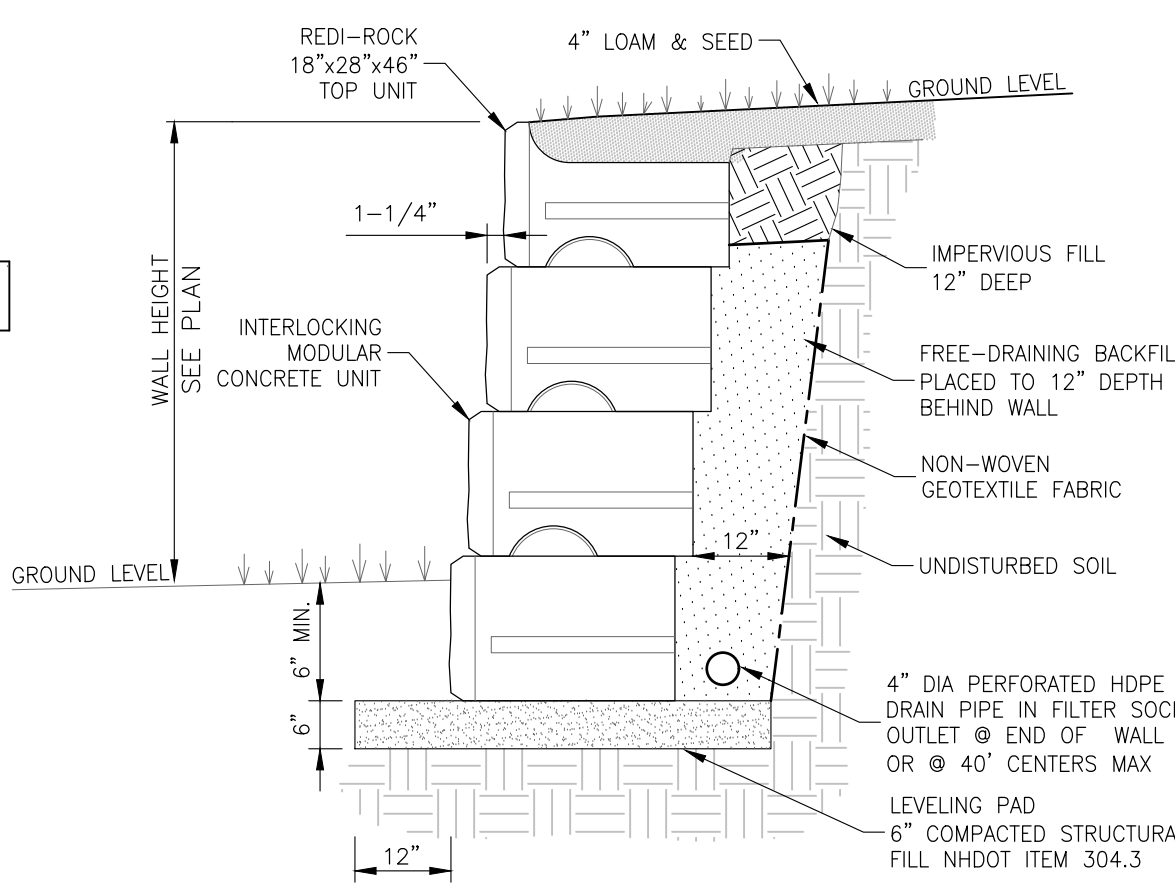


PROFILE VIEW

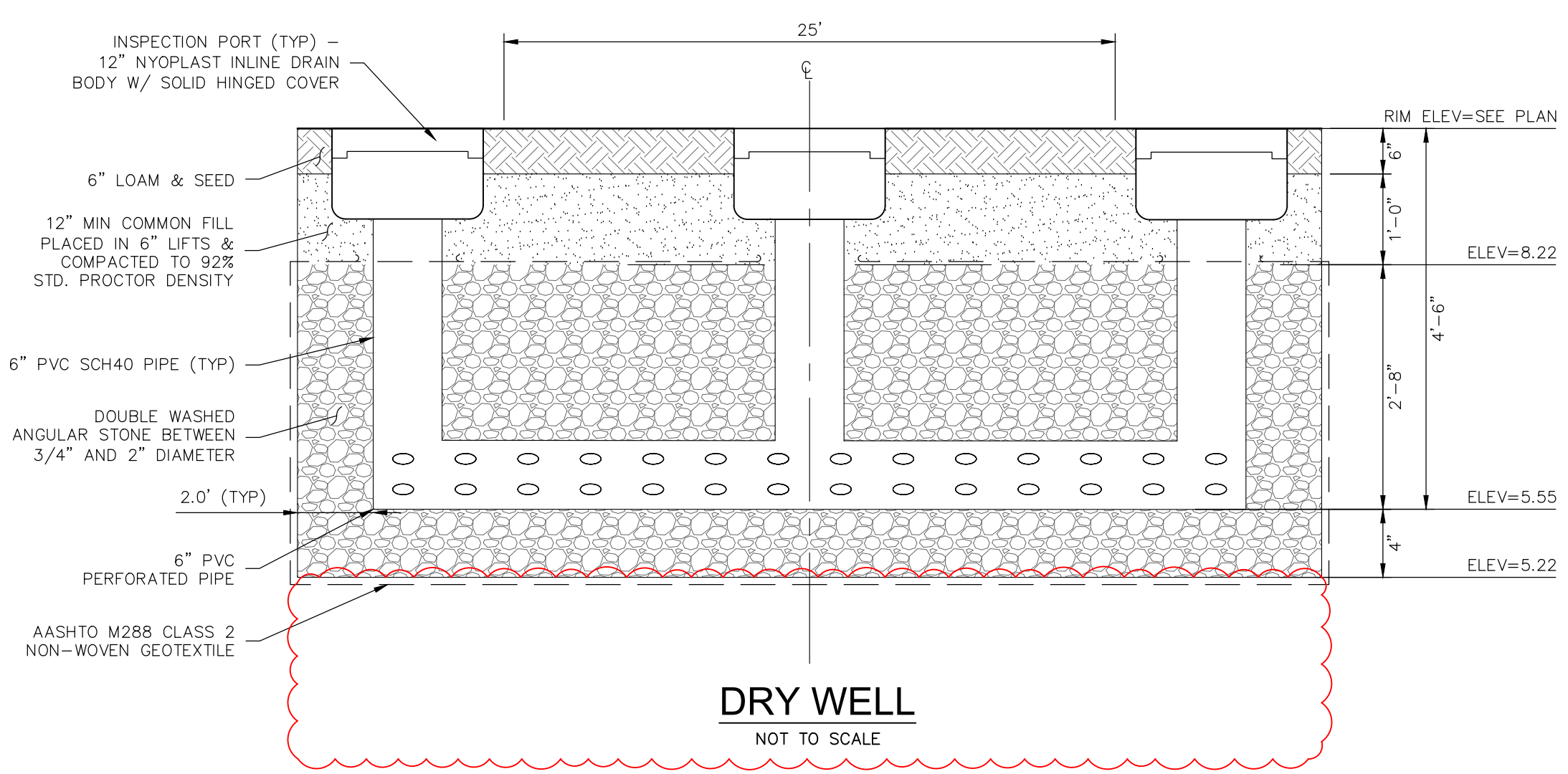
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 - MAJOR CLOGGING MAY NECESSITATE REPLACEMENT OF PAVERS AND POSSIBLY FILTER COURSE AND SUB-BASE COURSE.

PERMEABLE PAVER DRIVEWAY
NOT TO SCALE

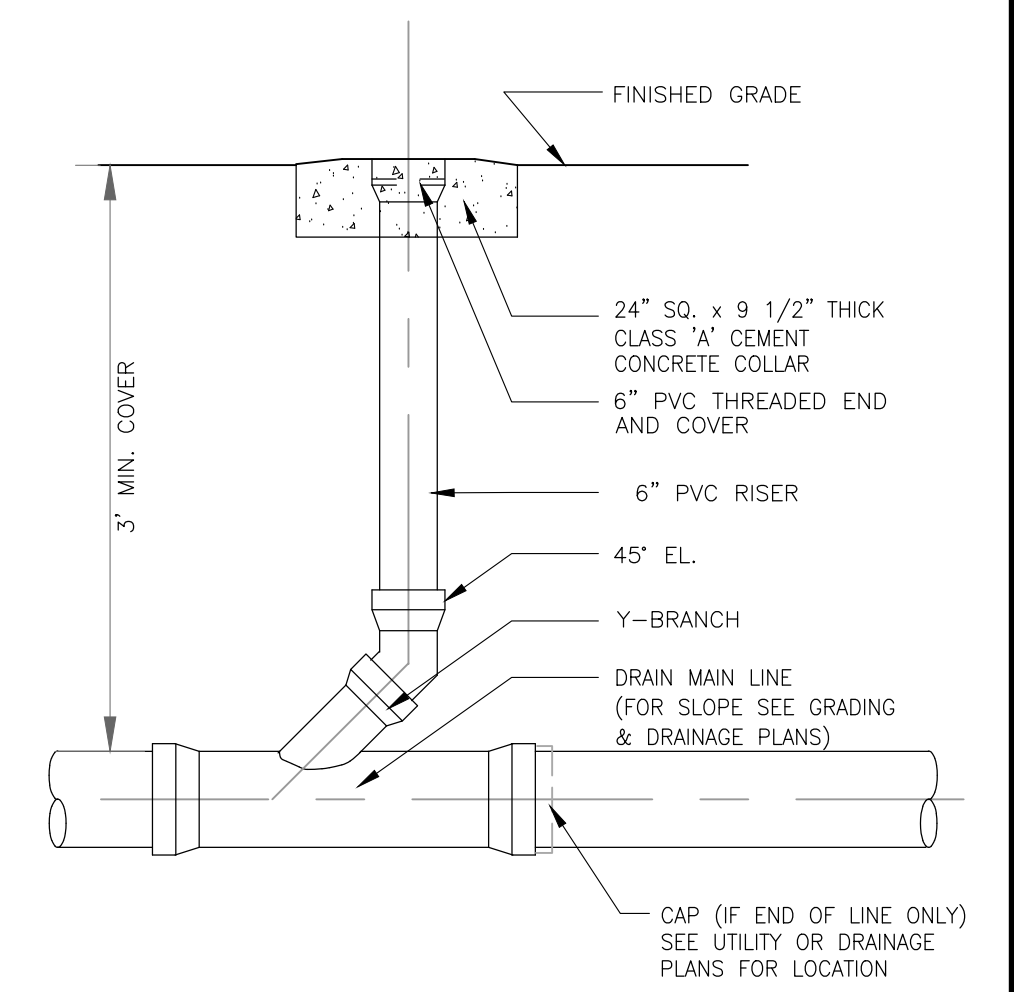
- GENERAL NOTES:**
- THIS DETAIL IS ONLY FOR WALLS LESS THAN 4 FEET IN HEIGHT.
 - WALL DESIGNS SHALL CONSIDER EFFECTS OF SLOPE, TRAFFIC LOADS, AND/OR BUILDING LOADS AS REQUIRED.
 - BLOCK COLOR SHALL BE DETERMINED BY OWNERS REPRESENTATIVE.
 - FINAL WALL DESIGN SHALL BE SUBJECT TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
 - IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR MUST CONTACT THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.
- MANUFACTURER'S DESIGN:**
- DESIGN SHALL BE FROM THE WALL MANUFACTURER.
 - DESIGN CALCULATIONS AND PLANS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER OF RECORD FOR APPROVAL.
 - DESIGN CALCULATIONS TO INCLUDE SAFETY FACTORS AGAINST OVERTURNING, SLIDING, BEARING CAPACITY, GEGRID PULLOUT AND GLOBAL STABILITY. MINIMUM FACTORS OF SAFETY ARE INDICATED BELOW.
 - THE WALL DESIGN ENGINEER SHALL COMPLETE SUFFICIENT INSPECTIONS DURING CONSTRUCTION TO CERTIFY WORK IS COMPLETE IN ACCORDANCE WITH DESIGN.
- DRAINAGE NOTES:**
- CONTRACTOR SHALL DIRECT SURFACE RUNOFF AWAY FROM THE WALL DURING CONSTRUCTION.
 - ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT OR OTHER SURFACE TREATMENT SHALL BE INSTALLED IN THE AREA OF THE WALL CONCURRENTLY WITH WALL CONSTRUCTION.



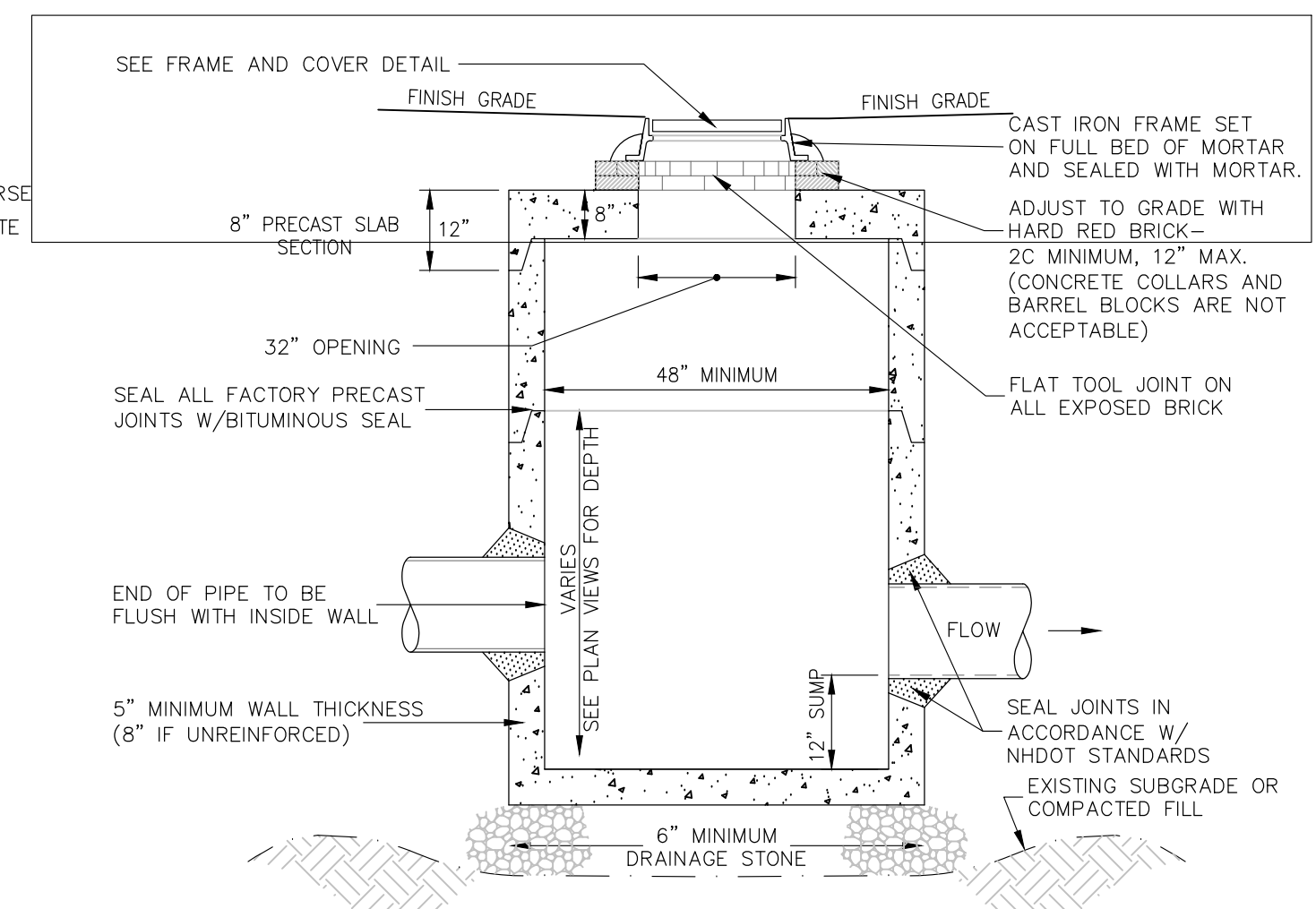
UNREINFORCED RETAINING WALL (MODULAR CONCRETE UNIT)
NOT TO SCALE



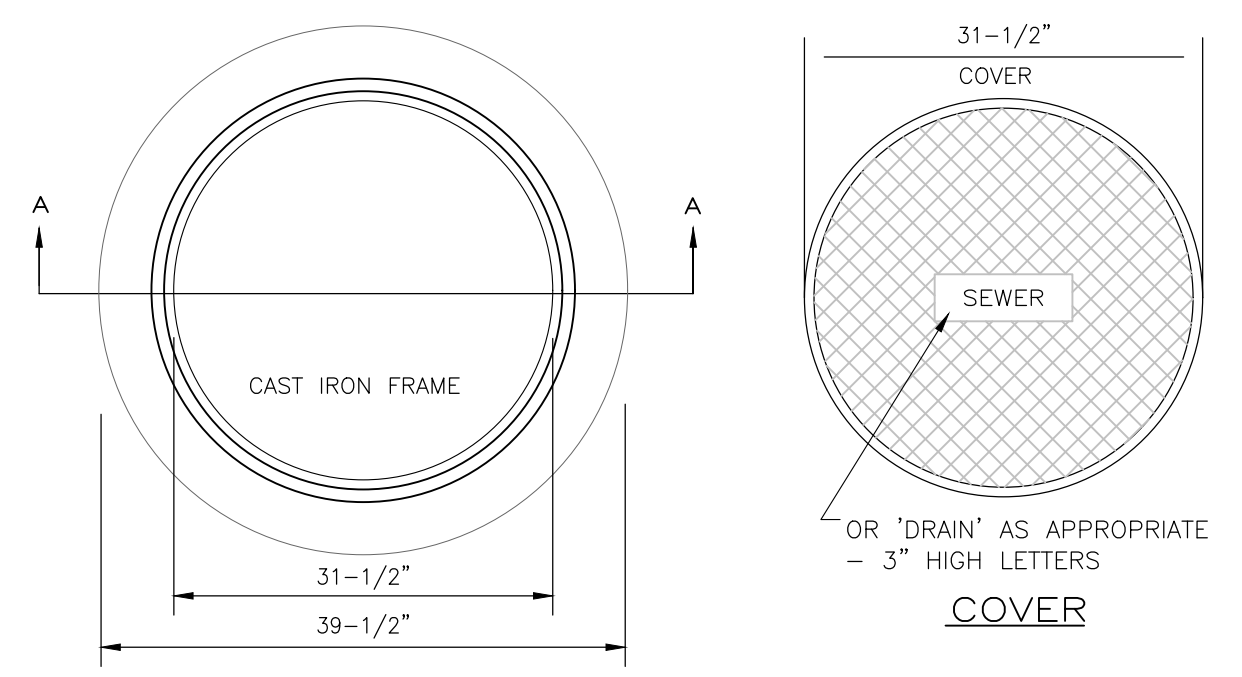
DRY WELL
NOT TO SCALE



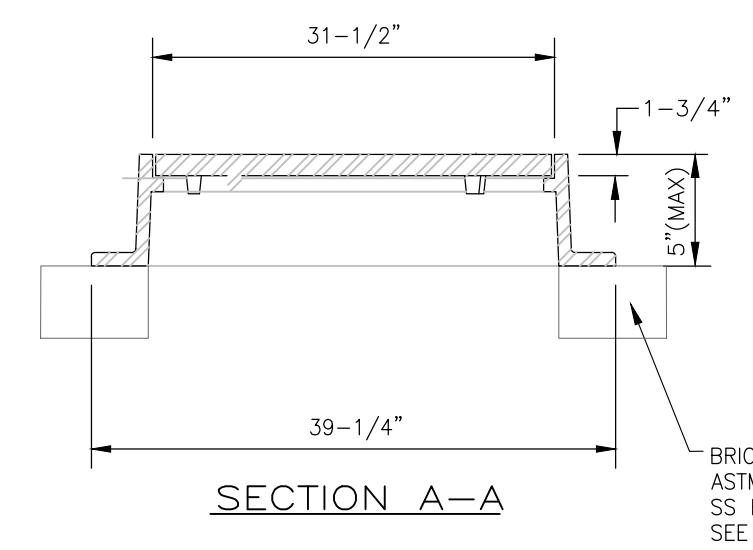
DRAINAGE CLEAN OUT
NOT TO SCALE



SLAB TOP MANHOLE
NOT TO SCALE



PLAN VIEW



SECTION A-A

MANHOLE FRAME AND COVER
NOT TO SCALE

- NOTES:**
- FRAMES AND COVERS SHALL BE MANUFACTURED FROM DUCTILE IRON IN ACCORDANCE WITH ISO 1083.
 - COVERS SHALL BE ON MAN OPERABLE USING STANDARDS TOOLS AND SHALL BE CAPABLE OF WITHSTANDING A TEST LOAD OF 120,000 LBS (#20 REQUIREMENT).
 - FRAME SHALL INCORPORATE A SEATING GASKET.
 - FLANGE SHALL INCORPORATE BEDDING SLOTS AND BOLT HOLES.
 - ALL COMPONENTS SHALL BE BLACK COATED.
 - MANHOLE FRAME AND COVER SHALL BE PER TOWN OF TILTON STANDARDS.

SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
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LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS

SEPTEMBER 29, 2021



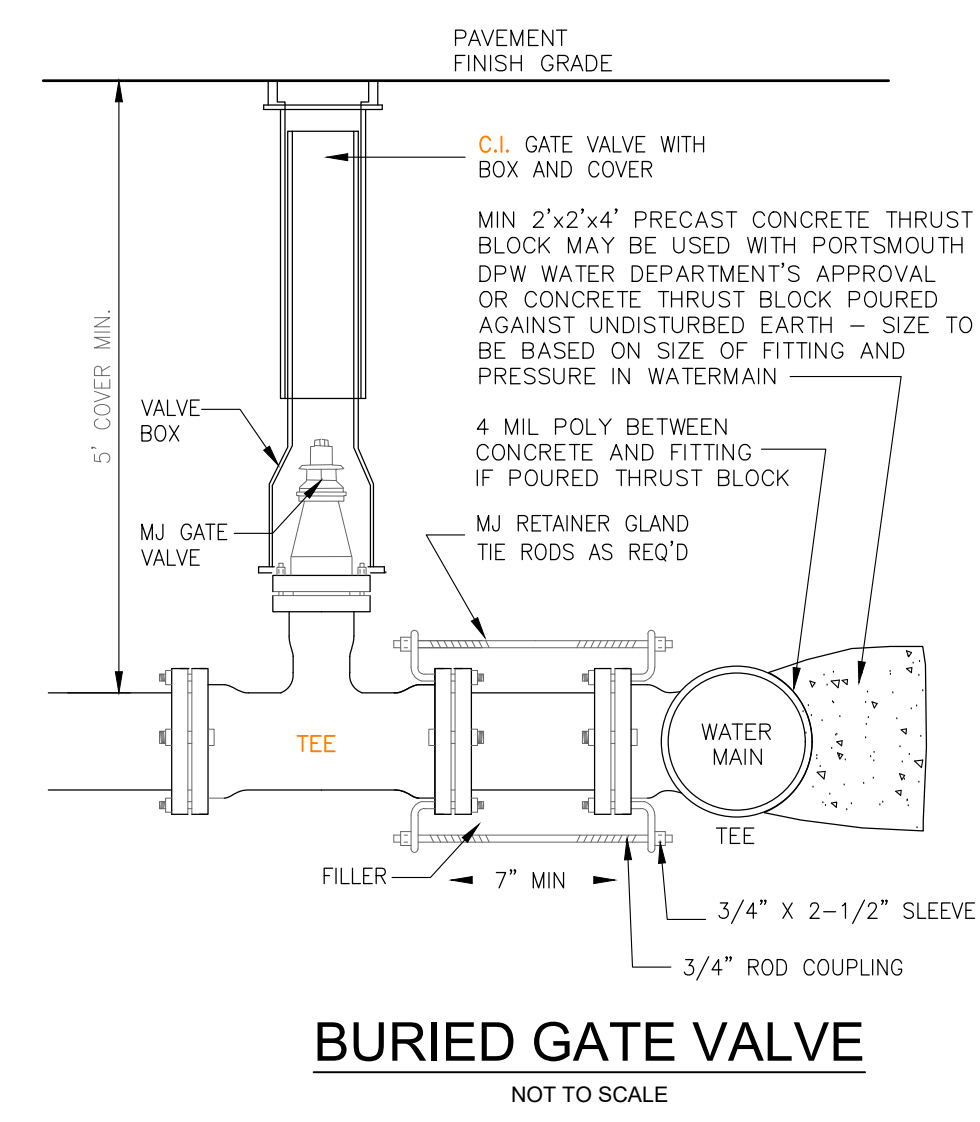
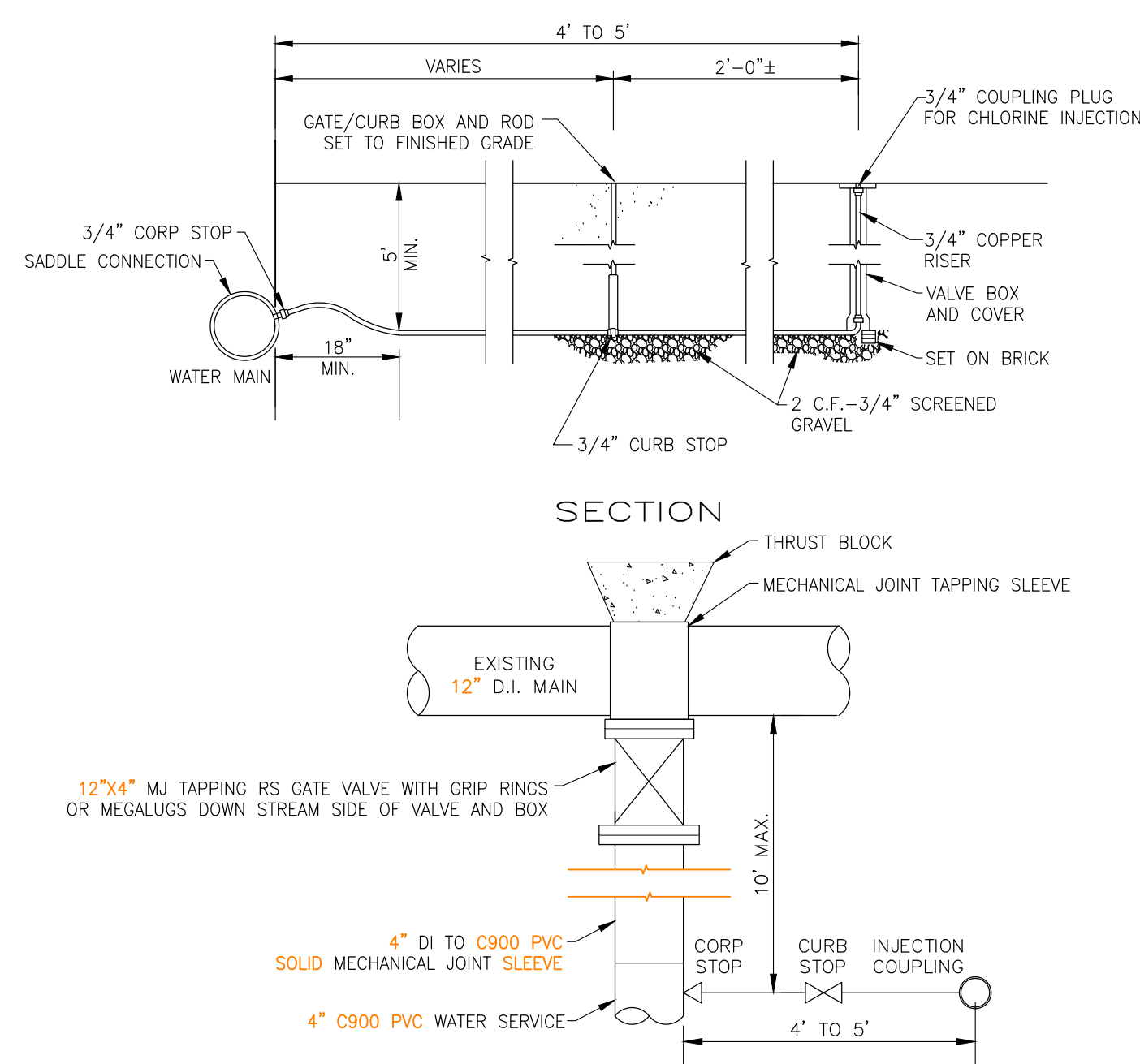
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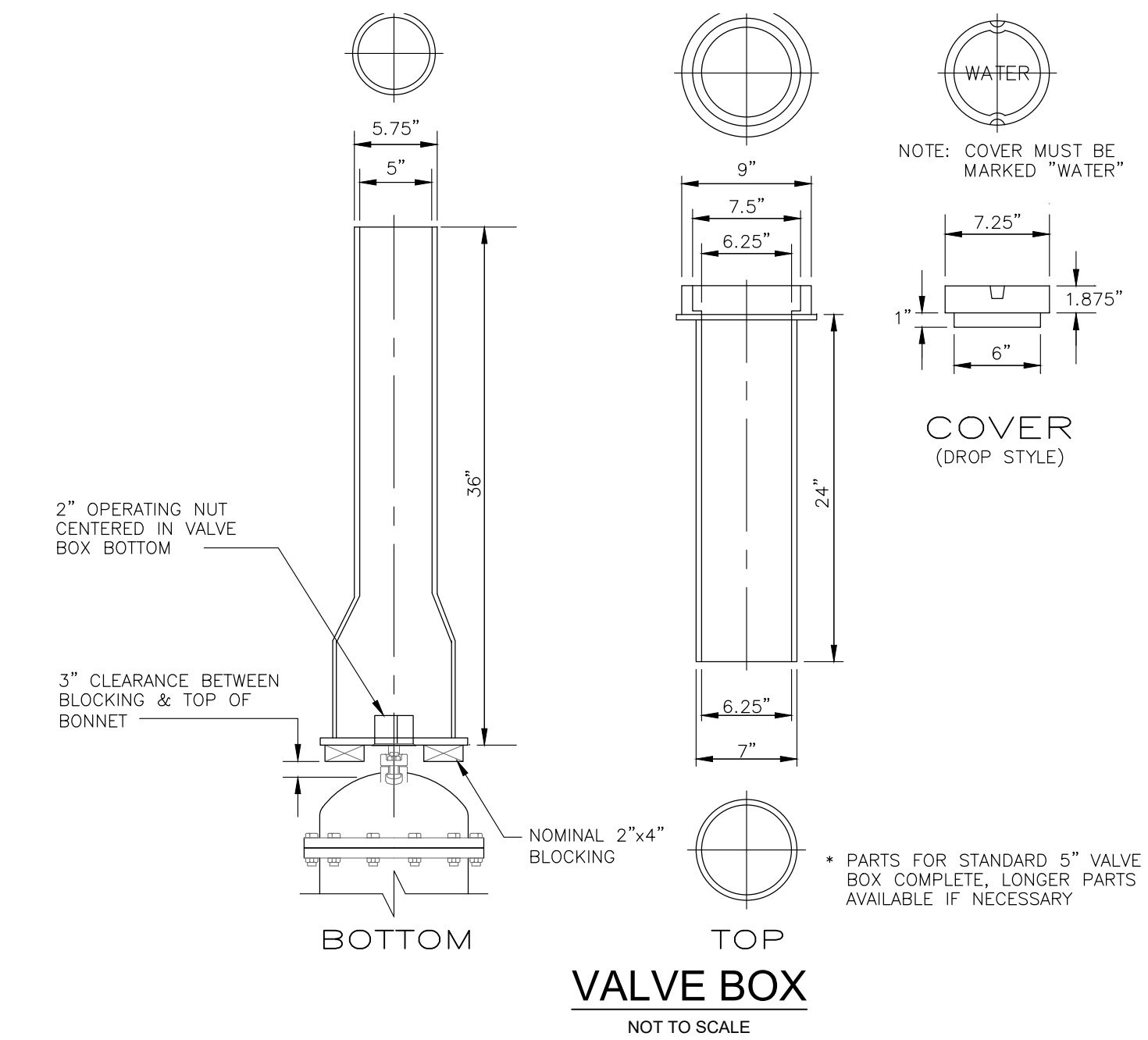
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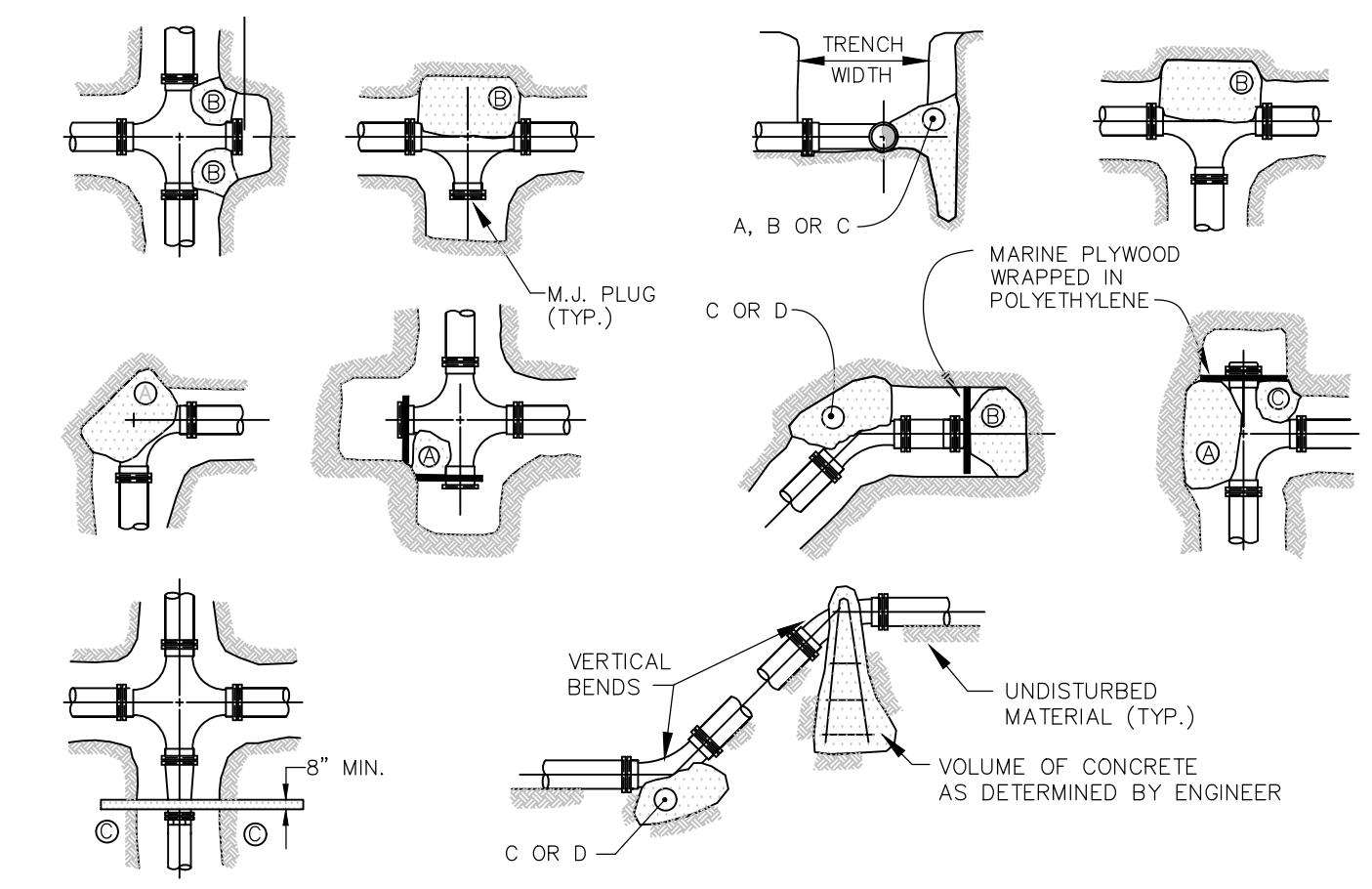
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BURIED GATE VALVE
NOT TO SCALE



