

ROOF REPLACEMENT

MANCHESTER REGIONAL ACADEMY

665 WETHERELL STREET
MANCHESTER, CONNECTICUT

State Project No. 077-0237 RR
Architect's Project No. 2017-031A

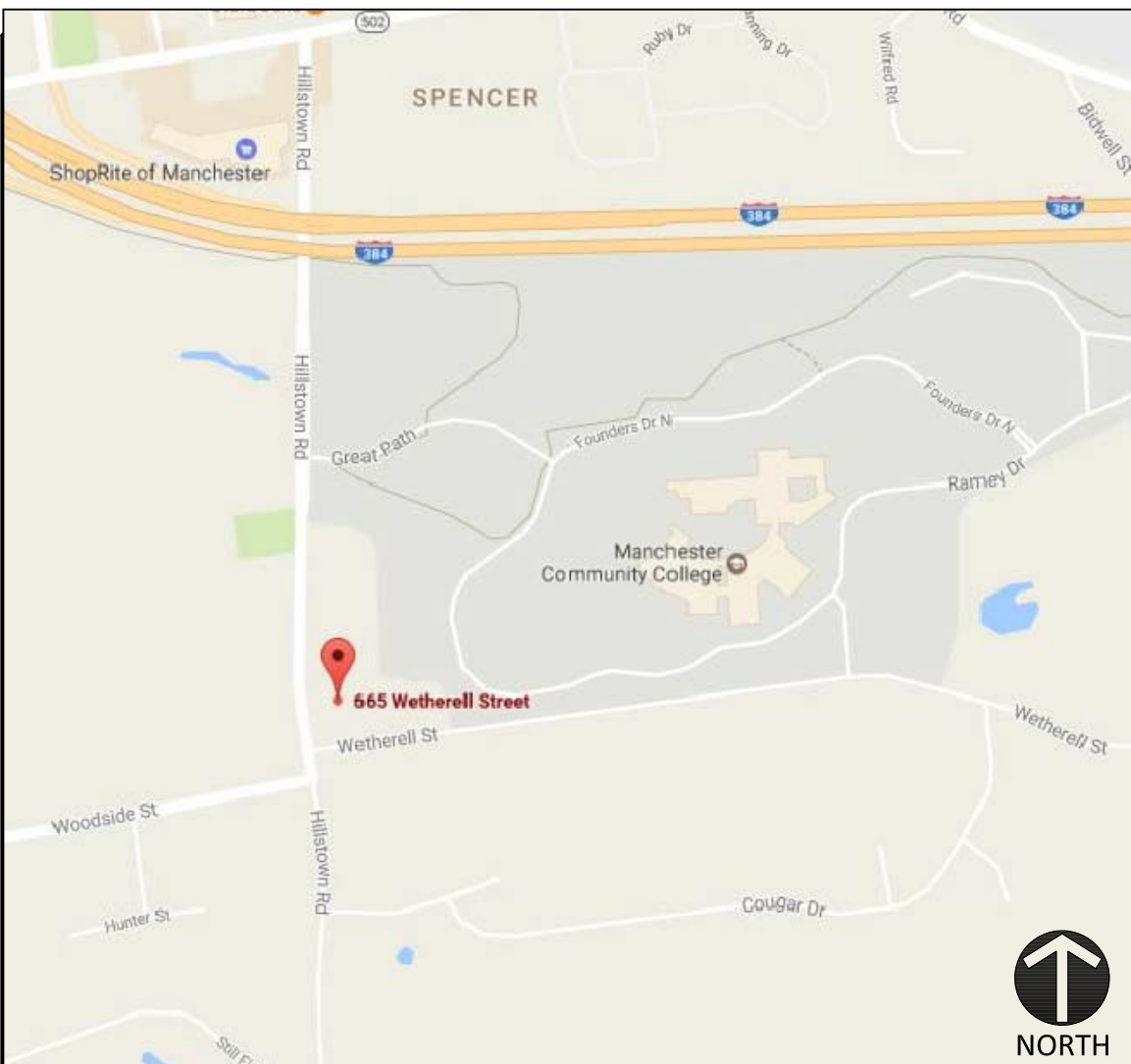
ISSUED FOR BID
5/18/2018

SUPERINTENDENT OF SCHOOLS
MATTHEW GEARY

ARCHITECT
FRIAR ARCHITECTURE
21 TALCOTT NOTCH ROAD
FARMINGTON, CONNECTICUT 06032

INDEX OF DRAWINGS

COVER SHEET
R1.1 CODE REFERENCE SHEET
ARCHITECTURAL
A1.1 DEMOLITION ROOF PLAN
A2.1 ROOF CONSTRUCTION PLAN
A3.1 ROOF DETAILS
A3.2 ROOF DETAILS



SITE LOCATION MAP

SET NUMBER

CODE INFORMATION

Date of Original Construction		1973	Renovation	1980
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1. GROUP CLASSIFICATION

(Primary)		<u>E</u>	
(Incidental)		<u>-</u>	

2. CONSTRUCTION TYPE (Chapter 6)

Minimum Type Required:		<u>2B</u>	
Actual Type Provided: (existing)		<u>2B</u>	
(new)		<u>-</u>	

3. BUILDING HEIGHT (Chapter 5)

Allowable Height (story/feet)		<u>2 STORIES/55 FEET</u>	
Actual Height (story/feet)		<u>1 STORIES/12'-8" - 22'-8"</u>	
(Stories Above Grade)		<u>1</u>	

4. BUILDING AREA (Chapter 5)

Building Area:			
(Total)	Existing Construction	23,306	s.f.
	New Construction		s.f.
	Total Floor	23,306	s.f.

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (Table 601)

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

13. SPRINKLER PROTECTION

	<u>X</u>	Entire Building
	<u>-</u>	None

14. CODES TO WHICH THIS PROJECT WAS DESIGNED

Dated:			
State Building Code w/Supplement		<u>2012 w/ 2016 Supplement</u>	
State Fire Code w/Supplement		<u>2012 w/ 2016 Supplement</u>	
State Health Code		<u>2017 w/current amendment</u>	
OSHA		<u>Current</u>	
Section 504		<u>Rehabilitation Act of 1973 and Americans With Disabilities Act of 1990 with all amendments</u>	
ADA		<u>2010</u>	
Other			

THE INTERNATIONAL EXISTING BUILDING CODE (IEBC)

CHAPTER 3: COMPLIANCE METHODS - Work Area Compliance Method per Section 3011.2

CHAPTER 3: Compliance Methods: Work Area Compliance Method per Section 3011.2

SECTION 503: CLASSIFICATION OF WORK -

Section 503 Alteration Level 1,

503.1 Scope refers to the removal and replacement or the covering of existing materials (roof replacement). The scope of work area is an Alteration Level 1

503.2 Application - Level 1 Alterations shall comply with the provisions of Chapter 7: Alterations - Level 1

The Alteration must comply with Chapter 7:

Section 701 General - In Particular Section 701.2 Conformance.

Section 706 Structural - In Particular Sections 706.1 General, Section 706.2 Addition or replacement of roofing or replacement of equipment and Section 706.3 Additional requirements for re-roof permits

Section 707 Energy Requirements In Particular Section 707.1 Minimum Requirements

By complying with the applicable requirements of Chapters 7 of the 2012 International Existing Building Code (IEBC) this alteration shall be considered in compliance.

15. THRESHOLD BUILDING CONDITIONS

	<u>-</u>	Yes	<u>X</u>	No
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16. BUILDING AREAS FOR GRANT CALCULATIONS (ENTIRE FACILITY)

EXISTING UNRENOVATED CONSTRUCTION	23,306	
EXISTING RENOVATED CONSTRUCTION	<u>0</u>	
EXISTING BEING DEMOLISHED	<u>(0)</u>	
TOTAL EXISTING CONSTRUCTION	23,306	
TOTAL NEW CONSTRUCTION	<u>0</u>	
TOTAL FACILITY	23,306	

WIND CODE DATA	
CLIMATE ZONE	5
RISK CATEGORY (per IBC TABLE 1604.5)	III
DESIGN WIND SPEED (per CT STATE BUILDING CODE)	135 mph
SURFACE ROUGHNESS CATEGORY (per IBC 1609.4.2)	B
IMPORTANCE FACTOR (I) (per ASCE 7, TABLE 7-4)	N/A

MEMBRANE ROOF SYSTEM <i>SEE SPECIFICATIONS FOR ROOF TYPE INFORMATION</i>	
INSULATION VALUES	
<u>MATERIAL</u>	<u>R VALUE</u>
OUTSIDE AIR	0.17
EPDM ROOF MEMBRANE (.090), FULLY ADHERED	0.5
1/2" HIGH DENSITY POLYISO COVER BOARD	2.5
4" RIGID ROOF INSULATION, MINIMUM	24.0
STEEL ROOF DECK	0
INSIDE AIR FILM	0.68
TOTAL ASSEMBLY CI PROVIDED	27.85
MIN. CI REQUIRED (per IECC C402.2)	25.0
ROOF ASSEMBLY TYPICAL SECTION	
.090 EPDM MEMBRANE ROOF; FULLY ADHERED 1/2" HIGH DENSITY COVERBOARD 4" MINIMUM POLYISO RIGID ROOF INSULATION EXISTING STEEL ROOF DECK	
DRAWING - NOT TO SCALE	

NOTES

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 PIPING, CABINETS TV BRACKETS AND RELATED ITEMS.

