Site Plan Review Saratoga Way, Lots 112 & 113 Portsmouth, New Hampshire

PREPARED FOR:

Raleigh Way Holding Group, LLC

PREPARED BY:

ROSS ENGINEERING, LLC

Civil/Structural Engineering & Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

August 4, 2020

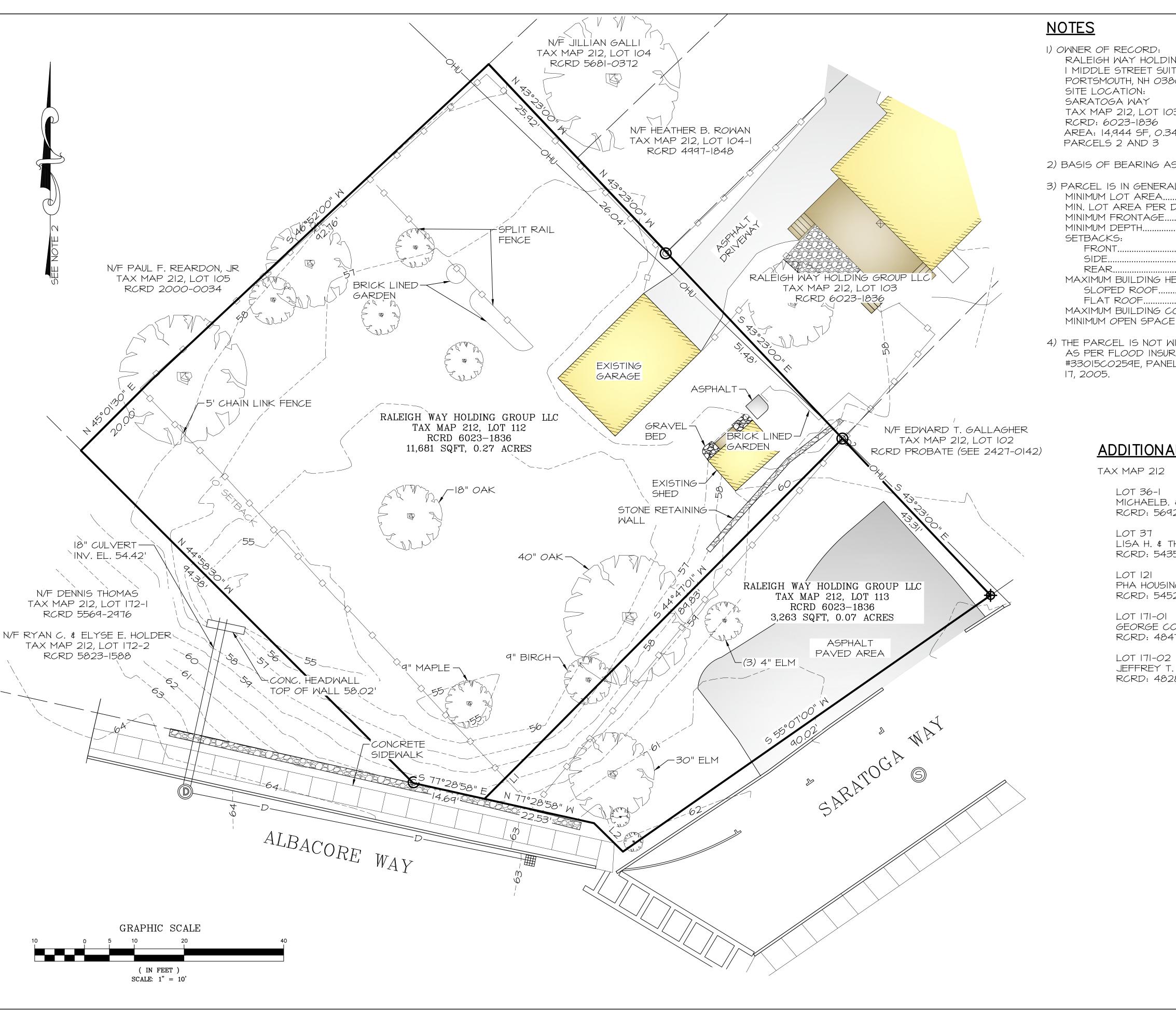
LIST OF PROJECT PLANS:

SITE PLAN SET

- 1 Existing Conditions
- 2 Site Plan
- 3 Utility Plan
- 4 Grading & Drainage5 Landscape Plan
- 6 Erosion Control Plan
- 7 Details
- 8 Notes
- 9 Sewer Details & Notes

ARCHITECTURAL PLAN SET

- 3D View
- A1 Proposed West & East Elev.
- A2 Proposed South & North Elev.
- A3 First Floor Plan
- A4 Second Floor Plan
- A5 Third Floor (Attic) Plan
- A6 Basement Floor Plan



I) OWNER OF RECORD: RALEIGH WAY HOLDING GROUP LLC I MIDDLE STREET SUITE I PORTSMOUTH, NH 03801 SITE LOCATION: SARATOGA WAY TAX MAP 212, LOT 103 RCRD: 6023-1836 AREA: 14,944 SF, 0.34 ACRES

2) BASIS OF BEARING AS PER REF. PLAN #2.

- 3) PARCEL IS IN GENERAL RESIDENCE B ZONE (GRB) ..5,000 SF MINIMUM LOT AREA.. MIN. LOT AREA PER DWELLING UNIT 5,000 SF MINIMUM FRONTAGE. ..80 FT MINIMUM DEPTH. ..60 FT SETBACKS: FRONT. ..5 FT ...IO FT SIDE. ..25 FT REAR. MAXIMUM BUILDING HEIGHT: ..35 FT SLOPED ROOF. FLAT ROOF. ..30 FT MAXIMUM BUILDING COVERAGE.
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, 2) "ATLANTIC HEIGHTS CO., PORTSMOUTH, N.H., AS PER FLOOD INSURANCE RATE MAP #33015C0259E, PANEL 259 OF 681. DATED MAY 17, 2*00*5.

ADDITIONAL ABUTTERS

TAX MAP 212

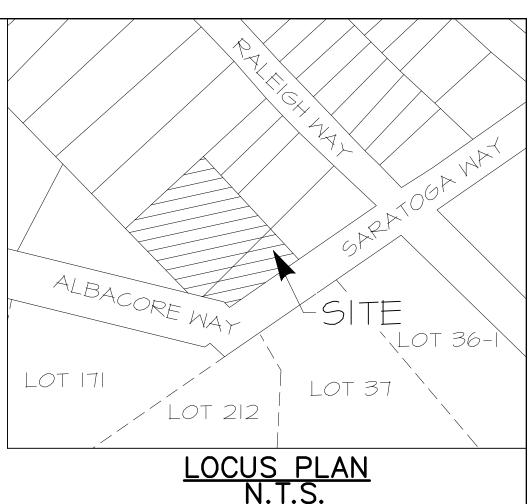
LOT 36-1 MICHAELB. & LEANNE L. POWER RCRD: 5692-0310

LOT 37 LISA H. & THOMAS M. CONRAD RCRD: 5435-1874

LOT 121 PHA HOUSING DEVELOPMENT, LTD. RCRD: 5452-0868

LOT 171-01 GEORGE COURTOVICH RCRD: 4847-0230

LOT 171-02 JEFFREY T. VEINO RCRD: 4828-0417



REFERENCE PLANS

- I) "PROPERTY MAP OF ATLANTIC HEIGHTS COMPANY FOR ATLANTIC HEIGHTS DEVELOPERS", BY LOCKWOOD, GREENE & CO. ENGINEERS, JULY, 1919. RCRD 0247.
- PLAN SHOWING ADDITIONS TO AND REVISION OF LAYOUT PLAN OF 1919", BY JOHN W. DURGIN, C.E., DATED MAY, 1925. RCRD 0273
- 3) "SUBDIVISION PLAN MAP 212 LOT 104 FOR JAMES A. MULEY LIVING TRUST & PETER BROWN", BY AMBIT ENGINEERING, DATED SEPTEMBER, 2004. RCRD D-32010.
- 4) "SUBDIVISION PLAN MEADOW VIEW HEIGHTS CHANGING PLACES, LLC", BY AMES MSC ARCHITECTS & ENGINEERS, DATED MAY 2 2006. RCRD D-33771
- 5) "CONDOMINIUM SITE PLAN "ATLANTIC POINTE" A CONDOMINIUM UNIT OWNERS ASSOCIATION", BY AMES MSC ARCHITECTS & ENGINEERS, DATED JULY 19, 2007. RCRD D-34872
- 6) "AS BUILT ROADWAY PLAN FOR ATLANTIC POINTE BUILDERS, LLC" BY MSC CIVIL ENGINEERS & LAND SURVEYORS, INC. DATED NOV. 17, 2010. NOT RECORDED.

LEGEND

MONUMENT TO BE SET

MONUMENT FOUND

UTILITY POLE

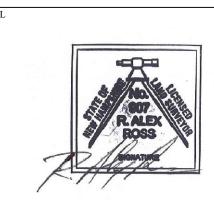
6' STOCKADE FENCE

VERTICAL GRANITE CURB

I ALEX ROSS, HEREBY CERTIFY:

- A) THAT THIS SURVEY PLAT WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION.
- B) THIS PLAN IS A RESULT OF FIELD SURVEY PERFORMED BY DDD, MGP & AR DURING NOVEMBER OF 2019 AND JULY 2020. THE ERROR OF CLOSURE IS BETTER THAN 1/15,000. SURVEY PER NHLSA STANDARDS; CATEGORY 1, CONDITION 1.
- C) "I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUB-DIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

