

ADDENDUM NO.: 3

DATE OF ADDENDUM: December 2, 2015

**ROOF REPLACEMENT AND MECHANICAL IMPROVEMENTS  
WINDHAM TECHNICAL HIGH SCHOOL  
210 BIRCH STREET  
WILLIMANTIC, CT  
BI – RT – 862**

Original Bid Due Date / Time:

December 9, 2015

1:00PM

Previous Addendums: Addendum 1 dated November 12, 2015, Addendum 2 dated November 20, 2015

**TO: Prospective Bid Proposers:**

This Addendum forms part of the "Contract Documents" and modifies or clarifies the original "Contract Documents" for this Project dated 9/21/2015. Prospective Bid Proposers shall acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form. Failure to do may subject Bid Proposers to disqualification.

The following clarifications are applicable to drawings and specifications for the project referenced above.

**Item 1 – RFI's**

1. What does the # indicate after WS-C (Water-Stained Ceiling)? Number of tiles? Square feet. Please advise.

**Gale response:** The # symbol indicates a numerical identifier of the existing interior ceiling stains observed. The symbol does not indicate a quantity. The WS-C symbols indicates a general location of the defect observed. The defect tracks current water infiltration issues and is intended as information only.

2. Will the actual building permit be waived? Or are we to carry the cost? Please advise.

**Gale response:** A building permit is not required. Local permits are not required since this is a State of CT project. Per Specification 00 72 13, Article 18.2, the "Contractor shall obtain and pay for permits and licenses necessary for the execution of the Work and the occupancy and use of the completed Work."

3. Spec section 07 51 00, 2.01 A-1. Acceptable manufacturers and products, has Sarnafil listed as an 80 mil while all other manufacturers are listed as a 60 mil? Is the 80 mil a typo? What thickness are you looking for? Please advise.

**Gale response:** The Sarnafil G410 PVC membrane specified for 80 mils is correct. The other membranes specified are either a KEE-PVC blend or a TPA roof membrane. Therefore a higher mil PVC membrane was specified.

4. Please provide the manufacturer and point of contact for the HVAC controls system currently in the building.

**RZ response:** There are multiple control systems in the facility including pneumatic, electronic and an old Novar ddc system. These systems do not relate to the new work specified. Refer to the specifications for the acceptable manufacturers.

5. Can a self-adhered vapor retarder be used at the gypsum, metal, and concrete deck areas in lieu of the (1) ply in hot asphalt?

**Gale response:** Substitutions will not be made without proper documentation as specified. Submitted bids shall reflect the Contract Documents.

6. Are the low flashing heights (LFH) existing conditions or anticipated flashing heights?

**Gale response:** The LFH designations are at existing locations and is provided for coordinating information only. Per the details, the low flashing heights at through-wall flashings are being raised.

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7. Are all of the skylights at roof area "J" to be removed and infilled? Or are some to remain? (notes are confusing, some have an (A) in them, some have (S)).

**Gale response:** All of the skylights on Roof Area J are to be removed and infilled. This is noted on A106, keynote #3. Skylights marked 'A' or 'S' are to be removed, the deck infilled, and then roofed over.

8. Is there a chance of extending the bid date?

**Gale response:** Per discussion with DCS, the bids will not be extended.

9. There appears to be a discrepancy regarding the pitch of the tapered insulation. Page 075100 Paragraph 2.02/A/2 specifies a minimum 1/4" / ft pitch. However, G104 shows most roofs only getting 1/8" / ft. Are all roofs required to have 1/4" / ft, or do the pitches shown on G104 govern?

**Gale response:** The referenced specification notes the 'tapered insulation shall be as required to provide a minimum of 1/4" per foot roof slope. Coordinate tapered insulation slope requirements with structural deck slope, the deck type plan and the conceptual tapered insulation plan.'

The Roof Deck Comparison Chart on G103 indicates which existing roof decks have zero slope, 1/8", and 1/4" structural deck slope. The Tapered Insulation column on the chart and the corresponding Conceptual Tapered Insulation Plan on G104 were developed based on the existing structural deck slopes to provide a minimum of 1/4" per foot deck slope for the final installations.

Per 07 51 00-1.03-F, the Contractor shall 'Perform a survey of the existing top of deck to coordinate existing slope with proposed tapered insulation plan.' The survey shall be developed in tandem with the tapered insulation shop drawings to provide the specified 1/4" per foot roof slope.