VALVE BOX
NOT TO SCALE



BEARING AREA REQUIRED, SQUARE FEET

TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, pfs	4" AND LESS DEGREE BEND				6" AND 8" DEGREE BEND				10" AND 12" DEGREE BEND			
	11 1/4	22 1/2	45	90	11 1/4	22 1/2	45	90	11 1/4	22 1/2	45	90
LOOSE SAND OR MEDIUM CLAY - 2,000	1.0	2.0	2.7	4.0	1.5	3.0	6.0	10.0	3.0	6.2	12.0	22.0
PACKED GRAVEL AND SAND - 4,000	1.0	1.0	1.5	2.0	1.0	1.5	3.0	5.0	1.5	3.1	6.0	11.0
ROCK - 10,000	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.0	1.0	1.3	2.4	4.4

BEARING AREA REQUIRED, SQUARE FEET

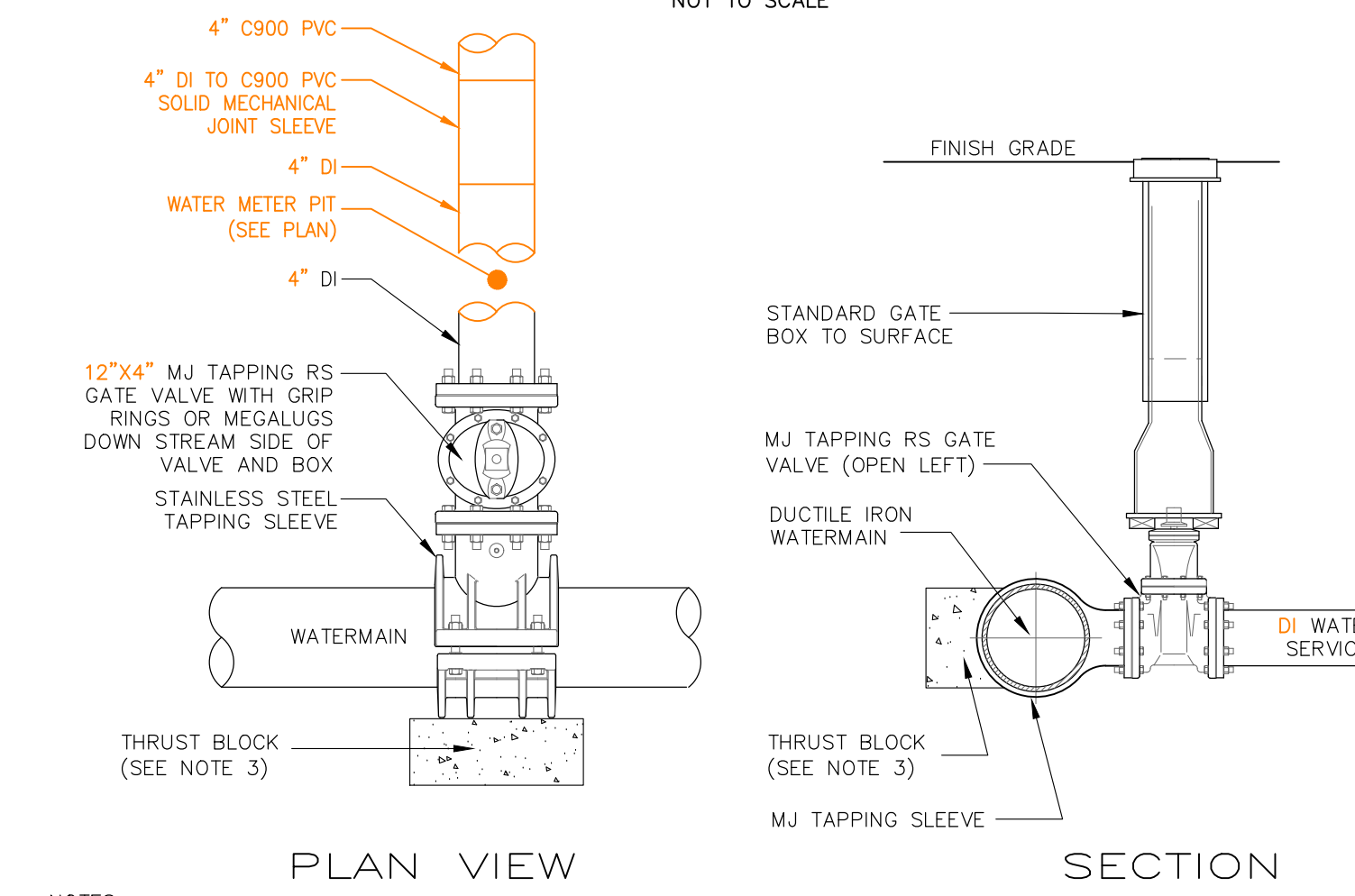
TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, pfs	14" AND 16" DEGREE BEND OR DEFLECTION				18" AND 20" DEGREE BEND OR DEFLECTION			
	11 1/4	22 1/2	45	90	11 1/4	22 1/2	45	90
LOOSE SAND OR MEDIUM CLAY - 2,000	6.0	12.0	22.5	40.0	9.5	19.0	37.0	67.0
PACKED GRAVEL AND SAND - 4,000	3.0	6.0	11.3	20.0	4.8	9.5	18.5	33.5
ROCK - 10,000	1.2	2.4	4.5	8.0	2.0	3.8	7.4	13.5

- NOTES:
- ALL MATERIAL, INSTALLATION PROCEDURES, MANUFACTURERS, AND DIMENSIONAL REQUIREMENTS SHALL CONFORM TO PORTSMOUTH'S INFRASTRUCTURE DESIGN STANDARDS AND PORTSMOUTH DPW'S ESTABLISHED RULES AND PROCEDURES.
 - A PRECAST CONCRETE THRUST BLOCK IS PREFERRED BY PORTSMOUTH DPW AND MUST CONFORM TO PORTSMOUTH DPW'S INFRASTRUCTURE DESIGN STANDARDS.
 - POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO PIPE JOINTS SHALL BE COVERED WITH CONCRETE.
 - ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
 - PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS. PLACE ROOFING FELT AROUND HYDRANT ELBOW BEFORE POURING THRUST BLOCKS AND ENSURE CONCRETE DOES NOT PLUG HYDRANT DRAIN PORTS.

THRUST BLOCKS
NOT TO SCALE

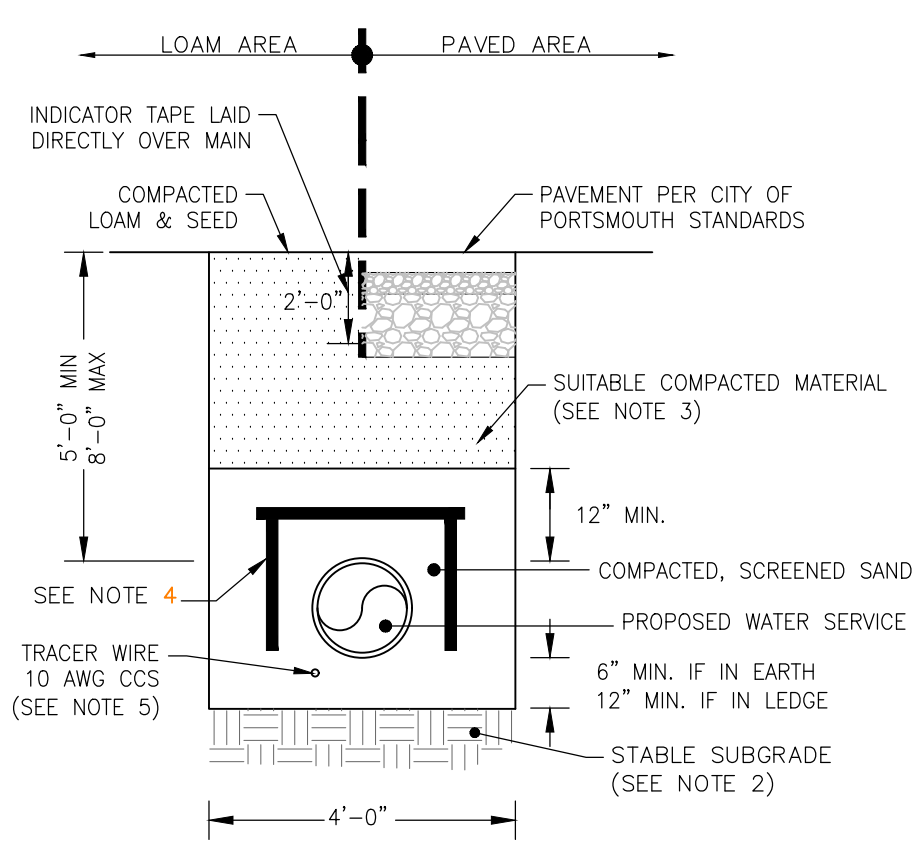
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 - CHLORINATION AND TESTING SHALL CONFORM TO AWWA C651.
 - DOMESTIC LINE MUST BE FLUSHED AND DISINFECTED BEFORE THE LINES ENTER THE BUILDING.

CHLORINE INJECTION CONNECTION
NOT TO SCALE



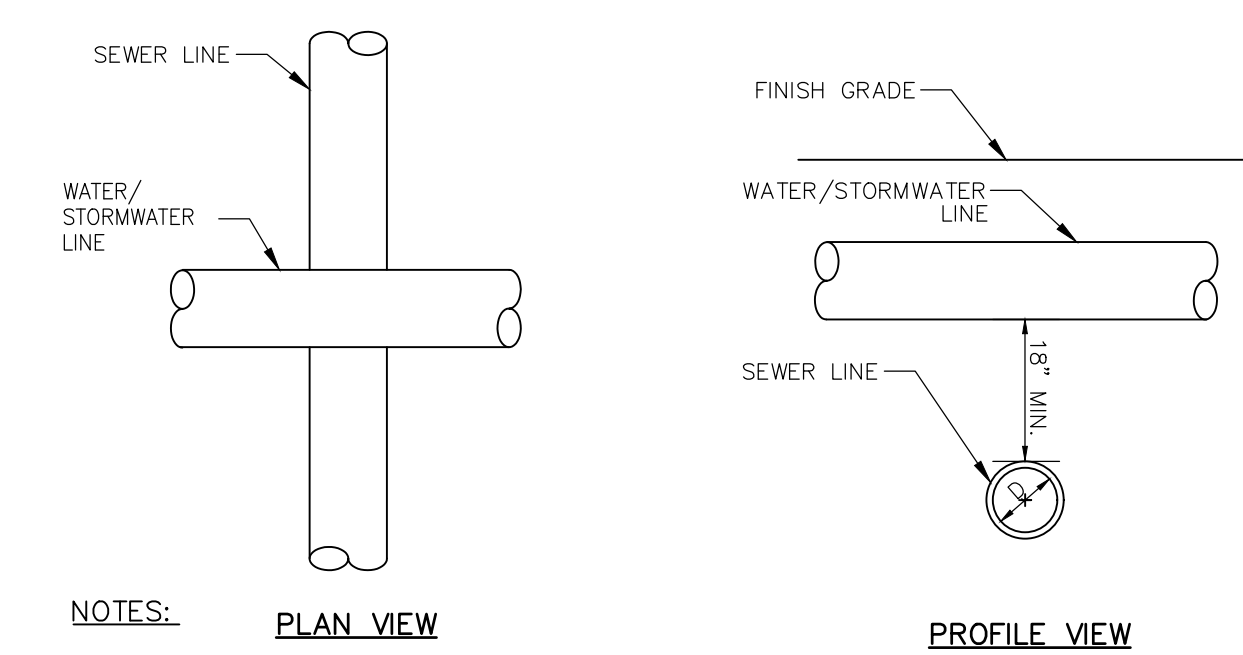
PLAN VIEW

SECTION



WATER TRENCH
NOT TO SCALE

- NOTES:
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 - IN LOCATIONS WITH EXISTING FILL SOILS, CONSULT WITH THE GEOTECHNICAL ENGINEER FOR METHODS TO PREPARE STABLE SUBGRADE AND REMOVAL OF MATERIAL IF NECESSARY.
 - SUITABLE MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER 6" IN THE LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. SUITABLE MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - RIGID STYROFOAM INSULATION (DOW HI-40 OR EQUAL) WITH 6" CLEAN SAND BLANKET AROUND WATER PIPE WHERE WATER AND DRAIN PIPE SEPARATION IS LESS THAN 18". TRACER WIRE SPECIFIED FOR NON-METALLIC WATER LINES SHALL BE INSTALLED BELOW AND TO THE SIDE OF THE PIPE AND PER THE MANUFACTURER REQUIREMENTS. TRACER WIRE PRODUCT SHALL BE SELECTED FOR OPEN CUT INSTALLATION TECHNIQUE.



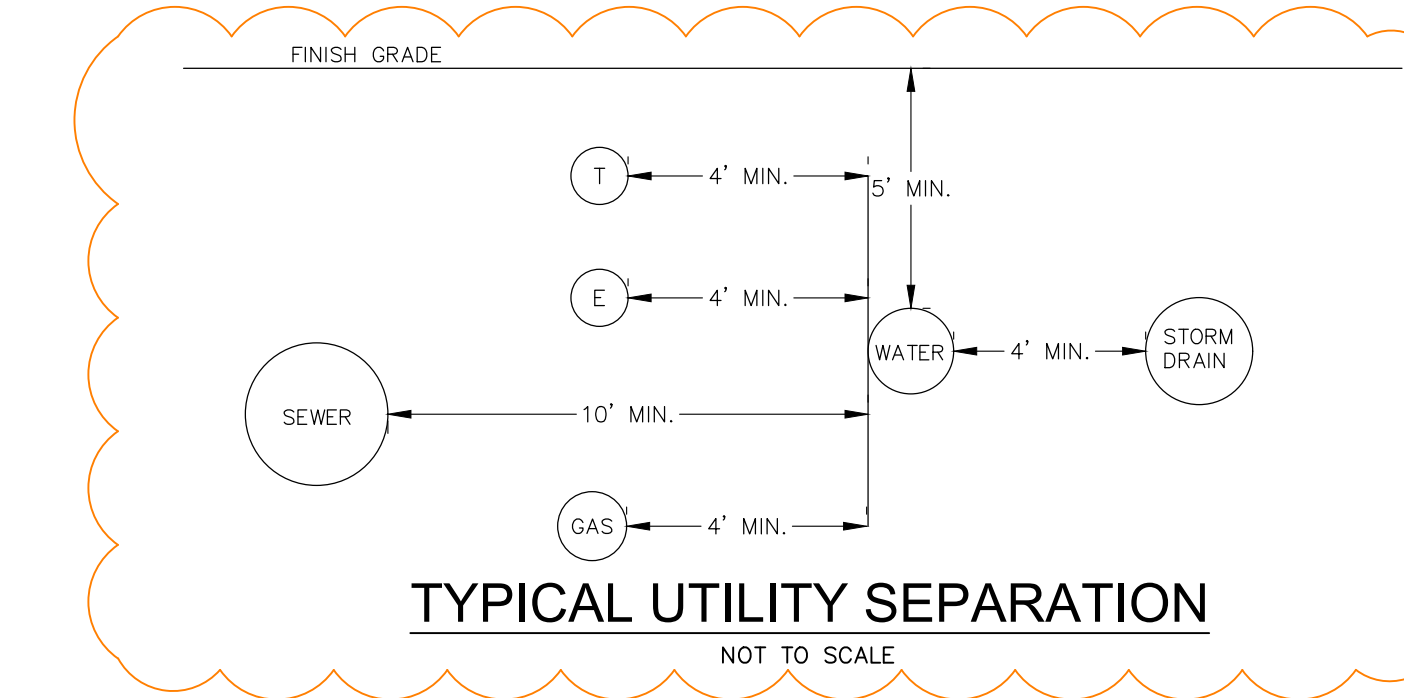
PLAN VIEW **PROFILE VIEW**

- NOTES:
- A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPERATION SHALL BE PROVIDED BETWEEN ALL WATER/STORMWATER AND SANITARY SEWER LINES. AN 18" MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPERATION SHALL BE PROVIDED AT ALL WATER/STORMWATER AND SANITARY SEWER CROSSINGS.
 - PROTECTION OF WATER SUPPLIES
 - THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.
 - NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTED RADI established in ENV-WIS 300 FOR ANY PUBLIC WATER SUPPLY WELLS OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.
 - SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
 - A DEVIATION FROM THE SEPERATION REQUIREMENTS OF (2) OR (3) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENV-WQ 704.06.
 - WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
 - VERTICAL SEPERATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
 - SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.

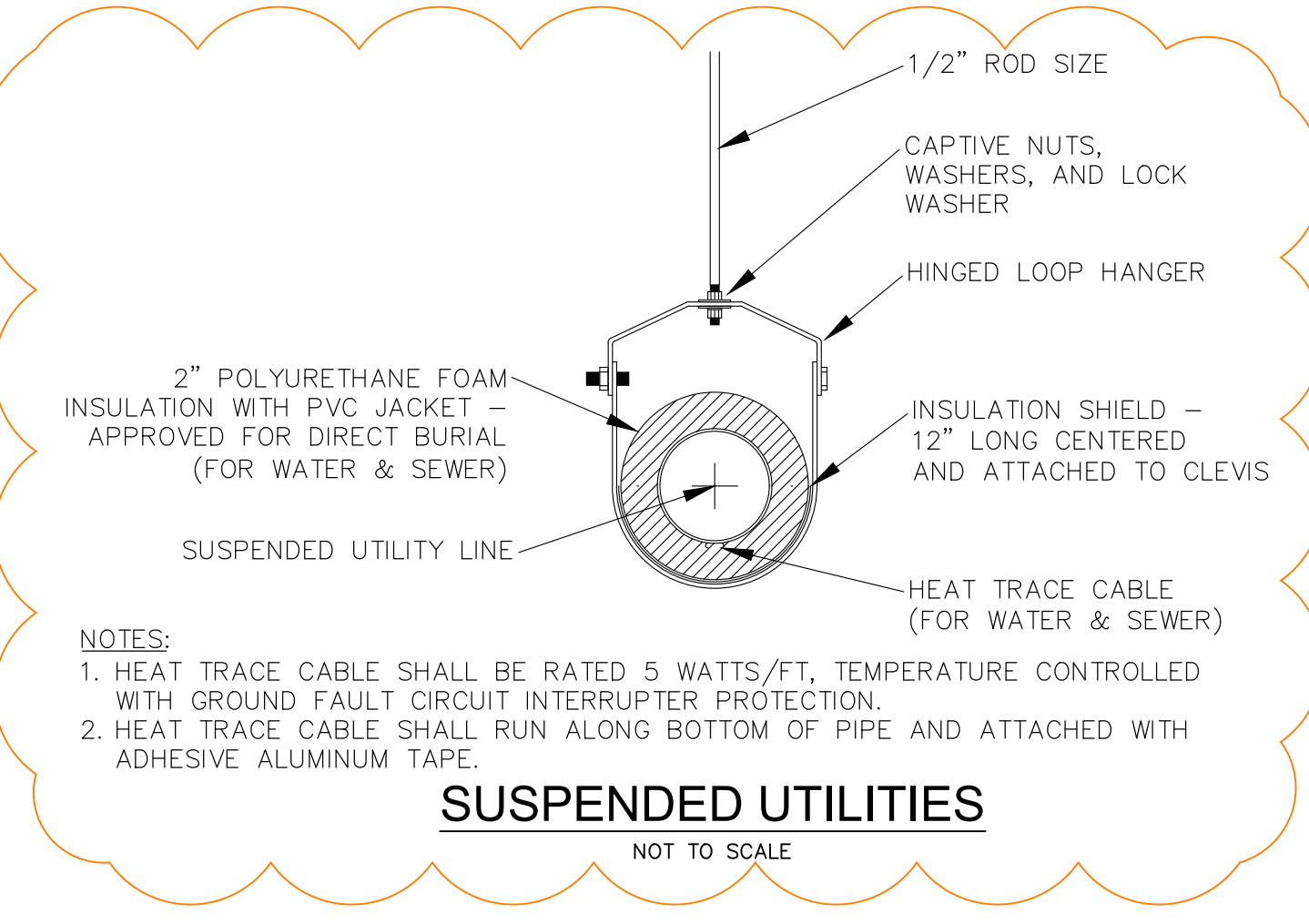
WATER/STORMWATER & SEWER CROSSING
NOT TO SCALE

- NOTES:
- TAPPING SLEEVES SHALL BE STAINLESS STEEL (SS) WITH SS HARDWARE.
 - ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 6" FROM TOP OF PIPE TO FINISH GRADE PER NHDOT REQUIREMENTS WITHIN THE RIGHT OF WAY.
 - PRECAST CONCRETE THRUST BLOCK TO BE USED, SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

WATER SERVICE WET TAP INSTALLATION
NOT TO SCALE



TYPICAL UTILITY SEPARATION
NOT TO SCALE



SUSPENDED UTILITIES
NOT TO SCALE

- NOTES:
- HEAT TRACE CABLE SHALL BE RATED 5 WATTS/FT. TEMPERATURE CONTROLLED WITH GROUND FAULT CIRCUIT INTERRUPTER PROTECTION.
 - HEAT TRACE CABLE SHALL RUN ALONG BOTTOM OF PIPE AND ATTACHED WITH ADHESIVE ALUMINUM TAPE.



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SITE DEVELOPMENT PLANS

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325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
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Feb 23, 2022 - 2:12pm F:\MISC Projects\47099 - Portsmouth\47099-01 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - Details_Main.dwg

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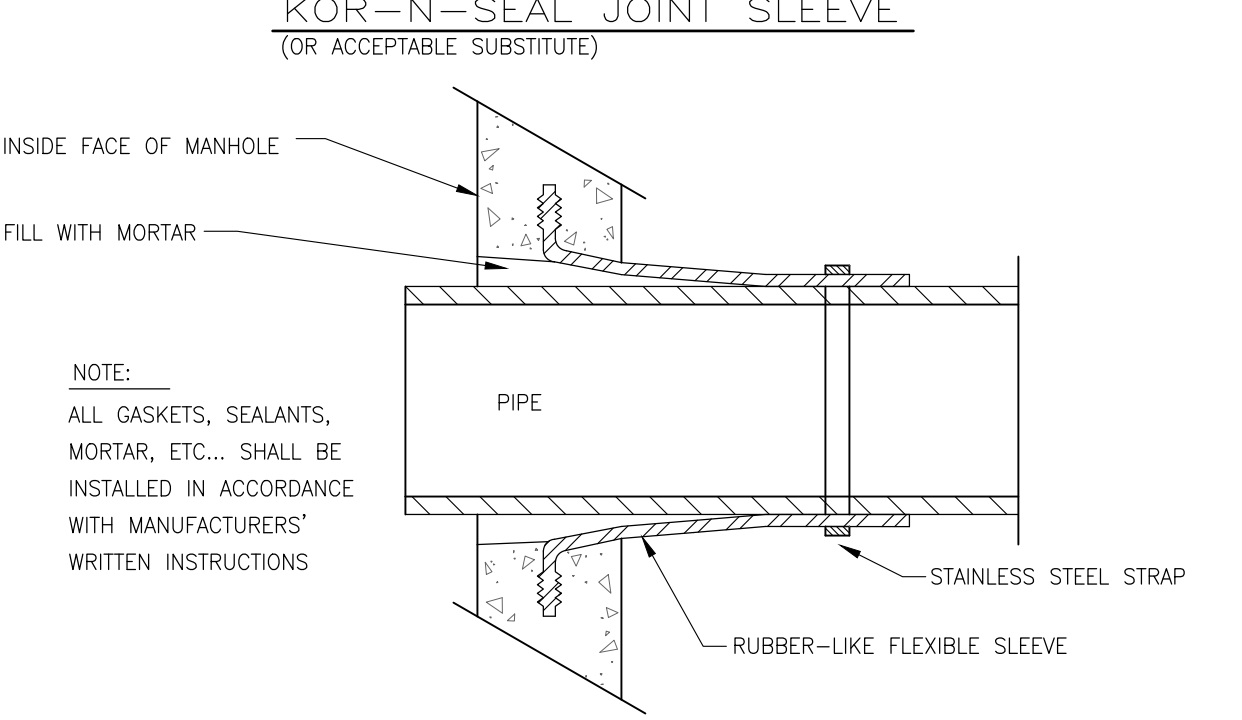
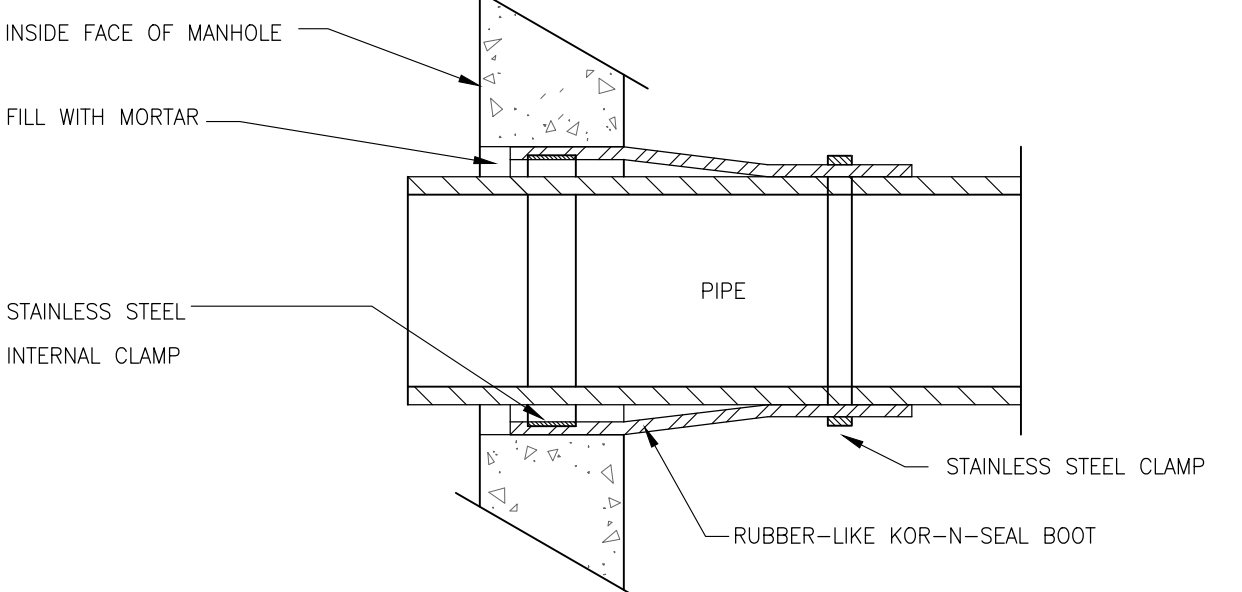
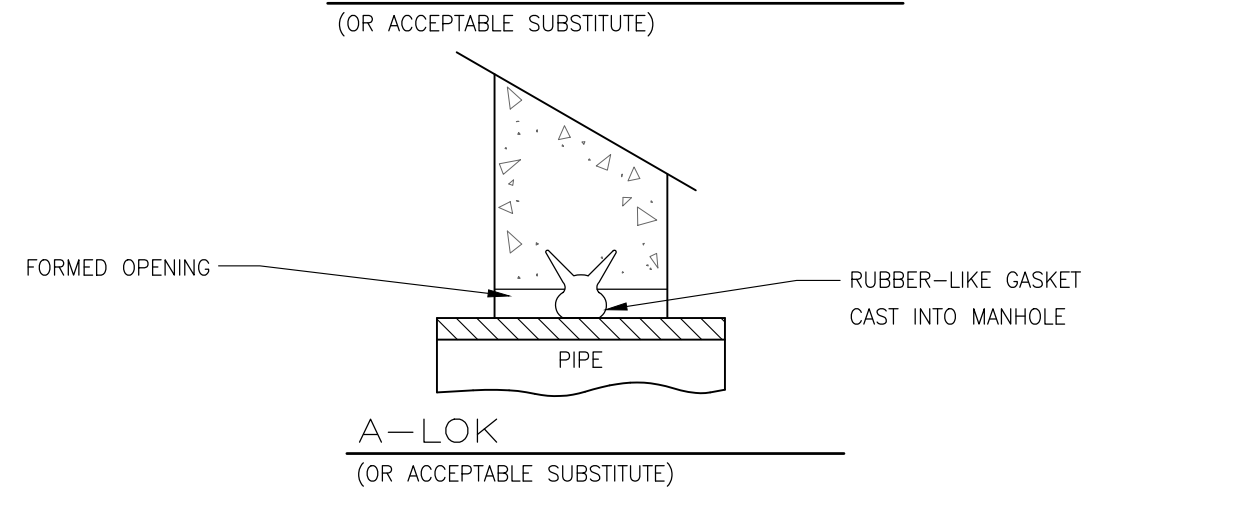
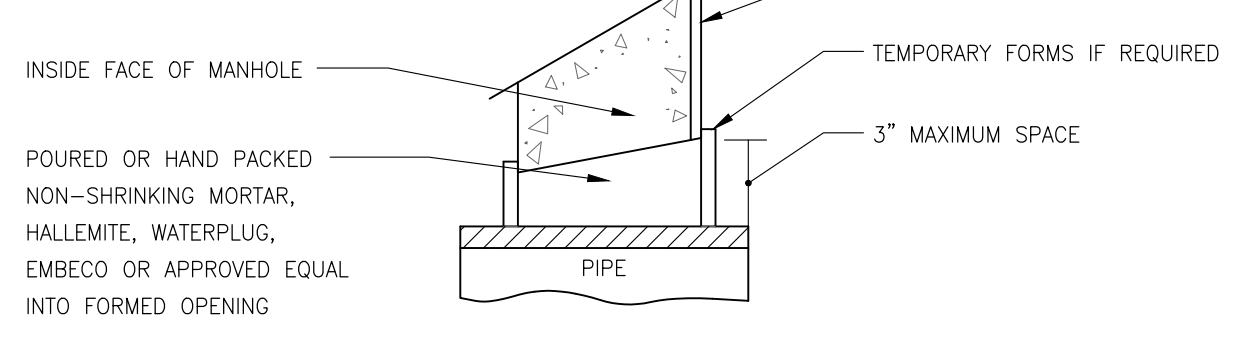
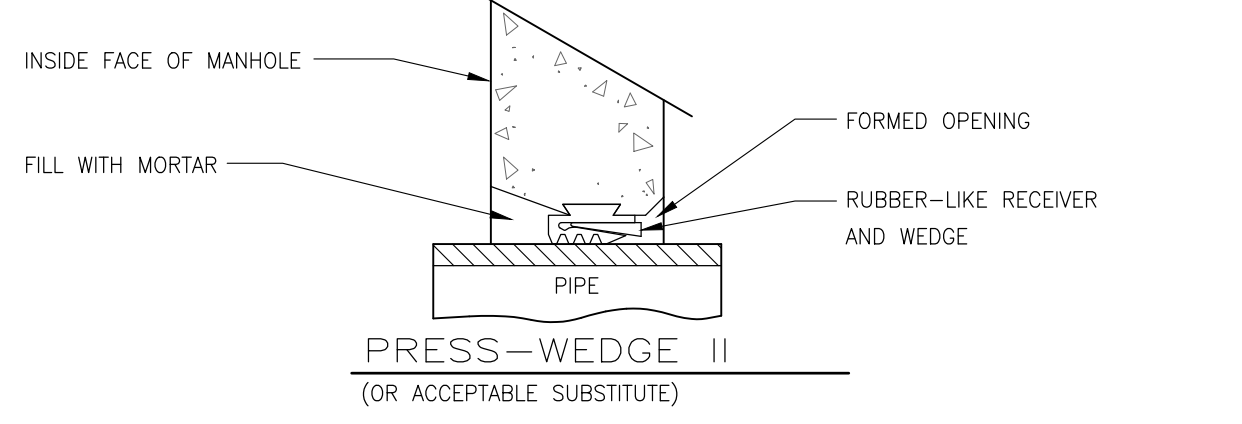
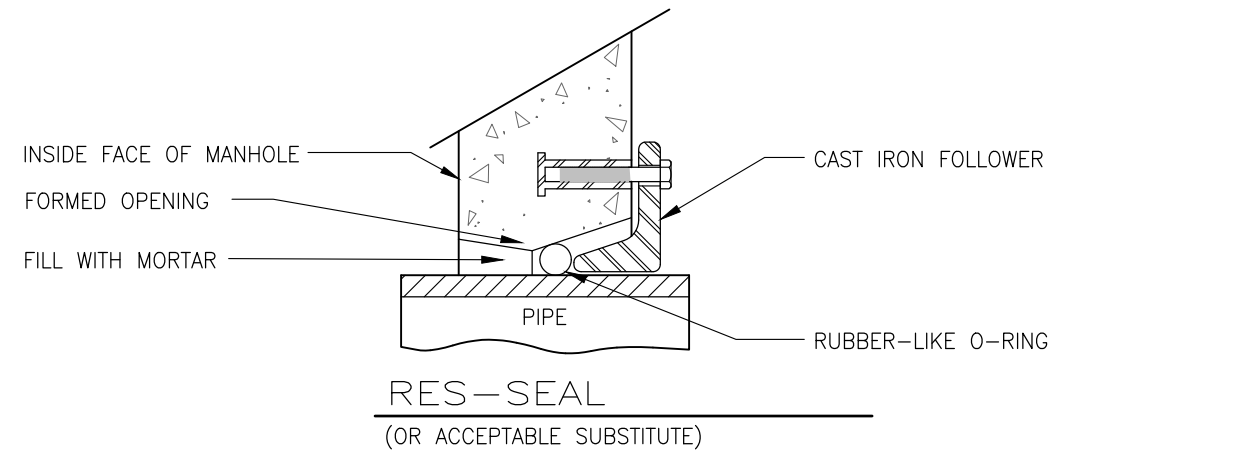
GENERAL NOTES

- IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H=20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
- BARRELS, CONE SECTIONS AND CONCRETE GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AND SHALL CONFORM ENV-WQ 704.12 & 704.13.
- PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06.
- BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
- MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
- ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
- ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
- SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H=20 LOADS.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT. APPROVED ELASTOMERIC SEALANTS ARE:
 - SIKAFLEX-12-SL
 - SONNEBORN BUILDING PRODUCTS-SONOLASTIC SL-1
- THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES. FOR SEWERS LARGER THAN 24-INCH DIAMETER, MANHOLE DIAMETERS SHALL BE INCREASED SO AS TO PROVIDE AT LEAST 12-INCHES OF SHELF ON EACH SIDE OF THE SEWER.
- LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE TO ENV-WQ 704.17.
 - (a) ALL MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244 STANDARD IN EFFECT WHEN THE TESTING IS PERFORMED.
 - (b) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
 - THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg.
 - THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR 1-INCH Hg PRESSURE DROP TO 9 INCHES SHALL BE:
 - A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP.
 - B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP.
 - C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
 - THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (b) ABOVE.
 - INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETE.
 - FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT

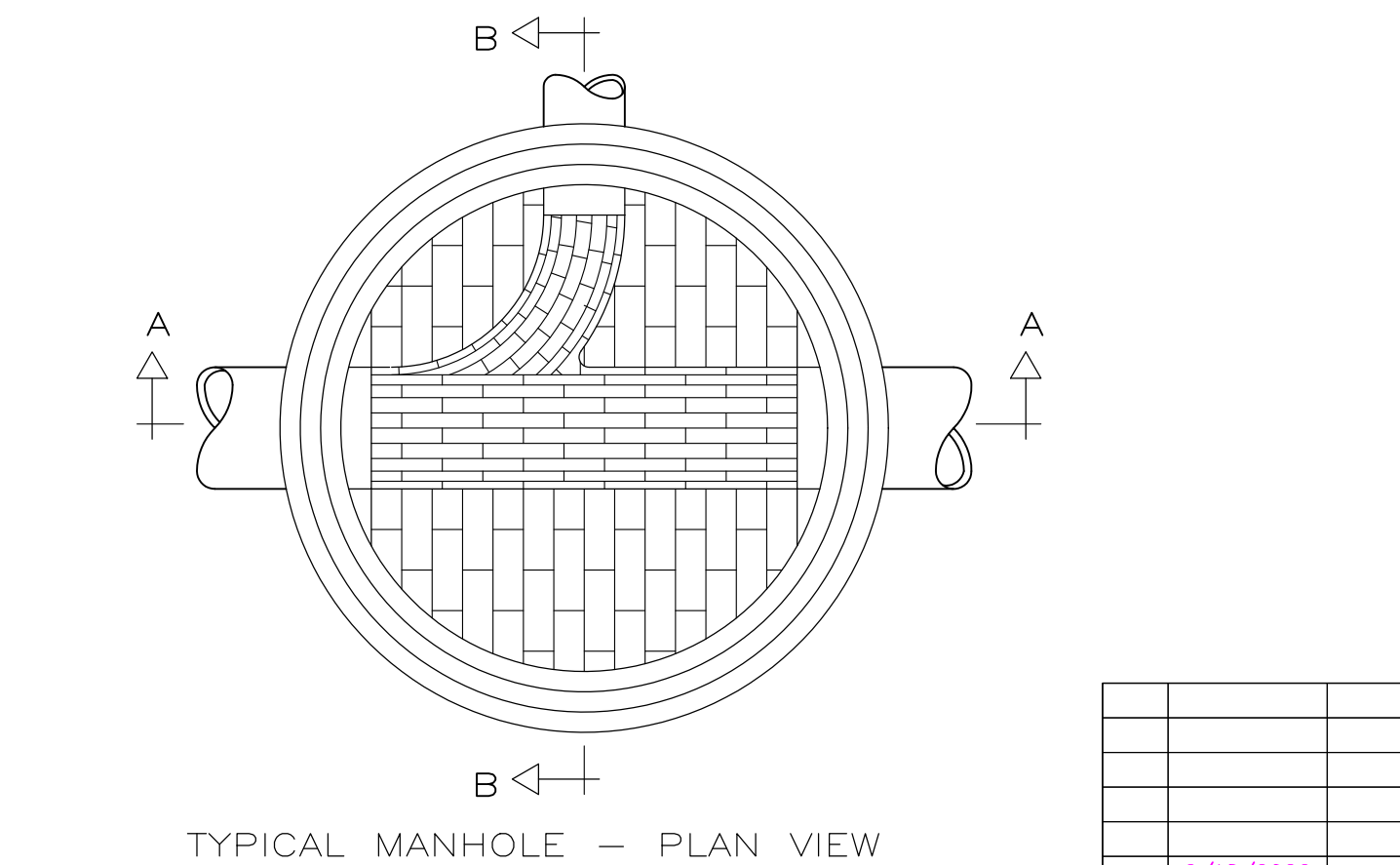
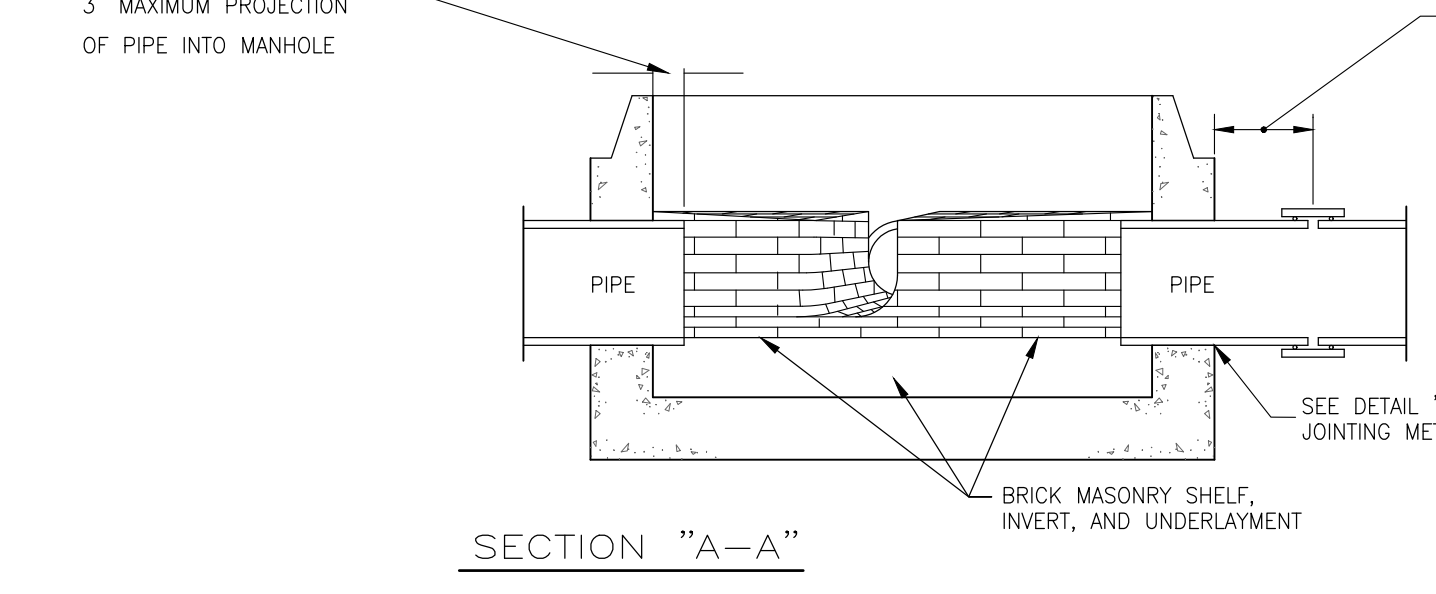
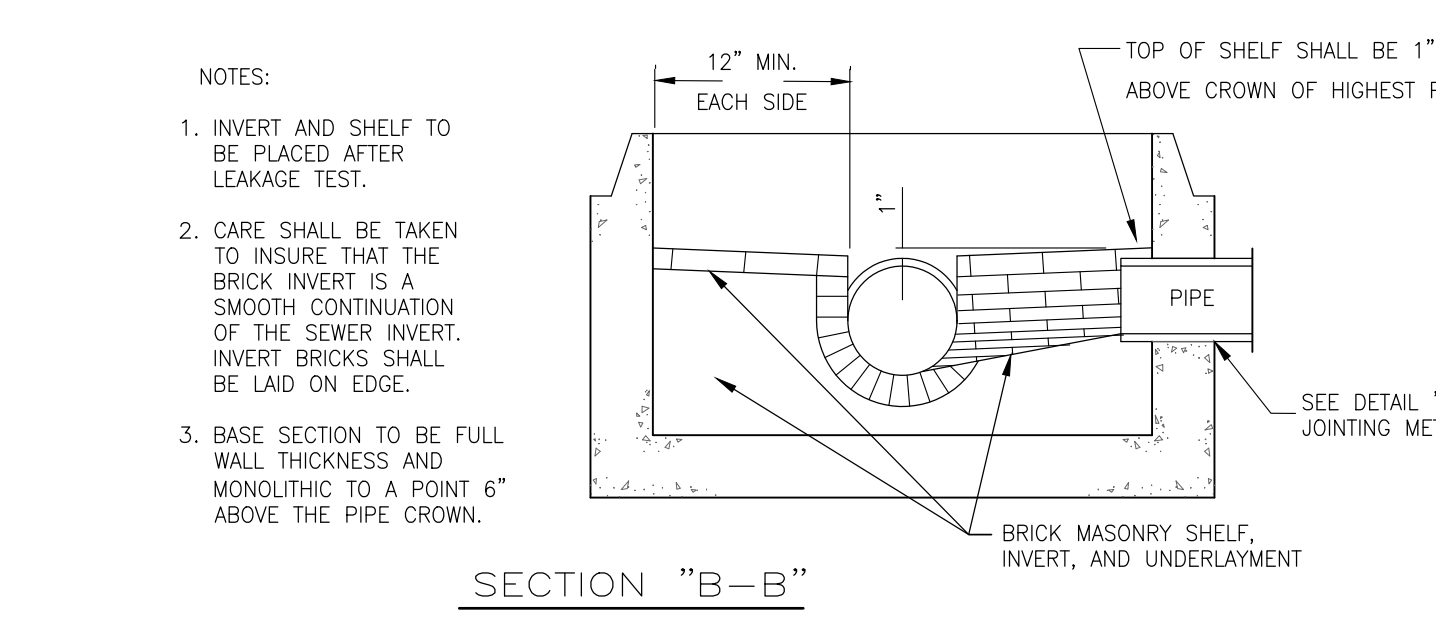
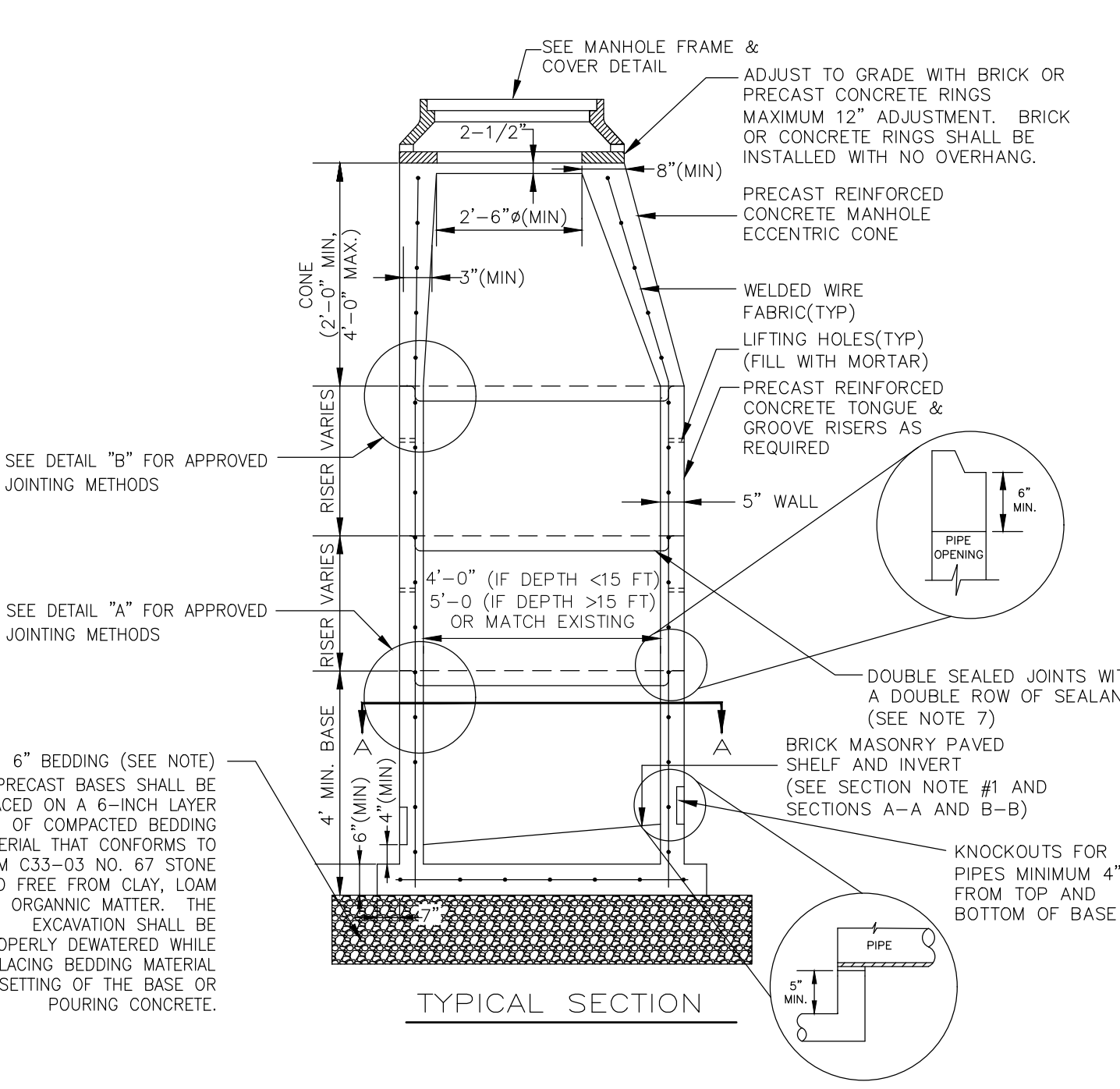
- ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
 - BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK.
- MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
- (a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
 - (b) 4.5 PARTS SAND, 1 PART CEMENT AND 0.5 PART HYDRATED LIME
- CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05. HYDRATED LIME SHALL BE TYPE S CONFORMING TO ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES". SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".

- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
- FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN, CLASS 30, CONFORMING TO ASTM A48/48M AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH WORD (MINIMUM HEIGHT) LETTERS "SEWER" SHALL BE PLAINLY CAST INTO THE TOP SURFACE. THE CASTING SHALL BE OF EVEN GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.
- BEDDING: PRECAST BASES SHALL BE PLACED ON A 6-INCH LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO ASTM C33-03 NO. 67 STONE AND FREE FROM CLAY, LOAM AND ORGANIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE. WATER-STOPS SHALL BE USED AT THE HORIZONTAL JOINT OF THE CAST-IN-PLACE MANHOLES.

- 100% PASSING 1" SCREEN
 90-100% PASSING 3/4" SCREEN
 20-55% PASSING 3/8" SCREEN
 0-10% PASSING #4 SIEVE
 0-5% PASSING #8 SIEVE
- FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION: (a) WITHIN 48 INCHES FOR REINFORCED CONCRETE PIPE (RCP). (b) WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15" DIAMETER.
 - NO FLEXIBLE JOINT SHALL BE REQUIRED FOR DUCTILE IRON PIPE OR PVC PIPE UP THROUGH 15-INCH DIAMETER.
 - PIPE TO MANHOLE JOINTS SHALL BE ONLY AS FOLLOWS:
 - A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES.
 - B. CAST INTO WALL OR SECURED WITH STAINLESS STEEL CLAMPS.
 - C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH THE SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING.
 - D. ON-SHRINKING GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
 - THE INVERT OF THE INCOMING PIPE SHALL BE NO MORE THAN 6 INCHES ABOVE THE OUTGOING PIPE UNLESS A DROP ENTRY IS USED.

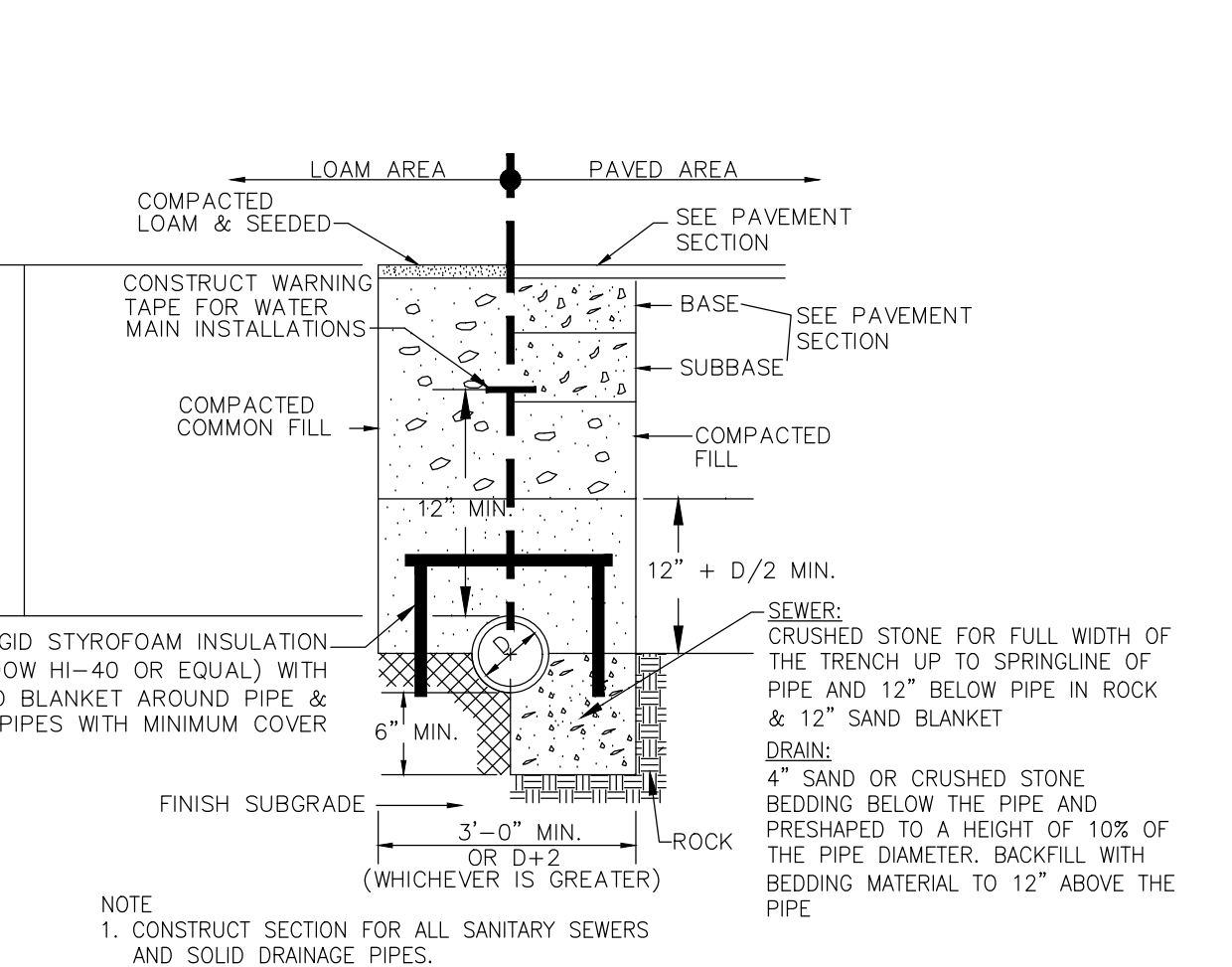


DETAIL "A" - PIPE TO MANHOLE JOINTS



STANDARD MANHOLE
NOT TO SCALE

- NOTES
- UNDERLAYMENT OF MANHOLE INVERT AND SHELF SHALL BE BRICK MASONRY PER ENV-WQ 704.12(K).
 - INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
 - CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
 - INVERT BRICKS SHALL BE LAID ON EDGE.
 - PRECAST CONCRETE MANHOLES SHALL MEET AASHTO M199-93/ ASTM C478-90B, RATED FOR HS=20 LOADING WITH CONCRETE STRENGTH OF 4000 PSI OR GREATER.
 - ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
 - HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
 - ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.
 - STATE OF NEW HAMPSHIRE APPROVED PRODUCTS
 - A) SIKAFLEX-12-SL
 - B) SONNEBORN BUILDING PRODUCTS SONOLASTIC SL-1
 - MANHOLE STEPS ARE PROHIBITED BY TILTON SEWER COMMISSION.



SITE DEVELOPMENT PLANS
 TAX MAP 205 LOT 2
DETAILS
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
 OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS SEPTEMBER 29, 2021

Seacoast Division
TFM
 Civil Engineers
 Structural Engineers
 Traffic Engineers
 Land Surveyors
 Landscape Architects
 Scientists

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REV	DATE	DESCRIPTION	DR	CK
4	2/18/2022	REVISED PER NHDES & UTILITIES	HEG	JCC
3	2/15/2022	REVISED PER NHDES & UTILITIES PER TAC	HEG	JCC
2	2/2/2022	REVISED PER NHDES & UPDATE SURVEY/UTILITIES	HEG	JCC
1	11/23/2021	REVISED PER NHDES & PROJECT COORDINATION	HEG	JCC

Feb 23, 2022 - 2:12pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Road\Design\PRODUCTION DRAWINGS\47099-01_Details_Main.dwg

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SEWER SERVICE NOTES

- MINIMUM SIZE PIPE FOR SEWER SERVICE SHALL BE FOUR INCHES.
- PIPE AND JOINT MATERIALS:
 - PLASTIC SEWER PIPE
 - PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
D2680	*ABS (COMPOSITES WALL)	8" THROUGH 15"

*PVC: POLY VINYL CHLORIDE
*ABS: ACRYLONITRILE-BUTADIENE-STYRENE
 - JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.
 - ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).
 - JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.
 - DUCTILE-IRON PIPE, FITTINGS AND JOINTS.
 - DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE: A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.
 - A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
 - JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO: A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS
- DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
- JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
- TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EXPLODED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.
- SEWER SERVICE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 6 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8" INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
- TESTING: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A THIRD PARTY LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)
 - AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.
 - THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.
 - DRY FLUORESCENE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE, IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWN-STREAM MANHOLE.

LEAKAGE OBSERVED IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.
- ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
- WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.

BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.
100% PASSING 1/8" SCREEN
90%-100% PASSING 3/4" INCH SCREEN
20%-55% PASSING 3/8" INCH SCREEN
0%-10% PASSING #4 SIEVE
0%-5% PASSING #8 SIEVE

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.
- LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.
- CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE SEWER CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

GRAVITY SEWER NOTES

- MINIMUM SIZE PIPE FOR GRAVITY SEWER SHALL BE 8-INCHES.
- PIPE AND JOINT MATERIALS FOR PLASTIC SEWER PIPE SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034-04g	* PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679-03	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F794-03	PVC (RIBBED WALL)	8" THROUGH 36"
F1760-01(2005)e1	PVC, RECYCLED	ALL DIAMETERS

*PVC: POLY VINYL CHLORIDE
- PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5 PERCENT PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2412-02 DURING MANUFACTURE.
- JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212-96(c)(2003)e1 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.
- DUCTILE-IRON PIPE, FITTINGS AND JOINTS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA).

AWWA C151/A21.51-02	THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536-84 (2004) DUCTILE IRON CASTINGS.
AWWA C151/A21.51-02	DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.

JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO AWWA C151/A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.
- CONCRETE PIPE SHALL CONFORM TO AWWA C302-04.
- PRESTRESSED CONCRETE CYLINDER PIPE AND FITTINGS SHALL CONFORM TO AWWA C301-99.

JOINTS SEALS FOR CONCRETE CYLINDER PIPE SHALL BE OIL RESISTANT ELASTOMERIC MATERIAL CONFORMING TO ASWWA C301-99 SPECIFICATIONS.
- DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
- GRAVITY SEWER PIPE TESTING SHALL BE AS FOLLOWS:

ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

LOW PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:

ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR".

UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE".
- ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.
- ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.
- THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5.0 PERCENT OF THE AVERAGE INSIDE DIAMETER.
- TRENCH CONSTRUCTION SHALL CONFORM TO THE FOLLOWING:

SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 6' BELOW GRADE IN ALL ROADWAY LOCATIONS AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS COUNTRY LOCATIONS.

WHERE SEWER LINES CROSS WATER PIPES, A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. AT SEWER/WATER INTERSECTIONS, A MINIMUM OF 6 FEET SHALL BE PROVIDED FROM THE WATER LINE TO THE SEWER PIPE JOINT. 12" SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE REQUIRED BETWEEN SEWER LINES AND ALL OTHER PIPES.

TRENCH DIMENSIONS FOR SEWER PIPE LESS THAN 15 INCHES IN DIAMETER, THE ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36 INCHES AND FOR PIPE 15 INCHES AND LARGER, THE ALLOWABLE WIDTH SHALL BE EQUAL TO THE PIPES OUTSIDE DIAMETER PLUS 24 INCHES.

TRENCH BEDDING MATERIAL AND FILL MATERIAL FOR EXCAVATION BELOW GRADE SHALL BE SCREENED GRAVEL OR CRUSHED STONE TO ASTM C33-03 STONE SIZE NO. 67. THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ANY ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSED THE 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE. IN LIEU OF A SAND BLANKET, A STONE ENVELOPE 6 INCHES THICK COMPLETELY AROUND THE PIPE USING 3/4-INCH STONE MAY BE USED.

PIPE BEDDING MATERIAL SHALL EXTEND FROM A HORIZONTAL PLANE THROUGH THE PIPE AXIS TO 6-INCHES BELOW THE BOTTOM OF THE OUTSIDE SURFACE OF THE PIPE.

PIPE SAND BLANKET MATERIAL SHALL COVER THE PIPE A MINIMUM OF 12 INCHES ABOVE THE CROWN OF THE OUTSIDE SURFACE.

COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.

BACKFILL MATERIAL SHALL BE IN 3-FOOT LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3-FEET SHALL BE COMPACTED IN 12-INCH LAYERS TO THE ROAD BASE SURFACE.