R. ALEX ROSS DATE



1	8/4/2020	TAC SUBMITTAL	
S.	DATE	DESCRIPTION OF ISSUE	
CA	1" = 10	,	
HE	A.ROSS		
R.A	M.G.P.		
ΉE	A.ROSS		

ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560

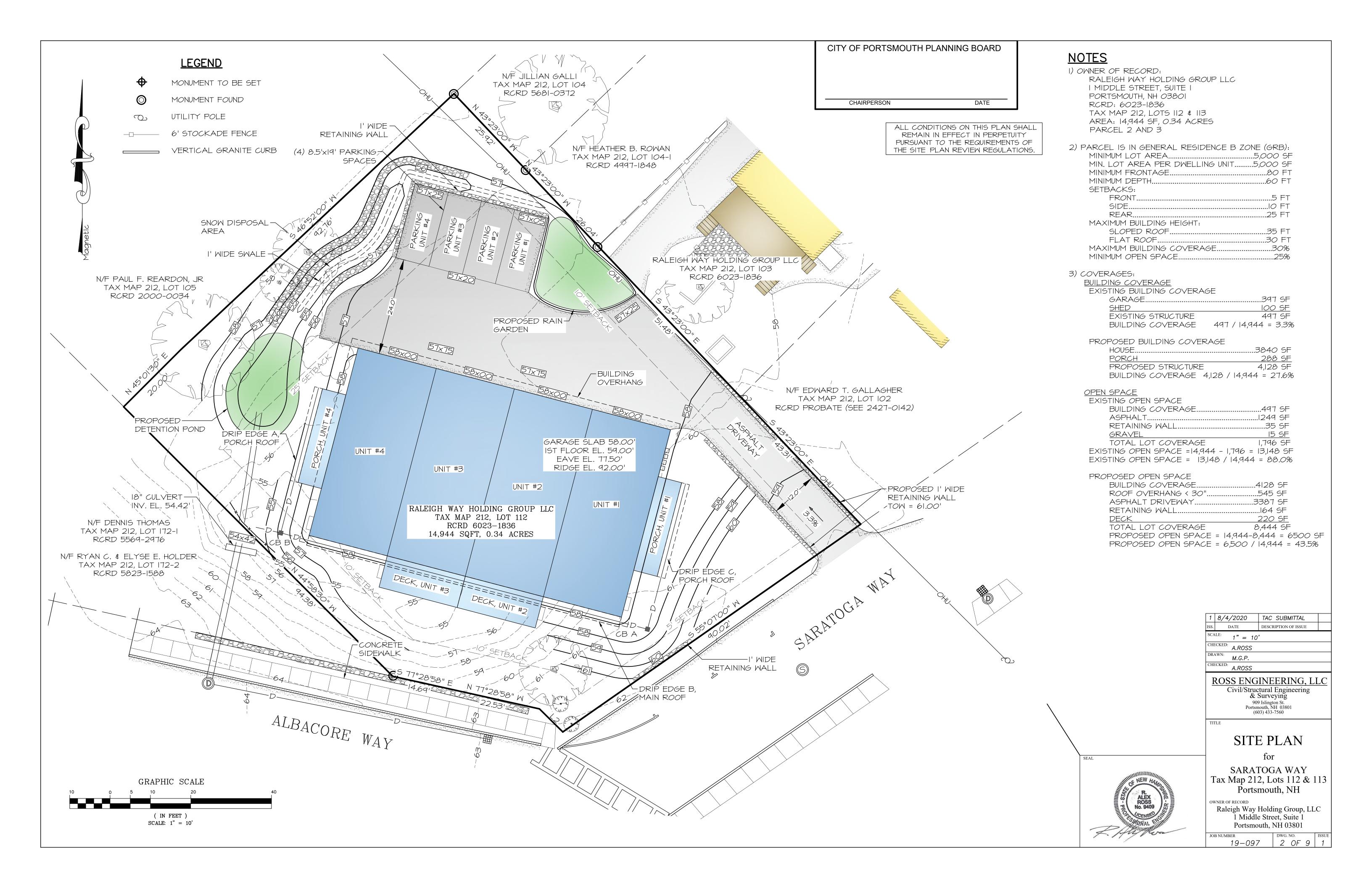
EXISTING

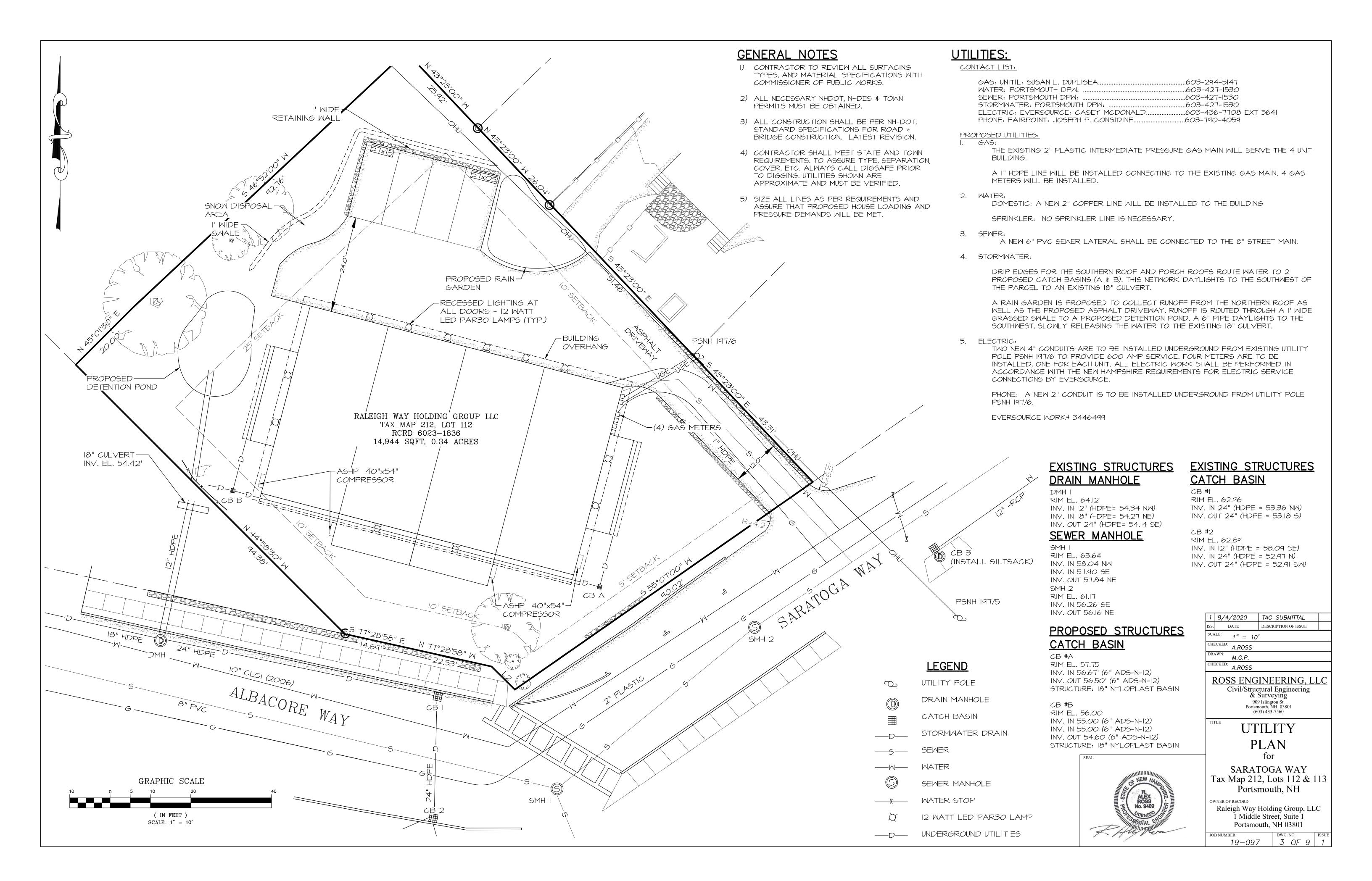
CONDITIONS

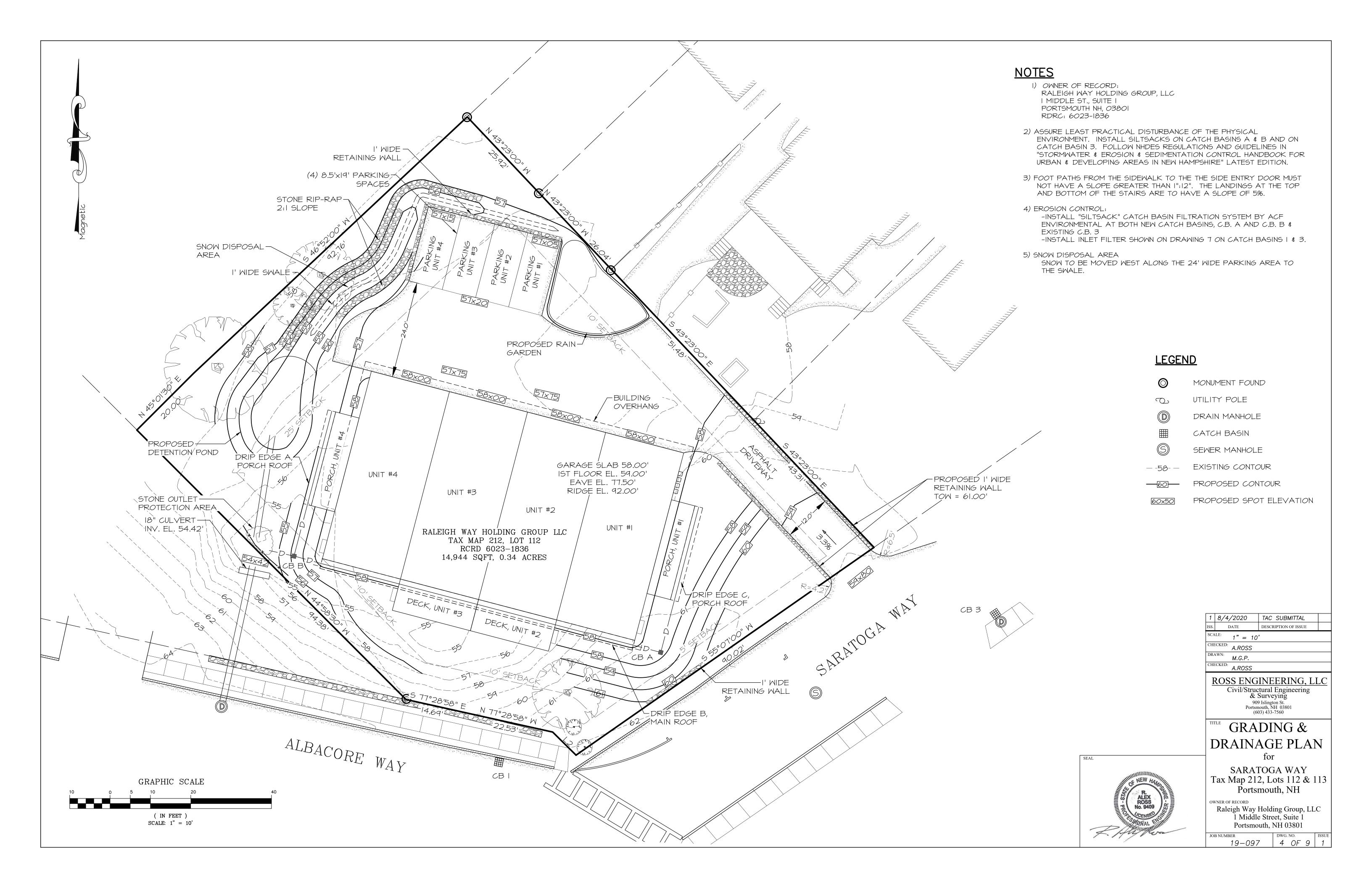
SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

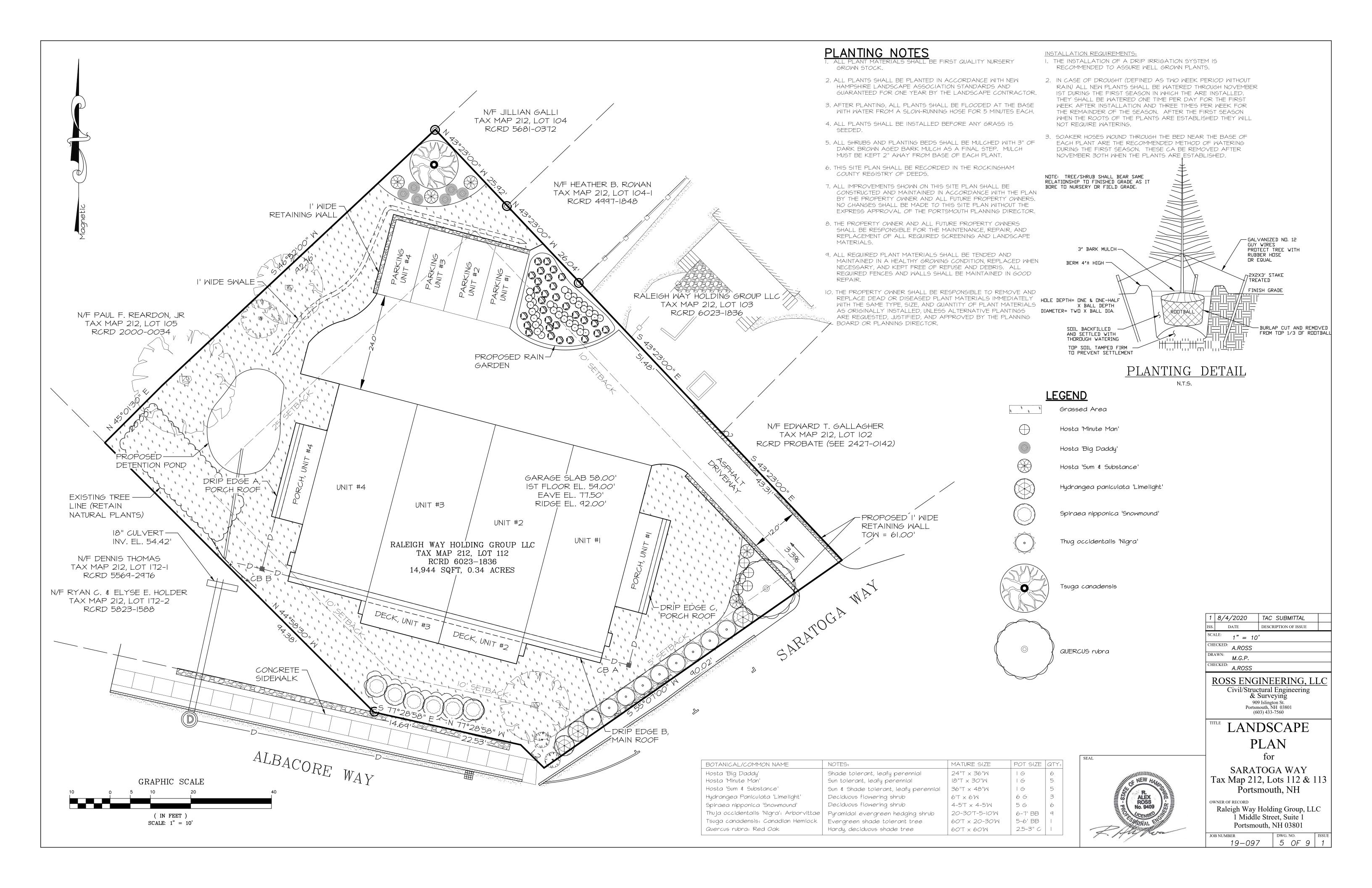
OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1 Portsmouth, NH 03801

JOB NUMBER 19-097 | 1 OF 9 | 1









EROSION AND SEDIMENTATION CONTROL

CONSTRICTION PHASING AND SEQUENCING

- I. SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO BE AN INTEGRAL PART OF THIS PROCESS.
- INSTALL SILTSOXX FENCING AS PER DETAILS AND AT SEDIMENT MIGRATION.
 CONSTRUCT TREATMENT SWALES, LEVEL SPREADERS AND DETENTION STRUCTURES AS DEPICTED ON DRAWINGS.
- 4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE(S) AS PER DETAIL AND AT LOCATIONS SHOWN ON THE DRAWINGS. MAINTAIN (TOP DRESS)
 REGULARLY TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS.

5. STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION MATERIAL & COVER WHERE PRACTICABLE.
6. MINIMIZE DUST THROUGH APPROPRIATE APPLICATION OF WATER OR OTHER

DUST SUPPRESSION TECHNIQUES ON SITE.

7. ROUGH GRADE SITE INSTALL CULVERTS AND ROAD DITCHES

ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES.
 FINISH GRADE AND COMPACT SITE.

9. RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES.

IO. STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING.

II. RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES.

I2. SILT SOXX FENCING TO REMAIN AND BE MAINTAINED FOR TWENTY FOUR MONTHS AFTER CONSTRUCTION TO ENSURE ESTABLISHMENT OF ADEQUATE SOIL STABILIZATION AND VEGETATIVE COVER. ALL SILT SOXX FENCING ARE THEN TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.

I3. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING

OPERATIONS.

14. ALL TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC. MUST BE USED)

AS NECESSARY UNTIL AREAS ARE STABILIZED.

15. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE - BEFORE ROUGH GRADING THE SITE.

16. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM

17. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

18. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

19. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY

HALF-INCH OF RAINFALL.

20. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME

BEFORE DISTURBED AREAS ARE STABILIZED.

21. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS,
SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO
DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

PLANTING NOTES:

I. ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK.

2. ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE LANDSCAPE CONTRACTOR.

3. ALL TREES AND SHRUBS SHALL HAVE WATER SAUCERS BUILT AROUND THEIR BASES AND THESE SHALL BE MULCHED WITH 4" OF DARK BROWN AGED BARK MULCH. MULCH MUST BE KEPT 2" AWAY FROM THEIR TRUNKS.

4. ALL TREES AND SHRUBS SHALL BE PLANTED AND MULCHED BEFORE LAWN IS SEEDED.

MAINTENANCE REQUIREMENTS:

I. ALL TREES, SHRUBS, AND PERENNIALS WILL NEED TO BE WATERED THROUGH THANKSGIVING DURING THE FIRST SEASON IN WHICH THEY ARE INSTALLED.

2. AN UNDERGROUND DRIP IRRIGATION SYSTEM IS RECOMMENDED. IF AN UNDERGROUND DRIP IRRIGATION SYSTEM IS NOT INSTALLED, SOAKER HOSES WOUND THROUGHOUT PLANTING BEDS ARE ACCEPTABLE. ALTHOUGH OVERHEAD SPRINKLERS ARE RECOMMENDED FOR LAWN AREAS, THEY ARE NOT ACCEPTABLE FOR IRRIGATING TREES AND SHRUBS.

SEEDING AND STABILIZATION FOR LOAMED SITE: FOR TEMPORARY & LONG TERM SEEDINGS USE AGWAY'S SOIL CONSERVATION

GRASS SEED OR EQUAL
COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2
FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE,
FERTILIZER & LIME:

NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P205) 100 LBS/ACRE, POTASH (K20) 100 LBS/ACRE, LIME 2000 LBS/ACRE
MUL CH:

HAY OR STRAW 1.5-2 TONS/ACRE

A) GRADING AND SHAPING

I) 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.

B) SEED BED PREPARATION

I) SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.

2) 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 A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

EROSION AND SEDIMENTATION CONTROL GENERAL NOTES

I. CONDUCT ALL CONSTRUCTION IN A MANNER AND SEQUENCE THAT CAUSES
THE LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT, BUT IN NO
CASE SHALL EXCEED 2 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS
ARE STABILIZED.

2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

3. ALL DITCHES, SWALES AND PONDS MUST BE STABILIZED PRIOR TO DIRECTING FLOW TO THEM.

4. ALL GROUND AREAS OPENED UP FOR CONSTRUCTION WILL BE STABILIZED WITHIN 24 HOURS OF EARTH-DISTURBING ACTIVITIES BEING CEASED, AND WILL BE FULLY STABILIZED NO LONGER THAN 14 DAYS AFTER INITIATION, (SEE NOTE II FOR DEFINITION OF STABLE). ALL SOILS FINISH GRADED MUST BE STABILIZED WITHIN SEVENTY TWO HOURS OF DISTURBANCE. ALL TEMPORARY OR LONG TERM SEEDING MUST BE APPLIED TO COMPLY WITH "WINTER CONSTRUCTION NOTES" (SEE WINTER CONSTRUCTION NOTES"). EMPLOY TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES AS DETAILED ON THIS PLAN AS NECESSARY UNTIL ADEQUATE STABILIZATION HAS BEEN ASSURED (SEE NOTE II FOR DEFINITION

5. TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES).
6. SILTSOXX FENCING TO BE SECURELY EMBEDDED AND STAKED AS DETAILED. WHEREVER POSSIBLE A VEGETATED STRIP OF AT LEAST TWENTY FIVE FEET IS TO BE KEPT BETWEEN SILTSOXX AND ANY EDGE OF WET AREA.
7. SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO

8. SEDIMENT BASIN(S), IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN CAPACITY.

9. SILTSOXX FENCING WILL BE CHECKED REGULARLY AND AFTER EACH SIGNIFICANT RAINFALL. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER AS WELL AS CLEANING, REMOVAL AND PROPER DISPOSAL OF TRAPPED SEDIMENT.

10. TREATMENT SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATIVE COVER HAS BEEN ESTABLISHED.

HAS OCCURRED:

• BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED

• AMUNIMUM OF RESULTING PRODUCTION OF THE PRODUCTION OF THE

A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
 A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED.
 EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

II. AN AREA SHALL BE CONSIDERED FULLY STABLE IF ONE OF THE FOLLOWING

II. ALL EROSION AND SEDIMENTATION CONTROL MEASURES IN THE PLAN SHALL MEET THE DESIGN BASED ON STANDARDS AND SPECIFICATIONS SET FORTH IN THE STORM WATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE (DECEMBER 2008 OR LATEST) PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, N.H. DES AND NRCS.

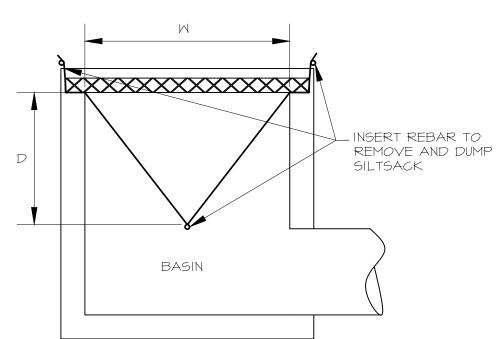
WINTER CONSTRUCTION NOTES

ENSURE VEGETATIVE ESTABLISHMENT.

I. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPETED IN ADVANCE OF THAW OR SPRING MELT EVENT.;

2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;

3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



SILTSACK IS TO BE SECURED BY WEIGHT OF BASIN GRATE TO PREVENT SEDIMENT FROM ENTERING THE DRAIN LINE

INSTALL SILTSACK TO CATCH BASIN 3 (SEE SHEET 3)

Siltsack

LONG TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C

	<u>Ib/ACRE</u>	<u> b/10009</u>
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED CLOVER (ALSIKE)	<u>20</u>	0.45
TOTAL	48	1.35

LIME: AT 2 TONS PER ACRE OR 100 LBS PER 1,000 S.F.
FERTILIZER: 10 20 20 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE.
MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F.

GRADING AND SHAPING:

SLOPES SHALL NOT BE STEEPER THAN 2 TO 1. 3 TO 1 OR FLATTER SLOPES ARE PREFERRED.

SEEDBED PREPARATION:
SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED.
SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE SEEDBED. FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL.
THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

* FROM: <u>STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION</u>
<u>CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE,</u>
DECEMBER 2008.

SHORT TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C

	#/ACRE	#/1000SF
FOR APRIL I - AUGUST 15		
ANNUAL RYE GRASS	40	I
FOR FALL SEEDING		
WINTER RYE	112	2.5

LIME: AT I TON PER ACRE OR 100 LBS PER 1,000 S.F.
FERTILIZER: 10 10 10 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE.
MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F.

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* FROM: <u>STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION</u>

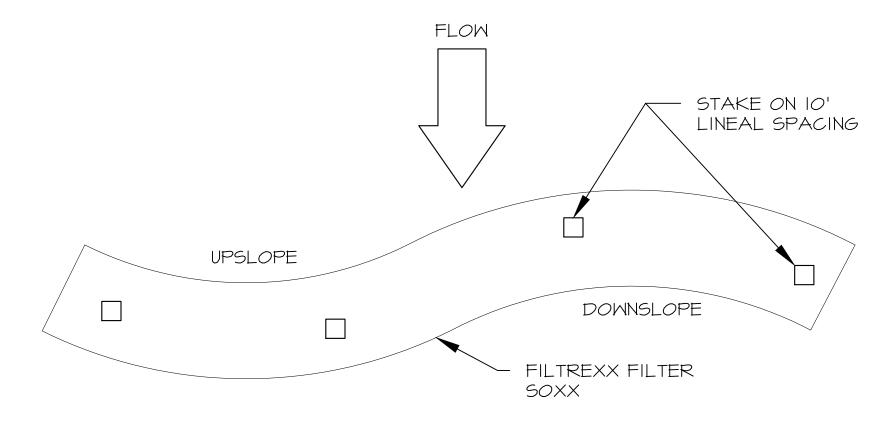
CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE,
DECEMBER 2008.

WHEN PROPOSED FOR ALTERATION DURING CONSTRUCTION AS BEING INFESTED WITH INVASIVE SPECIES SHALL BE MANAGED APPROPRIATELY USING THE DISPOSAL PRACTICES IDENTIFIED IN "NHDOT - BEST MANAGEMENT PRACTICES FOR ROADSIDE INVASIVE PLANTS -2008" AND "METHODS FOR DISPOSING NON-NATIVE INVASIVE PLANTS - UNH COOPERATIVE EXTENSION - 2010"

SEED MIXES SHALL NOT CONTAIN ANY SPECIES IDENTIFIED BY THE NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST.

FILTREXX SILTSOXX NOTES 1) ALL MAERTIAL TO MEET FILTREXX SPECIFICATIONS 2" x 2" WOODEN STAKE FILTREXX SILTSOXX (12"-18" TYP.) AREA TO BE PROTECTED WORK AREA H N

Filtrexx SiltSoxx Section



Filtrexx SiltSoxx Plan View

N.T.S.

1 8/4/2020 TAC SUBMITTAL

ISS. DATE DESCRIPTION OF ISSUE

SCALE: 1" = 10'

CHECKED: A.ROSS

DRAWN: M.G.P.

CHECKED: A.ROSS

ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St.