#### Item 2 – Schedule

- A. Revise G105 – Site and Phase Plan as follows:

During the time that school is not in session for the summer of 2016, the scope of work on the following roof areas must be substantially completed:

- Area C
- Area H
- Area I
- Area J
- Area M
- Area P
- Area Q

The following roof areas can be completed anytime during the 214 day contract duration:

- Area A
- Area B
- Area D
- Area E
- Area F
- Area G
- Area K
- Area L
- Area N
- Area O
- Area R
- Area S

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- B. Sheet note #3 references a utility project by others. The information regarding that project is not currently available but is anticipated to be distributed to the awarded contractor. The Contractor and the Utility Contractor are to coordinate schedules as required for the work to be completed on each project.

**Item 3 – Wind Uplift Tests**

- A. In specification 07 51 00, Article 1.09-C, ADD Paragraph C.3 as follows:

- C.3 The Contractor shall pay for roof system testing per FM 1-52. Acceptance of applicable new above deck roofing assemblies by FM Global is achieved by satisfactory completion of an uplift test. Contractor should be present during testing to make watertight any destructive test areas. See excerpt of Table 2 below for required number of tests per Roof Area. Tests are to be performed at each roof area at the Windham Technical High School.

*Table 2. Minimum Number of Tests*

**Roof Area (A, ft<sup>2</sup> or m<sup>2</sup>) Minimum No. of Tests**

A ≤ 10,000 (1,000) 3 (1 F, 1 P, 1 C)

10,000 (1,000) < A ≤ 60,000 (6,000) 5 (2 F, 2 P, 1 C)

A > 60,000 (6,000) or multiple adjoining roof areas See Section 2.1.1.9 and Figure 1  
Where F = field of roof. P = perimeter of roof. C = corner of roof

**Item 4 – Roof Area J Roof Hatch**

- A. In specification 05 50 00, ADD Article 2.08 as follows:

2.08 NEW ROOF ACCESS SHIP LADDER

- A. General: Ladder design shall be a delegated design system that is designed to provide a minimum tread load of 350 pounds. The ladder shall fit within the existing skylight space between the new roof joists at a width no less than 36" clear between the stringers and at an angle of 75 deg.
- B. Steel components: ASTM A36, Grade 36; hot-dip galvanized in conformance with ASTM A123/A. Thickness of the galvanized coating shall be 3.9 mils with a weight of 2.3 oz/ft<sup>2</sup>.
- C. Stringers shall be a minimum C6 profile of a depth as required to comply with the structural calculations.
- D. Ladder treads shall be 6" wide by 1-3/4" deep with a channel shaped section and corrugated surfaces. Equally space treads but no more than 12" apart vertically. Connect treads to stringers with bolts to allow for future replacement.
- E. Handrails shall be hot dipped galvanized Schedule 40 steel tubing connected to the top of the ladder stringer with vertical posts spaced at no more than 30" on center. Handrails shall be designed to resist a lateral force of 200 pounds.
- F. Provide supplemental steel vertical supports down to the floor slab if required by the structural design.
- G. Anchor the ladder to the floor slab and to the supplemental roof steel for the new roof hatch. Anchors shall be included in the delegated design.
- B. On drawing A1.06, REVISE Partial Roof Area Plan – Roof Area J per SK-1.

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**Item 5 – Operable Windows**

- A. In specification 08 41 00 , Article 2.02, ADD paragraph B.2 as follows:
  - B.2 Operable units shall meet or exceed designation AW-PG80-FW.
- B. In specification 08 41 00, Article 2.03, ADD paragraph A.2 as follows:
  - A.2 Operable Aluminum Window
    - a. Basis of Design: Traco 2400 Projected Flush Project In
- C. On drawing A204, REVISE Partial West Clerestory Elevations per SK-2.
- D. On drawing A602, REVISE Window Schedules per SK-3.

**Item 6 – Masonry Rebuilding**

- A. Contractor shall include masonry rebuilding on the West Clerestory Elevation above Roof Area J. On drawing A204, REVISE Partial West Clerestory Elevations per SK-2.

**Item 7 – Roof Area M**

- A. On drawing A1.01, REVISE Partial Roof Area Plan – Roof Areas A, B, N, and M per SK-4.
- B. On drawing S103, REVISE Partial Framing Plan – Area M per SK-5.

