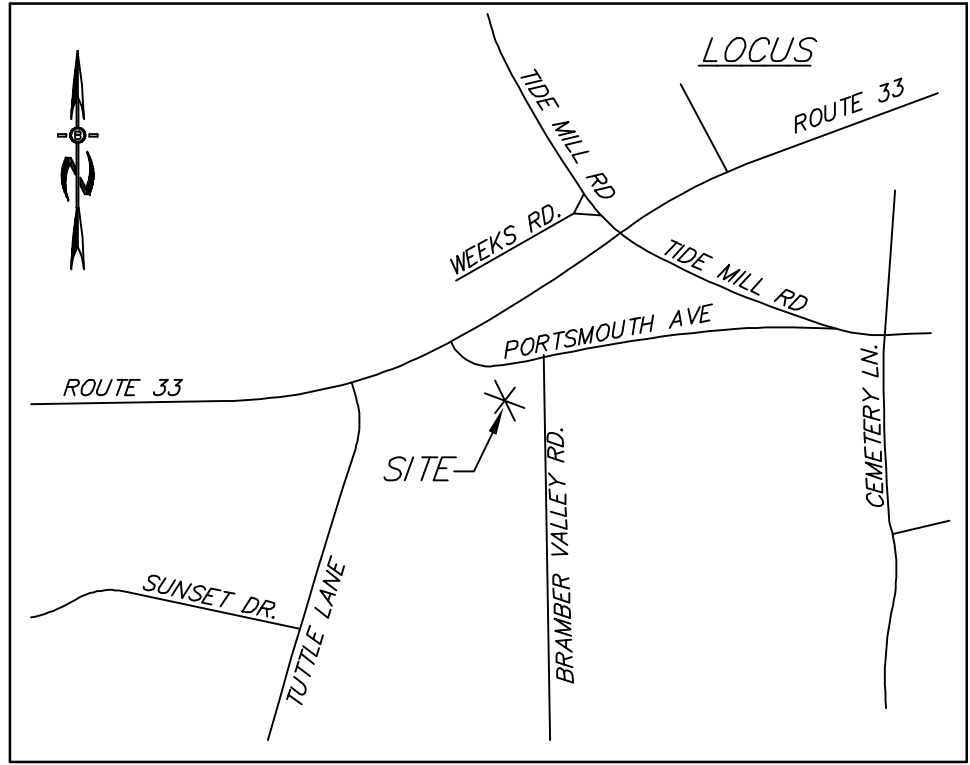
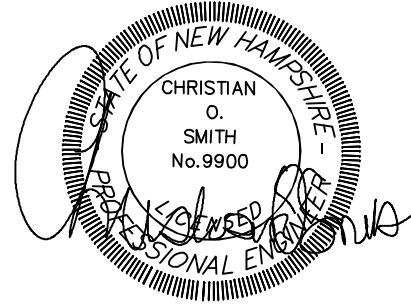


SITE PLAN  
597 & 603 PORTSMOUTH AVE  
TAX MAP U6, LOTS 1 & 3  
GREENLAND, NH

APPLICANT:  
ONE HOME BUILDERS II, LLC  
P.O. BOX 334  
STRATHAM, NH 03885

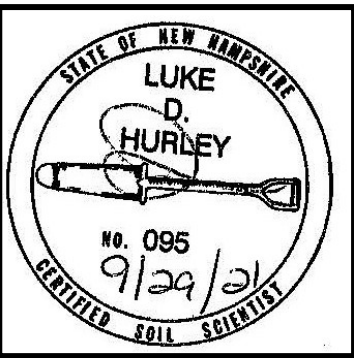
CIVIL ENGINEERS:  
**BA**  
**BEALS**  
ASSOCIATES, PLLC  
70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863



LOCATION MAP

- COVER SHEET
- 1 EXISTING CONDITIONS PLAN
  - 2 PARKING & PAVEMENT PLAN
  - 3 GRADING, DRAINAGE & UTILITY PLAN
  - 4 LIGHTING & LANDSCAPE PLAN
  - 5 EFFLUENT DISPOSAL PLAN
  - 6 CONSTRUCTION DETAILS
  - 7 EROSION CONTROL & PARKING DETAILS

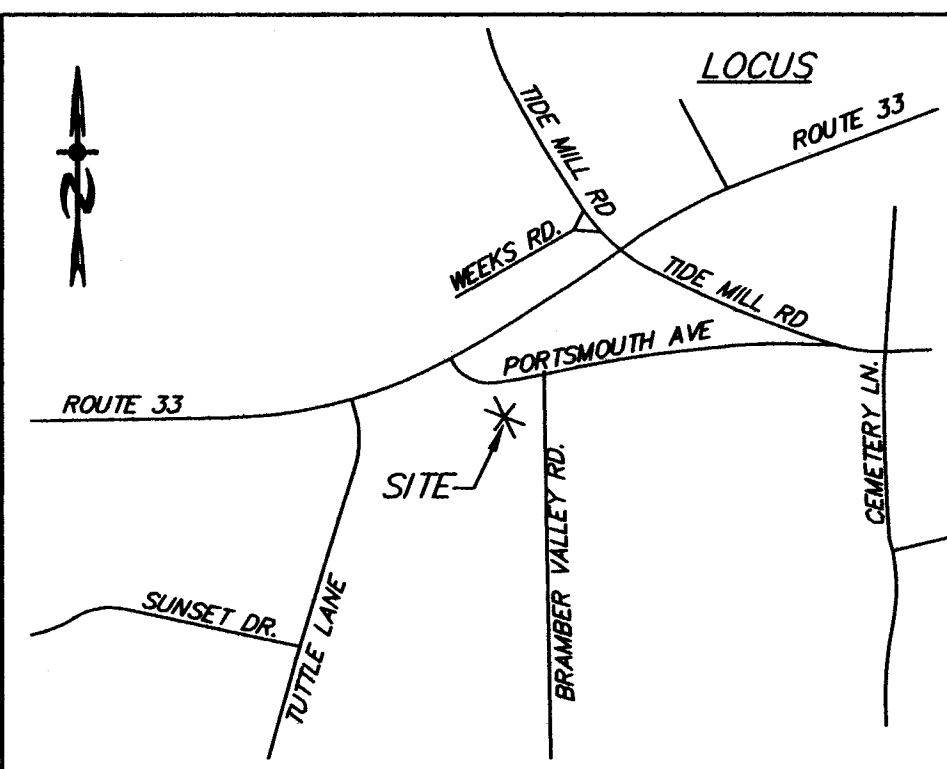
WETLAND / SOIL  
CONSULTANT:  
GOVE ENVIRONMENTAL SERVICES INC.  
8 CONTINENTAL DRIVE,  
BLDG 2 UNIT H  
EXETER, NH 03833  
1-603-778-0644



OWNER:  
603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840

REQUIRED PERMITS  
NHDES SUBSURFACE APPROVAL NUMBER: PENDING  
US EPA NOTICE OF INTENT

REVISIONS:		DATE:
REVISED PER ENGINEERING REVIEW		11-9-21
REVISED PER ENGINEERING REVIEW		12-15-21



LOCATION MAP

SSS STANDARDS:

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP. THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED ON MAY 13, 2018, AND WAS PREPARED BY LUKE HURLEY, OF GOVE ENVIRONMENTAL SERVICES, INC. SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH, ISSUE # 10, JANUARY 2011.

SOIL LEGEND:

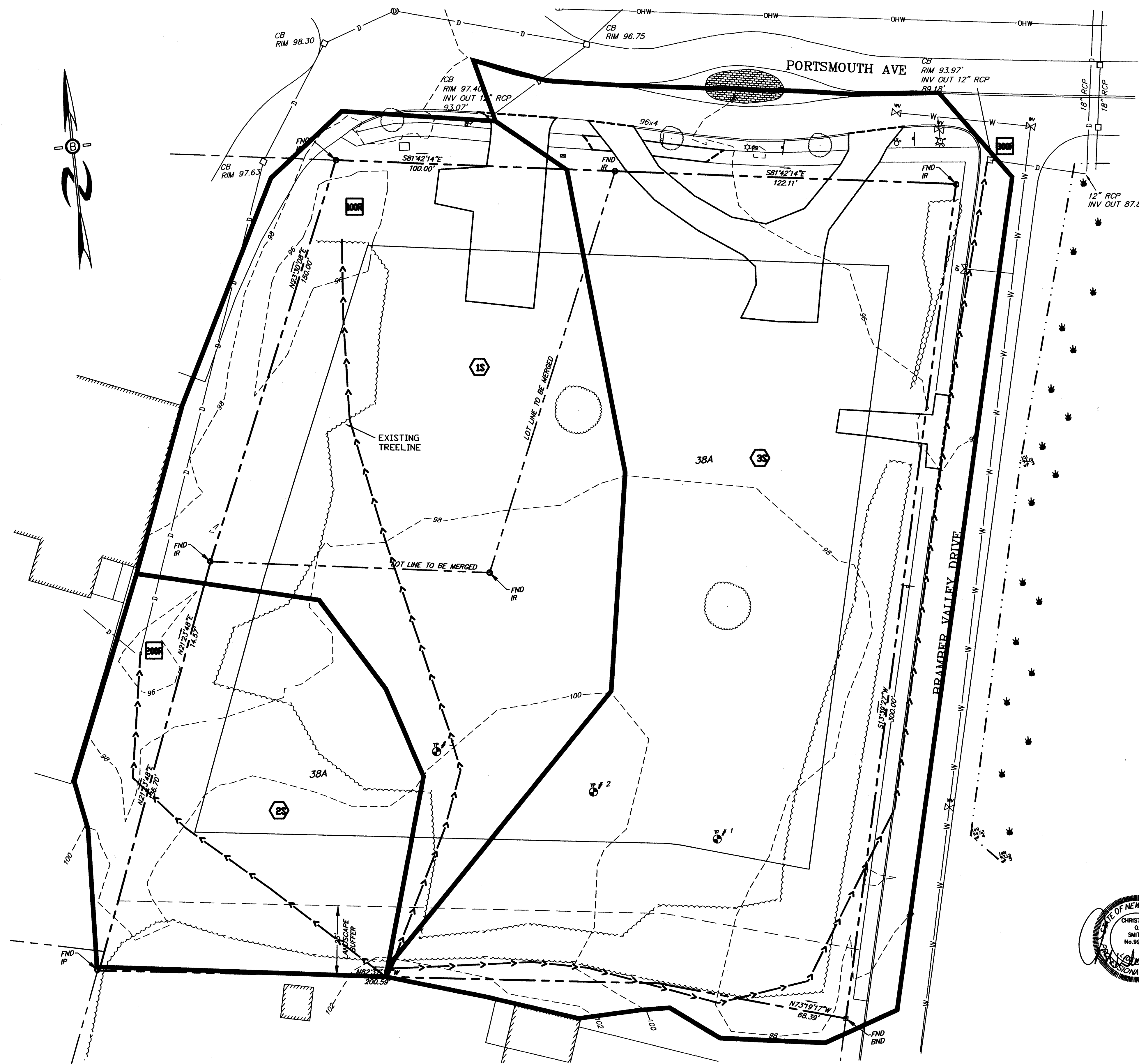
SOIL SERIES	MAP UNIT	HIGH INTENSITY SOIL TYPES	HYDROLOGIC GROUP
ELDRIDGE	38	(343)	C

SLOPE CLASS:	DRAINAGE CLASS:
0-8% = B	/P = POORLY DRAINED SOIL
8-15% = C	/VP = VERY POORLY DRAINED
15-25% = D	
25-50% = E	
>50% = F	

JURISDICTIONAL WETLANDS DELINEATED BY LUKE HURLEY, CSS, CWS OF GOVE ENVIRONMENTAL SERVICES, INC. ON MAY 13, 2015 IN ACCORDANCE WITH THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

LEGEND

UTILITY POLE	TEST PIT W/ NO.
STONE WALL	TREE LINE
EXISTING CONTOUR - 10'	EXISTING CONTOUR - 2'
OVERHEAD UTILITIES	SOILS BOUNDARY LINE
BUILDING SETBACK LINE	WETLAND BOUNDARY
PRIME WETLAND BOUNDARY	ABUTTING PROPERTY LINE
EXISTING PROPERTY LINE	



PREPARED FOR:

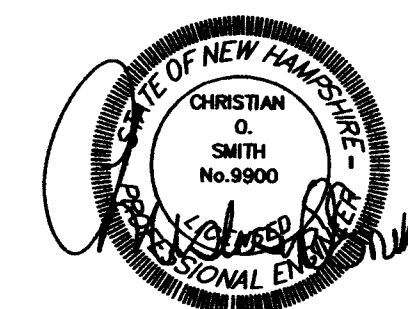
603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840

**BA**  
**BEALS**  
ASSOCIATES, PLLC

70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863

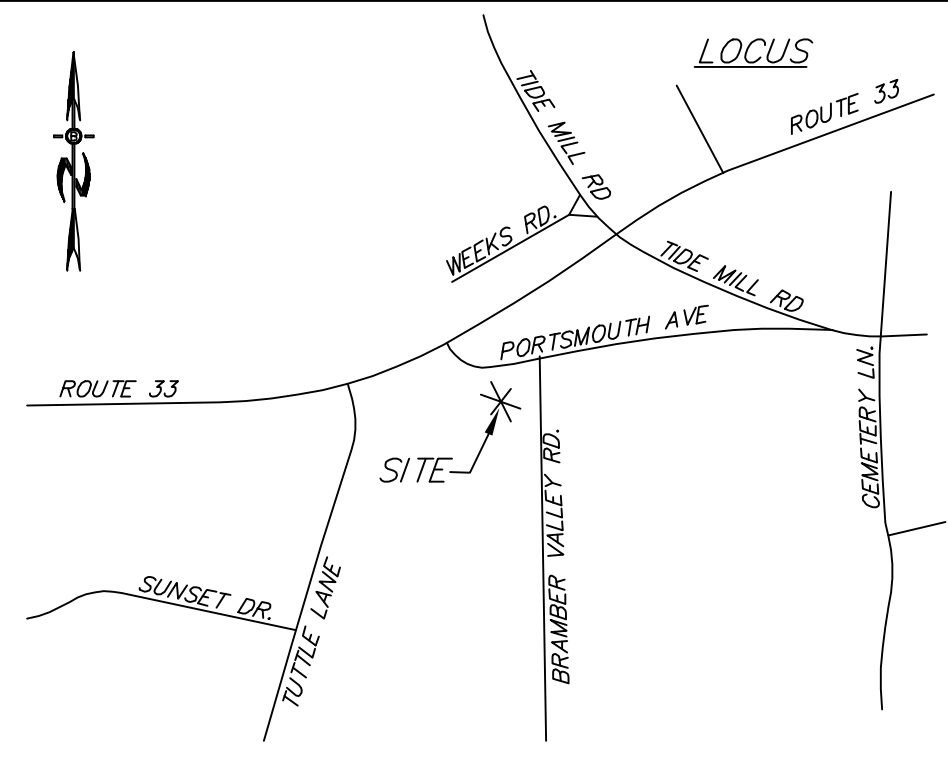
**\*\*THIS DRAWING IS FOR  
DRAINAGE PURPOSES ONLY**

WATERSHED KEY
4 SUBCATCHMENT
4 REACH
4 POND
4 LIMIT OF SUBCATCHMENT
4 FLOW PATH



REVISIONS:	DATE:
EXISTING WATERSHED PLAN - W1	
SITE PLAN 597 & 603 PORTSMOUTH AVE GREENLAND, NH	
DATE: SEPT 2021	SCALE: 1"=20'
PROJ. NO: NH-7724	SHEET NO. 1 OF 2

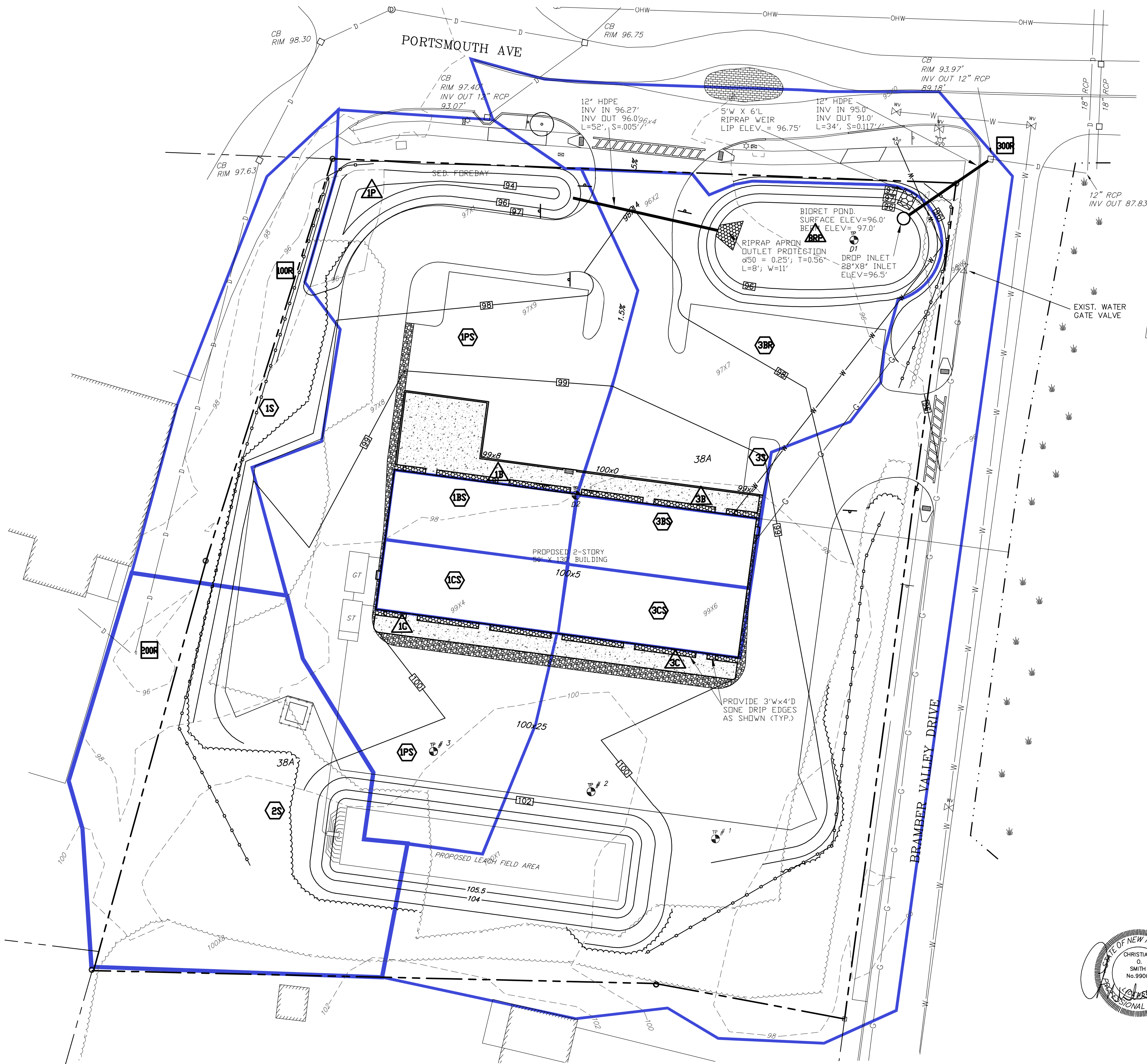




LOCATION MAP

**SETBACKS/BUFFERS:**  
ZONE: COMMERCIAL DISTRICT A  
MIN. LOT SIZE = 60,000 W/ 45,000 CONTIGUOUS UPLAND  
MIN. FRONTAGE = 200'  
MIN. WIDTH = 80'  
MAX. HEIGHT = 35'  
MIN. OPEN SPACE = 50%  
BUILDING FOOT PRINT MAX = 10,000 S.F.