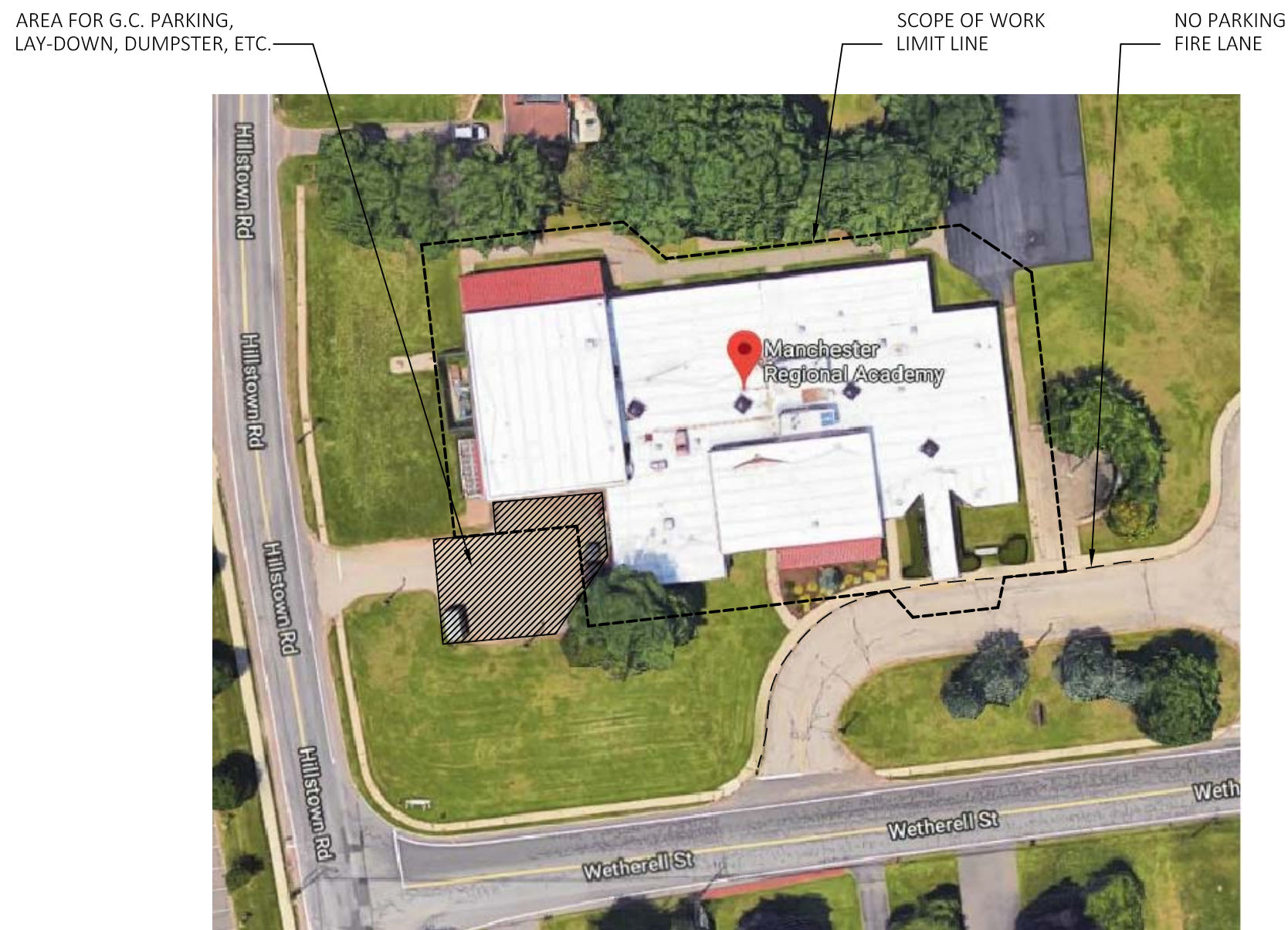
DEMOLITION NOTES

1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL NATIONAL, STATE, LOCAL CODES & ORDINANCES.
2. THE DEMOLITION 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 NOTED OTHERWISE. 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 NOTED OTHERWISE. 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.

HAZARDOUS MATERIAL NOTES

ALL DEMOLITION WORK IS TO BE PERFORMED IN ACCORDANCE WITH AN APPROVED ASBESTOS WORK PLAN FROM THE STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH, UNDER CONTAINMENT WITH A PRESSURE DIFFERENTIAL AND CONTIGUOUS DECONTAMINATION UNITS.

CURRENT AREAS HAVE BEEN TESTED AND HAVE NOT BEEN IDENTIFIED FOR ABATEMENT. ANY CHANGE IN PROJECT SCOPE WILL NEED TO BE INVESTIGATED BY THE OWNER'S ABATEMENT CONSULTANT PRIOR TO THE COMMENCEMENT OF WORK BY THE GENERAL CONTRACTOR.