909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

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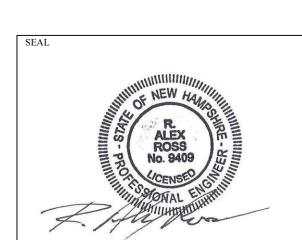
EROSION CONTROL

PLAN for

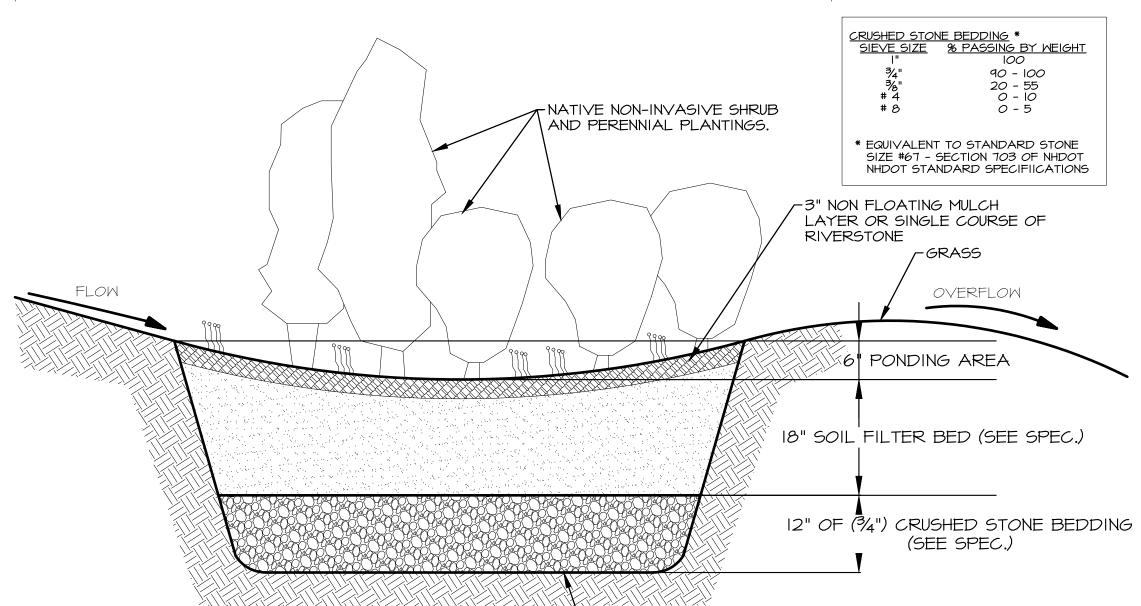
SARATOGA WAY
Tax Map 212, Lots 112 & 113
Portsmouth, NH

owner of Record
Raleigh Way Holding Group, LLC
1 Middle Street, Suite 1
Portsmouth NH 03801

Fortsmouth, NII 03001				
B NUMBER	DWG.	NO.		ISSU
19-097	6	OF	9	1



Fair Point **TELEPHONE: CONDUIT SPECIFICATIONS** ANY DEVIATION FROM OUTLINED SPECIFICATIONS MUST BE AGREED TO IN ADVANCE BY VERIZON ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE CONDUIT THROUGH WHICH CABLE CAN BE SUCCESSFULLY PULLED. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXPENSE ASSOCIATED WITH THE REPAIR OF CONDUIT THAT CANNOT BE USED BY VERIZON. VERIZON RESERVES THE RIGHT TO REQUIRE INSPECTION OF CONDUIT PRIOR TO BACK FILLING TO ENSURE COMPLIANCE. TRENCH DETAIL **FINISH GRADE** FINISH GRADE SUITABLE | 12" **ENTIRE TRENCH** FILL SAND BACK FILL ① POWER ·-----------SAND ② CATV 3"<u>312"</u>23" — SAND 1) 12" (2) 12" (3) 5 3 TELEPHONE A -- SAND BACK FILL SHALL CONSIST OF FINE GRANULAR MATERIAL 100% SHALL PASS THROUGH A 1/4" SIEVE B -- EXCEPTION: NATURALLY OCCURRING SMOOTH ROUND PEBBLES NO GREATER THAN 3/8" IN DIAMETER ARE PERMITTED AS LONG AS THEIR TOTAL VOLUME PER CUBIC FOOT OF SAND DOES NOT EXCEED 1% C -- THE SAND SHALL BE COMPLETELY FREE OF FROZEN LUMPS, ROCKS, STONES, DEBRIS OR RUBBISH #6 AWG COILED ALL CONDUIT SHALL BE GRAY NESC SCHEDULE 40 PVC OR EQUIVALEN FROM POWER FOR (REQUIRES TEL ENGINEER APPROVAL) TEL ATTACHEMENT 4" MINIMUM FOR TELEPHONE CABLE 2" MINIMUM FOR SERVICE WIRES INSTALLATION UNDER NO CIRCUMSTANCES WILL VERIZON SHARE A CONDUIT WITH ANOTHER UTILITY DO NOT ATTACH TO POWER CO STANDOFF BRACKETS FOR SERVICE WIRE CONDUIT SHOULD BE SWEPT UP AT LEAST EVERY 250' CATV ———— TEL. CONDUIT HERE——▶● traffic flow CURB OR EDGE OF PAVEMENT 6" MIN ALL CONDUITS ARE TO BE SWEPT UP HARD TOGETHER A MINIMUM OF 6" ABOVE FINISH GRADE FINISH GRADE AT ALL PEDESTAL LOCATIONS & MUST FIT INTO 11" X11" SQUARE AREA TO ALLOW CLOSURE TO FIT OVER ENDS GRADE ALL CONDUITS MUST BE LABELED "TEL" WITH DIRECTION OF RUN INDICATED SO AS TO POSITIVELY IDENTIFY THEM FOR OUR PERSONNEL AND FURNISHED WITH A PULL STRING CAPABLE OF A 200 TO ALL BENDS ARE TO BE 36" RADIUS SWEEPS 300 POUND PULL (NO PLUMBERS BENDS) A #6 AWG COPPER GROUND WIRE SHALL BE CONNECTED TO METALLIC SWEEPS REQUIRED ON ALL THE POWER CO. TRANSFORMER / SECTOR CABINET GRID AT **RUNS IN EXCESS OF 225'** EACH TRANSFORMER / SECTOR CABINET LOCATION AND RUN FROM THERE TO THE TEL CONDUIT LEAVING A 3 FOOT COIL SECURED TO THE CONDUIT TO PREVENT ITS LOSS

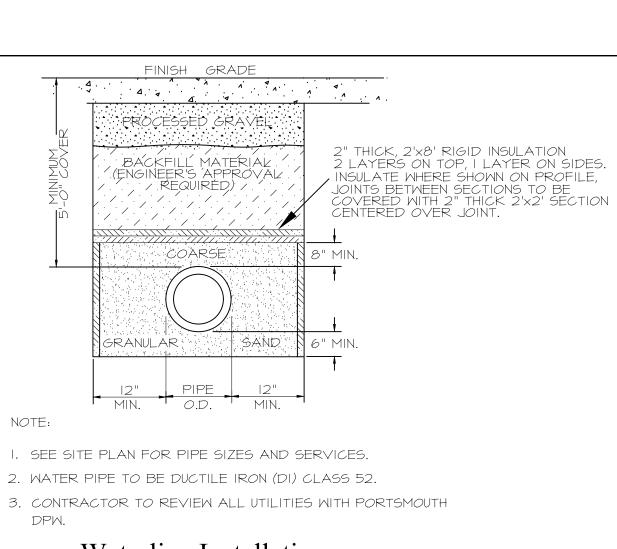


-SCARIFIED EXISING NATIVE EARTH

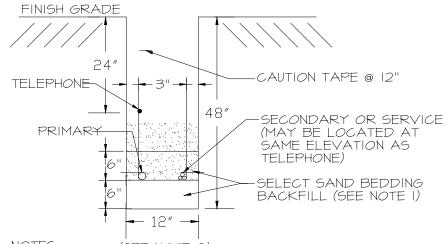
TYPICAL RAINGARDEN DETAIL

Component Material	Percent of Mixture	Gradation of Material		
	by Volume	Sieve No.	Percent by Weight Passing Standard Sieve	
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	<5	
	70 to 80	10	85 to 100	
Loamy coarse sand		20	70 to 100	
Loaning coal so salia		60	15 to 40	
		200	8 to 15	

FILTER MEDIA SPECIFICATION



Waterline Installation



I. SELECTED SAND BACKFILL--100% SHALL PASS THROUGH

2. TRENCH WIDTH IS TO BE 12" MINIMUM IF CABLE

TO ANY FUEL LINE.

Bedding Stone

1½"-3" Washed Stone

Porosity = 40%

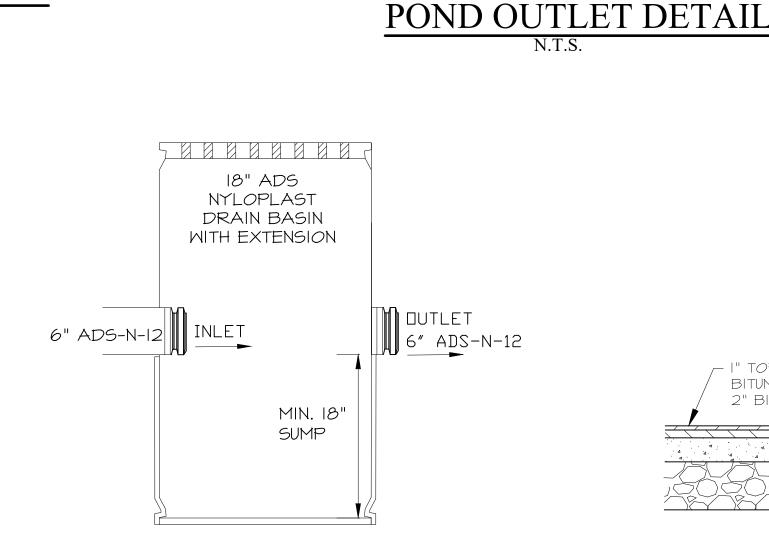
2'-0"

DRIP EDGE DETAIL

- 1/4" SCREEN. UP TO 1% MAY BE ROUNDED PEBBLES UP TO 3/8"IN SIZE.
- IS NOT PLOWED IN.
- 3. UNDERGROUND UTILITY CABLES ARE TO BE FIELD RUN AND COORDINATED WITH APPLICABLE UTILITY COMPANIES.

Utility Cable Installation

4. PRIMARY SERVICE IS BE NO LESS THAN 3' LATERALLY



POND BOTTOM

2"Stone d50

6″ thick

ELEV. 55.00

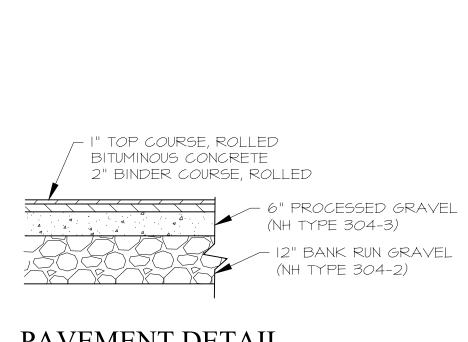
INV. ELEV. 54.80 ___

DETENTION POND

POND BOTTOM 54.50

AROUND DUTLET





16" ADS-N-12

PAVEMENT DETAIL N.T.S.

TRENCH NOTES - STORM DRAIN:

MIRAFI 140N-

Filter Fabric

6" ADS-N-12

56.33'

56.33'

56.78'

PERF. PIPE

DRIP EDGE INV. TRENCH OUTLET INV

56.33'

56.33'

56.63'

В

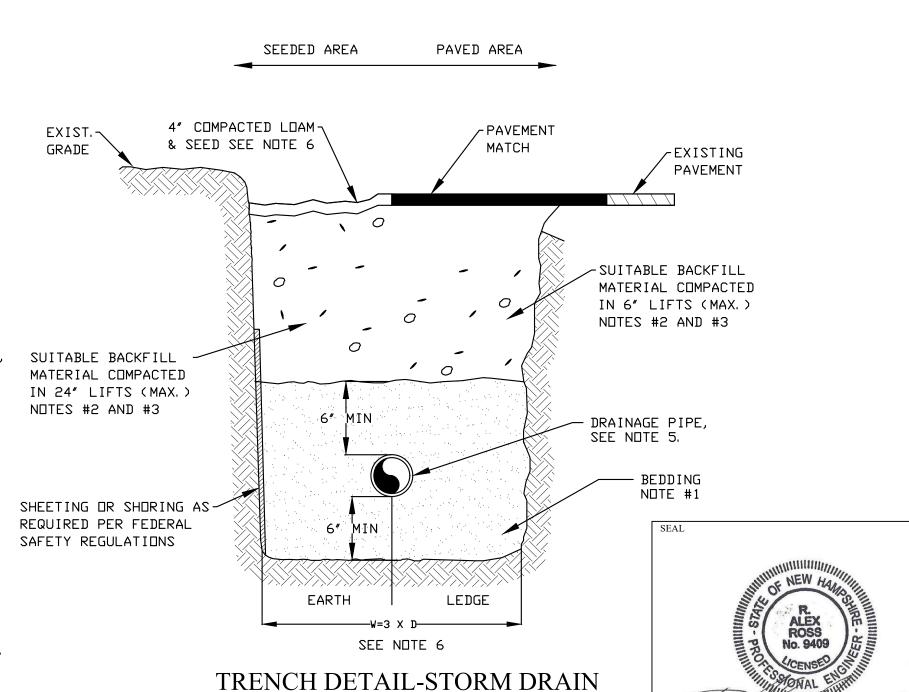
1) <u>BEDDING</u>: BEDDING FOR PIPES SHALL CONSIST OF PREPARING THE BOTTOM OF THE TRENCH TO SUPPORT THE ENTIRE LENGTH OF THE PIPE AT A UNIFORM SLOPE AND ALIGNMENT, CRUSHED STONE SHALL BE USED TO BED THE PIPE TO THE ELEVATION SHOWN ON THE DRAWINGS. NORMAL PIPE BEDDING IS CRUSHED STONE TO THE HAUNCH OF THE PIPE AND SAND BEDDING 6" ABOVE THE CROWN. IF THE TOP OF THE PIPE IS LESS THAN 30" FROM FINISH GRADE, BED PIPE COMPLETELY IN STONE UP TO 6" ABOVE PIPE CROWN. UNDERDRAIN TO HAVE 4" MIN' OF STONE OVER PIPE OR AS NECESSARY TO BE IN CONTACT WITH GRAVEL LAYER OF SELECTS ABOVE.

