

**AMBIT ENGINEERING, INC.** CIVIL ENGINEERS AND LAND SURVEYORS  
200 Griffin Road, Unit 3, Portsmouth, NH 03801  
Phone (603) 430-9282 Fax 436-2315

28 July 2021

Dexter Legg, Chair  
City of Portsmouth Planning Board  
1 Junkins Avenue  
Portsmouth, NH 03801

**Re: City of Portsmouth Application for Conditional Use Permit  
Tax Map 215, Lot 9  
Off Woodbury Avenue-Oriental Gardens Mobile Home Park  
Portsmouth, New Hampshire**

Dear Mr. Legg:

On behalf of Kelly Property Trust (Oriental Gardens Home Park) the accompanying Project Narrative and *Proposed Sewer Improvements and Drainage Maintenance* Plan Set is submitted for review for a City of Portsmouth Wetland Conditional Use Permit Application request to permit a total of 4,741 square feet of disturbance within a wetland area as well as the 100' City of Portsmouth Wetland Buffer, on the above referenced site. The property currently exists as a Home Park, owned and operated by the permit applicant. The project has 2 key components: 1. Proposed Sewer Improvements, and 2. Drainage Maintenance. This project received various approvals in 2017; however the work was never undertaken. The approvals include NHDES Wetlands Board Approval 2017-01336 (copy attached) and City of Portsmouth Conditional Use Approval June 15, 2017 (copy attached). We request that we be placed on the agenda for the Conservation Commissions **August 11, 2021** Meeting.

### **Proposed Sewer Improvements**

The Proposed Sewer Improvements include removing an existing pump station and some associated piping. The pump station can be eliminated and a gravity connection can be made to the existing city sewer line. The city sewer line crosses the property in an existing dedicated easement. The associated subsurface piping will be removed / abandoned in place, and a portion of the sewer system will be reconstructed to operate by gravity with the installation of two pipe connections. Permission for the connections is simultaneously being filed with the Portsmouth Department of Public Works. This work involves some impact to the City of Portsmouth Wetland Buffer; this application is to obtain Planning Board approval for the work. The area of this work is a grassed lawn area as well as some of the roadway pavement. These areas will be returned to their existing condition upon completion of the sewer work.

### **Drainage Maintenance**

The Drainage Maintenance consists of the removal of vegetation from the vicinity of the culvert outlet and the immediately adjacent downstream drainage swale. The culvert outlet is a part of the public drainage works for drainage on Woodbury Avenue. The outfall is just on the property of Oriental Gardens Home Park and upstream piping crosses an adjacent property which is currently the Starbucks site, all outside of the city Woodbury Avenue Right of Way. The project permit application includes the removal of sediment from the outlet of the existing 48" culvert and the installation of a stone plunge pool / rip rap apron at the outlet location to prevent erosion of the swale. This work involves some direct impact to the wetland (the swale area) and therefore requires approval from the NHDES Wetland Bureau. This approval was obtained in 2017, and the permit is valid until June of 2022. The construction also impacts the City of Portsmouth Wetland Buffer.

The following plans are included in our submission:

- Cover Sheet – This shows the Owner, Legend, Site Location, and Site Zoning.
- Existing Conditions Plan C1 – This plan shows the existing site conditions and topography. The site is adjacent to wetlands at the outlet of a 48 inch culvert; those wetlands have been delineated and shown.
- Sewer Improvement Plan C2 – This plan shows the removal of certain sewage works and the proposed piping connections to the city sewer system.
- Drainage Maintenance Plan C3 – This plan shows the proposed plunge pool.
- CUP Permit Plan C4 – This plan shows the impact areas within the wetland and the City 100 foot Buffer.
- Detail Sheets D1 and D2 - These plans show the associated erosion control notes and site construction details.

Attached to this application please find the following additional information for review:

- Copies of previous Correspondence and project approvals
- Photo logs

According to the City of Portsmouth Zoning Ordinance, *Article 10.1017.50 Criteria for Approval*, the proposal shall comply with the following criteria:

**1. The land is reasonably suited to the use, activity or alteration.**

The proposal is to provide needed maintenance to maintain an existing culvert outfall, remove an existing inoperable sewer pump station, and reconstruct the sewer to operate via gravity. The current inoperable sewer pump station is connected to the city sewer system, and the reconstructed sewer will also be connected to the city sewer system. The addition of the drainage outfall plunge pool will reduce flow velocity and thereby sediment transport. Due to this fact, the land is reasonable suited to the use, activity, or alteration.

**2. There is no alternative location outside of the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.**

The proposed plunge pool / rip rap outlet protection on the existing culvert, as well as the removal of the pump house and associated subsurface piping is currently located within the wetland buffer. There is no feasible method to perform the proposed work, or provide the new sewer connection, outside of the wetland buffer.

**3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.**

The proposal will not impact the existing wetland resource located adjacent to the site and its current functions and values. The rip rap outlet protection will prevent erosion and sedimentation issues during high flow storm events, and the reconstruction of the sewer on the subject parcel will replace an older dilapidated system, possibly preventing a leakage issue in the future that could impact the adjacent wetland resource.

**4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.**

The areas within the 100' City of Portsmouth Wetland Buffer that are proposed to be impacted would be characterized as existing landscaped area, maintained lawn, and paved roadway; all are previously disturbed.

**5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.**

The project represents the alternative with the least adverse impact to areas and environments while allowing reasonable use of the property. Actually, Potential Impacts will be avoided by this work.

**6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.**

The areas within the vegetated buffer strip that will be impacted by this project will be returned to the pre-existing surface condition; absent a small pump house building. The applicant wishes to re-use the structure as a tool shed, and will relocate the structure away from the resource.

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,

*John Chagnon*

John R. Chagnon  
Project Engineer  
Ambit Engineering, Inc.

Cc: Kelly Ann Vick, Property Owner  
Greg Bauer, Bauer Construction

23 July, 2021

**To Whom It May Concern**

**RE: Permit Applications for maintenance and site improvements for Kelly Property Trust AB, Oriental Gardens Mobile Home Park, Off Woodbury Avenue, Portsmouth, NH.**

This letter is to inform the City of Portsmouth and other Agencies with Jurisdiction that Ambit Engineering and their representatives are authorized to represent the Kelly Property Trust as our agents in the approval process. This includes signatory powers on application forms.

Please feel free to call me if there is any question regarding this authorization.

Sincerely,

A handwritten signature in cursive script that reads "Kelly Ann Vick".

**Kelly Property Trust AB**  
**Kelly Ann Vick, Trustee**  
PO Box 342  
Rye Beach, NH 03871  
214-537-3759



# PUBLIC WORKS DEPARTMENT

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CITY OF PORTSMOUTH  
680 Peverly Hill Road  
Portsmouth N.H. 03801  
(603) 427-1530 FAX (603) 427-1539

March 15, 2017

John Chagnon, PE  
Ambit Engineering  
200 Griffin Road, Unit 3  
Portsmouth, NH 03801

Dear Mr. Chagnon,

The Department is in receipt of your letter of March 9, 2017 in regards to the Oriental Gardens site. We have reviewed the issue on site with you last fall and we concur that this swale maintenance is appropriate. You have the Department's approval to move forward on the swale dredging as outlined in your letter and on the attached plan of the same date.

Regarding the proposed rip rap apron, please consider whether creating a rip rapped plunge pool would be more appropriate for this location. This would give any sediment a place to settle out adjacent to the culvert instead of being transported down the swale and deposited elsewhere.

Please let us know if you need additional information.

Sincerely,

Peter H. Rice, PE  
Director of Public Works

CC: Peter Britz, Environmental Planner  
File



**AMBIT ENGINEERING, INC.** CIVIL ENGINEERS AND LAND SURVEYORS  
200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

9 March, 2017

Peter Rice, PE, Director  
City of Portsmouth Department of Public Works  
680 Peverly Hill Road  
Portsmouth, NH 03801

**RE: Drainage Maintenance Plan, Oriental Gardens Mobile Home Park, Woodbury Avenue**

Dear Mr. Rice:

This letter transmits, on behalf of Oriental Gardens MHP, LLC, (Oriental Gardens) the accompanying Project Narrative and Drainage Maintenance Plans for your review and consent. The proposed project at the above referenced address consists of the removal of vegetation from the vicinity of the culvert outlet and the downstream drainage swale. We spoke with Dave Desfosses and Peter Britz about the project last November, and our intention was to submit the work under the NHDES Culvert Maintenance program, which requires that the work is performed for the maintenance of public drainage works. This pipe drains surface water runoff from Woodbury Avenue, a public street. The outfall is on property of Oriental Gardens and upstream piping crosses an adjacent property which is currently the Starbucks (formerly Pizza Hut) site, all outside of the city Woodbury Avenue right of way. Although there are numerous easements for public infrastructure on the Oriental Gardens property we did not find any recorded easement in regards to this drain and the associated flow. In light of this we want to be sure that the work meets the City's concurrence, so we are sending the plans to your office in advance of submission for approval.

The project permit application includes the removal of sediment from the outlet of the existing 48" culvert draining Woodbury Avenue. The owner proposes to install a stone rip rap apron at the outlet location to prevent erosion of the swale. We reviewed the project with Collis Adams of the NHDES Wetlands Bureau and he informed us that the removal of vegetation and sediment are considered maintenance and do not require any State level permitting. However, the construction of the stone rip rap apron will require a State Wetland Permit. We will file the application as soon as we receive concurrence from the City that we can proceed with the project, which is hereby requested.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

John Chagnon, PE  
Ambit Engineering, Inc.

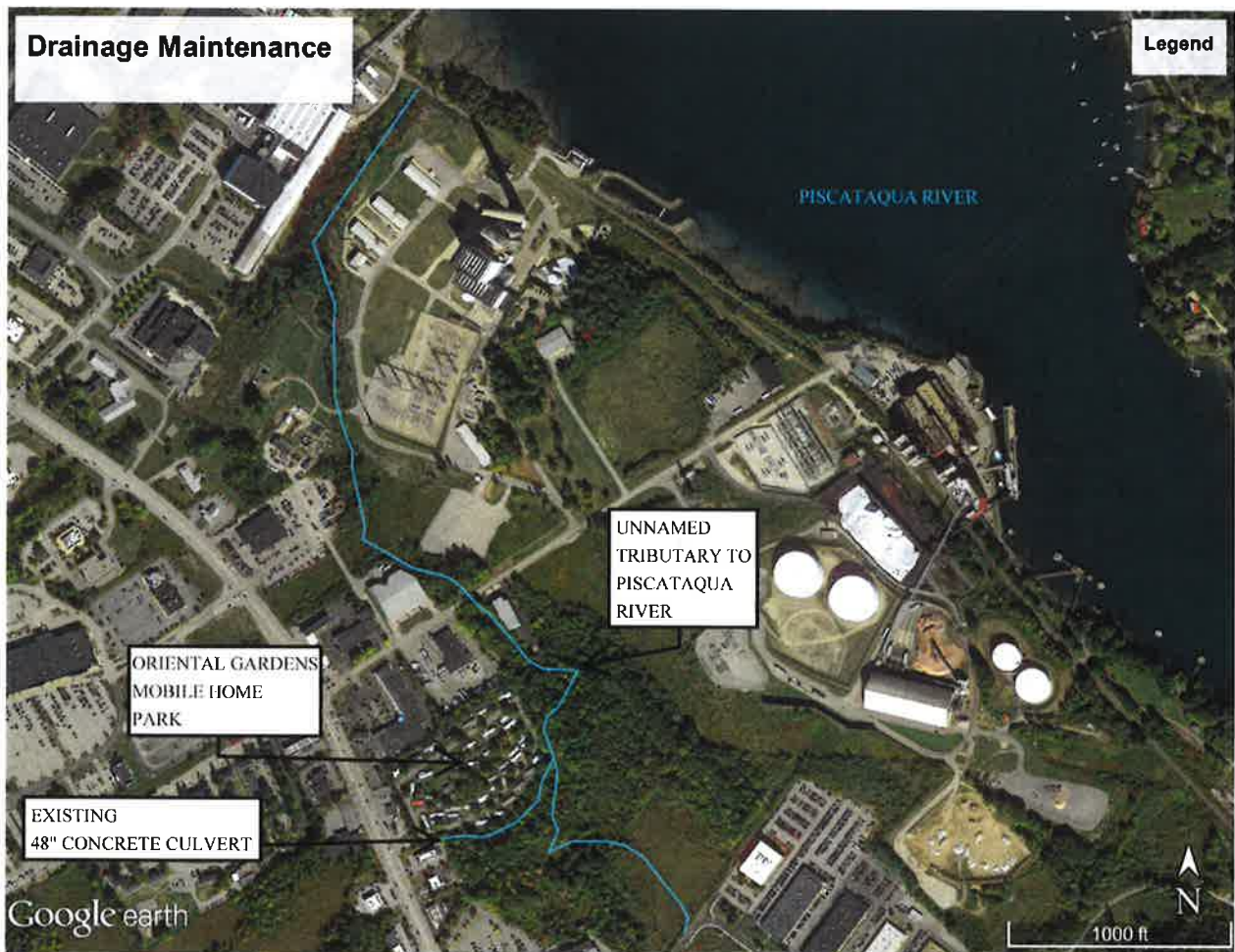
Enclosures

CC Via email: Oriental Gardens MHP, LLC (Kellyann Vick), Greg Bauer, File

Oriental Gardens  
Culvert Maintenance  
Narrative

**INTRODUCTION**

Oriental Gardens is a mobile home park located on Woodbury Avenue in Portsmouth, New Hampshire. The park property receives stormwater flows from a 48" Reinforced Concrete Culvert that is owned by the City of Portsmouth. The outlet of this culvert is located at the southwest corner of the property near the main entrance to the park. Stormwater flows from this culvert are conveyed within a channelized swale located along the southern boundary of the property. This flow then exits the property to the east and ultimately discharges via an unnamed tributary to the Piscataqua River.





