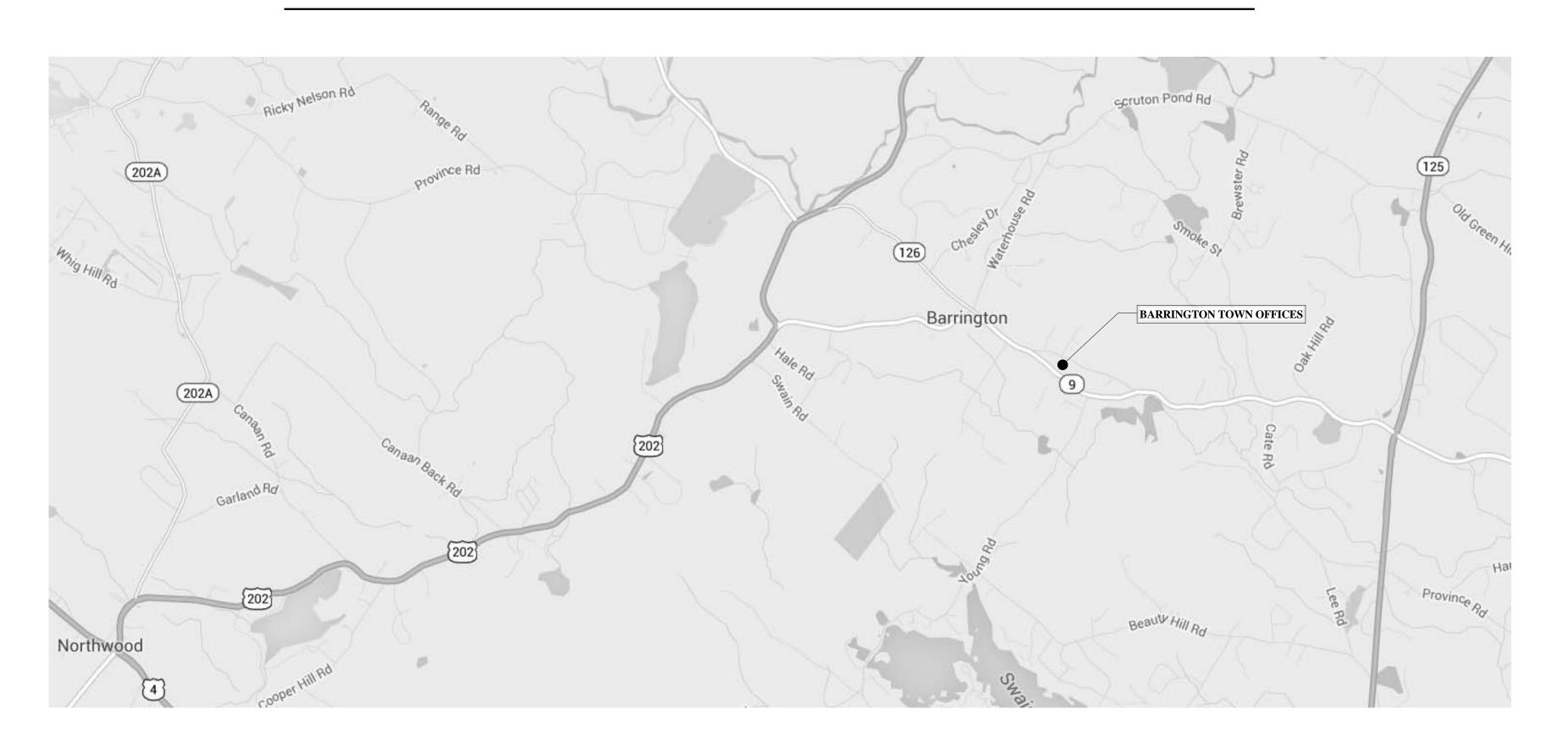
## BARRINGTON TOWN OFFICES

RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE 03825



# BID & CONSTRUCTION SET 12/11/2015

### LOCATION MAP:



#### PROJECT TEAM: SMP Architecture **ARCHITECT:** 30 S. Main St., Building 2 Concord, NH 03301-4809 PHONE: 603.228.8880 FAX: 603.228.8881 www.sheerr.com T: (603) 228-8880 F: (603) 228-8881 JSN Associates STRUCTURAL ENGINEER: 1 Autumn Street Portsmouth NH 03801 T: (603) 433-8639 **MECHANICAL ENGINEER:** Kohler and Lewis Engineering 27 Mechanic Street Keene NH 03431 T: (603) 352-4841 PLUMBING ENGINEER: Kohler and Lewis Engineering 27 Mechanic Street Keene, NH 03431 T: (603) 352-4841 **ELECTRICAL ENGINEER:** Swiftcurrent Engineering Services inc. 10 Forest Falls Drive, Unit 4B Yarmouth ME. 04096 T: (207) 847-9280 F: (207) 847-9281 CONSTRUCTION **MANAGER: CIVIL ENGINEER:: Dubois and King** 18 Constitution Drive Bedford NH 03110 T: 603-637-1043

### DRAWING LIST:

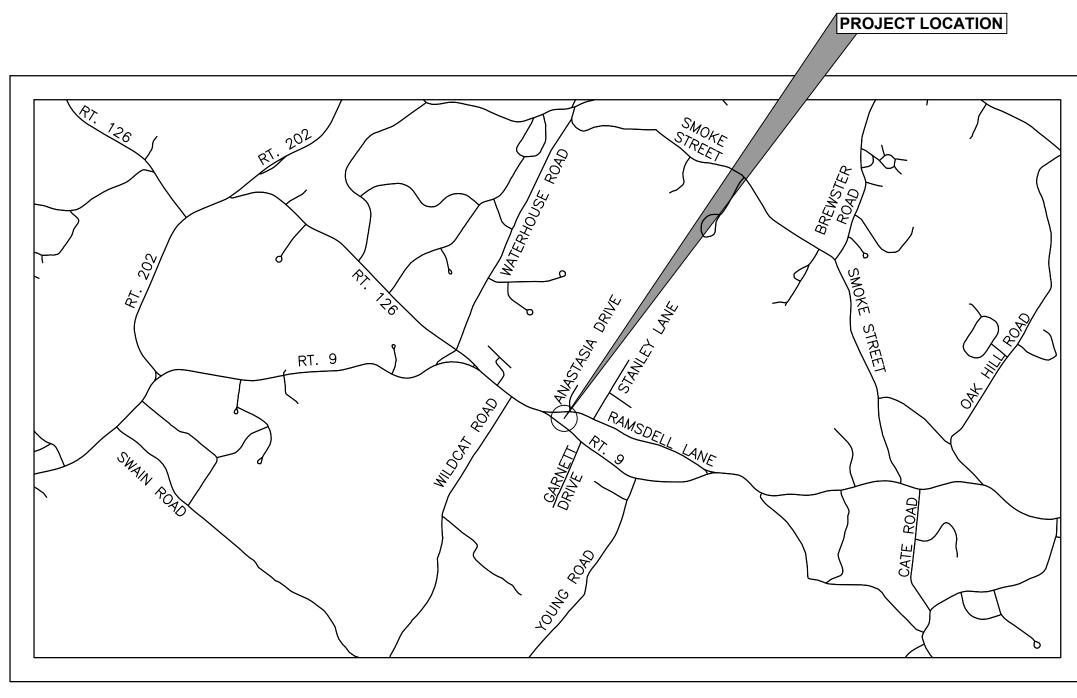
Civil/Survey

G1.1	COVER	A302	BUILDING SECTIONS
4069A	TOPOGRAPHIC PLAN OF THE FORMER	A302 A303	BUILDING SECTIONS  BUILDING SECTIONS
<del>1</del> 007 <i>1</i> 1	BARRINGTON TOWN HALL	A303 A401	WALL SECTIONS
D1.1	DEMOLITION PLAN	A401 A402	WALL SECTIONS WALL SECTIONS
C1.1	SITE LAYOUT PLAN	A403	WALL SECTIONS
C1.2	GRADING AND DRAINAGE PLAN	A501	DETAILS
C1.3	UTILITY PLAN	A502	DETAILS
C1.4	DETAILS	A503	DETAILS
C1.5	DETAILS	A504	DETAILS
C1.6	DETAILS	A601	DOOR, FRAME AND HARDWARE SCHEDULES
C1.7	DETAILS	A701	CASEWORK TYPES & ENLARGED RESTROOM
C1.8	DETAILS		PLANS & ELEVATIONS
C2.1	WASTEWATER SITE PLAN	A702	INTERIOR ELEVATIONS, ENLARGED PLANS &
C2.2	WASTEWATER DETAILS		CASEWORK DETAILS
C2.3	PUMP STATION DETAILS	A703	ENLARGED PLANS & CASEWORK DETAILS
	Structural	A901	FINISH PLAN AND SCHEDULE
S1.0	GENERAL STRUCTURAL NOTES (SHEET 1 OF 2)		Plumbing
S1.1	GENERAL STRUCTURAL NOTES (SHEET 2 OF 2)	M100	LEVEL 0 & LEVEL 1 PLUMBING PLAN
S1.2	SCHEDULE OF SPECIAL INSPECTIONS	WHOO	ELVELO & LEVEL I I LOMBINO I LAN
S2.0	FOUNDATION PLAN		Mechanical
S2.1	FOUNDATION DETAILS & SECTIONS	M200	LEVEL 0 & LEVEL 1 HEATING PLANS
S2.2	FOUNDATION WALL SECTIONS & DETAILS	M300	LEVEL 0 & LEVEL 1 VENTILATION PLANS
S2.3	FOUNDATION WALL SECTIONS & DETAILS	M400	PLUMBING AND MECHANICAL DETAILS &
S3.0	FLOOR FRAMING PLAN	2.2.00	LEGEND
S4.0	ROOF FRAMING PLAN		Electrical
S4.1	FOUNDATION WALL SECTIONS & DETAILS		Electrical
S4.2	FOUNDATION WALL SECTIONS & DETAILS	E0.0	ELECTRICAL LEGEND, SYMBOLS, & NOTES
	Architectural	ES1.0	ELECTRICAL POWER & SYSTEMS - FIRST FLOOR PLAN & LOWER LEVEL
	COVERSHEET	E1.0	ELECTRICAL POWER & SYSTEMS - FIRST FLOOR PLAN & LOWER LEVEL
A001	CODE ANALYSIS PLANS	E1.1	ELECTRICAL PANEL SCHEDULES & ONE-LINI DIAGRAM
A100	LOWER FLOOR PLAN/RCP & WALL TYPES	E2.0	ELECTRICAL LIGHTING & FIRE ALARM PLAN
A101	MAIN FLOOR PLAN		- FIRST FLOOR & LOWER LEVEL
A102	MAIN FLOOR - REFLECTED CEILING PLAN	E2.1	ELECTRICAL LIGHTING SCHEDULE,
A103	ROOF PLAN		LIGHTING CONTROLS, & FIRE ALARM RISER
A201	EXTERIOR ELEVATIONS		DIAGRAM
A202	EXTERIOR ELEVATIONS		
A301	BUILDING SECTIONS		

**Architectural** 

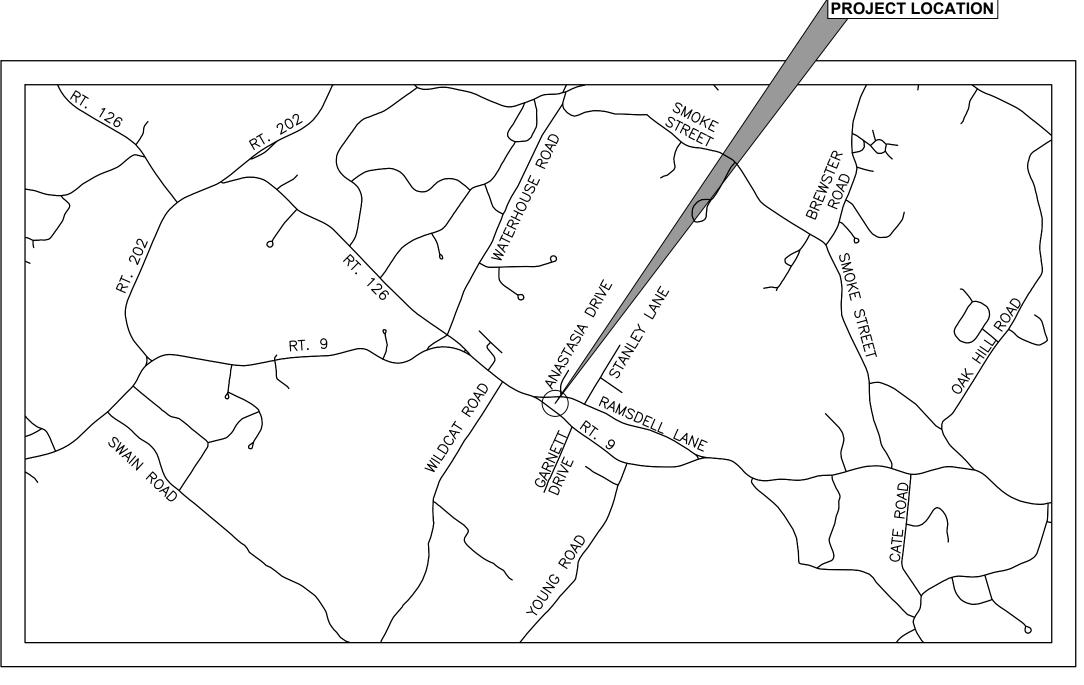
## BARRINGTON TOWN OFFICES

TAX MAP/LOT: 233/000044



VICINITY MAP SCALE: 1" = 2,500'

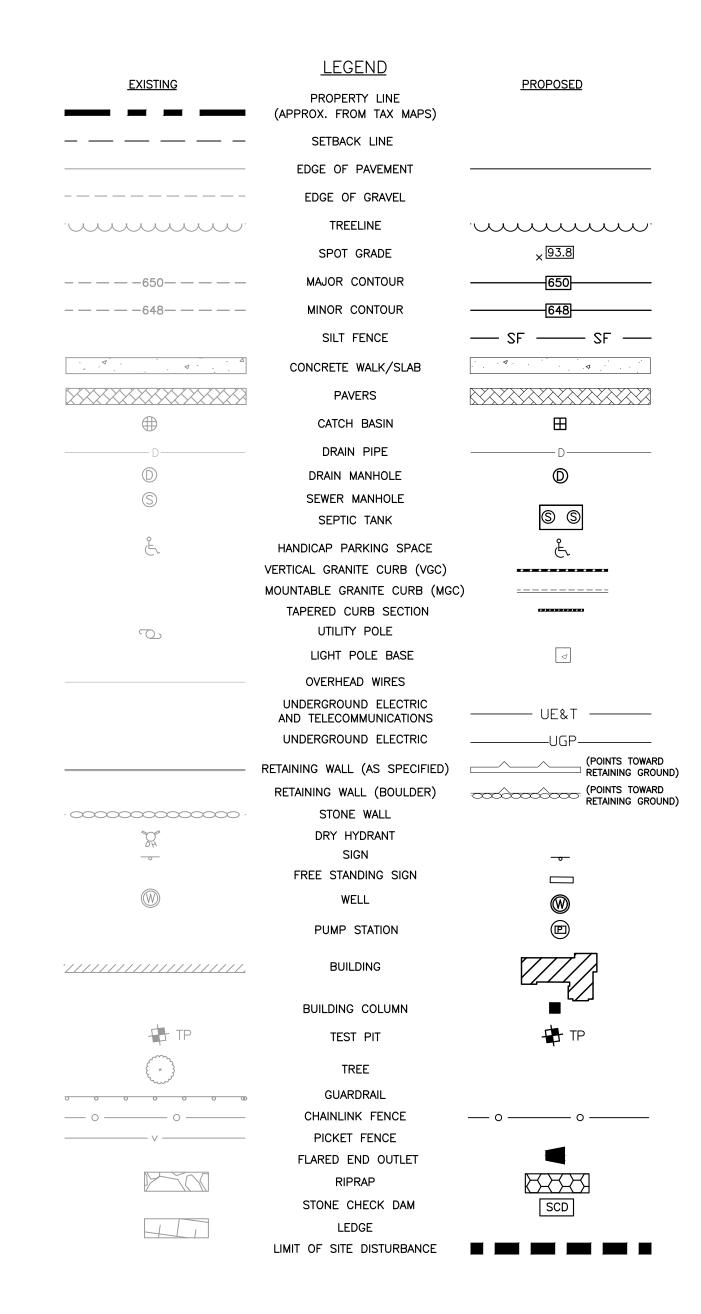
RAMSDELL LANE BARRINGTON, NH



**BID AND CONSTRUCTION SET** 

4	12/11/2015	BID AND CONSTRUCTION SET	DUP	МТО
3	11/23/2015	95% FINAL REVIEW SET	DUP	мто
2	10/26/2015	PROGRESS SET FOR BUDGET UPDATE	DUP	МТО
1	3/4/2015	GENERAL REVISIONS, ADD SHEETS C1.5-1.8	MEF	МТО
NO.	DATE	DESCRIPTION	BY	CK'D

### **NOT FOR CONSTRUCTION** PRELIMINARY PLANS



#### APPROVED BY BARRINGTON PLANNING BOARD:

CHAIRMAN **DATE** 

> DRAWN BY: FEB 2015 322819 PROJECT ENG:

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PREPARED BY:

SHEET 1 OF 14

#### G1.1 COVER TOPOGRAPHIC PLAN OF THE FORMER 4069A BARRINGTON TOWN HALL D1.1 DEMOLITION PLAN SITE LAYOUT PLAN C1.2 GRADING AND DRAINAGE PLAN C1.3 UTILITY PLAN C1.4-1.8 7-11 DETAILS C2.1 WASTEWATER SITE PLAN C2.2 WASTEWATER DETAILS

DRAWING LIST

TITLE

PUMP STATION DETAILS

DRAWING

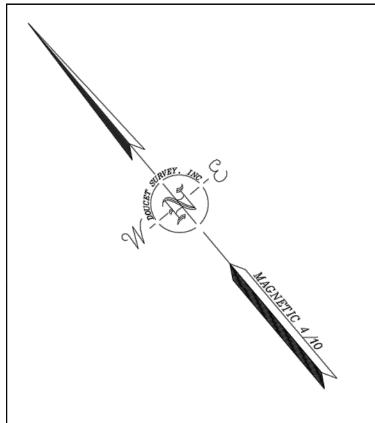
C2.3

SHEET NUMBER

Plymouth

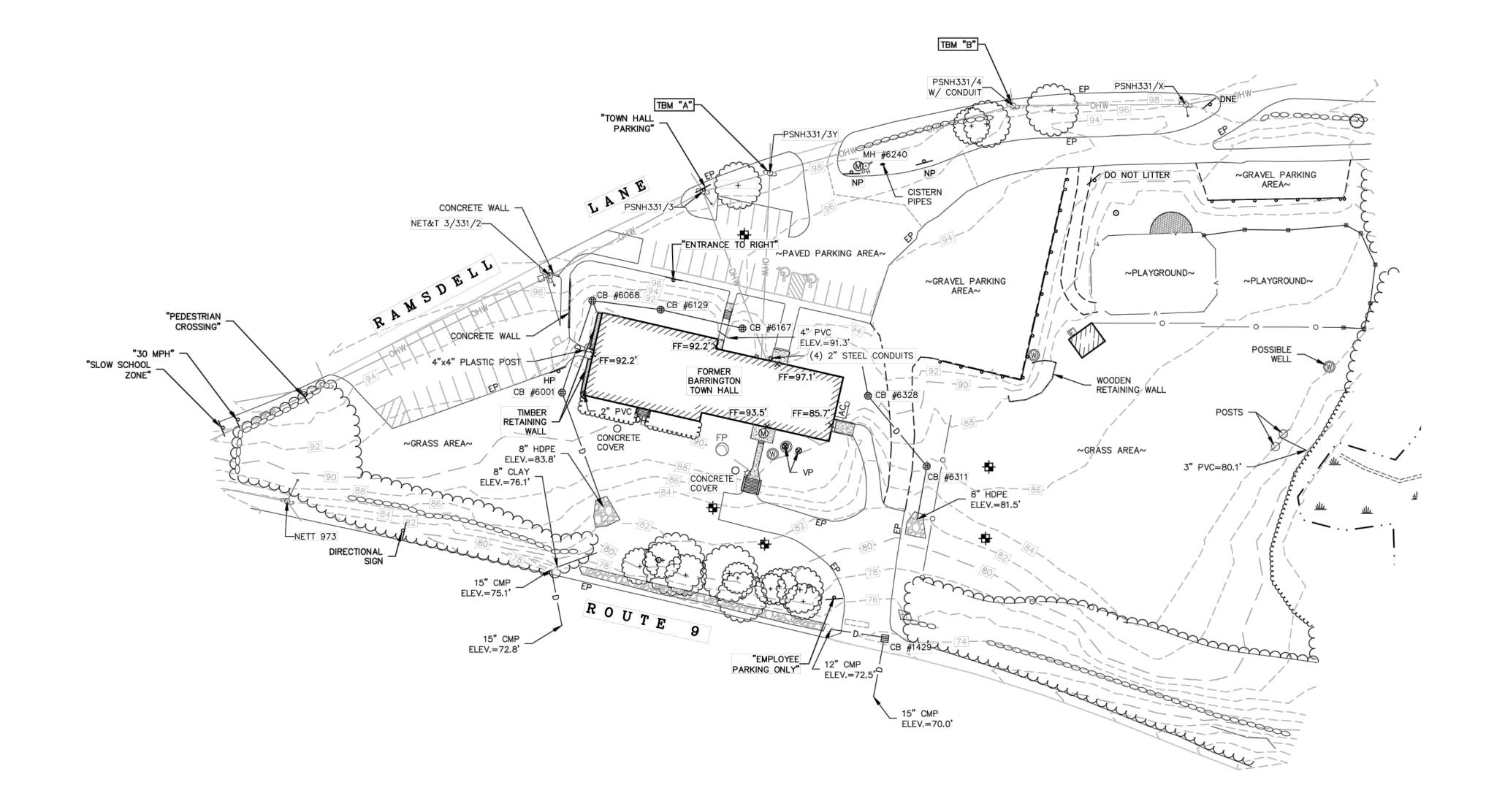
LOCUS MAP NOT TO SCALE

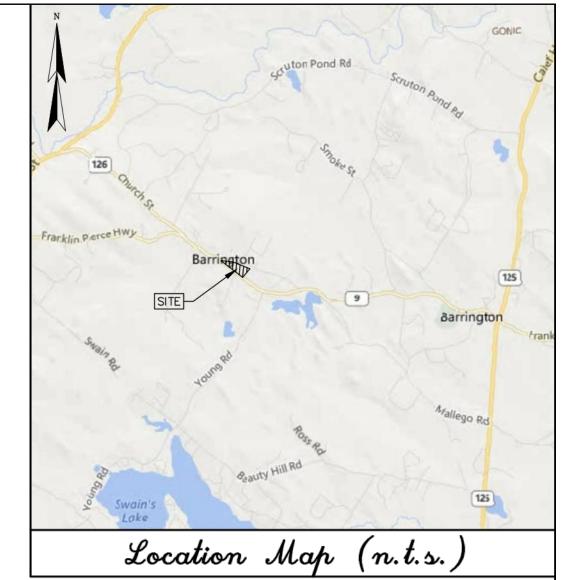
PROJECT LOCATION



MAG NAIL SET UP 12" IN

POLE #PSNH 331/3Y ELEV.=100.50' MAG NAIL SET UP 12" IN POLE #PSNH 331/4 ELEV.=99.06'





#### NOTES:

- 1. REFERENCE: TAX MAP 233 LOT.
- FIELD SURVEY PERFORMED BY JFK, RKM & JDG ON 4/10 AND BY NJM & JPE ON 9/15 TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- 3. JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING APRIL 2010 IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
- 4. HORIZONTAL DATUM BASED ON MAGNETIC OBSERVATION.
- 5. VERTICAL DATUM IS BASED ON ASSUMED ELEVATION.

DRAINAGE STRUCTURE TABLE INV. IN 12" CMP=71.3' INV. OUT 12" CMP=71.2' RIM=90.2' INV. IN 8" HDPE=86.7' INV. OUT 8" HDPE=86.6' CB #6068 RIM=91.0' INV. IN 4" PVC=87.6' INV. IN 8" HDPE=87.3' INV. OUT 8" HDPE=87.2' CB #6129 RIM=90.9 INV. IN 8" HDPE=87.6' INV. OUT 8" HDPE=87.6' RIM=90.6' INV. OUT 8" HDPE=88.3" CB #6311 RIM=85.5 INV. IN 8" HDPE=81.9' INV. OUT 8" HDPE=81.8' CB #6328 RIM=88.3' INV. IN 8" HDPE=83.3' INV. OUT 8" HDPE=83.4'

## TOPOGRAPHIC PLAN OF THE FORMER BARRINGTON TOWN HALL

RAMSDELL LANE & ROUTE 9 BARRINGTON, NEW HAMPSHIRE

DRAWN BY:	K. C. W.	DATE: OCTOBER 5, 2015
CHECKED BY:	S. V.M.	DRAWING NO.:
100 110	4069	7 1 1 100 1002



<u>LEGEND</u> STONE WALL ----- O --- O -- CHAIN LINK FENCE <del>∞ • • •</del> GUARDRAIL — D — DRAIN LINE — 90 — MAJOR CONTOUR LINE — — — 88 — — — MINOR CONTOUR LINE . TREE LINE - · · - EDGE OF WETLAND

UTILITY POLE UTILITY POLE & GUY WIRE UTILITY POLE W/ LIGHT LAMP POLE SIGN FLAG POLE DRY HYDRANT WELL VENT PIPE

ELECTRIC BOX CATCH BASIN

CATCH BASIN (ROUND) MANHOLE WETLAND AREA DECIDUOUS TREE POSSIBLE TEST PIT CONCRETE

RIP RAP

LANDSCAPED AREA LEDGE OUTCROP

NO. DATE

ACCESSIBLE PARKING SPACE FINISHED FLOOR

EDGE OF PAVEMENT CONC. CONCRETE HANDICAP PARKING SIGN NO PARKING SIGN VENT PIPE

DESCRIPTION

AUTO SPRINKLER

NOTE:
ALL ELECTRIC, GAS, TEL. WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC
FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK
WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE
SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE
LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG—SAFE AT 1—888—DIG—SAFE.

GRAPHIC SCALE ( IN FEET ) 1 inch = 50 ft.

1. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OR SITE CLEARING, THE LIMIT OF WORK SHALL BE CLEARLY MARKED IN THE FIELD (VIA DEMARCATION FENCE) BY THE CONTRACTOR AT 50-FOOT ( $\pm$ ) INTERVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK WITHIN THE LIMIT OF WORK AND IS PROHIBITED FROM USING ANY AREA LOCATED OUTSIDE OF SUCH LIMIT.

2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT DIG SAFE (888-DIG-SAFE) AT LEASE 72 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.

3. ROCK EXCAVATION AND BLASTING SHALL BE IN ACCORDANCE WITH SECTION 203.3.2 OF THE STATE OF NEW HAMPSHIRE DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AUGUST 2010 EDITION. SUBMITTALS SHALL BE COORDINATED WITH THE CITY AND THE OWNER, AND PROVIDED BY THE CONTRACTOR AS REQUIRED.

4. IN THE EVENT LEDGE REMOVAL IS REQUIRED (VIA BLASTING OR JACK—HAMMERING) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CREATING AN EXISTING CONDITIONS FILE CONSISTING OF VIDEO, PHOTOGRAPHS AND DOCUMENTATION OF THE PROJECT SITE AND ABUTTING EXISTING FEATURE(S), INCLUDING BUT NOT LIMITED TO, ABUTTERS LOCATED ACROSS ALL STREETS WITHIN THE VICINITY OF THE PROJECT SITE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF EROSION. ALL DISTURBED AREAS SHALL BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY CONTROL DEVISES SHALL BE DEPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIALS SHALL BE MANAGED IN A MANNER THAT WILL MINIMIZE EROSION. SEE EROSION CONTROL PLAN AND EROSION CONTROL NOTES & DETAIL SHEET FOR SUPPLEMENTAL INFORMATION.

6. SUITABLE EXCAVATED MATERIALS MAY BE INCORPORATED INTO THE PROJECT. THIS PROVISION SHALL IN NO WAY RELIEVE THE CONTRACTOR'S OBLIGATIONS TO REMOVE AND DISPOSE OF ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING OR EXCESS SUITABLE MATERIAL. ALL DISPOSED MATERIAL SHALL BE IN ACCORDANCE TO ALL LOCAL, STATE AND FEDERAL LAWS.

7. ALL EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH O.S.H.A. STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES.

8. THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.

9. BUILDING TO BE DEMOLISHED UNDER A SEPARATE CONTRACT PRIOR TO CONSTRUCTION OF THE PROPOSED TOWN OFFICE BUILDING. SOIL AREAS NEAR THE FORMER BUILDING FOOTPRINT WILL BE SLOPED TO PROVIDE SAFE GRADE CHANGES AND SMOOTH TRANSITIONS TO UNDISTURBED AREAS.

10. SHED SHALL BE RELOCATED PRIOR TO BEGINNING OF 2016 SUMMER CAMP SESSION, COORDINATE WITH OWNER ON TIMING AND LOCATION. PROVIDE TEMPORARY ELECTRIC AND WATER CONNECTIONS. SHED TO BE REMOVED FOLLOWING 2016 SUMMER CAMP SESSION.

11. REMOVE ALL UTILITIES IN THE WORK AREA WHETHER SHOWN OR NOT. CUT AND CAP ALL UNDERGROUND LINES AT THE PROPERTY LINE UNLESS OTHERWISE NOTED. EXISTING UTILITY SERVICES TO BE CAPPED, ABANDONED, OR REMOVED SHALL MEET THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANIES.

12. DEMOLITION/CONSTRUCTION DEBRIS AND STUMPS SHALL BE REMOVED FROM THE SITE AND BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

13. FOR ALL ITEMS NOTED TO BE REMOVED WITHIN THE FOOTPRINT OF THE NEW BUILDING — REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALL UNDERGROUND ELEMENTS AS WELL INCLUDING BUT NOT LIMITED TO: FOUNDATIONS, GRAVEL FILLS, TREE ROOTS, OLD PIPE, ETC. THE EXTENT OF THE DEMOLITION OF THE FORMER BUILDING IS NOT FULLY KNOWN OR DEFINED.

#### **SUGGESTED CONSTRUCTION SEQUENCE:**

8. INSTALL STABILIZED CONSTRUCTION ENTRANCE.

9. CLEAR AND GRUB ONLY TO THE LIMITS OF CUT AND FILL. COORDINATES IDENTIFIED ON THIS PLAN ARE FOR REFERENCE ONLY AND ARE NOT INTENDED FOR EXACT CLEARING LIMITS; HOWEVER THE AREA OF DISTURBANCE SHALL NOT EXCEED 100,000 SF DUE TO PERMITTING REQUIREMENTS.

10. CONSTRUCT TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL FACILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION. SEE EROSION AND SEDIMENTATION CONTROL PLAN, NOTES & DETAIL SHEETS.

11. PERFORM ALL DEMOLITION ACTIVITIES

12. REMOVE TOPSOIL FOR ITS TOTAL DEPTH WITHIN THE LIMITS OF DISTURBED AREA. UNLESS OTHERWISE DIRECTED, CONTRACTOR SHALL STOCKPILE TOPSOIL AND USE ON THIS PROJECT AS NEEDED IN ACCORDANCE WITH NHDOT SECTION 641 — LOAM.

13. CONSTRUCT STORMWATER COLLECTION AND CONVEYANCE SYSTEM.

14. CONSTRUCT SEPTIC SYSTEM FOLLOWING 2016 SUMMER CAMP SESSION.

15. CONSTRUCT UNDERGROUND UTILITES.

16. CONSTRUCT BUILDING.

17. CONSTRUCT EMBANKMENT AND SUBGRADE AREAS, INCLUDING ALL REPAIRS AS SHOWN ON THIS PLAN SET; INSTALL UTILITIES.

18. GRADE PROJECT SITE. PLACE TEMPORARY (AND PERMANENT, IF FEASIBLE) LOAM, SEED AND MULCH ON ALL DISTURBED AREAS IMMEDIATELY AFTER CONSTRUCTION OF SAID AREAS.

19. PLACE RIGID CONCRETE AND BITUMINOUS CONCRETE PAVEMENT BASE COURSES.

20. PLACE RIGID CONCRETE AND BITUMINOUS CONCRETE PAVEMENT.

21. COMPLETE PERMANENT SEEDING ON ALL DISTURBED AREAS AND LANDSCAPING PLANTINGS.

22. REMOVE TEMPORARY CONTROL MEASURES AND ACCOMPLISH FINAL CLEAN-UP.

DuBois EKing "

MANAGEMENT • DEVELOPMEN

18 CONSTITUTION DR. SUITE
BEDFORD, NH 03110
TEL: (603) 637-1043
FAX: (866) 783-7101
www.dubois-king.com
LACONIA, NH
RANDOLPH, VT
SOUTH BURLINGTON, VT
SPRINGFIELD, VT
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# NOT FOR CONSTRUCTION PRELIMINARY PLANS

BY CK'D	ВУ	DESCRIPTION	DATE	NO.
MTO	DUP	PROGRESS SET FOR BUDGET UPDATE	10/26/2015	2
MTO	DUP	95% FINAL REVIEW SET	11/23/2015	3
MTO	DUP	BID AND CONSTRUCTION SET	12/11/2015	4

TOWN OF BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

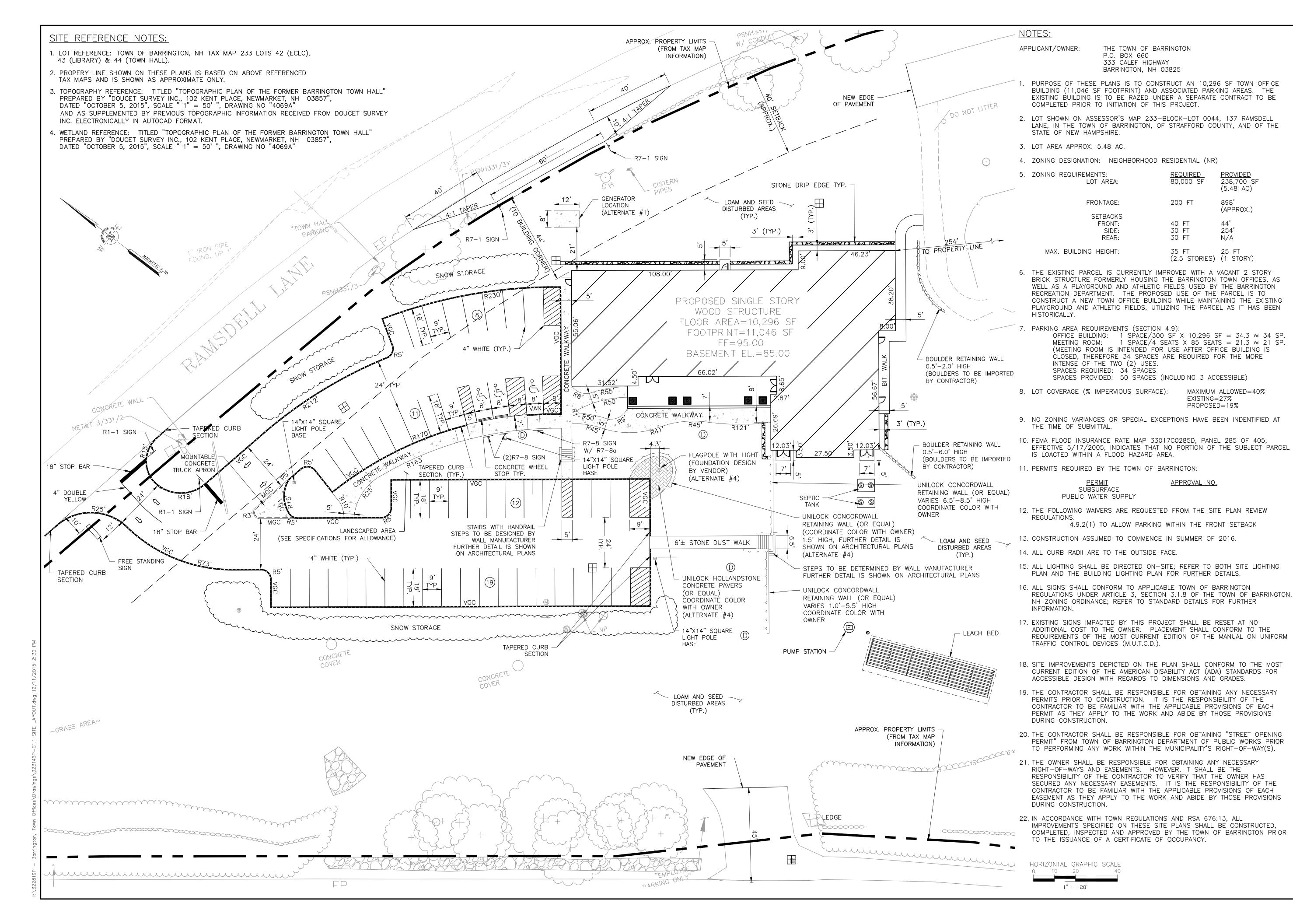
SHEET TITLE

DEMOLITION PLAN

DRAWN BY	DATE
DUP	FEB 2015
CHECKED BY	D&K PROJECT#
JAA	323146P
PROJ. ENG.	D&K ARCHIVE #
MTO	
DRAWI	NG NO.

D1.1

SHEET 3 OF 14



**ENGINEERING • PLANNING •** MANAGEMENT • DEVELOPMEN 18 CONSTITUTION DR. SUITE BEDFORD, NH 03110 TEL: (603) 637-1043

REQUIRED 80,000 SF

200 FT

40 FT

30 FT

30 FT

35 FT

PROVIDED 238,700 SF

(5.48 AC)

(APPROX.)

898'

44'

254

N/A

MAXIMUM ALLOWED=40%

EXISTING=27%

APPROVAL NO.

PROPOSED=19%

(2.5 STORIES) (1 STORY)

25 FT

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PROFESSIONAL SEAL

#### **NOT FOR** CONSTRUCTION **PRELIMINARY PLANS**

	MTO	MTO	MTO	MTO	BY CK'D
	DUP	DUP	DUP	MEF	ВҮ
	BID AND CONSTRUCTION SET	95% FINAL REVIEW SET	PROGRESS SET FOR BUDGET UPDATE	GENERAL REVISIONS	DESCRIPTION
	12/11/2015	11/23/2015	10/26/2015	3/4/2015	DATE
	4	3	2	<u></u>	NO.
			12/11/2015 BID AND CONSTRUCTION SET DUP 11/23/2015 95% FINAL REVIEW SET DUP	12/11/2015 BID AND CONSTRUCTION SET DUP 11/23/2015 95% FINAL REVIEW SET DUP 10/26/2015 PROGRESS SET FOR BUDGET UPDATE DUP	12/11/2015 BID AND CONSTRUCTION SET DUP 11/23/2015 95% FINAL REVIEW SET DUP 10/26/2015 PROGRESS SET FOR BUDGET UPDATE DUP 3/4/2015 GENERAL REVISIONS MEF

**TOWN OF** BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON **TOWN OFFICES** RAMSDELL LANE. BARRINGTON, NEW HAMPSHIRE

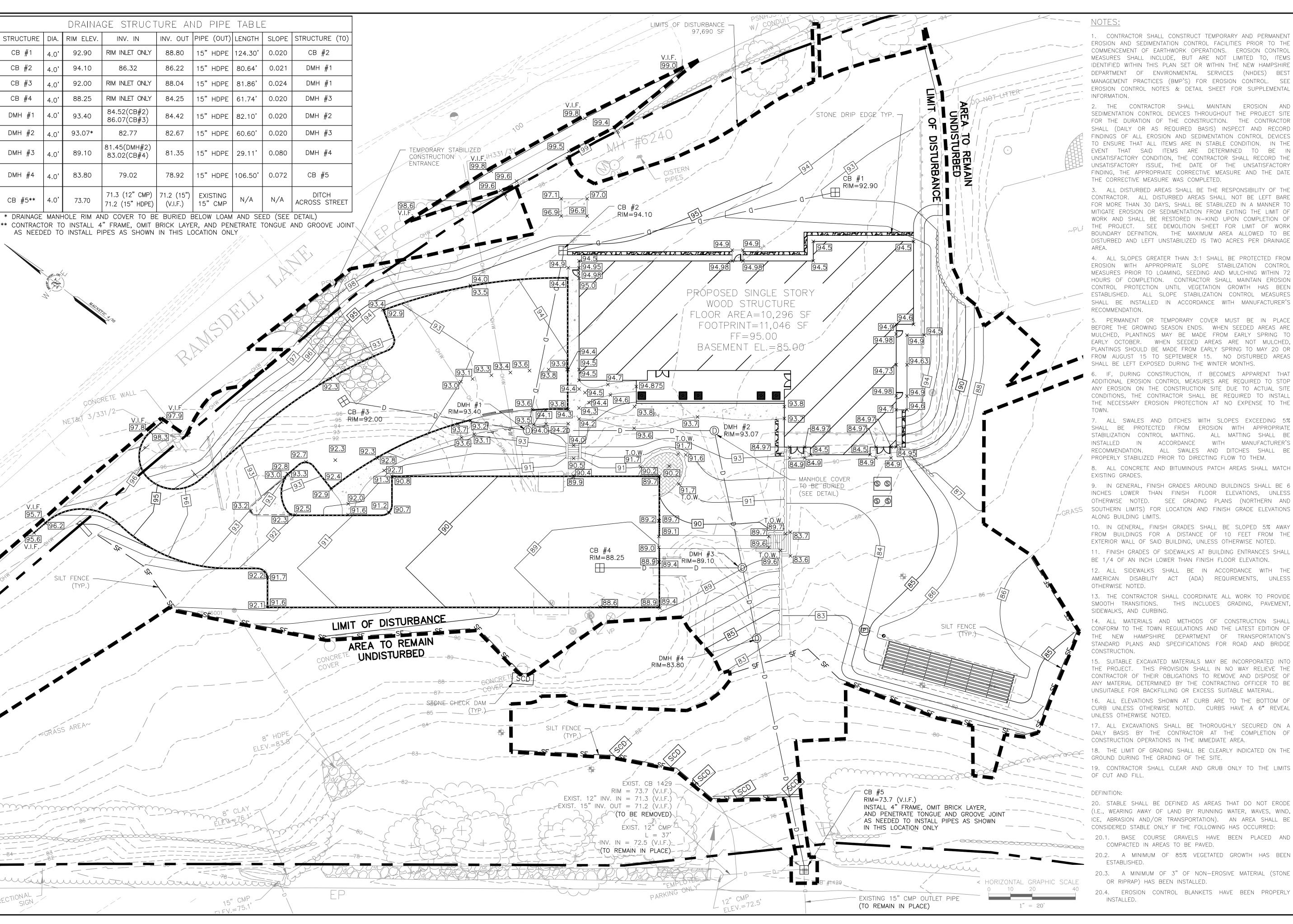
SHEET TITLE

SITE LAYOUT

AWN BY	DATE	
DUP	FEB 2015	
CKED BY	D&K PROJECT#	
JAA	323146P	
J. ENG.	D&K ARCHIVE #	
MTO		

DRAWING NO.

SHEET 4 OF 14



1. CONTRACTOR SHALL CONSTRUCT TEMPORARY AND PERMANEN EROSION AND SEDIMENTATION CONTROL FACILITIES PRIOR TO THE COMMENCEMENT OF EARTHWORK OPERATIONS. EROSION CONTROL MEASURES SHALL INCLUDE. BUT ARE NOT LIMITED TO. ITEMS IDENTIFIED WITHIN THIS PLAN SET OR WITHIN THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES) BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION CONTROL. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR SUPPLEMENTAL

2. THE CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION. THE CONTRACTOR SHALL (DAILY OR AS REQUIRED BASIS) INSPECT AND RECORD FINDINGS OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES TO ENSURE THAT ALL ITEMS ARE IN STABLE CONDITION. IN THE EVENT THAT SAID ITEMS ARE DETERMINED TO BE IN UNSATISFACTORY CONDITION, THE CONTRACTOR SHALL RECORD THE UNSATISFACTORY ISSUE, THE DATE OF THE UNSATISFACTORY FINDING, THE APPROPRIATE CORRECTIVE MEASURE AND THE DATE THE CORRECTIVE MEASURE WAS COMPLETED.

3. ALL DISTURBED AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISTURBED AREAS SHALL NOT BE LEFT BARE FOR MORE THAN 30 DAYS, SHALL BE STABILIZED IN A MANNER TO MITIGATE EROSION OR SEDIMENTATION FROM EXITING THE LIMIT OF WORK AND SHALL BE RESTORED IN-KIND UPON COMPLETION OF THE PROJECT. SEE DEMOLITION SHEET FOR LIMIT OF WORK BOUNDARY DEFINITION. THE MAXIMUM AREA ALLOWED TO BE DISTURBED AND LEFT UNSTABILIZED IS TWO ACRES PER DRAINAGE

4. ALL SLOPES GREATER THAN 3:1 SHALL BE PROTECTED FROM EROSION WITH APPROPRIATE SLOPE STABILIZATION CONTROL MEASURES PRIOR TO LOAMING. SEEDING AND MULCHING WITHIN 72 HOURS OF COMPLETION. CONTRACTOR SHALL MAINTAIN EROSION CONTROL PROTECTION UNTIL VEGETATION GROWTH HAS BEEN ESTABLISHED. ALL SLOPE STABILIZATION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.

PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREAS SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.

6. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE

7. ALL SWALES AND DITCHES WITH SLOPES EXCEEDING 5% SHALL BE PROTECTED FROM EROSION WITH APPROPRIATE STABILIZATION CONTROL MATTING. ALL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. ALL SWALES AND DITCHES SHALL BE PROPERLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.

8. ALL CONCRETE AND BITUMINOUS PATCH AREAS SHALL MATCH EXISTING GRADES.

9. IN GENERAL, FINISH GRADES AROUND BUILDINGS SHALL BE 6 INCHES LOWER THAN FINISH FLOOR ELEVATIONS, UNLESS OTHERWISE NOTED. SEE GRADING PLANS (NORTHERN AND SOUTHERN LIMITS) FOR LOCATION AND FINISH GRADE ELEVATIONS ALONG BUILDING LIMITS.

> FROM BUILDINGS FOR A DISTANCE OF 10 FEET FROM THE EXTERIOR WALL OF SAID BUILDING, UNLESS OTHERWISE NOTED.

> 11. FINISH GRADES OF SIDEWALKS AT BUILDING ENTRANCES SHALL BE 1/4 OF AN INCH LOWER THAN FINISH FLOOR ELEVATION.

12. ALL SIDEWALKS SHALL BE IN ACCORDANCE WITH THE AMERICAN DISABILITY ACT (ADA) REQUIREMENTS, UNLESS

13. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT,

SIDEWALKS, AND CURBING. 14. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE TOWN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S

STANDARD PLANS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. 15. SUITABLE EXCAVATED MATERIALS MAY BE INCORPORATED INTO THE PROJECT. THIS PROVISION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THEIR OBLIGATIONS TO REMOVE AND DISPOSE OF

UNSUITABLE FOR BACKFILLING OR EXCESS SUITABLE MATERIAL. 16. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL

17. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF

18. THE LIMIT OF GRADING SHALL BE CLEARLY INDICATED ON THE GROUND DURING THE GRADING OF THE SITE

- 19. CONTRACTOR SHALL CLEAR AND GRUB ONLY TO THE LIMITS

20. STABLE SHALL BE DEFINED AS AREAS THAT DO NOT ERODE (I.E., WEARING AWAY OF LAND BY RUNNING WATER, WAVES, WIND, ICE, ABRASION AND/OR TRANSPORTATION). AN AREA SHALL BE

CONSIDERED STABLE ONLY IF THE FOLLOWING HAS OCCURRED: 20.1. BASE COURSE GRAVELS HAVE BEEN PLACED AND COMPACTED IN AREAS TO BE PAVED.

20.2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.

20.3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL (STONE OR RIPRAP) HAS BEEN INSTALLED.

20.4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY

CONSTITUTION DR. SUITE BEDFORD, NH 03110 TEL: (603) 637-1043 FAX: (866) 783-7101 www.dubois-king.com LACONIA, NH RANDOLPH, VT SOUTH BURLINGTON, VT

#### NOT FOR CONSTRUCTION **PRELIMINARY PLANS**

SPRINGFIELD, VT

PROFESSIONAL SEAL

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$\circ$	BY C	DESCRIPTION	DATE	NO.
Ν	NEF N	GENERAL REVISIONS	3/4/2015	_
Λ	N ANA	PROGRESS SET FOR BUDGET UPDATE	2 10/26/2015	2
2	ANG	95% FINAL REVIEW SET	3 11/23/2015	3
2	N ANG	BID AND CONSTRUCTION SET	12/11/2015	4

**TOWN OF** BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON **TOWN OFFICES** RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

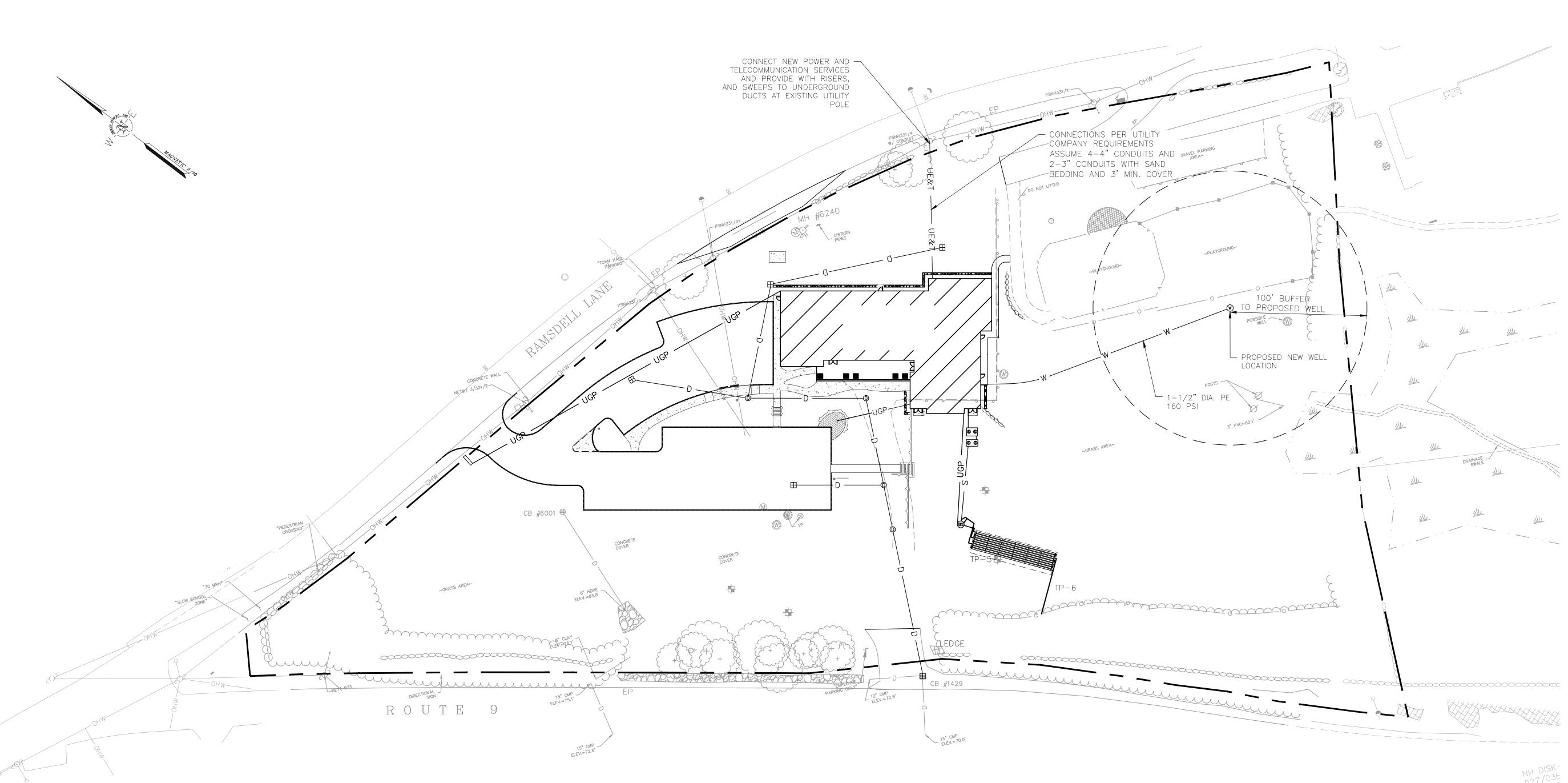
SHEET TITLE

**GRADING AND** DRAINAGE PLAN

DATE
FEB 2015
D&K PROJECT #
323146P
D&K ARCHIVE #

DRAWING NO.