N.T.S.

- 2) COMPACTION: ALL BACKFILL SHALL BE COMPACTED AT OR NEAR OPTIMUM MOISTURE CONTENT BY PNEUMATIC TAMPERS, VIBRATORY COMPACTORS OR OTHER APPROVED MEANS. BACKFILL BENEATH PAVED SURFACES SHALL BE COZMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
- 3) <u>SUITABLE MATERIAL</u>: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, SUITABLE BACKFILL OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ROCKS OVER 6 INCHES IN LARGEST DIMENSION; FROZEN EARTH AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

IN SEEDED AREAS, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAD, ROCKS UNDER 12", FROZEN EARTH OR CLAY, IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EAST ACCESS TO THE PIPE WILL BE PRESERVED.

- 4) BASE COURSE AND PAVEMENT: SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND 400 RESPECTIVELY.
- 5) <u>DRAINAGE PIPE:</u> PIPE MATERIALS SHALL BE POLYETHYLENE (SEE SPECIFICATIONS).
- 6) W=MAXIMUM ALLOWABLE TRENCH WIDTH: W SHALL BE THE MAXIMUM PAYMENT WIDTH FOR ROCK EXCAVATION (TRENCH) AND FOR ORDERED EXCAVATION BELOW GRADE.



1 8/4/2020 TAC SUBMITTAL DESCRIPTION OF ISSUE DATE SCALE: 1" = 10'CHECKED: A.ROSS

M.G.P.

4'x4' "NO-SEEP" ANTI-SEEP COLLAR

TEL. - 816-446-2343

SCHEIB DRAINAGE PRODUCTS OR EQUAL

A.ROSS ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying

909 Islington St. Portsmouth, NH 03801 (603) 433-7560

DETAILS

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

OWNER OF RECORD Raleigh Way Holding Group, LLC 1 Middle Street, Suite 1 Portsmouth, NH 03801

JOB NUMBER DWG. NO. 19-097 | 7 OF 9 | 1

WATER SYSTEM NOTES:

- 1) ALL WATER SERVICES SHALL BE AT LEAST 1" COPPER UNLESS THE EXISTING SERVICE IS LARGER.
- 2) NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY UNTIL THE OWNER HAS SIGNED A MEMORANDUM OF UNDERSTANDING WITH THE CITY.
- 3) THE CONTRACTOR SHALL PHASE THE CONSTRUCTION OF THE WATER TO MINIMIZE DISRUPTION TO THE EXISTING SYSTEM. THE SYSTEM SHALL NOT BE IMPACTED OR SHUT DOWN WITHOUT PROPER NOTICE AND ANY DAMAGE CAUSED BY A SHUTDOWN WILL BE PAID FOR BY THE CONTRACTOR. MAINTENANCE OF THE WATER FLOW IS SUBSIDIARY TO THE WORK.
- 4) WATER SHUT DOWN NOTICES SHALL BE 3 WEEK DAYS IN ADVANCE OF THE SHUTDOWN.
- 5) THE WATER MAINS SHALL BE CONSTRUCTED OF 8" CEMENT LINED DUCTILE IRON EXCEPT FOR TIE LINES AND HYDRANT STUBS.
- 6) WATER SERVICE CURB STOPS SHALL BE SET 1/4" OF AN INCH BELOW GRADE IN THE SIDEWALK SURFACE IF POSSIBLE.
- 7) ALL EXISTING PIPES ABANDONED IN PLACE SHALL BE PLUGGED AT ALL OPEN AREAS.
- 8) THE SYSTEM WILL BE TESTED FOR LEAKS, CONTAMINATION AND FLAWS PRIOR TO ACCEPTANCE BY THE CITY.
- 9) ALL EXISTING WATER GATE BOXES SHALL BE SET TO FINAL GRADE DURING THE ROAD WORK OPERATION.
- 10) ALL GATE VALVES SHALL BE RESTRAINED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 11) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 12) MAINTAIN A MINIMUM DISTANCE OF 10' BETWEEN THE SEWER AND THE WATER SYSTEM EXCEPT FOR CROSSINGS WHICH SHALL BE CONSTRUCTED PER THE CURRENT STATE APPROVED RULES.
- 13) ALL PORTIONS OF THE NEW DUCTILE IRON WATER MAIN SYSTEM SHALL BE PROTECTED USING PLASTIC WRAPPINGS AND BRASS CONDUCTIVITY WEDGES. SEE SPECIFICATIONS.
- 14) ADD FITTINGS AS NECESSARY TO ENSURE THAT VALVES ARE INSTALLED NEARLY LEVEL.

GENERAL NOTES:

- 1) THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY ROSS ENGINEERING. EXISTING UTILITIES THAT ARE SHOWN ON THE PLANS WERE GATHERED FROM AVAILABLE STRUCTURES THAT WERE VIABLE, RECORD DRAWINGS OF THE VARIOUS UTILITY COMPANIES CAMERA INSPECTIONS AND OBSERVATIONS MADE. THERE IS NO GUARANTEE THAT THE UTILITIES SHOWN ARE EXACTLY AS PORTRAYED OF THAT OTHER UTILITIES THAT ARE NOT SHOWN DON'T EXIST. ALL THE STRUCTURES SHOWN HAVE MULTIPLE SERVICES AND MAY HAVE OLD CONNECTIONS THAT MAY HAVE NOT BEEN PROPERLY ABANDONED. THE BIDDER SHOULD ASSUME THAT EXTREME CAUTION AND HAND EXCAVATION MAY BE REQUIRED IN THESE OLDER PORTIONS OF THE CITY. NO EXTRA PAYMENTS WILL BE MADE FOR EXPLORATION OF DEFUNCT UTILITIES LEFT IN THE GROUND.
- 2) THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPAIR (IF DAMAGED) OF THE EXISTING UTILITY INFRASTRUCTURE WITHIN THE BOUNDS OF THE PROJECT ONCE CONSTRUCTION HAS BEGUN. NOTIFY DIG SAFE AT LEAST 72 HOURS PRIOR TO THE BEGINNING OF EXCAVATION WORK. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF CONFLICTS BETWEEN THE EXISTING AND PROPOSED UTILITIES.
- 3) ALL CONFLICTS WITH GAS LINES SHALL BE COORDINATED WITH UNITIL, THE GAS COMPANY, AND SHALL BE SUBSIDIARY. THE GAS COMPANY WAS NOTIFIED OF OBVIOUS CONFLICTS PREVIOUSLY AND WAS TO LOCATE TEHIR MAINS AND SERVICES IN ACCORDANCE TO THE PROPOSED LAYOUT ON THIS PLAN. THE CITY MAKES NO GUARANTEES THAT THE ACTUAL AS BUILT LOCATIONS OF THE GAS LINES ARE AS SHOWN ON THESE PLANS.
- 4) THE CONTRACTOR SHALL MAINTAIN ONE PASSABLE LANE AND SAFE PASSAGE FOR RESIDENTS TO AND FROM THEIR BUSINESS AND DWELLINGS IN THE NEIGHBORHOOD. WORK THAT REQUIRES THE COMPLETE SHUT DOWN OF THE STREET HAS TO BE APPROVED BY THE ENGINEER PRIOR TO THE WORK COMMENCING.
- 5) THE STREETS IN THE PROJECT AREA WILL BE PASSABLE AND SAFE IN THE OPINION OF THE ENGINEER PRIOR TO WORK TERMINATING AT THE END OF THE DAY.
- 6) THE USE OF STEEL PLATES IN LIEU OF BACKFILLING WILL NOT BE ALLOWED UNLESS APPROVED BY THE DIRECTOR OF PUBLIC WORKS AHEAD OF TIME.
- 7) THESE PLANS HAVE BEEN CREATED TO BE USED TOGETHER WITH THE CONTRACT AND SPECIFICATIONS TO CREATE ONE COMPLETE BID AND CONSTRUCTION DOCUMENT.
- 8) THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL MATERIALS TO BE USED ON THIS PROJECT. THE CONTRACTOR SHALL NOT PURCHASE ANY MATERIALS UNTIL THEY HAVE BEEN APPROVED FOR USE BY THE DEPARTMENT.
- 9) THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL SURPLUS EARTHEN MATERIALS, PIPE, UNUSED CURBING, LEDGE, OLD OR UNUSED SEWER AND DRAINAGE STRUCTURES ETC.
- 10) THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PROPERTY RESTORATION BOTH PUBLIC AND PRIVATE FOR DAMAGE DONE BY THE CONTRACTOR, RESTORATION WILL BE COMPLETED WITH NOT COST TO THE CITY.
- 11) TEMPORARY OR PERMANENT PAVING WILL BE RESTORED TO EXISTING LINE AND GRADE UNLESS DIRECTED BY THE ENGINEER.
- 12) OVERHEAD WIRES ARE SHOWN ON THE DRAWINGS BUT THE CITY MAKES NO WARRANTY TO THEIR COMPLETENESS OR THAT THEIR HEIGHT IS SUFFICIENT TO COMPLETE THE WORK, POLES THAT NEED TO BE HELD UP BY THE UTILITY COMPANY WILL BE PAID FOR BY THE CONTRACTOR WITH NO ADDITIONAL COST PASSED ON TO THE CITY.
- 13) THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REINSTALLATION OF TRAFFIC AND CONSTRUCTION SIGNS AS NEEDED TO ACCOMPLISH THE WORK. CITY SIGNS (STOP, NO PARKING, ONE WAY, ETC) NEED TO BE REINSTALLED AT THE END OF EACH
- 14)ALL WORK BEING DONE IN THE CITY RIGHT-OF-WAY SHALL BE REVIEWED BY THE CITY AND INSPECTED BY THE CITY AS IT IS BEING DONE.

SANITARY SEWER SYSTEM NOTES:

- 1) ALL SEWER LATERALS SHALL BE 6" PVC UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PRIOR TO THE CONSTRUCTION OF THE NEW SEWER MAIN, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FIND THE EXACT LOCATION, SIZE, TYPE AND ELEVATION OF EACH SEWER LATERAL. SEWER LATERALS SHALL BE INSTALLED TO THE CAST IRON (OR OTHER) COMING THROUGH THE FOUNDATION UNLESS THAT POINT IS MORE THAN 3' BEYOND THE BACK OF THE SIDEWALK OR PROPERTY LINE. IF THE POINT OF CONNECTION IS NOT CLEAR, THE ENGINEER WILL DECIDE. ALL SEWER LATERALS SHALL HAVE A MINIMUM PITCH 2%.
- 2) NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY UNTIL THE OWNER HAS SIGNED A MEMORANDUM OF UNDERSTANDING WITH THE CITY.
- 3) THE CONTRACTOR SHALL PHASE THE CONSTRUCTION OF THE SEWER TO MINIMIZE DISRUPTION TO THE EXISTING SYSTEM. THE SYSTEM SHALL NOT BE SURCHARGED AND ANY DAMAGE CAUSED BY A SURCHARGE WILL BE PAID FOR BY THE CONTRACTOR.
- 4) EXISTING SERVICES THAT ARE DETERMINED TO BE YARD, FOUNDATION OR ROOF DRAINS SHALL BE CONNECTED TO THE DRAINAGE SYSTEM AFTER BEING TESTED.
- 5) SEWER CONSTRUCTION WILL BE FROM THE LOWEST POINT UPWARD UNLESS APPROVED BY THE ENGINEER.
- 6) SEWER MANHOLE COVERS SHALL BE SET 1/4" OF AN INCH BELOW GRADE.
- 7) ALL EXISTING STRUCTURES ABANDONED IN PLACE SHALL BE REMOVED TO 3' BELOW GRADE AND FILLED WITH COMPACTED GRAVEL. PIPES SHALL BE PLUGGED AT ALL OPEN AREAS AND ANY PIPE LARGER THAN 12" SHALL BE FILLED WITH PUMPED FLOWABLE FILL.
- 8) ALL SERVICES SHALL BE PROVIDED WITH A CLEANOUT FOR TESTING. WHENEVER POSSIBLE, THIS SHOULD BE LOCATED BEHIND THE SIDEWALK FOR FUTURE USE. CLEANOUTS THAT ARE IN THE SIDEWALK WILL HAVE PERMANENT CAST IRON COVERS SET TO SIDEWALK GRADE. COVERS IN GRASSED AREAS SHALL BE CUT TO 2" BELOW GRADE AND WITNESSED WITH A PIECE OF 5/8" REBAR. ALL SERVICE CONNECTIONS SHALL BE TIED OFF AT THE WYE TO THE MAIN, AT ANY BENDS IN THE LINE AND AT THE CLEANOUT AND THEIR LOCATIONS SHALL BE GIVEN TO THE CITY.
- 9) THE SEWER SYSTEM WILL BE CLEANED, TESTED FOR LEAKS AND FLAWS AND TELEVISED PRIOR TO ACCEPTANCE BY THE CITY.

