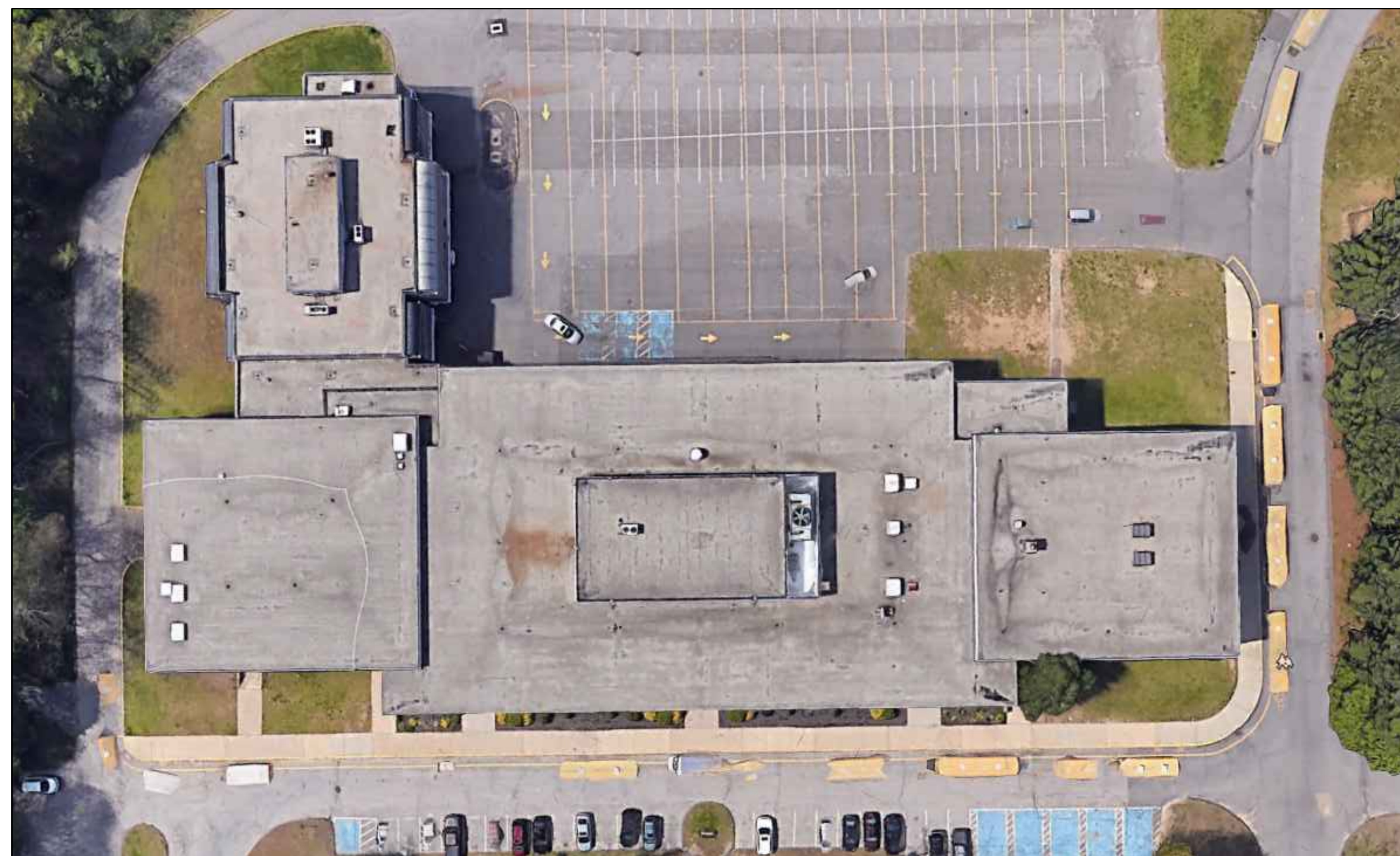


Borough of Naugatuck

City Hill Middle School Roof Replacement

441 City Hill Street
Naugatuck, Connecticut 06770



DRAWING LIST:

	Cover Sheet
C1	Code Information
A1	Overall Roof Plan
A2	Roof Details



SILVER / PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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State Project # 088-0073 RR

February 11, 2019

Issued for Bid: May 20, 2019

CODE INFORMATION

DATE OF ORIGINAL CONSTRUCTION 1972
DATE OF ADDITION

1. GROUP CLASSIFICATION (Chapter 3)
(Primary) E-EDUCATIONAL
(Incidental) A3-ASSEMBLY

2. CONSTRUCTION TYPE (Chapter 6)
Minimum Type Required 2B
Actual Type Provided (existing) ---
(new) 2B

3. BUILDING HEIGHT (Chapter 5)
Allowable Height (story/feet) 3/75'-0"
Actual Height (story/feet) 2/30'-0"
(Stories Above Grade) 2

4. BUILDING AREA (Chapter 5)
a) Building Area (first)
Existing construction 60,910 sq.ft.
New construction 0 sq.ft.
Total floor 60,910 sq.ft.
b) Building Area (second)
Existing construction 42,335 sq.ft.
New construction 0 sq.ft.
Total floor 42,335 sq.ft.
TOTAL (ALL FLOORS) 103,245 sq.ft.

5. AREA MODIFICATIONS TO TABLE 503 (for each separate building as defined by fire walls and/or exterior walls)
NA

6. CASE 1 - SINGLE OCCUPANCY OR NONSEPARATED USES (302.3.1)
(Allowable Area 506.4)
NA

7. CASE 2 - MIXED OCCUPANCY SEPARATED USES (302.3.2)
(Allowable Area 506.4)
NA

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS
(Table 601, See Code Plans for specific designations)

1 Structural frame: Including columns, girders, trusses 0 Hr(s)
2 Bearing walls: Exterior (Table 602) 0/1 Hr(s)
Interior 0 Hr(s)
3 Nonbearing walls & partitions Exterior (Table 602) 0/1 Hr(s)
4 Nonbearing walls & partitions Interior 0 Hr(s)
5 Floor Construction (including supporting beams & joists) 0 Hr(s)
6 Roof Construction (including supporting beams & joists) 0 Hr(s)

9. OCCUPANCY LOAD
Design Total for Basement NA
Total Exit Capacity for Basement NA
Design Total for First Floor NA
Total Exit Capacity for First Floor NA
Design Total for Building NA
Total Exit Capacity for Building NA

10. MODIFICATIONS
Approved Not Approved
Approved Not Approved
Approved Not Approved

11. ACCESSIBLE BUILDING X Designated
Non Designated

12. MINIMUM PLUMBING FIXTURE COUNT (I.P.C. Chapter 4)
For each type of occupancy per entire facility

Group "A3" occupancy (Design Load = NA)	Required	Provided
W/C Male	NA	NA
W/C Female	NA	NA
Lavs	NA	NA
D/F	NA	NA
W/C Unisex	NA	NA
Lavs Unisex	NA	NA

Group "E" occupancy, (Design Load = NA)	Required	Provided
W/C	NA	NA
Lavs	NA	NA
D/F	NA	NA

(Total Design Load for entire facility = NA)

13. ENTIRE BUILDINGS SPRINKLERED Yes No X

14. THRESHOLD BUILDING CONDITIONS Yes No X

15. CODES TO WHICH THIS PROJECT WAS DESIGNED

State Building Code	2015 IBC CTSBC/2016 AMEND.
State Mechanical Code	2015 ICC
State Plumbing Code	2015 IPC
State Energy Conservation Code	2015 IECC
State Electrical Code	2017 NFPA 70
State Health Code	MOST CURRENT
OSHA	MOST CURRENT
Section 504	CURRENT
ADA	MOST CURRENT
ANSI 117.1	MOST CURRENT

16. BUILDING AREAS FOR GRANT CALCULATION (ENTIRE FACILITY)

(measured to inside face of exterior walls)	
Existing unrenovated construction	0 sq.ft.
Existing renovated construction	0 sq.ft.
Existing being demolished	0 sq.ft.
Total existing construction	103,245 sq.ft.
Total new construction	0 sq.ft.
Total facility	103,245 sq.ft.