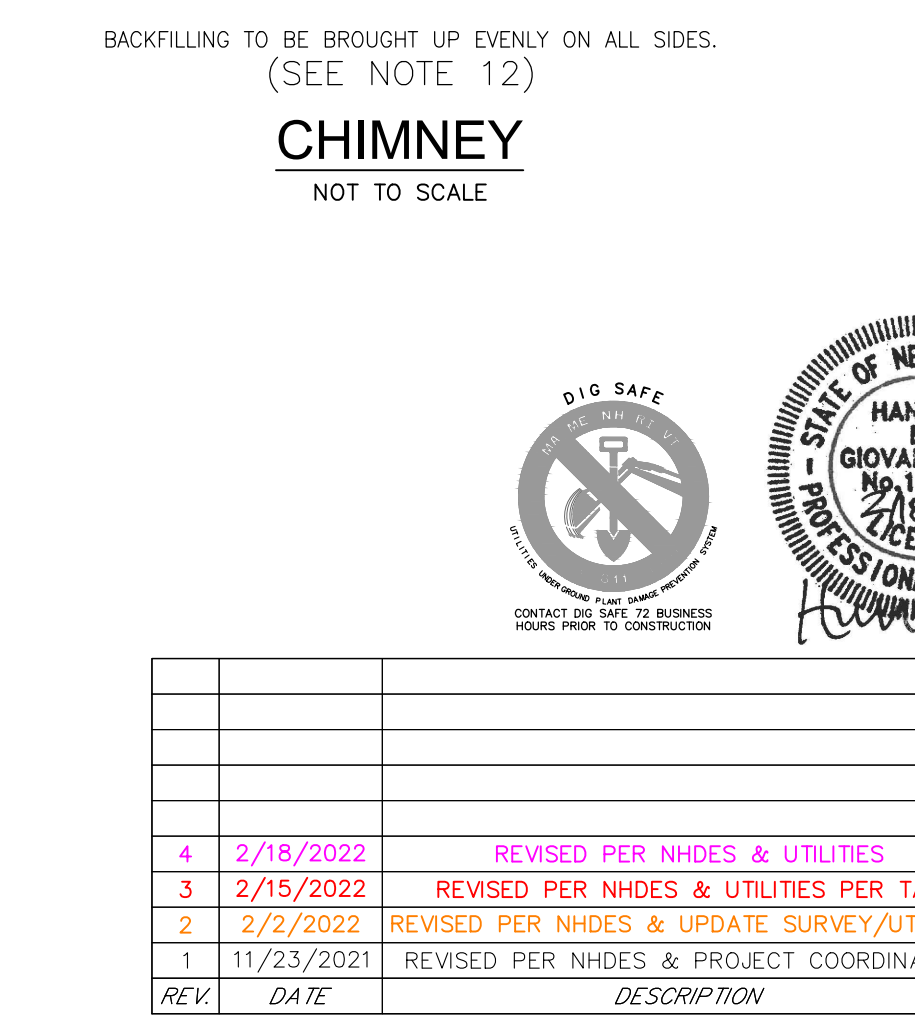
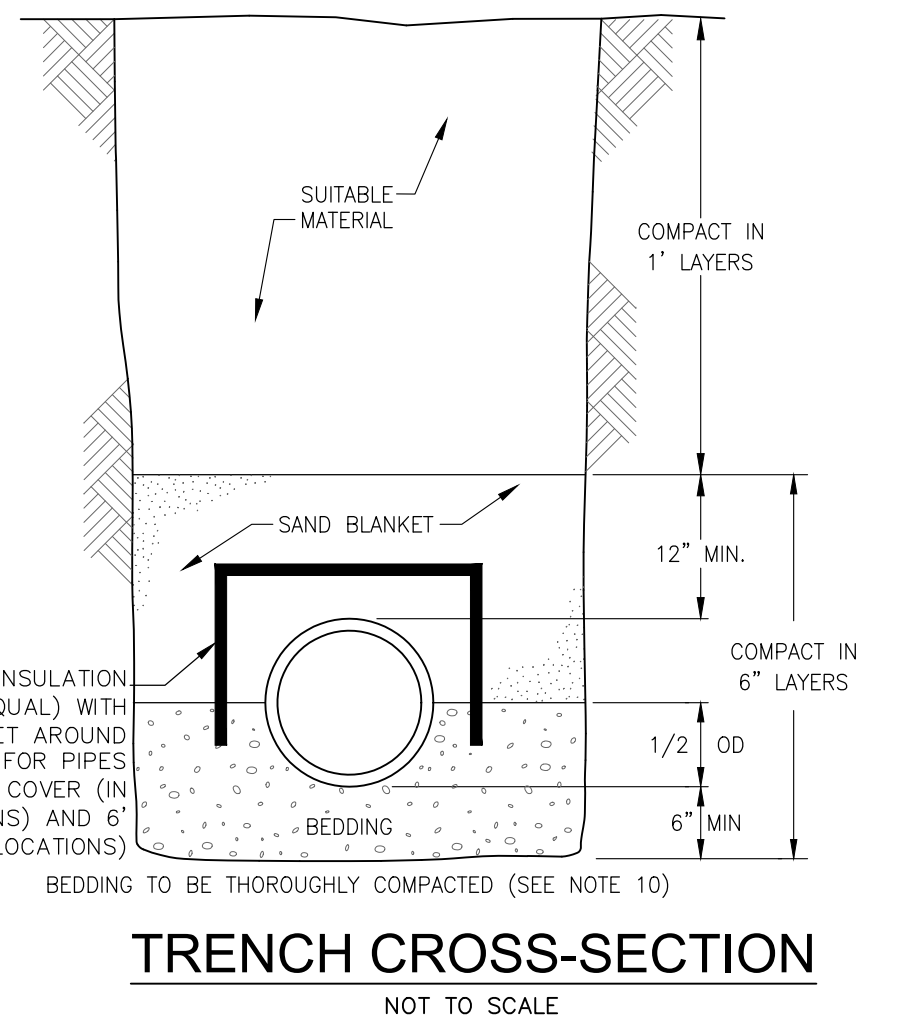
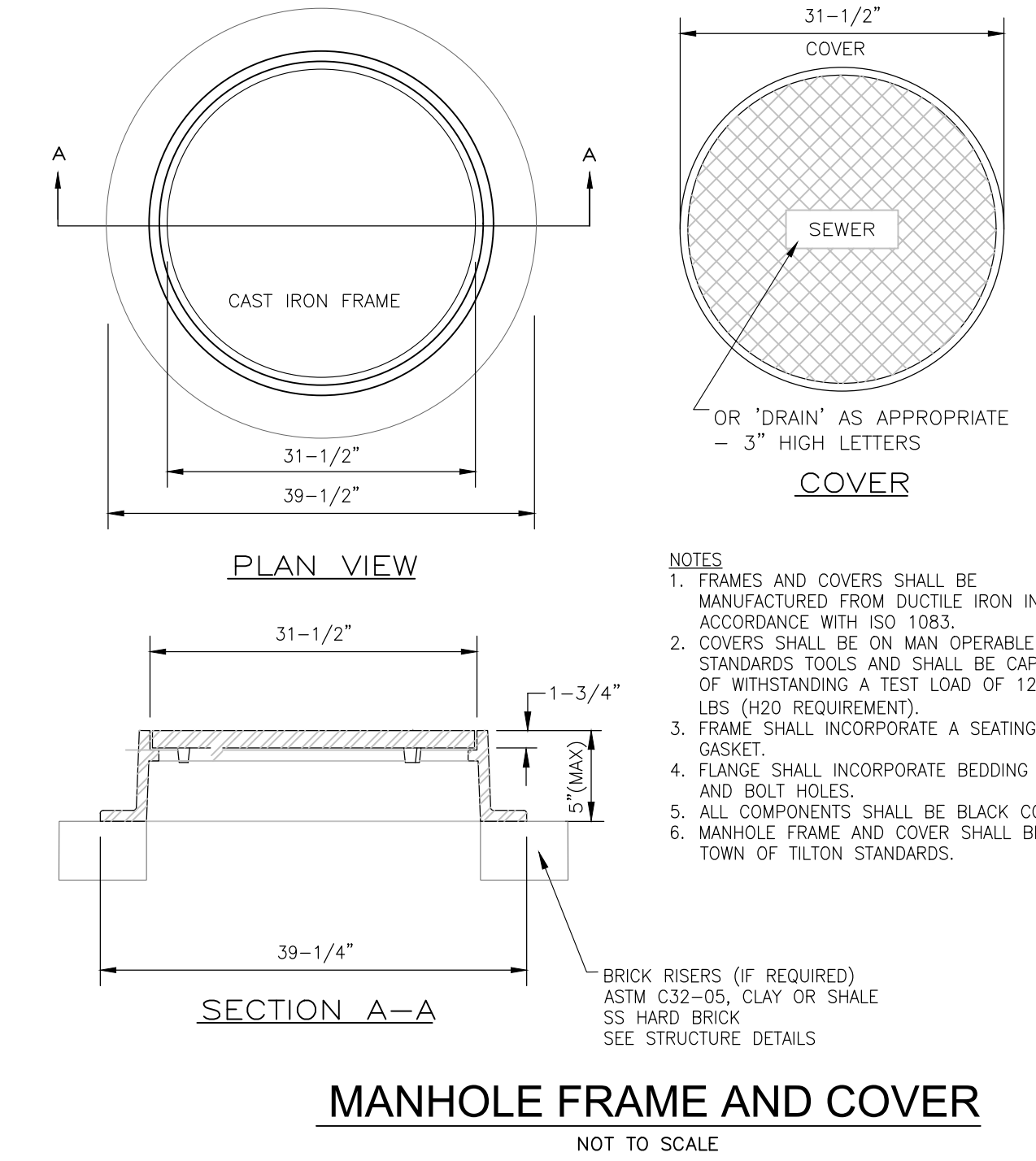
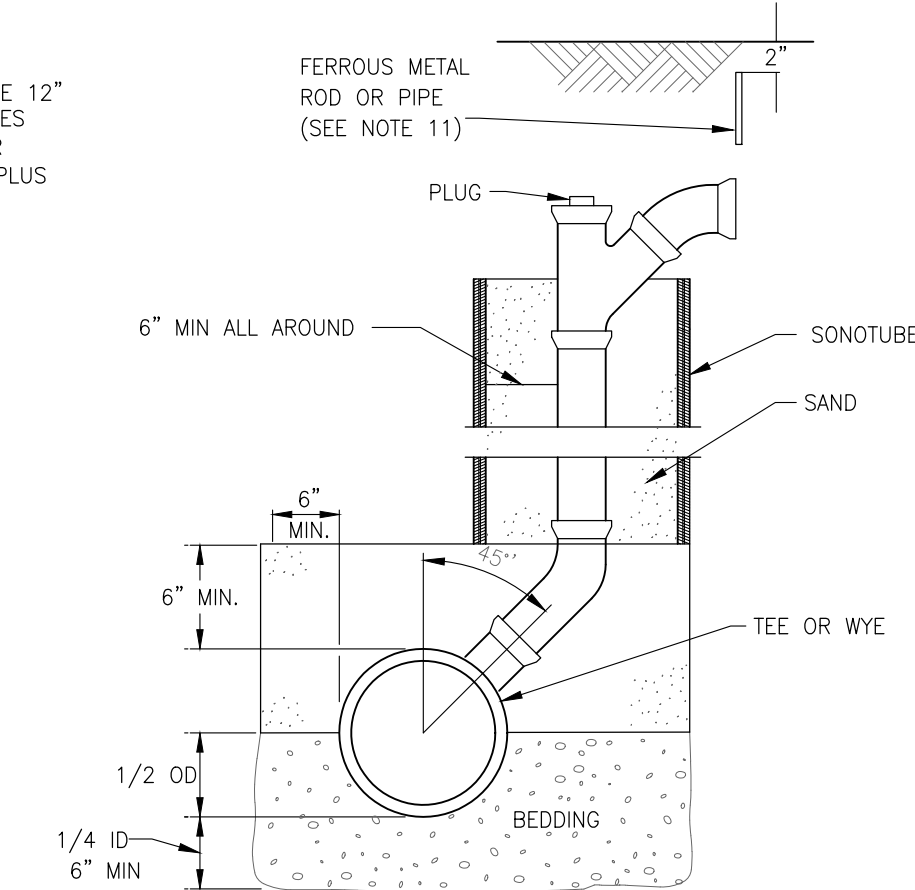
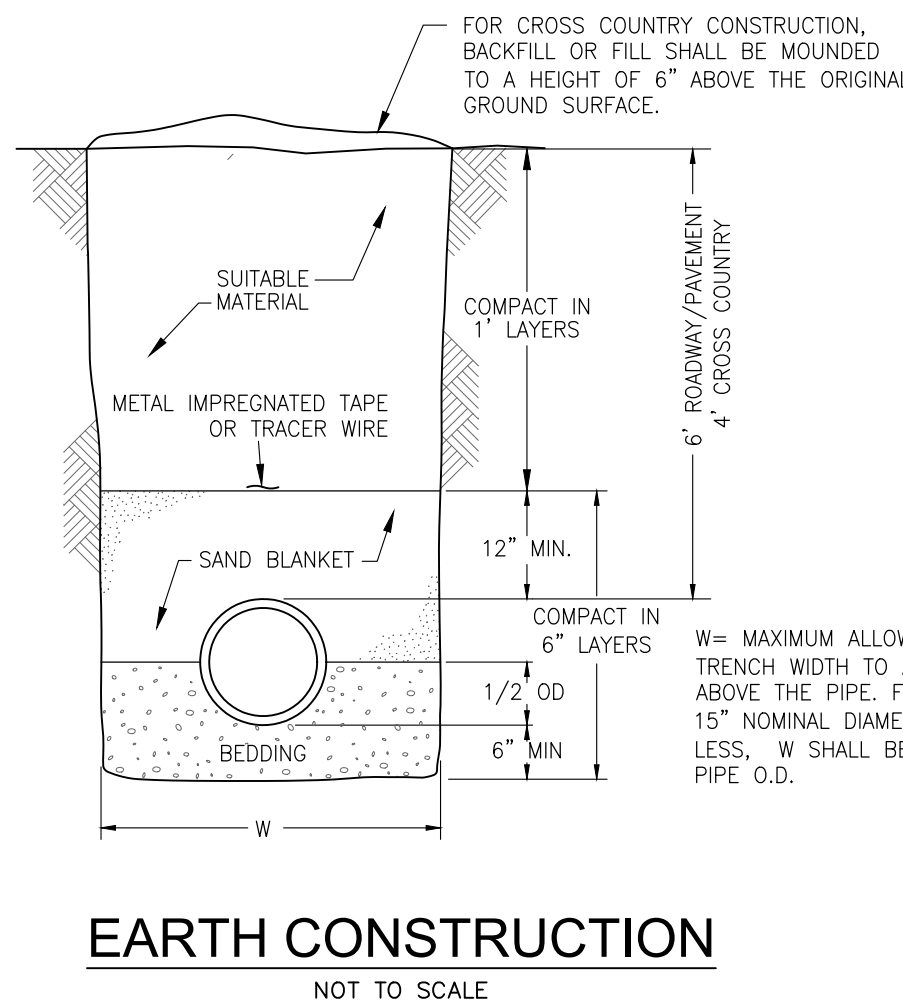
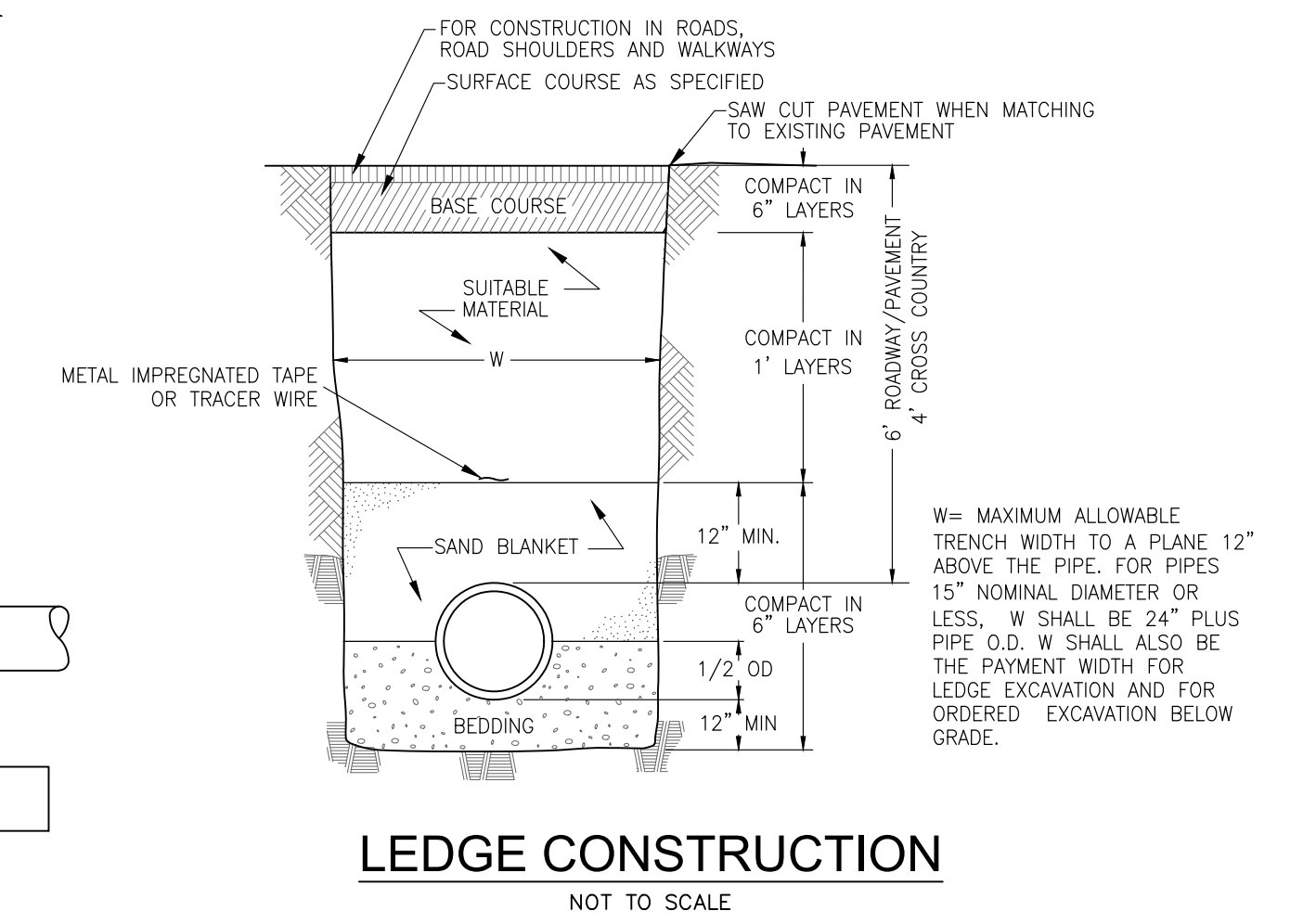
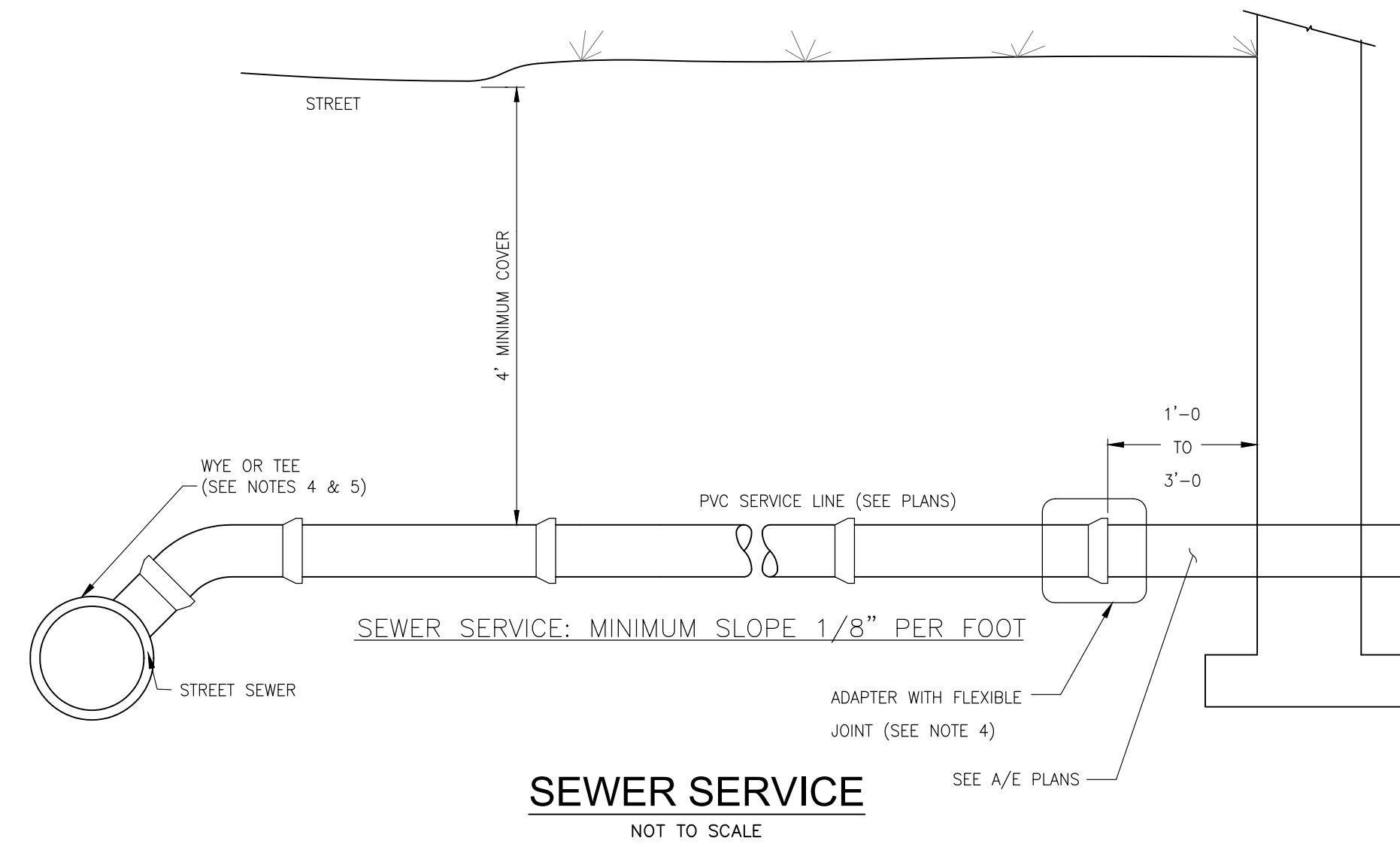
TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING DEBRIS, PAVEMENT PIECES, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT, CLAY, EXCAVATED LEDGE, ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION, OR ANY OTHER UNSUITABLE MATERIAL NOT APPROVED BY THE ENGINEER.

TRENCH BACKFILL AT CROSS-COUNTRY LOCATIONS SHALL BE AS DESCRIBED ABOVE EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED. BACKFILL SHALL BE MOUNDING 6-INCHES ABOVE ORIGINAL GROUND.

BASE COURSE MATERIALS FOR TRENCH REPAIRS SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

WHERE SHEETING IS PLACED ALONG SIDE OF THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISH GRADE.

TRENCHES FOR SEWER PIPES WITH SLOPES OVER 0.08 FEET PER FOOT AND TRENCHES FOR SEWER PIPES BELOW THE SEASONAL HIGH GROUND WATER LEVEL SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET TO PREVENT POTENTIAL DISTURBANCE TO PIPE BEDDING AND BLANKET MATERIALS.



SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2

DETAILS

LADY ISLE SITE RENOVATIONS

325 LITTLE HARBOR ROAD, PORTSMOUTH, NH

OWNED BY & PREPARED FOR

ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS

SEPTEMBER 29, 2021

Seacoast Division

Civil Engineers
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47099.01	DR	HEG	FB	-
	CK	JCC	CADFILE	47099-01_DETAILS_MAIN

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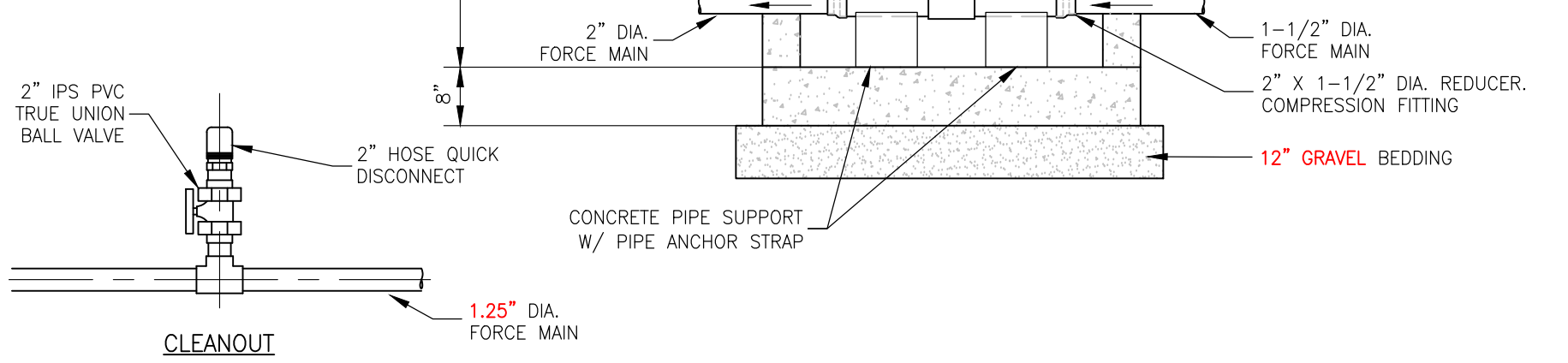
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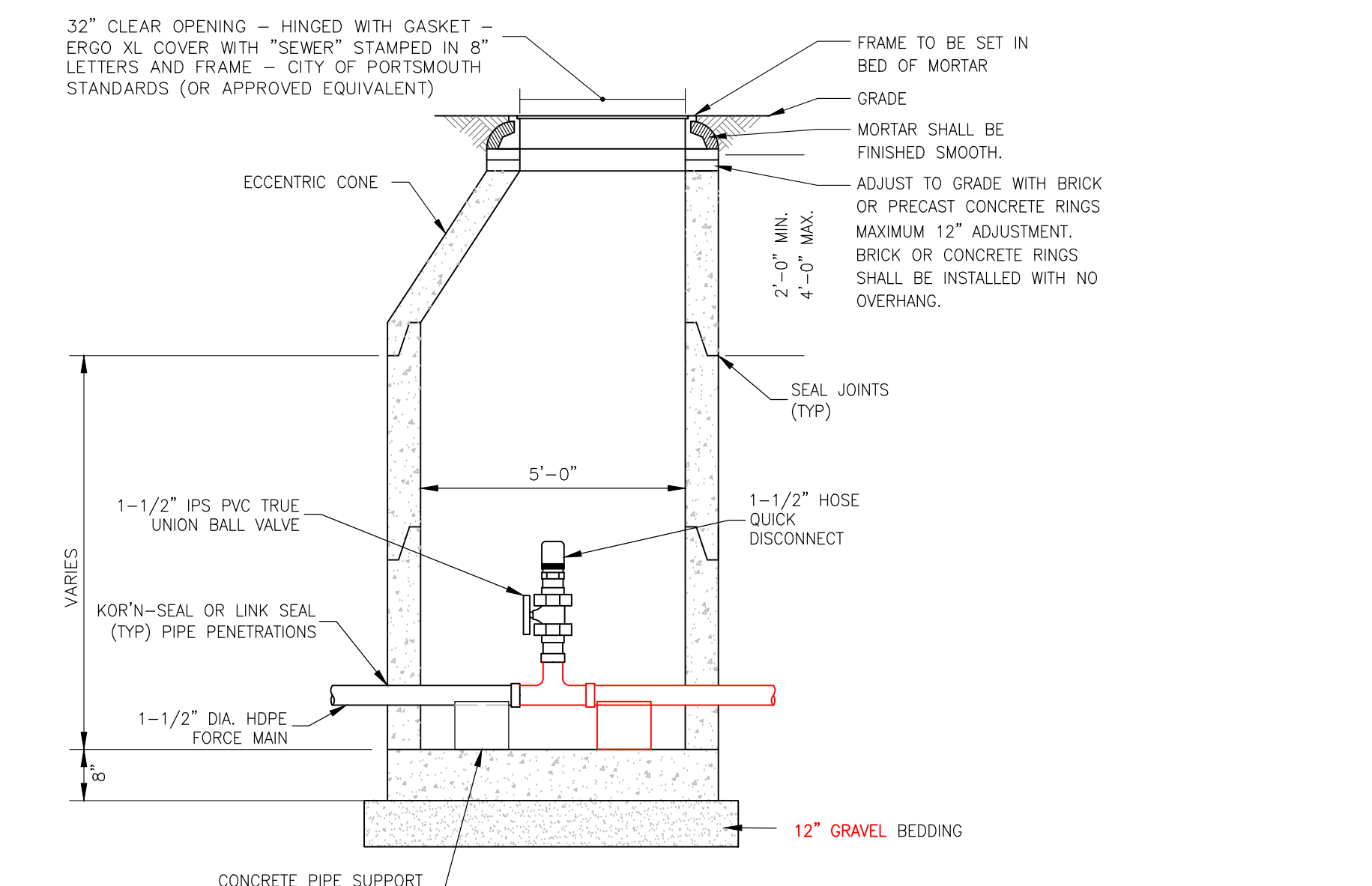
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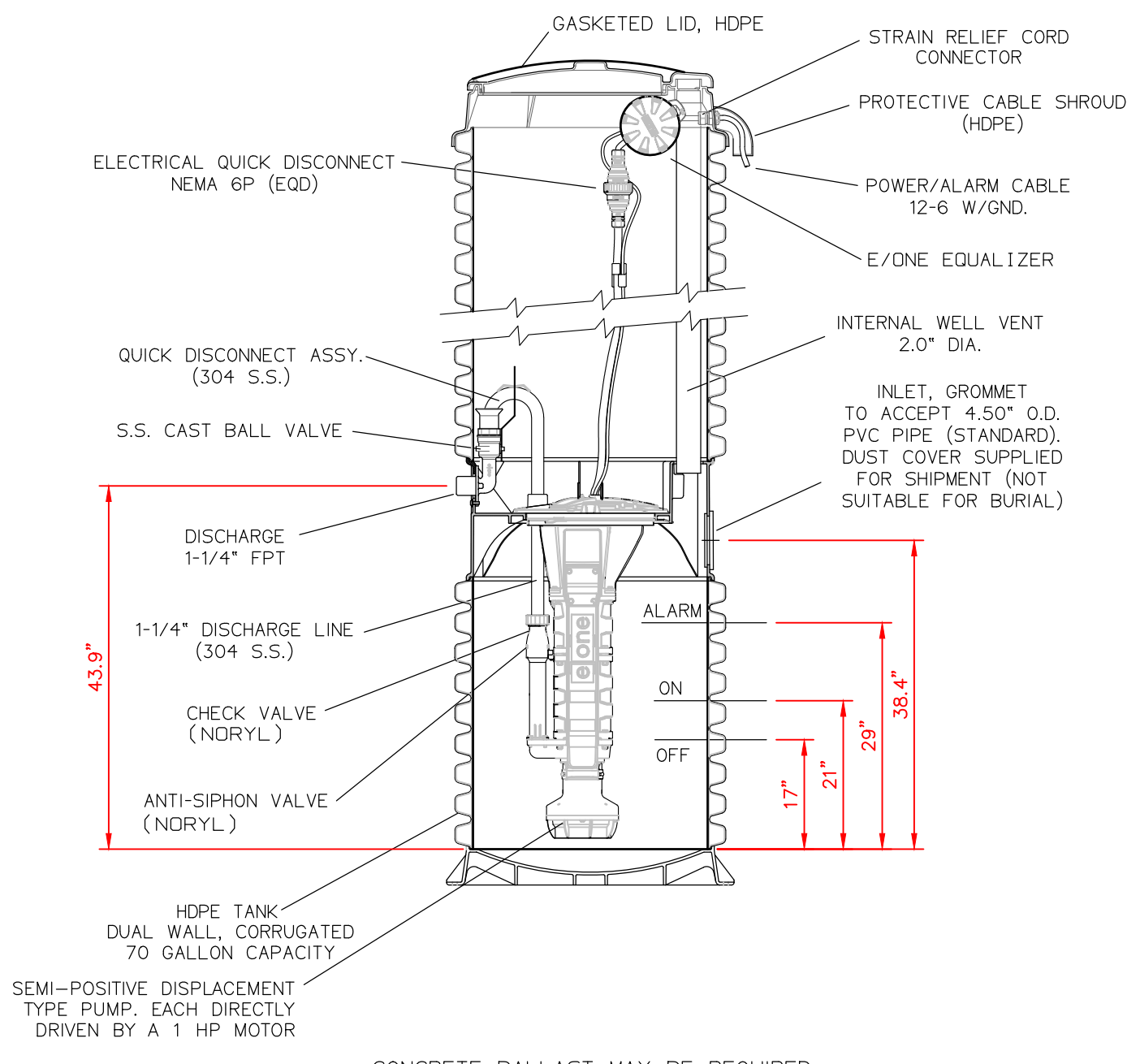
1. MANHOLE FRAME & GRATE SHALL BE NEENAH R-3589-A OR APPROVED EQUAL.
2. ALL COMPONENTS SHALL BE DESIGNED FOR HS-20 LOADING.
3. REINFORCING SHALL CONFORM TO ASTM 185 OR ASTM 1497 & ASTM A615, GRADE 60.
4. ALL CONCRETE SHALL BE NHDOT CLASS A.
5. LARGER DIAMETER STRUCTURES SHALL BE USED AS REQUIRED DUE TO NUMBER, ORIENTATION OR SIZE OF PIPES AT THE STRUCTURE.
6. "CL" USED AT ALL LOCATIONS WITHOUT CURB AND "C" TO BE USED AT ALL TO NUMBER, SIZE OR ORIENTATION OF PIPES AT THE BASIN.
7. ALL CASTINGS SHALL BE MADE IN THE USA.
8. ALL PIPE FITTINGS ARE TO BE RESTRAINED JOINT STYLE.
 - A. HDPE TO BE FUSION, ELECTROFUSION OR MECHANICAL JOINT.
 - B. PVC WOULD BE SOLVENT GLUE.
 - C. ALL JOINTS TO BE THREADED AND PRESSURE RATED TO 200 PSI.
9. 2" TRUE UNION BALL VALVE TO BE USED IN PLACE OF 2" AIR/VACUUM VALVE FOR CLEANOUT MANHOLES.
10. MANHOLE STRUCTURES SHALL MEET THE DESIGN REQUIREMENTS OF ENV-WQ 704.12 THROUGH ENV-WQ 704.17.
11. A.R.I. D-025 STAINLESS STEEL AIR RELEASE VALVE OR EQUIVALENT.



E-ONE CLEANOUT AND AIR VACUUM DETAIL
NOT TO SCALE

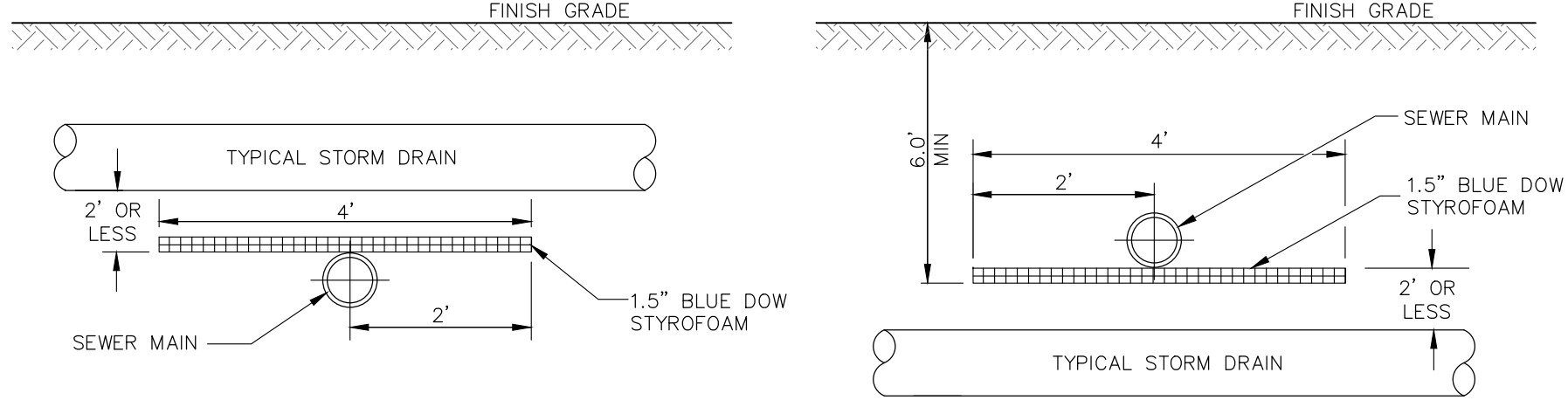


E-ONE FLUSHING MANHOLE
NOT TO SCALE



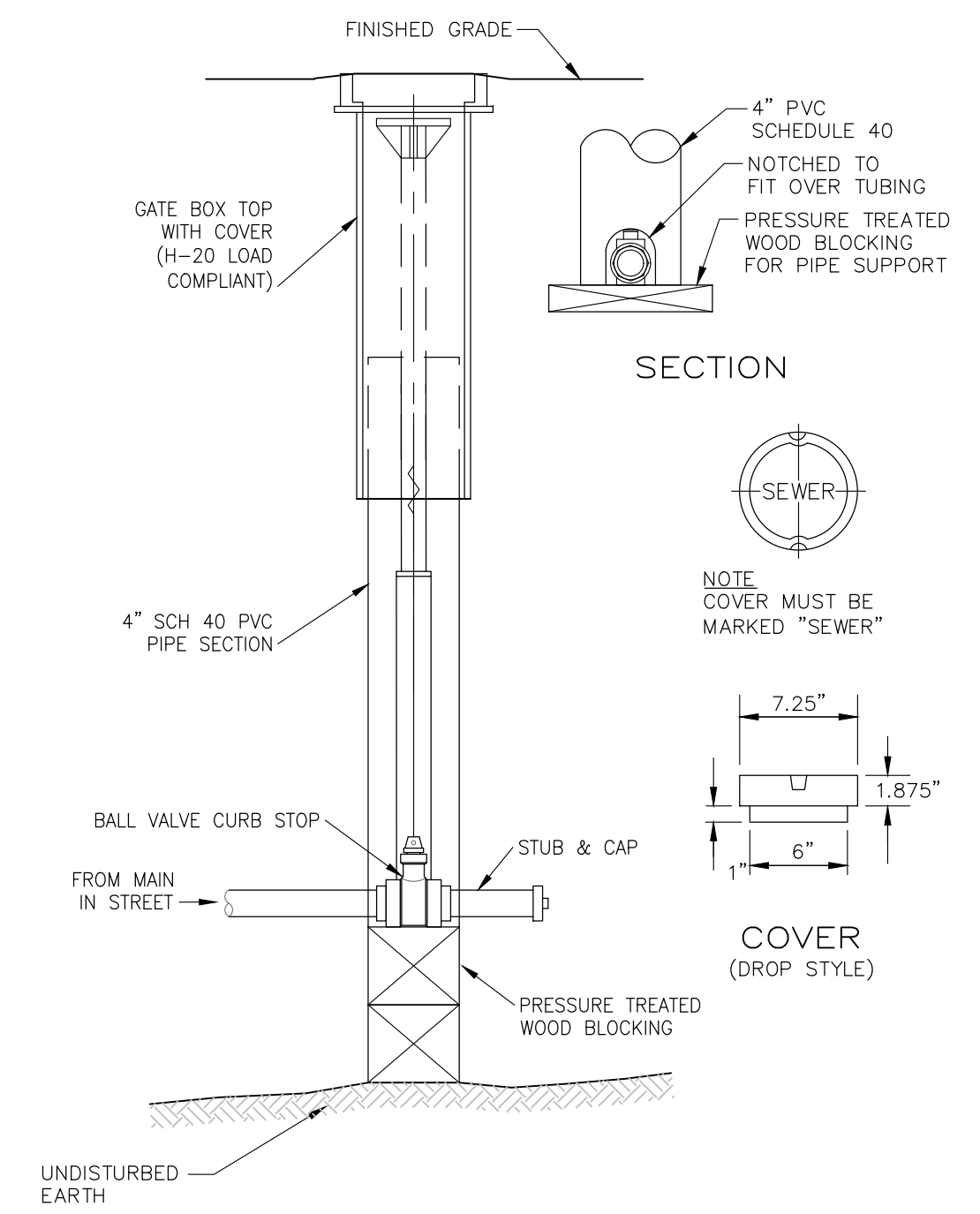
E-ONE DH151 PUMP
NOT TO SCALE

- NOTES:**
1. ACTUAL E-ONE PUMP AND SPECIFICATION MUST BE DESIGNED AND PROVIDED BY EONE DESIGNER OR EQUAL.
 2. THE PUMP CORE CONTAINS BUILT IN CHECK AND ANTI-SIPHON VALVES. IN ADDITION, THERE IS A REDUNDANT UNILATERAL CHECK AND ISOLATION VALVE AT THE LOT LINE WITH THE STAINLESS STEEL ASSEMBLY.
 3. THE STATION MONITOR CONTAINS A HIGH LEVEL ALARM. THE HIGH LEVEL ALARM IS RUN OFF A REDUNDANT RUN SWITCH THAT OVERRIDES THE RUN SWITCH IF IT SHOULD SEE A POWER FAILURE.
 4. THE ALARM PANEL HAS THE OPTION TO CONNECT A PORTABLE GENERATOR WITH A 20 AMP, 240 VOLT SUPPLY. POWER TRANSFERS AUTOMATICALLY IF THE PUMP IS CALLING TO RUN.
 5. THE PUMP RATED TO 700 GPD.
 6. THE TANK HAS A 150-GAL VOLUME.
 7. IN CASE OF A POWER FAILURE, A BATTERY BACKUP REMOTE SENTRY ALARM PANEL SHALL BE USED IN CONJUNCTION WITH THE E-ONE PUMP SYSTEM.
 8. A BACKUP GENERATOR WILL BE PROVIDED THAT SHALL BE AMPLE ENOUGH TO SUPPLY POWER TO RUN THE GRINDER PUMP AND ALARM SYSTEM. THERE SHALL BE ENOUGH FUEL ON SITE TO RUN THE GENERATOR FOR A MINIMUM OF 6 HRS.