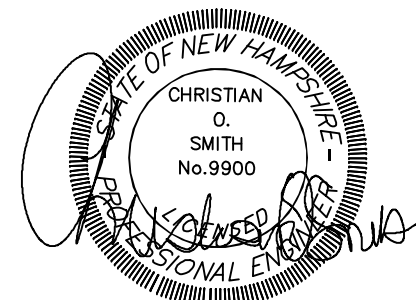
**BUILDING SETBACKS:**  
FRONT = 30'  
SIDE = 20'/50' ABUTTING RESIDENTIAL  
REAR = 20'/50' ABUTTING RESIDENTIAL  
TIDAL WETLAND = 100'  
INLAND JURISDICTIONAL WETLANDS = 50'  
INLAND JURISDICTIONAL WETLANDS CONTIGUOUS W/ SURFACE WATER = 75'



- NOTES**
1. ALL ELECTRICAL, TELEPHONE, CABLE TELEVISION AND ALARM LINES TO BE UNDERGROUND. THE SIZE AND LOCATION IS TO BE DETERMINED BY APPROPRIATE UTILITY COMPANY.
  2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR, ENGINEER TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY.
  3. ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM TO THE TOWN STANDARD SPECIFICATIONS AND TO N.H.D.O.T. STANDARDS AND REGULATIONS.
  4. ALL DRAINAGE STRUCTURE AND SWALES WILL BE BUILT AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
  5. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.
  6. SEE ADDITIONAL NOTES ON DETAIL SHEET.

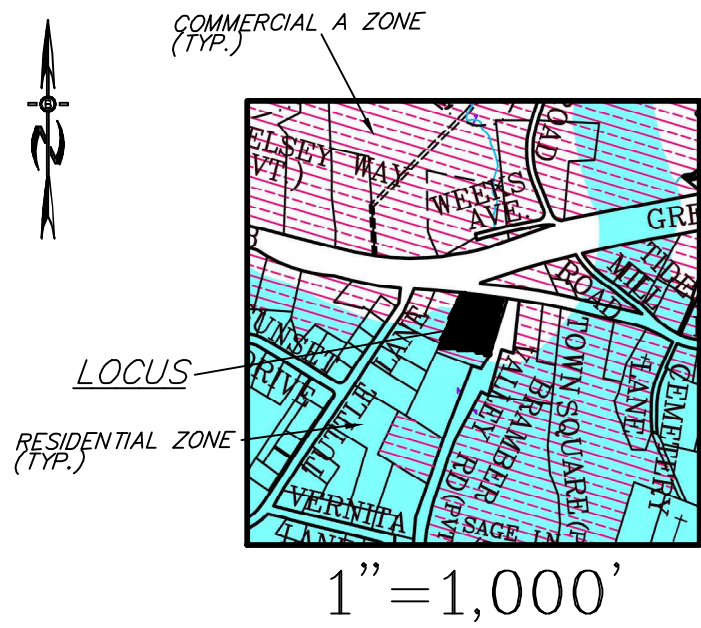
**\*\*THIS DRAWING IS FOR DRAINAGE PURPOSES ONLY**

- WATERSHED KEY**
- 4 SUBCATCHMENT
  - 4 REACH
  - 4 POND
  - LIMIT OF SUBCATCHMENT
  - FLOW PATH



REVISED PER ENGINEERING REVIEW		11-10-21
REVISIONS:		DATE:
PROPOSED WATERSHED PLAN - W2		
SITE PLAN 597 & 603 PORTSMOUTH AVE GREENLAND, NH		
DATE:	SEPT 2021	SCALE: 1"=20'
PROJ. NO:	NH-772.4	SHEET NO. 2 OF 2





## VICINITY MAP

### SSS STANDARDS:

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED ON MAY 13, 2019, AND WAS PREPARED BY LUKE HURLEY, OF GOVE ENVIRONMENTAL SERVICES, INC. SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011.

### SOIL LEGEND:

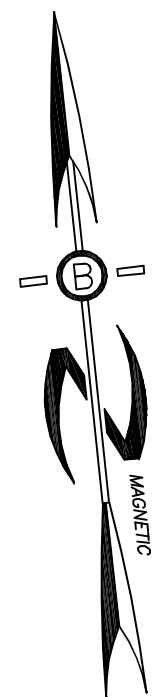
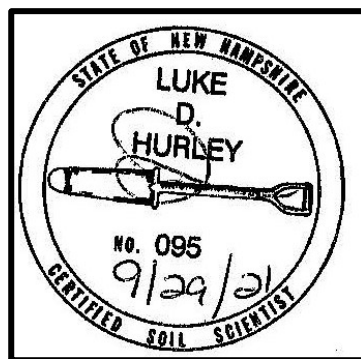
SOIL SERIES	MAP UNIT	HIGH INTENSITY SOIL TYPES	HYDROLOGIC GROUP
ELDRIDGE	38	(343)	C

SLOPE CLASS:

0-8% = B  
8-15% = C  
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DRAINAGE CLASS:

/P = POORLY DRAINED SOIL  
/VP = VERY POORLY DRAINED



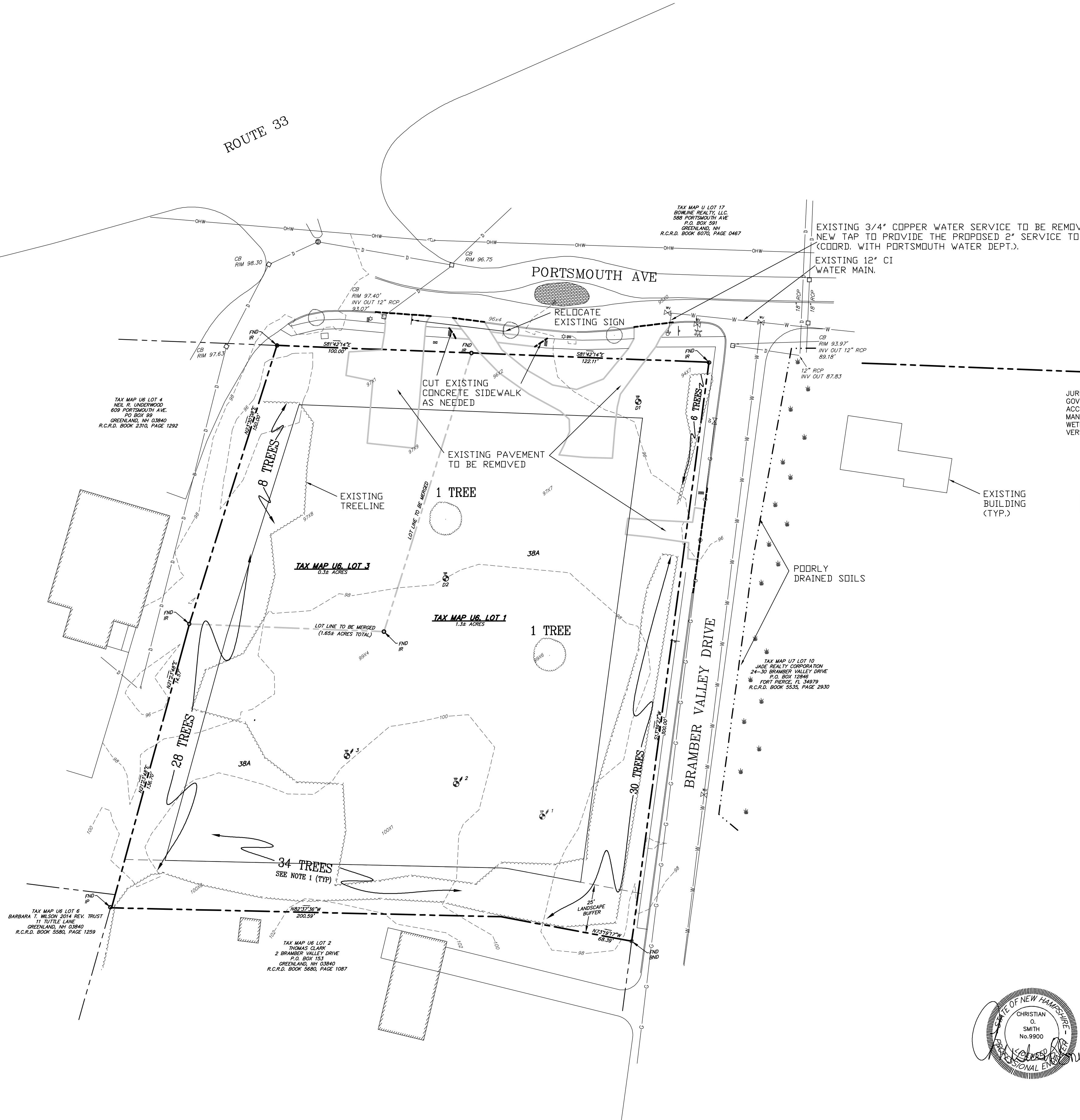
## LEGEND

	UTILITY POLE
	TEST PIT W/ NO.
	STONE WALL
	TREE LINE
	EXISTING CONTOUR - 10'
	EXISTING CONTOUR - 2'
	OVERHEAD UTILITIES
	SOILS BOUNDARY LINE
	BUILDING SETBACK LINE
	WETLAND BOUNDARY
	PRIME WETLAND BOUNDARY
	ABUTTING PROPERTY LINE
	EXISTING PROPERTY LINE

## APPROVAL BLOCK

APPROVED TOWN OF GREENLAND PLANNING BOARD

CHAIRPERSON \_\_\_\_\_ DATE \_\_\_\_\_



### PREPARED FOR:

603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840



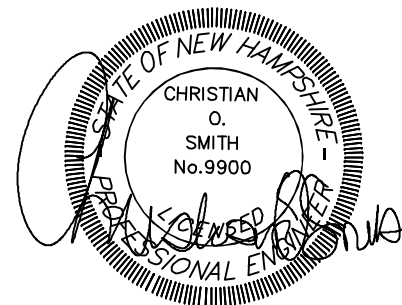
70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863

JURISDICTIONAL WETLANDS DELINEATED BY LUKE HURLEY, CSS, CWS OF GOVE ENVIRONMENTAL SERVICES, INC. ON MAY 13, 2015 IN ACCORDANCE WITH THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.



## NOTES

1. TREE INVENTORY PERFORMED NOVEMBER 3, 2021. 108 TOTAL SIX INCH DIA TREES COUNTED OF DIFFERENT SPECIES.
2. SITE IS DESIGNATED AS ZONE X, MINIMAL FLOOD HAZARD, PER FEMA FLOOD MAP 33015C0265F, EFFECTIVE DATE 1-29-2021.

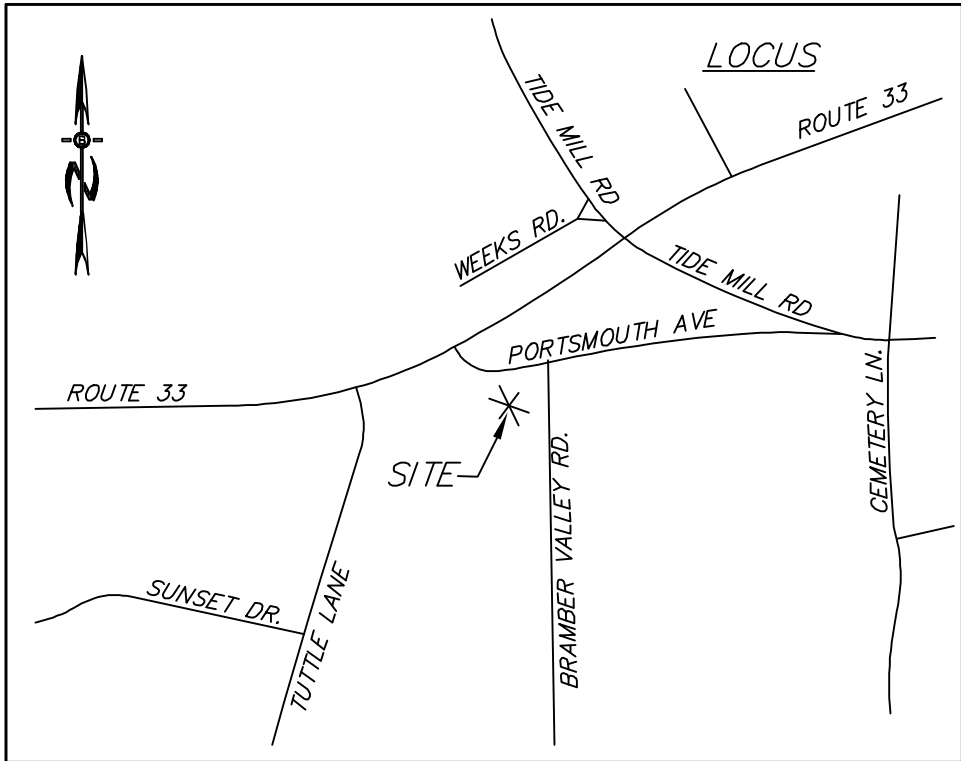


## EXISTING CONDITIONS PLAN

SITE PLAN  
597 & 603 PORTSMOUTH AVE  
GREENLAND, NH

DATE:	SEPT 2021	SCALE:	1"=30'
PROJ. NO:	NH-772.4	SHEET NO.	1 OF 7





LOCATION MAP

SETBACKS/BUFFERS:

ZONE: COMMERCIAL DISTRICT A  
MIN. LOT SIZE = 60,000 W/ 45,000 CONTIGUOUS UPLAND  
MIN. FRONTAGE = 200'  
MIN. WIDTH = 80'  
MAX. HEIGHT = 35'  
MIN. OPEN SPACE = 50%  
BUILDING FOOT PRINT MAX = 10,000 S.F.

BUILDING SETBACKS:

FRONT = 30'  
SIDE = 20'/50' ABUTTING RESIDENTIAL  
REAR = 20'/50' ABUTTING RESIDENTIAL  
TIDAL WETLAND = 100'  
INLAND JURISDICTIONAL WETLANDS = 50'  
INLAND JURISDICTIONAL WETLANDS CONTIGUOUS W/ SURFACE WATER = 75'

PROVIDED:

71,802 S.F. - 100% UPLAND  
222.11' ON PORTSMOUTH AVE.  
221.81'  
MAX. PROPOSED 35'  
36,906 S.F. = 51.4%  
6,500 S.F.

