CITY OF DANBURY

155 DEER HILL AVENUE
DANBURY, CONNECTICUT 06810

CHARLES J. VOLPE, JR
PURCHASING AGENT

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August 31, 2016

ADDENDUM #6

To

Bid #07-16-17-01 "Danbury Public Schools – Shelter Rock Modular Classrooms Project"

This addendum shall be part of the Purchasing documents for the above captioned Bid. This addendum is to be acknowledged by the bidder by signing as provided below and returning with the bidder's proposal.

SEE ATTACHED: Updated Drawings, 6-pages

Updated Technical Specifications, 3-pages

BID DUE DATE: Remains: Tuesday, September 13, 2016, 10:00 AM

Receipt of the addendum is hereby acknowledged.

Bidder _____

Signature _____

Title _____

Date _____

Charles J. Volpe, Jr.
Purchasing Agent
City of Danbury

SHELTER ROCK ELEMENTARY SCHOOL

2 CROWS NEST LANE
DANBURY, CONNECTICUT
MODULAR CLASSROOMS

STATE PROJECT NO. TMP-034-FTZS
BID NO. 07-16-17-01

ISSUED FOR BID
JUNE 1, 2016

MAYOR
MARK D. BOUGHTON

PUBLIC WORKS DIRECTOR
ANTONIO IADAROLA, P.E.

SUPERINTENDENT OF SCHOOLS
SAL V. PASCARELLA, PH.D

DIRECTOR OF FINANCE
JOSEPH MARTINO

ARCHITECT

FRIAR ASSOCIATES INC.
281 FARMINGTON AVENUE
FARMINGTON, CONNECTICUT 06032

INDEX OF DRAWINGS

COVER SHEET

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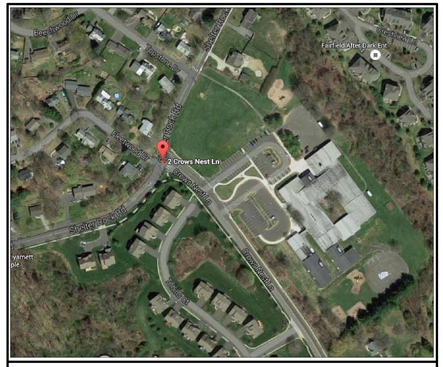
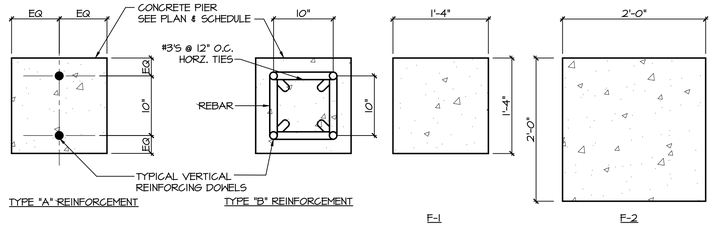
A2.1 ELEVATIONS, ROOF PLAN & DETAILS



SITE LOCATION MAP

SET NUMBER

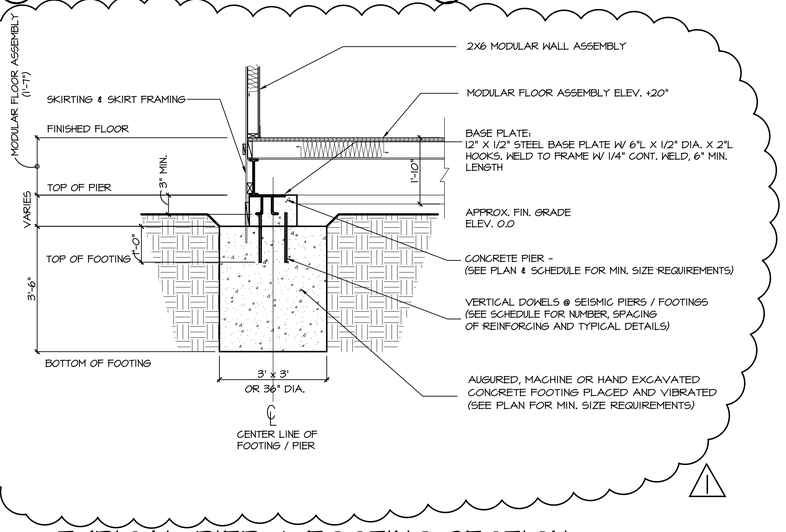


3 REBAR CAGE DETAILS

SCALE: 1"=1'-0"

4 TYP. PIER DETAILS

SCALE: 1"=1'-0"



2 TYPICAL PIER & FOOTING SECTION

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

REINFORCEMENT SCHEDULE - ONE STORY UNITS SEISMIC REQUIRED PIERS & FOOTINGS ONLY (*)				
SEISMIC REQUIRED PIER & FOOTING LOCATION (*)	PIER HEIGHT (MAXIMUM)	PIER SIZE	REINF. TYPE	VERTICAL PIER REINF.
EXTERIOR	1'6"	16" X 16"	"A"	2 - #5
	4'0"	16" X 16"	"B"	4 - #5
	6'6"	16" X 16"	"B"	4 - #5
INTERIOR	1'6"	24" X 24"	"A"	2 - #5
	4'0"	24" X 24"	"B"	4 - #5
	6'6"	24" X 24"	"B"	4 - #5

STRUCTURAL DESIGN DATA

DESIGN:

CONFORM TO THE 2003 BOCA NATIONAL BUILDING CODE AND CONNECTICUT 2003 SUPPLEMENT

FLOOR LIVE LOAD DESIGN:

CLASSROOMS: 40 PSF + 20 PSF PARTITION LOAD
CORRIDORS: 100 PSF

ROOF SNOW LOAD DESIGN:

GROUND SNOW LOAD : Pg = 30 PSF
FLAT ROOF SNOW LOAD: Pf = 30 PSF
SNOW EXPOSURE FACTOR: Ce = 0.7
SNOW LOAD IMPORTANCE FACTOR: I=1.0

WIND LOAD DESIGN:

BASIC WIND SPEED: 85 MPH
WIND IMPORTANCE FACTOR (I) = 1.08
WIND EXPOSURE "C"

SEISMIC DESIGN:

PEAK VELOCITY - RELATED ACCELERATION (Av) = 0.11
PEAK ACCELERATION (Aa): 0.14
SEISMIC HAZARD EXPOSURE GROUP: II
SEISMIC PERFORMANCE CATEGORY: C
SOIL PROFILE (S): 1.5 (ASSUMED)
BASIC STRUCTURAL SYSYTEM: LOADBEARING WALL
SEISMIC-RESISTING SYSTEM: LIGHT-FRAMED WALLS WITH SHEAR PANELS
RESPONSE MODIFICATION FACTOR (R): 6 1/2
DEFLECTION AMPLIFICATION FACTOR (Cd): 4
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

SOIL BEARING CAPACITY

ALLOWABLE SOIL BEARING CAPACITY = 4,000 PSF (ASSUMED)

ALLOWABLE STRESSES

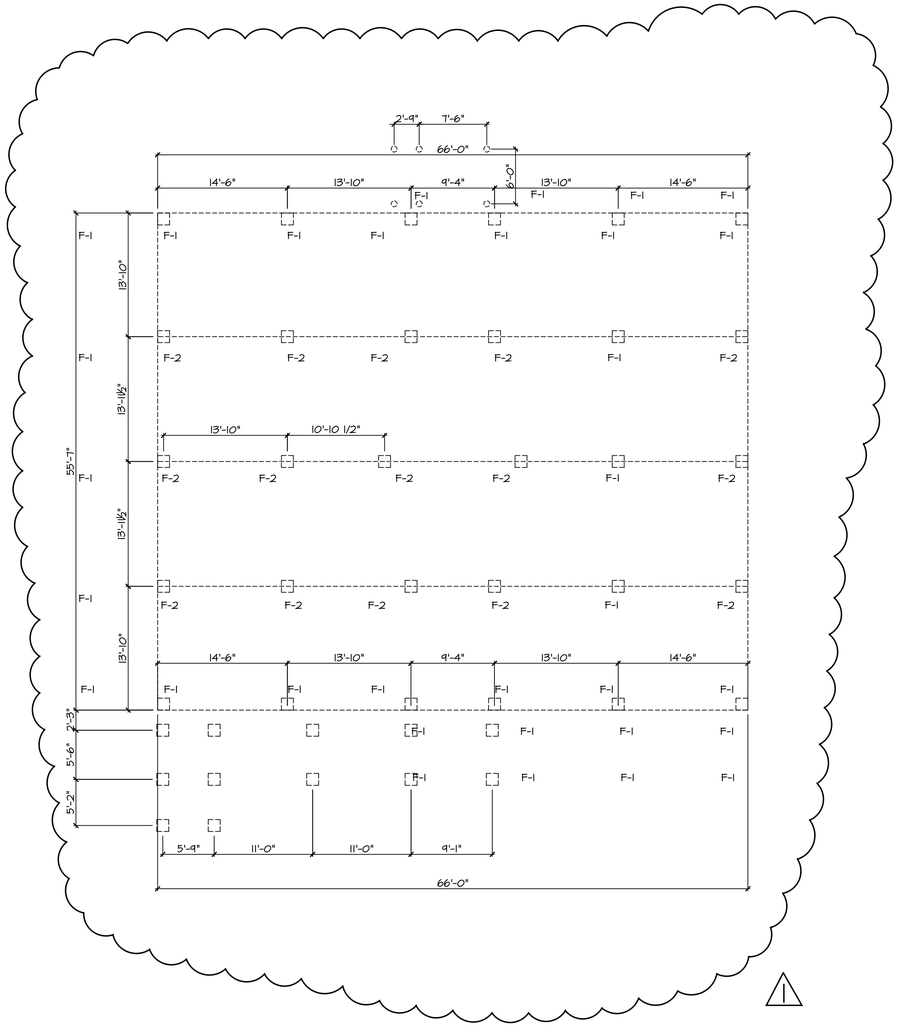
CONCRETE (NORMAL WEIGHT)
F'c= 3,000 PSI (28 DAYS) MIN. - FOOTINGS AND FOUNDATION WALLS.
F'c = 3,500 PSI (28 DAYS) MIN. - ALL INTERIOR SLABS
F'c = 4,000 PSI (28 DAYS) MIN. - ALL EXTERIOR SLABS