STORM DRAINAGE SYSTEM NOTES:

- 1) ALL DRAIN LATERALS SHALL BE 6" UNLESS OTHERWISE DIRECTED BY THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE NEW DRAIN MAIN, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FIND THE EXACT LOCATION, SIZE, TYPE AND ELEVATION OF EACH DRAIN LATERAL. DRAIN LATERALS SHALL BE INSTALLED TO THE FOUNDATION UNLESS THAT POINT IS MORE THAN 3' BEYOND THE BACK OF THE SIDEWALK OR PROPERTY LINE. IF THE POINT OF CONNECTION IS NOT CLEAR, THE ENGINEER WILL DECIDE. ALL DRAIN LATERALS SHALL HAVE A MINIMUM PITCH OF 2%.
- 2) NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY UNTIL THE OWNER HAS SIGNED A MEMORANDUM OF UNDERSTANDING WITH THE CITY.
- 3) THE CONTRACTOR SHALL PHASE THE CONSTRUCTION OF THE DRAIN TO MINIMIZE DISRUPTION TO THE EXISTING SYSTEM. THE SYSTEM SHALL NOT BE SURCHARGED AND ANY DAMAGE CAUSED BY A SURCHARGE WILL BE PAID FOR BY THE CONTRACTOR. MAINTENANCE OF THE DRAINAGE PLOWS IS SUBSIDIARY TO THE WORK.
- 4) EXISTING SERVICES THAT ARE DETERMINED TO BE YARD, FOUNDATION OR ROOF DRAINS SHALL BE CONNECTED TO THE DRAINAGE SYSTEM AFTER BEING TESTED.
- 5) DRAINAGE CONSTRUCTION WILL BE FROM THE LOWEST POINT UPWARD UNLESS APPROVED BY THE ENGINEER.
- 6) DRAIN MANHOLE COVERS AND CATCH BASIN GRATES SHALL BE SET 1/4" OF AN INCH BELOW GRADE.
- 7) ALL EXISTING STRUCTURES ABANDONED IN PLACE SHALL BE REMOVED TO 3' BELOW GRADE AND FILLED WITH COMPACTED GRAVEL. PIPES SHALL BE PLUGGED AT ALL OPEN AREAS AND ANY PIPE LARGER THAN 12" SHALL BE FILLED WITH PUMPED FLOWABLE FILL.
- 8) ALL SERVICE COVERS IN GRASSED AREAS SHALL BE CUT TO 2" BELOW GRADE AND WITNESSED WITH A PIECE OF 5/8"REBAR. ALL SERVICE CONNECTIONS SHALL BE TIED OFF AT THE TEE TO THE MAIN, AT ANY BENDS IN THE LINE AND AT THE TERMINATION POINT AND THEIR LOCATIONS SHALL BE GIVEN TO THE CITY.
- 9) THE SYSTEM SHALL BE CLEANED PRIOR TO ACCEPTANCE. THIS CLEANING SHALL INCLUDE ALL STRUCTURES IN THE RAILYARD THAT WERE PREVIOUSLY CONSTRUCTED (AND CLEANED) BY THE PHASE 3A CONTRACTOR.
- 10) THERE MAY BE MORE DRAINAGE LATERALS NEEDED THAN IS SHOWN ON THESE PLANS. THE ENGINEER WILL HAVE FINAL DETERMINATION.

1	8/4/2020	TAC SUBMITTAL	
ISS.	DATE	DESCRIPTION OF ISSUE	
SCA	1" = 10	,	
CHECKED: A.ROSS			
DRA	M.G.P.		
CHECKED: A.ROSS			

ROSS ENGINEERING, LLC
Civil/Structural Engineering
& Surveying
909 Islington St.
Portsmouth, NH 03801

(603) 433-7560

TITLE

NOTES

Ov

SARATOGA WAY
Tax Map 212, Lots 112 & 113
Portsmouth, NH

OWNER OF RECORD
Raleigh Way Holding Group, LLC
1 Middle Street, Suite 1
Portsmouth, NH 03801

JOB NUMBER DWG. NO. ISSU
19-097 8 OF 9 1

TFILL WITH MORTAR TEMPORARY PAVEMENT REPAIR WIDTH ANDDIZED ALUMINUM —(Vt)— TACK EDGE WITH INTERNAL CLAMP EMULSIFIED ASPHALT EXCAVATED WIDTH 6" MIN── EXISTING PAVEMENT (TYP) PIPE || NOTES: 4" HOT BIT. PAVEMENT TYPE TO BE APPROVED 1) ALL DAMAGED PAVEMENT DISPLACED FROM EXCAVATION -CRUSHED GRAVEL, NHDOT 304. SHALL BE REMOVED PRIOR TO DEPTH TO MATCH EXISTING OR PLACEMENT OF TEMPORARY -STAINLESS STEEL TWELVE (12") INCHES, PAVEMENT REPAIRS. CLAMP (316 SS) WHICHEVER IS GREATER ∽ RUBBER-LIKE CRUSHED GRAVEL SHALL BE KOR-N-SEAL BOOT INCIDENTAL TO TRENCH PAVEMENT REPAIRS. KOR-N-SEAL JOINT SLEEVE (OR EQUAL)

Scale: N.T.S.

MANHOLE PENETRATIONS

Scale: N.T.S.

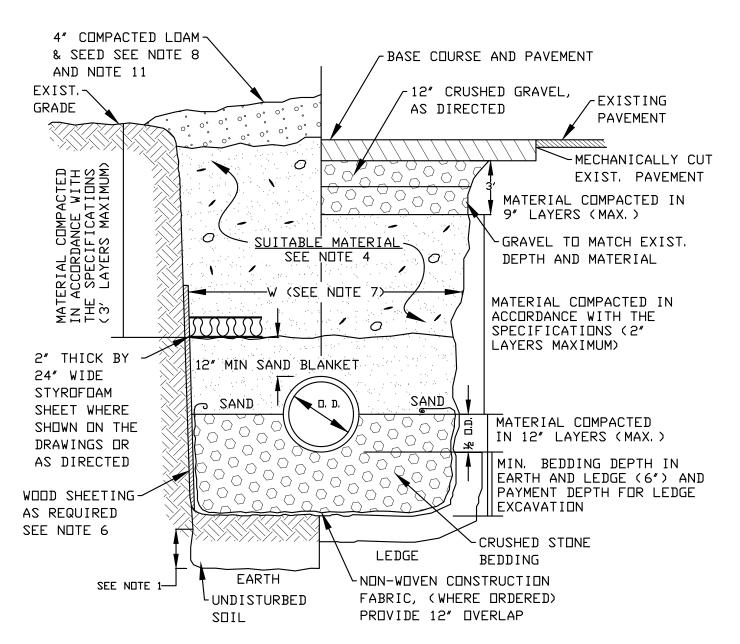
TEMPORARY TRENCH PAVEMENT REPAIR

GRAVITY SEWER TRENCH NOTES:

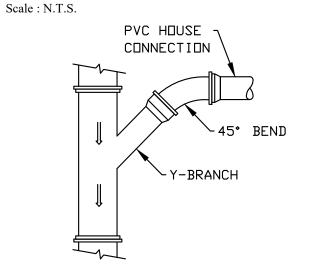
- 1) <u>ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE:</u> BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWINGS.
- 2) <u>BEDDING:</u> SEE NOTE 7 OF STANDARD MANHOLE NOTES. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.
- 3) <u>SAND BLANKET:</u> 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. NO STONE LARGER THAN 2" SHOULD BE IN CONTACT WITH THE PIPE.
- 4) <u>SUITABLE MATERIAL</u>: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION; AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. 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 AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WILL BE PRESERVED.
- 5) <u>BASE COURSE AND PAVEMENT</u> SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DIVISIONS 300 AND 400 RESPECTIVELY AND LOCAL REGULATION.
- 6) WOOD SHEATHING, 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 1 FOOT ABOVE THE TOP OF 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, NUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- 7) W = MAXIMUM ALLOWABLE TRENCH PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 12 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O. D.) ALSO, W SHALL BE THE PAYMENT WIDTH.
- 8) <u>FOR CROSS COUNTRY CONSTRUCTION</u>, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 9) <u>CONCRETE FOR ENCASEMENT</u> SHALL CONFORM TO THE REQUIREMENTS OF SECTION 520, (NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- 10) CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I. D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
- 11) GRAVEL DRIVEWAY AND SHOULDER RESTORATION: CRUSHED GRAVEL IN DRIVEWAYS AND ROAD SHOULDERS SHALL MATCH EXISTING WITH A MINIMUM OF 12". GRAVEL REPLACEMENT SHALL BE SUBSIDIARY TO SEWER CONSTRUCTION AND WILL NOT BE MEASURED FOR PAYMENT.

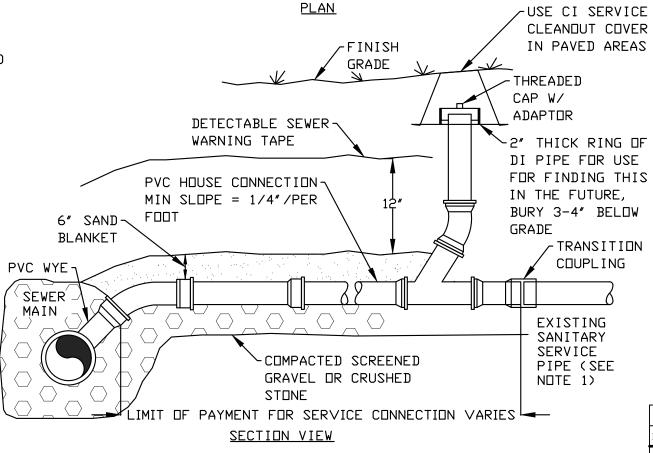
NOTES:

- 1) ALL SEWER SERVICE EXTENSIONS SHALL BE 6", CONTRACTOR SHALL VERIFY EXISTING SEWER SERVICE LOCATION AND ELEVATION BY EXCAVATION OF TEST PITS OR OTHER MEANS PRIOR TO THE CONSTRUCTION OF SEWER MAIN.
- 2) SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.
- 3) VARIOUS SIZE TRANSITION COUPLINGS SHALL BE STORED ON SITE FOR CONNECTION TO EXITING SERVICES.
- 4) CLEANDUTS SHALL BE INSTALLED AT EACH LIVE SEWER SERVICE CONNECTION, AS SHOWN ON THIS PLAN. REBAR SHALL BE PLACED AT SIDE OF CLEANDUT.
- 5) CLEANOUT SHALL BE USED TO PLUG AND TEST ALL NEW LATERALS WITH MINIMAL INTERRUPTION TO OPERATION OF HOMEOWNER SANITARY SYSTEM. CLEANOUTS SHALL BE INCIDENTAL TO SERVICE CONNECTIONS AND SHALL NOT BE CONSIDERED FOR PAYMENT.



TRENCH DETAIL- GRAVITY SEWER





	1	8/4/2020	TAC SUBMITTAL	
]	ISS.	DATE	DESCRIPTION OF ISSUE	
	SCA	1" = 10	,	
	CHECKED: A.ROSS			

M.G.P.

O: A.ROSS

TYPICAL SERVICE CONNECTION Scale: N.T.S.

PERMANENT PAVEMENT 1 1/2" WEARING COURSE-REPAIR WIDTH -MECHANICALLY CUT JOINT (TYP) TACK EDGE WITH EMULSIFIED NHDOT SECTION 401, TYPE E **ASPHALT** EXCAVATED WIDTH ✓ EXISTING PAVEMENT NOTES: -ASPHALT DEPTH TO 1) ALL PAVEMENT REMOVAL SHALL BE MATCH EXISTING 4" PRECEDED BY MACHINE CUTTING. MIN, TYPE TO BE APPROVED

PERMANENT TRENCH PAVEMENT REPAIR

2) ALL TEMPORARY, DAMAGED OR
DEFECTIVE PAVEMENT SHALL BE
REMOVED PRIOR TO PLACEMENT TRENCH
REPAIRS,

3) DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDOT REQUIREMENTS.