54.58' (TO BRAMBER VALLEY DRIVE)  
54.28'  
118.83'  
N/A  
90.42'  
N/A

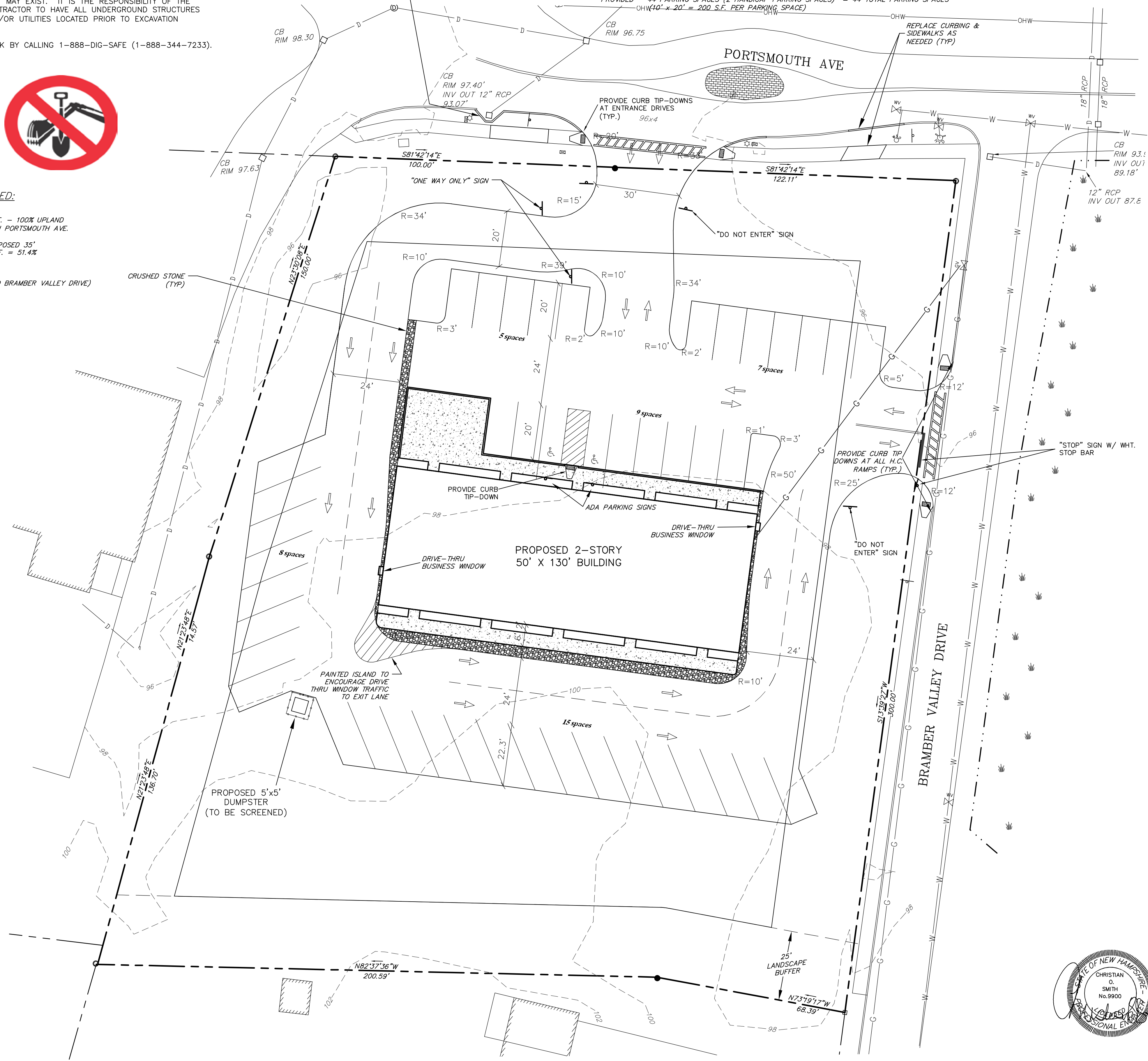


UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION

WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).

PARKING REQUIREMENTS:

BUSINESS & PROFESSIONAL OFFICES - 1 SPACE PER 300 S.F.  
RESTAURANTS - 1-SPACE PER 4-SEATS + 1 PER 2-EMPLOYEES  
REQUIRED - 11,700 S.F. / 300 S.F. (OFFICES AND BANK) = 39 PARKING SPACES  
1,300 S.F. COFFEE SHOP W/NO SEATING, 3 EMPLOYEES = 1.5 SPACES  
TOTAL = 41 SPACES  
PROVIDED - 44 PARKING SPACES (2 HANDICAP PARKING SPACES) = 44 TOTAL PARKING SPACES  
OH(10' x 20' = 200 S.F. PER PARKING SPACE)



LEGEND

- UTILITY POLE
- TEST PIT W/ NO.
- TREE LINE
- EXISTING CONTOUR - 10'
- EXISTING CONTOUR - 2'
- OVERHEAD UTILITIES
- SOILS BOUNDARY LINE
- BUILDING SETBACK LINE
- WETLAND BOUNDARY
- ABUTTING PROPERTY LINE
- EXISTING PROPERTY LINE

APPROVAL BLOCK

APPROVED TOWN OF GREENLAND PLANNING BOARD

CHAIRPERSON DATE

PREPARED FOR:

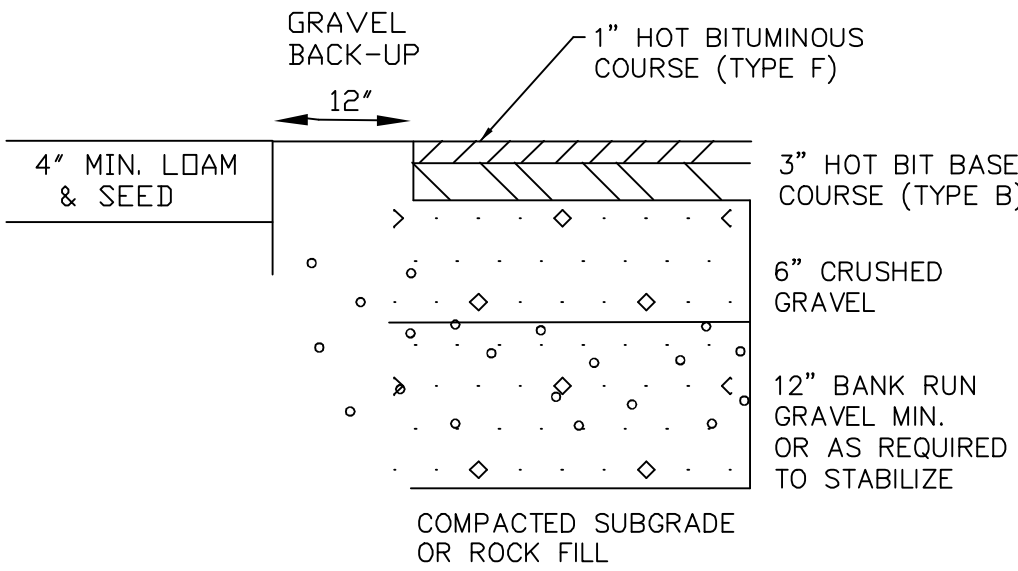
603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840



70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863

NOTES

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. BEALS ASSOCIATES OR ANY OF THEIR EMPLOYEES TAKE NO RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN, THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND UTILITIES OR STRUCTURES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE
2. THIS PLAN HAS BEEN PREPARED FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
3. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
4. ALL CONSTRUCTION AND DRAINAGE WORK TO CONFORM TO TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. ALL PROPOSED SIGNS SHALL CONFORM TO THE TOWN ZONING REGULATIONS.
6. PROJECT IS BASED ON USGS DATUM NAVD 1988. REFERENCE BENCHMARK:
7. THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
8. SEE DETAIL SHEET FOR STANDARD CONSTRUCTION NOTES AND DETAILS.
9. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY AN "AS-BUILT" PLAN IS REQUIRED TO BE PREPARED BY A "COMPETENT" SURVEYOR OR ENGINEER.
10. BOUNDARY SURVEY PERFORMED BY THOMAS BROUILLETTE, LLS (DECEASED) IN SEPTEMBER OF 2015.
11. BUILDING TO HAVE FIRE ALARM SYSTEM INSTALLED.
12. TOTAL PARKING LOT AREA IS APPROX. 14,100 S.F., 3,728 S.F. OF LANDSCAPE AREA IS PROVIDED WITHIN AND AROUND THE PARKING AREAS.



NOTE: IN AREAS OF ROCK EXCAVATION, MINIMUM 9" BANK RUN GRAVEL SHALL BE PLACED

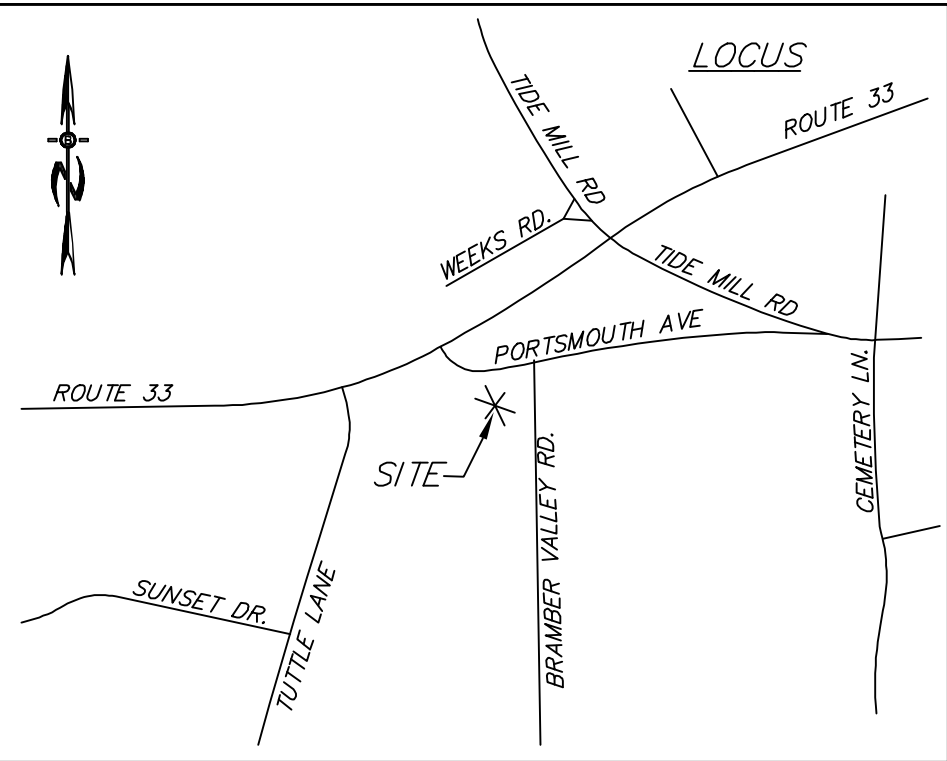
TYPICAL PAVEMENT SECTION  
NEW ASPHALT - NTS

PARKING & PAVEMENT PLAN

SITE PLAN  
597 & 603 PORTSMOUTH AVE  
GREENLAND, NH

DATE: SEPT 2021 SCALE: 1"=20'  
PROJ. NO: NH-772.4 SHEET NO. 2 OF 7





## LOCATION MAP

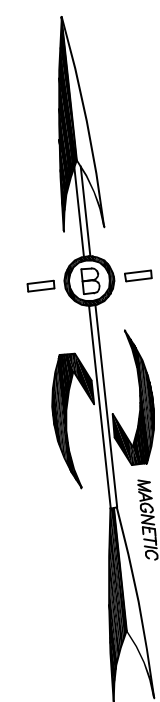
### SETBACKS/BUFFERS:

ZONE: COMMERCIAL DISTRICT A

MIN. LOT SIZE = 60,000 W/ 45,000 CONTIGUOUS UPLAND  
MIN. FRONTAGE = 200'  
MIN. WIDTH = 80'  
MAX. HEIGHT = 35'  
MIN. OPEN SPACE = 50%  
BUILDING FOOT PRINT MAX = 10,000 S.F.

### BUILDING SETBACKS:

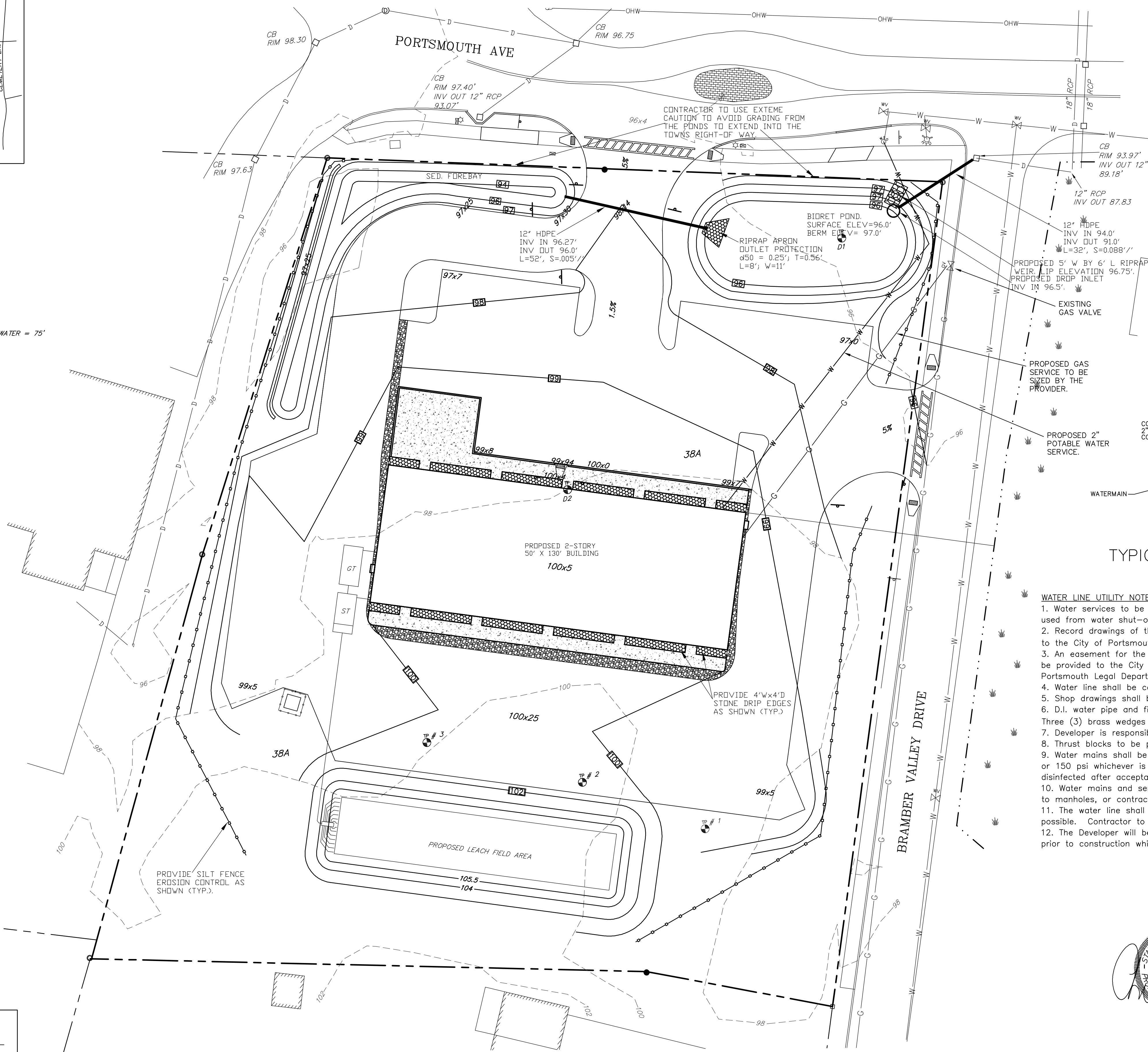
FRONT = 30'  
SIDE = 20'/50' ABUTTING RESIDENTIAL  
REAR = 20'/50' ABUTTING RESIDENTIAL  
TIDAL WETLAND = 100'  
INLAND JURISDICTIONAL WETLANDS = 50'  
INLAND JURISDICTIONAL WETLANDS CONTIGUOUS W/ SURFACE WATER = 75'



### APPROVAL BLOCK

APPROVED TOWN OF GREENLAND PLANNING BOARD

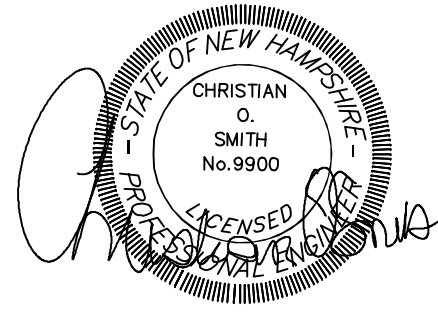
CHAIRPERSON \_\_\_\_\_ DATE \_\_\_\_\_



## TYPICAL WATER SERVICE CONNECTION

### WATER LINE UTILITY NOTES:

- Water services to be copper from main to water shut-off. Plastic with tracer wire may be used from water shut-off to building.
- Record drawings of the water line shall be prepared in digital format acceptable to the City and submitted to the City of Portsmouth DPW for approval. Plans need to be stamped by a registered land surveyor/engineer.
- An easement for the as-built water line and appurtenances including services up to the water shut-offs shall be provided to the City of Portsmouth. Easement Plans and descriptions shall be approved by the City of Portsmouth Legal Department.
- Water line shall be constructed per City of Portsmouth requirements.
- Shop drawings shall be submitted to City of Portsmouth for review and approval.
- D.I. water pipe and fittings shall be bagged and sealed with low density polyethylene encasement.
- Three (3) brass wedges shall be installed at all non-conductive pipe joints.
- Developer is responsible to obtain all permits and approvals required for the construction activity.
- Thrust blocks to be provided at all bends, tees, mechanical joints and fire hydrants.
- Water mains shall be hydrostatically pressure tested for leakage at 1.5 times the working pressure or 150 psi whichever is greater in accordance with AWWA Standard C 600. Water mains shall be disinfected after acceptance of pressure test in accordance with AWWA Standard C 651.
- Water mains and service pipes shall have a minimum 12" vertical and 24" horizontal separation to manholes, or contractor shall install 4" of rigid insulation in 2" lifts for freezing protection.
- The water line shall be gradually deepened at drainage crossings without the use of fittings where possible. Contractor to request City of Portsmouth approval for use of fittings on a case by case basis.
- The Developer will be required to enter into a Water Service agreement with the City of Portsmouth prior to construction which will include requirements for construction, transfer of assets, maintenance bond.