REINFORCING STEEL - ASTM A-615 GRADE 60 (Fy = 60,000 PSI)

STRUCTURAL STEEL - ASTM A-36 (Fy = 36,000 PSI) PLATES, ANGLES, MISC.
ASTM A-572 Grade 50 (Fy = 50,000 PSI) COLUMNS AND WIDE FLANGE BEAMS
ASTM A-500 Grade B (Fy = 46,000 PSI) TUBE SECTIONS
ASTM A-53 Grade B (Fy = 35,000 PSI) PIPE SECTIONS.

WOOD FRAMING - SEE "GENERAL NOTES".

"THE FOUNDATION DESIGN IS BASED ON A ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 4,000 POUNDS PER SQUARE FOOT. A SUBSURFACE EXPLORATION AND A GEOTECHNICAL REPORT ARE REQUIRED BEFORE COMMENCEMENT OF ANY REBAR SHOP DRAWINGS AND FOUNDATION RELATED WORK. ALL RECOMMENDATIONS MADE BY THE GEOTECHNICAL ENGINEER MUST BE INCLUDED DURING CONSTRUCTION. THE FINAL FOUNDATION DESIGN MUST BE STAMPED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT."



1 FOUNDATION PLAN

SCALE: 1/8"=1'-0"

NOTE:
F-1, DENOTES TYPICAL 16" X 16" CONCRETE FOOTING
F-2, DENOTES TYPICAL 24" X 24" CONCRETE FOOTING

GENERAL NOTES :

LOADS

1. Design Live Loads: See "Design Data"

EXCAVATION & BACKFILL

1. Footings shall rest on inorganic undisturbed soil or compacted gravel backfill.
2. All fill and backfill inside the foundation must be approved gravel compacted to 95% optimum density.
3. No backfill shall be placed against any foundation wall until walls are properly braced or floors are erected & anchored in place.
4. Maximum assumed soil bearing capacity: 4000 lbs/sq ft. (to be verified by a Soils Engineer).

POURED IN PLACE CONCRETE

1. All concrete is to have a minimum 28 day compressive strength (f'c) as noted in "Structural Design Data".
2. Concrete coverage of reinforcing steel: 3" at bottoms of footings, 2" for other steel with soil contact, otherwise 1 1/2", except 3/4" for slabs.
3. Reinforcing steel shall be Grade 60, new billet steel, of intermediate or hard grade conforming to ASTM A-615.
4. Welded wire fabric shall conform to ASTM A-185. Fabric in slabs on grade shall be in the upper 1/3 of slab.
5. All continuous reinforcing bars shall lap 24 diameters unless noted otherwise. Vertical bars in columns and piers shall lap a minimum of 30 bar diameters.
6. Slab elevations are to tops of slabs. Slabs on grade shall be poured in panels not exceeding 1000 square feet having length to with ratio not exceeding 3.
7. The General Contractor shall install all anchors, pipe sleeves, inserts,etc. in concrete as required by the trades, and shall coordinate and verify the locations before proceeding with concrete work.
8. Key all construction joints with a beveled 2x4. Dowel all reinforcing a minimum of 24 diameters at joints, more if noted.
9. Piping, conduit, etc. passing through or embedded in concrete shall be placed strictly in accordance with ACI recommendations. Aluminum products shall not be placed in concrete.
10. All openings in concrete walls shall have 2 additional #5 rebars all around opening, extending 12" beyond opening.

STRUCTURAL STEEL

1. All structural steel shall be fabricated & erected in accordance with AISC type 2 construction, unless noted.
2. Connections shall be designed for not less than 10 kips for welded and 7 kips for bolted connections, but equal to the uniform load capacity as set forth in the AISC beam load tables.
3. All structural steel shall be as noted in "Structural Design Data".
4. No penetrations shall be made through any structural members unless shown on the structural drawings.

WOOD FRAMING

1. Structural lumber includes: roof joists, built-up header beams, stud walls, ties and blocking. Use new lumber conforming to nominal sizes indicated.
2. All Lumber support framing shall be Douglas Fir #2 or better, and have the following minimum strength properties:

Modulus of elasticity	E = 1600000 p.s.i.
Bending stress	Fb = 875 p.s.i.
Compression perpendicular to grain	Fc = 625 p.s.i.
Compression parallel to grain	Fc1 = 1300 p.s.i.
Horizontal shear	Fv = 45 p.s.i.
Tension parallel to grain	Ft = 575 p.s.i.

3. Panel Spacing: 1/16" at ends - 1/8" at edges U.O.N., stagger joints.
4. Structural plywood shall conform to requirements of American Plywood Assoc. (APA) Exposure.

OPEN-WEB TRUSS JOISTS

1. Chord memebers shall be laminated veneer lumber (LVL) or machine stress rated (MSR) structural sawn dimensional lumber.
2. Web members shall be die stamped from electronically welded, cold rolled steel tubing having a minimum yield strength of 45,000 p.s.i.
3. Connecting pins and bearing shall be of material and size as required by design.
4. Materials shall comply with NES report No. NER-148 or ICBO ES report No. PFC-4354.

PREFABRICATED WOOD TRUSSES

1. Prefabricated wood trusses shall be fabricated to carry loads as shown.
2. Design and fabrication of wood trusses shall be in accordance with the State of Connecticut Basic Building code and applicable AITC Standards.
3. Furnish and install temporary and permanent truss bracing as required by applicable codes and standards.
4. Fabricator to submit shop drawings for review and approval prior to manufacture of trusses. They shall show all member sizes and connection details, and be signed and sealed by a liscensed professional engineer of the State of Connecticut.
5. Top and bottom chords of roof trusses shall have a minimum size of 2 x 6.

MICROLLAM (LVL)

1. Microllam laminated venneer lumber (LVL) shall be fabricated of Eastern Species (ES) or Western Species (WS). The finish product shall have the following minimum properties:

Shear modulus of elasticity	G = 118,750 p.s.i.
Modulus of elasticity	E = 1,900,000 p.s.i.
Flexural stress	Fb = 2600 p.s.i.
Compression perpendicular to grain parallel to glue line	Fc = 750 p.s.i.
Compression parallel to grain	Fc = 2310 p.s.i.
Horizontal shear perpendicular to glue line	Fv = 285 p.s.i.

2. Microllam manufacturer shall provide all metal hangers for microllam beams as required.

DIMENSIONS

1. The General Contractor shall coordinate the dimensions and locations of the roof, floor, & wall openings so the framing properly fits the requirements of all trades.
2. The General Contractor shall field verify all dimensions related to the existing construction prior to beginning construction. Report all conflicts to the Architect immediately.

"BEARING WALLS MUST BE DESIGNED TO SUPPORT TRIBUTARY DEAD AND LIVE LOADS. SHEAR WALLS MUST BE DESIGNED TO RESIST TRIBUTARY WIND AND/OR SEISMIC LOADS. COMBINED BEARING AND SHEAR WALLS MUST BE DESIGNED TO SUPPORT THE TRIBUTARY COMBINATION OF GRAVITY AND LATERAL LOADS.