**Item 8 – Roof Area A – Roof Access Door**

- A. In specification 08 10 00, REVISE Article 2.01 – B.1 as follows:
  - Penthouse Roof Area A: 48" x 84"
- B. On drawing A500, REVISE Detail 6 – Penthouse Roof Access Door Relocation per SK-6.

**Item 9 – Mechanical**

- A. On drawing M600, REVISE Roof Top Unit Schedule as follows:
  - a. Note #1 – Delete reference to 2-stage natural gas burner
  - b. Note #2 – Delete reference to natural gas
  - c. Delete note #5 in its entirety
  - d. Note #8 – Deleted reference to factory installed VFD

All questions must be in writing (not phone or e-mail) and must be forwarded to the consulting Architect/Engineer (Marc Loranger, PE, Gale Associates, Inc., 860.430.9072) with copies sent to the DCS Project Manager (Steven Longo, 860.713.7261).

**End of Addendum 3**

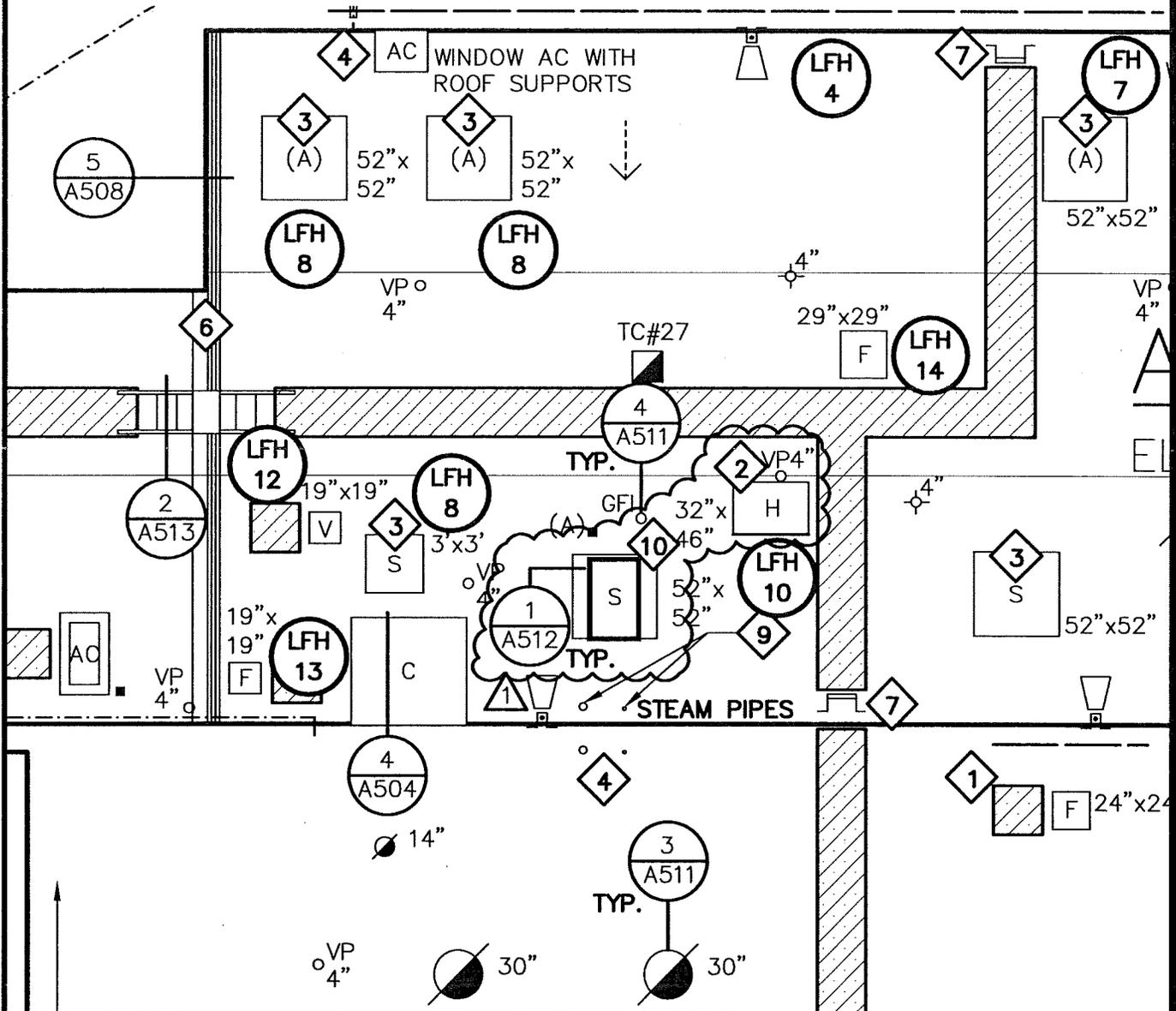
  
Mellanee Walton, Associate Fiscal Administrative Officer  
Department of Administrative Services  
On Behalf of the Division of Construction Services

# SHEET NOTES

10

FURNISH AND INSTALL NEW ROOF HATCH, CURB, FLASHINGS, AND ACCESSORIES. REFER TO STRUCTURAL DRAWINGS S102 AND 6/S501 FOR SUPPLEMENTAL STEEL FRAMING. INSTALL DECK INFILL AS REQUIRED. COORDINATE ROOF DECK OPENING WITH NEW ROOF HATCH. FURNISH AND INSTALL NEW INTERIOR ROOF ACCESS SHIP LADDER.

1



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**WINDHAM TECHNICAL HIGH SCHOOL**

**PARTIAL ROOF AREA PLAN – ROOF AREA J**

PROJ. NO:	DRAWN	REVIEWED	CADD FILE
BI-RT-862	DJC	MAL	975900 A100

DATE:	12.02.15
SCALE:	1/8" = 1'-0"
REVISION:	