PREPARED FOR:

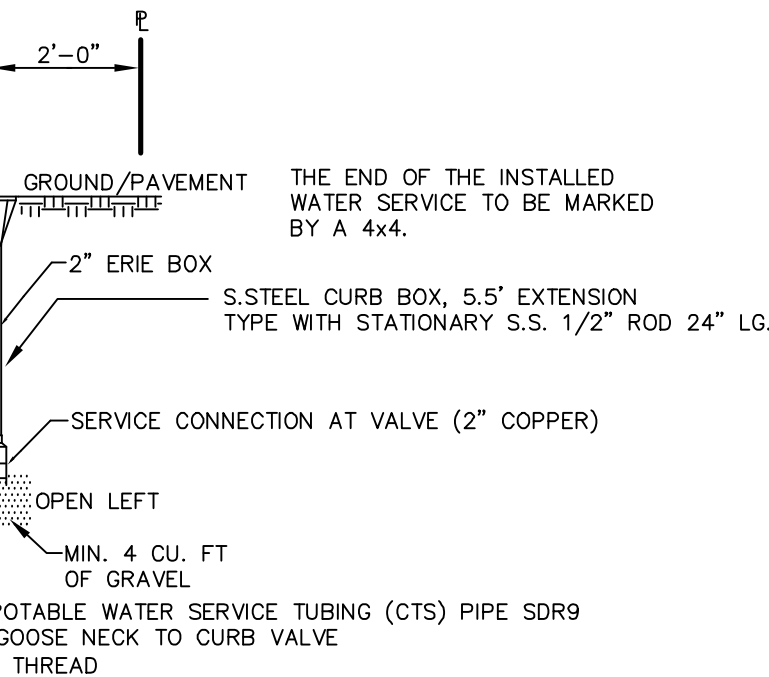
603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840

**BA**  
**BEALS**  
ASSOCIATES, PLLC

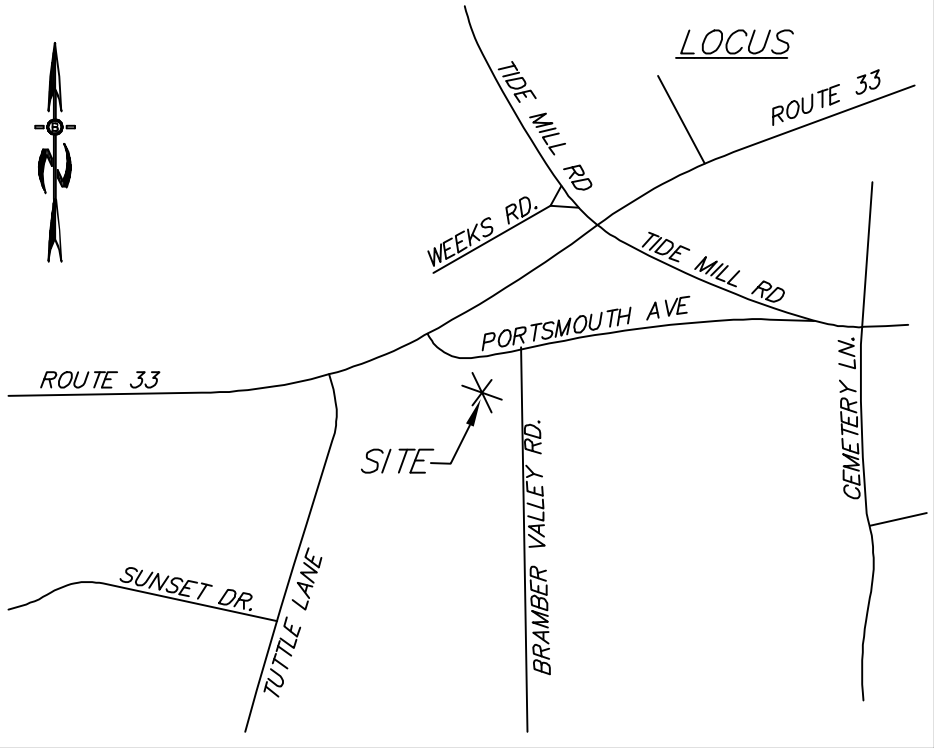
70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863

### NOTES

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- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR, ENGINEER TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY.
- ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM TO THE TOWN STANDARD SPECIFICATIONS AND TO M.H.D.C.T. STANDARDS AND REGULATIONS.
- ALL DRAINAGE STRUCTURE AND SWALES WILL BE BUILT AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
- SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.
- THE SIDEWALK AND ASPHALT IN BRAMBER VALLEY DR. SHALL BE PATCHED AFTER INSTALLATION OF DRAINAGE AND WATER.
- SEE ADDITIONAL NOTES ON DETAIL SHEET.







## LOCATION MAP

### PLANTING NOTES:

1. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
2. A 4-INCH DEEP SHREDDED PINE BARK SHALL BE INSTALLED UNDER ALL SHRUBS, AND IN ALL PLANTING BEDS, AS DIRECTED BY OWNER. ALL TREES SHALL BE BAILED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER.
3. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
4. LOAM AND SEED ALL AREAS NOT OTHERWISE NOTED.
5. DO NOT INSTALL LOAM IN AREAS OF EXISTING TREES TO REMAIN.
6. THE LANDSCAPING OF THE SITE DEPICTED ON THIS PLAN IS INTEGRAL TO THE APPROVAL BY THE GREENLAND PLANNING BOARD AND SHALL BE REASONABLY MAINTAINED AND WHEN DEAD OR REMOVED, MUST BE REASONABLY REPLACED.

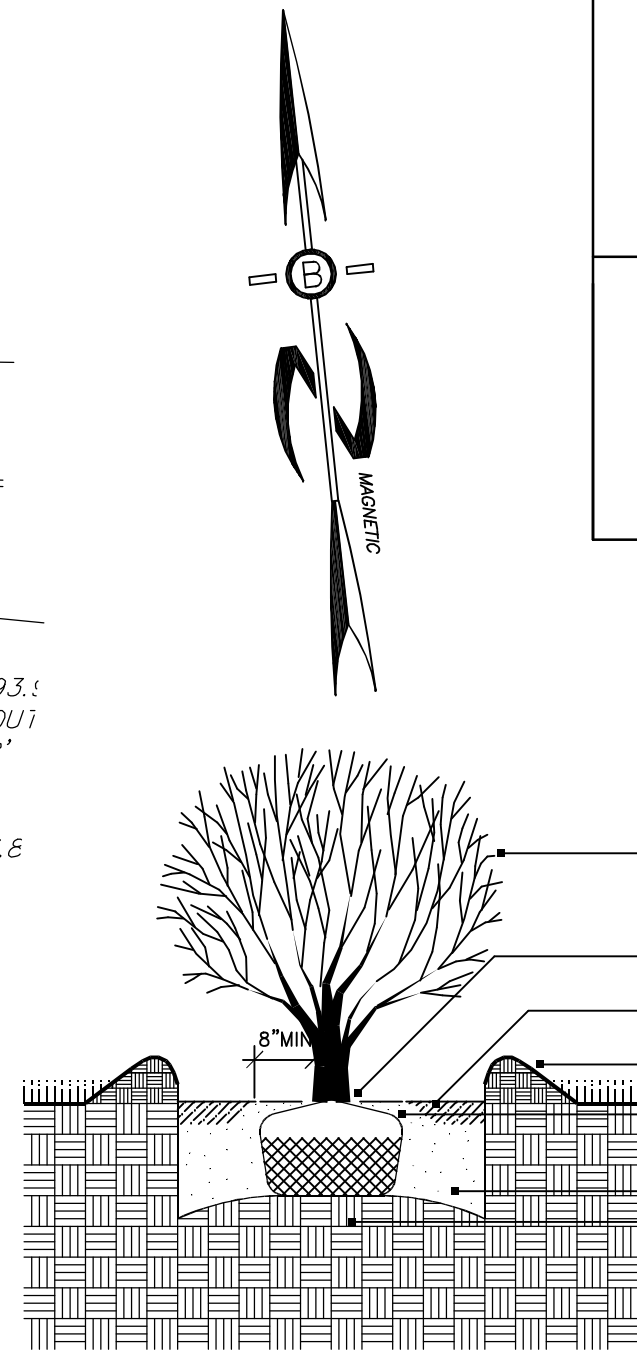
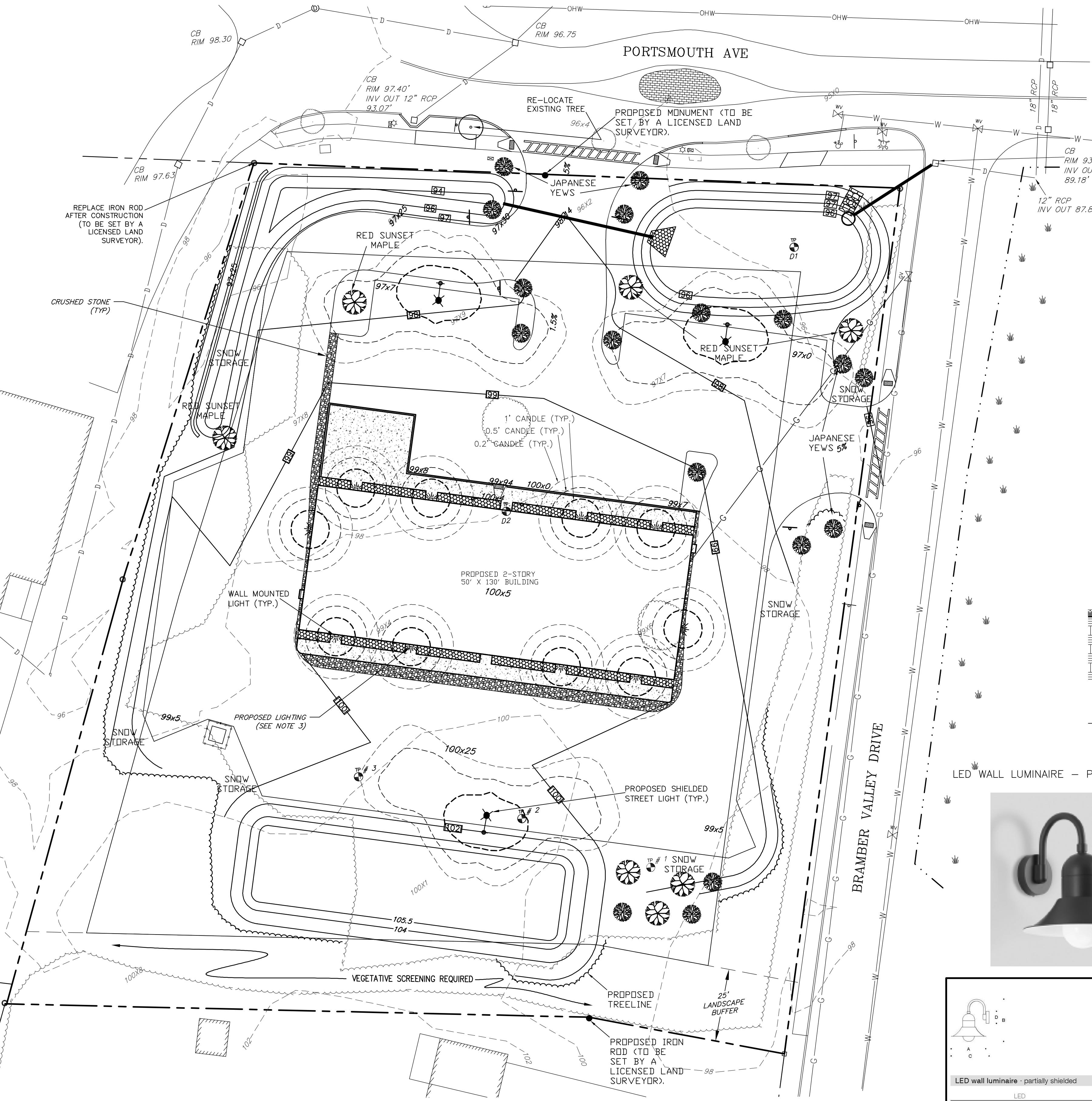
### GENERAL NOTES:

1. A BOND FOR 20% OF THE SITE LANDSCAPE COSTS WILL BE HELD BY THE TOWN FOR 2-GROWING SEASONS AFTER COMPLETION.
2. LANDSCAPING REQUIRED BASED ON 57,523 S.F. OF TOTAL DISTURBANCE = 57523/500=115 TREES. WITH THE CREDIT FOR EXISTING TREES (108) PLUS THE PROPOSED 24 TO BE PLANTED RESULTS IN 132 TREES PROVIDED.
3. BUILDING MOUNTED DAR SKY COMPLIANT WALL PACKS TO BE INSTALLED TO MEET MUNICIPAL REQUIREMENTS FOR MINIMUM ILLUMINANCE FOR PARKING AREA. SEE DETAIL SHEET 6.

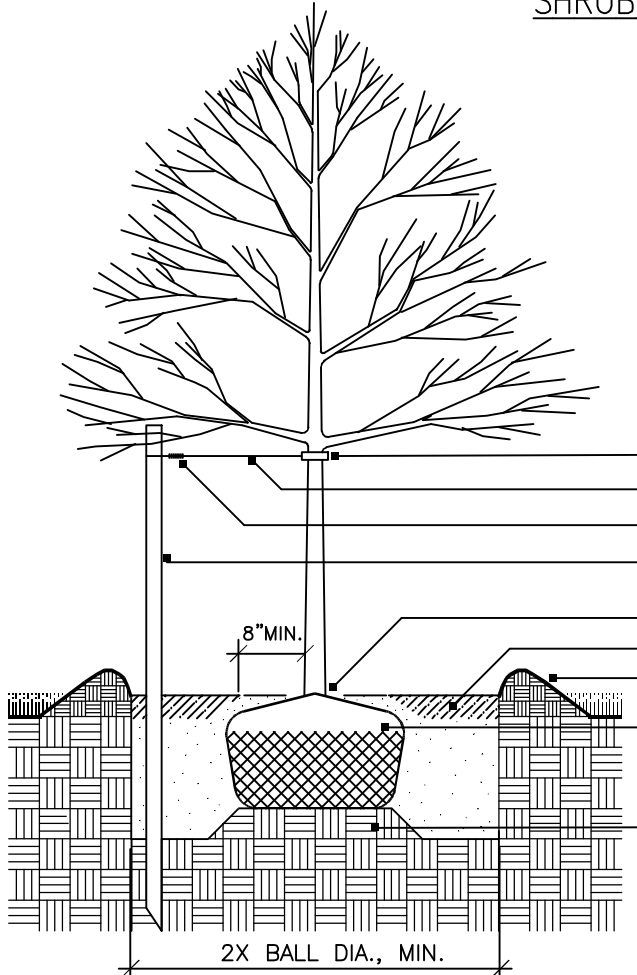
POLE TOP LUMINAIRE W/ ASYMMETRICAL LIGHT DISTRIBUTION



Single pole-top luminaires					
Lamp	LEED	A	B	C	
77911	42.8W LED	LZ-2	26%	46%	40%
Recommended for use with 14' to 18' poles.					



SHRUB PLANTING - BALL & BURLAP  
NOT TO SCALE



DECIDUOUS TREE PLANTING WITH STAKE AND WIRE TIE - HEAVY DUTY

NOTE: STAKING TO BE USED IN PARKING ISLANDS AND OTHER CONFINED AREAS AS NECESSARY TO AVOID CONFLICTS WITH PEDESTRIANS

LED WALL LUMINAIRE - PARTIALLY SHIELDED



LED wall luminaire - partially shielded				
	LED	A	B	C D
66411	8.9W	12%	14%	13% 4%

PREPARED FOR:

603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840

**BA**  
**BEALS**  
ASSOCIATES, PLLC

70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863

StateArea\_1  
11/11/2010 (F)  
Average = 0.21  
Maximum = 0.21  
Minimum = 0.0  
Avg/Min Ratio = N/A.  
Max/Min Ratio = N/A.