# CITY OF PORTSMOUTH

Community Development Department  
(603) 610-7232

Planning Department  
(603) 610-7216

## PLANNING BOARD

June 20, 2017

Kelly Ann Vick, Trustee  
Kelly Property Trust AB  
P. O. Box 342  
Rye Beach, NH 03871

RE: Conditional Use Permit Application for Property Located  
off Woodbury Avenue (Oriental Gardens)

Dear Ms. Vick:

The Planning Board, at its regularly scheduled meeting of June 15, 2017, considered your application for a Conditional Use Permit under Section 10.1017 of the Zoning Ordinance for work within the inland wetland buffer consisting of installation of rip rap outlet protection associated with an existing 48" RCP culvert and sewer improvements including removing an existing inoperative pump station, subsurface piping and reconstruction of the sewer system to operate by gravity, with 3,318 ± s.f. of impact to the wetland buffer. As a result of said consideration, the Board voted to **grant** Conditional Use Permit approval with the following stipulations:

- 1) The applicant revise the plan to show the updated limits of construction.
- 2) The applicant add a note to the plan to restore the site with a conservation seed mix where disturbance occurs.
- 3) Remove the note from the plan calling for trimming and pruning vegetation.
- 4) The applicant shall provide a revised plan showing the correct limit of construction.
- 5) The inlet and outlet dimensions on Sheet P2 shall be corrected.

Article 10, Section 10.1017.70 of the Zoning Ordinance provides that a Conditional Use Permit shall expire one year after the date of approval by the Planning Board unless a building permit is issued prior to that date. The Planning Board may grant a one year extension of a Conditional Use Permit if the applicant submits a written request to the Planning Board prior to the expiration date. Any other extension may be granted only after a new public hearing on the reconsideration of the application.



Page two.

RE: Oriental Gardens, Woodbury Avenue

June 20, 2017

Please note that the building/construction plans must be reviewed and approved by the Inspection Department prior to a Building Permit being issued.

The City's Land Use Compliance Agent, Vincent Hayes, will be inspecting the work during construction.

The minutes and audio recording of this meeting are available through the Planning Department.

Very truly yours,

A handwritten signature in black ink that reads "Juliet T.H. Walker". The signature is written in a cursive style with a long horizontal flourish at the end.

Juliet T.H. Walker, Planning Director  
for Dexter Legg, Chairman of the Planning Board  
JTHW:jms

cc: Robert Marsilia, Building Inspector  
Rosann Maurice-Lentz, City Assessor  
Steven Riker, NHCWS, Ambit Engineering



The State of New Hampshire  
**Department of Environmental Services**



**Clark B. Freise, Assistant Commissioner**

June 9, 2017

KELLY PROPERTY TRUST AB  
C/O KELLY ANN VICK  
PO BOX 342  
RYE BEACH NH 03871

RE: NHDES Wetlands File #2017-01336, Oriental Gardens Mobile Home Park, Portsmouth Tax Map/Lot # 215/9

Dear Ms. Vick:

Attached please find Wetlands Permit # 2017-01336 to dredge and fill 139 square feet of palustrine scrub-shrub wetland for drainage improvements including installation of rip-rap outlet protection for an existing 48 inch RCP culvert. Waive Env-Wt 304.04(a) regarding 20 foot setback from property lines.

The decision to approve this application was based on the following findings:

1. This is a minimum impact project per Administrative Rule Env-Wt 303.04(f), alteration of less than 3,000 square feet of swamps or wet meadows.
2. The need for the proposed impacts has been demonstrated by the applicant per Env-Wt 302.01. The applicant has demonstrated that the wetland impact is necessary to minimize erosion for an outlet to an existing 48 inch RCP culvert.
3. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Env-Wt 302.03. The project proposes a minimal amount of rip-rap outlet protection to protect existing infrastructure.
4. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(b) Requirements for Application Evaluation, has been considered in the design of the project.
5. On May 30, 2017, NHDES received the applicant's request for a Waiver, pursuant to the requirements of Env-Wt 204, to waive the requirements of Env-Wt 304.04, relative to work within the 20 foot abutter setback, after being unable to obtain written permission from the abutter.
6. Pursuant to the requirements of Env-Wt 204.04(a)(1)a., NHDES finds that granting the Waiver will not result in an adverse effect to the environment or natural resources of the state, public health, or public safety. The proposal is maintenance of an existing drainage outlet to minimize erosion.
7. Pursuant to the requirements of Env-Wt 204.04(a)(1)b., NHDES finds that granting the waiver will not result in a more significant impact on abutters than compliance with the rule. The proposal will stabilize a culvert outlet and will not redirect existing drainage patterns.
8. Pursuant to the requirements of Env-Wt 204.04(a)(2), NHDES finds that condition Env-Wt 204.04(a)(2)b., necessary to granting the Waiver, has been met. NHDES finds that strict adherence to the rule being waived would result in preventing the applicant from maintaining an existing outlet structure.
9. Based on findings 5-8 above, NHDES grants the applicant a Waiver to rule Env-Wt 304.04.
10. The NH Natural Heritage has no record of sensitive species within the project vicinity.
11. The Portsmouth Conservation Commission signed the NHDES application waiving its right to intervene, believes that the application and submitted plans accurately represent the proposed project, and has no objection to permitting

[www.des.nh.gov](http://www.des.nh.gov)

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095  
(603) 271-3503 • TDD Access: Relay NH 1-800-735-2964

the proposed work.

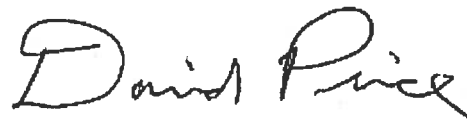
Any person aggrieved by this decision may appeal to the New Hampshire Wetlands Council (the Council) by filing an appeal that meets the requirements specified in RSA 482-A:10, RSA 21-O:14, and the rules adopted by the Council, Env-WtC 100-200. The appeal must be filed **directly with the Council within 30 days** of the date of this decision and must set forth fully **every ground** upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council.

Information about the Council, including a link to the Council's rules, is available at <http://nhec.nh.gov/> (or more directly at <http://nhec.nh.gov/wetlands/index.htm>.) Copies of the rules also are available from the New Hampshire Department of Environmental Services (NHDES) Public Information Center at (603) 271-2975.

Your permit must be signed, and a copy must be posted in a prominent location on site during construction.

If you have any questions, please contact our office at (603) 271-2147.

Sincerely,

A handwritten signature in black ink that reads "David Price". The signature is written in a cursive, slightly slanted style.

David Price  
East Region Inspector  
NHDES Land Resources Management

cc: Portsmouth Conservation Commission  
Portsmouth Municipal Clerk  
Ambit Engineering, Inc.



The State of New Hampshire  
Department of Environmental Services



Clark B. Freise, Assistant Commissioner

WETLANDS AND NON-SITE SPECIFIC PERMIT 2017-01336

Permittee: **KELLY PROPERTY TRUST AB** **NOTE CONDITIONS**  
C/O KELLY ANN VICK  
PO BOX 342  
RYE BEACH NH 03871  
Project Location: **WOODBURY AVE, PORTSMOUTH**  
**TAX MAP/LOT NO: 215 / 9**  
Waterbody:

APPROVAL DATE: **JUNE 09, 2017** EXPIRATION DATE: **JUNE 09, 2022**

Based upon review of the above referenced application, in accordance with RSA 482-A and RSA 485-A:17, a Wetlands Permit and Non-Site Specific Permit was issued. This permit shall not be considered valid unless signed as specified below.

**PERMIT DESCRIPTION:** Dredge and fill 139 square feet of palustrine scrub-shrub wetland for drainage improvements including installation of rip-rap outlet protection for an existing 48 inch RCP culvert. Waive Env-Wt 304.04(a) regarding 20 foot setback from property lines.

**THIS APPROVAL IS SUBJECT TO THE FOLLOWING PROJECT SPECIFIC CONDITIONS:**

1. All work shall be in accordance with plans by Ambit Engineering, Inc. dated January 2017, and revised through March 31, 2017, as received by the NH Department of Environmental Services (NHDES) on May 11, 2017.
2. Appropriate turbidity controls shall be installed prior to construction, shall be maintained during construction such that no turbidity escapes the immediate dredge area, and shall remain until suspended particles have settled and the water at the work site has returned to normal clarity.
3. Construction equipment shall not be located within surface waters.
4. Dredged materials, whether to be stockpiled or disposed of, shall be dewatered in sedimentation basins lined with siltation and erosion controls, and located outside of areas subject to RSA 482-A jurisdiction.
5. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, with a preferred undisturbed vegetated buffer of at least 50 feet and a minimum undisturbed vegetative buffer of 20 feet.
6. Any temporary work areas shall be restored to original condition upon completion of work.
7. Any further alteration of areas on these properties that are within the jurisdiction of the NHDES Wetlands Bureau will require a new application and further permitting by the Bureau.
8. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and remain in place until the area is stabilized. Silt fence(s) must be removed once the area is stabilized.
9. Within three days of final grading or temporary suspension of work, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.
10. The contractor responsible for completion of the work shall utilize techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
11. Construction equipment shall be inspected daily for leaking fuel, oil and hydraulic fluid prior to entering surface

waters or wetlands.


12. Faulty equipment shall be repaired prior to entering jurisdictional areas.

13. The contractor shall have appropriate oil spill kits on site and readily accessible at all times during construction and each operator shall be trained in its use.

14. All refueling of equipment shall occur outside of surface waters or wetlands.

**GENERAL CONDITIONS THAT APPLY TO ALL NHDES WETLANDS PERMITS:**

1. A copy of this permit shall be posted on site during construction in a prominent location visible to inspecting personnel;
2. This permit does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
3. The Wetlands Bureau shall be notified upon completion of work;
4. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required (including US EPA, US Army Corps of Engineers, NH Department of Transportation, NH Division of Historical Resources (NH Department of Cultural Resources), NHDES-Alteration of Terrain, etc.);
5. Transfer of this permit to a new owner shall require notification to and approval by NHDES;
6. This project has been screened for potential impacts to **known** occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have only received cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.
7. Review enclosed sheet for status of the US Army Corps of Engineers' federal wetlands permit.

APPROVED:   
 David Price  
 NHDES Wetlands Bureau

=====

**BY SIGNING BELOW I HEREBY CERTIFY THAT I HAVE FULLY READ THIS PERMIT AND AGREE TO ABIDE BY ALL PERMIT CONDITIONS.**

\_\_\_\_\_  
 OWNER'S SIGNATURE (required)

\_\_\_\_\_  
 CONTRACTOR'S SIGNATURE (required)

