

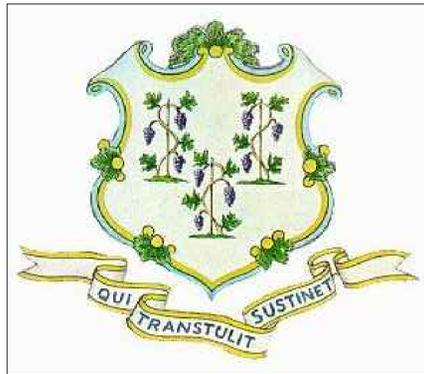
THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) OWNER OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)



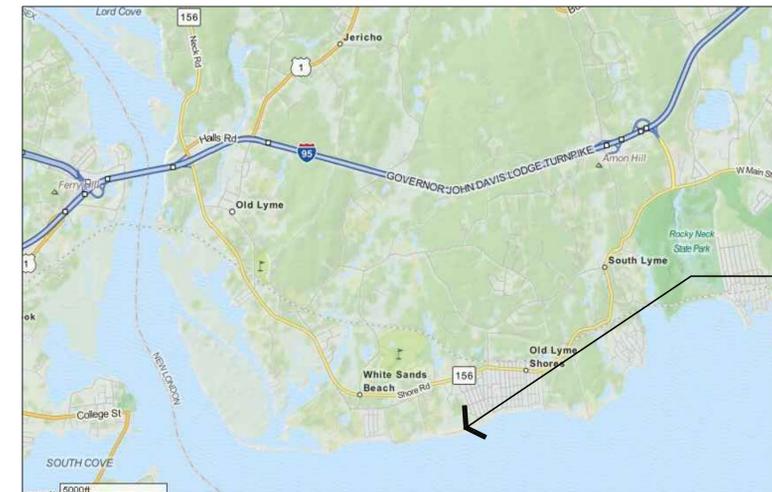
October 5, 2015

csa project 1347-46

Issued for: Bidding & Construction



Rosenfield Residence Rehabilitation and Mitigation Application No. 1648 28 West End Drive Old Lyme, CT 06371



PROJECT SITE

LOCATION PLAN

not to scale



Architect

Capital Studio Architects, LLC
1379 Main Street
East Hartford, Connecticut 06108
tel: 860.289.3262 fax: 860.289.3163

Civil / Site Engineer

Design Professionals, Inc.
PO Box 1167
425 Sullivan Avenue
South Windsor, CT 06074
tel: 860.291.8755 fax: 860.291.8757

Environmental Consultant

Eagle Environmental, Inc.
8 South Main Street, Suite 3
Terryville, Connecticut 06786
tel: 860.589.8257 fax: 860.585.7034

Structural Engineer

William M. Lapoint, PE
1379 Main Street
East Hartford, CT 06108
tel: 860.622.0840

MEP Engineer

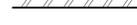
Consulting Engineering Services
811 Middle Street
Middletown, CT 06457
tel: 860.632.1682

Drawing List

Title Sheet	Description
A-0.0	GENERAL INFORMATION
P-1	PLOT PLAN
S-1.0	FOUNDATION PLAN
S-1.1	STRUCTURAL FRAMING DETAILS
S-2.0	STRUCTURAL FRAMING PLANS
A-1.0	GROUND FLOOR PLAN
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A-2.0	ELEVATIONS
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MEP-1.0	MEP DEMOLITION FLOOR PLANS
P-1.0	PLUMBING FLOOR PLANS
P-5.0	PLUMBING SCHEDULES AND DETAILS
M-1.0	MECHANICAL FLOOR PLANS
M-5.0	MECHANICAL SCHEDULES AND DETAILS
E-1.0	ELECTRICAL FLOOR PLANS
E-5.0	ELECTRICAL SCHEDULES AND DETAILS
E-5.1	ELECTRICAL SPECIFICATIONS

**THE STATE OF
CONNECTICUT
DEPARTMENT OF
HOUSING (DOH)
COMMUNITY
DEVELOPMENT BLOCK
GRANT - DISASTER
RECOVERY (CDBG-DR)
DOH OCCUPIED
REHABILITATION and
REBUILDING PROGRAM
(OORR)**

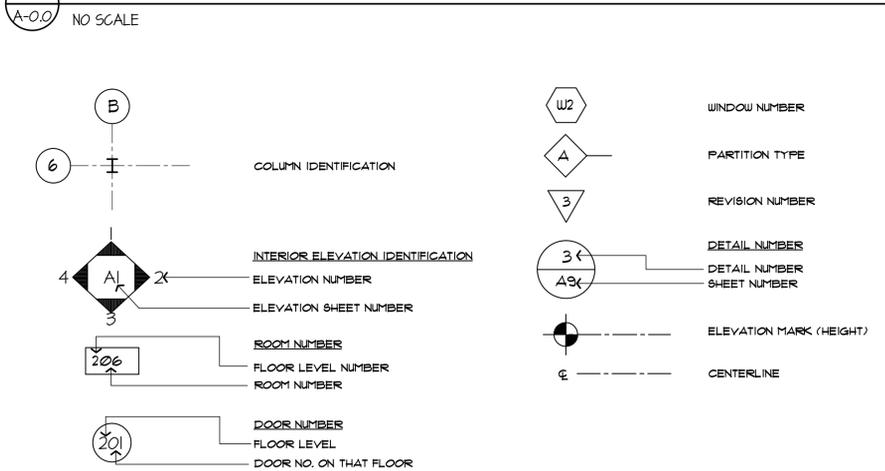
**REHABILITATION and
MITIGATION for the
ROSENFIELD
RESIDENCE
APPLICATION No. 1648
28 West End Drive
Old Lyme, CT 06371**

	BRICK		RIGID INSULATION
	STONE		BATT INSULATION
	CONCRETE		FINISH WOOD (ELEVATION)
	MASONRY BLOCK		FINISH WOOD (SECTION)
	PLYWOOD		WOOD BLOCKING (CONT.)
	GYPSUM BOARD		WOOD BLOCKING (NOT CONT.)
	STEEL (SECTION)		STEEL ANGLE
	CERAMIC TILE		STEEL BEAM
	EARTH		GRAVEL

A.C.T. ACOUST. ALT. ALUM. ARCH. ASB. A.T. @	ACOUSTICAL CEILING TILE ACOUSTIC ALTERNATE ALUMINUM ARCHITECTURAL ASBESTOS ASPHALT TILE AT	I.D. INSUL. JAN. JT. LAM. L.P. LCKR.	INSIDE DIAMETER INSULATION JANITOR JOINT LAMINATED LOW POINT LOCKER
B.C. BD. B.F. BLDGS.	BRICK COURSE BOARD BOTTOM OF FOOTING BUILDING	MAS. MAT. MAX. M.C. MECH. MEM. MFR. MIN. MIR. MISC. M.O.	MASONRY MATERIAL MAXIMUM MASONRY COURSE MECHANICAL MEMBRANE MANUFACTURER MINIMUM MIRROR MISCELLANEOUS MASONRY OPENING
CAB. C/C C.T. C.J. C.L. C.L.G. C.O. COL. COMP. CONC. CONN. CONT. CORR. CSK.	CABINET CENTER TO CENTER CERAMIC TILE CONTROL JOINT CENTER LINE CEILING CASED OPENING COLUMN COMPACTED CONCRETE CONNECTION CONTINUOUS CORRIDOR COUNTERSINK	N.I.C. NO. N.T.S. O/C O.D. OPNG. OPP. HND.	NOT IN CONTRACT NUMBER NOT TO SCALE ON CENTER OUTSIDE DIAMETER OPENING OPPOSITE HAND
D.F. DET. DNIG. DN. DP.	DRINKING FOUNTAIN DETAIL DRAWING DOWN DAMP-PROOFING	PERF. PNTD. PT	PERFORATED PAINTED PRESSURE TREATED
ELECT. E.J. ELEV. E.P. EQUIP. E.W.C. EXP.	ELECTRICAL EXPANSION JOINT ELEVATION (ELEVATOR) ELECTRICAL PANEL EQUIPMENT ELECTRIC WATER COOLER EXPOSURE (EXPANSION)	R. R.B. RE REINF. R.L. RM. R.O.	RISER (RADIUS) RUBBER BASE REFERENCE REINFORCING RAIN LEADER ROOM ROUGH OPENING
F.A.P. F.D. F.E. F.H.G. FIN. FL. F/M F/F FDN F.R. FTG.	FIRE ALARM PANEL FLOOR DRAIN FIRE EXTINGUISHER FIREHOSE CABINET FINISH FLOOR FACE OF MASONRY FACE OF FRAMING FOUNDATION FIRE RATED FOOTING	SIM. SPEC. STL. STRUCT. STOR. SUSP.	SIMILAR SPECIFICATION STEEL STRUCTURAL STORAGE SUSPENDED
G.M.U. GALV. GL. GLZ. GYP. BD.	GLAZED MASONRY UNIT GALVANIZED GLASS GLAZING GYPSUM WALL BOARD	T&G. THK. THRESH. T. T/S T/STL T/W TYP.	TONGUE AND GROOVE THICK THRESHOLD TREAD TOP OF SLAB TOP OF STEEL TOP OF WALL TYPICAL
HGT. H.M. H.P. HDWD. HDWR.	HEIGHT HOLLOW METAL HIGH POINT HARDWOOD HARDWARE	V.C.T. V.B. VERT. VEST. V.I.F. V.W.C.	VINYL COMPOSITE TILE VINYL BASE VERTICAL VESTIBULE VERIFY IN FIELD VINYL WALL COVERING
W. W.C. WD. WIND. W.P.	WITH WATER CLOSET WOOD WINDOW WATERPROOFING		

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH APPLICABLE STATE OF CONNECTICUT BUILDING AND FIRE CODES AND SAFETY CODES. BEFORE WORK BEGINS CONTRACTOR IS TO CONTACT CALL BEFORE YOU DIG AT 1-800-922-4455 TO LOCATE ALL UNDERGROUND UTILITIES.
- WORK PERMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL SECURE ALL REQUIRED LOCAL AND STATE OF CONNECTICUT PERMITS PRIOR TO COMMENCING WORK. ALL COSTS OF SECURING PERMITS SHALL BE PAID BY THE OWNER.
- ALL MATERIALS AND EQUIPMENT THAT WILL BE USED IN THE CONSTRUCTION OF THIS PROJECT ARE SUBJECT TO THE APPROVAL OF THE OWNER. ALL MATERIALS AND EQUIPMENT REQUIRED BY NOTES OR SPECIFICATIONS SHALL BE SUBMITTED IN THE FORM OF SAMPLES AND SHOP DRAWINGS FOR APPROVAL BY ARCHITECT. WHERE COLOR SELECTIONS ARE MADE, COMPLETE SAMPLES SHALL BE FURNISHED TO THE ARCHITECT.
- ALL EXISTING OR NEW CONSTRUCTION DISTURBED OR DAMAGED DURING THE COURSE OF THIS WORK SHALL BE RESTORED TO MATCH EXISTING ADJACENT SURFACES OR ORIGINAL CONSTRUCTION.
- PRECAUTION MUST BE EXERCISED AT ALL TIMES FOR THE PROTECTION OF PERSONS AND PROPERTY. THE SAFETY PROVISIONS OF APPLICABLE LAWS AND CONSTRUCTION CODES MUST BE OBSERVED. CONTRACTOR SHALL TAKE OR CAUSE TO BE TAKEN SUCH ADDITIONAL SAFETY AND HEALTH MEASURES AS ARE REASONABLY NECESSARY. MACHINERY, EQUIPMENT AND OTHER HAZARDS GUARDED IN ACCORDANCE WITH SAFETY PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, TO THE EXTENT THAT SUCH PROVISIONS ARE NOT IN CONTRADICTION OF APPLICABLE LAWS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AND PRESERVE, IN OPERATIONAL CONDITION ALL UTILITIES TRAVERSING THE WORK AREA. DAMAGE TO ANY UTILITY DUE TO WORK UNDER THIS CONTRACT SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT NO ADDITION COST TO THE OWNER. UTILITY SHUT DOWNS MUST BE COORDINATED WITH THE OWNER.
- EACH BIDDER WILL BE HELD TO HAVE EXAMINED THE PREMISES AND SATISFIED HIMSELF WITH THE CONDITIONS WHICH WOULD IN ANY MANNER AFFECT THE WORK UNDER THE CONTRACT AND NO LATER CLAIMS FOR EXTRA COMPENSATION FOR LABOR, MATERIALS AND EQUIPMENT WHICH COULD HAVE BEEN FORSEEN BY SUCH EXAMINATION WILL BE RECOGNIZED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASUREMENTS FOR HIS WORK AT THE SITE AND SHALL VERIFY ALL MEASUREMENTS AND DIMENSION GIVEN ON THE DRAWINGS. DO NOT SCALE DRAWINGS.
- DO NOT PROCEED WITH CHANGE IN SCOPE OF WORK WITHOUT WRITTEN APPROVAL FROM OWNER OR ARCHITECT.
- ALL DEMOLITION SHOWN ON THESE DRAWINGS IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND RELOCATION WORK NECESSARY TO PROPERLY COMPLETE THE PROJECT, REGARDLESS IF DEMOLITION WORK IS SHOWN OR NOT ON DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR LEGAL DISPOSAL OF ALL CONSTRUCTION WASTE AND REMOVED ELEMENTS, UNLESS NOTED OTHERWISE ON DRAWINGS. DEBRIS SHALL BE DISPOSED OF ON A DAILY BASIS.
- THE CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SHORING, BRACING AND SHEATHING AS REQUIRED FOR SAFETY AND FOR PROPER EXECUTION OF WORK AND HAVE SAME REMOVED WHEN WORK IS COMPLETED.
- THE OWNER RETAINS THE RIGHT TO SALVAGE ANY DEMOLISHED OR CONTRACTOR REMOVED MATERIAL(S). CONTACT OWNER BEFORE REMOVAL FROM SITE

4 MATERIALS LEGEND



3 SYMBOLS LEGEND



2 ABBREVIATIONS



1 GENERAL CONSTRUCTION and DEMOLITION NOTES

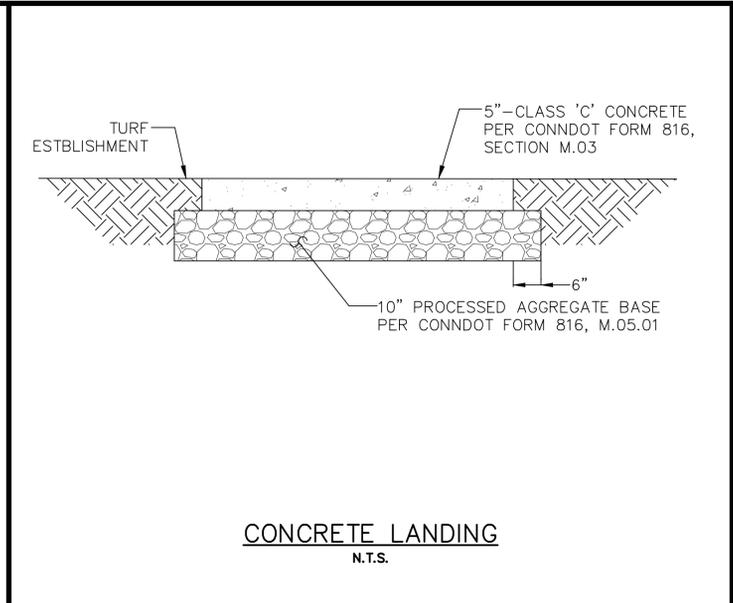
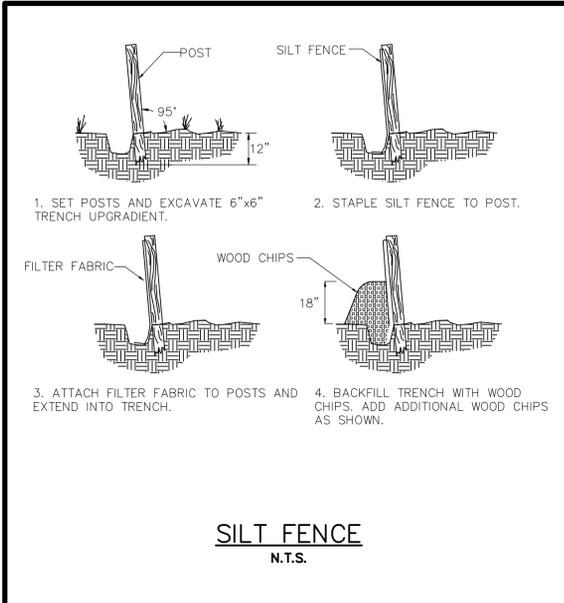


date	description	no.
revisions		

**GENERAL
INFORMATION**

A-0.0

date	18 SEP 2015
drawn	JB/NWF
scale	AS SHOWN
checked	JP/KG
project no.	1347-46
application no.	1648

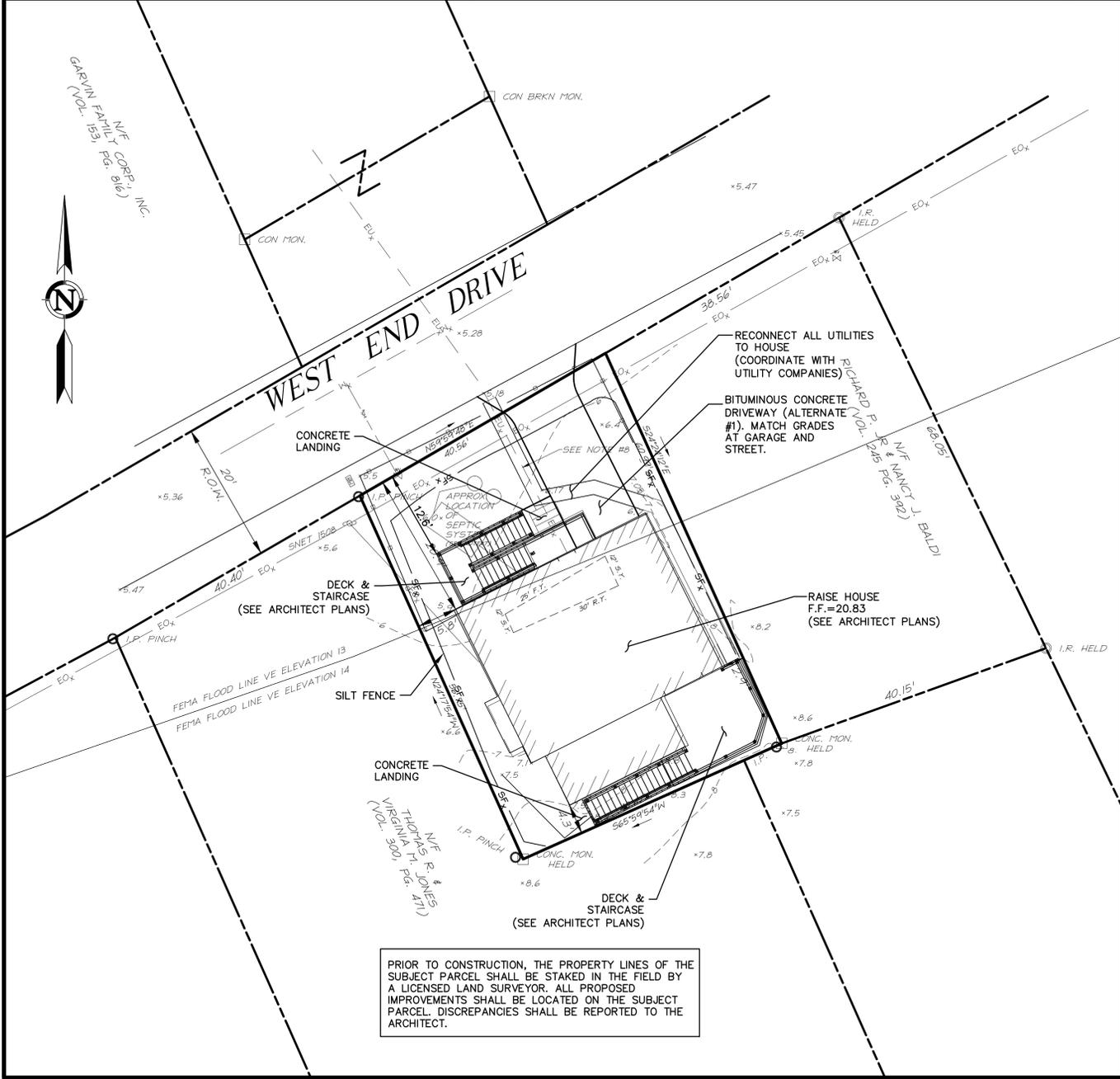
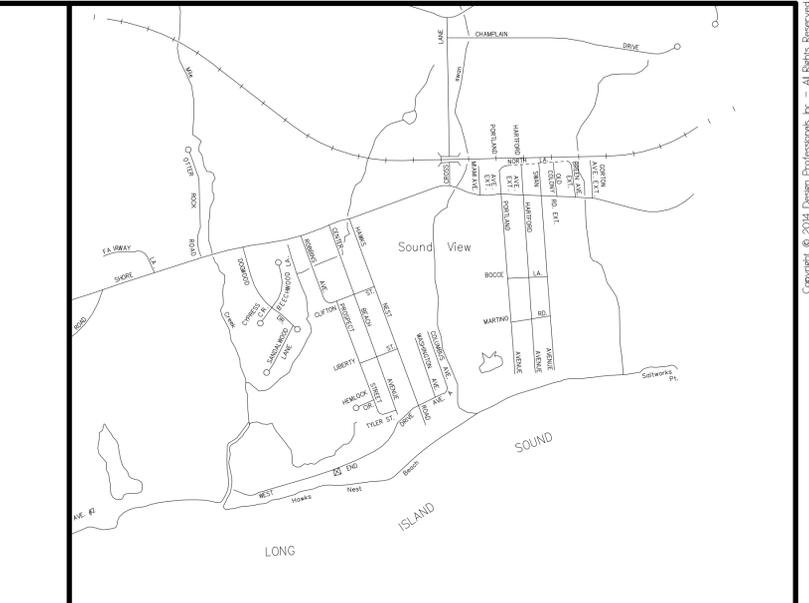


Zoning Information

ZONE: R-10

ITEM	REQUIRED	EXISTING CONDITIONS	PROPOSED CONDITIONS
Minimum Lot Area	10,000 s.f.	2,379± s.f. *	2,379± s.f. *
Minimum Front Yard Setback	25 feet	20.9 feet **	12.6 feet **
Minimum Side Yard Setback	12 feet	2.9 feet **	2.9 feet **
Minimum Rear Yard Setback	30 feet	4.3 feet **	0.2 feet **
Maximum Building Height	24 feet	21.7± feet	33.0± feet
Maximum Building Stories	1 1/2	1 1/2	1 1/2
Maximum floor area as a percent of lot area	25%	69%*	69%*
Maximum Lot Coverage by buildings & structures as a percent of lot area	25%	44%*	53%*
Maximum Total ground coverage as a percent of lot area	30%	44%*	53%*

* Property is existing non-conforming with regards to minimum lot area requirements, maximum lot coverage, maximum floor area, and total ground coverage requirements.
** Property is existing non-conforming with regards to front, rear and side yard setback requirements. The proposed condition measurements for front & rear setbacks apply to the new staircases required to provide accessibility to the raised building.

