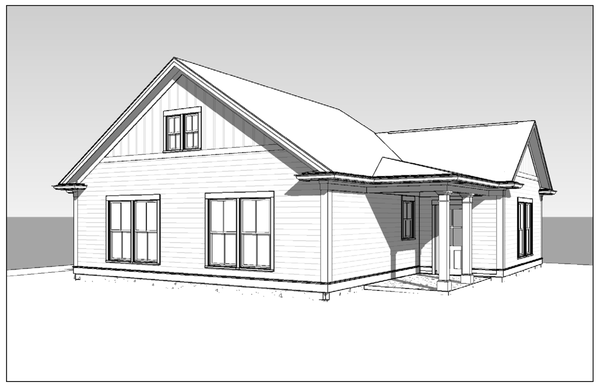
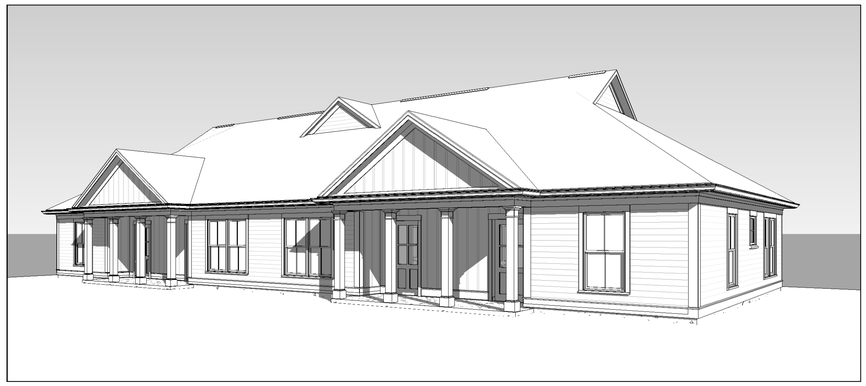
CHURCHWOODS

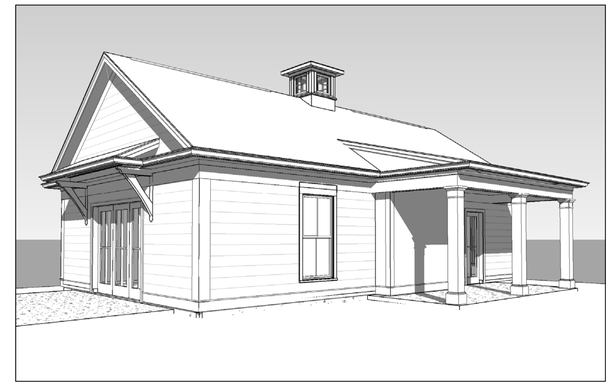
A NEW NEIGHBORHOOD IN SOUTH COUNTY

100% CONSTRUCTION DOCUMENTS

4130 OLD POST ROAD
CHARLESTOWN, RI







PROJECT DATA			
PROJECT NAME	CHURCHWOODS		
PROJECT ADDRESS	4130 OLD POST ROAD CHARLESTOWN, RI 02813		
CLIENT NAME	WASHINGTON COUNTY CDC		
CLIENT ADDRESS	400 TOWER HILL RD NORTH KINGSTOWN, RI 02852		
LEGAL DESCRIPTION	PLAT 13	LOT 43	
PROJECT DESCRIPTION	NEW CONSTRUCTION OF (2) TWO DUPLEX BUILDINGS, (5) FIVE FOUR-UNIT TOWNHOUSE BUILDINGS, (1) COMMUNITY BUILDING, AND (1) WELL HOUSE		

SITE CIVIL
SITE POWER & LIGHTING
LANDSCAPE
BUILDINGS 1,7
BUILDINGS 2, 3, 4, 5, 6
BUILDING 8
BUILDING 9

MAY 27, 2016

UNION STUDIO
ARCHITECTURE & COMMUNITY DESIGN

140 Union Street Providence, RI 02903
t 401.272.4724 f 401.272.4825
www.unionstudioarch.com

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ARCHITECTURE & COMMUNITY DESIGN

OWNER:
CHURCHWOODS, LLC
C/OWASHINGTON COUNTY CDC
400 TOWER HILL RD
NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

ARCHITECT:
UNION STUDIO
ARCHITECTURE &
COMMUNITY DESIGN
140 UNION STREET
PROVIDENCE, RI 02903
TEL: 401.272.4724

CONTRACTOR:

STRUCTURAL:
YODER + TIDWELL
333 SMITH STREET
PROVIDENCE, RI 02908
TEL: 401.751.2460

MECHANICAL,
ELECTRICAL &
PLUMBING
ENGINEERING DESIGN
SERVICES, INC.
141 INDUSTRIAL DRIVE
SLATERSVILLE, RI 02876
TEL: 401.765.7659

CIVIL:
DOWDELL ENGINEERING, INC.
3949 OLD POST ROAD
CHARLESTOWN, RI 02813
TEL: 401.364.1027

LANDSCAPE:
BIRCHWOOD DESIGN GROUP
150 CHESTNUT STREET,
4TH FLOOR
PROVIDENCE, RI 02909
TEL: 401.383.4950

A.M. 12/LOT 137
N/F WASHINGTON TRUST CO.

A.M. 13/LOT 1
N/F ANGELO J. & JANICE E. FALCONE, TR.

A.M. 13/LOT 2
N/F SOUTH SHORE PHYSICIANS INC.

A.M. 13/LOT 3
N/F ANGELO J. & JANICE E. FALCONE, TR.

A.M. 13 LOT 4
N/F VBT INC.

A.M. 13/LOT 5-2
N/F CHATIM INC.

A.M. 13/LOT 5-1
N/F CHATIM INC.

A.M. 13/LOT 43
184,280 S.F.±

A.M. 13/LOT 41
N/F JOYCE M. MACINNES

A.M. 13/LOT 40
N/F JOHN E. & CHRISTINE M. WARD

A.M. 13/LOT 40-3
N/F WAYNE J. GAUMOND

A.M. 13/LOT 40-2
N/F EUGENE A. & SUSAN E. PICA

A.M. 13/LOT 40-1
N/F MERVIN H. BROWNING

A.M. 13/LOT 50
N/F CLEVELAND ASSOCIATES

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N/F WILLIAM C. & LESLIE M. OLIVER

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N/F RICHARD J. & CLAIRE DALIDOWITZ

A.M. 13/LOT 50-7
N/F PATRICK J. & AMY MEAD

A.M. 13/LOT 49
N/F JAMES B. & NANCY A. HARVEY

A.M. 13/LOT 44
DIOCESE OF RHODE ISLAND

OLD POST ROAD

BROWNING DRIVE

PUBLIC - VARIABLE WIDTH

EXISTING ACCESS & UTILITY EASEMENTS

TVD ZONE
R-40 ZONE

SETBACK LINE (TYP.)

TREELINE

EXISTING BUILDING

EXISTING PUBLIC WELL

EXISTING WELL

L=251.67'

296.50'

305.85'

191.27'

254.38'

159.44'

121.20'

120.22'

100.00'

N
W
E
S
NAD 83

ZONING DISTRICT – TVD

MINIMUM AREA = 20,000 S.F.
MINIMUM LOT FRONTAGE = 120 FEET
MINIMUM YARD REQUIREMENTS:
FRONT SETBACK . . . . 20 FEET
SIDE SETBACK . . . . . 20 FEET
REAR SETBACK . . . . . 30 FEET

OWNER/APPLICANT:

WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.
400 TOWER HILL ROAD
NORTH KINGSTOWN, RI 02852

LOCATION MAP
SCALE: 1" = 2000'

CERTIFICATION:

THIS SURVEY AND PLAN CONFORM TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS, AND IS SUBSTANTIALLY CORRECT.

BY: _____
REGISTERED PROFESSIONAL LAND SURVEYOR DATE

NOTES:

1. SUBJECT PROPERTY IS LOCATED IN ZONE "X" AS DELINEATED ON FIRM MAP #44009C0169H, DATED OCTOBER 19, 2010.
2. THERE ARE NO 15% SLOPES ON THE SUBJECT PROPERTY.
3. SUBJECT PROPERTY IS LOCATED IN THE SOUTH SHORE SALT PONDS CRITICAL RESOURCE AREA.
4. THERE ARE NO FRESH OR SALT WATER COURSES, WETLANDS OR BUFFER AREAS LOCATED ON THE SUBJECT PROPERTY.
5. SUBJECT PROPERTY IS LOCATED A WELLHEAD PROTECTION AREA. SUBJECT PROPERTY IS NOT LOCATED IN GW PROTECTION OVERLAY DISTRICT SUBJECT PROPERTY IS LOCATED IN THE HISTORIC VILLAGE OVERLAY DISTRICT
6. SUBJECT PROPERTY IS LOCATED IN A RI GREENWAYS CORRIDOR.
7. SUBJECT PROPERTY IS NOT LOCATED IN A NATURAL HERITAGE AREA.
8. SOIL DESIGNATION – REFERENCE: 1981 SOIL SURVEY OF RHODE ISLAND
   MmA – MERRIMAC SANDY LOAM
   BUILDING SITE DEVELOPMENT – SLIGHT
   FLOODING – NONE, >6' WATER TABLE
9. THERE ARE NO AREAS OF AGRICULTURAL USE ON THE SUBJECT PROPERTY.

SCALE: 1" = 40'
0 20' 40' 80' 120'
GRAPHIC SCALE

EXISTING CONDITIONS PLAN
"CHURCHWOODS"
PRELIMINARY PLAN
ASSESSOR'S MAP 13 LOT 43
PREPARED FOR
WASHINGTON COUNTY COMMUNITY DEVELOPMENT
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND

NO.	REVISION	DATE
1.	PER ARCHITECT	05/27/16

RICHARD L. COUCHON
STATE OF RHODE ISLAND
No. 1820
PROFESSIONAL LAND SURVEYOR

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 • 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-P1.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: MAY 20, 2016
SHEET: 1	C1
1 OF 5 SHEETS	1 OF 15 SHEETS

CIRCLED NOTES APPLY

EROSION CONTROL & SOIL STABILIZATION PROGRAM

1. DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.

2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION PERIOD.

3. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH R.I. STANDARD SPECIFICATION M. 20.

4. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.

5. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:

PERMANENT SEEDING MIXTURES:

A. –LAWNS:
FOR SUN OR SHADED; MODERATE MANAGEMENT SUGGESTED (IMPROVED U.R.I. NUMBER 2 LAWN SEED MIXTURE).

	LBS/ACRE	LBS/1000SF
RED FESCUE	40	.90
KENTUCKY BLUEGRASS *	40	.90
PERENNIAL RYEGRASS **	20	.45

* 50% (20 LBS/ACRE) MUST BE NAMED OR IMPROVED VARIETY, SUCH AS AMERICAN KENTUCKY BLUEGRASS.
** MUST BE NAMED OR IMPROVED VARIETY, SUCH AS YORKTOWN II PERENNIAL RYEGRASS.

B. –SOD WATERWAYS, DRAINAGE DITCHES, DETENTION BASINS, ETC.

	LBS/ACRE	LBS/1000SF
CREEPING RED FESCUE	20	.45
TALL FESCUE OR		
REED CANARYGRASS *	20	.45

* USE REED CANARY GRASS WHERE MOWING IS NOT REQUIRED. SUCH AS AMERICAN KENTUCKY BLUEGRASS.
SOURCE: USDA, SOIL CONSERVATION SERVICE

C. –SAND DUNES, BLOWING SAND

	NO./ACRE	NO./1000SF
'CAPE' AMERICAN BEACHGRASS CULMS	58,500	1,345

D. –GENERAL PURPOSE LAWN

	LBS/ACRE	LBS/1000SF
RED FESCUE	75	1.75
KENTUCKY BLUEGRASS	15	.35
COLONIAL BENTGRASS	5	.11
PERENNIAL RYEGRASS	5	.11

SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432 KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'PARK' SEED MIXTURE).

E. –GENERAL PURPOSE : MINIMUM MAINTENANCE; UNMOWED OR INFREQUENTLY MOWED

	LBS/ACRE	LBS/1000SF
RED FESCUE	75	1.75
COLONIAL BENTGRASS, 'EXETER'	5	.11
PERENNIAL RYEGRASS	5	.11
BIRDSFOOT TREFOIL 'EMPIRE'	15	.35

*USE INOCULATED SEED; MAY INCLUDE 20% HARD SEED.
SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432 KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'SLOPE' SEED MIXTURE).

F. –BUFFER ZONES ADJACENT TO WETLANDS OR SURFACE WATERS AND WETLAND AREAS

	LBS/ACRE	LBS/1000SF
REED CANARY GRASS	20	.45
LADINO CLOVER*		

*USE INOCULATED SEED.

SEEDING DATES:
EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED; MID–SUMMER SEEDING IS NOT RECOMMENDED. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. THE RECOMMENDED SEEDING DATES ARE: APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH SEPTEMBER 30. THE FINAL SEEDING DATES MAY BE EXTENDED 15 DAYS IN NEWPORT COUNTY.

6. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.

7. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000–4000 LBS/AC.

8. ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED:

SPECIES	LBS/ACRE	LBS/1,000 SQ. FT.	SEEDING DATES
ANNUAL RYEGRASS	60	1.5	MARCH 1 – JUNE 15 & AUGUST 1 – OCTOBER 1
PERENNIAL RYEGRASS	60	1.5	MARCH 1 – JUNE 15 & AUGUST 1 – OCTOBER 1
SUDAN GRASS	40	1.0	MAY 15 – AUGUST 15
MILLET	40	1.0	MAY 15 – AUGUST 15
WINTER RYE	100	2.5	AUGUST 15 – OCTOBER 1

9. THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.

10. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THRU OCTOBER 15TH.

11. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS SECTION 202.

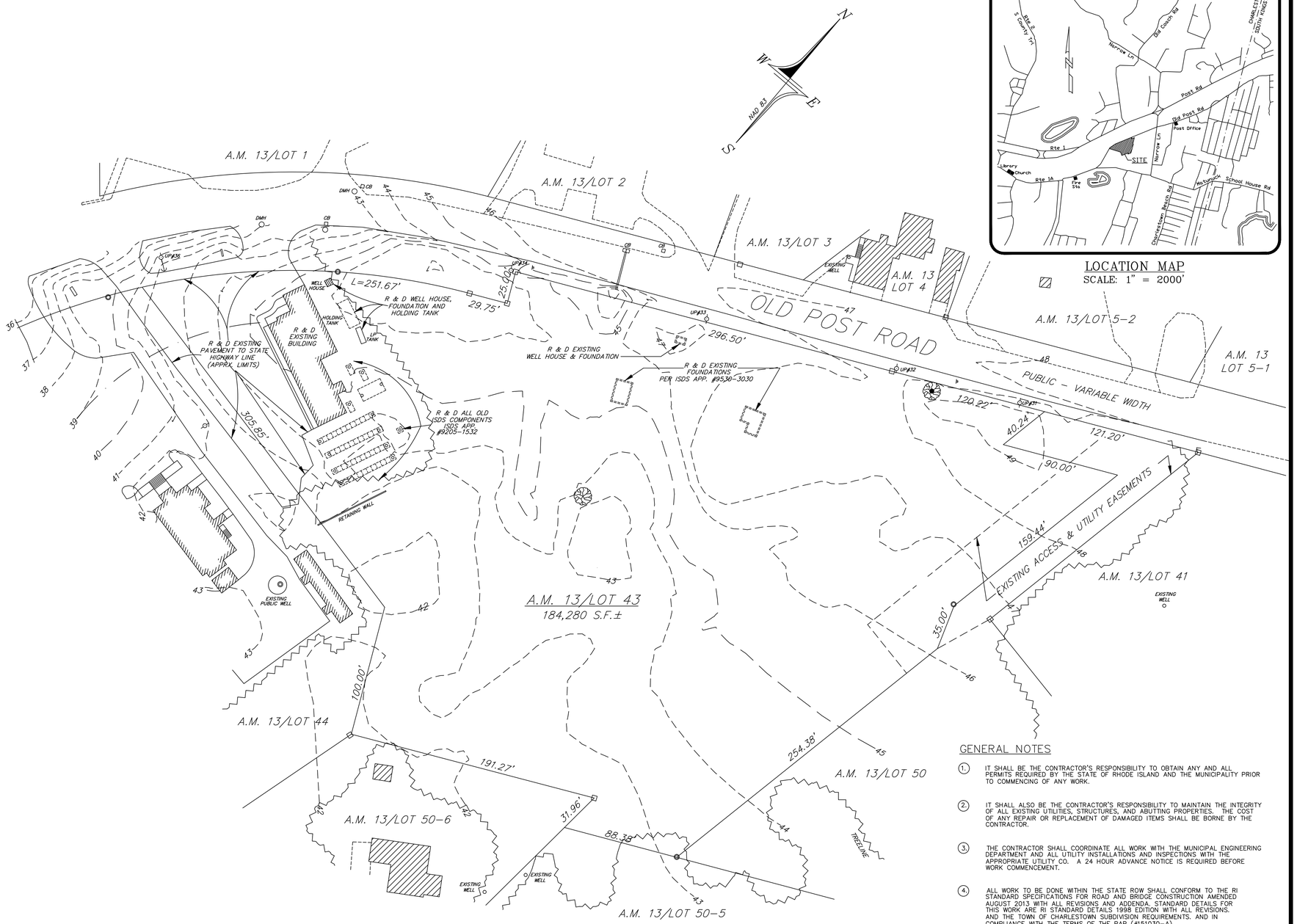
12. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.

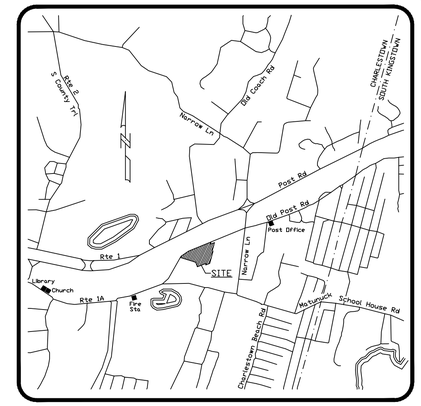
13. STOCKPILES OF TOPSOILS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED.

14. ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

15. REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.

16. ANY DETENTION/RETENTION FACILITIES AND THE DRAINAGE SYSTEM SHALL RECEIVE ONE FINAL CLEANING PRIOR TO ACCEPTANCE OF THE OVERALL PROJECT BY THE OWNER. SEDIMENTS SHALL BE DISPOSED OF IN A PROPER MANNER.





LOCATION MAP
SCALE: 1" = 2000'

DEMOLITION NOTES:

1. COORDINATE DEMOLITION OF EXISTING STRUCTURES WITH ENGINEER AND OWNER.
2. COORDINATE DEMOLITION OF ALL EXISTING OVERHEAD, WATER, SEWER AND GAS SERVICES WITH UTILITY COMPANY.
3. ALL EXISTING TREES SHALL BE MAINTAINED & PROTECTED UNLESS OTHERWISE NOTED. COORDINATE TREE PROTECTION AND PRUNING REQUIREMENTS WITH LANDSCAPE ARCHITECT AND OWNER.
4. ANY DEMOLITION ACTIVITIES INVOLVING ENCROACHMENT FROM OR ONTO NEIGHBORING PROPERTIES SHALL BE COORDINATED WITH THE OWNER AND ABUTTER(S) PRIOR TO COMMENCING DEMOLITION (AM 13 LOT 44).
5. CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL DURING DEMOLITION AND CONSTRUCTION.

SCALE: 1" = 40'
0 20' 40' 80' 120'
GRAPHIC SCALE

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCING OF ANY WORK.

2. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.

3. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MUNICIPAL ENGINEERING DEPARTMENT AND ALL UTILITY INSTALLATIONS AND INSPECTIONS WITH THE APPROPRIATE UTILITY CO. A 24 HOUR ADVANCE NOTICE IS REQUIRED BEFORE WORK COMMENCEMENT.

4. ALL WORK TO BE DONE WITHIN THE STATE ROW SHALL CONFORM TO THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AMENDED AUGUST 2013 WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RI STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS. AND THE TOWN OF CHARLESTOWN SUBDIVISION REQUIREMENTS. AND IN COMPLIANCE WITH THE TERMS OF THE PAP (#15103O–A).

5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR QUANTITY TAKE OFF IN COMPUTING AND ESTIMATES.

6. EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEED. SEE EROSION CONTROL PROGRAM DETAILS.

7. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE PLANS. THAT IS ANY CONSTRUCTION TO BRING UTILITIES TO THE SITE, ANY REPAIRS, ANY TRENCHING REQUIRED, HYDRANTS, FIRE ALARMS, ANY AND ALL CONSTRUCTION FOR ACCEPTANCE OF ROADS AND EASEMENTS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY, SEDIMENTATION AND SOIL EROSION CONTROL MEASURES.

9. THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES.

10. IN ALL EXCAVATION AND PLACEMENT OF FILL THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.

DEMOLITION PLAN
"CHURCHWOODS"
PRELIMINARY PLAN
ASSESSOR'S MAP 13 LOT 43
PREPARED FOR
WASHINGTON COUNTY
COMMUNITY DEVELOPMENT
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND

NO.	REVISION	DATE
1.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364–1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859–DEMO.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: MAY 18, 2016

SHEET: C2

A.M. 12/LOT 137
N/F WASHINGTON TRUST CO.

A.M. 13/LOT 1
N/F ANGELO J. & JANICE E. FALCONE, TR.

A.M. 13/LOT 2
N/F SOUTH SHORE PHYSICIANS INC.

A.M. 13/LOT 3
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A.M. 13/LOT 44
DIOCESE OF RHODE ISLAND

A.M. 13/LOT 43
184,280 S.F.±

OLD POST ROAD

BROWNING DRIVE

PUBLIC - VARIABLE WIDTH

EXISTING ACCESS & UTILITY EASEMENTS

LIMIT OF DISTURBANCE

EXISTING BUILDING TO BE RAZED

EXISTING WELL HOUSE TO BE REMOVED

PROPOSED 12" CLASS IV W/FLARED ENDS IN EXISTING SWALE

PROPOSED WELL HOUSE

PROPOSED FENCE

SETBACK LINE (TYP.)

25' BUFFER LINE

TVD ZONE
R-40 ZONE

BLDG I 2-1 BDRM UNITS SLAB=45.5'

BLDG II 4-1 BDRM UNITS SLAB=45.0'

BLDG III 4-1 BDRM UNITS SLAB=44.5'

BLDG IV 4-1 BDRM UNITS SLAB=44.5'

BLDG V 4-1 BDRM UNITS SLAB=45.5'

BLDG VI 4-1 BDRM UNITS SLAB=46.5'

BLDG VII 2-1 BDRM UNITS SLAB=47.5'

BLDG VIII 30 PERSON COMMUNITY ROOM

L=251.67'

305.85'

296.50'

254.38'

191.27'

159.44'

121.20'

120.22'

90.00'

100.00'

88.35'

31.96'

29.75'

25.00'

35.00'

200' RADIUS

100' RADIUS

EXISTING PUBLIC WELL

EXISTING WELL

TREELINE

NAD 83

N

W

E

S

NOTE:

TOTAL SITE AREA = 184,280 S.F
TOTAL EXISTING IMPERMEABLE AREA = 13,082 S.F OR 7.1%
TOTAL PROPOSED IMPERMEABLE AREA = 45,792 S.F OR 24.8%

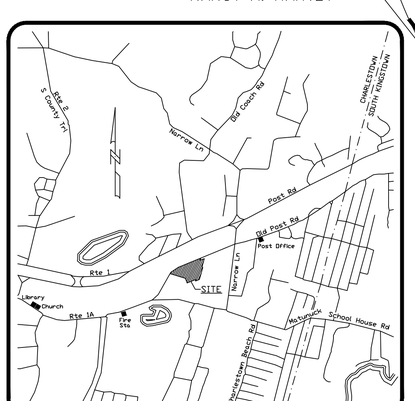
THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION & COORDINATION OF ALL SITE UTILITIES, SEE ALL CIVIL, LANDSCAPE, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS AND PROJECT MANUAL INCLUDING SPECIFICATIONS.

CERTIFICATION:

A PERIMETER SURVEY OF THE LAND BEING SUBDIVIDED HAS BEEN PERFORMED AND CONFORMS TO THE SURVEY REQUIREMENTS OF THESE REGULATIONS.

BY: _____
REGISTERED PROFESSIONAL LAND SURVEYOR DATE

SCALE: 1" = 40'
0 20' 40' 80' 120'
GRAPHIC SCALE



LOCATION MAP
SCALE: 1" = 2000'

PROPOSED DEVELOPMENT PLAN
"CHURCHWOODS"
PRELIMINARY PLAN
ASSESSOR'S MAP 13 LOT 43
PREPARED FOR
WASHINGTON COUNTY
COMMUNITY DEVELOPMENT
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND

NO.	REVISION	DATE
1.	PER ARCHITECT	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
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DWG. NO. 2859-P2R.	CHECKED: W.D.D.
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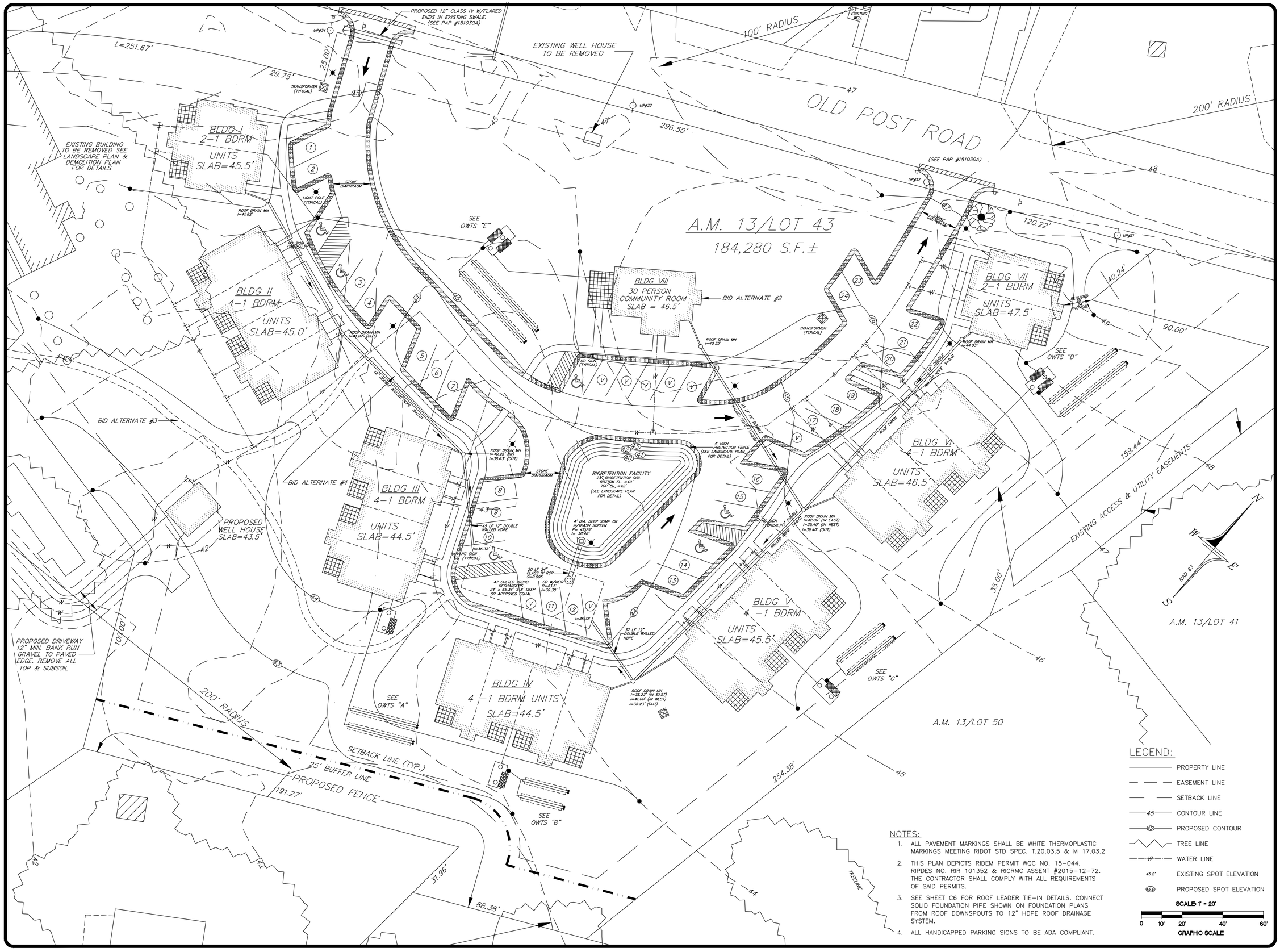
SCALE: 1"=40'	DATE: DEC. 18, 2015
SHEET: 2	C3
2 OF 5 SHEETS	3 OF 15 SHEETS



LEGEND:

- PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- 45 CONTOUR LINE
- 45 PROPOSED CONTOUR
- TREE LINE
- WATER LINE
- 45.2' EXISTING SPOT ELEVATION
- 46.9 PROPOSED SPOT ELEVATION

SCALE: 1" = 20'

0 10' 20' 40' 60'

GRAPHIC SCALE

NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE WHITE THERMOPLASTIC MARKINGS MEETING RIDOT STD SPEC. T.20.03.5 & M 17.03.2
2. THIS PLAN DEPICTS RIDEM PERMIT WQC NO. 15-044, RIPDES NO. RIR 101352 & RICRMC ASSENT #2015-12-72. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF SAID PERMITS.
3. SEE SHEET C6 FOR ROOF LEADER TIE-IN DETAILS. CONNECT SOLID FOUNDATION PIPE SHOWN ON FOUNDATION PLANS FROM ROOF DOWNSPOUTS TO 12" HDPE ROOF DRAINAGE SYSTEM.
4. ALL HANDICAPPED PARKING SIGNS TO BE ADA COMPLIANT.

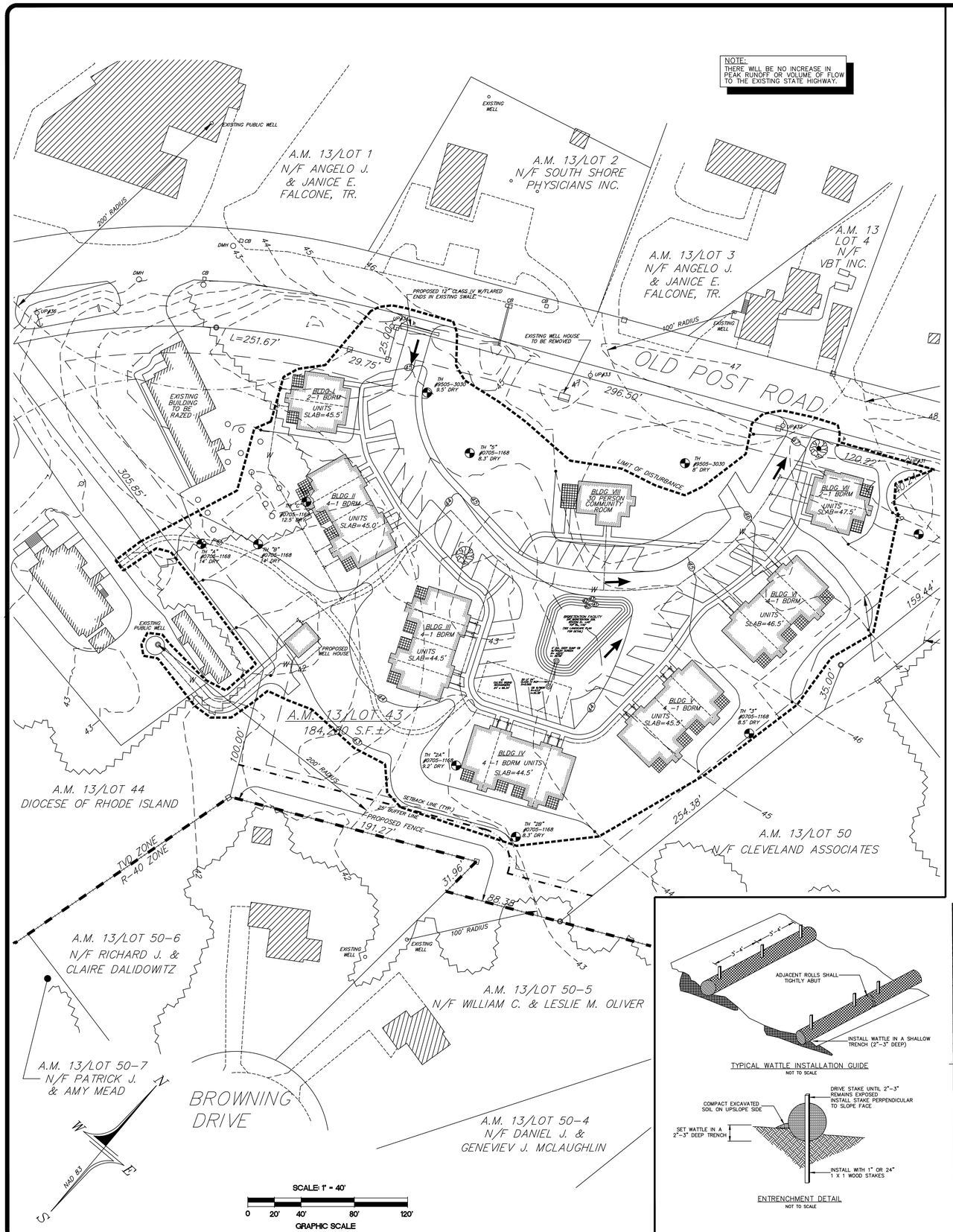
SITE IMPROVEMENT PLAN
"CHURCHWOODS"
ASSESSOR'S MAP 13 LOT 43
PREPARED FOR
WASHINGTON COUNTY
COMMUNITY DEVELOPMENT CORP.
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND

NO.	REVISION	DATE
1.	BLDGS/SHEDS	05/13/16
2.	PER ARCHITECT	05/20/16
3.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-DRN.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=20'	DATE: DEC. 18, 2015
SHEET: 3	C4
3 OF 5 SHEETS	4 OF 15 SHEETS



CIRCLED NOTES APPLY

EROSION CONTROL & SOIL STABILIZATION PROGRAM

1. DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.

2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION PERIOD.

3. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH R.I. STANDARD SPECIFICATION M. 20.

4. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.

5. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWNG:

PERMANENT SEEDING MIXTURES:

A. –LAWNS:
FOR SUN OR SHADED; MODERATE MANAGEMENT SUGGESTED (IMPROVED U.R.I. NUMBER 2 LAWN SEED MIXTURE).

	LBS/ACRE	LBS/1000SF
RED FESCUE	40	.90
KENTUCKY BLUEGRASS *	40	.90
PERENNIAL RYEGRASS **	20	.45

* 50% (20 LBS/ACRE) MUST BE NAMED OR IMPROVED VARIETY, SUCH AS AMERICAN KENTUCKY BLUEGRASS.
** MUST BE NAMED OR IMPROVED VARIETY, SUCH AS YORKTOWN II PERENNIAL RYEGRASS.

B. –SOD WATERWAYS, DRAINAGE DITCHES, DETENTION BASINS, ETC.

	LBS/ACRE	LBS/1000SF
CREEPING RED FESCUE	20	.45
TALL FESCUE OR REED CANARYGRASS *	20	.45

* USE REED CANARY GRASS WHERE MOWING IS NOT REQUIRED.
SUCH AS AMERICAN KENTUCKY BLUEGRASS.
SOURCE: USDA, SOIL CONSERVATION SERVICE

C. –SAND DUNES, BLOWING SAND

	NO./ACRE	NO./1000SF
'CAPE' AMERICAN BEACHGRASS CULMS	58,500	1,345

D. –GENERAL PURPOSE LAWN

	LBS/ACRE	LBS/1000SF
RED FESCUE	75	1.75
KENTUCKY BLUEGRASS	15	.35
COLONIAL BENTGRASS	5	.11
PERENNIAL RYEGRASS	5	.11

SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432 KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'PARK' SEED MIXTURE).

E. –GENERAL PURPOSE :
MINIMUM MAINTENANCE; UNMOWED OR INFREQUENTLY MOWED

	LBS/ACRE	LBS/1000SF
RED FESCUE	75	1.75
COLONIAL BENTGRASS, 'EXETER'	5	.11
PERENNIAL RYEGRASS	5	.11
BIRDSFOOT TREFOIL 'EMPIRE'	15	.35

*USE INOCULATED SEED; MAY INCLUDE 20% HARD SEED.
SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432 KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'SLOPE' SEED MIXTURE).

F. –BUFFER ZONES ADJACENT TO WETLANDS OR SURFACE WATERS AND WETLAND AREAS

	LBS/ACRE	LBS/1000SF
REED CANARY GRASS	20	.45
LADINO CLOVER*		

*USE INOCULATED SEED.

SEEDING DATES:
EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED; MID–SUMMER SEEDING IS NOT RECOMMENDED. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. THE RECOMMENDED SEEDING DATES ARE: APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH SEPTEMBER 30. THE FINAL SEEDING DATES MAY BE EXTENDED 15 DAYS IN NEWPORT COUNTY.

6. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.

7. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000–4000 LBS/AC.

8. TREE PROTECTION SHALL BE RIDOT STD 51.1.0

8. ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED:

SPECIES	LBS/ACRE	LBS/1,000 SQ. FT.	SEEDING DATES
ANNUAL RYEGRASS	60	1.5	MARCH 1 – JUNE 15 & AUGUST 1 – OCTOBER 1
PERENNIAL RYEGRASS	60	1.5	MARCH 1 – JUNE 15 & AUGUST 1 – OCTOBER 1
SUDAN GRASS	40	1.0	MAY 15 – AUGUST 15
MILLET	40	1.0	MAY 15 – AUGUST 15
WINTER RYE	100	2.5	AUGUST 15 – OCTOBER 1

9. THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.

10. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THRU OCTOBER 15TH.

11. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS SECTION 202.

12. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.

13. STOCKPILES OF TOPSOILS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED.

14. ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

15. REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.

16. ANY DETENTION/RETENTION FACILITIES AND THE DRAINAGE SYSTEM SHALL RECEIVE ONE FINAL CLEANING PRIOR TO ACCEPTANCE OF THE OVERALL PROJECT BY THE OWNER. SEDIMENTS SHALL BE DISPOSED OF IN A PROPER MANNER.

OPERATION & MAINTENANCE PLAN

1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE WETLANDS.

2. ALL DISTURBED AREAS SUBJECT TO EROSIVE TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SUITABLE SLOPE PROTECTION.

3. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.

4. CARE SHALL BE TAKEN SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING EITHER EXISTING OR PROPOSED DRAINAGE OR SEWER STRUCTURES.

5. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.

6. CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECT TO STORM WATER FLOW.

7. ADDITIONAL HAYBALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.

8. ALL SEDIMENTS SHALL BE REMOVED FROM THE DETENTION BASINS OR STRUCTURES WHEN DIRECTED BY THE ENGINEER OR THE LOCAL CONSERVATION COMMISSION.

9. REFERENCE THE "STATE OF RHODE ISLAND STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE–FAMILY RESIDENTIAL LOT DEVELOPMENT."

10. THE CONTACT PERSON IN RESPONSIBLE CHARGE IS GERRY BETRAND, TEL. 401–667–7185.

ORDER OF PROCEDURE

1. IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY ROUGH GRADING, TEMPORARY HAYBALES OR SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF CONSTRUCTION AS PER THE PLANS (I.E. ALONG NEW ROADWAYS, STREAMBANKS, CRITICAL AREAS, ETC.)

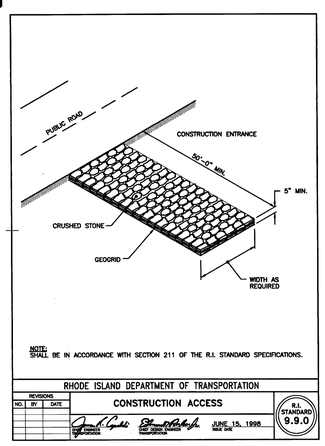
2. ALL EROSION AND SEDIMENTATION STRUCTURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.

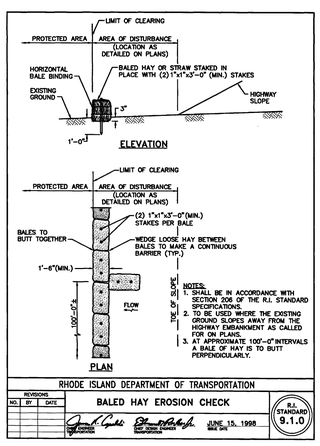
3. IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.

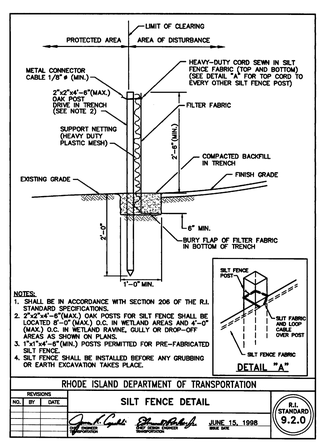
4. TEMPORARY HAYBALES AND SANDBAGS ALONG AND AT THE END OF ROADWAYS MAY BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.

5. HAYBALES LOCATED AT DRAINAGE OUTLETS MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

6. ONLY THOSE AREAS SHOWN ON THE ATTACHED SITE PLAN, THE LIMITS OF WHICH ARE DESIGNATED BY THE EXTENT OF THE PROPOSED CONTOURS, ARE SUBJECT TO THE EROSION CONTROL MEASURES SPECIFIED ABOVE.







EROSION CONTROL SHEET
FOR
"CHURCHWOODS"
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND
PREPARED FOR
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.

NO.	REVISION	DATE
1.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
STATE OF RHODE ISLAND
No. 4217
REGISTERED PROFESSIONAL ENGINEER

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JOB NO. 2859 DWG. NO. 2859–ECP.	DRAWN BY: R.L.C. CHECKED: W.D.D. APPROVED: W.D.D.
SCALE: 1"=40'	DATE: MAY 20, 2016
SHEET: 4 4 OF 5 SHEETS	C5 5 OF 15 SHEETS

CIRCLED NOTES APPLY

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCING OF ANY WORK.

2. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.

3. BEFORE STARTING ANY CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ANY HYDRANTS, BLOWOFF ASSEMBLIES, WATER MAINS, FITTINGS AND VALVES WITH THE LOCAL WATER DEPARTMENT AS TO TYPE AND MANUFACTURER.

4. ALL WATER MAINS SHALL BE CLASS 52 DUCTILE IRON, DOUBLE CEMENT MORTAR LINED, PUSH ON STYLE JOINTS.

5. FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT CLASS 350 CEMENT MORTAR LINED COMPACT STYLE AMERICAN MANUFACTURED ONLY.

6. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MUNICIPAL ENGINEERING DEPARTMENT AND ALL UTILITY INSTALLATIONS AND INSPECTIONS WITH THE APPROPRIATE UTILITY CO. A 24 HOUR ADVANCE NOTICE IS REQUIRED BEFORE WORK COMMENCEMENT.

7. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE "R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (REVISION OF 2004)" WITH ALL CORRECTIONS AND ADDENDA AND THE 1998 R.I. STANDARD DETAILS WITH ALL CORRECTIONS AND ADDENDA AND THE TOWN OF CHARLESTOWN SUBDIVISION REQUIREMENTS.

8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR QUANTITY TAKE OFF IN COMPUTING AND ESTIMATES.

9. EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEED. SEE EROSION CONTROL PROGRAM DETAILS.

10. UNLESS OTHERWISE SPECIFIED, ALL STORM DRAINS SHALL BE REINFORCED CONCRETE CLASS IV PIPE.

11. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE PLANS. THAT IS ANY CONSTRUCTION TO BRING UTILITIES TO THE SITE, ANY REPAIRS, ANY TRENCHING REQUIRED, HYDRANTS, FIRE ALARMS, ANY AND ALL CONSTRUCTION FOR ACCEPTANCE OF ROADS AND EASEMENTS.

12. ALL SEWER MAINS SHALL BE P.V.C. PIPE, SIZES AND SLOPES TO BE SHOWN ON PLANS AND PROFILES.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY, SEDIMENTATION AND SOIL EROSION CONTROL MEASURES.

14. THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES.

15. IN ALL EXCAVATION AND PLACEMENT OF FILL THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.

16. FLARED END SECTIONS ARE TO BE R.I. STANDARD 2.3.0 WITH A R.I. STANDARD 2.12 CLASS C RIP RAP END SECTION (UNLESS OTHERWISE NOTED).

17. CATCH BASINS ARE TO BE R.I. STANDARD 4.4.0 TYPE "R" GRATE.

18. DRAIN MANHOLES ARE TO BE R.I. STANDARD 4.2.0 WITH A R.I. STANDARD 6.2.1 HEAVY DUTY FRAME AND COVER.

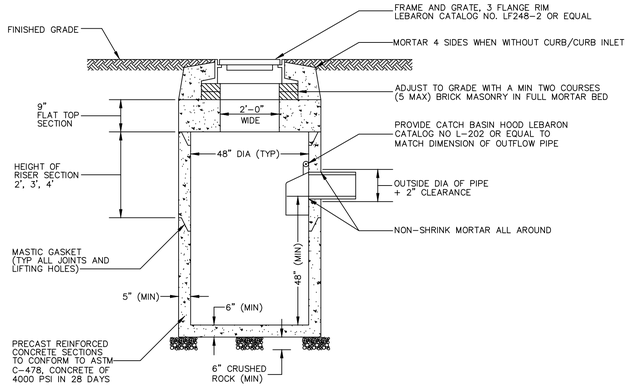
19. BRICK AND BLOCK MANHOLES AND CATCH BASINS MAY BE USED IN LIEU OF THE ABOVE MENTIONED STRUCTURES WITH PRIOR APPROVAL OF THE ENGINEER.

20. PIPE BEDDING SHALL CONFORM TO R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 701. CLASS B BEDDING WILL BE USED FOR ALL STORM DRAINS AND CLASS C BEDDING WILL BE USED FOR ALL SANITARY SEWERS UNLESS OTHERWISE SPECIFIED ON THE PLANS.

21. ALL WATER MAINS ARE TO BE INSTALLED WITH A MINIMUM RADIUS OF 300 FEET AT ANY LOCATION WHERE THIS IS NOT POSSIBLE, PROPER FITTINGS AND THRUST BLOCKS SHALL BE USED.

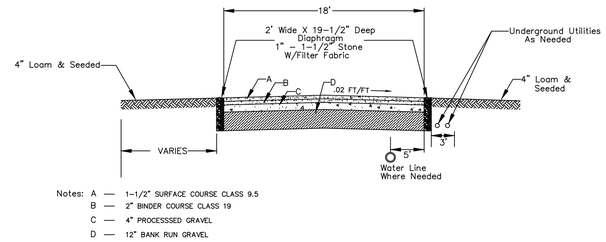
22. THE PROPOSED WATER DISTRIBUTION SYSTEM SHALL CONFORM TO THE LOCAL WATER AUTHORITY'S REQUIREMENTS FOR SERVICE AND MAIN INSTALLATION.

23. HEAVY MACHINERY SHALL NOT BE ALLOWED TO PASS OVER THE BIO-RETENTION FACILITY OR CULTEC RECHARGER BED AREAS.



DEEP SUMP CATCH BASIN (MADEP, 2008)

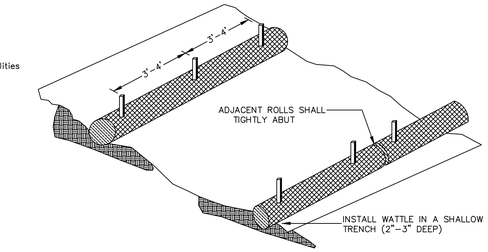
NOT TO SCALE



TYPICAL DRIVEWAY CROSS SECTION

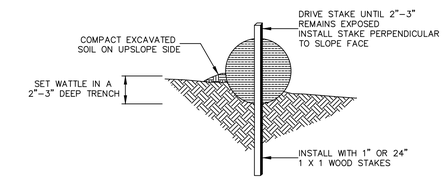
NOT TO SCALE

USE SAME BASE PAVEMENT & CROSS SECTION @ PARKING SPACES



TYPICAL WATTLE INSTALLATION GUIDE

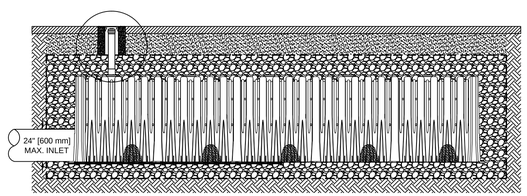
NOT TO SCALE

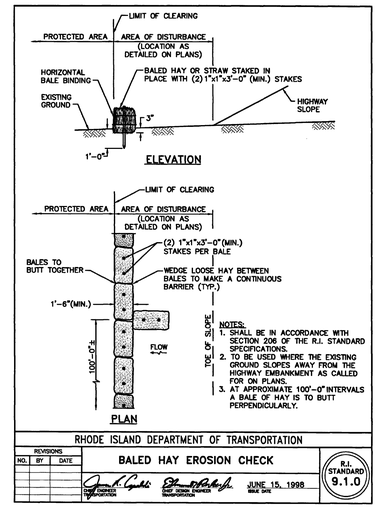


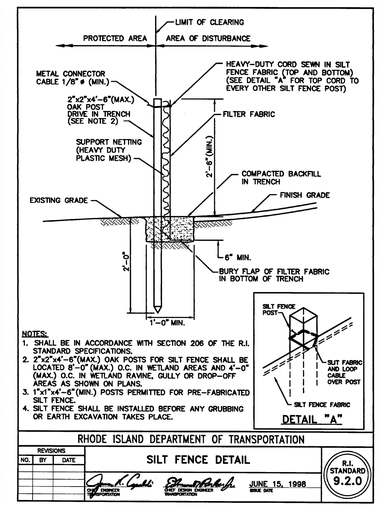
ENTRENCHMENT DETAIL

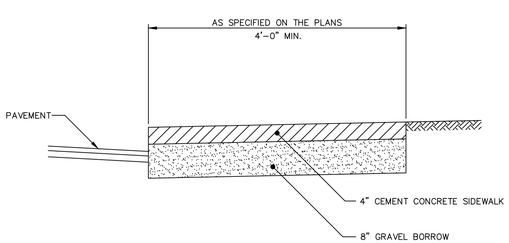
NOT TO SCALE

COMBINED PROJECT MATERIALS LIST		
RECHARGER 902HD CHAMBER	47	PIECES
RECHARGER 902HD END CAP	10	PIECES
HVLV FC-48 FEED CONNECTORS	1	PIECES
CULTEC NO. 410 NON-WOVEN GEOTEXTILE 12.5' X 360'	2	ROLLS
CULTEC NO. 66 WOVEN GEOTEXTILE 7.5' X 300'	1	ROLLS
CULTEC NO. 66 WOVEN GEOTEXTILE 7.5' X 300'	315	TONS









NOTES
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD 7.6.0.

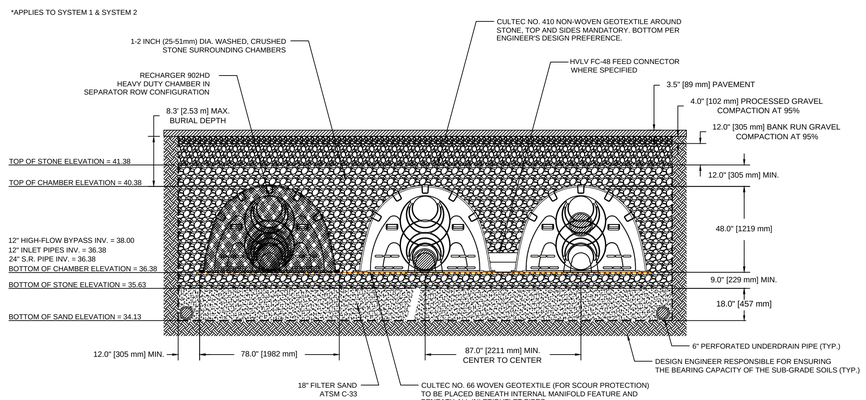
CEMENT CONCRETE SIDEWALK

NOT TO SCALE

RIDOT STD DETAIL 43.1.0 W/O CURBING W/43.3.0 @ ADA HANDICAP SPACES
BID ALTERNATE #4 = RIDOT STD 43.2.0

NOTE: PROPOSED ELEVATIONS ONLY. DESIGN ENGINEER MUST APPROVE ALL SYSTEM ELEVATIONS

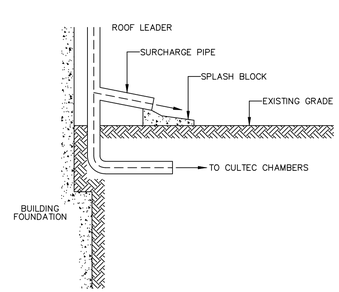
*APPLIES TO SYSTEM 1 & SYSTEM 2



CULTEC RECHARGER 902HD

NOT TO SCALE

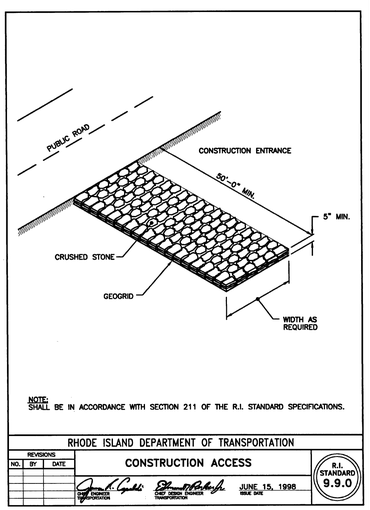
FOR DETAILS SEE CULTEC DESIGN PLANS DATED 12/14/15, SHEETS 1 THRU 6
(47 UNITS - TOTAL VOLUME PROVIDED = 5,079 CF)



ROOF DRAIN DETAIL

NOT TO SCALE

NOTE: CONNECT ALL DOWNSPOUTS TO SOLID FOUNDATION DRAINS, THEN TO ROOF DRAIN SYSTEM (12" DOUBLE WALL HDPE)



DETAIL SHEET
"CHURCHWOODS"
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND
PREPARED FOR
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.

NO.	REVISION	DATE
1.	PER ARCHITECT	05/27/16

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REGISTERED PROFESSIONAL ENGINEER

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JOB NO. 2859 DWG. NO. 2859-P4.	DRAWN BY: R.L.C. CHECKED: W.D.D. APPROVED: W.D.D.
SCALE: AS NOTED	DATE: MAY 20, 2016
SHEET: 5 5 OF 5 SHEETS	C6 6 OF 15 SHEETS

A.M. 12/LOT 137
N/F WASHINGTON
TRUST CO.

A.M. 13/LOT 1
N/F ANGELO J.
& JANICE E.
FALCONE, TR.

A.M. 13/LOT 2
N/F SOUTH SHORE
PHYSICIANS INC.

A.M. 13/LOT 3
N/F ANGELO J.
& JANICE E.
FALCONE, TR.

A.M. 13
LOT 4
N/F
VBT INC.

A.M. 13/LOT 5-2
N/F CHATIM INC.

A.M. 13/LOT 5-1
N/F CHATIM INC.

A.M. 13/LOT 41
N/F JOYCE M. MACINNES

A.M. 13/LOT 40
N/F JOHN E. &
CHRISTINE M. WARD

A.M. 13/LOT 40-3
N/F WAYNE J. GAUMOND

A.M. 13/LOT 40-2
N/F EUGENE A. &
SUSAN E. PICA

A.M. 13/LOT 40-1
N/F MERVIN H. BROWNING

A.M. 13/LOT 50
N/F CLEVELAND ASSOCIATES

A.M. 13/LOT 50-5
N/F WILLIAM C. & LESLIE M. OLIVER

A.M. 13/LOT 50-4
N/F DANIEL J. &
GENEVIEV J. MCLAUGHLIN

A.M. 13/LOT 50-6
N/F RICHARD J. &
CLAIRE DALIDOWITZ

A.M. 13/LOT 50-7
N/F PATRICK J.
& AMY MEAD

A.M. 13/LOT 49
N/F JAMES B. &
NANCY A. HARVEY

A.M. 13/LOT 44
DIOCESE OF RHODE ISLAND

A.M. 13/LOT 43
184,280 S.F.±

OLD POST ROAD

BROWNING
DRIVE

PUBLIC - VARIABLE WIDTH

EXISTING ACCESS & UTILITY EASEMENTS

OWTS "A"
SHEET 1 OF 5

OWTS "B"
SHEET 2 OF 5

OWTS "C"
SHEET 3 OF 5

OWTS "D"
SHEET 4 OF 5

OWTS "E"
SHEET 5 OF 5

BLDG I
2-1 BDRM
UNITS
SLAB=45.5'

BLDG II
4-1 BDRM
UNITS
SLAB=45.0'

BLDG III
4-1 BDRM
UNITS
SLAB=44.5'

BLDG IV
4-1 BDRM UNITS
SLAB=44.5'

BLDG V
4-1 BDRM
UNITS
SLAB=45.5'

BLDG VI
4-1 BDRM
UNITS
SLAB=46.5'

BLDG VII
2-1 BDRM
UNITS
SLAB=47.5'

BLDG VIII
30 PERSON
COMMUNITY ROOM
SLAB = 46.5'

BIO ALTERNATE

BIORETENTION
FACILITY

PROPOSED
WELL HOUSE

EXISTING
BUILDING
TO BE
RAZED

EXISTING WELL HOUSE
TO BE REMOVED

EXISTING
PUBLIC WELL

EXISTING
WELL

TREELINE

200' RADIUS

100' RADIUS

L=251.67'

305.85'

296.50'

29.75'

25.00'

120.22'

40.24'

121.20'

90.00'

159.44'

35.00'

254.38'

191.27'

100.00'

31.96'

88.38'

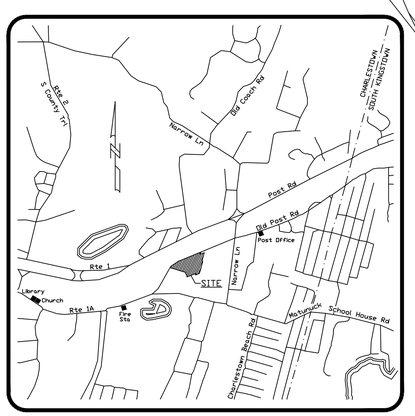
NOTE:

ALL OWTS PLAND PERMITTED UNDER OWTS PERMIT #0705-1168

SCALE: 1" = 40'

0 20' 40' 80' 120'

GRAPHIC SCALE



LOCATION MAP
SCALE: 1" = 2000'

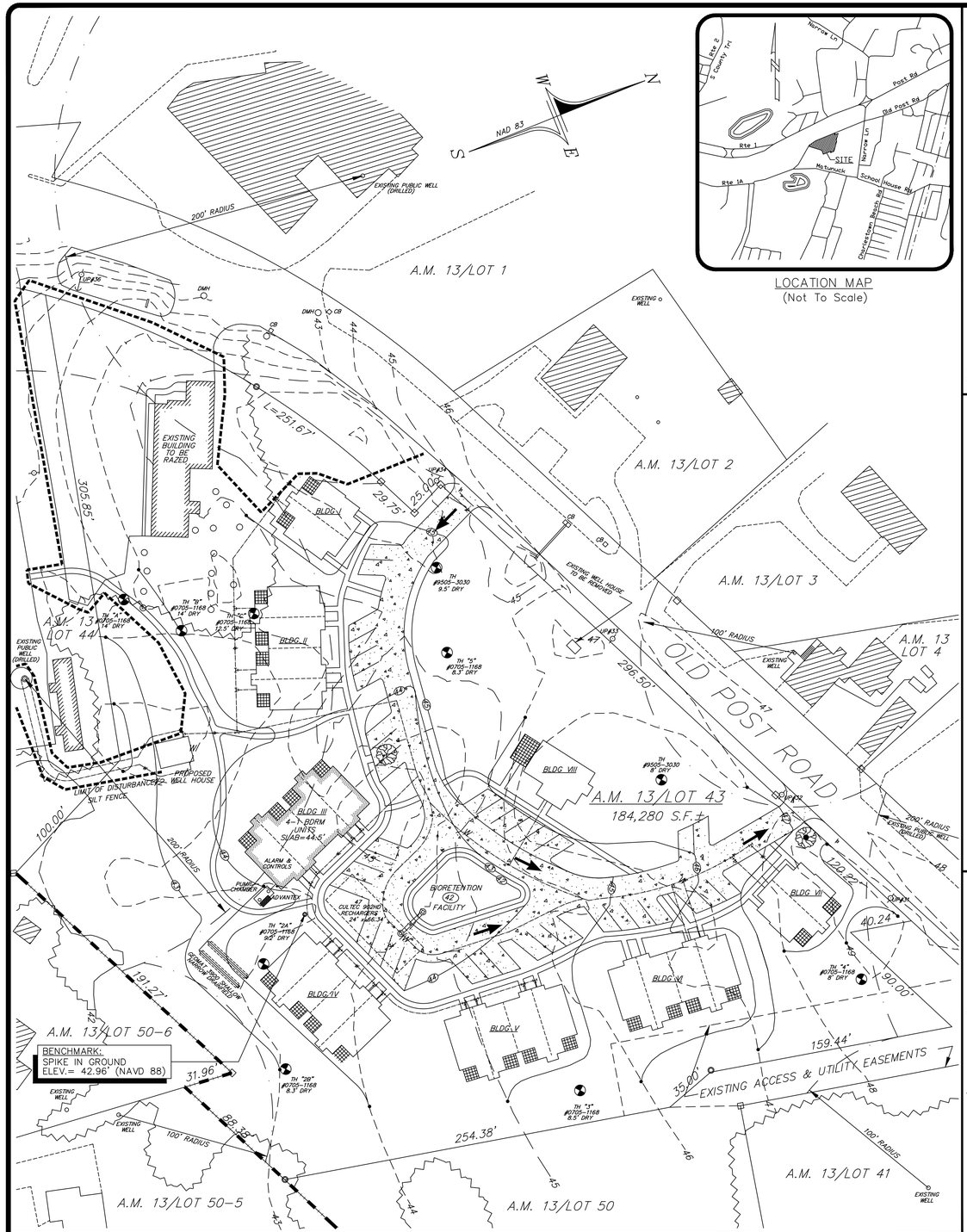
ONSITE WASTEWATER TREATMENT SYSTEM
KEY PLAN
"CHURCHWOODS"
ASSESSOR'S MAP 13 LOT 43
PREPARED FOR
WASHINGTON COUNTY
COMMUNITY DEVELOPMENT CORP.
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND

NO.	REVISION	DATE
1.	FINAL GRADING	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
No. 4217
REGISTERED
PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-OWK.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: OCT. 27, 2015
SHEET:	C7
	7 OF 15 SHEETS



LOCATION MAP
(Not To Scale)

GRAPHIC SCALE
0 20' 40' 80' 120'

ZONING CLASSIFICATION = TVD
SETBACKS: FRONT–20' SIDE–20' REAR–30'

LEGEND:

40	PROP. CONTOUR
40.5	PROP. FIN. GRADE
40	EXIST. CONTOUR
40x8	EXIST. SPOT GRADE
	VERIFIED TEST HOLE
	PERCOLATION TEST
	PROPERTY LINE
W	WATER SERVICE
	STORM DRAIN

PERCOLATION TEST DATA

PERC. NO.	DATE	DEPTH	ELEV.	RATE
N/A				

DESIGN APPLICATION RATE: 2.3 GAL/SF/DAY

DESIGN SOIL CATEGORY: 6

SOIL TEST DATA

DEEP TEST PIT NO. 2A 9/8/15	DEEP TEST PIT NO.
SURFACE ELEVATION = 43.1'	SURFACE ELEVATION =
DEPTH/SOIL SOIL DESCRIPTION	DEPTH/SOIL SOIL DESCRIPTION
SEE ATTACHED SOIL EVALUATION	
GROUND WATER DESIGN DEPTH = 9.2'	GROUND WATER DESIGN DEPTH =
ELEVATION = 33.9' VERIFIED WT=0705-1168	ELEVATION = VERIFIED WT=

PLAN VIEW OF SYSTEM

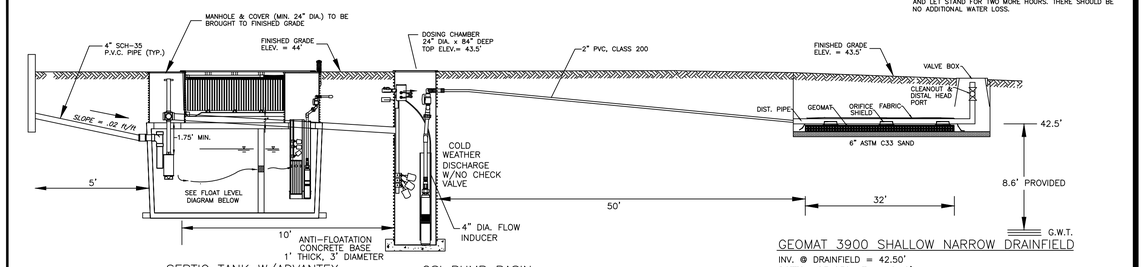
SCALE: 1" = 40'

PROFILE OF SYSTEM

(NOT TO SCALE)

TOP OF SLAB = 44.5'
INV. OF PIPE AT FND. = 38.35'

NOTE: ALL TANKS INCLUDING RISERS SHALL BE WATER TIGHT AND SHALL BE TESTED ON SITE AS FOLLOWS: FIRST, SEAL THE TANK INLET AND OUTLET. NEXT, FILL THE TANK WITH TAP WATER TO 2 TO 4 INCHES ABOVE THE JOINT BETWEEN THE RISER AND TANK AND LET STAND FOR 24 HOURS. IF THERE IS A WATER LOSS, REFILL MARK THE WATER LEVEL AND LET STAND FOR TWO MORE HOURS. THERE SHOULD BE NO ADDITIONAL WATER LOSS.



SEPTIC TANK W/ADVANTEX TREATMENT SYSTEM

CAPACITY = 2,000 GALLONS
INV. @ SEPTIC TANK INLET = 38.25'
INV. ABOVE RSV CAGE = 40.50'
ROTONDO ST 2000
OR APPROVED EQUAL

OSI PUMP BASIN

INV. IN /FORCE MAIN OUT= 40.20'
TIMER CONTROLLED
HIGH ALARM= 40.00'
PUMP ON= 39.43'
PUMP OFF= 38.50'
LOW WATER ALARM= 38.33'
BOTTOM OF CHAMBER= 36.50'

USE MODEL PF5005-2 STAGE
PACKAGE E, OR APPRVD. EQUAL

GEOMAT 3900 SHALLOW NARROW DRAINFIELD

INV. @ DRAINFIELD = 42.50'
BOTTOM OF GEOMAT = 42.42'
BOTTOM OF SAND ELEVATION = 41.92'
NOTE: FINISHED GRADE OVER LEACHING AREA, SEE PLAN

NOTE:

THE ADVANTEX SYSTEM TANK AND THE PUMP BASIN/SAND FILTER PRODUCTS ARE AVAILABLE FROM GREEN WASTEWATER SOLUTIONS @ 401-737-7600 AND/OR ATLANTIC SOLUTIONS @ 401-293-0176.

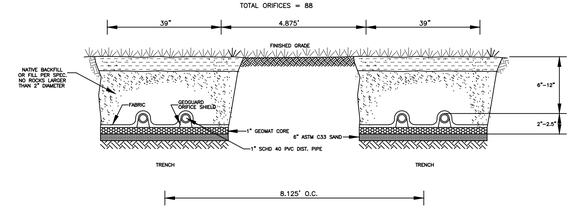
DESIGN DATA

PROP. NUMBER OF BEDROOMS = 4 x 115 GAL/BDRM/DAY = 460 GPD

(460 GAL/DAY ÷ 2.3 GAL./S.F./DAY = 200 S.F. REQUIRED
200 S.F. ÷ 3.25 S.F/L.F. = 61.54 L.F. REQUIRED
2 TRENCHES @ 32 LF/TRENCH = 64 L.F./208 S.F. PROVIDED (3.25 SF/LF)

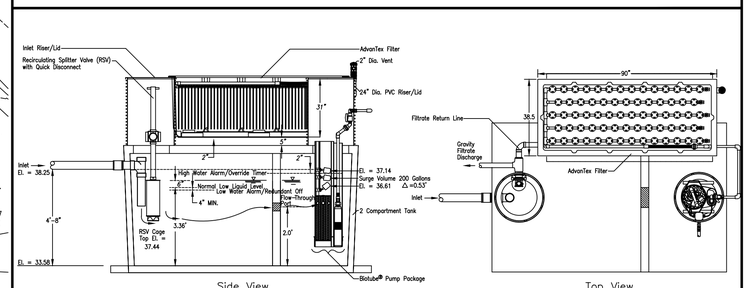
GEOMAT 3900 SHALLOW NARROW DRAINFIELD

CROSS SECTION
(NOT TO SCALE)
NUMBER OF TRENCH LINES REQUIRED = 2 @ 32 LF = 64 LF TOTAL
TOTAL ORIFICES = 88



DOSING NOTE:

THE DOSING WILL BE CONTROLLED EXCLUSIVELY BY THE PROGRAMMABLE TIMER AS LONG AS THE WATER LEVEL IS BETWEEN THE TIMER OVERRIDE FLOATS. IF THE SEPTIC TANK RECEIVES A MUCH LARGER THAN NORMAL QUANTITY OF WASTEWATER IN A SHORT TIME, A TIMER-OVERRIDE FLOAT ACTIVATES THE PUMP AND ALSO SOUNDS AN ALARM TO ALERT THE USER OF THE UNUSUAL VOLUME. PUSHING THE ILLUMINATED BUTTON ON THE FRONT OF THE PANEL SILENCES THE ALARM, WHICH RESETS AUTOMATICALLY WHEN THE LIQUID LEVEL IN THE TANK RETURNS TO A NORMAL LEVEL. AN ALARM THAT OCCURS WHEN OCCUPANTS ARE NOT USING MORE WATER THAN USUAL IS AN INDICATION THAT MAINTENANCE MAY BE REQUIRED FOR A FAULTY TOILET FLUSH VALVE, A LEAKING SEPTIC TANK, OR A PROBLEM WITH THE PUMPING OR ELECTRICAL SYSTEM. THE PUMP SYSTEM SHALL DOSE 22 GALLONS PER DOSE PER ZONE TO THE SHALLOW NARROW DRAINFIELD (21 TIMES PER DAY/1 ZONE).



Advantex Treatment System

AX 20 Series Mode 3b

DETERMINING RSV AND FLOAT LEVELS:

RSV LEVEL: FOR STINGER PIPE LENGTHS UP TO 24" LONG, THE LOW LIQUID LEVEL WILL BE APPROXIMATELY 5"-6" BELOW THE TOP OF THE RSV CAGE. (THE LOW LIQUID LEVEL IS THE LEVEL AT WHICH 100% OF THE FILTRATE RETURNS TO THE TANK.) FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS (APPROX. 50% TO 100% OF ACTUAL FLOW). THE SURGE VOLUME IS THE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. FOR MODE 3 INSTALLATIONS, THE DUCKBILL MODEL RSV IS REQUIRED, WHICH HAS A FLEXIBLE PVC TUBE THAT VENTS THE RSV CAGE TO ATMOSPHERE.

FLOAT LEVELS: TYPICALLY THE BOTTOM FLOAT SHOULD BE POSITIONED AS CLOSE TO THE TOP OF THE BIOTUBE CARTRIDGE AS POSSIBLE. THE TOP FLOAT IS NORMALLY SET ONE TO TWO INCHES BELOW THE INVERT OF THE TANK INLET. FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS. THE SURGE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. BE SURE TO CHECK THE PLANS FOR ANY SITE-SPECIFIC OR TANK-SPECIFIC FLOAT SETTINGS.

LICENSED DESIGNER SYSTEM REQUIREMENTS

NOTICE TO OWNER & INSTALLER – THE EXACT LOCATION OF THE PROPOSED LEACHING SYSTEM SHALL BE FIELD STAKED BY THE LICENSED DESIGNER AS PART OF HIS CONSTRUCTION OBSERVATION CONTRACT WITH THE OWNER. A 72 HOUR NOTICE IS HEREBY REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION. A PRE-CONSTRUCTION MEETING BETWEEN THE LICENSED DESIGNER & LICENSED INSTALLER AT THE SITE IS REQUIRED FOLLOWING THE FIELD STAKING OF THE LEACHING SYSTEM. THE LICENSED INSTALLER SELECTED FOR THIS PROJECT MUST INSTALLED A MINIMUM OF 3 SAND FILTERS/PSND'S.

A. THE LICENSED DESIGNER SHALL BE RESPONSIBLE FOR WITNESSING AND INSPECTING THE INSTALLATION OF ANY OWTS WHICH HE/SHE DESIGNED. IN NO CASE SHALL THE PERSON WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS BE THE LICENSED INSTALLER WHO INSTALLS THE SYSTEM, EXCEPT FOR THE REPAIR OF AN EXISTING OWTS. ANY PERSON ASSISTING A LICENSED DESIGNER IN WITNESSING AND OBSERVING THE INSTALLATION OF AN OWTS MUST BE AN EMPLOYEE OF THE SAME BUSINESS ENTITY AS THE LICENSED DESIGNER, AND SUCH PERSON MUST WORK UNDER THE LICENSED DESIGNER'S DIRECT SUPERVISION IN RESPECT TO WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS.

B. PRIOR TO INSTALLATION OF AN OWTS IN AREAS SERVED BY PRIVATE WELLS, THE DESIGNER MUST VERIFY THAT CONDITIONS ON SITE AND ADJACENT TO THE SITE ARE THE SAME AS AT THE TIME OF DESIGN APPROVAL, OR HAVE NOT CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN. IF CONDITIONS HAVE CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN, THE DESIGNER SHALL NOTIFY THE DEPARTMENT PRIOR TO INSTALLATION

C. THE INSTALLER SHALL NOTIFY THE DESIGNER DURING NORMAL BUSINESS HOURS AT LEAST 72 HOURS PRIOR TO THE PLANNED INSTALLATION OF ANY OWTS. THE DEPARTMENT, AT ITS DISCRETION, MAY INSPECT ANY ASPECT OF THE INSTALLATION OF THE SYSTEM.

D. THE DESIGNER MUST AT A MINIMUM, INSPECT AND MAKE MEASUREMENTS, WHERE APPROPRIATE, OF THE FOLLOWING COMPONENTS AND STEPS IN THE INSTALLATION OF THE OWTS;
(1) THE EXPOSED BOTTOM OF THE EXCAVATION FOR THE LEACH FIELD;
(2) THE SIZE AND CONDITION OF ALL STRUCTURES SUCH AS THE SEPTIC TANK, D-BOX, GALLEYS, FLOW DIFFUSERS, ETC.;
(3) THE ELEVATIONS OF ALL PIPE INVERTS;
(4) ALL SAND MEDIA AND AGGREGATE IS IN ACCORDANCE WITH SPECIFICATIONS AND IS PLACED IN ACCORDANCE WITH THE DESIGN PLAN;
(5) COMPLETED INSTALLATION PRIOR TO COVERING;
(6) THE TYPE OF BACKFILL AND THAT THE BACKFILL IS PROPERLY PLACED AND COMPACTED.
(7) FINAL SOIL COVER INCLUDING 10 FT PERIMETER; AND
(8) ALL HORIZONTAL SET-BACKS, INCLUDING FROM THE BUILDING AND ANY WELLS ON-SITE OR ON ABUTTING LOTS.

E. IF CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION WHICH INDICATE THAT THE SYSTEM CANNOT BE INSTALLED OR IS NOT INSTALLED IN ACCORDANCE WITH THE PERMIT, OR ANY TERMS AND CONDITIONS CONTAINED THEREIN, THE DESIGNER SHALL NOTIFY THE DIRECTOR AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER DISCOVERY. THE DEPARTMENT SHALL ISSUE WRITTEN GUIDANCE ON SPECIFICATIONS FOR CONSTRUCTION TOLERANCES AS WELL AS CONDITIONS UNDER WHICH AS-BUILT PLANS AND REDESIGNED PLANS ARE REQUIRED. THE INSTALLER SHALL STOP CONSTRUCTION IF CONDITIONS ARE SUCH THAT A REDESIGN IS REQUIRED. NOTIFICATION IS NOT REQUIRED IF ALL DESIGN ELEMENTS ARE WITHIN THE TOLERANCES ESTABLISHED BY THE DEPARTMENT THROUGH WRITTEN GUIDANCE. IN RESPONSE TO THE DESIGNER'S NOTIFICATION, THE DIRECTOR SHALL EITHER:
(1) AUTHORIZE THE INSTALLER TO PROCEED WITH THE WORK ON-SITE AND REQUIRE THE DESIGNER TO PROVIDE APPROPRIATE DOCUMENTATION TO THE DEPARTMENT AS MAY BE REQUIRED BY THE DIRECTOR;
(2) REQUIRE THE DESIGNER TO SUBMIT AS-BUILT PLANS WITHIN 10 BUSINESS DAYS AFTER THE OWTS IS INSTALLED TO RECORD CHANGES THAT ARE IN COMPLIANCE WITH THE STANDARDS IN THESE REGULATIONS, BUT WHICH NEED TO BE DOCUMENTED; OR
(3) REQUIRE THE DESIGNER TO SUBMIT REDESIGNED PLANS AND SPECIFICATIONS TO THE DIRECTOR FOR APPROVAL SHOWING CHANGES FROM THE ORIGINAL APPROVED APPLICATION, PLAN AND SPECIFICATIONS.

F. THE INSTALLER SHALL PROVIDE THE LICENSED DESIGNER THE INFORMATION BELOW THAT CAN BE USED TO VERIFY THAT THE INSTALLATION OF THE OWTS WAS PERFORMED AS SPECIFIED:
(1) DAILY INSPECTION REPORT (WEATHER CONDITIONS, PERSONS ON-SITE, WORK ACCOMPLISHED AND OTHER INFORMATION CUSTOMARILY INCLUDED IN INSPECTION REPORTS);
(2) A MINIMUM OF TWO PHOTOGRAPHS OF THE SYSTEM BEING INSTALLED;
(3) LIST OF ALL MATERIALS USED, THEIR SOURCE, AND THE DATES DELIVERED TO THE SITE; AND
(4) PRODUCT SPECIFICATION SHEETS, IF DIFFERENT FROM THOSE SPECIFIED IN THE APPROVED DESIGN.

G. CERTIFICATE OF CONSTRUCTION
(1) THE DESIGNER THAT IS RESPONSIBLE FOR THE SYSTEM INSTALLATION IN ACCORDANCE WITH RULE 44 SHALL COMPLETE A CERTIFICATE OF CONSTRUCTION THAT CERTIFIES THAT THE OWTS WAS INSTALLED IN CONFORMANCE WITH THE APPROVED APPLICATION, PLANS, SPECIFICATIONS, APPLICABLE STATUTES AND REGULATIONS AND THAT HE OR SHE IS RESPONSIBLE FOR HAVING OBSERVED THE INSTALLATION. THE CERTIFICATE OF CONSTRUCTION SHALL BE ON FORMS PROVIDED BY THE DIRECTOR.
(2) THE CERTIFICATE OF CONSTRUCTION SHALL BE SUBMITTED TO THE DIRECTOR WITHIN FIVE BUSINESS DAYS AFTER THE OWTS, BUILDING FOUNDATION, DRINKING WATER WELL, AND OTHER APPURTENANCES, AS MAY BE SPECIFIED IN WRITTEN DEPARTMENT GUIDANCE HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN PLAN. THE DESIGNER SHALL PROVIDE A COPY OF THE CERTIFICATE OF CONSTRUCTION TO THE PROPERTY OWNER.
(3) IN ADDITION TO THE CERTIFICATION IN RULE 44 ABOVE, THE CERTIFICATE OF CONSTRUCTION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
(A) NAME AND LICENSE NUMBER OF THE DESIGNER;
(B) NAME AND LICENSE NUMBER OF THE INSTALLER;
(C) DISTANCES FROM TWO BUILDING FOUNDATION CORNERS TO THE SEPTIC TANK MANHOLE, TO THE DISTRIBUTION BOX, AND TO THE LEACH FIELD CORNERS.

H. ONCE THE DESIGNER HAS CERTIFIED THAT THE OWTS HAS BEEN PROPERLY INSTALLED, THE DESIGNER SHALL PROVIDE INFORMATION AND RECOMMENDATIONS TO THE OWNER OF THE OWTS ON SYSTEM SPECIFIC OPERATION AND MAINTENANCE PRACTICES TO PREVENT AGAINST PREMATURE SYSTEM FAILURE AND POLLUTION OF THE WATERS OF THE STATE.

I. THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OR OMISSION OF A USER OF AN OWTS, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE OWTS.

GENERAL NOTES

(ONLY CIRCLED NOTES APPLY)

1. ALL OTHER DESIGN, CONSTRUCTION AND MAINTENANCE REQUIREMENTS WHETHER NOTED HEREON, OR NOT, SHALL BE IN CONFORMANCE WITH RULES & REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER DISPOSAL SYSTEMS, JANUARY 1, 2008 BY R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, AUTHORITY: CHAPTER 42-35 PURSUANT TO CHAPTERS 42-17.1, 23-19.5 & 5-56.1 OF THE RHODE ISLAND GENERAL LAWS OF 1956, AS AMENDED, AND THE R.I.DEM SANDFILTER GUIDANCE DOCUMENT (SFDD) DATED APRIL 2000 AND ANY AMENDMENTS THERETO.
2. MAINTAIN PERIMETER ELEVATION 42.5' FOR 5' AROUND SYSTEM.
3. THE DISTRIBUTION BOX SHALL HAVE A BOTTOM AREA OF 3 S.F. AND BE H-20 LOAD.
4. ALL TREES, BRUSH AND STUMPS WITHIN 10 FEET OF LEACH FIELD TO BE REMOVED.
5. THERE SHALL BE NO SUBSURFACE FOUNDATION OR STORM DRAINS WITHIN 25 FEET OF OWTS.
6. COMPLY WITH ANY ADDITIONAL TERMS OF APPROVAL AS MAY BE REQUIRED BY R.I.D.E.M.
7. SCHEDULE 35-SDR P.V.C. PIPE OR EQUAL FOR ALL OWTS PIPING.
8. THE LEACH FIELD AND EXTENDING 0 FEET INTO THE LEACH FIELD PERIMETER FROM THE SIDE WALLS MUST BE STRIPPED OF TREES, BRUSH, TOPSOIL, SUBSOIL, UNDESIRABLE MATERIAL AND SOIL CONTAINING FINES AND THE EXCAVATION SCARIFIED AND BACKFILLED WITH CLEAN COARSE GRAVEL (RULE 32.12). REMOVE ALL CATEGORY SOILS. STRIP TO ELEV.
9. BENCHMARK TO BE SET WITHIN 100' OF PROPOSED OWTS LOCATION PRIOR TO CONSTRUCTION.
10. THERE ARE NO EXISTING OR PROPOSED WELLS WITHIN 200' OF THE PROPOSED OWTS NOR ARE THERE ANY OTHER OWTS WITHIN 100' OF THE PROPOSED WELL, EXCEPT AS NOTED.
11. ALL PIPING TO CONSIST OF POLYVINYL CHLORIDE PIPE (P.V.C.) SCHEDULE 35-SDR, UNLESS OTHERWISE NOTED.
12. HEAVY MACHINERY SHALL NOT BE PERMITTED TO PASS OVER THE LEACH FIELD.
13. FOR PROPER PERFORMANCE, THE SEPTIC TANK SHOULD BE INSPECTED AT LEAST ONCE A YEAR AND WHEN TOTAL DEPTH OF SCUM AND SOLIDS EXCEED 1/3 THE LIQUID DEPTH OF THE TANK, THE TANK SHOULD BE PUMPED.
14. THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THIS SYSTEM UNLESS CONSTRUCTED AS SHOWN. ANY OTHER ALTERATIONS MUST BE APPROVED BY THE DESIGNER.
15. PROPERTY LINES: UNLESS OTHERWISE INDICATED THE PROPERTY LINES SHOWN HEREON ARE APPROXIMATE ONLY. THEY HAVE BEEN DEVELOPED FROM TAX MAPS, PLATS, DEEDS AND OTHER SOURCES OF INFORMATION. THESE REPRESENTATIONS ARE NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND ARE SUBJECT TO CHANGES THAT AN ACCURATE SURVEY MAY DISCLOSE.
16. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS, EXCEPT AS SHOWN.
17. THERE ARE NO COASTAL PONDS OR TRIBUTARIES THERETO INCLUDING STORM AND SUBSURFACE DRAINS DIRECTLY DISCHARGING THERETO WITHIN 200' OF PROPOSED OWTS, EXCEPT AS SHOWN.
18. SUBJECT PARCEL IS SITUATED IN THE COASTAL POND CRITICAL RESOURCE AREA.
19. REPLUMB EXISTING STRUCTURE AS NECESSARY TO MATCH THE INVERTS OF THE PROPOSED OWTS.
20. ANY FILL ENCOUNTERED IN THE AREA OF THE PROPOSED LEACHING SHALL BE REMOVED AND REPLACED WITH BANK RUN GRAVEL MEETING RULE 32.12.

PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM
FOR A 4 BEDROOM AFFORDABLE HOUSING UNIT-SYSTEM "A"
@ A.M. 13 / LOT 43
SITUATED IN THE TOWN OF CHARLESTOWN, R.I.

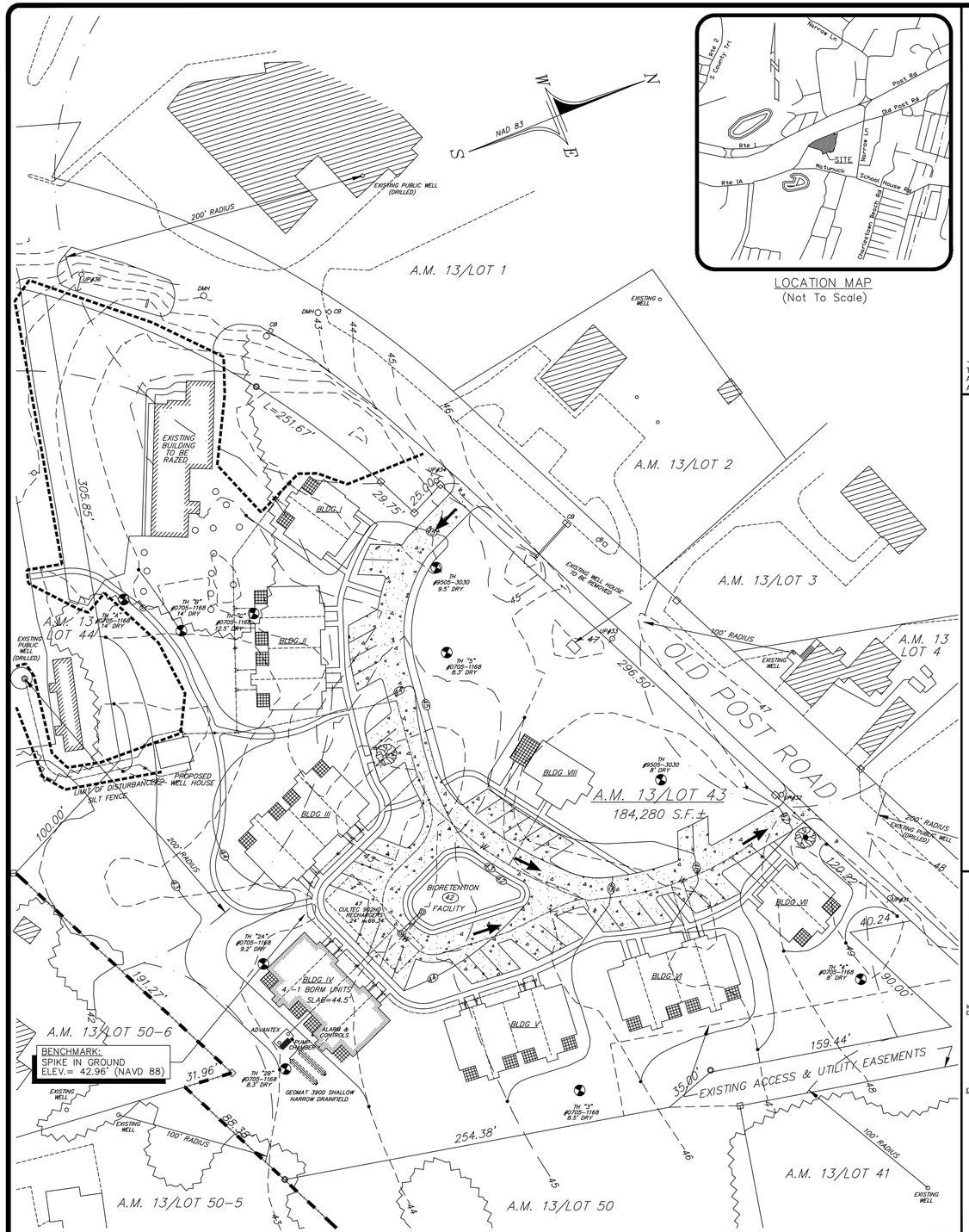
APPLICANT:
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.
400 TOWER HILL ROAD
NORTH KINGSTOWN, RI 02852

NO.	REVISION	DATE
1.	FINAL GRADING	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
STATE OF RHODE ISLAND
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-OWTA	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: SEPT. 18, 2015
SHEET: 1 OF 5 SHEETS	C8 8 OF 15 SHEETS



LOCATION MAP
(Not To Scale)

ZONING CLASSIFICATION = TVD
SETBACKS: FRONT–20' SIDE–20' REAR–30'

LEGEND:

- (40) PROP. CONTOUR
- (40.5) PROP. FIN. GRADE
- 40 EXIST. CONTOUR
- 40x8 EXIST. SPOT GRADE
- VERIFIED TEST HOLE
- PERCOLATION TEST
- PROPERTY LINE
- –W– WATER SERVICE
- STORM DRAIN

PERCOLATION TEST DATA

PERC. NO.	DATE	DEPTH	ELEV.	RATE
N/A				

DESIGN APPLICATION RATE: 3.5 GAL/SF/DAY

DESIGN SOIL CATEGORY: 3

SOIL TEST DATA

DEEP TEST PIT NO. 2B 9/8/15		DEEP TEST PIT NO.	
SURFACE ELEVATION = 43.1'		SURFACE ELEVATION =	
DEPTH/SOIL	SOIL DESCRIPTION	DEPTH/SOIL	SOIL DESCRIPTION
SEE ATTACHED SOIL EVALUATION			
GROUND WATER DESIGN DEPTH = 8.3'		GROUND WATER DESIGN DEPTH =	
ELEVATION = 34.8' VERIFIED WT=0705-1168		ELEVATION =	VERIFIED WT=

PLAN VIEW OF SYSTEM

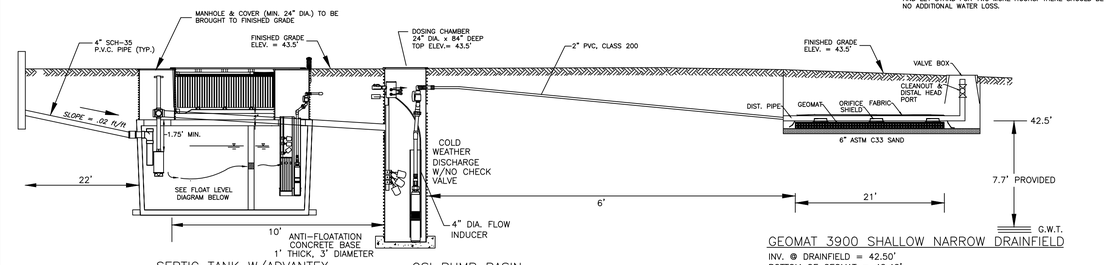
SCALE: 1" = 40'

PROFILE OF SYSTEM

(NOT TO SCALE)

TOP OF SLAB = 44.5'
INV. OF PIPE AT FND. = 38.69'

NOTE: ALL TANKS INCLUDING RISERS SHALL BE WATER TIGHT AND SHALL BE TESTED ON SITE AS FOLLOWS: FIRST, SEAL THE TANK INLET AND OUTLET. NEXT, FILL THE TANK WITH TAP WATER TO 2 TO 4 INCHES ABOVE THE JOINT BETWEEN THE RISER AND TANK AND LET STAND FOR 24 HOURS. IF THERE IS A WATER LOSS, REFILL. MARK THE WATER LEVEL AND LET STAND FOR TWO MORE HOURS. THERE SHOULD BE NO ADDITIONAL WATER LOSS.



SEPTIC TANK W/ADVANTEX TREATMENT SYSTEM

CAPACITY = 2,000 GALLONS
INV. @ SEPTIC TANK INLET = 38.25'
INV. ABOVE RSV CAGE = 40.00'
ROTONDO ST 2000
OR APPROVED EQUAL

OSI PUMP BASIN

INV. IN /FORCE MAIN OUT= 39.80'
TIMER CONTROLLED
HIGH ALARM= 39.35'
PUMP ON= 39.14'
PUMP OFF= 38.50'
LOW WATER ALARM= 38.33'
BOTTOM OF CHAMBER= 36.50'

USE MODEL PF5005-2 STAGE PACKAGE E, OR APPRVD. EQUAL

GEOMAT 3900 SHALLOW NARROW DRAINFIELD

INV. @ DRAINFIELD = 42.50'
BOTTOM OF GEOMAT = 42.42'
BOTTOM OF SAND ELEVATION = 41.92'
NOTE: FINISHED GRADE OVER LEACHING AREA, SEE PLAN

DESIGN DATA

PROP. NUMBER OF BEDROOMS = 4 x 115 GAL/BDRM/DAY = 460 GPD

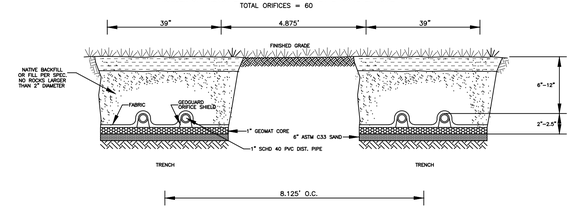
(460 GAL/DAY ÷ 3.5 GAL./S.F./DAY = 131.4 S.F. REQUIRED
131.4 S.F÷ 3.25 S.F/L.F. = 40.44 L.F. REQUIRED
2 TRENCHES @ 21 LF/TRENCH = 42 L.F./136 S.F. PROVIDED (3.25 SF/LF)

NOTE:

THE ADVANTEX SYSTEM TANK AND THE PUMP BASIN/SAND FILTER PRODUCTS ARE AVAILABLE FROM GREEN WASTEWATER SOLUTIONS @ 401-737-7600 AND/OR ATLANTIC SOLUTIONS @ 401-293-0176.

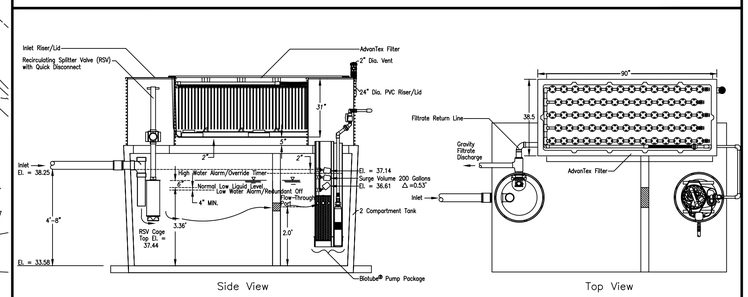
GEOMAT 3900 SHALLOW NARROW DRAINFIELD

CROSS SECTION
(NOT TO SCALE)
NUMBER OF TRENCH LINES REQUIRED = 2 @ 21 LF = 42 LF TOTAL
TOTAL ORIFICES = 60



DOSING NOTE:

THE DOSING WILL BE CONTROLLED EXCLUSIVELY BY THE PROGRAMMABLE TIMER AS LONG AS THE WATER LEVEL IS BETWEEN THE TIMER OVERRIDE FLOATS. IF THE SEPTIC TANK RECEIVES A MUCH LARGER THAN NORMAL QUANTITY OF WASTEWATER IN A SHORT TIME, A TIMER-OVERRIDE FLOAT ACTIVATES THE PUMP AND ALSO SOUNDS AN ALARM TO ALERT THE USER OF THE UNUSUAL VOLUME. PUSHING THE ILLUMINATED BUTTON ON THE FRONT OF THE PANEL SILENCES THE ALARM, WHICH RESETS AUTOMATICALLY WHEN THE LIQUID LEVEL IN THE TANK RETURNS TO A NORMAL LEVEL. AN ALARM THAT OCCURS WHEN OCCUPANTS ARE NOT USING MORE WATER THAN USUAL IS AN INDICATION THAT MAINTENANCE MAY BE REQUIRED FOR A FAULTY TOILET FLUSH VALVE, A LEAKING SEPTIC TANK, OR A PROBLEM WITH THE PUMPING OR ELECTRICAL SYSTEM. THE PUMP SYSTEM SHALL DOSE 15 GALLONS PER DOSE PER ZONE TO THE SHALLOW NARROW DRAINFIELD (31 TIMES PER DAY/1 ZONE).



Advantex Treatment System

AX 20 Series Mode 3b

DETERMINING RSV AND FLOAT LEVELS:

RSV LEVEL: FOR STINGER PIPE LENGTHS UP TO 24" LONG, THE LOW LIQUID LEVEL WILL BE APPROXIMATELY 5"-6" BELOW THE TOP OF THE RSV CAGE. (THE LOW LIQUID LEVEL IS THE LEVEL AT WHICH 100% OF THE FILTRATE RETURNS TO THE TANK.) FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS (APPROX. 50% TO 100% OF ACTUAL FLOW). THE SURGE VOLUME IS THE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. FOR MODE 3 INSTALLATIONS, THE DUCKBILL MODEL RSV IS REQUIRED, WHICH HAS A FLEXIBLE PVC TUBE THAT VENTS THE RSV CAGE TO ATMOSPHERE.

FLOAT LEVELS: TYPICALLY THE BOTTOM FLOAT SHOULD BE POSITIONED AS CLOSE TO THE TOP OF THE BIOTUBE CARTRIDGE AS POSSIBLE. THE TOP FLOAT IS NORMALLY SET ONE TO TWO INCHES BELOW THE INVERT OF THE TANK INLET. FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS. THE SURGE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. BE SURE TO CHECK THE PLANS FOR ANY SITE-SPECIFIC OR TANK-SPECIFIC FLOAT SETTINGS.

LICENSED DESIGNER SYSTEM REQUIREMENTS

NOTICE TO OWNER & INSTALLER – THE EXACT LOCATION OF THE PROPOSED LEACHING SYSTEM SHALL BE FIELD STAKED BY THE LICENSED DESIGNER AS PART OF HIS CONSTRUCTION OBSERVATION CONTRACT WITH THE OWNER. A 72 HOUR NOTICE IS HEREBY REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION. A PRE-CONSTRUCTION MEETING BETWEEN THE LICENSED DESIGNER & LICENSED INSTALLER AT THE SITE IS REQUIRED FOLLOWING THE FIELD STAKING OF THE LEACHING SYSTEM. THE LICENSED INSTALLER SELECTED FOR THIS PROJECT MUST INSTALLED A MINIMUM OF 3 SAND FILTERS/PSND'S.

A. THE LICENSED DESIGNER SHALL BE RESPONSIBLE FOR WITNESSING AND INSPECTING THE INSTALLATION OF ANY OWTS WHICH HE/SHE DESIGNED. IN NO CASE SHALL THE PERSON WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS BE THE LICENSED INSTALLER WHO INSTALLS THE SYSTEM, EXCEPT FOR THE REPAIR OF AN EXISTING OWTS. ANY PERSON ASSISTING A LICENSED DESIGNER IN WITNESSING AND OBSERVING THE INSTALLATION OF AN OWTS MUST BE AN EMPLOYEE OF THE SAME BUSINESS ENTITY AS THE LICENSED DESIGNER, AND SUCH PERSON MUST WORK UNDER THE LICENSED DESIGNER'S DIRECT SUPERVISION IN RESPECT TO WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS.

B. PRIOR TO INSTALLATION OF AN OWTS IN AREAS SERVED BY PRIVATE WELLS, THE DESIGNER MUST VERIFY THAT CONDITIONS ON SITE AND ADJACENT TO THE SITE ARE THE SAME AS AT THE TIME OF DESIGN APPROVAL, OR HAVE NOT CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN. IF CONDITIONS HAVE CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN, THE DESIGNER SHALL NOTIFY THE DEPARTMENT PRIOR TO INSTALLATION

C. THE INSTALLER SHALL NOTIFY THE DESIGNER DURING NORMAL BUSINESS HOURS AT LEAST 72 HOURS PRIOR TO THE PLANNED INSTALLATION OF ANY OWTS. THE DEPARTMENT, AT ITS DISCRETION, MAY INSPECT ANY ASPECT OF THE INSTALLATION OF THE SYSTEM.

D. THE DESIGNER MUST AT A MINIMUM, INSPECT AND MAKE MEASUREMENTS, WHERE APPROPRIATE, OF THE FOLLOWING COMPONENTS AND STEPS IN THE INSTALLATION OF THE OWTS;
   (1) THE EXPOSED BOTTOM OF THE EXCAVATION FOR THE LEACH FIELD;
   (2) THE SIZE AND CONDITION OF ALL STRUCTURES SUCH AS THE SEPTIC TANK, D-BOX, GALLEYS, FLOW DIFFUSERS, ETC.;
   (3) THE ELEVATIONS OF ALL PIPE INVERTS;
   (4) ALL SAND MEDIA AND AGGREGATE IS IN ACCORDANCE WITH SPECIFICATIONS AND IS PLACED IN ACCORDANCE WITH THE DESIGN PLAN;
   (5) COMPLETED INSTALLATION PRIOR TO COVERING;
   (6) THE TYPE OF BACKFILL AND THAT THE BACKFILL IS PROPERLY PLACED AND COMPACTED.
   (7) FINAL SOIL COVER INCLUDING 10 FT PERIMETER; AND
   (8) ALL HORIZONTAL SET-BACKS, INCLUDING FROM THE BUILDING AND ANY WELLS ON-SITE OR ON ABUTTING LOTS.

E. IF CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION WHICH INDICATE THAT THE SYSTEM CANNOT BE INSTALLED OR IS NOT INSTALLED IN ACCORDANCE WITH THE PERMIT, OR ANY TERMS AND CONDITIONS CONTAINED THEREIN, THE DESIGNER SHALL NOTIFY THE DIRECTOR AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER DISCOVERY. THE DEPARTMENT SHALL ISSUE WRITTEN GUIDANCE ON SPECIFICATIONS FOR CONSTRUCTION TOLERANCES AS WELL AS CONDITIONS UNDER WHICH AS-BUILT PLANS AND REDESIGNED PLANS ARE REQUIRED. THE INSTALLER SHALL STOP CONSTRUCTION IF CONDITIONS ARE SUCH THAT A REDESIGN IS REQUIRED. NOTIFICATION IS NOT REQUIRED IF ALL DESIGN ELEMENTS ARE WITHIN THE TOLERANCES ESTABLISHED BY THE DEPARTMENT THROUGH WRITTEN GUIDANCE. IN RESPONSE TO THE DESIGNER'S NOTIFICATION, THE DIRECTOR SHALL EITHER:
   (1) AUTHORIZE THE INSTALLER TO PROCEED WITH THE WORK ON-SITE AND REQUIRE THE DESIGNER TO PROVIDE APPROPRIATE DOCUMENTATION TO THE DEPARTMENT AS MAY BE REQUIRED BY THE DIRECTOR;
   (2) REQUIRE THE DESIGNER TO SUBMIT AS-BUILT PLANS WITHIN 10 BUSINESS DAYS AFTER THE OWTS IS INSTALLED TO RECORD CHANGES THAT ARE IN COMPLIANCE WITH THE STANDARDS IN THESE REGULATIONS, BUT WHICH NEED TO BE DOCUMENTED; OR
   (3) REQUIRE THE DESIGNER TO SUBMIT REDESIGNED PLANS AND SPECIFICATIONS TO THE DIRECTOR FOR APPROVAL SHOWING CHANGES FROM THE ORIGINAL APPROVED APPLICATION, PLAN AND SPECIFICATIONS.

F. THE INSTALLER SHALL PROVIDE THE LICENSED DESIGNER THE INFORMATION BELOW THAT CAN BE USED TO VERIFY THAT THE INSTALLATION OF THE OWTS WAS PERFORMED AS SPECIFIED:
   (1) DAILY INSPECTION REPORT (WEATHER CONDITIONS, PERSONS ON-SITE, WORK ACCOMPLISHED AND OTHER INFORMATION CUSTOMARILY INCLUDED IN INSPECTION REPORTS);
   (2) A MINIMUM OF TWO PHOTOGRAPHS OF THE SYSTEM BEING INSTALLED;
   (3) LIST OF ALL MATERIALS USED, THEIR SOURCE, AND THE DATES DELIVERED TO THE SITE; AND
   (4) PRODUCT SPECIFICATION SHEETS, IF DIFFERENT FROM THOSE SPECIFIED IN THE APPROVED DESIGN.

G. CERTIFICATE OF CONSTRUCTION
   (1) THE DESIGNER THAT IS RESPONSIBLE FOR THE SYSTEM INSTALLATION IN ACCORDANCE WITH RULE 44 SHALL COMPLETE A CERTIFICATE OF CONSTRUCTION THAT CERTIFIES THAT THE OWTS WAS INSTALLED IN CONFORMANCE WITH THE APPROVED APPLICATION, PLANS, SPECIFICATIONS, APPLICABLE STATUTES AND REGULATIONS AND THAT HE OR SHE IS RESPONSIBLE FOR HAVING OBSERVED THE INSTALLATION. THE CERTIFICATE OF CONSTRUCTION SHALL BE ON FORMS PROVIDED BY THE DIRECTOR.
   (2) THE CERTIFICATE OF CONSTRUCTION SHALL BE SUBMITTED TO THE DIRECTOR WITHIN FIVE BUSINESS DAYS AFTER THE OWTS, BUILDING FOUNDATION, DRINKING WATER WELL, AND OTHER APPURTENANCES, AS MAY BE SPECIFIED IN WRITTEN DEPARTMENT GUIDANCE HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN PLAN. THE DESIGNER SHALL PROVIDE A COPY OF THE CERTIFICATE OF CONSTRUCTION TO THE PROPERTY OWNER.
   (3) IN ADDITION TO THE CERTIFICATION IN RULE 44 ABOVE, THE CERTIFICATE OF CONSTRUCTION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
      (A) NAME AND LICENSE NUMBER OF THE DESIGNER;
      (B) NAME AND LICENSE NUMBER OF THE INSTALLER;
      (C) DISTANCES FROM TWO BUILDING FOUNDATION CORNERS TO THE SEPTIC TANK MANHOLE, TO THE DISTRIBUTION BOX, AND TO THE LEACH FIELD CORNERS.

H. ONCE THE DESIGNER HAS CERTIFIED THAT THE OWTS HAS BEEN PROPERLY INSTALLED, THE DESIGNER SHALL PROVIDE INFORMATION AND RECOMMENDATIONS TO THE OWNER OF THE OWTS ON SYSTEM SPECIFIC OPERATION AND MAINTENANCE PRACTICES TO PREVENT AGAINST PREMATURE SYSTEM FAILURE AND POLLUTION OF THE WATERS OF THE STATE.

I. THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OR OMISSION OF A USER OF AN OWTS, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE OWTS.

GENERAL NOTES

(ONLY CIRCLED NOTES APPLY)

1. ALL OTHER DESIGN, CONSTRUCTION AND MAINTENANCE REQUIREMENTS WHETHER NOTED HEREON, OR NOT, SHALL BE IN CONFORMANCE WITH RULES & REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER DISPOSAL SYSTEMS, JANUARY 1, 2008 BY R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, AUTHORITY: CHAPTER 42-35 PURSUANT TO CHAPTERS 42-17.1, 23-19.5 & 5-56.1 OF THE RHODE ISLAND GENERAL LAWS OF 1956, AS AMENDED, AND THE R.I.DEM SANDFILTER GUIDANCE DOCUMENT (SFDD) DATED APRIL 2000 AND ANY AMENDMENTS THERETO.
2. MAINTAIN PERIMETER ELEVATION 42.5' FOR 5' AROUND SYSTEM.
3. THE DISTRIBUTION BOX SHALL HAVE A BOTTOM AREA OF 3 S.F. AND BE H-20 LOAD.
4. ALL TREES, BRUSH AND STUMPS WITHIN 10 FEET OF LEACH FIELD TO BE REMOVED.
5. THERE SHALL BE NO SUBSURFACE FOUNDATION OR STORM DRAINS WITHIN 25 FEET OF OWTS.
6. COMPLY WITH ANY ADDITIONAL TERMS OF APPROVAL AS MAY BE REQUIRED BY R.I.D.E.M.
7. SCHEDULE 35-SDR P.V.C. PIPE OR EQUAL FOR ALL OWTS PIPING.
8. THE LEACH FIELD AND EXTENDING 0 FEET INTO THE LEACH FIELD PERIMETER FROM THE SIDE WALLS MUST BE STRIPPED OF TREES, BRUSH, TOPSOIL, SUBSOIL, UNDESIRABLE MATERIAL AND SOIL CONTAINING FINES AND THE EXCAVATION SCARIFIED AND BACKFILLED WITH CLEAN COARSE GRAVEL (RULE 32.12). REMOVE ALL CATEGORY SOILS. STRIP TO ELEV.
9. BENCHMARK TO BE SET WITHIN 100' OF PROPOSED OWTS LOCATION PRIOR TO CONSTRUCTION.
10. THERE ARE NO EXISTING OR PROPOSED WELLS WITHIN 200' OF THE PROPOSED OWTS NOR ARE THERE ANY OTHER OWTS WITHIN 100' OF THE PROPOSED WELL, EXCEPT AS NOTED.
11. ALL PIPING TO CONSIST OF POLYVINYL CHLORIDE PIPE (P.V.C.) SCHEDULE 35-SDR, UNLESS OTHERWISE NOTED.
12. HEAVY MACHINERY SHALL NOT BE PERMITTED TO PASS OVER THE LEACH FIELD.
13. FOR PROPER PERFORMANCE, THE SEPTIC TANK SHOULD BE INSPECTED AT LEAST ONCE A YEAR AND WHEN TOTAL DEPTH OF SCUM AND SOLIDS EXCEED 1/3 THE LIQUID DEPTH OF THE TANK, THE TANK SHOULD BE PUMPED.
14. THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THIS SYSTEM UNLESS CONSTRUCTED AS SHOWN. ANY OTHER ALTERATIONS MUST BE APPROVED BY THE DESIGNER.
15. PROPERTY LINES: UNLESS OTHERWISE INDICATED THE PROPERTY LINES SHOWN HEREON ARE APPROXIMATE ONLY. THEY HAVE BEEN DEVELOPED FROM TAX MAPS, PLATS, DEEDS AND OTHER SOURCES OF INFORMATION. THESE REPRESENTATIONS ARE NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND ARE SUBJECT TO CHANGES THAT AN ACCURATE SURVEY MAY DISCLOSE.
16. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS, EXCEPT AS SHOWN.
17. THERE ARE NO COASTAL PONDS OR TRIBUTARIES THERETO INCLUDING STORM AND SUBSURFACE DRAINS DIRECTLY DISCHARGING THERETO WITHIN 200' OF PROPOSED OWTS, EXCEPT AS SHOWN.
18. SUBJECT PARCEL IS SITUATED IN THE COASTAL POND CRITICAL RESOURCE AREA.
19. REPLUMB EXISTING STRUCTURE AS NECESSARY TO MATCH THE INVERTS OF THE PROPOSED OWTS.
20. ANY FILL ENCOUNTERED IN THE AREA OF THE PROPOSED LEACHING SHALL BE REMOVED AND REPLACED WITH BANK RUN GRAVEL MEETING RULE 32.12.

PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM
FOR A 4 BEDROOM AFFORDABLE HOUSING UNIT-SYSTEM "B"
@ A.M. 13 / LOT 43
SITUATED IN THE TOWN OF CHARLESTOWN, R.I.