SK-1

SHEET 1 OF 6

# SHEET NOTES

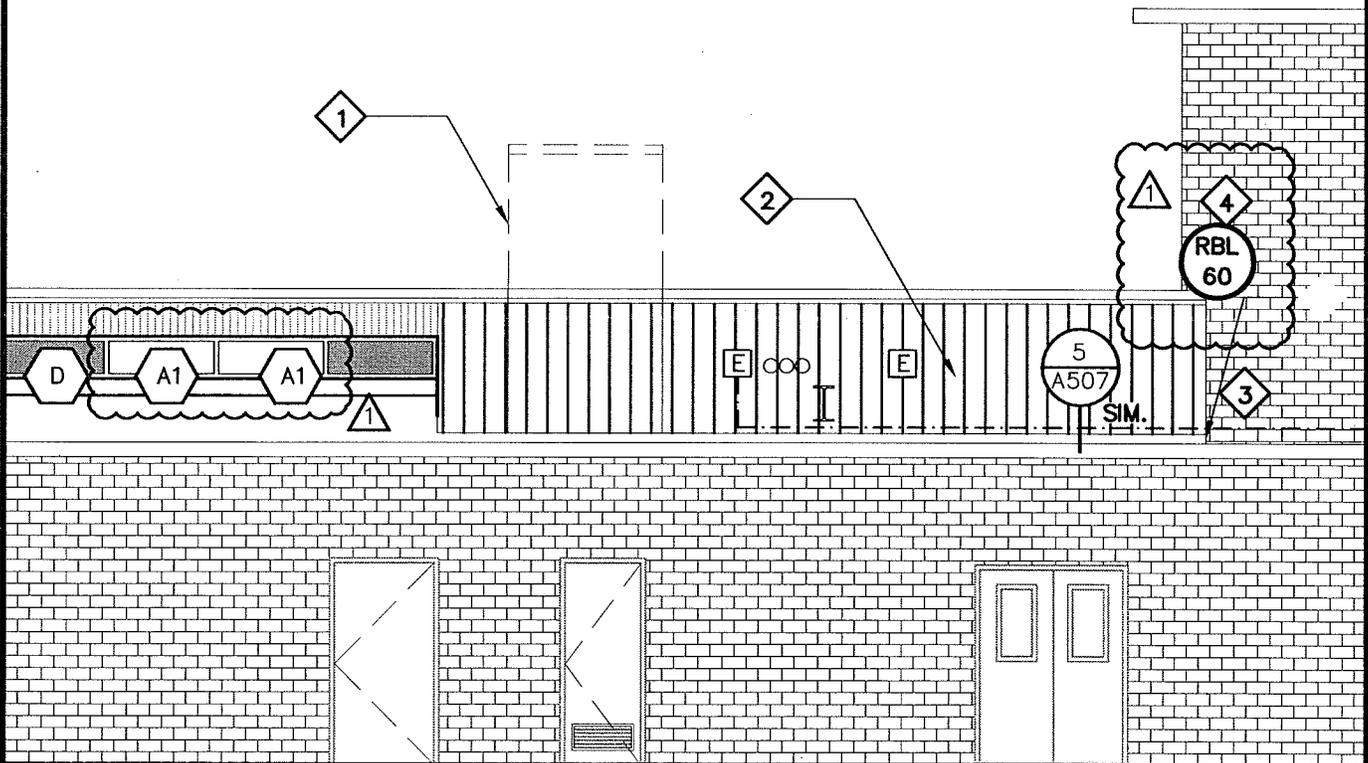
3

INSTALL END DAM AT LIMITS OF THROUGHWALL FLASHING AND WHERE NEW PANEL SYSTEM TERMINATES.

4

REBUILD EXISTING MASONRY VENEER AT CORNER INCLUDING ON THE NORTH ELEVATION. MASONRY WORK SHALL BE COMPLETED PRIOR TO THE NEW METAL WALL PANEL INSTALLATION.

1



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PARTIAL WEST CLERESTORY ELEVATION

PROJ. NO:	DRAWN	REVIEWED	CADD FILE
BI-RT-862	DJC	MAL	975900 A203_A204

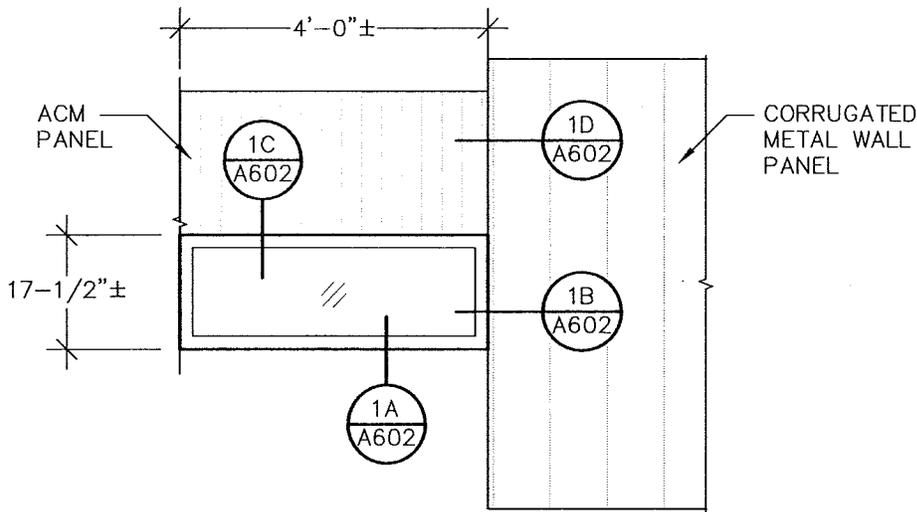
DATE: 12.02.15

