

HOEFLE, PHOENIX, GORMLEY & ROBERTS, PLLC

ATTORNEYS AT LAW

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To: Portsmouth Zoning Board of Adjustment (“ZBA”)
From: R. Timothy Phoenix
Date: April 27, 2022
Re: I. Request for Amendment to Plans in Support of Zoning Relief Granted June 16, 2020 (LU20-164)
II. Request for One Year Extension of Zoning Relief Granted June 16, 2020.
Owner: London Bridge South, Inc., Owner/Currier Homes of Windham, LLCJ Applicant

Property Location: 114 Saratoga Way, Units 1-4
Tax Map 212 Lots 112 and 113, GRB Dist.

Dear Chair Parrott and Zoning Board Members;

We are pleased to submit this letter (letter and exhibits uploaded to LU20-164, one hard copy delivered to Planning Board today) on behalf of applicant Currier Homes of Windham, LLC (“Currier”), requesting an amendment to the approved site plans and architectural plans submitted in support of the variance and special exception granted by the ZBA to Raleigh Way Holding Group, LLC on June 16, 2020. This request for amendment does not alter the variance and special exception relief granted on June 16, 2020. The request is limited to minor changes to the site plans and architectural plans.

I. REQUEST FOR AMENDMENT

EXHIBITS:

1. Site Plans Approved 6/16/20 – updated to 1/7/21 after TAC review
2. Elevations and Floor Plans Approved 6/16/20
3. 6/17/20 Notice of Decision Granting Variance and Special Exception Relief
4. 6/16/20 ZBA Minutes
5. Proposed Amended Site Plans
6. Proposed Amended Elevations and Floor Plans

DANIEL C. HOEFLE	R. PETER TAYLOR	MONICA F. KIESER	STEPHANIE J. JOHNSON
R. TIMOTHY PHOENIX	KIMBERLY J.H. MEMMESHEIMER	SAMUEL HARKINSON	OF COUNSEL:
LAWRENCE B. GORMLEY	KEVIN M. BAUM	JACOB J.B. MARVELLEY	SAMUEL R. REID
STEPHEN H. ROBERTS	GREGORY D. ROBBINS	DUNCAN A. EDGAR	JOHN AHLGREN

The building footprint perimeter walls remain as originally approved. The minor amendments to plans now requested are as follows:

- Third-floor dormer added to approved building creates +/- 140 s.f. additional floor area to interior units.
- Site plan amendments providing for fence and new utilities/room location.
- Side indents decreased to 1 foot to alleviate odd access to stairwells and bathroom areas and improve structurability. This added 8 s.f. per end unit and 0 s.f. for interior units.
- Front and back walls moved to line up with first-floor exterior wall for aesthetics, less stringent structural requirements, and to accommodate two panel egress windows in place of casement windows.
- Stone and new siding choices for exterior finish, remove some windows to better accommodate energy code.

The ZBA-approved variance and special exception on 6/16/20 are in no way changed. For the reasons set forth in the minutes and notice of decision, because this request for amendment changes nothing with respect to the relief requested, this amendment request complies with the following:

I. Variance from section 10.521 to allow a lot area per dwelling of 3736 s.f. where 5000 s.f. is the minimum required.

1. Granting the variance will not be contrary to the public interest
2. The spirit of the ordinance is observed.
3. Substantial justice will be done by granting the variance.
4. The values of surrounding properties will not be diminished by granting the variance.
5. Literal enforcement of the ordinance will result in an unnecessary hardship.
 - a. Special conditions exist that distinguish the property from others in the area
 - b. there is no fair and substantial relationship between the public purposes of the ordinance and its application in this instance.
 - c. The proposed use is a reasonable one

II. Special exception from section 10.440 use #1.51 to allow four dwelling units where the use is allowed by special exception.

10.232.21-the 4 unit residential use of the property is permitted by special exception

10.232.22-there will be no hazard to the public or adjacent property on account of potential fire, explosion or release of toxic materials.

10.232.23- there will be no detriment or change in the essential characteristics of the surrounding area.

10.232.24 will there be no creation of a traffic safety hazard or substantial increase in the level of traffic congestion in the area resulting from the proposed 4 unit residential use of the property.

10.232.25-the proposed use of the property will not result in any excessive demand on municipal services.

10.232.26-there will be no significant increase of stormwater runoff onto adjacent properties or streets.

Currier's original building permit application was filed on December 2, 2021 with the understanding that site and building changes that did not affect the variances could be made administratively. Materials have been ordered. A foundation permit was issued, and the foundation is installed. It was recently brought to Currier's attention that Zoning Board amended approval would be required in order to move forward with the final site plan and architectural drawings. Currier also believes that the changes make for better looking and functioning homes by improving light, egress, and providing more livable bedrooms.

For all of the reasons cited by the previous owner/applicant, the zoning Board of adjustment as set forth in the minutes of the 6/16/20 meeting, the attached plans showing minimal changes, and the contents hereof, the applicant respectfully requests that the ZBA approve these minor amendments to the site plans, floor plans and elevations.

II. REQUEST FOR EXTENSION OF ZONING RELIEF GRANTED 6/16/20

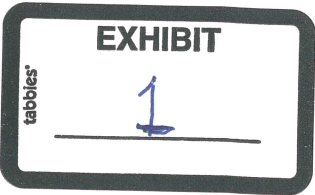
Zoning relief was granted for two (2) years from 6/16/20, expiring 6/16/22. PZO §10.236. Currier recently purchased the property and has had a building permit application pending since 12/2/21. Due to the pending amendment application status, it is unknown whether a full building permit will be issued by 6/16/22. Id. Accordingly, a one (1) year extension is hereby requested, expiring 6/16/22. PZO §10.236

Respectfully submitted,



R. Timothy Phoenix

cc Client
Ross Engineering



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

LIST OF PROJECT PLANS:

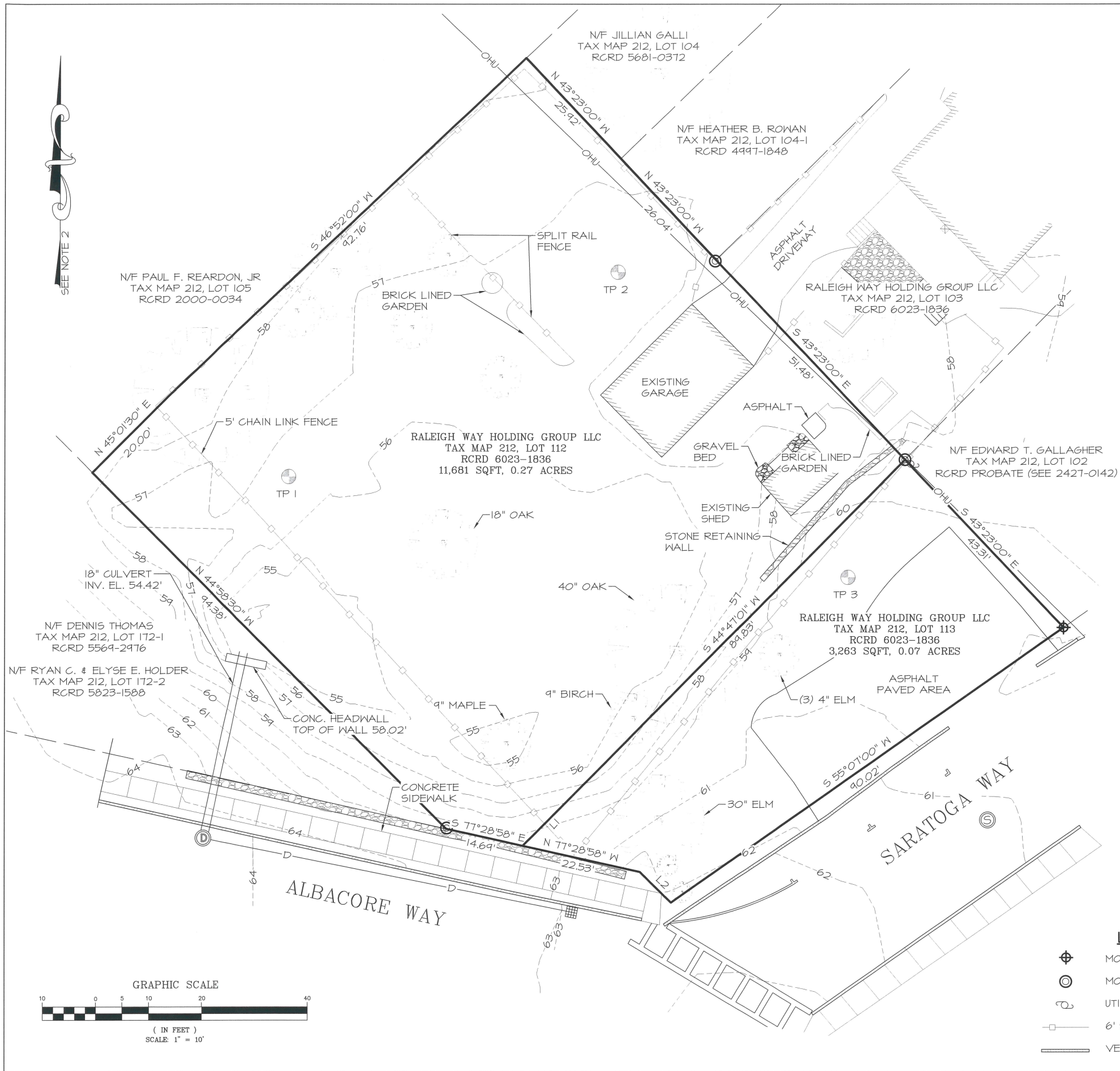
SITE PLAN SET

- 1 - Existing Conditions
- 2 - Site Plan
- 3 - Utility Plan
- 4 - Grading & Drainage
- 5 - Landscape Plan
- 6 - Roadway Plan
- 7 - Erosion Control Plan
- 8 - Details
- 9 - Pavement Details
- 10 - Notes

ARCHITECTURAL PLAN SET

- Color Rendering
- A1 - Proposed West & East Elev.
- A2 - Proposed South & North Elev.
- A3 - First Floor Plan
- A4 - Second Floor Plan
- A5 - Third Floor (Attic) Plan
- A6 - First Floor Plan, Unit #1

January 7, 2021



NOTES

- OWNER OF RECORD:
RALEIGH WAY HOLDING GROUP LLC
1 MIDDLE STREET SUITE 1
PORTSMOUTH, NH 03801
SITE LOCATION:
SARATOGA WAY
TAX MAP 212, LOT 103
RCRD: 6023-1836
AREA: 14,944 SF, 0.34 ACRES
PARCELS 2 AND 3
- BASIS OF BEARING AS PER REF. PLAN #2.
- PARCEL IS IN GENERAL RESIDENCE B ZONE (GRB):
MINIMUM LOT AREA.....5,000 SF
MIN. LOT AREA PER DWELLING UNIT.....5,000 SF
MINIMUM FRONTAGE.....80 FT
MINIMUM DEPTH.....60 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....25 FT
MAXIMUM BUILDING HEIGHT:
SLOPED ROOF.....35 FT
FLAT ROOF.....30 FT
MAXIMUM BUILDING COVERAGE.....30%
MINIMUM OPEN SPACE.....25%
- THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE,
AS PER FLOOD INSURANCE RATE MAP
#33015C0259E, PANEL 259 OF 681. DATED MAY
17, 2005.
- VARIANCES WERE GRANTED ON THE JUNE 16, 2020
ZBA MEETING
A) TO ALLOW 3,736 SF PER DWELLING UNIT
B) A SPECIAL EXCEPTION FROM SECTION 10.440
USE #1.51 TO ALLOW 4 DWELLING UNITS.

ADDITIONAL ABUTTERS

TAX MAP 212

LOT 36-I
MICHAEL B. & 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

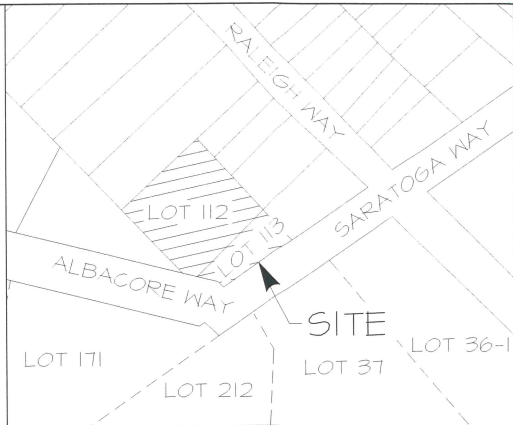
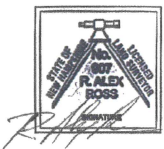
I ALEX ROSS, HEREBY CERTIFY:

- THAT THIS SURVEY PLAT WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION.
- 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.
- "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

SEAL



LOCUS PLAN N.T.S.

REFERENCE PLANS

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

7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	

SCALE: 1" = 10'

CHECKED: A.ROSS

DRAWN: DDD

CHECKED: A.ROSS

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

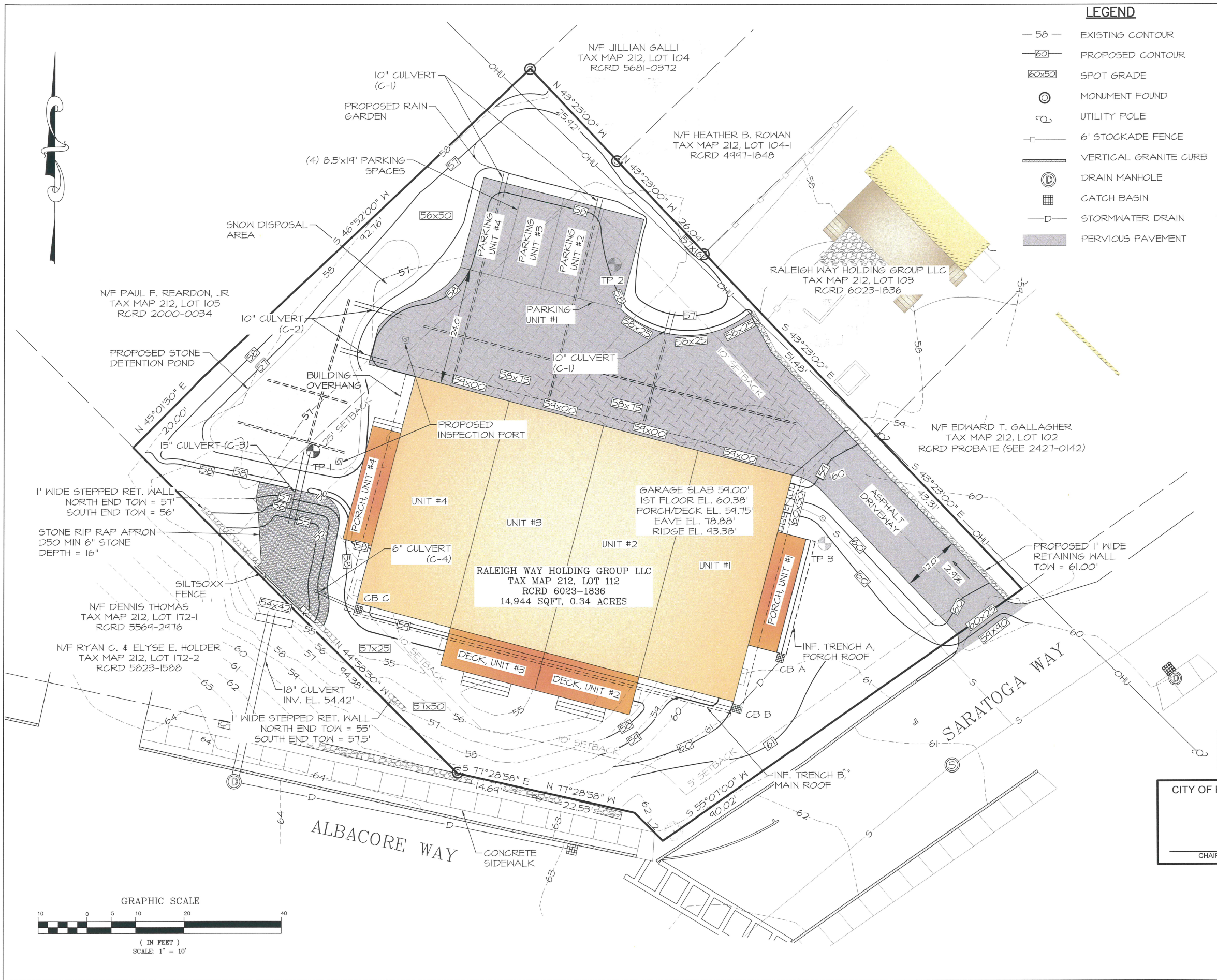
TITLE
**EXISTING
CONDITIONS**
for
SARATOGA WAY
Tax Map 212, Lots 112 & 113
Portsmouth, NH

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

JOB NUMBER
19-097

DWG. NO
1 OF 10

ISSUE
7



LEGEND

- 58 EXISTING CONTOUR
- 60 PROPOSED CONTOUR
- 60x50 SPOT GRADE
- MONUMENT FOUND
- UTILITY POLE
- 6' STOCKADE FENCE
- VERTICAL GRANITE CURB
- DRAIN MANHOLE
- CATCH BASIN
- STORMWATER DRAIN
- PERVIOUS PAVEMENT

NOTES

- OWNER OF RECORD:
RALEIGH WAY HOLDING GROUP LLC
1 MIDDLE STREET, SUITE 1
PORTSMOUTH, NH 03801
RCRD: 6023-1836
TAX MAP 212, LOTS 112 & 113
AREA: 14,444 SF, 0.34 ACRES
- PARCEL IS IN GENERAL RESIDENCE B ZONE (GRB):
MINIMUM LOT AREA.....5,000 SF
MIN. LOT AREA PER DWELLING UNIT.....5,000 SF
MINIMUM FRONTAGE.....80 FT
MINIMUM DEPTH.....60 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....25 FT
MAXIMUM BUILDING HEIGHT:
SLOPED ROOF.....35 FT
FLAT ROOF.....30 FT
PROPOSED HEIGHT.....27.33 FT
MAXIMUM BUILDING COVERAGE.....30%
PROPOSED BUILDING COVERAGE.....27.6%
MINIMUM OPEN SPACE.....25%
PROPOSED OPEN SPACE.....43.6%
- THIS SITE PLAN SHALL BE RECORDED IN THE
ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE
CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH
THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE
PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO
THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF
THE PORTSMOUTH PLANNING DIRECTOR.
- VARIANCES WERE GRANTED ON THE JUNE 16, 2020 ZBA
MEETING
A) TO ALLOW 3,736 SF PER DWELLING UNIT
B) A SPECIAL EXCEPTION FROM SECTION 10.440 USE
#151 TO ALLOW 4 DWELLING UNITS.
- CONTINUE VERTICAL GRANITE CURB TO DRIVEWAY APRON.

7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	

SCALE:	1" = 10'
CHECKED:	A.ROSS
DRAWN:	DDD
CHECKED:	A.ROSS

ALL CONDITIONS ON THIS PLAN SHALL
REMAIN IN EFFECT IN PERPETUITY
PURSUANT TO THE REQUIREMENTS OF
THE SITE PLAN REVIEW REGULATIONS.

CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON _____ DATE _____

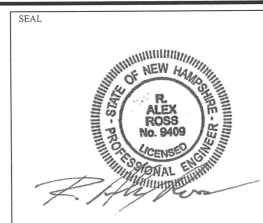
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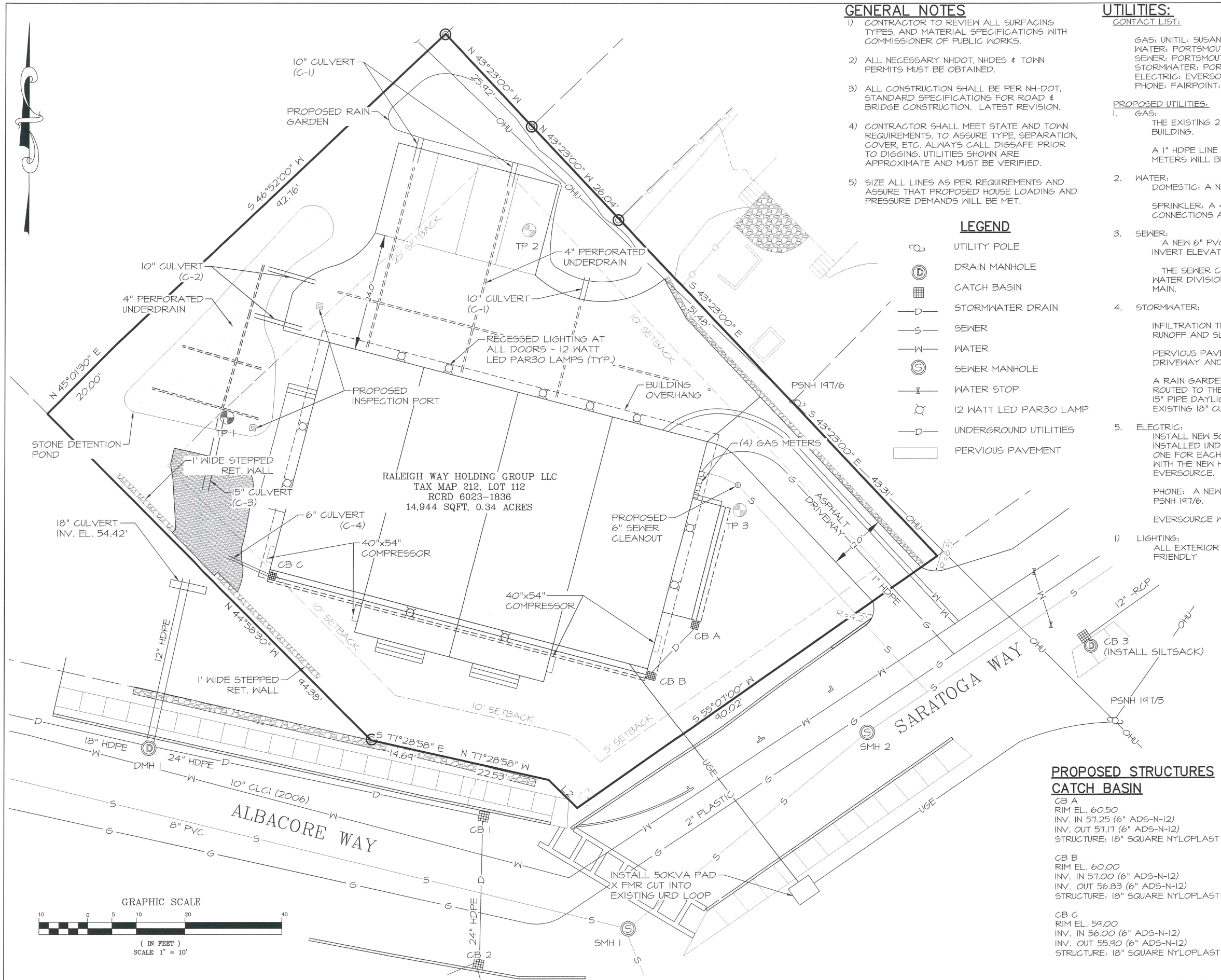
TITLE

SITE 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

JOB NUMBER	DWG. NO.	ISSUE
19-097	2 OF 10	7





GENERAL NOTES

- 1) CONTRACTOR TO REVIEW ALL SURFACING TYPES, AND MATERIAL SPECIFICATIONS WITH COMMISSIONER OF PUBLIC WORKS.
- 2) ALL NECESSARY NHDOT, NHDES & TOWN PERMITS MUST BE OBTAINED.
- 3) ALL CONSTRUCTION SHALL BE PER NH-DOT, STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION. LATEST REVISION.
- 4) CONTRACTOR SHALL MEET STATE AND TOWN REQUIREMENTS. TO ASSURE TYPE, SEPARATION, COVER, ETC. ALWAYS CALL DIGSAFE PRIOR TO DIGGING. UTILITIES SHOWN ARE APPROXIMATE AND MUST BE VERIFIED.
- 5) SIZE ALL LINES AS PER REQUIREMENTS AND ASSURE THAT PROPOSED HOUSE LOADING AND PRESSURE DEMANDS WILL BE MET.

LEGEND

	UTILITY POLE
	DRAIN MANHOLE
	CATCH BASIN
	STORMWATER DRAIN
	SEWER
	WATER
	SEWER MANHOLE
	WATER STOP
	12 WATT LED PAR30 LAMP
	UNDERGROUND UTILITIES
	PERVIOUS PAVEMENT

UTILITIES:

CONTACT LIST:

GAS: UNILIT: SUSAN L. DUPLISEA.....603-294-5147
WATER: PORTSMOUTH DPW:603-427-1530
SEWER: PORTSMOUTH DPW:603-427-1530
STORMWATER: PORTSMOUTH DPW:603-427-1530
ELECTRIC: EVERSOURCE: CASEY McDONALD.....603-436-7708 EXT 5641
PHONE: FAIRPOINT: JOSEPH P. CONSIDINE.....603-790-4059

PROPOSED UTILITIES:

1. GAS:
THE EXISTING 2" PLASTIC INTERMEDIATE PRESSURE GAS MAIN WILL SERVE THE 4 UNIT BUILDING.

A 1" HDPE LINE WILL BE INSTALLED CONNECTING TO THE EXISTING GAS MAIN. 4 GAS METERS WILL BE INSTALLED.
2. WATER:
DOMESTIC: A NEW 2" COPPER LINE WILL BE INSTALLED TO THE BUILDING

SPRINKLER: A 4" SPRINKLER LINE WILL BE INSTALLED. NECESSARY FLOW TEST CONNECTIONS AND SPECIFICATIONS AS PER CITY REQUIREMENTS.
3. SEWER:
A NEW 6" PVC SEWER LATERAL SHALL BE CONNECTED TO THE 8" STREET MAIN. INVERT ELEVATION AT BUILDING SHALL BE 56.00'. SEE CROSS SECTION ON SHEET II

THE SEWER CONNECTION SHALL BE WITNESSED AND APPROVED BY THE PORTSMOUTH WATER DIVISION AND SOLID COUPLINGS WILL BE USED TO CUT IN THE SERVICE TO THE MAIN.
4. STORMWATER:
INFILTRATION TRENCHES FOR THE SOUTHERN ROOF AND EASTERN PORCH ROOF STORE RUNOFF AND SLOWLY RELEASE IT TO THE 18" CULVERT.

PERVIOUS PAVEMENT IS PROPOSED TO COLLECT RUNOFF FROM THE ASPHALT DRIVEWAY AND NORTHERN ROOF.

A RAIN GARDEN IS PROPOSED TO COLLECT RUNOFF FROM THE NORTH. RUNOFF IS ROUTED TO THE PERVIOUS PAVEMENT SUB BASE, THEN TO A STONE DETENTION POND. A 15" PIPE DAYLIGHTS TO THE SOUTHWEST, SLOWLY RELEASING THE WATER TO THE EXISTING 18" CULVERT.
5. ELECTRIC:
INSTALL NEW 50KVA PAD CUT INTO EXISTING LOOP. TWO NEW 4" CONDUITS ARE TO BE INSTALLED UNDERGROUND TO PROVIDE SERVICE. FOUR METERS ARE TO BE INSTALLED, ONE FOR EACH UNIT. ALL ELECTRIC WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NEW HAMPSHIRE REQUIREMENTS FOR ELECTRIC SERVICE CONNECTIONS BY EVERSOURCE.

PHONE: A NEW 2" CONDUIT IS TO BE INSTALLED UNDERGROUND FROM UTILITY POLE PSNH 197/6.

EVERSOURCE WORK# 3446499
- 1) LIGHTING:
ALL EXTERIOR LIGHTING SHALL COMPLY WITH CITY REGULATIONS AND BE DARK SKY FRIENDLY

EXISTING STRUCTURES CATCH BASINS

CB #1
RIM EL. 62.96
INV. IN 24" (HDPE = 53.36 NW)
INV. OUT 24" (HDPE = 53.10 S)

CB #2
RIM EL. 62.89
INV. IN 12" (HDPE = 58.09 SE)
INV. IN 24" (HDPE = 52.97 N)
INV. OUT 24" (HDPE = 52.91 SW)

DRAIN MANHOLES

DMH 1
RIM EL. 64.12
INV. IN 12" (HDPE = 54.34 NW)
INV. IN 18" (HDPE = 54.27 NE)
INV. OUT 24" (HDPE = 54.14 SE)

SEWER MANHOLES

SMH 1
RIM EL. 63.64
INV. IN 58.04 (8" PVC)
INV. IN 57.90 (8" PVC)
INV. OUT 57.84 (8" PVC)
SMH 2
RIM EL. 61.17
INV. IN 56.26 (8" PVC)
INV. OUT 56.16 (8" PVC)

PROPOSED STRUCTURES CATCH BASIN

CB A
RIM EL. 60.50
INV. IN 57.25 (6" ADS-N-12)
INV. OUT 57.17 (6" ADS-N-12)
STRUCTURE: 18" SQUARE NYLOPLAST

CB B
RIM EL. 60.00
INV. IN 57.00 (6" ADS-N-12)
INV. OUT 56.83 (6" ADS-N-12)
STRUCTURE: 18" SQUARE NYLOPLAST

CB C
RIM EL. 59.00
INV. IN 56.00 (6" ADS-N-12)
INV. OUT 55.90 (6" ADS-N-12)
STRUCTURE: 18" SQUARE NYLOPLAST

ISS	DATE	DESCRIPTION OF ISSUE
7	1/7/2021	PB SUBMITTAL
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5	10/28/2020	PB SUBMITTAL
4	10/10/2020	REVISIONS
3	9/21/2020	TAC SUBMITTAL
2	8/17/2020	TAC SUBMITTAL
1	8/4/2020	TAC SUBMITTAL

CHECKED:	A.ROSS
DRAWN:	DDD
CHECKED:	A.ROSS

ROSS ENGINEERING, LLC
Civil/Structural Engineering
& Surveying
909 Estington St.
Portsmouth, NH 03801
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TITLE
**UTILITY
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

JOB NUMBER	DWG NO	ISSUE
19-097	3 OF 10	7

LEGEND

- MONUMENT FOUND
- UTILITY POLE
- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PERVIOUS PAVEMENT

NOTES

- 1) OWNER OF RECORD:
RALEIGH WAY HOLDING GROUP, LLC
1 MIDDLE ST, SUITE 1
PORTSMOUTH NH, 03801
RCRD: 6023-1836
- 2) ASSURE LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT. INSTALL SILTSACKS ON CATCH BASINS A, B, & C AND ON CATCH BASIN 3. FOLLOW NHDES REGULATIONS AND GUIDELINES IN "STORMWATER & EROSION & SEDIMENTATION CONTROL HANDBOOK FOR URBAN & DEVELOPING AREAS IN NEW HAMPSHIRE" LATEST EDITION.
- 3) SNOW DISPOSAL AREA
SNOW TO BE MOVED WEST ALONG THE 24' WIDE PARKING AREA TO THE STONE DETENTION POND. 4" UNDERDRAIN TO BE INSTALLED TO ENSURE PROPER DRAINAGE.

TEST PIT 1 (of 3)

DEPTH (INCHES)	COLOR	TEXTURE	STRUCTURE	CONSISTENCE
0	10 YR 1/2 DARK BROWN	FINE SANDY LOAM	WEAK FINE GRANULAR	MOIST FRIABLE
12	10 YR 1/2 BROWN	FINE SANDY LOAM	WEAK FINE SUBANGULAR BLOCKY	MOIST FRIABLE
24	10 YR 1/2 GRAYISH BROWN 15 YR 1/2 STRONG BROWN REDOXIMORPHIC CONCENTRATION AND 10 YR 1/2 LIGHT GRAY REDOXIMORPHIC DEPLETIONS	FINE SANDY LOAM	MASSIVE	DRY FIRM & RESTRICTIVE
42	2.5 YR 1/2 LIGHT OLIVE BROWN MANY REDOXIMORPHIC FEATURES	SILT LOAM	WEAK PLATY	DRY FIRM & RESTRICTIVE

ESKHT	24 INCHES	ROOTS	COMMON TO 30 INCHES	RESTRICTIVE LAYERS	24 INCHES
OBSERVED H2C	NONE	REFUSAL (INCHES)	NONE TO 64"		
NOTES	ALL PITS MARKED WITH PINK FLAG EMBELAZONED WITH THE CORRESPONDING PIT #				

TEST PIT 2 (of 3)

DEPTH (INCHES)	COLOR	TEXTURE	STRUCTURE	CONSISTENCE
0	10 YR 1/2 VERY DARK GRAYISH BROWN	FINE SANDY LOAM	WEAK FINE GRANULAR	DRY TO MOIST FRIABLE
10	10 YR 1/2 DARK YELLOWISH BROWN	FINE SANDY LOAM	WEAK FINE SUBANGULAR BLOCKY	MOIST FRIABLE
18	10 YR 1/2 GRAYISH BROWN 15 YR 1/2 STRONG BROWN REDOXIMORPHIC FEATURES AND 20 YR 1/2 LIGHT GRAY REDOXIMORPHIC DEPLETIONS	FINE SANDY LOAM	MASSIVE	DRY FIRM AND RESTRICTIVE
20	10 YR 1/2 GRAYISH BROWN COMMON REDOXIMORPHIC FEATURES	GRAVELLY FINE SANDY LOAM	MASSIVE	DRY FIRM
44	10 YR 1/2 BROWN 20 YR 1/2 STRONG BROWN REDOXIMORPHIC CONCENTRATIONS AND 20 YR 1/2 LIGHT GRAY REDOXIMORPHIC DEPLETIONS	ALTERNATING 2" LAYERS OF VERY FINE SANDY LOAM AND SILT LOAM	MASSIVE	DRY FRIABLE

ESKHT	18 INCHES	ROOTS	FEH	RESTRICTIVE LAYERS	NONE
OBSERVED H2C	NONE	REFUSAL (INCHES)	NONE TO 64"		
NOTES					

TEST PIT 3 (of 3)

DEPTH (INCHES)	COLOR	TEXTURE	STRUCTURE	CONSISTENCE
0	10 YR 1/2 VERY DARK GRAYISH BROWN	FINE SANDY LOAM	WEAK FINE GRANULAR	DRY TO MOIST FRIABLE
15	10 YR 1/2 DARK YELLOWISH BROWN	FINE SANDY LOAM	MASSIVE	DRY FRIABLE
30	10 YR 1/2 BROWN 10 YR 1/2 STRONG BROWN REDOXIMORPHIC CONCENTRATIONS	FINE SANDY LOAM	MASSIVE	DRY FIRM AND RESTRICTIVE

ESKHT	30 INCHES	ROOTS	FEH	RESTRICTIVE LAYERS	NONE
OBSERVED H2C	NONE	REFUSAL (INCHES)	NONE TO 60"		
NOTES					

7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	

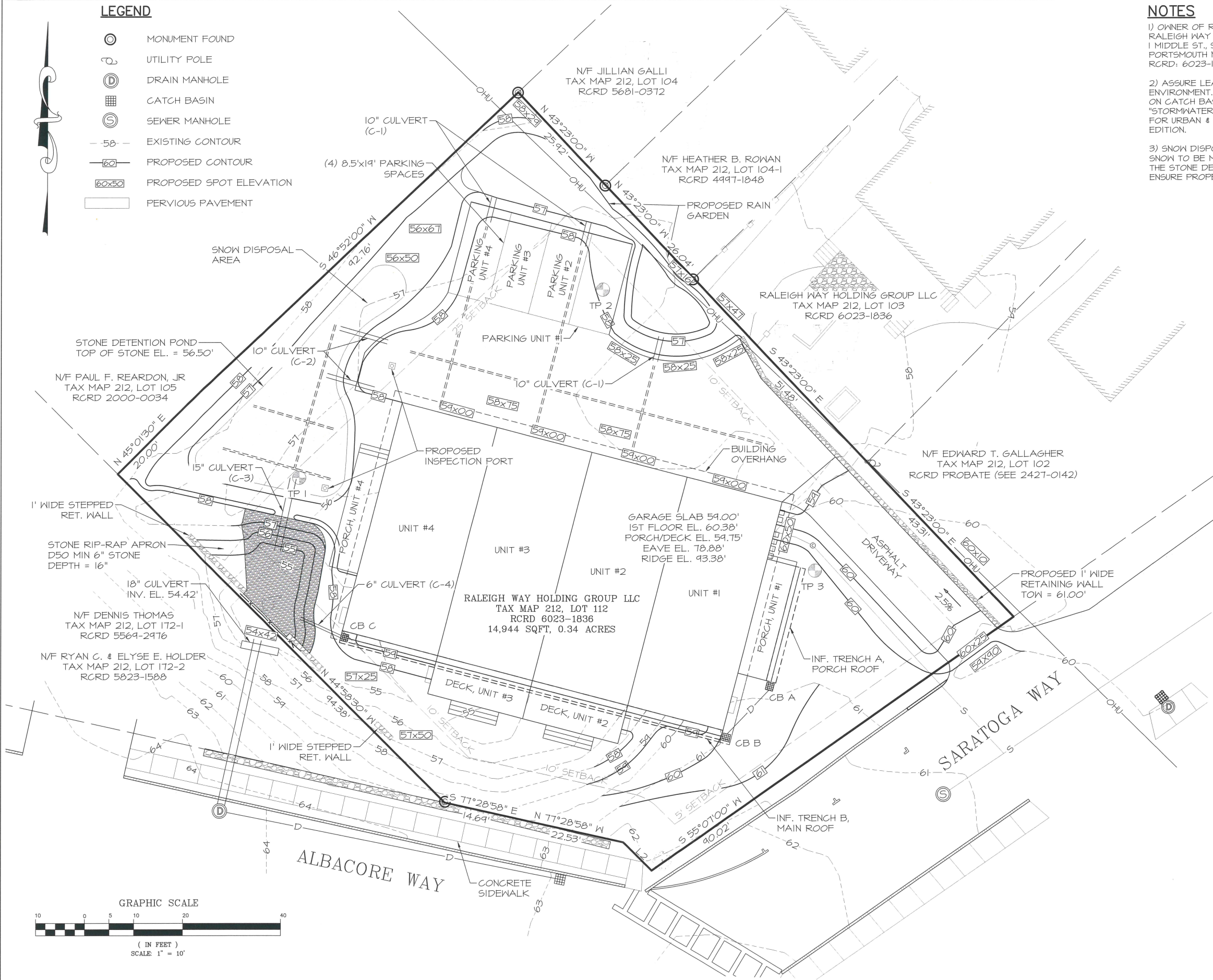
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CHECKED: A.ROSS

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

TITLE: GRADING & DRAINAGE 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

JOB NUMBER	DWG. NO.	ISSUE
19-097	4 OF 10	7



CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON _____ DATE _____

ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.

NOTES

- THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.

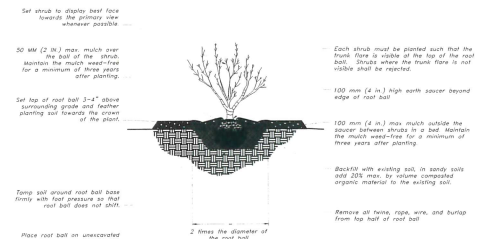
PLANTING NOTES

- ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK.
- ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE LANDSCAPE CONTRACTOR.
- AFTER PLANTING, ALL PLANTS SHALL BE FLOODED AT THE BASE WITH WATER FROM A SLOW-RUNNING HOSE FOR 5 MINUTES EACH.
- ALL PLANTS SHALL BE INSTALLED BEFORE ANY GRASS IS SEEDED.
- ALL SHRUBS AND PLANTING BEDS SHALL BE MULCHED WITH 3" OF DARK BROWN AGED BARK MULCH AS A FINAL STEP. MULCH MUST BE KEPT 2" AWAY FROM BASE OF EACH PLANT.
- THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL REQUIRED SCREENING AND LANDSCAPE MATERIALS.
- ALL REQUIRED PLANT MATERIALS SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION, REPLACED WHEN NECESSARY, AND KEPT FREE OF REFUSE AND DEBRIS. ALL REQUIRED FENCES AND WALLS SHALL BE MAINTAINED IN GOOD REPAIR.
- THE PROPERTY OWNER IS RESPONSIBLE FOR REMOVING AND REPLACING DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY WITH THE SAME TYPE, SIZE, AND QUANTITY OF PLANT MATERIALS AS ORIGINALLY INSTALLED, UNLESS ALTERNATIVE PLANTINGS ARE REQUESTED, JUSTIFIED, AND APPROVED BY THE PLANNING BOARD OR PLANNING DIRECTOR.

INSTALLATION REQUIREMENTS:

- THE INSTALLATION OF A DRIP IRRIGATION SYSTEM IS RECOMMENDED TO ASSURE WELL GROWN PLANTS.
- IN CASE OF DROUGHT (DEFINED AS TWO WEEK PERIOD WITHOUT RAIN) ALL NEW PLANTS SHALL BE WATERED THROUGH NOVEMBER 1ST DURING THE FIRST SEASON IN WHICH THEY ARE INSTALLED. THEY SHALL BE WATERED ONE TIME PER DAY FOR THE FIRST WEEK AFTER INSTALLATION AND THREE TIMES PER WEEK FOR THE REMAINDER OF THE SEASON. AFTER THE FIRST SEASON WHEN THE ROOTS OF THE PLANTS ARE ESTABLISHED THEY WILL NOT REQUIRE WATERING.
- SOAKER HOSES WOUND THROUGH THE BED NEAR THE BASE OF EACH PLANT ARE THE RECOMMENDED METHOD OF WATERING DURING THE FIRST SEASON. THESE CAN BE REMOVED AFTER NOVEMBER 30TH WHEN THE PLANTS ARE ESTABLISHED.

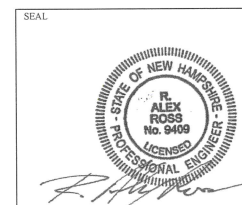
Shrub Detail



LEGEND

- Pervious Pavement
- Grassed Area
- Hydrangea paniculata 'Limelight'
- Spiraea nipponica 'Snowmound'
- Thuja occidentalis 'Nigra'

BOTANICAL/COMMON NAME	NOTES	MATURE SIZE	POT SIZE	QTY.
Hydrangea paniculata 'Limelight'	Deciduous flowering shrub	6' T x 6' W	6 G	5
Spiraea nipponica 'Snowmound'	Deciduous flowering shrub	4-5' T x 4-5' W	5 G	3
Thuja occidentalis 'Nigra' Arborvitae	Pyramidal evergreen hedging shrub	20-30' T x 5-10' W	6-7' BB	17



7	1/7/2021	PB SUBMITTAL
6	12/3/2020	PB SUBMITTAL
5	10/28/2020	PB SUBMITTAL
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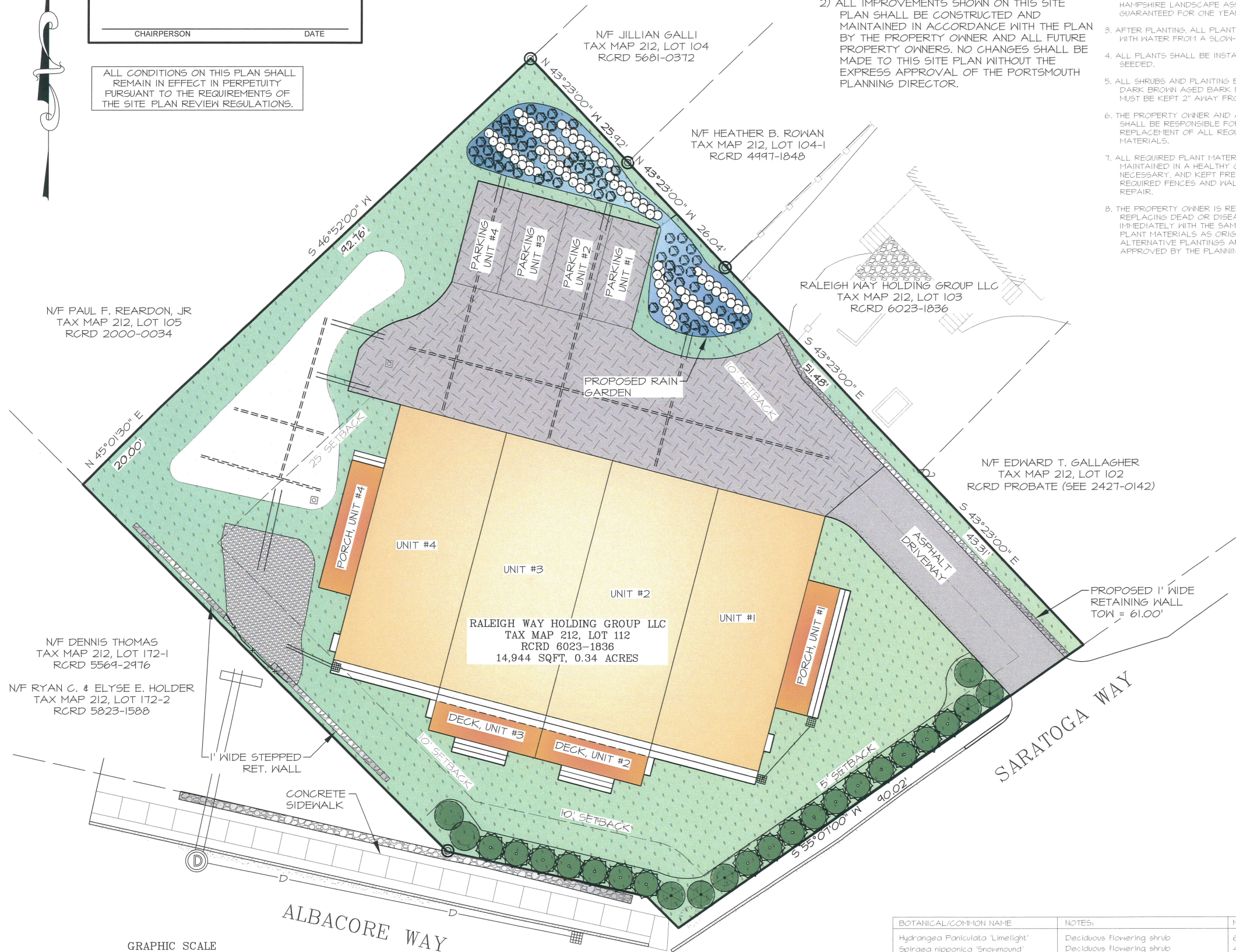
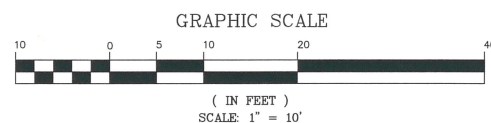
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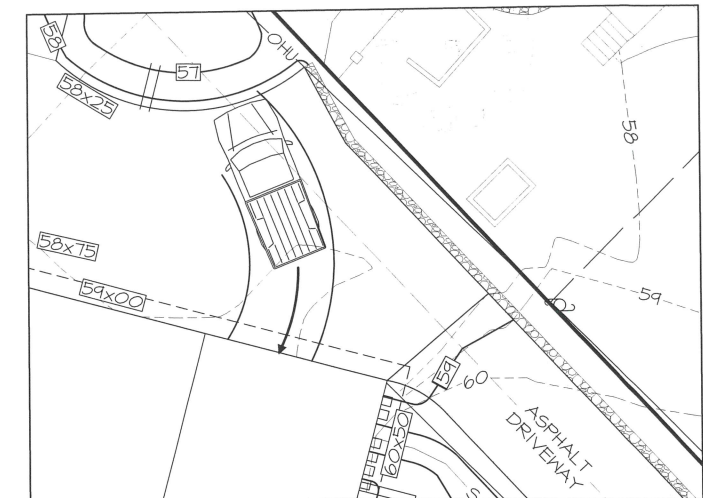
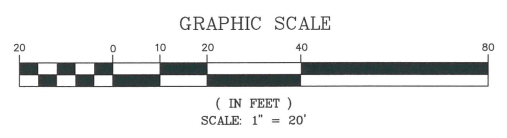
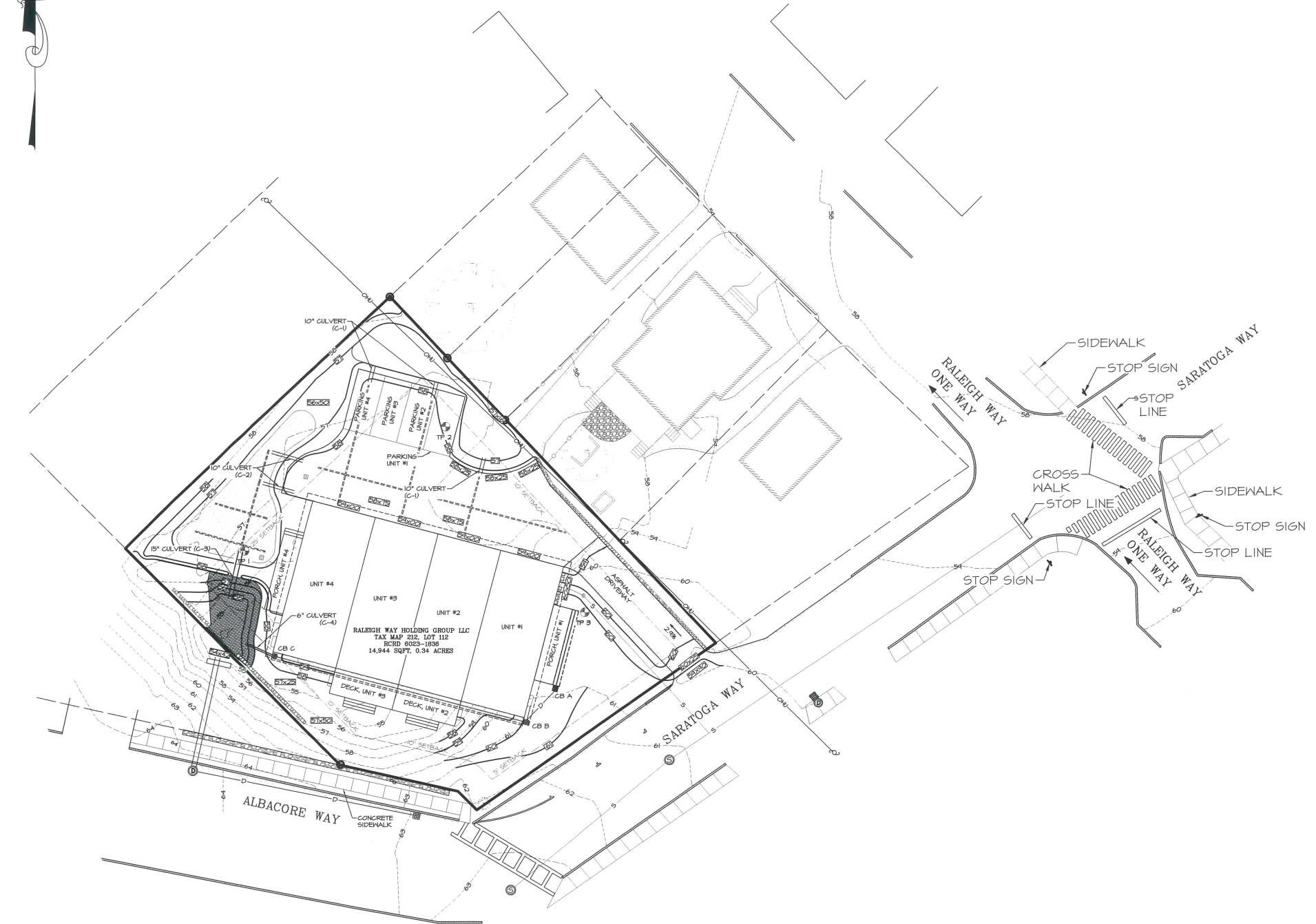
ROSS ENGINEERING, LLC
Civil/Structural Engineering
& Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

TITLE: **LANDSCAPE PLAN**
for
SARATOGA WAY
Tax Map 212, Lots 112 & 113
Portsmouth, NH

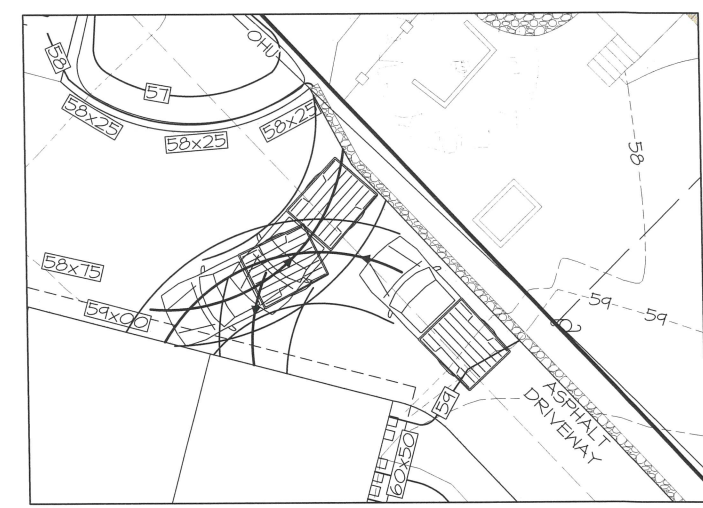
OWNER OF RECORD
Raleigh Way Holding Group, LLC
1 Middle Street, Suite 1
Portsmouth, NH 03801

JOB NUMBER	DWG. NO.	ISSUE
19-097	5 OF 10	7



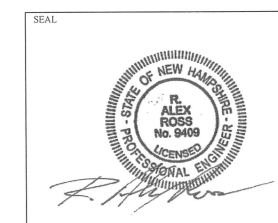


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7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
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ISS	DATE	DESCRIPTION OF ISSUE	
SCALE: 1" = 20'			
CHECKED: A.ROSS			
DRAWN: DDD			
CHECKED: A.ROSS			
ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560			
TITLE: ROADWAY 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			
JOB NUMBER	DWG. NO.	ISSUE	
19-097	6 OF 10	7	



EROSION AND SEDIMENTATION CONTROL
CONSTRUCTION PHASING AND SEQUENCING

1. SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO BE AN INTEGRAL PART OF THIS PROCESS.
2. INSTALL SILT/STOXX FENCING AS PER DETAILS AND AT SEDIMENT MIGRATION.
3. CONSTRUCT TREATMENT SWALES, LEVEL SPREADERS AND DETENTION STRUCTURES AS DEPICTED ON DRAWINGS.
4. STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION MATERIAL & COVER WHERE PRACTICABLE.
5. MINIMIZE DUST THROUGH APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES ON SITE.
6. ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES.
7. FINISH GRADE AND COMPACT SITE.
8. RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES.
9. STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING.
10. RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES.
11. SILT /STOXX FENCING TO REMAIN AND BE MAINTAINED FOR TWENTY FOUR MONTHS AFTER CONSTRUCTION TO ENSURE ESTABLISHMENT OF ADEQUATE SOIL STABILIZATION AND VEGETATIVE COVER. ALL SILT /STOXX FENCING ARE THEN TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
12. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
13. ALL TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC. MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
14. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE - BEFORE ROUGH GRADING THE SITE.
15. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
16. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
17. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
18. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
19. 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.
20. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COME INTO BEING UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

PLANTING NOTES:

1. 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:

1. 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 ROUNO 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:

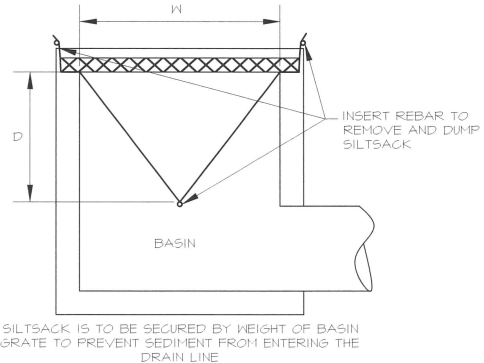
FOR TEMPORARY & LONG TERM SEEDINGS USE AGWAY'S SOIL CONSERVATION GRASS SEED OR EQUAL
COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2 FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE,
FERTILIZER & LIME:
NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P2O5) 100 LBS/ACRE, POTASH (K2O) 100 LBS/ACRE, LIME 2000 LBS/ACRE
MULCH:
HAY OR STRAW 1.5-2 TONS/ACRE

A) GRADING AND SHAPING:

- 1) 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:

- 1) 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.



Silt sack
N.T.S.

EROSION AND SEDIMENTATION CONTROL GENERAL
NOTES

1. 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 OF STABLE).
5. TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES).
6. SILT/STOXX 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 SILT/STOXX AND ANY EDGE OF WET AREA.
7. SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO ENSURE VEGETATIVE ESTABLISHMENT.
8. SEDIMENT BASINS, IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN CAPACITY.
9. SILT/STOXX 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.
11. AN AREA SHALL BE CONSIDERED FULLY STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED.
12. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
13. 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

1. 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 COMPLETED 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.

LONG TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE C

	lb/ACRE	lb/1000SF
TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
RED CLOVER (ALSIKE)	20	0.45
TOTAL	40	1.35

LIME: AT 2 TONS PER ACRE OR 100 LBS PER 1,000 SF.

FERTILIZER: 10 20 20 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE.

MULCH: HAY OR CLEAN STRAW, 2 TONS/ACRE OR 2 BALES/1000 SF.

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: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, 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 1 - AUGUST 15		
ANNUAL RYE GRASS	40	1
FOR FALL SEEDING		
WINTER RYE	112	2.5

LIME: AT 1 TON PER ACRE OR 100 LBS PER 1,000 SF.

FERTILIZER: 10 10 10 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE.

MULCH: HAY OR CLEAN STRAW, 2 TONS/ACRE OR 2 BALES/1000 SF.

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: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

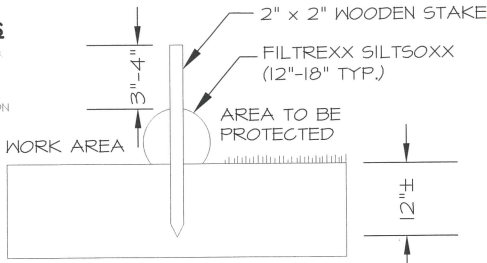
WHEN PROPOSED FOR ALTERATION DURING CONSTRUCTION AS BEING INFESTED WITH INVASIVE SPECIES SHALL BE MANAGED APPROPRIATELY USING THE DISPOSAL PRACTICES IDENTIFIED IN "NHDOT - BEST MANAGEMENT PRACTICES FOR ROADSIDE INVASIVE PLANTS -2008" AND "METHODS FOR DISPOSING NON-NATIVE INVASIVE PLANTS - UNH COOPERATIVE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

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

FILTREXX SILT/STOXX NOTES

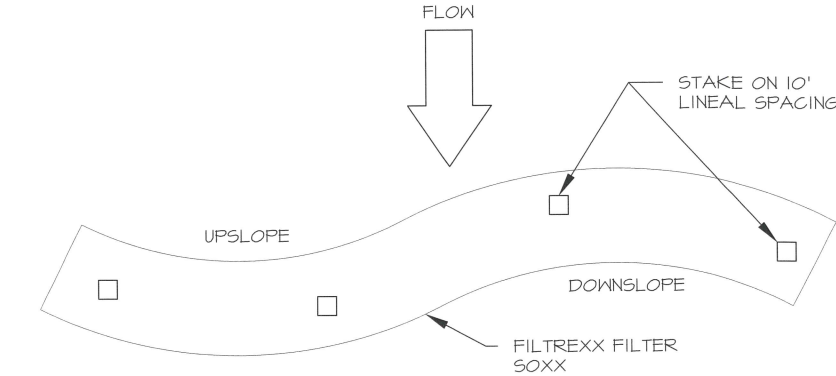
1) ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS

2) SILT/STOXX COMPOST, SOIL, ROCK, SEED FILL TO MEET APPLICATION REQUIREMENTS



Filtrex SiltSoxx Section

N.T.S.



Filtrex SiltSoxx Plan View

N.T.S.

TRENCH NOTES - STORM DRAIN:

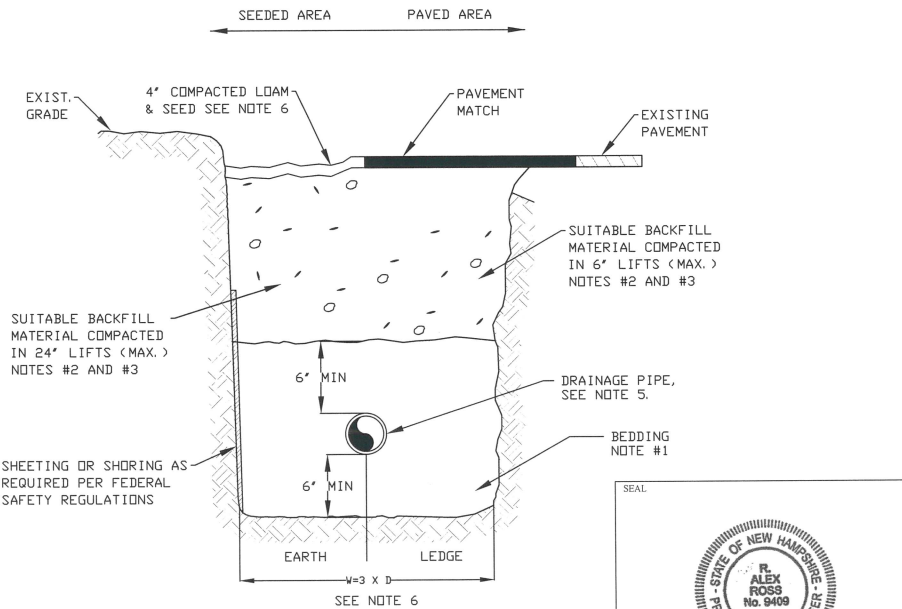
- 1) **BEDDING:** BEDDING FOR PIPES SHALL CONSIST OF PREPARING THE BOTTOM OF THE TRENCH TO SUPPORT THE ENTIRE LENGTH OF THE PIPE AT A UNIFORM SLOPE AND ALIGNMENT. CRUSHED STONE SHALL BE USED TO BED THE PIPE TO THE ELEVATION SHOWN ON THE DRAWINGS. NORMAL PIPE BEDDING IS CRUSHED STONE TO THE HAUNCH OF 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. FILTER FABRIC TO BE PLACED IN BETWEEN ALL STONE BEDDING MATERIAL AND SUBSEQUENT LAYERS OF FILL MATERIAL.
- 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 COMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
- 3) **SUITABLE MATERIAL:** 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; 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) **DRAINAGE PIPE:** 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.



TRENCH DETAIL-STORM DRAIN

Scale: N.T.S.

7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	

ISS	DATE	DESCRIPTION OF ISSUE
SCALE:	1" = 10'	
CHECKED:	A.ROSS	
DRAWN:	DDD	
CHECKED:	A.ROSS	

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

TITLE
**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

JOB NUMBER	DWG NO	ISSUE
19-097	7 OF 10	7

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, CONTAMINANTS.
- 9) NATION AND FLAWS PRIOR TO ACCEPTANCE BY THE CITY.
- 10) ALL EXISTING WATER GATE BOXES SHALL BE SET TO FINAL GRADE DURING THE ROAD WORK OPERATION.
- 11) ALL GATE VALVES SHALL BE RESTRAINED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 12) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 13) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
- 14) 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.
- 15) ALL PORTIONS OF THE NEW DUCTILE IRON WATER MAIN SYSTEM SHALL BE PROTECTED USING PLASTIC WRAPPINGS AND BRASS CONDUCTIVITY WEDGES. SEE SPECIFICATIONS.
- ADD FITTINGS AS NECESSARY TO ENSURE THAT VALVES ARE INSTALLED NEARLY LEVEL.

GENERAL NOTES:

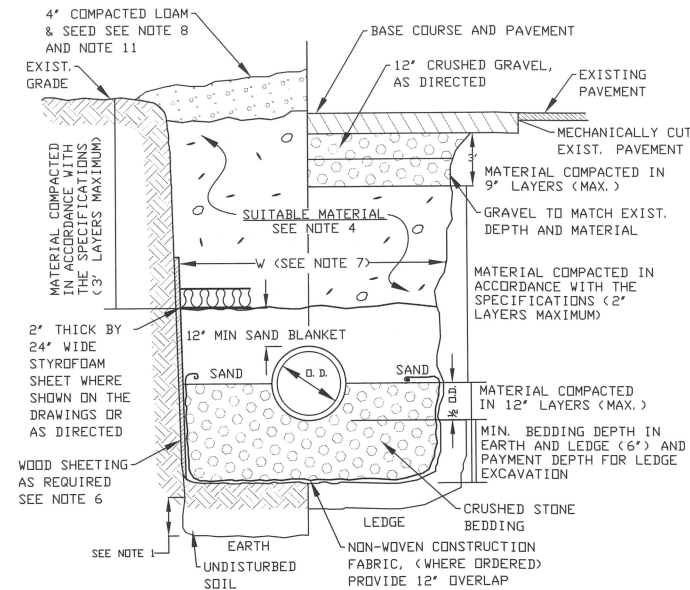
- 1) THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY ROSS ENGINEERING. EXISTING UTILITIES THAT ARE SHOWN ON THE PLANS WERE GATHERED FROM AVAILABLE STRUCTURES THAT WERE VIABLE, RECORD DRAWINGS OF THE VARIOUS UTILITY COMPANIES CAMERA INSPECTIONS AND OBSERVATIONS MADE. THERE IS NO GUARANTEE THAT THE UTILITIES 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 UNILIT, THE GAS COMPANY, AND SHALL BE SUBSIDIARY. THE GAS COMPANY WAS NOTIFIED OF OBVIOUS CONFLICTS PREVIOUSLY AND WAS TO LOCATE THEIR 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 WORKDAY.
- 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.

GRAVITY SEWER TRENCH NOTES:

- 1) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWINGS.
- 2) BEDDING: 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) SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 90-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. NO STONE LARGER THAN 2" SHOULD BE IN CONTACT WITH THE PIPE.
- 4) SUITABLE MATERIAL: 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) 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 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, BUT 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) FOR CROSS COUNTRY CONSTRUCTION: BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 9) CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS OF SECTION 520, (NHDDT 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.

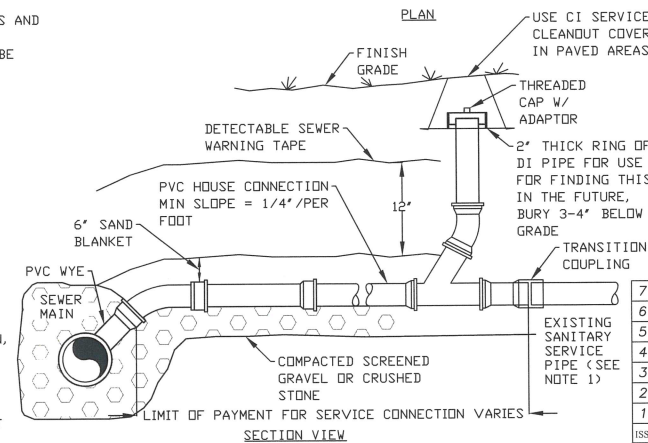
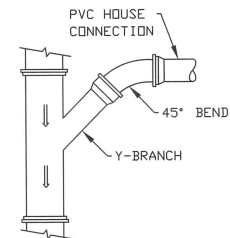
NOTES:

- 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 EXISTING SERVICES.
- 4) CLEANOUTS SHALL BE INSTALLED AT EACH LIVE SEWER SERVICE CONNECTION, AS SHOWN ON THIS PLAN. REBAR SHALL BE PLACED AT SIDE OF CLEANOUT.
- 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.



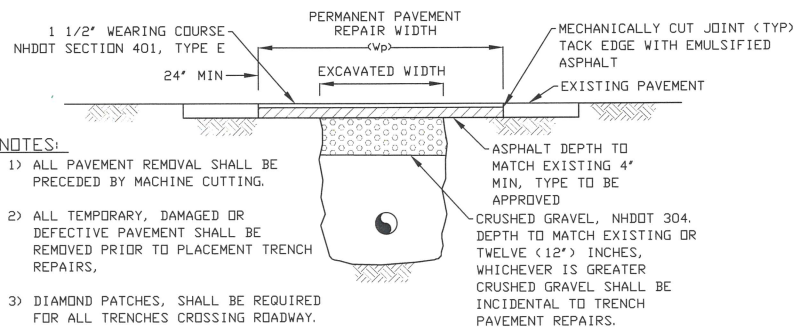
TRENCH DETAIL- GRAVITY SEWER

Scale : N.T.S.



TYPICAL SERVICE CONNECTION

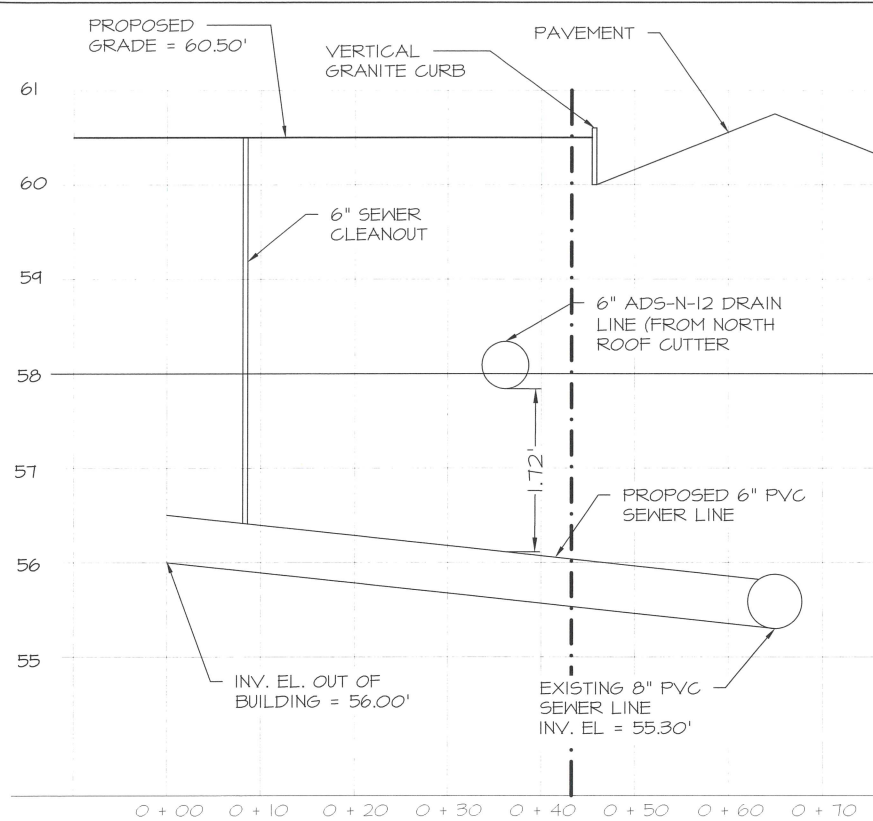
Scale : N.T.S.



NOTES:

- 1) ALL PAVEMENT REMOVAL SHALL BE PRECEDED BY MACHINE CUTTING.
- 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 NHDDT REQUIREMENTS.

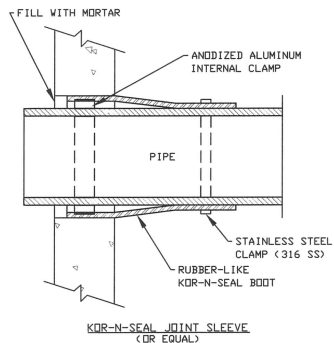
PERMANENT TRENCH PAVEMENT REPAIR



SEWER PROFILE

SCALE: HORIZONTAL: 1" = 10'

VERTICAL: 1" = 1'



MANHOLE PENETRATIONS

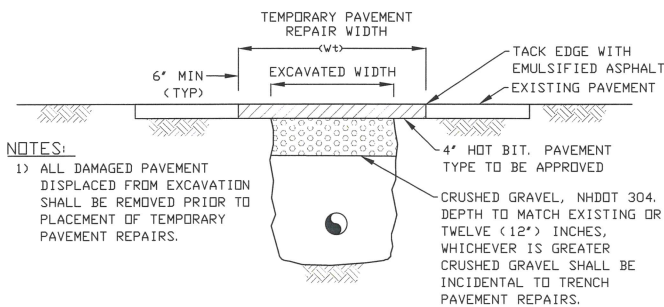
Scale : N.T.S.

PAVEMENT REPAIR NOTE:

THE DIMENSIONS SHOWN SHALL BE CONSIDERED MINIMUM PAVEMENT PAYMENT WIDTHS FOR 0-10' DEEP CONSTRUCTION. Wt AND Wp SHALL BE INCREASED BY 4'-0" FOR TRENCHES 10' TO 15' AND BY 8'-0" FOR TRENCHES 15' TO 20' IN DEPTH.

MINIMUM TRENCH PAVEMENT WIDTHS

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



NOTES:

- 1) ALL DAMAGED PAVEMENT DISPLACED FROM EXCAVATION SHALL BE REMOVED PRIOR TO PLACEMENT OF TEMPORARY PAVEMENT REPAIRS.

TEMPORARY TRENCH PAVEMENT REPAIR

Scale : N.T.S.

7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	

SCALE	1" = 10'
CHECKED	A.ROSS
DRAWN	DDD
CHECKED	A.ROSS

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

TITLE	NOTES 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		
JOB NUMBER	DWG. NO	ISSUE	
19-097	10 OF 10	7	

Brendan McNamara
RESIDENTIAL ARCHITECTURE

Brendan McNamara
19 Doe Drive
Eliot, ME 03903
207 439 3521 Phone
BrendanMcNamara.com

FINISH HEIGHT
EL = 32.7'

ATTIC FLOOR
EL = 14' 9 3/8"

2ND FLOOR
EL = 9' 10 3/8"

1ST FLOOR
EL = 0' 0"

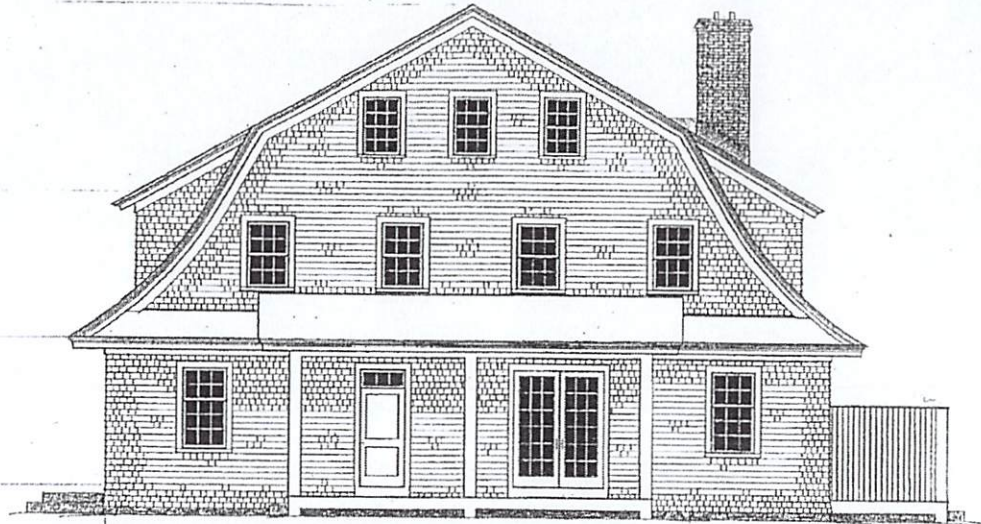
BASEMENT SLAB
EL = -8' 7 5/8"

FINISH HEIGHT
EL = 32.7'

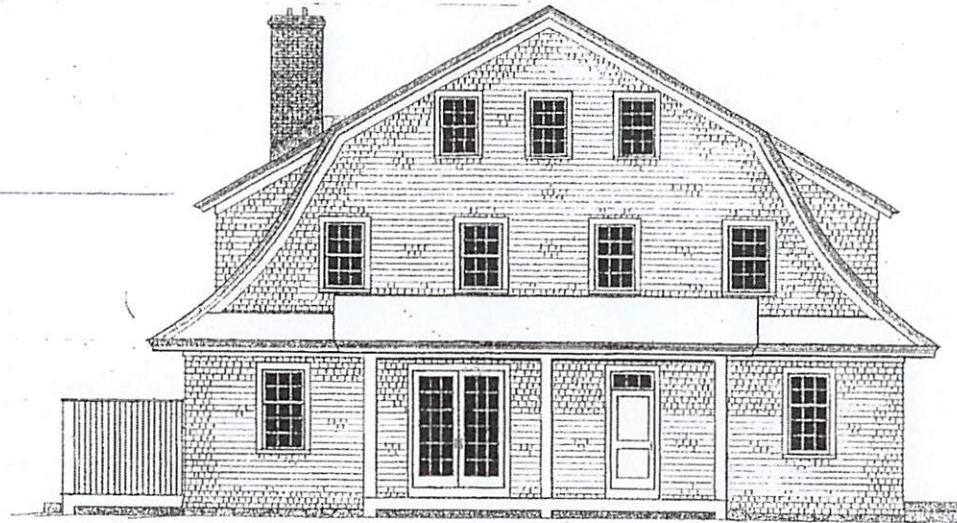
ATTIC FLOOR
EL = 14' 9 3/8"

2ND FLOOR
EL = 9' 10 3/8"

1ST FLOOR
EL = 0' 0"



WEST ELEVATION 1/8" = 1' 0"



EAST ELEVATION 1/8" = 1' 0"

tabbles

EXHIBIT

2

TITLE: PROP WEST & EAST ELEV

SCALE: 1/8" = 1' 0"

DATE: 3.30.2020

REVISIONS:

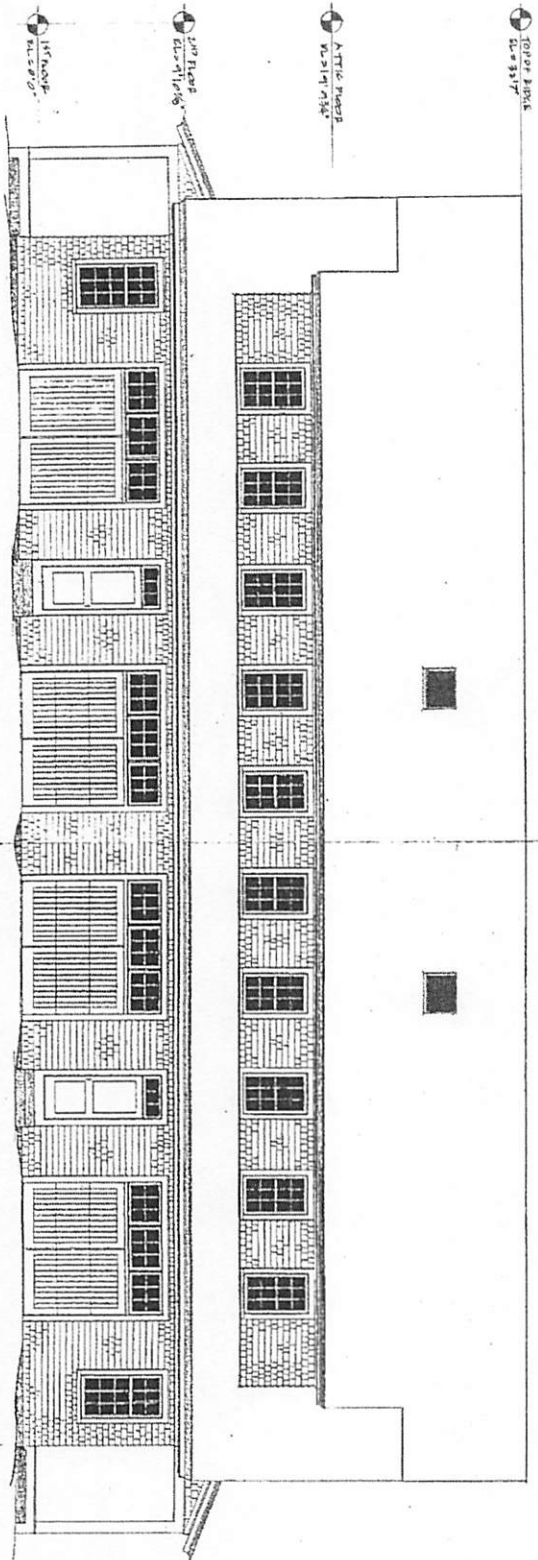
PROPOSED BUILDING AT

185-187 PALEIGH WAY

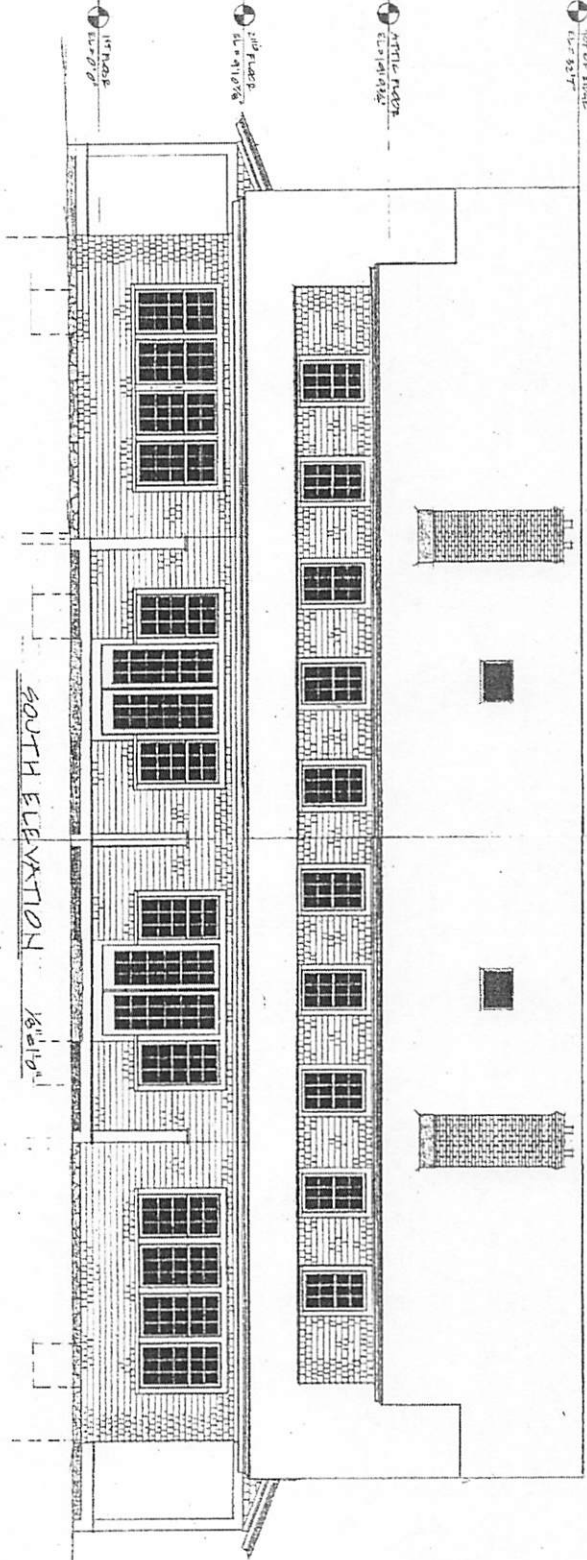
PORTSMOUTH, NH

PAGE A.1.

NORTH ELEVATION 1/8"=1'0"



SOUTH ELEVATION 1/8"=1'0"



PAGE A.2.

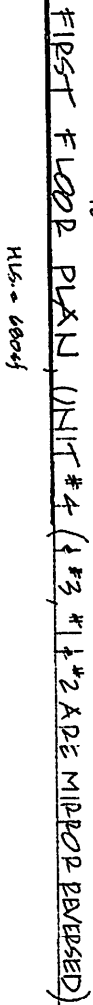
PROPOSED BUILDING AT
185-187 PALEIGH WAY
PORTSMOUTH, NH

TITLE: PROP' SOUTH & NORTH ELEV'

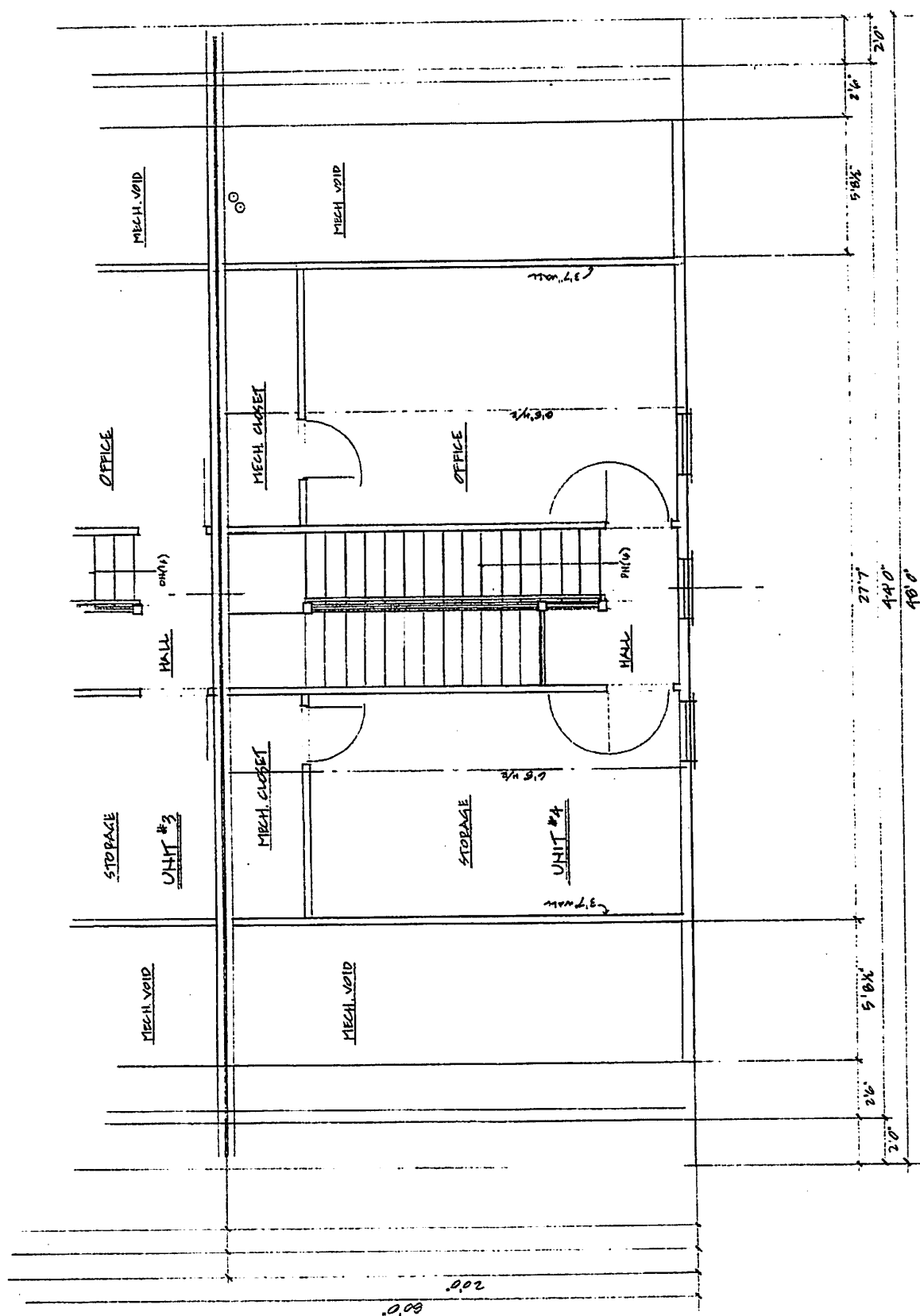
SCALE: 1/8"=1'0"

DATE: 3.30.2020

REVISIONS:



REVISIONS:



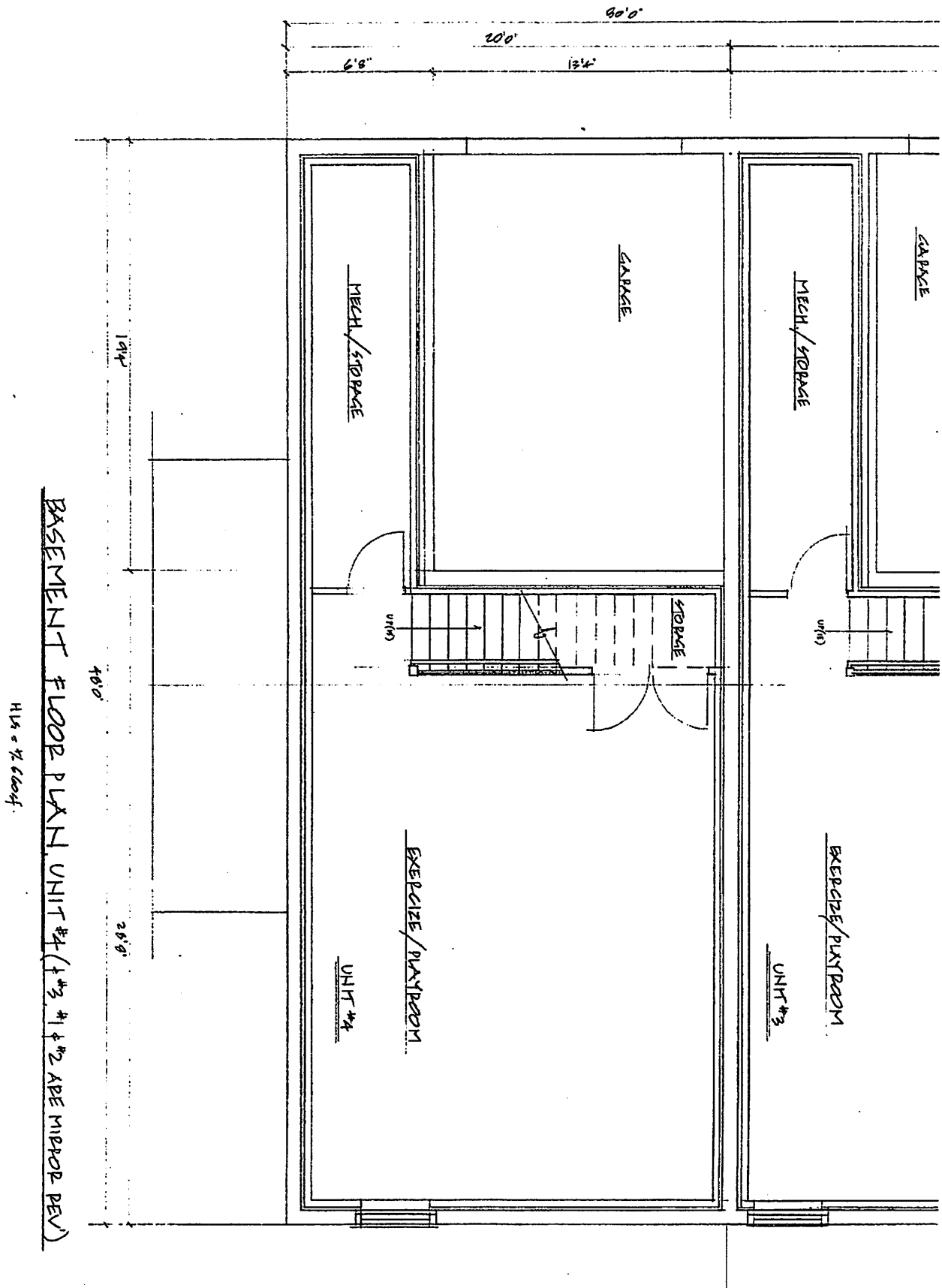
THIRD FLOOR PLAN (ATTIC) UNIT #4 (1st, 1st, 2nd ARE MIRROR REV)

WITH 6'8" HEADROOM = 320'4", TO MECH WALLS = 500'4"

PROPOSED BUILDING AT 185-187 RALEIGH WAY
 TITLE: 3RD FLOOR (ATTIC) PLAN
 SCALE: 1/4" = 1'0"

PORTSMOUTH, NH
 DATE: 3.30.2020

REVISIONS:



PROPOSED BUILDING AT
185-187 PALEIGH WAY
PORTSMOUTH, NH

TITLE: BASEMENTS FLOOR PLAN

SCALE: 1/4"=1'0"

DATE: 3.30.2020

REVISIONS:



CITY OF PORTSMOUTH

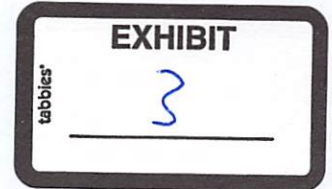
Planning Department
1 Junkins Avenue
Portsmouth, New
Hampshire 03801

(603) 610-7216

ZONING BOARD OF ADJUSTMENT

June 17, 2020

Raleigh Way Holdings Group, LLC
1 Middle Street, Suite 1
Portsmouth, NH 03801



RE: Board of Adjustment request for property located at 0 Falkland Way

Dear Property Owner:

The Zoning Board of Adjustment, at its regularly scheduled meeting of **Tuesday, June 16, 2020**, considered your application for merge two lots and demo existing structures in order to construct a 4 unit multi family dwelling which requires the following: 1) A Variance from Section 10.521 to allow a lot area per dwelling unit of 3,736 square feet where 5,000 square feet is the minimum required; and 2) A Special Exception from Section 10.440 Use #1.51 to allow 4 dwelling units where the use is allowed by a special exception. Said property is shown on Assessor Map 212 Lot 112 and lies within the General Residence B (GRB) District. As a result of said consideration, the Board voted to grant your request as presented.

The Board's decision may be appealed up to thirty (30) days after the vote. Any action taken by the applicant pursuant to the Board's decision during this appeal period shall be at the applicant's risk. Please contact the Planning Department for more details about the appeals process.

Approvals may also be required from other City Commissions or Boards. Once all required approvals have been received, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work.

This approval shall expire unless a building permit is issued within a period of two (2) years from the date granted unless an extension is granted in accordance with Section 10.236 of the Zoning Ordinance.

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

Very truly yours,

A handwritten signature in black ink, appearing to read 'David Rheahme', with a large, stylized initial 'D'.

David Rheahme, Chairman of the Zoning Board of Adjustment

cc: Robert Marsilia, Chief Building Inspector

Rosann Maurice-Lentz, City Assessor

Derek Durbin, Esq. Durbin Law Office, PLLC

MINUTES of the
BOARD OF ADJUSTMENT MEETING
PORTSMOUTH, NEW HAMPSHIRE



Remote Meeting Via Zoom Conference Call

7:00 P.M.

JUNE 16, 2020

MEMBERS PRESENT: Chairman David Rheaume, Vice-Chairman Jeremiah Johnson, Jim Lee, Peter McDonell, Christopher Mulligan, John Formella, Alternate Phyllis Eldridge, Alternate Chase Hagaman

MEMBERS EXCUSED: Arthur Parrott, Peter McDonell

ALSO PRESENT: Peter Stith, Planning Department

~~Chairman Rheaume noted that two petitions were withdrawn, 268 Dennett Street and 77 Meredith Way. He stated that alternates Ms. Eldridge and Mr. Hagaman would vote on all petitions.~~

I. APPROVAL OF MINUTES

A) Approval of the minutes of the meetings of May 19, 2020 and May 26, 2020.

*It was moved, seconded, and passed by unanimous roll call vote (7-0) to **approve** the May 19, 2020 minutes as amended.*

*It was moved, seconded, and passed by unanimous roll call vote (7-0) to **approve** the May 26, 2020 minutes as presented.*

II. PUBLIC HEARINGS – OLD BUSINESS

1) Petition of the **Donna Pantelakos Revocable Trust, Owner** for property located at **138 Maplewood Avenue** wherein relief was needed from the Zoning Ordinance to create a new dwelling unit by constructing a second floor addition over an existing garage which requires the following; 1) A Variance from Section 10.521 to allow: a) a lot area per dwelling unit of 2,616 where 3,000 is required; and b) a 1' right side yard where 5' is required. 2) A Variance from Section 10.321 to allow a nonconforming structure or building to be extended, reconstructed or enlarged without conforming to the requirements of the Ordinance. Said property is shown on Assessor Map 124 Lot 6 and lies within the Character District 4-L1 (CD4-L1) District.

~~SPEAKING TO THE PETITION~~

~~Chairman Rheaume said a developer would come before the Board and state that he could build a great thing, but then the owner who bought the structure later realized that simple quality-of-life items could be improved. He said the applicant had good reasons to meet the criteria, and he thought it was a fine opportunity to grant a variance. However, he said that just because the yard was narrow wasn't a great criterion to deserve a variance. Vice-Chair Johnson agreed and thought it was a good example of the Board and the applicant having to clean up the developer's mess. He said it was a challenge to find a hardship but that he would support the petition. Mr. Hagaman said the Board should be careful in characterizing the developer because the back of the house didn't seem designed to have a deck.~~

DECISION OF THE BOARD

*Mr. Lee moved to **grant** the variance for the petition as presented and advertised, and Vice-Chair Johnson seconded.*

Mr. Lee said the applicant unfortunately ended up with the smallest backyard. He said granting the variance would not be contrary to the public interest or the spirit of the ordinance, and the proposed use would not alter the essential characteristics of the neighborhood or threaten the public's health, safety, or welfare. He said it would do substantial justice because the benefit to the applicant would not be outweighed by any harm to the public, and it would not diminish the value of surrounding properties. He said the hardship was due to the way the lot was laid out, which prevented the applicant from having outdoor space and fully enjoying his property.

Vice-Chair Johnson concurred. He said the hardship was the developer's overall plan for the condo association's build-out and the narrow lot, and that the slope of the back of the house was enough to preclude a patio, which would render it unusable without a deck. He said the applicant was asking for 50 percent of the requirement, but the fact that it was a rear lot and faced a vacant wooded lot in perpetuity overrode the dimensional discrepancies

*The motion **passed** by unanimous roll call vote, 7-0.*

3) Petition of Raleigh Way Holding Group, LLC, Owner, for property located at 0 Falkland Way (off Albacore and Saratoga Way) wherein relief was needed from the Zoning Ordinance to merge two lots and demo existing structures in order to construct a 4 unit multi family dwelling which requires the following: 1) A Variance from Section 10.521 to allow a lot area per dwelling unit of 3,736 square feet where 5,000 square feet is the minimum required; and 2) A Special Exception from Section 10.440 Use #1.51 to allow 4 dwelling units where the use is allowed by a special exception. Said property is shown on Assessor Map 212 Lot 112 and lies within the General Residence B (GRB) District.

SPEAKING TO THE PETITION

Attorney Derek Durbin representing the applicant was present, along with the project designer Brendan McNamara and the project engineer Alex Ross. Attorney Durbin reviewed the petition, noting that the applicant wanted to merge Lots 112 and 113 to develop a four-unit residential

building and would also have four affordable housing units. Mr. McNamara said the gambrel roof was in keeping with the English Village concept of the Atlantic Heights neighborhood and would fit in like a converted barn or large carriage house. He said each unit would be 2,100 square feet and would be shingles instead of brick. Attorney Durbin reviewed the variance criteria, noting that it included a 2005 decision by the Board to approve the 9 Falkland Place property that he thought was relevant and similar to the application. He reviewed the special exception criteria. Mr. Ross briefly described the site's stormwater management plan and said they would have a full Technical Advisory Committee (TAC) review.

Vice-Chair Johnson asked if the units would be apartments or condominiums, noting that he hadn't seen anything else in Portsmouth that was the size of the proposed units and couldn't see how the applicant could put it on the market at a low affordable housing rate. Attorney Durbin said the units were condominiums. He said the surrounding property values dictated the ceiling for individual homes to be sold for in every part of the city, and that some of the Atlantic Heights properties were treated as starter homes, which was a driving force behind the build-out size.

Mr. Hagaman asked if the applicant would commit to listing the condos lower than market value so that they would be affordable, and whether the applicant had considered smaller-sized dwelling units within the same footprint to be more affordable and more similar to homes in Atlantic Heights. Attorney Durbin said affordable housing had been loosely defined and was a term that got thrown out a lot to make projects more salable to the Board and other people. He said he couldn't just focus on Atlantic Heights but looked at the city as a whole as to what was or wasn't affordable. He said 2,100 square feet was probably maxing out the evaluation range of Atlantic Heights, but the idea was not to sell the units at a percentage below what Atlantic Heights homes were selling for but to sell them below what other areas in Portsmouth were selling for. He said they had not considered building out more units because the primary consideration was to create something that was consistent with the existing density. He said the proposed building was less dense than the majority of properties in Atlantic Heights but more consistent. Mr. McNamara said the term 'affordable housing' should really be 'efficient construction', meaning finding the balance between efficient and affordable.

Chairman Rheume asked the basis for stating that the lots were involuntarily merged. Attorney Durbin said each of the parcels was identified from the property descriptions in the deeds. Chairman Rheume noted that the applicant said they had considered doing all the lots individually but would still have to go before the Board and that the lots would still be undersized due to no street frontage for most of the lots. Attorney Durbin said the present proposal was the better option for the neighborhood. Chairman Rheume said Albacore Way had a lot of housing that wasn't dissimilar from what the applicant was seeking. Mr. McNamara said those properties were done in 2008 and were in the far reaches of the original development. He said it was a different development that also had single-family houses on much larger lots. Chairman Rheume said the condominiums were pretty close physically to the proposed development and had the same number of units and overall size. Mr. McNamara said they had a positive context to his client's development in terms of size but had an unattractive design. Chairman Rheume said the gambrel roof had a bowed appearance. Mr. McNamara said that doing a swale roof reduced the sense of overall mass and lowered the possibility of allowing the windows to be larger on that side.

Chairman Rheume opened the public hearing.

SPEAKING IN FAVOR OF THE PETITION

No one was present to speak in favor.

SPEAKING IN OPPOSITON TO THE PETITION

Chairman Rheume said the Board received two emails in opposition.

Alan Davidson of 24 Raleigh Way said the building was not affordable housing because it was a 2,100-sf 3-story building in Atlantic Heights where there were no other 3-story buildings. He thought the shingled exterior would be inconsistent with the neighborhood's brick homes.

SPEAKING TO, FOR, OR AGAINST THE PETITION

Mr. McNamara said the 2005 development on Falkland Way was a 3-story structure, and the third floor of the proposed development was within the gambrel's attic, so there was limited headroom on that floor. He said the shingles would make the building look less institutional.

No one else was present to speak, and Chairman Rheume closed the public hearing.

DISCUSSION OF THE BOARD

Mr. Mulligan said he wasn't convinced that the 2005 Falkland Place petition was relevant or much of a comparison because the development was built in the shadow of the highway and didn't have the kind of neighborhood surrounding it that the applicant's property did. He said that otherwise, the density seemed to be pretty close if one looked at the lot and compared it with the character of many of the lots in proximity, and was probably less dense. He pointed out that the original existing home on Raleigh Way was a duplex on a lot less than half the size of the applicant's lot and that there were similar lots, so the lot-area-per-dwelling was consistent. He said the proposed development was aggressive in terms of how big the units were but otherwise met all the dimensional requirements. Mr. Formella said he didn't see the development as affordable housing because the tradeoff would be a request for relief when it came to the number of dwelling units in exchange for making them smaller or affordable. He said he agreed with Mr. Mulligan, though, that it would be nice to see an attempt at affordable housing, but he thought it was a uniquely large lot and the applicant had tried to make the units look like the other buildings, even though they were big and didn't quite fit in. He said the applicant met all the dimensional requirements and it was a big enough lot that they had a good case for some relief from the lot-area-per-dwelling-unit limitations. Mr. Hagaman said he didn't consider the petition a pitch for affordable housing but it didn't mean that the application wasn't worthy of the variance and special exception and that he was inclined to support it.

Chairman Rheume said the neighborhood probably had affordable housing at one time because it was constructed to support the shipbuilding firm back then. He said he didn't think the units

were super affordable but were a bit less valuable than single-family homes. He said the neighborhood context was supportive, even though Albacore Way had larger lots. He said the lot-area-per-dwelling unit was the key and it was a bit higher than anywhere else but wouldn't feel out of place. He said the units weren't tiny but the size of the building was driven by the setbacks and not the total size of the units.

DECISION OF THE BOARD

Mr. Mulligan moved to grant the special exception and the variance for the petition as presented and advertised, and Mr. Hagaman seconded.

Mr. Mulligan addressed the special exception criteria and said a four-unit residential dwelling was permitted by special exception in the zone. He said granting it would not pose a hazard to the public or adjacent properties on account of potential fire, explosion, release of toxic materials, and so on and would pose no detriment to property values in the vicinity or change to the essential characteristics of the area on account of the location or scale of buildings or other structures, parking areas, accessways, odor, smoke, dust, storage of equipment, and so on. He said the most relevant things were the location and scale of the buildings and other structures, and as the Board had discussed, what was proposed was similar in density to much if not most of the greater Atlantic Heights neighborhood in terms of lot area per dwelling. He said the building's size and massing were similar to at least some of the other buildings, like the nearby condo development on Albacore Way or some of the other larger buildings in Atlantic Heights. He said granting the special exception would pose no creation of a traffic safety hazard or substantial increase in the level of traffic congestion in the vicinity because the amount of residential density for the lot given its size was consistent with Atlantic Heights. He said there would be no excessive demand on municipal services, noting that they wouldn't be impacted significantly at all. He said the project had to go through site review, so all the municipal departments would weigh in. He said granting the special exception would pose no significant increase of stormwater runoff onto adjacent properties or streets, noting that the project engineer provided preliminary assurance that all stormwater could be managed and TAC would take care of the rest. He said the proposal easily met all the criteria for a special exception.

Mr. Mulligan said a variance was requested for the lot-area-per-dwelling unit of 3,700 square feet where 5,000 square feet was the minimum required, so given the essential character of the neighborhood, which was dense, he said he didn't feel that there would be any material alteration to the character of the neighborhood or compromise to the public's health, safety, and welfare. He said that granting the variance would not be contrary to the spirit of the ordinance for the same reason. Substantial justice would be done because, given the existing density of the surrounding neighborhood, he could not see how there would be any gain to the public that would outweigh the loss to the applicant if the Board required strict compliance to the ordinance. He said granting the variance would not diminish the value of surrounding properties, noting that they would probably be boosted by brand new code-compliant construction, and the large condo units would hopefully attract affluent buyers who would pay additional value for the property. He said literal enforcement of the ordinance would cause unnecessary hardship because the special conditions of the property was its location on a corner lot and the conglomeration of

several lots that made it larger than the typical lot in Atlantic Heights, which were conditions that distinguished the property from others in the area. He said there was no fair and substantial relationship between the purpose of the lot-area-per-dwelling ordinance and its application to the property, and that the resulting density would be very similar and consistent with what was already on a large portion of Atlantic Heights. He said it was a reasonable use, a residential use in a residential zone, and met all the criteria for both the special exception and variance.

Mr. Hagaman concurred, adding that dropping from four units to three would not materially change or impact the project or the appearance of the building.

The motion passed by a vote of 6-1, with Vice-Chair Johnson voting in opposition.

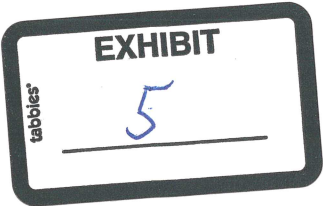
~~4) Petition of RKW Investment Properties, LLC, Owner, for property located at 115 Heritage Avenue wherein relief was needed from the Zoning Ordinance to allow a place of assembly which requires the following: 1) A Variance from Section 10.440 Use #3.10 to allow a place of assembly where the use is not permitted in the district. Said property is shown on Assessor Map 285 Lot 5-1 and lies within the Industrial (I) District.~~

SPEAKING TO THE PETITION

Attorney Kevin Baum was present on behalf of the applicant to review the petition. Also present was Major Reed of the Salvation Army. Attorney Baum explained that they were seeking a temporary home for the Salvation Army and that the use would be the same as the former long-term use on Middle Street. He said they would use the Salvation Army food truck for the daily meals due to the lack of a kitchen. He said the property was buffered from residential neighborhoods and was consistent with other churches in the area.

Chairman Rheaume said the applicant's previous application had made a lot of sense because it was in a commercial district and only for a special exception, but the applicant was requesting a variance on a property further away from Lafayette Road. He said Heritage Avenue wasn't conducive to pedestrian traffic. Attorney Baum said the variance request was caused by the difficulty of finding a space that would allow the Salvation Army to provide its full services, adding that the Salvation Army had several vans and volunteers to transport patrons. Chairman Rheaume said the Salvation Army's needs were more intense than other churches because a greater number of people showed up. Regarding compatibility with the industrial district, he said a typical food truck for an industrial company was for the employees, but patrons would go to the Salvation Army's site to take advantage of the free meal services and the other things going on, like the free educational classes. He said the Lafayette Road property had lent itself better to those activities. Attorney Baum said the food truck would be a lighter use and that the number of congregants was less than most churches. He said the service would be mostly on weekends, when the area was underutilized. Chairman Rheaume said if the Board granted the variance, it would be in perpetuity for the property and would allow the same use to a future owner. Attorney Baum said he hoped it would only be for six to twelve months.

~~Chairman Rheaume opened the public hearing.~~



Site Plan Review

Saratoga Way, Lot 112

Portsmouth, New Hampshire

PREPARED FOR:

LONDON BRIDGE SOUTH INC

PREPARED BY:

ROSS ENGINEERING, LLC

Civil/Structural Engineering
& Surveying

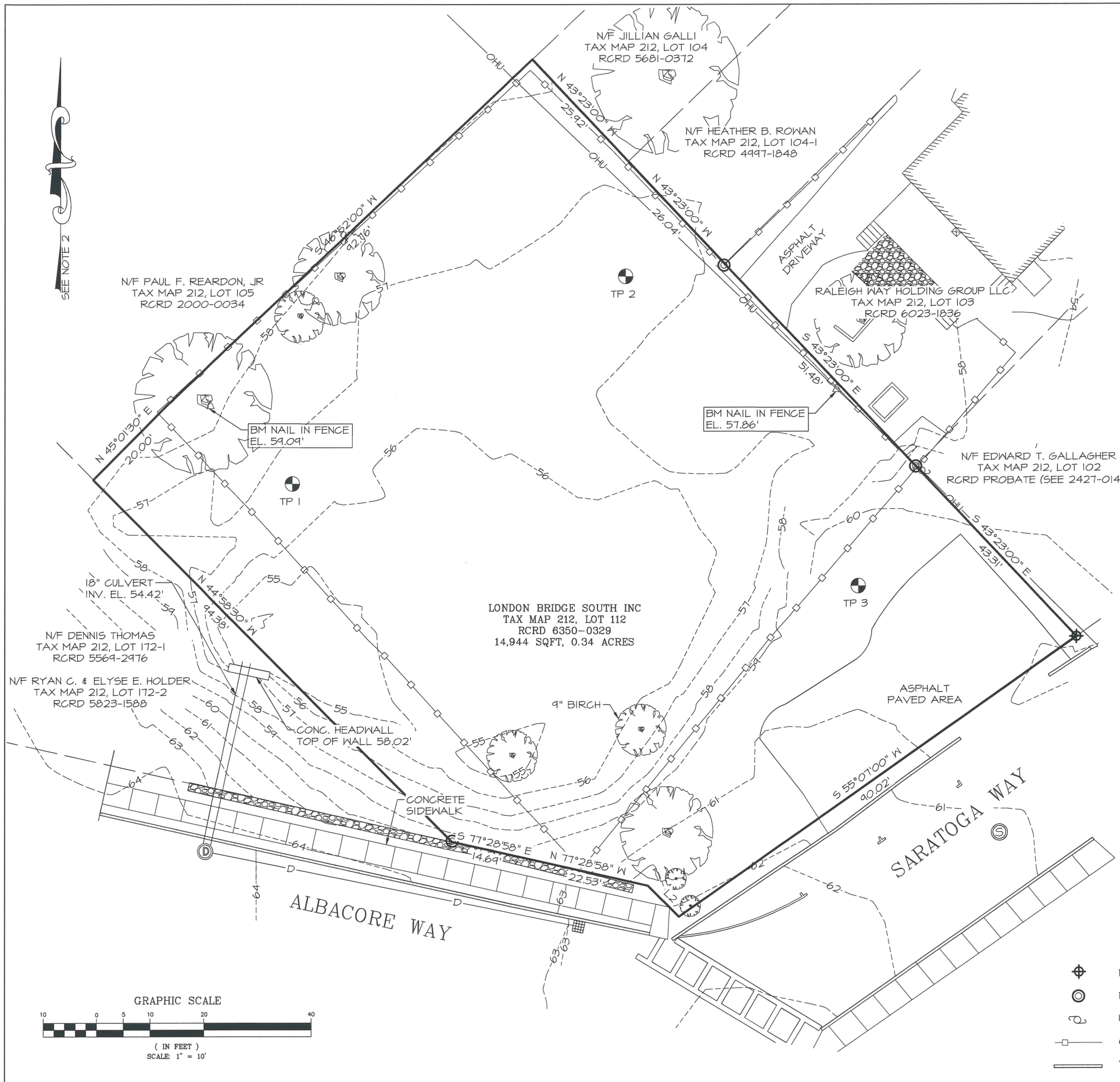
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

LIST OF PROJECT PLANS:

SITE PLAN SET

- 1 - Existing Conditions
- 2 - Site Plan
- 3 - Utility Plan
- 4 - Grading & Drainage
- 5 - Landscape Plan
- 6 - Roadway Plan
- 7 - Erosion Control Plan
- 8 - Details
- 9 - Pavement Details
- 10 - Notes

April 26, 2022



NOTES

1) OWNER OF RECORD:
LONDON BRIDGE SOUTH INC
273 CURRIER RD
CANDIA, NH 03034
SITE LOCATION:
114 SARATOGA WAY
TAX MAP 212, LOT 112
RCRD: 6350-0329
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):
MINIMUM LOT AREA.....5,000 SF
MIN. LOT AREA PER DWELLING UNIT.....5,000 SF
MINIMUM FRONTAGE.....80 FT
MINIMUM DEPTH.....60 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....25 FT
MAXIMUM BUILDING HEIGHT:
SLOPED ROOF.....35 FT
FLAT ROOF.....30 FT
MAXIMUM BUILDING COVERAGE.....30%
MINIMUM OPEN SPACE.....25%

4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0254E, PANEL 254 OF 681. DATED MAY 17, 2005.

5) VARIANCES WERE GRANTED ON THE JUNE 16, 2020 ZBA MEETING
A) TO ALLOW 3,736 SF PER DWELLING UNIT
B) A SPECIAL EXCEPTION FROM SECTION 10.440 USE #1.51 TO ALLOW 4 DWELLING UNITS.

LOCUS PLAN N.T.S.

REFERENCE PLANS

1) "PROPERTY MAP OF ATLANTIC HEIGHTS COMPANY FOR ATLANTIC HEIGHTS DEVELOPERS", BY LOCKWOOD, GREENE & CO. ENGINEERS, JULY, 1919. RCRD 0247.
2) "ATLANTIC HEIGHTS CO., PORTSMOUTH, N.H., 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-33711
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.

ADDITIONAL ABUTTERS

TAX MAP 212

LOT 36-1
MICHAEL B. & 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

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 _____

9	4/26/2022	REVISIONS
8	11/4/2021	FOR RECORDING
7	1/7/2021	PB SUBMITTAL
6	12/3/2020	PB SUBMITTAL
5	10/28/2020	PB SUBMITTAL
4	10/10/2020	REVISIONS
3	9/21/2020	TAC SUBMITTAL
2	8/17/2020	TAC SUBMITTAL
1	8/4/2020	TAC SUBMITTAL

ISS DATE DESCRIPTION OF ISSUE

SCALE: 1" = 10'

CHECKED: A.ROSS

DRAWN: DDD

CHECKED: A.ROSS

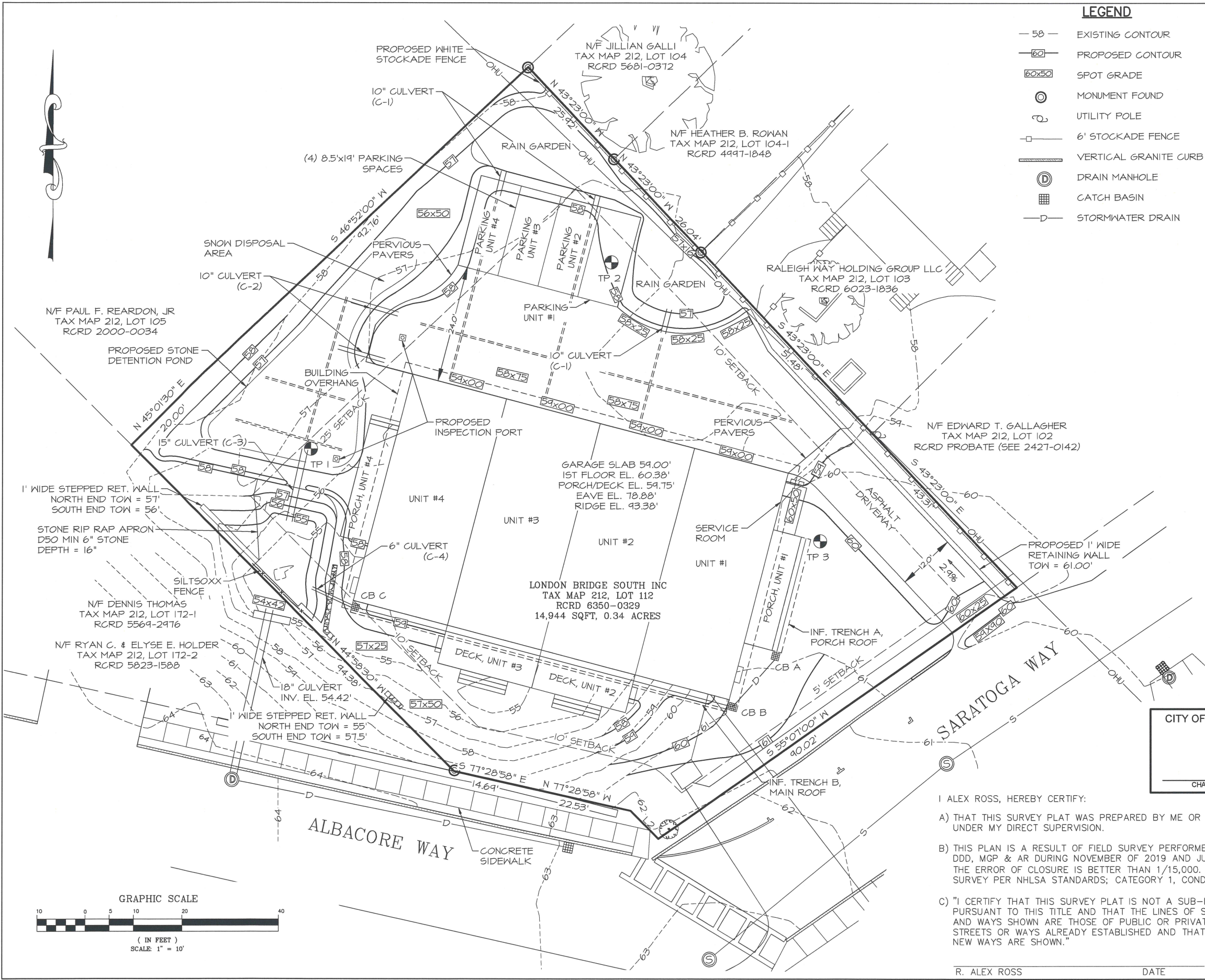
ROSS ENGINEERING, LLC
Civil/Structural Engineering & Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

TITLE

EXISTING CONDITIONS
for
114 SARATOGA WAY
Tax Map 212, Lot 112
Portsmouth, NH

OWNER OF RECORD
LONDON BRIDGE SOUTH INC
273 CURRIER RD
CANDIA, NH 03034

JOB NUMBER 22-023 DWG NO. 1 OF 10 ISSUE 9



LEGEND

- 58 — EXISTING CONTOUR
- 60 — PROPOSED CONTOUR
- 60x50 SPOT GRADE
- ⊙ MONUMENT FOUND
- ⊙ UTILITY POLE
- 6' STOCKADE FENCE
- VERTICAL GRANITE CURB
- ⊙ DRAIN MANHOLE
- ⊙ CATCH BASIN
- D — STORMWATER DRAIN

NOTES

- 1) OWNER OF RECORD:
LONDON BRIDGE SOUTH INC
RCRD: 6350-0329
TAX MAP 212, LOT 112
AREA: 14,944 SF, 0.34 ACRES
- 2) PARCEL IS IN GENERAL RESIDENCE B ZONE (GRB):
MINIMUM LOT AREA.....5,000 SF
MIN. LOT AREA PER DWELLING UNIT.....5,000 SF
MINIMUM FRONTAGE.....80 FT
MINIMUM DEPTH.....60 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....25 FT
MAXIMUM BUILDING HEIGHT:
SLOPED ROOF.....35 FT
FLAT ROOF.....30 FT
PROPOSED HEIGHT.....27.33 FT
MAXIMUM BUILDING COVERAGE.....30%
PROPOSED BUILDING COVERAGE.....27.6%
MINIMUM OPEN SPACE.....25%
PROPOSED OPEN SPACE.....43.6%
- 3) THIS SITE PLAN SHALL BE RECORDED IN THE
ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 4) ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE
CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH
THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE
PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO
THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF
THE PORTSMOUTH PLANNING DIRECTOR.
- 5) VARIANCES WERE GRANTED ON THE JUNE 16, 2020 ZBA
MEETING
A) TO ALLOW 3,736 SF PER DWELLING UNIT
B) A SPECIAL EXCEPTION FROM SECTION 10.440 USE
#1.51 TO ALLOW 4 DWELLING UNITS.
- 6) CONTINUE VERTICAL GRANITE CURB TO DRIVEWAY APRON.
- 7) TAX MAP 212, LOTS 112 & 113 WERE MERGED INTO ONE LOT
ON OCTOBER 20, 2021. SEE NOTICE OF VOLUNTARY
MERGER OF CONTIGUOUS LOTS RCRD 6348-2591.

ALL CONDITIONS ON THIS PLAN
SHALL REMAIN IN EFFECT IN
PERPETUITY PURSUANT TO THE
REQUIREMENTS OF THE SITE PLAN
REVIEW REGULATIONS.

ISS	DATE	DESCRIPTION OF ISSUE
9	4/26/2022	REVISIONS
8	11/4/2021	FOR RECORDING
7	1/7/2021	PB SUBMITTAL
6	12/3/2020	PB SUBMITTAL
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2	8/17/2020	TAC SUBMITTAL
1	8/4/2020	TAC SUBMITTAL

SCALE: 1" = 10'
CHECKED: A.ROSS
DRAWN: DDD
CHECKED: A.ROSS

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

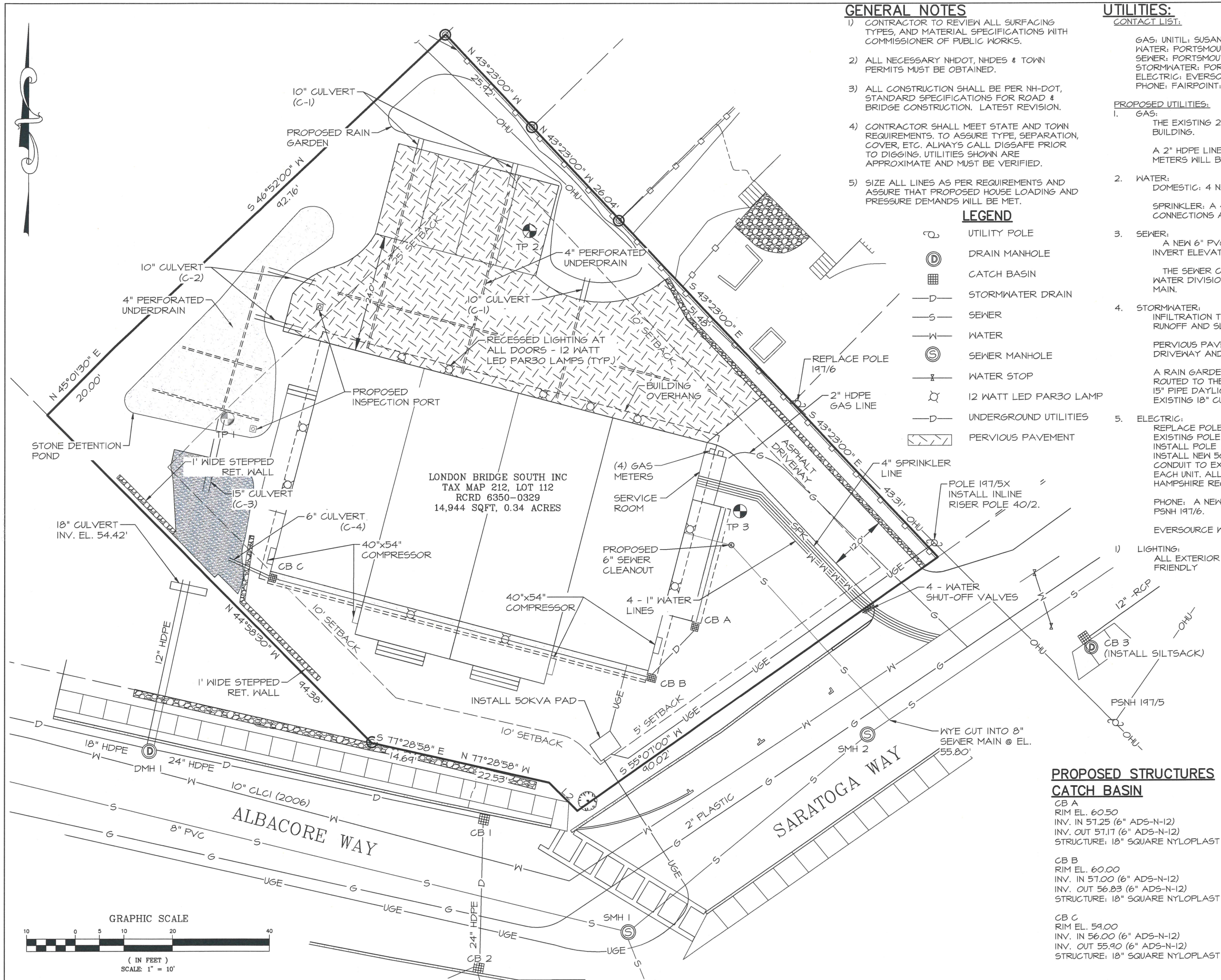
TITLE	SITE PLAN for 114 SARATOGA WAY Tax Map 212, Lot 112 Portsmouth, NH
OWNER OF RECORD	LONDON BRIDGE SOUTH INC 273 CURRIER RD CANDIA, NH 03034
RUB NUMBER	22-023
DWG. NO	2 OF 10
ISSUE	9

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



GENERAL NOTES

- 1) CONTRACTOR TO REVIEW ALL SURFACING TYPES, AND MATERIAL SPECIFICATIONS WITH COMMISSIONER OF PUBLIC WORKS.
- 2) ALL NECESSARY NHDOT, NHDES & TOWN PERMITS MUST BE OBTAINED.
- 3) ALL CONSTRUCTION SHALL BE PER NH-DOT, STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION. LATEST REVISION.
- 4) CONTRACTOR SHALL MEET STATE AND TOWN REQUIREMENTS, TO ASSURE TYPE, SEPARATION, COVER, ETC. ALWAYS CALL DIGSAFE PRIOR TO DIGGING. UTILITIES SHOWN ARE APPROXIMATE AND MUST BE VERIFIED.
- 5) SIZE ALL LINES AS PER REQUIREMENTS AND ASSURE THAT PROPOSED HOUSE LOADING AND PRESSURE DEMANDS WILL BE MET.

LEGEND

- UTILITY POLE
- DRAIN MANHOLE
- CATCH BASIN
- STORMWATER DRAIN
- SEWER
- WATER
- SEWER MANHOLE
- WATER STOP
- 12 WATT LED PAR30 LAMP
- UNDERGROUND UTILITIES
- PERVIOUS PAVEMENT

UTILITIES:

CONTACT LIST:

GAS: UTILIL: SUSAN L. DUPLISEA.....603-294-5147
WATER: PORTSMOUTH DPW:603-427-1530
SEWER: PORTSMOUTH DPW:603-427-1530
STORMWATER: PORTSMOUTH DPW:603-427-1530
ELECTRIC: EVERSOURCE: CASEY McDONALD.....603-436-1108 EXT 5641
PHONE: FAIRPOINT: JOSEPH P. CONSIDINE.....603-790-4059

PROPOSED UTILITIES:

1. GAS:
THE EXISTING 2" PLASTIC INTERMEDIATE PRESSURE GAS MAIN WILL SERVE THE 4 UNIT BUILDING.

A 2" HDPE LINE WILL BE INSTALLED CONNECTING TO THE EXISTING GAS MAIN. 4 GAS METERS WILL BE INSTALLED.
2. WATER:
DOMESTIC: 4 NEW 1" COPPER LINES WILL BE INSTALLED TO THE BUILDING

SPRINKLER: A 4" SPRINKLER LINE WILL BE INSTALLED. NECESSARY FLOW TEST CONNECTIONS AND SPECIFICATIONS AS PER CITY REQUIREMENTS.
3. SEWER:
A NEW 6" PVC SEWER LATERAL SHALL BE CONNECTED TO THE 8" STREET MAIN. INVERT ELEVATION AT BUILDING SHALL BE 56.00'.

THE SEWER CONNECTION SHALL BE WITNESSED AND APPROVED BY THE PORTSMOUTH WATER DIVISION AND SOLID COUPLINGS WILL BE USED TO CUT IN THE SERVICE TO THE MAIN.
4. STORMWATER:
INFILTRATION TRENCHES FOR THE SOUTHERN ROOF AND EASTERN PORCH ROOF STORE RUNOFF AND SLOWLY RELEASE IT TO THE 18" CULVERT.

PERVIOUS PAVEMENT IS PROPOSED TO COLLECT RUNOFF FROM THE ASPHALT DRIVEWAY AND NORTHERN ROOF.

A RAIN GARDEN IS PROPOSED TO COLLECT RUNOFF FROM THE NORTH. RUNOFF IS ROUTED TO THE PERVIOUS PAVEMENT SUB BASE, THEN TO A STONE DETENTION POND. A 15" PIPE DAYLIGHTS TO THE SOUTHWEST, SLOWLY RELEASING THE WATER TO THE EXISTING 18" CULVERT.
5. ELECTRIC:
REPLACE POLE 197/6. INSTALL ANCHORD WITH 10' LEAD LENGTH FROM BASE OF EXISTING POLE AND INSTALL FUSHERACE.
INSTALL POLE 197/5X, & INLINE RISER POLE 40/2
INSTALL NEW 50KVA PAD CUT IN EVERSOURCE. CONTRACTOR TO CUT IN AND JOIN CONDUIT TO EXISTING PRIMARY 3" URD. FOUR METERS ARE TO BE INSTALLED, ONE FOR EACH UNIT. ALL ELECTRIC WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NEW HAMPSHIRE REQUIREMENTS FOR ELECTRIC SERVICE CONNECTIONS BY EVERSOURCE.

PHONE: A NEW 2" CONDUIT IS TO BE INSTALLED UNDERGROUND FROM UTILITY POLE PSNH 197/6.

EVERSOURCE WORK# 7758115 & 8667419

- 1) LIGHTING:
ALL EXTERIOR LIGHTING SHALL COMPLY WITH CITY REGULATIONS AND BE DARK SKY FRIENDLY

EXISTING STRUCTURES

CATCH BASINS

CB #1
RIM EL. 62.96
INV. IN 24" (HDPE = 53.36 NW)
INV. OUT 24" (HDPE = 53.18 S)

CB #2
RIM EL. 62.89
INV. IN 12" (HDPE = 58.09 SE)
INV. IN 24" (HDPE = 52.97 N)
INV. OUT 24" (HDPE = 52.91 SW)

DRAIN MANHOLES

DMH 1
RIM EL. 64.12
INV. IN 12" (HDPE= 54.34 NW)
INV. IN 18" (HDPE= 54.27 NE)
INV. OUT 24" (HDPE= 54.14 SE)

SEWER MANHOLES

SMH 1
RIM EL. 63.64
INV. IN 58.04 (8" PVC)
INV. IN 57.90 (8" PVC)
INV. OUT 57.84 (8" PVC)

SMH 2
RIM EL. 61.17
INV. IN 56.26 (8" PVC)
INV. OUT 56.16 (8" PVC)

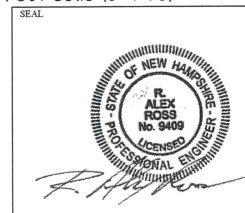
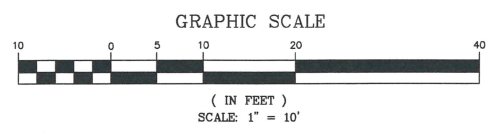
PROPOSED STRUCTURES

CATCH BASIN

CB A
RIM EL. 60.50
INV. IN 57.25 (6" ADS-N-12)
INV. OUT 57.17 (6" ADS-N-12)
STRUCTURE: 18" SQUARE NYLOPLAST

CB B
RIM EL. 60.00
INV. IN 57.00 (6" ADS-N-12)
INV. OUT 56.83 (6" ADS-N-12)
STRUCTURE: 18" SQUARE NYLOPLAST

CB C
RIM EL. 59.00
INV. IN 56.00 (6" ADS-N-12)
INV. OUT 55.90 (6" ADS-N-12)
STRUCTURE: 18" SQUARE NYLOPLAST



ROSS ENGINEERING, LLC

Civil/Structural Engineering
& Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7500

CLIENT
JOEL ASADOORIAN

UTILITY PLAN

for
114 SARATOGA WAY
Tax Map 212, Lot 112
Portsmouth, NH

JOB NUMBER 22-023 DWG NO. 1 OF 1 ISSUE 1

LEGEND

- MONUMENT FOUND
- UTILITY POLE
- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PERVIOUS PAVEMENT

NOTES

- OWNER OF RECORD:
LONDON BRIDGE SOUTH INC
273 CURRIER RD
CANDIA, NH 03034
RCRD: 6350-0329
- ASSURE LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT. INSTALL SILTSACKS ON CATCH BASINS A, B, & C AND ON CATCH BASIN 3. FOLLOW NHDES REGULATIONS AND GUIDELINES IN "STORMWATER & EROSION & SEDIMENTATION CONTROL HANDBOOK FOR URBAN & DEVELOPING AREAS IN NEW HAMPSHIRE" LATEST EDITION.
- SNOW DISPOSAL AREA
SNOW TO BE MOVED WEST ALONG THE 24' WIDE PARKING AREA TO THE STONE DETENTION POND. 4" UNDERDRAIN TO BE INSTALLED TO ENSURE PROPER DRAINAGE.

DEPTH (INCHES)	COLOR	TEXTURE	STRUCTURE	CONSISTENCE
0	10 YR 1/2 DARK BROWN	FINE SANDY LOAM	HEAK FINE GRANULAR	MOIST FRIABLE
12	10 YR 1/2 BROWN	FINE SANDY LOAM	HEAK FINE SUBANGULAR BLOCKY	MOIST FRIABLE
24	10 YR 1/2 GRAYISH BROWN 1.5 YR 1/2 STRONG BROWN REDOXIMORPHIC CONCENTRATION AND 28 10 YR 1/2 LIGHT GRAY REDOXIMORPHIC DEPLETIONS	FINE SANDY LOAM	MASSIVE	DRY FIRM & RESTRICTIVE
42	2.5 YR 1/2 LIGHT OLIVE BROWN MANY REDOXIMORPHIC FEATURES	SILT LOAM	HEAK PLATY	DRY FIRM & RESTRICTIVE

ESHT	24 INCHES	ROOTS	COMMON TO 30 INCHES	RESTRICTIVE LAYERS	24 INCHES
OBSERVED H2C	NONE	REFUSAL (INCHES)	NONE TO 84"		
NOTES	ALL PITS MARKED WITH PINK FLAG EMBELAZONED WITH THE CORRESPONDING PIT #				

DEPTH (INCHES)	COLOR	TEXTURE	STRUCTURE	CONSISTENCE
0	10 YR 1/2 VERY DARK GRAYISH BROWN	FINE SANDY LOAM	HEAK FINE GRANULAR	DRY TO MOIST FRIABLE
10	10 YR 1/2 DARK YELLOWISH BROWN	FINE SANDY LOAM	HEAK FINE SUBANGULAR BLOCKY	MOIST FRIABLE
18	10 YR 1/2 GRAYISH BROWN 28 1.5 YR 1/2 STRONG BROWN REDOXIMORPHIC FEATURES AND 28 10 YR 1/2 LIGHT GRAY REDOXIMORPHIC DEPLETIONS	FINE SANDY LOAM	MASSIVE	DRY FIRM AND RESTRICTIVE
28	10 YR 1/2 GRAYISH BROWN COMMON REDOXIMORPHIC FEATURES	GRAVELLY FINE SANDY LOAM	MASSIVE	DRY FIRM
44	10 YR 1/2 BROWN 228 1.5 YR 1/2 STRONG BROWN REDOXIMORPHIC CONCENTRATIONS AND 228 10 YR 1/2 LIGHT GRAY REDOXIMORPHIC DEPLETIONS	ALTERNATING 2" LAYERS OF VERY FINE SANDY LOAM AND SILT LOAM	MASSIVE	DRY FRIABLE

ESHT	18 INCHES	ROOTS	FEM	RESTRICTIVE LAYERS	NONE
OBSERVED H2C	NONE	REFUSAL (INCHES)	NONE TO 84"		
NOTES					

DEPTH (INCHES)	COLOR	TEXTURE	STRUCTURE	CONSISTENCE
0	10 YR 1/2 VERY DARK GRAYISH BROWN	FINE SANDY LOAM	HEAK FINE GRANULAR	DRY TO MOIST FRIABLE
15	10 YR 1/2 DARK YELLOWISH BROWN	FINE SANDY LOAM	MASSIVE	DRY FRIABLE
30	10 YR 1/2 BROWN 108 1.5 YR 1/2 STRONG BROWN REDOXIMORPHIC CONCENTRATIONS	FINE SANDY LOAM	MASSIVE	DRY FIRM AND RESTRICTIVE

ESHT	30 INCHES	ROOTS	FEM	RESTRICTIVE LAYERS	NONE
OBSERVED H2C	NONE	REFUSAL (INCHES)	NONE TO 80"		
NOTES					

DATE	REVISIONS
9/4/2022	FOR RECORDING
8/11/2021	PB SUBMITTAL
7/1/2021	PB SUBMITTAL
6/12/2020	PB SUBMITTAL
5/10/2020	PB SUBMITTAL
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2/8/2020	TAC SUBMITTAL
1/8/2020	TAC SUBMITTAL

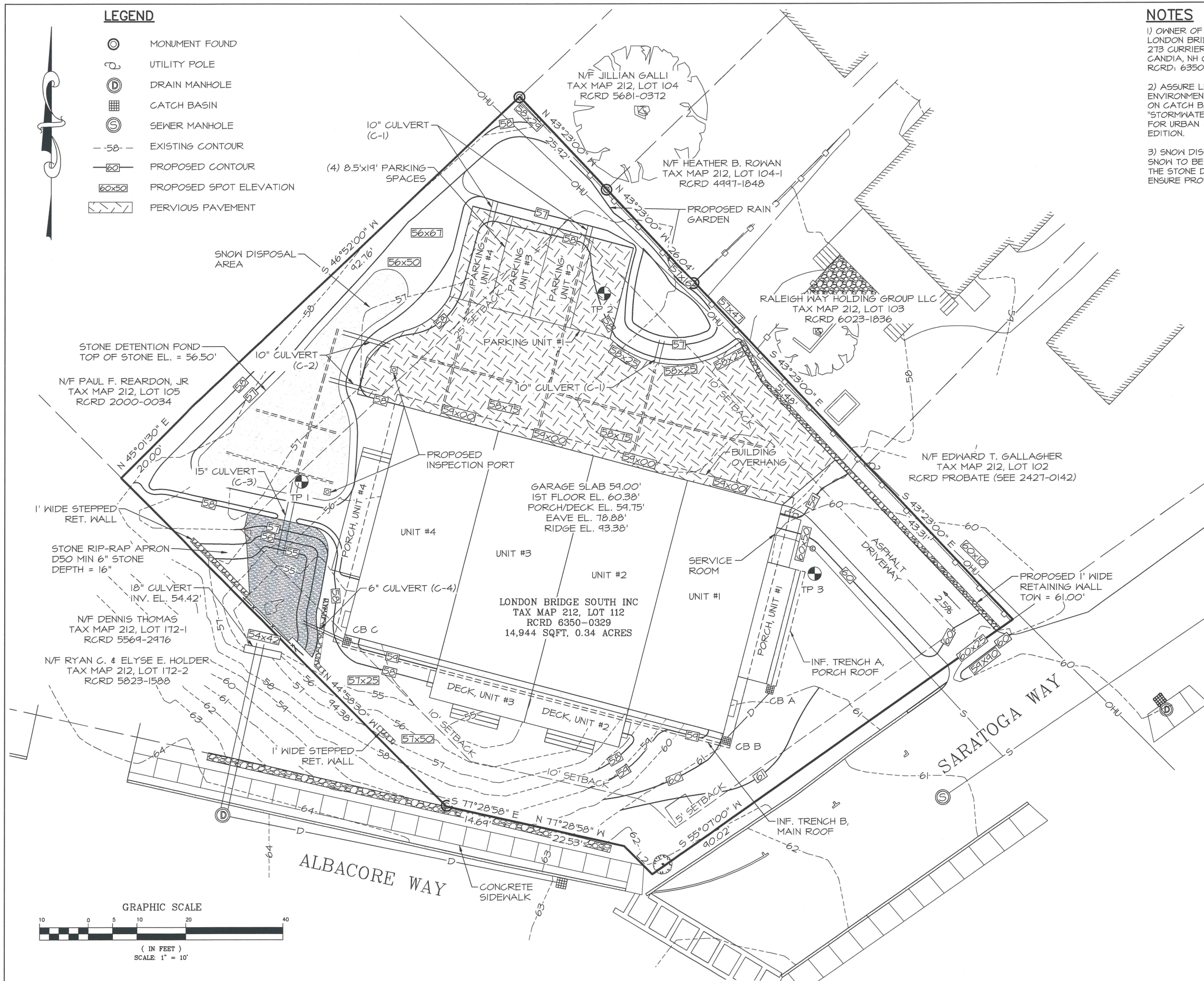
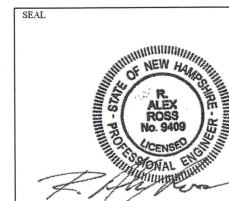
ISS	DATE	DESCRIPTION OF ISSUE
SCALE	1" = 10'	
CHECKED:	A.ROSS	
DRAWN:	DDD	
CHECKED:	A.ROSS	

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

GRADING & DRAINAGE PLAN
for
114 SARATOGA WAY
Tax Map 212, Lot 112
Portsmouth, NH

OWNER OF RECORD
LONDON BRIDGE SOUTH INC
273 CURRIER RD
CANDIA, NH 03034

JOB NUMBER	DWG. NO.	ISSUE
22-023	4 OF 10	9



ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.

N/F PAUL F. REARDON, JR
TAX MAP 212, LOT 105
RCRD 2000-0034

N/F DENNIS THOMAS
TAX MAP 212, LOT 172-1
RCRD 5564-2476

N/F RYAN C. & ELYSE E. HOLDER
TAX MAP 212, LOT 172-2
RCRD 5823-1588

NOTES

- 1) THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 2) ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.

PLANTING NOTES

1. 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. AFTER PLANTING, ALL PLANTS SHALL BE FLOODED AT THE BASE WITH WATER FROM A SLOW-RUNNING HOSE FOR 5 MINUTES EACH.
4. ALL PLANTS SHALL BE INSTALLED BEFORE ANY GRASS IS SEEDED.
5. ALL SHRUBS AND PLANTING BEDS SHALL BE MULCHED WITH 3" OF DARK BROWN AGED BARK MULCH AS A FINAL STEP. MULCH MUST BE KEPT 2" AWAY FROM BASE OF EACH PLANT.
6. THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL REQUIRED SCREENING AND LANDSCAPE MATERIALS.
7. ALL REQUIRED PLANT MATERIALS SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION, REPLACED WHEN NECESSARY, AND KEPT FREE OF REFUSE AND DEBRIS. ALL REQUIRED FENCES AND WALLS SHALL BE MAINTAINED IN GOOD REPAIR.
8. THE PROPERTY OWNER IS RESPONSIBLE FOR REMOVING AND REPLACING DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY WITH THE SAME TYPE, SIZE, AND QUANTITY OF PLANT MATERIALS AS ORIGINALLY INSTALLED, UNLESS ALTERNATIVE PLANTINGS ARE REQUESTED, JUSTIFIED, AND APPROVED BY THE PLANNING BOARD OR PLANNING DIRECTOR.

INSTALLATION REQUIREMENTS:

1. THE INSTALLATION OF A DRIP IRRIGATION SYSTEM IS RECOMMENDED TO ASSURE WELL GROWN PLANTS.
2. IN CASE OF DROUGHT (DEFINED AS TWO WEEK PERIOD WITHOUT RAIN) ALL NEW PLANTS SHALL BE WATERED THROUGH NOVEMBER 1ST DURING THE FIRST SEASON IN WHICH THE ARE INSTALLED. THEY SHALL BE WATERED ONE TIME PER DAY FOR THE FIRST WEEK AFTER INSTALLATION AND THREE TIMES PER WEEK FOR THE REMAINDER OF THE SEASON. AFTER THE FIRST SEASON WHEN THE ROOTS OF THE PLANTS ARE ESTABLISHED THEY WILL NOT REQUIRE WATERING.
3. SOAKER HOSES WOUND THROUGH THE BED NEAR THE BASE OF EACH PLANT ARE THE RECOMMENDED METHOD OF WATERING DURING THE FIRST SEASON. THESE CA BE REMOVED AFTER NOVEMBER 30TH WHEN THE PLANTS ARE ESTABLISHED.

LEGEND



Hydrangea paniculata 'Limelight'

Spiraea nipponica 'Snowmound'

Thuja occidentalis 'Nigra'

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

CITY OF PORTSMOUTH PLANNING BOARD

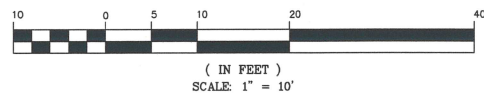
CHAIRPERSON

DATE

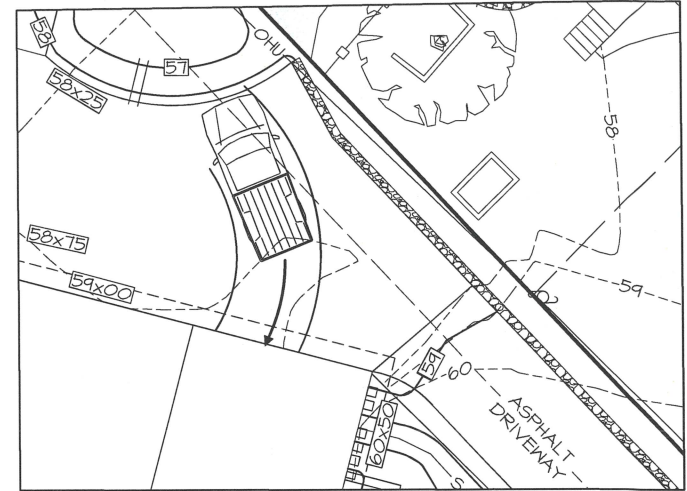
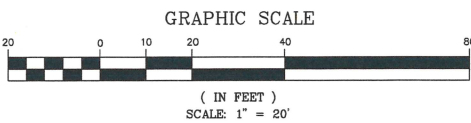
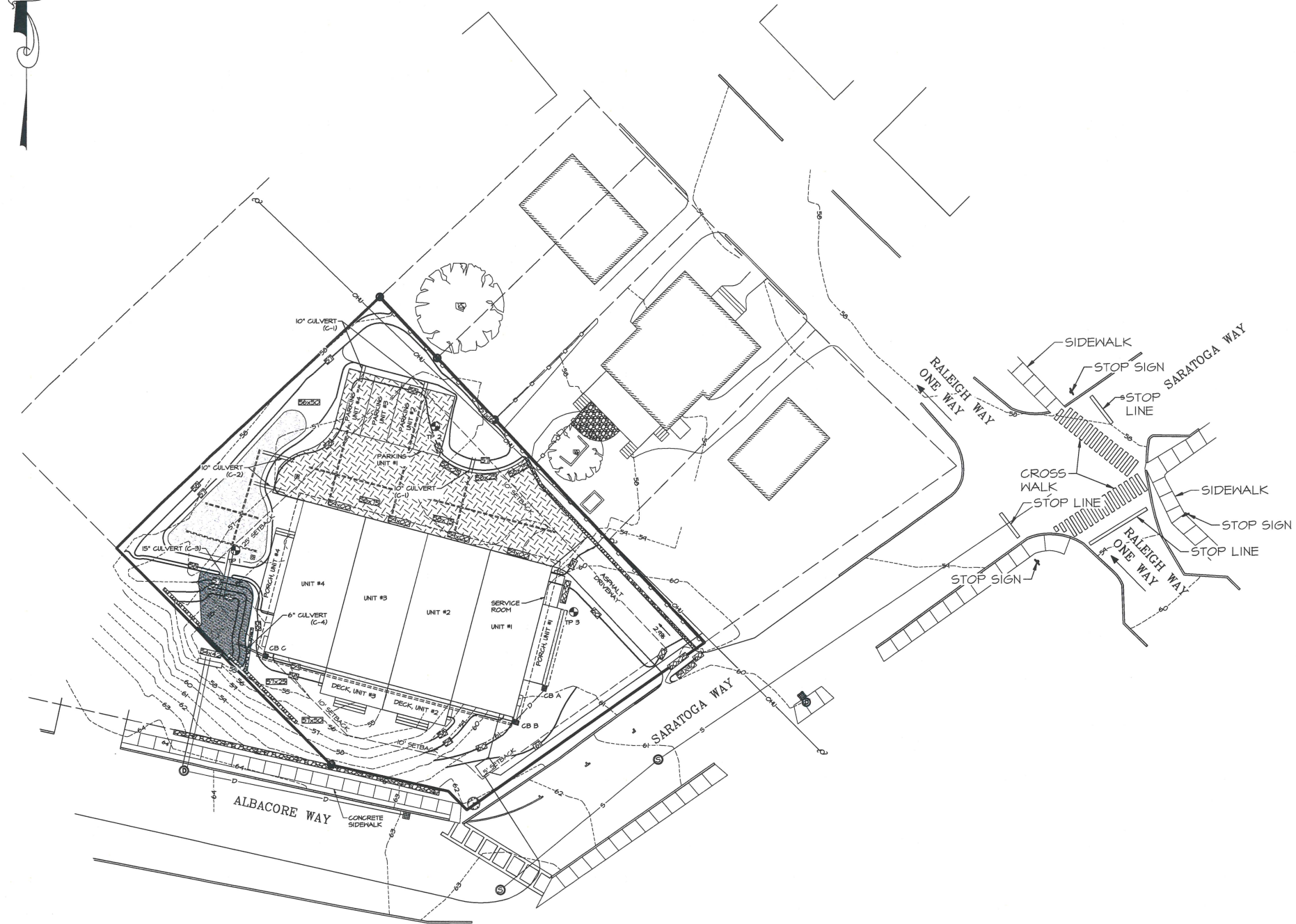
SEAL

BOTANICAL/COMMON NAME	NOTES:	MATURE SIZE	POT SIZE	QTY:
Hydrangea Paniculata 'Limelight'	Deciduous flowering shrub	6'T x 6'W	6 G	5
Spiraea nipponica 'Snowmound'	Deciduous flowering shrub	4-5'T x 4-5'W	5 G	3
Thuja occidentalis 'Nigra': Arborvitae	Pyramidal evergreen hedging shrub	20-30'T-5-10'W	6-7' BB	17

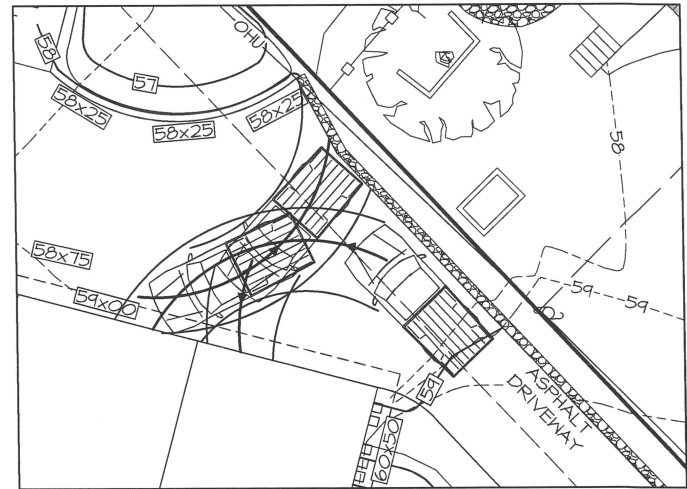
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8	11/4/2021	FOR RECORDING	
7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	
SCALE: 1" = 10'			
CHECKED:	A.ROSS		
DRAWN:	DDD		
CHECKED:	A.ROSS		
ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560			
TITLE LANDSCAPE PLAN for 114 SARATOGA WAY Tax Map 212, Lot 112 Portsmouth, NH			
OWNER OF RECORD LONDON BRIDGE SOUTH INC 273 CURRIER RD CANDIA, NH 03034			
JOB NUMBER	DWG. NO.	ISSUE	
22-023	5 OF 10	9	



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ISS	DATE	DESCRIPTION OF ISSUE
9	4/26/2022	REVISIONS
8	11/4/2021	FOR RECORDING
7	1/7/2021	PB SUBMITTAL
6	12/3/2020	PB SUBMITTAL
5	10/28/2020	PB SUBMITTAL
4	10/10/2020	REVISIONS
3	9/21/2020	TAC SUBMITTAL
2	8/17/2020	TAC SUBMITTAL
1	8/4/2020	TAC SUBMITTAL

SCALE: 1" = 20'

CHECKED: A.ROSS

DRAWN: DDD

CHECKED: A.ROSS

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

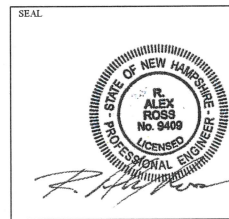
TITLE

ROADWAY PLAN

for
114 SARATOGA WAY
Tax Map 212, Lot 112
Portsmouth, NH

OWNER OF RECORD
LONDON BRIDGE SOUTH INC
273 CURRIER RD
CANDIA, NH 03034

JOB NUMBER: 22-023
DWG. NO.: 6 OF 10
ISSUE: 9



EROSION AND SEDIMENTATION CONTROL
CONSTRUCTION PHASING AND SEQUENCING

1. SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO BE AN INTEGRAL PART OF THIS PROCESS.
2. INSTALL SILT/SOXX FENCING AS PER DETAILS AND AT SEDIMENT MIGRATION.
3. CONSTRUCT TREATMENT SWALES, LEVEL SPREADERS AND DETENTION STRUCTURES AS DEPICTED ON DRAWINGS.
4. STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION MATERIAL & COVER WHERE PRACTICABLE.
5. MINIMIZE DUST THROUGH APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES ON SITE.
6. ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES.
7. FINISH GRADE AND COMPACT SITE.
8. RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES.
9. STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING.
10. RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES.
11. 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.
12. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
13. ALL TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC.) MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
14. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE - BEFORE ROUGH GRADING THE SITE.
15. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
16. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
17. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
18. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
19. 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.
20. 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:

1. 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:

1. 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:

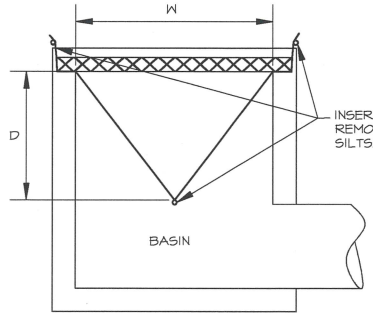
FOR TEMPORARY & LONG TERM SEEDINGS USE AGNAY'S SOIL CONSERVATION GRASS SEED OR EQUAL COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2 FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE, FERTILIZER & LIME:
NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P2O5) 100 LBS/ACRE, POTASH (K2O) 100 LBS/ACRE, LIME 2000 LBS/ACRE
MULCH:
HAY OR STRAW 1.5-2 TONS/ACRE

A) GRADING AND SHAPING

- 1) SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOVING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

B) SEED BED PREPARATION

- 1) 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.



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

INSTALL SILT/SACK TO CATCH BASIN 3 (SEE SHEET 3)

Silt/sack
N.T.S.

EROSION AND SEDIMENTATION CONTROL GENERAL NOTES

1. 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 OF STABLE).
5. TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES).
6. SILT/SOXX 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 SILT/SOXX AND ANY EDGE OF WET AREA.
7. SEEDING AREAS WILL BE FERTILIZED AND RE-SEEDING AS NECESSARY TO ENSURE VEGETATIVE ESTABLISHMENT.
8. SEDIMENT BASINS, IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN CAPACITY.
9. SILT/SOXX 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.
11. AN AREA SHALL BE CONSIDERED FULLY STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED.
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
12. 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, NH. DES AND NRCs.

WINTER CONSTRUCTION NOTES

1. 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 COMPLETED 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 MHDOT ITEM 304.3.

LONG TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE G

	lb/ACRE	lb/1000SF
TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
RED CLOVER (ALSIKE)	20	0.45
TOTAL	40	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: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

SHORT TERM SEEDING

*WELL TO MODERATELY WELL DRAINED SOILS

FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS

SEEDING MIXTURE G

	#/ACRE	#/1000SF
FOR APRIL 1 - AUGUST 15		
ANNUAL RYE GRASS	40	1
FOR FALL SEEDING		
WINTER RYE	112	2.5

LIME: AT 1 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.

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.

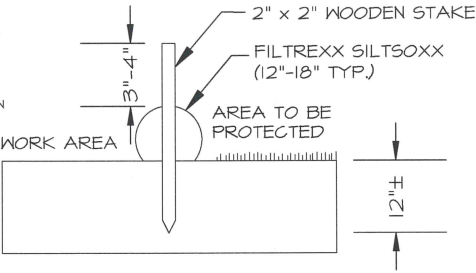
* FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER 2008.

WHEN PROPOSED FOR ALTERATION DURING CONSTRUCTION AS BEING INFESTED WITH INVASIVE SPECIES SHALL BE MANAGED APPROPRIATELY USING THE DISPOSAL PRACTICES IDENTIFIED IN "MHDOT - 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.

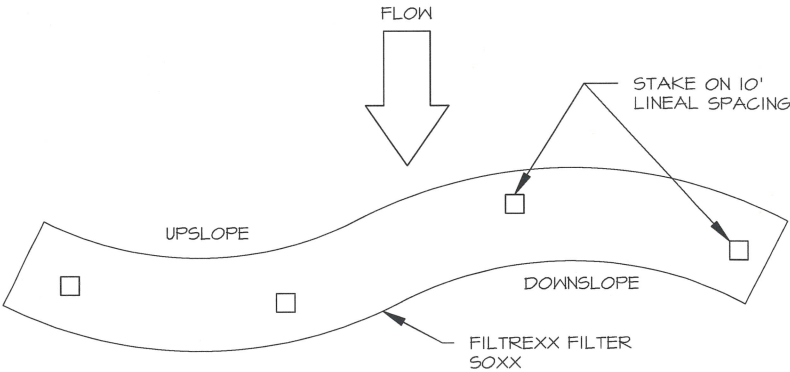
FILTREXX SILT/SOXX NOTES

- 1) ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS
- 2) SILT/SOXX COMPOST, SOIL, ROCK, SEED FILL TO MEET APPLICATION REQUIREMENTS



Filtrex Silt/Sox Section

N.T.S.



Filtrex Silt/Sox Plan View

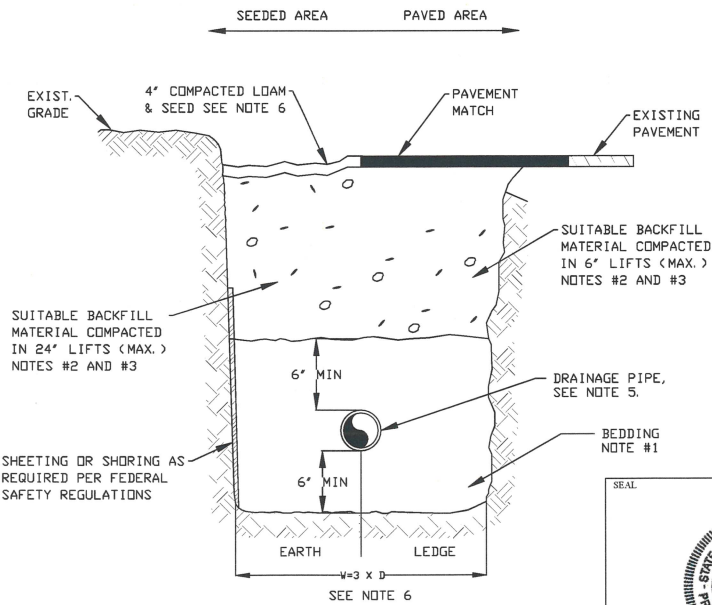
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TRENCH NOTES - STORM DRAIN:

- 1) **BEDDING:** 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. FILTER FABRIC TO BE PLACED IN BETWEEN ALL STONE BEDDING MATERIAL AND SUBSEQUENT LAYERS OF FILL MATERIAL.
- 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 COMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
- 3) **SUITABLE MATERIAL:** 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; 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) **DRAINAGE PIPE:** 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.



TRENCH DETAIL-STORM DRAIN

Scale : N.T.S.

9	4/26/2022	REVISIONS	
8	11/4/2021	FOR RECORDING	
7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	
SCALE: 1" = 10'			
CHECKED:	A.ROSS		
DRAWN:	DDD		
CHECKED:	A.ROSS		
ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560			
TITLE EROSION CONTROL PLAN for 114 SARATOGA WAY Tax Map 212, Lot 112 Portsmouth, NH			
OWNER OF RECORD LONDON BRIDGE SOUTH INC 273 CURRIER RD CANDIA, NH 03034			
JOB NUMBER	22-023	DWG. NO.	7 OF 10
ISSUE			9



TRENCH DETAIL

FINISH GRADE

48"

32"

ENTIRE TRENCH SAND BACK FILL

8"

1" 1" 2" 1" 3" 4"

① POWER

② CATV

OR

③ TELEPHONE

FINISH GRADE

12"

SUITABLE FILL

12"

SAND

3" 1" 3" 2" 3"

SAND

12"

①

PRIMARY SECONDARY

6"

A - SAND BACK FILL SHALL CONSIST OF FINE GRANULAR MATERIAL 100% SHALL PASS THROUGH A 14" SIEVE
 B - EXCEPTION: NATURALLY OCCURRING SMOOTH ROUND PEBBLES NO GREATER THAN 3/8" IN DIAMETER ARE

METALLIC SWEEPS REQUIRED ON ALL
RUNS IN EXCESS OF 225'

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 - 100
3/8"	20 - 55
#4	0 - 10
#8	0 - 5

* EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 103 OF NHDOT STANDARD SPECIFICATIONS

3" NON FLOATING MULCH LAYER OR SINGLE COURSE OF RIVERSTONE

NATIVE NON-INVASIVE SHRUB AND PERENNIAL PLANTINGS. FOLLOW "NATIVE PLANTS FOR NEW ENGLAND RAIN GARDENS" FOR PLANT TYPE & SPACING

10" ADS-N-12 CULVERT (C-1) INV. EL. 55.20' (SEE CULVERT PROTECTION DETAIL)

GRASS OVERFLOW

6" PONDING AREA

18" SOIL FILTER BED (SEE SPEC.)

12" OF (3/4") CRUSHED STONE BEDDING (SEE SPEC.)

SCARIFIED EXISTING NATIVE EARTH

MIRAFI 140N GEOTEXTILE FILTER FABRIC

BOT. PONDING AREA ELEV: 56.50'

BOT. SOIL FILTER BED ELEV: 55.00'

FLOW

Component Material	Percent of Mixture by Volume	Gradation of Material	
		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
Loamy coarse sand	70 to 80	10	85 to 100
		20	70 to 100
		60	15 to 40
		200	8 to 15

CRUSHED STONE BEDDING *	
SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 - 100
3/8"	20 - 35
# 4	0 - 10
# 20	0 - 5

* EQUIVALENT TO STANDARD STONE
 SIZE #67 - SECTION 103 OF NHDOT
 NHDOT STANDARD SPECIFICATIONS

Diagram illustrating the cross-section of a telephone vault structure. The diagram shows a vault with a sloped roof and a flat base. Key dimensions and components are labeled:

- FINISH GRADE**: Indicated at the top of the structure.
- 24'**: Vertical dimension from the finish grade to the top of the vault structure.
- 3"**: Horizontal dimension from the centerline to the edge of the vault structure.
- CAUTION TAPE @ 12"**: Indicated by an arrow pointing to the edge of the vault structure.
- 48'**: Vertical dimension from the base of the vault structure to the top of the vault structure.
- PRIMARY**: Label for the main vault structure.
- 6"**: Vertical dimension from the base of the vault structure to the top of the vault structure.
- 6"**: Vertical dimension from the base of the vault structure to the top of the vault structure.
- 12'**: Horizontal dimension from the centerline to the edge of the vault structure.
- SECONDARY OR SERVICE (MAY BE LOCATED AT SAME ELEVATION AS TELEPHONE)**: Label for the secondary or service vault structure.
- SELECT SAND BEDDING BACKFILL (SEE NOTE 1)**: Label for the backfill material.

INF. TRENCH	INV. TRENCH	OUTLET INV.	HEIGHT
A	57.25'	57.25'	3.25'
B	56.00'	56.00'	3.00'

TITLE			
<h1 style="text-align: center;">DETAILS</h1> <p style="text-align: center;">for</p> <p style="text-align: center;">114 SARATOGA WAY Tax Map 212, Lot 112 Portsmouth, NH</p>			
OWNER OF RECORD			
<p style="text-align: center;">LONDON BRIDGE SOUTH INC 273 CURRIER RD CANDIA, NH 03034</p>			
JOB NUMBER	DWG. NO	ISSUE	
22-023	8 OF 10	9	

CONSTRUCTION SPECIFICATIONS FOR POROUS ASPHALT

REFERENCE DOCUMENT: UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS, UNH STORMWATER CENTER, FEBRUARY, 2014.

INSTALLATION RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS WILL HELP ASSURE THAT THE POROUS ASPHALT PAVEMENT IS PROPERLY INSTALLED.

1. THE FULL PAVEMENT SPECIFICATION MUST BE FOLLOWED CONSCIENTIOUSLY DURING CONSTRUCTION. IT IS BASED ON UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS. THE UNH SPECIFICATION INCLUDE NUMEROUS VITAL PROVISIONS FOR AGGREGATE AND BITUMINOUS MATERIALS, THEIR PLACEMENT, AND QUALITY CONTROL. AMONG ITS NOTABLE PROVISIONS ARE THE FOLLOWING EXAMPLES:
- OPEN-GRADED AGGREGATE TO MAKE ALL PAVEMENT LAYERS POROUS AND PERMEABLE.
 - STIFF ASPHALT BINDER TO ADHERE TO THE AGGREGATE PARTICLES AND RESIST "DRAINDOWN" THROUGH THE PAVEMENT'S PORES, ENHANCING THE MATERIAL'S PERFORMANCE AND DURABILITY;
 - A SPECIFIC LIMIT ON ALLOWABLE DRAINDOWN, AND ADDITION OF A
 - STYRENE-BUTADIENE-STYRENE (SBS) POLYMER ADDITIVE TO HELP MEET THAT REQUIREMENT;
 - THE POROUS PAVEMENT IS TO BE INSTALLED ONLY AFTER MAJOR CONSTRUCTION IS COMPLETED, SO THAT CONSTRUCTION TRAFFIC WILL NOT TRACK POTENTIALLY CLOGGING SEDIMENT ONTO THE PAVEMENT SURFACE. FOR CONSTRUCTION ACCESS, A TEMPORARY SURFACE WILL BE INSTALLED, SIMILAR IN CONSTRUCTION TO A STANDARD STABILIZED CONSTRUCTION ENTRANCE. THIS TYPE OF SURFACE CAN BEAR CONSTRUCTION TRAFFIC WITHOUT ERODING.
 - PROMINENT AND REPEATED STATEMENTS OF THE SPECIAL NATURE AND PURPOSE OF POROUS PAVEMENT, AND THE NECESSITY OF COMPLYING STRICTLY WITH THESE DISTINCTIVE SPECIFICATIONS.
 - PROTECTION OF THE FINISHED POROUS ASPHALT SURFACE FROM TRACKING OF CONSTRUCTION SEDIMENT.
2. THOROUGH COMMUNICATION WITH THE POROUS ASPHALT SUPPLIER AND PAVEMENT INSTALLER IS ESSENTIAL. THEY MUST UNDERSTAND THE POROUS PAVEMENT'S SPECIAL OBJECTIVES, THE SPECIAL MATERIALS AND PROCEDURES NECESSARY TO MAKE IT EFFECTIVE, AND WHY COMPLIANCE WITH SPECIFICATIONS IS ESSENTIAL. TO THIS END, THE SPECIFICATIONS STATE PROMINENTLY AND REPEATEDLY THE SPECIAL NATURE AND PURPOSE OF THE POROUS MATERIALS. IN ADDITION, THE PROJECT ENGINEER SHOULD MEET WITH THE CONTRACTORS IN PERSON TO REVIEW THE SPECIFICATIONS AND MAKE SURE THE CONTRACTORS UNDERSTAND THE OBJECTIVES. HE SHOULD OBSERVE THE CONTRACTORS ON-SITE FREQUENTLY, TO MAKE SURE THE OBJECTIVES ARE CARRIED OUT. HE SHOULD MAINTAIN A WRITTEN RECORD DOCUMENTING REVIEW AND APPROVAL AT CRITICAL PROJECT STAGES SUCH AS EXCAVATION OF THE SUB GRADE AND QUALITY CHECKS AND SURFACE MATERIALS. HE SHOULD INSPECT THE SITE TO MAKE SURE CONSTRUCTION VEHICLES ARE NOT ALLOWED TO TRAVEL ON EXCAVATED SUB GRADE OR THE PAVEMENT STRUCTURE AT ANY INAPPROPRIATE STAGE. HE SHOULD FORBID CONSTRUCTION TRAFFIC FROM TRACKING SOIL ONTO THE FINISHED PAVEMENT SURFACE.

INSTALLATION

- A. PERCOLATION BEDS
1. OWNER SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO ALL PERCOLATION BED AND POROUS PAVING WORK.
2. SUB GRADE PREPARATION
- a. EXISTING SUB GRADE UNDER BED AREAS SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO STONE BED PLACEMENT
- b. WHERE EROSION OF SUB GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE OR EQUIVALENT AND LIGHT TRACTOR.
- c. BRING SUB GRADE OF STONE PERCOLATION BED TO LINE, GRADE, AND ELEVATIONS INDICATED. FILL AND LIGHTLY REGRADE ANY AREAS DAMAGED BY EROSIONS, PONDING, OR TRAFFIC COMPACTION BEFORE THE PLACING OF STONE. ALL BED BOTTOMS ARE LEVEL GRADE.
3. RECHARGE BED INSTALLATION
- a. UPON COMPLETION OF SUB GRADE WORK, THE ENGINEER SHALL BE NOTIFIED AND SHALL INSPECT AT HIS DISCRETION BEFORE PROCEEDING WITH PERCOLATION BED INSTALLATION.
- b. PERCOLATION BED AGGREGATE SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB GRADE PREPARATION. ANY ACCUMULATION OF DEBRIS OR SEDIMENT WHICH HAS TAKEN PLACE AFTER APPROVAL OF SUB GRADE SHALL BE REMOVED PRIOR TO INSTALLATION OF AGGREGATE AT NO EXTRA COST TO THE OWNER.
- c. INSTALL COARSE AGGREGATE (CRUSHED STONE) IN 8-INCH MAXIMUM LIFTS, TO A MAXIMUM OF 95% STANDARD PROCTOR COMPACTION, KEEPING EQUIPMENT MOVEMENT OVER STORAGE BED SUBGRADES TO A MINIMUM. INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS.
- d. INSTALL FILTER COARSE (BANK RUN GRAVEL) IN 8-INCH MAXIMUM LIFTS, TO A MAXIMUM OF 95% STANDARD PROCTOR COMPACTION, KEEPING EQUIPMENT MOVEMENT OVER STORAGE BED SUBGRADES TO A MINIMUM. INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS.
- e. INSTALL CHOKER BASE COURSE (SEE MATERIALS SECTION) AGGREGATE EVENLY OVER SURFACE OF STONE BED, SUFFICIENT TO ALLOW PLACEMENT OF PAVEMENT, AND NOTIFY ENGINEER FOR APPROVAL. CHOKER BASE COURSE SHALL BE SUFFICIENT TO ALLOW FOR EVEN PLACEMENT OF ASPHALT BUT NO LESS THAN 4-INCH IN DEPTH.
4. SURROUNDING AREAS
- a. BEFORE THE POROUS PAVEMENT IS INSTALLED, ADJACENT SOIL AREAS SHOULD BE SLOPED AWAY FROM ALL PAVEMENT EDGES, TO PREVENT POTENTIAL SEDIMENT FROM WASHING ON THE PAVEMENT SURFACE.
- b. TO ACCOMPLISH THIS, A SEQUENCE OF TEMPORARY SHALES SHOULD BE EXCAVATED INTO ALL EARTHEN (UNPAVED) AREAS AT LEAST ON THE UPHILL SIDES OF THE PAVEMENT, AND WHERE NECESSARY, TO BELOW THE CURB OR PAVEMENT ELEVATION. ITS SHAPE AND PLANTINGS CAN BE INTEGRATED WITH THE PROJECT'S ARCHITECTURE AND LANDSCAPE, AND DESIGNED TO MAXIMIZE INFILTRATION. SWALE OVERFLOW, WHEN IT OCCURS, CAN BE DISCHARGED FROM ONE SWALE TO ANOTHER BY CONNECTING PIPES UNDER DRIVEWAYS.
- c. BUILDING BASEMENTS AND FOUNDATIONS SHOULD BE WATERPROOFED AS NECESSARY, WHERE THE POROUS PAVEMENT ADJUTS BUILDINGS.

INSTALLATION (CONT...)

- B. POROUS ASPHALT
1. TRANSPORTING MATERIAL
- a. TRANSPORTING OF MIX TO THE SITE SHALL BE IN VEHICLES WITH SMOOTH, CLEAN DUMP BEDS THAT HAVE BEEN SPRAYED WITH A NON-PETROLEUM RELEASE AGENT.
- b. THE MIX SHALL BE COVERED DURING TRANSPORT TO CONTROL COOLING.
2. POROUS BITUMINOUS ASPHALT SHALL NOT BE STORED IN EXCESS OF 90 MINUTES BEFORE PLACEMENT.
3. ASPHALT PLACEMENT
- a. THE POROUS BITUMINOUS SURFACE COURSE SHALL BE LAID IN ONE OR TWO LIFTS DIRECTLY OVER THE CHOKER COARSE, FILTER COARSE, AND CRUSHED STONE BASE COURSE TO DEPTH INDICATED. IF LAID IN TWO LIFTS THE PAVEMENT SHALL BE CLEANED AND INSPECTED BY THE ENGINEER BEFORE PLACEMENT OF THE SECOND LIFT.
- b. THE LAYING TEMPERATURE OF THE BITUMINOUS MIX SHALL BE BETWEEN 275 DEGREES FAHRENHEIT AND 325 DEGREES FAHRENHEIT (BASED ON RECOMMENDATIONS OF THE ASPHALT SUPPLIER).
- c. INSTALLATION SHALL TAKE PLACE WHEN AMBIENT TEMPERATURES ARE 55 DEGREES FAHRENHEIT OR ABOVE, WHEN MEASURED IN THE SHADE AWAY FROM ARTIFICIAL HEAT.
- d. THE USE OF A REMIXING MATERIAL TRANSFER DEVICE BETWEEN THE TRUCKS AND THE PAYER IS HIGHLY RECOMMENDED TO ELIMINATE COLD LUMPS IN THE MIX.
- e. THE POLYMER-MODIFIED ASPHALT IS VERY DIFFICULT TO RAKE, A WELL-HEATED SCREED SHOULD BE USED TO MINIMIZE THE NEED FOR RAKING.
- f. COMPACTION OF THE SURFACE COURSE SHALL TAKE PLACE WHEN THE SURFACE IS COOL ENOUGH TO RESIST AN 8-12-TON ROLLER. BREAKDOWN ROLLING SHALL OCCUR WHEN THE MIX TEMPERATURE IS BETWEEN 275 DEGREES FAHRENHEIT AND 325 DEGREES FAHRENHEIT. INTERMEDIATE ROLLING SHALL OCCUR WHEN THE MIX TEMPERATURE IS BETWEEN 150 DEGREES FAHRENHEIT AND 200 DEGREES FAHRENHEIT. THE CESSATION TEMPERATURE OCCURS AT APPROXIMATELY 175 DEGREES FAHRENHEIT, AT WHICH POINT THE MIX BECOMES RESISTANT TO COMPACTION. IF COMPACTION HAS NOT BEEN DONE AT TEMPERATURE GREATER THAN THE CESSATION TEMPERATURE, THE PAVEMENT WILL NOT ACHIEVE ADEQUATE DURABILITY.
4. IN THE EVENT CONSTRUCTION SEDIMENT IS INADVERTENTLY DEPOSITED ON THE FINISHED POROUS SURFACE, IT MUST BE IMMEDIATELY REMOVED BY VACUUMING.
5. AFTER FINAL ROLLING, NO VEHICULAR TRAFFIC OF ANY KIND SHALL BE PERMITTED ON THE SURFACE UNTIL COOLING AND HARDENING HAS TAKEN PLACE, AND IN NO CASE WITHIN THE FIRST 48 HOURS, PROVIDE BARRIERS AS NECESSARY AT NO EXTRA COST TO THE OWNER TO PREVENT VEHICULAR USE, REMOVE AT THE DISCRETION OF THE ENGINEER.
6. STRIPING PAINT FOR TRAFFIC LANES AND PARKING BAYS SHALL BE CHLORINATED RUBBER BASE, FACTORY MIXED, NON-BLEEDING, FAST DRYING, BEST QUALITY, WHITE TRAFFIC PAINT WITH A LIFE EXPECTANCY OF TWO YEARS UNDER NORMAL TRAFFIC USE.
- a. PAVEMENT-MARKING PAINT; LATEX, WATER-BASE EMULSION, READY-MIXED, COMPLYING WITH PS TT-P-1952.
- b. SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST.
- c. PAINT 4 INCH WIDE PARKING STRIPING AND TRAFFIC LANE STRIPING IN ACCORDANCE WITH LAYOUTS OF PLAN, APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES, APPLY IN TWO COATS AT MANUFACTURER'S RECOMMENDED RATES. PROVIDE CLEAR, SHARP LINES USING WHITE TRAFFIC PAINT, INSTALLED IN ACCORDANCE WITH MHDOT SPECIFICATIONS.
7. WORK SHALL BE DONE EXPERTLY THROUGHOUT, WITHOUT STAINING OR INJURY TO OTHER WORK. TRANSITION TO ADJACENT IMPERVIOUS BITUMINOUS PAVING SHALL BE MERGED NEATLY WITH FLUSH, CLEAN LINE. FINISHED PAVING SHALL BE EVEN, WITHOUT POCKETS, AND GRADED TO ELEVATIONS SHOWN ON DRAWING.
- a. POROUS PAVEMENT BEDS SHALL NOT BE USED FOR EQUIPMENT OR MATERIALS STORAGE DURING CONSTRUCTION, AND UNDER NO CIRCUMSTANCES SHALL VEHICLES BE ALLOWED TO DEPOSIT SOIL ON PAVED POROUS SURFACES.
8. REPAIR OF DAMAGED PAVING
- a. ANY EXISTING PAVING ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER WITHOUT ADDITIONAL COST TO THE OWNER.
9. FULL QUALITY CONTROL
- a. THE FULL PERMEABILITY OF THE PAVEMENT SURFACE SHALL BE TESTED BY APPLICATION OF CLEAN WATER AT THE RATE OF AT LEAST 5 GPM OVER THE SURFACE, USING A HOSE OR OTHER DISTRIBUTION DEVICE, WATER USED FOR THE TEST SHALL BE CLEAN, FREE OF SUSPENDED SOLIDS AND DELETERIOUS LIQUIDS AND WILL BE PROVIDED AT NO EXTRA COST TO THE OWNER. ALL APPLIED WATER SHALL INFILTRATE DIRECTLY WITHOUT PUDDLE FORMATION OR SURFACE RUNOFF, AND SHALL BE OBSERVED BY THE ENGINEER AND OWNER.
- b. TEST IN-PLACE BASE AND SURFACE COURSE FOR COMPLIANCE WITH REQUIREMENTS FOR THICKNESS AND SURFACE SMOOTHNESS, REPAIR OR REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE OWNER.
- c. SURFACE SMOOTHNESS: TEST FINISHED SURFACE FOR SMOOTHNESS AND EVEN DRAINAGE, USING A TEN-FOOT TO CENTERLINE OF PAVED AREA. SURFACE WILL NOT BE ACCEPTED IF GAPS OR RIDGES EXCEED 3/16 OF AN INCH.

MAINTENANCE SPECIFICATIONS FOR POROUS ASPHALT

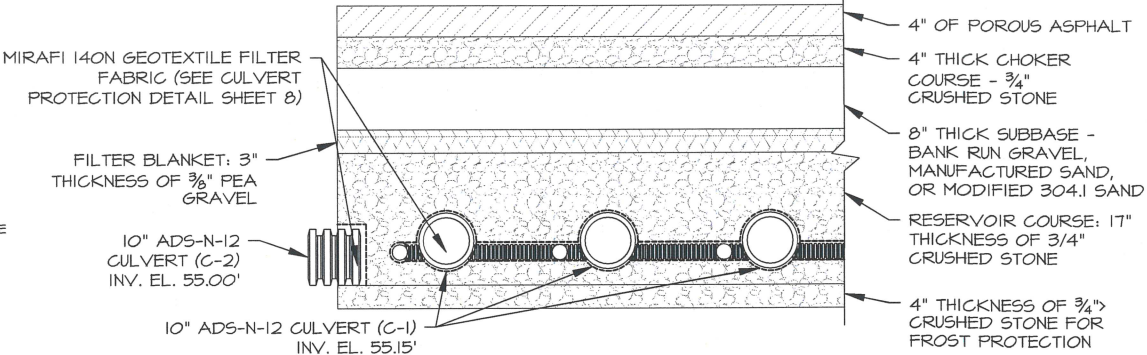
THE FOLLOWING RECOMMENDATIONS WILL HELP ASSURE THAT THE PAVEMENT IS MAINTAINED TO PRESERVE ITS HYDROLOGIC EFFECTIVENESS.

WINTER MAINTENANCE:

1. SANDING FOR WINTER TRACTION IS PROHIBITED. DEICING IS PERMITTED (NaCl, MgCl2, OR EQUIVALENT). REDUCED SALT APPLICATION OF 50% OVER TRADITIONAL PAVING APPLICATION RATES, NONTOXIC, ORGANIC DEICERS, APPLIED EITHER AS BLENDED, MAGNESIUM CHLORIDE-BASED LIQUID PRODUCTS OR AS PRETREATED SALT, ARE PREFERABLE.
2. PLOWING IS ALLOWED, BLADE SHOULD BE SLIGHTLY RAISED (ALTHOUGH NOT NECESSARY, THIS WILL PREVENT PAVEMENT SCARING). ICE AND LIGHT SNOW ACCUMULATION ARE GENERALLY NOT AS PROBLEMATIC AS FOR STANDARD ASPHALT. SNOW WILL ACCUMULATE DURING HEAVIER STORMS AND SHOULD BE PLOWED AFTER 2 TO 4 INCHES OF SNOW ACCUMULATION.

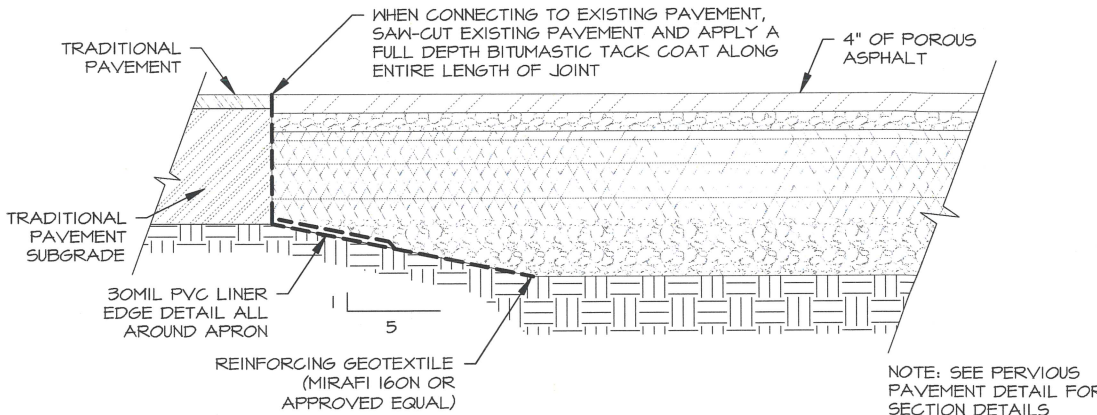
ROUTINE MAINTENANCE:

1. ASPHALT SEAL COATING MUST BE ABSOLUTELY FORBIDDEN. SURFACE SEAL COATING IS NOT REVERSIBLE.
2. THE PAVEMENT SURFACE SHOULD BE VACUUMED 2 TO 4 TIMES PER YEAR, ESPECIALLY AFTER WINTER AND FALL SEASONS, AND AT ANY ADDITIONAL TIMES SEDIMENT IS SPILLED, ERODED, OR TRACKED ONTO THE SURFACE.
3. PLANTED AREAS ADJACENT TO PERVIOUS PAVEMENT SHOULD BE WELL MAINTAINED TO PREVENT SOIL WASHOUT ONTO THE PAVEMENT. IF ANY BARE SPOTS OR ERODED AREAS ARE OBSERVED WITHIN THE PLANTED AREAS, THEY SHOULD BE REPLANTED AND/OR STABILIZED AT ONCE.
4. IMMEDIATELY CLEAN ANY SOIL DEPOSITED ON PAVEMENT. SUPERFICIAL DIRT DOES NOT NECESSARILY CLOG THE PAVEMENT VOIDS. HOWEVER, DIRT THAT IS GROUND IN REPEATEDLY BY TIRES CAN LEAD TO CLOGGING. THEREFORE, TRUCKS OR OTHER HEAVY VEHICLES SHOULD BE PREVENTED FROM TRACKING OR SPILLING DIRT ONTO THE PAVEMENT.
5. DO NOT ALLOW CONSTRUCTION STAGING, SOIL/MULCH STORAGE, ETC. ON UNPROTECTED PAVEMENT SURFACE.
6. REPAIRS: FOR THE POROUS ASPHALT PARKING LOT, POTHOLES OF LESS THAN 50 SQUARE FEET CAN BE PATCHED BY ANY MEANS SUITABLE WITH STANDARD PAVEMENT OR A PERVIOUS MIX IS PREFERRED. FOR AREAS GREATER THAN 50 SQ. FT. IS IN NEED OF REPAIR, APPROVAL OF PATCH TYPE SHOULD BE SOUGHT FROM A QUALIFIED ENGINEER. ANY REQUIRED REPAIR OF DRAINAGE STRUCTURES SHOULD BE DONE PROMPTLY TO ENSURE CONTINUED PROPER FUNCTIONING OF THE SYSTEM. REPAIRS TO THE POROUS ASPHALT SIDEWALK SHALL BE MADE WITH A PERVIOUS MIX.
7. WRITTEN AND VERBAL COMMUNICATION TO THE POROUS PAVEMENT'S FUTURE OWNER SHOULD MAKE CLEAR THE PAVEMENT'S SPECIAL PURPOSE AND SPECIAL MAINTENANCE REQUIREMENTS SUCH AS THOSE LISTED HERE.



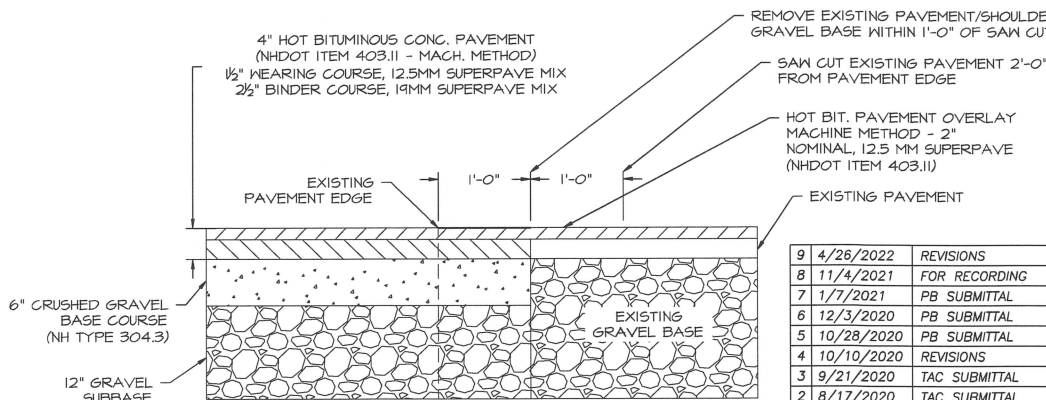
PERVIOUS PAVEMENT DETAIL

N.T.S.



PERVIOUS PAVEMENT TRANSITION DETAIL

N.T.S.



PAVEMENT JOINT DETAIL

N.T.S.

MIX SUMMARY

1. POROUS ASPHALT PAVEMENT MIX PER THE CURRENT UNH STORM WATER CENTER DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS MANUAL.

2. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR HAS SUBMITTED AND THE ENGINEER HAS APPROVED A MIX DESIGN INCLUDING THE PERCENTAGE OF EACH INGREDIENT INCLUDING BINDER, POLYMER, AND THE JOB-MIX FORMULA FROM SUCH A COMBINATION. THE JOB-MIX FORMULA SHALL ESTABLISH A SINGLE PERCENTAGE OF AGGREGATE PASSING SIEVE AND A SINGLE PERCENTAGE OF BITUMINOUS MATERIAL TO BE ADDED TO THE AGGREGATE. NO CHANGE IN THE JOB-MIX FORMULA MAY BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER. THE JOB-MIX FORMULA MUST FALL WITH THE MASTER RANGE SPECIFIED IN COMPOSITION OF MIXTURE TABLE.

TRANSPORTING MATERIAL: SEE CONSTRUCTION AND INSTALL SPECIFICATIONS

SEAL



9	4/26/2022	REVISIONS	
8	11/4/2021	FOR RECORDING	
7	1/7/2021	PB SUBMITTAL	
6	12/3/2020	PB SUBMITTAL	
5	10/28/2020	PB SUBMITTAL	
4	10/10/2020	REVISIONS	
3	9/21/2020	TAC SUBMITTAL	
2	8/17/2020	TAC SUBMITTAL	
1	8/4/2020	TAC SUBMITTAL	
ISS	DATE	DESCRIPTION OF ISSUE	

SCALE: AS SHOWN

CHECKED: A.ROSS

DRAWN: DDD

CHECKED: A.ROSS

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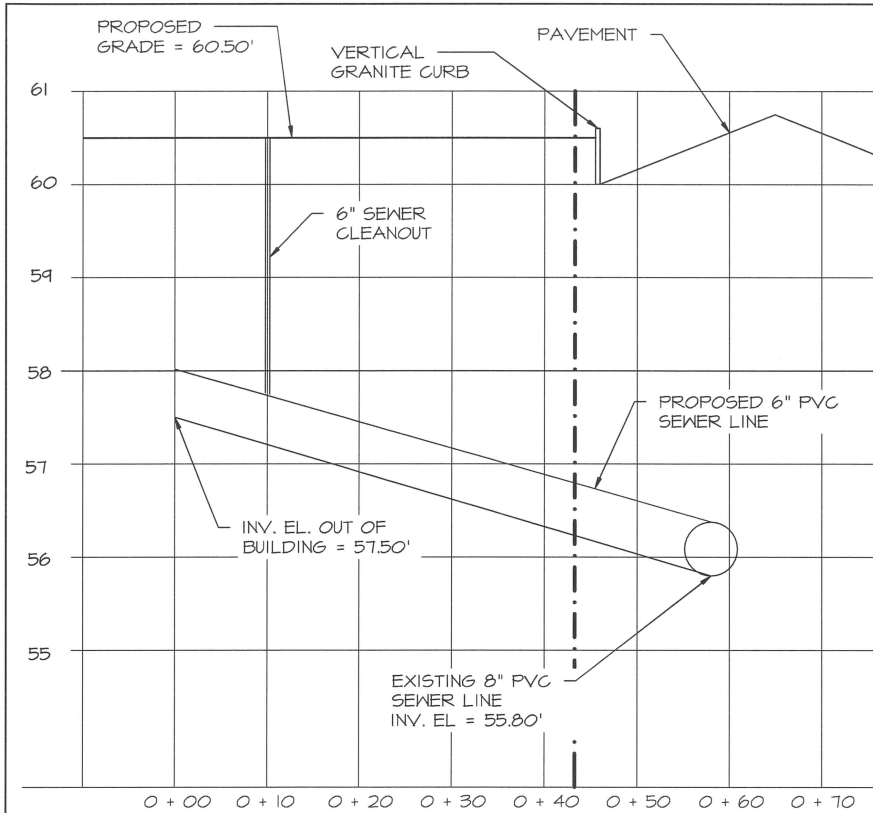
TITLE

PAVEMENT
DETAILS

for
114 SARATOGA WAY
Tax Map 212, Lot 112
Portsmouth, NH

OWNER OF RECORD
LONDON BRIDGE SOUTH INC
273 CURRIER RD
CANDIA, NH 03034

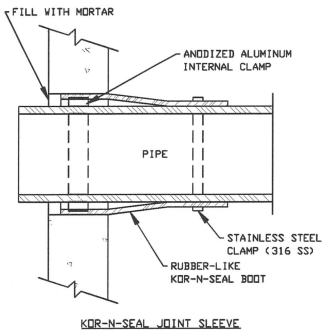
JOB NUMBER	DWG NO.	ISSUE
22-023	9 OF 10	9



SEWER PROFILE

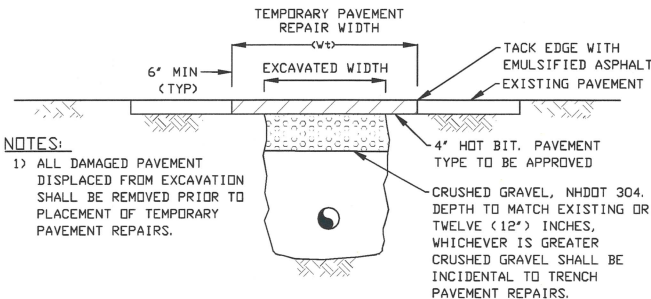
SCALE: HORIZONTAL: 1" = 10'

VERTICAL: 1" = 1'



MANHOLE PENETRATIONS

Scale : N.T.S.



TEMPORARY TRENCH PAVEMENT REPAIR

Scale : N.T.S.

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, CONTAMINANTS.
 - 9) NATION AND FLAWS PRIOR TO ACCEPTANCE BY THE CITY.
 - 10) ALL EXISTING WATER GATE BOXES SHALL BE SET TO FINAL GRADE DURING THE ROAD WORK OPERATION.
 - 11) ALL GATE VALVES SHALL BE RESTRAINED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
 - 12) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
 - 13) ALL TEES, BENDS GATES AND CAPS SHALL BE USED WITH MECHANICAL RESTRAINT JOINTS AND REINFORCED WITH THRUST BLOCKING.
 - 14) 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.
 - 15) ALL PORTIONS OF THE NEW DUCTILE IRON WATER MAIN SYSTEM SHALL BE PROTECTED USING PLASTIC WRAPPINGS AND BRASS CONDUCTIVITY WEDGES. SEE SPECIFICATIONS.
- ADD FITTINGS AS NECESSARY TO ENSURE THAT VALVES ARE INSTALLED NEARLY LEVEL.

GENERAL NOTES:

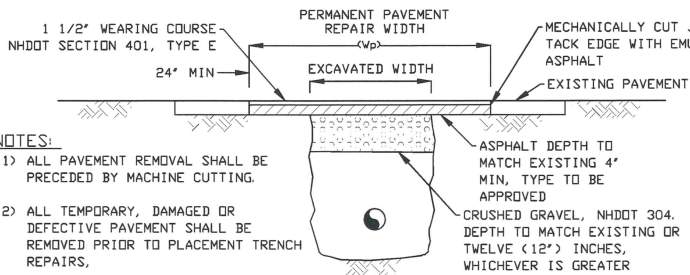
- 1) THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY ROSS ENGINEERING. EXISTING UTILITIES THAT ARE SHOWN ON THE PLANS WERE GATHERED FROM AVAILABLE STRUCTURES THAT WERE VIABLE. RECORD DRAWINGS OF THE VARIOUS UTILITY COMPANIES CAMERA INSPECTIONS AND OBSERVATIONS MADE. THERE IS NO GUARANTEE THAT THE UTILITIES 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 THEIR 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 WORKDAY.
- 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.

GRAVITY SEWER TRENCH NOTES:

- 1) ~~ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE.~~ BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWINGS.
- 2) ~~BEDDING.~~ 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) ~~SAND BLANKET.~~ CLEAN SAND FREE FROM ORGANIC MATTER, SD 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) ~~SUITABLE MATERIAL.~~ 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) ~~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 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, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- 7) ~~V = MAXIMUM ALLOWABLE TRENCH PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.~~ FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, V 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) ~~FOR CROSS COUNTRY CONSTRUCTION.~~ BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 9) ~~CONCRETE FOR ENCASEMENT~~ SHALL CONFORM TO THE REQUIREMENTS OF SECTION 520, (NHDT 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:

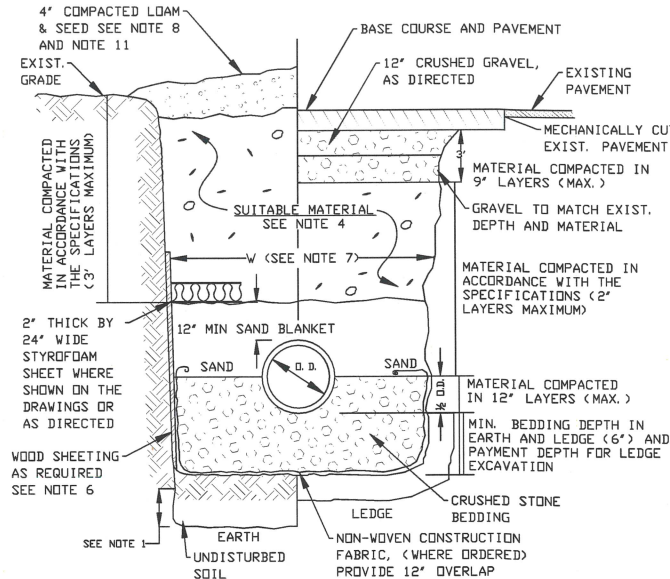
- 1) ALL SEWER SERVICE EXTENSIONS SHALL BE 6", CONTRACTOR SHALL VERIFY EXISTING SEWER SERVICE LOCATION AND ELEVATION BY EXCAVATION OF TEST PITS OR OTHER MEANS PRIOR TO THE CONSTRUCTION OF SEWER MAIN.
- 2) SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.
- 3) VARIOUS SIZE TRANSITION COUPLINGS SHALL BE STORED ON SITE FOR CONNECTION TO EXISTING SERVICES.
- 4) CLEANOUTS SHALL BE INSTALLED AT EACH LIVE SEWER SERVICE CONNECTION, AS SHOWN ON THIS PLAN. REBAR SHALL BE PLACED AT SIDE OF CLEANOUT.
- 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.



NOTES:

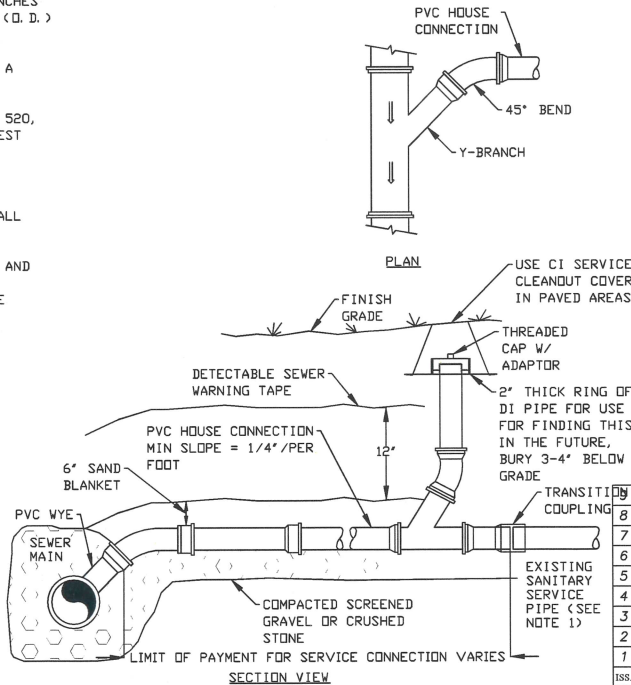
- 1) ALL PAVEMENT REMOVAL SHALL BE PRECEDED BY MACHINE CUTTING.
- 2) ALL TEMPORARY, DAMAGED OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT TRENCH REPAIRS.
- 3) DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDT REQUIREMENTS.

PERMANENT TRENCH PAVEMENT REPAIR



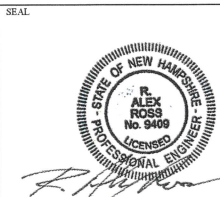
TRENCH DETAIL- GRAVITY SEWER

Scale : N.T.S.



TYPICAL SERVICE CONNECTION

Scale : N.T.S.



DATE	REVISIONS	
4/26/2022	FOR RECORDING	
8 11/4/2021	PB SUBMITTAL	
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4 10/10/2020	REVISIONS	
3 9/21/2020	TAC SUBMITTAL	
2 8/17/2020	TAC SUBMITTAL	
1 8/4/2020	TAC SUBMITTAL	

ISS	DATE	DESCRIPTION OF ISSUE
SCALE:	1" = 10'	
CHECKED:	A.ROSS	
DRAWN:	DDD	
CHECKED:	A.ROSS	

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Portsmouth, NH 03801
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TITLE

NOTES

for

114 SARATOGA WAY

Tax Map 212, Lot 112

Portsmouth, NH

OWNER OF RECORD

LONDON BRIDGE SOUTH INC

273 CURRIER RD

CANDIA, NH 03034

JOB NUMBER

DWG NO.

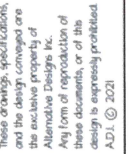
ISSUE

22-023

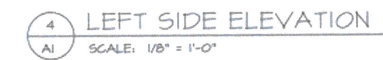
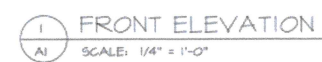
10 OF 10

9

MIDDLE UNITS		
FIRST FLOOR	707	S.F.
SECOND FLOOR	960	S.F.
THIRD FLOOR	380	S.F.
TOTAL	2047	S.F.



6





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CODE:

- ALL CONSTRUCTION SHALL FOLLOW LOCAL STATE BUILDING CODE, MANUFACTURES' SPECIFICATIONS, AND WELL KNOWN INDUSTRY STANDARDS. IF ANY QUESTIONS SHALL ARISE, THE DESIGNER OR ENGINEER ON RECORD SHALL BE CONTACTED.
- INTERNATIONAL RESIDENTIAL CODE 2015 (IRC 2015) AND THE REFERENCED STANDARDS INCLUDED THEREIN. AHJ = AUTHORITY HAVING JURISDICTION.
 - NUMBER OF UNITS. 4. (1 OR 2)
 - NUMBER OF STORIES. 3. (MAX. 3)

DESIGN LOADS:

- UNIFORM FLOOR LIVE LOAD (NONBEDROOM):
 - NON-BEDROOM 40PSF
 - BEDROOM 30PSF
 - ATTIC 20PSF
- UNIFORM FLOOR DEAD LOAD: 10PSF
- ROOF SNOW LOAD (AHJ):
 - GROUND SNOW LOAD: 50 PSF (TOWN STATE SPECIFIC)
 - DEAD LOAD: 10 PSF
- WIND DESIGN:
 - EXPOSURE CATEGORY B. (A-D, R301.2.1.4) (B IS NORMAL)
 - WIND SPEED ZONE (AHJ) 120 (90 -120, MOST OF NORTHERN AND WESTERN NH AND WESTERN MA=100, CENTRAL AND SOUTH NH AND MA = 100, NH COAST, BOSTON AND SOUTH = 110, CAPE COD AND ISLANDS = 120, R301.2.1.4)
 - TOPOGRAPHIC EFFECTS (AHJ): NO. (YES/NO)

- SEISMIC:
 - DESIGN CATEGORY (AHJ) (A - E, R301.2.2), (C FOR MOST OF SOUTH AND CENTRAL NH AND B FOR MA)
- DAMAGE:
 - WEATHERING: SEVERE (CONCRETE) (R301.2(3))
 - TERMITTE INFESTATION PROBABILITY: SLIGHT (NORTHERN NH), MODERATE (SOUTHERN NH), HEAVY (MA)
- DESIGN FROST DEPTH OF 4 FEET BELOW FINISHED GRADE (4" IS TYPICAL; VERIFY AS NEEDED WITH AHJ)
- WINTER DESIGN TEMP. NH: 0 DEG. F, MA 10 DEG. F, (PER 301.2(1))
- FLOOD HAZARD (AHJ): NO

GENERAL NOTES:

- THESE DRAWINGS REPRESENT AN OVERALL DESIGN CONCEPT. THEY ARE PREPARED WITH THE INTENT TO DEMONSTRATE THE OVERALL DESIGN ARRANGEMENT AND METHODS OF ASSEMBLY TO THE VARIOUS COMPONENTS. THE DRAWINGS DO NOT INDICATE EXTENSIVE DETAILS. THE CONTRACTOR SHALL HAVE REVIEWED THESE PLANS, SEEN THE SUBJECT PROPERTY, AND BE CAPABLE OF EXECUTING THE DETAIL WORK AS NECESSARY TO ACHIEVE THE INTENDED RESULT, IN A MANNER CONSISTENT WITH QUALITY WORKMANSHIP WITHIN THE REGION.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL STATE AND LOCAL CODES, REGULATIONS AND PHA/VIA MPS.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE BEFORE BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO ALTERNATIVE DESIGNS INC. FOR JUSTIFICATION AND OR CORRECTION BEFORE PROCEEDINGS WITH WORK.

- THE OWNER AND CONTRACTOR SHALL HOLD HARMLESS THE DESIGNER FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING LEGAL FEES) ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK BY THE CONTRACTOR.
- ALL DIMENSIONS SHOULD BE READ OR CALCULATED AND NEVER SCALED.
- ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER OR STRUCTURAL ENGINEER BEFORE PROCEEDINGS.
- IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE DESIGNER OR STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CONSULTATION. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN, THE DESIGNER OR STRUCTURAL ENGINEER SHALL BE NOTIFIED BEFORE ANY WORK IS PROCEEDED WITH.
- ALTERNATIVE DESIGN ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE DESIGNER OR ENGINEER ON RECORD.
- ALTERNATIVE DESIGN ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER ON RECORD.
- REPRODUCTION OF DESIGNER PLANS AND STRUCTURAL DRAWINGS FOR SHOP DRAWINGS IS NOT PERMITTED.
- SECTIONS, DETAILS, NOTES, METHODS, OR MATERIALS SHOWN AND/OR NOTED ON ANY PLAN, SECTION OR ELEVATION SHALL APPLY TO ALL OTHER SIMILAR LOCATIONS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED DURING CONSTRUCTION. TEMPORARY SUPPORTS REQUIRED FOR STABILITY DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE REMOVED AFTER CONSTRUCTION AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.

- ALL ROOF TRUSSES SHALL BE DESIGN FOR THE FOLLOWING UNIFORM LOADS WITH 5/2"OR 3/2"MAX BEARINGS. COORDINATE TRUSS BEARINGS WITH BEARING WALL FRAMING WIDTH.
 - SNOW LIVE LOAD: GROUND SNOW LOAD X 0.7= 200 PSF
 - BOTTOM CHORD LIVE LOAD (ATTIC): 20 PSF
 - TOP CHORD DEAD LOAD: 10 PSF
 - BOTTOM CHORD DEAD LOAD: 10 PSF
- TRUSS SHALL BE DESIGNED FOR AN UNBALANCED UNIFORM SNOW LOADING AS WELL AS ANY DRIFTED VALLEY SNOW LOADING CONDITIONS, AND WIND LOADING AS SPECIFIED IN THE PROJECT BUILDING CODE.

- PRE-ENGINEERED ROOF TRUSSES TO BE APPROVED BY THE STRUCTURAL ENGINEER. TRUSS SHOP DRAWINGS SHALL BE DESIGNED, STAMPED, AND SUBMITTED BY A LICENSED PROFESSIONAL ENGINEER QUALIFIED TO PERFORM THE WORK IN THE STATE WHERE THE PROJECT IS LOCATED. SUBMITTAL SHALL INCLUDE ALL LOADING COMBINATIONS, A FULL REPORT FOR EACH TRUSS, AND TEMPORARY AND PERMANENT LATERAL TRUSS RESTRAINT LAYOUT AND DETAILS.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL VENTS, STACKS, RISERS, DRAINS, ETC. BEFORE TRUSSES ARE FIXED IN PLACE.
- ALL TRUSSES SHALL HAVE HURRICANE CLIPS INSTALLED AT EACH END OF EACH TRUSS IN ORDER TO PREVENT LIFT.
- ALL TRUSS TO TRUSS CONNECTION DESIGNS ARE RESPONSIBILITY OF THE TRUSS MANUFACTURER.
- ALL TEMPORARY AND PERMANENT TRUSS BRACING (INDIVIDUAL AND OVERALL) IS THE RESPONSIBILITY OF THE TRUSS DESIGNER. BRACING AND LATERAL TRUSS RESTRAINT (INCLUDING DETAILS) SHALL BE SHOWN ON TRUSS DESIGN DRAWINGS AND TRUSS ERECTION DRAWINGS.

MASONRY:

- CONCRETE MASONRY UNITS (CMU) SHALL BE NOMINAL THICKNESS UNLESS NOTED OTHERWISE.
- MASONRY CONSTRUCTION SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5/TMS 402)
- SPECIFIED MASONRY COMPRESSIVE STRENGTH, FM = 1500PSI.
- HOLLOW LOAD BEARING CMU SHALL HAVE THE FOLLOWING PROPERTIES: ASTM C40, TYPE 1, GRADE N-1 (NORMAL HEIGHT) WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ACCORDING TO ASTM C40, OPEN DRY WEIGHT OVER 125PCF AND MAXIMUM MOISTURE ABSORPTION OF 13PCF.
- MORTAR SHALL BE ASTM C270, TYPE S WITH 28 DAY COMPRESSIVE STRENGTH OF 2000PSI. MIX MORTAR MATERIALS TO PRODUCE MORTAR CUBES HAVING A 2800PSI COMPRESSIVE STRENGTH WHEN TESTED IN ACCORDANCE WITH COMPRESSIVE STRENGTH TEST ASTM C780.
- GROUT SHALL BE ASTM C476, FINE GROUT WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000PSI.
- VERTICAL AND HORIZONTAL DEFORMED REINFORCEMENT SHALL BE ASTM A615 GR 60 AND HORIZONTAL JOINT REINFORCEMENT SHALL BE ASTM A82, GALVANIZED ACCORDING TO ASTM A641 CLASS 1 AS SPECIFIED.
- PRISM TESTS ACCORDING TO ASTM E446 ARE REQUIRED PRIOR TO WORK.
- GROUT CMU SOLID AT EXPANSION ANCHOR LOCATIONS.
- CORES AND BOND BEAMS WITH REINFORCING SHALL BE FILLED SOLIDLY WITH GROUT. FILLING SUCH CORES AND BOND BEAMS WITH MORTAR IS STRICTLY PROHIBITED. IN ADDITION, CARE SHALL BE EXERCISED IN KEEPING CORES FREE FROM MORTAR DROPPINGS.
- MINIMUM REINFORCING REQUIREMENTS FOR REINFORCED CMU WALLS SHALL CONFORM TO THE SCHEDULE SHOWN ON THE CONTRACT DRAWINGS AND THE APPLICABLE BUILDING CODE REQUIREMENTS.
- GROUT SHALL BE PLACED USING LOW OR HIGH LIFT GROUTING PROCEDURES CONFORMING TO ACI/ASCE. TERMINATE GROUT FOURS 1-1/2" BELOW TOP COURSE OF PLACEMENT. REINFORCING SHALL BE SPLICED A MINIMUM OF 40 BAR DIAMETERS.
- VERTICAL REINFORCING SHALL BE SECURELY HELD IN PROPER ALIGNMENT AND POSITION DURING GROUTING OPERATIONS BY USING "REBAR POSITIONERS," AS MANUFACTURED BY WIRE BOND OR APPROVED EQUIVALENT. THE PRODUCT, IN ADDITION, SHALL ALLOW FOR GUIDING THE SPLICED REINFORCING DROPPED FROM THE TOP OF THE LIFT.
- MASONRY SHALL BE BRACED DURING CONSTRUCTION. BRACE SPACING SHALL NOT EXCEED TEN TIMES THE WALL THICKNESS BUT NOT LESS THAN THE PROCEDURES LISTED UNDER NEMA-TEK T2
- PROVIDE FULL HEIGHT VERTICAL REINFORCEMENT AT EACH SIDE OF CONTROL JOINTS, WINDOWS, DOORS, AND WALL OPENINGS, AT ALL ENDS OF WALLS AND CORNERS. REINFORCING SHALL BE GROUTED SOLID AND MATCH THE DIAMETER OF THE TYPICAL WALL REINFORCING.

FIRE RESISTANT CONSTRUCTION

- FOLLOW SECTION 302. A FEW COMMON CRITICAL LOCATIONS FOLLOW:
 - GARAGE/RESIDENCE OR GARAGE/ATTIC SEPARATION: 5/8" TYPE X GYPSUM DRYWALL AT GARAGE SIDE WHEN ADJACENT TO LIVING SPACE. 5/8" TYPE X DRYWALL REQUIRED AT CEILING WHEN LIVING SPACE ABOVE. (TABLE R302.6)
 - ENCLOSED ACCESSIBLE SPACE UNDER STAIRS REQUIRES MIN. 1/2" GYPSUM (R302.7)
 - FIREBLOCKING IS REQUIRED TO ISOLATE EACH FLOOR LEVEL. 2X BLOCKING AND " GYPSUM AND FIBERGLASS/MINERAL WOOL IF SECURE ARE ALL ACCEPTABLE (R302.11.1)
- DUPLEX2 FAMILY STANDARD SEPARATION IS 5/8" TYPE X BOTH SIDES. (R302.3)

FOUNDATIONS:

- FOUNDATIONS CONSIST OF CONTINUOUS FOOTINGS ASSUMED TO BEAR ON COMPACTED STRUCTURAL FILL PLACED ON UNDISTURBED NATURAL SOIL HAVING AN ASSUMED ALLOWABLE BEARING PRESSURE OF 2500 PSF (TO BE VERIFIED BY BUILDER). IF THE SOIL AT BEARING DEPTH IS DISTURBED OR THE ACTUAL ALLOWABLE BEARING PRESSURE IS LESS THAN 2500 PSF, THEN A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE CONSULTED.
- UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED UNDER SUPPORTED MEMBERS.
- THE BOTTOM PERIMETER FOUNDATIONS SHALL BE DESIGN FROST DEPTH BELOW FINISHED GRADE.
- THE BOTTOM 3 INCHES OF FOOTING EXCAVATIONS SHALL BE FINISHED BY HAND SHOVEL.
- FINISH EXTERIOR GRADE SHALL BE AT LEAST 8" BELOW TOP OF FOUNDATION WALL.
- PLACE BACKFILL SIMULTANEOUSLY ON BOTH SIDES OF WALLS TO THE GRADES INDICATED.
- UNGRADED/UNBALANCED FOUNDATION WALLS: MAXIMUM UNBALANCED FILL: 24" WITHOUT DESIGN/ENGINEER INPUT/APPROVAL. (EXAMPLE: GARAGE SLAB ON GRADE WHERE BACKFILL WILL BE MORE THAN 24" BELOW TOP OF SLAB) (SEE R404.1.3) (ENGINEER DESIGN REQUIRED WHEN 48")
- WE RECOMMEND THAT WALKOUT AND KNEEWALL STYLE BASEMENTS BE REVIEWED. (IE, WHENEVER PERIMETER FOUNDATION WALLS ARE NOT FULL HEIGHT).
- PROVIDE FORMWORK FOR ALL FOOTINGS, WALLS, AND PIERS. EARTH FORMED FOUNDATIONS ARE NOT ALLOWED.
- SUB-SOIL SHALL HAVE 3/4" MAXIMUM AGGREGATE WITHIN 12" OF SLAB ON GRADE
- ANCHOR BOLTS: 1/2" X 4" (MIN. 1" EMBEDMENT) @ 4' OC AND BETWEEN 6'-12" OF EACH END. (R403.1.6)
- DAMP PROOFING ALWAYS REQUIRED BELOW GRADE WHEN INTERIOR SPACE IS CREATED (PER R406)
- WATERPROOFING REQUIRED WHEN INTERIOR SPACE CREATED AND HIGH WATER TABLE OR OTHER CONDITIONS. (PER R406)

CONCRETE

- CONCRETE SHALL BE A MIX DESIGNED FOR ULTIMATE STRENGTH IN ACCORDANCE WITH ACI 211J TO ACHIEVE THE DESIRED COMPRESSIVE STRENGTH. STANDARD MINIMUM 3000 PSI FOR FOOTINGS AND INTERIOR FLOOR, 3500 PSI FOR WALLS AND GARAGE SLAB. (R402.2)
- CONCRETE SHALL NOT BE CAST IN WATER OR ON FROZEN GROUND. CONCRETE SHALL NOT BE EXPOSED TO WATER (I.E. RAIN) DURING SETTING PERIOD.
- CONCRETE FLOORS SHALL BE PLACED OVER MIN. 4" THICK POROUS LAYER (SUCH AS CRUSHED STONE) WITH DRAINAGE AND APPROVED VAPOR BARRIER. (R405.2.2)
- TOP OF FOUNDATION WALLS AND SLABS SHALL BE SMOOTH AND LEVEL.
- NO PIPE GREATER THAN 4" DIAMETER WITH APPROPRIATE SLEEVE SHALL PASS THROUGH CONCRETE WITHOUT ENGINEER APPROVAL. PIPE SLEEVES SHALL BE PROVIDED AND SPACED A MINIMUM THREE DIAMETERS APART.
- KEYS SHALL BE 2"x4", WITH BEVELED SIDES, UNLESS OTHERWISE NOTED
- CONSTRUCTION JOINTS SHALL BE FORMED WITH A KEY, AND REINFORCING SHALL BE LAPPED TO DEVELOP THE FULL TENSION CAPACITY OF THE (SMALLER) BAR.
- EXPOSED CONCRETE SHALL BE RUBBED IMMEDIATELY AFTER REMOVAL OF FORMS AND SNAP TIES REMOVED TO FLUSH.
- OPENINGS IN CONCRETE WALLS SHALL BE LOCATED, SIZED, AND REINFORCED (WITH THE EXCEPTION OF SMALL OPENINGS AND/OR SLEEVES OF A SIZE THAT WILL NOT DISPLACE OR INTERRUPT THE CONTINUITY OF THE REINFORCING) AS SHOWN ON RESPECTIVE DETAILS. ANY ALTERATIONS REQUIRE APPROVAL OF THE STRUCTURAL ENGINEER.
- DO NOT BACKFILL FOUNDATION WALLS UNTIL THE CONCRETE HAS BEEN IN PLACE FOR SEVEN (7) DAYS AND ATTAINED 75% OF ITS DESIGN COMPRESSIVE STRENGTH, AND FLOOR DIAPHRAGMS ARE IN PLACE. (R404.1.7)

REINFORCING STEEL

- REINFORCING STEEL SHALL BE NEW STEEL BAR, FREE FROM LOOSE RUST AND SCALE, AND CONFORMING TO ASTM A615, GR 60.
- STANDARD MINIMUM FOUNDATION FOOTINGS: 16" WIDE X 8" HIGH WITH NO REINFORCING.
- STANDARD MINIMUM VERTICAL FOUNDATION WALL REINFORCING FOR COMMON CONDITIONS:

WALL HEIGHT	MAX. BACKFILL	WALL THICKNESS	HORIZONTAL REINFORCING (R404.1.2)	VERTICAL * REINFORCING
8'	7'	8"	1 #4 WITHIN 12" OF TOP AND 1 #4 AT MID-HEIGHT	#6 @ 36" OC *
4'	0'	10"	1 #4 WITHIN 12" OF TOP AND #4 BARS AT THIRD HEIGHTS	#6 @ 30" OC *
10'	9'	10"	1 #4 WITHIN 12" OF TOP AND #4 BARS AT THIRD HEIGHTS	#6 @ 30" OC **

TABLE ABOVE ASSUMES BEST SOIL, CLASS GM, GP, SN AND SP.

* AT 8' AND 9' WALLS, VERTICAL REINFORCING NOT REQUIRED IF 75% DESIGN COMPRESSIVE STRENGTH AND 7 DAYS BEFORE BACKFILL IS ATTAINED

** AT 10' WALLS, ADDITIONAL ENGINEERING REQUIRED IF BACKFILLED BEFORE 75% DESIGN COMPRESSIVE STRENGTH IS ATTAINED

- FLATWORK: WELDED WIRE FABRIC (WFF: 6"x6" X 10. 10) RECOMMENDED IN ALL FLATWORK. IT SHALL CONFORM TO ASTM A685. LAP TWO SQUARES AT JOINTS AND TIE AT 3'-0" O.C. FURNISH WFF IN FLAT SHEETS.
- PLAN CONTROL JOINTS AT 10'-12" OC BOTH DIRECTIONS. WFF MUST NOT CROSS CONTROL JOINTS.
- DECOUPLE FLATWORK FROM WALLS.
- WELDED WIRE FABRIC SHALL BE SUPPORTED ON CONCRETE BRICKS SP. AT 24" OC EACH DIRECTION ON GRADE. WELDED WIRE FABRIC SHALL BE SUPPORTED ON ELEVATED DECK WITH CONTINUOUS BOLSTERS LOCATED OVER JOISTS AND BEAMS.
- CLEAR CONCRETE COVER OVER BARS SHALL BE IN ACCORDANCE WITH ACI 318.
- ACCESSORIES SHALL HAVE UPTURNED LEGS AND BE PLASTIC DIPPED AFTER FABRICATION. ACCESSORIES FOR REINFORCING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ACI EDITION.
- LAP REINFORCING TO DEVELOP THE FULL TENSION CAPACITY OF THE (SMALLER) BAR.

WOOD:

- WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN WOOD COUNCIL, ANSI/APA, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION 2012 (NDS)" INCLUDING "DESIGN VALUES FOR WOOD CONSTRUCTION", NATIONAL FOREST PROTECTION ASSOCIATION.
- ALL LUMBER SHALL BE NEW AND STRAIGHT AS DESCRIBED IN "STANDARD GRADING RULES FOR NORTHEASTERN LUMBER" BY NORTHEASTERN LUMBER MANUFACTURERS ASSOCIATION.
- NEW WOOD FOR STRUCTURAL USE SHALL HAVE A MOISTURE CONTENT AS SPECIFIED IN THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION"
- FRAMING FOR WALLS AND JOISTS SHALL BE SPRUCE/PINE -FIR NO. 1 AND 2 OR BETTER, UNLESS NOTED OTHERWISE. DIMENSIONAL LUMBER REPRESENTS NOMINAL SIZES.
- SHEATHING PANELS SHALL BE MARKED WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) TRADEMARK AND SHALL MEET THE LATEST US PRODUCT STANDARD PS 1 OR APA PRP -108 PERFORMANCE STANDARDS.
- ALL WALL SHEATHING PANELS SHALL BE NOMINAL 1/2" THICK, APA RATED , UNLESS OTHERWISE NOTED, FASTEN WITH 80 COMMON NAIL SPACED AT 6" OC AT PANEL PERIMETER SUPPORTED EDGES AND 12" OC AT INTERIOR INTERMEDIATE SUPPORTS (FIELD). 1 -3/8" MIN. FASTENER PENETRATION, LAY WALL WITH REQUIREMENTS OF IRC 604.
- ALL ROOF SHEATHING PANELS SHALL BE 5/8" THICK UNLESS NOTED OTHERWISE, C-D EXTERIOR GRADE, APA RATED EXPOSURE 1 MEETING DOC PSI OR PS2. FASTEN WITH 80 COMMON NAILS SPACED AT 6" OC AT PANEL PERIMETER SUPPORTED EDGES AND 6" OC AT INTERIOR INTERMEDIATE SUPPORTS (FIELD). 1 -3/8" MIN. FASTENER PENETRATION, LAY ROOF SHEATHING WITH LONG DIMENSION PERPENDICULAR TO SUPPORT MEMBERS.
- WOOD TO STEEL AND WOOD TO WOOD BOLTED CONNECTORS SHALL BE MADE WITH ASTM A307 BOLTS WITH FLAT WASHERS. BOLT HOLES IN WOOD SHALL BE 1/32" LARGER THAN THE BOLT. WOOD NAILERS SHALL BE FASTENED WITH 3/8" DIA. BOLTS STAGGERED AT 20" OC UNLESS OTHERWISE NOTED.
- FASTENING SCHEDULE (SEE ALSO R602.3(1)).
 - PLATE TO STUD, DIRECT: 2 - 16D
 - STUD TO PLATE, TOENAIL: 4 - 8D
- WOOD IN CONTACT WITH SOIL, MOISTURE, WEATHER, CONCRETE, OR MASONRY SHALL BE PRESURE TREATED SOUTHERN PINE NO. 2, OR BETTER AND APPROVED FOR THE APPLICATION.
- BRACING: THE PERMANENT LATERAL BRACING SYSTEM INCLUDES PLYWOOD, WALL AND ROOF SHEATHING WITH FASTENING AND LAYOUT AS DEFINED BY: SECTION 602. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED TO LATERALLY SUPPORT THE STRUCTURE DURING CONSTRUCTION.
- ENGINEERED LUMBER (LVL, ETC.) SHALL MATCH MANUFACTURER AND SERIES LISTED OR APPROVED EQUIVALENT. PROVIDE LATERAL SUPPORT AT ALL BEARING POINTS AND ALONG COMPRESSION EDGES AT INTERVALS OF 24" OC, OR CLOSER.
- MINIMUM SECTION WIDTH = 1-3/4", 3-1/2", 3-1/4" AND 1" MEMBERS MAY BE COMBINATIONS OF 1-3/4" MEMBERS. FOLLOW MANUFACTURER'S GUIDELINES FOR MULTIPLE MEMBER CONNECTIONS AND FOR SIDE LOADED BEAMS.
- WOOD CONSTRUCTION CONNECTORS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE CO., INC., OR APPROVED EQUAL, AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INCLUDING FASTENERS.
- ALL FLUSH FRAMING TO HAVE APPROPRIATELY SIZED METAL JOIST HANGERS.
- LATERAL RESTRAINT REQUIRED AT ENDS OF FLOOR FRAMING JOIST BLOCK OF SAME MATERIAL (R502.7)
- BRIDGING OR CONT. W3 BRACE NAILED TO UNDERSIDE OF FLOOR FRAMING REQUIRED AT 8' INTERVALS (R502.7.1)
 - INTERIOR: (2) 2X8
 - EXTERIOR: (2) 2X10 WITH 2-4"X 1" RIGID FOAM INSULATION.
- HEADERS: DEFAULT (MAX. 12" SPAN) 3-2X12 FOR 2 FLOORS CEILING AND ROOF
- WIND BRACING: PROVIDE DIAGONAL WIND BRACING AT ALL OUTSIDE CORNERS. AT CORNERS WITH LESS THAN 48" OF PANEL WALL, USE ALTERNATE BRACING PANELS IN ACCORDANCE WITH R602.10.6.2. (GENERAL REFERENCE: R602)
- RAFTER/CEILING JOIST HEEL CONNECTIONS (VAULTED CEILS @ 1/3) TABLE R602.5.1(4)

PRE-ENGINEERED WOOD TRUSSES:

- ALL PRE-ENGINEERED WOOD TRUSSES SHALL CONFORM TO ANSI/TPI -2002 "NATIONAL DESIGN STANDARDS FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION."
- THE MANUFACTURER OF THE PRE-ENGINEERED TRUSSES SHALL BE A TRUSS PLATE INSTITUTE (TPI) CERTIFIED PLANT. PROOF OF CERTIFICATION SHALL BE SUBMITTED TO THE DESIGNER/ENGINEER PRIOR TO FABRICATION OF THE WOOD TRUSSES.
- THE CONTRACTOR SHALL ENSURE PROPER HANDLING, BRACING, AND LATERAL RESTRAINT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL TEMPORARY AND PERMANENT TRUSS BRACING (INDIVIDUAL AND OVERALL) SHALL BE DESIGNED BY THE TRUSS MANUFACTURER AND INSTALLED BY THE CONTRACTOR. ALL PERMANENT TRUSS BRACING/LATERAL RESTRAINT REQUIREMENTS AND LOCATIONS SHALL BE DETAILED AND SUBMITTED PRIOR TO CONSTRUCTION TO THE ENGINEER OF RECORD BY THE TRUSS MANUFACTURER. ALTERNATIVELY, THE TRUSS DESIGNER MAY DESIGN ALL TRUSSES SUCH THAT NO PERMANENT LATERAL RESTRAINT IS REQUIRED.

WINDOW SCHEDULE

MARK	QTY	MODEL NUMBER	RSO	NOTES
A		(2)-244DH3049		MULLION
B		244DH3049		DBL HUNG
C				
D		244DH2836		DBL HUNG
E		(3)-3020		MULLED AWNING
F		244DH3040		DBL HUNG
G				
H				
J				
K				

NOTES:

- RSO TO BE DETERMINED BY WINDOW MANUFACTURER.
- BEDROOM WINDOWS TO MEET EGRESS
- IN ACCORDANCE WITH IRC (2015)-R312.2, WHERE THE OPENING OF AN OPERABLE WINDOW IS MORE THAN 12" ABOVE THE EXT. FINISHED GRADE OR EXT. DECK BELOW, THE LOWEST PART OF THE CLEAR OPENING IS TO BE A MIN. OF 24" ABV. THE FIN. FLR.
- WINDOWS ARE BASED ON ANDERSEN 200 SERIES TILT-WASH MODEL NUMBERS

DOOR SCHEDULE

MARK	QTY	SIZE	RSO	NOTES
1		3'0" X 6'8"		EXT. DOOR
2		2'8" X 6'8"		FIRERATED DOOR
3		2'8" X 6'8"		INTERIOR
4		2'4" X 6'8"		INTERIOR
5		6'0" X 6'8"		EXT FRENCH DOOR
6		(2) 2'4" X 6'8"		DBL INTERIOR
7		2'4" X 6'8"		POCKET DOOR
8		2'8" X 6'8"		INTERIOR
9				
10				
11				

RSO TO BE DETERMINED BY DOOR MANUFACTURER.

EGRESS WINDOWS

SECTIONS 1030 & 1015.8 EMERGENCY ESCAPE AND RESCUE REQUIRED

BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, EMERGENCY EGRESS AND RESCUE OPENINGS SHALL BE REQUIRED IN EACH SLEEPING ROOM. WHERE EMERGENCY AND RESCUE OPENINGS ARE PROVIDED, THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR.

MINIMUM OPENING AREA.

ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (0.530 M2). EXCEPTION: GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (0.465 M2).

MINIMUM OPENING HEIGHT: THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES (610 MM).

MINIMUM OPENING WIDTH: THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES (508 MM).

OPERATIONAL CONSTRAINTS, EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS OR TOOLS.

Contractor to check & verify all dimensions & structural members before construction.
All construction shall be in strict compliance with the State of New Hampshire Building Codes, whenever applicable.

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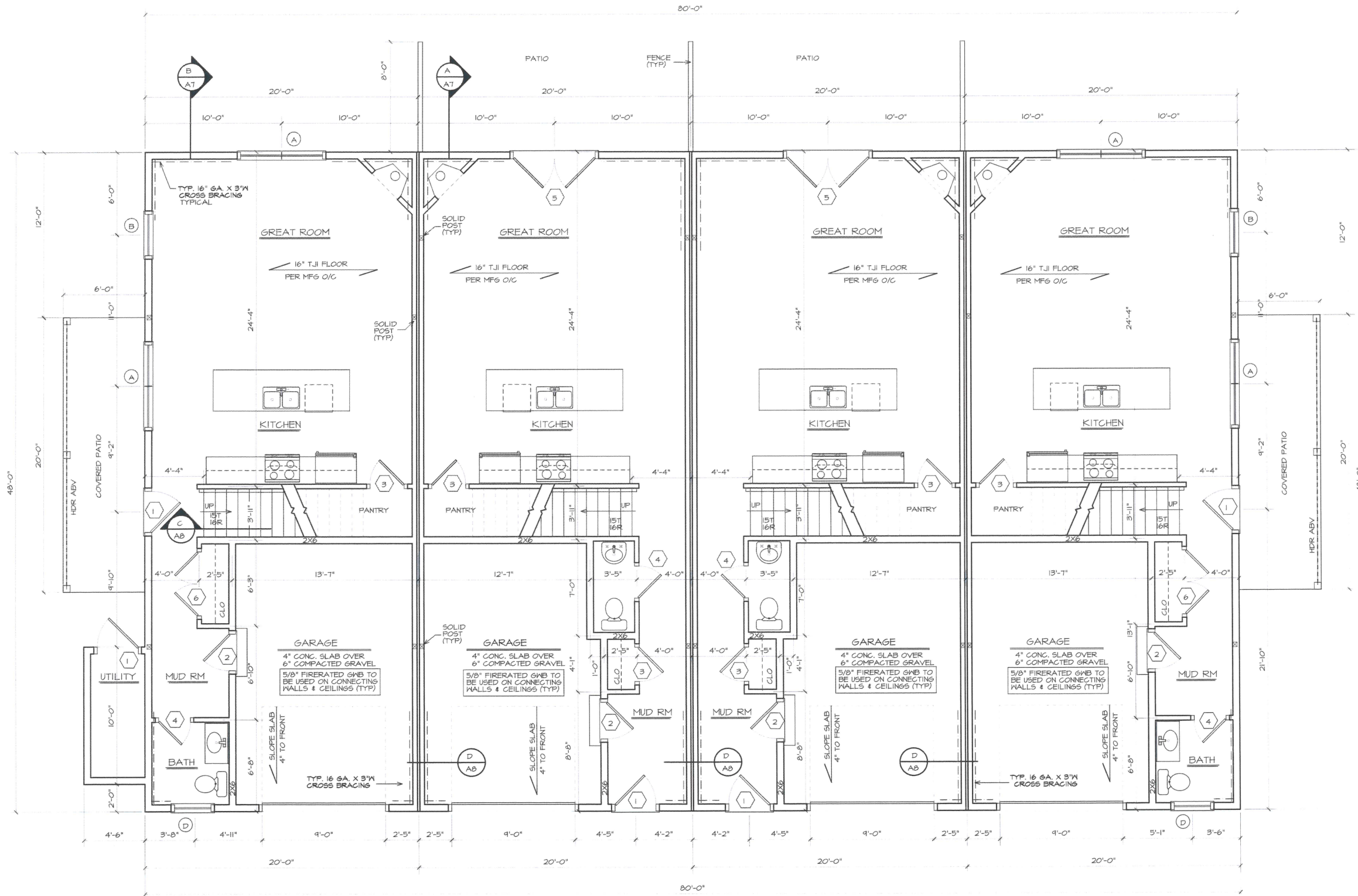
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A3



1 FIRST FLOOR PLAN
A3 SCALE: 1/4" = 1'-0"

NOTE:
1. PROVIDE HANDRAIL AT EACH STAIRWAY WITH
4 OR MORE RISERS

WIND BRACING NOTE: PROVIDE DIAGONAL WIND BRACING AT ALL
OUTSIDE CORNERS. AT CORNERS WITH LESS THAN 48" OF PANEL
WALL, USE ALTERNATE BRACING PANELS IN ACCORDANCE WITH
INTERNATIONAL BUILDING CODE FIGURE R602.10.6.2



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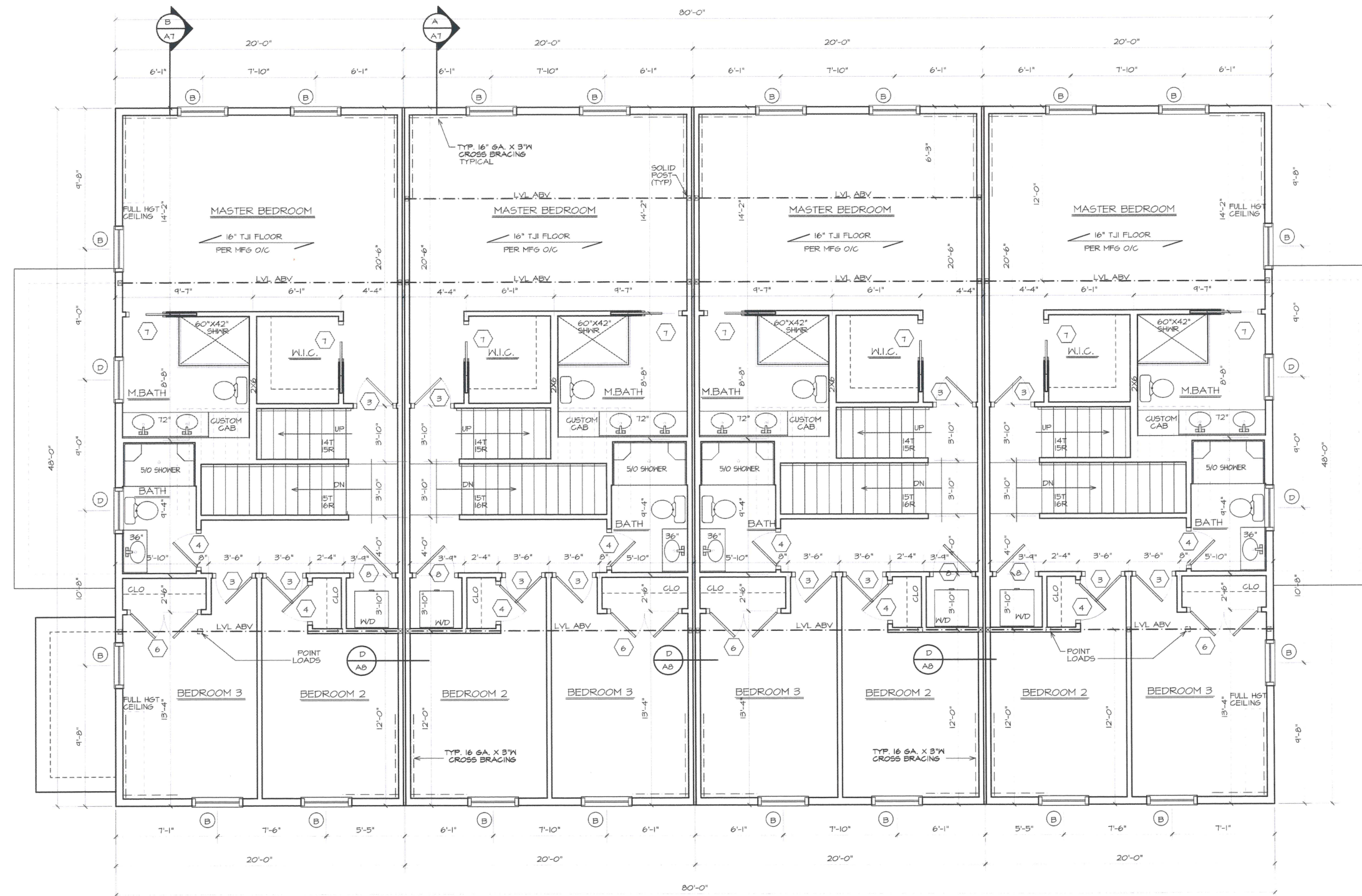
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1 SECOND FLOOR PLAN
A4 SCALE: 1/4" = 1'-0"

NOTE:
1. PROVIDE HANDRAIL AT EACH STAIRWAY WITH
4 OR MORE RISERS

WIND BRACING NOTE: PROVIDE DIAGONAL WIND BRACING AT ALL
OUTSIDE CORNERS, AT CORNERS WITH LESS THAN 48" OF PANEL
WALL, USE ALTERNATE BRACING PANELS IN ACCORDANCE WITH
INTERNATIONAL BUILDING CODE FIGURE R602.10.6.2



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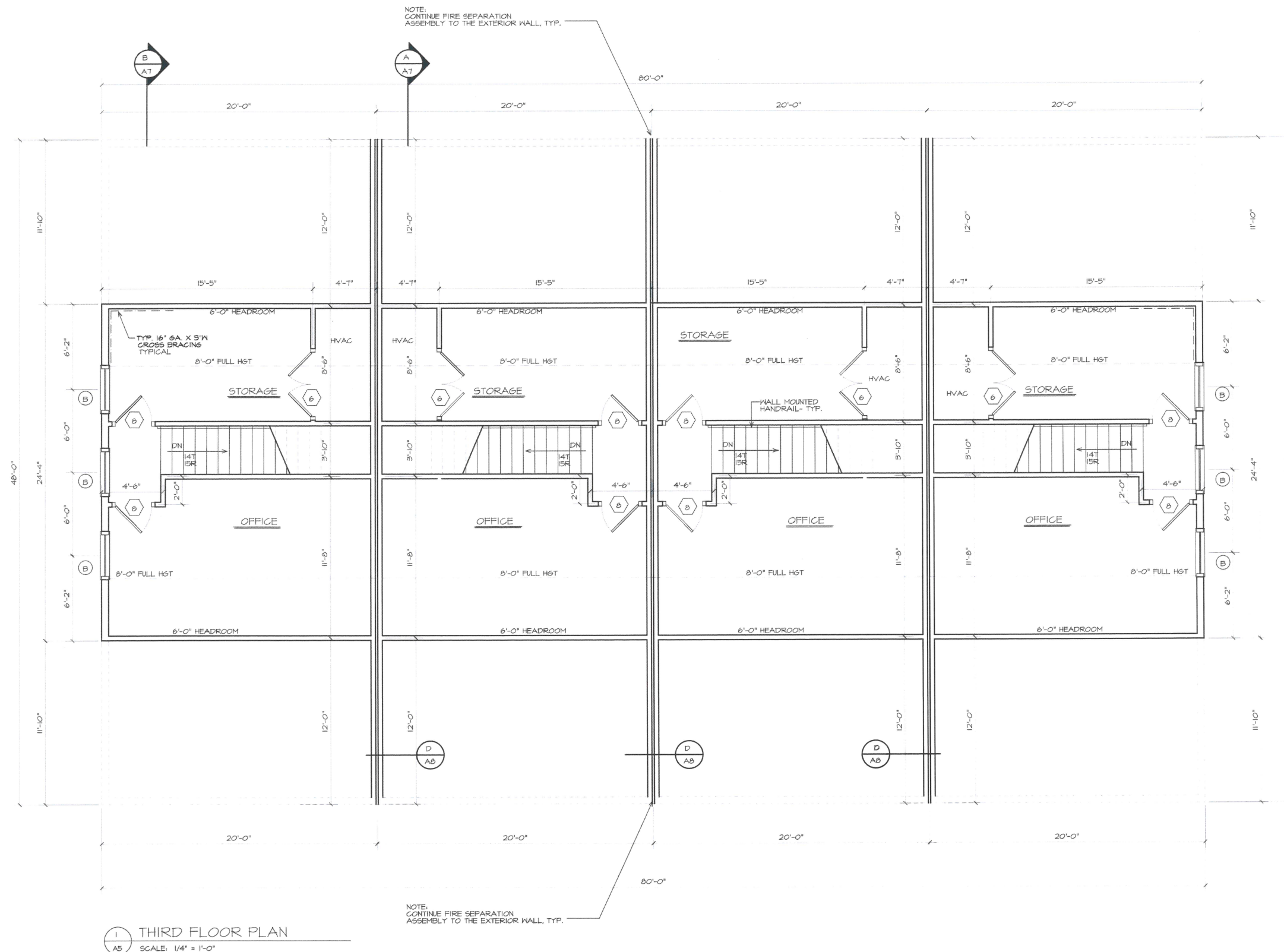
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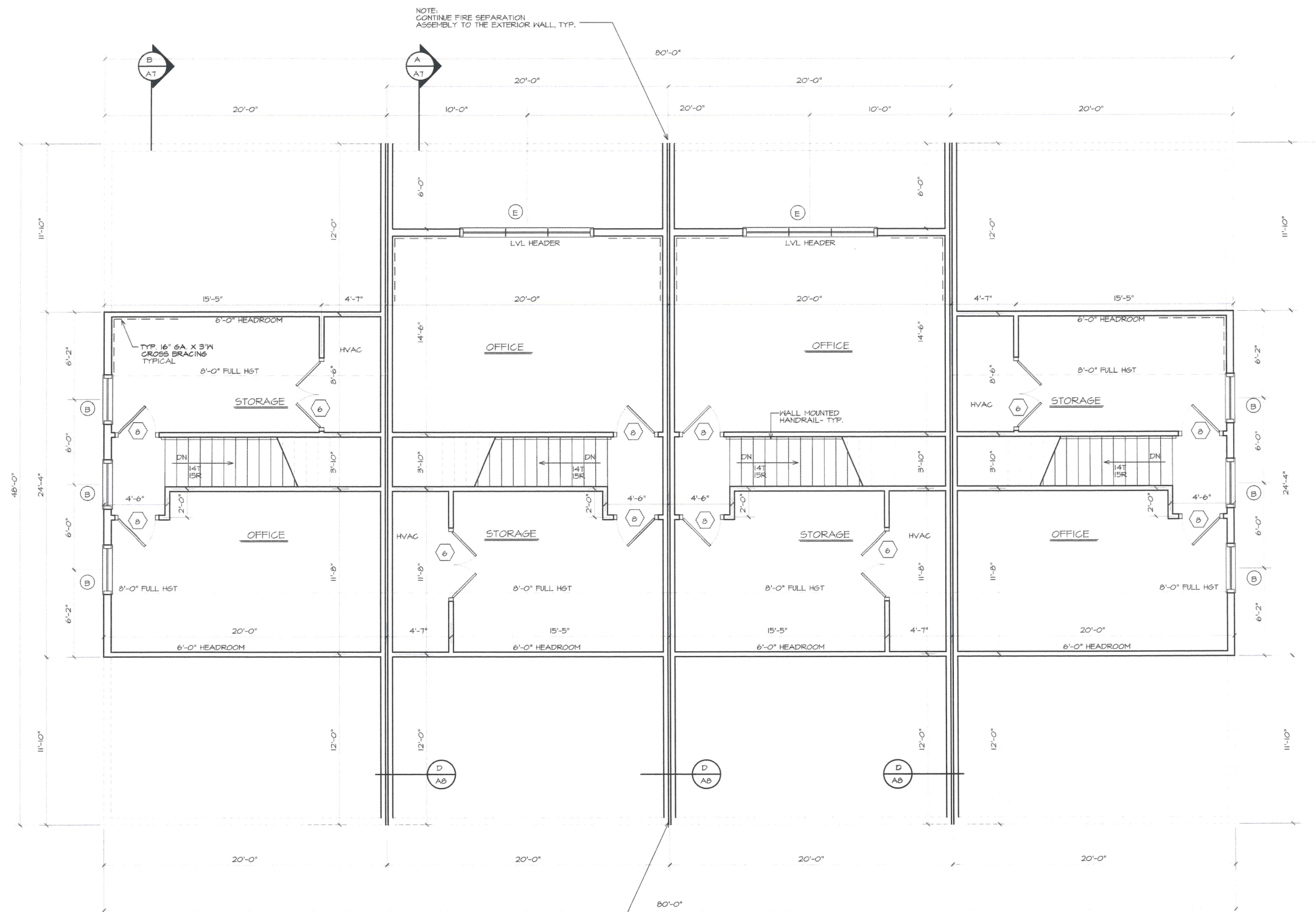
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A5



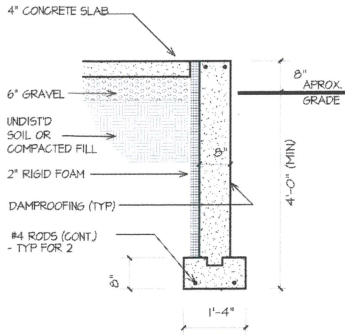
1 THIRD FLOOR PLAN
A5 SCALE: 1/4" = 1'-0"

NOTE:
CONTINUE FIRE SEPARATION
ASSEMBLY TO THE EXTERIOR WALL, TYP.

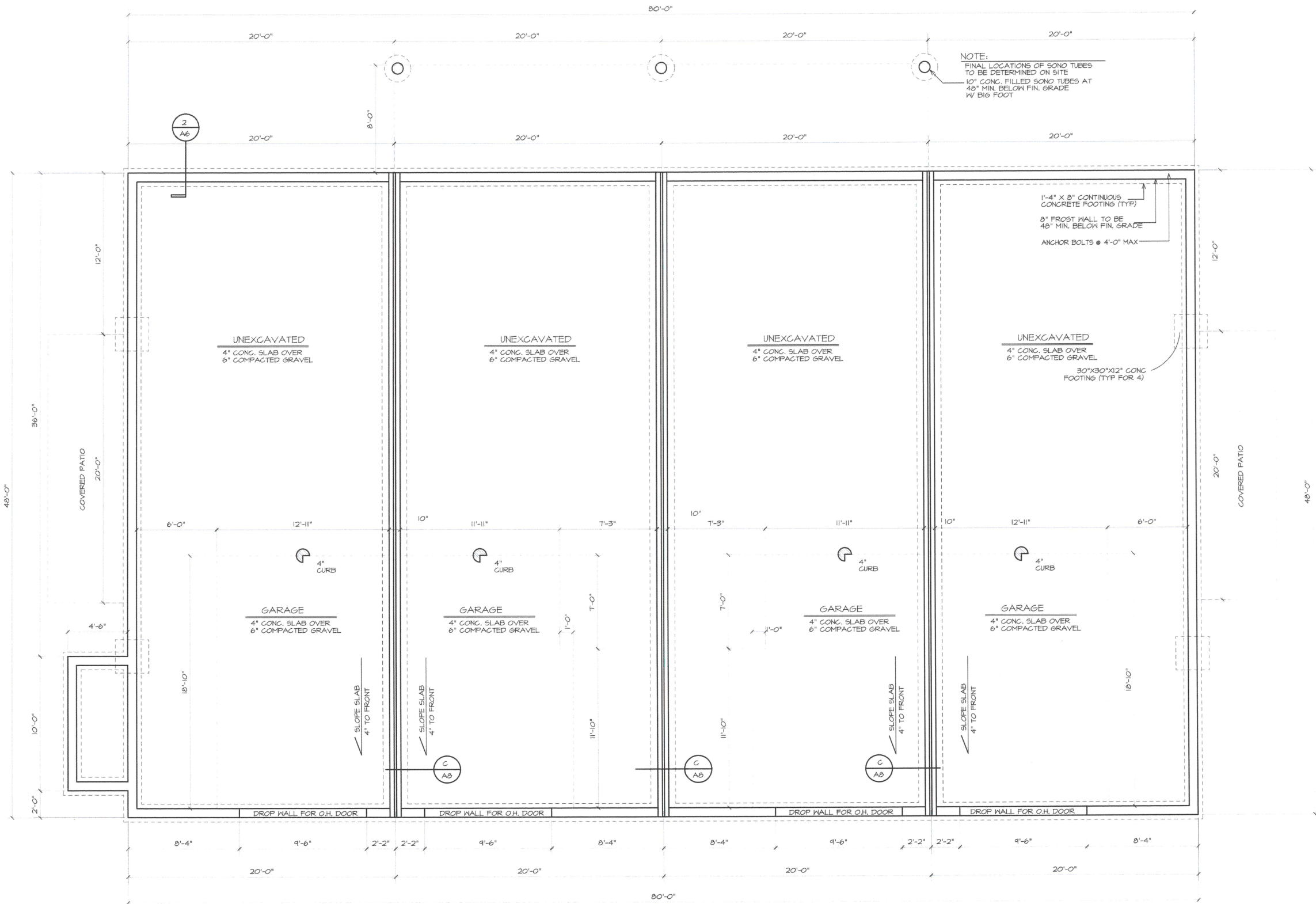
NOTE:
CONTINUE FIRE SEPARATION
ASSEMBLY TO THE EXTERIOR WALL, TYP.

NOTE:
1. PROVIDE HANDRAIL AT EACH STAIRWAY WITH
4 OR MORE RISERS

WIND BRACING NOTE: PROVIDE DIAGONAL WIND BRACING AT ALL
OUTSIDE CORNERS. AT CORNERS WITH LESS THAN 48" OF PANEL
WALL, USE ALTERNATE BRACING PANELS IN ACCORDANCE WITH
INTERNATIONAL BUILDING CODE FIGURE R602.10.6.2



2 TYP. FOUNDATION DETAIL
SCALE: 1/2" = 1'-0"



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

NOTE: SEE DRAWING A2 FOR CONCRETE NOTES AND ADDITIONAL INFORMATION

GENERAL NOTES

- CONC BULKHEAD SIZE AND LOCATION TO BE DETERMINED BY SITE CONDITIONS AND/OR CONTRACTOR
- WALKOUTS AS PER SITE CONDITIONS AND CONTRACTOR
- STEEL SASH WINDOW SIZES AND LOCATIONS TO BE DETERMINED BY CONTRACTOR



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GENERAL NOTES

- A. 2X12/LVL RIDGE BOARD

B. 2X10/12 RAFTERS 12/16 " O/C (UNLESS OTHERWISE NOTED) PLYWOOD SHEATHING, 15# BUILDING PAPER, & 235# ASPHALT SHINGLES W/ ICE SHIELD AT RAFTER TAILS AND VALLEYS.

C. 2X6 COLLAR TIES AT 32" O/C (TYPICAL)

D. 2X8 CEILING JOISTS AT 16" O/C WITH R49 FIBERGLASS BATT INSULATION (TYPICAL)

E. METAL DRIP EDGE, 1X4 PINE BLOCKING (SUB-FASCIA) 1X8 PINE BOARD FASCIA, & 3/8" EXTERIOR AC PLYWOOD SOFFIT WITH 2" CONTINUOUS LOUVERED VENTS (TYPICAL)

F. 2X6 STUDS 16" O/C, R-21 FIBERGLASS BATT INSULATION IN BETWEEN, 1/2" PLYWOOD SHEATHING & EXTERIOR SIDING W/ "TYVEK" OR EQUAL (OPTIONAL) AND 1/2" GYP. BD. ON THE INTERIOR.

G. 2-2X6 TOP PLATES AND 1-2X6 SHOE (BOTTOM PLATE)

H. 16" TJI FLOOR JOISTS PER MFG O/C (UNLESS OTHERWISE NOTED) WITH 3/4" T&G SUBFLOOR (GLUED & NAILED) R-30 FIBERGLASS BATT INSULATION AT FIRST FLOOR ONLY.
- J. 8" CONCRETE FOUNDATION WALL WITH 1-2X6 PRESSURE TREATED SILL PLATE W/ SILL SEALER, ANCHOR BOLTS @ 4'-0" O.C. (TYPICAL)

K. 4" CONCRETE SLAB FLOOR OVER (MIN. 6") COMPACTED GRAVEL

L. 8" CONCRETE FROST WALL TO BE 48" MIN. BELOW FINISHED GRADE

M. 1'4" X 8" CONTINUOUS CONCRETE FOOTING (TYPICAL)

N. 3-2X12 BUILT-UP BEAM OVER 3 1/2" DIAM. STEEL LALLY COLUMN WITH TOP AND BOTTOM END PLATES, OVER 24"X24"X12" CONCRETE FOOTINGS.

O. 1X3 STRAPPING AT 16" O/C & 1/2" GYP. BD. (TYPICAL)

P. 3-2X12 STAIR STRINGERS

Q. CONTINUOUS RIDGE VENT

R. 2X6 STUD WALL @ 16" O.C.

S. HURRICANE CLIPS AND FRAMING ANCHORS AS REQ'D.

T. 2" RIGID INSULATION INSIDE FACE OF CONCRETE WALL TO TOP OF SLAB

DESIGN LOADS

LIVE LOAD AT LIVING SPACES: 40 PSF
LIVE LOAD AT SLEEPING SPACES: 30 PSF
GROUND SNOW LOAD: 50 PSF

FRAMER TO INSTALL DOUBLE FLOOR JOISTS UNDER ALL PARALLEL BEARING WALLS

PROVIDE 1X4 CROSS BRIDGING AT MID POINT OF SPAN OR 8'-0" O.C. MAXIMUM IN ALL FLOORS.

WHERE PREENGINEERED FLOOR OR ROOF TRUSSES ARE USED, TRUSS MANUFACTURER MUST PROVIDE SHOP DRAWINGS WHICH BEAR SEAL OF REGISTERED ENGINEER IN STATE IN WHICH WORK IS TO BE PERFORMED.

ALL LUMBER MUST BE NO. 2 OR BETTER, SPRUCE - PINE - FIR.

PROVIDE MOISTURE VAPOR RETARDERS IN ALL FRAMED WALLS, FLOORS AND ROOF/CEILING IN ACCORDANCE WITH I.R.G. SECTIONS R102.7

PROVIDE MOISTURE VAPOR RETARDERS UNDER CONC. SLABS AS PER R-506.2.3
ATTIC ACCESS (MIN 22" X 30") LOCATION TO BE DETERMINED BY CONTRACTOR



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Residential/Commercial

Design

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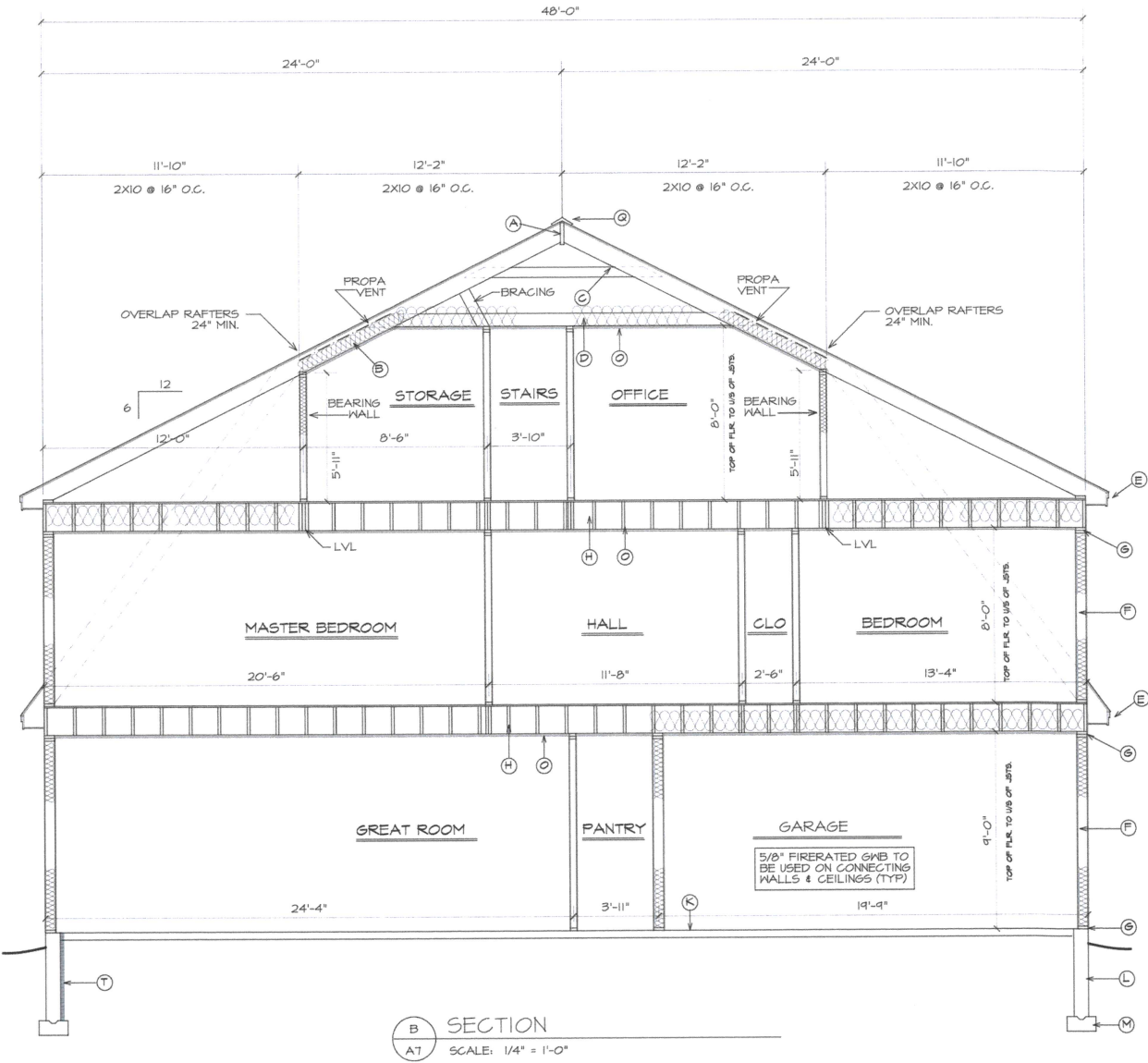
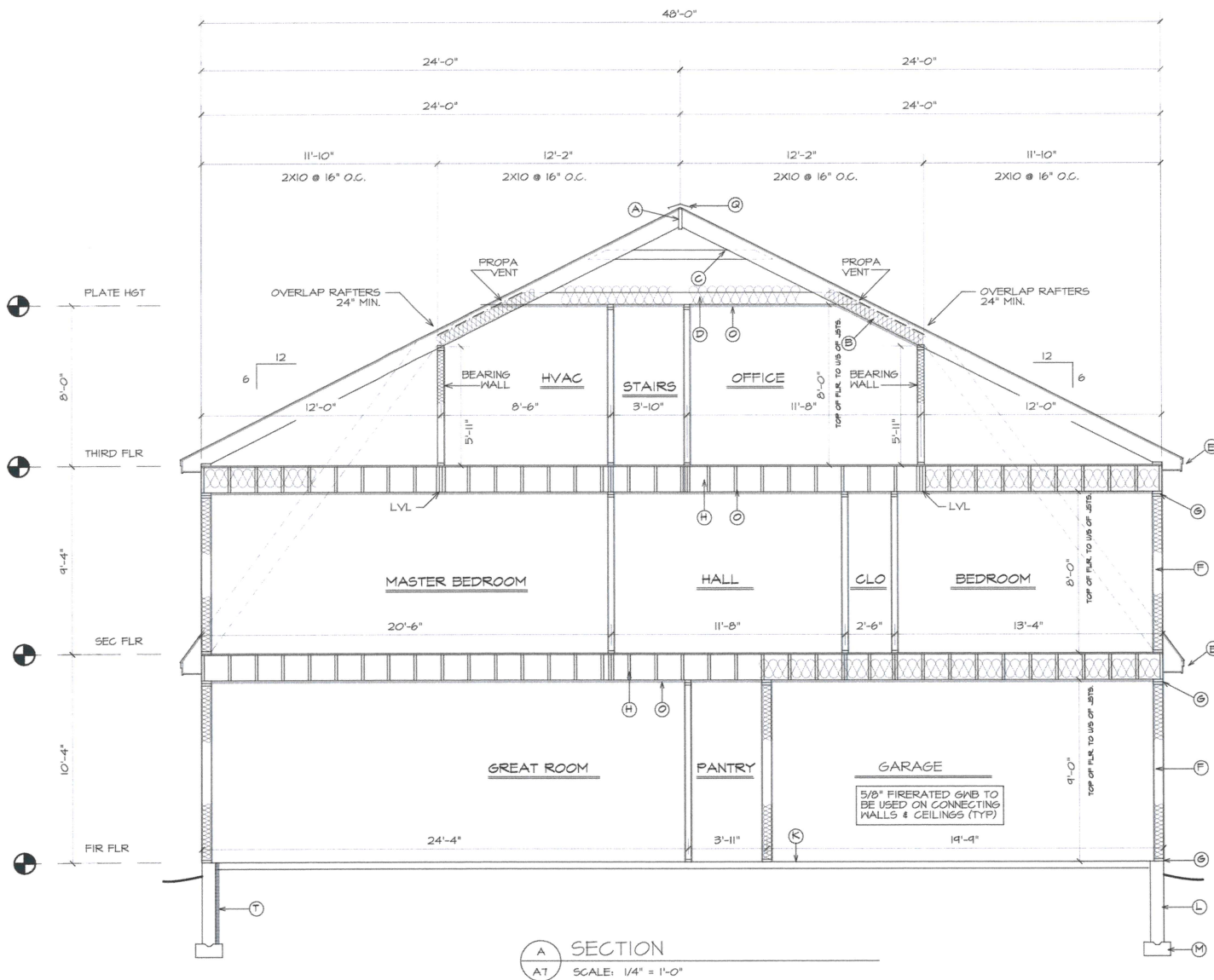
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GENERAL NOTES

- A. 2X12/LVL RIDGE BOARD

B. 2X10/12 RAFTERS 12/16" O/C (UNLESS OTHERWISE NOTED) PLYWOOD SHEATHING, 15# BUILDING PAPER, & 235# ASPHALT SHINGLES W/ ICE SHIELD AT RAFTER TAILS AND VALLEYS.

C. 2X6 COLLAR TIES AT 32" O/C (TYPICAL)

D. 2X8 CEILING JOISTS AT 16" O/C WITH R49 FIBERGLASS BATT INSULATION (TYPICAL)

E. METAL DRIP EDGE, 1X4 PINE BLOCKING (SUB-FASCIA) 1X8 PINE BOARD FASCIA, & 3/8" EXTERIOR, AC PLYWOOD SOFFIT WITH 2" CONTINUOUS LOUVERED VENTS (TYPICAL)

F. 2X6 STUDS 16" O/C, R-21 FIBERGLASS BATT INSULATION IN BETWEEN, 1/2" PLYWOOD SHEATHING & EXTERIOR SIDING W/ "TYVEK" OR EQUAL (OPTIONAL) AND 1/2" GYP. BD. ON THE INTERIOR.

G. 2-2X6 TOP PLATES AND 1-2X6 SHOE (BOTTOM PLATE)

H. 16" TJI FLOOR JOISTS PER MFG O/C (UNLESS OTHERWISE NOTED) WITH 3/4" T&G SUBFLOOR (GLUED & NAILED) R-30 FIBERGLASS BATT INSULATION AT FIRST FLOOR ONLY.
- J. 8" CONCRETE FOUNDATION WALL WITH 1-2X6 PRESSURE TREATED SILL PLATE W/ SILL SEALER; ANCHOR BOLTS @ 4'-0" O.C. (TYPICAL)

K. 4" CONCRETE SLAB FLOOR OVER (MIN. 6") COMPACTED GRAVEL

L. 8" CONCRETE FROST WALL TO BE 48" MIN. BELOW FINISHED GRADE

M. 1'4" X 8" CONTINUOUS CONCRETE FOOTING (TYPICAL)

N. 3-2X12 BUILT-UP BEAM OVER 3 1/2" DIAM. STEEL LALLY COLUMN WITH TOP AND BOTTOM END PLATES, OVER 24"X24"X12" CONCRETE FOOTINGS.

O. 1X3 STRAPPING AT 16" O/C & 1/2" GYP. BD. (TYPICAL)

P. 3-2X12 STAIR STRINGERS

Q. CONTINUOUS RIDGE VENT

R. 2X6 STUD WALL @ 16" O.C.

S. HURRICANE CLIPS AND FRAMING ANCHORS AS REQ'D.

T. 2" RIGID INSULATION INSIDE FACE OF CONCRETE WALL TO TOP OF SLAB

DESIGN LOADS

LIVE LOAD AT LIVING SPACES: 40 PSF
LIVE LOAD AT SLEEPING SPACES: 30 PSF
GROUND SNOW LOAD: 50 PSF

FRAMER TO INSTALL DOUBLE FLOOR JOISTS UNDER ALL PARALLEL BEARING WALLS

PROVIDE 1X4 CROSS BRIDGINGS AT MID POINT OF SPAN OR 8'-0" O.C. MAXIMUM IN ALL FLOORS.

WHERE PREENGINEERED FLOOR OR ROOF TRUSSES ARE USED, TRUSS MANUFACTURER MUST PROVIDE SHOP DRAWINGS WHICH BEAR SEAL OF REGISTERED ENGINEER IN STATE IN WHICH WORK IS TO BE PERFORMED.

ALL LUMBER MUST BE NO. 2 OR BETTER, SPRUCE - PINE - FIR.

PROVIDE MOISTURE VAPOR RETARDERS IN ALL FRAMED WALLS, FLOORS AND ROOF/CEILINGS IN ACCORDANCE WITH I.R.G. SECTIONS R102.1

PROVIDE MOISTURE VAPOR RETARDERS UNDER CONC. SLABS AS PER R-506.2.3

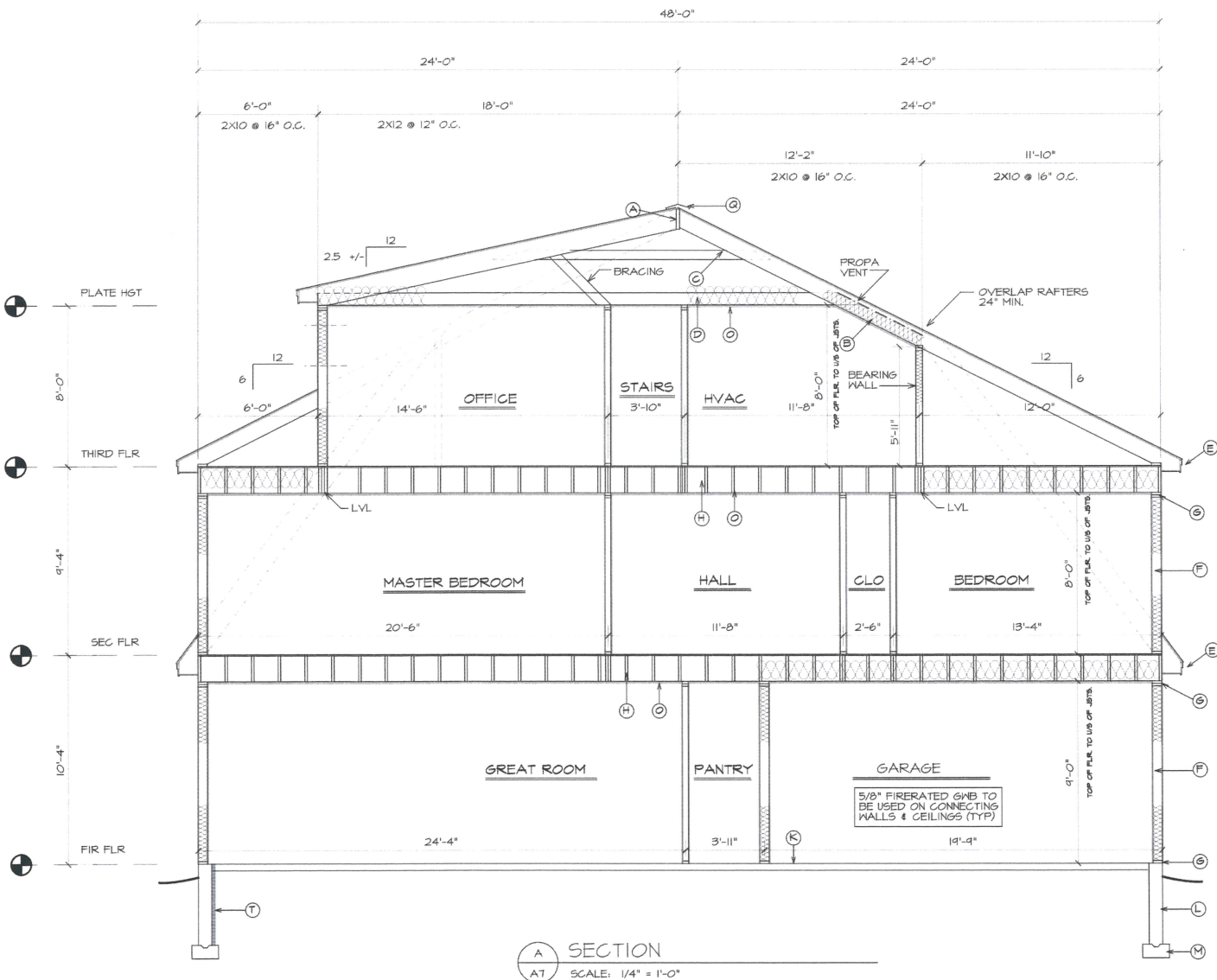
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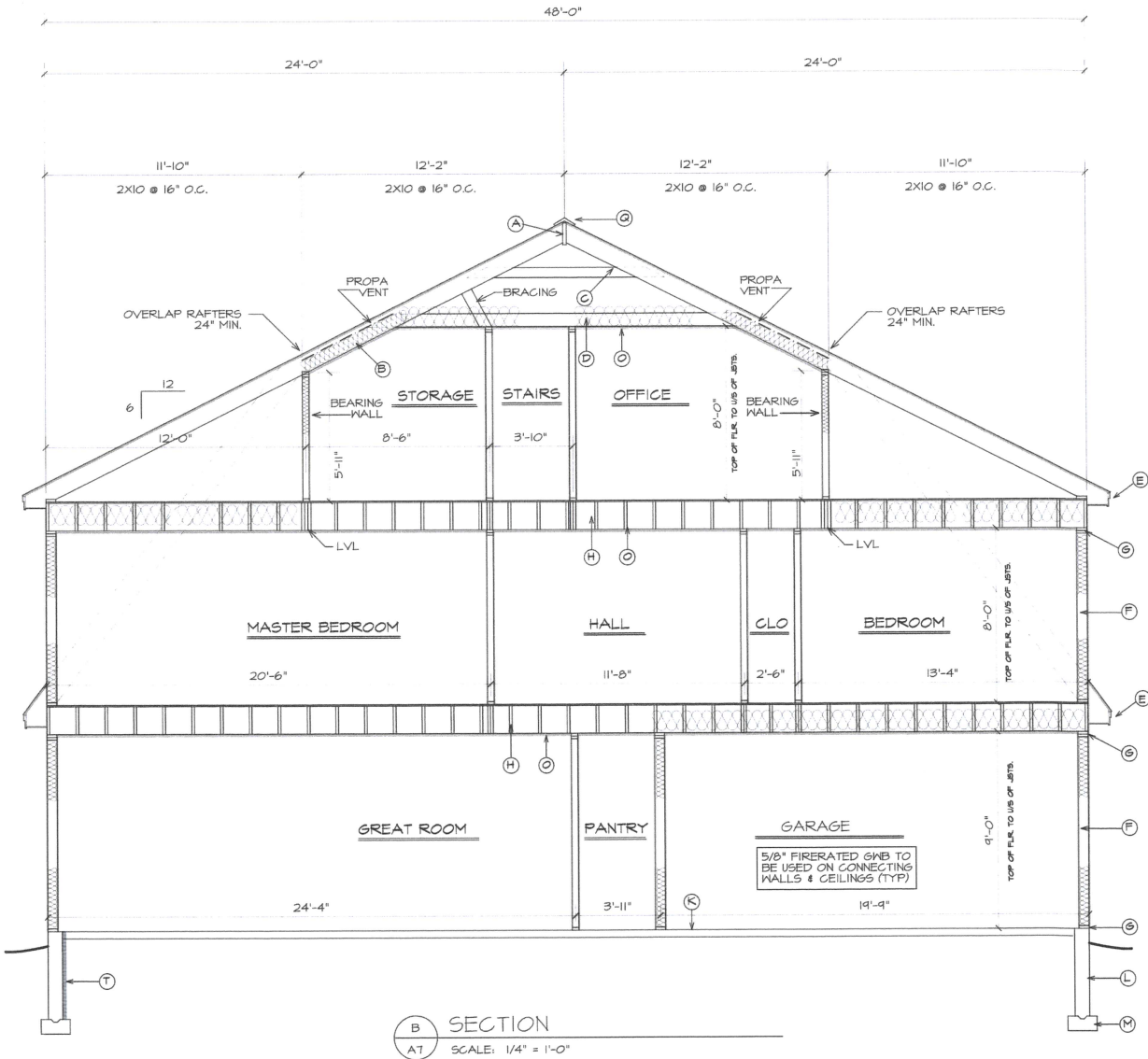
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A SECTION
AT SCALE: 1/4" = 1'-0"



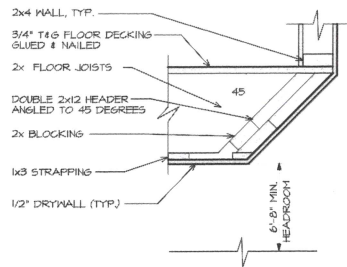
B SECTION
AT SCALE: 1/4" = 1'-0"

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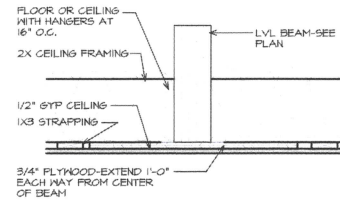
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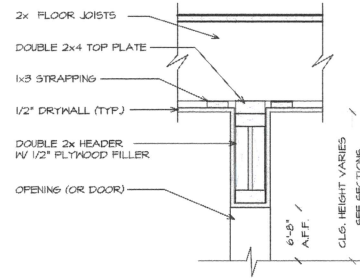
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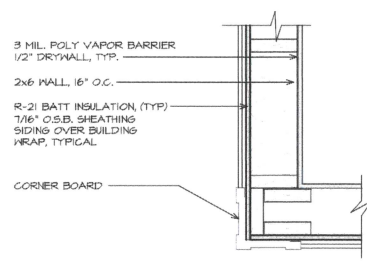
1 STAIRWELL HEADER
SCALE: 1" = 1'-0"



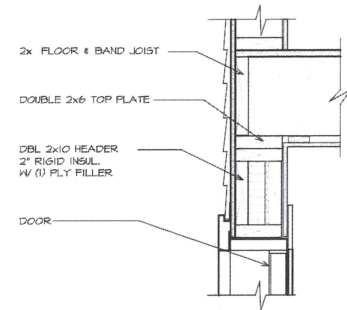
2 LVL FLUSH BEAM
SCALE: 1" = 1'-0"



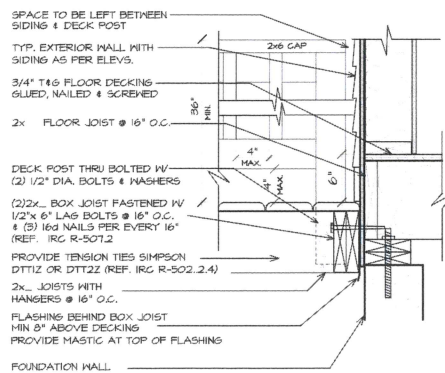
3 INTERIOR HEADER DTL.
SCALE: 1" = 1'-0"



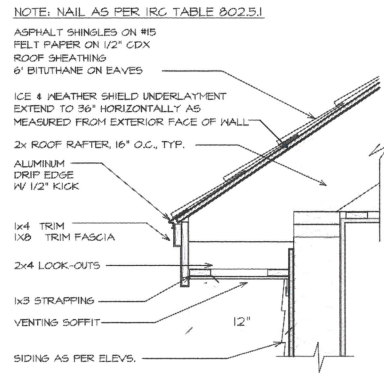
4 CORNER DETAIL
SCALE: 1" = 1'-0"



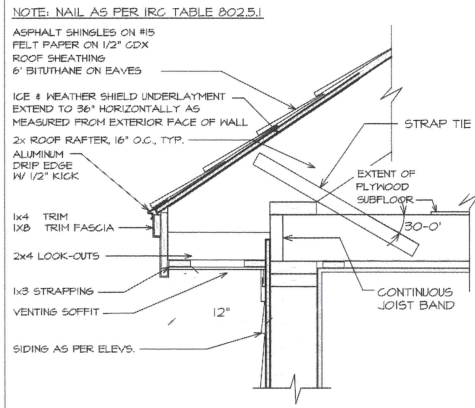
5 EXT. DOOR HEADER DTL.
SCALE: 1" = 1'-0"



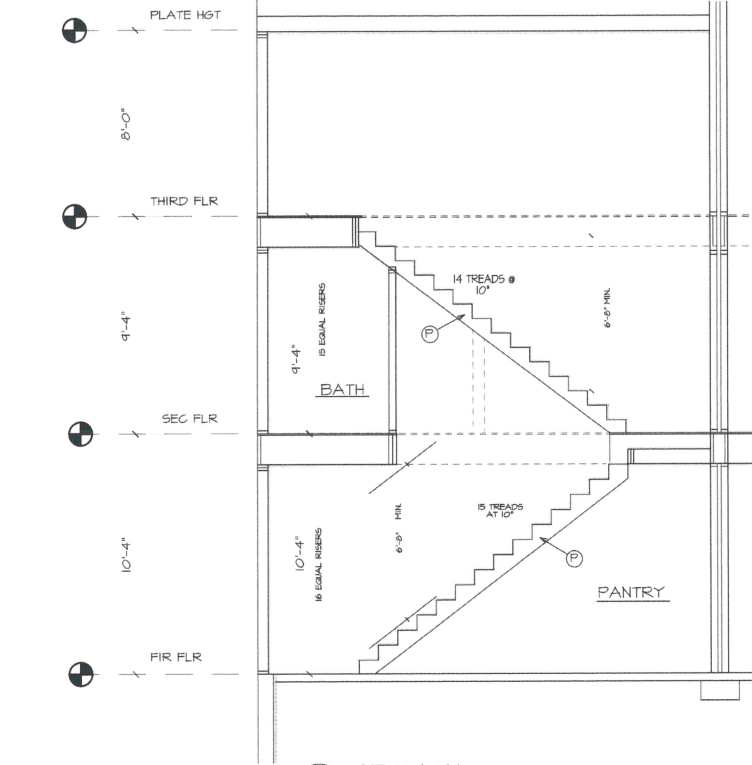
6 DECK TO HOUSE DETAIL
SCALE: 1" = 1'-0"



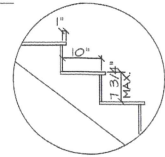
7 SOFFIT DETAIL (LOW EAVE)
SCALE: 1" = 1'-0"



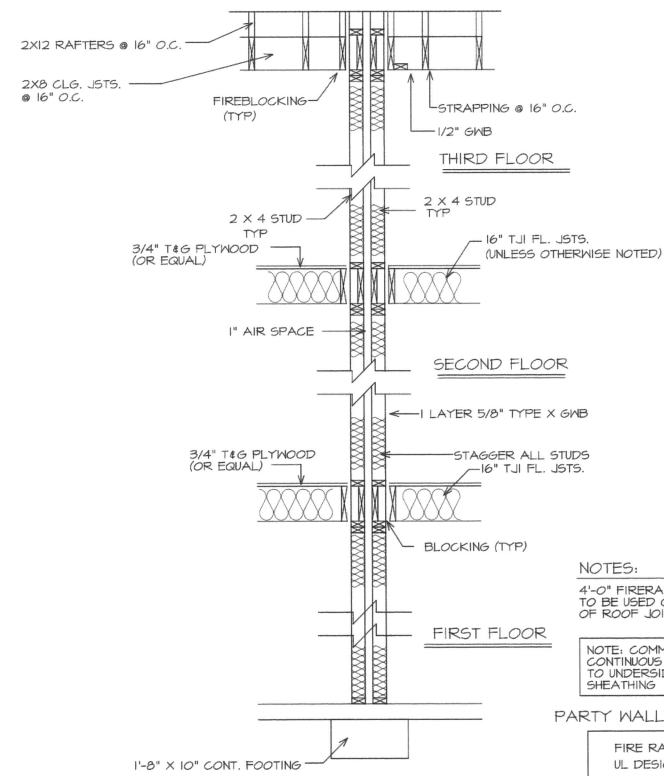
8 SOFFIT DETAIL (HIGH EAVE)
SCALE: 1" = 1'-0"



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



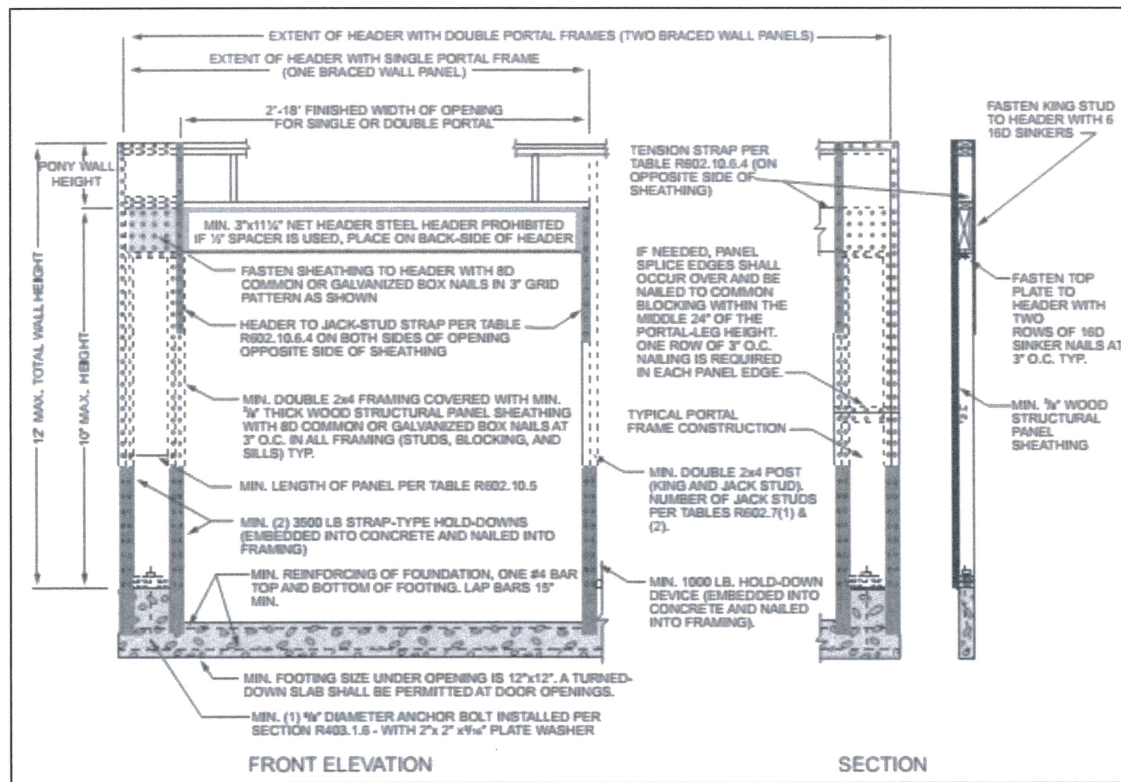
STAIR CODE
NOT TO SCALE



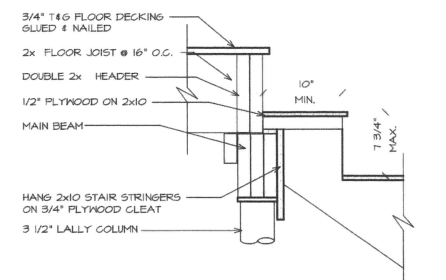
D PARTY WALL DET.
SCALE: 1/4" = 1'-0"

NOTES:
4'-0" FIRERATED SHEATHING TO BE USED ON BOTH SIDES OF ROOF JOINTS
NOTE: COMMON WALL TO BE CONTINUOUS FROM FOUNDATION TO UNDERSIDE OF ROOF SHEATHING

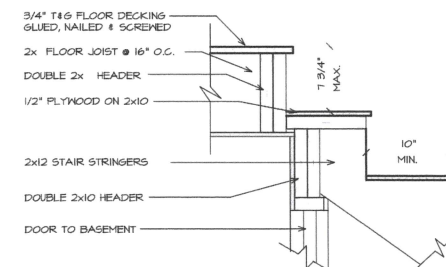
PARTY WALL SPECIFICATIONS
FIRE RATED - 1 HR
UL DESIGN U376



9 METHOD PFG-PORTAL FRAME AT GARAGE DOOR OPENINGS IN SEISMIC DESIGN CATEGORIES A, B, AND C
REF. (FIGURE R602.10.6.3)



10 STAIRWELL BEAM
SCALE: 1" = 1'-0"



11 STAIR OVER HEADER
SCALE: 1" = 1'-0"



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