MAXIMUM WIND DESIGN PRESSURES ARE AS FOLLOWS:
WINDWARD DESIGN PRESSURE = +20.9 PSF
LEEWARD DESIGN PRESSURE = -14.5 PSF
SIDE WALL AND ROOF SUCTION DESIGN PRESSURE = -18.8 PSF
SEISMIC BASE SHEAR IS V=CSW. THE SEISMIC DESIGN COEFFICIENT (CS) = 0.054. "W" INCLUDES THE FOLLOWING:
- ROOF AND FLOOR DEAD LOADS
- 0.20 X SNOW LOAD
- 10 PSF FOR FLOOR INTERIOR PARTITIONS
- TRIBUTARY LOADS FROM EXTERIOR WALLS
- OPERATING WEIGHT OF PERMANENT EQUIPMENT

PROPOSED WALL CONSTRUCTION MUST BE DESIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT."

"FLOOR STRUCTURAL FRAMING TO SUPPORT DESIGN LIVE LOADS INDICATED IN "DESIGN DATA" PLUS ALL APPLICABLE DEAD LOADS. PROPOSED FLOOR CONSTRUCTION MUST BE DESIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT."

GENERAL NOTES:

1. CONCRETE SHALL BE AIR ENTRAINED & SHALL HAVE MIN. DESIGN STRENGTH OF 3000 PSI AT 28 DAYS.
2. ALL ACTUAL DIMENSIONS TO BE DETERMINED BY "ON SITE" CONDITIONS.
3. FOOTING SIZE INDICATED ARE BASED UPON 2 TON / SQ. FT. SOIL BEARING CAPACITY. SHOULD LESS SOIL CAPACITY BE ENCOUNTERED, FOOTING SIZE SHALL BE ADJUSTED ACCORDINGLY.

TYPICAL VERTICAL PIER DOWEL NOTES:

1. BAR TO EXTEND A MIN. OF 12" INTO FOOTING & A MIN. OF 3" FROM THE TOP OF THE PIER
2. ALL HORIZONTALLY PLACED CROSS MEMBERS TO BE 3/8" DIA. (#3 MIN.) REBAR @ 12" o.c. FROM BOTTOM OF VERTICAL DOWELS
3. ALL 6" HOOKS TO POINT TO THE CENTER OF THE PIERS

DATE: 6/1/2016
DRAWN BY: JTK
SCALE: AS NOTED
REVIEWED BY: GGY
PROJECT NO. 2016-056A
A1.0 Foundation Plan

REVISIONS

NO.	DATE	DESCRIPTION
1	8/30/16	ADDENDUM 6

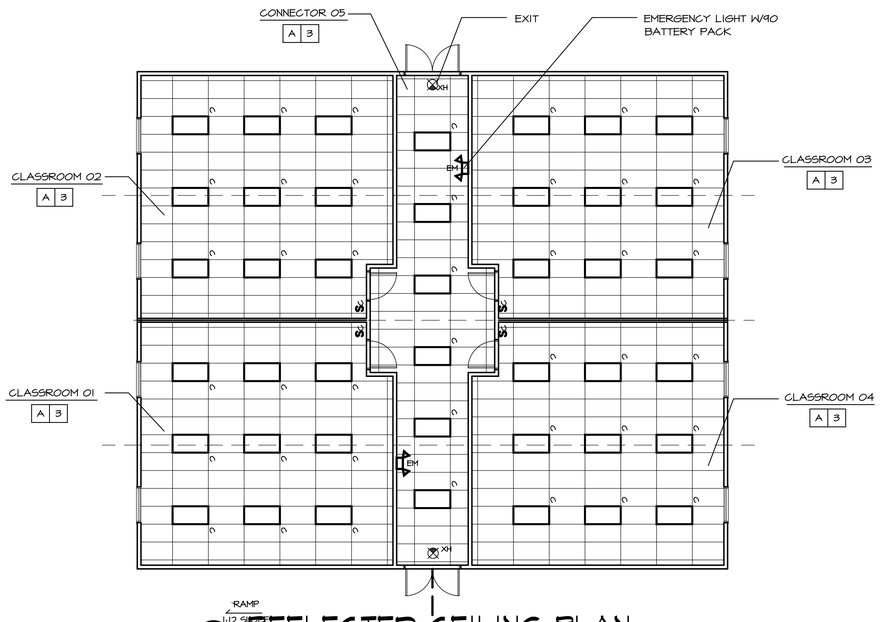
FOUNDATION PLAN, NOTES & DETAILS

STATE PROJECT NO. TMP-034-FT2S
MODULAR CLASSROOMS
SHELTER ROCK ELEMENTARY SCHOOL
2 CROWS NEST LANE
DANBURY CONNECTICUT

ARCHITECT'S SEAL

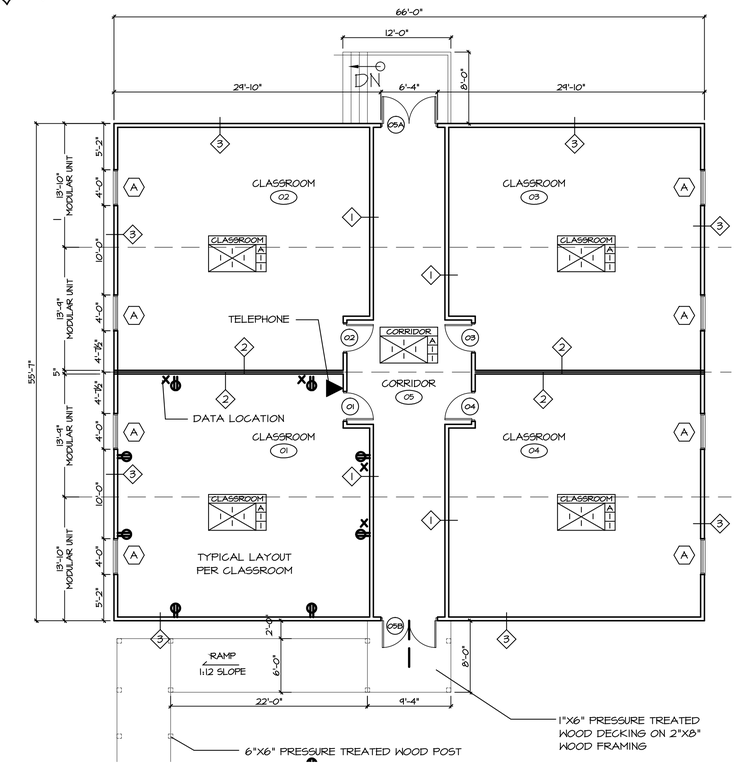
FRIAR
281 Farmington Avenue
Farmington, CT 06032

SHEET NO.
A1.0R2



2 REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"



1 FLOOR PLAN

SCALE: 1/8"=1'-0"

CEILING SYMBOLS

- C = 2 X 4 LIGHT FIXTURES
- LIGHTING FIXTURES. REFER TO ELECTRICAL DRAWINGS AND SCHEDULES FOR SPECIFIC FIXTURE TYPES.
- CEILING TYPE AND HEIGHT SYMBOL - REFER TO ADJACENT SCHEDULES
  - CEILING HEIGHT (NUMBER)
  - CEILING TYPE (LETTER)
- NEW SUPPLY AND RETURN GRILLES. REFER TO MECHANICAL DRAWINGS FOR SPECIFIC INFORMATION.
- SPRINKLER HEAD. REFER TO FIRE PROTECTION DRAWINGS FOR SPECIFIC TYPES.

GENERAL NOTES

1. REFER TO DETAILS 5/A1.1 FOR SEISMIC BRACING DETAILS FOR NEW SUSPENDED CEILINGS.
2. CUT CEILING TILES AS REQUIRED FOR INSTALLATION AROUND VENT PIPING, EXHAUST DUCTS, SPRINKLER HANGER RODS, CONDUIT, ETC.

CEILING HEIGHT SCHEDULE

1	6'-10"	3	7'-10"
2	7'-8"		

CEILING TYPE SCHEDULE

A	2x4 SUSPENDED ACOUSTICAL TILE

CEILING TYPE: C-1
ARMSTRONG: FINE FISSURED SQUARE LAY-IN MEDIUM TEXTURE ITEM NO. 1714
SIZE: 2' X 4' X 3/4", CLASS A, GRID SYSTEM 15/16" PRELUDE XL

PAINT TYPE:
SHERWIN WILLIAMS: LATEX PAINT - (GYP. BD. WALLS)
SHERWIN WILLIAMS: EPOXY PAINT / LOW VOC - (CONCRETE/GYP BD.)