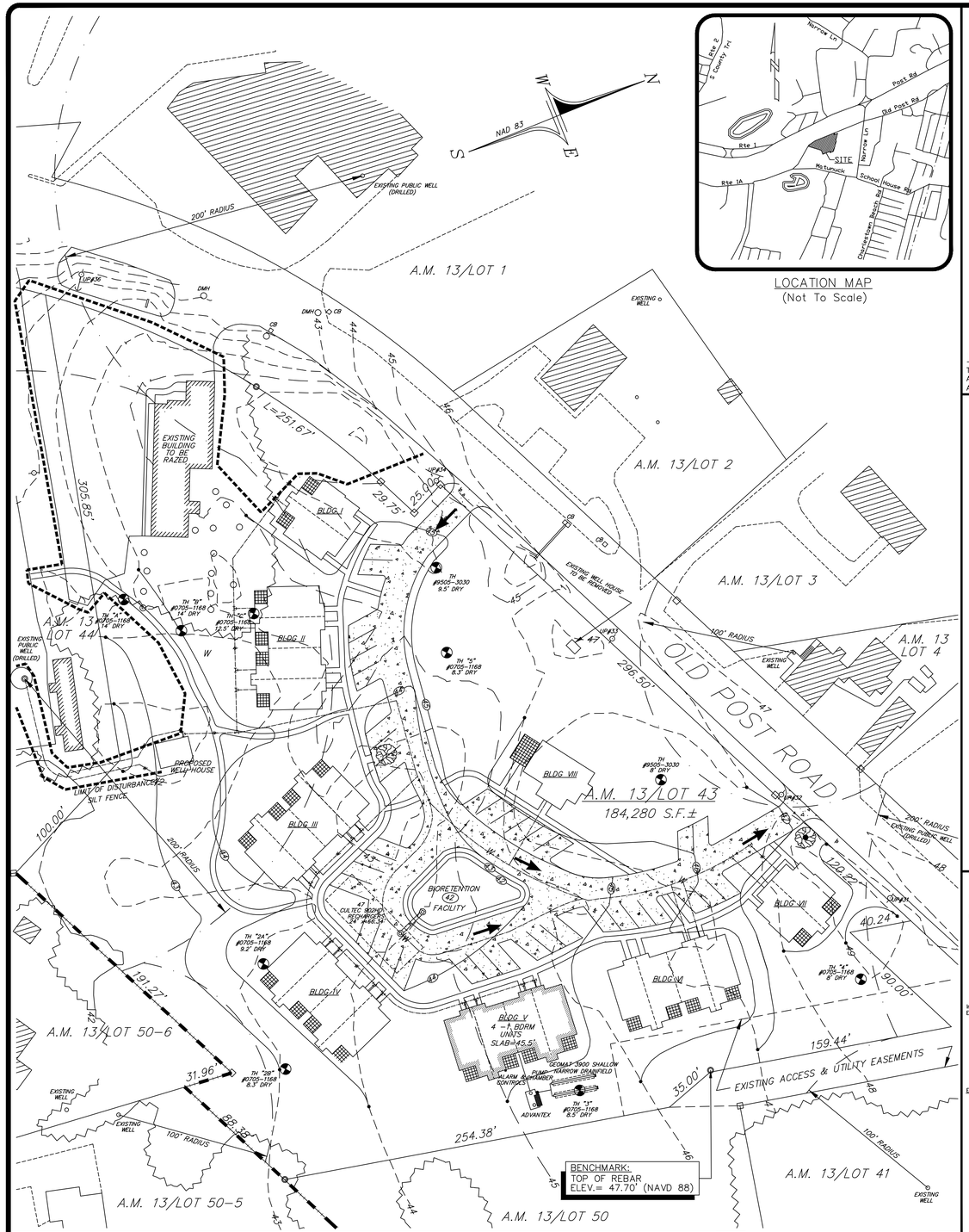
APPLICANT:
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.
400 TOWER HILL ROAD
NORTH KINGSTOWN, RI 02852

NO.	REVISION	DATE
1.	FINAL GRADING	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
STATE OF RHODE ISLAND
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-OWTB	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: SEPT. 18, 2015
SHEET: 2	C9
2 OF 5 SHEETS	9 OF 15 SHEETS



LOCATION MAP
(Not To Scale)

GRAPHIC SCALE
0 20' 40' 80' 120'

ZONING CLASSIFICATION = TVD
SETBACKS: FRONT–20' SIDE–20' REAR–30'

LEGEND:

- (40) PROP. CONTOUR
- (40.5) PROP. FIN. GRADE
- 40 EXIST. CONTOUR
- 40x8 EXIST. SPOT GRADE
- VERIFIED TEST HOLE
- PERCOLATION TEST
- PROPERTY LINE
- –W– WATER SERVICE
- STORM DRAIN

PERCOLATION TEST DATA

PERC. NO.	DATE	DEPTH	ELEV.	RATE
N/A				

DESIGN APPLICATION RATE: 2.7 GAL/SF/DAY

DESIGN SOIL CATEGORY: 5

SOIL TEST DATA

DEEP TEST PIT NO. 3 9/8/15	DEEP TEST PIT NO.
SURFACE ELEVATION = 46.1'	SURFACE ELEVATION =
DEPTH/SOIL SOIL DESCRIPTION	DEPTH/SOIL SOIL DESCRIPTION
SEE ATTACHED SOIL EVALUATION	
GROUND WATER DESIGN DEPTH = 8.5'	GROUND WATER DESIGN DEPTH =
ELEVATION = 37.6' VERIFIED WT=0705–1168	ELEVATION = VERIFIED WT=

PLAN VIEW OF SYSTEM

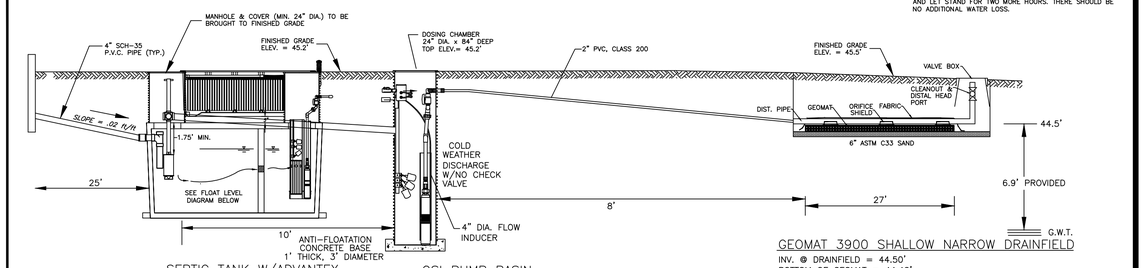
SCALE: 1" = 40'

PROFILE OF SYSTEM

(NOT TO SCALE)

TOP OF SLAB = 46.0'
INV. OF PIPE AT FND. = 40.45'

NOTE: ALL TANKS INCLUDING RISERS SHALL BE WATER TIGHT AND SHALL BE TESTED ON SITE AS FOLLOWS: FIRST, SEAL THE TANK INLET AND OUTLET. NEXT, FILL THE TANK WITH TAP WATER TO 2 TO 4 INCHES ABOVE THE JOINT BETWEEN THE RISER AND TANK AND LET STAND FOR 24 HOURS. IF THERE IS A WATER LOSS, REFILL. MARK THE WATER LEVEL AND LET STAND FOR TWO MORE HOURS. THERE SHOULD BE NO ADDITIONAL WATER LOSS.



SEPTIC TANK W/ADVANTEX TREATMENT SYSTEM

CAPACITY = 2,000 GALLONS
INV. @ SEPTIC TANK INLET = 39.95'
INV. ABOVE RSV CAGE = 42.00'
ROTONDO ST 2000
OR APPROVED EQUAL

OSI PUMP BASIN

INV. IN /FORCE MAIN OUT= 41.80'
TIMER CONTROLLED
HIGH ALARM= 41.55'
PUMP ON= 41.31'
PUMP OFF= 40.50'
LOW WATER ALARM= 40.03'
BOTTOM OF CHAMBER= 38.20'

USE MODEL PF5005–2 STAGE PACKAGE E, OR APPRVD. EQUAL

GEOMAT 3900 SHALLOW NARROW DRAINFIELD

INV. @ DRAINFIELD = 44.50'
BOTTOM OF GEOMAT = 44.42'
BOTTOM OF SAND ELEVATION = 43.92'
NOTE: FINISHED GRADE OVER LEACHING AREA, SEE PLAN

DESIGN DATA

PROP. NUMBER OF BEDROOMS = 4 x 115 GAL/BDRM/DAY = 460 GPD

(460 GAL/DAY ÷ 2.7 GAL./S.F./DAY = 170.4 S.F. REQUIRED
170.4 S.F. ÷ 3.25 S.F/L.F. = 52.43 L.F. REQUIRED
2 TRENCHES @ 27 LF/TRENCH = 54 L.F./176 S.F. PROVIDED (3.25 SF/LF)

NOTE:

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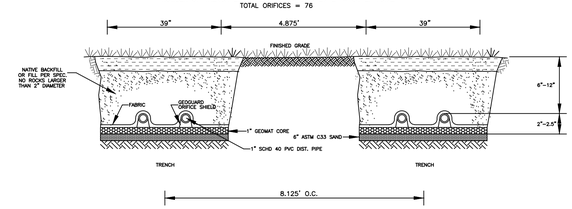
GEOMAT 3900 SHALLOW NARROW DRAINFIELD

CROSS SECTION
(NOT TO SCALE)
NUMBER OF TRENCH LINES REQUIRED = 2 @ 27 LF = 54 LF TOTAL
TOTAL ORIFICES = 76



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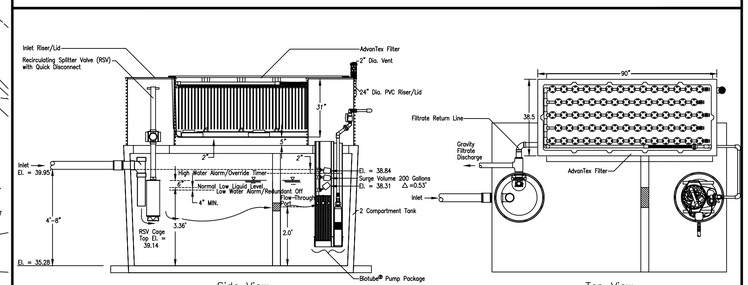

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   (7) FINAL SOIL COVER INCLUDING 10 FT PERIMETER; AND
   (8) ALL HORIZONTAL SET–BACKS, INCLUDING FROM THE BUILDING AND ANY WELLS ON–SITE OR ON ABUTTING LOTS.

E. IF CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION WHICH INDICATE THAT THE SYSTEM CANNOT BE INSTALLED OR IS NOT INSTALLED IN ACCORDANCE WITH THE PERMIT, OR ANY TERMS AND CONDITIONS CONTAINED THEREIN, THE DESIGNER SHALL NOTIFY THE DIRECTOR AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER DISCOVERY. THE DEPARTMENT SHALL ISSUE WRITTEN GUIDANCE ON SPECIFICATIONS FOR CONSTRUCTION TOLERANCES AS WELL AS CONDITIONS UNDER WHICH AS–BUILT PLANS AND REDESIGNED PLANS ARE REQUIRED. THE INSTALLER SHALL STOP CONSTRUCTION IF CONDITIONS ARE SUCH THAT A REDESIGN IS REQUIRED. NOTIFICATION IS NOT REQUIRED IF ALL DESIGN ELEMENTS ARE WITHIN THE TOLERANCES ESTABLISHED BY THE DEPARTMENT THROUGH WRITTEN GUIDANCE. IN RESPONSE TO THE DESIGNER'S NOTIFICATION, THE DIRECTOR SHALL EITHER:
   (1) AUTHORIZE THE INSTALLER TO PROCEED WITH THE WORK ON–SITE AND REQUIRE THE DESIGNER TO PROVIDE APPROPRIATE DOCUMENTATION TO THE DEPARTMENT AS MAY BE REQUIRED BY THE DIRECTOR;
   (2) REQUIRE THE DESIGNER TO SUBMIT AS–BUILT PLANS WITHIN 10 BUSINESS DAYS AFTER THE OWTS IS INSTALLED TO RECORD CHANGES THAT ARE IN COMPLIANCE WITH THE STANDARDS IN THESE REGULATIONS, BUT WHICH NEED TO BE DOCUMENTED; OR
   (3) REQUIRE THE DESIGNER TO SUBMIT REDESIGNED PLANS AND SPECIFICATIONS TO THE DIRECTOR FOR APPROVAL SHOWING CHANGES FROM THE ORIGINAL APPROVED APPLICATION, PLAN AND SPECIFICATIONS.

F. THE INSTALLER SHALL PROVIDE THE LICENSED DESIGNER THE INFORMATION BELOW THAT CAN BE USED TO VERIFY THAT THE INSTALLATION OF THE OWTS WAS PERFORMED AS SPECIFIED:
   (1) DAILY INSPECTION REPORT (WEATHER CONDITIONS, PERSONS ON–SITE, WORK ACCOMPLISHED AND OTHER INFORMATION CUSTOMARILY INCLUDED IN INSPECTION REPORTS);
   (2) A MINIMUM OF TWO PHOTOGRAPHS OF THE SYSTEM BEING INSTALLED;
   (3) LIST OF ALL MATERIALS USED, THEIR SOURCE, AND THE DATES DELIVERED TO THE SITE; AND
   (4) PRODUCT SPECIFICATION SHEETS, IF DIFFERENT FROM THOSE SPECIFIED IN THE APPROVED DESIGN.

G. CERTIFICATE OF CONSTRUCTION
   (1) THE DESIGNER THAT IS RESPONSIBLE FOR THE SYSTEM INSTALLATION IN ACCORDANCE WITH RULE 44 SHALL COMPLETE A CERTIFICATE OF CONSTRUCTION THAT CERTIFIES THAT THE OWTS WAS INSTALLED IN CONFORMANCE WITH THE APPROVED APPLICATION, PLANS, SPECIFICATIONS, APPLICABLE STATUTES AND REGULATIONS AND THAT HE OR SHE IS RESPONSIBLE FOR HAVING OBSERVED THE INSTALLATION. THE CERTIFICATE OF CONSTRUCTION SHALL BE ON FORMS PROVIDED BY THE DIRECTOR.
   (2) THE CERTIFICATE OF CONSTRUCTION SHALL BE SUBMITTED TO THE DIRECTOR WITHIN FIVE BUSINESS DAYS AFTER THE OWTS, BUILDING FOUNDATION, DRINKING WATER WELL, AND OTHER APPURTENANCES, AS MAY BE SPECIFIED IN WRITTEN DEPARTMENT GUIDANCE HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN PLAN. THE DESIGNER SHALL PROVIDE A COPY OF THE CERTIFICATE OF CONSTRUCTION TO THE PROPERTY OWNER.
   (3) IN ADDITION TO THE CERTIFICATION IN RULE 44 ABOVE, THE CERTIFICATE OF CONSTRUCTION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
      (A) NAME AND LICENSE NUMBER OF THE DESIGNER;
      (B) NAME AND LICENSE NUMBER OF THE INSTALLER;
      (C) DISTANCES FROM TWO BUILDING FOUNDATION CORNERS TO THE SEPTIC TANK MANHOLE, TO THE DISTRIBUTION BOX, AND TO THE LEACH FIELD CORNERS.

H. ONCE THE DESIGNER HAS CERTIFIED THAT THE OWTS HAS BEEN PROPERLY INSTALLED, THE DESIGNER SHALL PROVIDE INFORMATION AND RECOMMENDATIONS TO THE OWNER OF THE OWTS ON SYSTEM SPECIFIC OPERATION AND MAINTENANCE PRACTICES TO PREVENT AGAINST PREMATURE SYSTEM FAILURE AND POLLUTION OF THE WATERS OF THE STATE.

I. THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OR OMISSION OF A USER OF AN OWTS, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE OWTS.

GENERAL NOTES

(ONLY CIRCLED NOTES APPLY)

1. ALL OTHER DESIGN, CONSTRUCTION AND MAINTENANCE REQUIREMENTS WHETHER NOTED HEREON, OR NOT, SHALL BE IN CONFORMANCE WITH RULES & REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER DISPOSAL SYSTEMS, JANUARY 1, 2008 BY R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, AUTHORITY: CHAPTER 42–35 PURSUANT TO CHAPTERS 42–17.1, 23–19.5 & 5–56.1 OF THE RHODE ISLAND GENERAL LAWS OF 1956, AS AMENDED, AND THE R.I.DEM SANDFILTER GUIDANCE DOCUMENT (SFDD) DATED APRIL 2000 AND ANY AMENDMENTS THERETO.
2. MAINTAIN PERIMETER ELEVATION 44.5' FOR 5' AROUND SYSTEM.
3. THE DISTRIBUTION BOX SHALL HAVE A BOTTOM AREA OF 3 S.F. AND BE H–20 LOAD.
4. ALL TREES, BRUSH AND STUMPS WITHIN 10 FEET OF LEACH FIELD TO BE REMOVED.
5. THERE SHALL BE NO SUBSURFACE FOUNDATION OR STORM DRAINS WITHIN 25 FEET OF OWTS.
6. COMPLY WITH ANY ADDITIONAL TERMS OF APPROVAL AS MAY BE REQUIRED BY R.I.D.E.M.
7. SCHEDULE 35–SDR P.V.C. PIPE OR EQUAL FOR ALL OWTS PIPING.
8. THE LEACH FIELD AND EXTENDING 0 FEET INTO THE LEACH FIELD PERIMETER FROM THE SIDE WALLS MUST BE STRIPPED OF TREES, BRUSH, TOPSOIL, SUBSOIL, UNDESIRABLE MATERIAL AND SOIL CONTAINING FINES AND THE EXCAVATION SCARIFIED AND BACKFILLED WITH CLEAN COARSE GRAVEL (RULE 32.12). REMOVE ALL CATEGORY SOILS. STRIP TO ELEV.
9. BENCHMARK TO BE SET WITHIN 100' OF PROPOSED OWTS LOCATION PRIOR TO CONSTRUCTION.
10. THERE ARE NO EXISTING OR PROPOSED WELLS WITHIN 200' OF THE PROPOSED OWTS NOR ARE THERE ANY OTHER OWTS WITHIN 100' OF THE PROPOSED WELL, EXCEPT AS NOTED.
11. ALL PIPING TO CONSIST OF POLYVINYL CHLORIDE PIPE (P.V.C.) SCHEDULE 35–SDR, UNLESS OTHERWISE NOTED.
12. HEAVY MACHINERY SHALL NOT BE PERMITTED TO PASS OVER THE LEACH FIELD.
13. FOR PROPER PERFORMANCE, THE SEPTIC TANK SHOULD BE INSPECTED AT LEAST ONCE A YEAR AND WHEN TOTAL DEPTH OF SCUM AND SOLIDS EXCEED 1/3 THE LIQUID DEPTH OF THE TANK, THE TANK SHOULD BE PUMPED.
14. THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THIS SYSTEM UNLESS CONSTRUCTED AS SHOWN. ANY OTHER ALTERATIONS MUST BE APPROVED BY THE DESIGNER.
15. PROPERTY LINES: UNLESS OTHERWISE INDICATED THE PROPERTY LINES SHOWN HEREON ARE APPROXIMATE ONLY. THEY HAVE BEEN DEVELOPED FROM TAX MAPS, PLATS, DEEDS AND OTHER SOURCES OF INFORMATION. THESE REPRESENTATIONS ARE NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND ARE SUBJECT TO CHANGES THAT AN ACCURATE SURVEY MAY DISCLOSE.
16. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS, EXCEPT AS SHOWN.
17. THERE ARE NO COASTAL PONDS OR TRIBUTARIES THERETO INCLUDING STORM AND SUBSURFACE DRAINS DIRECTLY DISCHARGING THERETO WITHIN 200' OF PROPOSED OWTS, EXCEPT AS SHOWN.
18. SUBJECT PARCEL IS SITUATED IN THE COASTAL POND CRITICAL RESOURCE AREA.
19. REPLUMB EXISTING STRUCTURE AS NECESSARY TO MATCH THE INVERTS OF THE PROPOSED OWTS.
20. ANY FILL ENCOUNTERED IN THE AREA OF THE PROPOSED LEACHING SHALL BE REMOVED AND REPLACED WITH BANK RUN GRAVEL MEETING RULE 32.12.

PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM
FOR A 4 BEDROOM AFFORDABLE HOUSING UNIT–SYSTEM "C"
@ A.M. 13 / LOT 43
SITUATED IN THE TOWN OF CHARLESTOWN, R.I.

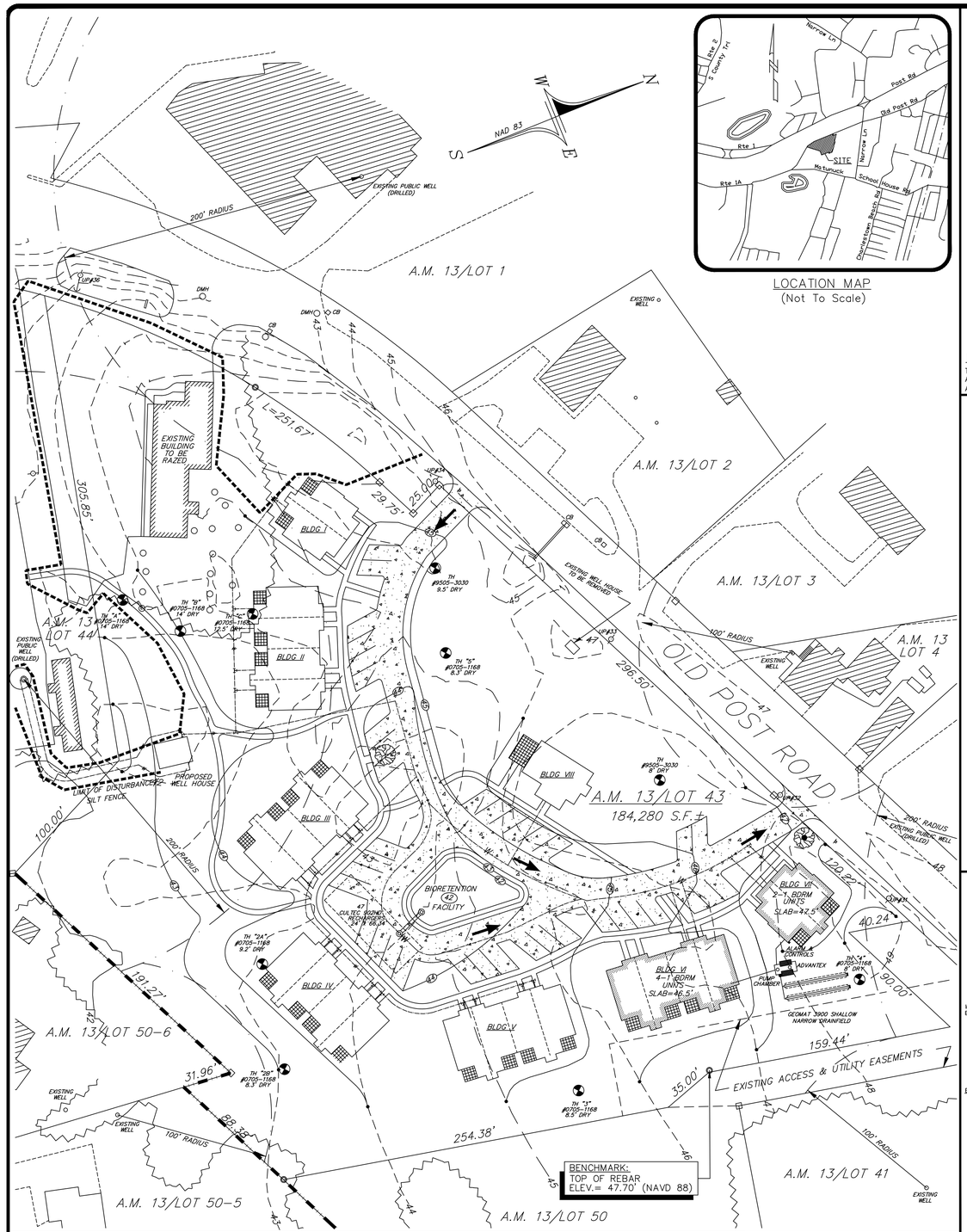
APPLICANT:
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.
400 TOWER HILL ROAD
NORTH KINGSTOWN, RI 02852

NO.	REVISION	DATE
1.	FINAL GRADING	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
STATE OF RHODE ISLAND
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364–1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859–OWTC	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: SEPT. 21, 2015
SHEET: 3	C10
3 OF 5 SHEETS	10 OF 15 SHEETS



LOCATION MAP
(Not To Scale)

GRAPHIC SCALE
0 20' 40' 80' 120'

ZONING CLASSIFICATION = TVD
SETBACKS: FRONT–20' SIDE–20' REAR–30'

PLAN VIEW OF SYSTEM
SCALE: 1" = 40'

LEGEND:

- (40) PROP. CONTOUR
- (40.5) PROP. FIN. GRADE
- 40 EXIST. CONTOUR
- 40x8 EXIST. SPOT GRADE
- VERIFIED TEST HOLE
- PERCOLATION TEST
- PROPERTY LINE
- –W– WATER SERVICE
- STORM DRAIN

PERCOLATION TEST DATA

PERC. NO.	DATE	DEPTH	ELEV.	RATE
N/A				

DESIGN APPLICATION RATE: 2.7 GAL/SF/DAY

DESIGN SOIL CATEGORY: 5

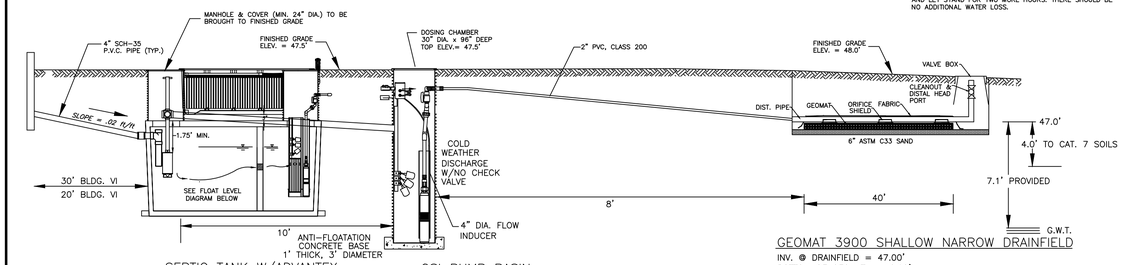
SOIL TEST DATA

DEEP TEST PIT NO. 4 9/8/15	DEEP TEST PIT NO.
SURFACE ELEVATION = 47.9'	SURFACE ELEVATION =
DEPTH/SOIL SOIL DESCRIPTION	DEPTH/SOIL SOIL DESCRIPTION
SEE ATTACHED SOIL EVALUATION	
GROUND WATER DESIGN DEPTH = 8.0'	GROUND WATER DESIGN DEPTH =
ELEVATION = 39.9' VERIFIED WT=0705-1168	ELEVATION = VERIFIED WT=

TOP OF SLAB BLDG. VI = 46.5'
INV. OF PIPE AT FND. BLDG. VI = 42.85'
TOP OF SLAB BLDG. VII = 47.5'
INV. OF PIPE AT FND. BLDG VII = 42.65'

PROFILE OF SYSTEM
(NOT TO SCALE)

NOTE: ALL TANKS INCLUDING RISERS SHALL BE WATER TIGHT AND SHALL BE TESTED ON SITE AS FOLLOWS: FIRST, SEAL THE TANK INLET AND OUTLET. NEXT, FILL THE TANK WITH TAP WATER TO 2 TO 4 INCHES ABOVE THE JOINT BETWEEN THE RISER AND TANK AND LET STAND FOR 24 HOURS. IF THERE IS A WATER LOSS, REFILL MARK THE WATER LEVEL AND LET STAND FOR TWO MORE HOURS. THERE SHOULD BE NO ADDITIONAL WATER LOSS.



ANTI-FLOATATION CONCRETE BASE 1' THICK, 3' DIAMETER

SEPTIC TANK W/ADVANTEX TREATMENT SYSTEM

CAPACITY = 3,000 GALLONS
INV. @ SEPTIC TANK INLET = 42.25'
INV. ABOVE RSV CAGE = 43.50'
ROTONDO ST 6X14-3
OR APPROVED EQUAL

OSI PUMP BASIN

INV. IN /FORCE MAIN OUT= 43.30'
TIMER CONTROLLED
HIGH ALARM= 43.25'
PUMP ON= 42.74'
PUMP OFF= 41.60'
LOW WATER ALARM= 41.33'
BOTTOM OF CHAMBER= 39.50'

USE MODEL PF5005-2 STAGE PACKAGE E, OR APPRVD. EQUAL

GEOMAT 3900 SHALLOW NARROW DRAINFIELD

INV. @ DRAINFIELD = 47.00'
BOTTOM OF GEOMAT = 46.92'
BOTTOM OF SAND ELEVATION = 46.42'
NOTE: FINISHED GRADE OVER LEACHING AREA, SEE PLAN

DESIGN DATA

PROP. NUMBER OF BEDROOMS = 6 x 115 GAL/BDRM/DAY = 690 GPD

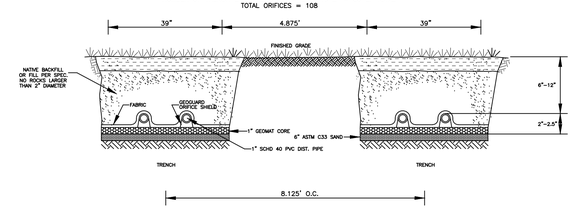
(690 GAL/DAY ÷ 2.7 GAL./S.F./DAY = 255.6 S.F. REQUIRED
255.6 S.F. ÷ 3.25 S.F/L.F. = 78.63 L.F. REQUIRED
2 TRENCHES @ 40 LF/TRENCH = 80 L.F./260 S.F. PROVIDED (3.25 SF/LF)

NOTE:

THE ADVANTEX SYSTEM TANK AND THE PUMP BASIN/SAND FILTER PRODUCTS ARE AVAILABLE FROM GREEN WASTEWATER SOLUTIONS @ 401-737-7600 AND/OR ATLANTIC SOLUTIONS @ 401-293-0176.

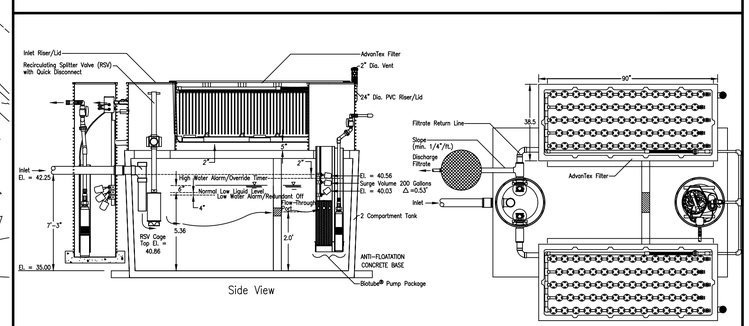
GEOMAT 3900 SHALLOW NARROW DRAINFIELD

CROSS SECTION
(NOT TO SCALE)
NUMBER OF TRENCH LINES REQUIRED = 2 @ 40 LF = 80 LF TOTAL
TOTAL ORIFICES = 108



DOSING NOTE:

THE DOSING WILL BE CONTROLLED EXCLUSIVELY BY THE PROGRAMMABLE TIMER AS LONG AS THE WATER LEVEL IS BETWEEN THE TIMER OVERRIDE FLOATS. IF THE SEPTIC TANK RECEIVES A MUCH LARGER THAN NORMAL QUANTITY OF WASTEWATER IN A SHORT TIME, A TIMER-OVERRIDE FLOAT ACTIVATES THE PUMP AND ALSO SOUNDS AN ALARM TO ALERT THE USER OF THE UNUSUAL VOLUME. PUSHING THE ILLUMINATED BUTTON ON THE FRONT OF THE PANEL SILENCES THE ALARM, WHICH RESETS AUTOMATICALLY WHEN THE LIQUID LEVEL IN THE TANK RETURNS TO A NORMAL LEVEL. AN ALARM THAT OCCURS WHEN OCCUPANTS ARE NOT USING MORE WATER THAN USUAL IS AN INDICATION THAT MAINTENANCE MAY BE REQUIRED FOR A FAULTY TOILET FLUSH VALVE, A LEAKING SEPTIC TANK, OR A PROBLEM WITH THE PUMPING OR ELECTRICAL SYSTEM. THE PUMP SYSTEM SHALL DOSE 27 GALLONS PER DOSE PER ZONE TO THE SHALLOW NARROW DRAINFIELD (25 TIMES PER DAY/1 ZONE).



AdvanTex Treatment System
AX 20 Series - Mode 3b

DETERMINING RSV AND FLOAT LEVELS:
RSV LEVEL: FOR STINGER PIPE LENGTHS UP TO 24" LONG, THE LOW LIQUID LEVEL WILL BE APPROXIMATELY 5"–6" BELOW THE TOP OF THE RSV CAGE. (THE LOW LIQUID LEVEL IS THE LEVEL AT WHICH 100% OF THE FILTRATE RETURNS TO THE TANK.) FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS (APPROX. 50% TO 100% OF ACTUAL FLOW). THE SURGE VOLUME IS THE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. FOR MODE 3 INSTALLATIONS, THE DUCKBILL MODEL RSV IS REQUIRED, WHICH HAS A FLEXIBLE PVC TUBE THAT VENTS THE RSV CAGE TO ATMOSPHERE.
FLOAT LEVELS: TYPICALLY THE BOTTOM FLOAT SHOULD BE POSITIONED AS CLOSE TO THE TOP OF THE BIOTUBE CARTRIDGE AS POSSIBLE. THE TOP FLOAT IS NORMALLY SET ONE TO TWO INCHES BELOW THE INVERT OF THE TANK INLET. FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS. THE SURGE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. BE SURE TO CHECK THE PLANS FOR ANY SITE-SPECIFIC OR TANK-SPECIFIC FLOAT SETTINGS.

LICENSED DESIGNER SYSTEM REQUIREMENTS

NOTICE TO OWNER & INSTALLER – THE EXACT LOCATION OF THE PROPOSED LEACHING SYSTEM SHALL BE FIELD STAKED BY THE LICENSED DESIGNER AS PART OF HIS CONSTRUCTION OBSERVATION CONTRACT WITH THE OWNER. A 72 HOUR NOTICE IS HEREBY REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION. A PRE-CONSTRUCTION MEETING BETWEEN THE LICENSED DESIGNER & LICENSED INSTALLER AT THE SITE IS REQUIRED FOLLOWING THE FIELD STAKING OF THE LEACHING SYSTEM. THE LICENSED INSTALLER SELECTED FOR THIS PROJECT MUST INSTALLED A MINIMUM OF 3 SAND FILTERS/PSND'S.

A. THE LICENSED DESIGNER SHALL BE RESPONSIBLE FOR WITNESSING AND INSPECTING THE INSTALLATION OF ANY OWTS WHICH HE/SHE DESIGNED. IN NO CASE SHALL THE PERSON WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS BE THE LICENSED INSTALLER WHO INSTALLS THE SYSTEM, EXCEPT FOR THE REPAIR OF AN EXISTING OWTS. ANY PERSON ASSISTING A LICENSED DESIGNER IN WITNESSING AND OBSERVING THE INSTALLATION OF AN OWTS MUST BE AN EMPLOYEE OF THE SAME BUSINESS ENTITY AS THE LICENSED DESIGNER, AND SUCH PERSON MUST WORK UNDER THE LICENSED DESIGNER'S DIRECT SUPERVISION IN RESPECT TO WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS.

B. PRIOR TO INSTALLATION OF AN OWTS IN AREAS SERVED BY PRIVATE WELLS, THE DESIGNER MUST VERIFY THAT CONDITIONS ON SITE AND ADJACENT TO THE SITE ARE THE SAME AS AT THE TIME OF DESIGN APPROVAL, OR HAVE NOT CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN. IF CONDITIONS HAVE CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN, THE DESIGNER SHALL NOTIFY THE DEPARTMENT PRIOR TO INSTALLATION

C. THE INSTALLER SHALL NOTIFY THE DESIGNER DURING NORMAL BUSINESS HOURS AT LEAST 72 HOURS PRIOR TO THE PLANNED INSTALLATION OF ANY OWTS. THE DEPARTMENT, AT ITS DISCRETION, MAY INSPECT ANY ASPECT OF THE INSTALLATION OF THE SYSTEM.

D. THE DESIGNER MUST AT A MINIMUM, INSPECT AND MAKE MEASUREMENTS, WHERE APPROPRIATE, OF THE FOLLOWING COMPONENTS AND STEPS IN THE INSTALLATION OF THE OWTS;
(1) THE EXPOSED BOTTOM OF THE EXCAVATION FOR THE LEACH FIELD;
(2) THE SIZE AND CONDITION OF ALL STRUCTURES SUCH AS THE SEPTIC TANK, D-BOX, GALLEYS, FLOW DIFFUSERS, ETC.;
(3) THE ELEVATIONS OF ALL PIPE INVERTS;
(4) ALL SAND MEDIA AND AGGREGATE IS IN ACCORDANCE WITH SPECIFICATIONS AND IS PLACED IN ACCORDANCE WITH THE DESIGN PLAN;
(5) COMPLETED INSTALLATION PRIOR TO COVERING;
(6) THE TYPE OF BACKFILL AND THAT THE BACKFILL IS PROPERLY PLACED AND COMPACTED.
(7) FINAL SOIL COVER INCLUDING 10 FT PERIMETER; AND
(8) ALL HORIZONTAL SET-BACKS, INCLUDING FROM THE BUILDING AND ANY WELLS ON-SITE OR ON ABUTTING LOTS.

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15. PROPERTY LINES: UNLESS OTHERWISE INDICATED THE PROPERTY LINES SHOWN HEREON ARE APPROXIMATE ONLY. THEY HAVE BEEN DEVELOPED FROM TAX MAPS, PLATS, DEEDS AND OTHER SOURCES OF INFORMATION. THESE REPRESENTATIONS ARE NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND ARE SUBJECT TO CHANGES THAT AN ACCURATE SURVEY MAY DISCLOSE.
16. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS, EXCEPT AS SHOWN.
17. THERE ARE NO COASTAL PONDS OR TRIBUTARIES THERETO INCLUDING STORM AND SUBSURFACE DRAINS DIRECTLY DISCHARGING THERETO WITHIN 200' OF PROPOSED OWTS, EXCEPT AS SHOWN.
18. SUBJECT PARCEL IS SITUATED IN THE COASTAL POND CRITICAL RESOURCE AREA.
19. REPLUMB EXISTING STRUCTURE AS NECESSARY TO MATCH THE INVERTS OF THE PROPOSED OWTS.
20. ANY FILL ENCOUNTERED IN THE AREA OF THE PROPOSED LEACHING SHALL BE REMOVED AND REPLACED WITH BANK RUN GRAVEL MEETING RULE 32.12.

PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM
FOR 6 BEDROOM AFFORDABLE HOUSING UNITS-SYSTEM "D"
@ A.M. 13 / LOT 43
SITUATED IN THE TOWN OF CHARLESTOWN, R.I.

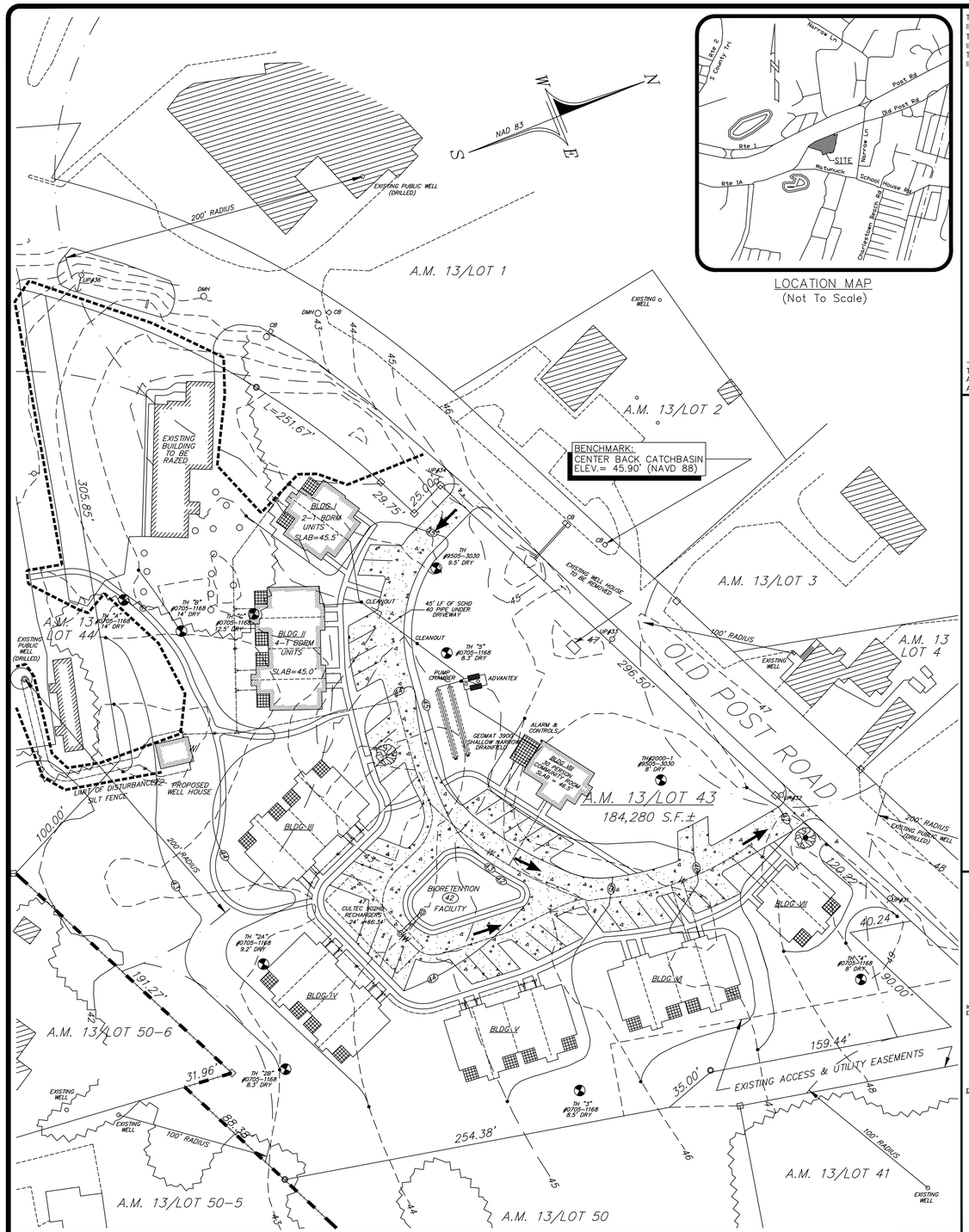
APPLICANT:
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.
400 TOWER HILL ROAD
NORTH KINGSTOWN, RI 02852

NO.	REVISION	DATE
1.	FINAL GRADING	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-OWTD	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: OCT. 15, 2015
SHEET: 4	C11
4 OF 5 SHEETS	11 OF 15 SHEETS

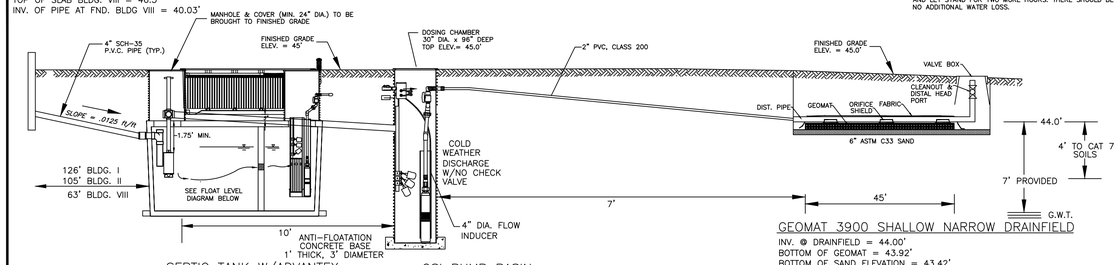


LOCATION MAP
(Not To Scale)

PROFILE OF SYSTEM

(NOT TO SCALE)

TOP OF SLAB BLDG. I = 45.5'
INV. OF PIPE AT FND. BLDG. I = 40.82'
TOP OF SLAB BLDG. II = 45.0'
INV. OF PIPE AT FND. BLDG II = 40.56'
TOP OF SLAB BLDG. VIII = 46.5'
INV. OF PIPE AT FND. BLDG VIII = 40.03'



NOTE: ALL TANKS INCLUDING RISERS SHALL BE WATER TIGHT AND SHALL BE TESTED ON SITE AS FOLLOWS: FIRST, SEAL THE TANK INLET AND OUTLET. NEXT, FILL THE TANK WITH TAP WATER TO 2 TO 4 INCHES ABOVE THE JOINT BETWEEN THE RISER AND TANK AND LET STAND FOR 24 HOURS. IF THERE IS A WATER LOSS, REFILL, MARK THE WATER LEVEL AND LET STAND FOR TWO MORE HOURS. THERE SHOULD BE NO ADDITIONAL WATER LOSS.

SEPTIC TANK W/ADVANTEX TREATMENT SYSTEM

CAPACITY = 3,500 GALLONS
INV. @ SEPTIC TANK INLET = 39.25'
INV. ABOVE RSV CAGE = 40.50'
ROTONDO ST 6X14-35
OR APPROVED EQUAL

OSI PUMP BASIN

INV. IN /FORCE MAIN OUT= 40.30'
TIMER CONTROLLED
HIGH ALARM= 40.00'
PUMP ON= 39.84'
PUMP OFF= 39.00'
LOW WATER ALARM= 38.83'
BOTTOM OF CHAMBER= 37.00'

USE MODEL PF5005-2 STAGE PACKAGE E, OR APPRVD. EQUAL

GEOMAT 3900 SHALLOW NARROW DRAINFIELD

INV. @ DRAINFIELD = 44.00'
BOTTOM OF GEOMAT = 43.92'
BOTTOM OF SAND ELEVATION = 43.42'
NOTE: FINISHED GRADE OVER LEACHING AREA, SEE PLAN

DESIGN DATA

PROP. NUMBER OF BEDROOMS = 6 x 115 GAL/BDRM/DAY = 690 GPD
30 PERSON COMMUNITY ROOM = 30 x 3 GAL/PERSON/DAY = 90 GPD
(AUDITORIUM PER SEAT)
TOTAL = 780 GPD

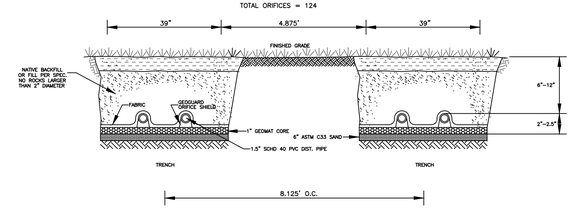
(780 GAL/DAY ÷ 2.7 GAL./S.F./DAY = 288.9 S.F. REQUIRED
288.9 S.F. ÷ 3.25 S.F/L.F. = 88.9 L.F. REQUIRED
2 TRENCHES @ 45 LF/TRENCH = 90 L.F./292.5 S.F. PROVIDED (3.25 SF/LF)

NOTE:

THE ADVANTEX SYSTEM TANK AND THE PUMP BASIN/SAND FILTER PRODUCTS ARE AVAILABLE FROM GREEN WASTEWATER SOLUTIONS @ 401-737-7600 AND/OR ATLANTIC SOLUTIONS @ 401-293-0176.

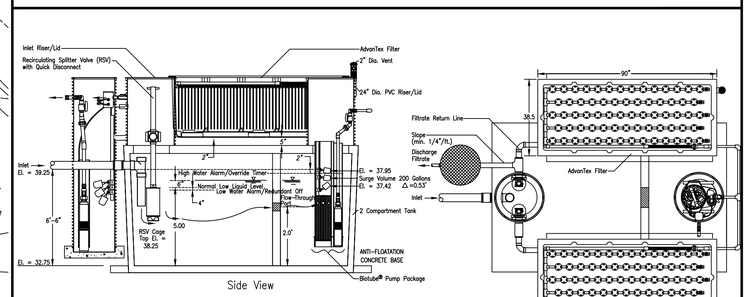
GEOMAT 3900 SHALLOW NARROW DRAINFIELD

CROSS SECTION
(NOT TO SCALE)
NUMBER OF TRENCH LINES REQUIRED = 2 @ 45 LF = 90 LF TOTAL
TOTAL ORIFICES = 124



DOSING NOTE:

THE DOSING WILL BE CONTROLLED EXCLUSIVELY BY THE PROGRAMMABLE TIMER AS LONG AS THE WATER LEVEL IS BETWEEN THE TIMER OVERRIDE FLOATS. IF THE SEPTIC TANK RECEIVES A MUCH LARGER THAN NORMAL QUANTITY OF WASTEWATER IN A SHORT TIME, A TIMER-OVERRIDE FLOAT ACTIVATES THE PUMP AND ALSO SOUNDS AN ALARM TO ALERT THE USER OF THE UNUSUAL VOLUME. PUSHING THE ILLUMINATED BUTTON ON THE FRONT OF THE PANEL SILENCES THE ALARM, WHICH RESETS AUTOMATICALLY WHEN THE LIQUID LEVEL IN THE TANK RETURNS TO A NORMAL LEVEL. AN ALARM THAT OCCURS WHEN OCCUPANTS ARE NOT USING MORE WATER THAN USUAL IS AN INDICATION THAT MAINTENANCE MAY BE REQUIRED FOR A FAULTY TOILET FLUSH VALVE, A LEAKING SEPTIC TANK, OR A PROBLEM WITH THE PUMPING OR ELECTRICAL SYSTEM. THE PUMP SYSTEM SHALL DOSE 31 GALLONS PER DOSE PER ZONE TO THE SHALLOW NARROW DRAINFIELD (25 TIMES PER DAY/1 ZONE).



AdvanTex Treatment System

AX 20 Series - Mode 3b

DETERMINING RSV AND FLOAT LEVELS:

RSV LEVEL: FOR STINGER PIPE LENGTHS UP TO 24" LONG, THE LOW LIQUID LEVEL WILL BE APPROXIMATELY 5"-6" BELOW THE TOP OF THE RSV CAGE. (THE LOW LIQUID LEVEL IS THE LEVEL AT WHICH 100% OF THE FILTRATE RETURNS TO THE TANK.) FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS (APPROX. 50% TO 100% OF ACTUAL FLOW). THE SURGE VOLUME IS THE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. FOR MODE 3 INSTALLATIONS, THE DUCKBILL MODEL RSV IS REQUIRED, WHICH HAS A FLEXIBLE PVC TUBE THAT VENTS THE RSV CAGE TO ATMOSPHERE.

FLOAT LEVELS: TYPICALLY THE BOTTOM FLOAT SHOULD BE POSITIONED AS CLOSE TO THE TOP OF THE BIOTUBE CARTRIDGE AS POSSIBLE. THE TOP FLOAT IS VERY IMPORTANT TO SET ONE TWO INCHES BELOW THE INVERT OF THE TANK INLET. FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS. THE SURGE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. BE SURE TO CHECK THE PLANS FOR ANY SITE-SPECIFIC OR TANK-SPECIFIC FLOAT SETTINGS.

LICENSED DESIGNER SYSTEM REQUIREMENTS

NOTICE TO OWNER & INSTALLER – THE EXACT LOCATION OF THE PROPOSED LEACHING SYSTEM SHALL BE FIELD STAKED BY THE LICENSED DESIGNER AS PART OF HIS CONSTRUCTION OBSERVATION CONTRACT WITH THE OWNER. A 72 HOUR NOTICE IS HEREBY REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION. A PRE-CONSTRUCTION MEETING BETWEEN THE LICENSED DESIGNER & LICENSED INSTALLER AT THE SITE IS REQUIRED FOLLOWING THE FIELD STAKING OF THE LEACHING SYSTEM. THE LICENSED INSTALLER SELECTED FOR THIS PROJECT MUST INSTALLED A MINIMUM OF 3 SAND FILTERS/PSND'S.

A. THE LICENSED DESIGNER SHALL BE RESPONSIBLE FOR WITNESSING AND INSPECTING THE INSTALLATION OF ANY OWTS WHICH HE/SHE DESIGNED. IN NO CASE SHALL THE PERSON WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS BE THE LICENSED INSTALLER WHO INSTALLS THE SYSTEM, EXCEPT FOR THE REPAIR OF AN EXISTING OWTS. ANY PERSON ASSISTING A LICENSED DESIGNER IN WITNESSING AND OBSERVING THE INSTALLATION OF AN OWTS MUST BE AN EMPLOYEE OF THE SAME BUSINESS ENTITY AS THE LICENSED DESIGNER, AND SUCH PERSON MUST WORK UNDER THE LICENSED DESIGNER'S DIRECT SUPERVISION IN RESPECT TO WITNESSING AND INSPECTING THE INSTALLATION OF THE OWTS.

B. PRIOR TO INSTALLATION OF AN OWTS IN AREAS SERVED BY PRIVATE WELLS, THE DESIGNER MUST VERIFY THAT CONDITIONS ON SITE AND ADJACENT TO THE SITE ARE THE SAME AS AT THE TIME OF DESIGN APPROVAL, OR HAVE NOT CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN. IF CONDITIONS HAVE CHANGED IN A MANNER THAT WOULD AFFECT THE ORIGINAL DESIGN, THE DESIGNER SHALL NOTIFY THE DEPARTMENT PRIOR TO INSTALLATION

C. THE INSTALLER SHALL NOTIFY THE DESIGNER DURING NORMAL BUSINESS HOURS AT LEAST 72 HOURS PRIOR TO THE PLANNED INSTALLATION OF ANY OWTS. THE DEPARTMENT, AT ITS DISCRETION, MAY INSPECT ANY ASPECT OF THE INSTALLATION OF THE SYSTEM.

D. THE DESIGNER MUST AT A MINIMUM, INSPECT AND MAKE MEASUREMENTS, WHERE APPROPRIATE, OF THE FOLLOWING COMPONENTS AND STEPS IN THE INSTALLATION OF THE OWTS;
(1) THE EXPOSED BOTTOM OF THE EXCAVATION FOR THE LEACH FIELD;
(2) THE SIZE AND CONDITION OF ALL STRUCTURES SUCH AS THE SEPTIC TANK, D-BOX, GALLEYS, FLOW DIFFUSERS, ETC.;
(3) THE ELEVATIONS OF ALL PIPE INVERTS;
(4) ALL SAND MEDIA AND AGGREGATE IS IN ACCORDANCE WITH SPECIFICATIONS AND IS PLACED IN ACCORDANCE WITH THE DESIGN PLAN;
(5) COMPLETED INSTALLATION PRIOR TO COVERING;
(6) THE TYPE OF BACKFILL AND THAT THE BACKFILL IS PROPERLY PLACED AND COMPACTED.
(7) FINAL SOIL COVER INCLUDING 10 FT PERIMETER; AND
(8) ALL HORIZONTAL SET-BACKS, INCLUDING FROM THE BUILDING AND ANY WELLS ON-SITE OR ON ABUTTING LOTS.

E. IF CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION WHICH INDICATE THAT THE SYSTEM CANNOT BE INSTALLED OR IS NOT INSTALLED IN ACCORDANCE WITH THE PERMIT, OR ANY TERMS AND CONDITIONS CONTAINED THEREIN, THE DESIGNER SHALL NOTIFY THE DIRECTOR AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER DISCOVERY. THE DEPARTMENT SHALL ISSUE WRITTEN GUIDANCE ON SPECIFICATIONS FOR CONSTRUCTION TOLERANCES AS WELL AS CONDITIONS UNDER WHICH AS-BUILT PLANS AND REDESIGNED PLANS ARE REQUIRED. THE INSTALLER SHALL STOP CONSTRUCTION IF CONDITIONS ARE SUCH THAT A REDESIGN IS REQUIRED. NOTIFICATION IS NOT REQUIRED IF ALL DESIGN ELEMENTS ARE WITHIN THE TOLERANCES ESTABLISHED BY THE DEPARTMENT THROUGH WRITTEN GUIDANCE. IN RESPONSE TO THE DESIGNER'S NOTIFICATION, THE DIRECTOR SHALL EITHER:
(1) AUTHORIZE THE INSTALLER TO PROCEED WITH THE WORK ON-SITE AND REQUIRE THE DESIGNER TO PROVIDE APPROPRIATE DOCUMENTATION TO THE DEPARTMENT AS MAY BE REQUIRED BY THE DIRECTOR;
(2) REQUIRE THE DESIGNER TO SUBMIT AS-BUILT PLANS WITHIN 10 BUSINESS DAYS AFTER THE OWTS IS INSTALLED TO RECORD CHANGES THAT ARE IN COMPLIANCE WITH THE STANDARDS IN THESE REGULATIONS, BUT WHICH NEED TO BE DOCUMENTED; OR
(3) REQUIRE THE DESIGNER TO SUBMIT REDESIGNED PLANS AND SPECIFICATIONS TO THE DIRECTOR FOR APPROVAL SHOWING CHANGES FROM THE ORIGINAL APPROVED APPLICATION, PLAN AND SPECIFICATIONS.

F. THE INSTALLER SHALL PROVIDE THE LICENSED DESIGNER THE INFORMATION BELOW THAT CAN BE USED TO VERIFY THAT THE INSTALLATION OF THE OWTS WAS PERFORMED AS SPECIFIED:
(1) DAILY INSPECTION REPORT (WEATHER CONDITIONS, PERSONS ON-SITE, WORK ACCOMPLISHED AND OTHER INFORMATION CUSTOMARILY INCLUDED IN INSPECTION REPORTS);
(2) A MINIMUM OF TWO PHOTOGRAPHS OF THE SYSTEM BEING INSTALLED;
(3) LIST OF ALL MATERIALS USED, THEIR SOURCE, AND THE DATES DELIVERED TO THE SITE; AND
(4) PRODUCT SPECIFICATION SHEETS, IF DIFFERENT FROM THOSE SPECIFIED IN THE APPROVED DESIGN.

G. CERTIFICATE OF CONSTRUCTION
(1) THE DESIGNER THAT IS RESPONSIBLE FOR THE SYSTEM INSTALLATION IN ACCORDANCE WITH RULE 44 SHALL COMPLETE A CERTIFICATE OF CONSTRUCTION THAT CERTIFIES THAT THE OWTS WAS INSTALLED IN CONFORMANCE WITH THE APPROVED APPLICATION, PLANS, SPECIFICATIONS, APPLICABLE STATUTES AND REGULATIONS AND THAT HE OR SHE IS RESPONSIBLE FOR HAVING OBSERVED THE INSTALLATION. THE CERTIFICATE OF CONSTRUCTION SHALL BE ON FORMS PROVIDED BY THE DIRECTOR.
(2) THE CERTIFICATE OF CONSTRUCTION SHALL BE SUBMITTED TO THE DIRECTOR WITHIN FIVE BUSINESS DAYS AFTER THE OWTS, BUILDING FOUNDATION, DRINKING WATER WELL, AND OTHER APPURTENANCES, AS MAY BE SPECIFIED IN WRITTEN DEPARTMENT GUIDANCE HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN PLAN. THE DESIGNER SHALL PROVIDE A COPY OF THE CERTIFICATE OF CONSTRUCTION TO THE PROPERTY OWNER.
(3) IN ADDITION TO THE CERTIFICATION IN RULE 44 ABOVE, THE CERTIFICATE OF CONSTRUCTION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
(A) NAME AND LICENSE NUMBER OF THE DESIGNER;
(B) NAME AND LICENSE NUMBER OF THE INSTALLER;
(C) DISTANCES FROM TWO BUILDING FOUNDATION CORNERS TO THE SEPTIC TANK MANHOLE, TO THE DISTRIBUTION BOX, AND TO THE LEACH FIELD CORNERS.

H. ONCE THE DESIGNER HAS CERTIFIED THAT THE OWTS HAS BEEN PROPERLY INSTALLED, THE DESIGNER SHALL PROVIDE INFORMATION AND RECOMMENDATIONS TO THE OWNER OF THE OWTS ON SYSTEM SPECIFIC OPERATION AND MAINTENANCE PRACTICES TO PREVENT AGAINST PREMATURE SYSTEM FAILURE AND POLLUTION OF THE WATERS OF THE STATE.

I. THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OR OMISSION OF A USER OF AN OWTS, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE OWTS.

GRAPHIC SCALE
0 20' 40' 80' 120'

ZONING CLASSIFICATION = TVD
SETBACKS: FRONT-20' SIDE-20' REAR-30'

PLAN VIEW OF SYSTEM

SCALE: 1" = 40'

LEGEND:

- (40) PROP. CONTOUR
- (40.5) PROP. FIN. GRADE
- 40 EXIST. CONTOUR
- 40x8 EXIST. SPOT GRADE
- VERIFIED TEST HOLE
- PERCOLATION TEST
- PROPERTY LINE
- -W- WATER SERVICE
- STORM DRAIN

PERCOLATION TEST DATA

PERC. NO.	DATE	DEPTH	ELEV.	RATE
N/A				

DESIGN APPLICATION RATE: 2.7 GAL/SF/DAY

DESIGN SOIL CATEGORY: 5

SOIL TEST DATA

DEEP TEST PIT NO. 5 9/8/15	DEEP TEST PIT NO.
SURFACE ELEVATION = 45.3'	SURFACE ELEVATION =
DEPTH/SOIL SOIL DESCRIPTION	DEPTH/SOIL SOIL DESCRIPTION
SEE ATTACHED SOIL EVALUATION	
GROUND WATER DESIGN DEPTH = 8.3'	GROUND WATER DESIGN DEPTH =
ELEVATION = 37.0' VERIFIED WT=0705-1168	ELEVATION = VERIFIED WT=

GENERAL NOTES

(ONLY CIRCLED NOTES APPLY)

1. ALL OTHER DESIGN, CONSTRUCTION AND MAINTENANCE REQUIREMENTS WHETHER NOTED HEREON, OR NOT, SHALL BE IN CONFORMANCE WITH RULES & REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER DISPOSAL SYSTEMS, JANUARY 1, 2008 BY R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, AUTHORITY: CHAPTER 42-35 PURSUANT TO CHAPTERS 42-17.1, 23-19.5 & 5-56.1 OF THE RHODE ISLAND GENERAL LAWS OF 1956, AS AMENDED, AND THE R.I.DEM SANDFILTER GUIDANCE DOCUMENT (SFDS) DATED APRIL 2000 AND ANY AMENDMENTS THERETO.
2. MAINTAIN PERIMETER ELEVATION 44.0' FOR 5' AROUND SYSTEM.
3. THE DISTRIBUTION BOX SHALL HAVE A BOTTOM AREA OF 3 S.F. AND BE H-20 LOAD.
4. ALL TREES, BRUSH AND STUMPS WITHIN 10 FEET OF LEACH FIELD TO BE REMOVED.
5. THERE SHALL BE NO SUBSURFACE FOUNDATION OR STORM DRAINS WITHIN 25 FEET OF OWTS.
6. COMPLY WITH ANY ADDITIONAL TERMS OF APPROVAL AS MAY BE REQUIRED BY R.I.D.E.M.
7. SCHEDULE 35-SDR P.V.C. PIPE OR EQUAL FOR ALL OWTS PIPING.
8. THE LEACH FIELD AND EXTENDING 0 FEET INTO THE LEACH FIELD PERIMETER FROM THE SIDE WALLS MUST BE STRIPPED OF TREES, BRUSH, TOPSOIL, SUBSOIL, UNDESIRABLE MATERIAL AND SOIL CONTAINING FINES AND THE EXCAVATION SCARIFIED AND BACKFILLED WITH CLEAN COARSE GRAVEL (RULE 32.12). REMOVE ALL CATEGORY SOILS. STRIP TO ELEV.
9. BENCHMARK TO BE SET WITHIN 100' OF PROPOSED OWTS LOCATION PRIOR TO CONSTRUCTION.
10. THERE ARE NO EXISTING OR PROPOSED WELLS WITHIN 200' OF THE PROPOSED OWTS NOR ARE THERE ANY OTHER OWTS WITHIN 100' OF THE PROPOSED WELL, EXCEPT AS NOTED.
11. ALL PIPING TO CONSIST OF POLYVINYL CHLORIDE PIPE (P.V.C.) SCHEDULE 35-SDR, UNLESS OTHERWISE NOTED.
12. HEAVY MACHINERY SHALL NOT BE PERMITTED TO PASS OVER THE LEACH FIELD.
13. FOR PROPER PERFORMANCE, THE SEPTIC TANK SHOULD BE INSPECTED AT LEAST ONCE A YEAR AND WHEN TOTAL DEPTH OF SCUM AND SOLIDS EXCEED 1/3 THE LIQUID DEPTH OF THE TANK, THE TANK SHOULD BE PUMPED.
14. THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THIS SYSTEM UNLESS CONSTRUCTED AS SHOWN. ANY OTHER ALTERATIONS MUST BE APPROVED BY THE DESIGNER.
15. PROPERTY LINES: UNLESS OTHERWISE INDICATED THE PROPERTY LINES SHOWN HEREON ARE APPROXIMATE ONLY. THEY HAVE BEEN DEVELOPED FROM TAX MAPS, PLATS, DEEDS AND OTHER SOURCES OF INFORMATION. THESE REPRESENTATIONS ARE NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND ARE SUBJECT TO CHANGES THAT AN ACCURATE SURVEY MAY DISCLOSE.
16. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS, EXCEPT AS SHOWN.
17. THERE ARE NO COASTAL PONDS OR TRIBUTARIES THERETO INCLUDING STORM AND SUBSURFACE DRAINS DIRECTLY DISCHARGING THERETO WITHIN 200' OF PROPOSED OWTS, EXCEPT AS SHOWN.
18. SUBJECT PARCEL IS SITUATED IN THE COASTAL POND CRITICAL RESOURCE AREA.
19. REPLUMB EXISTING STRUCTURE AS NECESSARY TO MATCH THE INVERTS OF THE PROPOSED OWTS.
20. ANY FILL ENCOUNTERED IN THE AREA OF THE PROPOSED LEACHING SHALL BE REMOVED AND REPLACED WITH BANK RUN GRAVEL MEETING RULE 32.12.

PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM
FOR 6 BEDROOM AFFORDABLE HOUSING UNITS-SYSTEM "E"
@ A.M. 13 / LOT 43
SITUATED IN THE TOWN OF CHARLESTOWN, R.I.

APPLICANT:
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.
400 TOWER HILL ROAD
NORTH KINGSTOWN, RI 02852

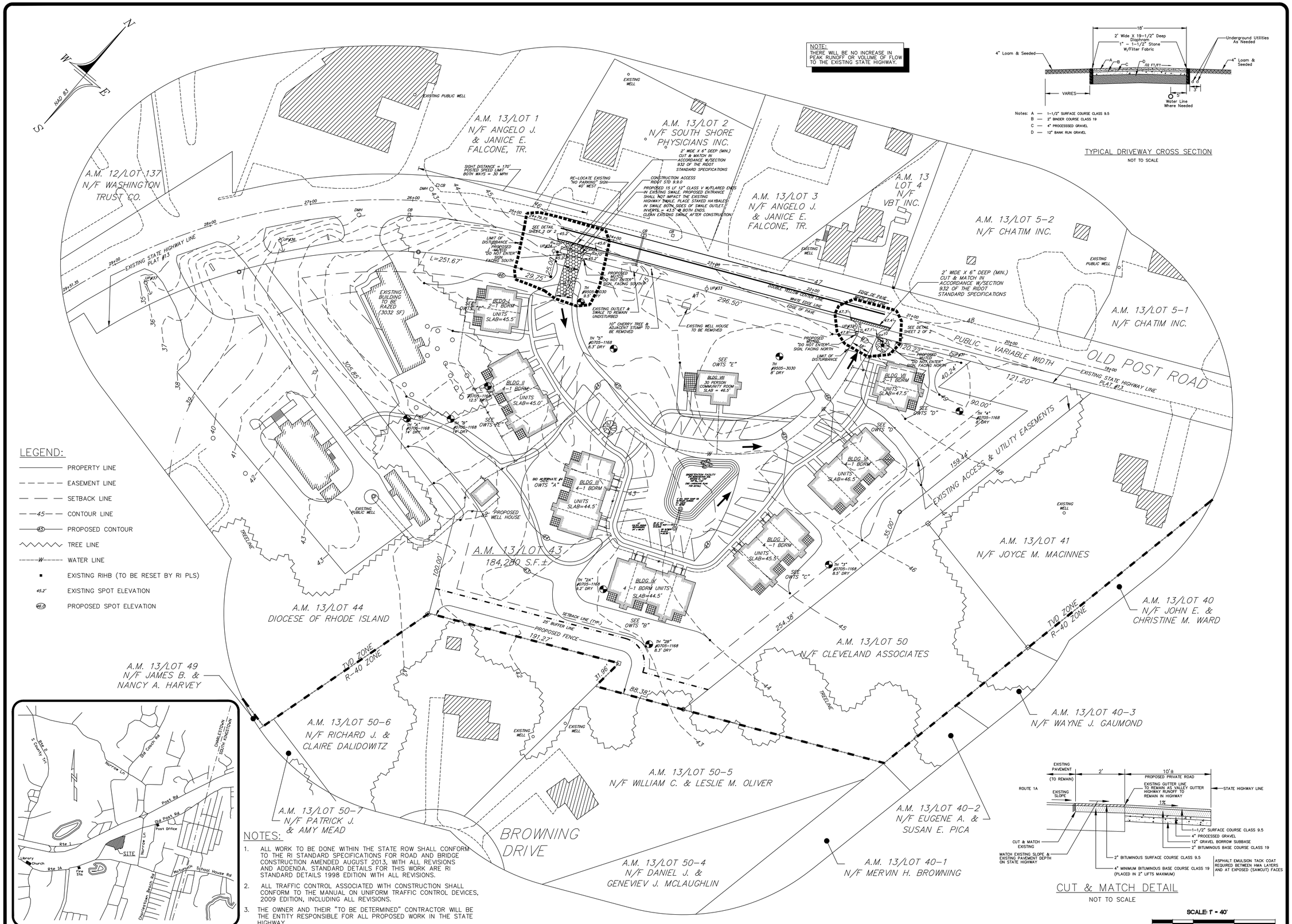
NO.	REVISION	DATE
1.	FINAL GRADING	05/20/16
2.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
STATE OF RHODE ISLAND
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-OWTE.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: OCT. 20, 2015
SHEET: 5	C12
5 OF 5 SHEETS	12 OF 15 SHEETS

NOTE:
THERE WILL BE NO INCREASE IN PEAK RUNOFF OR VOLUME OF FLOW TO THE EXISTING STATE HIGHWAY.



Notes: A — 1-1/2" SURFACE COURSE CLASS 9.5
B — 2" BINDER COURSE CLASS 19
C — 4" PROCESSED GRAVEL
D — 12" BANK RUN GRAVEL

TYPICAL DRIVEWAY CROSS SECTION
NOT TO SCALE

LEGEND:

- PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- 45 CONTOUR LINE
- 45.0 PROPOSED CONTOUR
- TREE LINE
- W WATER LINE
- EXISTING RIHB (TO BE RESET BY RI PLS)
- 45.2' EXISTING SPOT ELEVATION
- 46.0 PROPOSED SPOT ELEVATION

LOCATION MAP
SCALE: 1" = 2000'

NOTES:

1. ALL WORK TO BE DONE WITHIN THE STATE ROW SHALL CONFORM TO THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AMENDED AUGUST 2013, WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RI STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS.
2. ALL TRAFFIC CONTROL ASSOCIATED WITH CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION, INCLUDING ALL REVISIONS.
3. THE OWNER AND THEIR "TO BE DETERMINED" CONTRACTOR WILL BE THE ENTITY RESPONSIBLE FOR ALL PROPOSED WORK IN THE STATE HIGHWAY.
4. PAP PERMITTED UNDER PAP#151030-A. CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF SAID PERMIT.

CUT & MATCH DETAIL
NOT TO SCALE

SCALE: 1" = 40'
0 20' 40' 80' 120'
GRAPHIC SCALE

RIDOT PAP PLAN
"CHURCHWOODS"
ASSESSOR'S MAP 13 LOT 43
PREPARED FOR
WASHINGTON COUNTY
COMMUNITY DEVELOPMENT CORP.
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND

NO.	REVISION	DATE
1.	RIDOT COMMENTS	12/17/15
2.	RIDOT COMMENTS	02/01/16
3.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
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SURVEYORS & LAND PLANNERS
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JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859-PAP1.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: 1"=40'	DATE: OCT. 28, 2015
SHEET: 1	C13
1 OF 2 SHEETS	13 OF 15 SHEETS

CIRCLED NOTES APPLY

EROSION CONTROL & SOIL STABILIZATION PROGRAM

1. DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.

2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION PERIOD.

3. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH R.I. STANDARD SPECIFICATION M. 20.

4. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.

5. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:

PERMANENT SEEDING MIXTURES:

A. –LAWNS:
FOR SUN OR SHADED; MODERATE MANAGEMENT SUGGESTED
(IMPROVED U.R.I. NUMBER 2 LAWN SEED MIXTURE).

	LBS/ACRE	LBS/1000SF
RED FESCUE	40	.90
KENTUCKY BLUEGRASS *	40	.90
PERENNIAL RYEGRASS **	20	.45

* 50% (20 LBS/ACRE) MUST BE NAMED OR IMPROVED VARIETY, SUCH AS AMERICAN KENTUCKY BLUEGRASS.
** MUST BE NAMED OR IMPROVED VARIETY, SUCH AS YORKTOWN II PERENNIAL RYEGRASS.

B. –SOD WATERWAYS, DRAINAGE DITCHES, DETENTION BASINS, ETC.

	LBS/ACRE	LBS/1000SF
CREEPING RED FESCUE	20	.45
TALL FESCUE OR		
REED CANARYGRASS *	20	.45

* USE REED CANARY GRASS WHERE MOWING IS NOT REQUIRED. SUCH AS AMERICAN KENTUCKY BLUEGRASS.
SOURCE: USDA, SOIL CONSERVATION SERVICE

C. –SAND DUNES, BLOWING SAND

	NO./ACRE	NO./1000SF
'CAPE' AMERICAN	58,500	1,345
BEACHGRASS CULMS		

D. –GENERAL PURPOSE LAWN

	LBS/ACRE	LBS/1000SF
RED FESCUE	75	1.75
KENTUCKY BLUEGRASS	15	.35
COLONIAL BENTGRASS	5	.11
PERENNIAL RYEGRASS	5	.11

SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432
KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'PARK' SEED MIXTURE).

E. –GENERAL PURPOSE :
MINIMUM MAINTENANCE; UNMOWED OR INFREQUENTLY MOWED

	LBS/ACRE	LBS/1000SF
RED FESCUE	75	1.75
COLONIAL BENTGRASS, 'EXETER'	5	.11
PERENNIAL RYEGRASS	5	.11
BIRDSFOOT TREFOIL 'EMPIRE'	15	.35

*USE INOCULATED SEED; MAY INCLUDE 20% HARD SEED.
SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432
KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'SLOPE' SEED MIXTURE).

F. –BUFFER ZONES ADJACENT TO WETLANDS OR SURFACE WATERS AND WETLAND AREAS

	LBS/ACRE	LBS/1000SF
REED CANARY GRASS	20	.45
LADINO CLOVER*		

*USE INOCULATED SEED.

SEEDING DATES:
EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED; MID–SUMMER SEEDING IS NOT RECOMMENDED. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. THE RECOMMENDED SEEDING DATES ARE: APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH SEPTEMBER 30. THE FINAL SEEDING DATES MAY BE EXTENDED 15 DAYS IN NEWPORT COUNTY.

6. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.

7. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000–4000 LBS/AC.

8. ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED:

SPECIES	LBS/ACRE	LBS/1,000 SQ. FT.	SEEDING DATES
ANNUAL RYEGRASS	60	1.5	MARCH 1 – JUNE 15 & AUGUST 1 – OCTOBER 1
PERENNIAL RYEGRASS	60	1.5	MARCH 1 – JUNE 15 & AUGUST 1 – OCTOBER 1
SUDAN GRASS	40	1.0	MAY 15 – AUGUST 15
MILLET	40	1.0	MAY 15 – AUGUST 15
WINTER RYE	100	2.5	AUGUST 15 – OCTOBER 1

9. THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.

10. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THRU OCTOBER 15TH.

11. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS SECTION 202.

12. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.

13. STOCKPILES OF TOPSOILS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED.

14. ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

15. REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.

16. ANY DETENTION/RETENTION FACILITIES AND THE DRAINAGE SYSTEM SHALL RECEIVE ONE FINAL CLEANING PRIOR TO ACCEPTANCE OF THE OVERALL PROJECT BY THE OWNER. SEDIMENTS SHALL BE DISPOSED OF IN A PROPER MANNER.

SEDIMENTATION CONTROL PROGRAM

1. RIP–RAP SPLASH PADS SHALL BE INSTALLED AT THE OUTLETS FOR ALL CULVERTS DISCHARGING INTO A WATERWAY.

2. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE WETLANDS.

3. ALL DISTURBED AREAS SUBJECT TO EROSIVE TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SUITABLE SLOPE PROTECTION.

4. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.

5. CARE SHALL BE TAKEN SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING EITHER EXISTING OR PROPOSED DRAINAGE OR SEWER STRUCTURES.

6. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.

7. CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECT TO STORM WATER FLOW.

8. ADDITIONAL HAYBALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.

9. ALL SEDIMENTS SHALL BE REMOVED FROM THE DETENTION BASINS OR STRUCTURES WHEN DIRECTED BY THE ENGINEER OR THE LOCAL CONSERVATION COMMISSION.

10. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE R.I.D.E.M. AND THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, AS A GUIDE. REVISED–2014.

11. THE PERSON IN REPONSIBLE CHARGE IS GERRY BETRAND. TEL: 401–667–7185. (OWNER/APPLICANT)

ORDER OF PROCEDURE

1. IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY ROUGH GRADING, TEMPORARY HAYBALES OR SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF CONSTRUCTION AS PER THE PLANS (I.E. ALONG NEW ROADWAYS, STREAMBANKS, CRITICAL AREAS, ETC.)

2. ALL EROSION AND SEDIMENTATION STRUCTURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.

3. IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.

4. TEMPORARY HAYBALES AND SANDBAGS ALONG AND AT THE END OF ROADWAYS MAY BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.

5. HAYBALES LOCATED AT DRAINAGE OUTLETS MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

6. ONLY THOSE AREAS SHOWN ON THE ATTACHED SITE PLAN, THE LIMITS OF WHICH ARE DESIGNATED BY THE EXTENT OF THE PROPOSED CONTOURS, ARE SUBJECT TO THE EROSION CONTROL MEASURES SPECIFIED ABOVE.

RIP RAP INSTALLATION AND MAINTENANCE REQUIREMENTS

1. THE SUBGRADE FOR THE RIPRAP SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY APPROXIMATING THAT OF THE SURROUNDING UNDISTURBED MATERIAL. BRUSH, TREES, STUMPS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED.

2. PLACEMENT OF RIPRAP SHALL FOLLOW IMMEDIATELY AFTER ESTABLISHING THE SUBGRADE. THE RIPRAP SHALL BE PLACED SO THAT IT PRODUCES A WELL GRADED MASS OF STONE WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF STONES THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY, CONTROLLED DUMPING OF SUCCESSIVE LOADS DURING FINAL PLACING, OR BY A COMBINATION OF THESE METHODS. THE RIPRAP SHALL BE PLACED TO ITS FULL THICKNESS IN ONE OPERATION AND NOT IN LAYERS. THE RIPRAP SHALL NOT BE PLACED BY DUMPING INTO CHUTES OR SIMILAR METHODS WHICH ARE LIKELY TO CAUSE SEGREGATION OF THE VARIOUS STONE SIZES. CARE SHALL BE TAKEN NOT TO DISLODGE THE UNDERLYING MATERIAL WHEN PLACING THE STONES.

3. THE FINISH SLOPE SHALL BE FREE OF POCKETS OF SMALL STONE OR CLUSTERS OF LARGE STONES AND THE FINAL FACE OF THE RIPRAP SURFACE MUST BE SET AT THE SPECIFIED GRADE OF REPOSE. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE REQUIRED GRADES AND A GOOD DISTRIBUTION OF STONE SIZES. THE FINAL THICKNESS OF THE RIPRAP BLANKET SHALL BE WITHIN PLUS OR MINUS 1/4 OF THE SPECIFIED THICKNESS.

4. ONCE THE RIPRAP INSTALLATION HAS BEEN COMPLETED THE FINAL PRODUCT SHALL BE INSPECTED MONTHLY FOR A PERIOD OF SIX (6) MONTHS FOLLOWING PLACEMENT. IF REPAIRS ARE NEEDED THEY SHALL BE ACCOMPLISHED IMMEDIATELY FOLLOWING SAID INSPECTION.

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCING OF ANY WORK.

2. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.

3. BEFORE STARTING ANY CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ANY HYDRANTS, BLOWOFF ASSEMBLIES, WATER MAINS, FITTINGS AND VALVES WITH THE LOCAL WATER DEPARTMENT AS TO TYPE AND MANUFACTURER.

4. ALL WATER MAINS SHALL BE CLASS 52 DUCTILE IRON, DOUBLE CEMENT MORTAR LINED, PUSH ON STYLE JOINTS.

5. FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT CLASS 350 CEMENT MORTAR LINED COMPACT STYLE AMERICAN MANUFACTURED ONLY.

6. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MUNICIPAL ENGINEERING DEPARTMENT AND ALL UTILITY INSTALLATIONS AND INSPECTIONS WITH THE APPROPRIATE UTILITY CO. A 24 HOUR ADVANCE NOTICE IS REQUIRED BEFORE WORK COMMENCEMENT.

7. ALL WORK TO BE DONE WITHIN THE STATE ROW SHALL CONFORM TO THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AMENDED AUGUST 2013 WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RI STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS. AND THE TOWN OF CHARLESTOWN SUBDIVISION REQUIREMENTS.

8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR QUANTITY TAKE OFF IN COMPUTING AND ESTIMATES.

9. EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEED. SEE EROSION CONTROL PROGRAM DETAILS.

10. UNLESS OTHERWISE SPECIFIED, ALL STORM DRAINS SHALL BE REINFORCED CONCRETE CLASS IV PIPE.

11. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE PLANS. THAT IS ANY CONSTRUCTION TO BRING UTILITIES TO THE SITE, ANY REPAIRS, ANY TRENCHING REQUIRED, HYDRANTS, FIRE ALARMS, ANY AND ALL CONSTRUCTION FOR ACCEPTANCE OF ROADS AND EASEMENTS.

12. ALL SEWER MAINS SHALL BE P.V.C. PIPE, SIZES AND SLOPES TO BE SHOWN ON PLANS AND PROFILES.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY, SEDIMENTATION AND SOIL EROSION CONTROL MEASURES.

14. THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES.

15. IN ALL EXCAVATION AND PLACEMENT OF FILL THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.

16. FLARED END SECTIONS ARE TO BE R.I. STANDARD 2.3.0 WITH A R.I. STANDARD 2.12 CLASS C RIP RAP END SECTION (UNLESS OTHERWISE NOTED).

17. CATCH BASINS ARE TO BE R.I. STANDARD 4.4.0 TYPE "R" GRATE.

18. DRAIN MANHOLES ARE TO BE R.I. STANDARD 4.2.0 WITH A R.I. STANDARD 6.2.1 HEAVY DUTY FRAME AND COVER.

19. BRICK AND BLOCK MANHOLES AND CATCH BASINS MAY BE USED IN LIEU OF THE ABOVE MENTIONED STRUCTURES WITH PRIOR APPROVAL OF THE ENGINEER.

20. PIPE BEDDING SHALL CONFORM TO R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 701. CLASS B BEDDING WILL BE USED FOR ALL STORM DRAINS AND CLASS C BEDDING WILL BE USED FOR ALL SANITARY SEWERS UNLESS OTHERWISE SPECIFIED ON THE PLANS.

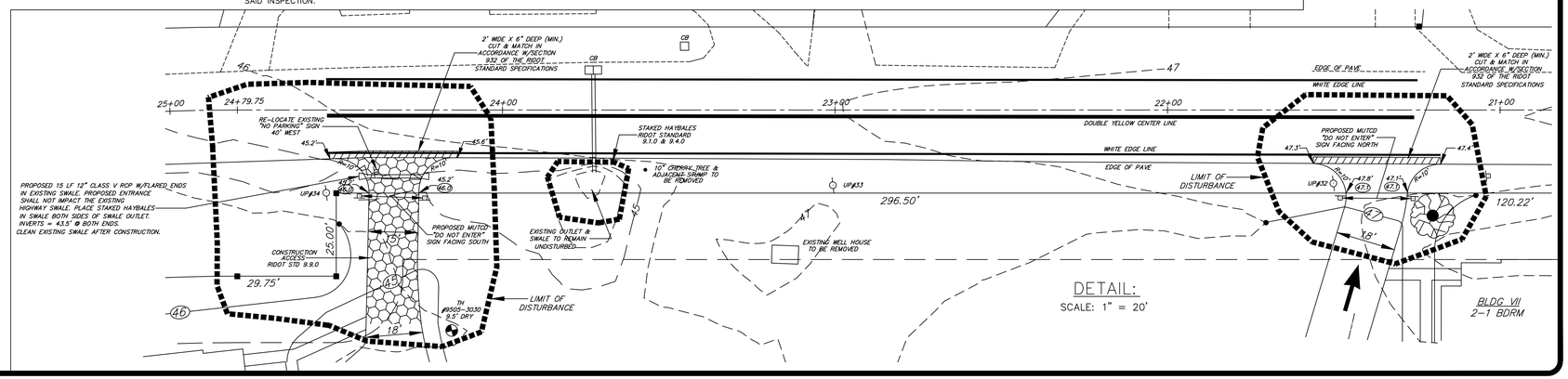
21. ALL WATER MAINS ARE TO BE INSTALLED WITH A MINIMUM RADIUS OF 300 FEET AT ANY LOCATION WHERE THIS IS NOT POSSIBLE, PROPER FITTINGS AND THRUST BLOCKS SHALL BE USED.

22. THE PROPOSED WATER DISTRIBUTION SYSTEM SHALL CONFORM TO THE LOCAL WATER AUTHORITY'S REQUIREMENTS FOR SERVICE AND MAIN INSTALLATION.

23. HEAVY MACHINERY SHALL NOT BE ALLOWED TO PASS OVER THE DRY SWALES.

LEGEND:

- PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- 45 CONTOUR LINE
- 45 PROPOSED CONTOUR
- TREE LINE
- W WATER LINE
- EXISTING RIHB (TO BE RESET RI PLS)
- 45.2' EXISTING SPOT ELEVATION
- 46.0 PROPOSED SPOT ELEVATION



DETAIL:
SCALE: 1" = 20'

EROSION CONTROL SHEET
FOR
"CHURCHWOODS"
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND
PREPARED FOR
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.

NO.	REVISION	DATE
1.	RIDOT COMMENTS	12/17/15
2.	RIDOT COMMENTS	02/01/16
3.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 * 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364–1027

JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859–PAP2	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: AS NOTED	DATE: OCT. 27, 2015
SHEET: 2	C14
2 OF 2 SHEETS	14 OF 15 SHEETS

GENERAL NOTES

1 Project entails construction of new potable water storage and booster pump facility at the Churchwoods facility located in Charlestown, Rhode Island.

2 Mechanical plan includes water supply storage treatment (as required) and booster pump systems only. Refer to building plans by Churchwoods for architectural, plumbing, structural, electrical, and HVAC systems building construction requirements.

3 Existing and proposed water system is classified as a public water supply by the Rhode Island Department of Health – Office of Drinking Water Quality (RIDOH), RI PWS #2980017–01. Contractor shall adhere to all public health regulations and shall be take proper care and precautions when performing the work so as not to contaminate the water system. All material shall be new unless otherwise noted and shall conform to NSF 60 / 61 approval for using portable drinking water applications.

4 The owner has applied to RIDOH for approval to construct the proposed potable water facilities. Contractor shall be required to comply with all conditions of RIDOH approval. Copy of the RIDOH approval for the proposed facility shall be provided to the contractor upon availability.

5 Existing water system (existing well, piping, etc.) servicing the existing church to remain in service until new facilities are complete and approved for operation. Contractor to protect and maintain existing public water system as needed to maintain satisfactory operations until new facilities are activated and connected to the new system.

MECHANICAL NOTES

1 All workmanship to be of best quality and best practice of trade. All materials that come in contact with water, including lubricants, shall be tested and certified for conformance with NSF Standards.

2 Contractor shall furnish all labor, materials, equipment, and incidentals as required to install the pipe, tanks, equipment and appurtenances as shown and as required to provide a complete and functional system.

3 The piping and mechanical equipment layout is schematic and does not show all required fittings and appurtenances for proper horizontal or vertical alignment. All material shall be provided and delivered, connected and finished in every detail and shall be so selected and arranged to fit properly in the building spaces. The contractor shall dry fit all required fittings to obtain proper alignment based on field conditions.

4 All materials and water system components shall be thoroughly cleaned before installation and shall be kept clean until they are used in the work, and when placed shall conform to the lines and grades as required.

5 All materials and equipment shall be new, stored, handled and installed in accordance to the manufacturer's recommendations and requirements. All pipe shall be examined before placement and notice that is found to be defective shall be installed. Any defective pipe or piece of equipment discovered after it is installed shall be removed and replaced with a sound material in a satisfactory manner at no additional cost to the owner.

6 Contractor shall provide all necessary fittings as required for transition between different pipeline sizes and materials.

7 Contractor shall provide all hangers, supports, framework, etc. required to properly support piping and pumping systems under normal system operation.

8 All piping shall be hydrostatically pressure tested to 125 psi for 2 hours prior to acceptance. Clean and flush piping before performing hydrostatic pressure test.

9 Water storage tanks shall be 1000 gallon capacity, vertical tanks, black color as manufactured by Norwesco Model#40892 w/ NSF 61 rating or approved equal.

10 All tank penetrations shall be verified watertight. Tank drain connection shall be equipped with siphon drain fittings. Tanks shall be secured to floor with stainless steel tie down assembly and hardware furnished by the tank manufacturer.

11 Water meter shall be 2 inch Badger bronze disc meter, Indicating pressure gauges shall be Ashcroft Model 1279, 4.5–inch diameter dial 0–100 and 0–20 psi range. Each gauge shall be equipped with a pressure snubber and isolating gauge cock/valve. Sediment filters shall be 4.5–inch by 10 inch cartridge–type filters. Filter housing shall be minimum 1–inch diameter pipe connection. Contractor shall provide 24 spare cartridges for each filter size indicated on the plans.

12 Goulds Pump Station (2) shall be Goulds Model #10SV5FG44F60 Aquaforce Pump Station or approved equal.

13 Contractor shall provide services of booster pump manufacturer authorized factory technician to verify proper equipment installation, perform initial equipment startup operation, and provide operation and maintenance training instructions to owner personnel. Contractor shall provide qualified personnel acceptable to the owner to inspect installation, start and provide operating instructions to owner personnel for all other equipment systems.

14 All workmanship and materials shall be guaranteed for one year from the date of startup. Contractor shall provide written certification to owner of one–year warranty for the completed water system.

CONSTRUCTION NOTES, SEQUENCE AND COORDINATION

1 Location and extent of existing well system piping and other buried utilities is not known.
2 Existing well system for existing church property must remain in continuous service throughout entire construction period until new system is connected, tested, approved and activated. Contractor shall be responsible for locating and protecting existing piping and repairing any damage that occurs as a result of construction activities in order to maintain continuous, uninterrupted water service as required.

3 Contractor shall be responsible for contacting and coordinating with Church owner as necessary to identify the location of all existing water service piping in order to properly locate and install connections to existing well system. No additional compensation will be provided should owner require that a service interruption and/or connection to the new system be performed outside of normal working hours.

4 No permanent connection shall occur between the new system piping and the existing piping until contractor has disinfected the new system in accordance with AWWA Standards.

5 Coordinate with Church owner as necessary to interrupt water service shutdown and lockout well pump.

OPERATION AND CONTROL STRATEGY

1 Well pump shall operate in response to changing water level to fill the bulk storage tanks. Each bulk storage tank shall be equipped with pump on and pump off level control electrodes so that either tank may act as the controlling tank as selected by operator via hand switch. Each tank shall also include grounding electrodes as necessary for proper control and low water level electrode for booster pump dry running protection.

2 Booster pump system shall operate to maintain constant pressure of 70 psi to the distribution system through continuously variable speed adjustment of the pump in response to discharge pressure transducer input control signal.

3 Booster pump system shall operate as a lead/lag system pump system where normal operation shall require one lead pump to run with a lag pump to operate in the event of a continued water level drop in the water storage tank. Control system shall automatically alternate the lead and lag pumps on each successive pump start to promote even wear and operation.

4 Booster pump on and pump off setpoints shall be adjustable. Initial (factory) setting shall be system pressure setpoint plus/minus 5%. Diaphragm tank shall be factory precharged and furnished by the booster pump system manufacturer to accommodate required system operating pressure.

5 Booster pump system shall monitor flow conditions and shall shut down automatically when detecting low flow/reduced system demands.

6 Booster pump system shall include dry running protection via bulk storage tank low water level electrode sensors. Booster pump shall shut down on detection of low water level in the well pump control tank.

DISINFECTION AND PIPE CONNECTION NOTES

1 Storage tanks, pumps, piping and treatment vessels shall be cleaned, flushed and disinfected prior to connecting to existing water supply and distribution piping and placing into service in accordance with AWWA C651 and C652 and RIDOH requirements.

2 The general procedure for chlorination shall be to flush all dirty water / debris from all lines tanks and equipment and introduce a quantity of chlorine that will result in a minimum residual chlorine content of 50 PPM applied to the new supply and distribution piping and to 5% of the volume (50 gallons) of each tank. The heavily chlorinated water shall be held in the tanks and piping for 6 hours.

3 At the end of the 6–hour holding period, the tanks shall be filled to overflow and allowed to stand for 24 hours. Chlorination procedure must be repeated if residual chlorine content is less than 2 PPM after the 24 hour holding period.

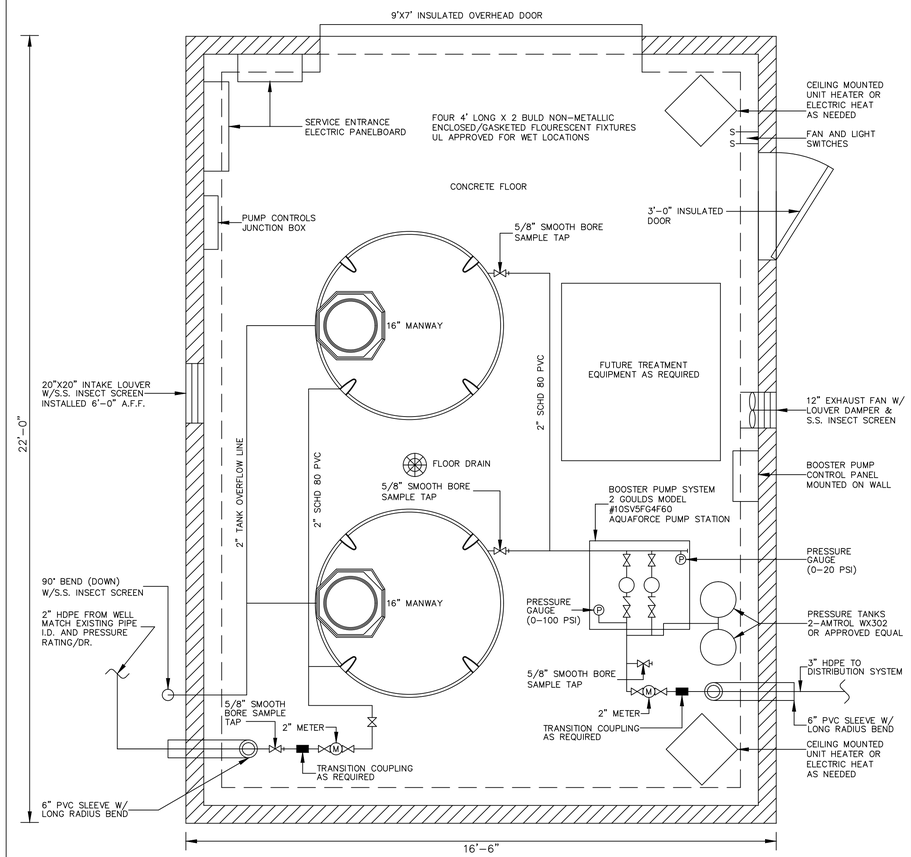
4 Any heavily chlorinated water remaining in the tank and piping after satisfactory completion of the 24–hour holding period shall be purged. Discharge of chlorinated water shall comply with all federal state and local standards. Sodium bisulfate shall be applied in sufficient quantity to satisfactorily dechlorinate the water prior to discharge in accordance with AWWA C651 Appendix C.

5 Collect two samples taken at least 24 hours apart for bacteriological analysis including heterotrophic plate count (HPC) by an RIDOH–approved laboratory. Select one sample for volatile organic compound (VOC) analysis by an RIDOH–approved Laboratory. Bacteriological sampling and analysis shall be in accordance with AWWA C651 and C652 VOC sampling and analysis. All sampling and analysis shall be in accordance with RIDOH requirements. Sample bottles must be furnished by the approved laboratory.

6 Contractor shall bear all costs for laboratory testing. Contractor shall be required to rechlorinate and resample at contractor's expense in the event that any sample results are unsatisfactory.

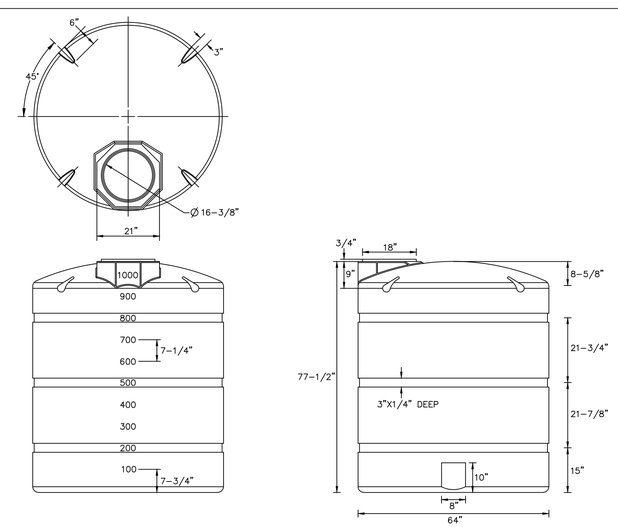
7 Contractor shall provide all labor, materials and equipment as necessary to protect the existing potable water supply for flushing, testing and disinfecting the new facilities.

8 All pipe fittings, etc, shall be sprayed with a 1 – 5% chlorine solution before making final connections. No connection shall be buried until the system is activated and visually inspected for leaks.



WATER STORAGE FACILITY FLOOR PLAN LAYOUT

SCALE: 1"=2'



1000 GALLON VERTICAL TANK DETAIL

(NORWESCO HDPE MODEL #40892 W/ NSF 61 RATING OR APPROVED EQUAL)

SCALE: 1"=2'

WELL HOUSE PLAN
FOR
"CHURCHWOODS"
SITUATED IN THE TOWN OF
CHARLESTOWN, RHODE ISLAND
PREPARED FOR
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORP.

NO.	REVISION	DATE
1.	PER ARCHITECT	05/27/16

WILLIAM D. DOWDELL
STATE OF RHODE ISLAND
No. 4217
REGISTERED PROFESSIONAL ENGINEER

DOWDELL ENGINEERING, INC.
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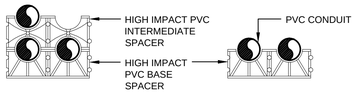
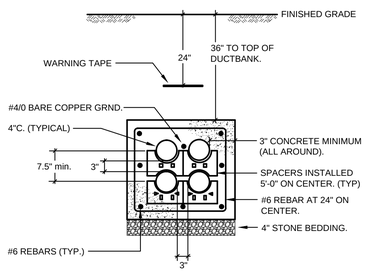
JOB NO. 2859	DRAWN BY: R.L.C.
DWG. NO. 2859–WH.	CHECKED: W.D.D.
	APPROVED: W.D.D.
SCALE: NONE	DATE: MAY 9, 2016

SHEET: C15

NOTES:
1) ALL BASE AND INTERMEDIATE SPACERS TO BE INTERLOCKING TYPE.
2) ALL SPACERS TO MAINTAIN 3" SPACE WITH 4" DUCTS.
3) ALL SPACERS TO BE CONSTRUCTED OF HIGH IMPACT PVC.
4) ALL SPACERS TO BE INSTALLED AT 5'-0" CENTERS ALONG ENTIRE RUN.



TYPICAL SPACER DETAILS
NOT TO SCALE

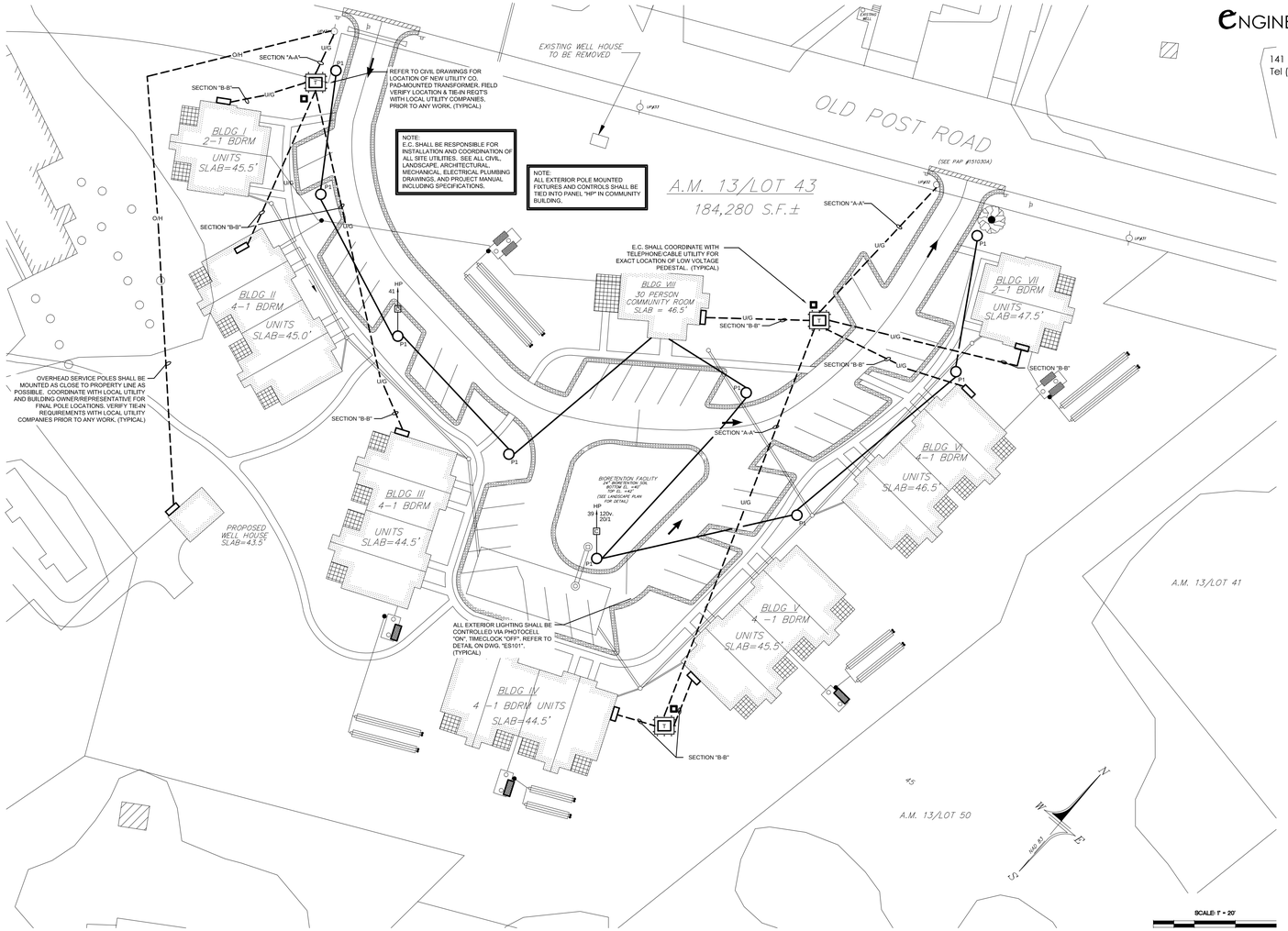


TYPICAL DUCT BANK CONSTRUCTION DETAIL
NOT TO SCALE

DENITRIFICATION SCHEDULE

SYSTEM NUMBER	DESCRIPTION	VOLTS	PH	FREQ.	(KW) / HP	CIRCUIT #
1	PUMP #1	120	1	60	0.5	HP/18
	PUMP #2	120	1	60	0.5	HP/20
	CONTROL PANEL	120	1	60	-	HP/22
2	PUMP #1	120	1	60	0.5	HP/24
	PUMP #2	120	1	60	0.5	HP/26
	CONTROL PANEL	120	1	60	-	HP/28
3	PUMP #1	120	1	60	0.5	HP/30
	PUMP #2	120	1	60	0.5	HP/32
	CONTROL PANEL	120	1	60	-	HP/34
4	PUMP #1	120	1	60	0.5	HP/36
	PUMP #2	120	1	60	0.5	HP/38
	CONTROL PANEL	120	1	60	-	HP/40
5	PUMP #1	120	1	60	0.5	HP/31
	PUMP #2	120	1	60	0.5	HP/33
	CONTROL PANEL	120	1	60	-	HP/35

NOTES:
1. ALL CIRCUITS SHALL BE FED FROM THE COMMUNITY BUILDING ON THIS SITE.
2. CONFIRM EXACT LOCATION OF PUMPS AND CONTROL PANELS IN SITE WITH PUMP MANUFACTURER AND CIVIL ENGINEER.
3. CONFIRM REQUIREMENTS FOR ALARM SYSTEM WITH DENITRIFICATION SYSTEM MANUFACTURER.



EXTERIOR LIGHTING FIXTURE SCHEDULE

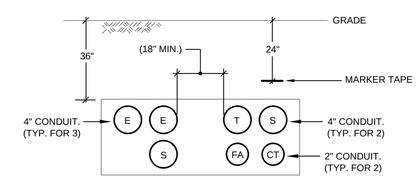
TYPE	MANUFACTURER	CATALOG No.	MOUNTING	LAMPING			VOLT.	DESCRIPTION / REMARKS
				TYPE	WATTAGE	QUANTITY		
P1	LITHONIA LIGHTING	MRP-LED-42C-530-40K-SR3-MVOLT	POLE	LED	75	1	120V	LED POLE MOUNTED FIXTURE.

CBA = COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
CC = CUSTOM COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY CUSTOM COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.

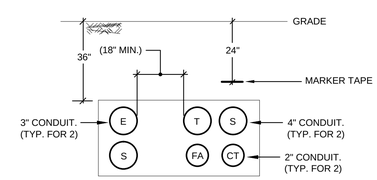
NOTES:
1. ALL FLUORESCENT LAMPS AND BALLASTS SHALL COMPLY WITH NATIONAL GRID SUPER T8 INCENTATIVE.
2. ALL PENDANT MOUNTED LIGHTING FIXTURES SHALL BE COORDINATED CEILING HEIGHTS AND ARCHITECT FOR PROPER HEIGHT OF THE BOTTOM OF THE FIXTURES
3. ALL LIGHTING FIXTURES SHALL BE PROVIDED WITH MATCHING KELVIN TEMPERATURE OF (3500K.)

DUCT BANK LEGEND

P = PRIMARY SERVICE CABLES
E = SECONDARY SERVICE CABLES
S = SPARE (W/PULL STRING)
T = TELEPHONE SERVICE CABLES
FA = FIRE ALARM SYSTEM (IMSA) CABLE
CT = CABLE TV SERVICE CABLES
G = EMERGENCY GENERATOR SERVICE CABLE
G = EMERGENCY GENERATOR CONTROL CABLE



SECTION A - A
NOT TO SCALE



SECTION B - B
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CHURCHWOODS - SITE ELECTRIC

SITE POWER & LIGHTING
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

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ELECTRICAL SITE PLAN AND LEGENDS

ES100

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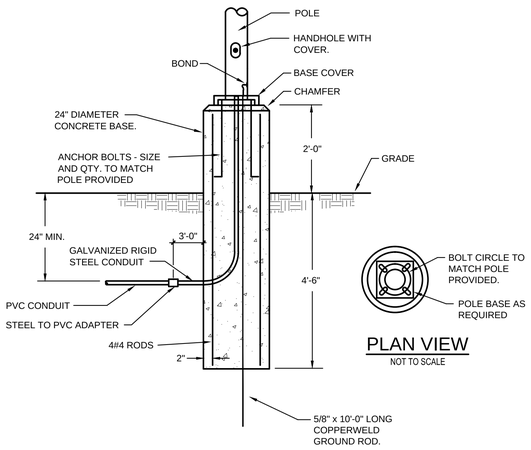
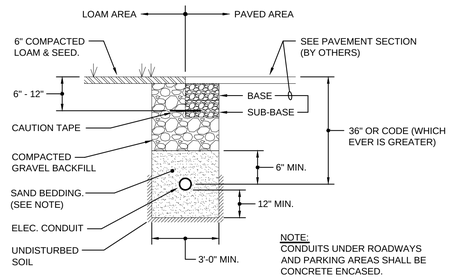
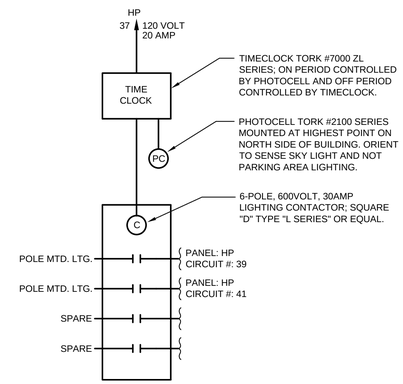


TYPICAL POLE BASE DETAIL
NOT TO SCALE

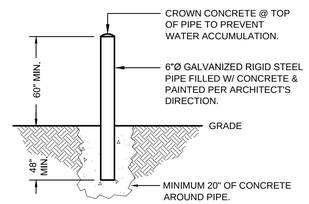
PLAN VIEW
NOT TO SCALE



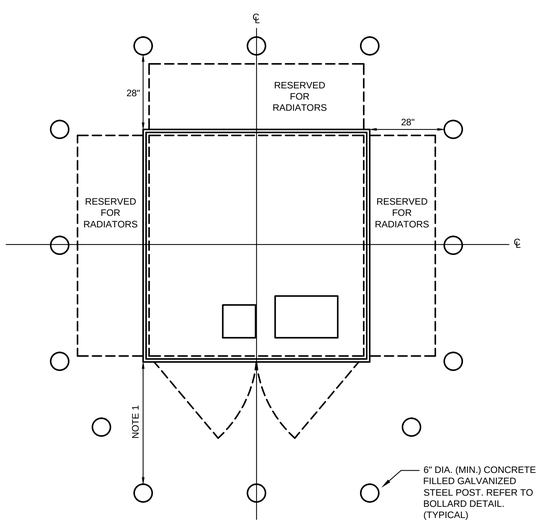
SITE LIGHTING / POWER / SECURITY CONDUIT TRENCH DETAIL
NOT TO SCALE



EXTERIORLIGHTING CONTROL DIAGRAM
NOT TO SCALE



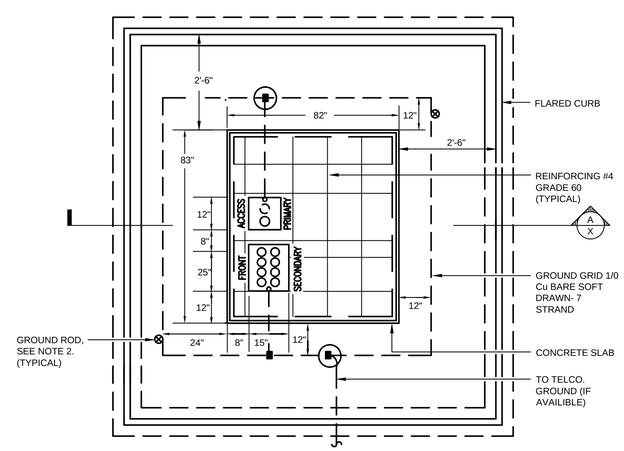
BOLLARD DETAIL
NOT TO SCALE



12' CLEAR SPACE FROM FRONT OF PAD.

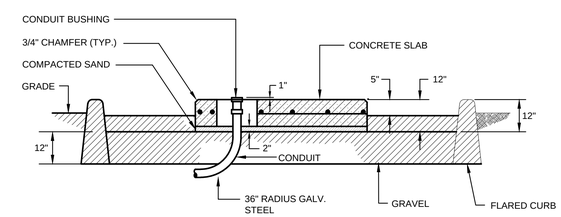
NOTES:
1. 44" FOR 15Kv AND BELOW & 55" FOR 25Kv AND 35Kv.
2. POSTS SHALL BE INSTALLED WITH DUE CARE TO AVOID INTERFERING WITH GROUND GRID AND CONDUITS.
3. COORDINATE WITH THE UTILITY COMPANY FOR EXACT NUMBER OF BOLLARDS REQUIRED. THE ACTUAL NUMBER & LOCATION OF BOLLARDS MAY BE MODIFIED BY THE UTILITY COMPANY TAKING INTO ACCOUNT PROXIMITY TO TRAFFIC AND BUILDINGS AN OTHER BARRIERS TO TRAFFIC.

BOLLARD PLACEMENT PLAN
NOT TO SCALE



PAD CONSTRUCTION PLAN VIEW
NOT TO SCALE

UTILITY COMPANY TRANSFORMER PAD DETAIL
NOT TO SCALE



SECTION THRU PAD
NOT TO SCALE

NOTES:
1. GROUND GRID SHALL CONSIST OF #1/0 7 STRAND COPPER INSTALLED 1'-0" BELOW GRADE. BOND TO ALL EXPOSED METALLIC CONDUIT AND LEAVE 3'-0" SLACK AT TWO POINTS IN OPPOSITE CONDUIT OPENINGS FOR GROUNDING TRANSFORMER. ALL CONNECTIONS SHALL BE MADE WITH THE CADWELL PROCESS.
2. GROUND RODS SHALL BE 8'-0" LONG BY 3/4" DIAMETER - COPPERWELD.
3. REINFORCE CONCRETE WITH RODS IN CENTER OF SLAB LOCATED AS SHOWN, WITH MIMINUM OF 2" CLEARANCE FROM FACE OF CONCRETE.
4. CONCRETE SHALL BE INSTALLED IN ACCORDANCE WITH MIX #4- STANDARD 0211. GROUND GRID SHALL BE INSPECTED BEFORE IT IS BURIED.
5. DETAIL IS INCLUDED FOR PRICING ONLY. REFER TO ELECTRIC UTILITY'S'S ELECTRICAL SERVICE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.