Open Areas (not included in total facility)

NA NA sq.ft.

17. TOTAL CONSTRUCTED BUILDING AREA (outside face of exterior walls including open areas above) NA sq.ft.

FIRE SAFETY CODE DATA:

1. CLASSIFICATION OF OCCUPANCY EDUCATIONAL/ASSEMBLY
2. MINIMUM CONSTRUCTION REQUIRED 2B
ACTUAL CONSTRUCTION PROVIDED 2B
3. NOTIFICATION / ALARMS YES X NO
(CFSC 2005, NFPA 72, NATIONAL FIRE ALARM CODE 2002)
4. DETECTION YES X NO
(CFSC 2005, NFPA 72, NATIONAL FIRE ALARM CODE 2002)
5. EXTINGUISHMENT REQUIREMENTS YES X NO
(NFPA 13, 2002)

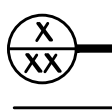
MEANS OF EGRESS

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT
IBC TABLE 1004.1.2

USE	FLOOR AREA IN S.F. PER OCCUPANT
1. CLASSROOMS	20 S.F. NET
2. SHOPS & VOCATIONAL	50 S.F. NET
3. ASSEMBLY WITHOUT FIXED SEATS TABLES AND CHAIRS	7 S.F. NET 15 S.F. NET
4. PLATFORMS	15 S.F. NET
5. LIBRARY	
READING ROOMS	50 S.F. NET
STACK AREA	100 S.F. GROSS
6. LOCKER ROOMS	50 S.F. GROSS
7. MECHANICAL AREAS	300 S.F. GROSS
8. STORAGE	300 S.F. GROSS
9. BUSINESS AREAS	100 S.F. GROSS
10. Courtyards	15 S.F. NET
MAXIMUM LENGTH OF EXIT TRAVEL	
1. I.B.C. TABLE 1015.1	250 FEET

SYMBOL LEGEND

- PLAN, SECTION, DETAIL OR ELEVATION NUMBER - SHEET NUMBER.



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V.I.F.

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ROOF "EB"

ROOF "EC"

ROOF "ED"

ROOF "EE"

ROOF "EF"

SYMBOL LEGEND

- PLAN, SECTION, DETAIL OR ELEVATION NUMBER - SHEET NUMBER.
- EXISTING OUTLINE OF BUILDING.
- INDICATES SLOPE DIRECTION OF TAPERED INSULATION AT 1/4" FT. MIN.
- TAPERED INSULATION CRICKET SLOPED @ 1/4" PER FOOT.
- CONTRACTOR TO VERIFY DIMENSION IN FIELD.
- INDICATES SLOPE DIRECTION & INDICATES EXISTING ROOF PITCH.
- INDICATES HIGH POINT OF INSULATION.
- EXISTING ROOF DRAIN TO BE REMOVED. SEE DEMOLITION NOTES.
- ROOF DRAIN & SUMP TO BE INSTALLED. SEE DETAIL A/A2.
- BI-FUNCTIONAL EMERGENCY ROOF DRAIN & SUMP. SEE DETAIL B/A2.
- WALL MOUNTED EMERGENCY DRAIN. SEE DETAIL C/A2.
- HORIZONTAL ROOF DRAIN LEADER. SEE CONSTRUCTION NOTE #3.
- EMERGENCY OVERFLOW SCUPPER. SEE DETAIL R & T/A2.
- EXIST. VENT STACK. SEE DETAIL D/A2.
- PITCH POCKET DETAIL. SEE DETAIL F/A2.
- EXIST. ROOF TOP FAN UNIT. SEE DETAIL E/A2.
- EXIST. MECHANICAL UNIT. SEE DETAILS F & G/A2.
- EXIST. ROOF TOP MECH. UNIT. SEE DETAIL U/A2.
- EXIST. SMOKE HATCH. SEE DETAIL K/A2.
- ROOF HATCH. SEE DETAIL J/A2.
- WALKWAY PADS. SEE CONSTRUCTION NOTE #2.
- EXISTING CHIMNEY. SEE CONSTRUCTION NOTE #4.
- HOT FLUE. SEE DETAIL H/A2.
- NEW METAL LADDER. SEE DETAIL N/A2.
- EXIST. CONDUIT. SEE DETAIL L/A2.
- EXIST. SATELLITE DISH TO REMAIN.
- METAL COLLECTION BOX. SEE DETAIL Y/A2.
- METAL DOWNSPOUT. SEE CONSTRUCTION NOTE #5.
- CONCRETE SPLASH BLOCK. SEE CONSTRUCTION NOTE #6.