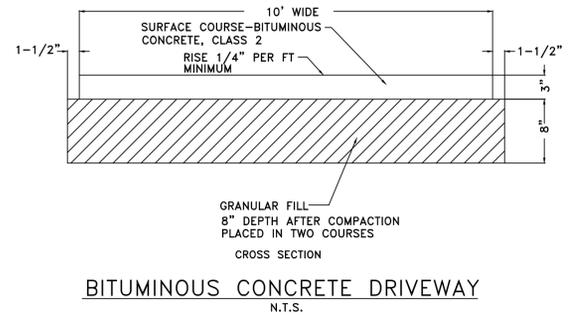


LEGEND

EXISTING	DESCRIPTION
COMMUNICATION	
C _x	OVERHEAD COMM. LINES (CABLE, TEL, ETC.)
DOMESTIC WATER	
W _x	WATER MAIN
WS _x	WATER SERVICE
WV	WATER VALVE
FH	FIRE HYDRANT
LIGHTING	
PL	POLE MOUNTED LIGHT
NATURAL GAS	
G _x	GAS MAIN
POWER	
EO _x	ELECTRICAL LINES, OVERHEAD
EU _x	ELECTRICAL LINES, UNDERGROUND
UP	UTILITY POLE
PROPERTY	
PL	PROPERTY LINE
IP	IRON PIN
MON	MONUMENT
ROADS	
GR	GUARD RAIL
SITE FEATURES	
X	BARBED WIRE FENCE
○	CHAIN LINK FENCE
—	RAIL FENCE
□	STOCKADE FENCE
+	WIRE FENCE
OR	TREE
TL	TREE LINE
SANITARY SEWER	
SS _x	SANITARY SEWER MAIN
SM	SANITARY SEWER MANHOLE
STORM SEWER	
SD _x	STORM DRAIN PIPE
SDM	STORM DRAIN MANHOLE
CI	CURB INLET
CB	CATCH BASIN
TOPOGRAPHY	
95	CONTOUR
X61.95	SPOT ELEVATION
WETLANDS	
W	WETLANDS LINE

- ### EROSION & SEDIMENTATION CONTROL:
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL FOR SOIL AND WATER CONSERVATION.
 - EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, AND SHALL BE MAINTAINED OR REPLACED AS NECESSARY.
 - CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHOWN ON THIS PLAN. ANY PROPOSED CHANGES TO THIS PLAN MUST BE APPROVED BY THE ENGINEER AND/OR THE TOWN OF OLD LYME.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING EXISTING ROADS & DRIVEWAYS AS DEEMED NECESSARY.
 - AREAS TO BE LEFT BARE FOR MORE THAN 15 DAYS SHALL BE TREATED WITH AIR DRIED WOOD CHIP MULCH OR SEEDED WITH PERENNIAL RYE-GRASS, UNTIL FINAL GRADING AND STABILIZATION EFFORTS TAKE PLACE.

- ### CONSTRUCTION NOTES:
- "CALL BEFORE YOU DIG" - CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF PENDING EXCAVATION AT OR NEAR PUBLIC UTILITIES. CONTRACTOR SHALL CALL (800) 922-4455 AT LEAST 72 HOURS PRIOR TO BEGINNING EXCAVATION.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION AND PROTECTION OF ALL UTILITIES, LANDSCAPING, SIDEWALK, PAVEMENT, ETC. DESIGNATED TO REMAIN. SHOULD ANY FEATURES BE DAMAGED DURING THE CONSTRUCTION EFFORT, CONTRACTOR SHALL MAKE ARRANGEMENTS FOR REPLACEMENT AT NO ADDITIONAL COST.
 - CONTRACTOR SHALL VERIFY LAYOUT DIMENSIONS. DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER AND ARCHITECT PRIOR TO CONSTRUCTION.
 - ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE REQUIREMENTS OF ALL FEDERAL, STATE, AND LOCAL PERMITS ISSUED FOR THIS PROJECT.
 - DEWATERING, IF REQUIRED, SHALL BE CONDUCTED IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, AS REVISED.
- MAP REFERENCES:**
- PROPERTY & TOPOGRAPHIC SURVEY PREPARED FOR: STEVEN D. & CAROL A. ROSENFELD 28 WEST END DR. OLD LYME, CT 06371 DATE: 4/30/2015 REVISIONS: 5/18/2015 SCALE: 1" = 10' SHEET V-1 PREPARED BY DESIGN PROFESSIONALS, INC.
- SURVEY NOTES:**
- THIS SURVEY AND MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
 - TYPE OF SURVEY IS AN PROPERTY & TOPOGRAPHIC SURVEY - AND IS INTENDED TO DEPICT THE LOCATION OF IMPROVEMENTS RELATIVE TO PROPERTY LINES.
 - THIS IS A DEPENDENT RESURVEY BASED ON MAP REFERENCE #1.
 - HORIZONTAL ACCURACY: MEETS CLASS A-2 STANDARDS AND VERTICAL ACCURACY MEETS CLASS T-2 STANDARDS.
- TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.



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21 BEFFREY DRIVE
SOUTH WINDSOR, CT 06074
860-291-9257
www.designprofessionals.com

Design Professionals
CIVIL & TRAFFIC ENGINEERS / PLANNERS / SURVEYORS
GIS ANALYSTS / LANDSCAPE ARCHITECTS

PREPARED FOR:
Steven D. & Carol A. Rosenfeld
28 West End Drive
Old Lyme, CT 06371

PROJECT NO.: 3400-1818
DATE: 04/30/15
BY: AK
CHECKED BY: AK

STEVEN D. & CAROL A. ROSENFELD
28 WEST END DRIVE
OLD LYME, CONNECTICUT

BY: BFW

REVISIONS

NO.	DATE	Adjust House Position	Add driveway at Alternate #1
1	9/14/15		
2	10/13/15		

PLOT PLAN

SCALE: 0' 5' 10' 20'
1" = 10'

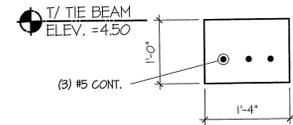
SHEET
P-1

LAWRENCE R. GEISSLER, JR., L.S.
12327 LIC. NO.

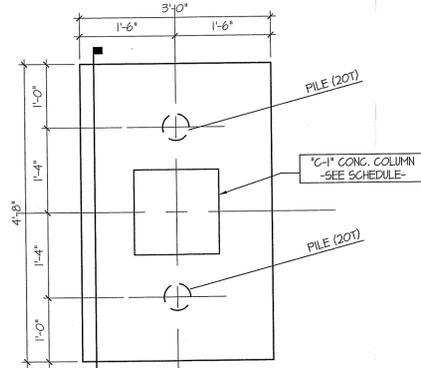
CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033		CLIENT CAPITAL STUDIO ARCHITECTS 28 WEST END ROAD, OLD LYME, CT	PROJECT NAME ROSENFELD RESIDENCE LOCATION 28 WEST END ROAD, OLD LYME, CT
TYPE HSA	AUGER CASING SS	LINE & STA. 1.375"	GROUND WATER OBSERVATIONS AT 6.0 FT. AFTER 0 HOURS
SIZE I.D. 3.75"	SAMPLER CORE BAR OFFSET	N. COORDINATE E. COORDINATE	START DATE 6/11/15
HAMMER WT. 140 LBS	STRATUM DESCRIPTION + REMARKS	FINISH DATE 6/11/15	HOLE NO. B-1
DEPTH 0	NO. 1-1-2-3 DEPTH 0.00'-2.00'	LIGHT BR. FINE-MED. SAND GREY/BR. FINE-MED. SAND, TRACE SILT - FILL	ELEV. 1.0
2	2-4-6-7 2.00'-4.00'	LIGHT GREY/BR. FINE-MED. SAND, TRACE SILT & FINE GRAVEL	2.0
3	11-8-8-8 4.00'-6.00'	BLACK PEAT	9.0
4	VDH 10.00'-12.00'	GREY/BR. FINE SAND, LITTLE SILT, TRACE FINE GRAVEL	16.0
5	2-4-4-4 12.00'-14.00'	GREY SILT, TRACE FINE SAND	26.0
6	1-1-6-8 15.00'-17.00'		34.0
7	7-10-11-3 17.00'-19.00'		
8	4-5-11 20.00'-21.50'		
9	5-8-11 25.00'-26.50'		
10	5-7-12 30.00'-31.50'		
38			

LEGEND: COL. A:
 SAMPLE TYPE: D-DRY A-AUGER C-CORE U-UNDISTURBED PISTON S-SPLIT SPOON
 PROPORTIONS USED: TRACE-0-10% LITTLE-10-20% SOME-20-35% AND-35-50%

DRILLER: T. CZMYR
 INSPECTOR:
 SHEET 1 OF 2 HOLE NO. B-1

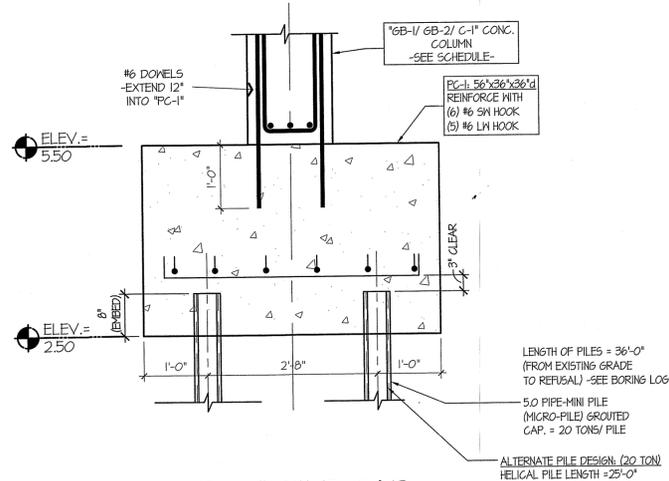


2 "TB-1" CONC. TIE BEAM
 SCALE: 3/4"=1'-0"

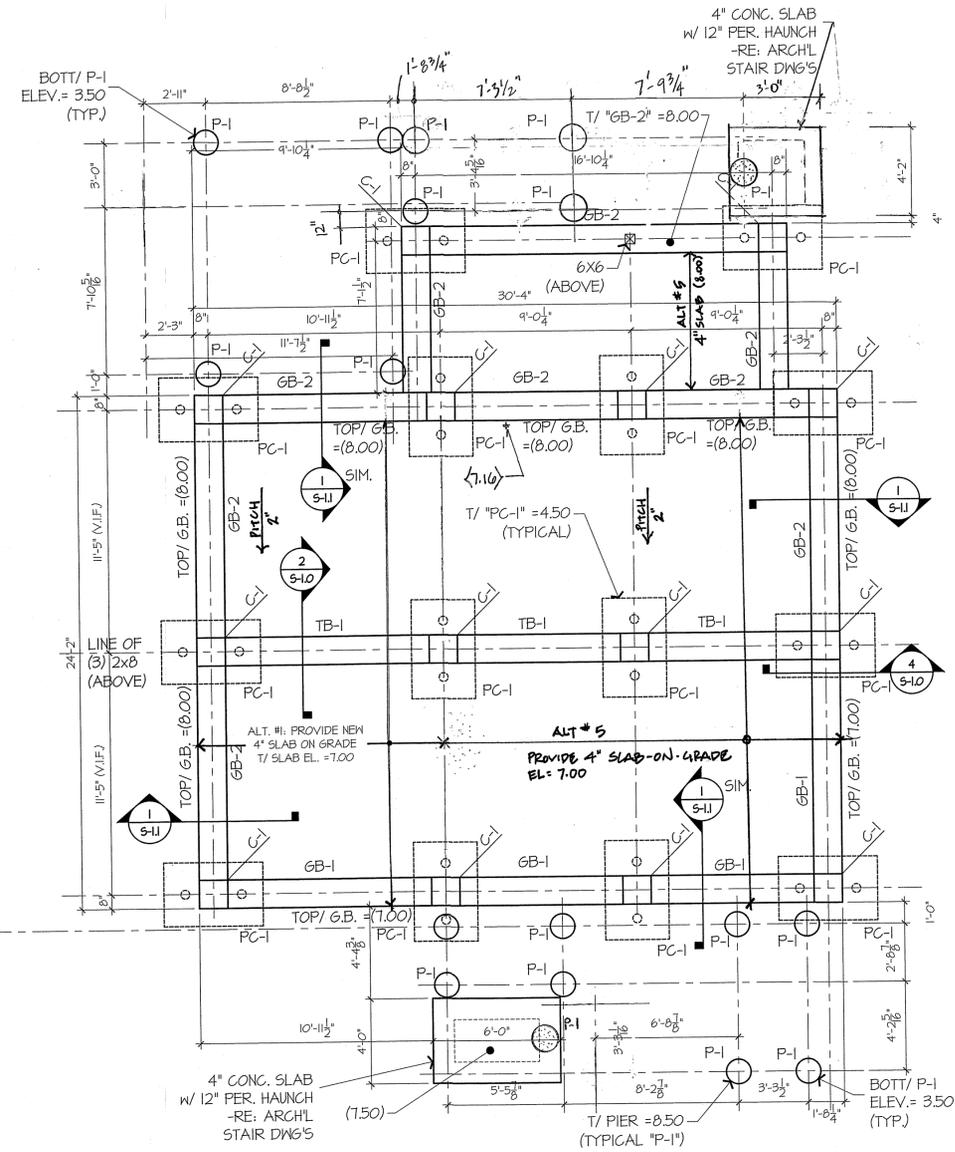


4 ALL PILE CAPS LOCATED ON CENTERLINE OF "C-1"

3 "PC-1" - PILE LOCATION PLAN
 SCALE: 3/4"=1'-0"



4 "PC-1" PILE CAP
 SCALE: 3/4"=1'-0"



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

VERIFY IN FIELD
 1. EXISTING FOUNDATION DIMENSIONS
 2. DEPTH OF EXISTING FRAMING TO DETERMINE TOP/FND WALLS/ PIERS/ COL'S.

NOTES:

- TOP/ SLAB-ON-GRADE ELEV. = 0'-0" (LOCAL ELEV. 7.00) UNLESS NOTED THIS (3). ALL ELEVATIONS (+ OR -)
- ALTERNATE #1: SLAB-ON-GRADE SHALL BE 4" THICK (3500 PSI), ON 4" STONE BASE OVER 10 MIL POLY VAPOR BARRIER ON 8" NEW COMPACTED STRUCTURAL FILL (ALT #5 TYP)
- BOTTOM/ PILES ELEVATION = REFUSAL (-36'-0")
- FIBERMESH OPTION: @ CONCRETE SLAB, SYNTHETIC FIBER UNIFORMLY DISPERSED IN CONCRETE MIXTURE @ MANUF. RECOMMENDED RATE; NOT LESS THAN 1.5lb/cy.
- EXTERIOR DECK:
 4" SCHED. 40 PIPE C.R.S. (ALTERNATE TO PT 6x6)
 CAP PLATE: 3/8" x 8"
 BASE PLATE: 1/2" x 12" x 12" W/ (4) 3/8" AB. (GALV.)
 ALL STEEL PRIME & RUST PROOF PAINTED

COL/PIER SCHEDULE		
NO:	SIZE:	REINF.
C-1	16" x 16"	(4) #6 #3 TIES @ 16"
P-1	14" Ø SONO-TUBE	(2) #5

GRADE BEAM "GB-x"		
NO:	SIZE:	REINF.
GB-1	16" x 30"d	(3) #5 TOP (3) #6 BOTT #3 TIES @ 16"oc
GB-2	16" x 42"d	(3) #5 TOP (4) #6 BOTT #3 TIES @ 16"oc

PILE CAP "PC-1"		
NO:	SIZE:	REINF.
PC-1	56" x 36" x 36" dp	(6) #6 x 2'-6" (5) #6 x 4'-2"



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)

GENERAL RENOVATIONS for the ROSENFELD RESIDENCE
 APPLICATION No. 1648
 28 West End Drive
 Old Lyme, CT 06371



date	description	no.
05 OCT 15	6:00 AM	

FOUNDATION PLAN

S-1.0

date	drawn	scale	checked	project no.	application no.
05 OCT 2015	JB	AS SHOWN	WML	1347-46	1648

STRUCTURAL NOTES:

A. GENERAL

- ALL WORK SHALL CONFORM TO THE CT BUILDING CODES: IRC 2003, & 2007, 2009 & 2013 CONNECTICUT SUPPLEMENTS, ALL FEMA Requirements, and the Town of Old Lyme.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED TO MAINTAIN STRUCTURAL STABILITY DURING LIFTING OPERATIONS & CONSTRUCTION.
- IF REQ'D, ALL FIELD TESTING SHALL PERFORMED BY AN ACCREDITED TESTING LABORATORY.

B. FOUNDATION

- ALL BLDG FOUNDATIONS SHALL BEAR ON STEEL PILES and PILE CAPS. ANY UNSUITABLE SOIL CONDITION UNDER SLAB SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ARCHITECT/ENGINEER.
- SLAB-ON-GRADE SUB-GRADE SHALL BE COMPACTED USING A VIBRATORY TAMPER OR JUMPING SOIL RAMMER AFTER THE STRUCTURAL BACKFILL HAS BEEN APPROVED.
- PROVIDE BACKFILL MATERIAL (Submit for Approval) FOR BELOW SLAB-ON-GRADE & SHALL BE PLACED IN LAYERS NOT TO EXCEED 8". REF: BACKFILL SPECIFICATIONS.
- WHERE BOTTS/FOOTINGS ARE BELOW THE GROUNDWATER ELEVATION, PLACE 8" OF 3/8" CRUSHED STONE UNDER FOOTINGS.

C. CONCRETE (All materials to be submitted for Review before start of work)

- CONCRETE MATERIALS ARE AS FOLLOWS: 3000 psi at FOOTINGS/GRADE BEAMS, 3000 psi at SLAB-ON GRADE & 4000 psi COLUMNS/PIERS, PILE CAPS.
- REINFORCEMENT: ASTM A615, Fy = 60 ksi.
- CONCRETE WORK SHALL CONFORM TO ACI 301-11 & ACI 318-11.
- MINIMUM COVER FOR REBAR:
 - CONCRETE AGAINST EARTH.....3"
 - CONCRETE EXPOSED TO WEATHER.....2"
 - CONCRETE AT INTERIOR SLABS.....1"
- INTERIOR - GRADE LEVEL
BASEMENT SLAB SHALL HAVE A STEEL TROWEL FINISH. PITCH TO EXTERIOR.
EXTERIOR SLABS SHALL RECEIVE A COURSE BROOM FINISH. VERIFY WITH OWNER ON SLAB TREATMENT BEFORE PRECEEDING.
- APPLY CURING COMPOUND TO SLABS IMMEDIATELY FOLLOWING TROWELING, Cure-N-Seal #830 or EQUAL.
- GROUT & RUB ALL EXPOSED SURFACES OF FOUNDATION WALLS/PIERS WITHIN 48 HOURS OF POUR.
- SAW CUT SLAB-ON-GRADE CONTROL JOINTS AT A MAX. (4' x 4') MAX. JOINTS SHALL BE CUT 1/4" min. and WITHIN 24 HOURS OF POUR. FILL JOINTS WITH NON SHRINK GROUT.

D. STEEL (All materials to be submitted for Review before start of work)

- MATERIALS: (All exposed steel shall be galvanized)
W or HP Sections.....ASTM A992, Fy = 50 ksi.
PLATES, ANGLES, ETC.....ASTM A36, Fy = 36 ksi.
ANCHOR BOLTS (galv).....ASTM A307.
EXTERIOR PIPE COLS.....ASTM A501, Fy = 36 ksi.
- STEEL PILES: TYPE SHALL BE MICRO PILES, MINI PILES OR APPROVED HELICAL ANCHORS. RATED = 20 TON CAPACITY. STEEL SHALL BE 50 KSI. SUBMIT MATERIAL & SPECS FOR REVIEW

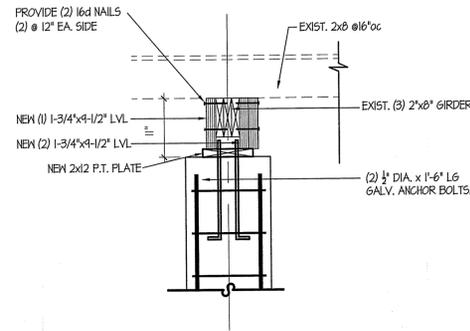
E. WOOD (All materials to be submitted for Review before start of work)

- MATERIALS: USE HEM OR DOUG FIR-LARCH, NO. 1 OR BETTER FOR ALL CONVENTIONAL FRAMING. USE LUMBER WITH LESS THAN 19 PERCENT MOISTURE CONTENT.
Design Data - Fb = 1000 psi, E = 1500 ksi
- MATERIALS: USE LVL OR EQUAL (micro-lam) BEAMS AS INDICATED ON DRAWINGS. FOLLOW MANUF. REQUIREMENTS FOR INSTALLATION AT EXTERIOR DECK. MIN BEARING = 3 1/2"
Design Data - Fb = 2800 psi, E = 2000 ksi
- USE TJI (truss joist or Approved Equal) FLOOR TRUSSES AS INDICATED ON DRAWINGS. USE WEB STIFFENERS AND SOLID BLOCKING AT ALL BEARING POINTS AND AS REQUIRED PER MANUFACTURE. TJI's ARE UNSTABLE UNTIL BRACED Laterally, PROVIDE TEMPORARY BRACING AND SHORING BEFORE ALL FLOORING IS IN PLACE. MIN. BEARING FOR TJI's = 3 1/2".
- USE SIMPSON (or Approved Equal) STRONG TIE JOIST HANGERS AND FRAMING CONNECTORS. SUBMIT TO ENGINEER FOR REVIEW.
- THE RAFTERS TO WALL PLATES WITH SIMPSON HURRICANE CONNECTORS. SEE DETAILS.
- DOUBLE UP FLOOR JOISTS NEXT TO ALL FLOOR PENETRATIONS GREATER THAN 24".
- DO NOT CUT HOLES IN FLOOR JOISTS WITHOUT APPROVAL FROM ENGINEER OR MANUF.
- ANY LUMBER TOUCHING CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.
- IT IS CRITICAL THAT ALL ROOF RAFTERS, RIDGE BEAMS, HEADERS AND BEARING WALLS CARRY THEIR LOADS DOWN TO THE FOUNDATION. WHENEVER A BEAM OR HEADER BEARS ON A FRAMED WALL, INSTALL A 3-2X4 COL. (OR AS NOTED) IN THE FRAMED WALL VERTICALLY UNDER THE BEARING POINT LOAD. USE SOLID BLOCKING BETWEEN FLOORS.
- CONTRACTOR SHALL CONFORM TO THE "WOOD FRAME CONSTRUCTION MANUAL", 105 mph, EXPOSURE C (WFCM), FOR ALL NAILING PATTERNS, FASTENING & CONNECTIONS. SEE DWGS FOR ADDITIONAL SHEAR WALL CONNECTIONS.