Site Photograph #1

March 2017



Site Photograph #2

March 2017



Site Photograph #3

May 2017



Site Photograph #4

May 2017



Site Photograph #5

May 2017



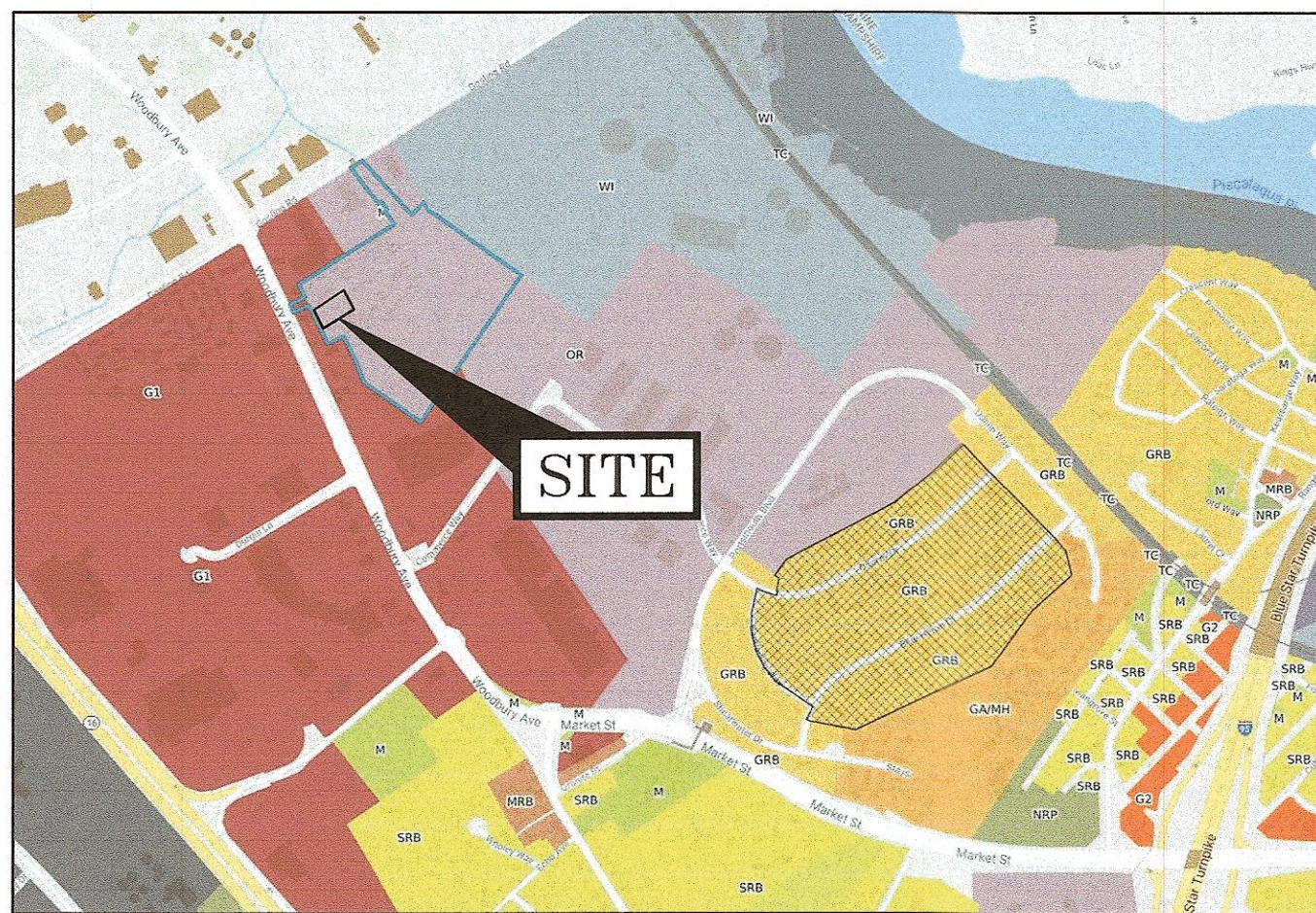


PROJECT PERMITS:  
 NHDES WETLANDS: 2017-01336  
 CITY OF PORTSMOUTH CUP: PENDING  
 CITY OF PORTSMOUTH SEWER CONNECTION: PENDING

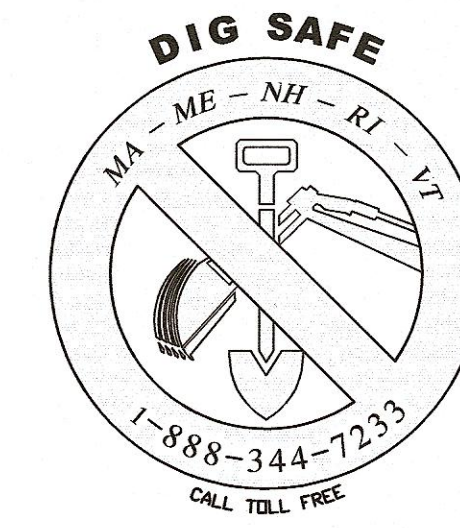
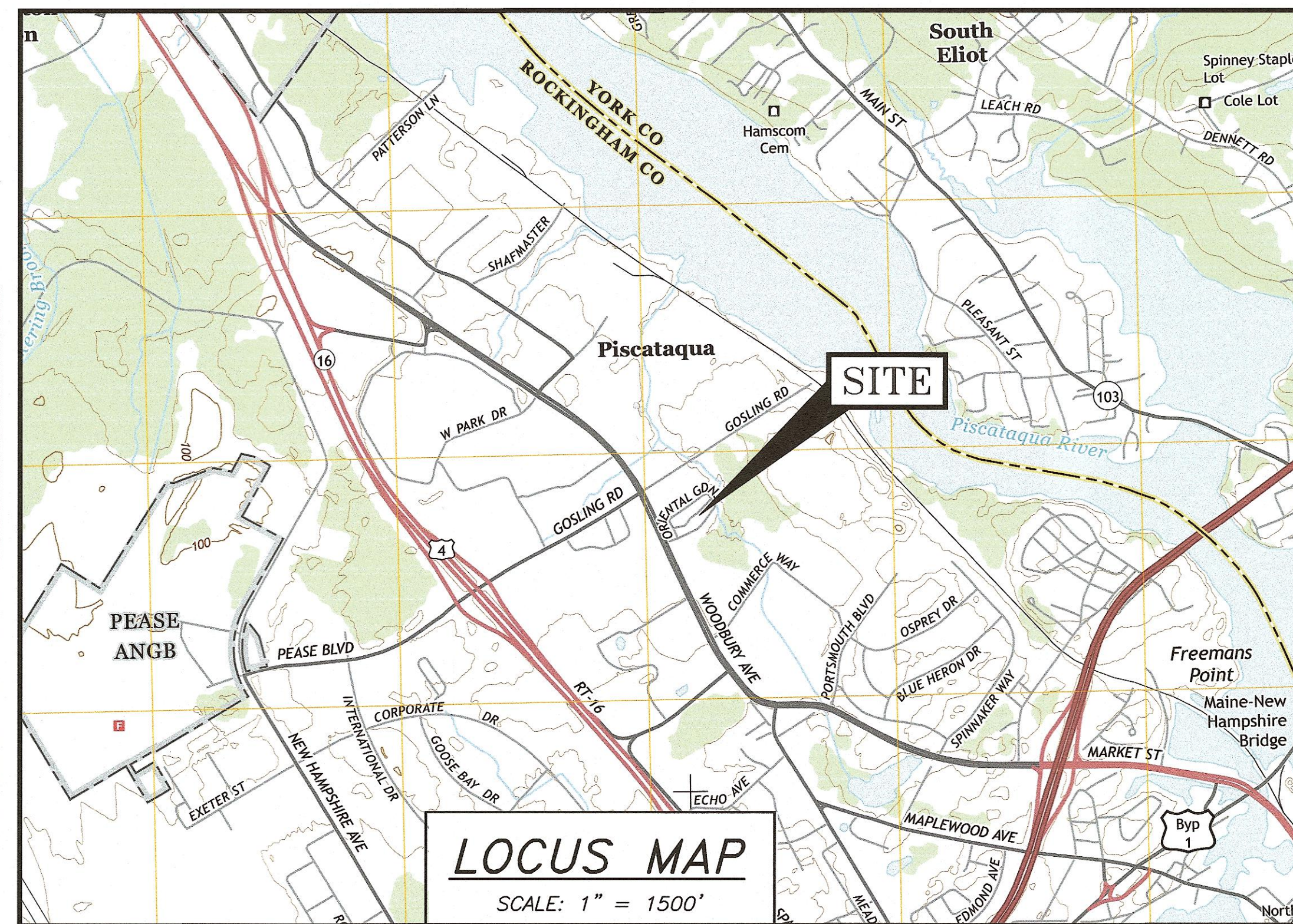
# PROPOSED SEWER IMPROVEMENTS & DRAINAGE MAINTENANCE ORIENTAL GARDENS HOME PARK WOODBURY AVENUE PORTSMOUTH, NEW HAMPSHIRE PLANS

**OWNER:**  
**KELLY PROPERTY TRUST**  
 PO BOX 342  
 RYE BEACH, NH 03871  
 TEL. (603) 868-5995

**CIVIL ENGINEER & LAND SURVEYOR:**  
**AMBIT ENGINEERING, INC.**  
 200 GRIFFIN ROAD, UNIT 3  
 PORTSMOUTH, N.H. 03801  
 Tel. (603) 430-9282  
 Fax (603) 436-2315



Legend	
<b>Character Districts</b>	
[Symbol]	Character-Based Zoning Area (Refer to Zoning Map Sheet 2 of 2 Character Districts Regulatory Plan)
<b>Residential Districts</b>	
[Symbol]	R Rural
[Symbol]	SRA Single Residence A
[Symbol]	SRB Single Residence B
[Symbol]	GRA General Residence A
[Symbol]	GRB General Residence B
[Symbol]	GRC General Residence C
[Symbol]	GAMH Garden Apartment/Mobile Home Park
<b>Mixed Residential Districts</b>	
[Symbol]	MRO Mixed Residential Office
[Symbol]	MRB Mixed Residential Business
[Symbol]	G1 Gateway Corridor
[Symbol]	G2 Gateway Center
<b>Business Districts</b>	
[Symbol]	GB General Business
[Symbol]	B Business
[Symbol]	WB Waterfront Business
<b>Industrial Districts</b>	
[Symbol]	OR Office Research
[Symbol]	I Industrial
[Symbol]	WI Waterfront Industrial



LEGEND:		
EXISTING	PROPOSED	
---	---	PROPERTY LINE
---	---	SETBACK
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	G	GAS LINE
D	D	STORM DRAIN
W	W	WATER LINE
WS	WS	WATER SERVICE
UGE	UGE	UNDERGROUND ELECTRIC
OHW	OHW	OVERHEAD ELECTRIC/WIRES
---	---	FOUNDATION DRAIN
---	---	EDGE OF PAVEMENT (EP)
---	---	CONTOUR
---	---	SPOT ELEVATION
---	---	UTILITY POLE
---	---	WALL MOUNTED EXTERIOR LIGHTS
---	---	TRANSFORMER ON CONCRETE PAD
---	---	ELECTRIC HANDHOLE
---	---	SHUT OFFS (WATER/GAS)
---	---	GATE VALVE
---	---	HYDRANT
---	---	CATCH BASIN
---	---	SEWER MANHOLE
---	---	DRAIN MANHOLE
---	---	TELEPHONE MANHOLE
---	---	PARKING SPACE COUNT
---	---	PARKING METER
---	---	LANDSCAPED AREA
---	---	TO BE DETERMINED
---	---	CAST IRON PIPE
---	---	COPPER PIPE
---	---	DUCTILE IRON PIPE
---	---	POLYVINYL CHLORIDE PIPE
---	---	REINFORCED CONCRETE PIPE
---	---	ASBESTOS CEMENT PIPE
---	---	VITRIFIED CLAY PIPE
---	---	EDGE OF PAVEMENT
---	---	ELEVATION
---	---	FINISHED FLOOR
---	---	INVERT
S =	S =	SLOPE FT/FT
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL

### INDEX OF SHEETS

- C1 EXISTING CONDITIONS PLAN
- C2 SEWER IMPROVEMENT PLAN
- C3 DRAINAGE MAINTENANCE PLAN
- C4 CUP/DES PERMIT PLAN
- D1-D2 DETAILS

### UTILITY CONTACTS

**ELECTRIC:**  
 EVERSOURCE  
 1700 LAFAYETTE ROAD  
 PORTSMOUTH, N.H. 03801  
 Tel. (603) 436-7708, Ext. 555.5678  
 ATTN: MICHAEL BUSBY, P.E. (MANAGER)  
 MICHAEL.BUSBY@NU.COM

**NATURAL GAS:**  
 UNITIL  
 325 WEST ROAD  
 PORTSMOUTH, N.H. 03801  
 Tel. (603) 294-5144  
 ATTN: DAVE BEAULIEU

**CABLE:**  
 COMCAST  
 155 COMMERCE WAY  
 PORTSMOUTH, N.H. 03801  
 Tel. (603) 679-5695 (X1037)  
 ATTN: MIKE COLLINS

**SEWER & WATER:**  
 PORTSMOUTH DEPARTMENT OF PUBLIC WORKS  
 680 PEVERLY HILL ROAD  
 PORTSMOUTH, N.H. 03801  
 Tel. (603) 427-1530  
 ATTN: JIM TOW

**COMMUNICATIONS:**  
 CONSOLIDATED COMMUNICATIONS  
 JOE CONSIDINE  
 1575 GREENLAND ROAD  
 GREENLAND, N.H. 03840  
 Tel. (603) 427-5525