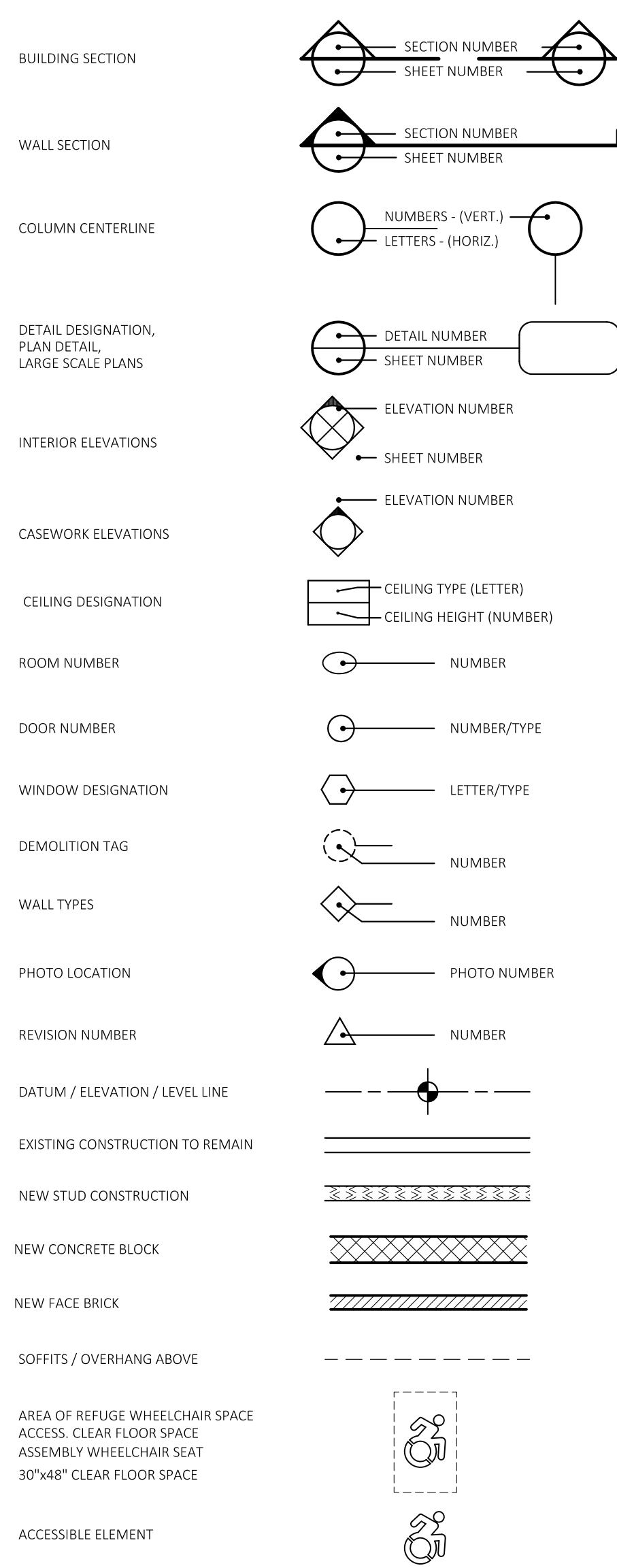


SITE LOGISTICS PLAN

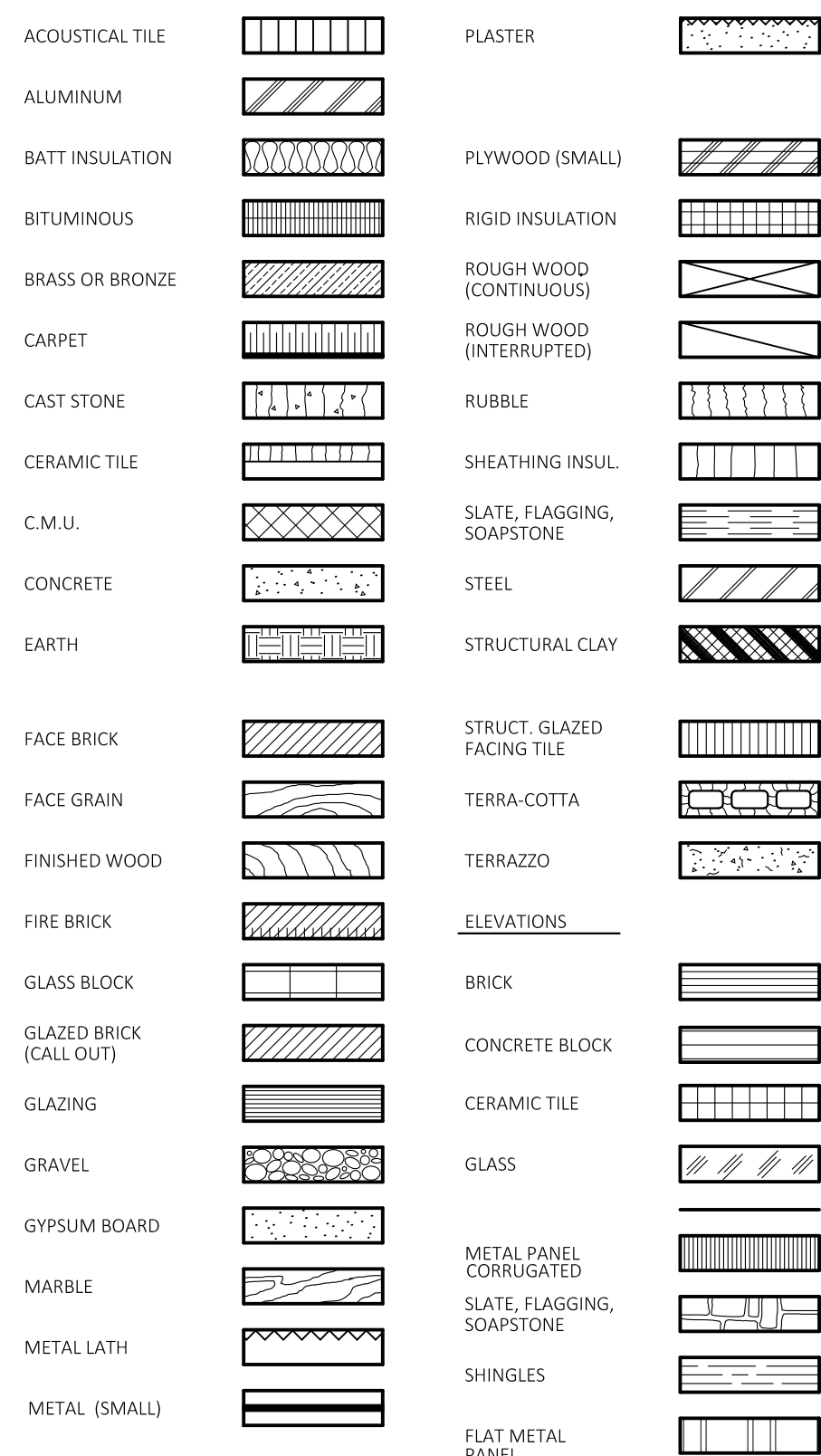
SCALE: N.T.S.

SYMBOLS LEGEND

ARCHITECTURAL SYMBOLS



ARCHITECTURAL MATERIALS



ABBREVIATIONS

ABOVE FINISH FLOOR	A.F.F.	MASONRY	MAS.
ABOVE FINISH GRADE	A.F.G.	MASONRY OPENING	M.O.
ACOUSTIC	AC.	MATERIAL	MATL.
ACOUSTIC TILE	A.C.T.	MAXIMUM	MAX.
AIR CONDITIONING	A.C.	MECHANICAL	MECH.
AIR HANDLING UNIT	A.H.U.	MET.	MET.
ALTERNATE	ALT.	MEZZANINE	MEZZ.
ALUMINUM	ALUM.	MINIMUM	MIN.
ANCHOR, ANCHORAGE	ANCH.	MISCELLANEOUS	MISC.
ANCHOR BOLTS	AB		
ANGLE	L		
ANODIZED	ANOD.	OFFICE	OFF.
APPROVED	APPD.	ON CENTER	O.C.
ARCHITECTURAL / ARCHITECT	ARCH.	OPPOSITE HAND	O.H.
ASBESTOS	ASB.		
ASPHALT	ASPH.	OPENING	OPG.
ASSEMBLY	ASSY.	OUTSIDE DIAMETER	O.D.
ASSISTANT	ASST		
AT	@		
AUTOMATIC	AUTO.	PAINTED	PTD.
BEAM	B.M.	PAIR	PR.
BEARING	BMG.	PAPER TOWEL DISPENSER	P.T.D.
BETWEEN	BET.	PERPENDICULAR	P.P.
BEVEL / BEVELED	BEV.	PLASTER	PLAS.
BITUMINOUS	BIT.	PLASTIC LAMINATE	PLIAM.
BLOCK	BLK.	PLATE	PL.
BLOCKING	BLKG.	PLUMBING	PLBG.
BOARD	BD		
BOTTOM OF	B/O	PLYWOOD	PLYWDD
BOTTOM	BOTT.	PRECAST	P.C.
BUILDING	BLDG.	PREFABRICATED	PREFAB.
BUILT-UP ROOF	B.U.R.	PROJECT, PROJECTION	PROJ.
		POINT	PT.
CABINET	CAB.	QUANTITY	QTY.
CABINET UNIT HEATER	C.U.H.	QUARRY TILE	Q.T.
CAPACITY	CAP.		
CEILING	CLG.		
CEILING HEIGHT	CLG. HGT.	RADIUS	RAD.
CEMENT	CEM.	RAIN WATER LEADER	RWL.
CENTER	CTR.	RECEIVING	RECV.
CENTERLINE	CL	REFRIGERATOR	REF.
CERAMIC	CT	REINFORCED / REINFORCING	REINF.
CHALKBOARD	C.B.D.	REQUIRED	REQD.
CHANNEL	CH.	REVISION, REVISED	REV.
CLOSET	CLOS.	RISER	R.
COLUMN	COL.	ROOF DRAIN	R.D.
CONFERENCE	CONF.	ROOM	RM.
CONTROL OR			
CONSTRUCTION JOINT	C.J.	SANITARY NAPKIN DISPENSER	S.N.D.
CONTINUOUS	CONT.	SANITARY NAPKIN RECEPTACLE	S.N.R.
CONTRACTOR	CONTR.	SCHEDULE	SCHED.
CORNDOR	CORR.	SCUPPER	SC.
COURSE / COURSES	CRS.	SECTION	SECT.
		SEISMIC JOINT	S.J.
DAMP-PROOFING	DAMP.R.	SERVICE SINK	S.S.
DEGREE	DEG.	SHEET	SHT.
DEMOLITION	DEMOQ.	SIMILAR	SIM.
DEPARTMENT	DEPT.	SOAP DISPENSER	S.D.
DETAIL	DET.	SOUND TRANSMISSION CLASS	S.T.C
DIAMETER	DIA.	SPECIFICATIONS	SPEC.
DIMENSION	DIM.	SPLASH BLOCK	S.B.
DISTANCE	DIST.	SQUARE	SQ.
DOOR	DR.	SQUARE INCH (S)	SQ.IN.
DOUBLE	DBL.	SQUARE YARD (S)	SQ.YD.
DOUBLE HUNG	D.H.	SQUARE FEET (FOOT)	S.F.
DOWN	DN.	STAINLESS STEEL	STL. STL.
DOWNSPOUT	D.S.	STANDARD	STD.
DRAWING	DWG.	STEEL	STL.
DRINKING FOUNTAIN	D.F.	STORAGE	STOR.
		STRUCTURAL	STRUCT.
EACH	EA.	STRUCTURAL GLAZED FACING TILE	SFGT.
ELECTRIC / ELECTRICAL	ELEC.	STRUCTURAL STEEL	STR.
ELECTRIC WATER COOLER	EW.C.	SUSPEND. SUSPENSION	SUSP.
ELEVATION	EL.	SURFACE	SURF.
ELEVATOR	ELEV.	SYSTEM	SYS.
EXISTING FIRE EXTINGUISHER	EXFE		
EMERGENCY	EMG.		
EQUAL	EQ.		
EQUIPMENT	EQUIP.		
EXISTING	EXIST.		
EXISTING TO REMAIN	ETR.	TACKBOARD	T.BD.
EXPANSION	E.P.	TELEPHONE	TEL.
EXPANSION JOINT	E.J.	TEMPERATURE/TEMPORARY	TEMP.
EXTERIOR	EXT.	TONGUE & GROOVE	T & G
EXTERIOR INSULATION		THRESHOLD	THLD.
FINISH SYSTEM	EIFS.	THICK	THK.
		TOILET	TLT
EQUIPMENT	EQUIP.	TOP OF	T/O
EXISTING	EXIST.	TREAD	T.
EXISTING TO REMAIN	ETR.	TYPICAL	TYP.
EXPANSION	EXP.		
EXPANSION JOINT	E.J.	UNDERWRITER'S LABORATORIES	U.L.
		UNIT HEATER	U.H.
FEET, FOOT	FT.	UNIT VENTILATOR	U.V.
FINISH, FINISHED	FIN.	UNLESS NOTED OTHERWISE	U.N.O.
FIRE DAMPER	FD.	URINAL	UR.
FIRE EXTINGUISHER	FE.		
FIRE RETARDANT	FR.	VENT THRU ROOF	V.T.R.
FIREPROOFING	FRFG.	VERIFY IN FIELD	V.I.F.
FIXTURE	FIXT.	VERTICAL	VERT.
FLASHING	FLASH.	VINYL ASBESTOS TILE	V.A.T.
FLOOR	FL.	VINYL COMPOSITION TILE	V.C.T.
FLOOR DRAIN	FD.	WATER CLOSET	W.C.
FLOOR FINISH	FLR. FIN.	WATERPROOFING	W.P.
FOOTING	FTG.	WELDED WIRE FABRIC	W.W.F.
FOUNDATION	FDN.	WEIGHT	WT.
FURNISH / FURNISHED	FURN.	WHITE BOARD	WB.
FURRED / FURRING	FURR.	WOOD	WD.