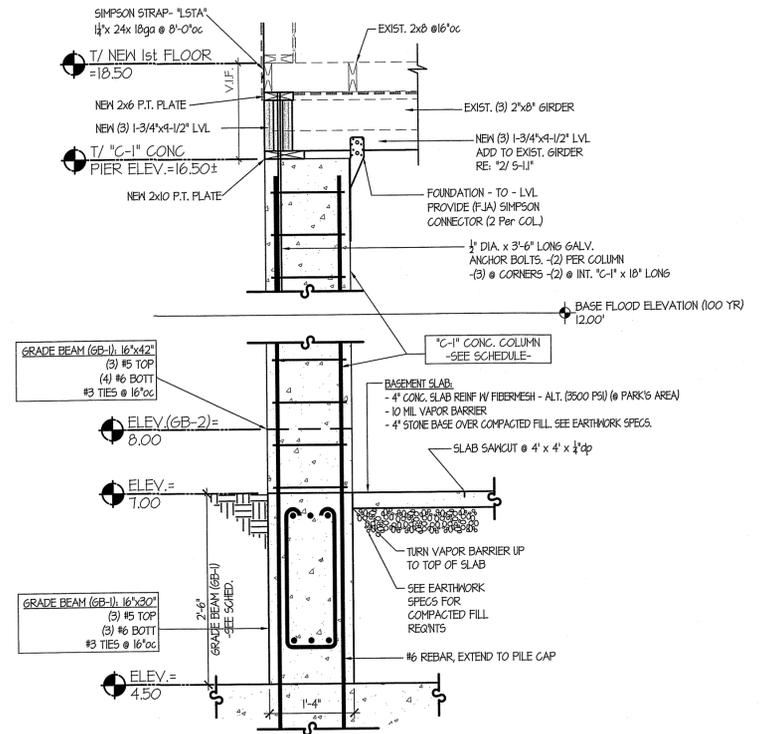
F. DESIGN CRITERIA (OLD LYME, CT)

- FIRST FLOOR LIVE LOAD = 40 psf
- SECOND FLOOR (Bedrooms) LIVE LOAD = 30 psf
- ATTIC FLOOR LIVE LOAD = 10 psf
- EXTERIOR DECK LIVE LOAD = 60 psf
- ROOF LIVE LOAD = 30 psf
- WIND LOAD (App K).....105 mph (3 sec)
- PRESUMPTIVE SOIL BEARING PRESSURE.....PILES TO REFUSAL

NOTE: The structural design was performed only for general conformance at this Site in Old Lyme, CT, using the assumed local site conditions and general compliance with the CT State Code and based on information provided by the Architect/Owner. The Building Contractor is responsible for: existing framing sizes & dimensions, and shall be confirmed and coordinated at the job site with the Architect & Owner, information that pertains to the fabrication process, or to the means, methods, techniques, sequences, and procedures of construction. The Contractor is responsible for all work in a safe and satisfactory manner. Any discrepancies shall be brought to the attention of the Architect/Engineer/ Owner before the start of Work.



2
S-1.1
SCALE: 3/4"=1'-0"
DETAIL @ INTERIOR "C-1"



1
S-1.1
SCALE: 3/4"=1'-0"
"GB-1" -GRADE BEAM/ "C-1" COLUMN
DET. SIM. @ "GB-2"



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)

GENERAL RENOVATIONS for the ROSENFIELD RESIDENCE APPLICATION No. 1648 28 West End Drive Old Lyme, CT 06371

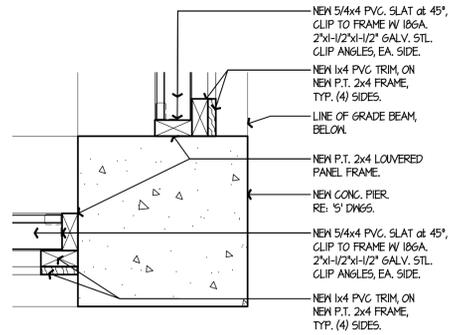
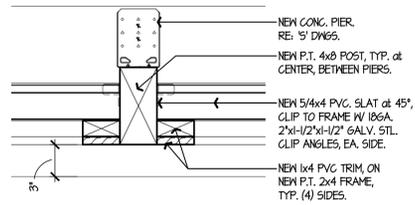
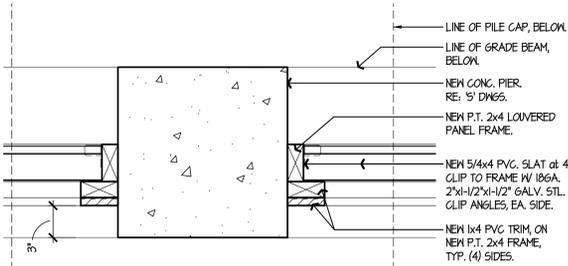
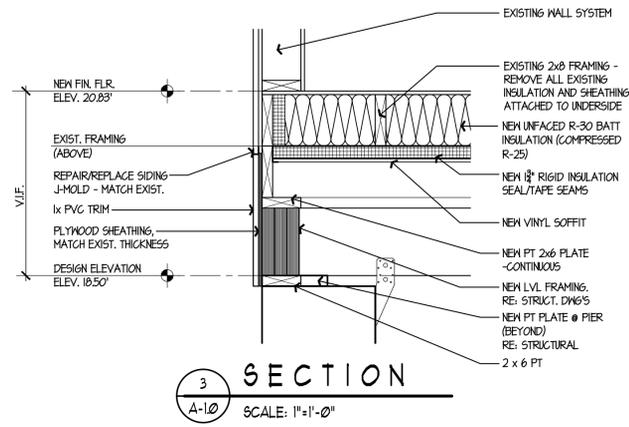


date	description	no.
05 OCT 2015	BIDDING	

STRUCTURAL FRAMING PLANS

S-1.1

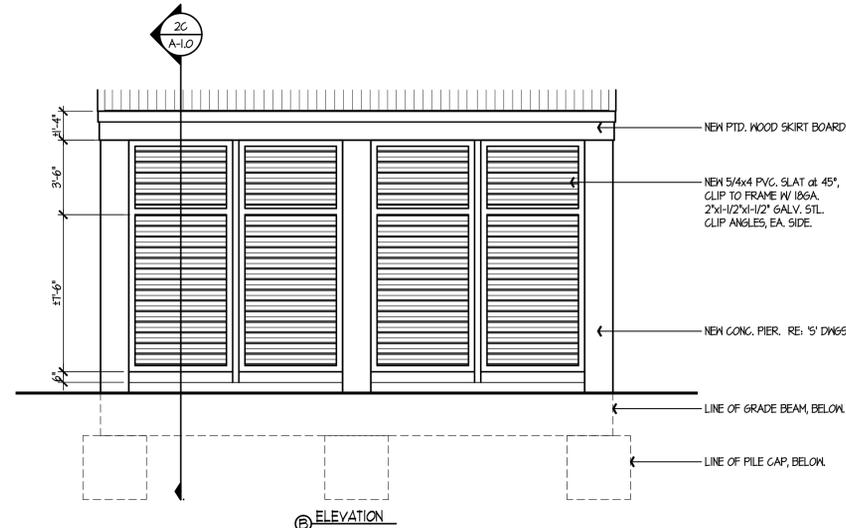
date	05 OCT 2015
drawn	JB
scale	AS SHOWN
checked	MML
project no.	1347-46
application no.	1648



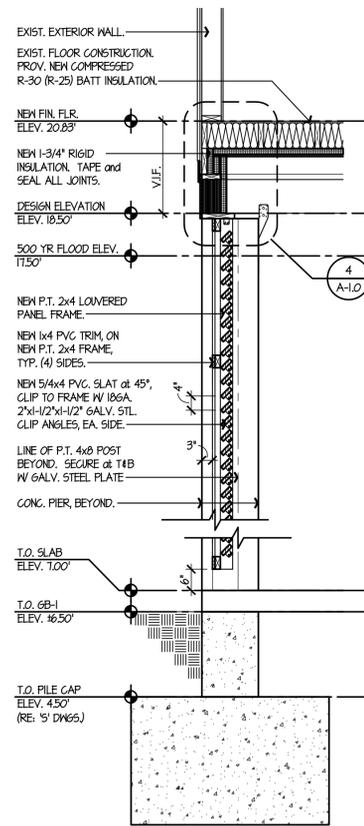
D PLAN DETAIL

E PLAN DETAIL

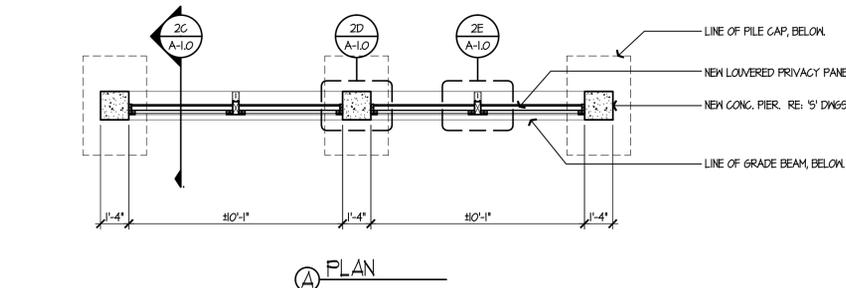
F PLAN DETAIL



ELEVATION



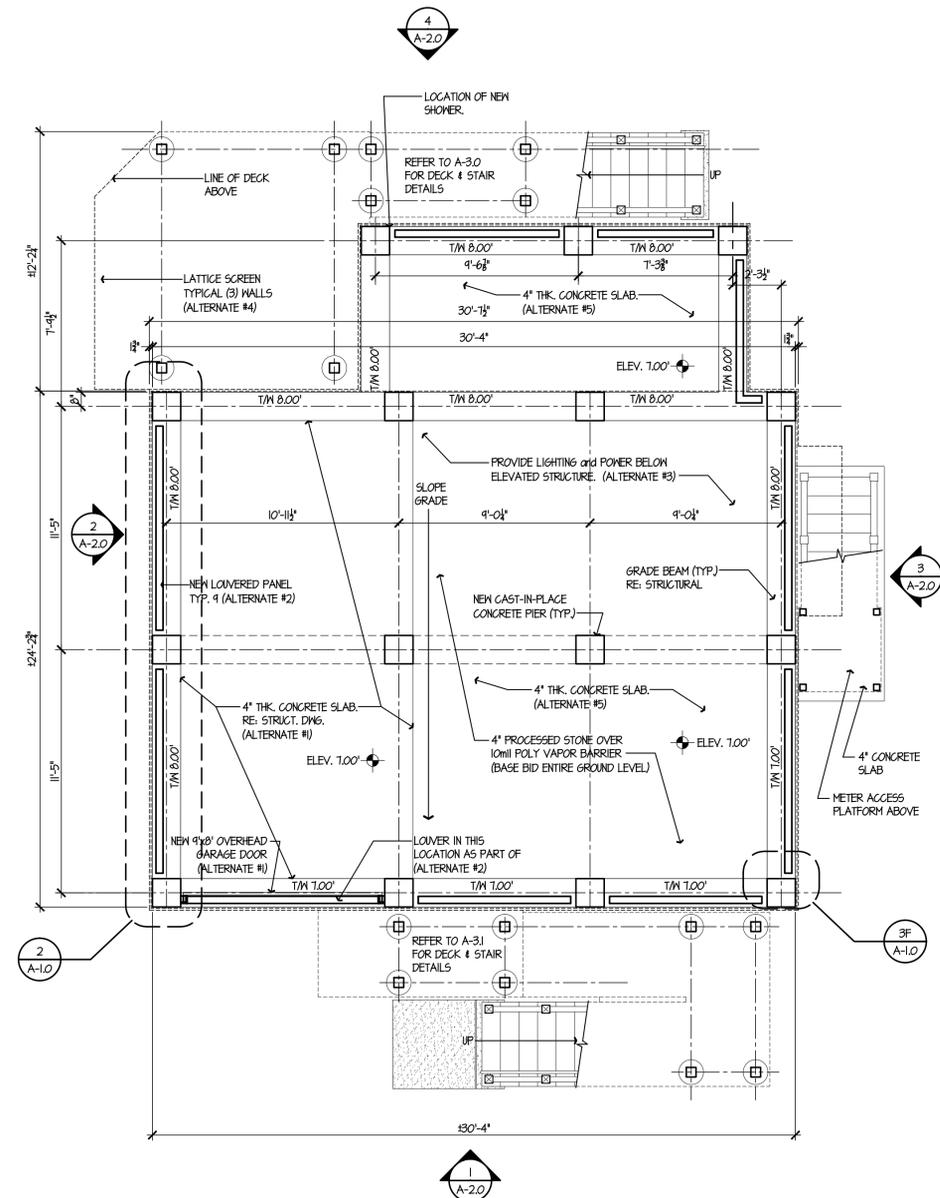
SECTION



PLAN

LOUVERED PRIVACY PANEL (PLAN, ELEVATION, SECTION and DETAILS) - ALTERNATE No. 2

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



SCOPE OF WORK NOTES

BASE BID WORK:

1. EXTEND AND/OR RECONNECT EXISTING UTILITIES, INCLUDING PLUMBING, MECHANICAL and ELECTRICAL SERVICES.
2. REMOVE ALL EXISTING PLYWOOD, "HOMASOTE" ETC. and EXISTING INSULATION FROM UNDERSIDE OF 1st FLOOR FRAMING
3. EXISTING SKIRT MATERIALS (MDO, 4 x 4's, 6 x 6's ETC.) TO BE SALVAGED AND TURNED OVER TO HOMEOWNER.
4. SALVAGE REMOVED EXISTING VINYL SIDING FOR REPAIR WORK.
5. EXTEND EXISTING DOWNSPOUTS.
6. REPLACE ANY LANDSCAPING REMOVED, OR DAMAGED DURING SITEWORK. COORDINATE LOCATION WITH OWNER IN FIELD.

ALTERNATE WORK:

1. PROVIDE NEW GARAGE DOOR at PARKING BELOW ELEVATED STRUCTURE.
2. PROVIDE NEW LOUVERED PRIVACY PANELS BETWEEN NEW CONCRETE PIERS.
3. PROVIDE ADDITIONAL LIGHTING and ELECTRICAL OUTLETS at UNDERSIDE OF ELEVATED STRUCTURE.
4. PROVIDE LATTICE PANELS at AREA BELOW NEW ELEVATED REAR DECK.
5. PROVIDE CONCRETE SLAB FOR REMAINDER OF GROUND LEVEL. RE: 1/A-1.0

GENERAL NOTES:

1. REMOVE and SALVAGE FOR REUSE, ALL EXISTING COMPOSITE DECKING.
2. OWNER SHALL REMOVE and RELOCATE EXISTING SITE PAVERS and PLANTINGS PRIOR TO THE START OF WORK.

GROUND LEVEL
SCALE: 1/4" = 1'-0"



date	description	no.
	revisions	

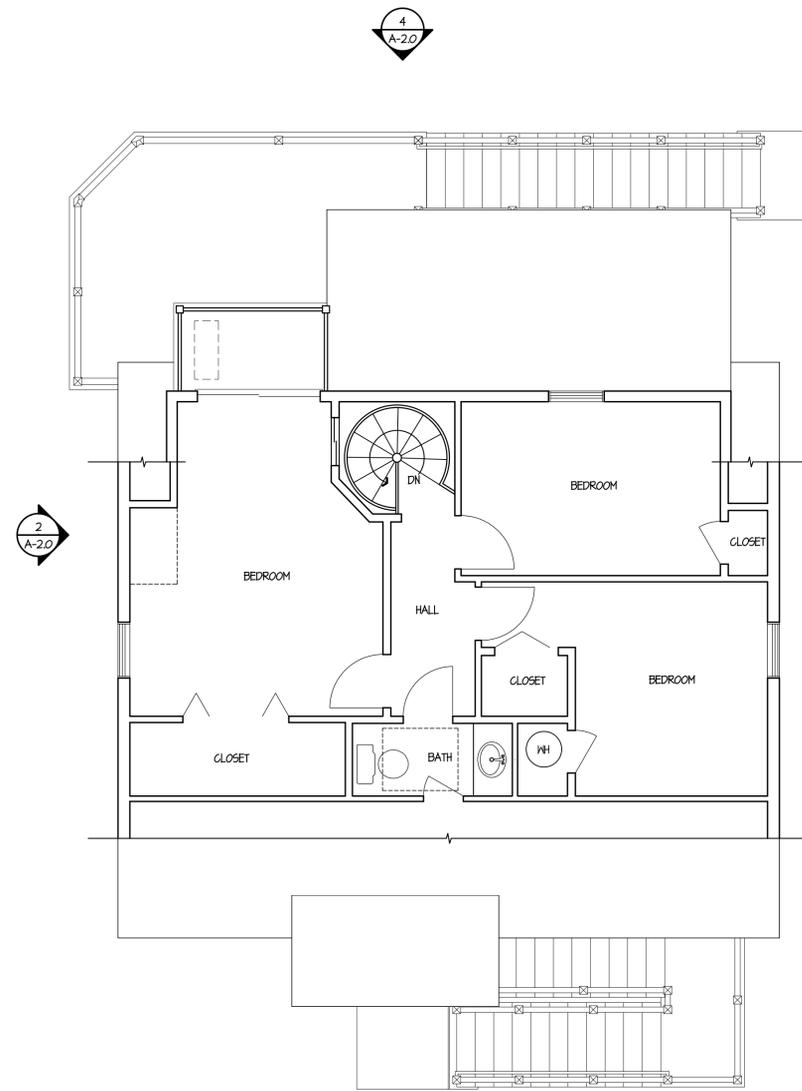
GROUND FLOOR PLAN

A-1.0

date	18 SEP 2015
drawn	JB/NWF
scale	AS SHOWN
checked	JP/KG
project no.	1347-46
application no.	1648

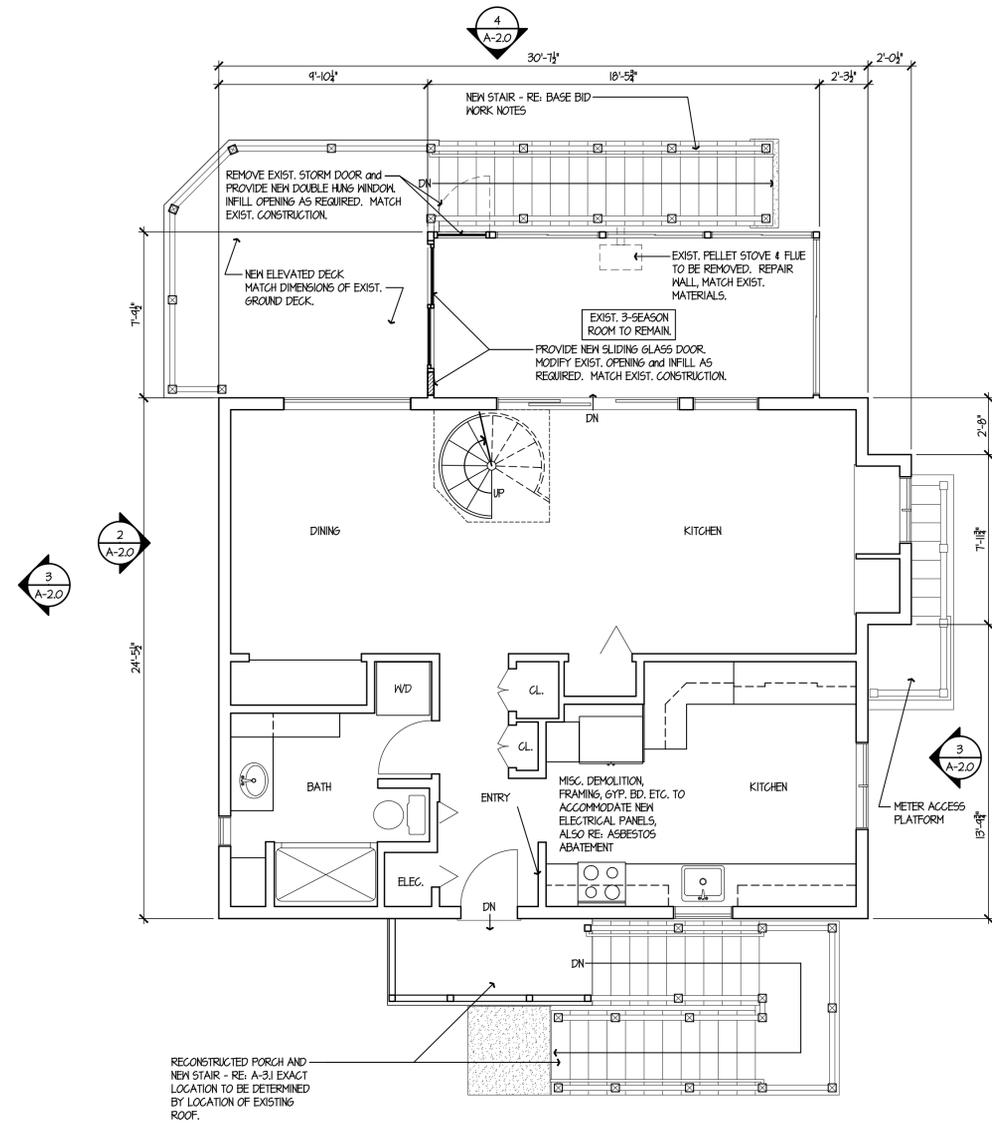
**THE STATE OF
CONNECTICUT
DEPARTMENT OF
HOUSING (DOH)
COMMUNITY
DEVELOPMENT BLOCK
GRANT - DISASTER
RECOVERY (CDBG-DR)
DOH OCCUPIED
REHABILITATION and
REBUILDING PROGRAM
(OOR)**

**REHABILITATION and
MITIGATION for the
ROSENFELD
RESIDENCE
APPLICATION No. 1648
28 West End Drive
Old Lyme, CT 06371**



2 2nd FLOOR PLAN
A-11 SCALE: 1/4" = 1'-0"