**PORTSMOUTH APPROVAL CONDITIONS NOTE:**  
 ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.

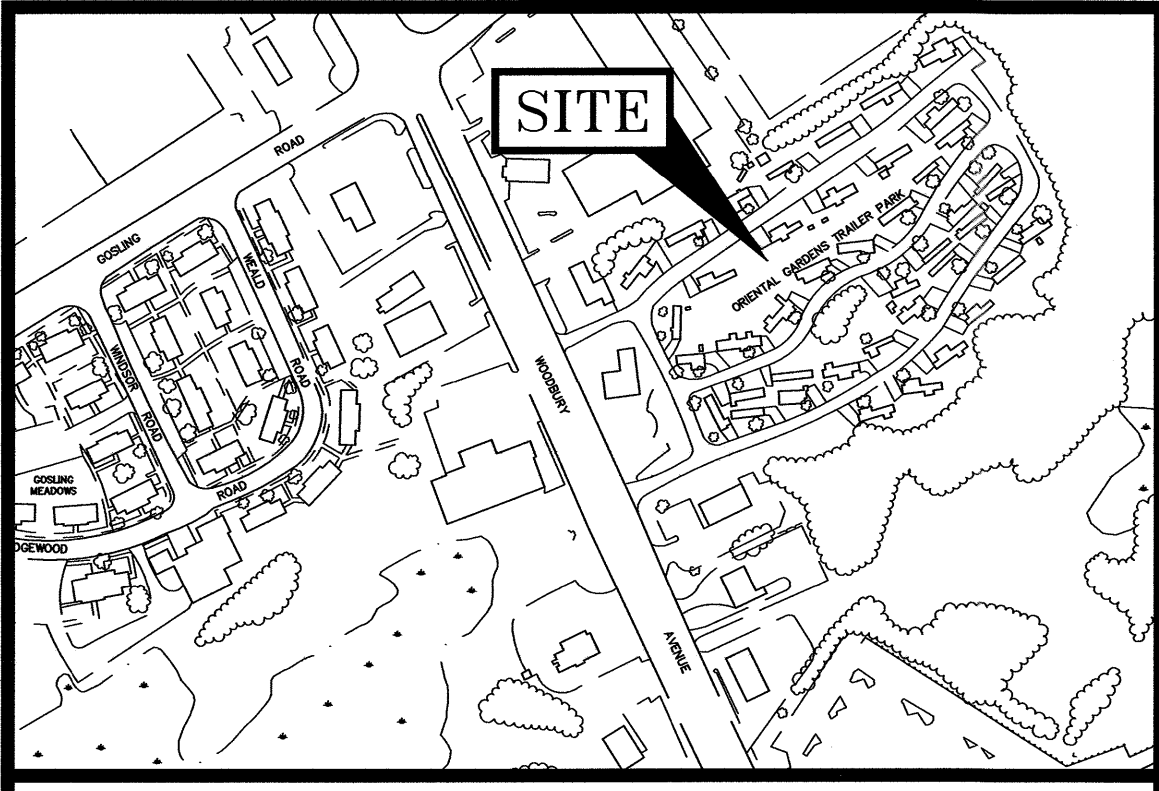
APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**PROPOSED SEWER IMPROVEMENTS  
 & DRAINAGE MAINTENANCE  
 ORIENTAL GARDENS HOME PARK  
 WOODBURY AVENUE  
 PORTSMOUTH, N.H.**

**AMBIT ENGINEERING, INC.**  
 Civil Engineers & Land Surveyors  
 200 Griffin Road - Unit 3  
 Portsmouth, N.H. 03801-7114  
 Tel (603) 430-9282  
 Fax (603) 436-2315

PLAN SET SUBMITTAL DATE: 28 JULY 2021



LOCATION MAP SCALE 1" = 300

Structure ID#	Rim	Inv. In	Size/Type	From	Inv. Out	Size/Type	Length	Slope	To
SMH #1	50.61	36.96	10" CI	-	36.96	10" CI	212'	0.00335	SMH #2
SMH #2	42.85	36.25	10" CI	SMH #1	36.07	10" CI	264'	0.00284	SMH #3
SMH #2	-	36.85	8" CI	SMH #8	-	-	-	-	-
SMH #3	35.32	35.32	10" CI	SMH #2	35.32	10" CI	-	-	-
SMH #4	45.35	39.63	8" CI	-	39.54	8" CI	155'	0.00555	SMH #5
SMH #4	-	39.95	(2) 4" CI	-	-	-	-	-	-
SMH #5	43.56	38.68	8" CI	SMH #4	38.66	8" CI	79'	0.02544	SMH #6
SMH #6	42.10	36.65	8" CI	SMH #5	36.40	8" CI	64'	?	SMH #8
SMH #6	-	36.43	8" CI	SMH #7	-	-	-	-	-
SMH #7	44.05	38.60	8" CI	-	38.60	8" CI	195'	0.01113	SMH #6
SMH #8	43.08	Fluid Level 37.48 (111816) / Baffle 38.18 / Sump 31.08		-	-	8" CI	30'	-	SMH #2

**WETLAND NOTES:**

- 1) WETLAND LINES DELINEATED BY STEVEN D. RIKER, CWS ON 11/18/16 IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
  - A) U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. TECHNICAL REPORT Y-87-1 (JAN. 1987). AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012.
  - B) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.2, USDA-NRCS, 2018 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEWPCC WETLANDS WORK GROUP (2019).
  - C) NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). USFWS (MAY 1988).
  - D) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFWS MANUAL FWS/OBS-79/31 (1997).
  - E) "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE" (1997). NEW HAMPSHIRE FISH AND GAME DEPARTMENT.
- 2) WETLAND FLAGS WERE FIELD LOCATED BY AMBIT ENGINEERING, INC.

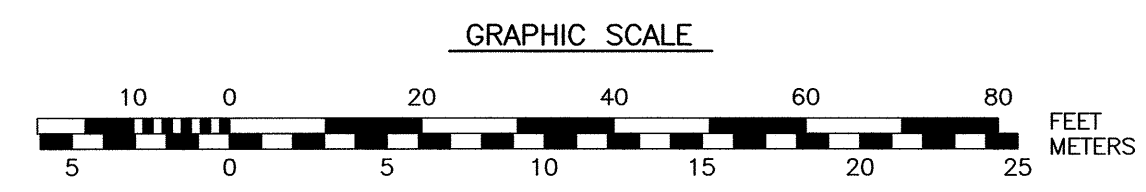
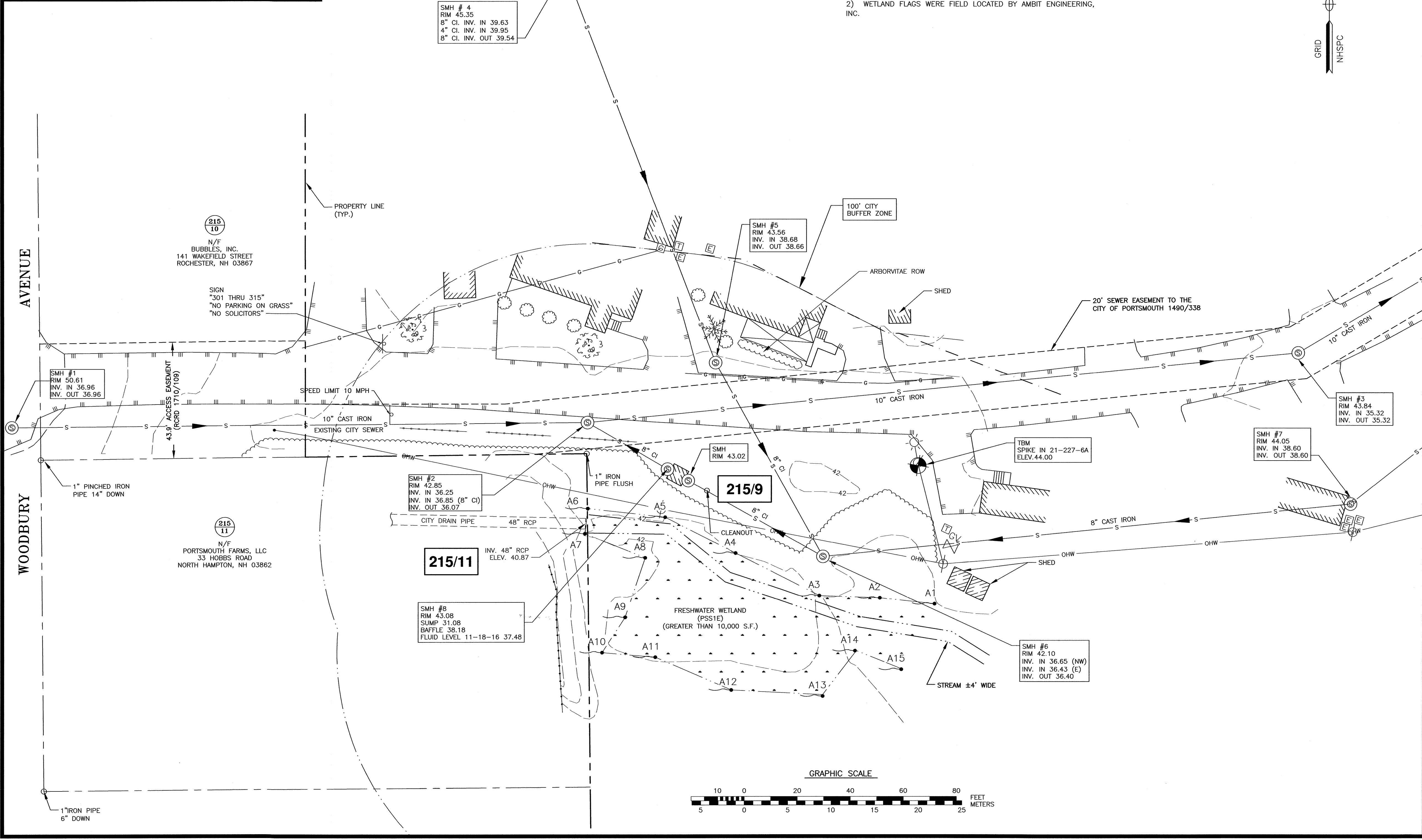
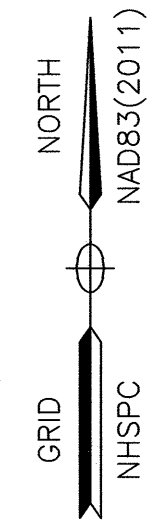
**PLAN REFERENCES:**

- 1) TOPOGRAPHIC PLAN FOR WILLIAM ASHLEY, 1"=50', AUGUST 1986, BY PARKER SURVEY (NOT RECORDED).
- 2) ORIENTAL GARDENS MOBILE HOME PARK. FOR VIRGINIA ASHLEY, MARCH 1963 BY JOHN W. DURGIN.
- 3) PLAN OF LAND FOR STANLEY VOGEL, NOV. 1956 BY JOHN W. DURGIN, RCRD 02509.
- 4) STARBUCKS COFFEE, UTILITY PLAN, 3/29/06 BY BOHLER ENGINEERING.

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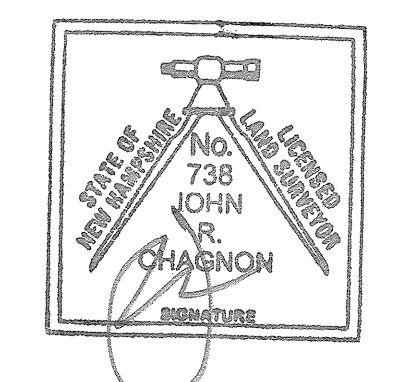
**NOTES:**

- 1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 215 AS LOT 9.
- 2) OWNER OF RECORD: KELLY PROPERTY TRUST A & B  
 P.O. BOX 342  
 RYE BEACH, NH 03871  
 3636/1647
- 3) PARCEL NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN OF FIRM PANEL 33015C0260F, EFFECTIVE JANUARY 29, 2021.
- 4) PARCEL IS LOCATED IN THE OFFICE RESEARCH (OR) ZONING DISTRICT.
- 5) HORIZONTAL DATUM AND BASIS OF BEARING IS NEW HAMPSHIRE SPC NAD83(2011). VERTICAL DATUM IS NAVD88. BASIS OF HORIZONTAL AND VERTICAL DATUMS IS RTK GPS OBSERVATIONS (HORZ. ±0.05', VERT ±0.3').
- 6) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON A PORTION OF ASSESSOR'S MAP 215 LOT 9 IN THE CITY OF PORTSMOUTH.