HANDRAIL	HR.
HANDICAPPED	H.C.
HEIGHT	HGT.
HIGH POINT	HP.
HOLLOW METAL	HR.
HORIZONTAL	HORIZ.
HOSE BIB	HB.
INCH OR INCHES	IN. OR "
INCLUDE / INCLUDING	INCL.
INFORMATION	INFO.
INSIDE DIAMETER	I.D.
INSULATION	INSUL.
INTERIOR	INT.
JOINT	JT.
KICKPLATE	KP.
LABORATORY	LAB.
LAVATORY	LAV.
LIGHTING	LTG.
MACHINE	MACH.
MAINTENANCE	MAINT.
MANUFACTURER	MFR.
MARKER BOARD	MBD.

DATE: 3.9.18
 DRAWN BY: LLB
 SCALE: NTS
 REVIEWED BY: RR
 PROJECT NO. 2017-031A

REVISIONS		
NO.	DATE	DESCRIPTION
	3/9/2018	BID APPROVAL
	5/18/2018	ISSUED FOR BID

CODE REFERENCE SHEET

STATE PROJECT NO. 077-0237 RR
MANCHESTER REGIONAL ACADEMY
ROOF REPLACEMENT
665 WETHERELL STREET
MANCHESTER, CONNECTICUT

ARCHITECT'S SEAL

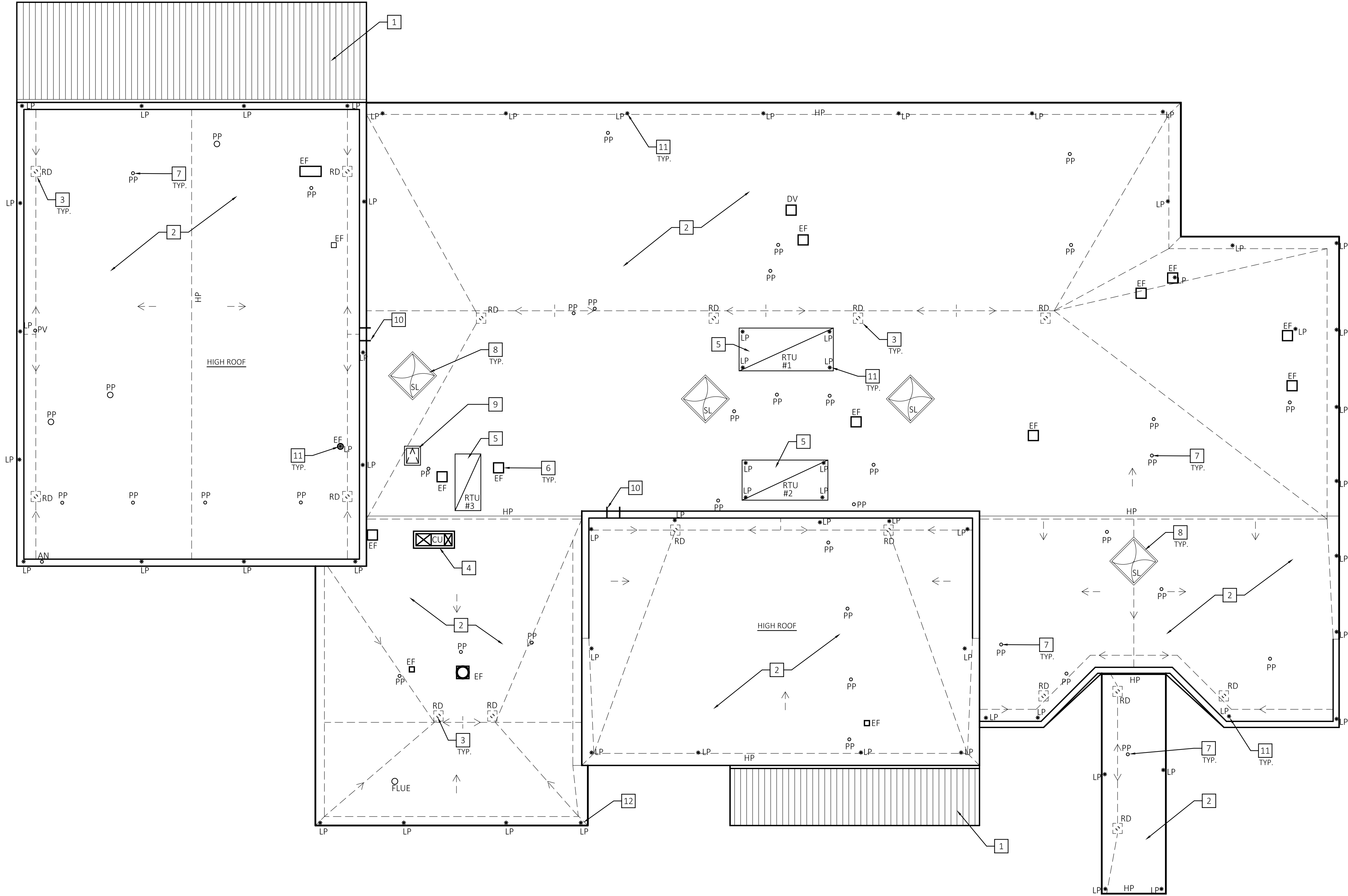


SHEET NO.
R1.1

ROOF LEGEND			
	NEW SINGLY PLY MEMBRANE ROOF SYSTEM		LP LIGHTNING PROTECTION TERMINAL
	ROOF CRICKET		RTU ROOF TOP UNIT
	ROOF SLOPE MIN. 1/4" PER FOOT, TYP.		CU CONDENSER UNIT
	COMBINATION MAIN ROOF & OVERFLOW DRAIN		DV DRYER VENT
	PRIMARY ROOF DRAIN		EF EXHAUST FAN
	SKYLIGHT W/ FALL PROTECTION GUARDS		PP PIPE/VENT PENETRATION
	ROOFTOP WALKWAY PADS		OFS OVERFLOW ROOF DRAIN THRU-WALL SCUPPER; REF: DETAILS
			OFP OVERFLOW ROOF DRAIN PIPING - PITCH 1/8" PER FOOT FROM DRAIN TO OVERFLOW SCUPPER
			HP HIGH POINT
			FLUE FLUE OR VENT STACK

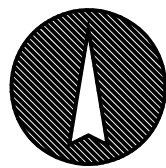
ROOF DEMO GENERAL NOTES	
A.	ALL EXISTING ROOF EQUIPMENT TO REMAIN, U.O.N.; REF: KEYNOTES FOR FURTHER INFORMATION
B.	ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL NATIONAL, STATE, LOCAL CODES & ORDINANCES
C.	CONTRACTOR IS RESPONSIBLE FOR REMOVAL & REINSTALLATION OF ALL MECHANICAL, PLUMBING AND ELECTRICAL ITEMS INDICATED ON DRAWINGS; ALL ELECTRICAL CONNECTIONS, POWER CONNECTIONS AND PLUMBING LINES SHALL REMAIN, BE REINSTALLED OR NEW CONNECTIONS INSTALLED FOR FULLY FUNCTIONING EQUIPMENT.
D.	THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL DEMOLITION WORK.
E.	ALL ITEMS SCHEDULED FOR DEMOLITION SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OF SITE ON A DAILY BASIS.
F.	CONTRACTOR MUST VERIFY LOCATIONS OF ALL EXISTING STRUCTURAL, MECHANICAL, PLUMBING & ELECTRICAL ELEMENTS PRIOR TO START OF DEMOLITION.
G.	CONTRACTOR TO VERIFY ALL ROOFTOP EQUIPMENT IS CURRENTLY FUNCTIONING BEFORE COMMENCEMENT OF WORK. CONTRACTOR TO NOTIFY THE OWNER OF ANY ABANDONED ROOF TOP EQUIPMENT.