SHEET 5 OF 14



NOTES:

- 1. BELOW GRADE UTILITY INFORMATION IS BASED ON RECORD DRAWINGS. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE LINES ARE NOT SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ALL UTILITIES WITH LOCAL UTILITY COMPANIES ALONG WITH NOTIFYING "DIG-SAFE" (1-800-344-7233) AT LEASE 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE INITIATION OF CONSTRUCTION.
- 2. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY RELOCATION AND INSTALLATION WITH THE APPROPRIATE UTILITY. THE APPROPRIATE UTILITY OR ITS AUTHORIZED REPRESENTATIVE WILL PERFORM ADJUSTMENTS OF ALL UTILITY STRUCTURES. UTILITY CONTACTS ARE AS FOLLOWS:

WATER: ON SITE DRILLED WELL SEPTIC: ON SITE PRIVATE SEPTIC ELECTRIC: EVERSOURCE PHONE: 800-362-7764 TELEPHONE: FAIRPOINT PHONE: 888-984-1515 STORMWATER: PRIVATE

- 3. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE DEMOLITION PLAN. AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL REPAIR OR COORDINATE WITH THE RESPECTIVE UTILITY FOR DAMAGE TO UTILITIES.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY FEES.

- 5. SEE SHEET C1.3 FOR ISOLATED WATER, ELECTRIC, TELEPHONE AND CABLE LAYOUT. SEE SHEETS C1.2 FOR GRADING 12. THE CONTRACTOR SHALL COORDINATE MATERIAL, CONNECTION REQUIREMENTS, INSTALLATION AND TESTING AND DRAINAGE LAYOUT. SEE SHEET C2.1 FOR SEPTIC TANK AND LEACHING CHAMBER LAYOUT.
- 6. CONSTRUCTION AND TESTING OF SANITARY UTILITES SHALL BE IN ACCORDANCE WITH NHDES AND THE MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL COORDINATE INSPECTIONS AND PAY ANY ASSOCIATED COSTS.
- 7. CONSTRUCTION, TESTING AND DISINFECTION OF WATER UTILITES SHALL BE IN ACCORDANCE WITH NHDES REQUIREMENTS.
- 8. CABLE/TV UTILITY SERVICE SHALL BE LOCATED WITHIN THE SAME UTILITY TRENCH AS SUBSURFACE TELEPHONE (UT).
- 9. ELECTRICAL, TELEPHONE AND CABLE SHALL BE INSTALLED IN ACCORDANCE WITH RESPECTIVE UTILITY COMPANY'S INSTALLATION REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH EACH RESPECTIVE UTILITY COMPANY. UTILITY CONDUIT SIZES SHALL BE PER RESPECTIVE UTILITY COMPANY'S STANDARDS OR AS NOTED ON THE PLANS; WHICHEVER IS LARGER. AT A MINIMUM UTILITY SERVICES SHALL BE INSTALLED WITHIN SCHEDULE 80 PVC AND 40 PVC CONDUITS UNDER ROADWAYS AND NON-ROADWAYS AREAS (RESPECTIVELY) UNLESS OTHERWISE NOTED AND SHALL HAVE A MINIMUM OF 3' OF COVER.

10. SEE SHEETS C2.1, C2.2 AND C2.3 FOR WELL AND SEPTIC DESIGN.

11. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.

- SPECIFICATIONS WITH THE INDIVIDUAL UTILITY COMPANIES AND ARRANGE FOR ALL INSPECTIONS.
- 13. COORDINATE UTILITY CONNECTIONS TO THE BUILDING WITH ARCHIECTURAL DRAWINGS.
- 14. ALL MANHOLES, HANDHOLES, AND COVERS IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE, REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
- 15. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
- 16. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.

MANAGEMENT • DEVELOPMEN 18 CONSTITUTION DR. SUITE BEDFORD, NH 03110 TEL: (603) 637-1043 FAX: (866) 783-7101 www.dubois-king.com LACONIA, NH RANDOLPH, VT SOUTH BURLINGTON, VT SPRINGFIELD, VT Copyright 2015 Dubois & King Inc PROFESSIONAL SEAL

#### NOT FOR CONSTRUCTION **PRELIMINARY PLANS**

CK,D	ВУ	DESCRIPTION	DATE	NO.
MEF MTO	MEF	GENERAL REVISIONS	3/4/2015	<u></u>
MTO	DUP	PROGRESS SET FOR BUDGET UPDATE	10/26/2015	2
MTO	DUP	95% FINAL REVIEW SET	11/23/2015	3
DUP MTO	DUP	BID AND CONSTRUCTION SET	12/11/2015	4

TOWN OF **BARRINGTON** 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON **TOWN OFFICES** RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

SHEET TITLE

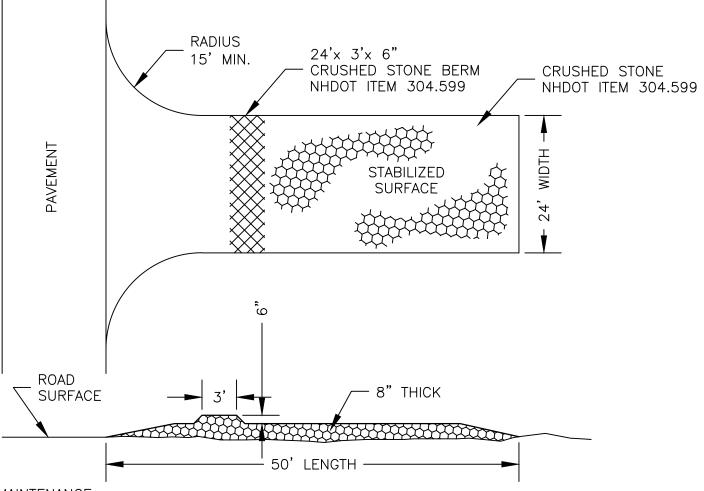
UTILITY PLAN

DRAWN BY	DATE
DUP	FEB 2015
CHECKED BY	D&K PROJECT #
JAA	323146P
PROJ. ENG.	D&K ARCHIVE #
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SHEET 6 OF 14

#### **GENERAL NOTES:**

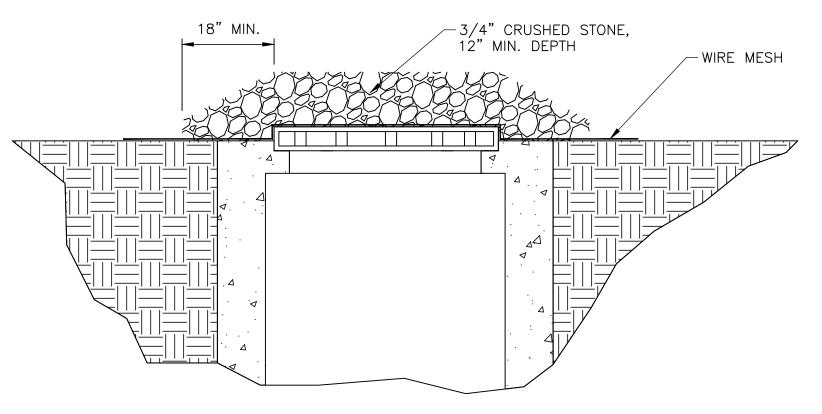
- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY DUBOIS & KING, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO SAFETY OF THE CONTRACTOR, HIS SUBCONTRACTORS, OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- 2. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY THIS WORK AT ALL TIMES.
- 3. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS. NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
- 4. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. DUBOIS & KING, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
- 5. DUBOIS & KING, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
- 6. EXCAVATION AND FILL PERMITS SHALL BE OBTAINED FROM THE TOWN OF BARRINGTON BY THE EXCAVATION CONTRACTOR AT HIS EXPENSE. BONDING REQUIREMENTS ASSOCIATED WITH THESE PERMITS ARE ALSO THE RESPONSIBILITY OF THE EXCAVATION CONTRACTOR.
- 7. THE CONTRACTOR SHALL FURNISH AND MAINTAIN A TELEPHONE NUMBER WHERE THE CONTRACTOR CAN BE REACHED 24 HOURS A DAY, 7 DAYS A WEEK, UNTIL THE PROJECT HAS REACHED SUBSTANTIAL COMPLETION.
- 8. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL DEVICES AS NECESSARY AND IN A MANNER CONSISTENT WITH THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
- 9. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER AND THE TOWN OF BARRINGTON PUBLIC WORKS DEPARTMENT PRIOR TO PERFORMING ANY ACTIVITIES WITHIN THE MUNICIPALITIES RIGHTS-OF-WAY. THE TOWN OF BARRINGTON POLICE DEPARTMENT (603-664-2700), FIRE DEPARTMENT (603-664-2241), AND PUBLIC WORKS (603-664-0166) ARE TO BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR.
- 10. THE CONTRACTOR SHALL SUBMIT A COPY OF ALL ENVIRONMENTAL PERMITS OBTAINED TO THE OWNER INCLUDING ALL UP-DATES OF STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P)
- 11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT'S SCOPE OF WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS, RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE INITIATION OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL, STATE, AND FEDERAL CODES AND REGULATIONS.



#### MAINTENANCE:

- 1. IN THE EVENT THAT MUD OR SOIL PARTICLES CLOG THE VOIDS OF THE CONSTRUCTION ENTRANCE, THE CONSTRUCTION ENTRANCE SHOULD BE TOPDRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE CONSTRUCTION ENTRANCE MAY BE REQUIRED.
- 2. IF WASH FACILITIES ARE USED, SEDIMENTATION TRAPS SHOULD BE CLEANED AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE PERFORMANCE OF SEDIMENTATION COLLECTION AND STORAGE IS AVAILABLE.

## STABILIZED CONSTRUCTION ENTRANCE (TEMPORARY, TO BE REMOVED PRIOR TO FINAL PAVING) NOT TO SCALE



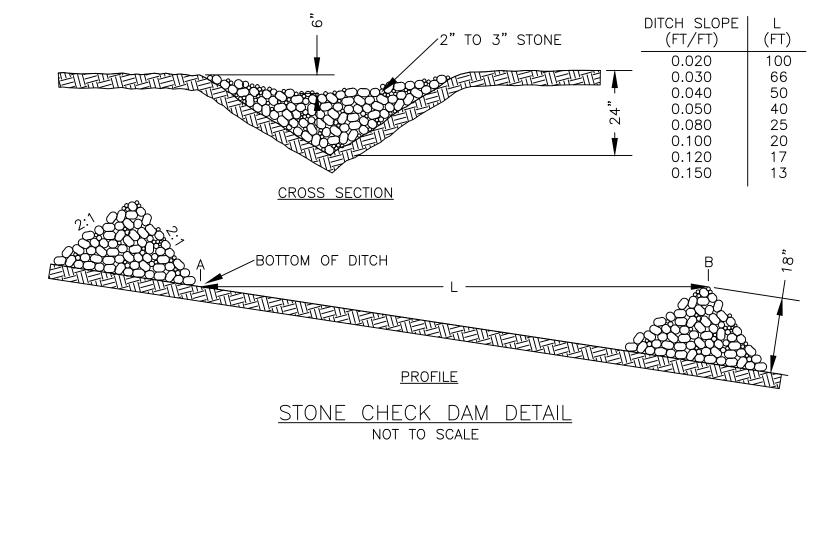
<u>NOTE</u>:

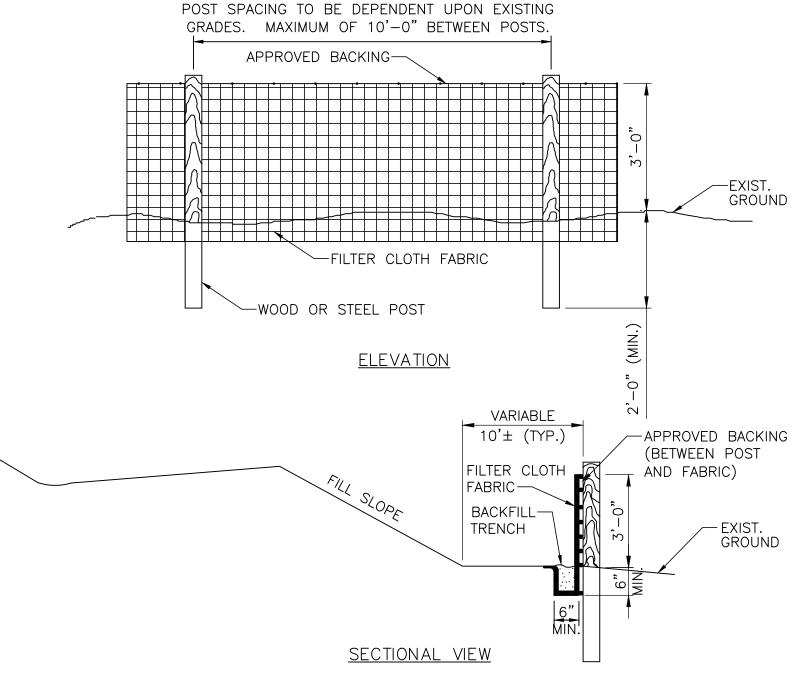
3/8" CRUSHED STONE —

CONTRACTOR WILL NOT BE PERMITTED TO SUBSTITUTE SILTATION CONTROL FABRIC UNDER CB GRATE

STONE INLET PROTECTION DEVICE

NOT TO SCALE





#### <u>SILT FENCE NOTES</u>:

- 1. PREASSEMBLED SILT FENCING AS MANUFACTURED FOR THIS PURPOSE IS ACCEPTABLE IN LIEU OF A FIELD CONSTRUCTED SILT FENCE UPON APPROVAL BY THE ENGINEER.
- 2. FILTER CLOTH SHALL HAVE APPROVED BACKING OR A BUILT—IN REINFORCED STRUCTURE, AS RECOMMENDED BY THE MANUFACTURER TO SUPPORT THE FILTER CLOTH.
- 3. SILT FENCE SHALL BE CONSTRUCTED AT LOCATIONS AS SHOWN ON PLANS OR WHERE DIRECTED BY THE ENGINEER.
- 4. THE CONTRACTOR SHALL MAINTAIN THE SILT FENCES DURING THE LIFE OF THE CONTRACT. SILT ACCUMULATIONS SHALL BE REMOVED AND THE FENCES SHALL REMAIN IN PLACE.
- 5. THE CONTRACTOR SHALL BE REQUIRED TO PREVENT SOIL EROSION FROM LEAVING THE CONSTRUCTION AREA.
- 6. AFTER AN ACCEPTABLE STAND OF TURF HAS BEEN ESTABLISHED, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE SILT FENCE.

STANDARD TEMPORARY SILT FENCE

(TEMPORARY, TO BE REMOVED PRIOR TO FINAL PAVING)

NOT TO SCALE



MANAGEMENT • DEVELOPMENT

18 CONSTITUTION DR. SUITE 8

BEDFORD, NH 03110

TEL: (603) 637-1043

FAX: (866) 783-7101

www.dubois-king.com

LACONIA, NH

RANDOLPH, VT

SOUTH BURLINGTON, VT

SPRINGFIELD, VT

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# NOT FOR CONSTRUCTION PRELIMINARY PLANS

PROFESSIONAL SEAL

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MTO	MEF
MTO	DUP
MTO	DUP
DUP MTO	DUP

TOWN OF BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

SHEET TITLE

DETAILS

DRAWN BY	DATE
DUP	FEB 2015
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JAA	323146P
PROJ. ENG.	D&K ARCHIVE #
MTO	

DRAWING NO.

SHEET 7 OF 14

00 - Barrington Town Office Organization

PERFORATED
6" HDPE
W/ SMOOTH INTERIOR
(SEE PLANS FOR SIZE)
UNDISTURBED
SOIL

18"

NON-WOVEN -

GEOTEXTILE FABRIC

STONE DRIP EDGE DETAIL

NOT TO SCALE

#### GENERAL EROSION AND SEDIMENTATION CONTROL NOTES:

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN THE NEW HAMPSHIRE DEPARTMENT OF EROSION CONTROL BEST MANAGEMENT PRACTICES (TO BE INSTALLED AT A MINIMUM) ARE SHOWN ON THE PLAN SET HEREIN.

- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3 - EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION", PUBLISHED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES); DATED DECEMBER 2008 (OR CURRENT EDITION)
- 2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL BE MAINTAINED IN AN UNTREATED OR UNVEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL, ALL DISTURBED AREAS SHALL NOT BE LEFT BARE FOR MORE THAN 30 DAYS. SHALL BE STABILIZED IN A MANNER TO MITIGATE EROSION OR SEDIMENTATION FROM EXITING THE LIMIT OF WORK AND SHALL BE RESTORED IN-KIND UPON COMPLETION OF THE PROJECT. THE MAXIMUM AREA ALLOWED TO BE DISTURBED AND LEFT UNSTABILIZED IS TWO (2) ACRES AT ANY ONE TIME
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT, MONITOR AND MAINTAIN ALL EROSION CONTROL STRUCTURES; SEE EROSION CONTROL - INSPECTION, MONITORING & MAINTENANCE NOTES LOCATED HEREIN.
- SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, STABILIZED CONSTRUCTION ENTRANCES, ETC.) SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF UP-GRADIENT DRAINAGE AREAS.
- 5. ALL EXISTING STORM DRAINAGE INLETS SHALL BE PROTECTED BY STONE INLET PROTECTION DEVICES 3. AT LEAST ONCE EVERY 7 CALENDAR DAYS AND DURING OR WITHIN 24 HOURS OF ANY RAIN EVENT AND CATCH BASIN FILTER BASKETS TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS INTO THE STORM DRAIN SYSTEM.
- 6. NO TREES ARE TO BE REMOVED FROM AREAS OUTSIDE THE LIMITS OF GRADING OR FROM SPECIFICALLY DESIGNATED UNDISTURBED AREAS WITHIN THE CONSTRUCTION AREA. IF TREES DESIGNATED TO BE SAVED ARE DAMAGED, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THEM AT NO COST TO THE OWNER OR OWNER'S REPRESENTATIVE.
- SLOPES, EITHER PERMANENT OR TEMPORARY, BETWEEN SLOPES 3 HORIZONTAL TO ONE VERTICAL (3:1) TO TWO HORIZONTAL TO ONE VERTICAL (2:1) SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS AND ANCHORED MULCH NETTING (100% BIODEGRADABLE - PLASTIC NETTING WILL NOT BE ALLOWED - AND BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS). SLOPES BETWEEN TWO HORIZONTAL TO ONE VERTICAL (2:1) AND ONE AND ONE-HALF HORIZONTAL TO ONE VERTICAL (1.5:1) SHALL BE STABILIZED WITH RIPRAP. SLOPES STEEPER THAN ONE AND ONE-HALF HORIZONTAL TO ONE VERTICAL (1.5:1) SHALL BE DESIGNED BY A GEOTECHNICAL ENGINEER.
- 8. CUT AND FILL AREAS ARE TO BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 72 HOURS FOLLOWING FINAL GRADING.
- 9. ALL AREAS OF EXPOSED OR DISTURBED SOIL OTHER THAN THE NEWLY STABILIZED STREAM BANK TO BE STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 45 DAYS FROM THE TIME OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT
- 10. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, SEED SHOULD BE PLACED FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS (NOVEMBER THROUGH MARCH). SEE WINTER CONSTRUCTION NOTES. PLANT ANNUAL RYE GRASS PRIOR TO OCTOBER 15TH.
- 11. AFTER OCTOBER 15TH: WHERE MULCH IS USED, IT SHALL BE APPLIED AT TWICE THE RATE AS DURING REGULAR CONSTRUCTION SEASON TO PROVIDE ADDITIONAL PROTECTION. SNOW AND ICE SHALL BE REMOVED TO A THICKNESS LESS THAN ONE INCH BEFORE APPLYING MULCH (IF APPLICABLE) TO DISTURBED SOILS. WHERE FINISHED GRADE IS ACHIEVED, OR BEFORE FORECASTED THAW OR SPRING MELT, MULCH MUST BE SECURED WITH EROSION CONTROL NETTING, TRACKING, OR OTHER METHOD. DIVERSION SWALES OR DITCHES WITHOUT STABILIZED VEGETATION BY OCTOBER 15TH SHALL BE STABILIZED WITH STONE FILL OR EROSION CONTROL NETTING AS APPROVED BY OWNER OR OWNER'S DESIGNATED REPRESENTATIVE.
- 12. ONCE DISTURBED AREAS HAVE BEEN STABILIZED AND VEGETATION IS ESTABLISHED, ALL TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE SHALL BE REMOVED. AREAS DISTURBED BY REMOVAL OF THESE MEASURES SHALL BE IMMEDIATELY SEEDED ACCORDING TO SEEDING SPECIFICATIONS ON THESE DRAWINGS.
- 13. SPECIES CONSIDERED LOCALLY INVASIVE OR NOXIOUS MAY NOT BE USED.
- 14. USE ONLY NON-PHOSPHATE FERTILIZERS WITHIN 20' OF SURFACE WATERS.
- 15. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND RE-GRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
- 16. RE-VEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND RE-VEGETATED AS FOLLOWS:
- 16.1. A MINIMUM OF FOUR (4) INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
- 16.2. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT DEEMED FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P205-K20) OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLÙS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1.000 SQ. FT.).
- 16.3. FOLLOWING SEED BED PREPARATION. DITCHES AND BACK SLOPES WILL BE SEEDED WITH A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED WITH A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYE GRASS: SEEDING RATE IS 1.03 LBS PER 1000 SQ. FT. LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED.
- 16.4. HAY MULCH AT THE RATE OF 70-90 LBS PER 1000 SQUARE FEET OR A HYDRO-APPLICATION OF CELLULOSE FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER WILL BE USED ON HAY MULCH FOR WIND CONTROL.
- 17. AN AREA IS CONSIDERED "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 RIP RAP OR A CERTIFIED COMPOST BLANKET) HAS BEEN INSTALLED; OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

#### EROSION CONTROL - INSPECTION, MONITORING & MAINTENANCE

- 1. THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE REQUIREMENTS OF THE NPDES CGP.
- OF ENVIRONMENTAL SERVICES (NHDES) STORMWATER MANUAL, VOLUME 3. THE PROPOSED LOCATIONS 2. THE CONTRACTOR SHALL MAINTAIN INSPECTION AND REPAIR REPORTS OF EROSION AND SEDIMENT CONTROL MONITORING AND THESE SHALL BE KEPT AT THE PROJECT SITE DURING CONSTRUCTION. THE REPORTS SHALL INCLUDE THE FOLLOWING:
  - 2.1. THE INSPECTION DATE;
  - 2.2. NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
  - 2.3. WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION;
  - 2.4. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
  - 2.5. LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED;
  - 2.6. LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR 2. SEEDBED PREPARATION: A PARTICULAR LOCATION;
  - 2.7. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND,
  - 2.8. CORRECTIVE ACTION REQUIRED INCLUDING IMPLEMENTATION DATES
  - IN WHICH 1/2 -INCH OF PRECIPITATION OR MORE FALLS WITHIN A 24-HOUR PERIOD. THE CONTRACTOR SHALL HAVE QUALIFIED PERSONNEL INSPECT ALL CLEARED AND GRADED AREAS OF THE CONSTRUCTION SITE AND ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
  - 4. THIS INSPECTION WILL VERIFY THAT ALL EROSION CONTROL DEVICES ARE IN GOOD AND WORKING CONDITION. DISCHARGE LOCATIONS WILL BE INSPECTED TO VERIFY THAT SEDIMENTS ARE NOT ENTERING THE DRAINAGE SYSTEM AND ARE NOT EXITING THE PROJECT SITE. VEHICLE ACCESS LOCATIONS WILL BE INSPECTED FOR EVIDENCE OF SEDIMENT TRACKING INTO THE PUBLIC RIGHT-OF-WAY.
  - 5. ANY OBSERVED ACCUMULATION OF SEDIMENT OFF THE SITE WILL BE IMMEDIATELY REMOVED AND THE AREA RESTORED TO PRE-CONSTRUCTION CONDITIONS.
  - INSPECTION SHALL VERIFY THAT ANY TEMPORARY MEASURES BEING USED BY THE CONTRACTOR ARE CONSTRUCTED AND OPERATING IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS. MEASURES SHALL BE REPAIRED AND ACCUMULATION OF SEDIMENTS SHALL BE CLEANED AS NEEDED. 3. SEEDING

#### EROSION CONTROL - WINTER CONSTRUCTION

FOR SITE WORK CONSTRUCTION BETWEEN OCTOBER 15TH AND EARLY APRIL THE CONTRACTOR SHALL FOLLOW WINTER CONSTRUCTION EROSION PROTECTION METHODS AS DESCRIBED BELOW:

- 1. CHECK ALL PERIMETER EROSION CONTROL MEASURES AND COMPLETE ANY REQUIRED MAINTENANCE AND REPAIR BEFORE THE GROUND FREEZES.
- 2. PUT IN PLACE ANY ADDITIONALLY NECESSARY EROSION CONTROL MEASURES; DIVERSION DIKES, HAY BALES, SILT FENCE, SEDIMENT TRAPS AND/OR BASINS, ETC. TO PROTECT DOWNSTREAM WATER QUALITY FROM ANTICIPATED WINTER WORK PRIOR TO GROUND FREEZING.
- 3. 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 EVENTS.
- ALL DITCHES OR SWALES THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH OR THAT ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 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, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- 6. INSPECT THE EROSION AND SEDIMENT CONTROL MEASURES MORE FREQUENTLY THAN IS SPECIFIED IN THE EROSION CONTROL INSPECTION, MONITORING, AND MAINTENANCE SPECIFICATIONS FOUND ON THIS SHEET DURING THE WINTER AND SPRING THAW MONTHS TO PREVENT FAILURE AND/OR
- 7. BEFORE PREDICTED THAWS AND/OR HEAVY RAIN EVENTS CHECK ALL MEASURES TO ENSURE THAT THEY WILL BE ABLE TO HANDLE POTENTIALLY HEAVY AND INTENSE RUNOFF AND SEDIMENTATION.
- 8. CONTRACTOR SHALL BE PREPARED TO INSTALL A SECOND LINE OF DEFENSE IF PROBLEMS WITH IN-PLACE EROSION CONTROL MEASURES OCCUR DURING WINTER THAW AND SPRING RAIN EVENTS.
- 9. AS EARLY AS PRACTICAL AT THE BEGINNING OF THE NEXT GROWING SEASON, CONTRACTOR SHALL STABILIZE COMPLETED AREAS WITH PERMANENT VEGETATIVE CONTROLS AS SPECIFIED ON THESE DRAWINGS.

#### EROSION CONTROL - SOIL STOCKPILE PRACTICES:

- 1. STOCKPILES SHALL BE LOCATED A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES, AND INLETS.
- 2. STOCKPILES SHALL BE PROTECTED FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS DIVERSIONS, BERMS, SANDBAGS, OR OTHER APPROVED PRACTICE.
- 3. STOCKPILES SHALL BE SURROUNDED BY SEDIMENT BARRIERS TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.
- 4. STOCKPILES SHALL BE PROTECTED FROM WIND EROSION CONTROL PRACTICES AS APPROPRIATE.
- 5. PROTECTION OF INACTIVE STOCKPILES: 5.1. COVER WITH ANCHORED TARPS OR PROTECT WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS AT ALL TIMES.
- 5.2. CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS, AND OTHER SIMILAR MATERIALS TO BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY ARE TO BE COVERED.
- 6. PROTECTION OF ACTIVE STOCKPILES:
- 6.1. SURROUND WITH TEMPORARY LINEAR SEDIMENT BARRIERS PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS TO BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER TO BE INSPECTED AT THE END OF EACH WORKING DAY.
- 6.2. WHEN A STORM EVENT IS PREDICTED, STOCKPILES TO BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.
- 7. MAINTENANCE REQUIREMENTS: 7.1. INSPECT ALL SOIL STOCKPILES IMMEDIATELY AFTER STORM EVENTS AND AT THE FREQUENCIES SPECIFIED IN THE PROJECT EROSION AND SEDIMENT CONTROL PLAN AND IN APPLICABLE PERMITS. AT A MINIMUM, INSPECT WEEKLY DURING WET WEATHER PERIODS TO VERIFY THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND FUNCTIONING PROPERLY.
- 7.2. REPAIR AND/OR REPLACE PERIMETER CONTROLS AND STOCKPILE COVERINGS AS NEEDED TO KEEP THEM FUNCTIONING PROPERLY.

#### EROSION CONTROL - TEMPORARY VEGETATED SPECIFICATIONS:

TEMPORARY VEGETATIVE COVER SHOULD BE APPLIED WHERE EXPOSED SOIL SURFACES WILL NOT BE FINAL GRADED WITHIN 45 DAYS FROM INITIAL DISTURBANCE, SUCH AREAS INCLUDE EXCAVATED AREAS, SOIL STOCKPILES, BERMS, EMBANKMENTS AND SIDES OF SEDIMENT BASINS, TEMPORARY ROAD BANKS, AND OTHER EARTHWORKS.

- 1.1. INSTALL NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS, DIVERSIONS, AND SEDIMENT TRAPS.
- 1.2. GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDBED PREPARATION. SEEDING. MULCH APPLICATION, AND MULCH ANCHORING.
- 1.3. RUNOFF SHOULD BE DIVERTED FROM THE SEEDED AREA.
- 1.4. ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHOULD INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

- 2.1. STONES AND TRASH SHALL BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
- 2.2. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
- 2.3. IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING THE GROWING SEASON.
  - 2.3.1. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES. OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1.000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER1 (N-P205-K20) OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).
- 2.3.2. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE (LESS THAN 2% PHOSPHORUS), SLOW RELEASE NITROGEN (AT LEAST 50% SLOW RELEASE COMPONENT) FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF A SURFACE WATER BODY. THESE LIMITATIONS ARE REQUIREMENTS FOR ANY WATER BODY PROTECTED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT.

- 3.1. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2-INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING
- 3.2. TEMPORARY SEEDING SHOULD TYPICALLY OCCUR PRIOR TO SEPTEMBER 15TH.
- 3.3. AREAS SEEDED BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
- 3.4. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR WINTER PROTECTION.

#### 3.5. RECOMMENDED SEEDING:

<u>SPECIES</u>	LBS/Ac	LBS/1k S.F.	<u>REMARKS</u>
WINTER RYE	112	2.5	FALL SEEDING (8/15-9/15). SEED TO A 1" DEPTH.
OATS	80	2.0	SPRING SEEDING $(4/15-5/15)$ . SEED TO A 1" DEPTH.
ANNUAL RYEGRASS	40	1.0	EARLY SPRING/FALL SEEDING. 1/4" COVER OVER SEED
PERENNIAL RYEGRAS	S 30	0.7	SUMMER/FALL SEEDING. SEED TO 1/2" DEPTH.

- 4. MAINTENANCE REQUIREMENTS 4.1. TEMPORARY SEEDING SHOULD BE INSPECTED WEEKLY AND AFTER ANY RAINFALL EXCEEDING ½ INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES.
- 4.2. TEMPORARY SEEDING SHOULD BE INSPECTED JUST PRIOR TO SEPTEMBER 15. TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
- 4.3. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS. IF IT IS TOO LATE IN THE PLANTING SEASON TO APPLY ADDITIONAL SEED, THEN OTHER TEMPORARY STABILIZATION MEASURES SHOULD BE IMPLEMENTED.
- 4.4. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.
- 4.5. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS SHOULD BE RESEEDED, WITH OTHER TEMPORARY MEASURES (E.G., MULCH) USED 4. HYDROSEEDING: TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

#### <u>EROSION CONTROL - PERMANENT VEGETATED SPECIFICATIONS</u>

#### 1. SITE PREPARATION:

- 1.1. INSTALL NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS DIVERSIONS, AND SEDIMENT TRAPS.
- 1.2. GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
- 1.3. RUNOFF SHOULD BE DIVERTED FROM THE SEEDED AREA.
- 1.4. ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHOULD INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

#### 2. SEEDBED PREPARATION:

THE GROWING SEASON.

- 2.1. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
- 2.2. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.

2.4. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A

- 2.3. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED AS ABOVE.
- 2.5. IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING

DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.

- 2.5.1. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER1 (N-P205-K20) OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).
- 2.5.2. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE (LESS THAN 2% PHOSPHORUS), SLOW RELEASE NITROGEN (AT LEAST 50% SLOW RELEASE COMPONENT) FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF A SURFACE WATER BODY. THESE LIMITATIONS ARE REQUIREMENTS FOR ANY WATER BODY PROTECTED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT.

#### 3.1. INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE AND AMOUNT OF INOCULANT.

- 3.2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
- 3.3. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
- 3.4. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST. WHEN CROWN VETCH IS SEEDED IN LATER SUMMER, AT LEAST 35% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES. MULCH ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING PRACTICE," AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- 3.4.1. TEMPORARY SEEDING SHOULD TYPICALLY OCCUR PRIOR TO SEPTEMBER 15TH.
- 3.4.2. AREAS SEEDED BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE PRESENTED IN THE "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL VOLUME 3 — CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS
- 3.5. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED. IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION, AND COMPLETE PERMANENT SEED STABILIZATION DURING THE NEXT GROWING SEASON

#### 4.1. WHEN HYDROSEEDING (HYDRAULIC APPLICATION). PREPARE THE SEEDBED AS SPECIFIED ABOVE OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.

- 4.2. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
- 4.3. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
- 4.4. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
- 4.5. RECOMMENDED SEEDING:

SPECIES TALL FESCUE LBS/Ac LBS/1k S.F. 0.45 CREEPING RED FESCUE 20 0.45 REDTOP 0.95 TOTAL

- 5. MAINTENANCE REQUIREMENTS
- 5.1. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
- 5.2. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
- 5.3. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS.
- 5.4. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.
- 5.5. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS SHOULD BE RESEEDED, WITH OTHER TEMPORARY MEASURES (E.G., MULCH) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

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### NOT FOR | CONSTRUCTION **PRELIMINARY PLANS**

PROFESSIONAL SEAL

В	DESCRIPTION	DATE	NO.	
ME	ADD SHEETS C1.5—1.8	3/4/2015	_	
ΠO	PREOGRESS SET FOR BUDGET UPDATE	10/26/2015	2	
NO	95% FINAL REVIEW SET	11/23/2015	3	
NO	BID AND CONSTRUCTION SET	12/11/2015	4	
	) N	G C		

TOWN OF BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

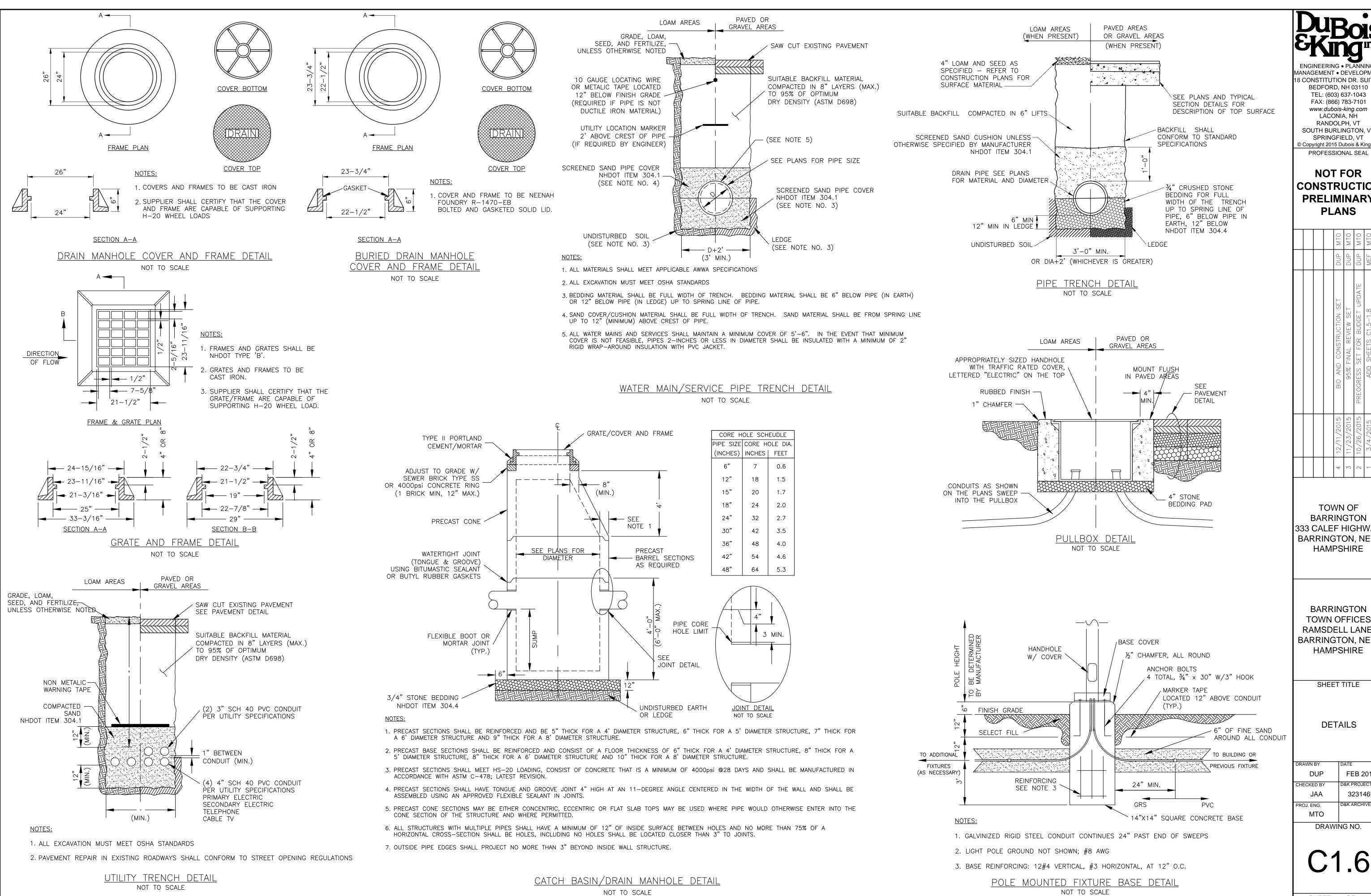
SHEET TITLE

**DETAILS** 

RAWN BY FEB 2015 CHECKED BY &K PROJECT# 323146P D&K ARCHIVE # ROJ. ENG.

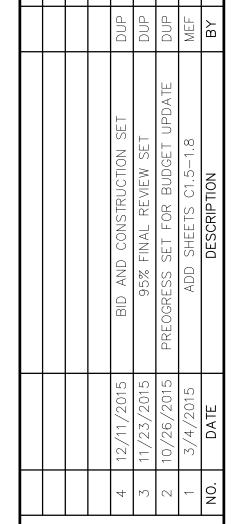
DRAWING NO.

SHEET 8 OF 14



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#### **NOT FOR** CONSTRUCTION **PRELIMINARY PLANS**



**TOWN OF** BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

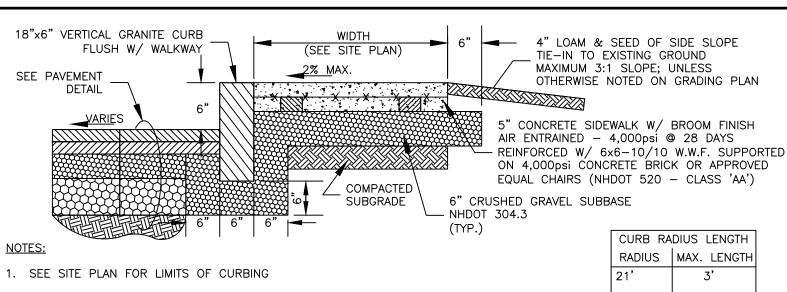
BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

SHEET TITLE

DETAILS

FEB 2015 CHECKED BY 323146P D&K ARCHIVE # PROJ. ENG.

SHEET 9 OF 14



MAXIMUM ALLOWABLE SIDEWALK SLOPE IN ALL DIRECTIONS SHALL BE IN ACCORDANCE WITH 22'-28' AMERICAN DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN; CROSS-SLOPE SHALL BE NO LESS THAN 1% AND NO GREATER THAN 2% . ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS 36'-42'

4. ADJOINING STONES SHALL HAVE THE SAME (OR APPROX.) LENGTH

MINIMUM LENGTH OF CURB STONES = 3'

6. MAXIMUM LENGTH OF CURB STONES = 10'

1. SEE SITE PLAN FOR LIMITS OF CURBING

3. MINIMUM LENGTH OF CURB STONES = 3

4. MAXIMUM LENGTH OF CURB STONES = 10'

CURVES SHALL BE PER THE ABOVE CHART

LENGTH

2. ADJOINING STONES SHALL HAVE THE SAME (OR APPROX.)

5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON

6. REMOVE ALL UNSUITABLE MATERIAL BELOW PAVEMENT

7. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE

BEDROCK TO A MINIMUM OF 6" BELOW THE SUB-BASE

SECTION TO THE SATISFACTION OF THE ENGINEER

MATERIAL AND REPLACE WITH BANKRUN GRAVEL

CRUSHED GRAVEL

NHDOT 304.3

SEE PAVEMENT

(TYP.)

DETAIL

MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES — SEE CHART

3. REMOVE ALL UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER

9. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE BEDROCK TO A MINIMUM OF 6" BELOW THE SUB-BASE MATERIAL AND REPLACE WITH BANKRUN GRAVEL

10. SUBGRADE MATERIAL SHALL BE SHAPED AND COMPACTED TO AN EVEN SURFACE. ALL SOFT AND YIELDING MATERIAL SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL

11. 1/4" RADIUS x 1/2" WIDE x 1/2" DEPTH TOOLED CONTROL JOINTS SHALL BE LOCATED 5' O.C.

12. 1/2" EXPANSION JOINTS SHALL CONFORM TO AASHTO M153, TYPE III OR AASHTO M213 AND BE LOCATED 20' O.C.

13. PROTECTIVE COATING SHALL BE SILANE/SILOXANE AND APPLIED IN ACCORDANCE WITH NHDOT 534.2.2 AND 534.3; RESPECTIVELY

CONCRETE SIDEWALK w/ VERTICAL GRANITE CURB DETAIL NOT TO SCALE

#### (SEE SITE PLAN) - x - x - x - x - x 6" CONCRETE 6" CRUSHED 4,000psi W/ WIRE GRAVEL SUBBASE MESH (NHDOT 304.3) COMPACTED **SUBGRADE**

ACCEPTABLE MATERIAL

43'-49

50'-56'

57'-60'

3" X 3" BEVEL

SEE PAVEMENT

CONCRETE

MOUNTABLE GRANITE CURB DETAIL

NOT TO SCALE

CLASS

CRUSHED GRAVEL

NHDOT ITEM 304.3

98% COMPACTION

< 21'

29'-35

36'-42

43'—49'

50'-56'

57'-60'

OVER 60'

A OR AA

DETAIL

1. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH NHDOT STANDARD **SPECIFICATIONS** 

2. REMOVE ALL UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER

3. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE BEDROCK TO A MINIMUM OF

6" BELOW THE SUB-BASE MATERIAL AND REPLACE WITH BANKRUN GRAVEL 4. SUBGRADE MATERIAL SHALL BE SHAPED AND COMPACTED TO AN EVEN SURFACE. ALL SOFT AND YIELDING MATERIAL SHALL BE REMOVED AND REPLACED WITH

5. 1/2" EXPANSION JOINTS SHALL CONFORM TO AASHTO M153, TYPE III OR AASHTO M213 AND BE LOCATED 20' O.C.

6. PROTECTIVE COATING SHALL BE SILANE/SILOXANE AND APPLIED IN ACCORDANCE WITH NHDOT 534.2.2 AND 534.3; RESPECTIVELY

NHDOT ITEM 609.01123

TRUCK APRON

STRAIGHT GRANITE CURB. 12" HIGH

RADIUS

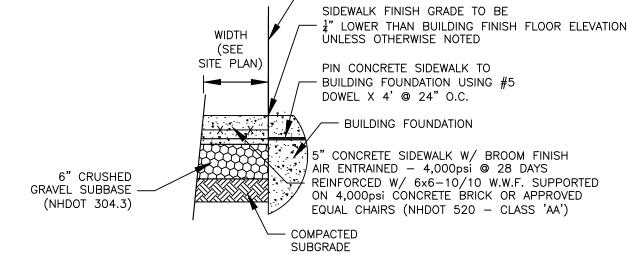
OVER 60

| MAX. LENGTH

CURVED CURB

W/ 3"X3" BEVELED MOUNTABLE EDGE

CONCRETE TRUCK APRON SECTION NOT TO SCALE



BUILDING AT DOOR OPENING

2. MAXIMUM ALLOWABLE SIDEWALK SLOPE IN ALL DIRECTIONS SHALL BE IN ACCORDANCE WITH AMERICAN DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN; CROSS-SLOPE SHALL BE NO LESS THAN 1% AND NO GREATER

3. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS

4. REMOVE ALL UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER

5. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE BEDROCK TO A MINIMUM OF 6" BELOW THE SUB-BASE MATERIAL AND REPLACE WITH BANKRUN GRAVEL

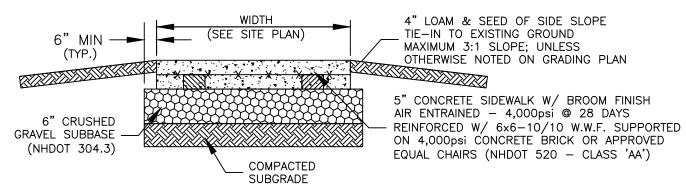
6. SUBGRADE MATERIAL SHALL BE SHAPED AND COMPACTED TO AN EVEN SURFACE. ALL SOFT AND YIELDING MATERIAL SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL

7. 1/4" RADIUS x 1/2" WIDE x 1/2" DEPTH TOOLED CONTROL JOINTS SHALL BE LOCATED 5' O.C.

8. 1/2" EXPANSION JOINTS SHALL CONFORM TO AASHTO M153, TYPE III OR AASHTO M213 AND BE LOCATED 20' O.C.

9. PROTECTIVE COATING SHALL BE SILANE/SILOXANE AND APPLIED IN ACCORDANCE WITH NHDOT 534.2.2 AND 534.3; RESPECTIVELY

#### CONCRETE SIDEWALK AT DOOR DETAIL NOT TO SCALE



<u>Design Specific Geometric Information</u>

2. MAXIMUM ALLOWABLE SIDEWALK SLOPE IN ALL DIRECTIONS SHALL BE IN ACCORDANCE WITH AMERICAN DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN; CROSS-SLOPE SHALL BE NO LESS THAN 1% AND NO GREATER THAN 2%

3. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS

4. REMOVE ALL UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER

5. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE BEDROCK TO A MINIMUM OF 6" BELOW THE SUB-BASE MATERIAL AND REPLACE WITH BANKRUN GRAVEL

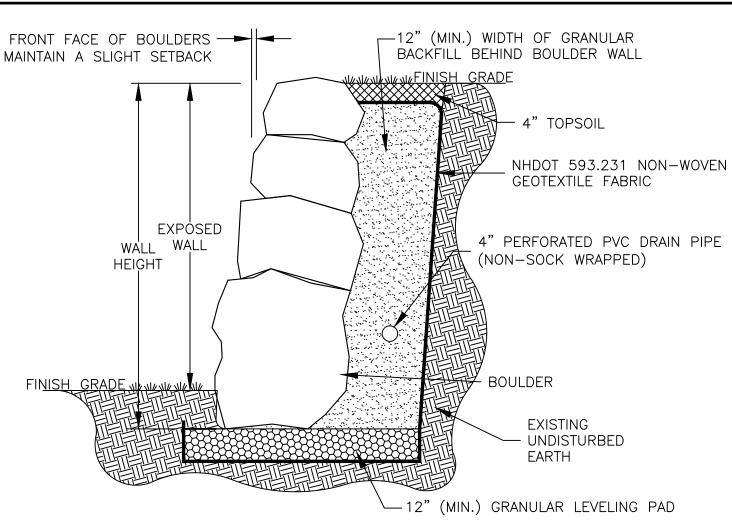
6. SUBGRADE MATERIAL SHALL BE SHAPED AND COMPACTED TO AN EVEN SURFACE. ALL SOFT AND YIELDING MATERIAL SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL

7. 1/4" RADIUS x 1/2" WIDE x 1/2" DEPTH TOOLED CONTROL JOINTS SHALL BE LOCATED 5' O.C.

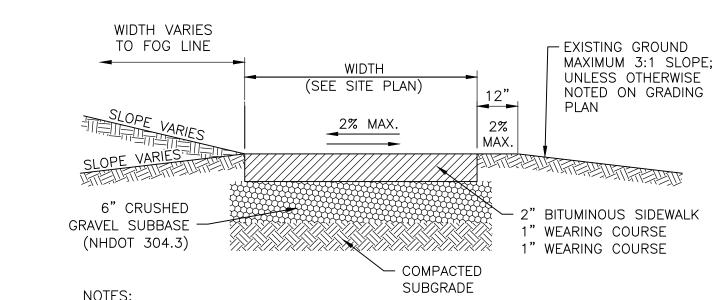
8. 1/2" EXPANSION JOINTS SHALL CONFORM TO AASHTO M153, TYPE III OR AASHTO M213 AND BE LOCATED 20' O.C.

9. PROTECTIVE COATING SHALL BE SILANE/SILOXANE AND APPLIED IN ACCORDANCE WITH NHDOT 534.2.2 AND 534.3; RESPECTIVELY

#### CONCRETE SIDEWALK DETAIL NOT TO SCALE



### BOULDER RETAINING WALL DETAIL NOT TO SCALE



MAXIMUM ALLOWABLE SIDEWALK SLOPE IN ALL DIRECTIONS SHALL BE IN ACCORDANCE WITH AMERICAN DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN; CROSS-SLOPE SHALL BE NO LESS THAN 1% AND NO GREATER THAN 2%.

2. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS.

3. REMOVE ALL UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER.

4. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE BEDROCK TO A MINIMUM OF 6" BELOW THE SUB-BASE.

5. SUBGRADE MATERIAL SHALL BE SHAPED AND COMPACTED TO AN EVEN SURFACE. ALL SOFT AND YIELDING MATERIAL SHALL BE REMOVED AND REPLACED WITH BANKRUN GRAVEL MATERIAL.

6. IN NON-CURB AREAS PAVEMENT SUB-BASE MATERIAL SHALL EXTEND 3' BEYOND EDGE-OF-PAVEMENT.

JOINTING SAND

SUBGRADE

TYPICAL AT GRADE BITUMINOUS SIDEWALK DETAIL NOT TO SCALE

UNILOCK PAVERS

(2 3/8", 60mm)

BEDDING SAND (1", 25mm)

AGGREGATE BASE

(Minimum 4", 100mm)

# N/A None 153 (6) NR

Retaining Wall **Gravity Section** 690mm (2.26ft) Site: 3H: 1V Slope-Clays Infill: Granular

PLASTIC EDGE RESTRAINT GALVANIZED **SPIKE (10")** PEDESTRIAN APPLICATION Plastic Edging This cross section is intended for preliminary design purposes only. A qualified professional Engineer should approve the final design and confirm site conditions.

Designed to be a step ahead

1-800-UNILOCK

www.unilock.com

Cross Section

SCALE

EDGER.DWG

SHEET 10 OF 14

DRAWING NO.

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TEL: (603) 637-1043

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PROFESSIONAL SEAL

**NOT FOR** 

CONSTRUCTION

**PRELIMINARY** 

**PLANS** 

TOWN OF

BARRINGTON

333 CALEF HIGHWAY

BARRINGTON, NEW

HAMPSHIRE

BARRINGTON

**TOWN OFFICES** 

RAMSDELL LANE,

BARRINGTON, NEW

HAMPSHIRE

SHEET TITLE

**DETAILS** 

FEB 2015

&K PROJECT#

323146P

O&K ARCHIVE #

RAWN B

CHECKED BY

ROJ. ENG.

RADIUS MAX. LENGTH CURVED CURB 10'

**12" →** 5"

1. SEE SITE PLAN FOR LIMITS OF CURBING

2. ADJOINING STONES SHALL HAVE THE SAME (OR APPROX.) IENGTH

3. MINIMUM LENGTH OF CURB STONES = 3

4. MAXIMUM LENGTH OF CURB STONES = 10'

5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES SHALL BE PER THE ABOVE CHART

6. REMOVE ALL UNSUITABLE MATERIAL BELOW PAVEMENT SECTION TO THE SATISFACTION OF THE ENGINEER

6" BELOW THE SUB-BASE MATERIAL AND REPLACE WITH BANKRUN GRAVEL VERTICAL GRANITE CURB DETAIL

NOT TO SCALE

7. IN THE EVENT BEDROCK IS ENCOUNTERED, EXCAVATE BEDROCK TO A MINIMUM OF

TYPICAL SECTION - NOT FOR CONSTRUCTION Retaining Wall System Geogrid Type nd Manufacture Maximum Heigh mm (in) 690 (27) Geogrid LTD kN/m (lb/f Coping Unit Maximum Slo Above Wall 1V: 3H Below Wall Max. Surcharg Above Wall kPa (lb/sq.f None Embedmer mm (in) ConcordWall Batter of Wall 610 x 153 (24 x 6) 9.5 ° Standard Unit Design Specific Soil Information fill/Retained Perforated Drain Infill / Retained Foundation Base Drainage with Filter Sock [conn. to positive outlet] CL GW
Inorganic Clays Well graded, free see infill (by USCS) Low Plasticity draining Granular Effective Internal Friction 39° Angle Moist Unit 20 (127) 18 (115) 22 (140) 13 (270) Placed in 150mm (6") stone placed at 1H:1V from compacted to 95% SPD.