NOTE: PLAN SHOWN FOR REFERENCE ONLY.
NO NEW WORK



1 1st FLOOR PLAN
A-11 SCALE: 1/4" = 1'-0"

date	description	no.
revisions		

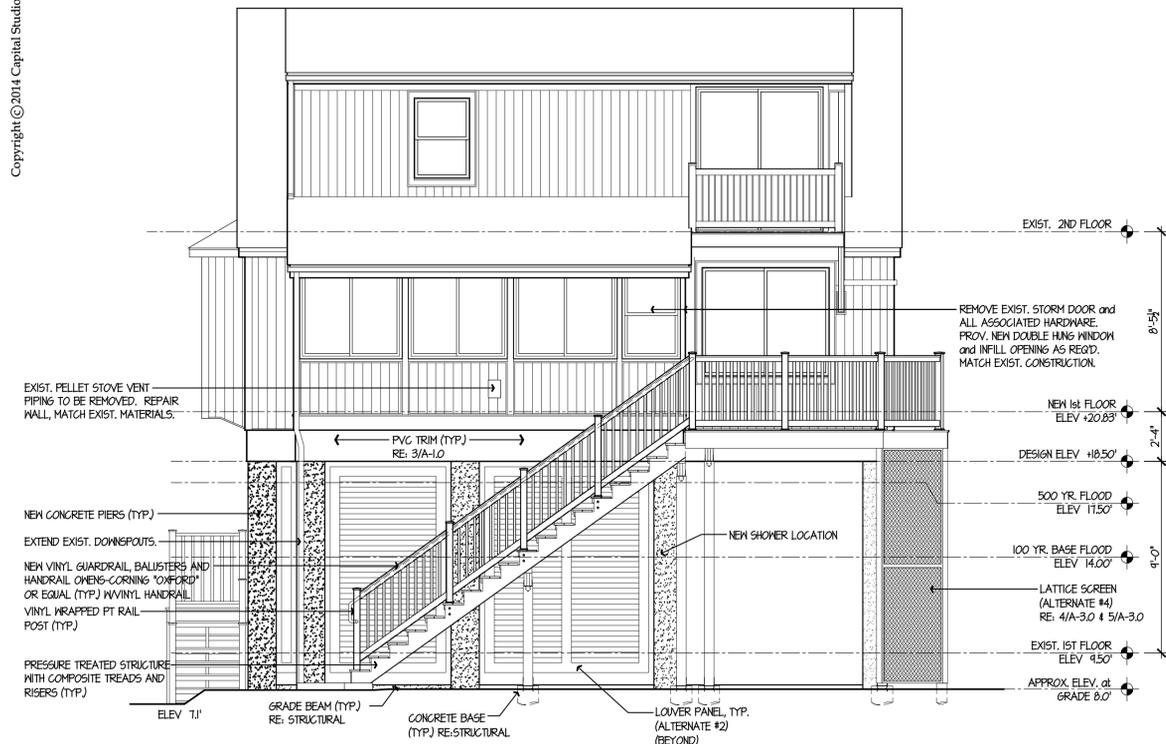
**FIRST and
SECOND
FLOOR PLANS**

A-1.1

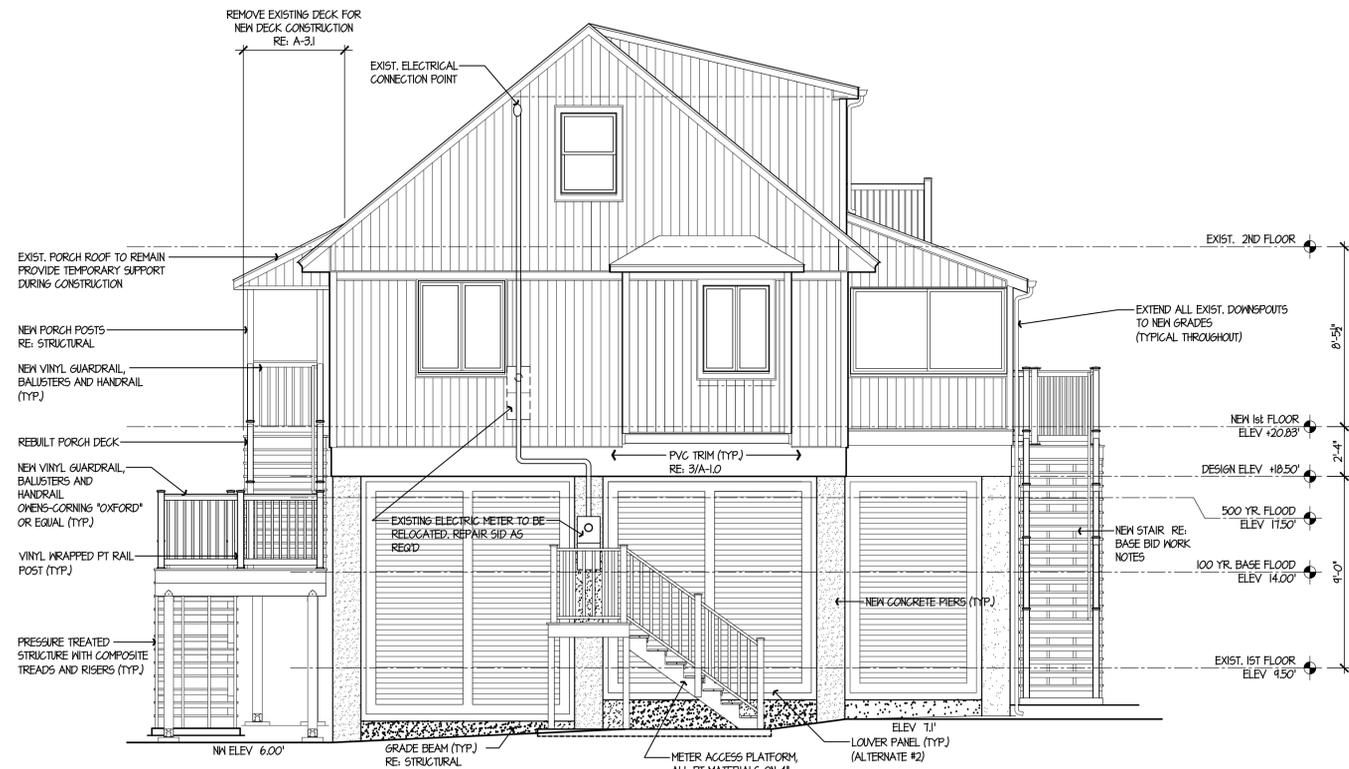
date	18 SEP 2015
drawn	JB/NWF
scale	AS SHOWN
checked	JP/KG
project no.	1347-46
application no.	1648

THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

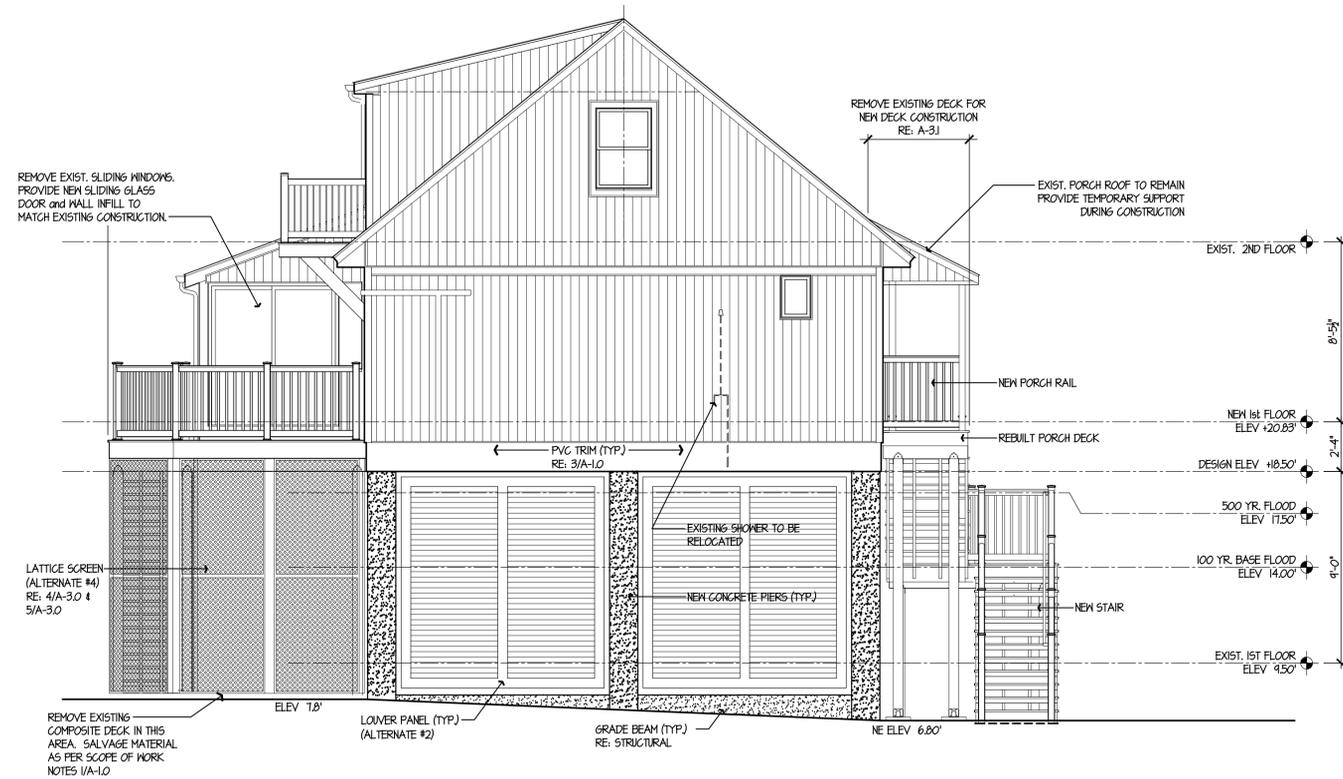
REHABILITATION and MITIGATION for the ROSENFELD RESIDENCE
APPLICATION No. 1648
28 West End Drive
Old Lyme, CT 06371



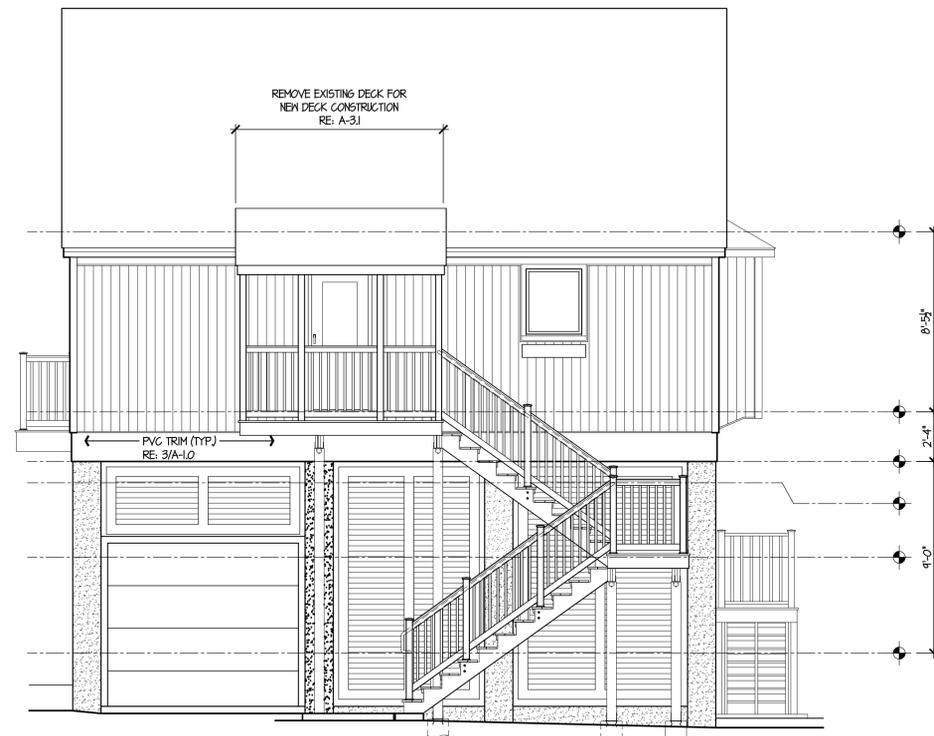
4 SOUTH ELEVATION
A-2.0 SCALE: 1/4" = 1'-0"



3 WEST ELEVATION
A-2.0 SCALE: 1/4" = 1'-0"



2 EAST ELEVATION
A-2.0 SCALE: 1/4" = 1'-0"



1 NORTH ELEVATION
A-2.0 SCALE: 1/4" = 1'-0"

date	description	no.
	revisions	

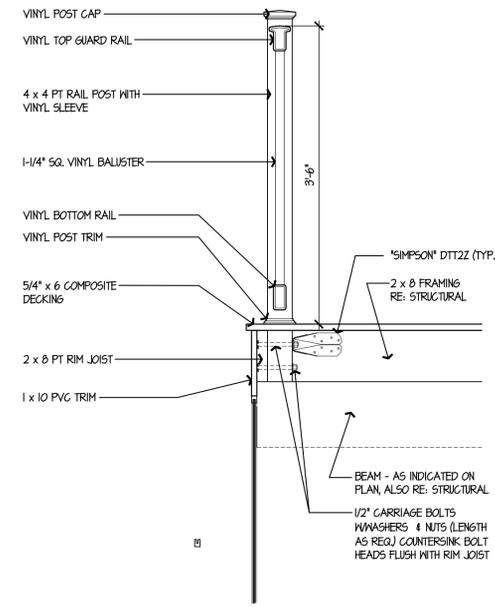
ELEVATIONS

A-2.0

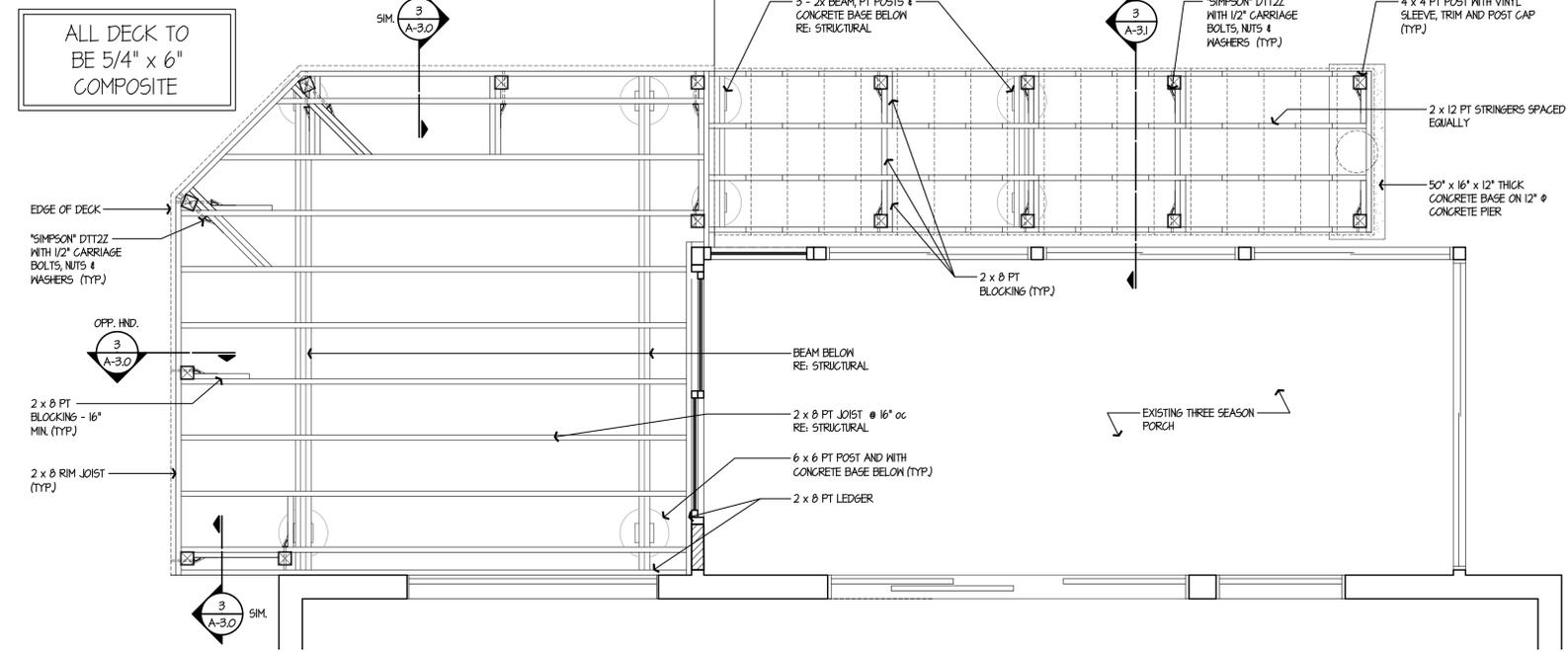
date	18 SEP 2015
drawn	JB/NWF
scale	AS SHOWN
checked	JP/KG
project no.	1347-46
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THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)

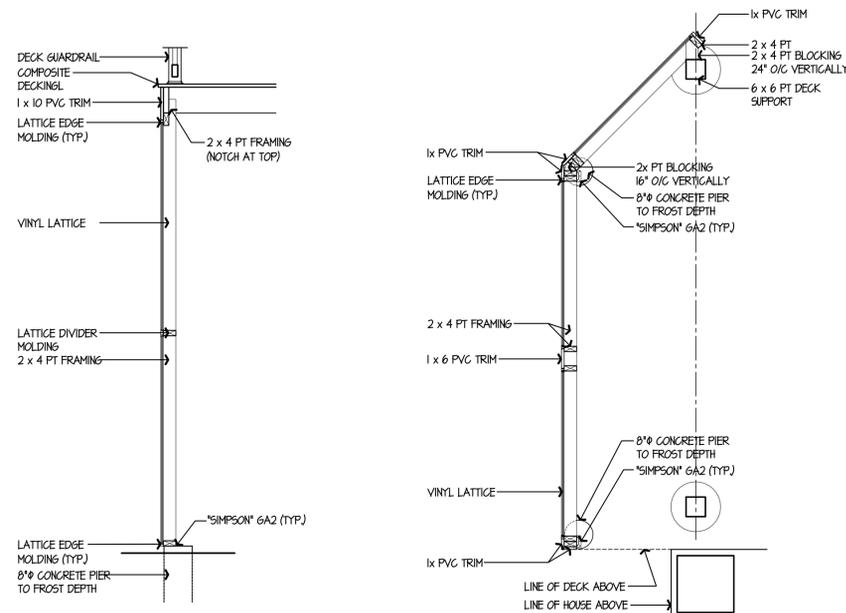
REHABILITATION and MITIGATION for the ROSENFELD RESIDENCE
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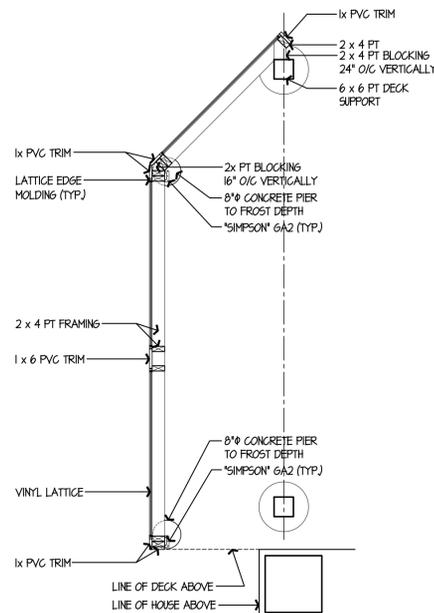
3 RAILING SECTION
1" = 1'-0"



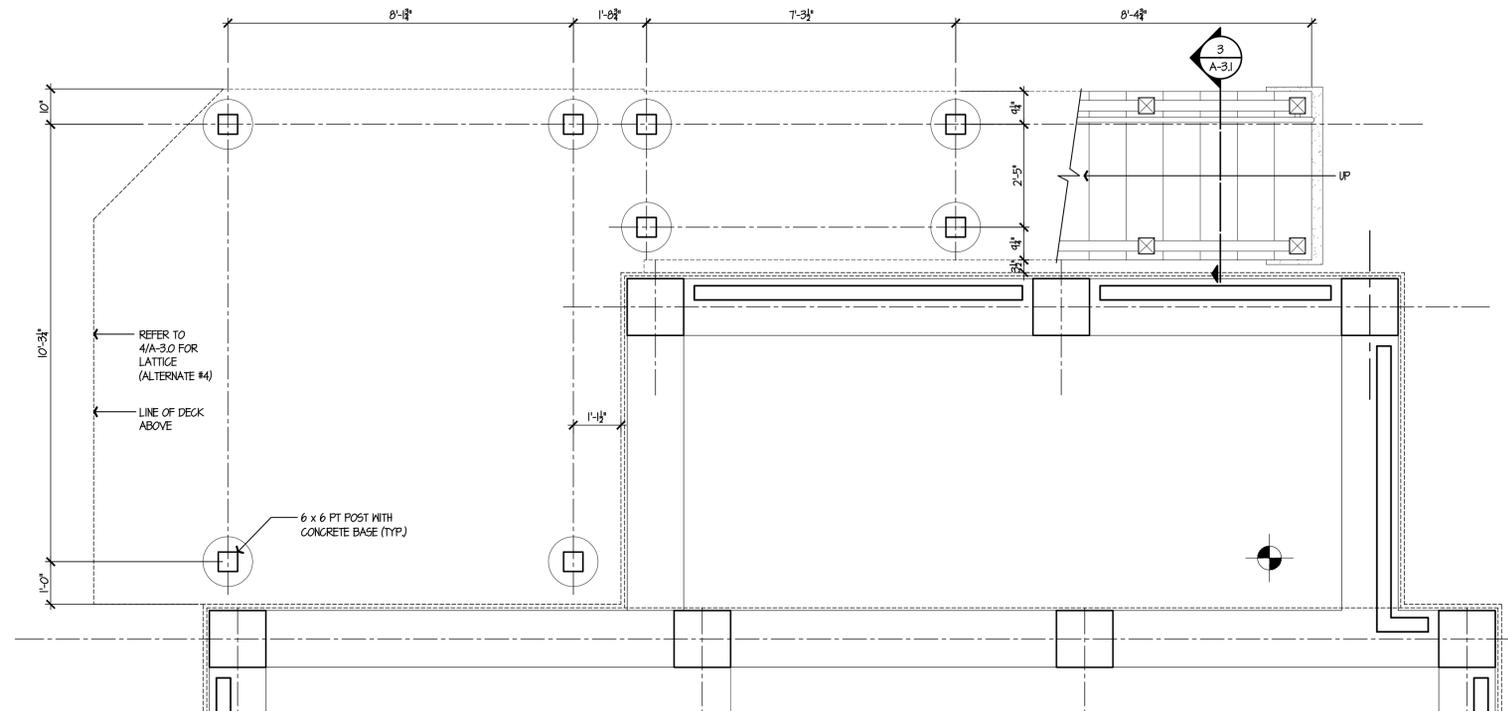
2 1st FLOOR LEVEL DECK & STAIR PLAN-SOUTH
SCALE: 1/2" = 1'-0"



5 LATTICE SECTION
SCALE: 1/2" = 1'-0"



4 LATTICE PLAN
SCALE: 1/2" = 1'-0"



1 GROUND LEVEL DECK & STAIR PLAN-SOUTH
SCALE: 1/2" = 1'-0"

date	description	no.
revisions		

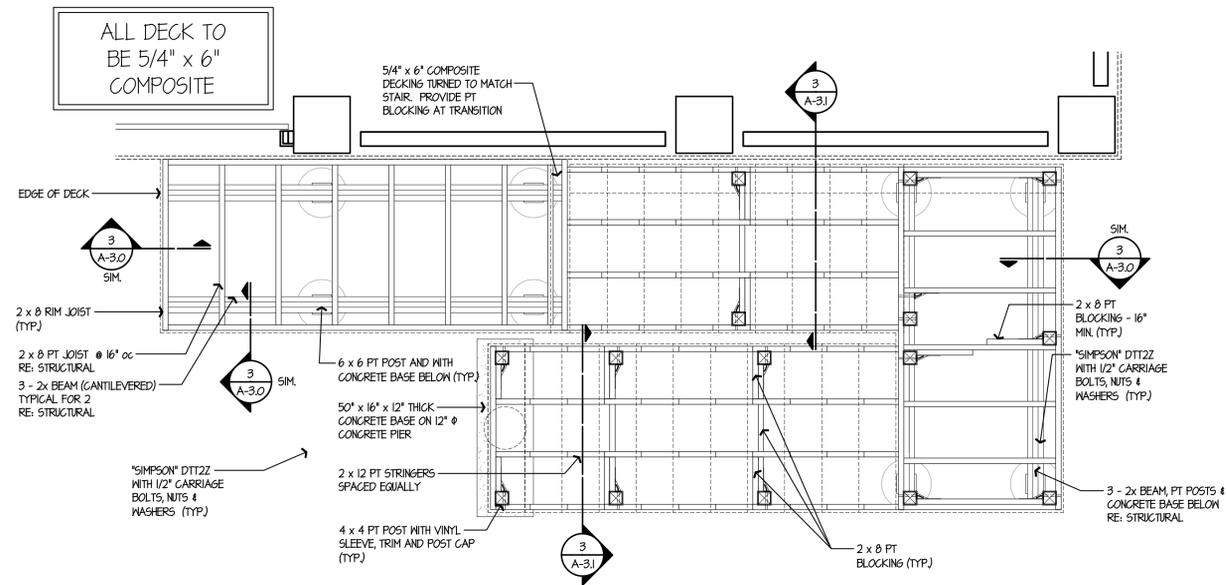
STAIR and DECK DETAILS

A-3.0

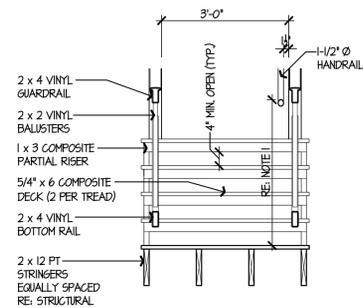
date	18 SEP 2015
drawn	JB/NWF
scale	AS SHOWN
checked	JP/KG
project no.	1347-46
application no.	1648

THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)

REHABILITATION and MITIGATION for the ROSENFELD RESIDENCE
APPLICATION No. 1648
28 West End Drive
Old Lyme, CT 06371

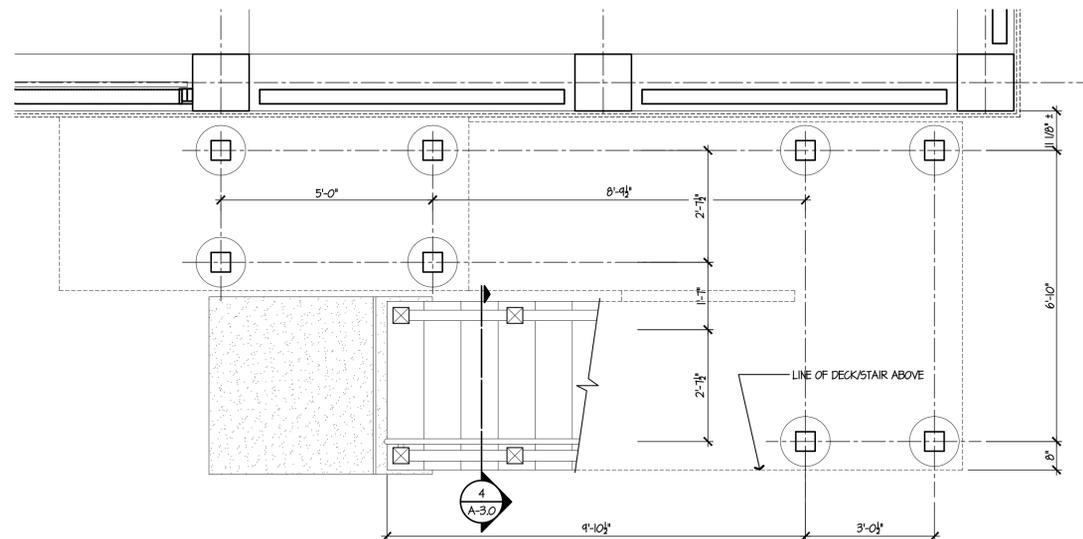


2 GROUND LEVEL DECK & STAIR PLAN - NORTH
SCALE: 1/2" = 1'-0"



NOTE 1 - HANDRAIL MIN. HEIGHT 34" - MAX HEIGHT 38"
NOTE 2 - GUARDRAIL MIN. HEIGHT 36"
HANDRAIL TO BE LOCATED MIN. 1-1/2" BELOW GUARDRAIL
RAILING SYSTEM - "OXFORD" BY CERTANTEED

3 STAIR SECTION
SCALE: 1/2" = 1'-0"



1 GROUND LEVEL DECK & STAIR PLAN - NORTH
SCALE: 1/2" = 1'-0"

date	description	no.
	revisions	

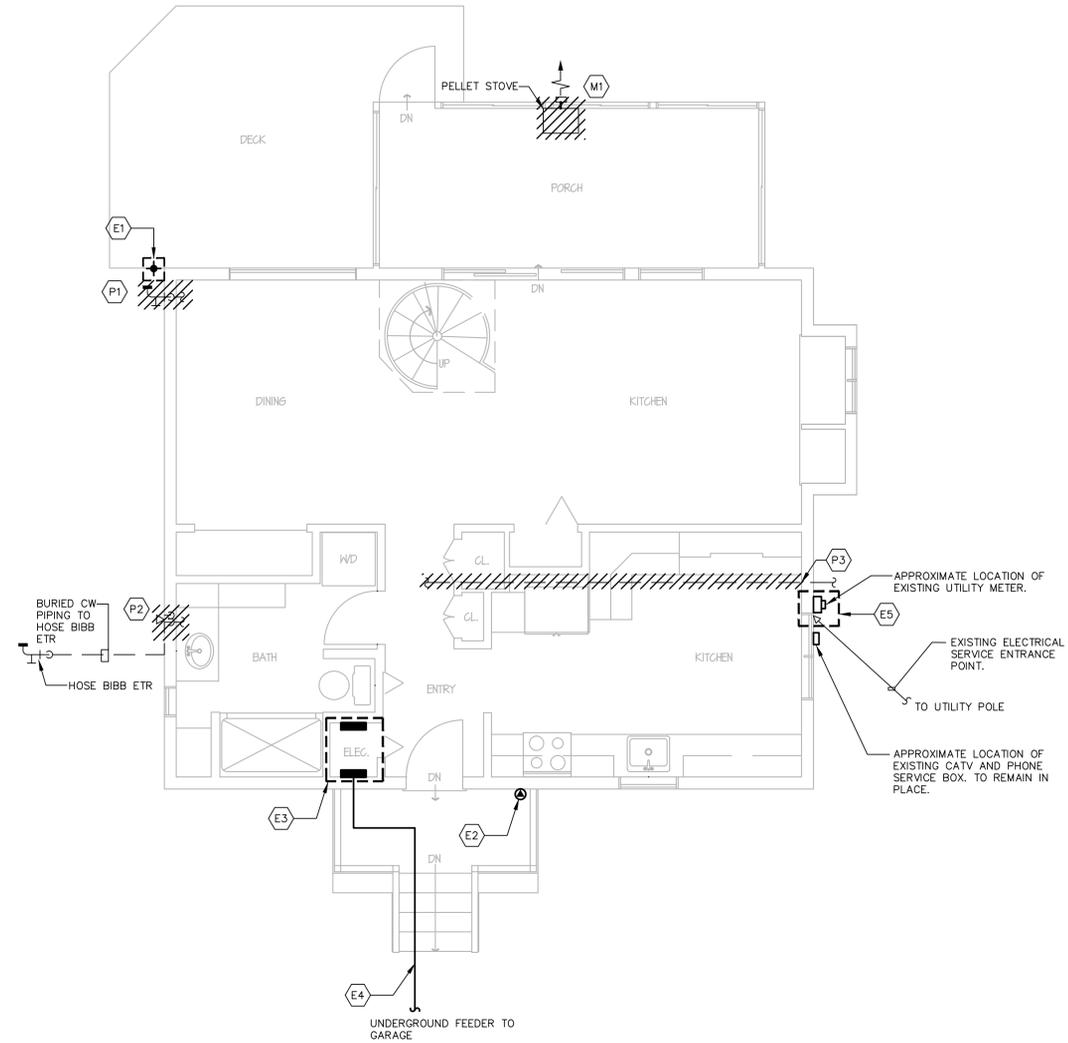
STAIR and DECK DETAILS

A-3.1

date	18 SEP 2015
drawn	JB/NWF
scale	AS SHOWN
checked	JP/KG
project no.	1347-46
application no.	1648

**THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)**

**GENERAL RENOVATIONS for the ROSENFELD RESIDENCE
APPLICATION No. 1648
28 West End Drive
Old Lyme, CT 06371**



1st FLOOR PLAN
MEP-1.0 SCALE: 1/4"= 1'-0"



PLUMBING DEMOLITION KEY NOTES	
P1	REMOVE EXISTING HOSE BIBB AND ALL ASSOCIATED PIPING BACK TO NEAREST ACTIVE MAIN. CAP PIPING AT MAIN.
P2	REMOVE EXISTING SHOWERHEAD AND ALL ASSOCIATED PIPING BACK TO NEAREST ACTIVE MAIN. CAP PIPING AT MAIN.
P3	REMOVE EXISTING CW PIPING INTO THE CRAWL SPACE.

MECHANICAL DEMOLITION KEY NOTES	
M1	REMOVE EXISTING PELLET STOVE AND ALL PIPING AND SPECIALTIES

ELECTRICAL DEMOLITION KEY NOTES	
E1	REMOVE EXISTING LIGHTING POST AT THIS APPROXIMATE LOCATION AND ALL ASSOCIATED WIRING BACK TO PANEL OF ORIGIN.
E2	REMOVE EXISTING 240V GENERATOR RECEPTACLE AND ENCLOSURE LOCATED UNDER FRONT PORCH. STORE AND PROTECT FOR FUTURE REUSE. REMOVE ALL ASSOCIATED WIRING BACK TO PANEL OF ORIGIN.
E3	REMOVE ELECTRICAL PANEL AND SUB PANEL. EXISTING BRANCH CIRCUITS WIRING SHALL BE PROTECTED, MADE SAFE AND LEFT IN PLACE FOR FUTURE RECONNECTION.
E4	UNDERGROUND FEEDER TO THE GARAGE TO REMAIN IN PLACE AND SHALL BE DISCONNECTED AT PANEL LOCATION, MADE SAFE, AND PROTECTED FOR FUTURE RECONNECTION. INFORM AND COORDINATE PRIOR TO EXCAVATION WORK IF APPLICABLE.
E5	REMOVE EXISTING ELECTRIC SERVICE TO THE RESIDENCE. REMOVE ALL ASSOCIATED WIRING FROM WEATHER HEAD BACK TO MAIN ELECTRICAL PANEL IN THE RESIDENCE. REMOVE WEATHER HEAD, METER, METER SOCKET, AND METER ENCLOSURE. PROTECT, AND STORE FOR FUTURE RELOCATION/REINSTALLATION.

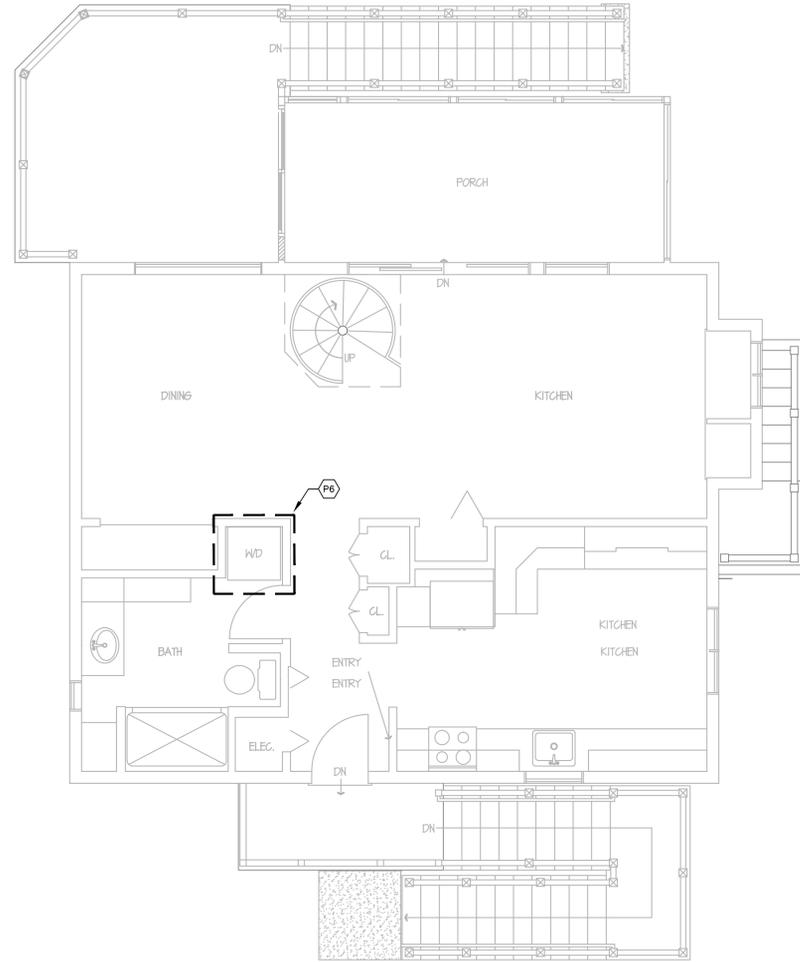
CES
Consulting Engineering Services, Inc.
1811 Middle Street
Middletown, CT 06457
Tel: 860.632-1682
Fax: 860.632-1768
CES #2014064.00

date	description	no.
	revisions	

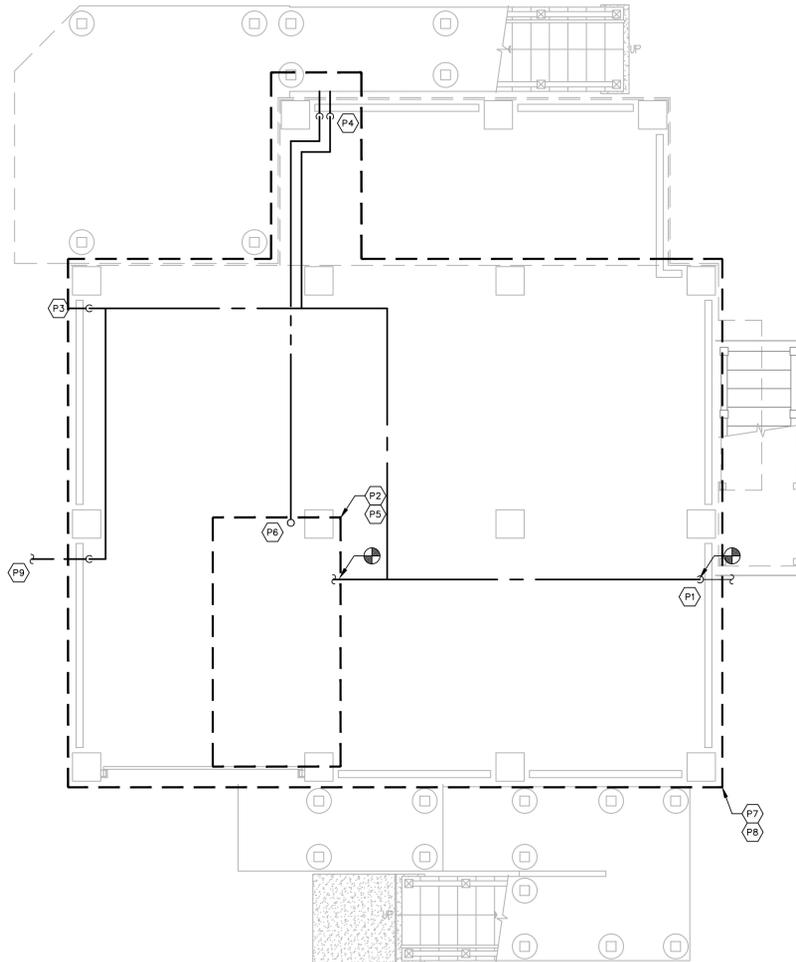
MEP DEMOLITION FLOOR PLANS

MEP-1.0

date	OCTOBER 5, 2015
drawn	ANK/VCM
scale	AS SHOWN
checked	DTB
project no.	2014064.00
application no.	1648



2 1st FLOOR PLAN
P-1.0 SCALE: 1/4" = 1'-0" NORTH



1 GROUND LEVEL
P-1.0 SCALE: 1/4" = 1'-0" NORTH

GENERAL NOTES

1. PLUMBING ITEMS INCLUDING BUT NOT LIMITED TO PIPING, EQUIPMENT, ETC SHALL BE INSTALLED ABOVE THE FLOOD PLANE AS DETERMINED BY THE ARCHITECTURAL PLANS.
2. WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS INCLUDING ACCESS PANELS FOR VALVES AND EQUIPMENT, ETC.

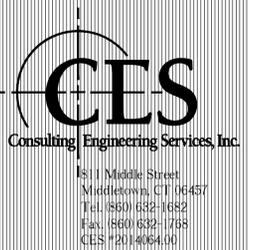
PLUMBING KEY NOTES

- P1 PROVIDE PRESSURE RELIEF VALVE AND ISOLATION VALVE ON RISE FOR CW PIPING.
- P2 PROVIDE SANITARY PIPING EXTENSION AS NECESSARY FOR RAISING OF HOUSE. SAN PIPING RISING FROM BELOW GRADE THIS AREA SHALL RUN UP TIGHT TO NEAREST COLUMN BEFORE CONNECTING TO EXISTING SANITARY PIPING AS TO AVOID PARKING SPACE, CONTRACTOR TO FIELD VERIFY PIPING LOCATION AND SIZE PRIOR TO BIDDING AND INSTALLATION.
- P3 PROVIDE NEW EXTERIOR WALL HYDRANT 3' ABOVE FINAL FINISHED GRADE. HOSE BIBB SHALL BE FREEZELESS, ANTI-SIPHON, WITH 3/4" THREADED OUTLET MODEL 17 AS MANUFACTURED BY WOODFORD OR APPROVED EQUAL. PROVIDE LOW POINT DRAIN ON PIPING DROP FROM HOUSE. SEE DETAIL 1/PS.0 FOR MORE DETAILS. CONNECT CW PIPING SERVING HOSE BIBB TO NEAREST ACTIVE MAIN.
- P4 PROVIDE NEW EXPOSED SHOWER HEAD MODEL SC-1220-AF AS MANUFACTURED BY SPEAKMAN. CONNECT CW AND HW PIPING SERVING SHOWER HEAD TO NEAREST ACTIVE MAINS. PROVIDE ISOLATION VALVE ON DROPS ABOVE FLOOD PLANE. PROVIDE LOW POINT DRAIN ON PIPING DROPS FROM HOUSE.
- P5 CONNECT NEW CW PIPING TO EXISTING CW PIPING THIS AREA.
- P6 EXTEND HW PIPING SERVING WASHING MACHINE DN TO TOP OF GROUND LEVEL FOR SHOWER CONNECTION.
- P7 ALL NEW AND EXISTING DOMESTIC COLD WATER AND HOT WATER SUPPLY PIPING EXPOSED BELOW THE PROPERTY SHALL BE INSULATED WITH 1/2" FIBERGLASS INSULATION WITH CONTINUOUS PVC JACKETING. ALL HOT AND COLD WATER PIPING EXPOSED BELOW THE PROPERTY SHALL BE HEAT TRACED WITH SELF REGULATION HEAT TRACE CABLE MODEL H612 AS MANUFACTURED BY PENTAIR. CABLE SHALL BE 120V INPUT AND HAVE AN OUTPUT OF 6W PER FOOT. PROVIDE ONE HEAT TAPE FOR HOT WATER PIPING AND ONE HEAT TAPE FOR COLD WATER PIPING. PROVIDE ALL NECESSARY ACCESSORIES NEEDED FOR COMPLETE AND OPERATIONAL SYSTEM. PROVIDE ONE 20A/120V DEDICATED POWER CIRCUIT FOR EVERY 150 FEET OF HEAT TRACE CABLE.
- P8 PROVIDE PIPE EXTENSIONS FOR CW AND HW PIPING AS NECESSARY FOR RAISING OF HOUSE. CONTRACTOR TO FIELD VERIFY PIPING LOCATION AND SIZE PRIOR TO BIDDING AND INSTALLATION.
- P9 CONNECT TO EXISTING UNDERGROUND CW PIPING SERVING HOSE BIBB.



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

GENERAL RENOVATIONS for the ROSENFELD RESIDENCE APPLICATION No. 1648 28 West End Drive Old Lyme, CT 06371

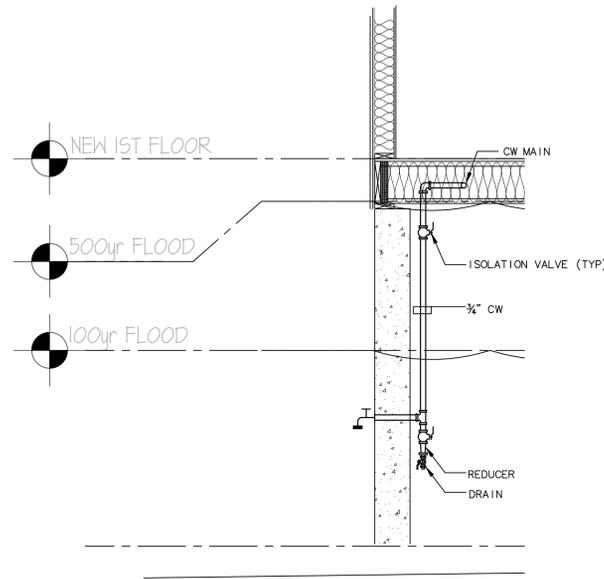


date	description	no.
revisions		

PLUMBING FLOOR PLANS

P-1.0

date	OCTOBER 5, 2015
drawn	ANK
scale	AS SHOWN
checked	DTB
project no.	2014064.00
application no.	1648



1 HOSE BIBB CW SUPPLY DETAIL
N.T.S.

- GENERAL PROCEDURES ALL TRADES**
- THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS UNLESS NOTED OTHERWISE.
 - DESCRIPTION
 - THIS PROJECT COMPRISES ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY OCCUPIED AND THE PROJECT WILL PROCEED IN A MANNER WHICH WILL MINIMIZE ANY INCONVENIENCE TO THE BUILDING OCCUPANTS.
 - SCOPE OF WORK CONSISTS OF INSTALLATION OF MATERIALS TO BE FURNISHED UNDER THE CONTRACT DOCUMENTS AND WITHOUT LIMITING GENERALITY THEREOF CONSISTS OF FURNISHING LABOR, MATERIALS, EQUIPMENT, HOISTING, PLANT, TRANSPORTATION, RIGGING, STAGING, APPURTENANCES, AND INSTALLATION THAT NECESSARY AND/OR INCIDENTAL TO PROPERLY COMPLETE ALL WORK AS SHOWN ON THE DRAWINGS AND AS DESCRIBED HEREIN.
 - DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT
 - FURNISH: THE TERM "FURNISH" MEANS TO "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."
 - INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."
 - PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
 - REMOVE: THE TERM REMOVE MEANS TO DISCONNECT FROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER.
 - SUBSTITUTIONS: "SUBSTITUTIONS" ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
 - DRAWINGS
 - PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. THE CONTRACTOR IS TO NOTE THAT THESE DOCUMENTS ARE DIAGRAMMATIC ONLY AND THAT FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. IF CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL.
 - SURVEY AND MEASUREMENTS:
 - PRIOR TO SUBMITTING BID, VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK TO BE PERFORMED. NO COMPENSATION WILL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS. INCLUDE IN THE BID ALL DEMOLITION WORK REQUIRED.
 - DO NOT SCALE DRAWINGS. SCALE INDICATED ON DRAWINGS IS FOR ESTABLISHING REFERENCE POINTS ONLY. ACTUAL FIELD CONDITIONS SHALL GOVERN ALL DIMENSIONS.
 - PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT, THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER RIGGING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE.
 - ARRANGE INSTALLATION TO PROVIDE ACCESS TO EQUIPMENT FOR EASY MAINTENANCE AND REPAIR.
 - CODES AND STANDARDS: ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STATE OF CONNECTICUT ACCEPTED VERSION OF THE FOLLOWING
 - INTERNATIONAL RESIDENTIAL CODE
 - INTERNATIONAL BUILDING CODE
 - INTERNATIONAL PLUMBING CODE
 - INTERNATIONAL MECHANICAL CODE
 - NATIONAL ELECTRIC CODE (NFPA 70)
 - THE LIFE SAFETY CODE (NFPA 101)
 - PERMITS AND FEES: THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS; AND PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE WORK, FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER A COPY TO THE OWNER AND ENGINEER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.
 - SHOP DRAWINGS:
 - SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'-0", HIGHLIGHT, ENCIRCLE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
 - SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
 - DIMENSIONS.
 - IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.
 - COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE DATA AS INDICATED.
 - NOTATION OF COORDINATION REQUIREMENTS.
 - NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT.
 - SUBMIT 3 BLACK-LINE PRINTS AND 2 ADDITIONAL PRINTS WHERE REQUIRED FOR MAINTENANCE MANUALS, PLUS THE NUMBER OF PRINTS NEEDED BY THE ENGINEER FOR DISTRIBUTION. ONE PRINT WILL BE RETAINED; THE REMAINDER RETURNED. ONE OF THE PRINTS RETURNED SHALL BE MARKED-UP AND MAINTAINED AS A "RECORD DOCUMENT".
 - DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH CONSTRUCTION.
 - DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SHOP DRAWINGS.
 - PROVIDE SUBMITTALS AS INDICATED IN SPECIFIC SPECIFICATION SECTIONS.
 - USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
 - THE CONTRACTOR SHALL COORDINATE ALL INTERRUPTIONS OF SERVICES AND LIMITATIONS OF ACCESS WITH THE OWNER NO LESS THAN 5 DAYS PRIOR TO THE INTERRUPTION.
 - OPERATION AND MAINTENANCE
 - UPON COMPLETION OF ALL WORK AND TESTS, THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF ALL EQUIPMENT FURNISHED. THE CONTRACTOR SHALL GIVE AT LEAST SEVEN (7) DAYS NOTICE TO THE OWNER AND THE ENGINEER IN ADVANCE OF THIS PERIOD.
 - THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A COMPLETE OPERATION AND MAINTENANCE MANUAL, BOUND IN BOOKLET FORM. ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION AND DESIGNATION PARTITIONS WITH IDENTIFICATION TABS. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER.
 - OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE THE FOLLOWING:
 - MANUFACTURER'S PRINTED OPERATING AND MAINTENANCE PROCEDURES.
 - MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING.
 - COPIES OF WARRANTIES.
 - APPROVED SHOP DRAWINGS AND PRODUCT DATA.
 - BALANCE REPORTS.
 - INCLUDE IN THE MANUAL, A TABULATED EQUIPMENT SCHEDULE FOR ALL EQUIPMENT. SCHEDULE SHALL INCLUDE PERTINENT DATA SUCH AS: MAKE, MODEL NUMBER, SERIAL NUMBER, VOLTAGE, NORMAL OPERATING CURRENT, BELT SIZE, FILTER QUANTITIES AND SIZES, BEARING NUMBER, ETC. SCHEDULE SHALL INCLUDE MAINTENANCE TO BE DONE AND FREQUENCY.
 - MAINTENANCE AND INSTRUCTION MANUALS SHALL BE SUBMITTED TO THE OWNER AT THE SAME TIME AS THE SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INSTRUCTION PERIOD.
 - AS-BUILT DRAWINGS
 - PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
 - MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
 - NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE.
 - ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
 - OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED

- IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
- GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITHIN CONTRACT PRICE.
- SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR THEIR RECORDS.