SCALE: NTS

REVISION:

SK-2

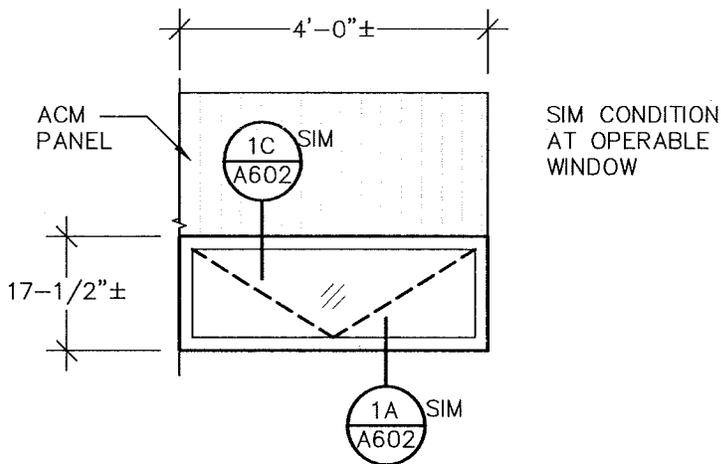
4 SHEET 2 OF 6



**A CLERESTORY WINDOW TYPE A**

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

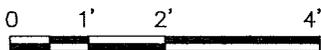
QUANTITY=69 CONTRACTOR TO VERIFY



**A1 CLERESTORY WINDOW TYPE A1**

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

QUANTITY=2



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WINDOW TYPES A AND A1

PROJ. NO:	DRAWN	REVIEWED	CADD FILE
BI-RT-862	DJC	MAL	975900 A600s

DATE:	12.02.15
SCALE:	NTS
REVISION:	