Symbol	Code	Label	Arrangement	Description	Notes	Qty
★	1	LED	SHIELD	8.9W LED LUMINAIRE (12"x14" POLE)	100-000	10
★	2	LED	SHIELD	8.9W LED LUMINAIRE (12"x14" POLE)	100-000	10

NOTES:  
ALL PROPOSED LIGHTING TO BE DOWN CAST.  
STREET LIGHTS SHALL BE BLACK LIGHT HEADS WITH METAL POLES

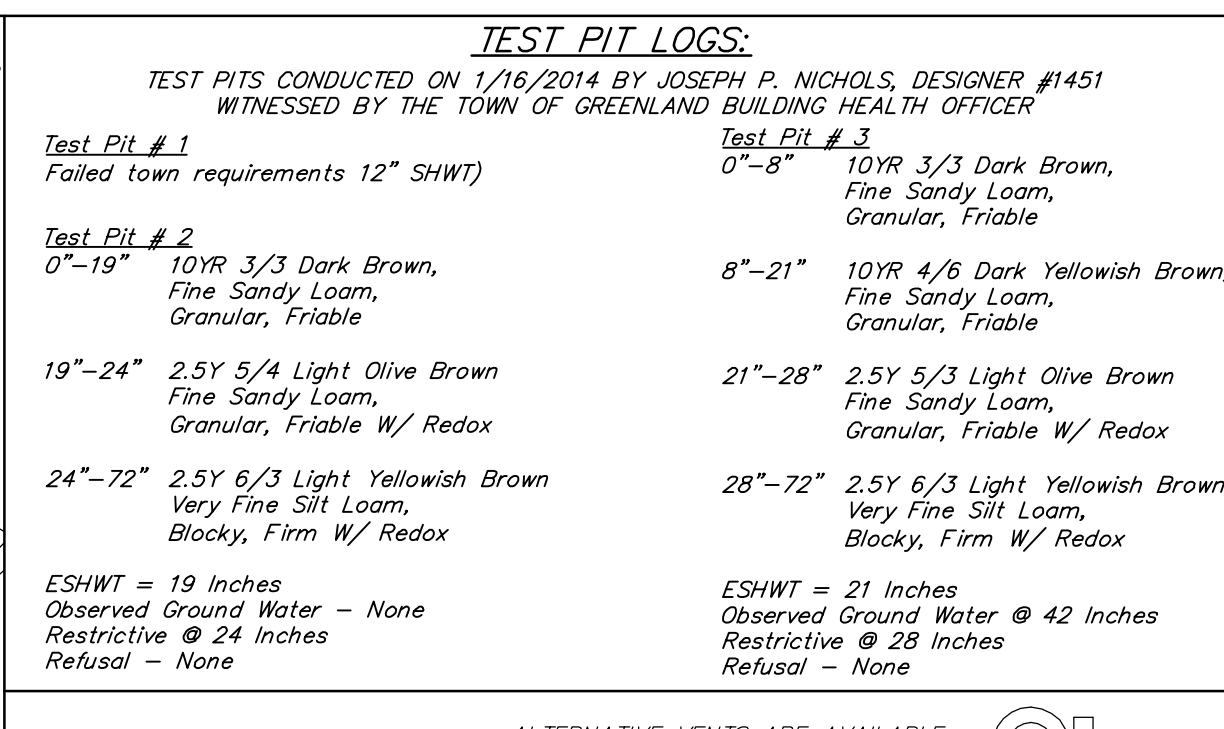
REVISED PER ENGINEERING REVIEW	12-15-21
REVISED PER ENGINEERING REVIEW	11-9-21
REVISIONS:	DATE:

## LIGHTING/LANDSCAPE PLAN

SITE PLAN  
597 & 603 PORTSMOUTH AVE  
GREENLAND, NH

DATE:	SEPT. 2021	SCALE:	1"=20'
PROJ. NO:	NH-772.4	SHEET NO.	4 OF 7



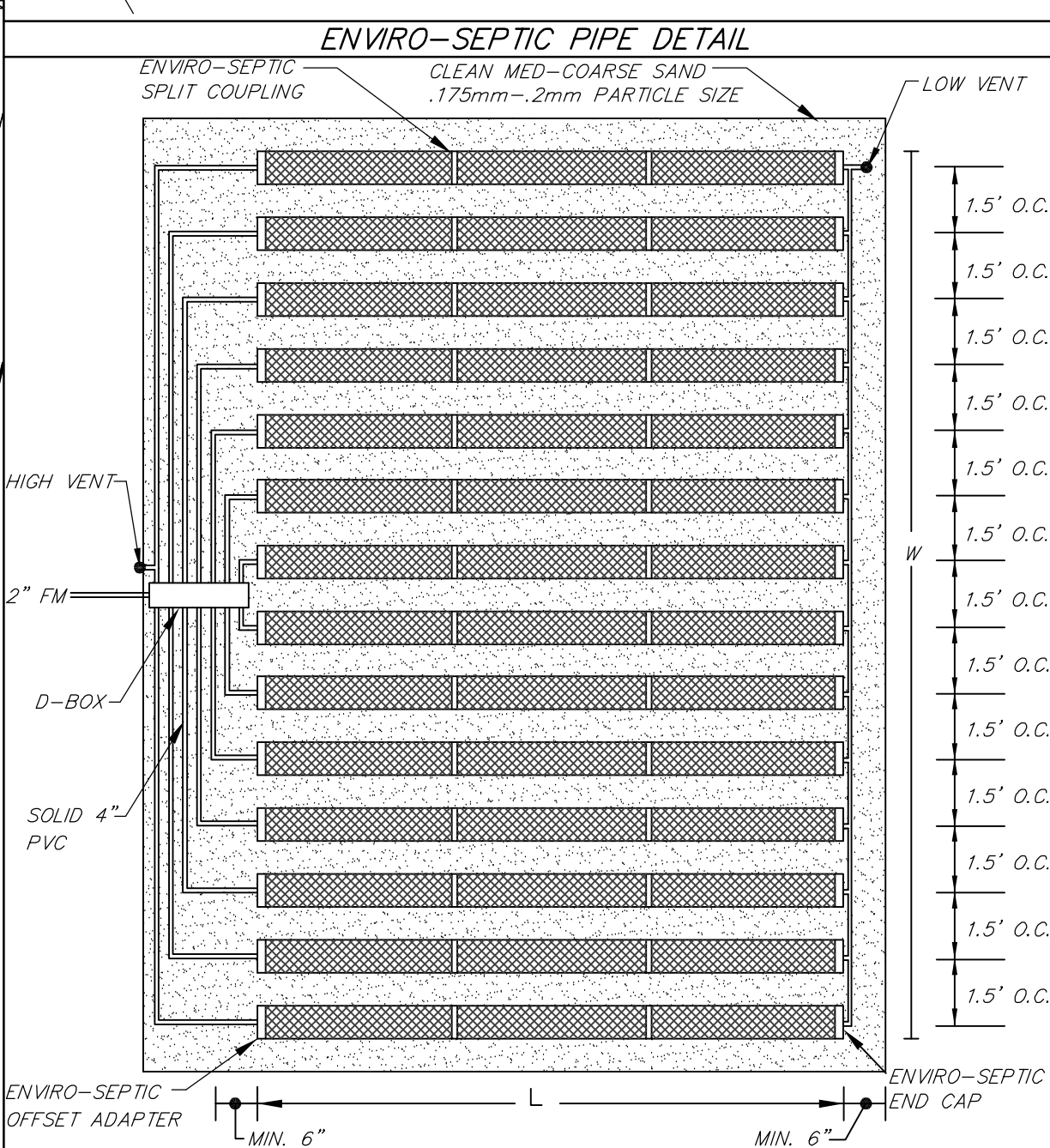
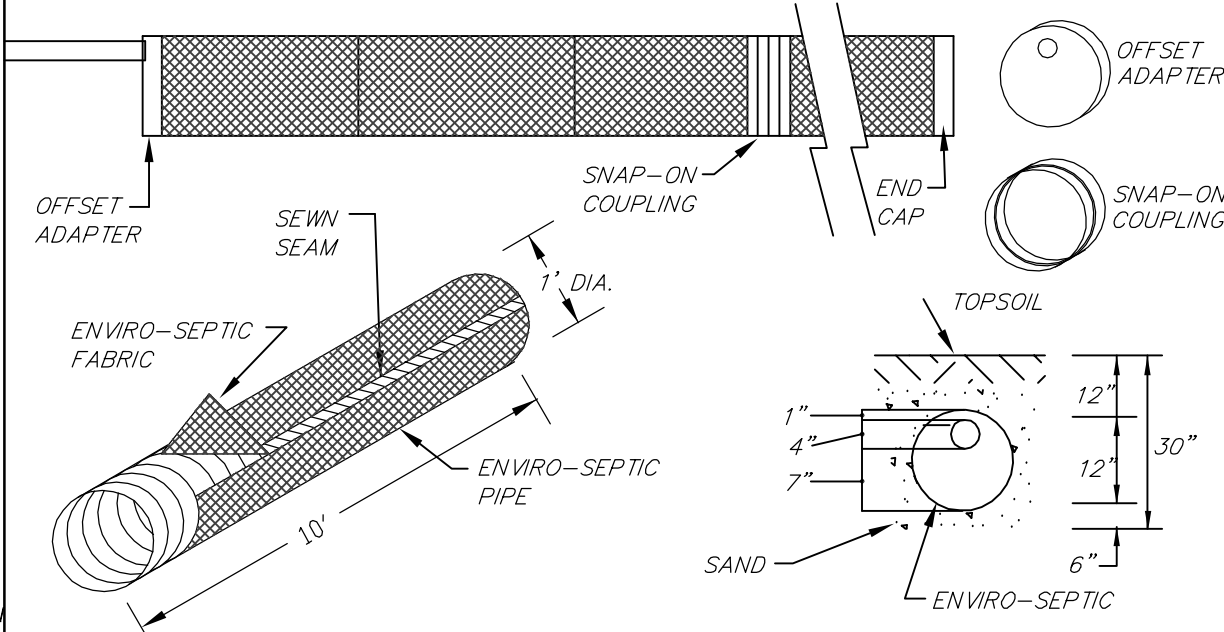


**SEPTIC TANK SIZE**  
2,060 GAL. X 70% = 1,442 GAL. + 1,500 GAL. = 2,942 GAL.  
**GREASE TRAP**  
1.5 (36 HR DETENTION) X 2,060 GALLONS = 3,090 GAL.

**STANDARD TRENCH DETAIL**  
FOR EFFLUENT SEWER OR FORCEMAIN  
N.T.S.

**SITE NOTES:**

- SILL ELEVATION SHOWN IS FOR PERMITTING ONLY; THE CONTRACTOR IS RESPONSIBLE TO SET THE APPROPRIATE SILL ELEVATION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE FOUNDATION IN SUCH A MANNER AS TO PREVENT WATER INFILTRATION IN THE BASEMENT.



**NICHOLS ENVIRONMENTAL, LLC.**

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FREMONT, NH 03044  
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Office: 603-244-5325  
Cell: 603-234-3228

LOCUS

ROUTE 33

WEEKS RD

TIDE MILL RD

PORTSMOUTH AVE

CEMETERY LN

POST ROAD (ROUTE 154)