ROOF DEMO KEY NOTES	
#	
1.	EXISTING METAL ROOF TO REMAIN
2.	DEMOLISH EXISTING ROOF CONSTRUCTION TO EXISTING ROOF DECK FOR INSTALLATION OF NEW ROOF SYSTEM, U.O.N.; ALL ASSOCIATED FLASHING AND COPINGS TO BE DEMOLISHED, TYP.
3.	EXISTING ROOF DRAINS TO BE DEMOLISHED AND EXISTING DRAIN PIPING TO REMAIN FOR RECONNECTION WITH NEW OVERFLOW DRAINS, TYP.
4.	EXISTING CONDENSER UNITS AND DUNNAGE TO REMAIN
5.	EXISTING ROOF TOP UNIT TO REMAIN, EXISTING CURB & FLASHING TO BE REMOVED AND REPLACED.
6.	EXISTING EXHAUST FAN TO BE REMOVED AND SALVAGED FOR REINSTALLATION; EXISTING CURB AND ASSOCIATED FRAMING TO BE REMOVED TO DECK; TO BE REPLACED WITH NEW CURB, TYP.
7.	EXISTING PLUMBING VENTS AND PIPE PENETRATIONS TO REMAIN AND ASSOCIATED FLASHING TO BE REMOVED FOR INSTALLATION OF NEW FLASHING, TYP.; EXTEND VENTS AS REQUIRED
8.	EXISTING SKYLIGHTS AND CAGES TO REMAIN AND TO BE PROTECTED DURING CONSTRUCTION; NEW ROOFING AND SKYLIGHT CURB FLASHING TO BE INSTALLED PER DETAIL 10/A3.1
9.	EXISTING ROOF HATCH TO REMAIN; EXISTING FLASHING & CURB TO BE REMOVED TO DECK; NEW FLASHING & CURB TO BE INSTALLED
10.	EXISTING ROOF LADDER TO BE REMOVED AND STORED FOR REINSTALLATION AFTER ROOF CONSTRUCTION; PROVIDE NEW FASTENERS FOR INSTALLATION, TYP.
11.	EXISTING LIGHTNING PROTECTION SYSTEM TO BE REMOVED, SALVAGED AND TURNED OVER TO OWNER. PATCH ALL HOLES IN EIFS AND MASONRY AS REQUIRED.
12.	LIGHTNING PROTECTION GROUND WIRE ATTACHED TO OVERHEAD LINE, V.I.F.



DEMOLITION ROOF PLAN

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



DATE:	3.9.18
DRAWN BY:	LLB
SCALE:	AS NOTED
REVIEWED BY:	RR
PROJECT NO.	2017-031A

REVISIONS	
NO.	DESCRIPTION
1	3/9/2018 BID APPROVAL
2	5/18/2018 ISSUED FOR BID

DEMOLITION

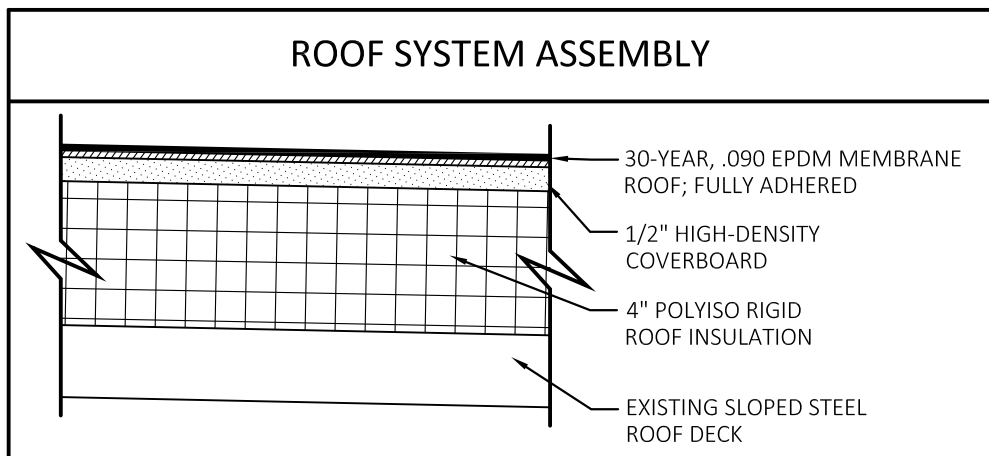
ROOF PLAN

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ARCHITECT'S SEAL



SHEET NO.
A1.1



ROOF SYSTEM	
MATERIAL	R VALUE
OUTSIDE AIR	0.17
EPDM ROOF MEMBRANE (.090), FULLY ADHERED	0.5
1/2" HIGH DENSITY POLYISO COVER BOARD	2.5
4" RIGID ROOF INSULATION, AVERAGE MIN	24.0
STEEL ROOF DECK	0
INSIDE AIR FILM	0.68
TOTAL INSULATING MATERIAL	24.0
TOTAL ASSEMBLY CI PROVIDED	27.85
MIN. CI REQUIRED (per IECC C402.2)	25.0

WIND CODE DATA	
CLIMATE ZONE	5
RISK CATEGORY (per IBC TABLE 1604.5)	III
DESIGN WIND SPEED (per CT STATE BUILDING CODE)	135 mph
SURFACE ROUGHNESS CATEGORY (per IBC 1609.4.2)	B
IMPORTANCE FACTOR (I) (per ASCE 7, TABLE 7-4)	N/A

APPLICABLE CODES	
2016 CONNECTICUT STATE BUILDING CODE	
BUILDING	2012 INTERNATIONAL BUILDING CODE WITH CONNECTICUT STATE AMENDMENTS
FIRE SAFETY	2016 CONNECTICUT STATE FIRE SAFETY CODE
ACCESSIBILITY	ICC/ANSI A117.1, 2009 WITH CONNECTICUT STATE AMENDMENTS
PLUMBING	2012 INTERNATIONAL PLUMBING CODE WITH CONNECTICUT STATE AMENDMENTS
MECHANICAL	2012 INTERNATIONAL MECHANICAL CODE WITH CONNECTICUT STATE AMENDMENTS
ENERGY	2012 INT'L ENERGY CONSERVATION CODE WITH CONNECTICUT STATE AMENDMENTS
ELECTRICAL	2014 NFPA 70, NAT'L ELECTRICAL CODE WITH CONNECTICUT STATE AMENDMENTS
EXISTING	2012 INT'L EXISTING BUILDING CODE WITH CONNECTICUT STATE AMENDMENTS

CHAPTER 3: COMPLIANCE METHODS: WORK AREA COMPLIANCE METHOD PER SECTION 301.1.2

CHAPTER 5: CLASSIFICATION OF WORK: SECTION 503, ALTERATION LEVEL 1
503.1 SCOPE REFERS TO THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS (ROOF REPLACEMENT). THE SCOPE OF WORK AREA IS AN ALTERATION LEVEL 1

503.2 APPLICATION - LEVEL 1 ALTERATIONS SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 7: ALTERATIONS - LEVEL 1

THE INTERNATIONAL EXISTING BUILDING CODE (IEBC)

SECTION 701 GENERAL - IN PARTICULAR SECTION 701.2 CONFORMANCE.

SECTION 706 STRUCTURAL - IN PARTICULAR SECTIONS 706.1 GENERAL, SECTION 706.2 ADDITION OR REPLACEMENT OF ROOFING OR REPLACEMENT OF EQUIPMENT AND SECTION 706.3 ADDITIONAL REQUIREMENTS FOR RE-ROOF PERMITS

SECTION 707 ENERGY REQUIREMENTS IN PARTICULAR SECTION 707.1 MINIMUM REQUIREMENTS

BY COMPLYING WITH THE APPLICABLE REQUIREMENTS OF CHAPTERS 7 OF THE 2012 INTERNATIONAL EXISTING BUILDING CODE (IEBC) THIS ALTERATION SHALL BE CONSIDERED IN COMPLIANCE.