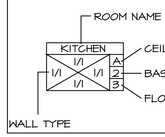
VCT TYPE:
MANNINGTON COMMERCIAL, SIZE - 12 X 12 STYLE: SOLID POINT COLOR: TBD

VINYL BASE TYPE:
ROPPE, 4" COVE BASE (VINYL) - TYPE TS COLOR: TBD
ROPPE, 4" CARPET BASE - TYPE TS COLOR: TBD

ROOM FINISH LEGEND

WALL FINISHES
1 - PAINTED GYP BD.
2 - EPOXY PAINTED GYP BD.
3 - CLEAN EXISTING BRICK

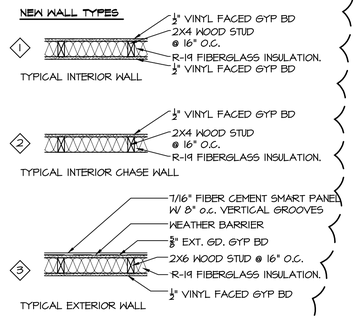
CEILING TYPE
A - 2X4 ACT

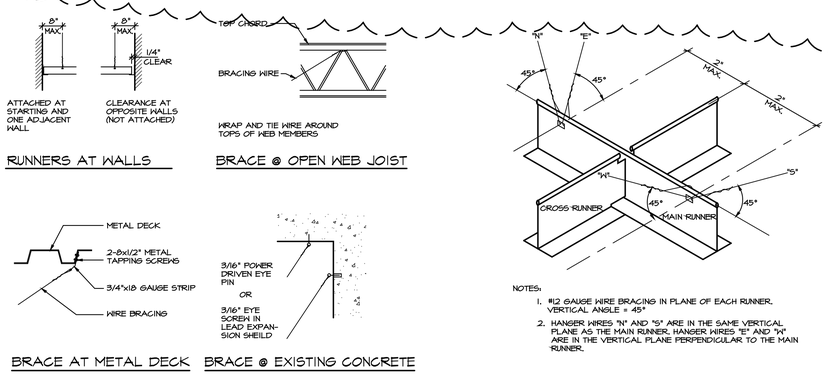


BASE TYPE
1 - 4" VINYL
2 - NO BASE

FLOOR TYPE
1 - VCT

NEW WALL TYPES





NOTES:
1. #12 GAUGE WIRE BRACING IN PLANE OF EACH RUNNER. VERTICAL ANGLE = 45°
2. HANGER WIRES "N" AND "S" ARE IN THE SAME VERTICAL PLANE AS THE MAIN RUNNER. HANGER WIRES "E" AND "N" ARE IN THE VERTICAL PLANE PERPENDICULAR TO THE MAIN RUNNER.

4 TYPICAL SEISMIC BRACING DETAILS

SCALE: NOT TO SCALE

CONTRACTOR SHALL BE RESPONSIBLE ENGINEERED, SEALED DRAWINGS BASED ON THE FOLLOWING PERFORMANCE BASED ITEMS,

1. FIRE ALARM - EXTEND EXISTING SYSTEM AS REQUIRED TO MEET CODE REQUIREMENTS, PROVIDE LAYOUT FOR REVIEW BY LOCAL F.M.
2. DATA & PHONE - EXTEND EXISTING SYSTEMS AS REQUIRED FOR FULL CONNECTIVITY. PROVIDE DATA JACKS (4 PER CLASSROOM).
3. ELECTRICAL POWER - PROVIDE A MINIMUM OF 8 POWER RECEPTACLES PER CLASSROOM. PULL POWER FROM EXISTING BUILDING OR TRANSFORMER/ CONTRACTOR'S OPTION.
3. MECHANICAL SYSTEMS - PROVIDE HEATING & COOLING SYSTEMS. CONTRACTOR SHALL SUBMIT LOAD CALCULATIONS FOR REVIEW. SYSTEM DESIGN SHALL BE SUBMITTED FOR REVIEW. SYSTEM SHALL BE ELECTRICAL OR NATURAL GAS / CONTRACTOR'S OPTION. PROVIDE A COMPLETE SYSTEM OF CONTROLS W/TIE-IN TO THE SCHOOL BMS.

DATE: 6/1/2016
DRAWN BY: JTM
SCALE: AS NOTED
REVIEWED BY: GSY
PROJECT NO. 2016-056A
A.1.1 Floor Plan - RCP

REVISIONS

NO.	DATE	DESCRIPTION
1	8/30/16	ADDENDUM 6

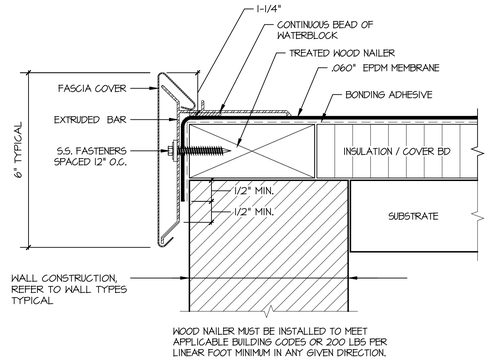
FLOOR PLAN, REFLECTED CEILING PLAN & SCHEDULES

STATE PROJECT NO. TMP-034-FT25
MODULAR CLASSROOMS
SHELTER ROCK ELEMENTARY SCHOOL
2 CROWS NEST LANE
DANBURY CONNECTICUT

ARCHITECT'S SEAL

FRIAR
281 Farmington Avenue
Farmington, CT 06032

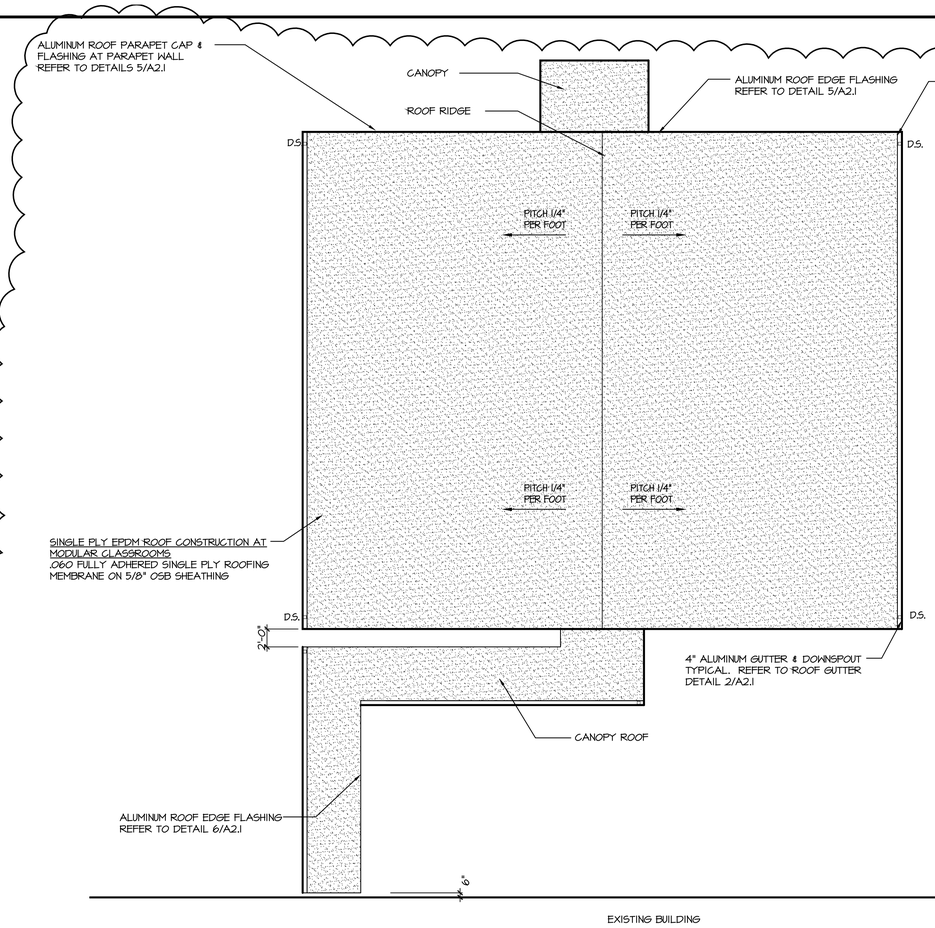
SHEET NO.
A1.1



WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS PER LINEAR FOOT MINIMUM IN ANY GIVEN DIRECTION.

5 TYP. EPDM ROOF EDGE DETAIL

SCALE: N.T.S.