SK-3

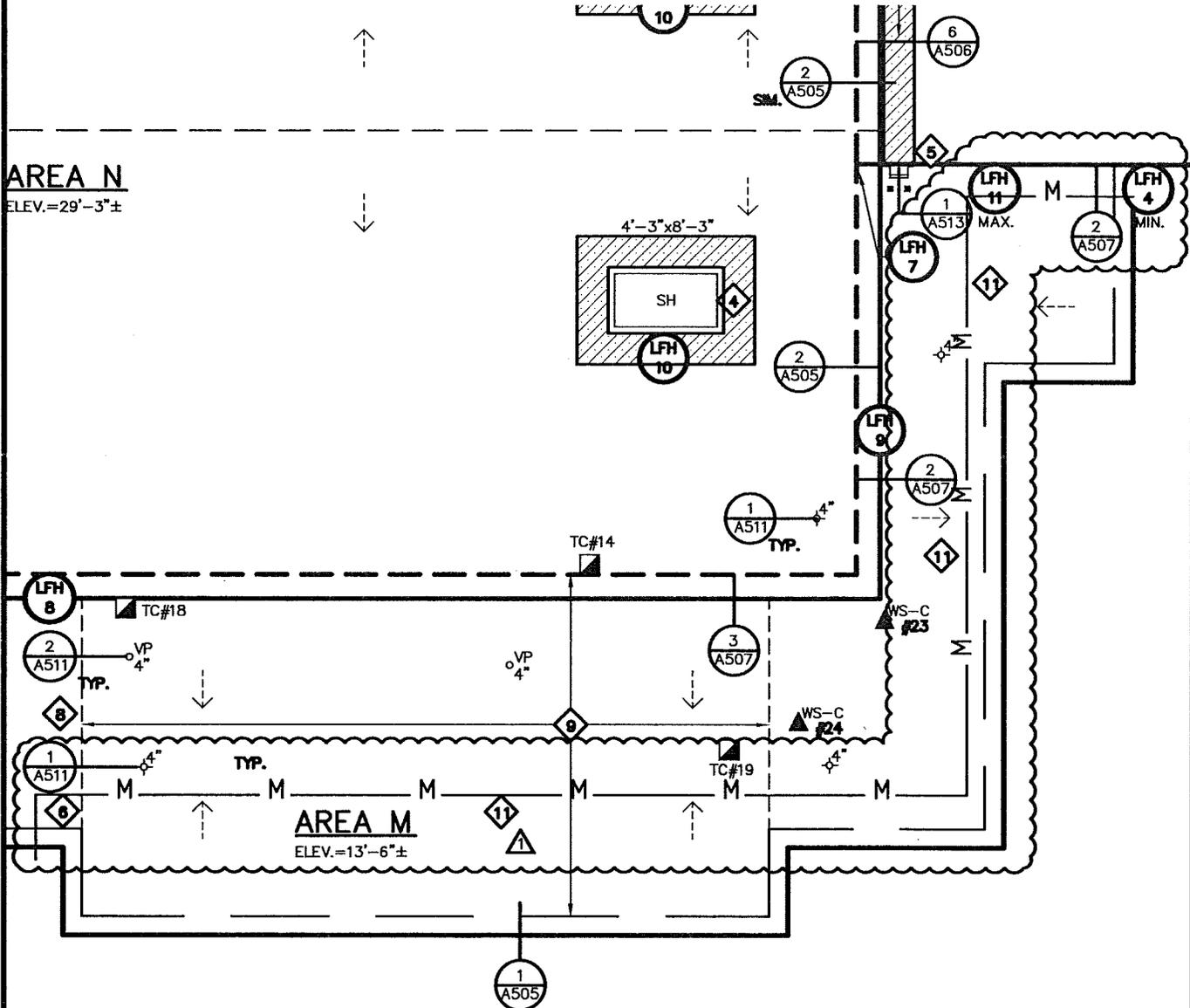
SHEET 3 OF 6

# SHEET NOTES

11

NEW GAS PIPING AND SUPPORT STANDS INSTALLED ON ROOF AREA M BY OTHERS. CONTRACTOR TO ADJUST HEIGHT AND PROTECT PIPING AS REQUIRED FOR NEW ROOFING AND DECKING. CONTRACTOR TO PROVIDE NEW PADS UNDER PIPE STANDS PER 4/A513 AND M401.