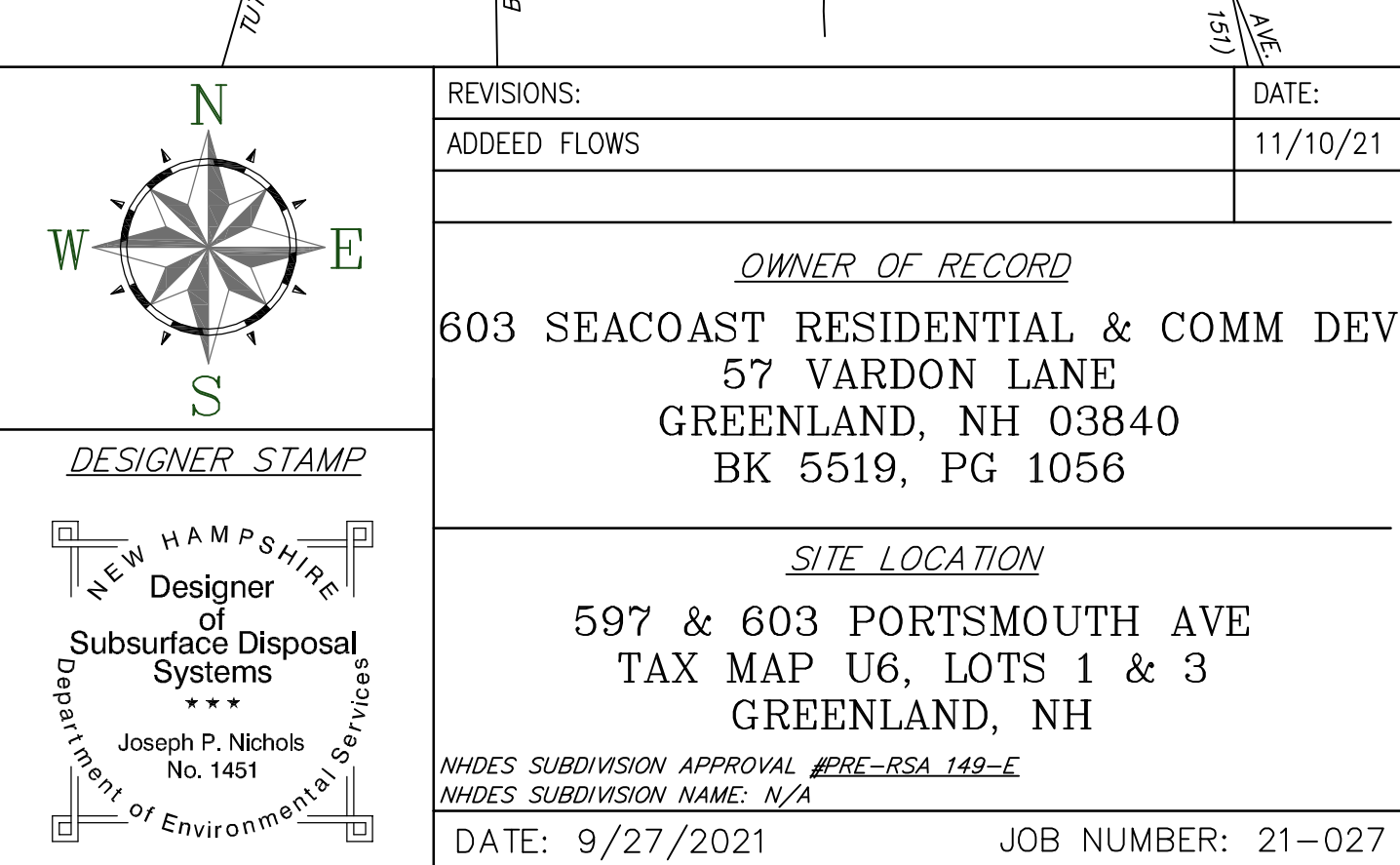
PARK

SUNSET DR

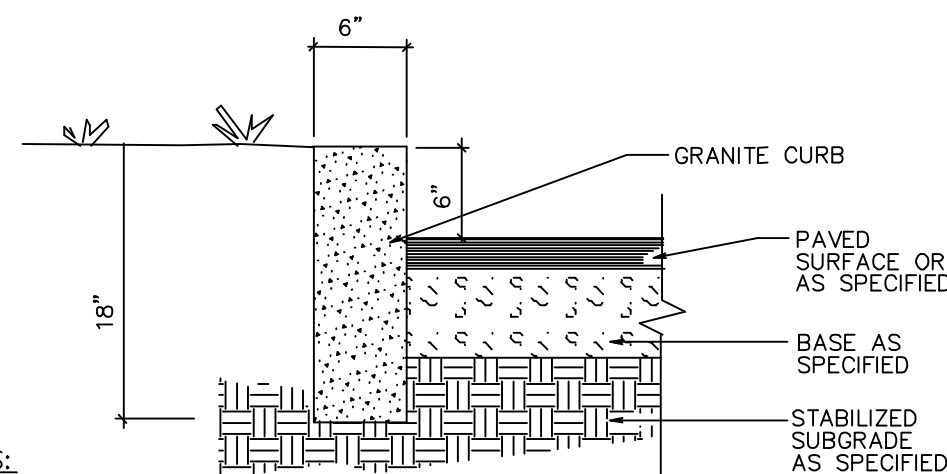
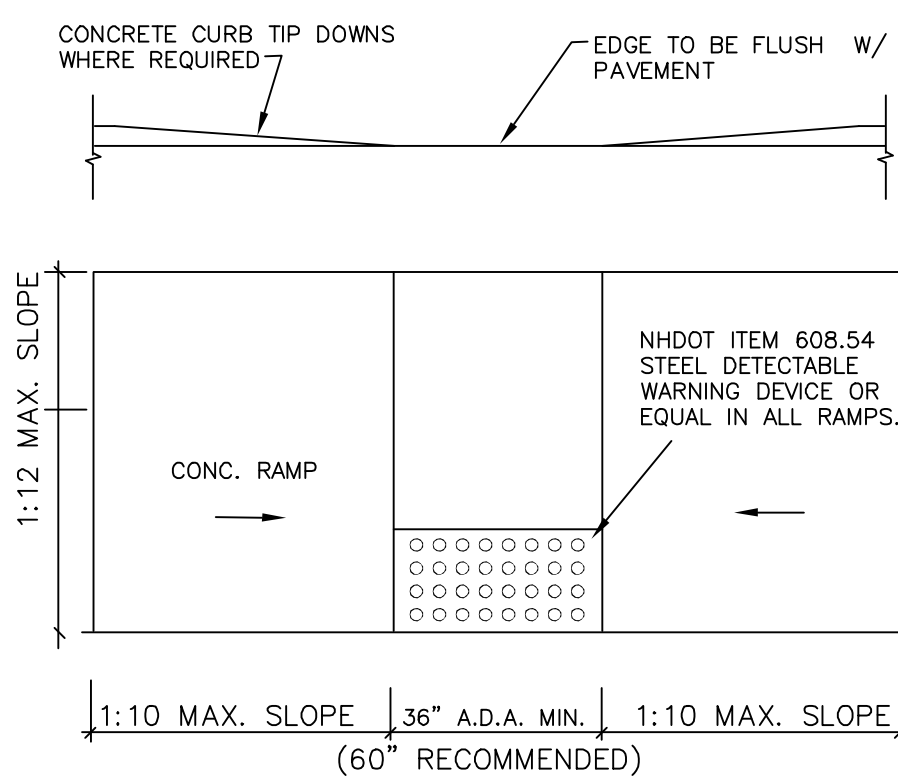
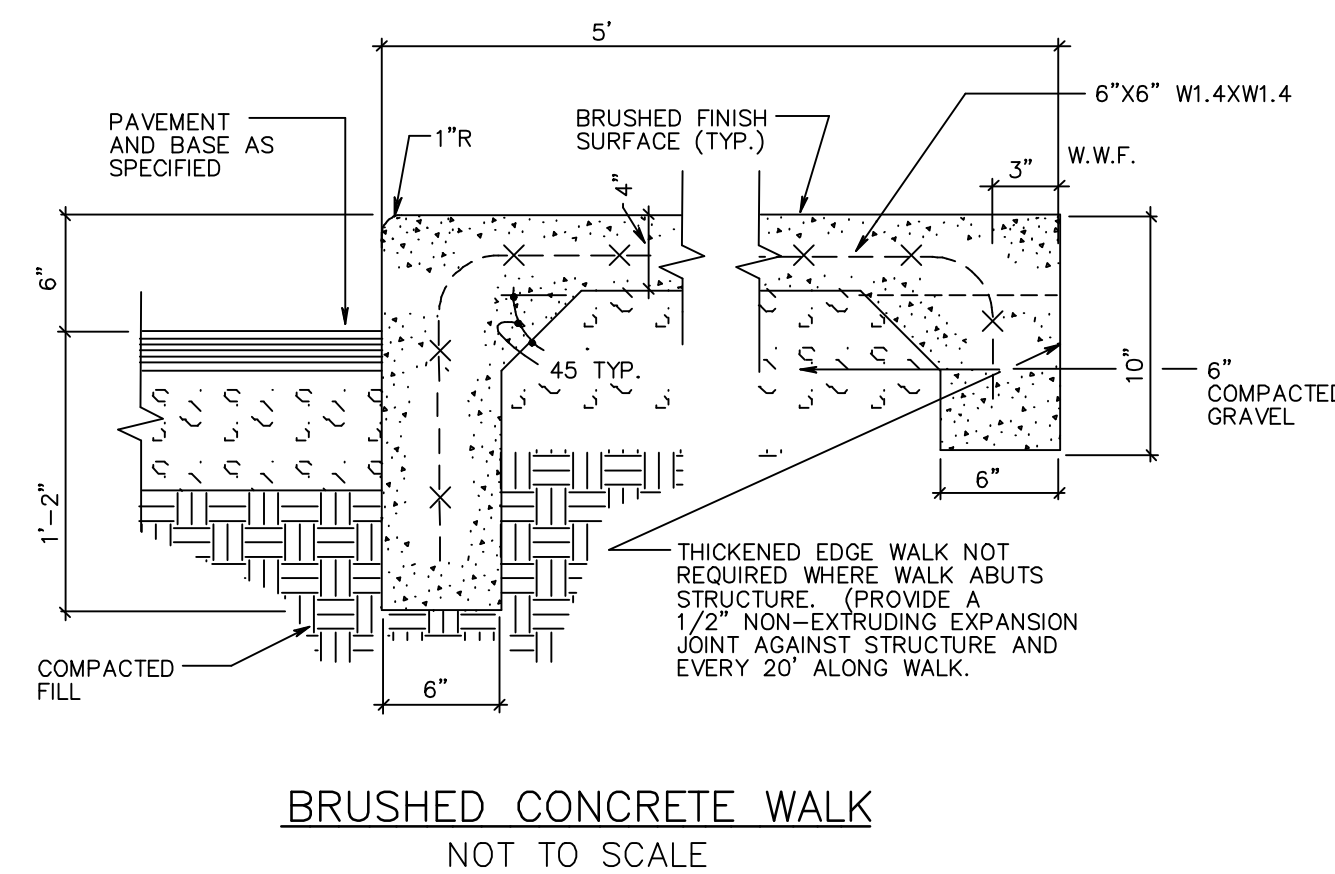
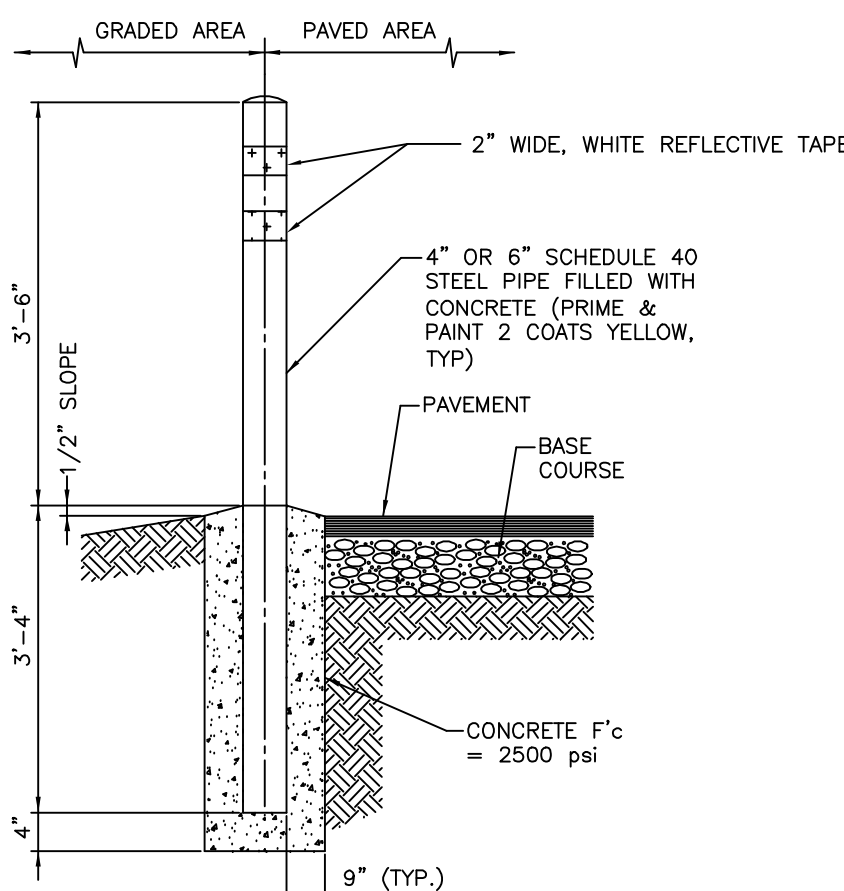
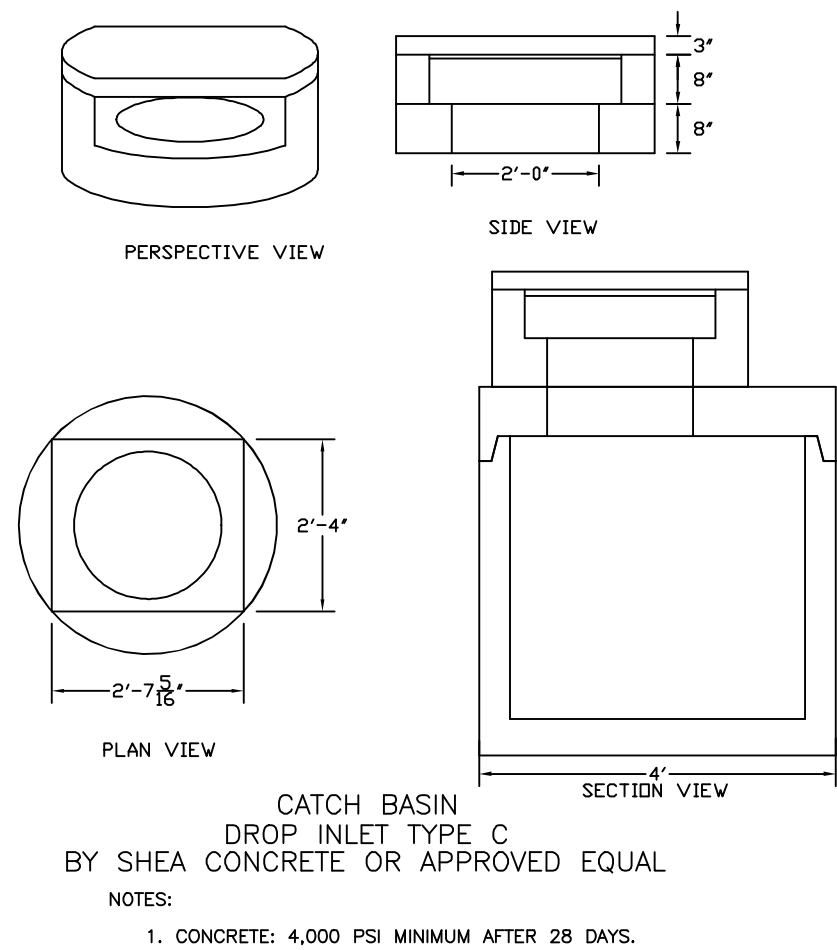
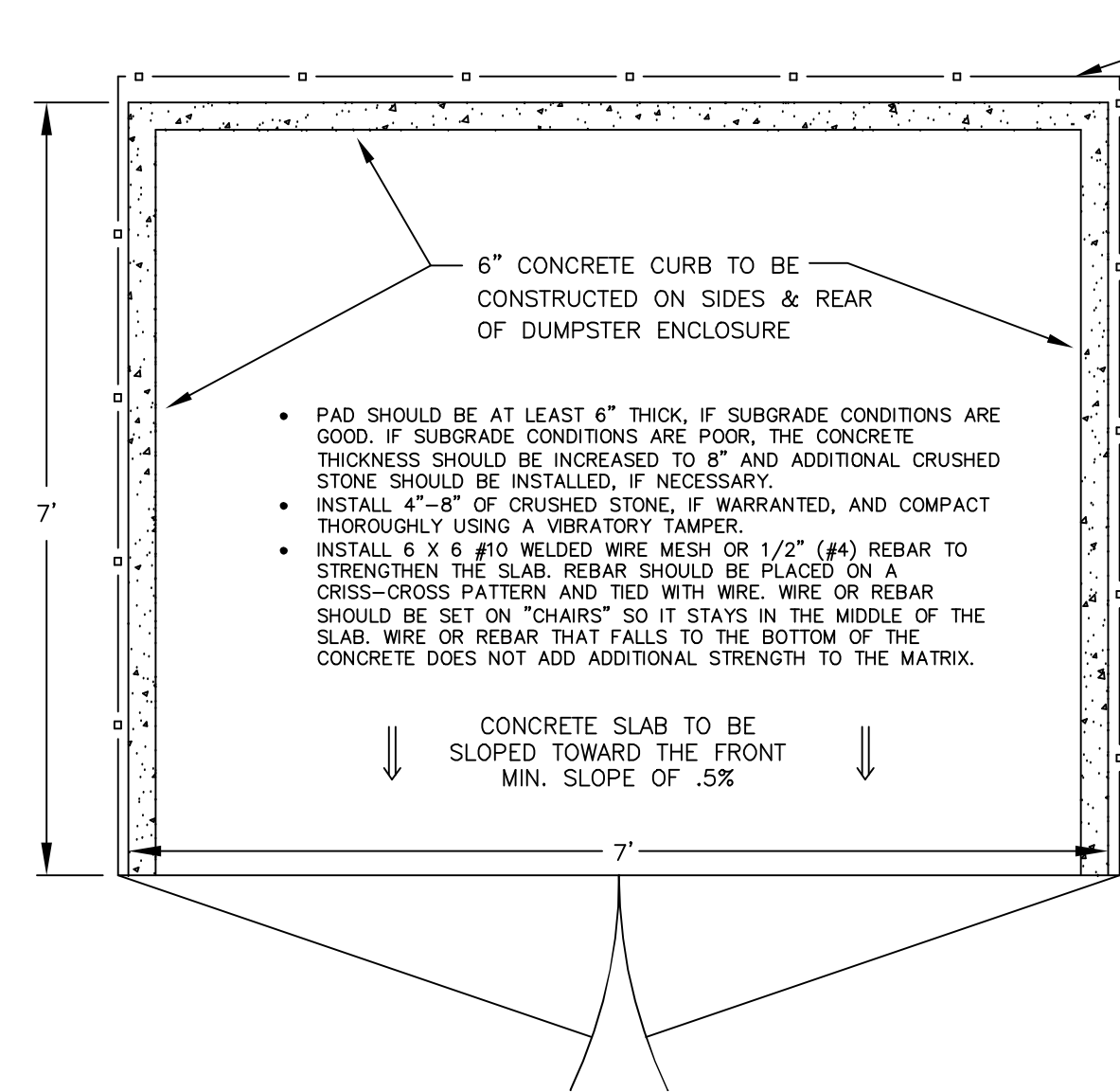
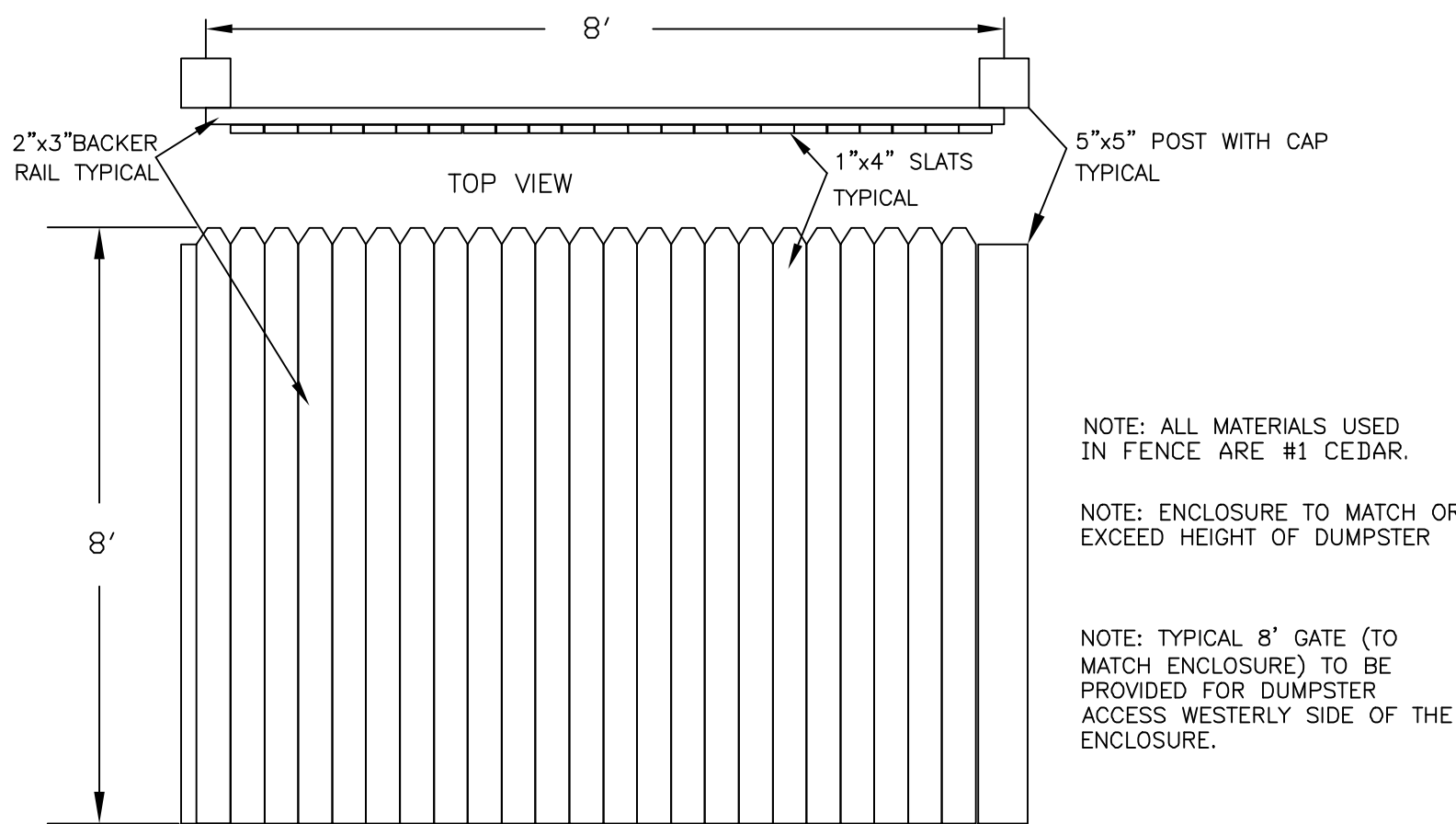
TILE LAKE