MEANS AND METHODS ALL TRADES

 - INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
 - DO NOT BURY WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
 - MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STANDARD HAS BEEN ESTABLISHED.
 - CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.
 - SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES ANY EQUIPMENT AND APPARATUS FURNISHED UNDER THIS DIVISION. REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
 - EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
 - WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING, INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALLS AND FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL BE REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAULKING AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY WATERTIGHT.
 - PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
 - ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL DAMPERS, VALVES, CONTROL DEVICES, AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. COORDINATE TYPE AND LOCATION WITH ARCHITECTURAL PLANS.
 - SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMACNA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.

- PLUMBING**
- PIPING:
 - DOMESTIC WATER PIPING SHALL BE COPPER TUBING TYPE L. SOLDER FILLER METALS SHALL BE 95-5 TIN-ANTIMONY SOLDER JOINTS.
 - WASTE AND VENT PIPING SHALL BE PVC, TYPE DWV PIPE AND FITTINGS WITH SOLVENT CEMENTED JOINTS.
 - WASTE AND VENT PIPING SHALL BE HUBLESS, SERVICE WEIGHT, CAST-IRON SOIL PIPE AND FITTINGS, WITH NEOPRENE GASKETS, BURIED PIPING SHALL BE HUB AND SPOUT FITTINGS.
 - INSULATION:
 - INSULATION SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE IECC EXCEPT THAT PIPE INSULATION SHALL NOT BE LESS THAN 1" THICK. ALL INSULATION MATERIALS, ADHESIVES, COATINGS, AND OTHER ACCESSORIES SHALL HAVE FLAME SPREAD RATINGS OF 25 OR LESS, AND SMOKE DEVELOPED RATINGS OF 50 OR LESS AS TESTED BY ASTM E 84 (NFPA 255) METHOD. ALL INSULATION MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA AND ASHRAE STANDARDS.
 - PIPE INSULATION SHALL BE FIBERGLASS WITH VAPOR BARRIER JACKET. PROVIDE INSULATION FOR THE FOLLOWING PIPING SYSTEMS:
 - DOMESTIC COLD WATER PIPING
 - DOMESTIC HOT WATER PIPING
 - ALL EXPOSED DOMESTIC WATER PIPE SHALL BE WRAPPED WITH A PVC VAPOR BARRIER JACKET AS MANUFACTURED BY ZESTON OR APPROVED EQUAL. PVC JACKETING SHALL BE FINISHED TO BE WATER TIGHT.
 - PIPING INSTALLATION:
 - INSTALL PIPING IN ACCORDANCE WITH ALL APPLICABLE CODES AND GOOD PRACTICES.
 - INSTALL UNIONS OR FLANGES IN PIPES ADJACENT TO EACH VALVE, CONTROL DEVICE AND AT FINAL CONNECTIONS EACH PIECE OF EQUIPMENT.
 - INSTALL DIELECTRIC UNIONS TO JOIN DISSIMILAR METALS.
 - INSTALL AND ANCHOR PIPING TO ENSURE PROPER EXPANSION AND CONTRACTION.
 - ANCHOR PIPING TO ENSURE PROPER DIRECTION OF EXPANSION AND CONTRACTION.
 - SUPPORT PIPING TO PREVENT VIBRATION OR SAGGING. PROVIDE HANGER SPACING ACCORDING TO DISTANCES LISTED IN APPLICABLE CODES AND REGULATIONS.
 - PLUMBING IDENTIFICATION
 - PLUMBING IDENTIFICATION WORK SHALL COMPLY WITH ANSI A13.1. NAMES, ABBREVIATIONS AND OTHER DESIGNATIONS USED IN MECHANICAL IDENTIFICATION WORK, SHALL CORRESPOND WITH DESIGNATIONS SHOWN, SPECIFIED OR SCHEDULED.
 - VALVE TAGS SHALL BE 1-1/2" DIAMETER, 19-GAGE POLISHED BRASS WITH STAMP-ENGRAVED LETTERING, ATTACH VALVES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - PROVIDE VALVE TAG ON EVERY VALVE, EXCLUDING DRAIN VALVES.
 - PIPE IDENTIFICATION, PLASTIC PIPE MARKERS, FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC, PERFORMED TO FIT AROUND PIPE OR PIPE COVERING, MINIMUM INFORMATION INDICATING FLOW DIRECTION ARROW AND IDENTIFICATION OF FLUID BEING CONVEYED.
 - TESTING AND ADJUSTING
 - ALL WATER PIPING SHALL BE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE. THE SYSTEM SHALL BE PROVED TIGHT UNDER WATER PRESSURE OF 100 PSIG. THE PRESSURE SHALL BE APPLIED GRADUALLY AND THEN HELD FOR A MINIMUM OF TWO HOURS.
 - ALL WASTE PIPING SHALL BE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE. THE SYSTEM SHALL BE FILLED WITH WATER TO A HEAD OF NOT LESS THAN 10 FEET. THE WATER LEVEL AT THE TOP OF THE TEST HEAD OF WATER SHALL NOT DROP FOR AT LEAST 15 MINUTES.
 - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR ALL TESTING.



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

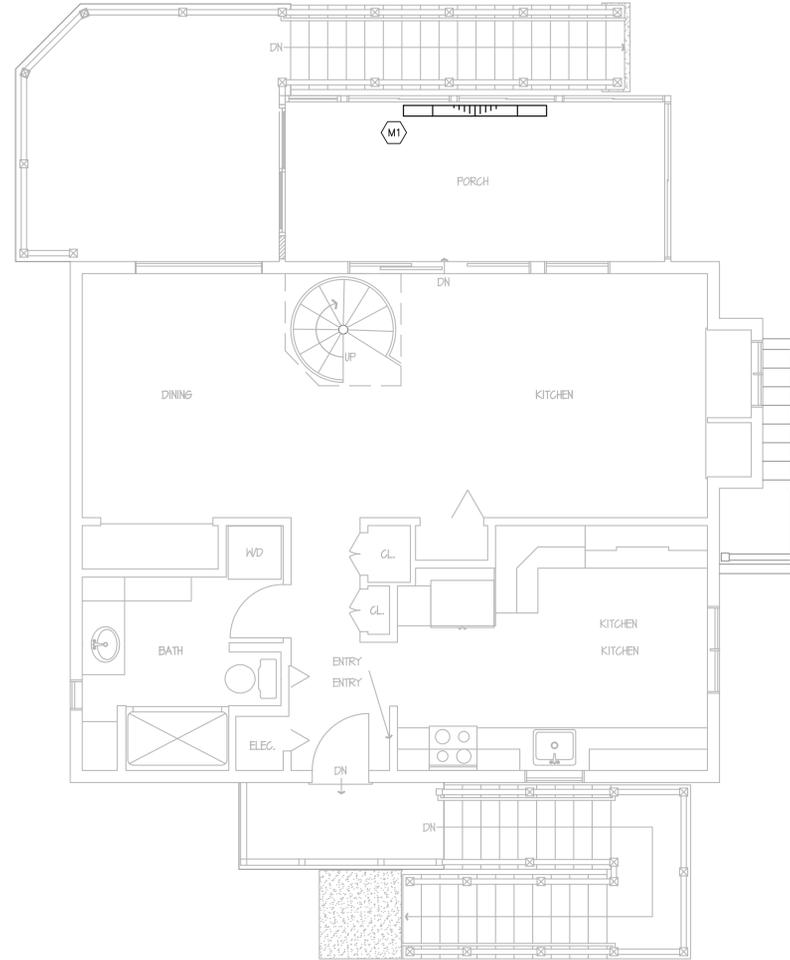
GENERAL RENOVATIONS for the ROSENFELD RESIDENCE APPLICATION No. 1648 28 West End Drive Old Lyme, CT 06371



date	description	no.
	revisions	

PLUMBING SCHEDULES AND DETAILS

P-5.0	
date	OCTOBER 5, 2015
drawn	ANK
scale	NOT TO SCALE
checked	DTB
project no.	2014064.00
application no.	1648



1st FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 NORTH

GENERAL NOTES ALL TRADES

1. ALL MECHANICAL ITEMS SHALL BE INSTALLED ABOVE THE FLOOD PLANE AS INDICATED ON THE ARCHITECTURAL PLANS.
2. WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS INCLUDING ACCESS PANELS FOR VALVES AND EQUIPMENT, DIFFUSER LOCATIONS, THERMOSTAT AND SENSOR LOCATIONS, ETC.
3. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS PRIOR TO PROVIDING ALL EQUIPMENT AND PIPING.

MECHANICAL KEY NOTES

- (M1) PROVIDE ELECTRIC BASEBOARD HEATER MODEL FAHRENHEAT F2546W (240V/1500WATT/5120BTU/6.3AMP) WITH ACCESSORY DP THERMOSTAT CATALOG NUMBER TA2AW AS MANUFACTURED BY MARLEY ENGINEERED PRODUCTS.



**THE STATE OF CONNECTICUT
 DEPARTMENT OF HOUSING (DOH)
 COMMUNITY DEVELOPMENT BLOCK
 GRANT - DISASTER RECOVERY (CDBG-DR)
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 REBUILDING PROGRAM (OOR)**

**GENERAL RENOVATIONS for the
 ROSENFELD RESIDENCE
 APPLICATION No. 1648
 28 West End Drive
 Old Lyme, CT 06371**



date	description	no.
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MECHANICAL FLOOR PLANS

M-1.0

date	OCTOBER 5, 2015
drawn	ANK
scale	AS SHOWN
checked	DTB
project no.	2014064.00
application no.	1648

- GENERAL PROCEDURES ALL TRADES**
1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS UNLESS NOTED OTHERWISE.
 2. DESCRIPTION
 - A. THIS PROJECT COMPRISES ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY OCCUPIED AND THE PROJECT WILL PROCEED IN A MANNER WHICH WILL MINIMIZE ANY INCONVENIENCE TO THE BUILDING OCCUPANTS.
 - B. SCOPE OF WORK CONSISTS OF INSTALLATION OF MATERIALS TO BE FURNISHED UNDER THE CONTRACT DOCUMENTS AND WITHOUT LIMITING GENERALITY THEREOF CONSISTS OF FURNISHING LABOR, MATERIALS, EQUIPMENT, HOISTING, PLANT, TRANSPORTATION, RIGGING, STAGING, APPURTENANCES, AND SERVICES NECESSARY AND/OR INCIDENTAL TO PROPERLY COMPLETE ALL WORK AS SHOWN ON THE DRAWINGS AND AS DESCRIBED HEREIN.
 3. DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT
 - A. FURNISH: THE TERM "FURNISH" MEANS TO "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."
 - B. INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."
 - C. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
 - D. REMOVE: THE TERM REMOVE MEANS TO DISCONNECT FROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER.
 - E. SUBSTITUTIONS: "SUBSTITUTIONS" ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
 4. DRAWINGS
 - A. PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. THE CONTRACTOR IS TO NOTE THAT THESE DOCUMENTS ARE DIAGRAMMATIC ONLY AND THAT FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. IF A CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL.
 5. SURVEY AND MEASUREMENTS:
 - A. PRIOR TO SUBMITTING BID, VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK TO BE PERFORMED. NO COMPENSATION WILL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS. INCLUDE IN THE BID ALL DEMOLITION WORK REQUIRED.
 - B. DO NOT SCALE DRAWINGS. SCALE INDICATED ON DRAWINGS IS FOR ESTABLISHING REFERENCE POINTS ONLY. ACTUAL FIELD CONDITIONS SHALL GOVERN ALL DIMENSIONS.
 - C. PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT, THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER RIGGING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE.
 - D. ARRANGE INSTALLATION TO PROVIDE ACCESS TO EQUIPMENT FOR EASY MAINTENANCE AND REPAIR.
 6. CODES AND STANDARDS: ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STATE OF CONNECTICUT ACCEPTED VERSION OF THE FOLLOWING
 - A. INTERNATIONAL BUILDING CODE
 - B. INTERNATIONAL PLUMBING CODE
 - C. INTERNATIONAL MECHANICAL CODE
 - D. NATIONAL ELECTRIC CODE (NFPA 70)
 - E. THE LIFE SAFETY CODE (NFPA 101)
 7. PERMITS AND FEES: THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS; AND PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE WORK, FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER A COPY TO THE OWNER AND ENGINEER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.
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 - A. SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'-0". HIGHLIGHT, ENCIRCLE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
 - B. SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
 - a. DIMENSIONS.
 - b. IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.
 - c. COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE DATA AS INDICATED.
 - d. NOTATION OF COORDINATION REQUIREMENTS.
 - e. NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT.
 - f. SUBMIT 3 BLACK-LINE PRINTS AND 2 ADDITIONAL PRINTS WHERE REQUIRED FOR MAINTENANCE MANUALS, PLUS THE NUMBER OF PRINTS NEEDED BY THE ENGINEER FOR DISTRIBUTION. ONE PRINT WILL BE RETAINED; THE REMAINDER RETURNED. ONE OF THE PRINTS RETURNED SHALL BE MARKED-UP AND MAINTAINED AS A "RECORD DOCUMENT".
 - g. DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH CONSTRUCTION.
 - h. DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SHOP DRAWINGS.
 - i. PROVIDE SUBMITTALS AS INDICATED IN SPECIFIC SPECIFICATION SECTIONS.
 9. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
 10. THE CONTRACTOR SHALL COORDINATE ALL INTERRUPTIONS OF SERVICES AND LIMITATIONS OF ACCESS WITH THE OWNER NO LESS THAN 5 DAYS PRIOR TO THE INTERRUPTION.
 11. OPERATION AND MAINTENANCE
 - A. UPON COMPLETION OF ALL WORK AND TESTS, THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF ALL EQUIPMENT FURNISHED. THE CONTRACTOR SHALL GIVE AT LEAST SEVEN (7) DAYS NOTICE TO THE OWNER AND THE ENGINEER IN ADVANCE OF THIS PERIOD.
 - B. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A COMPLETE OPERATION AND MAINTENANCE MANUAL, BOUND IN BOOKLET FORM. ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION AND DESIGNATION PARTITIONS WITH IDENTIFICATION TABS. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER.
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 - a. MANUFACTURER'S PRINTED OPERATING AND MAINTENANCE PROCEDURES.
 - b. MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING.
 - c. COPIES OF WARRANTIES.
 - d. APPROVED SHOP DRAWINGS AND PRODUCT DATA.
 - e. BALANCE REPORTS.
 - f. INCLUDE IN THE MANUAL, A TABULATED EQUIPMENT SCHEDULE FOR ALL EQUIPMENT. SCHEDULE SHALL INCLUDE PERTINENT DATA SUCH AS MAKE, MODEL NUMBER, SERIAL NUMBER, VOLTAGE, NORMAL OPERATING CURRENT, BELT SIZE, FILTER QUANTITIES AND SIZES, BEARING NUMBER, ETC. SCHEDULE SHALL INCLUDE MAINTENANCE TO BE DONE AND FREQUENCY.
 - g. MAINTENANCE AND INSTRUCTION MANUALS SHALL BE SUBMITTED TO THE OWNER AT THE SAME TIME AS THE SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INSTRUCTION PERIOD.
 12. AS-BUILT DRAWINGS
 - A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
 - B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
 - C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE.
 - D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
 13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.

14. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITHIN CONTRACT PRICE.
15. SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR THEIR RECORDS.

- MEANS AND METHODS ALL TRADES**
1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
 2. DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
 3. MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STANDARD HAS BEEN ESTABLISHED.
 4. CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.
 5. SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES ANY EQUIPMENT AND APPARATUS FURNISHED UNDER THIS DIVISION. REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
 6. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
 7. WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING, INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALL AND FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL BE REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAULKING AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY WATERTIGHT.
 8. PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
 9. ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL DAMPERS, VALVES, CONTROL DEVICES, AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. COORDINATE TYPE AND LOCATION WITH ARCHITECTURAL PLANS.
 10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMAGNA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.
- HVAC SPECIFICATIONS**
1. INSULATION:
 - A. INSULATION THICKNESS SHALL BE IN ACCORDANCE WITH LATEST EDITION OF ASHRAE 90.1 EXCEPT THAT PIPE INSULATION SHALL NOT BE LESS THAN 1" THICK. ALL INSULATION MATERIALS, ADHESIVES, COATINGS, AND OTHER ACCESSORIES SHALL HAVE FLAME SPREAD RATINGS OF 25 OR LESS, AND SMOKE DEVELOPED RATINGS OF 50 OR LESS AS TESTED BY ASTM E-84 (NFPA 255) METHOD. ALL INSULATION MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF ASHRAE STANDARDS.
 2. TESTING , ADJUSTING AND BALANCING
 - A. THE MECHANICAL CONTRACTOR SHALL PROVIDE THE SERVICES OF AN INDEPENDENT TESTING, ADJUSTING, AND BALANCING (TAB) AGENCY TO PROVIDE TAB SERVICES FOR THE MECHANICAL SYSTEMS. THE TAB AGENCY SHALL BE CERTIFIED BY NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) OR THE ASSOCIATED AIR BALANCE COUNCIL (AABC) IN THOSE TESTING AND BALANCING DISCIPLINES REQUIRED FOR THIS PROJECT. THE TAB AGENCY SHALL HAVE AT LEAST ONE PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE SERVICES ARE TO BE PERFORMED AND CERTIFIED BY NEBB OR AABC AS A TEST AND BALANCE ENGINEER.
 - B. PRIOR TO TESTING, ADJUSTING, AND BALANCING, THE MECHANICAL CONTRACTOR SHALL VERIFY THAT THE SYSTEMS HAVE BEEN INSTALLED AND ARE OPERATING AS SPECIFIED. APPROVED SHOP DRAWINGS, AS BUILT DRAWINGS, AND ALL OTHER DATA REQUIRED FOR EACH SYSTEM AND/OR COMPONENT TO BE TESTED SHALL BE MADE AVAILABLE AT THE JOB SITE DURING THE ENTIRE TAB EFFORT. THE OWNER SHALL BE NOTIFIED IN WRITING OF ALL EQUIPMENT, COMPONENTS, OR BALANCING DEVICES, THAT ARE DAMAGED, INCORRECTLY INSTALLED, OR MISSING, AS WELL AS ANY DESIGN DEFICIENCIES THAT WILL PREVENT PROPER TESTING, ADJUSTING, AND BALANCING. TESTING, ADJUSTING, AND BALANCING SHALL COMMENCE UNTIL APPROVED BY THE OWNER.
 - C. PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM IDENTIFIED, IN ACCORDANCE WITH THE DETAILED PROCEDURES OUTLINED IN EITHER NEBB: "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, AND BALANCING OF ENVIRONMENTAL SYSTEMS" OR AABC: "NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE". THE TAB AGENCY SHALL TEST, ADJUST, AND BALANCE THE FOLLOWING MECHANICAL SYSTEMS:
 - a. ALL SUPPLY AIR SYSTEMS
 - b. ALL RETURN AIR SYSTEMS
 - c. VERIFY OPERATION OF ALL TEMPERATURE CONTROL SYSTEMS
 - d. TEST SYSTEMS FOR PROPER SOUND AND VIBRATION LEVELS
 - D. SUBMIT TESTING, ADJUSTING, AND BALANCING REPORTS BEARING THE SEAL AND SIGNATURE OF THE TAB PROFESSIONAL ENGINEER. PREPARE A REPORT OF RECOMMENDATIONS FOR CORRECTING UNSATISFACTORY MECHANICAL PERFORMANCES WHEN A SYSTEM CANNOT BE SUCCESSFULLY BALANCED.
 - E. PROVIDE ALL NECESSARY CONTROL DEVICES, EQUIPMENT, MATERIALS, LABOR, WIRE AND CONDUIT TO PERFORM THE SEQUENCES OF OPERATION AS INDICATED. WIRING AND CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 16. ALL CONTROL WIRING INSTALLED WITHIN AIR PLENUM SPACES TO BE TEFLON COATED RATED FOR PLENUM CEILINGS.