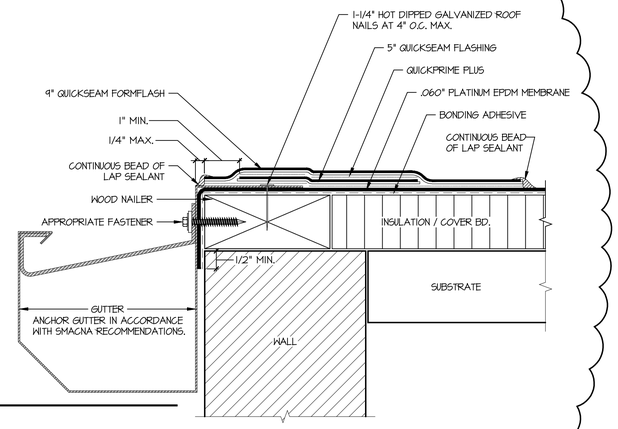


1 ROOF PLAN

SCALE: 1/8"=1'-0"

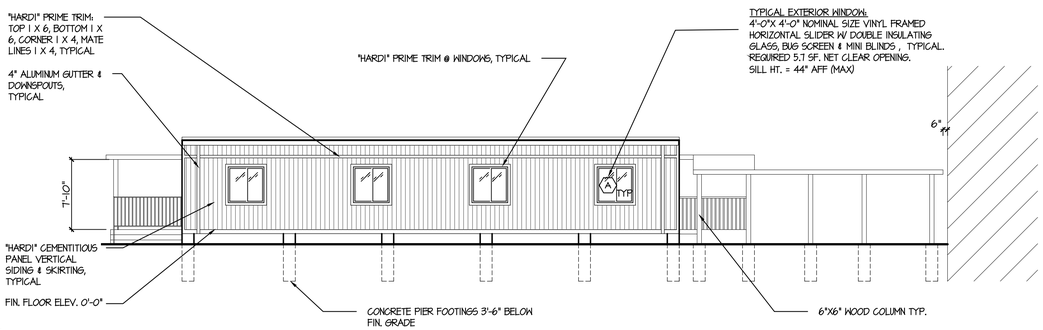
GENERAL NOTES:

1. ALL INSULATION TO BE BATT TYPE W/ KRAFT PAPER ON WARM SIDE, AS FOLLOWS:
   - FLOOR --- 6" (R-22) W/ VAPOR BARRIER
   - EXT. WALL --- 6" (R-19) FACED AT WARM SIDE
   - INT. WALL --- 3-1/2" (R-11) UNFACED
   - MODULAR ROOF --- (R-30) CLOSED CELL FOAM INSULATION
2. ALL GENERAL NOTES ON SHEETS APPLY UNLESS NOTED OTHERWISE.
3. ALL DESIGN DATA INFORMATION ON SHEETS APPLY UNLESS NOTED OTHERWISE.



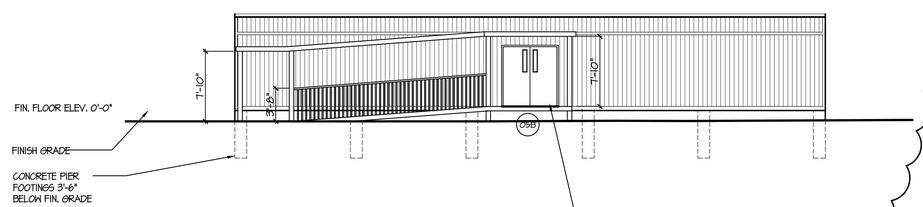
2 TYPICAL ROOF GUTTER DETAIL

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



4 ELEVATION #1

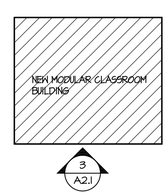
SCALE: 1/8"=1'-0"



TYPICAL EXTERIOR DOOR & FRAME:
36" X 80" (18 Ga.) INSULATED STEEL DOOR W/ (16 Ga.) STEEL DOOR JAMBS. DOOR GLAZING - 1/2 LITE SAFETY GLAZED INSULATED GLASS. DOOR HARDWARE LCN CLOSER, LEVER HANDLE, PANIC HARDWARE, WEATHER STRIPPING & HANDICAP ACCESSIBLE THRESHOLD.

3 ELEVATION #2

SCALE: 1/8"=1'-0"



KEY PLAN

DATE: 6/1/2016
DRAWN BY: JTW
SCALE: AS NOTED
REVIEWED BY: GSY
PROJECT NO. 2016-056A
A2.1 Roof Plan/Details

REVISIONS

NO.	DATE	DESCRIPTION
1	8/30/16	ADDENDUM 6

ELEVATIONS, ROOF PLAN & DETAILS

STATE PROJECT NO. TMP-034-FTZS
MODULAR CLASSROOMS
SHELTER ROCK ELEMENTARY SCHOOL
2 CROWS NEST LANE
DANBURY CONNECTICUT

ARCHITECT'S SEAL

FRIAR
281 Farmington Avenue
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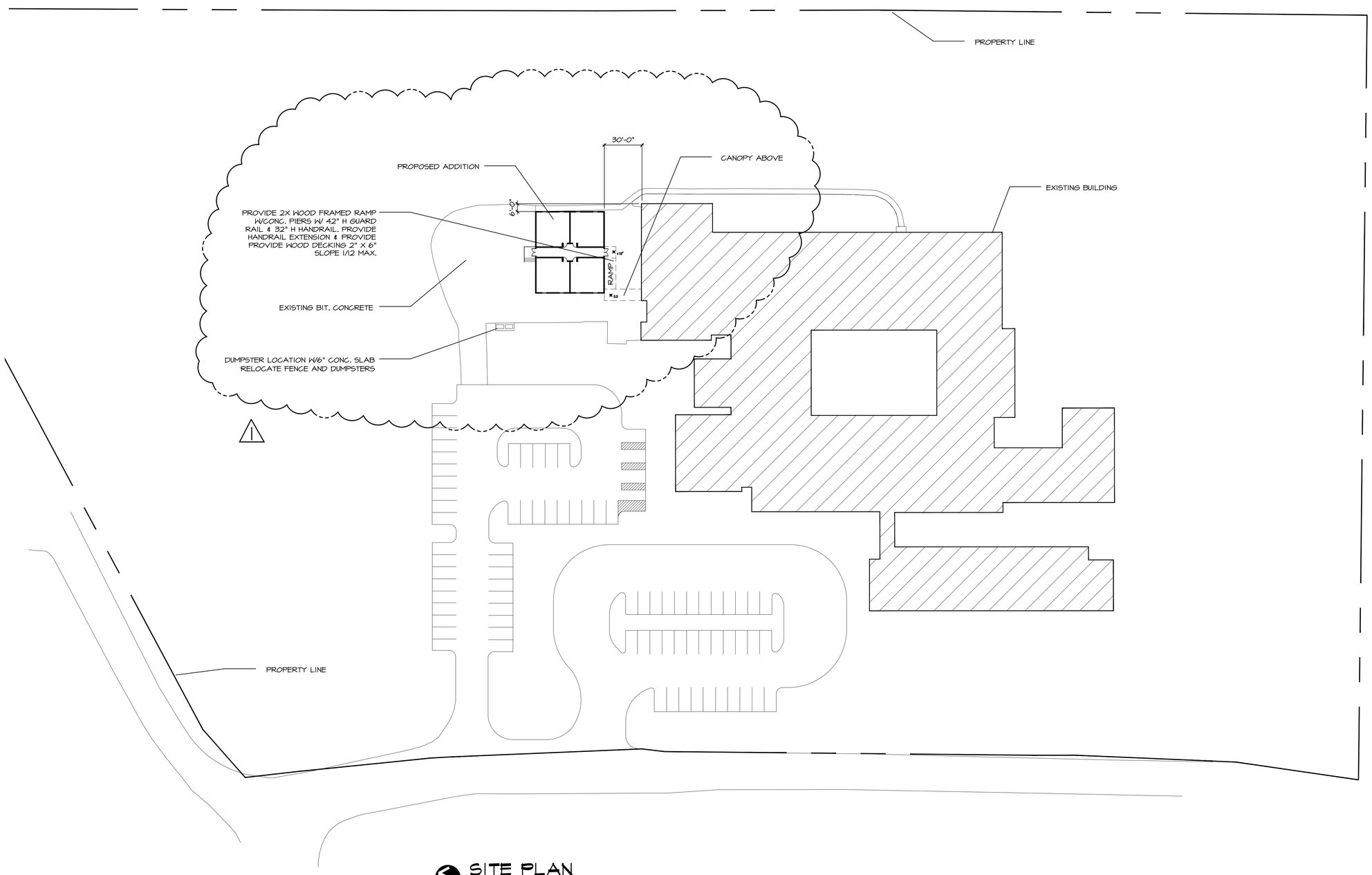
SHEET NO.
A2.1



SITE PLAN

SCALE: 1/40"=1'-0"

DATE: 6/1/2016
DRAWN BY: JTK
SCALE: AS NOTED
REVIEWED BY: GSY
PROJECT NO. 2016-056A
C1.1 SITE PLAN

REVISIONS

NO.	DATE	DESCRIPTION
1	8/30/16	ADDENDUM 6

SITE PLAN

STATE PROJECT NO. TMP-034-FTZS
MODULAR CLASSROOMS
SHELTER ROCK ELEMENTARY SCHOOL
2 CROWS NEST LANE
DANBURY CONNECTICUT

ARCHITECT'S SEAL

FRIAR
281 Farmington Avenue
Farmington, CT 06032

SHEET NO.
C1.1

ELECTRICAL MOUNTING HEIGHTS

ALL MOUNTING HEIGHTS TO BE COORDINATED WITH BLOCK COURSING AS OCCURS. CONSULT ARCHITECT IF EXISTING CONDITIONS DIFFER

ALL DIMENSIONS ARE TO THE CENTER OF THE DEVICE UNLESS OTHERWISE NOTED. SEE ELECTRICAL DRAWINGS FOR TYPES AND LOCATIONS.