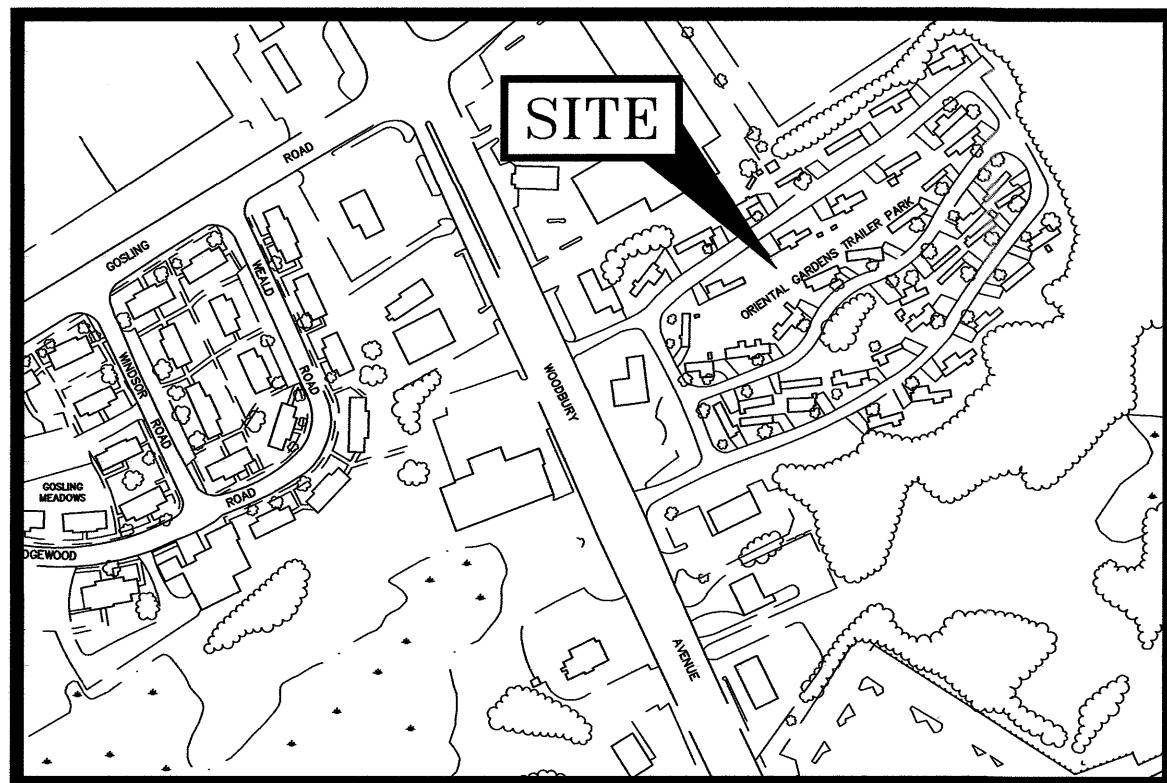
**ORIENTAL GARDENS HOME PARK  
 WOODBURY AVENUE  
 PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR APPROVAL	7/28/21
REVISIONS		



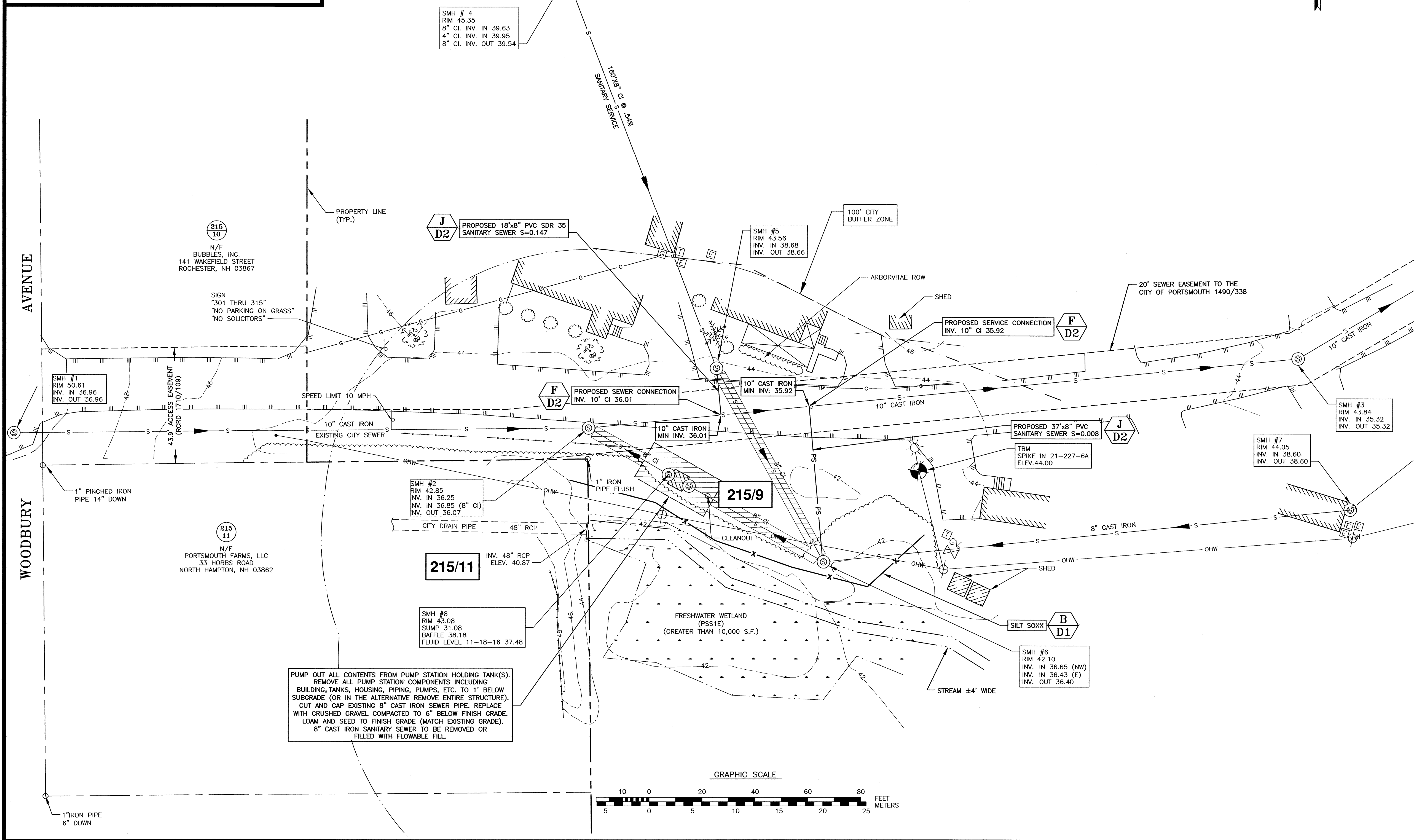
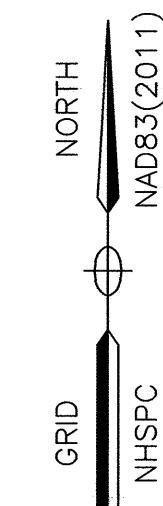
SCALE 1" = 20' JANUARY 2021

EXISTING CONDITIONS PLAN **C1**



LOCATION MAP SCALE 1" = 300

Structure ID #	Rim	Inv. In	Size/Type	From	Inv. Out	Size/Type	Length	Slope	To
SMH #1	50.61	36.96	10" CI	-	36.96	10" CI	212'	0.00335	SMH #2
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SMH #3	35.32	35.32	10" CI	SMH #2	35.32	10" CI	-	-	-
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SMH #4	-	39.95	(2) 4" CI	-	-	-	-	-	-
SMH #5	43.56	38.68	8" CI	SMH #4	38.66	8" CI	79'	0.02544	SMH #6
SMH #6	42.10	36.65	8" CI	SMH #5	36.40	8" CI	64'	?	SMH #8
SMH #6	-	36.43	8" CI	SMH #7	-	-	-	-	-
SMH #7	44.05	38.60	8" CI	?	38.60	8" CI	195'	0.01113	SMH #6
SMH #8	43.08	38.60	Fluid Level 37.48(111816) / Baffle 38.18 / Sump 31.08	8" CI	30'	-	-	-	SMH #2



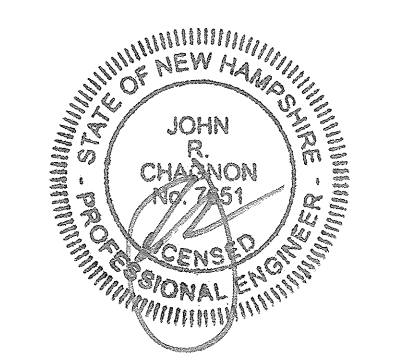
PUMP OUT ALL CONTENTS FROM PUMP STATION HOLDING TANK(S). REMOVE ALL PUMP STATION COMPONENTS INCLUDING BUILDING, TANKS, HOUSING, PIPING, PUMPS, ETC. TO 1' BELOW SUBGRADE (OR IN THE ALTERNATIVE REMOVE ENTIRE STRUCTURE). CUT AND CAP EXISTING 8" CAST IRON SEWER PIPE. REPLACE WITH CRUSHED GRAVEL COMPACTED TO 6" BELOW FINISH GRADE. LOAM AND SEED TO FINISH GRADE (MATCH EXISTING GRADE). 8" CAST IRON SANITARY SEWER TO BE REMOVED OR FILLED WITH FLOWABLE FILL.

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- NOTES:**
- PROJECT LOCATION: ORIENTAL GARDENS HOME PARK PORTSMOUTH, NH  
PARCEL I.D.: TAX MAP 215/LOT 9  
OWNER: KELLY PROPERTY TRUST A & B  
P.O. BOX 342  
RYE BEACH, NH 03871  
3636/1647  
ZONING DISTRICT: OFFICE RESEARCH (OR)
  - HORIZONTAL DATUM AND BASIS OF BEARING IS NEW HAMPSHIRE SPC NAD83(2011). VERTICAL DATUM IS NAVD88. BASIS OF HORIZONTAL AND VERTICAL DATUMS IS RTK GPS OBSERVATIONS (HORZ. ±0.05', VERT ±0.3')
  - THE PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN OF FIRM PANEL 33015C0260F, EFFECTIVE JANUARY 29, 2021.
  - BYPASS PUMPING OF SEWAGE WILL BE REQUIRED AT VARIOUS STAGES THROUGHOUT THE COURSE OF THE WORK. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE BEST MEANS AND METHODS TO ENSURE NO PART OF THE SYSTEM SURCHARGES INTO PRIVATE RESIDENCES OR ONTO PUBLIC / PRIVATE PROPERTY.
  - PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.

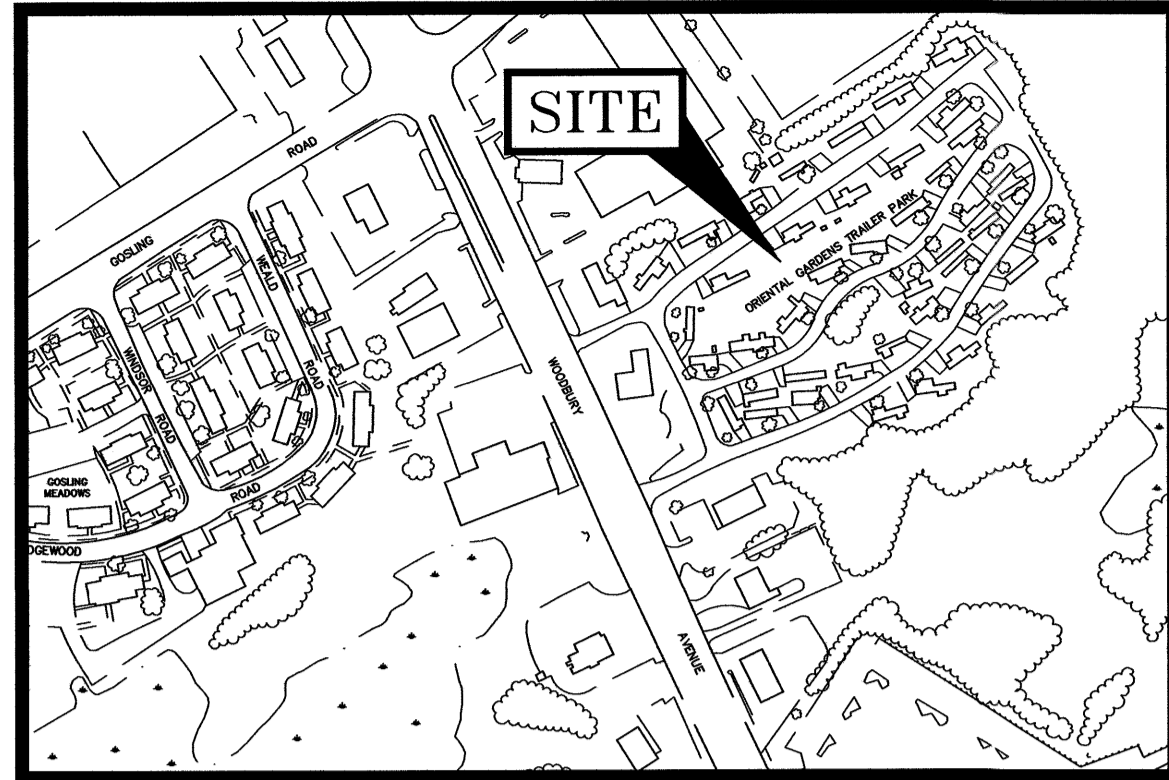
**ORIENTAL GARDENS HOME PARK  
WOODBURY AVENUE  
PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
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REVISIONS		