- NOTES:**
1. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
 2. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

INSULATION AT STORM DRAIN AND SEWER MAIN INTERSECTING RUNS
NOT TO SCALE



FORCE MAIN CURB STOP
NOT TO SCALE

- NOTES:**
1. MANHOLE FRAME & GRATE SHALL BE NEENAH R-3589-A OR APPROVED EQUAL.
 2. ALL COMPONENTS SHALL BE DESIGNED FOR HS-20 LOADING.
 3. REINFORCING SHALL CONFORM TO ASTM 185 OR ASTM 1497 & ASTM A615, GRADE 60.
 4. ALL CONCRETE SHALL BE NHDOT CLASS A.
 5. LARGER DIAMETER STRUCTURES SHALL BE USED AS REQUIRED DUE TO NUMBER, ORIENTATION OR SIZE OF PIPES AT THE STRUCTURE.
 6. "CL" USED AT ALL LOCATIONS WITHOUT CURB AND "C" TO BE USED AT ALL TO NUMBER, SIZE OR ORIENTATION OF PIPES AT THE BASIN.
 7. ALL CASTINGS SHALL BE MADE IN THE USA.
 8. INSTALL PIPE SUPPORTS ON THE SWEEP ELBOW.
 9. ALL PIPE FITTINGS ARE TO BE RESTRAINED JOINT STYLE.
 - A. HDPE TO BE FUSION, ELECTROFUSION OR MECHANICAL JOINT.
 - B. PVC WOULD BE SOLVENT GLUE.
 - C. ALL JOINTS TO BE THREADED AND PRESSURE RATED TO 200 PSI.
 10. MANHOLE STRUCTURES SHALL MEET THE DESIGN REQUIREMENTS OF ENV-WQ 704.12 THROUGH ENV-WQ 704.17.
 11. A.R.I. D-025 STAINLESS STEEL AIR RELEASE VALVE OR EQUIVALENT.

PRESSURE SEWER TESTING NOTES

1. PIPE AND JOINT MATERIALS:
 - A. PRESSURE SEWERS SHALL BE CONSTRUCTED OF DUCTILE IRON (DI), HIGH DENSITY POLYETHYLENE (HDPE), OR PVC MATERIAL.
 - B. PRESSURE SEWERS SHALL BE TREATED AS GRAVITY SEWERS FOR PURPOSES OF FOUNDATION BEDDING AND BACKFILL REQUIREMENTS.
 - C. PVC PIPE USED FOR PRESSURE SEWERS SHALL BE CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM D2241 OR ASTM D1785 STANDARDS IN EFFECT WHEN THE PIPE IS MANUFACTURED.
 - D. HDPE PIPE USED FOR PRESSURE SEWERS SHALL BE CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM D3035 STANDARD IN EFFECT WHEN THE PIPE IS MANUFACTURED.
 - E. IF DI PIPE IS USED IN AN ENVIRONMENT THAT COULD CAUSE CORROSION OR OTHER DETERIORATION OF OR DAMAGE TO AN IRON PIPE, OR OTHERWISE REDUCE THE TYPICAL LIFE EXPECTANCY OF THE PIPE, SUCH AS MAY OCCUR WITH CERTAIN SOIL TYPES, LOW PH LEVELS, OR WATER CONDITIONS, THE PIPE SHALL BE PROTECTED AGAINST CORROSION, SUCH AS WITH CATHODIC PROTECTION.
2. TESTING: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A THIRD PARTY LEAKAGE TEST ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING) PRESSURE SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTION 5 OF THE AWWA C600. INSTALLATION OF CAST IRON WATER MAINS AND THEIR APPURTENANCES STANDARD IN EFFECT WHEN THE TEST IS CONDUCTED AT A PRESSURE EQUAL TO THE GREATER OF 150 PERCENT OF THE DESIGN OPERATING TOTAL DYNAMIC HEAD OR AT LEAST 100 PSI.
3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
4. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
5. SEWER SERVICE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 6 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 11. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.
6. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
7. THE CENTERLINE OF ALL BUILDING CONNECTIONS SHALL ENTER THE TOP HALF OF THE SEWER.
8. ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
9. PRESSURE SEWERAGE SHALL HAVE AN ISOLATION VALVE OR CURB STOP VALVE INSTALLED AT THE PROPERTY LINE / LIMITED COMMON AREA. IF A CHECK VALVE IS USED AT THE PROPERTY LINE, THE VALVE SHALL BE INSTALLED WITHIN A VAULT TO FACILITATE MAINTENANCE.
10. WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.
11. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33/C33M STONE SIZE 67 AND FREE FROM CLAY, LOAM AND ORGANIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%-55% PASSING	3/8 INCH SCREEN
0%-10% PASSING	#4 SIEVE
0%-5% PASSING	#8 SIEVE
12. LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS.
13. INTERNAL STEPS IN MANHOLES ARE PROHIBITED PER PORTSMOUTH DPW STANDARDS.

SITE DEVELOPMENT PLANS

TAX MAP 205 LOT 2
DETAILS
LADY ISLE SITE RENOVATIONS
325 LITTLE HARBOR ROAD, PORTSMOUTH, NH
OWNED BY & PREPARED FOR
ADL 325 LITTLE HARBOR ROAD TRUST

SCALE: NTS SEPTEMBER 29, 2021



REV	DATE	DESCRIPTION	DR	CK
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Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

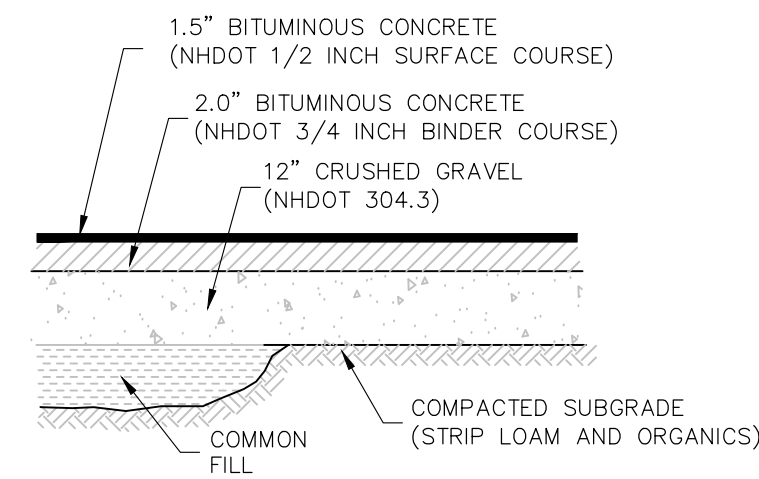
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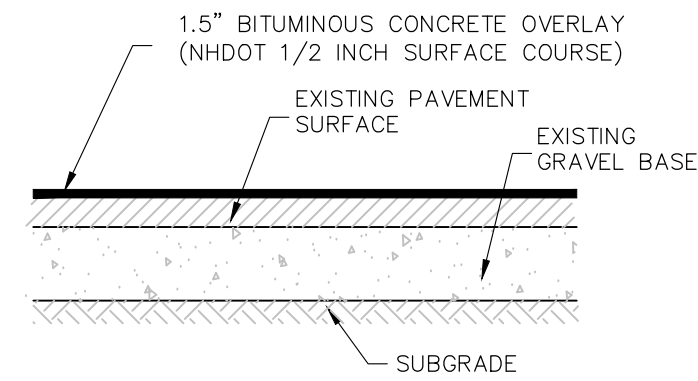
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STANDARD DUTY PAVEMENT



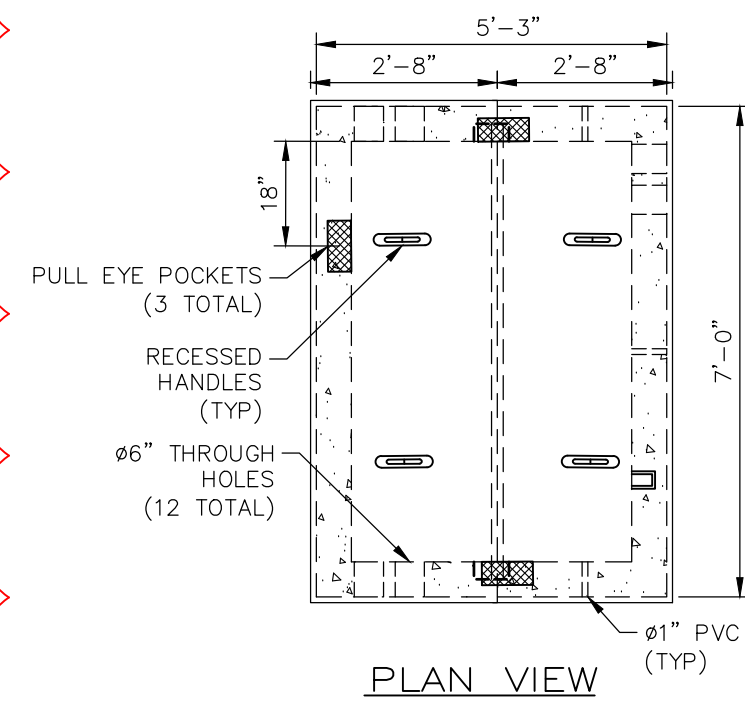
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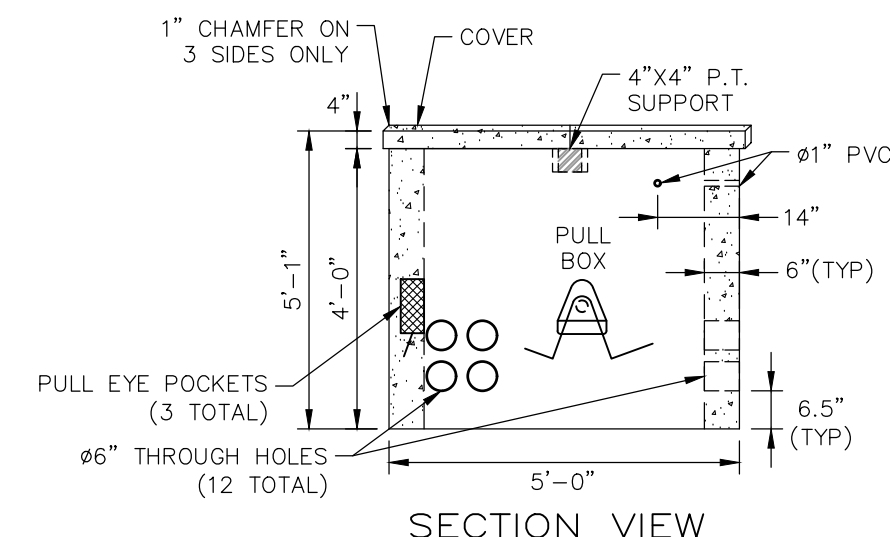
- SEE GRADING & DRAINAGE PLAN & DRIVEWAY GRADING & PROFILE FOR PAVEMENT SLOPE AND CROSS-SLOPE.
- PROVIDE CLEAN BUTT TO EXISTING PAVEMENT - USE TACK COAT. A TACK COAT SHALL ALSO BE PLACED BETWEEN GRAVEL COURSE AND SUCCESSIVE LAYERS OF BITUMINOUS CONCRETE. SPECIFICALLY, A TACK COAT SHALL BE PLACED ATOP THE BINDER COURSE PAVEMENT PRIOR TO PLACING THE WEARING COURSE.
- REMOVE ALL LOAM AND/OR YIELDING MATERIAL BELOW PAVEMENT.
- BITUMINOUS MATERIALS SHALL CONFORM TO NHDOT SPECIFICATION SECTION 401.
- BITUMINOUS CONCRETE SHALL BE COMPACTED TO AT LEAST 92.5% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D2041 OR AASHTO T209. PLACEMENT TEMPERATURES OF BITUMINOUS CONCRETE MIXES, IN GENERAL, RANGE BETWEEN 270 AND 310 DEGREES FAHRENHEIT.
- PAVEMENT BASE COURSE AGGREGATE SHALL CONFORM TO NHDOT SPECIFICATION SECTION 304, ITEM 304.3 AND COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.
- PAVEMENT SUBBASE COURSE AGGREGATE AND AGGREGATE FOR SUBGRADE REPAIR AREAS SHALL BE SUITABLE FOR USE AS STRUCTURAL FILL AND BE PROOF ROLLED AND COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY.
- THE EXPOSED SOIL SUBGRADE SHOULD BE PROOF ROLLED PRIOR TO THE PLACEMENT OF SUBBASE GRAVEL, AND SOFT AREAS SHOULD BE REPAIRED AND REPLACED.

PAVEMENT SECTIONS

NOT TO SCALE



PLAN VIEW



SECTION VIEW

ESTIMATED VAULT WEIGHTS:
 COVER (EACH) = 675 LBS
 BASE = 6,500 LBS
 TOTAL = 7,850 LBS

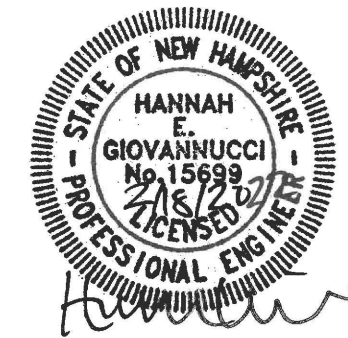
NOTES:

- ELECTRIC PULLBOX SHALL BE PER THE STANDARDS OF EVERSOURCE.
- REINFORCEMENT STEEL CONFORMS TO: ASTM A615 GRADE 60
- CONCRETE: FC = 5,000 PSI @ 28 DAYS MINIMUM
- DESIGN LOADING: AASHTO-HS20-44
- BUTYL RUBBER JOINT SEALANT PROVIDED

ELECTRIC PULL BOX

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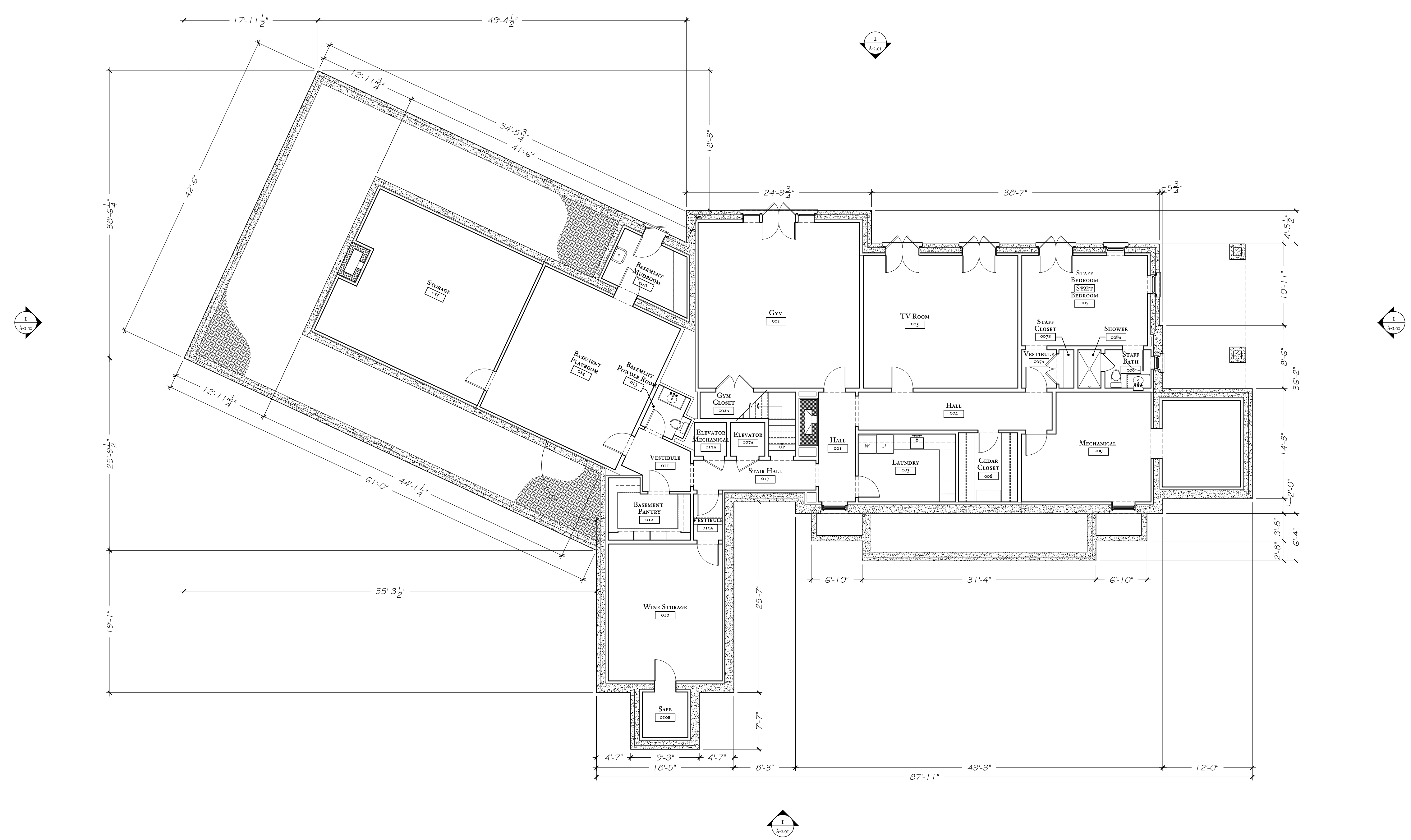


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	CK	JCC	CADFILE	47099-01_DETAILS_MAIN		

GROSS FLOOR AREA AT MAIN HOUSE		
	CONDITIONED SQ.FT.	UNCONDITIONED SQ.FT.
BASEMENT	3,382 SQ.FT.	1,050 SQ.FT.
FIRST FLOOR	3,897 SQ.FT.	1,496 SQ.FT.
SECOND FLOOR	3,487 SQ.FT.	--
TOTAL	10,766 SQ.FT.	2,546 SQ.FT.
		13,312 SQ.FT.



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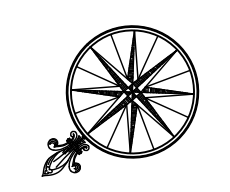
A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Basement
Overall Plan

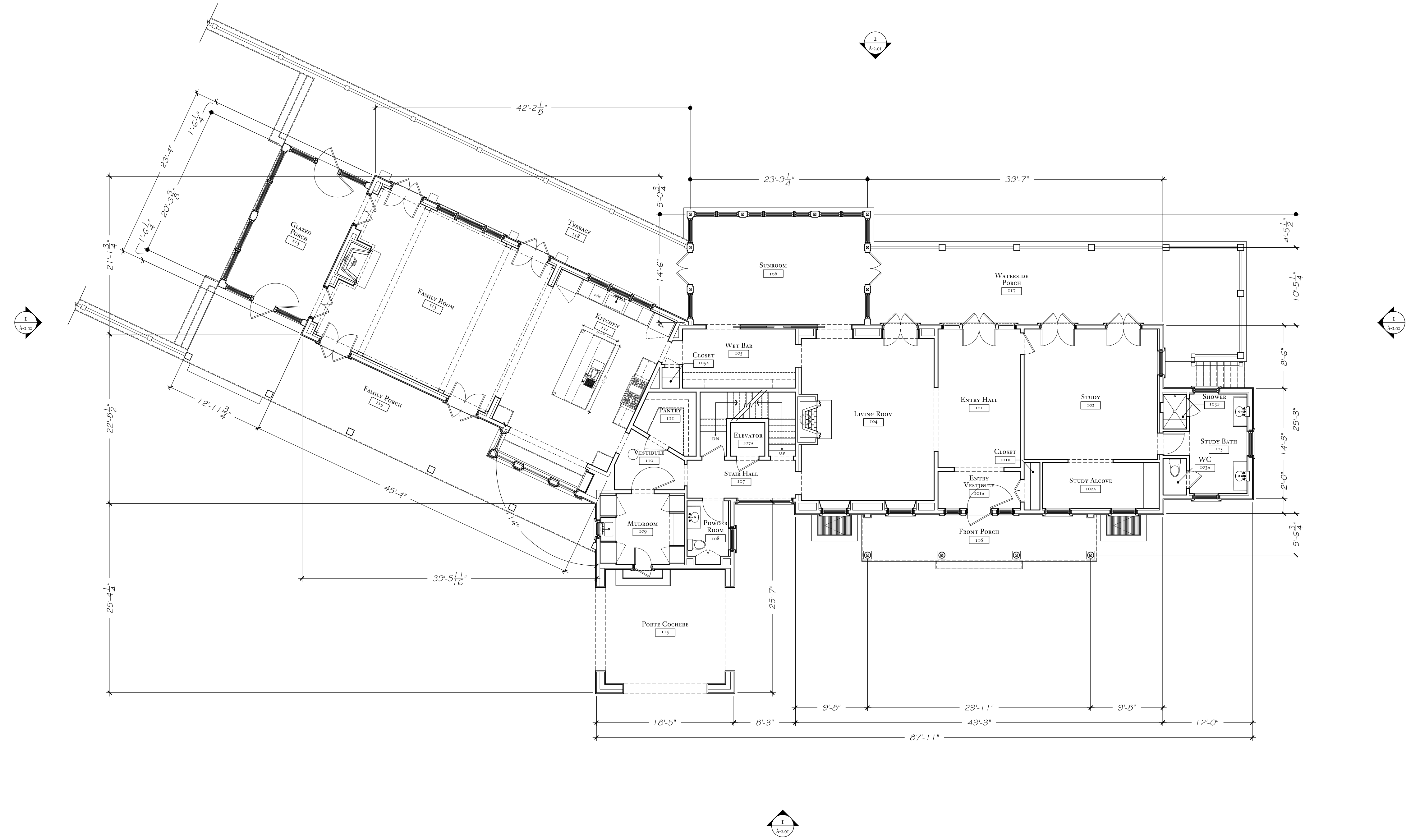
DATE: June 24, 2021	SHEET NUMBER: MH A-1.00
SCALE: 1/8" = 1'-0"	
DRAWN BY: PM / AB	

G. P. SCHAFER ARCHITECT, DPC
19 UNION SQUARE WEST
4TH FLOOR
NEW YORK, NEW YORK 10003
TELEPHONE: 212-965-1355
TELEFAX: 212-965-1356
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1
A-1.00
BASEMENT FLOOR PLAN - OVERALL
SCALE: 1/8" = 1'-0"



GROSS FLOOR AREA AT MAIN HOUSE		
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A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

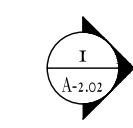
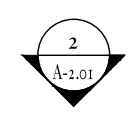
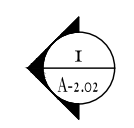
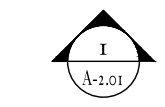
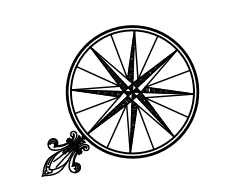
SHEET TITLE:
*First Floor
Overall Plan*

DATE: June 24, 2021
SCALE: 1/8" = 1'-0"
DRAWN BY: PM / AB

SHEET NUMBER:
MH
A-1.01

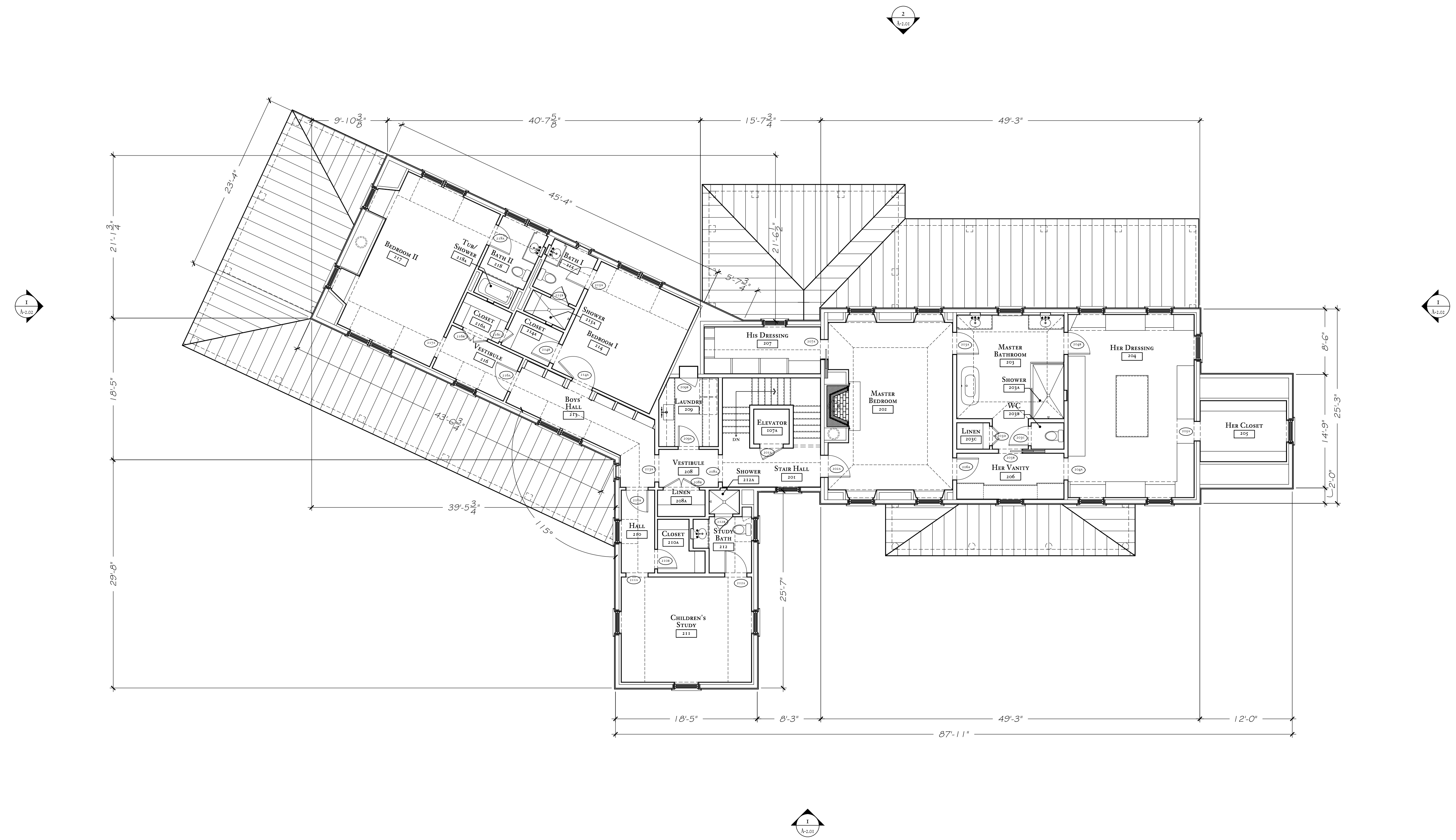
G. P. SCHAFER ARCHITECT, DPC
19 UNION SQUARE WEST
4TH FLOOR
NEW YORK, NEW YORK 10003
TELEPHONE: 212-965-1355
TELEFAX: 212-965-1356

1 FIRST FLOOR PLAN - OVERALL
A-1.01 SCALE: 1/8" = 1'-0"



GROSS FLOOR AREA AT MAIN HOUSE		
	CONDITIONED SQ.FT.	UNCONDITIONED SQ.FT.
BASEMENT	3,382 SQ.FT.	1,050 SQ.FT.
FIRST FLOOR	3,897 SQ.FT.	1,496 SQ.FT.
SECOND FLOOR	3,487 SQ.FT.	--
TOTAL	10,766 SQ.FT.	2,546 SQ.FT.
		13,312 SQ.FT.

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NOT FOR CONSTRUCTION



I
A-1.02
SECOND FLOOR PLAN - OVERALL
SCALE: 1/8" = 1'-0"

ISSUED FOR PERMIT 6/24/21

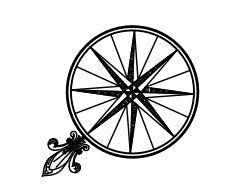
A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Second Floor
Overall Plan

DATE: June 24, 2021
SCALE: 1/8" = 1'-0"
DRAWN BY: PM / AB

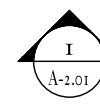
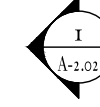
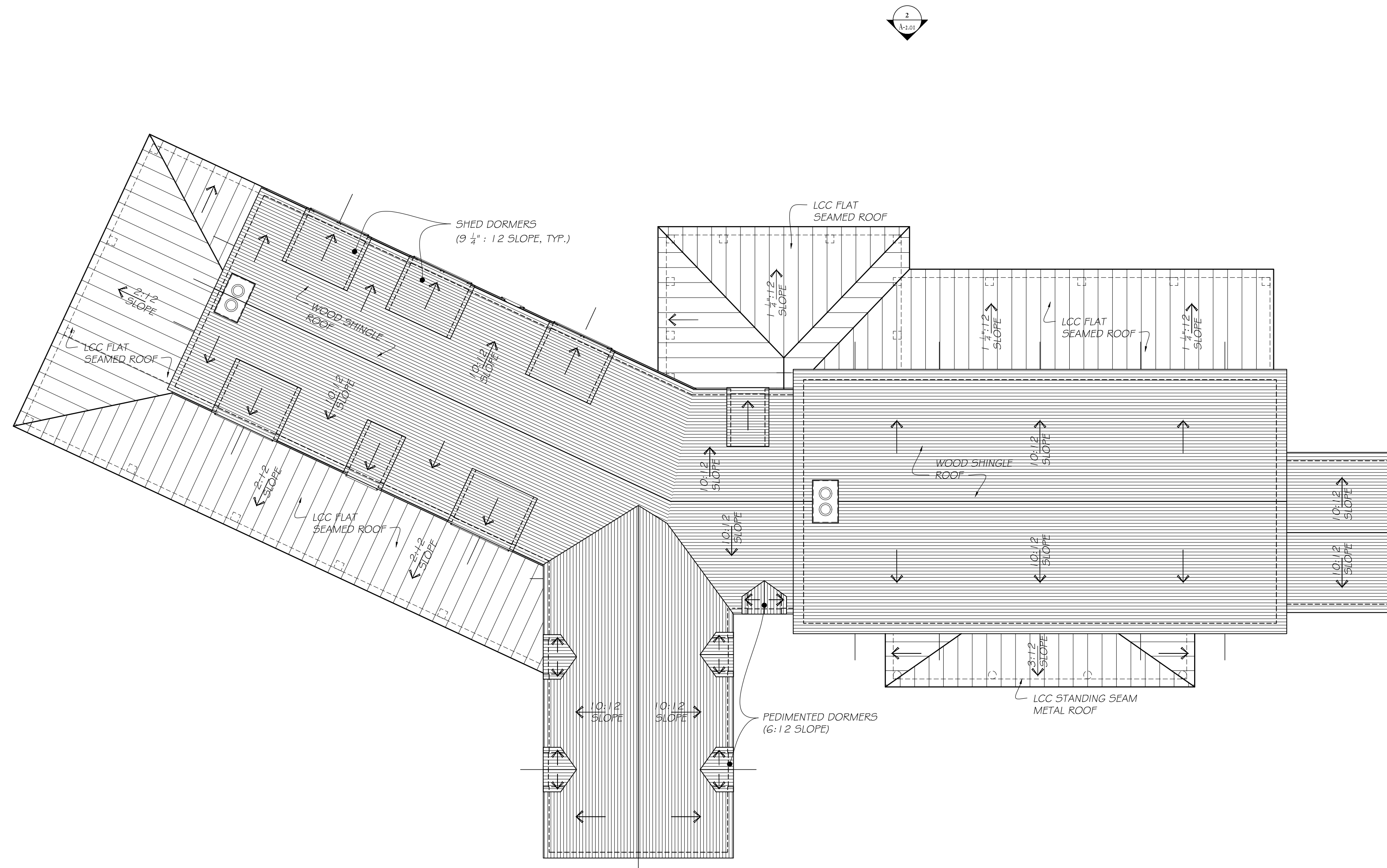
SHEET NUMBER:
MH
A-1.02

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1
A-1.03
ROOF PLAN - OVERALL
SCALE: 1/8" = 1'-0"

ISSUED FOR PERMIT 6/24/21

A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Roof
Overall Plan

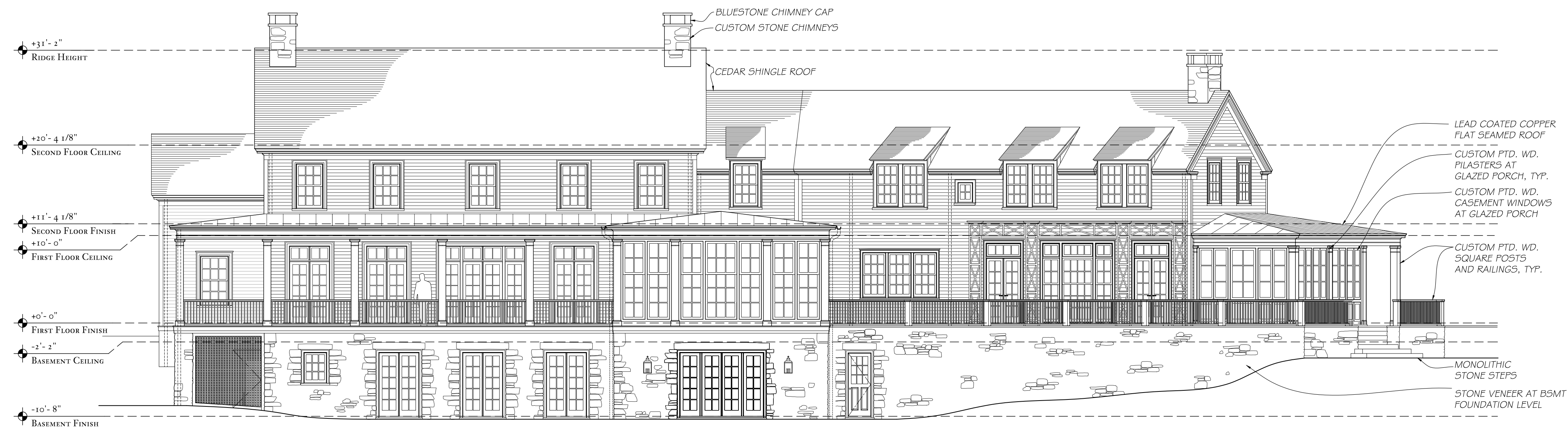
DATE: June 24, 2021
SCALE: 1/8" = 1'-0"
DRAWN BY: PM / AB