RECEPTACLES: 18" A.F.F. (AT LOCATIONS ABOVE CASEWORK, MOUNT BOTTOM OF RECEPTACLE AT 2" ABOVE BACKSPLASH. AT LOCATIONS BELOW CASEWORK, MOUNT AT 24" A.F.F.)

WIREMOLD: 24" A.F.F. (AT LOCATIONS ABOVE CASEWORK, MOUNT BOTTOM OF WIREMOLD AT 2" ABOVE BACKSPLASH)

EXTERIOR RECEPTACLES: 24" A.F.G. (20" A.F.F.)

SWITCHES: 48" A.F.F.

BOILER EMERGENCY SWITCHES : 60" A.F.F.

DATA / PHONE OUTLETS: 18" A.F.F.

TV OUTLETS: 18" A.F.F. OR 18" BELOW FINISHED CEILING*
* FIELD VERIFY CEILING HEIGHTS WITH COORDINATION DRAWINGS

WALL PHONE: 48" A.F.F. TO CENTER OF EARPIECE

SECURITY KEYPAD: 48" A.F.F.

MICROPHONE WALL JACK : 18" A.F.F.

FIRE ALARM PULL STATION: 48" A.F.F.

FIRE ALARM VISUAL/AUDIO INDICATING UNITS: 6'-8" TO BOTTOM OF UNIT

AREA OF REFUGE CALL STATION: 48" A.F.F.

EMERGENCY SHUT-OFF SWITCH / PUSH BUTTON: 48" A.F.F.

EMERGENCY CALL SWITCH: 36" A.F.F.

EMERGENCY CALL BELL / LIGHT: +/- 7'-6" A.F.F., CENTER ABOVE DOOR

WALL MOUNTED EXIT SIGNS: 7'-6" A.F.F.

CONSTRUCTION NOTES

1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES AND ORDINANCES.
2. DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION OF DIMENSIONS FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
3. CONTRACT DRAWINGS MAY VARY FROM ACTUAL FIELD CONDITIONS. CONTRACTOR SHALL CORRECT DIMENSIONS OF ALL MATERIALS TO CARRY OUT THE INTENT OF THE CONTRACT DRAWINGS. VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN FIELD BEFORE ORDERING ANY MATERIALS. CONTRACTOR SHALL NOTIFY ARCHITECT PROMPTLY OF ANY CRITICAL DISCREPANCIES BEFORE PROCEEDING WITH WORK.
4. ALL NEW WORK SHALL BE IMPLEMENTED SO AS TO PROVIDE A SMOOTH AND CONTINUOUS SURFACE WITH ALL EXISTING CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO ACHIEVE THIS REQUIREMENT, EVEN THOUGH PROCEDURES ARE NOT DETAILED FOR EACH SPECIFIC CONDITION OR COMBINATION OF CONDITIONS. QUALITY OF WORKMANSHIP, MATERIALS AND FINISHES SHALL BE EQUAL TO THE LEVEL ESTABLISHED FOR SIMILAR CONSTRUCTION, EXCEPT WHERE EXISTING APPEARANCE IS TO BE MATCHED TO ACHIEVE CONTINUITY.
5. CUTTING AND PATCHING SHALL BE THE RESPONSIBILITY OF THE TRADE WHOSE WORK RESULTS IN THE NEED FOR CUTTING AND PATCHING UNLESS A SPECIFIC CONTRACTOR IS CALLED OUT ON THE DRAWINGS. ALL HOLES LEFT BY REMOVING MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT, ETC. SHALL BE PATCHED.
6. UNLESS OTHERWISE NOTED OR DIMENSIONED, NEW PARTITIONS SHALL BE CENTERED ON BUILDING COLUMN GRID OR WINDOW MULLIONS.
7. CONTRACTOR SHALL PROVIDE WOOD BLOCKING AT WALLS AS REQUIRED TO SUPPORT SHELVES, CABINETS TV BRACKETS AND RELATED ITEMS.
8. WHERE REQUIRED, SEISMIC BRACING SHALL BE PROVIDED AT SUSPENDED CEILINGS.
9. ALL EGRESS DOORS SHALL BE NON-LOCKING IN DIRECTION OF TRAVEL.
10. ALL PARTITIONS ARE TO EXTEND TO UNDERSIDE OF DECK ABOVE.

DEMOLITION NOTES

1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL NATIONAL, STATE, LOCAL CODES & ORDINANCES
2. THE PLANS ARE DIAGRAMMATIC AND INTENDED TO SHOW THE GENERAL EXTENT OF THE WORK ONLY. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK REQUIRED TO ACCOMPLISH THE INTENT OF THE PLANS AND SPECIFICATIONS.
3. ALL DEMOLISHED ITEMS SHALL BE REMOVED FROM BUILDING / SITE UNLESS OTHERWISE NOTED. COORDINATE WITH OWNER FOR DELIVERY OF ITEMS NOTED TO REMAIN OWNERS PROPERTY. THE PROJECT SITE/ BUILDING SHALL BE CLEANED OF DEBRIS ON A DAILY BASIS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND SUPPORT (TEMPORARY OR PERMANENT) FOR ALL PORTIONS OF CONSTRUCTION DURING DEMOLITION AND CONSTRUCTION.
5. ALL ABANDONED MECHANICAL / ELECTRICAL / PLUMBING LINES SHALL BE CAPPED OFF BEHIND FINISHES, UNLESS OTHERWISE NOTED. REFER TO MECHANICAL / ELECTRICAL / PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
6. CONTRACTOR SHALL SAWCUT ALL MASONRY OR CONCRETE OPENINGS INDICATED. MASONRY SHALL BE TOOTHED IN AND / OR RETURNED TO FINISHED OPENING
7. ALL OPENINGS WHERE EXISTING CONSTRUCTION HAS BEEN REMOVED, AND WHICH ARE NOT NOTED TO REMAIN, SHALL BE FILLED AND / OR PATCHED TO MATCH THE ADJACENT EXISTING OR NEW FINISH, INCLUDING ANY FIRE RATINGS REQUIRED.
8. ALL AREAS OF FLOORS, WALLS AND CEILINGS DISTURBED BY DEMOLITION SHALL BE FILLED, PATCHED OR OTHERWISE REFINISHED TO MATCH EXISTING OR NEW FINISH AS DESIGNATED, INCLUDING ALL REQUIRED RATINGS.
9. CONTRACTOR MUST VERIFY LOCATIONS OF ALL EXISTING STRUCTURAL, MECHANICAL, PLUMBING & ELECTRICAL ELEMENTS PRIOR TO START OF DEMOLITION.

GENERAL NOTES

1.) DIMENSION CRITERIA

A. FROM FACE OF METAL STUD TO FACE OF METAL STUD.
B. FROM FACE OF METAL STUD TO FACE OF CONCRETE MASONRY UNIT.
C. FROM FACE OF CONCRETE MASONRY UNIT TO FACE OF CONCRETE MASONRY UNIT.

2.) REFER TO FLOOR PLAN SHEET A1.1 FOR WALL TYPES.

ARCHITECTURAL SYMBOLS

BUILDING SECTION — SECTION NUMBER / SHEET NUMBER
WALL SECTION — SECTION NUMBER / SHEET NUMBER
COLUMN CENTERLINE — NUMBERS - (VERT.) / LETTERS - (HORIZ.)
DETAIL DESIGNATION, PLAN DETAIL, LARGE SCALE PLANS — DETAIL NUMBER / SHEET NUMBER
INTERIOR ELEVATIONS — ELEVATION NUMBER / SHEET NUMBER
CASEWORK ELEVATIONS — ELEVATION NUMBER
CEILING DESIGNATION — CEILING TYPE (LETTER) / CEILING HEIGHT (NUMBER)
ROOM NUMBER — NUMBER
DOOR NUMBER — NUMBER/TYPE
WINDOW DESIGNATION — LETTER/TYPE
DEMOLITION TAG — NUMBER
WALL TYPES — NUMBER
REVISION NUMBER — NUMBER
DATUM / ELEVATION / LEVEL LINE
EXISTING CONSTRUCTION TO REMAIN
NEW STUD CONSTRUCTION
NEW CONCRETE BLOCK
SOFFITS / OVERHANG ABOVE
ACCESSIBLE ELEMENT

ARCHITECTURAL MATERIALS

ACOUSTICAL TILE
BATT INSULATION
BITUMINOUS
C.M.U.
CONCRETE
EARTH
GRAVEL
GYPSUM BOARD
PLYWOOD (SMALL)
RIGID INSULATION
ROUGH WOOD (CONTINUOUS)
ROUGH WOOD (INTERRUPTED)