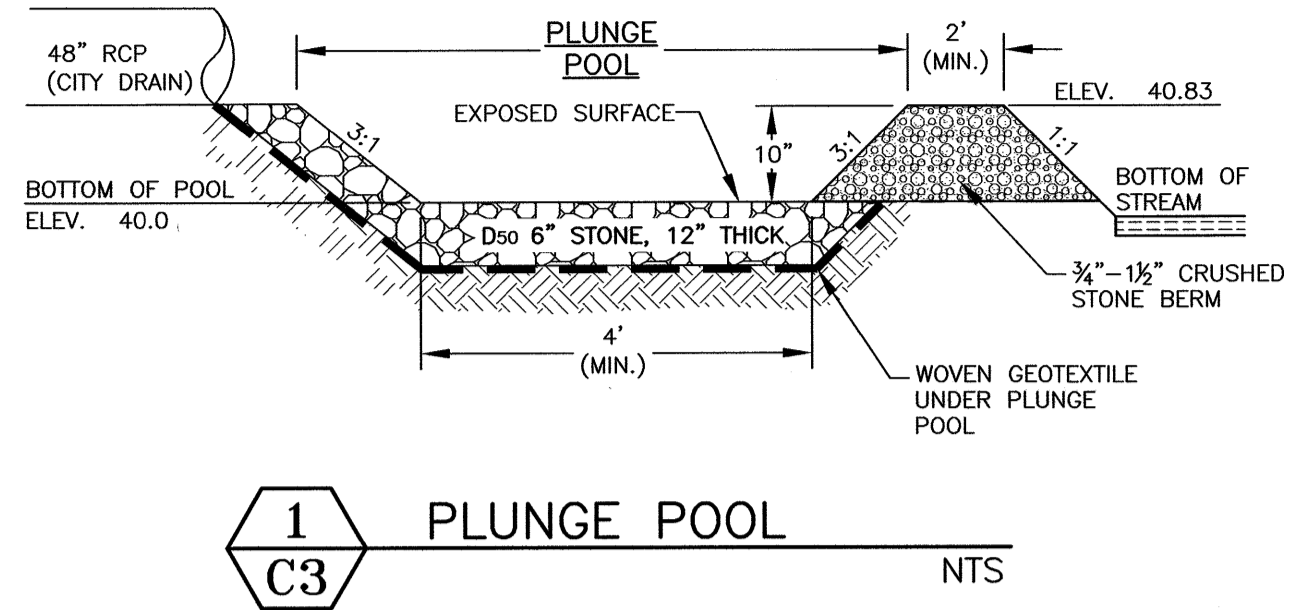


SCALE 1" = 20' JANUARY 2021

**SEWER IMPROVEMENT PLAN** **C2**



LOCATION MAP SCALE 1" = 300

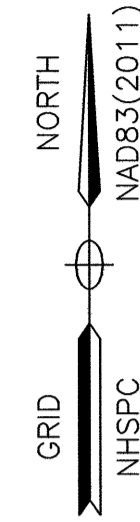


**MATERIALS SPECIFICATIONS:**

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF THE STORMWATER MANAGEMENT AND EROSION CONTROL HANDBOOK FOR NEW HAMPSHIRE BEST MANAGEMENT PRACTICE (BMP) FOR ROCK RIP RAP.
2. ANCHOR PINS FOR FABRIC SHALL MEET THE REQUIREMENTS OF THE MANUFACTURER OF THE FABRIC.
3. RIP RAP SHALL BE A WELL GRADED MIX OF DURABLE ANGULAR OR SUBANGULAR STONES (d50 = 6"). FLAT ROCKS SHALL NOT BE USED FOR RIP RAP.

**CONSTRUCTION SPECIFICATIONS:**

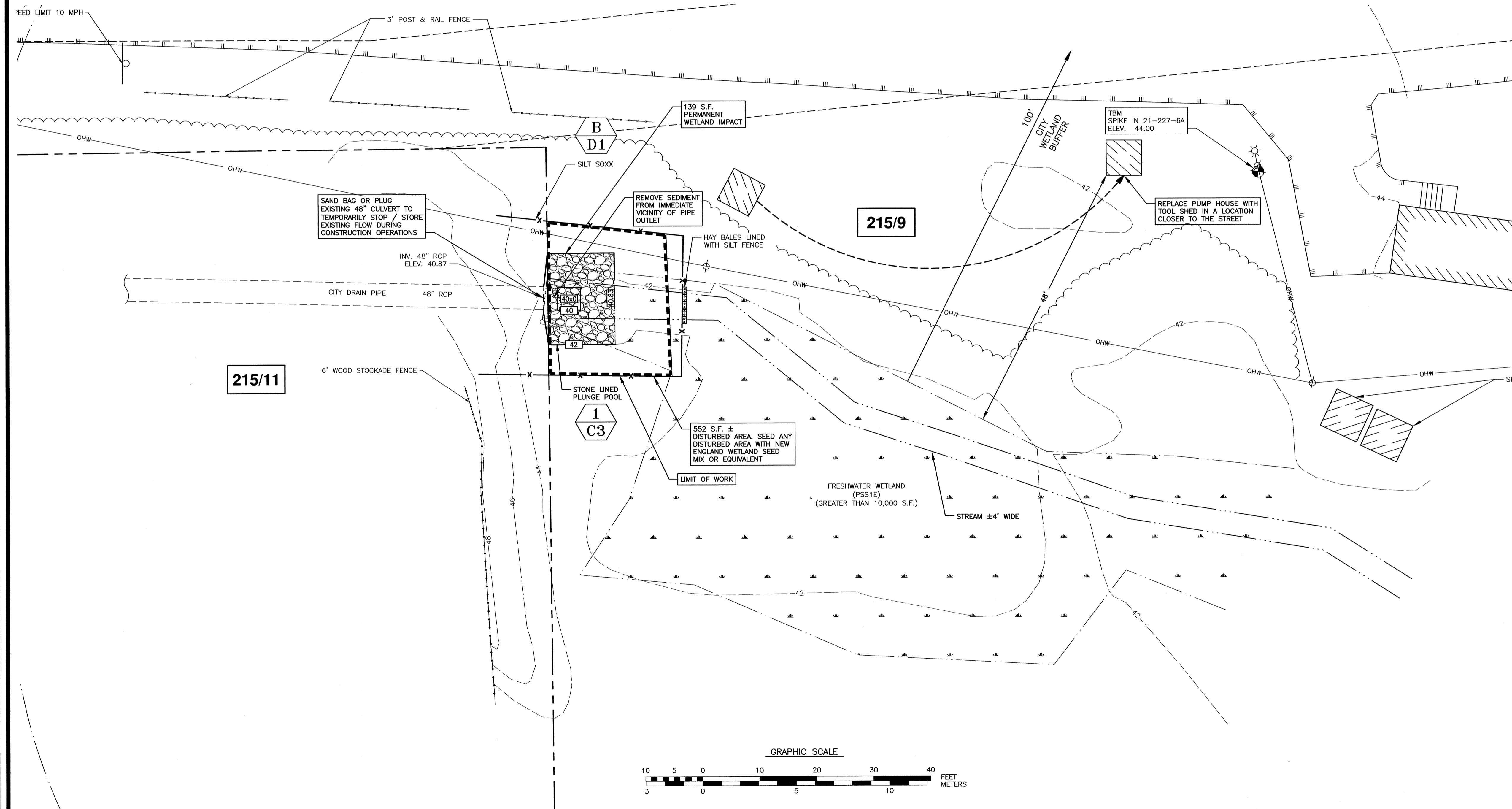
1. THE SUBGRADE FOR THE RIP RAP SHALL BE CLEARED AND GRUBBED TO REMOVE ALL ROOTS, VEGETATION, AND DEBRIS AND PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE THICKNESS OF THE RIP RAP LAYER (T) SHALL BE 2.25 TIMES THE ROCK d50 AS DETERMINED BY THE METHOD IN BEST MANAGEMENT PRACTICE FOR ROCK RIP RAP.
3. GEOTEXTILE FABRIC SHALL BE PROTECTED FROM PUNCTURES OR TEARING DURING PLACEMENT OF THE ROCK RIP RAP BY PLACING A CUSHION OF SAND OR FINE GRAVEL OVER THE FABRIC. 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 INCHES.
4. STONE FOR 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 DISPLACEMENT OF THE UNDERLYING MATERIALS. HAND PLACEMENT MAY BE REQUIRED TO PREVENT DAMAGE TO ANY PERMANENT STRUCTURES.
5. VOIDS IN RIP RAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.



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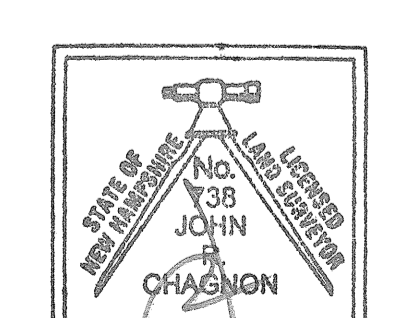
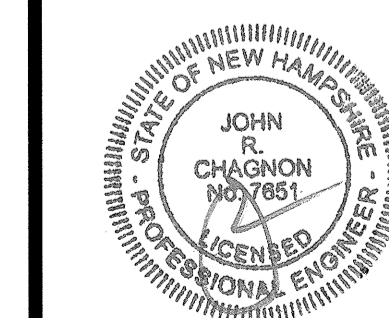
**NOTES:**

- 1) PROJECT LOCATION:  
ORIENTAL GARDENS HOME PARK  
PORTSMOUTH, NH  
PARCEL I.D.:  
TAX MAP 215/LOT 9  
  
OWNER:  
KELLY PROPERTY TRUST A & B  
P.O. BOX 342  
RYE BEACH, NH 03871  
3636/1647  
  
ZONING DISTRICT:  
OFFICE RESEARCH (OR)
- 2) HORIZONTAL DATUM AND BASIS OF BEARING IS NEW HAMPSHIRE SPC NAD83(2011). VERTICAL DATUM IS NAVD88. BASIS OF HORIZONTAL AND VERTICAL DATUMS IS RTK GPS OBSERVATIONS (HORZ. ±0.05', VERT ±0.3')
- 3) THE PARCEL NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN OF FIRM PANEL 33015C0260F, EFFECTIVE JANUARY 29, 2021.
- 4) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION.
- 5) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 6) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 7) PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.



**ORIENTAL GARDENS HOME PARK  
WOODBURY AVENUE  
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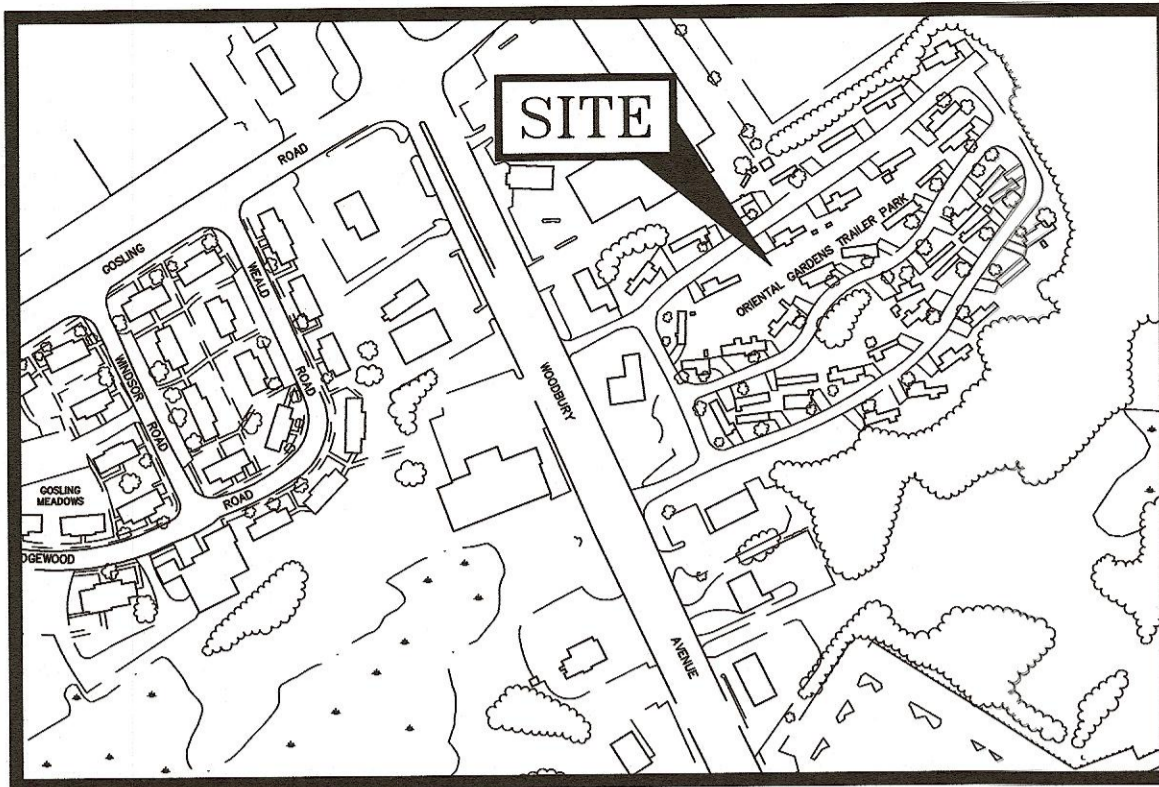
NO.	DESCRIPTION	DATE
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SCALE 1" = 10' JANUARY 2021

**DRAINAGE MAINTENANCE PLAN**

**C3**

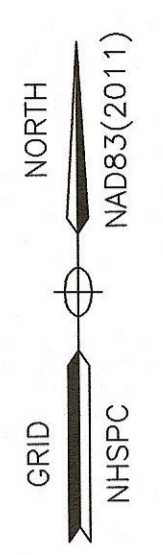


**CITY OF PORTSMOUTH BUFFER IMPACT AREAS (IN S.F.)**

DESCRIPTION	COLOR (KEY)	TEMPORARY IMPACT AREA	PERMANENT IMPACT AREA
100' CITY OF PORTSMOUTH WETLAND BUFFER	[Yellow Box]	4,554 S.F.	N/A
	[Blue Box]	N/A	187 S.F.