GENERAL NOTES

- ALL FLAT ROOFS TO RECEIVE 1/4" PER FOOT TAPERED RIGID INSULATION MINIMUM UNLESS OTHERWISE NOTED.
- FIELD VERIFY ALL DIMENSIONS & PERFORM TEST CUTS AT EACH ROOF PRIOR TO THE BID.
- ALL MATERIALS ARE NEW UNLESS OTHERWISE NOTED "EXISTING".
- ALL WOOD BLOCKING, PLYWOOD & NAILERS TO BE PRESSURE TREATED, (P.T.)
- ALL WOOD BLOCKING INDICATED IN DETAILS ARE TO BE ANCHORED TO THE EXISTING STRUCTURE.
- ALL MEMBRANE FLASHING INDICATED IS TO EXTEND A MINIMUM OF 6" (VERTICAL OR HORIZONTAL).
- CONTRACTOR IS TO SURVEY THE EXISTING ROOF DECKS W/A LEVEL (AFTER DEMOLITION) TO VERIFY THE SLOPES INDICATED ON PLAN ARE ACCURATE. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY ADDITIONAL ROOFING OPERATIONS.
- CONTRACTOR IS TO INSPECT THE UNDERSIDE OF ALL ROOF DECKS PRIOR TO ROOFING OPERATIONS TO INSURE THAT NO INTERIOR MATERIALS, EQUIPMENT, FINISHES OR OBJECTS WILL BE PERCED OR DAMAGED.
- CONTRACTOR ASSUMES ALL RESPONSIBILITY DURING PROJECT & WILL REPLACE ANY & ALL DAMAGED EQUIPMENT W/NO ADDITIONAL COST TO OWNER.
- SITE AREAS DISTURBED SHALL BE CLEANED & RE-LEVELLED, W/LAWN AREAS MAGNETICALLY RAKED TO REMOVE ANY METAL DEBRIS & RE-SEED AS REQUIRED TO MATCH ADJACENT CONDITIONS.
- CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR CLEAN UP OF ROOFING MATERIALS & DEBRIS THAT PENETRATES THE INTERIOR ENVELOPE OF THE BUILDING W/NO ADDITIONAL COST TO THE OWNER.
- SHAKE/CLEAN OUT ALL EXISTING VERTICAL & HORIZONTAL LEADERS OUT TO NEAREST MANHOLE OUTSIDE OF BUILDING.
- ALL CRICKETS ARE TO BE SLOPED @ A MINIMUM OF 1/4" PER FOOT & COORDINATE CRICKETS AROUND EXIST. HVAC UNITS AS REQUIRED TO AVOID PONDING.
- CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL & RE-INSTALLATION OF ALL HVAC UNITS INCLUDING ANY ELECTRICAL OR MECHANICAL CONNECTIONS. THIS MAY INCLUDE THE EXTENSION OF EXISTING ELECTRICAL & DUCTWORK SYSTEMS TO ACCOMMODATE NEW MECHANICAL UNIT CURBING & NEW ROOFING SYSTEM.
- SHAKE/CLEAN OUT ALL EXISTING VENT STACKS BEFORE THE INSTALLATION OF METAL SLEEVE.
- ALL DRAIN PIPING IS INSULATED ABOVE THE CEILINGS, THE EXACT ROUTE WILL BE DETERMINED IN THE FIELD, MAKE MINOR ADJUSTMENT IN THE ROUTE AT NO ADDITIONAL COST TO OWNER.
- NEW ROOF INSULATION TO BE A MINIMUM OF R-30 AT ALL NEW ROOF DRAINS AND/OR THE LOW POINTS OF THE ROOF AREAS.
- ALL ANTENNAS, CONDUITS & ANY OTHER OBJECTS TO REMAIN AFFECTED BY SCOPE OF WORK, TO BE REMOVED & REINSTALLED.