Angular drain stone placed at 1H:1V from heel of wall as shown

Allowable bearing cap. (free draining) compacted to 98% SPD.

Gravel infill must be gap compacted to 98% SPD.

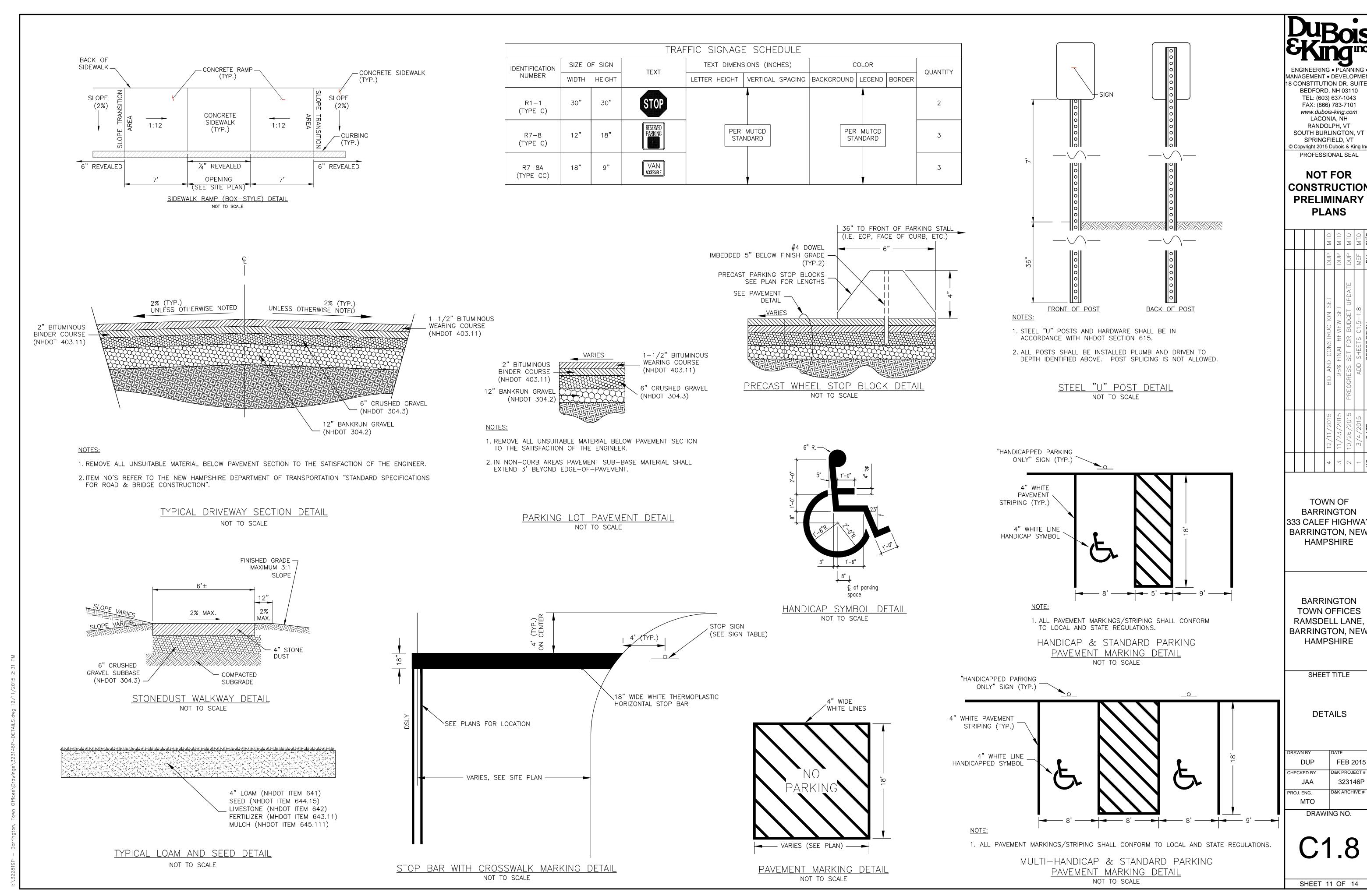
Gravel infill must be gap compacted to 98% SPD.

Gravel infill must be gap compacted to 98% SPD. Compacted Granular Base Filter Cloth Notes:

1. This design meets or exceeds the minimum factors of safety required by Risi Stone Systems based on the design parameters listed above. The analysis was performed as outlined in the National Concrete Masonry Association Design Manual for Segmental Retaining Walls, Second Edition. This is a typical, non site—specific Design.

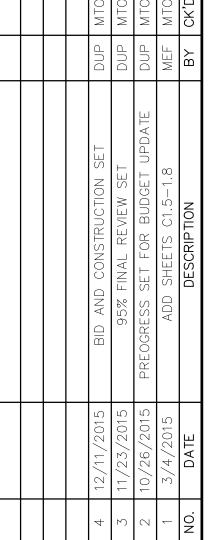
2. No analysis of global stability, total or differential settlement, or seismic effects has been performed. 3. This design is only provided to illustrate the general arrangement of the SRW structure for preliminary costing and feasibility purposes only. This drawing is not for construction. A qualified Engineer must be retained to provide the Final Design prior to construction. 4. Structures such as handrails, guardrails, fences, terraces, and site conditions such as water applications, drainage and soil conditions, additional live and dead loads, etc., have significant effects on the wall design and have not been taken into account in this typical section. When accounted for in the Final Design, other conditions and elements may result in additional design measures (geogrid, drainage, etc) and cost. |ConcordWall® **RisiStone**® Buffalo · Boston · Chicago · Cleveland Detroit • New York • Philadelphia • Toronto www.risistone.com © 2010 Risi Stone Systems CW1GBSAI069 Unilock is a licenced manufacturer of Risi Stone Systems

MODULAR WALLS TO BE DESIGNED BY WALL VENDOR. THESE DETAILS ARE GENERAL AND FOR INFORMATIONAL PURPOSES ONLY. WALL DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN NEW HAMPSHIRE.



MANAGEMENT • DEVELOPMEN 18 CONSTITUTION DR. SUITE BEDFORD, NH 03110 www.dubois-king.com SOUTH BURLINGTON, VT

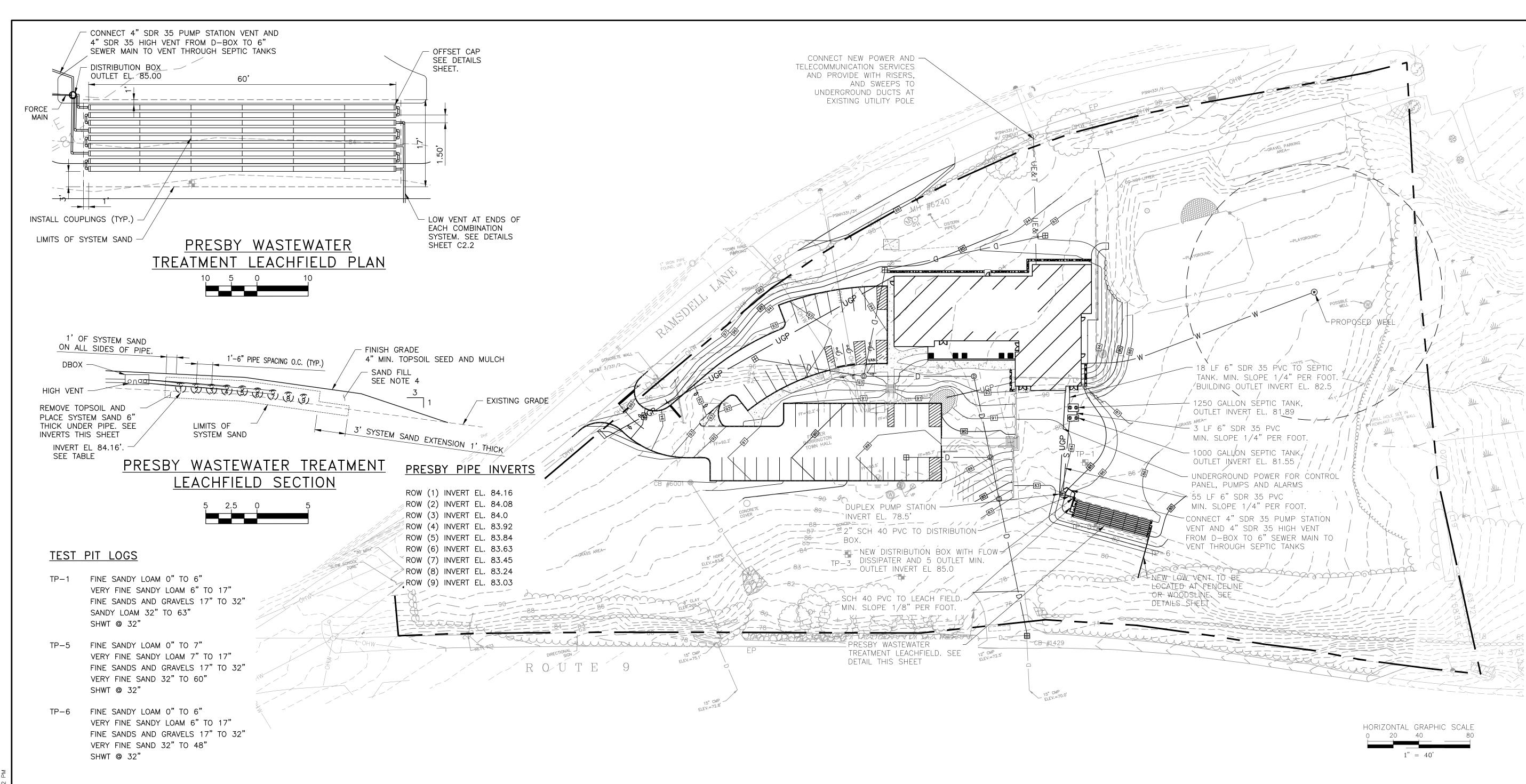
## CONSTRUCTION **PRELIMINARY**



BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW

> BARRINGTON **TOWN OFFICES** RAMSDELL LANE,

VN BY	DATE
DUP	FEB 2015
KED BY	D&K PROJECT#
JAA	323146P
. ENG.	D&K ARCHIVE #
MTO	



**DESIGN AND CONSTRUCTION NOTES:** 

- 1. THIS SYSTEM IS DESIGNED FOR TOWN OF BARRINGTON NH, TOWN OFFICES.
- THE WASTEWATER SYSTEM CONSISTS OF TWO SEPTIC TANKS IN SERIES, A DUPLEX PUMP STATION, AND PRESBY WASTEWATER TREATMENT SYSTEM WITH ENVIRO SEPTIC (ES) PIPE.
- 3. THE PRESBY WASTEWATER TREATMENT SYSTEM FOR ENVIRO—SEPTIC LEACHING PIPE SYSTEM SHALL BE INSTALLED BY A CONTRACTOR WHO IS CERTIFIED BY PRESBY WASTEWATER TREATMENT SYSTEMS. THE SYSTEM SHALL MEET ALL APPLICABLE REGULATIONS OF THE NEW HAMPSHIRE DESIGN AND INSTALLATION MANUAL 19.0 COMBINATION SERIAL DISTRIBUTION (SINGLE LEVEL) ENVIRO—SEPTIC LEACHING SYSTEMS AND THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES.
- 4. THE SYSTEM SAND SHALL MEET THE REQUIREMENTS OF THE NH DESIGN AND INSTALLATION MANUAL SECTION 30.1. SAND FILL SHALL MEET THE REQUIREMENTS OF SECTION 30.4.
- 5. SEE NH RULE ENV-WQ 1024.03 USE, REPAIR, AND REPLACEMENT OF INNOVATIVE/ALTERNATIVE TECHNOLOGY.
- 6. FOR THE PURPOSES OF THE BID, THE CONTRACTOR SHALL CARRY THE PRICE FOR THE FULL INSTALLATION OF THE WELL, CASING, PUMP, ELECTRICAL, CONTROLS, AND APPURTANANCES FOR THE COMPLETE INSTALLATION OF THE SYSTEM BASED ON THE FOLLOWING: TOTAL WELL DEPTH 200 FT., WELL DRILLER YIELD MIN. 5 GPM, AND 100 FT. OF 6" DIA. CASING.
- 7. CONTRACTOR SHALL COORDINATE WITH WELL DRILLER TO FURNISH AND INSTALL THE FOLLOWING HARDWARE, MATERIALS, AND FITTINGS: A 1 ½ HP STA-RITE PUMP, FINAL SELECTION TO BE DETERMINED AFTER DRILLING OF WELL. 1 ¼ PE4710 NSF61 POTABLE WATER DROP PIPE WITH A FLOMATIC SUBMERSIBLE PUMP CHECK INSTALLED AT PUMP AND AT EVERY 200' OF VERTICAL PIPE LENGTH. PROVIDE ALL FITTINGS AS REQUIRED TO TRANSITION FROM PUMP TO PE PIPE. PITLESS ADAPTER, AND 1 ½ PE4710 WELL SUPPLY MAIN FROM WELL TO BUILDING. COORDINATE WITH GC AND SITE CONTRACTOR TO PROVIDE4 PVC CASING THROUGH FOOTING AND SLAB, AND INSTALLPE PIPE TO 4" ABOVE SLAB. INCLUDE ALL FITTINGS AND ADAPTERS AS REQUIRED. ONCE WELL YIELD HAS BEEN DETERMINED CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO FINALIZE SIZE OF HYDROPNEUMATIC WELL TANK.

- 8. WATER QUALITY TESTING SHALL BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH THE STATE OF NEW HAMPSHIRE DRINKING WATER AND GROUND WATER PROTECTION DIVISION RULES. COPIES OF ALL TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER.
- 9. COPIES OF THE DRILLER LOG AND DRILLERS YIELD SHALL BE SUBMITTED TO THE ENGINEER AND THE STATE OF NEW HAMPSHIRE, DES, AS REQUIRED.
- 10. CONTRACTOR TO VERIFY INVERTS OF PRECAST COMPONENTS PRIOR TO INSTALLATION AND REPORT ANY DISCREPANCIES TO ENGINEER FOR APPROVAL.
- 11. HIGH VENT TO BE THROUGH SYSTEM AND OUT BUILDING ROOF.

#### **OPERATION AND MAINTENANCE NOTES:**

- 12. SEPTIC TANK SHOULD BE PUMPED OUT AND CLEANED EVERY THREE YEARS.
- 13. OWNER IS WARNED THAT GARBAGE DISPOSALS, LAUNDRY BLEACH, ANTI-BACTERIAL SOAP, HAZARDOUS MATERIALS, AND HOUSEHOLD CLEANERS WILL REDUCE THE LIFE OF SEPTIC SYSTEM.
- 14. IT IS THE OWNER'S RESPONSIBILITY TO BECOME FAMILIAR WITH THESE PLANS IN REGARDS TO THE OVERALL PROJECT AND FUTURE USE OF THE PROPERTY.
- 15. THE LEACHFIELD SHOULD BE MAINTAINED AS A MOWED LAWN AREA. HEAVY EQUIPMENT SHALL NOT BE ALLOWED ON THE LEACHFIELD AREA PRIOR, DURING OR FOLLOWING CONSTRUCTION.

DuBois EKing III

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TEL: (603) 637-1043

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PROFESSIONAL SEAL

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CK'D	ВУ	DESCRIPTION	DATE	NO.
MTO	MEF	GENERAL REVISIONS	3/4/2015	1
MTO	ANG	PROGRESS SET FOR BUDGET UPDATE	2 10/26/2015	2
DUP MTO	ana	95% FINAL REVIEW SET	3 11/23/2015	2
OLM	DUP	BID AND CONSTRUCTION SET	4   12/11/2015	4

TOWN OF BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

SHEET TITLE

WASTEWATER SITE PLAN

DRAWN BY	DATE
SANZ	FEB 2015
CHECKED BY	D&K PROJECT #
JAA	323146P
PROJ. ENG.	D&K ARCHIVE #
MTO	
DRAWI	NG NO.

C2.1

SHEET 12 OF 14

> - Barrington, Town Offices\Drawings\323146P-C1.1 SITE LAYOUT.dwg 12/11/2015 2:33

BASIS OF DESIGN — THE PRESBY WASTEWATER

TREATMENT SYSTEM - ENVIRO SEPTIC (ES)

VOLUME OF TANK WILL BE TWO TIMES DAILY FLOW

<u>USE:</u> (1) 1,250 GALLON PRECAST CONCRETE TANK

3. PERCOLATION RATE USE: 3 MIN PER INCH

(1) 1,000 GALLON PRECAST CONCRETE TANK

USE: PRESBY WASTEWATER TREATMENT - ENVIRO

USE: 9 ROWS OF 60' LENGTH SPACED AT 1'-6" ON CENTER

SEPTIC (ES) - COMBINATION SERIAL SYSTEM - RAISED

1. <u>DESIGN FLOW</u> = CALCULATED 1025 GPD

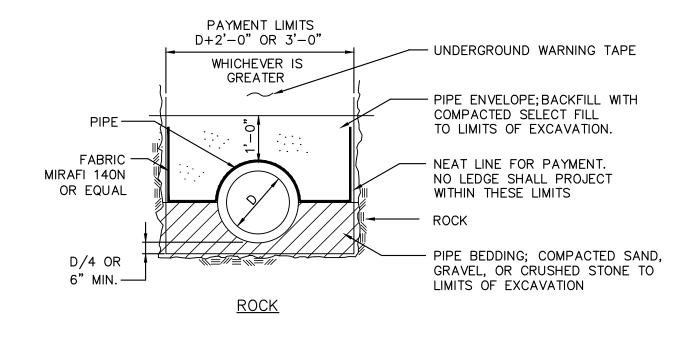
2. SEPTIC TANK SIZING

4. SYSTEM TYPE

5. SYSTEM DESIGN

SLOPING

PRESBY ENVIRO SEPTIC PIPE: (ES)

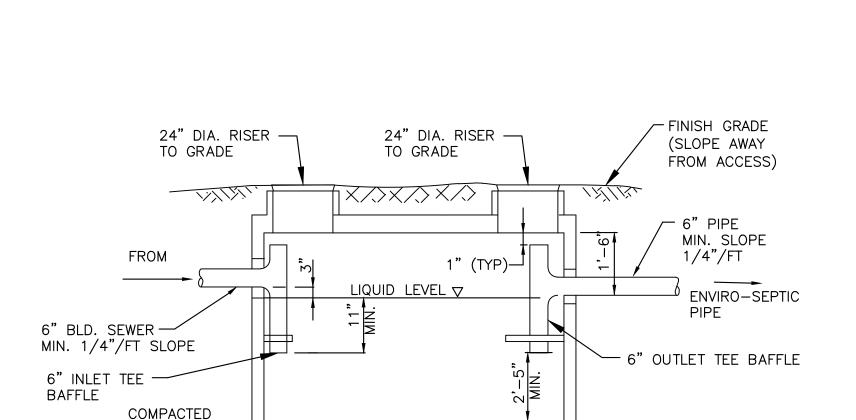


#### NOTE:

1. PROVIDE 4" RIGID FOAM INSULATION OVER PIPES AT BURIAL DEPTHS WHICH ARE LESS THAN 6'-0".

TYPICAL TRENCH SECTIONS

NOT TO SCALE



#### SEPTIC TANK NOTES:

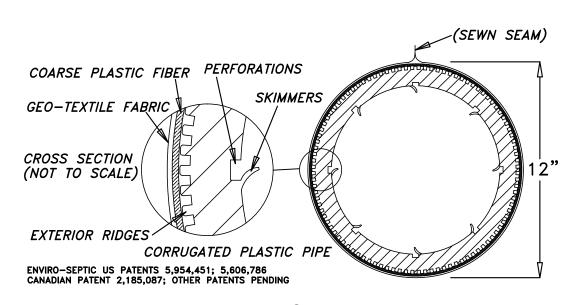
SCREENED

GRAVEL —

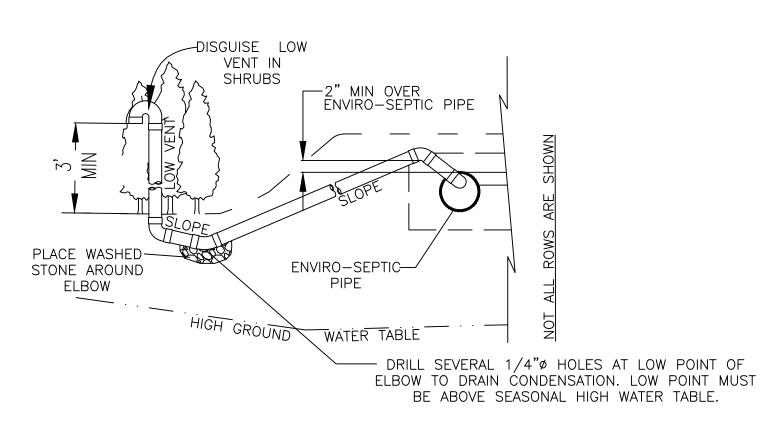
- 1. ALL JOINTS IN PRECAST SECTIONS TO BE SEALED WATERTIGHT WITH FLEXIBLE MASTIC JOINT COMPOUND.
- 2. PRECAST REINFORCED CONCRETE SECTIONS SHALL BE IN ACCORDANCE WITH ASTM C-478 CONCRETE STRENGTH (fc) (TYPE II CEMENT): 4000 PSI.
- 3. USE NON-SHRINK GROUT AROUND PIPE OPENINGS.
- 4. FOR SEPTIC TANK LOCATION SEE SITE PLAN.

PRECAST SEPTIC TANK DETAIL

NOT TO SCALE



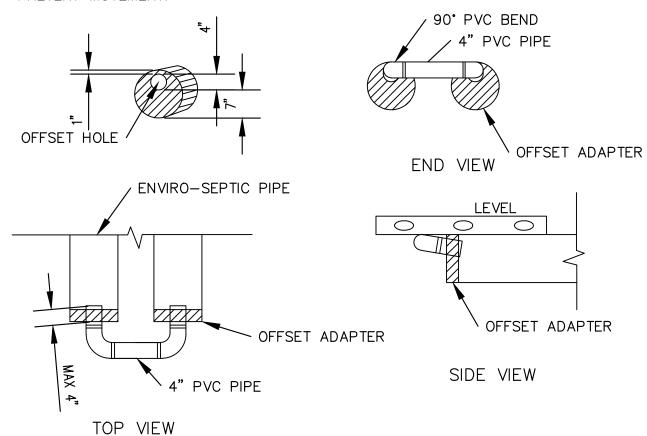
ENVIRO-SEPTIC® LEACHING SYSTEM



## LOW VENT DETAIL NOT TO SCALE

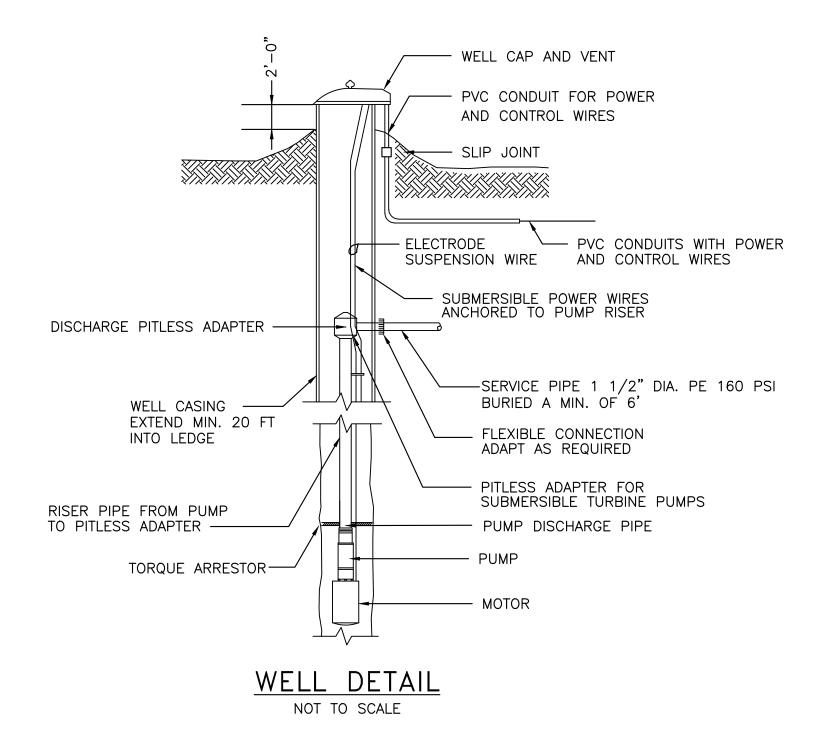
#### INSTALLATION NOTES:

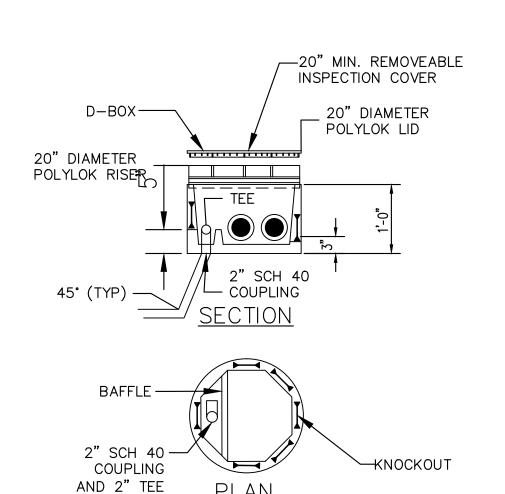
- 1. INSERT PVC PIPE NO MORE THAN 4-INCHES INTO THE OFFSET ADAPTER TO PREVENT AIR LOCKING.
- 2. INSTALL THE RAISED CONNECTION SO THAT THE TOP OF THE 90° BEND IS LEVEL WITH THE TOP OF THE OFFSET ADAPTER.
- 3. PACK SAND UNDER AND AROUND THE RAISED CONNECTION TO PREVENT MOVEMENT.



RAISED CONNECTIONS

NOT TO SCALE





THE DISTRIBUTIOIN BOX SHALL BE SET LEVEL AND ARRANGED SO THAT THE EFFLUENT IS EVENLY DISTRIBUTED TO EACH DISTRIBUTION LINE. EACH DISTRIBUTION LINE SHALL CONNECT INDIVIDUALLY TO THE DISTRIBUTION BOX AND EXIT AT THE SAME SLOPE FOR THE FIRST FIVE FEET FROM THE BOX. ALL CONNECTIONS SHALL BE SEALED WATERTIGHT WITH NON—SHRINK GROUT.

### 5 OUTLET DISTRIBUTION BOX

NOT TO SCALE



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18 CONSTITUTION DR. SUITE 8

BEDFORD, NH 03110

TEL: (603) 637-1043

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# NOT FOR CONSTRUCTION PRELIMINARY PLANS

PROFESSIONAL SEAL

Ç,	BY CK'	DESCRIPTION	DATE	NO.	
) M L	MEF	GENERAL REVISIONS	3/4/2015	_	
)LM	DUP   MT(	PROGRESS SET FOR BUDGET UPDATE	10/26/2015	2	
)_M_(	) IW   ANG	95% FINAL REVIEW SET	3 11/23/2015	3	
)_M_(	) IW   ANG	BID AND CONSTRUCTION SET	12/11/2015	4	
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TOWN OF
BARRINGTON
333 CALEF HIGHWAY
BARRINGTON, NEW
HAMPSHIRE

BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

SHEET TITLE

WASTEWATER DETAILS

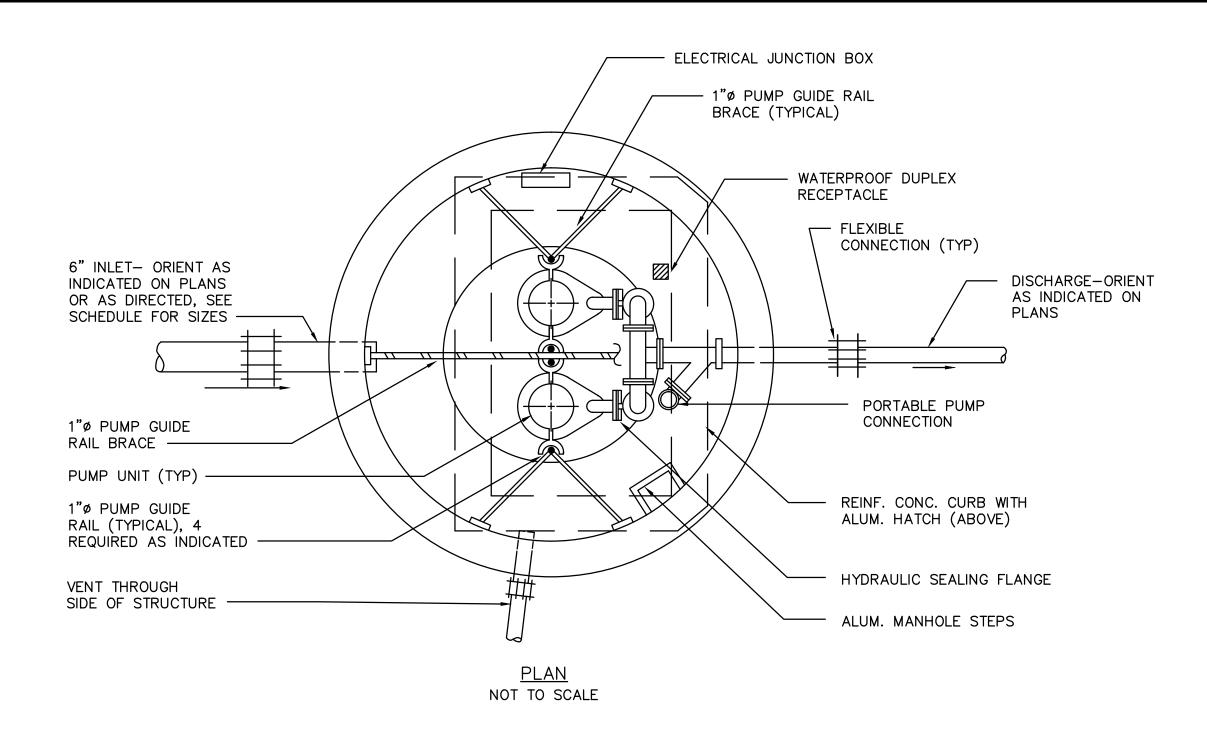
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JAA	323146P
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MTO	

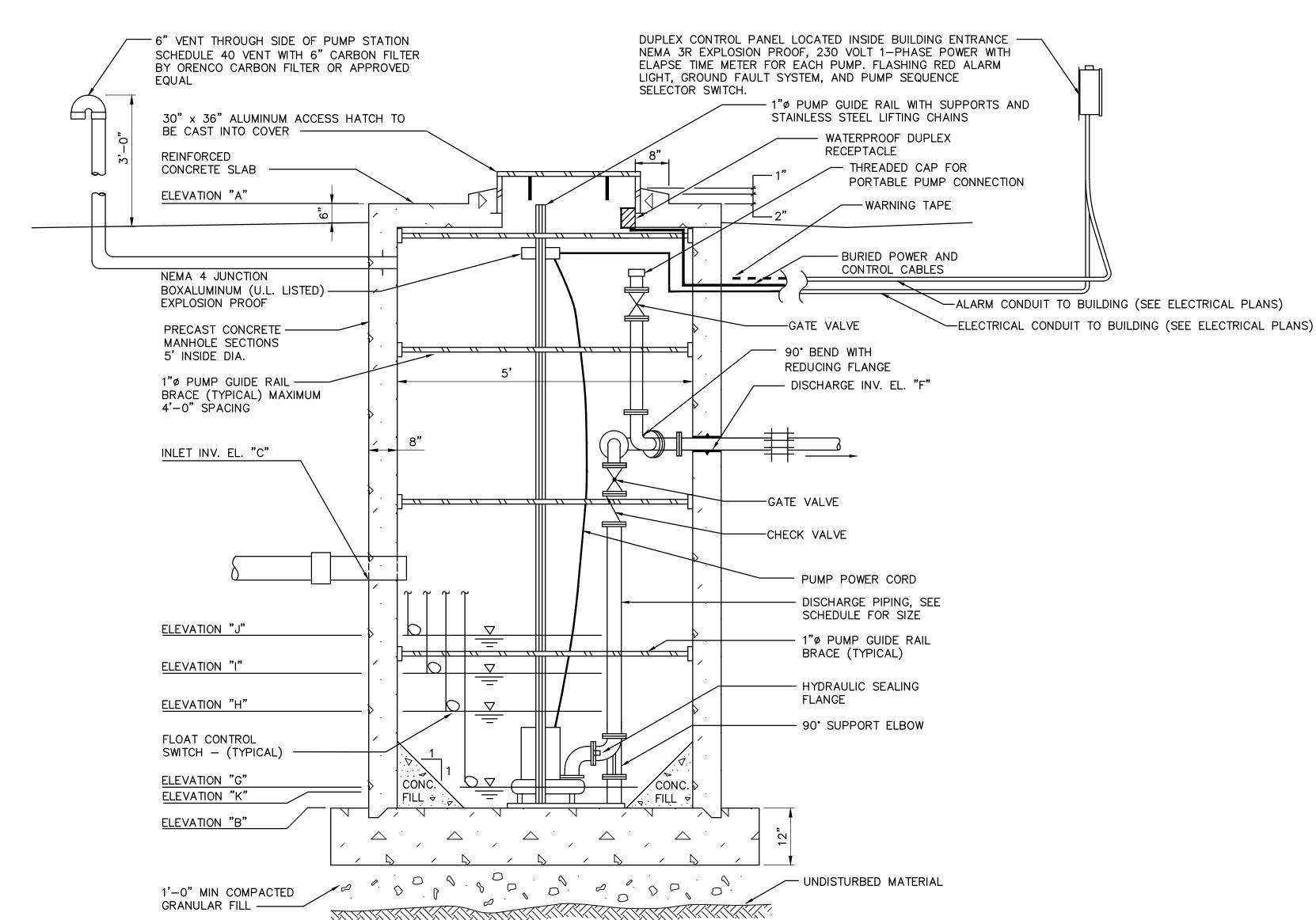
DRAWING NO.

C2.2

SHEET 13 OF 14

P - Barrinaton Town Offices\Drawinas\323146P-C11 SITF LAYOLIT dwa 12/11/201





SECTION NOT TO SCALE

#### **DESIGN NOTES:**

#### ALARM SYSTEMS

- 1. ALARM SYSTEMS SHALL BE PROVIDED FOR ALL SEWAGE PUMPING STATIONS.
- 2. THE ALARM SIGNAL SHALL BE ACTIVATED IN ONE OF THE FOLLOWING CASES:
- A. HIGH WATER IN THE WET WELL
  - B. LOW WATER IN THE WET WELL
    CLOSS OF ONE OR MORE PHASES OF POWER SUPPLY OR S
- C. LOSS OF ONE OR MORE PHASES OF POWER SUPPLY OR SEVERE VOLTAGE DROP. D. LOSS OF ALARM TRANSMISSION LINE.
- E. STANDBY GENERATOR APPLICATION.
- 3. THE HIGH WATER ALARM TRIGGER SHALL BE SEPARATE DEVICE, INDEPENDENT OF THE PUMP WET WELL LEVEL CONTROL SYSTEM.
- 4. SATISFACTORY OPERATION OF THE ALARM SYSTEM SHALL BE INDICATED ON A PANEL WITH A LIGHT WHICH LIGHTS UP UPON FAILURE OF THE ALARM SYSTEM.
- 5. THE POWER SOURCE FOR THE ALARM SYSTEM SHALL BE:
  - A. AN INDEPENDENT BATTERY WITH A CONTINUOUS CHARGE OR:
    B. MAIN LINE POWER WITH A BACK-UP BATTERY SYSTEM, WHICH SHALL BE CONNECTED AUTOMATICALLY SHOULD MAIN POWER FAIL.
- 6. THE ALARM SHALL INCLUDE A LOCAL AUDIBLE ENUNCIATOR AND LIGHT.
- 7. PROVISION SHALL BE MADE TO PERMIT SILENCING OF THE AUDIBLE ENUNCIATOR MANUALLY, AFTER THE ALARM HAS BEEN SOUNDED, BUT THE LIGHT SHALL CONTINUE UNTIL THE ALARM CONDITION HAS BEEN RECTIFIED.

#### INSTRUCTION AND EQUIPMENT

8. THE OWNER SHALL MAINTAIN A COMPLETE SET OF OPERATIONAL INSTRUCTIONS, INCLUDING RECOMMENDATION FOR SPARES AND MAINTENANCE FOR THE SEWAGE PUMPING STATION SO AS TO BE AVAILABLE TO ALL OPERATORS.

#### EMERGENCY OPERATION

- 9. THIS SEWAGE PUMPING STATION IS DESIGNED WITH A CAPACITY OF 100 GPM OR LESS AND CAN THEREFORE USE WET WELL STORAGE OVER AND ABOVE NORMAL STORAGE OPERATING SYSTEM STORAGE IN LIEU OF A PERMANENT BACKUP GENERATOR BECAUSE:
  - A. THE ADDITIONAL WET WELL STORAGE IS DESIGNED TO PROVIDE AT LEAST 6 HOURS OF FLOW DETENTION AT AVERAGE DAILY FLOW;
  - B. A SUITABLE RECEPTACLE SHALL BE INCLUDED IN THE ELECTRICAL SUPPLY PANEL FOR CONNECTION TO A PORTABLE GENERATOR WITH MANUAL TRANSFER; AND,
  - C. A SUITABLE RECEPTACLE SHALL BE INCLUDED IN THE ELECTRICAL SUPPLY PANEL FOR CONNECTION TO A PORTABLE PUMP WITH MANUAL TRANSFER.

RECEPTACLE FOR CONNECTION TO AN INDEPENDENT GASOLINE ENGINE—GENERATOR TYPE SOURCE OF ELECTRIC POWER SHALL BE PROVIDED FOR ELECTRICALLY—DRIVEN PUMPS IN THE EVENT THAT POWER SERVICE IS LOST TO PREVENT THE BACK—UP, OVERFLOW, OR OTHER UNPERMITTED DISCHARGE OF WASTEWATER FROM THE SEWAGE PUMPING STATION. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND THE STATE FIRE CODE.

PROVISIONS SHALL BE MADE FOR MANUAL START-UP AND CUT-IN.

THE EMERGENCY POWER GENERATOR SHALL BE SIZED TO SEQUENTIALLY START AND OPERATE ALL PUMPS NEEDED TO HANDLE DESIGN MAXIMUM WASTE FLOWS, PLUS LIGHTING, VENTILATION, AND CONTROLS.

NO SEWAGE PUMPING STATION BY-PASSES ALLOWING THE DISCHARGE OF RAW SEWAGE EITHER OVERLAND OR TO ANY WATER COURSE SHALL BE PERMITTED.

#### FORCE MAINS

FORCE MAINS SHALL BE CONSTRUCTED WITH MATERIALS AS SPECIFIED IN Env-Wq 704.08, AND TESTED AS SPECIFIED IN Env-Wq

THRUST BLOCKS MADE FROM INORGANIC, CORROSION-RESISTANT MATERIAL SHALL BE PLACED AT ALL BENDS, ELBOWS, TEES AND JUNCTIONS.

#### <u>PUMPS</u>

PUMPS SHALL BE MYERS ME50 1 HP EFFLUENT PUMPS OR EQUAL, DESIGN POINT 20 GPM @ 20' TDH

#### GUIDE RAIL SYSTEM

CONTRACTOR SHALL PROVIDE STAINLESS STEEL GUIDE SYSTEM AND HYDRAULIC SEALING FLANGE SETUP IN COORDINATION WITH PUMP MANUFACTURER.

DUPLEX PUMP STATION SCH	HEDULE
PUMP STATION LOCATION	_
PUMP STATION DIAMETER (INSIDE)	5 ft
PUMP STATION ACCESS HATCH SIZE	24"x36"
TOP OF SLAB EL. "A"	84.0
BOTTOM OF WET WELL EL. "B"	73.0
SIZE & INVERT INLET EL. "C"	6" 78.5
SIZE & INVERT OUTLET EL. "F"	2" 78.5
LEAD/LAG PUMPS OFF EL. "G"	74.6
LEAD PUMP ON EL. "H"	76.0
LAG PUMP ON EL. "I"	76.5
HIGH WATER ALARM ON EL. "J"	77.0
LOW WATER ALARM ON EL. "K"	74.0
PORTABLE PUMP CONNECTION SIZE	1 1/2"
VENT DIAMETER	6"



MANAGEMENT ◆ DEVELOPMEN
18 CONSTITUTION DR. SUITE 3
BEDFORD, NH 03110
TEL: (603) 637-1043
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# NOT FOR CONSTRUCTION PRELIMINARY PLANS

PROFESSIONAL SEAL

BY CK'D	ВУ	DESCRIPTION	DATE	NO.
OLW	DUP	11/23/2015 95% FINAL REVIEW SET, ADDED SHEET C2.3 DUP	11/23/2015	2
OLW	ANG	BID AND CONSTRUCTION SET	12/11/2015	4

TOWN OF BARRINGTON 333 CALEF HIGHWAY BARRINGTON, NEW HAMPSHIRE

BARRINGTON TOWN OFFICES RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE

SHEET TITLE

PUMP STATION DETAILS

DRAWN BY	DATE
SANZ	FEB 2015
CHECKED BY	D&K PROJECT #
JAA	323146P
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MTO	

DRAWING NO.

C23

SHEET 14 OF 14

#### GENERAL

- 1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO:
  - 2009 INTERNATIONAL BUILDING CODE
  - ANSI/ASCE 7-05 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"
  - ACI 318-08 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 301-08 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
  - STEEL CONSTRUCTION MANUAL, 13TH EDITION
  - ANSI/AF&PA NDS-2005 "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" ACI 530-08/ASCE 5-08/TMS 402-08 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR
  - ANY DISCREPANCIES BETWEEN THE ABOVE LISTED CODES AND THE CONSTRUCTION DOCUMENTS
- SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING
- SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED. 3. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS IN ADDITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS PROVIDED BY

2. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE

- SUBCONTRACTORS AND SUPPLIERS. 4. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY THE GENERAL
- CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF WORK.
- CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS. 6. THESE DRAWINGS DO NOT SHOW SIZE, LOCATION, OR TYPE OF OPENINGS IN THE FOUNDATION SYSTEM FOR ELECTRICAL, PLUMBING, OR MECHANICAL EQUIPMENT; THE GENERAL CONTRACTOR SHALL BE

5. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS SHALL BE

- RESPONSIBLE FOR LOCATING THESE ITEMS. 7. ALL STRUCTURAL RELATED SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO THE FABRICATION OF MATERIAL OR THE PURCHASE OF
- 8. REFER TO THESE DRAWINGS, CIVIL DRAWINGS, AND THE GEOTECHNICAL REPORT FOR UNDER-DRAIN AND PERIMETER DRAIN REQUIREMENTS, IF APPLICABLE.

NON-RETURNABLE STOCK. QUANTITY AND DIMENSIONAL REVIEW IS THE CONTRACTOR'S

- 9. ANY AND ALL TEMPORARY BRACING OR SHORING NECESSARY TO HOLD THE STRUCTURE IN A SAFE AND STABLE POSITION UNTIL THE BUILDING IS COMPLETE, IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CONSULT AN INDEPENDENT ENGINEER IF DESIGN ASSISTANCE OR REVIEW IS
- 10. THE BUILDING PERMIT APPLICANT (e.g. OWNER, CONTRACTOR) MUST PROVIDE SPECIAL INSPECTIONS PER THE REQUIREMENTS OF CHAPTER 17 OF THE 2009 INTERNATIONAL BUILDING CODE AND FURNISH INSPECTION REPORTS TO THE CODE OFFICIAL AND TO THE ENGINEER OF RECORD. THE TESTING/INSPECTION AGENCY(S) MUST BE APPROVED BY THE ENGINEER OF RECORD. SEE SHEET SX.X FOR THE SCHEDULE OF SPECIAL INSPECTIONS.
- 11. THE ENGINEER, AT HIS/HER OPTION, MAY PROVIDE THE CONTRACTOR WITH ELECTRONIC FILES FOR HIS/HER CONVENIENCE AND USE IN THE PREPARATION OF SHOP DRAWINGS. DATA CONTAINED ON THESE ELECTRONIC FILES ARE THE ENGINEER'S INSTRUMENT OF SERVICE AND MAY NOT BE ELECTRONICALLY COPIED FOR REUSE AS SHOP DRAWINGS. THESE ELECTRONIC FILES ARE NOT CONSTRUCTION DOCUMENTS; THE CONTRACTOR IS NOT RELIEVED OF HIS/HER DUTY TO FULLY COMPLY WITH THE CONTRACT DOCUMENTS, INCLUDING THE NEED TO CONFIRM AND COORDINATE ALL DIMENSIONS AND DETAILS, TAKE FIELD MEASUREMENTS, VERIFY FIELD CONDITIONS AND COORDINATE THE CONTRACTOR'S WORK WITH THAT OF OTHER CONTRACTORS FOR THE PROJECT. THE CONTRACTOR MAY NOT MANUALLY ALTER THE HARD COPIES OF THE CONSTRUCTION DOCUMENTS AND REUSE THEM AS SHOP DRAWINGS

#### REFERENCE DOCUMENTS

1. ARCHITECTURAL DRAWINGS FOR "BARRINGTON TOWN OFFICES, RAMSDELL LANE, BARRINGTON, NEW HAMPSHIRE", PREPARED BY SMP ARCHITECTURE, 30 S. MAIN STREET, BUILDING 2, CONCORD, NH 03301, PREPARED FOR TOWN OF BARRINGTON, NH, DATED OCTOBER 19, 2015.

#### **DESIGN LOADS**

RESPONSIBILITY

1. THE NEW STRUCTURAL ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2009 EDITION TO CARRY ALL THE DEAD LOADS OF THE VARIOUS STRUCTURAL AND ARCHITECTURAL SYSTEMS AND THE FOLLOWING LIVE LOADS:

ASSEMBLY AREA (MOVABLE SEATS) ROOF TRUSSES

= SEE NOTES RELATED TO ROOF TRUSS

= 100 PSF

BASIC GROUND SNOW LOAD = 70 PSF

 $C_t = 1.1 \& 1.2 (AS APPROPRIATE)$ I<sub>s</sub> = 1.0 (OCCUPANCY CATEGORY II)

WIND

WIND SPEED = 100 MPH

I<sub>w</sub> = 1.0 (OCCUPANCY CATEGORY II)

<u>SEISMIC</u>

OCCUPANCY CATEGORY = II SITE CLASS "C"

 $I_e = 1.0$  $S_{DS} = 0.299$ 

 $S_{D4} = 0.093$ 

SEISMIC DESIGN CATEGORY = B BASIC SEISMIC-FORCE-RESISTING SYSTEM = BEARING WALL SYSTEM, ORDINARY REINFORCED CONCRETE SHEAR WALLS.

R = 4,  $\Omega^{\circ} = 2.5$ ,  $C_{d} = 4$ ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE

2. JSN ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE DESIGN OF STAIR SYSTEM, GUARDRAIL SYSTEM, CURTAIN WALL / WINDOW WALL SYSTEMS, COLD-FORMED METAL FRAMING SYSTEMS, WOOD OR METAL ROOF & FLOOR TRUSSES OR OTHER SYSTEMS NOT SHOWN IN THE STRUCTURAL DOCUMENTS. SUCH SYSTEMS MUST BE DESIGNED, FURNISHED AND INSTALLED AS REQUIRED BY OTHER PORTIONS OF THE CONTRACT DOCUMENTS.

#### **SOIL BEARING**

- 1. ALL FOOTINGS SHALL BE CARRIED DOWN TO REST ON UNDISTURBED SOIL OR SHALL BEAR ON SUITABLE FILL MATERIAL AS SPECIFIED ON THE REFERENCED GEOTECHNICAL REPORT. THE UNDERLYING SOILS AND THE FILL SHALL HAVE A MINIMUM SAFE LOAD BEARING CAPACITY OF 4000 PSF.
- 2. REMOVE ALL EXISTING TOPSOIL, PAVEMENT, ORGANIC MATERIALS, AND OTHER SOIL THAT APPEARS TO BE UNSUITABLE PRIOR TO PREPARING THE FOOTING GRADE.
- 3. IF ANY ADVERSE SOIL CONDITIONS ARE ENCOUNTERED WHICH EXTEND BELOW FOOTING LEVEL, SUCH AS THOSE LISTED ABOVE, THE GENERAL CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER IMMEDIATELY FOR DETERMINATION OF HOW TO REMEDY THE CONDITION BEFORE CONTINUATION OF
- 4. NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND. ALL EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN TO A MINIMUM OF FOUR (4) FEET BELOW FINISHED, ADJACENT EXTERIOR
- 5. REFER TO GEOTECHNICAL REPORT BY SOVEREIGN CONSULTING INC. DATED DECEMBER 5. 2014 FOR ALL INFORMATION REGARDING EXCAVATION, BACKFILL, STRUCTURAL FILL, SUBGRADE PREPARATION, ETC. IF ANY CONTRADICTING INFORMATION IS FOUND BETWEEN GEOTECHNICAL REPORT AND STRUCTURAL DRAWINGS, GEOTECHNICAL REPORT SHALL GOVERN.

#### CAST-IN-PLACE CONCRETE

- 1. ALL WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-08) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301)
- INTERIOR SLABS ON GRADE TO BE OF THICKNESS SHOWN ON DRAWINGS WITH SECONDARY CONCRETE
- 3. PROVIDE A 10-MIL POLYETHYLENE MOISTURE VAPOR RETARDER DIRECTLY BELOW ALL INTERIOR SLABS ON GRADE, UNLESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS. OVERLAP SEAMS A MINIMUM 6" AND TAPE AS REQUIRED TO MAINTAIN POSITION.
- 4. ALL FOOTINGS ARE TO REST ON UNDISTURBED SOIL OR COMPACTED FILL AS SPECIFIED IN THE REFERENCED GEOTECHNICAL REPORT.
- 5. MINIMUM CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS

FIBER REINFORCING. DOSAGE TO BE AS RECOMMENDED BY THE MANUFACTURER.

- CONCRETE CAST AGAINST EARTH.... FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
- #5 BARS AND SMALLER. #6 BARS AND LARGER...
- 6. INCLUSION OF CALCIUM CHLORIDE IS PROHIBITED IN ANY CONCRETE MIX.
- 7. CONCRETE SHALL BE ADEQUATELY PROTECTED FROM HOT OR COLD WEATHER AS REQUIRED BY ACI PUBLICATIONS 305 AND 306, RESPECTIVELY.
- 8. ALL CONCRETE FOR WALLS, FOOTINGS, SLABS-ON-DECK AND INTERIOR SLABS-ON-GRADE SHALL BE NORMAL-WEIGHT, 3/4" AGGREGATE AND ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 3000
- 9. SLAB CONTROL JOINTS, WHERE SHOWN OR INDICATED, SHALL BE SAW CUT IMMEDIATELY AFTER FINISHING. JOINTS SHALL BE AT MINIMUM 1/4 OF THE THICKNESS OF THE SLAB.
- 10. GENERAL CONTRACTOR MUST SUBMIT A PLAN TO THE ENGINEER INDICATING PROPOSED LOCATIONS OF CONSTRUCTION JOINTS FOR SLABS-ON-GRADE AND/OR SLABS-ON-DECK. ENGINEER. AT HIS OPTION. MAY REJECT, APPROVE OR APPROVE WITH MODIFICATIONS THE LOCATIONS. MODIFICATIONS MAY INCLUDE ADDITION OF REINFORCING BARS & DOWELS. COSTS ASSOCIATED WITH THE SAID
- 11. WALL CONTROL JOINTS SHALL BE PLACED AS SHOWN ON DRAWINGS OR AT A MAXIMUM OF 40 FEET ON

MODIFICATIONS WILL BE BORNE BY THE GENERAL CONTRACTOR OR ITS SUBCONTRACTOR(S).