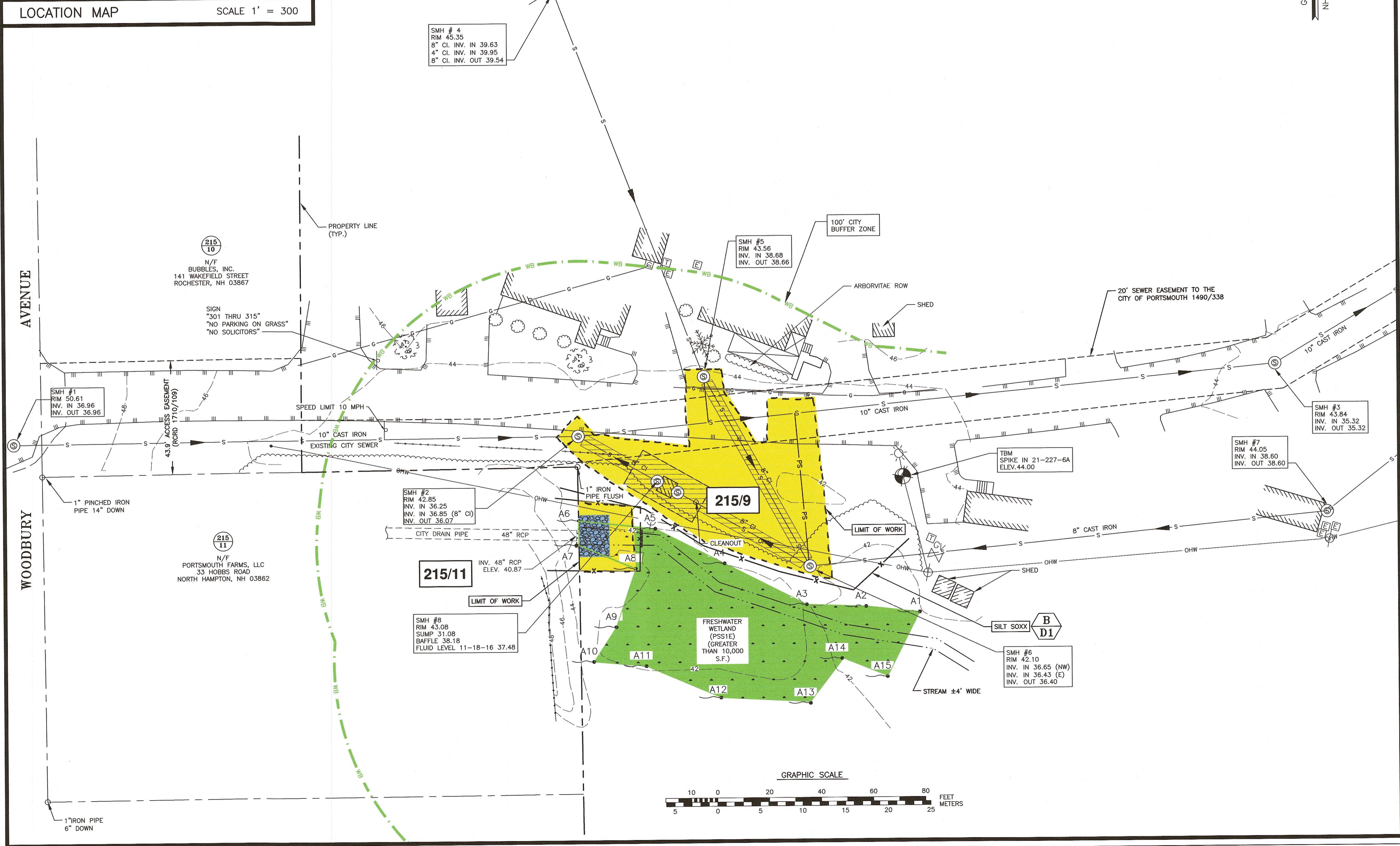
**NHDES WETLAND IMPACT AREAS (IN S.F.)**

DESCRIPTION	COLOR (KEY)	TEMPORARY IMPACT AREA	PERMANENT IMPACT AREA
EXISTING WETLAND AREA	[Green Box]	N/A	N/A
WETLAND AREA IMPACTED	[Green Line]	134 S.F.	139 S.F.



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- NOTES:**
- PROJECT LOCATION: ORIENTAL GARDENS MOBILE HOME PARK, PORTSMOUTH, NH. PARCEL I.D.: TAX MAP 215/LOT 9. OWNER: KELLY PROPERTY TRUST A & B, P.O. BOX 342, RYE BEACH, NH 03871, 3636/1647. ZONING DISTRICT: OFFICE RESEARCH (OR).
  - HORIZONTAL DATUM AND BASIS OF BEARING IS NEW HAMPSHIRE SPC NAD83(2011). VERTICAL DATUM IS NAVD88. BASIS OF HORIZONTAL AND VERTICAL DATUMS IS RTK GPS OBSERVATIONS (HORZ. ±0.05', VERT ±0.3').
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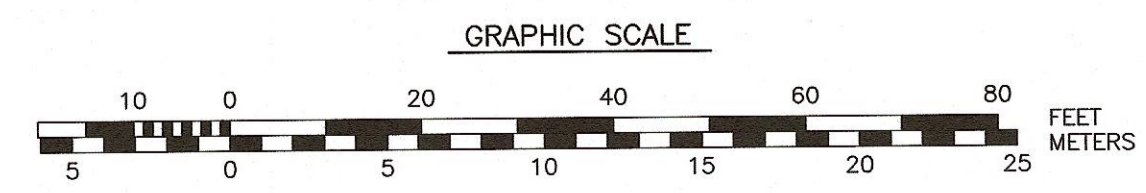
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SCALE 1" = 20'      JANUARY 2021

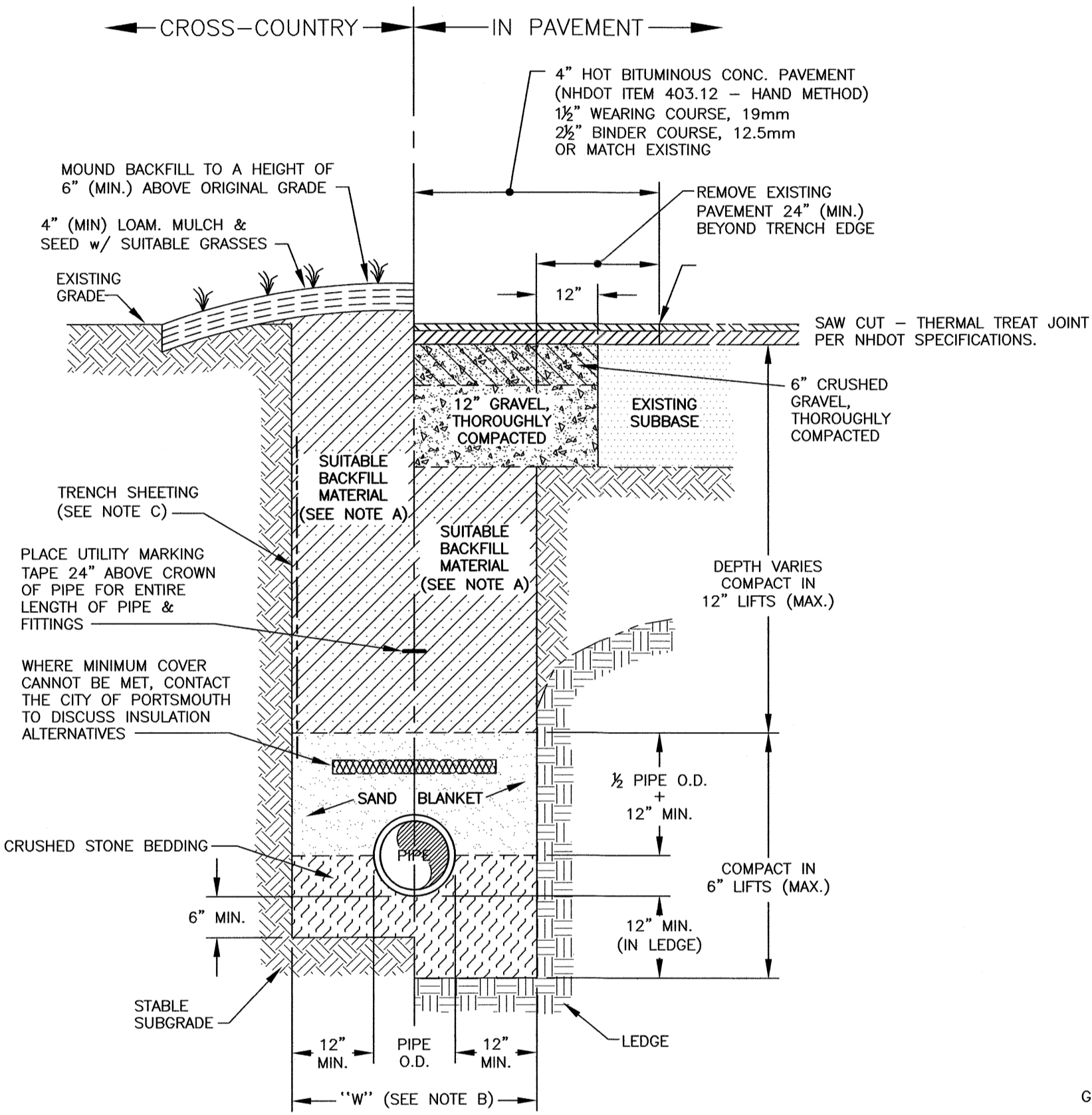
CUP PERMIT PLAN      **C4**



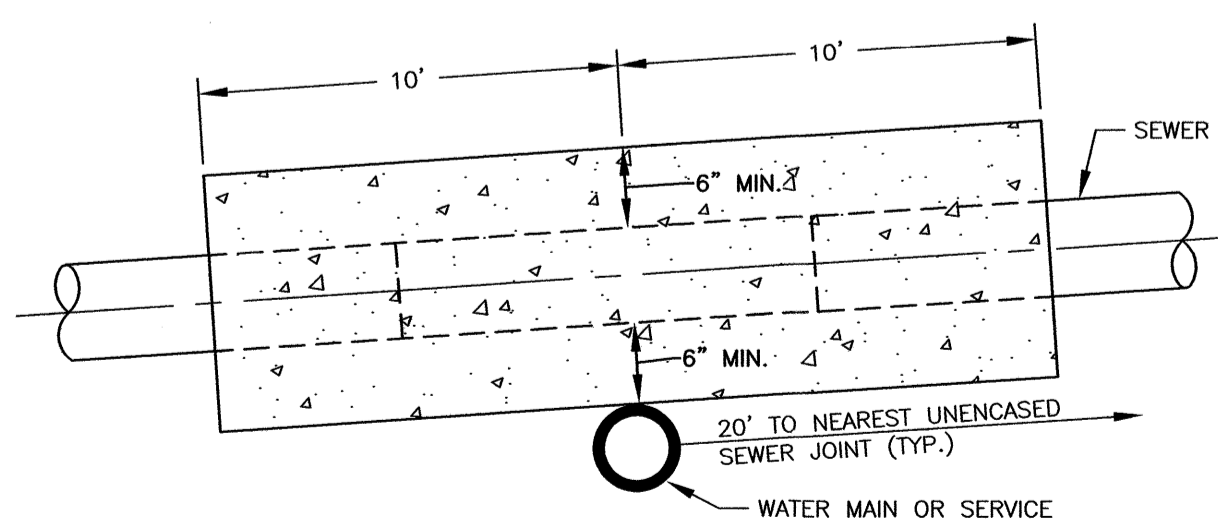


**TRENCH NOTES:**

- A) TRENCH BACKFILL: IN PAVED AREAS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING 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 SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.
- IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL 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.
- B) "W" = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D..
- C) TRENCH SHEETING: IF REQUIRED, WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- D) MINIMUM PIPE COVER FOR SEWER MAINS (UNLESS GOVERNED BY OTHER CODES):  
6" MINIMUM FOR SEWER (IN PAVEMENT)  
4" MINIMUM FOR SEWER (CROSS COUNTRY)
- E) ALL PAVEMENT CUTS SHALL BE REPAIRED BY THE INFRARED HEAT METHOD.