EXISTING BUILDING INFORMATION

Date of Original Construction 1980 Renovations 1

1. GROUP CLASSIFICATION
(Primary) E, EDUCATIONAL
(Primary)
(Primary)

2. CONSTRUCTION TYPE
Actual Type Provided 2B
New Construction None

3. WORK AREA
(WORK AREA) Existing Roof Area to be Replaced 22,311 s.f.

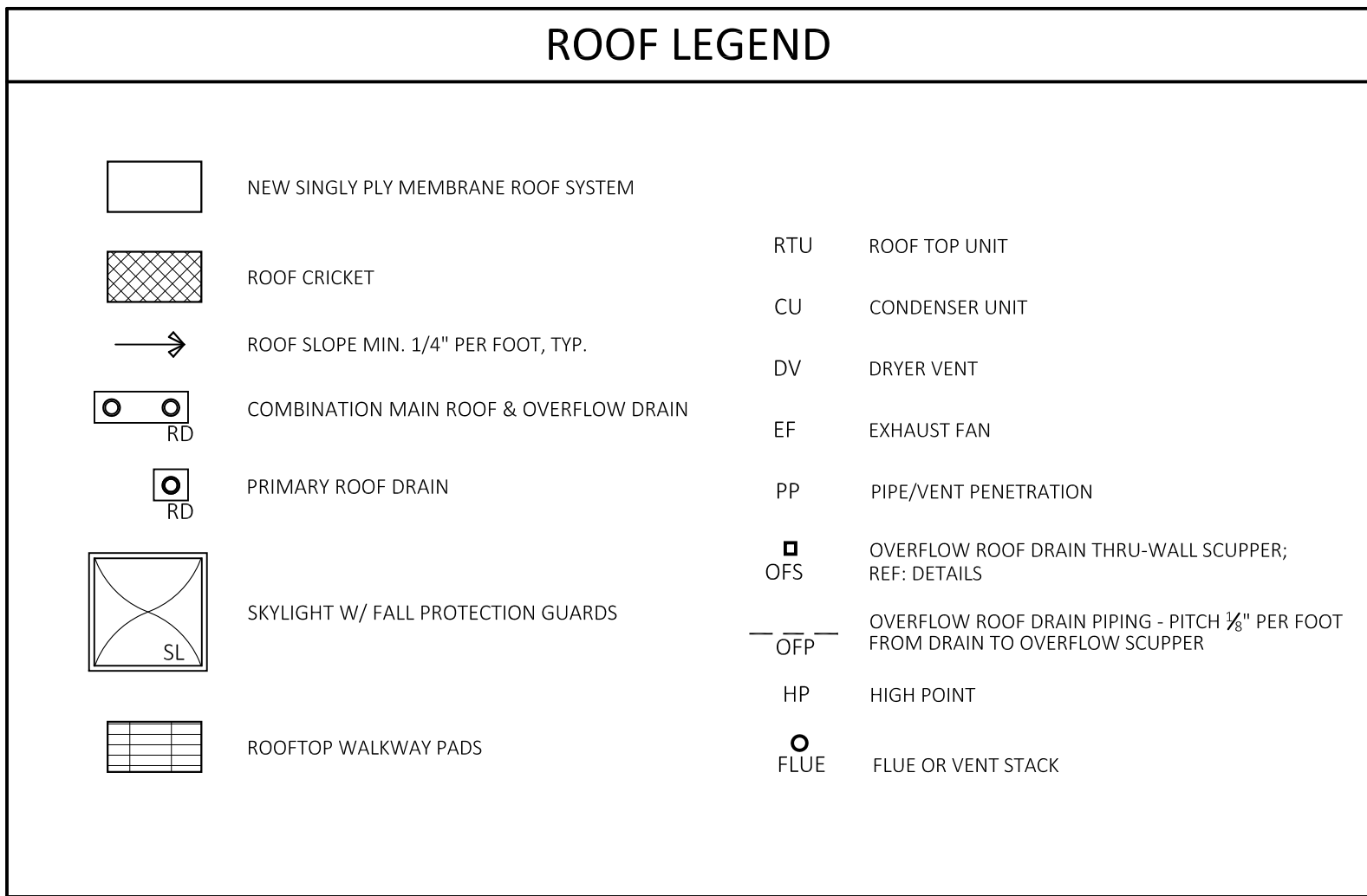
4. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (Table 601) 2B

Primary structural frame	0 Hr(s)
Bearing walls:	
Exterior	0 Hr(s) See Table 602
Interior	0 Hr(s)
Nonbearing walls and partitions (Exterior)	- Hr(s) See Table 602
Nonbearing walls and partitions (Interior)	0 Hr(s)

Floor Construction and associated secondary members	0 Hr(s)
Roof Construction and associated secondary members	0 Hr(s)

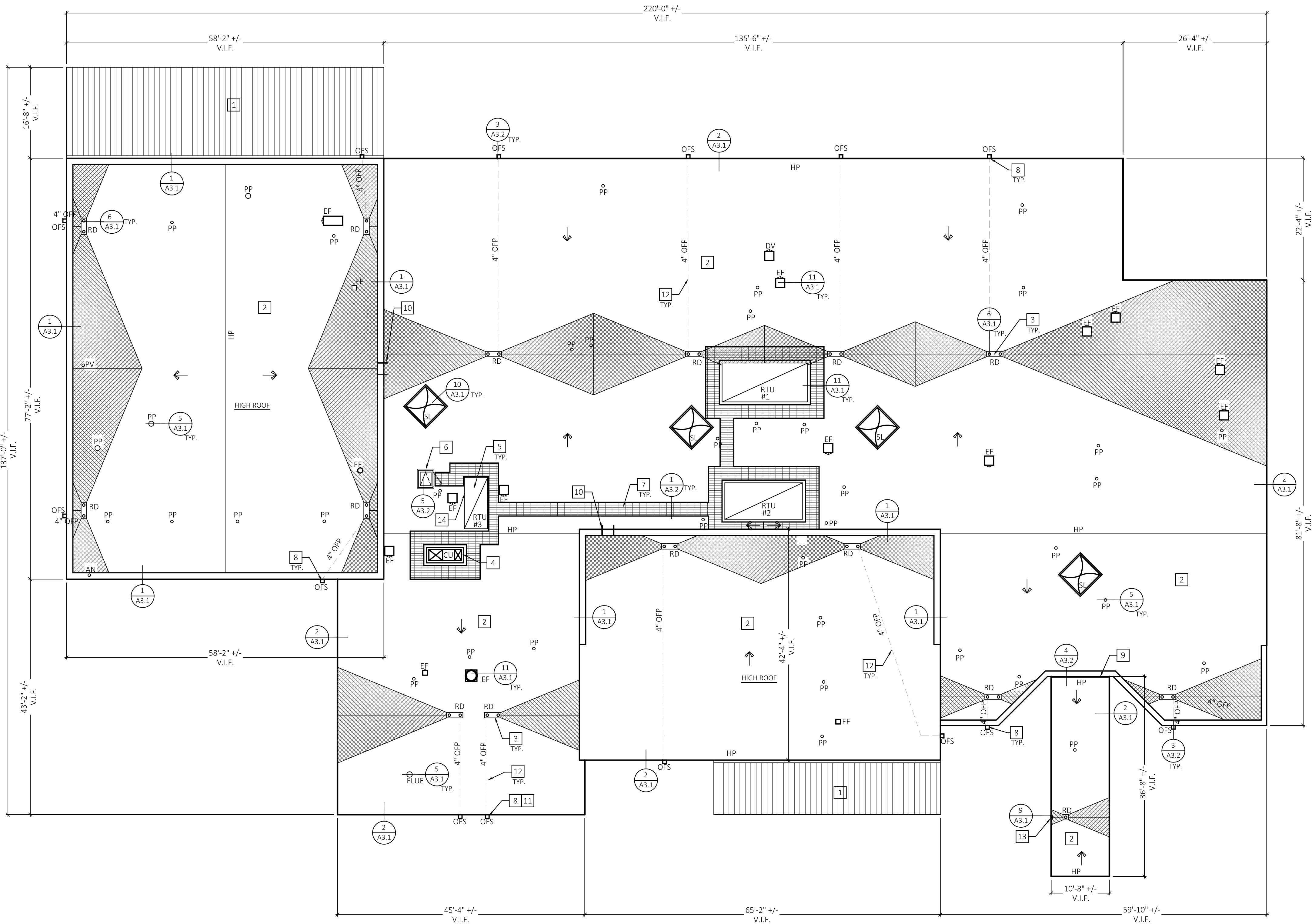
Refer to Table 601 for all footnotes

5. SPRINKLER PROTECTION X None Provided



- ROOF PLAN KEY NOTES
- EXISTING METAL ROOF TO REMAIN
 - NEW SINGLE PLY MEMBRANE ROOF SYSTEM, WITH NEW CRICKETS, FLASHING, COPINGS & EQUIPMENT CURBS AS INDICATED ON PLAN AND IN DETAILS
 - NEW OVERFLOW DRAINS AT EXISTING LOCATIONS
 - EXISTING CONDENSER UNITS AND DUNNAGE TO REMAIN; PROVIDE FLASHING PER TYP. PIPE PENETRATION DETAIL; REF: 5/A3.1
 - EXISTING ROOF TOP UNIT TO BE REINSTALLED OVER NEW SLEEPERS
 - EXISTING ROOF HATCH WITH NEW GALVANIZED STEEL SAFETY RAILING AND POSTS WITH SELF CLOSING GATE; MOUNTED TO ROOF HATCH CURB
 - NEW ROOF WALKWAY PADS AS INDICATED ON PLAN
 - NEW THROUGH WALL OVERFLOW SCUPPER
 - NEW COMPRESSIBLE TUBE AND INSULATION EXISTING 1" BUILDING EXPANSION JOINT;
 - EXISTING ACCESS LADDER TO BE CLEANED, PREPPED AND PAINTED AS REQUIRED.
 - COORDINATE SCUPPER WITH EXISTING LOUVER AND WALL VENT, THIS LOCATION
 - NEW OVERFLOW ROOF DRAIN PIPING SHOWN AT APPROXIMATE LOCATIONS, EXACT LOCATIONS TO BE COORDINATED IN FIELD; WHERE PIPING PENETRATES FIRE RATED WALLS, FIRE RATING TO BE MAINTAINED PER DETAIL 6/A3.2. PROVIDE MIN PITCH OF 1/8" PER FOOT FROM DRAIN TO OVERFLOW SCUPPER, TYP.
 - PROVIDE SCUPPER AT ROOF EDGE AT LOCATION INDICATED TO ALLOW FOR OVERFLOW DRAINAGE
 - REPLACE ALL PITCH POCKETS PENETRATIONS, TYP.; REF: DETAIL 8/A3.1