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ELECTRICAL SITE DETAILS

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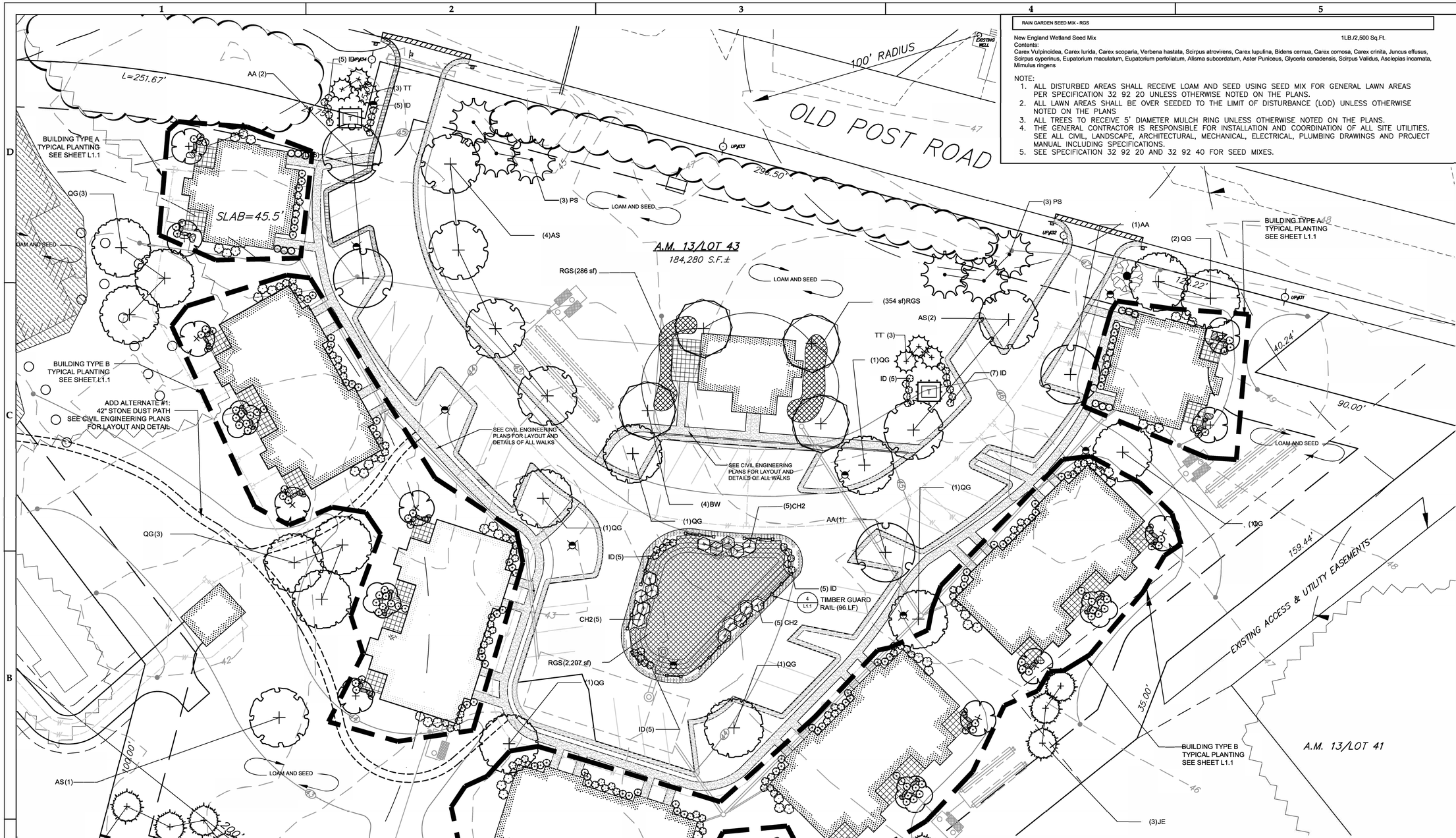
RAIN GARDEN SEED MIX - RGS

New England Wetland Seed Mix — 1LB./2,500 Sq.Ft.

Contents:
Carex Vulpinoidea, Carex lurida, Carex scoparia, Verbena hastata, Scirpus atrovirens, Carex lupulina, Bidens cernua, Carex comosa, Carex crinita, Juncus effusus, Scirpus cyperinus, Eupatorium maculatum, Eupatorium perfoliatum, Alisma subcordatum, Aster Puniceus, Glyceria canadensis, Scirpus Validus, Asclepias incarnata, Mimulus ringens

NOTE:
1. ALL DISTURBED AREAS SHALL RECEIVE LOAM AND SEED USING SEED MIX FOR GENERAL LAWN AREAS PER SPECIFICATION 32 92 20 UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL LAWN AREAS SHALL BE OVER SEEDED TO THE LIMIT OF DISTURBANCE (LOD) UNLESS OTHERWISE NOTED ON THE PLANS
3. ALL TREES TO RECEIVE 5' DIAMETER MULCH RING UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND COORDINATION OF ALL SITE UTILITIES. SEE ALL CIVIL, LANDSCAPE, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS AND PROJECT MANUAL INCLUDING SPECIFICATIONS.
5. SEE SPECIFICATION 32 92 20 AND 32 92 40 FOR SEED MIXES.



PLANT SCHEDULE COMMON AREA

TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
AA	Acer rubrum 'Autumn Glory' / Autumn Glory Maple	B & B	2.5"Cal		4
AS	Acer rubrum 'Red Sunset' / Red Sunset Maple	B & B	2.5"Cal		7
BW	Betula populifolia 'Whitespire Sr.' / Gray Birch	B & B	2.5"Cal		4
JE	Juniperus virginiana / Eastern Red Cedar	B & B		7' H × 3' W	24
PS	Pinus strobus / White Pine	B & B		7' H × 3' W	6
QG	Quercus palustris 'Green Pillar' / Green Pillar Oak	B & B	2.5"Cal		15
TT	Thuja occidentalis 'Techny' / Techny Arborvitae	B&B		5/6'	9

SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY
CH2	Clethra alnifolia 'Hummingbird' / Summersweet	B & B	54
ID	Ilex glabra 'Densa' / Inkberry Holly	2 gal	47
VB	Viburnum trilobum 'Bailey' / Bailey Cranberrybush Viburnum	B & B	23

GROUND COVERS	CODE	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY
	RGS	New England Wetland Seed Mix	seed		2,848 sf
	RS	Residential Seed Mix	seed		19,886 sf

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CHURCHWOODS -
LANDSCAPE
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CHARLESTOWN, RI

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OVERALL
LANDSCAPE
PLAN

L101

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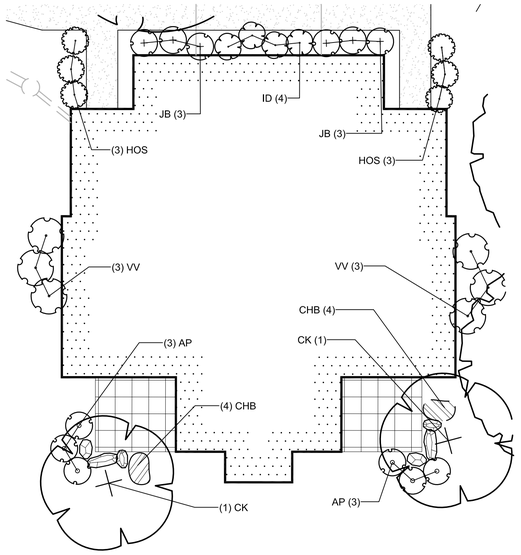


PLANT SCHEDULE BUILDING A

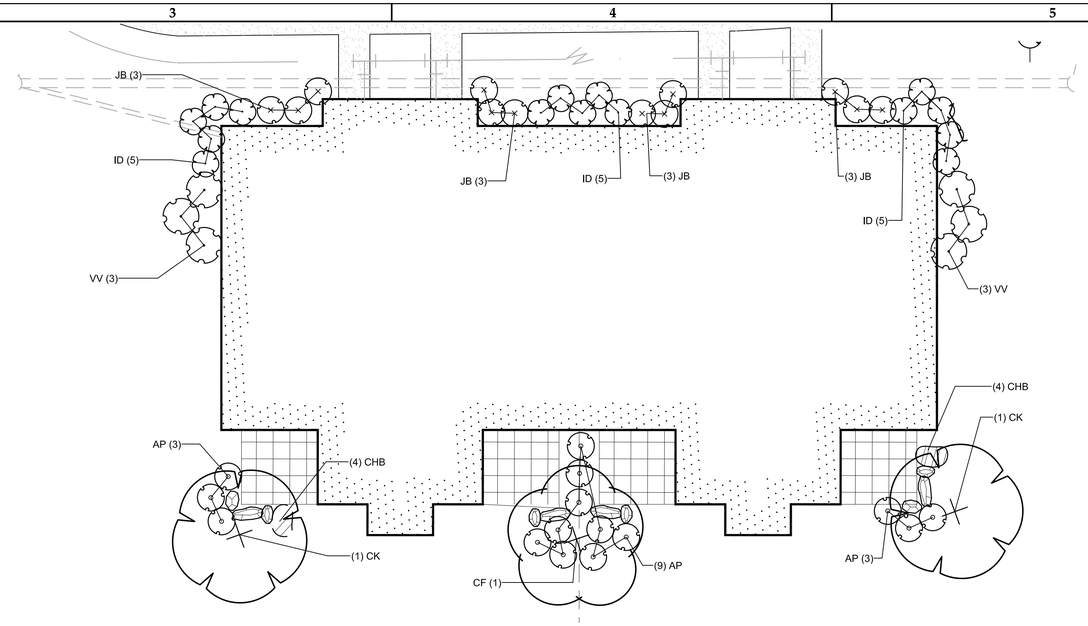
TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	QTY
CK	Cornus kousa / Kousa Dognood	B & B	2"Cal	4
SHRUBS	**BOTANICAL NAME / COMMON NAME**	**CONT**		**QTY**
AP	Azalea viscosum 'Pink Mist' / Pink Mist Swamp Azalea	2 gal		12
HOS	Hosta x 'Blue Cadet' / Plantain Lily	24"-36"		12
ID	Ilex glabra 'Densa' / Inkberry Holly	2 gal		8
JB	Juniperus horizontalis 'Bar Harbor' / Bar Harbor Creeping Juniper	24"-36"		12
VV	Viburnum x burkwoodii 'Mohank' / Mohank Viburnum	5 gal		12

SHRUB AREAS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY
CHB	Cotoneaster horizontalis / Rock Cotoneaster	2 gal	18" o.c.	16

NOTE:
1. PLANT TOTALS ARE FOR ALL TYPE A BUILDINGS (QUANTITY 2)
2. ALL DISTURBED AREAS SHALL RECEIVE LOAM AND SEED USING SEED MIX FOR GENERAL LAWN AREAS
3. ALL TREES TO RECEIVE 5' DIAMETER MULCH RING UNLESS OTHERWISE NOTED ON THE PLANS.

01 PLANTING BUILDING A

SCALE: 1/8" = 1"



PLANT SCHEDULE BUILDING B

TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	QTY
CF	Cercis canadensis 'Forest Pansy' TM / Forest Pansy Redbud	B & B	2"Cal	5
CK	Cornus kousa / Kousa Dognood	B & B	2"Cal	9
SHRUBS	**BOTANICAL NAME / COMMON NAME**	**CONT**		**QTY**
AP	Azalea viscosum 'Pink Mist' / Pink Mist Swamp Azalea	2 gal		73
ID	Ilex glabra 'Densa' / Inkberry Holly	2 gal		75
JB	Juniperus horizontalis 'Bar Harbor' / Bar Harbor Creeping Juniper	24"-36"		60
VV	Viburnum x burkwoodii 'Mohank' / Mohank Viburnum	5 gal		30

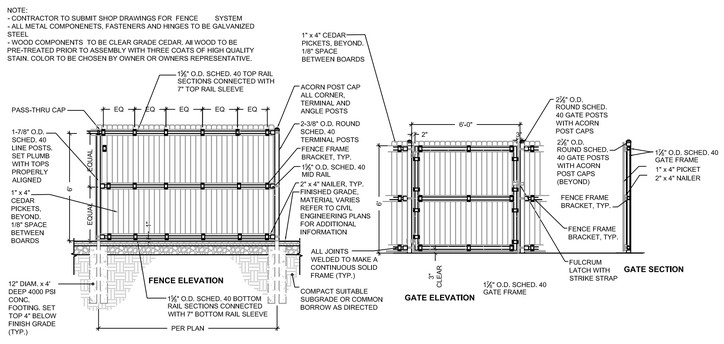
SHRUB AREAS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY
CHB	Cotoneaster horizontalis / Rock Cotoneaster	2 gal	18" o.c.	36

NOTE:
1. PLANT TOTALS ARE FOR ALL TYPE B BUILDINGS (QUANTITY 5)
2. ALL DISTURBED AREAS SHALL RECEIVE LOAM AND SEED USING SEED MIX FOR GENERAL LAWN AREAS
3. ALL TREES TO RECEIVE 5' DIAMETER MULCH RING UNLESS OTHERWISE NOTED ON THE PLANS.

02 PLANTING BUILDING B

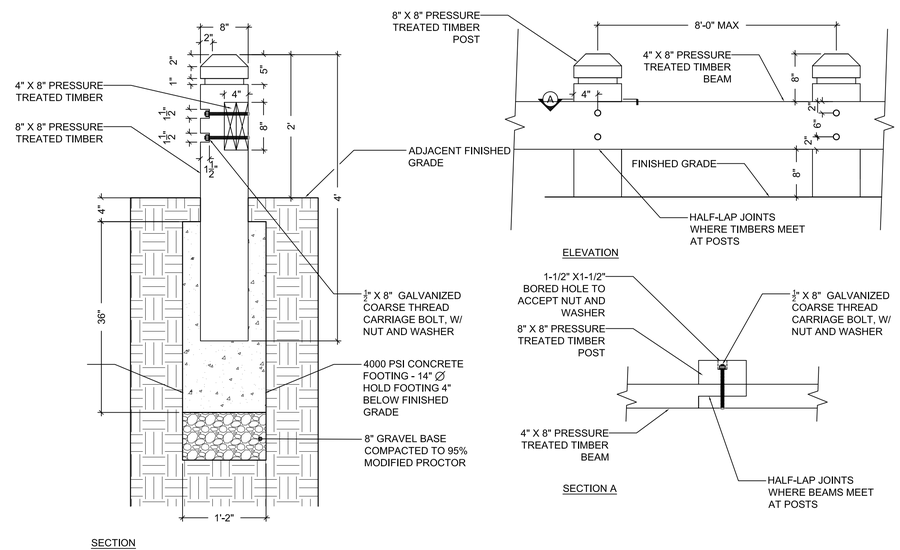
SCALE: 1/8" = 1"

NOTE:
- CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR FENCE SYSTEM
- ALL METAL COMPONENETS, FASTENERS AND HINGES TO BE GALVANIZED STEEL
- WOOD COMPONENTS TO BE CLEAR GRADE CEDAR. All WOOD TO BE PRE-TREATED PRIOR TO ASSEMBLY WITH THREE COATS OF HIGH QUALITY STAIN. COLOR TO BE CHOSEN BY OWNER OR OWNERS REPRESENTATIVE.



03 6' BOARD FENCE AND GATE

SCALE: 1" = 1'-0"



04 TIMBER GUARD RAIL

SCALE: 1" = 1'-0"

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DETAILED LANDSCAPE PLAN

L102

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GENERAL NOTES:

1. All plant material must be tagged in the ground, at the nursery by the Landscape Architect. All plant material shall be commercially obtained and shall meet the American Association of Nurseryman standards for nursery stock, latest edition, and its amendments. Plant only during season normal to the particular variety. All plant inspections will be at the expense of the contractor. Permanent seals will be required.

2. Planting beds shall be excavated to a minimum depth of 12" and new laom and compost (50/50 mix) shall be incorporated into the planting bed to meet surrounding grades unless otherwise noted or detailed. Cover all planting beds with 3" shredded hardwood bark mulch within a seventy-two hour period after planting. See plan for bed layout.

3. All existing and proposed trees shown in lawn areas shall receive a 5' diameter mulch bed. Mulch shall be placed to a depth of 3". Remove all sod, roots, sticks and stones prior to placement of mulch.

4. All plant materials furnished by the contractor shall be guaranteed for a period of one year from final acceptance of landscape work.

5. Stake all trees over 5' as shown on details. Remove stakes at the end of the guarantee period.

6. The contractor is responsible for keeping the site clean of miscellaneous debris throughout the construction period. All waste material is to be disposed of immediately to an off-site location, unless otherwise indicated on the plans.

7. The contractor shall perform all work in accordance with all local, state, and federal regulations, and shall obtain all necessary permits for this project.

8. Loam: Loam moved during the course of construction shall be retained and distributed within the site in accordance with the landscape plan. Stockpiled loam shall not be mixed with any subsoil, noxious weeds or unsuitable materials. All excess loam shall remain on the property of the owner. New loam if required to provide the specified depth, shall be a fertile, friable medium textured sandy loam free of material toxic to healthy plant growth. Loam shall also be free of all stumps, roots, stones and other extraneous matter an inch (1") or greater in diameter. The pH shall be between 6.5 and 7.5. Organic content shall be a minimum of 5%.

9. Lawn Preparation: Remove all debris and other inorganic materials on the prepared subgrade, reshape and dress any damaged or eroded area prior to spreading the loam. Scarify and loosen subgrade in any areas where compaction may have occurred. Spread stockpiled and off-site loam on all disturbed areas to produce a depth of 4" unless otherwise noted on the plans. Fine grade loamed areas to produce a smooth and unbroken finish grade to the required depth. Apply a starter fertilizer (10-20-10) at a rate of 20 lbs. per 1000 square feet and lime at a rate of 40 lbs. per 1000 square feet unless otherwise noted on the plans or in the specifications. Once spread, the fertilizer and lime shall be thoroughly incorporated into the loam. The loam shall be rolled, and depression shall be top dressed and raked to create a smooth surface.

10. Seeding: Seeding shall take place between March 15 and May 31 or August 15 and October 15 only. Seed shall be pure, live, fresh seed from commercial sources meeting and labeled in accordance with State and Federal rules and regulations. The seed mixture shall be as noted on this sheet.

    Seeded areas shall, at a minimum, include all areas of the site that have been disturbed or are barren unless otherwise noted on the plans. Seed shall be applied at the rates indicated per seed mix.

11. Protection of Existing Plantings: Maximum effort should be made to save tree or other plant specimens which are large for their species, rare to the area, or of special horticultural or landscape value. Contact owner/landscape architect before removing any specimen of this type unless otherwise noted on the plans. No material or temporary soil deposits shall be placed within the drip line of shrubs or trees designated on the landscape plan to be retained. Protective barriers are to be installed around each plant and/or group of plants that are to remain on the site. Barriers shall not be supported by the plants they are protecting, but shall be self supporting. They shall be of minimum of four feet (4') high and constructed of a durable material, such as snow or silt fence, that will last until construction is completed.

12. Pruning: The contractor shall employ a certified arborist to prune any existing roots or branches carefully prune branches in the way of construction by using only approved methods and tools. The use of axes for trimming or spurs for climbing will not be permitted.

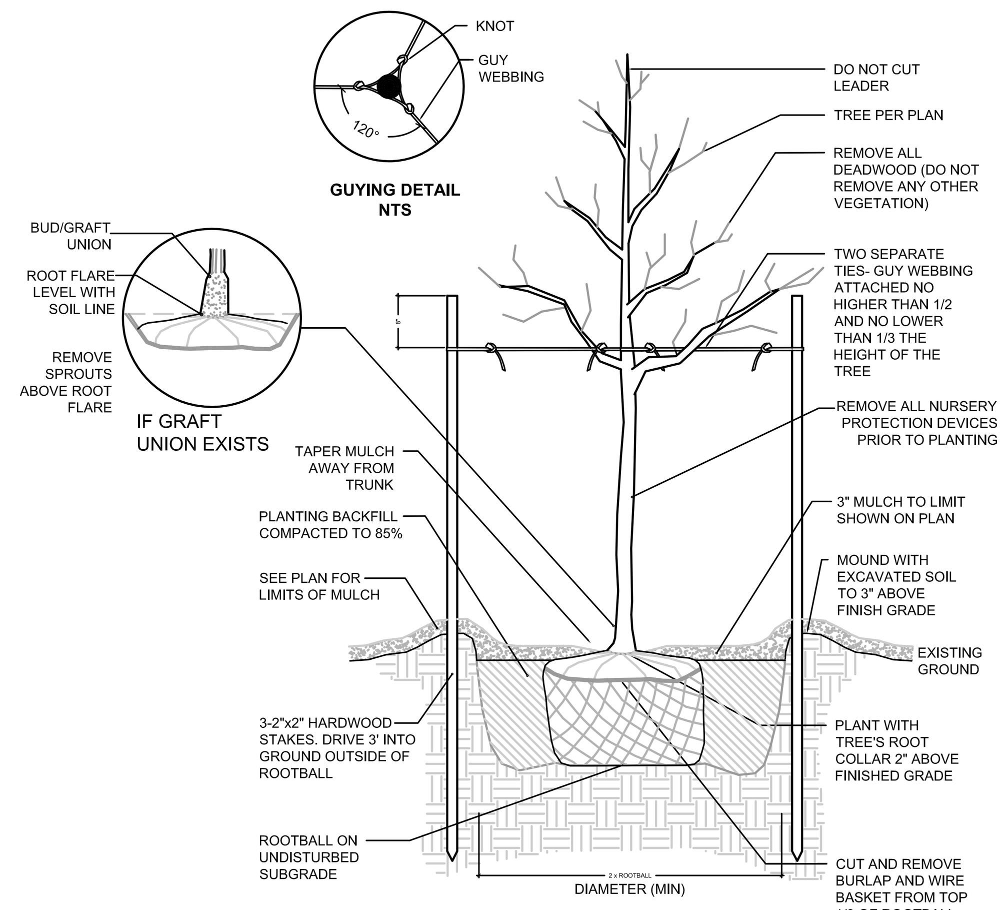
13. Existing Utilities: In accordance with Dig-Safe law (1-800-225-4977), the contractor shall contact all applicable utility companies and verify utility line locations. The contractor shall be solely responsible for any/all utility damage. Record locations of Dig-Safe utility line markings on project record documents.

14. Disturbed Areas: Any areas disturbed during the course of construction are to be restored to original (or better) condition by contractor before completion of the project, and are subject to approval by landscape architect and owner. All grass areas disturbed during construction shall be york raked to remove stones and loamed and seeded as per specifications.

15. Layout: All notes and dimensions are typical unless otherwise noted. All dimensions are square (parallel or perpendicular) unless otherwise noted. The contractor shall notify the owner/owner's representative immediately in the event of any discrepancies found in the contract documents and/or in the field, or of conditions uncovered in the work which are not reflected in the plans.

16. Drainage Systems: Contractor is responsible for general clean-out of all catch basins, manholes, and/or other drainage features on the site which have accumulated sediment as a result of construction activities.

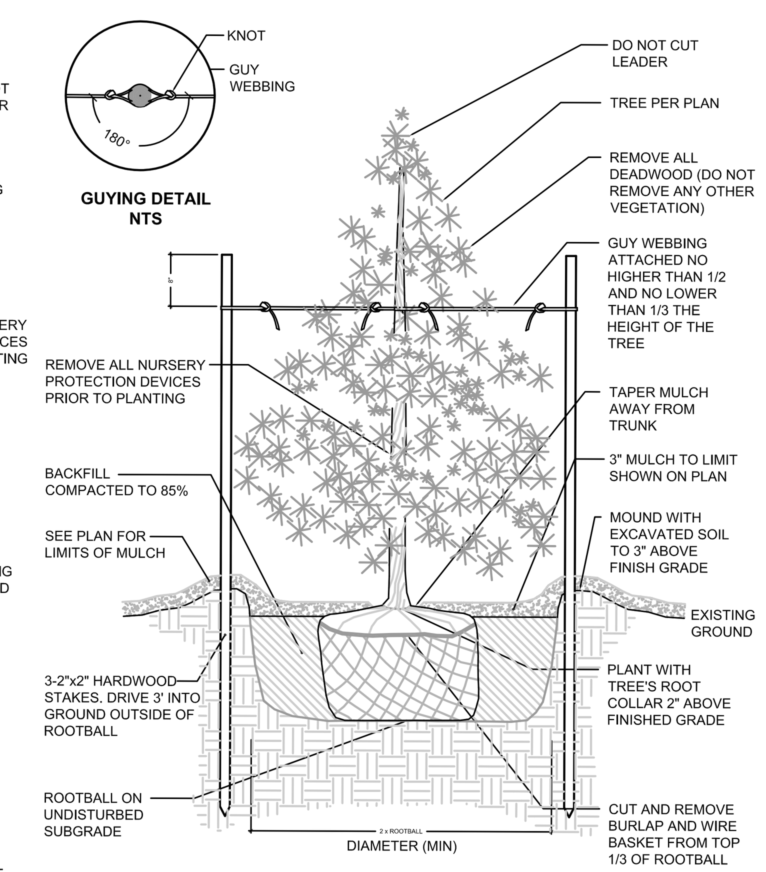
17. Cleaning: Contractor is responsible for keeping site clean of miscellaneous debris throughout the construction period. All waste material is to be disposed of immediately to an off-site location, unless otherwise indicated on the plan.



NOTE:
1. ALL TREES SHALL BE SET SO THAT THE ROOT FLARE IS ABOVE EXISTING GRADE.
2. AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.
3. ALL TREES NOT LOCATED WITHIN A LARGER MULCHED PLANTING BED SHALL RECEIVE A 5' DIAMETER MULCH BED AROUND THE BASE OF THE TREE. IN NO INSTANCE SHALL MULCH BE PILED UP AROUND THE ROOT FLARE.

DECIDUOUS TREE STAKING & PLANTING

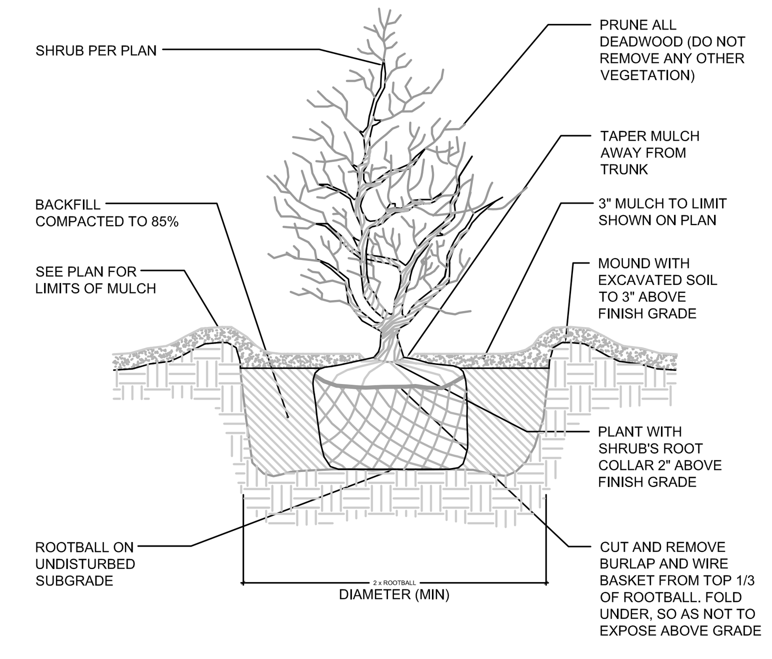
SCALE: NOT TO SCALE



NOTE:
AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.

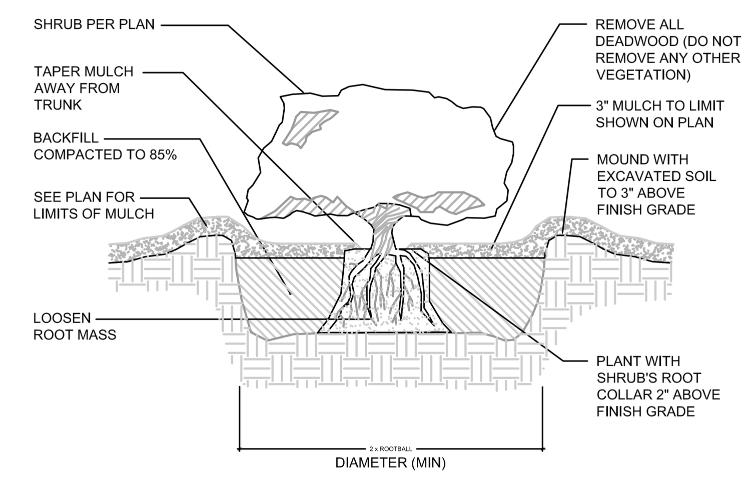
EVERGREEN TREE STAKING & PLANTING

SCALE: NOT TO SCALE



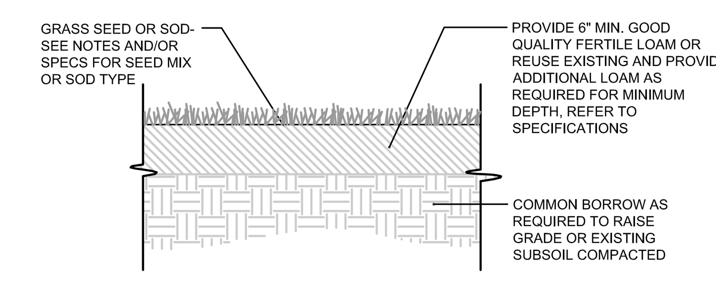
SHRUB PLANTING

SCALE: NOT TO SCALE



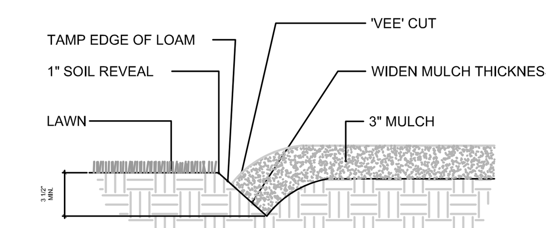
CONTAINER GROWN TREE & SHRUB PLANTING

SCALE: NOT TO SCALE



LOAM AND SEED OR LOAM AND SOD

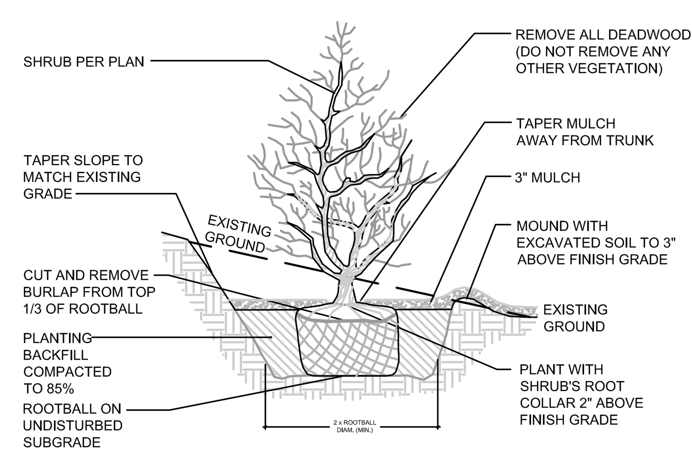
SCALE: NOT TO SCALE



NOTE:1. LOCATE BEDLINE AS SHOWN ON PLAN.
2. LANDSCAPE ARCHITECT TO APPROVE ALL BEDLINES.

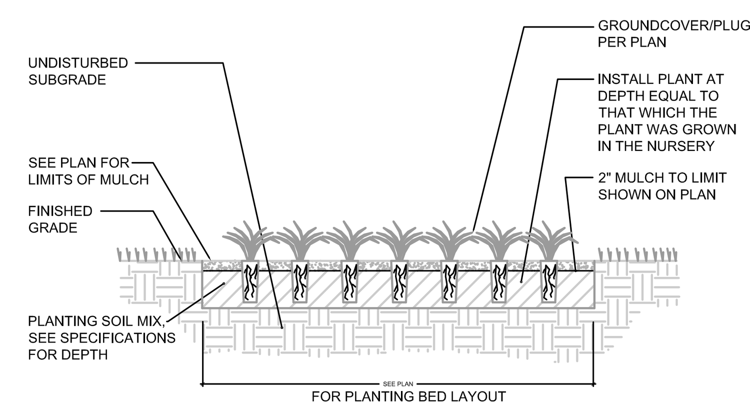
PLANTING BEDLINE EDGE

SCALE: NOT TO SCALE



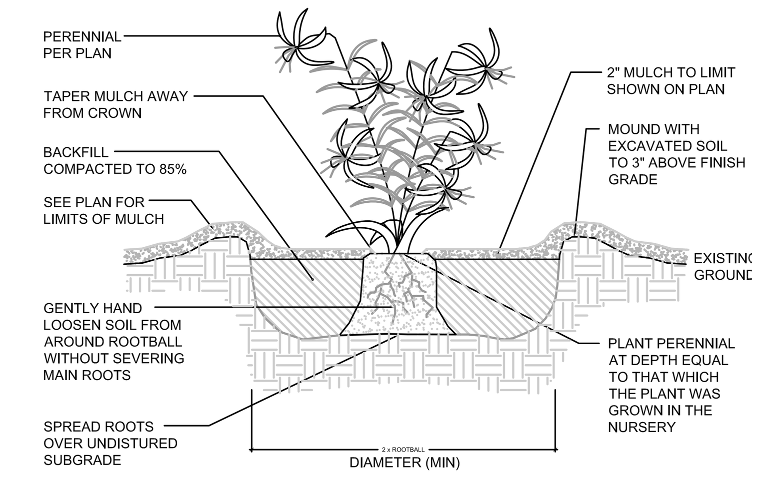
SHRUB PLANTING ON SLOPE

SCALE: NOT TO SCALE



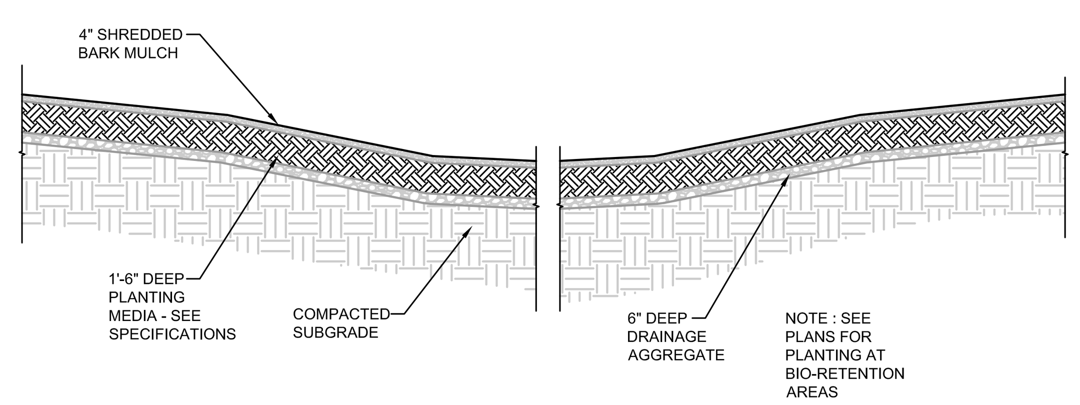
GROUNDCOVER AND PLUG PLANTING

SCALE: NOT TO SCALE



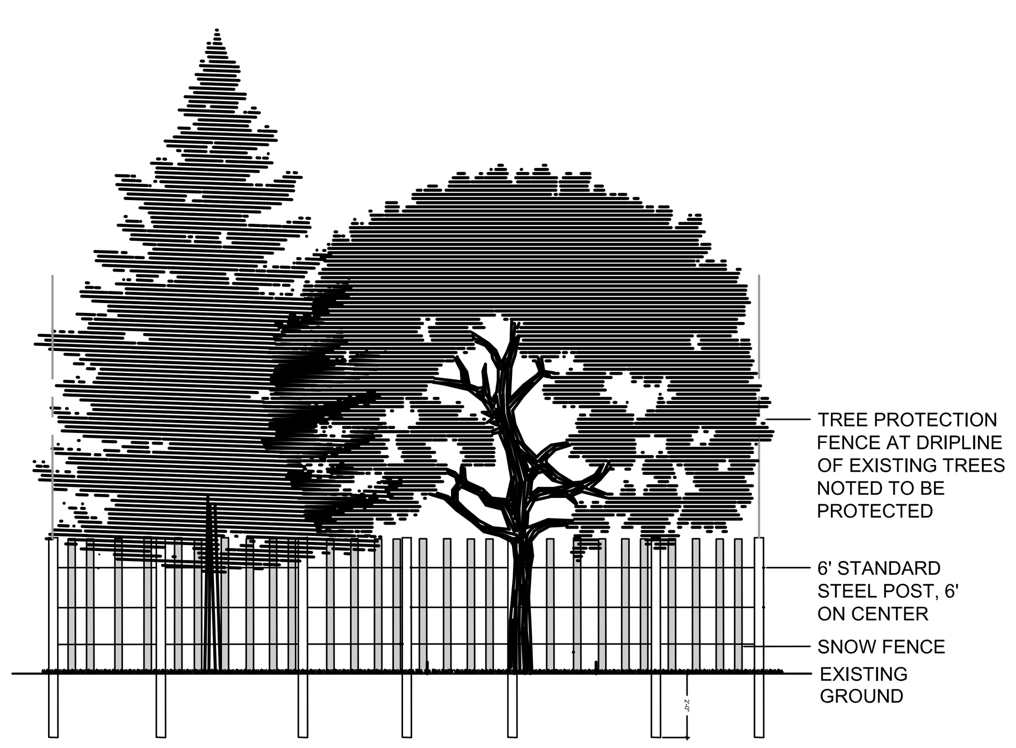
PERENNIAL GRASSES PLANTING

SCALE: NOT TO SCALE



BIO-RETENTION AREA

SCALE: NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL REFER TO SPECIFICATION 11 56 39 TREE PROTECTION AND TRIMMING.
2. CONTRACTOR SHALL FOLLOW SPECIFICATIONS FOR ALL TREE PROTECTION AREAS NOTED ON THE PLANS.

TREE PROTECTION AREA

SCALE: NTS

BIRCHWOOD DESIGN GROUP

OWNER:

CHURCHWOODS, LLC
C/O WASHINGTON COUNTY CDC
400 TOWER HILL RD
NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS -

LANDSCAPE
4130 OLD POST ROAD
CHARLESTOWN, RI

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200

DATE: MAY 27, 2016

SCALE: As indicated

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THESE DOCUMENTS HAVE BEEN PREPARED SPECIFICALLY FOR CHURCHWOODS, LLC
THEY ARE NOT SUITABLE FOR USE ON OTHER PROJECTS OR IN OTHER LOCATIONS WITHOUT THE APPROVAL AND PARTICIPATION OF UNION STUDIO.
REPRODUCTION IS PROHIBITED.

LANDSCAPE DETAILS

L103

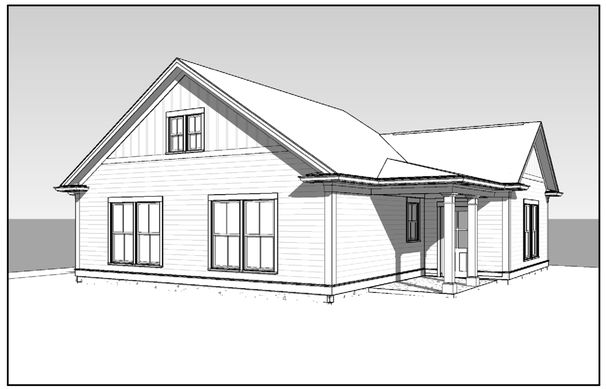
5/27/2016 1:58:45 PM Z:\15_1119 CHW Bldg A_BH.rvt

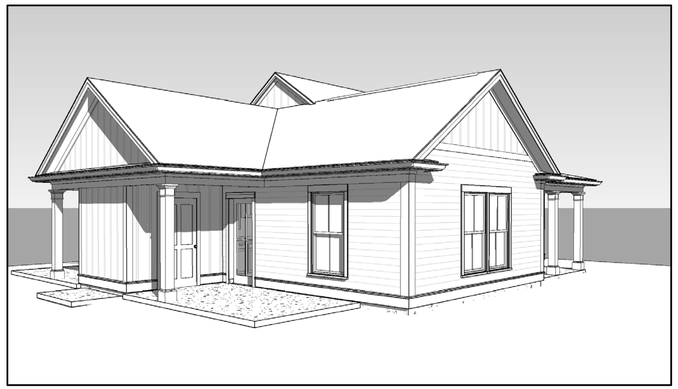
CHURCHWOODS - BUILDINGS 1, 7

100% CONSTRUCTION DOCUMENTS

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

MAY 27, 2016





DRAWING LIST	
NUMBER	NAME
0 - COVER	
G101	TITLE SHEET
2 - STRUCTURAL	
S100	FOUNDATION PLAN & DETAILS
S101	ROOF FRAMING & SHEAR WALL PLANS
3 - ARCHITECTURAL	
A101	FIRST FLOOR PLAN & RCP
A102	ROOF PLAN
A201	EXTERIOR ELEVATIONS
A202	INTERIOR PLANS, ELEVATIONS & SCHEDULES
A301	BUILDING SECTIONS
A302	TYPICAL WALL SECTIONS
A501	EXTERIOR DETAILS
A502	DOOR & WINDOW SCHEDULES & DETAILS
A503	TYPICAL CONSTRUCTION DETAILS
4 - PLUMBING	
P101	PLUMBING FLOOR PLAN, ROOF PLAN, PART PLAN, LEGEND, & GENERAL NOTES
6 - MECHANICAL	
M101	FLOOR PLAN & ROOF / ATTIC PLAN
M102	SCHEDULES & DETAILS
7 - ELECTRICAL	
E100	ELECTRICAL SCHEDULES, NOTES & DETAILS
E101	ELECTRICAL FIRST FLOOR PLAN
E102	ELECTRICAL POWER RISER, SCHEDULES & NOTES
E103	ELECTRICAL LOW VOLTAGE RISER, DETAILS & NOTES

GENERAL PROJECT NOTES

1 GENERAL NOTES APPLY TO ALL DRAWINGS AND ALL TRADES. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES.

2 UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, PERMITS, TRANSPORTATION AND OTHER SERVICES AND FACILITIES NECESSARY FOR PROPER AND TIMELY EXECUTION OF THE REQUIRED WORK UNDER THIS CONTRACT.

3 THE GENERAL CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF WRITTEN SUBSTANTIAL COMPLETION.

4 THE GENERAL CONTRACTOR WARRANTS TO THE OWNER AND TO THE ARCHITECT, THAT ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED UNDER THE CONTRACT ARE NEW UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK WILL BE AS SPECIFIED AND FREE OF DEFECTS.

5 ALL FLOOR LEVELS ON ALL DRAWINGS ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. COORDINATE BUILDING SLAB ELEVATIONS WITH CIVIL DRAWINGS.

6 ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES WELL AS ANY REQUIREMENTS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION.

7 DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS OR OF ANY VARIATIONS REQUIRED IN ORDER TO CONFORM TO CODE REQUIREMENTS, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ARCHITECT WILL FORWARD WRITTEN INSTRUCTION TO ALL CONCERNED PARTIES. ANY SUCH DISCREPANCY, OMISSION OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WORK SHALL BE PERFORMED IN A MANNER DIRECTED BY THE ARCHITECT.

8 DRAWING SCALES: THESE DRAWINGS ARE PREPARED TO THE SCALES NOTED. HOWEVER, DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THE PLANS, SECTIONS OR DETAILS. THE CONTRACTOR SHALL CONTACT THE ARCHITECT WITH ANY QUESTIONS PERTAINING TO DIMENSIONS OR DETAILS PRIOR TO COMMENCING ANY WORK.

9 THE REQUIREMENTS OF THE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR THEIR EMPLOYEES USE ON THE PROJECT TO ENSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.

10 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING CONSTRUCTION THAT IS SCHEDULED TO REMAIN IN PLACE OR INTACT. ANY DAMAGE INCURRED TO SUCH ITEMS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION.

11 ALL FRAMING LUMBER INSTALLED IN CONTACT WITH CONCRETE, MASONRY OR STEEL SHALL BE PRESSURE TREATED.

12 THE GENERAL CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL APPROVED, CODE COMPLIANT FIRE EXTINGUISHERS. SUCH EXTINGUISHERS SHALL BE FULLY COORDINATED WITH AND APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

13 ALL DIMENSIONS ARE ACTUAL AND ARE TAKEN TO THE FACE OF STUD, FACE OF CONCRETE WALL, FACE OF CMU WALL OR FACE OF FRAME, UNLESS NOTED OTHERWISE.

14 ALL INTERIOR WALLS AND PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF STRUCTURE OR DECK ABOVE, UNLESS NOTED OTHERWISE.

15 ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE CONDITIONED, USED, APPLIED, INSTALLED, CONNECTED, ERECTED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS, GUIDELINES AND INSTALLATION INSTRUCTIONS.

16 ALL NEW WINDOWS, SIDELITES AND BORROWED LITES AS WELL AS ASSOCIATED GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES IN PLACE WITHIN THE JURISDICTION OF THE WORK. PROVIDE SAFETY GLAZING AS REQUIRED BY CODE.

17 ALL PENETRATIONS OF FIRE-RESISTIVE-RATED FLOORS, WALLS, PARTITIONS AND SHAFTS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAILS THAT CONFORM TO U.L. DESIGN STANDARDS FOR THROUGH PENETRATION FIRESTOP SYSTEMS. THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SPECIFICATIONS AND DETAILS THAT SHOW COMPLETE CONFORMANCE TO THE U.L. LISTING TO THE ARCHITECT FOR REVIEW AND APPROVAL. SUCH DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE MADE AVAILABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE SPECIFIC FOR EACH PENETRATION WITH ANY AND ALL VARIABLES DEFINED.

18 SEAL AROUND ALL PENETRATIONS (DUCTS, PIPES, CONDUIT, ETC.) AT NEW AND EXISTING FIRE-RATED WALL, PARTITION AND CEILING CONSTRUCTION. SEAL SHALL NOT DIMINISH RATING OF THE WALL, PARTITION OR CEILING. AT CONCRETE OR MASONRY, SEAL OFF OPENINGS WITH CONCRETE GROUT. AT PLASTER OR DRYWALL, DAM UP GAPS AND WALL VOIDS WITH U.L. APPROVED FIRE-RESISTIVE-RATED SEALANT OR PUTTY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

19 LEVEL ALL FLOORS AS REQUIRED TO CONCEAL ANY DROPS OR RISERS IN FLOORS THAT WOULD OTHERWISE BE SEEN WITH THE SCHEDULED FLOOR FINISHES.

20 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND PROPERLY INSTALLING ALL FIRESAFING, FIRE/SMOKE STOPPING AT ALL PENETRATIONS OR OPENINGS AT INTERSECTIONS OF RATED WALLS AND STRUCTURAL ELEMENTS, AT ALL PENETRATIONS OR OPENINGS THROUGH FIRE-RESISTIVE RATED WALLS AND AT ANY OTHER AREAS WHERE FIRE AND SMOKE MAY PENETRATE.

21 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE SHORING AND BRACING TO SAFELY SUPPORT THE STRUCTURE DURING CONSTRUCTION.

22 THE CONTRACTOR IS RESPONSIBLE FOR DUST AND WEATHER PROTECTION DURING CONSTRUCTION.

23 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONS USING THE SURROUNDING FACILITIES WHO COME INTO CONTACT WITH THE AREA OF CONSTRUCTION. THE CONSTRUCTION AREA SHALL BE PROPERLY BARRICADED TO PREVENT INTRUSION BY PERSONS NOT ASSOCIATED WITH THE CONSTRUCTION OF THIS FACILITY.

24 THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. SAFETY, CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SAFETY SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

25 REFER TO THE PROJECT MANUAL, WRITTEN SPECIFICATIONS AND INTERPRETATION OF CONTRACT DOCUMENTS SECTION BELOW FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
EL 0' - 0"	DATUM POINT
FLOOR LEVEL 0' - 0"	ELEVATION MARKER
A3.0 A3.0	BUILDING SECTION
1 A4.0	AREA OF DETAIL
1 A3.0	DETAIL SECTION
1 A3.0	WALL SECTION
A A	MATCH LINE
A1 A4 A204 A2 A3	INTERIOR ELEVATION
1 A4.0	EXTERIOR ELEVATION
A1	WINDOW TYPE
108	DOOR NUMBER
KITCHEN 108	ROOM NAME AND NUMBER
1	KEYNOTE NUMBER
1	WALL TYPE
	NEW CONSTRUCTION
1	REVISION NUMBER AND CLOUD REFERENCE
12 4	ROOF PITCH
℄	CENTERLINE

ABBREVIATIONS

A	ABV	ABOVE
	AT	ACOUSTICAL TILE
	AD	AREA DRAIN
	ADJ	ADJUSTABLE
	AFF	ABOVE FINISH FLOOR
	ALUM	ALUMINUM
	ANOD	ANODIZED
	APPROX	APPROXIMATE(LY)
	ARCH	ARCHITECT
	ASPH	ASPHALT
B	B/	BOTTOM OF
	BB	BASEBOARD
	BBH	BASEBOARD HEAT
	BD	BOARD
	BIT	BITUMINOUS
	BLDG	BUILDING
	BLK	BLOCK
	BM	BEAM
	BO	BY OWNER
	B.O.	BOTTOM OF
	BRK	BRICK
C	CAB	CABINET
	CB	CATCH BASIN
	CEM	CEMENT
	CI	CAST IRON
	CIP	CAST IN PLACE
	CJ	CONTROL JOINT
	CL	CENTER LINE
	CLG	CEILING
	CLR	CLEAR
	CMT	CERAMIC MOSAIC TILE
	CMU	CONCRETE MASONRY UNIT
	CO	CLEAN OUT
	CO	CARBON MONOXIDE
	COL	COLUMN
	CONC	CONCRETE
	CONN	CONNECTION
	CONST	CONSTRUCTION
	CONST JT	CONSTRUCTION JOINT
	CONT	CONTINUOUS
	CONTR	CONTRACTOR
	CPT	COLD ROLLED COOPER
	CRC	
	CS	COURSE
	CT	CERAMIC TILE
	CTR	CENTER
	CF	CUBIC FOOT
	CW	COLD WATER
D	D	DEEP
	DBL	DOUBLE
	DEPT	DEPARTMENT
	DI	DRAIN INLET
	DIA	DIAMETER
	DIM	DIMENSION
	DISP	DISPENSER
	DN	DOWN
	DO	DITTO
	DP	DAMPPROOF(ING)
	DR	DOOR
	DRN	DRAIN
	DS	DOWNSPOUT
	DTL	DETAIL
	DW	DISHWASHER
	DWG	DRAWING
	DWR	DRAWER
	DWT	DUMBWAITER
E	E	EAST
	EA	EACH
	EL	ELEVATION
	ELEC	ELECTRIC (AL)
	ELEV	ELEVATOR
	EMER	EMERGENCY
	EPDM	ELASTOMERIC ROOFING
	EQ	EQUAL
	EQUIP	EQUIPMENT
	EWC	ELECTRIC WATER COOLER
	EXIST	EXISTING
	EJ	EXPANSION JOINT
	EXP	EXPOSED
	EXT	EXTERIOR
F	F/	FACE OF
	FCO	FLOOR CLEANOUT
	FCU	FAN COIL UNIT
	FD	FLOOR DRAIN
	FDN	FOUNDATION
	FE	
	FEC	FIRE EXTINGUISHER CABINET
	FF	FINISH FLOOR
	FHC	FIRE HOSE CABINET
	FIN	FINISH
	FIXT	FIXTURE
	FL	FLOOR
	FLUOR	FLUORESCENT
	FRTW	FIRE RETARDENT TREATED WOOD
	FRWK	FRAMEWORK
	FT	FOOT
	FTG	FOOTING
	FURN	FURNISH (ED)
	FURR	FURRING
	FUT	FUTURE
G	GA	GAUGE
	GALV	GALVANIZED
	GB	GRAB BAR
	GD	GROUND
	GEN	GENERAL
	GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	GL	GLASS
	GL BLK	GLASS BLOCK
	GR	GRADE
	GRAN	GRANITE
	GWB	GYPSUM WALL BOARD
	GYP	GYPSUM
H	H	HIGH
	HB	HOSE BIB
	HC	HOLLOW CORE
	HDW	HARDWARE
	HDWD	HARDWOOD
	HT	HEIGHT
	HM	HOLLOW METAL
	HORZ	HORIZONTAL
	HSS	HOLLOW STRUCTURAL SECTION
	HR	HOUR
	HW	HOT WATER
	HVAC	HEAT/VENT AIR CONDITION
I	IC	IN CONTRACT
	ID	INSIDE DIMENSION
	IN	INCH
	INSUL	INSULATION
	INT	INTERIOR
	INV	INVERT
J	JST	JOIST
	JSTH	JOIST HANGER
	JT	JOINT
L	LAM	LAMINATE
	LCC	LEAD COATED COPPER
	LG	LONG
	LH	LEFT HAND
M	MACH	MACHINE
	MAR	MARBLE
	MAS	MASONRY
	MATL	MATERIAL
	MAX	MAXIMUM
	MDF	MEDIUM DENSITY FIBERBOARD
	MDO	MEDIUM DENSITY OVERLAY PLYWOOD
	MEM	MEMBRANE
	MFR	MANUFACTURER
	MIN	MINIMUM
	MO	MASONRY OPENING
	MT	METAL
	MTL	THRESHOLD METAL
N	N	NORTH
	NIC	NOT IN CONTRACT
	NO	NUMBER
	NS	NON-SLIP
	NTS	NOT TO SCALE
O	OA	OVERALL
	OAE	OR APPROVED EQUAL
	OC	ON CENTER
	OD	OUTSIDE DIMENSION
	OPNG	OPENING
	OPP	OPPOSITE
P	PARL	PARALLEL
	PART	PARTITION
	PERP	PERPENDICULAR
	PJF	PREMOLDED JOINT FILLER
	PL	PLASTIC
	PLAS	PLASTER
	PLAM	PLASTIC LAMINATE
	PLBG	PLUMBING
	PLYWD	PLYWOOD
	POL	POLISHED
	PNL	PANEL (ING)
	PR	PAIR
	PREFIN	PREFINISHED
	PSI	POUNDS PER SQUARE INCH
	PSF	POUNDS PER SQUARE FOOT
	PSL	PARALLEL STRAND LUMBER
	PT	PRESSURE TREATED
	PNTD	PAINTED
Q	QT	QUARRY TILE
	QTR	QUARTER
	QTY	QUANITTY
R	R	RISER
	RAD	RADIUS
	RD	ROOF DRAIN
	RECP	RECEPTACLE
	REF	REFERENCE
	REFRIG	REFRIGERATOR
	REIN	REINFORCED
	REQD	REQUIRED
	RES	RESILIENT
	RH	RIGHT HAND
	RL	RAIN LEADER
	RM	ROOM
	RND	ROUND
	RO	ROUGH OPENING
S	S	SOUTH
	SC	SOLID CORE
	SCHD	SCHEDULE
	SD	SOAP DISPENSER
	SEAL	SEALANT
	SECT	SECTION
	SEL	SELECT
	SF	SQUARE FEET(FOOT)
	SHEATH	SHEATHING
	SIM	SIMILAR
	SHT	SHEET
	SJ	SEALANT JOINT
	SOF	SOFFIT
	SPEC	SPECIFICATION
	SPF	SPRUCE/PINE/FIR
	SQ	SQUARE
	SS	STAINLESS STEEL
	SSD	SEE STRUCTURAL DRAWINGS
	STD	STANDARD
	STL	STEEL
	STRCT	STRUCTURAL
	SUSP	SUSPENDED
	SY	SQUARE YARD
T	T	TREAD
	TJ	TOP OF
	TB	TACK BOARD
	TEL	TELEPHONE
	TEMP	TEMPORARY
	THK	THICK (NESS)
	THRES	THRESHOLD
	T.O.	TOP OF
	TOIL	TOILET
	TZ	TERRAZZO
	TTD	TOILET TISSUE DISPENSER
	TV	TELEVISION
	TYP	TYPICAL
	T&G	TONGUE & GROVE
U	UR	URINAL
	UNFIN	UNFINISHED
	UON	UNLESS OTHERWISE NOTED
V	VB	VAPOR BARRIER
	VCT	VINYL COMPOSITION TILE
	VENT	VENTILATE
	VERT	VERTICAL
	VIF	VERIFY IN FIELD
	VP	VENEER PLASTER
	VT	VINYL TILE
	VWC	VINYL WALL COVERING
W	W	WIDE
	W	WEST
	W/	WITH
	W/O	WITHOUT
	WC	WATER CLOSET
	WD	WOOD
	WDW	WINDOW
	WNSCT	WAINSCOT
	WP	WATERPROOF
	WR	WATER RESISTANT
	WS	WEATHER STRIP
	WWM	WELDED WIRE MESH

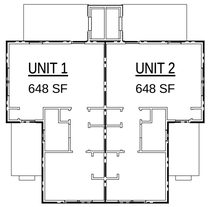
ROOM NAMES

BDR	BEDROOM
BSMNT	BASEMENT
CC	CUSTODIAN'S CLOSET
CLOS	CLOSET
COR	CORRIDOR
CTRM	COAT ROOM
DNR	DINING ROOM
ELEV	ELEVATOR
ENT	ENTRANCE
KIT	KITCHEN
LAV	LAVATORY
LKR	LOCKER ROOM
LNG	LOUNGE
LVR	LIVING ROOM
MACH RM	MACHINE ROOM
MBATH	MASTER BATH
MBDR	MASTER BEDROOM
MECH	MECHANICAL ROOM
OFF	OFFICE
PWDR	POWDER ROOM
P.R.	POWDER ROOM
SH	SHOWER
ST	STAIR
STOR	STORAGE
TOIL	TOILET
VEST	VESTIBULE

BUILDING CODE DATA

BUILDING CODE	RHODE ISLAND STATE BUILDING CODE - SBC-1 JULY 1, 2013 INTERNATIONAL RESIDENTIAL CODE 2012 EDITION
LOCALITY	CHARLESTOWN, RI 02813
TYPE OF CONSTRUCTION	5-A
STORIES	ONE
FROST LINE DEPTH	40 INCHES
WIND SPEED	110 MPH
GROUND SNOW LOAD	30 PSF

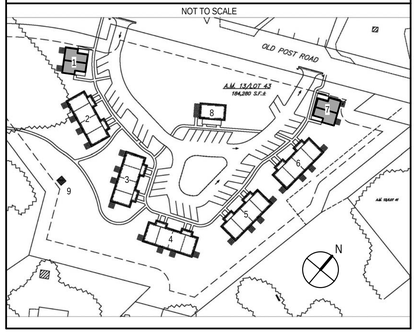
AREA SCHEDULE - GROSS BUILDING	
AREA NAME	AREA (SF)
UNIT 1	648 SF
UNIT 2	648 SF
	1296 SF



FIRST FLOOR - GROSS AREA PLAN

KEY PLAN

NOT TO SCALE

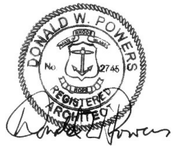


INTERPRETATION OF CONTRACT DOCUMENTS

IN THE EVENT OF CONFLICTING PROVISIONS IN THE CONTRACT DOCUMENTS, THE DRAWINGS WILL TAKE PRECEDENCE OVER THE SPECIFICATIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE DRAWINGS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE. ON ALL DRAWINGS, FIGURES TAKE PRECEDENCE OVER SCALED DIMENSIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE SPECIFICATIONS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE.



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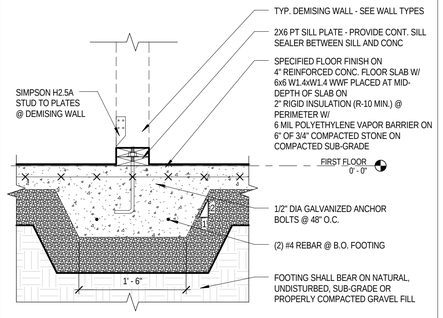
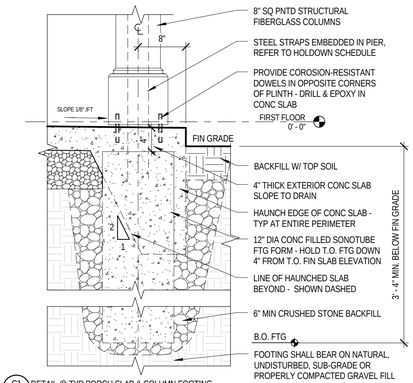
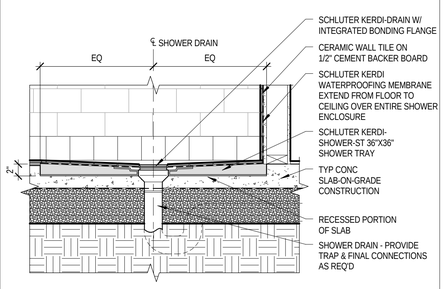
G101
CHURCHWOODS - BUILDINGS 1, 7



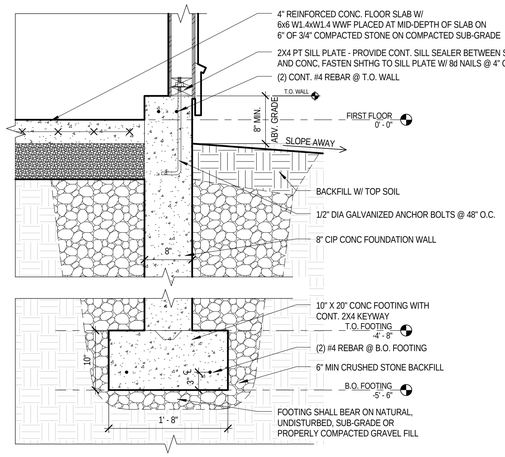
D1 S100 SECTION @ DEMISING WALL FOOTING
SCALE: 1" = 1'-0"



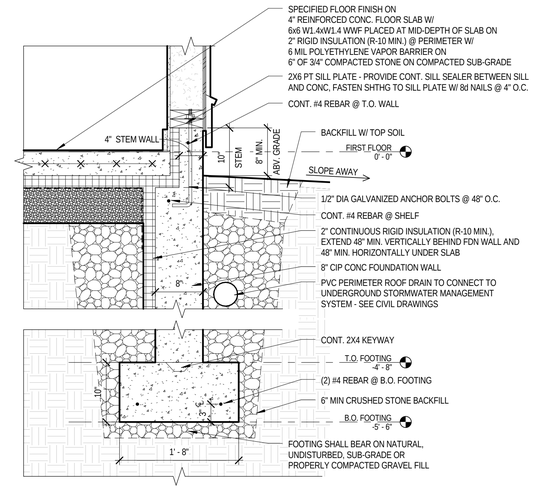
C1 S100 DETAIL @ TYP PORCH SLAB & COLUMN FOOTING
SCALE: 1" = 1'-0"



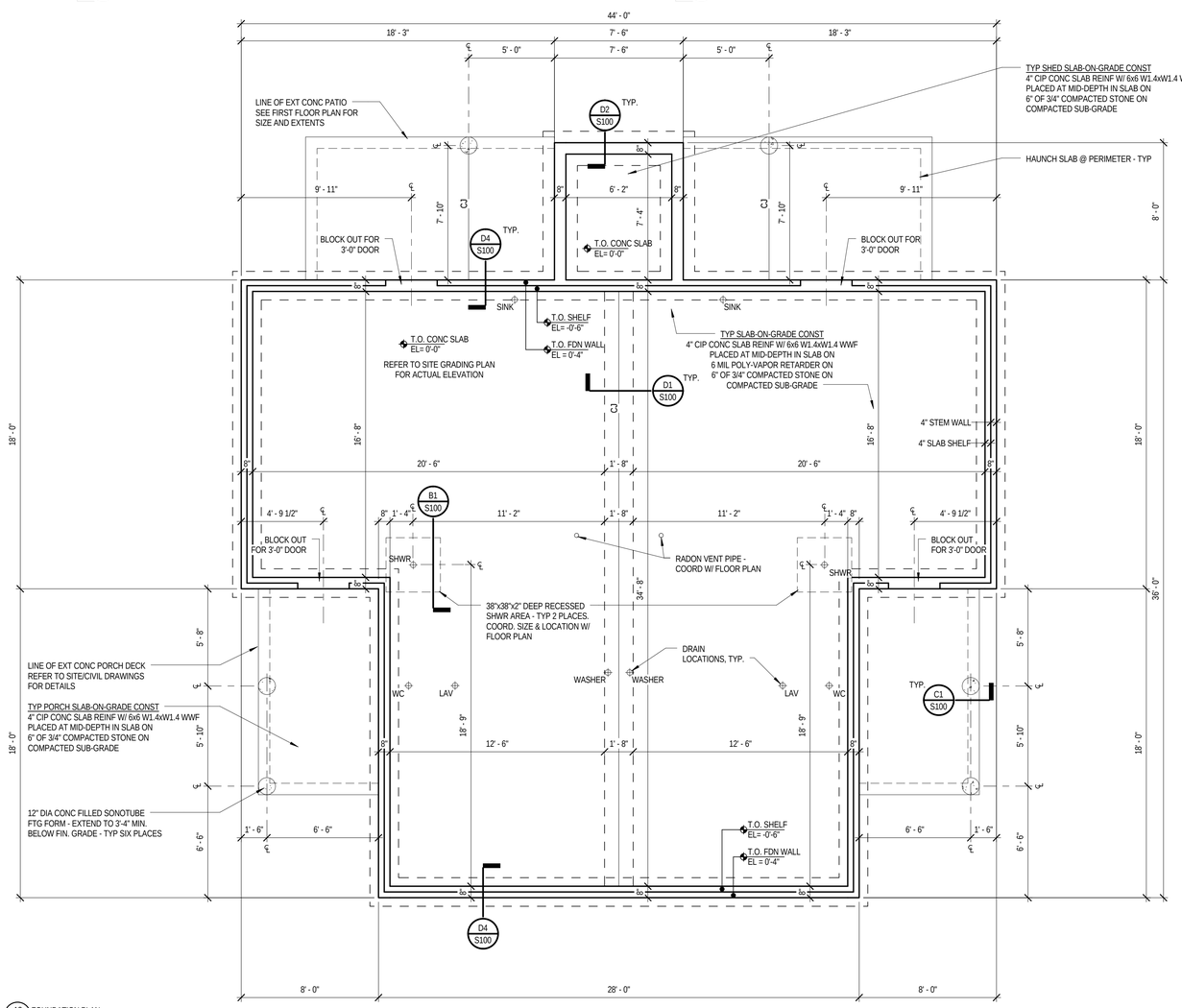
B1 S100 RECESSED SHOWER BASE DETAIL
SCALE: 1" = 1'-0"



D2 S100 DETAIL @ SHED FOUNDATION
SCALE: 1" = 1'-0"



D4 S100 SECTION @ TYP FOUNDATION WALL
SCALE: 1" = 1'-0"



A2 S100 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES - FOUNDATION

ALL NEW STRUCTURAL FILL SHALL BE COMPACTED 95% AT MAXIMUM DRY DENSITY.

FOUNDATION DESIGN IS BASED ON PRESUMPTIVE SOIL BEARING CAPACITY OF 4000 LBS/SF. THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ANY SOILS ARE DISCOVERED ON SITE THAT ARE INCAPABLE OF MEETING THIS BEARING PRESSURE.

SYNTHETIC FIBER REINFORCING MAY BE SUBSTITUTED FOR WELDED WIRE MESH REINFORCING UPON WRITTEN APPROVAL OF THE ARCHITECT. GLASS FIBER REINFORCED CONCRETE SHALL BE IN ACCORDANCE WITH PCI MNL-128 STANDARDS.

ANCHOR WOOD SILL PLATES TO FOUNDATION WITH 1/2" DIAMETER x 10" OR 12" LONG GALVANIZED ANCHOR BOLTS, NUTS, & WASHERS SPACED 48" O.C., REFER TO DETAILS FOR BOLT LENGTHS. PROVIDE A MINIMUM OF TWO BOLTS PER PLATE SECTION WITH BOLTS LOCATED NOT MORE THE 12" FROM CORNERS. BOLTS SHALL EXTEND 7" MINIMUM INTO CONCRETE. HOLDOWN ANCHORS ARE ALSO REGUIRED, REFER TO STRUCTURAL FRAMING DRAWINGS FOR ADDITIONAL INFORMATION.

VAPOR RETARDER TO BE 6 MIL POLYETHYLENE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE.

BASE COURSE TO 6-INCH-THICK MINIMUM CONSISTING OF CLEAN GRADED SAND, GRAVEL, OR CRUSHED STONE PASSING A 2-INCH SIEVE PLACED ON THE SUBGRADE.

UNDER NO CIRCUMSTANCES SHALL THE TOP OF FOUNDATION WALL ELEVATION EXCEED 18" ABOVE FINISHED GRADE ELEVATION.

BACKFILL EACH SIDE OF FOUNDATION IN A BALANCED MANNER TO KEEP SOIL PRESSURES BALANCED (2' UNBALANCED BACKFILL MAX.)

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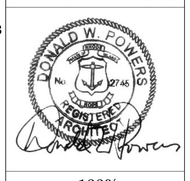
CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI



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FOUNDATION PLAN & DETAILS

S100

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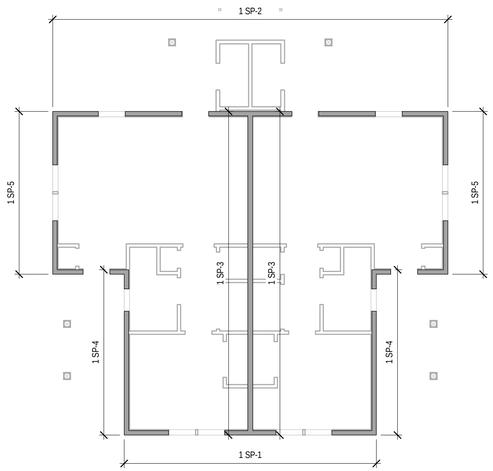


D1 / S101 SHEAR WALL PLAN
SCALE: 1/8" = 1'-0"

SHEAR WALL NAILING & HOLDOWN SCHEDULE

MARK	PLYWOOD ATTACHMENT	HOLDOWN CONNECTOR
1SP-1	8d NAILS @ 4" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU2-SDS2.5
1SP-2	8d NAILS @ 4" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU2-SDS2.5
1SP-3	GYP WALL BOARD, ONE EACH SIDE OF DEMISING WALL W/ #6 SCREWS @ 7" O.C PERIMETER AND INTERMEDIATE, NO BLOCKING REQ'D	NONE REQUIRED
1SP-4	8d NAILS @ 6" O.C. AT VERTICAL SEAMS, 12" O.C. INTERMEDIATE. NO BLOCKING REQ'D	NONE REQUIRED
1SP-5	8d NAILS @ 6" O.C. AT VERTICAL SEAMS, 12" O.C. INTERMEDIATE. NO BLOCKING REQ'D	NONE REQUIRED

SHEAR WALL NOTES:
1. 1SP-1 AND 1SP-2 SHEAR WALLS ARE TO HAVE SOLID BLOCKING INSTALLED BETWEEN STUDS ALONG ALL HORIZONTAL PLYWOOD EDGES.
2. ALL DESIGNATED SHEAR WALLS ARE TO HAVE A DOUBLE STUD AT EACH END OF THE SHEAR WALL FOR HOLDOWN ATTACHMENT.
3. ALL SIMPSON HDU HOLDOWN ANCHORS AT THE ENDS OF SHEAR WALLS ARE TO BE CONNECTED TO NEAREST ANCHOR BOLT W/ SIMPSON CNW5/8 COUPLER.

ROOF MEMBER HOLDOWN SCHEDULE

MEMBER	LOCATION	CONNECTION
CLEARSPAN TRUSSES	EXT WALL	SIMPSON H2A FROM TRUSS TO STUD (STUDS MUST ALIGN W/ TRUSSES)
	GIRDER TRUSS	LUS SERIES HANGER
GIRDER TRUSSES	POST BELOW	SIMPSON LGT SERIES HOLDOWN
HIP TRUSSES / RB-3	EXT WALL / RB-2	TS21 LAPPED EQUALLY ON SHEATHED SIDE OF WALL
RB1 / RB2	EXT WALL	HUC SERIES HANGER
	HOLLOW COLUMN	(2) 18ga STRAP CONTINUOUS FROM ROOF BEAM, THRU COLUMN, EMBEDDED INTO CONC FOUNDATION 14" MIN
HD-1	JACKS	18ga x 16" LONG STEEL STRAP CENTERED ON EACH MEMBER
RJ-1	EXT WALL / RB-2	SIMPSON H2.5A ON SHEATHED SIDE OF WALL

STRUCTURAL FRAMING LEGEND

ROOF FRAMING	
OUTLOOKER - RJ1	2x6 SPF @ 24" O.C.
PORCH ROOF BEAM - RB1	(3) 2x8 SPF
PORCH ROOF BEAM - RB2	(2) 2x8 SPF
PORCH ROOF BEAM - RB3	(2) 2x8 SPF
WINDOW & DOOR HEADERS	
HEADER - HD1	(3) 2x8 SPF
HEADER - HD2	(2) 2x8 SPF
HEADER - HD3	(2) 2x8 SPF
STRUCTURAL COLUMNS	
PORCH CLOUMN - C1	HB&G 8" SQ PERMACAST COLUMN
CLOUMN - C2	(2) 2x6 SPF

STRUCTURAL SYMBOL LEGEND

COLUMN DOWN	BEAMS
BEARING WALL	RAFTERS
HEADERS	RAFTERS - OVERFRAMED

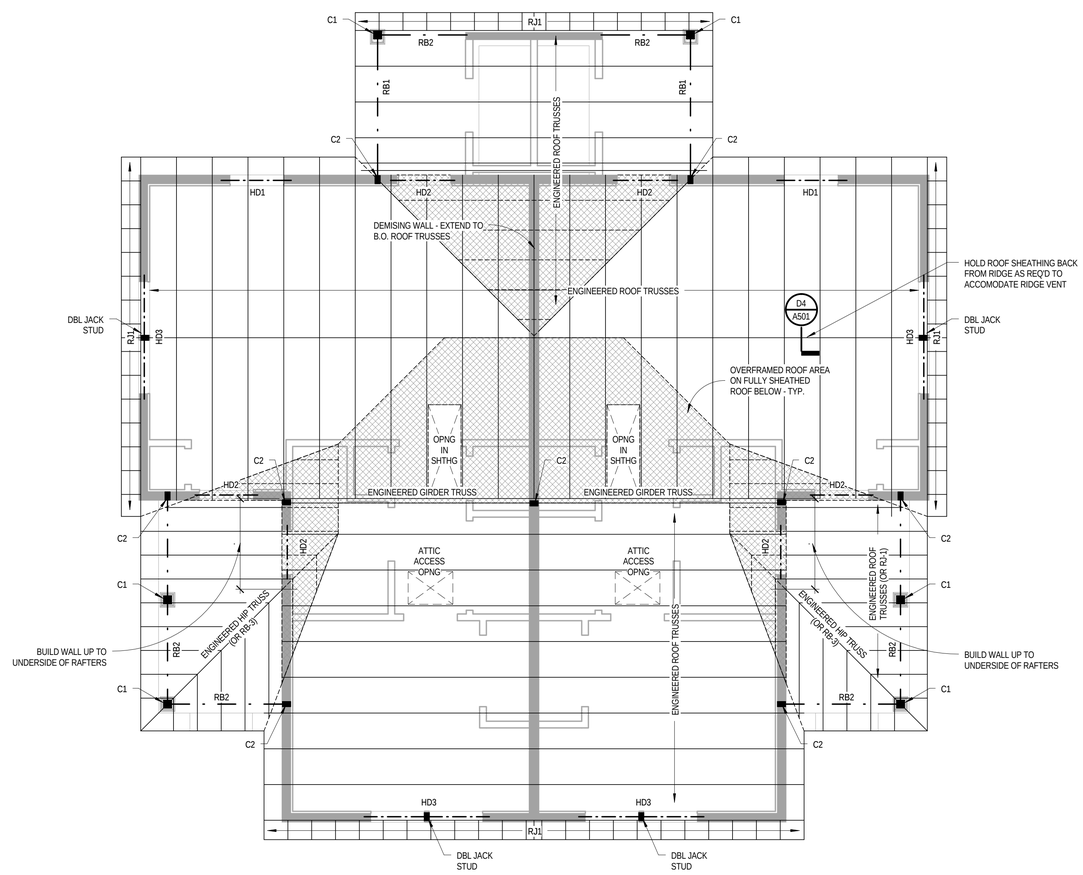
GENERAL STRUCTURAL NOTES

COLUMN DIMENSIONS ARE TAKEN FROM THE EXTERIOR FACE OF FRAMING / FOUNDATION TO THE CENTERLINE OF THE POST UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOULD BE VERIFIED WITH THE FLOOR PLANS.

DIMENSIONS TO PLUMBING FIXTURES ARE TO CENTERLINE OF ROUGH DRAIN. DIMENSIONS GIVEN ARE APPROXIMATE AND SHOULD BE CONFIRMED WITH FINAL FIXTURE SELECTION.

CONTRACTOR TO SUPPLY ALL CODE REQUIRED HURRICANE CLIPS AND HOLD DOWNS

PROVIDE CONTINUOUS HOLD DOWN STRAPPING OR THREADED ROD @ ALL LOAD BEARING PERMACAST PORCH COLUMNS.



A2 / S101 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

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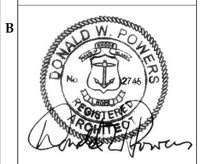
CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI



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ROOF FRAMING & SHEAR WALL PLANS

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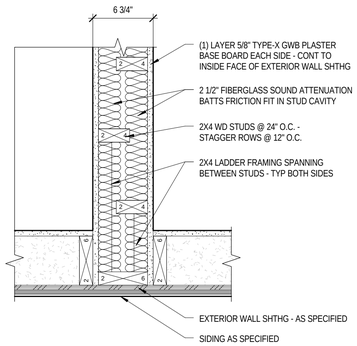
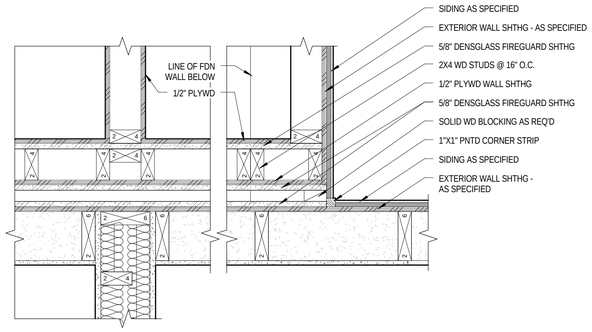
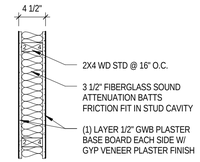


D1 / A101 SEPARATION WALL @ EXTERIOR WALL
SCALE: 1 1/2" = 1'-0"



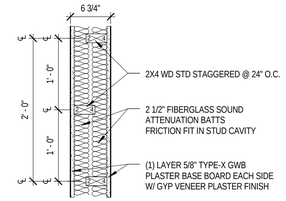
D2 / A101 SEPARATION WALL @ SHED WALL
SCALE: 1 1/2" = 1'-0"



1A 2X4 INTERIOR WALL
AS DESCRIBED

1B 2X4 INTERIOR WALL
OMIT ACOUSTICAL INSULATION

1C 2X4 INTERIOR WALL @ WET LOCATION
REPLACE GWB PLASTER BASE BOARD W/ 1/2" PNTD WATER-AND-MOLD-RESILIENT GWB ON WET SIDE



2A TYPICAL 1-HR RATED INTERIOR DEMISING WALL: UL U340
AS DESCRIBED

2B TYPICAL INTERIOR DEMISING WALL @ WET LOCATION
REPLACE GWB PLASTER BASE BOARD W/ 5/8" TYPE-X PNTD WATER-AND-MOLD-RESILIENT GWB ON WET SIDE

WALL TYPES

GENERAL SHEET NOTES

ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE.

FURNISH AND INSTALL PERMANENT AND RESILIENT ACOUSTICAL SEALANT ALONG ALL JOINTS BETWEEN THE FLOOR AND SEPARATION WALLS. UTILIZE UL RATED FIRESTOP SEALANT AT ALL FIRE-RESISTIVE RATED PARTITIONS.

ALL INTERIOR WALL SURFACES SHALL RECEIVE A PLASTER FINISH. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FURNISH AND INSTALL SOUND ATTENUATION BATT INSULATION IN ALL INTERIOR PARTITIONS UNLESS NOTED OTHERWISE.

DOOR OPENINGS NOT LOCATED BY A DIMENSION SHALL BE CENTERED IN WALLS AS SHOWN OR LOCATED 6" FROM FINISH WALL TO FINISH JAMB UNLESS NOTED OTHERWISE.

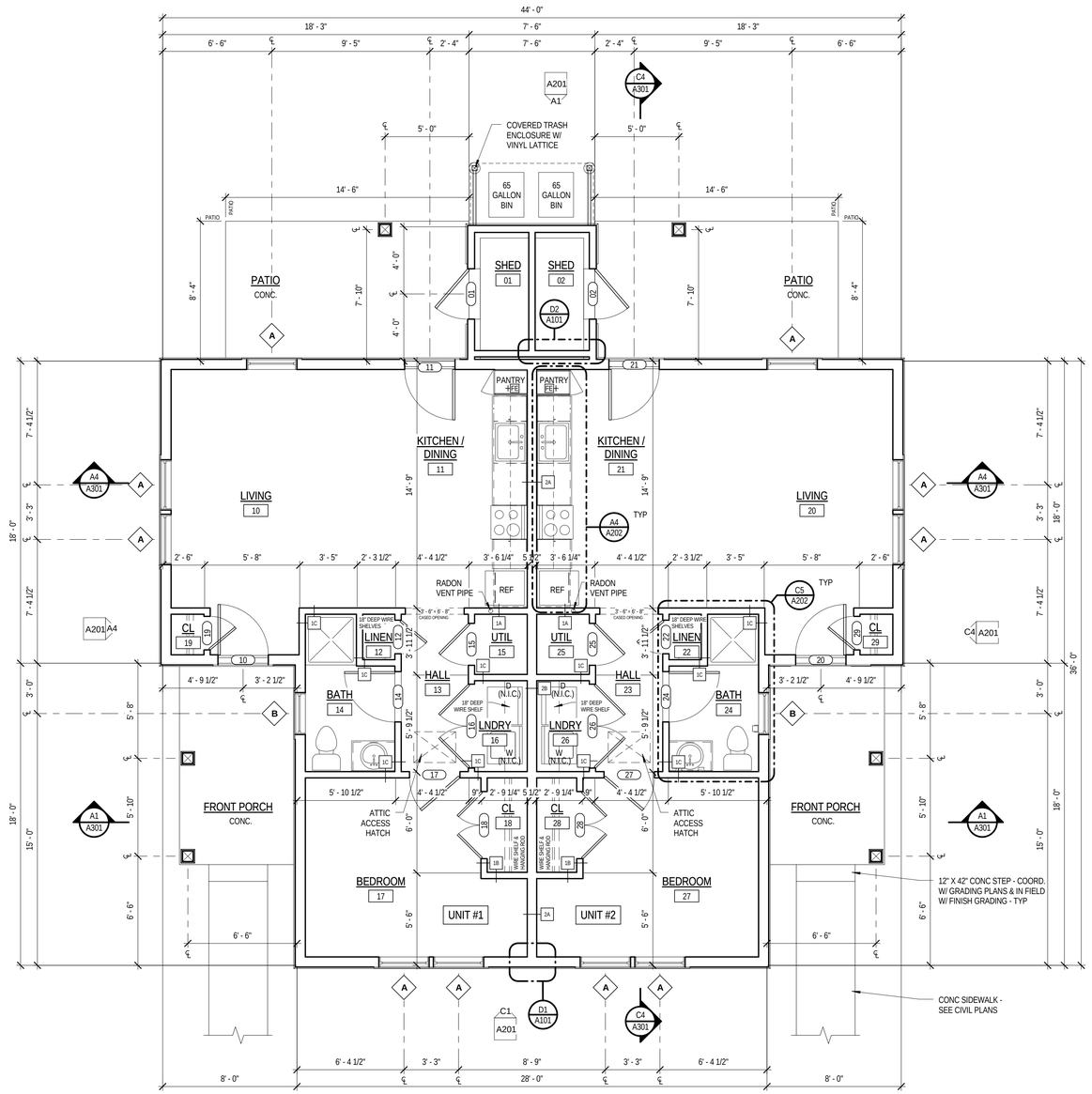
ATTIC ACCESS DOOR TO BE 22"X30" R-42 DELUXE E-Z HATCH ATTIC ACCESS SCUTTLE DOOR WITH LOCKING 4-POINT LATCH AND HANDLES.

PROVIDE PORTABLE FIRE EXTINGUISHERS IN EACH KITCHEN. FINAL LOCATION TO BE DETERMINED IN FIELD BY ARCHITECT.

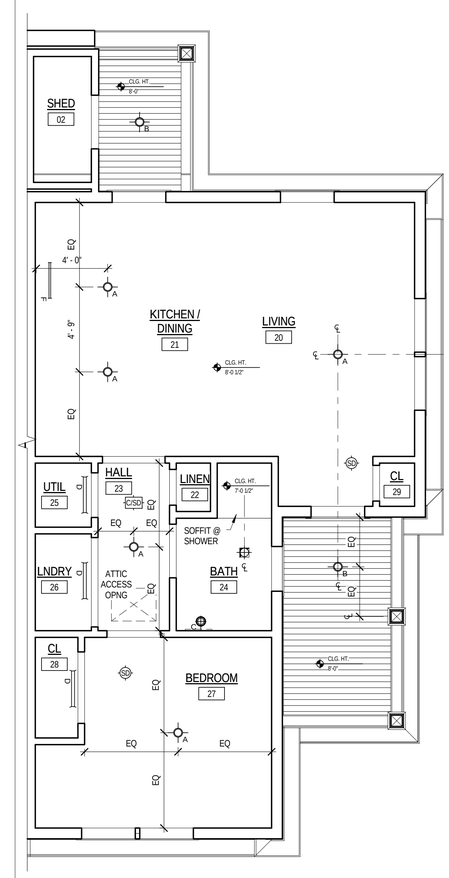
PROVIDE WASHER & DRYER HOOKUPS AND DRYER VENT TO EXTERIOR.

LIGHTING FIXTURE LEGEND

SYMBOL	DESCRIPTION	SPECIFICATION
A	CEILING MOUNTED - COMPACT FLOURESCENT FIXTURE	
B	CEILING MOUNTED - EXTERIOR PORCH FIXTURE - DAYLIGHT SWITCHED	
C	BATHROOM WALL SCONCE 2-LIGHT FLOURESCENT FIXTURE	
D	CLOSET LIGHT / FLUORESCENT UTILITY	
E	BATHROOM VENT FAN W/ FLOURESCENT LIGHT	
F	UNDER CABINET MOUNTED / COVE	



A2 / A101 FIRST FLOOR
SCALE: 1/4" = 1'-0"



A5 / A101 FIRST FLOOR RCP
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS No. 2745 REGISTERED ARCHITECT

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FIRST FLOOR PLAN & RCP

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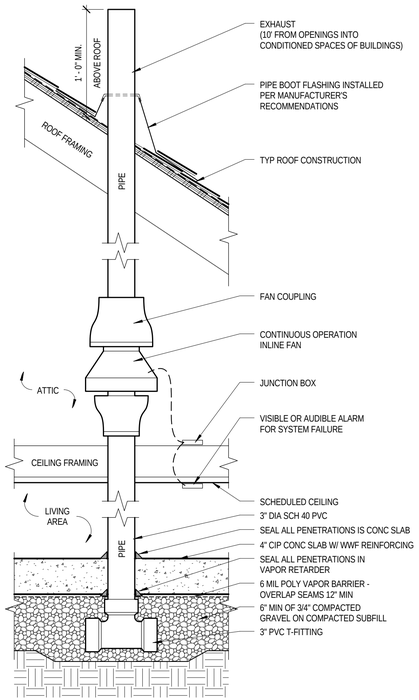
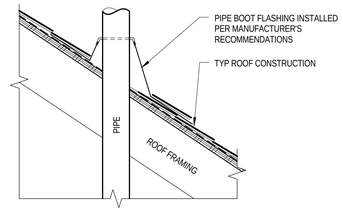
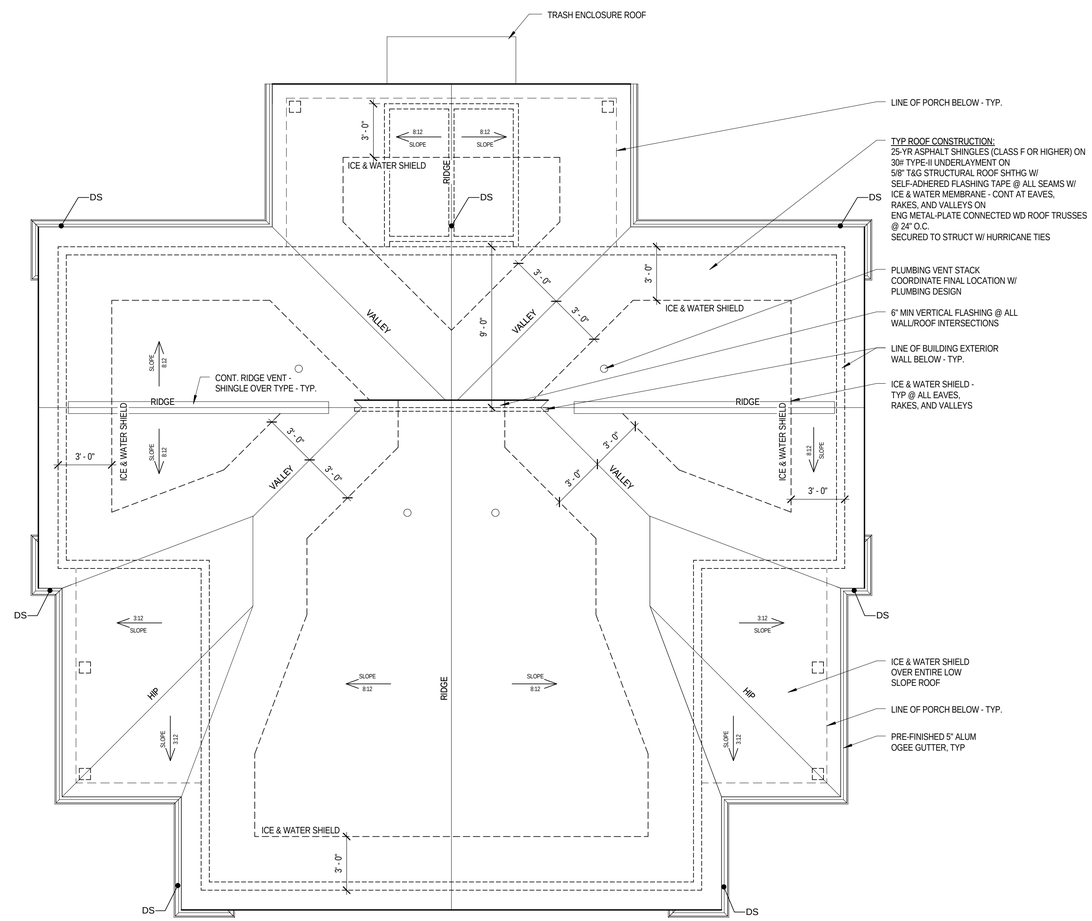


C1 / A102 DETAIL @ RADON VENTING
SCALE: 1 1/2" = 1'-0"



D2 / A102 DETAIL @ ROOF PENETRATION
SCALE: 1 1/2" = 1'-0"



A2 / A102 ROOF PLAN
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES - ROOFING

SHINGLES SHALL BE TESTED IN ACCORDANCE WITH ASTM D 7158 AND SHALL MEET THE CLASSIFICATION REQUIREMENTS FOR A BASIC WIND SPEED OF 110 MPH AND SHALL BE FASTENED TO THE ROOF TO ACCOMODATE SUCH WIND SPEED.

PROVIDE CONTINUOUS METAL DRIP EDGE ON ALL EAVES AND RAKES.

PROVIDE SIDEWALL FLASHING AT ALL VERTICAL SIDEWALLS BY THE STEP-FLASHING METHOD. FLASHING SHALL RUN UP VERTICAL SIDEWALLS 6" MINIMUM. AT THE END OF THE VERTICAL SIDEWALL THE STEP FLASHING SHALL BE TURNED OUT IN A MANNER THAT DIRECTS WATER AWAY FROM THE WALL AND ONTO THE ROOF AND/OR GUTTER.

PROVIDE (1) ONE LAYER NO. 30 (TYPE II) ASPHALT-SATURATED ORGANIC ROOFING FELT ON ALL ROOF SURFACES THAT ARE NOT COMPLETELY COVERED WITH ICE & WATER SHIELD MEMBRANE. ROOFING FELT MAY BE ELIMINATED AT THE CONTRACTOR'S OPTION IF ZIP SYSTEM ROOF SHEATHING WITH MOISTURE-RESISTIVE BARRIER IS UTILIZED AND ALL PANEL SEAMS ARE TAPED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.

PROVIDE ICE & WATER SHIELD MEMBRANE AT ALL EAVES, RAKES, VALLEYS, EAVE RETURNS, PORCH ROOFS AND ROOF TO SIDEWALL INTERSECTIONS. EXTEND MEMBRANE FROM LOWEST EDGES OF ALL ROOF SURFACES UP THE SLOPE TO A POINT AT LEAST 36" INSIDE THE EXTERIOR WALL LINE OF THE BUILDING.

PROVIDE 5" ALUMINUM OGEE STYLE GUTTERS AS INDICATED ON THE DRAWINGS. PROVIDE 3"X4" COORDINATING ALUMINUM DOWNSPOUTS AND BRACKETS WITH BOOT SLEEVES AT GRADE AT BASE OF DOWNSPOUT.

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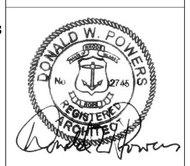

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ROOF PLAN

A102

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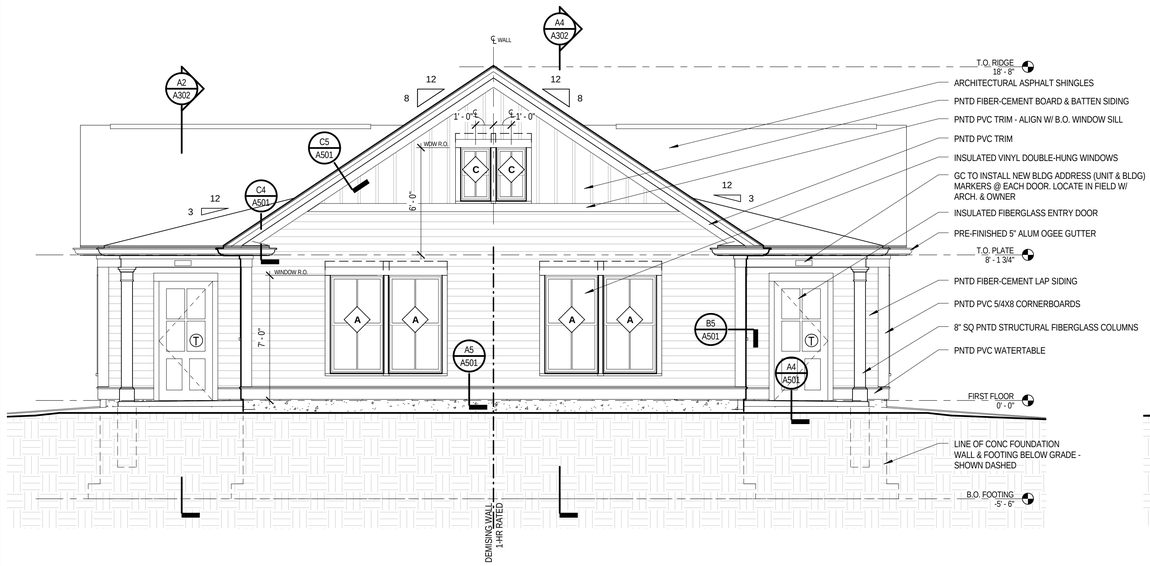
GENERAL SHEET NOTES - ELEVATIONS

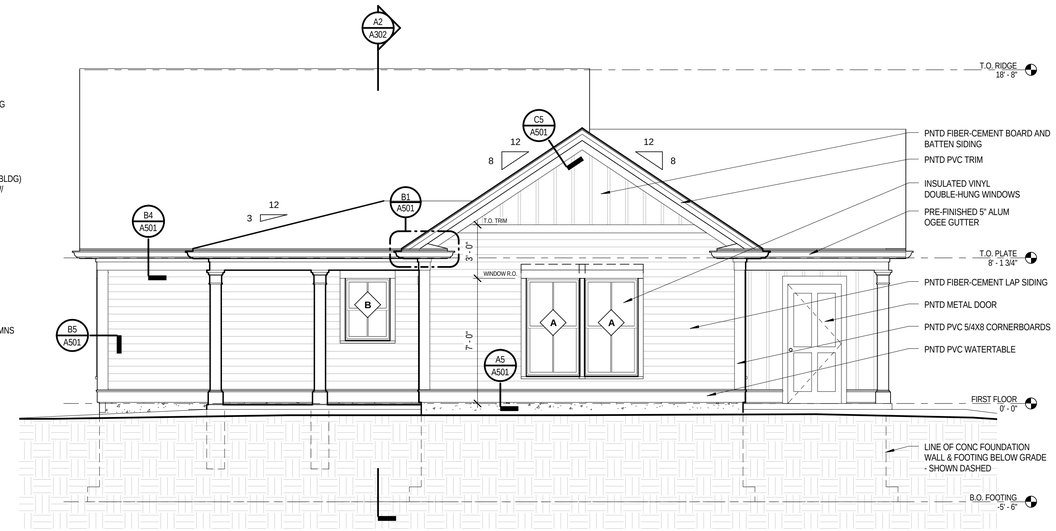
ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. THE TOP OF CONCRETE SLAB AT EACH BUILDING IS CONSIDERED THE REFERENCE ELEVATION FOR ALL VERTICAL MEASUREMENTS AND DIMENSIONS. REFER TO THE SITE GRADING PLAN FOR ACTUAL SLAB ELEVATIONS.

ALIGN ALL ROOF AND WALL ACCESSORIES AS INDICATED ON THE ELEVATIONS. ANY ACCESSORIES NOT INDICATED ON THE PLANS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.

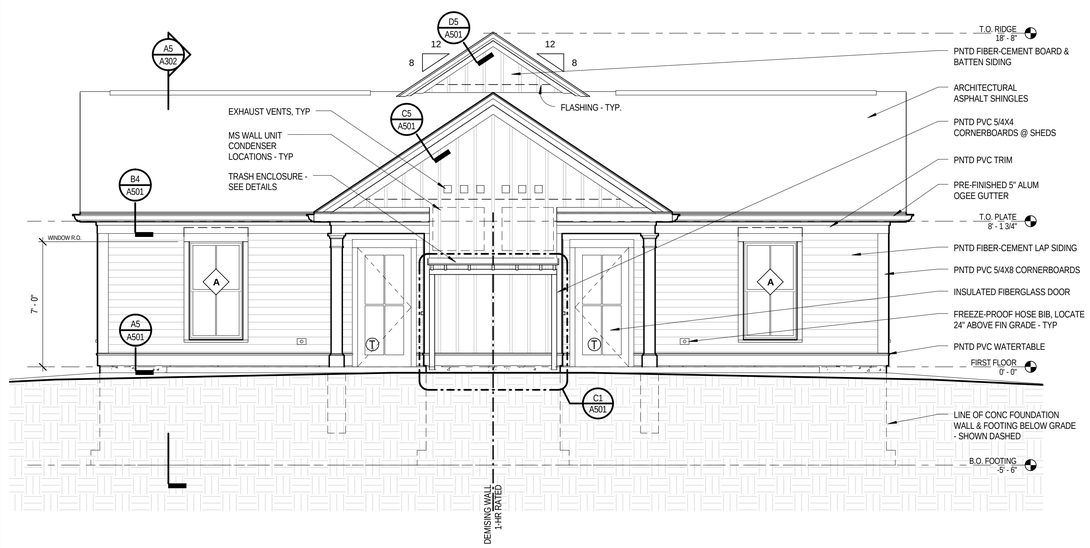
ALL EXTERIOR WALL MOUNTED ELECTRICAL BOXES, HOSE BIBBS, LIGHT FIXTURES, DEVICES AND ACCESSORIES SHALL BE INSTALLED ON MOUNTING BLOCKS. MOUNTING BLOCKS SHALL BE PAINTED TO MATCH BUILDING SIDING FIELD COLOR.



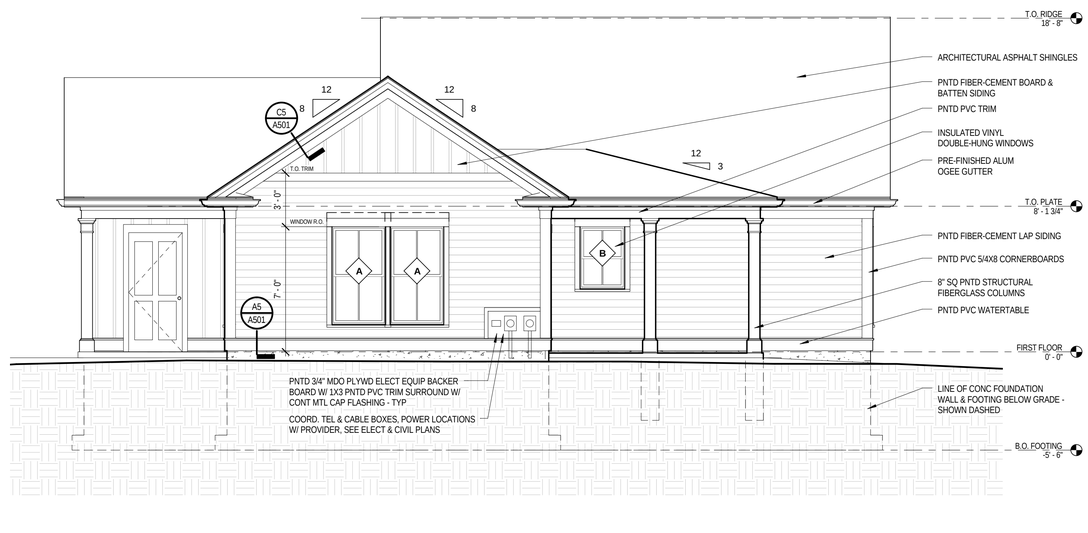
C1 A201 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



C4 A201 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



A1 A201 REAR ELEVATION
SCALE: 1/4" = 1'-0"



A4 A201 LEFT ELEVATION
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS
No. 2745
REGISTERED ARCHITECT
RHODE ISLAND

100% CONSTRUCTION DOCUMENTS

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EXTERIOR ELEVATIONS

A201

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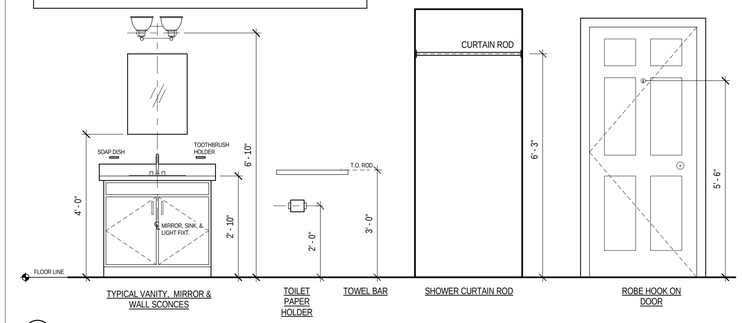
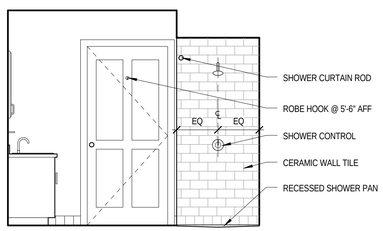
ROOM FINISH SCHEDULE						
		ROOM FINISHES				CEILING HEIGHT
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	
10	LIVING	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
11	KITCHEN / DINING	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
12	LINEN	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
13	HALL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
14	BATH	2X2 MOSAIC CERAMIC TILE	4" CT COVE BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
15	UTIL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
16	LNDRY	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
17	BEDROOM	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
18	CL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
19	CL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"

TYPICAL @ UNITS 1 & 2
SEE SPECIFICATIONS FOR PAINT TYPE TO BE USED FOR SPECIFIC APPLICATIONS

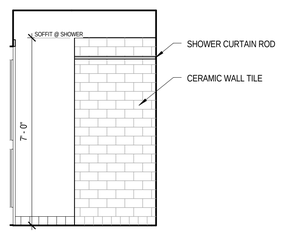
MOUNTING HEIGHT SCHEDULE NOTES:
1. SEE INTERIOR ELEVATIONS FOR ALL CABINET & BATHROOM CONFIGURATIONS.
2. CABINET STYLES ARE ONLY DIAGRAMMATIC - SEE SPECIFICATIONS FOR TYPE.



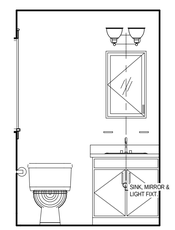
D4 A202 MOUNTING HEIGHT SCHEDULE FOR BATHROOMS
SCALE: 1/2" = 1'-0"



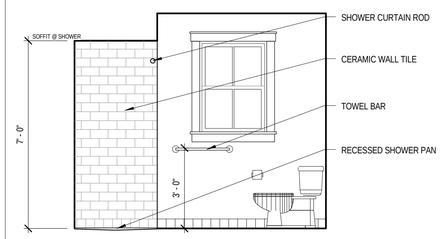
C1 A202 TYPICAL BATHROOM ELEVATION 1
SCALE: 3/8" = 1'-0"



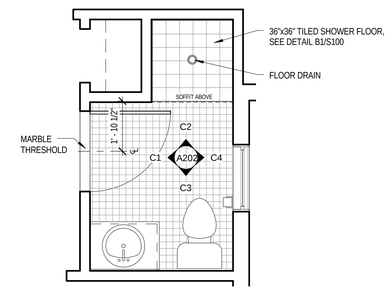
C2 A202 TYPICAL BATHROOM ELEVATION 2
SCALE: 3/8" = 1'-0"



C3 A202 TYPICAL BATHROOM ELEVATION 3
SCALE: 3/8" = 1'-0"

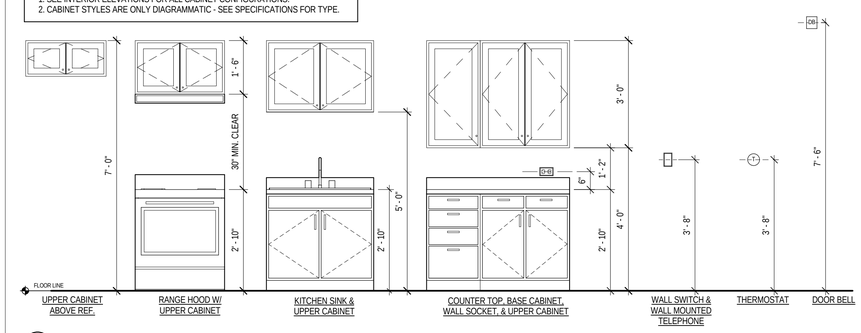


C4 A202 TYPICAL BATHROOM ELEVATION 4
SCALE: 3/8" = 1'-0"

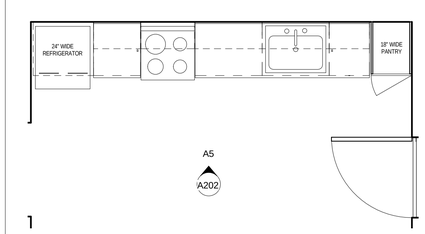


C5 A202 TYPICAL BATHROOM FLOOR PLAN
SCALE: 3/8" = 1'-0"

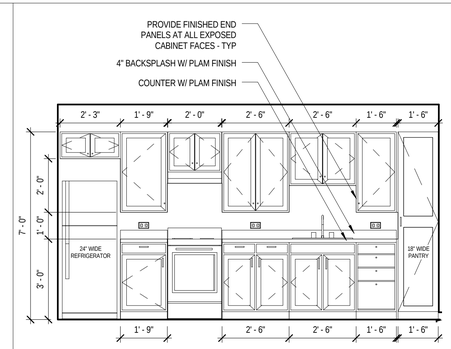
MOUNTING HEIGHT SCHEDULE NOTES:
1. SEE INTERIOR ELEVATIONS FOR ALL CABINET CONFIGURATIONS.
2. CABINET STYLES ARE ONLY DIAGRAMMATIC - SEE SPECIFICATIONS FOR TYPE.