1



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## WINDHAM TECHNICAL HIGH SCHOOL

### EXISTING GAS PIPING – ROOF AREA M

PROJ. NO:	DRAWN	REVIEWED	CADD FILE
BI-RT-862	DJC	MAL	975900 A100

DATE: 12.02.15

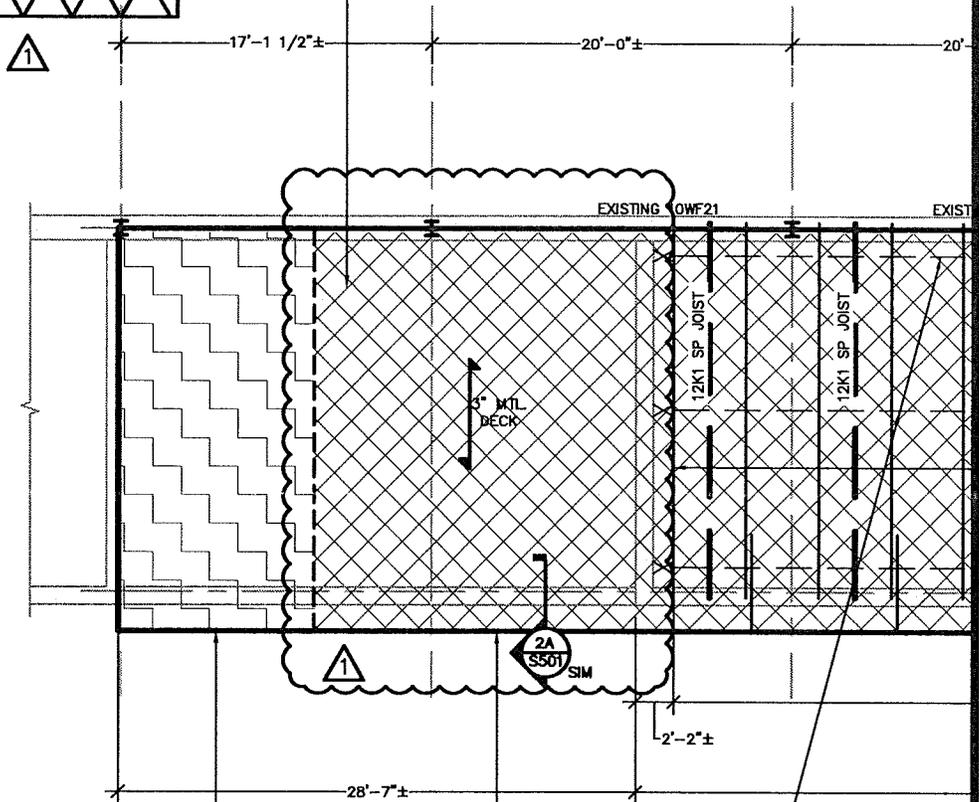
SCALE: NTS

REVISION:

# SK-4

SHEET 4 OF 6

CONTRACTOR NOTE: CARRY THREE (3) ADDITIONAL 12K1 JOISTS UNDER THE BASE BID FOR FRAMING IN/FIL IN THIS AREA.



EXISTING ROOF DECK CONSISTS OF METAL DECK. CONTRACTOR TO CARRY PROVISIONS FOR REMOVAL OF METAL DECK. EXISTING FRAMING UNKNOWN, ALLOW ENGINEER TO REVIEW PRIOR TO COVERING.

EXISTING ROOF DECK CONSISTS OF CEMENTITIOUS WOOD FIBER. ALL EXISTING DECK AND BULB TEES TO BE REMOVED. EXISTING BEAMS TO REMAIN. ALLOW ENGINEER TO REVIEW STRUCTURE PRIOR TO COVERING. FURNISH AND INSTALL NEW 3" METAL DECK.