DEMOLITION NOTES

- REMOVE ALL EXISTING INSULATION & ROOFING MEMBRANE.
- REMOVE ALL INDICATED EXISTING METAL FLASHING.
- REMOVE EXISTING ROOF DRAINS & SUMP.

CONSTRUCTION NOTES

- CONTRACTOR TO PROVIDE A SPECIFIED QUANTITY OF TECTUM & METAL DECK REPAIR & REPLACEMENT. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- WALKWAY PADS TO BE INSTALLED. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- HORIZONTAL ROOF LEADER (MATCH DIAMETER OF EXIST.) ABOVE CEILING SLOPED @ 1/8" FT. MIN. THE VERTICAL LEADERS INTO EXIST. PIPING AS REQ'D. SEAL ALL PENETRATIONS THROUGH WALLS W/FIRE PUTTY AS REQ'D. BY CODE. PATCH & REPAIR ALL AREAS DAMAGED BY INSTALLATION OF NEW PIPING.
- REMOVE & DISPOSE OF EXISTING MASONRY CHIMNEY DOWN TO BELOW EXISTING ROOF. INFILL WITH NEW ROOF DECKING & INSTALL NEW ROOFING INSULATION, COVER BOARD & ROOFING MEMBRANE. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- INSTALL NEW METAL DOWNSPOUTS @ ALL INDICATED SCUPPER LOCATIONS. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- INSTALL NEW CONCRETE SPLASH BLOCKS @ ALL INDICATED METAL DOWNSPOUT LOCATIONS. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.

ROOF AREAS

ROOF 'A' 483 SF.	ROOF 'I' 9,975 SF.
ROOF 'B' 7,508 SF.	ROOF 'G' 25,525 SF.
ROOF 'C' 1,311 SF.	ROOF 'H' 4,250 SF.
ROOF 'D' 1,541 SF.	ROOF 'J' 1,030 SF.
ROOF 'E' 717 SF.	ROOF 'K' 8,600 SF.

TOTAL FLAT ROOFS: 60,910 SF.

THIS AREA IS APPROXIMATE - V.I.F.