B4 A202 MOUNTING HEIGHT SCHEDULE FOR KITCHENS
SCALE: 1/2" = 1'-0"



A4 A202 TYPICAL KITCHEN LAYOUT
SCALE: 3/8" = 1'-0"



A5 A202 KITCHEN ELEVATION
SCALE: 3/8" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS No. 2745 REGISTERED ARCHITECT

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INTERIOR PLANS, ELEVATIONS & SCHEDULES

A202

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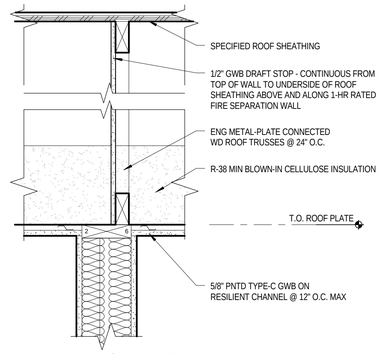
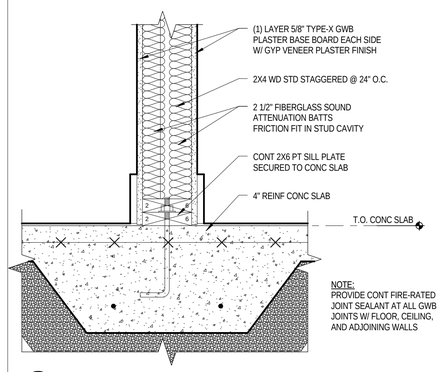
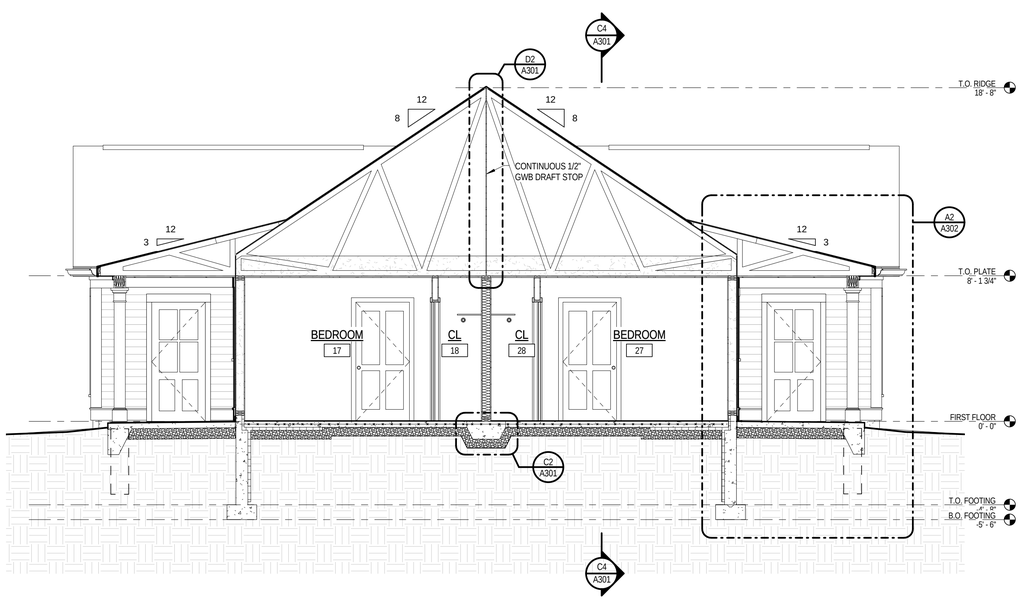


D2 A301 1-HR FIRE SEPARATION DETAIL @ CEILING & ROOF
SCALE: 1 1/2" = 1'-0"

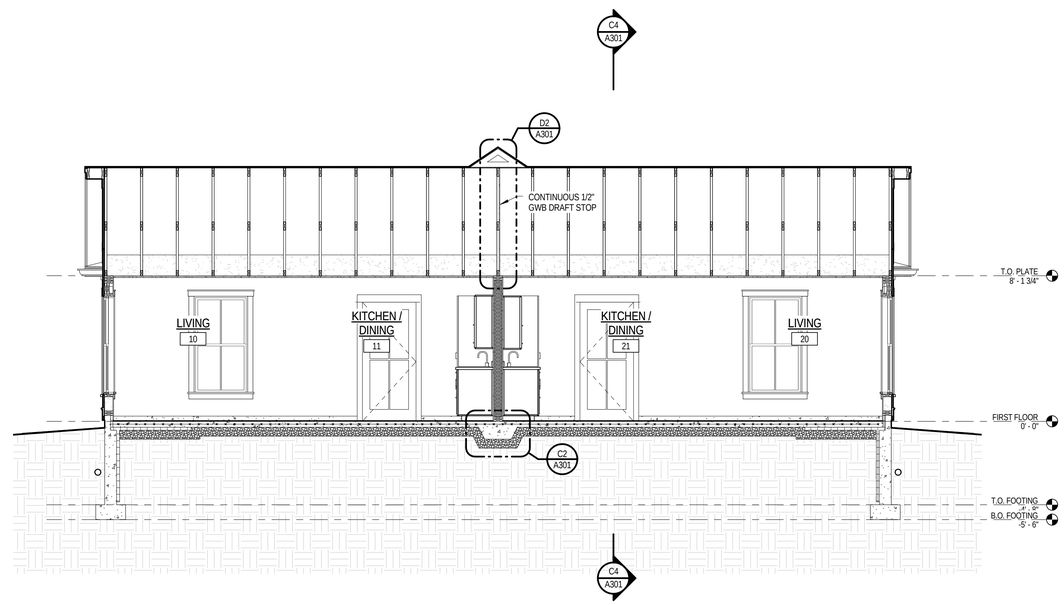


C2 A301 1-HR FIRE SEPARATION DETAIL @ CONC SLAB
SCALE: 1 1/2" = 1'-0"

C4 A301 LONGITUDINAL SECTION @ KITCHEN
SCALE: 1/4" = 1'-0"



A1 A301 TRANSVERSE SECTION @ BEDROOM
SCALE: 1/4" = 1'-0"



A4 A301 TRANSVERSE SECTION @ LIVING ROOM
SCALE: 1/4" = 1'-0"

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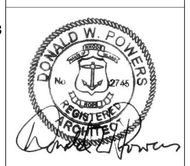
CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI



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BUILDING SECTIONS

A301

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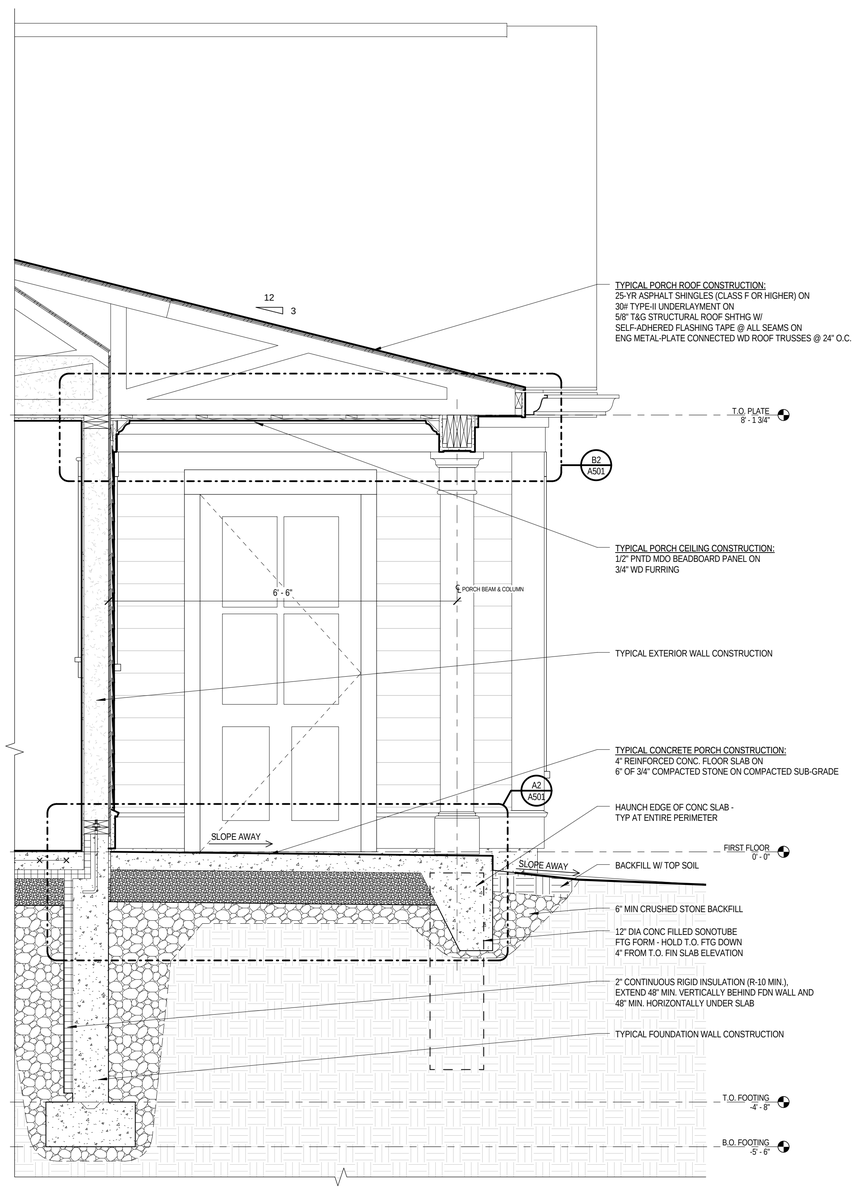
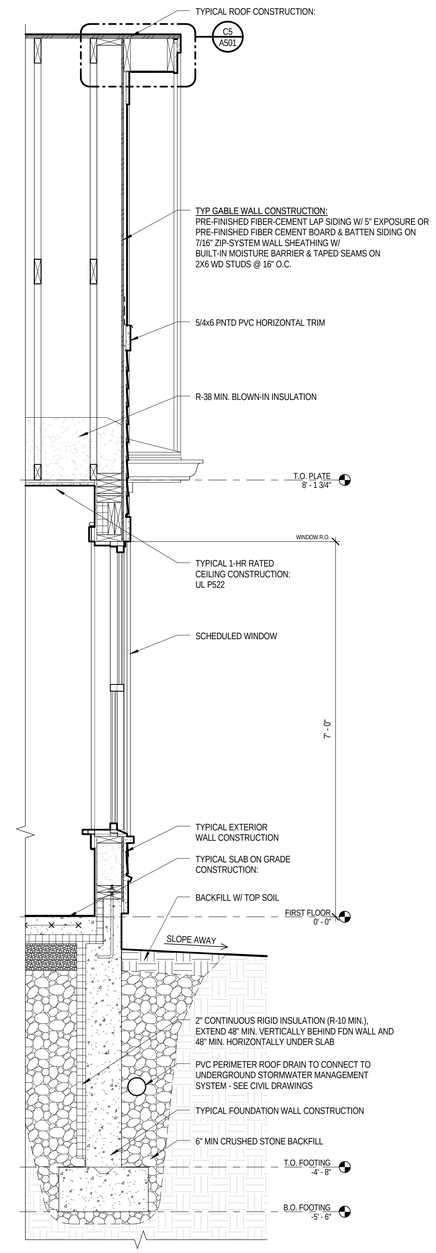
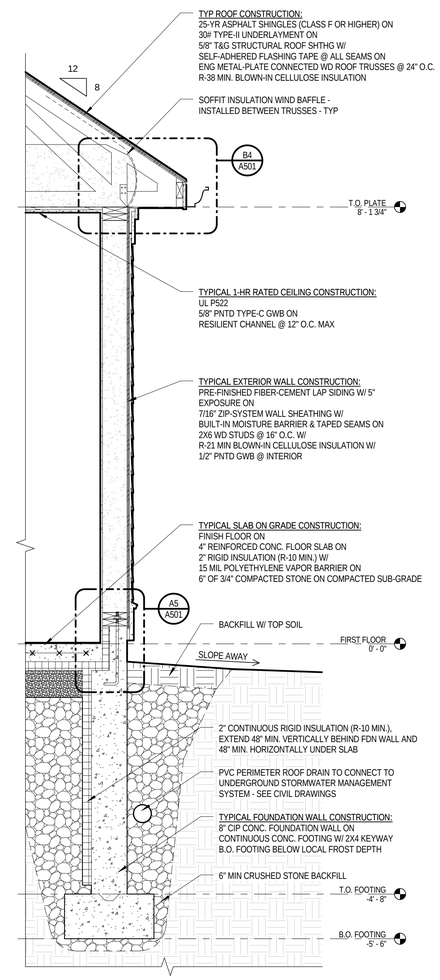


A2 / A302 WALL SECTION @ FRONT PORCH
SCALE: 3/4" = 1'-0"



A4 / A302 WALL SECTION @ GABLE
SCALE: 3/4" = 1'-0"



A5 / A302 TYPICAL WALL SECTION
SCALE: 3/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. FOWLER
No. 2745
COMMONWEALTH OF MASSACHUSETTS
REGISTERED ARCHITECT

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TYPICAL WALL SECTIONS

A302

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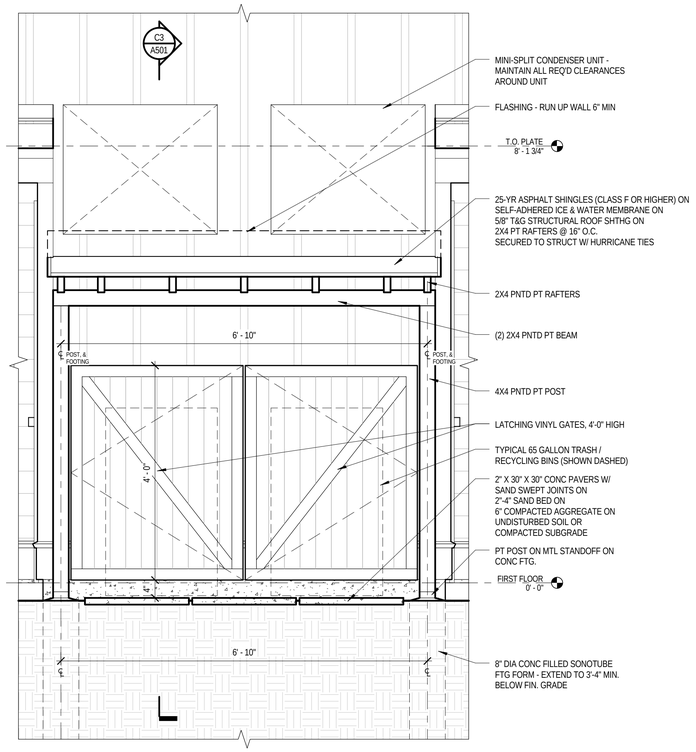
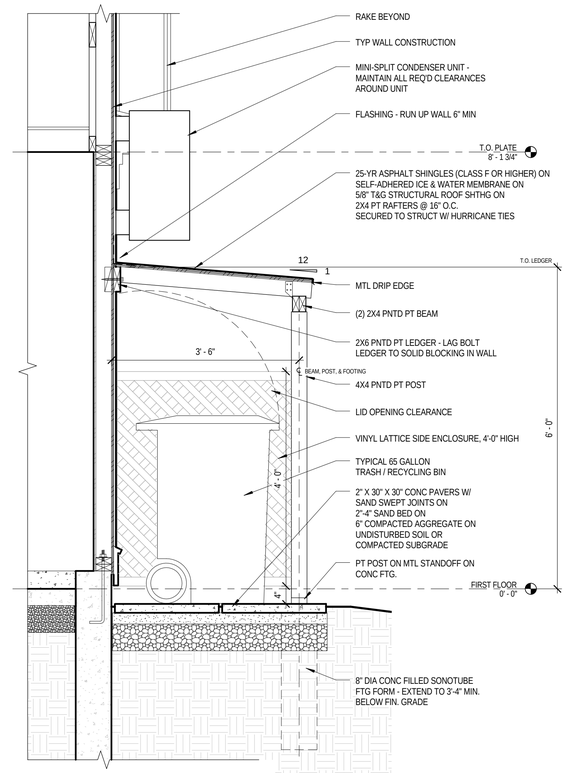
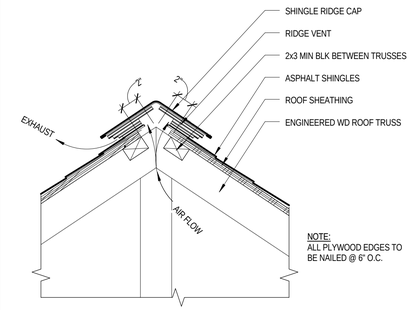


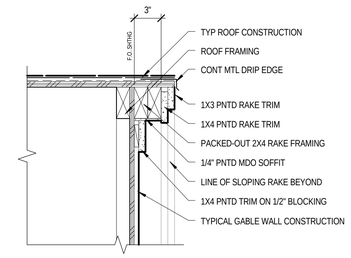
C1 A501 DETAIL @ TRASH ENCLOSURE ELEVATION
SCALE: 3/4" = 1'-0"



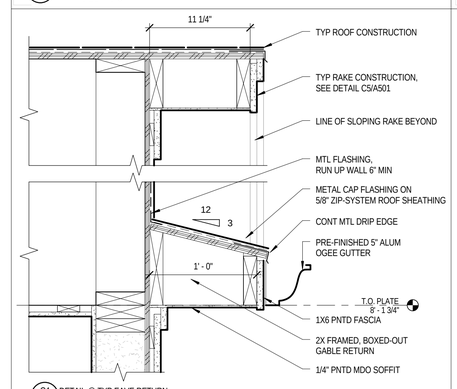
C3 A501 DETAIL @ TRASH ENCLOSURE SECTION
SCALE: 3/4" = 1'-0"



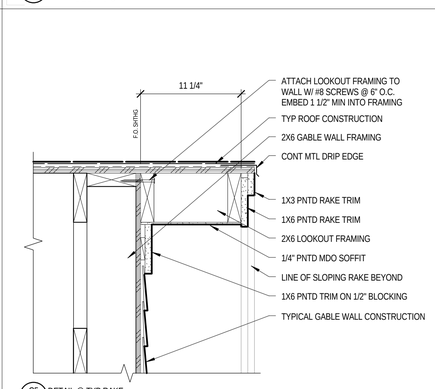
D4 A501 DETAIL @ RIDGE VENT
SCALE: 1 1/2" = 1'-0"



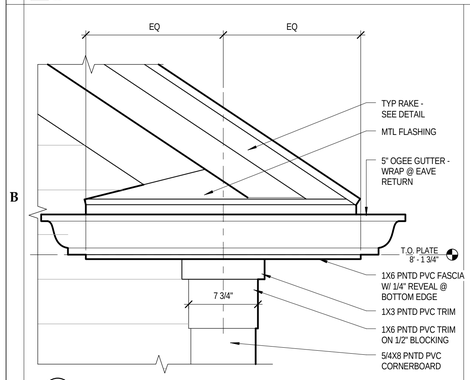
D5 A501 DETAIL @ PACKED-OUT RAKE
SCALE: 1 1/2" = 1'-0"



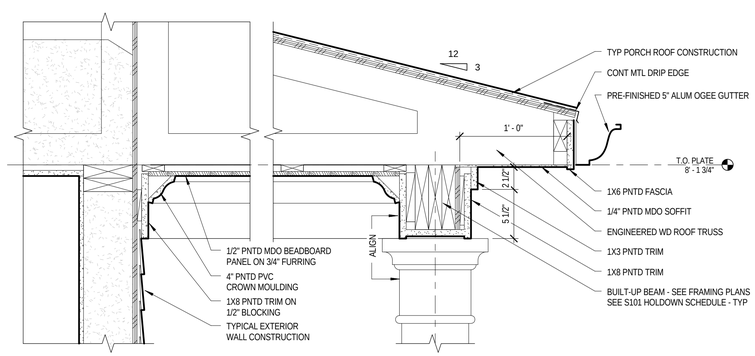
C4 A501 DETAIL @ TYP EAVE RETURN
SCALE: 1 1/2" = 1'-0"



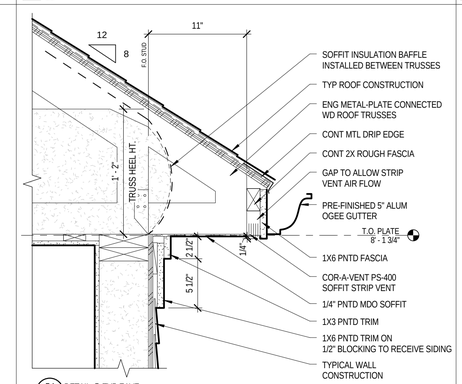
C5 A501 DETAIL @ TYP RAKE
SCALE: 1 1/2" = 1'-0"



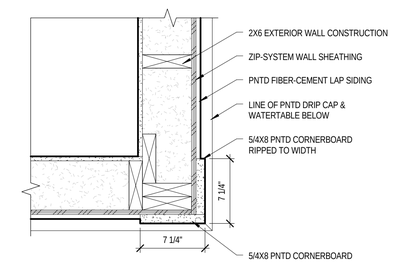
B1 A501 DETAIL ELEVATION @ EAVE RETURN
SCALE: 1 1/2" = 1'-0"



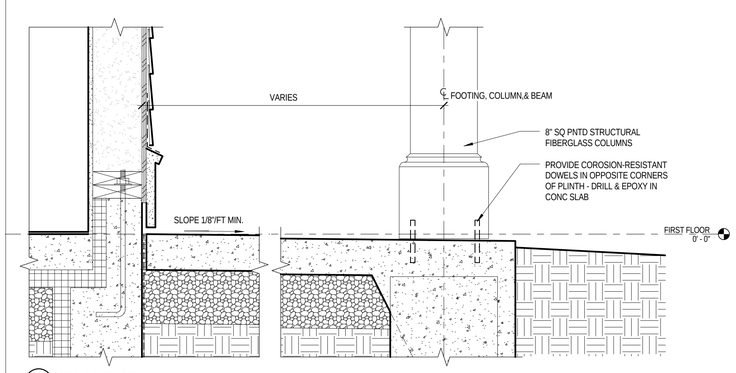
B2 A501 DETAIL @ PORCH BEAM & CEILING
SCALE: 1 1/2" = 1'-0"



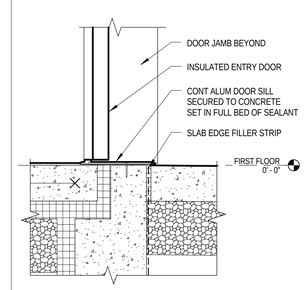
B4 A501 DETAIL @ TYP EAVE
SCALE: 1 1/2" = 1'-0"



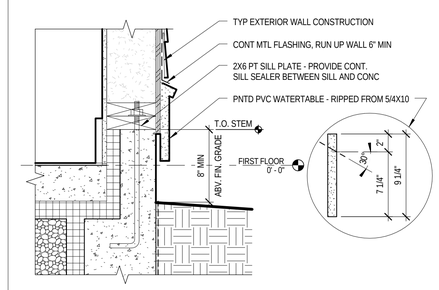
B5 A501 DETAIL @ CORNERBOARD
SCALE: 1 1/2" = 1'-0"



A2 A501 DETAIL @ PORCH DECK
SCALE: 1 1/2" = 1'-0"



A4 A501 DETAIL @ STOOP SILL
SCALE: 1 1/2" = 1'-0"



A5 A501 DETAIL @ WATERTABLE
SCALE: 1 1/2" = 1'-0"

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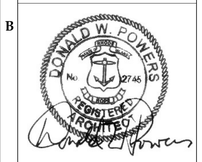
BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI



100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

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EXTERIOR DETAILS

A501

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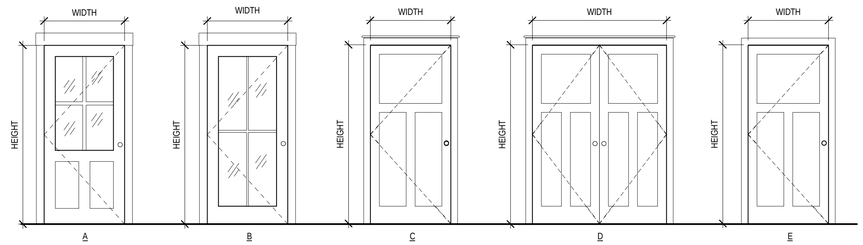
DOOR SCHEDULE

DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MANUFACTURER	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	THRESHOLD	DESCRIPTION
10	3' - 0"	6' - 8"	0' - 1 3/4"	THERMATRUE OR APPROVED EQ.	A	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	INSULATED
11	3' - 0"	6' - 8"	0' - 1 3/4"	THERMATRUE OR APPROVED EQ.	B	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	INSULATED
17	3' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
15	2' - 6"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
14	3' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD	MARBLE	
19	2' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
12	2' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
18	4' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	D	SEMI-SOLID WD	PNTD	WD	PNTD		PAIR OF DOORS
16	5' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	D	SEMI-SOLID WD	PNTD	WD	PNTD		PAIR OF DOORS
01	3' - 0"	6' - 8"	0' - 1 3/4"	MASONITE OR APPROVED EQ.	E	METAL	PNTD	WD	PNTD		UNINSULATED

TYPICAL @ UNITS 1 & 2



A — SINGLE-LEAF, INSULATED FIBERGLASS SIZE AS NOTED ON SCHEDULE

B — SINGLE-LEAF, INSULATED FIBERGLASS SIZE AS NOTED ON SCHEDULE

C — SINGLE-LEAF, SEMI-SOLID WD SIZE AS NOTED ON SCHEDULE

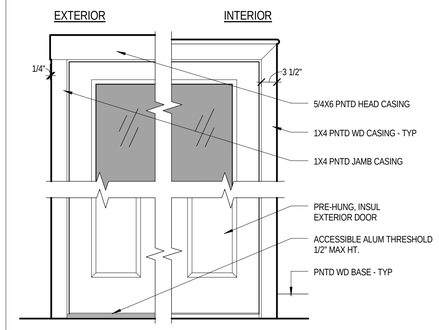
D — DOUBLE-LEAF, SEMI-SOLID WD SIZE AS NOTED ON SCHEDULE

E — SINGLE-LEAF, METAL SIZE AS NOTED ON SCHEDULE

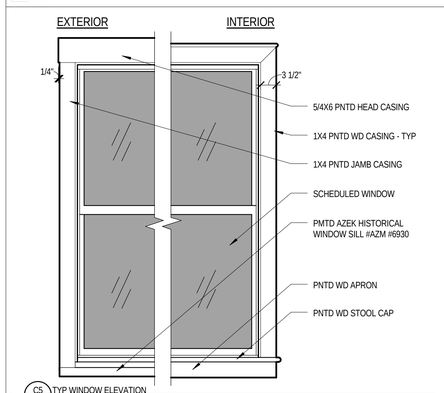
DOOR LEGEND
3/8" = 1'-0"

WINDOW SCHEDULE

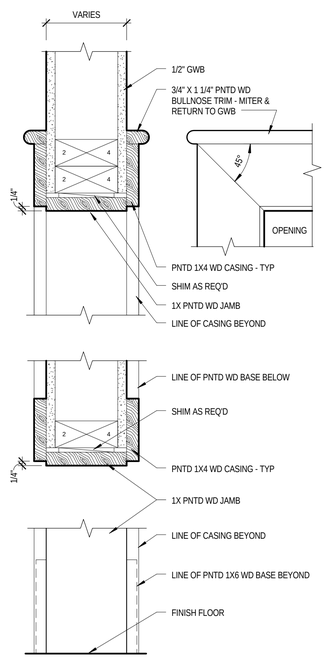
TYPE MARK	UNIT SIZE WIDTH	UNIT SIZE HEIGHT	OPERATION	COMMENTS
A	3' - 0"	5' - 6"	DOUBLE HUNG	
B	2' - 6"	3' - 6"	DOUBLE HUNG	
C	1' - 8"	3' - 0"	DOUBLE HUNG	



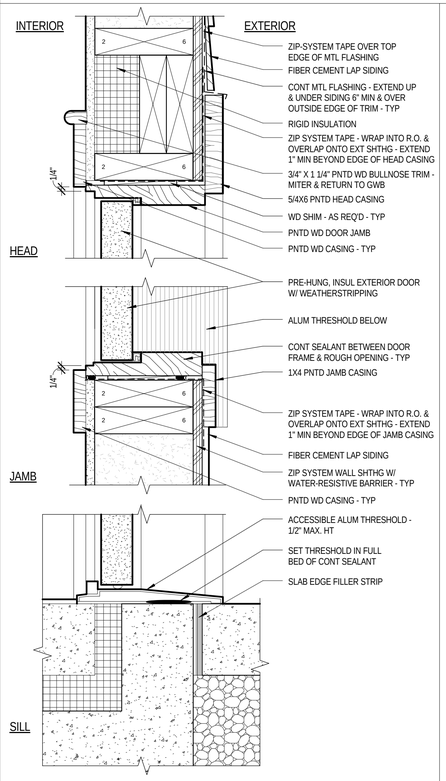
D5 / A502 TYP EXTERIOR DOOR ELEVATION
SCALE: 3/4" = 1'-0"



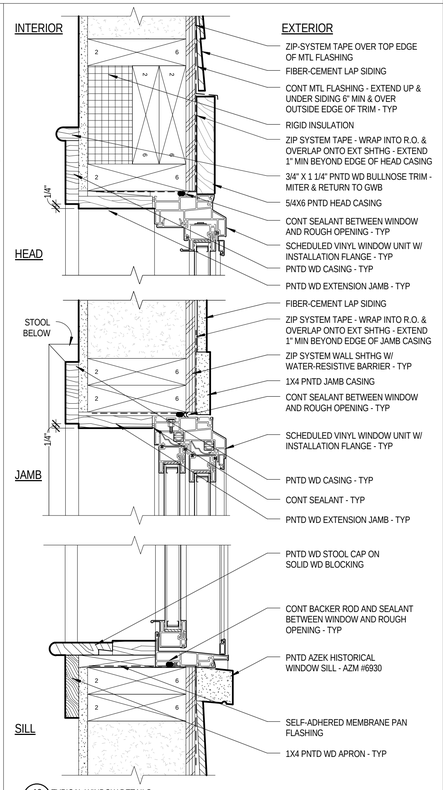
C5 / A502 TYP WINDOW ELEVATION
SCALE: 3/4" = 1'-0"



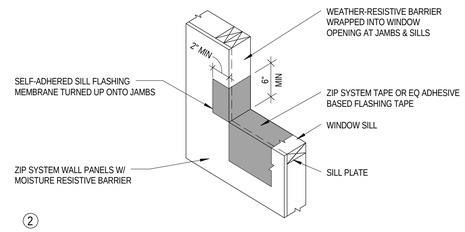
A1 / A502 INTERIOR CASED OPENING DETAILS
SCALE: 3" = 1'-0"



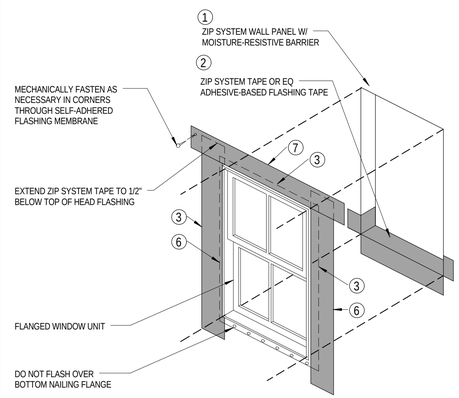
A2 / A502 TYPICAL EXTERIOR DOOR DETAIL
SCALE: 3" = 1'-0"



A3 / A502 TYPICAL WINDOW DETAILS
SCALE: 3" = 1'-0"



2
SILL FLASHING

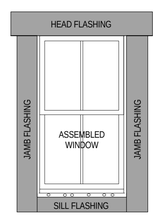


3 4 5 6 7
JAMB & HEAD FLASHING DETAILS

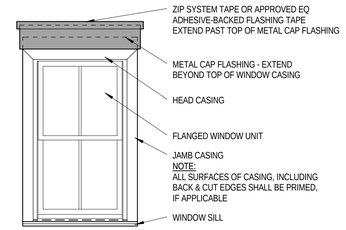
A4 / A502 TYPICAL FLASHING DETAILS
SCALE: 1/2" = 1'-0"

WINDOW INSTALLATION STEPS:

1. FASTEN ZIP SYSTEM WALL SHEATHING TO THE WOOD FRAME AND INSTALL THE ZIP SYSTEM TAPE AS SPECIFIED BY MANUFACTURER
2. APPLY ZIP SYSTEM TAPE OR APPROVED EQ ADHESIVE-BASED FLASHING TAPE, ENSURING THAT FLASHING EXTENDS UP JAMBS AT LEAST 6" & OVERHANGS SHEATHING AT LEAST 2".
3. APPLY A 3/8" NOM. DIA. BEAD OF SEALANT TO THE BACKSIDE (INTERIOR) OF THE WINDOW MOUNTING FLANGE AT THE TOP AND SIDES ONLY. PLACE BEAD IN LINE WITH ANY PRE-PUNCHED HOLES.
4. IMMEDIATELY INSTALL WINDOW USING MANUFACTURER RECOMMENDED FASTENERS.
5. APPLY BEAD OF SEALANT ACROSS THE FACE OF THE MOUNTING FLANGE AT HEAD.
6. APPLY JAMB FLASHING, EXTENDING TO 1/2" BELOW TOP OF HEAD FLASHING. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
7. APPLY HEAD FLASHING, OVERLAPPING JAMB FLASHING BY 1" MINIMUM. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
8. INSTALL METAL CAP FLASHING AND TRIM.



FINAL CLOSURE DETAIL



8
CAP FLASHING & TRIM DETAIL

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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. FOWERS
No. 2745
COMMONWEALTH OF MASSACHUSETTS
REGISTERED ARCHITECT

100% CONSTRUCTION DOCUMENTS

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DOOR & WINDOW SCHEDULES & DETAILS

A502

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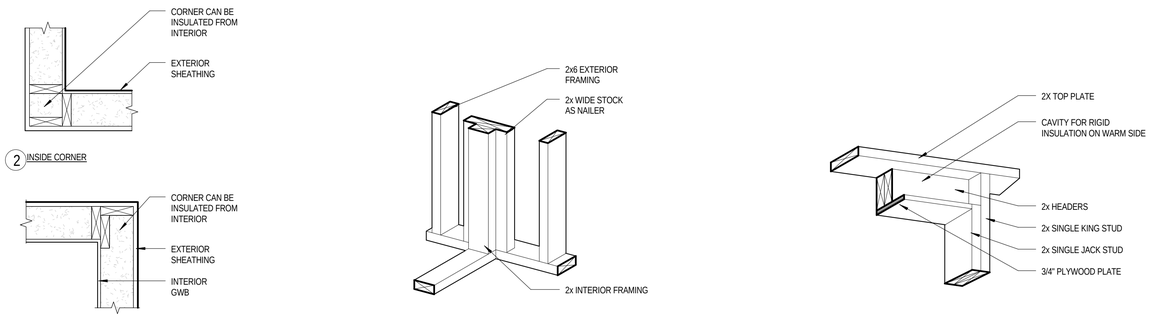
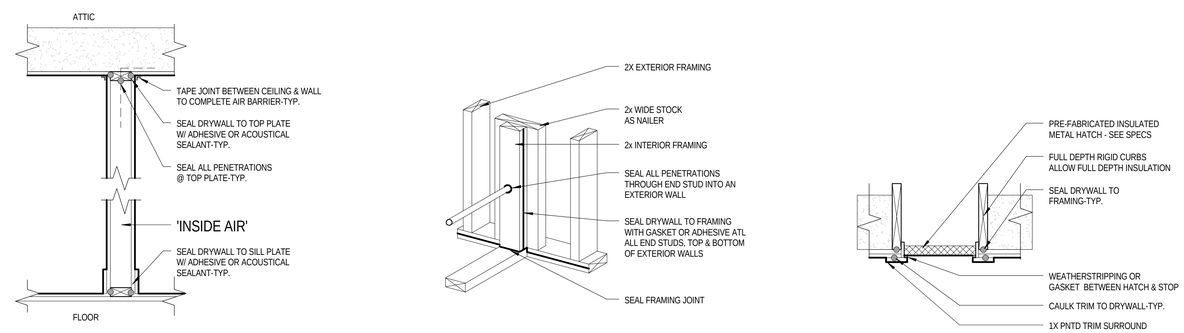
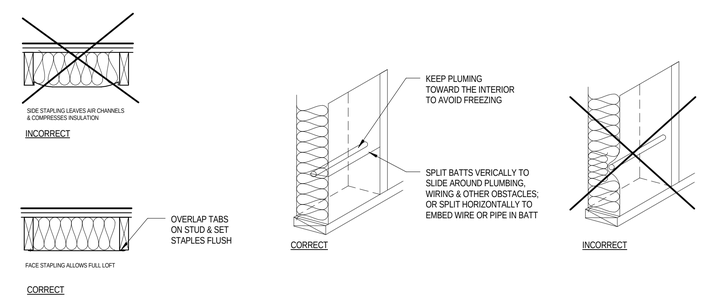


C3 / A503 TYPICAL FRAMING DETAILS
SCALE: 1" = 1'-0"



B3 / A503 TYPICAL AIR SEALING DETAILS
SCALE: 1" = 1'-0"



A4 / A503 BATT INSULATION DETAILS
SCALE: 1" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS
No. 2745
REGISTERED ARCHITECT
RHODE ISLAND

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TYPICAL CONSTRUCTION DETAILS

A503

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PLUMBING LEGEND

PIPING

SYMBOL	ABBREVIATION	DESCRIPTION
		NEW WORK (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
	ETR	EXISTING WORK TO REMAIN (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
	RE	REMOVE EXISTING (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
		NEW WORK (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	ETR	EXISTING WORK TO REMAIN (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	RE	REMOVE EXISTING (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	CW	COLD WATER
	HW	HOT WATER 140°F
	HWC	HOT WATER RECIRCULATION
G	G	NATURAL GAS
GTV	GTV	NATURAL GAS TRAIN, APPLIANCE OR REGULATOR VENT
	S or W	SOIL OR WASTE
	V	VENT

GENERAL

SYMBOL	ABBREVIATION	DESCRIPTION
	CO	CLEANOUT
	FCO	CLEANOUT (FLUSH FLOOR)
	WCO	CLEANOUT (WALL)
	CTE	CONNECT TO EXISTING
	C&C	CUT & CAP
	FD-A	DRAIN (FLOOR DRAIN & TYPE)
	DN	DOWN (PENETRATES LEVEL BELOW)
	P-1	PROPERTY DESIGNATION
		RISE (PENETRATE LEVEL BELOW)
		INDICATES DIRECTION OF FLOW
		INDICATES DIRECTION OF SLOPE DOWN
	INV	INVERT ELEVATION
		RISE (BUT DOES NOT PENETRATE LEVEL ABOVE)
	S=.01	SLOPE = 1/8" PER FOOT
	S=.02	SLOPE = 1/4" PER FOOT
	S=.05	SLOPE = 1/2" PER FOOT
	UP	UP (PENETRATES LEVEL ABOVE)
	W&V	WASTE & VENT
	GWH-A	WATER HEATER (GAS AND TYPE)
	W & T	WASTE & TRAP

VALVES

SYMBOL	ABBREVIATION	DESCRIPTION
	BV	BALANCING VALVE
	CV	CHECK VALVE
	DV-A	DRAIN VALVE TYPE WITH HOSE THREADS
	HB-A	HOSE BIBB TYPE WITH HOSE THREADS
	PRV	PRESSURE REDUCING VALVE
		SHUTOFF VALVE
		SHUTOFF VALVE (EXISTING)
	VIV	VALVE IN VERTICAL

PLUMBING COORDINATION NOTE:

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FULLY COORDINATE LOCATIONS OF THE WATER AND SEWER SERVICE ENTRANCES TO EACH BUILDING WITH THE PLANS PROVIDED BY THE GOVERNING CIVIL ENGINEER, PRIOR TO ANY TRENCHING OR INSTALLATION OCCURS. LOCATIONS SHOWN ON THESE DRAWINGS ARE NOT TYPICAL .

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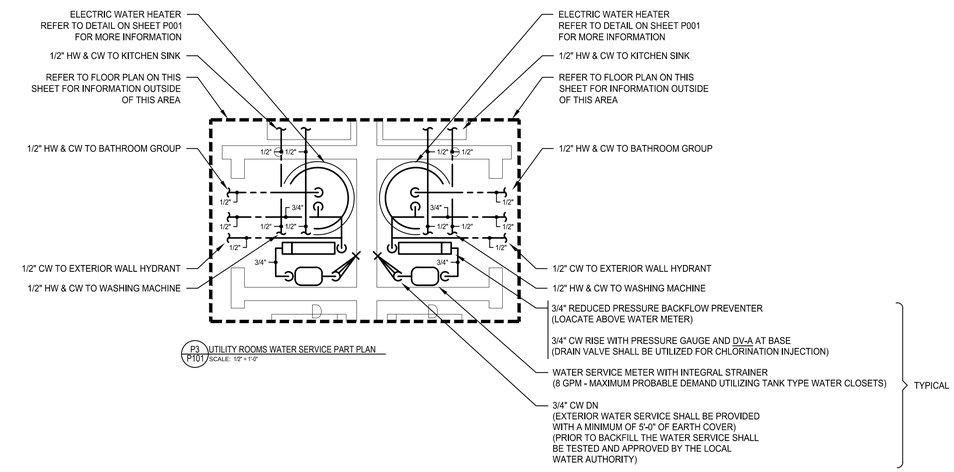


P3 / P101 UTILITY ROOMS WATER SERVICE PART PLAN
SCALE: 1/2" = 1'-0"

PLUMBING GENERAL NOTES

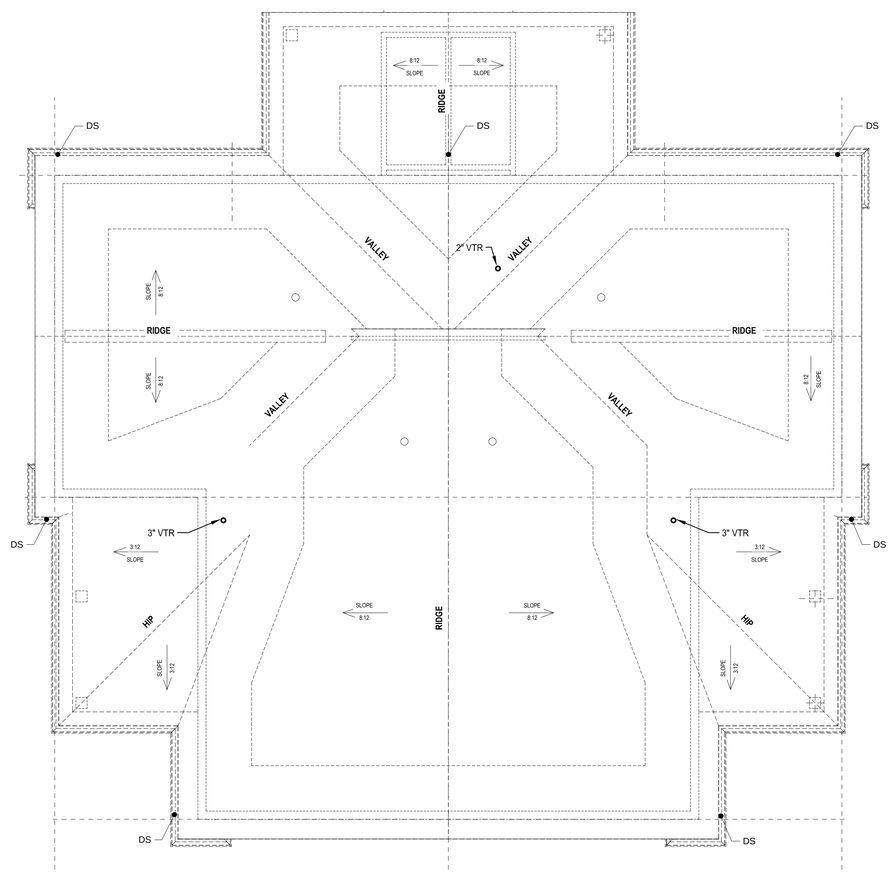
1. BIDDERS SHALL UTILIZE A COMPLETE SET OF PLUMBING BIDDING DOCUMENTS IN PREPARING OF BID INCLUDING DRAWINGS AND SPECIFICATIONS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ERRORS OR MISINTERPRETATIONS RESULTING FROM THE USE OF INCOMPLETE SETS OF PLUMBING BIDDING DOCUMENTS.

   THESE PLUMBING BIDDING DOCUMENTS SHALL INCLUDE:

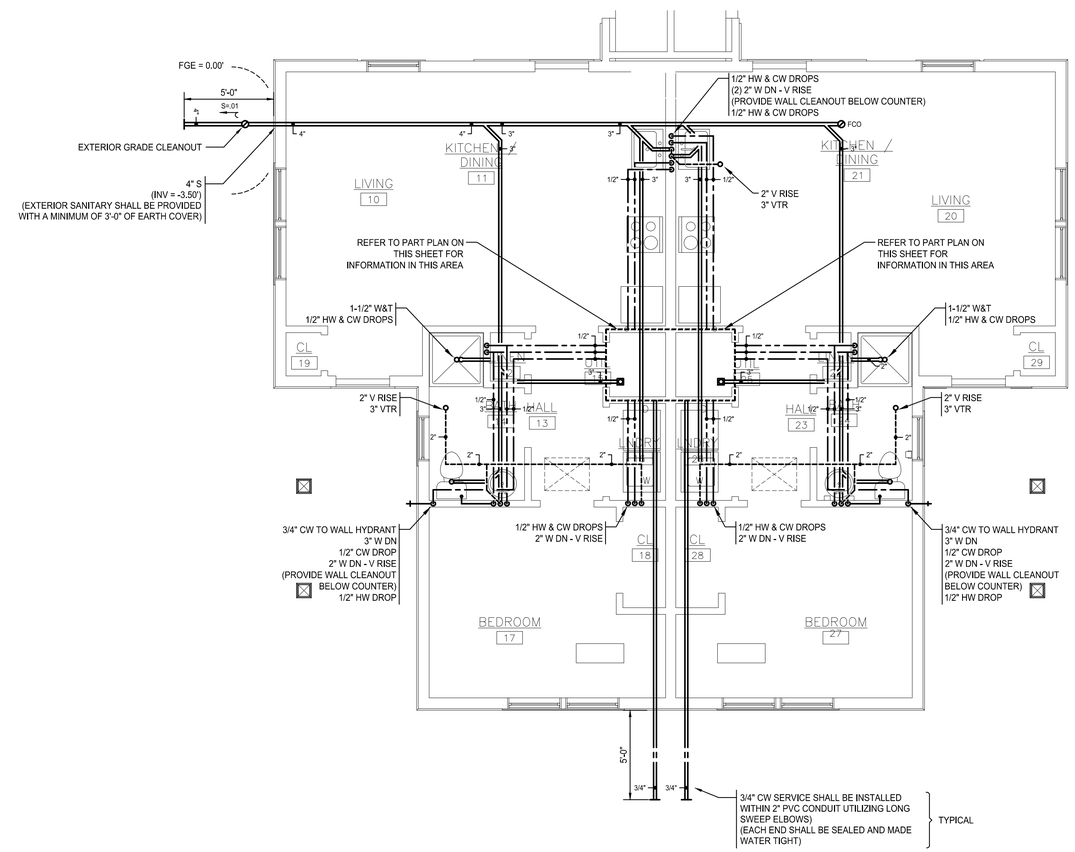
   SPECIFICATION
   22 00 00 PLUMBING SPECIFICATION

   DRAWINGS
   P101 PLUMBING FLOOR PLAN, ROOF PLAN, PART PLAN, LEGEND & GENERAL NOTES

2. THE WORK COVERED CONSISTS OF FURNISHING ALL LABOR AND MATERIALS NECESSARY TO INSTALL, COMPLETE AND READY FOR CONTINUOUS OPERATION, THE PLUMBING SYSTEMS, APPARATUS AND EQUIPMENT FOR THIS PROJECT.
3. ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THE PLUMBING SUB-CONTRACT, LABOR AND TESTING PERFORMED HEREIN SHALL BE IN COMPLETE ACCORDANCE WITH THE STATE BUILDING CODE, LOCAL FUEL GAS AND PLUMBING CODES, ALL LOCAL CODES AND REGULATIONS, NATIONAL FIRE PROTECTION ASSOCIATION, INSURANCE REGULATIONS AND REQUIREMENTS GOVERNING SUCH WORK.
4. ANY AND ALL PERMITS REQUIRED FOR INSTALLATION OF ANY MATERIAL SHALL BE OBTAINED AS PART OF THE WORK OF THE SPECIFICATION INCLUDING ALL FEES OR EXPENSES INCURRED.
5. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES AND EQUIPMENT.
6. ACCESSIBLE FIXTURES SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES AND ANSI A117.1 STANDARD ON ACCESSIBLE USABLE BUILDINGS AND FACILITIES.
7. MISCELLANEOUS DISCREPANCIES OR OMISSIONS WHICH MIGHT APPEAR ON THE PLANS OR SPECIFICATIONS WILL NOT RELIEVE THE PLUMBING SUB-CONTRACTOR OF CODE COMPLIANCE.



P1 / P101 ROOF PLAN
SCALE: 1/4" = 1'-0"



P2 / P101 FIRST FLOOR
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

GLEN G. MARKEY
STATE OF RHODE ISLAND
No. 7349
REGISTERED PROFESSIONAL ENGINEER MECHANICAL

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PLUMBING FLOOR PLAN, ROOF PLAN, PART PLAN, LEGEND & GENERAL NOTES

P101

LEGEND

Ⓣ	THERMOSTAT
Ⓢ	SENSOR
ACCU	HEAT PUMP UNIT
AC	AIR-CONDITIONING UNIT
ECH	ELECTRIC CEILING HEATER
EWH	ELECTRIC WALL HEATER
CEF	CEILING EXHAUST FAN
------R------	REFRIGERANT PIPING (LIQUID AND SUCTION)
– – –D– – –	CONDENSATE DRAIN PIPING
S.A.	SUPPLY AIR
R.A.	RETURN AIR
E.A.	EXHAUST AIR
O.A.	OUTSIDE AIR

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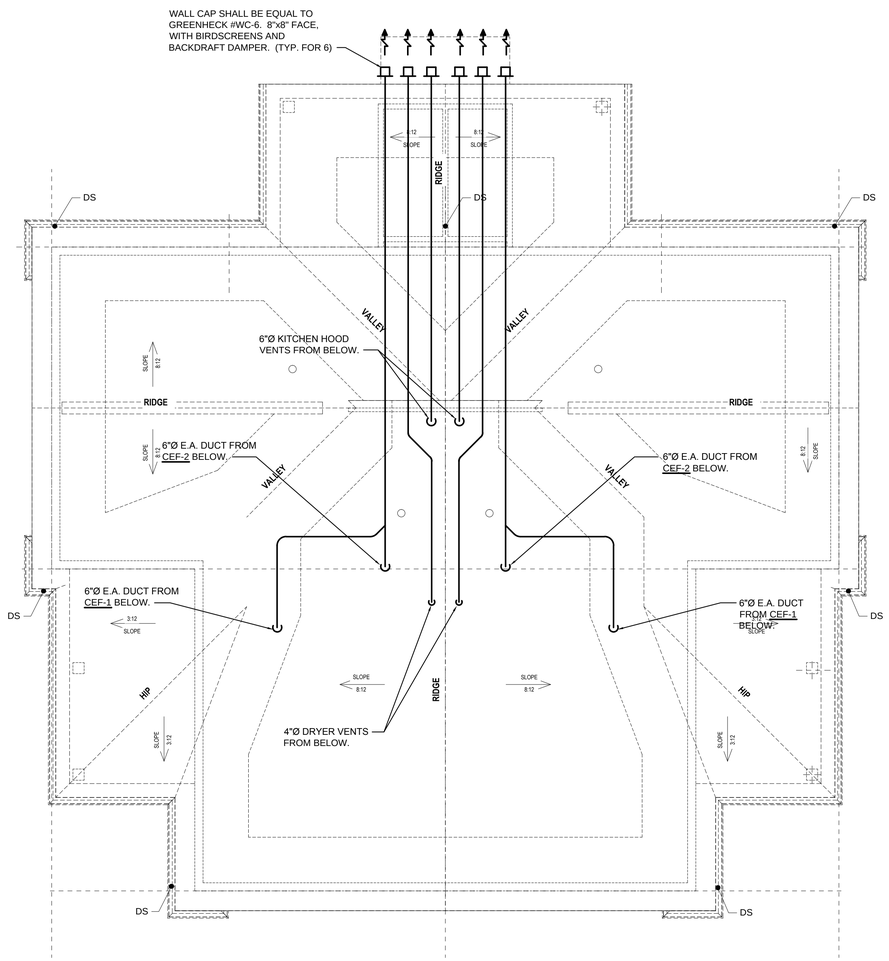
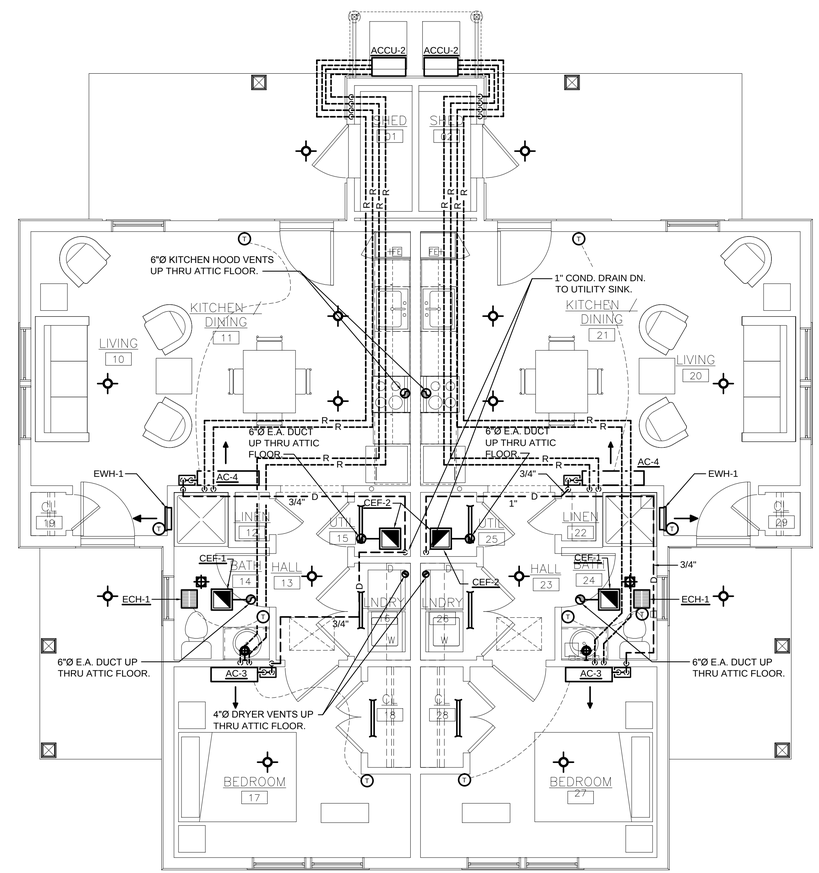


M2 ROOF/ATTIC PLAN
M101 SCALE: 1/4" = 1'-0"



M1 FLOOR PLAN
M101 SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER MECHANICAL

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FLOOR PLAN & ROOF/ATTIC PLAN

M101

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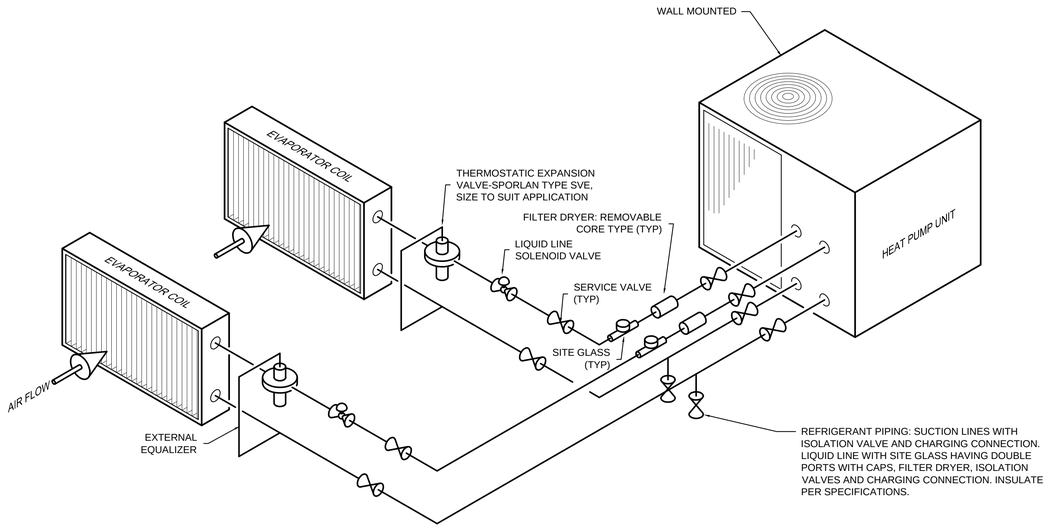

REFRIGERANT PIPING DIAGRAM
NO SCALE

ELECTRIC HEATER SCHEDULE

(BASED ON QMARK)

SYMBOL	MODEL	QUANTITY / TYPE "A" BUILDING	TYPE	CFM	KW	MBH	ELECTRICAL DATA		NOTES
							AMPS	VOLTAGE	
ECH-1	QCH1202	2	RECESSED, CEILING	65	0.75	2.6	3.6	208/1/60	2, 4
EWH-1	CWH1202DS	2	RECESSED, WALL	65	0.75	2.6	3.6	208/1/60	1, 3, 5

NOTE:
1. PROVIDE WITH DISCONNECT SWITCH, AUTOMATIC THERMAL CUTOUT AND FAN DELAY RELAY.
2. PROVIDE WITH DISCONNECT SWITCH, AUTOMATIC THERMAL CUTOUT, FAN DELAY RELAY AND 208V PRIMARY/24V SECONDARY CONTROL RELAY.
3. PROVIDE WITH WALL RECESS MOUNTING ENCLOSURE.
4. PROVIDE WITH TRIM RING FOR FLUSH MOUNTING AT CEILING.
5. PROVIDE WITH UNIT-MOUNTED THERMOSTAT.
6. CONTRACTOR TO PROVIDE REMOTE THERMOSTAT FOR WALL MOUNTING.

FAN / LIGHT SCHEDULE

(BASED ON PANASONIC WHISPER GREEN)

SYMBOL	MODEL	QUANTITY / TYPE "A" BUILDING	SERVICE	TYPE	DRIVE	CFM	ESP (IN)	FAN RPM	MOTOR DATA		NOTES
									POWER	VOLTAGE	
CEF-1	FV-05-11VKL1	2	BATHROOM	CEILING	DIRECT	53	0.25	1081	7W	115/1/60	1
CEF-2	FV-05VQ5	2	UTILITY RM.	CEILING	DIRECT	53	0.25	1081	7W	115/1/60	1

NOTE:
1. PROVIDE WITH DC MOTOR, LED LAMP, 1 WATT LED NIGHT LIGHT, CONDENSATION SENSOR AND MULTI-SPEED MOTOR WITH TIME DELAY.
2. PROVIDE WITH DC MOTOR AND MULTI-SPEED MOTOR WITH TIME DELAY.

SPLIT-SYSTEM HEAT PUMP SCHEDULE

(BASED ON DAIKIN)

INDOOR UNIT											OUTDOOR UNIT											
SYMBOL	MODEL	QUANTITY / TYPE "A" BUILDING	CFM	MOUNTING LOCATION	COOL. CAP. MBH	HEAT. CAP. MBH	ELECTRICAL DATA			NOTES	SYMBOL	MODEL	QUANTITY / TYPE "A" BUILDING	COOL. CAP. MBH	HEAT. CAP. MBH	EER	SEER	HSPF	ELECTRICAL DATA			NOTES
							MCA	MFS	VOLTAGE										MCA	MFS	VOLTAGE	
AC-3	FTXS09LVJU	2	381	WALL-MT'D.	9.0	6.6	--	--	208/1/60	1, 2, 3, 4, 6, 7	ACCU-2	3MX24NMVJU	2	24.0	19.7	12.7	17.9	12.5	18.7	20	208/1/60	3, 4, 5, 7
AC-4	FTXS18LVJU	2	583	WALL-MT'D.	18.0	13.1	--	--	208/1/60	1, 2, 3, 4, 6, 7												

NOTES:
1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH AUTOMATIC FAN SPEED CONTROL AND WIRED PROGRAMMABLE THERMOSTAT.
3. REFER TO MANUFACTURER'S GUIDELINES FOR LINE SIZING AND ALL INSTALLATION INSTRUCTIONS.
4. FURNISH AND INSTALL ALL REQUIRED INTERLOCKING CONTROLS & PIPING FOR REQUIRED SEQUENCE OF OPERATIONS.
5. PROVIDE WITH STARTER & DISCONNECT.
6. CONTRACTOR SHALL PROVIDE ASPEN MODEL ASPMLS115SP CONDENSATE PUMP AS SUPPLIED BY RECTORSEAL.
7. OUTDOOR DESIGN TEMPERATURES: 95°F DB SUMMER, 5°F WB WINTER.
8. PROVIDE HARD-WIRED PROGRAMMABLE THERMOSTAT.

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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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SCHEDULES AND DETAILS

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GENERAL ELECTRICAL SPECIFICATIONS

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. REFER TO THE TENANT'S LEASE INFORMATION FOR SPECIFIC REQUIREMENTS. THE TENANT'S LEASE INFORMATION SHALL SUPERCEDE THIS SPECIFICATIONS WHERE A CONFLICT OCCURS BETWEEN THE TWO.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.
9. ALL EQUIPMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
10. FURNISH AND INSTALL TEMPORARY POWER AS REQUIRED TO OPERATE TOOLS AND LIGHTING. PROVIDE PANELS AND LIGHTING FIXTURES FOR CONSTRUCTION AS NEEDED.
11. THE ELECTRICAL CONTRACTOR (E.C.) SHALL INSPECT THE SITE, PRIOR TO SUBMITTING HIS BID, AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH THIS WORK SHALL BE PREFORMED. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK WHICH REQUIRED SHALL NOT EXCUSE THE E.C. FROM HIS OBLIGATIONS TO SUPPLY AND INSTALL THE WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND THE DRAWINGS AND UNDER ALL SITE CONDITIONS AS THEY EXIST.
12. THE PLANS DEPICT THE LOCATION OF ALL FIXTURE AND EQUIPMENT AND ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK, BUT THE CONTRACTOR SHALL UNDERSTAND THAT SUCH DETAILS ARE PART OF THE WORK.
13. THE ELECTRICAL CONTRACTOR SHALL CAREFULLY VERIFY ALL MEASUREMENTS AT THE SITE AND DETERMINE THE EXACT LOCATION OF ALL CHASES AND OPENINGS REQUIRED BY THIS WORK AND SHALL PROVIDE ALL SLEEVES, INSERTS, AND HANGERS REQUIRED.
14. BRANCH CIRCUITS ADDED TO ANY EXISTING PANELBOARDS SHALL ALSO INCLUDE THE CIRCUIT BREAKER DIRECTORY TO BE UPDATED. IF NO DIRECTORY EXISTS THAN ONE SHALL BE PROVIDED INDICATING THE NEW CIRCUITS ADDED.
15. WIRE AND CABLE FOR BRANCH CIRCUITS SHALL BE TYPE THWN/THHN, INSULATED FOR 600VOLTS, RATED AT 75°C MINIMUM AND UL LISTED FOR BUILDING WIRE USE. WIRE SIZE SHALL BE A MINUMUM OF #12 AWG SOLID. ALL CONDUCTORS SHALL BE COPPER. ALL WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS. METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR.
16. FIRE ALARM SYSTEM WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS WITH INSULATED THROAT. FIRE ALARM METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR. THE MINIMUM WIRE SIZE FOR FIRE ALARM WIRING SHALL BE #14 AWG. ALL SPLICES SHALL BE MADE ON SCREW TYPE TERMINAL STRIPS. WIRE NUTS SHALL NOT BE USED. T-TAPPING OF FIRE ALARM WIRING SHALL NOT BE ALLOWED.
17. RED PAINTED TERMINAL CABINETS AND BOXES WITH LOCKABLE COVERS SHALL BE PROVIDED AT ALL JUNCTION POINTS FOR FIRE ALARM SYSTEM WIRING.
18. ADDITIONAL JUNCTION BOXES BEYOND THOSE SHOWN ON THE DRAWINGS SHALL BE PROVIDED AS NECESSARY FOR ALL ELECTRICAL INSTALLATIONS.
19. ALL CUTTING, PATCHING AND FIRESTOPPING FOR ELECTRICAL INSTALLATIONS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
20. PROVIDE CONDUIT SLEEVES FILLED WITH AN APPROVED FIRE RESISTANT MATERIAL WHERE FIRE RATED WALLS, FLOORS OR CEILINGS ARE PENETRATED. APPROVED WATERTIGHT CONDUIT SLEEVES SHALL BE PROVIDED WHERE WALLS ARE PENETRATED EITHER ENTERING OR LEAVING THE BUILDING.
21. RECEPTACLES, LIGHT FIXTURES, AND POWER ITEMS BRANCH CIRCUIT WIRING MAY NOT BE SHOWN BUT SHALL BE PROVIDED AS REQUIRED. MINIMUM WIRING SHALL BE 2#12 PLUS 1#12GROUND IN 3/4"C. NO MORE THAN THREE PHASES MAY BE COMBINED IN A SINGLE HOMERUN AND EACH PHASE SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL.
22. ALL CONDUITS SHALL CONTAIN A GREEN SAFETY GROUND WIRE. BOND ALL PANELS, CABINETS, ENCLOSURES, CONDUITS, ETC., AS REQUIRED PER CODE.
23. ALL SUPPORTS AND ANCHORS SHALL BE DESIGNED AND INSTALLED PER REQUIREMENTS FOR THE SEISMIC CLASSIFICATIONS AS OUTLINED IN THE APPLICABLE BUILDING CODE. SITE LOCATION AND PREVAILING ORIENTATION SHALL BE TAKEN INTO ACCOUNT IN THE DESIGN.
24. SUBMIT SIX (6) COPIES FOR REVIEW AND APPROVAL OF THE FOLLOWING SHOP DRAWINGS: LIGHTING FIXTURES, WIRING DEVICES, RACEWAY, POKE-THRU DEVICES AND BUILDING WIRE & CABLE.

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	18" A.F.F.
	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	QUADRAPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE COVER")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE" COVER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	SPECIAL NEMA CONFIGUATION OUTLET; VERIFY NEMA TYPE WITH EQUIPMENT TO BE SERVED.	18" A.F.F.
J	JUNCTION BOX; SIZE AS REQUIRED PER CODE.	
	TEL./DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	TELEPHONE OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
IC	INTERCOM SYSTEM PROVIDE BACKBOX & 3/4" CONDUIT W/PULL STRING TO ABOVE CEILING. MIRCOM K-SERIES INTERCOM SYSTEM #IC-51-3 VANDAL RESISTANT STATION. COORDINATE INSTALLATION OF ALL ASSOCIATED EQUIPMENT WITH ARCHITECTURAL DRAWINGS.	REFER TO ARCHITECTURAL DWGS
	MOTOR	
	PANELBOARD SURFACE MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION.	MOUNT 6'-6" AFF TO TOP BREAKER.
	PANELBOARD FLUSH MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION. FLUSH MOUNTED PANELS SHALL BE SET IN 6" (MIN.) STUD WALLS.	MOUNT 6'-6" AFF TO TOP BREAKER.
1,3 A / 1,3	HOMERUN TO PANELBOARD (LOADCENTER); "A" INDICATES PANEL, "1,3" INDICATES CIRCUIT NUMBERS. REFER TO "TYPICAL CIRCUITING DETAIL" ON PLANS. NOTE: ALSO INDICATED AS A/1,3.	
MS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #DT-200/DT-205 SERIES OR (APPROVED EQUAL)	MOUNT TO FIXTURE / MTG. J-BOX.
WS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #W500A. OR (APPROVED EQUAL). PROVIDE WITH REQ'D. POWER PACK LISTED BELOW. INSTALL ONE WALL SENSOR / POWER PACK ON EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQ'S.	48" AFF
PP	PROVIDE A REMOTE POWER PACK FOR WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #B120E-P. OR (APPROVED EQUAL). PROVIDE POWER PACK FOR EACH WALL SENSOR EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQ'S.	
S3a	THREE-WAY SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
Sa	SINGLE POLE SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
SM	MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	42" AFF
60/50	FUSED DISCONNECT SWITCH. 60/50 INDICATES FRAME SIZE/FUSE SIZE IN THAT ORDER. STARTERS FOR HVAC EQUIPMENT BY MECHANICAL CONTRACTOR.	
	GROUND.	
EBS	EMERGENCY BURNER SWITCH, SLATER CAT. No. 730 BR WITH RED FACEPLATE MARKED "BURNER EMERGENCY SWITCH". PROVIDE A CLEAR PROTECTIVE COVER. REFER TO DETAIL ON DWG E4.3.	72" AFF
FM	FIRE-O-MATIC SWITCH MOUNTED OVER BURNER. REFER TO DETAIL ON THIS DRAWING.	
TV	CABLE TELEVISION OUTLET.	18" A.F.F.
PC	PHOTOCELL TORK #2100 SERIES MOUNTED AT HIGHEST POINT ON NORTH SIDE OF BUILDING. ORIENT TO SENSE SKY LIGHT AND NOT PARKING AREA LIGHTING.	

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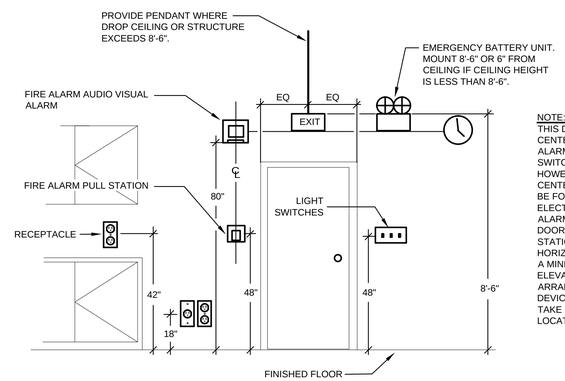
TYPICAL FIRE STOPPING NOTES

A. GENERAL: FIRE STOPPING SHALL BE PROVIDED BY THIS CONTRACTOR FOR ALL FLOOR, CEILING AND FIRE RATED WALL PENETRATIONS FOR CONDUIT, SLEEVES AND/OR CABLING AS REQUIRED BY JOB CONDITIONS.

B. THE CONTRACTOR SHALL PROVIDE A FIRE STOP SYSTEM IN ACCORDANCE WITH THE FOLLOWING:

1. THE SYSTEM SHALL CONSIST OF A WATERBASED SEALANT AND SUITABLE DAMMING MATERIALS (WHERE REQUIRED) AND BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. THE SEALANT SUPPLIED SHALL BE A TWO STAGED INTUMESCENT AND CAPABLE OF EXPANDING UP TO 8 TIMES ITS ORIGINAL VOLUME.
3. THE SEALANT SUPPLIED SHALL CONTAIN NO ASBESTOS, NO FIBERGLASS, AND NO SOLVENTS NOT CORROSIVE MINERAL SALTS OF ANY KIND.
4. THE SEALANT SHALL FORM A SURFACE CAPABLE OF BEING SANDED AND PAINTED TO MATCH SURROUNDING SURFACES AND SHALL BE IMPERVIOUS TO WATER WHEN DRY.
5. THE FIRE STOP SYSTEM SHALL BE TESTED TO THE TIME/TEMPERATURE REQUIREMENTS OF ASTM E119 AND SHALL BE UL1479 (ASTM E814) AND CLASSIFIED FOR UP TO 3 HOURS.
6. THE FIRE STOP SEALANT SHALL BE SPECSEAL SEALANT AS MANUFACTURED BY SPECIFIED TECHNOLOGIES, INC. OR APPROVED EQUAL.
7. SPECIAL CARE SHALL BE TAKEN WITH ELECTRICAL SYSTEMS NOT TO COMPROMISE ANY OF THE BUILDING FIRE PARTITIONS, FLOORS, WALLS OR MEMBRANES. PROVIDE ALL FIRESTOPPING REQUIRED TO COMPLY WITH THE BUILDING CODE, THE ELECTRICAL CODE AND THE UL LISTING OF EACH ASSEMBLY. COORDINATE LOCATIONS AND TYPES OF MEMBRANES WITH ARCHITECT.



NOTE:
THIS DETAIL INDICATES CENTERLINE FOR FIRE ALARM/PULL STATION SWITCHES AND RECEPTACLES. HOWEVER THIS SAME CENTERLINE PRINCIPLE SHALL BE FOR ALL GROUP MTD. ELECTRICAL DEVICES. IF FIRE ALARM IS ON SAME SIDE OF DOOR AS SWITCHES, PULL STATION SHALL BE HORIZONTALLY SEPARATED BY A MINIMUM OF 18". THIS ELEVATION IS A GENERAL ARRANGEMENT OF OF DEVICES. ARCHITECT PLANS TAKE PRECEDENCE FOR EXACT LOCATIONS.

MOUNTING HEIGHT DETAIL

NOT TO SCALE

ABBREVIATIONS

A	AMPERES	F.A.	FIRE ALARM	MTD	MOUNTED
ADA	AMERICANS WITH DISABILITIES ACT	FACP	FIRE ALARM CONTROL PANEL	NAC	F.A. NOTIFICATION APPLIANCE CIRCUIT EXPANDER PANEL
AMPS	AMPERES	FLR	FLOOR	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	G.C.	GENERAL CONTRACTOR	P	POLE
A/C	AIR CONDITIONING	GFCI	GROUND FAULT CIRCUIT INTERUPTER.	PNL	PANEL
AWG	AMERICAN WIRE GAGE	G	GROUND	RE	RE-LOCATED EXISTING DEVICE OR EQUIPMENT SHOWN IN NEW LOCATION
BLDG.	BUILDING	GND	GROUND	TYP	TYPICAL
C	CONDUIT	HVAC	HEATING, VENTILATING, & & AIR CONDITIONING	UL	UNDERWRITERS LABATORY
CLG	CEILING	JB	JUNCTION BOX	UON	UNLESS OTHERWISE NOTED
DN	DOWN	KVA	KILOVOLT AMPERES	V	VOLTS
DWG	DRAWING	KW	KILOWATT	W	WATTS
E.C.	ELECTRICAL CONTRACTOR	LTG	LIGHTING	WH	WATER HEATER
EPO	EMERGENCY POWER OFF	MAX	MAXIMUM	WP	WEATHER-PROOF
EQ	EQUAL	MECH	MECHANICAL	℄	CENTERLINE
ER	EXISTING TO BE REMOVED	MIN	MINIMUM		
ERN	EXISTING TO REMAIN				
ERL	EXISTING TO BE RE-LOCATED				

NOTES FOR ALUMINUM EQUIPMENT

1. THESE DRAWINGS ARE BASED ON THE USE OF COPPER IN CONDUCTORS, TRANSFORMER WINDINGS, SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS.

2. ALTHOUGH PERMITTED BY CODE, THIS OFFICE DOES NOT RECOMMEND THE USE OF ALUMINUM ELECTRICAL EQUIPMENT.

3. USE OF ALUMINUM CONDUCTORS, TRANSFORMERS WITH ALUMINUM WINDINGS AND SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS WITH ALUMINUM BUSS IS AT THE DISCRETION & DECISION OF THE OWNER.

4. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE ALL CONDUCTOR AND CONDUIT SIZES, PER NEC, SHOULD ALUMINUM BE USED.

5. IF ALUMINUM EQUIPMENT IS USED IN ANY OF THE ELECTRICAL COMPONENTS OF ITEM "3" ABOVE, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
   a. INSTALLATION SHALL BE IN ACCORDANCE WITH IEEE STD. 241-1990, PARAGRAPH 8.7.2
   b. WHEN CUTTING CABLE, AVOID NICKING THE STRANDS.
   c. UNPLATED CONTACT SURFACES SHALL BE CLEANED WITH WIREBRUSH, STEEL WOOL, EMERY CLOTH OR SIMILAR ABRASIVE TOOL OR MATERIAL.
   d. PLATED SURFACES SHALL BE CLEANED WITH AN APPROVED SOLVENT.
   e. APPLY JOINT COMPOUND TO THE CONDUCTOR IF THE CONNECTOR DOES NOT ALREADY HAVE IT.
   f. USE ONLY CONNECTORS SPECIFICALLY TESTED AND APPROVED FOR USE ON ALUMINUM CONDUCTORS.
   g. REFER TO ANSI/UL486B-1982.
   h. ON MECHANICAL CONNECTORS, TIGHTEN THE CONNECTOR WITH A SCREWDRIVER OR WRENCH TO THE REQUIRED TORQUE. REMOVE EXCESS COMPOUND.
   i. ON COMPRESSION CONNECTORS, CRIMP THE CONNECTOR USING THE PROPER TOOL AND DIE. REMOVE EXCESS COMPOUND.
   j. ALWAYS USE JOINT COMPOUND THAT IS COMPATIBLE WITH THE INSULATION AND AS RECOMMENDED BY THE MANUFACTURER.
   k. WHEN MAKING AN ALUMINUM-TO-COPPER CONNECTION THAT IS EXPOSED TO MOISTURE, PLACE THE ALUMINUM CONDUCTOR ABOVE THE COPPER. IF THERE IS NO EXPOSURE TO MOISTURE, THE RELATIVE POSITION OF THE TWO METALS IS NOT IMPORTANT.
   i. WHEN USING INSULATED CONDUCTORS OUTDOORS, EXTEND THE CONDUCTOR INSULATION OR COVERING AS CLOSE TO THE CONNECTOR AS POSSIBLE TO MINIMIZE WEATHERING THE JOINT. OUTDOOR JOINTS SHALL BE COMPLETELY PROTECTED BY TAPE OR OTHER MEANS. WHEN OUTDOOR JOINTS ARE COVERED OR PROTECTED, THE PROTECTION SHALL COMPLETELY EXCLUDE MOISTURE.

SEISMIC RESTRAINT NOTE

A. GENERAL: IT IS THE INTENT OF THIS SEISMIC SPECIFICATION TO KEEP ALL ELECTRIAL BUILDING SYSTEM COMPONENTS IN PLACE DURING A SEISMIC EVENT. ALL ELECTRICAL SYSTEMS MUST BE INSTALLED IN STRICT ACCORDANCE WITH SEISMIC CODES, COMPONENT MANUFACTURER'S AND BUILDING CONSTRUCTION STANDARDS. WHENEVER A CONFLICT OCCURS BETWEEN THE MANUFACTURER'S OR CONSTRUCTION STANDARDS, THE MOST STRINGENT SHALL APPLY.

B. THIS CONTRACTOR SHALL ENGAGE A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE JURISDICTION OF THIS PROJECT TO REVIEW THE ENTIRE INSTALLATION TO DETERMINE ALL SEISMIC RESTRAINT REQUIREMENTS AND METHODS. CONTRACTOR SHALL SUBMIT A REPORT OUTLINING THE STRUCTURAL ENGINEER'S REVIEW AS WELL AS SEISMIC RESTRAINT SHOP DRAWINGS AND SUPPORTING CALCULATIONS PREPARED BY THE PROFESSIONAL STRUCTURAL ENGINEER FOR REVIEW BY THE ARCHITECT.

C. SEISMIC RESTRAINTS SHALL BE DESIGNED IN ACCORDANCE WITH SEISMIC FORCE LEVELS AS DETAILED IN THE APPLICABLE BUILDING CODE.

1. ALL EQUIPMENT, CONDUIT AND PULL BOXES SHALL BE ADEQUATELY RESTRAINED TO RESIST SEISMIC FORCES. RESTRAINT DEVICES SHALL BE DESIGNED AND SELECTED TO MEET SEISMIC REQUIREMENTS AS DEFINED IN THE LATEST ISSUE OF THE BOCA NATIONAL BUILDING CODE IN ACCORDANCE WITH THE APPLICABLE SEISMIC ZONE.

2. ANCHOR BOLT CALCULATORS, SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED SHOWING ADEQUACY OF THE BOLT SIZING AND TYPE. STAMPED CALCULATIONS SHALL ALSO BE FURNISHED FOR ANCHORS ON RESTRAINT DEVICES, CABLES, ISOLATORS AND RIGIDLY MOUNTED EQUIPMENT.

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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 1, 7
BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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ELECTRICAL SCHEDULES, NOTES AND DETAILS

E100

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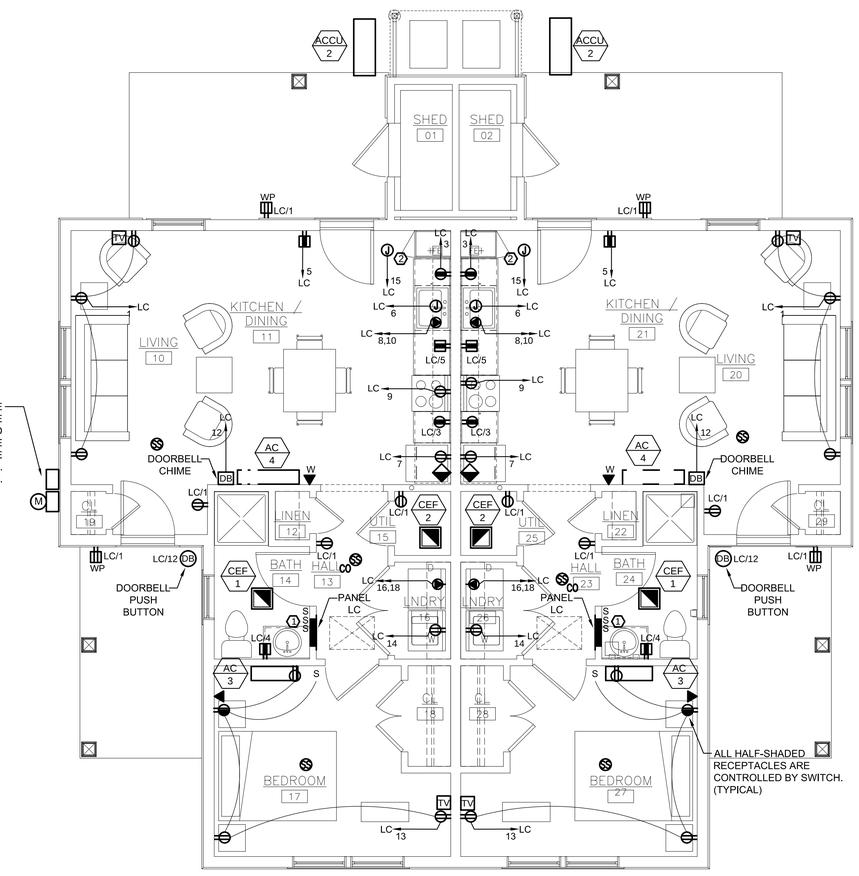
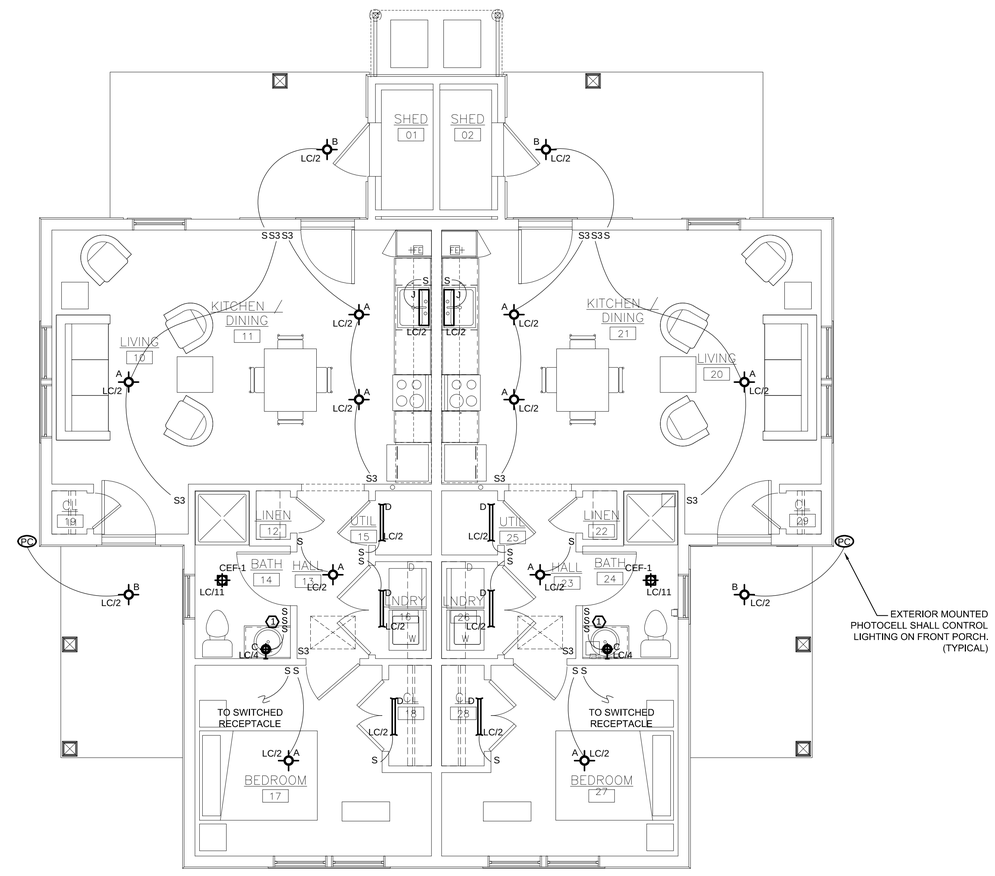
MECHANICAL EQUIPMENT CONNECTION TAG:

REFER TO 'MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE' ON THIS DWG. 'E102', FOR ALL CIRCUITING INFORMATION, INCLUDING BUT NOT LIMITED TO BRANCH CIRCUITING WIRING AND CONDUIT SIZE, VOLTAGE, PHASE, MOTOR CONTROL, DISC. SWITCH & CIRCUIT BREAKER.



1 E101 FIRST FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"



1 E101 FIRST FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'-0"

OWNER:
CHURCHWOODS, LLC
C/O WASHINGTON COUNTY CDC
400 TOWER HILL RD
NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 1, 7

BUILDING TYPE A
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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ELECTRICAL FIRST FLOOR PLAN

E101

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LOADCENTER "LC" SCHEDULE

LOADCENTER DESCRIPTION:
FLUSH MOUNTED 120/240 VOLT., 1-PHASE, 3-WIRE, MAIN LUG ONLY 30 CIRCUIT LOADCENTER WITH PLUG-IN FULL SIZE BRANCH CIRCUIT BREAKERS. LOADCENTER BUSSING AND TERMINALS SHALL BE COPPER AND HAVE A RATING OF 150 AMPERES, SHORT CIRCUIT RATING NOT LESS THAN 10,000 AMPERES RMS SYMMETRICAL AND BUSSING SHALL BE BRACED TO 22kAIC.

CIRCUIT No.	AMPS	POLES	LOAD DESCRIPTION
2	20	1	COMMON LIGHTING (LIVING / DINING / KITCHEN / HALLWAY)
4	20	1	BATHROOM POWER
6	20	1	MICROWAVE / STOVE HOOD (ABOVE STOVE)
8,10	50	2	ELECTRIC STOVE (SEE NOTE #2.)
12	20	1	DOORBELL
14	20	1	CLOTHES WASHER MACHINE
16,18	30	2	ELECTRIC CLOTHES DRYER (SEE NOTE #5)
20	20	1	ELECTRIC WATER HEATER (SEE NOTE #6)
22	20	1	(SPARE)
24,26	20	2	AC-3 & AC-4
28,30	20	2	ACCU-2
1	20	1	CONVENIENCE RECEPTACLES / UTILITY EXHAUST FAN
3	20	1	APPLIANCE RECEPTACLES
5	20	1	APPLIANCE RECEPTACLES
7	20	1	(TELEPHONE / DATA / TV) PATCH PANEL
9	20	1	REFRIGERATOR
11	20	1	BATHROOM FAN / LIGHT COMBO UNIT
13	20	1	BEDROOM RECEPTACLES
15	20	1	DISHWASHER
17	20	1	PHOTOCELL
19	20	1	(SPARE)
21	20	1	(SPARE)
23	20	1	(SPARE)
25	20	1	(SPARE)
27,29	20	2	EWH-1 & ECH-1

NOTES:
1. ALL LOADCENTERS IN ADA APARTMENTS SHALL BE INSTALLED SO THAT THE TOP BREAKER IS A MAXIMUM OF 48" A.F.F.
2. ALL BRANCH CIRCUITS FEEDING ELECTRIC STOVES SHALL BE 3#6 & 1#10 GND. WITH A NEMA TYPE #14-50R RECEPTACLE. (TYP.)
3. BRANCH CIRCUITS FEEDING HVAC UNITS SHALL BE 2#12 & 1#12 GND. (TYP.)
4. CONTRACTOR SHALL PROVIDE & INSTALL ARC FAULT TYPE BREAKERS FOR ALL CIRCUITS IN DWELLING UNITS.
5. ALL BRANCH CIRCUITS FEEDING ELECTRIC DRYERS SHALL BE 2#10+1#10GND.
6. ALL BRANCH CIRCUITS FEEDING ELECTRIC WATER HEATERS SHALL BE 2#10+1#10 GND.

ENGINEERING DESIGN SERVICES INCORPORATED
141 Industrial Highway Slatersville, RI 02876
Tel (401) 765-7659 Fax (401) 765-2984

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG No.	MOUNTING	LAMPING TYPE	LAMPING WATTAGE	LAMPING QUANTITY	VOLTAGE	DESCRIPTION / REMARKS
A	SEAGULL LIGHTING	7643591S-962	RECESSED	LED	28	1	120	LED 6" DOWNLIGHT
B	SEAGULL LIGHTING	79903991S-12	SURFACE	LED	14	1	120	EXTERIOR FLUSH MOUNT FIXTURE. PROVIDE WITH DAYLIGHT SENSOR.
C	SEAGULL LIGHTING	4122891S-04	SURFACE	LED	11	1	120	LED WALL / BATH LIGHT
D	SEAGULL LIGHTING	59021L-15	SURFACE	FLUORESCENT	17	2	120	SURFACE MOUNTED 4' STRIP
CEF-1	PANASONIC	SEE MECHANICAL DRAWINGS	RECESSED	-	--	-	120	RECESSED EXHAUST FAN/LIGHT COMBO UNIT.
F	AMERICAN LIGHTING	ALC-24-DB	SURFACE	LED	8	1	120	SURFACE MOUNTED UNDERCABINET
G	SEAGULL LIGHTING	6543791S-962	LED	LED	14	1	120	MEDIUM LED PENDANT
H	SEAGULL LIGHTING	15030-15	SURFACE	-	-	-	120	CEILING FAN
J	AMERICAN LIGHTING	ALC-24-COLOR BY OWNER/ARCHITECT (OR EQUAL)	SURFACE	LED	6	-	120	UNDER-CABINET LED FIXTURE

CBA = COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
CC = CUSTOM COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY CUSTOM COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.

NOTES:
1. PROVIDE ACCESSORIES AND MOUNTING HARDWARE AS REQUIRED FOR ALL FIXTURES.
2. ALL FIXTURE/ACCESSORY COLORS NOT INDICATED ON DWG'S SHALL BE SELECTED BY ARCHITECT.
3. PROVIDE LAMPING FOR ALL FIXTURES UNLESS LAMPING IS INCLUDED WITH FIXTURE AS INDICATED IN SCHEDULE.
4. PROVIDE TYPICAL UNIT MOCK UP FOR LIGHT FIXTURE HANGING HEIGHTS AND EXPOSED ELECTRICAL CONDUIT LAYOUT TO BE REVIEWED BY ARCHITECT.
5. FIXTURE TO BE WIRED TO PHOTO CELL AND TIME CLOCK PROVIDED BY G.C.
6. ALL LIGHT FIXTURES WITH INCANDESCENT LAMPING SHALL BE PROVIDED W/ CFL/LED LAMP IN LIEU OF INCANDESCENT LAMP.

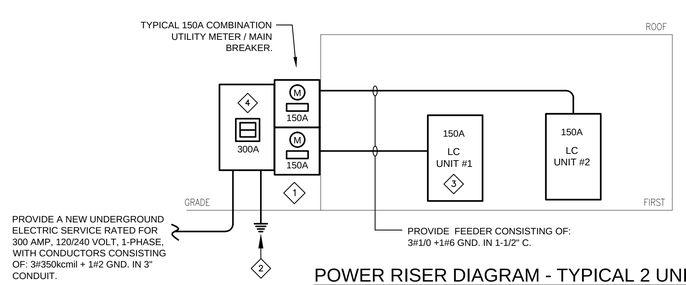
MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

XXX # ITEM No.	DESCRPITION	LOCATION	EQUIPMENT CHARACTERISTICS VOLTS	PH	FREQ.	(KW) / HP	FLA	CIRCUIT	CIRCUIT BREAKER (HACR TYPE)	FEEDER & CONDUIT	DISCONNECT SWITCH SIZE	FUSE	POLES	NEMA	MANUAL MOTOR CONTROLLER	REMARKS
AC-3	AIR CONDITIONER	(SEE PLANS)	208	1	60	-	-	LC/24,26	20A/2P	2#12+1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
AC-4	AIR CONDITIONER	(SEE PLANS)	208	1	60	-	-	LC/24,26	20A/2P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
ACCU-2	AIR CONDITIONER CONDENSER	(SEE PLANS)	208	1	60	-	18.7	LC/28,30	20A/2P	2#12+1#12 GND IN 3/4" C.	30	20	2	3R	PROVIDE "WP" DISCONNECT SWITCH WITH FUSING AS INDICATED.	SEE NOTES
CEF-1	EXHAUST FAN	(SEE PLANS)	120	1	60	7W	-	LC/11	15A/1P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
CEF-2	EXHAUST FAN	(SEE PLANS)	120	1	60	7W	-	LC/1	20A/1P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
ECH-1	ELECTRIC HEAT	(SEE PLANS)	208	1	60	-	3.6	LC/27,29	20A/2P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
EWH-1	ELECTRIC HEAT	(SEE PLANS)	208	1	60	-	3.6	LC/27,29	20A/2P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES

1. COORDINATE WITH HVAC CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
2. COORDINATE WITH PLUMBING CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS AND WIRING OF ALL PLUMBING EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
3. ALL DISCONNECTING MEANS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
4. ALL STARTERS, VFD'S ETC. SHALL BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE ALL HVAC EQUIPMENT.
5. ALL HVAC CONTROL WIRING SHALL BE PROVIDED BY OTHERS.

POWER RISER NOTES

1. 200 AMPERE - RATED BY CUTLER HAMMER 1MM OR 3MM NEMA 3R RINGLESS STYLE METER STACK MODULE, WITH METER SOCKETS AND 2-POLE CIRCUIT BREAKERS AS INDICATED. PROVIDE ALL REQUIRED BUSSING, CONNECTION, EQUIPMENT, ETC. FOR FUTURE METERS.
2. GROUNDING, BONDING AND COPPER GROUNDING ELECTRODE SYSTEM PER NEC 250 AS ADOPTED BY AUTHORITY HAVING JURISDICTION. WHEN BUILDING DOMESTIC WATER SERVICE PIPE IS NON-METALLIC PROVIDE 'UFER' GROUND IN BUILDING FOUNDATION HAVING DIRECT CONTACT WITH EARTH.
3. 150-AMPERE / 2-POLE CIRCUIT BREAKER.
4. MAIN CIRCUIT BREAKER CUTLER HAMMER 3MCB NEMA 3R MAIN SERVICE MODULE. (RATED FOR 400 AMPS, 120V/240, 1Ø., PROVIDE A 400 AMP, 2-POLE MAIN SERVICE BREAKER.)



POWER RISER DIAGRAM - TYPICAL 2 UNIT
SCALE: NONE

"LOCAL" SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
SS	LOCAL 120 VOLT, SMOKE DETECTOR. DETECTOR SHALL BE WIRED INTO LOCAL AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. DETECTOR SHALL BE TIED INTO REMAINING LOCAL INITIATING DEVICES WITHIN THE UNIT, SO THAT WHEN ONE DEVICE IS ACTIVATED, ALL LOCAL DEVICES ARE ACTIVATED.	CEILING
SS CO	LOCAL 120 VOLT, COMBINATION SMOKE / CARBON MONOXIDE DETECTOR. COMBO DETECTOR SHALL BE WIRED INTO LOCAL AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. COMBO DETECTOR SHALL BE TIED INTO REMAINING LOCAL INITIATING DEVICES WITHIN THE UNIT, SO THAT WHEN ONE DEVICE IS ACTIVATED, ALL LOCAL DEVICES ARE ACTIVATED.	CEILING
S	LOCAL 120 VOLT STROBE. STROBE SHALL BE WIRED INTO LOCAL SMOKE & CARBON MONOXIDE DETECTORS IN "ACCESSIBLE" UNITS, SO THAT WHEN ANY ONE DEVICE (DETECTOR) IS ACTIVATED, ALL LOCAL STROBE DEVICES ARE ACTIVATED.	WALL
	LOCAL 120 VOLT INTERCONNECT WIRING BETWEEN LOCAL FIRE ALARM DEVICES LOCATED IN UNITS.	

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ELECTRICAL POWER RISER, SCHEDULES AND NOTES

E102

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TYPICAL ELECTRICAL NOTES

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.

TYPICAL DWELLING UNIT (F.A.) NOTES

1. WHERE THERE ARE TWO (2) OR MORE SMOKE DETECTORS INSTALLED IN ONE (1) LIVING UNIT, THEY SHALL BE WIRED SO THAT THE ACTIVATION OF ANY DETECTOR SHALL CAUSE THE AUDIBLE ALARM IN ALL OF THE DETECTORS WITHIN THE LIVING UNIT TO BE ACTIVATED WITH A MINIMUM RATING OF EIGHTY-FIVE (85) dBA AT TEN FEET (10'). (TYPICAL)
2. ALL COMBINATION SINGLE STATION SMOKE & CARBON MONOXIDE DETECTORS SHALL BE MOUNTED ON THE CEILING AND UL LISTED FOR CEILING MOUNTING AND LOCATED NOT LESS THAN 12-INCHES FROM ANY WALL. (TYPICAL)
3. THE WIRING FOR THE COMBINATION SINGLE STATION SMOKE & CARBON MONOXIDE DETECTORS SHALL BE TAKEN FROM A BRANCH LIGHTING CIRCUIT SERVING THE LOCAL AREA. THE POWER SOURCE FOR CARBON MONOXIDE DETCTORS SHALL BE ON THE SUPPLY SIDE AHEAD OF ANY SWITCHES AND NOT ON CIRCUITS PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER.
4. ALL CARBON MONOXIDE DETECTORS SHALL BE PROVIDED WITH A VISIBLE INTERMITTENT OR STEADY "POWER ON" INDICATOR AND BE PROVIDED WITH BATTERY BACK-UP.

ENGINEERING DESIGN SERVICES INCORPORATED
141 Industrial Highway Slatersville, RI 02876
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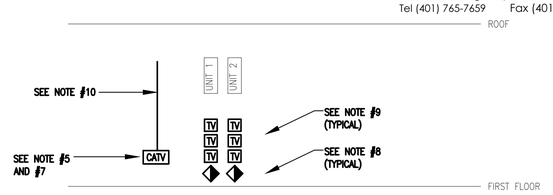
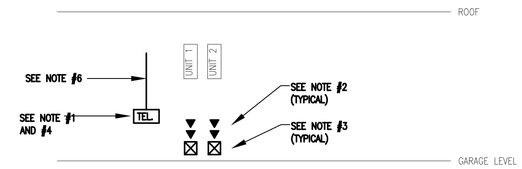


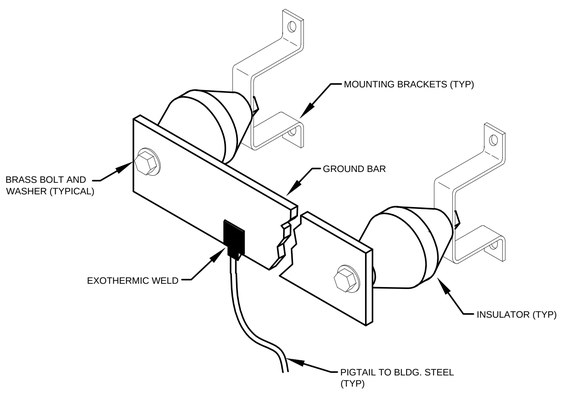
CABLE TELEVISION SYSTEM RISER DIAGRAM

NOT TO SCALE



TELEPHONE SYSTEM RISER DIAGRAM

NOT TO SCALE



NOTES:

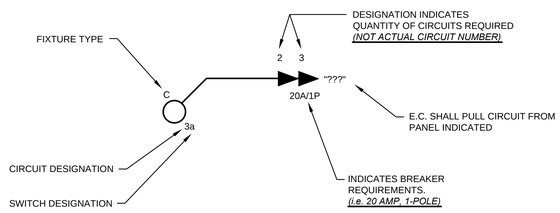
1. PROVIDE GROUND BAR (1/4" X 4" X 12") WITH WALL MOUNTING BRACKETS, INSULATORS AND A 25' EXOTHERMICALLY WELDED PIGTAIL (#6 AWG) IN EACH LAN ROOM & COMMUNICATIONS ROOM.
2. MOUNT GROUND BAR AT THE BOTTOM RIGHT CORNER ON THE PLYWOOD BACKBOARD.
3. GROUND BARS SHALL HAVE CAPACITY FOR NINE (9) GROUNDING LUGS TO BE ATTACHED.
4. CONNECT EXOTHERMICALLY WELDED PIGTAIL TO BUILDING STEEL.
5. GROUND BARS SHALL BE ELECTROLYTIC COPPER AND SHALL BE MOUNTED ON INSULATORS RATED AT 2700 VOLTS.
6. COPPER SURFACES SHALL BE SMOOTH AND WITHOUT MARKS DEEPER THAN 0.010 INCHES.
7. MANUFACTURERS SHALL BE ERICO, HARGER OR APPROVED EQUAL.

TYPICAL GROUND BAR DETAIL

NOT TO SCALE

NOTES

1. 3/4' X 8'-0" X 8'-0" MAIN TELEPHONE PLYWOOD BACKBOARD. FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR.
2. THE ELECTRICAL CONTRACTOR WIRE SHALL WIRE TELEPHONE OUTLET TO THE DWELLING UNIT TELEPHONE NETWORK INTERFACE UNIT LOCATED IN DWELLING UNIT CLOSET.
3. THE ELECTRICAL CONTRACTOR SHALL WIRE DWELLING UNIT TELEPHONE NETWORK INTERFACE UNIT TO TELEPHONE BACKBOARD BASMENT.
4. E.C. SHALL COORD. TELEPHONE WIRING / HEAD-END EQUIPMENT REQUIREMENT'S WITH LOCAL UTILITY REPRESENTATIVE. (TYPICAL)
5. E.C. SHALL COORD. CABLE TELEVISION WIRING / HEAD-END EQUIPMENT REQUIREMENT'S WITH LOCAL UTILITY REPRESENTATIVE. (TYPICAL)
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SLEEVES REQUIRED FOR THE INSTALLATION OF THE BUILDING TELEPHONE SYSTEM. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE PROOFING ALL SLEEVES.
7. THE GENERAL CONTRACTOR SHALL FURNISH AND INSTALL 3/4" X 4'-0" X 8'-0" CABLE TELEVISION SYSTEM PLYWOOD BACKBOARD FOR CABLE TELEVISION EQUIPMENT. THE GENERAL CONTRACTOR SHALL FURNISH AND INSTALL THE TELEVISION PLYWOOD BACKBOARD.
8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CABLE TELEVISION SYSTEM SYSTEM SPLITTER AND CABLE TELEVISION SYSTEM DISTRIBUTION. CABLE SHALL MEET THE REQUIREMENT'S OF THE LOCAL CABLE TELEVISION SUPPLIER. FINAL TERMINATING SHALL BE BY THE LOCAL CABLE TELEVISION SYSTEM SUPPLIER.
9. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CABLE TELEVISION SYSTEM WIRING BETWEEN THE DWELLING UNIT CABLE TELEVISION SPLITTER CABLE SHALL MEET THE REQUIREMENTS OF THE LOCAL CABLE TELEVISION SYSTEM SUPPLIER FINAL CONNECTION SHALL BE BY THE LOCAL TELEVISION SYSTEM SUPPLIER.
10. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SLEEVES REQUIRED FOR THE INSTALLATION OF THE "CATV" SYSTEM. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE PROOFING ALL SLEEVES.
11. THE ELECTRICAL CONTRACTOR SHALL WIRE TO THE BUILDING MAIN TELEPHONE PLYWOOD BACKBOARD WITH CAT. 5E CABLE IN 3/4" CONDUIT.
12. THE TELEVISION SYSTEM CABLING SHALL BE CAT. 5E CABLE UNLESS OTHERWISE NOTED ON THE DRAWING.



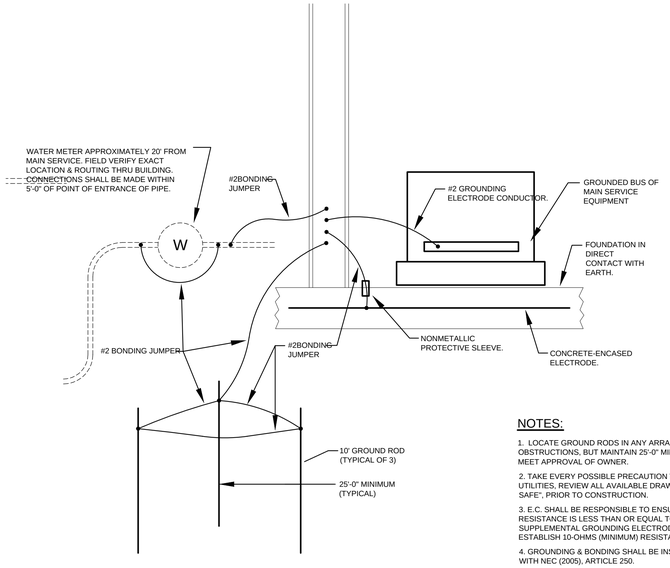
NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN CONTRACT. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS BUT NOT ON PLANS, AND VICE VERSA, SHALL APPLY OR SHALL BE PROVIDED AS THOUGH EXPRESSLY REQUIRED ON BOTH. IT IS NOT INTENDED THAT EVERY JUNCTION BOX, OFFSET, FITTING OR COMPONENT BE SPECIFIED OR SHOWN ON DRAWINGS; HOWEVER, CONTRACT DOCUMENTS REQUIRE PROVISION OF ALL COMPONENTS AND MATERIALS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL INSTALLATION, WHETHER OR NOT INDICATED OR SPECIFIED.

2. BRANCH CIRCUIT WIRING MAY NOT BE GRAPHICALLY SHOWN ON DRAWINGS AND MAY BE SHOWN BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT SHOWN GRAPHICALLY. WIRING IS SHOWN BY CONDUIT RUNS ON DRAWINGS WHERE SPECIFIC ROUTING IS REQUIRED OR FOR OTHER SPECIAL REASONS. ONLY ROOMS WITH MULTIPLE SWITCHING HAVE "SWITCH CONTROL LETTERS" ASSIGNED. PROVIDE THHN CONDUCTORS IN AREAS WITH HIGH AMBIENT TEMPERATURES SUCH AS BOILER ROOMS, INCINERATOR ROOMS, MECHANICAL EQUIPMENT ROOMS ETC., FOR SIZES LARGER THAN NO. 10 AWG.

TYPICAL CIRCUITING DETAIL

NOT TO SCALE



GROUNDING GRID SCHEMATIC

NO SCALE

NOTES:

1. LOCATE GROUND RODS IN ANY ARRANGEMENT TO AVOID OBSTRUCTIONS, BUT MAINTAIN 25'-0" MINIMUM SEPARATION AND MEET APPROVAL OF OWNER.
2. TAKE EVERY POSSIBLE PRECAUTION TO AVOID UNDERGROUND UTILITIES. REVIEW ALL AVAILABLE DRAWINGS AND CONTACT "DIG SAFE", PRIOR TO CONSTRUCTION.
3. E.C. SHALL BE RESPONSIBLE TO ENSURE THAT GROUND RESISTANCE IS LESS THAN OR EQUAL TO 10-OHMS. E.C. SHALL SUPPLEMENTAL GROUNDING ELECTRODES AS NECESSARY TO ESTABLISH 10-OHMS (MINIMUM) RESISTANCE TO GROUND.
4. GROUNDING & BONDING SHALL BE INSTALLED IN ACCORDANCE WITH NEC (2005), ARTICLE 250.

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ELECTRICAL LOW VOLTAGE RISER, DETAILS AND NOTES

E103

3/17/2016 10:13:43 AM Z:\15_1119 CHW Bldg A_BH.rvt

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

100% CONSTRUCTION DOCUMENTS

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

MAY 27, 2016

DRAWING LIST

NUMBER	NAME
0 - COVER	
G101	TITLE SHEET
2 - STRUCTURAL	
S100	FOUNDATION PLAN & DETAILS
S101	ROOF FRAMING & SHEAR WALL PLANS
3 - ARCHITECTURAL	
A101	FIRST FLOOR PLAN & RCP
A102	ROOF PLAN
A201	EXTERIOR ELEVATIONS
A202	EXTERIOR ELEVATIONS
A203	INTERIOR PLANS, ELEVATIONS & SCHEDULES
A301	BUILDING SECTIONS
A302	TYPICAL WALL SECTIONS
A501	EXTERIOR DETAILS
A502	DOOR & WINDOW SCHEDULES & DETAILS
A503	TYPICAL CONSTRUCTION DETAILS
4 - PLUMBING	
P101	PLUMBING FLOOR PLAN, PART PLAN, LEGEND, & GENERAL NOTES
P102	PLUMBING ROOF PLAN
6 - MECHANICAL	
M101	FIRST FLOOR PLAN
M102	ROOF / ATTIC PLAN
M103	SCHEDULES & DETAILS
7 - ELECTRICAL	
E100	ELECTRICAL SCHEDULES, NOTES & DETAILS
E101	ELECTRICAL FIRST FLOOR POWER PLAN
E102	ELECTRICAL FIRST FLOOR LIGHTING PLAN
E103	ELECTRICAL POWER RISER, SCHEDULES AND NOTES
E104	ELECTRICAL LOW VOLTAGE RISER, DETAILS & NOTES

GENERAL PROJECT NOTES

1 GENERAL NOTES APPLY TO ALL DRAWINGS AND ALL TRADES. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES.

2 UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, PERMITS, TRANSPORTATION AND OTHER SERVICES AND FACILITIES NECESSARY FOR PROPER AND TIMELY EXECUTION OF THE REQUIRED WORK UNDER THIS CONTRACT.

3 THE GENERAL CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF WRITTEN SUBSTANTIAL COMPLETION.

4 THE GENERAL CONTRACTOR WARRANTS TO THE OWNER AND TO THE ARCHITECT, THAT ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED UNDER THE CONTRACT ARE NEW UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK WILL BE AS SPECIFIED AND FREE OF DEFECTS.

5 ALL FLOOR LEVELS ON ALL DRAWINGS ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. COORDINATE BUILDING SLAB ELEVATIONS WITH CIVIL DRAWINGS.

6 ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES WELL AS ANY REQUIREMENTS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION.

7 DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS OR OF ANY VARIATIONS REQUIRED IN ORDER TO CONFORM TO CODE REQUIREMENTS, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ARCHITECT WILL FORWARD WRITTEN INSTRUCTION TO ALL CONCERNED PARTIES. ANY SUCH DISCREPANCY, OMISSION OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WORK SHALL BE PERFORMED IN A MANNER DIRECTED BY THE ARCHITECT.

8 DRAWING SCALES: THESE DRAWINGS ARE PREPARED TO THE SCALES NOTED. HOWEVER, DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THE PLANS, SECTIONS OR DETAILS. THE CONTRACTOR SHALL CONTACT THE ARCHITECT WITH ANY QUESTIONS PERTAINING TO DIMENSIONS OR DETAILS PRIOR TO COMMENCING ANY WORK.

9 THE REQUIREMENTS OF THE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR THEIR EMPLOYEES USE ON THE PROJECT TO ENSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.

10 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING CONSTRUCTION THAT IS SCHEDULED TO REMAIN IN PLACE OR INTACT. ANY DAMAGE INCURRED TO SUCH ITEMS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION.

11 ALL FRAMING LUMBER INSTALLED IN CONTACT WITH CONCRETE, MASONRY OR STEEL SHALL BE PRESSURE TREATED.

12 THE GENERAL CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL APPROVED, CODE COMPLIANT FIRE EXTINGUISHERS. SUCH EXTINGUISHERS SHALL BE FULLY COORDINATED WITH AND APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

13 ALL DIMENSIONS ARE ACTUAL AND ARE TAKEN TO THE FACE OF STUD, FACE OF CONCRETE WALL, FACE OF CMU WALL OR FACE OF FRAME, UNLESS NOTED OTHERWISE.

14 ALL INTERIOR WALLS AND PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF STRUCTURE OR DECK ABOVE, UNLESS NOTED OTHERWISE.

15 ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE CONDITIONED, USED, APPLIED, INSTALLED, CONNECTED, ERECTED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS, GUIDELINES AND INSTALLATION INSTRUCTIONS.

16 ALL NEW WINDOWS, SIDELITES AND BORROWED LITES AS WELL AS ASSOCIATED GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES IN PLACE WITHIN THE JURISDICTION OF THE WORK. PROVIDE SAFETY GLAZING AS REQUIRED BY CODE.

17 ALL PENETRATIONS OF FIRE-RESISTIVE-RATED FLOORS, WALLS, PARTITIONS AND SHAFTS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAILS THAT CONFORM TO U.L. DESIGN STANDARDS FOR THROUGH PENETRATION FIRESTOP SYSTEMS. THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SPECIFICATIONS AND DETAILS THAT SHOW COMPLETE CONFORMANCE TO THE U.L. LISTING TO THE ARCHITECT FOR REVIEW AND APPROVAL. SUCH DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE MADE AVAILABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE SPECIFIC FOR EACH PENETRATION WITH ANY AND ALL VARIABLES DEFINED.

18 SEAL AROUND ALL PENETRATIONS (DUCTS, PIPES, CONDUIT, ETC.) AT NEW AND EXISTING FIRE-RATED WALL, PARTITION AND CEILING CONSTRUCTION. SEAL SHALL NOT DIMINISH RATING OF THE WALL, PARTITION OR CEILING. AT CONCRETE OR MASONRY, SEAL OFF OPENINGS WITH CONCRETE GROUT. AT PLASTER OR DRYWALL, DAM UP GAPS AND WALL VOIDS WITH U.L. APPROVED FIRE-RESISTIVE-RATED SEALANT OR PUTTY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

19 LEVEL ALL FLOORS AS REQUIRED TO CONCEAL ANY DROPS OR RISERS IN FLOORS THAT WOULD OTHERWISE BE SEEN WITH THE SCHEDULED FLOOR FINISHES.

20 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND PROPERLY INSTALLING ALL FIRESAFING, FIRE/SMOKE STOPPING AT ALL PENETRATIONS OR OPENINGS AT INTERSECTIONS OF RATED WALLS AND STRUCTURAL ELEMENTS, AT ALL PENETRATIONS OR OPENINGS THROUGH FIRE-RESISTIVE RATED WALLS AND AT ANY OTHER AREAS WHERE FIRE AND SMOKE MAY PENETRATE.

21 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE SHORING AND BRACING TO SAFELY SUPPORT THE STRUCTURE DURING CONSTRUCTION.

22 THE CONTRACTOR IS RESPONSIBLE FOR DUST AND WEATHER PROTECTION DURING CONSTRUCTION.

23 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONS USING THE SURROUNDING FACILITIES WHO COME INTO CONTACT WITH THE AREA OF CONSTRUCTION. THE CONSTRUCTION AREA SHALL BE PROPERLY BARRICADED TO PREVENT INTRUSION BY PERSONS NOT ASSOCIATED WITH THE CONSTRUCTION OF THIS FACILITY.