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

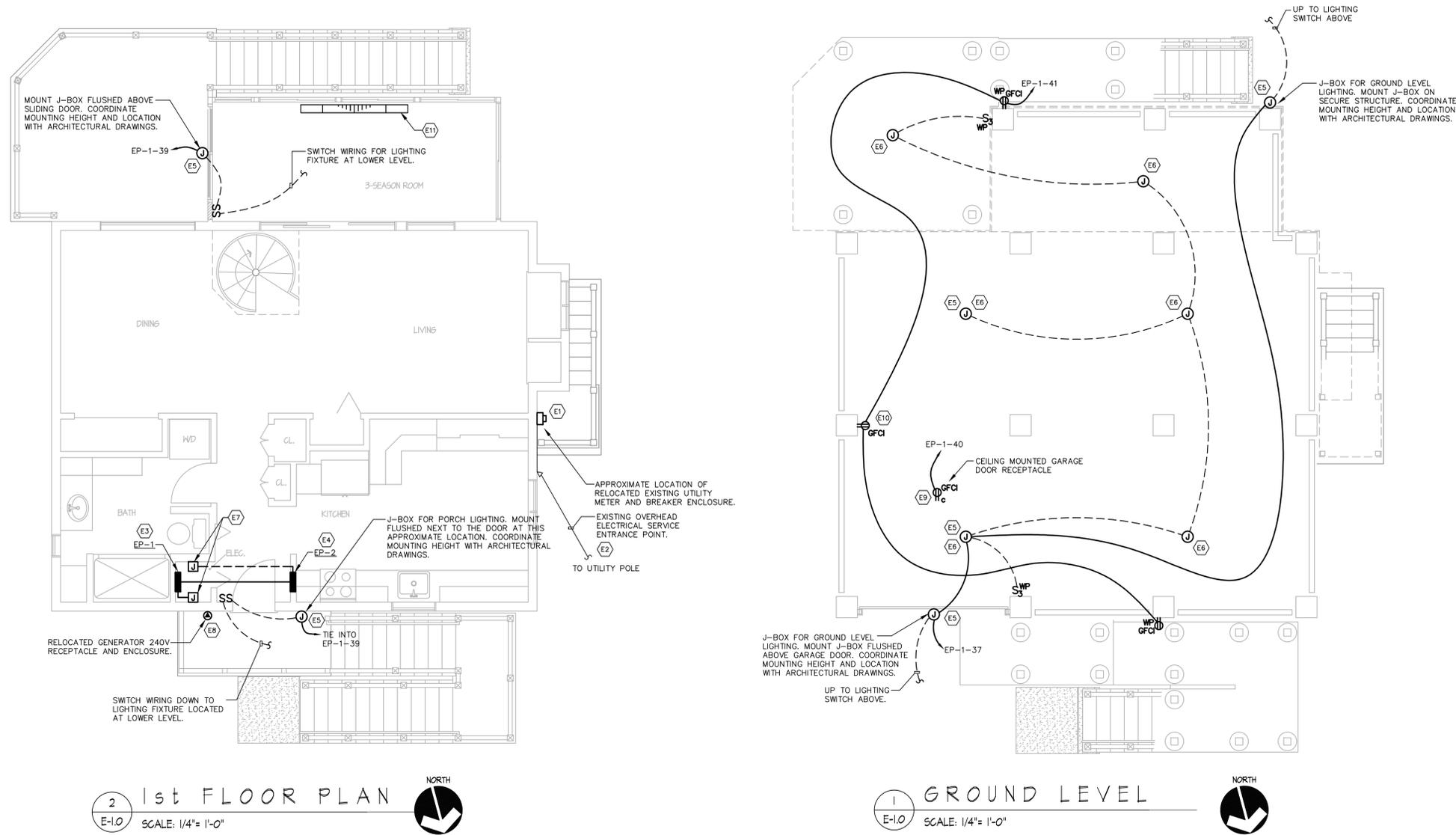
GENERAL RENOVATIONS for the ROSENFELD RESIDENCE APPLICATION No. 1648 28 West End Drive Old Lyme, CT 06371



date	description	no.
revisions		

MECHANICAL SCHEDULES AND DETAILS

M-5.0	
date	OCTOBER 5, 2015
drawn	ANK
scale	NOT TO SCALE
checked	DTB
project no.	2014064.00
application no.	1648



2 1st FLOOR PLAN
E-1.0 SCALE: 1/4" = 1'-0"

1 GROUND LEVEL
E-1.0 SCALE: 1/4" = 1'-0"

ELECTRICAL KEY NOTES

<p>(E1) APPROXIMATE LOCATION OF RELOCATED ELECTRIC SERVICE EQUIPMENT. PROVIDE ALL ASSOCIATED PARTS AND MATERIALS FOR A COMPLETE AND FUNCTIONAL RELOCATION OF ELECTRICAL EQUIPMENT AND CONNECTION TO MAIN ELECTRICAL PANEL 'EP-1'. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION. COORDINATE ADDITIONAL REQUIREMENTS WITH THE UTILITY COMPANY FOR THE RELOCATION AND RECONNECTION OF EQUIPMENT.</p> <p>(E2) COORDINATE WITH THE ELECTRIC COMPANY THE RELOCATION OF EXISTING, OR THE PROVISION OF A NEW WEATHER HEAD. COORDINATE OVERHEAD ELECTRIC SERVICE ENTRY POINT FROM UTILITY POLE WITH ELECTRIC COMPANY. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION. COORDINATE ADDITIONAL REQUIREMENTS WITH THE UTILITY COMPANY FOR THE RELOCATION AND RECONNECTION OF EQUIPMENT. PROVIDE ALL ASSOCIATED PARTS AND MATERIALS FOR A COMPLETE AND FUNCTIONAL SERVICE TO THE RESIDENCE.</p> <p>(E3) PROVIDE NEW FLUSH MOUNTED ELECTRICAL PANEL 'EP-1', 200A/MCB, 2P, 120/240V, 42-POLE, 3-WIRE. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION.</p> <p>(E4) PROVIDE NEW FLUSH MOUNTED ELECTRICAL PANEL 'EP-2', 125A RATED MAIN LUG, 2P, 120/240V, 20-POLE, 3-WIRE. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION.</p> <p>(E5) BASE BID PROVIDE 12-2 WIRING AND JUNCTION BOX TO THIS LOCATION. WIRING AND JUNCTION BOX SHALL BE PROTECTED FOR FUTURE USE AND INSTALLATION OF LIGHTING FIXTURE. OWNER SHALL SELECT LIGHTING FIXTURE AND COORDINATE INSTALLATION BASED ON ALLOWANCE PROVIDED UNDER THIS PROJECT. REFER TO PANELBOARD SCHEDULE FOR CKT INFORMATION. INCLUDE 3-WAY SWITCHING AS PART OF THIS ALTERNATE AS SHOWN. REFER TO DWGS FOR APPROXIMATE LOCATION OF DEVICES AND WIRING INFORMATION.</p> <p>(E6) ALTERNATE #1 PROVIDE 12-2 WIRING AND JUNCTION BOX TO THIS LOCATION. WIRING AND JUNCTION BOX SHALL BE PROTECTED FOR FUTURE USE AND INSTALLATION OF LIGHTING FIXTURE. OWNER SHALL SELECT LIGHTING FIXTURE AND COORDINATE INSTALLATION BASED ON ALLOWANCE PROVIDED UNDER THIS PROJECT. REFER TO PANELBOARD SCHEDULE FOR CKT INFORMATION. INCLUDE 3-WAY SWITCHING AS PART OF THIS ALTERNATE AS SHOWN. REFER TO DWGS FOR APPROXIMATE LOCATION OF DEVICES AND WIRING INFORMATION.</p>	<p>(E7) PROVIDE NEW SPLICE/JUNCTION BOX FOR EXTENSION OF EXISTING BRANCH CIRCUITS TO LOCATION OF NEW PANEL 'EP-1' AND 'EP-2'. REFER TO FLOOR PLAN FOR RELOCATION AND WIRING INFORMATION. PROVIDE FEEDER EXTENSION OF GARAGE UNDERGROUND CIRCUIT DISCONNECTED DURING THE DEMOLITION PHASE, UP TO THE LOCATION OF ELECTRICAL PANEL 'EP-1'. PROVIDE APPROPRIATELY SIZED WIRING BASED ON CIRCUIT BREAKER SIZE FOR ALL ASSOCIATED CIRCUITS. PROVIDE ALL ASSOCIATED PARTS AND MATERIALS FOR A COMPLETE EXTENSION AND RECONNECTION. REFER TO FLOORPLAN FOR APPROXIMATE LOCATION OF DEVICES.</p> <p>(E8) RELOCATE EXISTING GENERATOR 240V RECEPTACLE AND ENCLOSURE TO THIS APPROXIMATE LOCATION. COORDINATE THE MOUNTING TO A SECURE AND ACCESSIBLE STRUCTURE. PROVIDE 10-3 FEED BACK TO MAIN ELECTRICAL PANEL 'EP-1'. PROVIDE AND CONNECT TO 30A/2P CIRCUIT BREAKER. PROVIDE ALL ASSOCIATED PARTS AND MATERIALS FOR A COMPLETE AND FUNCTIONAL INSTALLATION AND OPERATION.</p> <p>(E9) ALTERNATE #1 PROVIDE 120VAC/20AMP GFCI CEILING MOUNTED RECEPTACLE FOR OVERHEAD GARAGE DOOR. PROVIDE 12-2 WIRING FEED BACK TO 20A/1P SPARE CIRCUIT BREAKER IN ELECTRICAL PANEL 'EP-2'. REFER TO PANELBOARD SCHEDULE FOR MORE INFORMATION.</p> <p>(E10) ALTERNATE #3 PROVIDE 120VAC/20AMP GFCI RECEPTACLE FOR GARAGE USE. TIE TO LOCAL BRANCH CIRCUIT AS SHOWN IN FLOOR PLAN.</p> <p>(E11) PROVIDE 12-3 FEED BACK TO ELECTRICAL PANEL 'EP-1' FOR BASEBOARD AT THIS APPROXIMATE LOCATION. PROVIDE AND CONNECT TO 20A/2P CIRCUIT BREAKER. ADD AND LABEL CIRCUIT IN PANELBOARD DIRECTORY.</p>
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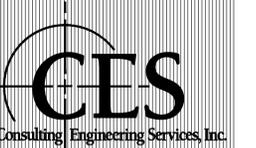
GENERAL NOTES ALL TRADES

- ELECTRICAL ITEMS INCLUDING BUT NOT LIMITED TO WIRING, EQUIPMENT, SWITCHES, OUTLETS, ETC SHALL BE INSTALLED ABOVE THE FLOOD PLANE AS DETERMINED BY THE ARCHITECTURAL PLANS.
- WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS.
- CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS PRIOR TO PROVIDING ALL EQUIPMENT AND PIPING.
- CIRCUITS SHALL BE #12 FOR 20A-1P CIRCUIT BREAKERS AND #14 FOR 15A-1P CIRCUIT BREAKERS IN PANEL INDICATED UNLESS NOTED OTHERWISE.



THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
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APPLICATION No. 1648
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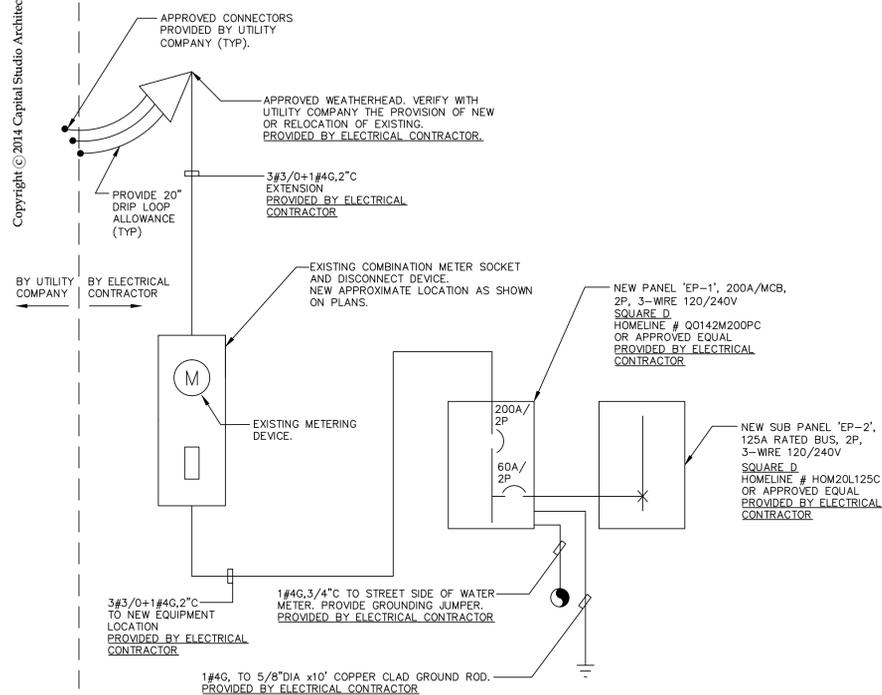


1811 Middle Street
Middletown, CT 06457
Tel: (860) 632-1682
Fax: (860) 632-1768
CES #2014064.00

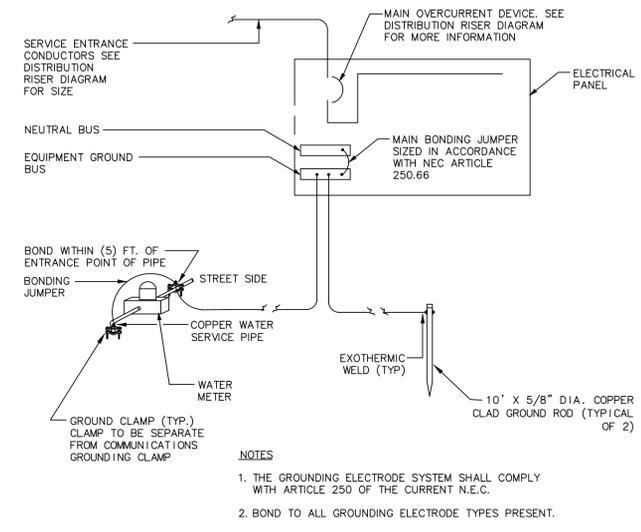
date	description	no.

ELECTRICAL FLOOR PLANS

E-1.0	
date	OCTOBER 5, 2015
drawn	VCN
scale	AS SHOWN
checked	DTB
project no.	2014064.00
application no.	1648



SERVICE ENTRANCE / DISTRIBUTION RISER DIAGRAM
N.T.S.



TYPICAL MAIN ELECTRIC GROUNDING DETAIL
N.T.S.

PANELBOARD SCHEDULE															
PANELBOARD	LOCATION	MAIN			VOLTAGE	PHASE	WIRE	FEEDER	SE RATED	MOUNTING	MIN SCR	REMARKS			
EP-1	KITCHEN	200A/2P	MCB		120/240	1	3	3#3/0+1#4G,2°C	N/A	RECESSED	10,000	-			
CKT	DESCRIPTION	P	AT	AF	CIRCUITRY	KVA	CKT	DESCRIPTION	P	AT	AF	CIRCUITRY	KVA		
1	EXISTING**	1	15	15	14-2*	0.4	2	EXISTING	2	20	20	12-3	3.5		
3	EXISTING**	1	15	15	14-2*	0.4	4								
5	EXISTING**	1	15	15	14-2*	0.4	6	EXISTING**	1	20	20	12-2*	0.72		
7	EXISTING**	1	15	15	14-2*	0.4	8	EXISTING**	1	20	20	12-2*	0.72		
9	EXISTING	2	20	20	12-3	1.0	10	EXISTING**	1	20	20	12-2*	0.54		
11							12	EXISTING**	1	15	15	14-2*	0.40		
13							14	EXISTING**	1	15	15	14-2*	0.40		
15							16	(GARAGE) EXISTING**	1	15	15	14-2*	0.40		
17							18	(GARAGE) EXISTING**	1	15	15	14-2*	0.40		
19							20	EXISTING**	1	15	15	14-2	0.40		
21							22	PANEL "EP-2"	2	60	60	6-3	11.42		
23							24								
25							26	EXISTING	2	20	20	12-3	1.0		
27							28								
29							30	EXISTING**	1	20	20	12-2*	0.72		
31							32	EXISTING**	1	20	20	12-2*	1.2		
33							34	EXISTING**	1	20	20	12-2*	0.54		
35	EXISTING GENERATOR CIRCUIT	2	30	30	10-3	7.0	36								
37	LTG-FRONT PORCH/LOWER**	1	15	15	14-2*	0.4	38	NEW BASEBOARD UNIT	2	20	20	12-3	1.5		
39	LTG-BACK & FRONT PORCH**	1	15	15	14-2*	0.2	40	RCPT-GARAGE DOOR**	1	20	20	12-2*	1.5		
41	RCPT-LOWER LVL/GARAGE**	1	20	20	12-2*	0.54	42	SPARE**	1	20	20	-	-		
						SUBTOTAL KVA	16.44							SUBTOTAL KVA	25.36
						TOTAL KVA								TOTAL KVA	41.8

* CONTRACTOR SHALL FIELD VERIFY THE WIRING SIZE OF EXISTING CIRCUITS AND PROVIDE APPROPRIATELY SIZED AFCI CIRCUIT BREAKERS.
** CIRCUIT SHALL BE PROVIDED WITH CIRCUIT BREAKER OF AFCI TYPE.

PANELBOARD REMARKS:

1. PROVIDE WITH EQUIPMENT GROUND BUS.
2. PROVIDE WITH 100% RATED NEUTRAL BUS.
3. BRANCH CIRCUIT BREAKERS SHALL BE PLUG-ON TYPE.
4. PROVIDE WITH HINGED DOOR WITH IN DOOR TRIM.
5. PROVIDE A TYPED WRITTEN PANELBOARD DIRECTORY AND A DIRECTORY HOLDER ON THE INSIDE COVER OF DOOR.
6. PROVIDE WITH COPPER BUS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TYPES AND QUANTITIES OF CIRCUIT BREAKERS INDICATED ON THE DRAWINGS.
8. CIRCUITRY SPECIFIED IS FOR WIRING FROM PANEL TO FIRST DEVICE. CONTRACTOR TO PROVIDE CALL MULTI-CONDUCTOR CABLES AS REQUIRED FOR 3 & 4 WAY SWITCHES.
9. CIRCUITS UNDER THIS NOTE ARE EXISTING AND SHALL BE EXTENDED AND RECONNECTED TO THE NEW LOCATION OF PANEL 'EP-1'. EC SHALL FIELD VERIFY CIRCUIT QUANTITIES AND CIRCUIT BREAKERS REQUIRED TAKING INTO ACCOUNT THE REMOVAL OF PREVIOUSLY EXISTING CIRCUITS IN THE DEMOLITION PHASE. CIRCUITS SHOWN UNDER THIS NOTE REFLECT EXISTING CONDITIONS. CIRCUITS SHOWN ON PANELBOARD FOR DEVICES AND FIXTURES NO LONGER EXISTING SHALL BE REMOVED AND BE DESIGNATED AS SPACES IN PANEL OR REUTILIZED. EC SHALL PROVIDE SPACE COVER IF NECESSARY. PROVIDE WIRING EXTENSION TO MATCH EXISTING.
10. CIRCUIT BREAKERS UNDER THIS PROJECT THAT ARE 120V/1P AND ASSOCIATED WITH NEW, OR EXISTING TO-BE-EXTENDED AND RECONNECTED CIRCUITS SHALL BE OF AFCI TYPE. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY QUANTITIES AND CIRCUIT LOCATIONS, AND PROVIDE AFCI CIRCUIT BREAKERS AS NECESSARY.

PANELBOARD SCHEDULE															
PANELBOARD	LOCATION	MAIN			VOLTAGE	PHASE	WIRE	FEEDER	SE RATED	MOUNTING	MIN SCR	REMARKS			
EP-1	2ND FLOOR	60A	MLO		120/240	1	3	3#6+1#10G,3/4"C	N/A	RECESSED	10,000	-			
CKT	DESCRIPTION	P	AT	AF	CIRCUITRY	KVA	CKT	DESCRIPTION	P	AT	AF	CIRCUITRY	KVA		
1	EXISTING	2	30	30	10-3	5.0	2	EXISTING	2	30	30	10-3	2.5		
3							4								
5	EXISTING**	1	15	15	14-2*	0.20	6	EXISTING**	1	15	15	14-2*	0.20		
7	EXISTING**	1	15	15	14-2*	0.18	8	EXISTING**	1	20	20	12-2*	1.0		
9	EXISTING**	1	15	15	14-2*	0.20	10	EXISTING**	1	20	20	12-2*	0.20		
11	EXISTING**	1	20	20	12-2*	0.36	12	EXISTING**	1	20	20	12-2*	0.36		
13	EXISTING**	1	15	15	14-2*	0.20	14	EXISTING	2	20	20	12-3	1.0		
15	SPACE	-	-	-	-	-	16								
17	SPACE	-	-	-	-	-	18	SPACE	-	-	-	-	-		
19	SPACE	-	-	-	-	-	20	SPACE	-	-	-	-	-		
						SUBTOTAL KVA	6.16							SUBTOTAL KVA	5.26
						TOTAL KVA								TOTAL KVA	11.42

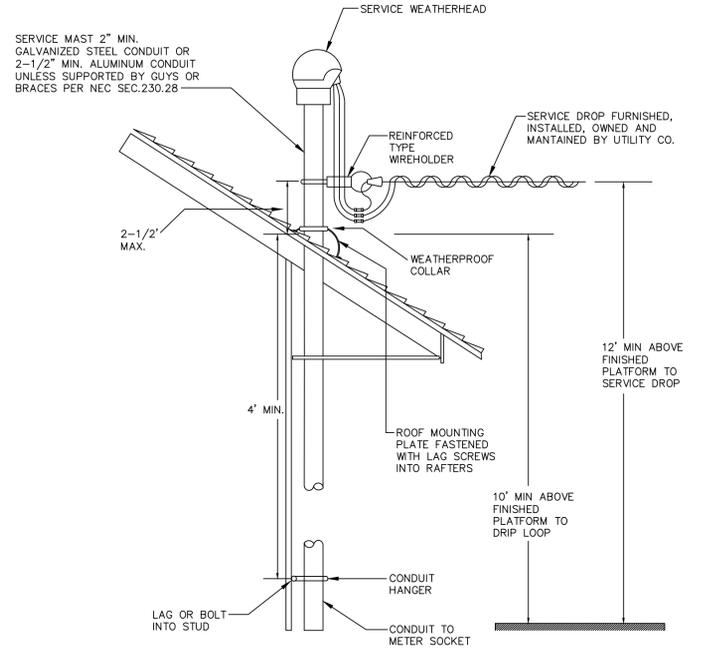
* CONTRACTOR SHALL FIELD VERIFY THE WIRING SIZE OF EXISTING CIRCUITS AND PROVIDE APPROPRIATELY SIZED AFCI CIRCUIT BREAKERS.
** CIRCUIT SHALL BE PROVIDED WITH CIRCUIT BREAKER OF AFCI TYPE.