- 12. BACKFILL BOTH SIDES OF THE FOUNDATION WALLS SIMULTANEOUSLY TO THE MAXIMUM HEIGHT POSSIBLE. IF THE SOIL LEVEL IS NOT EQUAL ON BOTH SIDES OF THE WALL, DO NOT CONTINUE TO BACKFILL THE HIGH SIDE UNTIL THE FLOOR/ROOF FRAMING AND DECK ON THE LOW SIDE ARE INSTALLED, THE SLAB-ON-GRADE IS INSTALLED AND HAS REACHED ITS MINIMUM DESIGN COMPRESSIVE STRENGTH. IF THE DECK IS CONCRETE, IT MUST REACH ITS MINIMUM DESIGN COMPRESSIVE STRENGTH BEFORE THE WALL IS FULLY BACKFILLED. FOUNDATION WALLS SUBJECT TO UNBALANCED FILL HEIGHTS MAY NOT BE FULLY BACKFILLED UNTIL CONCRETE HAS REACHED ITS MINIMUM COMPRESSIVE STRENGTH OR THE G.C HAS RECEIVED APPROVAL FROM THE STRUCTURAL ENGINEER-OF-RECORD (SEOR).
- 13. ALL CONCRETE SHALL BE CURED BY AN APPROVED METHOD AS PRESCRIBED BY ACI.
- 14. MID-RANGE WATER REDUCERS (MRWR) ARE REQUIRED FOR ALL CONCRETE MIXES EXCEPT FOOTINGS.
- 15. MAXIMUM WATER TO CEMENT RATIO FOR MIXES WITH MRWR:

FOR 3000 PSI CONCRETE FOR 4000 PSI CONCRETE

MAXIMUM WATER TO CEMENT RATIO FOR MIXES WITHOUT MRWR (PERMITTED FOR FOOTINGS ONLY):

FOR 3000 PSI CONCRETE FOR 4000 PSI CONCRETE 0.48

16. MINIMUM CEMENT QUANTITIES:

517 LB./CY FOR 3000 PSI CONCRETE 611 LB./CY FOR 4000 PSI CONCRETE

17. MAXIMUM CONCRETE SLUMP:

FOR MIXES WITHOUT MRWR

6 INCHES (3 INCHES PRIOR TO ADDING A WATER REDUCER) FOR MIXES WITH MRWR

- 18. USE AIR-ENTRAINING ADMIXTURES IN CONCRETE SUBJECT TO FREEZING AND THAWING, THIS INCLUDES EXTERIOR FOUNDATION WALLS, EXTERIOR PIERS, AND EXTERIOR SLABS. AIR CONTENT AT POINT OF DELIVERY TO BE 6 PERCENT, PLUS OR MINUS 1.5 PERCENT
- 19. DO NOT USE AIR-ENTRAINING ADMIXTURES IN CONCRETE FOR INTERIOR SLABS ON GRADE AND SLABS ON STEEL DECK. AIR CONTENT OF TROWELED FINISH FLOORS NOT TO EXCEED 3 PERCENT.
- 20. REINFORCING BARS AND ALL EMBEDDED ITEMS, INCLUDING ANCHOR BOLTS, MUST BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED <u>BEFORE</u> CONCRETE IS PLACED. "WET-STICKING" OF ANCHOR BOLTS, VERTICAL PIER REINFORCING OR VERTICAL WALL REINFORCING IS NOT ACCEPTABLE.

#### REINFORCING STEEL

- 1. ALL REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.
- 2. WELDED WIRE FABRIC REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A1064. USE
- 3. ALL REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL.
- WHERE CONTINUOUS BARS ARE REQUIRED. THEY SHALL RUN CONTINUOUSLY AROUND CORNERS, LAP AT NECESSARY SPLICES, AND SPLICES SHALL BE STAGGERED AND HOOKED AT DISCONTINUOUS ENDS. LAP LENGTHS SHALL BE AS SHOWN OR NOTED ON THE DRAWINGS. IF LAP/SPLICE LENGTHS ARE NOT INDICATED FOLLOW ACI STANDARDS.

#### SLAB-ON-GRADE CONTROL JOINTS

- SLAB CONTROL JOINTS SHALL BE SAW CUT IMMEDIATELY AFTER FINISHING. JOINT DEPTH SHALL BE A MINIMUM 1/4 OF THE THICKNESS OF THE SLAB.
- CONTROL JOINTS IN CONCRETE SLABS ARE GENERALLY SPACED IN A MANNER TO CONTROL CRACK LOCATIONS OCCURRING DUE TO CURING SHRINKAGE AND THERMAL MOVEMENT OF CONCRETE. WELDED WIRE FABRIC DOES NOT INHIBIT CRACKING, BUT HOLDS CONCRETE TIGHTLY TOGETHER AFTER CRACKING HAS OCCURRED. IN ORDER TO BETTER CONTROL RANDOM CRACKING OF CONCRETE THE FOLLOWING MEASURES ARE RECOMMENDED:
- SUPPLY A WELL COMPACTED AND CONSISTENT SUBGRADE.
- LIMIT WATER VOLUME IN CONCRETE USING A STIFFER MIX
- SUPPLY ADEQUATE CURING MEASURES. WET CURE OR USE CURING SEALERS. LIMIT JOINT SPACING TO 2 TIMES SLAB THICKNESS IN FEET.
- 2. SLAB CURLING IS ALSO A PROBLEM WHICH HAS BECOME MORE PREVALENT WITH MODERN CONCRETE MIXES WHICH HAVE HIGHER STRENGTHS. THE FOLLOWING MEASURES IN ADDITION TO THOSE STATED ABOVE ARE RECOMMENDED TO LIMIT CURLING OF CONCRETE SLABS-ON-GRADE:
  - CURE THE SLAB PROPERLY.
  - USE HIGHER QUANTITY OF COARSE AGGREGATES IN THE MIX. USE A LOWER AMOUNT OF CEMENT.

#### STRUCTURAL STEEL

- 1. STRUCTURAL STEEL WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE 2009 INTERNATIONAL BUILDING CODE.
- 2. STRUCTURAL STEEL WORK SHALL CONFORM TO "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AISC CURRENT EDITION)", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS (AISC CURRENT EDITION)", AND "STRUCTURAL WELDING CODE (AWS D1.1-04)".
- 3. STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:
  - ROLLED SHAPES AND PLATES ASTM A36 (EXCEPT AS NOTED BELOW)
  - WIDE FLANGE SHAPES ASTM A992
  - STRUCTURAL TUBES ASTM A500, GRADE B
- 4. ALL BOLTED CONNECTIONS SHALL USE NEW BOLTS. SLIP-CRITICAL BOLTS ARE PROHIBITED FROM ALL CONNECTIONS. SLOTTED BOLT HOLES ARE NOT PERMITTED AT BRACED FRAME CONNECTIONS. ALL BOLTS SHALL BE INSTALLED AS BEARING TO A 'SNUG-TIGHTENED' CONDITION, UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL BOLTED CONNECTIONS SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN COMPLIANCE WITH RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", DATED DECEMBER 31, 2009.

ANCHOR RODS - HEADED RODS CONFORMING TO ASTM F1554 GRADE 36 (HEADED BOLTS)

- 5. VOIDS BENEATH COLUMN BASE PLATES SHALL BE DRY PACKED WITH NON-SHRINK CONSTRUCTION GROUT BEFORE APPLICATION OF LOADS.
- 6. WELDED CONNECTIONS SHALL BE MADE BY AWS QUALIFIED WELDERS USING FILLER MATERIAL CONFORMING TO E70XX, LOW HYDROGEN.
- 7. PROVIDE TEMPORARY ERECTION BRACING TO HOLD STRUCTURAL STEEL FRAMING SECURELY IN PLACE. MAINTAIN BRACING UNTIL ROOF DECK AND PERMANENT LATERAL BRACING ARE FULLY INSTALLED. BRACING REQUIREMENTS ARE NOT PROVIDED BY THE E.O.R.
- 8. STRUCTURAL STEEL SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS ARE FINALLY BOLTED OR
- 9. FIELD CUTTING OF STRUCTURAL STEEL OR ANY MODIFICATIONS SHALL NOT BE MADE WITHOUT APPROVAL BY ENGINEER.
- 10. ALL CONNECTIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE FABRICATOR. SHOP DRAWINGS AND STAMPED CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. FABRICATOR'S ENGINEER SHALL BE LICENSED IN THE STATE THE PROJECT IS LOCATED, AND CARRY PROFESSIONAL LIABILITY INSURANCE WITH A MINIMUM PER INCIDENT AND ANNUAL COVERAGE OF \$1,000,000.
- 11. ALL STRUCTURAL STEEL SHALL RECEIVE ONE (1) SHOP COAT OF RUST INHIBITIVE PRIMER, UNLESS OTHERWISE DIRECTED BY OWNER. COMPOSITE BEAMS WITH SHEAR STUDS SHALL HAVE UNPAINTED TOP FLANGES TO ALLOW THE WELDING OF SHEAR STUDS. ALL STEEL SCHEDULED TO RECEIVE FIREPROOFING, SHALL NOT BE PRIMED. REFER TO ARCHITECTURAL DRAWINGS & SPECIFICATIONS FOR FIREPROOFING LOCATIONS AND REQUIREMENTS.
- 12. THE STEEL FABRICATOR SHALL BE AISC CERTIFIED, OR BE ABLE TO DEMONSTRATE TO THE ENGINEER'S SATISFACTION THAT ALL AISC PROCEDURES FOR FABRICATION, QUALITY CONTROL, AND RECORD KEEPING ARE STRICTLY ADHERED TO. THE ENGINEER SHALL DETERMINE IF FABRICATOR QUALIFICATIONS ARE ACCEPTABLE.
- 13. SHOP DRAWINGS SHALL BE PREPARED BY FABRICATOR. PHOTO COPIES OF STRUCTURAL DRAWINGS ARE NOT ACCEPTABLE.
- 14. THE TESTING AGENCY (TO BE APPROVED BY JSN ASSOCIATES, INC.) MUST PERFORM A VISUAL INSPECTION OF ALL SHOP AND FIELD WELDS. ADDITIONALLY, ALL SHOP AND FIELD FILLET AND PARTIAL PENETRATION WELDS MUST BE SPOT TESTED AT A RATE OF ONE TEST PER MEMBER USING THE MAGNETIC PARTICLE METHOD. ONE HUNDRED PERCENT (100%) OF ALL FIELD AND SHOP FULL PENETRATION WELDS MUST BE TESTED USING THE ULTRASONIC METHOD.
- 15. ALL HSS COLUMNS SHALL BE SEALED TO PREVENT WATER PENETRATION DURING CONSTRUCTION OR DURING SERVICE AND SHALL BE PROVIDED WITH A DRAIN HOLE NEAR THE BASE ON SIDE OF COLUMN.

#### STEEL DECKS

- 1. STEEL FLOOR DECK SHALL BE STANDARD 22 GAGE, GALVANIZED 11/2" COMPOSITE DECK AS MANUFACTURED BY "VULCRAFT" (1.5VL22) OR APPROVED EQUAL. UNLESS OTHERWISE NOTED, FASTEN COMPOSITE DECK TO EACH SUPPORT USING 5/8" PUDDLE WELDS IN A 36/4 PATTERN. PROVIDE (1) #10 TEK SCREW PER SPAN FOR SIDELAP FASTENING.
- 2. FLOOR DECKS MUST SPAN OVER FOUR (4) OR MORE SUPPORTS (i.e. 3-SPAN CONDITION).
- 3. SHEET STEEL FOR GALVANIZED COMPOSITE FLOOR DECK MUST CONFORM TO ASTM A653-07 "STRUCTURAL QUALITY", GRADE 33 OR HIGHER. GALVANIZING MUST CONFORM TO ASTM A924-07 WITH A MINIMUM COATING CLASS OF G60 AS DEFINED IN A653-07.

#### **GALVANIZING**

- 1. ITEMS EXPOSED TO THE EXTERIOR AND/OR INDICATED ON THE DRAWINGS MUST BE HOT-DIPPED GALVANIZED AFTER FABRICATION. DURAGALV BY DUNCAN GALVANIZING OF EVERETT, MA IS SPECIFIED AS A REFERENCE STANDARD OF QUALITY.
- 2. PRIOR TO GALVANIZING, THE STEEL MUST BE IMMERSED IN A PRE-FLUX SOLUTION OF ZINC AMMONIUM CHLORIDE. THE USE OF WET KETTLE PROCESS IS PROHIBITED. GALVANIZE ALL FERROUS FASTENERS, CLIPS, SLEEVES, ANCHORS AND ACCESSORIES IN CONTACT WITH GALVANIZED ITEMS.
- 3. GALVANIZING MUST COMPLY WITH ASTM A123 OR A153 AS APPLICABLE FOR FABRICATION AND DESIGN
- 4. ALL GALVANIZED MATERIALS MUST BE INSPECTED FOR COMPLIANCE WITH THE ABOVE SPECIFICATIONS AND MARKED WITH A STAMP, INDICATING THE NAME OF GALVANIZER, THE ASTM SPECIFICATION AND THE WEIGHT OF THE ZINC COATING IN OUNCES PER SQUARE FOOT.
- 5. A NOTARIZED STATEMENT OF COMPLIANCE WITH SPECIFICATIONS MUST BE SUBMITTED TO THE ENGINEER OF RECORD BY THE GALVANIZER WITH THE INITIAL SHIPMENT.
- 6. GALVANIZER MUST FURNISH CERTIFICATION THAT SAMPLES REPRESENTING EACH LOT HAVE BEEN EITHER TESTED OR INSPECTED AS DIRECTED BY THE APPLICABLE ASTM SPECIFICATION (A123 OR A153) AND THE REQUIREMENTS HAVE BEEN MET. A REPORT OF THE TEST RESULTS MUST BE FURNISHED TO THE OWNER IF REQUESTED.
- 7. FIELD WELDED JOINTS MUST BE GROUND SMOOTH AND FINISHED WITH FOUR (4) FULL COATS OF CALIFORNIA PRODUCTS CORPORATION WW TOTRUST, SEALUBE ZRC, ZIRP BY DUNCAN OR APPROVED

#### WOOD FRAMING

ASSOCIATION FOR THE APPROPRIATE USE.

CONNECTION HARDWARE TO ENSURE A RIGID STRUCTURE.

DIAMETER (PER THE 2005 NDS, SECTION 11.1.2.2.).

- 1. ALL FRAMING SHALL BE SPRUCE-PINE-FIR, NO. 2 OR BETTER , UNLESS OTHERWISE NOTED OR SHOWN ON
- 2. ALL TWO (2) INCH NOMINAL LUMBER SHALL BE SEASONED TO 19% MAXIMUM MOISTURE CONTENT.
- 3. ALL LUMBER AND PLYWOOD SHALL BE GRADE-STAMPED BY THE APPROPRIATE MANUFACTURER'S
- 4. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESSURE TREATED
- 5. ALL WOOD FRAMING SHALL BE BUILT PLUMB, LEVEL, SQUARE, AND TRUE WITH ADEQUATE BRACING AND
- 6. FRAMING CONNECTIONS SHALL BE ACCURATELY CUT AND TIGHTLY FITTED AS NECESSITATED BY THE
- CONDITIONS ENCOUNTERED TO PROVIDE FULL SURFACE CONTACT WITHOUT USE OF SHIMS. 7. ROOF SHEATHING SHALL BE APA RATED, EXPOSURE 1, UNLESS NOTED OTHERWISE. SHEATHING SHALL

BE ADEQUATELY SPACED AT JOINTS (1/8" TYP) AS RECOMMENDED BY THE APA FOR EXPANSION.

- 8. ALL SHEATHING SHALL BE LAID WITH LONG DIMENSIONS PERPENDICULAR TO SUPPORTS AND BE CONTINUOUS OVER TWO OR MORE SUPPORTS. STAGGER ALL JOINTS.
- 9. ALL SHEATHING SHALL BE NAILED 6" ON CENTER AT SUPPORTED PANEL EDGES AND AT 12" ON CENTER AT INTERMEDIATE SUPPORTS USING 10d NAILS, UNLESS OTHERWISE SHOWN OR NOTED.
- 10. ALL INTERIOR DOOR HEADERS SHALL CONSIST OF THREE 2X8'S FOR SPANS LESS THAN OR EQUAL TO 4 FEET AND THREE 2X10'S FOR SPANS GREATER THAN 4 FEET, UNLESS OTHERWISE NOTED OR SHOWN ON THE DRAWINGS.
- NOTED ON THE DRAWINGS. 12. SIMPSON CONSTRUCTION HARDWARE (OR APPROVED EQUAL) SHALL BE FASTENED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND NAILING SCHEDULE. THE GENERAL CONTRACTOR MUST BE

11. ALL INTERIOR HEADERS SHALL BEAR ON DOUBLE STUD POSTS AS A MINIMUM, UNLESS OTHERWISE

- FAMILIAR WITH, AND HAVE THE APPROPRIATE PRODUCT CATALOGS ON SITE. A. ALL SPECIFIED FASTENERS MUST BE INSTALLED ACCORDING TO THE INSTRUCTIONS IN THE SIMPSON CATALOG. INCORRECT FASTENER QUANTITY, SIZE, TYPE, MATERIAL, OR FINISH MAY CAUSE THE CONNECTION TO FAIL. 16d FASTENERS ARE COMMON NAILS (8 GAGE X 3-1/2") AND
- CANNOT BE REPLACED WITH 16d SINKERS (9 GAGE X 3-1/4") UNLESS OTHERWISE SPECIFIED. B. BOLT HOLES SHALL BE A MINIMUM OF 1/32" AND A MAXIMUM OF 1/16" LARGER THAN THE BOLT
- C. INSTALL ALL SPECIFIED FASTENERS BEFORE LOADING THE CONNECTION.
- D. PNEUMATIC NAILERS MAY BE USED TO INSTALL CONNECTORS, PROVIDED THE CORRECT QUANTITY AND TYPE OF NAILS ARE PROPERLY INSTALLED IN THE NAIL HOLES. TOOLS WITH NAIL HOLE-LOCATING MECHANISMS SHOULD BE USED. FOLLOW THE MANUFACTURER'S INSTRUCTIONS AND USE THE APPROPRIATE SAFETY EQUIPMENT.
- E. JOIST SHALL BEAR COMPLETELY ON THE CONNECTOR SEAT AND THE GAP BETWEEN THE JOIST AND THE HEADER SHALL NOT EXCEED 1/8".
- 14. BEAMS NOTED AS "LVL" SHALL BE "VERSA-LAM" AS MANUFACTURED BY BOISE CASCADE (E=2,000,000 PSI, Fb=3100 PSI). VERSA-LAM PRODUCTS SHALL BE PROPERLY STORED AND PROTECTED FROM WATER DAMAGE DURING CONSTRUCTION.
- 15. COLUMNS NOTED AS "LVL" SHALL BE "VERSA-LAM" AS MANUFACTURED BY BOISE CASCADE (E=1,800,000 PSI, Fb=2750 PSI). VERSA-LAM PRODUCTS SHALL BE PROPERLY STORED AND PROTECTED FROM WATER DAMAGE DURING CONSTRUCTION.
- 16. UNLESS NOTED OTHERWISE, MINIMUM FASTENING OF WOOD MEMBERS SHALL CONFORM TO TABLE 2304.9.1 OF THE IBC.
- 17. ALL POSTS SHALL CONTINUE TO THE FOUNDATION. UNLESS OTHERWISE INDICATED, INSTALL SOLID BLOCKING WITHIN FLOOR PLENUM TO PROVIDE CONTINUITY OF LOAD PATH.

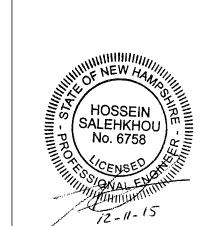
#### PRESSURE TREATED LUMBER

- 1. PRESSURE TREATED LUMBER SHALL BE TREATED WITH AN ACQ PROCESS SUITABLE TO EXTERIOR EXPOSED SERVICE. ACQ TREATMENT WITH AMMONIA IS NOT PERMITTED.
- 2. USE PT SOUTHERN PINE LUMBER FOR ALL EXTERIOR FRAMING AND FOR SILL PLATES ON FOUNDATION WALLS AND INTERIOR SLABS ON GRADE. 3. USE HOT DIPPED GALVANIZED ANCHOR BOLTS TO FASTEN PT PLATES TO FOUNDATION WALLS. USE
- ALL PLATE TO SLAB CONNECTIONS. USE HOT DIP GALV. NAILS IN ALL FRAMING CONNECTIONS TO PT. 4. USE G185 GALVANIZED CONNECTORS (SIMPSON ZMAX OR EQUAL) AND HOT DIPPED GALVANIZED NAILS (G185 OR EQ.) FOR ALL PT CONNECTIONS. USE STAINLESS STEEL CONNECTORS AND STAINLESS STEEL

NAILS IN HIGHLY CORROSIVES AREAS SUCH AS OCEAN FRONT.

5. FAILURE TO FOLLOW THESE NOTES MAY RESULT IN A RAPID CORROSION OF METAL FASTENERS AND CONNECTORS AND STRUCTURAL FAILURE.

STAINLESS STEEL OR OTHERWISE ACCEPTED CORROSION RESISTANT POWER ACTUATED FASTENERS IN



Associates, Inc. Consulting Structural Engineers

One Autumn Street Portsmouth, NH 03801

Phone: (603) 433 - 8639

Fax: (603) 431 - 2811

www.jsneng.com

December 11, 2015

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#### WOOD TRUSSES

- 1. ALL WOOD ROOF TRUSSES SHALL BE DESIGNED AND MANUFACTURED BY BOISE STRUCTURAL SOLUTIONS, INC. OF BIDDEFORD, MAINE; RELIABLE TRUSS AND COMPONENTS, INC. OF NEW BEDFORD, MA; OR APPROVED EQUAL. ALL ASSOCIATED CONNECTION HARDWARE FOR TRUSSES SHALL ALSO BE DESIGNED AND SUPPLIED BY TRUSS MANUFACTURER. TRUSS DESIGNS ARE TO BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER RETAINED BY MANUFACTURER. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO START OF PRODUCTION.
- 2. ALL WOOD TRUSSES SHALL BE BRACED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND IN ACCORDANCE WITH TRUSS PLATE INSTITUTE (TPI) PUBLICATION BCSI 2008 FOR BRACING WOOD TRUSSES. PROPER BRACING OF WOOD TRUSSES DURING ERECTION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 3. MINIMUM GRADE FOR ANY TRUSS MEMBER SHALL BE #2.
- 4. WOOD TRUSS MANUFACTURER SHALL CLEARLY LABEL ALL COMPRESSION WEBS WHICH REQUIRE LATERAL BRACING WITH RED TAGS OR PAINT. FAILURE TO LABEL WILL REQUIRE IN-PLACE LABELING BY TRUSS MANUFACTURER.
- 5. WOOD TRUSS MANUFACTURER SHALL MAINTAIN A MAXIMUM PANEL POINT SPACING OF 10 FT. UNLESS WRITTEN APPROVAL FOR A MODIFICATION IS RECEIVED FROM ENGINEER.
- 6. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM UNIFORMLY DISTRIBUTED LOADS:
  TOP CHORD SNOW LOAD.......60 PSF BALANCED\* (DO NOT REDUCE)
  TOP CHORD DEAD LOAD.......7 PSF

BOTTOM CHORD LIVE LOAD.......10 PSF BOTTOM CHORD DEAD LOAD.......7 PSF

\* CONSIDER UNBALANCED LOADING PER ASCE 7-05

- 7. WOOD TRUSS LAYOUT DRAWINGS SHALL BE PREPARED ON 24"X36" SHEETS AND CLEARLY LABEL ALL TRUSSES AND CONNECTORS. SHOP DRAWINGS MUST INCLUDE THE FOLLOWING INFORMATION: MEMBER SPECIES AND GRADE; MEMBER FORCES; MEMBER CSI RATIOS; ACTUAL DL AND LL DEFLECTIONS; REACTIONS; CONNECTOR PLATE REQUIREMENTS AND SIZES.
- 8. OVERBUILD TRUSSES SHALL HAVE BOTTOM CHORDS BEVEL CUT TO MATCH THE SLOPE OF THE SUPPORTING ROOF.
- 9. ROOF AND FLOOR TRUSSES SHALL BE DESIGNED FOR A MAXIMUM LIVE LOAD DEFLECTION CRITERIA OF L/480. SCISSOR TRUSS DESIGN LIVE LOAD HORIZONTAL DEFLECTION SHALL BE LIMITED TO 3/4".
- 10. THE "MINIMUM" MEMBER SIZE USED IN ANY ROOF TRUSS SHALL BE A 2X4. FLOOR TRUSSES SHALL ALSO USE A MINIMUM MEMBER SIZE OF 2X4 UNLESS APPROVED BY ENGINEER PRIOR TO BIDDING. THE MINIMUM "PLATE" SIZE USED ON ANY ROOF TRUSS CONNECTION SHALL BE 3"X4", REGARDLESS OF DESIGN REQUIREMENT.
- 11. TRUSS MANUFACTURER SHALL BE ACCEPTABLE TO THE ENGINEER. CONTRACTOR SHALL QUALIFY MANUFACTURERS WITH ENGINEER PRIOR TO BIDDING.
- 12. LONG SPAN TRUSSES REQUIRE "EXTREME" TEMPORARY BRACING REQUIREMENTS. REFER TO THE LATEST EDITION OF THE TPI PUBLICATION BCSI AND CONSULT TRUSS MANUFACTURER FOR ALL BRACING REQUIREMENTS.
- 13. ERECTION BRACING OF WOOD TRUSSES IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THIS IS MEANS AND METHODS. FOLLOW THE LATEST EDITION OF THE TPI PUBLICATION BCSI STRICTLY IN ADDITION TO WEB BRACING REQUIREMENTS SHOWN ON TRUSS SHOP DRAWINGS. CONSULT TRUSS MANUFACTURER OR INDEPENDENT ENGINEER IF FURTHER DESIGN ASSISTANCE IS NEEDED.
- 14. ALL LATERAL BRACING INSTALLED ON COMPRESSION WEBS OF TRUSSES, AS DIRECTED BY MANUFACTURER, MUST HAVE CROSS BRACING INSTALLED ON SAME WEB PLANE AT INTERVALS SHOWN ON THESE DRAWINGS AND BCSI-B3 FIGURE B3-11. NOTE THAT CROSS BRACING IS REQUIRED FOR PERMANENT BRACING TO PREVENT WEBS FROM BUCKLING AS A GROUP. WHERE DIAGONAL BRACES CROSS, INTERRUPT ONE BRACE AND ADD A 4-FT. LONG 2X4 SPLICE OVER THE INTERRUPTED BRACE AND USE (8) 10d NAILS ON EACH SIDE. AS AN ALTERNATE, VEE OR CHEVRON BRACING CAN BE INSTALLED USING THE SAME QUANTITY OF DIAGONAL MEMBERS, WHICH ELIMINATES THE NEED FOR THE SPLICE. IN THE EVENT THAT TEE-BRACING OR STRONGBACKS ARE USED INSTEAD OF CONTINUOUS LATERAL BRACING, THE CROSS BRACING IS THEN ONLY A TEMPORARY ERECTION STABILITY REQUIREMENT. CONTINUOUS LATERAL BRACING MUST, HOWEVER, BE LOCATED ON TOP AND BOTTOM CHORDS ABOVE AND BELOW CROSS BRACING FOR TEMPORARY CROSS BRACING TO BE EFFECTIVE.
- 15. TRUSS MANUFACTURER SHALL ATTEMPT TO ALIGN ADJACENT TRUSS WEBS TO ALLOW INSTALLATION OF LATERAL BRACING. A MINIMUM OF 6 ADJACENT WEBS MUST ALIGN, OTHERWISE MANUFACTURER SHALL SPECIFY AND PROVIDE A DETAIL FOR TEE-BRACING.
- 16. DO NOT USE HINGED FALSE TOP CHORDS WHERE PIGGYBACKS ARE REQUIRED FOR SHIPPING HEIGHTS. USE PIGGYBACKS OVER 2X4 PURLINS AT 24" O/C WITH DIAGONAL BRACING APPLIED TO THE TOP CHORD PLANE.

#### FIRE-RESISTANT CONSTRUCTION

- 1. THIS PROJECT SHALL BE BUILT IN ACCORDANCE WITH CHAPTER 7 OF IBC 2009 WHICH ADDRESSES FIRE RESISTANT MATERIALS AND CONSTRUCTION. THE CONTRACTOR SHALL BE FAMILIAR WITH THE REQUIREMENTS NOTED THEREIN.
- 2. WALLS NOTED AS FIRE WALLS, FIRE BARRIERS, AND FIRE PARTITIONS SHALL HAVE THE FIRE RESISTANCE RATING SHOWN ON THE DRAWINGS AND SHALL HAVE THE FOLLOWING PROPERTIES:

#### FIRE WALLS

- A. SHALL BE BUILT SUCH THAT THE CONSTRUCTION ON EITHER SIDE OF WALL CAN COLLAPSE DURING A FIRE WITHOUT CAUSING THE WALL TO COLLAPSE.
- B. SHALL BE CONTINUOUS FROM TOP TO BOTTOM.C. NO ADJACENT CONSTRUCTION CAN BEAR ON A FIRE WALL.

#### FIRE BARRIERS

- A. SHALL BE CONTINUOUS FROM THE TOP OF THE FLOOR DECK BELOW TO THE UNDERSIDE OF THE FLOOR DECK OR ROOF SHEATHING ABOVE.
- B. SHALL BE CONTINUOUS THROUGH ALL CONCEALED SPACES SUCH AS ABOVE SUSPENDED CFILINGS.

#### FIRE PARTITION

- RE PARTITIONS

  A. SHALL BE CONTINUOUS FROM THE TOP OF THE FLOOR DECK BELOW TO THE UNDERSIDE OF THE FIRE RATED ASSEMBLY ABOVE. IF THE CEILING ABOVE IS FIRE RATED, THE RATED MEMBRANE (SHEET ROCK) OF THE FIRE PARTITION DOES NOT NEED TO CONTINUE ABOVE THE CEILING.
- 3. OPENING PROTECTIVES IN RATED WALLS SHALL HAVE THE RATINGS SHOWN ON THE DRAWINGS. ALL DOORS IN FIRE RATED WALLS SHALL HAVE CLOSURES.
- 4. FIRE RATED WALLS THAT INTERSECT EXTERIOR WALLS SHALL CONTINUE TO THE INSIDE FACE OF EXTERIOR SHEATHING OF THE EXTERIOR WALL.
- 5. ALL FIRE RATED ASSEMBLIES BEARING A UL RATING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS IN THESE DRAWINGS AND IN ACCORDANCE WITH THE UNDERWRITERS LABORATORIES FIRE RESISTANCE DIRECTORY
- 6. FIRE RATED FLOOR/CEILING ASSEMBLIES SHALL EXTEND TIGHT AGAINST EXTERIOR WALLS.

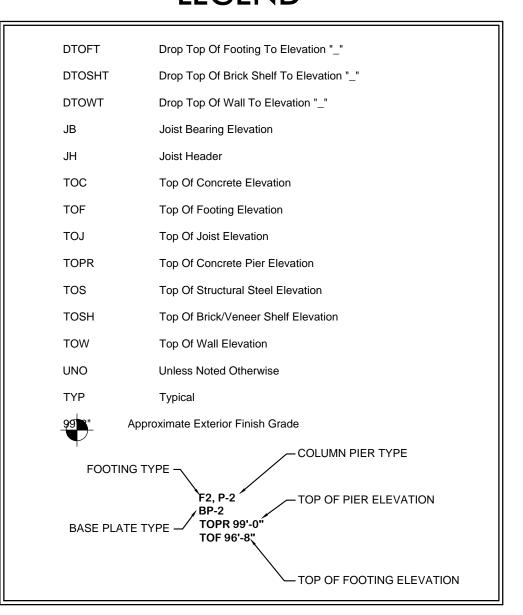
#### FIRE-RESISTANT CONSTRUCTION (Continued)

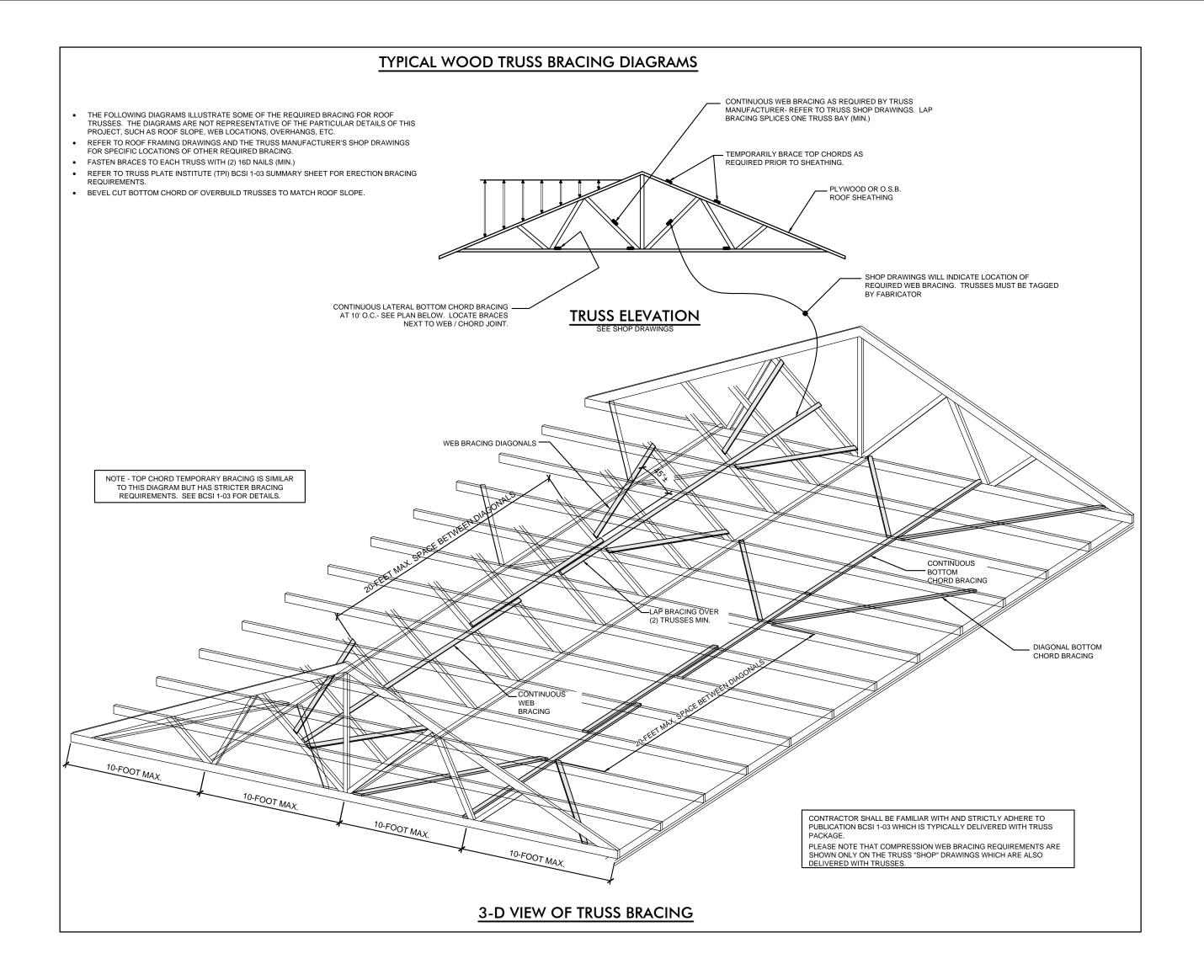
- 7. FIRE BLOCKING AND DRAFT STOPPING SHALL BE INSTALLED IN ACCORDANCE WITH IBC 2009 SECTION
- 8. ALL PENETRATIONS IN FIRE RATED FLOOR OR WALL ASSEMBLIES SHALL BE PROTECTED AS NOTED IN IBC 2009 SECTION 714.0.
- 9. ALL VERTICAL SHAFTS THAT CONNECT LESS THAN FOUR STORIES SHALL BE ENCLOSED IN ONE (1) HOUR FIRE SEPARATION ASSEMBLIES. SHAFTS CONNECTING FOUR OR MORE STORIES SHALL BE ENCLOSED IN TWO (2) HOUR FIRE SEPARATION ASSEMBLIES. THIS INCLUDES STAIRWAYS AND ELEVATOR SHAFTS.
- 10. IF LOCAL CODES REGARDING THE RATING FOR ELEVATOR SHAFTS ARE MORE RESTRICTIVE THAN IBC 2009, THE MORE RESTRICTIVE REQUIREMENT SHALL APPLY.

#### CONSTRUCTION ADMINSTRATION

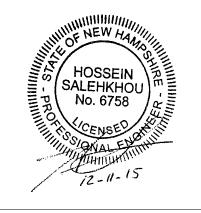
1. IT IS RECOMMENDED THAT THE GENERAL CONTRACTOR OR OWNER RETAIN JSN ASSOCIATES, INC. FOR PERIODIC OBSERVATION OF THE STRUCTURE DURING CONSTRUCTION. IF JSN IS NOT RETAINED THE OWNER OR GENERAL CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR VERIFYING THAT THE STRUCTURE IS BUILT IN COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. JSN WILL NOT BE HELD LIABLE FOR DEFICIENCIES AS A RESULT OF NON-COMPLIANT CONSTRUCTION.

### LEGEND









## Bid and Construction Set

December 11, 2015

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DATE: December 11, 2015		
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1		1

Construction Set

SHEET NUMBER:

JOB NO:

**S1.1** 

#### SCHEDULE OF SPECIAL INSPECTIONS, C.A.S.E. FORM-101

PROJECT: LOCATION: RAMSDELL LANE BARRINGTON, NH 03825

TOWN OF BARRINGTON, NH OWNER:

OWNER'S ADDRESS: 333 CALEF HIGHWAY (ROUTE 125), BARRINGTON, NH 03825

ARCHITECT OF RECORD (AOR): SMP ARCHITECTURE, 30 S. MAIN STREET, BUILDING 2, CONCORD, NH 03301

BARRINGTON TOWN OFFICES

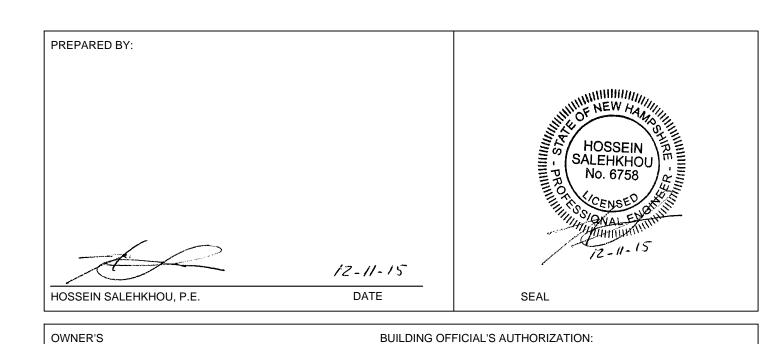
JSN ASSOCIATES, INC. / HOSSEIN SALEHKHOU, P.E. STRUCTURAL ENGINEER OF RECORD (EOR): THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE PE/GE SPECIAL INSPECTION REQUIREMENTS OF THE 2009 INTERNATIONAL BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THIS PROJECT AS WELL AS THE NAME OF SPECIAL INSPECTORS AND THE IDENTITY OF OTHER APPROVED AGENCIES INTENDED TO BE RETAINED FOR CONDUCTING THESE SERVICES.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER AND ARCHITECT OF RECORD. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR.

A FINAL REPORT OF SPECIAL INSPECTIONS BY THE SPECIAL INSPECTOR(S) DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ACI-STT ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

THE SPECIAL INSPECTOR, WHO IS GENERALLY EMPLOYED BY THE PRIMARY TESTING AGENCY, MAY USE VARIOUS INSPECTORS WHO ARE FAMILIAR WITH EACH CATEGORY OF WORK. IF SPECIAL INSPECTIONS ARE ALSO PERFORMED BY AGENTS WHO ARE NOT EMPLOYED BY PRIMARY TESTING AGENCY, EACH OF THESE ADDITIONAL SPECIAL INSPECTORS SHALL ISSUE A FINAL REPORT FOR THEIR CATEGORY OF INSPECTION. ONLY AFTER THE FINAL REPORT(S) HAS(HAVE) BEEN ISSUED BY THE SPECIAL INSPECTOR(S) CAN THE AOR AND EOR ISSUE FINAL AFFIDAVITS FOR THE PROJECT COMPLETION.

JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.



SCHEDULE OF SPECIAL INSPECTION SERVICES

THE FOLLOWING TABLES COMPRISE THE REQUIRED SCHEDULE OF SPECIAL INSPECTIONS FOR THIS PROJECT. THE CONSTRUCTION DIVISIONS WHICH REQUIRE SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS FOLLOW:

SIGNATURE

- CAST-IN-PLACE CONCRETE

**AUTHORIZATION:** 

SIGNATURE

- STRUCTURAL STEEL
- COLD-FORMED METAL FRAMING WOOD CONSTRUCTION

INSPECTION AGENT	FIRM	ADDRESS
1. SPECIAL INSPECTOR	TBD	TBD
2. TESTING LABORATORY	TBD	TBD
3. STRUCTURAL ENGINEER	JSN ASSOCIATES, INC.	ONE AUTUMN STREET PORTSMOUTH, NH 03801 (603) 433-8639
4. COLD-FORMED METAL DESIGN ENGINEER	TBD	TBD

NOTE: THE INSPECTION AND TESTING AGENT SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK.

#### QUALIFICATIONS OF INSPECTORS / TESTING TECHNICIANS

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION ACTIVITIES ARE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED IF

#### KEY FOR MINIMUM QUALIFICATIONS OF INSPECTION AGENTS:

WHEN THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE DEEMS IT APPROPRIATE THAT THE INDIVIDUAL PERFORMING TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION OR LICENSE AS INDICATED BELOW, SUCH DESIGNATION SHALL APPEAR BELOW THE AGENCY NUMBER ON THE SCHEDULE.

STRUCTURAL ENGINEER - A LICENSED SE OR PE SPECIALIZING IN THE DESIGN OF BUILDING STRUCTURES.

GEOTECHNICAL ENGINEER - A LICENSED PE SPECIALIZING IN SOIL MECHANICS AND FOUNDATIONS. EIT ENGINEER-IN-TRAINING - A GRADUATE ENGINEER WHO HAS PASSED THE FUNDAMENTALS OF ENGINEERING EXAMINATION.

AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION

ACI-CFTT CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 ACI-CCI CONCRETE CONSTRUCTION INSPECTOR ACI-LTT LABORATORY TESTING TECHNICIAN - GRADE 1 & 2 STRENGTH TESTING TECHNICIAN

AMERICAN WELDING SOCIETY (AWS) CERTIFICATION

CERTIFIED WELDING INSPECTOR AWS/AISC-SSI CERTIFIED STRUCTURAL STEEL INSPECTOR

AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING (ASNT) CERTIFICATION NON-DESTRUCTIVE TESTING TECHNICIAN - LEVEL II OR III

INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION

STRUCTURAL MASONRY SPECIAL INSPECTOR ICC-SWSI STRUCTURAL STEEL AND WELDING SPECIAL INSPECTOR ICC-SFSI SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR

PRESTRESSED CONCRETE SPECIAL INSPECTOR ICC-PCSI ICC-RCSI REINFORCED CONCRETE SPECIAL INSPECTOR

NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET) CONCRETE TECHNICIAN - LEVELS I, II, III & IV

SOIL TECHNICIAN - LEVELS I, II, III & IV GEOTECHNICAL ENGINEERING TECHNICIAN - LEVELS I, II, III & IV NICET-GET

EXTERIOR DESIGN INSTITUTE (EDI) CERTIFICATION EDI-EIFS EIFS THIRD PARTY INSPECTOR

#### **SOILS AND FOUNDATIONS**

ITEM	AGENT NO. & QUALIFICATIONS	SCOPE & FREQUENCY
1. SHALLOW FOUNDATIONS	1 PE/GE	VERIFY THAT UNSUITABLE BEARING MATERIALS ARE REMOVED. VERIFY THE SOIL LOAD-BEARING CAPACITY COINCIDES WITH THAT IDENTIFIED IN THE CONSTRUCTION DOCUMENTS. FREQUENCY - AT EACH AFFECTED FOOTING.
2. CONTROLLED STRUCTURAL FILL	1	N/A
3. DEEP FOUNDATIONS	1	N/A
4. OTHER	1	N/A

#### CAST-IN-PLACE CONCRETE

DATE

ITEM	AGENT NO. & QUALIFICATIONS	SCOPE & FREQUENCY
1. MIX DESIGN	2 ACI-CCI ICC-RCSI	REVIEW CONCRETE BATCH TICKETS AND VERIFY COMPLIANCE WITH APPROVED MIX DESIGN. VERIFY THAT WATER ADDED AT THE SITE DOES NOT EXCEED THAT ALLOWED BY THE MIX DESIGN. FREQUENCY - EACH MIX DESIGN.
2. MATERIAL CERTIFICATION	3 PE	REVIEW FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
3. REINFORCEMENT INSTALLATION	2 ACI-CCI ICC-RCSI	INSPECT SIZE, SPACING, COVER, POSITIONING AND GRADE OF REINFORCING STEEL. VERIFY THAT REINFORCING BARS ARE FREE OF FORM OIL OR OTHER DELETERIOUS MATERIALS. INSPECT BAR LAPS AND MECHANICAL SPLICES. VERIFY THAT BARS ARE ADEQUATELY TIED AND SUPPORTED ON CHAIRS OR BOLSTERS. FREQUENCY - 25% OF STRIP FOOTINGS AND FROST WALLS 100% OF ISOLATED FOOTINGS, 100% OF RETAINING WALLS AND 50% OF ALL OTHERS.
4. ANCHOR RODS & FORMWORK GEOMETRY	2 ACI-CCI ICC-RCSI	INSPECT SIZE, POSITIONING AND EMBEDMENT OF ANCHOR RODS. INSPECT CONCRETE PLACEMENT AND CONSOLIDATION AROUND ANCHORS. REVIEW FORMWORK GEOMETRY FOR COMPLIANCE WITH THE STRUCTURAL CONSTRUCTION DOCUMENTS. FREQUENCY - 100% OF ALL ANCHOR RODS, 25% OF FORMWORK.
5. CONCRETE PLACEMENT	2 ACI-CCI ICC-RCSI	INSPECT PLACEMENT OF CONCRETE. VERIFY THAT CONCRETE CONVEYANCE AND DEPOSITING AVOIDS SEGREGATION OR CONTAMINATION. VERIFY THAT CONCRETE IS PROPERLY CONSOLIDATED. FREQUENCY - 100% OF ALL FOOTING PLACEMENTS AND THOSE EXCEEDING 5 CUBIC YARDS PLACED ELSEWHERE. TEST SLUMP AND TEMPERATURE OF EACH BATCH. TEST AIR CONTENT WHEN COMPRESSIVE STRENGTH TEST SPECIMENS ARE MOLDED.
6. SAMPLING AND TESTING OF CONCRETE	2 ACI-CFTT ACI-STT	TEST CONCRETE COMPRESSIVE STRENGTH (ASTM C31 & C39), SLUMP (ASTM C143), AIR-CONTENT (ASTM C231 OR C173) AND TEMPERATURE (ASTM C1064).
		OBTAIN ONE SET OF (4) STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST. TEST TWO (2) CYLINDERS AT 7-DAYS AND TWO (2) AT 28-DAYS.
		TESTING FREQUENCY: (1) COMPRESSIVE STRENGTH TEST SHOULD BE PERFORMED FOR EACH DAY'S POUR EXCEEDING 5 CUBIC YARDS AND (1) ADDITIONAL SET FOR EACH 50 CUBIC YARDS MORE THAN THE FIRST 25 CUBIC YARDS. AT A MINIMUM, COMPRESSIVE STRENGTH TESTS SHOULD BE PERFORMED ON CONCRETE USED IN 30% OF ALL NEW INTERIOR FOOTINGS.
		FIELD-CURED CYLINDERS - DURING COLD WEATHER CONCRETE OPERATIONS, PREPARE TWO (2) ADDITIONAL SETS OF TWO (2) STANDARD CYLINDERS TO BE CURED AT THE SITE, MAINTAINING CYLINDERS IN CONDITIONS AND AT TEMPERATURES OF THE IN-PLACE CONCRETE. PROTECT CYLINDERS FROM BEING HIT, DAMAGED, AND FROM VIBRATION DURING INITIAL SET. PERFORM COMPRESSIVE STRENGTH TEST ON TWO (2) OF THE CYLINDERS AT 7 DAYS AND ON THE REMAINING TWO (2) CYLINDERS AT 28 DAYS.
7. CURING AND PROTECTION	2 ACI-CCI ICC-RCSI	INSPECT CURING, COLD WEATHER PROTECTION AND HOT WEATHER PROTECTION PROCEDURES.

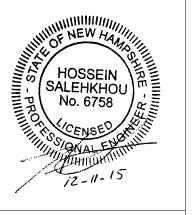
#### STRUCTURAL STEEL, STEEL JOISTS & DECKS

ITEM	AGENT NO. & QUALIFICATIONS	SCOPE & FREQUENCY
FABRICATOR CERTIFICATION     AND QUALITY CONTROL     PROCEDURES	TBD AWS/AISC-SSI ICC-SWSI	REVIEW SHOP FABRICATION AND QUALITY CONTROL PROCEDURES.
2. MATERIAL CERTIFICATION	TBD AWS/AISC-SSI ICC-SWSI	REVIEW CERTIFIED MILL TEST REPORTS AND IDENTIFICATION MARKINGS ON WIDE-FLANGE SHAPES, HIGH STRENGTH BOLTS, NUTS AND WELDING ELECTRODES.
3. OPEN WEB STEEL JOISTS	1 AWS/AISC-SSI ICC-SWSI	N/A
4. BOLTING	1 AWS/AISC-SSI ICC-SWSI	INSPECT INSTALLATION AND TIGHTENING OF HIGH-STRENGTH BOLTS. VERIFY THAT SPLINES HAVE SEPARATED FROM TENSION CONTROL BOLTS. VERIFY PROPER TIGHTENING SEQUENCES. FREQUENCY - 25% OF BEARING-TYPE BOLTS. CONTINUOUS INSPECTION OF BOLTS IN SLIP-CRITICAL CONNECTIONS.
5. WELDING	1 AWS-CWI ASNT	VISUALLY INSPECT ALL WELDS. INSPECT PRE-HEAT, POST-HEAT AND SURFACE PREPARATION BETWEEN PASSES. VERIFY SIZE AND LENGTH OF FILLET WELDS. REVIEW WELDER QUALIFICATION STATEMENTS BY FABRICATOR AND ERECTOR. FREQUENCY - 100% SHOP & FIELD FILLET (>5/16", MULTI-PASS) AND PARTIAL PENETRATION GROOVE WELDS MUST BE SPOT TESTED AT A RATE OF ONE (1) TEST PER MEMBER USING THE MAGNETIC PARTICLE TEST METHOD. 100% OF ALL SHOP & FIELD COMPLETE PENETRATION GROOVE WELDS MUST BE TESTED USING THE ULTRASONIC METHOD.
6. SHEAR CONNECTORS	1 AWS/AISC-SSI ICC-SWSI	N/A
7. STRUCTURAL DETAILS	3 PE/SE	VERIFY THAT THE GENERAL GEOMETRY OF THE ERECTED STEEL FRAME CONFORMS TO THE CONSTRUCTION DOCUMENTS AND APPROVED SHOP DRAWINGS. FREQUENCY - TBD
8. METAL DECK	2 AWS-CWI	INSPECT WELDING AND SIDE-LAP FASTENING OF METAL ROOF AND FLOOR DECK. VERIFY SIZE AND QUANTITY OF FASTENERS FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS. FREQUENCY - 100% OF FASTENING PATTERNS. SPOT-CHECK 10% OF ALL WORK FOR SIZE & TYPE OF FASTENERS.