24 THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. SAFETY, CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SAFETY SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

25 REFER TO THE PROJECT MANUAL, WRITTEN SPECIFICATIONS AND INTERPRETATION OF CONTRACT DOCUMENTS SECTION BELOW FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
EL 0' - 0"	DATUM POINT
FLOOR LEVEL 0' - 0"	ELEVATION MARKER
A3.0 A3.0	BUILDING SECTION
1 A4.0	AREA OF DETAIL
1 A3.0	DETAIL SECTION
1 A3.0	WALL SECTION
A A	MATCH LINE
A1 A4 A204 A2 A3	INTERIOR ELEVATION
1 A4.0	EXTERIOR ELEVATION
A1	WINDOW TYPE
108	DOOR NUMBER
KITCHEN 108	ROOM NAME AND NUMBER
1	KEYNOTE NUMBER
1	WALL TYPE
	NEW CONSTRUCTION
1	REVISION NUMBER AND CLOUD REFERENCE
12 4	ROOF PITCH
℄	CENTERLINE

ABBREVIATIONS

A	
ABV	ABOVE
AT	ACOUSTICAL TILE
AD	AREA DRAIN
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT
ASPH	ASPHALT
B	
B/	BOTTOM OF
BB	BASEBOARD
BBH	BASEBOARD HEAT
BD	BOARD
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BM	BEAM
BO	BY OWNER
B.O.	BOTTOM OF
BRK	BRICK
C	
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
CO	CARBON MONOXIDE
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONST JT	CONSTRUCTION JOINT
CONT	CONTINUOUS
CONTR	CONTRACTOR
CPT	COLD ROLLED COOPER
CRC	
CS	COURSE
CT	CERAMIC TILE
CTR	CENTER
CF	CUBIC FOOT
CW	COLD WATER
D	
D	DEEP
DBL	DOUBLE
DEPT	DEPARTMENT
DI	DRAIN INLET
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DO	DITTO
DP	DAMPPROOF(ING)
DR	DOOR
DRN	DRAIN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER
DWT	DUMBWAITER
E	
E	EAST
EA	EACH
EL	ELEVATION
ELEC	ELECTRIC (AL)
ELEV	ELEVATOR
EMER	EMERGENCY
EPDM	ELASTOMERIC ROOFING
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EJ	EXPANSION JOINT
EXP	EXPOSED
EXT	EXTERIOR
F	
F/	FACE OF
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FLUOR	FLUORESCENT
FRTW	FIRE RETARDENT TREATED WOOD
FRWK	FRAMEWORK
FT	FOOT
FTG	FOOTING
FURN	FURNISH (ED)
FURR	FURRING
FUT	FUTURE
G	
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GD	GROUND
GEN	GENERAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GL	GLASS
GL BLK	GLASS BLOCK
GR	GRADE
GRAN	GRANITE
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	
H	HIGH
HB	HOSE BIB
HC	HOLLOW CORE
HDW	HARDWARE
HDWD	HARDWOOD
HT	HEIGHT
HM	HOLLOW METAL
HORZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
HR	HOUR
HW	HOT WATER
HVAC	HEAT/VENT AIR CONDITION
I	
IC	IN CONTRACT
ID	INSIDE DIMENSION
IN	INCH
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
J	
JST	JOIST
JSTH	JOIST HANGER
JT	JOINT
L	
LAM	LAMINATE
LCC	LEAD COATED COPPER
LG	LONG
LH	LEFT HAND
M	
MACH	MACHINE
MAR	MARBLE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MDO	MEDIUM DENSITY OVERLAY PLYWOOD
MEM	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MO	MASONRY OPENING
MT	METAL
MTL	THRESHOLD METAL
N	
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NON-SLIP
NTS	NOT TO SCALE
O	
OA	OVERALL
OAE	OR APPROVED EQUAL
OC	ON CENTER
OD	OUTSIDE DIMENSION
OPNG	OPENING
OPP	OPPOSITE
P	
PARL	PARALLEL
PART	PARTITION
PERP	PERPENDICULAR
PJF	PREMOLDED JOINT FILLER
PL	PLASTIC
PLAS	PLASTER
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLYWD	PLYWOOD
POL	POLISHED
PNL	PANEL (ING)
PR	PAIR
PREFIN	PREFINISHED
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PNTD	PAINTED
Q	
QT	QUARRY TILE
QTR	QUARTER
QTY	QUANITTY
R	
R	RISER
RAD	RADIUS
RD	ROOF DRAIN
RECP	RECEPTACLE
REF	REFERENCE
REFRIG	REFRIGERATOR
REIN	REINFORCED
REQD	REQUIRED
RES	RESILIENT
RH	RIGHT HAND
RL	RAIN LEADER
RM	ROOM
RND	ROUND
RO	ROUGH OPENING
S	
S	SOUTH
SC	SOLID CORE
SCHD	SCHEDULE
SD	SOAP DISPENSER
SEAL	SEALANT
SECT	SECTION
SEL	SELECT
SF	SQUARE FEET(FOOT)
SHEATH	SHEATHING
SIM	SIMILAR
SHT	SHEET
SJ	SEALANT JOINT
SOF	SOFFIT
SPEC	SPECIFICATION
SPF	SPRUCE/PINE/FIR
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STL	STEEL
STRCT	STRUCTURAL
SUSP	SUSPENDED
SY	SQUARE YARD
T	
T	TREAD
T/	TOP OF
TB	TACK BOARD
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK (NESS)
THRES	THRESHOLD
T.O.	TOP OF
TOIL	TOILET
TZ	TERRAZZO
TTD	TOILET TISSUE DISPENSER
TV	TELEVISION
TYP	TYPICAL
T&G	TONGUE & GROVE
U	
UR	URINAL
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
V	
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VENT	VENTILATE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VP	VENEER PLASTER
VT	VINYL TILE
VWC	VINYL WALL COVERING
W	
W	WIDE
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WNSCT	WAINSCOT
WP	WATERPROOF
WR	WATER RESISTANT
WS	WEATHER STRIP
WWM	WELDED WIRE MESH

ROOM NAMES

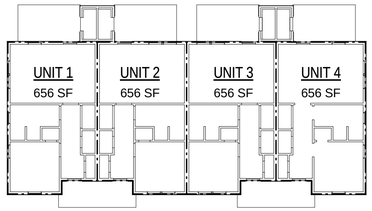
BDR	BEDROOM
BSMNT	BASEMENT
CC	CUSTODIAN'S CLOSET
CLOS	CLOSET
COR	CORRIDOR
CTRM	COAT ROOM
DNR	DINING ROOM
ELEV	ELEVATOR
ENT	ENTRANCE
KIT	KITCHEN
LAV	LAVATORY
LKR	LOCKER ROOM
LNG	LOUNGE
LVR	LIVING ROOM
MACH RM	MACHINE ROOM
MBATH	MASTER BATH
MBDR	MASTER BEDROOM
MECH	MECHANICAL ROOM
OFF	OFFICE
PWDR	POWDER ROOM
P.R.	POWDER ROOM
SH	SHOWER
ST	STAIR
STOR	STORAGE
TOIL	TOILET
VEST	VESTIBULE

BUILDING CODE DATA

BUILDING CODE	RHODE ISLAND STATE BUILDING CODE - SBC-1 JULY 1, 2013 INTERNATIONAL RESIDENTIAL CODE 2012 EDITION
LOCALITY	CHARLESTOWN, RI 02813
TYPE OF CONSTRUCTION	5-A
STORIES	ONE
FROST LINE DEPTH	40 INCHES
WIND SPEED	110 MPH
GROUND SNOW LOAD	30 PSF

AREA SCHEDULE - GROSS BUILDING

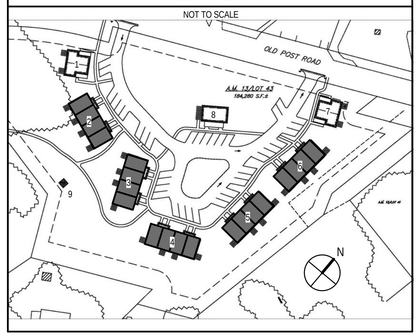
AREA NAME	AREA (SF)
UNIT 1	656 SF
UNIT 2	656 SF
UNIT 3	656 SF
UNIT 4	656 SF
	2624 SF



FIRST FLOOR - GROSS AREA PLAN

KEY PLAN

NOT TO SCALE



INTERPRETATION OF CONTRACT DOCUMENTS

IN THE EVENT OF CONFLICTING PROVISIONS IN THE CONTRACT DOCUMENTS, THE DRAWINGS WILL TAKE PRECEDENCE OVER THE SPECIFICATIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE DRAWINGS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE. ON ALL DRAWINGS, FIGURES TAKE PRECEDENCE OVER SCALED DIMENSIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE SPECIFICATIONS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE.

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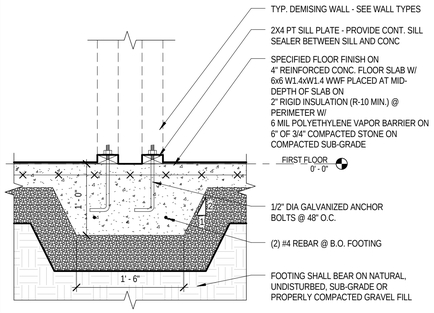
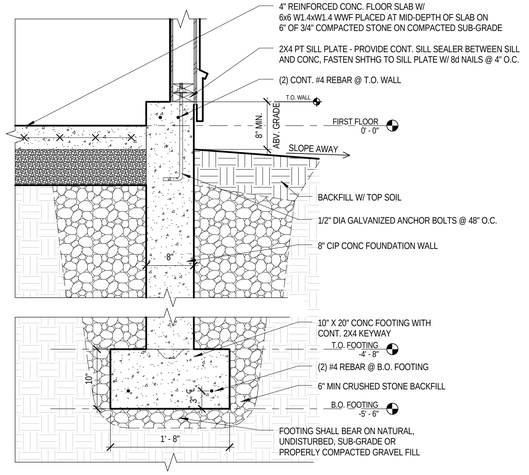
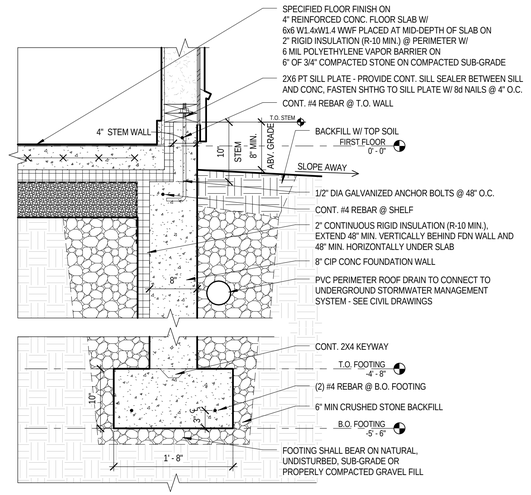
G101
CHURCHWOODS - BUILDINGS
2, 3, 4, 5, 6



D1 S100 SECTION @ DEMISING WALL FOOTING
SCALE: 1" = 1'-0"



D2 S100 DETAIL @ SHED FOUNDATION
SCALE: 1" = 1'-0"



D4 S100 SECTION @ TYP FOUNDATION WALL
SCALE: 1" = 1'-0"

GENERAL SHEET NOTES - FOUNDATION

ALL NEW STRUCTURAL FILL SHALL BE COMPACTED 95% AT MAXIMUM DRY DENSITY.

FOUNDATION DESIGN IS BASED ON PRESUMPTIVE SOIL BEARING CAPACITY OF 4000 LBS/SF. THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ANY SOILS ARE DISCOVERED ON SITE THAT ARE INCAPABLE OF MEETING THIS BEARING PRESSURE.

SYNTHETIC FIBER REINFORCING MAY BE SUBSTITUTED FOR WELDED WIRE MESH REINFORCING UPON WRITTEN APPROVAL OF THE ARCHITECT. GLASS FIBER REINFORCED CONCRETE SHALL BE IN ACCORDANCE WITH PCI MNL-128 STANDARDS.

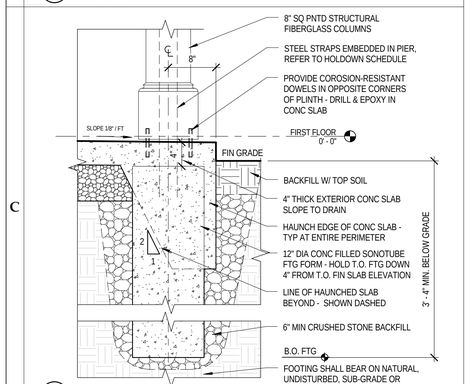
ANCHOR WOOD SILL PLATES TO FOUNDATION WITH 1/2" DIAMETER x 10" OR 12" LONG GALVANIZED ANCHOR BOLTS, NUTS, & WASHERS SPACED 48" O.C., REFER TO DETAILS FOR BOLT LENGTHS. PROVIDE A MINIMUM OF TWO BOLTS PER PLATE SECTION WITH BOLTS LOCATED NOT MORE THE 12" FROM CORNERS. BOLTS SHALL EXTEND 7" MINIMUM INTO CONCRETE. HOLDOWN ANCHORS ARE ALSO REGUIRED, REFER TO STRUCTURAL FRAMING DRAWINGS FOR ADDITIONAL INFORMATION.

VAPOR RETARDER TO BE 6 MIL POLYETHYLENE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE.

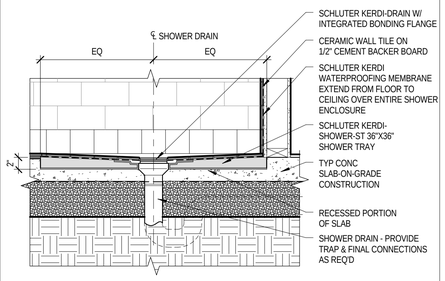
BASE COURSE TO 6-INCH-THICK MINIMUM CONSISTING OF CLEAN GRADED SAND, GRAVEL, OR CRUSHED STONE PASSING A 2-INCH SIEVE PLACED ON THE SUBGRADE.

UNDER NO CIRCUMSTANCES SHALL THE TOP OF FOUNDATION WALL ELEVATION EXCEED 18" ABOVE FINISHED GRADE ELEVATION.

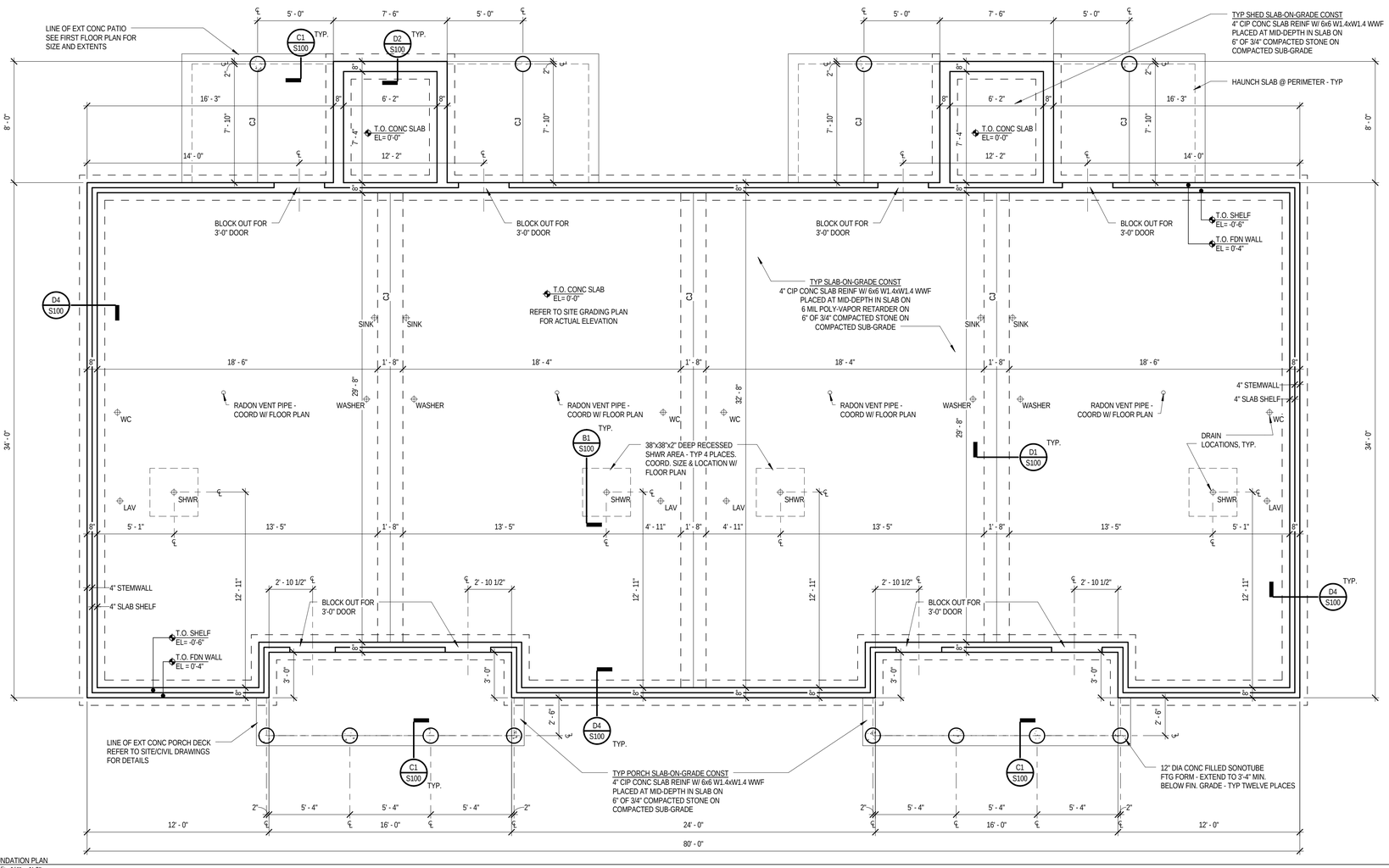
BACKFILL EACH SIDE OF FOUNDATION IN A BALANCED MANNER TO KEEP SOIL PRESSURES BALANCED (2' UNBALANCED BACKFILL MAX.)



C1 S100 DETAIL @ TYP PORCH SLAB & COLUMN FOOTING
SCALE: 1" = 1'-0"



B1 S100 RECESSED SHOWER BASE DETAIL
SCALE: 1" = 1'-0"



A2 S100 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

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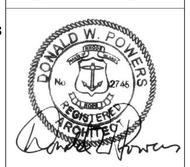
CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI



100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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FOUNDATION PLAN & DETAILS

S100

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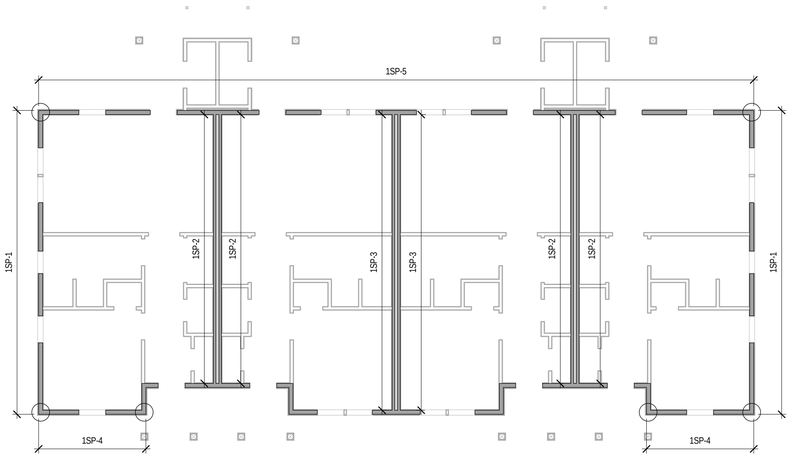


D1 / S101 SHEAR WALL PLAN
SCALE: 1/8" = 1'-0"

SHEAR WALL NAILING & HOLDOWN SCHEDULE

MARK	PLYWOOD ATTACHMENT	HOLDOWN CONNECTOR
1SP-1	8d NAILS @ 6" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU2-SDS2.5
1SP-2	GYP WALL BOARD BOTH SIDES OF EACH DEMISING WALL W/ #6 SCREWS @ 7" O.C PERIMETER AND INTERMEDIATE, NO BLOCKING REQ'D	NONE REQUIRED
1SP-3	GYP WALL BOARD BOTH SIDES OF EACH DEMISING WALL W/ #6 SCREWS @ 7" O.C PERIMETER AND INTERMEDIATE, NO BLOCKING REQ'D	NONE REQUIRED
1SP-4	8d NAILS @ 6" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU2-SDS2.5
1SP-5	8d NAILS @ 6" O.C. AT VERTICAL SEAMS, 12" O.C. INTERMEDIATE. NO BLOCKING REQ'D	NONE REQUIRED

SHEAR WALL NOTES:
1. 1SP-1 AND 1SP-4 SHEAR WALLS ARE TO HAVE SOLID BLOCKING INSTALLED BETWEEN STUDS ALONG ALL HORIZONTAL PLYWOOD EDGES.
2. ALL DESIGNATED SHEAR WALLS ARE TO HAVE A DOUBLE STUD AT EACH END OF THE SHEAR WALL FOR HOLDOWN ATTACHMENT.
3. ALL SIMPSON HDU HOLDOWN ANCHORS AT THE ENDS OF SHEAR WALLS ARE TO BE CONNECTED TO NEAREST ANCHOR BOLT W/ SIMPSON CNW5/8 COUPLER.
4. WHERE SHEAR WALLS INTERSECT, USE SINGLE HOLDOWN TO SERVE BOTH SHEAR WALLS. HOLDOWN MUST BE THE LARGER OF THE TWO SPECIFIED.

ROOF MEMBER HOLDOWN SCHEDULE

MEMBER	LOCATION	CONNECTION
CLEARSPAN TRUSSES	EXT WALL	SIMPSON H10A ON SHEATHED SIDE OF WALL
GIRDER TRUSSES	POST BELOW	SIMPSON LGT SERIES HOLDOWN
JACK TRUSSES	EXT WALL	SIMPSON H2.5A ON SHEATHED SIDE OF WALL
	GIRDER TRUSS	LUS SERIES HANGER
HIP TRUSSES	EXT WALL	TS21 LAPPED EQUALLY ON SHEATHED SIDE OF WALL
	GIRDER TRUSS	SIMPSON THJA
RB1 / RB2	EXT WALL	LUS SERIES HANGER
	HOLLOW COLUMN	(2) 18ga STRAP CONTINUOUS FROM ROOF BEAM, THRU COLUMN, EMBEDDED INTO CONC FOUNDATION 14" MIN
GIRDER TRUSSES	JACKS	18ga x 16" LONG STEEL STRAP CENTERED ON EACH MEMBER
RJ-1	EXT WALL / RB-1, RB-2	SIMPSON H2.5A ON SHEATHED SIDE OF WALL

STRUCTURAL FRAMING LEGEND

ROOF FRAMING	
OUTLOOKER - RJ1	2x6 SPF @ 24" O.C.
PORCH ROOF BEAM - RB1	(2) 1.75x7.25 LVL
PORCH ROOF BEAM - RB2	(2) 2x8 SPF
WINDOW & DOOR HEADERS	
HEADER - HD1	(2) 2x8 SPF
HEADER - HD2	(2) 2x10 SPF
HEADER - HD3	(2) 2x8 SPF
STRUCTURAL COLUMNS	
PORCH CLOUMN - C1	HB&G 8" SQ PERMACAST COLUMN
CLOUMN - C2	(2) 2x6 SPF

STRUCTURAL SYMBOL LEGEND

COLUMN DOWN	BEAMS
BEARING WALL	RAFTERS
HEADERS	RAFTERS - OVERFRAMED

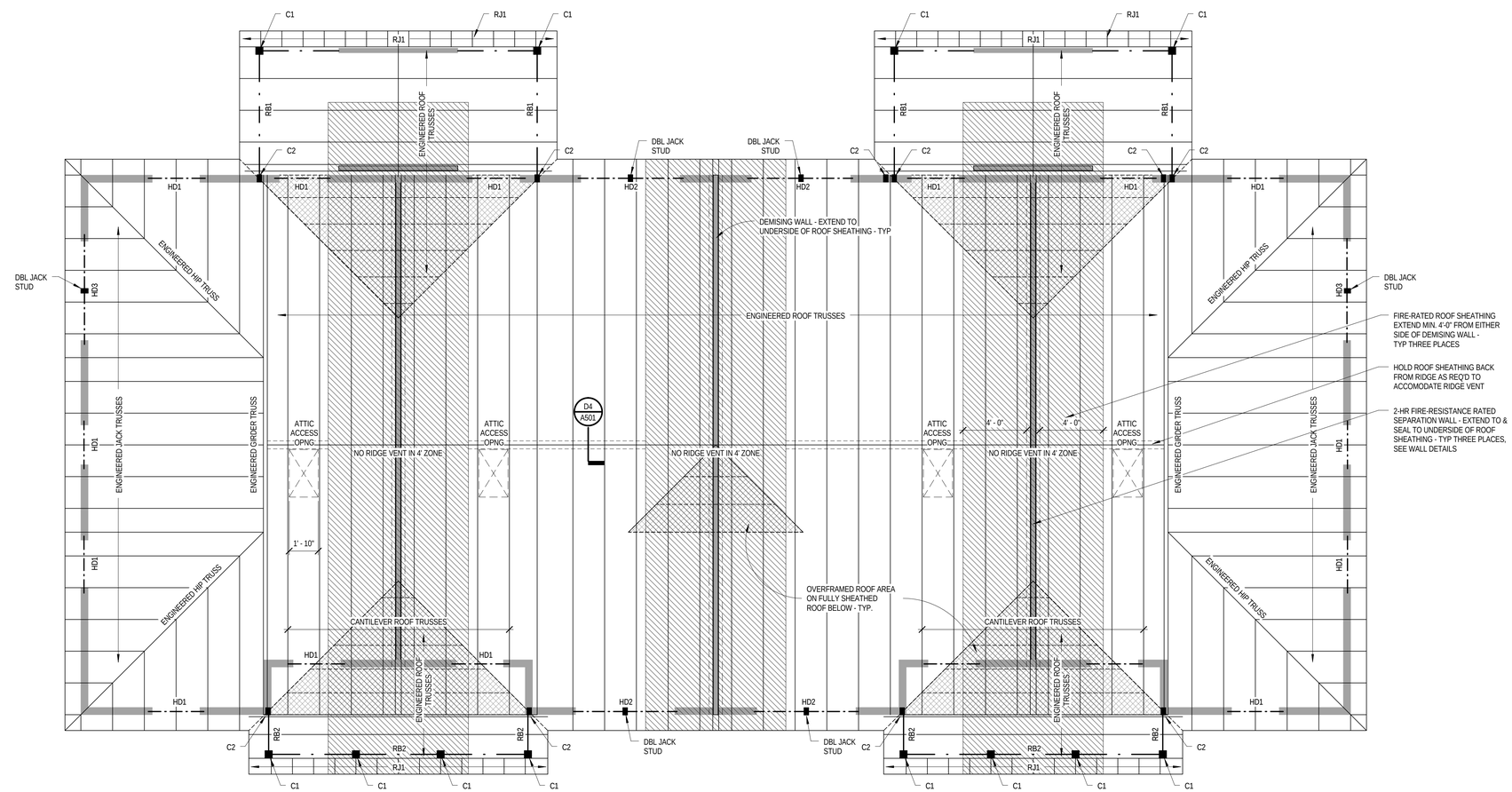
GENERAL STRUCTURAL NOTES

COLUMN DIMENSIONS ARE TAKEN FROM THE EXTERIOR FACE OF FRAMING / FOUNDATION TO THE CENTERLINE OF THE POST UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOULD BE VERIFIED WITH THE FLOOR PLANS.

DIMENSIONS TO PLUMBING FIXTURES ARE TO CENTERLINE OF ROUGH DRAIN. DIMENSIONS GIVEN ARE APPROXIMATE AND SHOULD BE CONFIRMED WITH FINAL FIXTURE SELECTION.

CONTRACTOR TO SUPPLY ALL CODE REQUIRED HURRICANE CLIPS AND HOLD DOWNS

PROVIDE CONTINUOUS HOLD DOWN STRAPPING OR THREADED ROD @ ALL LOAD BEARING PERMACAST PORCH COLUMNS.



A2 / S101 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

RONALD W. POWERS No. 2745 REGISTERED ARCHITECT

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ROOF FRAMING & SHEAR WALL PLANS

S101

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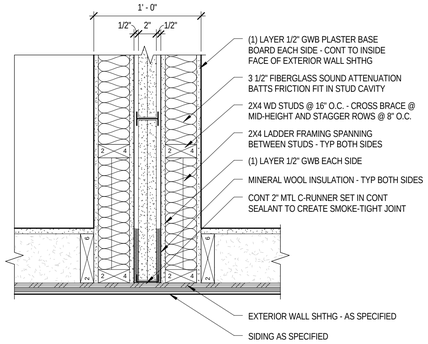
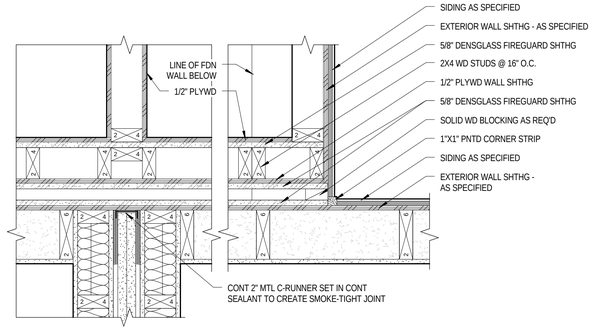
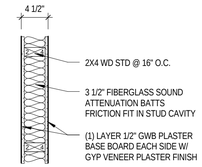


D1 A101 SEPARATION WALL @ EXTERIOR WALL
SCALE: 1 1/2" = 1'-0"



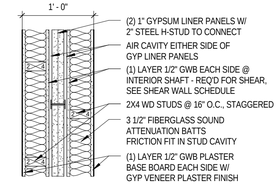
D2 A101 SEPARATION WALL @ SHED WALL
SCALE: 1 1/2" = 1'-0"



1A 2X4 INTERIOR WALL
AS DESCRIBED

1B 2X4 INTERIOR WALL
OMIT ACOUSTICAL INSULATION

1C 2X4 INTERIOR WALL @ WET LOCATION
REPLACE GWB PLASTER BASE BOARD W/ 5/8" PNTD WATER-AND-MOLD-RESILIENT GWB ON WET SIDE



2A TYPICAL 2-HR RATED INTERIOR DEMISING WALL: UL U336
STC: 60
AS DESCRIBED

2B TYPICAL INTERIOR DEMISING WALL @ WET LOCATION
REPLACE GWB PLASTER BASE BOARD W/ 1/2" PNTD WATER-AND-MOLD-RESILIENT GWB ON WET SIDE

WALL TYPES

GENERAL SHEET NOTES

ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE.

FURNISH AND INSTALL PERMANENT AND RESILIENT ACOUSTICAL SEALANT ALONG ALL JOINTS BETWEEN THE FLOOR AND SEPARATION WALLS. UTILIZE UL RATED FIRESTOP SEALANT AT ALL FIRE-RESISTIVE RATED PARTITIONS.

ALL INTERIOR WALL SURFACES SHALL RECEIVE A PLASTER FINISH. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FURNISH AND INSTALL SOUND ATTENUATION BATT INSULATION IN ALL INTERIOR PARTITIONS UNLESS NOTED OTHERWISE.

DOOR OPENINGS NOT LOCATED BY A DIMENSION SHALL BE CENTERED IN WALLS AS SHOWN OR LOCATED 6" FROM FINISH WALL TO FINISH JAMB UNLESS NOTED OTHERWISE.

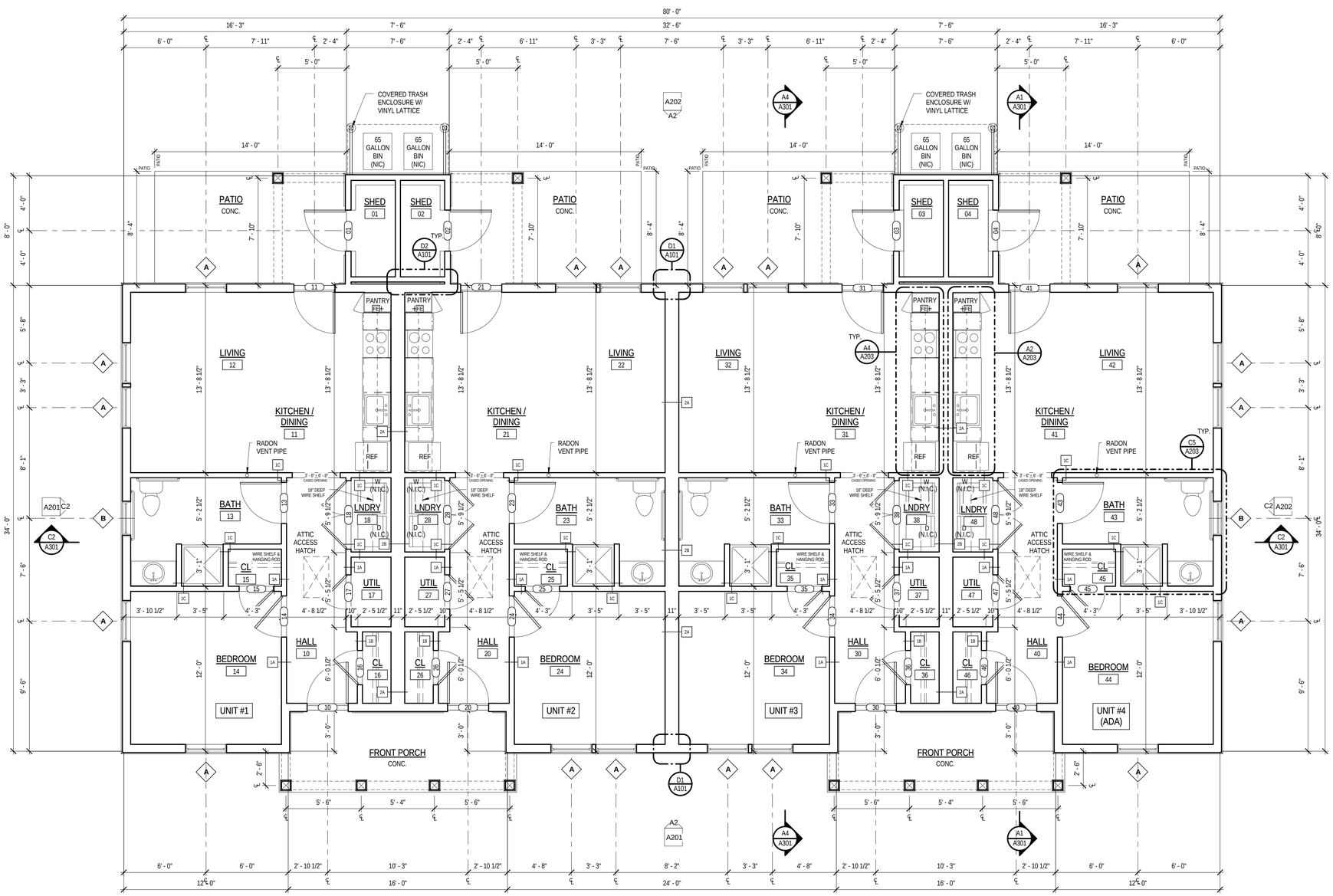
ATTIC ACCESS DOOR TO BE 22"X30" R-42 DELUXE E-Z HATCH ATTIC ACCESS SCUTTLE DOOR WITH LOCKING 4-POINT LATCH AND HANDLES.

PROVIDE PORTABLE FIRE EXTINGUISHERS IN EACH KITCHEN. FINAL LOCATION TO BE DETERMINED IN FIELD BY ARCHITECT.

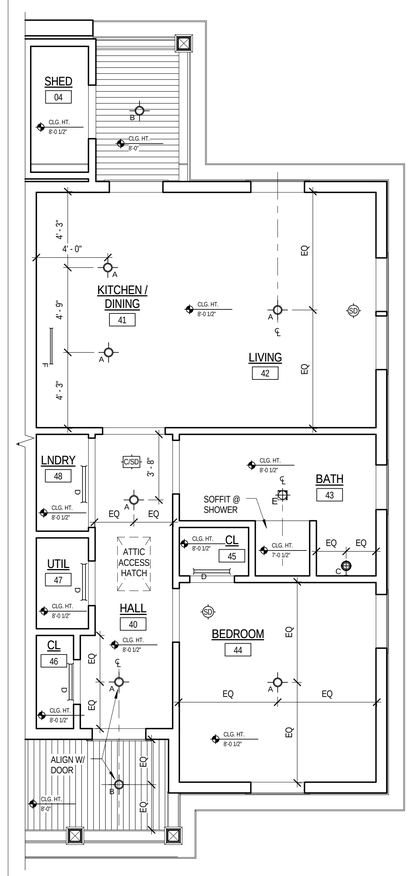
PROVIDE WASHER & DRYER HOOKUPS AND DRYER VENT TO EXTERIOR.

LIGHTING FIXTURE LEGEND

SYMBOL	DESCRIPTION	SPECIFICATION
A	CEILING MOUNTED - COMPACT FLOURESCENT FIXTURE	
B	CEILING MOUNTED - EXTERIOR PORCH FIXTURE	
C H	BATHROOM WALL SCONCE 2-LIGHT FLOURESCENT FIXTURE	
D	CLOSET LIGHT / FLUORESCENT UTILITY	
E	BATHROOM VENT FAN W/ FLOURESCENT LIGHT	
F	UNDER CABINET MOUNTED / COVE	



A2 A101 FIRST FLOOR
SCALE: 1/4" = 1'-0"



A5 A101 FIRST FLOOR RCP
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS
No. 2745
REGISTERED ARCHITECT
RHODE ISLAND

100% CONSTRUCTION DOCUMENTS

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FIRST FLOOR PLAN & RCP

A101

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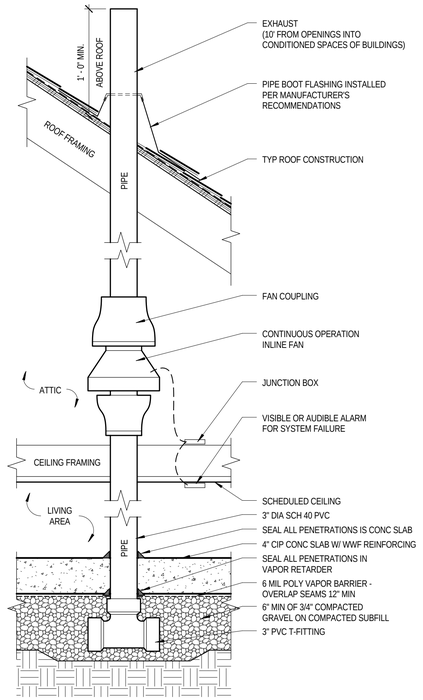
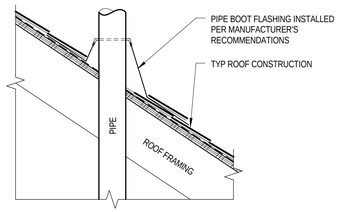


C1 / A102 DETAIL @ RADON VENTING
SCALE: 1 1/2" = 1'-0"



D2 / A102 DETAIL @ ROOF PENETRATION
SCALE: 1 1/2" = 1'-0"

GENERAL SHEET NOTES - ROOFING

SHINGLES SHALL BE TESTED IN ACCORDANCE WITH ASTM D 7158 AND SHALL MEET THE CLASSIFICATION REQUIREMENTS FOR A BASIC WIND SPEED OF 110 MPH AND SHALL BE FASTENED TO THE ROOF TO ACCOMODATE SUCH WIND SPEED.

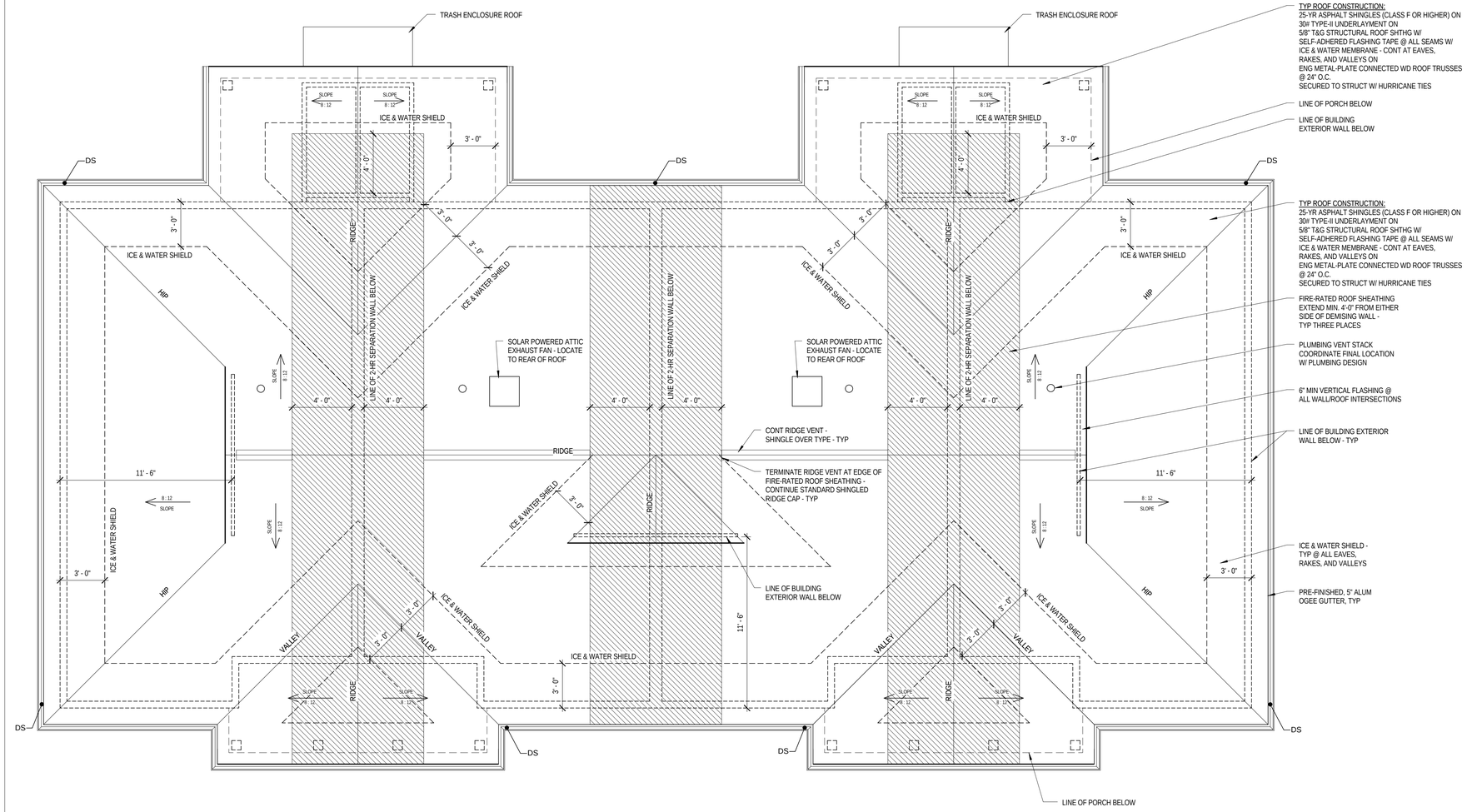
PROVIDE CONTINUOUS METAL DRIP EDGE ON ALL EAVES AND RAKES.

PROVIDE SIDEWALL FLASHING AT ALL VERTICAL SIDEWALLS BY THE STEP-FLASHING METHOD. FLASHING SHALL RUN UP VERTICAL SIDEWALLS 6" MINIMUM. AT THE END OF THE VERTICAL SIDEWALL THE STEP FLASHING SHALL BE TURNED OUT IN A MANNER THAT DIRECTS WATER AWAY FROM THE WALL AND ONTO THE ROOF AND/OR GUTTER.

PROVIDE (1) ONE LAYER NO. 30 (TYPE II) ASPHALT-SATURATED ORGANIC ROOFING FELT ON ALL ROOF SURFACES THAT ARE NOT COMPLETELY COVERED WITH ICE & WATER SHIELD MEMBRANE. ROOFING FELT MAY BE ELIMINATED AT THE CONTRACTOR'S OPTION IF ZIP SYSTEM ROOF SHEATHING WITH MOISTURE-RESISTIVE BARRIER IS UTILIZED AND ALL PANEL SEAMS ARE TAPED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.

PROVIDE ICE & WATER SHIELD MEMBRANE AT ALL EAVES, RAKES, VALLEYS, EAVE RETURNS, PORCH ROOFS AND ROOF TO SIDEWALL INTERSECTIONS. EXTEND MEMBRANE FROM LOWEST EDGES OF ALL ROOF SURFACES UP THE SLOPE TO A POINT AT LEAST 36" INSIDE THE EXTERIOR WALL LINE OF THE BUILDING.

PROVIDE 5" ALUMINUM OGEE STYLE GUTTERS AS INDICATED ON THE DRAWINGS. PROVIDE 3"X4" COORDINATING ALUMINUM DOWNSPOUTS AND BRACKETS WITH BOOT SLEEVES AT GRADE AT BASE OF DOWNSPOUT.



A2 / A102 ROOF PLAN
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W POWERS
No. 2745
REGISTERED ARCHITECT
RHODE ISLAND

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ROOF PLAN

A102

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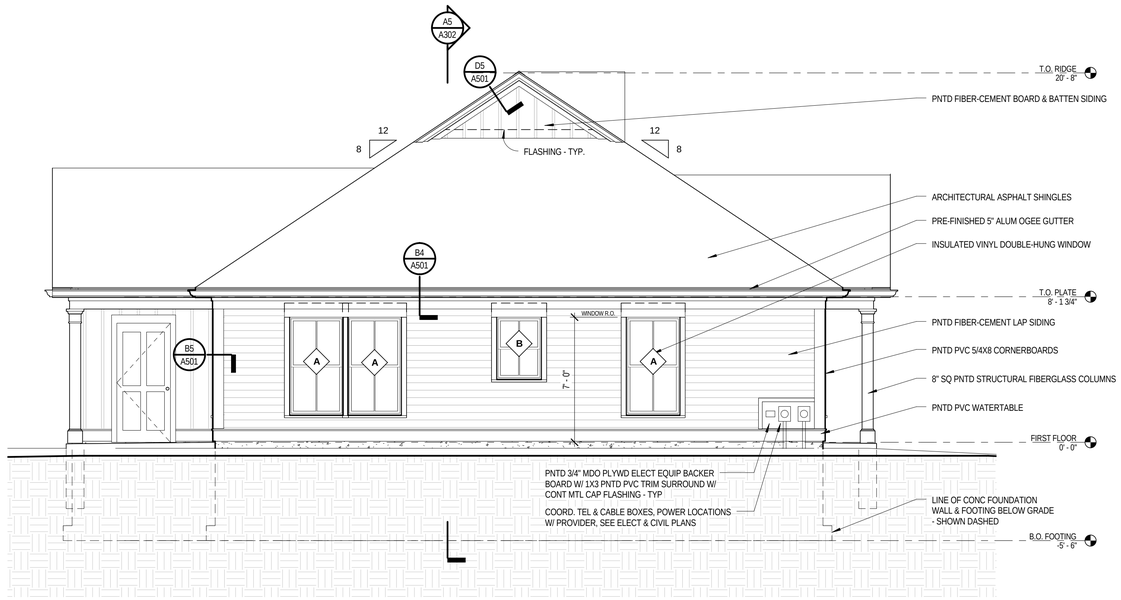
GENERAL SHEET NOTES - ELEVATIONS

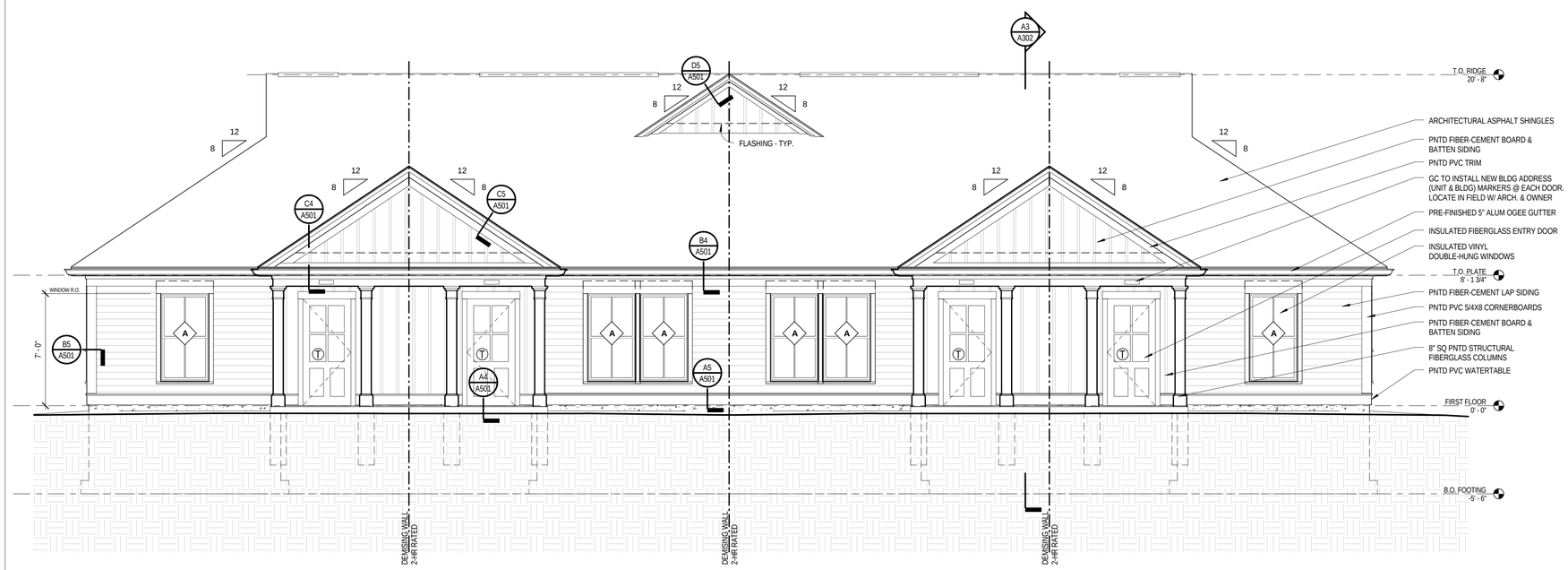
ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. THE TOP OF CONCRETE SLAB AT EACH BUILDING IS CONSIDERED THE REFERENCE ELEVATION FOR ALL VERTICAL MEASUREMENTS AND DIMENSIONS. REFER TO THE SITE GRADING PLAN FOR ACTUAL SLAB ELEVATIONS.

ALIGN ALL ROOF AND WALL ACCESSORIES AS INDICATED ON THE ELEVATIONS. ANY ACCESSORIES NOT INDICATED ON THE PLANS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.

ALL EXTERIOR WALL MOUNTED ELECTRICAL BOXES, HOSE BIBBS, LIGHT FIXTURES, DEVICES AND ACCESSORIES SHALL BE INSTALLED ON MOUNTING BLOCKS. MOUNTING BLOCKS SHALL BE PAINTED TO MATCH BUILDING SIDING FIELD COLOR.



C2 A201 LEFT ELEVATION
SCALE: 1/4" = 1'-0"



A2 A201 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

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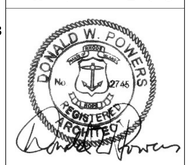
CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI



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EXTERIOR ELEVATIONS

A201

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ALIGN ALL ROOF AND WALL ACCESSORIES AS INDICATED ON THE ELEVATIONS. ANY ACCESSORIES NOT INDICATED ON THE PLANS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.

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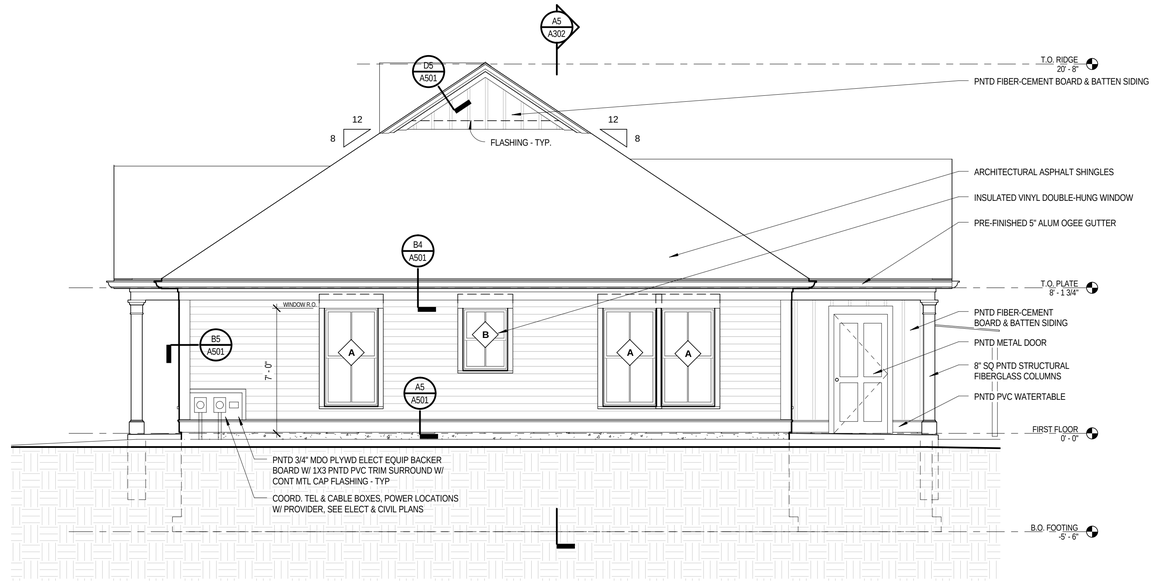
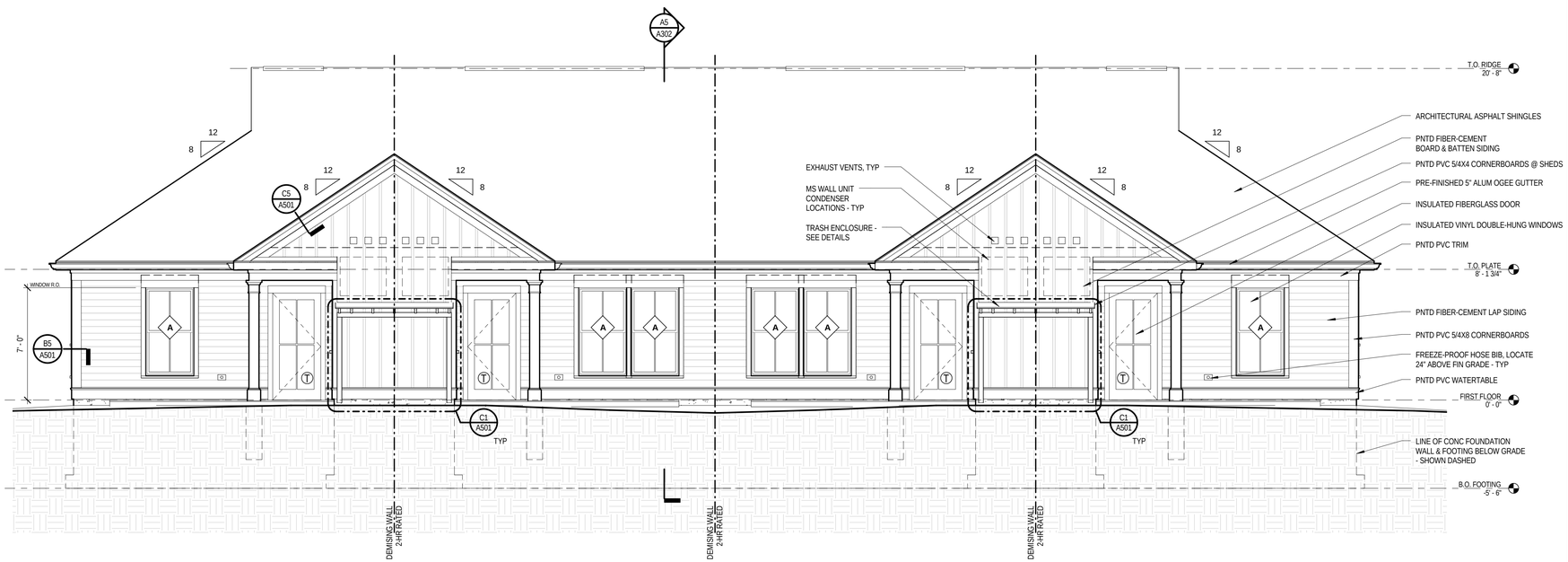


C2 / A202 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



A2 / A202 REAR ELEVATION
SCALE: 1/4" = 1'-0"

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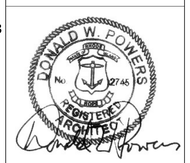
CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI



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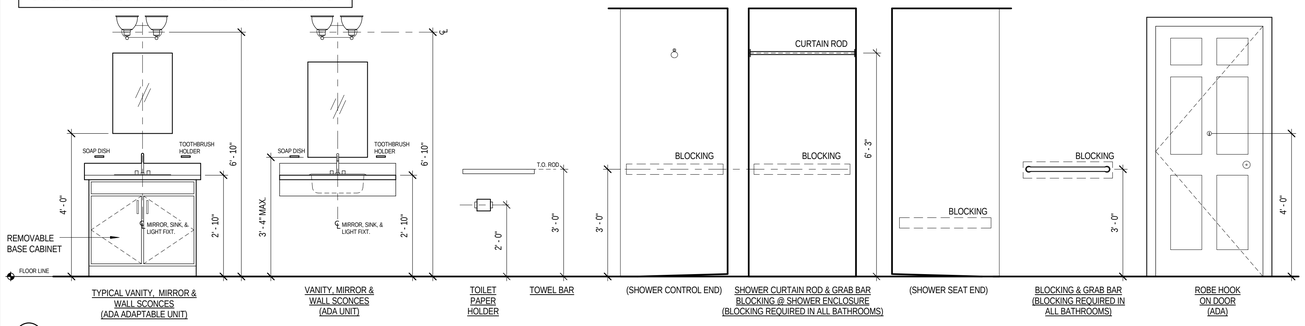
EXTERIOR ELEVATIONS

A202

ROOM FINISH SCHEDULE						
		ROOM FINISHES				CEILING HEIGHT
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	
10	HALL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
11	KITCHEN / DINING	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
12	LIVING	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
13	BATH	2X2 MOSAIC CERAMIC TILE	4" CT COVE BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
14	BEDROOM	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
15	CL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
16	CL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
17	UTIL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"
18	LNDRY	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 0 1/2"

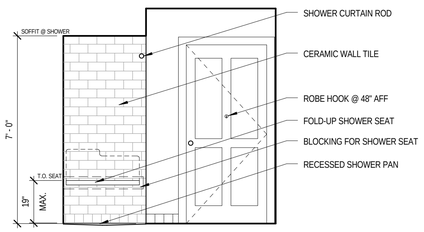
TYPICAL @ UNITS 1-4
SEE SPECIFICATIONS FOR PAINT TYPE TO BE USED FOR SPECIFIC APPLICATIONS.

MOUNTING HEIGHT SCHEDULE NOTES:
1. SEE INTERIOR ELEVATIONS FOR ALL CABINET & BATHROOM CONFIGURATIONS.
2. CABINET STYLES ARE ONLY DIAGRAMMATIC - SEE SPECIFICATIONS FOR TYPE.

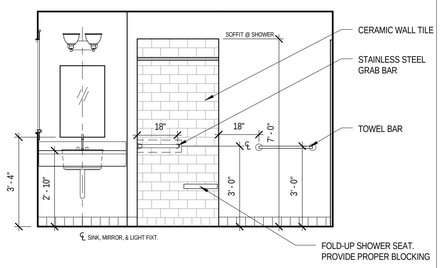


TYPICAL VANITY, MIRROR & WALL SCONCES (ADA ADAPTABLE UNIT) | VANITY, MIRROR & WALL SCONCES (ADA UNIT) | TOILET PAPER HOLDER | TOWEL BAR | (SHOWER CONTROL END) | SHOWER CURTAIN ROD & GRAB BAR BLOCKING @ SHOWER ENCLOSURE (BLOCKING REQUIRED IN ALL BATHROOMS) | (SHOWER SEAT END) | BLOCKING & GRAB BAR (BLOCKING REQUIRED IN ALL BATHROOMS) | ROBE HOOK ON DOOR (ADA)

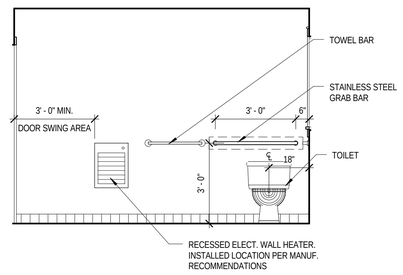
D3 / A203 MOUNTING HEIGHT SCHEDULE FOR ALL BATHROOMS (ADA & ADA ADAPTABLE)
SCALE: 1/2" = 1'-0"



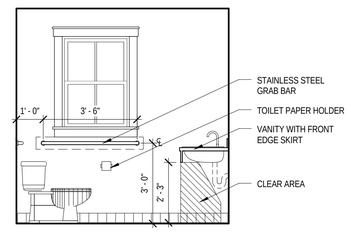
C1 / A203 TYPICAL BATHROOM ELEVATION 1 (ADA FEATURES SHOWN)
SCALE: 3/8" = 1'-0"



C2 / A203 TYPICAL BATHROOM ELEVATION 2 (ADA FEATURES SHOWN)
SCALE: 3/8" = 1'-0"

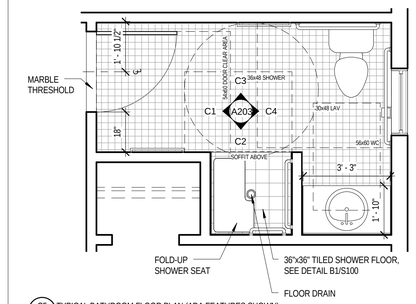


C3 / A203 TYPICAL BATHROOM ELEVATION 3 (ADA FEATURES SHOWN)
SCALE: 3/8" = 1'-0"



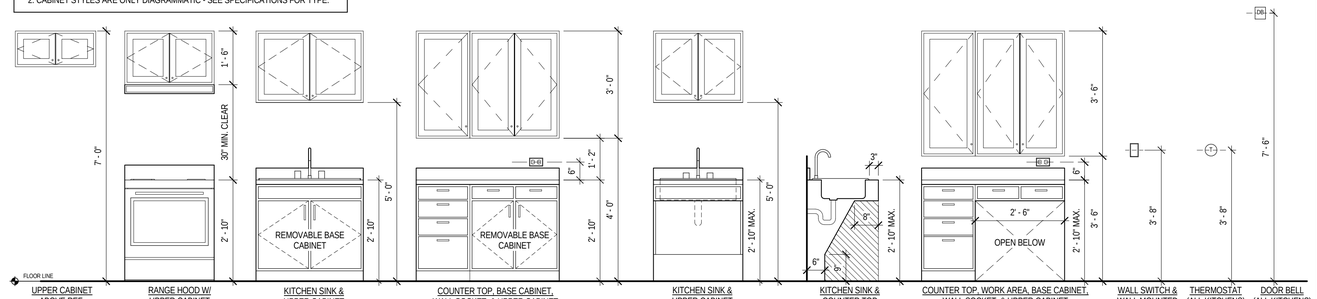
C4 / A203 TYPICAL BATHROOM ELEVATION 4 (ADA FEATURES SHOWN)
SCALE: 3/8" = 1'-0"

NOTES:
1. ADA BATHROOM PLAN AND INTERIOR ELEVATIONS SHOWN.
2. ADA ADAPTABLE BATHROOMS TO HAVE ALL BLOCKING FOR FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEAT INSTALLED AS SHOWN IN ELEVATIONS AND MOUNTING HEIGHT SCHEDULE.
3. OMIT SHOWER SEAT AND GRAB BARS IN SHOWER AND AT TOILET IN ADA ADAPTABLE BATHROOMS.



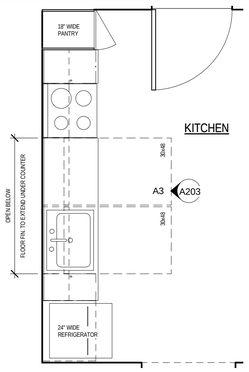
C5 / A203 TYPICAL BATHROOM FLOOR PLAN (ADA FEATURES SHOWN)
SCALE: 3/8" = 1'-0"

MOUNTING HEIGHT SCHEDULE NOTES:
1. SEE INTERIOR ELEVATIONS FOR ALL CABINET CONFIGURATIONS.
2. CABINET STYLES ARE ONLY DIAGRAMMATIC - SEE SPECIFICATIONS FOR TYPE.

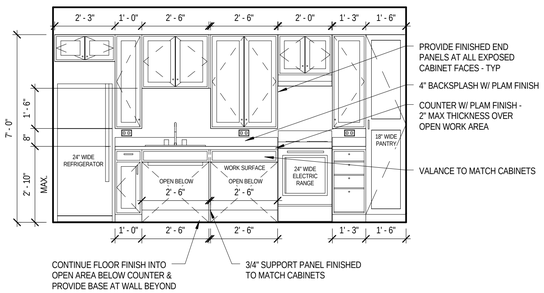


UPPER CABINET ABOVE REF. (ALL KITCHENS) | RANGE HOOD W/ UPPER CABINET (ALL KITCHENS) | KITCHEN SINK & UPPER CABINET (ADA ADAPTABLE UNIT) | COUNTER TOP, BASE CABINET, WALL SOCKET, & UPPER CABINET (ADA ADAPTABLE UNIT) | KITCHEN SINK & UPPER CABINET (ADA UNIT) | KITCHEN SINK & COUNTER TOP (ADA UNIT) | COUNTER TOP, WORK AREA, BASE CABINET, WALL SOCKET, & UPPER CABINET (ADA UNIT) | WALL SWITCH & WALL MOUNTED TELEPHONE (ALL KITCHENS) | THERMOSTAT (ALL KITCHENS) | DOOR BELL (ALL KITCHENS)

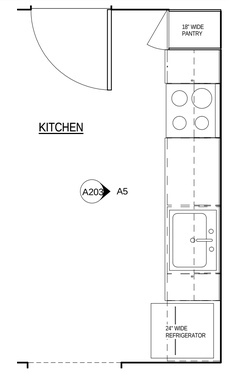
B3 / A203 MOUNTING HEIGHT SCHEDULE FOR ALL KITCHENS (ADA & ADA ADAPTABLE)
SCALE: 1/2" = 1'-0"



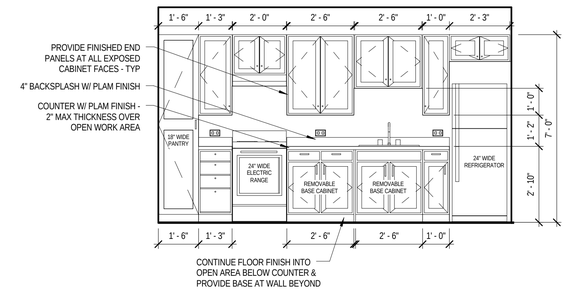
A2 / A203 KITCHEN LAYOUT @ ADA UNIT
SCALE: 3/8" = 1'-0"



A3 / A203 KITCHEN ELEVATION @ ADA UNIT
SCALE: 3/8" = 1'-0"



A4 / A203 KITCHEN LAYOUT @ ADA ADAPTABLE UNIT
SCALE: 3/8" = 1'-0"



A5 / A203 KITCHEN ELEVATION @ ADA ADAPTABLE UNIT
SCALE: 3/8" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

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REVISION SCHEDULE

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INTERIOR PLANS, ELEVATIONS & SCHEDULES

A203

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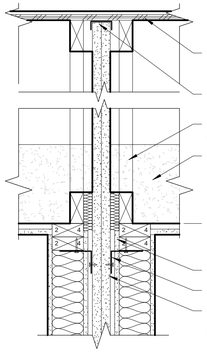
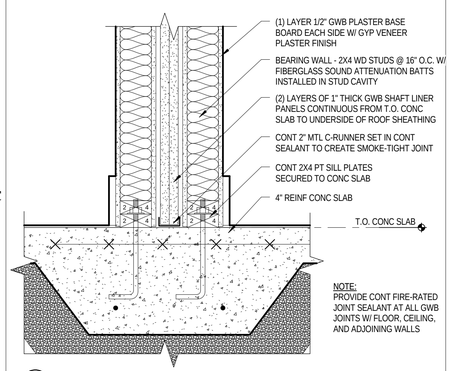
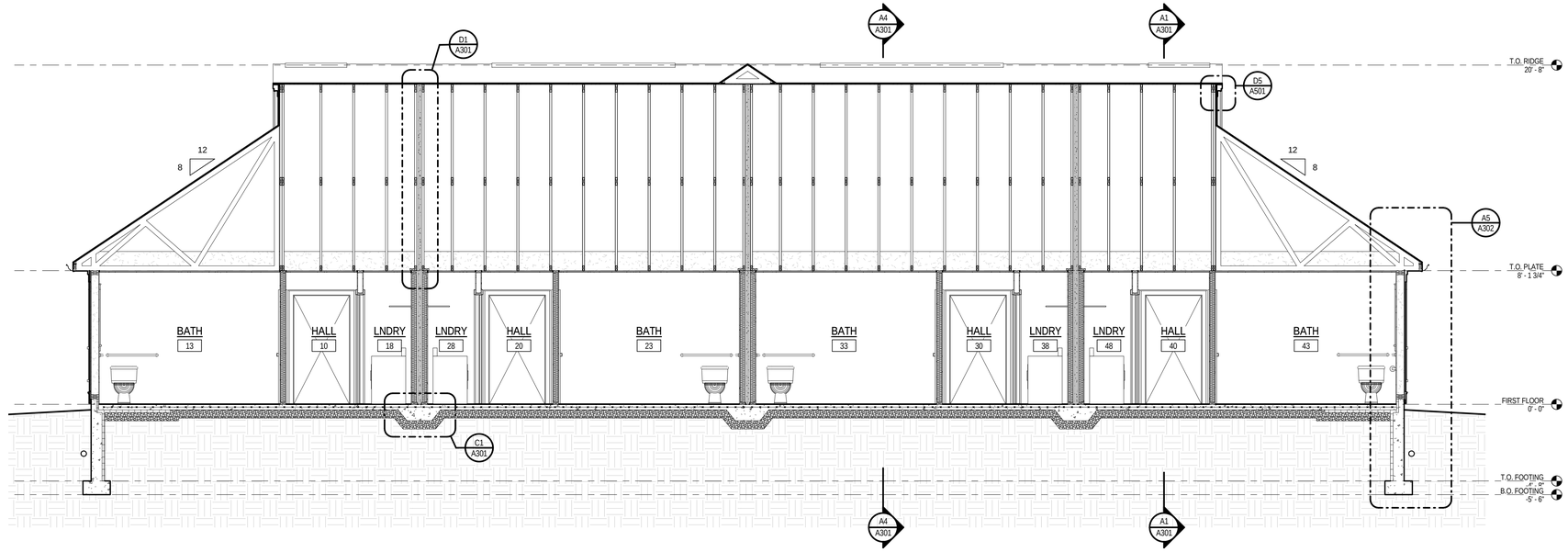


D1 / A301 2-HR FIRE-SEPARATION DETAIL @ CEILING & ROOF
SCALE: 1 1/2" = 1'-0"

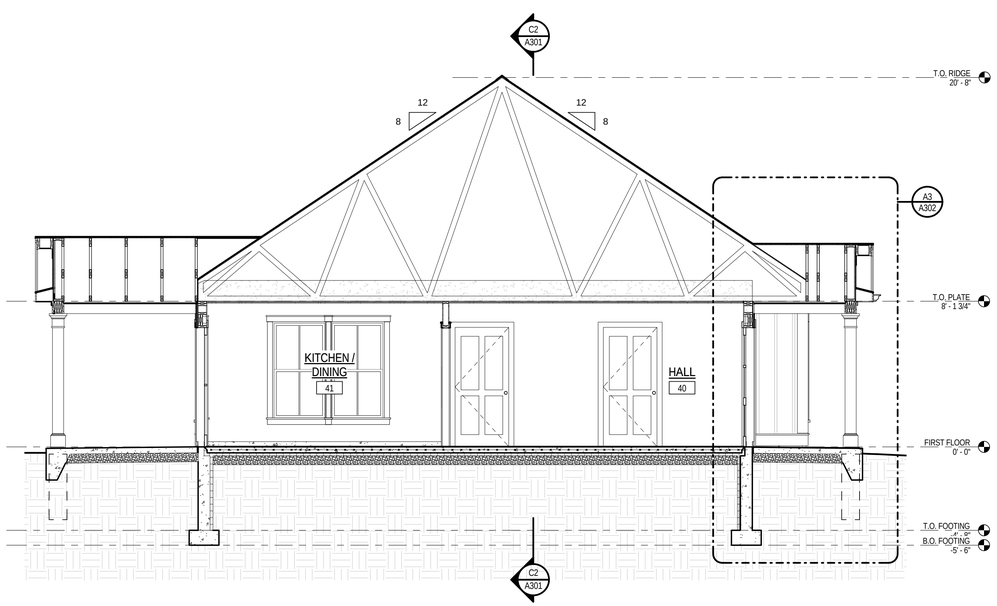


NOTE:
PROVIDE CONT FIRE-RATED JOINT SEALANT AT ALL GWB JOINTS W/ FLOOR, CEILING, AND ADJOINING WALLS

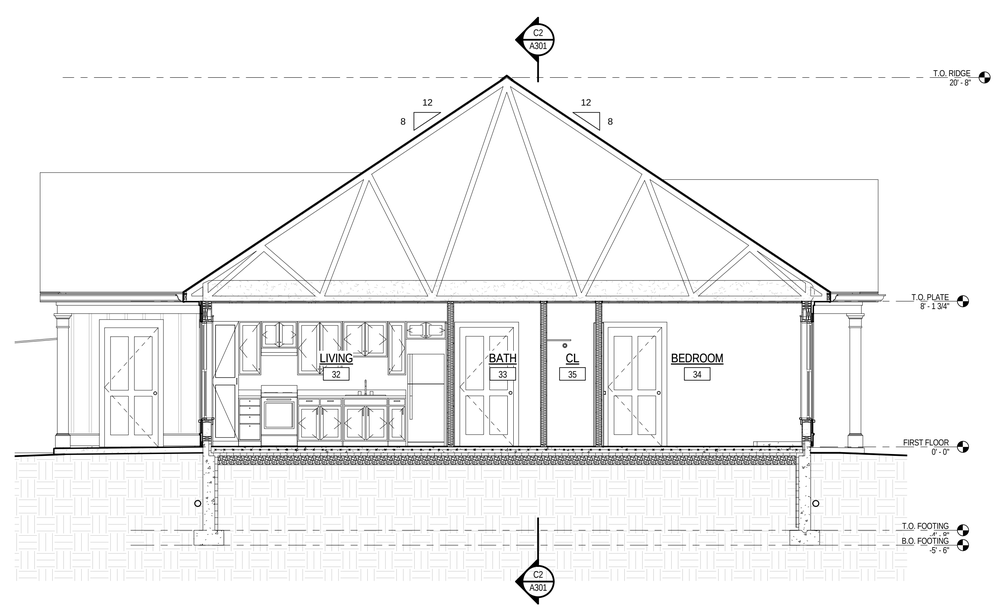
C1 / A301 2-HR FIRE-SEPARATION DETAIL @ CONC SLAB
SCALE: 1 1/2" = 1'-0"



C2 / A301 TRANSVERSE SECTION
SCALE: 1/4" = 1'-0"



A1 / A301 LONGITUDINAL SECTION @ HALL
SCALE: 1/4" = 1'-0"



A4 / A301 LONGITUDINAL SECTION @ BEDROOM
SCALE: 1/4" = 1'-0"

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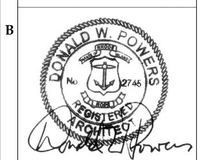
CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI



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BUILDING SECTIONS

A301

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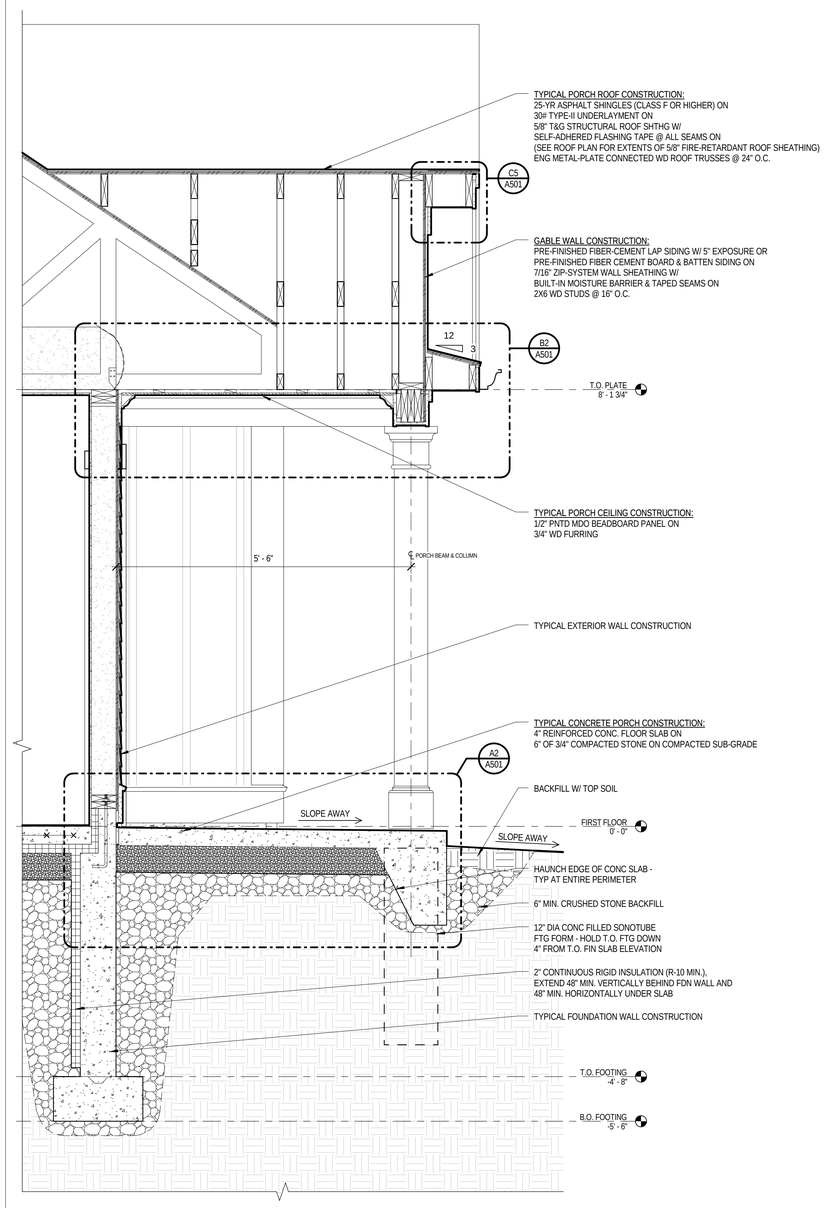
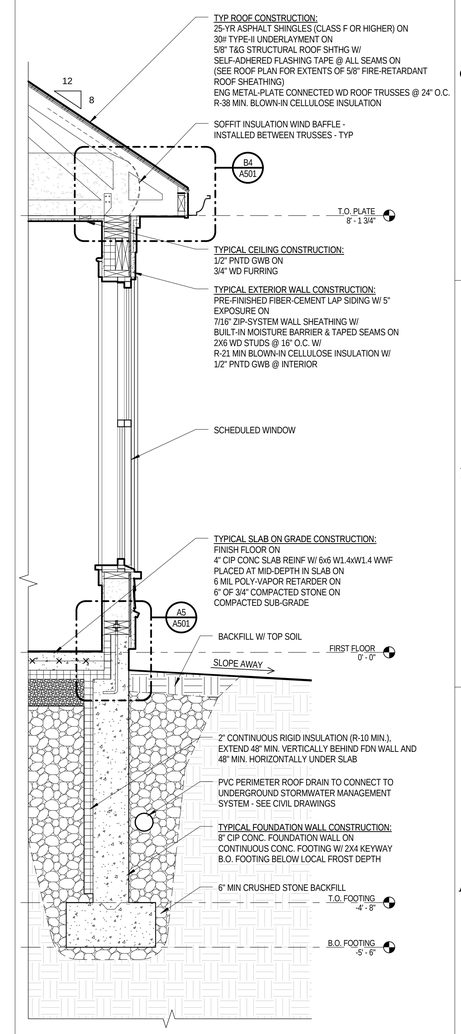


A3 / A302 WALL SECTION @ FRONT PORCH
SCALE: 3/4" = 1'-0"



A5 / A302 TYPICAL WALL SECTION
SCALE: 3/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

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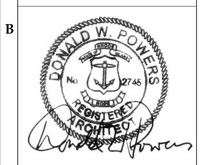

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SCALE: 3/4" = 1'-0"

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TYPICAL WALL SECTIONS

A302

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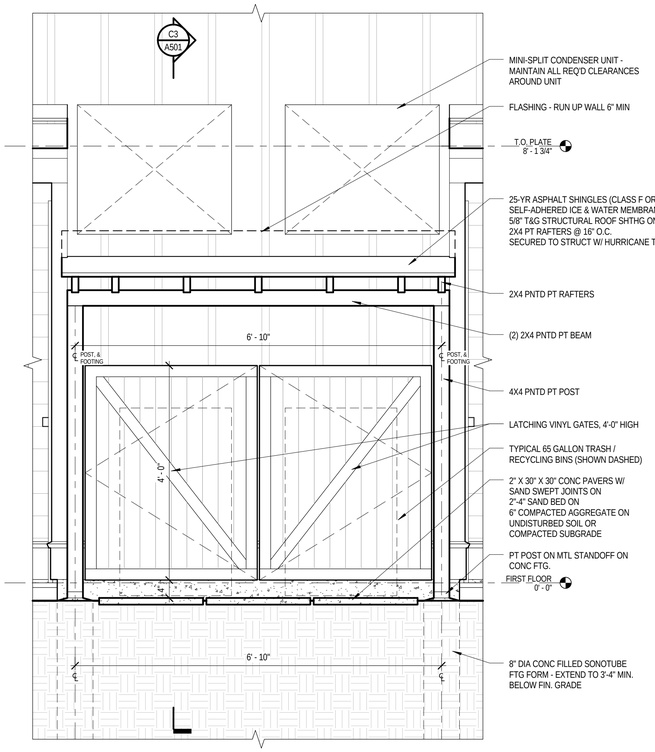
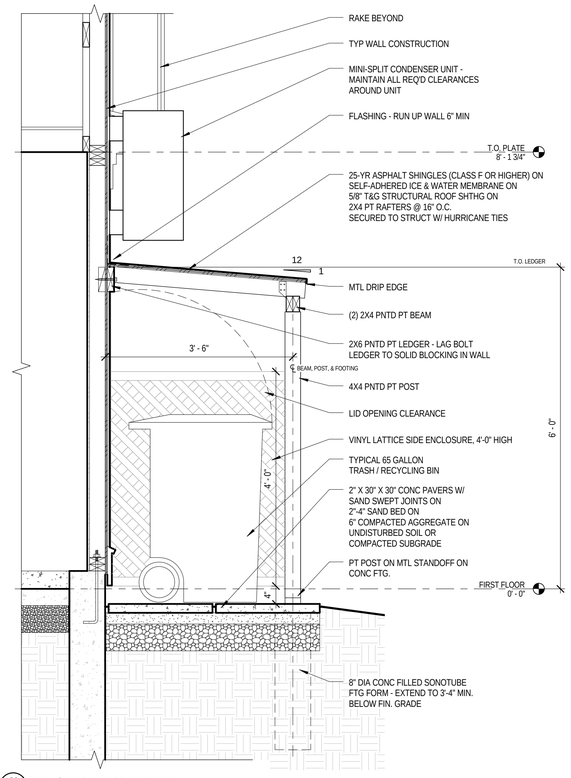
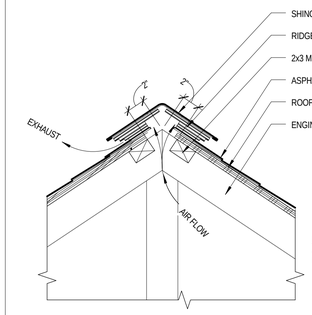


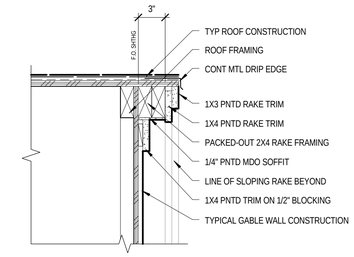
C1 A501 DETAIL @ TRASH ENCLOSURE ELEVATION
SCALE: 3/4" = 1'-0"



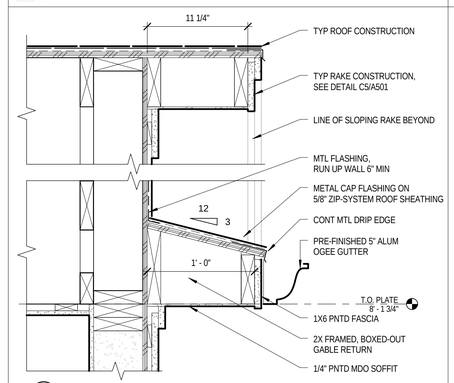
C3 A501 DETAIL @ TRASH ENCLOSURE SECTION
SCALE: 3/4" = 1'-0"



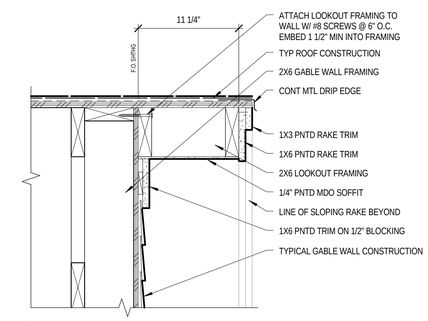
D4 A501 DETAIL @ RIDGE VENT
SCALE: 1 1/2" = 1'-0"



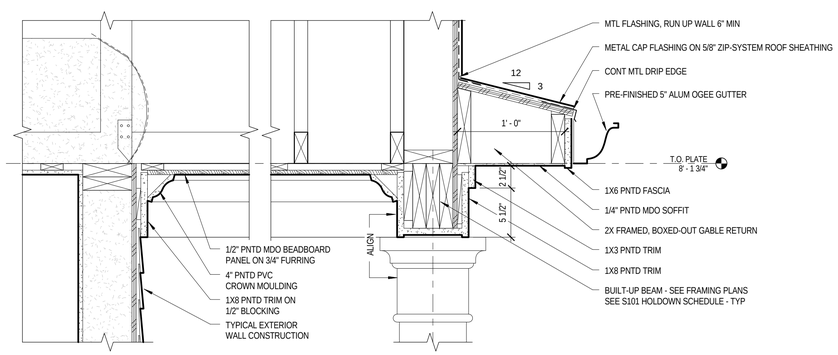
D5 A501 DETAIL @ PACKED-OUT RAKE
SCALE: 1 1/2" = 1'-0"



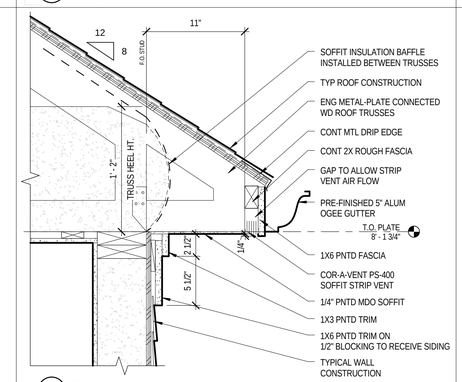
C4 A501 DETAIL @ TYP EAVE RETURN
SCALE: 1 1/2" = 1'-0"



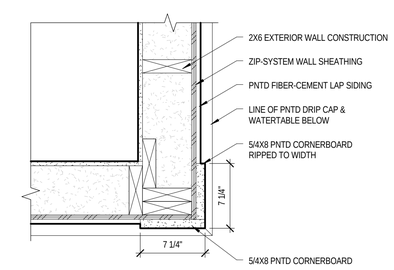
C5 A501 DETAIL @ TYP RAKE
SCALE: 1 1/2" = 1'-0"



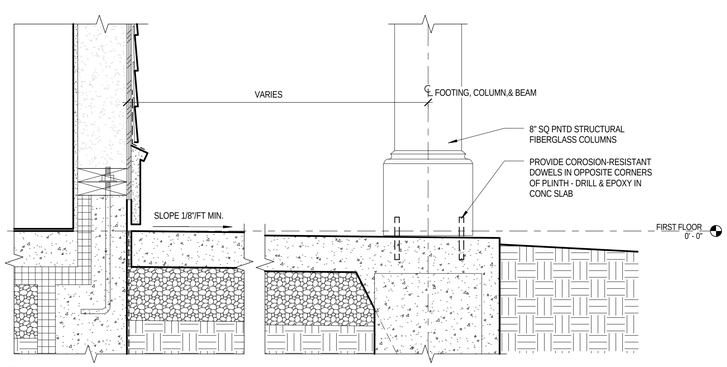
B2 A501 DETAIL @ PORCH BEAM & CEILING
SCALE: 1 1/2" = 1'-0"



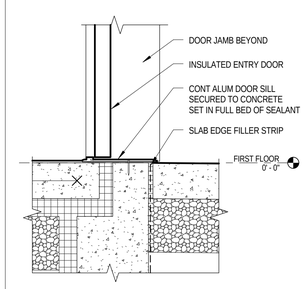
B4 A501 DETAIL @ TYP EAVE
SCALE: 1 1/2" = 1'-0"



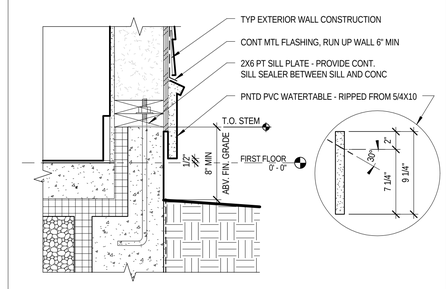
B5 A501 DETAIL @ CORNERBOARD
SCALE: 1 1/2" = 1'-0"



A2 A501 DETAIL @ PORCH DECK
SCALE: 1 1/2" = 1'-0"



A4 A501 DETAIL @ STOOP SILL
SCALE: 1 1/2" = 1'-0"



A5 A501 DETAIL @ WATERTABLE
SCALE: 1 1/2" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

RONALD W. FOWERS No. 2745 REGISTERED ARCHITECT

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EXTERIOR DETAILS

A501

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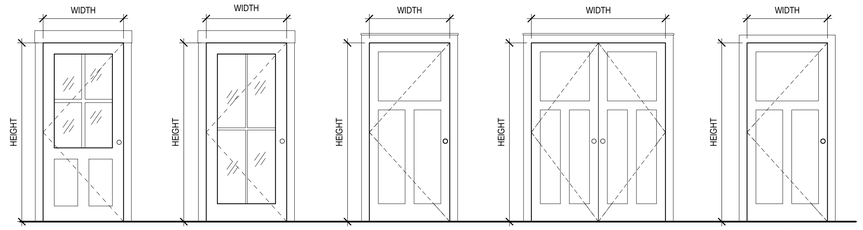
DOOR SCHEDULE

DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MANUFACTURER	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	THRESHOLD	DESCRIPTION
10	3' - 0"	6' - 8"	0' - 1 3/4"	THERMATRU OR APPROVED EQ.	A	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	INSULATED
11	3' - 0"	6' - 8"	0' - 1 3/4"	THERMATRU OR APPROVED EQ.	B	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	INSULATED
17	2' - 6"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
13	3' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD	MARBLE	
16	2' - 6"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
15	2' - 6"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
14	3' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
18	5' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	D	SEMI-SOLID WD	PNTD	WD	PNTD		PAIR OF DOORS
01	3' - 0"	6' - 8"	0' - 1 3/4"	MASONITE OR APPROVED EQ.	E	METAL	PNTD	WD	PNTD		UNINSULATED

TYPICAL @ UNITS #1-4



A — SINGLE-LEAF, INSULATED FIBERGLASS SIZE AS NOTED ON SCHEDULE

B — SINGLE-LEAF, INSULATED FIBERGLASS SIZE AS NOTED ON SCHEDULE

C — SINGLE-LEAF, SEMI-SOLID WD SIZE AS NOTED ON SCHEDULE

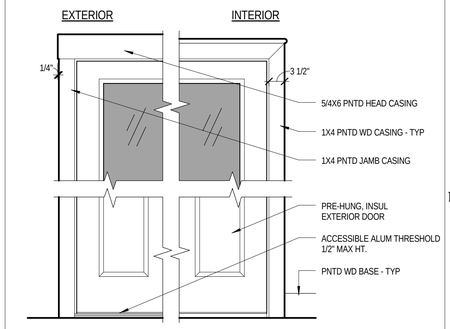
D — DOUBLE-LEAF, SEMI-SOLID WD SIZE AS NOTED ON SCHEDULE

E — SINGLE-LEAF, METAL SIZE AS NOTED ON SCHEDULE

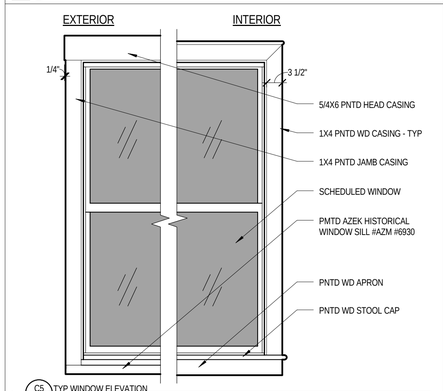
DOOR LEGEND
3/8" = 1'-0"

WINDOW SCHEDULE

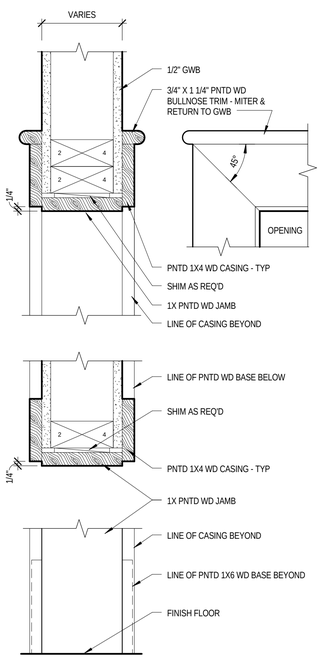
TYPE MARK	UNIT SIZE WIDTH	UNIT SIZE HEIGHT	OPERATION	COMMENTS
A	3' - 0"	5' - 6"	DOUBLE HUNG	
B	2' - 6"	3' - 6"	DOUBLE HUNG	



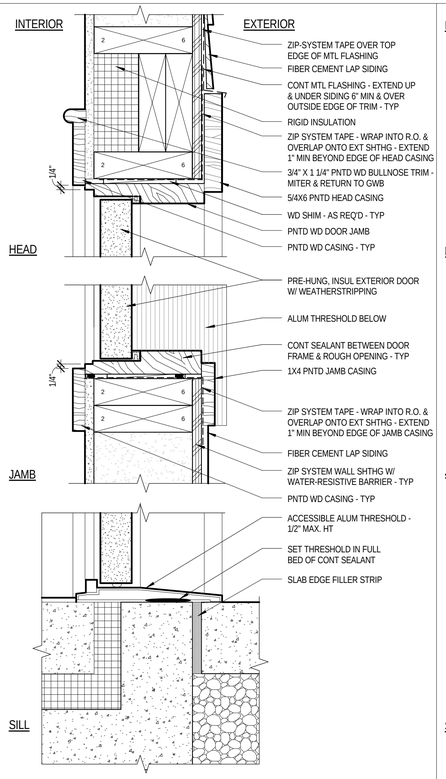
D5 / A502 TYP EXTERIOR DOOR ELEVATION
SCALE: 3/4" = 1'-0"



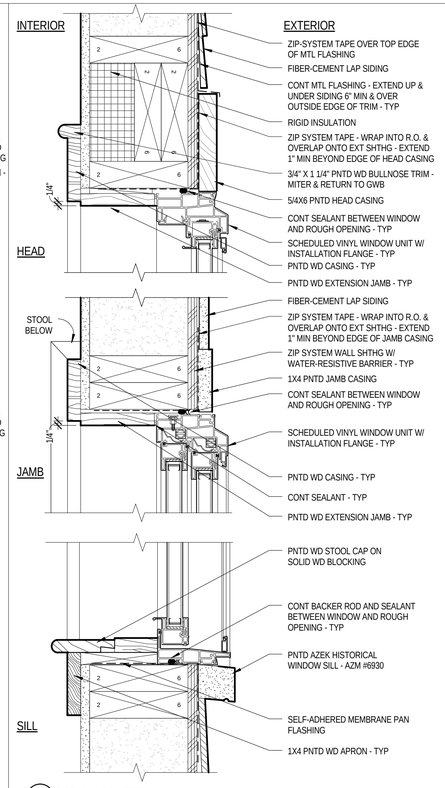
C5 / A502 TYP WINDOW ELEVATION
SCALE: 3/4" = 1'-0"



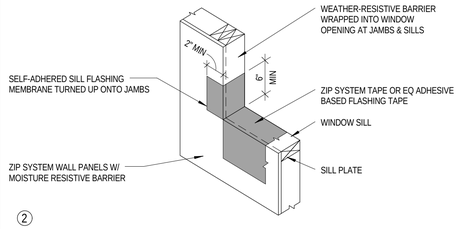
A1 / A502 INTERIOR CASED OPENING DETAILS
SCALE: 3" = 1'-0"



A2 / A502 TYPICAL EXTERIOR DOOR DETAIL
SCALE: 3" = 1'-0"



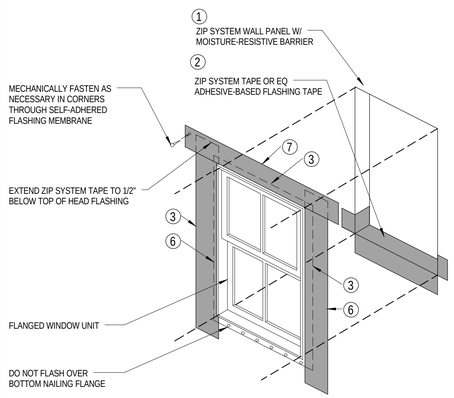
A3 / A502 TYPICAL WINDOW DETAILS
SCALE: 3" = 1'-0"



2 SILL FLASHING

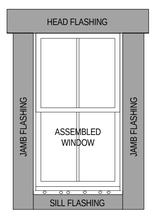
WINDOW INSTALLATION STEPS:

1. FASTEN ZIP SYSTEM WALL SHEATHING TO THE WOOD FRAME AND INSTALL THE ZIP SYSTEM TAPE AS SPECIFIED BY MANUFACTURER
2. APPLY ZIP SYSTEM TAPE OR APPROVED EQ ADHESIVE-BASED FLASHING TAPE, ENSURING THAT FLASHING EXTENDS UP JAMBS AT LEAST 6" & OVERHANGS SHEATHING AT LEAST 2".
3. APPLY A 3/8" NOM. DIA. BEAD OF SEALANT TO THE BACKSIDE (INTERIOR) OF THE WINDOW MOUNTING FLANGE AT THE TOP AND SIDES ONLY. PLACE BEAD IN LINE WITH ANY PRE-PUNCHED HOLES.
4. IMMEDIATELY INSTALL WINDOW USING MANUFACTURER RECOMMENDED FASTENERS.
5. APPLY BEAD OF SEALANT ACROSS THE FACE OF THE MOUNTING FLANGE AT HEAD.
6. APPLY JAMB FLASHING, EXTENDING TO 1/2" BELOW TOP OF HEAD FLASHING. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
7. APPLY HEAD FLASHING, OVERLAPPING JAMB FLASHING BY 1" MINIMUM. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
8. INSTALL METAL CAP FLASHING AND TRIM.

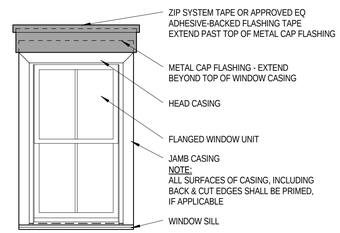


JAMB & HEAD FLASHING DETAILS

A4 / A502 TYPICAL FLASHING DETAILS
SCALE: 1/2" = 1'-0"



FINAL CLOSURE DETAIL



8 CAP FLASHING & TRIM DETAIL

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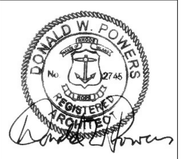
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI



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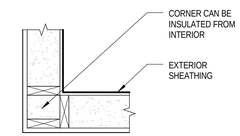
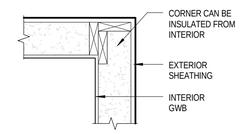
DOOR & WINDOW SCHEDULES & DETAILS

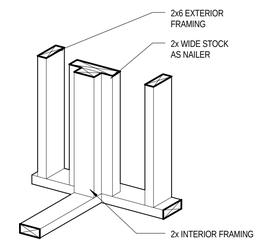
A502



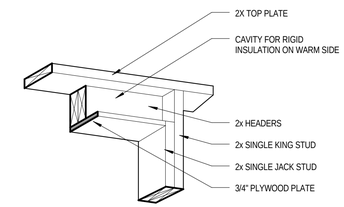
2 INSIDE CORNER



1 OUTSIDE CORNER

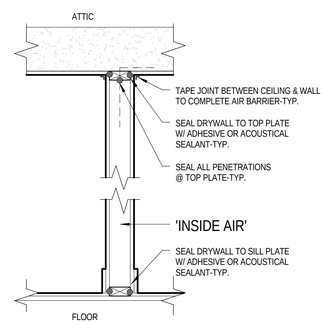


3 DRYWALL NAILER FOR INTERIOR PARTITIONS

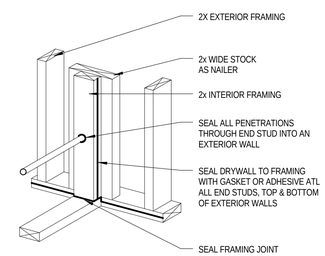


4 INSULATED HEADER

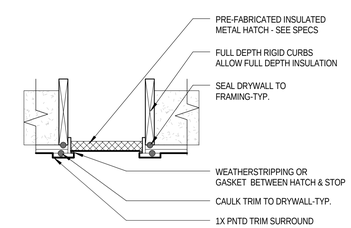
C3 / A503 TYPICAL FRAMING DETAILS
SCALE: 1" = 1'-0"



1 INTERIOR PARTITION WALL INTERSECTION CEILING & FLOOR

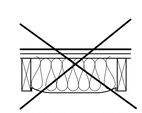


2 INTERSECTION OF INTERIOR PARTITION W/ EXTERIOR WALL



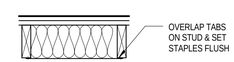
3 ATTIC HATCH

B3 / A503 TYPICAL AIR SEALING DETAILS
SCALE: 1" = 1'-0"



SIDE STAPLING LEAVES AIR CHANNELS & COMPRESSES INSULATION

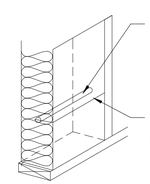
INCORRECT



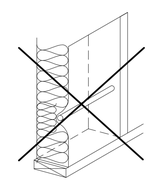
FACE STAPLING ALLOWS FULL LOFT

CORRECT

1 STAPLING BATT INSULATION



CORRECT



INCORRECT

2 BATT INSULATION AROUND PLUMBING, WIRING & OTHER OBSTACLES

A4 / A503 BATT INSULATION INSTALLATION
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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. FOWLERS No. 2745 REGISTERED ARCHITECT

100% CONSTRUCTION DOCUMENTS

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TYPICAL CONSTRUCTION DETAILS

A503

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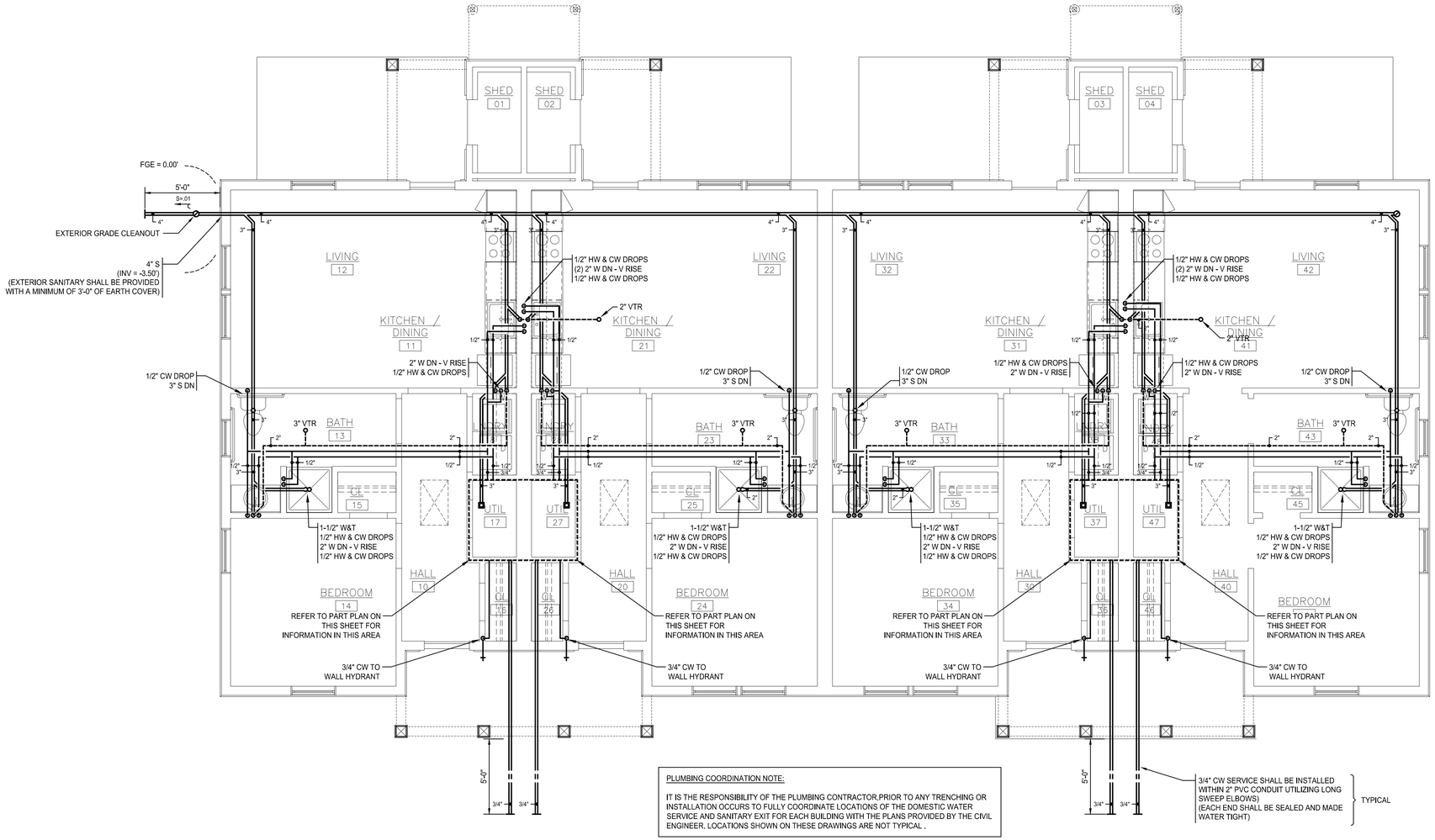
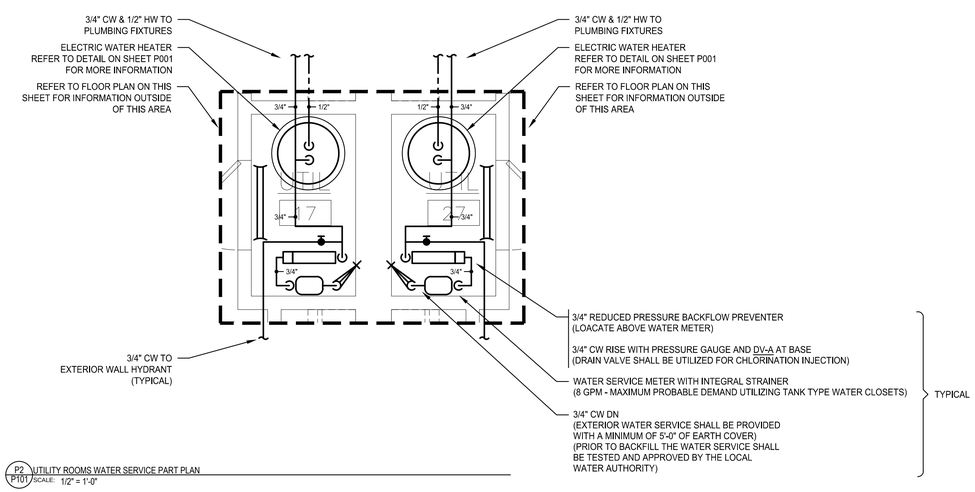


PLUMBING COORDINATION NOTE:

IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR,PRIOR TO ANY TRENCHING OR INSTALLATION OCCURS TO FULLY COORDINATE LOCATIONS OF THE DOMESTIC WATER SERVICE AND SANITARY EXIT FOR EACH BUILDING WITH THE PLANS PROVIDED BY THE CIVIL ENGINEER. LOCATIONS SHOWN ON THESE DRAWINGS ARE NOT TYPICAL .

3/4" CW SERVICE SHALL BE INSTALLED WITHIN 2" PVC CONDUIT UTILIZING LONG SWEEP ELBOWS) (EACH END SHALL BE SEALED AND MADE WATER TIGHT) } TYPICAL

P1 / P101 PLUMBING PLANS
SCALE: 1/4" = 1'-0"



P2 / P101 UTILITY ROOMS WATER SERVICE PART PLAN
SCALE: 1/2" = 1'-0"

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PLUMBING LEGEND

PIPING

SYMBOL	ABBREVIATION	DESCRIPTION
		NEW WORK (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
	ETR	EXISTING WORK TO REMAIN (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
	RE	REMOVE EXISTING (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
		NEW WORK (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	ETR	EXISTING WORK TO REMAIN (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	RE	REMOVE EXISTING (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	CW	COLD WATER
	HW	HOT WATER 140°F
	HWC	HOT WATER RECIRCULATION
G	G	NATURAL GAS
GTV	GTV	NATURAL GAS TRAIN, APPLIANCE OR REGULATOR VENT
	S or W	SOIL OR WASTE
	V	VENT

VALVES

SYMBOL	ABBREVIATION	DESCRIPTION
	BV	BALANCING VALVE
	CV	CHECK VALVE
	DV-A	DRAIN VALVE TYPE WITH HOSE THREADS
	HB-A	HOSE BIBB TYPE WITH HOSE THREADS
	PRV	PRESSURE REDUCING VALVE
		SHUTOFF VALVE
		SHUTOFF VALVE (EXISTING)
	VIV	VALVE IN VERTICAL

GENERAL

SYMBOL	ABBREVIATION	DESCRIPTION
	CO	CLEANOUT
	FCO	CLEANOUT (FLUSH FLOOR)
	WCO	CLEANOUT (WALL)
	CTE	CONNECT TO EXISTING
	C&C	CUT & CAP
	FD-A	DRAIN (FLOOR DRAIN & TYPE)
	DN	DOWN (PENETRATES LEVEL BELOW)
		DROP (BUT DOES NOT PENETRATE LEVEL BELOW)
	P-1	FIXTURE DESIGNATION
		INDICATES DIRECTION OF FLOW
		INDICATES DIRECTION OF SLOPE DOWN
	INV	INVERT ELEVATION
		RISE (BUT DOES NOT PENETRATE LEVEL ABOVE)
	S=.01	SLOPE = 1/8" PER FOOT
	S=.02	SLOPE = 1/4" PER FOOT
	S=.05	SLOPE = 1/2" PER FOOT
	UP	UP (PENETRATES LEVEL ABOVE)
	W&V	WASTE & VENT
	GWH-A	WATER HEATER (GAS AND TYPE)
	W & T	WASTE & TRAP

PLUMBING GENERAL NOTES

1. BIDDERS SHALL UTILIZE A COMPLETE SET OF PLUMBING BIDDING DOCUMENTS IN PREPARING OF BID INCLUDING DRAWINGS AND SPECIFICATIONS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ERRORS OR MISINTERPRETATIONS RESULTING FROM THE USE OF INCOMPLETE SETS OF PLUMBING BIDDING DOCUMENTS.

   THESE PLUMBING BIDDING DOCUMENTS SHALL INCLUDE:

   SPECIFICATION
   22 00 00 PLUMBING SPECIFICATION

   DRAWINGS
   P101 PLUMBING FLOOR PLAN, PART PLAN, LEGEND & GENERAL NOTES

2. THE WORK COVERED CONSISTS OF FURNISHING ALL LABOR AND MATERIALS NECESSARY TO INSTALL, COMPLETE AND READY FOR CONTINUOUS OPERATION, THE PLUMBING SYSTEMS, APPARATUS AND EQUIPMENT FOR THIS PROJECT.

3. ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THE PLUMBING SUB-CONTRACT, LABOR AND TESTING PERFORMED HEREIN SHALL BE IN COMPLETE ACCORDANCE WITH THE STATE BUILDING CODE, LOCAL FUEL GAS AND PLUMBING CODES, ALL LOCAL CODES AND REGULATIONS, NATIONAL FIRE PROTECTION ASSOCIATION, INSURANCE REGULATIONS AND REQUIREMENTS GOVERNING SUCH WORK.

4. ANY AND ALL PERMITS REQUIRED FOR INSTALLATION OF ANY MATERIAL SHALL BE OBTAINED AS PART OF THE WORK OF THE SPECIFICATION INCLUDING ALL FEES OR EXPENSES INCURRED.

5. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES AND EQUIPMENT.

6. ACCESSIBLE FIXTURES SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES AND ANSI A117.1 STANDARD ON ACCESSIBLE USABLE BUILDINGS AND FACILITIES.

7. ALL LOCATIONS OF EXISTING PIPING, FIXTURES AND EQUIPMENT INDICATED HAS BEEN OBTAINED FROM EXISTING CONDITIONS DURING SITE VISITS AND EXISTING PLANS. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING, PIPE SIZES, POINTS OF CONNECTIONS TO EXISTING PIPING, FIXTURES AND EQUIPMENT PRIOR TO COMMENCEMENT OF WORK.

8. MISCELLANEOUS DISCREPANCIES OR OMISSIONS WHICH MIGHT APPEAR ON THE PLANS OR SPECIFICATIONS WILL NOT RELIEVE THE PLUMBING SUB-CONTRACTOR OF CODE COMPLIANCE.