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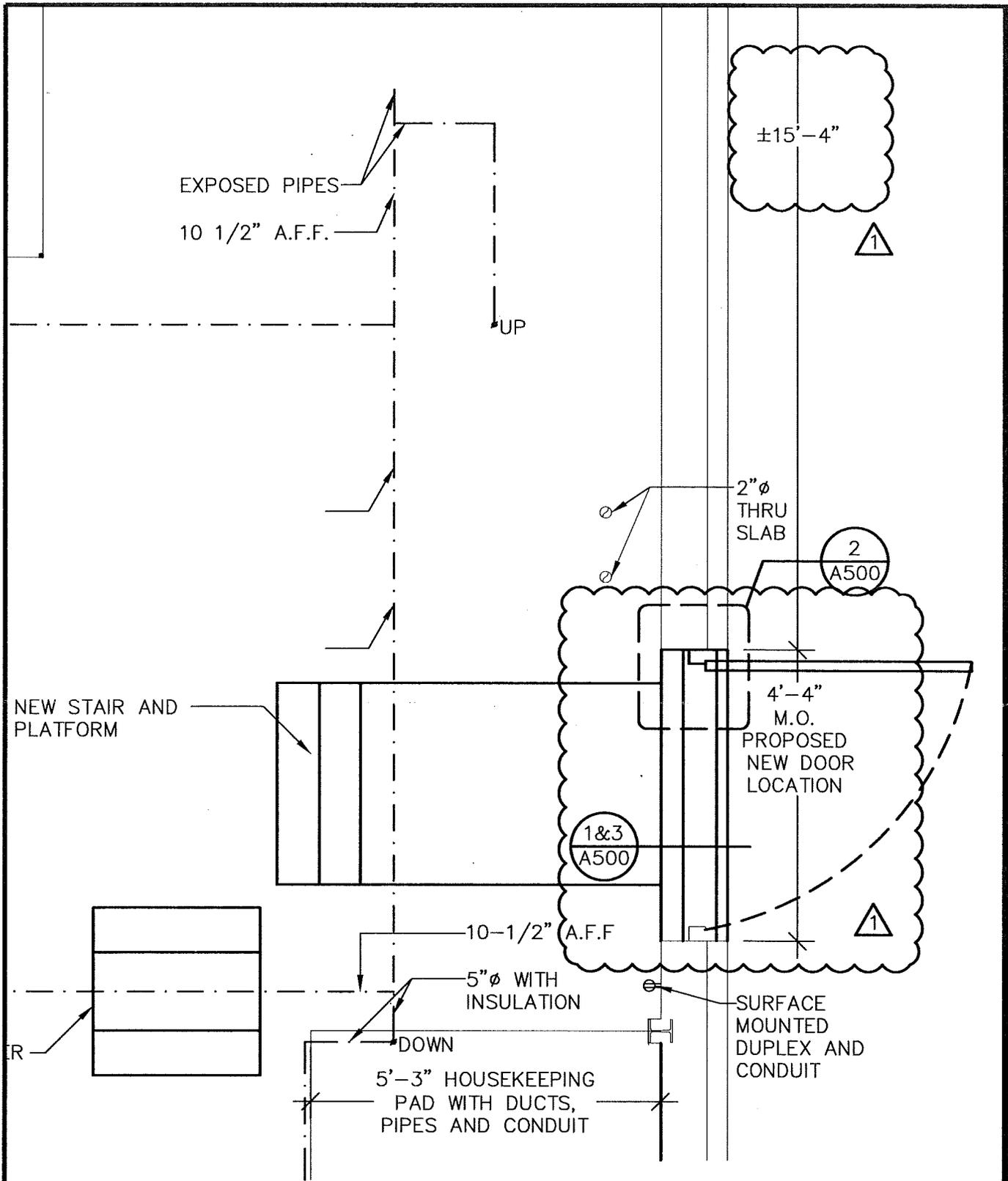
### DECK REPLACEMENT – AREA M

PROJ. NO:	DRAWN	REVIEWED	CADD FILE
BI-RT-862	DJC	MAL	975900 S100s

DATE:	12.02.15
SCALE:	1/8" = 1'-0"
REVISION:	

# SK-5

SHEET 5 OF 6



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WINDHAM TECHNICAL HIGH SCHOOL

PENTHOUSE ROOF ACCESS DOOR SIZE

PROJ. NO:	DRAWN	REVIEWED	CADD FILE
BI-RT-862	DJC	MAL	975900 A500s

DATE:	12.02.15
SCALE:	1/2" = 1'-0"
REVISION:	

SK-6