**J** SEWER PIPE TRENCH  
C2 NTS



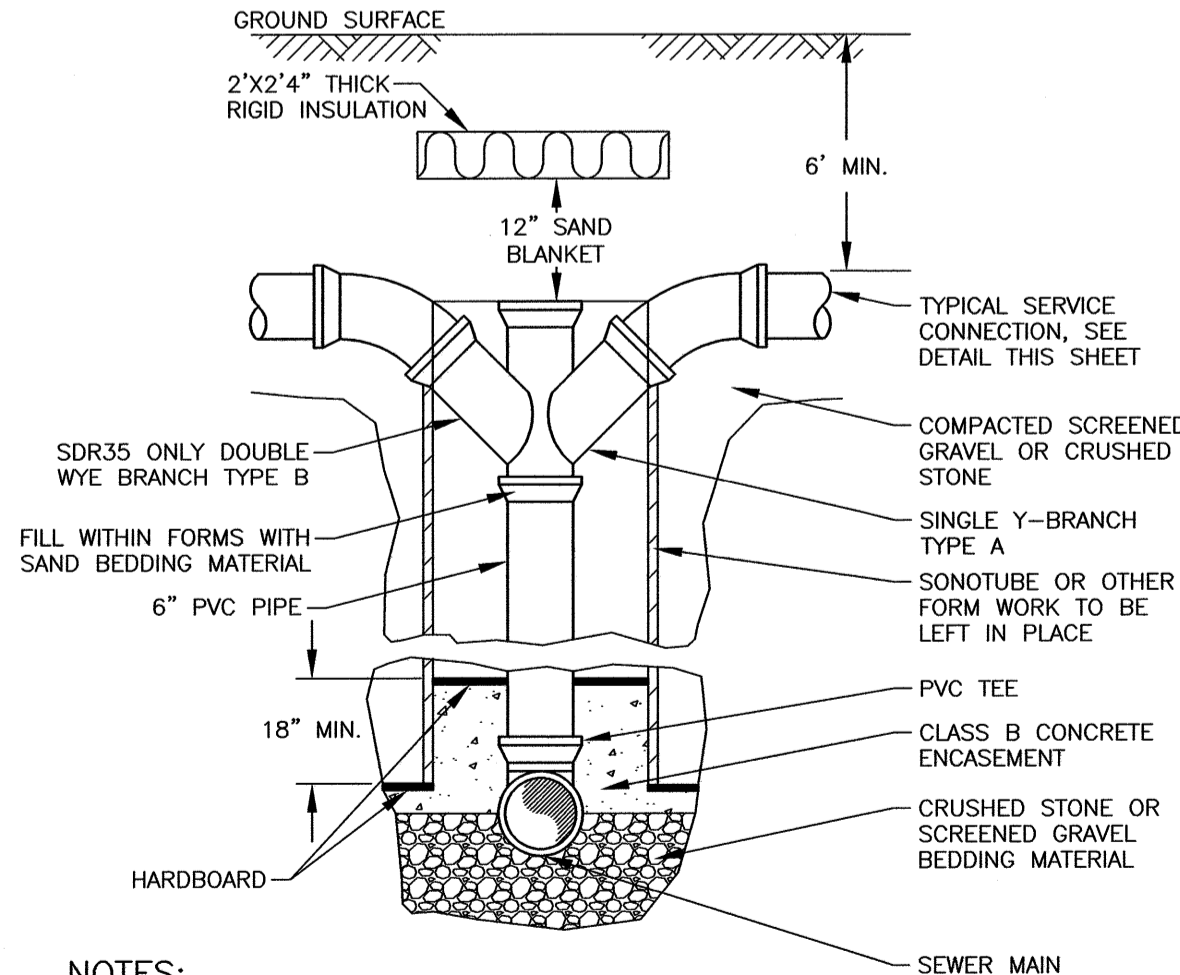
**G** CONCRETE ENCASUREMENT FOR WATER CROSSING  
(IF NEEDED) NTS

**GENERAL NOTES:**

- 1) MINIMUM PIPE SIZE FOR HOME SERVICES SHALL BE SIX INCHES.
- 2) PIPE AND JOINT MATERIALS:  
A. PLASTIC SEWER PIPE  
1. 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"
AWWA C900	PVC (SOLID WALL)	8" THROUGH 18"

\*PVC: POLYVINYL CHLORIDE
- 2. JOINT 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.
- B. DUCTILE IRON PIPE, FITTINGS AND JOINTS.  
1. DUCTILE IRON PIPE AND FITTINGS FOR SEWERS 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 SEWER APPLICATIONS.  
2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:  
A21.11 RUBBER GASKET JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.  
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. TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE DEPENDING ON THE PIPE ENCOUNTERED. FOR PVC PIPE, USE PVC SADDLES OR INSERT-A-TEE, OR CUT IN A SANITARY TEE. FOR CLAY PIPE, USE INSERT-A-TEE OR CUT IN A SANITARY TEE. ALL WORK TO BE APPROVED BY GOVERNING BODY.  
6. HOUSE SEWER 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 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND REFILL 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 1/4 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.  
7. TESTING: WHEN REQUIRED BY THE GOVERNING AUTHORITY, TESTING SHALL CONFORM TO ENV-WQ 704.07.  
8. ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM DWELLING 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. WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE, UNLESS IT IS ON A SHELF 12" HIGHER, AND 18" APART.



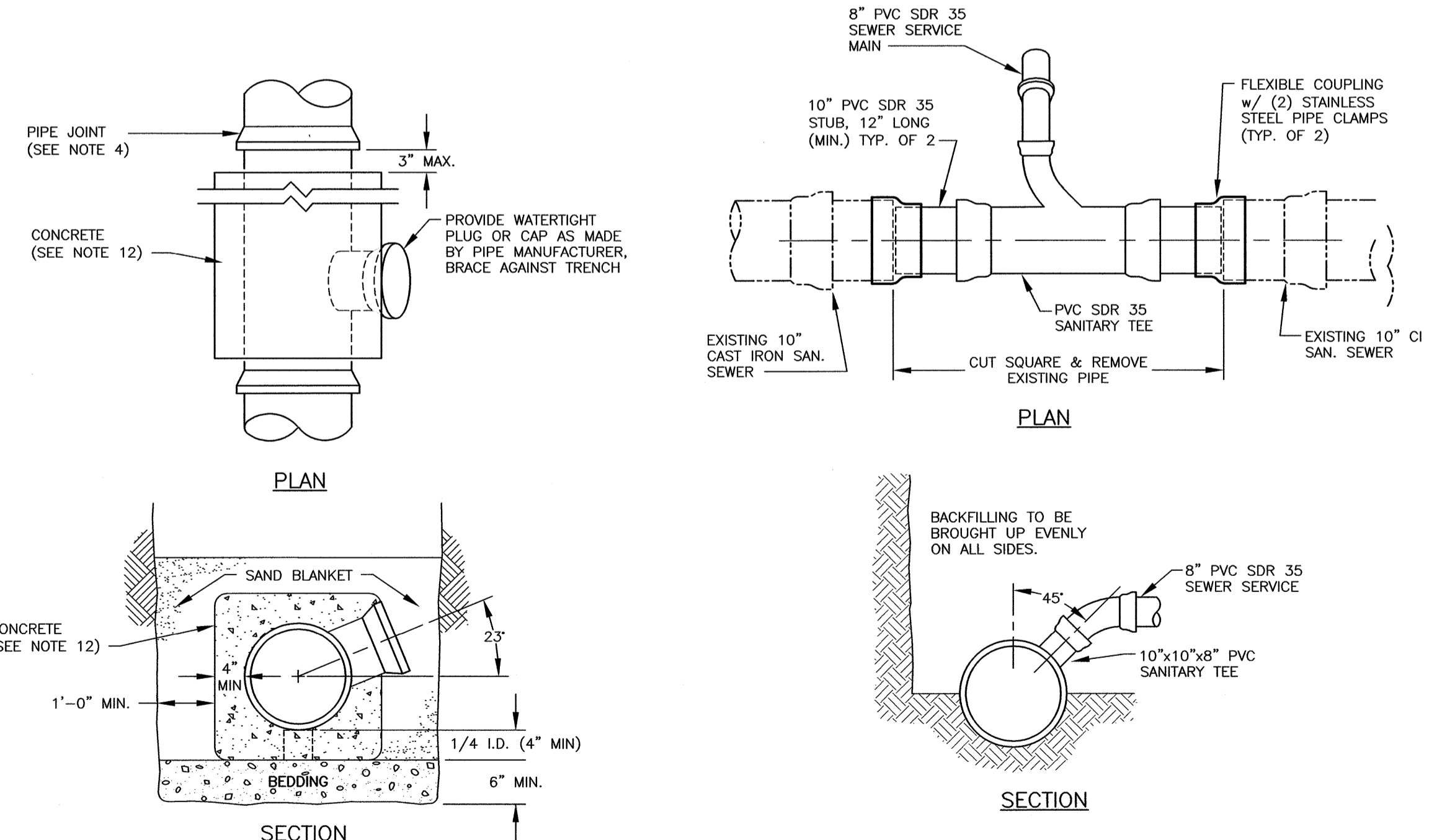
**I** PVC SEWER SERVICE CHIMNEY WITH WYE  
(IF NEEDED) NTS

**GENERAL NOTES- CONT'D:**

- 10) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE, FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.  

PERCENT PASSING	SCREEN SIZE
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

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.
- 11) 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 PIPE FINDER.
- 12) CAST-IN-PLACE CONCRETE: SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:  
CEMENT: 6.0 BAGS PER CUBIC YARD  
WATER: 5.75 GALLONS PER BAG OF CEMENT  
MAXIMUM AGGREGATE SIZE: 3/4 INCH
- 13) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION OR MAIN. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.
- 14) BACKFILL UP TO SUBBASE GRAVEL SHALL BE WITH EXCAVATED SOIL FROM TRENCHING OPERATIONS. COMPACT IN 8" LIFTS WITH VIBRATORY PLATE COMPACTORS TO 90% OF MODIFIED PROCTOR DENSITY. IF FINE-GRAINED, COMPACT WITH POGO STICKS OR SHEEPSFOOT ROLLERS. PLACE NO LARGE ROCKS WITHIN 24" OF PIPE. TRENCHES THAT ARE NOT ADEQUATELY COMPACTED SHALL BE RE-EXCAVATED AND BACKFILLED UNDER THE SUPERVISION OF THE DESIGN ENGINEER OR GOVERNING BODY. UNSUITABLE BACKFILL MATERIAL INCLUDES CHUNKS OF PAVEMENT, TOPSOIL, ROCKS OVER 6" IN SIZE, MUCK, PEAT OR PIECES OF PAVEMENT.
- 15) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB-SITE SAFETY AND COMPLIANCE WITH GOVERNING REGULATIONS.
- 16) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. FOR TRENCH WIDTH SEE TRENCH DETAIL.
- 17) SAND BLANKET: CLEAN SAND, FREE FROM ORGANIC MATTER, SO GRADED THAT 90% - 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.
- 18) BASE COURSE GRAVEL, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION.
- 19) FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 20) IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
- 21) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 22) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION.
- 23) THE PURPOSE OF THESE NOTES IS TO DETAIL STANDARDS FOR SEWER CONSTRUCTION.
- 24) ALL WORK SHALL BE IN COMPLIANCE WITH NHDES CODE OF ADMINISTRATIVE RULES PART ENV-WQ 704 DESIGN OF SEWERS.



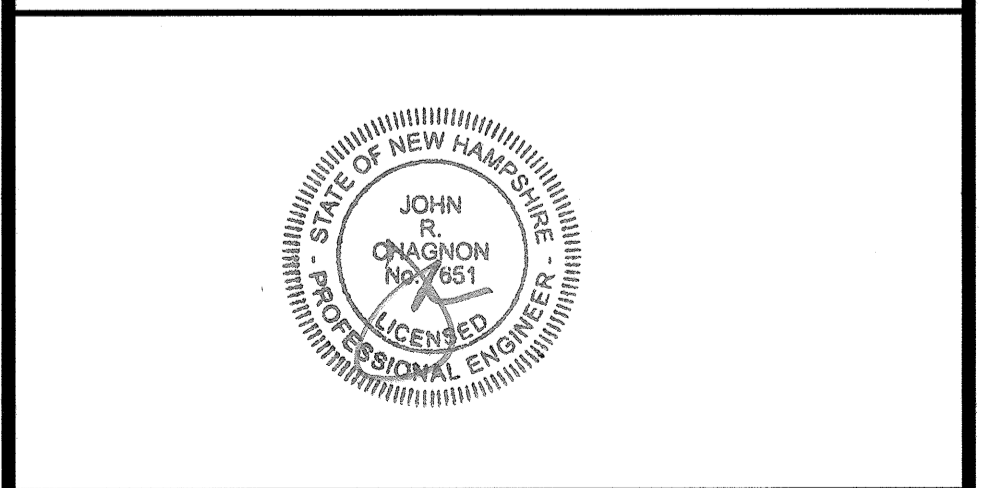
**H** CONCRETE FULL ENCASUREMENT (IF NEEDED) NTS  
**F** SEWER SERVICE CONNECTION DETAIL (IF NEEDED) NTS

**AMBIT ENGINEERING, INC.**  
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Portsmouth, N.H. 03801-7114  
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- NOTES:**
- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
  - 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
  - 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
  - 4) CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS STANDARDS.

**ORIENTAL GARDENS HOME PARK WOODBURY AVENUE PORTSMOUTH, N.H.**

NO.	DESCRIPTION	DATE
0	ISSUED FOR APPROVAL	7/28/21
REVISIONS		



SCALE AS NOTES JANUARY 2021

**SEWER DETAILS AND NOTES**

**D2**