RAMBER VALLEY RD

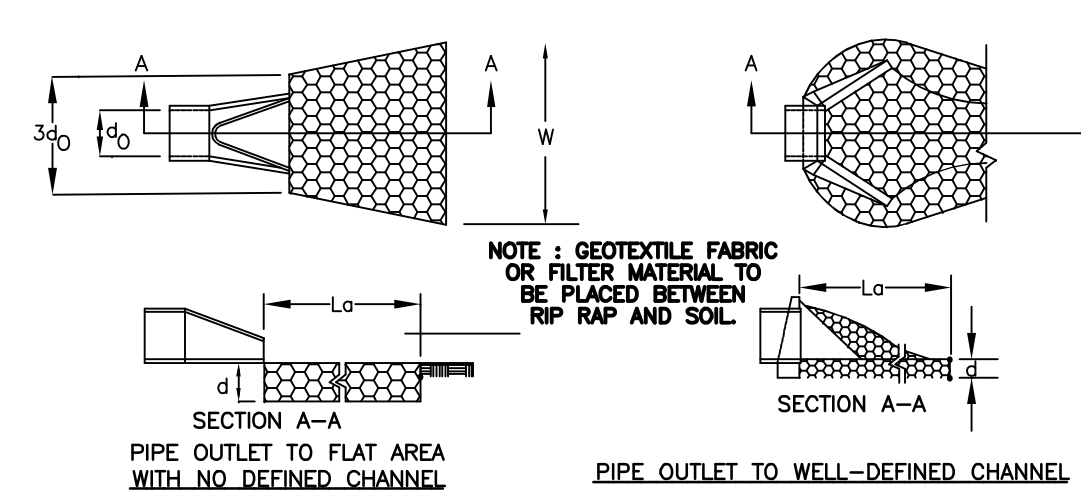
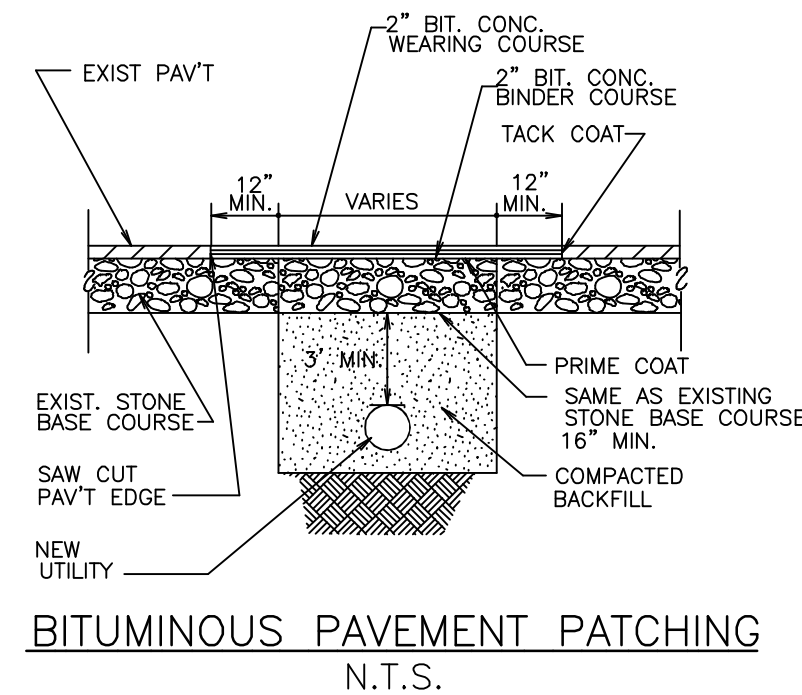
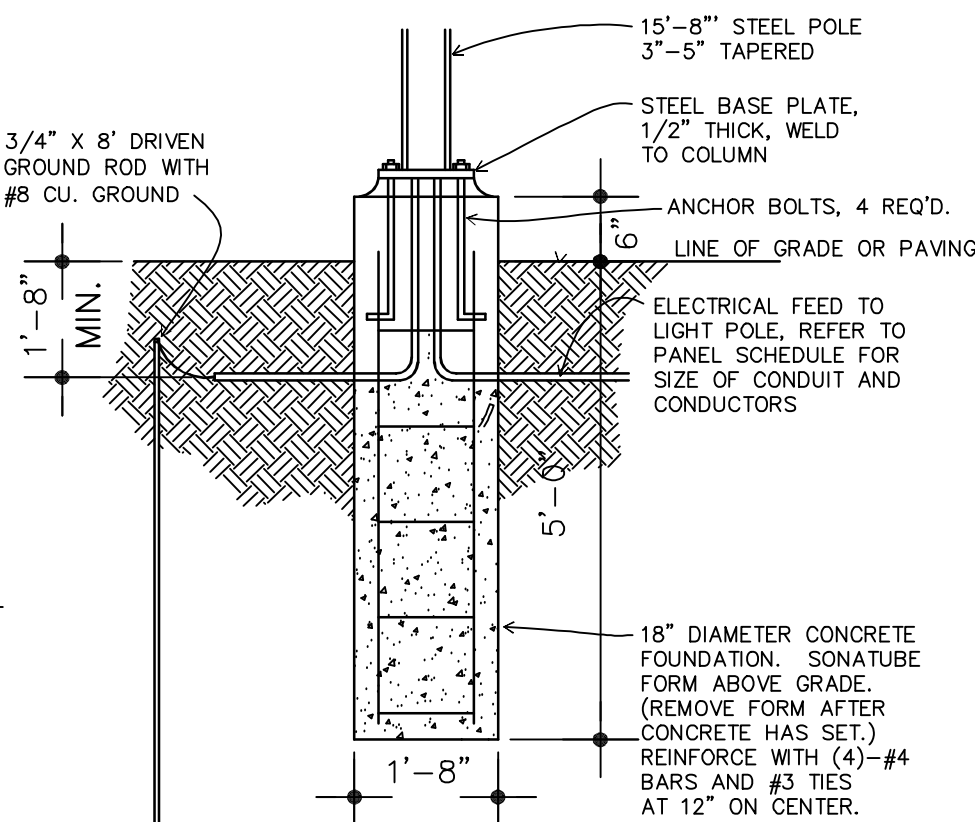
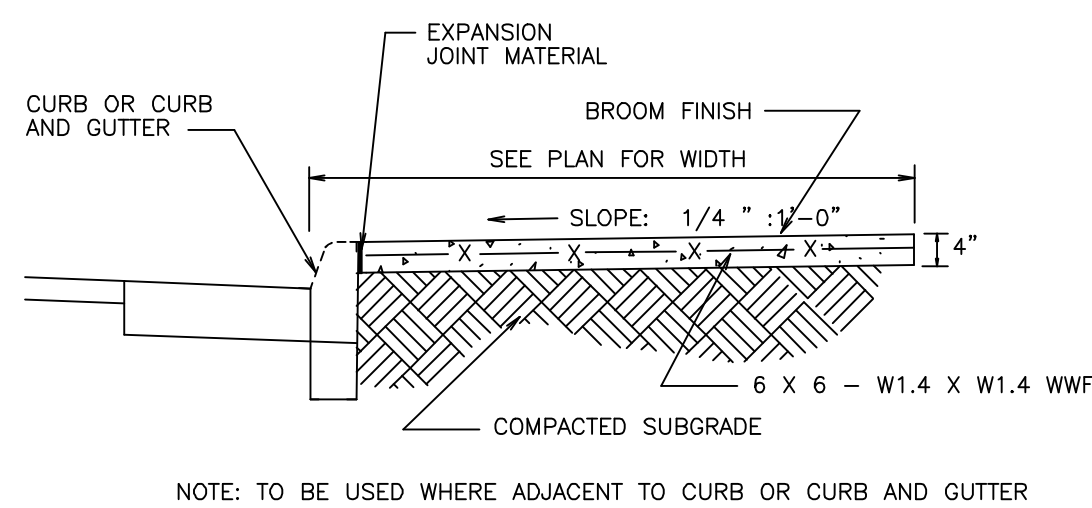
SITE







- NOTES:
- EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
  - JOINTS BETWEEN STONES SHALL BE MORTARED.

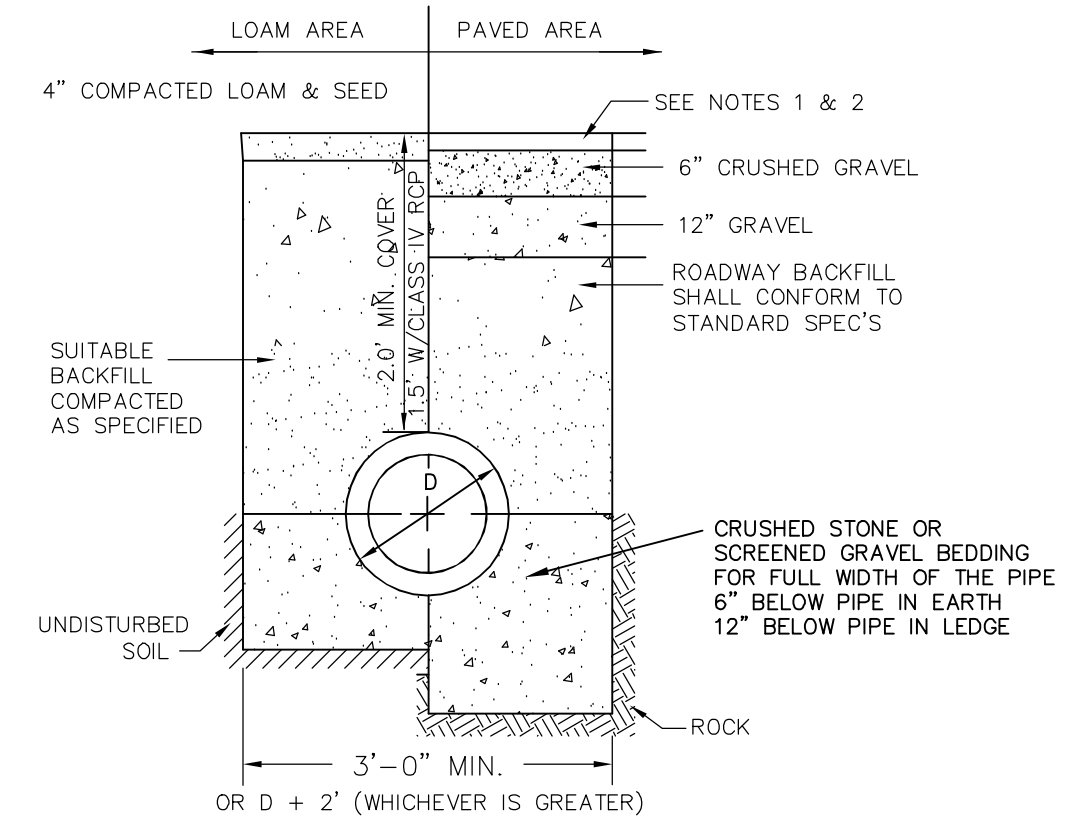


- CONSTRUCTION SPECIFICATIONS
- THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
  - THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION. 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM 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 INCHES.
  - 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.
  - STONE FOR RIPRAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE-THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT.
  - FLAT ROCKS SHALL NOT USED FOR RIP RAP. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.
- 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 REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET 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 TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

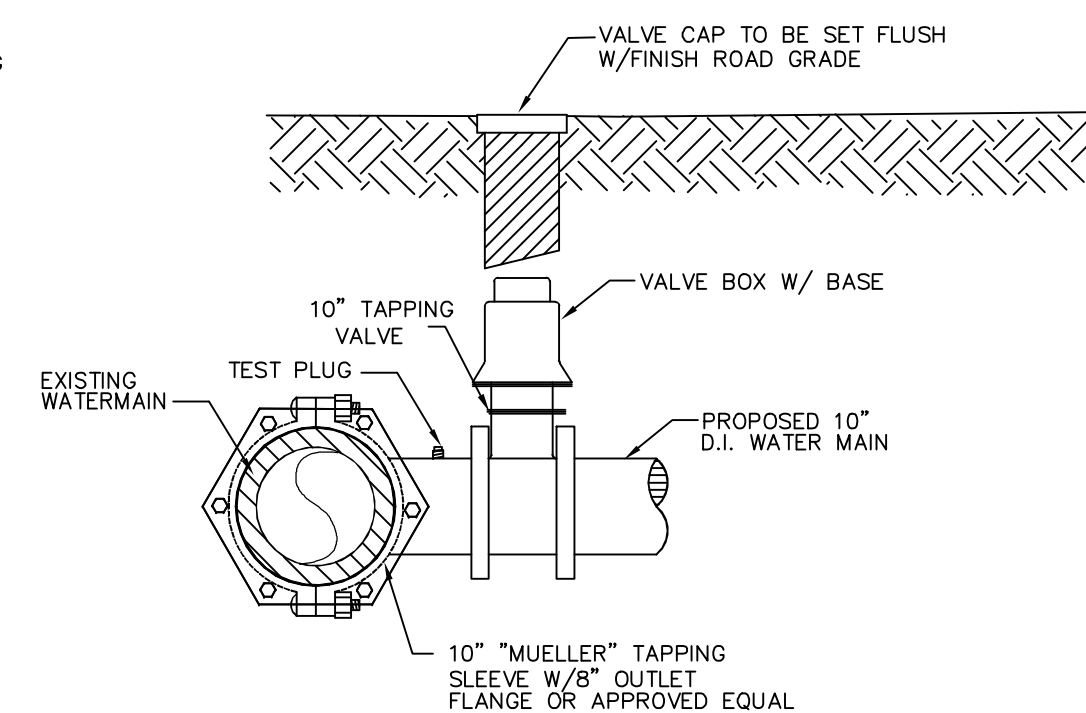
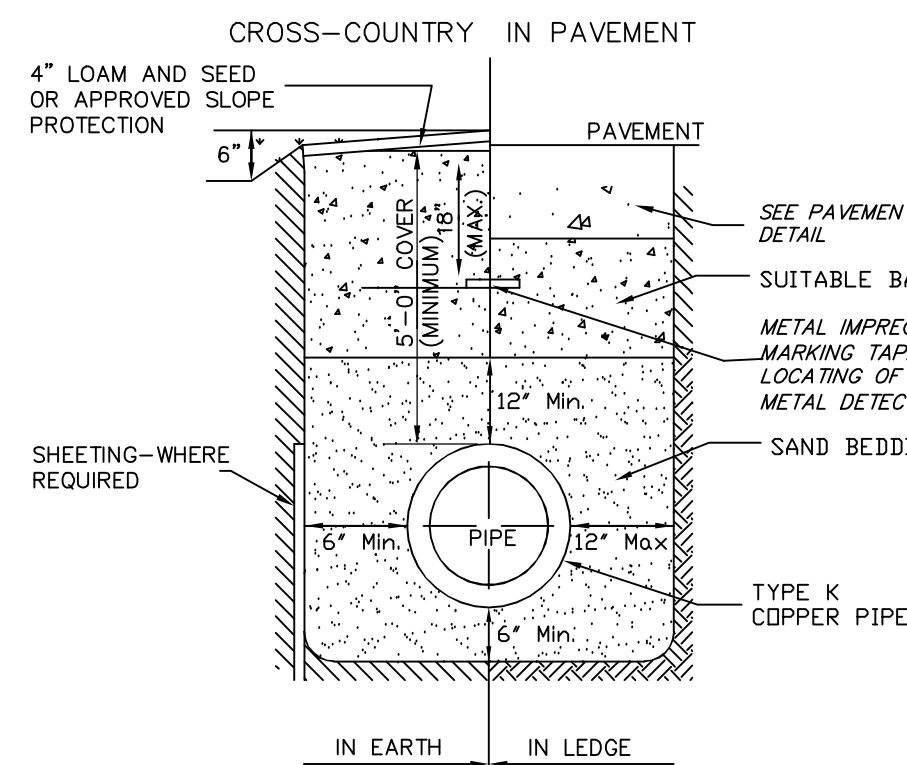
PIPE OUTLET PROTECTION

TABLE 7-24-RECOMMENDED RIP RAP GRADATION RANGES

d50 SIZE=	0.25	FEET	3	INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE(INCHES) FROM	TO		
100%	5	6		
85%	4	5		
50%	3	5		
15%	1	2		



- NOTES:
- PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
  - NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.



PREPARED FOR:

603 SEACOAST RESIDENTIAL & COMMERCIAL DEV  
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GREENLAND, NH 03840

**BA BEALS**  
ASSOCIATES, PLLC

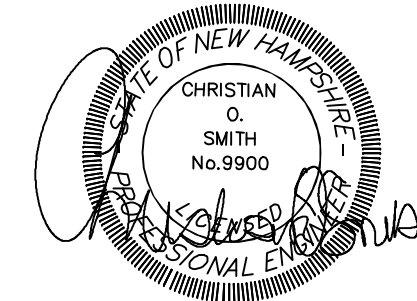
70 PORTSMOUTH AVE,  
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STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863

REVISED PER ENGINEERING REVIEW	12-16-21
REVISED PER ENGINEERING REVIEW	11-9-21
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## CONSTRUCTION DETAILS

SITE PLAN  
597 & 603 PORTSMOUTH AVE  
GREENLAND, NH

DATE:	SEPT 2021	SCALE:	1"=20'
PROJ. NO:	NH-772.4	SHEET NO.	6 OF 7





## TEMPORARY EROSION CONTROL MEASURES

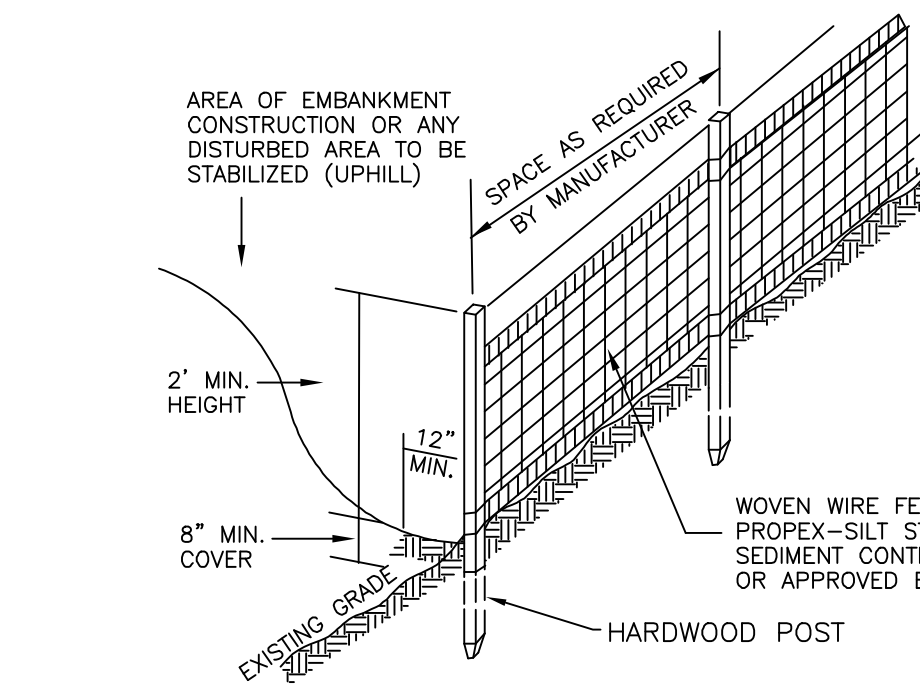
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BE EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED.\*
- PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
  - STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING OF THE SITE.
  - RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPs ARE STABILIZED.
  - STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- EROSION CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT EXCEPT AFTER:
  - CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
  - ROADWAYS AND PARKING AREAS MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR DIRECTED BY THE ENGINEER. ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS.
- DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF SEED PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET.
- SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.5" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
- AREAS MUST BE SEEDED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL.
  - AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    - IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
    - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
    - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED.
    - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

## CONSTRUCTION SPECIFICATIONS

- STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
- STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES IN TO THE SOIL.
- SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP.
- STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
- THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABATE AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING OR VACUUMING.
- THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION, TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW RSA 430:53 AND NH CODE ADMINISTRATIVE RULES AGR 3800. THE PROJECT SHALL MEET ALL REQUIREMENTS AND THE INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- IN THE EVENT THAT GREATER THAN ONE ACRE OF CONTIGUOUS DISTURBANCE OCCURS, THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FOURTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT <http://cfpub.epa.gov/npdes/stormwater/noi/noisearch.cfm>. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

## CONSTRUCTION SEQUENCE

- CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.
- CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.
- CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS.
- EXCAVATE AND STOCKPILE TOPSOIL /LOAM. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED.
- CONSTRUCT THE ROADWAY AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE.
- INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.
- DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVEGETATE ALL DISTURBED AREAS.
- ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.
- FINISH PAVING ALL ROADWAYS.
- LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE CRUSHED STONE COURSE TO DESIGN ELEVATION/REQUIRED COMPACTION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.



## SILT FENCE

### CONSTRUCTION SPECIFICATIONS

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8". 2. THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF.
- PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
- SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED.