ELEVATIONS

BRICK
CONCRETE BLOCK
CERAMIC TILE
GLASS
SHINGLES

EGRESS PLAN LEGEND

(02) ROOM NUMBER
ROOM OCCUPANCY LOAD
726 / 20 — AREA IN SQUARE FEET / OCCUPANCY LOAD FACTOR
EXIT CAPACITY
152 — ACTUAL EGRESS OCCUPANCY OF DOOR OR STAIR
342 — MAXIMUM ALLOWABLE EGRESS OCCUPANCY OF DOOR OR STAIR
15 — DIRECTION OF TRAVEL WITH ACCUMULATED OCCUPANCY LOAD
MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT
1 HOUR RATED WALL (TIGHT TO DECK ABOVE)
2 HOUR FIRE WALL (TIGHT TO DECK ABOVE)
SMOKE PARTITION (TIGHT TO DECK ABOVE)

NOTES:

1. A VALUE OF 0.2 INCHES OF WIDTH PER OCCUPANT HAS BEEN USED TO CALCULATE DOOR AND CORRIDOR EGRESS CAPACITY. IN ALL CASES, THE ACTUAL CLEAR OPENING OF THE DOOR AND ACTUAL CLEAR WIDTH OF CORRIDOR IS USED.
2. A VALUE OF 0.3 INCHES OF WIDTH PER OCCUPANT HAS BEEN USED TO CALCULATE STAIRWAY EGRESS CAPACITY. IN ALL CASES, THE ACTUAL CLEAR WIDTH BETWEEN HAND-RAILS IS USED.

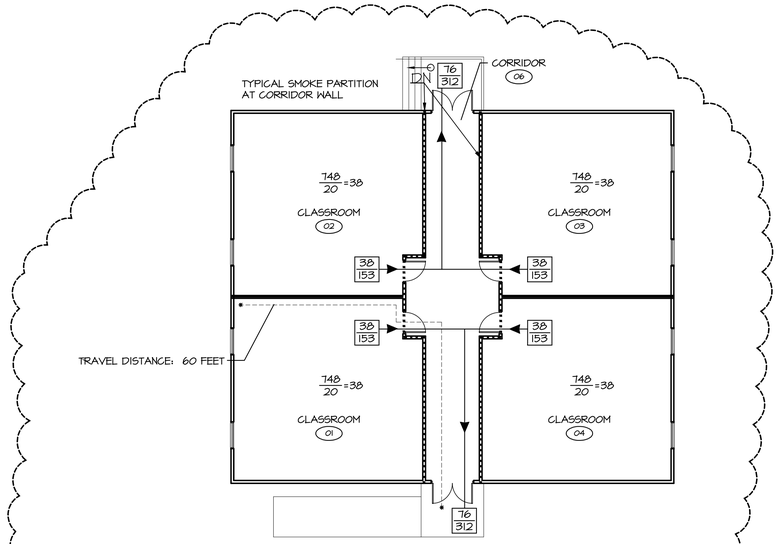
CODE INFORMATION

Date of Original Construction: 1969 — Renovation: 2007

1. GROUP CLASSIFICATION
   (Primary): E - EDUCATIONAL
   (Incidental): -
2. CONSTRUCTION TYPE (Chapter 6)
   Minimum Type Required: 5B
   Actual Type Provided: (existing): - (new): 5B
3. BUILDING HEIGHT (Chapter 5)
   Allowable Height (story/feet): 1 STORY - 20'
   Actual Height (story/feet): 1 STORY - 15'
   (Stories Above Grade): 1
4. BUILDING AREA (Chapter 5)
   Building Area: (each floor)
   (MODULAR Addition)
   Total New Construction: 3,869 s.f.
8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (Table 601)
   1) Structural Frame: including columns, girders, trusses: 0 Hr(s)
   2) Bearing Walls: Exterior: 0 Hr(s); Interior: 0 Hr(s)
   3) Nonbearing walls and partitions (Exterior): see Table 602
   4) Nonbearing walls and partitions (Interior): 0 Hr(s)
   5) Floor Construction (Including supporting beams and joists): 0 Hr(s)
   6) Roof Construction, (Including supporting beams and joists): 0 Hr(s)
9. OCCUPANCY LOAD
   Design Total for Modular Addition: 152
   Total Exit Capacity for Modular Addition: 624
11. ACCESSIBLE BUILDING: X Designated; ___ Non-designated
13. SPRINKLER PROTECTION: ___ Entire Building; ___ Limited Area
14. CODES TO WHICH THIS PROJECT WAS DESIGNED

	Dated:
State Building Code w/Supplement	2003 IBC w/ 2005 SUPPLEMENT AND 2013 AMENDMENT
State Fire Code w/Supplement	2005
State Health Code	2002 w/current amendment
OSHA	Current
Section 504	1973 w/current amendment
ADA	ICC/ANSI A117.1-2003
Other	-

15. THRESHOLD BUILDING CONDITIONS: ___ Yes; X No



EGRESS PLAN

SCALE: 3/32"=1'-0"

SMOKE STOPPING:
INSTALL SMOKE STOPPING AT ALL NEW CORRIDOR WALLS TOP & BOTTOM & AT ALL PENETRATIONS, TYPICAL. THE BASIS OF DESIGN: PRODUCT - CP 506 AS MANUFACTURED BY HILTI, INC.

2-HOUR RATED FIRE STOPPING SYSTEM - UL SYSTEM NO. W-L-1252:
METAL PIPE THROUGH GYPSUM WALL ASSEMBLY, INSTALL AT 2 - HOUR RATED FIRE WALL ASSEMBLY, TYPICAL. THE BASIS OF DESIGN: PRODUCT - FS-ONE OR CP 606 AS MANUFACTURED BY HILTI, INC. FOR 2 HOUR RATED WALL

DATE: 6/17/2016
DRAWN BY: JTM
SCALE: AS NOTED
REVIEWED BY: GSY
PROJECT NO. 2016-056A
R.I. Reference / Code

REVISIONS

NO.	DATE	DESCRIPTION
1	8/30/16	ADDENDUM 6

CODE INFO, REFERENCE & EGRESS PLAN

STATE PROJECT NO. TMP-034-FT25
MODULAR CLASSROOMS
SHELTER ROCK ELEMENTARY SCHOOL
2 CROWS NEST LANE
DANBURY CONNECTICUT

ARCHITECT'S SEAL

FRIAR
281 Farmington Avenue
Farmington, CT 06032

SHEET NO.
R1.1

REVISIONS FOR ADDENDUM # 6
BOLD TEXT REPRESENTS SOMETHING CHANGED.

THE SPECIFICATIONS AND MANUFACTURES LISTED BELOW ARE BASIS OF DESIGN. OTHER MANUFACTURES MEETING THE STANDARDS BELOW WILL BE CONSIDERED.

FRAME:	OUTRIGGERS/PERIMETER FRAME
TYPE	OUTRIGGER: I-BEAM W/ CROSS MEMBERS @ 48” O.C. (1 LAG BOLT), OR @ 9 (2 LAG BOLTS), OR PERIMETER: I-BEAM W/ CROSS MEMBERS @ 48” O.C. MAX.
MAIN BEAM	10” OR 12” JR. I-BEAM.
HITCH	DETACHABLE HITCH WITH ALL ELECTRICAL BREAK.
TIRES	MOBILE HOME TYPE.
FLOOR:	WOVEN REINFORCED PLASTIC TYPICAL OR EQUIVALENT.
FLOOR JOIST	OUTRIGGER: 2x6 OR 2x8 #2 OR SPF OR BETTER @ 16” O.C. W/ DOUBLE JOIST FRONT AND REAR (PER SPEC.) PERIMETER: 2x6 OR 2x8 #2 SP OR SPF @ 16 O.C. W/ DOUBLE JOIST FRONT AND REAR (PER SPECS).
NOTE	FLOOR JOIST SYSTEM FOR PERIMETER FRAME MUST BE EITHER A 2x8 #2 SP OR SPF OR IF THE JOIST RUN LONGITUDALLY, THEN JOIST MAY REMAIN 2x6 #2 SP OR SPF.
INSULATION	R-21 HD FIBERGLASS OR EQUAL
DECKING	5/8” TONGUE AND GROVE PLYWOOD, 16” SPAN INDEX
COVERING	1/8” VINYL COMPOSITION TILE (COOL WHITE - ARMSTRONG).
EXTERIOR WALLS:	
WALL HEIGHT	8’ 4-1/2” (LAY-IN ACOUSTICAL CEILING WITH HARD 1/2” RAW GYPSUM CEILING) (DOUBLE AND ABOVE).
WALL PLATES	DOUBLE 2X6 TOP AND SINGLE 2x6 BOTTOM PLATE(S) #2 SP OR SPF.
STUDS	2x6 OR EQUIVALENT #2 SP OR SPF @ 16” O.C.
NOTE	JAMB STUDS 2x6 #2 SP OR SPF.
INSULATION	R-21 HD UNFACED FIBERGLASS OR EQUIVALENT.
SHEATHING	**5/8” EXTERIOR GYPSUM BOARD**
	HOUSE WRAP PERIMETER.
COVERING	1/2” VINYL COVER GYPSUM (CLASS 3 F.S.) WITH 7/8” BATTENS (“HAMPTON GRAY”).
SIDING	**7/16” FIBER CEMENT PANELS**
SIDING COLOR	“LIGHT GRAY”
	MODSPACE PT-2 LIGHT GRAY-5 GALLON PAIL-BODY-SHERWIN WILLIAMS-MS43043
	MODSPACE PT-1 LIGHT GRAY-5 GALLON PAIL-TRIM-SHERWIN WILLIAMS-MS43045
TRIM	**FIBER CEMENT BD’S** - BOTTOM TRIM 3/4”x16x6” TEXTURED.
	TOP TRIM/DOOR TRIM/BAND BOARD TRIM/UPPER TRIM 3/4”x16x4” TEXTURED.
NOTE	INTERMEDIATED JOINTS MUST USE PROPER Z-FLASHING.