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

GLEN G. MARKEY
STATE OF RHODE ISLAND
No. 7349
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

100% CONSTRUCTION DOCUMENTS

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PLUMBING
FLOOR PLAN, PART PLAN, LEGEND & GENERAL NOTES

P101

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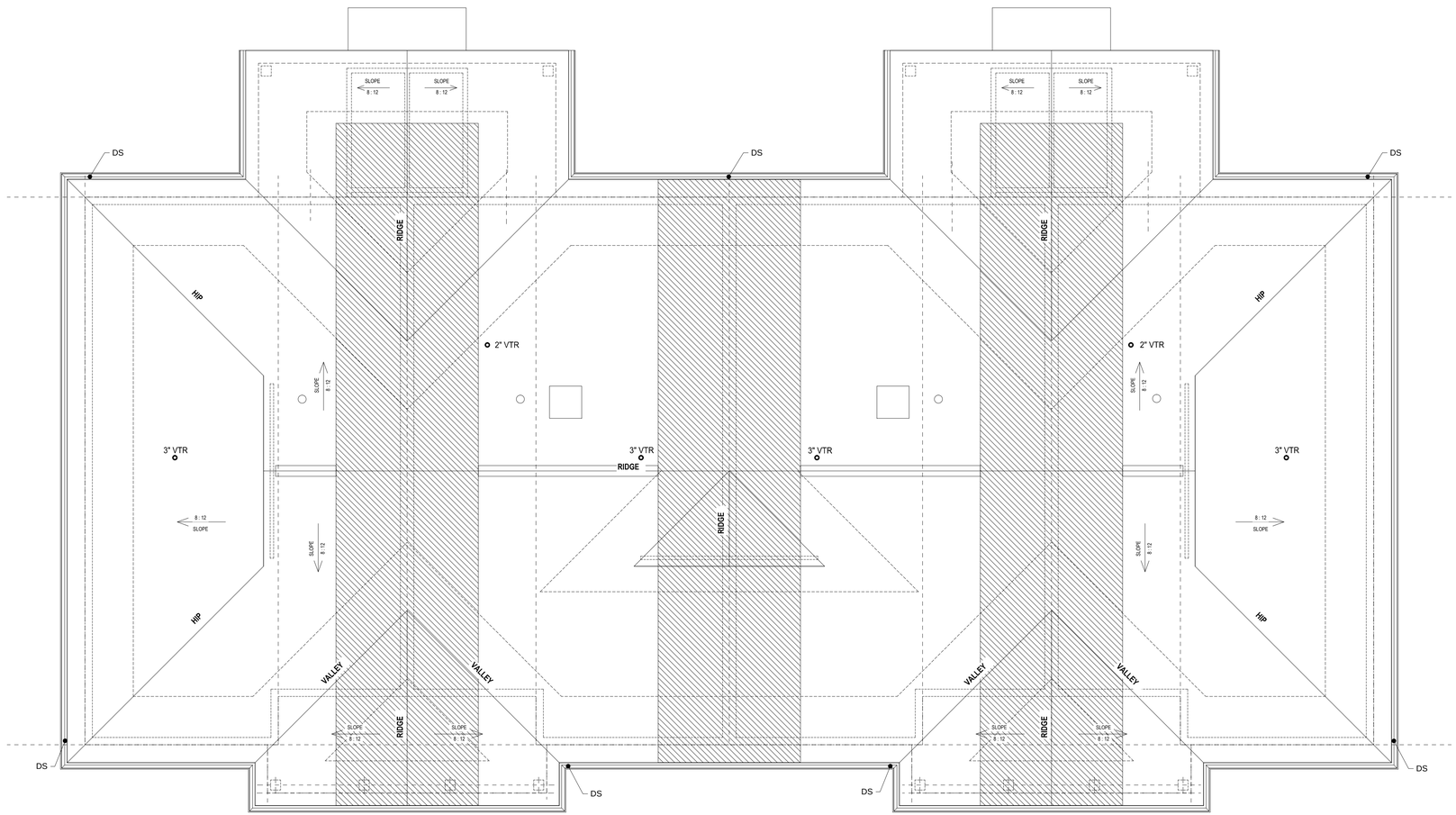

P1 / P102 PLUMBING ROOF PLAN
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
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PLUMBING ROOF PLAN

P102

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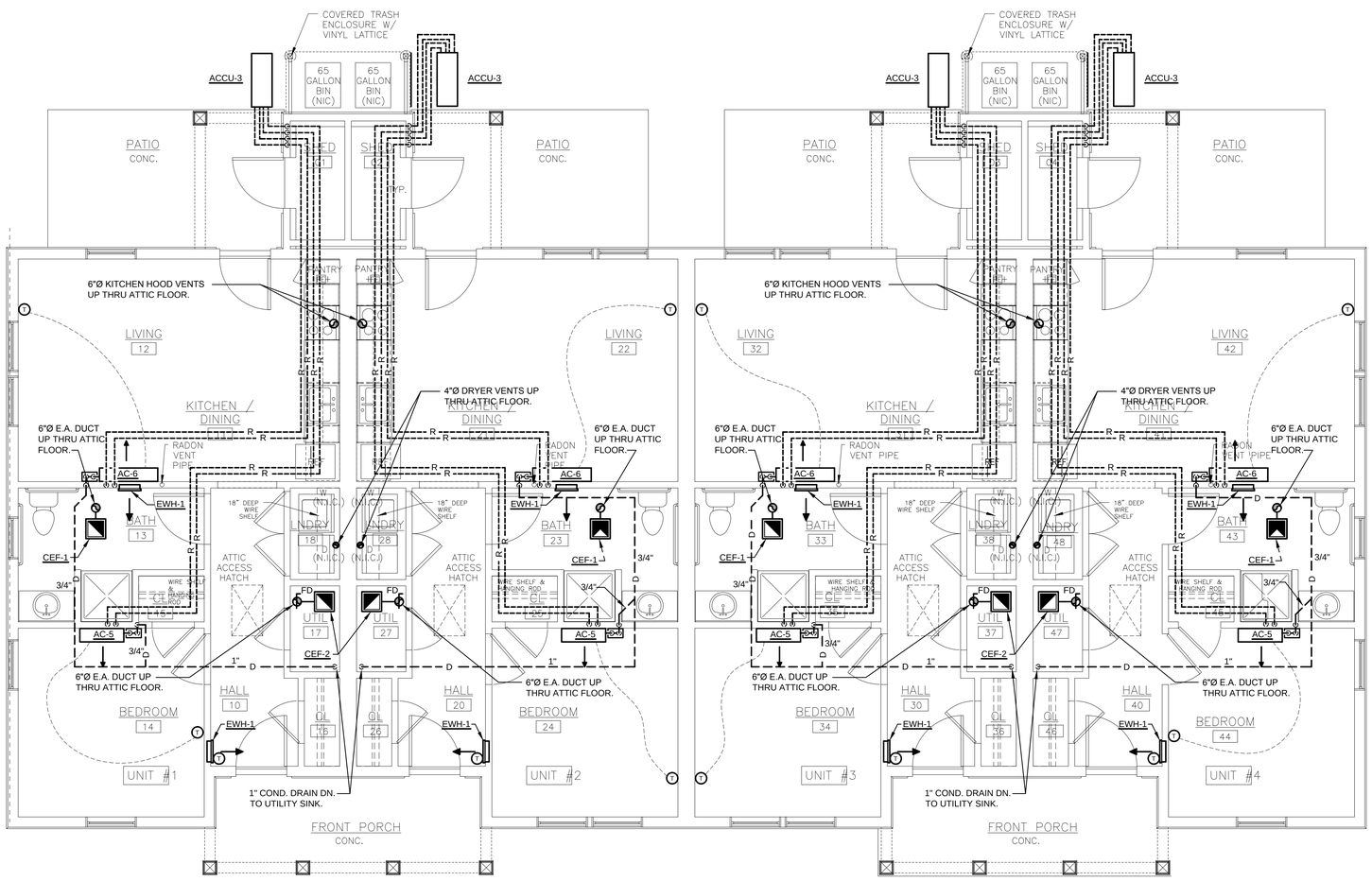
LEGEND

Ⓣ	THERMOSTAT
Ⓢ	SENSOR
ACCU	HEAT PUMP UNIT
AC	AIR-CONDITIONING UNIT
SAEF	SOLAR ATTIC EXHAUST FAN
EWH	ELECTRIC WALL HEATER
CEF	CEILING EXHAUST FAN
------R------	REFRIGERANT PIPING (LIQUID AND SUCTION)
– – –D– – –	CONDENSATE DRAIN PIPING
S.A.	SUPPLY AIR
R.A.	RETURN AIR
E.A.	EXHAUST AIR
O.A.	OUTSIDE AIR



M1 / M101 FIRST FLOOR
SCALE 1/4" = 1'-0"

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER MECHANICAL

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FIRST FLOOR PLAN

M101

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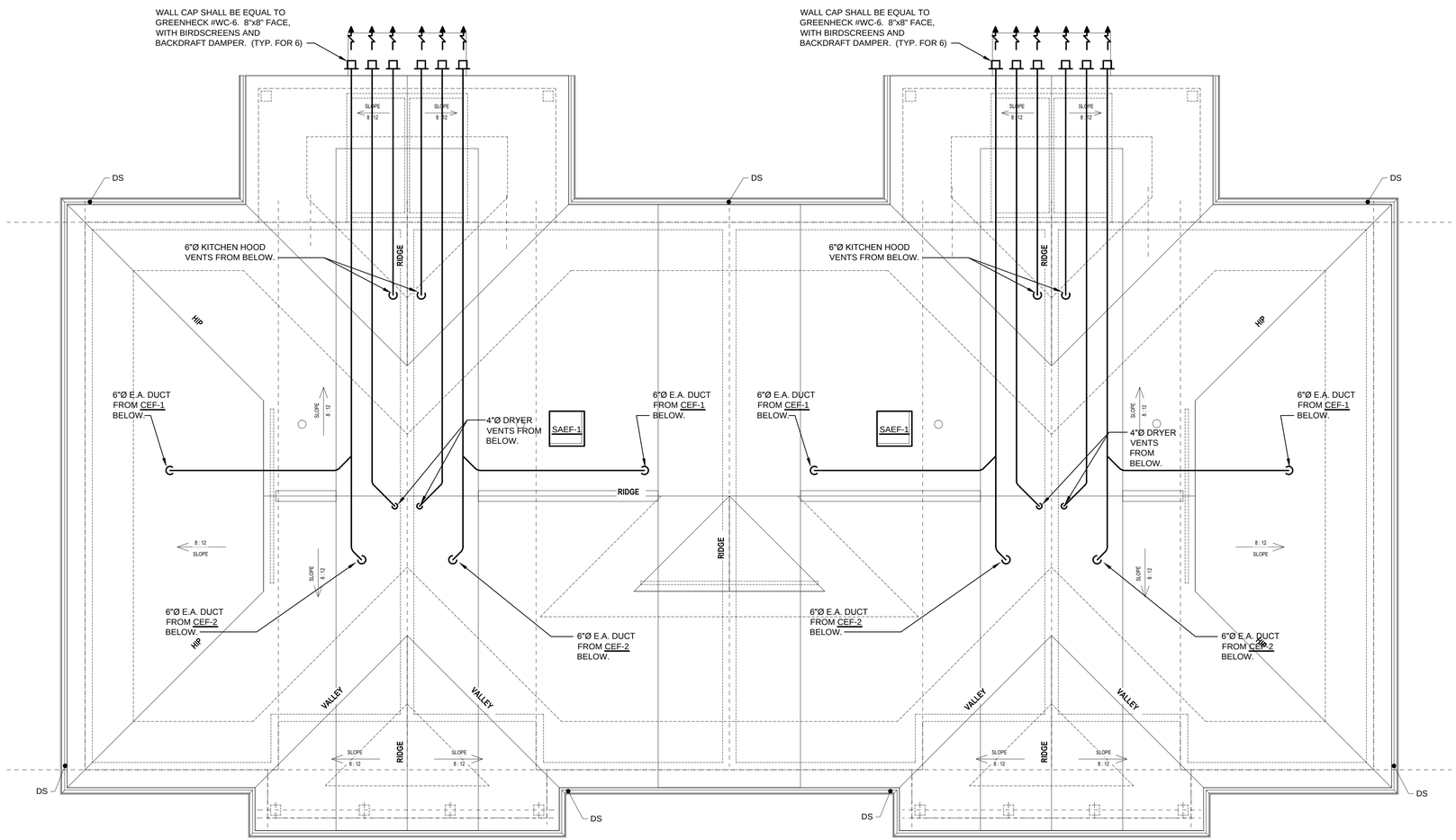

M102 ROOF/ATTIC PLAN
SCALE: 1/4" = 1'-0"

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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER MECHANICAL

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ROOF/ATTIC PLAN

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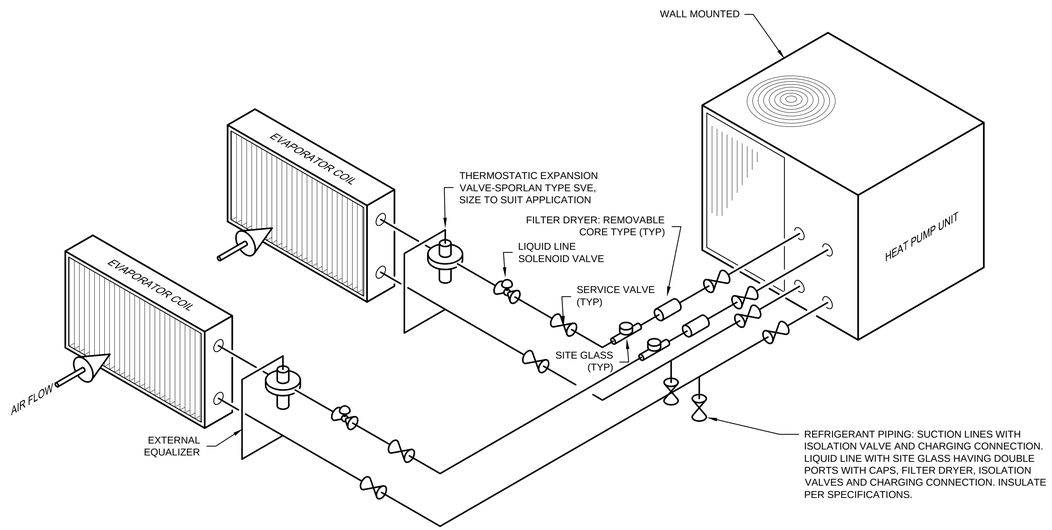

REFRIGERANT PIPING DIAGRAM
NO SCALE

FAN / LIGHT SCHEDULE

(BASED ON PANASONIC WHISPER GREEN)

SYMBOL	MODEL	QUANTITY / TYPE "B" BUILDING	SERVICE	TYPE	DRIVE	CFM	ESP (IN)	FAN RPM	MOTOR DATA		NOTES
									POWER	VOLTAGE	
CEF-1	FV-05-11VKL1	4	BATHROOM	CEILING	DIRECT	53	0.25	1081	7W	115/1/60	1
CEF-2	FV-05VQ5	4	UTILITY RM.	CEILING	DIRECT	53	0.25	1081	7W	115/1/60	1

NOTE:

1. PROVIDE WITH DC MOTOR, LED LAMP, 1 WATT LED NIGHT LIGHT, CONDENSATION SENSOR AND MULTI-SPEED MOTOR WITH TIME DELAY.
2. PROVIDE WITH DC MOTOR AND MULTI-SPEED MOTOR WITH TIME DELAY.

ELECTRIC HEATER SCHEDULE

(BASED ON QMARK)

SYMBOL	MODEL	QUANTITY / TYPE "B" BUILDING	TYPE	CFM	KW	MBH	ELECTRICAL DATA		NOTES
							AMPS	VOLTAGE	
EWH-1	CWH1202DS	6	RECESSED, WALL	65	0.75	2.6	3.6	208/1/60	1, 2, 3
EWH-2	NOT USED								
EWH-3	CWH1101DS	6	RECESSED, WALL	65	0.50	1.7	4.2	120/1/60	1, 2, 3

NOTE:

1. PROVIDE WITH DISCONNECT SWITCH, AUTOMATIC THERMAL CUTOUT AND FAN DELAY RELAY.
2. PROVIDE WITH WALL RECESS MOUNTING ENCLOSURE.
3. PROVIDE WITH UNIT-MOUNTED THERMOSTAT.

SOLAR ATTIC EXHAUST FAN SCHEDULE

SYMBOL	MANUFACTURER	QUANTITY / TYPE "B" BUILDING	MODEL	SOLAR PANEL WATTS	FAN MOTOR	POWER BACKUP		NOTES
						POWER	VOLTAGE	
SAEF-1	VENTSURE	2	SIZE 1	25	38VDC	xW	115/1/60	1

NOTE:

1. PROVIDE CONTROLLER MODULE WITH ELECTRONIC THERMOSTAT AND HUMIDISTAT.
2. LOCATE TO REAR OF ROOF.

SPLIT-SYSTEM HEAT PUMP SCHEDULE

(BASED ON DAIKIN)

INDOOR UNIT											OUTDOOR UNIT											
SYMBOL	MODEL	QUANTITY / TYPE "B" BUILDING	CFM	MOUNTING LOCATION	COOL. CAP. MBH	HEAT. CAP. MBH	ELECTRICAL DATA			NOTES	SYMBOL	MODEL	QUANTITY / BUILDING	COOL. CAP. MBH	HEAT. CAP. MBH	EER	SEER	HSPF	ELECTRICAL DATA			NOTES
							MCA	MFS	VOLTAGE										MCA	MFS	VOLTAGE	
AC-5	FTXS09LVJU	4	381	WALL-MT'D.	9.0	6.6	--	--	208/1/60	1, 2, 3, 4, 6, 7	ACCU-3	3MX24NMVJU	4	24.0	17.5	12.7	17.9	12.5	18.7	20	208/1/60	3, 4, 5, 7
AC-6	FTXS15LVJU	4	568	WALL-MT'D.	15.0	10.9	--	--	208/1/60	1, 2, 3, 4, 6, 7												

NOTES:

1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH AUTOMATIC FAN SPEED CONTROL AND WIRED PROGRAMMABLE THERMOSTAT.
3. REFER TO MANUFACTURER'S GUIDELINES FOR LINE SIZING AND ALL INSTALLATION INSTRUCTIONS.
4. FURNISH AND INSTALL ALL REQUIRED INTERLOCKING CONTROLS & PIPING FOR REQUIRED SEQUENCE OF OPERATIONS.
5. PROVIDE WITH STARTER & DISCONNECT.
6. CONTRACTOR SHALL PROVIDE ASPEN MODEL ASPMLS115SP CONDENSATE PUMP AS SUPPLIED BY RECTORSEAL.
7. OUTDOOR DESIGN TEMPERATURES: 95°F DB SUMMER, 5°F WB WINTER.
8. PROVIDE HARD-WIRED PROGRAMMABLE THERMOSTAT.

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER MECHANICAL

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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SCHEDULES AND DETAILS

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GENERAL ELECTRICAL SPECIFICATIONS

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. REFER TO THE TENANT'S LEASE INFORMATION FOR SPECIFIC REQUIREMENTS. THE TENANT'S LEASE INFORMATION SHALL SUPERCEDE THIS SPECIFICATIONS WHERE A CONFLICT OCCURS BETWEEN THE TWO.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.
9. ALL EQUIPMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
10. FURNISH AND INSTALL TEMPORARY POWER AS REQUIRED TO OPERATE TOOLS AND LIGHTING. PROVIDE PANELS AND LIGHTING FIXTURES FOR CONSTRUCTION AS NEEDED.
11. THE ELECTRICAL CONTRACTOR (E.C.) SHALL INSPECT THE SITE, PRIOR TO SUBMITTING HIS BID, AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH THIS WORK SHALL BE PREFORMED. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK WHICH REQUIRED SHALL NOT EXCUSE THE E.C. FROM HIS OBLIGATIONS TO SUPPLY AND INSTALL THE WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND THE DRAWINGS AND UNDER ALL SITE CONDITIONS AS THEY EXIST.
12. THE PLANS DEPICT THE LOCATION OF ALL FIXTURE AND EQUIPMENT AND ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK, BUT THE CONTRACTOR SHALL UNDERSTAND THAT SUCH DETAILS ARE PART OF THE WORK.
13. THE ELECTRICAL CONTRACTOR SHALL CAREFULLY VERIFY ALL MEASUREMENTS AT THE SITE AND DETERMINE THE EXACT LOCATION OF ALL CHASES AND OPENINGS REQUIRED BY THIS WORK AND SHALL PROVIDE ALL SLEEVES, INSERTS, AND HANGERS REQUIRED.
14. BRANCH CIRCUITS ADDED TO ANY EXISTING PANELBOARDS SHALL ALSO INCLUDE THE CIRCUIT BREAKER DIRECTORY TO BE UPDATED. IF NO DIRECTORY EXISTS THAN ONE SHALL BE PROVIDED INDICATING THE NEW CIRCUITS ADDED.
15. WIRE AND CABLE FOR BRANCH CIRCUITS SHALL BE TYPE THWN/THHN, INSULATED FOR 600VOLTS, RATED AT 75°C MINIMUM AND UL LISTED FOR BUILDING WIRE USE. WIRE SIZE SHALL BE A MINUMUM OF #12 AWG SOLID. ALL CONDUCTORS SHALL BE COPPER. ALL WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS. METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR.
16. FIRE ALARM SYSTEM WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS WITH INSULATED THROAT. FIRE ALARM METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR. THE MINIMUM WIRE SIZE FOR FIRE ALARM WIRING SHALL BE #14 AWG. ALL SPLICES SHALL BE MADE ON SCREW TYPE TERMINAL STRIPS. WIRE NUTS SHALL NOT BE USED. T-TAPPING OF FIRE ALARM WIRING SHALL NOT BE ALLOWED.
17. RED PAINTED TERMINAL CABINETS AND BOXES WITH LOCKABLE COVERS SHALL BE PROVIDED AT ALL JUNCTION POINTS FOR FIRE ALARM SYSTEM WIRING.
18. ADDITIONAL JUNCTION BOXES BEYOND THOSE SHOWN ON THE DRAWINGS SHALL BE PROVIDED AS NECESSARY FOR ALL ELECTRICAL INSTALLATIONS.
19. ALL CUTTING, PATCHING AND FIRESTOPPING FOR ELECTRICAL INSTALLATIONS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
20. PROVIDE CONDUIT SLEEVES FILLED WITH AN APPROVED FIRE RESISTANT MATERIAL WHERE FIRE RATED WALLS, FLOORS OR CEILINGS ARE PENETRATED. APPROVED WATERTIGHT CONDUIT SLEEVES SHALL BE PROVIDED WHERE WALLS ARE PENETRATED EITHER ENTERING OR LEAVING THE BUILDING.
21. RECEPTACLES, LIGHT FIXTURES, AND POWER ITEMS BRANCH CIRCUIT WIRING MAY NOT BE SHOWN BUT SHALL BE PROVIDED AS REQUIRED. MINIMUM WIRING SHALL BE 2#12 PLUS 1#12GROUND IN 3/4"C. NO MORE THAN THREE PHASES MAY BE COMBINED IN A SINGLE HOMERUN AND EACH PHASE SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL.
22. ALL CONDUITS SHALL CONTAIN A GREEN SAFETY GROUND WIRE. BOND ALL PANELS, CABINETS, ENCLOSURES, CONDUITS, ETC., AS REQUIRED PER CODE.
23. ALL SUPPORTS AND ANCHORS SHALL BE DESIGNED AND INSTALLED PER REQUIREMENTS FOR THE SEISMIC CLASSIFICATIONS AS OUTLINED IN THE APPLICABLE BUILDING CODE. SITE LOCATION AND PREVAILING ORIENTATION SHALL BE TAKEN INTO ACCOUNT IN THE DESIGN.
24. SUBMIT SIX (6) COPIES FOR REVIEW AND APPROVAL OF THE FOLLOWING SHOP DRAWINGS: LIGHTING FIXTURES, WIRING DEVICES, RACEWAY, POKE-THRU DEVICES AND BUILDING WIRE & CABLE.

ABBREVIATIONS

A	AMPERES	F.A.	FIRE ALARM	MTD	MOUNTED
ADA	AMERICANS WITH DISABILITIES ACT	FACP	FIRE ALARM CONTROL PANEL	NAC	F.A. NOTIFICATION APPLIANCE CIRCUIT EXPANDER PANEL
AMPS	AMPERES	FLR	FLOOR	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	G.C.	GENERAL CONTRACTOR	P	POLE
A/C	AIR CONDITIONING	GFCI	GROUND FAULT CIRCUIT INTERUPTER.	PNL	PANEL
AWG	AMERICAN WIRE GAGE	G	GROUND	RE	RE-LOCATED EXISTING DEVICE OR EQUIPMENT SHOWN IN NEW LOCATION
BLDG.	BUILDING	GND	GROUND	TYP	TYPICAL
C	CONDUIT	HVAC	HEATING, VENTILATING, & & AIR CONDITIONING	UL	UNDERWRITERS LABATORY
CLG	CEILING	JB	JUNCTION BOX	UON	UNLESS OTHERWISE NOTED
DN	DOWN	KVA	KILOVOLT AMPERES	V	VOLTS
DWG	DRAWING	KW	KILOWATT	W	WATTS
E.C.	ELECTRICAL CONTRACTOR	LTG	LIGHTING	WH	WATER HEATER
EPO	EMERGENCY POWER OFF	MAX	MAXIMUM	WP	WEATHER-PROOF
EQ	EQUAL	MECH	MECHANICAL	℄	CENTERLINE
ER	EXISTING TO BE REMOVED	MIN	MINIMUM		
ERN	EXISTING TO REMAIN				
ERL	EXISTING TO BE RE-LOCATED				

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	18" A.F.F.
	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	QUADRAPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE COVER")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE" COVER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
P	SPECIAL NEMA CONFIGUATION OUTLET; VERIFY NEMA TYPE WITH EQUIPMENT TO BE SERVED.	18" A.F.F.
J	JUNCTION BOX; SIZE AS REQUIRED PER CODE.	
	TEL./DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	TELEPHONE OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
IC	INTERCOM SYSTEM PROVIDE BACKBOX & 3/4" CONDUIT W/PULL STRING TO ABOVE CEILING. MIRCOM K-SERIES INTERCOM SYSTEM #IC-51-3 VANDAL RESISTANT STATION. COORDINATE INSTALLATION OF ALL ASSOCIATED EQUIPMENT WITH ARCHITECTURAL DRAWINGS.	REFER TO ARCHITECTURAL DWGS
	MOTOR	
	PANELBOARD SURFACE MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION.	MOUNT 6'-6" AFF TO TOP BREAKER.
	PANELBOARD FLUSH MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION. FLUSH MOUNTED PANELS SHALL BE SET IN 6" (MIN.) STUD WALLS.	MOUNT 6'-6" AFF TO TOP BREAKER.
1,3 A / A/1,3	HOMERUN TO PANELBOARD (LOADCENTER); "A" INDICATES PANEL, "1,3" INDICATES CIRCUIT NUMBERS. REFER TO "TYPICAL CIRCUITING DETAIL" ON PLANS. NOTE: ALSO INDICATED AS A/1,3.	
MS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #DT-200/DT-205 SERIES OR (APPROVED EQUAL)	MOUNT TO FIXTURE / MTG. J-BOX.
WS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #W500A. OR (APPROVED EQUAL). PROVIDE WITH REQ'D. POWER PACK LISTED BELOW. INSTALL ONE WALL SENSOR / POWER PACK ON EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQT'S.	48" AFF
PP	PROVIDE A REMOTE POWER PACK FOR WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #B120E-P. OR (APPROVED EQUAL). PROVIDE POWER PACK FOR EACH WALL SENSOR EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQT'S.	
S3a	THREE-WAY SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
Sa	SINGLE POLE SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
SM	MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	42" AFF
60/50	FUSED DISCONNECT SWITCH. 60/50 INDICATES FRAME SIZE/FUSE SIZE IN THAT ORDER. STARTERS FOR HVAC EQUIPMENT BY MECHANICAL CONTRACTOR.	
	GROUND.	
EBS	EMERGENCY BURNER SWITCH, SLATER CAT. No. 730 BR WITH RED FACEPLATE MARKED "BURNER EMERGENCY SWITCH". PROVIDE A CLEAR PROTECTIVE COVER. REFER TO DETAIL ON DWG E4.3.	72" AFF
FM	FIRE-O-MATIC SWITCH MOUNTED OVER BURNER. REFER TO DETAIL ON THIS DRAWING.	
TV	CABLE TELEVISION OUTLET.	18" A.F.F.
PC	PHOTOCELL TORK #2100 SERIES MOUNTED AT HIGHEST POINT ON NORTH SIDE OF BUILDING. ORIENT TO SENSE SKY LIGHT AND NOT PARKING AREA LIGHTING.	

NOTES FOR ALUMINUM EQUIPMENT

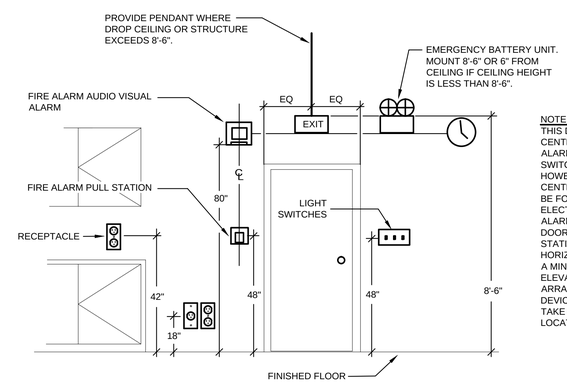
1. THESE DRAWINGS ARE BASED ON THE USE OF COPPER IN CONDUCTORS, TRANSFORMER WINDINGS, SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS.
2. ALTHOUGH PERMITTED BY CODE, THIS OFFICE DOES NOT RECOMMEND THE USE OF ALUMINUM ELECTRICAL EQUIPMENT.
3. USE OF ALUMINUM CONDUCTORS, TRANSFORMERS WITH ALUMINUM WINDINGS AND SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS WITH ALUMINUM BUSS IS AT THE DISCRETION & DECISION OF THE OWNER.
4. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE ALL CONDUCTOR AND CONDUIT SIZES, PER NEC, SHOULD ALUMINUM BE USED.
5. IF ALUMINUM EQUIPMENT IS USED IN ANY OF THE ELECTRICAL COMPONENTS OF ITEM "3" ABOVE, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
   a. INSTALLATION SHALL BE IN ACCORDANCE WITH IEEE STD. 241-1990, PARAGRAPH 8.7.2
   b. WHEN CUTTING CABLE, AVOID NICKING THE STRANDS.
   c. UNPLATED CONTACT SURFACES SHALL BE CLEANED WITH WIREBRUSH, STEEL WOOL, EMERY CLOTH OR SIMILAR ABRASIVE TOOL OR MATERIAL.
   d. PLATED SURFACES SHALL BE CLEANED WITH AN APPROVED SOLVENT.
   e. APPLY JOINT COMPOUND TO THE CONDUCTOR IF THE CONNECTOR DOES NOT ALREADY HAVE IT.
   f. USE ONLY CONNECTORS SPECIFICALLY TESTED AND APPROVED FOR USE ON ALUMINUM CONDUCTORS.
   g. REFER TO ANSIUL486B-1982.
   h. ON MECHANICAL CONNECTORS, TIGHTEN THE CONNECTOR WITH A SCREWDRIVER OR WRENCH TO THE REQUIRED TORQUE. REMOVE EXCESS COMPOUND.
   i. ON COMPRESSION CONNECTORS, CRIMP THE CONNECTOR USING THE PROPER TOOL AND DIE. REMOVE EXCESS COMPOUND.
   j. ALWAYS USE JOINT COMPOUND THAT IS COMPATIBLE WITH THE INSULATION AND AS RECOMMENDED BY THE MANUFACTURER.
   k. WHEN MAKING AN ALUMINUM-TO-COPPER CONNECTION THAT IS EXPOSED TO MOISTURE, PLACE THE ALUMINUM CONDUCTOR ABOVE THE COPPER. IF THERE IS NO EXPOSURE TO MOISTURE, THE RELATIVE POSITION OF THE TWO METALS IS NOT IMPORTANT.
   i. WHEN USING INSULATED CONDUCTORS OUTDOORS, EXTEND THE CONDUCTOR INSULATION OR COVERING AS CLOSE TO THE CONNECTOR AS POSSIBLE TO MINIMIZE WEATHERING THE JOINT. OUTDOOR JOINTS SHALL BE COMPLETELY PROTECTED BY TAPE OR OTHER MEANS. WHEN OUTDOOR JOINTS ARE COVERED OR PROTECTED, THE PROTECTION SHALL COMPLETELY EXCLUDE MOISTURE.

TYPICAL FIRE STOPPING NOTES

A. GENERAL: FIRE STOPPING SHALL BE PROVIDED BY THIS CONTRACTOR FOR ALL FLOOR, CEILING AND FIRE RATED WALL PENETRATIONS FOR CONDUIT, SLEEVES AND/OR CABLING AS REQUIRED BY JOB CONDITIONS.

B. THE CONTRACTOR SHALL PROVIDE A FIRE STOP SYSTEM IN ACCORDANCE WITH THE FOLLOWING:

1. THE SYSTEM SHALL CONSIST OF A WATERBASED SEALANT AND SUITABLE DAMMING MATERIALS (WHERE REQUIRED) AND BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. THE SEALANT SUPPLIED SHALL BE A TWO STAGED INTUMESCENT AND CAPABLE OF EXPANDING UP TO 8 TIMES ITS ORIGINAL VOLUME.
3. THE SEALANT SUPPLIED SHALL CONTAIN NO ASBESTOS, NO FIBERGLASS, AND NO SOLVENTS NOT CORROSIVE MINERAL SALTS OF ANY KIND.
4. THE SEALANT SHALL FORM A SURFACE CAPABLE OF BEING SANDED AND PAINTED TO MATCH SURROUNDING SURFACES AND SHALL BE IMPERVIOUS TO WATER WHEN DRY.
5. THE FIRE STOP SYSTEM SHALL BE TESTED TO THE TIME/TEMPERATURE REQUIREMENTS OF ASTM E119 AND SHALL BE UL1479 (ASTM E814) AND CLASSIFIED FOR UP TO 3 HOURS.
6. THE FIRE STOP SEALANT SHALL BE SPECSEAL SEALANT AS MANUFACTURED BY SPECIFIED TECHNOLOGIES, INC. OR APPROVED EQUAL.
7. SPECIAL CARE SHALL BE TAKEN WITH ELECTRICAL SYSTEMS NOT TO COMPROMISE ANY OF THE BUILDING FIRE PARTITIONS, FLOORS, WALLS OR MEMBRANES. PROVIDE ALL FIRESTOPPING REQUIRED TO COMPLY WITH THE BUILDING CODE, THE ELECTRICAL CODE AND THE UL LISTING OF EACH ASSEMBLY. COORDINATE LOCATIONS AND TYPES OF MEMBRANES WITH ARCHITECT.



NOTE:
THIS DETAIL INDICATES CENTERLINE FOR FIRE ALARM/PULL STATION SWITCHES AND RECEPTACLES. HOWEVER THIS SAME CENTERLINE PRINCIPLE SHALL BE FOR ALL GROUP MTD. ELECTRICAL DEVICES. IF FIRE ALARM IS ON SAME SIDE OF DOOR AS SWITCHES, PULL STATION SHALL BE HORIZONTALLY SEPARATED BY A MINIMUM OF 18". THIS ELEVATION IS A GENERAL ARRANGEMENT OF OF DEVICES. ARCHITECT PLANS TAKE PRECEDENCE FOR EXACT LOCATIONS.

MOUNTING HEIGHT DETAIL
NOT TO SCALE

SEISMIC RESTRAINT NOTE

A. GENERAL: IT IS THE INTENT OF THIS SEISMIC SPECIFICATION TO KEEP ALL ELECTRIAL BUILDING SYSTEM COMPONENTS IN PLACE DURING A SEISMIC EVENT. ALL ELECTRICAL SYSTEMS MUST BE INSTALLED IN STRICT ACCORDANCE WITH SEISMIC CODES, COMPONENT MANUFACTURER'S AND BUILDING CONSTRUCTION STANDARDS. WHENEVER A CONFLICT OCCURS BETWEEN THE MANUFACTURER'S OR CONSTRUCTION STANDARDS, THE MOST STRINGENT SHALL APPLY.

B. THIS CONTRACTOR SHALL ENGAGE A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE JURISDICTION OF THIS PROJECT TO REVIEW THE ENTIRE INSTALLATION TO DETERMINE ALL SEISMIC RESTRAINT REQUIREMENTS AND METHODS. CONTRACTOR SHALL SUBMIT A REPORT OUTLINING THE STRUCTURAL ENGINEER'S REVIEW AS WELL AS SEISMIC RESTRAINT SHOP DRAWINGS AND SUPPORTING CALCULATIONS PREPARED BY THE PROFESSIONAL STRUCTURAL ENGINEER FOR REVIEW BY THE ARCHITECT.

C. SEISMIC RESTRAINTS SHALL BE DESIGNED IN ACCORDANCE WITH SEISMIC FORCE LEVELS AS DETAILED IN THE APPLICABLE BUILDING CODE.

1. ALL EQUIPMENT, CONDUIT AND PULL BOXES SHALL BE ADEQUATELY RESTRAINED TO RESIST SEISMIC FORCES. RESTRAINT DEVICES SHALL BE DESIGNED AND SELECTED TO MEET SEISMIC REQUIREMENTS AS DEFINED IN THE LATEST ISSUE OF THE BOCA NATIONAL BUILDING CODE IN ACCORDANCE WITH THE APPLICABLE SEISMIC ZONE.

2. ANCHOR BOLT CALCULATORS, SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED SHOWING ADEQUACY OF THE BOLT SIZING AND TYPE. STAMPED CALCULATIONS SHALL ALSO BE FURNISHED FOR ANCHORS ON RESTRAINT DEVICES, CABLES, ISOLATORS AND RIGIDLY MOUNTED EQUIPMENT.

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TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6
BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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ELECTRICAL SCHEDULES, NOTES AND DETAILS

E100

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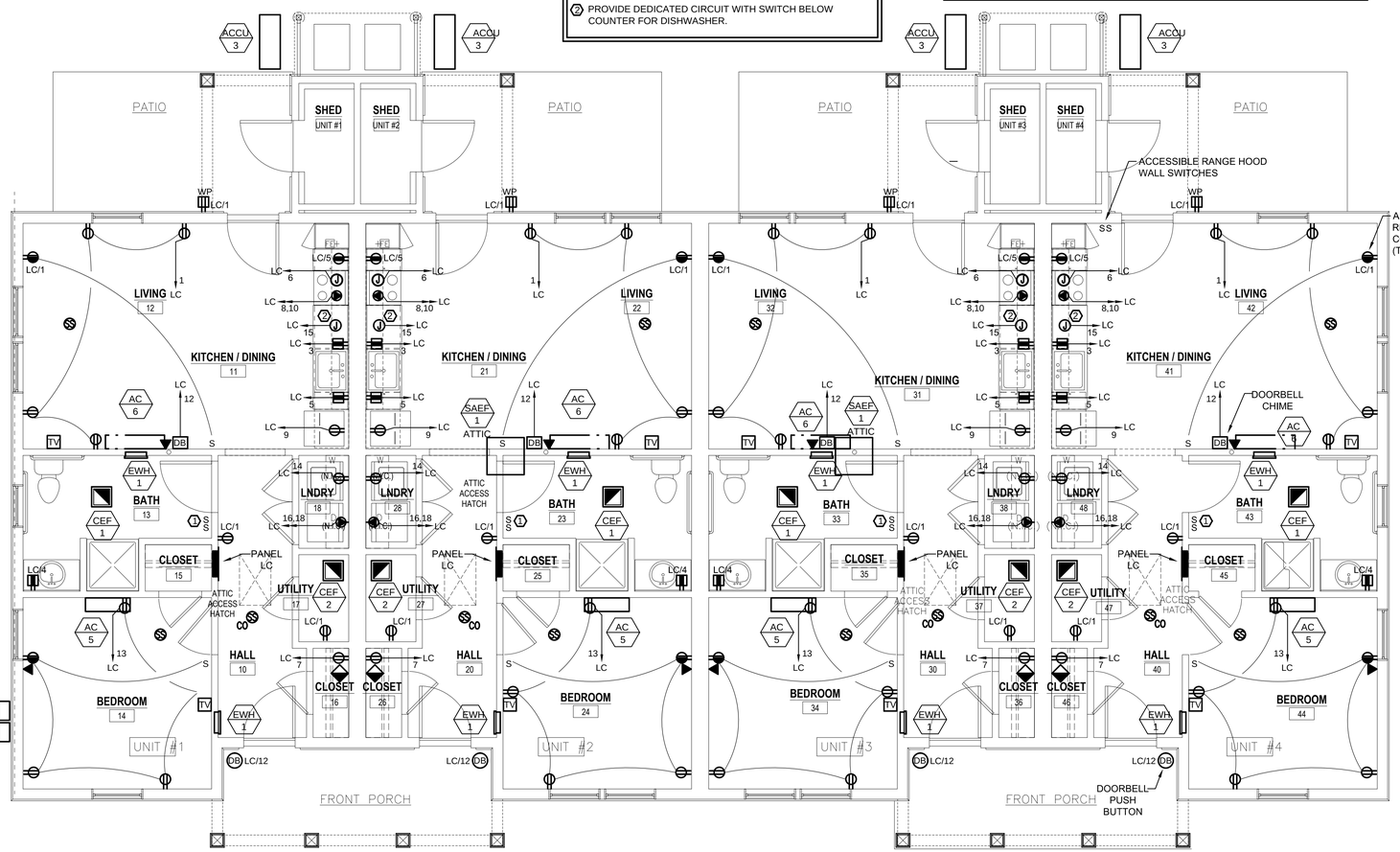
SHEET NOTES:

1. PROVIDE TWO SWITCHES
   (1) FOR FAN/LIGHT CONTROL
   (1) FOR LIGHT
   (TYPICAL)
2. PROVIDE DEDICATED CIRCUIT WITH SWITCH BELOW COUNTER FOR DISHWASHER.

MECHANICAL EQUIPMENT CONNECTION TAG:

XXX / #

REFER TO 'MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE' ON THIS DWG. 'E103', FOR ALL CIRCUITING INFORMATION, INCLUDING BUT NOT LIMITED TO BRANCH CIRCUITING WIRING AND CONDUIT SIZE, VOLTAGE, PHASE, MOTOR CONTROL, DISC. SWITCH & CIRCUIT BREAKER.



1 E102 FIRST FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"

OWNER:
CHURCHWOODS, LLC
C/O WASHINGTON COUNTY CDC
400 TOWER HILL RD
NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
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ELECTRICAL FIRST FLOOR POWER PLAN

E101

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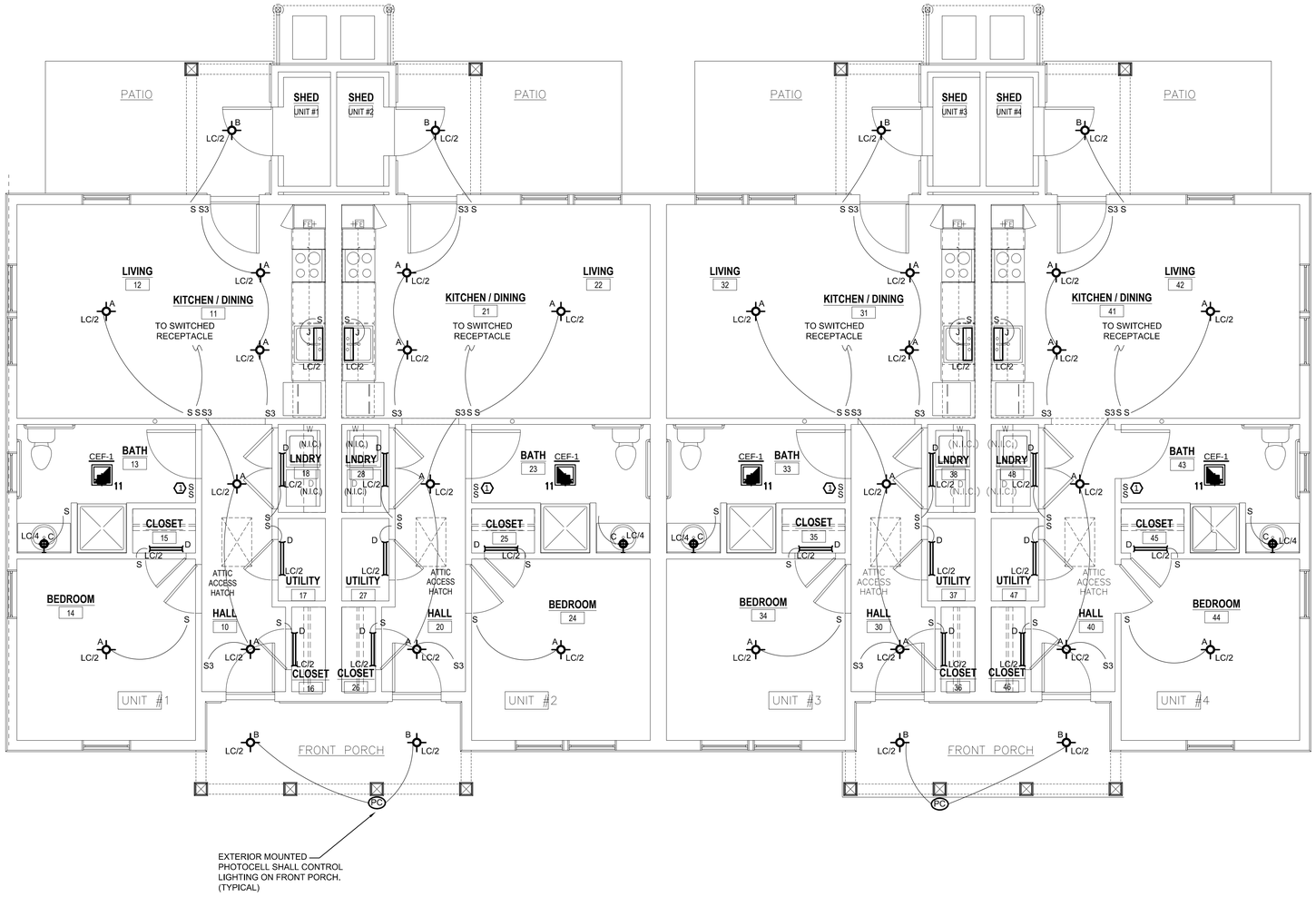

1 E101 FIRST FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'-0"

OWNER:
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C/O WASHINGTON COUNTY CDC
400 TOWER HILL RD
NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
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ELECTRICAL FIRST FLOOR LIGHTING PLAN

E102

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LOADCENTER "LC" SCHEDULE

LOADCENTER DESCRIPTION:
FLUSH MOUNTED 120/240 VOLT., 1-PHASE, 3-WIRE, MAIN LUG ONLY 30 CIRCUIT LOADCENTER WITH PLUG-IN FULL SIZE BRANCH CIRCUIT BREAKERS. LOADCENTER BUSSING AND TERMINALS SHALL BE COPPER AND HAVE A RATING OF 150 AMPERES, SHORT CIRCUIT RATING NOT LESS THAN 10,000 AMPERES RMS SYMMETRICAL AND BUSSING SHALL BE BRACED TO 22kAIC.

CIRCUIT No.	AMPS	POLES	LOAD DESCRIPTION
2	20	1	COMMON LIGHTING (LIVING / DINING / KITCHEN / HALLWAY)
4	20	1	BATHROOM POWER
6	20	1	MICROWAVE / STOVE HOOD (ABOVE STOVE)
8,10	50	2	ELECTRIC STOVE (SEE NOTE #2.)
12	20	1	DOORBELL
14	20	1	CLOTHES WASHER MACHINE
16,18	30	2	ELECTRIC CLOTHES DRYER (SEE NOTE #5)
20	20	1	ELECTRIC WATER HEATER (SEE NOTE #6)
22	20	1	(SPARE)
24,26	20	2	AC-5 & AC-6
28,30	20	2	ACCU-3
1	20	1	CONVENIENCE RECEPTACLES / UTILITY EXHAUST FAN
3	20	1	APPLIANCE RECEPTACLES
5	20	1	APPLIANCE RECEPTACLES
7	20	1	(TELEPHONE / DATA / TV) PATCH PANEL
9	20	1	REFRIGERATOR
11	20	1	BATHROOM FAN / LIGHT COMBO UNIT
13	20	1	BEDROOM RECEPTACLES
15	20	1	DISHWASHER
17	20	1	PHOTOCELL
19	20	1	(SPARE)
21	20	1	(SPARE)
23	20	1	(SPARE)
25	20	1	EWH-3 & SAEF-1
27,29	20	2	EWH-1

NOTES:
1. ALL LOADCENTERS IN ADA APARTMENTS SHALL BE INSTALLED SO THAT THE TOP BREAKER IS A MAXIMUM OF 48" A.F.F.
2. ALL BRANCH CIRCUITS FEEDING ELECTRIC STOVES SHALL BE 3#6 & 1#10 GND. WITH A NEMA TYPE #14-50R RECEPTACLE. (TYP.)
3. BRANCH CIRCUITS FEEDING HVAC UNITS SHALL BE 2#12 & 1#12 GND. (TYP.)
4. CONTRACTOR SHALL PROVIDE & INSTALL ARC FAULT TYPE BREAKERS FOR ALL CIRCUITS IN DWELLING UNITS.
5. ALL BRANCH CIRCUITS FEEDING ELECTRIC DRYERS SHALL BE 2#10+1#10GND.
6. ALL BRANCH CIRCUITS FEEDING ELECTRIC WATER HEATERS SHALL BE 2#10+1#10 GND.

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LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG No.	MOUNTING	LAMPING TYPE	LAMPING WATTAGE	LAMPING QUANTITY	VOLTAGE	DESCRIPTION / REMARKS
A	SEAGULL LIGHTING	7643591S-962	RECESSED	LED	28	1	120	LED 6" DOWNLIGHT
B	SEAGULL LIGHTING	79903991S-12	SURFACE	LED	14	1	120	EXTERIOR FLUSH MOUNT FIXTURE. PROVIDE WITH DAYLIGHT SENSOR.
C	SEAGULL LIGHTING	4122891S-04	SURFACE	LED	11	1	120	LED WALL / BATH LIGHT
D	SEAGULL LIGHTING	59021L-15	SURFACE	FLUORESCENT	17	2	120	SURFACE MOUNTED 4' STRIP
CEF-1	PANASONIC	SEE MECHANICAL DRAWINGS	RECESSED	-	--	-	120	RECESSED EXHAUST FAN/LIGHT COMBO UNIT.
F	AMERICAN LIGHTING	ALC-24-DB	SURFACE	LED	8	1	120	SURFACE MOUNTED UNDERCABINET
G	SEAGULL LIGHTING	6543791S-962	LED	LED	14	1	120	MEDIUM LED PENDANT
H	SEAGULL LIGHTING	15030-15	SURFACE	-	-	-	120	CEILING FAN
J	AMERICAN LIGHTING	ALC-24-COLOR BY OWNER/ARCHITECT (OR EQUAL)	SURFACE	LED	6	-	120	UNDER-CABINET LED FIXTURE

CBA = COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
CC = CUSTOM COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY CUSTOM COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
NOTES:
1. PROVIDE ACCESSORIES AND MOUNTING HARDWARE AS REQUIRED FOR ALL FIXTURES.
2. ALL FIXTURE/ACCESSORY COLORS NOT INDICATED ON DWG'S SHALL BE SELECTED BY ARCHITECT.
3. PROVIDE LAMPING FOR ALL FIXTURES UNLESS LAMPING IS INCLUDED WITH FIXTURE AS INDICATED IN SCHEDULE.
4. PROVIDE TYPICAL UNIT MOCK UP FOR LIGHT FIXTURE HANGING HEIGHTS AND EXPOSED ELECTRICAL CONDUIT LAYOUT TO BE REVIEWED BY ARCHITECT.
5. FIXTURE TO BE WIRED TO PHOTO CELL AND TIME CLOCK PROVIDED BY G.C.
6. ALL LIGHT FIXTURES WITH INCANDESCENT LAMPING SHALL BE PROVIDED W/ CFL/LED LAMP IN LIEU OF INCANDESCENT LAMP.

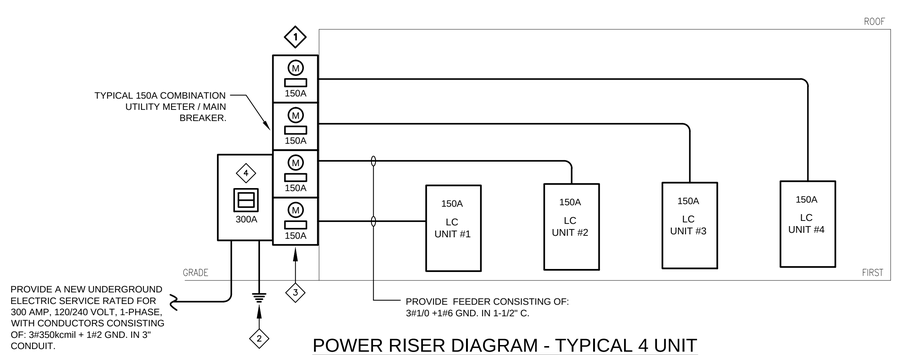
MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

XXX # ITEM No.	DESCRPITION	LOCATION	EQUIPMENT CHARACTERISTICS VOLTS	PH	FREQ.	(KW) / HP	FLA	CIRCUIT	CIRCUIT BREAKER (HACR TYPE)	FEEDER & CONDUIT	DISCONNECT SWITCH SIZE	FUSE	POLES	NEMA	MANUAL MOTOR CONTROLLER	REMARKS
AC-5	AIR CONDITIONER	(SEE PLANS)	208	1	60	-	-	LC/24,26	20A/2P	2#12+1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
AC-6	AIR CONDITIONER	(SEE PLANS)	208	1	60	-	-	LC/24,26	20A/2P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
ACCU-3	AIR CONDITIONER CONDENSER	(SEE PLANS)	208	1	60	-	18.7	LC/28,30	20A/2P	2#12+1#12 GND IN 3/4" C.	30	20	2	3R	PROVIDE "WP" DISCONNECT SWITCH WITH FUSING AS INDICATED.	SEE NOTES
CEF-1	EXHAUST FAN	(SEE PLANS)	120	1	60	7W	-	LC/11	15A/1P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
CEF-2	EXHAUST FAN	(SEE PLANS)	120	1	60	7W	-	LC/1	20A/1P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
EWH-1	ELECTRIC HEAT	(SEE PLANS)	208	1	60	-	3.6	LC/27,29	20A/2P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
EWH-3	ELECTRIC HEAT	(SEE PLANS)	120	1	60	-	4.2	LC/25	20A/1P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES
SAEF-1	ELECTRIC HEAT	(SEE PLANS)	120	1	60	-	-	LC/25	20A/1P	2#12+1#12 GND IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE NOTES

1. COORDINATE WITH HVAC CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
2. COORDINATE WITH PLUMBING CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS AND WIRING OF ALL PLUMBING EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
3. ALL DISCONNECTING MEANS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
4. ALL STARTERS, VFD'S ETC. SHALL BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE ALL HVAC EQUIPMENT.
5. ALL HVAC CONTROL WIRING SHALL BE PROVIDED BY OTHERS.

POWER RISER NOTES

1. 200 AMPERE - RATED BY CUTLER HAMMER 1MM OR 3MM NEMA 3R RINGLESS STYLE METER STACK MODULE, WITH METER SOCKETS AND 2-POLE CIRCUIT BREAKERS AS INDICATED. PROVIDE ALL REQUIRED BUSSING, CONNECTION, EQUIPMENT, ETC. FOR FUTURE METERS.
2. GROUNDING, BONDING AND COPPER GROUNDING ELECTRODE SYSTEM PER NEC 250 AS ADOPTED BY AUTHORITY HAVING JURISDICTION. WHEN BUILDING DOMESTIC WATER SERVICE PIPE IS NON-METALLIC PROVIDE 'UFER' GROUND IN BUILDING FOUNDATION HAVING DIRECT CONTACT WITH EARTH.
3. 150-AMPERE / 2-POLE CIRCUIT BREAKER.
4. MAIN CIRCUIT BREAKER CUTLER HAMMER 3MCB NEMA 3R MAIN SERVICE MODULE. (RATED FOR 400 AMPS, 120V/240, 1Ø., PROVIDE A 400 AMP, 2-POLE MAIN SERVICE BREAKER.)



POWER RISER DIAGRAM - TYPICAL 4 UNIT
SCALE: NONE

"LOCAL" SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
SS	LOCAL 120 VOLT, SMOKE DETECTOR. DETECTOR SHALL BE WIRED INTO LOCAL AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. DETECTOR SHALL BE TIED INTO REMAINING LOCAL INITIATING DEVICES WITHIN THE UNIT, SO THAT WHEN ONE DEVICE IS ACTIVATED, ALL LOCAL DEVICES ARE ACTIVATED.	CEILING
SS CO	LOCAL 120 VOLT, COMBINATION SMOKE / CARBON MONOXIDE DETECTOR. COMBO DETECTOR SHALL BE WIRED INTO LOCAL AREA LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. COMBO DETECTOR SHALL BE TIED INTO REMAINING LOCAL INITIATING DEVICES WITHIN THE UNIT, SO THAT WHEN ONE DEVICE IS ACTIVATED, ALL LOCAL DEVICES ARE ACTIVATED.	CEILING
S	LOCAL 120 VOLT STROBE. STROBE SHALL BE WIRED INTO LOCAL SMOKE & CARBON MONOXIDE DETECTORS IN "ACCESSIBLE" UNITS, SO THAT WHEN ANY ONE DEVICE (DETECTOR) IS ACTIVATED, ALL LOCAL STROBE DEVICES ARE ACTIVATED.	WALL
	LOCAL 120 VOLT INTERCONNECT WIRING BETWEEN LOCAL FIRE ALARM DEVICES LOCATED IN UNITS.	

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ELECTRICAL POWER RISER, SCHEDULES AND NOTES

E103

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TYPICAL ELECTRICAL NOTES

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.

TYPICAL DWELLING UNIT (F.A.) NOTES

1. WHERE THERE ARE TWO (2) OR MORE SMOKE DETECTORS INSTALLED IN ONE (1) LIVING UNIT, THEY SHALL BE WIRED SO THAT THE ACTIVATION OF ANY DETECTOR SHALL CAUSE THE AUDIBLE ALARM IN ALL OF THE DETECTORS WITHIN THE LIVING UNIT TO BE ACTIVATED WITH A MINIMUM RATING OF EIGHTY-FIVE (85) dBA AT TEN FEET (10'). (TYPICAL)
2. ALL COMBINATION SINGLE STATION SMOKE & CARBON MONOXIDE DETECTORS SHALL BE MOUNTED ON THE CEILING AND UL LISTED FOR CEILING MOUNTING AND LOCATED NOT LESS THAN 12-INCHES FROM ANY WALL. (TYPICAL)
3. THE WIRING FOR THE COMBINATION SINGLE STATION SMOKE & CARBON MONOXIDE DETECTORS SHALL BE TAKEN FROM A BRANCH LIGHTING CIRCUIT SERVING THE LOCAL AREA. THE POWER SOURCE FOR CARBON MONOXIDE DETCTORS SHALL BE ON THE SUPPLY SIDE AHEAD OF ANY SWITCHES AND NOT ON CIRCUITS PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER.
4. ALL CARBON MONOXIDE DETECTORS SHALL BE PROVIDED WITH A VISIBLE INTERMITTENT OR STEADY "POWER ON" INDICATOR AND BE PROVIDED WITH BATTERY BACK-UP.

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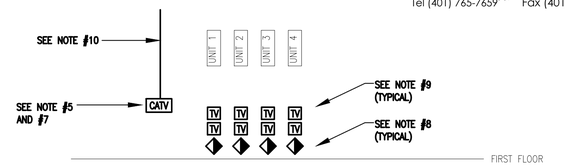
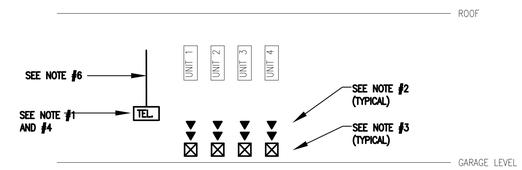


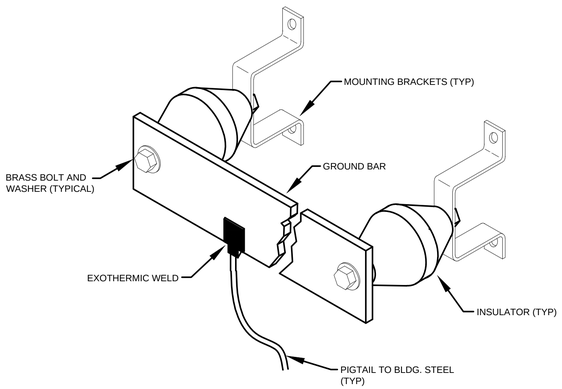
CABLE TELEVISION SYSTEM RISER DIAGRAM

NOT TO SCALE



TELEPHONE SYSTEM RISER DIAGRAM

NOT TO SCALE



NOTES:

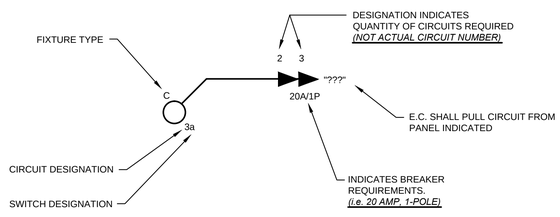
1. PROVIDE GROUND BAR (1/4" X 4" X 12") WITH WALL MOUNTING BRACKETS, INSULATORS AND A 25' EXOTHERMICALLY WELDED PIGTAIL (#6 AWG) IN EACH LAN ROOM & COMMUNICATIONS ROOM.
2. MOUNT GROUND BAR AT THE BOTTOM RIGHT CORNER ON THE PLYWOOD BACKBOARD.
3. GROUND BARS SHALL HAVE CAPACITY FOR NINE (9) GROUNDING LUGS TO BE ATTACHED.
4. CONNECT EXOTHERMICALLY WELDED PIGTAIL TO BUILDING STEEL.
5. GROUND BARS SHALL BE ELECTROLYTIC COPPER AND SHALL BE MOUNTED ON INSULATORS RATED AT 2700 VOLTS.
6. COPPER SURFACES SHALL BE SMOOTH AND WITHOUT MARKS DEEPER THAN 0.010 INCHES.
7. MANUFACTURERS SHALL BE ERICO, HARGER OR APPROVED EQUAL.

TYPICAL GROUND BAR DETAIL

NOT TO SCALE

NOTES

1. 3/4" X 8'-0" X 8'-0" MAIN TELEPHONE PLYWOOD BACKBOARD. FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR.
2. THE ELECTRICAL CONTRACTOR WIRE SHALL WIRE TELEPHONE OUTLET TO THE DWELLING UNIT TELEPHONE NETWORK INTERFACE UNIT LOCATED IN DWELLING UNIT CLOSET.
3. THE ELECTRICAL CONTRACTOR SHALL WIRE DWELLING UNIT TELEPHONE NETWORK INTERFACE UNIT TO TELEPHONE BACKBOARD BASMENT.
4. E.C. SHALL COORD. TELEPHONE WIRING / HEAD-END EQUIPMENT REQUIREMENT'S WITH LOCAL UTILITY REPRESENTATIVE. (TYPICAL)
5. E.C. SHALL COORD. CABLE TELEVISION WIRING / HEAD-END EQUIPMENT REQUIREMENT'S WITH LOCAL UTILITY REPRESENTATIVE. (TYPICAL)
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SLEEVES REQUIRED FOR THE INSTALLATION OF THE BUILDING TELEPHONE SYSTEM. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE PROOFING ALL SLEEVES.
7. THE GENERAL CONTRACTOR SHALL FURNISH AND INSTALL 3/4" X 4'-0" X 8'-0" CABLE TELEVISION SYSTEM PLYWOOD BACKBOARD FOR CABLE TELEVISION EQUIPMENT. THE GENERAL CONTRACTOR SHALL FURNISH AND INSTALL THE TELEVISION PLYWOOD BACKBOARD.
8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CABLE TELEVISION SYSTEM SYSTEM SPLITTER AND CABLE TELEVISION SYSTEM DISTRIBUTION. CABLE SHALL MEET THE REQUIREMENTS OF THE LOCAL CABLE TELEVISION SUPPLIER. FINAL TERMINATING SHALL BE BY THE LOCAL CABLE TELEVISION SYSTEM SUPPLIER.
9. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CABLE TELEVISION SYSTEM WIRING BETWEEN THE DWELLING UNIT CABLE TELEVISION SPLITTER CABLE SHALL MEET THE REQUIREMENTS OF THE LOCAL CABLE TELEVISION SYSTEM SUPPLIER FINAL CONNECTION SHALL BE BY THE LOCAL TELEVISION SYSTEM SUPPLIER.
10. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SLEEVES REQUIRED FOR THE INSTALLATION OF THE "CATV" SYSTEM. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE PROOFING ALL SLEEVES.
11. THE ELECTRICAL CONTRACTOR SHALL WIRE TO THE BUILDING MAIN TELEPHONE PLYWOOD BACKBOARD WITH CAT. 5E CABLE IN 3/4" CONDUIT.
12. THE TELEVISION SYSTEM CABLING SHALL BE CAT. 5E CABLE UNLESS OTHERWISE NOTED ON THE DRAWING.



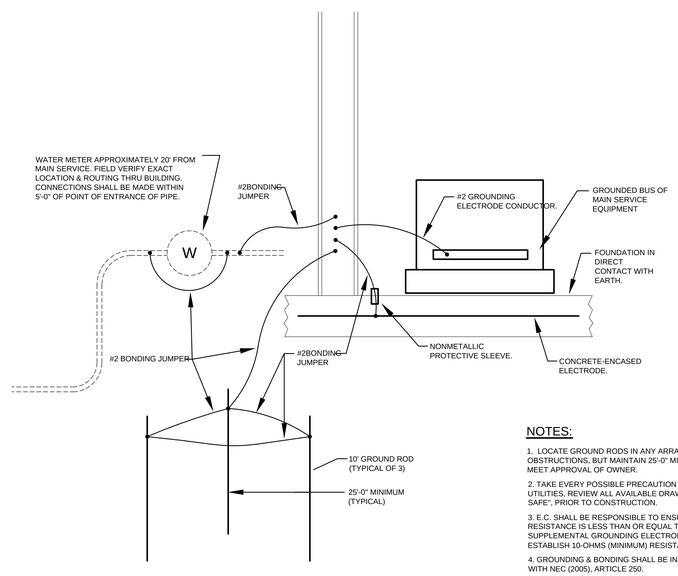
NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN CONTRACT. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS BUT NOT ON PLANS, AND VICE VERSA, SHALL APPLY OR SHALL BE PROVIDED AS THOUGH EXPRESSLY REQUIRED ON BOTH. IT IS NOT INTENDED THAT EVERY JUNCTION BOX, OFFSET, FITTING OR COMPONENT BE SPECIFIED OR SHOWN ON DRAWINGS; HOWEVER, CONTRACT DOCUMENTS REQUIRE PROVISION OF ALL COMPONENTS AND MATERIALS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL INSTALLATION, WHETHER OR NOT INDICATED OR SPECIFIED.

2. BRANCH CIRCUIT WIRING MAY NOT BE GRAPHICALLY SHOWN ON DRAWINGS AND MAY BE SHOWN BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT SHOWN GRAPHICALLY. WIRING IS SHOWN BY CONDUIT RUNS ON DRAWINGS WHERE SPECIFIC ROUTING IS REQUIRED OR FOR OTHER SPECIAL REASONS. ONLY ROOMS WITH MULTIPLE SWITCHING HAVE "SWITCH CONTROL LETTERS" ASSIGNED. PROVIDE THHN CONDUCTORS IN AREAS WITH HIGH AMBIENT TEMPERATURES SUCH AS BOILER ROOMS, INCINERATOR ROOMS, MECHANICAL EQUIPMENT ROOMS ETC., FOR SIZES LARGER THAN NO. 10 AWG.

TYPICAL CIRCUITING DETAIL

NOT TO SCALE



NOTES:

1. LOCATE GROUND RODS IN ANY ARRANGEMENT TO AVOID OBSTRUCTIONS, BUT MAINTAIN 25'-0" MINIMUM SEPARATION AND MEET APPROVAL OF OWNER.
2. TAKE EVERY POSSIBLE PRECAUTION TO AVOID UNDERGROUND UTILITIES. REVIEW ALL AVAILABLE DRAWINGS AND CONTACT "DIG SAFE", PRIOR TO CONSTRUCTION.
3. E.C. SHALL BE RESPONSIBLE TO ENSURE THAT GROUND RESISTANCE IS LESS THAN OR EQUAL TO 10-OHMS. E.C. SHALL SUPPLEMENTAL GROUNDING ELECTRODES AS NECESSARY TO ESTABLISH 10-OHMS (MINIMUM) RESISTANCE TO GROUND.
4. GROUNDING & BONDING SHALL BE INSTALLED IN ACCORDANCE WITH NEC (2005), ARTICLE 250.

GROUNDING GRID SCHEMATIC

NO SCALE

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CHURCHWOODS - BUILDINGS 2, 3, 4, 5, 6

BUILDING TYPE B
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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ELECTRICAL LOW VOLTAGE RISER, DETAILS AND NOTES

E104

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CHURCHWOODS - BUILDING 8

100% CONSTRUCTION DOCUMENTS

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

MAY 27, 2016

DRAWING LIST

NUMBER	NAME
0 - COVER	
G101	TITLE SHEET
2 - STRUCTURAL	
S100	FOUNDATION PLAN & DETAILS
S101	ROOF FRAMING & SHEAR WALL PLANS
3 - ARCHITECTURAL	
A101	FIRST FLOOR PLAN & RCP
A102	ROOF PLAN
A201	EXTERIOR ELEVATIONS
A202	INTERIOR PLANS, ELEVATIONS & SCHEDULES
A301	BUILDING SECTIONS
A302	TYPICAL WALL SECTIONS
A501	EXTERIOR DETAILS
A502	DOOR & WINDOW SCHEDULES & DETAILS
A503	TYPICAL CONSTRUCTION DETAILS
4 - PLUMBING	
P101	PLUMBING FLOOR PLAN, ROOF PLAN, PART PLAN, LEGEND, SCHEDULES, DETAILS & GENERAL NOTES
6 - MECHANICAL	
M101	FLOOR PLAN & ROOF / ATTIC PLAN
M102	SCHEDULES & DETAILS
7 - ELECTRICAL	
E100	ELECTRICAL LEGEND, SPEC. & NOTES
E101	ELECTRICAL FLOOR PLANS
E102	ELECTRICAL DETAILS & NOTES
LS100	LIFE SAFETY DETAILS, NOTES & SCHEDULES
LS101	LIFE SAFETY FLOOR PLAN & DETAILS

GENERAL PROJECT NOTES

1 GENERAL NOTES APPLY TO ALL DRAWINGS AND ALL TRADES. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES.

2 UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, PERMITS, TRANSPORTATION AND OTHER SERVICES AND FACILITIES NECESSARY FOR PROPER AND TIMELY EXECUTION OF THE REQUIRED WORK UNDER THIS CONTRACT.

3 THE GENERAL CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF WRITTEN SUBSTANTIAL COMPLETION.

4 THE GENERAL CONTRACTOR WARRANTS TO THE OWNER AND TO THE ARCHITECT, THAT ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED UNDER THE CONTRACT ARE NEW UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK WILL BE AS SPECIFIED AND FREE OF DEFECTS.

5 ALL FLOOR LEVELS ON ALL DRAWINGS ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. COORDINATE BUILDING SLAB ELEVATIONS WITH CIVIL DRAWINGS.

6 ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES WELL AS ANY REQUIREMENTS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION.

7 DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS OR OF ANY VARIATIONS REQUIRED IN ORDER TO CONFORM TO CODE REQUIREMENTS, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ARCHITECT WILL FORWARD WRITTEN INSTRUCTION TO ALL CONCERNED PARTIES. ANY SUCH DISCREPANCY, OMISSION OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WORK SHALL BE PERFORMED IN A MANNER DIRECTED BY THE ARCHITECT.

8 DRAWING SCALES: THESE DRAWINGS ARE PREPARED TO THE SCALES NOTED. HOWEVER, DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THE PLANS, SECTIONS OR DETAILS. THE CONTRACTOR SHALL CONTACT THE ARCHITECT WITH ANY QUESTIONS PERTAINING TO DIMENSIONS OR DETAILS PRIOR TO COMMENCING ANY WORK.

9 THE REQUIREMENTS OF THE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR THEIR EMPLOYEES USE ON THE PROJECT TO ENSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.

10 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING CONSTRUCTION THAT IS SCHEDULED TO REMAIN IN PLACE OR INTACT. ANY DAMAGE INCURRED TO SUCH ITEMS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION.

11 ALL FRAMING LUMBER INSTALLED IN CONTACT WITH CONCRETE, MASONRY OR STEEL SHALL BE PRESSURE TREATED.

12 THE GENERAL CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL APPROVED, CODE COMPLIANT FIRE EXTINGUISHERS. SUCH EXTINGUISHERS SHALL BE FULLY COORDINATED WITH AND APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

13 ALL DIMENSIONS ARE ACTUAL AND ARE TAKEN TO THE FACE OF STUD, FACE OF CONCRETE WALL, FACE OF CMU WALL OR FACE OF FRAME, UNLESS NOTED OTHERWISE.

14 ALL INTERIOR WALLS AND PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF STRUCTURE OR DECK ABOVE, UNLESS NOTED OTHERWISE.

15 ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE CONDITIONED, USED, APPLIED, INSTALLED, CONNECTED, ERECTED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS, GUIDELINES AND INSTALLATION INSTRUCTIONS.

16 ALL NEW WINDOWS, SIDELITES AND BORROWED LITES AS WELL AS ASSOCIATED GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES IN PLACE WITHIN THE JURISDICTION OF THE WORK. PROVIDE SAFETY GLAZING AS REQUIRED BY CODE.

17 ALL PENETRATIONS OF FIRE-RESISTIVE-RATED FLOORS, WALLS, PARTITIONS AND SHAFTS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAILS THAT CONFORM TO U.L. DESIGN STANDARDS FOR THROUGH PENETRATION FIRESTOP SYSTEMS. THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SPECIFICATIONS AND DETAILS THAT SHOW COMPLETE CONFORMANCE TO THE U.L. LISTING TO THE ARCHITECT FOR REVIEW AND APPROVAL. SUCH DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE MADE AVAILABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE SPECIFIC FOR EACH PENETRATION WITH ANY AND ALL VARIABLES DEFINED.

18 SEAL AROUND ALL PENETRATIONS (DUCTS, PIPES, CONDUIT, ETC.) AT NEW AND EXISTING FIRE-RATED WALL, PARTITION AND CEILING CONSTRUCTION. SEAL SHALL NOT DIMINISH RATING OF THE WALL, PARTITION OR CEILING. AT CONCRETE OR MASONRY, SEAL OFF OPENINGS WITH CONCRETE GROUT. AT PLASTER OR DRYWALL, DAM UP GAPS AND WALL VOIDS WITH U.L. APPROVED FIRE-RESISTIVE-RATED SEALANT OR PUTTY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

19 LEVEL ALL FLOORS AS REQUIRED TO CONCEAL ANY DROPS OR RISERS IN FLOORS THAT WOULD OTHERWISE BE SEEN WITH THE SCHEDULED FLOOR FINISHES.

20 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND PROPERLY INSTALLING ALL FIRESAFING, FIRE/SMOKE STOPPING AT ALL PENETRATIONS OR OPENINGS AT INTERSECTIONS OF RATED WALLS AND STRUCTURAL ELEMENTS, AT ALL PENETRATIONS OR OPENINGS THROUGH FIRE-RESISTIVE RATED WALLS AND AT ANY OTHER AREAS WHERE FIRE AND SMOKE MAY PENETRATE.

21 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE SHORING AND BRACING TO SAFELY SUPPORT THE STRUCTURE DURING CONSTRUCTION.

22 THE CONTRACTOR IS RESPONSIBLE FOR DUST AND WEATHER PROTECTION DURING CONSTRUCTION.

23 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONS USING THE SURROUNDING FACILITIES WHO COME INTO CONTACT WITH THE AREA OF CONSTRUCTION. THE CONSTRUCTION AREA SHALL BE PROPERLY BARRICADED TO PREVENT INTRUSION BY PERSONS NOT ASSOCIATED WITH THE CONSTRUCTION OF THIS FACILITY.

24 THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. SAFETY, CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SAFETY SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

25 REFER TO THE PROJECT MANUAL, WRITTEN SPECIFICATIONS AND INTERPRETATION OF CONTRACT DOCUMENTS SECTION BELOW FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
EL 0' - 0"	DATUM POINT
FLOOR LEVEL 0' - 0"	ELEVATION MARKER
A3.0 A3.0	BUILDING SECTION
1 A4.0	AREA OF DETAIL
1 A3.0	DETAIL SECTION
1 A3.0	WALL SECTION
A A	MATCH LINE
A1 A4 A204 A2 A3	INTERIOR ELEVATION
1 A4.0	EXTERIOR ELEVATION
A1	WINDOW TYPE
108	DOOR NUMBER
KITCHEN 108	ROOM NAME AND NUMBER
1	KEYNOTE NUMBER
1	WALL TYPE
	NEW CONSTRUCTION
1	REVISION NUMBER AND CLOUD REFERENCE
12 4	ROOF PITCH
℄	CENTERLINE

ABBREVIATIONS

A	ABV	ABOVE
	AT	ACOUSTICAL TILE
	AD	AREA DRAIN
	ADJ	ADJUSTABLE
	AFF	ABOVE FINISH FLOOR
	ALUM	ALUMINUM
	ANOD	ANODIZED
	APPROX	APPROXIMATE(LY)
	ARCH	ARCHITECT
	ASPH	ASPHALT
B	B/	BOTTOM OF
	BB	BASEBOARD
	BBH	BASEBOARD HEAT
	BD	BOARD
	BIT	BITUMINOUS
	BLDG	BUILDING
	BLK	BLOCK
	BM	BEAM
	BO	BY OWNER
	B.O.	BOTTOM OF
	BRK	BRICK
C	CAB	CABINET
	CB	CATCH BASIN
	CEM	CEMENT
	CI	CAST IRON
	CIP	CAST IN PLACE
	CJ	CONTROL JOINT
	CL	CENTER LINE
	CLG	CEILING
	CLR	CLEAR
	CMT	CERAMIC MOSAIC TILE
	CMU	CONCRETE MASONRY UNIT
	CO	CLEAN OUT
	CO	CARBON MONOXIDE
	COL	COLUMN
	CONC	CONCRETE
	CONN	CONNECTION
	CONST	CONSTRUCTION
	CONST JT	CONSTRUCTION JOINT
	CONT	CONTINUOUS
	CONTR	CONTRACTOR
	CPT	COLD ROLLED COOPER
	CRC	
	CS	COURSE
	CT	CERAMIC TILE
	CTR	CENTER
	CF	CUBIC FOOT
	CW	COLD WATER
D	D	DEEP
	DBL	DOUBLE
	DEPT	DEPARTMENT
	DI	DRAIN INLET
	DIA	DIAMETER
	DIM	DIMENSION
	DISP	DISPENSER
	DN	DOWN
	DO	DITTO
	DP	DAMPPROOF(ING)
	DR	DOOR
	DRN	DRAIN
	DS	DOWNSPOUT
	DTL	DETAIL
	DW	DISHWASHER
	DWG	DRAWING
	DWR	DRAWER
	DWT	DUMBWAITER
E	E	EAST
	EA	EACH
	EL	ELEVATION
	ELEC	ELECTRIC (AL)
	ELEV	ELEVATOR
	EMER	EMERGENCY
	EPDM	ELASTOMERIC ROOFING
	EQ	EQUAL
	EQUIP	EQUIPMENT
	EWC	ELECTRIC WATER COOLER
	EXIST	EXISTING
	EJ	EXPANSION JOINT
	EXP	EXPOSED
	EXT	EXTERIOR
F	F/	FACE OF
	FCO	FLOOR CLEANOUT
	FCU	FAN COIL UNIT
	FD	FLOOR DRAIN
	FDN	FOUNDATION
	FE	
	FEC	FIRE EXTINGUISHER CABINET
	FF	FINISH FLOOR
	FHC	FIRE HOSE CABINET
	FIN	FINISH
	FIXT	FIXTURE
	FL	FLOOR
	FLUOR	FLUORESCENT
	FRTW	FIRE RETARDENT TREATED WOOD
	FRWK	FRAMEWORK
	FT	FOOT
	FTG	FOOTING
	FURN	FURNISH (ED)
	FURR	FURRING
	FUT	FUTURE
G	GA	GAUGE
	GALV	GALVANIZED
	GB	GRAB BAR
	GD	GROUND
	GEN	GENERAL
	GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	GL	GLASS
	GL BLK	GLASS BLOCK
	GR	GRADE
	GRAN	GRANITE
	GWB	GYPSUM WALL BOARD
	GYP	GYPSUM
H	H	HIGH
	HB	HOSE BIB
	HC	HOLLOW CORE
	HDW	HARDWARE
	HDWD	HARDWOOD
	HT	HEIGHT
	HM	HOLLOW METAL
	HORZ	HORIZONTAL
	HSS	HOLLOW STRUCTURAL SECTION
	HR	HOUR
	HW	HOT WATER
	HVAC	HEAT/VENT AIR CONDITION
I	IC	IN CONTRACT
	ID	INSIDE DIMENSION
	IN	INCH
	INSUL	INSULATION
	INT	INTERIOR
	INV	INVERT
J	JST	JOIST
	JSTH	JOIST HANGER
	JT	JOINT
L	LAM	LAMINATE
	LCC	LEAD COATED COPPER
	LG	LONG
	LH	LEFT HAND
M	MACH	MACHINE
	MAR	MARBLE
	MAS	MASONRY
	MATL	MATERIAL
	MAX	MAXIMUM
	MDF	MEDIUM DENSITY FIBERBOARD
	MDO	MEDIUM DENSITY OVERLAY PLYWOOD
	MEM	MEMBRANE
	MFR	MANUFACTURER
	MIN	MINIMUM
	MO	MASONRY OPENING
	MT	METAL
	MTL	THRESHOLD METAL
N	N	NORTH
	NIC	NOT IN CONTRACT
	NO	NUMBER
	NS	NON-SLIP
	NTS	NOT TO SCALE
O	OA	OVERALL
	OAE	OR APPROVED EQUAL
	OC	ON CENTER
	OD	OUTSIDE DIMENSION
	OPNG	OPENING
	OPP	OPPOSITE
P	PARL	PARALLEL
	PART	PARTITION
	PERP	PERPENDICULAR
	PJF	PREMOLDED JOINT FILLER
	PL	PLASTIC
	PLAS	PLASTER
	PLAM	PLASTIC LAMINATE
	PLBG	PLUMBING
	PLYWD	PLYWOOD
	POL	POLISHED
	PNL	PANEL (ING)
	PR	PAIR
	PREFIN	PREFINISHED
	PSI	POUNDS PER SQUARE INCH
	PSF	POUNDS PER SQUARE FOOT
	PSL	PARALLEL STRAND LUMBER
	PT	PRESSURE TREATED
	PNTD	PAINTED
Q	QT	QUARRY TILE
	QTR	QUARTER
	QTY	QUANTITY
R	R	RISER
	RAD	RADIUS
	RD	ROOF DRAIN
	RECP	RECEPTACLE
	REF	REFERENCE
	REFRIG	REFRIGERATOR
	REIN	REINFORCED
	REQD	REQUIRED
	RES	RESILIENT
	RH	RIGHT HAND
	RL	RAIN LEADER
	RM	ROOM
	RND	ROUND
	RO	ROUGH OPENING
S	S	SOUTH
	SC	SOLID CORE
	SCHD	SCHEDULE
	SD	SOAP DISPENSER
	SEAL	SEALANT
	SECT	SECTION
	SEL	SELECT
	SF	SQUARE FEET(FOOT)
	SHEATH	SHEATHING
	SIM	SIMILAR
	SHT	SHEET
	SJ	SEALANT JOINT
	SOF	SOFFIT
	SPEC	SPECIFICATION
	SPF	SPRUCE/PINE/FIR
	SQ	SQUARE
	SS	STAINLESS STEEL
	SSD	SEE STRUCTURAL DRAWINGS
	STD	STANDARD
	STL	STEEL
	STRCT	STRUCTURAL
	SUSP	SUSPENDED
	SY	SQUARE YARD
T	T	TREAD
	T/	TOP OF
	TB	TACK BOARD
	TEL	TELEPHONE
	TEMP	TEMPORARY
	THK	THICK (NESS)
	THRES	THRESHOLD
	T.O.	TOP OF
	TOIL	TOILET
	TZ	TERRAZZO
	TTD	TOILET TISSUE DISPENSER
	TV	TELEVISION
	TYP	TYPICAL
	T&G	TONGUE & GROVE
U	UR	URINAL
	UNFIN	UNFINISHED
	UON	UNLESS OTHERWISE NOTED
V	VB	VAPOR BARRIER
	VCT	VINYL COMPOSITION TILE
	VENT	VENTILATE
	VERT	VERTICAL
	VIF	VERIFY IN FIELD
	VP	VENEER PLASTER
	VT	VINYL TILE
	VWC	VINYL WALL COVERING
W	W	WIDE
	W	WEST
	W/	WITH
	W/O	WITHOUT
	WC	WATER CLOSET
	WD	WOOD
	WDW	WINDOW
	WNSCT	WAINSCOT
	WP	WATERPROOF
	WR	WATER RESISTANT
	WS	WEATHER STRIP
	WWM	WELDED WIRE MESH

ROOM NAMES

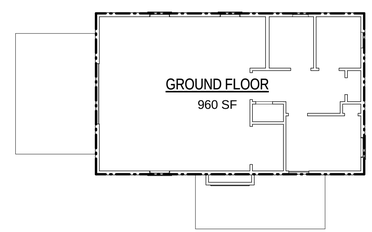
BDR	BEDROOM
BSMNT	BASEMENT
CC	CUSTODIAN'S CLOSET
CLOS	CLOSET
COR	CORRIDOR
CTRM	COAT ROOM
DNR	DINING ROOM
ELEV	ELEVATOR
ENT	ENTRANCE
KIT	KITCHEN
LAV	LAVATORY
LKR	LOCKER ROOM
LNG	LOUNGE
LVR	LIVING ROOM
MACH RM	MACHINE ROOM
MBATH	MASTER BATH
MBDR	MASTER BEDROOM
MECH	MECHANICAL ROOM
OFF	OFFICE
PWDR	POWDER ROOM
P.R.	POWDER ROOM
SH	SHOWER
ST	STAIR
STOR	STORAGE
TOIL	TOILET
VEST	VESTIBULE

BUILDING CODE DATA

BUILDING CODE	INTERNATIONAL BUILDING CODE 2012 EDITION - IBC NFPA LIFE SAFETY CODE - 2012 EDITION RHODE ISLAND STATE BUILDING CODE - SBC-1 - JULY 1, 2013		
LOCALITY	CHARLESTOWN, RI 02813		
DATA	REFERENCE		
USE / OCCUPANCY	SECTION 304	ASSEMBLY	
CONSTRUCTION TYPE	SECTION 602.5	TYPE 5-A	
		REQUIRED / ALLOWABLE	PROPOSED / ACTUAL
BUILDING HEIGHT			
STORIES	IBC SEC 503	2	1
FEET	IBC SEC 503	60	18
BUILDING AREA (PER FLOOR)	IBC SEC 503	9,000 SF/FLOOR	960
FIRE SPRINKLERS	IBC 903 & NFPA 1 CH 13	NOT REQUIRED	
FIRE BLOCKING / DRAFT STOPS	IBC 718.2 IBC 718.3 IBC 718.4	AS REQUIRED	
MAXIMUM TRAVEL DISTANCE	IBC 1016	250'	LESS THAN 250'
OCCUPANT LOAD	IBC 1014		
AREA PER OCCUPANT	IBC 1014.1.2		
TOTAL NUMBER OF OCCUPANTS	IBC 1014.1.2	50 OCCUPANTS TOTAL	
EGRESS WIDTH	IBC 1015.1	36"	36"
NUMBER OF EXITS	IBC 1021.2 (2)		1
DEAD ENDS			
COMMON PATH OF TRAVEL			
FROST LINE DEPTH	40 INCHES		
WIND SPEED	110 MPH		
GROUND SNOW LOAD	30 PSF		

AREA SCHEDULE - GROSS BUILDING

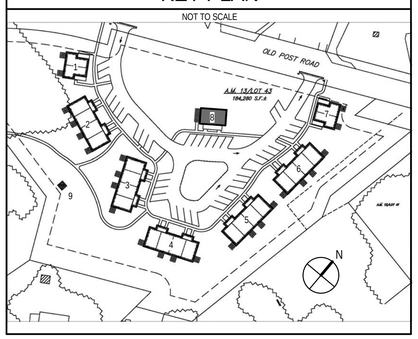
AREA NAME	AREA (SF)
GROUND FLOOR	960 SF
	960 SF



FIRST FLOOR - GROSS AREA PLAN

KEY PLAN

NOT TO SCALE



INTERPRETATION OF CONTRACT DOCUMENTS

IN THE EVENT OF CONFLICTING PROVISIONS IN THE CONTRACT DOCUMENTS, THE DRAWINGS WILL TAKE PRECEDENCE OVER THE SPECIFICATIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE DRAWINGS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE. ON ALL DRAWINGS, FIGURES TAKE PRECEDENCE OVER SCALED DIMENSIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE SPECIFICATIONS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE.

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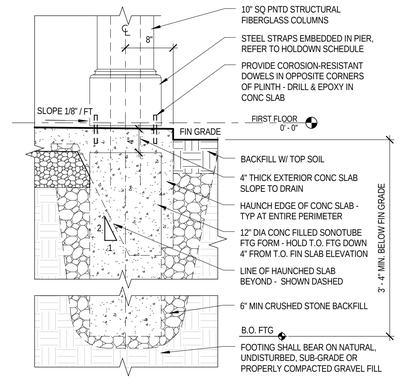
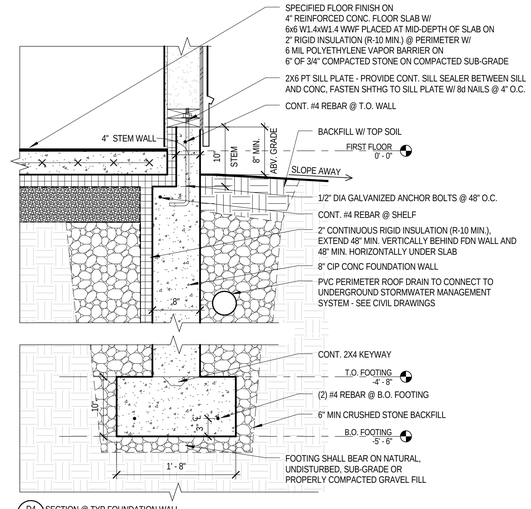
G101

CHURCHWOODS - BUILDING 8



D3 S100 DETAIL @ TYP PORCH SLAB & COLUMN FOOTING
SCALE: 1" = 1'-0"



D4 S100 SECTION @ TYP FOUNDATION WALL
SCALE: 1" = 1'-0"

GENERAL SHEET NOTES - FOUNDATION

ALL NEW STRUCTURAL FILL SHALL BE COMPACTED 95% AT MAXIMUM DRY DENSITY.

FOUNDATION DESIGN IS BASED ON PRESUMPTIVE SOIL BEARING CAPACITY OF 4000 LBS/SF. THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ANY SOILS ARE DISCOVERED ON SITE THAT ARE INCAPABLE OF MEETING THIS BEARING PRESSURE.

SYNTHETIC FIBER REINFORCING MAY BE SUBSTITUTED FOR WELDED WIRE MESH REINFORCING UPON WRITTEN APPROVAL OF THE ARCHITECT. GLASS FIBER REINFORCED CONCRETE SHALL BE IN ACCORDANCE WITH PCI MNL-128 STANDARDS.

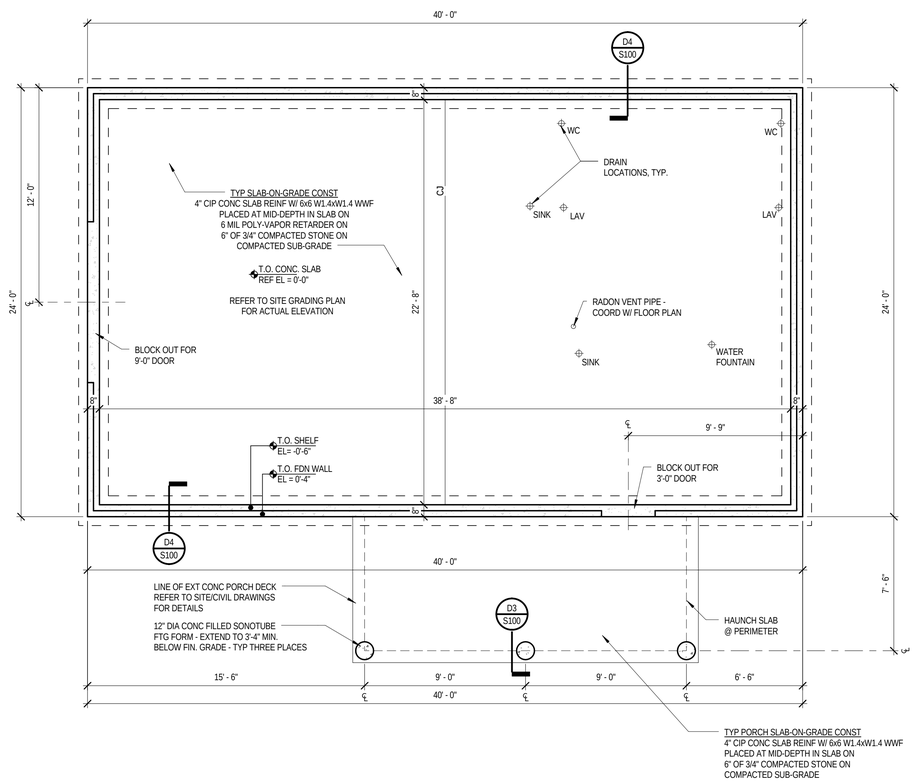
ANCHOR WOOD SILL PLATES TO FOUNDATION WITH 1/2" DIAMETER x 10" OR 12" LONG GALVANIZED ANCHOR BOLTS, NUTS, & WASHERS SPACED 48" O.C., REFER TO DETAILS FOR BOLT LENGTHS. PROVIDE A MINIMUM OF TWO BOLTS PER PLATE SECTION WITH BOLTS LOCATED NOT MORE THE 12" FROM CORNERS. BOLTS SHALL EXTEND 7" MINIMUM INTO CONCRETE. HOLDOWN ANCHORS ARE ALSO REGUIRED, REFER TO STRUCTURAL FRAMING DRAWINGS FOR ADDITIONAL INFORMATION.

VAPOR RETARDER TO BE 6 MIL POLYETHYLENE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE.

BASE COURSE TO 6-INCH-THICK MINIMUM CONSISTING OF CLEAN GRADED SAND, GRAVEL, OR CRUSHED STONE PASSING A 2-INCH SIEVE PLACED ON THE SUBGRADE.

UNDER NO CIRCUMSTANCES SHALL THE TOP OF FOUNDATION WALL ELEVATION EXCEED 18" ABOVE FINISHED GRADE ELEVATION.

BACKFILL EACH SIDE OF FOUNDATION IN A BALANCED MANNER TO KEEP SOIL PRESSURES BALANCED (2' UNBALANCED BACKFILL MAX.)



A2 S100 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

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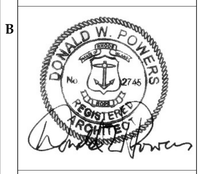
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI



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FOUNDATION PLAN & DETAILS

S100

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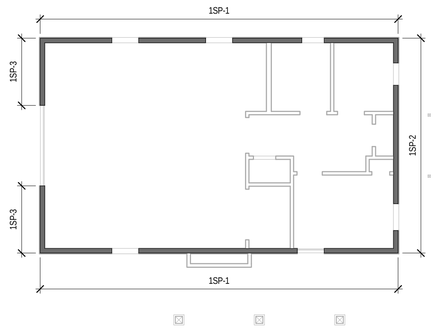


D2 / S101 SHEAR WALL PLAN
SCALE: 1/8" = 1'-0"

SHEAR WALL NAILING & HOLDOWN SCHEDULE

MARK	PLYWOOD ATTACHMENT	HOLDOWN CONNECTOR
1SP-1	8d NAILS @ 6" O.C. AT EDGES, 12" O.C. INTERMEDIATE	NONE REQUIRED
1SP-2	8d NAILS @ 6" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU4-SDS2.5
1SP-3	8d NAILS @ 6" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU4-SDS2.5

SHEAR WALL NOTES:
1. ALL SHEAR WALLS ARE TO HAVE SOLID BLOCKING INSTALLED BETWEEN STUDS ALONG ALL HORIZONTAL PLYWOOD EDGES.
2. ALL DESIGNATED SHEAR WALLS ARE TO HAVE A DOUBLE STUD AT EACH END OF THE SHEAR WALL FOR HOLDOWN ATTACHMENT.
3. ALL SIMPSON HDU HOLDOWN ANCHORS AT THE ENDS OF SHEAR WALLS ARE TO BE CONNECTED TO NEAREST ANCHOR BOLT W/ SIMPSON CNW5/8 COUPLER.
4. WHERE SHEAR WALLS INTERSECT, USE SINGLE HOLDOWN TO SERVE BOTH SHEAR WALLS. HOLDOWN MUST BE THE LARGER OF THE TWO SPECIFIED.

ROOF MEMBER HOLDOWN SCHEDULE

MEMBER	LOCATION	CONNECTION
CLEARSPAN TRUSSES	EXT WALL	SIMPSON H2A ON SHEATHED SIDE OF WALL (STUDS MUST ALIGN W/ TRUSSES)
RB1	EXT WALL	HUC SERIES HANGER
	HOLLOW COLUMN	(2) 18ga STRAP CONTINUOUS FROM ROOF BEAM, THRU COLUMN, EMBEDDED INTO CONC FOUNDATION 14" MIN
RJ-1	EXT WALL / RB-1	SIMPSON H2.5A ON SHEATHED SIDE OF WALL

STRUCTURAL FRAMING LEGEND

ROOF FRAMING	
RJ1	2x8 SPF @ 24" O.C.
OUTLOOKER - RJ2	2x6 SPF @ 24" O.C.
PORCH ROOF BEAM - RB1	(2) 2x8 SPF
PORCH ROOF BEAM - RB2	(2) 2x8 SPF
WINDOW & DOOR HEADERS	
HEADER - HD1	(2) 2x8 SPF
HEADER - HD2	(2) 2x10 SPF
STRUCTURAL COLUMNS	
PORCH CLOUMN - C1	HB&G 10" SQ PERMACAST COLUMN
CLOUMN - C2	(2) 2x6 SPF

STRUCTURAL SYMBOL LEGEND

COLUMN DOWN	BEAMS
BEARING WALL	RAFTERS
HEADERS	RAFTERS - OVERFRAMED

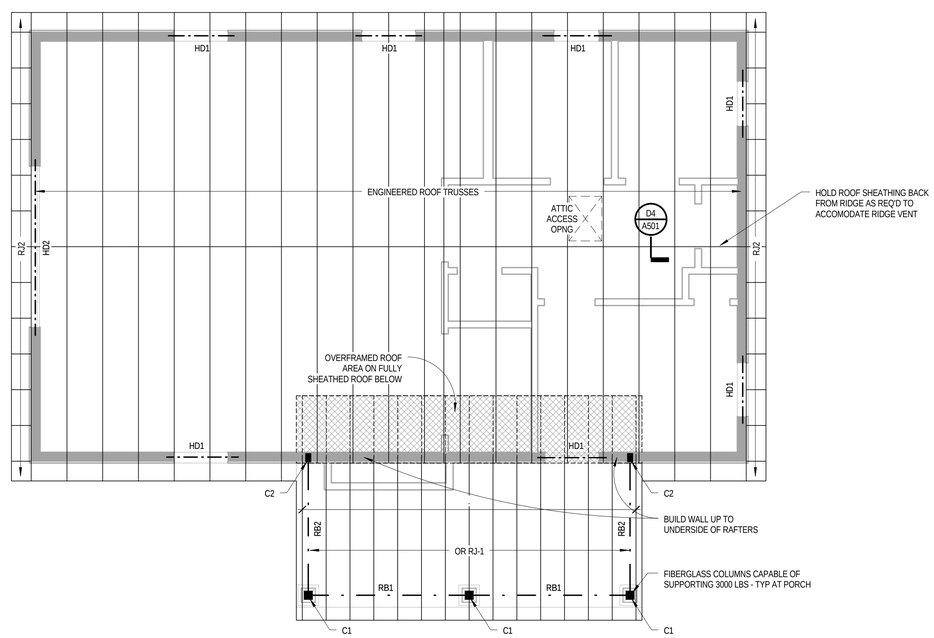
GENERAL STRUCTURAL NOTES

COLUMN DIMENSIONS ARE TAKEN FROM THE EXTERIOR FACE OF FRAMING / FOUNDATION TO THE CENTERLINE OF THE POST UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOULD BE VERIFIED WITH THE FLOOR PLANS.

DIMENSIONS TO PLUMBING FIXTURES ARE TO CENTERLINE OF ROUGH DRAIN. DIMENSIONS GIVEN ARE APPROXIMATE AND SHOULD BE CONFIRMED WITH FINAL FIXTURE SELECTION.

CONTRACTOR TO SUPPLY ALL CODE REQUIRED HURRICANE CLIPS AND HOLD DOWNS

PROVIDE CONTINUOUS HOLD DOWN STRAPPING OR THREADED ROD @ ALL LOAD BEARING PERMACAST PORCH COLUMNS.



A2 / S101 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

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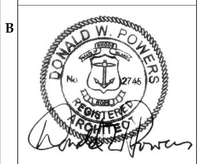
CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI



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ROOF FRAMING & SHEAR WALL PLANS

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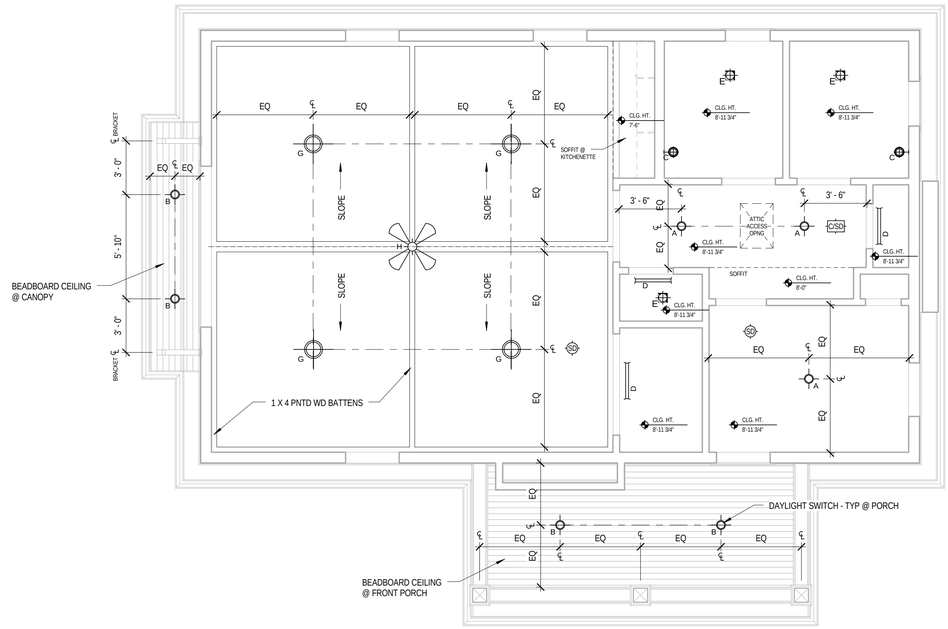
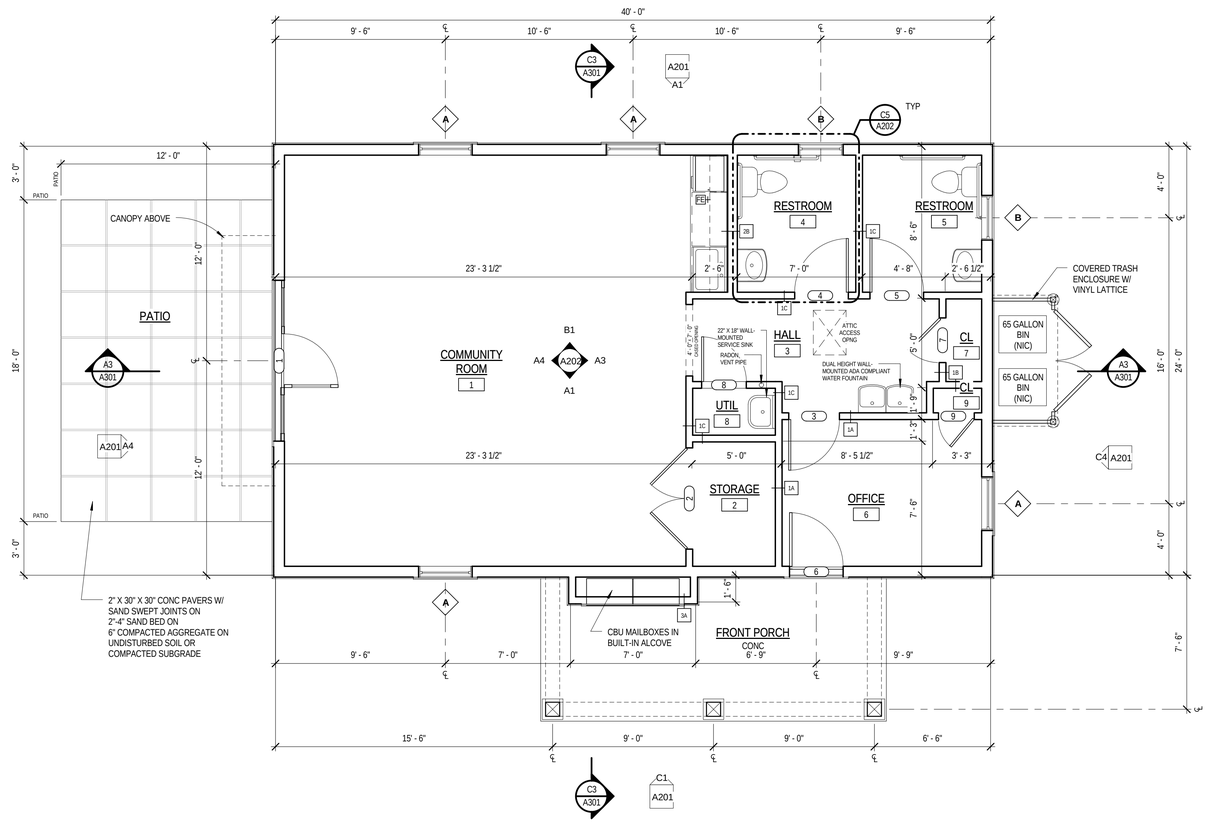


C1 A101 FIRST FLOOR RCP
SCALE: 1/4" = 1'-0"



A2 A101 FIRST FLOOR
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES

ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE.

FURNISH AND INSTALL PERMANENT AND RESILIENT ACOUSTICAL SEALANT ALONG ALL JOINTS BETWEEN THE FLOOR AND SEPARATION WALLS. UTILIZE UL RATED FIRESTOP SEALANT AT ALL FIRE-RESISTIVE RATED PARTITIONS.

ALL INTERIOR WALL SURFACES SHALL RECEIVE A PLASTER FINISH. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FURNISH AND INSTALL SOUND ATTENUATION BATT INSULATION IN ALL INTERIOR PARTITIONS UNLESS NOTED OTHERWISE.

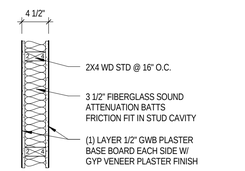
DOOR OPENINGS NOT LOCATED BY A DIMENSION SHALL BE CENTERED IN WALLS AS SHOWN OR LOCATED 6" FROM FINISH WALL TO FINISH JAMB UNLESS NOTED OTHERWISE.

ATTIC ACCESS DOOR TO BE 22"X30" R-42 DELUXE E-Z HATCH ATTIC ACCESS SCUTTLE DOOR WITH LOCKING 4-POINT LATCH AND HANDLES.

PROVIDE PORTABLE FIRE EXTINGUISHERS IN EACH KITCHEN. FINAL LOCATION TO BE DETERMINED IN FIELD BY ARCHITECT.

LIGHTING FIXTURE LEGEND

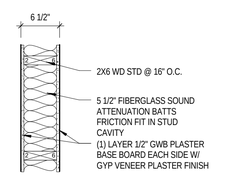
SYMBOL	DESCRIPTION	SPECIFICATION
A	CEILING MOUNTED - COMPACT FLOURESCENT FIXTURE	
B	CEILING MOUNTED - EXTERIOR PORCH FIXTURE - DAYLIGHT SWITCHED	
H	BATHROOM WALL SCONCE 2-LIGHT FLOURESCENT FIXTURE	
D	CLOSET LIGHT / FLUORESCENT UTILITY	
E	BATHROOM VENT FAN W/ FLOURESCENT LIGHT	
G	CEILING MOUNTED - DECORATIVE PENDANT FIXTURE	
H	CEILING FAN	



1A 2X4 INTERIOR WALL
AS DESCRIBED

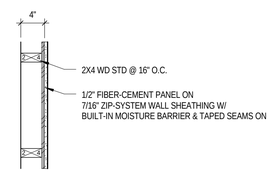
1B 2X4 INTERIOR WALL
OMIT ACOUSTICAL INSULATION

1C 2X4 INTERIOR WALL @ WET LOCATION
REPLACE GWB PLASTER BASE BOARD W/ 5/8" PNTD
WATER-AND-MOLD-RESILIENT GWB ON WET SIDE



1A 2X6 INTERIOR WALL
AS DESCRIBED

1B 2X6 INTERIOR WALL @ WET LOCATION
REPLACE GWB PLASTER BASE BOARD W/ 5/8" PNTD
WATER-AND-MOLD-RESILIENT GWB ON WET SIDE



3A 2X4 MAILBOX ENCLOSURE WALL
AS DESCRIBED

WALL TYPES

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CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS
No. 27.45
REGISTERED PROFESSIONAL ENGINEER

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FIRST FLOOR PLAN
& RCP

A101

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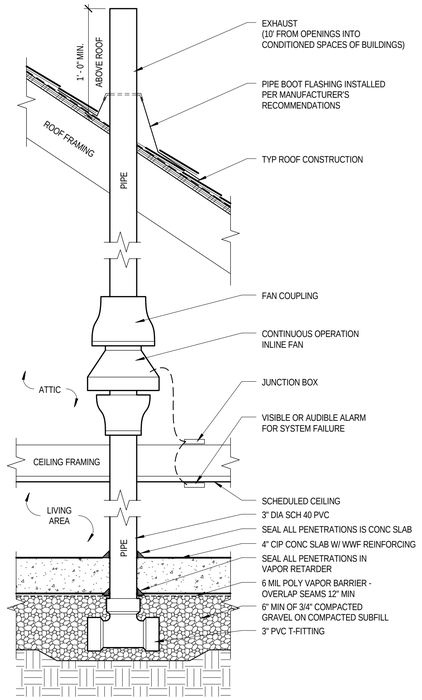
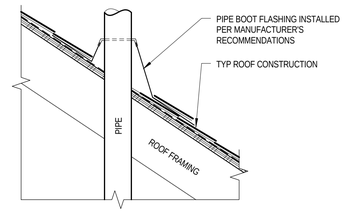


C2 A102 DETAIL @ RADON VENTING
SCALE: 1 1/2" = 1'-0"



D3 A102 DETAIL @ ROOF PENETRATION
SCALE: 1 1/2" = 1'-0"

GENERAL SHEET NOTES - ROOFING

SHINGLES SHALL BE TESTED IN ACCORDANCE WITH ASTM D 7158 AND SHALL MEET THE CLASSIFICATION REQUIREMENTS FOR A BASIC WIND SPEED OF 110 MPH AND SHALL BE FASTENED TO THE ROOF TO ACCOMODATE SUCH WIND SPEED.

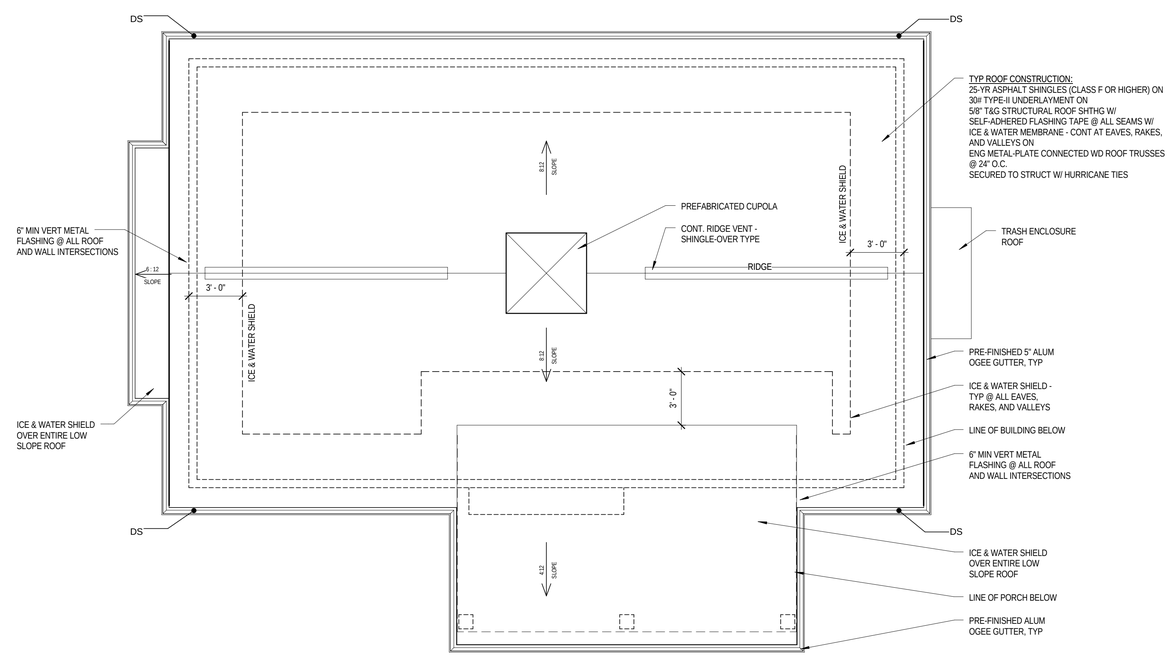
PROVIDE CONTINUOUS METAL DRIP EDGE ON ALL EAVES AND RAKES.