PANELBOARD REMARKS:

1. PROVIDE WITH EQUIPMENT GROUND BUS.
2. PROVIDE WITH 100% RATED NEUTRAL BUS.
3. BRANCH CIRCUIT BREAKERS SHALL BE PLUG-ON TYPE.
4. PROVIDE WITH HINGED DOOR WITH IN DOOR TRIM.
5. PROVIDE A TYPED WRITTEN PANELBOARD DIRECTORY AND A DIRECTORY HOLDER ON THE INSIDE COVER OF DOOR.
6. PROVIDE WITH COPPER BUS (PREFERRED).
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TYPES AND QUANTITIES OF CIRCUIT BREAKERS INDICATED ON THE DRAWINGS.
8. CIRCUITRY SPECIFIED IS FOR WIRING FROM PANEL TO FIRST DEVICE. CONTRACTOR TO PROVIDE CALL MULTI-CONDUCTOR CABLES AS REQUIRED FOR 3 & 4 WAY SWITCHES IF APPLICABLE.
9. EXISTING CIRCUITS SHALL BE EXTENDED AND RECONNECTED TO THE NEW LOCATION OF PANEL 'EP-2'. EC SHALL FIELD VERIFY CIRCUIT QUANTITIES AND CIRCUIT BREAKERS REQUIRED TAKING INTO ACCOUNT THE REMOVAL OF PREVIOUSLY EXISTING CIRCUITS IN THE DEMOLITION PHASE IF APPLICABLE. CIRCUITS SHOWN REFLECT EXISTING CONDITIONS. CIRCUITS SHOWN ON PANELBOARD FOR DEVICES AND FIXTURES NO LONGER EXISTING SHALL BE REMOVED AND BE DESIGNATED AS SPACES IN PANEL. EC SHALL PROVIDE SPACE COVER IF NECESSARY.
10. CIRCUIT BREAKERS UNDER THIS PROJECT THAT ARE 120V/1P AND ASSOCIATED WITH NEW, OR EXISTING TO-BE-EXTENDED AND RECONNECTED CIRCUITS SHALL BE OF AFCI TYPE. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY QUANTITIES AND CIRCUIT LOCATIONS, AND PROVIDE AFCI CIRCUIT BREAKERS AS NECESSARY.

ELECTRICAL ABBREVIATIONS			
A/AMP	AMPERE	NEC	NATIONAL ELECTRIC CODE
AC	ALTERNATING CURRENT	NIC	NOT IN CONTRACT
ACU	AIR CONDITIONING UNIT	NL	NEW LOCATION OF EXISTING RELOCATED
AFF	ABOVE FINISHED FLOOR	NR	NEW TO REPLACE EXISTING
AFG	ABOVE FINISHED GRADE	NTS	NOT TO SCALE
AWG	AMERICAN WIRE GAUGE	P	POLE
BSMT	BASEMENT	PE	PRIMARY ELECTRICAL SERVICE
C	CONDUIT	PF	POWER FACTOR
CATV	CABLE TELEVISION	PH/φ	PHASE
C/B	CIRCUIT BREAKER	PNL	PANEL
CKT	CIRCUIT	PVC	POLYVINYL CHLORIDE CONDUIT
°	DEGREE	RE	RIGID GALVANIZED STEEL CONDUIT
DIA/φ	DIAMETER	RGS	RELOCATE EXISTING
DN	DOWN	RL	RELOCATE EXISTING
DWG	DRAWING	RM	ROOM
ETR	EXISTING TO REMAIN	RRC	REMOVE AND REPLACE ON NEW SURFACE
ELEC	ELECTRICAL	SPEC	SPECIFICATION
EWH	ELECTRIC WATER HEATER	SWBD	SWITCHBOARD
GFCI	GROUND FAULT INTERRUPTER	TELE	TELECOMMUNICATIONS/TELEPHONE
JB	JUNCTION BOX	TV	TELEVISION
KVA	KILOVOLT AMPERE	T/XT	TRANSFORMER
KW	KILOWATT	TYP	TYPICAL
MAX	MAXIMUM	V	VOLTS
MCCB	MOLDED CASE CIRCUIT BREAKER	VA	VOLT AMPERE
MIN	MINIMUM	VAC	VOLTS ALTERNATING CURRENT
MLO	MAIN LUGS ONLY	W	WATT, WIRE
NA	NOT APPLICABLE	WP	WEATHERPROOF

ELECTRICAL SYMBOL LIST	
SYMBOL	DESCRIPTION
■	RECESSED PANELBOARD
⊠	ELECTRICAL METER
—	BRANCH CIRCUIT WIRING, CONCEALED IN WALLS OR CEILINGS
—	HOMERUN TO PANELBOARD, UNLESS INDICATED OTHERWISE SHALL BE CONNECTED TO A 1 POLE, 20 AMP CIRCUIT BREAKER
- - -	BRANCH CIRCUIT WIRING, SWITCHED
⊠	JUNCTION BOX
S ₃ WP	THREE WAY SWITCH, WEATHERPROOF
S	SINGLE POLE SWITCH
GFCI WP	GFCI DUPLEX RECEPTACLE, WEATHERPROOF



TYPICAL ELECTRICAL SERVICE MAST DETAIL
N.T.S.



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

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date	description	no.
	revisions	

ELECTRICAL SCHEDULES AND DETAILS

E-5.0	
date	OCTOBER 5, 2015
drawn	VCM
scale	NOT TO SCALE
checked	DTB
project no.	2014064.00
application no.	1648

GENERAL PROCEDURES ALL TRADES

1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS UNLESS NOTED OTHERWISE.
2. DESCRIPTIVE
 - A. THIS PROJECT COMPRISES ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY OCCUPIED AND THE PROJECT WILL PROCEED IN A MANNER WHICH WILL MINIMIZE ANY INCONVENIENCE TO THE BUILDING OCCUPANTS.
 - B. SCOPE OF WORK CONSISTS OF INSTALLATION OF MATERIALS TO BE FURNISHED UNDER THE CONTRACT DOCUMENTS AND WITHOUT LIMITING GENERALITY THEREOF CONSISTS OF FURNISHING LABOR, MATERIALS, EQUIPMENT, HOISTING, PLANT, TRANSPORTATION, RIGGING, STAGING, CONFINEMENTS, AND SERVICES NECESSARY AND/OR INCIDENTAL TO PROPERLY COMPLETE ALL WORK AS SHOWN ON THE DRAWINGS AND AS DESCRIBED HEREIN.
3. DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT
 - A. FURNISH: THE TERM "FURNISH" MEANS TO SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS.
 - B. INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."
 - C. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
 - D. REMOVE: THE TERM REMOVE MEANS TO DISCONNECT/FROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER.
 - E. SUBSTITUTIONS: "SUBSTITUTIONS" ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
4. DRAWINGS
 - A. PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. THE CONTRACTOR IS TO NOTE THAT THESE DOCUMENTS ARE DIAGRAMMATIC ONLY AND THAT FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. IF A CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL.

5. SURVEY AND MEASUREMENTS:
 - A. PRIOR TO SUBMITTING BID, VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK TO BE PERFORMED. NO COMPENSATION WILL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS. INCLUDE IN THE BID ALL DEMOLITION WORK REQUIRED.
 - B. DO NOT SCALE DRAWINGS. SCALE INDICATED ON DRAWINGS IS FOR ESTABLISHING REFERENCE POINTS ONLY. ACTUAL FIELD CONDITIONS SHALL GOVERN ALL DIMENSIONS.
 - C. PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT, THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER RIGGING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE.
 - D. ARRANGE INSTALLATION TO PROVIDE ACCESS TO EQUIPMENT FOR EASY MAINTENANCE AND REPAIR.
6. CODES AND STANDARDS: ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STATE OF CONNECTICUT ACCEPTED VERSION OF THE FOLLOWING
 - A. INTERNATIONAL RESIDENTIAL CODE
 - B. INTERNATIONAL BUILDING CODE
 - C. INTERNATIONAL PLUMBING CODE
 - D. INTERNATIONAL MECHANICAL CODE
 - E. NATIONAL ELECTRIC CODE (NFPA 70)
 - F. THE LIFE SAFETY CODE (NFPA 101)

7. PERMITS AND FEES: THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, AND PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE WORK, FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER A COPY TO THE OWNER AND ENGINEER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.
8. SHOP DRAWINGS:
 - A. SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'-0", HIGHLIGHT, ENCLOSE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
 - B. SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
 - a. DIMENSIONS.
 - b. IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.
 - c. COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE DATA AS INDICATED.
 - d. NOTATION OF COORDINATION REQUIREMENTS.
 - e. NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT.
 - f. SUBMIT 3 BLACK-LINE PRINTS AND 2 ADDITIONAL PRINTS WHERE REQUIRED FOR MAINTENANCE MANUALS, PLUS THE NUMBER OF PRINTS RECEIVED BY THE ENGINEER FOR DISTRIBUTION. ONE PRINT WILL BE RETAINED; THE REMAINDER RETURNED. ONE OF THE PRINTS RETURNED SHALL BE MARKED-UP AND MAINTAINED AS A "RECORD DOCUMENT".
 - g. DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH CONSTRUCTION.
 - h. DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SHOP DRAWINGS.
 - i. PROVIDE SUBMITTALS AS INDICATED IN SPECIFIC SPECIFICATION SECTIONS.
9. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
10. THE CONTRACTOR SHALL COORDINATE ALL INTERRUPTIONS OF SERVICES AND LIMITATIONS OF ACCESS WITH THE OWNER NO LESS THAN 5 DAYS PRIOR TO THE INTERRUPTION.
11. OPERATION AND MAINTENANCE
 - A. UPON COMPLETION OF ALL WORK AND TESTS, THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF ALL EQUIPMENT FURNISHED. THE CONTRACTOR SHALL GIVE AT LEAST SEVEN (7) DAYS NOTICE TO THE OWNER AND THE ENGINEER IN ADVANCE OF THIS PERIOD.
 - B. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A COMPLETE OPERATION AND MAINTENANCE MANUAL, BOUND IN BOOKLET FORM, ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION AND DESIGNATION PARTITIONS WITH IDENTIFICATION TABS. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER.
 - C. OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE THE FOLLOWING:
 - a. MANUFACTURER'S PRINTED OPERATING AND MAINTENANCE PROCEDURES.
 - b. MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING.
 - c. COPIES OF WARRANTIES.
 - d. APPROVED SHOP DRAWINGS AND PRODUCT DATA.
 - e. BALANCE REPORTS.
 - f. INCLUDE IN THE MANUAL, A TABULATED EQUIPMENT SCHEDULE FOR ALL EQUIPMENT. SCHEDULE SHALL INCLUDE PERTINENT DATA SUCH AS: MAKE, MODEL NUMBER, SERIAL NUMBER, VOLTAGE, NORMAL OPERATING CURRENT, BELT SIZE, FILTER QUANTITIES AND SIZES, BEARING NUMBER, ETC. SCHEDULE SHALL INCLUDE MAINTENANCE TO BE DONE AND FREQUENCY.
 - g. MAINTENANCE AND INSTRUCTION MANUALS SHALL BE SUBMITTED TO THE OWNER AT THE SAME TIME AS THE SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INSTRUCTION PERIOD.

12. AS-BUILT DRAWINGS
 - A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
 - B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
 - C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE.
 - D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED

- IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
14. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITHIN CONTRACT PRICE.
 15. SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR THEIR RECORDS.
- MEANS AND METHODS ALL TRADES**
1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
 2. DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
 3. MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STANDARD HAS BEEN ESTABLISHED.
 4. CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.
 5. SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES. ANY EQUIPMENT AND APPARATUS FURNISHED UNDER THIS DIVISION, REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
 6. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
 7. WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING, INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALL AND FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL BE REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAULKING AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY WATERIGHT.
 8. PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
 9. ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL DAMPERS, VALVES, CONTROL DEVICES, AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. COORDINATE TYPE AND LOCATION WITH ARCHITECTURAL PLANS.
 10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMACNA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.

ELECTRICAL SPECIFICATIONS

1. CONTACT THE POWER COMPANY FOR NECESSARY COORDINATION OF SERVICE REQUIREMENTS AND PAY FOR ALL RELATED CHARGES FOR THE SERVICE INSTALLATION. PROVIDE ALL NECESSARY EQUIPMENT, GROUNDING, CONDUITS, WIRE, TRENCHING, SAND AND BACKFILL ETC., FOR THE POWER COMPANY SERVICE CONNECTIONS AND ACTIVATION OF SERVICE FOR THE PROJECT. ALL EQUIPMENT SHALL MEET THE POWER COMPANIES REQUIREMENTS AND SHALL BE SUBMITTED TO THE POWER COMPANY PRIOR TO ORDERING OR INSTALLATION.
2. CONTACT THE TELEPHONE COMPANY FOR NECESSARY COORDINATION OF SERVICE REQUIREMENTS AND PAY FOR ALL RELATED CHARGES FOR THE SERVICE INSTALLATION. PROVIDE ALL BOXES, TERMINATIONS, CONDUITS AND WIRING PER DRAWINGS.
3. CONTACT THE CABLE TELEVISION COMPANY FOR NECESSARY COORDINATION OF SERVICE REQUIREMENTS AND PAY FOR ALL RELATED CHARGES FOR THE SERVICE INSTALLATION. PROVIDE ALL BOXES, TERMINATION, CONDUITS AND WIRING PER DRAWINGS.
4. SERVICE-DISCONNECTING MEANS SHALL BE OF THE TYPE AS INDICATED WITH EXTERNAL HANDLE FOR MANUAL OPERATION. WHEN SERVICE DISCONNECTING MEANS IS A PART OF AN ASSEMBLY, THE ASSEMBLY SHALL BE LISTED AS SUITABLE FOR SERVICE ENTRANCE EQUIPMENT. ENCLOSURES SHALL BE SHEET METAL WITH HINGED COVER FOR SURFACE MOUNTING UNLESS OTHERWISE INDICATED.
5. PANELBOARD/LOAD CENTER:
 - A. PROVIDE CIRCUIT BREAKER TYPE PANELBOARD/LOAD CENTER WITH BUS RATING AS INDICATED ON DRAWINGS.
 - B. MINIMUM INTEGRATED SHORT CIRCUIT RATING: 10,000A RMS SYMMETRICAL.
 - C. MOLDED CASE CIRCUIT BREAKER: NEMA AB, PLUG ON TYPE THERMAL MAGNETIC TRIP CIRCUIT BREAKERS, WITH COMMON TRIP HANDLES PER POLES, LISTED AS TYPE SWD FOR LIGHTING CIRCUITS, CLASS A GROUND FAULT INTERRUPTER CIRCUIT BREAKERS AS INDICATED ON DRAWINGS. ARC-FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKERS AS INDICATED ON DRAWINGS.
 - D. ENCLOSURE: GENERAL PURPOSE.
 - E. BOX: FLUSH TYPE WITH DOOR AND PULL RING LATCH, FINISH IN MANUFACTURER STANDARD GRAY ENAMEL.
6. MOUNT PANELBOARDS, CIRCUIT BREAKERS, AND DISCONNECTING SWITCHES SO HEIGHT OF OPERATING HANDLE AT ITS HIGHEST POSITION IS MAXIMUM 78 INCHES ABOVE FLOOR.
7. ALL BACKBOARDS SHALL UTILIZE FIRE RETARDANT 3/4 INCH PLYWOOD, SIZED AS INDICATED ON THE DRAWINGS.
8. GROUNDING SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 70.
 - A. GROUND EXPOSED, NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, AND NEUTRAL CONDUCTOR OF WIRING SYSTEMS.
 - B. MAKE GROUND CONNECTION AT MAIN SERVICE EQUIPMENT, AND EXTEND GROUNDING CONDUCTOR TO POINT OF ENTRANCE OF METALLIC WATER SERVICE. MAKE CONNECTION TO WATER PIPE WITH SUITABLE GROUND CLAMP WITH WETER JUMPER OR LUG CONNECTION TO PLUGGED TEE. IF FLANGED PIPES ARE ENCOUNTERED, MAKE CONNECTION WITH LUG BOLTED TO STREET SIDE OF FLANGED CONNECTION. SUPPLEMENT METALLIC WATER SERVICE GROUNDING SYSTEM WITH ADDITIONAL MADE ELECTRODE IN COMPLIANCE WITH NFPA 70.
 - C. MAKE GROUND CONNECTION TO DRIVEN GROUND RODS ON EXTERIOR OF BUILDING. GROUND RODS SHALL BE OF COPPER-CLAD STEEL CONFORMING TO UL 467 NOT LESS THAN 19.1 MM (3/4 INCH) IN DIAMETER BY 2.4 METER (8 FEET) IN LENGTH OF THE SECTIONAL TYPE DRIVEN FULL LENGTH INTO THE EARTH WHERE GROUND FAULT PROTECTION IS EMPLOYED, ENSURE THAT CONNECTION OF GROUND AND NEUTRAL DOES NOT INTERFERE WITH CORRECT OPERATION OF FAULT PROTECTION.
8. WIRING SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 70.
 - A. CONDUCTORS NO. 8 AWG AND LARGER DIAMETER SHALL BE STRANDED ANNEALED COPPER. CONDUCTORS NO. 10 AWG AND SMALLER DIAMETER SHALL BE SOLID ANNEALED COPPER. CONDUCTOR SIZES AND AMPACITIES SHOWN ARE BASED ON COPPER, UNLESS INDICATED OTHERWISE. UNLESS SPECIFIED OR INDICATED OTHERWISE OR REQUIRED BY NFPA 70, UNLESS OTHERWISE INDICATED WIRING METHODS SHALL BE:
 - a. SERVICE ENTRANCE WIRING AND WIRING TO DISTRIBUTION PANELS. WIRES SHALL BE IN PVC CONDUIT AND SHALL BE 600-VOLT, TYPE THWN/THHN ANNEALED COPPER.
 - b. BRANCH CIRCUITING INSIDE THE BUILDING IN DRY AREAS SHALL BE 600 VOLT, TYPE NM-B.
 - c. BRANCH CIRCUITING OUTSIDE THE BUILDING AND IN WET/DAMP AREAS SHALL BE 600 VOLT, TYPE UF-B.
 - d. WIRES SUBJECT TO DAMAGE SHALL BE IN PVC CONDUIT.
 - B. MAKE ALL SPLICES IN ACCESSIBLE LOCATIONS. MAKE SPLICES IN CONDUCTORS NO. 10 AWG AND SMALLER DIAMETER WITH INSULATED, PRESSURE-TYPE CONNECTOR. MAKE SPLICES IN CONDUCTORS NO. 8 AWG AND LARGER DIAMETER WITH SOLDERLESS CONDUCTOR AND COVER WITH INSULATION MATERIAL EQUIVALENT TO CONDUCTOR INSULATION.
 - C. PHASE CONDUCTORS SHALL BE IDENTIFIED BY COLOR CODING. THE COLOR OF THE INSULATION ON PHASES A AND B RESPECTIVELY (FOR SINGLE PHASE) OF DIFFERENT VOLTAGE SYSTEMS SHALL BE AS FOLLOWS: 120/240 VOLT, SINGLE-PHASE: BLACK AND RED.
9. BOXES:
 - A. ALL OUTLETS, SWITCH AND JUNCTION BOXES SHALL BE NONMETALLIC BOXES.
 - B. BOXES SHALL BE SIZED IN ACCORDANCE WITH NFPA 70.
 - C. EXTERIOR BOXES SHALL BE GASKETED AND WATERTIGHT.
10. OUTLETS AND SWITCHES:
 - A. ALL OUTLETS AND SWITCHES SHALL BE WHITE.
 - B. MOUNT LIGHTING SWITCHES 48 INCHES ABOVE FINISHED FLOOR, RECEPTACLES 18 INCHES ABOVE FINISHED FLOOR, AND OTHER DEVICES AS INDICATED. MEASURE MOUNTING HEIGHTS OF WIRING DEVICES AND OUTLETS TO TOP OF DEVICE OR OUTLET.
 - C. SINGLE AND DUPLEX RECEPTACLES SHALL BE RATED 15 AMPERES, 125 VOLTS, TWO-POLE, THREE-WIRE, GROUNDING TYPE WITH POLARIZED PARALLEL SLOTS. RECEPTACLE SHALL BE SIDE OR BACK WIRED WITH TWO SCREWS PER TERMINAL. THE THIRD GROUNDING POLE SHALL BE CONNECTED TO THE METAL MOUNTING YOKE.
 - a. SWITCHED RECEPTACLES SHALL BE THE SAME AS OTHER RECEPTACLES SPECIFIED EXCEPT THAT THE UNGROUNDED POLE OF EACH SUITABLE RECEPTACLE SHALL BE PROVIDED WITH A SEPARATE TERMINAL. ONLY THE TOP RECEPTACLE OF A DUPLEX RECEPTACLE SHALL BE WIRED FOR SWITCHING APPLICATION.
 - C. RECEPTACLES WITH GROUND FAULT CIRCUIT INTERRUPTERS SHALL HAVE THE CURRENT RATING AS INDICATED, AND SHALL BE UL CLASS A TYPE UNLESS OTHERWISE SHOWN. GROUND FAULT CIRCUIT PROTECTION SHALL BE PROVIDED AS REQUIRED BY NFPA 70 AND AS INDICATED ON THE DRAWINGS.
 - D. WEATHERPROOF RECEPTACLES SHOWN SHALL BE MOUNTED IN A BOX WITH A

- GASKETED, WEATHERPROOF, WATERPROOF COVER PLATE AND GASKETED CAP OVER EACH RECEPTACLE OPENING TO PREVENT WEATHER PENETRATION.
- E. WALL SWITCHES SHALL BE OF THE TOTALLY ENCLOSED TUMBLER TYPE. WIRING TERMINALS SHALL BE OF THE SCREW TYPE OR OF SOLDERLESS PRESSURE TYPE HAVING SUITABLE CONDUCTOR-RELEASE ARRANGEMENT. SWITCHES SHALL BE RATED 15 AMPERE 120/277-VOLT FOR USE ON ALTERNATING CURRENT ONLY.
 - F. DIMMING SWITCHES SHALL BE SLIDE TYPE, SOLID-STATE, FLUSH MOUNTED, AND SIZED FOR THE LOADS.
 - G. DEVICE PLATES SHALL BE ONE-PIECE TYPE AND BE PROVIDED FOR ALL RECEPTACLES, OUTLETS, SWITCHES AND FITTINGS. PLATES ON UNFINISHED WALLS AND ON FITTINGS SHALL BE OF IMPACT RESISTANT PLASTIC HAVING ROUNDED OR BEVELED EDGES. PLATES ON FINISHED WALLS SHALL BE IMPACT-RESISTANT PLASTIC. PLATES SHALL BE INSTALLED WITH ALL FOUR EDGES IN CONTINUOUS CONTACT WITH FINISHED WALL SURFACES WITHOUT THE USE OF MATS OR SIMILAR DEVICES. PLATES SHALL BE INSTALLED WITH AN ALIGNMENT TOLERANCE OF 1/16 INCH. THE USE OF SECTIONAL-TYPE DEVICE PLATES WILL NOT BE PERMITTED. PLATES INSTALLED IN WET LOCATIONS SHALL BE GASKETED AND PROVIDED WITH A HINGED, GASKETED COVER, UNLESS OTHERWISE SPECIFIED.
 11. PROVIDE ALL NECESSARY JUNCTION BOXES, PULL BOXES, PULL WIRES, COVER PLATES AND OTHER MISCELLANEOUS EQUIPMENT WHICH IS NOT SHOWN ON THE CONTRACT DOCUMENTS BUT NECESSARY TO COMPLETE THE WORK.
 12. PROVIDE ALL NECESSARY WIRE, CONDUIT AND EQUIPMENT TO SUPPLY POWER TO THE HEATING, VENTILATION AND AIR CONDITIONING EQUIPMENT, PLUMBING EQUIPMENT AND FIRE PROTECTION EQUIPMENT. CONTROL WIRING AND CONDUIT SHALL BE PROVIDED UNDER DIVISION 15.
 13. COORDINATE ALL WORK WITH OTHER TRADES AND ARRANGE INSTALLATION TO AVOID CLASHES BETWEEN EQUIPMENT, WORK OF OTHER TRADES AND BUILDING STRUCTURE.



THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

GENERAL RENOVATIONS for the ROSENFELD RESIDENCE
APPLICATION No. 1648
28 West End Drive
Old Lyme, CT 06371



date	description	no.
	revisions	

ELECTRICAL SPECIFICATIONS

E-5.1	
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