#### WOOD CONSTRUCTION

TEM	AGENT NO. & QUALIFICATIONS	SCOPE & FREQUENCY
. TRUSS FABRICATOR CERTIFICATION / QUALITY CONTROL PROCEDURES	1 TBD	VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES WHICH CONFORM TO THE REQUIREMENTS OF THE TRUSS PLATE INSTITUTE (TPI) AND WOOD TRUSS COUNCIL OF AMERICA (WTCA).
2. MATERIAL GRADING	3 PE	REVIEW SPECIES AND GRADES OF LUMBER USED TO ENSURE CONFORMANCE WITH CONSTRUCTION DOCUMENTS. REVIEW TRUSS MEMBERS TO ENSURE CONFORMANCE WITH TRUSS ENGINEERING AND SHOP DRAWINGS.
3. CONNECTIONS	3 PE	VERIFY THAT ROOF TRUSS AND OTHER WOOD FRAME CONNECTIONS COMPLY WITH CONSTRUCTION DOCUMENTS AND SHOP DRAWINGS. FREQUENCY - THREE (3) RANDOM OBSERVATIONS
4. FRAMING DETAILS	3 PE	VERIFY THAT FRAMING CONFIGURATION AND ALIGNMENT OF WALL FRAMING BELOW FLOOR AND ROOF FRAMING IS AS SPECIFIED ON THE CONSTRUCTION DOCUMENTS. VERIFY PERMANENT TRUSS BRACING TO CONFORM WITH PROJECT REQUIREMENTS.  FREQUENCY - THREE (3) RANDOM OBSERVATIONS
5. PERMANENT TRUSS BRACING	3 PE	REVIEW CONTRACT DOCUMENTS FOR PERMANENT TRUSS BRACING REQUIREMENTS AND VERIFY THEIR INSTALLATION PER THE SAID DOCUMENTS. FREQUENCY - AS NECESSARY
6. OTHER	3 PE	VERIFY THAT FASTENING OF ALL LATERAL LOAD RESISTING ELEMENTS SUCH AS SHEAR WALLS AND DIAPHRAGMS ARE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. FREQUENCY - THREE (3) RANDOM OBSERVATIONS





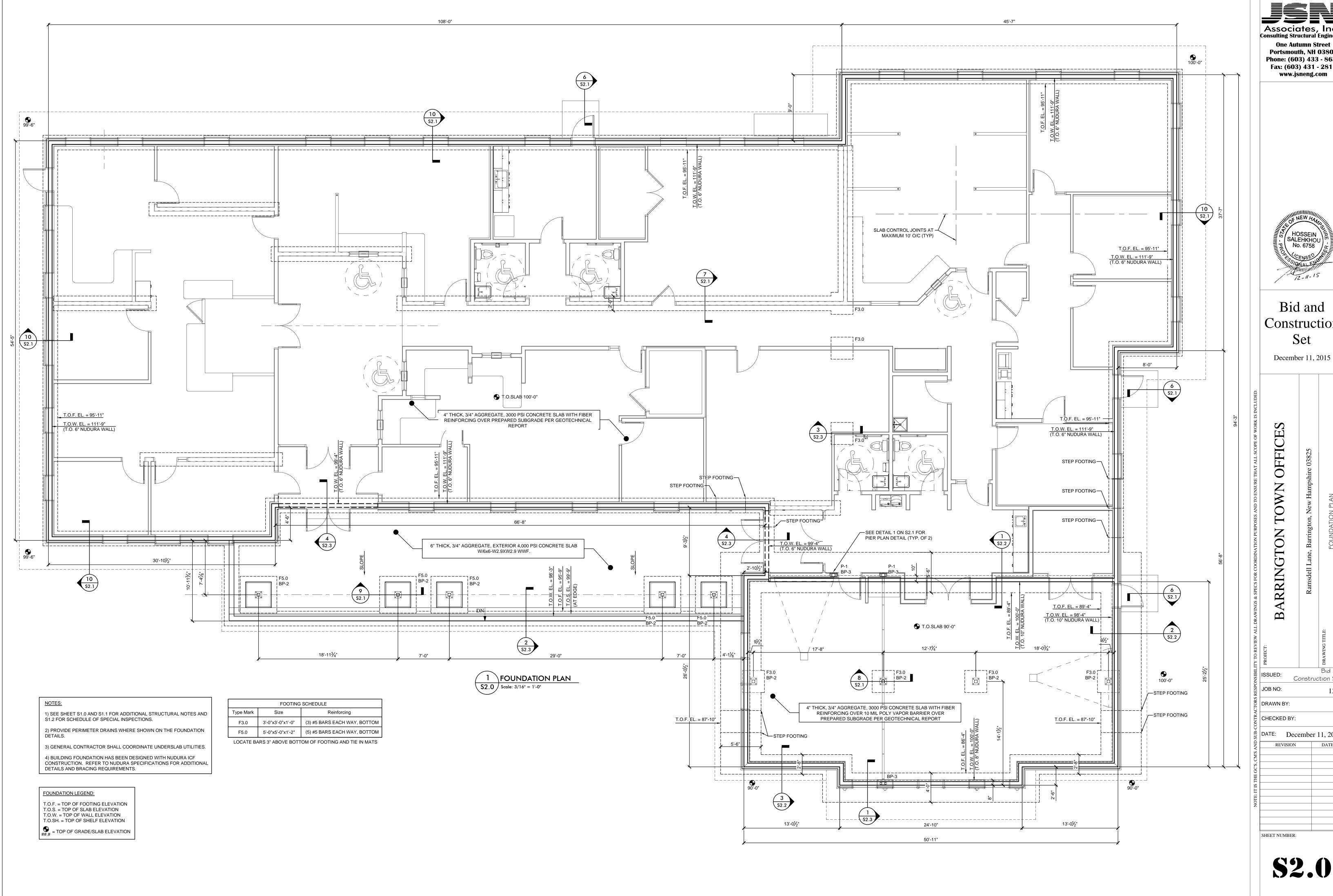
December 11, 2015

CTORS	DRAWN BY:			
GC'S, CM'S AND SUB-CONTRACTORS	CHECKED BY:			
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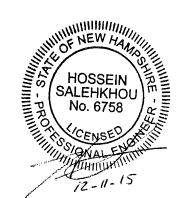
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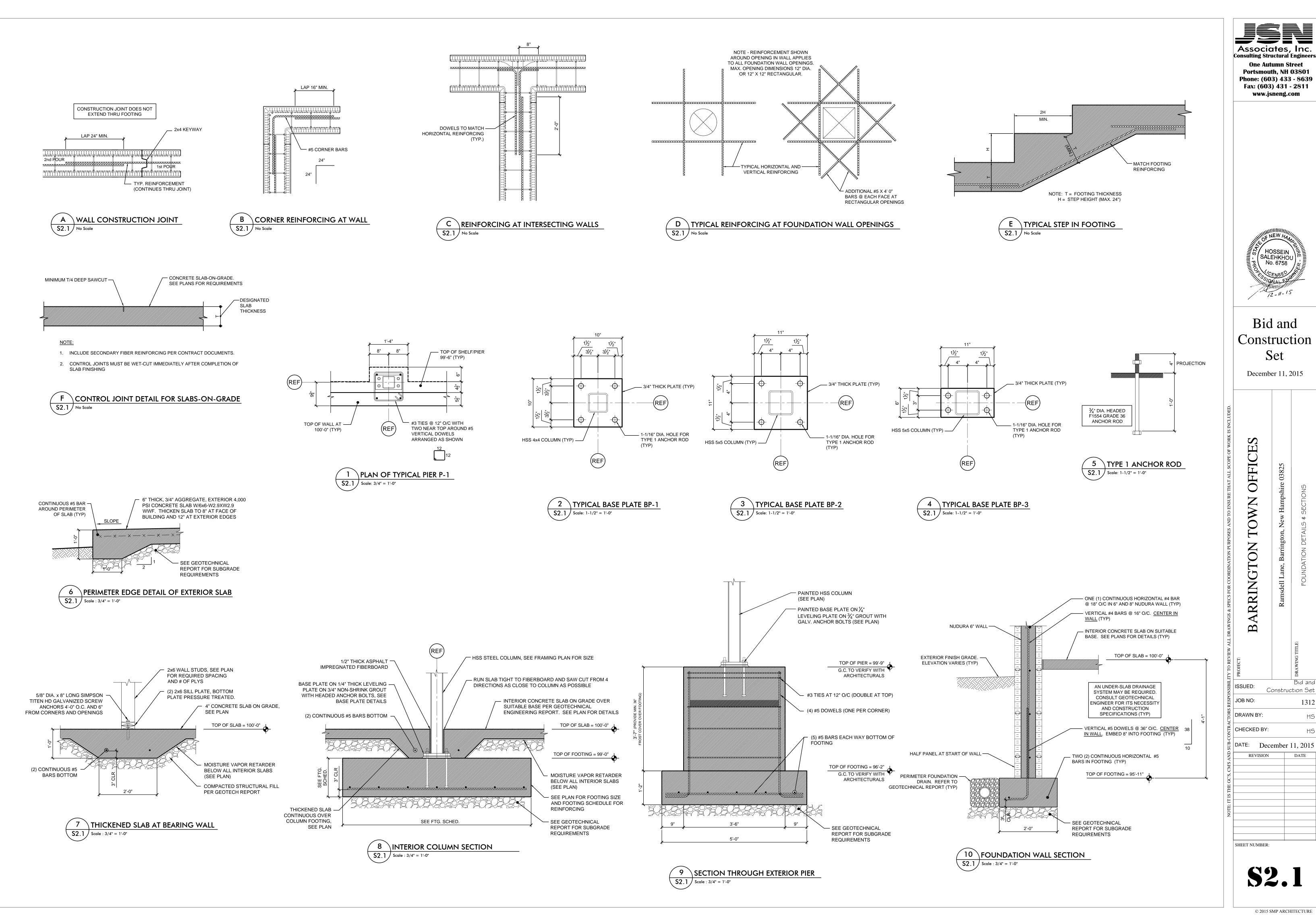
Associates, Inc. Consulting Structural Engineers Portsmouth, NH 03801 Phone: (603) 433 - 8639 Fax: (603) 431 - 2811 www.jsneng.com



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Construction Set

December 11, 2015

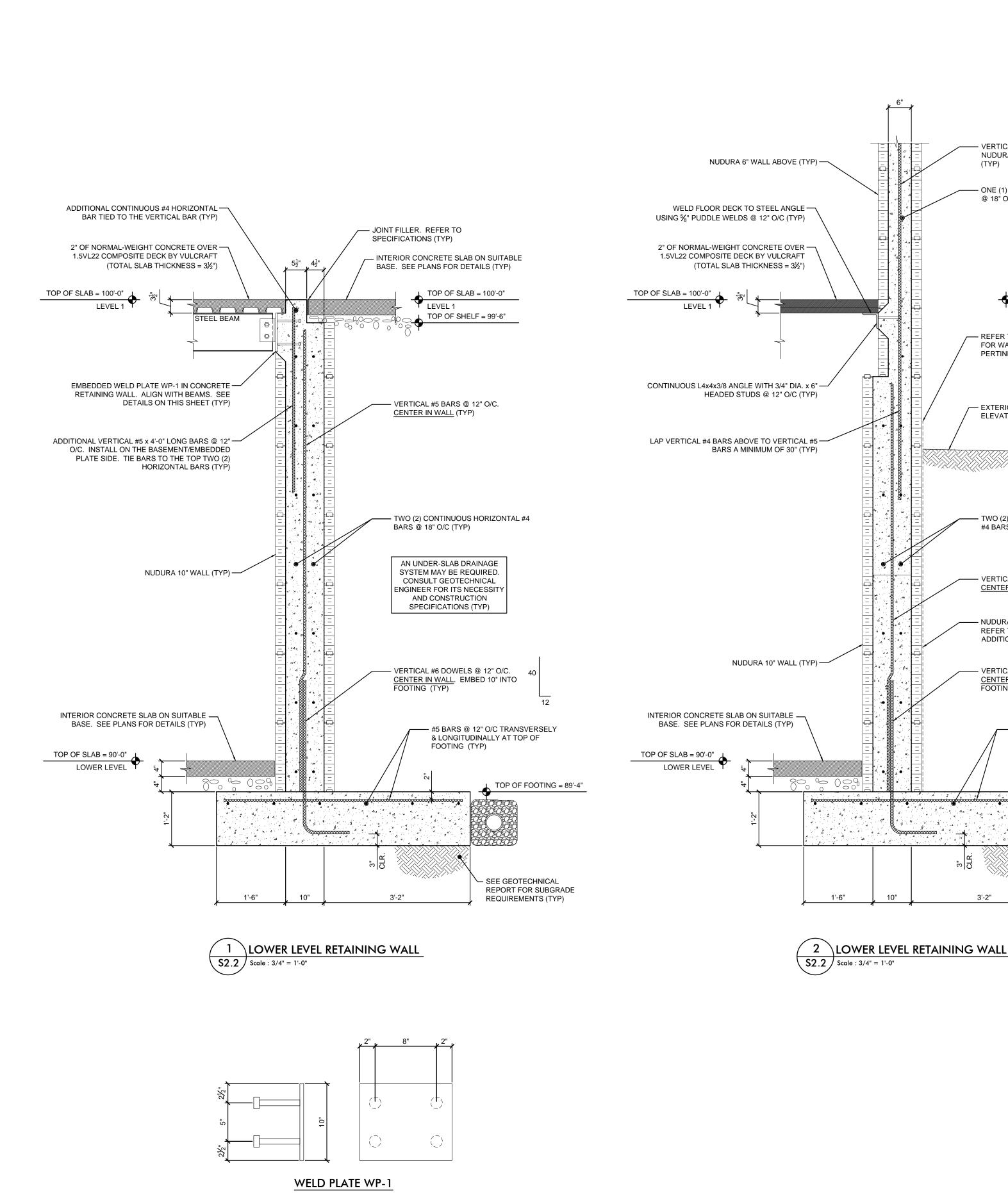


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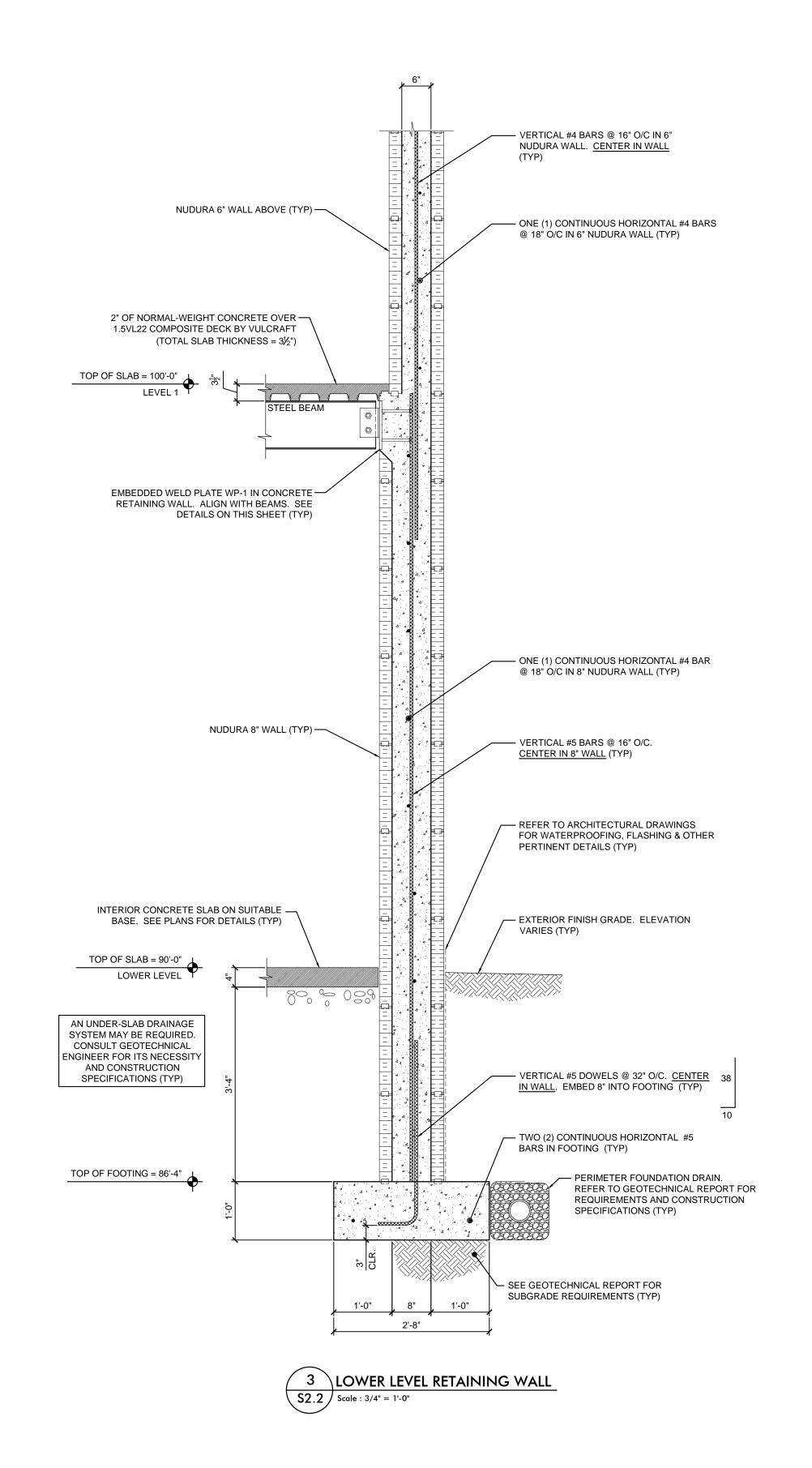
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1/2" THICK PLATE WITH FOUR (4) - 3/4" DIA. x 6" LONG EWS

4 TYPICAL EMBEDDED WELD PLATE TYPE WP-1

\$2.2 | Scale: 1-1/2" = 1'-0"



- VERTICAL #4 BARS @ 16" O/C IN 6" NUDURA WALL. <u>CENTER IN WALL</u>

@ 18" O/C (TYP)

- ONE (1) CONTINUOUS HORIZONTAL #4 BARS

TOP OF SLAB = 100'-0"

LEVEL 1

— REFER TO ARCHITECTURAL DRAWINGS FOR WATERPROOFING, FLASHING & OTHER

TOP OF 10" WALL = 98'-4"

PERTINENT DETAILS (TYP)

— EXTERIOR FINISH GRADE.

ELEVATION VARIES (TYP)

— TWO (2) CONTINUOUS HORIZONTAL

#4 BARS @ 18" O/C (TYP)

— VERTICAL #5 BARS @ 12" O/C.

- NUDURA WATERPROOFING MEMBRANE. REFER TO ARCHITECTURALS FOR ADDITIONAL PERTINENT DETAILS (TYP)

— VERTICAL #6 DOWELS @ 12" O/C.

CENTER IN WALL. EMBED 10" INTO FOOTING (TYP)

TOP OF FOOTING VARIES

- SEE GEOTECHNICAL

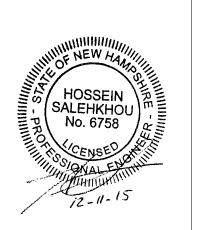
REPORT FOR SUBGRADE

REQUIREMENTS (TYP)

& LONGITUDINALLY AT TOP OF FOOTING (TYP)

CENTER IN WALL (TYP)

Associates, Inc. Consulting Structural Engineers One Autumn Street Portsmouth, NH 03801 Phone: (603) 433 - 8639 Fax: (603) 431 - 2811 www.jsneng.com



Bid and Construction Set

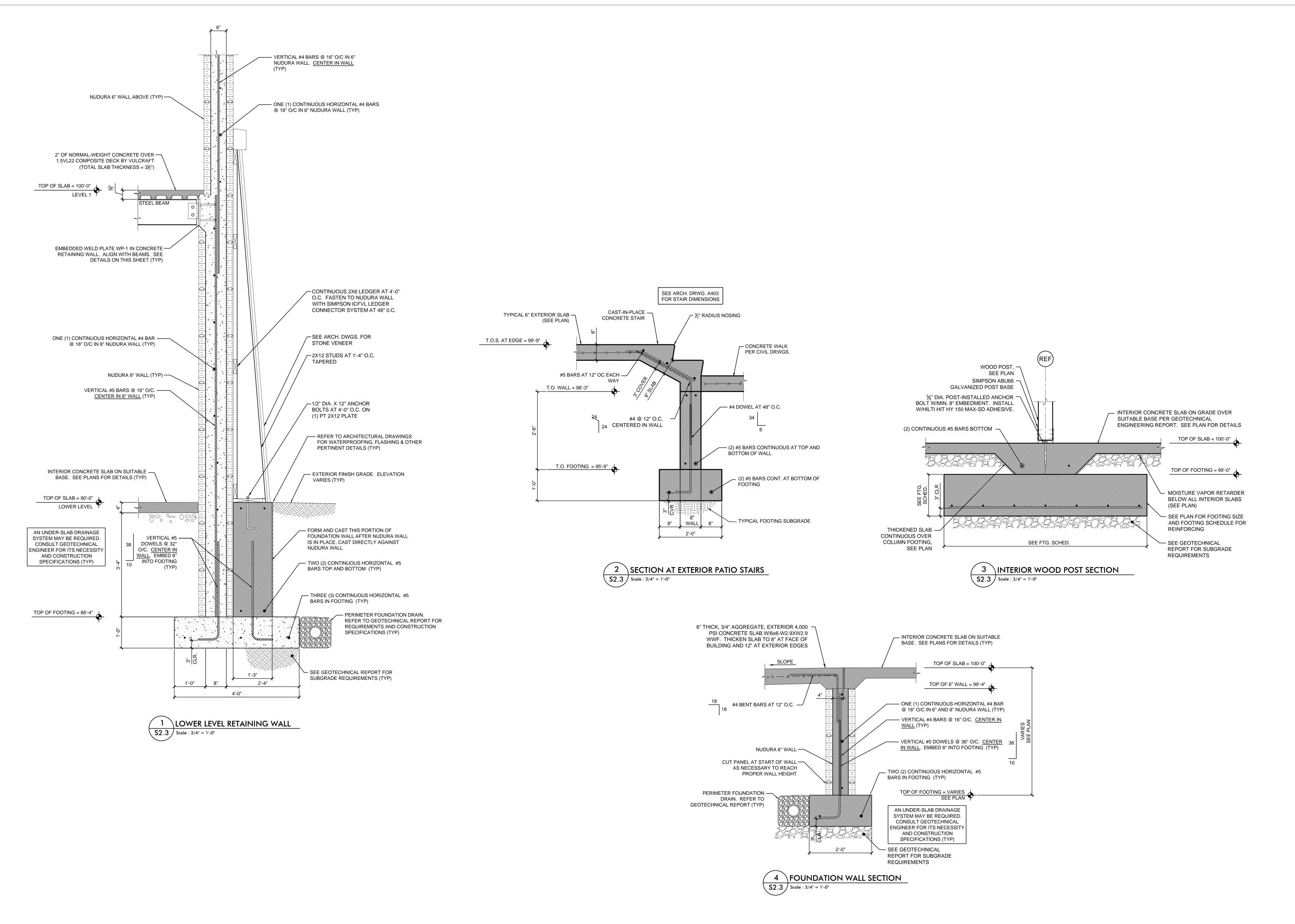
December 11, 2015

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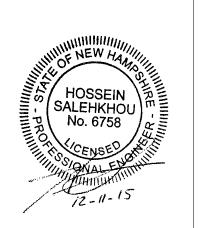
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DATE: December 11, 2015

SHEET NUMBER:







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December 11, 2015

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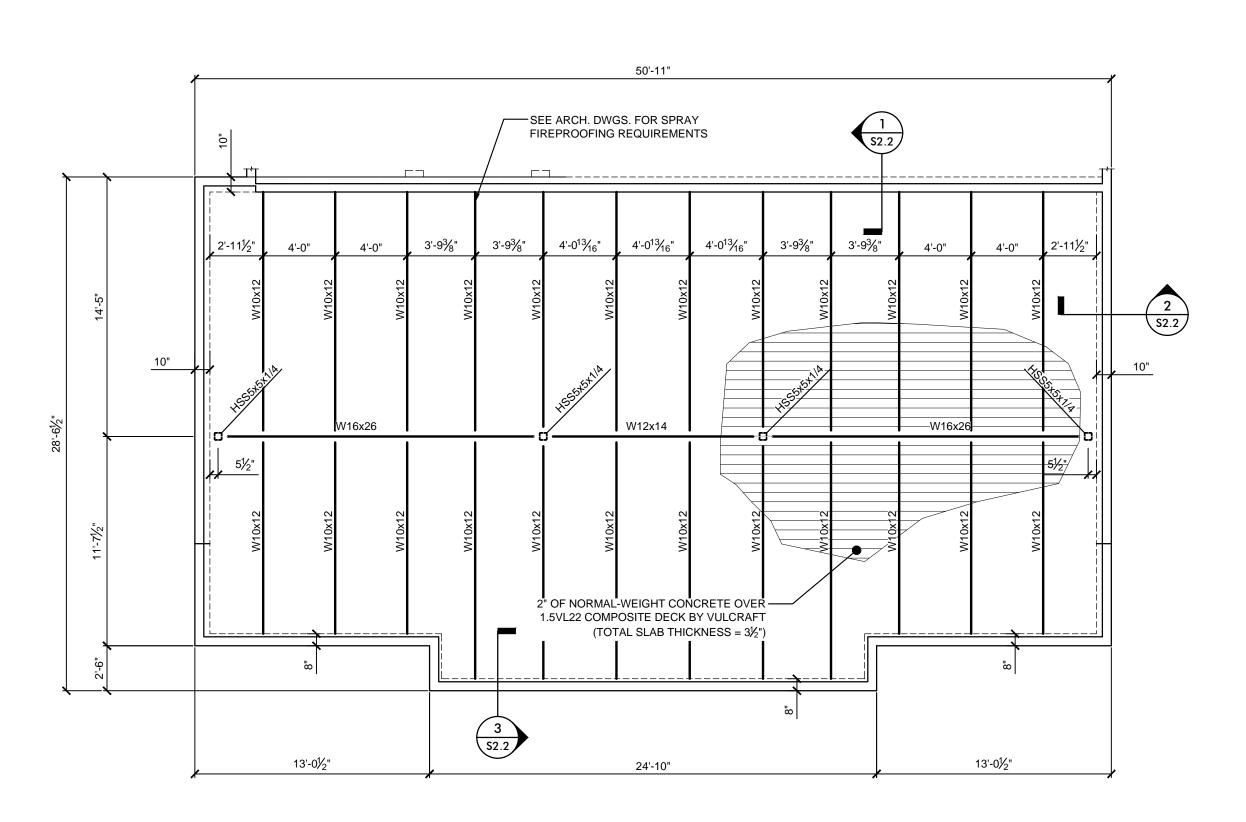
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DATE: December 11, 2015

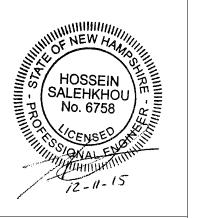
REVISION DATE

SHEET NUMBER:

**S2.3** 



1 FLOOR FRAMING PLAN Scale: 3/16" = 1'-0" Associates, Inc.
Consulting Structural Engineers
One Autumn Street
Portsmouth, NH 03801
Phone: (603) 433 - 8639
Fax: (603) 431 - 2811
www.jsneng.com



Bid and Construction Set

December 11, 2015

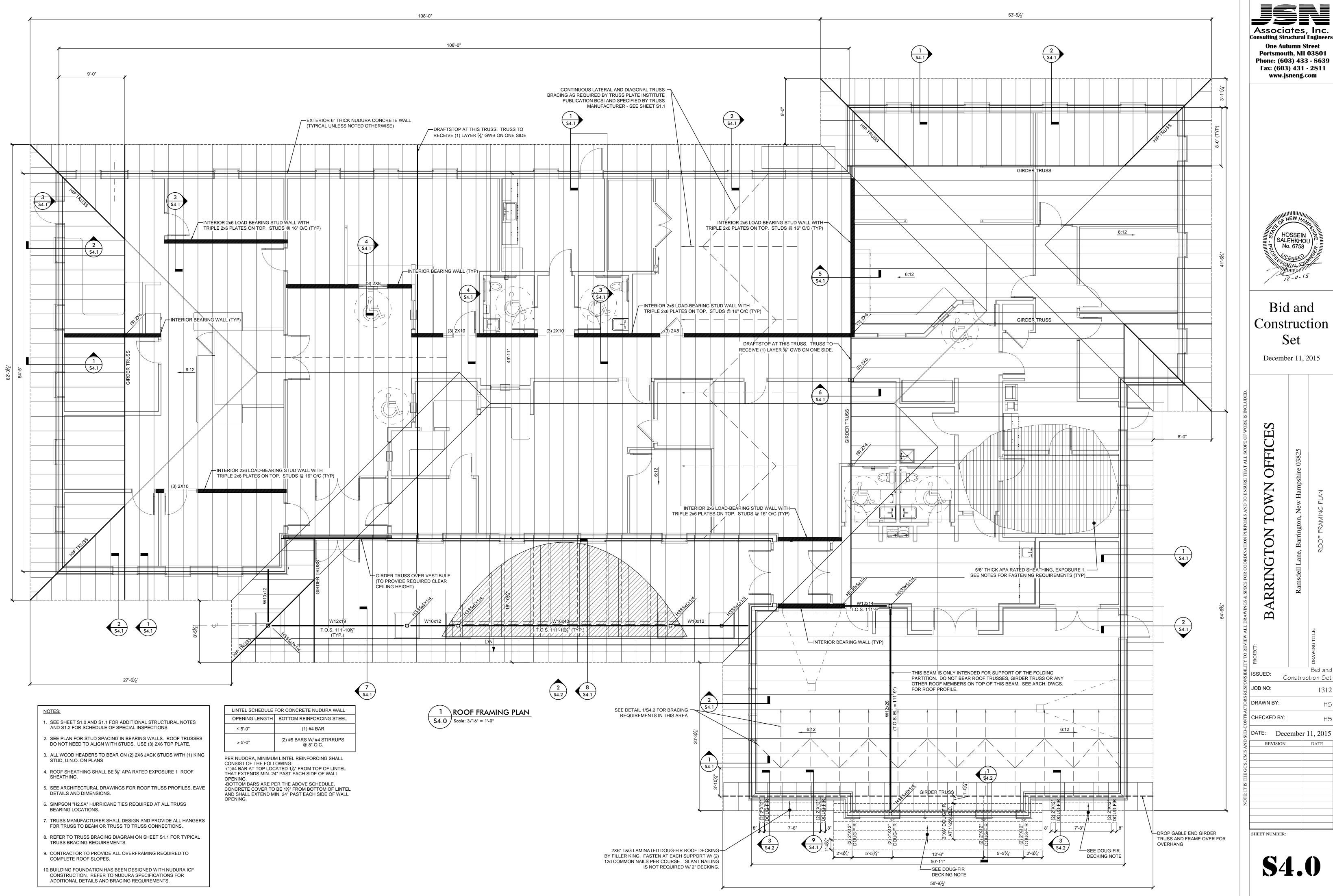
BARRINGTON TOWN OFFICES	Ramsdell Lane, Barrington, New Hampshire 03825	FLOOR FRAMING PLAN
B,		AWING TITLE:

		110
CHECKED BY:		HS
DATE:	December 11, 2015	
REVISION		DATE

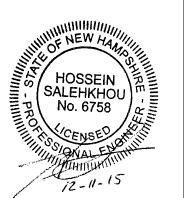
REVISION DATE

SHEET NUMBER:

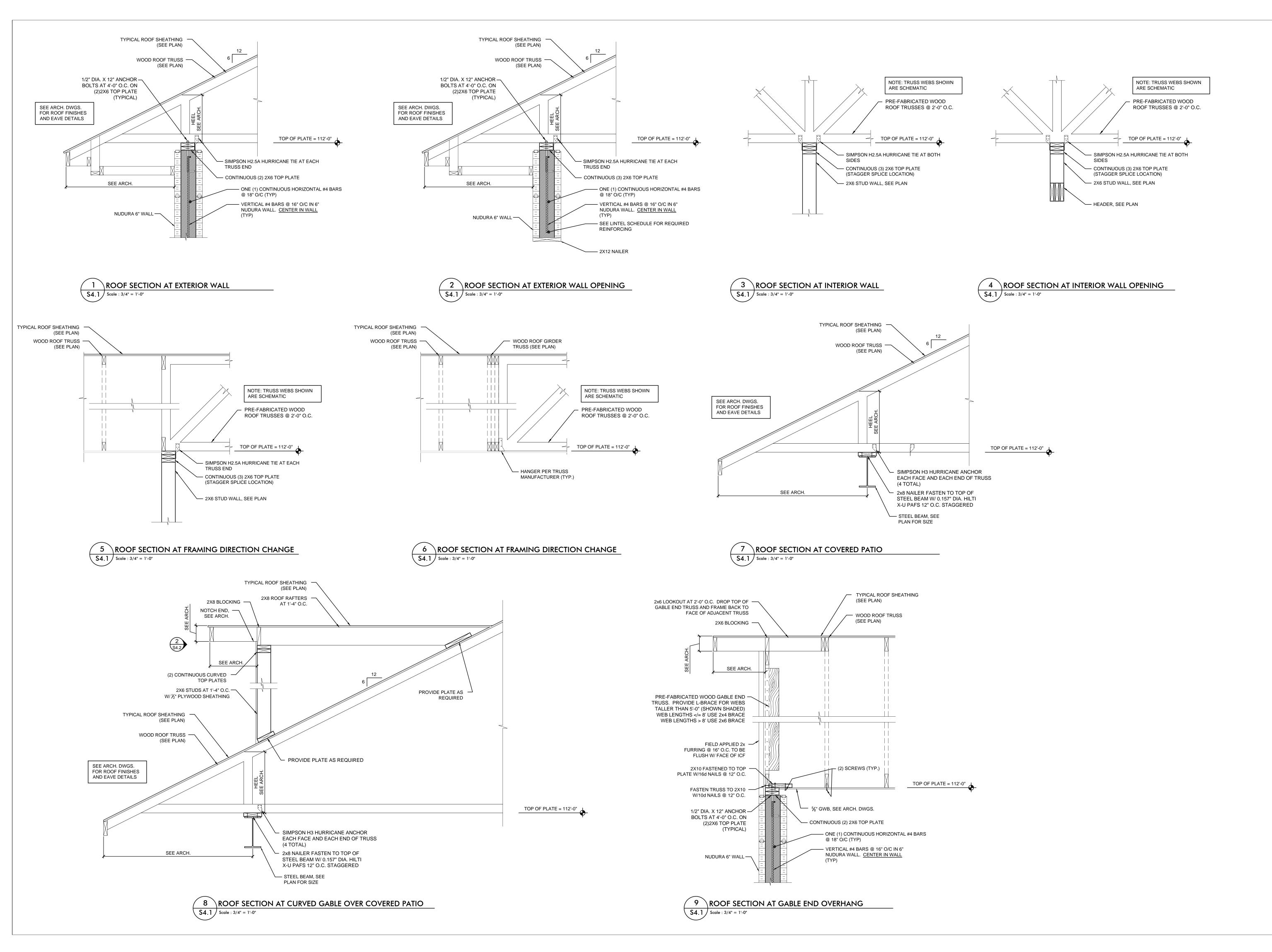
**S3.0** 



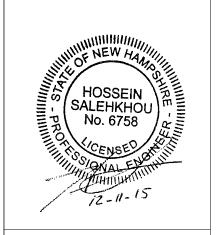
Associates, Inc. Consulting Structural Engineers Portsmouth, NH 03801 Phone: (603) 433 - 8639 Fax: (603) 431 - 2811



Construction Set



Associates, Inc.
Consulting Structural Engineers
One Autumn Street
Portsmouth, NH 03801
Phone: (603) 433 - 8639
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Bid and Construction Set

December 11, 2015

BARRINGTON TOWN OFFICES

Ramsdell Lane, Barrington, New Hampshire 03825

TITLE:

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Construction Set

JOB NO:

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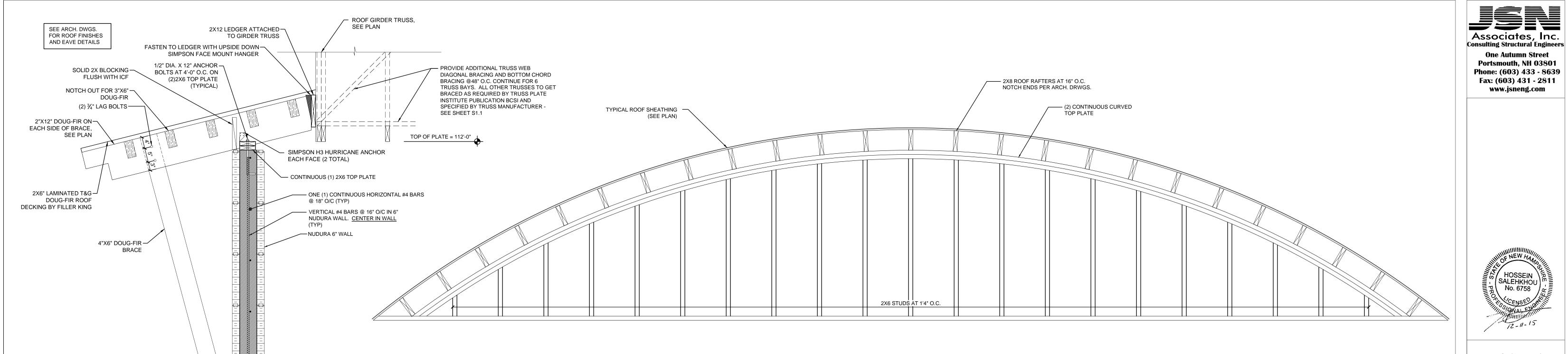
DATE: December 11, 2015

REVISION DATE

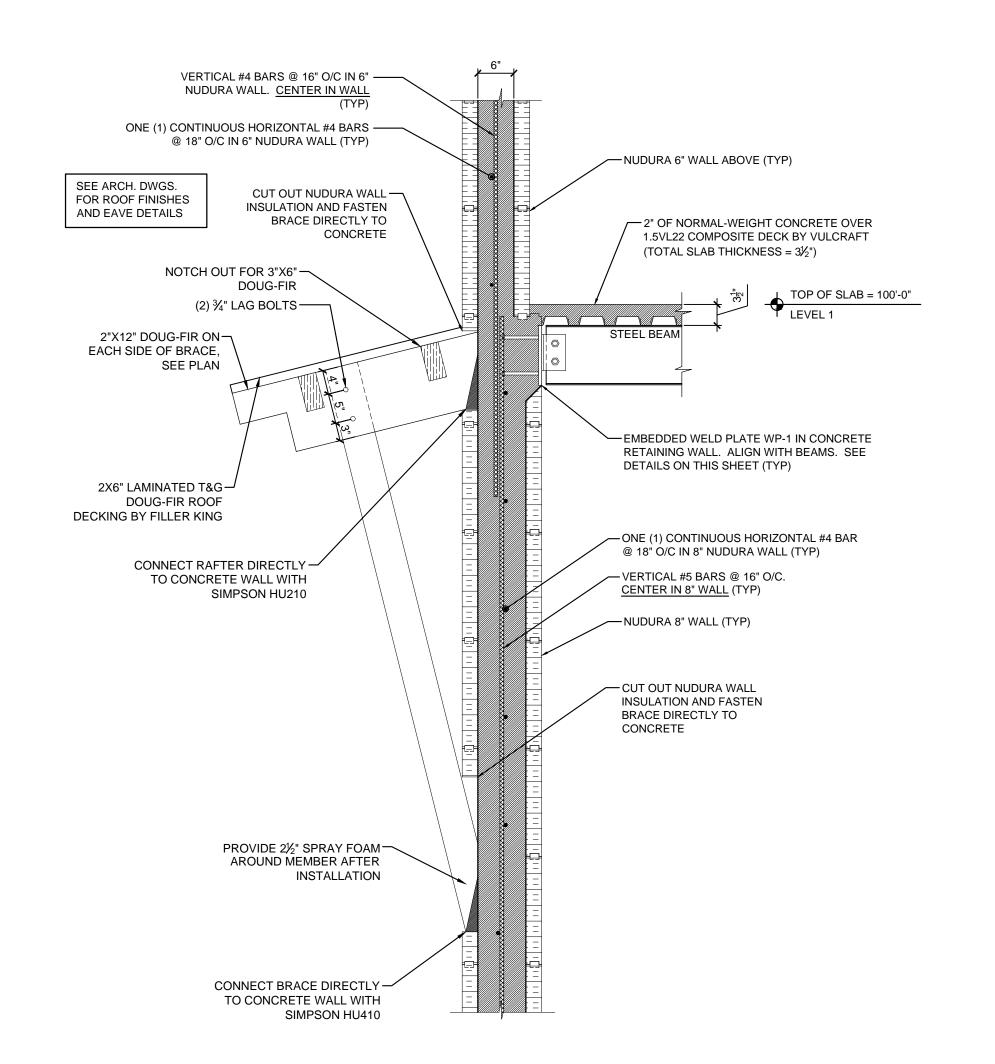
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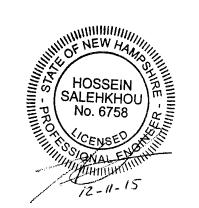
**S4.1** 



2 ROOF DETAIL AT CURVED GABLE \$4.2 | Scale : 3/4" = 1'-0"



3 ROOF SECTION AT GABLE END LOW ROOF OVERHANG S4.2 | Scale : 3/4" = 1'-0"



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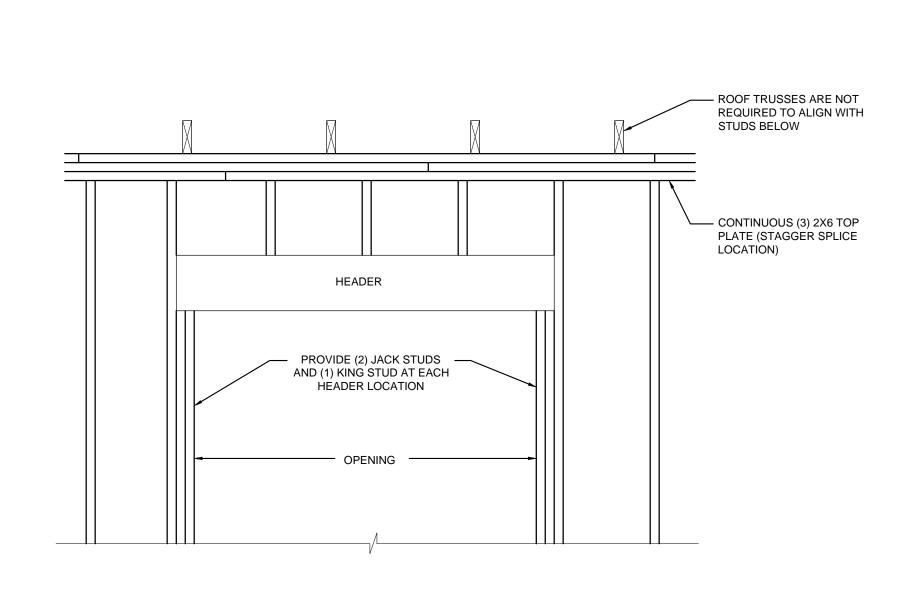
### Bid and Construction Set

December 11, 2015

NOTE: IT IS THE GCS, CMS AND SUB-CONTRACTORS RESPONSIBILITY TO REVIEW ALL DRAWINGS & SPECS FOR COORDINATION PURPOSES AND TO ENSURE THAT ALL SCOPE OF WORK IS INCLUDED.	BARRINGTON TOWN OFFICES	Ramsdell Lane, Barrington, New Hampshire 03825		DRAWING TITLE: FOUNDATION WALL SECTIONS & DETAILS	
ILITY TO	PROJECT			Sıd an	_
PONSIB		onstr		ion Se	2
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SHEET NUMBER:

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A FRAMING ELEVATION AT INTERIOR OPENING

S4.2 | Scale : 3/4" = 1'-0"

PROVIDE 21/2" SPRAY FOAM AROUND MEMBER AFTER

CONNECT BRACE DIRECTLY -TO CONCRETE WALL WITH

INSTALLATION

SIMPSON HU410

ROOF SECTION AT GABLE END LOW ROOF OVERHANG

-CUT OUT NUDURA WALL

CONCRETE

INSULATION AND FASTEN BRACE DIRECTLY TO

**CODE SUMMARY** 

#### 1. PROJECT SUMMARY:

Project consists of a new one story  $10,000 \, \mathrm{sf}$  +/- building with partial walk-out storage basement. Project includes all sitework, utilities, excavation, retaining walls, ICF foundations and exterior walls, interior framing and GWB, roof trusses, insulation, storefront doors, fiberglass windows, siding, painting mechanical and electrical systems. Building is non-sprinklered.

#### 2. APPLICABLE CODES INCLUDING, BUT NOT LIMITED TO:

BUILDING CODE: IBC 2009 LIFE SAFETY CODE: NFPA 101, 2009 ENERGY CODE: IEC, 2009 NH BARRIER FREE CODE NH CODE AMENDMENTS

## 3. OCCUPANCY/USE GROUPS: Separated Mixed use

## - Meeting Room: A3, Assembly - Lower Level: S2, Storage 4. CONSTRUCTION CLASSIFICATION: 5B

#### 5. BUILDING HEIGHT:

- Office areas : B, Business

PROPOSED BUILDING 31'-6" (ridge), 1 STORY, GRADE PLANE: 1'-0" BELOW FIRST FLOOR BASEMENT: YES (Partial, walk-out)

ALLOWABLE ADJUSTED BUILDING HEIGHT: 40'-0", 1 Story ALLOWABLE HEIGHT PER TOWN REGULATIONS = 35'-0"

#### 6. BUILDING AREA:

LOWER LEVEL AREA: 1,447 gsf MAIN LEVEL: 10,104 gsf TOTAL BUILDING AREA: 11,551 gsf

TABLE 503: ALLOWABLE AREA;
- BUSINESS = 9,000 SF
- ASSEMBLY = 6,000 SF

### - STORAGE = 13,500 SF **7. OCCUPANT CAPACITY:**

SEE CODE ANALYSIS KEY PLANS FOR ROOM OCCUPANT LOADS.

OCCUPANT LOAD PER FLOOR:

LOWER LEVEL:

MAIN LEVEL; OFFICES:

MAIN LEVEL; ACCESSORY USE STORAGE

MAIN LEVEL; MEETING ROOM:

83 Occupants

83 Occupants

NOTE: Meeting room use is not concurrent with office occupancy

#### 8. EGRESS/ TRAVEL DISTANCES:

EXITS REQUIRED, BUILDING = 2 EXITS REQUIRED, MEETING RM = 2, When open as 1 room EXITS REQUIRED, LOWER LEVEL = 2

EGRESS WIDTH: 44 INCHES

ALLOWABLE TRAVEL DISTANCE:

- Office areas : B, Business 200 Feet

- Meeting Room : A3, Assembly 200 Feet

- Lower Level : S2, Storage 200 Feet

ALLOWABLE DEAD END CORRIDOR:
- Office areas: B, Business

- Office areas: B, Business 20 Feet
- Meeting Room: A3, Assembly 20 Feet
- Lower Level: S2, Storage 50 Feet

ALLOWABLE COMMON PATH OF TRAVEL:

- Office areas: B, Business 75 Feet

- Meeting Room: A3, Assembly` 20 Feet (over 50 ppl)

#### 9. FIRE RESISTANCE RATINGS:

IBC TABLE 601 AND CHAPTER 7

- Lower Level : S2, Storage

PRIMARY STRUCTURAL FRAME 0 HOUR
BEARING WALLS, EXTERIOR 0 HOUR
BEARING WALLS, INTERIOR 0 HOUR

EXTEROR PARTITIONS 0 HOUR BASED ON FIRE SEPARATION

INTERIOR PARTITIONS 0 HOUR

FLOOR CONSTRUCTION 0 HOUR - 2-HR PER FIRE BARRIER/SEPARATION REQUIREMENTS

50 Feet

ROOF CONSTRUCTION 0 HOUR CORRIDORS 1 HOUR MECHANICAL ROOMS 0 HOUR FIRE WALLS (706) 0 HOUR - N/A FIRE BARRIERS (707) 2 HOUR SHAFT ENCLOSURES 1 HOUR - N/A FIRE PARTITIONS 0 HOUR SMOKE BARRIERS - HOUR - N/A

HORIZONTAL ASSEMBLIES 2 HOUR @ FLOOR OF MEETING ROOM

- HOUR - N/A

DRAFTSTOPPING REQUIREMENTS
- CONCEALED SLEEPER SPACES

- IN FLOORS - IN ATTICS

N/A

REQUIRED - 3,000 SF MAX AREA (717.4.3)

N/A

### 10. OPENING PROTECTIVES:

SMOKE PARTITIONS

CORRIDOR OPENINGS: 1/3 HOUR (715.4)
- GLAZING IN DOORS IN CORRIDORS, INCLUDING SIDELIGHTS TO BE 20
MIN. RATED AND MEET HOSESTREAM TEST (715.4.3.2)

- SIDELIGHTS AND TRANSOMS ACCEPTABLE (715.4.5)

11. INTERIOR FINISHES:

WALL AND CEILING FINISHES - TABLE 803.9
- EXIT ENCLOSURES CLASS A
- CORRIDORS CLASS A
- LOBBIES CLASS B
- ROOMS CLASS C

#### 12. FIRE PROTECTION SYSTEMS:

SPRINKLER SYSTEM REQUIRED? NO
SPRINKLER SYSTEM PROVIDED? NO

PORTABLE FIRE EXTINGUISHERS
- MAXIMUM FLOOR AREA
- MAX. TRAVEL DISTANCE 75 FEET

#### 13. ACCESSIBILITY:

TOWN OFFICE REQUIRED TO BE FULLY ACCESSIBLE RAMPS:

1:12 MAX. SLOPE WITH HANDRAILS EACH SIDE 1:20 MAX SLOPE WITH NO HANDRAILS

#### DOORS:

- 36" WIDE MIN. (32" CLEAR SPACE WHEN OPEN 90 DEGREES
- 18" CLEAR WIDTH FROM LATCH ON PULL SIDE
- 12" CLEAR WIDTH FROM LATCH ON PUSH SIDE
- POWER OPERATORS WITH PUSH BUTTONS REQUIRED AT

#### RESTROOMS:

- SINGLE USE ROOMS ALL REQUIRED TO BE ACCESSIBLE
- 60" DIAMETER CLEAR FLOOR SPACE
- CLEAR SPACE AT FIXTURES

DOORS MAY SWING INTO ROOM (SECTION 603.2.3 EXC. 2)
 SERVICE WINDOWS:
 PARALLEL APPROACH IS ACCEPTABLE
 36" LONG COUNTER

- COUNTER TO BE 36" MAX. AFF - 30x48" CLEAR FLOOR SPACE (SECTION 305)

EXTERIOR OF VESTIBULE DOORS

- 75 SEATS - 4 WHEELCHAIR SPACES ARE REQUIRED (221.2.1.1)

#### GENERAL CODE PLAN NOTES:

 SEE DOOR SCHEDULE FOR OPN'G PROTECTION REQUIREMENTS.
 MECHANICAL, ELECTRICAL & PLUMBING SUBCONTRACTORS TO COMPLY W/ FIREBLOCKING & FIRESTOPPING

3. ALL SEMI-RECESSED OR RECESSED FIRE EXTINGUISHER CABINETS SHALL BE U.L. LISTED WITH A RATING EQUIVALENT TO THE RATING OF THE WALL IN WHICH IT IS LOCATED. FINAL LOCATIONS TO BE VERIFIED BY LOCAL FIRE DEPT.
4. A KNOX BOX & RED JELLY JAR LIGHT & IS TO BE LOCATED AT EACH OF THE PRINCIPLE

5. 1-HR RATED CORRIDOR IS "FIRE PARTITION"1018.16. SEE SHEET A001 FOR WALL TYPES AND GENERAL WALL PARTITION NOTES.

ENTRANCE/ EXIT DOORS. FINAL LOCATIONS TO

#### **CODE PLAN LEGEND:**

BE VERIFIED BY LOCAL FIRE DEPT.