SHEET NUMBER:
MH
A-1.03

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2 OVERALL EAST ELEVATION
A-2.01 SCALE: 1/8" = 1'-0"



1 OVERALL WEST ELEVATION
A-2.01 SCALE: 1/8" = 1'-0"

ISSUED FOR PERMIT 6/24/21

A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior Elevations
Overall

DATE: June 24, 2021

SHEET NUMBER:

MH
A-2.01

SCALE:

1/8" = 1'-0"

DRAWN BY:

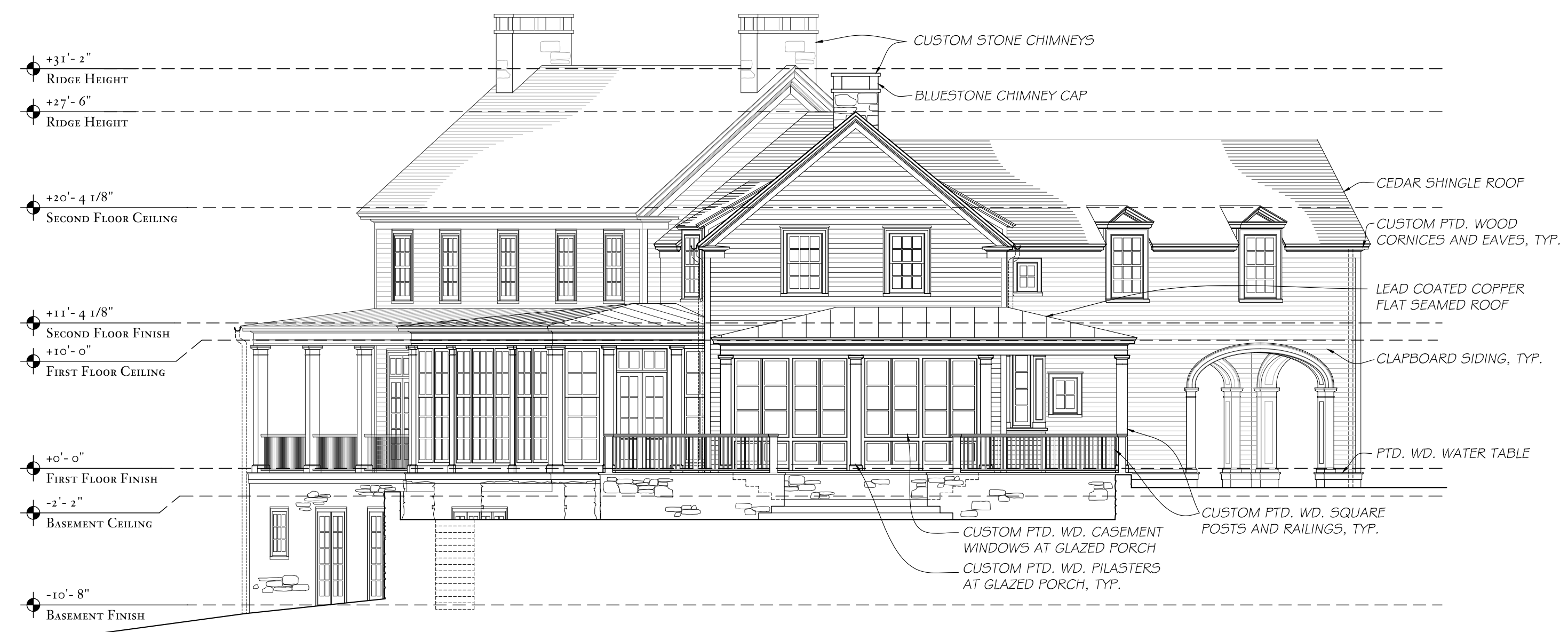
PM / AB

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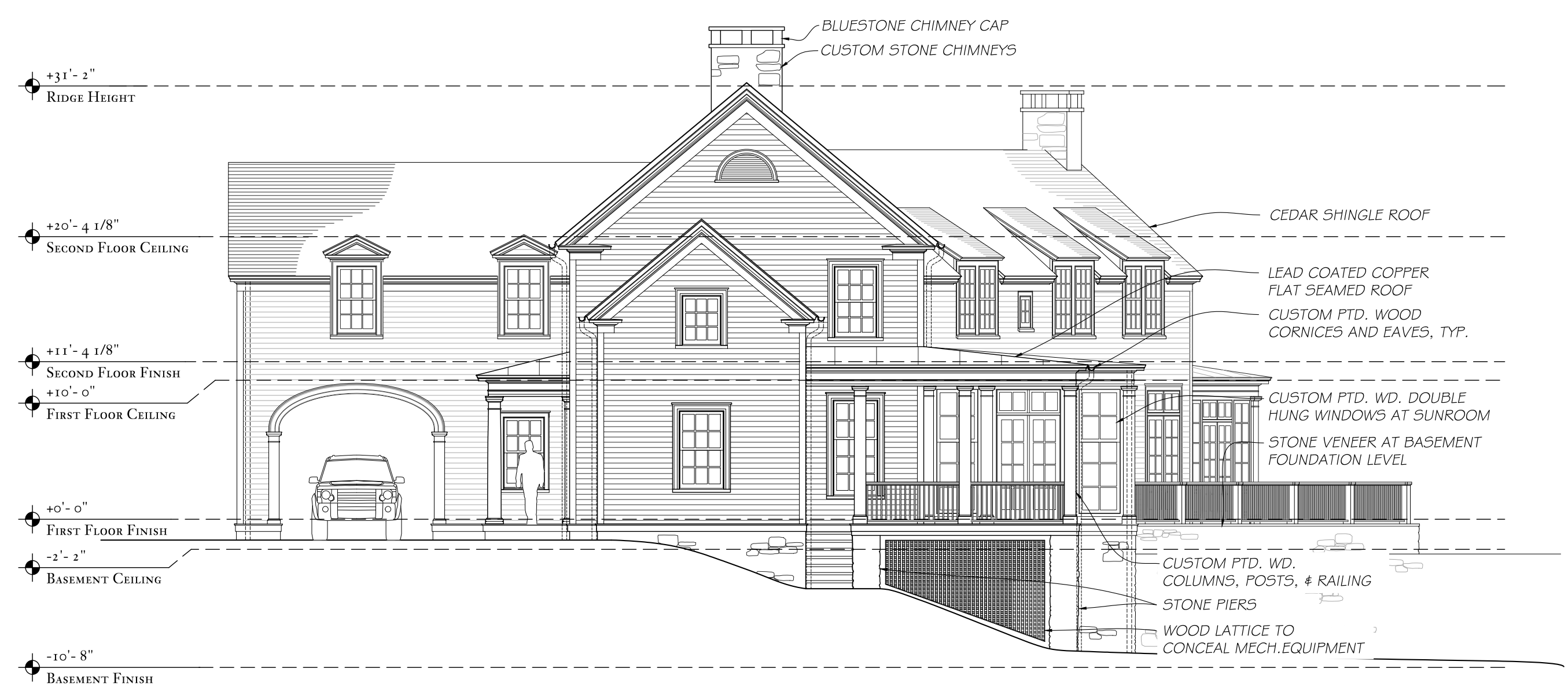
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2 OVERALL NORTH ELEVATION
A-2.02 SCALE: 1/8" = 1'-0"



1 OVERALL SOUTH ELEVATION
A-2.02 SCALE: 1/8" = 1'-0"

ISSUED FOR PERMIT 6/24/21

A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior Elevations
Overall

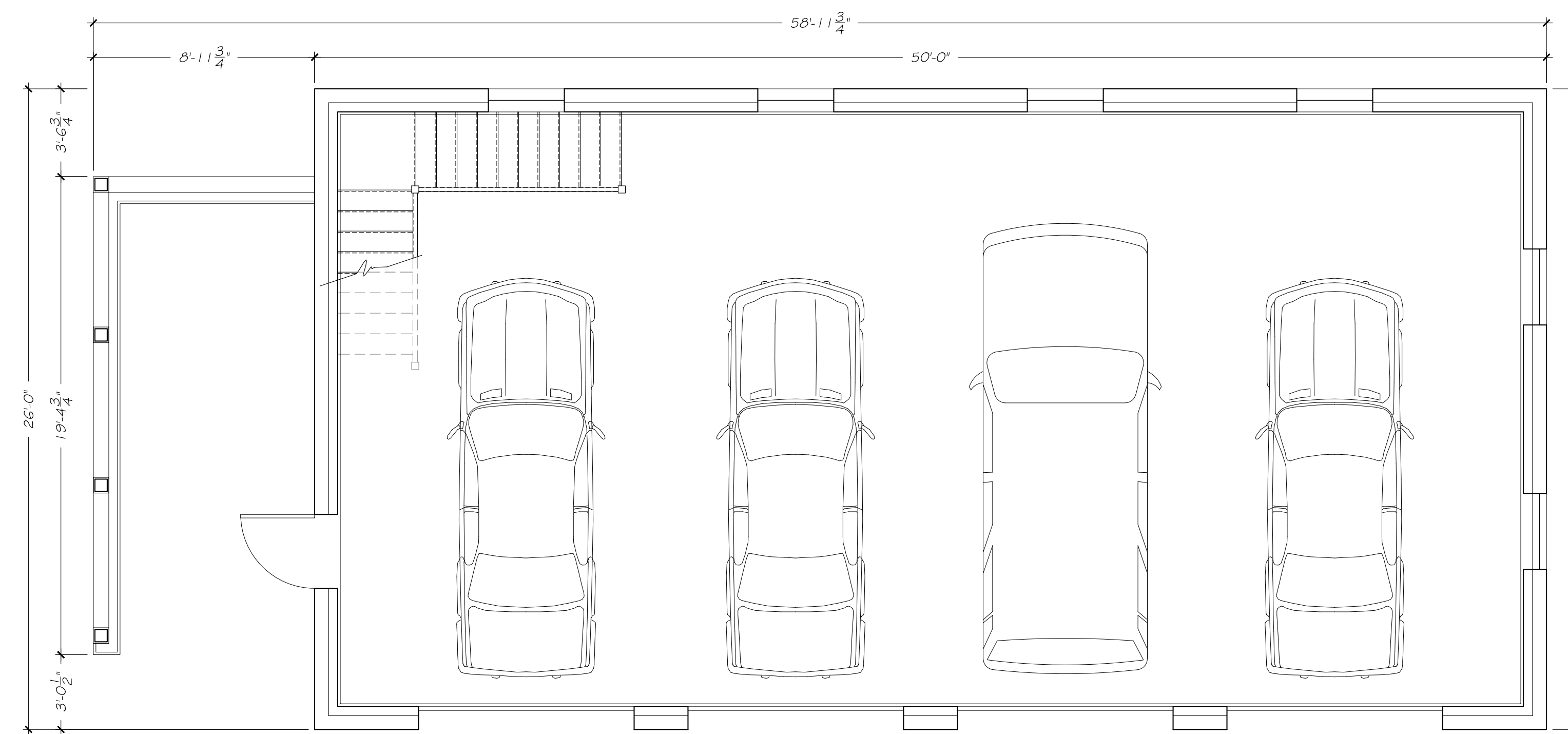
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SCALE: 1/8" = 1'-0"
DRAWN BY: PM / AB

SHEET NUMBER:
MH
A-2.02

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1 FIRST FLOOR PLAN
A-1.01 SCALE: 1/4" = 1'-0"

ISSUED FOR PERMIT 6/24/21

A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE :

First Floor Plan

DATE :
June 24, 2021

SHEET NUMBER :
GAR

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

A-1.01

DRAWN BY :
PM

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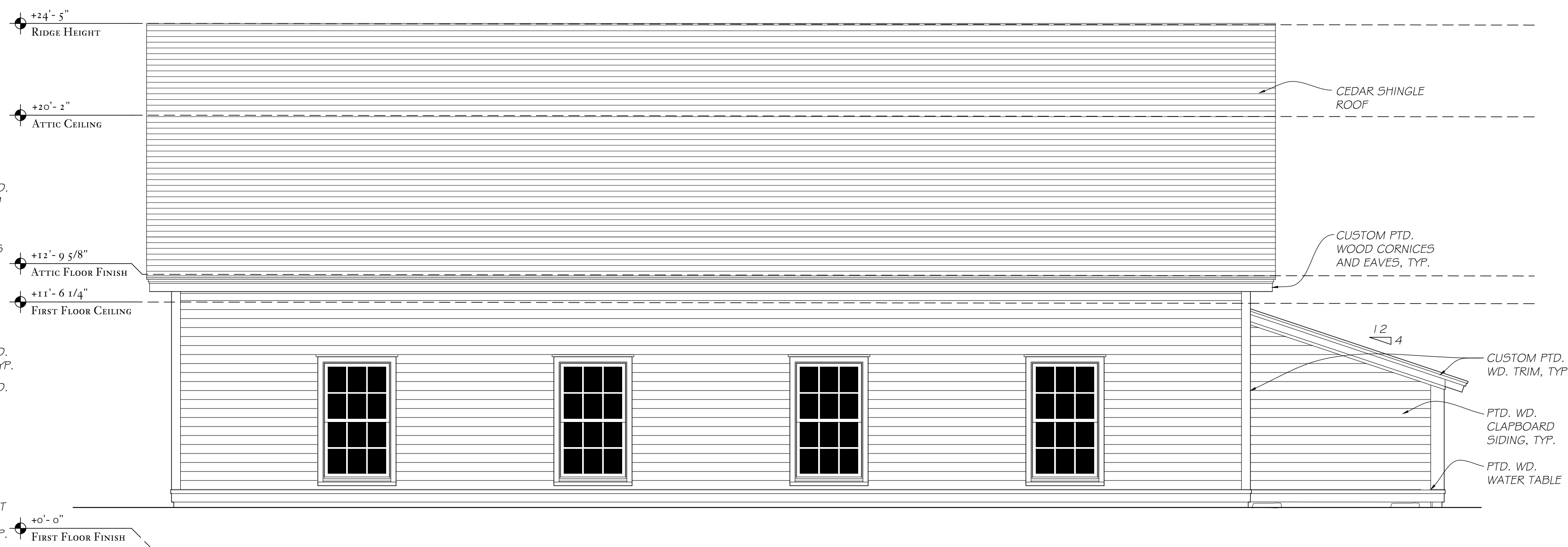
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4 EAST ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"



3 SOUTH ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"



2 WEST ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"



1 NORTH ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"

ISSUED FOR PERMIT 6/24/21

A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior
Elevations

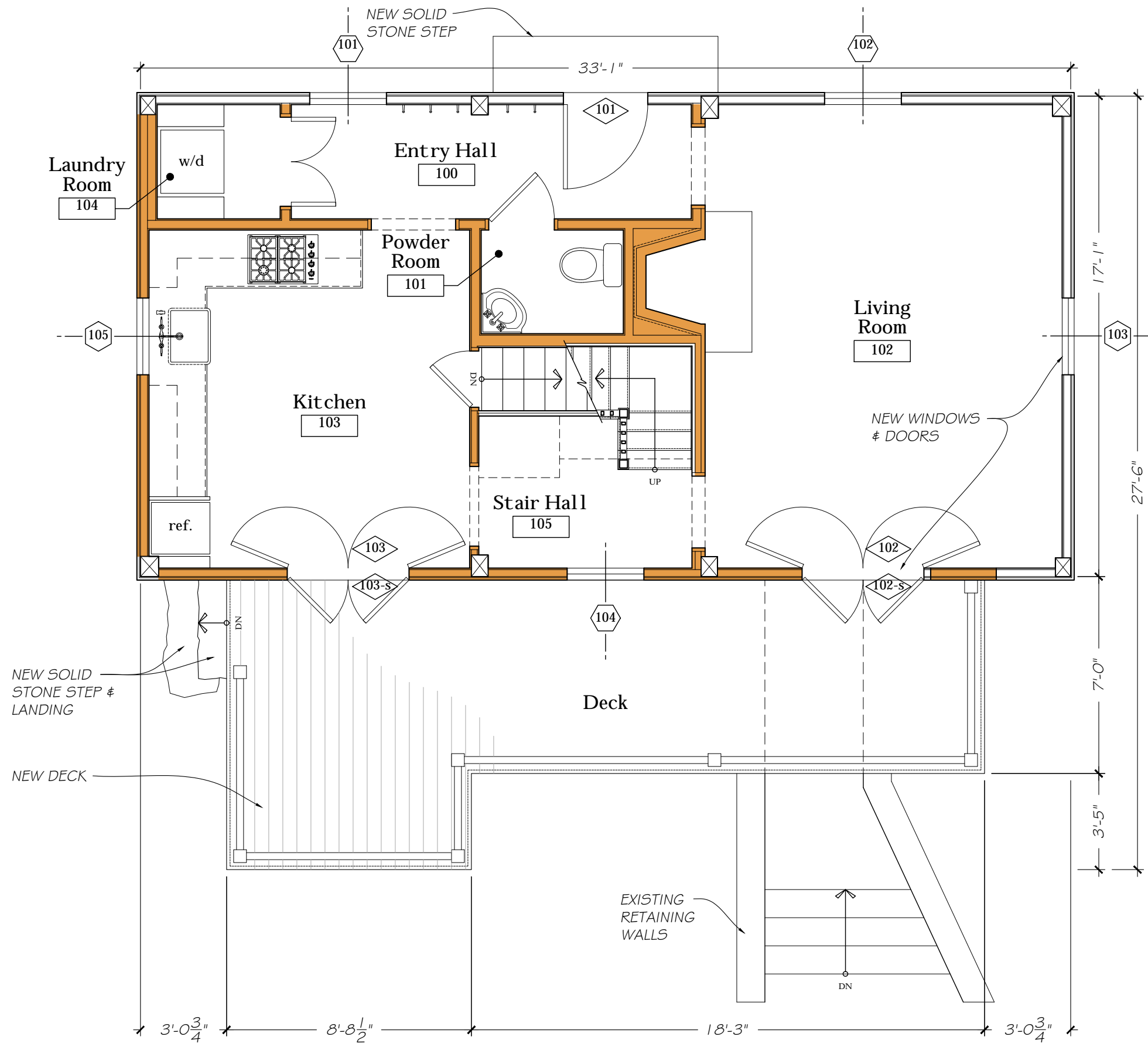
DATE: June 24, 2021
SCALE: 1/4" = 1'-0"
DRAWN BY: PM

SHEET NUMBER:
GAR
A-2.01

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PROPOSED PLAN GRAPHIC LEGEND:
 NEW CONSTRUCTION

GENERAL NOTE FOR REVISION 1:
 WINDOW AND DOOR NUMBER TAGS
 HAVE BEEN ADDED TO REFERENCE
 WITH SCHEDULES IN A-6 SERIES
 AND A-7 SERIES

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002	REVISION 1	1	06/12/2020
001	ISSUED FOR BUILDING PERMIT		05/14/2020

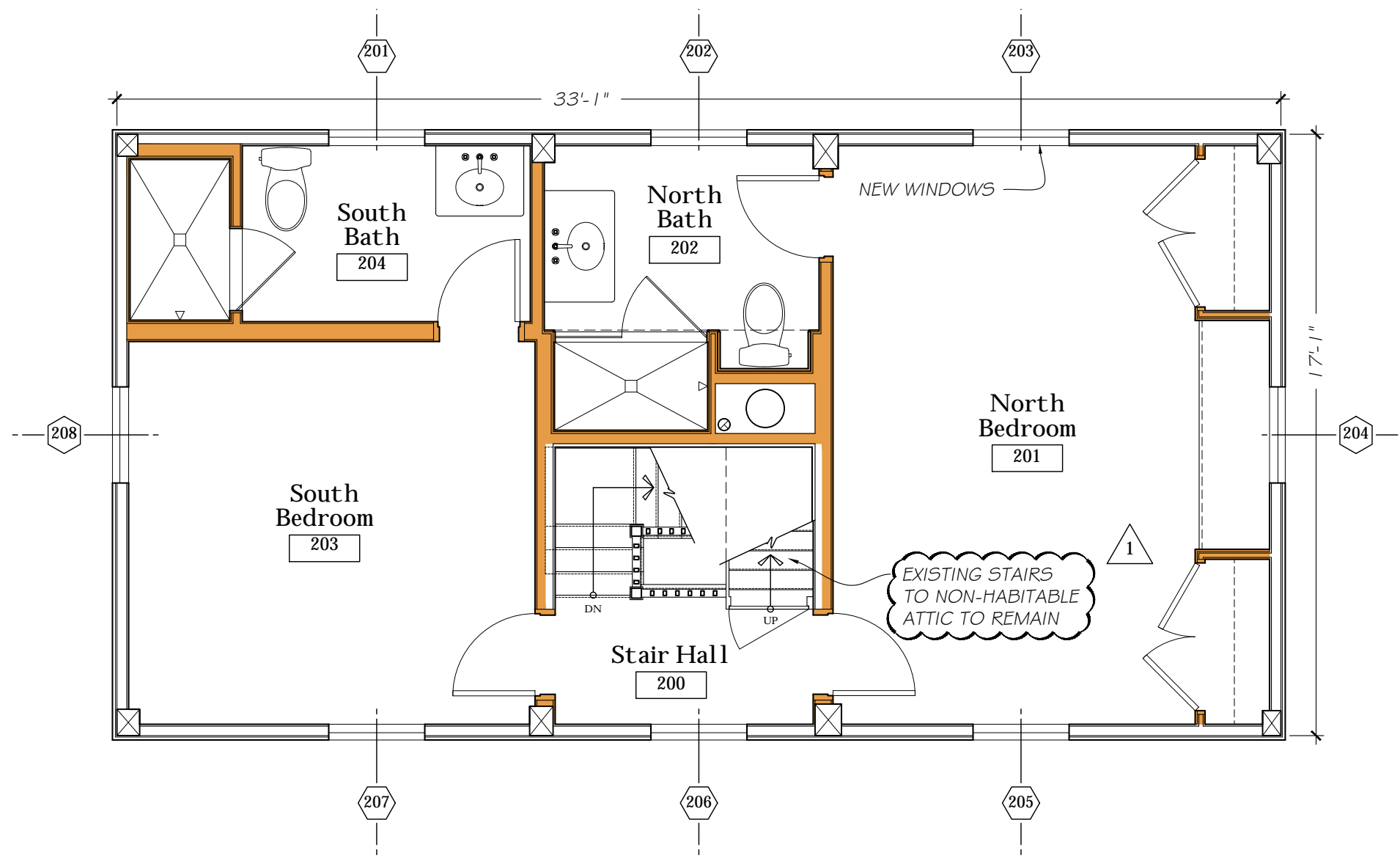
A RENOVATED GUEST COTTAGE
 for
LADY ISLE
 PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
*Proposed
 First Floor Plan*

DATE: <i>June 12, 2020</i>	SHEET NUMBER: A-1.01
SCALE: <i>1/4" = 1'-0"</i>	
DRAWN BY: <i>PM</i>	

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1 First Floor Plan - Proposed
 A-1.01 Scale: 1/4" = 1'-0"



PROPOSED PLAN GRAPHIC LEGEND:



GENERAL NOTE FOR REVISION 1:

WINDOW AND DOOR NUMBER TAGS HAVE BEEN ADDED TO REFERENCE WITH SCHEDULES IN A-6 SERIES AND A-7 SERIES

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002	REVISION 1	1	06/12/2020
001	ISSUED FOR BUILDING PERMIT		05/14/2020

A RENOVATED GUEST COTTAGE
for
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
*Proposed
Second Floor Plan*

DATE:
June 12, 2020

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

DRAWN BY:
PM

SHEET NUMBER:
A-1.02

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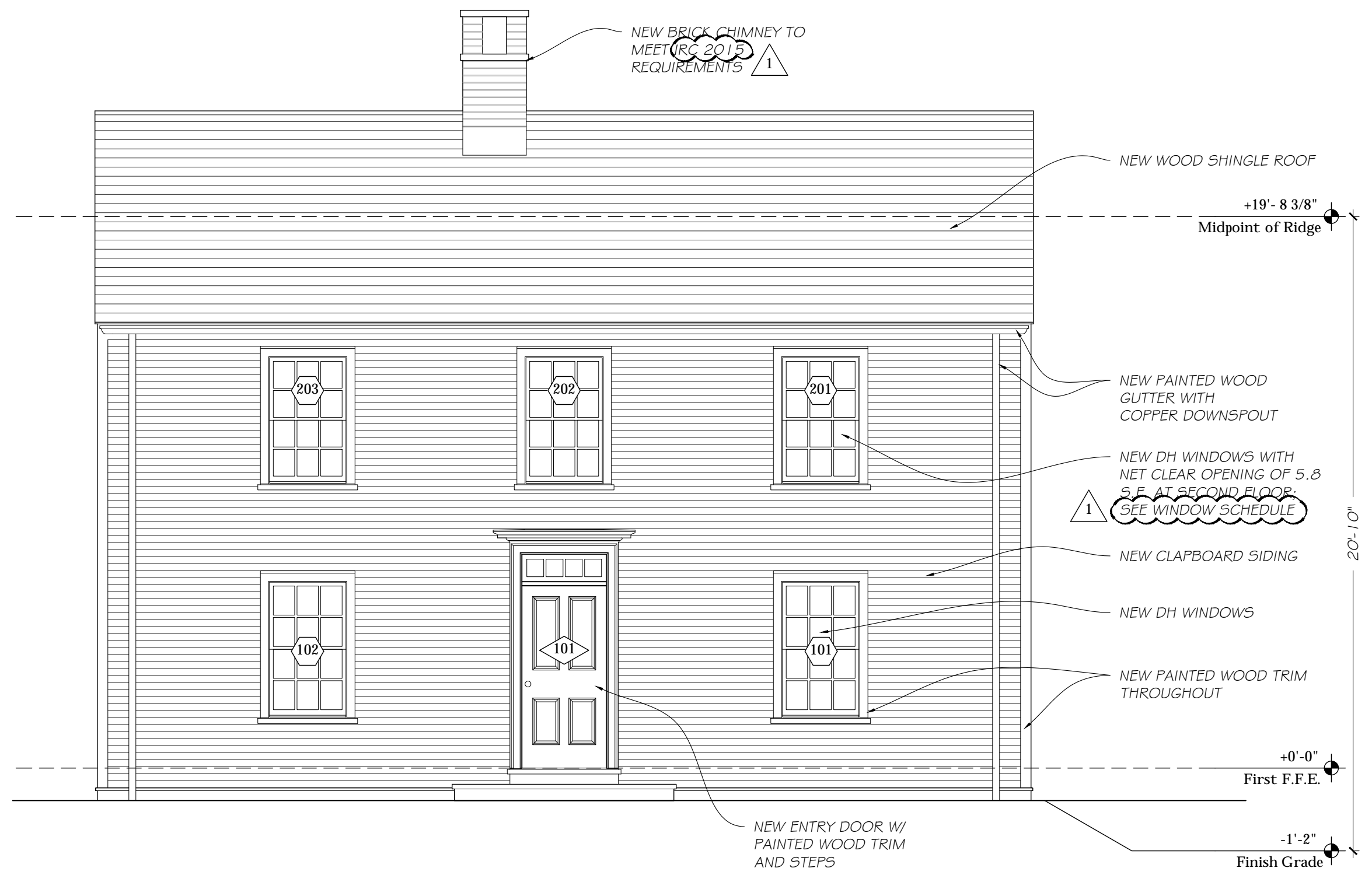
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1
A-1.02
Second Floor Plan - Proposed
Scale: 1/4" = 1'-0"



GENERAL NOTE FOR REVISION 1:
 WINDOW AND DOOR NUMBER TAGS
 HAVE BEEN ADDED TO REFERENCE
 WITH SCHEDULES IN A-6 SERIES
 AND A-7 SERIES



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002	REVISION 1	1	06/12/2020
001	ISSUED FOR BUILDING PERMIT		05/14/2020

A RENOVATED GUEST COTTAGE
 for
LADY ISLE
 PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior Elevations

DATE: <i>June 12, 2020</i>	SHEET NUMBER:
SCALE: <i>1/4" = 1'-0"</i>	A-2.01
DRAWN BY: <i>TG</i>	

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1
 D-2.01 West Elevation (Proposed)
 Scale: 1/4" = 1'-0"

GENERAL NOTE FOR REVISION 1:
 WINDOW AND DOOR NUMBER TAGS
 HAVE BEEN ADDED TO REFERENCE
 WITH SCHEDULES IN A-6 SERIES
 AND A-7 SERIES

1

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002	REVISION 1	1	06/12/2020
001	ISSUED FOR BUILDING PERMIT		05/14/2020

A RENOVATED GUEST COTTAGE
 for
LADY ISLE
 PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior Elevations

DATE: <i>June 12, 2020</i>	SHEET NUMBER: A-2.02
SCALE: <i>1/4" = 1'-0"</i>	
DRAWN BY: <i>TG</i>	

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NEW BRICK CHIMNEY TO MEET IRC 2015 REQUIREMENTS 1

NEW WOOD SHINGLE ROOF

NEW PAINTED WOOD TRIM THROUGHOUT

NEW DH WINDOWS WITH NET CLEAR OPENING OF 5.8 S.F. AT SECOND FLOOR. SEE WINDOW SCHEDULE 1

NEW CLAPBOARD SIDING

NEW PAINTED WOOD DECK & RAILING ON STONE PIERS WITH WOOD LATTICE SCREENING

+19'- 8 3/8"
Midpoint of Ridge

+0'-0"
First F.F.E.

-1'-2"
Finish Grade

20'-10"

1
 A-2.02
South Elevation (Proposed)
 Scale: 1/4" = 1'-0"

NEW BRICK CHIMNEY
TO MEET IRC 2015
REQUIREMENTS



NEW WOOD SHINGLE
ROOF

+19'-8 3/8"
Midpoint of Ridge

NEW PAINTED WOOD GUTTER
WITH COPPER DOWNSPOUT

NEW DH WINDOWS WITH
NET CLEAR OPENING OF 5.8
S.F. AT SECOND FLOOR.
SEE WINDOW SCHEDULE



NEW PAINTED WOOD TRIM
THROUGHOUT

NEW FRENCH DOORS WITH
PAINTED WOOD TRIM

NEW CLAPBOARD SIDING

22'-1 1/2"

+0'-0"
First F.F.E.

-3'-3"
Finish Grade



NEW PAINTED WOOD DECK &
RAILING ON STONE PIERS WITH
WOOD LATTICE SCREENING

NEW PAINTED WOOD DOOR
IN EXISTING OPENING.
EXISTING RETAINING WALL
TO REMAIN.