- ROOF CONSTRUCTION GENERAL NOTES
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES AND ORDINANCES.
 - DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION OF DIMENSIONS FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
 - 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.
 - 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.
 - 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 WITH LIKE MATERIALS.
 - THE EXISTING CONDITION OF THE BUILDING INTERIOR, EXTERIOR AND SITE SHALL NOT BE COMPROMISED DURING & AFTER THE PROJECT COMPLETION DUE TO THE CONSTRUCTION PROCESS AND/OR ANY ASSOCIATED ACTIVITY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE EXISTING MECHANICAL, ELECTRICAL & PLUMBING PIPING, CONDUIT, DUCTWORK ETC. DUE TO THE ROOF DEMOLITION AND CONSTRUCTION PROCESS.
 - INSULATE ALL NEW OVERFLOW ROOF DRAIN PIPING FROM ROOF DRAIN TO EXTERIOR WALL CONSTRUCTION, TYPICAL. INSULATE ALL EXISTING & NEW MAIN ROOF DRAIN PIPING AT NEW ROOF DRAIN, TYPICAL.
 - ALL NEW OVERFLOW ROOF DRAIN PIPING TO BE PLASTIC PIPING (PVC) - REFER TO SPECIFICATIONS.



ROOF CONSTRUCTION PLAN

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



DATE: 3.9.18
DRAWN BY: LLB
SCALE: AS NOTED
REVIEWED BY: RR
PROJECT NO. 2017-031A

REVISIONS	
NO.	DESCRIPTION
1	3/9/2018 BID APPROVAL
2	5/15/2018 ISSUED FOR BID

ROOF CONSTRUCTION PLAN

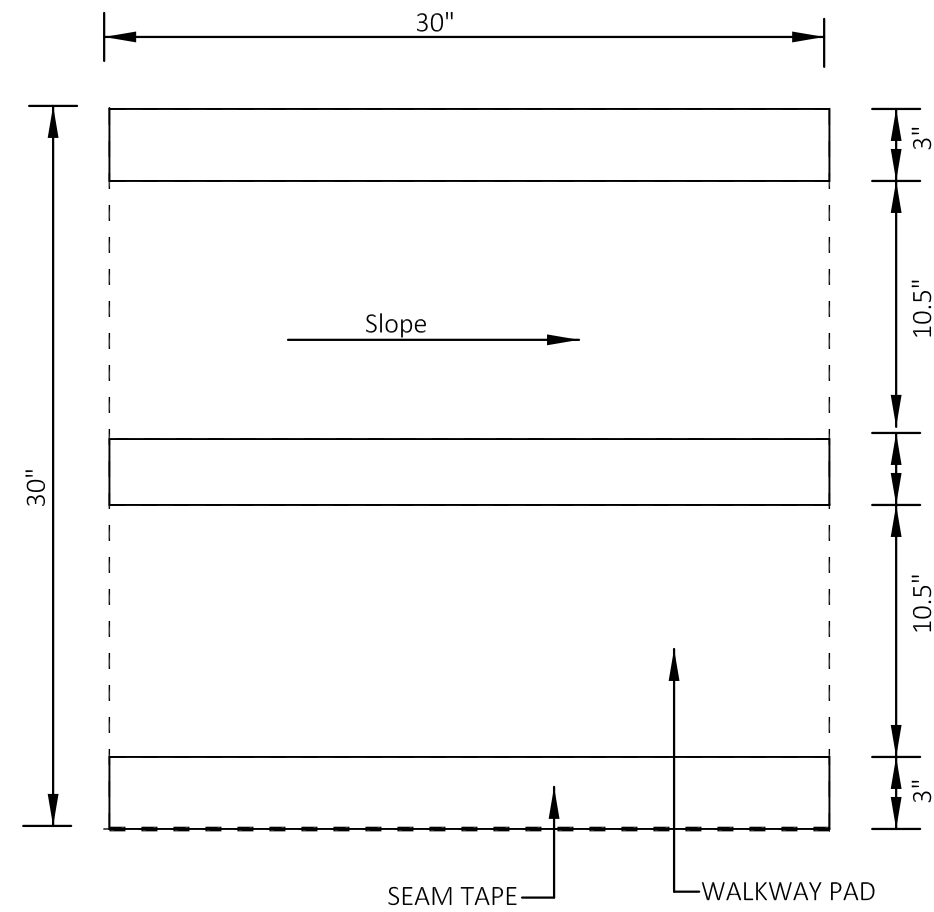
STATE PROJECT NO. 077-0237 RR
MANCHESTER REGIONAL ACADEMY
ROOF REPLACEMENT
665 WETHERELL STREET
MANCHESTER, CONNECTICUT

ARCHITECT'S SEAL

ARCHITECT'S SEAL

FRIAR
21 Talcott Notch Road
Farmington, CT 06032

SHEET NO.
A2.1

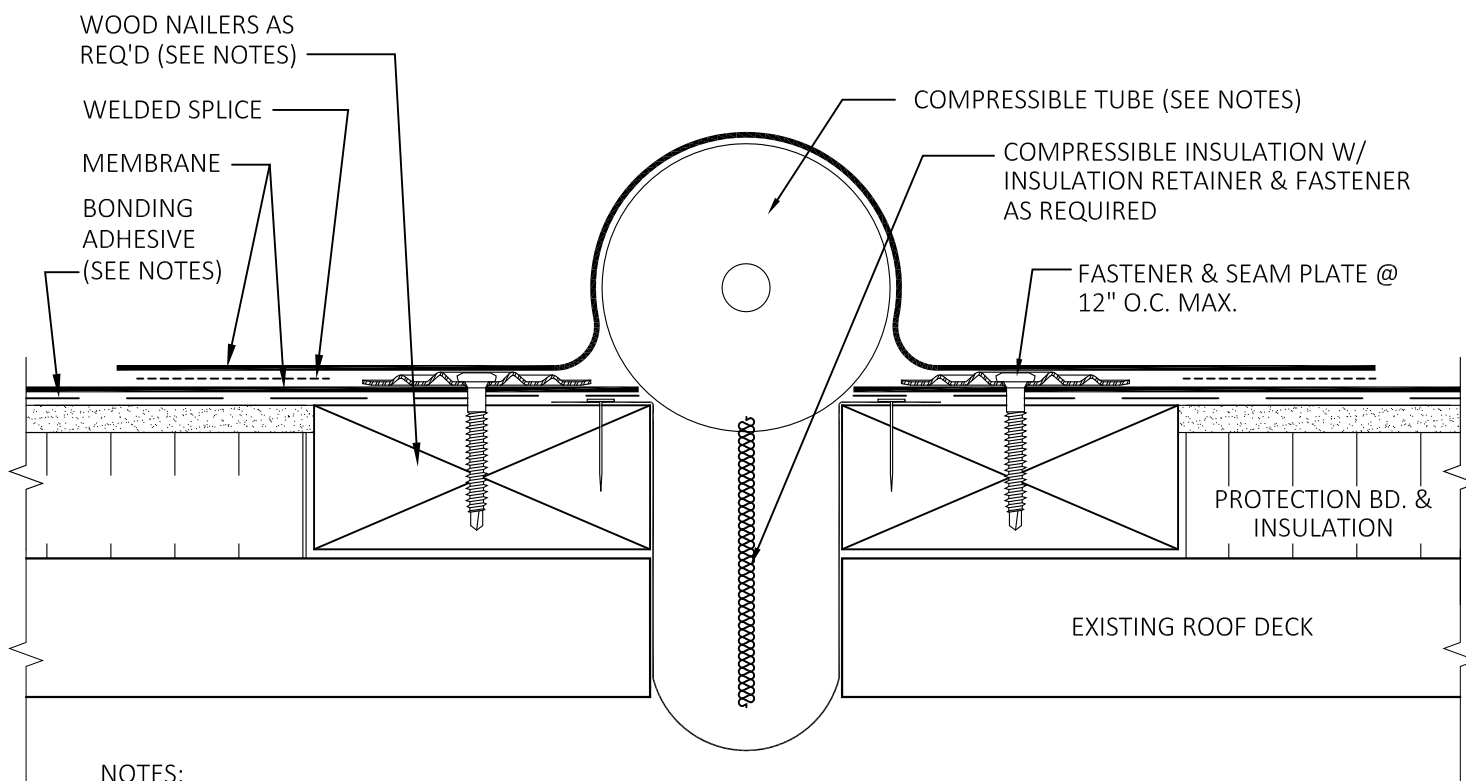


- NOTES:
1. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ROOF WALKWAY ATTACHMENT REQUIREMENTS.
 2. REFER TO ROOF PLAN FOR THE EXTENT OF WALKWAY PAD SIZE ACCORDINGLY AND ATTACH PER MANUFACTURER'S INSTRUCTIONS.