### MAINTENANCE

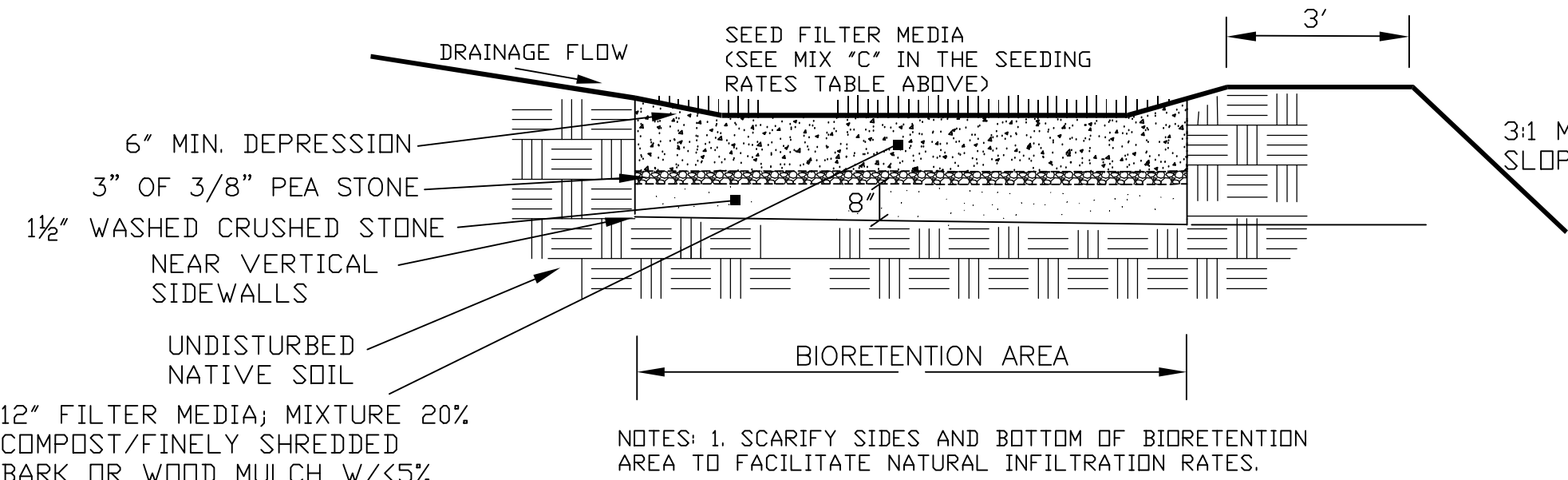
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADOED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

## WINTER MAINTENANCE

- ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.
- ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADOED AND SHAPED.
- PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.
- AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.

## SEEDING SPECIFICATIONS

- GRADING AND SHAPING
  - SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SEEDBED PREPARATION
  - A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
  - B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA, WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- ESTABLISHING A STAND
  - A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
    - AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS PER 1,000 SQ. FT.
    - NITROGEN(N), 50 LBS PER ACRE OR 1. 1 LBS PER 1,000 SQ.FT.
    - PHOSPHATE(P2O5), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.
    - POTASH(K2O), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.(NOTE: THIS IS THE EQUIVALENT OF 500 LBS PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS PER ACRE OF 5-10-10.)
  - B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
  - C. REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET) FOR SEED RATES OF SEEDING. ALL LEGUMES (CROWN VETCH, BIRDS FOOT TREFLOID, AND FLAT PEA) SHALL BE INOCULATED WITH THEIR SPECIFIC INOCULANT.
  - D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
- MULCH
  - A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
  - B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 SQ. FT.
- MAINTENANCE TO ESTABLISH A STAND
  - A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
  - B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
  - C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

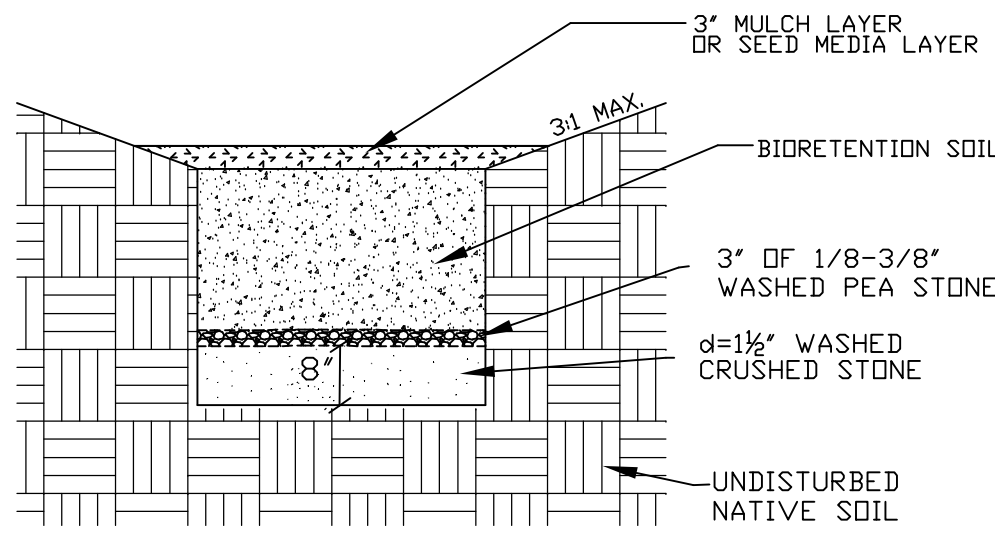


BIORETENTION AREA PROFILE DETAIL

NOT TO SCALE

### DRAINAGE NOTES:

- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
- DO NOT PLACE SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BIO-RETENTION AREA DURING ANY STAGE OF CONSTRUCTION.



BIORETENTION SECTION

NOT TO SCALE

- A. FOR FILTRATION BASIN:
  - DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
  - AFTER THE INFILTRATION SYSTEM AREA IS 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.
  - DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

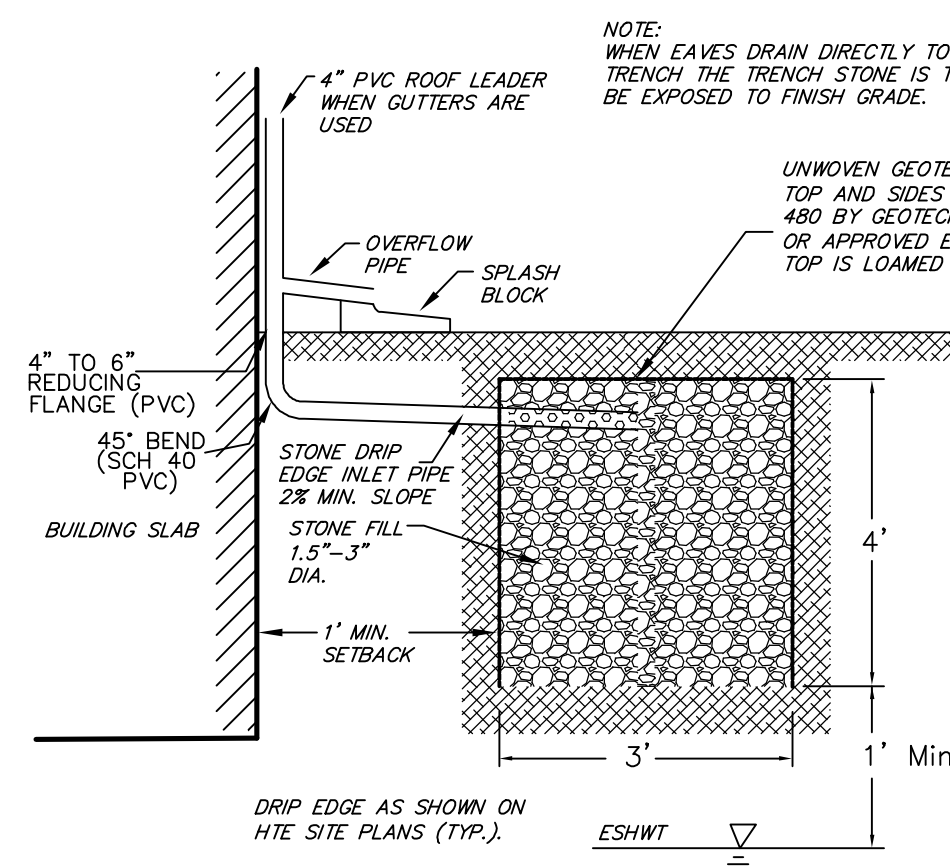
## SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C D	FAIR POOR POOR FAIR	GOOD GOOD GOOD EXCELLENT	GOOD FAIR GOOD EXCELLENT	FAIR FAIR GOOD EXCELLENT
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A B C D	GOOD GOOD GOOD GOOD	GOOD GOOD GOOD EXCELLENT	GOOD FAIR GOOD EXCELLENT	FAIR FAIR FAIR EXCELLENT
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C D	GOOD GOOD GOOD GOOD	GOOD GOOD GOOD GOOD	GOOD FAIR GOOD GOOD	FAIR POOR FAIR EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F G	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	2/ 2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

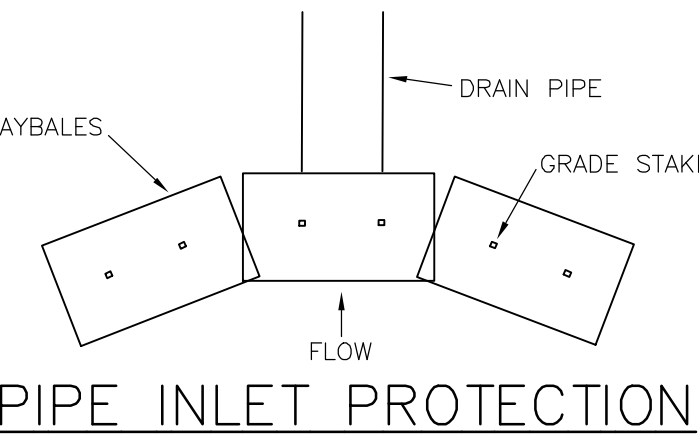
1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36. (PREFERRED MIX INDICATED WITH AN ASTERISK).  
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR DATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCT. 15, IF PERMANENT SEEDING NOT YET COMPLETE.



STONE DRIP EDGE SECTION

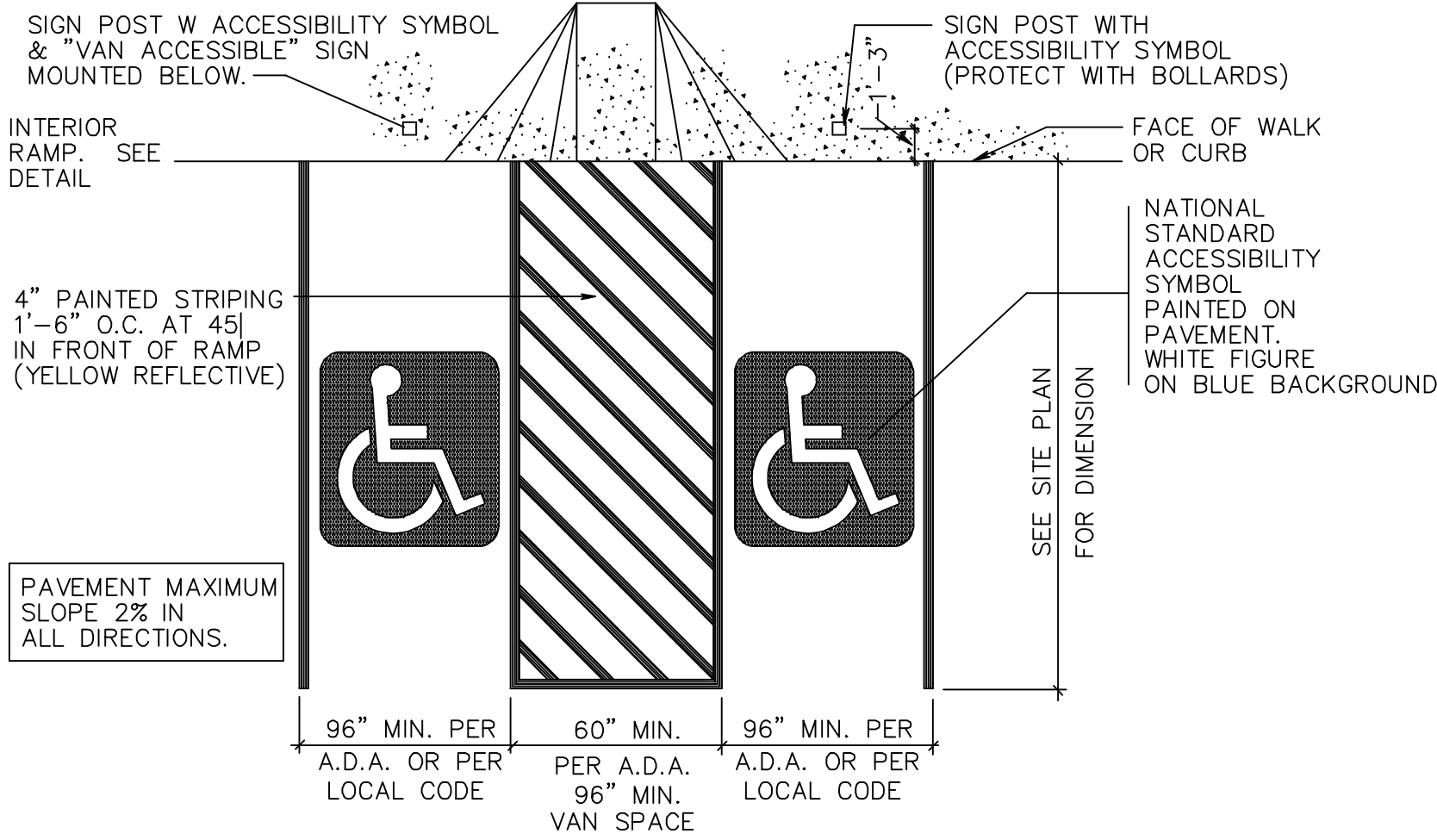
NOT TO SCALE



PIPE INLET PROTECTION

### SPECIFICATIONS

SEDIMENT BARRIERS SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. BALES SHOULD BE PLACED IN A SINGLE ROW LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. THE ENDS OF THE BARRIER SHOULD BE FLARED UP SLOPE. BARRIERS SHOULD NOT BE CONSTRUCTED MORE THAN ONE BALE HIGH. ALL BALES SHOULD BE EITHER WIRE-BOUND OR STRING-TIED. BALES SHOULD BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES, PARALLEL TO THE GROUND SURFACE TO PREVENT DETERRIORATION OF THE BINDINGS. THE BARRIER SHOULD BE ENTRENCHED AND BACKFILLED. A TRENCH SHOULD BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHOULD BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHOULD CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHOULD BE BUILT UP 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. IDEALLY, BALES SHOULD BE PLACED 10 FEET AWAY FROM THE TOE OF SLOPE. AT LEAST TWO STAKES DRIVEN THROUGH THE BALE AND PENETRATING AT LEAST 18 INCHES INTO THE GROUND, SHOULD SECURELY ANCHOR EACH BALE. THE FIRST STAKE IN EACH BALE SHOULD BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES SHOULD BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES. THE GAPS BETWEEN BALES SHOULD BE CHINKED (FILLED BY WEDGING) WITH HAY TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES. INSPECTION SHOULD BE FREQUENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. BALE BARRIERS SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.



PARKING STALL FOR THE PHYSICALLY CHALLENGED

NOT TO SCALE

DEC. 15, 1991

### SEEDING RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREeping RED FESCUE	10	0.25
CROWN VETCH OR FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
BIRDS FOOT TREFLOID	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREeping RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/2	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

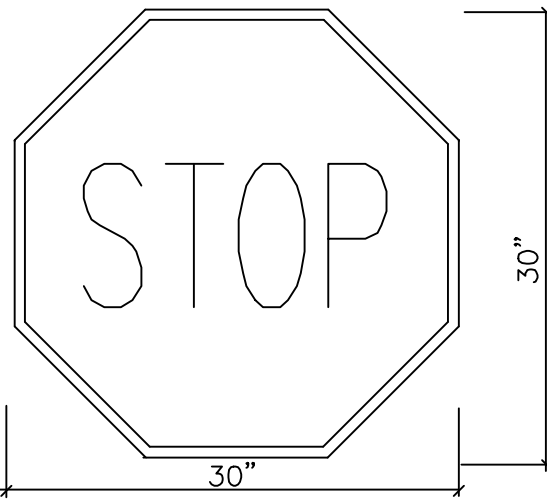
TABLE 7-36

### PREPARED FOR:

603 SEACOAST RESIDENTIAL  
& COMMERCIAL DEV  
57 VARDON LANE  
GREENLAND, NH 03840



70 PORTSMOUTH AVE,  
THIRD FLOOR, SUITE 2  
STRATHAM, N.H. 03885  
PHONE: 603-583-4860,  
FAX: 603-583-4863



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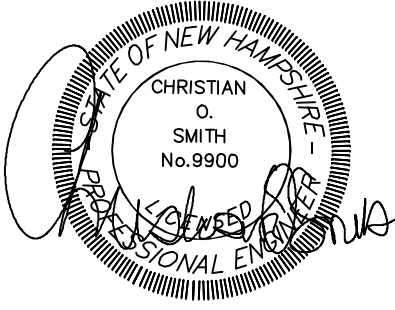
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REVISED PER ENGINEERING REVIEW	12-16-21
REVISED PER ENGINEERING REVIEW	11-9-21
REVISIONS:	DATE:

## ERO. CTRL & PARKING DETAILS

SITE PLAN  
597 & 603 PORTSMOUTH AVE  
GREENLAND, NH

DATE:	SEPT 2021	SCALE:	1"=20'
PROJ. NO:	NH-772.4	SHEET NO.	7 OF 7