1 East Elevation (Proposed)
A-2.03 Scale: 1/4" = 1'-0"

GENERAL NOTE FOR REVISION 1:

WINDOW AND DOOR NUMBER TAGS
HAVE BEEN ADDED TO REFERENCE
WITH SCHEDULES IN A-6 SERIES
AND A-7 SERIES



FOR PERMIT ONLY

002	REVISION 1	1	06/12/2020
001	ISSUED FOR BUILDING PERMIT		05/14/2020

A RENOVATED GUEST COTTAGE
for
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
*Exterior
Elevations*

DATE:
June 12, 2020

SHEET NUMBER:

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

A-2.03

DRAWN BY:
TG

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GENERAL NOTE FOR REVISION 1:
 WINDOW AND DOOR NUMBER TAGS
 HAVE BEEN ADDED TO REFERENCE
 WITH SCHEDULES IN A-6 SERIES
 AND A-7 SERIES

1

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002	REVISION 1	1	06/12/2020
001	ISSUED FOR BUILDING PERMIT		05/14/2020

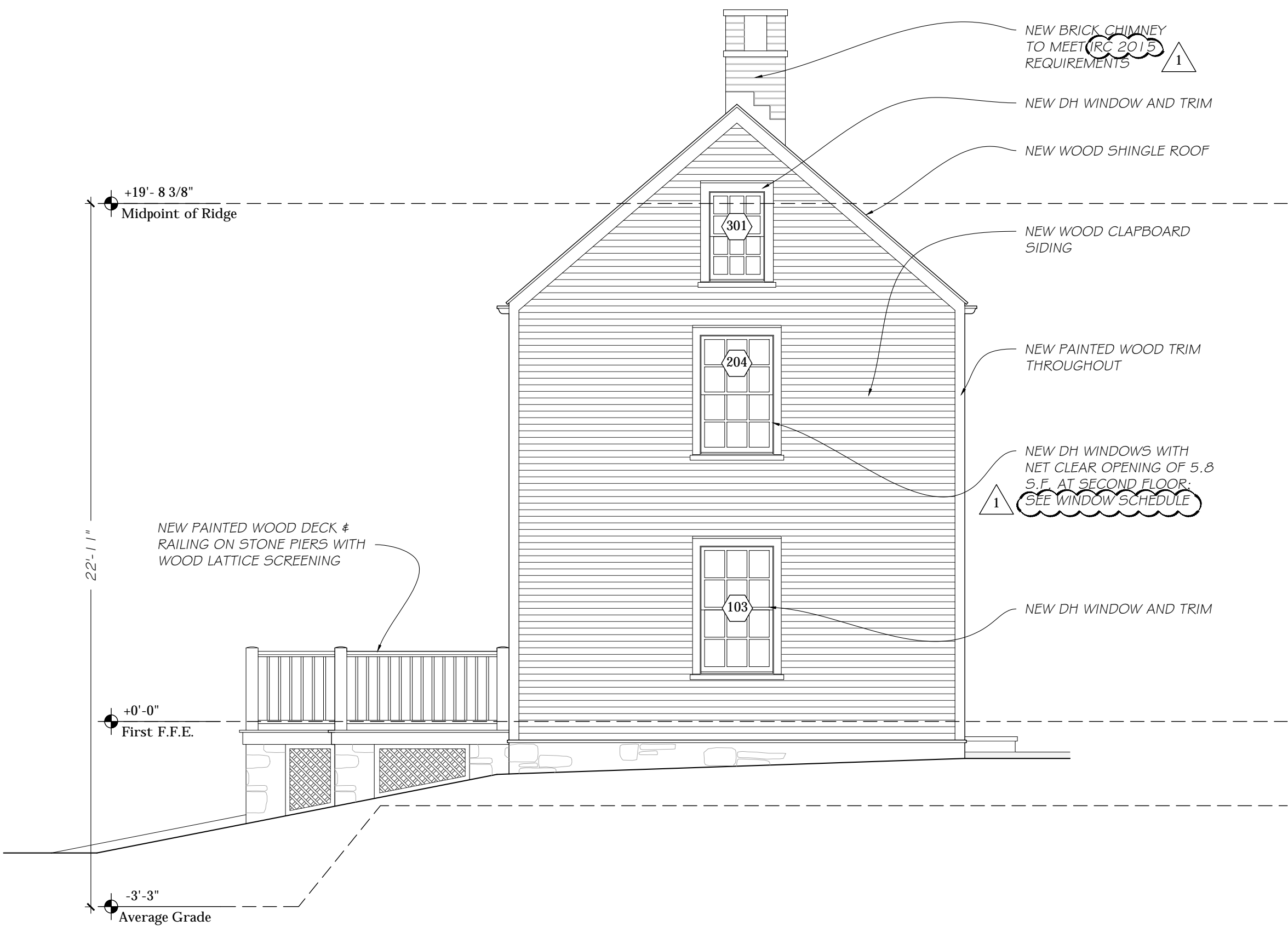
A RENOVATED GUEST COTTAGE
 for
LADY ISLE
 PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior Elevations

DATE: June 12, 2020	SHEET NUMBER:
SCALE: 1/4" = 1'-0"	A-2.04
DRAWN BY: TG	

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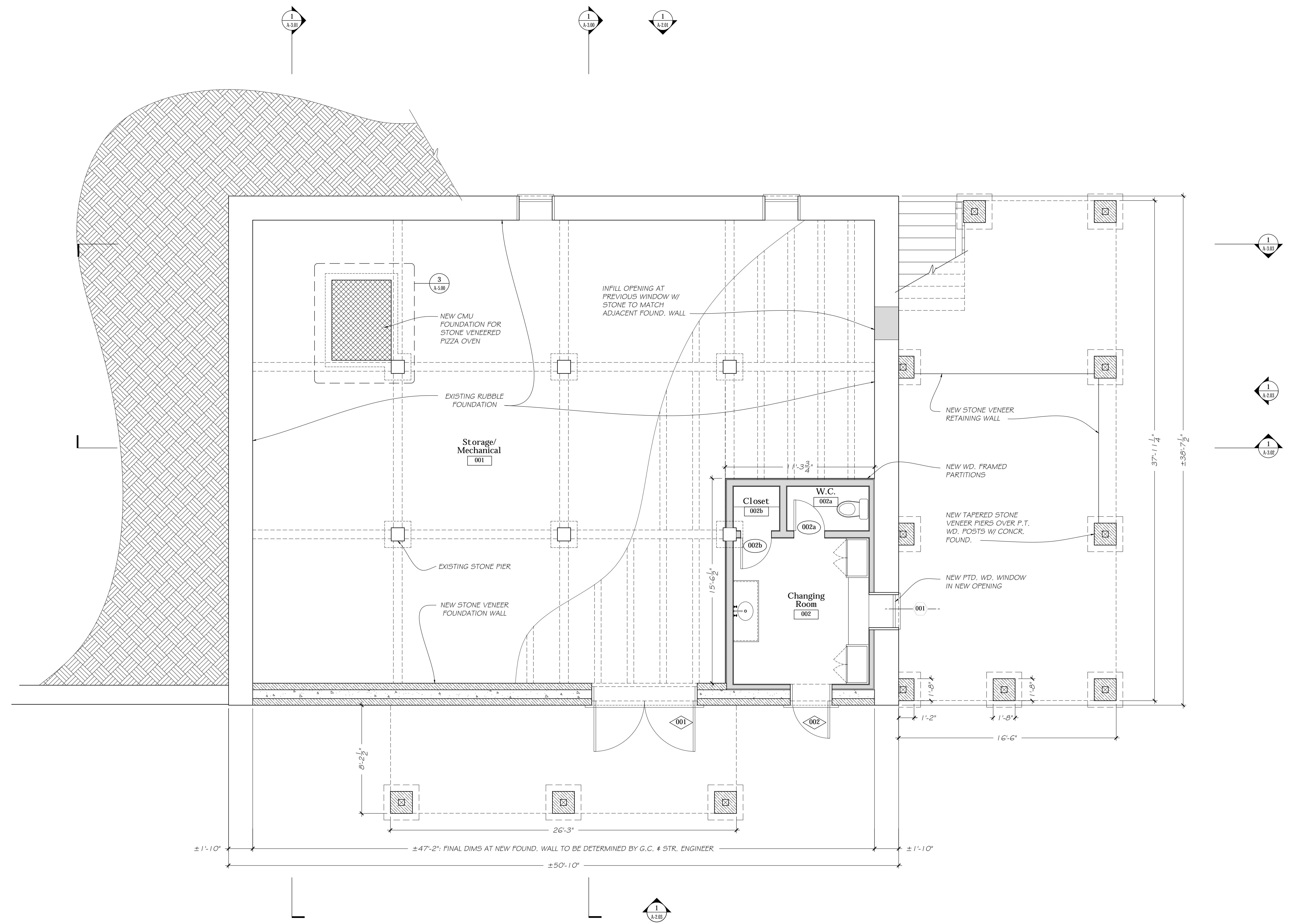
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1
 A-2.04
North Elevation (Proposed)
 Scale: 1/4" = 1'-0"

LEGEND	
	EXISTING FOUNDATION WALL
	NEW CONCR. STEM WALL
	NEW STONE VENEER
	NEW CMU FOUNDATION
	NEW FRAMING
	NEW WOOD POST

FOR COORDINATION ONLY
NOT FOR CONSTRUCTION



1
A-1.00
Basement Plan
Scale: 1/4" = 1'-0"

ISSUED FOR PRICING (NOT FOR CONSTRUCTION) 9/8/20

A RENOVATED BARN
for
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
*Basement Plan
Barn*

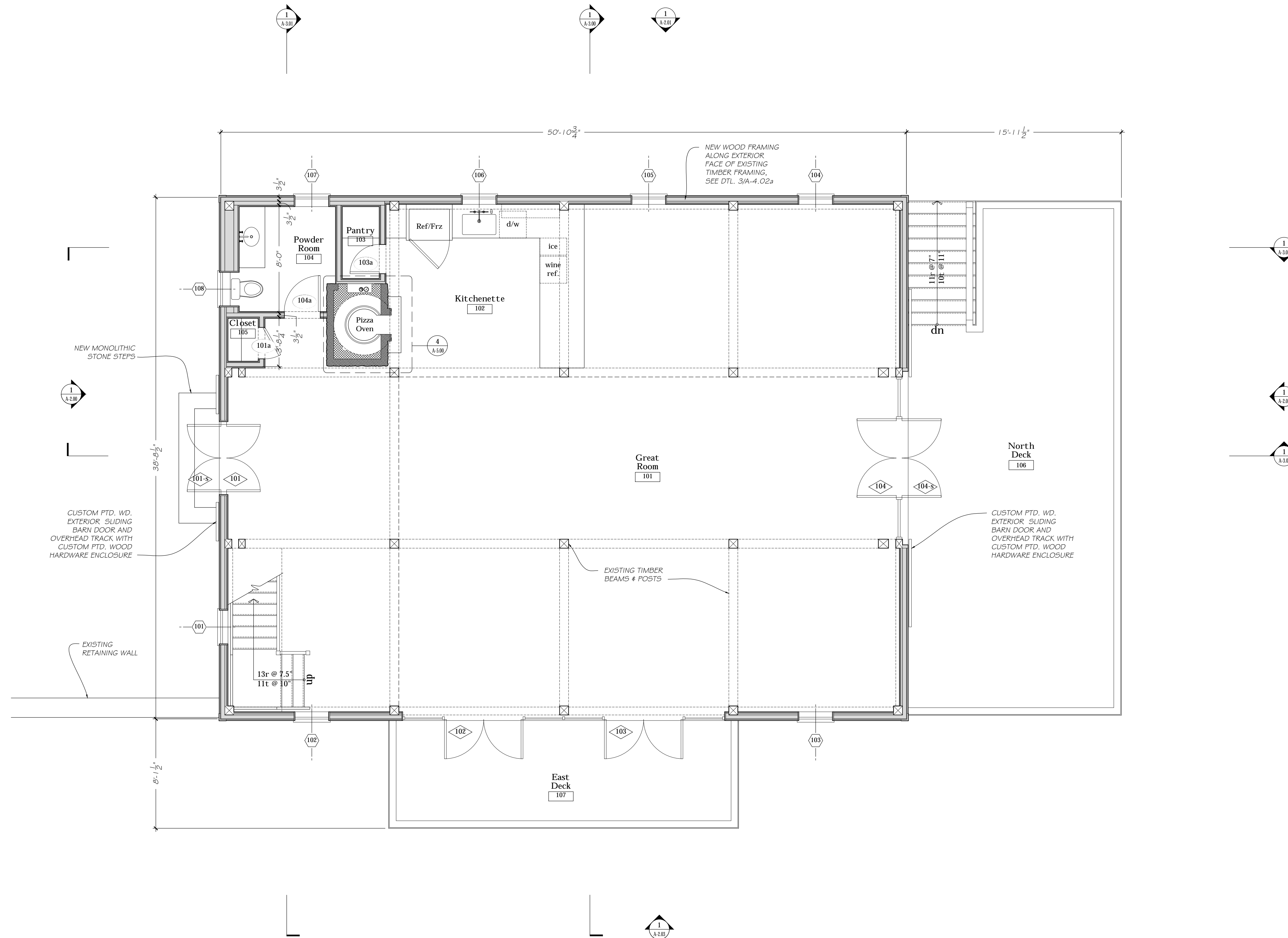
DATE: September 8, 2020

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

SHEET NUMBER: A-1.00

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19 UNION SQUARE WEST
4TH FLOOR
NEW YORK, NEW YORK 10003
TELEPHONE: 212-965-1355
TELEFAX: 212-965-1356





LEGEND	
	EXISTING FOUNDATION WALL
	NEW CONCR. STEM WALL
	NEW STONE VENEER
	NEW CMU FOUNDATION
	NEW FRAMING
	EXISTING TIMBER POST

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NOT FOR CONSTRUCTION

ISSUED FOR PRICING (NOT FOR CONSTRUCTION) 9/8/20

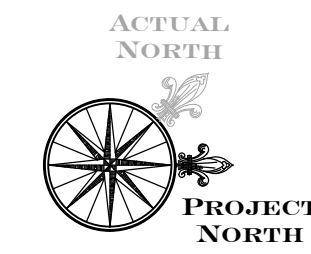
A RENOVATED BARN
for
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

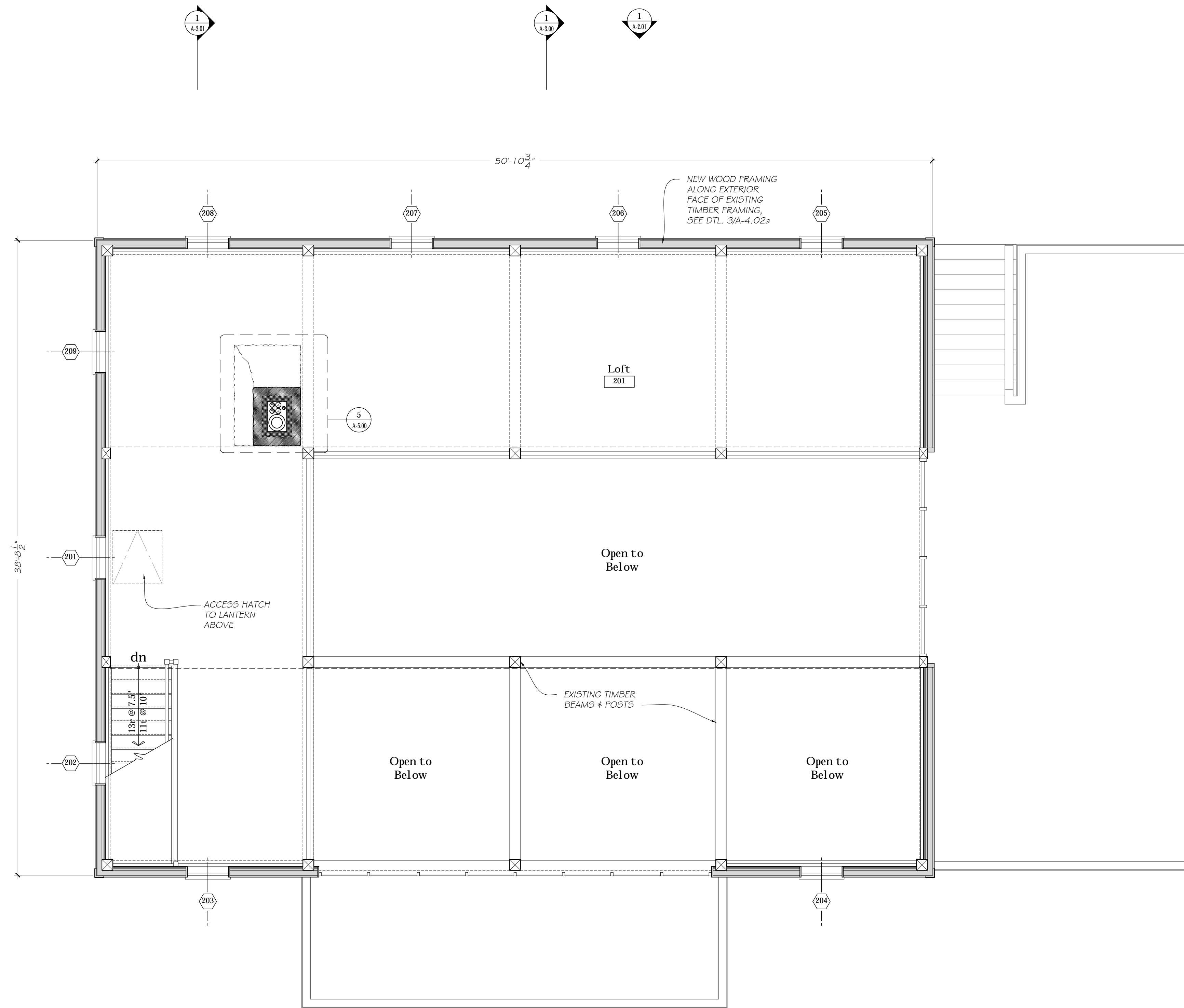
SHEET TITLE:
*First Floor Plan
Barn*

DATE: <i>September 8, 2020</i>	SHEET NUMBER: A-1.01
SCALE: <i>1/4" = 1'-0"</i>	
DRAWN BY:	

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1
A-1.01
First Floor Plan
Scale: 1/4" = 1'-0"





LEGEND	
	EXISTING FOUNDATION WALL
	NEW CONCR. STEM WALL
	NEW STONE VENEER
	NEW CMU FOUNDATION
	NEW FRAMING
	EXISTING TIMBER POST

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A RENOVATED BARN
for
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

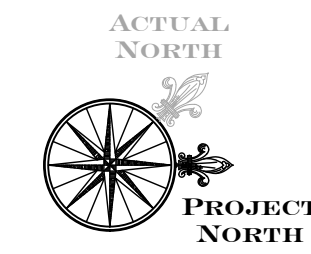
SHEET TITLE:
*Second Floor Plan
Barn*

DATE: *September 8, 2020* SHEET NUMBER:

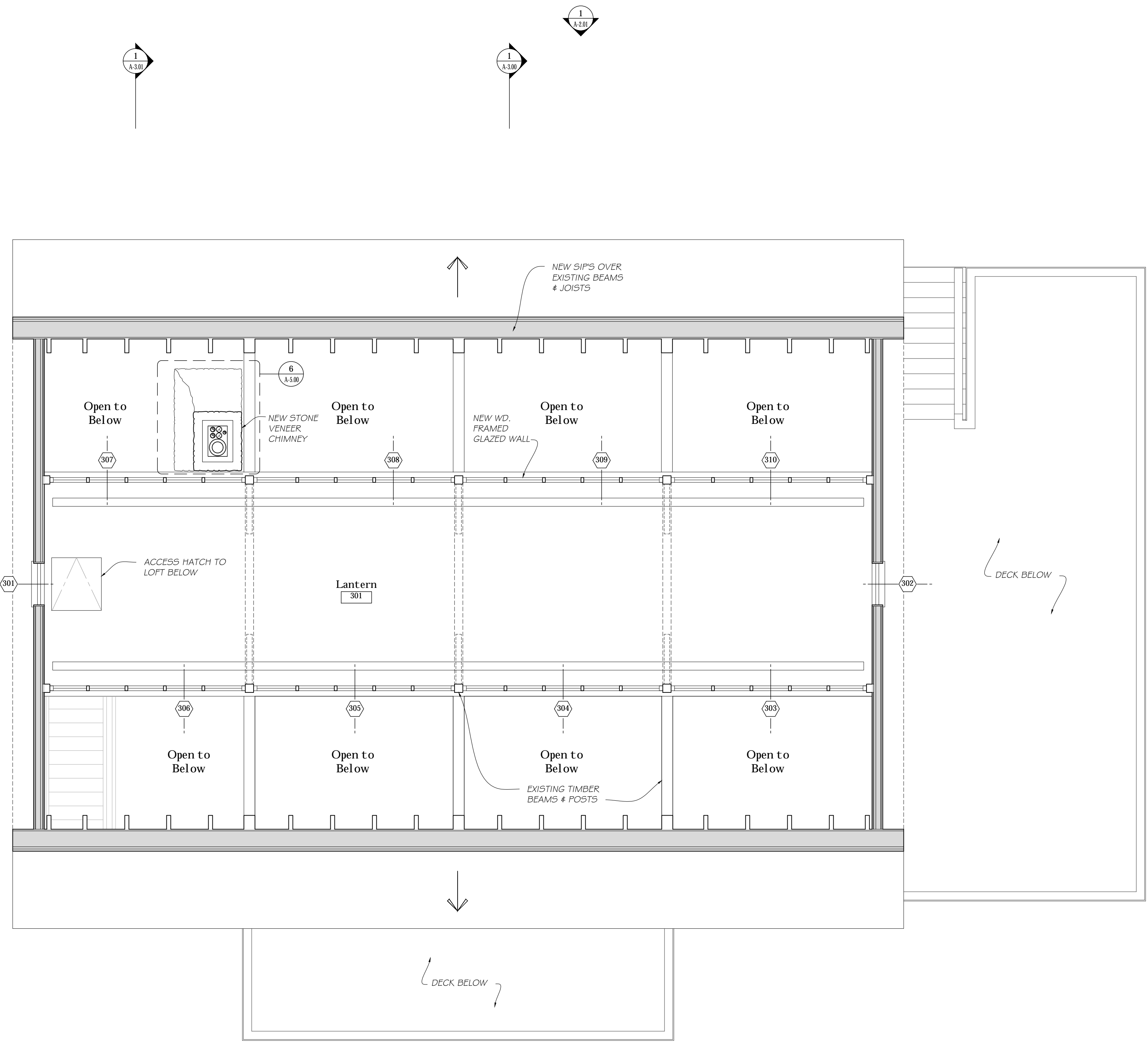
SCALE: *1/4" = 1'-0"* **A-1.02**

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1 Second Floor Plan
A-1.02 Scale: 1/4" = 1'-0"



LEGEND	
	EXISTING FOUNDATION WALL
	NEW CONCR. STEM WALL
	NEW STONE VENEER
	NEW CMU FOUNDATION
	NEW FRAMING
	EXISTING TIMBER POST

FOR COORDINATION ONLY
NOT FOR CONSTRUCTION

1
A-1.03
Third Floor Plan
Scale: 1/4" = 1'-0"

ISSUED FOR PRICING
(NOT FOR CONSTRUCTION) 9/8/20

A RENOVATED BARN
for
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
*Third Floor Plan
Barn*

DATE: September 8, 2020 SHEET NUMBER:

SCALE: 1/4" = 1'-0" **A-1.03**

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A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:

First Floor Plan

DATE: June 24, 2021

SHEET NUMBER:

PC

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

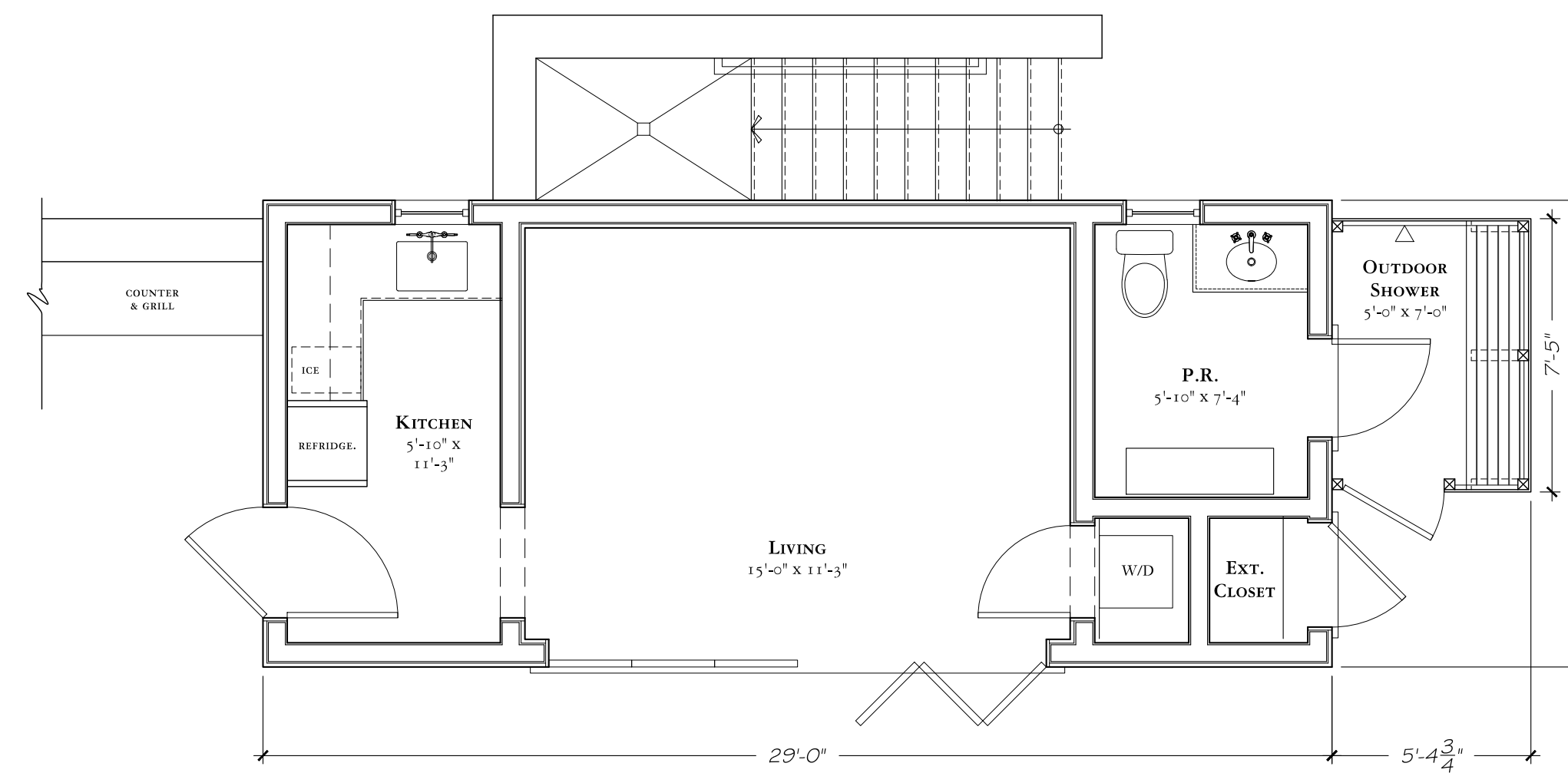
A-1.01

DRAWN BY: PM

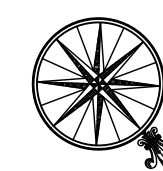
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NEW YORK, NEW YORK 10003
TELEPHONE: 212-965-1355
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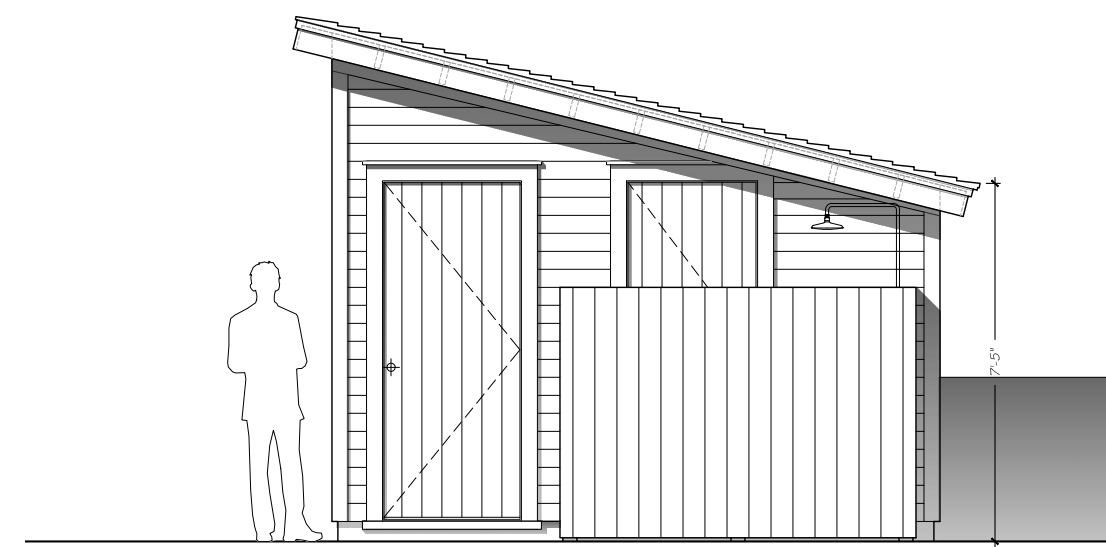
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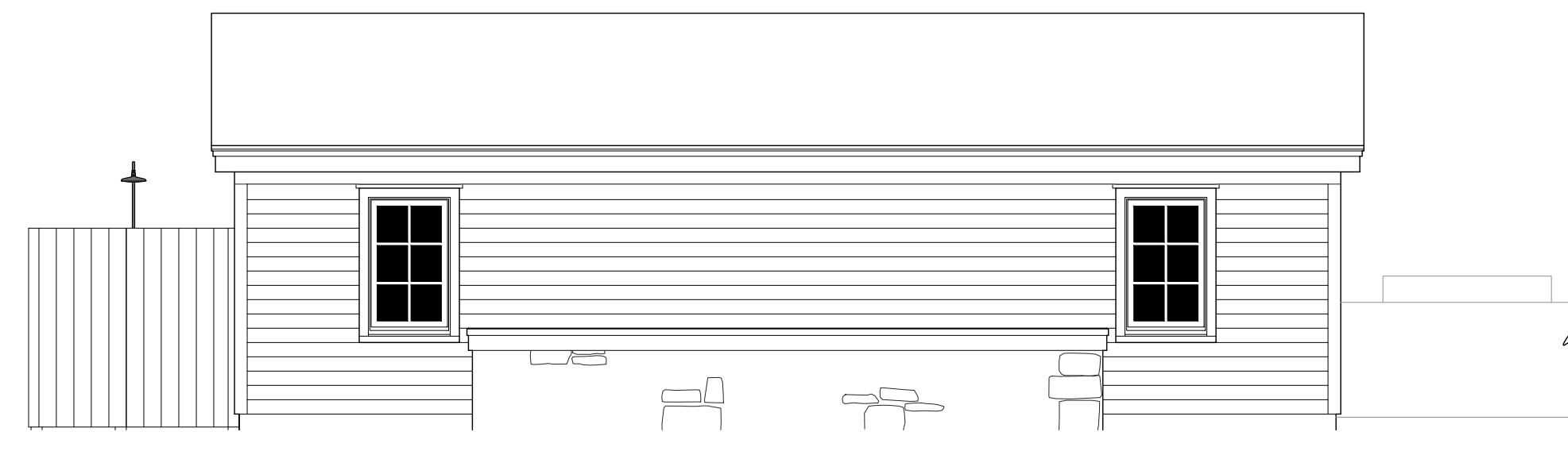
I
A-1.01 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



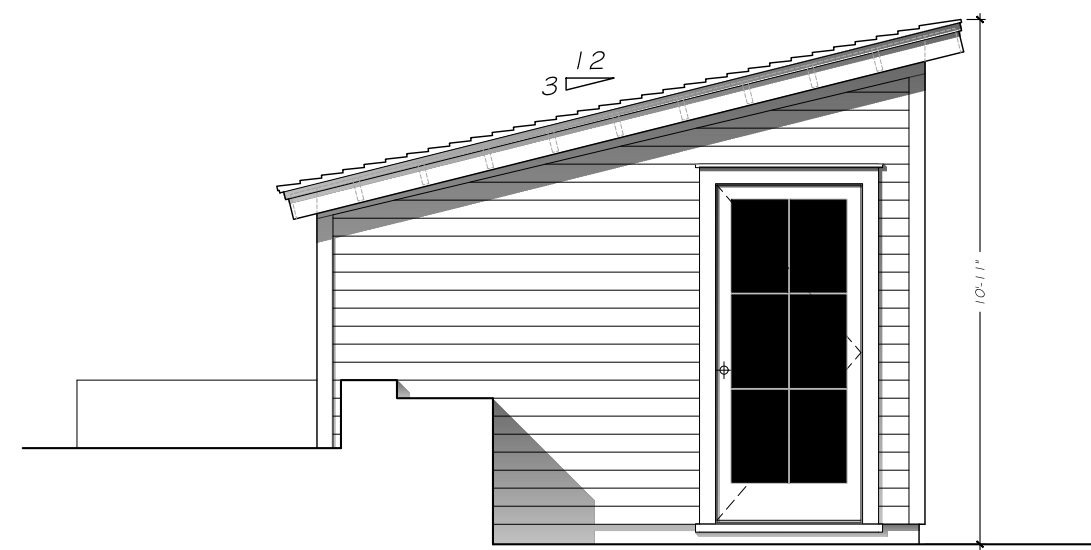
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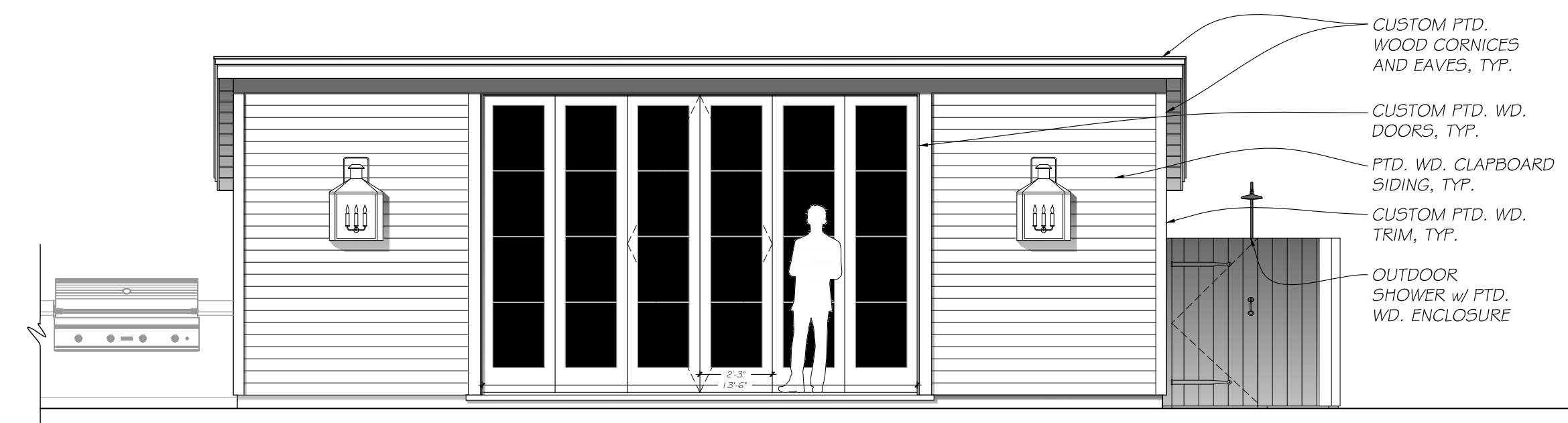
4 WEST ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"



3 NORTH ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"



2 SOUTH ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"



1 EAST ELEVATION
A-2.01 SCALE: 1/4" = 1'-0"

A NEW RESIDENCE & GARAGE
at
LADY ISLE
PORTSMOUTH, NEW HAMPSHIRE

SHEET TITLE:
Exterior Elevations

DATE: June 24, 2021

SHEET NUMBER:

PC

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

A-2.01

DRAWN BY: PM

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NEW YORK, NEW YORK 10003
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Lady Isle

325 Little Harbor Road,
Portsmouth NH

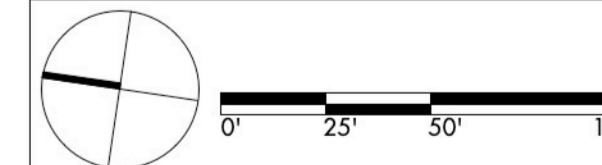
General Notes:

1. Existing conditions and topographic data are from a site plan of land dated March 2, 2021; prepared by: Thomas F. Moran Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, 03801 - Tel: (603) 431.2222
2. Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02180 - Tel: (617) 905.2246
3. Do not scale drawings



MATTHEW
CUNNINGHAM
LANDSCAPE
DESIGN LLC
matthew-cunningham.com

SCALE: 1" = 50'-0" DATE: 23 FEBRUARY 2022



SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

L1.0

FOR PERMIT SUBMISSION

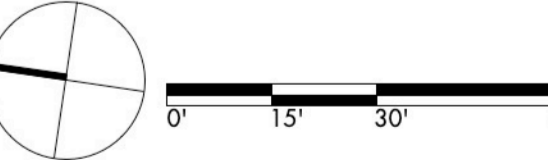
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MATTHEW
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SCALE: 1" = 30'-0" DATE: 23 FEBRUARY 2021



SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

L1.1

FOR PERMIT SUBMISSION

General Notes:

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TOTAL PROPOSED PLANT BED WITHIN LIMIT OF WORK: ~42,750SF
EXISTING LAWN AREA TO BE CONVERTED TO PLANT BED: ~34,770SF