REVISIONS FOR ADDENDUM # 6
BOLD TEXT REPRESENTS SOMETHING CHANGED.

THE SPECIFICATIONS AND MANUFACTURES LISTED BELOW ARE BASIS OF DESIGN. OTHER MANUFACTURES MEETING THE STANDARDS BELOW WILL BE CONSIDERED.

INTERIOR WALLS:	
WALL HEIGHT	8’ 4-1/2” (LAY-IN ACOUSTICAL CEILING WITH HARD 1/2” RAW GYPSUM CEILING) (DOUBLE AND ABOVE).
WALL PLATES	SINGLE 2x4 TOP AND BOTTOM PLATE #2 SP OR SPF.
STUDS	2x4 #2 SP OR SPF @ 16” O.C.
INSULATION	R-11 UNFACED FIBERGLASS IN ALL INTERIOR WALLS.
COVERINGS	1/2” VINYL COVERED GYPSUM (CLASS 3 F.S.).
BATTENS	“HAMPTON GRAY”.
SUPPORT COLUMNS	(PER PRINT) TYPICAL (5) 2x4 #2 SP
ROOF/CEILING:	
SUB CEILING	1/2” UNFINISHED RAW GYPSUM (WHEN ACOUSTICAL CEILING (DROP CEILING) IS BEING USED DOUBLE UNITS AND ABOVE.
CEILING	2x4 T-GRID CEILING (FINISHED CEILING HEIGHT 7’-10” +/- , WALL HEIGHT 8’ 4-1/2”) (DOUBLES AND ABOVE) ARMSTRONG CEILING TILE - 2’x4’x5/8” - CORTEGA MINABORAD 96 SQ. FT. / CARTON MS2015.
NOTE	POP RIVET & SECURED FOR SHIPMENT, INSTALLED EVEN TO BOTTOM EDGE OF RIDGE BEAM (SHIPLOOSE BEAM).
TRUSSES	GRADUATED BOX TRUSSES @ 24” O.C.
ENGINEERED GIRDER TRUSS @ 60#	32’ (56’ LONG BOX) OR 36’ (60’ LONG BOX) CLEAR SPAN 2 PLY TRANSVERS GIRDER TRUSSES, 12’ 2 PLY GIRDER TRUSS OVER EACH END FOR AREAS 41# UP TO 60# (DOUBLE AND ABOVE).
RIDGE BEAM @ 40#	1-1/2” X 24” (2) PLY LVL RIDGE BEAM FOR AREAS UP TO 40# (DOUBLE AND ABOVE).
CENTERED PEAK	SINGLE CENTERED PEAKED BOX TRUSS @ 60#.
INSULATION	R-38 FACED
ROOF COVERING	.045 BLACK EPDM RUBBER MEMBRANE ROOFING (MATELINE MATERIAL BRANCHES RESPONSIBILITY).
SHEATHING	15/32” OSB FR DECK SHEATHING (CLASS-C).
GABLE VENTS	(1) ROOF VENT AND (1) POWERED VENT @ 100 CFM.
EXTERIOR DOORS:	36x80 “TELSTAR” STEEL DOOR, **SEE ELEVATIONS**. PROVIDE HARWARD, WEATHER STRIPPING & THRESHOLD. COLOR: GRAY (TO MATCH SIDING) KEYING SHALL MATCH DANBURY STANDARDS.
NOTE	ALL HARDWARE TO BE 26D FINISH.
INTERIOR DOORS:	36”x80” **SOLID CORE DOOR** WITH 1-1/2” PAIR HINGES AND LEVER LOCKSET 26D, TIMELY JAMB STD COLOR: “BROWNSTONE”. NOTE: ALL DOORS TO HAVE FLOOR MOUNTED STOPS. KEYING SHALL MATCH DANBURY STANDARDS. **PROVIDE KD**

REVISIONS FOR ADDENDUM # 6
BOLD TEXT REPRESENTS SOMETHING CHANGED.

THE SPECIFICATIONS AND MANUFACTURES LISTED BELOW ARE BASIS OF DESIGN. OTHER MANUFACTURES MEETING THE STANDARDS BELOW WILL BE CONSIDERED.

	FRAMES. DOORS SHALL HAVE 6”X24” VISION LIGHTS.
WINDOWS:	WINTECH MODSEAL M70 WHITE VINYL **SLIDING**, LOW E, CLR IG - WITH NAIL FIN & ALUM. SELF FLASHING HEAT ATTACHED MS59632.
	ALL ELECTRICAL AND MECHANICAL SYSTEMS ARE TO BE DESIGN BUILD. SYSTEMS NOTES BELOW AND ON THE DRAWINGS AT GUIDELINES. CONTRACTORS ARE RESPONSIBLE SEAL DRAWING BY A LICEMSED CT ENGINEER AND TO MEET ALL CODE STANDARDS AND SUBMIT DOCUMENTS FOR REVIEW PRIOR TO SUBMISSION FOR PERMIT.
ELECTRICAL:	**SEE NOTES ON A1.1**
PANEL BOX	120/240 VOLT, SINGLE PHASE, 3 WIRE, 60HZ (CROSSOVERS WHERE ACCEPTABLE).
	“B” UNIT 200 AMP SUB PANEL (RECESSED) OTHER UNITS 150 AMP SIZE SUB PANEL (RECESSED), SEIMENS.
WIRE	MIN. #12 AWG COPPER WIRE, (MC/CABLE WHEN REQUIRED).
SWITCHES	115-VOLT TOGGLE TYPE OR SENSOR TYPE (SENSORY TO BE SET AT HIGHEST SENSITIVITY (WHITE WITH OVER SIZED COVERS).
LIGHTING	2-TUBE 48” FLUORESCENT TROFFER/DIFFUSED LIGHT, T8 LAMPS WITH ELECTRONIC BALLASTS.
	WALL MOUNTED LIGHT(S) AT ENTRY DOOR(S) SIMKAR V-5000 WITH PHOTO CELLS, SWITCHED.
	120 VOLT EXIT/EMERGENCY LIGHT COMBO WITH BATTERY BACK-UP.
	REMOTE EXTERIOR HEADS.
RECEPTACLES	120 VOLT 15 AMP DUPLEX GROUNDING TYPE.
	120 VOLT 15 AMP GFI RECEPT WITH WEATHER PROOF COVER LOCATED UNDER FLOOR ON WET BOX.
	120 VOLT 15 AMP GFI RECEPT WITH WEATHER PROOF COVER LOCATED LEFT OF HVAC 18” A.F.F.
	120 VOLT 15 AMP WIRED CEILING 2x4 “J” BOXES WITH COVER PLATES (DEDICATED/INDEPENDENTLY/WIRED/BREAKERED FOR FUTURE RECEPTACLES & FUTURE SWITCHES (QUANTITIES PER PRINT).
HVAC:	**SEE NOTES ON SHEET A1.1**
HEATING/COOLING	3 TON BARD UNIT WITH 15KW HEAT OR 2 TON BARD UNIT WITH 10KW (FOR 10x44 and 12x38).
T-STAT	HONEYWELL (OR EQUAL) PROGRMMABLE T-STAT.
DUCT	INSULATED FIBERGLASS IN ROOF CAVITY.
DIFFUSERS	24”x24” WITH 8” DIAM. NECK IN ACOUSTICAL LAY-IN CEILING.
RETURN AIR	16”x30” RETURN AIR OPENING
	JUMP DUCT (SIZES DEPENDS ON CEILING APPLICATION).
EXHAUST	100 CFM CEILING FANS (3” VENT THROUGH MANSARD).