ENERGY CONSERVATION

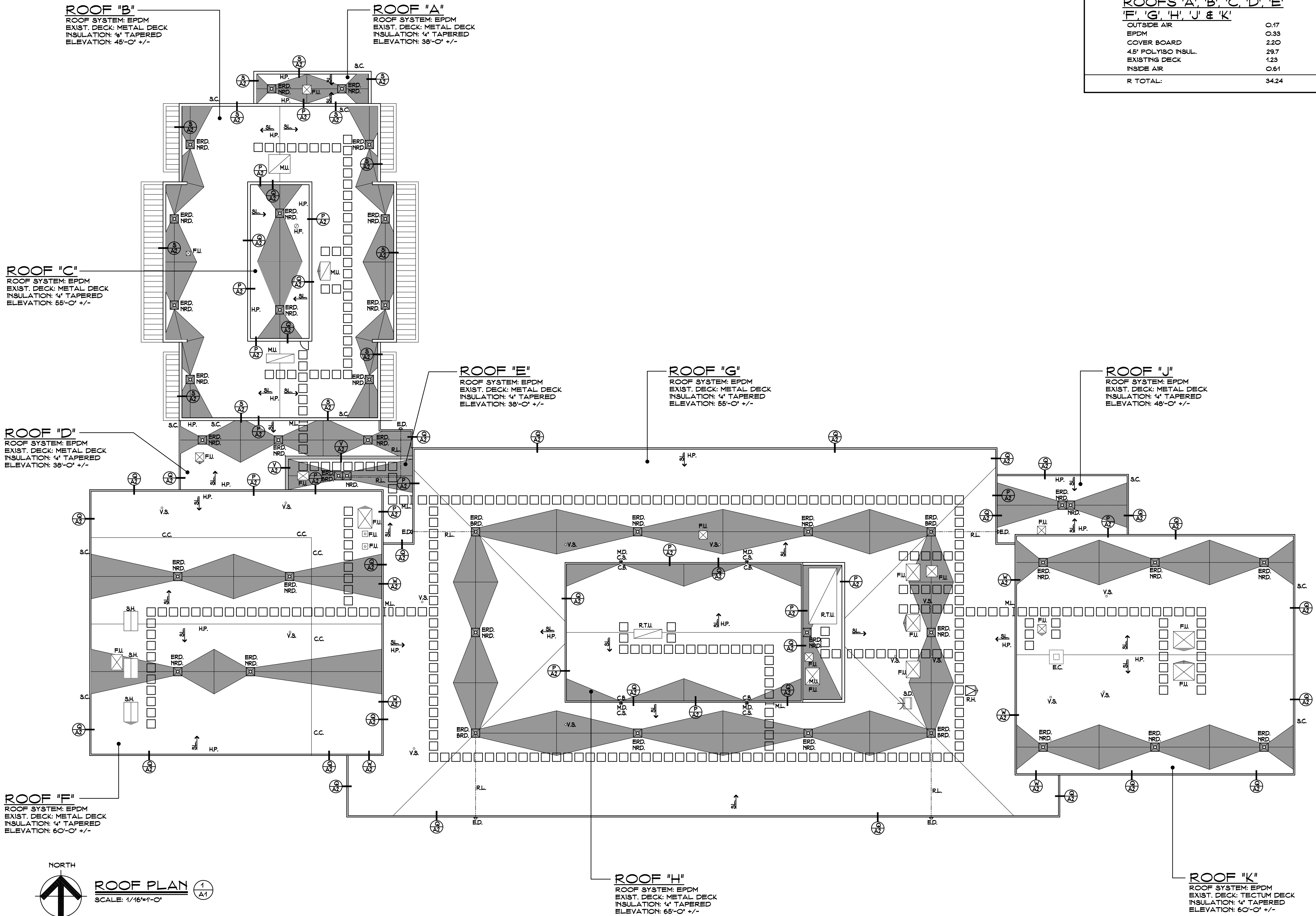
ECC CODE REQUIREMENT R-VALUE TOTAL
CONNECTICUT ZONE 5A
CBCS REQUIREMENT: R-30 = U .0333

CODE INFORMATION

USE GROUP : E
CONSTRUCTION CLASS: 2B
BASIC WIND SPEED: 110 MPH
RISK CATEGORY #3: 134 MPH
FACTORY MUTUAL ENGINEERING & RESEARCH CORPORATION (FM): ROOF ASSEMBLY CLASSIFICATION OF NON-COMBUSTIBLE CONSTRUCTION, WIND UPLIFT REQUIREMENT OF 140 FOR FIELD, 130 FOR PERIMETER AND 120 FOR CORNERS, IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEETS 1-28.

ROOFS 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'J' & 'K'

OUTSIDE AIR	0.17
EPDM	0.33
COVER BOARD	2.20
4.5" POLYISO INSUL.	29.7
EXISTING DECK	1.23
INSIDE AIR	0.61
R TOTAL:	34.24



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Architects / Engineers / Interior Designers

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Revision:

Description:

Date:

Revised By:

Drawing Title:

Overall Roof Plan

Date:

02/11/2019

Scale:

1/16"=1'-0"

Drawn By:

K. LINSLEY

Project Number:

18,112

Drawing Number:

A1

STATE PROJECT # 088-0073 RR