PROVIDE SIDEWALL FLASHING AT ALL VERTICAL SIDEWALLS BY THE STEP-FLASHING METHOD. FLASHING SHALL RUN UP VERTICAL SIDEWALLS 6" MINIMUM. AT THE END OF THE VERTICAL SIDEWALL THE STEP FLASHING SHALL BE TURNED OUT IN A MANNER THAT DIRECTS WATER AWAY FROM THE WALL AND ONTO THE ROOF AND/OR GUTTER.

PROVIDE (1) ONE LAYER NO. 30 (TYPE II) ASPHALT-SATURATED ORGANIC ROOFING FELT ON ALL ROOF SURFACES THAT ARE NOT COMPLETELY COVERED WITH ICE & WATER SHIELD MEMBRANE. ROOFING FELT MAY BE ELIMINATED AT THE CONTRACTOR'S OPTION IF ZIP SYSTEM ROOF SHEATHING WITH MOISTURE-RESISTIVE BARRIER IS UTILIZED AND ALL PANEL SEAMS ARE TAPED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.

PROVIDE ICE & WATER SHIELD MEMBRANE AT ALL EAVES, RAKES, VALLEYS, EAVE RETURNS, PORCH ROOFS AND ROOF TO SIDEWALL INTERSECTIONS. EXTEND MEMBRANE FROM LOWEST EDGES OF ALL ROOF SURFACES UP THE SLOPE TO A POINT AT LEAST 36" INSIDE THE EXTERIOR WALL LINE OF THE BUILDING.

PROVIDE 5" ALUMINUM OGEE STYLE GUTTERS AS INDICATED ON THE DRAWINGS. PROVIDE 3"X4" COORDINATING ALUMINUM DOWNSPOUTS AND BRACKETS WITH BOOT SLEEVES AT GRADE AT BASE OF DOWNSPOUT.



A2 A102 ROOF PLAN
SCALE: 1/4" = 1'-0"

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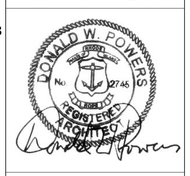
CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI



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ROOF PLAN

A102

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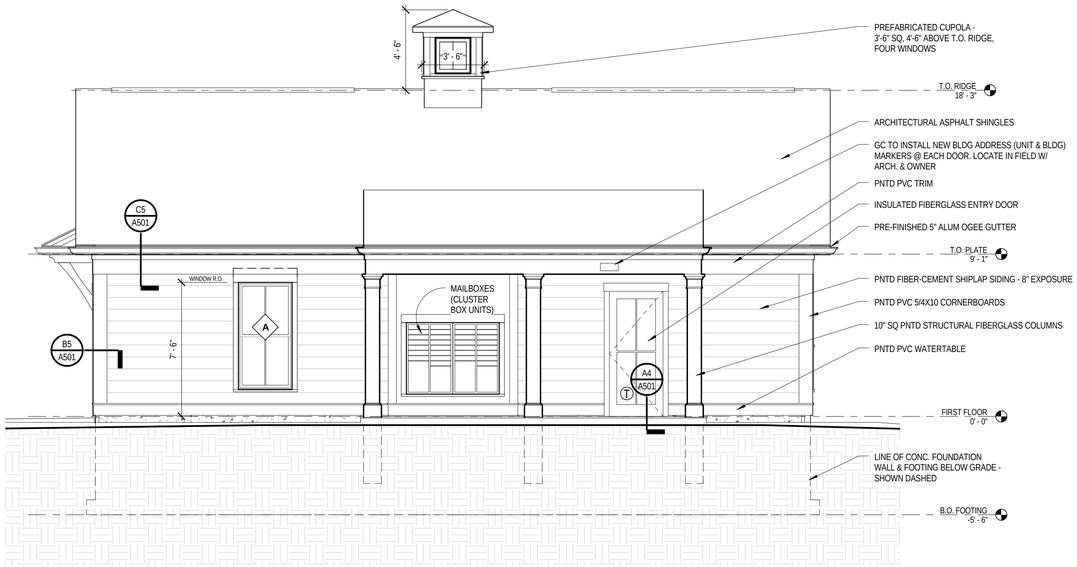
GENERAL SHEET NOTES - ELEVATIONS

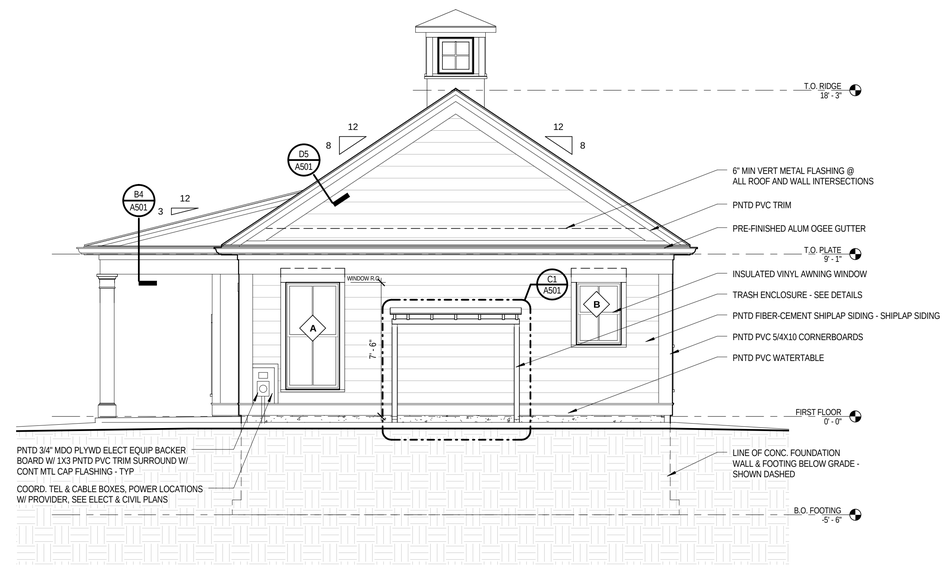
ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. THE TOP OF CONCRETE SLAB AT EACH BUILDING IS CONSIDERED THE REFERENCE ELEVATION FOR ALL VERTICAL MEASUREMENTS AND DIMENSIONS. REFER TO THE SITE GRADING PLAN FOR ACTUAL SLAB ELEVATIONS.

ALIGN ALL ROOF AND WALL ACCESSORIES AS INDICATED ON THE ELEVATIONS. ANY ACCESSORIES NOT INDICATED ON THE PLANS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.

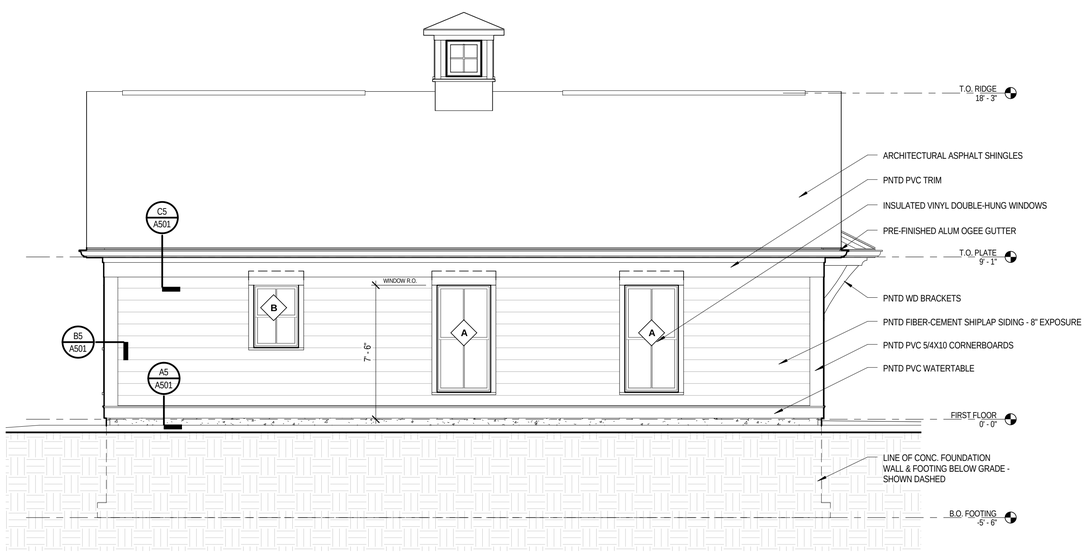
ALL EXTERIOR WALL MOUNTED ELECTRICAL BOXES, HOSE BIBBS, LIGHT FIXTURES, DEVICES AND ACCESSORIES SHALL BE INSTALLED ON MOUNTING BLOCKS. MOUNTING BLOCKS SHALL BE PAINTED TO MATCH BUILDING SIDING FIELD COLOR.



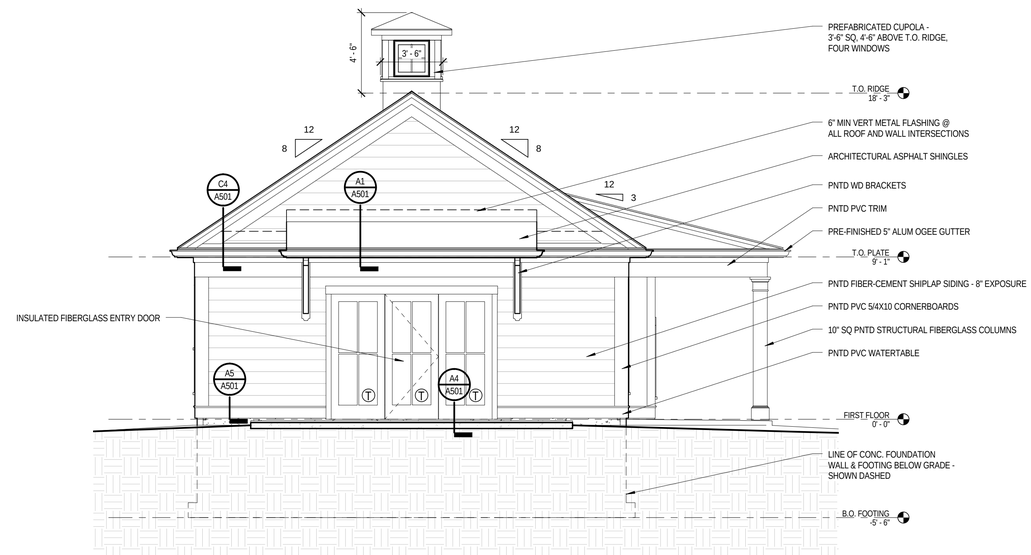
C1 A201 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



C4 A201 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



A1 A201 REAR ELEVATION
SCALE: 1/4" = 1'-0"



A4 A201 LEFT ELEVATION
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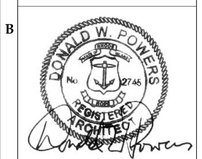

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EXTERIOR ELEVATIONS

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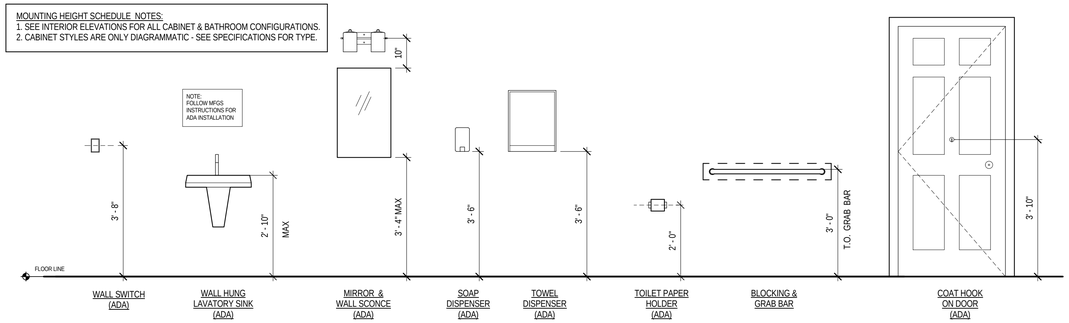
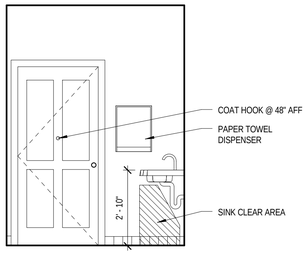
ROOM FINISH SCHEDULE						
		ROOM FINISHES				
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	CEILING HEIGHT
1	COMMUNITY ROOM	LVT	PNTD 1X8 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	
2	STORAGE	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
3	HALL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
4	RESTROOM	2X2 MOSAIC CERAMIC TILE	4" CT COVE BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
5	RESTROOM	2X2 MOSAIC CERAMIC TILE	4" CT COVE BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
6	OFFICE	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
7	CL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
8	UTIL	2X2 MOSAIC CERAMIC TILE	4" CT COVE BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"
9	CL	LVT	PNTD 1X6 WD BASE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	8' - 11 3/4"

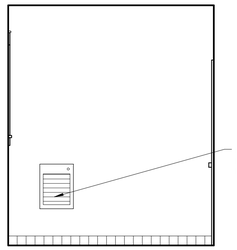
MOUNTING HEIGHT SCHEDULE NOTES:
1. SEE INTERIOR ELEVATIONS FOR ALL CABINET & BATHROOM CONFIGURATIONS.
2. CABINET STYLES ARE ONLY DIAGRAMMATIC - SEE SPECIFICATIONS FOR TYPE.



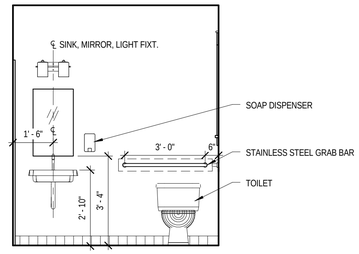
D3 A202 MOUNTING HEIGHT SCHEDULE FOR RESTROOMS
SCALE: 1/2" = 1'-0"



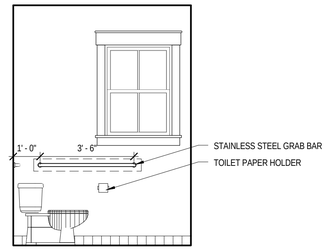
C1 A202 TYPICAL BATHROOM ELEVATION 1
SCALE: 3/8" = 1'-0"



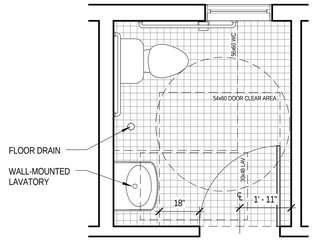
C2 A202 TYPICAL BATHROOM ELEVATION 2
SCALE: 3/8" = 1'-0"



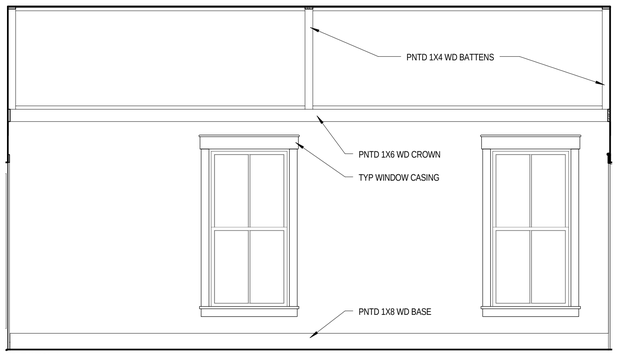
C3 A202 TYPICAL BATHROOM ELEVATION 3
SCALE: 3/8" = 1'-0"



C4 A202 TYPICAL BATHROOM ELEVATION 4
SCALE: 3/8" = 1'-0"



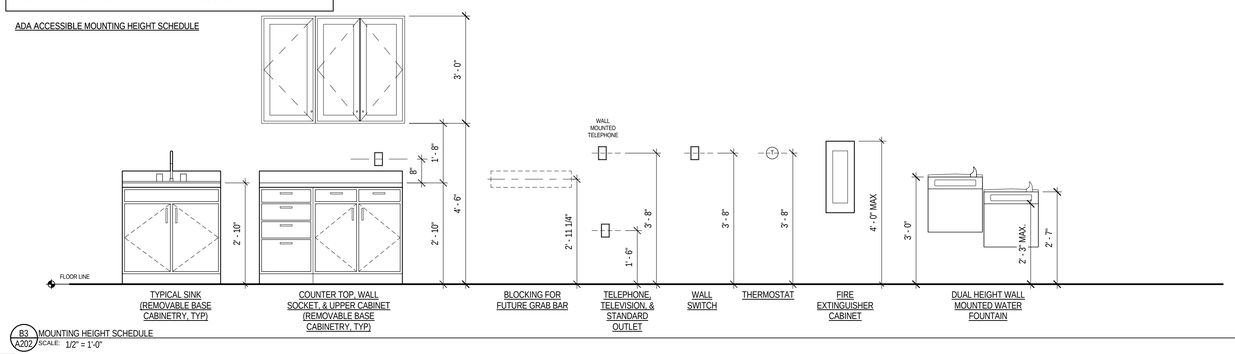
C5 A202 TYPICAL RESTROOM FLOOR PLAN
SCALE: 3/8" = 1'-0"



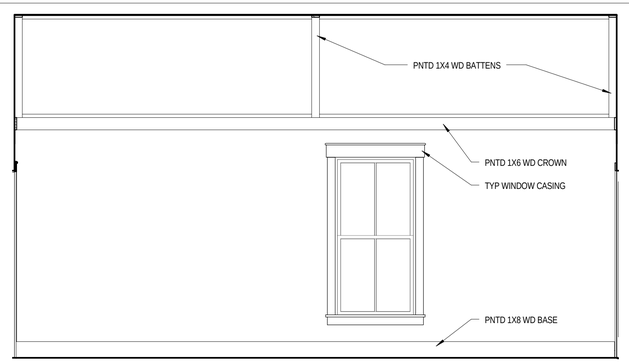
B1 A202 COMMUNITY ROOM ELEVATION 1
SCALE: 3/8" = 1'-0"

MOUNTING HEIGHT SCHEDULE NOTES:
1. SEE INTERIOR ELEVATIONS FOR ALL CABINET & BATHROOM CONFIGURATIONS.
2. CABINET STYLES ARE ONLY DIAGRAMMATIC - SEE SPECIFICATIONS FOR TYPE.

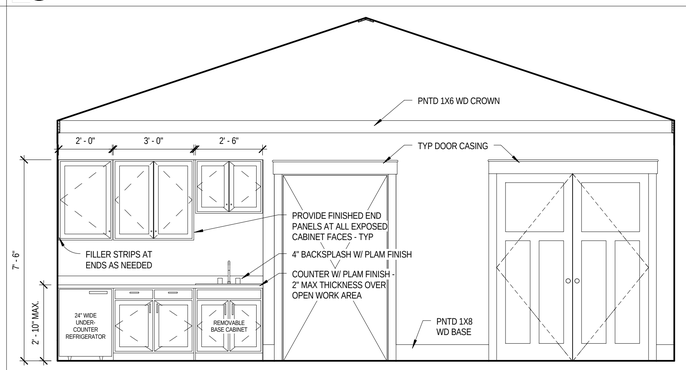
ADA ACCESSIBLE MOUNTING HEIGHT SCHEDULE



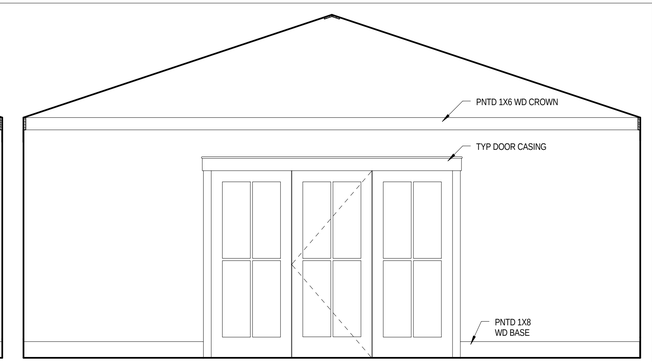
B3 A202 MOUNTING HEIGHT SCHEDULE
SCALE: 1/2" = 1'-0"



A1 A202 COMMUNITY ROOM ELEVATION 2
SCALE: 3/8" = 1'-0"



A3 A202 COMMUNITY ROOM ELEVATION 3
SCALE: 3/8" = 1'-0"



A4 A202 COMMUNITY ROOM ELEVATION 4
SCALE: 3/8" = 1'-0"

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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS
No. 2745
REGISTERED ARCHITECT

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

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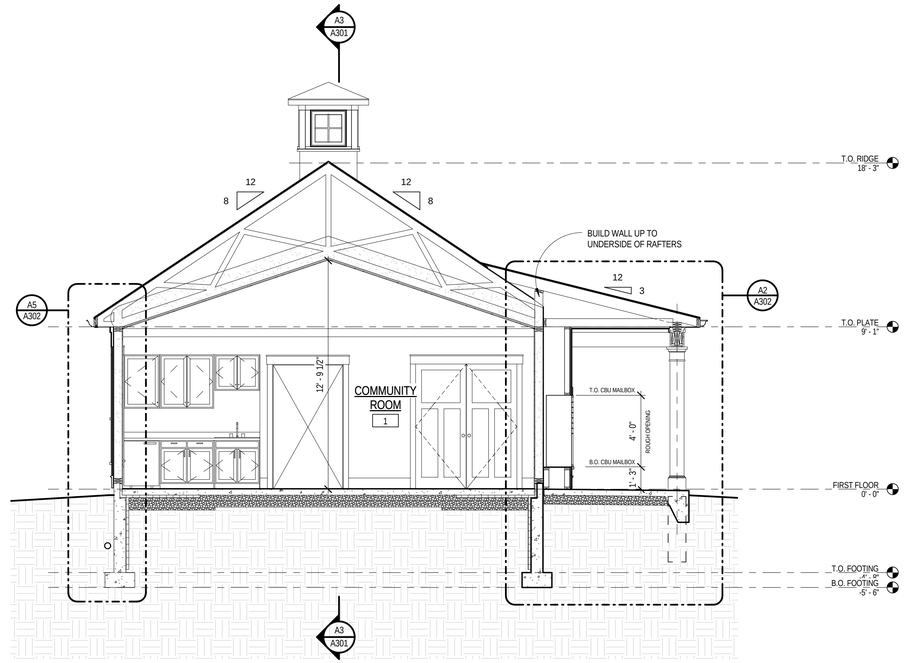
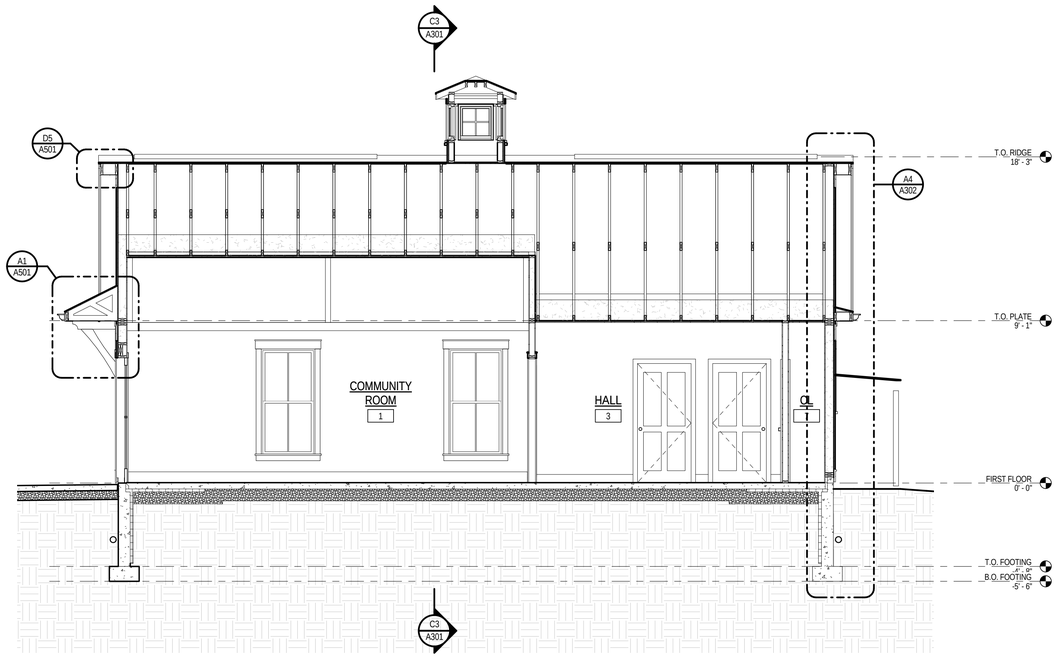
INTERIOR PLANS, ELEVATIONS & SCHEDULES

A202

5/27/2016 11:20:00 AM Z:\15_1119 CHW Comm_BH.rvt



C3 A301 TRANSVERSE BUILDING SECTION
SCALE: 1/4" = 1'-0"



A3 A301 LONGITUDINAL BUILDING SECTION
SCALE: 1/4" = 1'-0"

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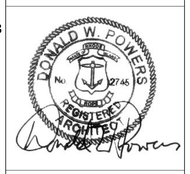
CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI



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

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BUILDING
SECTIONS

A301

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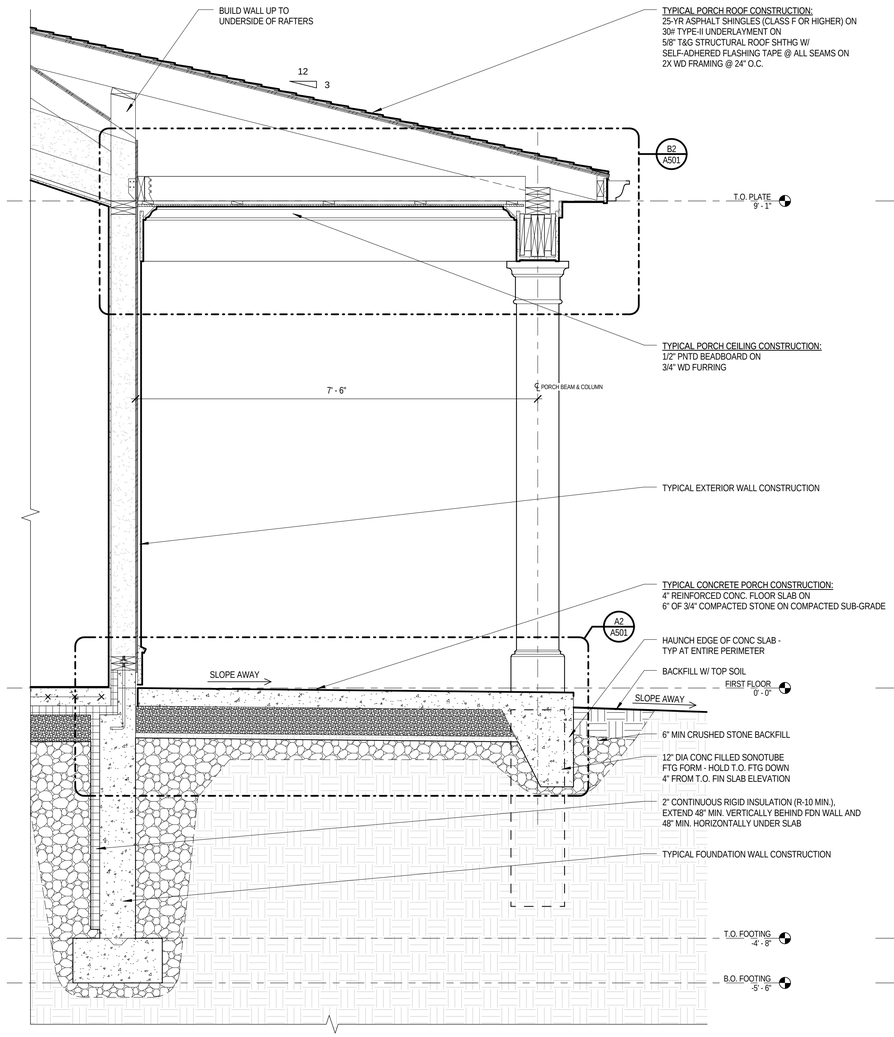
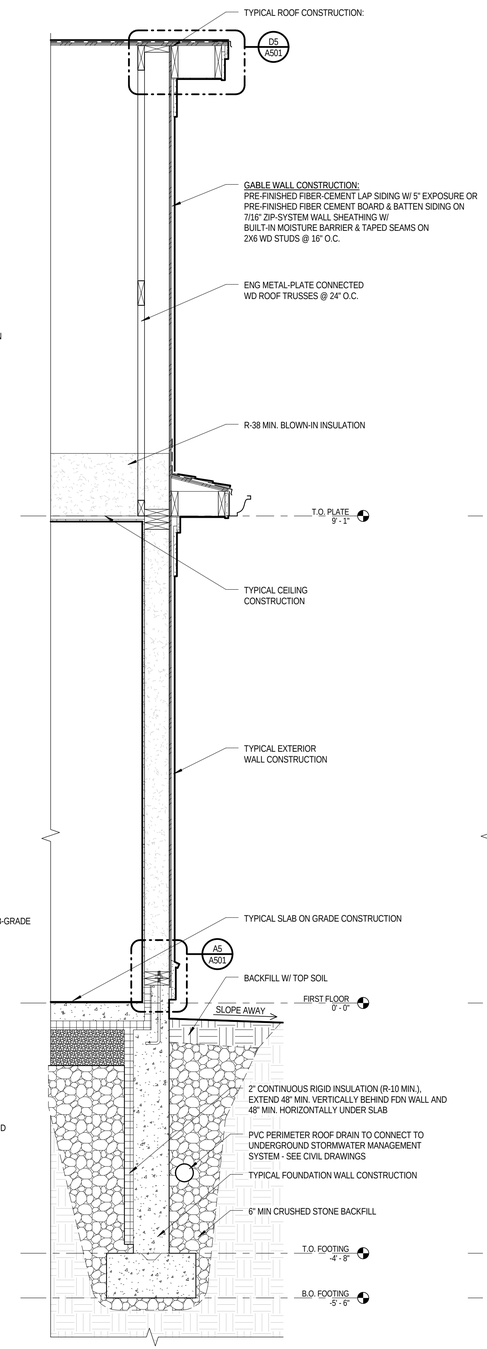
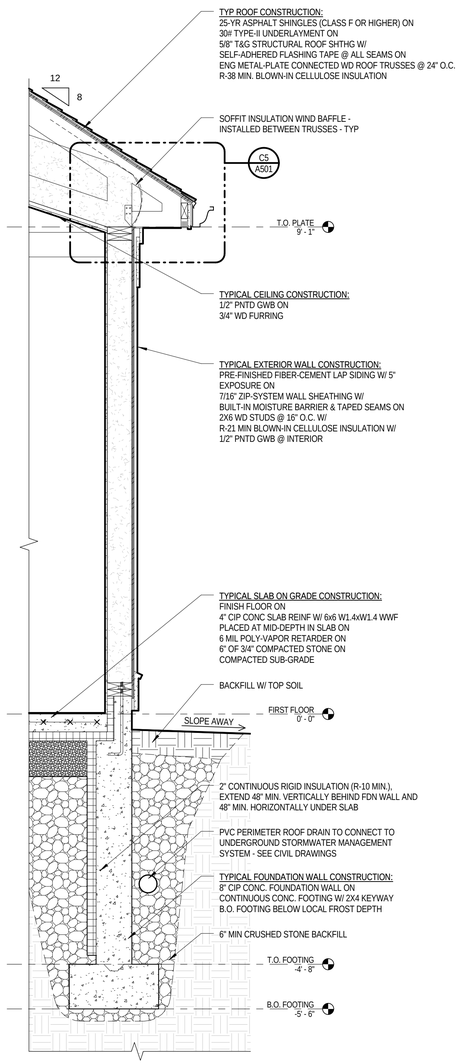


A2 / A302 WALL SECTION @ FRONT PORCH
SCALE: 3/4" = 1'-0"



A4 / A302 WALL SECTION @ GABLE WALL
SCALE: 3/4" = 1'-0"



A5 / A302 WALL SECTION @ LOW WALL
SCALE: 3/4" = 1'-0"

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CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

RONALD W. POWERS
No. 2745
REGISTERED ARCHITECT
RHODE ISLAND

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TYPICAL WALL SECTIONS

A302

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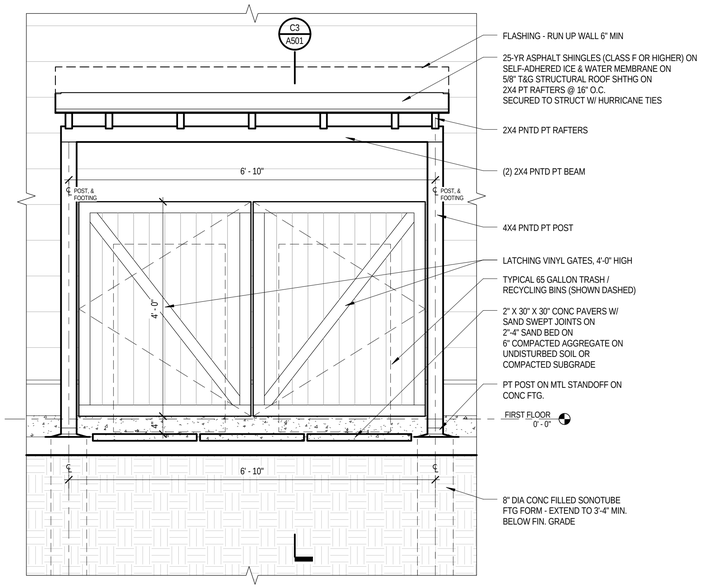
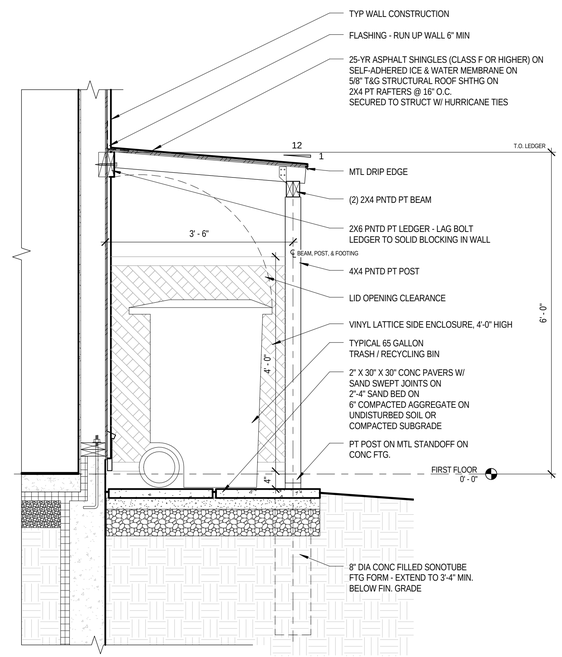
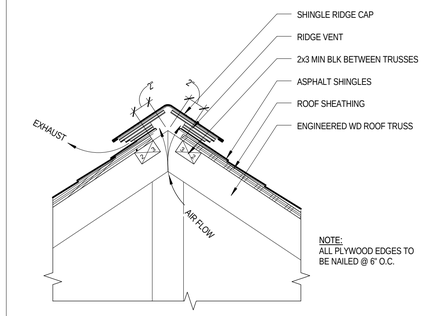


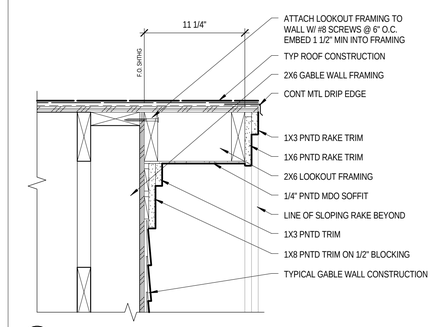
C1 A501 DETAIL @ TRASH ENCLOSURE ELEVATION
SCALE: 3/4" = 1'-0"



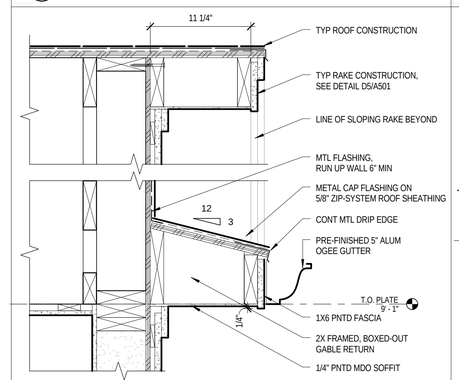
C3 A501 DETAIL @ TRASH ENCLOSURE SECTION
SCALE: 3/4" = 1'-0"



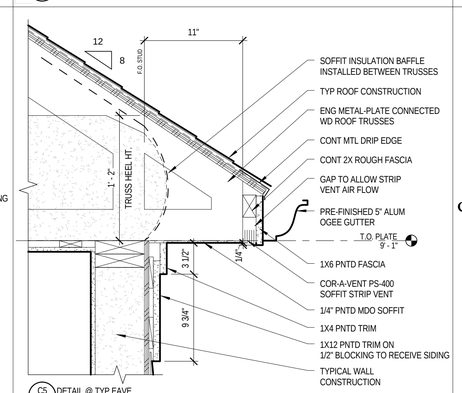
D4 A501 DETAIL @ RIDGE VENT
SCALE: 1 1/2" = 1'-0"



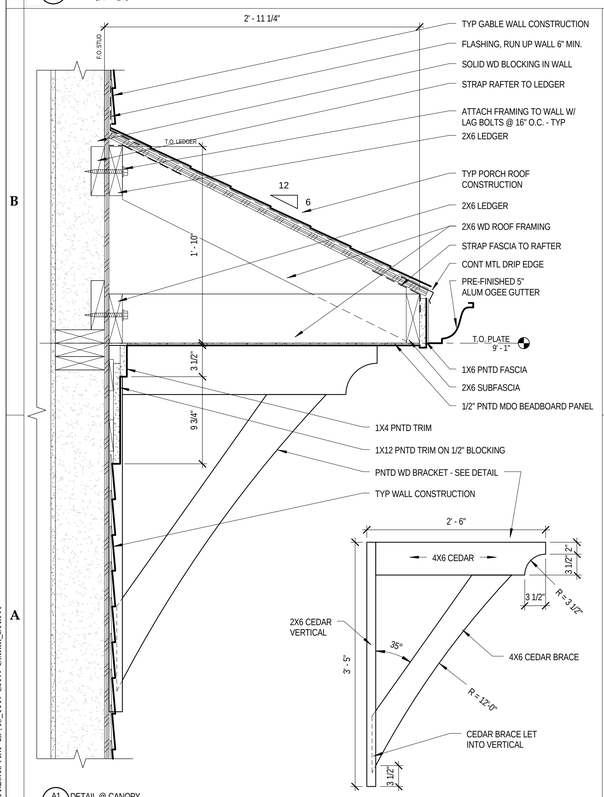
D5 A501 DETAIL @ TYP RAKE
SCALE: 1 1/2" = 1'-0"



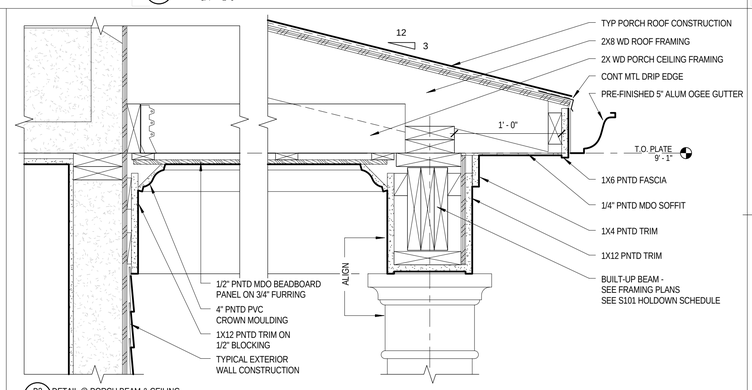
C4 A501 DETAIL @ TYP EAVE RETURN
SCALE: 1 1/2" = 1'-0"



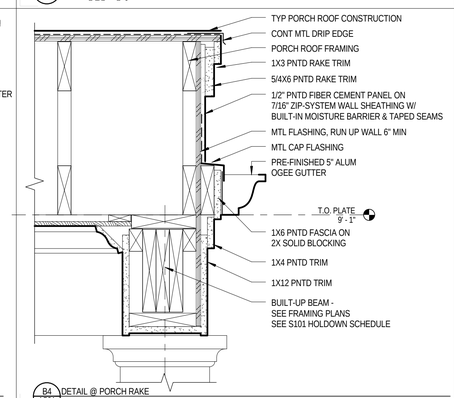
C5 A501 DETAIL @ TYP EAVE
SCALE: 1 1/2" = 1'-0"



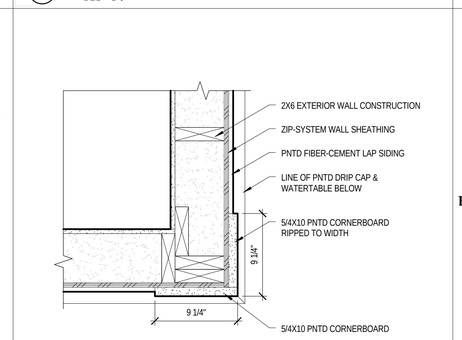
A1 A501 DETAIL @ CANOPY
SCALE: 1 1/2" = 1'-0"



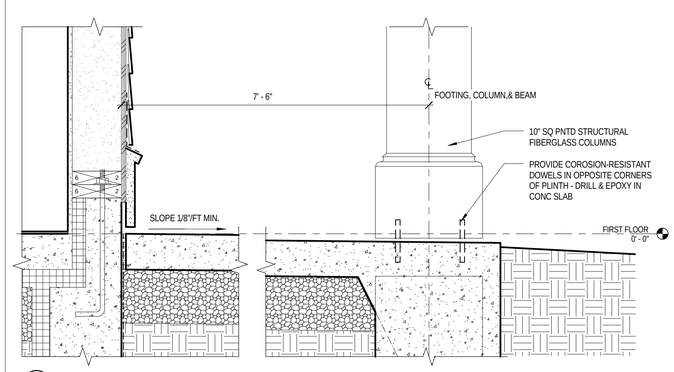
B2 A501 DETAIL @ PORCH BEAM & CEILING
SCALE: 1 1/2" = 1'-0"



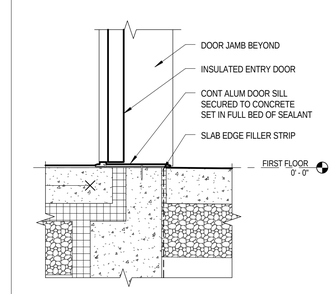
B4 A501 DETAIL @ PORCH RAKE
SCALE: 1 1/2" = 1'-0"



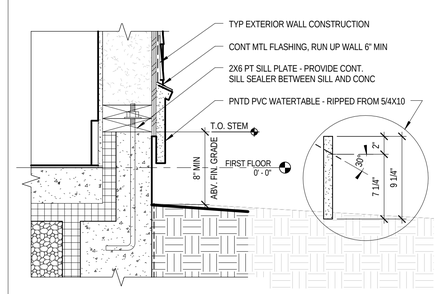
B5 A501 DETAIL @ CORNERBOARD
SCALE: 1 1/2" = 1'-0"



A2 A501 DETAIL @ PORCH DECK
SCALE: 1 1/2" = 1'-0"



A4 A501 DETAIL @ STOOP SILL
SCALE: 1 1/2" = 1'-0"



A5 A501 DETAIL @ WATERTABLE
SCALE: 1 1/2" = 1'-0"

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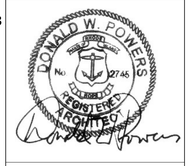
CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI



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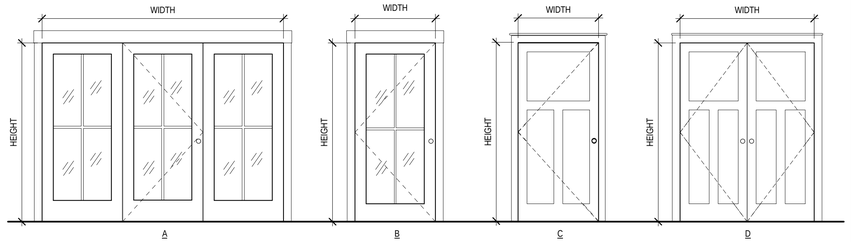
EXTERIOR DETAILS

A501

DOOR SCHEDULE

DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MANUFACTURER	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	THRESHOLD	DESCRIPTION
1	9' - 0"	7' - 0"	0' - 1 3/4"	THERMATRU OR APPROVED EQ.	A	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	INSULATED
6	3' - 0"	7' - 0"	0' - 1 3/4"	THERMATRU OR APPROVED EQ.	B	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	INSULATED
4	3' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
3	2' - 10"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
5	3' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
7	2' - 6"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
8	2' - 6"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
9	2' - 0"	6' - 8"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	C	SEMI-SOLID WD	PNTD	WD	PNTD		
2	5' - 8"	7' - 0"	0' - 1 3/8"	MASONITE OR APPROVED EQ.	D	SEMI-SOLID WD	PNTD	WD	PNTD		PAIR OF DOORS



A — TRIPLE-LEAF, SINGLE OPERATION, INSULATED FIBERGLASS SIZE AS NOTED ON SCHEDULE

B — SINGLE-LEAF, INSULATED FIBERGLASS SIZE AS NOTED ON SCHEDULE

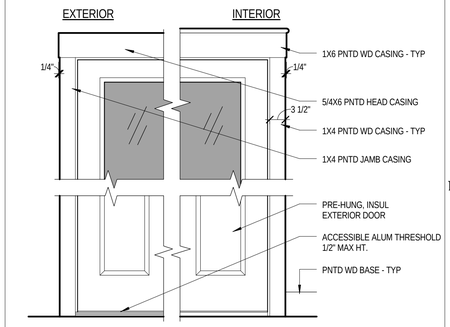
C — SINGLE-LEAF, SEMI-SOLID WD SIZE AS NOTED ON SCHEDULE

D — DOUBLE-LEAF, SEMI-SOLID WD SIZE AS NOTED ON SCHEDULE

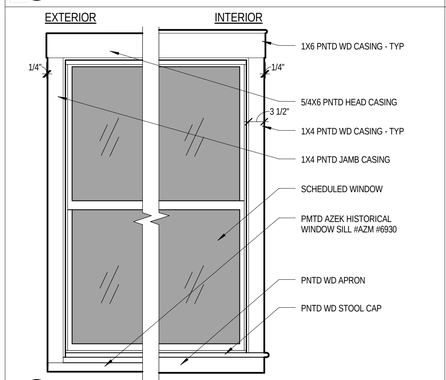
DOOR LEGEND
3/8" = 1'-0"

WINDOW SCHEDULE

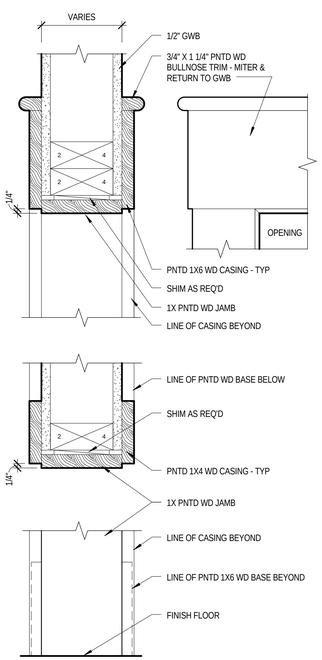
TYPE MARK	UNIT SIZE WIDTH	UNIT SIZE HEIGHT	OPERATION	COMMENTS
A	3' - 0"	6' - 0"	DOUBLE HUNG	
B	2' - 6"	3' - 6"	DOUBLE HUNG	



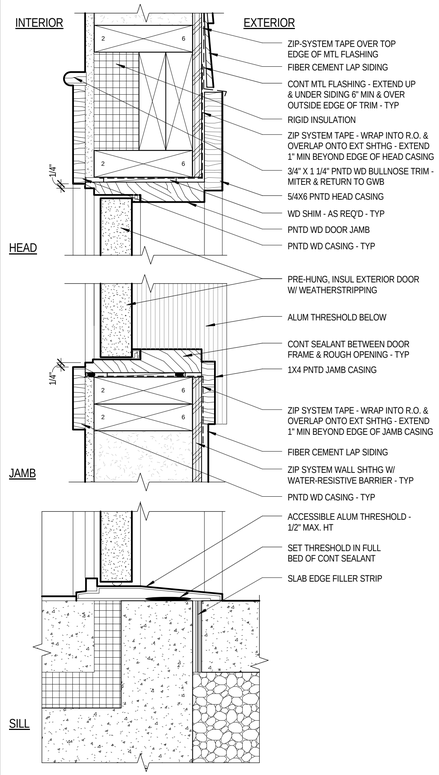
D5 / A502 TYP EXTERIOR DOOR ELEVATION
SCALE: 3/4" = 1'-0"



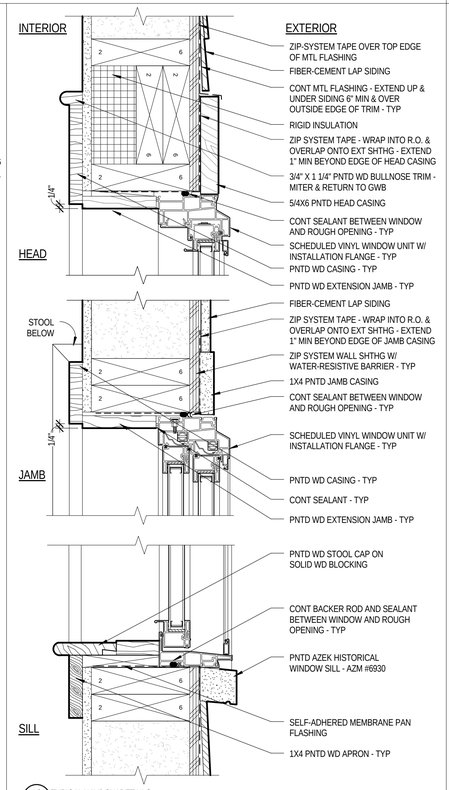
C5 / A502 TYP WINDOW ELEVATION
SCALE: 3/4" = 1'-0"



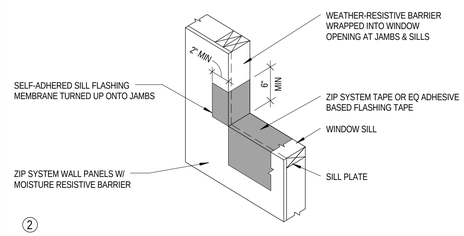
A1 / A502 INTERIOR CASED OPENING DETAILS
SCALE: 3" = 1'-0"



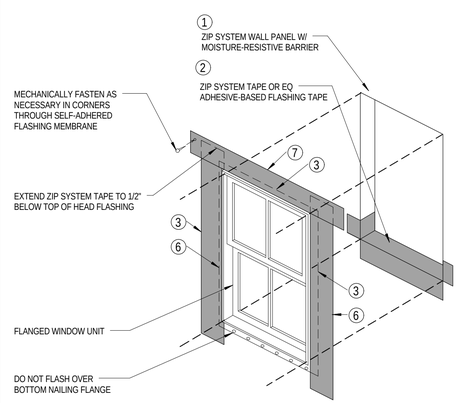
A2 / A502 TYPICAL EXTERIOR DOOR DETAILS
SCALE: 3" = 1'-0"



A3 / A502 TYPICAL WINDOW DETAILS
SCALE: 3" = 1'-0"



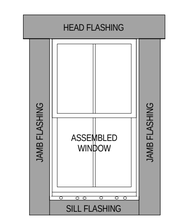
2
SILL FLASHING



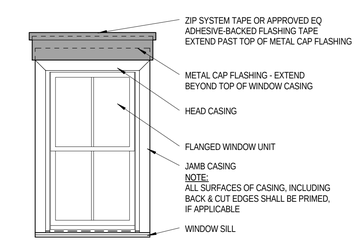
3 4 5 6 7
JAMB & HEAD FLASHING DETAILS

WINDOW INSTALLATION STEPS:

1. FASTEN ZIP SYSTEM WALL SHEATHING TO THE WOOD FRAME AND INSTALL THE ZIP SYSTEM TAPE AS SPECIFIED BY MANUFACTURER
2. APPLY ZIP SYSTEM TAPE OR APPROVED EQ ADHESIVE-BASED FLASHING TAPE, ENSURING THAT FLASHING EXTENDS UP JAMBS AT LEAST 6" & OVERHANGS SHEATHING AT LEAST 2".
3. APPLY A 3/8" NOM. DIA. BEAD OF SEALANT TO THE BACKSIDE (INTERIOR) OF THE WINDOW MOUNTING FLANGE AT THE TOP AND SIDES ONLY. PLACE BEAD IN LINE WITH ANY PRE-PUNCHED HOLES.
4. IMMEDIATELY INSTALL WINDOW USING MANUFACTURER RECOMMENDED FASTENERS.
5. APPLY BEAD OF SEALANT ACROSS THE FACE OF THE MOUNTING FLANGE AT HEAD.
6. APPLY JAMB FLASHING, EXTENDING TO 1/2" BELOW TOP OF HEAD FLASHING. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
7. APPLY HEAD FLASHING, OVERLAPPING JAMB FLASHING BY 1" MINIMUM. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
8. INSTALL METAL CAP FLASHING AND TRIM.



FINAL CLOSURE DETAIL



8
CAP FLASHING & TRIM DETAIL

A4 / A502 TYPICAL FLASHING DETAILS
SCALE: 1/2" = 1'-0"

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CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

DONALD W. POWERS No. 2745 REGISTERED ARCHITECT

100% CONSTRUCTION DOCUMENTS

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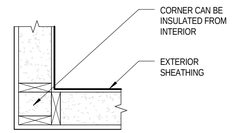
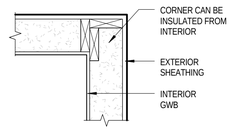
DOOR & WINDOW SCHEDULES & DETAILS

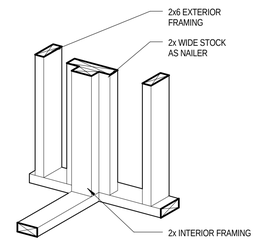
A502



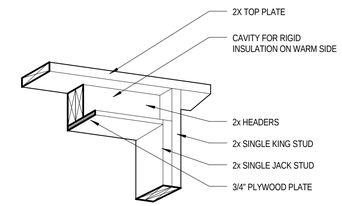
2 INSIDE CORNER



1 OUTSIDE CORNER

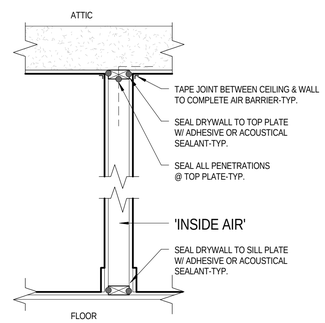


3 DRYWALL NAILER FOR INTERIOR PARTITIONS

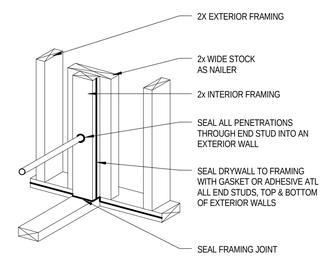


4 INSULATED HEADER

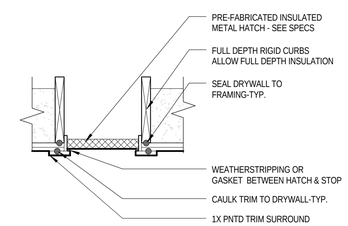
C3 / A503 TYPICAL FRAMING DETAILS
SCALE: 1" = 1'-0"



1 INTERIOR PARTITION WALL INTERSECTION CEILING & FLOOR

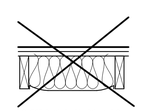


2 INTERSECTION OF INTERIOR PARTITION W/ EXTERIOR WALL



3 ATTIC HATCH

B3 / A503 TYPICAL AIR SEALING DETAILS
SCALE: 1" = 1'-0"



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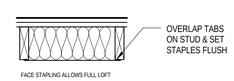
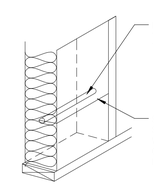
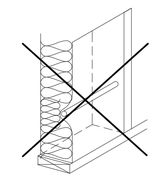


CORRECT

1 STAPLING BATT INSULATION



CORRECT



INCORRECT

2 BATT INSULATION AROUND PLUMBING, WIRING & OTHER OBSTACLES

A4 / A503 BATT INSULATION INSTALLATION
SCALE: 1" = 1'-0"

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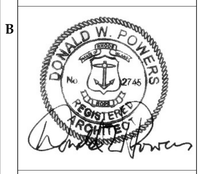
CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI



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TYPICAL CONSTRUCTION DETAILS

A503

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PLUMBING LEGEND

PIPING

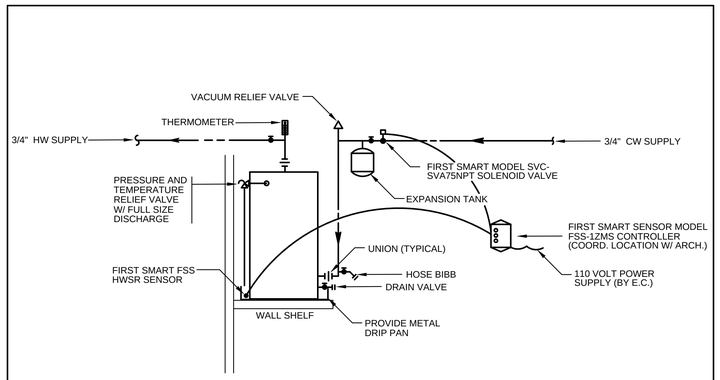
SYMBOL	ABBREVIATION	DESCRIPTION
		NEW WORK (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
	ETR	EXISTING WORK TO REMAIN (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
	RE	REMOVE EXISTING (ABOVE GROUND) (PERTAINS TO ALL SYSTEM)
		NEW WORK (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	ETR	EXISTING WORK TO REMAIN (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	RE	REMOVE EXISTING (BELOW GROUND) (PERTAINS TO ALL SYSTEM)
	CW	COLD WATER
	HW	HOT WATER 140°F
	HWC	HOT WATER RECIRCULATION
G	G	NATURAL GAS
GTV	GTV	NATURAL GAS TRAIN, APPLIANCE OR REGULATOR VENT
	S or W	SOIL OR WASTE
	V	VENT

VALVES

SYMBOL	ABBREVIATION	DESCRIPTION
	BV	BALANCING VALVE
	CV	CHECK VALVE
	DV-A	DRAIN VALVE TYPE WITH HOSE THREADS
	HB-A	HOSE BIBB TYPE WITH HOSE THREADS
	PRV	PRESSURE REDUCING VALVE
		SHUTOFF VALVE
		SHUTOFF VALVE (EXISTING)
	VIV	VALVE IN VERTICAL

GENERAL

SYMBOL	ABBREVIATION	DESCRIPTION
	CO	CLEANOUT
	FCO	CLEANOUT (FLUSH FLOOR)
	WCO	CLEANOUT (WALL)
	CTE	CONNECT TO EXISTING
	C&C	CUT & CAP
	FD-A	DRAIN (FLOOR DRAIN & TYPE)
	DN	DOWN (PENETRATES LEVEL BELOW)
		DROP (BUT DOES NOT PENETRATE LEVEL BELOW)
	P-1	FIXTURE DESIGNATION
		INDICATES DIRECTION OF FLOW
		INDICATES DIRECTION OF SLOPE DOWN
	INV	INVERT ELEVATION
		RISE (BUT DOES NOT PENETRATE LEVEL ABOVE)
	S=.01	SLOPE = 1/8" PER FOOT
	S=.02	SLOPE = 1/4" PER FOOT
	S=.05	SLOPE = 1/2" PER FOOT
	UP	UP (PENETRATES LEVEL ABOVE)
	W&V	WASTE & VENT
	GWH-A	WATER HEATER (GAS AND TYPE)
	W & T	WASTE & TRAP

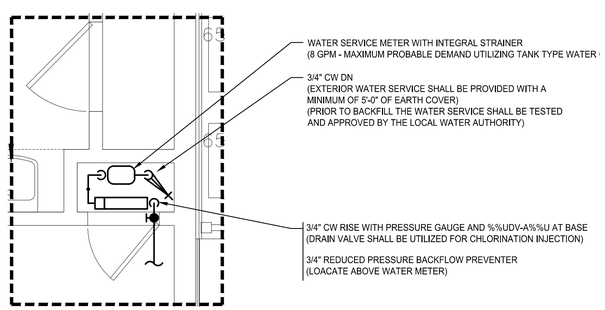


1 ELECTRIC WATER HEATER (EWH) PIPING DIAGRAM
SCALE: NONE

ELECTRIC WATER HEATER SCHEDULE

SYMBOL	STORAGE GALS	RECOVERY		NUMBER ELEMENTS	ELECTRICAL			TEMP SETTING	MANUFACTURER & MODEL
		GPH	DEG RISE		KW	V	PH		
EWH-1	20	18	80°	1	4.0	240	1	120°	A.O. SMITH DEL-10S

NOTE: PROVIDE HUBBARD "QUICK STAND" SUSPENDED WATER HEATER PLATFORM FOR EWH-1.



PLUMBING GENERAL NOTES

1. BIDDERS SHALL UTILIZE A COMPLETE SET OF PLUMBING BIDDING DOCUMENTS IN PREPARING OF BID INCLUDING DRAWINGS AND SPECIFICATIONS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ERRORS OR MISINTERPRETATIONS RESULTING FROM THE USE OF INCOMPLETE SETS OF PLUMBING BIDDING DOCUMENTS.

   THESE PLUMBING BIDDING DOCUMENTS SHALL INCLUDE:

   SPECIFICATION
   22 00 00 PLUMBING SPECIFICATION

   DRAWINGS
   P101 PLUMBING FLOOR PLAN, ROOF PLAN, LEGEND, SCHEDULES, DETAILS & GENERAL NOTES

2. THE WORK COVERED CONSISTS OF FURNISHING ALL LABOR AND MATERIALS NECESSARY TO INSTALL, COMPLETE AND READY FOR CONTINUOUS OPERATION, THE PLUMBING SYSTEMS, APPARATUS AND EQUIPMENT FOR THIS PROJECT.
3. ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THE PLUMBING SUB-CONTRACT, LABOR AND TESTING PERFORMED HEREIN SHALL BE IN COMPLETE ACCORDANCE WITH THE STATE BUILDING CODE, LOCAL FUEL GAS AND PLUMBING CODES, ALL LOCAL CODES AND REGULATIONS, NATIONAL FIRE PROTECTION ASSOCIATION, INSURANCE REGULATIONS AND REQUIREMENTS GOVERNING SUCH WORK.
4. ANY AND ALL PERMITS REQUIRED FOR INSTALLATION OF ANY MATERIAL SHALL BE OBTAINED AS PART OF THE WORK OF THE SPECIFICATION INCLUDING ALL FEES OR EXPENSES INCURRED.
5. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES AND EQUIPMENT.
6. ACCESSIBLE FIXTURES SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES AND ANSI A117.1 STANDARD ON ACCESSIBLE USABLE BUILDINGS AND FACILITIES.
7. ALL LOCATIONS OF EXISTING PIPING, FIXTURES AND EQUIPMENT INDICATED HAS BEEN OBTAINED FROM EXISTING CONDITIONS DURING SITE VISITS AND EXISTING PLANS. THIS CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING, PIPE SIZES, POINTS OF CONNECTIONS TO EXISTING PIPING, FIXTURES AND EQUIPMENT PRIOR TO COMMENCEMENT OF WORK.
8. MISCELLANEOUS DISCREPANCIES OR OMISSIONS WHICH MIGHT APPEAR ON THE PLANS OR SPECIFICATIONS WILL NOT RELIEVE THE PLUMBING SUB-CONTRACTOR OF CODE COMPLIANCE.

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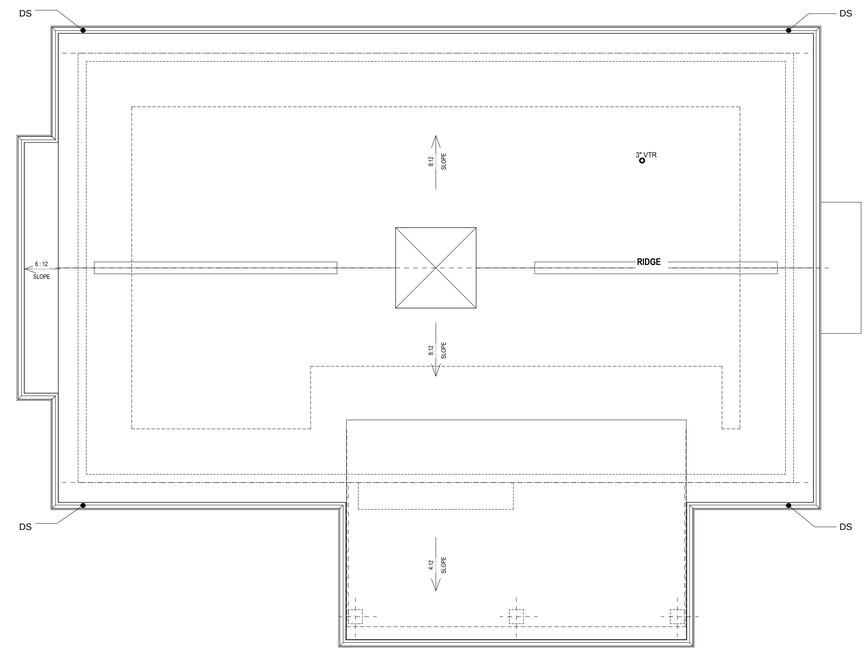
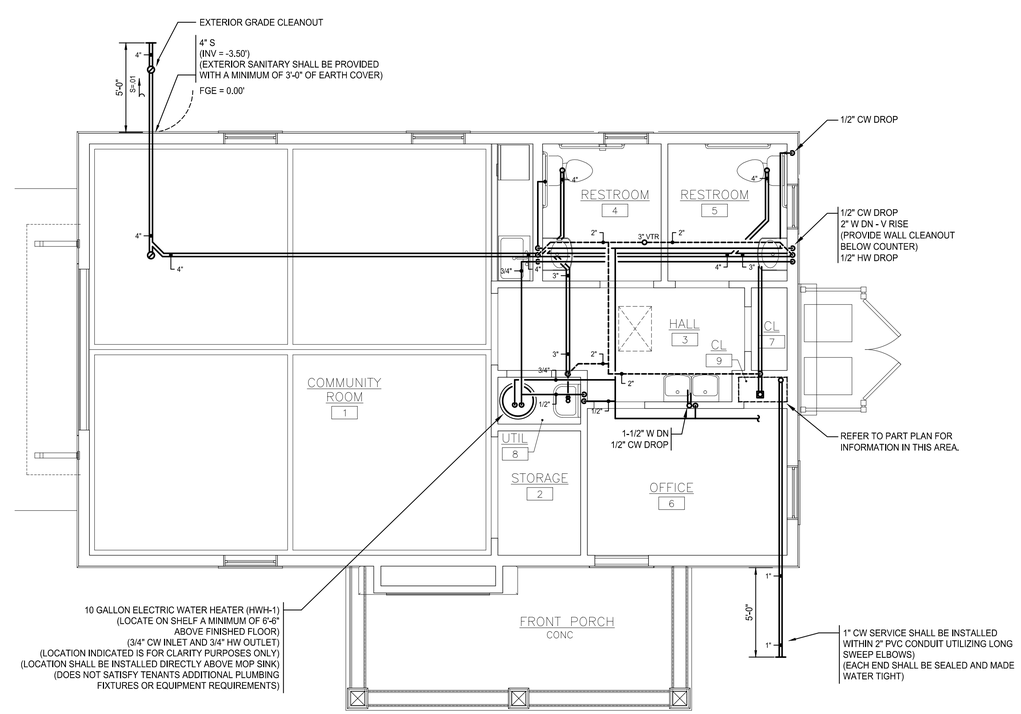


P2 / P101 ROOF PLAN
SCALE: 1/4" = 1'-0"



P1 / P101 FIRST FLOOR
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

GLEN G. MARKEY
STATE OF RHODE ISLAND
No. 7349
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

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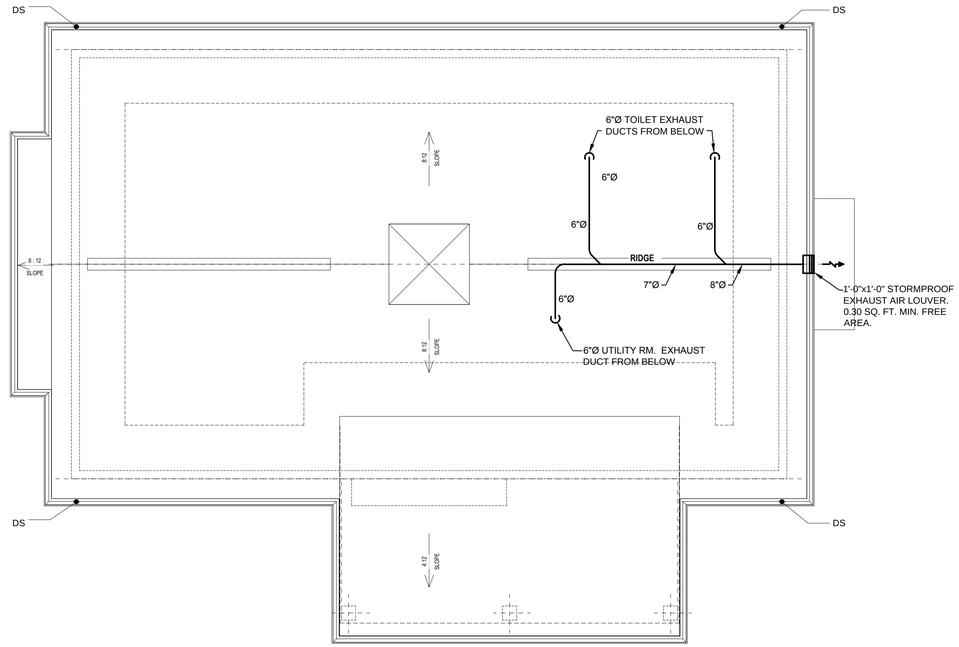
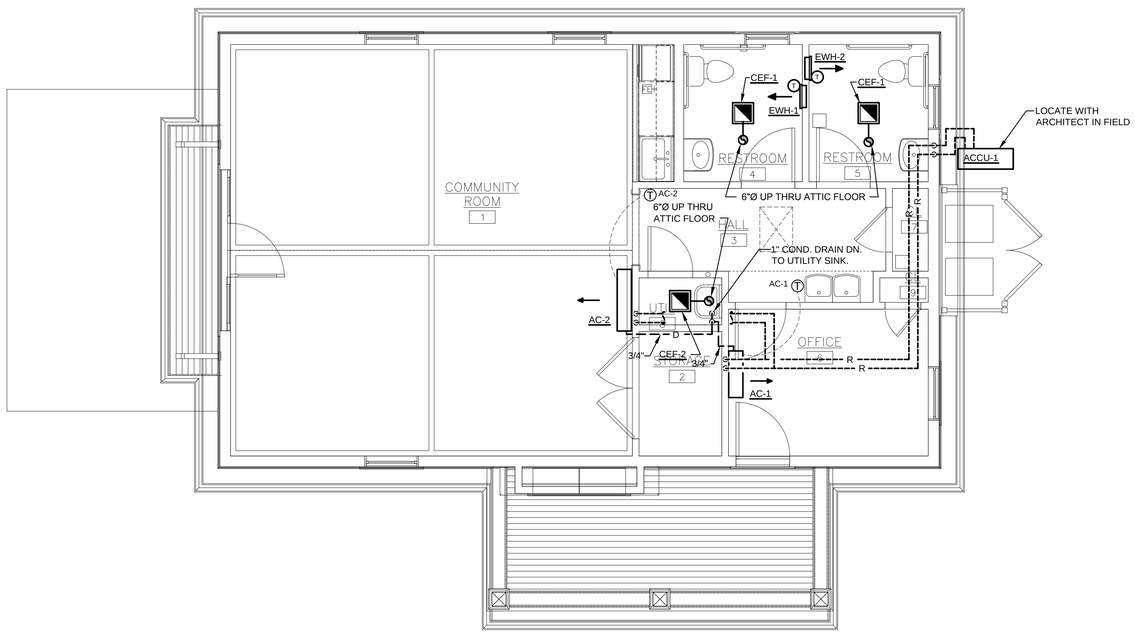
PLUMBING FLOOR PLAN, ROOF PLAN, LEGEND, SCHEDULES, DETAILS & GENERAL NOTES

P101

WITH
CT IN FIELD



M2 / M101 ROOF PLAN
SCALE: 1/4" = 1'-0"



M1 / M101 FIRST FLOOR
SCALE: 1/4" = 1'-0"

LEGEND

T	THERMOSTAT
S	SENSOR
ACCU	HEAT PUMP UNIT
AC	AIR-CONDITIONING UNIT
EWH	ELECTRIC WALL HEATER
CEF	CEILING EXHAUST FAN
-----R-----	REFRIGERANT PIPING (LIQUID AND SUCTION)
- - -D- - -	CONDENSATE DRAIN PIPING
S.A.	SUPPLY AIR
R.A.	RETURN AIR
E.A.	EXHAUST AIR
O.A.	OUTSIDE AIR

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CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED
PROFESSIONAL ENGINEER
MECHANICAL

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FLOOR PLAN & ROOF/ATTIC PLAN

M101

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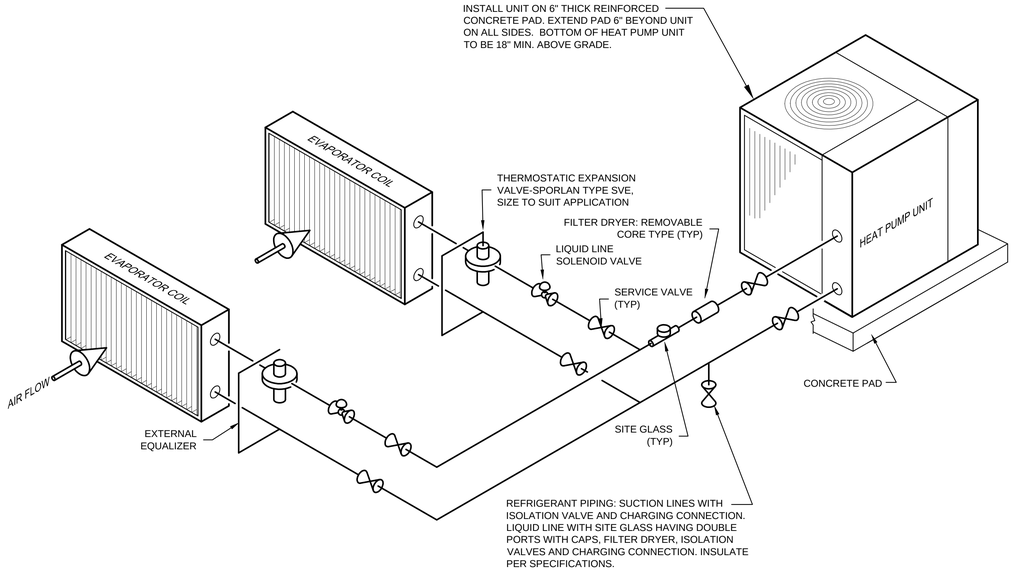

REFRIGERANT PIPING DIAGRAM

NO SCALE

ELECTRIC HEATER SCHEDULE

(BASED ON QMARK)

SYMBOL	MODEL	QUANTITY / BUILDING	TYPE	CFM	KW	MBH	ELECTRICAL DATA		NOTES
							AMPS	VOLTAGE	
EWH-1	CWH1202DS	1	RECESSED, WALL	65	0.75	2.6	3.6	208/1/60	1, 2, 3
EWH-2	CWH1208DS	1	RECESSED, WALL	65	1.0	3.4	4.8	208/1/60	1, 2, 3

NOTE:
1. PROVIDE WITH DISCONNECT SWITCH, AUTOMATIC THERMAL CUTOUT AND FAN DELAY RELAY.
2. PROVIDE WITH WALL RECESS MOUNTING ENCLOSURE.
3. PROVIDE WITH UNIT-MOUNTED THERMOSTAT.

FAN / LIGHT SCHEDULE

(BASED ON PANASONIC WHISPER GREEN)

SYMBOL	MODEL	QUANTITY / BUILDING	SERVICE	TYPE	DRIVE	CFM	ESP (IN)	FAN RPM	MOTOR DATA		NOTES
									POWER	VOLTAGE	
CEF-1	FV-05-11VKL1	2	BATHROOM	CEILING	DIRECT	53	0.25	1081	7W	115/1/60	1
CEF-2	FV-05VQ5	1	UTILITY RM.	CEILING	DIRECT	53	0.25	1081	7W	115/1/60	1

NOTE:
1. PROVIDE WITH DC MOTOR, LED LAMP, 1 WATT LED NIGHT LIGHT, CONDENSATION SENSOR AND MULTI-SPEED MOTOR WITH TIME DELAY.
2. PROVIDE WITH DC MOTOR AND MULTI-SPEED MOTOR WITH TIME DELAY.

SPLIT-SYSTEM HEAT PUMP SCHEDULE

(BASED ON DAIKIN)

INDOOR UNIT										OUTDOOR UNIT										
SYMBOL	MODEL	CFM	MOUNTING LOCATION	COOL. CAP. MBH	HEAT. CAP. MBH	ELECTRICAL DATA			NOTES	SYMBOL	MODEL	COOL. CAP. MBH	HEAT. CAP. MBH	EER	SEER	HSPF	ELECTRICAL DATA			NOTES
						MCA	MFS	VOLTAGE									MCA	MFS	VOLTAGE	
AC-1	FXAQ07PVJU	260	WALL-MT'D.	6.4	8.5	0.4	15	208/1/60	1, 2, 3, 4, 7, 8	ACCU-1	RTXQ36TAVJU	30.7	28.0	12.0	18.0	10.3	16.5	25	208/1/60	3, 4, 5, 7
AC-2	FXAQ24PVJU	635	WALL-MT'D.	20.6	20.9	0.6	15	208/1/60	1, 2, 3, 4, 7, 8											

NOTES:
1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH AUTOMATIC FAN SPEED CONTROL AND WIRED PROGRAMMABLE THERMOSTAT.
3. REFER TO MANUFACTURER'S GUIDELINES FOR LINE SIZING AND ALL INSTALLATION INSTRUCTIONS.
4. FURNISH AND INSTALL ALL REQUIRED INTERLOCKING CONTROLS & PIPING FOR REQUIRED SEQUENCE OF OPERATIONS.
5. PROVIDE WITH STARTER & DISCONNECT.
6. NOT USED
7. OUTDOOR DESIGN TEMPERATURES: 95°F SUMMER, 0°F WINTER.
8. PROVIDE HARD-WIRED PROGRAMMABLE THERMOSTAT.

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NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #:
DATE: MAY 27, 2016
SCALE: 1/4" = 1'-0"

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SCHEDULES AND DETAILS

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GENERAL ELECTRICAL SPECIFICATIONS

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. REFER TO THE TENANT'S LEASE INFORMATION FOR SPECIFIC REQUIREMENTS. THE TENANT'S LEASE INFORMATION SHALL SUPERCEDE THIS SPECIFICATIONS WHERE A CONFLICT OCCURS BETWEEN THE TWO.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.
9. ALL EQUIPMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
10. FURNISH AND INSTALL TEMPORARY POWER AS REQUIRED TO OPERATE TOOLS AND LIGHTING. PROVIDE PANELS AND LIGHTING FIXTURES FOR CONSTRUCTION AS NEEDED.
11. THE ELECTRICAL CONTRACTOR (E.C.) SHALL INSPECT THE SITE, PRIOR TO SUBMITTING HIS BID, AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH THIS WORK SHALL BE PREFORMED. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK WHICH REQUIRED SHALL NOT EXCUSE THE E.C. FROM HIS OBLIGATIONS TO SUPPLY AND INSTALL THE WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND THE DRAWINGS AND UNDER ALL SITE CONDITIONS AS THEY EXIST.
12. THE PLANS DEPICT THE LOCATION OF ALL FIXTURE AND EQUIPMENT AND ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK, BUT THE CONTRACTOR SHALL UNDERSTAND THAT SUCH DETAILS ARE PART OF THE WORK.
13. THE ELECTRICAL CONTRACTOR SHALL CAREFULLY VERIFY ALL MEASUREMENTS AT THE SITE AND DETERMINE THE EXACT LOCATION OF ALL CHASES AND OPENINGS REQUIRED BY THIS WORK AND SHALL PROVIDE ALL SLEEVES, INSERTS, AND HANGERS REQUIRED.
14. BRANCH CIRCUITS ADDED TO ANY EXISTING PANELBOARDS SHALL ALSO INCLUDE THE CIRCUIT BREAKER DIRECTORY TO BE UPDATED. IF NO DIRECTORY EXISTS THAN ONE SHALL BE PROVIDED INDICATING THE NEW CIRCUITS ADDED.
15. WIRE AND CABLE FOR BRANCH CIRCUITS SHALL BE TYPE THWN/THHN, INSULATED FOR 600VOLTS, RATED AT 75°C MINIMUM AND UL LISTED FOR BUILDING WIRE USE. WIRE SIZE SHALL BE A MINUMUM OF #12 AWG SOLID. ALL CONDUCTORS SHALL BE COPPER. ALL WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS. METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR.
16. FIRE ALARM SYSTEM WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS WITH INSULATED THROAT. FIRE ALARM METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR. THE MINIMUM WIRE SIZE FOR FIRE ALARM WIRING SHALL BE #14 AWG. ALL SPLICES SHALL BE MADE ON SCREW TYPE TERMINAL STRIPS. WIRE NUTS SHALL NOT BE USED. T-TAPPING OF FIRE ALARM WIRING SHALL NOT BE ALLOWED.
17. RED PAINTED TERMINAL CABINETS AND BOXES WITH LOCKABLE COVERS SHALL BE PROVIDED AT ALL JUNCTION POINTS FOR FIRE ALARM SYSTEM WIRING.
18. ADDITIONAL JUNCTION BOXES BEYOND THOSE SHOWN ON THE DRAWINGS SHALL BE PROVIDED AS NECESSARY FOR ALL ELECTRICAL INSTALLATIONS.
19. ALL CUTTING, PATCHING AND FIRESTOPPING FOR ELECTRICAL INSTALLATIONS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
20. PROVIDE CONDUIT SLEEVES FILLED WITH AN APPROVED FIRE RESISTANT MATERIAL WHERE FIRE RATED WALLS, FLOORS OR CEILINGS ARE PENETRATED. APPROVED WATERTIGHT CONDUIT SLEEVES SHALL BE PROVIDED WHERE WALLS ARE PENETRATED EITHER ENTERING OR LEAVING THE BUILDING.
21. RECEPTACLES, LIGHT FIXTURES, AND POWER ITEMS BRANCH CIRCUIT WIRING MAY NOT BE SHOWN BUT SHALL BE PROVIDED AS REQUIRED. MINIMUM WIRING SHALL BE 2#12 PLUS 1#12GROUND IN 3/4"C. NO MORE THAN THREE PHASES MAY BE COMBINED IN A SINGLE HOMERUN AND EACH PHASE SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL.
22. ALL CONDUITS SHALL CONTAIN A GREEN SAFETY GROUND WIRE. BOND ALL PANELS, CABINETS, ENCLOSURES, CONDUITS, ETC., AS REQUIRED PER CODE.
23. ALL SUPPORTS AND ANCHORS SHALL BE DESIGNED AND INSTALLED PER REQUIREMENTS FOR THE SEISMIC CLASSIFICATIONS AS OUTLINED IN THE APPLICABLE BUILDING CODE. SITE LOCATION AND PREVAILING ORIENTATION SHALL BE TAKEN INTO ACCOUNT IN THE DESIGN.
24. SUBMIT SIX (6) COPIES FOR REVIEW AND APPROVAL OF THE FOLLOWING SHOP DRAWINGS: LIGHTING FIXTURES, WIRING DEVICES, RACEWAY, POKE-THRU DEVICES AND BUILDING WIRE & CABLE.

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	18" A.F.F.
	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	QUADRAPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE COVER")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE" COVER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	SPECIAL NEMA CONFIGUATION OUTLET; VERIFY NEMA TYPE WITH EQUIPMENT TO BE SERVED.	18" A.F.F.
J	JUNCTION BOX; SIZE AS REQUIRED PER CODE.	
	TEL./DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	TELEPHONE OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
IC	INTERCOM SYSTEM PROVIDE BACKBOX & 3/4" CONDUIT W/PULL STRING TO ABOVE CEILING. MIRCOM K-SERIES INTERCOM SYSTEM #IC-51-3 VANDAL RESISTANT STATION. COORDINATE INSTALLATION OF ALL ASSOCIATED EQUIPMENT WITH ARCHITECTURAL DRAWINGS.	REFER TO ARCHITECTURAL DWGS
	MOTOR	
	PANELBOARD SURFACE MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION.	MOUNT 6'-6" AFF TO TOP BREAKER.
	PANELBOARD FLUSH MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION. FLUSH MOUNTED PANELS SHALL BE SET IN 6" (MIN.) STUD WALLS.	MOUNT 6'-6" AFF TO TOP BREAKER.
1,3 A; A/1,3	HOMERUN TO PANELBOARD (LOADCENTER); "A" INDICATES PANEL, "1,3" INDICATES CIRCUIT NUMBERS. REFER TO "TYPICAL CIRCUITING DETAIL" ON PLANS. NOTE: ALSO INDICATED AS A/1,3.	
MS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #DT-200/DT-205 SERIES OR (APPROVED EQUAL)	MOUNT TO FIXTURE / MTG. J-BOX.
WS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #W500A. OR (APPROVED EQUAL). PROVIDE WITH REQ'D. POWER PACK LISTED BELOW. INSTALL ONE WALL SENSOR / POWER PACK ON EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQT'S.	48" AFF
PP	PROVIDE A REMOTE POWER PACK FOR WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #B120E-P. OR (APPROVED EQUAL). PROVIDE POWER PACK FOR EACH WALL SENSOR EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQT'S.	
S3a	THREE-WAY SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
Sa	SINGLE POLE SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
SM	MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	42" AFF
J 60/50	FUSED DISCONNECT SWITCH. 60/50 INDICATES FRAME SIZE/FUSE SIZE IN THAT ORDER. STARTERS FOR HVAC EQUIPMENT BY MECHANICAL CONTRACTOR.	
	GROUND.	
EBS	EMERGENCY BURNER SWITCH, SLATER CAT. No. 730 BR WITH RED FACEPLATE MARKED "BURNER EMERGENCY SWITCH". PROVIDE A CLEAR PROTECTIVE COVER. REFER TO DETAIL ON DWG E4.3.	72" AFF
FM	FIRE-O-MATIC SWITCH MOUNTED OVER BURNER. REFER TO DETAIL ON THIS DRAWING.	
TV	CABLE TELEVISION OUTLET.	18" A.F.F.
PC	PHOTOCELL TORK #2100 SERIES MOUNTED AT HIGHEST POINT ON NORTH SIDE OF BUILDING. ORIENT TO SENSE SKY LIGHT AND NOT PARKING AREA LIGHTING.	

ENGINEERING DESIGN SERVICES INCORPORATED
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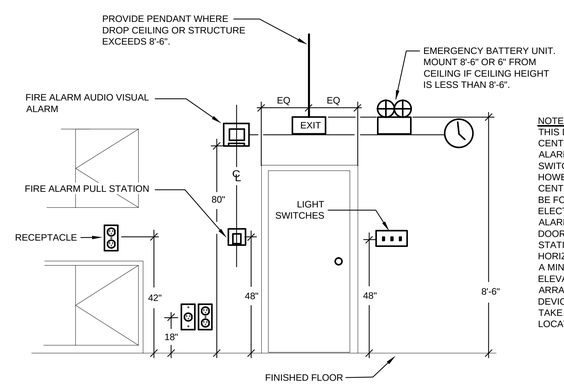
TYPICAL FIRE STOPPING NOTES

A. GENERAL: FIRE STOPPING SHALL BE PROVIDED BY THIS CONTRACTOR FOR ALL FLOOR, CEILING AND FIRE RATED WALL PENETRATIONS FOR CONDUIT, SLEEVES AND/OR CABLING AS REQUIRED BY JOB CONDITIONS.

B. THE CONTRACTOR SHALL PROVIDE A FIRE STOP SYSTEM IN ACCORDANCE WITH THE FOLLOWING:

1. THE SYSTEM SHALL CONSIST OF A WATERBASED SEALANT AND SUITABLE DAMMING MATERIALS (WHERE REQUIRED) AND BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. THE SEALANT SUPPLIED SHALL BE A TWO STAGED INTUMESCENT AND CAPABLE OF EXPANDING UP TO 8 TIMES ITS ORIGINAL VOLUME.
3. THE SEALANT SUPPLIED SHALL CONTAIN NO ASBESTOS, NO FIBERGLASS, AND NO SOLVENTS NOT CORROSIVE MINERAL SALTS OF ANY KIND.
4. THE SEALANT SHALL FORM A SURFACE CAPABLE OF BEING SANDED AND PAINTED TO MATCH SURROUNDING SURFACES AND SHALL BE IMPERVIOUS TO WATER WHEN DRY.
5. THE FIRE STOP SYSTEM SHALL BE TESTED TO THE TIME/TEMPERATURE REQUIREMENTS OF ASTM E119 AND SHALL BE UL1479 (ASTM E814) AND CLASSIFIED FOR UP TO 3 HOURS.
6. THE FIRE STOP SEALANT SHALL BE SPECSEAL SEALANT AS MANUFACTURED BY SPECIFIED TECHNOLOGIES, INC. OR APPROVED EQUAL.
7. SPECIAL CARE SHALL BE TAKEN WITH ELECTRICAL SYSTEMS NOT TO COMPROMISE ANY OF THE BUILDING FIRE PARTITIONS, FLOORS, WALLS OR MEMBRANES. PROVIDE ALL FIRESTOPPING REQUIRED TO COMPLY WITH THE BUILDING CODE, THE ELECTRICAL CODE AND THE UL LISTING OF EACH ASSEMBLY. COORDINATE LOCATIONS AND TYPES OF MEMBRANES WITH ARCHITECT.



NOTE:
THIS DETAIL INDICATES CENTERLINE FOR FIRE ALARM/PULL STATION SWITCHES AND RECEPTACLES. HOWEVER THIS SAME CENTERLINE PRINCIPLE SHALL BE FOR ALL GROUP MTD. ELECTRICAL DEVICES. IF FIRE ALARM IS ON SAME SIDE OF DOOR AS SWITCHES, PULL STATION SHALL BE HORIZONTALLY SEPARATED BY A MINIMUM OF 18". THIS ELEVATION IS A GENERAL ARRANGEMENT OF OF DEVICES. ARCHITECT PLANS TAKE PRECEDENCE FOR EXACT LOCATIONS.

MOUNTING HEIGHT DETAIL

NOT TO SCALE

ABBREVIATIONS

A	AMPERES	F.A.	FIRE ALARM	MTD	MOUNTED
ADA	AMERICANS WITH DISABILITIES ACT	FACP	FIRE ALARM CONTROL PANEL	NAC	F.A. NOTIFICATION APPLIANCE CIRCUIT EXPANDER PANEL
AMPS	AMPERES	FLR	FLOOR	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	G.C.	GENERAL CONTRACTOR	P	POLE
A/C	AIR CONDITIONING	GFCI	GROUND FAULT CIRCUIT INTERUPTER.	PNL	PANEL
AWG	AMERICAN WIRE GAGE	G	GROUND	RE	RE-LOCATED EXISTING DEVICE OR EQUIPMENT SHOWN IN NEW LOCATION
BLDG.	BUILDING	GND	GROUND	TYP	TYPICAL
C	CONDUIT	HVAC	HEATING, VENTILATING, & & AIR CONDITIONING	UL	UNDERWRITERS LABATORY
CLG	CEILING	JB	JUNCTION BOX	UON	UNLESS OTHERWISE NOTED
DN	DOWN	KVA	KILOVOLT AMPERES	V	VOLTS
DWG	DRAWING	KW	KILOWATT	W	WATTS
E.C.	ELECTRICAL CONTRACTOR	LTG	LIGHTING	WH	WATER HEATER
EPO	EMERGENCY POWER OFF	MAX	MAXIMUM	WP	WEATHER-PROOF
EQ	EQUAL	MECH	MECHANICAL	℄	CENTERLINE
ER	EXISTING TO BE REMOVED	MIN	MINIMUM		
ERN	EXISTING TO REMAIN				
ERL	EXISTING TO BE RE-LOCATED				

NOTES FOR ALUMINUM EQUIPMENT

1. THESE DRAWINGS ARE BASED ON THE USE OF COPPER IN CONDUCTORS, TRANSFORMER WINDINGS, SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS.

2. ALTHOUGH PERMITTED BY CODE, THIS OFFICE DOES NOT RECOMMEND THE USE OF ALUMINUM ELECTRICAL EQUIPMENT.

3. USE OF ALUMINUM CONDUCTORS, TRANSFORMERS WITH ALUMINUM WINDINGS AND SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS WITH ALUMINUM BUSS IS AT THE DISCRETION & DECISION OF THE OWNER.

4. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE ALL CONDUCTOR AND CONDUIT SIZES, PER NEC, SHOULD ALUMINUM BE USED.

5. IF ALUMINUM EQUIPMENT IS USED IN ANY OF THE ELECTRICAL COMPONENTS OF ITEM "3" ABOVE, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
   a. INSTALLATION SHALL BE IN ACCORDANCE WITH IEEE STD. 241-1990, PARAGRAPH 8.7.2
   b. WHEN CUTTING CABLE, AVOID NICKING THE STRANDS.
   c. UNPLATED CONTACT SURFACES SHALL BE CLEANED WITH WIREBRUSH, STEEL WOOL, EMERY CLOTH OR SIMILAR ABRASIVE TOOL OR MATERIAL.
   d. PLATED SURFACES SHALL BE CLEANED WITH AN APPROVED SOLVENT.
   e. APPLY JOINT COMPOUND TO THE CONDUCTOR IF THE CONNECTOR DOES NOT ALREADY HAVE IT.
   f. USE ONLY CONNECTORS SPECIFICALLY TESTED AND APPROVED FOR USE ON ALUMINUM CONDUCTORS.
   g. REFER TO ANSI/UL486B-1982.
   h. ON MECHANICAL CONNECTORS, TIGHTEN THE CONNECTOR WITH A SCREWDRIVER OR WRENCH TO THE REQUIRED TORQUE. REMOVE EXCESS COMPOUND.
   i. ON COMPRESSION CONNECTORS, CRIMP THE CONNECTOR USING THE PROPER TOOL AND DIE. REMOVE EXCESS COMPOUND.
   j. ALWAYS USE JOINT COMPOUND THAT IS COMPATIBLE WITH THE INSULATION AND AS RECOMMENDED BY THE MANUFACTURER.
   k. WHEN MAKING AN ALUMINUM-TO-COPPER CONNECTION THAT IS EXPOSED TO MOISTURE, PLACE THE ALUMINUM CONDUCTOR ABOVE THE COPPER. IF THERE IS NO EXPOSURE TO MOISTURE, THE RELATIVE POSITION OF THE TWO METALS IS NOT IMPORTANT.
   i. WHEN USING INSULATED CONDUCTORS OUTDOORS, EXTEND THE CONDUCTOR INSULATION OR COVERING AS CLOSE TO THE CONNECTOR AS POSSIBLE TO MINIMIZE WEATHERING THE JOINT. OUTDOOR JOINTS SHALL BE COMPLETELY PROTECTED BY TAPE OR OTHER MEANS. WHEN OUTDOOR JOINTS ARE COVERED OR PROTECTED, THE PROTECTION SHALL COMPLETELY EXCLUDE MOISTURE.

SEISMIC RESTRAINT NOTE

A. GENERAL: IT IS THE INTENT OF THIS SEISMIC SPECIFICATION TO KEEP ALL ELECTRIAL BUILDING SYSTEM COMPONENTS IN PLACE DURING A SEISMIC EVENT. ALL ELECTRICAL SYSTEMS MUST BE INSTALLED IN STRICT ACCORDANCE WITH SEISMIC CODES, COMPONENT MANUFACTURER'S AND BUILDING CONSTRUCTION STANDARDS. WHENEVER A CONFLICT OCCURS BETWEEN THE MANUFACTURER'S OR CONSTRUCTION STANDARDS, THE MOST STRINGENT SHALL APPLY.

B. THIS CONTRACTOR SHALL ENGAGE A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE JURISDICTION OF THIS PROJECT TO REVIEW THE ENTIRE INSTALLATION TO DETERMINE ALL SEISMIC RESTRAINT REQUIREMENTS AND METHODS. CONTRACTOR SHALL SUBMIT A REPORT OUTLINING THE STRUCTURAL ENGINEER'S REVIEW AS WELL AS SEISMIC RESTRAINT SHOP DRAWINGS AND SUPPORTING CALCULATIONS PREPARED BY THE PROFESSIONAL STRUCTURAL ENGINEER FOR REVIEW BY THE ARCHITECT.

C. SEISMIC RESTRAINTS SHALL BE DESIGNED IN ACCORDANCE WITH SEISMIC FORCE LEVELS AS DETAILED IN THE APPLICABLE BUILDING CODE.

1. ALL EQUIPMENT, CONDUIT AND PULL BOXES SHALL BE ADEQUATELY RESTRAINED TO RESIST SEISMIC FORCES. RESTRAINT DEVICES SHALL BE DESIGNED AND SELECTED TO MEET SEISMIC REQUIREMENTS AS DEFINED IN THE LATEST ISSUE OF THE BOCA NATIONAL BUILDING CODE IN ACCORDANCE WITH THE APPLICABLE SEISMIC ZONE.

2. ANCHOR BOLT CALCULATORS, SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED SHOWING ADEQUACY OF THE BOLT SIZING AND TYPE. STAMPED CALCULATIONS SHALL ALSO BE FURNISHED FOR ANCHORS ON RESTRAINT DEVICES, CABLES, ISOLATORS AND RIGIDLY MOUNTED EQUIPMENT.

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CHURCHWOODS - BUILDING 8
BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE		
NO.	ISSUE	DATE

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ELECTRICAL LEGEND, SPEC. & NOTES

E100

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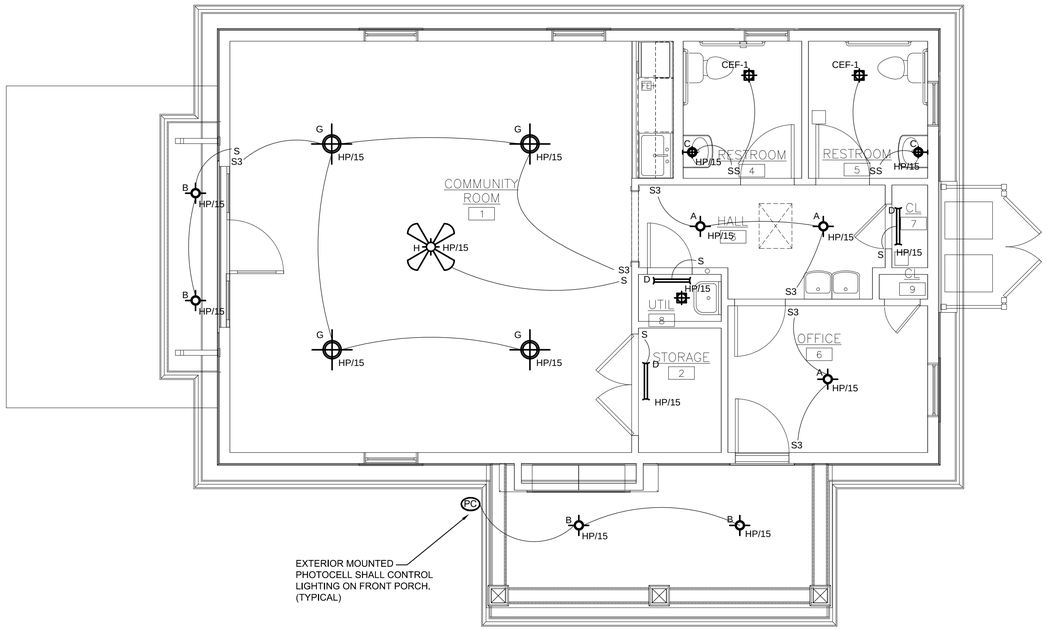
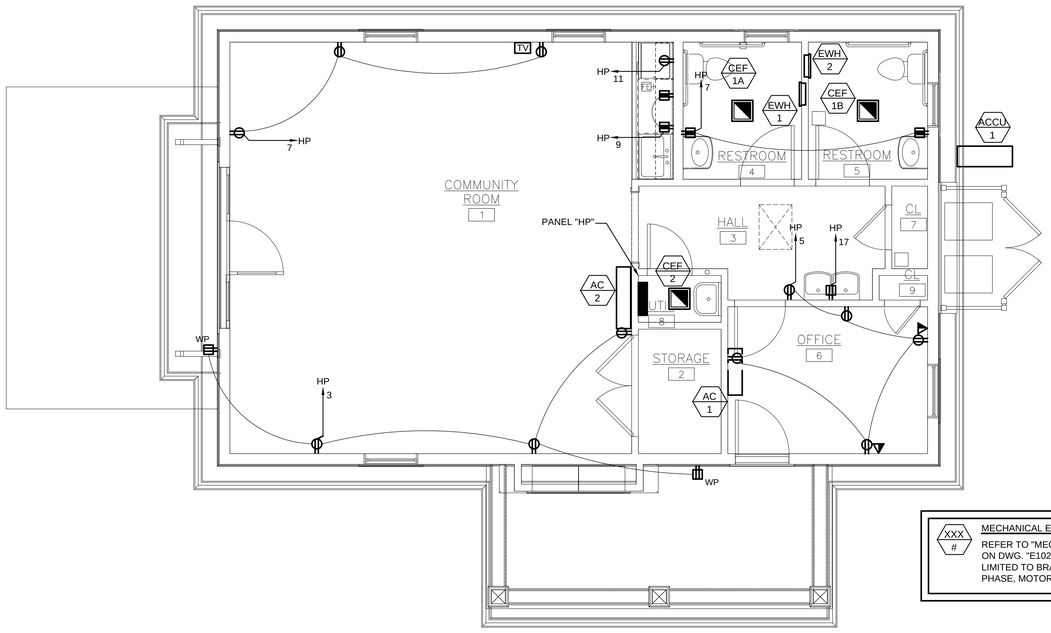


1 E101 FIRST FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'-0"



2 E101 FIRST FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"

XXX #	MECHANICAL EQUIPMENT CONNECTION TAG: REFER TO "MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE" ON DWG. "E102". FOR ALL CIRCUITING INFORMATION, INCLUDING BUT NOT LIMITED TO BRANCH CIRCUITING WIRING AND CONDUIT SIZE, VOLTAGE, PHASE, MOTOR CONTROL, DISC. SWITCH & CIRCUIT BREAKER.

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ELECTRICAL FLOOR PLANS

E101

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TYPICAL ELECTRICAL NOTES

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

XXX # ITEM No.	DESCRIPITION	LOCATION	EQUIPMENT CHARACTERISTICS					CIRCUIT	CIRCUIT BREAKER (HACR TYPE)	FEEDER & CONDUIT	DISCONNECT SWITCH				MANUAL MOTOR CONTROLLER	REMARKS
			VOLTS	PH	FREQ.	(KW) / HP	FLA				SIZE	FUSE	POLES	NEMA		
ACCU-1	AIR CONDITIONER	SEE PLANS	208	1	60	-	16.5	HP/10,12	25A/2P	2#10 + 1#10 GND. IN 3/4" C.	30	25	2	3R	PROVIDE "WP" DISCONNECT SWITCH WITH FUSING AS INDICATED.	-
AC-1	AIR CONDITIONER	SEE PLANS	208	1	60	-	0.4	HP/14,16	15A/2P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
AC-2	AIR CONDITIONER	SEE PLANS	208	1	60	-	0.6	HP/14,16	15A/2P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
CEF-1a	EXHAUST FAN	SEE PLANS	120	1	60	7W	-	HP/6	15A/1P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
CEF-1b	EXHAUST FAN	SEE PLANS	120	1	60	7W	-	HP/6	15A/1P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
CEF-2	EXHAUST FAN	SEE PLANS	120	1	60	7W	-	HP/8	15A/1P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
EWH-1	ELECTRIC HEATER	SEE PLANS	208	1	60	-	3.6	HP/2,4	15A/1P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
EWH-2	ELECTRIC HEATER	SEE PLANS	208	1	60	-	4.8	HP/2,4	15A/1P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-

1. COORDINATE WITH HVAC CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
2. COORDINATE WITH PLUMBING CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
3. ALL DISCONNECTING MEANS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
4. ALL STARTERS, VFD'S ETC. SHALL BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE ALL HVAC EQUIPMENT.
5. ALL HVAC CONTROL WIRING SHALL BE PROVIDED BY OTHERS.

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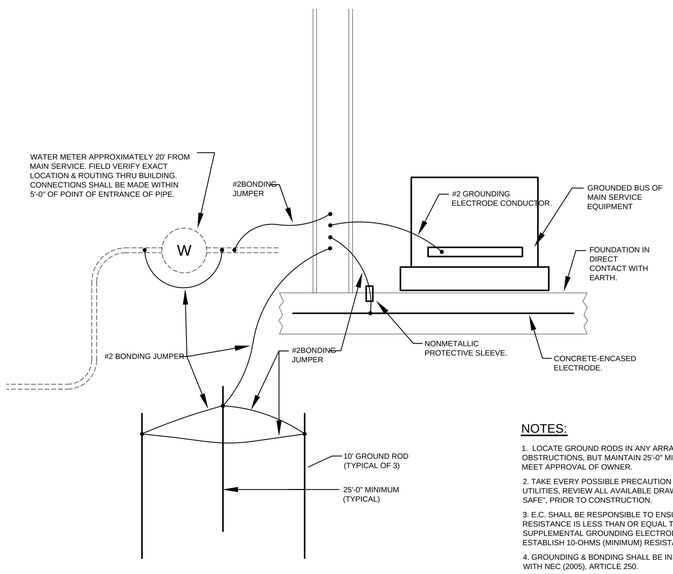


NOTES:

1. LOCATE GROUND RODS IN ANY ARRANGEMENT TO AVOID OBSTRUCTIONS, BUT MAINTAIN 25'-0" MINIMUM SEPARATION AND MEET APPROVAL OF OWNER.
2. TAKE EVERY POSSIBLE PRECAUTION TO AVOID UNDERGROUND UTILITIES, REVIEW ALL AVAILABLE DRAWINGS AND CONTACT "DIG SAFE", PRIOR TO CONSTRUCTION.
3. E.C. SHALL BE RESPONSIBLE TO ENSURE THAT GROUND RESISTANCE IS LESS THAN OR EQUAL TO 10-OHMS. E.C. SHALL SUPPLEMENTAL GROUNDING ELECTRODES AS NECESSARY TO ESTABLISH 10-OHMS (MINIMUM) RESISTANCE TO GROUND.
4. GROUNDING & BONDING SHALL BE INSTALLED IN ACCORDANCE WITH NEC (2005), ARTICLE 250.

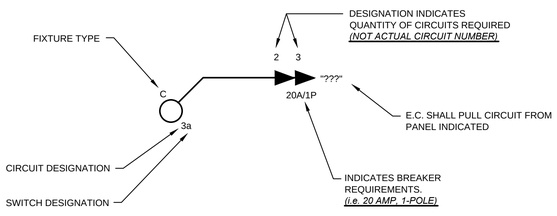
GROUNDING GRID SCHEMATIC

NO SCALE

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG No.	MOUNTING	LAMPING			VOLTAGE	DESCRIPTION / REMARKS
				TYPE	WATTAGE	QUANTITY		
A	SEAGULL LIGHTING	7643591S-962	RECESSED	LED	28	1	120	LED 6" DOWNLIGHT
B	SEAGULL LIGHTING	79903991S-12	SURFACE	LED	14	1	120	EXTERIOR FLUSH MOUNT FIXTURE. PROVIDE WITH DAYLIGHT SENSOR.
C	SEAGULL LIGHTING	4122891S-04	SURFACE	LED	11	1	120	LED WALL / BATH LIGHT
D	SEAGULL LIGHTING	59021L-15	SURFACE	FLUORESCENT	17	2	120	SURFACE MOUNTED 4' STRIP
CEF-1	PANASONIC	SEE MECHANICAL DRAWINGS	RECESSED	-	--	-	120	RECESSED EXHAUST FAN/LIGHT COMBO UNIT.
F	AMERICAN LIGHTING	ALC-24-DB	SURFACE	LED	8	1	120	SURFACE MOUNTED UNDERCABINET
G	SEAGULL LIGHTING	6543791S-962	LED	LED	14	1	120	MEDIUM LED PENDANT
H	SEAGULL LIGHTING	15030-15	SURFACE	-	-	-	120	CEILING FAN
J	AMERICAN LIGHTING	ALC-24-COLOR BY OWNER/ARCHITECT (OR EQUAL)	SURFACE	LED	6	-	120	UNDER-CABINET LED FIXTURE

CBA = COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
CC = CUSTOM COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY CUSTOM COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
NOTES:
1. PROVIDE ACCESSORIES AND MOUNTING HARDWARE AS REQUIRED FOR ALL FIXTURES.
2. ALL FIXTURE/ACCESSORY COLORS NOT INDICATED ON DWG'S SHALL BE SELECTED BY ARCHITECT.
3. PROVIDE LAMPING FOR ALL FIXTURES UNLESS LAMPING IS INCLUDED WITH FIXTURE AS INDICATED IN SCHEDULE.
4. PROVIDE TYPICAL UNIT MOCK UP FOR LIGHT FIXTURE HANGING HEIGHTS AND EXPOSED ELECTRICAL CONDUIT LAYOUT TO BE REVIEWED BY ARCHITECT.
5. FIXTURE TO BE WIRED TO PHOTO CELL AND TIME CLOCK PROVIDED BY G.C.
6. ALL LIGHT FIXTURES WITH INCANDESCENT LAMPING SHALL BE PROVIDED W/ CFL/LED LAMP IN LIEU OF INCANDESCENT LAMP.



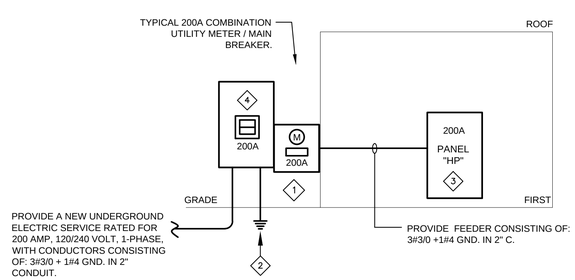
NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN CONTRACT. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS BUT NOT ON PLANS, AND VICE VERSA, SHALL APPLY OR SHALL BE PROVIDED AS THOUGH EXPRESSLY REQUIRED ON BOTH. IT IS NOT INTENDED THAT EVERY JUNCTION BOX, OFFSET, FITTING OR COMPONENT BE SPECIFIED OR SHOWN ON DRAWINGS; HOWEVER, CONTRACT DOCUMENTS REQUIRE PROVISION OF ALL COMPONENTS AND MATERIALS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL INSTALLATION, WHETHER OR NOT INDICATED OR SPECIFIED.

2. BRANCH CIRCUIT WIRING MAY NOT BE GRAPHICALLY SHOWN ON DRAWINGS AND MAY BE SHOWN BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT SHOWN GRAPHICALLY. WIRING IS SHOWN BY CONDUIT RUNS ON DRAWINGS WHERE SPECIFIC ROUTING IS REQUIRED OR FOR OTHER SPECIAL REASONS. ONLY ROOMS WITH MULTIPLE SWITCHING HAVE "SWITCH CONTROL LETTERS" ASSIGNED. PROVIDE THHN CONDUCTORS IN AREAS WITH HIGH AMBIENT TEMPERATURES SUCH AS BOILER ROOMS, INCINERATOR ROOMS, MECHANICAL EQUIPMENT ROOMS ETC., FOR SIZES LARGER THAN NO. 10 AWG.