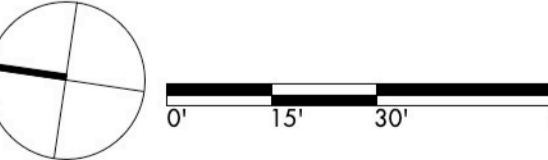
PROPOSED PLANT PALETTE				SHRUBS				PERENNIALS				PERENNIALS (Cont.)			
Key	Qty.	Latin Name	Common Name	Scheduled Size	Latin Name	Common Name	Latin Name	Common Name	Latin Name	Common Name	Latin Name	Common Name	Latin Name	Common Name	
TREES				SHRUBS				PERENNIALS				PERENNIALS (Cont.)			
ARR	6	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	4-4.5' cal. B&B	Aesculus parviflora	Bottlebrush Buckeye	Actaea racemosa	Snakeroot	Hakonechloa macra	Hakone Grass	ARR	6	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	
ASG	5	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	4-4.5' B&B	Aronia arbutifolia	Red Chokeberry	Agastache x hybrida	Anise Hyssop	Helleborus x hybridus	Lenten Rose	AC	30	Amelanchier canadensis	Shadblow Serviceberry	
AC	30	Amelanchier canadensis	Shadblow Serviceberry	10-12' B&B	Calliopsis dichotoma	Beautyberry	Alchemilla mollis	Lady's Mantle	Heuchera micrantha	Coral Bells	BPW	12	Betula platyphylla 'Whitespire'	Japanese Whitespire Birch	
BPW	12	Betula platyphylla 'Whitespire'	Japanese Whitespire Birch	8-10' B&B	Cephalanthus occidentalis	Buttonbush	Allium senescens	Circle Chives	Hydrangea anomala petiolaris	Climbing Hydrangea	CF	2	Cornus florida 'Cherokee Princess'	Cherokee Princess Dogwood	
CF	2	Cornus florida 'Cherokee Princess'	Cherokee Princess Dogwood	4-4.5' cal. B&B	Clethra alnifolia	Summersweet	Amsonia hubrichtii	Bluestar	Iris cristata	Crested Iris	JV	4	Juniperus virginiana	Eastern Red Cedar	
JV	4	Juniperus virginiana	Eastern Red Cedar	8-10' B&B	Comptonia peregrina	Sweetfern	Andropogon gerardii	Big Bluestem	Iris sibirica	Siberian Iris	LL	5	Larix laricina	Tamarack	
LL	5	Larix laricina	Tamarack	10-12' B&B	Cornus sericea	Red-Twig Dogwood	Anemone tomentosa	Grapeleaf Anemone	Kirengeshoma palmata	Yellow Waxbells	MJ	1	Magnolia illinoensis 'Jane'	Jane Magnolia	
MJ	1	Magnolia illinoensis 'Jane'	Jane Magnolia	7-8' ht. B&B	Daphne x burkwoodii	Burkwood Daphne	Anemone x hybrida	Japanese Anemone	Lavandula intermedia	Lavender	MV	5	Magnolia virginiana	Sweetbay Magnolia	
MV	5	Magnolia virginiana	Sweetbay Magnolia	8-10' ht. B&B	Fothergilla x intermedia	Fothergilla	Anemonea thalictroides	Rue Anemone	Leucanthemum superbum	Shasta Daisy	MG	13	Malus x domestica 'Gala'	Gala Apple	
MG	13	Malus x domestica 'Gala'	Gala Apple	4-4.5' cal. B&B	Hamamelis x intermedia	Witchhazel	Aruncus dioicus	Goat's Beard	Lupinus polyphilus	Lupine	NS	2	Nyssa sylvatica	Tupelo	
NS	2	Nyssa sylvatica	Tupelo	4-4.5' cal. B&B	Hydrangea arborescens	Smooth Hydrangea	Asclepias incarnata	Swamp Milkweed	Matteuccia struthiopteris	Ostrich Fern	PA	3	Picea abies	Norway Spruce	
PA	3	Picea abies	Norway Spruce	10-12' ht. B&B	Hydrangea paniculata	Laoceap Hydrangea	Asclepias syriaca	Common Milkweed	Miscanthus sinensis	Maiden Grass	QA	3	Quercus 'Alba'	White Oak	
QA	3	Quercus 'Alba'	White Oak	4-4.5' B&B	Hydrangea quercifolia	Oakleaf Hydrangea	Astilbe x hybrida	Astilbe	Nepeta x faasseni	Catmint	SA	6	Salix babylonica	Weeping Willow	
SA	6	Salix babylonica	Weeping Willow	3-3.5' cal. B&B	Ilex glabra	Inkberry	Astrantia rubra	Red Masterwort	Osmunda cinnamomea	Cinnamon Fern	SP	1	Stewartia pseudocamellia	Japanese Stewartia	
SP	1	Stewartia pseudocamellia	Japanese Stewartia	3.5-4' cal. B&B	Ilex verticillata	Winterberry	Athyrium niponicum pictum	Japanese Painted Fern	Paeonia lactiflora	Peony	TP	3	Thuja plicata 'Green Giant'	Green Giant Arborvitae	
TP	3	Thuja plicata 'Green Giant'	Green Giant Arborvitae	10-12' ht. B&B	Itea virginica	Sweetpire	Baptisia australis	False Indigo	Panicum virgatum	Switchgrass					
					Myrica gale	Sweetgale	Calamagrostis x acutiflora 'Karl Foerster'	Foerster's Feather Reed Grass	Pennisetum alopecuroides	Dwarf Fountain Grass					
					Myrica pensylvanica	Northern Bayberry	Carex pensylvanica	Oak Sedge	Perovskia atriplicifolia	Russian Sage					
					Prunus maritima	Beach Plum	Centaurea montana	Comflower	Podophyllum peltatum	May Apple					
					Rhododendron 'Cunningham's White'	Cunningham's White Rhododendron	Clematis x jackmanii	Jackman Clematis	Polygonatum odoratum	Solomon's Seal					
					Rhododendron maximum	Rosebay Rhododendron	Corydalis lutea	Yellow Corydalis	Pulmonaria officinalis	Lungwort					
					Rhus aromatica 'Gro-Lo'	Fragrant Sumac	Dennstaedtia punctilobula	Hay-Scented Fern	Rosa x 'New Dawn'	New Dawn Rose					
					Rhus typhina	Staghorn Sumac	Deschampsia cespitosa	Tufted Hairgrass	Salvia x sylvestris	Wood Sage					
					Rosa virginiana	Virginia Rose	Dicentra spectabilis	Bleeding Heart	Salvia nemorosa	Woodland Sage					
					Sambucus canadensis	American Elderberry	Digitalis purpurea	Foxglove	Schizachyrium scoparium	Little Bluestem					
					Syringa meyeri	Dwarf Korean Lilac	Echinacea purpurea	Purple Coneflower	Solidago ssp.	Goldenrod					
					Syringa vulgaris	Common Purple Lilac	Epimedium x rubrum	Red Barrenwort	Sorghastrum nutans	Indian Grass					
					Vaccinium corymbosum	Highbush Blueberry	Vaccinium spectabilis	Purple Love Grass	Sporobolus heterolepis	Prairie Dropseed					
					Viburnum dentatum	Arrowwood Viburnum	Eupatorium dubium	Dwarf Joe Pye Weed	Viburnum plicatum	Lamb's Ear					
					Viburnum plicatum f. tomentosum	Doublefile Viburnum	Eupatorium maculatum	Spotted Joe Pye Weed	Viburnum divaricatum	New England Aster					
					Viburnum trilobum	American Cranberry Viburnum	Erythraea divaricata	White Wood Aster	Galium odoratum	New York Aster					
							Galium odoratum	Sweet Woodruff	Geranium 'Rozanne'	Aromatic Aster					
							Geranium macrorrhizum	Cranesbill	Gillenia trifoliata	Lavender Mist Meadow-rue					
							Gillenia trifoliata	Bowman's Root		Common Thyme					

NOTES:
 1. PLANT LOCATIONS ON PLAN ARE FOR DIAGRAMMATIC PURPOSES AND DO NOT NECESSARILY REFLECT ACTUAL PROPOSED LOCATIONS OF PLANTING
 2. PLANT SIZES OR QUANTITIES SHOWN ARE SUBJECT TO CHANGE BASED ON AVAILABILITY
 3. THE USE OF ANY FERTILIZER IS PROHIBITED WITHIN A WETLAND, VEGETATED BUFFER AREA, OR LIMITED CUT AREA
 4. THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE OR SLOW RELEASE NITROGEN FERTILIZER IS PROHIBITED IN ALL COASTAL RESOURCE AREAS



MATTHEW CUNNINGHAM LANDSCAPE DESIGN LLC
 matthew-cunningham.com

SCALE: 1" = 30'-0" DATE: 23 FEBRUARY 2022



SHEET TITLE:

PLANTING PLAN

SHEET NUMBER:

L1.2
 FOR PERMIT SUBMISSION



Lady Isle

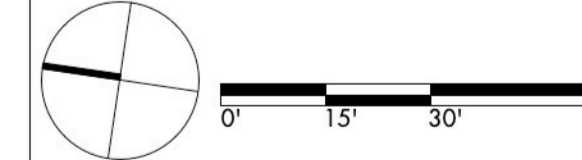
325 Little Harbor Road,
Portsmouth NH

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**MATTHEW
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LANDSCAPE
DESIGN LLC**
matthew-cunningham.com

SCALE: 1" = 30'-0" DATE: 23 FEBRUARY 2022



SHEET TITLE:

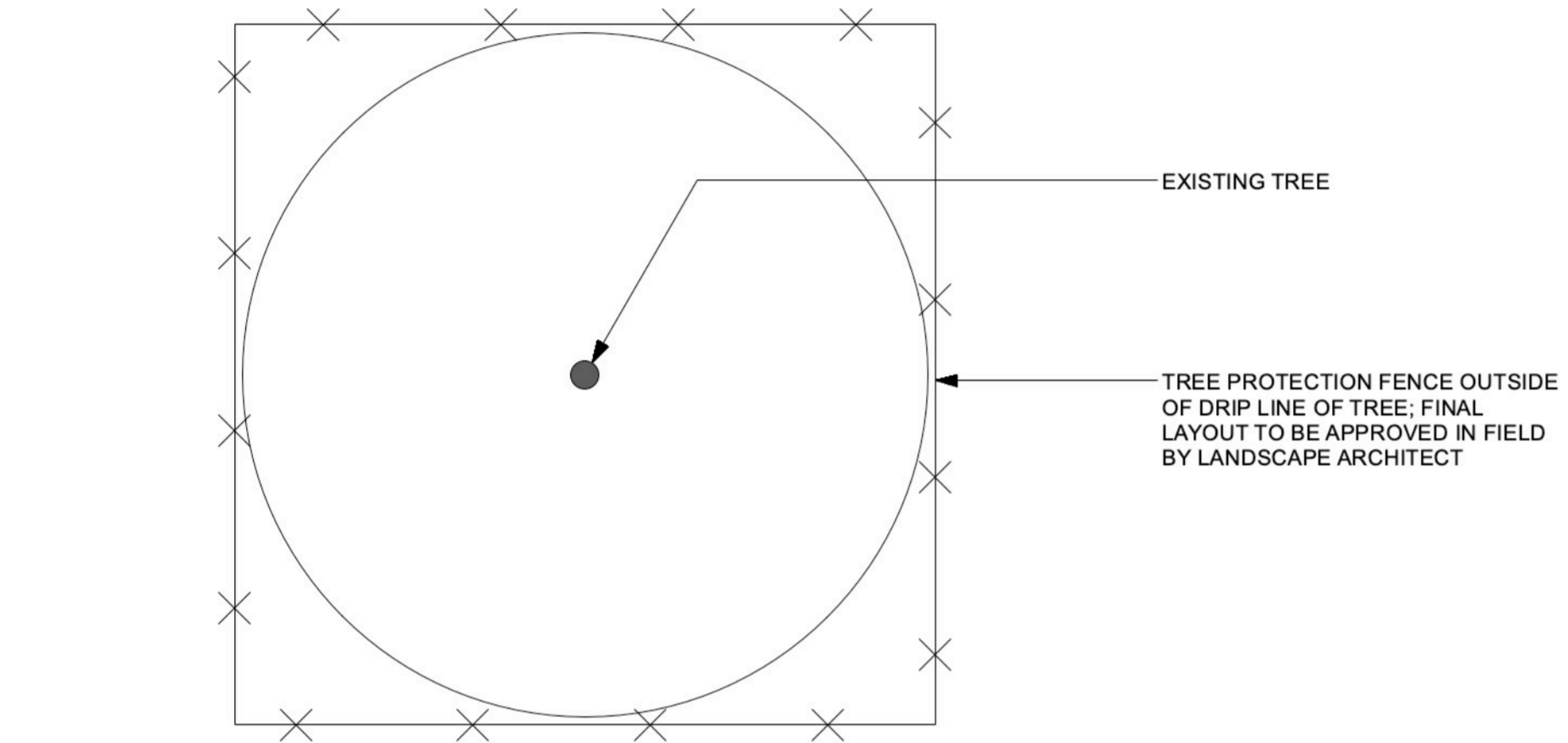
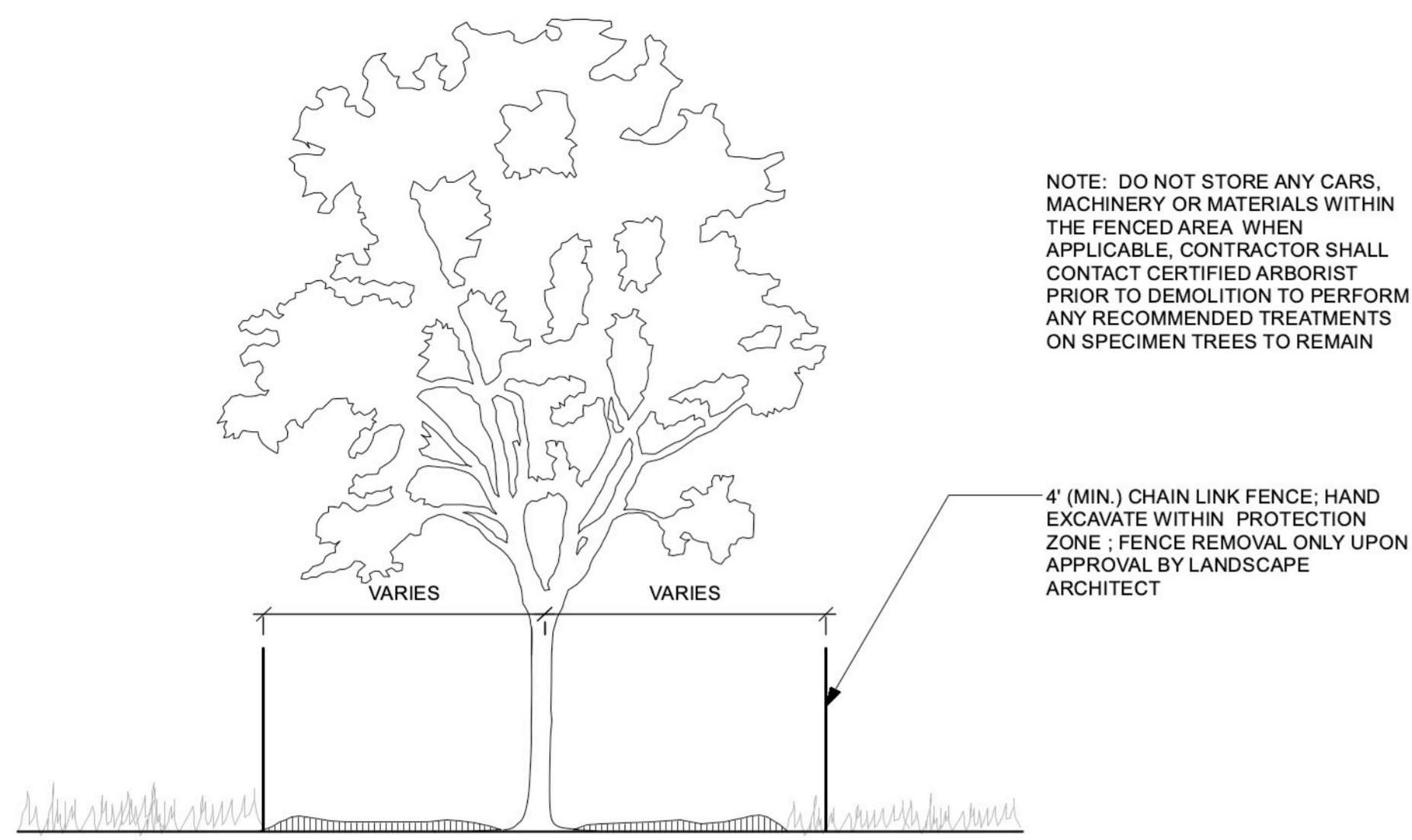
PLANTING PLAN

SHEET NUMBER:

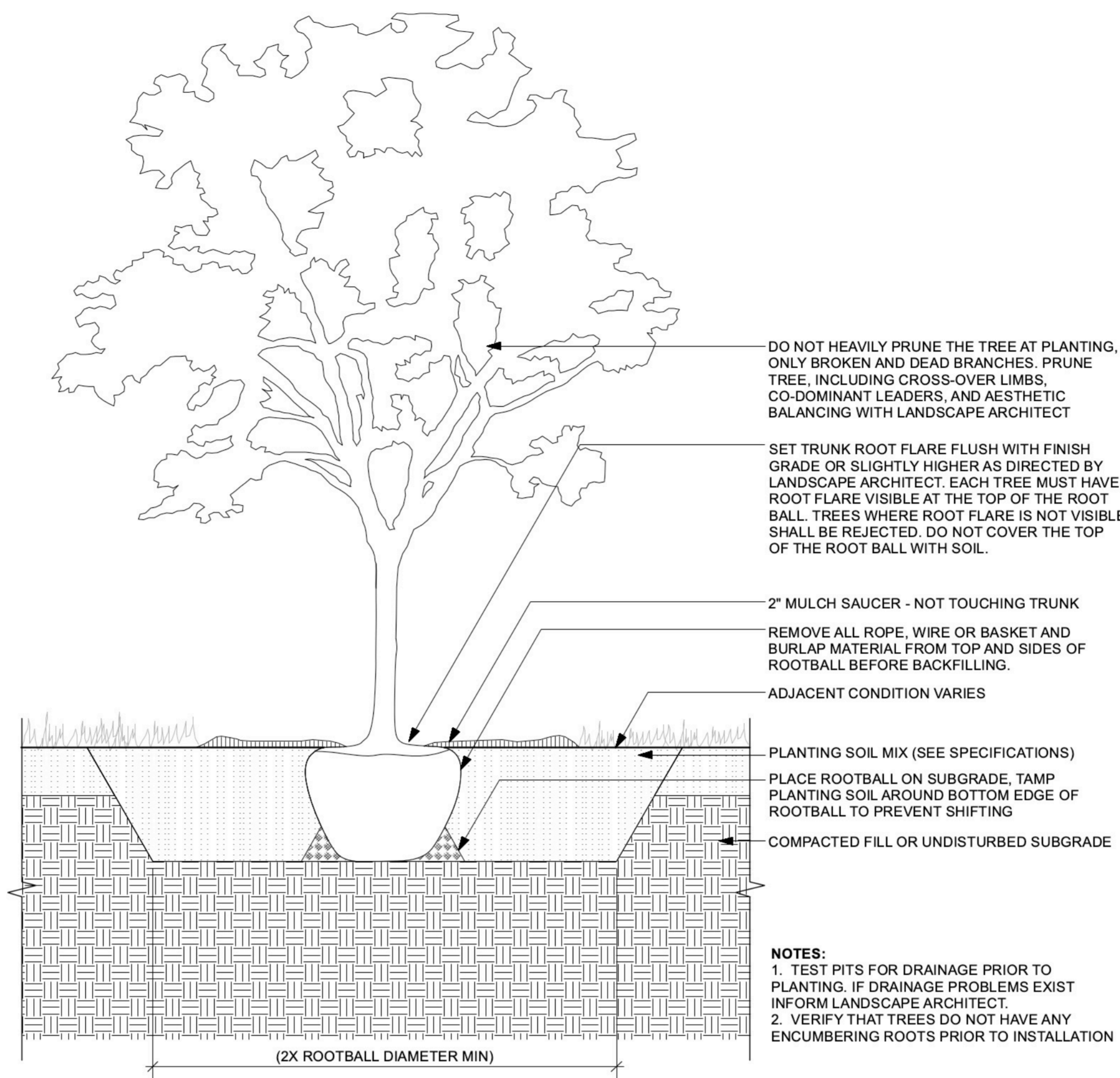
L1.3
FOR PERMIT SUBMISSION

General Notes:

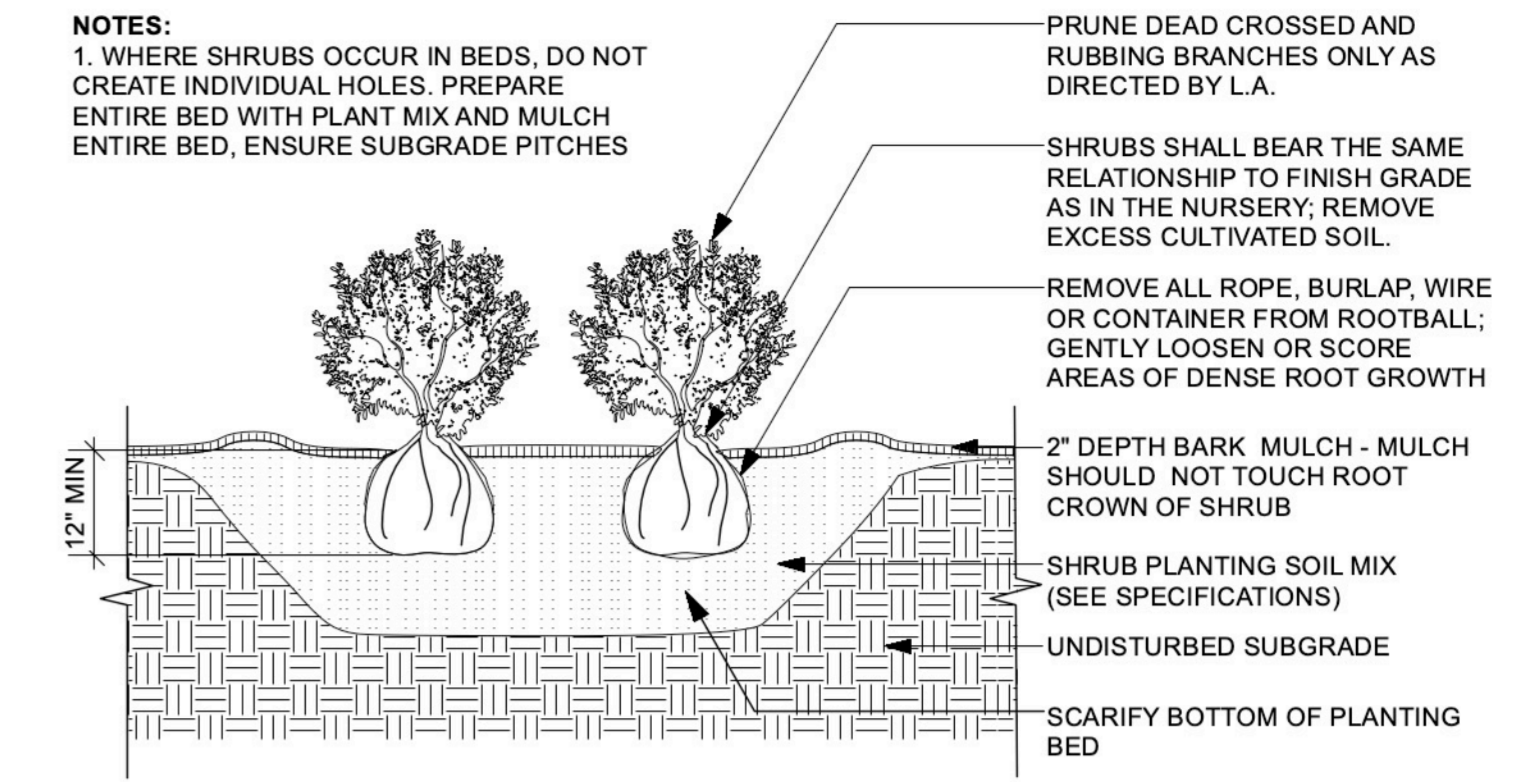
- Existing conditions and topographic data are from a site plan of land dated March 2, 2021; prepared by: Thomas F. Moran Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, 03801 - Tel: (603) 431.2222
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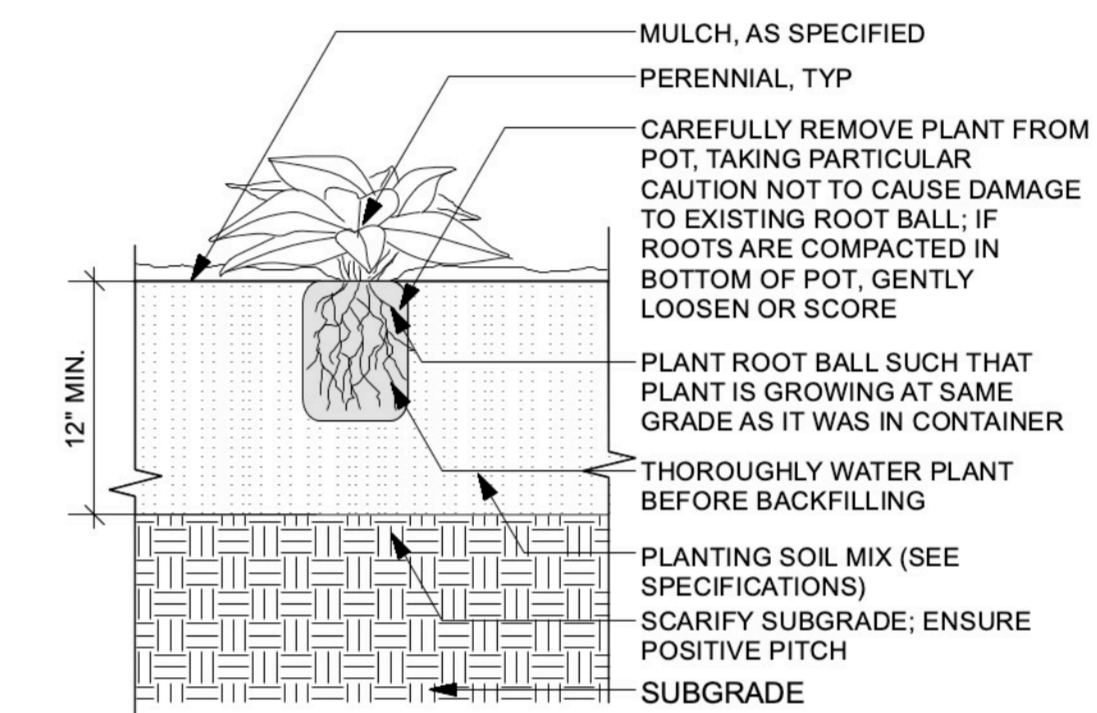
1 TREE PROTECTION FENCING
Scale: 1/2" = 1'-0"



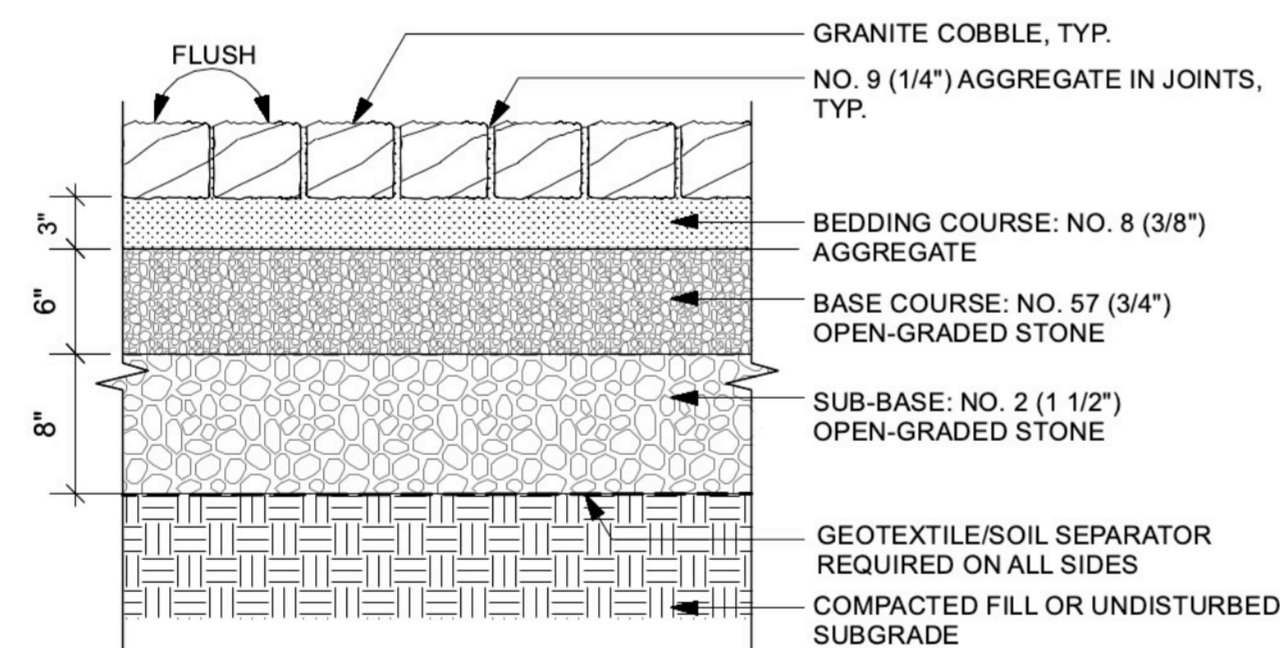
2 TREE PLANTING - TYPICAL SECTION
Scale: 1/2" = 1'-0"



3 SHRUB PLANTING - TYPICAL SECTION
Scale: 1/2" = 1'-0"



4 PERENNIAL PLANTING - TYPICAL SECTION
Scale: 1/2" = 1'-0"

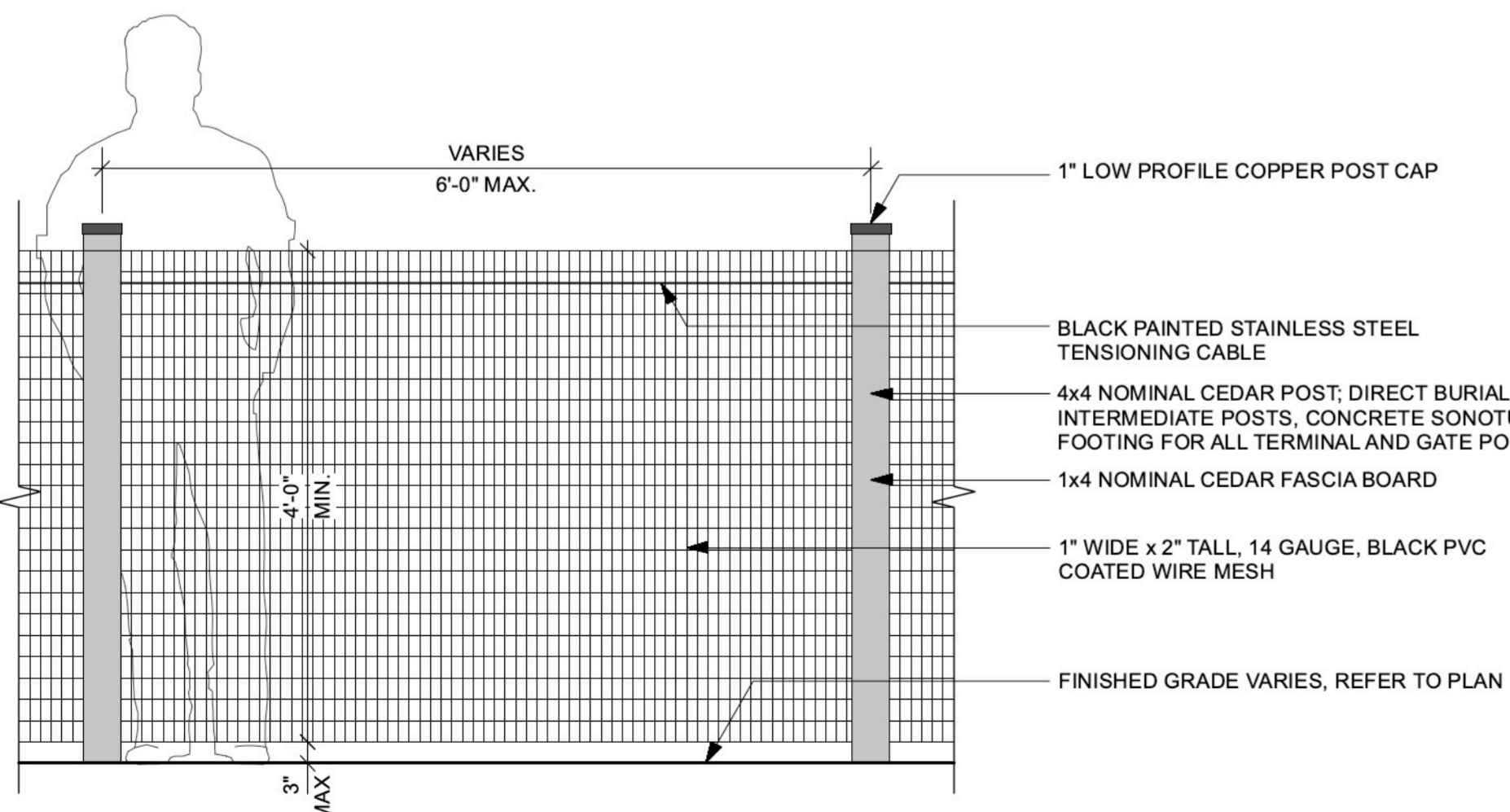


6 PERMEABLE COBBLE PAVING
Scale: 1" = 1'-0"

7 GRANITE VEHICULAR PAVING
Scale: 1" = 1'-0"

8 PEASTONE VEHICULAR PAVING
Scale: 1" = 1'-0"

5 STABILIZED SEEDED GRAVEL VEHICULAR PAVING
Scale: 1" = 1'-0"



- NOTES:
- ALL FENCING SHALL CONFORM TO STATE AND LOCAL POOL ENCLOSURE REQUIREMENTS
 - DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY, FINAL LAYOUT AND DIMENSIONS SHALL BE CONFIRMED PRIOR TO CONSTRUCTION

9 POOL ENCLOSURE MESH FENCE - TYPICAL PANEL ELEVATION
Scale: 3/4" = 1'-0"

10 TENNIS COURT FENCING - TYPICAL PANEL ELEVATION
Scale: 1/2" = 1'-0"



MATTHEW
CUNNINGHAM
LANDSCAPE
DESIGN LLC
matthew-cunningham.com

SCALE: AS NOTED DATE: 23 FEBRUARY 2022

SHEET TITLE:

LANDSCAPE DETAILS

SHEET NUMBER:

L1.4

FOR PERMIT SUBMISSION





1



2



3



4



GOOGLE EARTH - 2013 AERIAL IMAGE



GOOGLE EARTH - 2020 AERIAL IMAGE



5



6



PLANNING BOARD | PROPOSED ILLUSTRATIVE RENDERINGS

Lady Isle | 325 Little Harbor Road, Portsmouth NH
23 February 2022

G. P. SCHAFFER ARCHITECT
ARCHITECTURE & DESIGN



Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists



MATTHEW
CUNNINGHAM
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DESIGN LLC
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