1 WALKWAY PAD DETAIL
SCALE: NTS

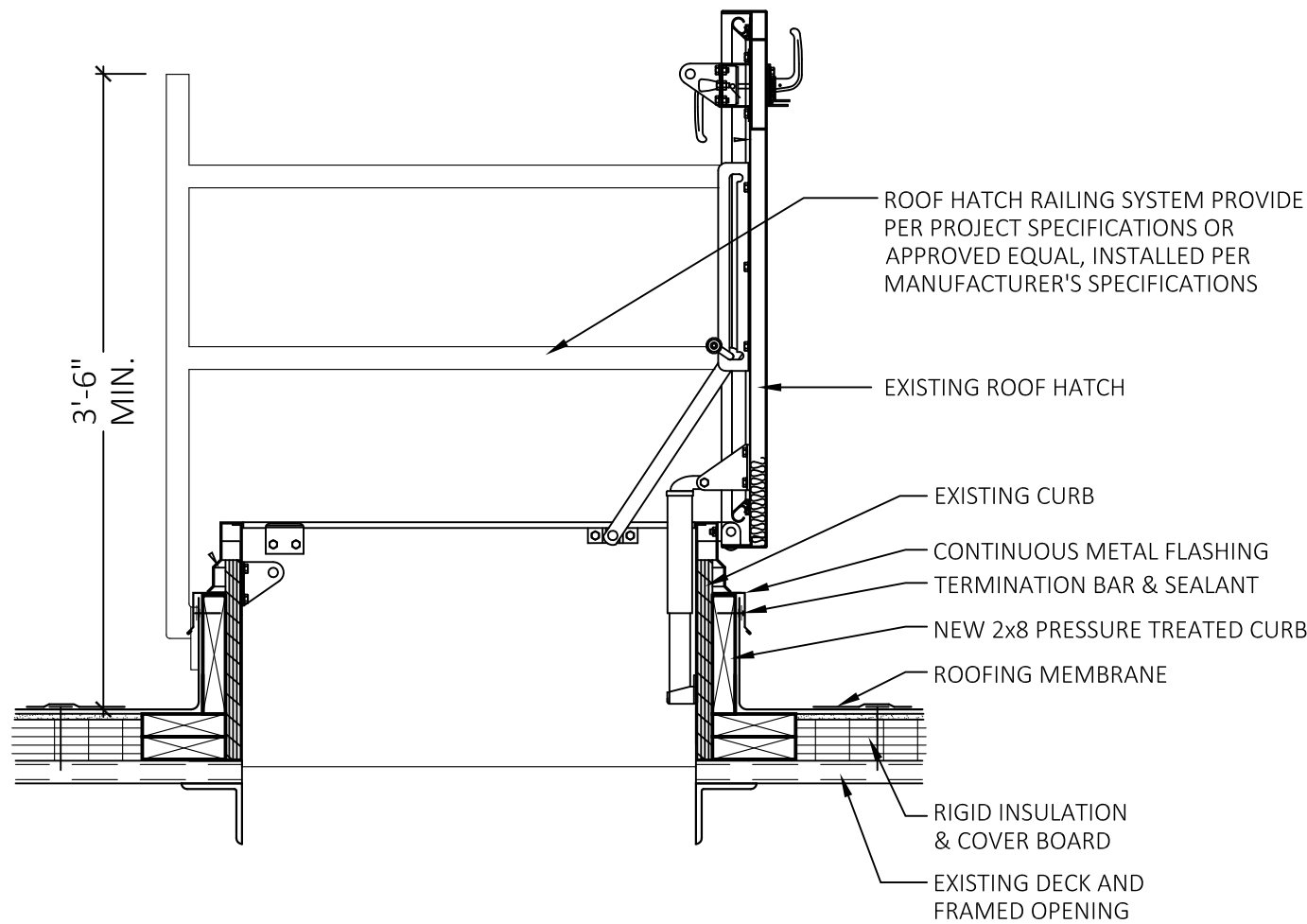
2 NOT USED
SCALE: NTS

3 THROUGH WALL SCUPPER
SCALE: NTS

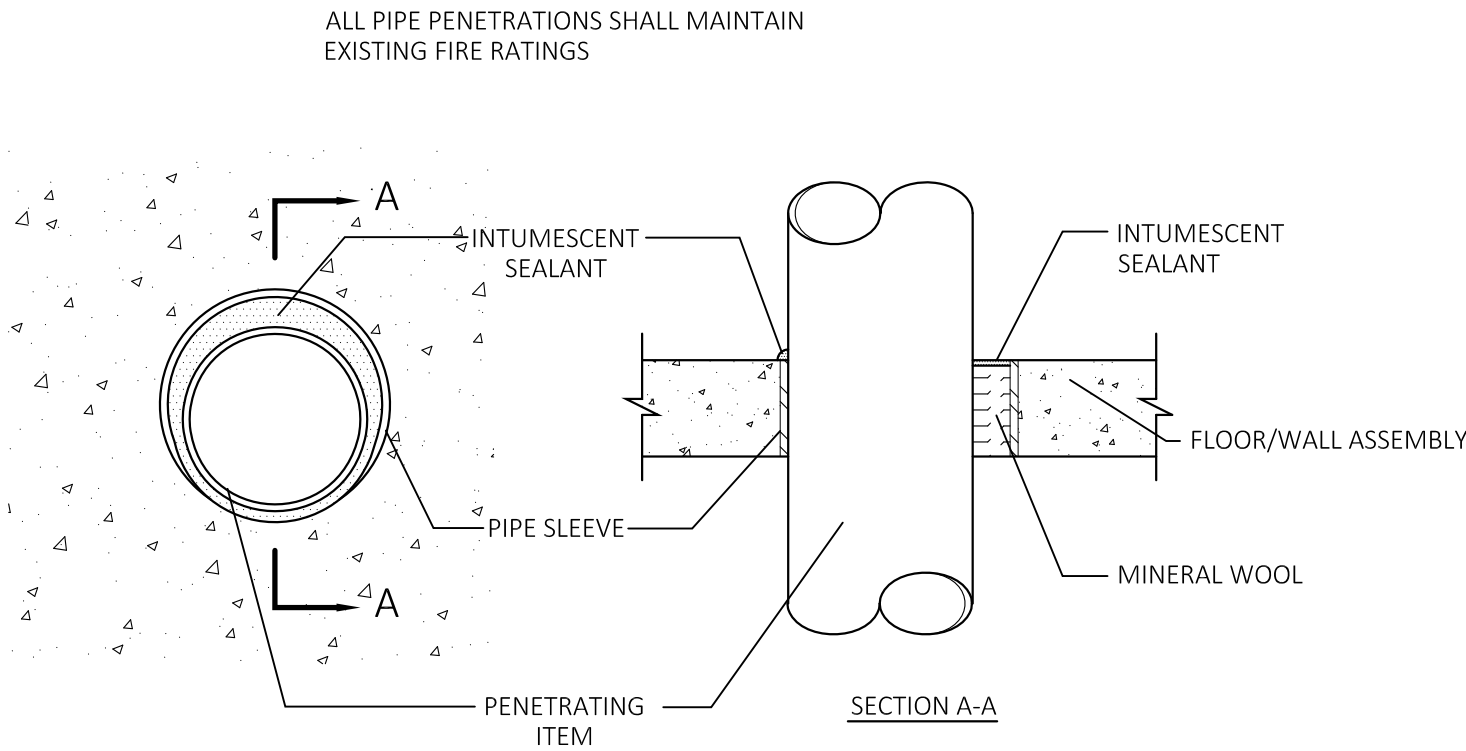


- NOTES:
1. COMPRESSIBLE TUBE DIAMETER MUST EXCEED THE DECK OPENING BY 50% MIN. OR DESIGNED MOVEMENT (WHICHEVER IS GREATER).
 2. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS PER LINEAR FOOT MINIMUM IN ANY GIVEN DIRECTION.
 3. BONDING ADHESIVE REQUIRED BETWEEN MEMBRANE AND INSULATION FOR FULLY ADHERED SYSTEMS.

4 EXPANSION JOINT
SCALE: NTS



5 ROOF HATCH RAILING
SCALE: NTS



6 METAL PIPE THROUGH A SLEEVE IN CONC. FLOOR/WALL
SCALE: NTS

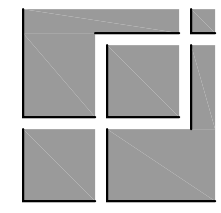
DATE:	3.9.18
DRAWN BY:	LLB
SCALE:	AS NOTED
REVIEWED BY:	PH
PROJECT NO.	2017-031A

NO.	DATE	DESCRIPTION
	3/9/2018	BID APPROVAL
	5/18/2018	ISSUED FOR BID

ROOF DETAILS

STATE PROJECT NO. 077-0237 RR
MANCHESTER REGIONAL ACADEMY
ROOF REPLACEMENT
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MANCHESTER, CONNECTICUT

ARCHITECT'S SEAL



FRIAR
21 Talcott Notch Road
Farmington, CT 06032

SHEET NO.
A3.2