TYPICAL CIRCUITING DETAIL

NOT TO SCALE



POWER RISER DIAGRAM - COMMUNITY BUILDING

SCALE: NONE

POWER RISER NOTES

1. 200 AMPERE - RATED BY CUTLER HAMMER 1MM OR 3MM NEMA 3R RINGLESS STYLE METER STACK MODULE, WITH METER SOCKETS AND 2-POLE CIRCUIT BREAKERS AS INDICATED. PROVIDE ALL REQUIRED BUSSING, CONNECTION, EQUIPMENT, ETC. FOR FUTURE METERS.
2. GROUNDING, BONDING AND COPPER GROUNDING ELECTRODE SYSTEM PER NEC 250 AS ADOPTED BY AUTHORITY HAVING JURISDICTION. WHEN BUILDING DOMESTIC WATER SERVICE PIPE IS NON-METALLIC PROVIDE 'UFER' GROUND IN BUILDING FOUNDATION HAVING DIRECT CONTACT WITH EARTH.
3. 200-AMPERE / 2-POLE CIRCUIT BREAKER.
4. MAIN CIRCUIT BREAKER CUTLER HAMMER 3MCB NEMA 3R MAIN SERVICE MODULE. (RATED FOR 200 AMPS, 120V/240, 1Ø., PROVIDE A 200 AMP, 2-POLE MAIN SERVICE BREAKER.)

OWNER:

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C/O WASHINGTON COUNTY CDC
400 TOWER HILL RD
NORTH KINGSTOWN, RI 02852
TEL: 401.788.0090
CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #:

DATE: MAY 27, 2016

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

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ELECTRICAL DETAILS AND NOTES

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FIRE ALARM NOTES

1. E.C. SHALL PROVIDE CIRCUIT BREAKER LOCK-ON DEVICES FOR FACP AND NAC POWER EXTENDER CIRCUITS.

2. E.C. SHALL FURNISH AND INSTALL REMOTE INDICATING LIGHTS/TEST SWITCHES FOR DUCT SMOKE DETECTORS AS WELL AS SMOKE DETECTOD LOCATED AT THE TOP OF THE ELEVATOR SHAFTS.
3. REFER TO FLOOR PLANS FOR EXACT NUMBER OF DEVICES & CANDELA RATINGS.

4. COLOR CODE PER NFPA, (LATEST EDITION).

5. ALL SPLICES SHALL BE MADE ON SCREW TYPE TERMINAL BLOCKS. NO WIRENUTS WILL BE ALLOWED.

6. RED PAINTED TERMINAL CABINETS & BOXES WITH LOCKABLE COVERS SHALL BE PROVIDED AT ALL JUNCTION POINTS.

7. AFC FIRE ALARM / CONTROL CABLE TYPE MC (UL LISTED) MAY BE USED ABOVE CEILINGS AND IN CONCEALED AREAS WHERE ACCEPTABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION, OTHERWISE WIRING SHALL BE INSTALLED IN EMT CONDUIT. WIRING IN EXPOSED AREAS SHALL BE EMT, E.C. SHALL PROVIDE AN ALTERNATE TO PAINT PER ARCHITECTS DIRECTION.

8. THE CONTRACTOR AT COMPLETION OF THE FIRE ALARM SYSTEM SHALL TEST THE ENTIRE SYSTEM PER THE LOCAL FIRE DEPARTMENTS REQUIREMENTS. THE CONTRACTOR SHALL REPLACES OR FIX ANY PART OF THE SYSTEM NOT PROPERLY WORKING.

9. ALL WIRING SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. E.C. SHALL TAKE INTO ACCOUNT VOLTAGE DROP. (TYPICAL)

10. ALL FIRE ALARM SYSTEM COMPONENTS & MOUNTING HEIGHTS SHALL COMPLY WITH ADA REQUIREMENTS.

11. E.C. SHALL PROVIDE ANY AND ALL AUXILIARY EQUIPMENT IN ORDER TO PROVIDE A COMPLETE, PROPERLY FUNCTIONING SYSTEM. COORDINATE REQUIREMENTS WITH LOCAL MANUFACTURERS REP.

12. ALL FIRE ALARM STROBE SIGNAL DEVICES SHALL BE SYNCHRONIZED TYPE DEVICES AND COMPLY WITH ADA REQUIREMENTS.

13. NO T-TAPPING OF FIRE ALARM WIRING SHALL BE ALLOWED. (TYPICAL)

14. ALL FIRE ALARM WIRING & RACEWAY SHALL BE SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT BE LOCATED AS TO BE DAMAGED BY BUILDING USE.

15. FIRE ALARM SYSTEM BATTERIES AND CHARGER SHALL BE PROVIDED FOR STAND-BY BATTERY POWER CAPACITY PER THE STATE'S FIRE LAWS (LATEST EDITION). E.C. SHALL SUBMIT BATTERY CALCULATIONS FOR THE MODIFIED SYSTEM DOCUMENTING CODE COMPLIANCE.

16. NEW NOTIFICATION APPLIANCE CIRCUIT EXPANDER PANELS SHALL BE PROVIDED WITH INTEGRAL BATTERY BACK-UP PER STATE'S FIRE LAWS (LATEST EDITION).

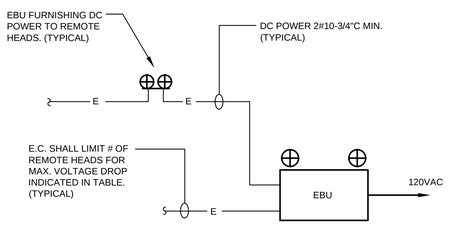
EMERGENCY LIGHTING NOTE:

ALL NEW EMERGENCY BATTERY UNITS AND EXIT SIGNS, SHALL BE TIED INTO LOCAL AREA, 120 VOLT LIGHTING CIRCUIT AHEAD OF ANY / ALL SWITCHING. (TYPICAL)

NOTES:

CONTRACTOR SHALL CONTACT AND COORDINATE WITH LOCAL MANUFACTURER'S REPRESENTATIVE, FOR ALL SPECIFIC INSTALLATION AND EQUIPMENT INFORMATION REQUIRED. (OR EQUAL) FIRE ALARM SYSTEM SHALL BE APPROVED DURING SUBMITTAL REVIEW.

REFER TO FLOOR PLANS FOR EXACT NUMBER OF FIRE ALARM DEVICES.



NOTES:

1. E.C. SHALL PROVIDE CIRCUIT BREAKER "LOCK-ON" DEVICE FOR ALL CIRCUITS TO EMERGENCY BATTERY UNITS (EBU). (TYPICAL)

2. DETAIL IS TYPICAL TO ALL DRAWINGS, UON.

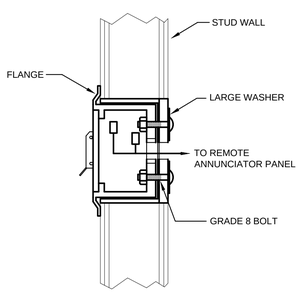
TYPICAL EMERGENCY LIGHTING CONNECTION DETAIL

NOT TO SCALE

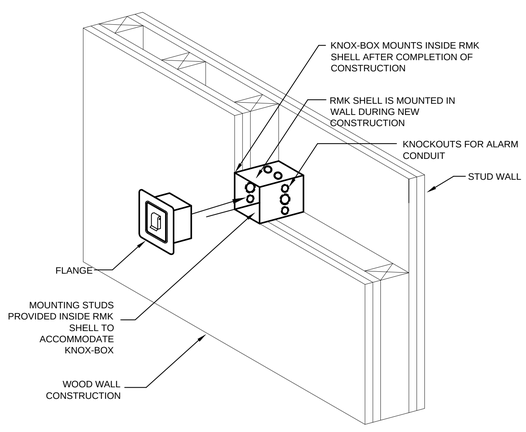
NOTES:

CONTRACTOR SHALL PROVIDE ADDITIONAL POWER SUPPLIES IN FIRE ALARM CONTROL PANEL AS REQUIRED AS WELL AS NEW NOTIFICATION EXTENDER PANELS (NAC). TO PROVIDE POWER FOR ALL NOTIFICATION DEVICES. COORDINATE REQUIRED EQUIPMENT WITH LOCAL MANUFACTURER'S REPRESENTATIVE. (TYPICAL)

CONTRACTOR SHALL ACQUIRE ACTUAL DEVICE COUNTS FROM FLOOR PLANS, NOT THIS RISER. THIS RISER DIAGRAM IS FOR WIRING INTENT PURPOSES ONLY.



NEW WALL INSTALLATION



FIRE ALARM SYSTEM KNOX-BOX DETAIL

NOT TO SCALE

EMERGENCY LIGHTING SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
WALL	DUAL EMERGENCY WALL MOUNTED LIGHTING FIXTURE WITH INTERGRAL BATTERY BACK-UP. E.C. TO PROVIDE ALL NECESSARY ACCESSORIES. EQUAL TO EMERGI-LITE, CAT. #RT-M-70-2(35H)-ADNA.	CEILING
CLG.	DUAL EMERGENCY CEILING MOUNTED LIGHTING FIXTURE WITH INTERGRAL BATTERY BACK-UP. E.C. TO PROVIDE ALL NECESSARY ACCESSORIES. EQUAL TO EMERGI-LITE, CAT. #RT-M-70-2(35H)-ADNA.	CEILING
RH	DUAL EMERGENCY LIGHTING FIXTURE WIRED TO EBU. LAMPS SHALL BE TUNGSTEN, 8-WATTS / 12-VOLTS FOR EACH LAMP. EQUAL TO EMERGI-LITE, CAT. #EF11D(HD).	CEILING
WP RH	DUAL EMERGENCY WEATHER PROOF LIGHTING FIXTURE WIRED TO EBU WITH REMOTE CAPABILITY (SUBSCRIPT "RH") 10-WATTS / 6-VOLTS FOR EACH LAMP. EQUAL TO EMERGI-LITE, CAT. #EF9DHB	CEILING
	EMERGENCY BATTERY UNIT LIGHTING FIXTURE. EQUAL TO EMERGI-LITE, CAT. #12ECM18-2.	WALL
EBU	EMERGENCY BATTERY UNIT LIGHTING FIXTURE ***WITH REMOTE CAPABILITIES***. EQUAL TO EMERGI-LITE, CAT. #12ECM54-2.	WALL
X	SINGLE FACE LED EDGE-LIT EXIT SIGN WITH EMERGENCY BATTERY BACK-UP. EQUAL TO EMERGI-LITE, CAT. #LXN-1-RC-(VERIFY)-C-U-D. PROVIDE ARROWS WHERE INDICATED ON PLANS.	CEILING
X2	DOUBLE FACE LED EDGE-LIT EXIT SIGN WITH EMERGENCY BATTERY BACK-UP. EQUAL TO EMERGI-LITE, CAT. #LXN-2-RC-(VERIFY)-C-U-D. PROVIDE ARROWS WHERE INDICATED ON PLANS.	CEILING
X3	SINGLE FACE LED LIGHTED EXIT SIGN WITH EMERGENCY LIGHTING HEADS, BATTERY BACK-UP & SPARE CAPACITY FOR REMOTE LIGHTING HEADS. EQUAL TO LITHONIA, CAT. #LHQM-S-W-3-R-120/277-HO. PROVIDE ARROWS WHERE INDICATED ON PLANS.	WALL

FIRE ALARM RISER NOTES

1. PROVIDE FIRE ALARM ISOLATION MODULE AT THE BEGINNING AND END OF EACH LOOP OF INITIATING DEVICES. ALSO PROVIDE FIRE ALARM ISOLATION MODULE AT A MAXIMUM OF EVERY 25 DEVICES ON LOOP.
2. PROVIDE 20 AMP CIRCUIT (2#12 + 1#12 GND. IN 3/4"C.) FROM SPARE BREAKER IN LOCAL 120/208V PANEL FOR EACH NEW NAC PANEL. PROVIDE BREAKER LOCK-ON DEVICE.
3. GROUND NEW NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL, PER LATEST EDITION OF NATIONAL ELECTRICAL CODE.
4. UPON ACTIVATION OF THE SPRINKLER SYSTEM FLOW SWITCHES, THE FIRE ALARM SYSTEM SHALL BE SET INTO ALARM VIA A MONITOR MODULE. FIELD VERIFY EXACT PROGRAMMING & WIRING REQ'T'S. WITH FIRE DEPARTMENT.

TYPICAL FIRE STOPPING NOTES

A. GENERAL: FIRE STOPPING SHALL BE PROVIDED BY THIS CONTRACTOR FOR ALL FLOOR, CEILING AND FIRE RATED WALL PENETRATIONS FOR CONDUIT, SLEEVES AND/OR CABLING AS REQUIRED BY JOB CONDITIONS.

B. THE CONTRACTOR SHALL PROVIDE A FIRE STOP SYSTEM IN ACCORDANCE WITH THE FOLLOWING:

1. THE SYSTEM SHALL CONSIST OF A WATERBASED SEALANT AND SUITABLE DAMMING MATERIALS (WHERE REQUIRED) AND BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. THE SEALANT SUPPLIED SHALL BE A TWO STAGED INTUMESCENT AND CAPABLE OF EXPANDING UP TO 8 TIMES ITS ORIGINAL VOLUME.
3. THE SEALANT SUPPLIED SHALL CONTAIN NO ASBESTOS, NO FIBERGLASS, AND NO SOLVENTS NOT CORROSIVE MINERAL SALTS OF ANY KIND.
4. THE SEALANT SHALL FORM A SURFACE CAPABLE OF BEING SANDED AND PAINTED TO MATCH SURROUNDING SURFACES AND SHALL BE IMPERVIOUS TO WATER WHEN DRY.
5. THE FIRE STOP SYSTEM SHALL BE TESTED TO THE TIME/TEMPERATURE REQUIREMENTS OF ASTM E119 AND SHALL BE UL1479 (ASTM E814) AND CLASSIFIED FOR UP TO 3 HOURS.
6. THE FIRE STOP SEALANT SHALL BE SPECSEAL SEALANT AS MANUFACTURED BY SPECIFIED TECHNOLOGIES, INC. OR APPROVED EQUAL.
7. SPECIAL CARE SHALL BE TAKEN WITH ELECTRICAL SYSTEMS NOT TO COMPROMISE ANY OF THE BUILDING FIRE PARTITIONS, FLOORS, WALLS OR MEMBRANES. PROVIDE ALL FIRESTOPPING REQUIRED TO COMPLY WITH THE BUILDING CODE, THE ELECTRICAL CODE AND THE UL LISTING OF EACH ASSEMBLY. COORDINATE LOCATIONS AND TYPES OF MEMBRANES WITH ARCHITECT.

FIRE ALARM LEGEND

FACP	FIRE ALARM SYSTEM CONTROL PANEL.
ANN	FIRE ALARM SYSTEM REMOTE ANNUNCIATOR PANEL.
M	FIRE ALARM SYSTEM, MASTER-BOX. PROVIDE ALL REQUIRED ACCESSORIES, ANTENNA, CABLE, ETC.
WP K	FIRE ALARM SYSTEM, WEATHER-PROOF KNOX BOX.
WP	FIRE ALARM SYSTEM, WEATHER-PROOF "RED" BEACON, LOCATED AT ENTRANCE OF BUILDING MOUNTED DIRECTLY OVER "KNOX-BOX".
60cd F	FIRE ALARM SYSTEM, HORN/STROBE DEVICE, SUB-SCRIPT INDICATES CANDELA RATING.
WP F	FIRE ALARM SYSTEM, WEATHER-PROOF HORN/STROBE DEVICE, LOCATED ON THE EXTERIOR OF THE BUILDING AT THE ENTRANCE / LOCATION OF FACP.
15cd F	FIRE ALARM SYSTEM STROBE. SUB-SCRIPT INDICATES CANDELA RATING.
F	FIRE ALARM SYSTEM MINI HORN. ALL STROBES SHALL BE SYNCHRONIZED AND COMPLY WITH ADA.
LF F	FIRE ALARM SYSTEM "LOW FREQUENCY" HORN. ALL STROBES SHALL BE SYNCHRONIZED AND COMPLY WITH ADA.
F	FIRE ALARM SYSTEM, PULL STATION, PROVIDE WITH STOPPER II PROTECTIVE COVER AND MOUNTED SO THAT THE OPERABLE PART OF THIS DEVICE IS 48" ABOVE FINISHED FLOOR.
MM	FIRE ALARM MONITOR MODULE.
CM	FIRE ALARM CONTROL MODULE.
R	FIRE ALARM SYSTEM, RELAY.
S	FIRE ALARM SYSTEM, SMOKE DETECTOR.
S	FIRE ALARM SYSTEM, DUCT SMOKE DETECTOR LOCATED IN THE SUPPLY & RETURN DUCTWORK OF HVAC UNITS WITH 2000 CFM (OR) GREATER.
TS	FIRE ALARM SYSTEM, DUCT SMOKE DETECTOR REMOTE TEST SWITCH WITH INDICATOR LIGHT.
135° R/R H	FIRE ALARM SYSTEM, RATE-OF-RISE TEMPERATURE HEAT DETECTOR, SUB-SCRIPT INDICATES TEMPERATURE RATING. (SUITABLE FOR 50'-0" "ON CENTER" MOUNTING)
190° FT H	FIRE ALARM SYSTEM, FIXED TEMPERATURE HEAT DETECTOR, SUB-SCRIPT INDICATES TEMPERATURE RATING. (SUITABLE FOR 50'-0" "ON CENTER" MOUNTING)
ATTIC RR H	FIRE ALARM SYSTEM, "CONVENTIONAL" TYPE, RATE-OF-RISE HEAT DETECTOR INSTALLED IN ATTIC SPACE. (SUITABLE FOR 50'-0" "ON CENTER" MOUNTING)
AC FT H	FIRE ALARM SYSTEM, FIXED TEMPERATURE HEAT DETECTOR INSTALLED ABOVE DROP CEILING, SUB-SCRIPT INDICATES TEMPERATURE RATING. (SUITABLE FOR 50'-0" "ON CENTER" MOUNTING)
FS	SPRINKLER SYSTEM FLOW SWITCH BY OTHERS. CONTRACTOR SHALL PROVIDE MONITOR MODULE TO TIE INTO FIRE ALARM SYSTEM. COORD. TIE-IN.
TS	SPRINKLER SYSTEM TAMPER SWITCH BY OTHERS. CONTRACTOR SHALL PROVIDE MONITOR MODULE TO TIE INTO FIRE ALARM SYSTEM. COORD. TIE-IN.
PS	SPRINKLER SYSTEM PRESSURE SWITCH BY OTHERS. CONTRACTOR SHALL PROVIDE MONITOR MODULE TO TIE INTO FIRE ALARM SYSTEM. COORD. TIE-IN.

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C/O WASHINGTON COUNTY CDC
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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #:
DATE: MAY 27, 2016
SCALE: 1/4" = 1'-0"

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LIFE SAFETY DETAILS, NOTES AND SCHEDULES

LS100

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ENGINEERING DESIGN SERVICES INCORPORATED
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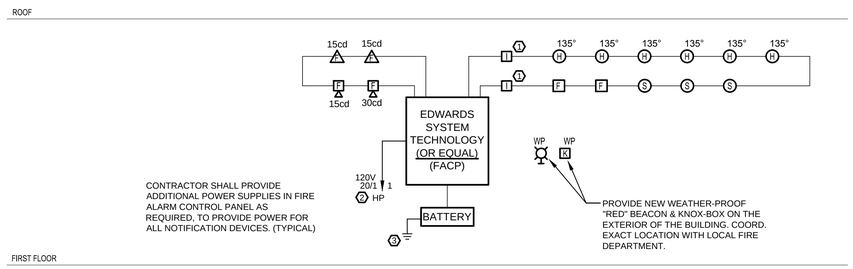
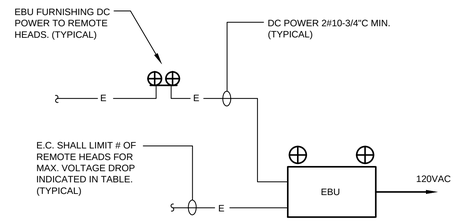


FIRE ALARM SYSTEM ONE-LINE DIAGRAM

NOT TO SCALE



NOTES:

1. E.C. SHALL PROVIDE CIRCUIT BREAKER "LOCK-ON" DEVICE FOR ALL CIRCUITS TO EMERGENCY BATTERY UNITS (EBU). (TYPICAL)

2. DETAIL IS TYPICAL TO ALL DRAWINGS, UON.

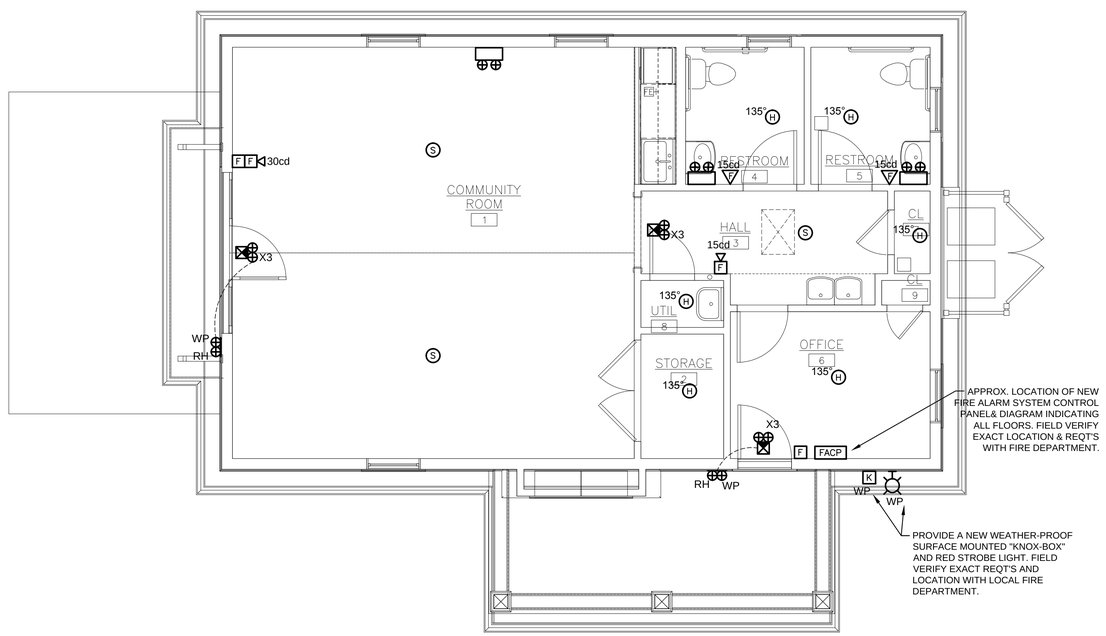
TYPICAL EMERGENCY LIGHTING CONNECTION DETAIL

NOT TO SCALE

12-VOLT SYSTEM VOLTAGE DROP TABLE

TOTAL WATTS ON WIRE RUN	WIRE GAUGE 12	10	8	6
6	378	600	955	1518
7	324	515	818	1301
8	283	450	716	1138
10	226	360	570	910
12	178	283	450	715
14	162	257	409	650
16	133	212	338	538
18	119	189	300	477
20	113	180	286	455
21	108	171	273	434
24	89	141	225	357
25	86	136	216	344
30	75	120	190	303
35	65	103	164	260
40	53	85	135	214
48	44	70	112	178
50	43	68	108	172
75	28	45	72	115
100	21	34	54	86
125	17	27	43	69
150	14	23	36	57
175	12	19	31	49
200	10	16	27	42
225	10	16	25	40
250	9	14	22	36
CONSTANT	2267	3604	5730	9109

MAXIMUM LENGTH OF RUN IN FEET



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CONTACT: GERARD BERTRAND

CHURCHWOODS - BUILDING 8

BUILDING TYPE C
4130 OLD POST ROAD
CHARLESTOWN, RI

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LIFE SAFETY FLOOR PLAN AND DETAILS

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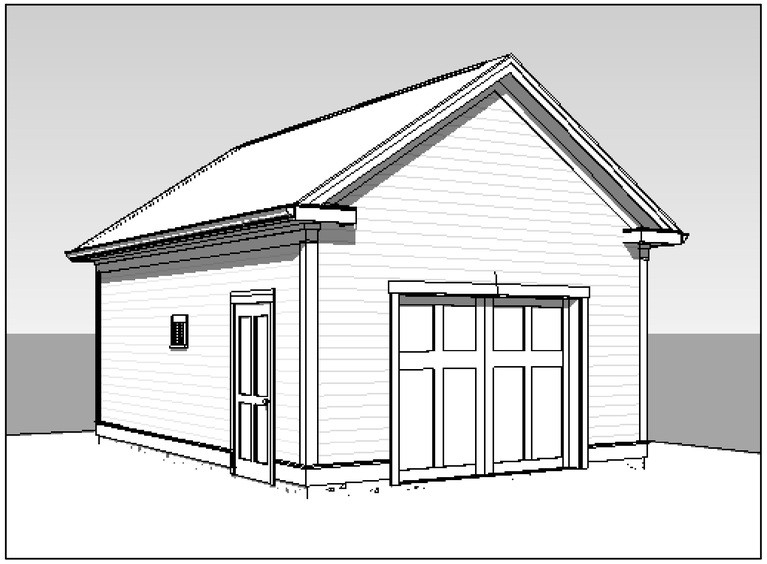
CHURCHWOODS - BUILDING 9

100% CONSTRUCTION DOCUMENTS

WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI

MAY 27, 2016



DRAWING LIST

NUMBER	NAME
0 - COVER	
G101	TITLE SHEET
2 - STRUCTURAL	
S101	FOUNDATION PLAN & FRAMING PLAN
3 - ARCHITECTURAL	
A101	FLOOR PLANS
A201	EXTERIOR ELEVATIONS
A301	BUILDING & WALL SECTIONS
A501	WINDOW & DOOR DETAILS & EXTERIOR DETAILS
A502	TYPICAL CONSTRUCTION DETAILS
6 - MECHANICAL	
M101	MECHANICAL WELL HOUSE PLAN
7 - ELECTRICAL	
E100	ELECTRICAL SCHEDULES, NOTES, LEGENDS, & DETAILS
E101	ELECTRICAL WELL HOUSE PLAN

GENERAL PROJECT NOTES

1 GENERAL NOTES APPLY TO ALL DRAWINGS AND ALL TRADES. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES.

2 UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, PERMITS, TRANSPORTATION AND OTHER SERVICES AND FACILITIES NECESSARY FOR PROPER AND TIMELY EXECUTION OF THE REQUIRED WORK UNDER THIS CONTRACT.

3 THE GENERAL CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF WRITTEN SUBSTANTIAL COMPLETION.

4 THE GENERAL CONTRACTOR WARRANTS TO THE OWNER AND TO THE ARCHITECT, THAT ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED UNDER THE CONTRACT ARE NEW UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK WILL BE AS SPECIFIED AND FREE OF DEFECTS.

5 ALL FLOOR LEVELS ON ALL DRAWINGS ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. COORDINATE BUILDING SLAB ELEVATIONS WITH CIVIL DRAWINGS.

6 ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES WELL AS ANY REQUIREMENTS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION.

7 DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS OR OF ANY VARIATIONS REQUIRED IN ORDER TO CONFORM TO CODE REQUIREMENTS, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ARCHITECT WILL FORWARD WRITTEN INSTRUCTION TO ALL CONCERNED PARTIES. ANY SUCH DISCREPANCY, OMISSION OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WORK SHALL BE PERFORMED IN A MANNER DIRECTED BY THE ARCHITECT.

8 DRAWING SCALES: THESE DRAWINGS ARE PREPARED TO THE SCALES NOTED. HOWEVER, DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THE PLANS, SECTIONS OR DETAILS. THE CONTRACTOR SHALL CONTACT THE ARCHITECT WITH ANY QUESTIONS PERTAINING TO DIMENSIONS OR DETAILS PRIOR TO COMMENCING ANY WORK.

9 THE REQUIREMENTS OF THE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR THEIR EMPLOYEES USE ON THE PROJECT TO ENSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.

10 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING CONSTRUCTION THAT IS SCHEDULED TO REMAIN IN PLACE OR INTACT. ANY DAMAGE INCURRED TO SUCH ITEMS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION.

11 ALL FRAMING LUMBER INSTALLED IN CONTACT WITH CONCRETE, MASONRY OR STEEL SHALL BE PRESSURE TREATED.

12 THE GENERAL CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL APPROVED, CODE COMPLIANT FIRE EXTINGUISHERS. SUCH EXTINGUISHERS SHALL BE FULLY COORDINATED WITH AND APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

13 ALL DIMENSIONS ARE ACTUAL AND ARE TAKEN TO THE FACE OF STUD, FACE OF CONCRETE WALL, FACE OF CMU WALL OR FACE OF FRAME, UNLESS NOTED OTHERWISE.

14 ALL INTERIOR WALLS AND PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF STRUCTURE OR DECK ABOVE, UNLESS NOTED OTHERWISE.

15 ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE CONDITIONED, USED, APPLIED, INSTALLED, CONNECTED, ERECTED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS, GUIDELINES AND INSTALLATION INSTRUCTIONS.

16 ALL NEW WINDOWS, SIDELITES AND BORROWED LITES AS WELL AS ASSOCIATED GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES IN PLACE WITHIN THE JURISDICTION OF THE WORK. PROVIDE SAFETY GLAZING AS REQUIRED BY CODE.

17 ALL PENETRATIONS OF FIRE-RESISTIVE-RATED FLOORS, WALLS, PARTITIONS AND SHAFTS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAILS THAT CONFORM TO U.L. DESIGN STANDARDS FOR THROUGH PENETRATION FIRESTOP SYSTEMS. THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SPECIFICATIONS AND DETAILS THAT SHOW COMPLETE CONFORMANCE TO THE U.L. LISTING TO THE ARCHITECT FOR REVIEW AND APPROVAL. SUCH DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE MADE AVAILABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE SPECIFIC FOR EACH PENETRATION WITH ANY AND ALL VARIABLES DEFINED.

18 SEAL AROUND ALL PENETRATIONS (DUCTS, PIPES, CONDUIT, ETC.) AT NEW AND EXISTING FIRE-RATED WALL, PARTITION AND CEILING CONSTRUCTION. SEAL SHALL NOT DIMINISH RATING OF THE WALL, PARTITION OR CEILING. AT CONCRETE OR MASONRY, SEAL OFF OPENINGS WITH CONCRETE GROUT. AT PLASTER OR DRYWALL, DAM UP GAPS AND WALL VOIDS WITH U.L. APPROVED FIRE-RESISTIVE-RATED SEALANT OR PUTTY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

19 LEVEL ALL FLOORS AS REQUIRED TO CONCEAL ANY DROPS OR RISERS IN FLOORS THAT WOULD OTHERWISE BE SEEN WITH THE SCHEDULED FLOOR FINISHES.

20 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND PROPERLY INSTALLING ALL FIRESAFING, FIRE/SMOKE STOPPING AT ALL PENETRATIONS OR OPENINGS AT INTERSECTIONS OF RATED WALLS AND STRUCTURAL ELEMENTS, AT ALL PENETRATIONS OR OPENINGS THROUGH FIRE-RESISTIVE RATED WALLS AND AT ANY OTHER AREAS WHERE FIRE AND SMOKE MAY PENETRATE.

21 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE SHORING AND BRACING TO SAFELY SUPPORT THE STRUCTURE DURING CONSTRUCTION.

22 THE CONTRACTOR IS RESPONSIBLE FOR DUST AND WEATHER PROTECTION DURING CONSTRUCTION.

23 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONS USING THE SURROUNDING FACILITIES WHO COME INTO CONTACT WITH THE AREA OF CONSTRUCTION. THE CONSTRUCTION AREA SHALL BE PROPERLY BARRICADED TO PREVENT INTRUSION BY PERSONS NOT ASSOCIATED WITH THE CONSTRUCTION OF THIS FACILITY.

24 THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. SAFETY, CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SAFETY SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

25 REFER TO THE PROJECT MANUAL, WRITTEN SPECIFICATIONS AND INTERPRETATION OF CONTRACT DOCUMENTS SECTION BELOW FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
EL 0' - 0"	DATUM POINT
FLOOR LEVEL 0' - 0"	ELEVATION MARKER
A3.0 A3.0	BUILDING SECTION
1 A4.0	AREA OF DETAIL
1 A3.0	DETAIL SECTION
1 A3.0	WALL SECTION
A A	MATCH LINE
A1 A4 A204 A2 A3	INTERIOR ELEVATION
1 A4.0	EXTERIOR ELEVATION
A1	WINDOW TYPE
108	DOOR NUMBER
KITCHEN 108	ROOM NAME AND NUMBER
1	KEYNOTE NUMBER
1	WALL TYPE
	NEW CONSTRUCTION
1	REVISION NUMBER AND CLOUD REFERENCE
12 4	ROOF PITCH
℄	CENTERLINE

ABBREVIATIONS

A	ABV	ABOVE
	AT	ACOUSTICAL TILE
	AD	AREA DRAIN
	ADJ	ADJUSTABLE
	AFF	ABOVE FINISH FLOOR
	ALUM	ALUMINUM
	ANOD	ANODIZED
	APPROX	APPROXIMATE(LY)
	ARCH	ARCHITECT
	ASPH	ASPHALT
B	B/	BOTTOM OF
	BB	BASEBOARD
	BBH	BASEBOARD HEAT
	BD	BOARD
	BIT	BITUMINOUS
	BLDG	BUILDING
	BLK	BLOCK
	BM	BEAM
	BO	BY OWNER
	B.O.	BOTTOM OF
	BRK	BRICK
C	CAB	CABINET
	CB	CATCH BASIN
	CEM	CEMENT
	CI	CAST IRON
	CIP	CAST IN PLACE
	CJ	CONTROL JOINT
	CL	CENTER LINE
	CLG	CEILING
	CLR	CLEAR
	CMT	CERAMIC MOSAIC TILE
	CMU	CONCRETE MASONRY UNIT
	CO	CLEAN OUT
	CO	CARBON MONOXIDE
	COL	COLUMN
	CONC	CONCRETE
	CONN	CONNECTION
	CONST	CONSTRUCTION
	CONST JT	CONSTRUCTION JOINT
	CONT	CONTINUOUS
	CONTR	CONTRACTOR
	CPT	COLD ROLLED COOPER
	CRC	
	CS	COURSE
	CT	CERAMIC TILE
	CTR	CENTER
	CF	CUBIC FOOT
	CW	COLD WATER
D	D	DEEP
	DBL	DOUBLE
	DEPT	DEPARTMENT
	DI	DRAIN INLET
	DIA	DIAMETER
	DIM	DIMENSION
	DISP	DISPENSER
	DN	DOWN
	DO	DITTO
	DP	DAMPPROOF(ING)
	DR	DOOR
	DRN	DRAIN
	DS	DOWNSPOUT
	DTL	DETAIL
	DW	DISHWASHER
	DWG	DRAWING
	DWR	DRAWER
	DWT	DUMBWAITER
E	E	EAST
	EA	EACH
	EL	ELEVATION
	ELEC	ELECTRIC (AL)
	ELEV	ELEVATOR
	EMER	EMERGENCY
	EPDM	ELASTOMERIC ROOFING
	EQ	EQUAL
	EQUIP	EQUIPMENT
	EWC	ELECTRIC WATER COOLER
	EXIST	EXISTING
	EJ	EXPANSION JOINT
	EXP	EXPOSED
	EXT	EXTERIOR
F	F/	FACE OF
	FCO	FLOOR CLEANOUT
	FCU	FAN COIL UNIT
	FD	FLOOR DRAIN
	FDN	FOUNDATION
	FE	
	FEC	FIRE EXTINGUISHER CABINET
	FF	FINISH FLOOR
	FHC	FIRE HOSE CABINET
	FIN	FINISH
	FIXT	FIXTURE
	FL	FLOOR
	FLUOR	FLUORESCENT
	FRTW	FIRE RETARDENT TREATED WOOD
	FRWK	FRAMEWORK
	FT	FOOT
	FTG	FOOTING
	FURN	FURNISH (ED)
	FURR	FURRING
	FUT	FUTURE
G	GA	GAUGE
	GALV	GALVANIZED
	GB	GRAB BAR
	GD	GROUND
	GEN	GENERAL
	GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	GL	GLASS
	GL BLK	GLASS BLOCK
	GR	GRADE
	GRAN	GRANITE
	GWB	GYPSUM WALL BOARD
	GYP	GYPSUM
H	H	HIGH
	HB	HOSE BIB
	HC	HOLLOW CORE
	HDW	HARDWARE
	HDWD	HARDWOOD
	HT	HEIGHT
	HM	HOLLOW METAL
	HORZ	HORIZONTAL
	HSS	HOLLOW STRUCTURAL SECTION
	HR	HOUR
	HW	HOT WATER
	HVAC	HEAT/VENT AIR CONDITION
I	IC	IN CONTRACT
	ID	INSIDE DIMENSION
	IN	INCH
	INSUL	INSULATION
	INT	INTERIOR
	INV	INVERT
J	JST	JOIST
	JSTH	JOIST HANGER
	JT	JOINT
L	LAM	LAMINATE
	LCC	LEAD COATED COPPER
	LG	LONG
	LH	LEFT HAND
M	MACH	MACHINE
	MAR	MARBLE
	MAS	MASONRY
	MATL	MATERIAL
	MAX	MAXIMUM
	MDF	MEDIUM DENSITY FIBERBOARD
	MDO	MEDIUM DENSITY OVERLAY PLYWOOD
	MEM	MEMBRANE
	MFR	MANUFACTURER
	MIN	MINIMUM
	MO	MASONRY OPENING
	MT	METAL
	MTL	THRESHOLD METAL
N	N	NORTH
	NIC	NOT IN CONTRACT
	NO	NUMBER
	NS	NON-SLIP
	NTS	NOT TO SCALE
O	OA	OVERALL
	OAE	OR APPROVED EQUAL
	OC	ON CENTER
	OD	OUTSIDE DIMENSION
	OPNG	OPENING
	OPP	OPPOSITE
P	PARL	PARALLEL
	PART	PARTITION
	PERP	PERPENDICULAR
	PJF	PREMOLDED JOINT FILLER
	PL	PLASTIC
	PLAS	PLASTER
	PLAM	PLASTIC LAMINATE
	PLBG	PLUMBING
	PLYWD	PLYWOOD
	POL	POLISHED
	PNL	PANEL (ING)
	PR	PAIR
	PREFIN	PREFINISHED
	PSI	POUNDS PER SQUARE INCH
	PSF	POUNDS PER SQUARE FOOT
	PSL	PARALLEL STRAND LUMBER
	PT	PRESSURE TREATED
	PNTD	PAINTED
Q	QT	QUARRY TILE
	QTR	QUARTER
	QTY	QUANTITY
R	R	RISER
	RAD	RADIUS
	RD	ROOF DRAIN
	RECP	RECEPTACLE
	REF	REFERENCE
	REFRIG	REFRIGERATOR
	REIN	REINFORCED
	REQD	REQUIRED
	RES	RESILIENT
	RH	RIGHT HAND
	RL	RAIN LEADER
	RM	ROOM
	RND	ROUND
	RO	ROUGH OPENING
S	S	SOUTH
	SC	SOLID CORE
	SCHD	SCHEDULE
	SD	SOAP DISPENSER
	SEAL	SEALANT
	SECT	SECTION
	SEL	SELECT
	SF	SQUARE FEET(FOOT)
	SHEATH	SHEATHING
	SIM	SIMILAR
	SHT	SHEET
	SJ	SEALANT JOINT
	SOF	SOFFIT
	SPEC	SPECIFICATION
	SPF	SPRUCE/PINE/FIR
	SQ	SQUARE
	SS	STAINLESS STEEL
	SSD	SEE STRUCTURAL DRAWINGS
	STD	STANDARD
	STL	STEEL
	STRCT	STRUCTURAL
	SUSP	SUSPENDED
	SY	SQUARE YARD
T	T	TREAD
	T/	TOP OF
	TB	TACK BOARD
	TEL	TELEPHONE
	TEMP	TEMPORARY
	THK	THICK (NESS)
	THRES	THRESHOLD
	T.O.	TOP OF
	TOIL	TOILET
	TZ	TERRAZZO
	TTD	TOILET TISSUE DISPENSER
	TV	TELEVISION
	TYP	TYPICAL
	T&G	TONGUE & GROVE
U	UR	URINAL
	UNFIN	UNFINISHED
	UON	UNLESS OTHERWISE NOTED
V	VB	VAPOR BARRIER
	VCT	VINYL COMPOSITION TILE
	VENT	VENTILATE
	VERT	VERTICAL
	VIF	VERIFY IN FIELD
	VP	VENEER PLASTER
	VT	VINYL TILE
	VWC	VINYL WALL COVERING
W	W	WIDE
	W	WEST
	W/	WITH
	W/O	WITHOUT
	WC	WATER CLOSET
	WD	WOOD
	WDW	WINDOW
	WNSCT	WAINSCOT
	WP	WATERPROOF
	WR	WATER RESISTANT
	WS	WEATHER STRIP
	WWM	WELDED WIRE MESH

ROOM NAMES

BDR	BEDROOM
BSMNT	BASEMENT
CC	CUSTOMAN'S
CLOS	CLOSET
COR	CORRIDOR
CTRM	COAT ROOM
DNR	DINING ROOM
ELEV	ELEVATOR
ENT	ENTRANCE
KIT	KITCHEN
LAV	LAVATORY
LKR	LOCKER ROOM
LNG	LOUNGE
LVR	LIVING ROOM
MACH RM	MACHINE ROOM
MBATH	MASTER BATH
MBDR	MASTER BEDROOM
MECH	MECHANICAL ROOM
OFF	OFFICE
PWDR	POWDER ROOM
P.R.	POWDER ROOM
SH	SHOWER
ST	STAIR
STOR	STORAGE
TOIL	TOILET
VEST	VESTIBULE

BUILDING CODE DATA

BUILDING CODE	INTERNATIONAL BUILDING CODE 2012 EDITION - IBC RHODE ISLAND STATE BUILDING CODE - SBC-1 - JULY 1, 2013
LOCALITY	CHARLESTOWN, RI 02813
TYPE OF CONSTRUCTION	5-A
STORIES	ONE
FROST LINE DEPTH	40 INCHES
WIND SPEED	110 MPH
GROUND SNOW LOAD	30 PSF

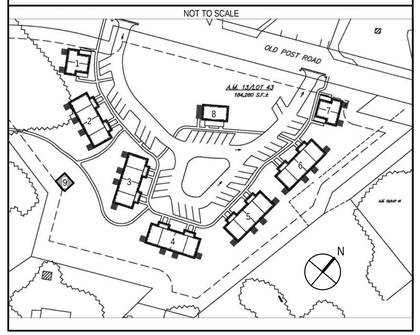
AREA SCHEDULE - GROSS BUILDING

AREA NAME	AREA (SF)
GROUND FLOOR	363 SF

FIRST FLOOR - GROSS AREA PLAN

KEY PLAN

NOT TO SCALE



INTERPRETATION OF CONTRACT DOCUMENTS

IN THE EVENT OF CONFLICTING PROVISIONS IN THE CONTRACT DOCUMENTS, THE DRAWINGS WILL TAKE PRECEDENCE OVER THE SPECIFICATIONS.

IN THE EVENT OF CONFLICTING PROVISIONS WITHIN THE DRAWINGS, THE FOLLOWING ORDER OF PRECEDENCE FOR RESOLUTION OF THE CONFLICT SHALL APPLY: THE MORE SPECIFIC PROVISION WILL TAKE PRECEDENCE OVER THE LESS SPECIFIC; IF NOT RESOLVED, THE LESS STRINGENT WILL TAKE PRECEDENCE OVER THE MORE STRINGENT; IF NOT RESOLVED, THE LESS EXPENSIVE ITEM WILL TAKE PRECEDENCE OVER THE MORE EXPENSIVE. ON ALL DRAWINGS, FIGURES TAKE PRECEDENCE OVER SCALED DIMENSIONS.

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G101

CHURCHWOODS - BUILDING 9

SHEAR WALL NAILING & HOLDOWN SCHEDULE

MARK	PLYWOOD ATTACHMENT	HOLDOWN CONNECTOR
1SP-1	8d NAILS @ 4" O.C. AT EDGES, 12" O.C. INTERMEDIATE	NONE REQUIRED
1SP-2	8d NAILS @ 4" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU2-SDS2.5
1SP-3	8d NAILS @ 4" O.C. AT EDGES, 12" O.C. INTERMEDIATE	SIMPSON HDU2-SDS2.5

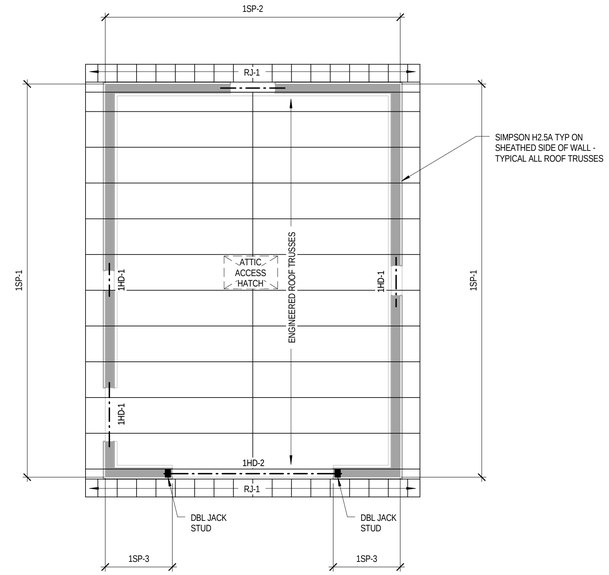
SHEAR WALL NOTES:
1. ALL SHEAR WALLS ARE TO HAVE SOLID BLOCKING INSTALLED BETWEEN STUDS ALONG ALL HORIZONTAL PLYWOOD EDGES.
2. ALL DESIGNATED SHEAR WALLS ARE TO HAVE A DOUBLE STUD AT EACH END OF THE SHEAR WALL FOR HOLDOWN ATTACHMENT.
3. ALL SIMPSON HDU HOLDOWN ANCHORS AT THE ENDS OF SHEAR WALLS ARE TO BE CONNECTED TO NEAREST ANCHOR BOLT W/ SIMPSON CNW5/8 COUPLER.
4. WHERE SHEAR WALLS INTERSECT, USE SINGLE HOLDOWN TO SERVE BOTH SHEAR WALLS. HOLDOWN MUST BE THE LARGER OF THE TWO SPECIFIED.

STRUCTURAL FRAMING LEGEND

ROOF FRAMING	
OUTLOOKER - RJ1	2x6 SPF @ 24" O.C.
WINDOW & DOOR HEADERS	
HEADER - HD1	(2) 2x6 SPF
HEADER - HD2	(2) 2x10 SPF, DOUBLE JACK STUDS

STRUCTURAL SYMBOL LEGEND

COLUMN DOWN	BEAMS
BEARING WALL	RAFTERS
HEADERS	RAFTERS - OVERFRAMED



C3 / S101 SHEAR WALL & ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

GENERAL STRUCTURAL NOTES

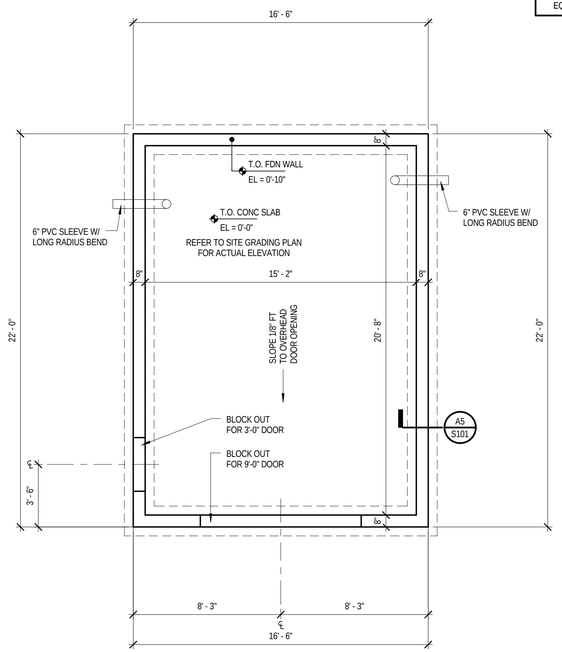
COLUMN DIMENSIONS ARE TAKEN FROM THE EXTERIOR FACE OF FRAMING / FOUNDATION TO THE CENTERLINE OF THE POST UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOULD BE VERIFIED WITH THE FLOOR PLANS.

DIMENSIONS TO PLUMBING FIXTURES ARE TO CENTERLINE OF ROUGH DRAIN. DIMENSIONS GIVEN ARE APPROXIMATE AND SHOULD BE CONFIRMED WITH FINAL FIXTURE SELECTION.

CONTRACTOR TO SUPPLY ALL CODE REQUIRED HURRICANE CLIPS AND HOLD DOWNS

PROVIDE CONTINUOUS HOLD DOWN STRAPPING OR THREADED ROD @ ALL LOAD BEARING PERMACAST PORCH COLUMNS.

NOTE: SEE CIVIL, PLUMBING, MECHANICAL, & ELECTRICAL DRAWINGS FOR WATER EQUIPMENT DETAILS & INFO



A3 / S101 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES - FOUNDATION

ALL NEW STRUCTURAL FILL SHALL BE COMPACTED 95% AT MAXIMUM DRY DENSITY.

FOUNDATION DESIGN IS BASED ON PRESUMPTIVE SOIL BEARING CAPACITY OF 4000 LBS/SF. THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ANY SOILS ARE DISCOVERED ON SITE THAT ARE INCAPABLE OF MEETING THIS BEARING PRESSURE.

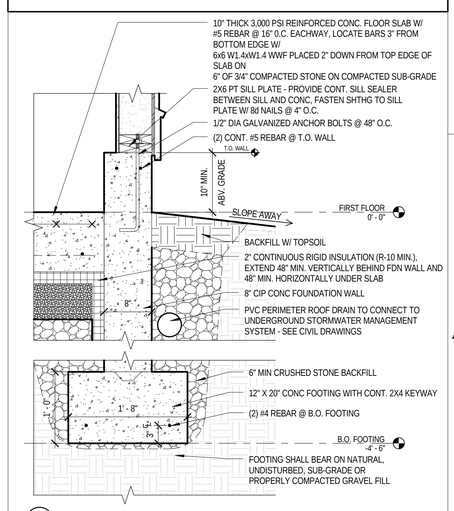
ANCHOR WOOD SILL PLATES TO FOUNDATION WITH 1/2" DIAMETER x 10" OR 12" LONG GALVANIZED ANCHOR BOLTS, NUTS, & WASHERS SPACED 48" O.C., REFER TO DETAILS FOR BOLT LENGTHS. PROVIDE A MINIMUM OF TWO BOLTS PER PLATE SECTION WITH BOLTS LOCATED NOT MORE THE 12" FROM CORNERS. BOLTS SHALL EXTEND 7" MINIMUM INTO CONCRETE. HOLDOWN ANCHORS ARE ALSO REGUIRED, REFER TO STRUCTURAL FRAMING DRAWINGS FOR ADDITIONAL INFORMATION.

VAPOR RETARDER TO BE 6 MIL POLYETHYLENE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE.

BASE COURSE TO 6-INCH-THICK MINIMUM CONSISTING OF CLEAN GRADED SAND, GRAVEL, OR CRUSHED STONE PASSING A 2-INCH SIEVE PLACED ON THE SUBGRADE.

UNDER NO CIRCUMSTANCES SHALL THE TOP OF FOUNDATION WALL ELEVATION EXCEED 18" ABOVE FINISHED GRADE ELEVATION.

BACKFILL EACH SIDE OF FOUNDATION IN A BALANCED MANNER TO KEEP SOIL PRESSURES BALANCED (2' UNBALANCED BACKFILL MAX.)



A5 / S101 SECTION @ TYP FOUNDATION WALL
SCALE: 1" = 1'-0"

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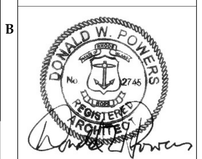
CHURCHWOODS - BUILDING 9

WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI



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FOUNDATION PLAN & FRAMING PLAN

S101

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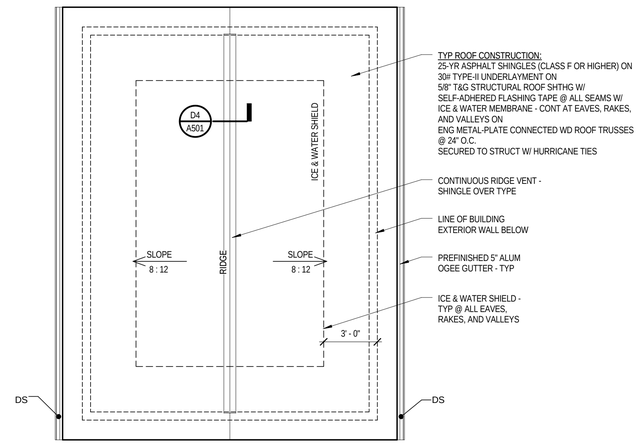


C3 ROOF PLAN
A101 SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES - ROOFING

SHINGLES SHALL BE TESTED IN ACCORDANCE WITH ASTM D 7158 AND SHALL MEET THE CLASSIFICATION REQUIREMENTS FOR A BASIC WIND SPEED OF 110 MPH AND SHALL BE FASTENED TO THE ROOF TO ACCOMODATE SUCH WIND SPEED.

PROVIDE CONTINUOUS METAL DRIP EDGE ON ALL EAVES AND RAKES.

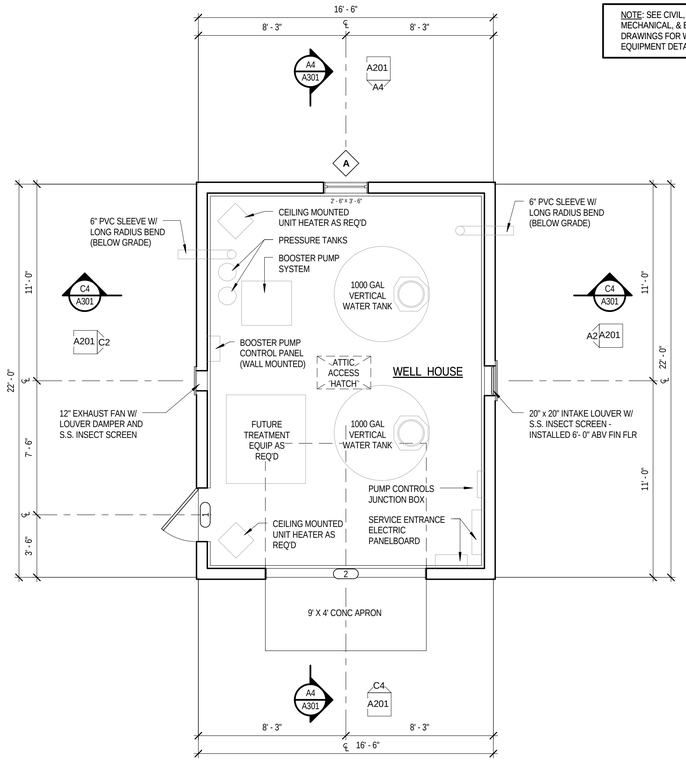
PROVIDE SIDEWALL FLASHING AT ALL VERTICAL SIDEWALLS BY THE STEP-FLASHING METHOD. FLASHING SHALL RUN UP VERTICAL SIDEWALLS 6" MINIMUM. AT THE END OF THE VERTICAL SIDEWALL THE STEP FLASHING SHALL BE TURNED OUT IN A MANNER THAT DIRECTS WATER AWAY FROM THE WALL AND ONTO THE ROOF AND/OR GUTTER.

PROVIDE (1) ONE LAYER NO. 30 (TYPE II) ASPHALT-SATURATED ORGANIC ROOFING FELT ON ALL ROOF SURFACES THAT ARE NOT COMPLETELY COVERED WITH ICE & WATER SHIELD MEMBRANE. ROOFING FELT MAY BE ELIMINATED AT THE CONTRACTOR'S OPTION IF ZIP SYSTEM ROOF SHEATHING WITH MOISTURE-RESISTIVE BARRIER IS UTILIZED AND ALL PANEL SEAMS ARE TAPED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.

PROVIDE ICE & WATER SHIELD MEMBRANE AT ALL EAVES, RAKES, VALLEYS, EAVE RETURNS, PORCH ROOFS AND ROOF TO SIDEWALL INTERSECTIONS. EXTEND MEMBRANE FROM LOWEST EDGES OF ALL ROOF SURFACES UP THE SLOPE TO A POINT AT LEAST 36" INSIDE THE EXTERIOR WALL LINE OF THE BUILDING.

PROVIDE 5" ALUMINUM OGEE STYLE GUTTERS AS INDICATED ON THE DRAWINGS. PROVIDE 3"X4" COORDINATING ALUMINUM DOWNSPOUTS AND BRACKETS WITH BOOT SLEEVES AT GRADE AT BASE OF DOWNSPOUT.

NOTE: SEE CIVIL, PLUMBING, MECHANICAL, & ELECTRICAL DRAWINGS FOR WATER EQUIPMENT DETAILS & INFO



A3 FIRST FLOOR
A101 SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES

ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE.

ALL INTERIOR WALL SURFACES SHALL RECEIVE A PLASTER FINISH. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

DOOR OPENINGS NOT LOCATED BY A DIMENSION SHALL BE CENTERED IN WALLS AS SHOWN OR LOCATED 6" FROM FINISH WALL TO FINISH JAMB UNLESS NOTED OTHERWISE.

ATTIC ACCESS DOOR TO BE 22"X30" R-42 DELUXE E-Z HATCH ATTIC ACCESS SCUTTLE DOOR WITH LOCKING 4-POINT LATCH AND HANDLES.

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	ROOM FINISHES				CEILING HEIGHT
		FLOOR	BASE	WALL	CEILING	
1	WELL HOUSE	CONC	NONE	PNTD GYP VENEER PLASTER	PNTD GYP VENEER PLASTER	9' - 9 3/4"

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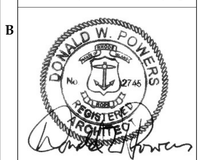
CHURCHWOODS - BUILDING 9

WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI



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FLOOR PLANS

A101

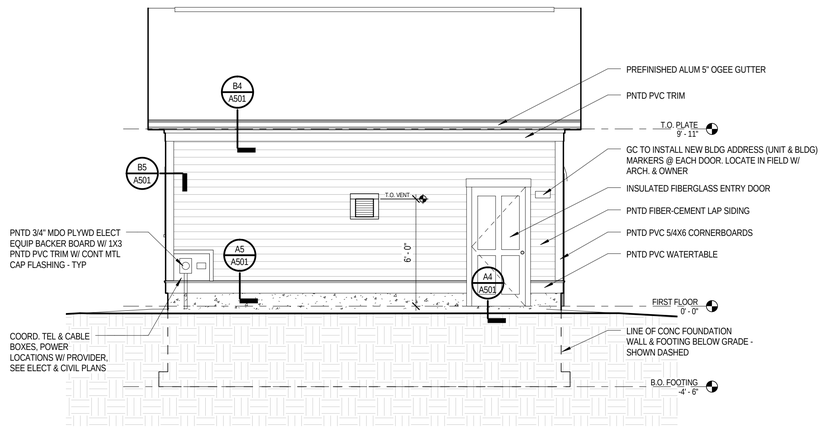
5/27/2016 11:29:18 AM Z:\16_0511 CHW Well House_BH.rvt

GENERAL SHEET NOTES - ELEVATIONS

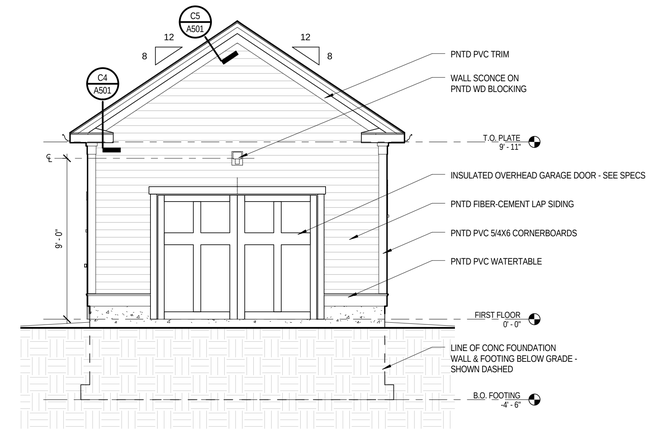
ALL FLOOR LEVELS ON THIS SHEET ARE ASSUMED TO BE AT ESTABLISHED DATUM UNLESS NOTED OTHERWISE. THE TOP OF CONCRETE SLAB AT EACH BUILDING IS CONSIDERED THE REFERENCE ELEVATION FOR ALL VERTICAL MEASUREMENTS AND DIMENSIONS. REFER TO THE SITE GRADING PLAN FOR ACTUAL SLAB ELEVATIONS.

ALIGN ALL ROOF AND WALL ACCESSORIES AS INDICATED ON THE ELEVATIONS. ANY ACCESSORIES NOT INDICATED ON THE PLANS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.

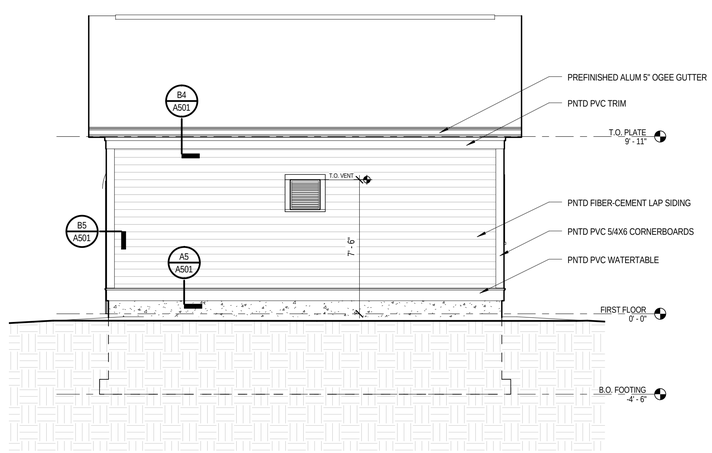
ALL EXTERIOR WALL MOUNTED ELECTRICAL BOXES, HOSE BIBBS, LIGHT FIXTURES, DEVICES AND ACCESSORIES SHALL BE INSTALLED ON MOUNTING BLOCKS. MOUNTING BLOCKS SHALL BE PAINTED TO MATCH BUILDING SIDING FIELD COLOR.



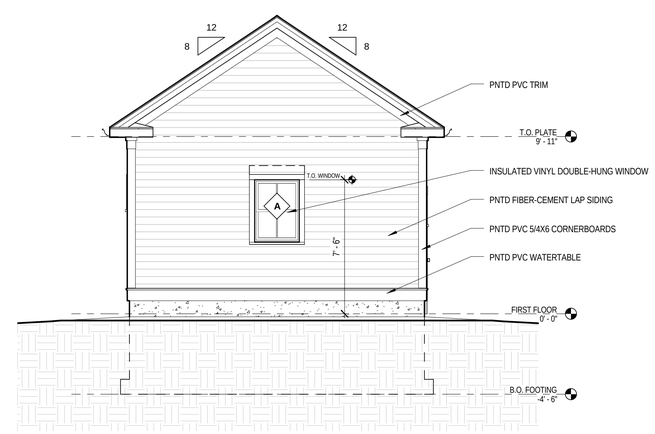
C2 A201 LEFT ELEVATION
SCALE: 1/4" = 1'-0"



C4 A201 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



A2 A201 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



A4 A201 REAR ELEVATION
SCALE: 1/4" = 1'-0"

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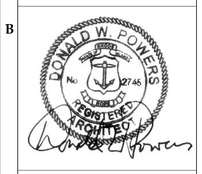
CHURCHWOODS - BUILDING 9

WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI



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

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EXTERIOR ELEVATIONS

A201

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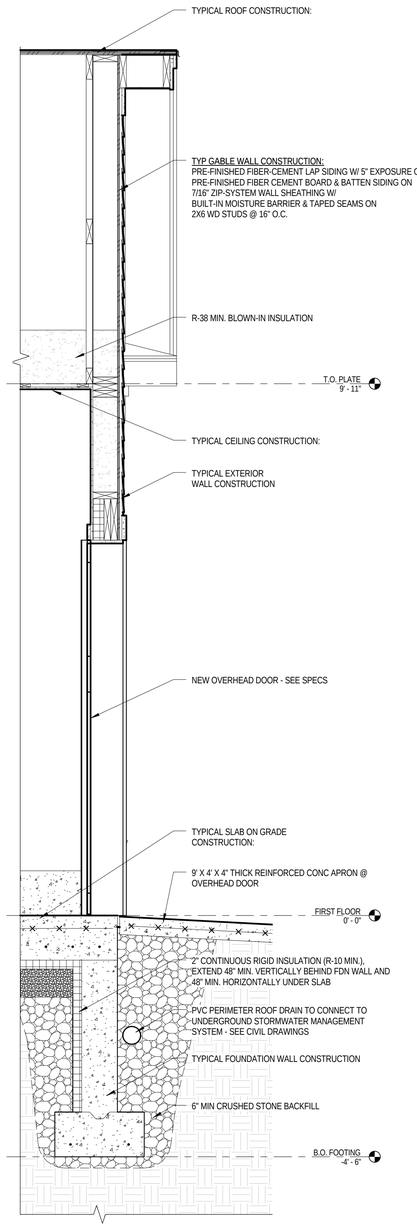
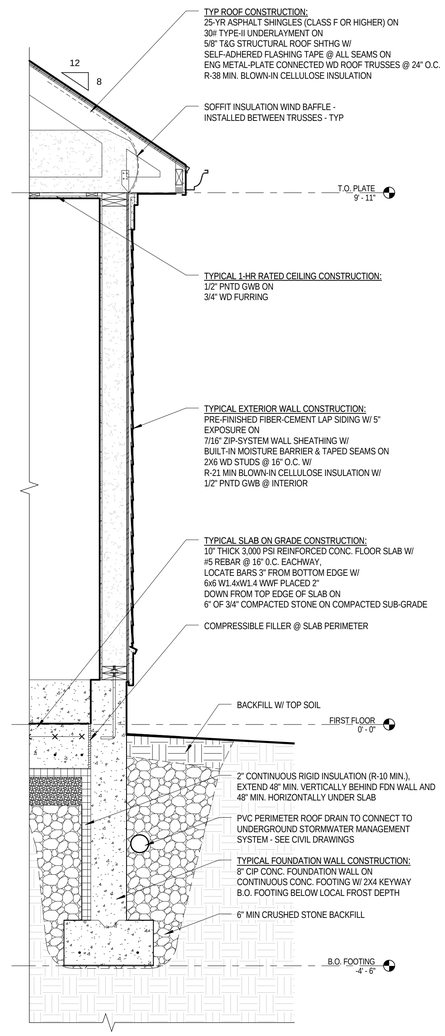
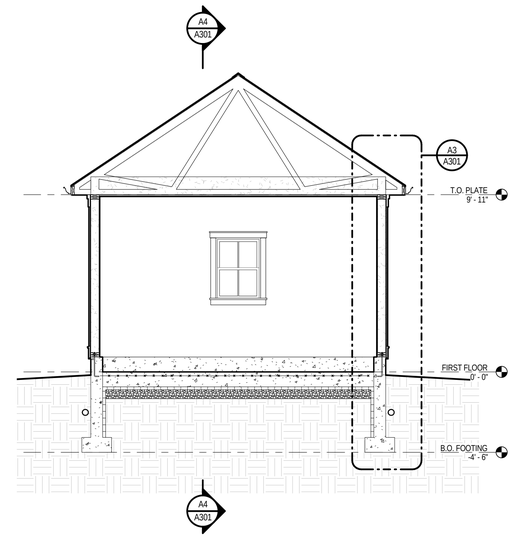


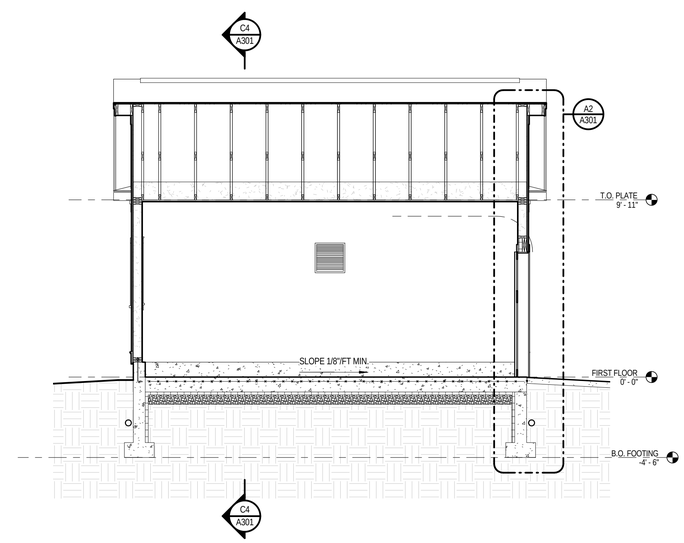
A2 A301 WALL SECTION @ GABLE WALL
SCALE: 3/4" = 1'-0"



A3 A301 TYPICAL WALL SECTION
SCALE: 3/4" = 1'-0"



C4 A301 TRANSVERSE BUILDING SECTION
SCALE: 1/4" = 1'-0"



A4 A301 LONGITUDINAL BUILDING SECTION
SCALE: 1/4" = 1'-0"

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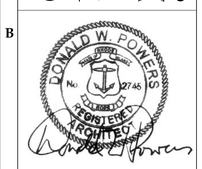

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BUILDING & WALL SECTIONS

A301

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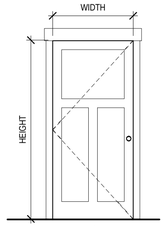
DOOR SCHEDULE											
	DOOR							FRAME			
DOOR NO	WIDTH	HEIGHT	THICKNESS	MANUFACTURER	TYPE	MATERIAL	FINISH	MATERIAL	FINISH	THRESHOLD	COMMENTS
1	3' - 0"	6' - 8"	0' - 1 3/4"	THERMATRU OR APPROVED EQ.	A	FIBERGLASS	PNTD	WD	PNTD	ALUMINUM	
2	9' - 0"	7' - 0"	0' - 2"	CLOPAY OR APPROVED EQ.	B	STEEL	PNTD	WD	PNTD		OVERHEAD DOOR

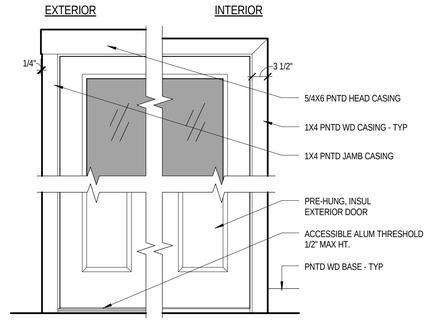


A

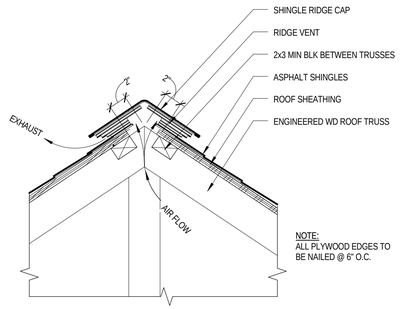
SINGLE-LEAF, INSULATED FIBERGLASS
SIZE AS NOTED ON SCHEDULE

DOOR LEGEND

3/8" = 1'-0"

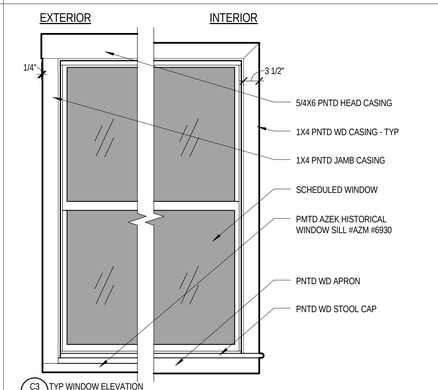


D3 / A501 TYP EXTERIOR DOOR ELEVATION
SCALE: 3/4" = 1'-0"



D4 / A501 DETAIL @ RIDGE VENT
SCALE: 1 1/2" = 1'-0"

WINDOW SCHEDULE				
	UNIT SIZE			
TYPE MARK	WIDTH	HEIGHT	OPERATION	COMMENTS
A	2' - 6"	3' - 6"	DOUBLE HUNG	



C3 / A501 TYP WINDOW ELEVATION
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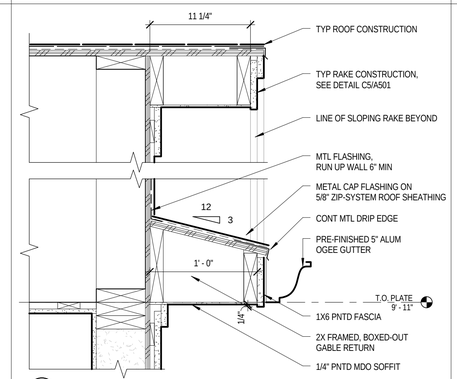
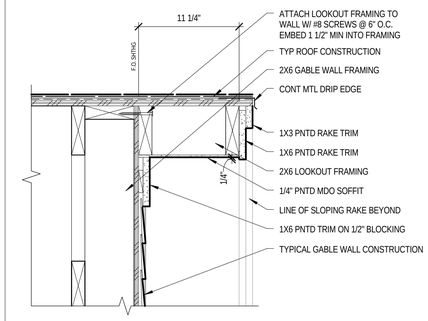
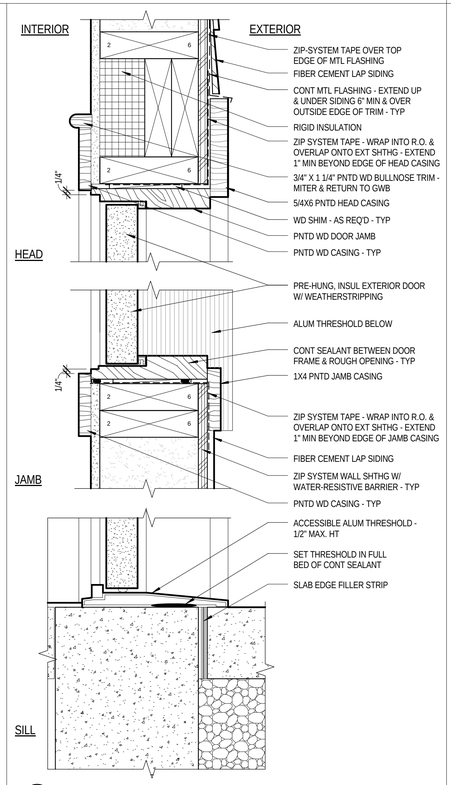


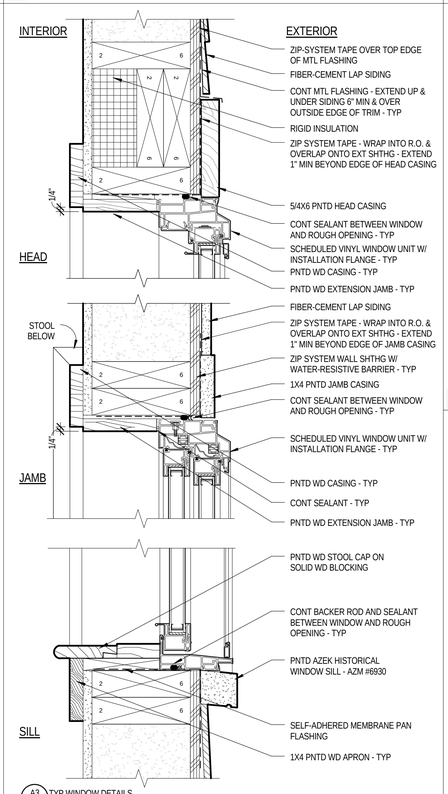
C4 / A501 DETAIL @ TYP EAVE RETURN
SCALE: 1 1/2" = 1'-0"



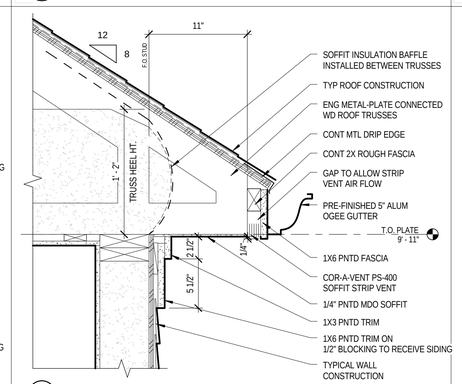
C5 / A501 DETAIL @ TYP RAKE
SCALE: 1 1/2" = 1'-0"



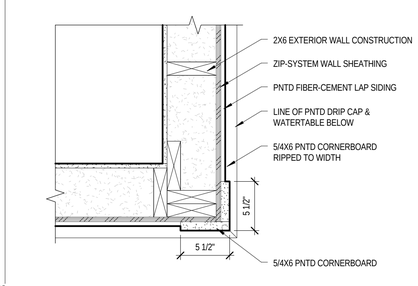
A2 / A501 TYP EXTERIOR DOOR DETAILS
SCALE: 3" = 1'-0"



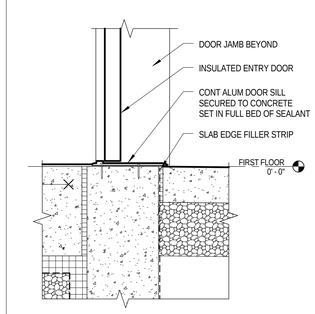
A3 / A501 TYP WINDOW DETAILS
SCALE: 3" = 1'-0"



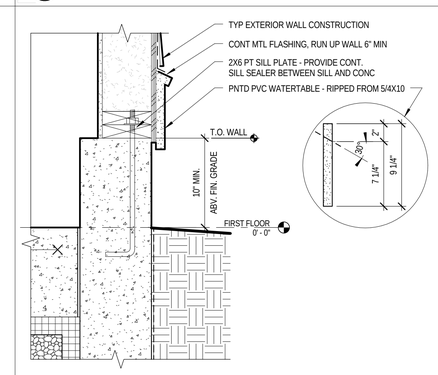
B4 / A501 DETAIL @ TYP EAVE
SCALE: 1 1/2" = 1'-0"



B5 / A501 DETAIL @ CORNERBOARD
SCALE: 1 1/2" = 1'-0"



A4 / A501 DETAIL @ DOOR SILL
SCALE: 1 1/2" = 1'-0"



A5 / A501 DETAIL @ WATERTABLE
SCALE: 1 1/2" = 1'-0"

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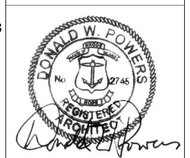
CHURCHWOODS - BUILDING 9

WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI



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CONSTRUCTION
DOCUMENTS

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WINDOW & DOOR
DETAILS &
EXTERIOR DETAILS

A501

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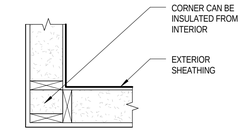
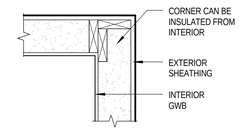


2 INSIDE CORNER



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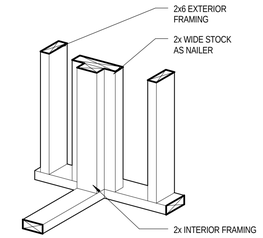
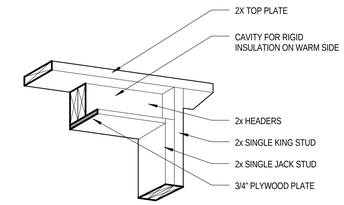
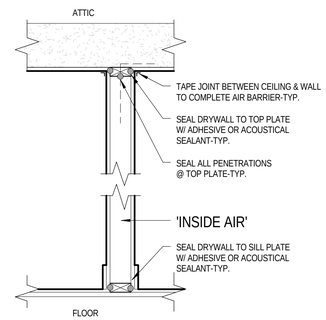


3 DRYWALL NAILER FOR INTERIOR PARTITIONS

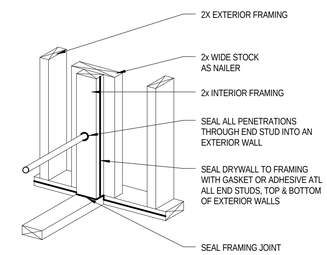


4 INSULATED HEADER

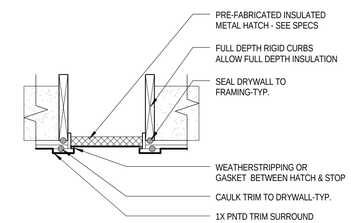
D3 / A502 TYPICAL FRAMING DETAILS
SCALE: 1" = 1'-0"



1 INTERIOR PARTITION WALL INTERSECTION CEILING & FLOOR

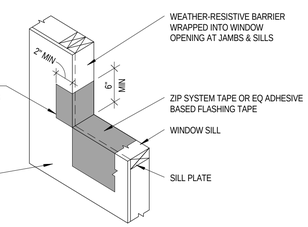


2 INTERSECTION OF INTERIOR PARTITION W/ EXTERIOR WALL



3 ATTIC HATCH

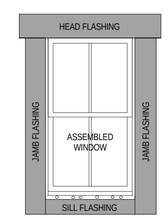
C3 / A502 TYPICAL AIR SEALING DETAILS
SCALE: 1" = 1'-0"



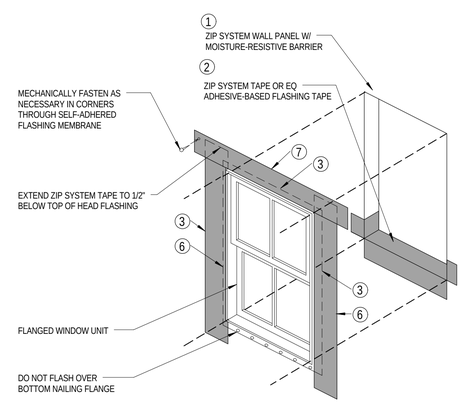
2
SILL FLASHING

WINDOW INSTALLATION STEPS:

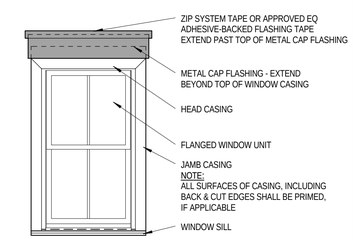
1. FASTEN ZIP SYSTEM WALL SHEATHING TO THE WOOD FRAME AND INSTALL THE ZIP SYSTEM TAPE AS SPECIFIED BY MANUFACTURER
2. APPLY ZIP SYSTEM TAPE OR APPROVED EQ ADHESIVE-BASED FLASHING TAPE, ENSURING THAT FLASHING EXTENDS UP JAMBS AT LEAST 6" & OVERHANGS SHEATHING AT LEAST 2".
3. APPLY A 3/8" NOM. DIA. BEAD OF SEALANT TO THE BACKSIDE (INTERIOR) OF THE WINDOW MOUNTING FLANGE AT THE TOP AND SIDES ONLY. PLACE BEAD IN LINE WITH ANY PRE-PUNCHED HOLES.
4. IMMEDIATELY INSTALL WINDOW USING MANUFACTURER RECOMMENDED FASTENERS.
5. APPLY BEAD OF SEALANT ACROSS THE FACE OF THE MOUNTING FLANGE AT HEAD.
6. APPLY JAMB FLASHING, EXTENDING TO 1/2" BELOW TOP OF HEAD FLASHING. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
7. APPLY HEAD FLASHING, OVERLAPPING JAMB FLASHING BY 1" MINIMUM. ONCE IN PLACE USE TAPE GUN OR ROLLER TO SEAL THE FLASHING TO THE SHEATHING.
8. INSTALL METAL CAP FLASHING AND TRIM.



FINAL CLOSURE DETAIL



3 4 5 6 7
JAMB & HEAD FLASHING DETAILS



8
CAP FLASHING & TRIM DETAIL

A4 / A502 TYPICAL FLASHING DETAILS
SCALE: 1/2" = 1'-0"

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CHURCHWOODS - BUILDING 9

WELL HOUSE
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TYPICAL CONSTRUCTION DETAILS

A502

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EXHAUST FAN SCHEDULE (BASED ON DAYTON)

SYMBOL	MODEL	TYPE	DRIVE	CFM	MOTOR DATA		NOTES
					HP	VOLTAGE	
EF-1	1BLH6	WALL	DIRECT	480	1/20	115/1Ø	1

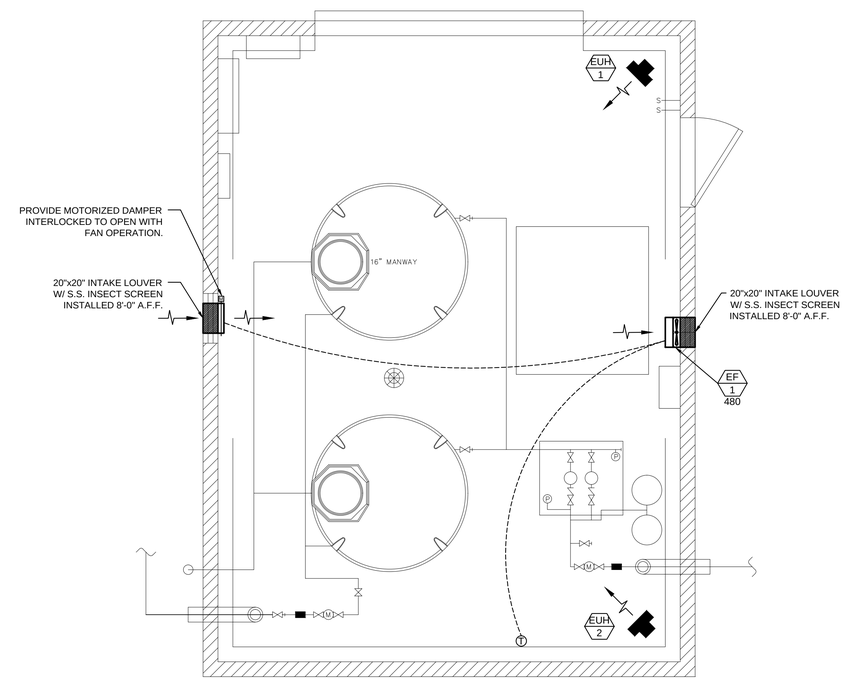
NOTES:
1. PROVIDE WITH 10 SECOND DELAY THERMOSTAT.
1. PROVIDE WITH INSECT SCREEN.

ELECTRIC HEATER SCHEDULE

(BASED ON QMARK)

SYMBOL	MODEL	TYPE	CFM	KW	ELECTRICAL DATA		NOTES
					AMPS	VOLTAGE	
EUH-1,2	MUH0581	CEILING	350	5.0	24	208/3Ø	1

NOTES:
1. PROVIDE WITH DISCONNECT SWITCH, AUTOMATIC THERMAL CUTOUT, FAN DELAY RELAY AND 208V PRIMARY/24V SECONDARY CONTROL RELAY.
2. PROVIDE WITH UNIT MOUNTED THERMOSTAT.
3. PROVIDE WITH HANGING KIT.



1 M101 WELL HOUSE
SCALE: 1/4" = 1'-0"

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CHURCHWOODS - BUILDING 9

WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI

WILLIAM T. MAYER III
STATE OF RHODE ISLAND
No. 7860
REGISTERED PROFESSIONAL ENGINEER MECHANICAL

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MECHANICAL WELL HOUSE PLAN

M101

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GENERAL ELECTRICAL SPECIFICATIONS

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. REFER TO THE TENANT'S LEASE INFORMATION FOR SPECIFIC REQUIREMENTS. THE TENANT'S LEASE INFORMATION SHALL SUPERCEDE THIS SPECIFICATIONS WHERE A CONFLICT OCCURS BETWEEN THE TWO.
2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.
4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.
6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.
7. ALL WORK SEQUENCES SHALL BE COORDINATED WITH THE ARCHITECT AND SHALL BE COORDINATION WITH OTHER BUILDING TRADES AND ARCHITECTS BUILDING SCHEDULES.
8. ALL BRANCH CIRCUITS RATED AT 120 VOLTS, 20 AMPERES EXCEEDING 75 FEET SHALL BE MINIMUM #10 AWG.
9. ALL EQUIPMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
10. FURNISH AND INSTALL TEMPORARY POWER AS REQUIRED TO OPERATE TOOLS AND LIGHTING. PROVIDE PANELS AND LIGHTING FIXTURES FOR CONSTRUCTION AS NEEDED.
11. THE ELECTRICAL CONTRACTOR (E.C.) SHALL INSPECT THE SITE, PRIOR TO SUBMITTING HIS BID, AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH THIS WORK SHALL BE PREFORMED. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK WHICH REQUIRED SHALL NOT EXCUSE THE E.C. FROM HIS OBLIGATIONS TO SUPPLY AND INSTALL THE WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND THE DRAWINGS AND UNDER ALL SITE CONDITIONS AS THEY EXIST.
12. THE PLANS DEPICT THE LOCATION OF ALL FIXTURE AND EQUIPMENT AND ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK, BUT THE CONTRACTOR SHALL UNDERSTAND THAT SUCH DETAILS ARE PART OF THE WORK.
13. THE ELECTRICAL CONTRACTOR SHALL CAREFULLY VERIFY ALL MEASUREMENTS AT THE SITE AND DETERMINE THE EXACT LOCATION OF ALL CHASES AND OPENINGS REQUIRED BY THIS WORK AND SHALL PROVIDE ALL SLEEVES, INSERTS, AND HANGERS REQUIRED.
14. BRANCH CIRCUITS ADDED TO ANY EXISTING PANELBOARDS SHALL ALSO INCLUDE THE CIRCUIT BREAKER DIRECTORY TO BE UPDATED. IF NO DIRECTORY EXISTS THAN ONE SHALL BE PROVIDED INDICATING THE NEW CIRCUITS ADDED.
15. WIRE AND CABLE FOR BRANCH CIRCUITS SHALL BE TYPE THWN/THHN, INSULATED FOR 600VOLTS, RATED AT 75°C MINIMUM AND UL LISTED FOR BUILDING WIRE USE. WIRE SIZE SHALL BE A MINUMUM OF #12 AWG SOLID. ALL CONDUCTORS SHALL BE COPPER. ALL WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS. METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR.
16. FIRE ALARM SYSTEM WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS WITH INSULATED THROAT. FIRE ALARM METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR. THE MINIMUM WIRE SIZE FOR FIRE ALARM WIRING SHALL BE #14 AWG. ALL SPLICES SHALL BE MADE ON SCREW TYPE TERMINAL STRIPS. WIRE NUTS SHALL NOT BE USED. T-TAPPING OF FIRE ALARM WIRING SHALL NOT BE ALLOWED.
17. RED PAINTED TERMINAL CABINETS AND BOXES WITH LOCKABLE COVERS SHALL BE PROVIDED AT ALL JUNCTION POINTS FOR FIRE ALARM SYSTEM WIRING.
18. ADDITIONAL JUNCTION BOXES BEYOND THOSE SHOWN ON THE DRAWINGS SHALL BE PROVIDED AS NECESSARY FOR ALL ELECTRICAL INSTALLATIONS.
19. ALL CUTTING, PATCHING AND FIRESTOPPING FOR ELECTRICAL INSTALLATIONS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
20. PROVIDE CONDUIT SLEEVES FILLED WITH AN APPROVED FIRE RESISTANT MATERIAL WHERE FIRE RATED WALLS, FLOORS OR CEILINGS ARE PENETRATED. APPROVED WATERTIGHT CONDUIT SLEEVES SHALL BE PROVIDED WHERE WALLS ARE PENETRATED EITHER ENTERING OR LEAVING THE BUILDING.
21. RECEPTACLES, LIGHT FIXTURES, AND POWER ITEMS BRANCH CIRCUIT WIRING MAY NOT BE SHOWN BUT SHALL BE PROVIDED AS REQUIRED. MINIMUM WIRING SHALL BE 2#12 PLUS 1#12GROUND IN 3/4"C. NO MORE THAN THREE PHASES MAY BE COMBINED IN A SINGLE HOMERUN AND EACH PHASE SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL.
22. ALL CONDUITS SHALL CONTAIN A GREEN SAFETY GROUND WIRE. BOND ALL PANELS, CABINETS, ENCLOSURES, CONDUITS, ETC., AS REQUIRED PER CODE.
23. ALL SUPPORTS AND ANCHORS SHALL BE DESIGNED AND INSTALLED PER REQUIREMENTS FOR THE SEISMIC CLASSIFICATIONS AS OUTLINED IN THE APPLICABLE BUILDING CODE. SITE LOCATION AND PREVAILING ORIENTATION SHALL BE TAKEN INTO ACCOUNT IN THE DESIGN.
24. SUBMIT SIX (6) COPIES FOR REVIEW AND APPROVAL OF THE FOLLOWING SHOP DRAWINGS: LIGHTING FIXTURES, WIRING DEVICES, RACEWAY, POKE-THRU DEVICES AND BUILDING WIRE & CABLE.

NOTES FOR ALUMINUM EQUIPMENT

1. THESE DRAWINGS ARE BASED ON THE USE OF COPPER IN CONDUCTORS, TRANSFORMER WINDINGS, SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS.

2. ALTHOUGH PERMITTED BY CODE, THIS OFFICE DOES NOT RECOMMEND THE USE OF ALUMINUM ELECTRICAL EQUIPMENT.

3. USE OF ALUMINUM CONDUCTORS, TRANSFORMERS WITH ALUMINUM WINDINGS AND SWITCHBOARDS, DISTRIBUTION PANELBOARDS, BRANCH CIRCUIT PANELBOARDS, LOAD CENTERS, DISCONNECT SWITCHES & CIRCUIT BREAKERS WITH ALUMINUM BUSS IS AT THE DISCRETION & DECISION OF THE OWNER.

4. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE ALL CONDUCTOR AND CONDUIT SIZES, PER NEC, SHOULD ALUMINUM BE USED.

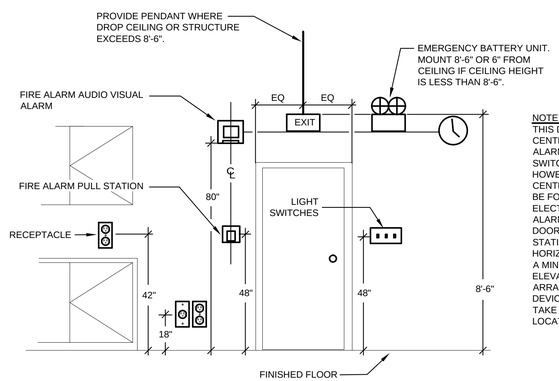
5. IF ALUMINUM EQUIPMENT IS USED IN ANY OF THE ELECTRICAL COMPONENTS OF ITEM "3" ABOVE, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
   a. INSTALLATION SHALL BE IN ACCORDANCE WITH IEEE STD. 241-1990, PARAGRAPH 8.7.2
   b. WHEN CUTTING CABLE, AVOID NICKING THE STRANDS.
   c. UNPLATED CONTACT SURFACES SHALL BE CLEANED WITH WIREBRUSH, STEEL WOOL, EMERY CLOTH OR SIMILAR ABRASIVE TOOL OR MATERIAL.
   d. PLATED SURFACES SHALL BE CLEANED WITH AN APPROVED SOLVENT.
   e. APPLY JOINT COMPOUND TO THE CONDUCTOR IF THE CONNECTOR DOES NOT ALREADY HAVE IT.
   f. USE ONLY CONNECTORS SPECIFICALLY TESTED AND APPROVED FOR USE ON ALUMINUM CONDUCTORS.
   g. REFER TO ANSI/UL486B-1982.
   h. ON MECHANICAL CONNECTORS, TIGHTEN THE CONNECTOR WITH A SCREWDRIVER OR WRENCH TO THE REQUIRED TORQUE. REMOVE EXCESS COMPOUND.
   i. ON COMPRESSION CONNECTORS, CRIMP THE CONNECTOR USING THE PROPER TOOL AND DIE. REMOVE EXCESS COMPOUND.
   j. ALWAYS USE JOINT COMPOUND THAT IS COMPATIBLE WITH THE INSULATION AND AS RECOMMENDED BY THE MANUFACTURER.
   k. WHEN MAKING AN ALUMINUM-TO-COPPER CONNECTION THAT IS EXPOSED TO MOISTURE, PLACE THE ALUMINUM CONDUCTOR ABOVE THE COPPER. IF THERE IS NO EXPOSURE TO MOISTURE, THE RELATIVE POSITION OF THE TWO METALS IS NOT IMPORTANT.
   i. WHEN USING INSULATED CONDUCTORS OUTDOORS, EXTEND THE CONDUCTOR INSULATION OR COVERING AS CLOSE TO THE CONNECTOR AS POSSIBLE TO MINIMIZE WEATHERING THE JOINT. OUTDOOR JOINTS SHALL BE COMPLETELY PROTECTED BY TAPE OR OTHER MEANS. WHEN OUTDOOR JOINTS ARE COVERED OR PROTECTED, THE PROTECTION SHALL COMPLETELY EXCLUDE MOISTURE.

TYPICAL FIRE STOPPING NOTES

A. GENERAL: FIRE STOPPING SHALL BE PROVIDED BY THIS CONTRACTOR FOR ALL FLOOR, CEILING AND FIRE RATED WALL PENETRATIONS FOR CONDUIT, SLEEVES AND/OR CABLING AS REQUIRED BY JOB CONDITIONS.

B. THE CONTRACTOR SHALL PROVIDE A FIRE STOP SYSTEM IN ACCORDANCE WITH THE FOLLOWING:

1. THE SYSTEM SHALL CONSIST OF A WATERBASED SEALANT AND SUITABLE DAMMING MATERIALS (WHERE REQUIRED) AND BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. THE SEALANT SUPPLIED SHALL BE A TWO STAGED INTUMESCENT AND CAPABLE OF EXPANDING UP TO 8 TIMES ITS ORIGINAL VOLUME.
3. THE SEALANT SUPPLIED SHALL CONTAIN NO ASBESTOS, NO FIBERGLASS, AND NO SOLVENTS NOT CORROSIVE MINERAL SALTS OF ANY KIND.
4. THE SEALANT SHALL FORM A SURFACE CAPABLE OF BEING SANDED AND PAINTED TO MATCH SURROUNDING SURFACES AND SHALL BE IMPERVIOUS TO WATER WHEN DRY.
5. THE FIRE STOP SYSTEM SHALL BE TESTED TO THE TIME/TEMPERATURE REQUIREMENTS OF ASTM E119 AND SHALL BE UL1479 (ASTM E814) AND CLASSIFIED FOR UP TO 3 HOURS.
6. THE FIRE STOP SEALANT SHALL BE SPECSEAL SEALANT AS MANUFACTURED BY SPECIFIED TECHNOLOGIES, INC. OR APPROVED EQUAL.
7. SPECIAL CARE SHALL BE TAKEN WITH ELECTRICAL SYSTEMS NOT TO COMPROMISE ANY OF THE BUILDING FIRE PARTITIONS, FLOORS, WALLS OR MEMBRANES. PROVIDE ALL FIRESTOPPING REQUIRED TO COMPLY WITH THE BUILDING CODE, THE ELECTRICAL CODE AND THE UL LISTING OF EACH ASSEMBLY. COORDINATE LOCATIONS AND TYPES OF MEMBRANES WITH ARCHITECT.



NOTE:
THIS DETAIL INDICATES CENTERLINE FOR FIRE ALARM/PULL STATION SWITCHES AND RECEPTACLES. HOWEVER THIS SAME CENTERLINE PRINCIPLE SHALL BE FOR ALL GROUP MTD. ELECTRICAL DEVICES. IF FIRE ALARM IS ON SAME SIDE OF DOOR AS SWITCHES, PULL STATION SHALL BE HORIZONTALLY SEPARATED BY A MINIMUM OF 18". THIS ELEVATION IS A GENERAL ARRANGEMENT OF OF DEVICES. ARCHITECT PLANS TAKE PRECEDENCE FOR EXACT LOCATIONS.

MOUNTING HEIGHT DETAIL

NOT TO SCALE

SEISMIC RESTRAINT NOTE

A. GENERAL: IT IS THE INTENT OF THIS SEISMIC SPECIFICATION TO KEEP ALL ELECTRIAL BUILDING SYSTEM COMPONENTS IN PLACE DURING A SEISMIC EVENT. ALL ELECTRICAL SYSTEMS MUST BE INSTALLED IN STRICT ACCORDANCE WITH SEISMIC CODES, COMPONENT MANUFACTURER'S AND BUILDING CONSTRUCTION STANDARDS. WHENEVER A CONFLICT OCCURS BETWEEN THE MANUFACTURER'S OR CONSTRUCTION STANDARDS, THE MOST STRINGENT SHALL APPLY.

B. THIS CONTRACTOR SHALL ENGAGE A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE JURISDICTION OF THIS PROJECT TO REVIEW THE ENTIRE INSTALLATION TO DETERMINE ALL SEISMIC RESTRAINT REQUIREMENTS AND METHODS. CONTRACTOR SHALL SUBMIT A REPORT OUTLINING THE STRUCTURAL ENGINEER'S REVIEW AS WELL AS SEISMIC RESTRAINT SHOP DRAWINGS AND SUPPORTING CALCULATIONS PREPARED BY THE PROFESSIONAL STRUCTURAL ENGINEER FOR REVIEW BY THE ARCHITECT.

C. SEISMIC RESTRAINTS SHALL BE DESIGNED IN ACCORDANCE WITH SEISMIC FORCE LEVELS AS DETAILED IN THE APPLICABLE BUILDING CODE.

1. ALL EQUIPMENT, CONDUIT AND PULL BOXES SHALL BE ADEQUATELY RESTRAINED TO RESIST SEISMIC FORCES. RESTRAINT DEVICES SHALL BE DESIGNED AND SELECTED TO MEET SEISMIC REQUIREMENTS AS DEFINED IN THE LATEST ISSUE OF THE BOCA NATIONAL BUILDING CODE IN ACCORDANCE WITH THE APPLICABLE SEISMIC ZONE.

2. ANCHOR BOLT CALCULATORS, SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED SHOWING ADEQUACY OF THE BOLT SIZING AND TYPE. STAMPED CALCULATIONS SHALL ALSO BE FURNISHED FOR ANCHORS ON RESTRAINT DEVICES, CABLES, ISOLATORS AND RIGIDLY MOUNTED EQUIPMENT.

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	18" A.F.F.
	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	QUADRAPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE COVER")	18" A.F.F.
WP 2	DUPLEX CONVENIENCE OUTLET; 125 VOLT, 20 AMPERE, U-SLOT GROUNDING TYPE WITH GROUND FAULT PROTECTION. (SUBSCRIPT "2" INDICATES CIRCUIT NUMBER, "WP" INDICATES WEATHER PROOF WITH "WHILE-IN-USE" COVER)	43" A.F.F. 7" ABV COUNTERTOP (KITCHEN ISLAND; MOUNT HORIZONTALLY)
	SPECIAL NEMA CONFIGUATION OUTLET; VERIFY NEMA TYPE WITH EQUIPMENT TO BE SERVED.	18" A.F.F.
J	JUNCTION BOX; SIZE AS REQUIRED PER CODE.	
	TEL./DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	TELEPHONE OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
	DATA OUTLET; PROVIDE 3/4"C. W/ PULL STRING FROM OUTLET TO ABOVE DROP CEILING & HOMERUN CABLE TO TERMINATION POINT.	18" A.F.F.
IC	INTERCOM SYSTEM PROVIDE BACKBOX & 3/4" CONDUIT W/PULL STRING TO ABOVE CEILING. MIRCOM K-SERIES INTERCOM SYSTEM #IC-51-3 VANDAL RESISTANT STATION. COORDINATE INSTALLATION OF ALL ASSOCIATED EQUIPMENT WITH ARCHITECTURAL DRAWINGS.	REFER TO ARCHITECTURAL DWGS
	MOTOR	
	PANELBOARD SURFACE MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION.	MOUNT 6'-6" AFF TO TOP BREAKER.
	PANELBOARD FLUSH MOUNTED; 120Y/208V, 1-PHASE, 3-WIRE. REFER TO "BRANCH CIRCUIT PANELBOARD SCHEDULES" ON PLANS FOR APPLICABLE INFORMATION. FLUSH MOUNTED PANELS SHALL BE SET IN 6" (MIN.) STUD WALLS.	MOUNT 6'-6" AFF TO TOP BREAKER.
1,3 A A/1,3	HOMERUN TO PANELBOARD (LOADCENTER); "A" INDICATES PANEL, "1,3" INDICATES CIRCUIT NUMBERS. REFER TO "TYPICAL CIRCUITING DETAIL" ON PLANS. NOTE: ALSO INDICATED AS A/1,3.	
MS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #DT-200/DT-205 SERIES OR (APPROVED EQUAL)	MOUNT TO FIXTURE / MTG. J-BOX.
WS	PROVIDE A WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #W500A. OR (APPROVED EQUAL). PROVIDE WITH REQ'D. POWER PACK LISTED BELOW. INSTALL ONE WALL SENSOR / POWER PACK ON EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQ'S.	48" AFF
PP	PROVIDE A REMOTE POWER PACK FOR WALL MOUNTED MOTION SENSOR MANUFACTURED BY "WATT STOPPER", CAT. #B120E-P. OR (APPROVED EQUAL). PROVIDE POWER PACK FOR EACH WALL SENSOR EACH FLOOR / LANDING IN EACH STAIRWELL. FIELD VERIFY EXACT WIRING REQ'S.	
S3a	THREE-WAY SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
Sa	SINGLE POLE SWITCH; "a" INDICATES LIGHTING FIXTURES CONTROLLED.	42" AFF
SM	MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	42" AFF

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG No.	MOUNTING	LAMPING TYPE	LAMPING WATTAGE	LAMPING QUANTITY	VOLTAGE	DESCRIPTION / REMARKS
D	SEAGULL LIGHTING	59021L-15	SURFACE	FLUORESCENT	17	2	120	SURFACE MOUNTED 4' STRIP
E	SEAGULL LIGHTING	8647701BLE-04	WALL	FLUORESCENT	18	1	120	EXTERIOR WALL LANTERN

CBA = COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
CC = CUSTOM COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY CUSTOM COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
NOTES:
1. PROVIDE ACCESSORIES AND MOUNTING HARDWARE AS REQUIRED FOR ALL FIXTURES.
2. ALL FIXTURE/ACCESSORY COLORS NOT INDICATED ON DWG'S SHALL BE SELECTED BY ARCHITECT.
3. PROVIDE LAMPING FOR ALL FIXTURES UNLESS LAMPING IS INCLUDED WITH FIXTURE AS INDICATED IN SCHEDULE.
4. PROVIDE TYPICAL UNIT MOCK UP FOR LIGHT FIXTURE HANGING HEIGHTS AND EXPOSED ELECTRICAL CONDUIT LAYOUT TO BE REVIEWED BY ARCHITECT.
5. FIXTURE TO BE WIRED TO PHOTO CELL AND TIME CLOCK PROVIDED BY G.C.
6. ALL LIGHT FIXTURES WITH INCANDESCENT LAMPING SHALL BE PROVIDED W/ CFL/LED LAMP IN LIEU OF INCANDESCENT LAMP.

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CHURCHWOODS - BUILDING 9
WELL HOUSE
4130 OLD POST ROAD
CHARLESTOWN, RI

RAYMOND W. DUSSEAULT III
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE

NO.	ISSUE	DATE

JOB #: 15-3200
DATE: MAY 27, 2016
SCALE: As indicated

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SCHEDULES, NOTES LEGENDS AND DETAILS.

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MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

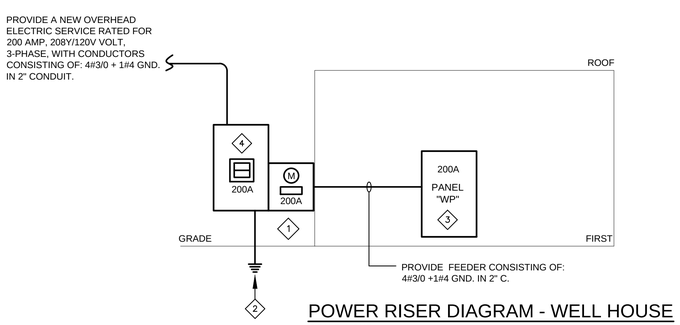
XXX # ITEM No.	DESCRPITION	LOCATION	EQUIPMENT CHARACTERISTICS					CIRCUIT	CIRCUIT BREAKER (HACR TYPE)	FEEDER & CONDUIT	DISCONNECT SWITCH				MANUAL MOTOR CONTROLLER	REMARKS
			VOLTS	PH	FREQ.	(KW) / HP	FLA				SIZE	FUSE	POLES	NEMA		
EF-1	EXHAUST FAN	SEE PLANS	120	1	60	-	-	WP/2	20A/1P	2#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE WITH MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
UH-1	UNIT HEATER	SEE PLANS	208	3	60	5	-	WP/4,6,8	20A/3P	3#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE WITH MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
UH-2	UNIT HEATER	SEE PLANS	208	3	60	5	-	WP/10,12,14	20A/3P	3#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE WITH MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
P-1	BOOSTER PUMP	SEE PLANS	208	3	60	5	10.4	WP/16,18,20	20A/3P	3#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE WITH MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
P-2	BOOSTER PUMP	SEE PLANS	208	3	60	5	10.4	WP/22,24,26	20A/3P	3#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE WITH MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-
WP-1	WELL PUMP	EXISTING WELL	208	3	60	2	4.2	WP/28,30,32	15A/3P	3#12 + 1#12 GND. IN 3/4" C.	-	-	-	-	PROVIDE WITH MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERLOADS.	-

1. COORDINATE WITH HVAC CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
2. COORDINATE WITH PLUMBING CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
3. ALL DISCONNECTING MEANS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
4. ALL STARTERS, VFD'S ETC. SHALL BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE ALL HVAC EQUIPMENT.
5. ALL HVAC CONTROL WIRING SHALL BE PROVIDED BY OTHERS.

NOTES:

1. ALL CONDUCTORS INDICATED ARE BASED ON COPPER.
2. ALL FEEDER SIZES SHOWN, HAVE HAD "VOLTAGE DROP" CALCULATIONS INCORPORATED. (TYPICAL)
3. ALL NEW ELECTRICAL SWITCHGEAR HAS BEEN BASED ON "SQUARE D". (NO SUBSTITUTIONS)

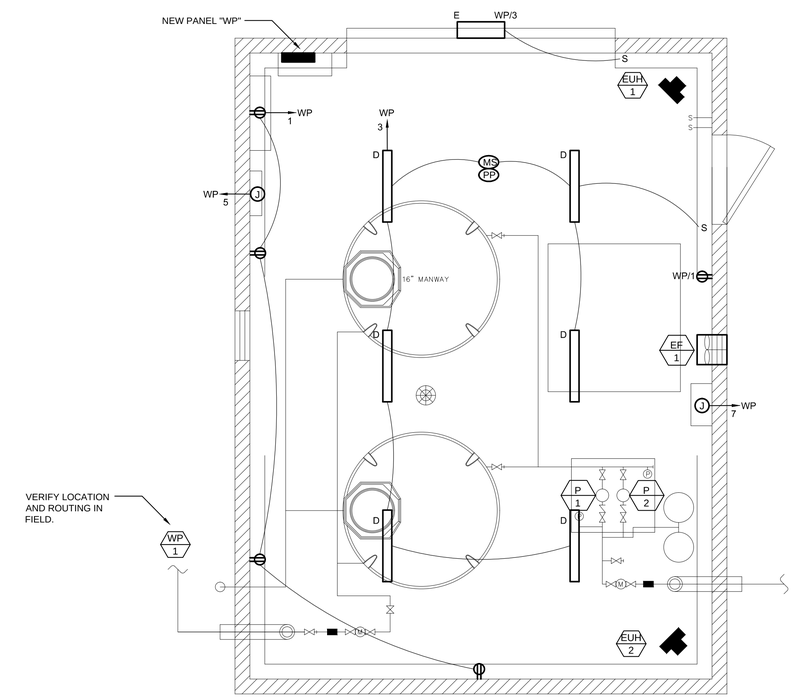
XXX # MECHANICAL EQUIPMENT CONNECTION TAG:
REFER TO "MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE" ON THIS DWG. FOR ALL CIRCUITING INFORMATION, INCLUDING BUT NOT LIMITED TO BRANCH CIRCUITING WIRING AND CONDUIT SIZE, VOLTAGE, PHASE, MOTOR CONTROL, DISC. SWITCH & CIRCUIT BREAKER.



POWER RISER DIAGRAM - WELL HOUSE
SCALE: NONE

POWER RISER NOTES

1. 200 AMPERE - RATED BY CUTLER HAMMER 1MM OR 3MM NEMA 3R RINGLESS STYLE METER STACK MODULE, WITH METER SOCKETS AND 3-POLE CIRCUIT BREAKERS AS INDICATED. PROVIDE ALL REQUIRED BUSSING, CONNECTION, EQUIPMENT, ETC. FOR FUTURE METERS.
2. GROUNDING, BONDING AND COPPER GROUNDING ELECTRODE SYSTEM PER NEC 250 AS ADOPTED BY AUTHORITY HAVING JURISDICTION. WHEN BUILDING DOMESTIC WATER SERVICE PIPE IS NON-METALLIC PROVIDE 'UFER' GROUND IN BUILDING FOUNDATION HAVING DIRECT CONTACT WITH EARTH.
3. 200-AMPERE / 3-POLE MAIN LUG ONLY CIRCUIT BREAKER.
4. MAIN CIRCUIT BREAKER CUTLER HAMMER 3MCB NEMA 3R MAIN SERVICE MODULE. (RATED FOR 200 AMPS, 208Y/120V, 3Ø., PROVIDE A 200 AMP, 3-POLE MAIN SERVICE BREAKER.)



WATER STORAGE FACILITY FLOOR PLAN LAYOUT

A1 A101 WELL HOUSE
SCALE: 1/4" = 1'-0"

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WELL HOUSE PLAN

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