SMOKE SEPERATION

1 HR RATED SEPERATION

2 HR RATED SEPERATION

WAXIMUM TRAVEL PATH

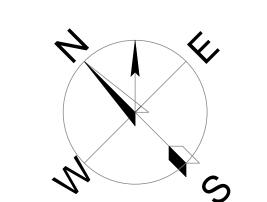
F.E.C. SEMI-RECESSED FIRE EXTINGUISHER CABINET

FIRE EXTINGUISHER ON

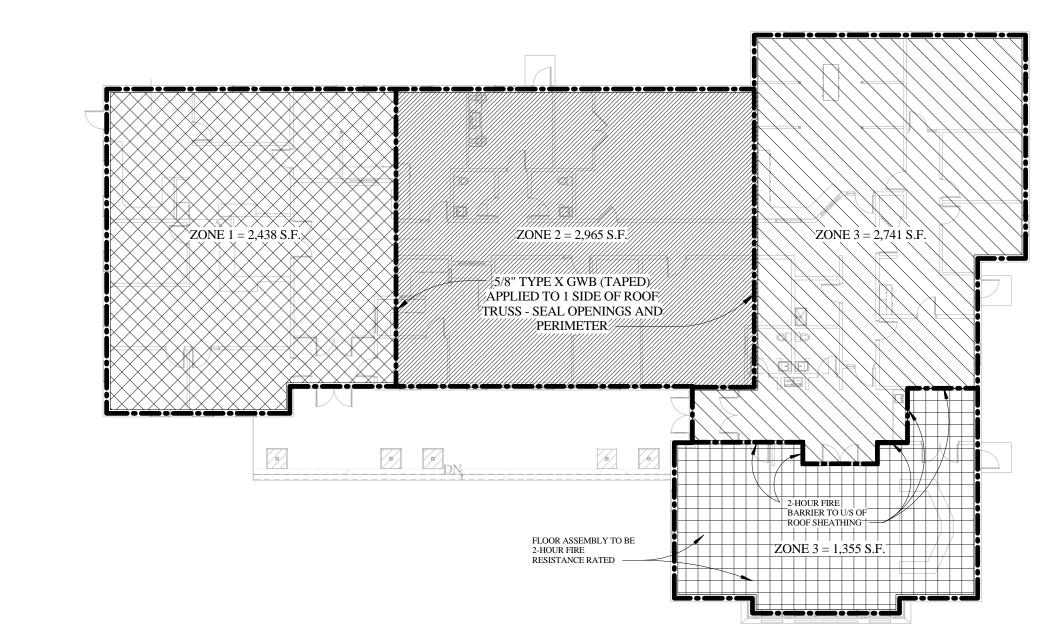
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#### PLAN ORIENTATION:

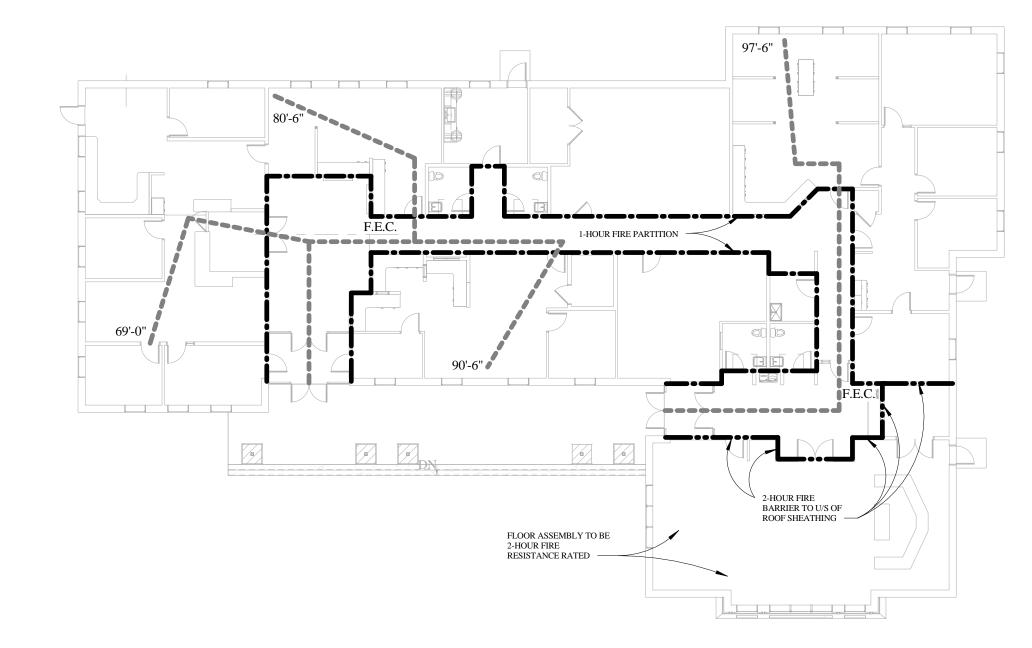
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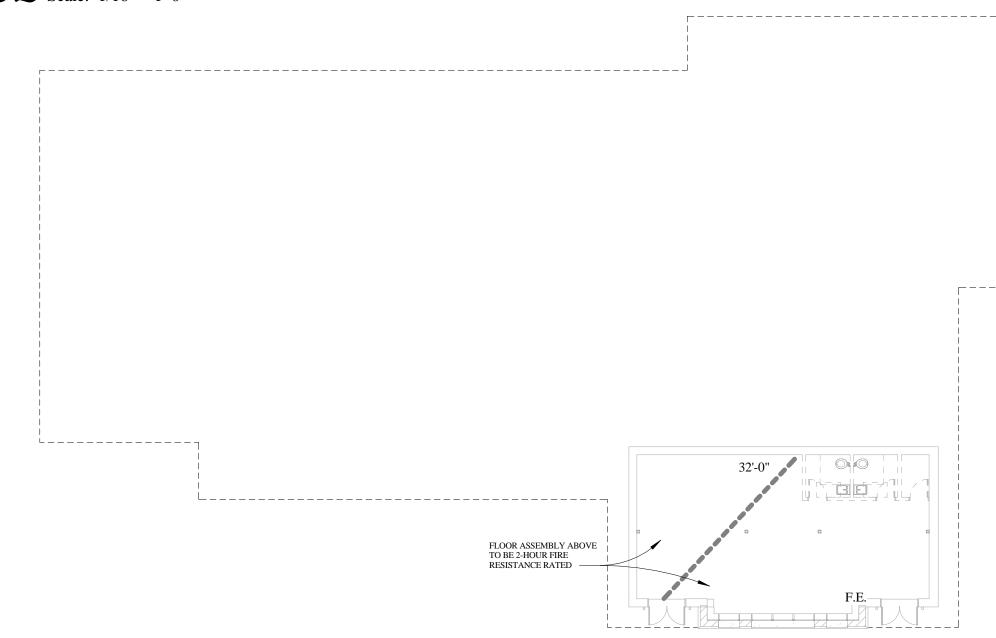
NORTH



ATTIC DRAFTSTOPPING PLAN
Scale: 1/16" = 1'-0"



MAIN FLOOR - CODE ANALYSIS PLAN Scale: 1/16'' = 1'-0''





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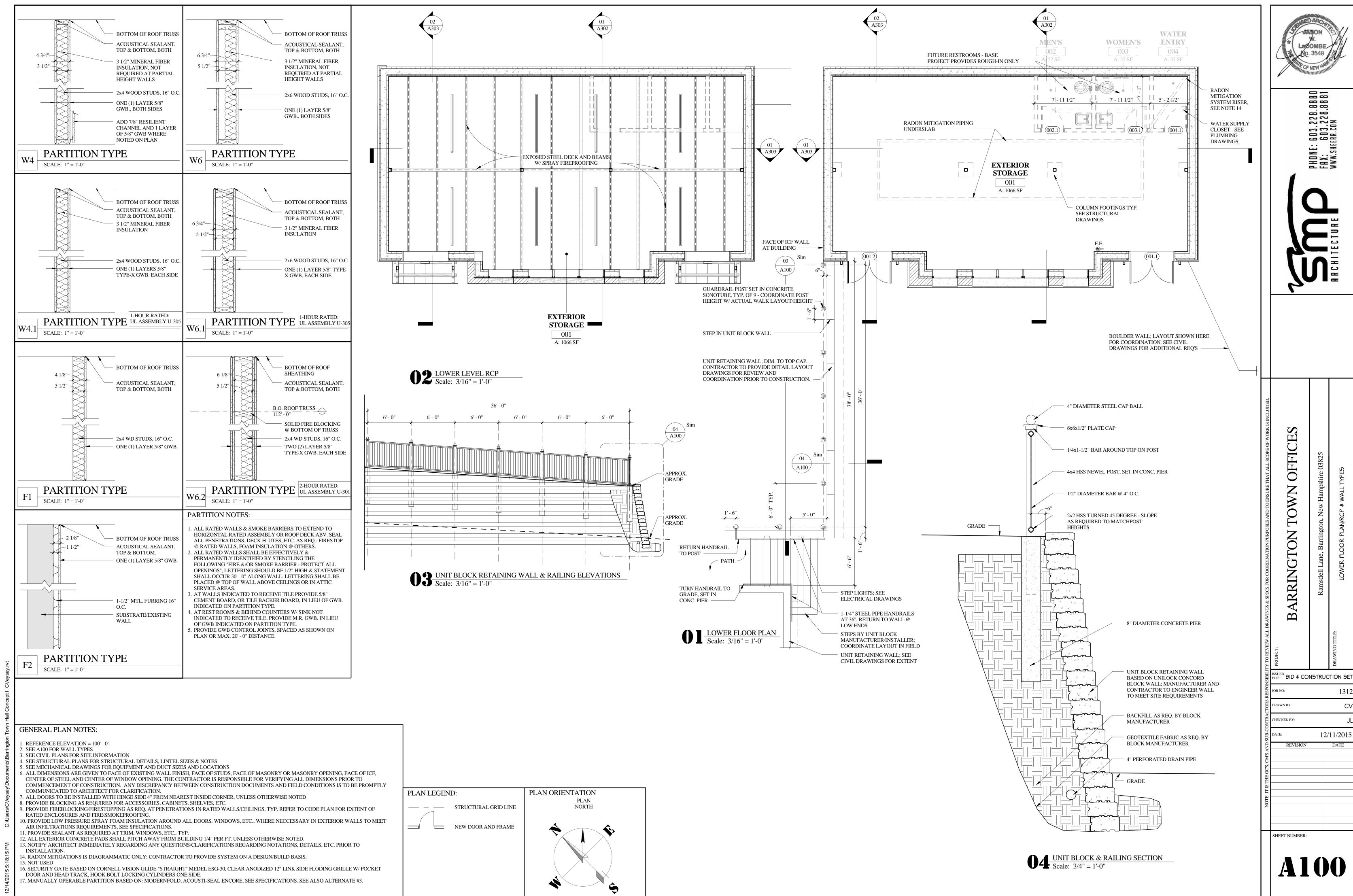
BARRINGTON TOWN OFFICES

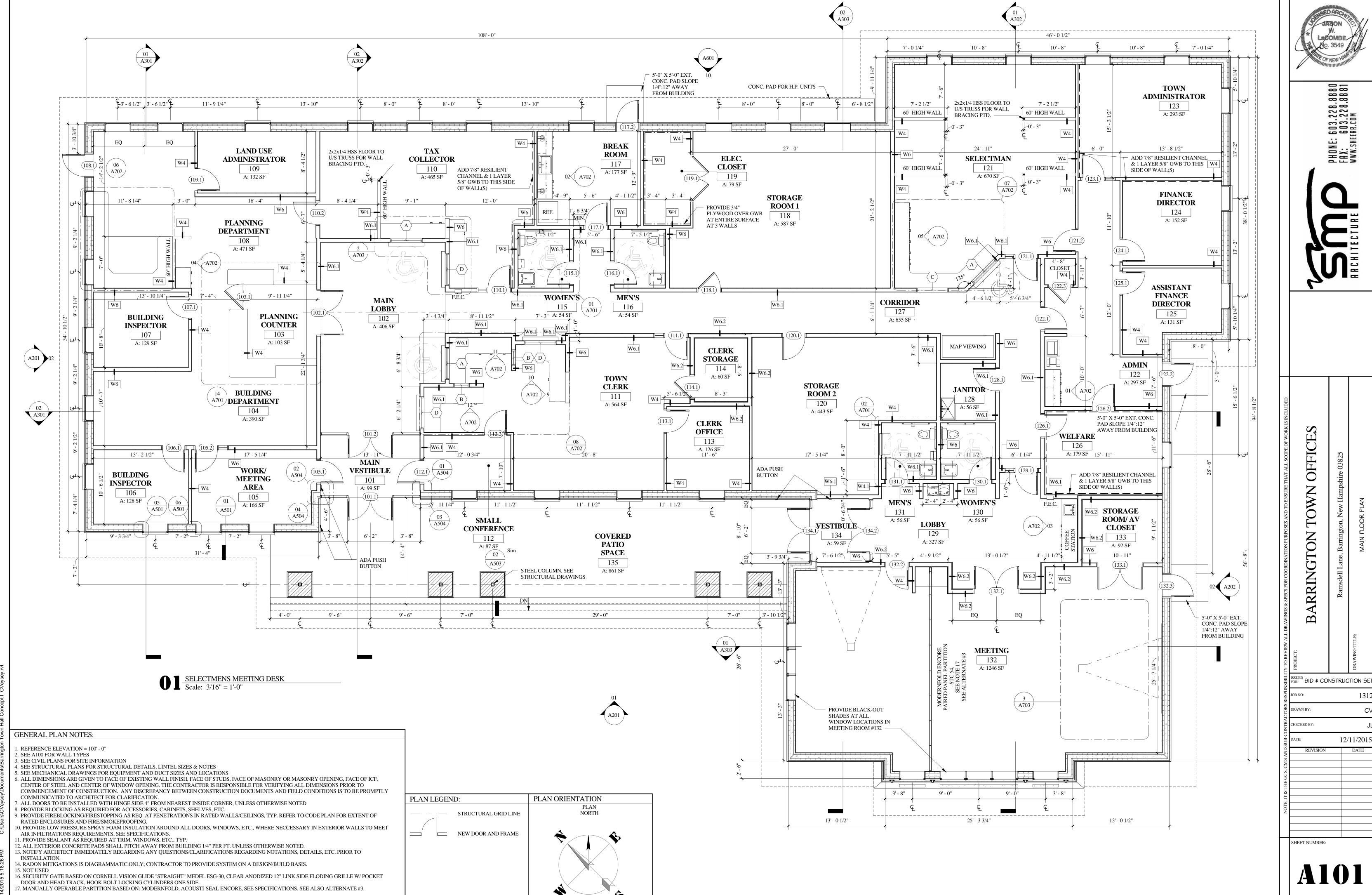
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A001

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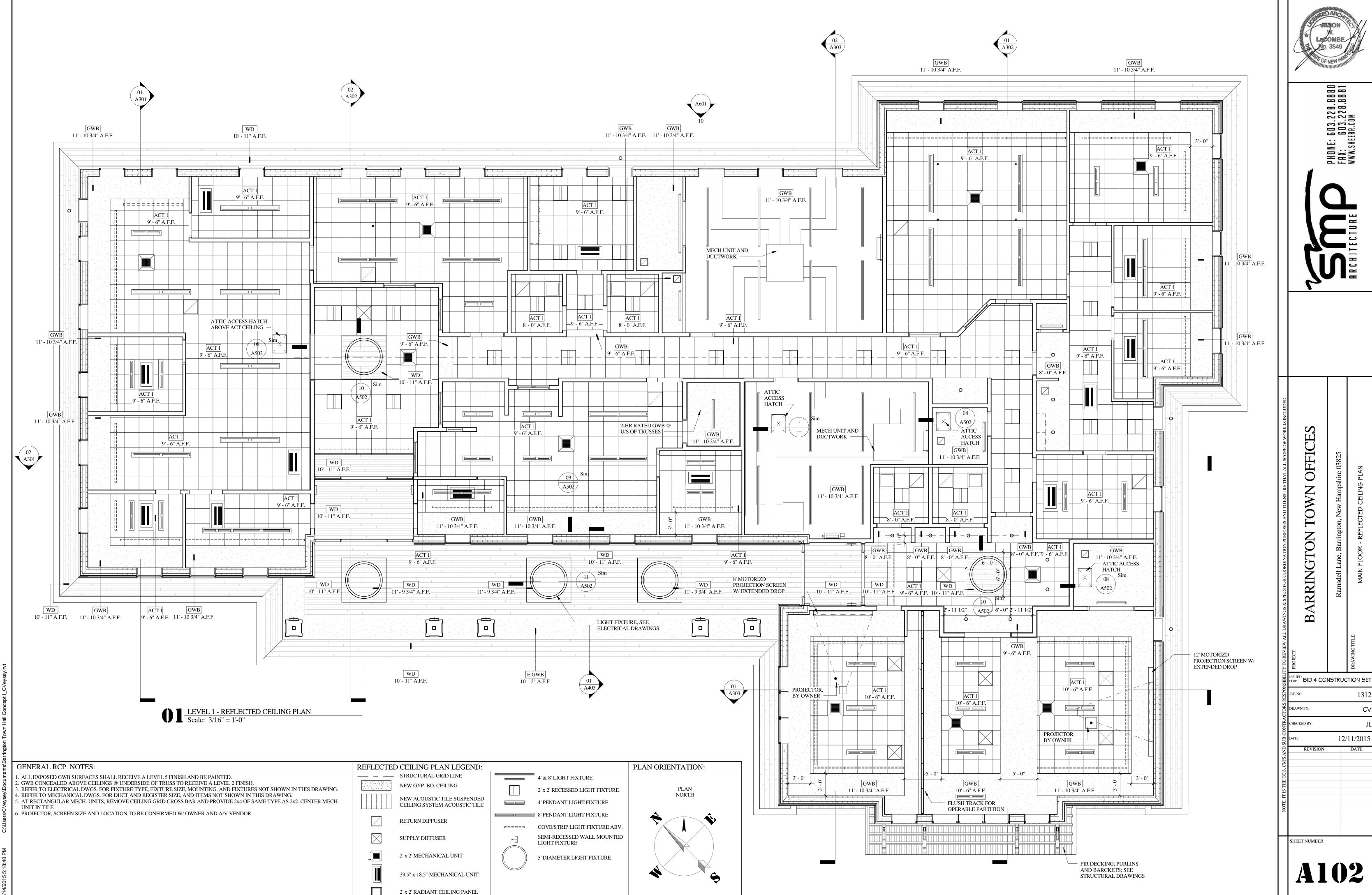
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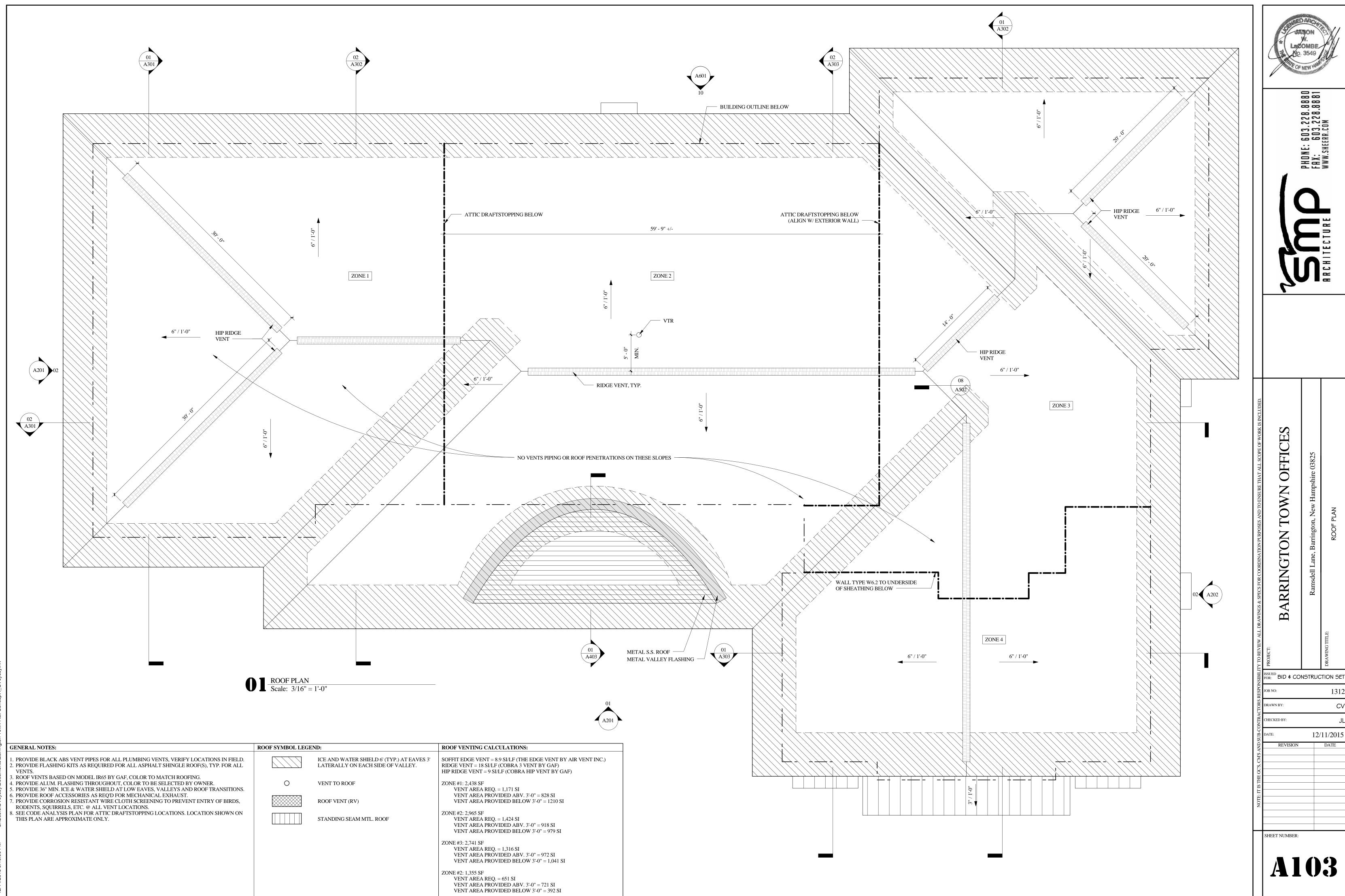


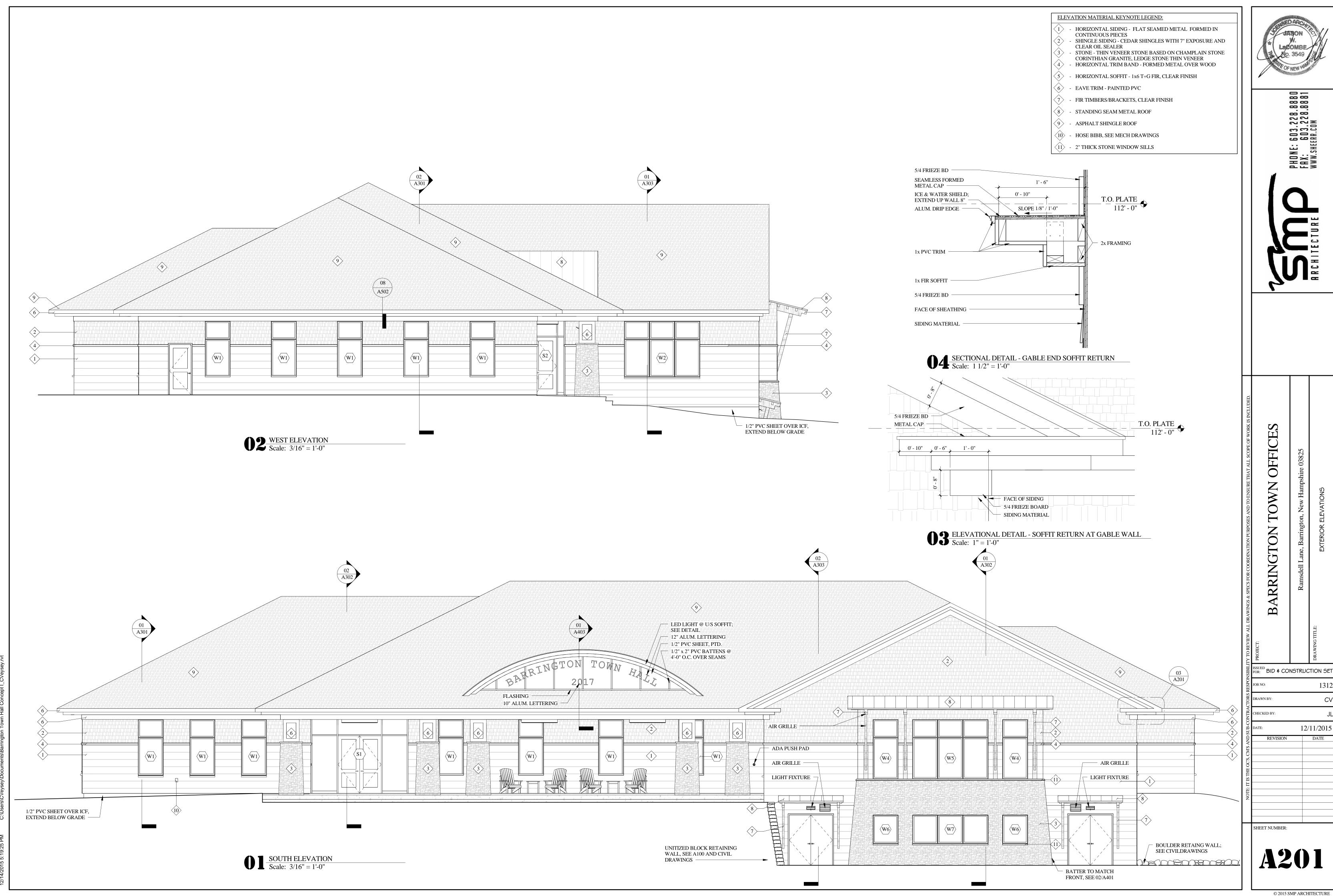


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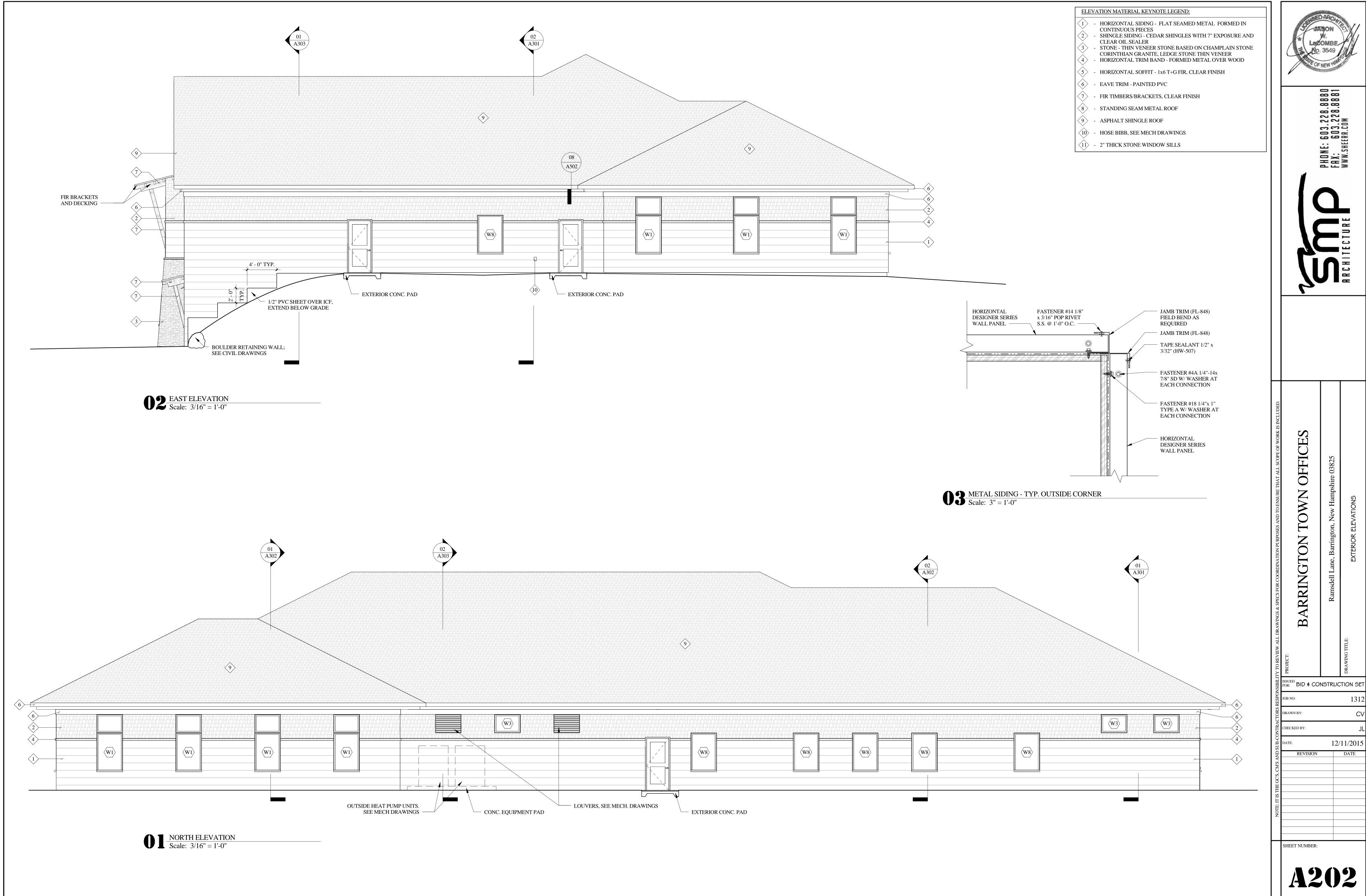
DR: BID & CONSTRUCTION SET



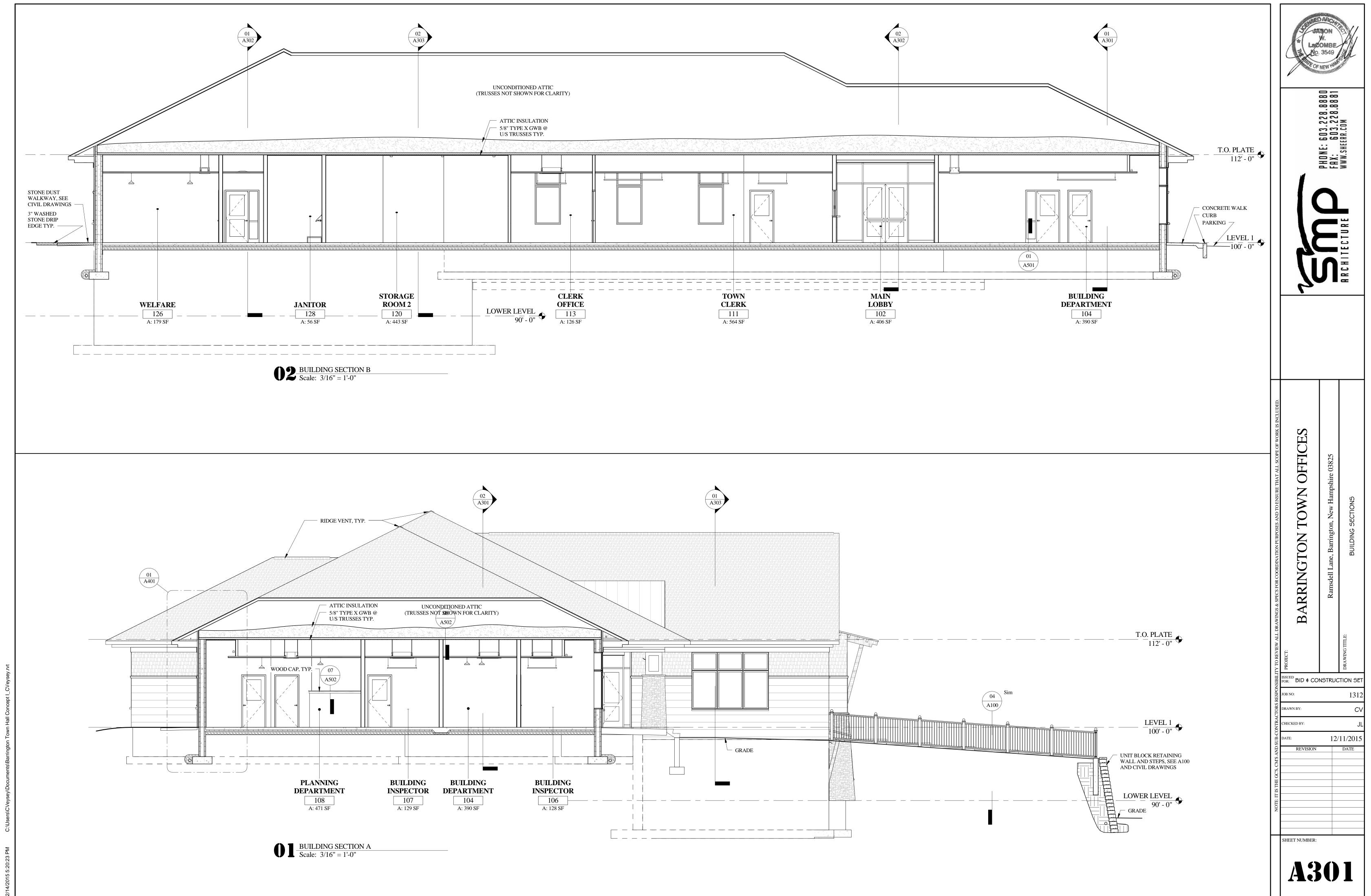


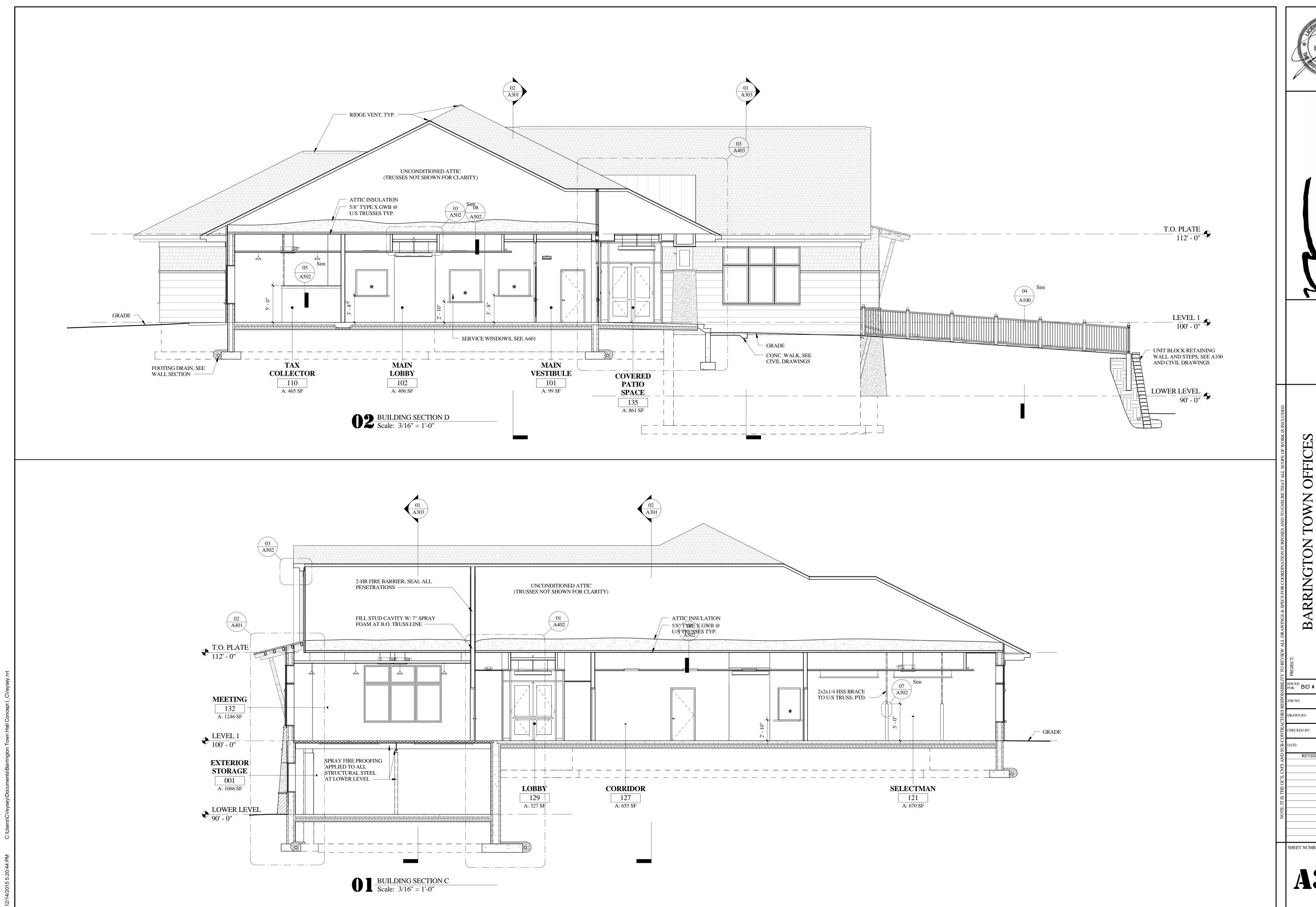


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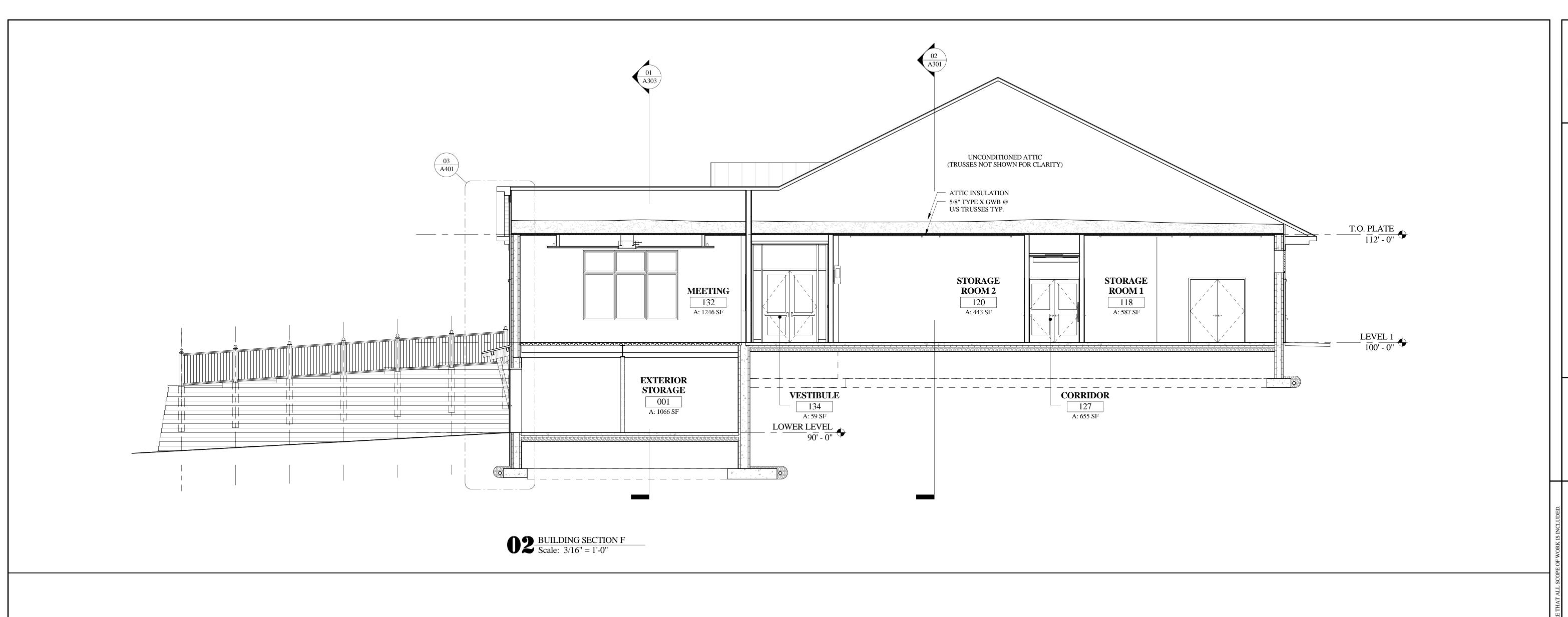
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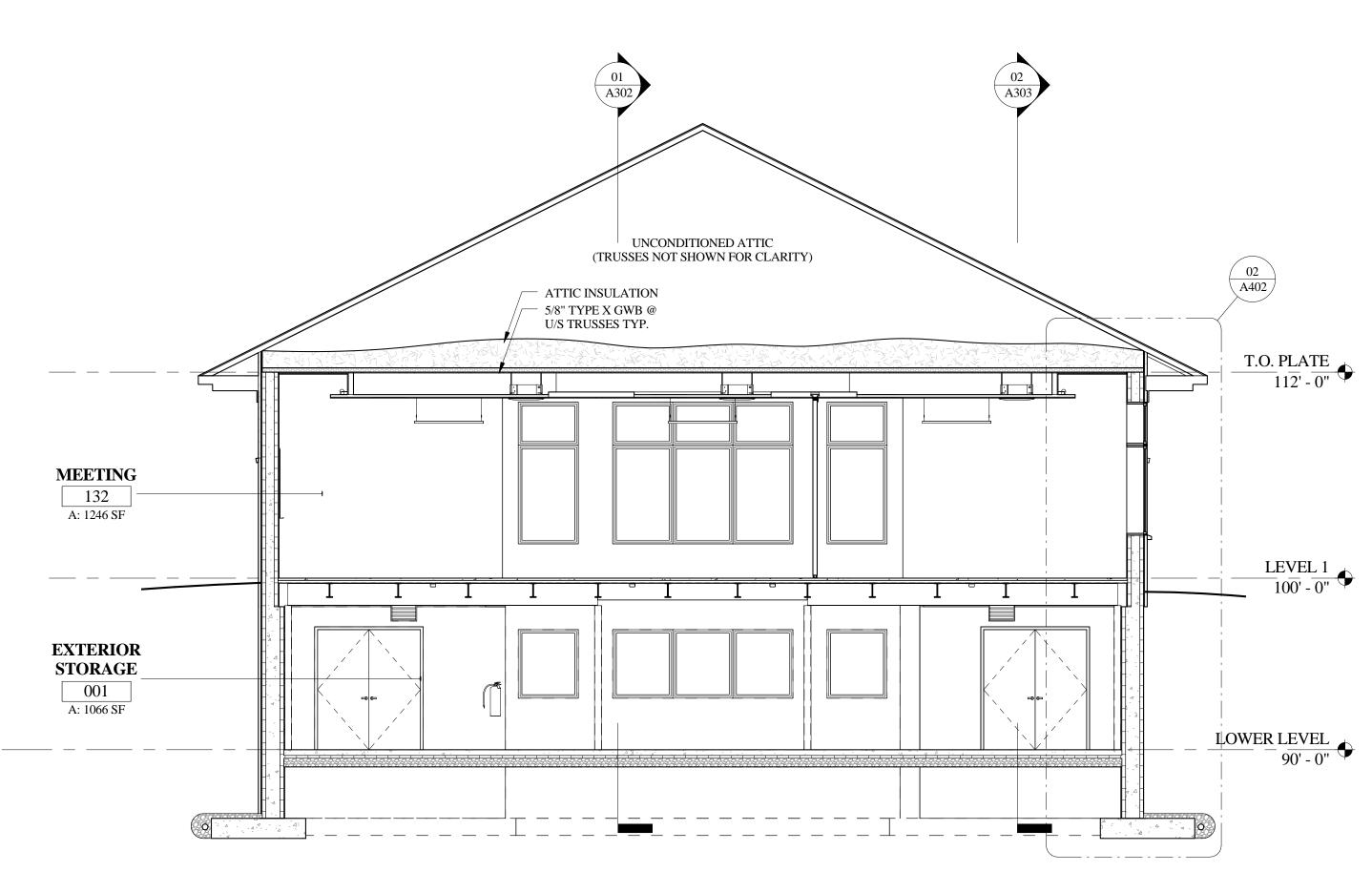
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12/11/2015

SHEET NUMBER:





JASON C. JASON W. LaCOMBE No. 3549

STATE TO REPRESENTED NAMES HERR. COM

BAKKINGTON TOWN OFFICE
Ramsdell Lane, Barrington, New Hampshire 03825

ISSUED BID & CONSTRUCTION SET

JOB NO: 1312

DRAWN BY: CV

DRAWN BY:

CV

CHECKED BY:

JL

DATE:

12/11/2015

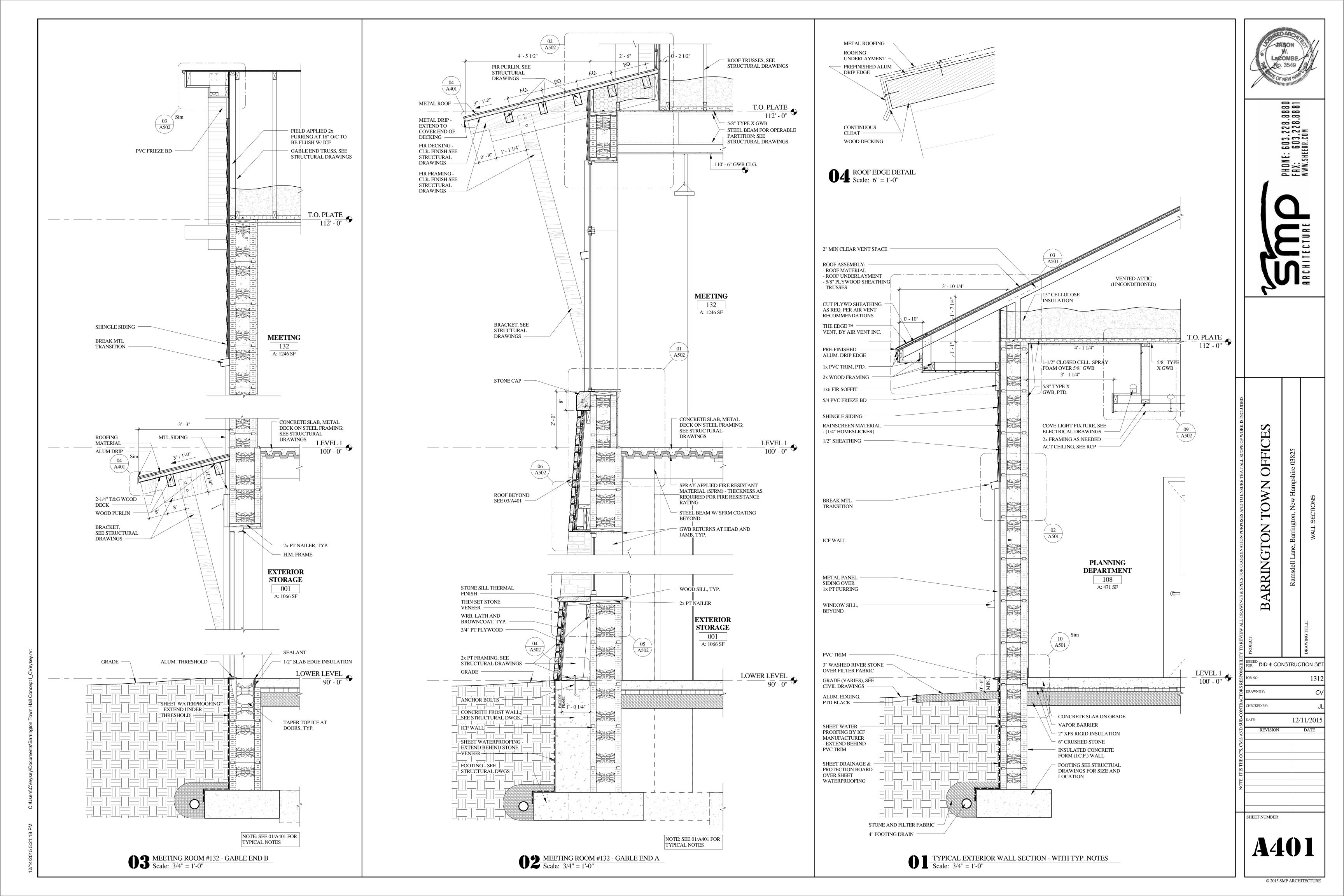
REVISION

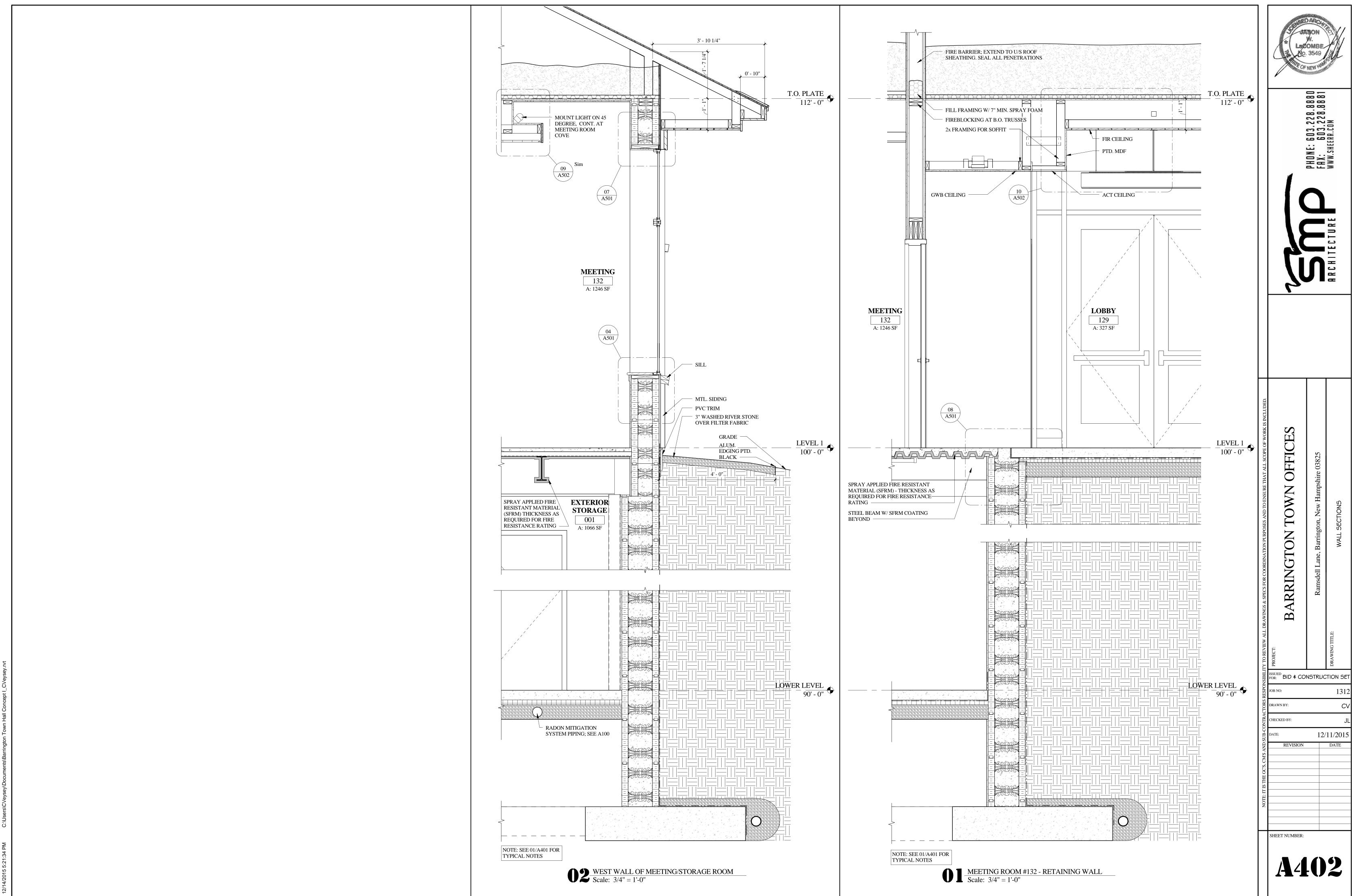
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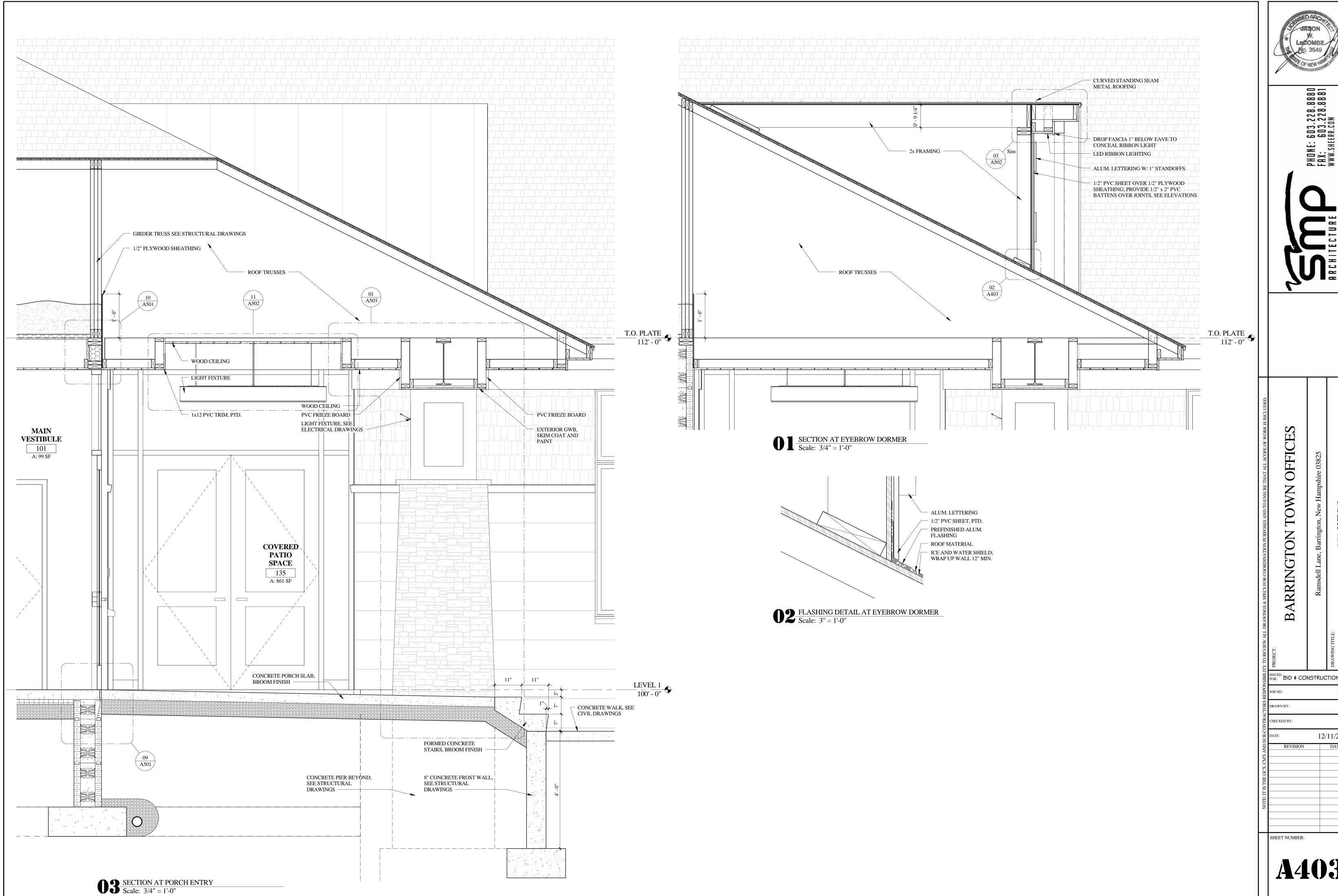
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A303

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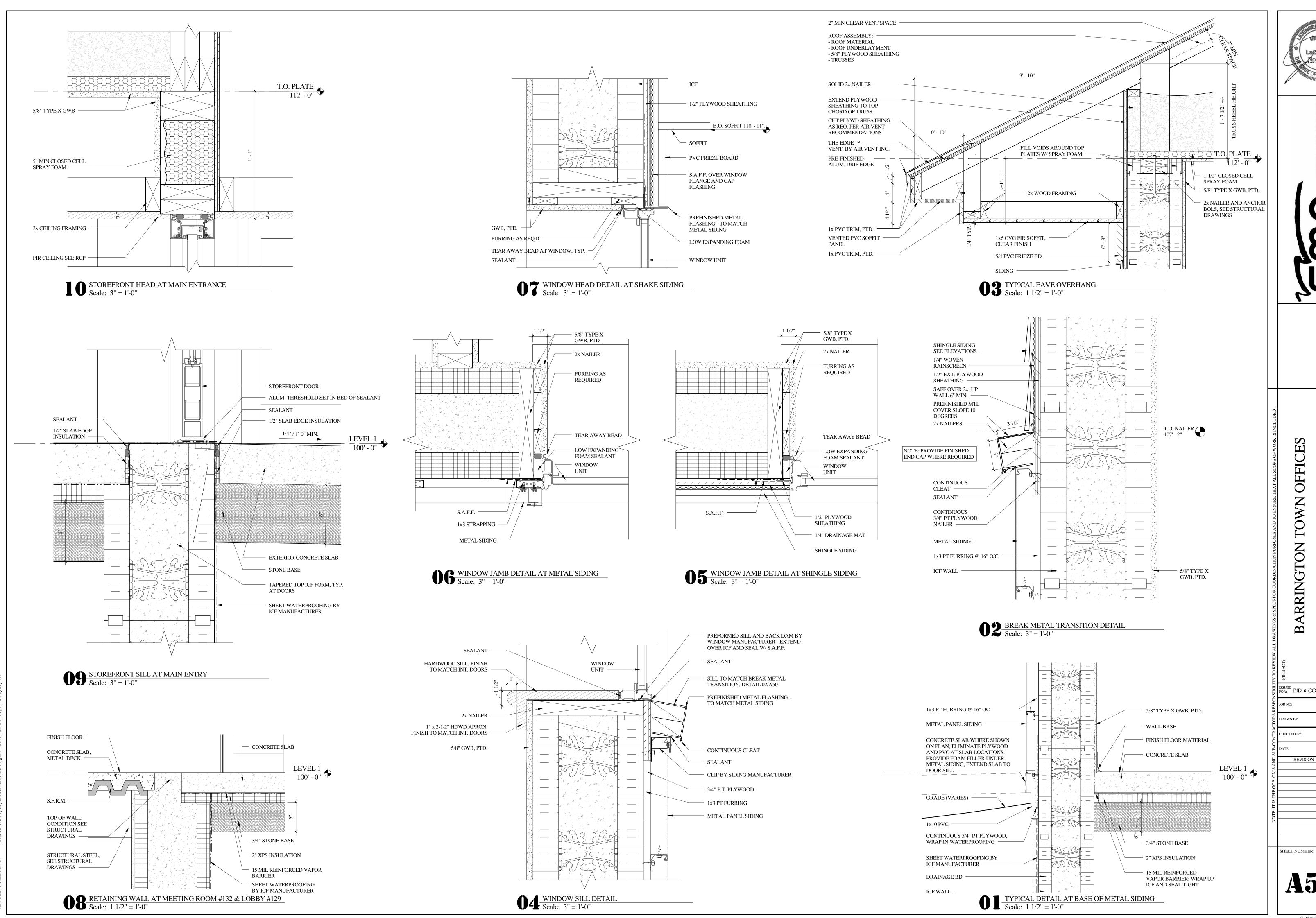






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SEDARCI JASON S. W. LaCOMBE No. 3549

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BARRINGTON TOWN OFFICES

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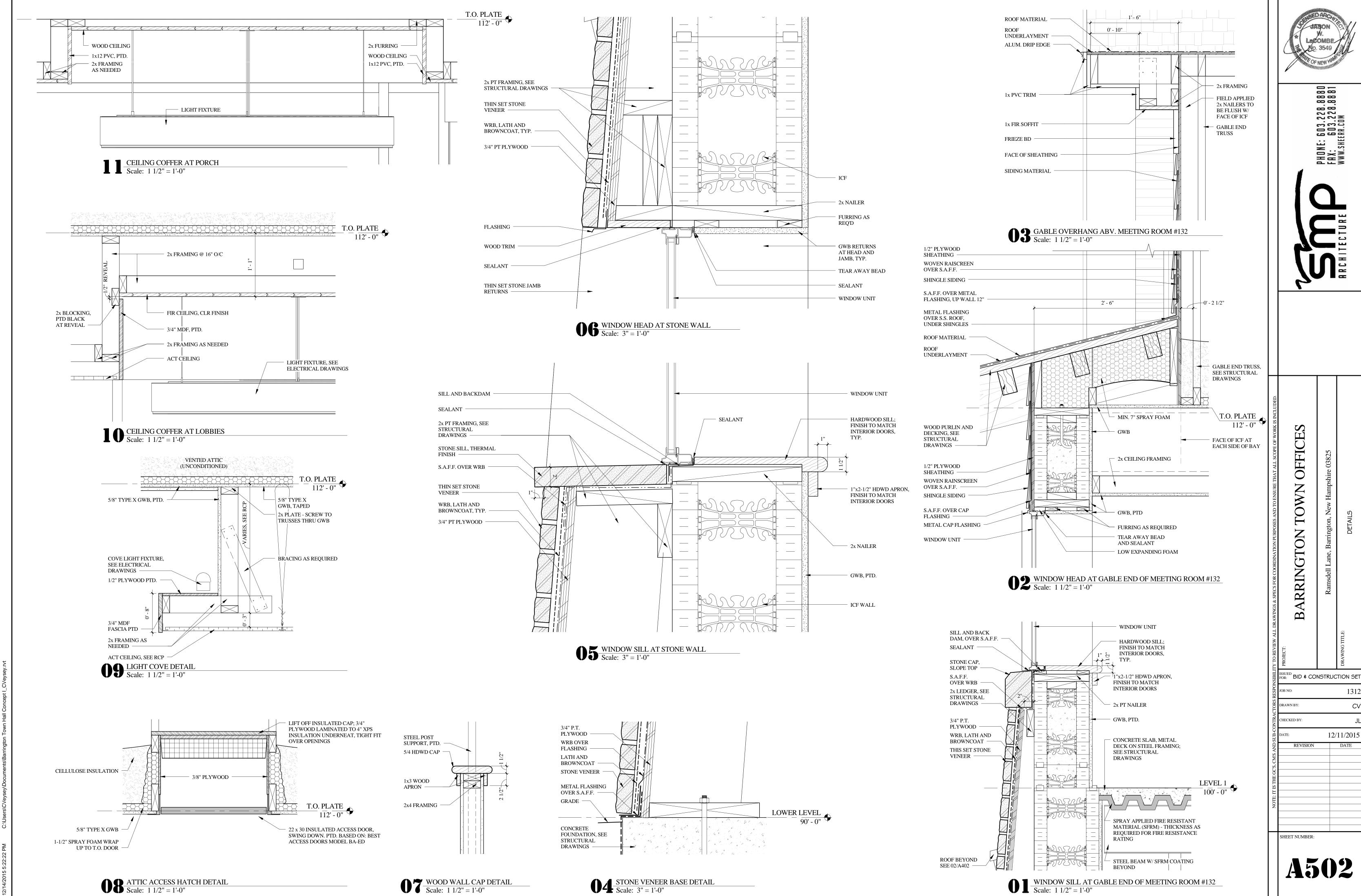
THE HONOR Hampshire 03825

DETAILS

DETAILS

A501

12/11/2015



HM DOOR FRAME 2x6 FRAMING ADA PUSH PAD MAIN VESTIBULE 101 - GWB, PTD. 3/4 PT PLYWOOD - 2x PT NAILER TEAR AWAY J-BEAD AND SEALANT TO FRAME ALUM. STORFRONT FRAME

ALUM. BREAK METAL BY ALUM.