CRUSHED GRAVEL, NHDOT 304.

DEPTH TO MATCH EXISTING OR
TWELVE (12") INCHES,
WHICHEVER IS GREATER
CRUSHED GRAVEL SHALL BE
INCIDENTAL TO TRENCH
PAVEMENT REPAIRS.

ROSS NO. 9409

WENTER NO. 9409

& Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

TITLE

SEWER

ROSS ENGINEERING, LLC

Civil/Structural Engineering

DETAILS & NOTES

SARATOGA WAY Tax Map 212, Lots 112 & 113 Portsmouth, NH

owner of Record
Raleigh Way Holding Group, LLC
1 Middle Street, Suite 1
Portsmouth, NH 03801

 JOB NUMBER
 DWG. NO.
 ISSU

 19-097
 9 OF 9
 1

FOR TRENCHES 15' TO 20' IN DEPTH.

Wt AND Wp SHALL BE INCREASED BY 4'-0"

FOR TRENCHES 10' TO 15' AND BY 8'-0"

MINIMUM TRENCH PAVEMENT WIDTHS

CONSIDERED MINIMUM PAVEMENT PAYMENT

WIDTHS FOR O-10' DEEP CONSTRUCTION.

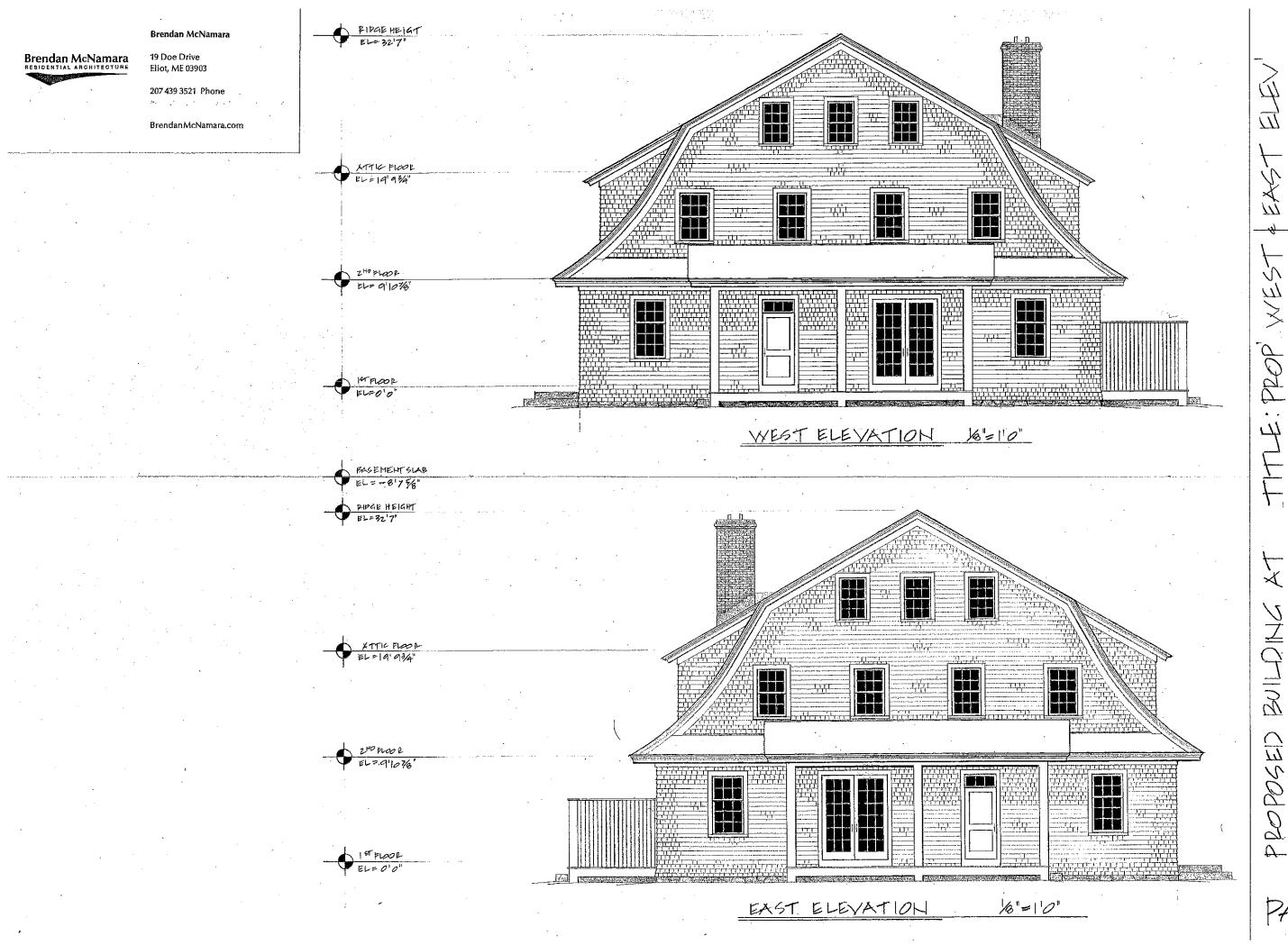
THE DIMENSIONS SHOWN SHALL BE

NOTE:

PIPE I. D.	Wt (INCHES).	Wp (INCHES
1-21 INCHES	72	108
24-30 INCHES	84	120
> 30 INCHES	96	132



PROPOSED VIEW FROM SARATOGA WAY



mx. 77PROP 4 X 工 <u>罗</u> $\frac{7}{7}$ $\frac{77}{2}$ K 202 101 2 10 $\bar{\varrho}$

25/21/21/21/3:

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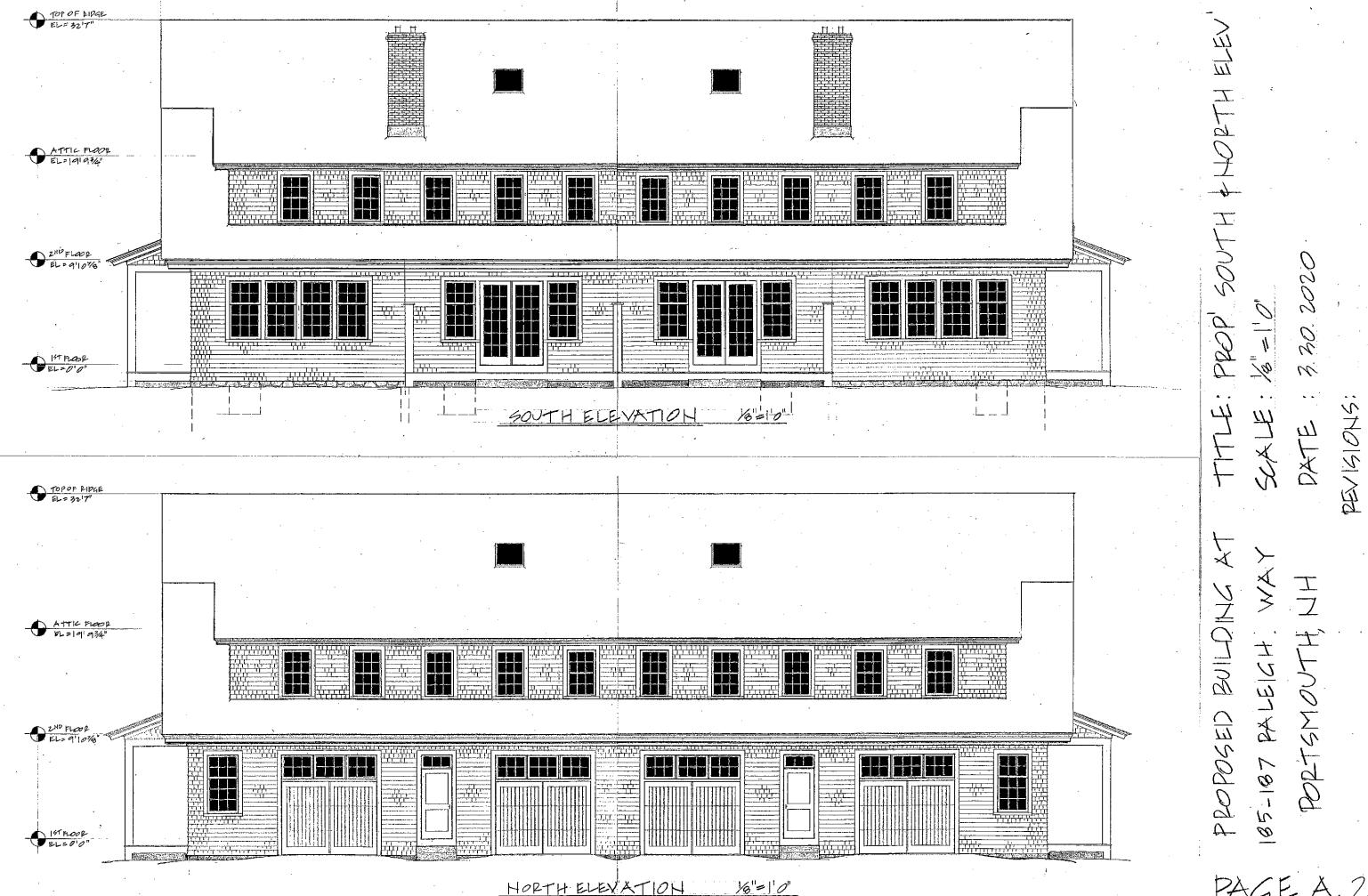
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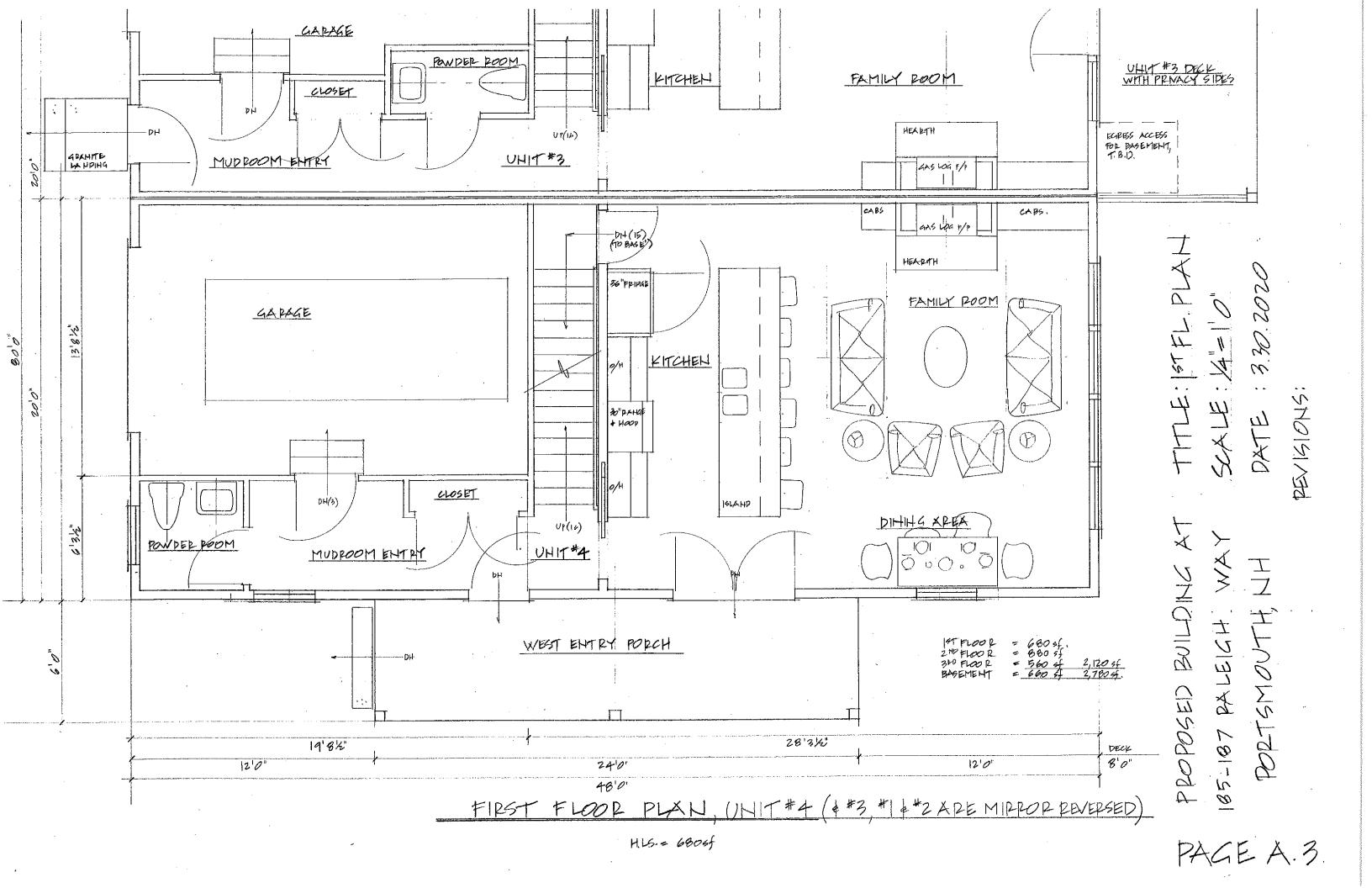
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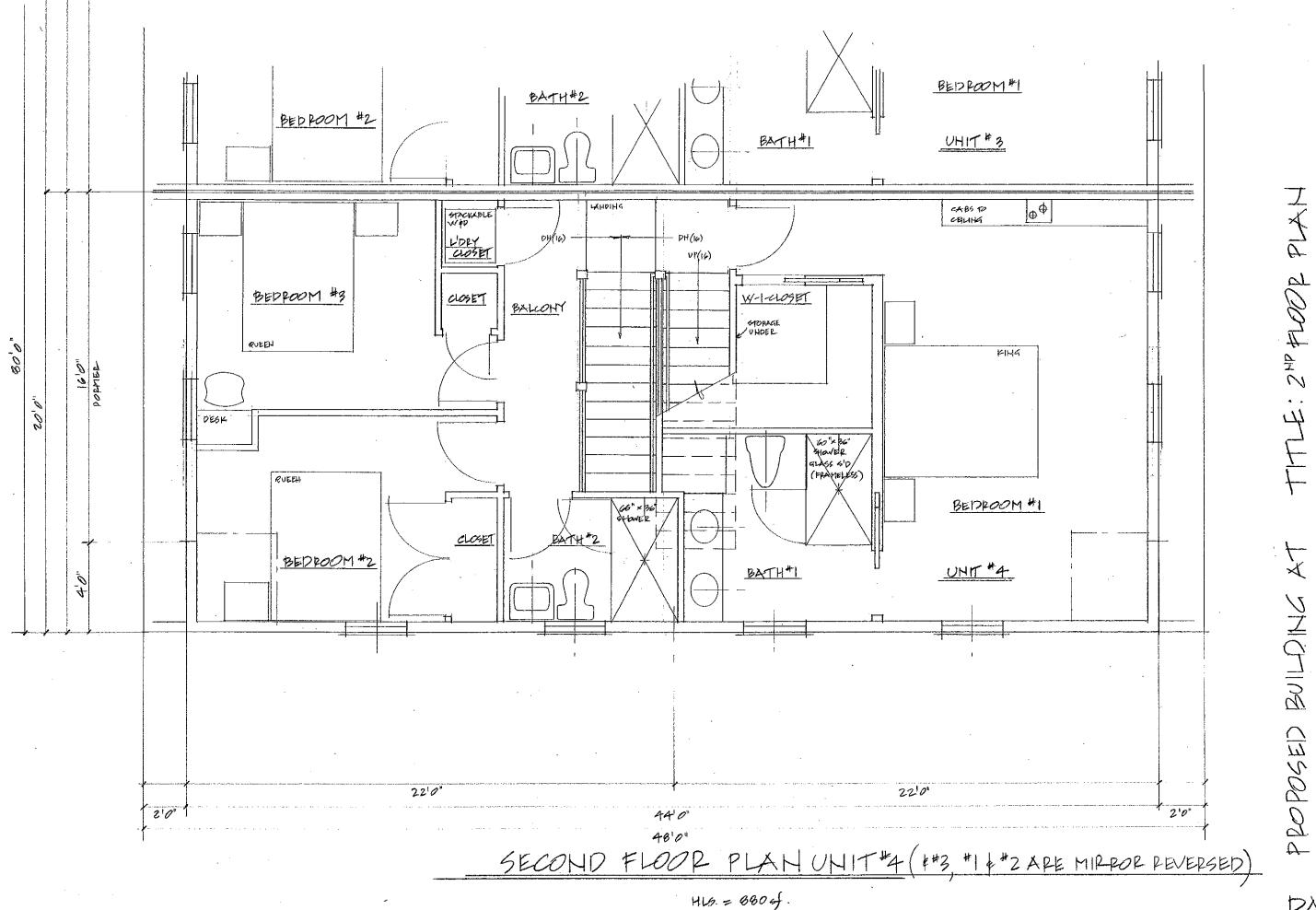
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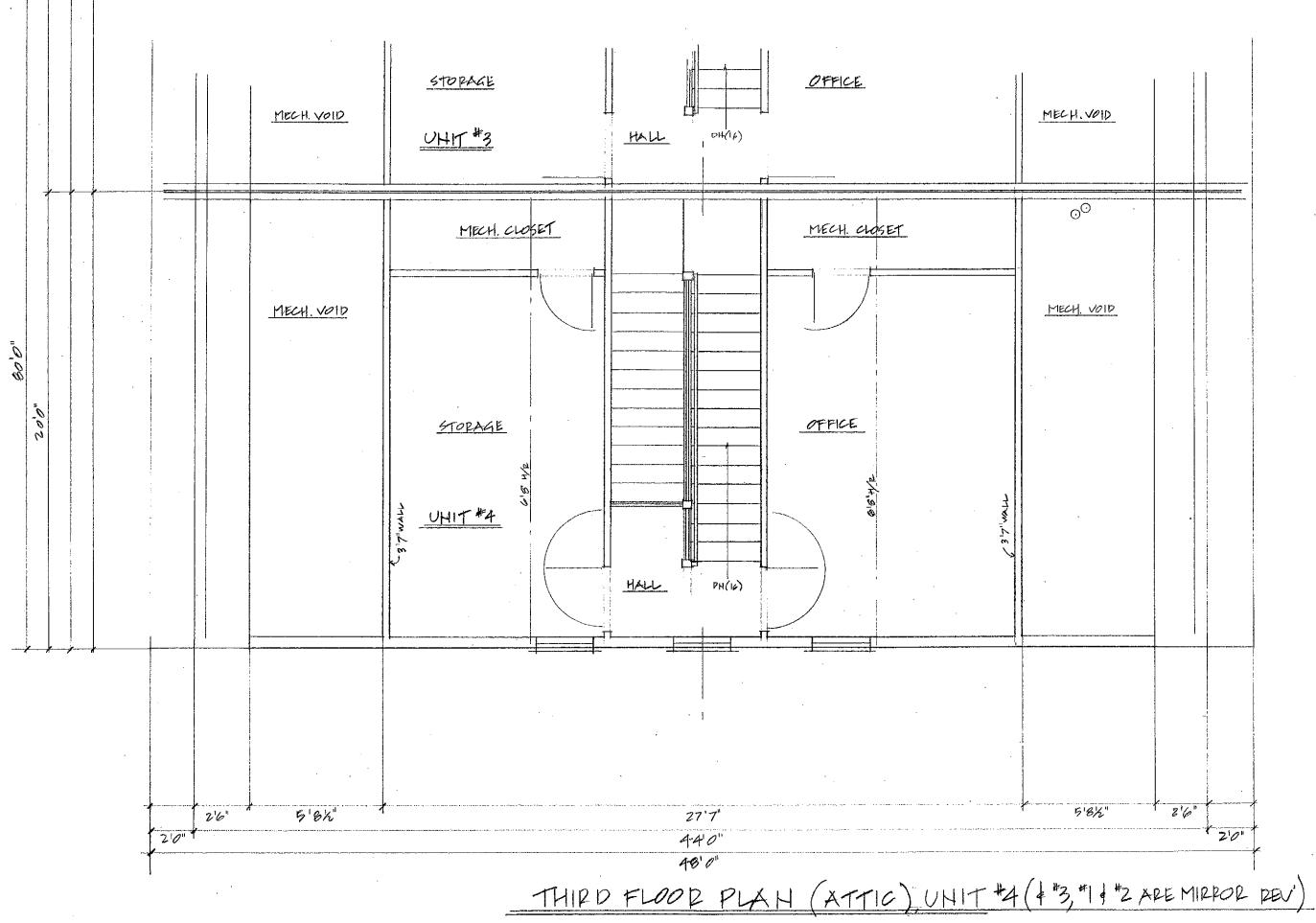
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PA LEIGH

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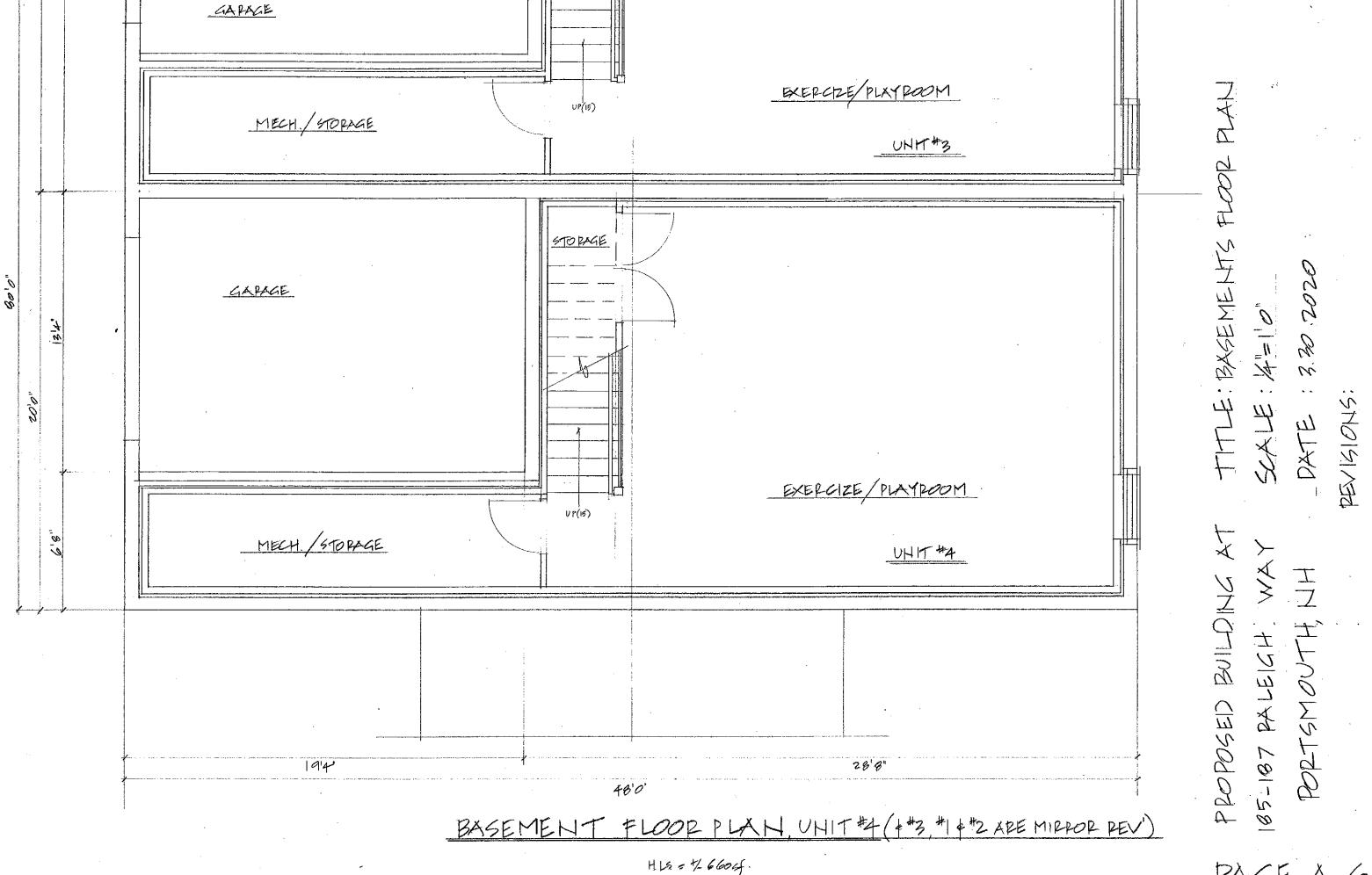


PROPOSEIS BUILDING AT PA LEIGH 185-187

3×元

PAGE A.S.

WITH 6'8" HEADROOM = 320 of, TO KHEE WALLS = 500 of.



PAGE A.G.