SHIM SPACE & SEALANT

- 1/4" WOVEN RAINSCREEN SHINGLE SIDING FINISH

S.A.F.F. AT R.O.

- 1/2 PT PLYWOOD

STOREFRONT MANUFACTURER TO COVER NAILER AND SEALANT JOINT

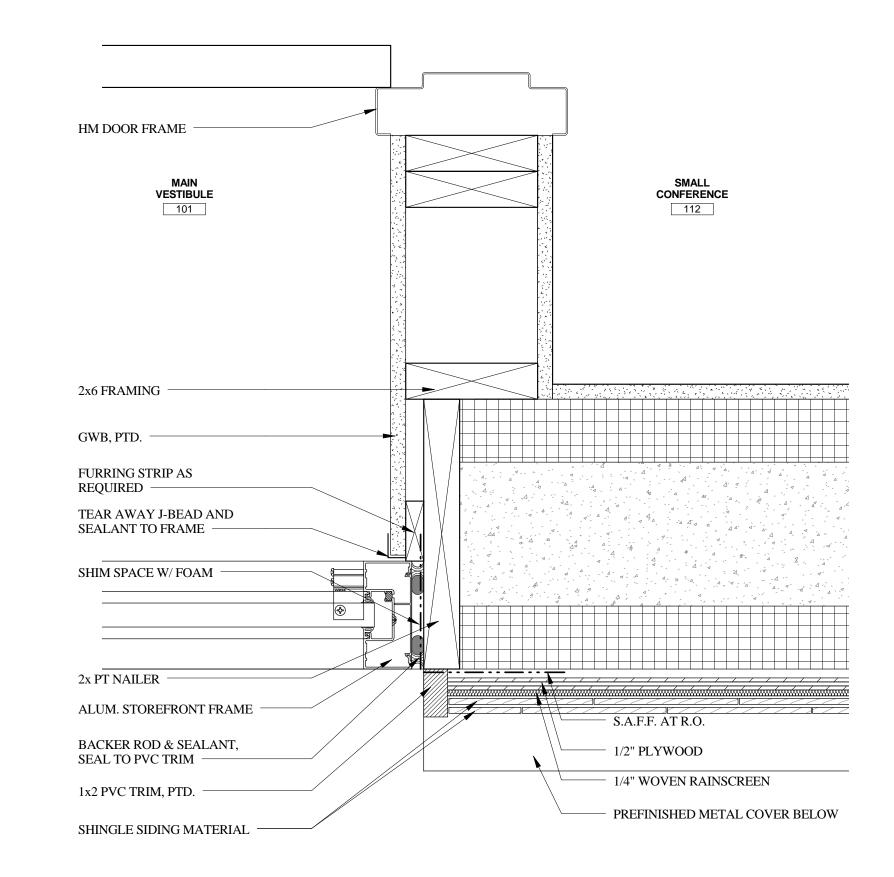
PREFINISHED METAL COVER BELOW

STOREFRONT JAMB DETAIL AT INSIDE CORNER ABV.

Scale: 3" = 1'-0"

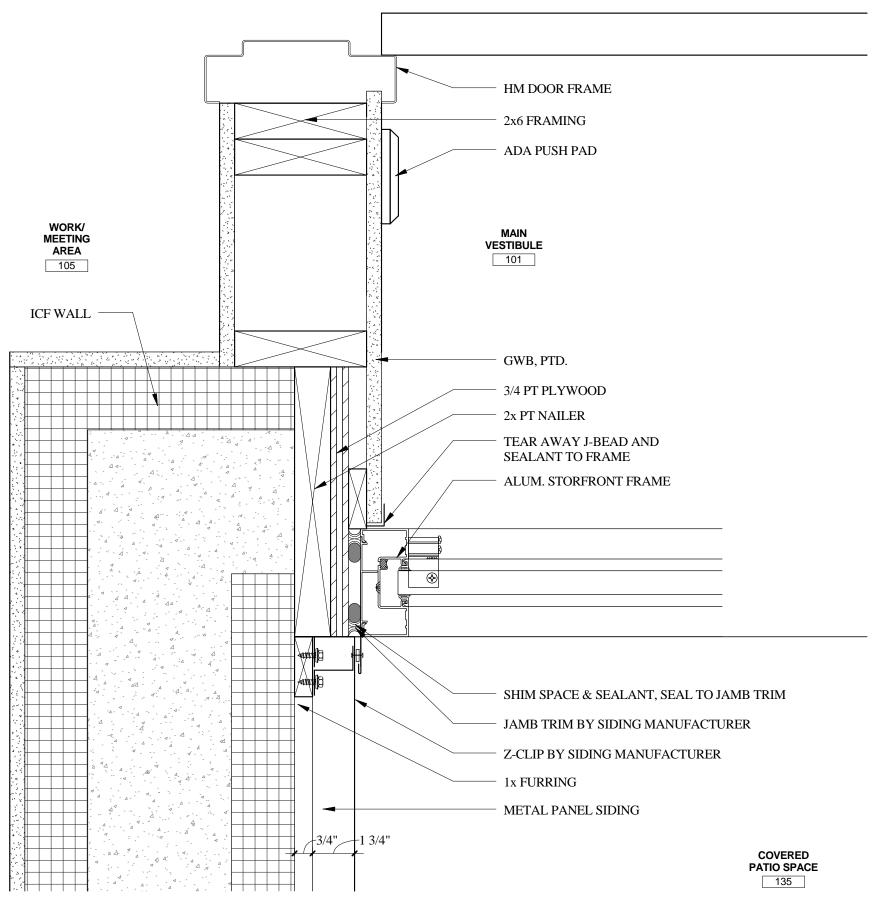
WORK/ MEETING AREA

ICF WALL -

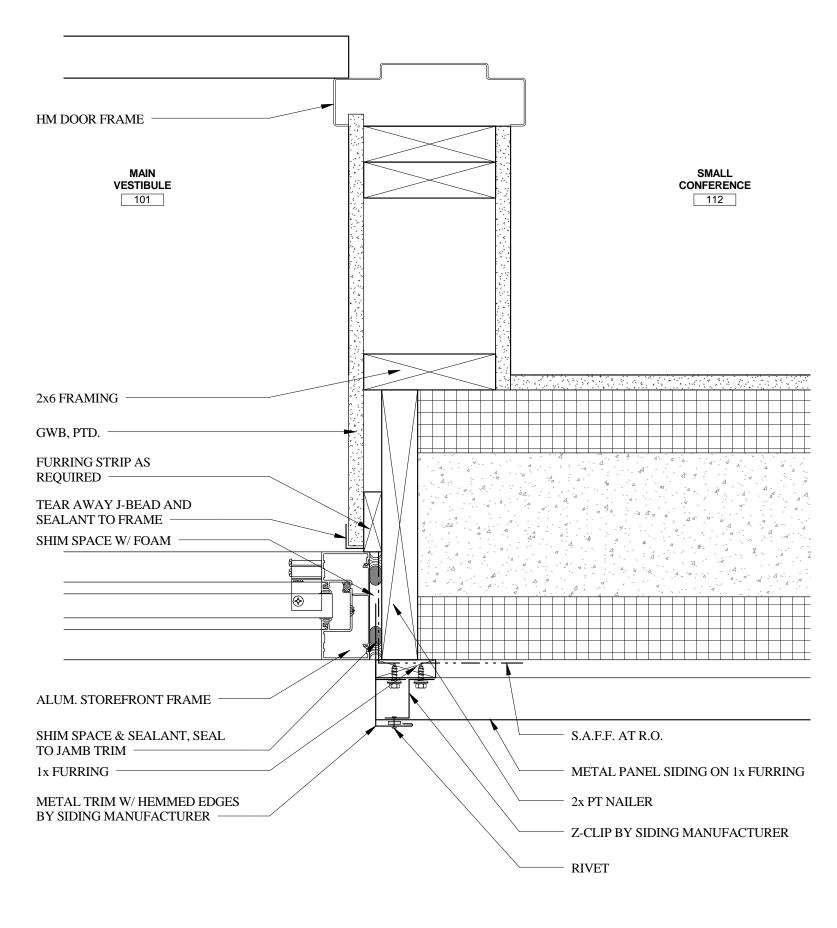


Storefront Jamb Detail at Main Entrance abv.

Scale: 3" = 1'-0"



STOREFRONT JAMB DETAIL AT INSIDE CORNER
Scale: 3" = 1'-0"



Storefront Jamb Detail at Mainthean Scale: 3" = 1'-0"

SHEET NUMBER:

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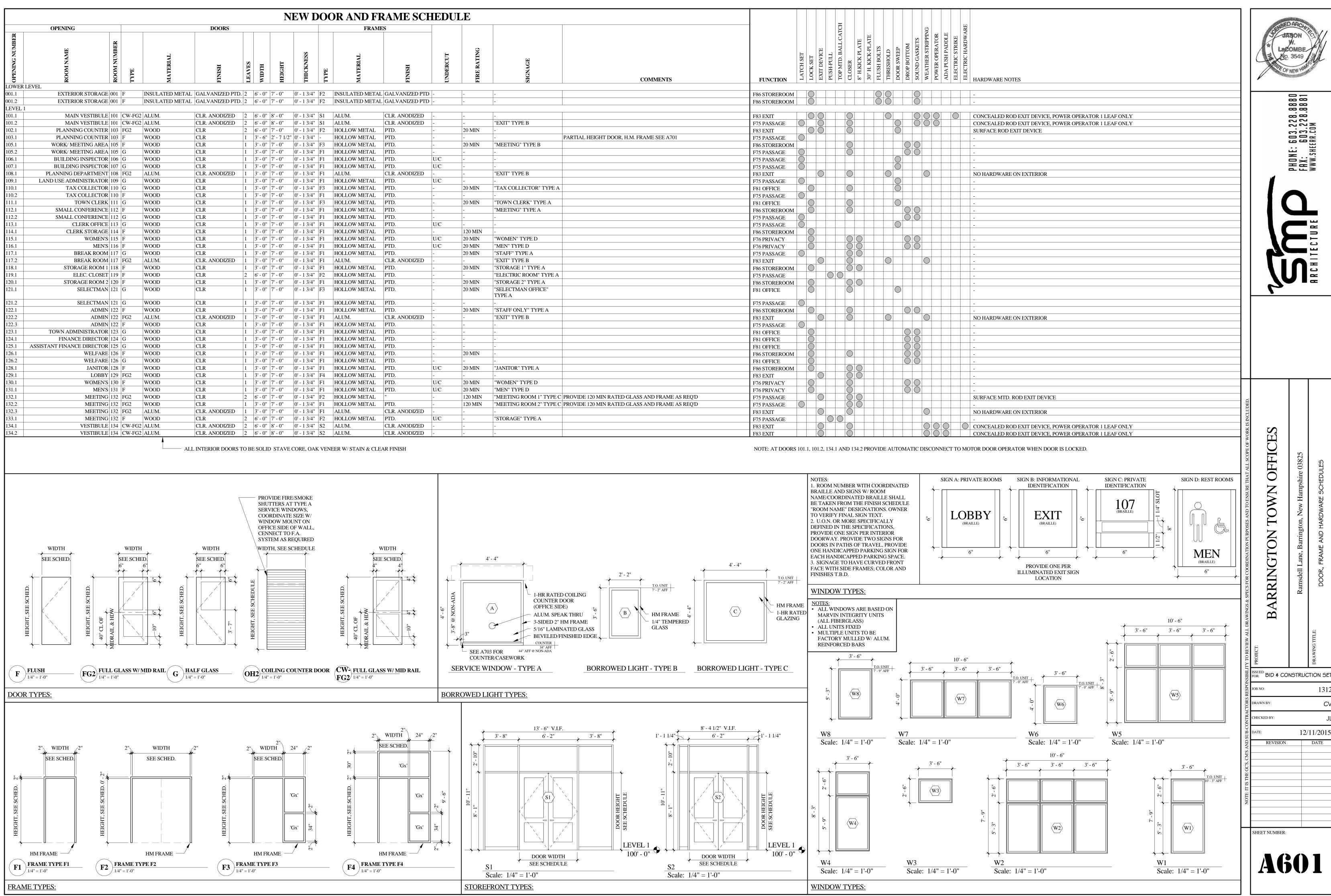
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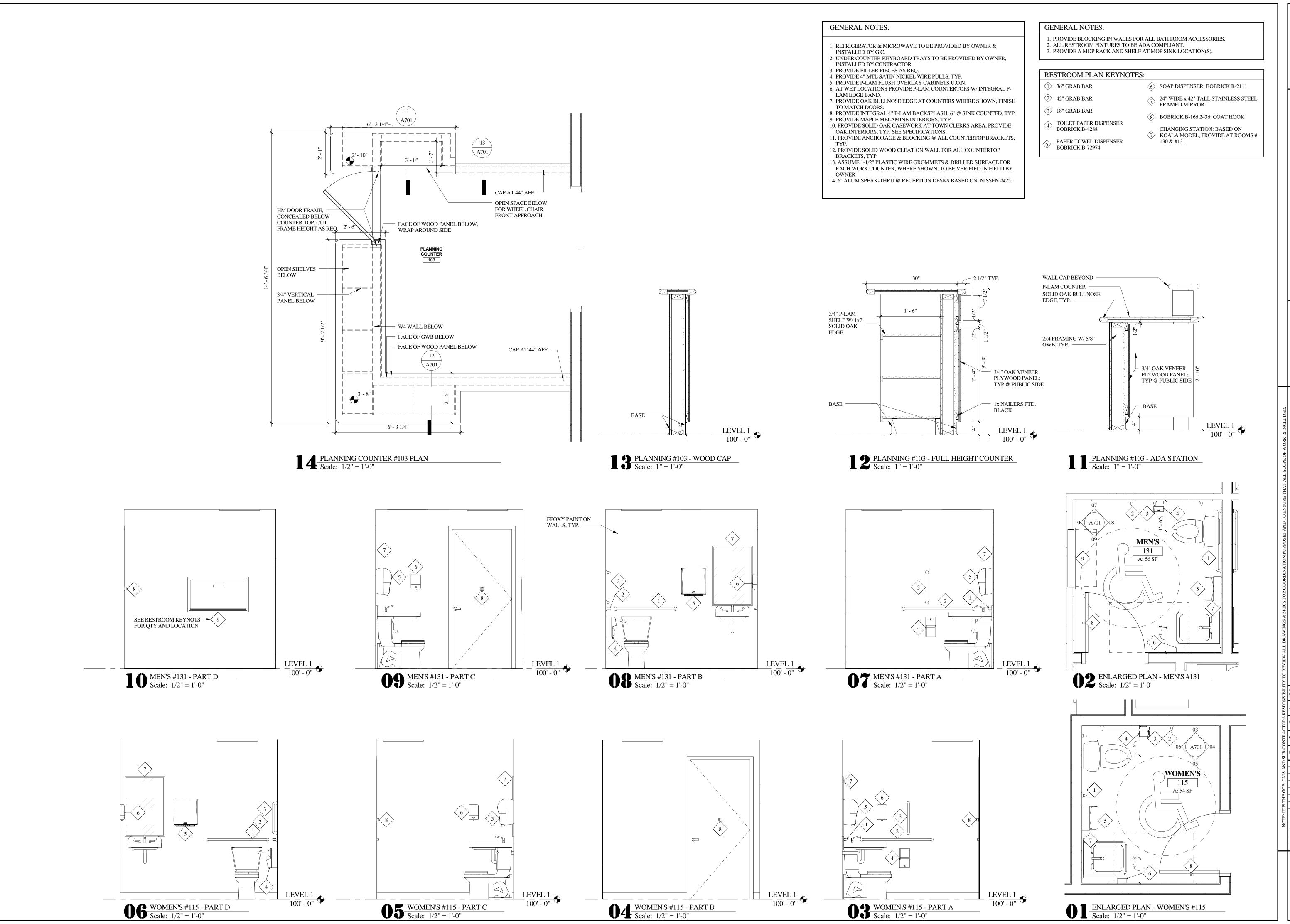
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SERVITE CTURE

BARRINGTON TOWN OFFICES

Ramsdell Lane, Barrington, New Hampshire 03825

CASEWORK TYPES & ENLARGED RESTROOM PLANS & ELEVATIONS

ISSUED BID & CONSTRUCTION SET

JOB NO: 1312

DRAWN BY: CV

 JOB NO:
 1312

 DRAWN BY:
 CV

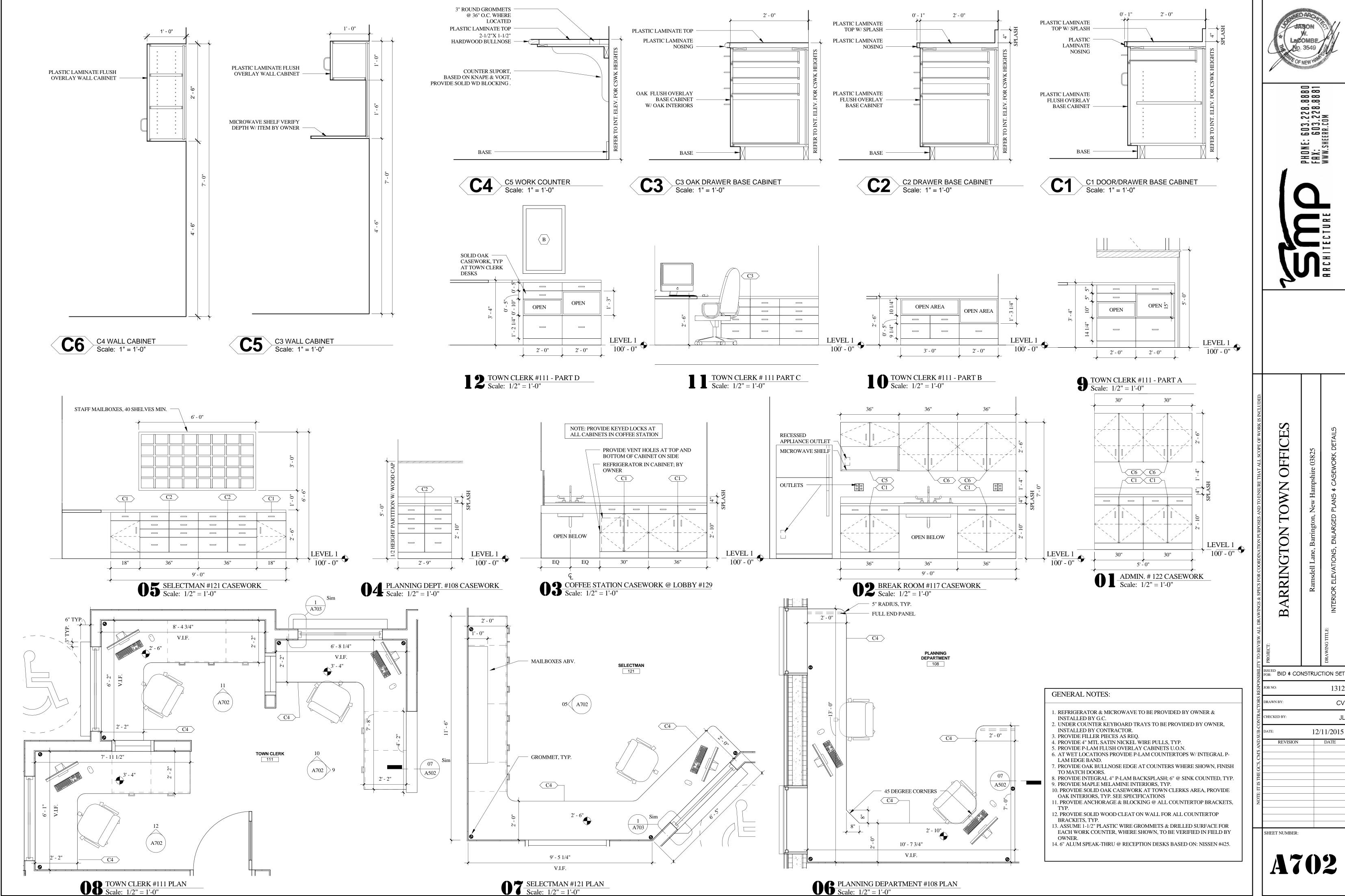
 CHECKED BY:
 JL

 DATE:
 12/11/2015

 REVISION
 DATE

SHEET NUMBER:

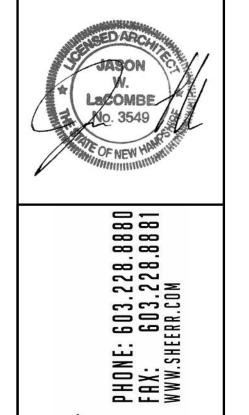
A701



12/11/2015

TAX COLLECTOR #110 PLAN

Scale: 1/2" = 1'-0"



ISSUED FOR: BID & CONSTRUCTION SET Checker

COILING FIRE — SHUTTER, HARD WIRED TO FIRE ALARM

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14. 6" ALUM SPEAK-THRU @ RECEPTION DESKS BASED ON: NISSEN #425.

TYPICAL SERVICE WINDOW JAMB DETAIL
Scale: 3" = 1'-0"

12/11/2015

/EL1	WALK OFF CARRET	411 3 773 3 77	CWD DED	
101 MAIN VESTIBULE	WALK-OFF CARPET	4" VINYL	GWB, PTD.	
102 MAIN LOBBY	LVT	4" VINYL- BX2	GWB, PTD.	
103 PLANNING COUNTER	LVT	4" VINYL- BX2	GWB, PTD.	
104 BUILDING DEPARTMENT	CARPET TILE	4" VINYL	GWB, PTD.	
105 WORK/ MEETING AREA	CARPET TILE	4" VINYL	GWB, PTD.	
106 BUILDING INSPECTOR	CARPET TILE	4" VINYL	GWB, PTD.	
107 BUILDING INSPECTOR	CARPET TILE	4" VINYL	GWB, PTD.	
108 PLANNING DEPARTMENT	CARPET TILE	4" VINYL	GWB, PTD.	
109 LAND USE ADMINISTRATOR	CARPET TILE	4" VINYL	GWB, PTD.	
110 TAX COLLECTOR	CARPET TILE	4" VINYL	GWB, PTD.	
111 TOWN CLERK	CARPET TILE	4" VINYL	GWB, PTD.	
112 SMALL CONFERENCE	CARPET TILE	4" VINYL	GWB, PTD.	
113 CLERK OFFICE	CARPET TILE	4" VINYL	GWB, PTD.	
114 CLERK STORAGE	CARPET TILE	4" VINYL	GWB, PTD.	
115 WOMEN'S	SHEET VINYL	4" VINYL	GWB, PTD.	EPOXY PAINT ON WALLS
116 MEN'S	SHEET VINYL	4" VINYL	GWB, PTD.	EPOXY PAINT ON WALLS
117 BREAK ROOM	SHEET VINYL	4" VINYL	GWB, PTD.	
118 STORAGE ROOM 1	CONCRETE	4" VINYL	GWB, PTD.	
119 ELEC. CLOSET	CONCRETE	4" VINYL	GWB, PTD.	
120 STORAGE ROOM 2	CONCRETE	4" VINYL	GWB, PTD.	
121 SELECTMAN	CARPET TILE	4" VINYL	GWB, PTD.	
122 ADMIN	CARPET TILE	4" VINYL	GWB, PTD.	
123 TOWN ADMINISTRATOR	CARPET TILE	4" VINYL	GWB, PTD.	
124 FINANCE DIRECTOR	CARPET TILE	4" VINYL	GWB, PTD.	
125 ASSISTANT FINANCE DIRECTOR	CARPET TILE	4" VINYL	GWB, PTD.	
126 WELFARE	CARPET TILE	4" VINYL	GWB, PTD.	
127 CORRIDOR	LVT	4" VINYL- BX2	GWB, PTD.	
128 JANITOR	LVT	4" VINYL	GWB, PTD.	
129 LOBBY	LVT	4" VINYL- BX2	GWB, PTD.	
130 WOMEN'S	SHEET VINYL	4" VINYL	GWB, PTD.	EPOXY PAINT ON WALLS
131 MEN'S	SHEET VINYL	4" VINYL	GWB, PTD.	EPOXY PAINT ON WALLS
132 MEETING	CARPET TILE	4" VINYL	GWB, PTD.	
133 STORAGE ROOM/ AV CLOSET	CARPET TILE	4" VINYL	GWB, PTD.	

GWB, PTD.

N.A.

4" VINYL

N.A.

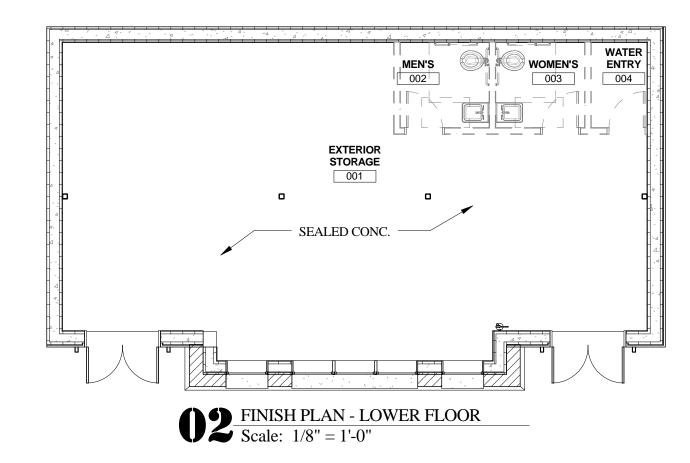
WALK-OFF CARPET

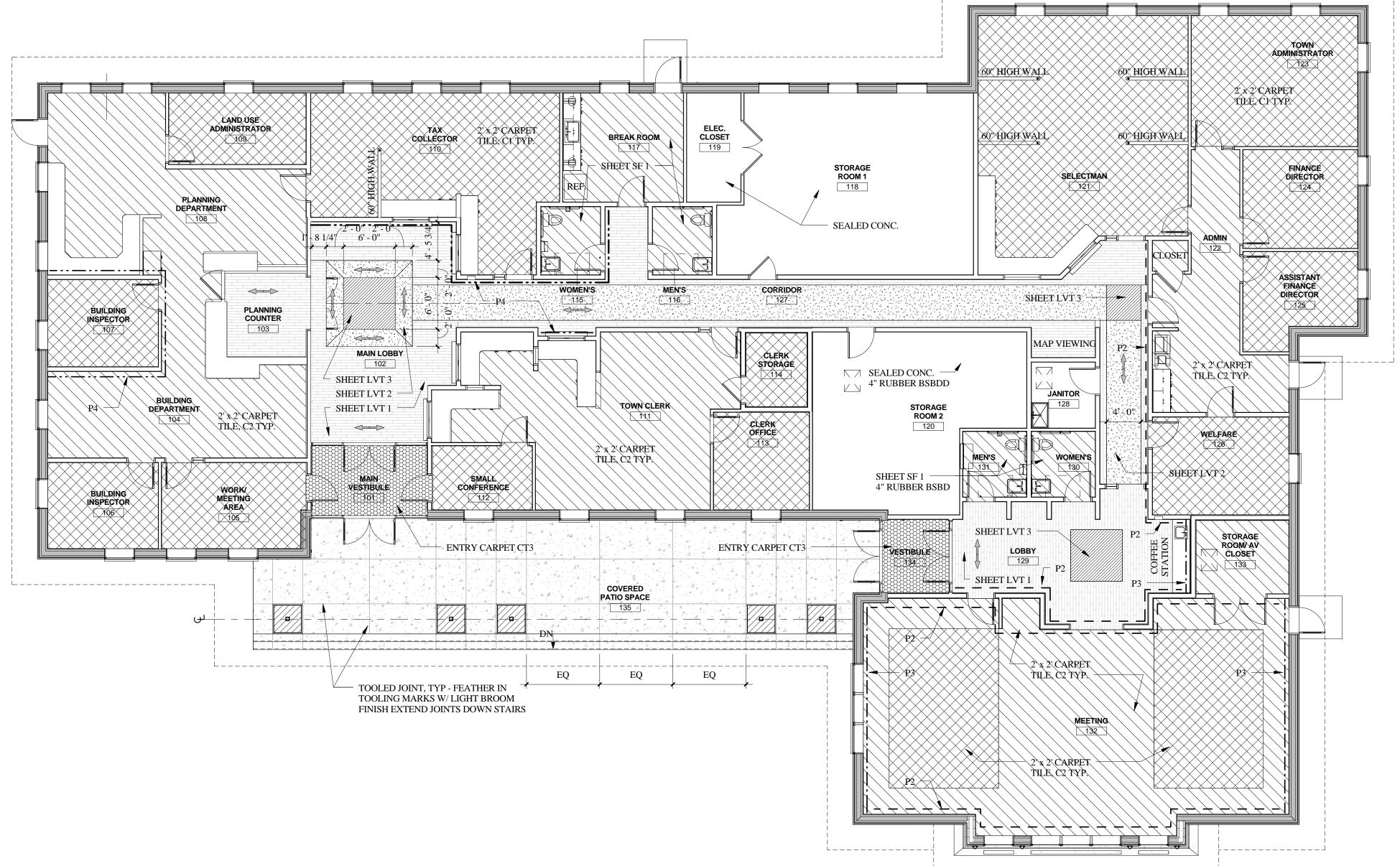
CONCRETE

134 VESTIBULE

135 COVERED PATIO SPACE

FINISH SCHEDULE





COMMENTS

**GENERAL PLAN NOTES:** 

- 1. ALL GYPSUM BOARD CEILINGS WILL BE PAINTED COLOR: P1 FLAT FINISH, UNLESS OTHERWISE
- 2. ALL GYPSUM WALLS TO BE PAINTED COLOR: P1 U.O.N.
- 3. ALL HM DOOR FRAMES WILL BE PAINTED COLOR: P2
- 4. ALL INTERIOR WOOD DOORS TO BE QUARTER SAWN WHITE OAK W/ STANDARD MANUFACTURES FINISH, BASED ON MOHAWK "CLEAR"
- 5. ALL WINDOW SILLS TO BE OAK, TO MATCH DOORS.
- 6. CAPS ON PARTIAL HEIGHT WALLS: SOLID OAK, STAINED TO MATCH DOORS, SEE DETAILS.
- 7. ALL WOOD THROUGHOUT PROJECT TO BE OAK TO MATCH DOORS.
- 8. ALL WINDOW AND DOORS TO HAVE GWB RETURNS AT HEAD & JAMBS, PAINTED TO MATCH WALL. 9. ALL GWB SHALL BE PAINTED COLORS: AS SHOWN; ALL TRIM ACCESSORIES SHALL BE CONCEALED 'TAPED' IN TYPE AND PAINTED TO MATCH WALL. PROVIDE REVEAL TRIMS/CONTROL JOINTS BY FRY REGLET OR SIM. AS NOTED ON DETAILS.
- 10. RUBBER BASE THROUGHOUT U.O.N IS COLOR BX1.
- 11. RUBBER BASE FOR CORRIDOR, LOBBY & PLANNING COUNTER IS COLOR BX2.
- 12. PROVIDE ALUMN. TRANSITION STRIP BETWEEN DISSIMILAR FLOORING MATERIALS; IE: VCT/CARPET, SHEET LVT/CARPET, TILE, ETC.
- 13. FINISH PRODUCTS LISTED ARE BASIS OF DESIGN. 14. FINAL SELECTIONS TO BE DETERMINED BY ARCHITECT & OWNER.
- 15. EXPOSED CONC. FLOORS TO BE SEALED. 16. COUNTERTOPS THROUGHOUT TO BE PLASTIC LAMINATE, COLOR T.B.D. SEE CASEWORK DETAILS.
- 17. MISC. METALS TO BE PAINTED COLOR P2, U.O.N. 18. WALK OFF MAT: MANNINGTON COMMERCIAL EXTREME TILE; REDEEM #3520

FINISH MATERIAL SELECTIONS:

PAINT COLORS:

P1: SW 7014 EIDER WHITE P2: SW 7017 DORIAN GRAY

P3: SW 2863 POWDER BLUE P4: SW 6347 CHRYSANTHEMUM

CARPET/TILE: MOHAWK

C1: CARPET TILE, STYLE: VENTURESOME BT356, COLOR: 358 THRILL SEEKER C2: CARPET TILE, STYLE: GRANIAC, INSURGENT, COLOR: 358 THRILL SEEKER

C3: ENTRY CARPET, MANNINGTON, STYLE: RECOARSE II, COLOR: TRAVERSE TAN 8413

VINYL BASE: JOHNSONITE BX1: 4" TOELESS, COLOR: #32 PEBBLE WG

BX2: 4" TOELESS, COLOR: #44 DARK BROWN B

LVT FLOORING: MANNINGTON COMMERCIAL NATURES PATHS

LVT 1: VIA PASSO; 18 x 18 - 12346 LVT 2: VIA REGIA; 18 x 18 - 12350

LVT 3: VENA DURANGO 18 X18 - 12366- AT LOBBIES ALIGN W/ CEILING COFFERS ABOVE

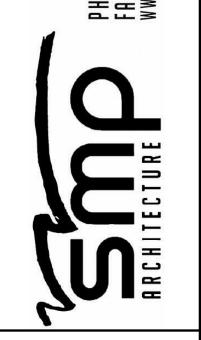
SHEET FLOORING: MANNINGTON COMMERCIAL

SF 1: VIVENDI, WOVEN, PARCHMENT VIV123

PLASTIC LAMINATE: WILSONART PL1: 4940K-18 ASTRO STRANDZ, CASEWORK FACE, HORIZONTAL

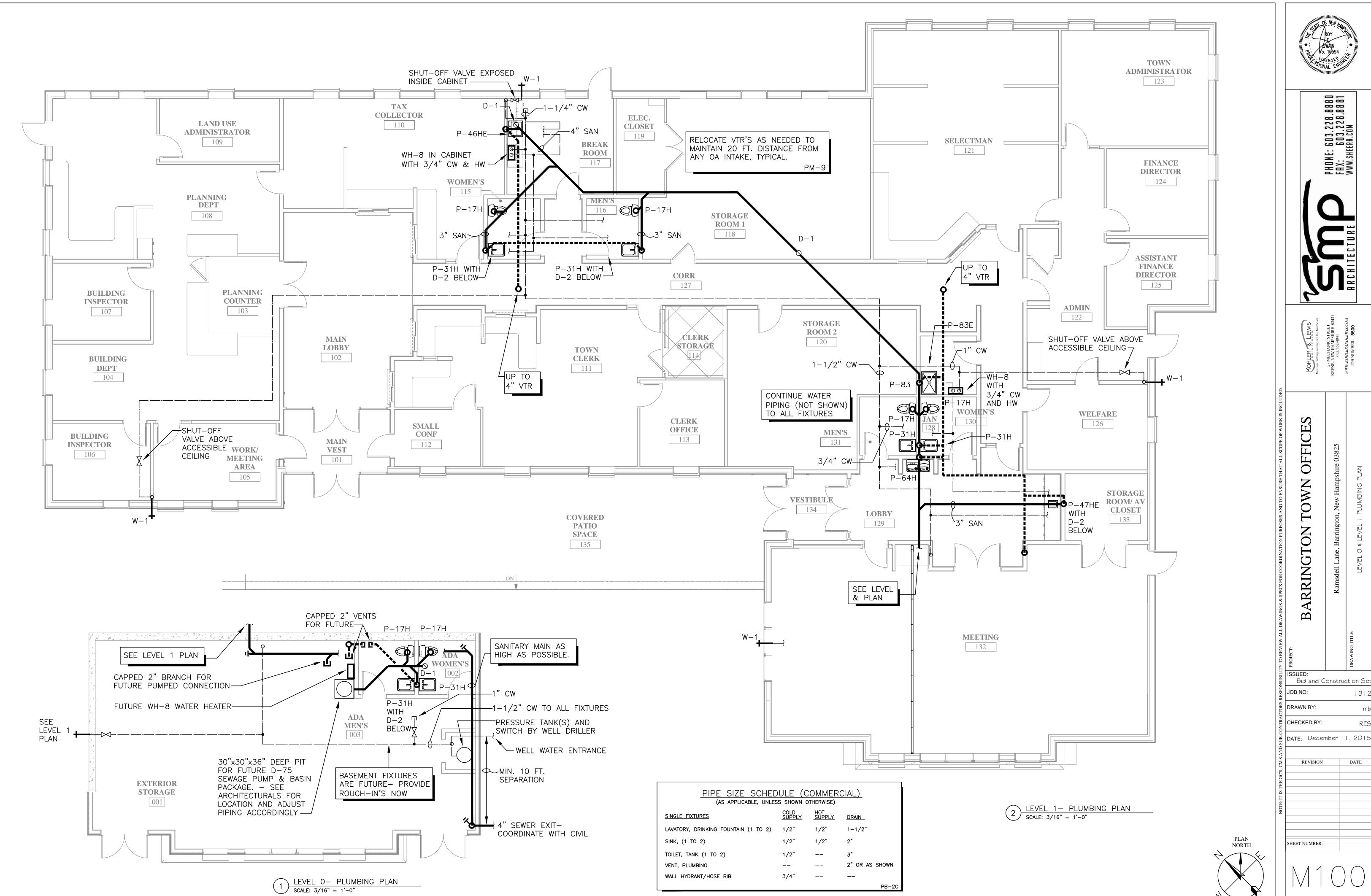
PL2: 4880-38 CARBON MESH, COUNTERTOP & BACK SPLASH

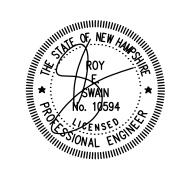
PHONE: 603.228.8880 FAX: 603.228.8881 www.sheerr.com

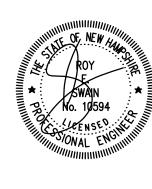


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ISSUED BID & CONSTRUCTION SET CHECKED BY: 12/11/2015







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REVISION SHEET NUMBER:

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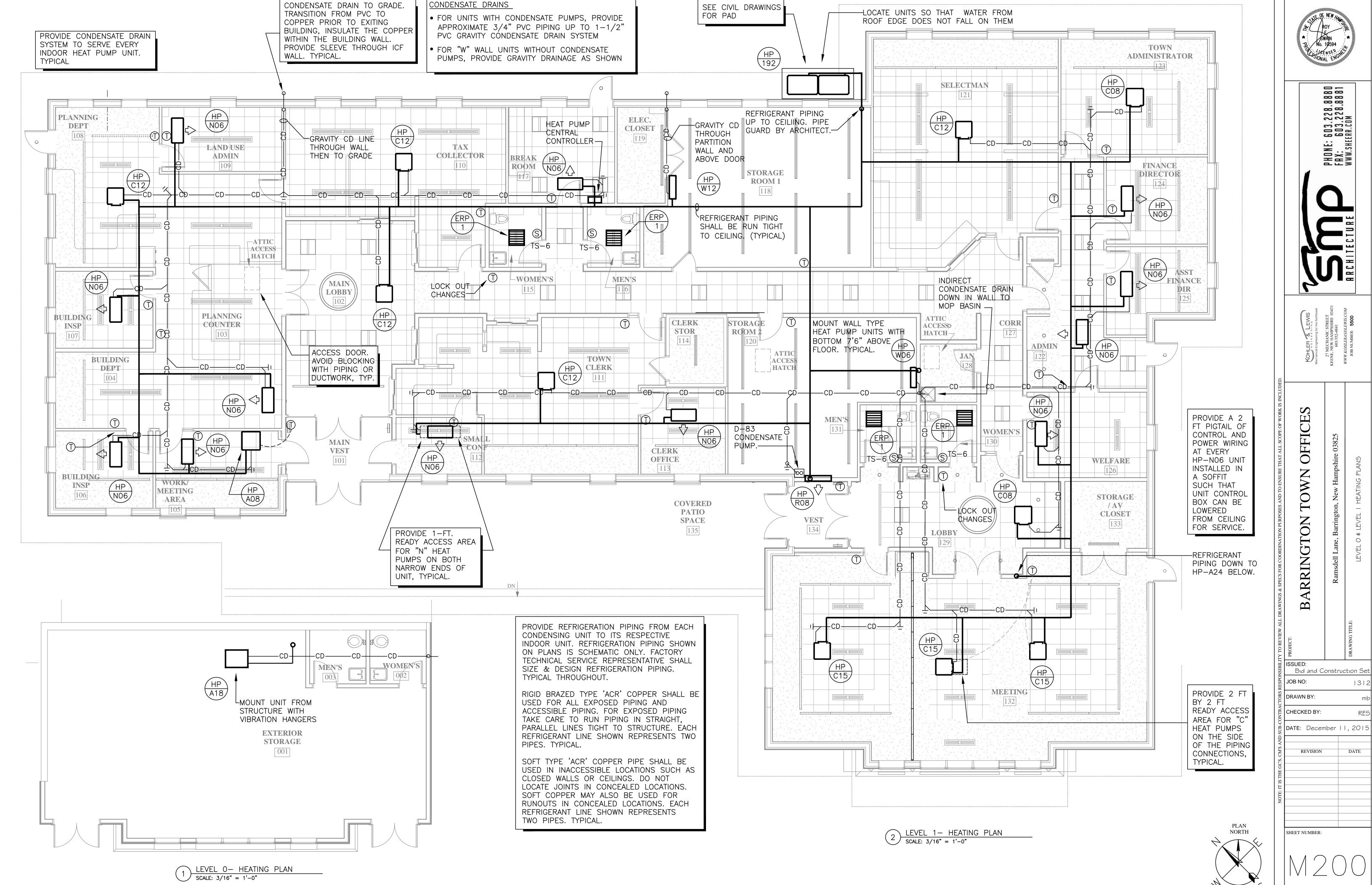
ARRINGTON

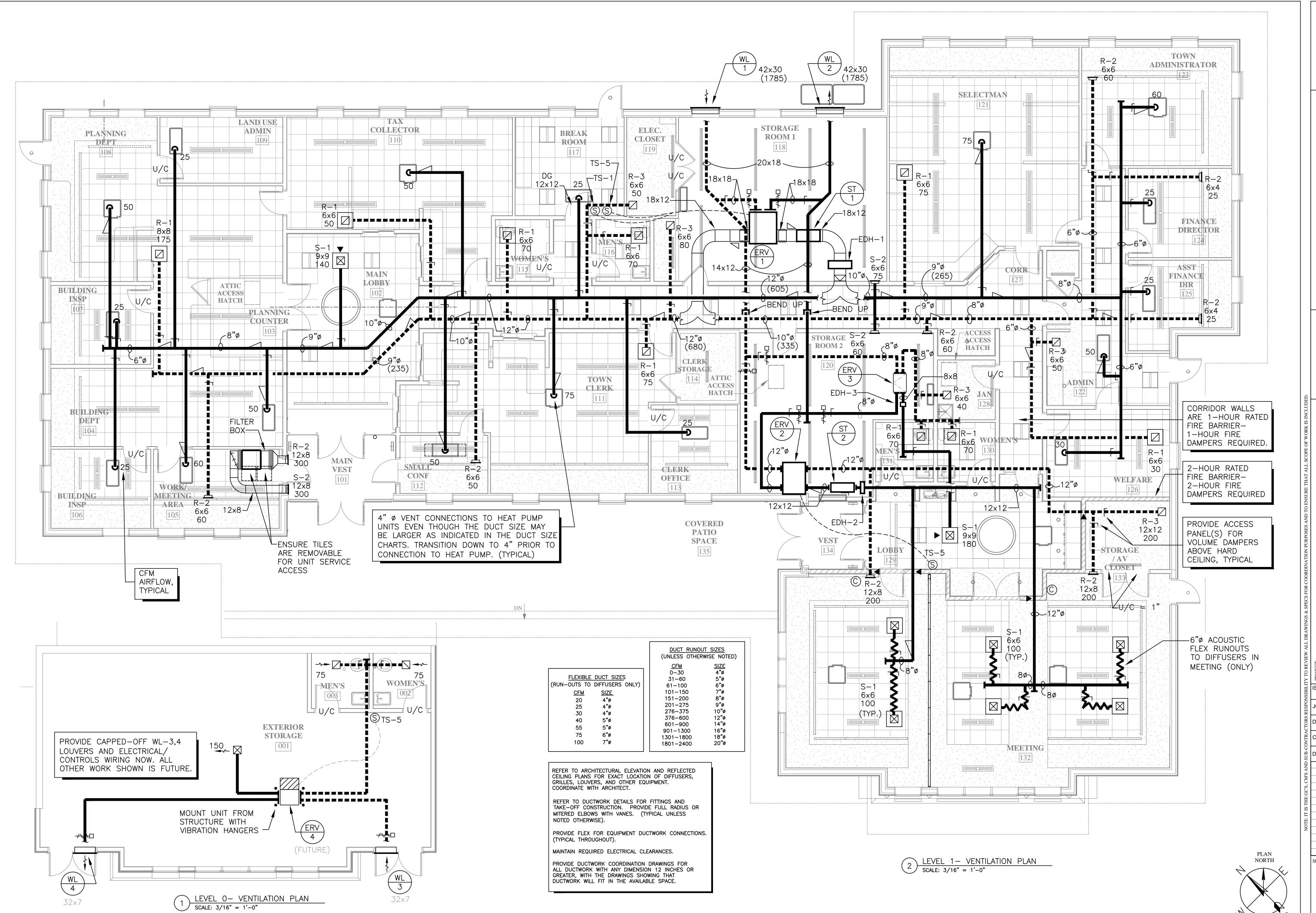
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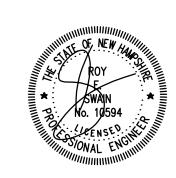
ISSUED:

CHECKED BY:

Bid and Construction Set





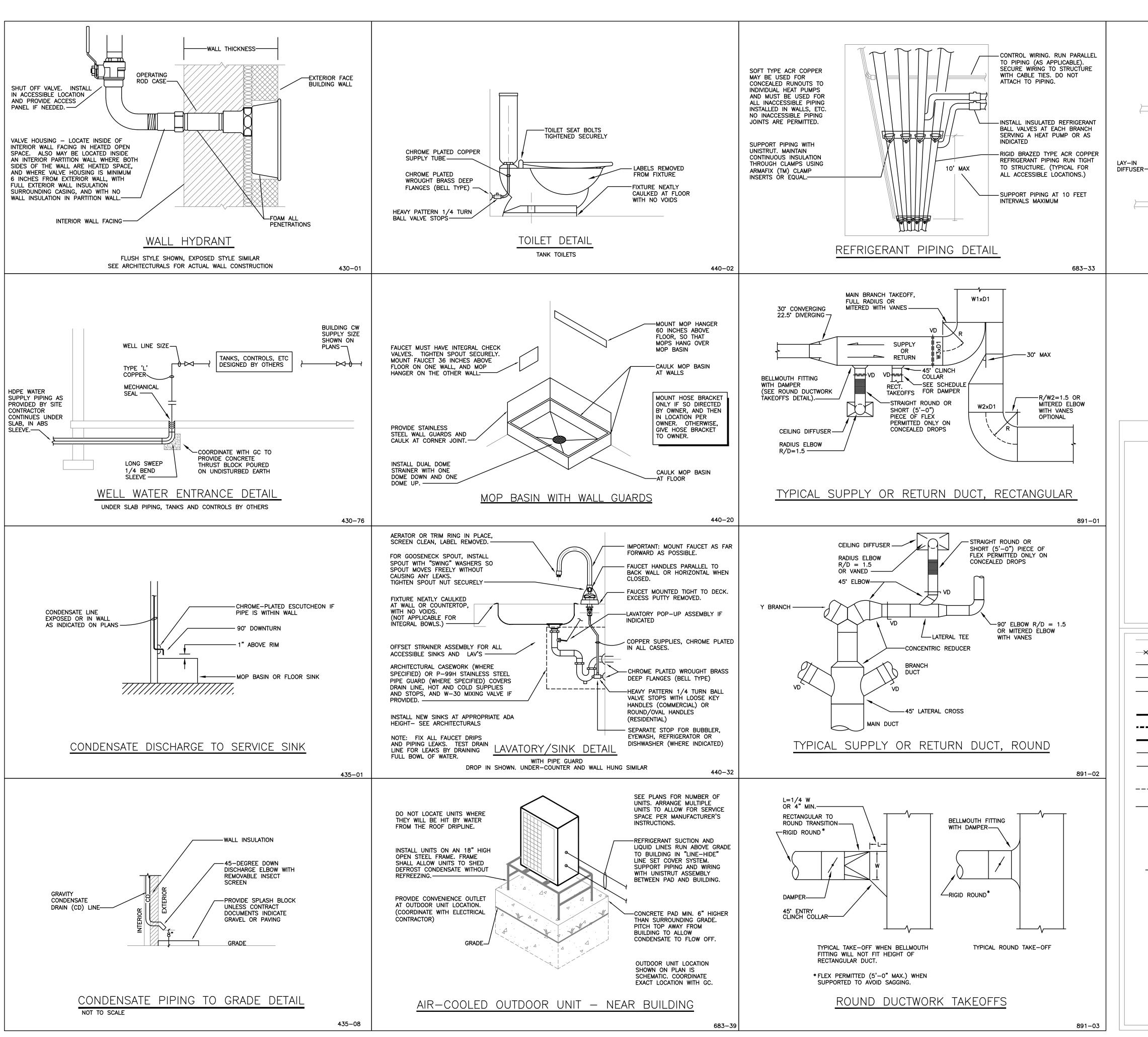


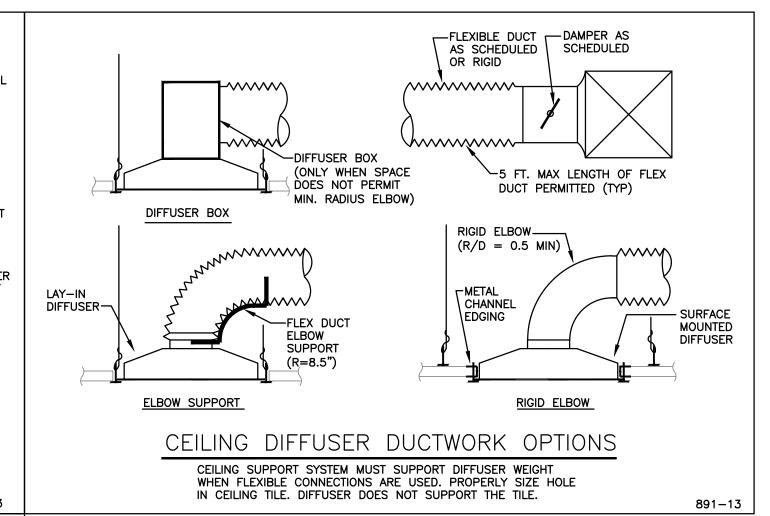
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ARRING M

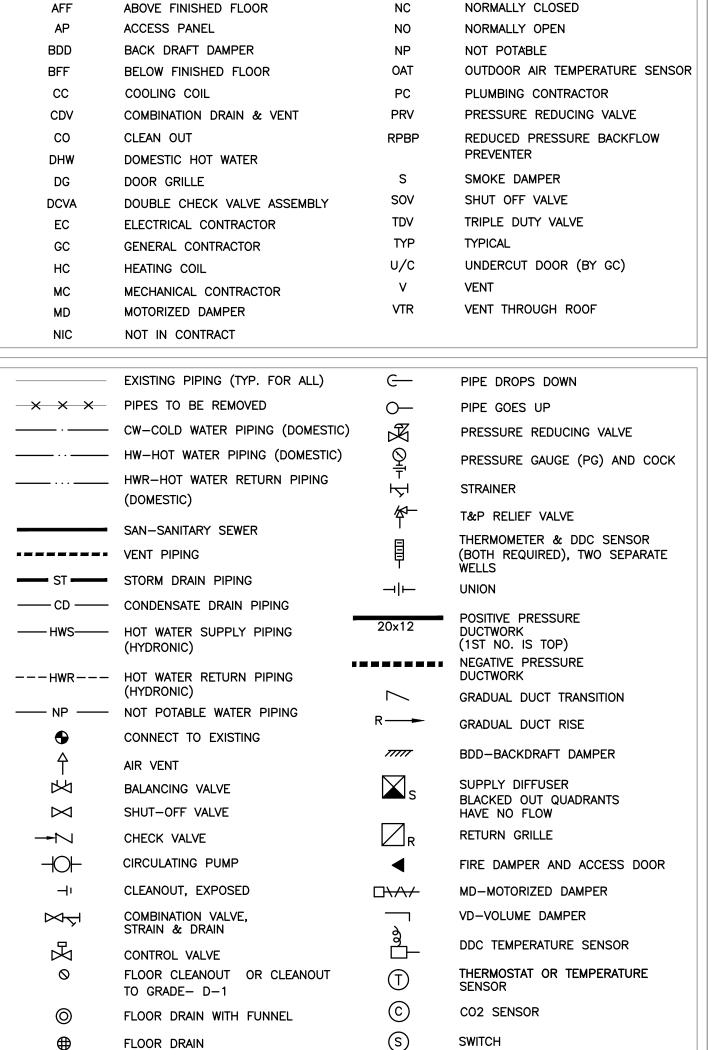
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SHEET NUMBER:





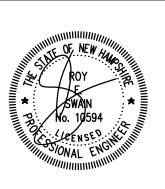
LEG<u>EN</u>D



FLOOR SINK

COCK/SILL FAUCET

HOSE BIB/WALL HYDRANT/SILL



PHONE: 603.228.8880 FRX: 603.228.8881 WWW.SHEERR.COM

STATE TO RE WWW.SHEI

Mechanical Engineering for the Northeast
27 MECHANIC STREET
KEENE, NEW HAMPSHIRE 03431
603/352-4841
WWW.KOHLERANDLEWIS.COM
JOB NUMBER: **5500** 

BARRINGTON TOWN OFFIC

Ramsdell Lane, Barrington, New Hampshire 03825

BARRINGTON TOWN OFFIC

Ramsdell Lane, Barrington, New Hampshire 03825

BLUMBING AND MECHANICAL DETAILS & LEGEND

CHECKED BY: RES

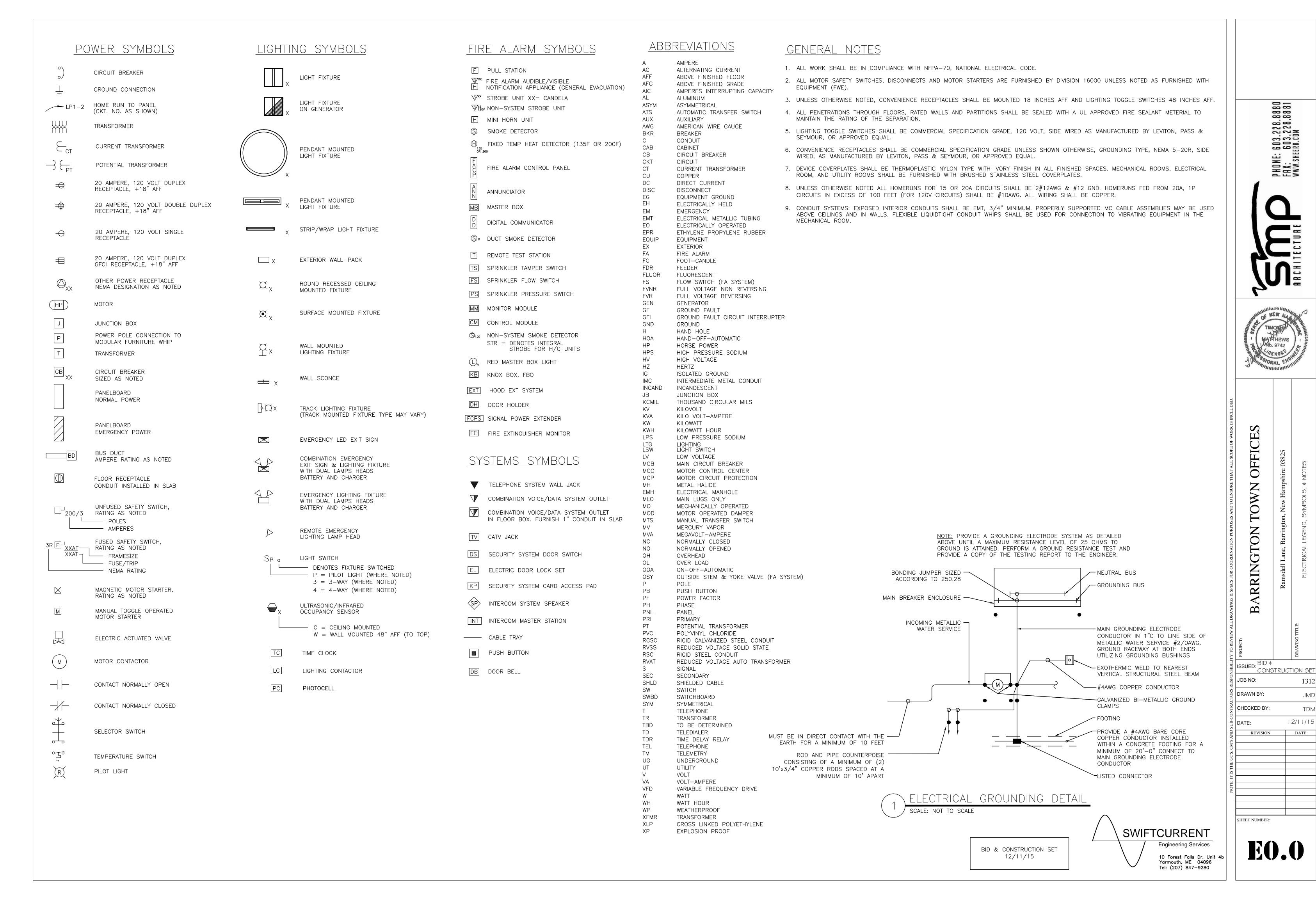
DATE: December 11, 2015

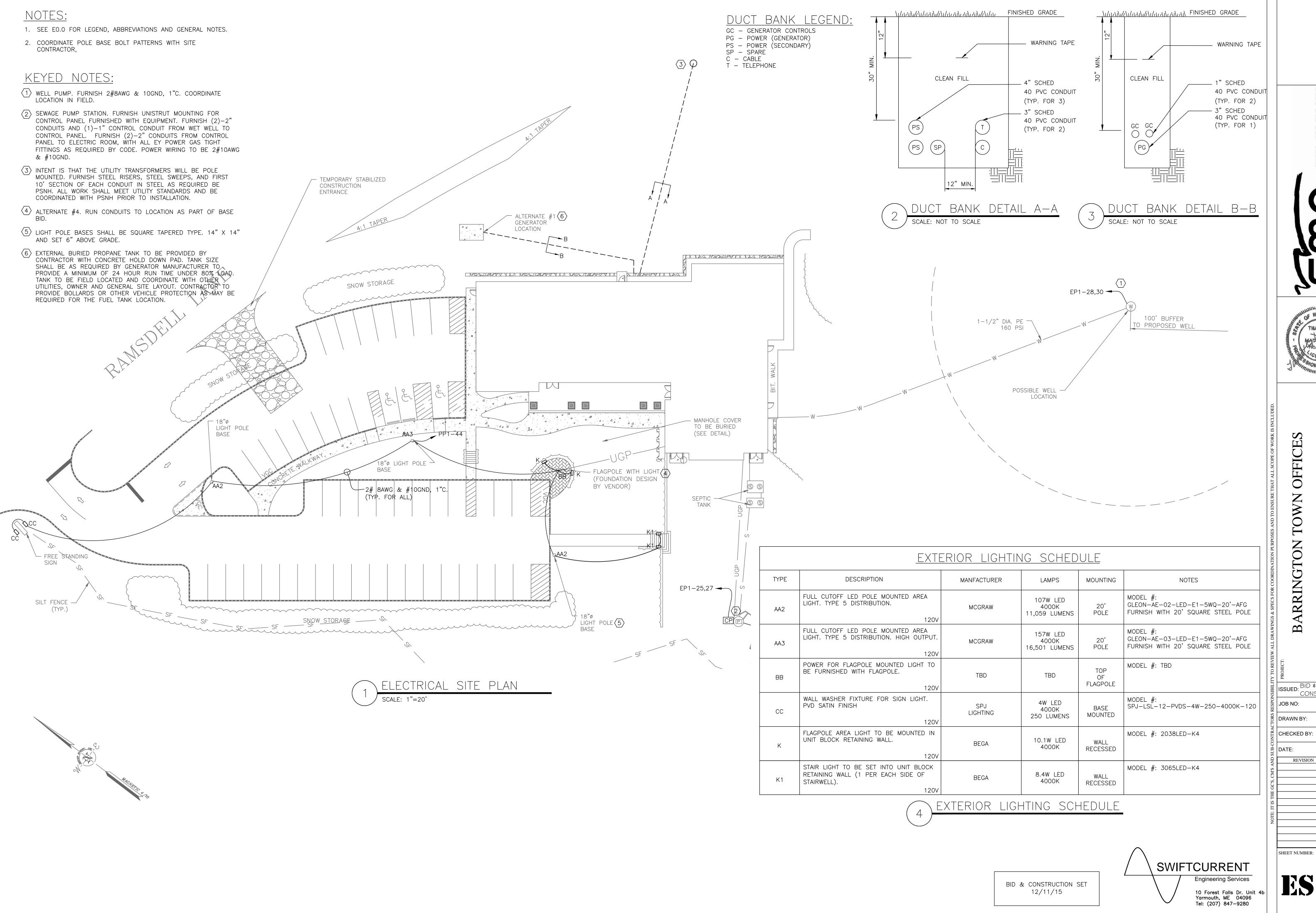
REVISION DATE

SHEET NUMBER:

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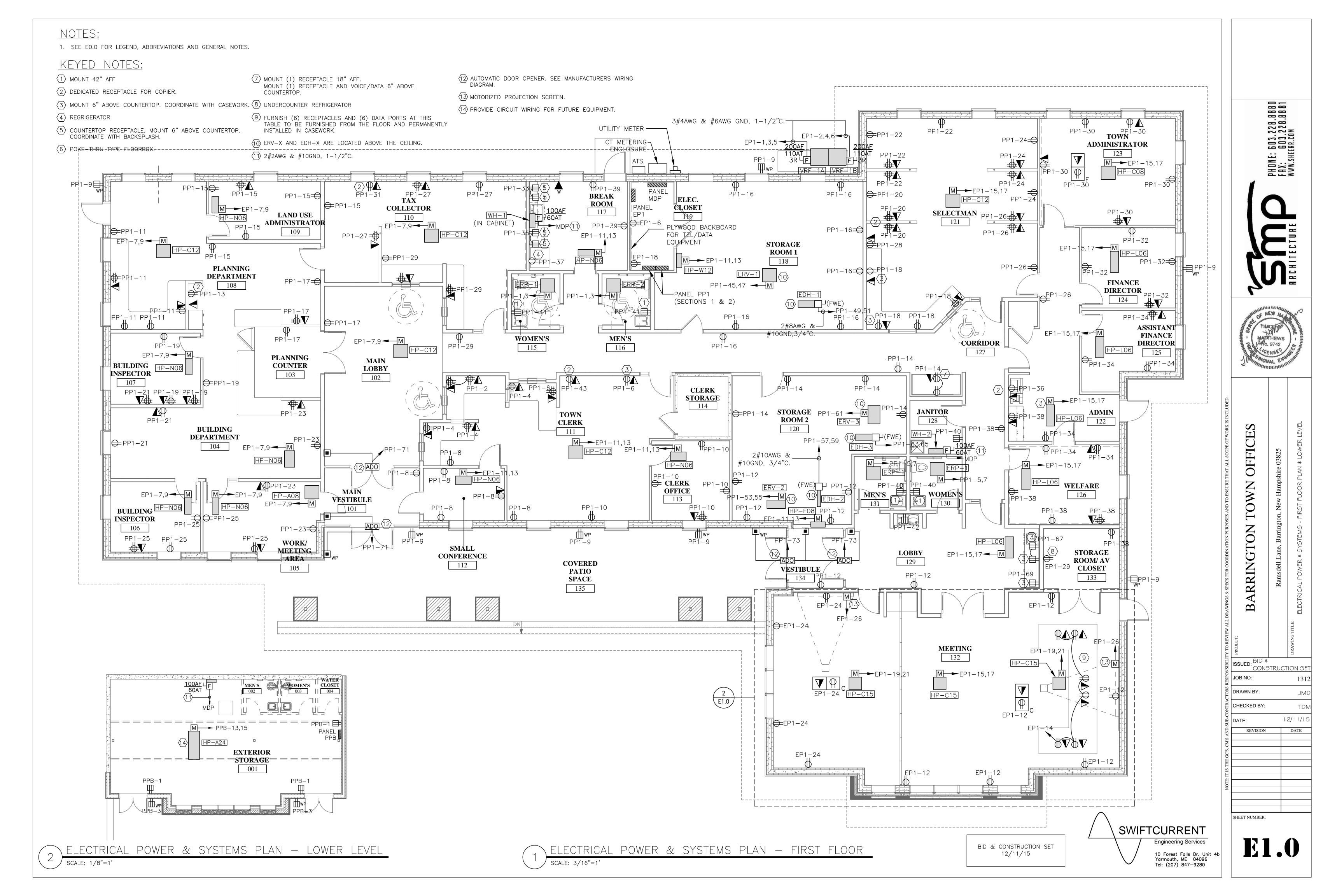


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ISSUED: BID \$ CONSTRUCTION SET TDM 12/11/15

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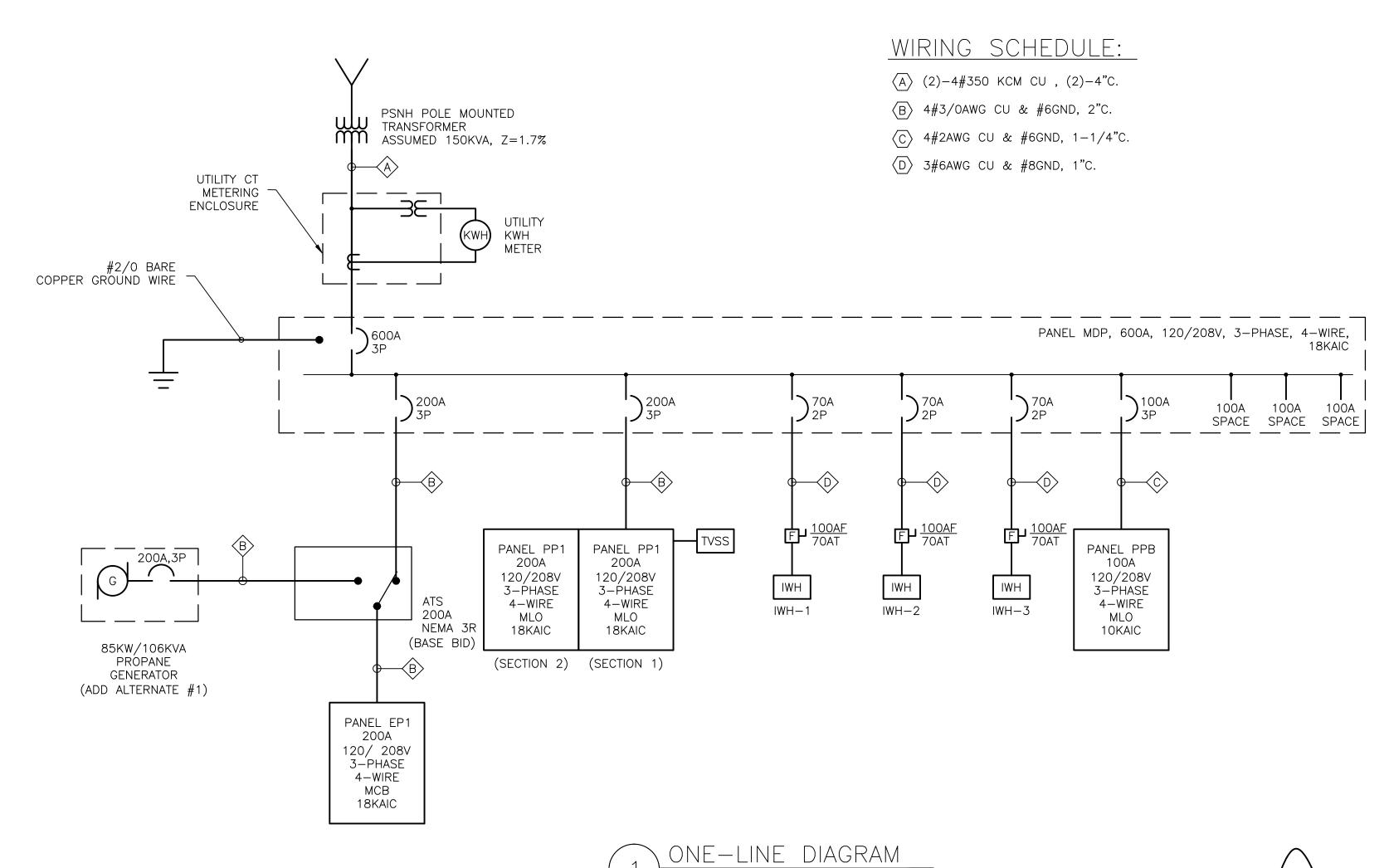
		KVA LOA	D	#	AMPS	Я	AMPS	#		KVA LOA	'D		
DIRECTORY	А	В	С	CKT	BKR	PHASE	BKR	CKT	Α	В	С	1	DIRECTORY
EDD 1.2	0.3			1	15	Α	20	2	0.8			TOWN CLI	ERK RECEPTS
ERP-1,2		0.3		3	15	В	20	4		0.8		TOWN CLI	ERK RECEPTS
ERP-3,4			0.3	5	15	С	20	6			1.1	TOWN CLI	ERK RECEPTS
ERP-3,4	0.3			7	15	Α	20	8	1.1			SMALL CO	NF. RECEPTS
EXTERIOR RECEPTS		1.1		9	20	В	20	10		1.1		CLERK OF	FICE RECEPTS
PLANNING RECEPTS			1.1	11	20	С	20	12			1.1	STORAGE	2 RECEPTS
PLANNING COPIER	1.5			13	20	Α	20	14	1.3			STORAGE	2 RECEPTS
LAND USE RECEPTS		1.3		15	20	В	20	16		1.3		STORAGE	1 RECEPTS
PLANNING RECEPTS			0.9	17	20	С	20	18			0.9	SELECTME	N RECEPTS
BLDG INSPECTOR RECEPTS	1.1			19	20	Α	20	20	0.9			SELECTME	N RECEPTS
BLDG INSPECTOR RECEPTS		0.8		21	20	В	20	22		1.1		SELECTME	N RECEPTS
BLDG DEPT RECEPTS			0.9	23	20	С	20	24			1.1 SELECTMEN RECEPTS		N RECEPTS
BLDG DEPT RECEPTS	1.1			25	20	Α	20	26	1.1			SELECTMEN RECEPTS	
TAX COLLECTOR RECEPTS		0.9		27	20	В	20	28		1.5		SELECTME	N COPIER
TAX COLLECTOR RECEPTS			1.1	29	20	С	20	30			1.3	TOWN AD	MIN RECEPTS
TAX COLLECTOR COPIER	1.5			31	20	Α	20	32	0.9			FINANCE	DIRECTOR RECEPTS
BREAK RM COUNTER		0.4		33	20	В	20	34		1.1		AST. FINA RECEPTS	NCE DIRECTOR
BREAK RM COUNTER			0.4	35	20	С	20	36			1.5	FINANCE	COPIER
BREAK RM REFRIGERATOR	0.5			37	20	Α	20	38	1.1			WELFARE	RECEPTS
BREAK RM RECEPTS		0.4		39	20	В	20	40		0.6		TOILET GF	TI RECEPTS
TOILET GFI RECEPTS			0.4	41	20	С	20	42			0.5	WATER CO	OOLER
SUBTOTAL	6.3	5.2	5.1						6.2	7.4	7.5		SUBTOTAL
VOLTAGE: 208Y/120V P	HASE: 3		POL	ES: 4		TOTAL	KVA A-	-PHASE	12	2.8	F	PANEL	PP1
MAIN LUGS ONLY			BUS AMI	PS: 200/	4	TOTAL	. KVA B-	-PHASE	12	2.9	,		(SECTION 1)
MOUNTING: SURFACE						TOTAL	AL KVA C-PHASE 12.6			2.6		CATION	ELECTRIC ROOM
SHORT CIRCUIT RATING: 18 KA	AIC						ТОТ	AL KVA	38	3.3		5/11/014	

		KVA LUA	U	#	₹	بير	₹	#	·	NVA LUA	Ü		
DIRECTORY	А	В	С	Ä	B X X	PHASE	BKR	CKT	А	В	С		DIRECTORY
TOWN CLERK COPIER	1.5			43	20	А	20	44	0.6			EXTERIOR	LTS.
ERV-1		1.2		45	15	В	20	46		1.3		PLANNING	LTS.
ERV-I			1.2	47	15	С	20	48			1.0	TAX COLL	/BREAK/CORR/LTS
EDH-1	3.8			49	40	А	20	50	0.8			TOWN CLE	RK LTS.
EDH-1		3.8		51	40	В	20	52		1.1		SELECTME	N LTS.
ERV-2			1.2	53	15	С	20	54			0.8	ADMIN/DIF	RECTOR LTS.
ERV-Z	1.2			55	15	Α	20	56	0.8			CONF. LOI	BBY LTS.
EDH-2		2.5		57	70	В	20	58		0.3		EXTERIOR	BLDG. LTS.
EDH-2			2.5	59	30	С	20	60			*	SPARE	
ERV-3	0.4			61	20	А	20	62	*			SPARE	
FDII 7		0.8		63		В	20	64		*		SPARE	
EDH-3			0.8	65	20	С	20	66			*	SPARE	
KITCHENETTE RECEPTACLE	0.2			67	20	Α	20	68	*			SPARE	
KITCHENETTE RECEPTACLE		0.4		69	20	В	20	70		*		SPARE	
AUTOMATIC DOOR OPENER			1.0	71	20	С	20	72			*	SPARE	
AUTOMATIC DOOR OPENER	1.0			73	20	А	20	74	*			SPARE	
SPARE		*		75	20	В	20	76		*		SPARE	
SPARE			*	77	20	С	20	78			*	SPARE	
SPARE	*			79	20	Α	20	80	*			SPARE	
SPARE		*		81	20	В	20	82		*		SPARE	
SPARE			*	83	20	С	20	84			*	SPARE	
SUBTOTAL	8.1	8.7	6.7				•		2.2	2.7	1.8		SUBTOTAL
VOLTAGE: 208Y/120V P	HASE: 3		POL	ES: 4		TOTAL	_ KVA A	-PHASE	10	).3			PP1
MAIN LUGS ONLY			BUS AM	PS: 200	A	TOTAL	_ KVA B	-PHASE	11	.4	]	PANEL	(SECTION 2)
MOUNTING: SURFAGE						TOTAL	KVA C	-PHASE	8	.5		CATION	ELECTRIC SOCI
SHORT CIRCUIT RATING: 18 KA	AIC .						TOT	AL KVA	30	0.2		CATION	ELECTRIC ROOM

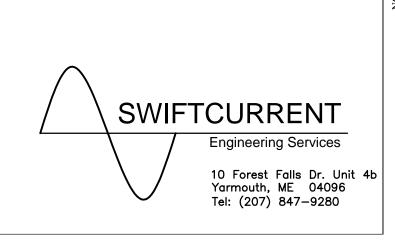
		KVA LOA	.D	#	AMPS	). )E	AMPS	#		KVA LOA	.D		
DIRECTORY	А	В	С	CKT	BKR	PHASE	BKR	CKT	А	В	С		DIRECTORY
	8.9			1		Α		2	8.9				
VRF-1A		8.9		3	110	В	110	4		8.9		VRF-13	
			8.9	5		С		6			8.9		
HP-102,104,105,106,107,108,	0.3			7	15	Α	20	8	0.4			CORRIDOR	LTS
109,110		0.3		9		В	20	10		1.0		MEETING I	RM LTS
HP-111,112,113,115,116,117,			0.3	11	15	С	20	12			1.1	MEETING I	RM RECEPTS
118,119,1120	0.3			13		Α	20	14	1.1			MEETING I	RM RECEPTS
HP-121,122,123,124,125,126,		0.4		15	15	В	20	16		0.2		PHONE RE	ECEPTS
129, HP-132			0.4	17		С	20	18			0.2	PHONE RE	ECEPTS
HP-132A,132C,134,001	0.2			19	15	Α	20	20	0.4			SECURITY	SYSTEM
HP-132A,132C,134,001		0.2		21	15	В	20	22		0.4		TELEPHONE SYSTEM	
MECHANICAL CONTROLS			1.0	23	20	С	20	24			0.9	MEETING RM RECEPTS	
CEWACE DIMP ((2)4 (2)10)	1.3			25	00	Α	20	26	0.2			SCREEN OPERATORS	
SEWAGE PUMP ((2)1/2HP)		1.3		27	20	В	00	28		0.6		WELL DUMP (1/2UP)	
A/V EQUIPMENT			0.2	29	20	С	20	30			0.6	WELL PUMP (1/2HP)	
FACP	1.0			31	20	Α	20	32	*			SPARE	
SPARE		*		33	20	В	20	34		*		SPARE	
SPARE			*	35	20	С	20	36			*	SPARE	
SPARE	*			37	20	Α	20	38	*			SPARE	
SPARE		*		39	20	В	20	40		*		SPARE	
SPARE			*	41	20	С	20	42			*	SPARE	
SUBTOTAL	12.0	11.1	10.8						11.0	11.1	11.7		SUBTOTAL
VOLTAGE: 208Y/120V PHA	ASE: 3		POL	ES: 4		TOTAL	KVA A-	-PHASE	23	3.0		PANEL	ED1
MAIN BREAKER: 200A			BUS	AMPS:	200A	TOTAL	. KVA B-	-PHASE	22	2.2	F	ANEL	EP1
MOUNTING: SURFACE						TOTAL	. KVA C-	-PHASE	22	2.5	LOCATION		ELECTRIC ROOI
SHORT CIRCUIT RATING: 18 KAIC	ORT CIRCUIT RATING: 18 KAIC						ТОТ	AL KVA	67	7.7		CATION	LLLCTRIC ROOI

		KVA LOA	.D	#	AMPS	) SE	AMPS	#		KVA LOA	.D		
DIRECTORY	Α	В	С	, K	BKR	PHASE	BX R	CKT	Α	В	С		DIRECTORY
BASEMENT RECEPTS.	0.6			1	20	Α	20	2	0.5			BASEMENT	LTS.
EXTERIOR BASEMENT RECEPTS.		0.4		3	20	В	20	4		0.2		BASEMENT	EXTERIOR LTS.
SPRINKLER RECEPT.			1.2	5	20	С	20	6			*	SPARE	
EDIL 4 (ELITUDE)	0.8			7	4.5	Α	20	8	*			SPARE	
EDH-4 (FUTURE)		0.8		9	15	В	20	10		*		SPARE	
ERV-4 (FUTURE)			0.4	11	20	С	20	12			*	SPARE	
LID AGA (FUTURE)	0.1			13	4.5	Α	20	14	*			SPARE	
HP-A24 (FUTURE)		0.1		15	15	В	20	16		*		SPARE	
SPARE			*	17	20	С	20	18			*	SPARE	
SPARE	*			19	20	Α	20	20	*			SPARE	
SPARE		*		21	20	В	20	22		*		SPARE	
SPARE			*	23	20	С	20	24			*	SPARE	
SPARE	*			25	20	Α	20	26	*			SPARE	
SPARE		*		27	20	В	20	28		*		SPARE	
SPARE			*	29	20	С	20	30			*	SPARE	
SUBTOTAL	1.5	1.3	1.6						0.5	0.2	###		SUBTOTAL
VOLTAGE: 208Y/120V PHA	ASE: 3	•	POL	ES: 4		TOTAL	_ KVA A	-PHASE	2	.0	_	ANIEL	555
MAIN LUGS ONLY			BUS AMI	PS: 100	4	TOTAL	. KVA B	-PHASE	1	.5		PANEL	PPB
MOUNTING: SURFACE						TOTAL	KVA C	-PHASE	1	.6		CATION	DACELIENT
SHORT CIRCUIT RATING: 10 KAIC	;						TOT	AL KVA	5	.1	1 10	CATION	BASEMENT

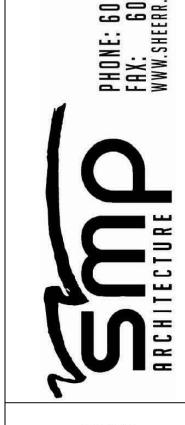
FURNISH WITH INTEGRAL TVSS OR FURNISH REQUIRED CIRCUIT BREAKER AND REMOTE MOUNT EQUIPMENT ADJACENT TO PANEL



SCALE: NOT TO SCALE



BID & CONSTRUCTION SET 12/11/15





BARRINGTON TOWN OFFICES
Ramsdell Lane, Barrington, New Hampshire 03825

DRAWING TITLE

CHECKED BA:

CHECKED BA:

CHECKED BA:

TDW

DRAWN BY: JMD

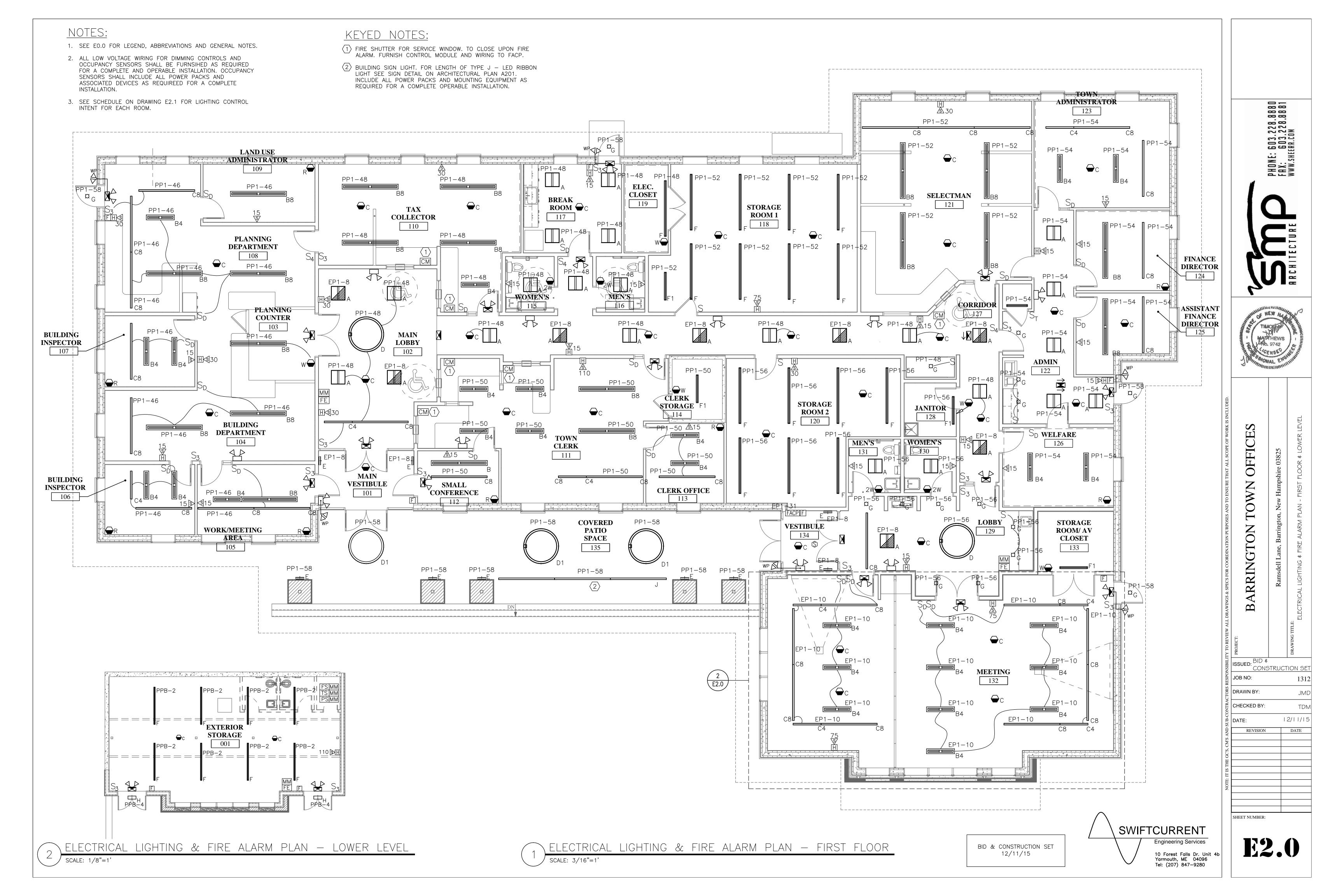
CHECKED BY: TDM

DATE: 12/11/15

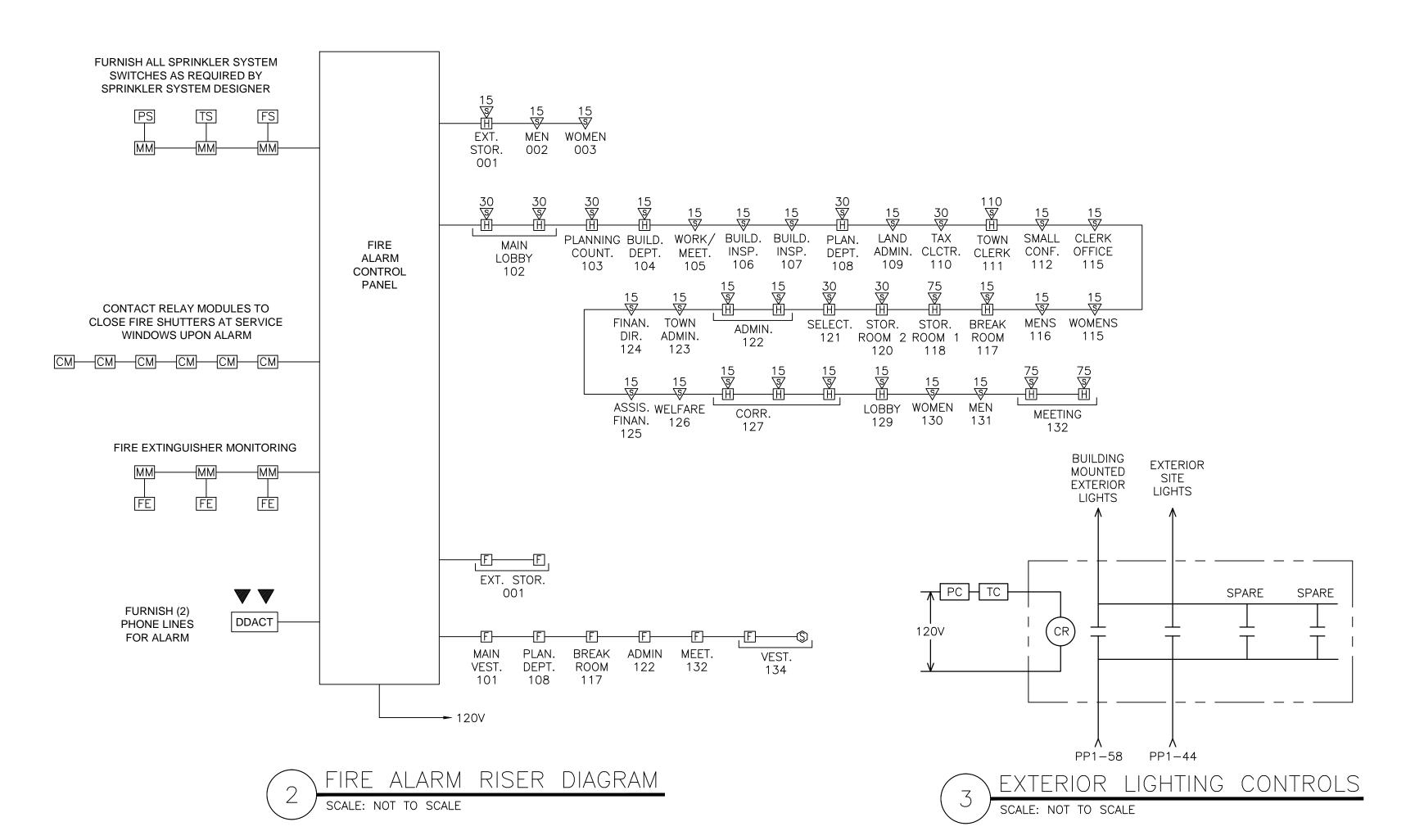
REVISION DATE

SHEET NUMBER:

E1.1



		<u>LIGHTING</u> S			1
TYPE	DESCRIPTION	MANFACTURER	LAMPS	MOUNTING	NOTES
Α	2'x2' LED TROFFER WITH 0-10V DIMMING	METALUX	34W LED 3500K 3400 LUMENS	CEILING GRID	MODEL #: 22EN-LD1-34-UNV-L835-CD1-U
B4	4' SUSPENDED LED PENDANT WITH FROSTED LENS	CORELITE	39W LED 3500K 3858 LUMENS	CEILING SUSPENDED	MODEL #: J2-WL-2L35-1D-UNV-AC48-T1-4
B8	8' SUSPENDED LED PENDANT WITH FROSTED LENS	CORELITE	78W LED 3500K 7716 LUMENS	CEILING SUSPENDED	MODEL #: J2-WL-2L35-1D-UNV-AC48-T1-8
C4	4' LED STRIPLIGHT	METALUX	28.3W LED 4000K 3200 LUMENS	CEILING SURFACE	MODEL #: 4SNLED-LD4-32SL-UNV-L835-CD1-U
C8	8' LED STRIPLIGHT	METALUX	28.3W LED 4000K 3200 LUMENS EACH 4' SECTION	CEILING SURFACE	MODEL #: 8SNLED-LD4-80SL-UNV-L835-CD1-U
D	48" DIAMETER DECORATIVE LED PENDANT INTERIOR — CABLE MOUNT	DELRAY LIGHTING	24W LED 3500K	CEILING SUSPENDED	MODEL #: 6714-W-W35-C2RD-C
D1	48" DIAMETER DECORATIVE LED PENDANT EXTERIOR — STEM MOUNT. BLACK FINISH.	DELRAY LIGHTING	24W LED 4000K	CEILING STEM	MODEL #: 6714-K-W40-C2RD-S
E	WALL MOUNTED SEMI-RECESSED LED FIXTURE. SEMIGLOSS WHITE FINISH.	ELLIPTIPAR	32W LED 3500K 1823 LUMENS	WALL MOUNT	MODEL #: S223-K014-T-02-8-00-0-35-00
E1	WALL MOUNTED SEMI-RECESSED LED FIXTURE. BLACK FINISH.	ELLIPTIPAR	32W LED 3500K 1823 LUMENS	WALL RECESSED	MODEL #: S223-M014-T-99-8-00-0-35-00
F	8' LED LENSED STRIPLIGHT WITH WIDE LENS WITH 0-10V DIMMING	METALUX	65W LED 3500K 6822 LUMENS	CEILING SURFACE	MODEL #: 8TSNLED-LD4-67SL-LW-UNV-L835- CD1-U
F1	4' LED LENSED STRIPLIGHT WITH WIDE LENS WITH 0-10V DIMMING	METALUX	41W LED 3500K 4119 LUMENS	CEILING SURFACE	MODEL #: 4SNLED-LD4-41SL-LW-UNV-L835- CD1-U
F2	2' LED LENSED STRIPLIGHT WITH WIDE LENS WITH 0-10V DIMMING	METALUX	XXW LED 3500K XXXX LUMENS	CEILING SURFACE	MODEL #: 2SNLED-LD4-XXSL-LW-UNV-L835- CD1-U
G	5" RECESSED LED DOWNLIGHT WITH HAZE REFLECTOR AND WHITE FLANGE	HALO	13.1W LED 3500K 894 LUMENS	CEILING RECESSED	MODEL #: ML5609835-592H
Н	WALL MOUNTED EXTERIOR INDIRECT FIXTURE	AMETRIX	55W LED 4000K 4797 LUMENS	WALL SURFACE	MODEL #: ASYX-WM-S1-OD-D-F-L4-1-UNV- W-C-STD
J	RIBBON-LIGHT FIXTURE TO BE INSTALLED ON SIGN	ACOLYTE	6W/LF LED 4000K 514 LUMEN/LF	MOUNT ON BUILDING SIGN	MODEL #: RB-6B-24-6.0-41 COORDINATE LENGTH WITH SIGNAGE FURNISH ALL POWER PACKS & MOUNTING ACCESSORIES FOR COMPLETE AND OPERABLE INSTALLATION
K	FLAGPOLE AREA LIGHT TO BE MOUNTED IN UNIT BLOCK RETAINING WALL.	BEGA	10.1W LED 4000K	WALL RECESSED	MODEL #: 2038LED-K4
K1	STAIR LIGHT TO BE SET INTO UNIT BLOCK RETAINING WALL (1 PER EACH SIDE OF STAIRWELL).	BEGA	8.4W LED 4000K	WALL RECESSED	MODEL #: 3065LED-K4
C	CEILING MOUNTED DUAL TECHNOLOGY UTRASONIC AND PASSIVE INFRARED OCCUPANCY SENSOR 120V	GREENGATE	N/A	CEILING SURFACE	MODEL #: OAC-DT-2000R FURNISH RELAYS/POWER PACKS AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION
CLO	CORNER MOUNTED DUAL TECHNOLOGY UTRASONIC AND PASSIVE INFRARED OCCUPANCY SENSOR 120V	GREENGATE	N/A	WALL CORNER	MODEL #: OAWC-DC-120W-R FURNISH RELAYS/POWER PACKS AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION
W	WALL MOUNT PASSIVE INFRARED OCCUPANCY SENSOR	GREENGATE	N/A	WALL	MODEL #: ONW-P-1001-MV
<b>2</b> W	WALL MOUNT PASSIVE INFRARED OCCUPANCY SENSOR — 2 RELAY CONTACTS FOR FAN CONTROL 120V	GREENGATE	N/A	WALL	MODEL #: ONW-P-1001-DMV
	EMERGENCY BATTERY UNIT	SURELITES	(2) 1.4 WATT LED	WALL SURFACE	MODEL #: LEM
WP	WEATHER PROOF REMOTE HEAD	SURELITES	(2) 1.4 WATT LED	WALL SURFACE	MODEL #: LEMWR2
	LED EXIT SIGN EMERGENCY BATTERY UNIT COMBINATION WITH REMOTE CAPACITY  120V	SURELITES	(2) 0.78 WATT LED	UNIVERSAL MOUNT	MODEL #: APCH7

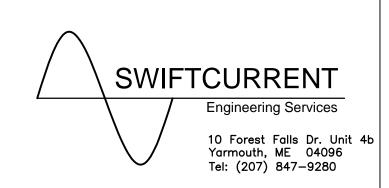


11	GHTING CONTROL SCHEDULE	
ROOM	FIXTURE "ON" BY	FIXTURE "OFF" BY
101 VESTIBULE	CEILING SENSOR	CEILING SENSOR
102 LOBBY	SWITCH	SWITCH/CEILING SENSOR
103 PUBLIC COUNTER/WAITING	SWITCH	WALL SENSOR/SWITCH
104 BUILDING DEPARTMENT	DIMMER SWITCH	SWITCH/CEILING SENSOR
105 WORK/MEETING AREA	DIMMER SWITCH	SWITCH/CEILING SENSOR
106 BUILDING INSPECTOR	DIMMER SWITCH	SWITCH/CEILING SENSOR
107 BUILDING INSPECTOR	DIMMER SWITCH	SWITCH/CEILING SENSOR
108 PLANNING DEPARTMENT	DIMMER SWITCH	SWITCH/CEILING SENSOR
109 LAND USE ADMINISTRATOR	DIMMER SWITCH	SWITCH/CEILING SENSOR
110 TAX COLLECTOR	DIMMER SWITCH	SWITCH/CEILING SENSOR
111 TOWN CLERK	DIMMER SWITCH	SWITCH/CEILING SENSOR
112 SMALL CONFERENCE	DIMMER SWITCH	SWITCH/CEILING SENSOR
113 CLERK OFFICE	DIMMER SWITCH	SWITCH/CEILING SENSOR
114 CLERK STORAGE	SWITCH	SWITCH/WALL SENSOR
115 WOMENS	SWITCH	WALL SENSOR/SWITCH
116 MENS	SWITCH	WALL SENSOR/SWITCH
117 BREAK ROOM	DIMMER SWITCH	SWITCH/CEILING SENSOR
118 STORAGE 1	SWITCH	SWITCH/CEILING SENSOR
119 ELEC/DATA PHONE	SWITCH	SWITCH/WALL SENSOR

Li	IGHTING CONTROL SCHEDULE					
ROOM	FIXTURE "ON" BY	FIXTURE "OFF" BY				
120 STORAGE 2	SWITCH	SWITCH/CEILING SENSOR				
121 SELECTMAN	DIMMER SWITCH	SWITCH/CEILING SENSOR				
122 ADMIN	SWITCH	SWITCH/CEILING SENSOR				
123 TOWN ADMINISTRATOR	DIMMER SWITCH	SWITCH/CEILING SENSOR				
124 FINANCE DIRACTOR	DIMMER SWITCH	SWITCH/CEILING SENSOR				
125 ASSISTANT FINANCE DIRECTOR	DIMMER SWITCH	SWITCH/CEILING SENSOR				
126 WELFARE	DIMMER SWITCH	SWITCH/CEILING SENSOR				
127 CORRIDOR	SWITCH	SWITCH/CEILING SENSOR				
128 JANITOR	SWITCH	SWITCH/WALL SENSOR				
129 LOBBY	SWITCH	SWITCH/CEILING SENSOR				
130 WOMENS	SWITCH	SWITCH/WALL SENSOR				
131 MENS	SWITCH	SWITCH/WALL SENSOR				
132 MEETING	DIMMER SWITCH	SWITCH/CEILING SENSOR				
133 STORAGE RM A/V CLOSET	. SWITCH	WALL SENSOR				
134 VESTIBULE	CEILING SENSOR	CEILING SENSOR				
135 COVERED PATIO SPACE	SWITCH/TIMER/PHOTOCELL	SWITCH/TIMER/PHOTOCELL				

4 LIGHTING CONTROL SCHEDULE scale: NOT TO SCALE

BID & CONSTRUCTION SET 12/11/15



PHONE: 603.228.8880
FRX: 603.228.8881
WWW.SHEERR.COM



BARRINGTON TOWN OFFICES
Ramsdell Lane, Barrington, New Hampshire 03825

WAND SUPCONTRACTORS RESPONSIBILITY TO RESPONSED BID & CONSTRUCTION SET DOB NO: 1312

DRAWN BY: JMD

CHECKED BY: TDM

DATE: | 2/1 | / | 5

REVISION DATE

REVISION DAT

E2.1

SHEET NUMBER: