



FARMINGTON PUBLIC SCHOOLS - 2015 BOND

2017 RENOVATIONS

161664B: ELEMENTARY SCHOOL RENOVATIONS

LONGACRE ELEMENTARY SCHOOL

ISSUED FOR: BIDS
 DATE: 11-30-16
 PROJECT NO.: 161664B

ARCHITECT:

 WAKELY ASSOCIATES, INC./ ARCHITECTS
 30500 VAN DYKE AVE, SUITE M-7, WARREN, MI 48093, 586.573.4100

MECHANICAL ENGINEER:

 PETER BASSO ASSOCIATES, INC.
 5145 LIVERNOIS, SUITE 100, TROY, MI 48098, 248.879.5666

ELECTRICAL ENGINEER:

 PETER BASSO ASSOCIATES, INC.
 5145 LIVERNOIS, SUITE 100, TROY, MI 48098, 248.879.5666

TECHNOLOGY ENGINEER:

 PLANTE & MORAN
 27400 NORTHWESTERN HWY, SOUTHFIELD, MI 48037, 248.603.5876

161664B - Farmington Public Schools. 2015 Bond
 LONGACRE ELEMENTARY SCHOOL

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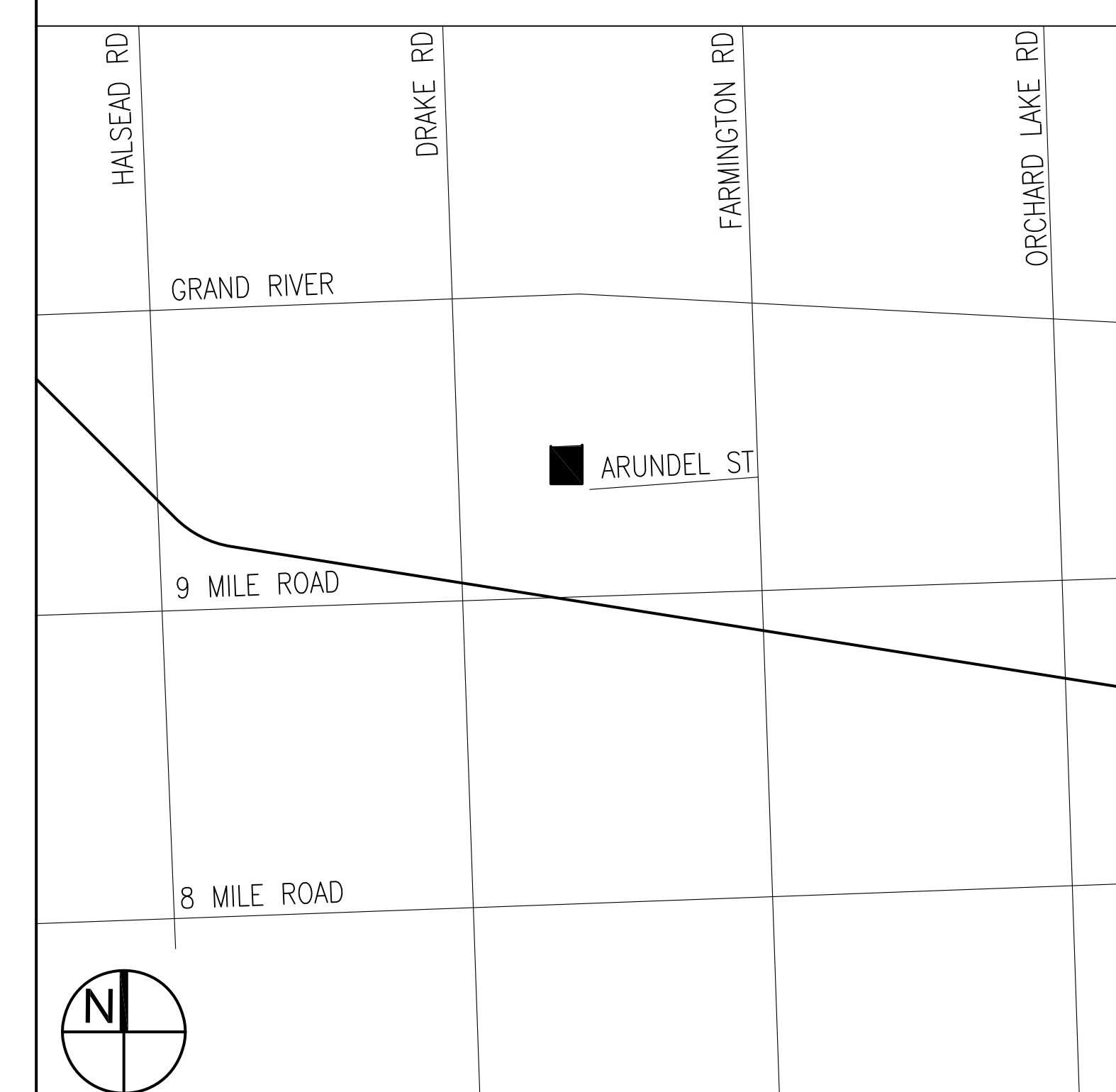
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Building Addresses

1 LONGACRE ELEMENTARY SCHOOL
 34850 ARUNDEL ST
 FARMINGTON HILLS, 48334

Location Map NOT TO SCALE



Farmington Public Schools - 2015 BOND - 2017 RENOVATIONS
 161664B: LONGACRE ELEMENTARY SCHOOL
 Issued for: BIDS Date - 11/30/16

REFLECTED CEILING PLAN KEY NOTES:

PLEASE NOTE:
NOT ALL FLOOR PLAN KEYNOTES APPLY TO EACH BUILDING.

- 1 NOT USED
- 2 NOT USED
- 3 PROVIDE NEW 2X4 ACOUSTIC CEILING AND T GRID SEE FINISH SCHEDULE FOR HT.
- 4 REMOVE/REPLACE EXISTING LAY-IN CEILING TILES. EXISTING GRID TO REMAIN.
- 5 NOT USED

NOTES:
1. NOT ALL WALL TYPES ARE USED ON EACH FLOOR.
2. EXTEND WALLS UP FULL HEIGHT TO DECK ABOVE (U.N.O.)
3. DO NOT FASTEN VERTICAL STUDS TO TOP RUNNER TRACK @ SECOND FLOOR ASSEMBLIES. USE SLIP TRACK TO ALLOW FOR DEFLECTION OF STRUCTURE WITHOUT COMPROMISING WALL INTEGRITY.

WALL TYPES:

- A NOMINAL 5", ACTUAL 4 1/2";
3/8" HI-IMPACT GYP BD BOTH SIDES OF 3 1/2" 20 GA METAL STUDS AT 1'-4" O.C. MAX W/ SOUND ATTEN BLANKETS IN ALL VOIDS FULL HEIGHT
- B NOT USED
- C NOT USED
- D NOT USED
- E NOT USED
- F NOMINAL 2"
3/8" HI-IMPACT GYP. BD. ON 1 1/2" METAL FURRING AT 1'-4" O.C.
- G NOT USED
- H NOT USED
- J NOMINAL 7", ACTUAL 7 1/2"
3/8" HI-IMPACT GYP BOARD ON METAL, ON 6" METAL STUDS AT 1'-4" O.C. MAX W/ SOUND BLANKETS INSTALLED IN VOIDS FULL HEIGHT
- K NOT USED
- L NOT USED
- M NOT USED

FIRE RATED WALL TYPES:

NOTE:
EXTEND WALLS UP FULL HEIGHT TO DECK ABOVE. FILL ALL VOIDS AT DECK FLUTES WITH FIRE SAFING MATERIAL AND APPROVED FIRE SPRAY SEALANTSON BOTH SIDES AS SPECIFIED.

- 1 **1 HOUR RATING (UL-U438)**
NOMINAL 5", ACTUAL 4 1/2";
3/8" TYPE 'X' FIRE RATED GYP BD BOTH SIDES OF 3 1/2" 20 GA METAL STUDS AT 1'-4" O.C. MAX W/ SOUND ATTEN BLANKETS IN ALL VOIDS FULL HEIGHT.
- 2 **1 HOUR RATING**
NOMINAL 7", ACTUAL 7 1/4";
3/8" TYPE 'X' FIRE RATED GYP BD BOTH SIDES OF 6", 20 GA METAL STUDS AT 1'-4" O.C. MAX W/ SOUND ATTEN BLANKETS IN ALL VOIDS FULL HEIGHT.
- 3 NOT USED
- 4 NOT USED
- 5 NOT USED
- 6 NOT USED
- 7 NOT USED
- 8 **1 HOUR RATING - FIRE WALL (UL-xxx)**
NOMINAL 6" CMU, ACTUAL 5 1/2";
NEW 6" CMU TO HEIGHT AS NOTED ON DRAWINGS.

NEW WORK PLAN KEYNOTES: CONTINUE

PLEASE NOTE:
NOT ALL FLOOR PLAN KEYNOTES APPLY TO EACH BUILDING.

- 48 NOT USED
- 49 NOT USED
- 50 NEW ROOF PENETRATION TECTUM ROOF DECK FOR NEW SOLAR TUBE. SEE DETAIL NO. 4-5 ON A1.11A. VERIFY LOCATION IN FIELD WITH ARCHITECT.
- 51 NOT USED

ELEMENTARY SCHOOL - NEW WORK PLAN KEYNOTES:

PLEASE NOTE:
NOT ALL FLOOR PLAN KEYNOTES APPLY TO EACH BUILDING.

- 1 INSTALL NEW DOOR AND HARDWARE PER SCHEDULE
- 2 INSTALL NEW ALUMINUM FRAME PER DOOR SCHEDULE
- 3 INSTALL NEW H.M. FRAME PER DOOR SCHEDULE
- 4 NOT USED
- 5 NOT USED
- 6 PAINT ALL WALLS IN ROOM FULL HEIGHT. SEE FINISH SCHEDULE FOR MORE INFO.
- 7 INSTALL NEW LOCKERS ON 4" CONC. BASE.
- 8 INSTALL NEW 4" CONC. LOCKER BASE. (AS DETAILED).
- 9 NOT USED
- 10 NOT USED
- 11 NOT USED
- 12 INSTALL NEW WALL MTD. ROOM SIGNAGE IN CORRIDOR.
- 13 NOT USED
- 14 NOT USED
- 15 NOT USED
- 16 NOT USED
- 17 NOT USED
- 18 LOCATION OF SOUND SYSTEM.
- 19 PAINT CMU WALLS ABOVE CERAMIC TILE WAINSCOT.
- 20 PROVIDE NEW STAGE CURTAIN TO FIT EXISTING STAGE. (V.I.F.)
- 21 PROVIDE AND INSTALL NEW LVT.
- 22 PROVIDE AND INSTALL NEW CPT.
- 23 PROVIDE AND INSTALL NEW PCT FLOOR.
- 24 NEW FURNITURE (BY OTHERS).
- 25 PROVIDE AND INSTALL NEW P. LAM. CASEWORK PER ELEVATION.
- 26 NOT USED
- 27 NOT USED
- 28 NOT USED
- 29 NOT USED
- 30 INSTALL NEW CEILING COMPLETE
- 31 SAND/ PREP/ PAINT EXISTING METAL SIDING
- 32 PROVIDE NEW WALL CONSTRUCTION - SEE DETAILS
- 33 INFILL DOOR OPENING WITH CMU TO MATCH THICKNESS AND TOOTH IN TO MATCH COURSING AT JAMBS. TOOTH IN NEW BRICK VENER AT CORRIDOR WALLS TO MATCH EXISTING IF APPLICABLE.
- 34 NOT USED
- 35 NOT USED
- 36 NOT USED
- 37 NOT USED
- 38 NEW OFFICE FURNITURE (BY OTHERS)
- 39 INSTALL WALK-OFF CARPET IN ENTIRE ROOM.
- 40 NOT USED
- 41 NEW H.M. FRAME BORROWED LITE. SEE ELEVATIONS.
- 42 PAINT GYP. BD. WALL FULL HEIGHT WITH MARKER BOARD PAINT.
- 43 NOT USED
- 44 NEW WINDOW TREATMENTS ON ALL WINDOWS IN ROOM.
- 45 NOT USED
- 46 REINSTALL P. LAM. CABINETS (SEE ELEVATIONS)
- 47 NEW P. LAM. WARDROBE CABINET

DEMO PLAN NOTES: (CONTINUE)

PLEASE NOTE:
NOT ALL DEMO PLAN KEYNOTES APPLY TO EACH BUILDING.

- 48A REMOVE EXISTING P. LAM. CABINETS AND SALVAGE FOR RE-INSTALLATION IN EXACT SAME LOCATION ON NEW WALL.
- 46A LINE OF SOFFIT ABOVE (TO REMAIN) PATCH AND REPAIR AS REQ'D AFTER WALL DEMOLITION
- 47A EXISTING P. LAM. CABINETS TO REMAIN.
- 48A REMOVE ALL EXISTING WOOD SHELVING COMPLETE IN ROOM.
- 49A NOT USED
- 50A REMOVE WALL MTD DISPLAY CASE AND SALVAGE FOR REINSTALLATION IN EXACT SAME LOCATION ON NEW WALL.
- 51A REMOVE WALL CONSTRUCTION IN BETWEEN URINALS COMPLETE.
- 52A MODIFY SGT CON. BASE AROUND ENTIRE PERIMETER OF ROOM PER DETAIL 4/AD1.11A.
- 53A NOT USED
- 54A REMOVE EXISTING BOOT SHELF COMPLETE. PATCH HOLES IN WALL FLUSH.
- 55A REMOVE/ REPLACE DAMAGE GYP. BD. (+/- 30 S.F.)
- 56A REMOVE 48" WIDE TALL P.LAM. CABINETS RELOCATE AS DIRECTED BY OWNER IN FIELD
- 57A REMOVE P.LAM. CABINETS & COUNTER TOP
- 58A REMOVE CMU WING WALL FULL HT. - PATCH WALL & FLOOR LEVEL

ELEMENTARY SCHOOL - DEMO PLAN NOTES:

PLEASE NOTE:
NOT ALL DEMO PLAN KEYNOTES APPLY TO EACH BUILDING.

- 1 REMOVE EXISTING DOOR AND HARDWARE COMPLETE.
- 2 REMOVE EXISTING HM FRAME AND GLASS COMPLETE.
- 3 REMOVE EXISTING FRAME AND GLASS COMPLETE.
- 4 REMOVE PORTION OF EXISTING WALL FOR NEW DOOR OR WINDOW OPENING PATCH FLOOR LEVEL. PROVIDE LINTEL FOR OPENING.
- 5 REMOVE EXISTING WALL COMPLETE. (SHOWN DASHED) INCLUDING ALL DOORS, GLAZING, COAT HOOKS, ETC. AS INDICATED BY DRAWINGS. GRIND FLOOR SMOOTH FOR NEW FLOOR OR CONSTRUCTION AS INDICATED IN NEW WORK PLAN.
- 6 NOT USED
- 7 REMOVE EXISTING COAT HOOKS. PATCH WALL AND PAINT TO MATCH EXISTING.
- 8 REMOVE EXISTING WALL TILE COMPLETE. PREP FOR NEW FINISH AS INDICATED ON NEW WORK PLAN.
- 9 REMOVE EXISTING CORRIDOR SECURITY GATE AND WALL MOUNTED RACK, CASE BRACKETS ETC. COMPLETE. PATCH HOLES IN WALLS AND FLOOR AS REQUIRED. INFILL MASONRY OPENINGS WITH BRICK/ CMU TO MATCH COURSING (V.I.F.)
- 10 REMOVE EXISTING LOCKERS FROM INSIDE RECESSED WALL. EXISTING BASE TO REMAIN.
- 11 REMOVE EXISTING FOLDING PARTITION WALL SYSTEM COMPLETE INCLUDING TRACK, MOTOR, ETC. (SOFFIT TO REMAIN U.N.O.)
- 12 NOT USED
- 13 NOT USED
- 14 REMOVE ALL WALL MOUNTED TOILET ACCESSORIES AND TOILET PARTITIONS IN ROOM. PATCH ALL HOLES IN WALLS AND FLOORS.
- 15 REMOVE ALL PLUMBING FIXTURES. SEE MECH. DRAWINGS.
- 16 REMOVE EXISTING CONCRETE FLOOR SLAB COMPLETE (4 - 6" THICK).
- 17 NOT USED
- 18 REMOVE EXISTING CARPET, TRANSITION STRIP, RESIL BASE, ETC. SCRAPE ALL MASTICE & ADHESIVES FROM CONCRETE FLOOR AS REQUIRED. (DO NOT USE CHEMICAL REMOVAL TECHNIQUES). FILL AND LEVEL TO PREP FLOOR FOR NEW FLOOR FINISHES AND BASE AS INDICATED ON DRAWINGS AND SCHEDULES.
- 19 REMOVE EXISTING VCT, TRANSITION STRIPS, RESIL BASE, ETC. SCRAPE ALL MASTICE & ADHESIVES FROM CONCRETE FLOOR AS REQUIRED. (DO NOT USE CHEMICAL REMOVAL TECHNIQUES). FILL AND LEVEL TO PREP FLOOR FOR NEW FLOOR FINISHES AND BASE AS INDICATED ON DRAWINGS AND SCHEDULES.
- 20 REMOVE EXISTING RUBBER FLOORING, TRANSITION STRIPS, RESIL BASE, ETC. SCRAPE ALL MASTICE & ADHESIVES FROM CONCRETE FLOOR AS REQUIRED. (DO NOT USE CHEMICAL REMOVAL TECHNIQUES). FILL AND LEVEL TO PREP FLOOR FOR NEW FLOOR FINISHES AND BASE AS INDICATED ON DRAWINGS AND SCHEDULES.
- 21 REMOVE EXISTING PCT, TRANSITION STRIPS, RESIL BASE, ETC. SCRAPE ALL MASTICE & ADHESIVES FROM CONCRETE FLOOR AS REQUIRED. (DO NOT USE CHEMICAL REMOVAL TECHNIQUES). FILL AND LEVEL TO PREP FLOOR FOR NEW FLOOR FINISHES AND BASE AS INDICATED ON DRAWINGS AND SCHEDULES.
- 22 NOT USED
- 23 REMOVE EXISTING P. LAM. CASEWORK AND/OR FURNITURE.
- 24 PROVIDE NEW OPENING IN ROOF FOR NEW LIGHT TUBE.
- 25 NOT USED
- 26 REMOVE EXISTING TACK BOARDS.
- 27 REMOVE EXISTING MARKER/CHALK BOARDS
- 28 NOT USED
- 29 REMOVE LAY-IN CEILING SYSTEM COMPLETE INCLUDING SUPPORT FRAMING/WIRE.
- 30 REMOVE EXISTING UNIT VENT OR CABINET HEATER. (SEE MECH.) PATH HOLE IN WALL WITH EXISTING MASONRY TO MATCH EXISTING (V.I.F.)
- 31 REMOVE EXISTING RECEPTION COUNTER COMPLETE.
- 32 REMOVE EXISTING HARD CEILING CONSTRUCTION COMPLETE
- 33 NOT USED
- 34 NOT USED
- 35 NOT USED
- 36 EXISTING STEEL COLUMN TO REMAIN.
- 37 REMOVE STEEL GUARDRAIL COMPLETE - PATCH HOLES IN BRICK.
- 38 REMOVE EXISTING WINDOW TREATMENTS COMPLETE INCLUDING TRACK, ETC. IN ENTIRE ROOM.
- 39 NOT USED
- 40 NOT USED
- 41 EXISTING DOOR FRAME TO BE REMOVED BY ABATEMENT CONTRACTOR
- 42 NOT USED
- 43 NOT USED
- 44 NOT USED



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE ELEMENTARY
DEMO PLAN KEY NOTES
REFL. CLG PLAN KEY NOTES
WALL TYPES

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

DRAWN BY: N.JL
CHECKED BY: BJS

REVISIONS

DATE: November 30, 2016
SHEET NO.

G4.2LA

JOB NO. 161664B

BUILDING CODE SUMMARY

PROJECT: LONGACRE ELEMENTARY
 ADDRESS: 2480 ARNOLD ST
 FARMINGTON, WI 53535
 PROPOSED USE: K-12 EDUCATIONAL FACILITY

REFERENCE CODES:
 IBC: 2012 INTERNATIONAL BUILDING CODE
 IBC: 2012 INTERNATIONAL FIRE CODE
 IBC: 2012 INTERNATIONAL MECHANICAL, ELECTRICAL & PLUMBING CODE
 IBC: 2012 INTERNATIONAL ENERGY CONSERVATION CODE
 IBC: 2012 INTERNATIONAL SAFETY CODE
 IBC: 2012 INTERNATIONAL WIND LOADS AND EFFECTS CODE
 IBC: 2012 INTERNATIONAL PLUMBING AND MECHANICAL CODE
 IBC: 2012 INTERNATIONAL ELECTRICAL CODE
 IBC: 2012 INTERNATIONAL MECHANICAL, ELECTRICAL & PLUMBING CODE
 IBC: 2012 INTERNATIONAL ENERGY CONSERVATION CODE
 IBC: 2012 INTERNATIONAL SAFETY CODE
 IBC: 2012 INTERNATIONAL WIND LOADS AND EFFECTS CODE

USE GROUP: E

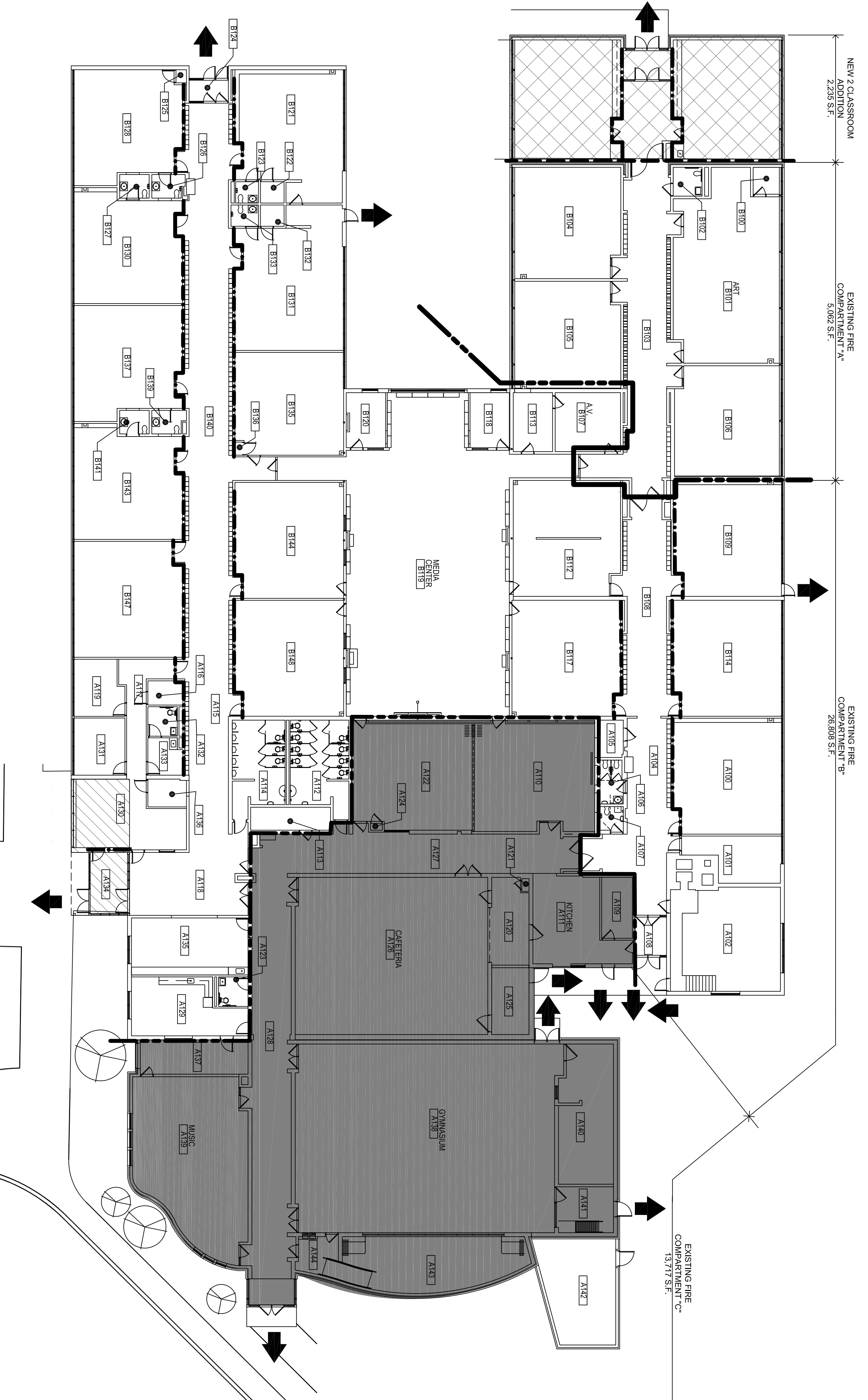
ASSEMBLY: INSTITUTIONAL 1-3 CONDITIONS IV
 BUSINESS: MERCHANTILE
 EDUCATIONAL: EDUCATIONAL
 FACTORY-INDUSTRIAL-LOW HAZARD: STORAGE-LOW HAZARD
 FACTORY-INDUSTRIAL-MODERATE HAZARD: STORAGE-MODERATE HAZARD
 HIGH HAZARD: UTILITY, MISCELLANEOUS
 () HIGH HAZARD

CONSTRUCTION TYPE:
 TYPE 1A - PROTECTED
 TYPE 1B - PROTECTED
 TYPE 1C - PROTECTED
 TYPE 2B - PROTECTED
 TYPE 2C - UNPROTECTED
 () MIXED CONSTRUCTION TYPE

SPRINKLER: () REQUIRED () PROVIDED (X) PARTIAL
 BUILDING HEIGHT PERMITTED:
 MIZZANIE () YES (X) NO
 HIGH RISE: () YES (X) NO

GROSS BUILDING AREA (EXISTING): 45,165 S.F.
 EXISTING BUILDING: 422 S.F.
 OFFICE ADDITION: 2,235 S.F.
 2 CLASSROOM ADDITION: 2,235 S.F.
 TOTAL AREA: 47,822 S.F.

AREA MODIFICATION APPLIED? () YES (X) NO
 PENETRATOR MODIFICATIONS APPLIED? () YES (X) NO



COMPOSITE FIRST FLOOR PLAN
 SCALE: 1/16" = 1'-0"

PARTY/PREVALS	HOURLY RATING	DETAIL # & SHEET #	% WALL OPENING	DESIGN NO. FOR RATED ASSEMBLIES
EXTERIOR BEARING WALLS				
EAST				
WEST				
SOUTH				
EXTERIOR NON-BEARING WALLS				
EAST				
WEST				
SOUTH				
INTERIOR WALLS				
NON-BEARING				
TENANT SEPARATION (OFFICES)				
FIRE SEPARATION ASSEMBLIES				
CEILING-FLOOR ASSEMBLY				
BEAMS				
CEILING-ROOF ASSEMBLY				
VERTICAL SHAFTS				
WALLED OCCUPANCY				
TENANT SEPARATION				
EXIT ACCESS CORRIDORS				
SMALL BUSINESS				

LEAF SAFETY SYSTEMS

EMERGENCY LIGHTING AND EXIT SIGNS: (X) REQUIRED () PROVIDED
 FIRE ALARMS: (X) REQUIRED () PROVIDED
 SMOKE DETECTION SYSTEMS: (X) REQUIRED () PROVIDED
 FIRE SUPPRESSION SYSTEM: (X) REQUIRED () PROVIDED
 STANDPIPE SYSTEM: (X) REQUIRED () PROVIDED

EXIT REQUIREMENTS

DEAD END LIGHT-MAXIMUM CONDITION (1016.4):
 ALLOWED: 20'
 ACTUAL: 0'

TRAVEL DISTANCE TO EXIT-MAXIMUM CONDITION (TABLE 1016.1):
 ALLOWED: 200'
 ACTUAL: 0'

COMMON PATH OF TRAVEL (1014.5):
 ALLOWED: 75'
 ACTUAL: 0'

NUMBER OF EXITS (1021):
 PROVIDED: 18

DESIGN LOADS: (SEE STRUCTURAL DRAWINGS)

LEGEND:

- EXISTING 2-HOUR RATED FIRE WALL CONSTRUCTION WITH 90 MINUTE OPENING PROTECTIVE
- EXISTING 1-HOUR FIRE RATED SEPARATION WALL WITH 20 MINUTE DOOR OPENING PROTECTIVE
- NEW 2-HOUR RATED FIRE WALL CONSTRUCTION WITH 90 MINUTE OPENING PROTECTIVE
- EXTERIOR EGRESS EXIT
- EXISTING FIRE SUPPRESSED AREA
- NEW CLASSROOM ADDITION - 2,235 SQ. FT.
- NEW SEQUENCED ENTRY VESTIBULE ADDITION UNDER EXISTING OVERHANG
- NEW 1-HOUR FIRE RATED SEPARATION WALL WITH 20 MINUTE DOOR OPENING PROTECTIVE

PRELIMINARY:
 DESIGN DEVELOPMENT:
 CONSTRUCTION:
 FINAL RECORD:
 DRAWN BY: NLS
 CHECKED BY: ELS
 REVISIONS:

DATE: November 23, 2016
 SHEET NO. 161664B

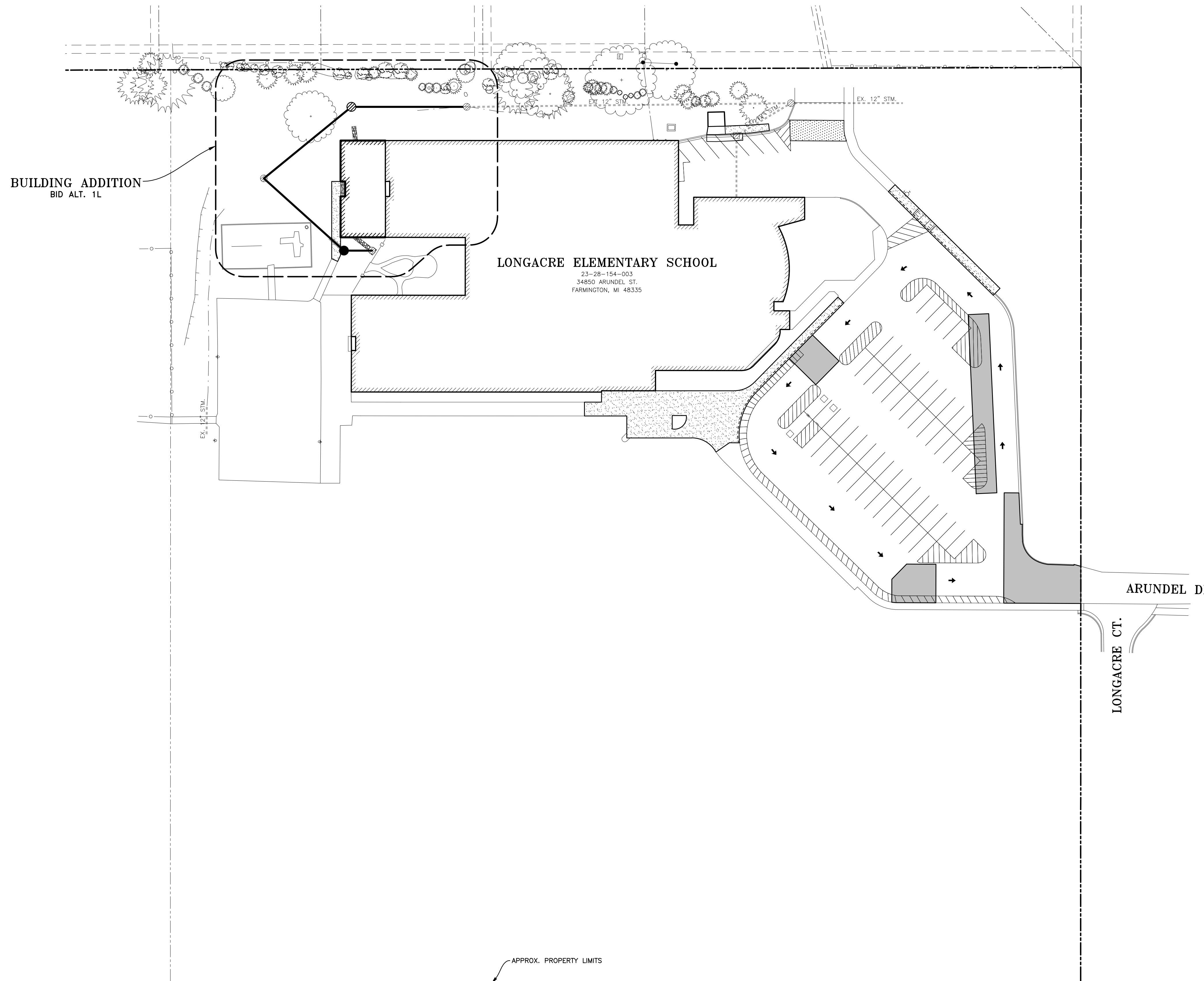
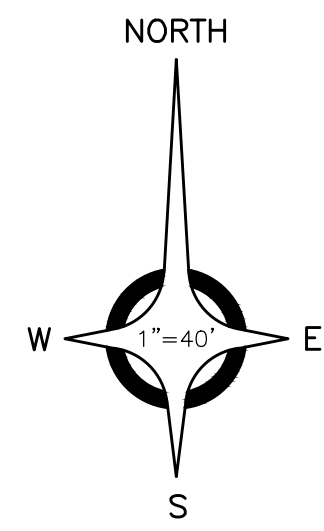
FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE ELEMENTARY SCHOOL
 LIFE SAFETY PLAN &
 CODE ANALYSIS

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 WWW.WARRENPAK.COM

WARKEY ASSOCIATES, INC.
 ARCHITECTS

LS1.0LA
 JOB NO. 161664B



LONGACRE ELEMENTARY SCHOOL
 23-28-154-003
 34850 ARUNDEL ST.
 FARMINGTON, MI 48335

BUILDING ADDITION
 BID ALT. 1L

ARUNDEL DR.

LONGACRE CT.

APPROX. PROPERTY LIMITS

**BENCH MARKS
 (NAVD88 DATUM)**

BENCH MARK NO. 1
 TOP OF HYDRANT AT N. END
 OF MAIN PKG. LOT 75'± E. OF
 N.E. COR. OF SCHOOL.
 ELEVATION: 795.47

BENCH MARK NO. 2
 "X" ON S.W. COR. CONC.
 TRANS. PAD. N. OF SCHOOL,
 W. OF DUMPSTER ENCLOSURE.
 ELEVATION: 794.56

BENCH MARK NO. 3
 "X" ON N. RIM STORM. CB.
 90'± W. OF BLDG., 33'± N.
 OF PLAYScape.
 ELEVATION: 793.35

UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE
 LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS
 DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE
 VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR
 IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF
 EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN
 CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED
 IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING
 THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND
 SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. FULL
 COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND
 PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM
 CONFLICTING WITH THAT UTILITY).

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE
 EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL
 OVERHEAD AND / OR BURIED UTILITIES.

3 WORKING DAYS BEFORE YOU DIG
 CALL MISS DIG 811 TOLL FREE

LEGEND

- FULL DEPTH BITUMINOUS PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- 8" CONC. PAVT.

LEGAL DESCRIPTION

PARCEL No. 23-28-154-003
 T1N, R9E, SEC 28 PART OF NW 1/4 BEG AT PT DIST S 89-30-14 E 654.10 FT
 FROM W 1/4 COR, TH N 00-38-55 E 660.39 FT, TH S 89-31-35 E 657.56 FT, TH
 S 00-38-55 W 660.66 FT, TH N 89-30-14 W 657.56 FT TO BEG EXC THAT PART
 TAKEN FOR 'LONGACRE WOODS' OCCP NO 658 9.60 A 3-12-90 FR 002.

SUBJECT TO ANY AND ALL EASEMENTS AND RIGHTS OF WAY OF RECORD OR
 OTHERWISE.
 FROM TAX RECORDS ONLY, NO FIELD SURVEY PERFORMED.



WAKELY ASSOCIATES, INC.
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 Phone: 586-758-1554
 Fax: 586-758-9760
 AEW NO. 0577-0091

**FARMINGTON PUBLIC SCHOOLS - 2015 BOND
 2017 RENOVATIONS
 ELEMENTARY SCHOOLS**

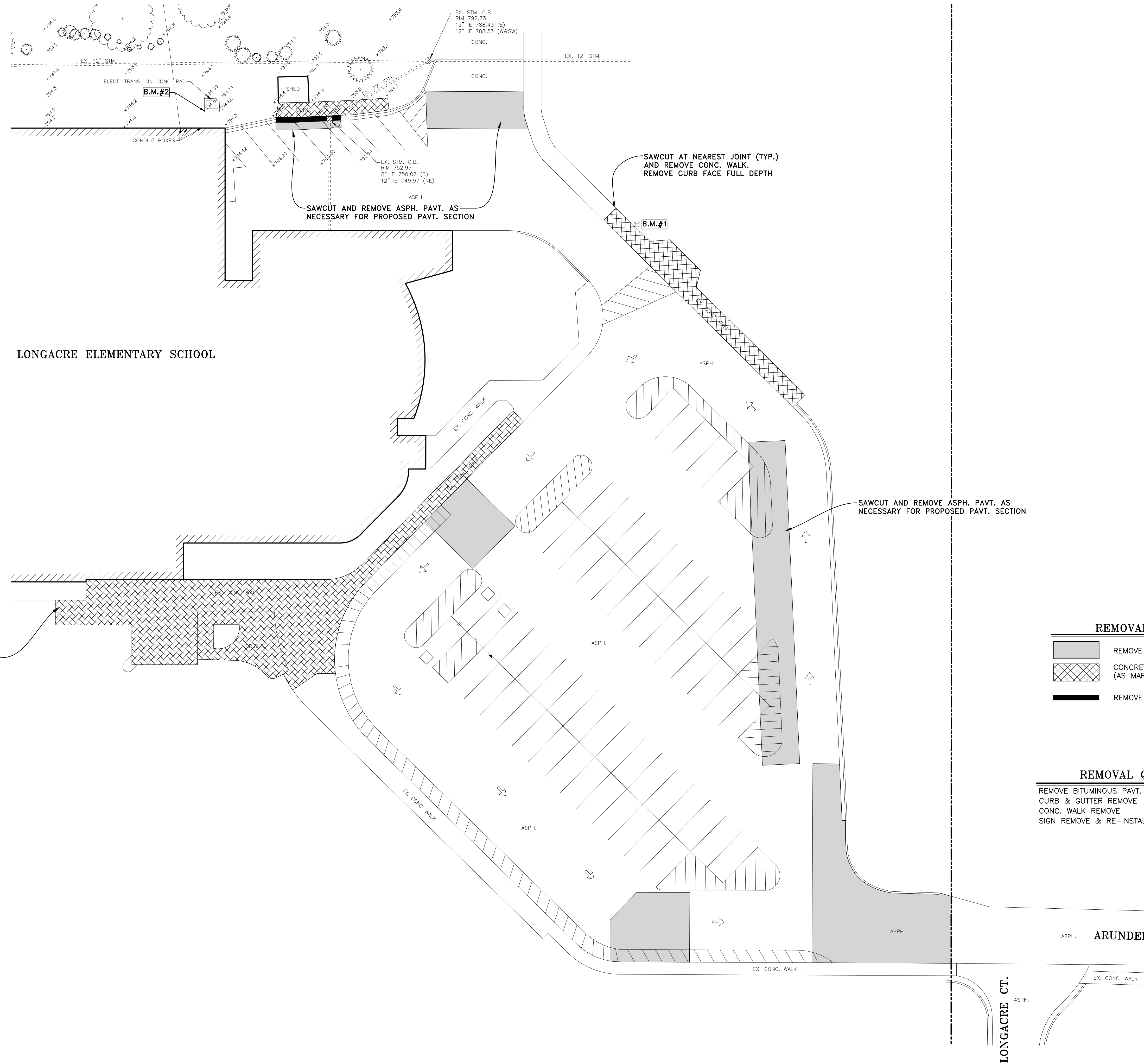
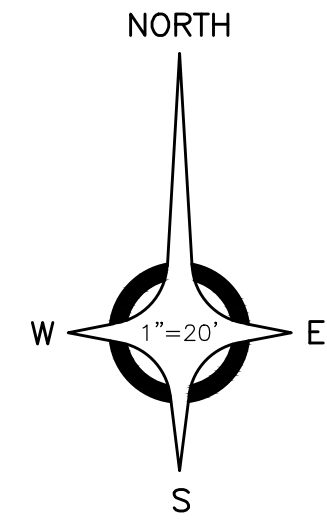
LONGACRE
 ELEMENTARY
 GENERAL
 PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD
- DRAWN BY: KJP
- CHECKED BY: JS
- REVISIONS

DATE: November 23, 2016
 SHEET NO.




C1.0L

JOB NO.
 161664B



LONGACRE ELEMENTARY SCHOOL

REMOVAL LEGEND

-  REMOVE ASPH. PAVT. FULL DEPTH
-  CONCRETE WALK REMOVAL (AS MARKED IN THE FIELD)
-  REMOVE CONC. CURB

REMOVAL QUANTITIES

REMOVE BITUMINOUS PAVT. FULL DEPTH	750 SY
CURB & GUTTER REMOVE	30 LF
CONC. WALK REMOVE	5300 SF
SIGN REMOVE & RE-INSTALL	1 EA

BENCH MARKS (NAVD88 DATUM)

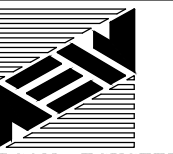
- BENCH MARK NO. 1
TOP OF HYDRANT AT N. END OF MAIN PKG. LOT 75 ± E. OF N.E. COR. OF SCHOOL.
ELEVATION: 795.47
- BENCH MARK NO. 2
"X" ON S.W. COR. CONC. TRANS. PAD. N. OF SCHOOL, W. OF DUMPSTER ENCLOSURE.
ELEVATION: 794.56
- BENCH MARK NO. 3
"X" ON N. RIM STORM. CB. 90' ± W. OF BLDG., 33' ± N. OF PLAYScape.
ELEVATION: 793.35

UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

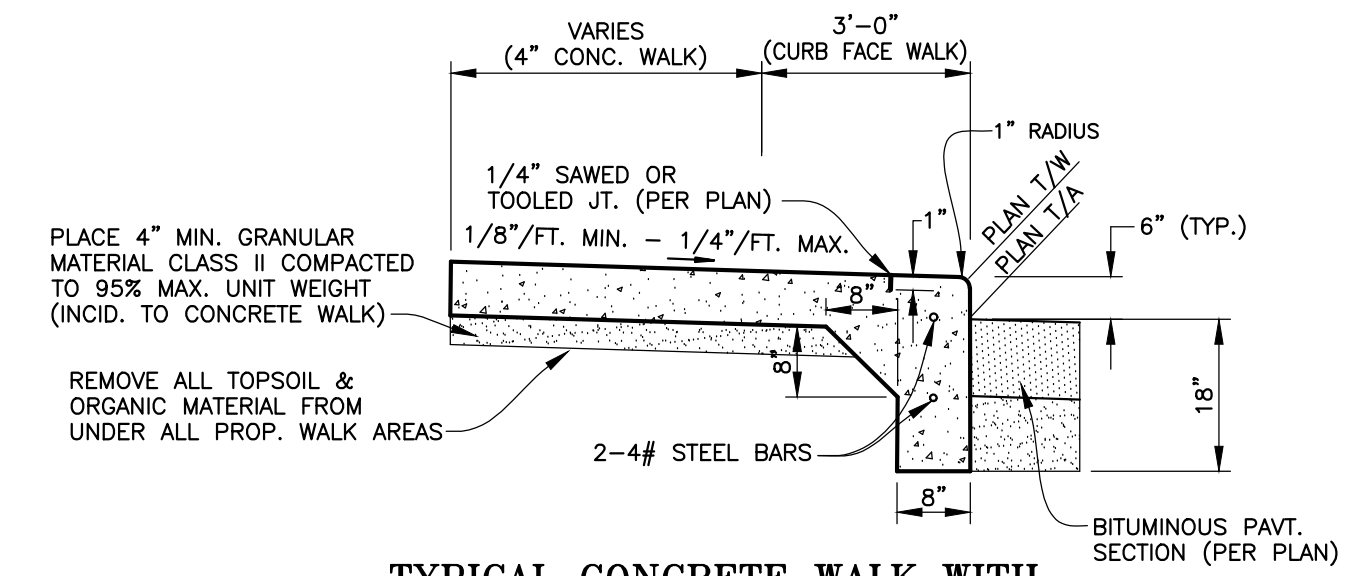
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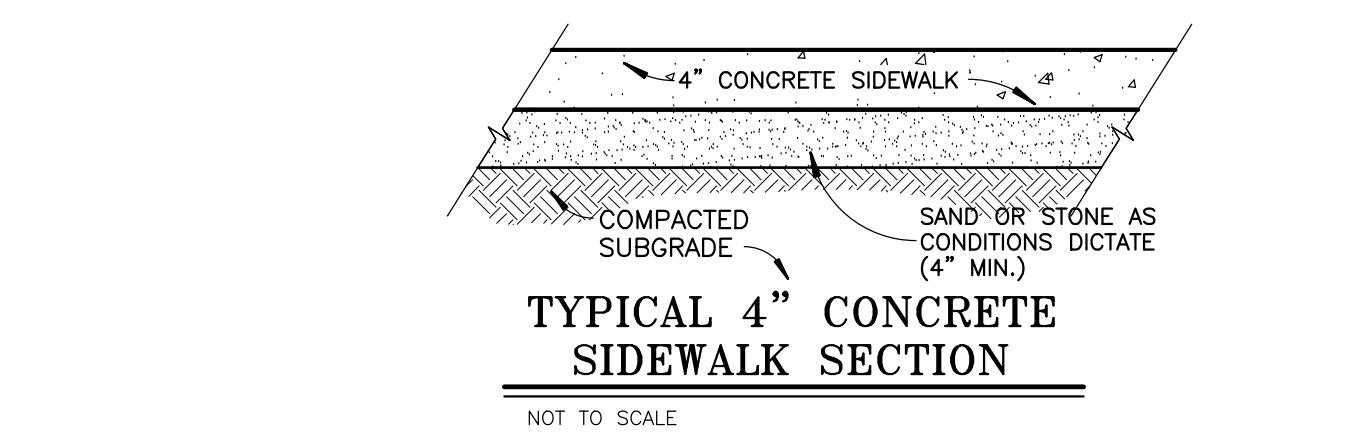
3 WORKING DAYS BEFORE YOU DIG
CALL MISS DIG 811 TOLL FREE



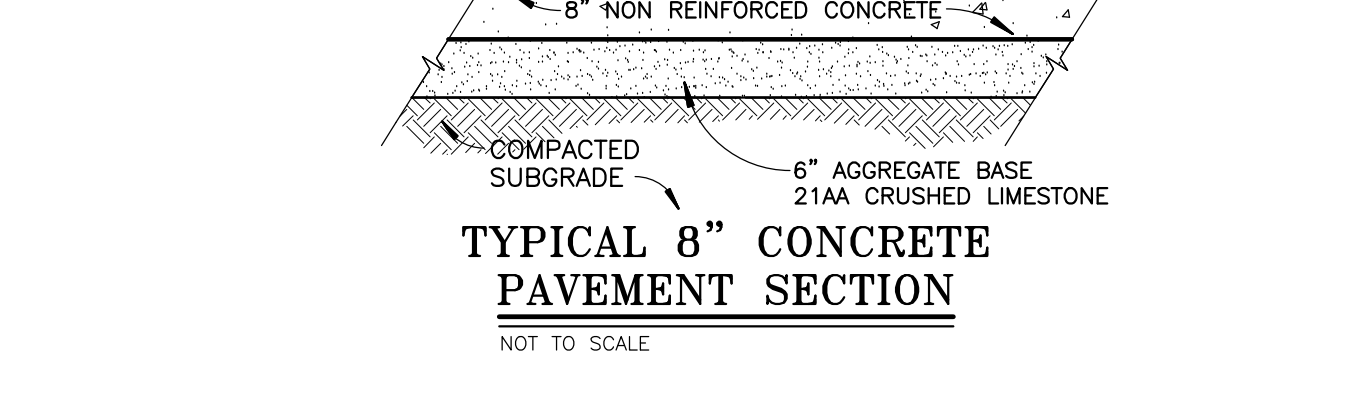
REVISIONS



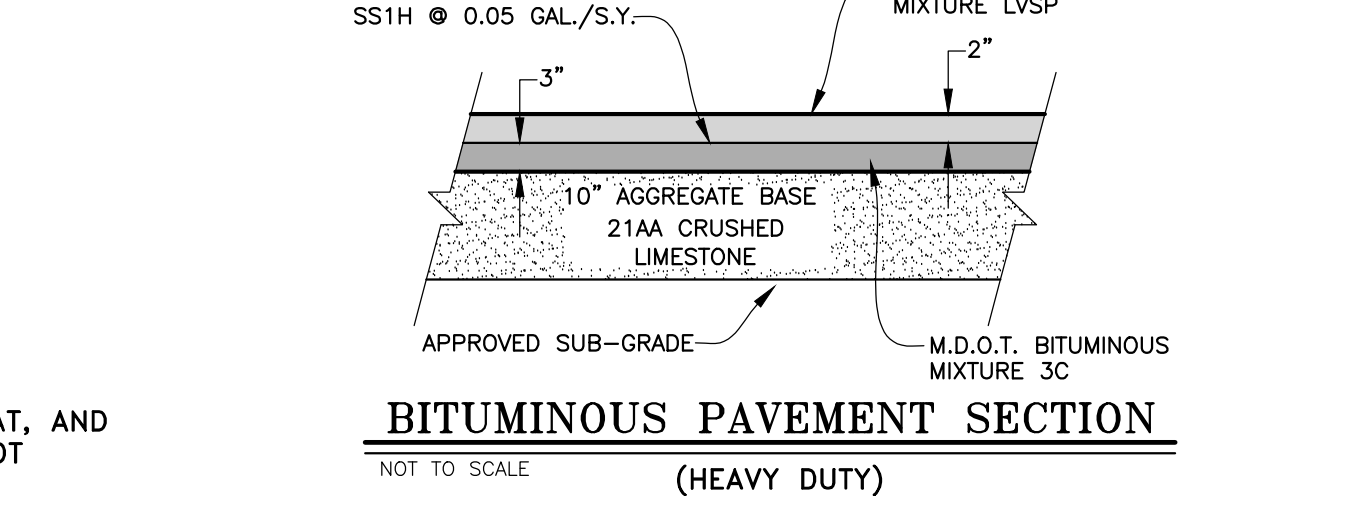
TYPICAL CONCRETE WALK WITH STANDARD CONCRETE CURB FACE NOT TO SCALE



TYPICAL 4 inch CONCRETE SIDEWALK SECTION NOT TO SCALE



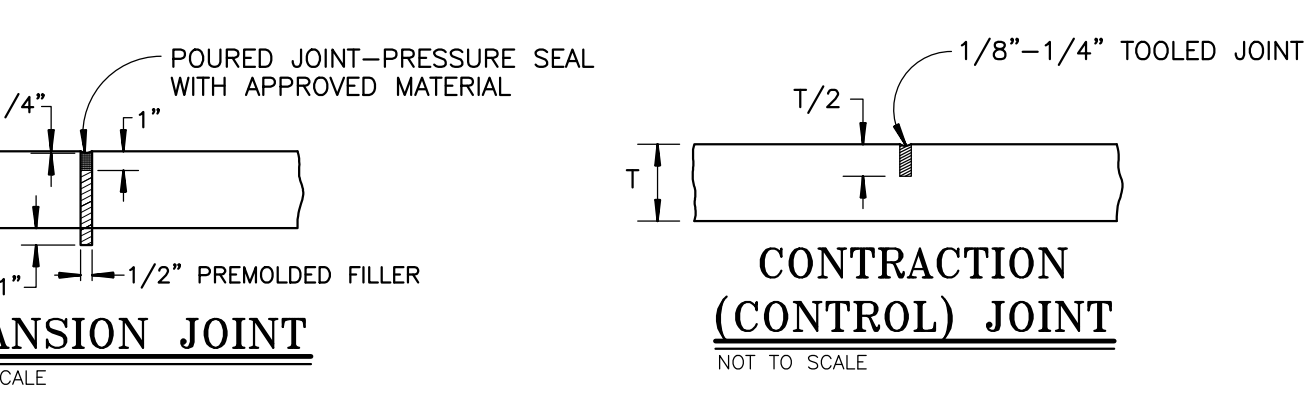
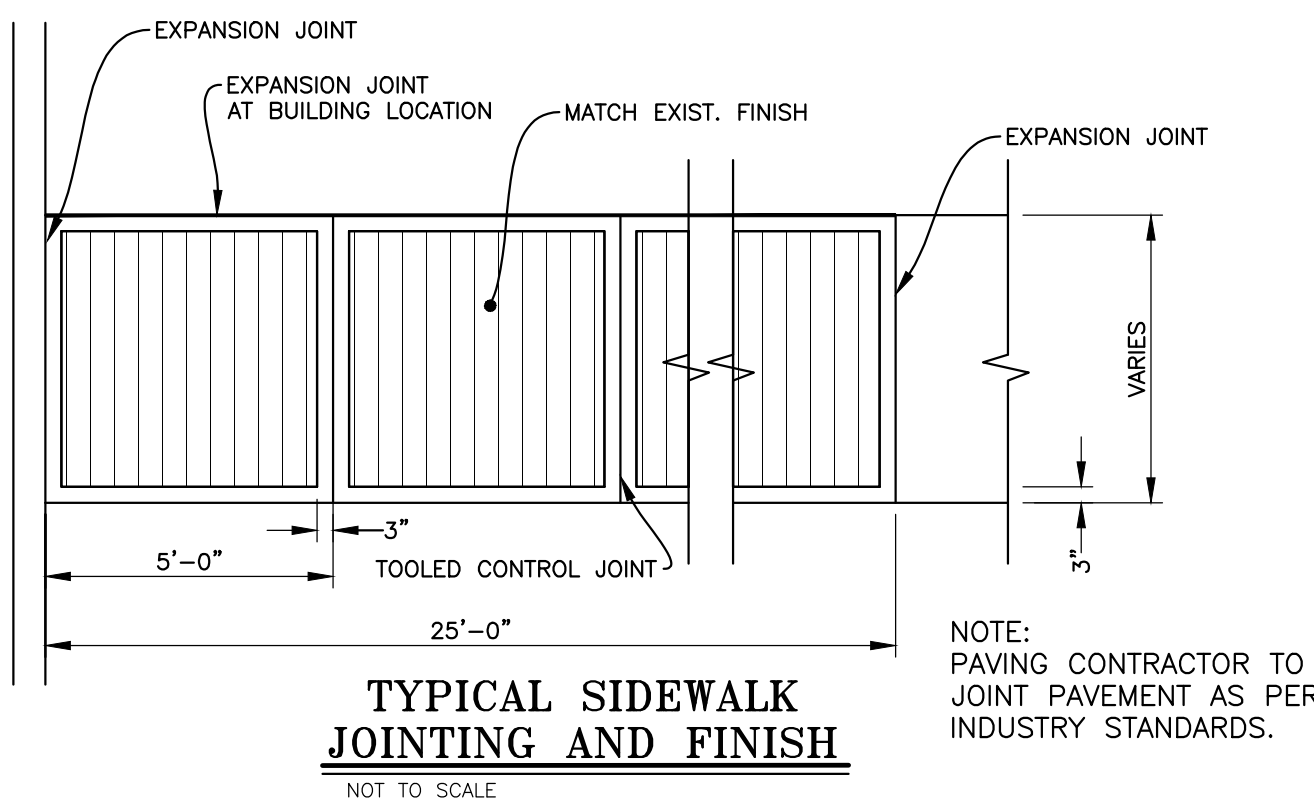
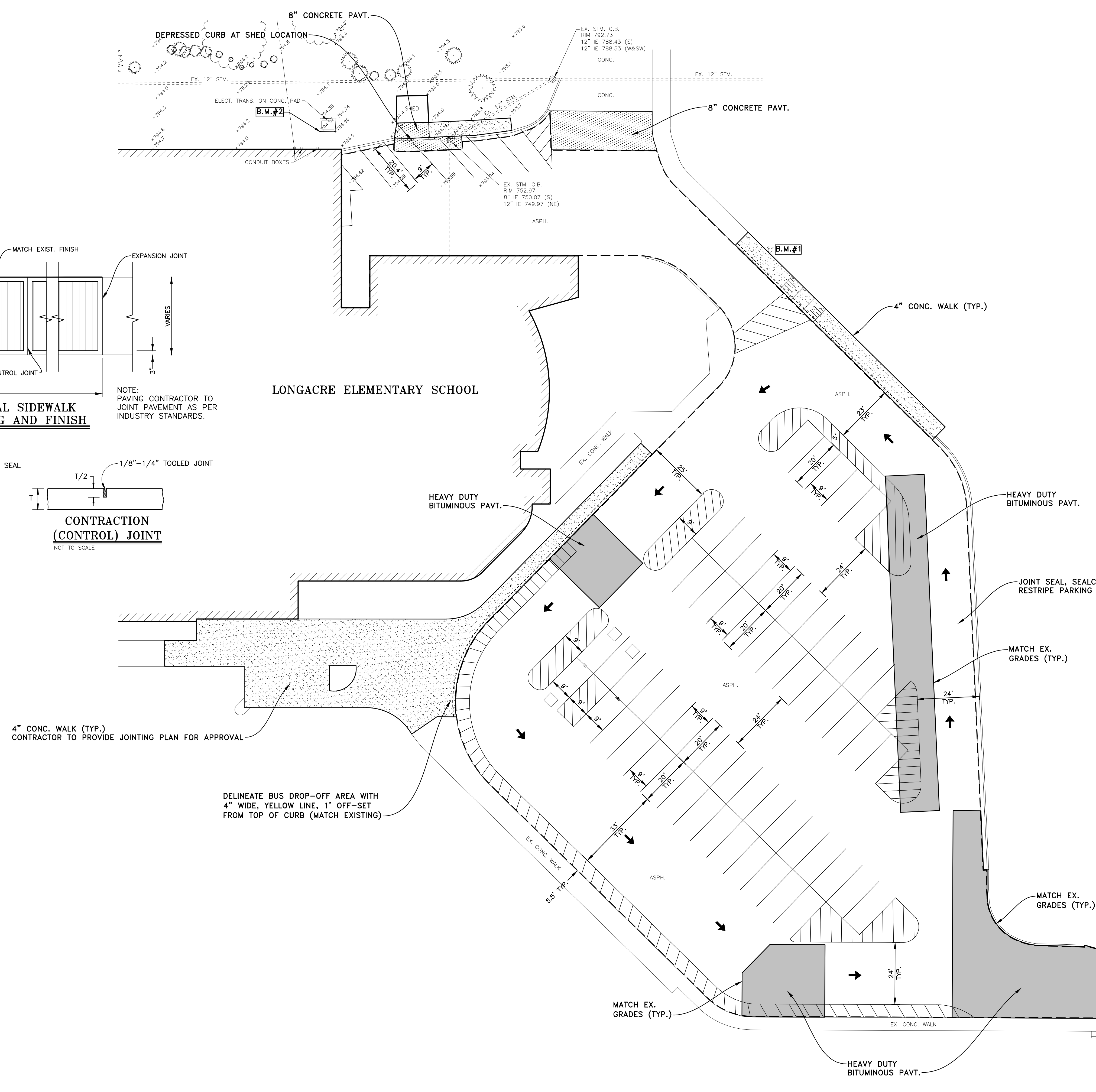
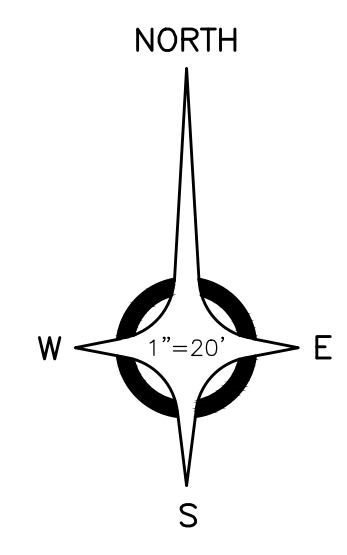
TYPICAL 8 inch CONCRETE PAVEMENT SECTION NOT TO SCALE



BITUMINOUS PAVEMENT SECTION (HEAVY DUTY) NOT TO SCALE

QUANTITIES table listing materials and quantities: BITUMINOUS PAVEMENT (HEAVY DUTY) 700 SY, 8 inch CONCRETE PAVEMENT 100 SY, CURB FACE CONC. WALK 250 LF, 4 inch CONCRETE WALK 5,300 SF, JOINT SEALING 3,000 LF, SEALCOAT 5,500 SY

PAVING LEGEND table with symbols for BITUMINOUS PAVEMENT (HEAVY DUTY), 4 inch THICK CONCRETE SIDEWALK, 6 inch HIGH CURB FACED WALK, 8 inch CONC. PAVT., and SEALCOAT LIMITS



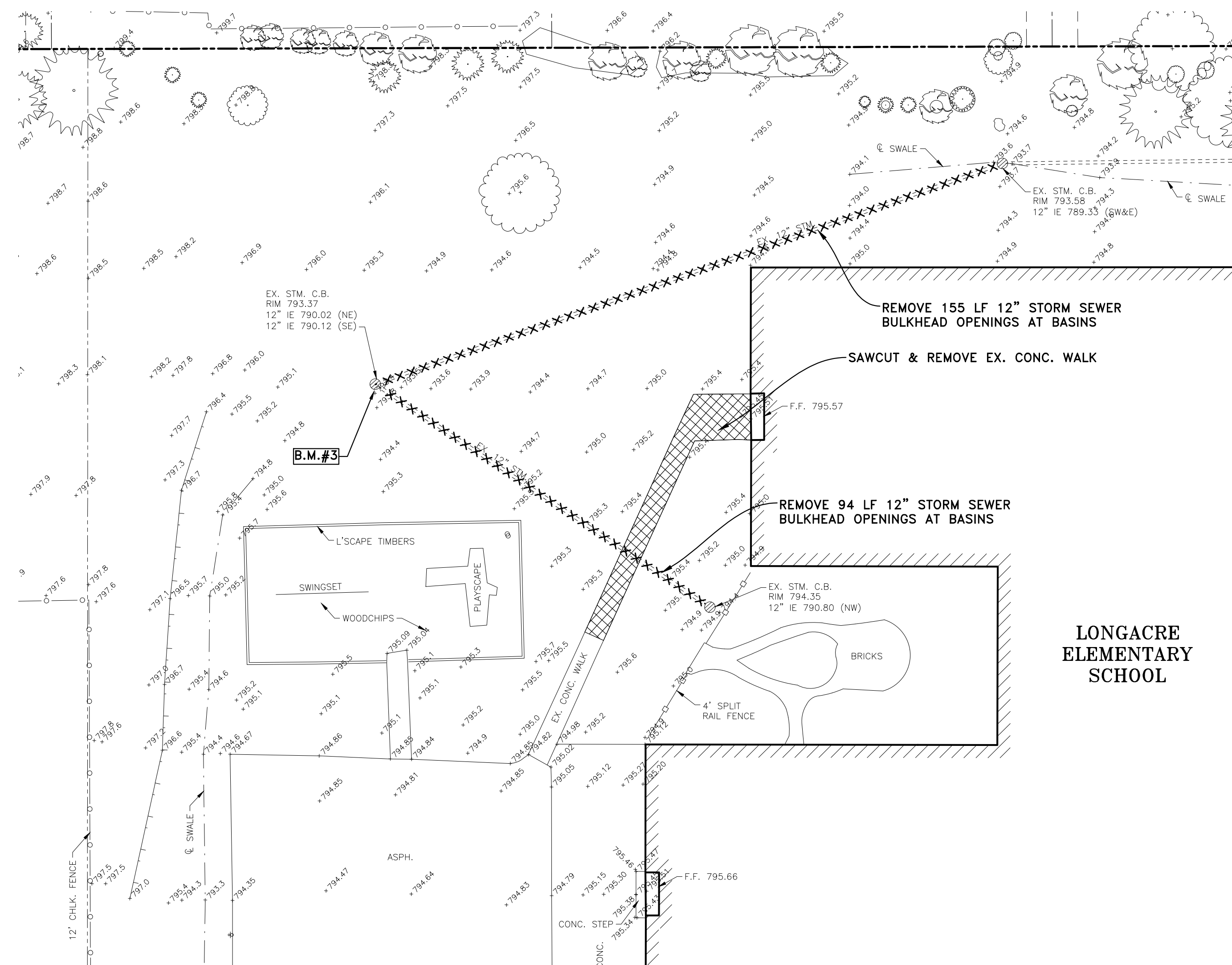
BENCH MARKS (NAVD88 DATUM)

BENCH MARK NO. 1 TOP OF HYDRANT AT N. END OF MAIN PKG. LOT 75 ± E.E. OF N.E. COR. OF SCHOOL. ELEVATION: 795.47
BENCH MARK NO. 2 'X' ON S.W. COR. CONC. TRANS. PAD. N. OF SCHOOL, W. OF DUMPSTER ENCLOSURE. ELEVATION: 794.56
BENCH MARK NO. 3 'X' ON N. RIM STORM. CB. 90 ± W. OF BLDG., 33 ± N. OF PLAYScape. ELEVATION: 793.35

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REMOVAL PLAN
SCALE: 1" = 20'

BID ALT. 1L - QUANTITIES

CONC. WALK REMOVAL	450 SF
STORM SEWER REMOVAL	250 LF

REMOVAL LEGEND

	CONCRETE WALK REMOVAL (AS MARKED IN THE FIELD)
xxxxxxx	REMOVE EXIST. STM. SWR.

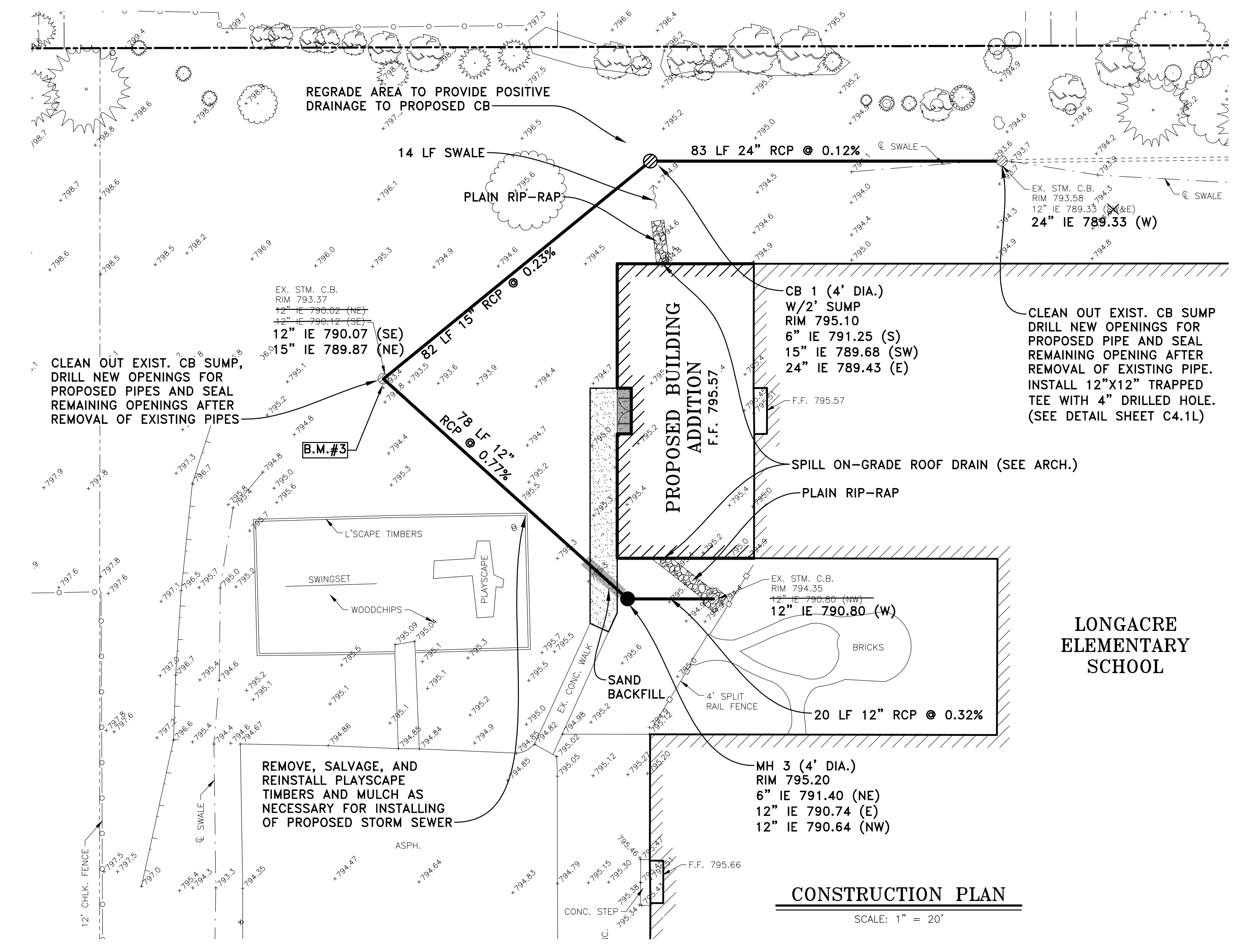
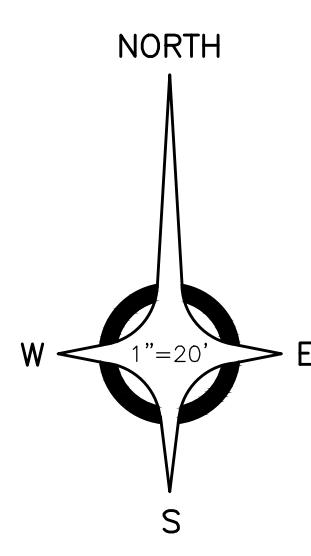
BENCH MARKS (NAVD88 DATUM)

- BENCH MARK NO. 1
TOP OF HYDRANT AT N. END OF MAIN PKG. LOT 75±E.E. OF N.E. COR. OF SCHOOL.
ELEVATION: 795.47
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"X" ON S.W. COR. CONC. TRANS. PAD. N. OF SCHOOL, W. OF DUMPSTER ENCLOSURE.
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CONSTRUCTION PLAN
SCALE: 1" = 20'

DETENTION BASIN CALCULATION (OAKLAND COUNTY)

Qa=Q allowable
A= Impervious area added
C= Runoff Coefficient
T= Storage Time
Vs = Storage Volume
Vt = Total Volume of Storage Required

A= 0.051 acres
Cp= 0.90

Note: The following detention basin calculation for a 100 year rain event is for an orifice outlet.

Proposed Conditions
Qa = 0.2 cfs/acre
Qo = 0.010 cfs
Qo = 0.22 cfs/acre imp
T = 190.42 minutes
Vs = 12,893 cubic feet
Vt = 589 cubic feet

Storage Provided

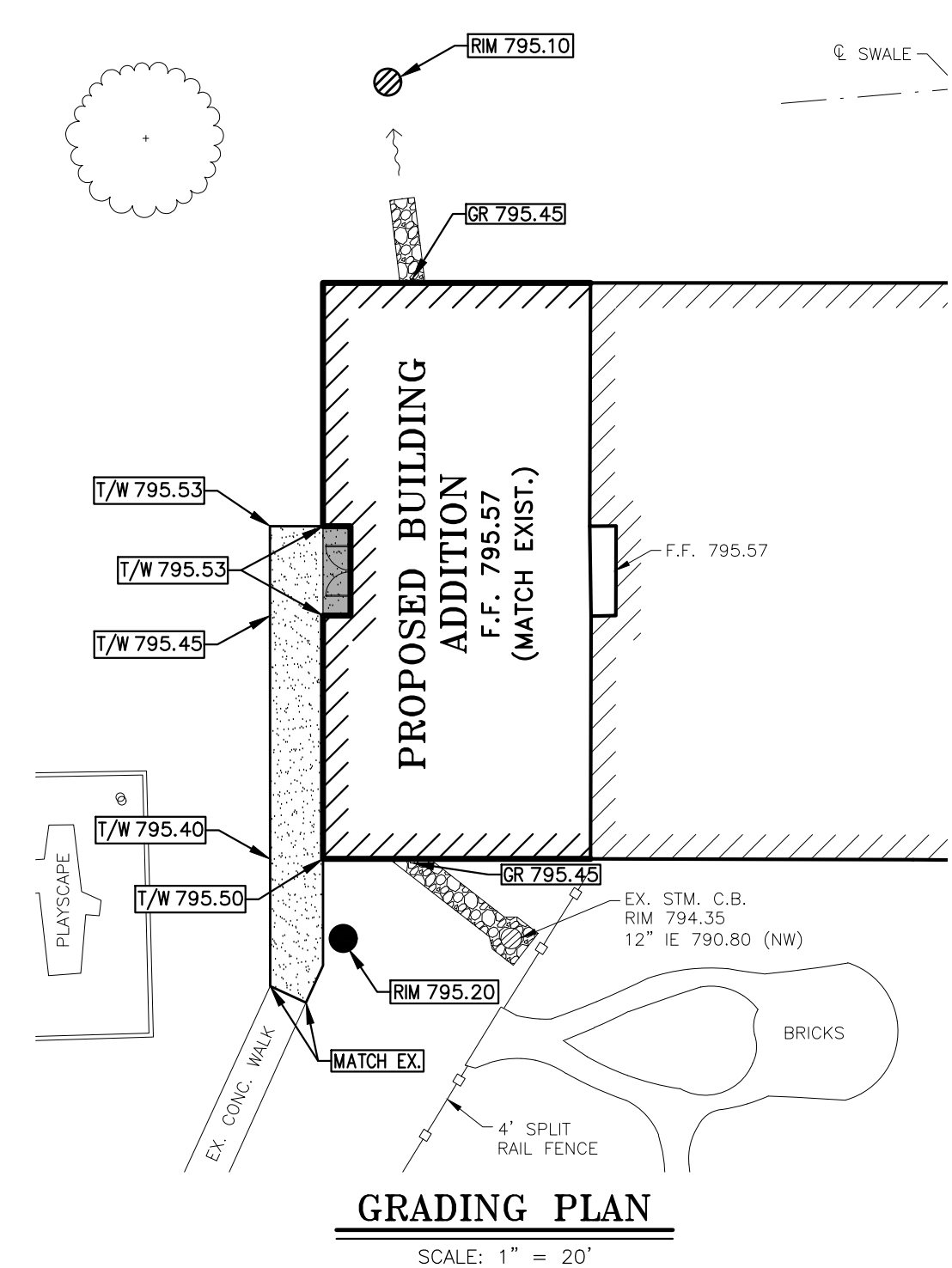
Storage Provided in Storm Sewer			
Pipe	Diameter [in]	Length [ft]	Storage Capacity [cf]
A	24	83	261
B	15	82	101
C	12	78	61
D	12	20	16
Subtotal			439

Storage Provided in Storm Structures				
Structure	Diameter [ft]	Invert [ft]	Rim Elev. [ft]	Storage Capacity [cf]
MH 1	4	789.43	795.10	59
EX CB	4	789.98	793.37	30
MH 2	4	790.66	795.20	44
EX CB	4	789.33	793.58	41
Subtotal				174

Total Storage Provided: 612

BID ALT. 1L - QUANTITIES

CONC. WALK	420 SF
24" RCP STORM SEWER	83 LF
15" RCP STORM SEWER	82 LF
12" RCP STORM SEWER	98 LF
4' DIA. CB	1 EA
4' DIA. MH	1 EA
PLAIN RIP-RAP	100 SY



GRADING PLAN
SCALE: 1" = 20'

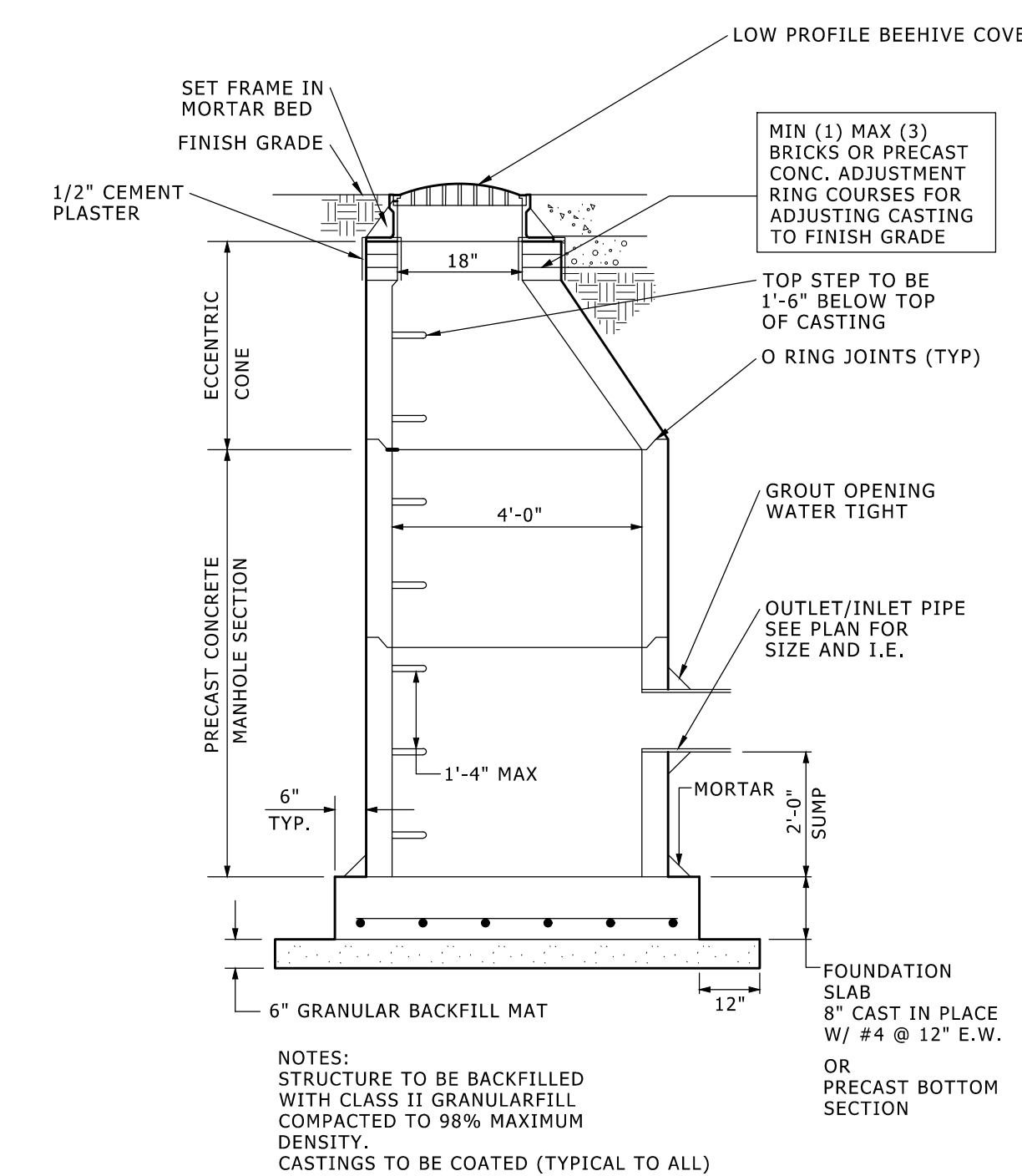
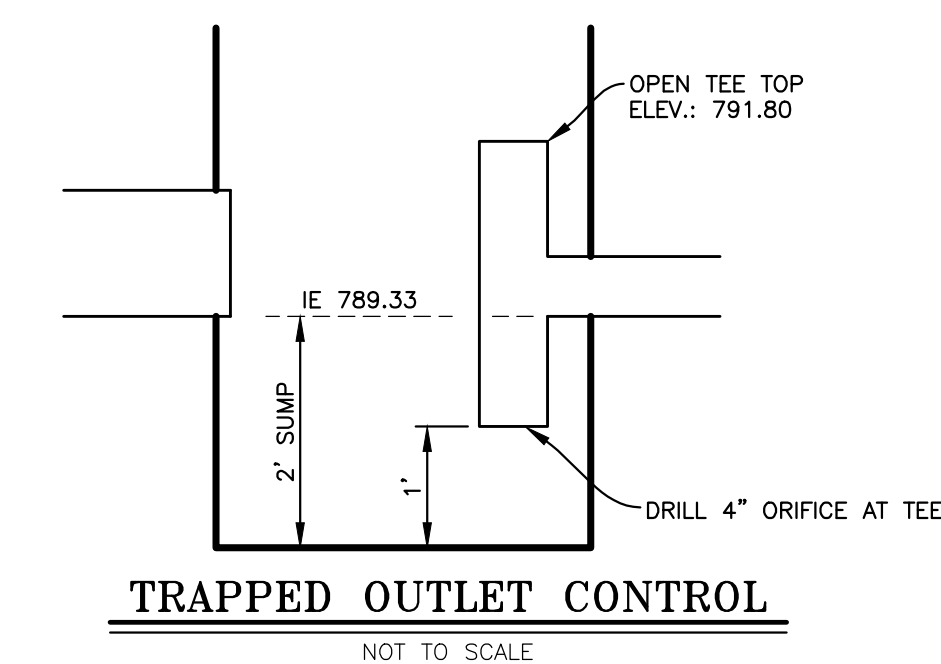
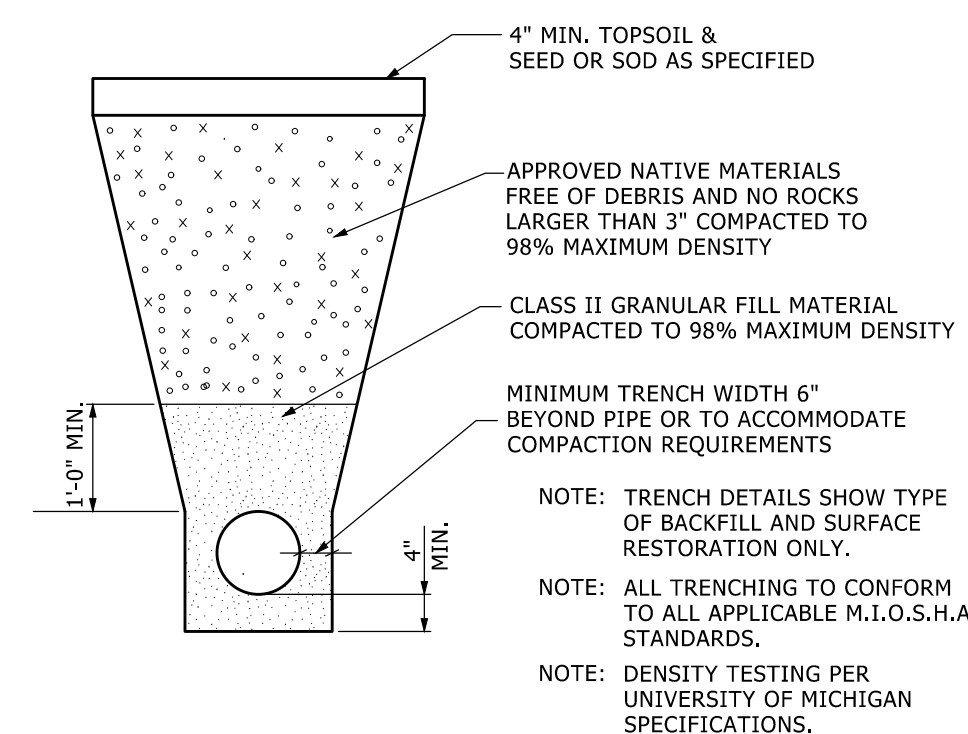
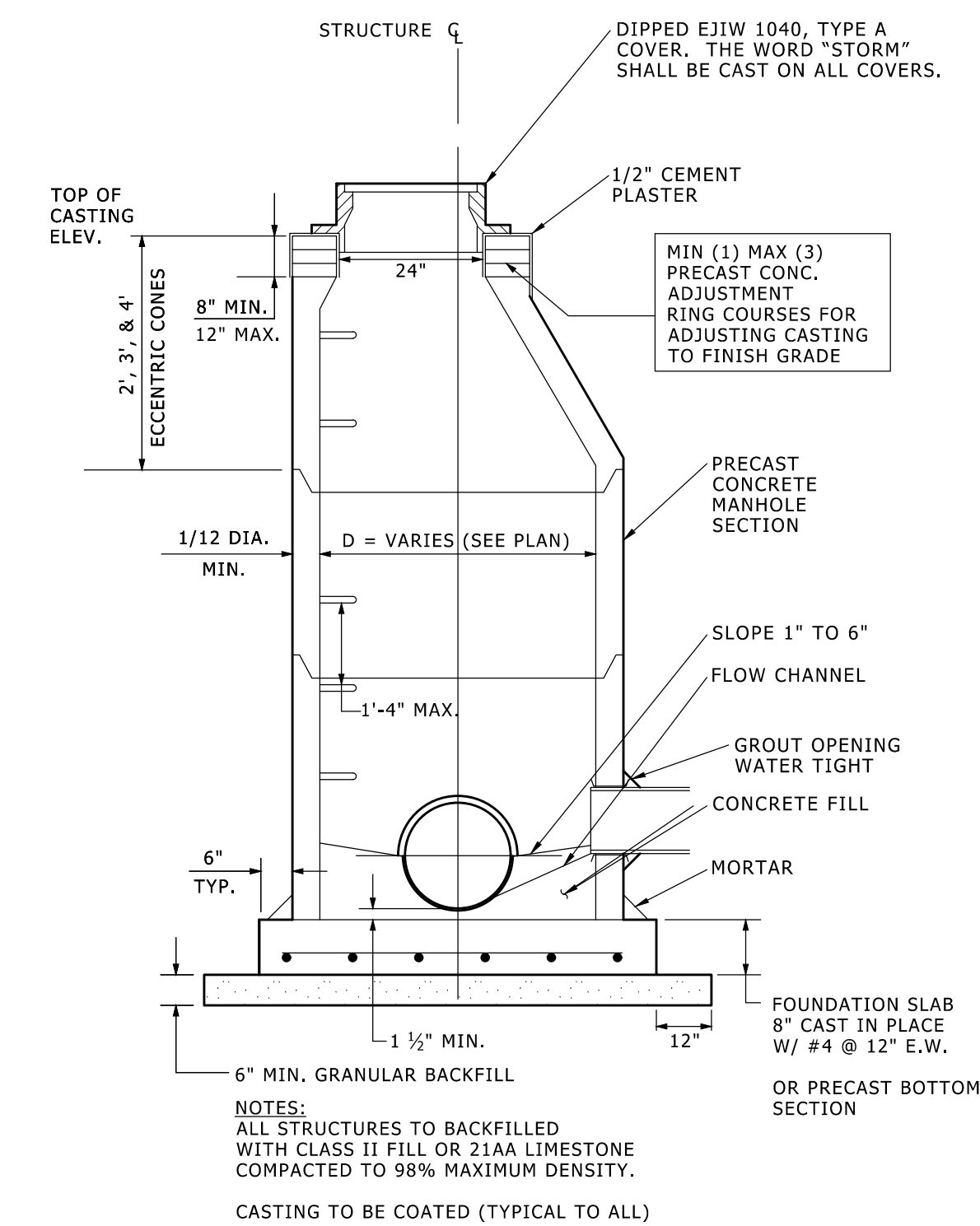
LEGEND

- PROPOSED STORM SEWER
- SAND BACKFILL
- PROPOSED CATCH BASIN (FIELD)
- PROPOSED STORM MAN HOLE
- EXIST. CATCH BASIN (FIELD)
- EXIST. STORM SEWER
- 4" CONCRETE SIDEWALK
- PROPOSED GRADE
- EXIST. GRADE

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

DRAWN BY: KJP
CHECKED BY: JS
REVISIONS

DATE: November 23, 2016
SHEET NO.



SOIL EROSION AND SEDIMENTATION CONTROL NOTES AND MAINTENANCE NOTES

- THIS PROJECT SHALL BE CONSTRUCTED IN COMPLIANCE WITH PART 91 OF ACT 451 OF 1994, AS AMENDED, THE SOIL EROSION AND SEDIMENTATION CONTROL ACT AND THE OAKLAND COUNTY SOIL EROSION AND SEDIMENTATION CONTROL ORDINANCE.
- ALL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF OAKLAND COUNTY WATER RESOURCES COMMISSION.
- EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF SITE AREAS OR IN WATERWAYS, WATERWAYS INCLUDE BOTH NATURAL AND MAN MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, AND PONDS.
- STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH CHANGE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.
- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS BEFORE AND AT ALL TIMES DURING CONSTRUCTION ON THIS PROJECT. ANY MODIFICATIONS OR ADDITIONS TO SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE COMPLIED WITH AS REQUIRED OR DIRECTED BY OAKLAND COUNTY WATER RESOURCES COMMISSION.
- IF ANY OF THE SESC MEASURES ON THE SITE ARE DEEMED INADEQUATE OR INEFFECTIVE, THE OAKLAND COUNTY WATER RESOURCES COMMISSION HAS THE RIGHT TO REQUIRE ADDITIONAL SESC MEASURES AT THE EXPENSE OF THE LANDOWNER.
- INSTALL CRUSHED CONCRETE ACCESS DRIVE, PLACED ON GEOTEXTILE FABRIC AS INDICATED ON THE PLAN. THE ACCESS DRIVE MUST BE A MINIMUM OF 12' x 50' x 8".
 - NEW LAYERS OF CRUSHED CONCRETE WILL BE ADDED AS OLD LAYERS BECOME COMPACTED.
- INSTALL SILT FENCE AS INDICATED ON THE PLAN AND AT ADDITIONAL AREAS AS NECESSARY.
 - SILT FENCE SHALL BE INSTALLED PER DETAIL.
 - BUILD UP OF SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE.
 - IF SILT FENCE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF EXPECTED USABLE LIFE AND THE BARRIER IS STILL REQUIRED, THE SILT FENCE SHALL BE REPLACED PROMPTLY.
 - SILT FENCE SHALL BE INSPECTED WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF RAINFALL AND DAILY DURING A PROLONGED RAIN EVENT, REQUIRED MAINTENANCE SHALL BE PROVIDED PROMPTLY.
- INSTALL INLET FILTER ON ALL PAVEMENT CATCH BASINS PER DETAIL.
 - INLET FILTERS SHALL BE INSPECTED WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF A RAINFALL, AND DAILY DURING A PROLONGED RAIN EVENT.
 - BUILDUP OF SEDIMENT AND DEBRIS SHALL BE REMOVED PROMPTLY.
 - IF FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF EXPECTED USABLE LIFE AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE REPLACED PROMPTLY.
- INSTALL SILT FENCE ON ALL YARD CATCH BASINS PER DETAIL. SEED OR SOO THE AREA BETWEEN THE SILT FENCE AND THE INLET.
 - SILT FENCE SHALL BE INSPECTED WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF RAINFALL, AND DURING A PROLONGED RAIN EVENT.
 - BUILD UP OF SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE.
 - IF FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF EXPECTED USABLE LIFE AND THE BARRIER IS STILL REQUIRED, THE SILT FENCE SHALL BE REPLACED PROMPTLY.
- INLET SEDIMENT TRAPS AND ALL DITCH SEDIMENT TRAPS SHALL BE INSPECTED DAILY, THE SEDIMENT PITS SHALL BE CLEANED OUT WHEN HALF FULL, OR AS DIRECTED BY OAKLAND COUNTY WATER RESOURCES COMMISSION.
- ALL STOCKPILES SHALL BE MAINTAINED IN SUCH A WAY AS TO PREVENT EROSION FROM LEAVING THE SITE. IF THE STOCKPILE WILL BE ON SITE FOR MORE THAN 30 DAYS, THE STOCKPILE MUST BE SEEDED. SILT FENCE MUST BE INSTALLED AROUND THE PERIMETER OF THE STOCKPILE.
- IMMEDIATELY AFTER SEEDING, MULCH ALL SEEDED AREAS WITH UNWEATHERED SMALL GRAIN STRAW, SPREAD UNIFORMLY AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE OR 100 POUNDS (2-3 BALES) PER 1000 SQUARE FEET. THIS MULCH SHOULD BE ANCHORED WITH DISC TYPE MULCH ANCHORING TOOL OR OTHER MEANS AS APPROVED BY OAKLAND COUNTY WATER RESOURCES COMMISSION. MULCH MATTING MAY BE USED IN LIEU OF LOOSE MULCH.
- IF ANY DEWATERING IS NEEDED, IT SHALL BE DISCHARGED THROUGH A FILTER BAG OVER A WELL VEGETATED AREA. THE PUMP MUST DISCHARGE AT A NON-EROSIVE VELOCITY. IF NECESSARY, AN APPROVED ENERGY DISSIPATER MAY BE USED.
- ALL DIRT TRACKED ONTO ANY ROADWAY SHALL BE REMOVED IMMEDIATELY.
- STREETS AND OR PARKING AREAS WILL BE SCRAPED ON A DAILY BASIS AND SWEEPED AT A MINIMUM OF ONCE PER WEEK BY THE CONTRACTOR.
- DURING DRY PERIODS, ALL DISTURBED AREAS SHALL BE WATERED FOR DUST CONTROL.
- PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED, WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGES ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. ALL TEMPORARY SOIL EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED. ALL PERMANENT SOIL EROSION CONTROL MEASURES WILL BE IMPLEMENTED AND ESTABLISHED BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED.
- FINAL GRADE, ESTABLISH VEGETATION, AND OR LANDSCAPE ALL DISTURBED AREAS NOT BUILT OR PAVED UPON.
- REMOVE ALL TEMPORARY SOIL EROSION DEVICES AFTER PERMANENT STABILIZATION IS ESTABLISHED.

NAME OF & DISTANCE TO NEAREST WATERCOURSE:
 TARABUSI CREEK APPROX. 1900 L.F.± W. OF SITE

NAME(S) & PHONE NUMBER(S) FOR PERSON(S) RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY & PERMANENT SOIL EROSION CONTROL MEASURES:
 TO BE DETERMINED

APPROXIMATE START DATE: JUNE 2017

APPROXIMATE COMPLETION DATE: JULY 2017

TOTAL ACRES DISTURBED = 0.3 ACRES

I UNDERSTAND MY RESPONSIBILITY OUTLINED UNDER THESE GUIDELINES.

CONTRACTOR'S SIGNATURE: _____ DATE: _____

FAILURE TO COMPLY WITH THE SESC PLAN AND THESE GUIDELINES MAY RESULT IN ENFORCEMENT ACTION AGAINST THE CONTRACTOR.

BENCH MARKS (NAVD88 DATUM)

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BENCH MARK NO. 3
 "X" ON N. RIM STORM. CB. 90'± W. OF BLDG., 33'± N. OF PLAYSCAPE. ELEVATION: 793.35

QUANTITIES

INLET FILTER	2 EA
SILT FENCE	708 LF
CRUSHED CONC. ACCESS DRIVE	1 EA

QUANTITIES ALT 1L

INLET FILTER	4 EA
SILT FENCE	480 LF

SEQUENCE OF EVENTS

NOTICE TO PROCEED	JUNE 2017
START DEMO, GRADING, COMPLETE FOR FOOTINGS	JUNE 2017
SIDEWALK CONSTRUCTION	JUNE 2017
SITE WORK COMPLETE	JULY 2017
SUBSTANTIAL COMPLETION	JULY 2017

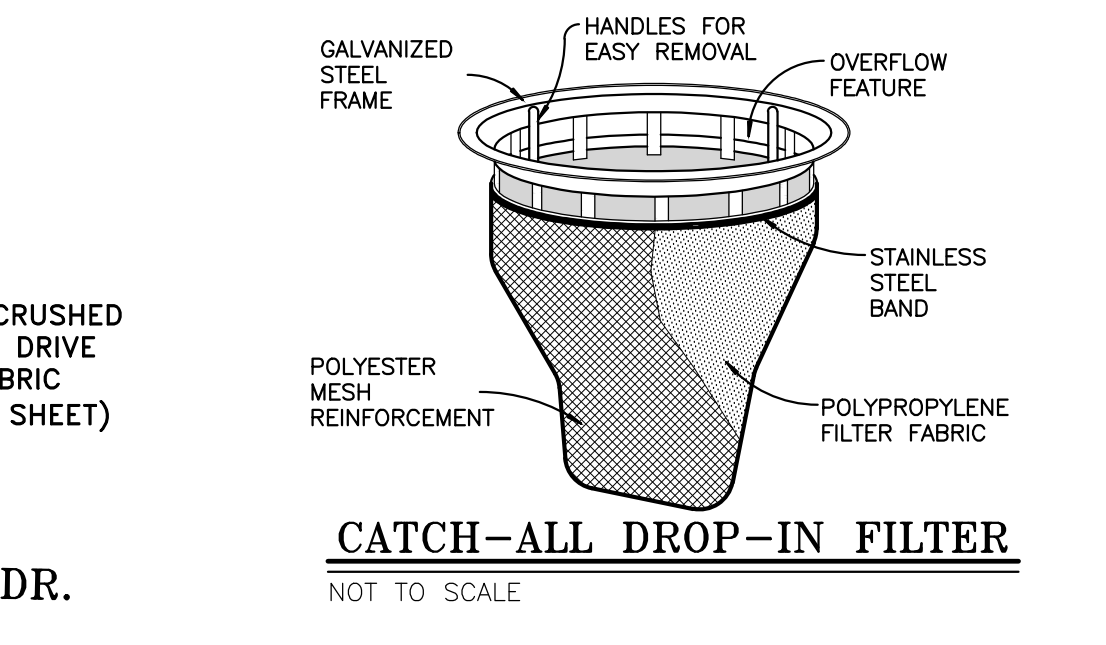
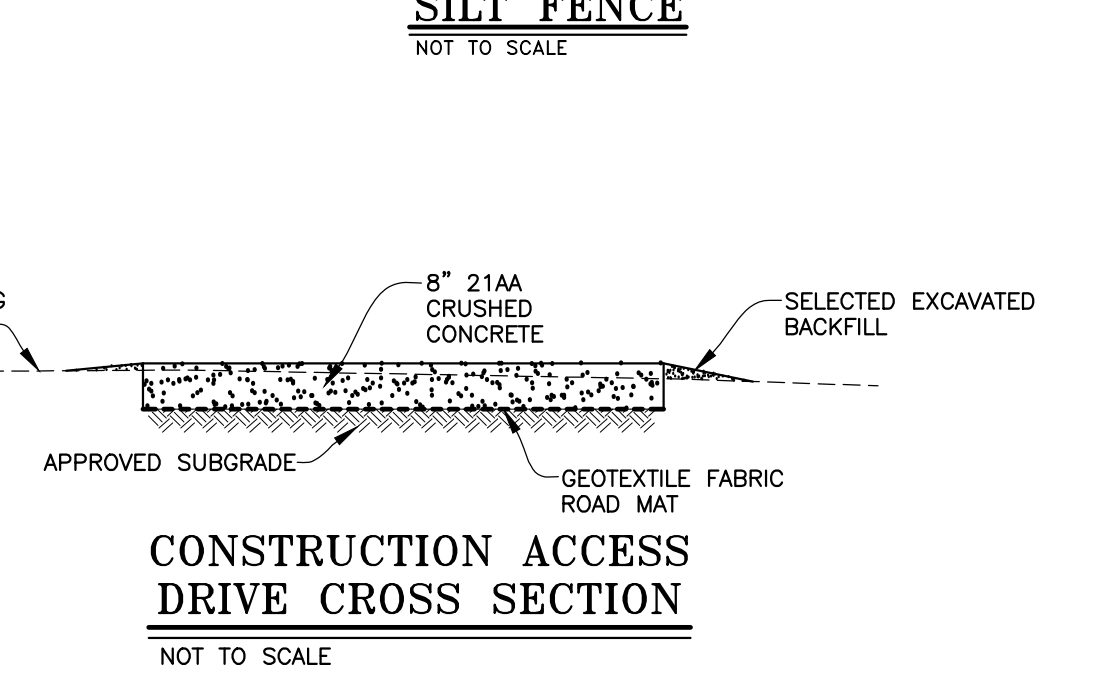
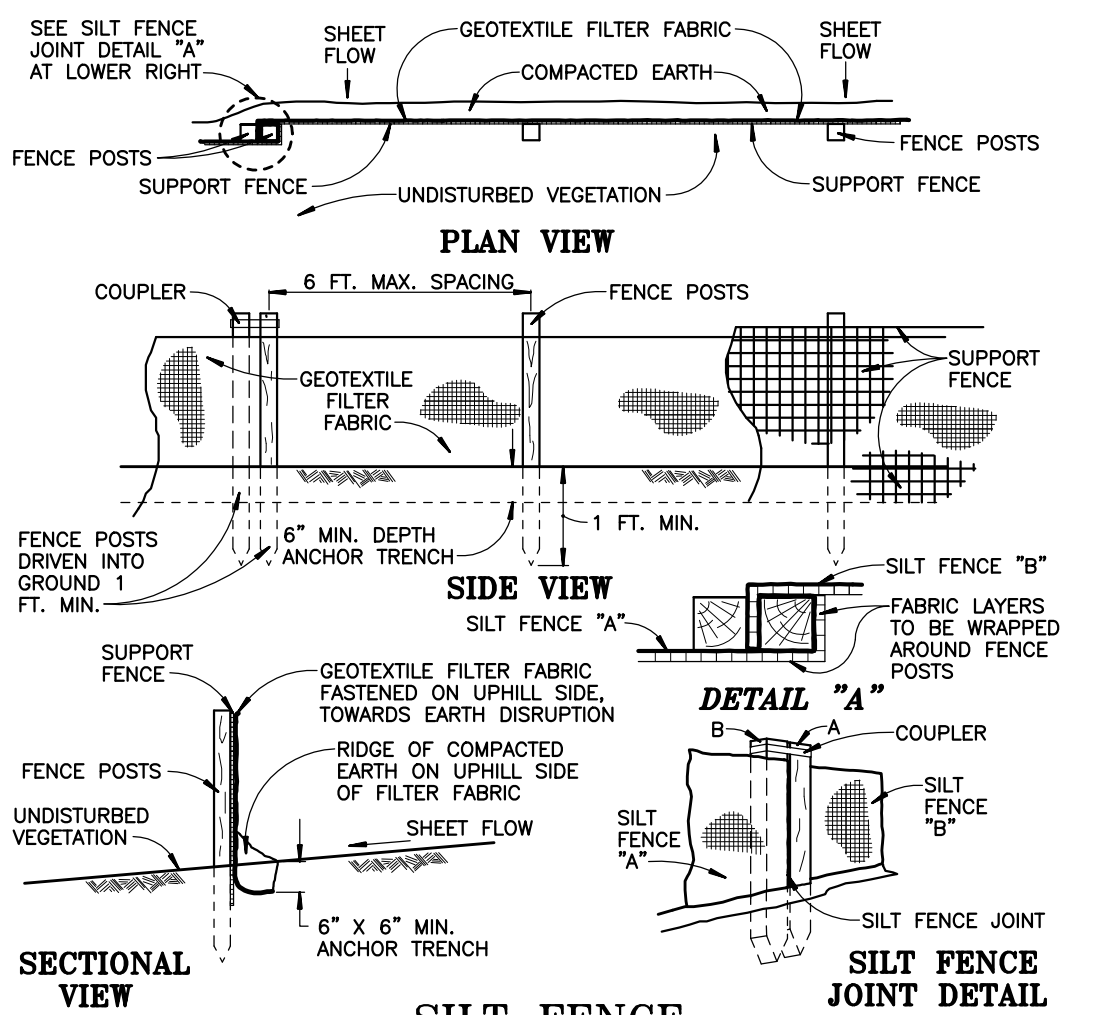
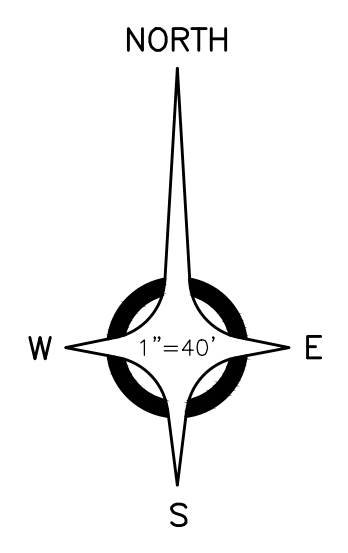
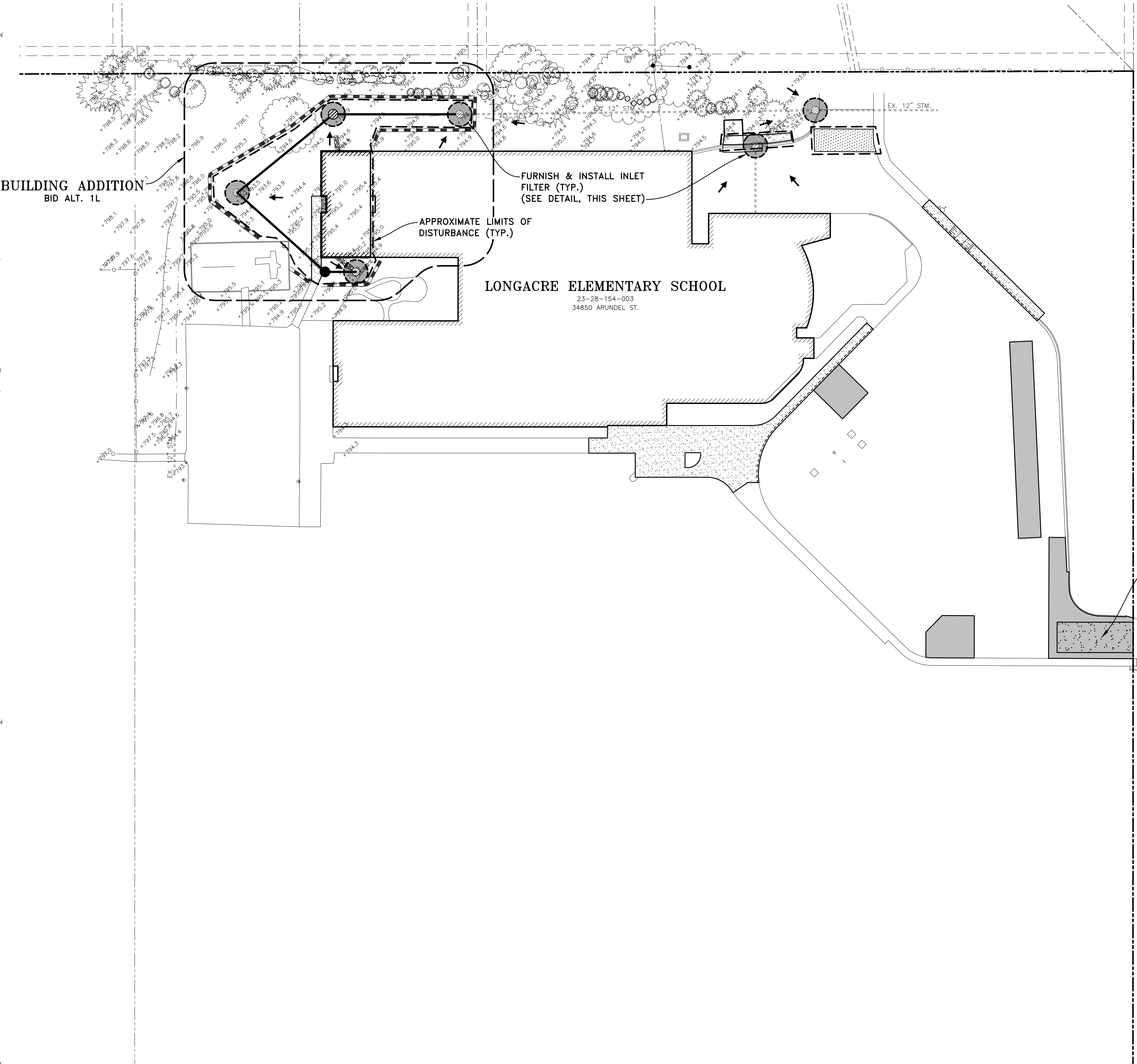
LEGAL DESCRIPTION

PARCEL No. 23-28-154-003

T1N, R9E, SEC 28 PART OF NW 1/4 BEG AT PT DIST S 89-30-14 E 654.10 FT FROM W 1/4 COR. TH N 00-38-55 E 660.39 FT, TH S 89-31-35 E 657.56 FT, TH S 00-38-55 W 660.66 FT, TH N 89-30-14 W 657.56 FT TO BEG EXC THAT PART TAKEN FOR 'LONGACRE WOODS' OCCP NO 658 9.60 A 3-12-90 FR 002.

SUBJECT TO ANY AND ALL EASEMENTS AND RIGHTS OF WAY OF RECORD OR OTHERWISE.

FROM TAX RECORDS ONLY, NO FIELD SURVEY PERFORMED.



NOTE: NO DEWATERING OR ON SITE STOCKPILING OF MATERIAL IS ANTICIPATED ON THIS PROJECT

NOTE: RESTORE ALL DISTURBED AREAS WITH 3" MIN. TOPSOIL, SEED, FERTILIZER & MULCH.

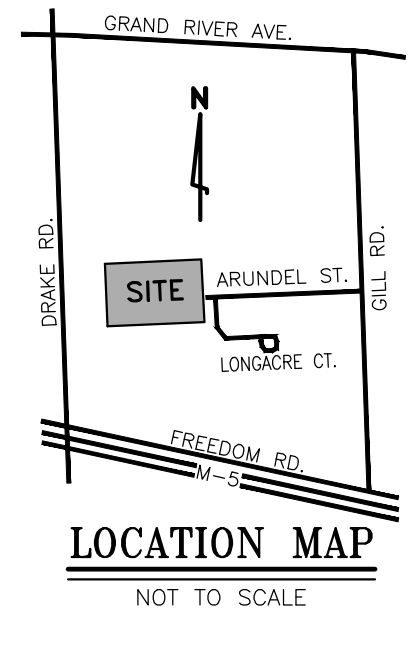
SOIL EROSION CONTACT PERSON: TO BE DETERMINED

DISTANCE TO TARABUSI CREEK APPROX. 1900 L.F.± W. OF SITE

GROSS ACREAGE DISTURBED IS 0.3 ACRES

SOILS INFORMATION

AREA OF CONSTRUCTION
 62B = Urban land-Spinks complex
 13B = Oshtemo-Boyer loamy sands



LEGEND

(Symbol)	EXIST. STORM CATCH BASIN (FIELD)
(Symbol)	EXIST. STORM CATCH BASIN (PAV'T.)
(Symbol)	STORM MAN HOLE
(Symbol)	STORM CATCH BASIN (FIELD)
(Symbol)	STORM CATCH BASIN (PAV'T.)
(Symbol)	INLET FILTER
(Symbol)	SILT FENCE
(Symbol)	LIMITS OF DISTURBANCE

WA
 WAKELY ASSOCIATES, INC. ARCHITECTS
 30500 VAN DYKE AVENUE SUITE M-7 WARREN, MICHIGAN 48093 PH: 586.673.4100 FX: 586.573.0822 www.WakelyAIA.com

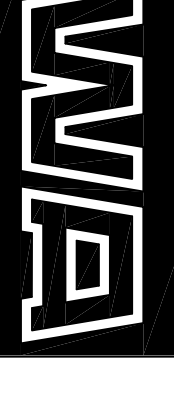
ANDERSON, ECKSTEIN AND WESTRICK INC.
 6105 Schaefer Ave., Shelby Township, Michigan 48115 Phone: 586-759-1554 Fax: 586-759-9760 AEW NO. 0577-0091

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
 ELEMENTARY SCHOOLS

LONGACRE ELEMENTARY
 SOIL EROSION AND SEDIMENTATION CONTROL PLAN

PRELIMINARY
 DESIGN DEVELOPMENT
 CONSTRUCTION
 FINAL RECORD
 DRAWN BY: JKP
 CHECKED BY: JS
 REVISIONS:
 DATE: November 23, 2016
 SHEET NO.
C5.0L
 JOB NO. 161664B

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WMA ASSOCIATES, INC.
ARCHITECTS

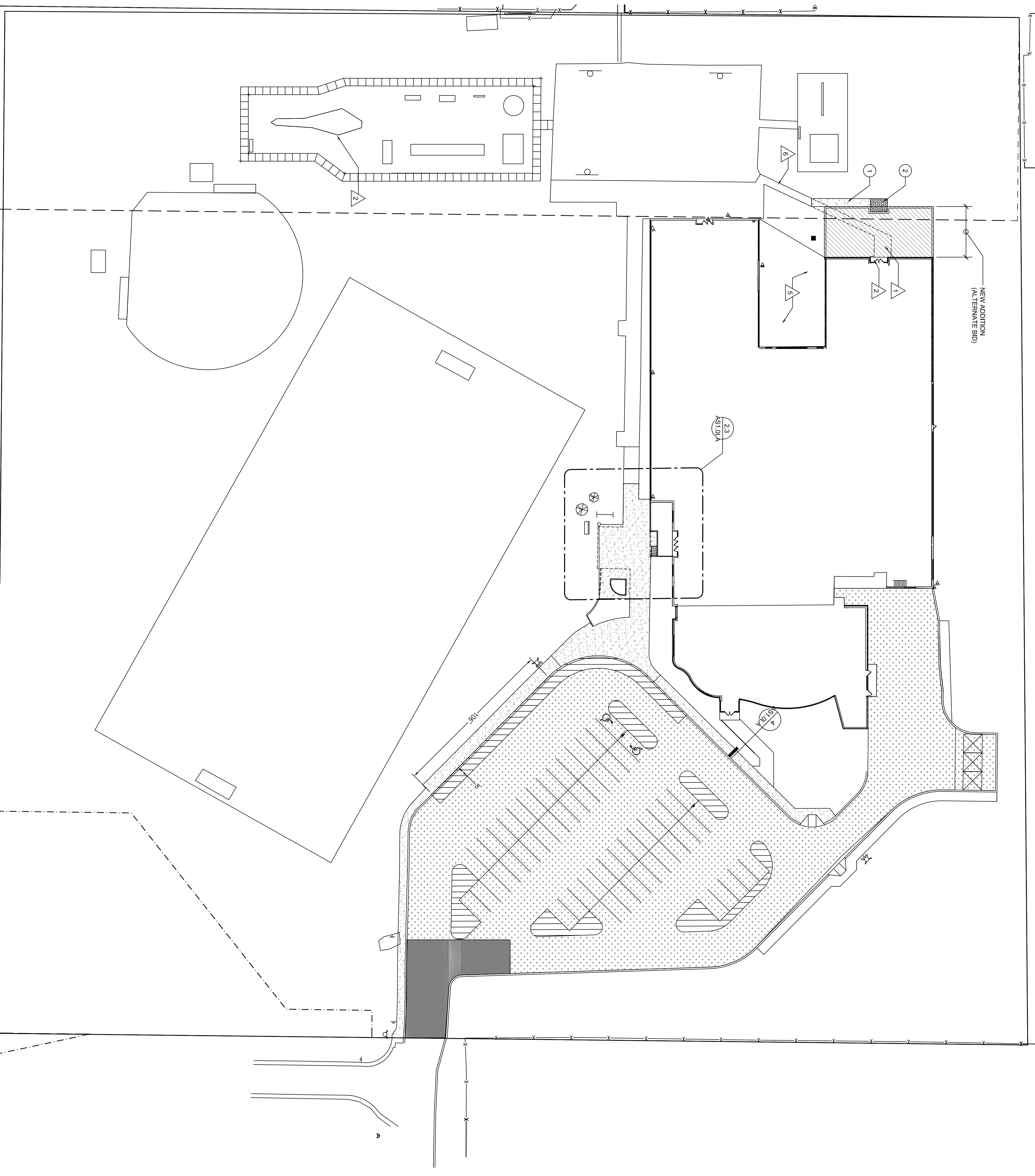
30500 VAN DYKE AVENUE
SUITE M-7
MORRISON, MICHIGAN 48093
TEL: 586.573.0822
FX: 586.573.0822
WWW.WMAIA.COM

SITE PLAN DEMOLITION KEY NOTES:

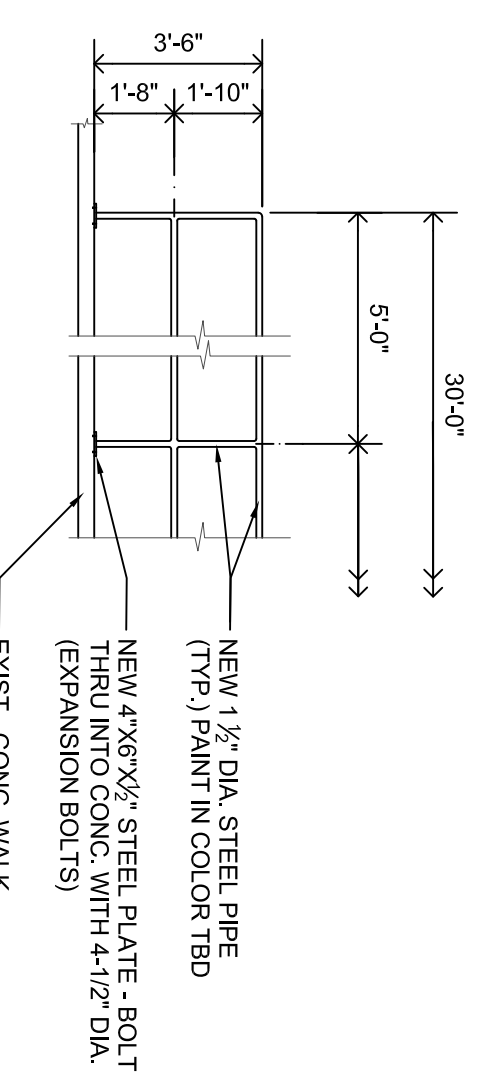
- 1 REMOVE EXIST' CONC WALK - SHOWN DASHED (ALTERNATE BID)
- 2 REMOVE CONC SUPPORTED SLAB COMPLETE FULL DEPTH (4'-48") (ALTERNATE BID)
- 3 EXIST STEEL COLUMN TO REMAIN
- 4 LINE OF EXISTING OVERHANG
- 5 EXIST CONC. TO REMAIN
- 6 EXIST LANDSCAPED AREA TO REMAIN (PROTECT DURING CONSTRUCTION)
- 7 EXIST BIKE RACK TO REMAIN
- 8 REMOVE EXIST' CONC. WALK COMPLETE - SHOWN DASHED
- 9 EXIST FLAGPOLE AND CONC. APRON TO REMAIN
- 10 EXISTING TREE TO REMAIN (PROTECT DURING CONSTRUCTION)
- 11 REMOVE ALL BRICK FAYERS
- 12 EXIST BENCH TO REMAIN

SITE PLAN NEW WORK KEY NOTES:

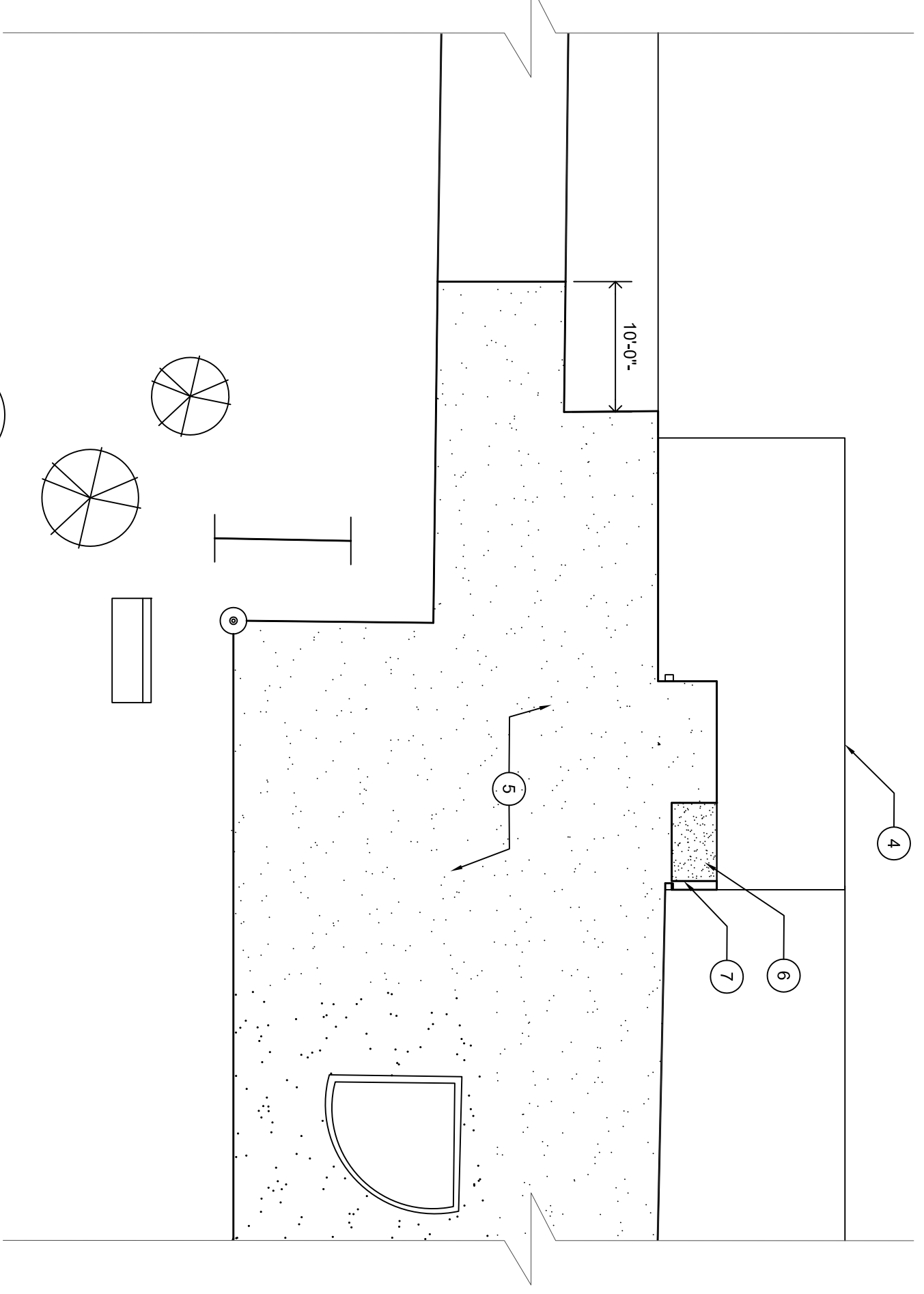
- 1 NEW 4" CONCRETE TO WALK ON MIN. 6" COMP. FILL (6" WIDE) (ALTERNATE BID)
- 2 NEW CONC. SUPPORTED SLAB AT NEW ENTRY DOORS. SEE DETAILS (ALTERNATE BIDS)
- 3 NEW PAINTED STEEL GUARDRAIL BOLTED TO EXIST' CONC. WALK. SEE DETAIL #4 THIS SHEET
- 4 NEW ADDITION BELOW EXIST' OVERHANG
- 5 NEW 4" CONC. ON MIN. 6" COMP. FILL. SLOPE TO DRAIN AWAY FROM BUILDING. MIN. FINISH ELEVATION (11/17)
- 6 NEW CONC. SUPPORTED SLAB AT NEW ENTRY DOORS. SEE DETAILS
- 7 NEW STEEL PIPE GUARDRAIL (32" LONG) SIMILAR TO DETAIL #4 THIS SHEET



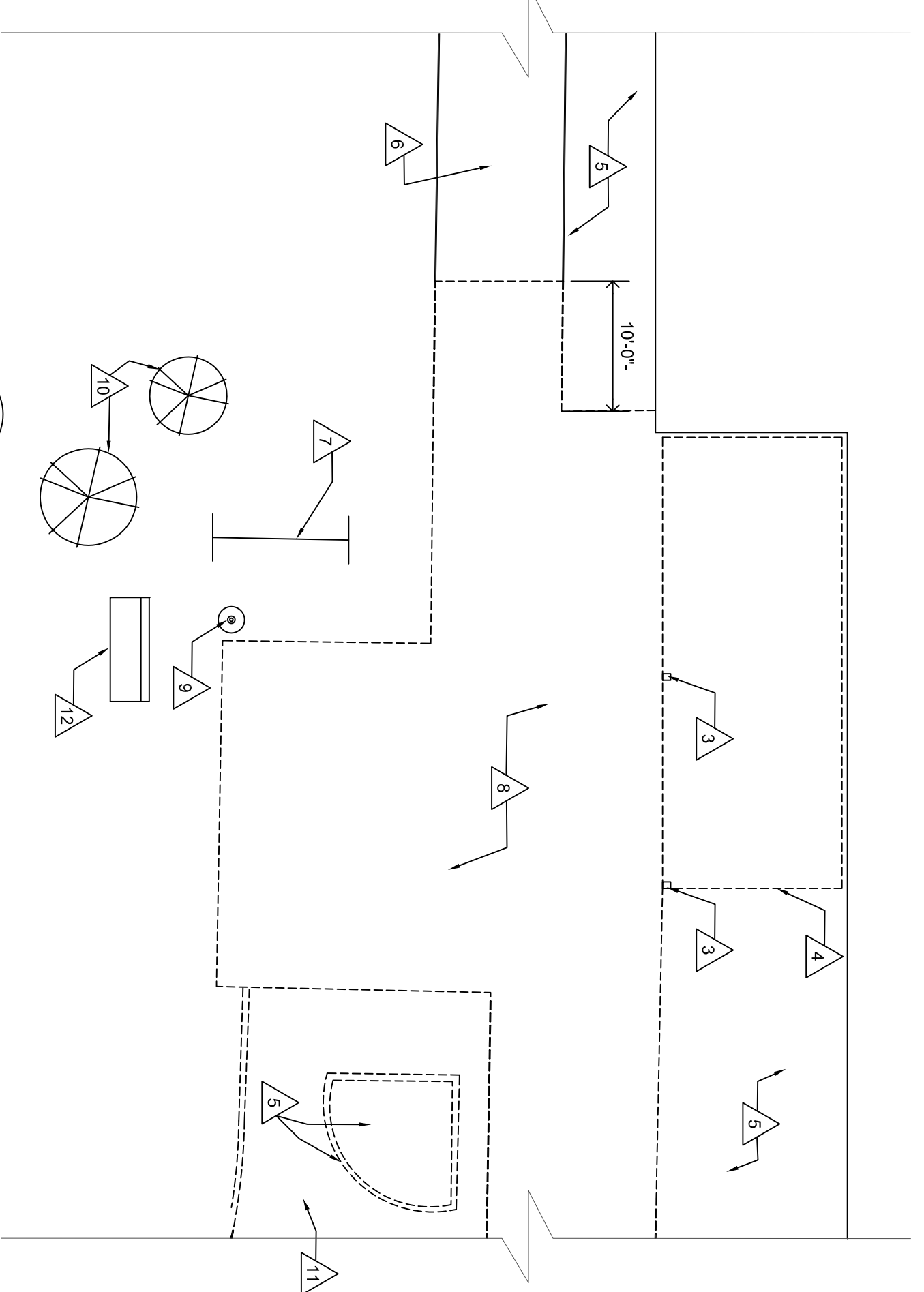
1 ARCHITECTURAL SITE PLAN
SCALE: 1/32" = 1'-0"



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



3 ENLARGED NEW WORK PLAN
SCALE: 1/16" = 1'-0"



2 ENLARGED DEMOLITION PLAN
SCALE: 1/16" = 1'-0"

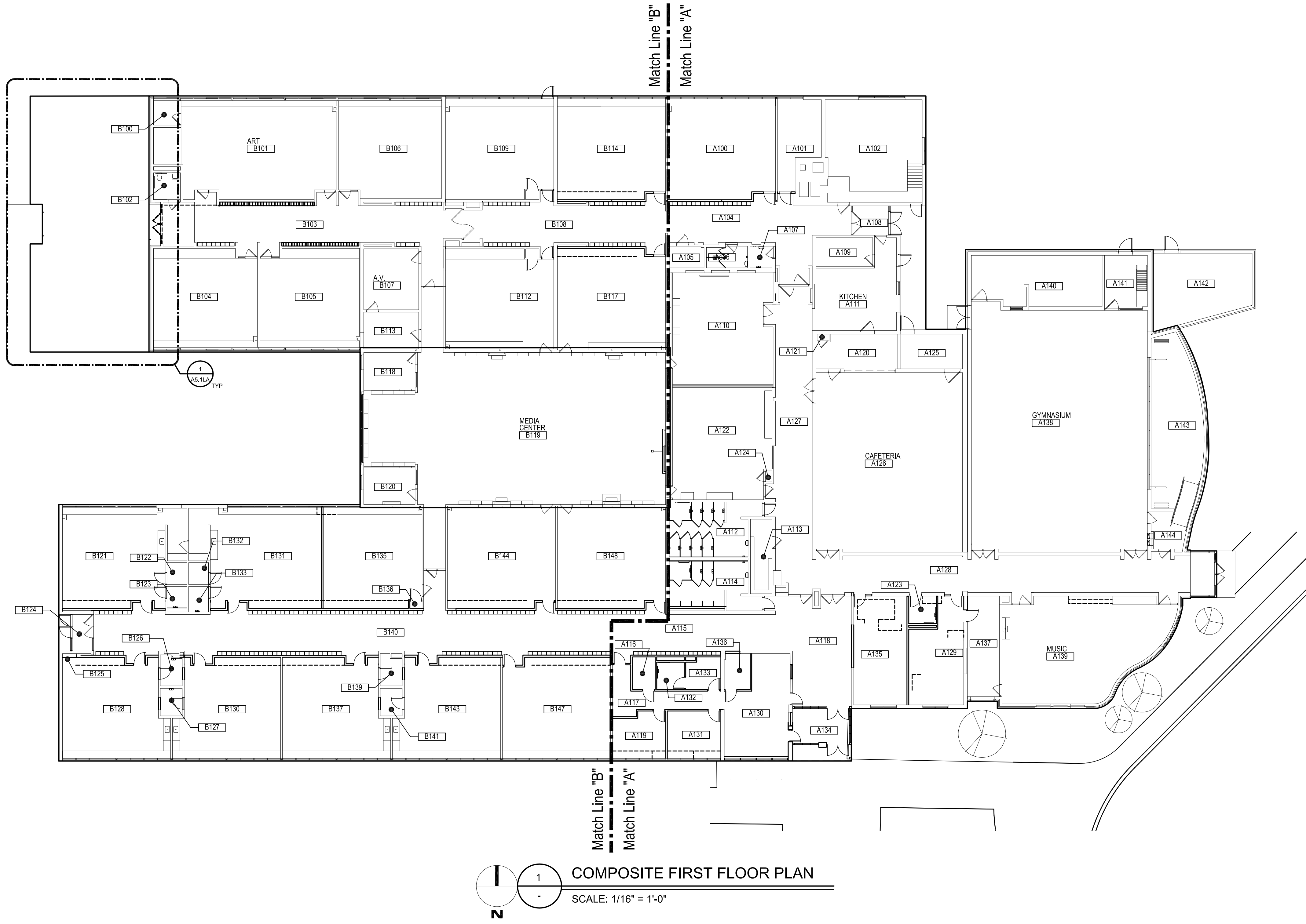
FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE SCHOOL
ARCHITECTURAL SITE PLAN
ENLARGED NEW WORK AND
DEMO PLAN AND DETAIL

PRELIMINARY	<input type="checkbox"/>
DESIGN DEVELOPMENT	<input type="checkbox"/>
CONSTRUCTION	<input checked="" type="checkbox"/>
FINAL RECORD	<input type="checkbox"/>
DRAWN BY: NIL	
CHECKED BY: BIS	
REVISIONS	
30% REVIEW	08/20/16

DATE: November 23, 2016
SHEET NO.

AS1.0LA
JOB NO. 161664B



FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL
COMPOSITE FLOOR PLAN

PRELIMINARY
 DESIGN DEVELOPMENT
 CONSTRUCTION
 FINAL RECORD

DRAWN BY: N.J.L.
 CHECKED BY: B.J.S.

REVISIONS

DATE: November 30, 2016
 SHEET NO.

A1.0LA

JOB NO. **161664B**

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL
AREA "A"
DEMOLITION PLAN

PRELIMINARY
DESIGN DEVELOPMENT
CONSTRUCTION
FINAL RECORD

DRAWN BY: NJL
CHECKED BY: BJS

REVISIONS

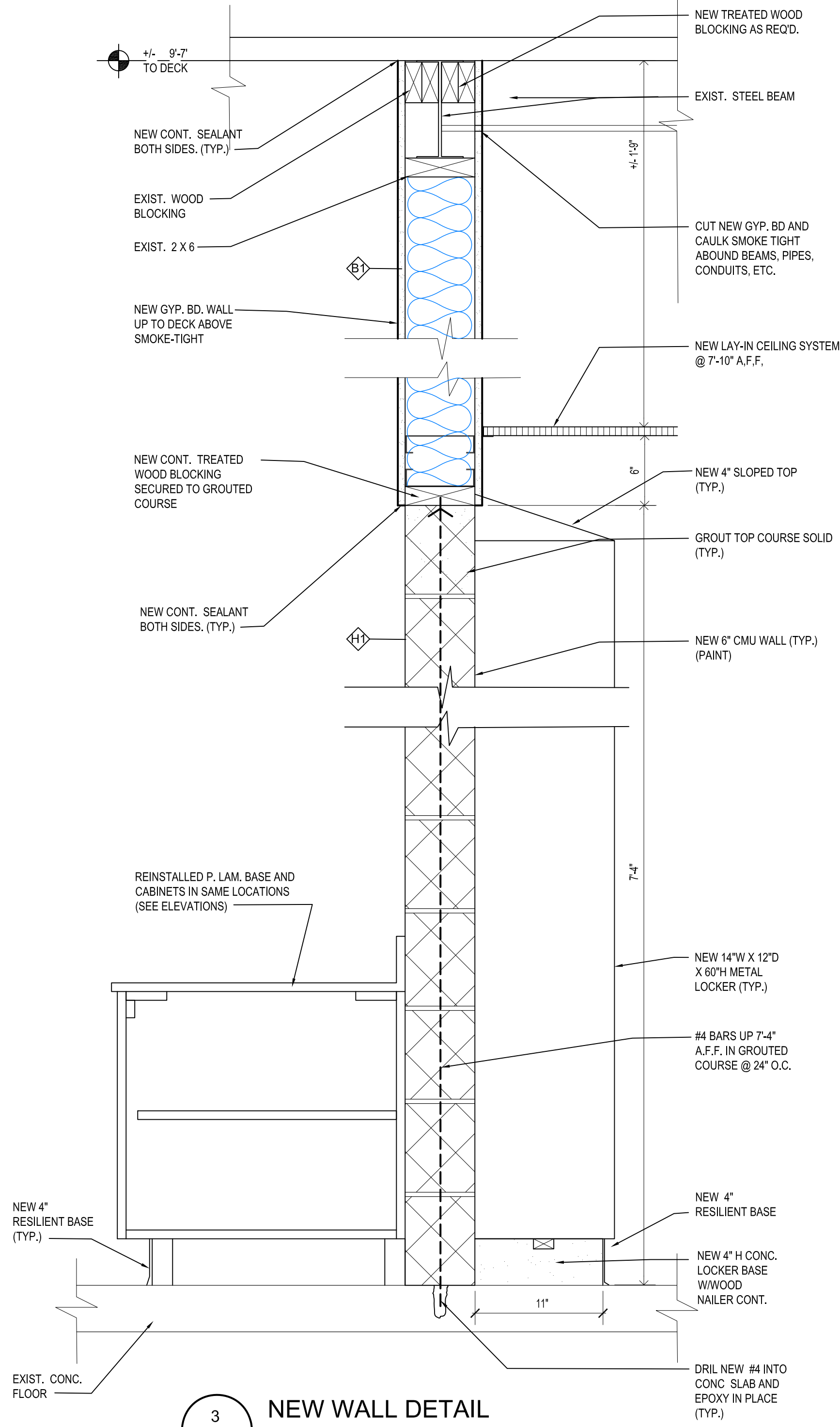
DATE: November 30, 2016
SHEET NO.

AD1.1LA

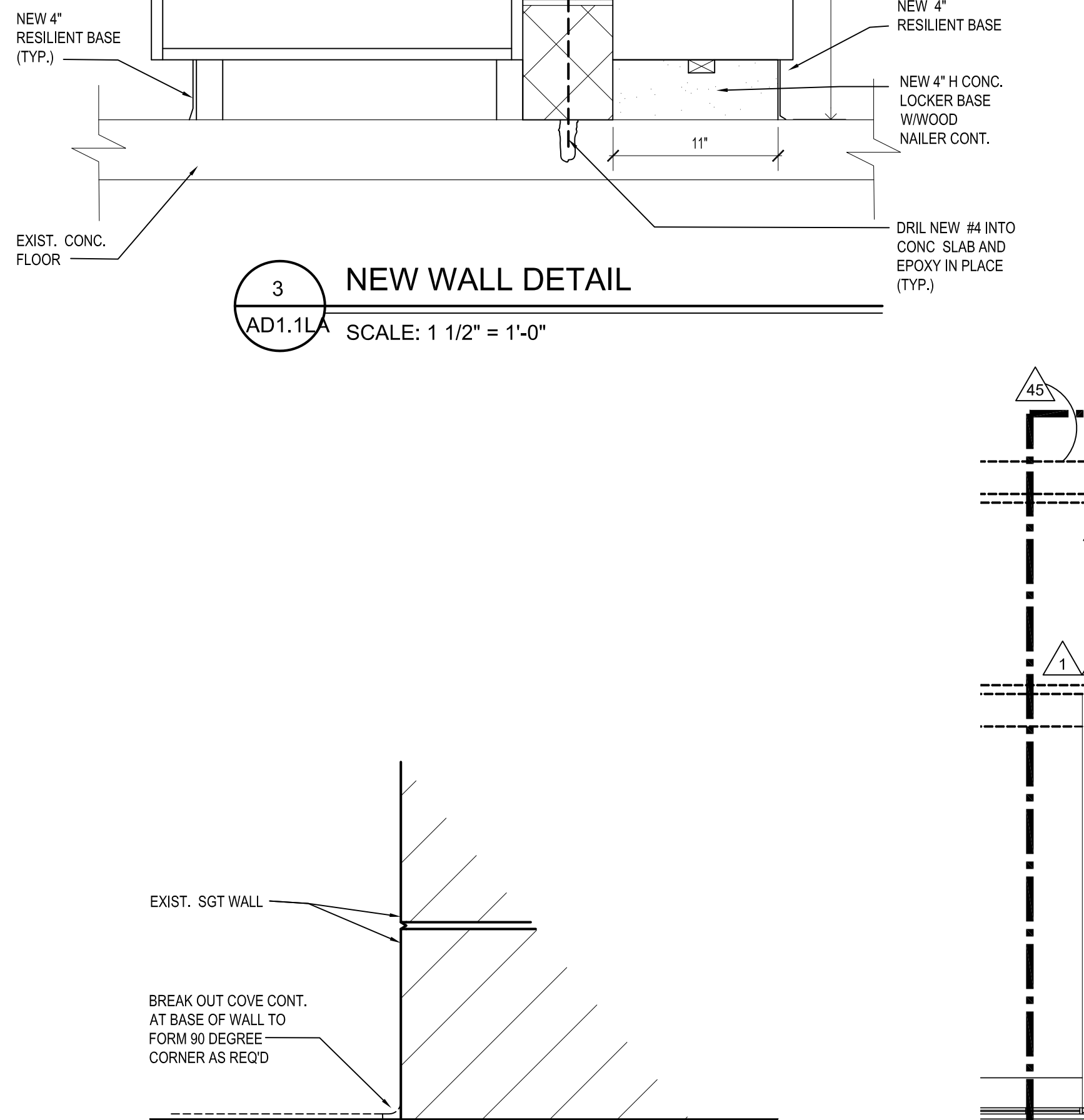
JOB NO. 161664B

GENERAL NOTES:

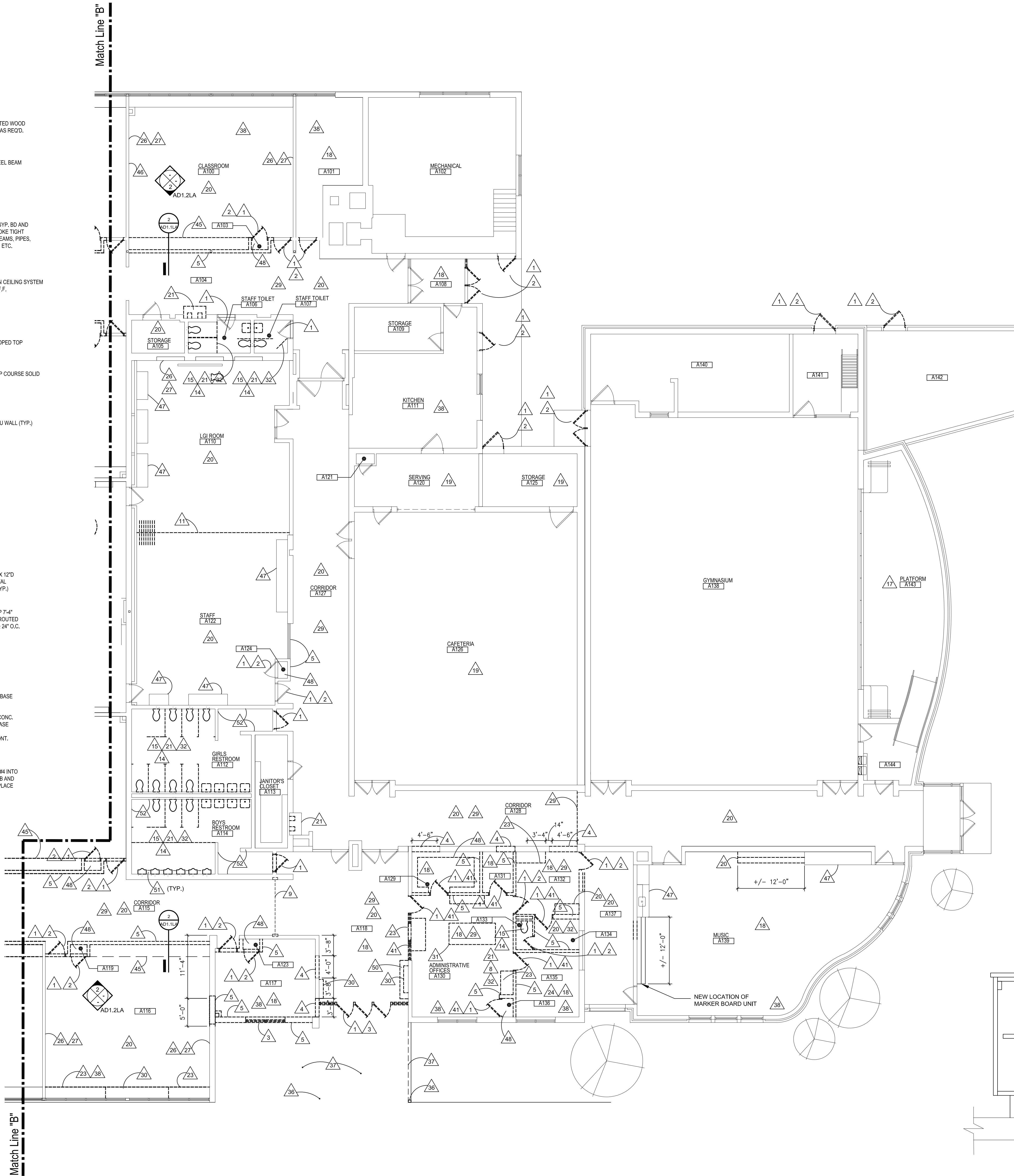
1. REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
2. REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.
3. REMOVE EXISTING WALL SIGNAGE, PATCH AND PREP FOR NEW SIGNAGE, INSTALL NEW SIGNAGE.



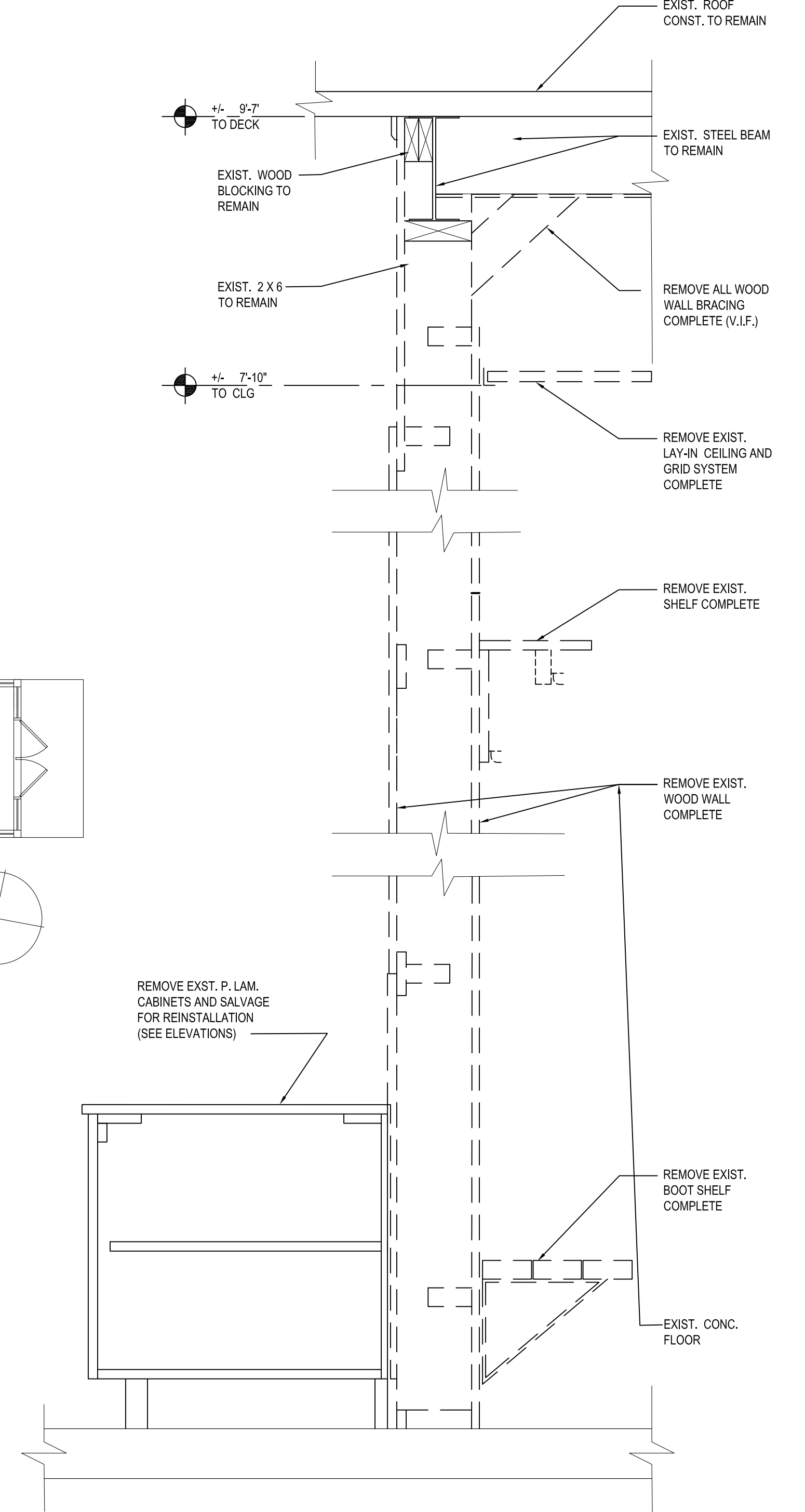
3 NEW WALL DETAIL
SCALE: 1 1/2" = 1'-0"



4 COVE DETAIL
NO SCALE



1 AREA "A" DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



2 DEMO WALL DETAIL
SCALE: 1 1/2" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
2. REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.
3. REMOVE EXISTING WALL SIGNAGE, PATCH AND PREP FOR NEW SIGNAGE. INSTALL NEW SIGNAGE.



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL
AREA "B"
DEMOLITION PLAN

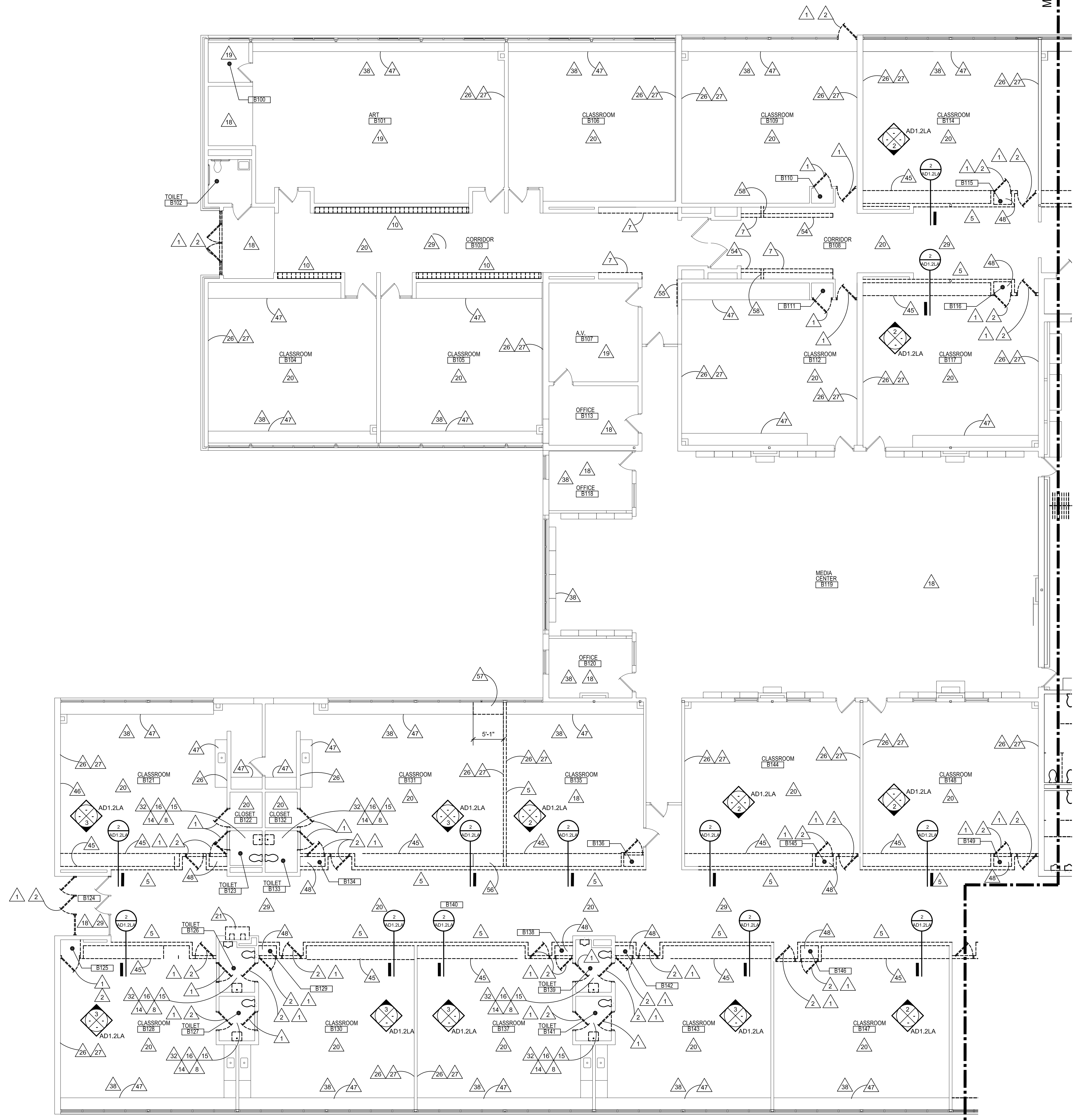
- PRELIMINARY
 - DESIGN DEVELOPMENT
 - CONSTRUCTION
 - FINAL RECORD
- DRAWN BY: NJL
CHECKED BY: BJS

REVISIONS

DATE: November 30, 2016
SHEET NO.

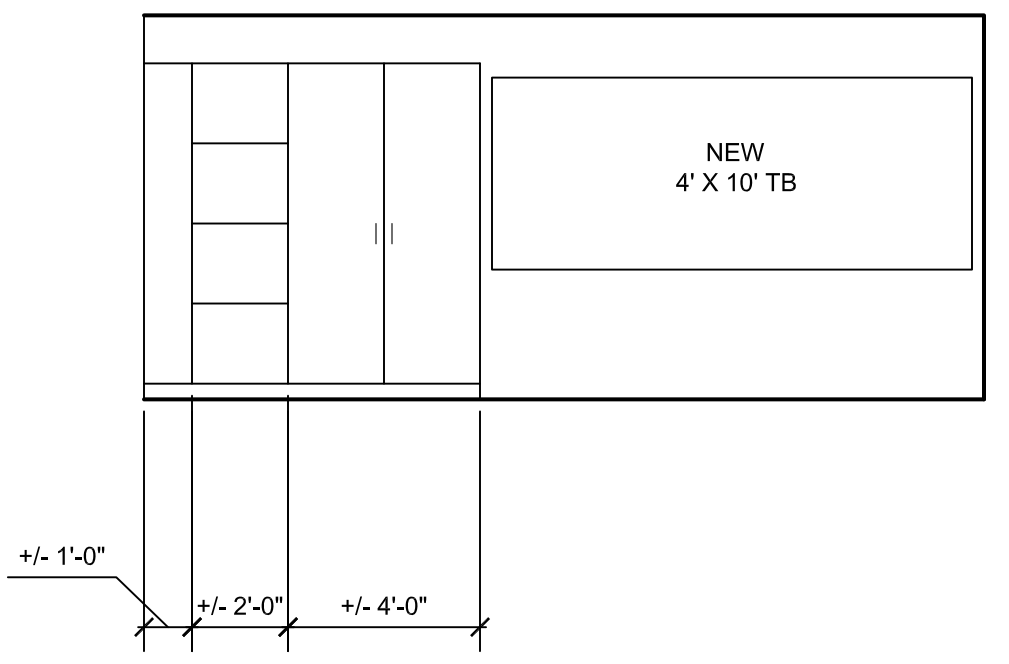
AD1.2LA

JOB NO. 161664B



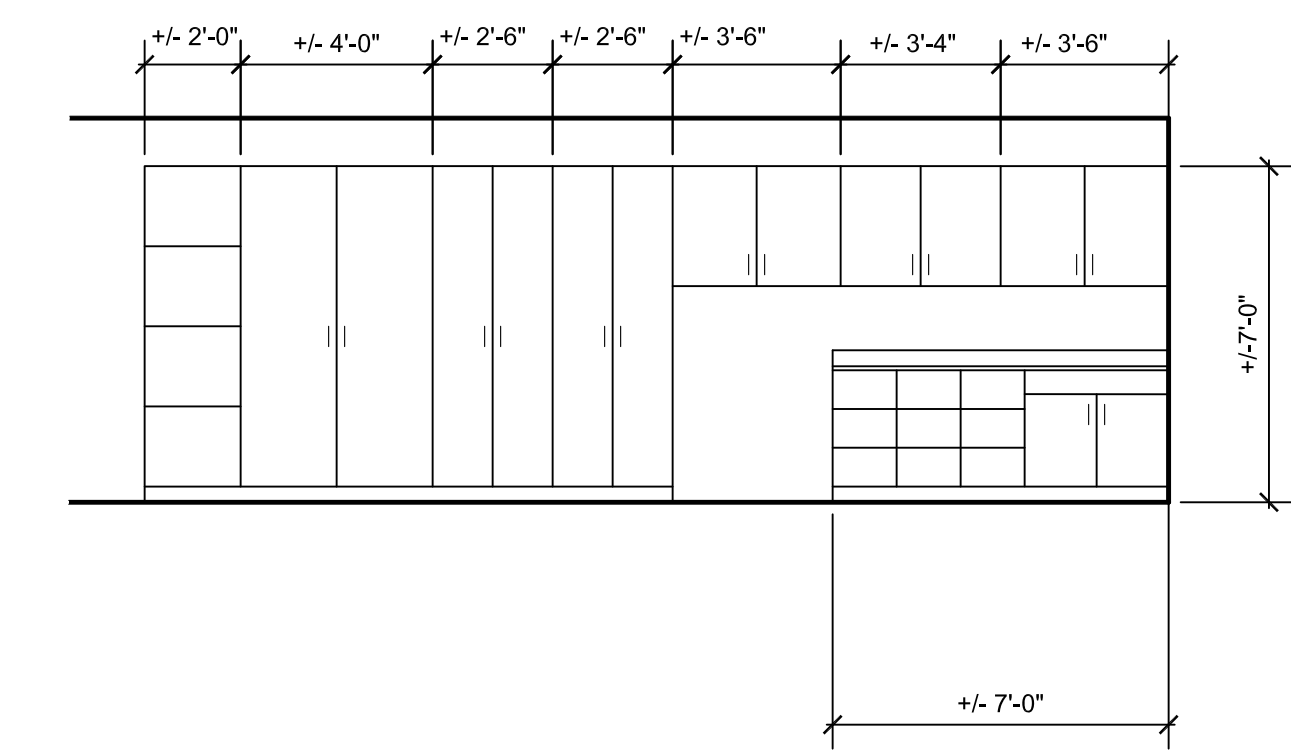
1 AREA "B" DEMOLITION PLAN
 A1.0LA SCALE: 1/8" = 1'-0"
 N

NOTE: REMOVE ALL EXISTING CABINETS AND SALVAGE AND REINSTALL IN SAME LOCATION ON NEW WALL CONSTRUCTION. (V.I.F.)



3 CASEWORK ELEVATION
 AD1.2LA SCALE: 1/4" = 1'-0"

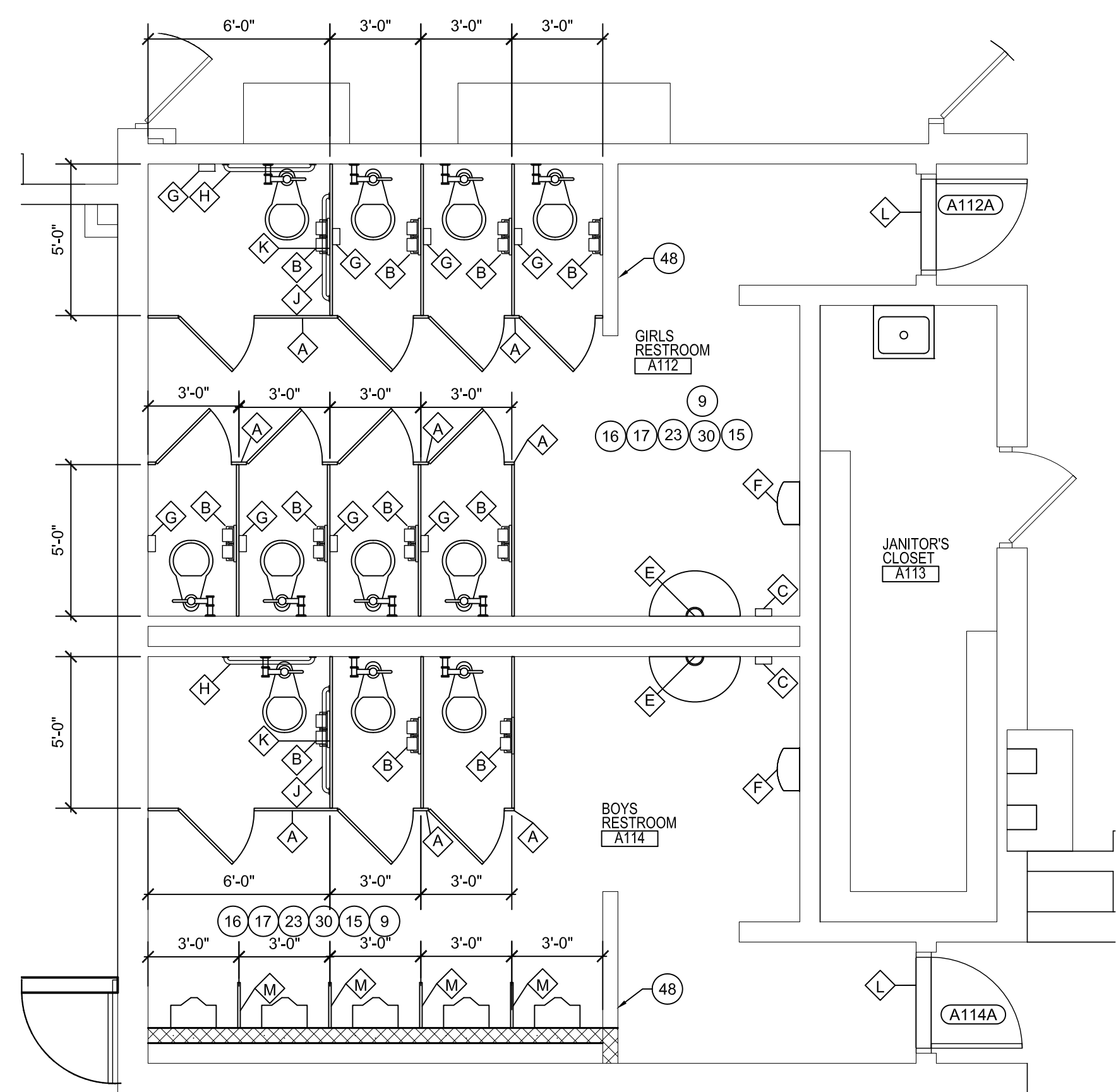
NOTE: REMOVE ALL EXISTING CABINETS AND SALVAGE AND REINSTALL IN SAME LOCATION ON NEW WALL CONSTRUCTION. (V.I.F.)



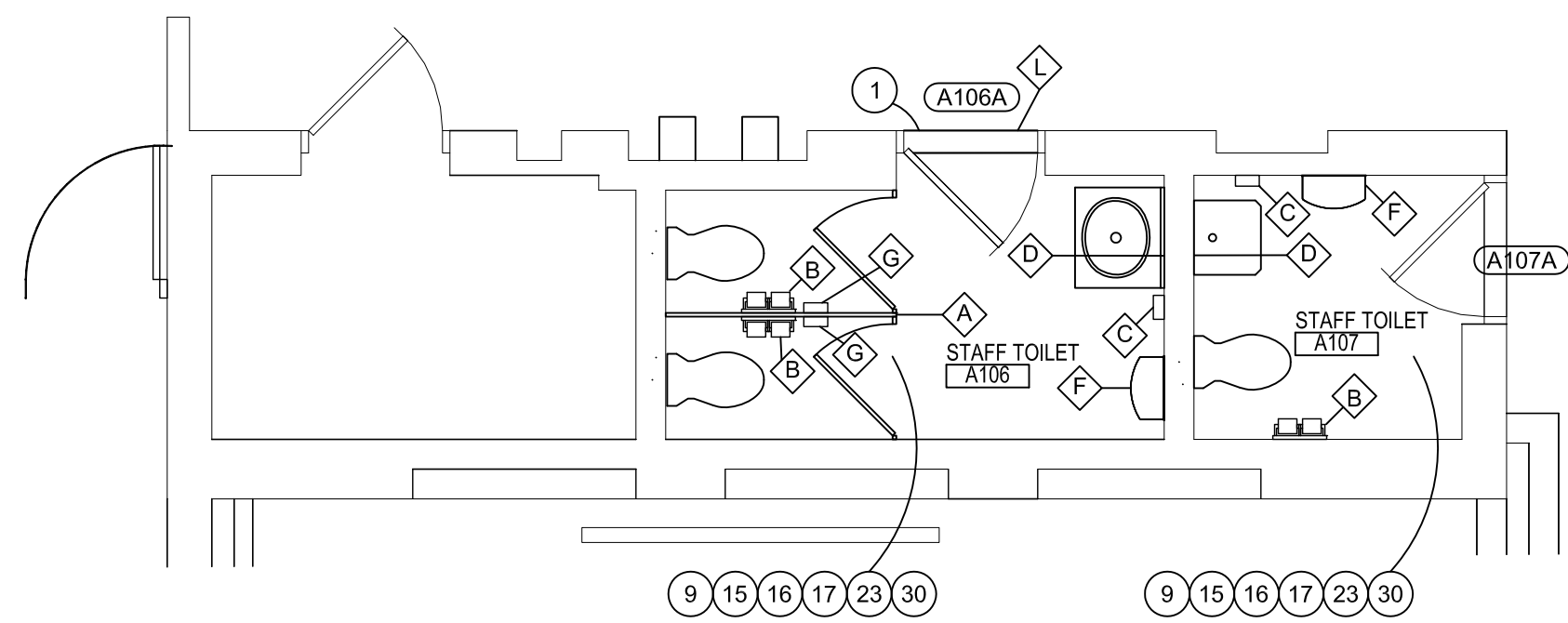
2 CASEWORK ELEVATION
 AD1.2LA SCALE: 1/4" = 1'-0"

Match Line "A"

Match Line "A"



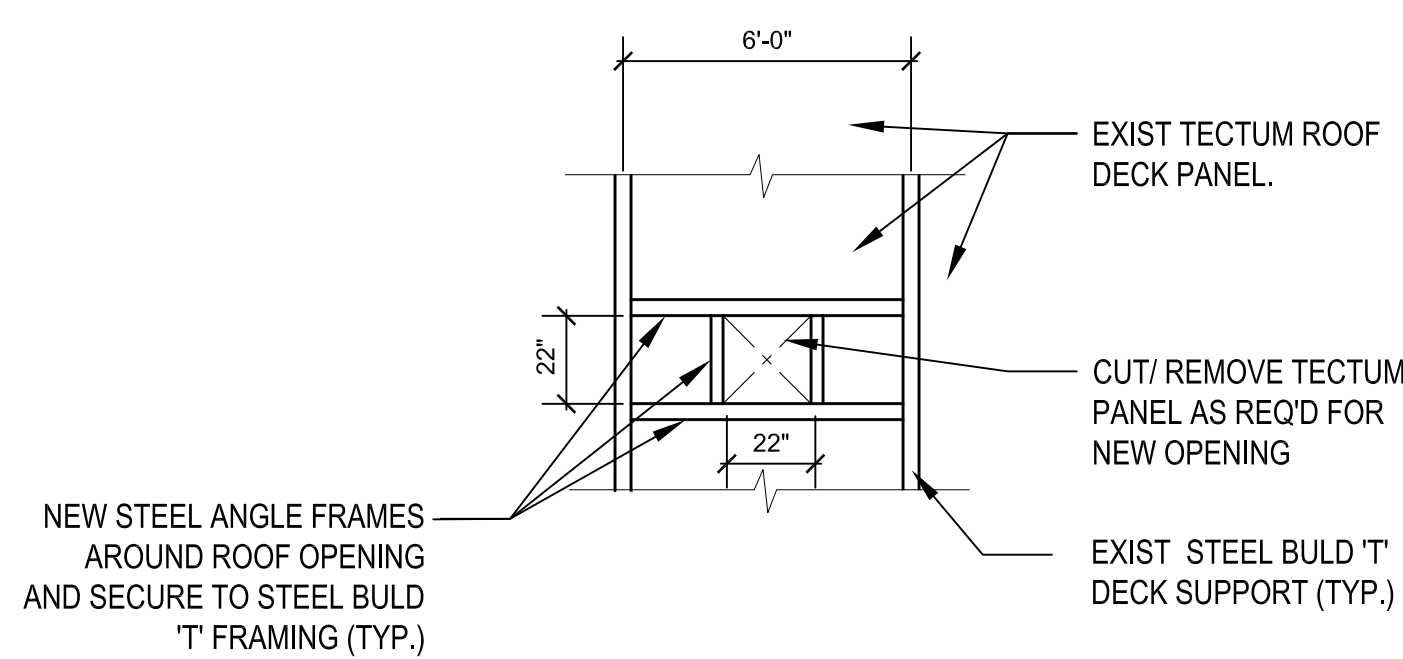
2 ENLARGED BATHROOM PLANS
A1.1LA SCALE: 1/4" = 1'-0"



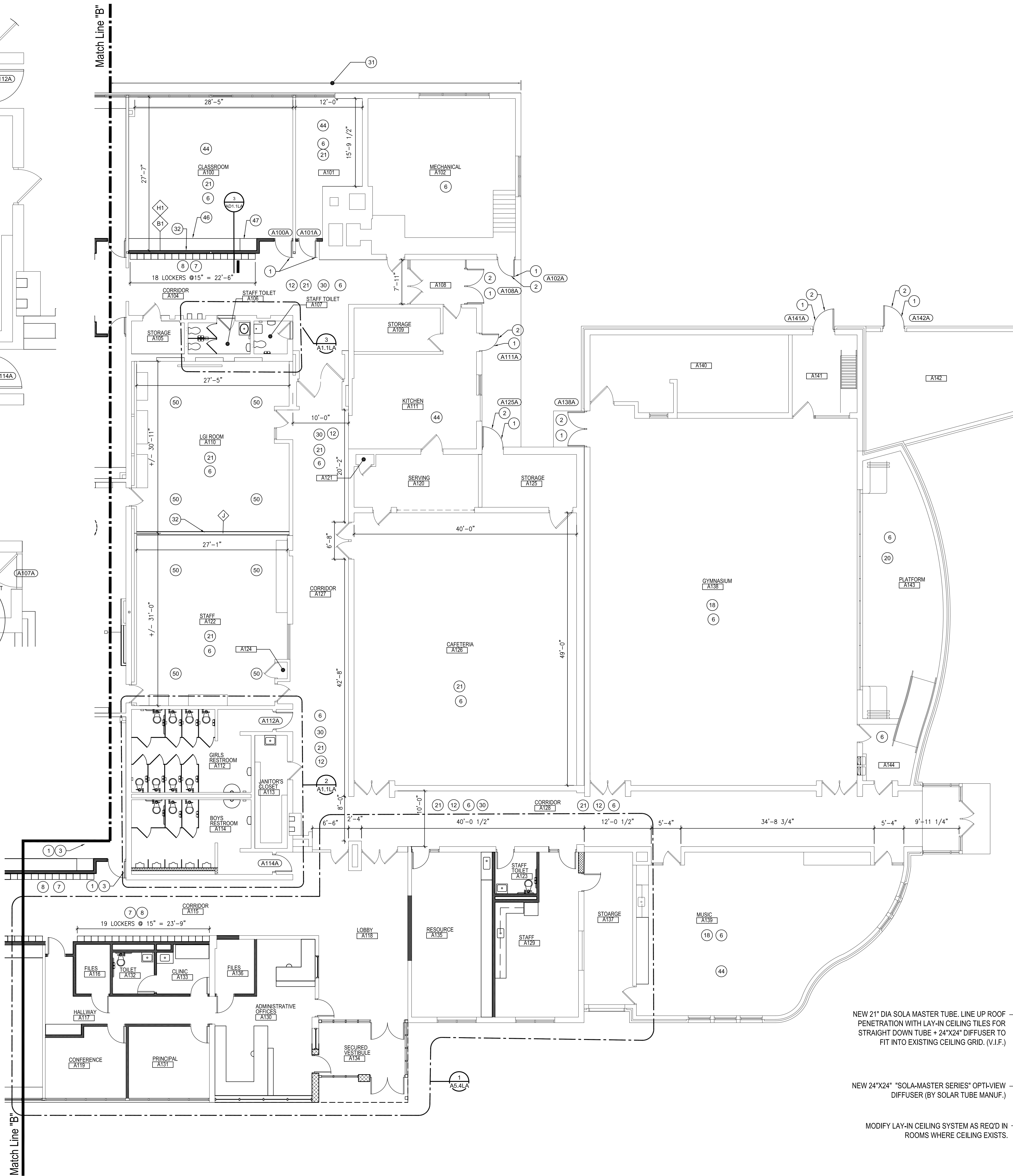
3 ENLARGED BATHROOM PLANS
A1.1LA SCALE: 1/4" = 1'-0"

TOILET ACCESSORY LEGEND:

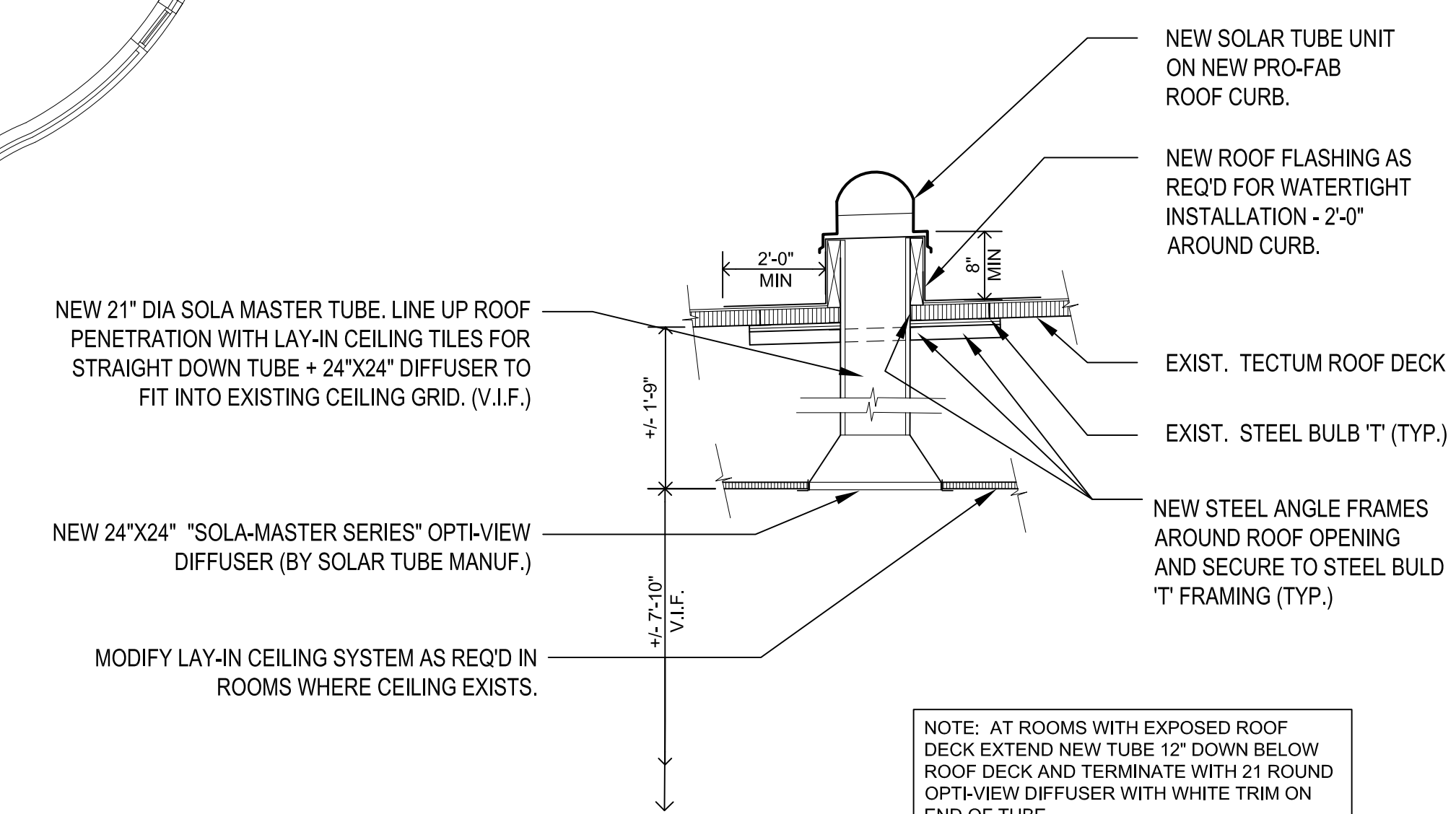
- ◇ TOILET PARTITION
- Ⓟ TOILET PAPER HOLDER (BY OWNER)
- Ⓞ SOAP DISPENSOR (BY OWNER)
- Ⓛ 24"X36" MIRROR
- Ⓛ 36"X36" MIRROR
- Ⓛ PAPER TOWEL DISPENSER (BY OWNER)
- Ⓛ SANITARY NAPKIN DISPOSAL
- Ⓛ 36" GRAB BAR
- Ⓛ 42" GRAB BAR
- Ⓛ 18" VERTICAL GRAB BAR
- Ⓛ MARBLE THRESHOLD
- Ⓛ VERTICAL SCREEN



4 SOLAR TUBE PLAN DETAIL
A1.1LA SCALE: 1/4" = 1'-0"



1 AREA "A" NEW WORK PLAN
A1.0LA SCALE: 1/8" = 1'-0"



5 SOLAR TUBE PLAN DETAIL
A1.1LA SCALE: 3/4" = 1'-0"

- GENERAL NOTES:**
- REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
 - REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.
 - REMOVE EXISTING WALL SIGNAGE, PATCH AND PREP FOR NEW SIGNAGE. INSTALL NEW SIGNAGE.

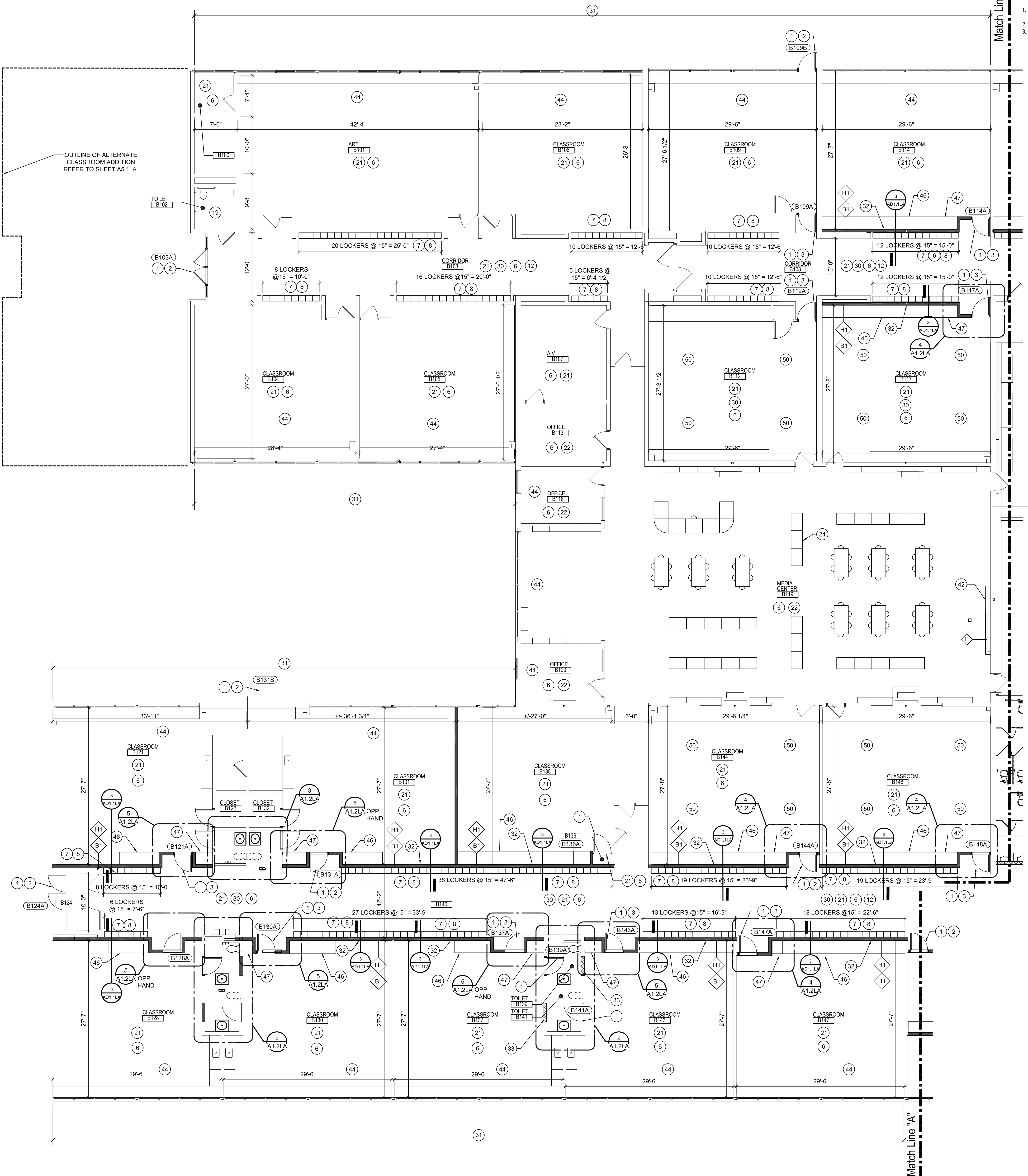


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2017 RENOVATIONS
ELEMENTARY SCHOOLS

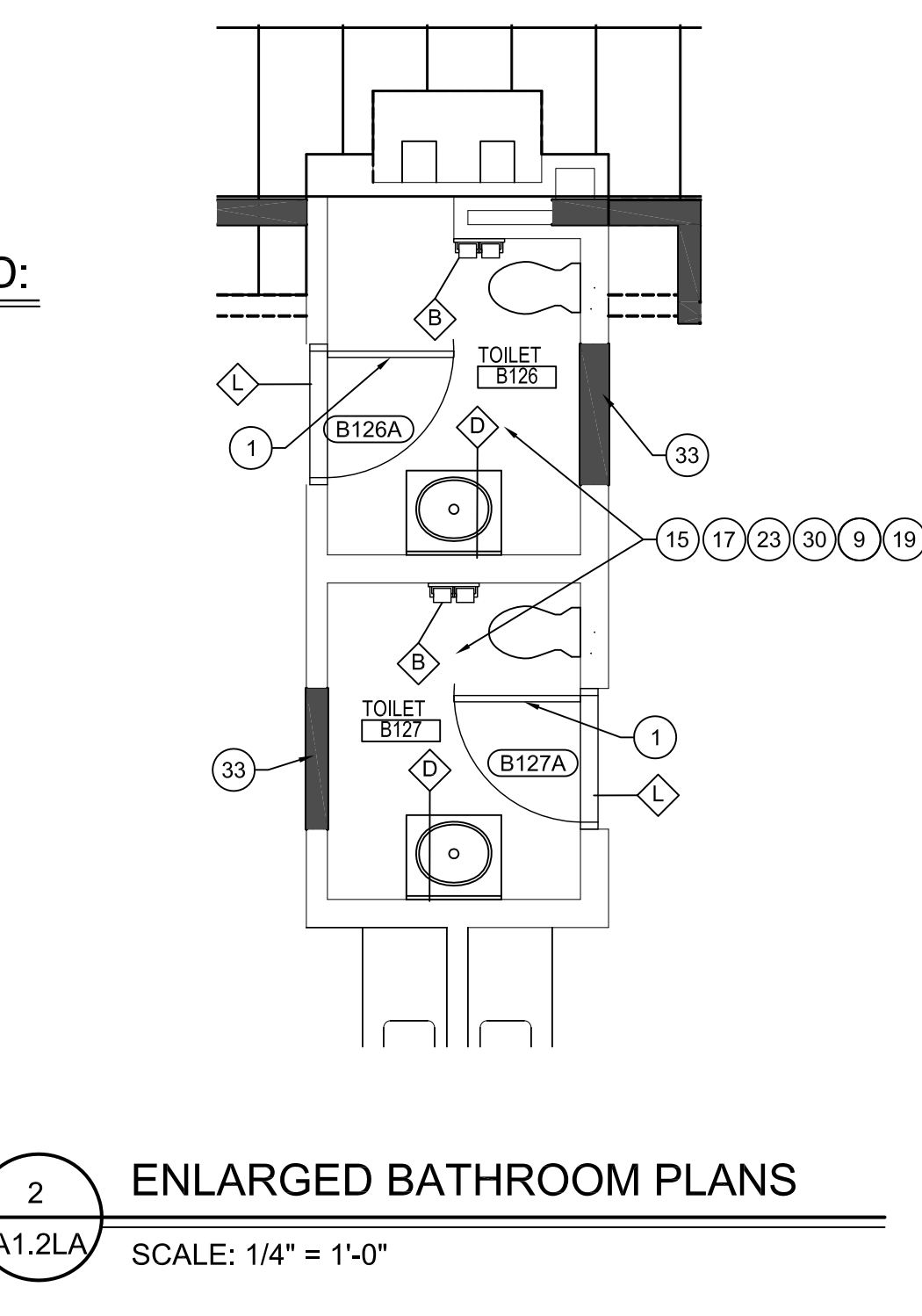
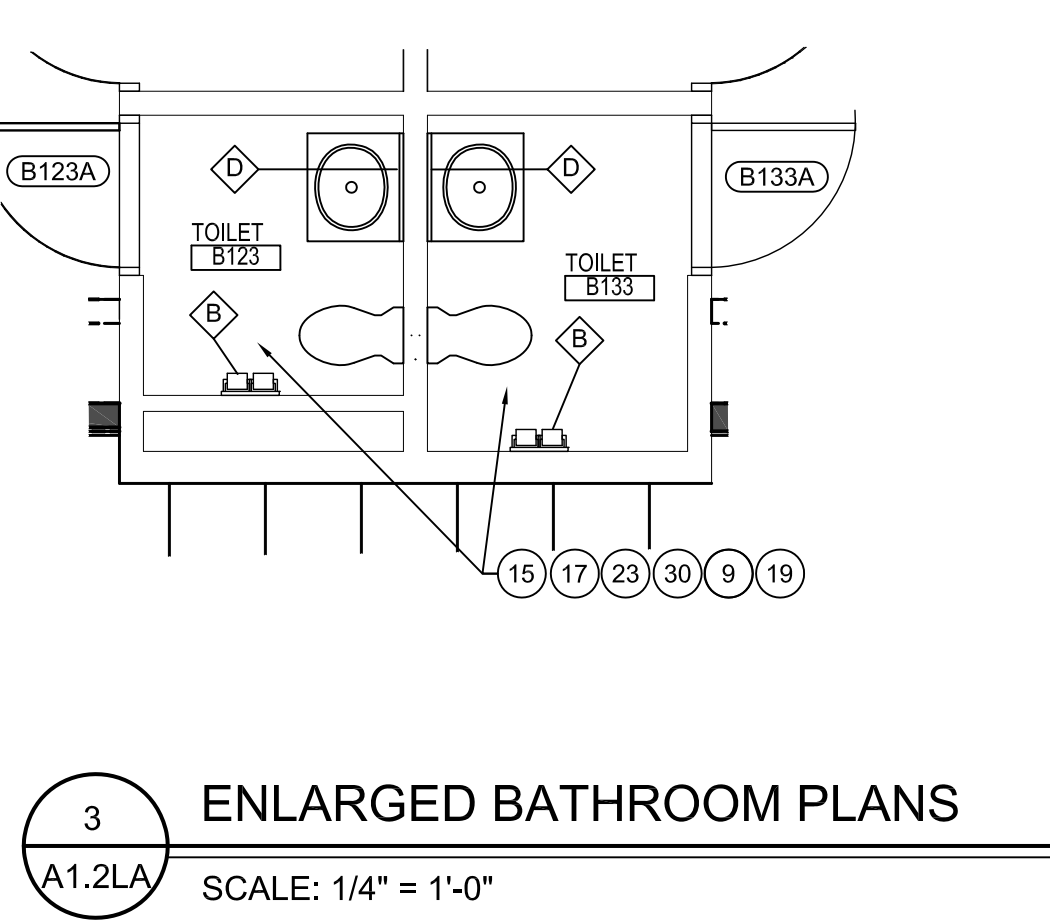
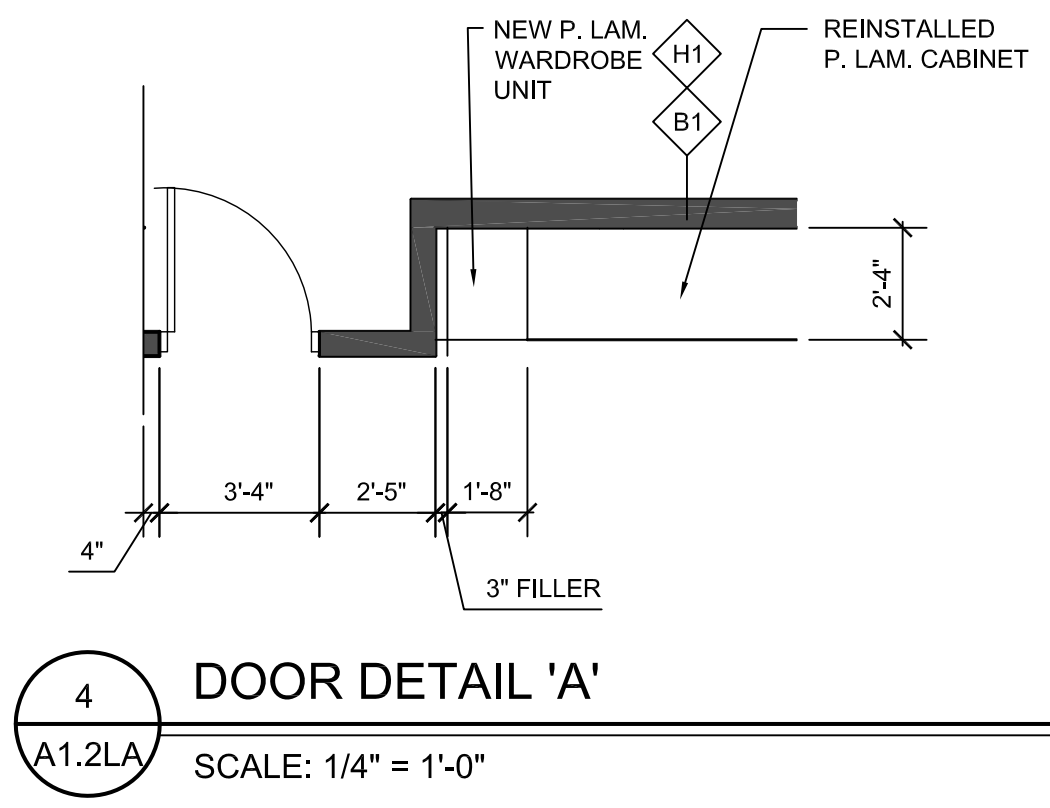
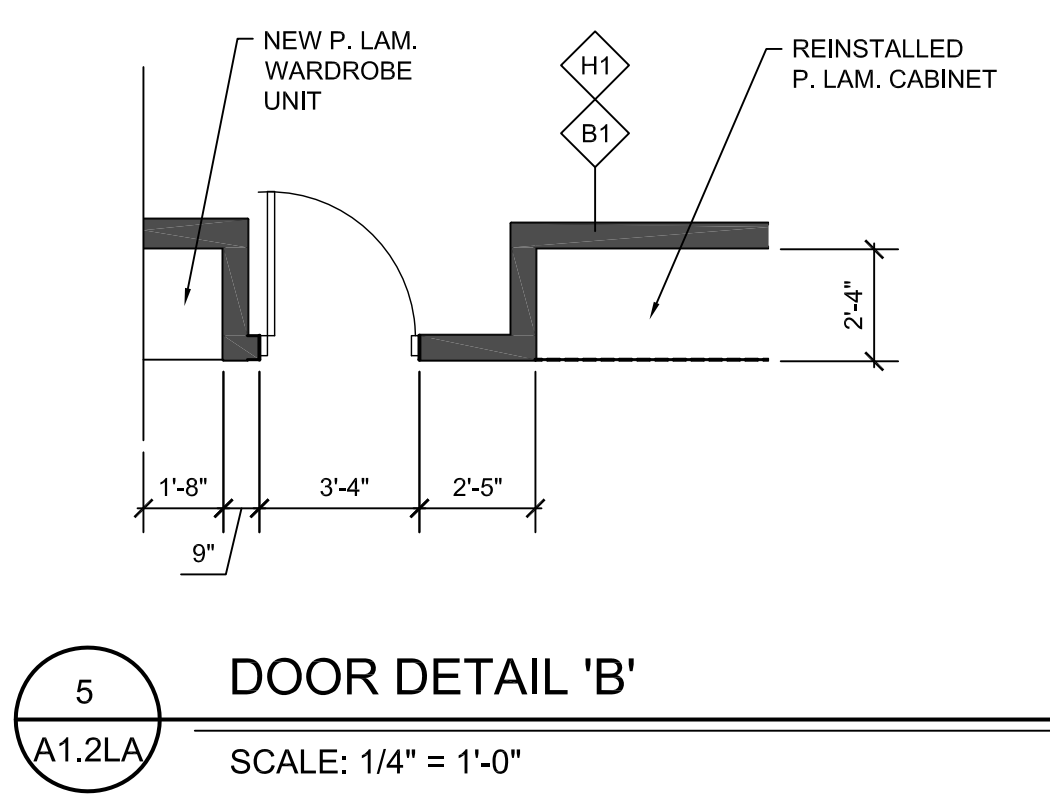
LONGACRE ELEMENTARY SCHOOL
AREA "A"
NEW WORK PLAN

PRELIMINARY	<input type="checkbox"/>
DESIGN DEVELOPMENT	<input type="checkbox"/>
CONSTRUCTION	<input checked="" type="checkbox"/>
FINAL RECORD	<input type="checkbox"/>
DRAWN BY	NJL
CHECKED BY	BJS
REVISIONS	
50% REVIEW	09-01-16
DATE:	November 30, 2016
SHEET NO.	
A1.1LA	
JOB NO.	161664B



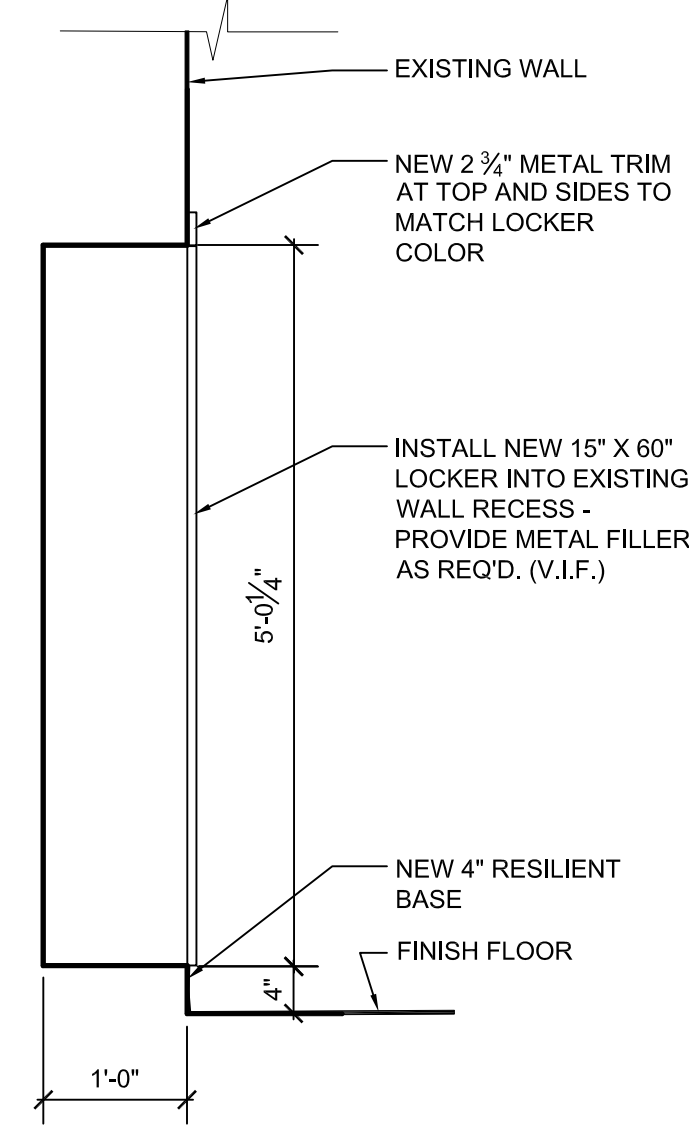
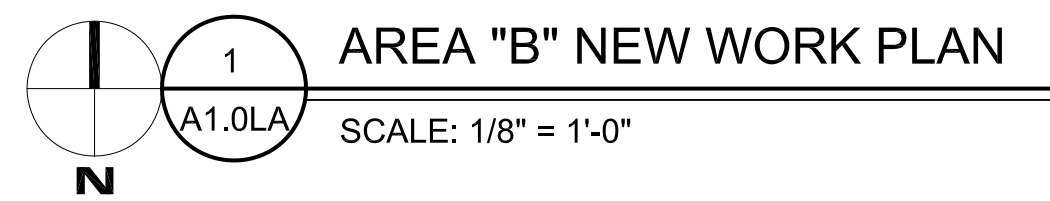
GENERAL NOTES:

- REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
- REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.
- REMOVE EXISTING WALL SIGNAGE, PATCH AND PREP FOR NEW SIGNAGE. INSTALL NEW SIGNAGE.



TOILET ACCESSORY LEGEND:

- (D) TOILET PARTITION
- (P) TOILET PAPER HOLDER (BY OWNER)
- (S) SOAP DISPENSER (BY OWNER)
- (M) 24"X36" MIRROR
- (E) 36"X36" MIRROR
- (T) PAPER TOWEL DISPENSER (BY OWNER)
- (N) SANITARY NAPKIN DISPOSAL
- (H) 36" GRAB BAR
- (V) 42" GRAB BAR
- (VB) 18" VERTICAL GRAB BAR
- (TR) MARBLE THRESHOLD
- (US) URINAL SCREEN



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**FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS**

LONGCRE
ELEMENTARY SCHOOL
AREA "B"
NEW WORK PLAN

PRELIMINARY	<input type="checkbox"/>
DESIGN DEVELOPMENT	<input type="checkbox"/>
CONSTRUCTION	<input type="checkbox"/>
FINAL RECORD	<input type="checkbox"/>

DRAWN BY: NJL
CHECKED BY: BJS

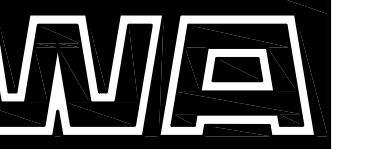
REVISIONS

DATE: November 30, 2016
SHEET NO. **A1.2LA**

JOB NO. **161664B**

GENERAL NOTES:

1. REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
2. REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.
3. REMOVE EXISTING WALL SIGNAGE, PATCH AND PREP FOR NEW SIGNAGE, INSTALL NEW SIGNAGE.



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL
AREA "A"
REFLECTED CEILING PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

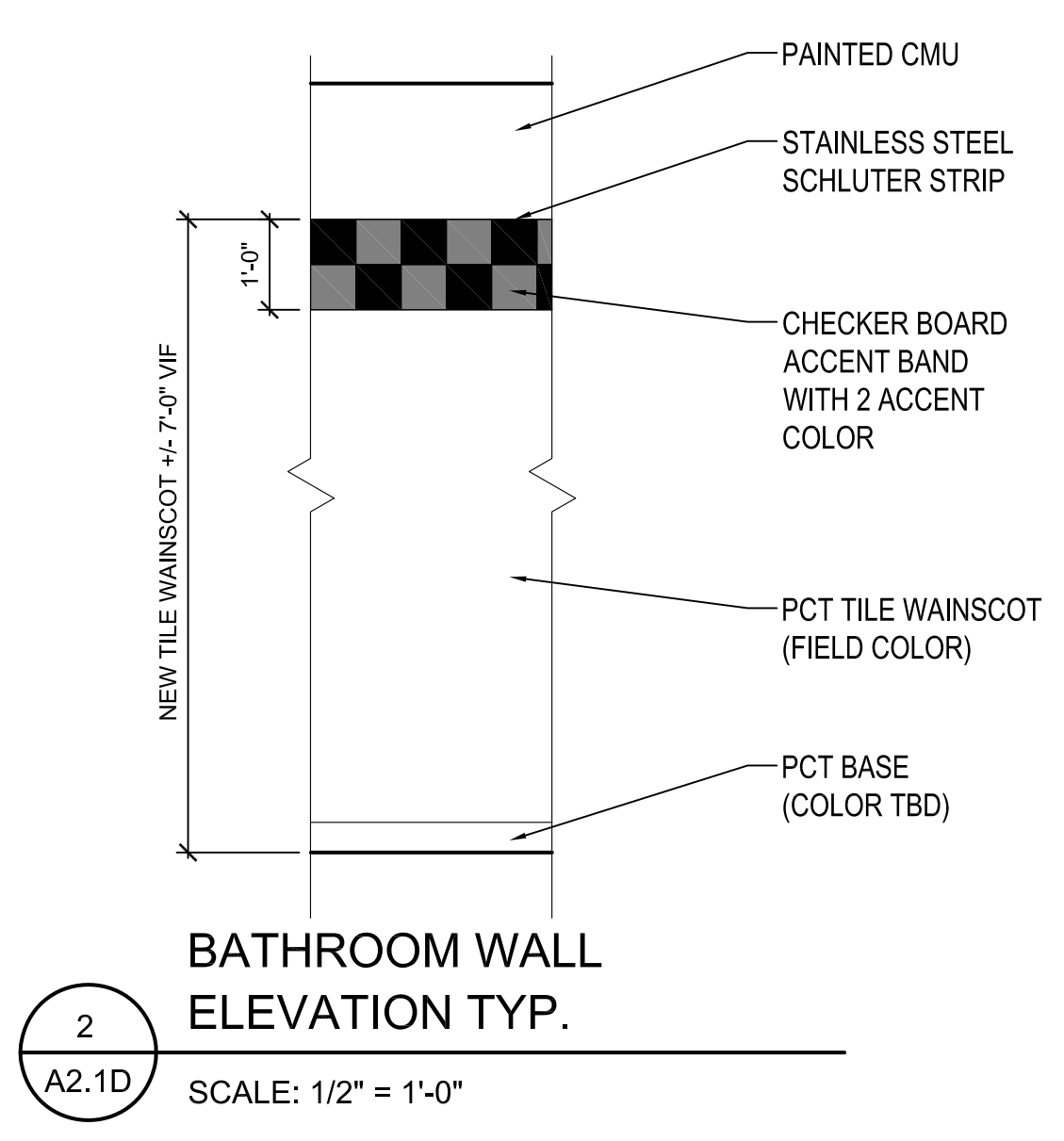
DRAWN BY: NJL
CHECKED BY: BJS

REVISIONS

DATE: November 30, 2016
SHEET NO.

A2.1LA

JOB NO. 161664B



1 AREA "A" REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



Match Line "A"

Match Line "A"

- GENERAL NOTES:**
1. REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
 2. REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.
 3. REMOVE EXISTING WALL SIGNAGE, PATCH AND PREP FOR NEW SIGNAGE, INSTALL NEW SIGNAGE.

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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
 ELEMENTARY SCHOOLS

LONGACRE
 ELEMENTARY SCHOOL
 AREA "B"
 REFLECTED CEILING PLAN

- PRELIMINARY
 DESIGN DEVELOPMENT
 CONSTRUCTION
 FINAL RECORD

DRAWN BY: NJL
 CHECKED BY: BJS

REVISIONS

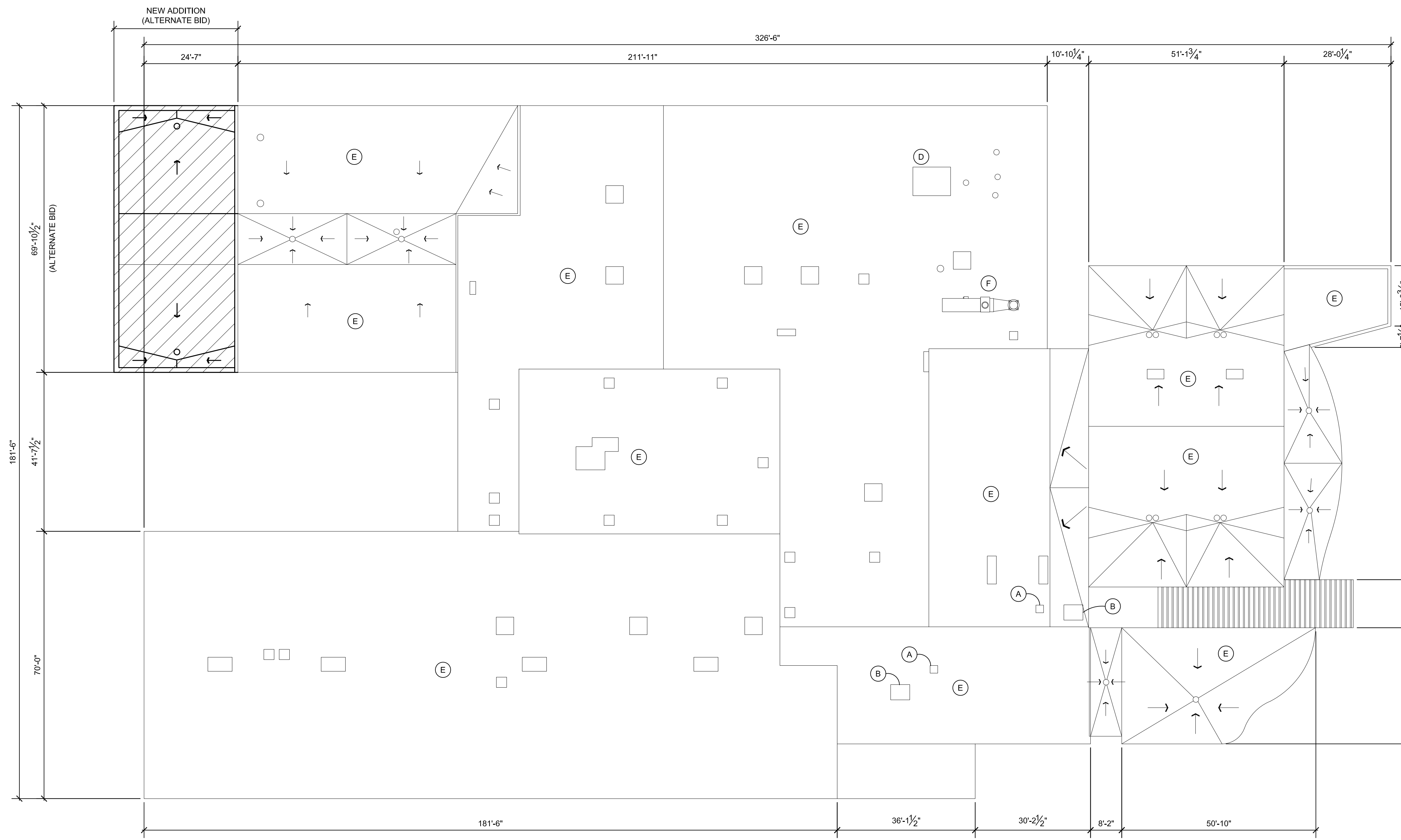
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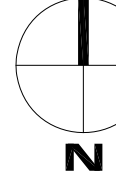
DATE: November 30, 2016
 SHEET NO.

A2.2LA

JOB NO. 161664B

1
 A1.0LA
 AREA "B" REFLECTED CEILING PLAN
 SCALE: 1/8" = 1'-0"




1 ROOF PLAN
 SCALE: 1/16" = 1'-0"


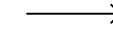

GENERAL NOTES:

1. REFER TO SHEET G4.1 FOR TYPICAL NOTES, SYMBOLS, GENERAL INFORMATION, AND ABBREVIATIONS.
2. REFER TO SHEET G4.2 FOR REFERENCED KEYNOTES.

ROOF PLAN GENERAL NOTES:

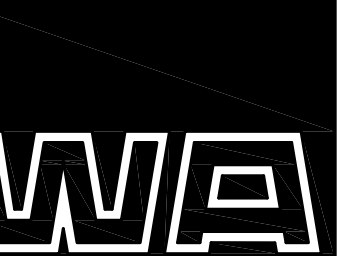
1. VERIFY ALL DIMENSIONS IN FIELD AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
2. VERIFY QUANTITY, SIZE AND LOCATION OF ALL ROOF TOP EQUIPMENT, CURBS, FANS, VENTS, ROOF SUMPS, ETC. IN FIELD.

ROOF PLAN LEGEND:

-  NEW SINGLE PLY ROOF MEMBRANE ON NEW 1" BOARD OVER EXISTING BUILT-UP ROOF SYSTEM (REMOVE BALLAST) PROVIDE NEW METAL COPING ALONG ENTIRE PERIMETER OF ROOF.
-  DIRECTION OF SLOPE
-  ROOF SUMP LOCATION (VERIFY LOCATION IN FIELD)

ROOF PLAN NOTES:

- (A)** NEW EXHAUST FAN (SEE MECH DRAWINGS). PROVIDE NEW STEEL ANGLE STRUCTURAL FRAMING BELOW AS REQ'D. AT LOCATIONS WITH EXISTING ROOFING MATERIAL TO REMAIN, CUT AND PATCH EXISTING ROOFING AS REQ'D PROVIDE NEW FLASHING, SUPPORT CURBS, & NEW STRUCTURAL STEEL ANGLE ROOF FRAMING AS REQUIRED FOR A WATERTIGHT INSTALLATION - REFER TO DETAIL 11/A3.1LA.
- (B)** NEW ROOF TOP UNIT (SEE MECHANICAL DWGS). PROVIDE NEW STRUCTURAL STEEL ANGLE FRAMING BELOW AS REQ'D (SEE STRUCTURAL DWGS). AT LOCATIONS WITH EXISTING ROOFING MATERIAL TO REMAIN, CUT & PATCH EXISTING ROOFING AS REQ'D PROVIDE NEW FLASHING, SUPPORT CURBS & NEW STRUCTURAL STEEL ANGLE ROOF FRAMING AS REQ'D FOR WATERTIGHT INSTALLATION - REFER TO DETAIL 11/A3.1LA.
- (C)** EXISTING ROOFING TO REMAIN
- (D)** EXISTING MECHANICAL UNIT



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
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 ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL

ROOF PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

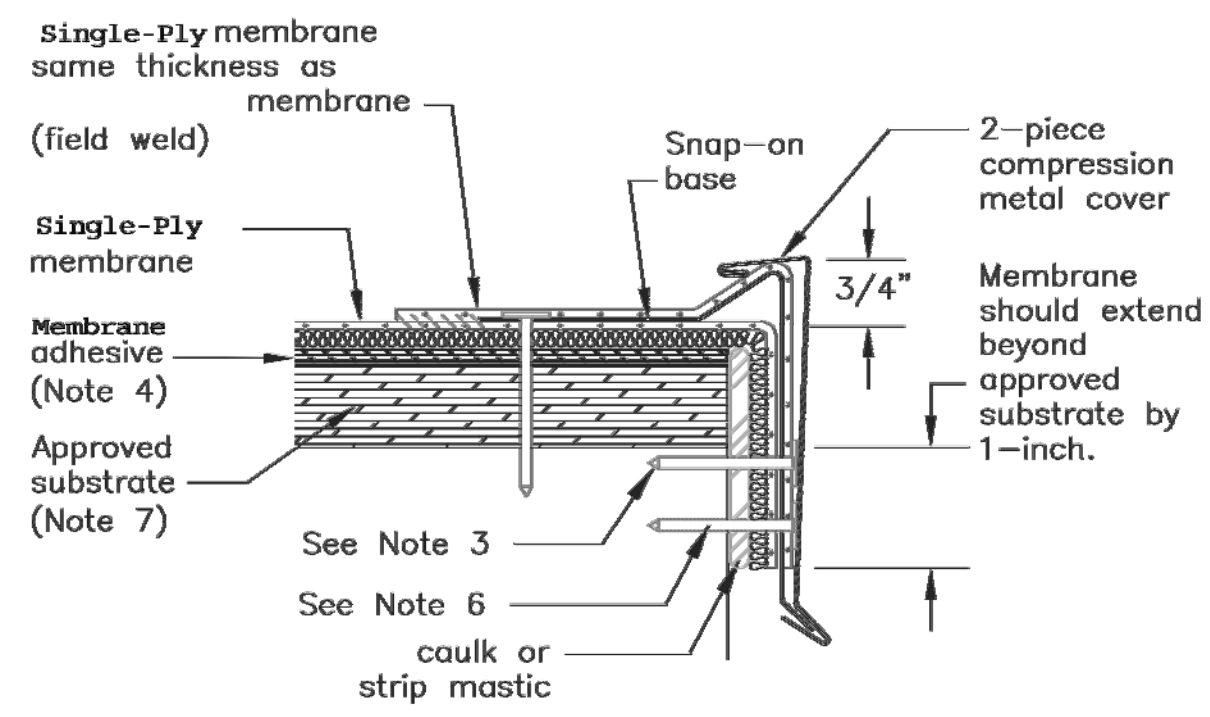
DRAWN BY: NJL
CHECKED BY: BJS

REVISIONS

DATE: November 30, 2016
SHEET NO.

A3.0LA

JOB NO. 161664B



Note 1: This detail is not allowed when roof slope exceeds 2-inches per 12-inches.

Note 2: A wood nailer is required if one or more inches of insulation is used. Top of wood nailer is to be flush with top of insulation. Wood nailer must extend at least 1/2-inch beyond the horizontal edge of the snap-on base.

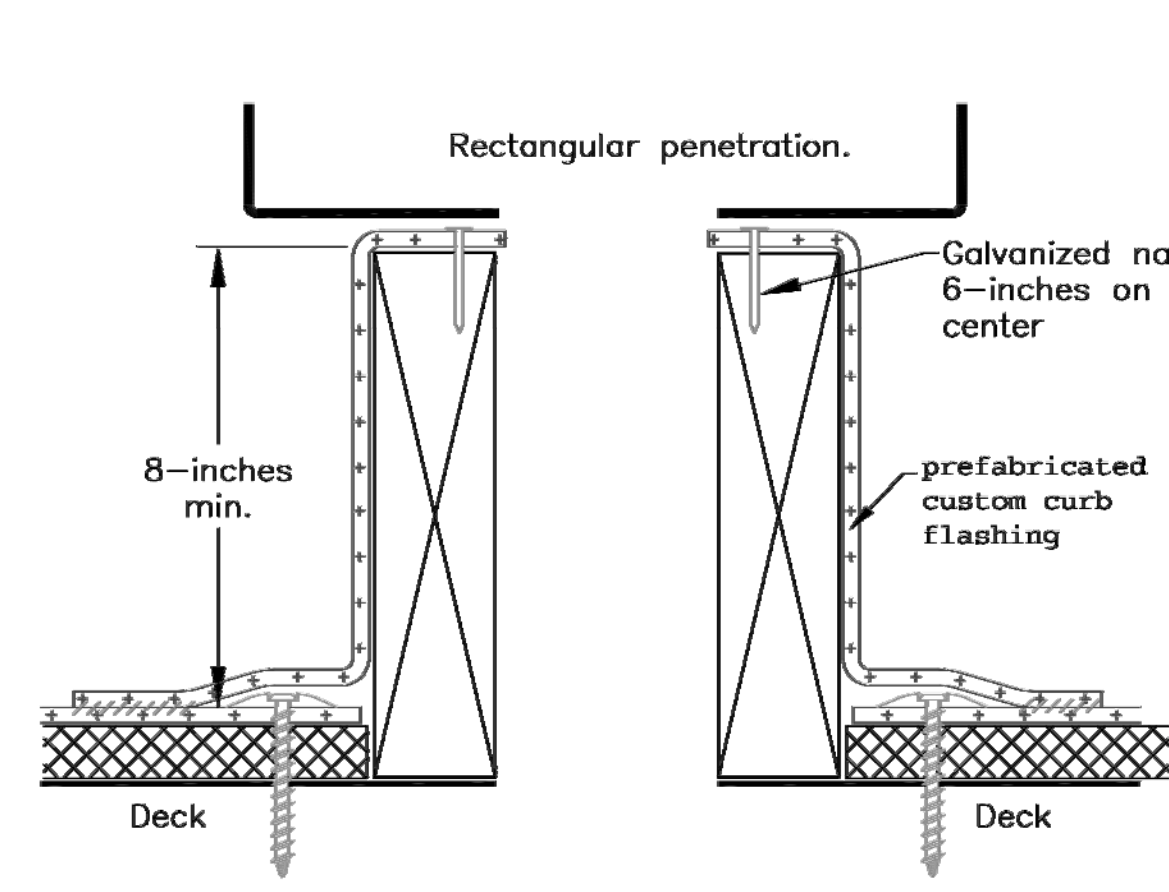
Note 3: The fasteners used to attach the snap-on base and the membrane to the nailer or into an approved structural surface must be spaced no greater than 6-inches on center. When installing within 10-feet of an outside corner the fastening pattern is 3-inches on center.

Note 4: For approved adhesives refer to the membrane Roofing System specification.

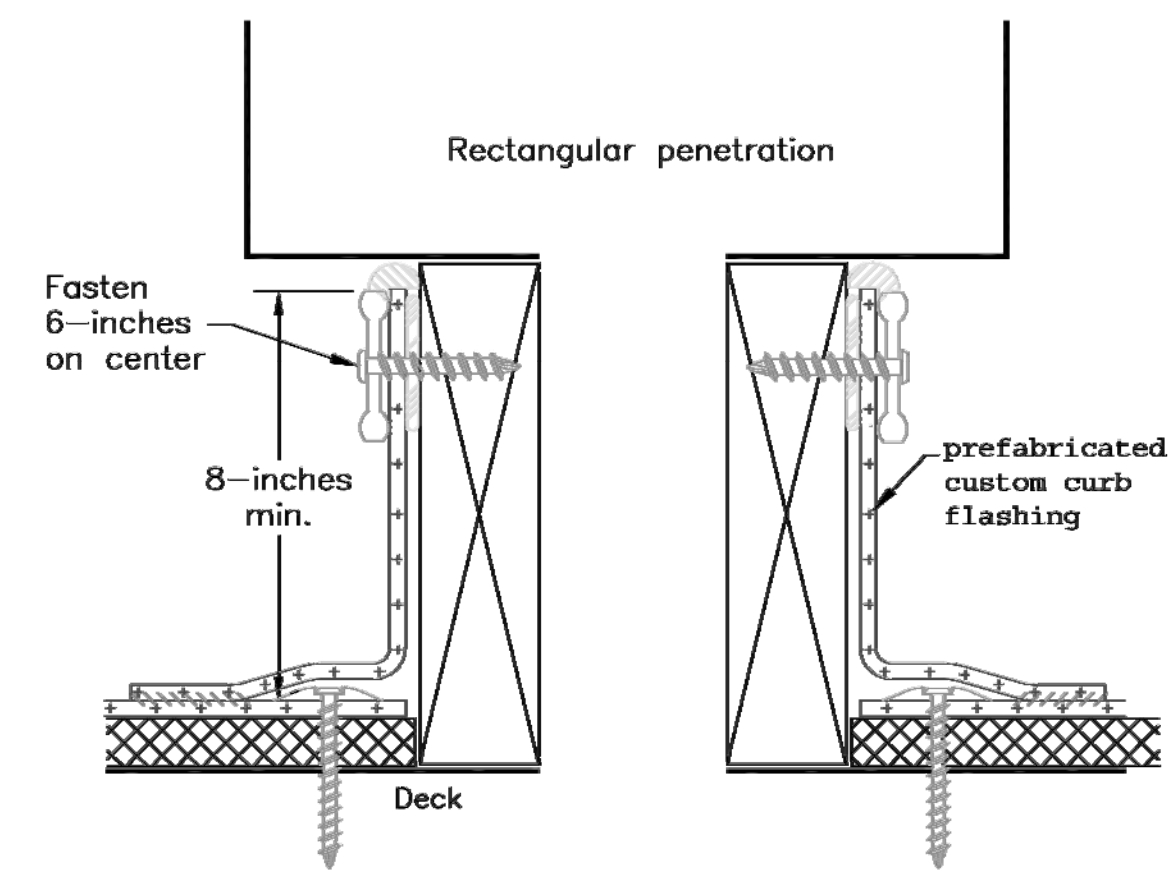
Note 5: Allow for 1/8-inch expansion gap between 10-foot lengths of snap-on base. Overlap the snap-on covers by 2-inches between 10-foot lengths.

Note 6: When installing this detail with a 6 to 13-inch wide metal cover, fasteners must be located within 2-inches of the kick-out.

Note 7: For substrate options see the membrane Roofing System specification.

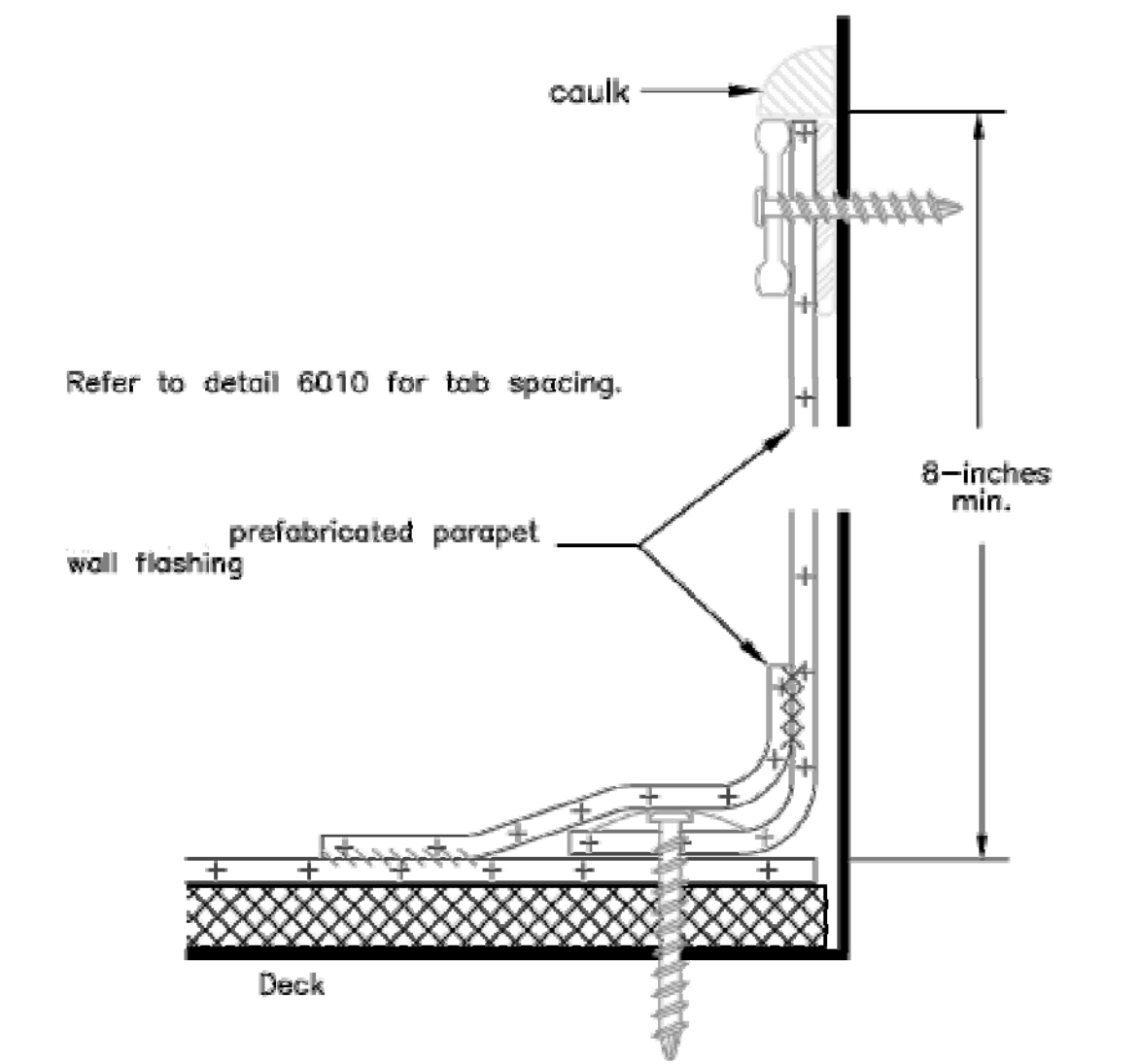


Note: Perimeter fastening of the deck membrane will be the same fastening pattern as the field membrane, max. 18-inches on center, and no less than one fastener per side.



Note 1: Perimeter fastening of the deck membrane will be the same fastening pattern as the field membrane, max. 18-inches on center, and no less than one fastener per side.

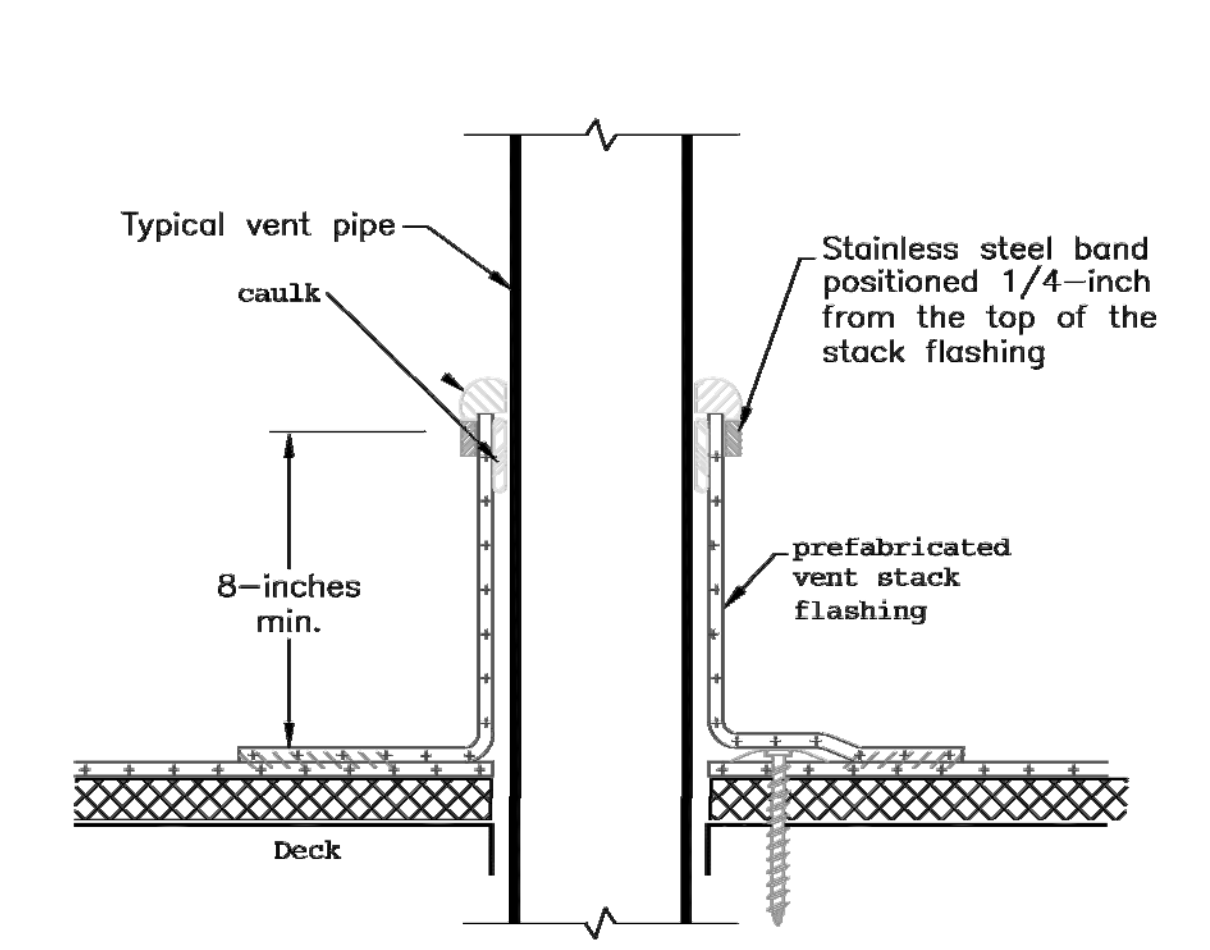
Note 2: All termination bar to have a fastener 1-inch max. from each corner.



Note 1: Fascia bar and cover may be used in place of the termination bar.

Note 2: The substrate must be free and clear of debris at and below the termination point.

Note 3: When attaching the parapet flashing to the substrate, appropriate fastener must be used. The fastener for the wall flashing may be different than the fastener used on the horizontal roof decking.



Note 1: If a lead flashing is present on the pipe, it must be removed before a stack flashing is installed.

Note 2: Membrane attachment around the penetration will be the same as the deck membrane, max. 18-inches on center, and a minimum of one plate/fastener per flashing.

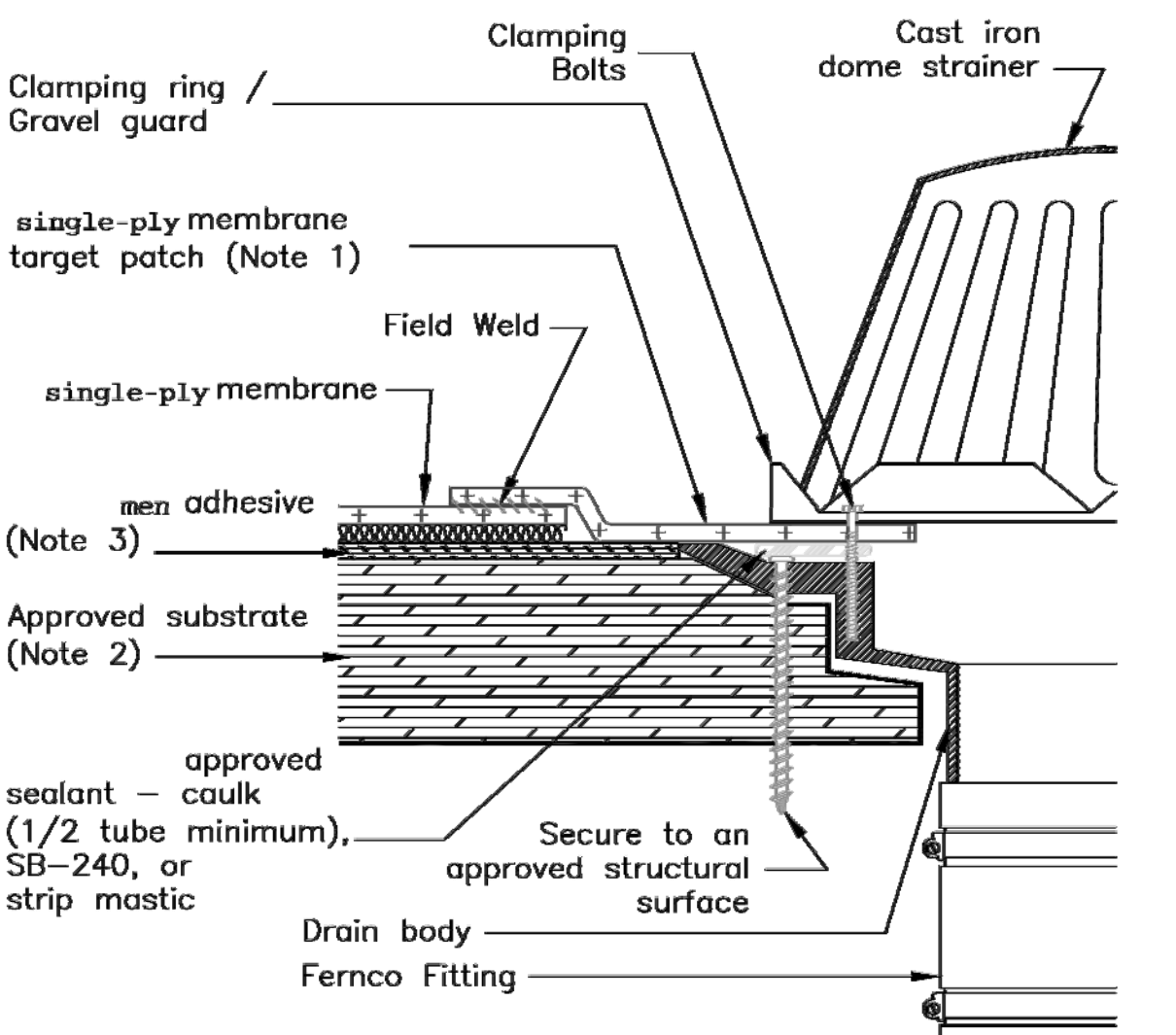
1 ROOF PARAPET DETAIL
NO SCALE

2 NEW ROOF CURB DETAIL
NO SCALE

3 EXISTING ROOF CURB DETAIL
NO SCALE

4 WALL TERMINATION DETAIL
NO SCALE

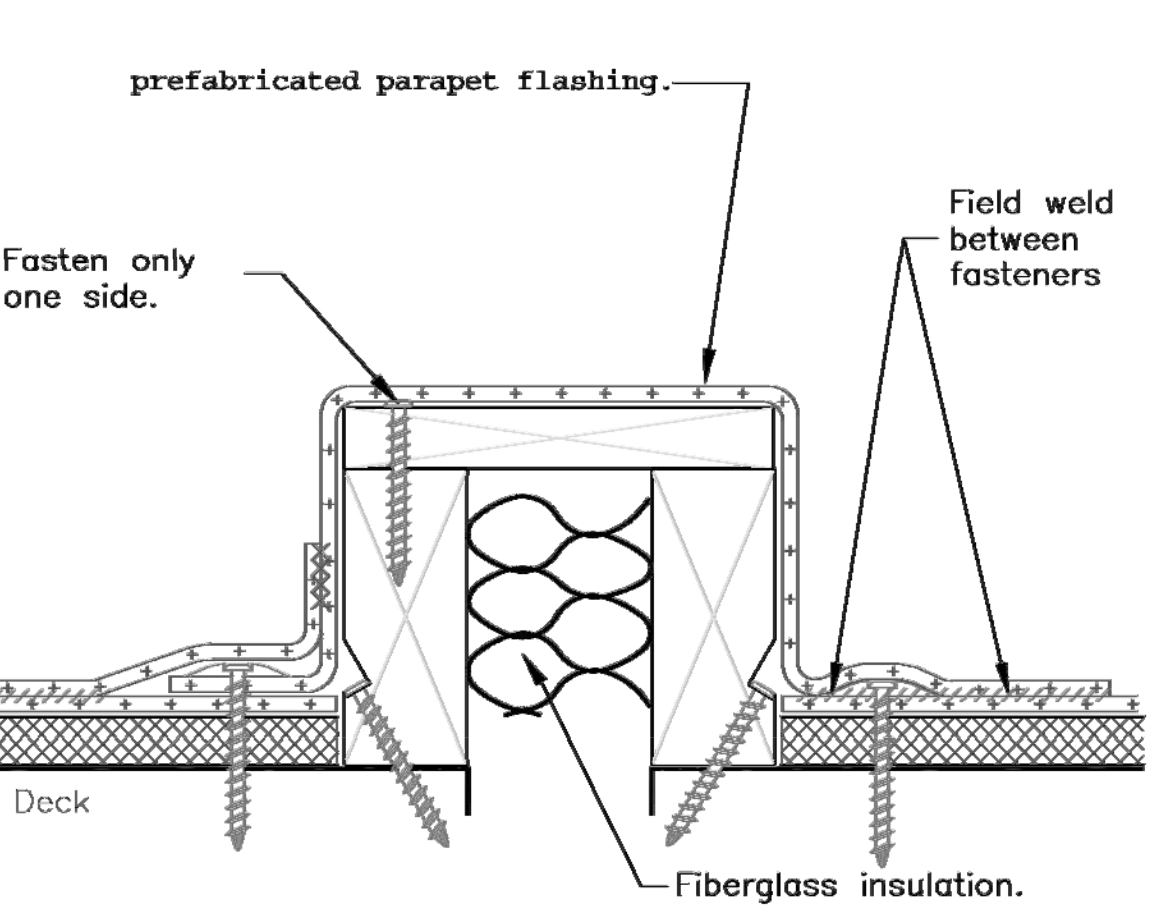
5 VENT STACK/PIPE PENETRATION DETAIL
NO SCALE



Note 1: Target patch must extend beyond drain sump so that no hot-air welding is done within the sump. If no sump is present the target patch must extend beyond the drain assembly a minimum of 12 inches in all directions. The target patch must be the same mil thickness as the roof membrane.

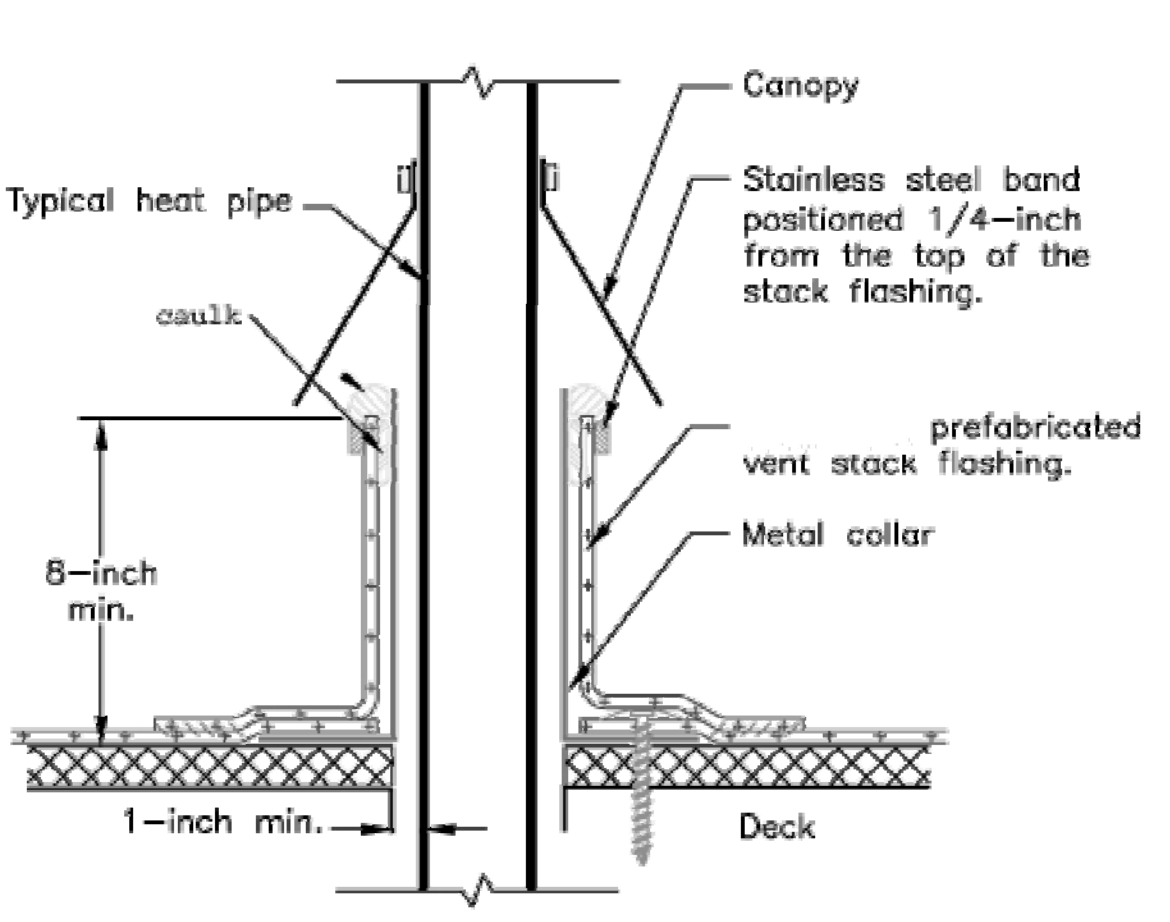
Note 2: For substrate options refer to the membrane Roofing System specification.

Note 3: For approved adhesives refer to the membrane Roofing System specification.



Note 1: Tabs that are parallel to the expansion joint must be mechanically fastened with the same fastening pattern used on the membrane in the field area.

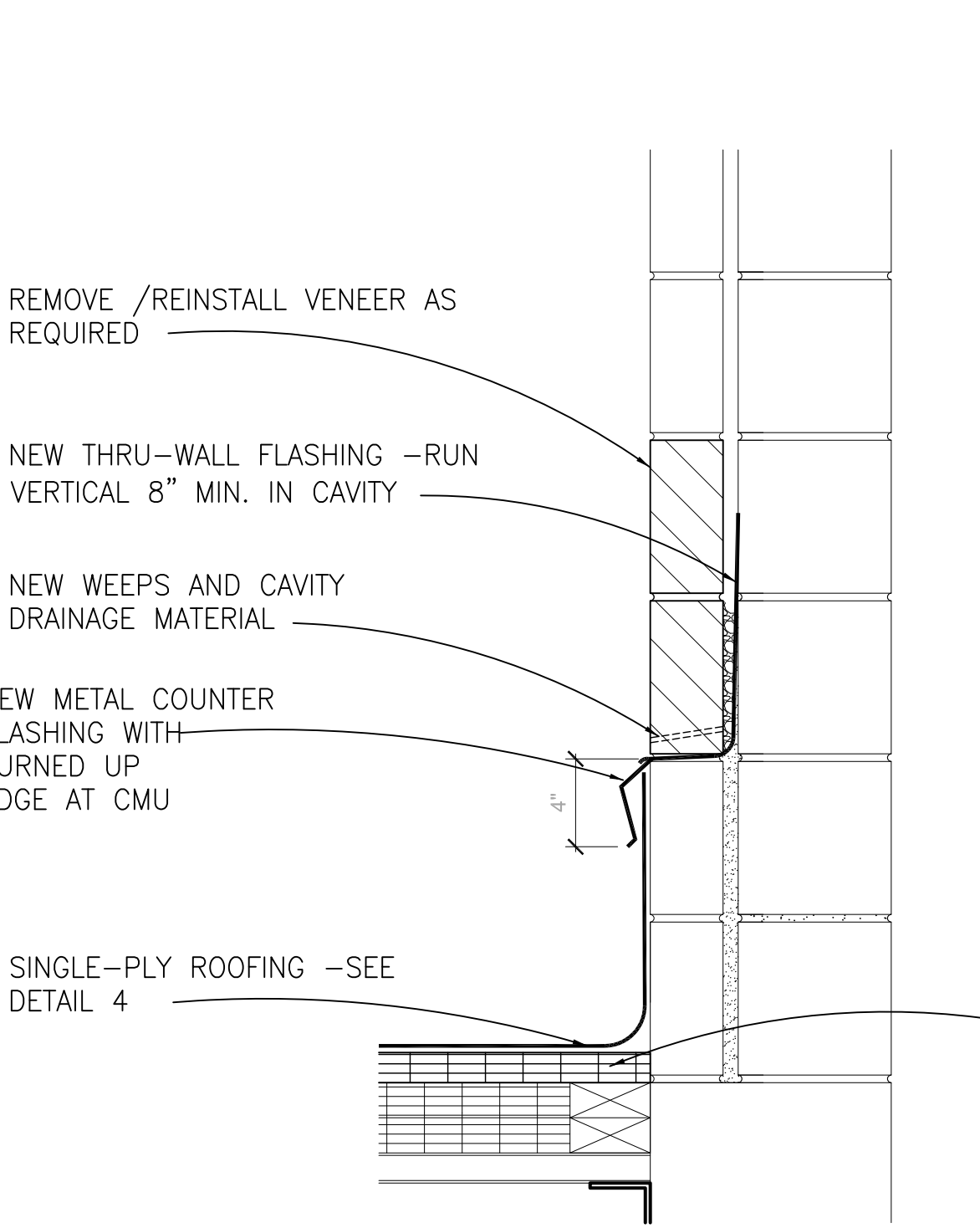
Note 2: Leave the membrane covering the expansion joint loose enough to allow for movement of the building on either side of the joint.



Note 1: Membrane attachment around the penetration will be the same as the deck membrane, max. 18-inches on center, and a minimum one plate/fastener per flashing.

Note 2: This detail required around pipes that exceed 120°F, including all insulated chimney pipes.

Note 3: A minimum of 1-inch air space is required between collar and hot pipes having temperatures greater than 120° F. Position canopy to allow air flow above termination.

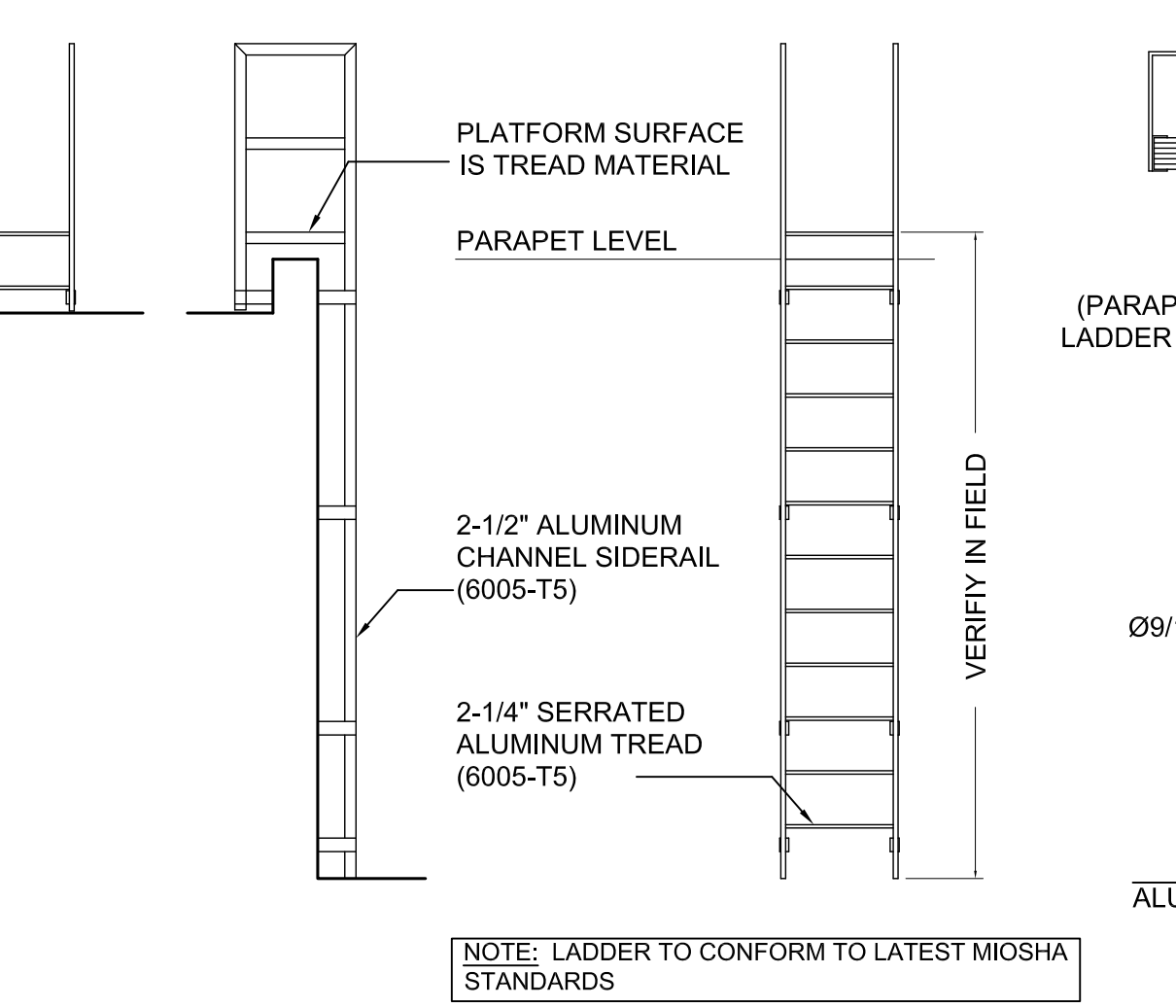


9 SECTION DETAIL AT NEW FLASHING/ WEEPS
SCALE: 1 1/2" = 1'-0"

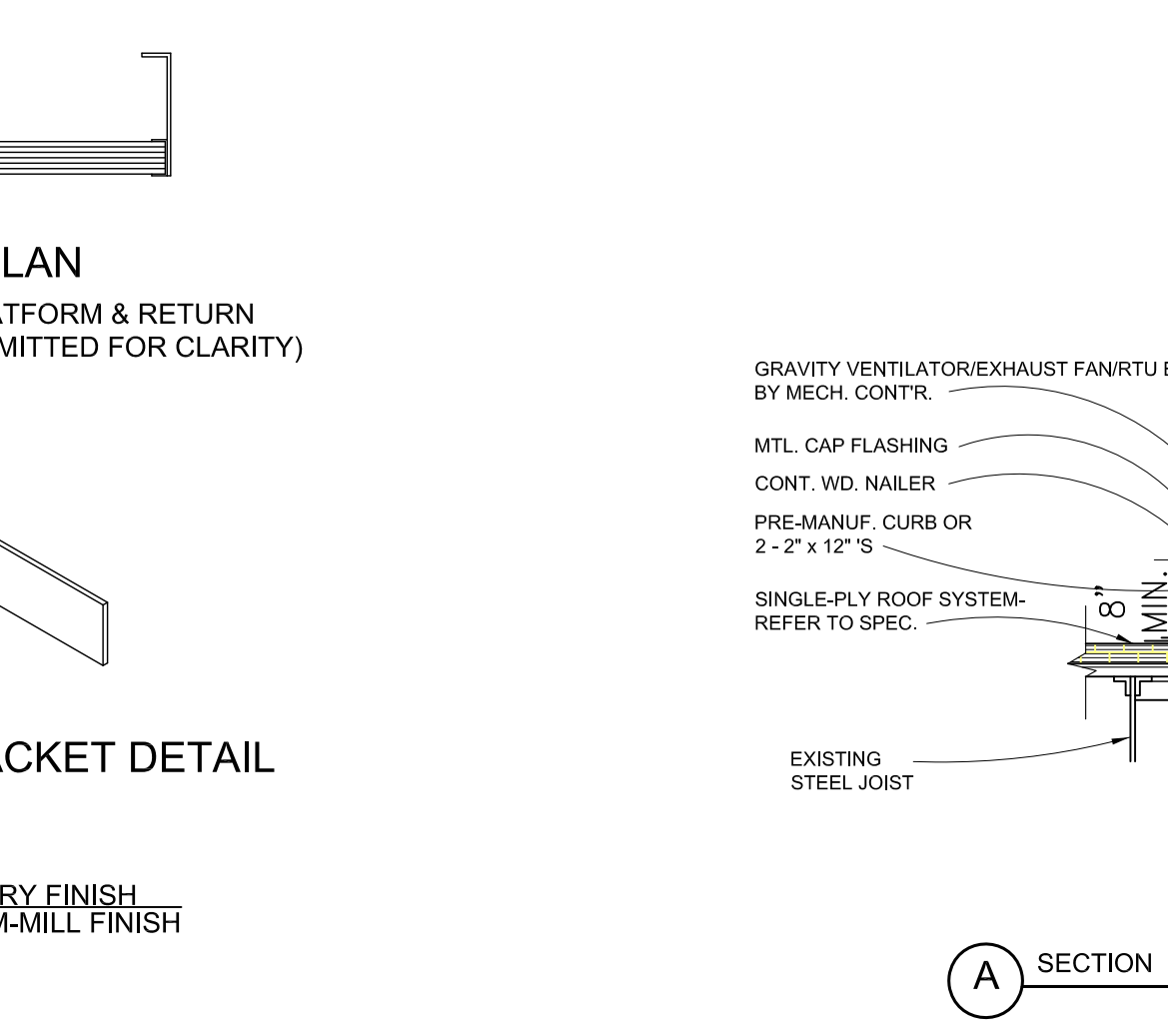
6 ROOF SUMP DETAIL
NO SCALE

7 ROOF CURB DETAIL
NO SCALE

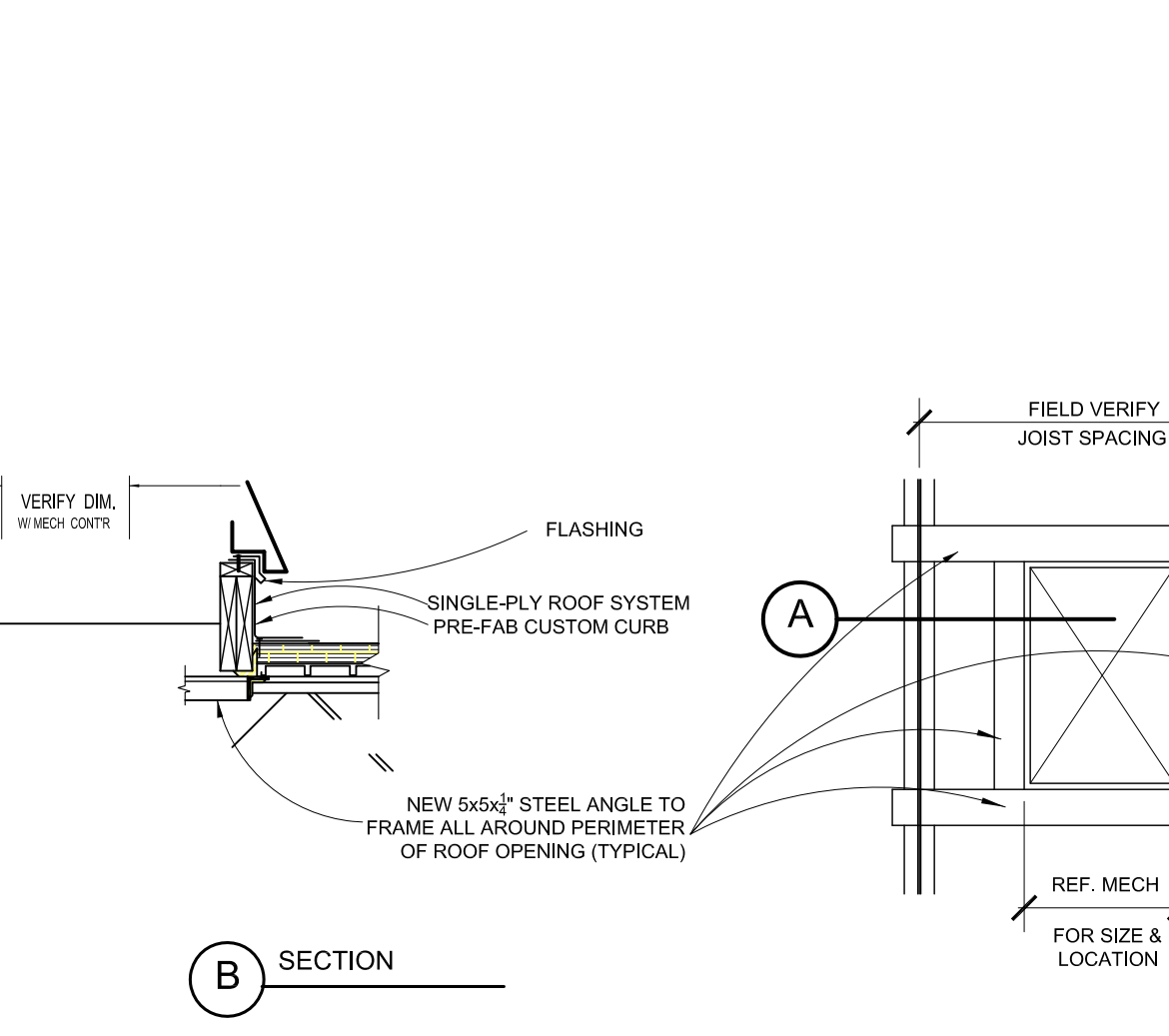
8 PIPE DETAIL
NO SCALE



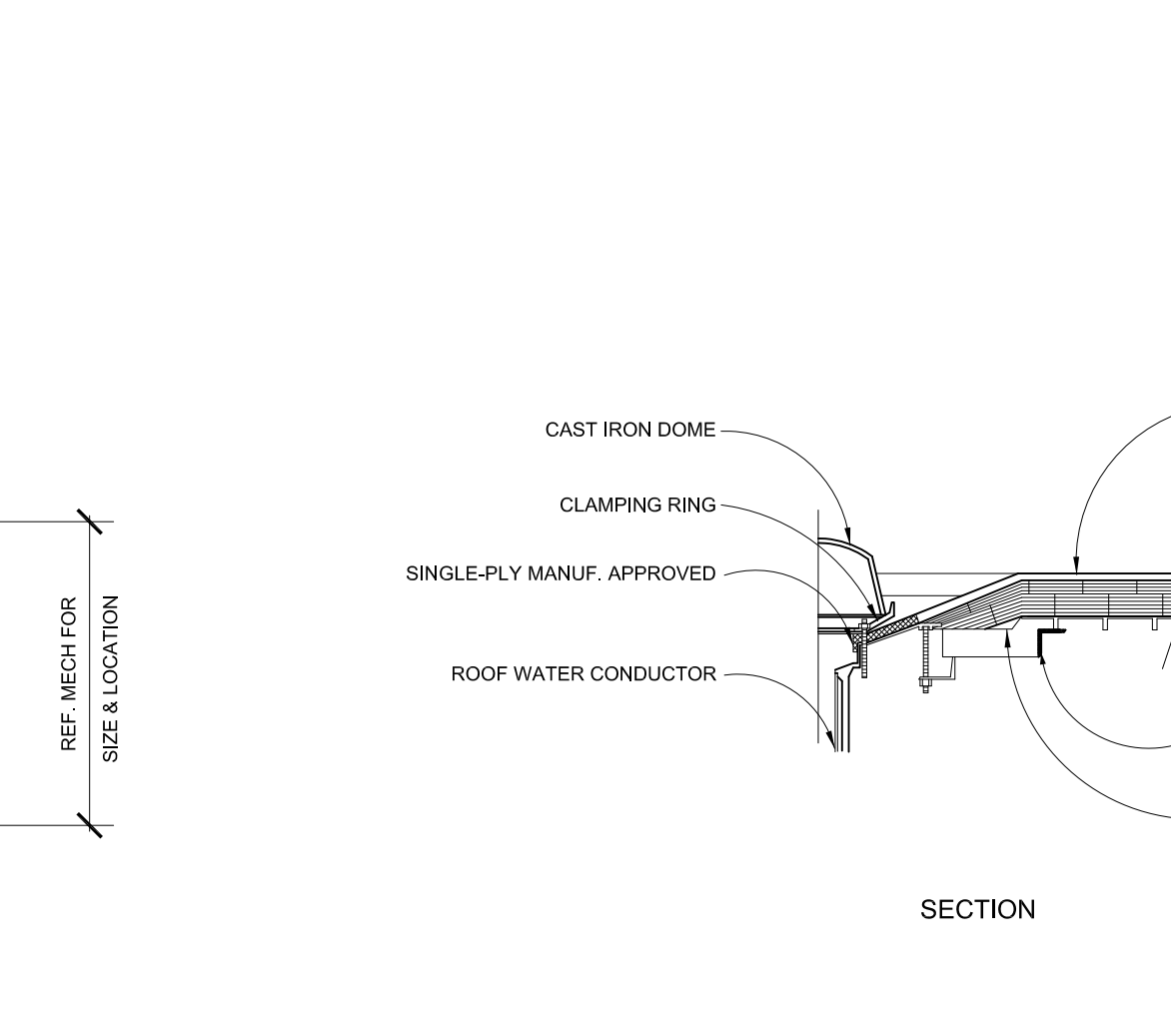
10 ROOF LADDER DETAILS
SCALE: 1/4" = 1'-0"



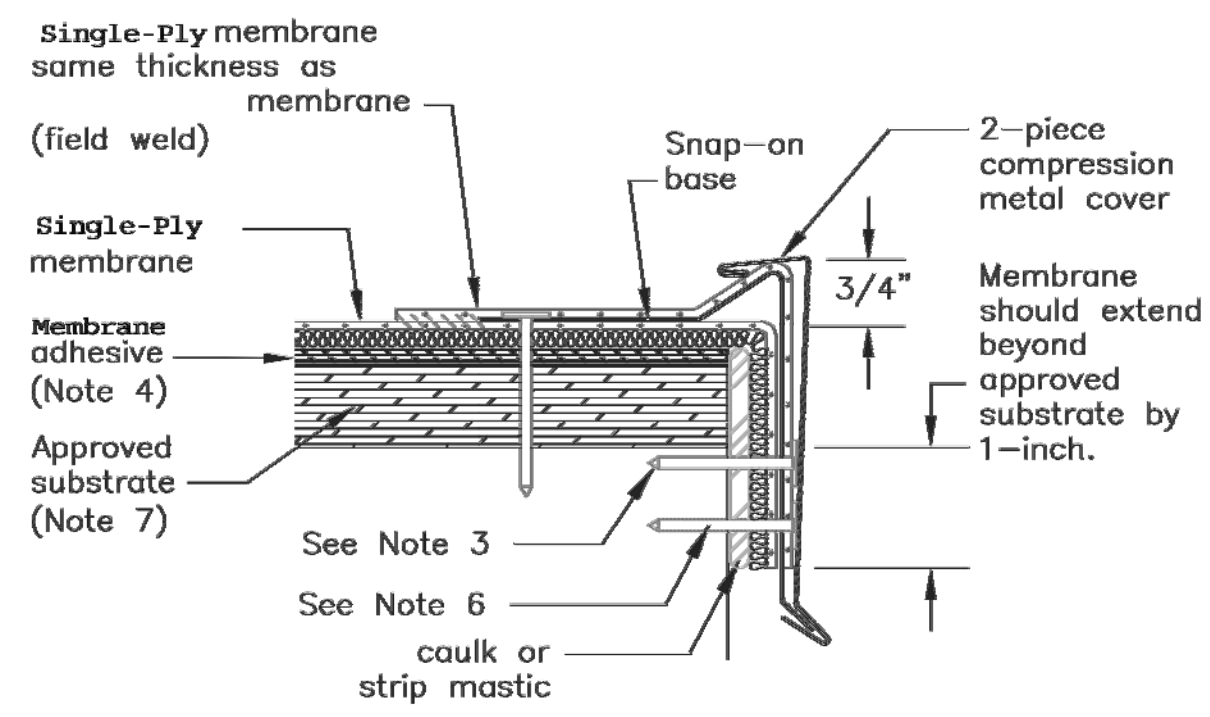
11 TYPICAL ROOF CURB DETAIL
NO SCALE



12 TYPICAL ROOF SUMP DETAIL
NO SCALE



13 SECTION DETAIL AT NEW FLASHING/ WEEPS
SCALE: 1 1/2" = 1'-0"



Note 1: This detail is not allowed when roof slope exceeds 2-inches per 12-inches.

Note 2: A wood nailer is required if one or more inches of insulation is used. Top of wood nailer is to be flush with top of insulation. Wood nailer must extend at least 1/2-inch beyond the horizontal edge of the snap-on base.

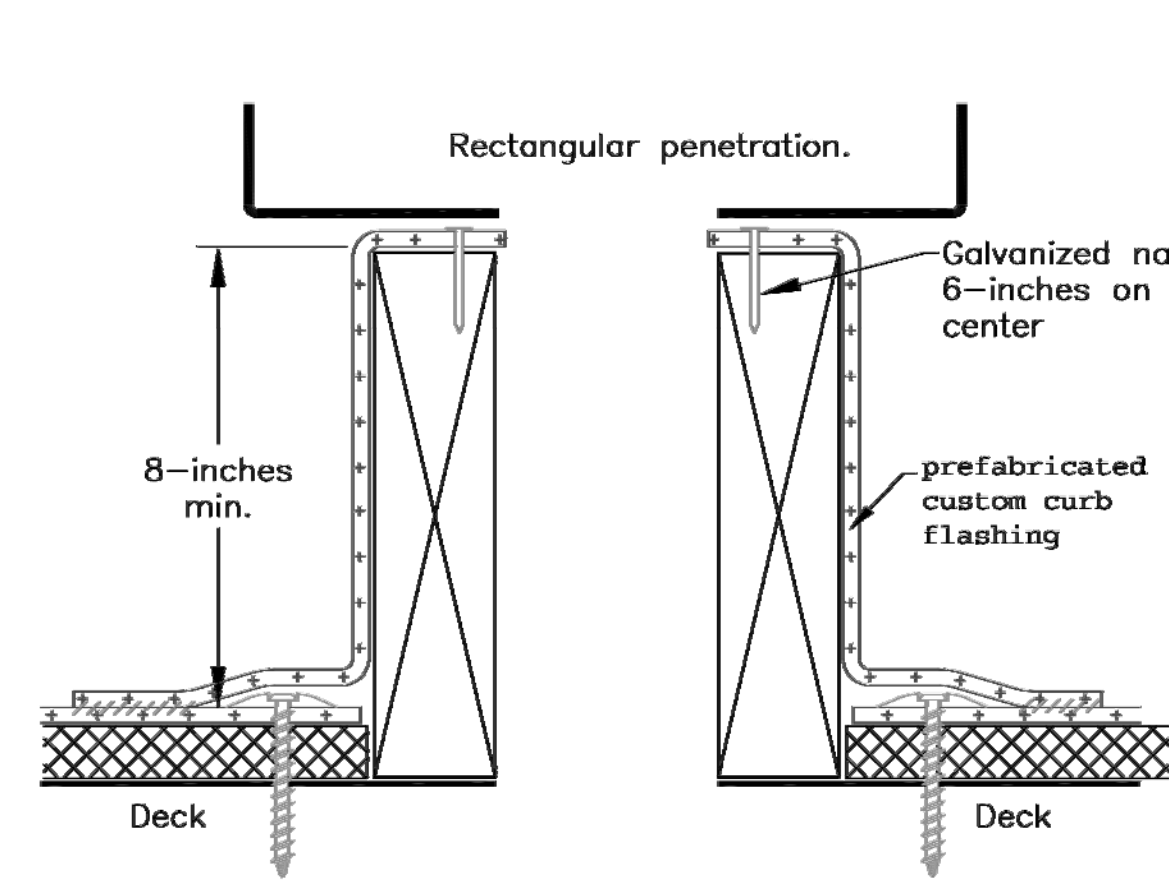
Note 3: The fasteners used to attach the snap-on base and the membrane to the nailer or into an approved structural surface must be spaced no greater than 6-inches on center. When installing within 10-feet of an outside corner the fastening pattern is 3-inches on center.

Note 4: For approved adhesives refer to the membrane Roofing System specification.

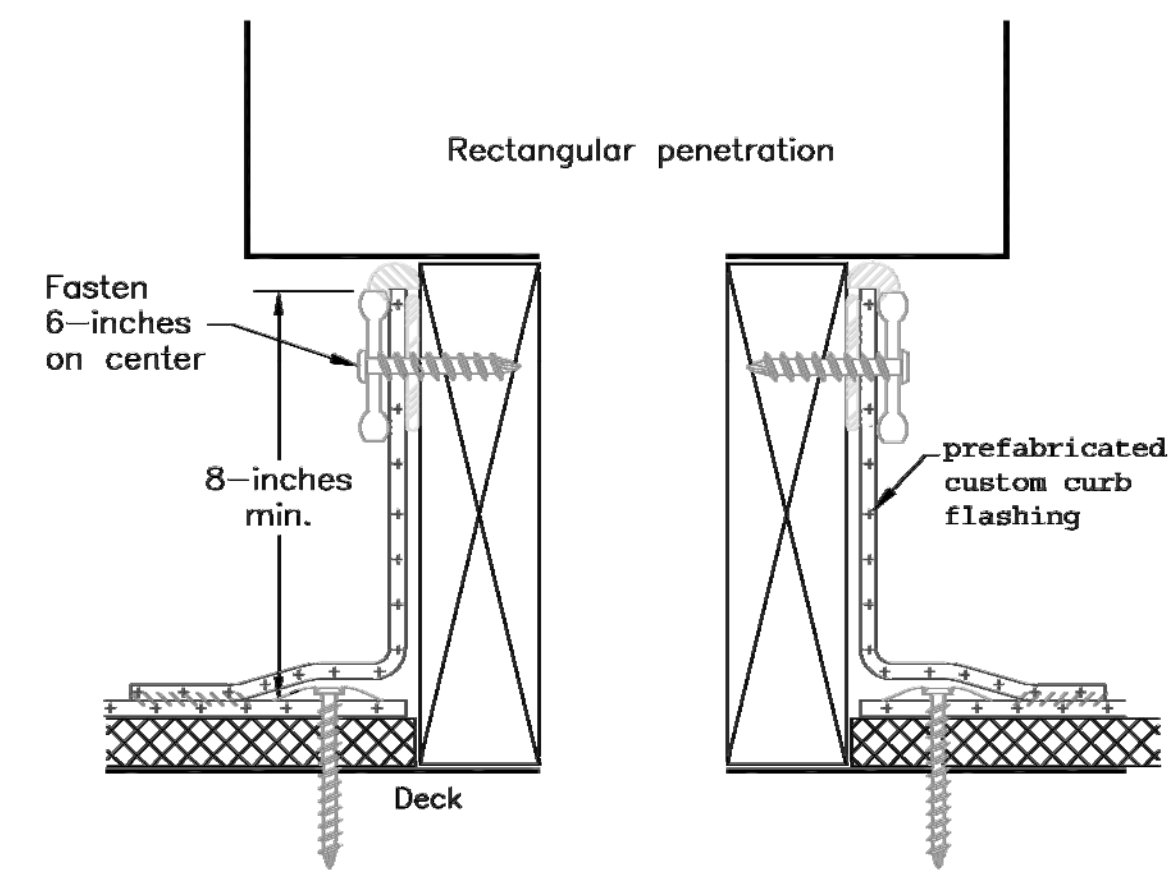
Note 5: Allow for 1/8-inch expansion gap between 10-foot lengths of snap-on base. Overlap the snap-on covers by 2-inches between 10-foot lengths.

Note 6: When installing this detail with a 6 to 13-inch wide metal cover, fasteners must be located within 2-inches of the kick-out.

Note 7: For substrate options see the membrane Roofing System specification.

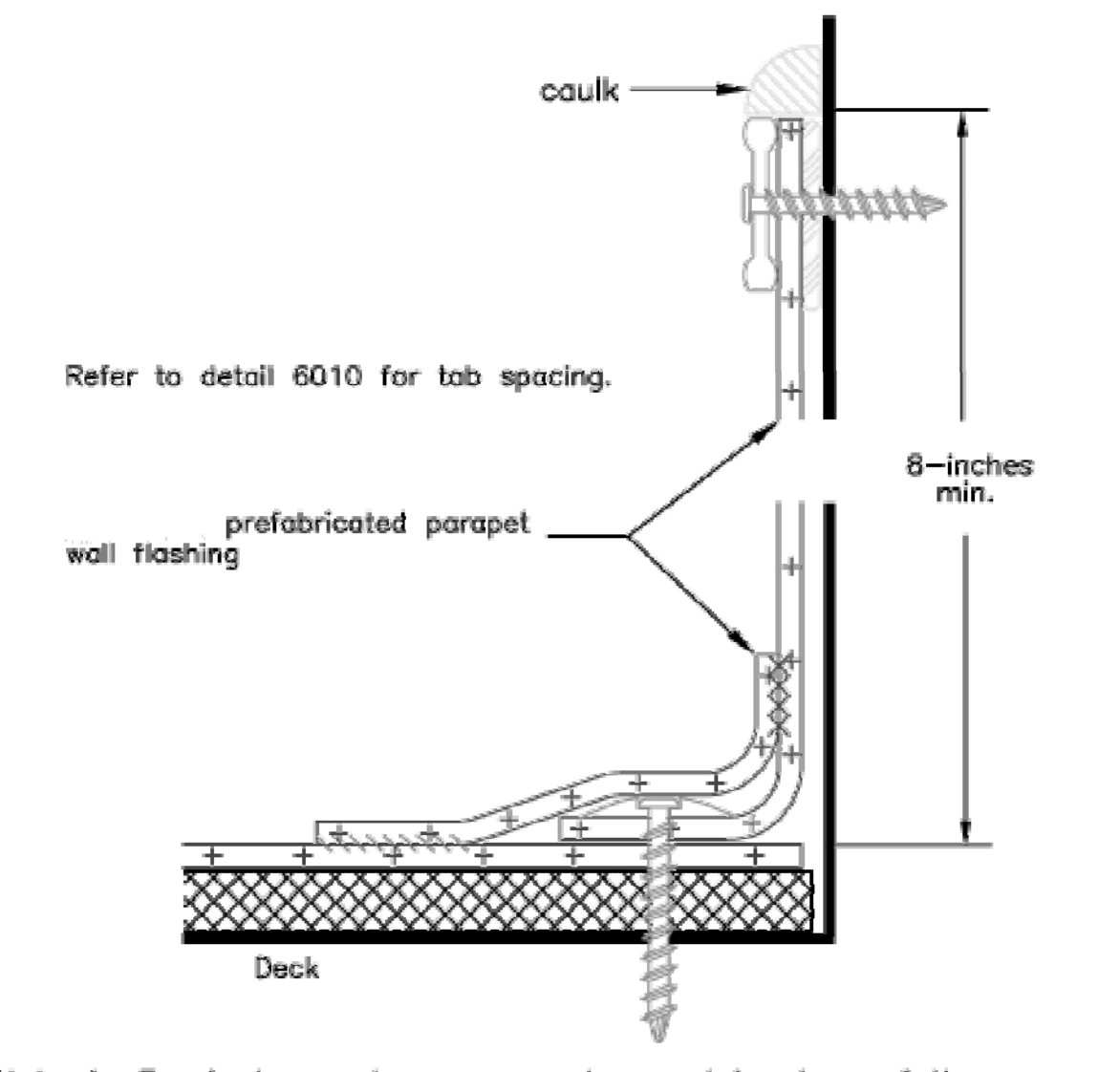


Note: Perimeter fastening of the deck membrane will be the same fastening pattern as the field membrane, max. 18-inches on center, and no less than one fastener per side.



Note 1: Perimeter fastening of the deck membrane will be the same fastening pattern as the field membrane, max. 18-inches on center, and no less than one fastener per side.

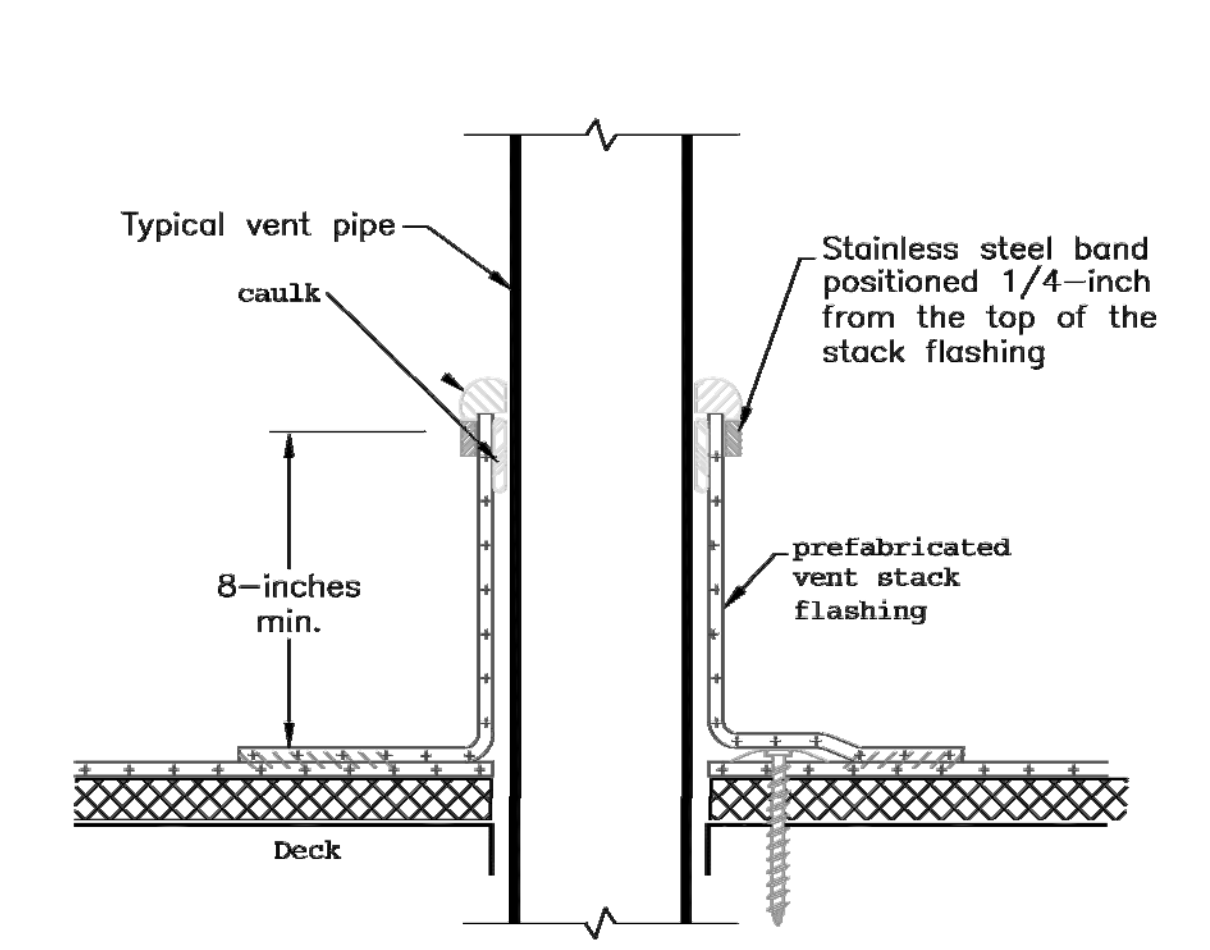
Note 2: All termination bar to have a fastener 1-inch max. from each corner.



Note 1: Fascia bar and cover may be used in place of the termination bar.

Note 2: The substrate must be free and clear of debris at and below the termination point.

Note 3: When attaching the parapet flashing to the substrate, appropriate fastener must be used. The fastener for the wall flashing may be different than the fastener used on the horizontal roof decking.



Note 1: If a lead flashing is present on the pipe, it must be removed before a stack flashing is installed.

Note 2: Membrane attachment around the penetration will be the same as the deck membrane, max. 18-inches on center, and a minimum of one plate/fastener per flashing.

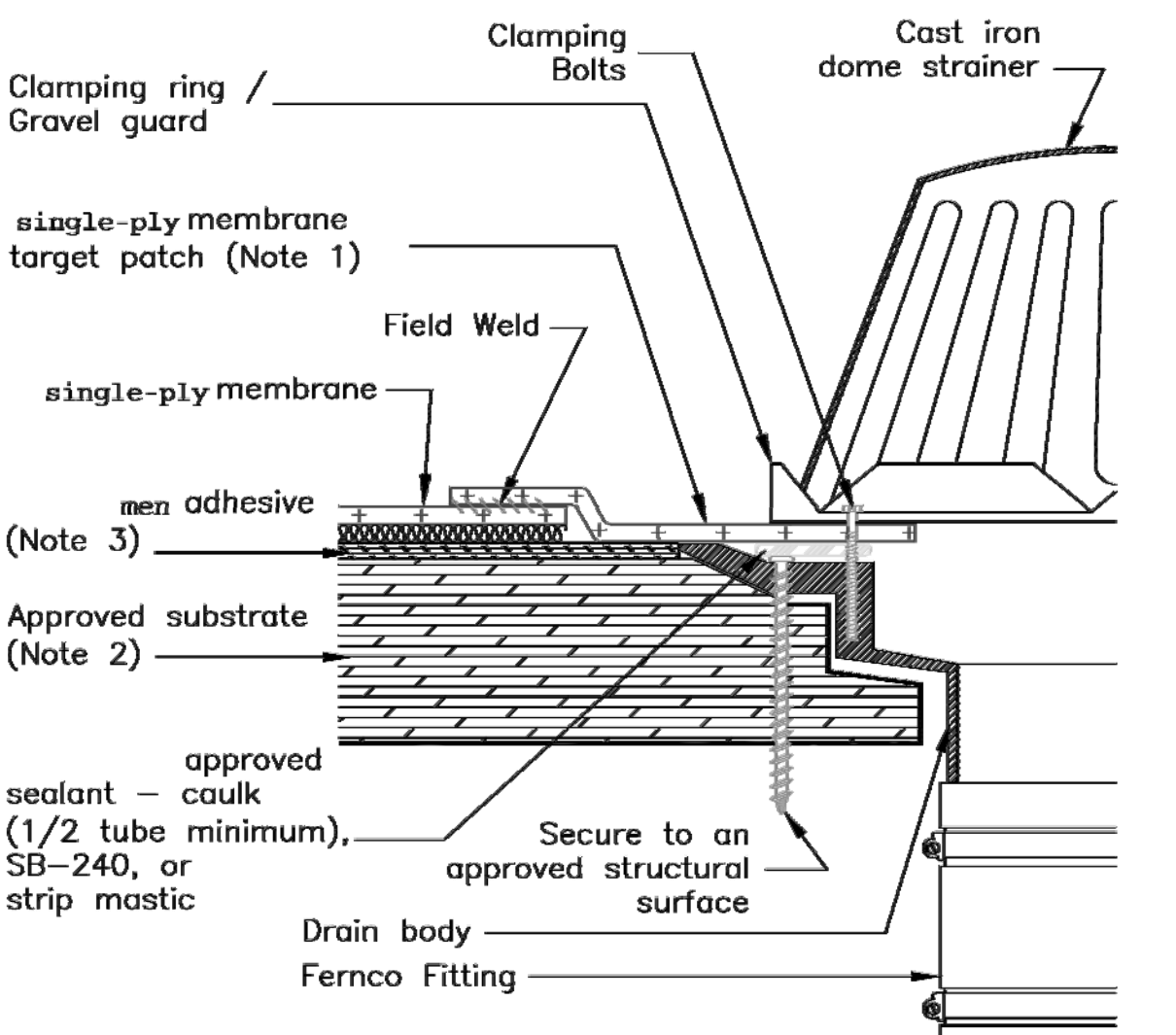
1 ROOF PARAPET DETAIL
NO SCALE

2 NEW ROOF CURB DETAIL
NO SCALE

3 EXISTING ROOF CURB DETAIL
NO SCALE

4 WALL TERMINATION DETAIL
NO SCALE

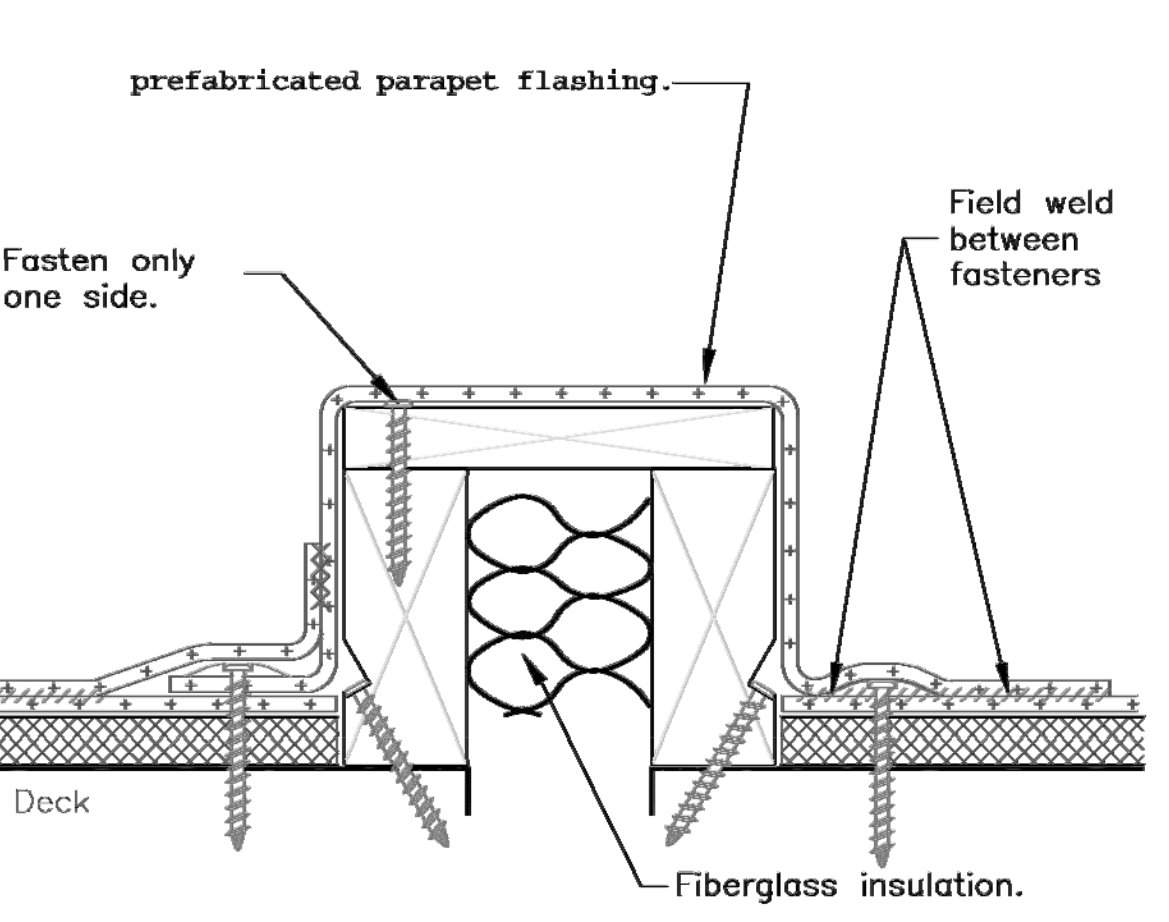
5 VENT STACK/PIPE PENETRATION DETAIL
NO SCALE



Note 1: Target patch must extend beyond drain sump so that no hot-air welding is done within the sump. If no sump is present the target patch must extend beyond the drain assembly a minimum of 12 inches in all directions. The target patch must be the same mil thickness as the roof membrane.

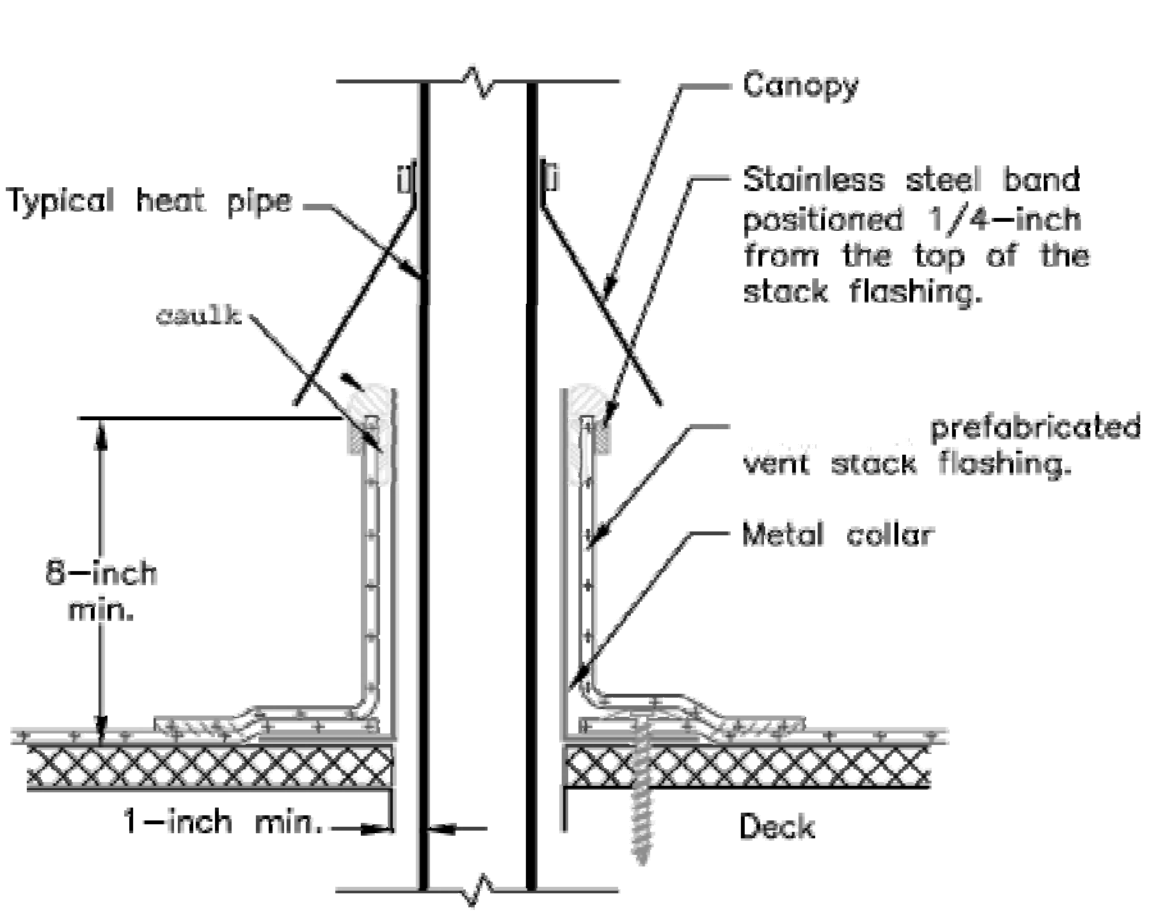
Note 2: For substrate options refer to the membrane Roofing System specification.

Note 3: For approved adhesives refer to the membrane Roofing System specification.



Note 1: Tabs that are parallel to the expansion joint must be mechanically fastened with the same fastening pattern used on the membrane in the field area.

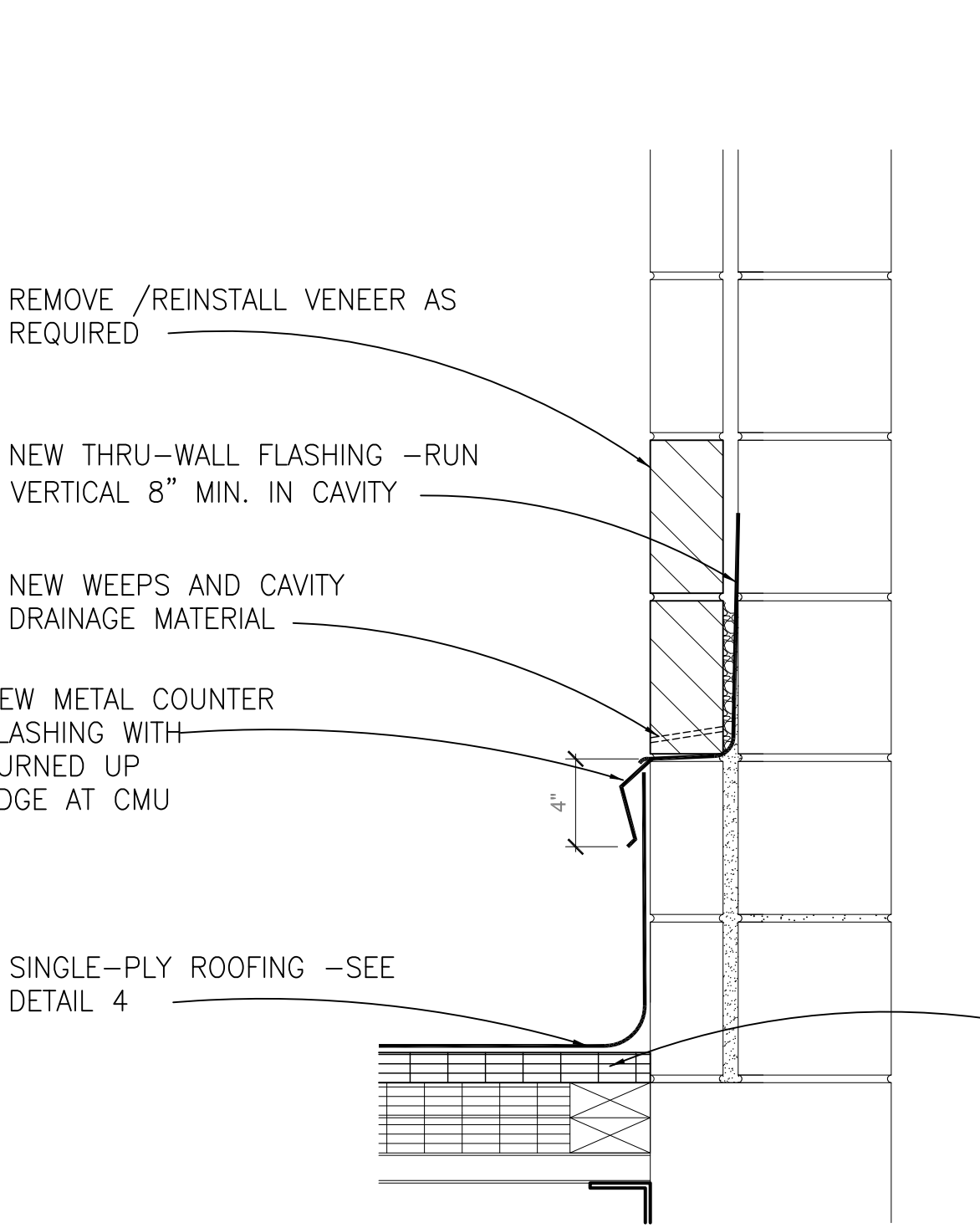
Note 2: Leave the membrane covering the expansion joint loose enough to allow for movement of the building on either side of the joint.



Note 1: Membrane attachment around the penetration will be the same as the deck membrane, max. 18-inches on center, and a minimum one plate/fastener per flashing.

Note 2: This detail required around pipes that exceed 120°F, including all insulated chimney pipes.

Note 3: A minimum of 1-inch air space is required between collar and hot pipes having temperatures greater than 120° F. Position canopy to allow air flow above termination.

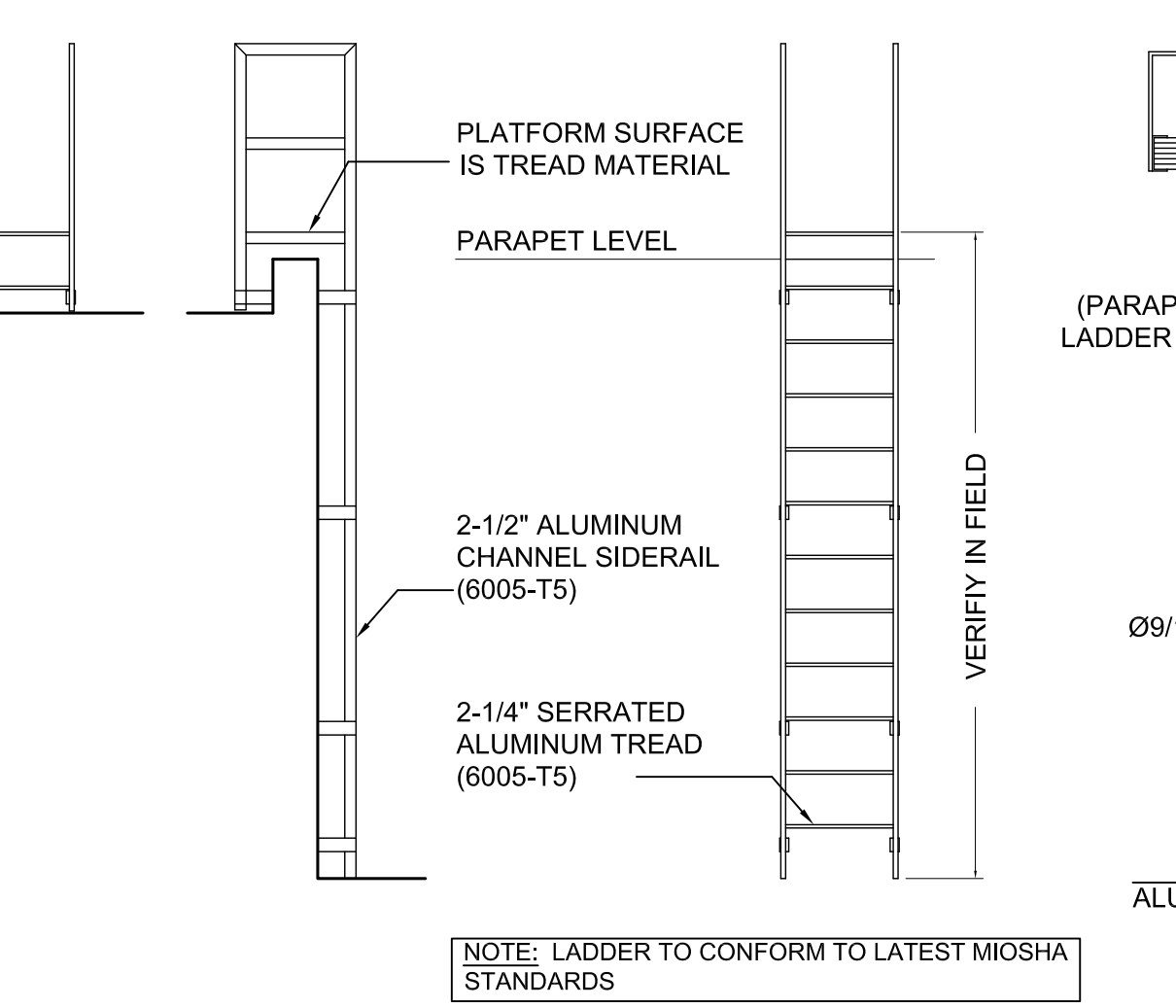


9 SECTION DETAIL AT NEW FLASHING/ WEEPS
SCALE: 1 1/2" = 1'-0"

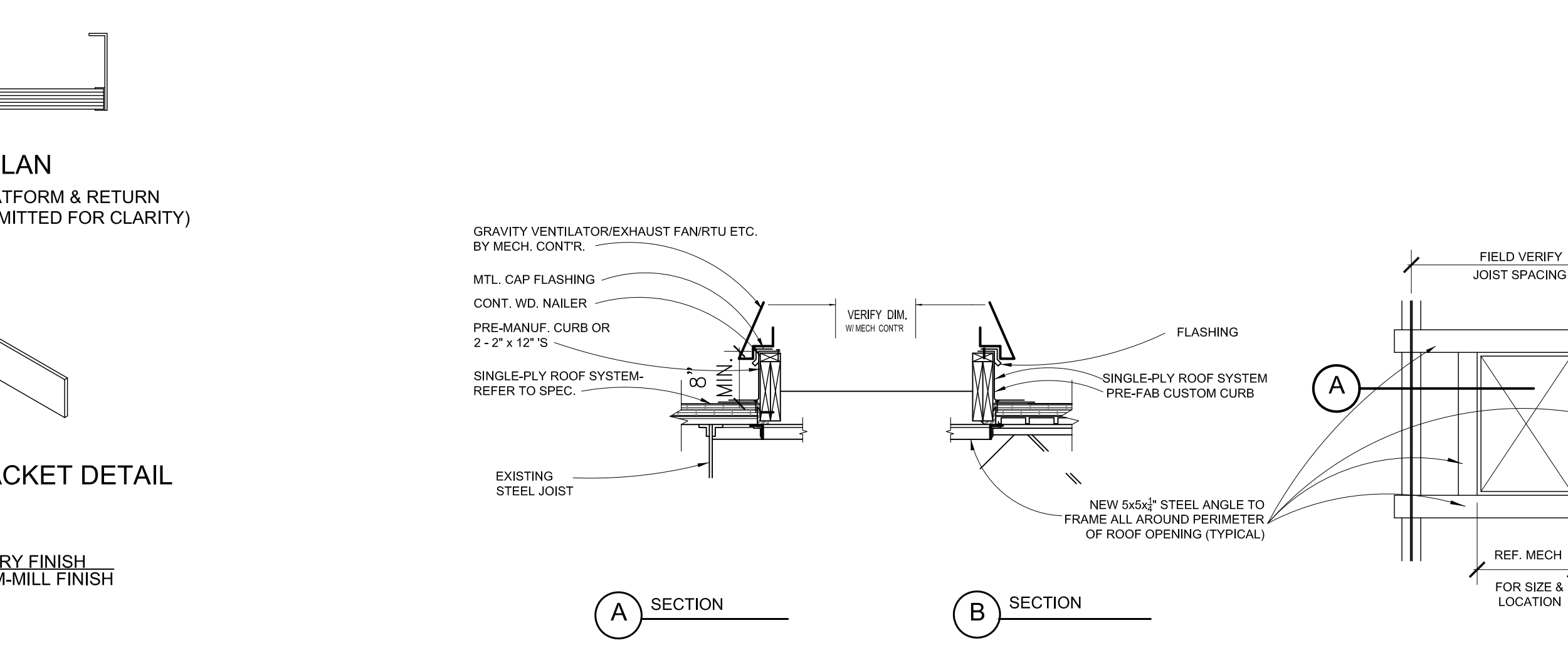
6 ROOF SUMP DETAIL
NO SCALE

7 ROOF CURB DETAIL
NO SCALE

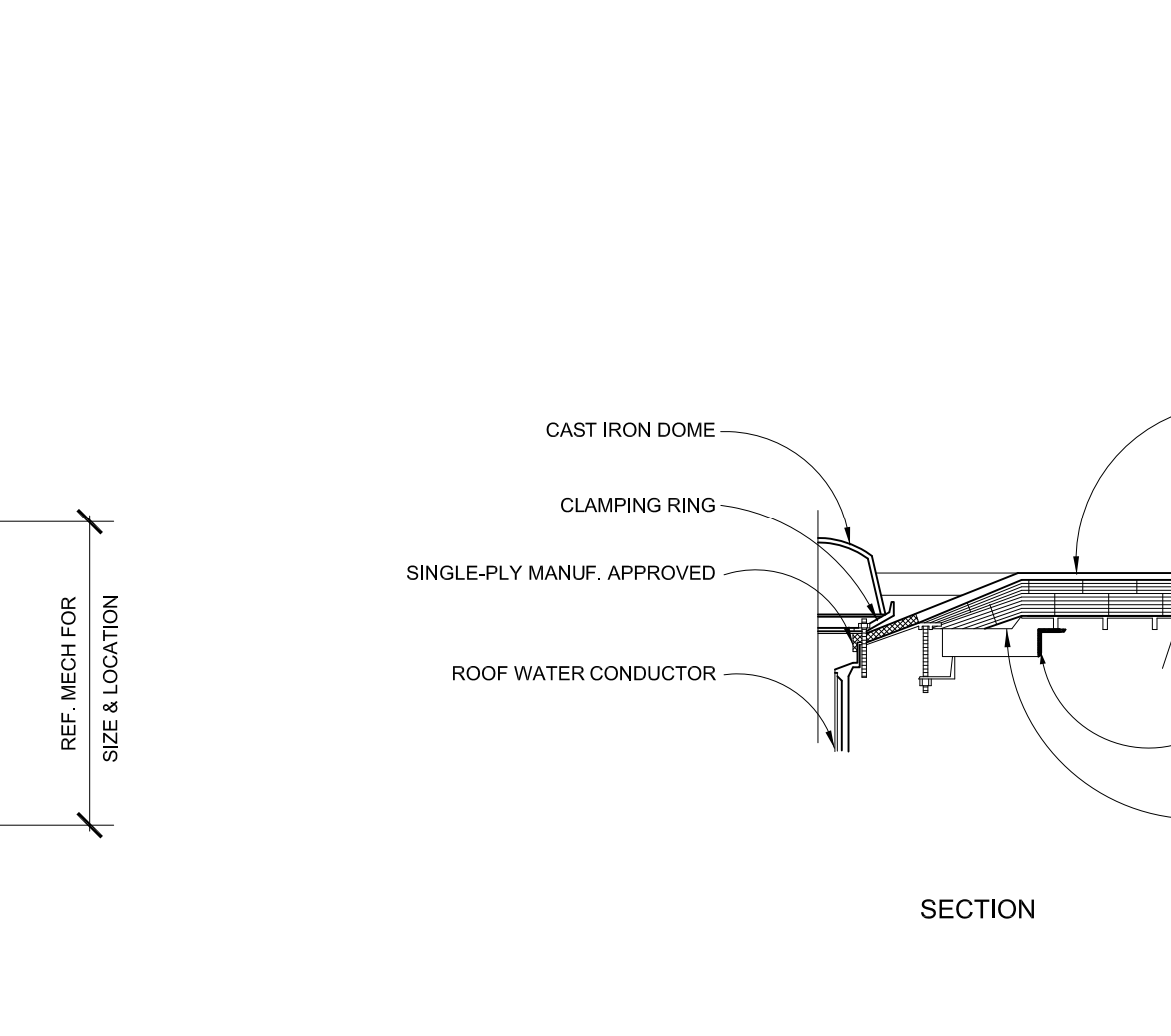
8 PIPE DETAIL
NO SCALE



10 ROOF LADDER DETAILS
SCALE: 1/4" = 1'-0"



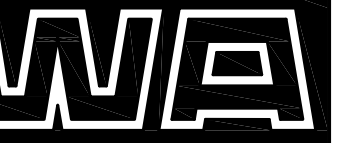
11 TYPICAL ROOF CURB DETAIL
NO SCALE



12 TYPICAL ROOF SUMP DETAIL
NO SCALE

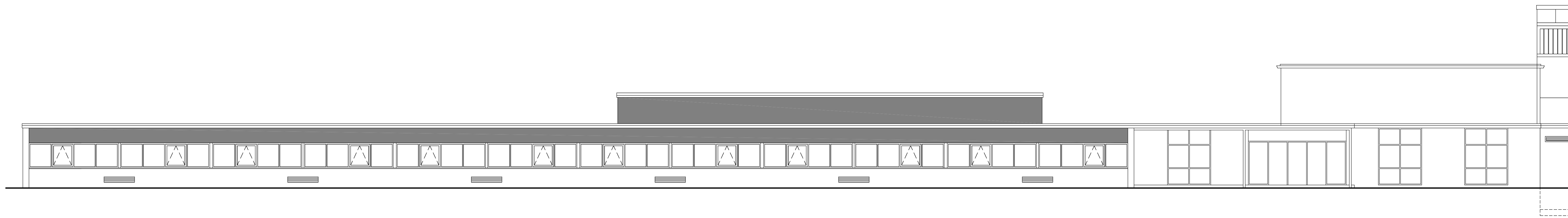
ROOF PLAN LEGEND:

 SAND/PREP./PAINT VERTICAL METAL SIDING, (TYPICAL AROUND PERIMETER OF BUILDING)

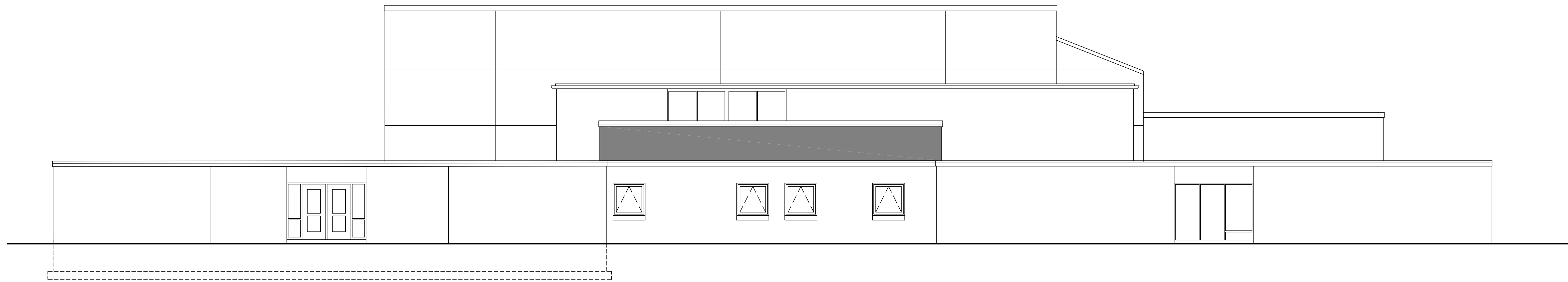


WAKELY ASSOCIATES, INC.
ARCHITECTS

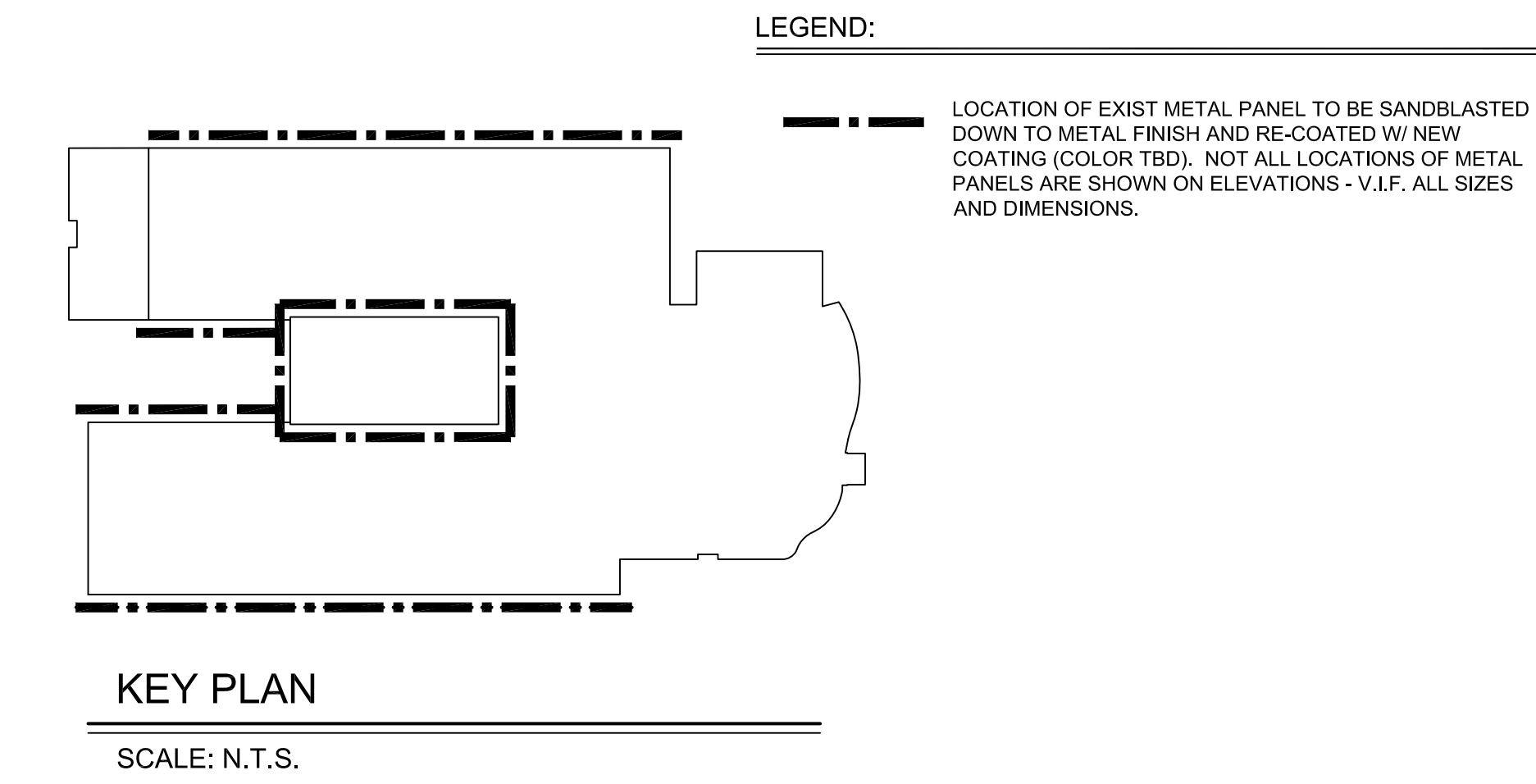
30500 VAN DYKE AVENUE
SUITE M-7
WARREN, MICHIGAN 48093
PH: 586.573.4100
FX: 586.573.0822
www.WakelyMA.com



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



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



FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL

BUILDING ELEVATIONS

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

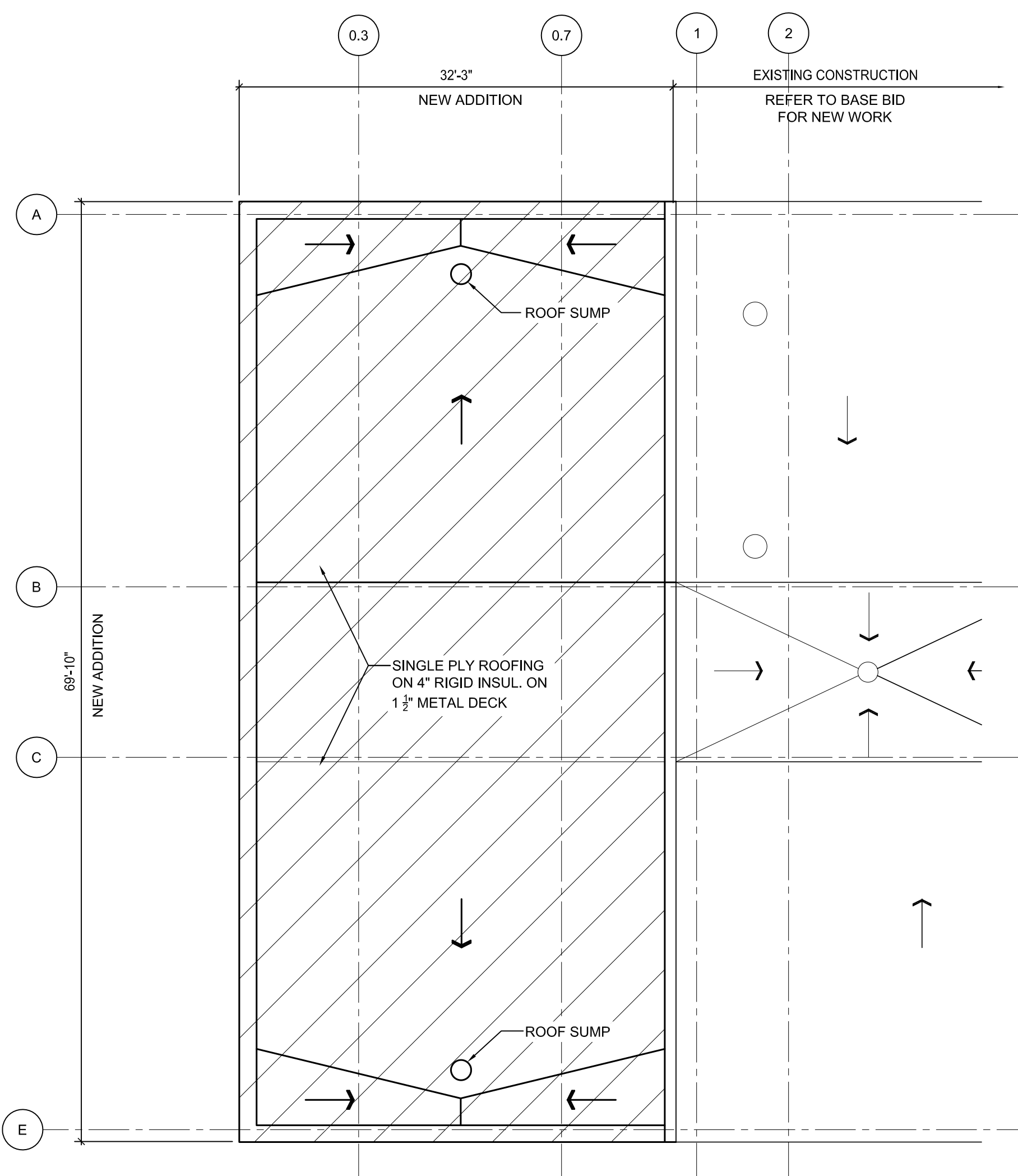
DRAWN BY: N.J.L.
CHECKED BY: B.J.S.

REVISIONS

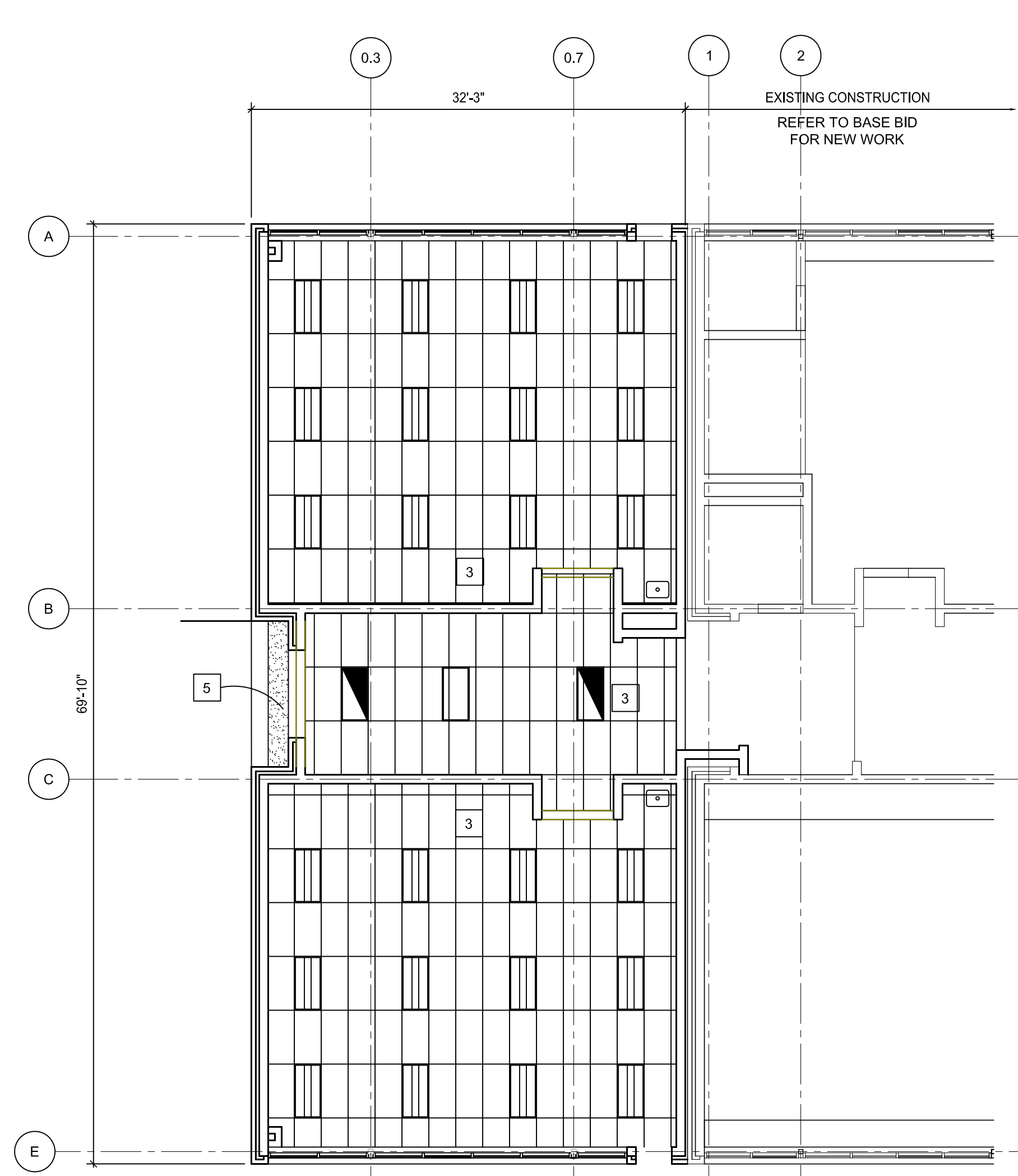
DATE: November 23, 2016
SHEET NO.

A4.0LA

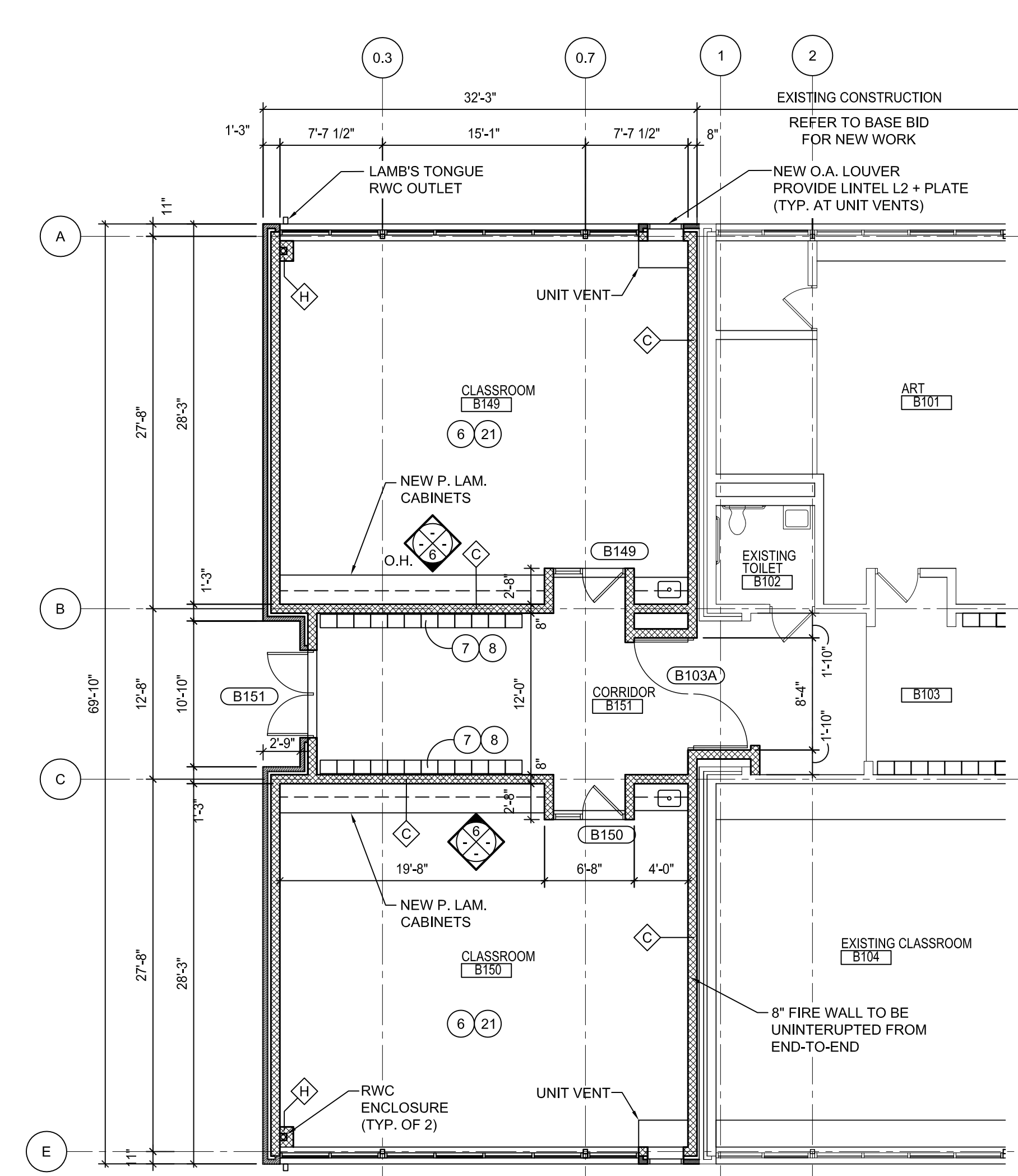
JOB NO. 161664B



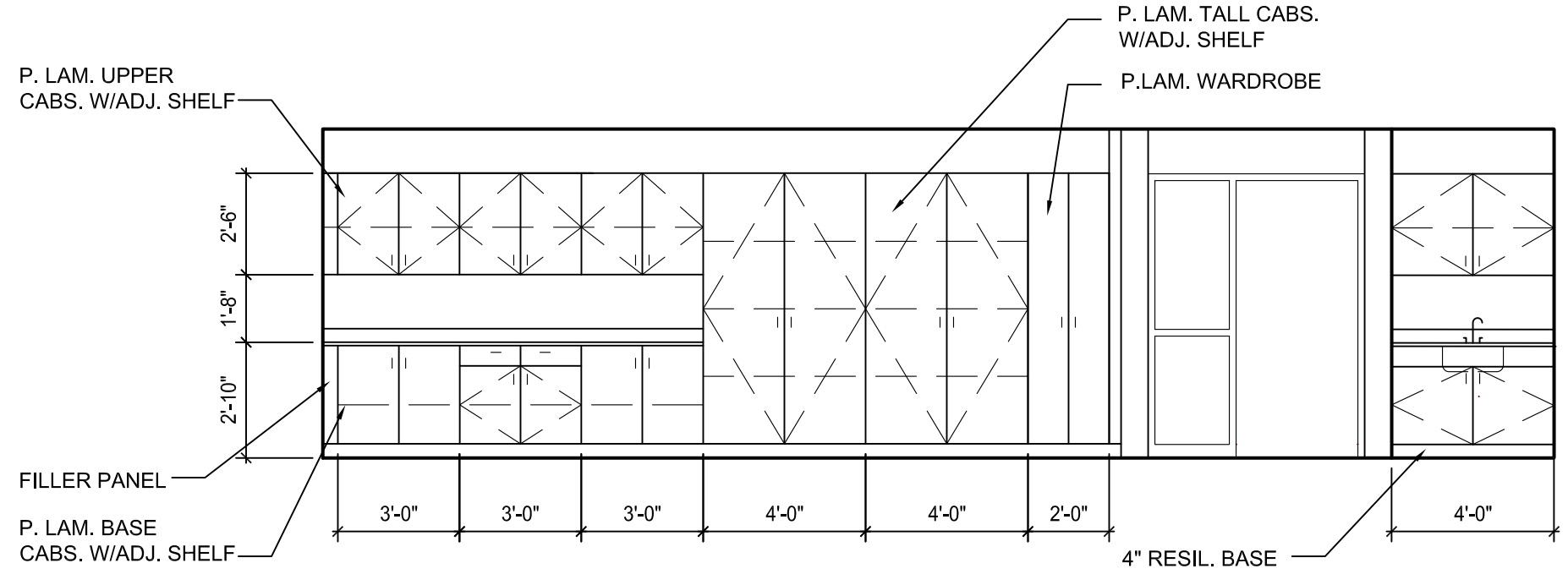
5 ROOF PLAN - NEW WORK
SCALE= 1/8" = 1'-0"



4 REFLECTED CEILING PLAN
SCALE= 1/8" = 1'-0"



2 FLOOR PLAN - NEW WORK
SCALE= 1/8" = 1'-0"



6 INTERIOR ELEVATION
SCALE= 1/4" = 1'-0"

FOOTING SCHEDULE				
FOOTING MARK	FOOTING SIZE WIDTH x THICKNESS x LENGTH	REINFORCEMENT	TOP OF FTG. ELEV	REMARKS
F1	2'-1" x 1'-0" x CONT.	(3) #4 BARS	96'-0"	-
F2	8" x 2'-10" x CONT.	(1) #4 T & B	FIELD VERIFY	STOOP TRENCH
F3	1'-4" x 1'-0" x CONT.	(2) #4 BARS	99'-4"	STEP FOOTING (SEE PLAN)
F4	3'-0" x 1'-0" x 3'-0"	(3) #4'S EA. WAY	96'-0"	-
F5	1'-4" x 1'-8" x CONT.	(2) #4'S CONT.	96'-8"	NEW @ EXISTING FOOTING

BEARING PLATE SCHEDULE			
MARK	SIZE	ANCHORS	REMARKS
BP1	3/8"x5 1/2"x1'-0"	(2) 3/8"x6" LG. HD STUDS	GROUT MIN. 3-COURSE BELOW PLATE
BP2	3/8"x6"x6"	(1) 3/8"x6" LG. HD STUDS	GROUT WALL SOLID FULL HEIGHT @ BRG

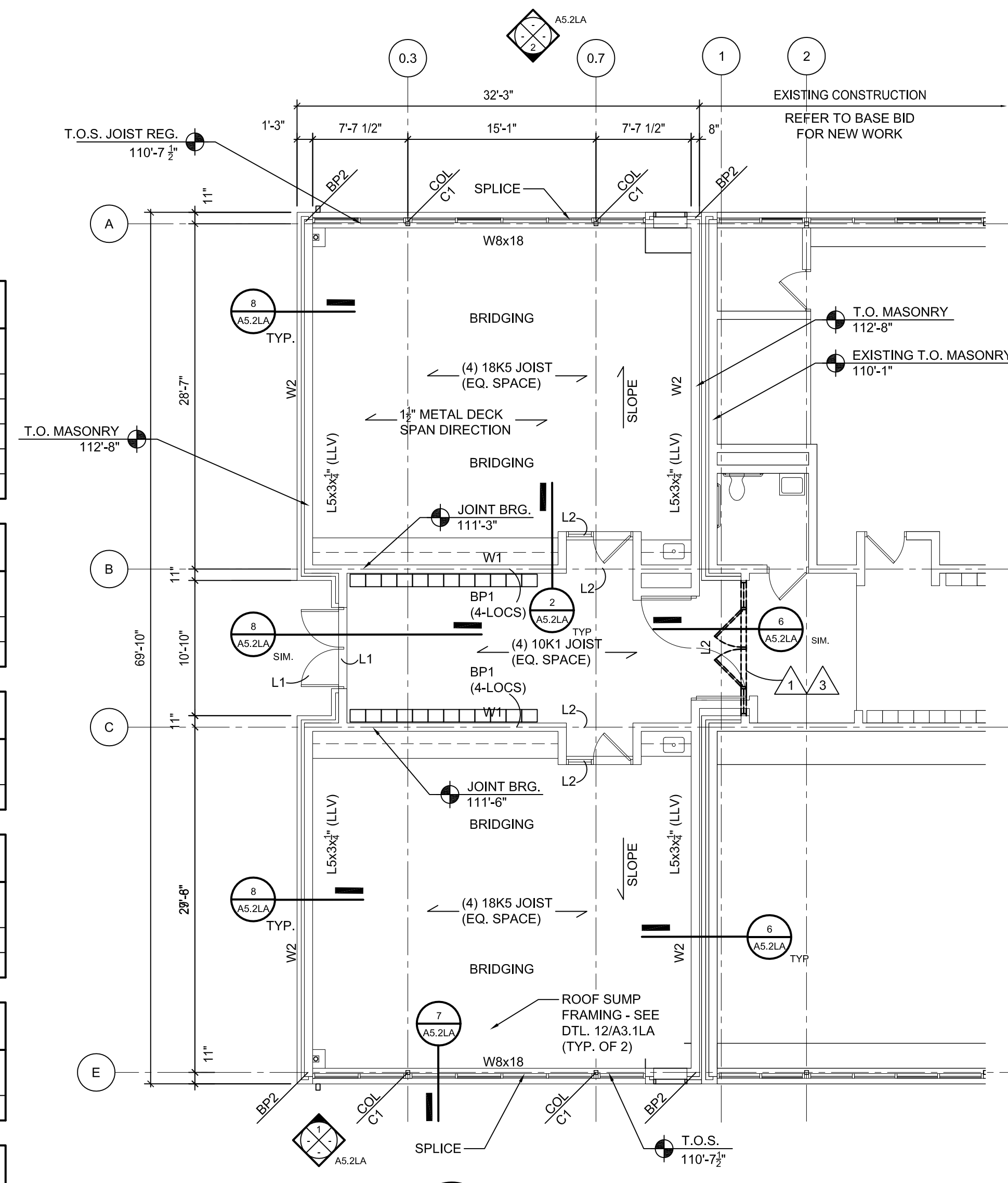
COLUMN SCHEDULE					
MARK	SIZE	BASE PLATE	ANCHORS	CAP PLATE	REMARKS
C1	HSS4x4x1/2"	3/4"x10"x10"	(4) 3/4"Ø EMBED 12"	3/4"x5 1/2"x10"	-

MASONRY WALL REINFORCEMENT SCHEDULE		
MARK	SIZE	BASE PLATE
W1	#5 BARS@32"O.C.	8" CMU EXTERIOR WALL
W2	#4 BARS@48"O.C.	8" CMU INTERIOR WALL

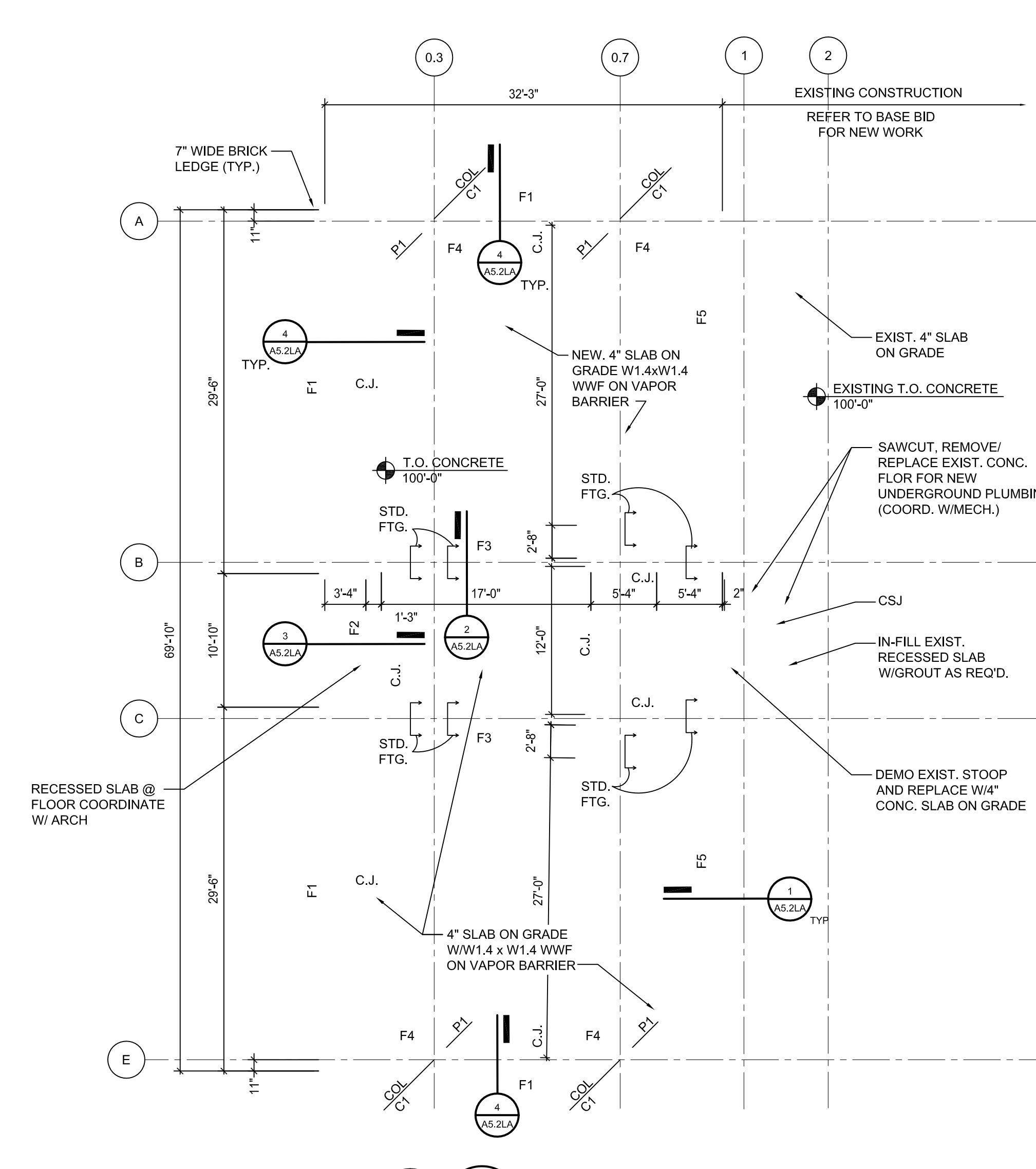
PIER SCHEDULE				
FOOTING MARK	PIER SIZE WIDTH x LENGTH	REINFORCEMENT	TOP OF PIER. ELEV	REMARKS
P1	19" x 19"	(6) #5 BARS	99'-4"	-

LINTEL SCHEDULE			
MARK	LINTEL TYPE	PLATE SIZE	REMARKS
L1	HSS8x4x1/2"	3/8" x OPENING x 1'-2 1/2"	-
L2	W8x10	3/8" x OPENING x 7 1/2"	-

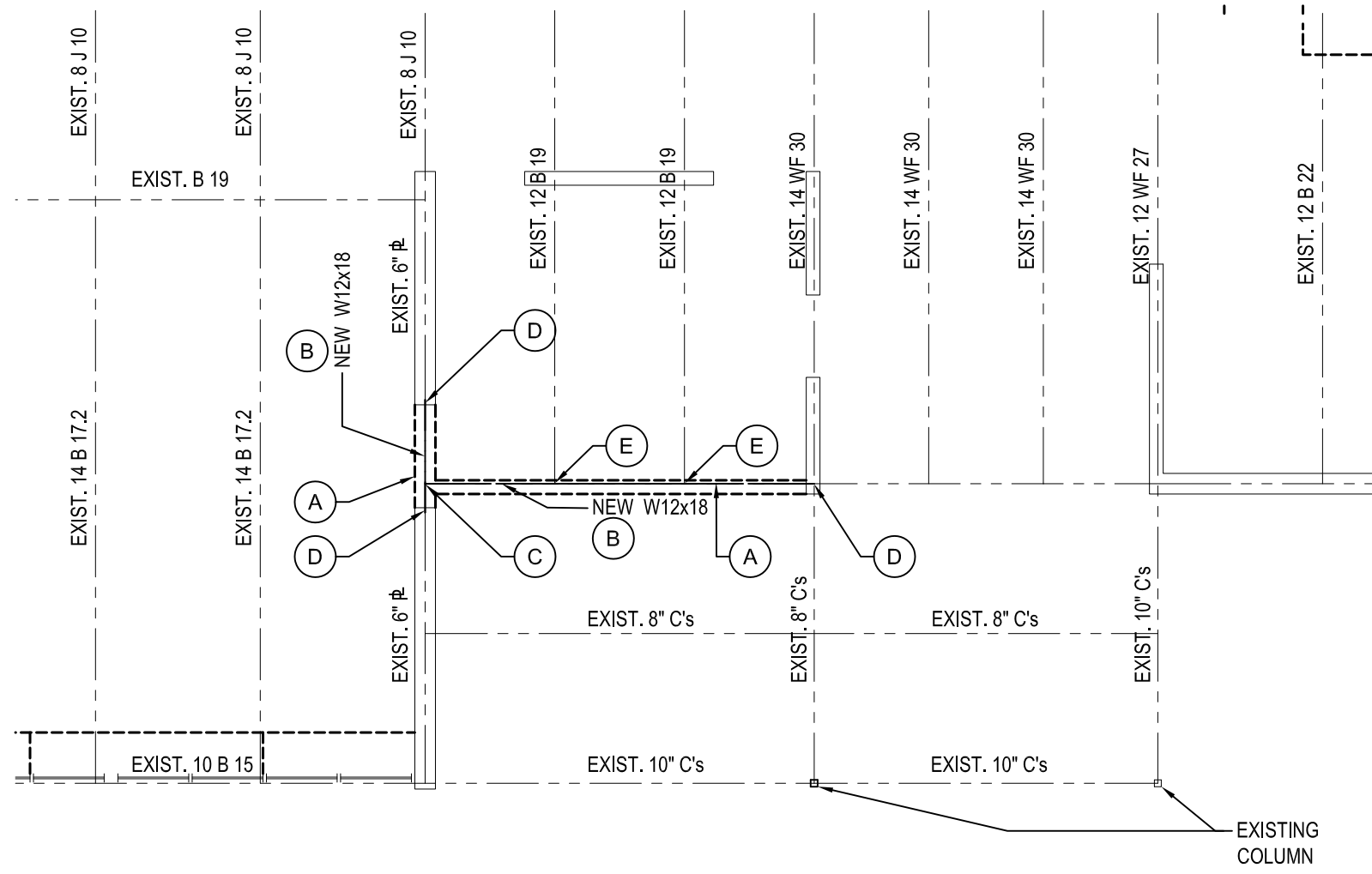
GENERAL NOTES:
 1. PROVIDE 3/8"x5 1/2"x5 1/2" BRG EACH END. GROUT EXISTING WALL SOLID @ BEARING.
 2. ALL EXTERIOR LINTELS TO BE GALV.
 3. PROVIDE 3/8" PLATE ON BOTTOM OF LINTELS AT CMU/BRICK CAVITY WALLS (WIDTH = 1/2" LESS WALL WIDTH)



4 FRAMING PLAN - NEW WORK
SCALE= 1/8" = 1'-0"



1 FOUNDATION PLAN - NEW WORK
SCALE= 1/8" = 1'-0"

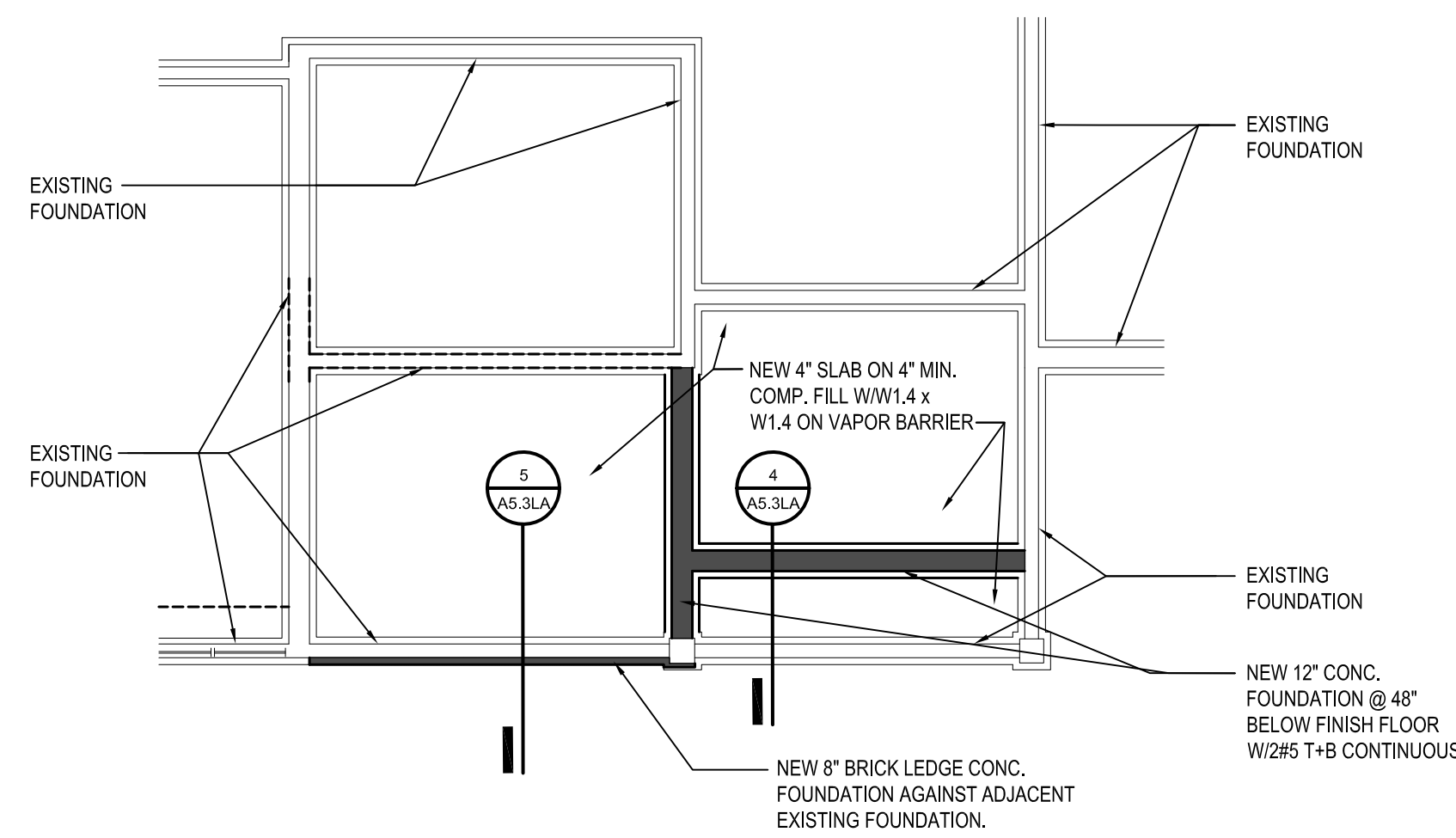


3 ROOF FRAMING PLAN

A1.1LA SCALE: 1/8" = 1'-0"

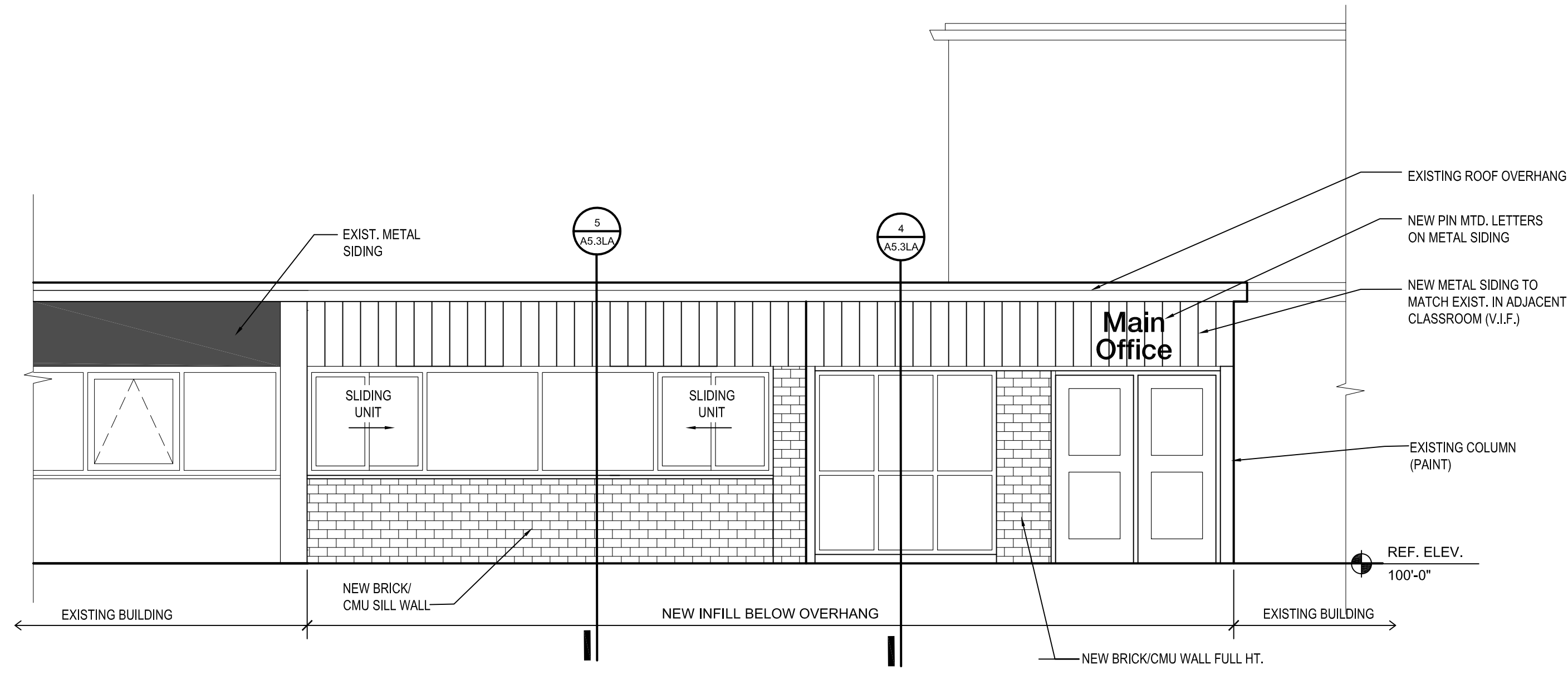
NOTES:

- (A) LINE OF REMOVED WALL BELOW THAT IS CURRENTLY ACTING AS BEARING FOR EXIST. ROOF FRAMING. SHORE BRACE EXISTING ROOF FRAMING DURING CONSTRUCTION AS REQ'D.
- (B) NEW STEEL LINTEL W12
- (C) FRAME NEW W12 INTO SIDE OF NEW W12
- (D) PROVIDE NEW 5'-0" X 5'-0" X 1/2" BEARING PLATE W12" DIA. X 6" L STUD ONTO 8" CMU. GROUT SOLID 3 COURSES BELOW BEARING PLATE (TYP.)
- (E) WELD NEW ANGLES ONTO EXIST. 12B19 INTO SIDE OF NEW W12 X18.



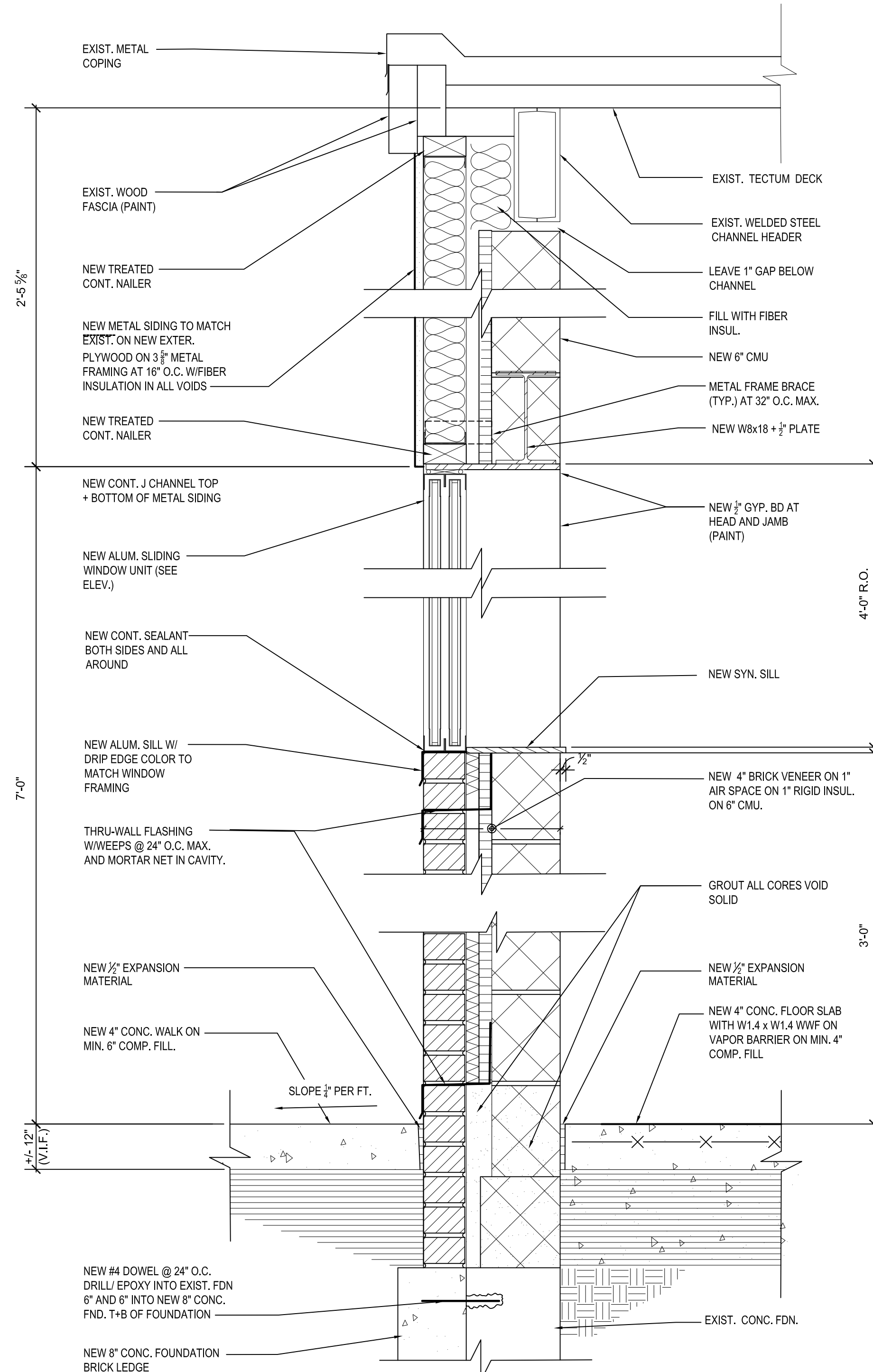
2 FOUNDATION PLAN

A1.1LA SCALE: 1/8" = 1'-0"



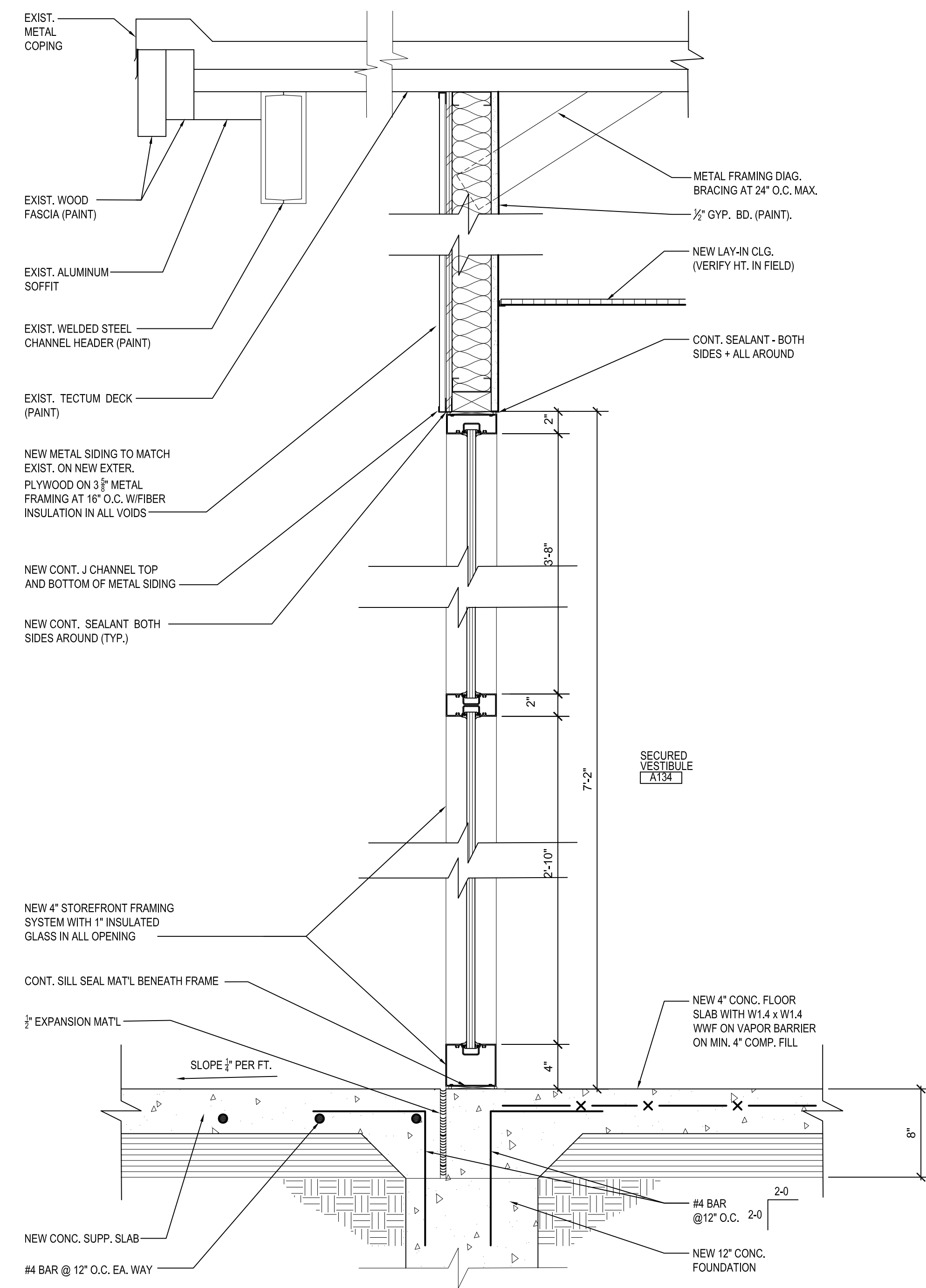
1 EXTERIOR ELEVATION

A1.1LA SCALE: 1/4" = 1'-0"



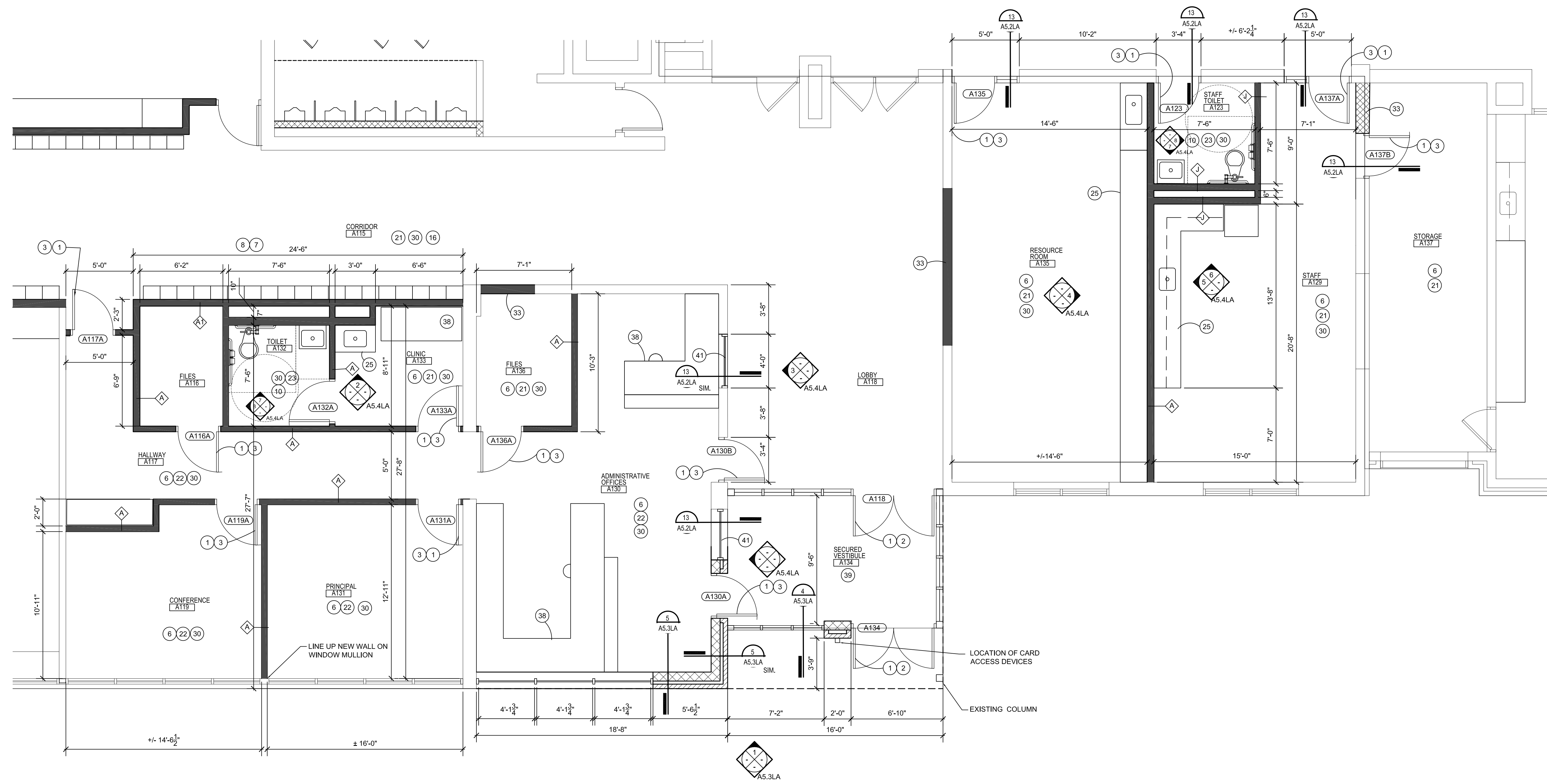
5 SECTION AT WINDOW

A1.1LA SCALE: 1 1/2" = 1'-0"

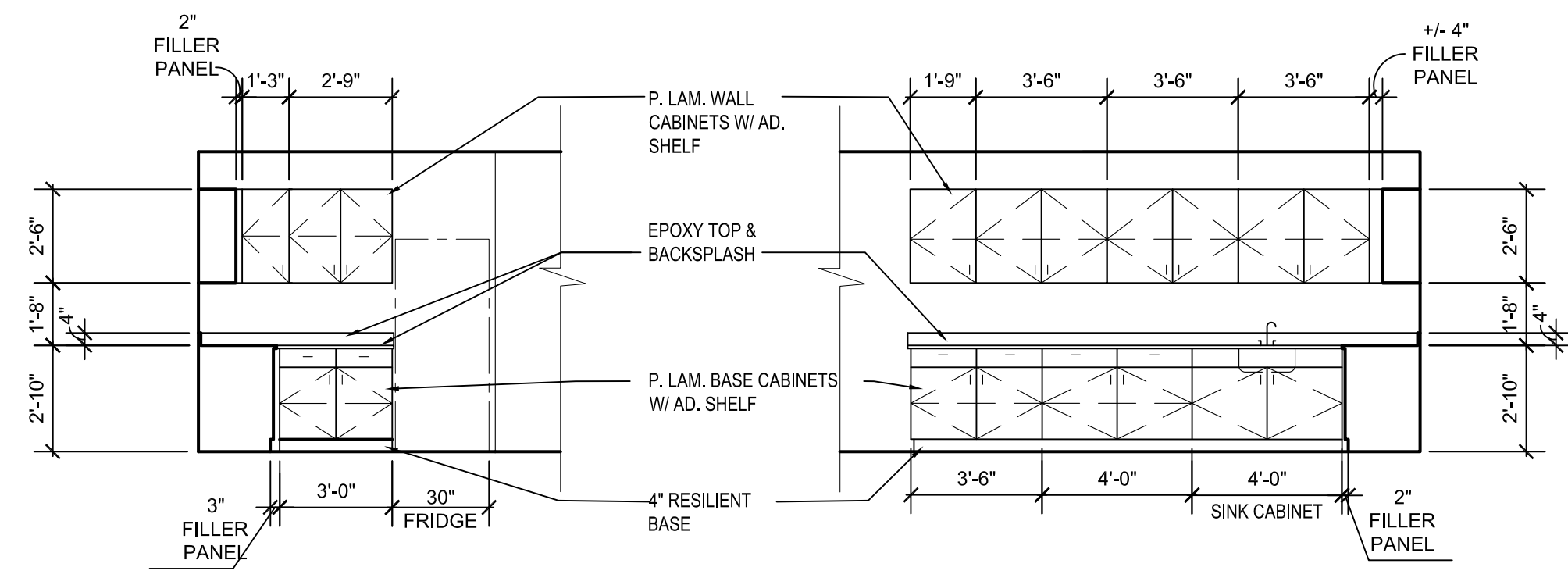


4 SECTION THRU VESTIBULE

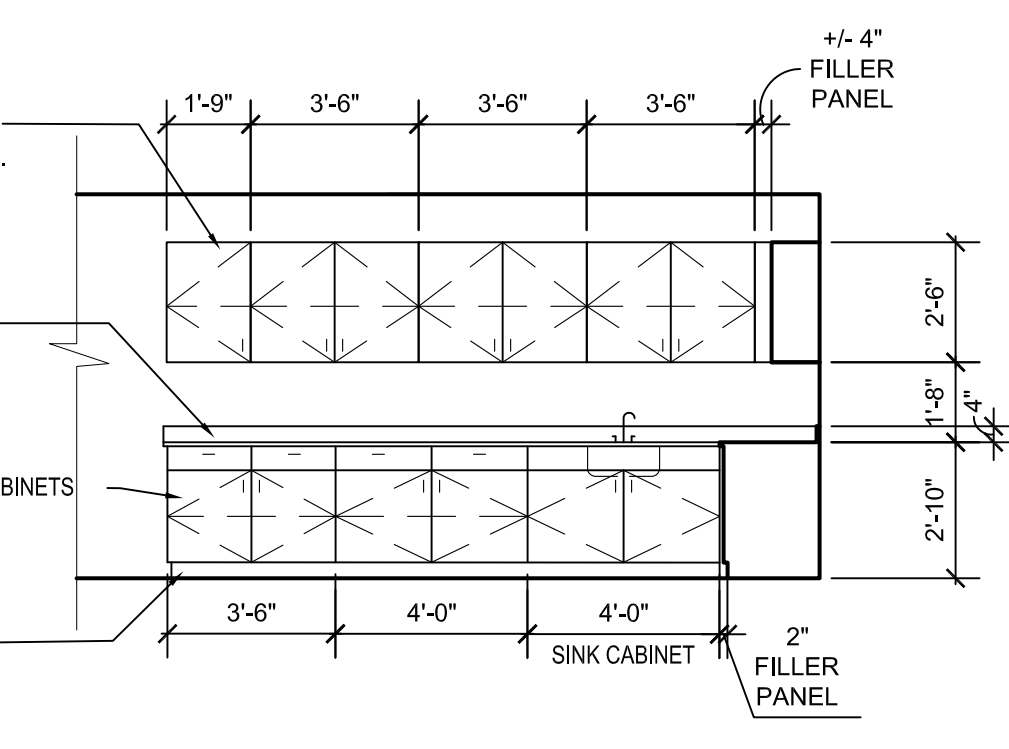
A1.1LA SCALE: 1 1/2" = 1'-0"



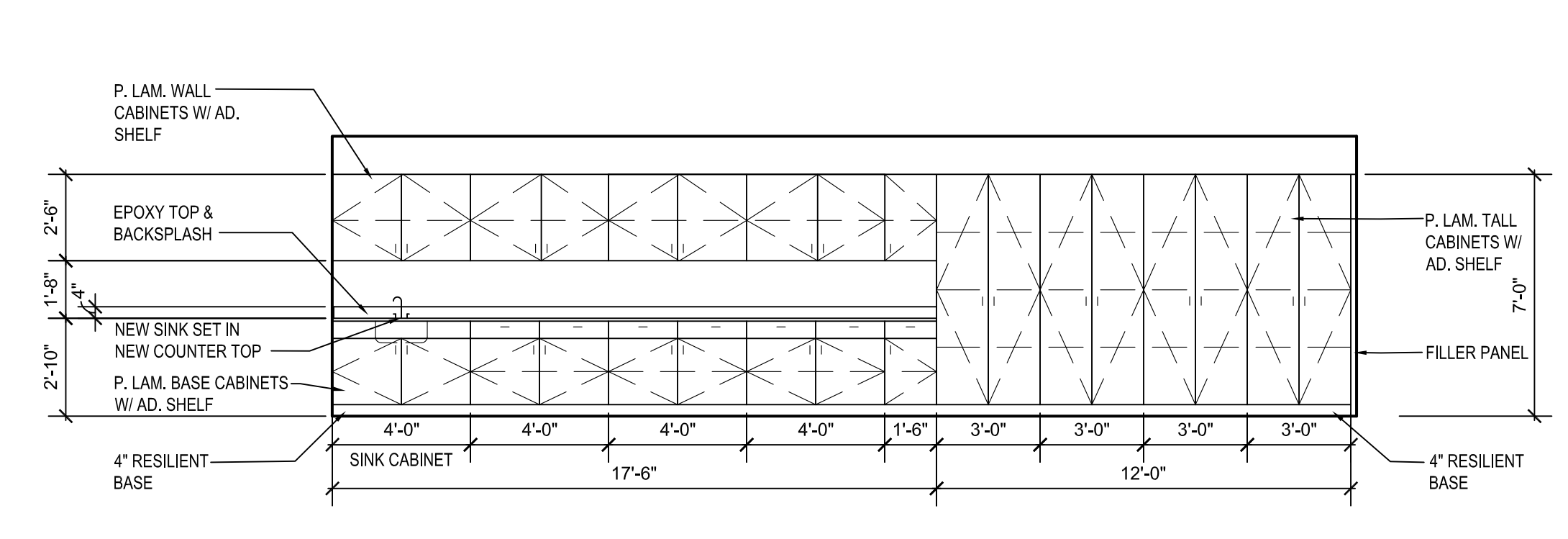
1 ENLARGED NEW WORK FLOOR PLAN
A1.1LA SCALE: 1/4" = 1'-0"



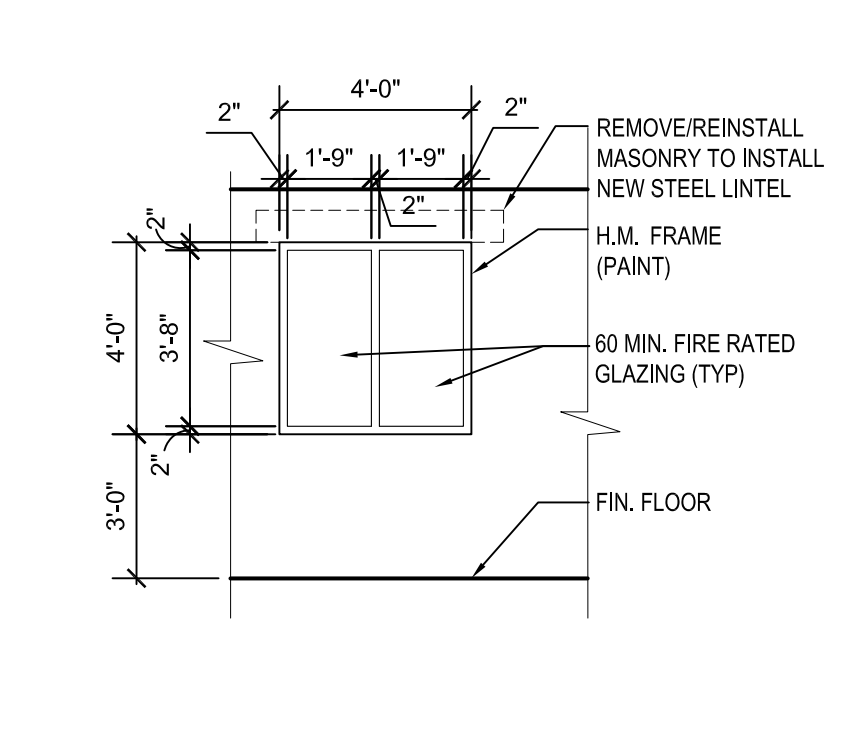
6 INTERIOR ELEVATION
A1.1LA SCALE: 1/4" = 1'-0"



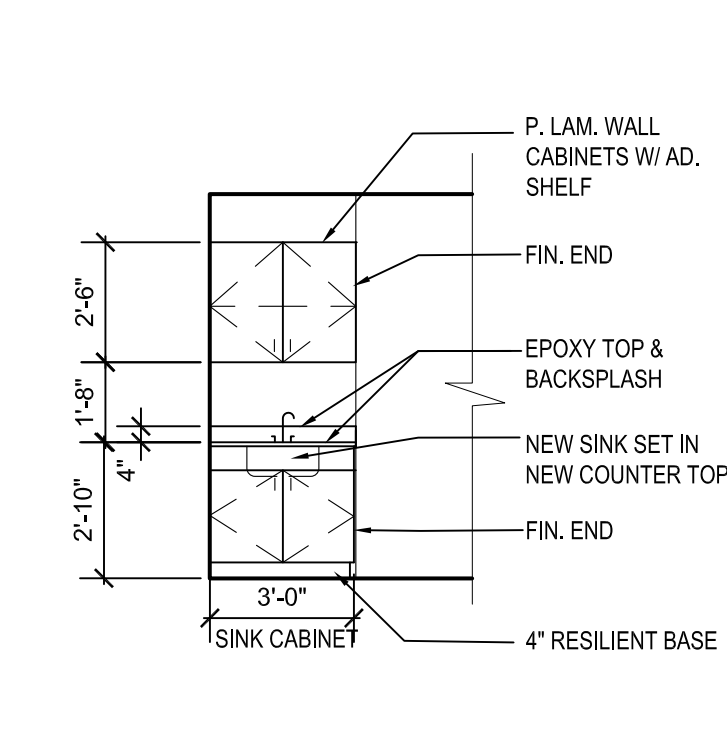
5 INTERIOR ELEVATION
A1.1LA SCALE: 1/4" = 1'-0"



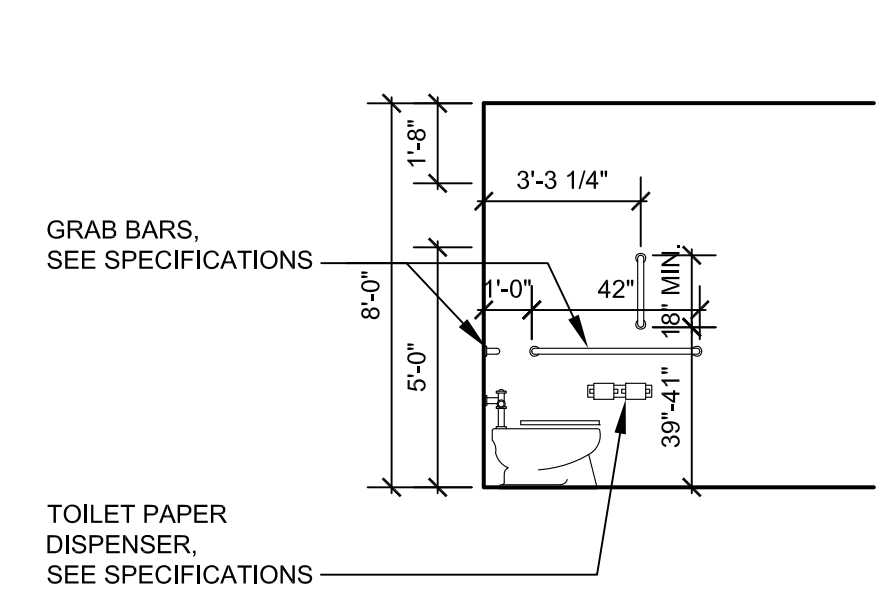
4 INTERIOR ELEVATION
A1.1LA SCALE: 1/4" = 1'-0"



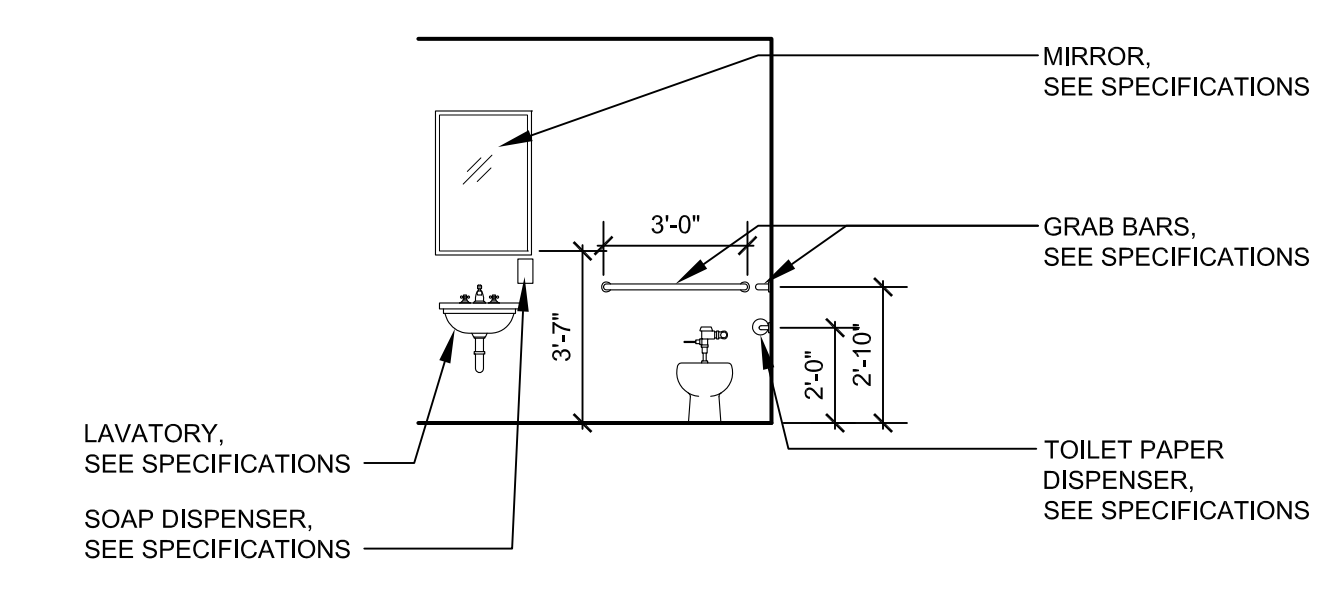
3 INTERIOR ELEVATION
A1.1LA SCALE: 1/4" = 1'-0"



2 INTERIOR ELEVATION
A1.1LA SCALE: 1/4" = 1'-0"



8 TYP. ADA TOILET INTERIOR ELEVATION
A5.4LA SCALE: 1/4" = 1'-0"



7 INTERIOR ELEVATION
A5.4LA SCALE: 1/4" = 1'-0"

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE
ELEMENTARY SCHOOL
DETAIL AND INTERIOR
ELEVATIONS

PRELIMINARY	<input type="checkbox"/>
DESIGN DEVELOPMENT	<input type="checkbox"/>
CONSTRUCTION	<input checked="" type="checkbox"/>
FINAL RECORD	<input type="checkbox"/>
DRAWN BY	N.J.L.
CHECKED BY	B.J.S.

NO.	REVISIONS

DATE: November 30, 2016
SHEET NO.

A5.4LA

JOB NO. 161664B

GENERAL DISPLAY BOARD KEYNOTES:

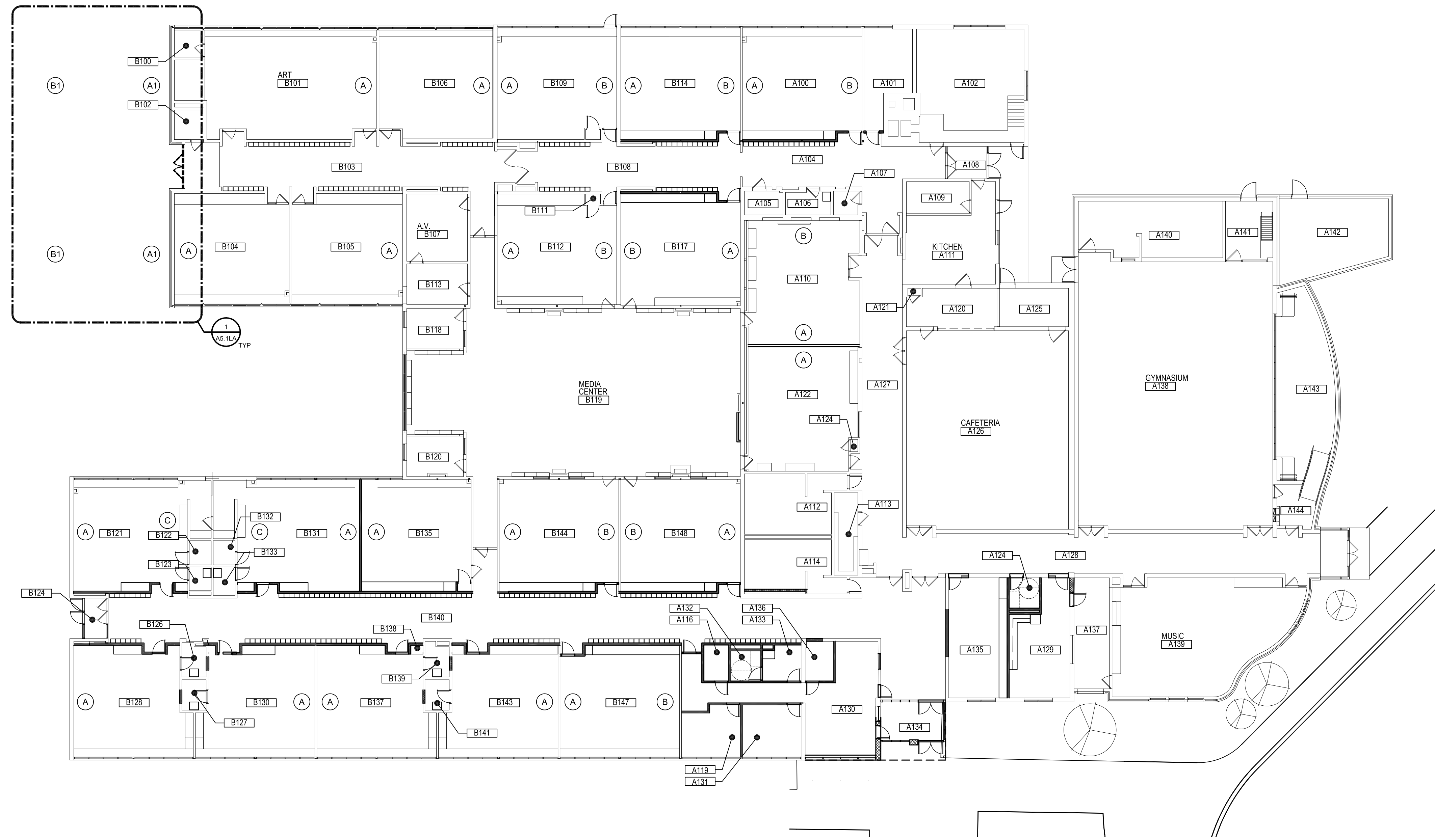
- ALL WHITE BOARD/TACK BOARD SIZES AND LOCATIONS ARE TO BE COORDINATED WITH ELECTRICAL DRAWINGS TO COMPATIBILITY WITH NEW RACEWAYS.

DISPLAY BOARD KEYNOTES:

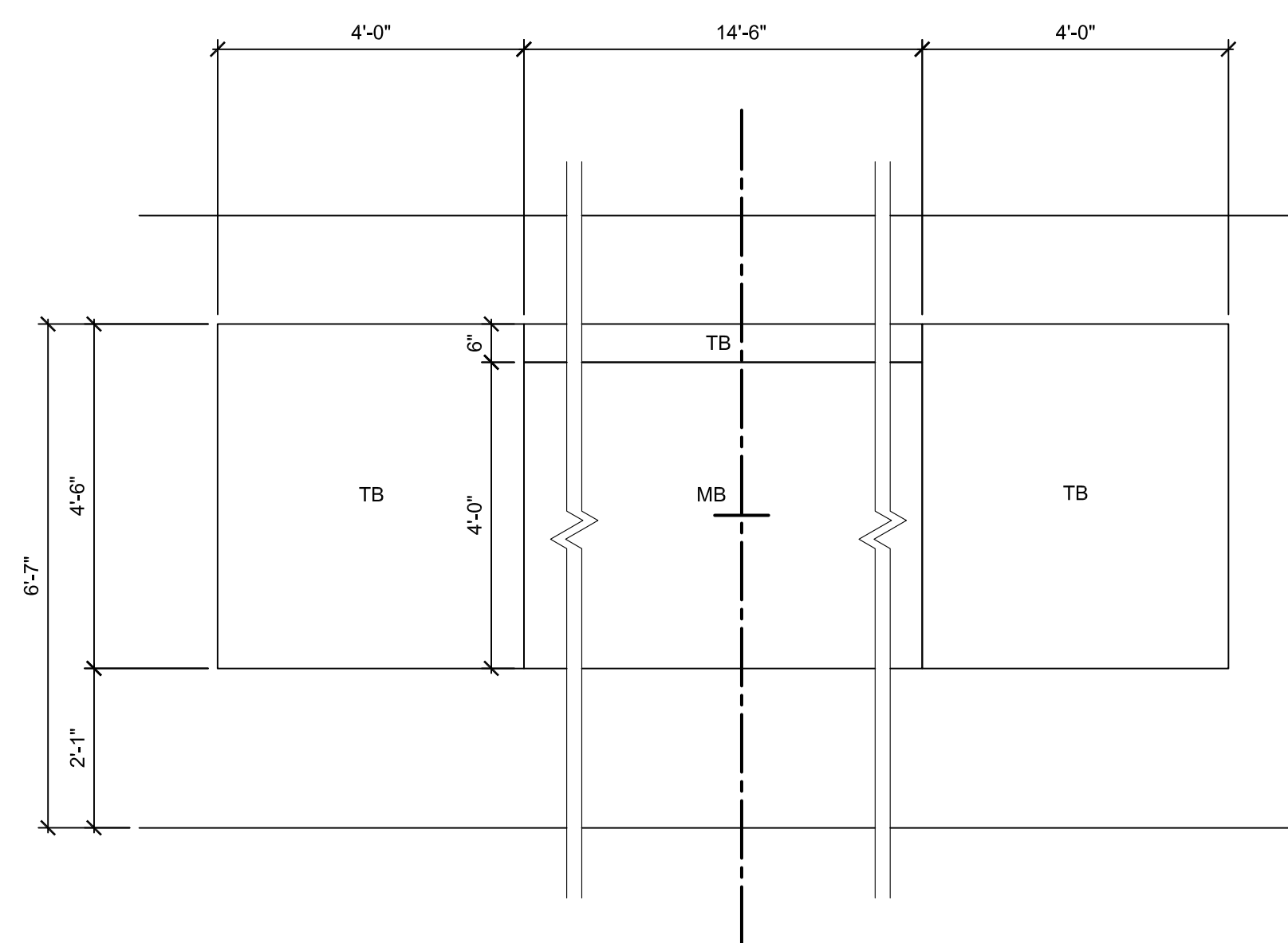
- (A) PROVIDE/INSTALL NEW TACK BOARD AND MARKER BOARD IN SAME LOCATION ON WALL. SEE ELEVATION No.4
- (B) PROVIDE/INSTALL NEW TACK BOARD AND MARKER BOARD IN SAME LOCATION ON WALL. SEE ELEVATION No.5.
- (C) PROVIDE/INSTALL NEW 48Wx84L" H TACK BOARD IN SAME LOCATION ON WALL. (36" A.F.F. OR ABOVE CASEWORK) SEE PLANS FOR WIDTHS.

DISPLAY BOARD KEYNOTES: ALTERNATE #

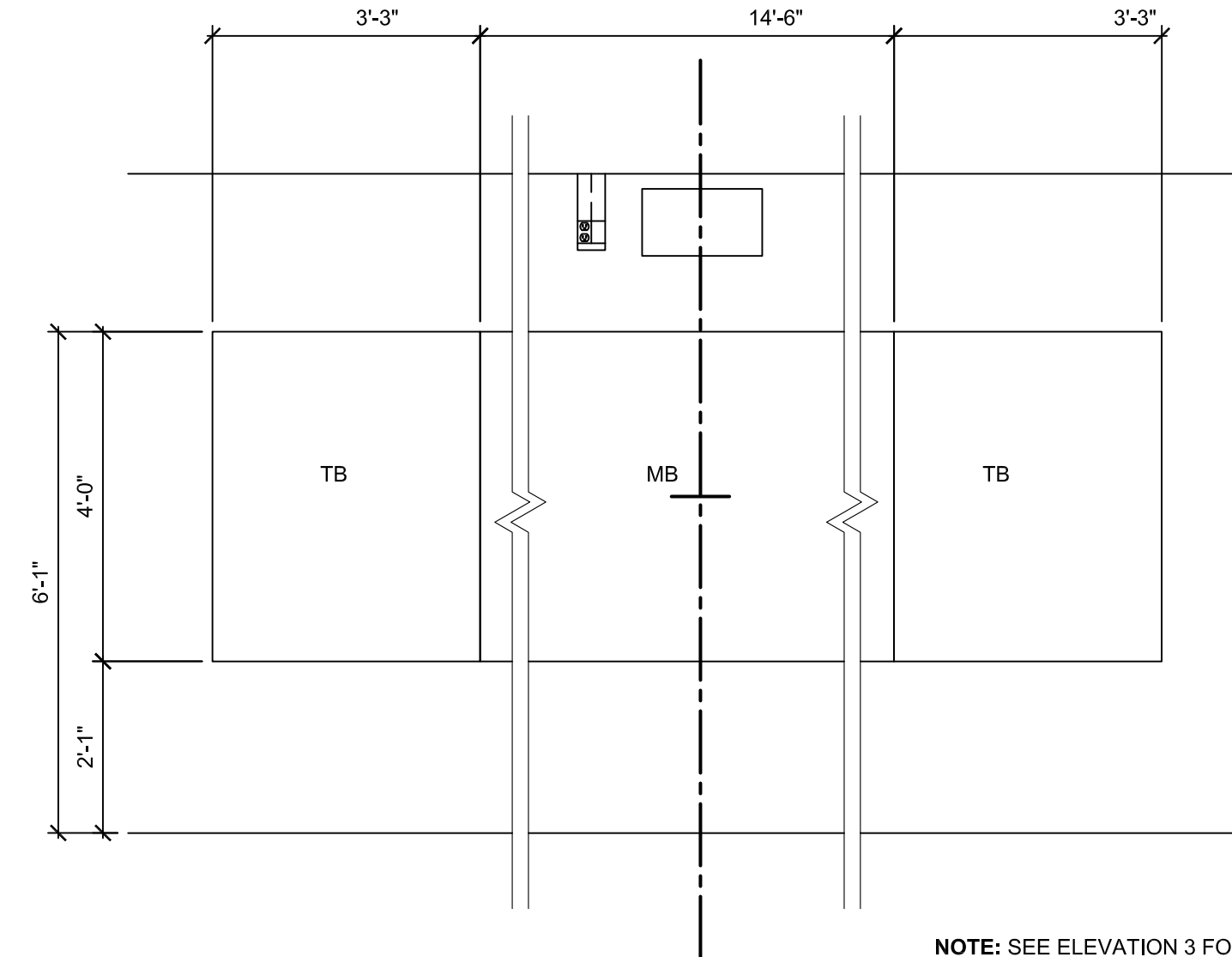
- (A) PROVIDE/INSTALL NEW 32" TACK BOARD IN SAME LOCATION ON WALL. (SAME HT. AS MARKER BOARD @ SMART BOARD) SEE PLANS FOR WIDTHS.
- (B) PROVIDE/INSTALL NEW 48" H MARKER BOARD IN SAME LOCATION ON WALL. (SAME HT. AS MARKER BOARD @ SMART BOARD) SEE PLANS FOR WIDTHS.



1 COMPOSITE FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

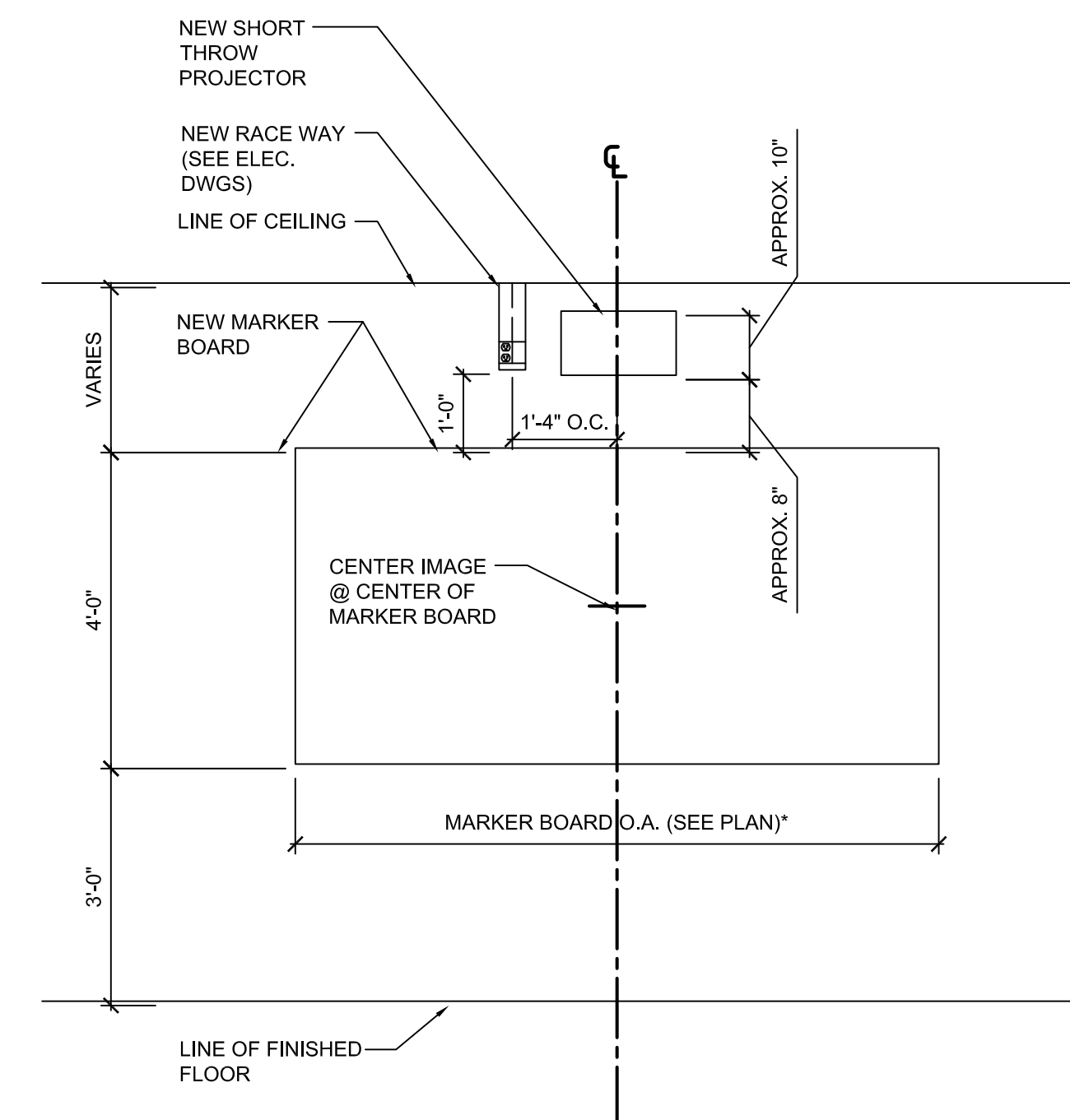


5 TYPICAL FRONT OF CLASSROOM ELEV.
SCALE: N.T.S.

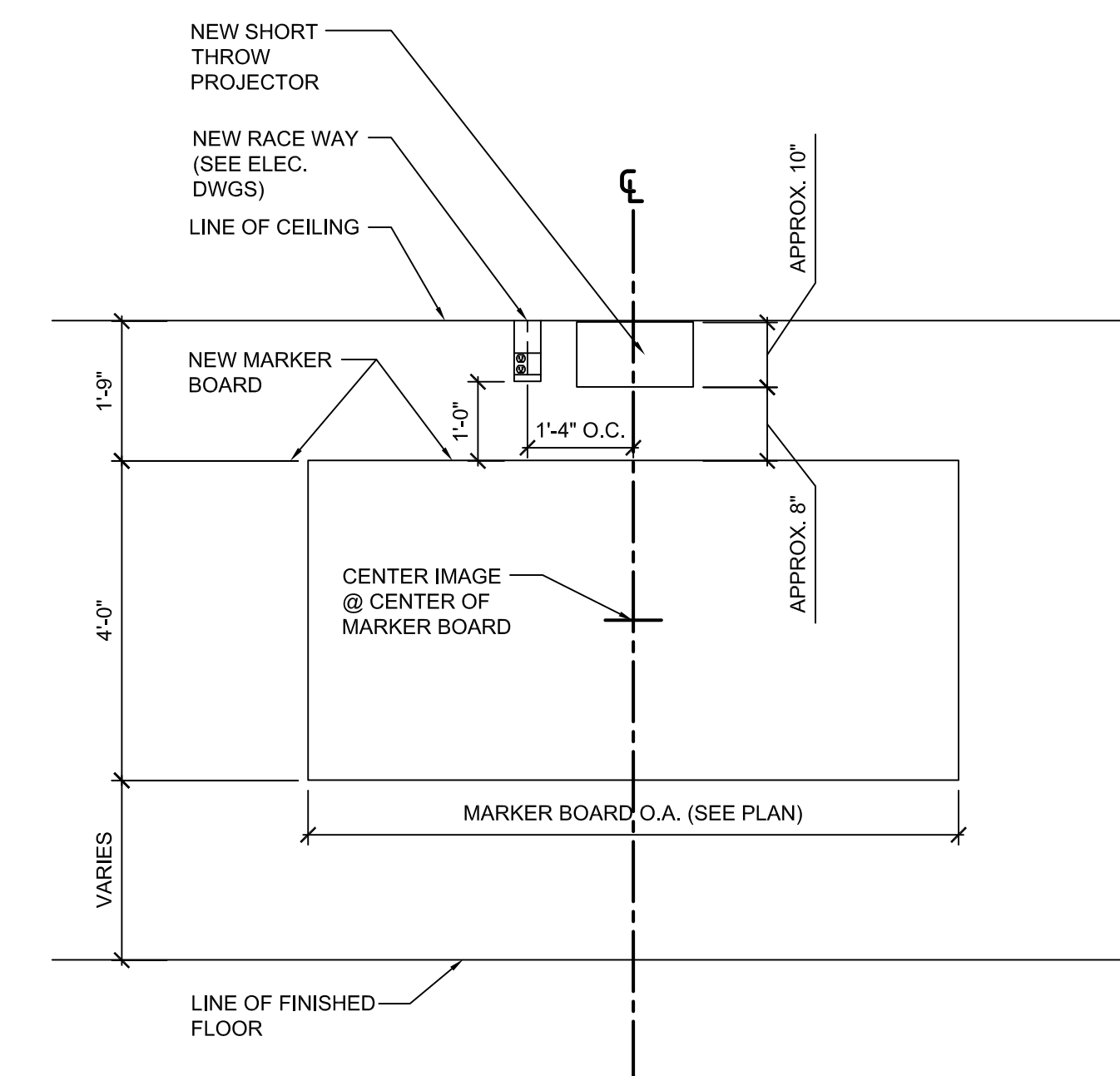


4 TYPICAL REAR WALL ELEVATION
SCALE: N.T.S.

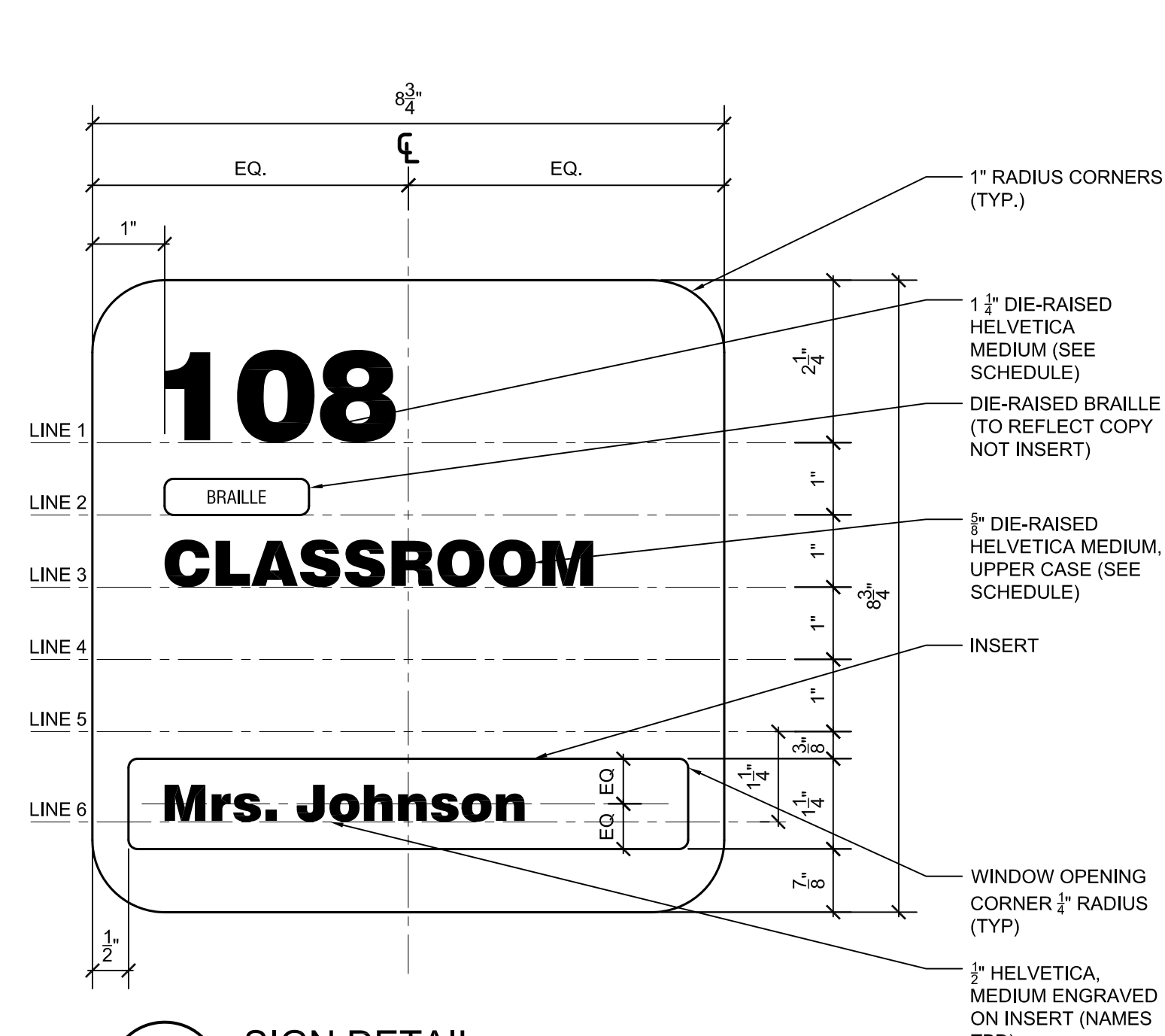
NOTE: SEE ELEVATION 3 FOR PROJECTOR AND RACEWAY LOCATION



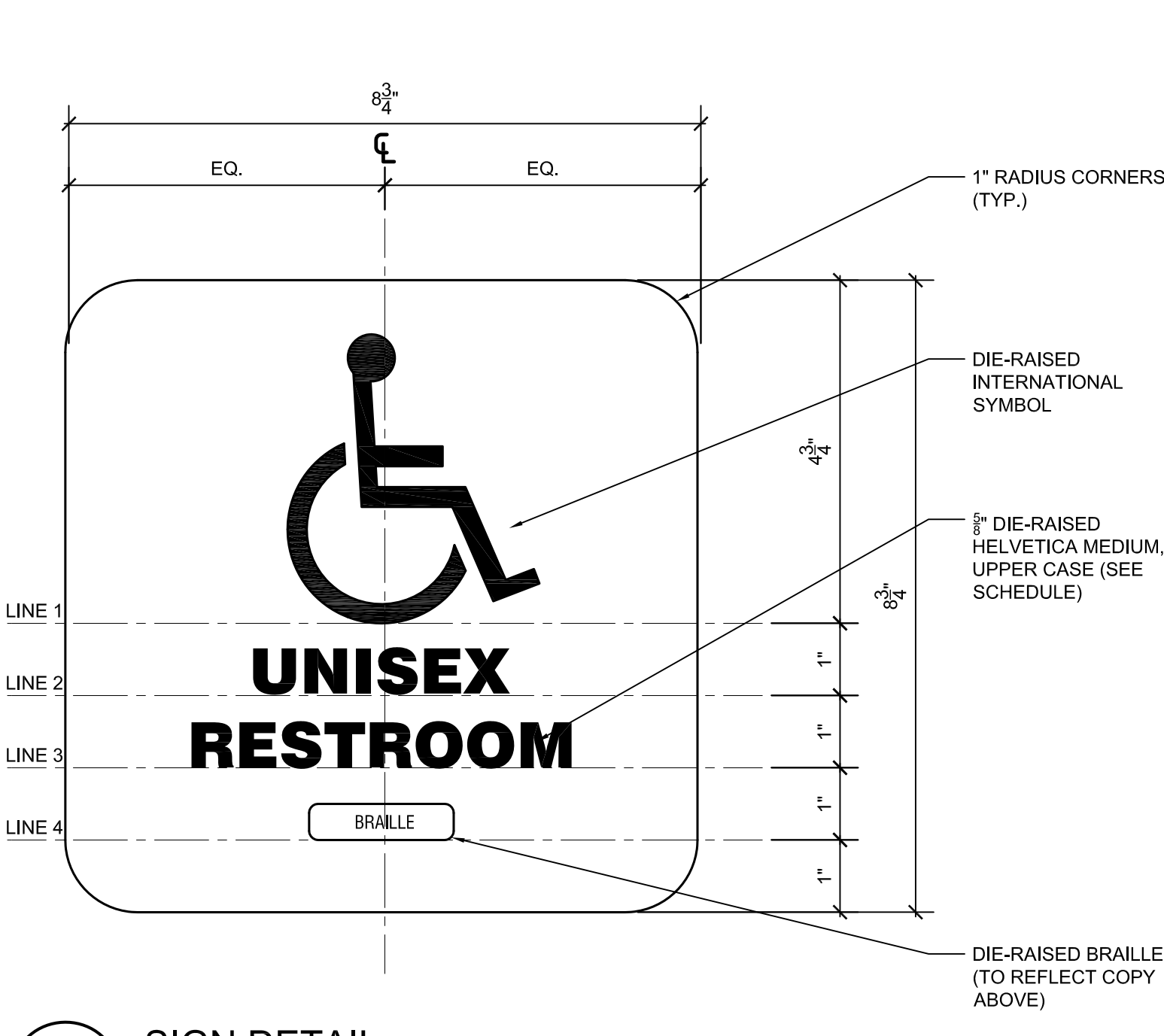
2 TYPICAL MARKER BOARD LOCATION @ PROJECTOR LOCATION - CEILING > 8'-9" A.F.F.
SCALE: N.T.S.



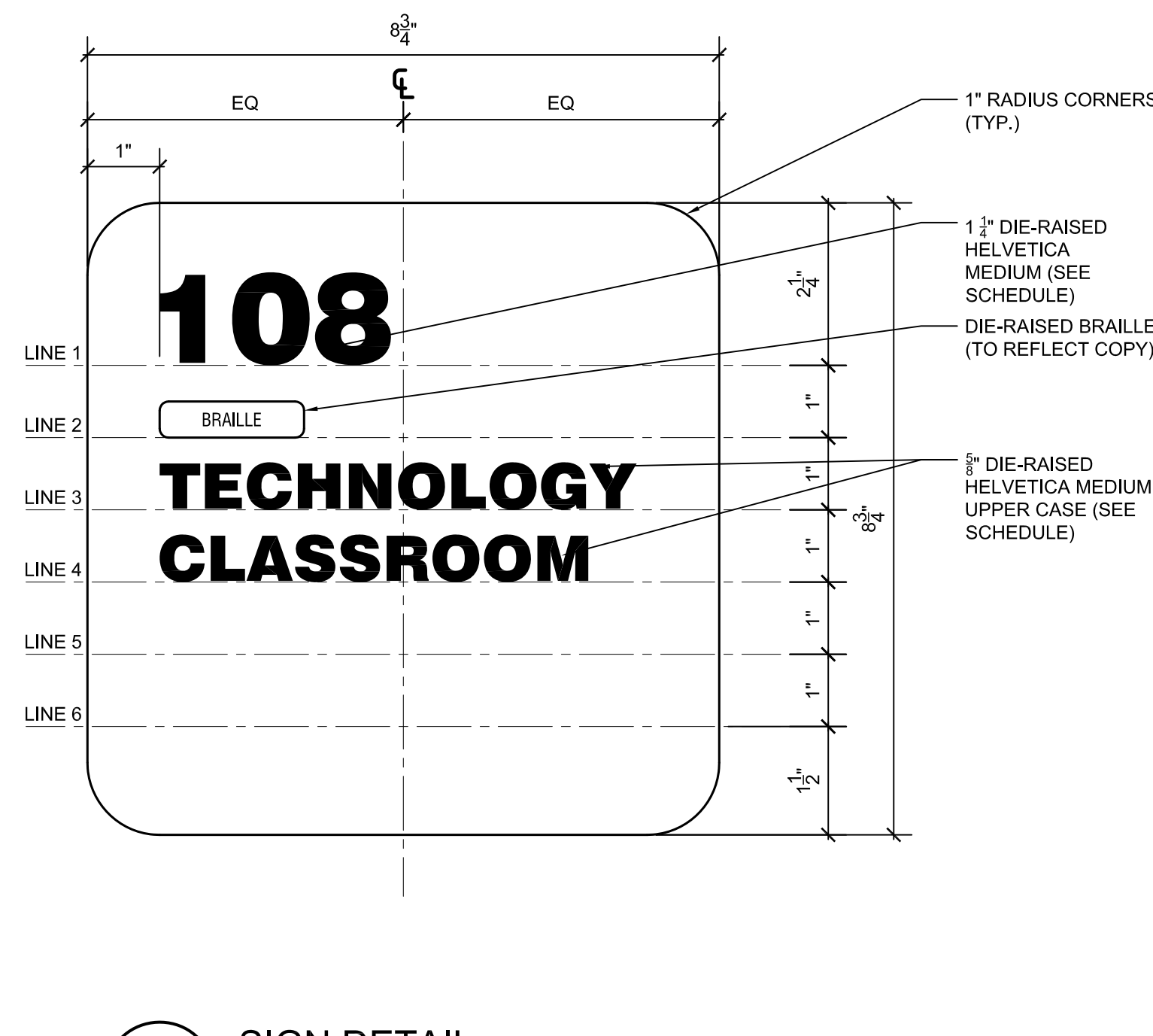
3 TYPICAL MARKER BOARD LOCATION @ PROJECTOR LOCATION - CEILING < 8'-9" A.F.F.
SCALE: N.T.S.



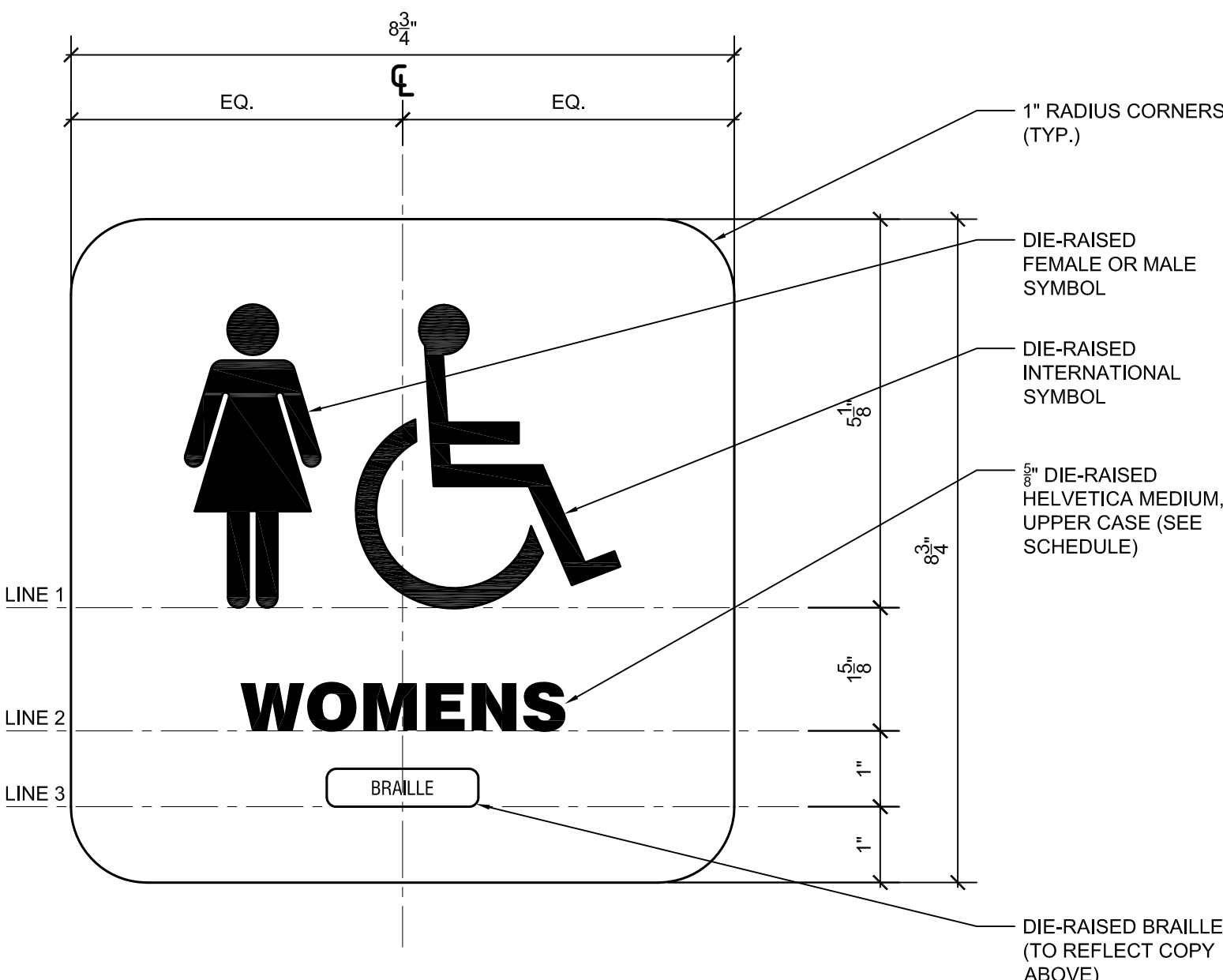
1 SIGN DETAIL
SCALE: 6" = 1'-0"



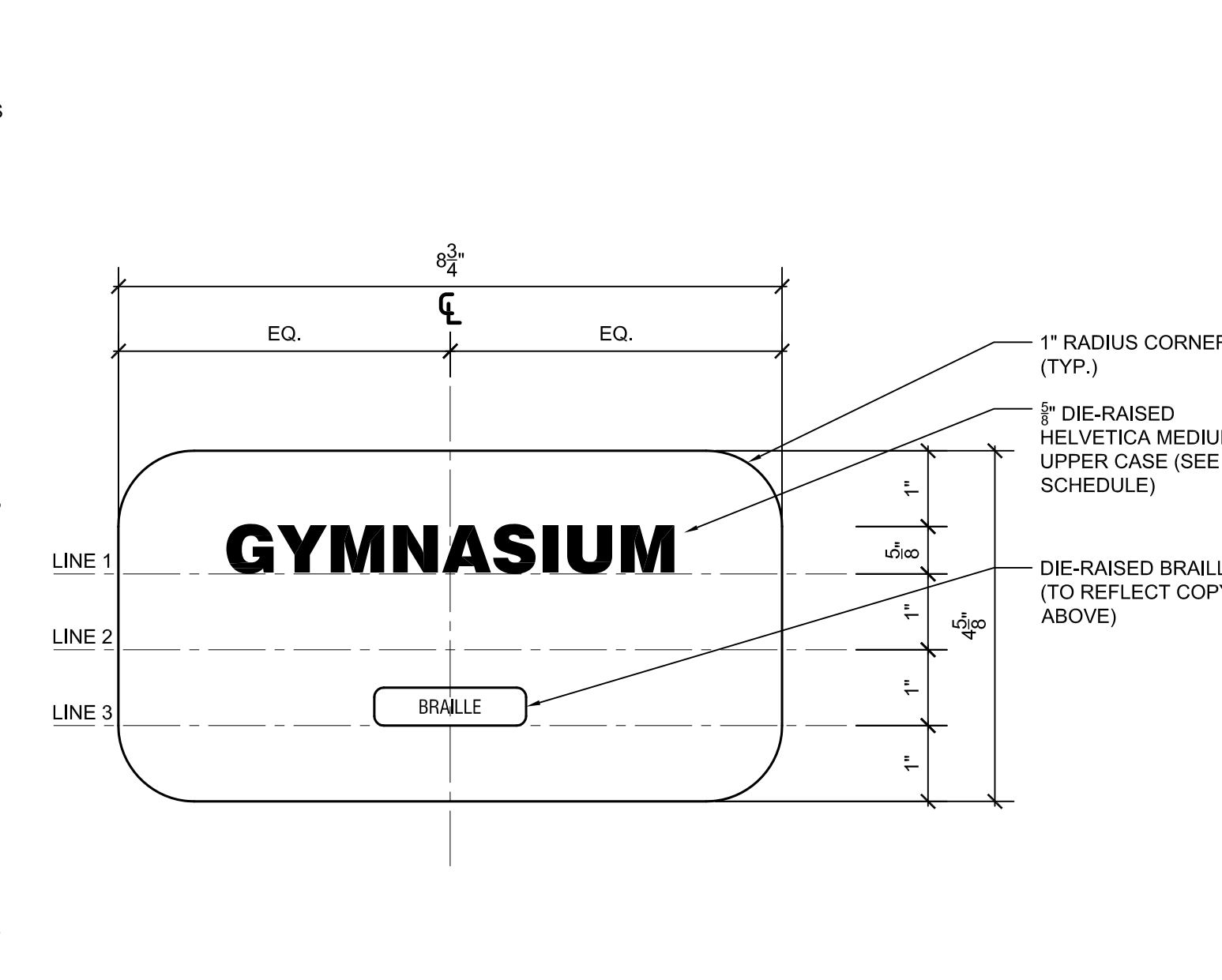
2 SIGN DETAIL
SCALE: 6" = 1'-0"



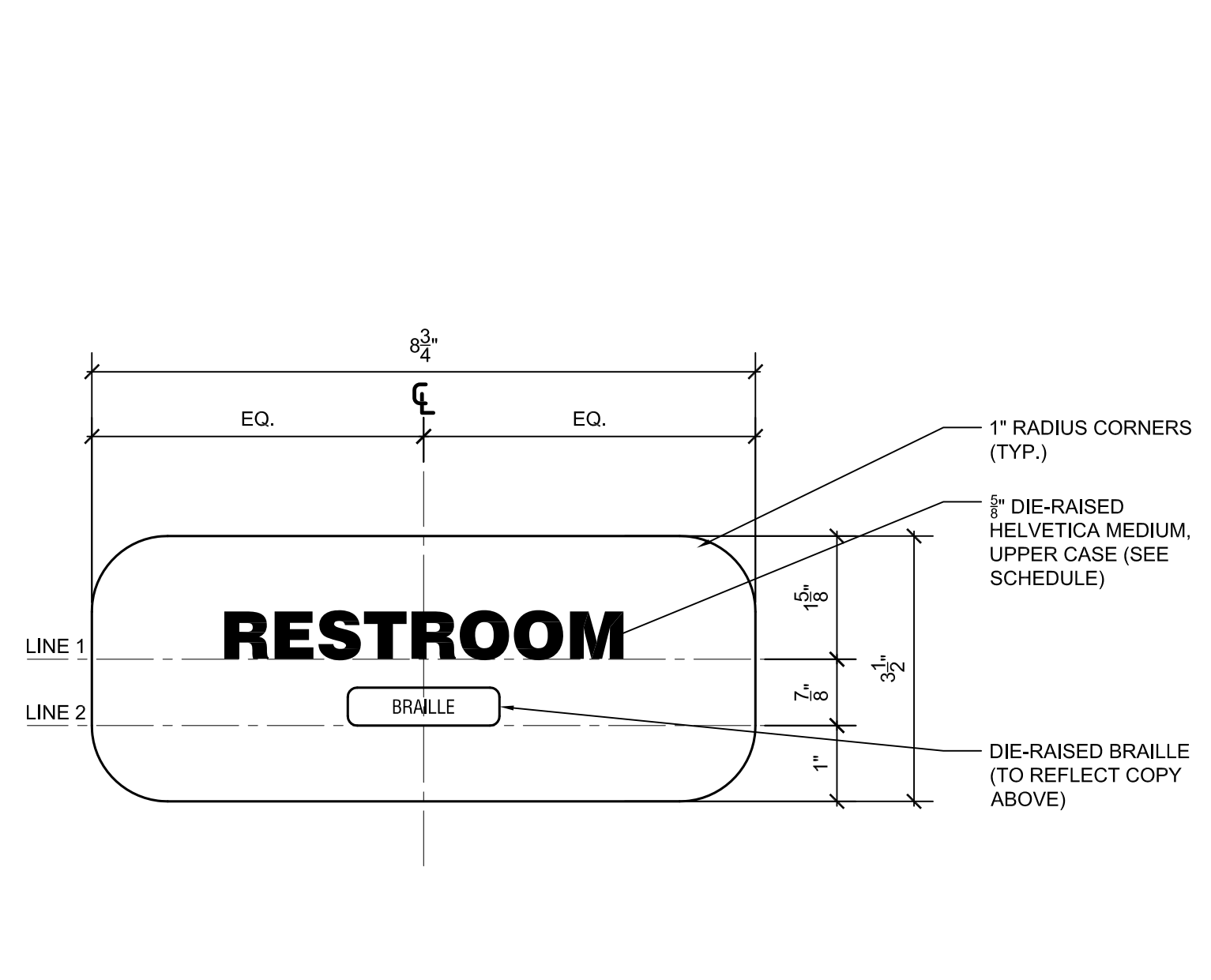
3 SIGN DETAIL
SCALE: 6" = 1'-0"



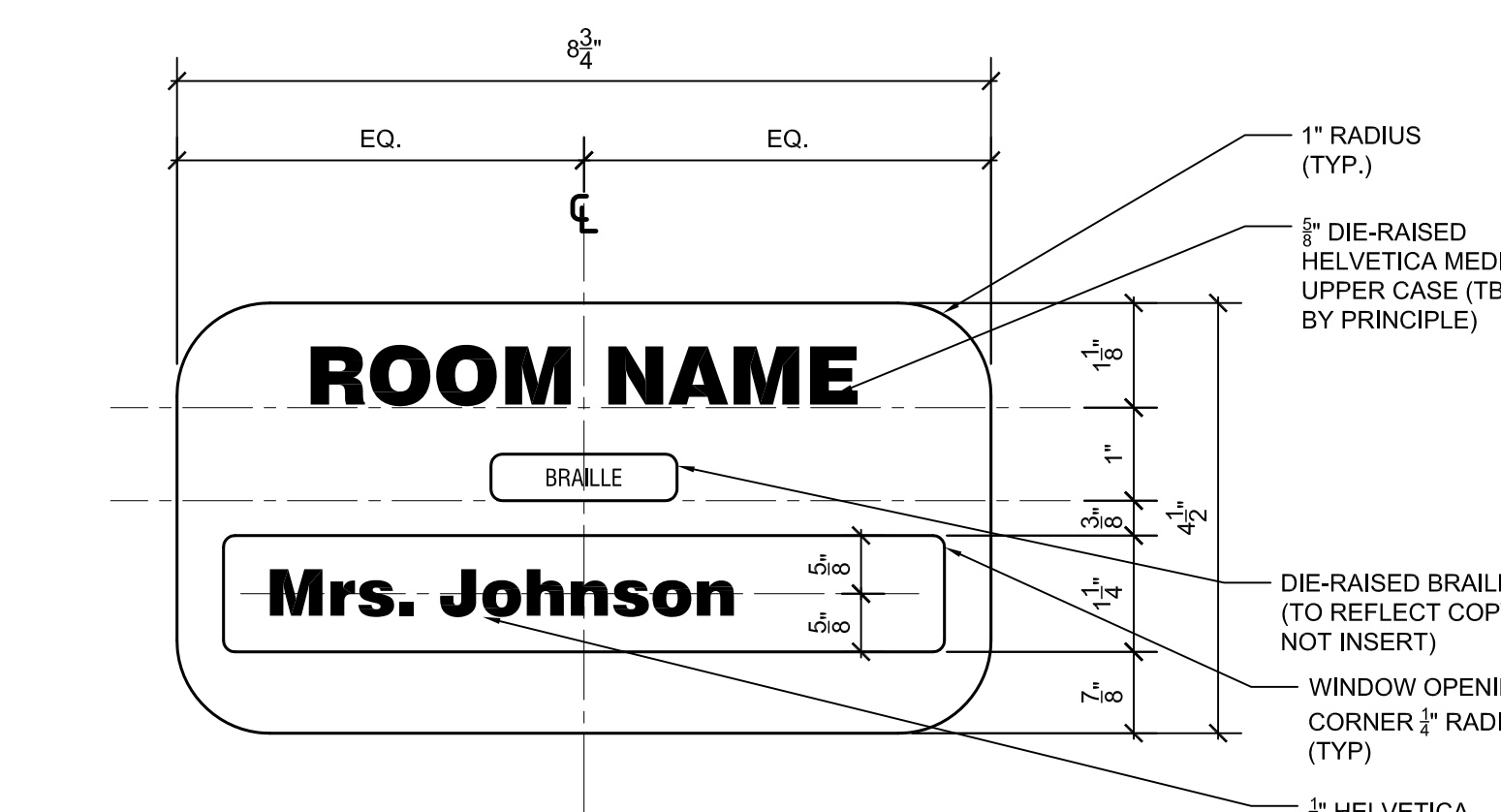
4 SIGN DETAIL
SCALE: 6" = 1'-0"



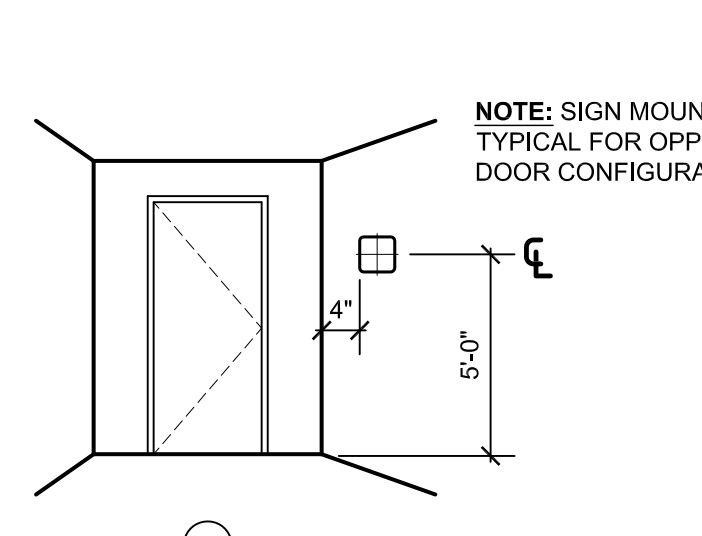
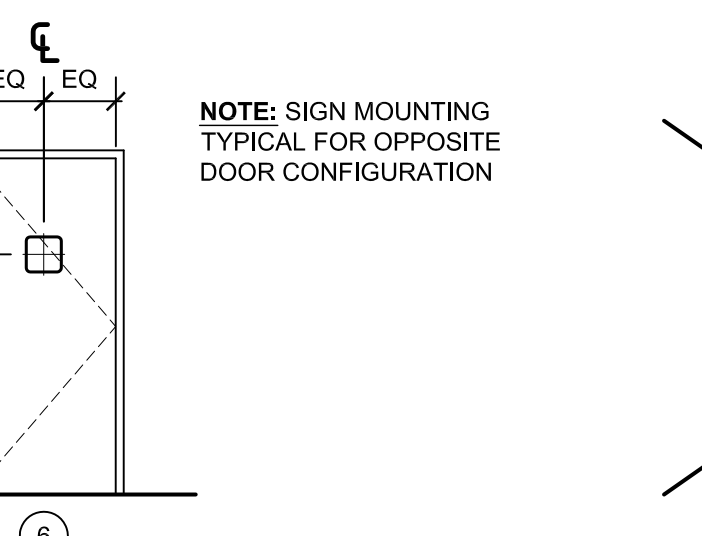
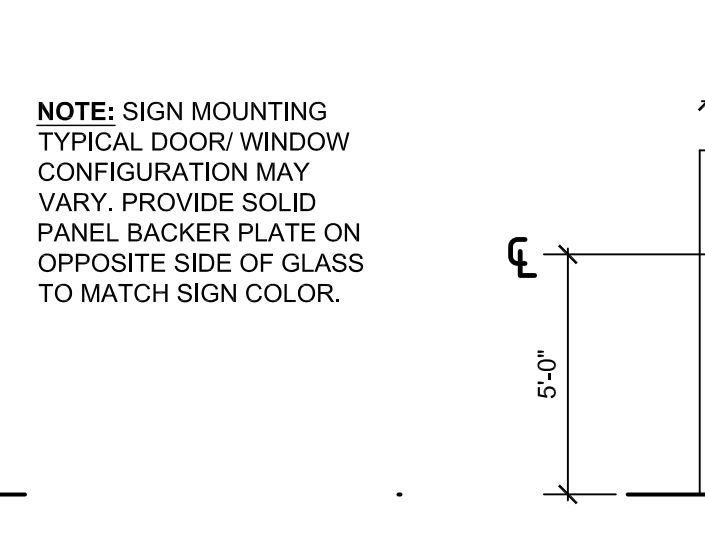
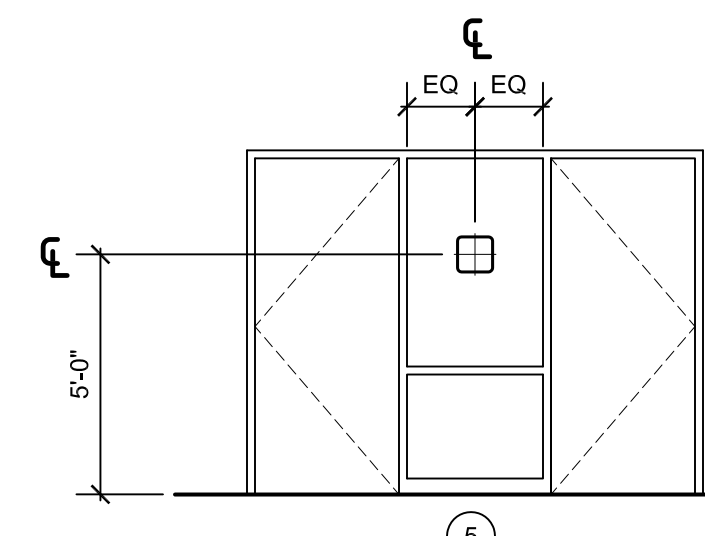
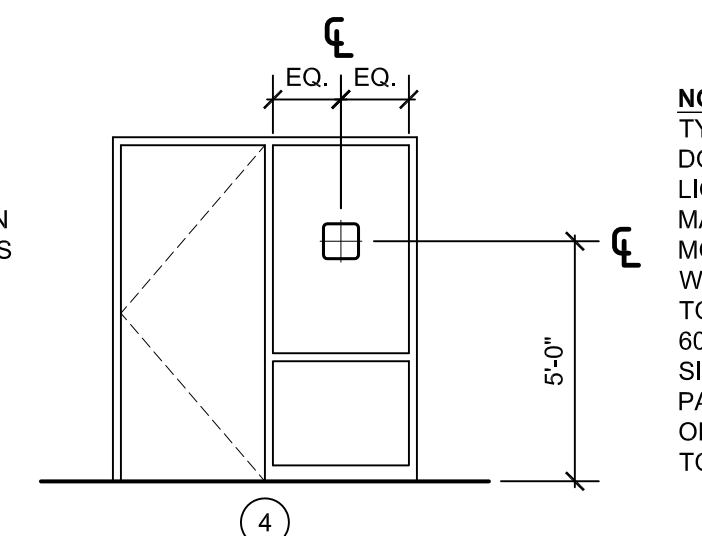
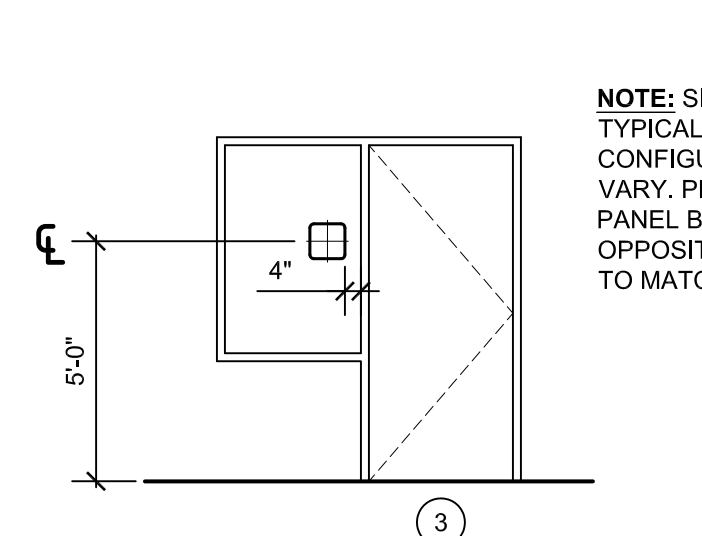
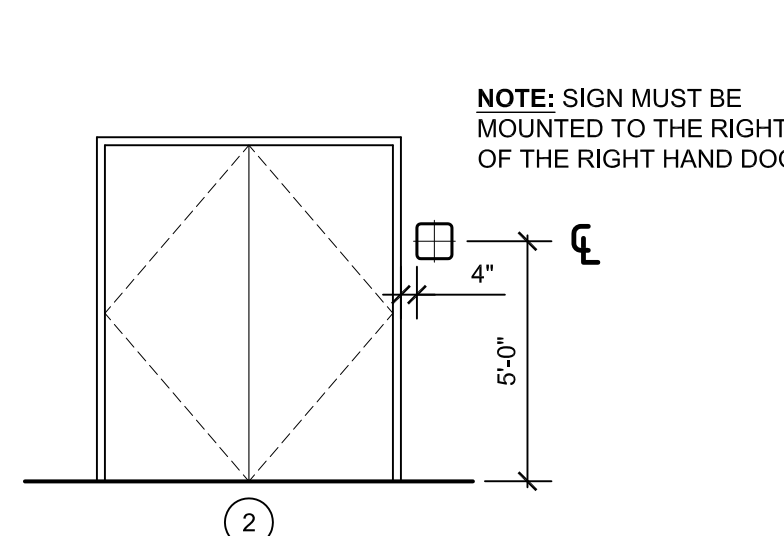
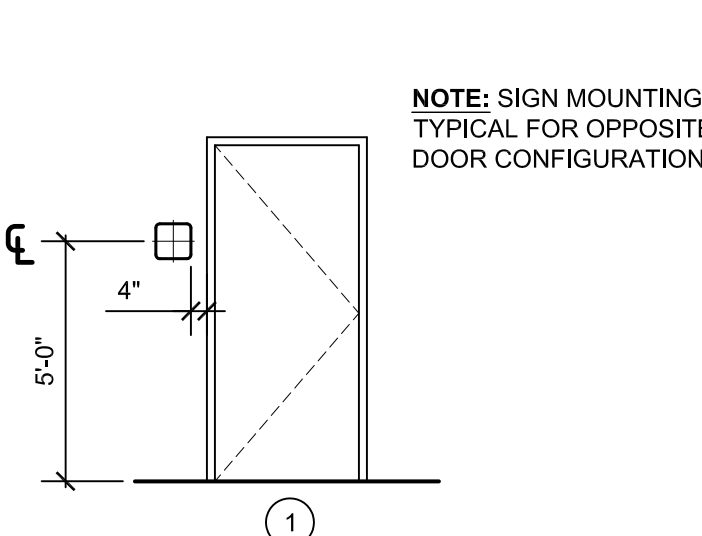
5 SIGN DETAIL
SCALE: 6" = 1'-0"



6 SIGN DETAIL
SCALE: 6" = 1'-0"



7 SIGN DETAIL
SCALE: 6" = 1'-0"



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

SIGNAGE SCHEDULE						
QTY	PLAN NO.	OWNER NO.	TYPE	MOUNTING	TEXT	
FIRST FLOOR						
1	A100	LINE 1: 13	1	1	-	
1	A101	-	7	7	LINE 1: OFFICE E	
1	A102	-	5	1	LINE 1: BOILER LINE 2: ROOM	
1	A105	-	6	1	LINE 1: CUSTODIAL	
1	A106	-	5	1	LINE 1: WOMEN LINE 2: RESTROOM	
1	A107	-	5	1	LINE 1: BOYS LINE 2: RESTROOM	
1	A109	-	6	1	LINE 1: STORAGE	
1	A110	LINE 1: 12	1	1	-	
2	A111	-	6	1	LINE 1: KITCHEN	
1	A112	-	5	7	LINE 1: GIRLS LINE 2: RESTROOM	
1	A113	-	6	1	LINE 1: CUSTODIAL	
1	A114	-	5	7	LINE 1: BOYS LINE 2: RESTROOM	
1	A116	-	6	1	LINE 1: STORAGE	
1	A119	-	6	1	LINE 1: CONFERENCE	
1	A120	-	6	-	LINE 1: SERVING	
1	A122	LINE 1: 11	1	1	-	
1	A123	-	2	-	-	
1	A125	-	6	1	LINE 1: STORAGE	
2	A126	-	6	1,7	LINE 1: CAFETERIA	
1	A129	-	5	1	LINE 1: STAFF LINE 2: ROOM	
2	A130	-	5	1	LINE 1: MAIN LINE 2: OFFICE	
1	A131	-	7	1	LINE 1: PRINCIPAL	
1	A132	-	2	-	-	
1	A133	-	6	1	LINE 1: CLINIC	
1	A135	-	5	1	LINE 1: RESOURCE LINE 2: ROOM	
1	A136	-	6	1	LINE 1: STORAGE	
2	A137	-	6	1	LINE 1: STORAGE	
2	A138	-	6	7	LINE 1: GYMNASIUM	
1	A139	-	1	1	LINE 3: MUSIC	
1	A140	-	6	1	LINE 1: STORAGE	
1	A141	-	6	1	LINE 1: MECHANICAL	
1	A143	-	6	1	LINE 1: PLATFORM	
2	A144	-	6	1	LINE 1: PLATFORM	
-	-	-	-	-	-	
1	B100	-	6	1	LINE 1: KILN	
2	B101	-	1	7	LINE 3: ART	
1	B102	-	2	1	-	
1	B104	LINE 1: 20	1	1	-	
1	B105	LINE 1: 18	1	1	-	
1	B106	LINE 1: 19	1	1	-	
1	B107	-	5	-	LINE 1: STAFF LINE 2: WORK	
1	B109	LINE 1: 17	1	1	-	
1	B112	LINE 1: 16	1	1	-	
1	B113	-	7	1	LINE 1: OFFICE D	
1	B114	LINE 1: 15	1	1	-	
1	B117	LINE 1: 14	1	1	-	
1	B118	-	5	1	LINE 1: MEDIA LINE 2: OFFICE	
1	B119	-	5	1	LINE 1: MEDIA LINE 2: CENTER LINE 3: SPEECH	
1	B120	-	6	1	-	
1	B121	LINE 1: 6	1	1	-	
1	B122	-	6	1	LINE 1: STORAGE	
1	B123	-	6	1	LINE 1: RESTROOM	
1	B126	-	6	1	LINE 1: RESTROOM	
1	B127	-	6	1	LINE 1: RESTROOM	
1	B128	LINE 1: 5	1	1	-	
1	B130	LINE 1: 4	1	1	-	
1	B131	LINE 1: 7	1	1	-	
1	B132	-	6	1	LINE 1: STORAGE	
1	B133	-	6	1	LINE 1: RESTROOM	
1	B135	LINE 1: 8	1	1	-	
1	B137	LINE 1: 3	1	1	-	
1	B139	-	6	1	LINE 1: RESTROOM	
1	B141	-	6	1	LINE 1: RESTROOM	
1	B143	LINE 1: 2	1	1	-	
1	B144	LINE 1: 9	1	1	-	
1	B147	LINE 1: 1	1	1	-	
1	B148	LINE 1: 10	1	1	-	



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
ELEMENTARY SCHOOLS

LONGACRE ELEMENTARY SCHOOL
SIGNAGE SCHEDULE AND DETAILS

PRELIMINARY
DESIGN DEVELOPMENT
CONSTRUCTION
FINAL RECORD

DRAWN BY: NUL
CHECKED BY: BUS

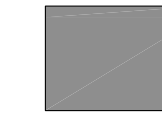
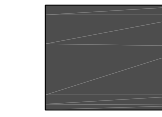
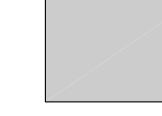
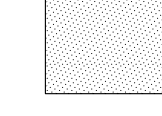
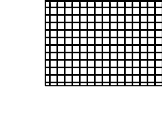

REVISIONS

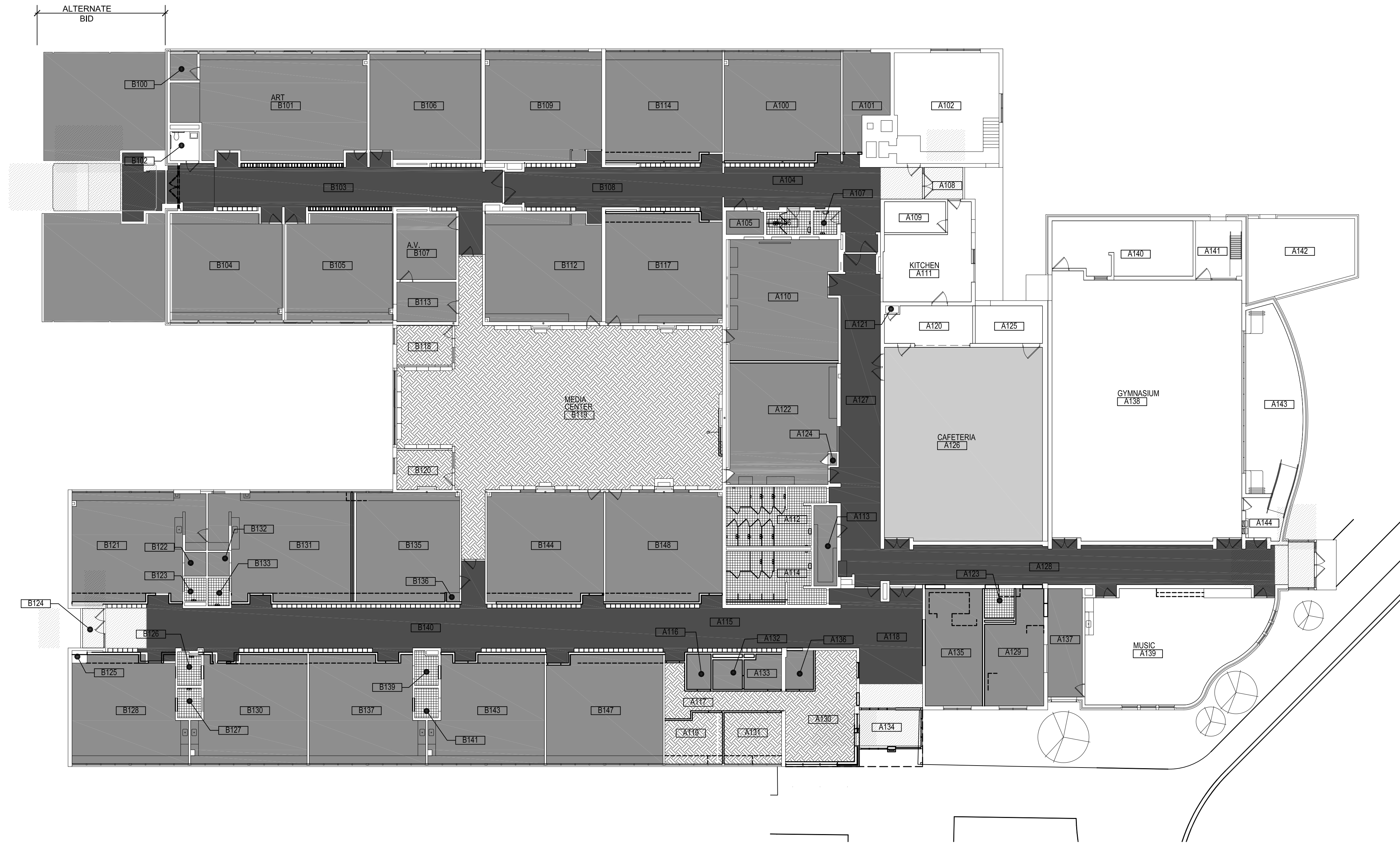
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SHEET NO.

A8.2LA

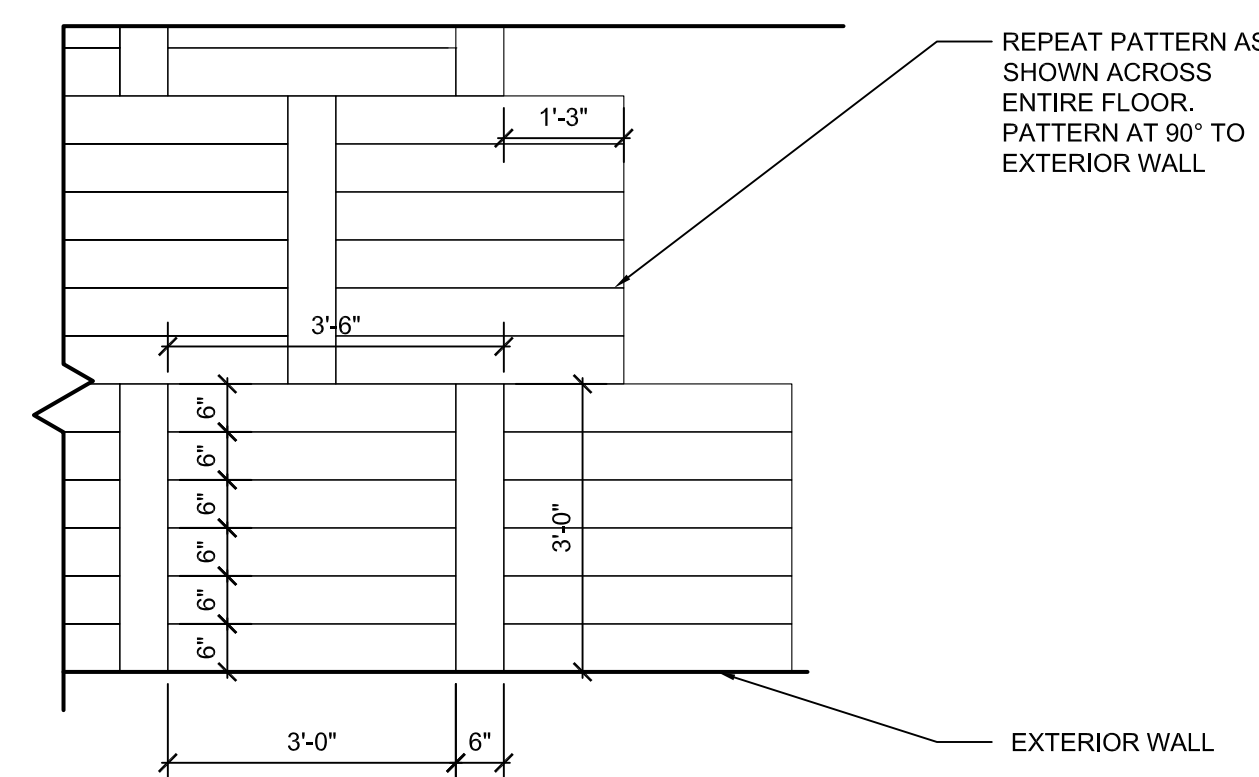
JOB NO. 161664B

TILE FLOORING LEGEND

-  6"X36" WOOD PLANK DESIGN - LAID OUT IN PATTERN IN DETAIL 2/A8.3LA
-  6"X36" AND 4"X36" WOOD PLANK TILE DESIGN - LAID OUT IN "RANDOM" PATTERN REPRESENTED BY DETAIL 4/A8.3LA
-  18"X18" STONE TILE DESIGN - LAID OUT IN "RANDOM" PATTERN REPRESENTED BY DETAIL A8.3LA
-  WALKOFF CARPET
-  CERAMIC TILE
-  CARPET

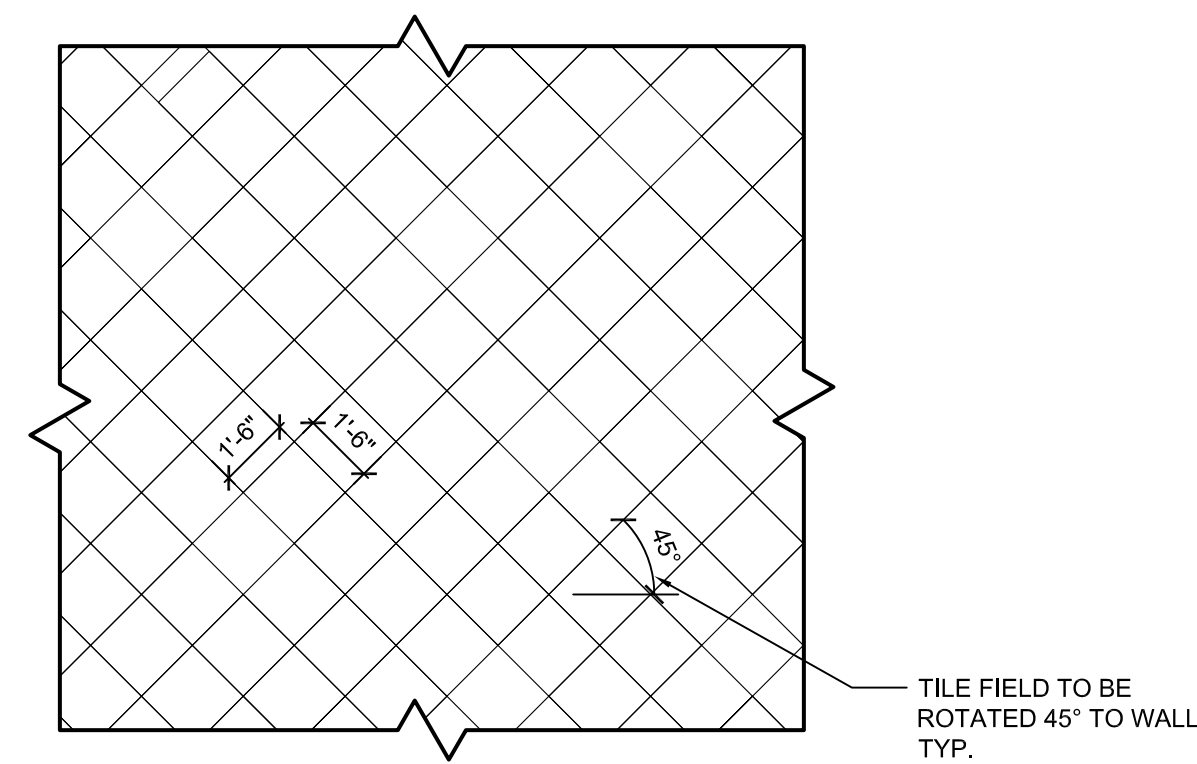


1 COMPOSITE FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"



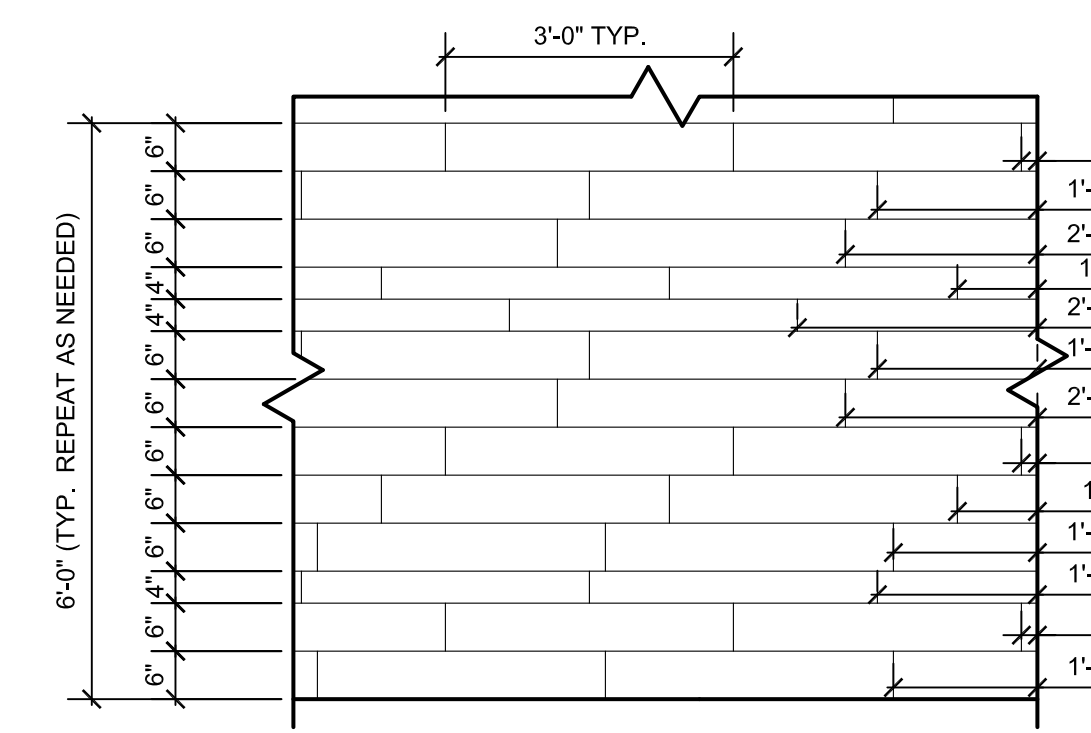
NOTE: COLOR TO BE DETERMINED.
1 FIELD COLOR AND UP TO 3 ACCENT COLORS

2 CLASSROOM FLOOR PATTERN DETAIL
A8.3LA SCALE: 1/2" = 1'-0"



NOTE: COLOR TO BE DETERMINED.
1 FIELD COLOR AND UP TO 3 ACCENT COLORS

3 CAFETERIA FLOOR PATTERN DETAIL
A8.3LA SCALE: 1/4" = 1'-0"



NOTE: COLOR TO BE DETERMINED.
1 FIELD COLOR AND UP TO 3 ACCENT COLORS

4 CORRIDOR FLOOR PATTERN DETAIL
A8.3LA SCALE: 3/32" = 1'-0"

MECHANICAL ABBREVIATION LIST

Table with 4 columns: ABBREVIATION, DESCRIPTION, ABBREVIATION, DESCRIPTION. Lists various mechanical symbols and their meanings, such as AAV (Automatic Air Vent), ASD (Air Servo Drop), and various pipe and duct symbols.

MECHANICAL SYMBOL LIST

Table with 2 columns: SYMBOL, DESCRIPTION. Lists mechanical symbols for piping and ductwork, such as AV (Air Vent), BFP (Backflow Preventer), and various valve symbols.

MECHANICAL DRAWING INDEX

Table with 2 columns: SHEET NO., SHEET TITLE. Lists drawing sheets and their titles, such as M0.1LA (Mechanical Demolition Plan) and M0.1BLA (Mechanical Demolition Plan).

STANDARD METHODS OF NOTATION

Table with 2 columns: SYMBOL, DESCRIPTION. Lists standard notation symbols for ductwork and piping, such as S-1 (Supply Diffuser), R-1 (Return Register), and various elbow symbols.

SECTION OR ENLARGED PLAN

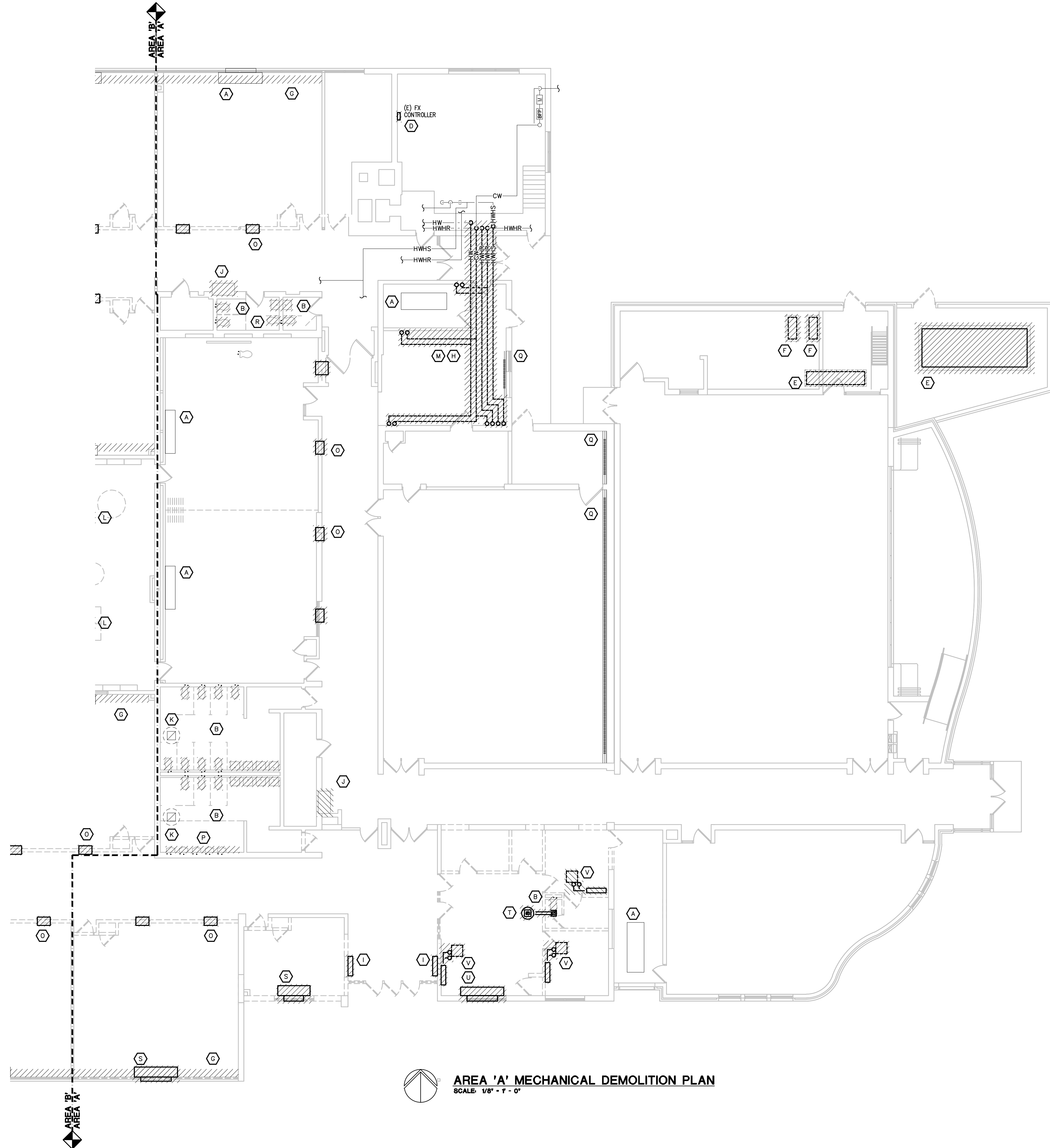
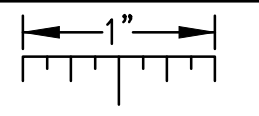
Table with 2 columns: SYMBOL, DESCRIPTION. Lists symbols for section or enlarged plans, such as M5.1 (Sheet M5.1), M1.1 (Sheet M1.1), and match lines.

TEMPERATURE CONTROL - PARTIAL SYMBOLS LIST

Table with 4 columns: SYMBOL, DESCRIPTION, SYMBOL, DESCRIPTION. Lists symbols for temperature control, such as CO2 (Carbon Dioxide Sensor), PT (Pressure Transmitter), and T (Thermostat).

NOTE: LIST OF ADDITIONAL SYMBOLS & ABBREVIATIONS ASSOCIATED WITH TEMPERATURE CONTROLS ARE IDENTIFIED ON TC DRAWINGS.

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



AREA 'A' MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1' - 0"

MECHANICAL GENERAL DEMOLITION NOTES:

1. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE.
2. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. ACTUAL ROUTING AND SIZES OF EXISTING PIPING AND DUCTWORK MIGHT DIFFER TO A LIMITED EXTENT FROM WHAT IS SHOWN. MAJOR DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER.
3. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.
4. ALL MECHANICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE, INCLUDING ALL RELATED ITEMS SUCH AS HANGERS, SUPPORTS, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTWORK.

DEMOLITION KEY NOTES:

- A. REMOVE EXISTING HOT WATER HEATING AND CHILLED WATER CONTROL VALVE AND ACTUATOR FROM EXISTING UNIT VENTILATOR. PREPARE PIPING FOR NEW VALVE. PROVIDE PRE-DEMOLITION WATER FLOW READINGS FOR HWH AND CHW.
- B. REMOVE EXISTING PLUMBING FIXTURES AND PREPARE PIPING FOR NEW WORK.
- C. REMOVE EXISTING ROOFTOP UNIT AND CONTROLS COMPLETE. ROOF CURB TO REMAIN.
- D. REMOVE EXISTING JCI NETWORK CONTROLLER AND PREPARE FOR NEW JCI FACILITY NETWORK CONTROLLER.
- E. REMOVE EXISTING CHILLER, REFRIGERANT PIPING, AND CONTROLS COMPLETE. PREPARE CHILLED WATER PIPING FOR NEW WORK.
- F. REMOVE EXISTING CHILLED WATER CIRCULATION PUMP COMPLETE. PREPARE CHILLED WATER PIPING FOR NEW WORK. PROVIDE PRE-DEMOLITION WATER FLOW READINGS.
- G. REMOVE HOT WATER HEATING PIPING ABOVE FLOOR, SERVING UNIT VENTILATOR. ABANDON HOT WATER HEATING PIPING MAINS IN TRENCH.
- H. REMOVE HOT WATER HEATING PIPING IN TUNNEL AND PATCH WALL TO MATCH EXISTING CONDITIONS. PREPARE PIPING FOR NEW WORK.
- I. REMOVE EXISTING CABINET UNIT HEATER COMPLETE. PREPARE PIPING FOR NEW WORK.
- J. REMOVE PORCELAIN DRINKING FOUNTAIN. PREPARE PIPING FOR NEW WORK.
- K. REMOVE EXHAUST GRILLE. PREPARE DUCTWORK FOR NEW WORK.
- L. REMOVE SUPPLY DIFFUSER. PREPARE DUCTWORK FOR NEW WORK.
- M. REMOVE UNDERGROUND DOMESTIC WATER PIPING. PREPARE PIPING FOR NEW WORK.
- N. REMOVE DOMESTIC WATER PIPING IN TUNNEL AND PATCH WALL TO MATCH EXISTING CONDITIONS. PREPARE PIPING FOR NEW WORK.
- O. REMOVE EXISTING RELIEF DUCTWORK COMPLETE (TYP.).
- P. REMOVE EXISTING FLOOR MOUNTED URINAL AND P-TRAP COMPLETE. PREPARE PIPING FOR NEW WORK.
- Q. DISCONNECT HOT WATER HEATING PIPING FROM BELOW, AND CAP PIPING IN A CONCEALED MANNER. PREPARE FIN TUBE AND HORIZONTAL PIPING FOR NEW WORK. EXISTING CONTROLS TO REMAIN FOR REUSE.
- R. REMOVE WATER CLOSET AND CAP SAN IN A CONCEALED MANNER. REMOVE CW BACK TO MAIN AND CAP.
- S. REMOVE UNIT VENTILATOR, WALL SLEEVE, EXTERIOR LOUVER, AND CONTROLS COMPLETE. REMOVE HWH/S/R PIPING BACK TO MAIN AND CAP.
- T. REMOVE ROOF MOUNTED EXHAUST FAN, EXHAUST GRILLE, DUCTWORK, AND CONTROLS COMPLETE. CAP ROOF CURB. REFER TO ROOF CURB CAP DETAIL ON SHEET M6.1.
- U. REMOVE UNIT VENTILATOR, WALL SLEEVE, EXTERIOR LOUVER, AND CONTROLS COMPLETE. IN-FILL WALL TO MATCH EXISTING CONDITIONS. REMOVE HWH/S/R PIPING BACK TO MAIN AND CAP.
- V. REMOVE WALL MOUNTED AC UNIT, ROOF MOUNTED CONDENSING UNIT, REFRIGERANT PIPING, CONDENSATE PIPING, AND CONTROLS COMPLETE. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ROOF PATCH.



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PE License No. 381524620

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

AREA A MECHANICAL DEMOLITION PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

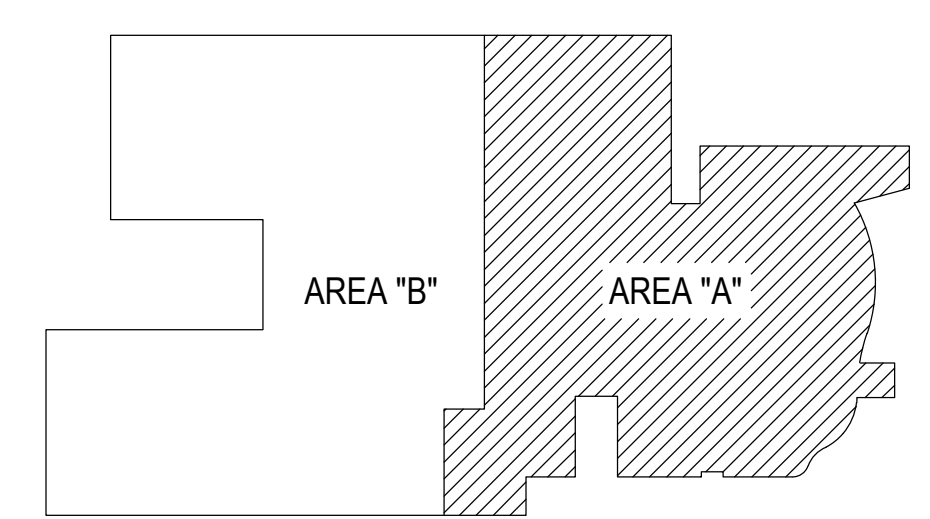
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CHECKED BY: RNR

REVISIONS:
BIDS: 11-30-2016

DATE: NOVEMBER 30, 2016
SHEET NO.:

MD1.1ALA

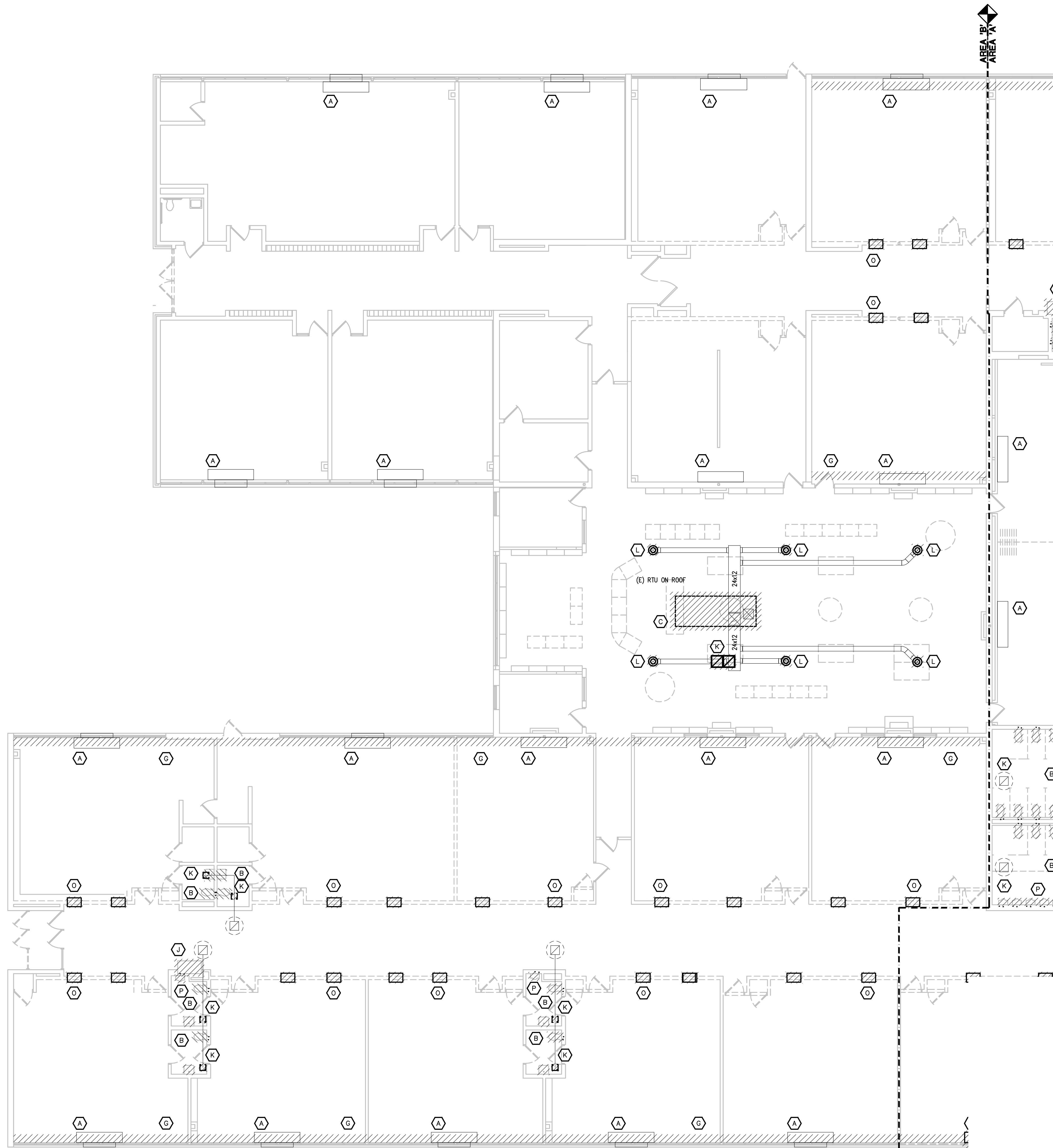
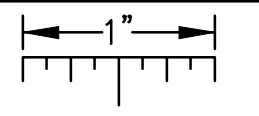
JOB NO. 161664A



KEY PLAN
N.T.S.

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THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



AREA 'B' MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1' - 0"

MECHANICAL GENERAL DEMOLITION NOTES:

1. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE.
2. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. ACTUAL ROUTING AND SIZES OF EXISTING PIPING AND DUCTWORK MIGHT DIFFER TO A LIMITED EXTENT FROM WHAT IS SHOWN. MAJOR DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER.
3. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.
4. ALL MECHANICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE, INCLUDING ALL RELATED ITEMS SUCH AS HANGERS, SUPPORTS, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTWORK.

DEMOLITION KEY NOTES:

- A. REMOVE EXISTING HOT WATER HEATING AND CHILLED WATER CONTROL VALVE AND ACTUATOR FROM EXISTING UNIT VENTILATOR. PREPARE PIPING FOR NEW VALVE. PROVIDE PRE-DEMOLITION WATER FLOW READINGS FOR HWH AND CHW.
- B. REMOVE EXISTING PLUMBING FIXTURES AND PREPARE PIPING FOR NEW WORK.
- C. REMOVE EXISTING ROOFTOP UNIT AND CONTROLS COMPLETE. ROOF CURB TO REMAIN.
- D. REMOVE EXISTING JCI NETWORK CONTROLLER AND PREPARE FOR NEW JCI FACILITY NETWORK CONTROLLER.
- E. REMOVE EXISTING CHILLER, REFRIGERANT PIPING, AND CONTROLS COMPLETE. PREPARE CHILLED WATER PIPING FOR NEW WORK.
- F. REMOVE EXISTING CHILLED WATER CIRCULATION PUMP COMPLETE. PREPARE CHILLED WATER PIPING FOR NEW WORK. PROVIDE PRE-DEMOLITION WATER FLOW READINGS.
- G. REMOVE HOT WATER HEATING PIPING ABOVE FLOOR, SERVING UNIT VENTILATOR. ABANDON HOT WATER HEATING PIPING MAINS IN TRENCH.
- H. REMOVE HOT WATER HEATING PIPING IN TUNNEL AND PATCH WALL TO MATCH EXISTING CONDITIONS. PREPARE PIPING FOR NEW WORK.
- I. REMOVE EXISTING CABINET UNIT HEATER COMPLETE. PREPARE PIPING FOR NEW WORK.
- J. REMOVE PORCELAIN DRINKING FOUNTAIN. PREPARE PIPING FOR NEW WORK.
- K. REMOVE EXHAUST GRILLE. PREPARE DUCTWORK FOR NEW WORK.
- L. REMOVE SUPPLY DIFFUSER. PREPARE DUCTWORK FOR NEW WORK.
- M. REMOVE UNDERGROUND DOMESTIC WATER PIPING. PREPARE PIPING FOR NEW WORK.
- N. REMOVE DOMESTIC WATER PIPING IN TUNNEL AND PATCH WALL TO MATCH EXISTING CONDITIONS. PREPARE PIPING FOR NEW WORK.
- O. REMOVE EXISTING RELIEF DUCTWORK COMPLETE (TYP.).
- P. REMOVE EXISTING FLOOR MOUNTED URINAL AND P-TRAP COMPLETE. PREPARE PIPING FOR NEW WORK.
- Q. DISCONNECT HOT WATER HEATING PIPING FROM BELOW, AND CAP PIPING IN A CONCEALED MANNER. PREPARE FIN TUBE AND HORIZONTAL PIPING FOR NEW WORK. EXISTING CONTROLS TO REMAIN FOR REUSE.
- R. REMOVE WATER CLOSET AND CAP SAN IN A CONCEALED MANNER. REMOVE CW BACK TO MAIN AND CAP.
- S. REMOVE UNIT VENTILATOR, WALL SLEEVE, EXTERIOR LOUVER, AND CONTROLS COMPLETE. REMOVE HHWS/R PIPING BACK TO MAIN AND CAP.
- T. REMOVE ROOF MOUNTED EXHAUST FAN, EXHAUST GRILLE, DUCTWORK, AND CONTROLS COMPLETE. CAP ROOF CURB. REFER TO ROOF CURB CAP DETAIL ON SHEET M6.1.
- U. REMOVE WALL MOUNTED AC UNIT, ROOF MOUNTED CONDENSING UNIT, REFRIGERANT PIPING, CONDENSATE PIPING, AND CONTROLS COMPLETE. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ROOF PATCH.
- V. REMOVE WALL MOUNTED AC UNIT, ROOF MOUNTED CONDENSING UNIT, REFRIGERANT PIPING, CONDENSATE PIPING, AND CONTROLS COMPLETE. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ROOF PATCH.



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PE# 0000000000

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

AREA B MECHANICAL DEMOLITION PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

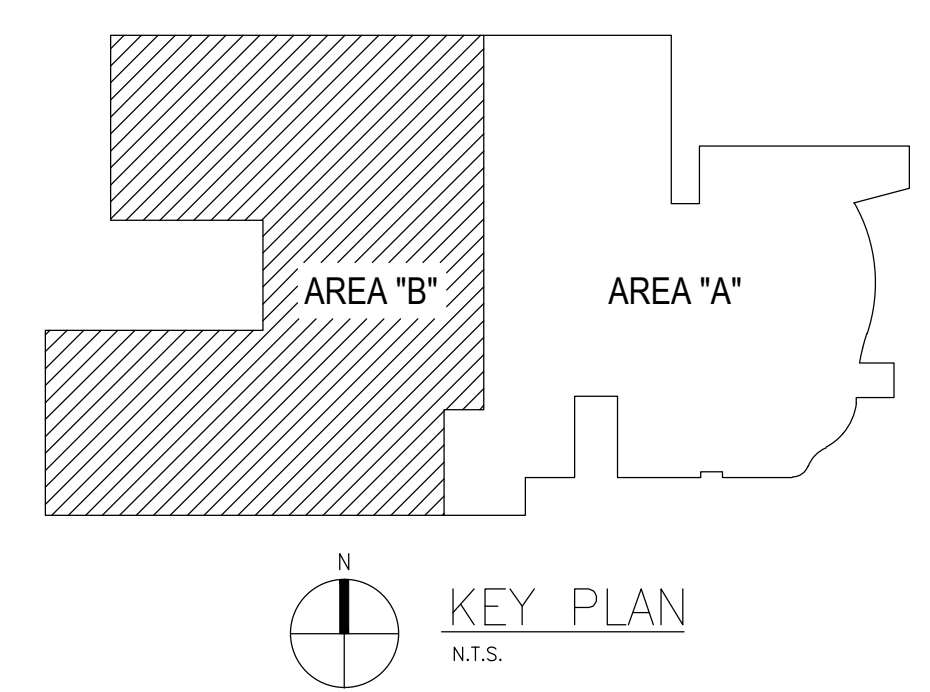
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REVISIONS:
BIDS: 11-30-2016

DATE: NOVEMBER 30, 2016
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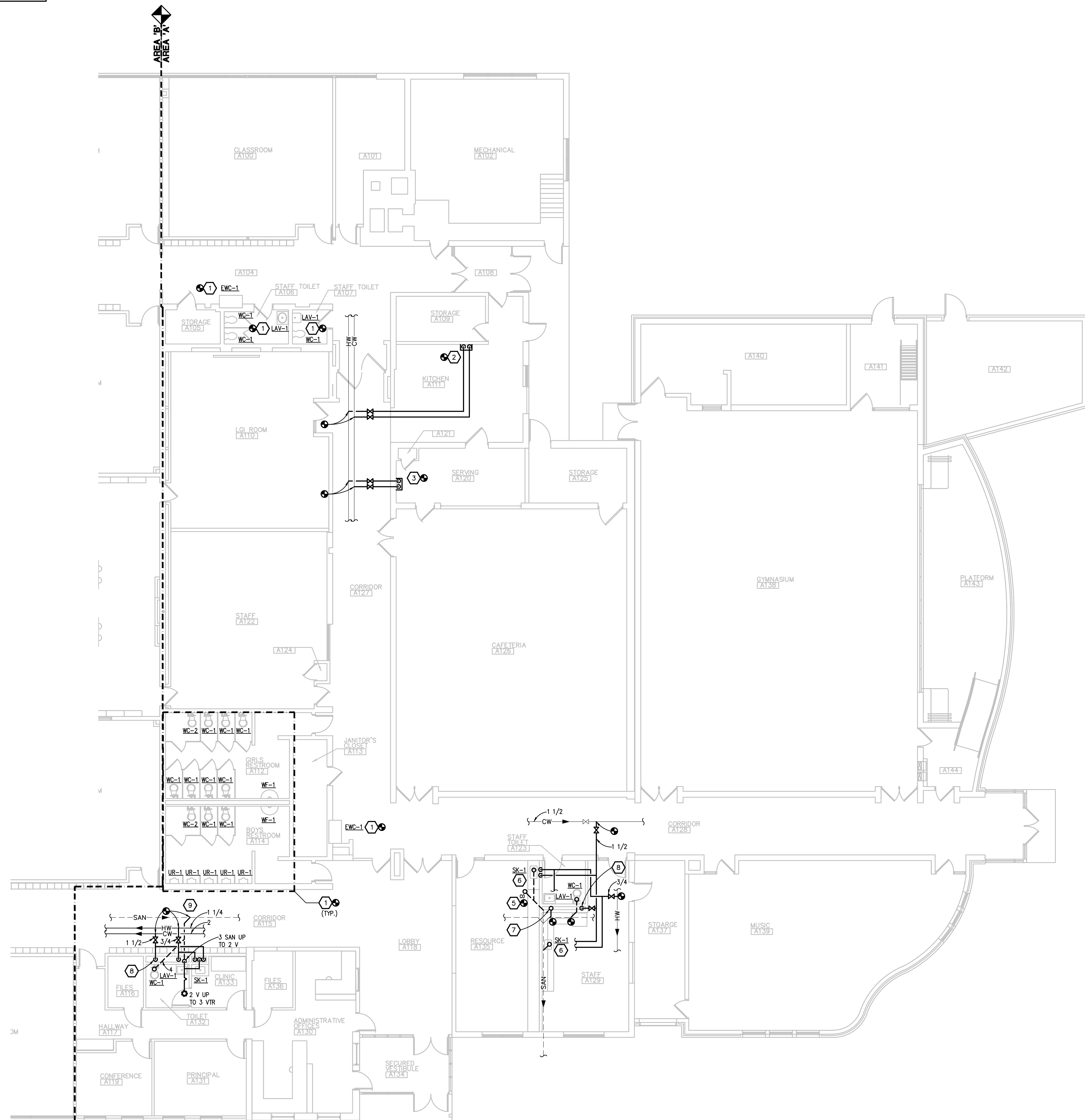
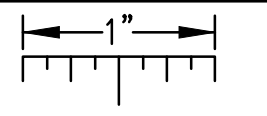
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JOB NO. 161664A



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THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



AREA 'A' PLUMBING NEW WORK PLAN
SCALE: 1/8" = 1' - 0"

PLUMBING GENERAL NOTES:

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2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
3. PIPING AND DUCTWORK SHALL NOT BE INSTALLED ABOVE ELECTRICAL TRANSFORMERS, SWITCHBOARDS, PANELBOARDS OR MOTOR CONTROL CENTERS.
4. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
5. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
6. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONED LOCATIONS OF PLUMBING FIXTURES.
7. HOT AND COLD WATER PIPING RUN-OUTS TO LAVATORIES AND SINKS SHALL BE 1/2" UNLESS OTHERWISE NOTED.
8. PLUMBING VENT PIPING THROUGH ROOF SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKE LOCATION AND A MINIMUM OF 18" CLEAR FROM THE INSIDE FACE OF PARAPET.
9. PROVIDE CODE REQUIRED CLEARANCE FOR ALL CLEANOUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.
10. MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".

CONSTRUCTION KEY NOTES:

1. EXTEND/MODIFY EXISTING CW/HW/SAN/VENT PIPING AS REQUIRED TO FACILITATE THE INSTALLATION OF NEW FIXTURES. SAWCUT AND PATCH FLOOR AS REQUIRED TO EXTEND EXISTING UNDERGROUND SANITARY.
2. ROUTE NEW 3/4" CW AND 3/4" HW PIPING DOWN WALL IN PIPE ENCLOSURE. CONNECT NEW PIPING TO EXISTING 3 COMPARTMENT SINK AND HANK SINK.
3. ROUTE NEW 1/2" CW AND 1/2" HW PIPING DOWN WALL IN PIPE ENCLOSURE. CONNECT NEW PIPING TO HANK SINK.
4. CONNECT NEW 3" SAN TO EXISTING UNDERGROUND SANITARY. SAWCUT AND PATCH FLOOR AS REQUIRED. VERIFY INVERT ELEVATION OF EXISTING UNDERGROUND SANITARY PRIOR TO SAWCUTTING/EXCAVATION. INFORM OWNER/ARCH/CM IF INVERT WILL NOT ALLOW PROPER SLOPING OF NEW UNDERGROUND SAN.
5. EXTEND EXISTING U.G. SAN PIPE AND INSTALL NEW CLEANOUT.
6. PROVIDE SINK WITH AIR ADMITTANCE VALVE WITHIN CASEWORK.
7. 3 SAN UP TO 2 VTR.
8. 1 1/2" CW DOWN IN CHASE TO SERVE WC AND LAV. CONNECT PER PLUMBING FIXTURE CONNECTION SCHEDULE.
9. FIELD VERIFY EXACT LOCATION OF EXISTING UNDERGROUND SANITARY PRIOR TO SAWCUT. SAWCUT AND PATCH FLOOR AS REQUIRED TO CONNECT TO EXISTING UNDERGROUND SANITARY.

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

AREA A PLUMBING NEW WORK PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

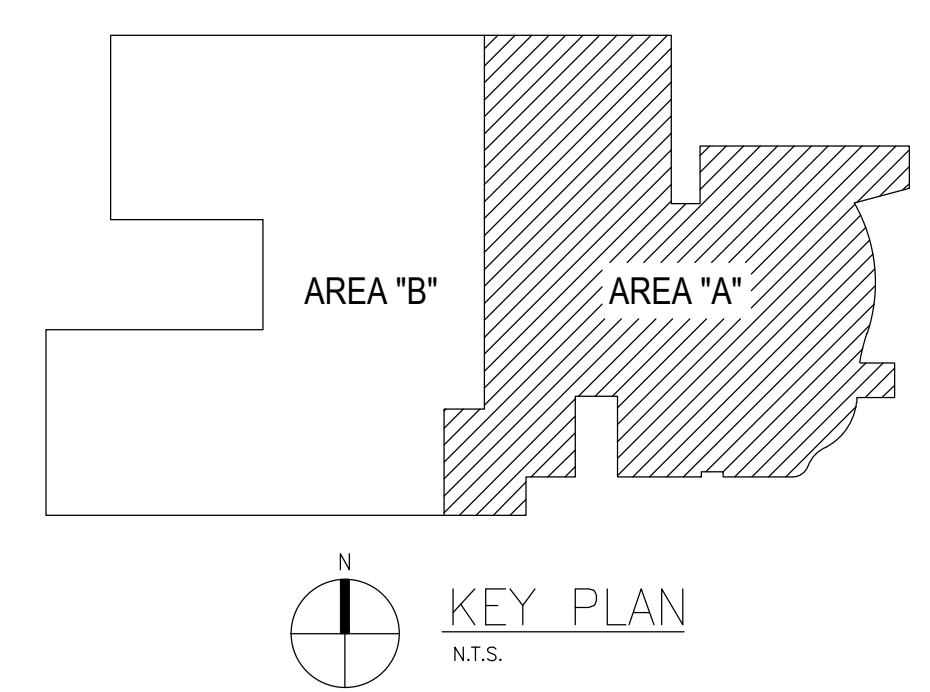
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CHECKED BY: RNR

REVISIONS: 11-30-2016

DATE: NOVEMBER 30, 2016
SHEET NO.:

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JOB NO. 161664A

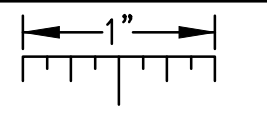


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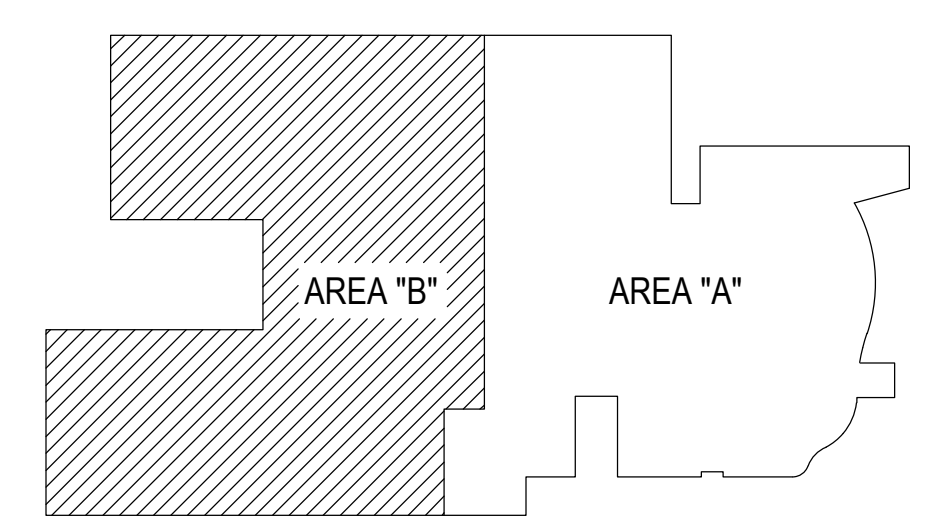
AREA 'B' PLUMBING NEW WORK PLAN
SCALE: 1/8" = 1' - 0"

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- FIELD VERIFY EXACT LOCATION OF EXISTING UNDERGROUND SANITARY PRIOR TO SAWCUT. SAWCUT AND PATCH FLOOR AS REQUIRED TO CONNECT TO EXISTING UNDERGROUND SANITARY.



KEY PLAN
N.T.S.

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

AREA B PLUMBING NEW WORK PLAN

- PRELIMINARY
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DRAWN BY: JRM
CHECKED BY: RNR

REVISIONS:
BIDS 11-30-2016

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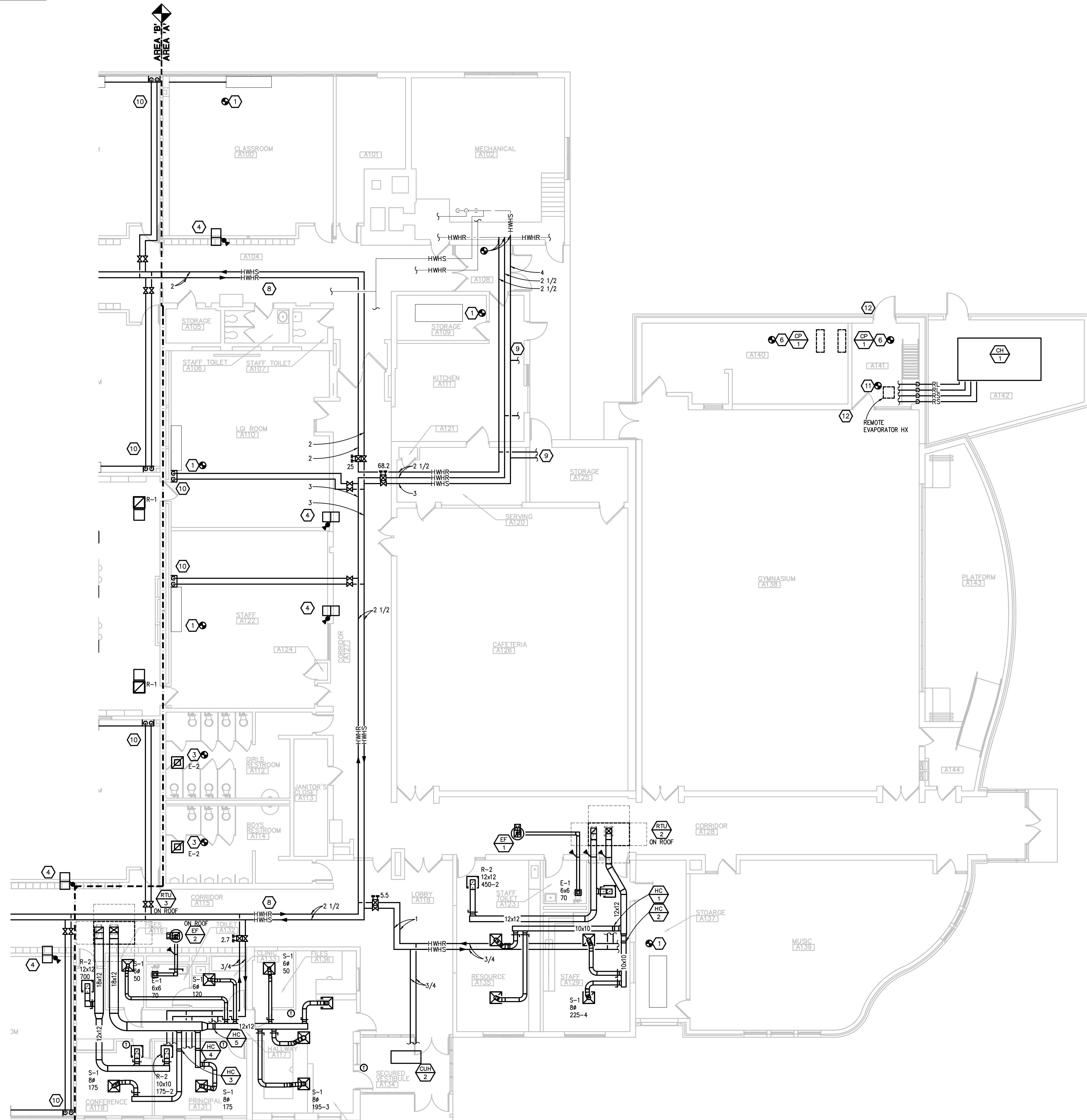
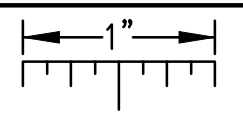
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AREA 'A' HVAC NEW WORK PLAN
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7. COORDINATE LOCATION OF DUCT-MOUNTED HYDRONIC DEVICES WITH SHEET METAL TRADES.
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2. CONNECT NEW 2x2 SUPPLY DIFFUSER AND RETURN GRILLE TO EXISTING DUCTWORK. FIELD VERIFY NECK SIZE. RE-BALANCE TO CFM INDICATED.
3. PROVIDE NEW 12x12 EXHAUST GRILLE. FIELD VERIFY NECK SIZE. RECONNECT TO EXISTING DUCTWORK.
4. 20x16 TRANSFER DUCT ABOVE CEILING. PROVIDE WITH COMBINATION FIRE/SMOKE DAMPER.
5. RECONNECT TO EXISTING SUPPLY DUCTWORK AND RETURN DUCTWORK. EXTEND/MODIFY DUCTWORK TO FACILITATE THE INSTALLATION OF THE NEW ROOFTOP UNIT. PROVIDE ROOF CURB ADAPTOR.
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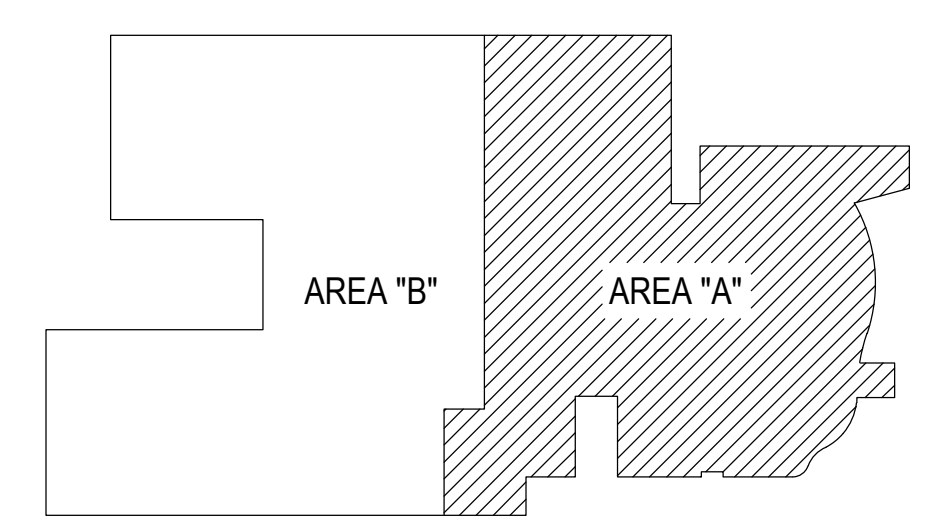
FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

AREA A HVAC NEW WORK PLAN

- PRELIMINARY
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DRAWN BY: JRM
CHECKED BY: RNR

REVISIONS: 11-30-2016



KEY PLAN
N.T.S.

DATE: NOVEMBER 30, 2016
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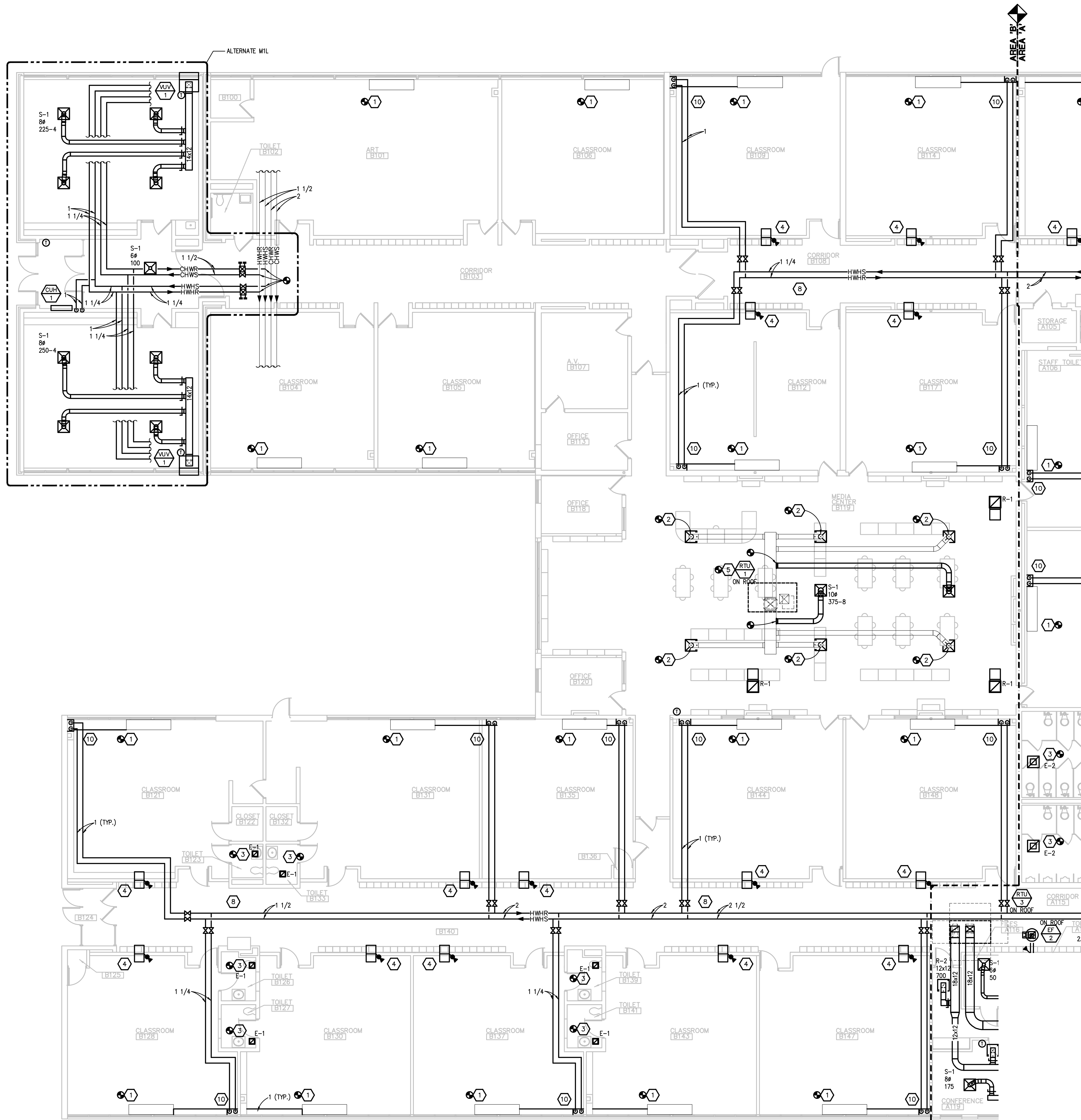
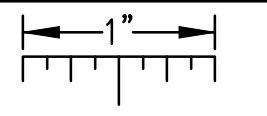
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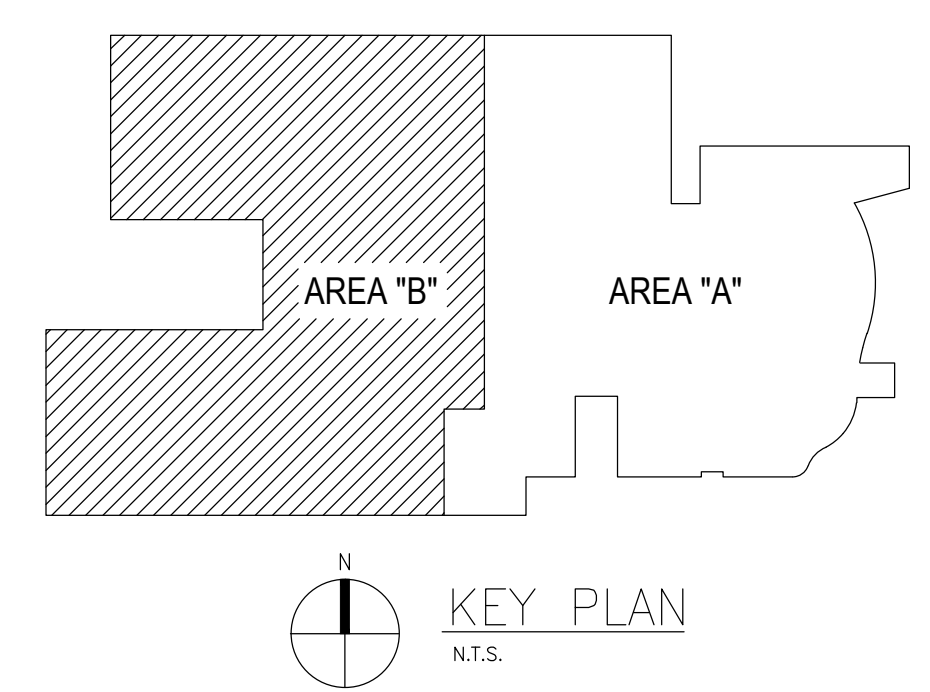
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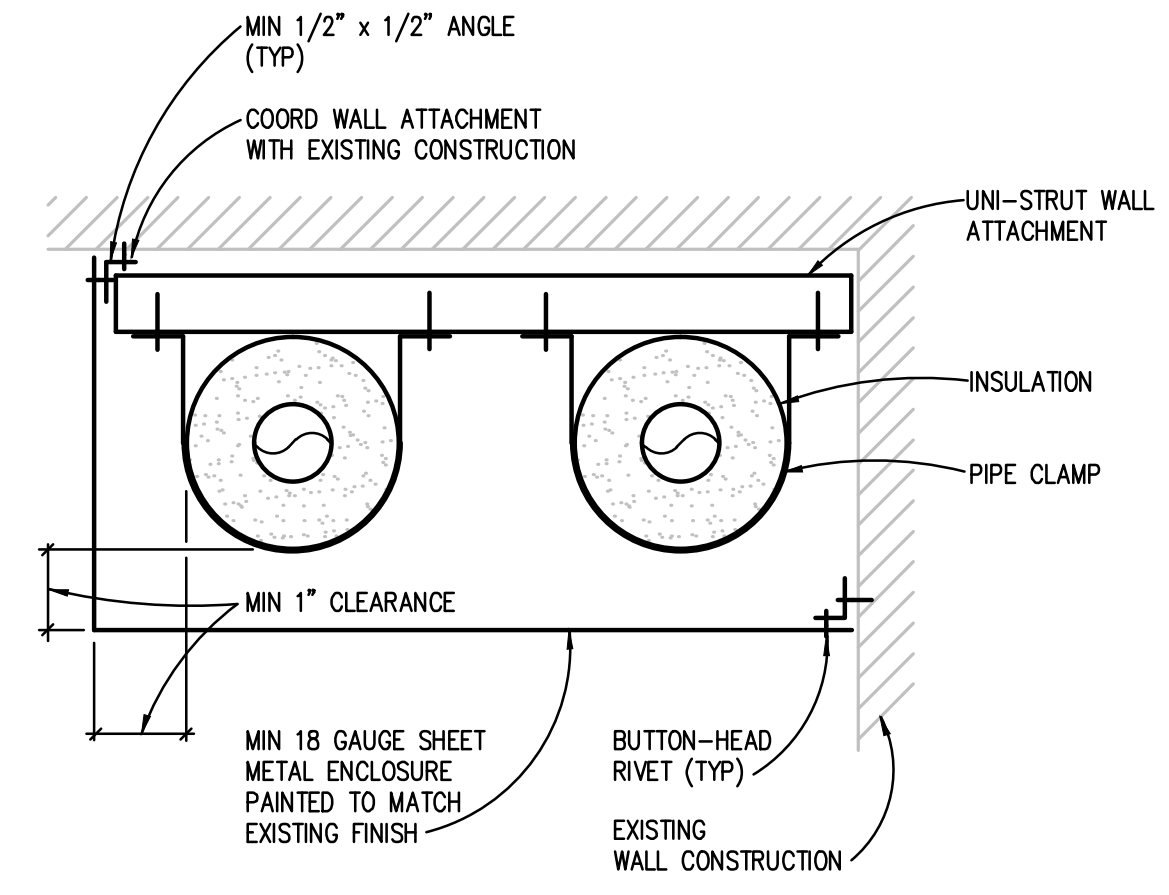
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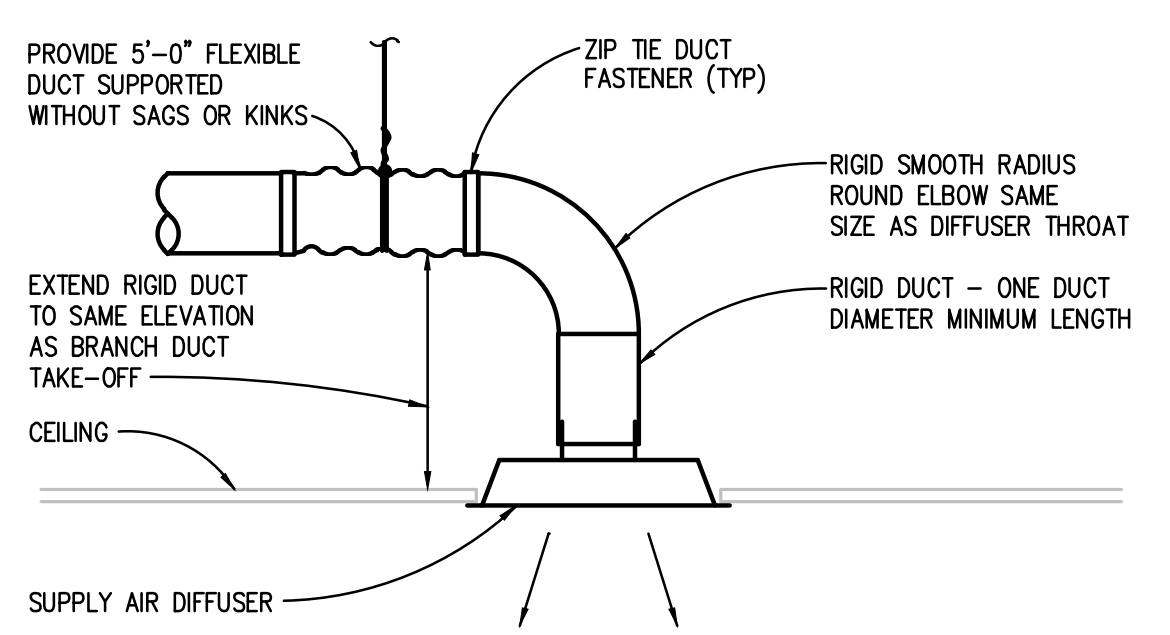
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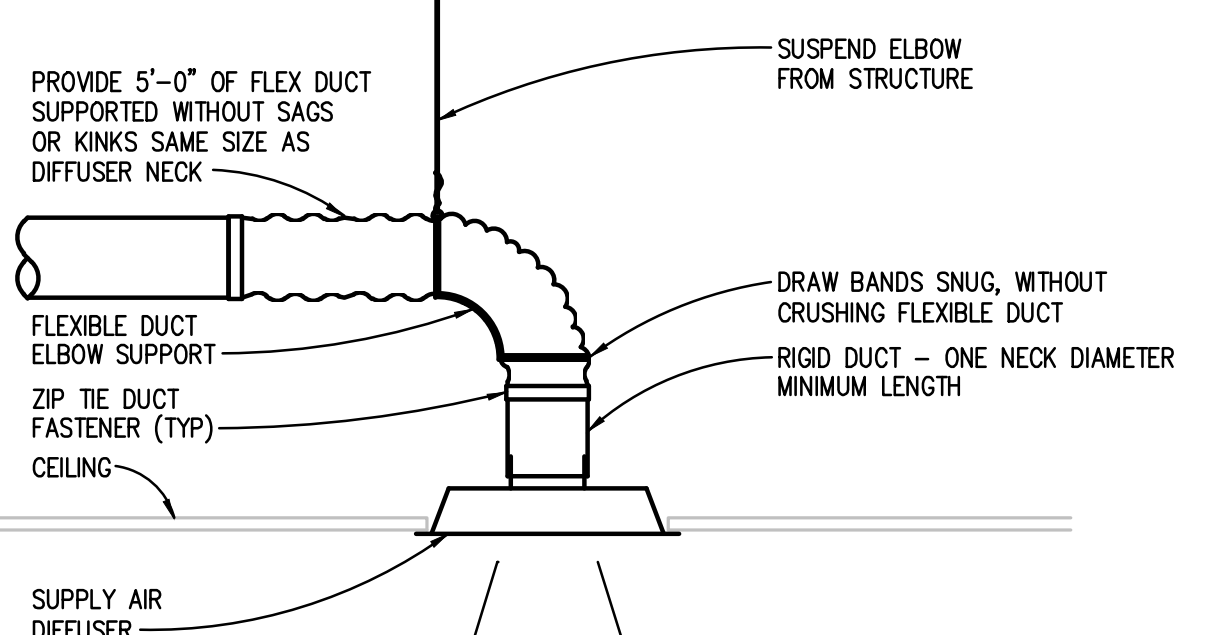
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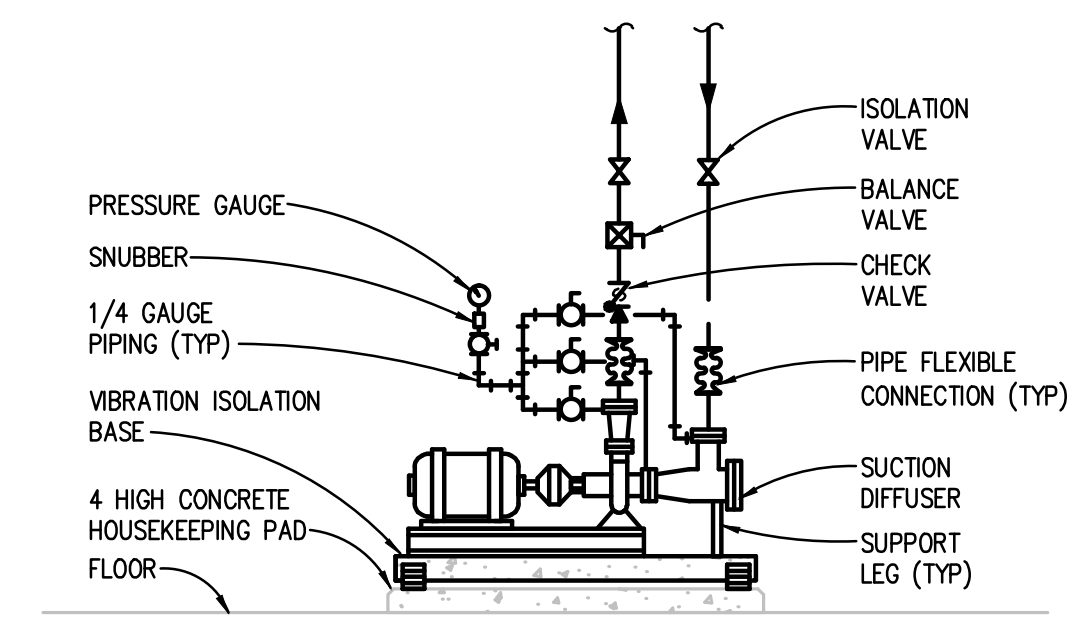
PIPE ENCLOSURE DETAIL
NO SCALE



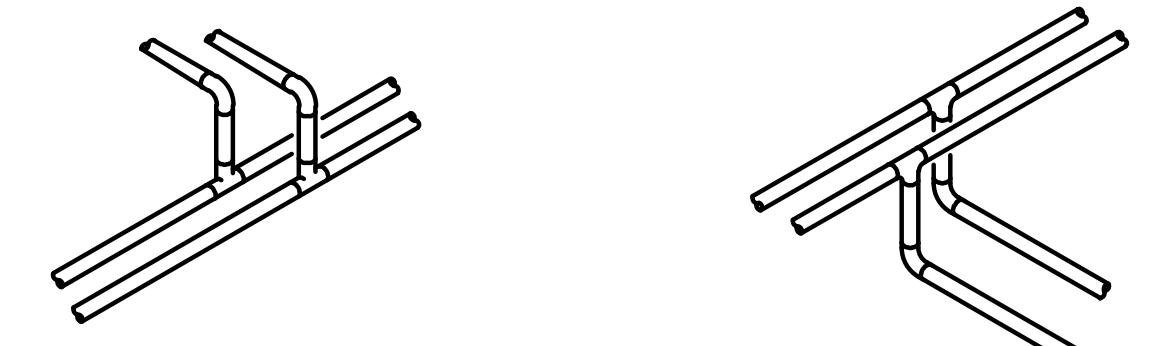
ROUND NECK SUPPLY AIR DIFFUSER DETAIL
NO SCALE



BASE MOUNTED END SUCTION PUMP PIPING DIAGRAM
NO SCALE



HOT WATER TEMPERING COIL WITH THREE-WAY CONTROL VALVE PIPING DIAGRAM
NO SCALE

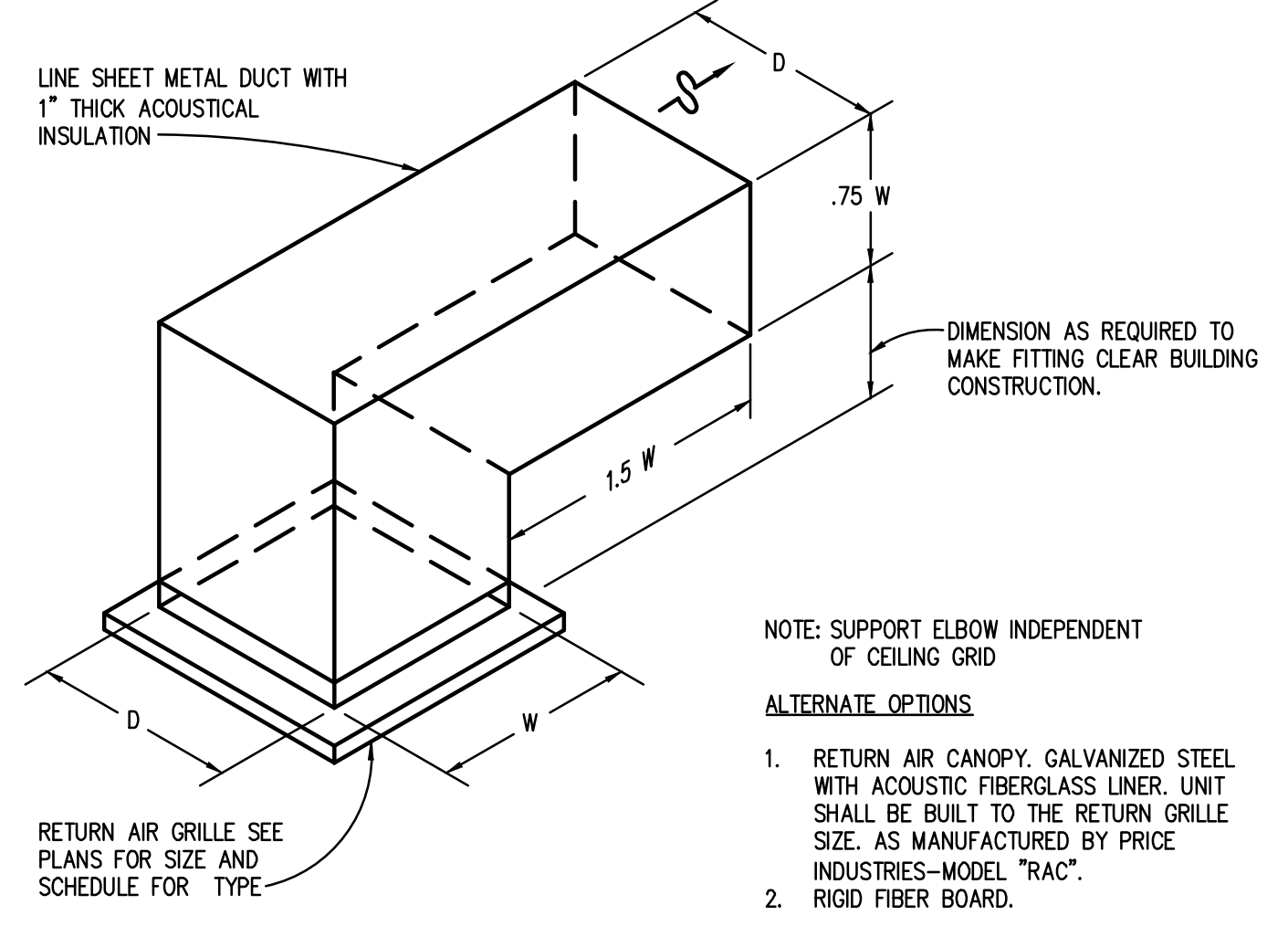


BRANCH CONNECTION OFF TOP
APPLIES TO THE FOLLOWING SYSTEMS:
DOMESTIC WATER
STEAM & CONDENSATE
LABORATORY GASES
LABORATORY VACUUM
COMPRESSED AIR
NATURAL GAS

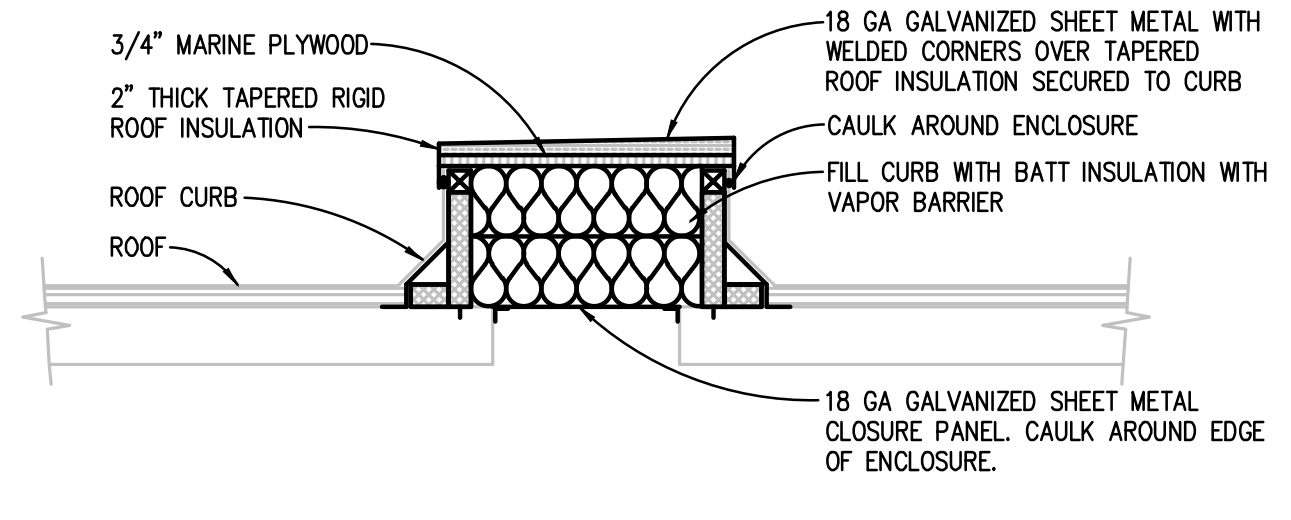
BRANCH CONNECTION OFF BOTTOM
APPLIES TO THE FOLLOWING SYSTEMS:
HOT WATER HEATING
CHILLED WATER
CONDENSER WATER
ENERGY RECOVERY
PROCESS COOLING WATER

NOTE: BOTTOM AS INDICATED OR SIDE CONNECTION IS ACCEPTABLE. CONNECTION ABOVE CENTERLINE OF MAINS IS NOT ACCEPTABLE.

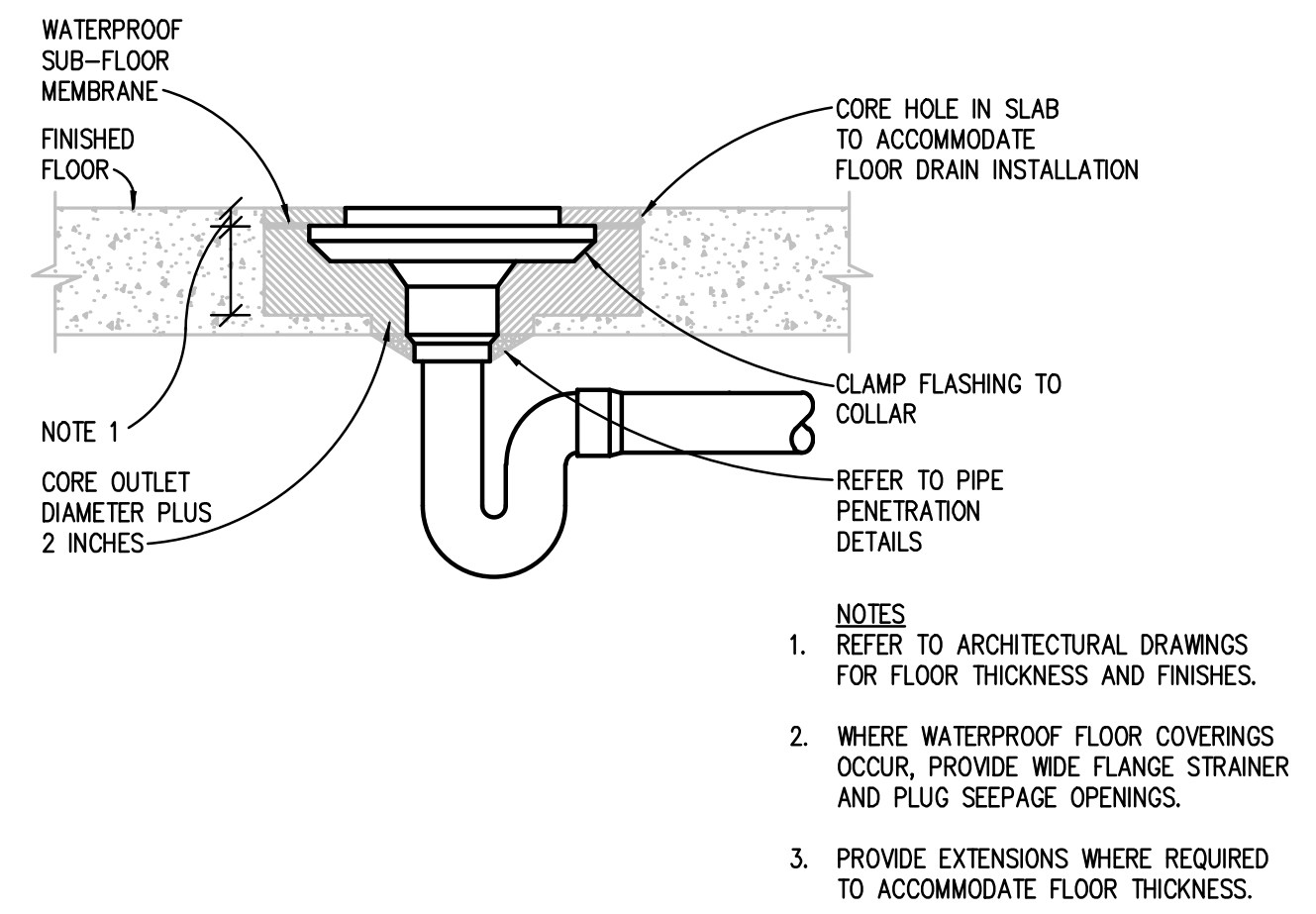
TYPICAL BRANCH TAKE-OFF CONNECTION PIPING DETAIL
NO SCALE



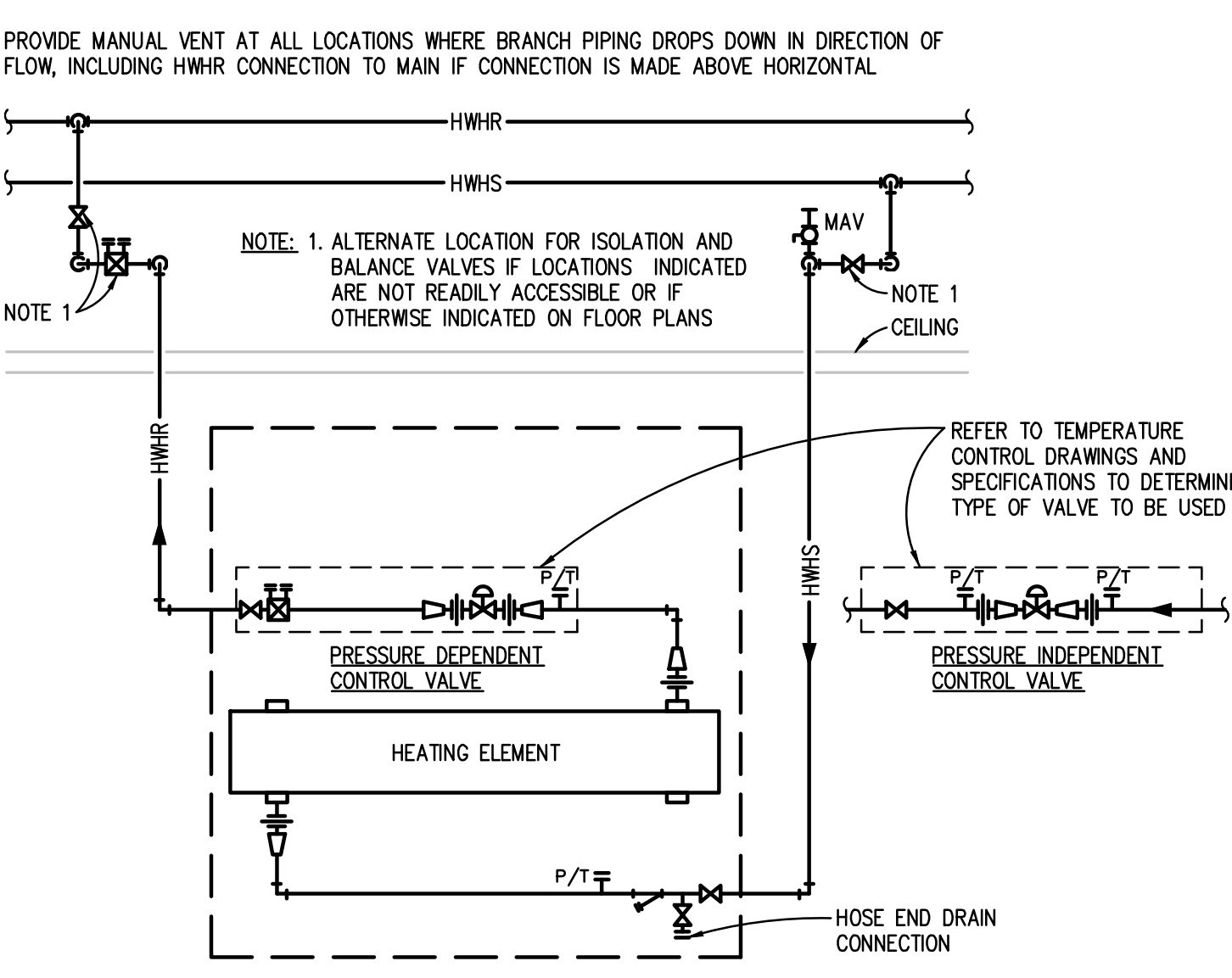
PLENUM RETURN AIR GRILLE DETAIL
NO SCALE



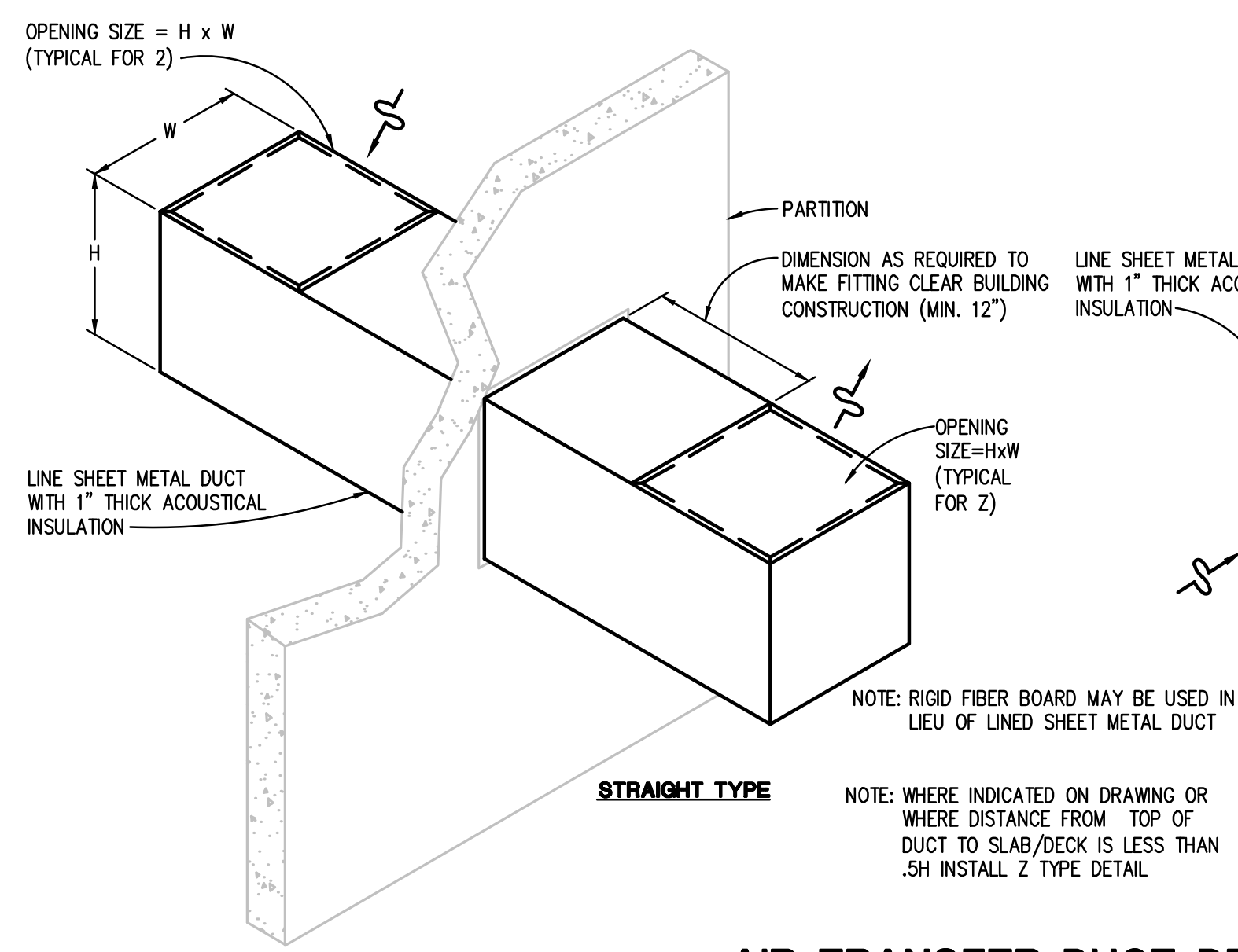
ROOF CURB CAP DETAIL
NO SCALE



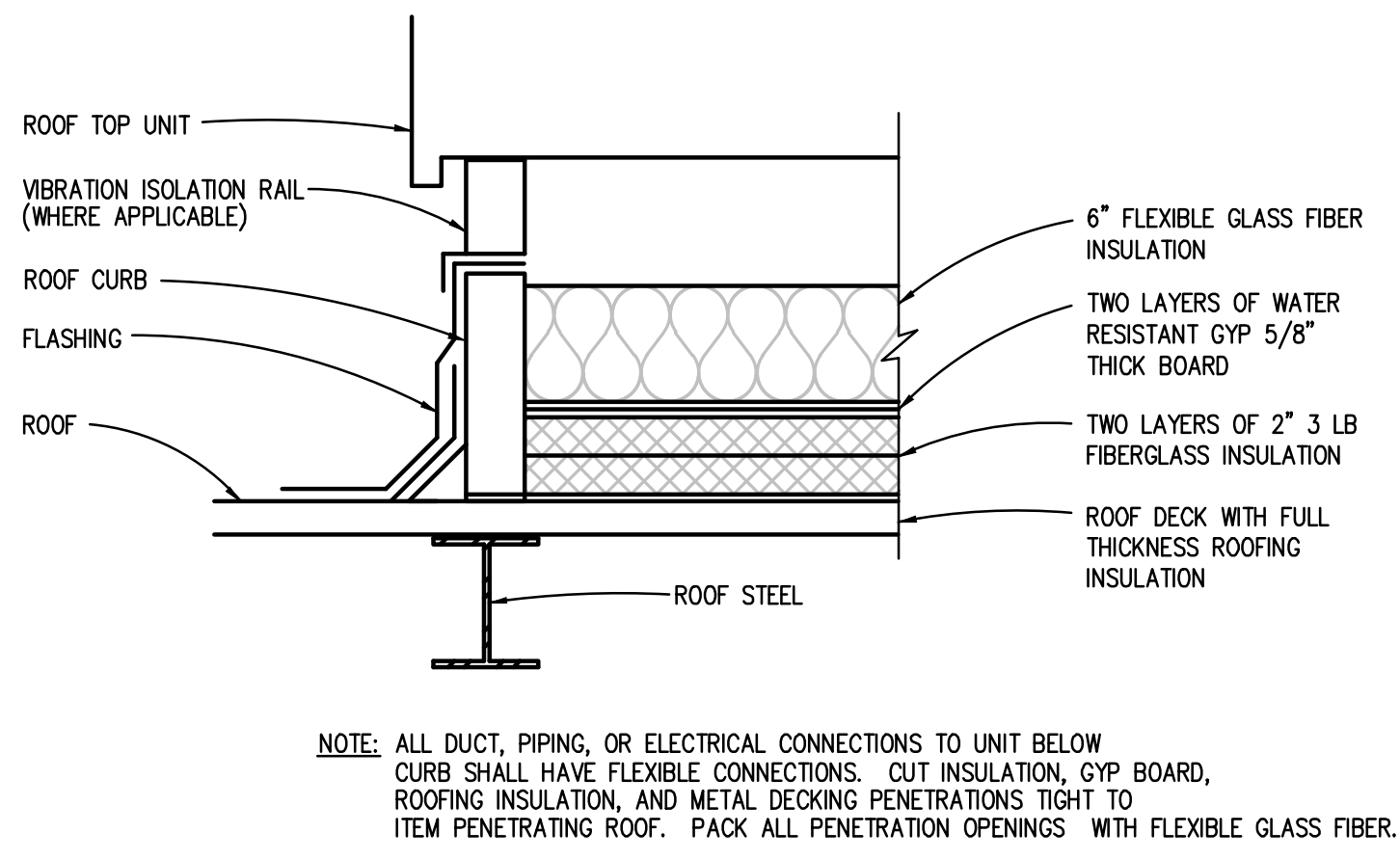
FLOOR DRAIN DETAIL (EXISTING FLOORS)
NO SCALE



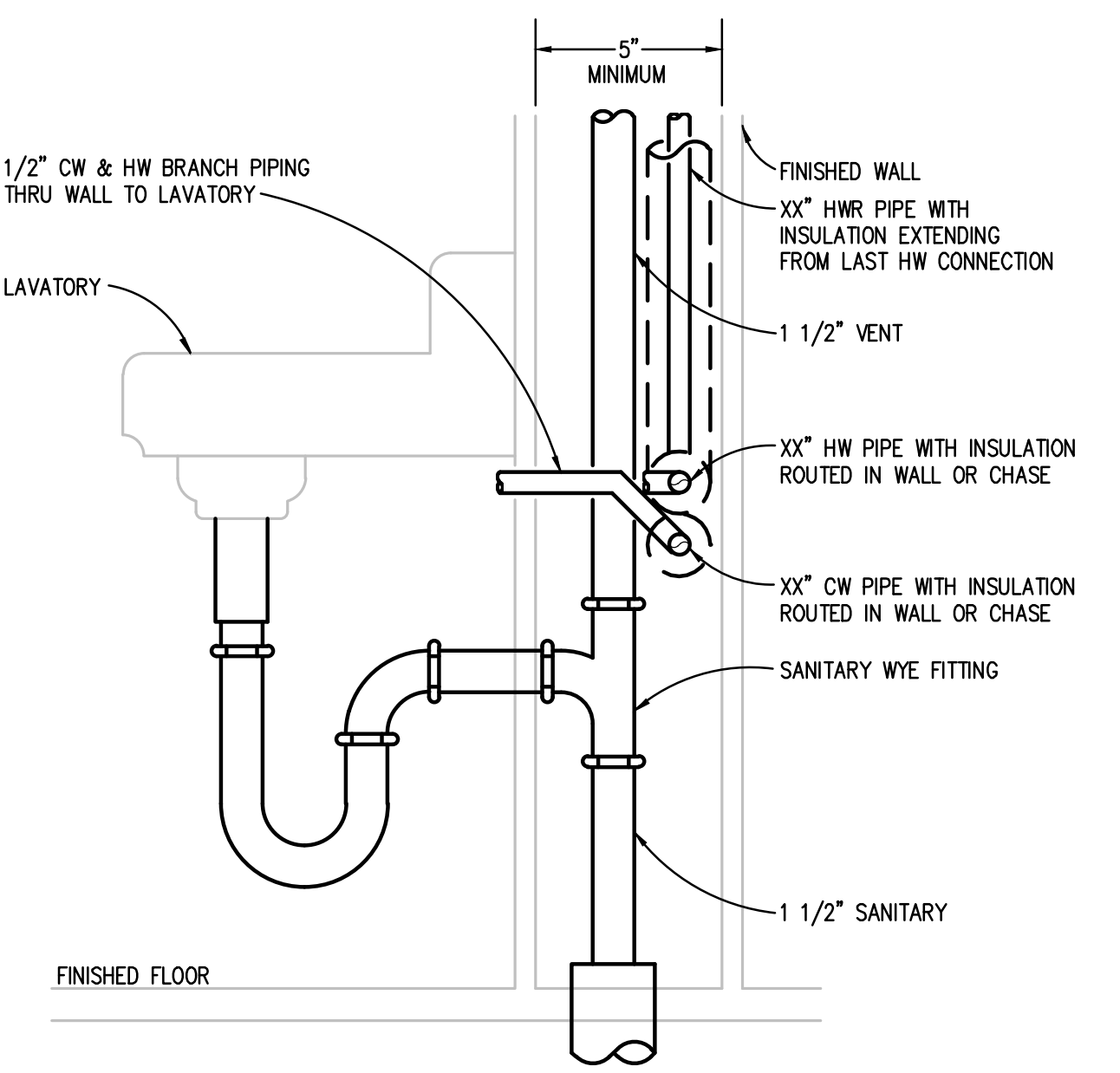
DOWNFEED CONV. OR CUH WITH TWO-WAY CONTROL VALVE PIPING DIAGRAM
NO SCALE



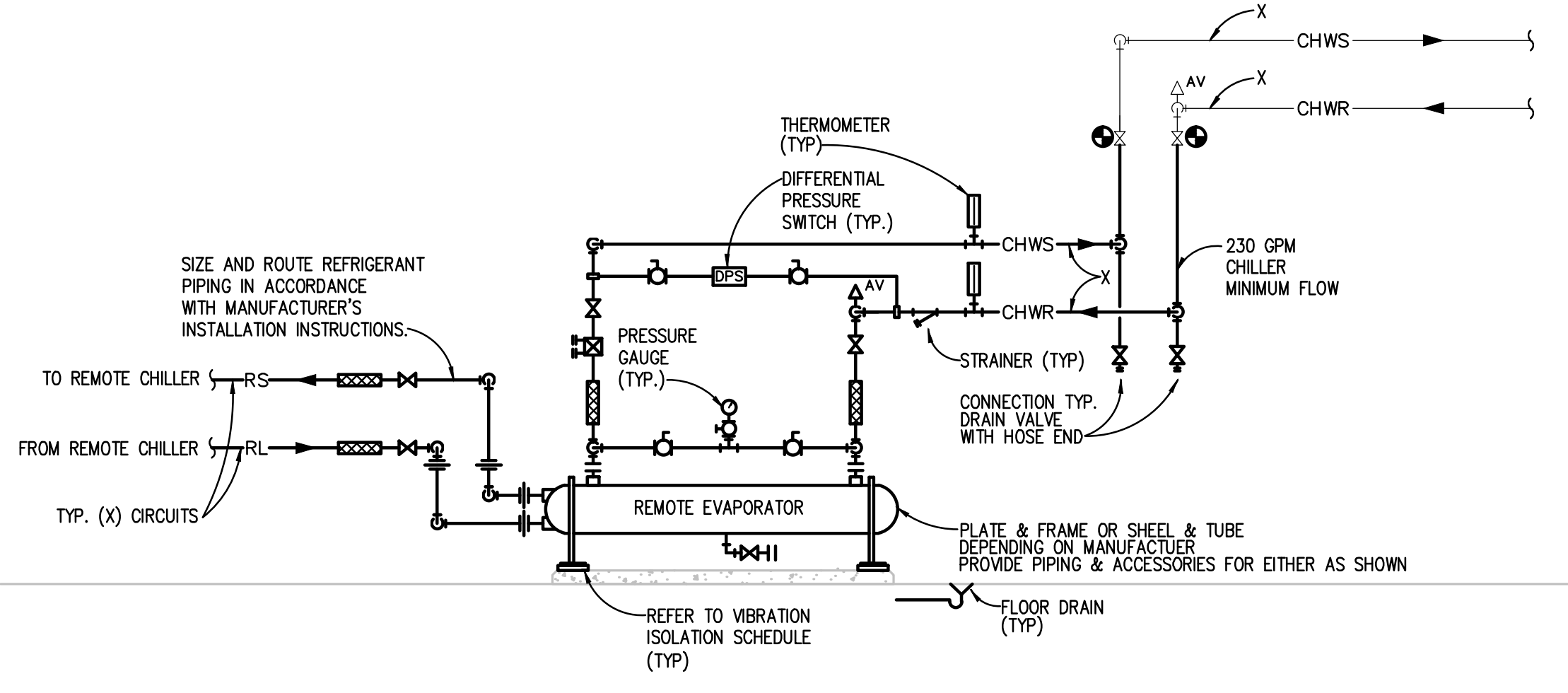
AIR TRANSFER DUCT DETAIL
NO SCALE



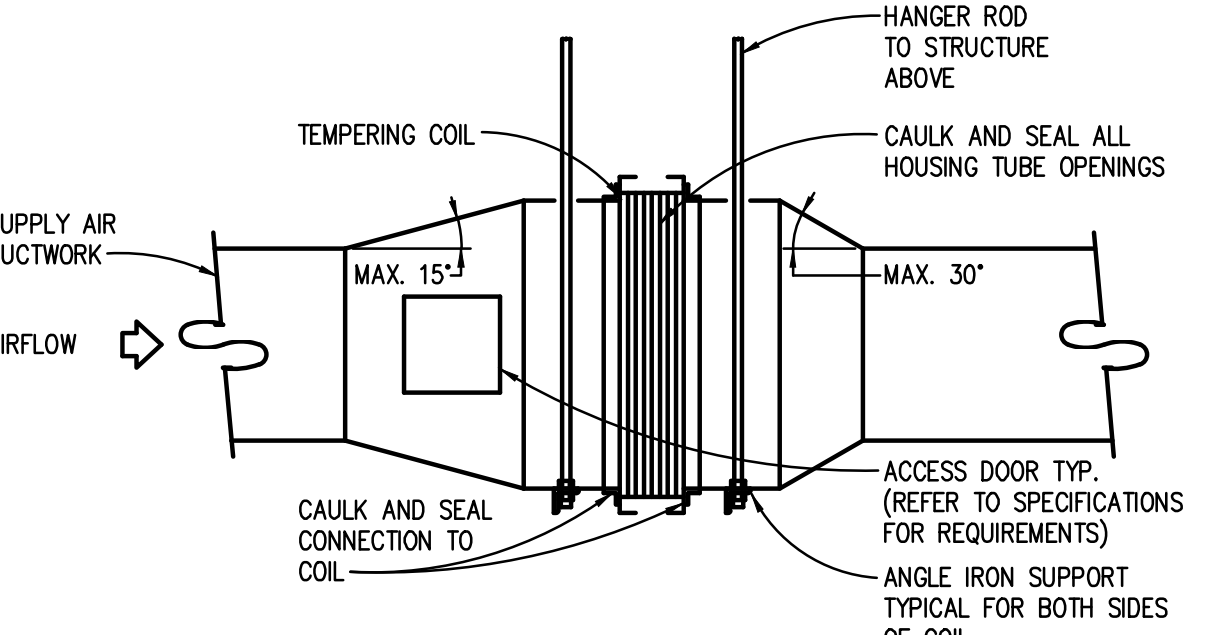
ROOF TOP UNIT CURB DETAIL
NO SCALE



TYPICAL LAVATORY DETAIL
NO SCALE

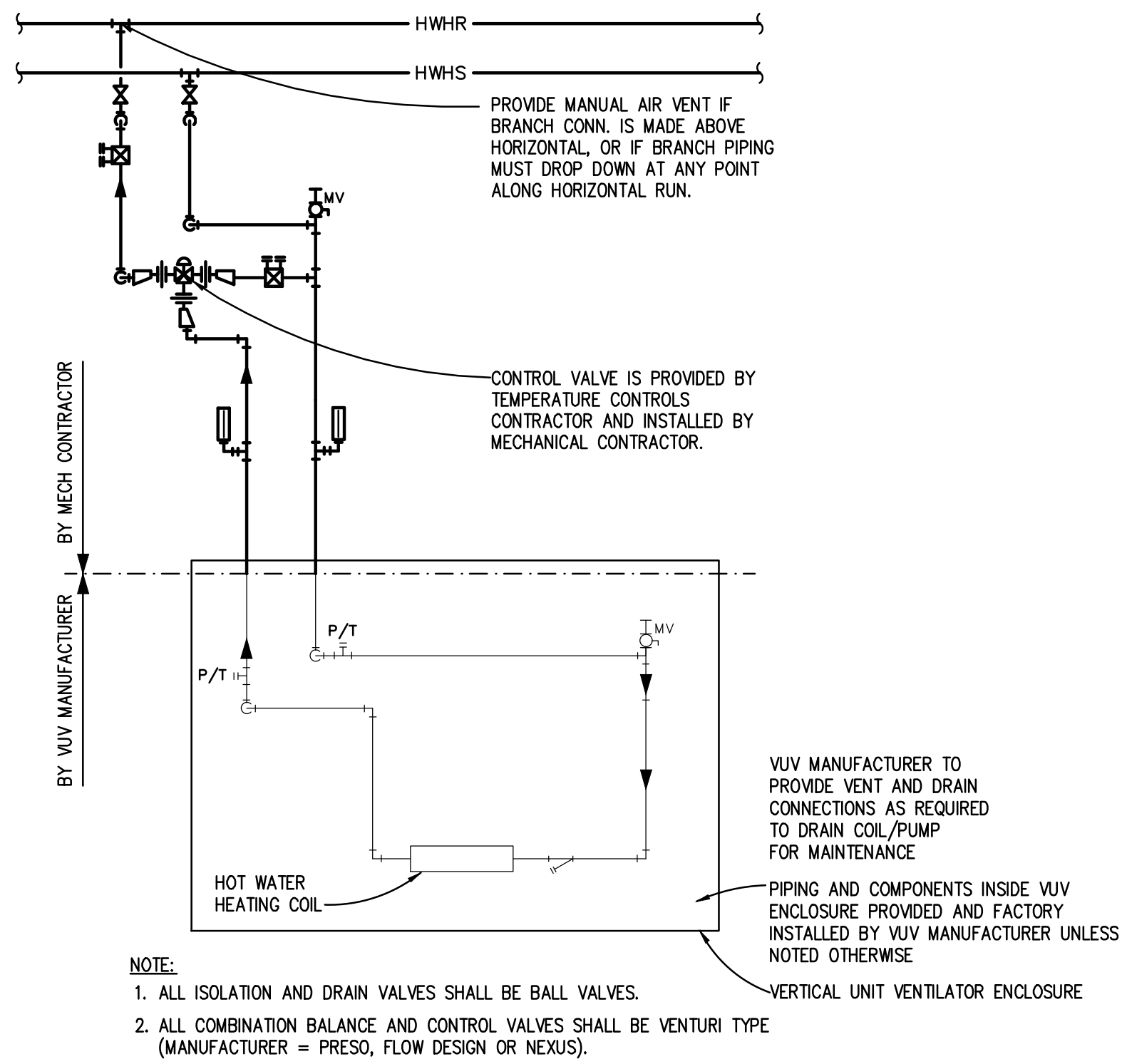


REMOTE DX EVAPORATOR PIPING DIAGRAM
NO SCALE

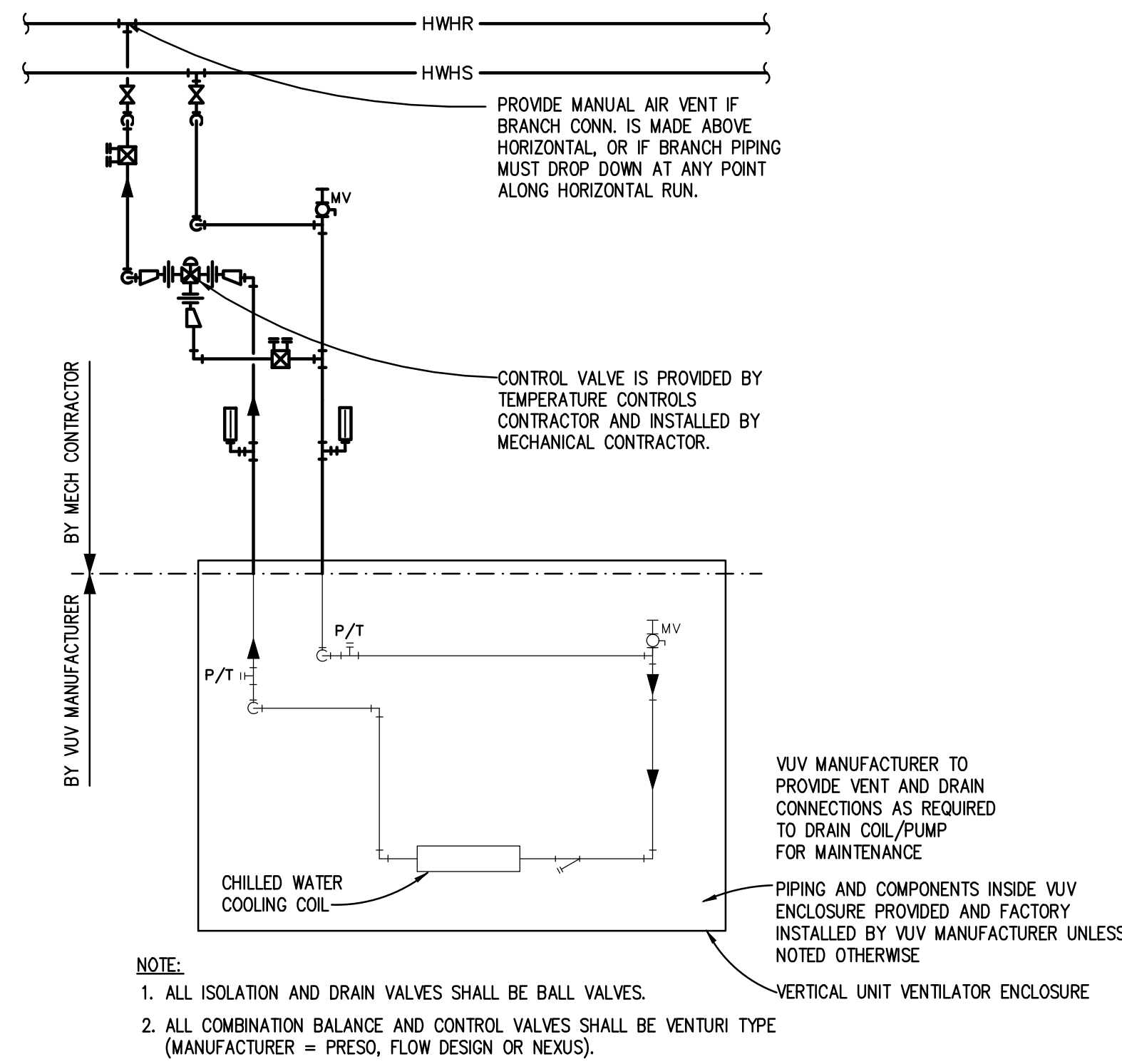


DUCT MOUNTED TEMPERING COIL INSTALLATION DETAIL
NO SCALE

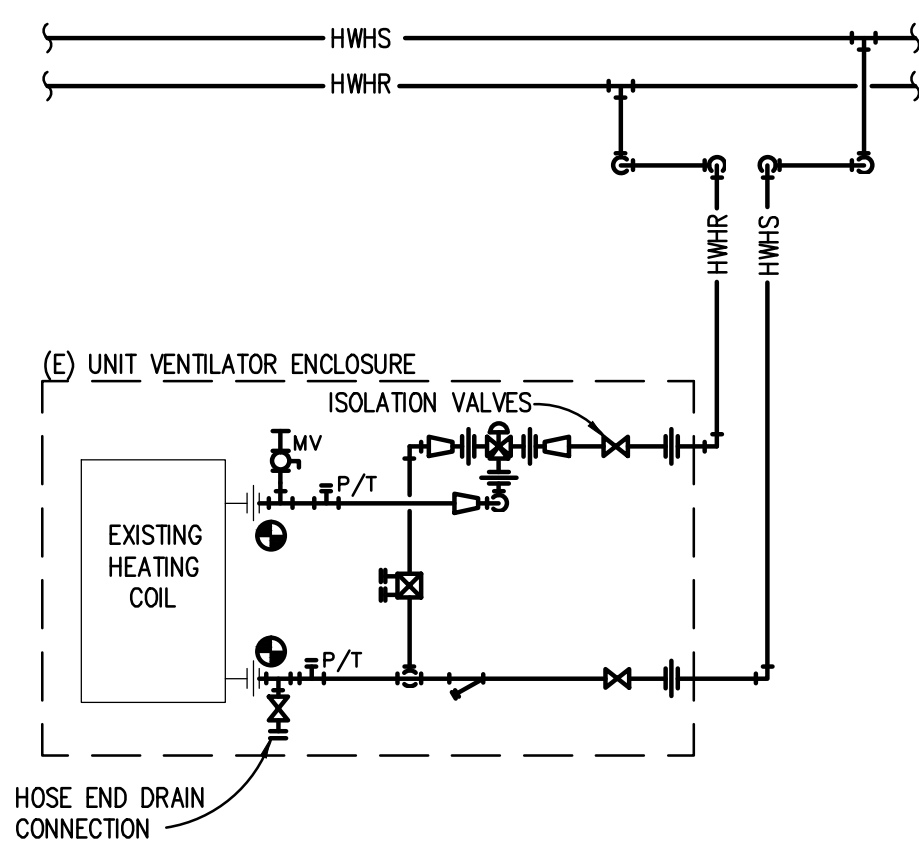
g:\2015\2015-0143-00\Cad\longacre es\2015-0143-03-M6-DT.dwg, M6.1, 11/29/2016 1:10:55 PM, Joel R. Maguire, Electronic - PDF.pc3, 0.77684, Peter Basso Associates Inc.



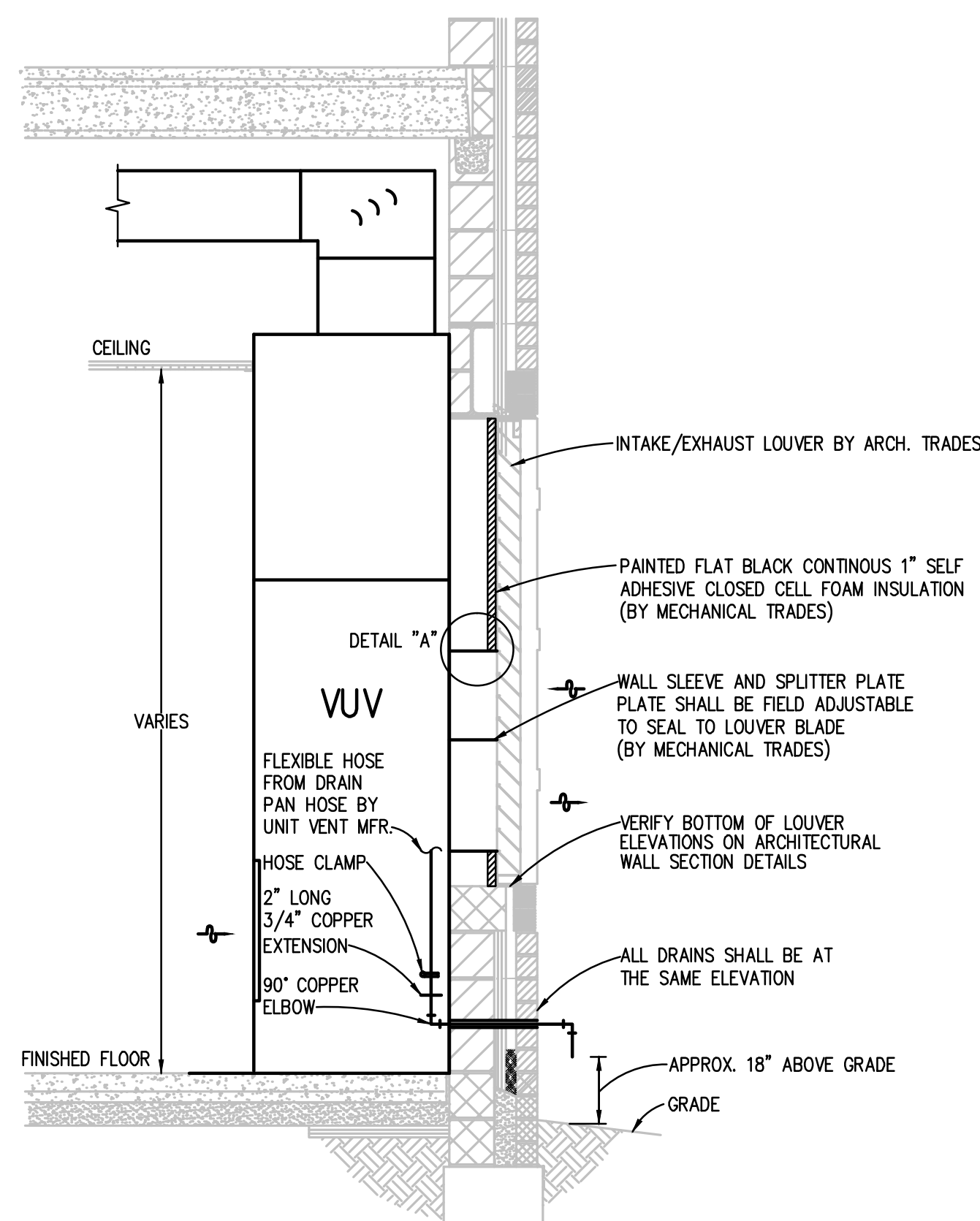
VUV HOT WATER HEATING COIL WITH THREE WAY CONTROL VALVE PIPING DIAGRAM
NO SCALE



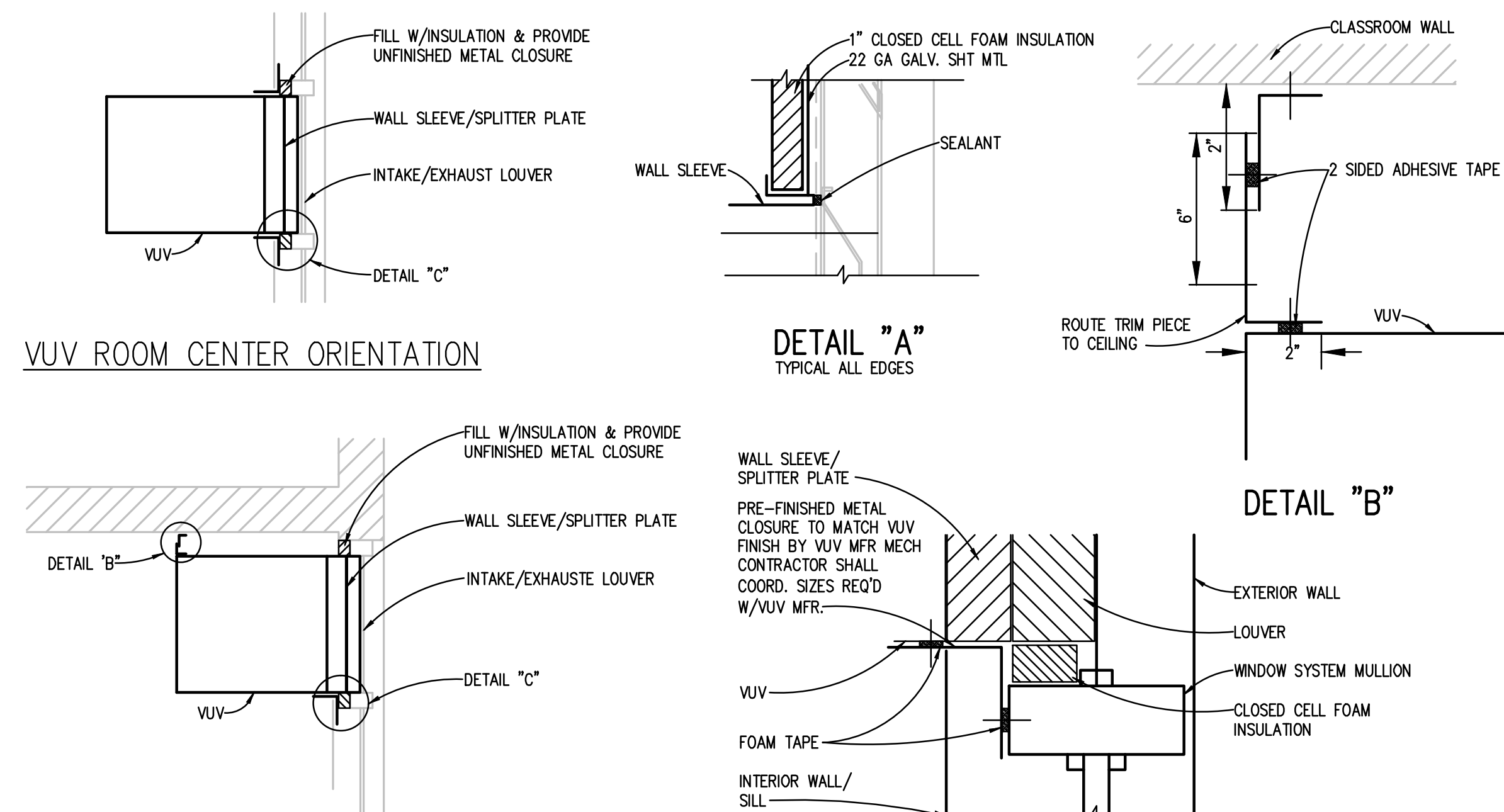
VUV CHILLED WATER HEATING COIL WITH THREE WAY CONTROL VALVE PIPING DIAGRAM
NO SCALE



(E) UNIT VENTILATOR WITH 3-WAY HOT WATER CONTROL VALVE PIPING DIAGRAM
NO SCALE



VERTICAL UNIT VENTILATOR SECTION VUV/LOUVER DETAIL
NO SCALE



VUV ROOM CENTER ORIENTATION

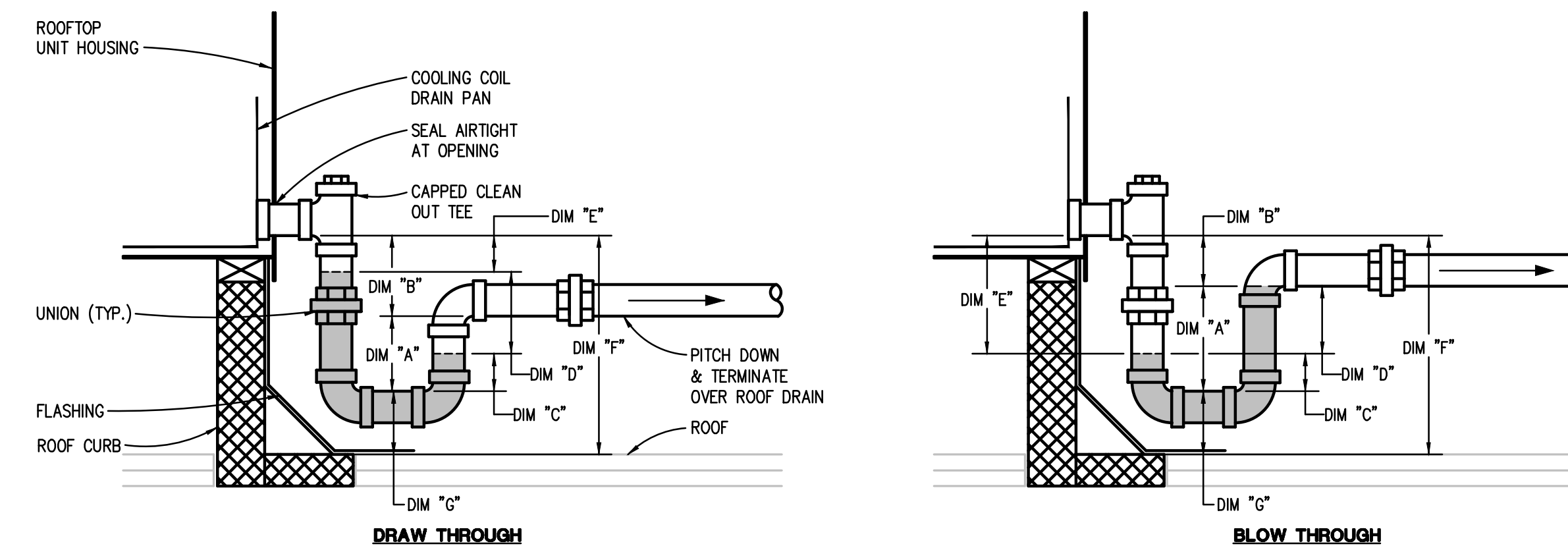
VUV ROOM CORNER ORIENTATION

VERTICAL UNIT VENTILATOR PLAN VIEW DETAILS
NO SCALE

NOTES
SECURELY FASTEN PRE-FINISHED METAL CLOSURE TO VUV CABINET & WINDOW MULLION WITH BUTTON HEAD SCREWS & SEAL W/FOAM TAPE.

TYPE OF SYSTEM	S.P. AT COIL DRAIN PAN (IN.) (NOTE A)	DIMENSION "A" (INCHES) MIN.	DIMENSION "B" (INCHES)	DIMENSION "C" (INCHES) (TRAP SEAL)	DIMENSION "D" (INCHES)	DIMENSION "E" (INCHES)	DIMENSION "F" (INCHES)			
							DRAIN PIPE SIZE (INCHES)			
							1 1/2	2	2 1/2	3
DRAW THROUGH	-5.1 TO -6	5.0	5.0	2	6	2	13.0	14.0	15.0	16.0
	-4.1 TO -5	4.5	4.5	2	5	2	12.0	13.0	14.0	15.0
	-3.1 TO -4	4.0	4.0	2	4	2	11.0	12.0	13.0	14.0
	-2.1 TO -3	3.5	3.5	2	3	2	10.0	11.0	12.0	13.0
BLOW THROUGH	UP TO -2	3.0	3.0	2	2	2	9.0	10.0	11.0	12.0
	UP TO +2	4.0	2.0	2	2	4	9.0	10.0	11.0	12.0
	+2.1 TO +3	5.0	2.0	2	3	5	10.0	11.0	12.0	13.0
	+3.1 TO +4	6.0	2.0	2	4	6	11.0	12.0	13.0	14.0
	+4.1 TO +5	7.0	2.0	2	5	7	12.0	13.0	14.0	15.0
	+5.1 TO +6	8.0	2.0	2	6	8	13.0	14.0	15.0	16.0

NOTES: A. REFER TO ROOFTOP AIR HANDLING UNIT (COMMERCIAL, UNITARY, MODULAR) SCHEDULE FOR (-) OR (+) STATIC PRESSURE AT COIL DRAIN PAN.
B. ENERGY RECOVERY UNIT HEAT EXCHANGER CONDENSATE PAN TRAP PIPING OUTSIDE CASING SHALL BE INSULATED AND HEAT TRACED.
C. DIMENSION "C" IS MIN: 3" FOR UP TO 1 1/2" DRAIN PIPE
4" FOR 2" DRAIN PIPE
5" FOR 2 1/2" OR 3" DRAIN PIPE
6" FOR 4" DRAIN PIPE
D. PROVIDE ROOF CURB WITH ADEQUATE HEIGHT TO MEET DIMENSION "F"



ROOFTOP AIR HANDLING UNIT CONDENSATE DRAIN PAN TRAP DETAIL
NO SCALE

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SCHEDULES GENERAL NOTES:

- TYPICAL FOR ALL SCHEDULE SHEETS: 1. REFER TO ELECTRICAL STANDARD SCHEDULES... 2. PROVIDE THE FOLLOWING FACTORY-WIRED ELECTRICAL OPTIONS/ACCESSORIES... 3. FOR MODULATION/CONTROL TYPE COLUMN... 4. IF VARIABLE FREQUENCY CONTROLLERS ARE INDICATED... 5. WHERE EQUIPMENT IS INDICATED TO HAVE A SINGLE POINT ELECTRICAL CONNECTION... 6. WHERE PACKAGED EQUIPMENT IS PROVIDED... 7. WHERE EQUIPMENT IS DESIGNATED BY MANUFACTURER... 8. WHERE EQUIPMENT IS SCHEDULED TO INCLUDE A SERVICE RECEPTACLE... 9. SIZE ALL EQUIPMENT FEEDERS BASED ON THE LISTED MOP...

ABOVEGROUND PLUMBING PIPE & ACCESSORY INSULATION APPLICATION SCHEDULE table with columns for material, insulation, and jacket material.

INDOOR PIPE SYSTEM AND SIZE (INCHES) table with rows for domestic cold water and domestic hot water supply & return.

GENERAL NOTES:

- 1. 'X' OR THICKNESS IN INCHES INDICATES ACCEPTABLE SELECTION... 2. INSULATE PIPING WITHIN AIR HANDLING EQUIPMENT THE SAME AS INDOOR PIPING...

KEYED NOTES:

- A. PROVIDE FIELD APPLIED JACKET FOR PIPING EXPOSED IN EQUIPMENT ROOMS... B. PROVIDE MANUFACTURER'S RECOMMENDED PROTECTIVE COATING...

PLUMBING PIPING & VALVE APPLICATION SCHEDULE table with columns for material, pressure connections, gravity DWV connections, and isolation valves.

ABOVEGROUND DOMESTIC WATER (POTABLE AND NON-POTABLE) ON DISTRIBUTION SIDE OF METER... ABOVEGROUND SANITARY WASTE & VENT... UNDERGROUND SANITARY WASTE & VENT... GENERAL NOTES...

KEYED NOTES:

- A. GROOVED AND PRESSURE SEALED FITTINGS, JOINTS, AND COUPLINGS... B. JOINTS ARE NOT PERMITTED ON UNDERGROUND WATER PIPING... C. USE CAST IRON DRAINAGE PATTERN (DURHAM) FITTINGS... D. INSTALL IN CONTAINMENT JACKET... E. USE STEEL WELDING FITTINGS AND WELDED JOINTS... F. NO JOINTS ALLOWED UNDERGROUND.

ABOVEGROUND HVAC PIPING & VALVE APPLICATION SCHEDULE table with columns for material, connection, and isolation valves.

GENERAL NOTES: 1. 'X' INDICATES ACCEPTABLE SELECTION... 2. DISSIMILAR-METAL PIPING JOINTS... 3. USE UNIONS OR FLANGES AT VALVE AND EQUIPMENT CONNECTIONS... 4. HVAC EQUIPMENT DRAINS, VENTS, SAFETY VALVE PIPING... 5. GROOVED END VALVES MAY BE USED WITH GROOVED PIPING.

KEYED NOTES:

- A. GROOVED FITTINGS, JOINTS, AND COUPLINGS... B. BALL VALVE WITH 250 PSIG STEAM TRIM... C. BALL VALVE WITH 150 PSIG STEAM TRIM... D. GROOVED FITTINGS, JOINTS AND COUPLINGS MAY BE USED IN MECHANICAL ROOMS ONLY.

DUCT SYSTEM APPLICATION SCHEDULE table with columns for duct material and supply/return/exhaust air systems.

GENERAL NOTES: 1. 'X' INDICATES ACCEPTABLE SELECTION... 2. 4 X 1 PVC-COATED GALVANIZED STEEL... 3. 1 X 4 (4 X 1 REVERSE COATED) PVC-COATED GALVANIZED STEEL... 4. 4 X 4 PVC-COATED GALVANIZED STEEL...

KEYED NOTES:

- A. SCREWS, DAMPERS, OR PROJECTIONS OF ANY TYPE ON INTERIOR OF DUCT SURFACE ARE PROHIBITED... B. DUCT SHALL BE LINED WITHIN 25 FEET UPSTREAM OF FANS... C. ALL WELDED CONSTRUCTION.

DUCT SYSTEM INSULATION APPLICATION SCHEDULE table with columns for insulation material and thickness.

DUCT SYSTEMS LOCATED INDOORS: SUPPLY AIR, EXCEPT AS NOTED BELOW... FIBROUS-Glass DUCTS... DOUBLE-WALL METAL DUCTS WITH INSULATION... METAL DUCTS WITH DUCT LINER... EXPOSED SUPPLY DUCT IN CONDITIONED SPACE... FABRIC SUPPLY DUCTS... FACTORY-INSULATED FLEXIBLE DUCTS... FLEXIBLE CONNECTORS... VIBRATION-CONTROL DEVICES... FACTORY-INSULATED ACCESS PANELS AND DOORS.

GENERAL NOTES:

- 1. 'X' OR THICKNESS IN INCHES INDICATE ACCEPTABLE SELECTION... 2. REFER TO METAL DUCT SECTION OF SPECIFICATIONS FOR DUCT LINING AND DOUBLE-WALL INSULATED DUCT... 3. REFER TO HVAC CASINGS SECTION OF SPECIFICATIONS FOR DOUBLE-WALL INSULATED PLENUMS.

KEYED NOTES:

- A. INCLUDE INSULATION AROUND DUCT MOUNTED COILS AND AIR TERMINAL UNIT COILS... B. NUMBER OF LAYERS AND TOTAL INSULATION THICKNESS AS RECOMMENDED BY SELECTED MANUFACTURER... C. DOES NOT APPLY TO PREFABRICATED, ZERO-CLEARANCE GREASE DUCT... D. PROVIDE MANUFACTURER'S RECOMMENDED PROTECTIVE COATING... E. INSULATE DUCTWORK IN CRAWLSPACES, VENTILATED ATTICS, AND PARKING GARAGES...

FARMINGTON PUBLIC SCHOOLS - 2015 BOND 2017 RENOVATIONS LONGACRE ELEMENTARY SCHOOL

MECHANICAL SCHEDULES

- PRELIMINARY [] DESIGN DEVELOPMENT [] CONSTRUCTION [] FINAL RECORD [] DRAWN BY: JRM CHECKED BY: RNR

REVISIONS: 11-30-2016

DATE: NOVEMBER 30, 2016 SHEET NO.:

M7.1LA

JOB NO. 161664A

PLUMBING CONNECTION SCHEDULE					
UNIT IDENTIFICATION	OW INCHES	HW INCHES	SAN INCHES	VENT INCHES	REMARKS
UR-1	3/4	-	2	1 1/2	
WC-1/WC-2	1 1/2	-	4	2	
LAV-1	1/2	1/2	1 1/2	1 1/2	
WF-1	3/4	3/4	1 1/2	1 1/2	
EW-1	1/2	-	1 1/2	1 1/2	
FD-1	-	-	3	-	

NOTE: INDIVIDUAL WATER LINE BRANCHES, WASTE LINES, VENTS, AND TRAPS FOR CONNECTION TO INDIVIDUAL FIXTURES, FIXTURE FITTINGS, AND SPECIALTIES SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE OR AS INDICATED ON DRAWINGS, WHICHEVER IS GREATER.

PLUMBING FIXTURE SCHEDULE										
UNIT IDENTIFICATION	WATER CLOSET & URINAL					FLUSH VALVE		TOILET SEAT	REMARKS	
	FIXTURE MATERIAL	FIXTURE COLOR	MOUNTING STYLE	BOWL TYPE	SUPPLY SPUD LOCATION	MANUFACTURER/MODEL	CONSUMPTION (GALLONS PER FLUSH)	MANUFACTURER/MODEL		MANUFACTURER/MODEL
WC-1	VITREOUS CHINA	WHITE	FLOOR	ELONGATED	TOP	KOHLER/K-4406	1.6	SLOAN/SOLIS	KOHLER/K-4731-SC	WITH BOTTOM DISCHARGE OUTLET.
WC-2 (CHLD)	VITREOUS CHINA	WHITE	FLOOR	ELONGATED	TOP	KOHLER/K-4321	1.6	SLOAN/SOLIS	PACKAGED WITH WATER CLOSET	WITH BOTTOM DISCHARGE OUTLET.
UR-1	VITREOUS CHINA	WHITE	WALL	ELONGATED	TOP	KOHLER/K-4904-ET	1.0	SLOAN/SOLIS	---	WITH BACK OUTLET. REFER TO ARCHITECTURAL DRAWINGS FOR URINAL HEIGHT.

APPROVED MANUFACTURERS:
 WATER CLOSETS - KOHLER, AMERICAN STANDARD, SLOAN.
 TOILET SEATS - KOHLER, AMERICAN STANDARD, BEMIS, CHURCH & OLSONITE.
 FLUSHMETERS - SLOAN.

UNIT IDENTIFICATION	LAVATORY/SINKS/WASH FOUNTAINS					FAUCET			REMARKS	
	FIXTURE MATERIAL	FIXTURE COLOR	MOUNTING STYLE	BOWL DIMENSIONS L x W x D INCHES	OVERALL DIMENSIONS L x W INCHES	MANUFACTURER/MODEL	FLOW RATE GALLONS/MINUTE	DESCRIPTION		MANUFACTURER/MODEL
LAV-1	VITREOUS CHINA	WHITE	WALL	15 x 10 x 6 1/2	21 1/4 x 18 1/8	KOHLER/K-2007	MAX. 0.25 GAL/USE	BRASS/CHROM PLATED, SINGLE FAUCET WITH METERED PUSH BUTTON OPERATION W/ VANDAL PROOF AERATOR	CHICAGO FAUCETS / 333-665VPA	NOTE 2, COMPLETE W/THERMOSTATIC MIXING VALVE, GRID DRAIN AND PROTECTIVE SHIELDING PIPE COVERS.
WF-1 (A.D.A)	STAINLESS STEEL	STAINLESS STEEL	FLOOR	---	36 x 32 HEMISPHERICAL	ACORN / 3423-ADA-2-H	0.5 GPM/STATION	3-STATION MANUAL METERED FAUCETS (PUSH BUTTON)	---	FLOOR MOUNTED, BACK OUTLET, 3-STATION, INTEGRAL ASSE 1070 MIXING VALVE, COLUMN BRACED TO BACKSPLASH
SK-1	STAINLESS STEEL	STAINLESS STEEL	TOP	16 x 16 x 6	19 1/2 x 22	ELKAY / LRAD2022	1.5			NOTE 2, COMPLETE W/ THERMOSTATIC MIXING VALVE, GRID DRAIN

UNIT IDENTIFICATION	FLOOR DRAINS & FLOOR SINKS					ACCESSORIES AND FEATURES	MANUFACTURER/MODEL	REMARKS
	PATTERN	TOP SHAPE	OUTLET SIZE INCHES	OUTLET TYPE	COATING			
FD-1	FLOOR DRAIN	ROUND	3	BOTTOM	ENAMEL	SEEPAGE FLANGE, CLAMPING DEVICE	JAY R. SMITH / 2005Y-NB-A	7 INCH DIAMETER NICKEL BRONZE TOP STRAINER, COMPLETE WITH TRAP SEAL PROTECTION DEVICE (SURESEAL), REFER TO SPECIFICATIONS.

NOTE:
 1. PROVIDE GRID WASTE OUTLET FOR ALL SINKS.
 2. PROVIDE CHROME PLATED, CAST BRASS P-TRAP AND WASTE TO WALL ESCUTCHEON.

APPROVED MANUFACTURERS:
 LAVATORIES - KOHLER, AMERICAN STANDARD, SLOAN, & ZURN.
 SINKS - ELKAY & JUST.
 SERVICE SINKS - KOHLER, AMERICAN STANDARD & ZURN.
 WASHFOUNTAINS - ACORN, BRADLEY, INTERSAN, & WILLOUGHBY
 FAUCETS - CHICAGO FAUCETS, AMERICAN STANDARD, & SLOAN.
 FLOOR DRAINS - JOSAM, MIFAB, SOUX CHEF, JAY R. SMITH, TYLER PIPE, WATTS & ZURN.

UNIT IDENTIFICATION	ELECTRIC WATER COOLER & DRINKING FOUNTAIN					BUBBLER			REMARKS	
	FIXTURE MATERIAL	FIXTURE COLOR	MOUNTING STYLE	NUMBER OF BOWLS	OVERALL DIMENSIONS L x W x D INCHES	MANUFACTURER/MODEL	STYLE	FLOW RATE		ELECTRICAL
EW-1	STAINLESS STEEL	SATIN FINISH	WALL MOUNTED	2 (B-LEVEL)	36-1/2 x 18-9/16 x 39	ACORN A172408F-UBL-BF25-BCD	VANDAL-RESISTANT	8 GPH	115V/1PH	NON-FILTERED, COMPLETE WITH MOUNTING FRAME, BOTTLE FILLER, ADA ACCESSORIES
DF-1	STAINLESS STEEL	SATIN FINISH	WALL MOUNTED	1	29-1/2 x 19 x 11	ELKAY EDFB12C	FLEXI-GUARD SAFETY BUBBLER	0.5 GPM	---	FULLY RECESSED FOUNTAIN

APPROVED MANUFACTURERS:
 WATER COOLERS - ELKAY, ACORN, OASIS, HALSEY-TAYLOR, & HAWS.



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
 2017 RENOVATIONS
 LONGACRE ELEMENTARY SCHOOL

MECHANICAL SCHEDULES

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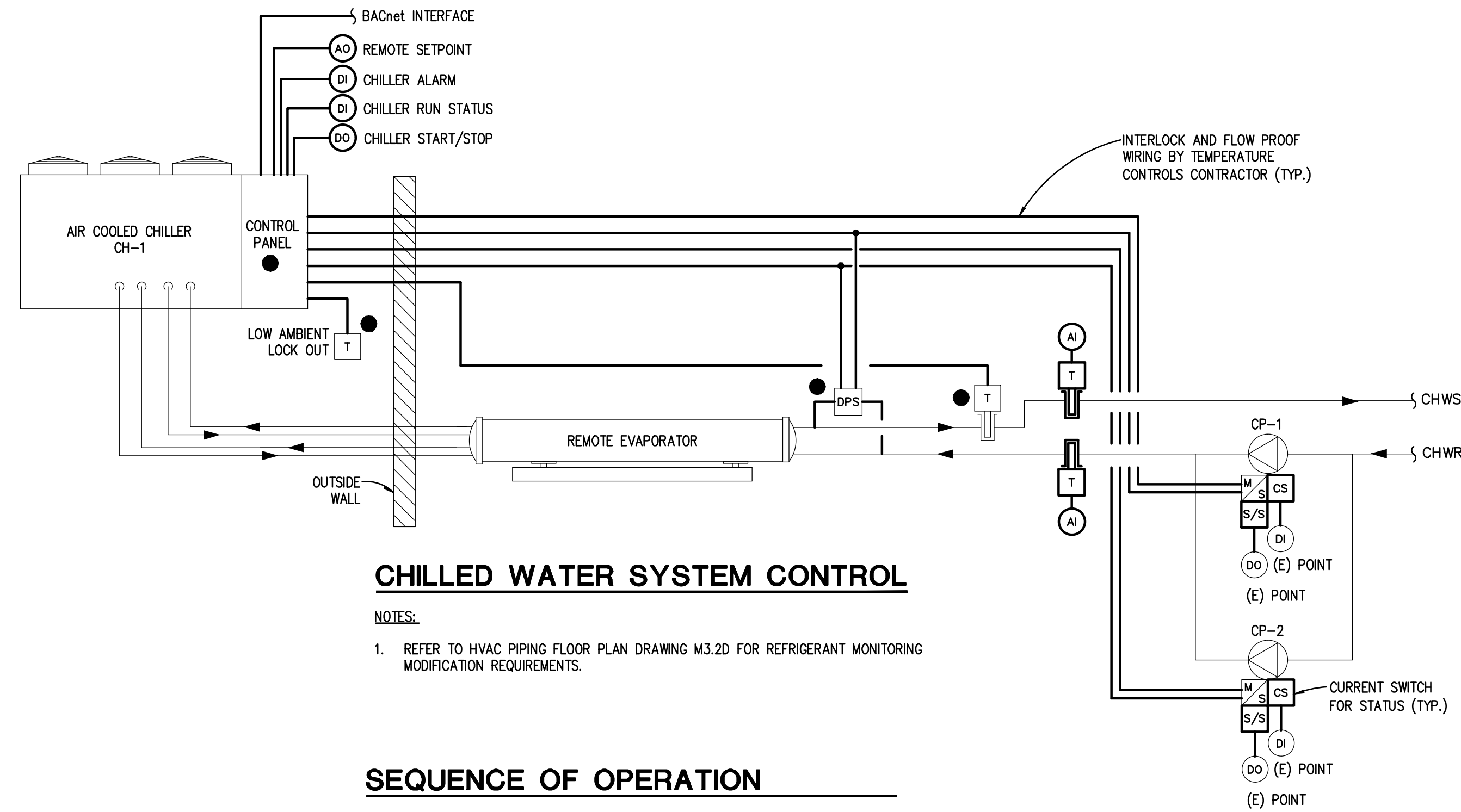
DRAWN BY: JRM
 CHECKED BY: RNR

REVISIONS:
 BIDS: 11-30-2016

DATE: NOVEMBER 30, 2016
 SHEET NO.:

M7.3LA

JOB NO. 161664A



CHILLED WATER SYSTEM CONTROL

NOTES:

- REFER TO HVAC PIPING FLOOR PLAN DRAWING M3.20 FOR REFRIGERANT MONITORING MODIFICATION REQUIREMENTS.

SEQUENCE OF OPERATION

CHILLED WATER SYSTEM:

- ALL SETPOINTS, RESET SETPOINTS, DELAYS, TIME INTERVALS, AND DEADBANDS DESCRIBED IN SEQUENCE SHALL BE ADJUSTABLE BY SYSTEM OPERATORS. APPROPRIATE DEADBANDS SHALL BE USED TO PREVENT SHORT CYCLING SITUATIONS. ALL FAN AND PUMP MOTOR CONTROL SWITCHES SHALL BE IN "AUTO" POSITION.
- CHILLER PACKAGED CONTROLS SHALL BE SET FOR REMOTE ENABLE FUNCTION BY OPERATORS.
- CHILLED WATER SYSTEM OPERATION SHALL BE ENABLED BY DDC SYSTEM AUTOMATICALLY WHEN OA ENTHALPY IS GREATER THAN 23 BTU/LB AND THERE IS A DEMAND FOR CHW PRODUCTION. DDC SHALL DISABLE CH-1 WHEN OA ENTHALPY IS LESS THAN 21 BTU/LB.
- THE CHW CIRCULATING PUMPS CP-1 & CP-2 SHALL HAVE START/STOP CAPABILITY FROM THE DDC SYSTEM. ONE OF THE TWO PUMPS SHALL BE ACTIVATED BY DDC WHEN SYSTEM IS ENABLED. THE OTHER WILL SERVE AS STANDBY.
- DDC SHALL ALTERNATE PUMP OPERATION BASED ON RUNTIME HOURS OR AT THE BEGINNING OF EACH MONTH - OPERATOR SELECTABLE. ALTERNATION SHALL OCCUR AT BEGINNING OF NEXT CHILLER START CYCLE.
- DDC SHALL MONITOR OPERATING STATUS OF EACH PUMP VIA CURRENT SWITCHES. UPON PUMP FAILURE, DDC SHALL ACTIVATE FAILURE ALARM AND AUTOMATICALLY START THE STANDBY PUMP. DDC SHALL TOTALIZE EACH PUMP'S RUN TIME HOURS OF OPERATION.
- WHEN CHW FLOW IS PROVEN BY DIFFERENTIAL PRESSURE SWITCH WIRED IN SERIES WITH PARALLELED PUMP AUXILIARY CONTACTS, CHILLER INTERLOCKS ARE COMPLETE AND THE CHILLER PACKAGED CONTROL PANEL WITH INTEGRAL TEMPERATURE SENSOR SHALL SEQUENCE CHILLER OPERATION TO MAINTAIN THE CHILLER'S CHW SUPPLY SETPOINT OF 42F (ADJUSTABLE AT CHILLER PANEL OR FROM REMOTE SETPOINT ADJUSTMENT THRU DDC).
- DDC SHALL MONITOR OTHER CHILLER POINTS VIA BACNET INTERFACE. ALLOW FOR TEN ADDITIONAL POINTS OF INFORMATION AT THE BAS GRAPHIC.
- DDC SHALL KEEP PUMP CP-3 ACTIVATED FOR 5 MINUTES AFTER CHILLER SHUTDOWN CYCLE IS ACTIVATED.
- REFRIGERANT MONITOR SHALL LOCKOUT CHILLER OPERATION WHEN A REFRIGERANT LEAK IS DETECTED.
- DDC SHALL PREVENT SHORT CYCLING OF CHILLER WITH A 20 MINUTE INTERVAL BETWEEN CHILLER SHUTDOWN AND CHILLER RESTART.

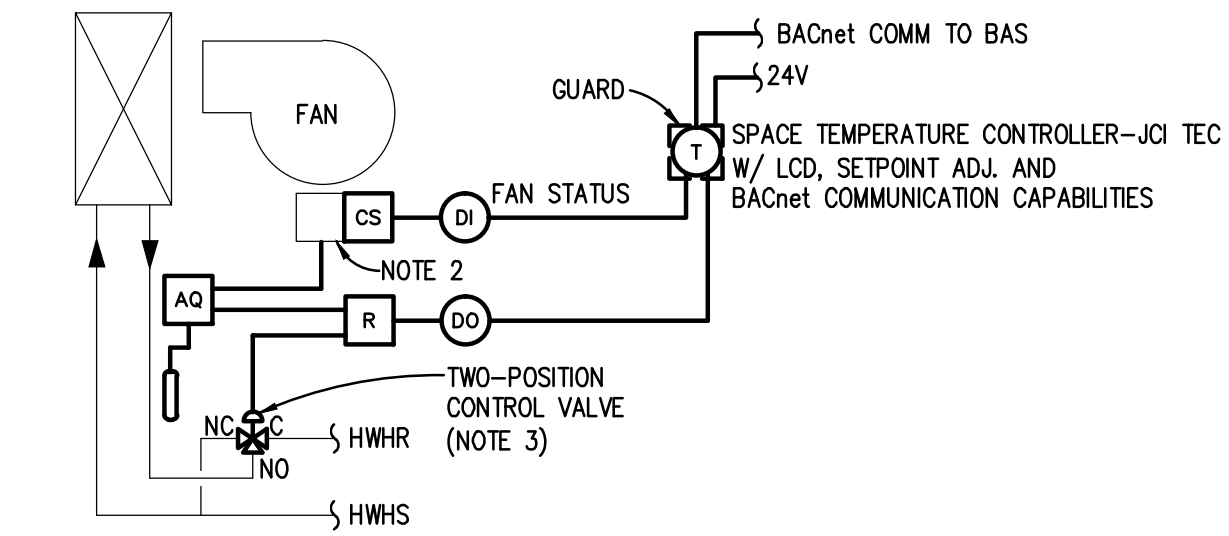
CAUTION
DO NOT ENTER WHEN THIS ALARM IS FLASHING. IT COULD INDICATE A REFRIGERANT RELEASE IN THIS ROOM. PLEASE CALL SCHOOL DISTRICT REPRESENTATIVES AND REPORT THIS ALARM IMMEDIATELY.

REFRIGERANT LEAK SIGN DETAIL

NO SCALE

NOTES:

- PROVIDE SIGN WITH WHITE LETTERING ON RED BACKGROUND, POLYVINYL PLASTIC, 11" WIDE X 8-1/2" HIGH. ENGRAVED LETTERS SHALL BE MINIMUM 1/2" LETTER HEIGHT. SECURE TO WALL OR DOOR APPROPRIATELY.
- ONE SIGN REQUIRED AT EACH DOOR INTO/OUT OF THE MECHANICAL ROOM A141. REFER TO DWGS FOR LOCATIONS.



HWH CUH CONTROL

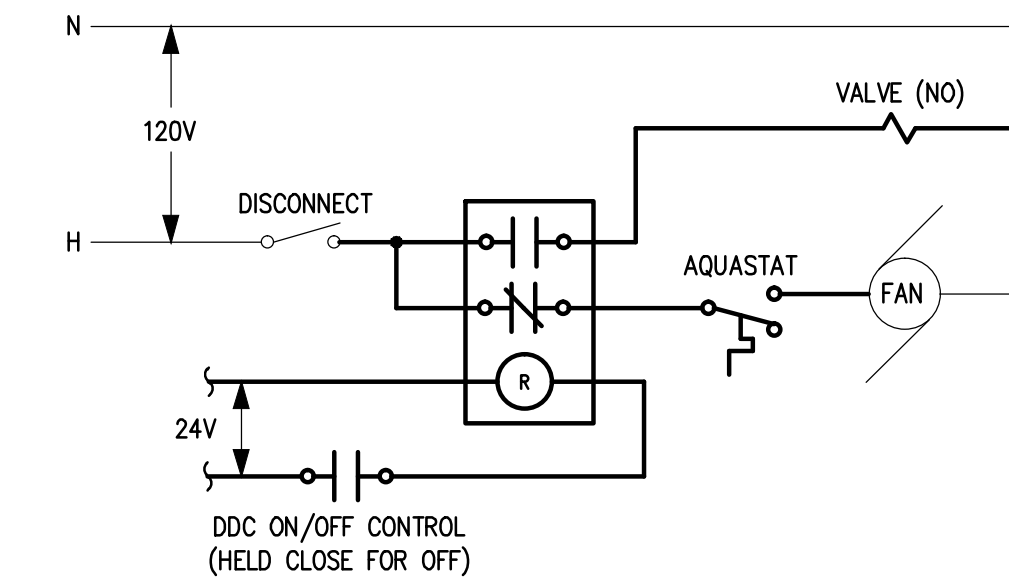
TYPICAL

NOTES:

- REFER TO FLOOR PLANS FOR QUANTITY AND LOCATION OF UNITS.
- AQUASTAT SHALL BE WIRED IN SERIES WITH FAN CONTROL WIRING CIRCUIT.
- CONTROL VALVE MANUFACTURER/MODEL SHALL BE SCHNEIDER ELECTRIC (FORMERLY EPE) / VM SERIES POPTOP ZONE VALVES WITH AP23A000 MODEL ACTUATOR WITH APPROPRIATE CONTROL SIGNAL TO INTERFACE WITH NEW CONTROLLER.

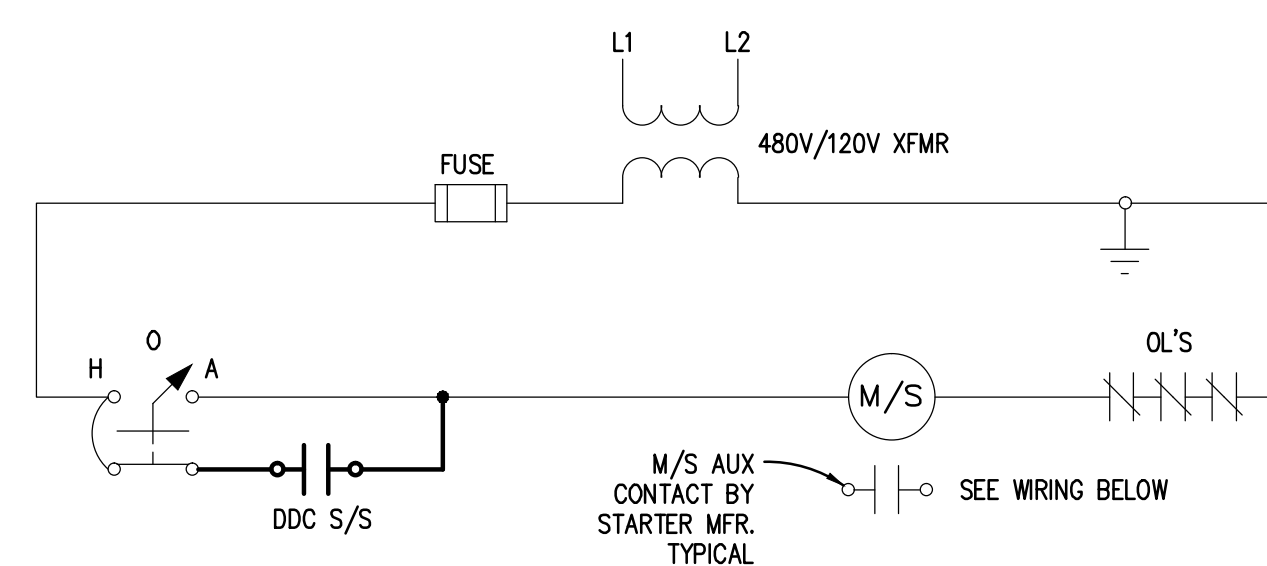
SEQUENCE OF OPERATION:

- JCI TEC CONTROLLER SHALL ENABLE/DISABLE FAN CIRCUIT AND OPEN/CLOSE HEATING VALVE AS REQUIRED TO MAINTAIN SPACE TEMP SETPOINT OF 69F DURING BLDG OCCUPANCY AND 55F DURING BLDG UNOCCUPANCY. FAN SHALL ACTIVATE UPON PROOF OF HWHR FLOW BY AQUASTAT. AQUASTAT SHALL PROVIDE 4T DEADBAND MINIMUM.
- TEC SHALL PROVIDE 2F DEADBAND AT SETPOINTS.
- TEC SHALL MONITOR FAN OPERATION. ABNORMAL OPERATING STATUS SHALL ACTIVATE AN ALARM.



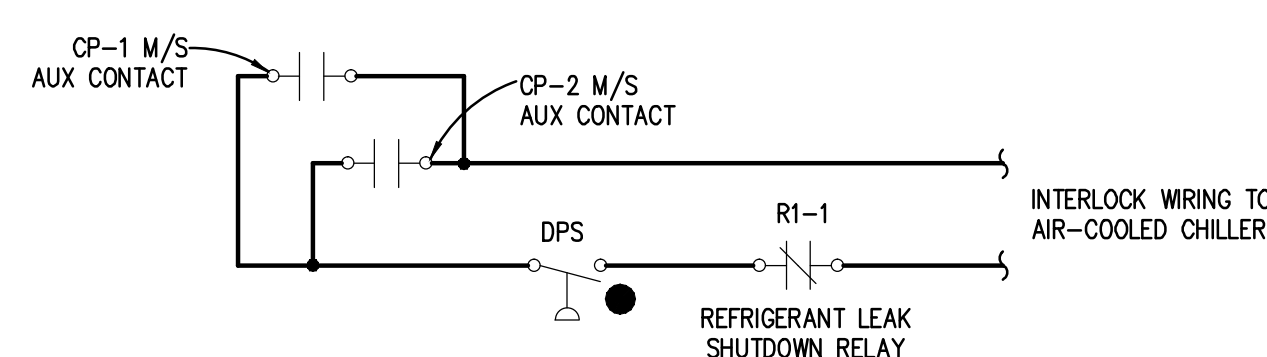
HWH CUH WIRING

TYPICAL

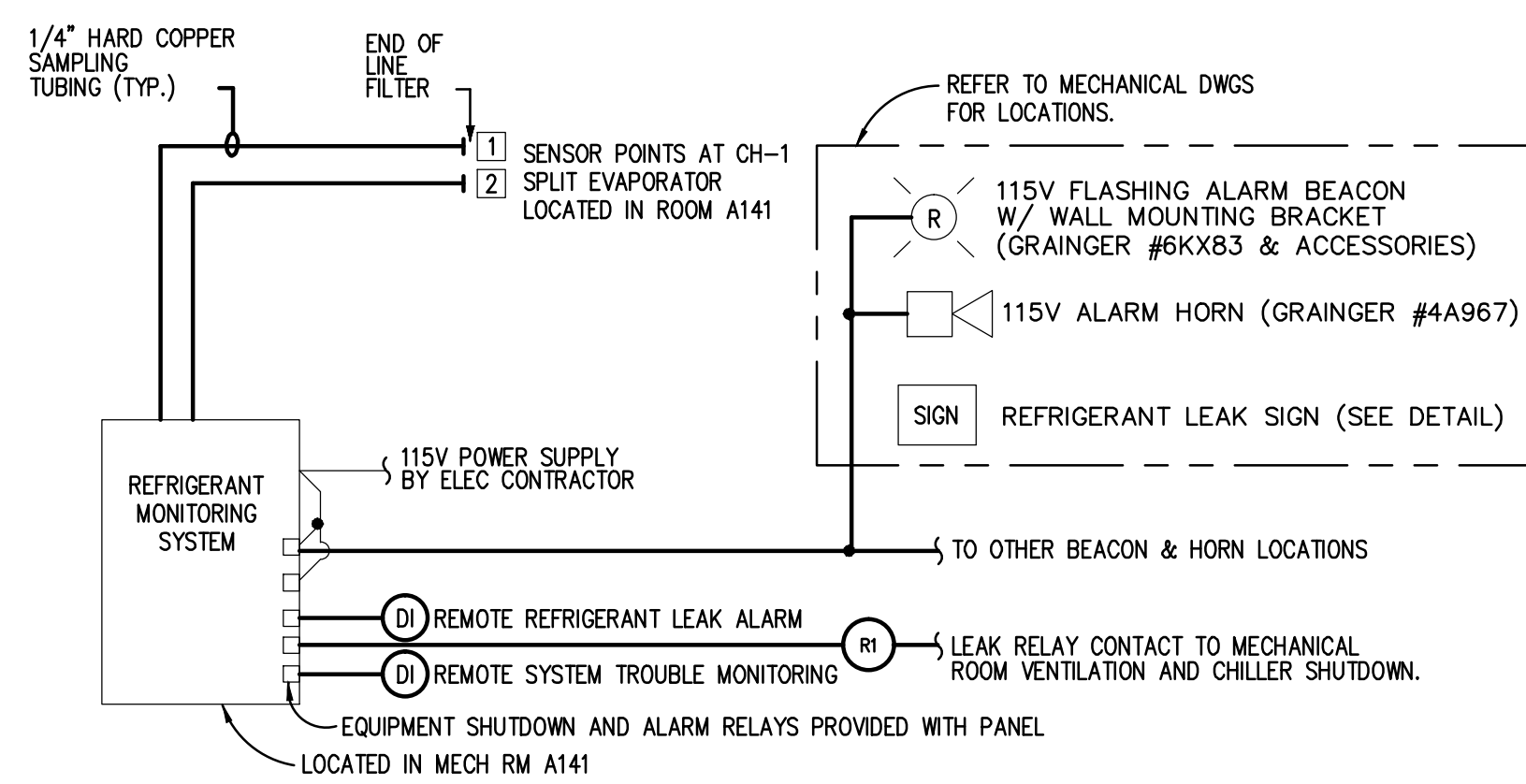


CHW PUMPS CP-1 & 2 M/S WIRING

TYPICAL



CH-1 INTERLOCK WIRING



REFRIGERANT MONITORING SYSTEM

NO SCALE

GENERAL NOTES:

- TC CONTRACTOR SHALL PROVIDE REFRIGERANT MONITORING SYSTEM FOR REFRIGERANT TYPE AS SPECIFIED AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- TC CONTRACTOR SHALL PROVIDE BEACONS AND HORNS AND PROVIDE ALL WIRING TO DEVICES.
- TC CONTRACTOR SHALL PROVIDE PANEL INTERFACE AND WIRING TO CHW SYSTEM DDC PANEL.
- ELECTRICAL CONTRACTOR SHALL PROVIDE DEDICATED 115V POWER SUPPLY TO REFRIGERANT MONITORING PANEL WHICH SHALL ALSO BE USED TO POWER BEACONS AND HORNS. ELECTRICAL CONTRACTOR SHALL PROVIDE JUNCTION BOX AT MONITORING PANEL IF NECESSARY.
- ELECTRICAL CONTRACTOR SHALL PROVIDE LOCKING BREAKER TO PREVENT ACCIDENTAL SHUTOFF OF SYSTEM.

SEQUENCE OF OPERATION:

- REFER TO 15970 REFRIGERANT MONITORING SPECIFICATION FOR DETAILS.
- REFRIGERANT MONITORING SYSTEM TROUBLE STATUS SHALL BE MONITORED BY DDC SYSTEM.
- REFRIGERANT MONITORING SYSTEM ALARM SHALL BE MONITORED BY DDC SYSTEM.
- WHEN THE REFRIGERANT MONITORING SYSTEM ALARM IS ACTIVATED, THE REFRIGERANT MONITORING SYSTEM ACTIVATES THE MECHANICAL ROOM VENTILATION PURSE MODE UPON ACTIVATION THROUGH DDC. DDC SHALL SHUTDOWN CHILLER IN AN ORDERLY MANNER, TURN OFF THE OPERATING PUMP, AND PROVIDE GAS WITH AN EMERGENCY REFRIGERANT LEAK ALARM.
- THE MECHANICAL ROOM VENTILATION RETURNS TO NORMAL OPERATION WHEN THE REFRIGERANT MONITORING SYSTEM ALARM IS MANUALLY RESET.

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

TEMPERATURE CONTROLS

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

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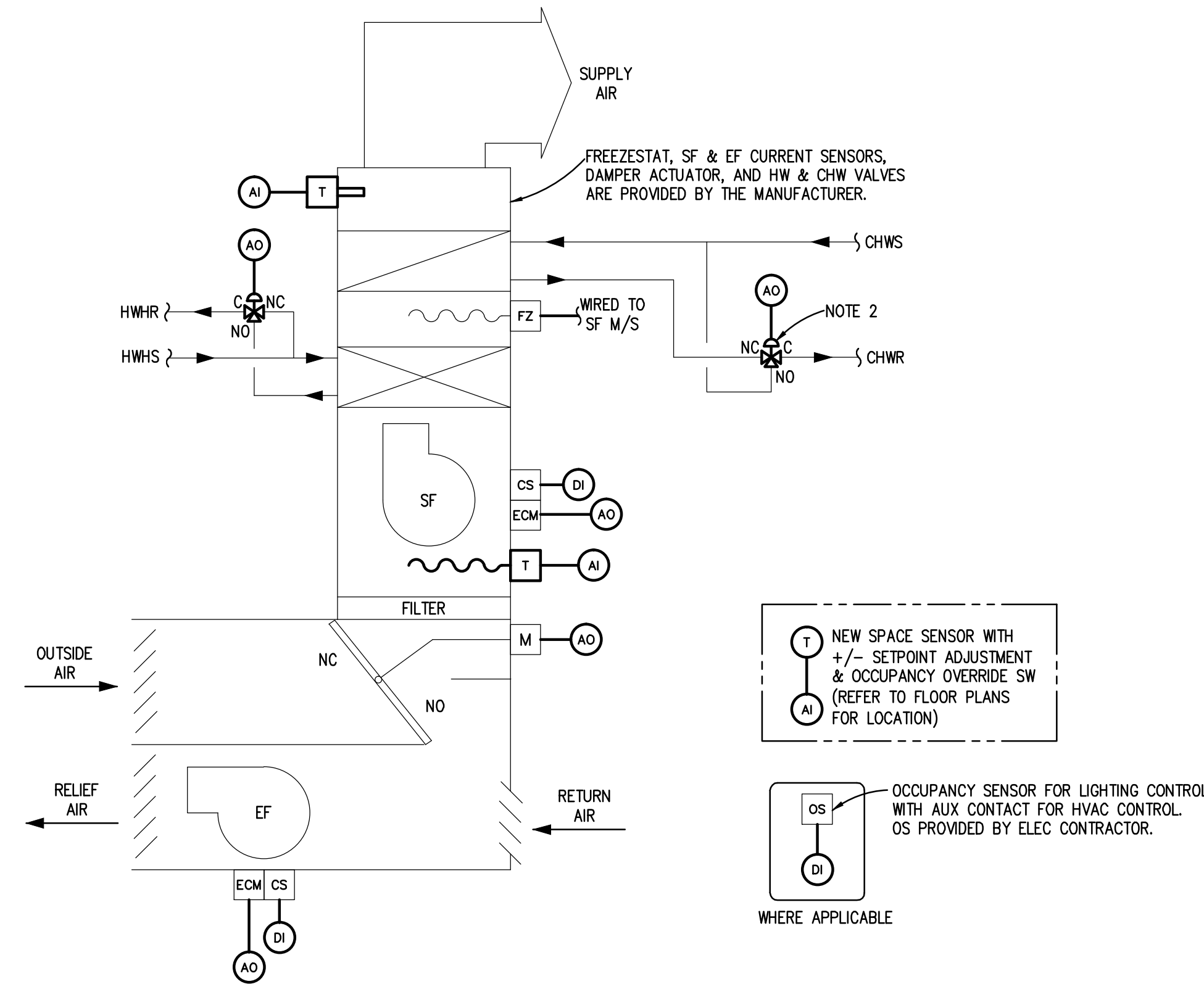
REVISIONS:
BIDS 11-30-2016

DATE: NOVEMBER 30, 2016
SHEET NO.:

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JOB NO. 161664A

ALTERNATE M1L



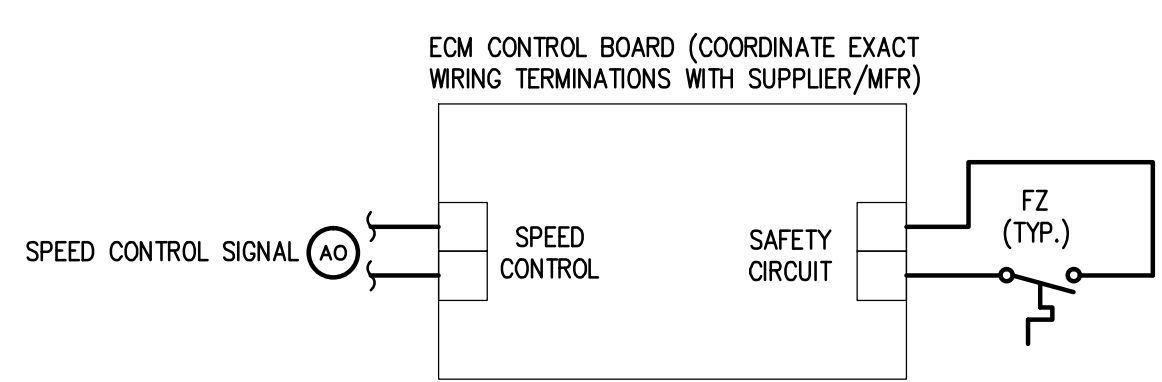
ALT. M1L - VERTICAL UNIT VENTILATOR CONTROLS

- NOTES:
- ELECTRICAL CONTRACTOR SHALL PROVIDE POWER WIRING TO UNIT VENTILATOR. TC CONTRACTOR SHALL PROVIDE CONTROL WIRING AS SHOWN. REFER TO FLOOR PLANS FOR QUANTITY OF UNITS AND LOCATIONS. COORDINATE WIRING, TERMINATION, CONTROL, AND I/O REQUIREMENTS WITH EQUIPMENT MANUFACTURER.
 - CONTROL DAMPERS SHALL BE FURNISHED BY MANUFACTURER. TC CONTRACTOR SHALL PROVIDE DAMPER ACTUATORS AND CONTROL VALVES.
 - CONTROL VALVE MANUFACTURER/MODEL SHALL BE SCHNEIDER ELECTRIC (FORMERLY ERIE) / VM SERIES POPTOP ZONE VALVES WITH AP23A000 MODEL ACTUATOR WITH APPROPRIATE CONTROL SIGNAL TO INTERFACE WITH EXISTING DDC CONTROLLER.
 - OA/RA AND HW/CHW COIL ARRANGEMENTS VARY PER SYSTEM. REFER TO MECHANICAL DRAWINGS FOR CONFIGURATIONS.

SEQUENCE OF OPERATION

VERTICAL UNIT VENTILATOR (HW/CHW COILS):

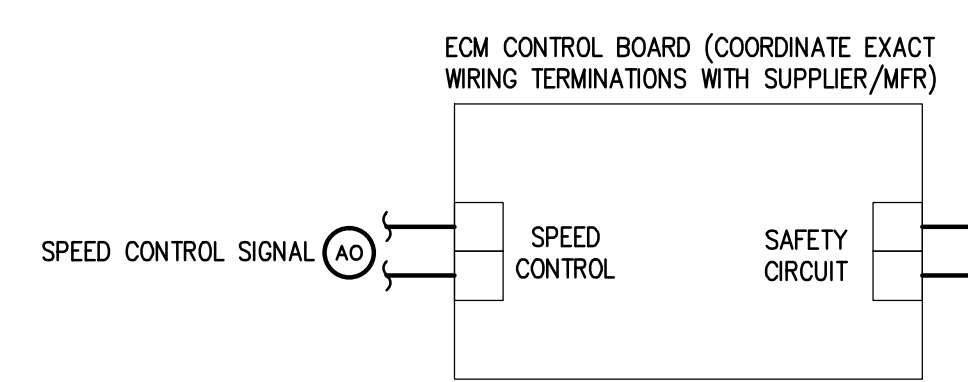
- ALL SETPOINTS, RESET SETPOINTS, DELAYS, TIME INTERVALS, AND DEADBANDS DESCRIBED IN SEQUENCE SHALL BE ADJUSTABLE BY SYSTEM OPERATORS. APPROPRIATE DEADBANDS SHALL BE USED TO PREVENT SHORT CYCLING SITUATIONS. ALL FAN AND PUMP MOTOR CONTROL SWITCHES SHALL BE IN "AUTO" POSITION.
- THE VUV CONTROLLER SHALL BE PROVIDED BY THE TC CONTRACTOR AND REFERRED TO AS DDC.
- SUPPLY FAN SHALL HAVE START/STOP CAPABILITY FROM DDC/BAS. VUV SYSTEM SHALL OPERATE BASED ON TIME SCHEDULED OCCUPIED MODE (COMPENSATED BY OPTIMUM START PROGRAM), TEMPORARY OCCUPIED MODE (SET FOR 2 HRS ENABLED FROM OVERRIDE SWITCH ON TEMPERATURE SENSOR) AND UNOCCUPIED CYCLE MODE.
- EXHAUST FAN SHALL HAVE START/STOP CAPABILITY FROM THE DDC/BAS SYSTEM AND SHALL BE COMMANDED ON BY DDC WHEN THE ECONOMIZER IS ENABLED AND THE MIXED AIR DAMPER IS MORE THAN 40% OPEN. WHEN THE MIXED AIR DAMPER IS LESS THAN 25% OPEN, DDC COMMANDS THE DAMPER TO THE MINIMUM OA POSITION.
- WHEN DDC ACTIVATES THE VUV IN OCCUPIED MODE, MIXED AIR DAMPER SHALL BE ALLOWED TO MODULATE AS DESCRIBED. REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR MINIMUM OA CFM REQUIREMENT AND ESTABLISH MINIMUM OA DAMPER POSITION WITH THE TAB CONTRACTOR. WHEN VUV IS DEACTIVATED OR OPERATING IN UNOCCUPIED CYCLE MODE OR MORNING WARM-UP MODE, MIXED AIR DAMPER SHALL REMAIN CLOSED TO OUTSIDE AIR.
- HEATING AND COOLING CONTROL SHALL NOT OVERLAP.
- DURING OCCUPIED HEATING MODE, DDC SHALL MODULATE DAMPERS TO THE MINIMUM OA POSITION AND MODULATE THE HEATING COIL VALVE TO MAINTAIN HEATING SETPOINT. COOLING CONTROL VALVE SHALL REMAIN CLOSED.
- DURING OCCUPIED COOLING MODE, WHEN OA TEMP IS LESS THAN 65°F AND OA HUMIDITY IS LESS THAN 60% RH, DDC SHALL MODULATE DAMPERS ABOVE MINIMUM OA POSITION FIRST PROVIDING FREE COOLING, THEN MODULATE THE COOLING COIL VALVE TO MAINTAIN COOLING SETPOINT. HEATING CONTROL VALVE SHALL REMAIN CLOSED.
- DDC SHALL MAINTAIN MIXED AIR TEMP LOW LIMIT CONTROL AT 50°F SETPOINT BY MODULATING MIXED AIR DAMPER POSITION LESS THAN THE MINIMUM OA POSITION.
- DURING OCCUPIED COOLING MODE, WHEN OA TEMP IS GREATER THAN 65°F OR OA HUMIDITY IS GREATER THAN 60% RH, DDC SHALL MODULATE DAMPERS TO THE MINIMUM OA POSITION AND MODULATE THE COOLING COIL VALVE TO MAINTAIN COOLING SETPOINT. HEATING COIL CONTROL VALVE SHALL REMAIN CLOSED.
- DURING HEATING UNOCCUPIED MODE, DDC SHALL NIGHT CYCLE THE VUV TO MAINTAIN UNOCCUPIED HEATING SETPOINT. COOLING COIL CONTROL VALVE SHALL REMAIN CLOSED. EXHAUST FAN SHALL REMAIN OFF.
- FOR COOLING UNOCCUPIED MODE, DDC SHALL DEACTIVATE OFF THE VUV.
- WHEN SPACE IS UNOCCUPIED DURING SCHEDULED OCCUPIED MODE AS DETERMINED BY MONITORING THE LIGHTING OCCUPANCY SENSOR AUX CONTACTS, DDC SHALL OPERATE VUV WITH TEMPORARY UNOCCUPIED MODE HEATING/COOLING SETPOINTS.
- SPACE TEMPERATURE SETPOINTS SHALL BE AS FOLLOWS:
HEATING UNOCCUPIED SETPOINT = 62°F
HEATING TEMPORARY UNOCCUPIED SETPOINT = 68°F
HEATING OCCUPIED SETPOINT = 72°F
COOLING OCCUPIED SETPOINT = 75°F
COOLING TEMPORARY UNOCCUPIED SETPOINT = 77°F
COOLING UNOCCUPIED SETPOINT = N/A
- SUPPLY FAN AND EXHAUST FAN STATUS SHALL BE MONITORED BY DDC THRU RESPECTIVE CURRENT SWITCHES. SF CURRENT SWITCH SHALL PROVIDE FEEDBACK TO ENABLE TEMPERATURE CONTROLS. ABNORMAL STATUS CONDITION FOR SF AND EF SHALL ACTIVATE ALARM.
- FREEZE/STAT SHALL DEACTIVATE THE VUV AND SOFTWARE INTERLOCKED EF WHEN TEMP IS 35°F OR BELOW.
- WHEN VUV IS DEACTIVATED, COOLING COIL VALVE SHALL REMAIN CLOSED, AND MIXED AIR DAMPER SHALL CLOSE TO THE OUTSIDE AIR. WHEN OA TEMP IS BELOW 40°F AND VUV IS DEACTIVATED, HEATING COIL VALVE SHALL BE MODULATED BY DDC BASED ON DISCHARGE AIR TEMP TO MAINTAIN LOW LIMIT TEMP SETPOINT OF 50°F.



VUV SF ECM WIRING

NOTE:

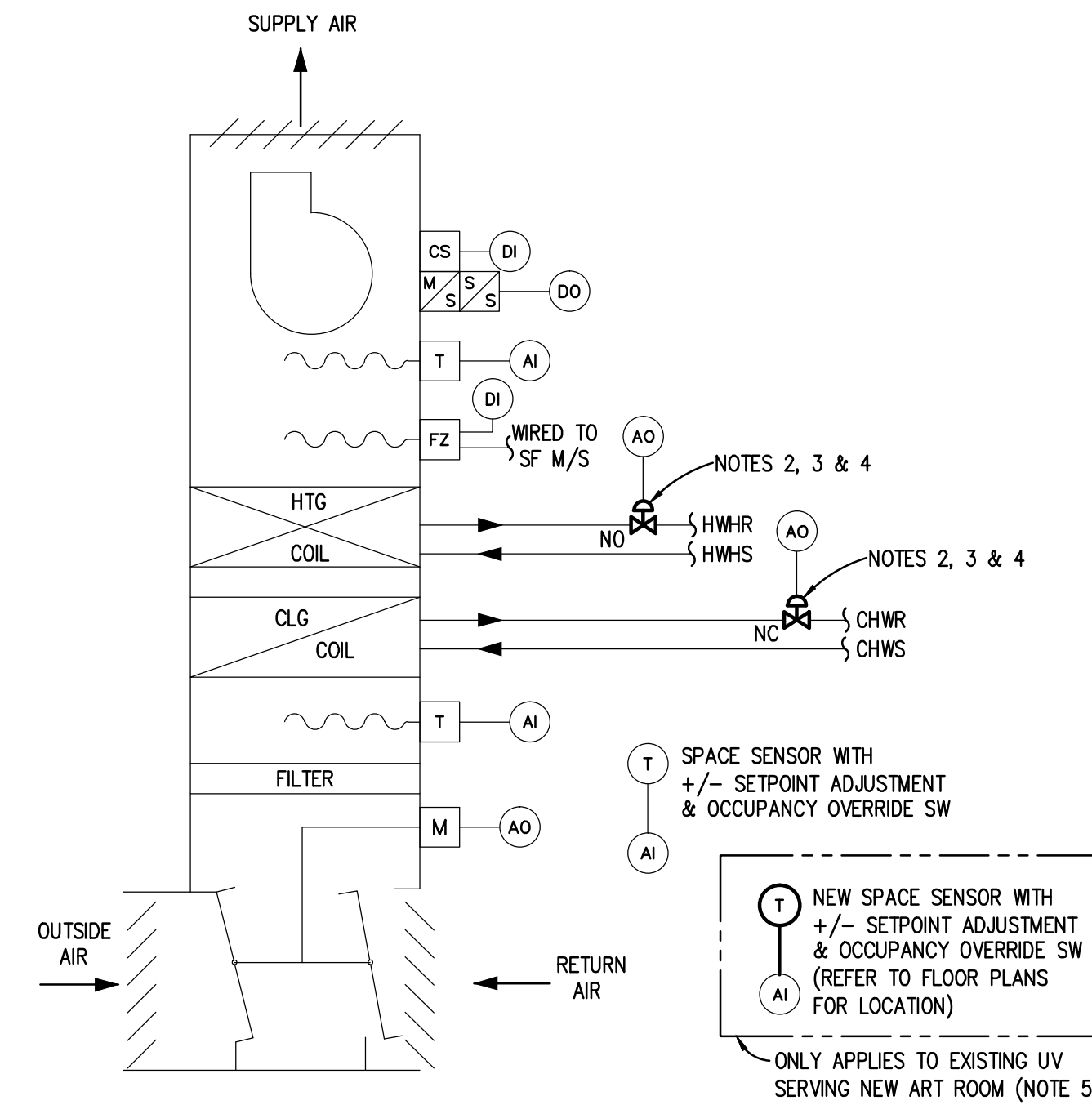
- WIRING DETAIL IDENTIFIES INTENT AND DOES NOT INDICATE ACTUAL WIRING REQUIREMENTS. CONSULT WITH ECM SUPPLIER FOR THE ACTUAL WIRING REQUIREMENTS.



VUV EF ECM WIRING

NOTE:

- WIRING DETAIL IDENTIFIES INTENT AND DOES NOT INDICATE ACTUAL WIRING REQUIREMENTS. CONSULT WITH ECM SUPPLIER FOR THE ACTUAL WIRING REQUIREMENTS.

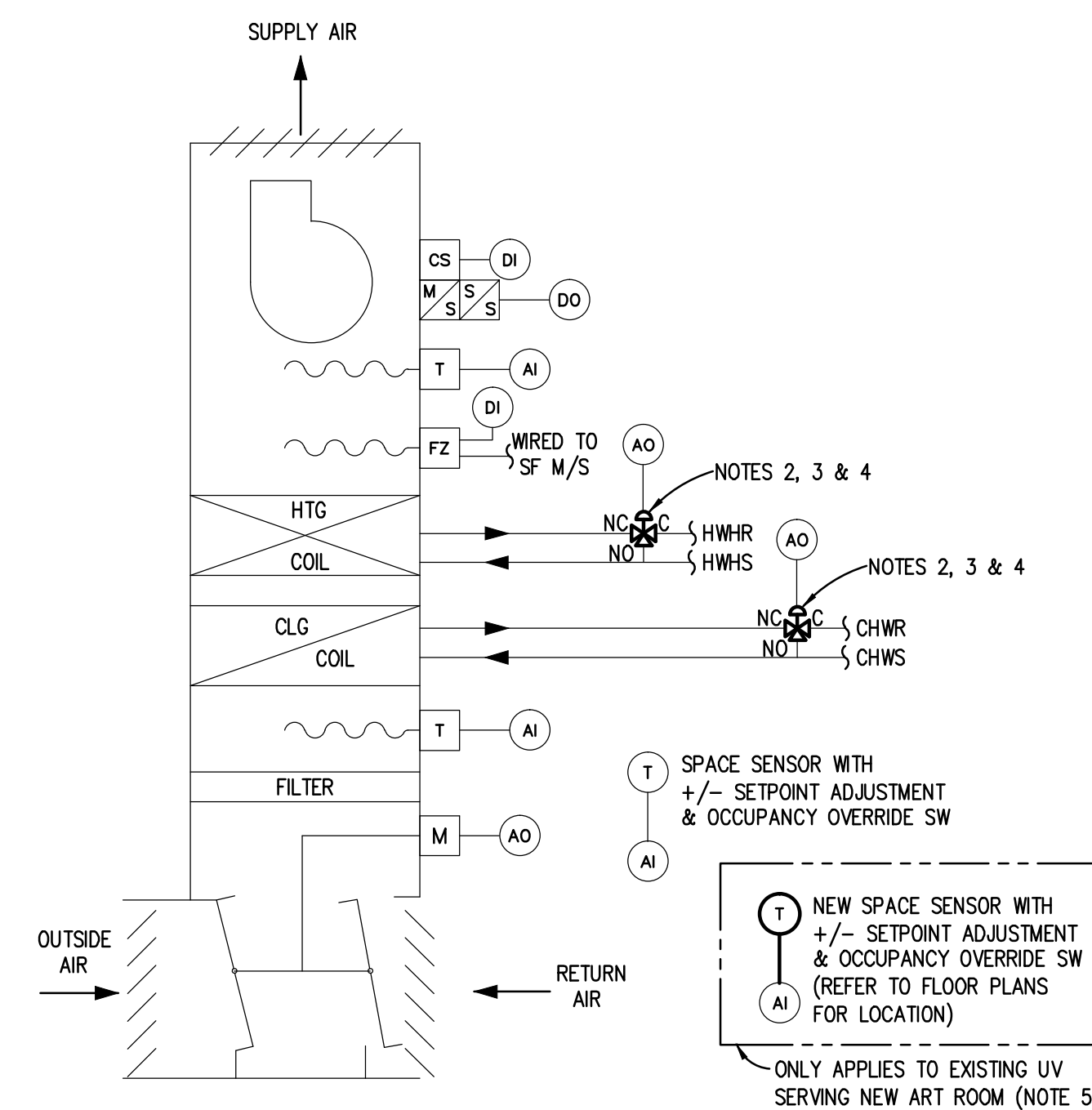


EXISTING CONSOLE UNIT VENTILATOR CONTROL CONTROL VALVE REPLACEMENTS & MISC

TYPICAL

NOTE:

- REFER TO FLOOR PLANS FOR QUANTITY OF EXISTING UNITS AND LOCATIONS.
- TEMPERATURE CONTROLS WORK SCOPE AT EXISTING UNIT VENTILATORS IS TO REPLACE THE EXISTING 2-WAY HOT WATER HEATING AND 2-WAY CHILLED WATER CONTROL VALVES AND ACTUATORS. EXISTING UNIT VENTILATOR CONTROLLER AND PROGRAMMING SEQUENCE TO REMAIN (COMPONENTS/POINTS INDICATED IN DETAIL MAY NOT REPRESENT ACTUAL EXISTING CONTROL).
- TC CONTRACTOR SHALL FIELD VERIFY EXISTING CONTROL VALVE PIPING CONFIGURATION AND SELECT CONTROL VALVES BASED ON EXISTING Cv VALUES OR BASED ON FLOW READINGS TAKEN BY TAB CONTRACTOR PRIOR TO PROJECT DEMOLITION REQUIREMENTS.
- CONTROL VALVE MANUFACTURER/MODEL SHALL BE SCHNEIDER ELECTRIC (FORMERLY ERIE) / VM SERIES POPTOP ZONE VALVES WITH AP23A000 MODEL ACTUATOR WITH APPROPRIATE CONTROL SIGNAL TO INTERFACE WITH EXISTING DDC CONTROLLER.

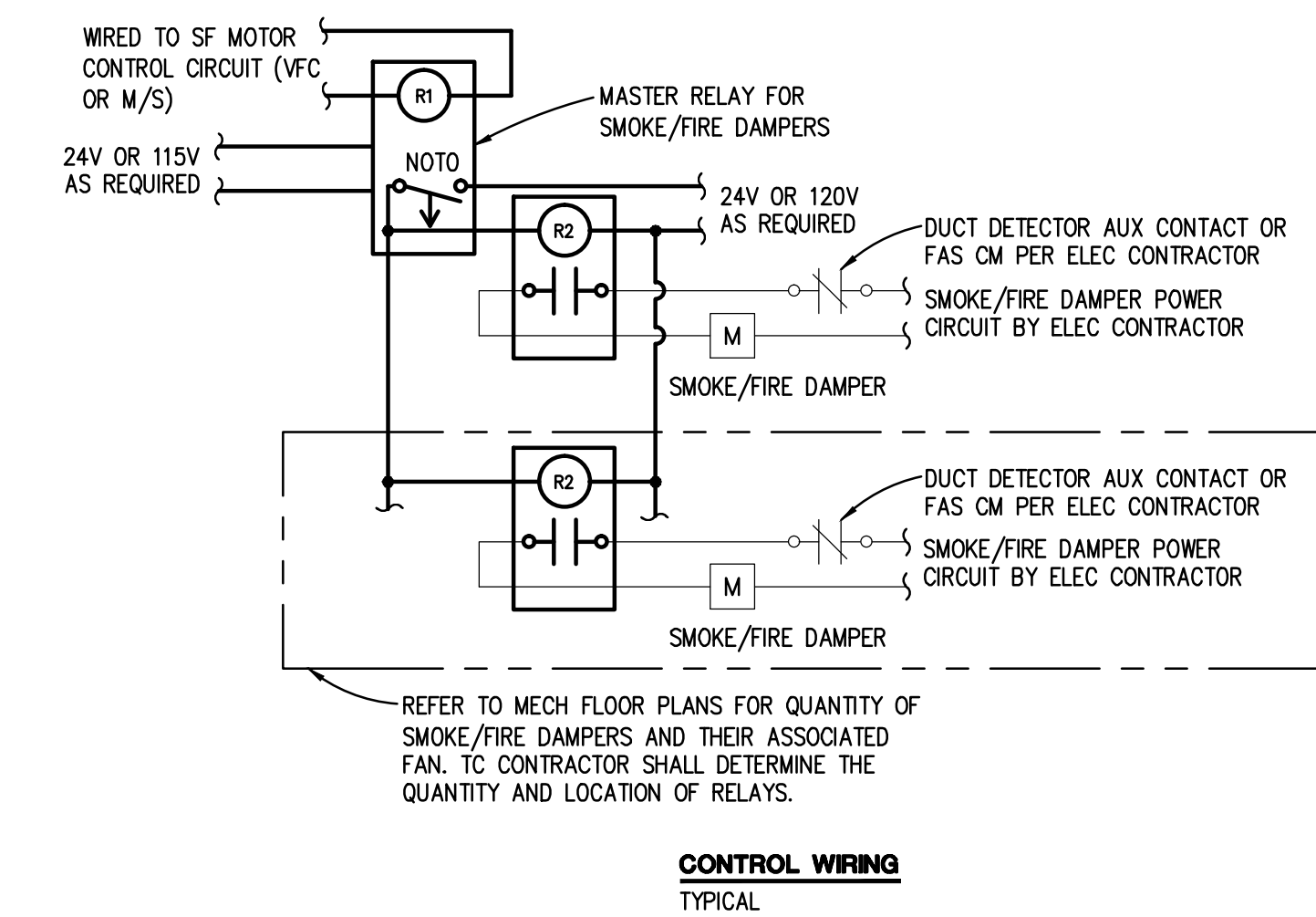
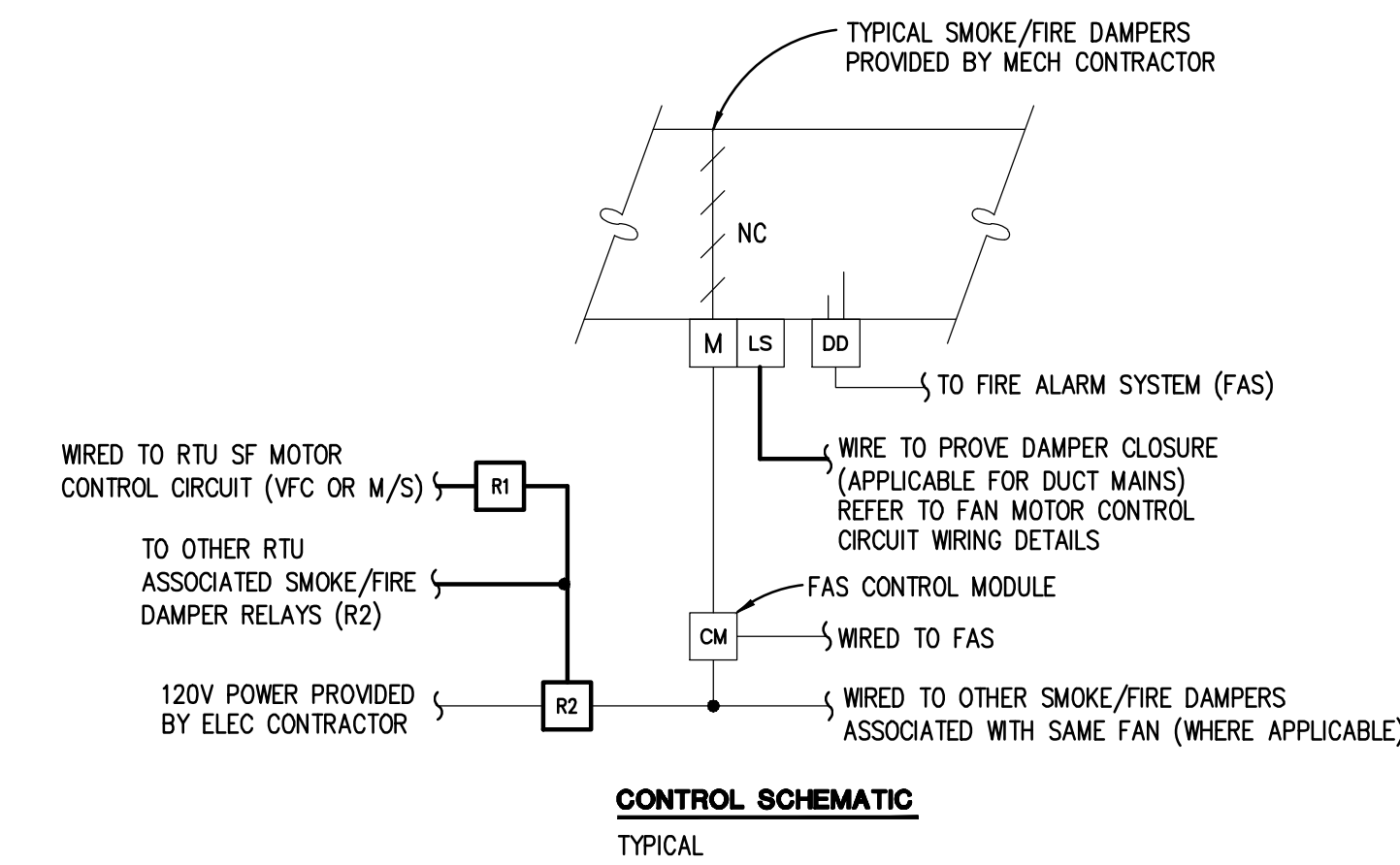


EXISTING CONSOLE UNIT VENTILATOR CONTROL CONTROL VALVE REPLACEMENTS & MISC

TYPICAL

NOTE:

- REFER TO FLOOR PLANS FOR QUANTITY OF EXISTING UNITS AND LOCATIONS.
- TEMPERATURE CONTROLS WORK SCOPE AT EXISTING UNIT VENTILATORS IS TO REPLACE THE EXISTING 3-WAY HOT WATER HEATING AND 3-WAY CHILLED WATER CONTROL VALVES AND ACTUATORS. EXISTING UNIT VENTILATOR CONTROLLER AND PROGRAMMING SEQUENCE TO REMAIN (COMPONENTS/POINTS INDICATED IN DETAIL MAY NOT REPRESENT ACTUAL EXISTING CONTROL).
- TC CONTRACTOR SHALL FIELD VERIFY EXISTING CONTROL VALVE PIPING CONFIGURATION AND SELECT CONTROL VALVES BASED ON EXISTING Cv VALUES OR BASED ON FLOW READINGS TAKEN BY TAB CONTRACTOR PRIOR TO PROJECT DEMOLITION REQUIREMENTS.
- CONTROL VALVE MANUFACTURER/MODEL SHALL BE SCHNEIDER ELECTRIC (FORMERLY ERIE) / VM SERIES POPTOP ZONE VALVES WITH AP23A000 MODEL ACTUATOR WITH APPROPRIATE CONTROL SIGNAL TO INTERFACE WITH EXISTING DDC CONTROLLER.



SMOKE/FIRE DAMPER CONTROL DETAILS

TYPICAL - VERIFY QUANTITIES WITH MECHANICAL FLOOR PLAN DETAILS

NOTES:

- REFER TO FLOOR PLANS FOR EXACT QUANTITY & LOCATION OF THE SMOKE/FIRE DAMPERS AND ASSOCIATED FAN.
- ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER REQUIREMENT FOR SMOKE/FIRE DAMPER ACTUATOR(S).
- TC CONTRACTOR SHALL PROVIDE CONTROL RELAY IN ENCLOSURE FOR SMOKE/FIRE DAMPER CONTROL. IF MULTIPLE POWER CIRCUITS ARE USED FOR SMOKE/FIRE DAMPERS ASSOCIATED WITH COMMON FAN, MULTIPLE CONTROL RELAYS SHALL BE USED AND WIRED IN PARALLEL.

SEQUENCE OF OPERATION:

- SMOKE/FIRE DAMPERS SHALL BE HARDWIRED INTERLOCKED TO ASSOCIATED VUV FAN CONTROLS AND SHALL OPEN WHEN SF IS ACTIVATED AND CLOSE WHEN SF IS DEACTIVATED.
- WHEN PRODUCTS OF COMBUSTION ARE DETECTED AT DUCT SMOKE DETECTOR, FIRE ALARM SYSTEM SHALL CLOSE RESPECTIVE SMOKE/FIRE DAMPERS AND DEACTIVATE ASSOCIATED FAN.
- WHERE APPLICABLE, SMOKE/FIRE DAMPER LIMIT(S) SWITCH SHALL BE HARDWIRED INTERLOCKED TO RESPECTIVE FAN CONTROL CIRCUIT TO PREVENT FAN FROM OPERATING UNTIL DAMPER(S) ARE PROVEN OPEN.

COMBINATION SMOKE AND FIRE DAMPERS ARE SHOWN ON SHEET METAL DRAWINGS. DETAIL IS TYPICAL FOR ALL UNITS WHERE INDICATED ON PLANS.

TEMPERATURE CONTROLS

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

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CHECKED BY: RNR

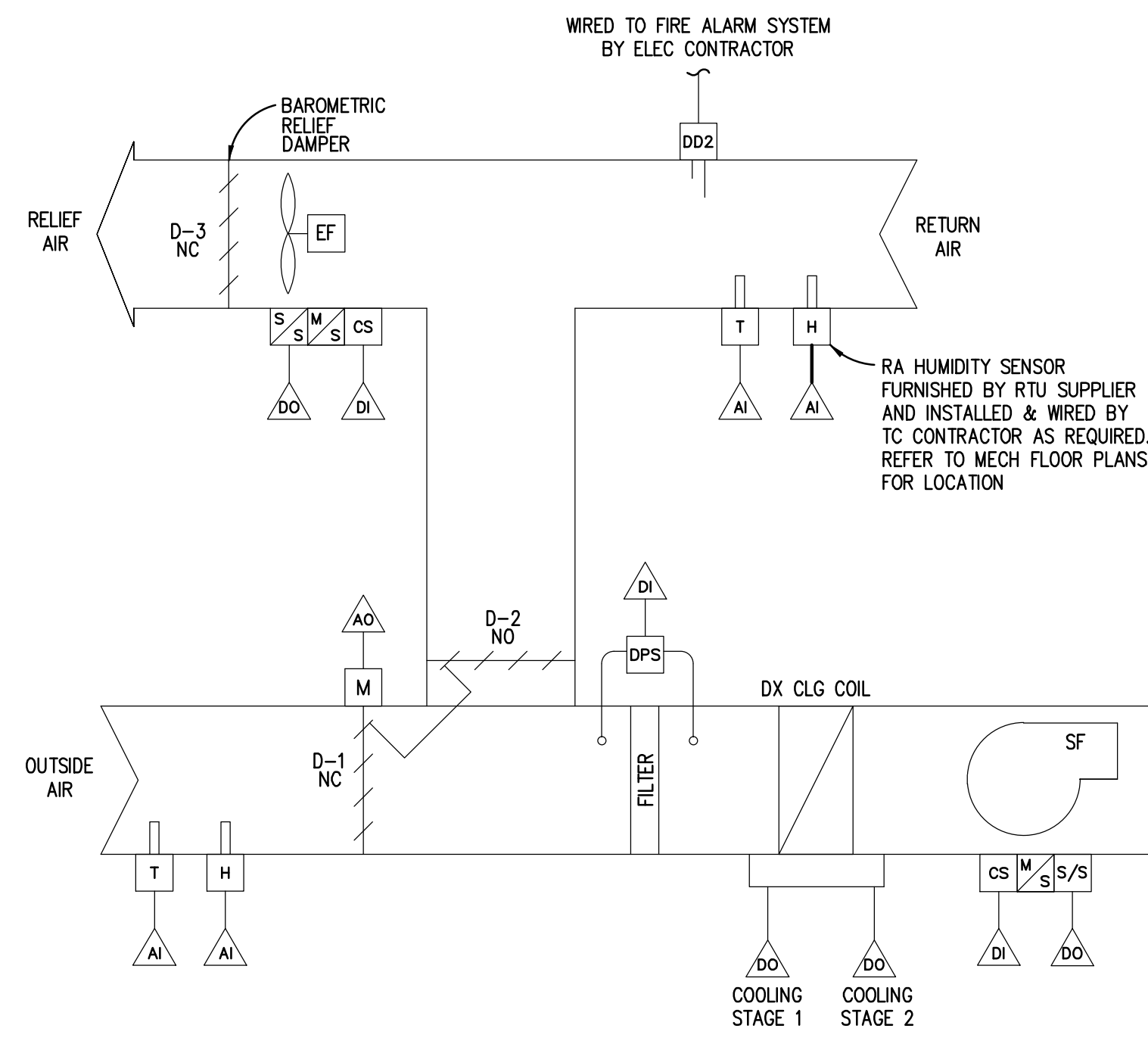
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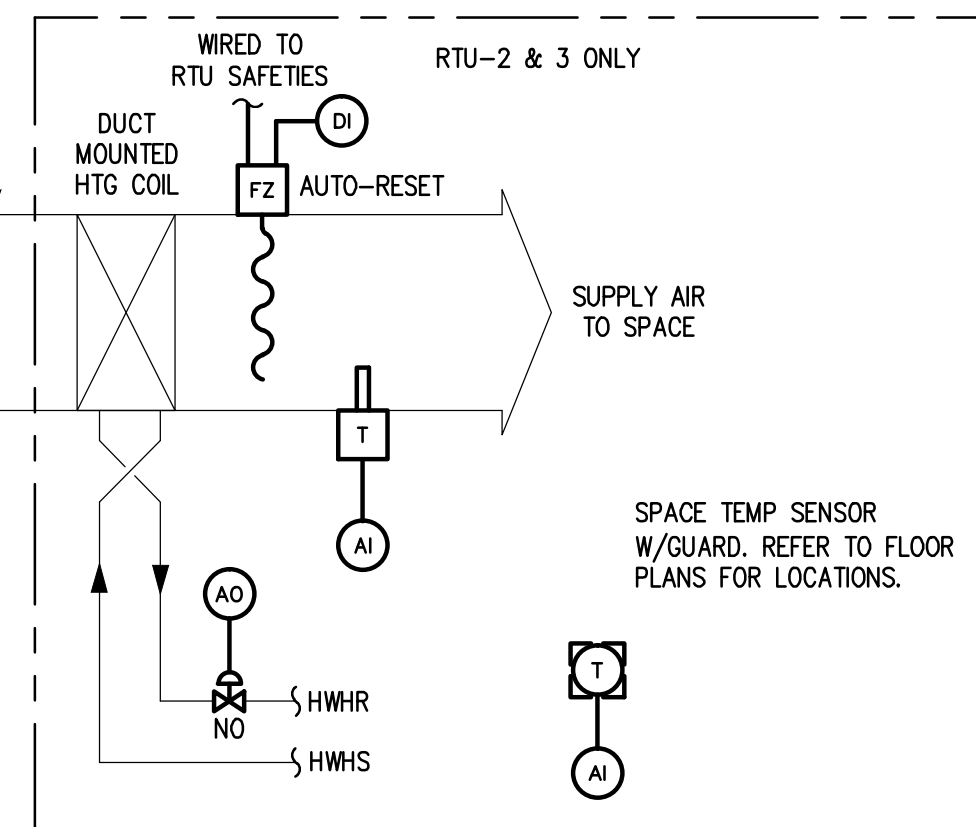
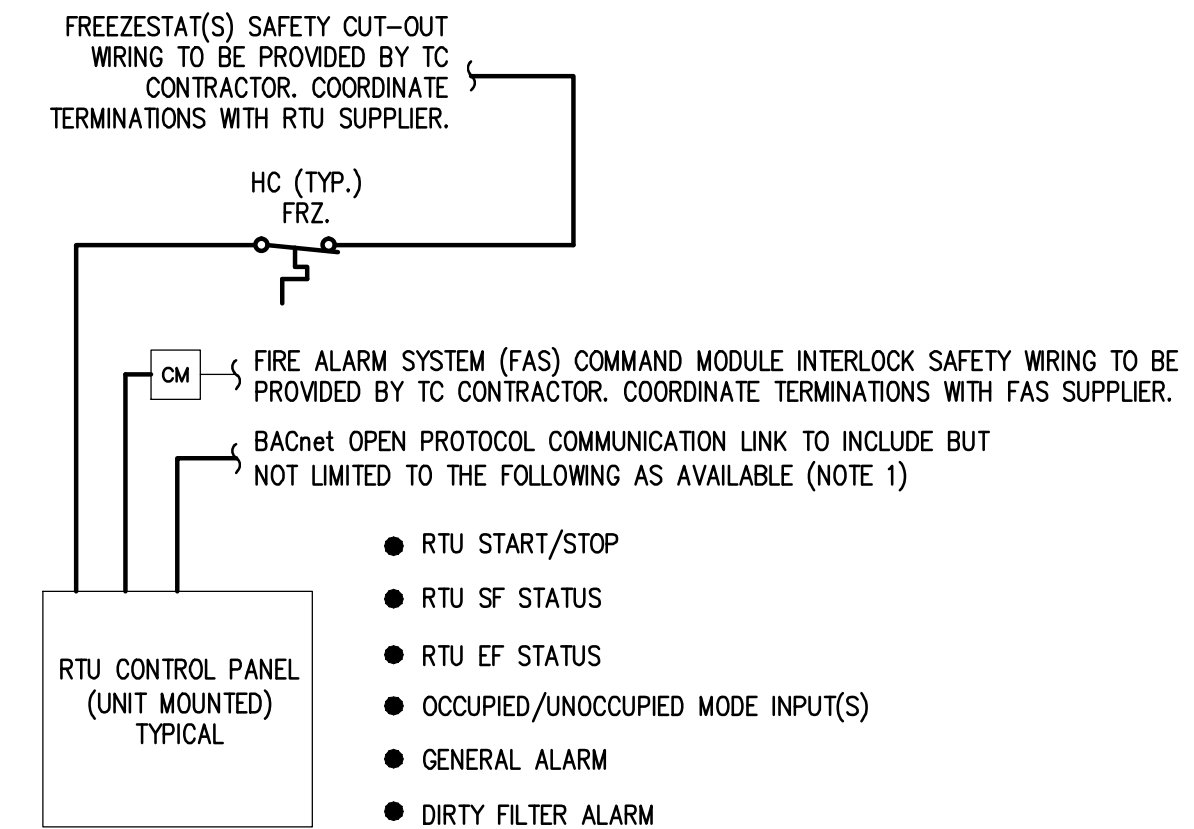


ROOF TOP UNIT CAV CONTROL

RTU-1 SERVES MEDIA CENTER B119
RTU-2 SERVES STAFF A129/RESOURCE A135
RTU-3 SERVES ADMIN OFFICES

NOTES:

- ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE ALARM SYSTEM COMPONENTS AND WIRING FROM FIRE ALARM PANEL TO CONTROL MODULE. TC CONTRACTOR SHALL PROVIDE WIRING FROM CONTROL MODULE TO MOTOR STARTER CONTROL CIRCUIT.
- RTU TO BE PROVIDED WITH PACKAGED CONTROLS AND BACNET COMPATIBLE CARD.



SEQUENCE OF OPERATION

RTU-2 DUCT-MOUNTED HEATING COIL HC-1 & 2 CONTROL.
RTU-3 DUCT-MOUNTED HEATING COIL HC-3, 4, & 5 CONTROL.

SEQUENCE OF OPERATION:

- ALL SETPOINTS INCLUDING RESET SCHEDULE SETPOINTS DESCRIBED IN SEQUENCE SHALL BE ADJUSTABLE BY SYSTEM OPERATORS (CREATE REQUIRED VIRTUAL POINTS). APPROPRIATE DEADBANDS SHALL BE USED TO PREVENT SHORT CYCLING SITUATIONS.
- DDC SHALL HAVE OCCUPIED/UNOCCUPIED CONTROL CAPABILITY FOR EACH DUCT-MOUNTED HEATING COIL AS SCHEDULED AND COMMANDED THRU THE BAS.
- DDC SHALL MODULATE THE DUCT-MOUNTED HEATING COIL VALVE TO MAINTAIN SPACE TEMPERATURE SETPOINTS. DUCT-MOUNTED HEATING COIL DISCHARGE AIR TEMP SENSORS SHALL LIMIT THE DAT TO 90°F SETPOINT.
- SPACE TEMPERATURE SETPOINTS SHALL BE AS FOLLOWS:
HEATING UNOCCUPIED SETPOINT = 62°F
HEATING OCCUPIED SETPOINT = 70°F
COOLING OCCUPIED SETPOINT = 75°F
COOLING UNOCCUPIED SETPOINT = N/A
- FREEZESTAT(S) LOCATED AFTER DUCT-MOUNTED HEATING COILS SHALL DEACTIVATE SUPPLY FAN WHEN TEMPERATURE IS 35°F OR BELOW. DDC SHALL MONITOR FREEZESTAT STATUS AND ACTIVATE ALARM IF CONDITION OCCURS. SEE RTU-2 & 3 DE-ACTIVATION MODE.
- WHEN THE ASSOCIATED RTU IS OFF (AS POLLED THROUGH BACNET), DDC SHALL MODULATE THE HEATING COIL VALVE TO MAINTAIN 50°F AT DUCT TEMP SENSOR.

RTU-1 SEQUENCE OF OPERATION

ROOFTOP UNIT RTU-1 CONTROL:

- MANUFACTURER'S RTU DDC CONTROLLER AND CONTROL SEQUENCE OF OPERATION (HEREIN CALLED RTU) MAY VARY SLIGHTLY FROM THE RECOMMENDED SEQUENCE SHOWN BELOW. MANUFACTURER'S REPRESENTATIVE SHALL DOCUMENT THESE VARIATIONS IN THE SUBMITTAL PACKAGE.

SEQUENCE OF OPERATION:

- ALL SETPOINTS, RESET SETPOINTS, DELAYS, TIME INTERVALS, AND DEADBANDS DESCRIBED IN SEQUENCE SHALL BE ADJUSTABLE BY SYSTEM OPERATORS. APPROPRIATE DEADBANDS SHALL BE USED TO PREVENT SHORT CYCLING SITUATIONS. ALL FAN AND PUMP MOTOR CONTROL SWITCHES SHALL BE IN "AUTO" POSITION.
- SUPPLY FAN AND EXHAUST FAN SHALL HAVE START/STOP CAPABILITY FROM THE BAS THRU THE RTU CONTROLLER. RTU CONTROLLER SHALL MAINTAIN BAS TIME-SCHEDULED OCCUPIED MODE (COMPENSATED BY OPTIMUM START PROGRAM), TEMPORARY OCCUPIED MODE (SET FOR 1-HR, ENABLED FROM OVERRIDE SWITCH ON TEMPERATURE SENSOR), AND UNOCCUPIED CYCLE MODE FROM HEATING/COOLING SETPOINTS AS DOWNLOADED FROM THE BAS.
- SUPPLY FAN AND EXHAUST FAN STATUS SHALL BE MONITORED BY DDC THRU RESPECTIVE CURRENT SWITCHES. ABNORMAL STATUS CONDITION SHALL ACTIVATE ALARM. RTU SHALL TOTALIZE RUN TIME HOURS OF OPERATION FOR BOTH FANS.
- RTU CONTROLLER SHALL CONTROL THE HEATING/COOLING FROM ONE SPACE TEMPERATURE SENSOR. OUTSIDE AND RETURN AIR DAMPERS SHALL BE ALLOWED TO MODULATE AS DESCRIBED. IN OPTIMUM START MODE, RTU SHALL MAINTAIN 90°F DAT SETPOINT AND IN COOLING MODE 55°F DAT SETPOINT UNTIL SPACE TEMPERATURE SETPOINT OR OCCUPIED MODE IS REACHED.
- IN HEATING MODE, RTU SHALL DEACTIVATE DX COOLING AND HOT-GAS REHEAT CONTROL, MODULATE DAMPERS TO THE MINIMUM OA POSITION, AND MODULATE GAS-FIRED HEATING TO MAINTAIN SPACE TEMPERATURE SETPOINT. SEE DEHUMIDIFICATION CONTROL HEREIN. WHEN HEATING IN OCCUPIED OR UNOCCUPIED MODE, RTU SHALL NOT EXCEED 90°F DAT HIGH LIMIT SETPOINT.
- IN COOLING MODE, RTU SHALL COMPARE OA ENTHALPY WITH RA ENTHALPY TO PERFORM ECONOMIZER OPERATION. WHEN OA ENTHALPY IS LESS THAN RA ENTHALPY AND OA HUMIDITY IS LESS THAN 60% RH, RTU CONTROLLER SHALL MODULATE DAMPERS MORE OPEN TO OUTSIDE AIR AS 1ST STAGE OF COOLING TO MAINTAIN SPACE TEMPERATURE SETPOINT. WHEN OA DAMPERS ARE FULLY OPEN AND SPACE TEMPERATURE IS STILL ABOVE SETPOINT, RTU SHALL STAGE DX COOLING CONTROL TO MAINTAIN SPACE TEMPERATURE SETPOINT. HOT-GAS REHEAT CONTROL MAY BE USED TO MAINTAIN SPACE TEMPERATURE SETPOINT. GAS-FIRED HEATING SHALL REMAIN OFF. SEE DEHUMIDIFICATION CONTROL HEREIN.
- IN COOLING MODE, RTU SHALL COMPARE OA ENTHALPY WITH RA ENTHALPY TO PERFORM ECONOMIZER OPERATION. WHEN OA ENTHALPY IS GREATER THAN RA ENTHALPY OR OA HUMIDITY IS GREATER THAN 60% RH, RTU CONTROLLER SHALL MODULATE DAMPERS TO MINIMUM OA POSITION AND STAGE DX COOLING TO MAINTAIN SPACE TEMPERATURE SETPOINT. HOT-GAS REHEAT CONTROL MAY BE USED TO MAINTAIN SPACE TEMPERATURE SETPOINT. GAS-FIRED HEATING SHALL REMAIN OFF. SEE DEHUMIDIFICATION CONTROL HEREIN.
- DEHUMIDIFICATION CONTROL: DURING OCCUPIED MODE, RTU SHALL MONITOR RETURN AIR HUMIDITY. WHEN RETURN AIR HUMIDITY RISES ABOVE 65% RH SETPOINT, RTU SHALL STAGE DX COOLING CONTROL (IF NOT ALREADY ACTIVATED) TO DEHUMIDIFY THE AIR AND MODULATE HOT-GAS REHEAT COIL VALVE TO REHEAT THE DEHUMIDIFIED AIR TO MAINTAIN COIL LEAVING TEMPERATURE SETPOINT OF 54°F. IF THE HOT-GAS REHEAT COIL CANNOT MAINTAIN SPACE TEMPERATURE SETPOINT AFTER A 5-MINUTE DELAY, RTU SHALL STAGE GAS-FIRED HEATING CONTROLS TO MAINTAIN SPACE TEMPERATURE SETPOINT. RTU SHALL DEHUMIDIFY THE SPACE UNTIL RA HUMIDITY IS LESS THAN 61% RH SETPOINT.
- RTU ECONOMIZER CONTROL SHALL ACTIVATE THE POWERED EXHAUST FAN AS REQUIRED WHEN OA DAMPER CONTROL OPENS BEYOND FAN ACTIVATION SETPOINT OF 50% (SETPPOINT TO BE ADJUSTED BY TAB CONTRACTOR AS REQUIRED). WHEN RTU IS DEACTIVATED OR OPERATING IN UNOCCUPIED CYCLE MODE OR MORNING WARM-UP MODE, OA DAMPER SHALL REMAIN CLOSED AND EXHAUST FAN SHALL REMAIN OFF.
- SPACE TEMPERATURE SETPOINTS SHALL BE AS FOLLOWS:
HEATING UNOCCUPIED SETPOINT = 62°F
HEATING OCCUPIED SETPOINT = 70°F
COOLING OCCUPIED SETPOINT = 75°F
COOLING UNOCCUPIED SETPOINT = N/A
- DUCT SMOKE DETECTOR(S) SHALL DEACTIVATE RTU (SF) WHEN PRODUCTS OF COMBUSTION ARE DETECTED.
- FILTER STATUS SHALL BE MONITORED BY RTU THRU DIFFERENTIAL PRESSURE SWITCH. MANUFACTURER SHALL SET DPS SETPOINT BASED ON FILTER MANUFACTURER'S LOADED DATA.
- WHEN RTU IS DEACTIVATED, SF/EF SHALL SHUT DOWN, OA DAMPER SHALL CLOSE, AND DX COOLING, HOT-GAS REHEAT, AND GAS-FIRED HEATING CONTROLS SHALL REMAIN OFF.
- FOR UNOCCUPIED NIGHT CYCLE CONTROL, RTU SHALL CYCLE BASED ON SPACE TEMPERATURE. RTU ENERGIZES SF ONLY (EXHAUST FAN REMAINS OFF). MIXED AIR DAMPERS REMAIN CLOSED TO OUTSIDE AIR, GAS-FIRED HEATING ONLY SHALL CONTROL. RTU SHALL PROVIDE 2°F DEADBAND FOR UNOCCUPIED SPACE TEMP SETPOINT CONTROL.
- BAS SHALL BE CAPABLE OF ADDITIONAL RTU MONITORING VIA BACNET OPEN PROTOCOL COMMUNICATION LINK AS INDICATED ON DETAIL.

RTU-2 & -3 SEQUENCE OF OPERATION

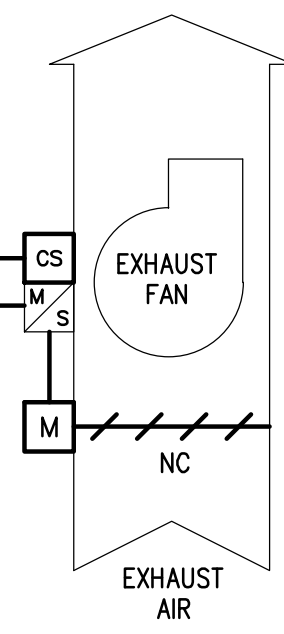
ROOFTOP UNIT RTU-2 & -3 CONTROL:

- MANUFACTURER'S RTU DDC CONTROLLER AND CONTROL SEQUENCE OF OPERATION (HEREIN CALLED RTU) MAY VARY SLIGHTLY FROM THE RECOMMENDED SEQUENCE SHOWN BELOW. MANUFACTURER'S REPRESENTATIVE SHALL DOCUMENT THESE VARIATIONS IN THE SUBMITTAL PACKAGE.

SEQUENCE OF OPERATION:

- ALL SETPOINTS, RESET SETPOINTS, DELAYS, TIME INTERVALS, AND DEADBANDS DESCRIBED IN SEQUENCE SHALL BE ADJUSTABLE BY SYSTEM OPERATORS. APPROPRIATE DEADBANDS SHALL BE USED TO PREVENT SHORT CYCLING SITUATIONS. ALL FAN AND PUMP MOTOR CONTROL SWITCHES SHALL BE IN "AUTO" POSITION.
- SUPPLY FAN AND EXHAUST FAN SHALL HAVE START/STOP CAPABILITY FROM THE BAS THRU THE RTU CONTROLLER. RTU CONTROLLER SHALL MAINTAIN BAS TIME-SCHEDULED OCCUPIED MODE (COMPENSATED BY OPTIMUM START PROGRAM), TEMPORARY OCCUPIED MODE (SET FOR 1-HR, ENABLED FROM OVERRIDE SWITCH ON TEMPERATURE SENSOR), AND UNOCCUPIED CYCLE MODE FROM HEATING/COOLING SETPOINTS AS DOWNLOADED FROM THE BAS.
- SUPPLY FAN AND EXHAUST FAN STATUS SHALL BE MONITORED BY DDC THRU RESPECTIVE CURRENT SWITCHES. ABNORMAL STATUS CONDITION SHALL ACTIVATE ALARM. RTU SHALL TOTALIZE RUN TIME HOURS OF OPERATION FOR BOTH FANS.
- RTU CONTROLLER SHALL CONTROL THE DISCHARGE AIR TEMPERATURE SETPOINT. DUCT-MOUNTED HEATING COILS SHALL CONTROL THE SPACE TEMPERATURE SETPOINT. OUTSIDE AND RETURN AIR DAMPERS SHALL BE ALLOWED TO MODULATE AS DESCRIBED. IN OPTIMUM START MODE, RTU SHALL MAINTAIN 72°F DAT SETPOINT AND IN COOLING MODE 55°F DAT SETPOINT UNTIL SPACE TEMPERATURE SETPOINT (FROM BACNET) OR OCCUPIED MODE IS REACHED.
- IN HEATING MODE, RTU SHALL DEACTIVATE DX COOLING AND HOT-GAS REHEAT CONTROL, MODULATE DAMPERS TO THE MINIMUM OA POSITION, AND MAINTAIN DAT SETPOINT. SEE DEHUMIDIFICATION CONTROL HEREIN.
- IN COOLING MODE, RTU SHALL COMPARE OA ENTHALPY WITH RA ENTHALPY TO PERFORM ECONOMIZER OPERATION. WHEN OA ENTHALPY IS LESS THAN RA ENTHALPY AND OA HUMIDITY IS LESS THAN 60% RH, RTU CONTROLLER SHALL MODULATE DAMPERS MORE OPEN TO OUTSIDE AIR AS 1ST STAGE OF COOLING TO MAINTAIN DAT SETPOINT. WHEN OA DAMPERS ARE FULLY OPEN AND DAT IS STILL ABOVE SETPOINT, RTU SHALL STAGE DX COOLING CONTROL TO MAINTAIN DAT SETPOINT. HOT-GAS REHEAT CONTROL SHALL REMAIN OFF. SEE DEHUMIDIFICATION CONTROL HEREIN.
- IN COOLING MODE, RTU SHALL COMPARE OA ENTHALPY WITH RA ENTHALPY TO PERFORM ECONOMIZER OPERATION. WHEN OA ENTHALPY IS GREATER THAN RA ENTHALPY OR OA HUMIDITY IS GREATER THAN 60% RH, RTU CONTROLLER SHALL MODULATE DAMPERS TO MINIMUM OA POSITION AND STAGE DX COOLING TO MAINTAIN DAT SETPOINT. HOT-GAS REHEAT CONTROL MAY BE USED TO MAINTAIN DAT SETPOINT. GAS-FIRED HEATING SHALL REMAIN OFF. SEE DEHUMIDIFICATION CONTROL HEREIN.
- DEHUMIDIFICATION CONTROL: DURING OCCUPIED MODE, RTU SHALL MONITOR RETURN AIR HUMIDITY. WHEN RETURN AIR HUMIDITY RISES ABOVE 65% RH SETPOINT, RTU SHALL STAGE DX COOLING CONTROL (IF NOT ALREADY ACTIVATED) TO DEHUMIDIFY THE AIR AND MODULATE HOT-GAS REHEAT COIL VALVE TO REHEAT THE DEHUMIDIFIED AIR TO MAINTAIN COIL LEAVING TEMPERATURE SETPOINT OF 54°F. RTU SHALL DEHUMIDIFY THE SPACE UNTIL RA HUMIDITY IS LESS THAN 61% RH SETPOINT.
- RTU ECONOMIZER CONTROL SHALL ACTIVATE THE POWERED EXHAUST FAN AS REQUIRED WHEN OA DAMPER CONTROL OPENS BEYOND FAN ACTIVATION SETPOINT OF 50% (SETPPOINT TO BE ADJUSTED BY TAB CONTRACTOR AS REQUIRED). WHEN RTU IS DEACTIVATED OR OPERATING IN UNOCCUPIED CYCLE MODE OR OPTIMUM START MODE, OA DAMPER SHALL REMAIN CLOSED AND EXHAUST FAN SHALL REMAIN OFF.
- DISCHARGE AIR TEMP SETPOINT SHALL BE BASED ON THE FOLLOWING OUTDOOR AIR TEMP RESET SCHEDULE:

OAT	DAT
< 30°F	60°F
≥ 55°F	55°F
- FREEZESTAT(S) LOCATED AFTER DUCT-MOUNTED HEATING COILS SHALL DEACTIVATE RTU (SF/EF).
- DUCT SMOKE DETECTOR(S) SHALL DEACTIVATE RTU (SF/EF) WHEN PRODUCTS OF COMBUSTION ARE DETECTED.
- FILTER STATUS SHALL BE MONITORED BY RTU THRU DIFFERENTIAL PRESSURE SWITCH. MANUFACTURER SHALL SET DPS SETPOINT BASED ON FILTER MANUFACTURER'S LOADED DATA.
- WHEN RTU IS DEACTIVATED, SF/EF SHALL SHUT DOWN, OA DAMPER SHALL CLOSE, AND DX COOLING, AND HOT-GAS REHEAT CONTROLS SHALL REMAIN OFF.
- FOR UNOCCUPIED NIGHT CYCLE CONTROL, RTU SHALL CYCLE ON/OFF BASED ON SPACE TEMPERATURE POLLED THROUGH BACNET. RTU ENERGIZES SF ONLY (EXHAUST FAN REMAINS OFF) AND MIXED AIR DAMPERS REMAIN CLOSED TO OUTSIDE AIR. RTU SHALL RUN UNTIL 2°F DEADBAND FOR UNOCCUPIED SPACE TEMP SETPOINT IS MET.
- BAS SHALL BE CAPABLE OF ADDITIONAL RTU MONITORING VIA BACNET OPEN PROTOCOL COMMUNICATION LINK AS INDICATED ON DETAIL.

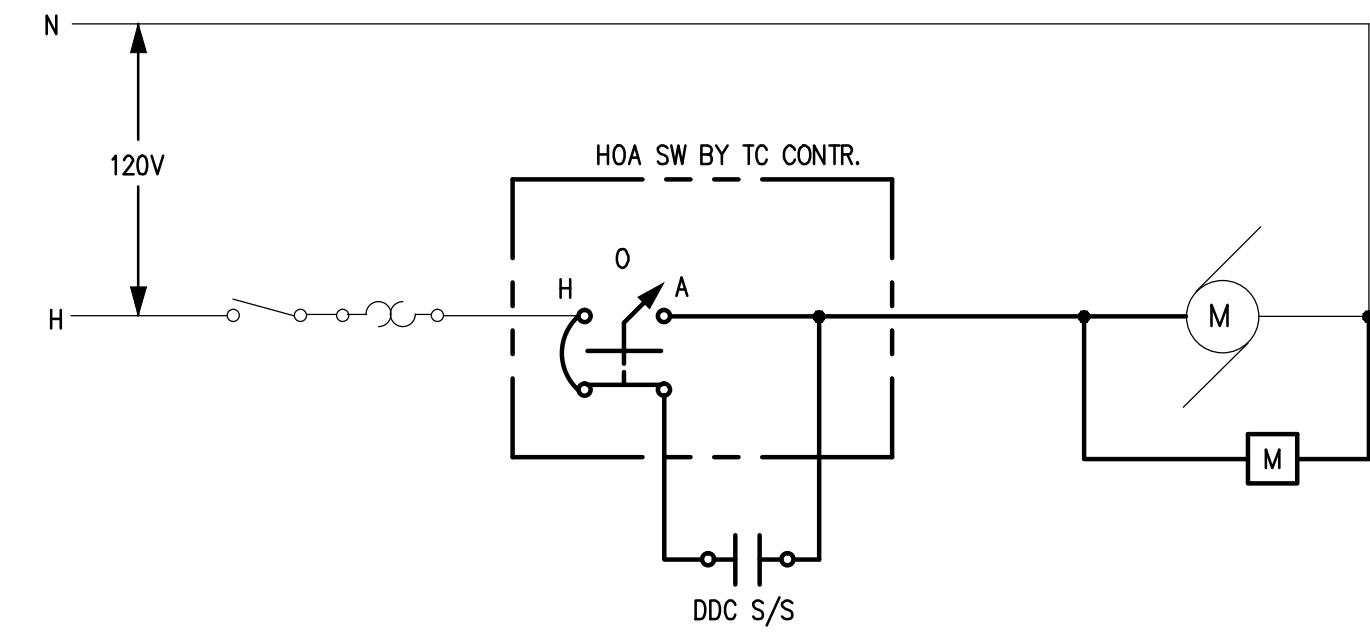


RESTROOM EF (TYP) CONTROL

SERVES: RTU-2 & 3 ASSOCIATED RESTROOMS

SEQUENCE OF OPERATION:

- EXHAUST FAN SHALL BE STARTED AND STOPPED BY DDC BASED ON ASSOCIATED BAS TIME OF DAY SCHEDULES OF THE ASSOCIATED ROOFTOP UNIT. IF UNIT IS IN OCCUPIED, EF SHALL RUN. WIRING INTERLOCK SHALL OPEN DAMPERS.
- DDC SHALL MONITOR EF RUN STATUS THRU CURRENT SWITCH. ABNORMAL STATUS CONDITION SHALL ACTIVATE ALARM. DDC SHALL MONITOR EF RUN STATUS THRU CURRENT SWITCH FOR RUNTIME HOURS OF OPERATION.



EF TYP. M/S WIRING

TEMPERATURE CONTROLS

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

DRAWN BY: JRM
CHECKED BY: RNR

REVISIONS:
BIDS: 11-30-2016

DATE: NOVEMBER 30, 2016

SHEET NO.:

M8.4LA

JOB NO. 161664A

LONGACRE LIGHTING FIXTURE SCHEDULE table with columns: TYPE, DESCRIPTION, MANUFACTURERS, LAMPS. Includes rows for L1 GYM, L1E, L2 OFFICE, L2E, L3 RESTROOM, L3E, L4 CORRIDORS, L4E, L5 CANOPY, L5E, L6 EXTERIOR WALL, L6E, L7 PARKING LOT, L8 PARKING LOT, and X.

ALL LED FIXTURES SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS: MULTI VOLT DRIVER, MINIMUM OF 50,000 HOURS OPERATION WITH GREATER THAN 70% DELIVERED LUMEN OUTPUT. DELIVERED LUMENS NOT JUST LUMENS WITHIN 3% OF SCHEDULE LUMENS.

OCCUPANCY SENSOR LEGEND table with columns: TYPE, DESCRIPTION. Includes rows for OSa, OSb, OSc, OSd, OSf, So, Soz, Do.

MOTOR CIRCUIT SIZING SCHEDULE (208V, 3 PHASE) table with columns: MOTOR HP, SWITCH/FUSE, CIRCUIT BREAKER, STARTER SIZE/TYPE, MOTOR DISCONNECT (NOTE 9).

NOTES: 1. BASED ON MOTOR FULL LOAD AMPERES AS PROVIDED BY THE N.E.C. 2. BASED ON MOTOR RUNNING OVERLOAD PROTECTIONS PROVIDED BY THERMAL OVERLOAD RELAYS.

DTE LIGHTING INCENTIVES PROGRAM

THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID AND BE RESPONSIBLE FOR PROVIDING AND MEETING ALL REQUIREMENTS FOR THE OWNER TO PARTICIPATE IN THE CURRENT DTE ENERGY SAVINGS PROGRAM.

- 1. ON BEHALF OF THE OWNER, PROVIDE ALL REQUIRED INFORMATION FOR THE RESERVATION APPLICATION AND THE FINAL APPLICATION. REFER TO DTE ENERGY PROGRAM APPLICATION AT www.dteenergy.com/sovereign.

IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO CONTACT DTE'S ENERGY SAVINGS TEAM OR ASSIGNED REPRESENTATIVE IF A PROJECT IS DELAYED, OR SUBSTANTIALLY CHANGED.

THE ELECTRICAL CONTRACTOR SHALL WORK WITH AND COORDINATE WITH THE OWNER FOR THE RESERVATION AND FINAL APPLICATION PROCESS PRIOR TO SITE WORK BEING CONDUCTED AND POST REVIEW INSPECTION FOR REMOVAL AND INSTALLATION OF ALL EQUIPMENT RELATED TO THE INCENTIVE PROGRAM.

RACEWAY APPLICATION SCHEDULE table with columns: RACEWAY, EXPOSED, CONCEALED (ABOVE GROUND), UNDERGROUND, CONNECTED TO VIBRATING EQUIPMENT, EXPOSED NOT SUBJECT TO PHYSICAL DAMAGE - UNFINISHED SPACES, EXPOSED NOT SUBJECT TO PHYSICAL DAMAGE - FINISHED SPACES, EXPOSED SUBJECT TO SEVERE PHYSICAL DAMAGE, CONCEALED IN CEILINGS, INTERIOR WALL AND PARTITIONS, CONNECTED TO VIBRATING EQUIPMENT, DAMP AND WET LOCATIONS, BELOW SLAB IN GRADE, EMBEDDED IN CONCRETE ABOVE GRADE, OPTICAL FIBER OR COMMUNICATIONS CABLE IN SPACES USED FOR ENVIRONMENTAL AIR, CONCEALED GENERAL PURPOSE DISTRIBUTION OF OPTICAL FIBER OR COMMUNICATION CABLE, MRI, NATATORIUMS/FOUNTAINS.

GENERAL NOTES: 1. 'X' INDICATES ACCEPTABLE SELECTION. 2. REFER TO "CONDUCTORS AND CABLES" SPECIFICATION FOR APPLICATION LIMITATIONS OF AC/MC CABLE.

FEEDER AND BRANCH CIRCUIT SIZING SCHEDULE - GENERAL PURPOSE

Table with columns: OVERCURRENT DEVICE RATING (AMPERES), WIRE SIZE (AWG OR KCMIL), GROUND, CONDUIT SIZE (SINGLE PHASE 2 WIRE+G, SINGLE PHASE 3 WIRE+G, THREE PHASE 3 WIRE+G, THREE PHASE 4 WIRE+G).

- 1. CONTRACTOR TO SIZE FEEDERS AND BRANCH CIRCUITS BASED ON THIS SCHEDULE AND OVER CURRENT DEVICE SIZE, UNLESS NOTED OTHERWISE. 2. CONTRACTOR MAY COMBINE 20A CIRCUITS AS NOTED IN SPECIFICATION.

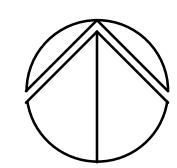
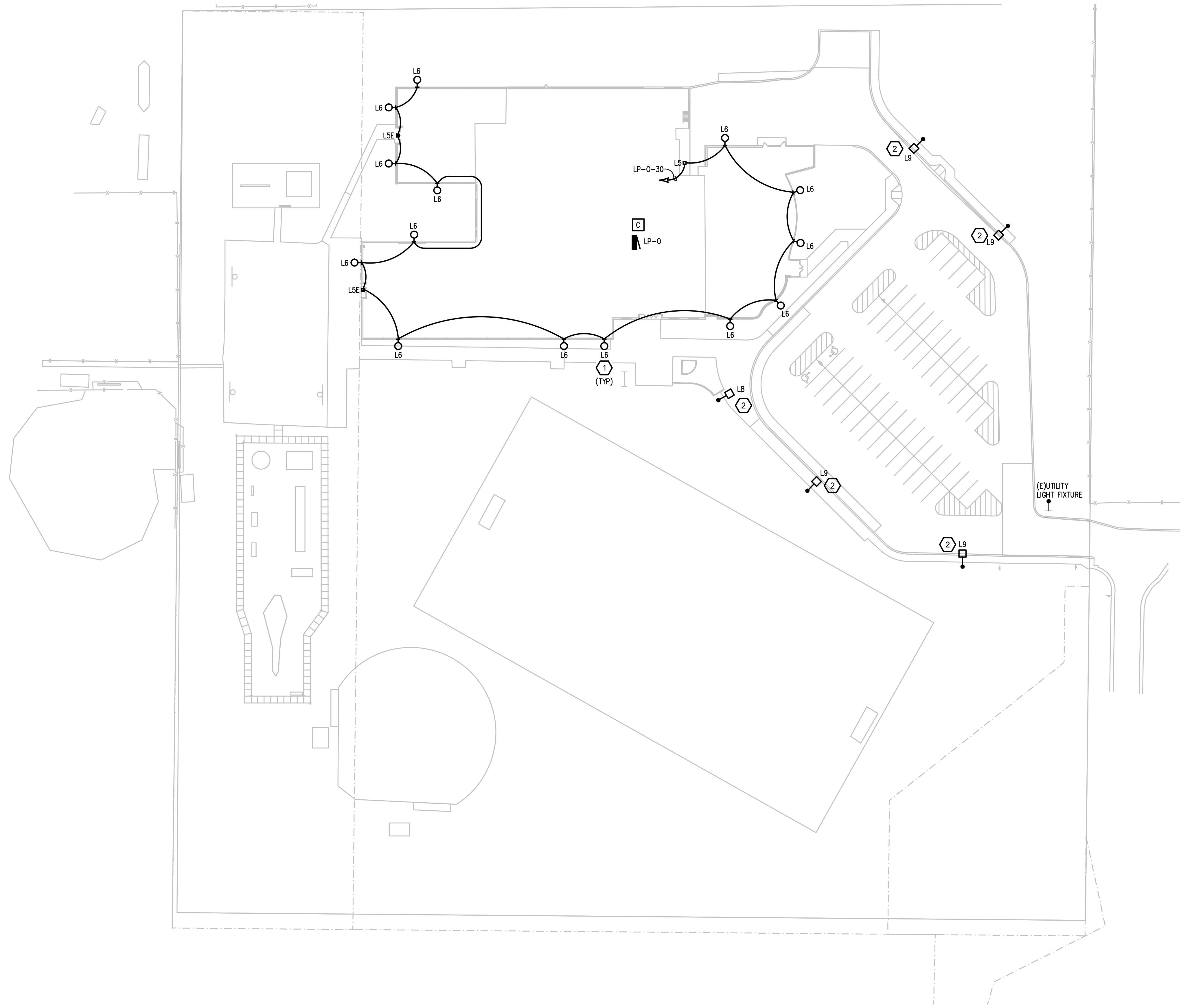
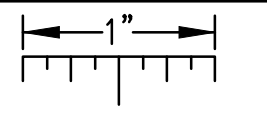
BRANCH CIRCUIT VOLTAGE DROP WIRING SCHEDULE FOR SINGLE PHASE CIRCUITS

Table with columns: BRANCH Ckt RATING (A), WIRE SIZE (AWG), MAXIMUM BRANCH CIRCUIT LENGTH (IN FEET) for 120V, 208V, 240V, 277V, 480V.

- 1. THE ABOVE TABLE VALUES ARE BASED ON COPPER CONDUCTORS, IN STEEL CONDUIT, WITH A LOAD POWER FACTOR OF 0.85 PER NEC CHAPTER 9, TABLE 9.

NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



ELECTRICAL SITE PLAN - ALTERNATE E2L
SCALE: 1" = 40'

GENERAL NOTES:

1. THESE NOTES ARE GENERIC GUIDELINES ONLY. ELECTRICAL CONTRACTOR'S PERSONNEL ON SITE SHALL BE THOROUGHLY FAMILIAR WITH THE PUBLISHED SPECIFICATIONS FOR EXACT DESCRIPTIONS OF SCOPE, METHODS, AND MATERIAL.
2. THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
3. CONDUCT A SURVEY TO IDENTIFY ALL UNDERGROUND UTILITIES. CALL 811 PRIOR TO EXCAVATION.
4. UTILITIES SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY. COORDINATE EXACT LOCATION OF ALL EXISTING UTILITIES, AND ROUTING OF ALL NEW UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
5. DEWATER TRENCHES PRIOR TO INSTALLATION OF CONDUITS. PROVIDE WATER TIGHT FITTINGS ON ALL UNDERGROUND CONDUITS.
6. COORDINATE DEMOLITION WORK, AND ELECTRICAL AND TELEPHONE SERVICES TO THE SITE, WITH THE RESPECTIVE LOCAL UTILITY COMPANY REPRESENTATIVES PRIOR TO COMMENCEMENT OF WORK. INCLUDE ALL ASSOCIATED COSTS/FEES BY THE UTILITY COMPANIES IN THE BID PRICE.
7. INSTALL UNDERGROUND CONDUITS 42" BELOW FINISHED GRADE, MINIMUM, UNLESS NOTED OTHERWISE.
8. COORDINATE SERVICE SHUT-DOWNS WITH ALL TRADES INVOLVED ON SITE AND OBTAIN WRITTEN AUTHORIZATION FROM OWNER 72 HOURS PRIOR TO ANY ELECTRICAL AND/OR TELEPHONE SHUT-DOWN.
9. REMOVE ALL DE-ENERGIZED CONDUCTORS FROM SITE AT COMPLETION OF THE PROJECT.
10. OUTDOOR LIGHTING BRANCH CIRCUIT WIRING SHALL BE MINIMUM #8 AWG CONDUCTORS (XHHW), IN MINIMUM 1" DIA. CONDUIT, UNLESS NOTED OTHERWISE.
11. SPARE CONDUITS SHALL INCLUDE PULL STRING AND SHALL BE TERMINATED WITH A CAP.
12. EXCAVATE THE ENTIRE LENGTH OF TRENCH TO PROPERLY SET DUCT ELEVATIONS.

CONSTRUCTION KEY NOTES:

1. REMOVE EXISTING FIXTURE AND BRANCH CIRCUIT COMPLETE (CONDUIT AND WIRE) AND PROVIDE NEW AS INDICATED. CIRCUIT LIGHT FIXTURES AS INDICATED VIA NEW CONTRACTOR. CONTRACTOR TO BE CONTROLLED BY BUILDING MANAGEMENT SYSTEM. REFER TO E7 SERIES DRAWINGS FOR DETAIL.
2. REMOVE LIGHT FIXTURE HEAD COMPLETE. EXISTING POLE TO REMAIN. PROVIDE NEW FIXTURE HEAD AS INDICATED. DRILL POLE AS REQUIRED TO ALLOW FOR NEW MOUNTING BRACKET. INTERCEPT EXISTING BRANCH CIRCUIT SERVING FIXTURE IN BUILDING AND EXTEND TO NEW CONTRACTOR NEAR PANEL LP-0. REFER TO E7 SERIES DRAWINGS FOR DETAIL.



Know what's below.
Call before you dig.

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ELECTRICAL SITE PLAN - ALTERNATE E2L

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

DRAWN BY: JRD
CHECKED BY: GJJ

REVISIONS:
BIDS 11-30-2016

DATE: NOVEMBER 30, 2016
SHEET NO.:

E0.3LA

JOB NO. 161664A

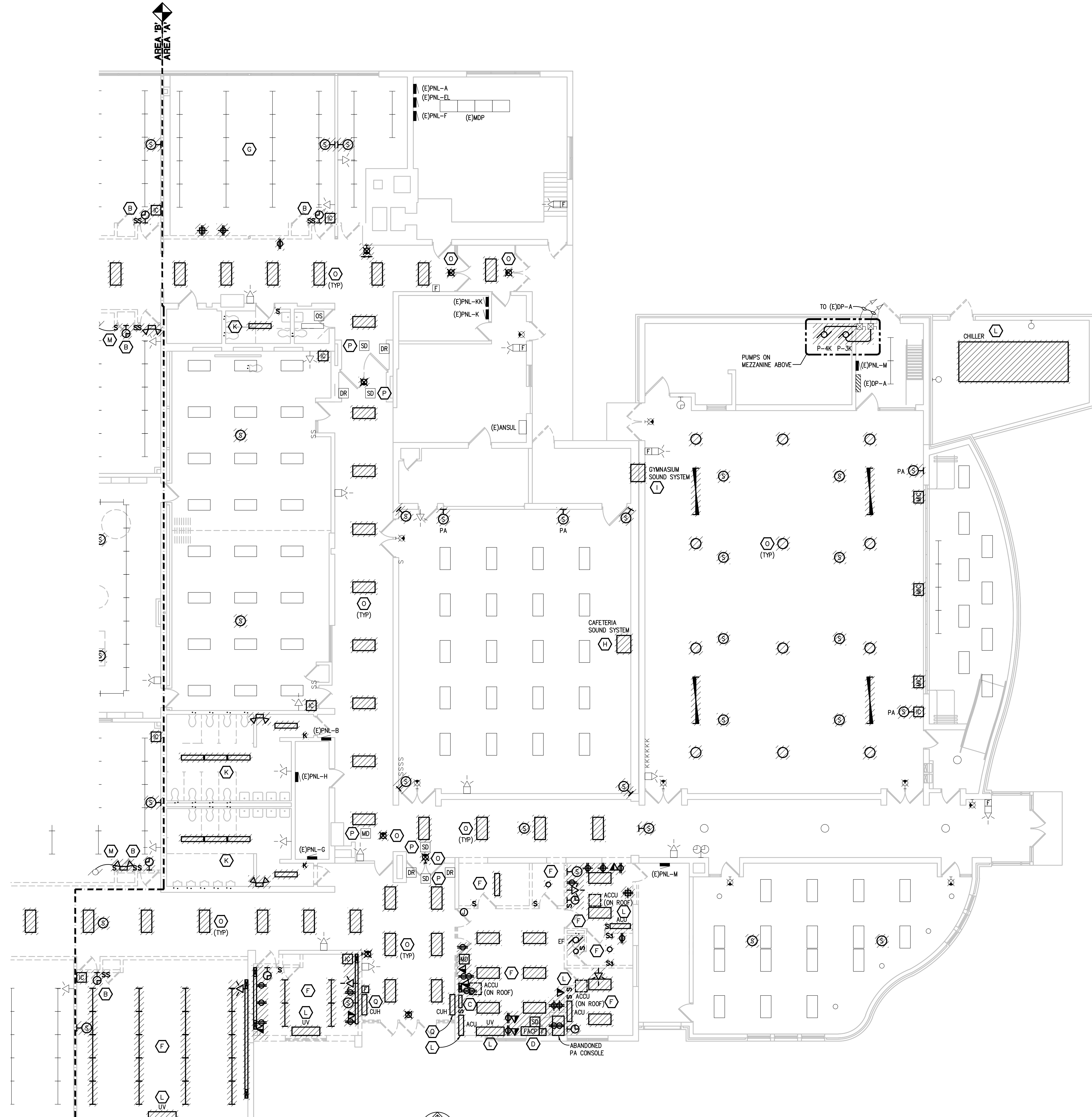
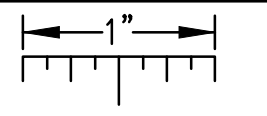


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REG. PROFESSIONAL ENGINEER

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



AREA 'A' ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
2. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.
3. REMOVE LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON PLAN WITH CROSS HATCHING. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO, THOSE DEVICES SHOWN.
4. COORDINATE WITH NEW WORK PLANS, ONE LINE DIAGRAMS AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
5. PROVIDE PROPER SUPPORT FOR EXISTING TO REMAIN CONDUITS AND BOXES WHERE EXISTING SUPPORT IS TO BE REMOVED. RE-ROUTE BRANCH CIRCUIT CONDUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.
6. REMOVE ALL CONDUIT AND WIRE BACK TO THE SOURCE OR NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
7. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES, DEVICES AND EQUIPMENT THAT ARE TO REMAIN. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM LOADS THAT ARE TO REMAIN.
8. DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL COSTS FOR DISPOSAL IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, INCLUDING TCLP TESTING, PROPER DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
9. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED BUT EXISTING WALLS REMAIN INTACT.
10. RING OUT AND TAG ALL CIRCUITS AFFECTED BY THIS ALTERATION AT BOTH ENDS. MARK ALL UNUSED CIRCUIT BREAKERS "SPARE".
11. PROVIDE UPDATED TYPED-IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
12. VERIFY ALL UNDERGROUND AND IN SLAB UTILITY LOCATIONS PRIOR TO SAW-CUTTING OR PENETRATING ANY FLOOR SLAB.
13. COORDINATE ANY SHUT DOWN OF EXISTING SERVICES AND EQUIPMENT THAT ARE REMAINING IN USE WITH THE OWNER'S REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COSTS TO PERFORM THIS WORK DURING WEEKENDS AND EVENINGS INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER WHERE SHUT DOWNS MUST OCCUR FOR PERIODS LONGER THAN THESE HOURS. COORDINATE ELECTRICAL SHUT DOWNS WITH THE OWNER 72 HOURS PRIOR TO SHUT DOWN.

DEMOLITION NOTES:

- A. PROVIDE TEMPORARY SUPPORT FOR EXISTING FIRE ALARM DEVICE. REATTACH TO NEW WALL ONCE NEW WALL IS CONSTRUCTED.
- B. CLOCK TO BE RELOCATED, REMOVE, STORE, AND PROTECT FOR REINSTALLATION. EXISTING CLOCK CIRCUIT TO REMAIN.
- C. NATIONAL TIME AND SIGNAL MC100 MASTER CLOCK TO BE RELOCATED, REMOVE, STORE, AND PROTECT FOR REINSTALLATION. EXISTING CLOCK CIRCUITS TO REMAIN TO BE EXTENDED TO NEW LOCATION. REFER TO E3 SERIES DRAWINGS FOR NEW MASTER CLOCK LOCATION.
- D. CERBERUS PYROTRONICS FIRE ALARM CONTROL PANEL, SMOKE DETECTOR, AND PULLSTATION TO BE RELOCATED, REMOVE, STORE, AND PROTECT FOR REINSTALLATION. EXISTING FIRE ALARM CIRCUITS TO REMAIN TO BE EXTENDED TO NEW LOCATION. REFER TO E3 SERIES DRAWINGS FOR NEW FIRE ALARM EQUIPMENT LOCATION.
- E. REMOVE EXISTING P.A. SYSTEM COMPLETE. THIS INCLUDES CALL SWITCHES, SPEAKERS, AND WIRING BACK TO SOURCE.
- F. REMOVE ALL ELECTRICAL DEVICES ON WALLS TO BE DEMOLISHED (LIGHTING, POWER, FIRE ALARM, P.A., ETC.) INCLUDING CEILING MOUNTED LIGHTING. MAINTAIN BRANCH CIRCUIT SERVING LIGHTING FOR CONNECTION TO NEW LIGHTING. WALLS TO BE DEMOLISHED ARE SHOWN AS DASHED.
- G. REMOVE ALL ELECTRICAL DEVICES ON WALLS TO BE DEMOLISHED (POWER, FIRE ALARM, P.A., ETC.) EXISTING CEILING MOUNTED LIGHTING TO AND BRANCH CIRCUITING TO REMAIN. WALLS TO BE DEMOLISHED ARE SHOWN AS DASHED.
- H. REMOVE CAFETERIA SOUND SYSTEM, SPEAKERS, AND CABLING COMPLETE.
- I. REMOVE GYMNASIUM SOUND SYSTEM, INCLUDING SPEAKERS, MICROPHONE INPUTS, AND CABLING COMPLETE.
- J. IN-ROOM SOUND SYSTEM SPEAKER TO BE RELOCATED, REMOVE, PROTECT, AND STORE FOR REINSTALLATION. EXISTING SPEAKER CABLING TO REMAIN.
- K. REMOVE LIGHT FIXTURES, SWITCH, AND COVERPLATE COMPLETE. BRANCH CIRCUIT SERVING ROOM SHALL REMAIN FOR REUSE. CIRCUITING FOR EXHAUST FAN CONTROLLED BY SWITCH TO REMAIN (AS APPLICABLE).
- L. MECHANICAL DEVICE TO BE REMOVED, DISCONNECT ASSOCIATED FEEDER AND/OR BRANCH CIRCUIT AS REQUIRED. EXISTING FEEDER/BRANCH CIRCUIT TO REMAIN FOR REUSE.
- M. REMOVE EXHAUST FAN CONTROL SWITCH COMPLETE. EXISTING BRANCH CIRCUIT TO REMAIN FOR REUSE.
- N. REMOVE EXIT SIGN COMPLETE. EXISTING BRANCH CIRCUIT TO REMAIN FOR REUSE.
- O. REMOVE LIGHT FIXTURE COMPLETE. EXISTING BRANCH CIRCUIT AND CONTROLS TO REMAIN. FIELD VERIFY LOCATION OF EXISTING CONTROLS.
- P. REMOVE CEILING MOUNTED DEVICE TO ALLOW FOR INSTALLATION OF NEW CEILING TILES AND GRID. REINSTALL DEVICE ONCE INSTALLATION OF NEW CEILING IS COMPLETE. EXISTING CABLING/BRANCH CIRCUIT TO REMAIN. COORDINATE WORK WITH CEILING INSTALLATION CONTRACTOR.
- Q. MECHANICAL DEVICE TO BE REMOVED, DISCONNECT ASSOCIATED FEEDER AND/OR BRANCH CIRCUIT AS REQUIRED. EXISTING FEEDER/BRANCH CIRCUIT TO REMAIN FOR REUSE.
- R. ALTERNATE E11A: REMOVE EXTERIOR LIGHT FIXTURES AS INDICATED COMPLETE. CLOCK SYSTEM BELL TO BE RELOCATED, REMOVE, PROTECT, AND STORE FOR REUSE. EXISTING CLOCK CIRCUIT TO REMAIN TO BE EXTENDED TO NEW LOCATION. REFER TO E3 SERIES DRAWINGS FOR NEW BELL LOCATION.



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

AREA 'A' ELECTRICAL DEMOLITION PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
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- FINAL RECORD

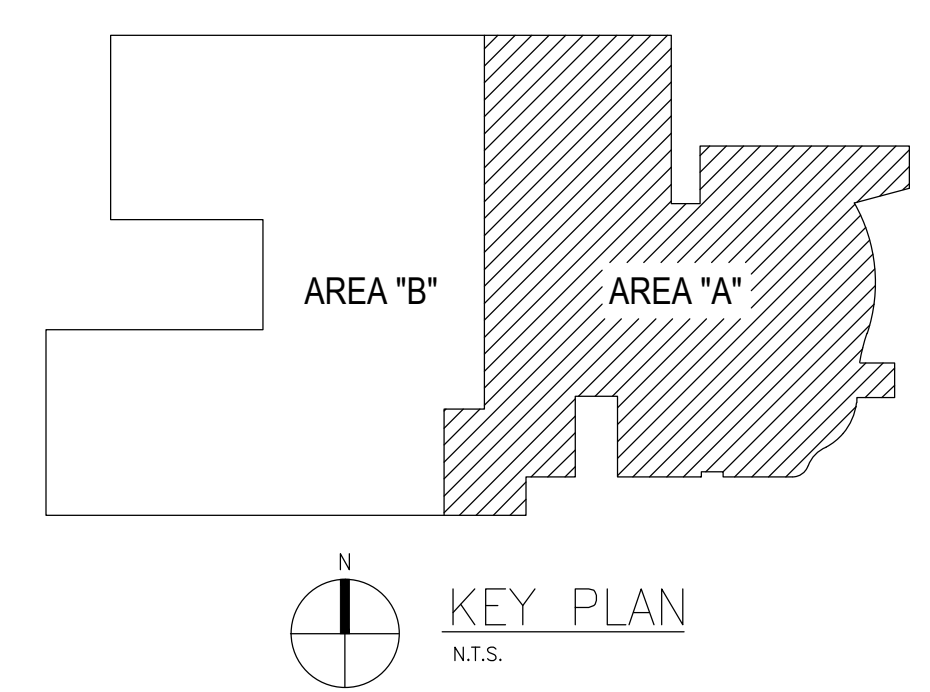
DRAWN BY: JRD
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REVISIONS:
BIDS: 11-30-2016

DATE: NOVEMBER 30, 2016
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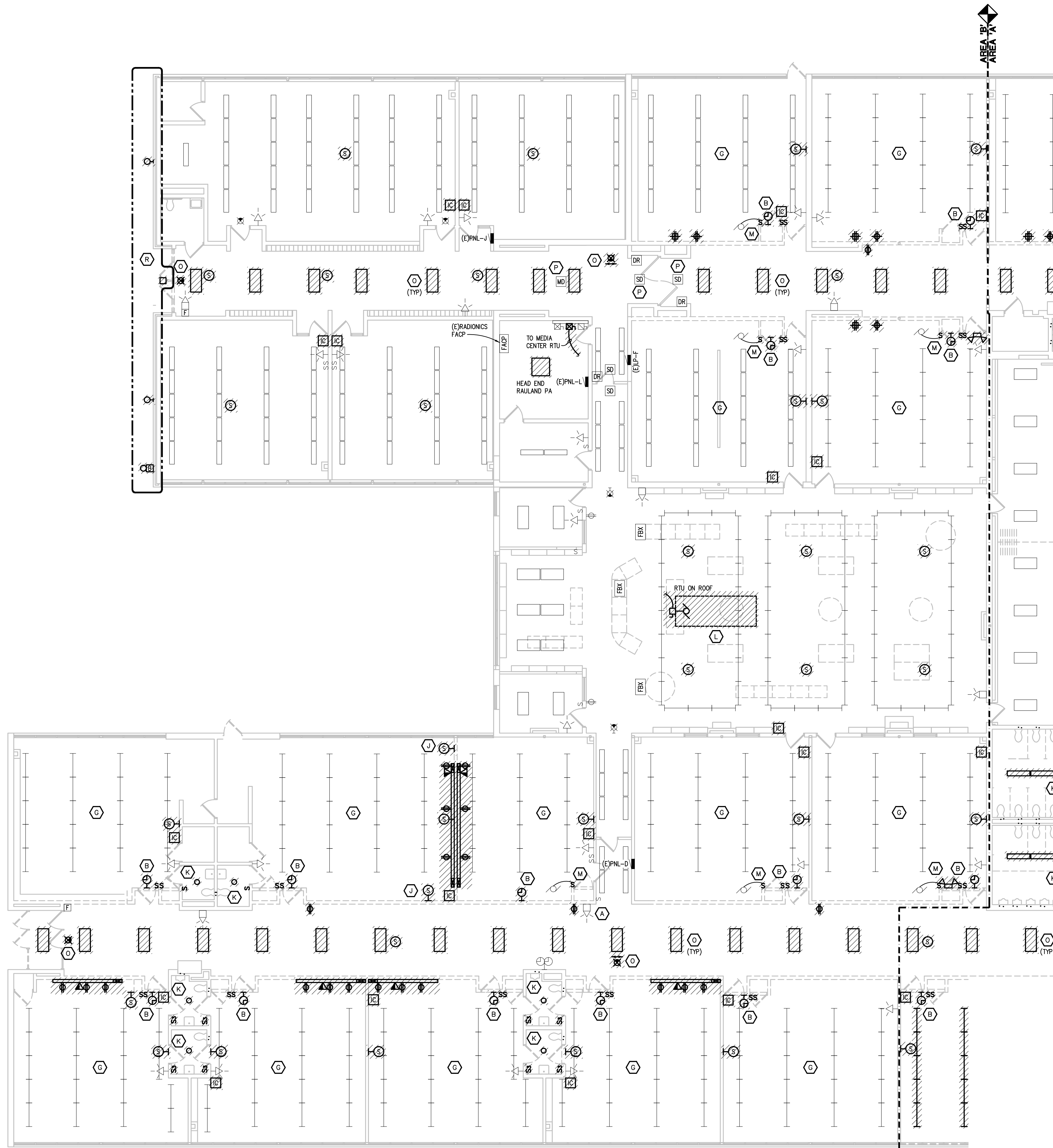
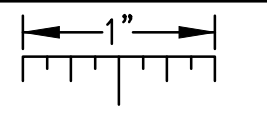
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THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



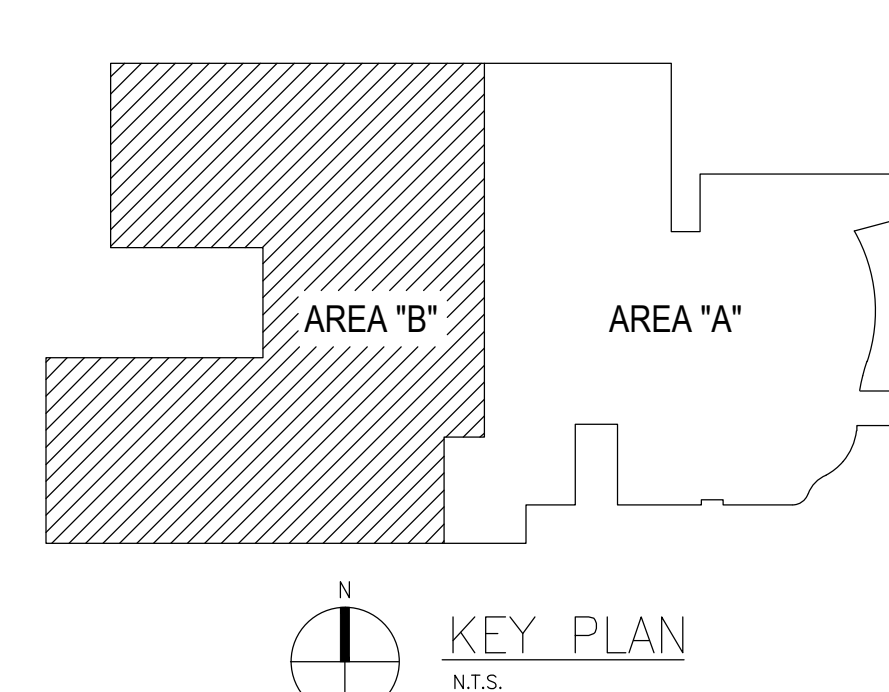
AREA 'B' ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1' - 0"

GENERAL NOTES:

1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
2. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.
3. REMOVE LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON PLAN WITH CROSS HATCHING. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO, THOSE DEVICES SHOWN.
4. COORDINATE WITH NEW WORK PLANS, ONE LINE DIAGRAMS AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
5. PROVIDE PROPER SUPPORT FOR EXISTING TO REMAIN CONDUITS AND BOXES WHERE EXISTING SUPPORT IS TO BE REMOVED. RE-ROUTE BRANCH CIRCUIT CONDUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.
6. REMOVE ALL CONDUIT AND WIRE BACK TO THE SOURCE OR NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
7. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES, DEVICES AND EQUIPMENT THAT ARE TO REMAIN. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM LOADS THAT ARE TO REMAIN.
8. DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL COSTS FOR DISPOSAL IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, INCLUDING TCLP TESTING, PROPER DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
9. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED BUT EXISTING WALLS REMAIN INTACT.
10. RING OUT AND TAG ALL CIRCUITS AFFECTED BY THIS ALTERATION AT BOTH ENDS. MARK ALL UNUSED CIRCUIT BREAKERS "SPARE".
11. PROVIDE UPDATED TYPED-IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
12. VERIFY ALL UNDERGROUND AND IN SLAB UTILITY LOCATIONS PRIOR TO SAW-CUTTING OR PENETRATING ANY FLOOR SLAB.
13. COORDINATE ANY SHUT DOWN OF EXISTING SERVICES AND EQUIPMENT THAT ARE REMAINING IN USE WITH THE OWNER'S REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COSTS TO PERFORM THIS WORK DURING WEEKENDS AND EVENINGS INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER WHERE SHUT DOWNS MUST OCCUR FOR PERIODS LONGER THAN THESE HOURS. COORDINATE ELECTRICAL SHUT DOWNS WITH THE OWNER 72 HOURS PRIOR TO SHUT DOWN.

DEMOLITION NOTES:

- A. PROVIDE TEMPORARY SUPPORT FOR EXISTING FIRE ALARM DEVICE. REATTACH TO NEW WALL ONCE NEW WALL IS CONSTRUCTED.
- B. CLOCK TO BE RELOCATED. REMOVE, STORE, AND PROTECT FOR REINSTALLATION. EXISTING CLOCK CIRCUIT TO REMAIN.
- C. NATIONAL TIME AND SIGNAL MC100 MASTER CLOCK TO BE RELOCATED. REMOVE, STORE, AND PROTECT FOR REINSTALLATION. EXISTING CLOCK CIRCUITS TO REMAIN TO BE EXTENDED TO NEW LOCATION. REFER TO E3 SERIES DRAWINGS FOR NEW MASTER CLOCK LOCATION.
- D. CERBERUS PYROTRONICS FIRE ALARM CONTROL PANEL, SMOKE DETECTOR, AND PULLSTATION TO BE RELOCATED. REMOVE, STORE, AND PROTECT FOR REINSTALLATION. EXISTING FIRE ALARM CIRCUITS TO REMAIN TO BE EXTENDED TO NEW LOCATION. REFER TO E3 SERIES DRAWINGS FOR NEW FIRE ALARM EQUIPMENT LOCATION.
- E. REMOVE EXISTING P.A. SYSTEM COMPLETE. THIS INCLUDES CALL SWITCHES, SPEAKERS, AND WIRING BACK TO SOURCE.
- F. REMOVE ALL ELECTRICAL DEVICES ON WALLS TO BE DEMOLISHED (LIGHTING, POWER, FIRE ALARM, P.A., ETC.) INCLUDING CEILING MOUNTED LIGHTING. MAINTAIN BRANCH CIRCUIT SERVING LIGHTING FOR CONNECTION TO NEW LIGHTING. WALLS TO BE DEMOLISHED ARE SHOWN AS DASHED.
- G. REMOVE ALL ELECTRICAL DEVICES ON WALLS TO BE DEMOLISHED (POWER, FIRE ALARM, P.A., ETC.) EXISTING CEILING MOUNTED LIGHTING TO AND BRANCH CIRCUITING TO REMAIN. WALLS TO BE DEMOLISHED ARE SHOWN AS DASHED.
- H. REMOVE CAFETERIA SOUND SYSTEM, SPEAKERS, AND CABLING COMPLETE.
- I. REMOVE GYMNASIUM SOUND SYSTEM, INCLUDING SPEAKERS, MICROPHONE INPUTS, AND CABLING COMPLETE.
- J. IN-ROOM SOUND SYSTEM SPEAKER TO BE RELOCATED. REMOVE, PROTECT, AND STORE FOR REINSTALLATION. EXISTING SPEAKER CABLING TO REMAIN.
- K. REMOVE LIGHT FIXTURES, SWITCH, AND COVERPLATE COMPLETE. BRANCH CIRCUIT SERVING ROOM SHALL REMAIN FOR REUSE. CIRCUITING FOR EXHAUST FAN CONTROLLED BY SWITCH TO REMAIN (AS APPLICABLE).
- L. MECHANICAL DEVICE TO BE REMOVED. DISCONNECT ASSOCIATED FEEDER AND/OR BRANCH CIRCUIT AND REMOVE BACK TO SOURCE. REMOVE ASSOCIATED STARTERS AND/OR DISCONNECT SWITCHES COMPLETE AS REQUIRED.
- M. REMOVE EXHAUST FAN CONTROL SWITCH COMPLETE. EXISTING BRANCH CIRCUIT TO REMAIN FOR REUSE.
- N. REMOVE EXIT SIGN COMPLETE. EXISTING BRANCH CIRCUIT TO REMAIN FOR REUSE.
- O. REMOVE LIGHT FIXTURE COMPLETE. EXISTING BRANCH CIRCUIT AND CONTROLS TO REMAIN. FIELD VERIFY LOCATION OF EXISTING CONTROLS.
- P. REMOVE CEILING MOUNTED DEVICE TO ALLOW FOR INSTALLATION OF NEW CEILING TILES AND GRID. REINSTALL DEVICE ONCE INSTALLATION OF NEW CEILING IS COMPLETE. EXISTING CABLING/BRANCH CIRCUIT TO REMAIN. COORDINATE WORK WITH CEILING INSTALLATION CONTRACTOR.
- Q. MECHANICAL DEVICE TO BE REMOVED. DISCONNECT ASSOCIATED FEEDER AND/OR BRANCH CIRCUIT AS REQUIRED. EXISTING FEEDER/BRANCH CIRCUIT TO REMAIN FOR REUSE.
- R. ALTERNATE E11A: REMOVE EXTERIOR LIGHT FIXTURES AS INDICATED COMPLETE. CLOCK SYSTEM BELL TO BE RELOCATED. REMOVE, PROTECT, AND STORE FOR REUSE. EXISTING CLOCK CIRCUIT TO REMAIN TO BE EXTENDED TO NEW LOCATION. REFER TO E3 SERIES DRAWINGS FOR NEW BELL LOCATION.



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REG. PROFESSIONAL ENGINEER

FARMINGTON PUBLIC SCHOOLS - 2015 BOND

2017 RENOVATIONS

LONGACRE ELEMENTARY SCHOOL

AREA B ELECTRICAL DEMOLITION PLAN

PRELIMINARY	<input type="checkbox"/>
DESIGN DEVELOPMENT	<input type="checkbox"/>
CONSTRUCTION	<input checked="" type="checkbox"/>
FINAL RECORD	<input type="checkbox"/>

DRAWN BY: JRD
CHECKED BY: G.J.

REVISIONS:

BIDS	11-30-2016
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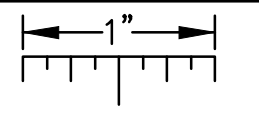
DATE: NOVEMBER 30, 2016
SHEET NO.:

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JOB NO. 161664A

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THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



AREA 'A' LIGHTING NEW WORK PLAN
SCALE: 1/8" = 1' - 0"

GENERAL NOTES:

1. THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
3. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
4. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
5. MOTOR CIRCUIT PROTECTION SHALL BE SIZED IN ACCORDANCE WITH MOTOR CIRCUIT SIZING SCHEDULES SHOWN ON "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS OTHERWISE NOTED.
6. COORDINATE THE MOUNTING HEIGHTS OF DEVICES WITH ARCHITECTURAL ELEVATIONS AND THE TRADES INSTALLING THE WORK.
7. REFER TO MECHANICAL SCHEDULE SHEETS FOR ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT. PROVIDE ALL CONNECTIONS, STARTERS, DISCONNECTS, ETC. AS REQUIRED BY SCHEDULES AND WHERE NOTED ELSEWHERE. VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH SHOP DRAWINGS SUBMITTALS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND ELECTRICAL DRAWINGS. WHERE CIRCUIT SIZES ARE SHOWN ON THE ELECTRICAL DRAWINGS THAT DIFFER FROM WHAT IS INDICATED ON THE MECHANICAL SCHEDULES, PROVIDE THE CIRCUIT OF HIGHER AMPACITY.
8. CIRCUIT EXIT LIGHT FIXTURES UNSWITCHED TO HOT LEG OF NEAREST AVAILABLE LIGHTING BRANCH CIRCUIT.

CONSTRUCTION KEY NOTES:

1. REMOVE EXISTING LAMPS AND BALLAST FOR LIGHT FIXTURES IN ROOM. PROVIDE (2) PHILIPS INSTANTFIT LED T8 LAMPS AND (1) T8 LED DRIVER. LAMPS SHALL BE 4000K COLOR TEMP.
2. REMOVE EXISTING LAMPS AND BALLAST FOR LIGHT FIXTURES IN ROOM. PROVIDE (3) PHILIPS INSTANTFIT LED T8 LAMPS AND (1) T8 LED DRIVER. LAMPS SHALL BE 4000K COLOR TEMP.
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5. CONNECT NEW LIGHT SWITCHES TO EXISTING BRANCH CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.
6. CIRCUIT NEW LIGHT FIXTURES TO EXISTING LIGHTING BRANCH CIRCUIT SERVING SPACE VIA NEW OCCUPANCY SENSORS AND EXISTING WALL SWITCHES. ELECTRICAL CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING WALL SWITCHES. EXTEND CONDUIT AND WIRE AS REQUIRED.
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8. CIRCUIT LIGHT FIXTURES TO EXISTING SITE LIGHTING BRANCH CIRCUIT AND CONTROLS. EXTEND CONDUIT AND WIRE AS REQUIRED.

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AREA 'A' LIGHTING NEW WORK PLAN

- PRELIMINARY
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- CONSTRUCTION
- FINAL RECORD

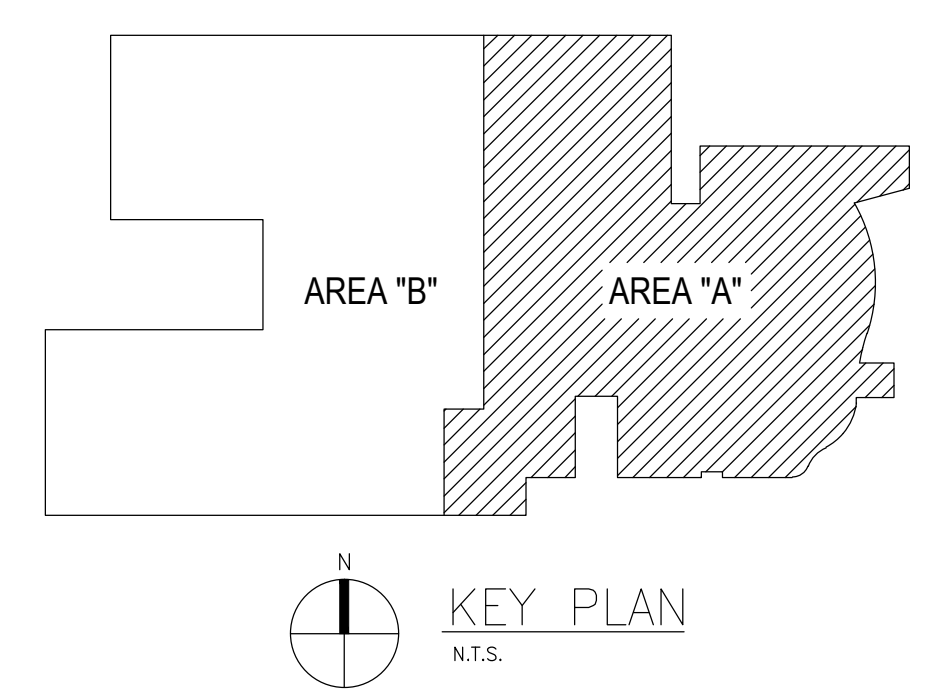
DRAWN BY: JRD
CHECKED BY: GJJ

REVISIONS:
BIDS: 11-30-2016

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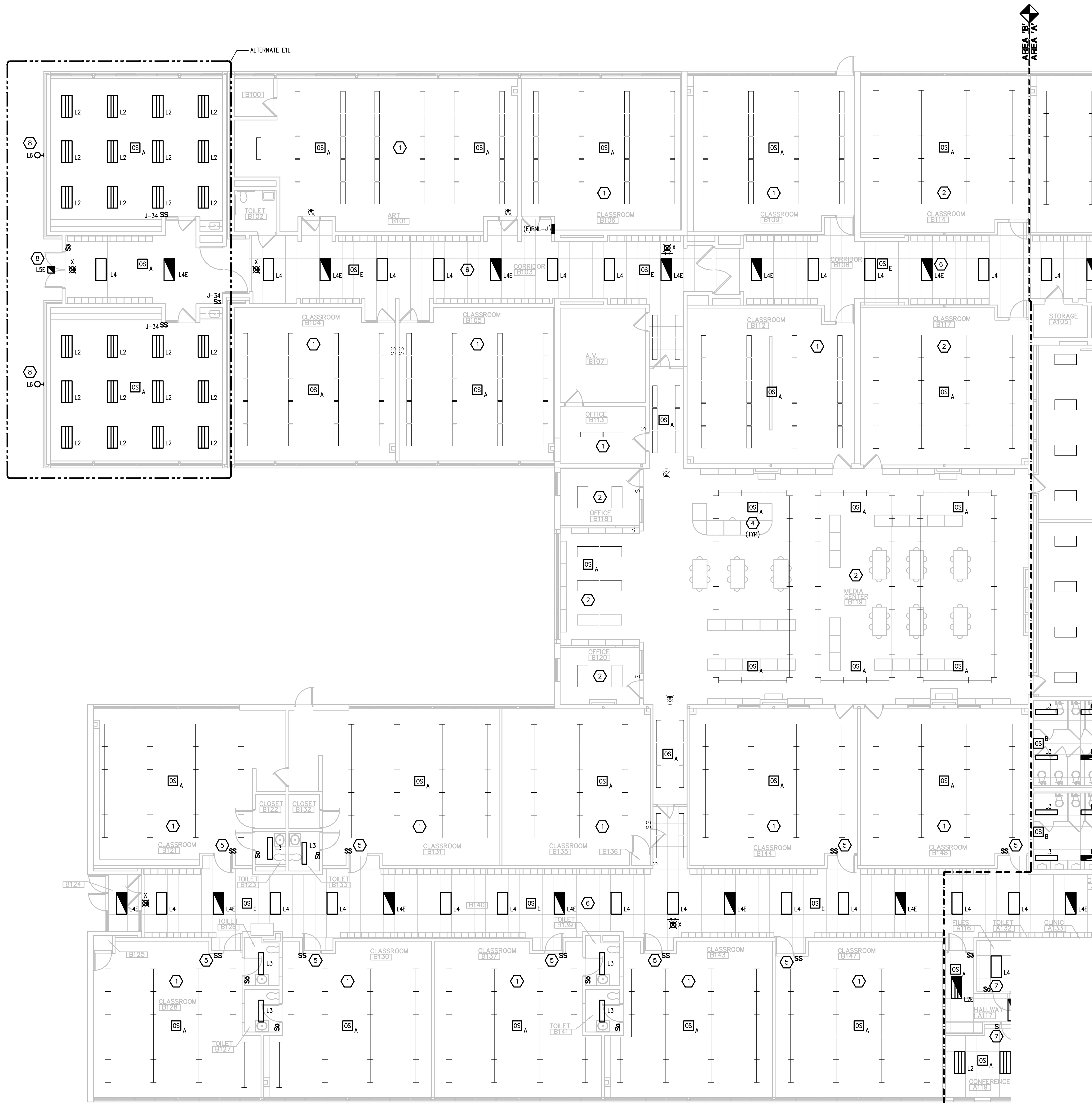
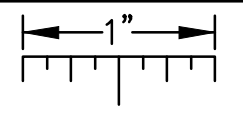
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JOB NO. 161664A



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AREA 'B' LIGHTING NEW WORK PLAN
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GENERAL NOTES:

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AREA B LIGHTING NEW WORK PLAN

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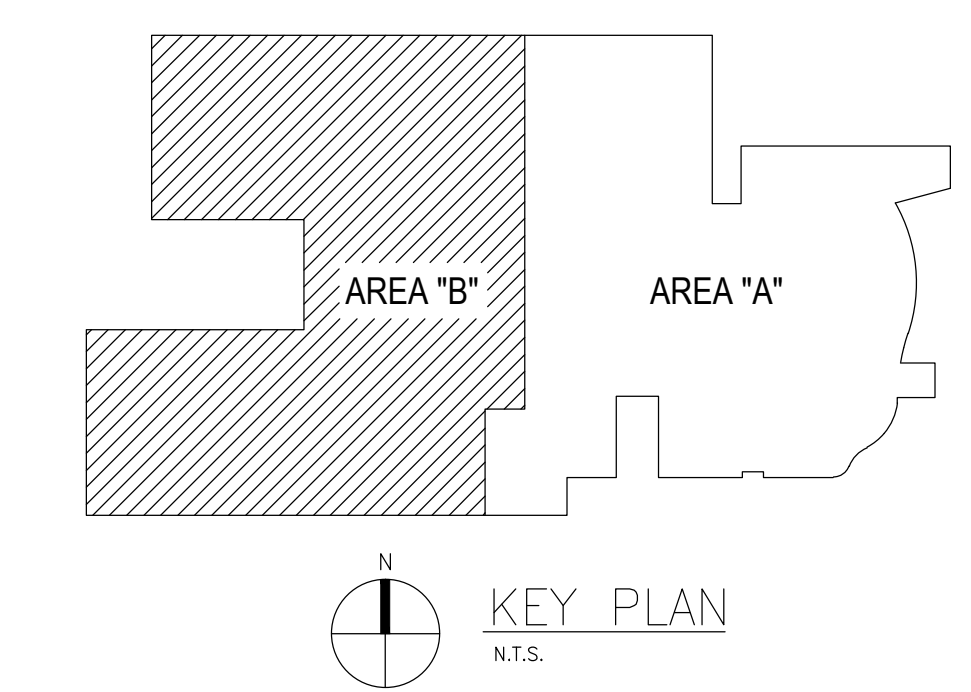
DRAWN BY: JRD
CHECKED BY: GJL

REVISIONS:
BIDS 11-30-2016

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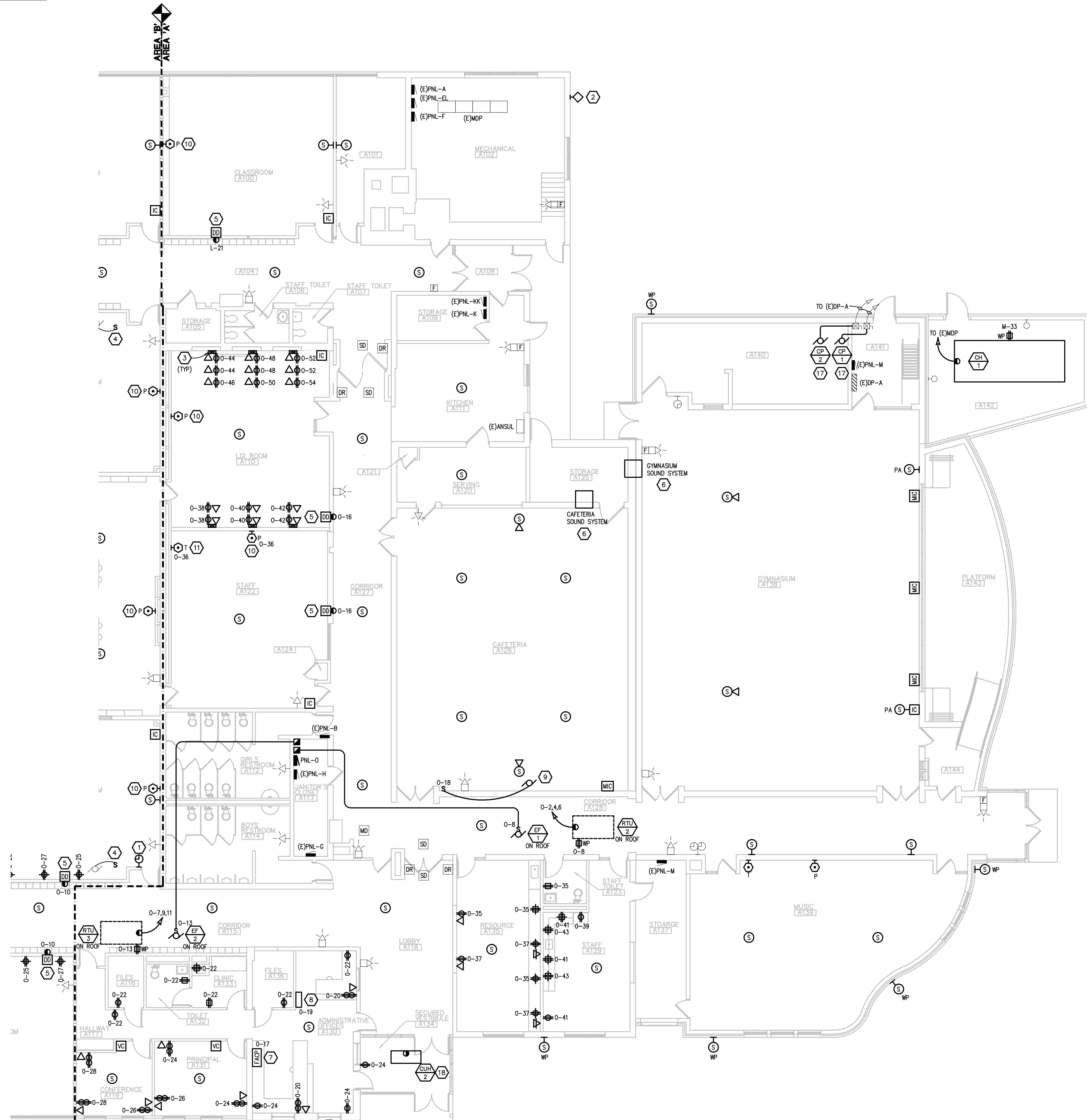
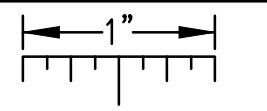
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AREA 'A' POWER NEW WORK PLAN
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- REFER TO MECHANICAL SCHEDULE SHEETS FOR ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT. PROVIDE ALL CONNECTIONS, STARTERS, DISCONNECTS, ETC. AS REQUIRED BY SCHEDULES AND WHERE NOTED ELSEWHERE. VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH SHOP DRAWINGS SUBMITTALS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND ELECTRICAL DRAWINGS. WHERE CIRCUIT SIZES ARE SHOWN ON THE ELECTRICAL DRAWINGS THAT DIFFER FROM WHAT IS INDICATED ON THE MECHANICAL SCHEDULES, PROVIDE THE CIRCUIT OF HIGHER AMPACITY.
- CIRCUIT EXIT LIGHT FIXTURES UNSWITCHED TO HOT LEG OF NEAREST AVAILABLE LIGHTING BRANCH CIRCUIT.

CONSTRUCTION KEY NOTES:

- RELOCATED CLOCK. CONNECT TO EXISTING CLOCK CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.
- PORTABLE GENERATOR CONNECTION. REFER TO E5 SERIES DRAWINGS FOR DETAILS.
- PROVIDE VERTICAL WIREMOLD 14000 OR EQUIVALENT STEEL DUAL CHANNEL RACEWAY FROM ABOVE CEILING TO 16" AFF WITH RECEPTACLES AND TECHNOLOGY OUTLETS AS INDICATED AT BOTTOM OF RACEWAY. PROVIDE WITH ALL COMPONENTS AND ACCESSORIES AS REQUIRED FOR A COMPLETE SYSTEM. CIRCUIT RECEPTACLES AS INDICATED. PROVIDE BLANK COVER FOR TECHNOLOGY OUTLETS. TECHNOLOGY WIRING, DEVICES, AND FINAL COVERPLATE BY OTHERS.
- CIRCUIT EXHAUST FAN TOGGLE SWITCH TO EXISTING BRANCH CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.
- SMOKE DAMPER DUCT SMOKE DETECTOR SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR. COORDINATE INSTALLATION WITH THE MECHANICAL CONTRACTOR SO THAT UPON DETECTION OF SMOKE, THE SUPPLY/RETURN FAN SERVING THE SPACE WILL SHUT DOWN. ELECTRICAL CONTRACTOR SHALL WIRE DUCT SMOKE DETECTOR TO FIRE ALARM SYSTEM, AND CIRCUIT DAMPER ACTUATOR FROM 120V CIRCUIT AS INDICATED. PROVIDE A 20A-1P SWITCH AT EACH ACTUATOR. CONTROL OF AIR HANDLING EQUIPMENT AND DAMPER ACTUATOR IS VIA THE FIRE ALARM CONTROL PANEL. PROVIDE ALL REQUIRED CONTROL MODULES AND RELAYS. COORDINATE WORK WITH THE TEMPERATURE CONTROL CONTRACTOR AND FIRE ALARM VENDOR. DAMPER SHALL CLOSE UPON DETECTION OF SMOKE AND SHUT DOWN ASSOCIATED AHU. DAMPER SHALL ALSO CLOSE UPON NORMAL SHUT DOWN OF AHU. PROVIDE ALL CONTROL MODULES, RELAYS, ETC. FOR A COMPLETE SYSTEM.
- SOUND EQUIPMENT RACK. REFER TO DETAIL ON E7 SERIES DRAWINGS FOR REQUIREMENTS.
- RELOCATED FIRE ALARM CONTROL PANEL. EXTEND EXISTING FIRE ALARM CIRCUITS TO NEW LOCATION. PROVIDE NEW BRANCH CIRCUIT AS INDICATED FOR SYSTEM POWER.
- RELOCATED MASTER CLOCK. EXTEND EXISTING CLOCK CIRCUITS TO NEW LOCATION. PROVIDE NEW BRANCH CIRCUIT AS INDICATED FOR SYSTEM POWER.
- MOTORIZED PROJECTION SCREEN AND CONTROLS FURNISHED BY OTHERS AND INSTALLED BY ELECTRICAL CONTRACTOR. PROVIDE BRANCH CIRCUIT AS INDICATED. VERIFY EXACT LOCATION OF CONTROL SWITCH WITH OWNER PRIOR TO INSTALLATION.
- REFER TO SHORT THROW PROJECTOR MOUNTING DETAILS ON E7 SERIES DRAWINGS FOR POWER AND DATA REQUIREMENTS AT NEW PROJECTOR LOCATION. COORDINATE EXACT LOCATION WITH TECHNOLOGY CONTRACTOR AND ARCHITECTURAL TRADES. CIRCUIT PROJECTOR TO BRANCH CIRCUIT IN ROOM THAT PREVIOUSLY SERVED TELEVISION UNLESS INDICATED OTHERWISE.
- REFER TO TEACHER STATION DETAILS ON E7 SERIES DRAWINGS FOR POWER AND DATA REQUIREMENTS AT TEACHER STATION LOCATION. COORDINATE EXACT LOCATION WITH TECHNOLOGY CONTRACTOR AND ARCHITECTURAL TRADES. CIRCUIT RECEPTACLES AS INDICATED.
- BASE BID: MOUNT PA SYSTEM SPEAKER AT EXISTING EXTERIOR WALL. ALTERNATE EEL: MOUNT PA SYSTEM SPEAKER TO NEW EXTERIOR WALL AS INDICATED.
- RELOCATED CLOCK SYSTEM BELL. EXTEND EXISTING CLOCK CIRCUIT AS REQUIRED.
- PROVIDE 2-CANAL JUNCTION BOX WITH 3/4" C. TO ABOVE ACCESSIBLE CEILING FOR CARD READER. PROVIDE CONDUIT WITH NYLON PULLSTRING. PROVIDE BLANK COVERPLATE AT JUNCTION BOX.
- ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE ALARM CONTROL MODULE AND SMOKE DETECTORS FOR DOOR RELEASE. COORDINATE MOUNTING WITH DOOR CONTRACTOR. ALL RELATED DOOR HARDWARE IS PROVIDED BY OTHERS. WIRE TO FIRE ALARM PANEL SO THAT UPON DETECTION OF SMOKE AT ASSOCIATED DOOR SMOKE DETECTORS, DOOR WILL RELEASE AND FIRE ALARM SYSTEM WILL BE ACTIVATED. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER (FROM DEDICATED CIRCUIT) OR 24V POWER FROM THE NEAREST FIRE ALARM SYSTEM AS REQUIRED. PROVIDE (2) 4" CONDUITS STUBBED THROUGH SMOKE PARTITION, EXTENDING 4" FROM EACH SIDE OF THE PARTITION. PROVIDE REMOVABLE/RESEALABLE FIRE STOPPING FOR EACH CONDUIT.
- PROVIDE BRANCH CIRCUIT AS INDICATED FOR DOOR HARDWARE POWER SUPPLY. POWER SUPPLY TO BE PROVIDED BY DOOR HARDWARE CONTRACTOR. COORDINATE EXACT REQUIREMENTS WITH DOOR HARDWARE CONTRACTOR. ELECTRICAL CONTRACTOR TO MAKE FINAL CONNECTIONS.
- CIRCUIT NEW MECHANICAL EQUIPMENT TO EXISTING STARTER AS INDICATED. EXISTING STARTER FED FROM DP-A LOCATED IN STORAGE A141. PROVIDE NEW THERMAL OVERLOAD PROTECTION AT EXISTING STARTER AS REQUIRED. COORDINATE REQUIREMENTS WITH NEW MOTOR MANUFACTURER.
- CIRCUIT NEW CABINET UNIT HEATER TO EXISTING BRANCH CIRCUIT THAT PREVIOUSLY SERVED REMOVED CABINET UNIT HEATER. EXTEND CONDUIT AND WIRE AS REQUIRED.

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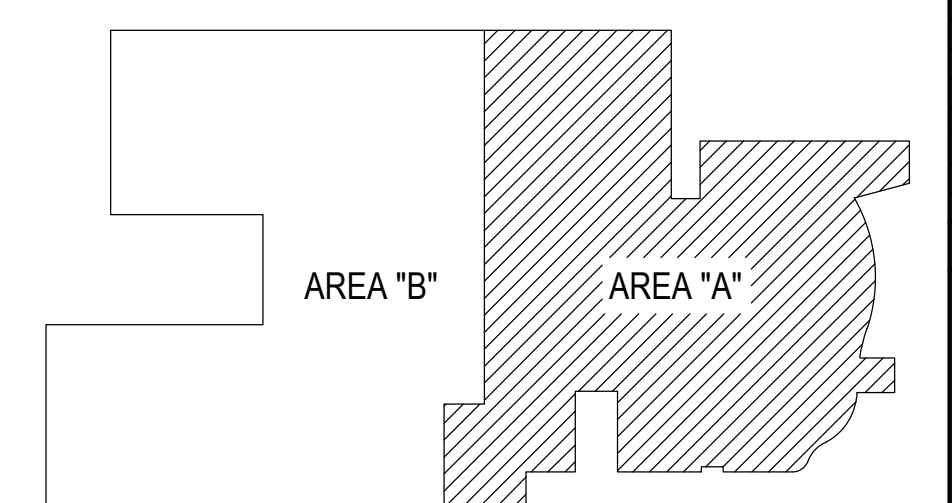
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KEY PLAN
N.T.S.



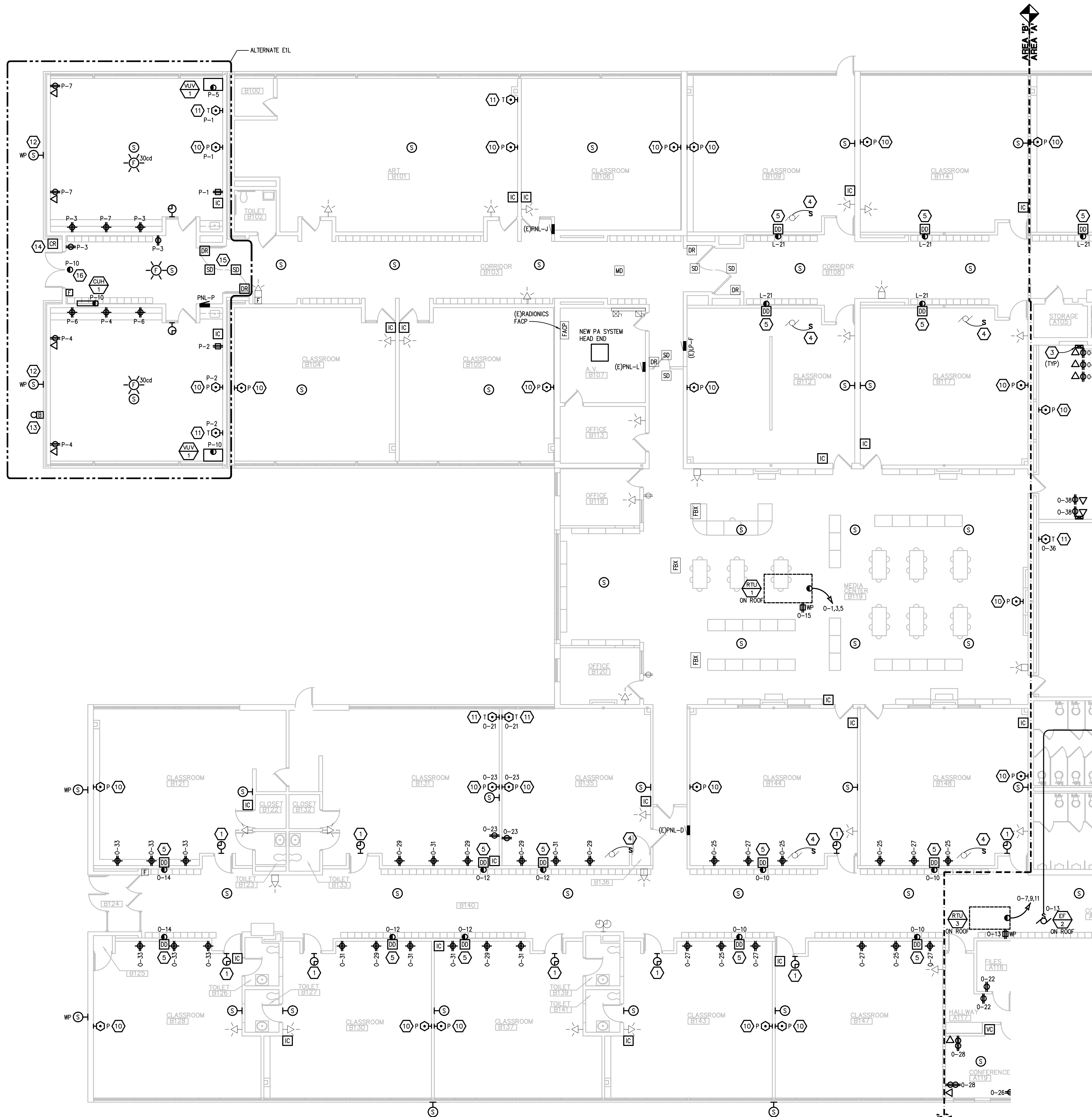
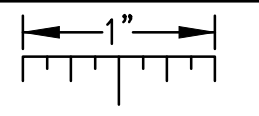
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13. RELOCATED CLOCK SYSTEM BELL. EXTEND EXISTING CLOCK CIRCUIT AS REQUIRED.
14. PROVIDE 2-CANAL JUNCTION BOX WITH 3/4" T. TO ABOVE ACCESSIBLE CEILING FOR CARD READER. PROVIDE CONDUIT WITH NYLON PULLSTRING. PROVIDE BLANK COVERPLATE AT JUNCTION BOX.
15. ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE ALARM CONTROL MODULE AND SMOKE DETECTORS FOR DOOR RELEASE. COORDINATE MOUNTING WITH DOOR CONTRACTOR. ALL RELATED DOOR HARDWARE IS PROVIDED BY OTHERS. WIRE TO FIRE ALARM PANEL SO THAT UPON DETECTION OF SMOKE AT ASSOCIATED DOOR SMOKE DETECTORS, DOOR WILL RELEASE AND FIRE ALARM SYSTEM WILL BE ACTIVATED. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER FROM DEDICATED CIRCUIT OR 24V POWER FROM THE NEAREST FIRE ALARM SYSTEM AS REQUIRED. PROVIDE (2) 4" CONDUITS STUBBED THROUGH SMOKE PARTITION, EXTENDING 4" FROM EACH SIDE OF THE PARTITION. PROVIDE REMOVABLE/RESEALABLE FIRE STOPPING FOR EACH CONDUIT.
16. PROVIDE BRANCH CIRCUIT AS INDICATED FOR DOOR HARDWARE POWER SUPPLY. POWER SUPPLY TO BE PROVIDED BY DOOR HARDWARE CONTRACTOR. COORDINATE EXACT REQUIREMENTS WITH DOOR HARDWARE CONTRACTOR. ELECTRICAL CONTRACTOR TO MAKE FINAL CONNECTIONS.
17. CIRCUIT NEW MECHANICAL EQUIPMENT TO EXISTING STARTER AS INDICATED. EXISTING STARTER FED FROM DP-A LOCATED IN STORAGE A141. PROVIDE NEW THERMAL OVERLOAD PROTECTION AT EXISTING STARTER AS REQUIRED. COORDINATE REQUIREMENTS WITH MOTOR MANUFACTURER.
18. CIRCUIT NEW CABINET UNIT HEATER TO EXISTING BRANCH CIRCUIT THAT PREVIOUSLY SERVED REMOVED CABINET UNIT HEATER. EXTEND CONDUIT AND WIRE AS REQUIRED.

FARMINGTON PUBLIC SCHOOLS - 2015 BOND
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AREA B POWER NEW WORK PLAN

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

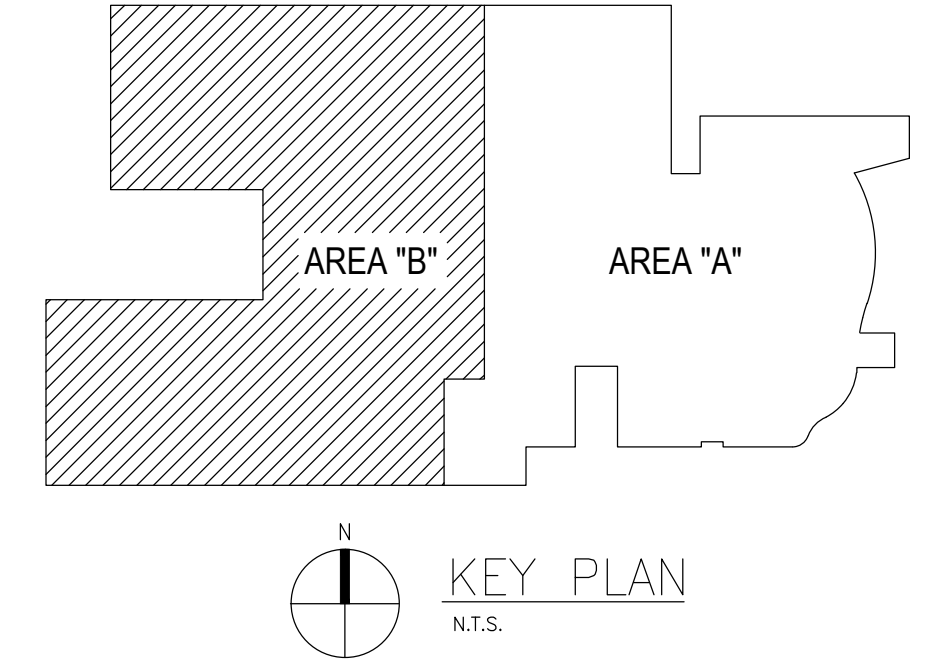
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REVISIONS:
BIDS: 11-30-2016

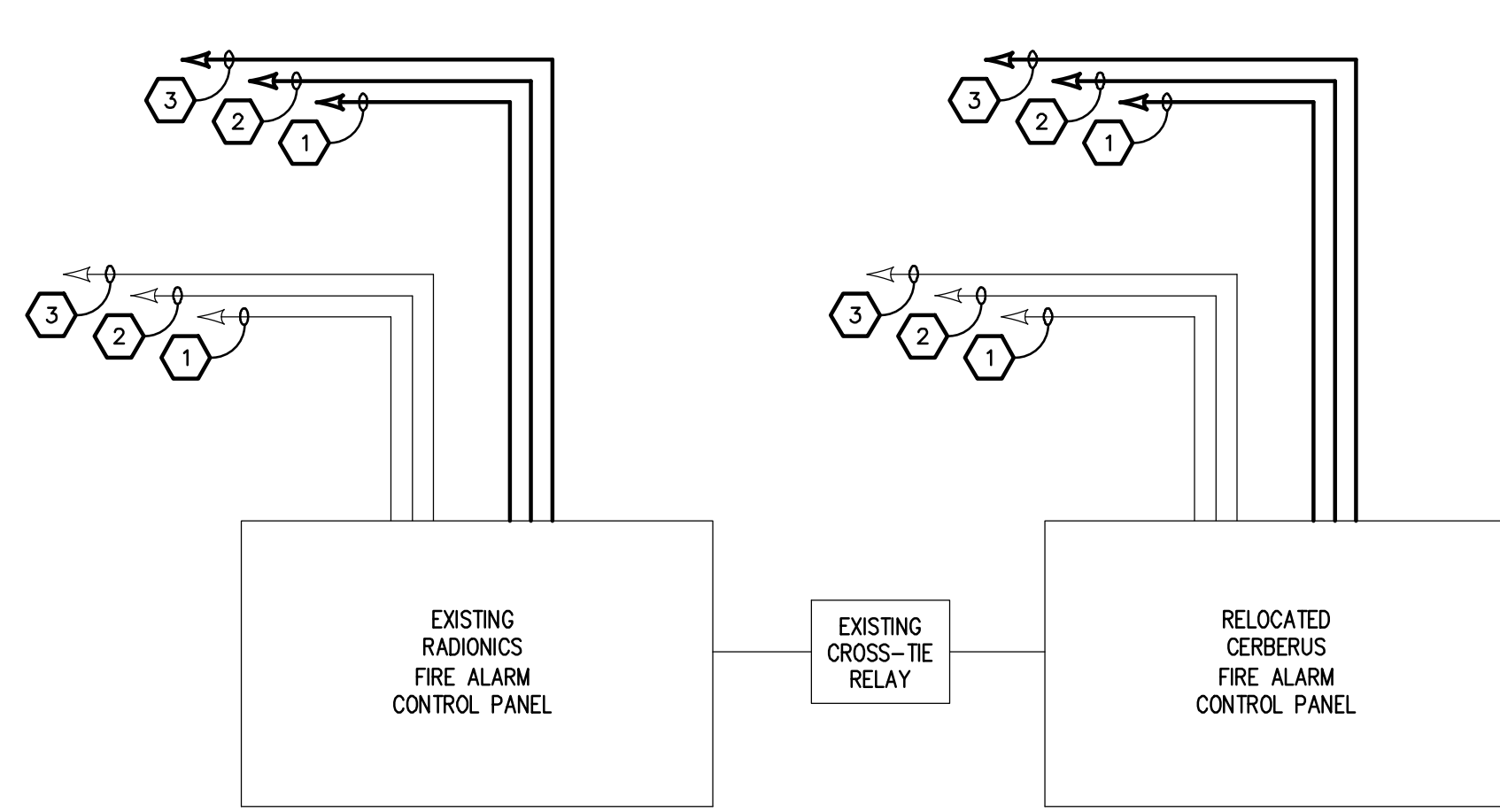
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SHEET NO.:

E3.1BLA

JOB NO. 161664A



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KEY NOTES:

- ADDRESSABLE INITIATING DEVICE LOOP (SIGNALLING LINE CIRCUIT), CLASS B, STYLE 4 WIRING, INCLUDES MANUAL PULL STATIONS, SMOKE DETECTORS, THERMAL DETECTORS, WATER FLOW SWITCHES, TAMPER SWITCHES, ETC. SEE PLAN DRAWINGS FOR DEVICE LOCATIONS AND QUANTITIES. PROVIDE WIRING AS SPECIFIED BY SYSTEM MANUFACTURER.
- VISUAL NOTIFICATION APPLIANCE CIRCUIT, CLASS B, STYLE Y WIRING. SEE PLAN DRAWINGS FOR DEVICE LOCATION AND QUANTITIES. PROVIDE WIRING AND NUMBER OF CIRCUITS AS REQUIRED BY SYSTEM MANUFACTURER BASED ON MANUFACTURERS CIRCUIT LOAD CALCULATIONS.
- AUDIBLE NOTIFICATION APPLIANCE CIRCUIT, CLASS B, STYLE Y WIRING. SEE PLAN DRAWINGS FOR DEVICE LOCATION AND QUANTITIES.

FIRE ALARM RISER DIAGRAM

NO SCALE

NOTE:

- COORDINATE ROOM NAMES AND/OR NUMBERS WITH OWNER PRIOR TO FINAL PROGRAMMING.
- PROVIDE MANUFACTURER'S FIELD SERVICES FOR SUPERVISING FINAL WIRING CONNECTIONS, INSPECTION AND ADJUSTING OF COMPLETED INSTALLATION, AND SYSTEMS DEMONSTRATION.
- PROVIDE 2 YEAR WARRANTY PARTS AND SERVICE.

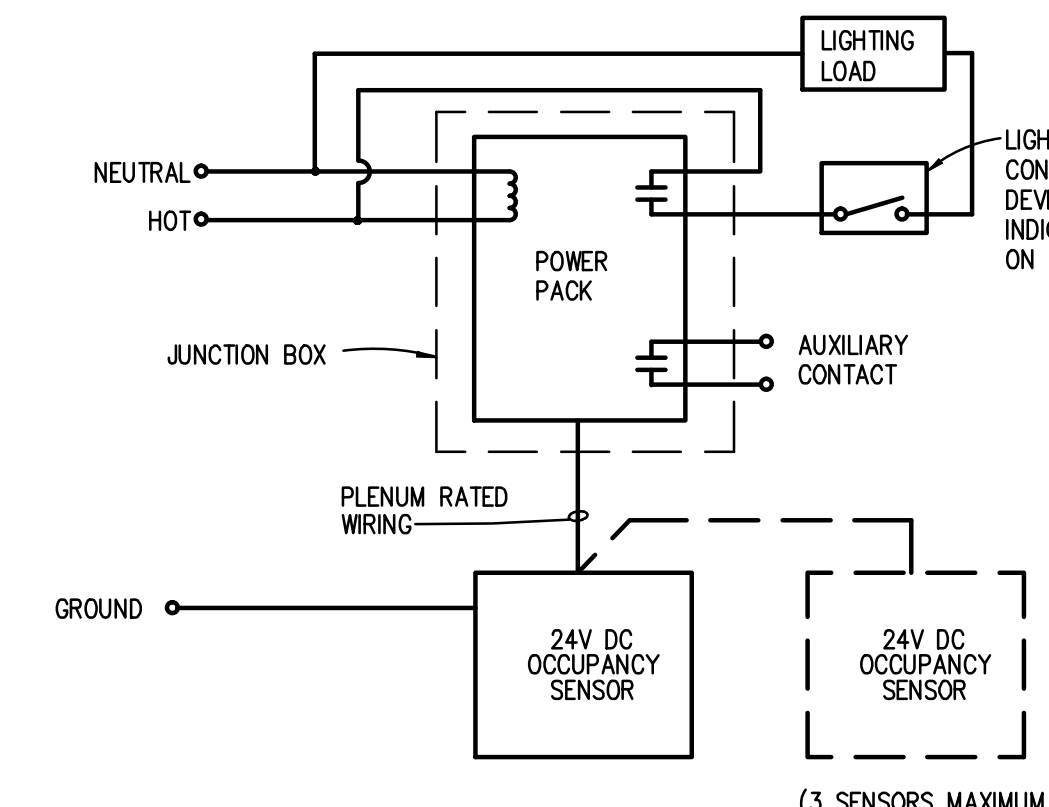
SYSTEM INPUTS	ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE EXHAUSTION SIGNALS	ACTIVATE AUDIBLE SUPERVISORY SIGNAL INDICATOR	ACTIVATE COMMON PROBABLE SIGNAL	ACTIVATE COMMON PROBABLE SIGNAL INDICATOR	ACTIVATE CHANGE OF STATUS	TRANSMIT FIRE ALARM SIGNAL ON DIST. P. CONTROL P.W.	TRANSMIT PROBABLE SIGNAL TO SECURITY	RELEASE MANUALLY REED SMOKE EXPOS
MANUAL FIRE ALARM BOXES	●	●	●	●	●	●	●	●	●
SMOKE AND HEAT DETECTOR ACTIVATION	●	●	●	●	●	●	●	●	●
DUCT DETECTOR ACTIVATION	●	●	●	●	●	●	●	●	●
FLOW SWITCH ACTIVATION	●	●	●	●	●	●	●	●	●
TAMPER SWITCH ACTIVATION	●	●	●	●	●	●	●	●	●
FIRE ALARM AC POWER FAILURE	●	●	●	●	●	●	●	●	●
FIRE ALARM SYSTEM LOW BATTERY	●	●	●	●	●	●	●	●	●
OPEN CIRCUIT	●	●	●	●	●	●	●	●	●
GROUND FAULT	●	●	●	●	●	●	●	●	●
NOTIFICATION APPLIANCE CIRCUIT SHORT	●	●	●	●	●	●	●	●	●

FIRE ALARM MATRIX

NO SCALE

NOTES:

- PROVIDE ALL RELAYS, CONTROL MODULES AND MATERIAL AND LABOR REQUIRED TO SHUT DOWN AIR HANDLING UNITS. COORDINATE WORK WITH THE TEMPERATURE CONTROL CONTRACTOR.
- FIRE ALARM VENDOR SHALL CONFIRM THE ABOVE OPERATION MATRIX WITH THE AUTHORITIES HAVING JURISDICTION. REVISE AS REQUIRED.

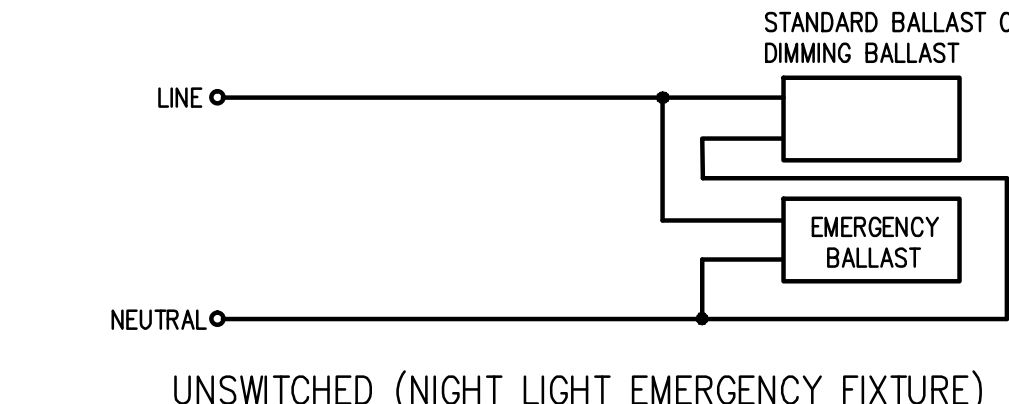
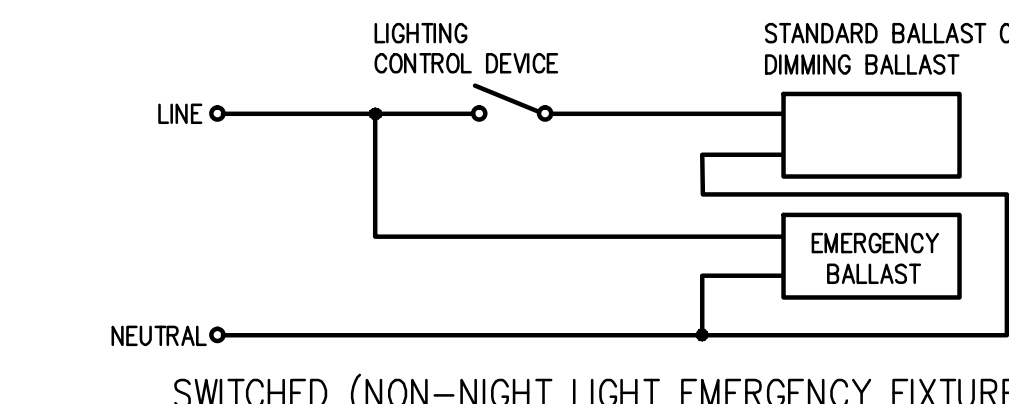


NOTES:

- REFER TO SPECIFICATIONS FOR ACCEPTED MANUFACTURERS.
- PROVIDE POWER PACKS AND SLAVE PACKS AS REQUIRED FOR SWITCHING AS INDICATED ON PLAN. REVISE DETAIL AS REQUIRED BY MANUFACTURER.
- MOUNTING LOCATION PER MANUFACTURER'S RECOMMENDATION.
- ADJUST SENSITIVITY LEVELS PER THE OWNER REQUIREMENTS.
- PROVIDE FACTORY SUPPORT FOR AIMING/ADJUSTING OF SENSORS.
- PLACE CEILING MOUNTED OCCUPANCY SENSORS IN CENTER OF A FULL CEILING TILE, WHERE APPLICABLE.
- SENSOR ADJUSTMENT: BEFORE MAKING ADJUSTMENTS, MAKE SURE ROOM FURNITURE IS INSTALLED, LIGHTING CIRCUITS ARE TURNED ON, AND THE HVAC SYSTEMS ARE IN THE ON POSITION. VAV SYSTEMS SHOULD BE SET TO THEIR HIGHEST AIRFLOW. SET THE LOGIC CONFIGURATION DIP SWITCHES TO "EITHER". EITHER REQUIRES MOTION DETECTION BY ONLY ONE TECHNOLOGY. SET THE TIME DELAY PER OWNERS DIRECTION.

OCCUPANCY SENSOR WIRING DIAGRAM

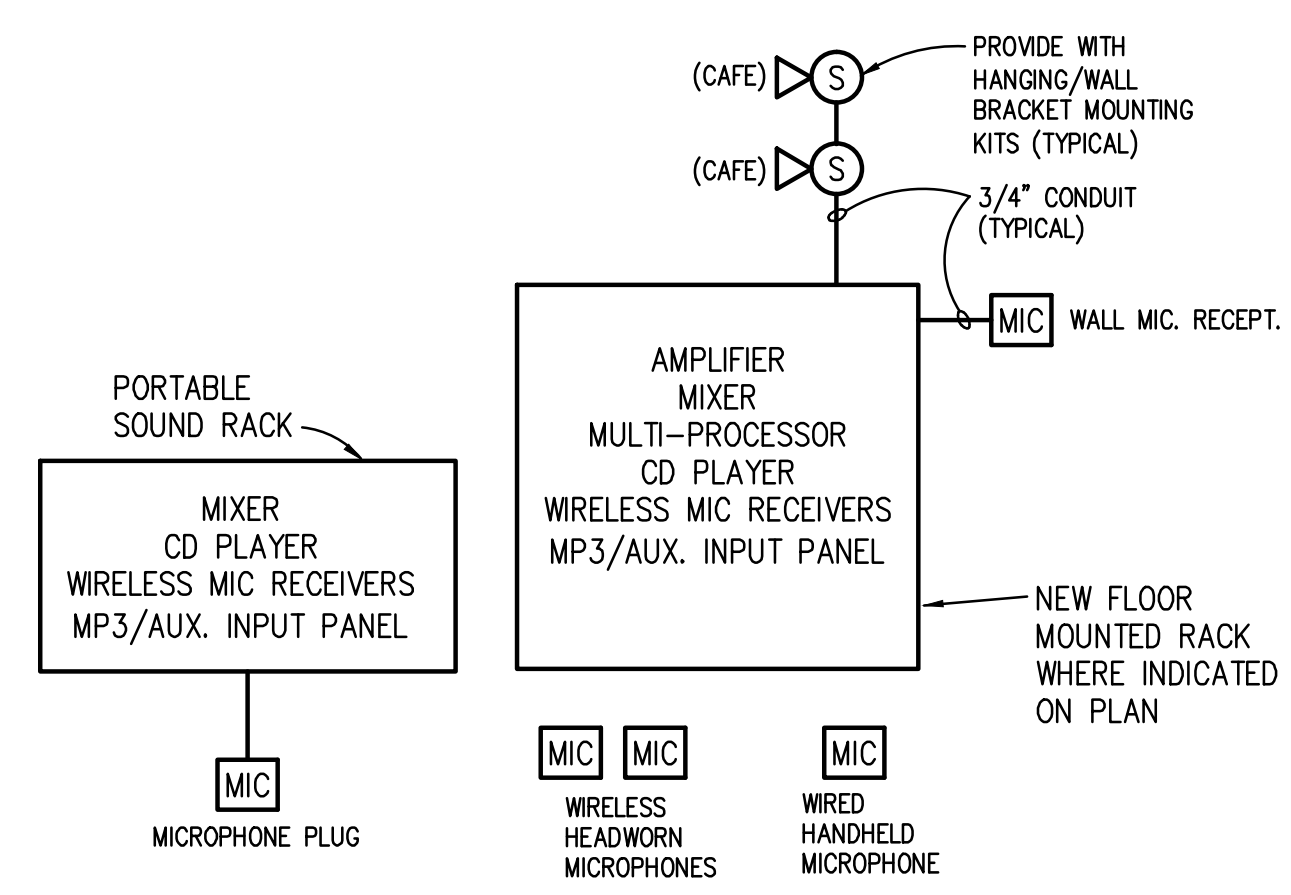
NO SCALE



NOTE: PRIMARY CIRCUIT ONLY. LAMP LEADS NOT SHOWN.

EMERGENCY BALLAST DIAGRAM

NO SCALE



CAFETERIA SOUND SYSTEM DETAIL

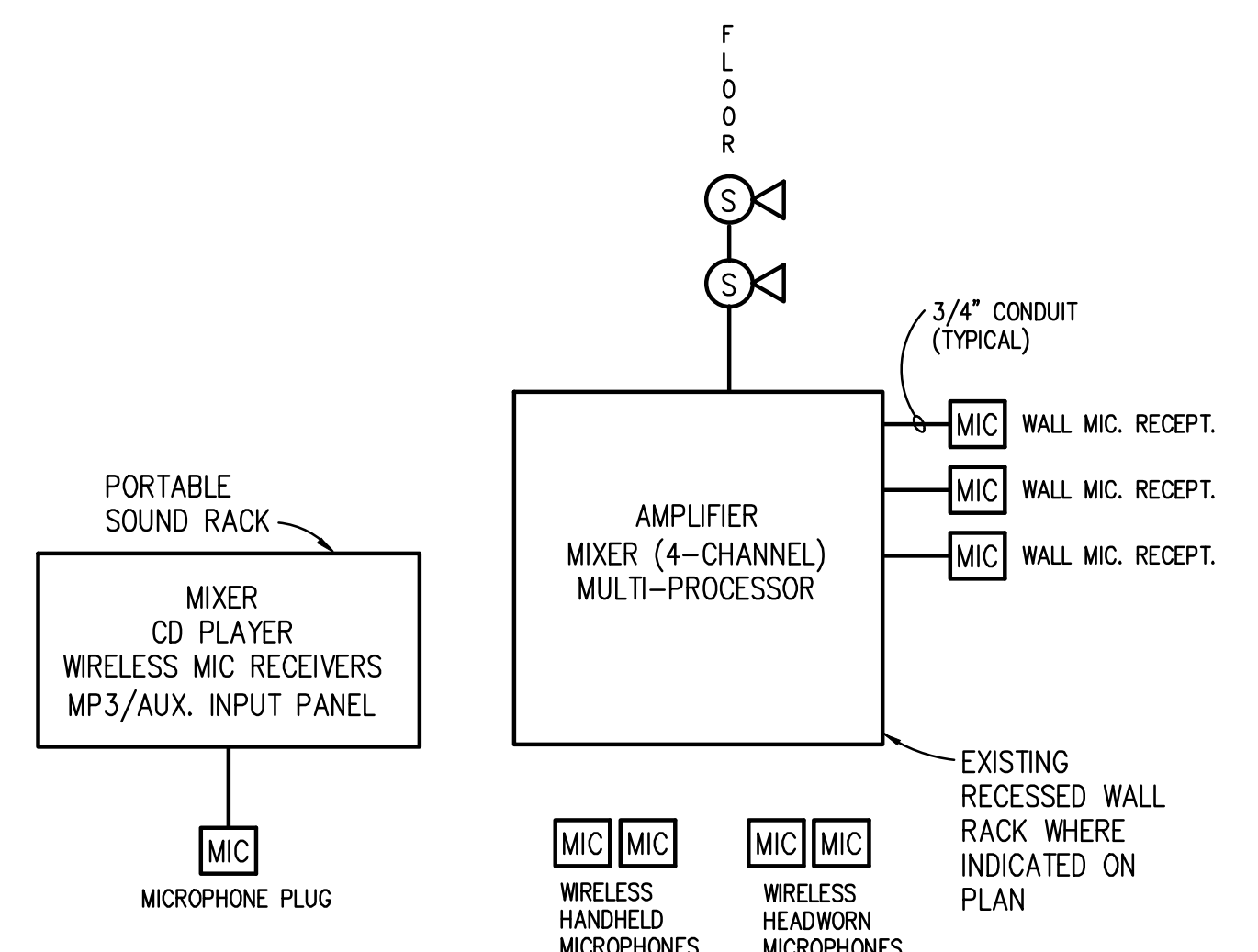
NO SCALE

NOTE:

- PROVIDE ALL CABLING PER MANUFACTURERS RECOMMENDATIONS. EQUIPMENT TO BE FURNISHED AND INSTALLED BY ICOMM (AS SUB-CONTRACTOR TO THE E.C.). PROVIDE ALL MISC WIRE/CABLING CONNECTORS AND BRACKETS FOR A COMPLETE SYSTEM. TEST AND TUNE SYSTEM. PROVIDE OWNER TRAINING. ENTIRE SYSTEM SHALL BE WARRANTED FOR FOR 1 YEARS FROM DATE OF ACCEPTANCE.

EQUIPMENT LIST

- (MISC. EQUIPMENT)
- 2 IBL AMS215/29 SPEAKERS
 - 2 HANGING/WALL BRACKETS (PROVIDE SUPPORT AS REQUIRED)
 - 1 WALL MOUNTED MICROPHONE OUTLETS WITH MICROPHONE JACKS
 - 1 SHURE SM58S MICROPHONE WITH 25' CABLE
- (FLOOR RACK)
- 2 CROWN CD-1000 AMPLIFIERS
 - 1 SHURE SMO268 MIXER
 - 1 DBX 220I DRIVERACK FEEDBACK SUPPRESSOR (MULTI-PROCESSOR)
 - 1 LOWELL LER-2422 LOCKING FLOOR CABINET (SIZED TO HOUSE EQUIPMENT NEEDED) WITH TWO RACK SPACE LOCKABLE DRAWER, PLUG STRIP AND FRONT DOOR
- (PORTABLE RACK)
- 1 MACKIE 1604VLZ4 MIXING BOARD
 - 1 DENON DN-C015 CD PLAYER
 - 2 AKG WMS470 WIRELESS HANDHELD MICROPHONE AND ALL COMPONENTS OR EQUAL
 - 1 AKG WMS470 WIRELESS PRESENTER HEADWORN MICROPHONE AND ALL COMPONENTS OR EQUAL
 - 1 PROCO RACK MP3/AUX. INPUT PANEL
 - 1 LOWELL PORTABLE RACK (SIZED TO HOUSE EQUIPMENT NEEDED) WITH CASTERS, TWO RACK SPACE LOCKABLE DRAWER AND PLUG STRIP. SYSTEM SHALL BE CAPABLE OF PROVIDING MUSIC FROM CD PLAYER, TUNER AND MAKE ANNOUNCEMENTS FROM WIRELESS MICROPHONES AND WIRED MICROPHONES BY PLUGGING INTO ANY MICROPHONE JACK



GYMNASIUM SOUND SYSTEM DETAIL

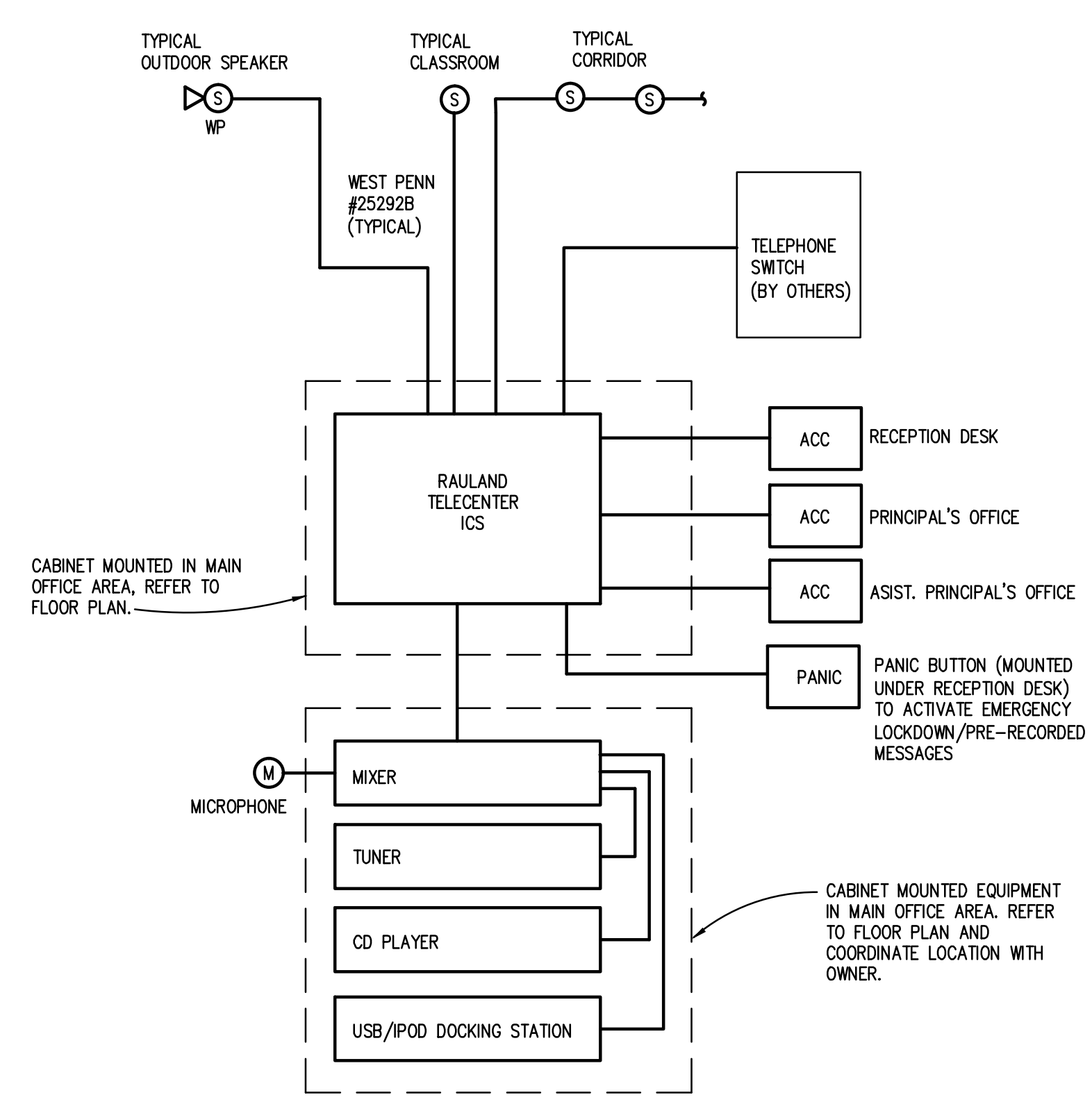
NO SCALE

NOTE:

- PROVIDE ALL CABLING PER MANUFACTURERS RECOMMENDATIONS. EQUIPMENT TO BE FURNISHED AND INSTALLED BY ICOMM (AS SUB-CONTRACTOR TO THE E.C.). PROVIDE ALL MISC WIRE/CABLING CONNECTORS AND BRACKETS FOR A COMPLETE SYSTEM. TEST AND TUNE SYSTEM. PROVIDE OWNER TRAINING. ENTIRE SYSTEM SHALL BE WARRANTED FOR FOR 1 YEAR FROM DATE OF ACCEPTANCE.

EQUIPMENT LIST

- (MISC. EQUIPMENT)
- 2 EV SX300PIX SPEAKERS
 - 2 HANGING/WALL BRACKETS (PROVIDE SUPPORT AS REQUIRED)
 - 2 WALL MOUNTED MICROPHONE OUTLETS WITH MICROPHONE JACKS
 - 1 SHURE SM58S MICROPHONE WITH 25' CABLE
 - 1 ATLASOUND FLOOR STAND MS12CE
- (FLOOR RACK)
- 2 CROWN CD-1000 AMPLIFIERS
 - 1 SHURE SMO268 MIXER
 - 2 WALL MOUNTED MICROPHONE OUTLETS WITH MICROPHONE JACKS
 - 1 SHURE SM58S MICROPHONE WITH 25' CABLE
 - 1 ATLASOUND FLOOR STAND MS12CE
- (PORTABLE RACK)
- 1 MACKIE 1604VLZ4 MIXING BOARD
 - 1 TASCAM CD200-IL CD PLAYER WITH IPOD INTERFACE
 - 1 AKG WMS470 WIRELESS HANDHELD MICROPHONE AND ALL COMPONENTS OR EQUAL
 - 2 AKG WMS470 WIRELESS PRESENTER HEADWORN MICROPHONE AND ALL COMPONENTS OR EQUAL
 - 1 PROCO RACK MP3/AUX. INPUT PANEL
 - 1 LOWELL PORTABLE RACK (SIZED TO HOUSE EQUIPMENT NEEDED) WITH CASTERS, TWO RACK SPACE LOCKABLE DRAWER AND PLUG STRIP. SYSTEM SHALL BE CAPABLE OF PROVIDING MUSIC FROM CD PLAYER, TUNER AND MAKE ANNOUNCEMENTS FROM WIRELESS MICROPHONES AND WIRED MICROPHONES BY PLUGGING INTO ANY MICROPHONE JACK



PUBLIC ADDRESS SYSTEM DETAIL

NO SCALE

NOTES:

- REFER TO FLOOR PLANS FOR LOCATIONS OF SPEAKERS.
- PROVIDE ALL NEW CABLING FOR THE ENTIRE SYSTEM.
- INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- SPLICE CABLE ONLY IN ACCESSIBLE JUNCTION BOXES OR AT TERMINAL BLOCK UNITS.
- MAKE CABLE SHIELDS CONTINUOUS AT SPLICES AND CONNECT SPEAKER CIRCUIT SHIELD TO EQUIPMENT GROUND ONLY AT AMPLIFIER.
- INSTALL INPUT CIRCUITS IN SEPARATE CABLES AND RACEWAYS FROM OUTPUT CIRCUITS.
- PROVIDE PROTECTION FOR EXPOSED CABLES SUBJECT TO DAMAGE.
- SUPPORT CABLES ABOVE ACCESSIBLE CEILINGS TO KEEP THEM FROM RESTING ON CEILING TILES. USE SPRING METAL CLIPS OR PLASTIC CABLE TIES TO SUPPORT CABLES FROM STRUCTURE. INCLUDE BRIDLE RINGS OR DRIVE RINGS.
- USE SUITABLE CABLE FITTINGS AND CONNECTORS.
- PROVIDE MANUFACTURER'S FIELD SERVICES FOR SUPERVISING FINAL WIRING CONNECTIONS, INSPECTION AND ADJUSTING OF COMPLETED INSTALLATION, AND SYSTEMS DEMONSTRATION.
- ADJUST TRANSFORMER TAPS FOR APPROPRIATE SOUND LEVEL.
- ADJUST DEVICES AND WALL PLATES TO BE FLUSH AND LEVEL.
- SEE FLOOR PLANS FOR LOCATION OF NEW CLOCKS.
- PROVIDE MANUFACTURER'S FIELD SERVICES FOR SUPERVISING FINAL WIRING CONNECTIONS AT MASTER CLOCK SYSTEM PANEL, INSPECTION AND ADJUSTING OF COMPLETED INSTALLATION, AND SYSTEMS DEMONSTRATION.
- INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- ALL CIRCUITING SHALL BE IN CONDUIT, WHERE REQUIRED BY THE N.E.C.



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FARMINGTON PUBLIC SCHOOLS - 2015 BOND
2017 RENOVATIONS
LONGACRE ELEMENTARY SCHOOL

ELECTRICAL DETAILS

- PRELIMINARY
- DESIGN DEVELOPMENT
- CONSTRUCTION
- FINAL RECORD

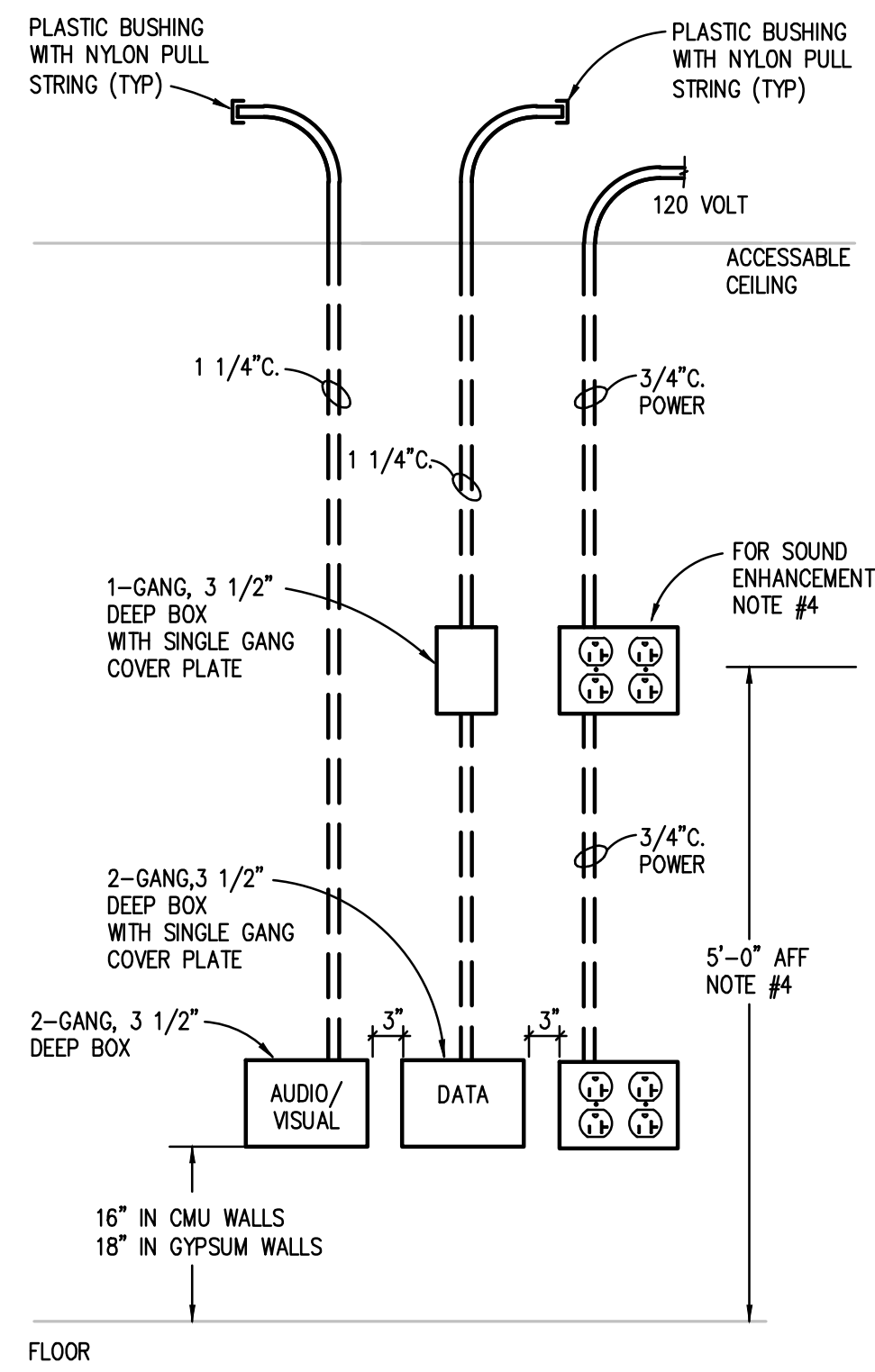
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REVISIONS: 11-30-2016

DATE: NOVEMBER 30, 2016
SHEET NO.:

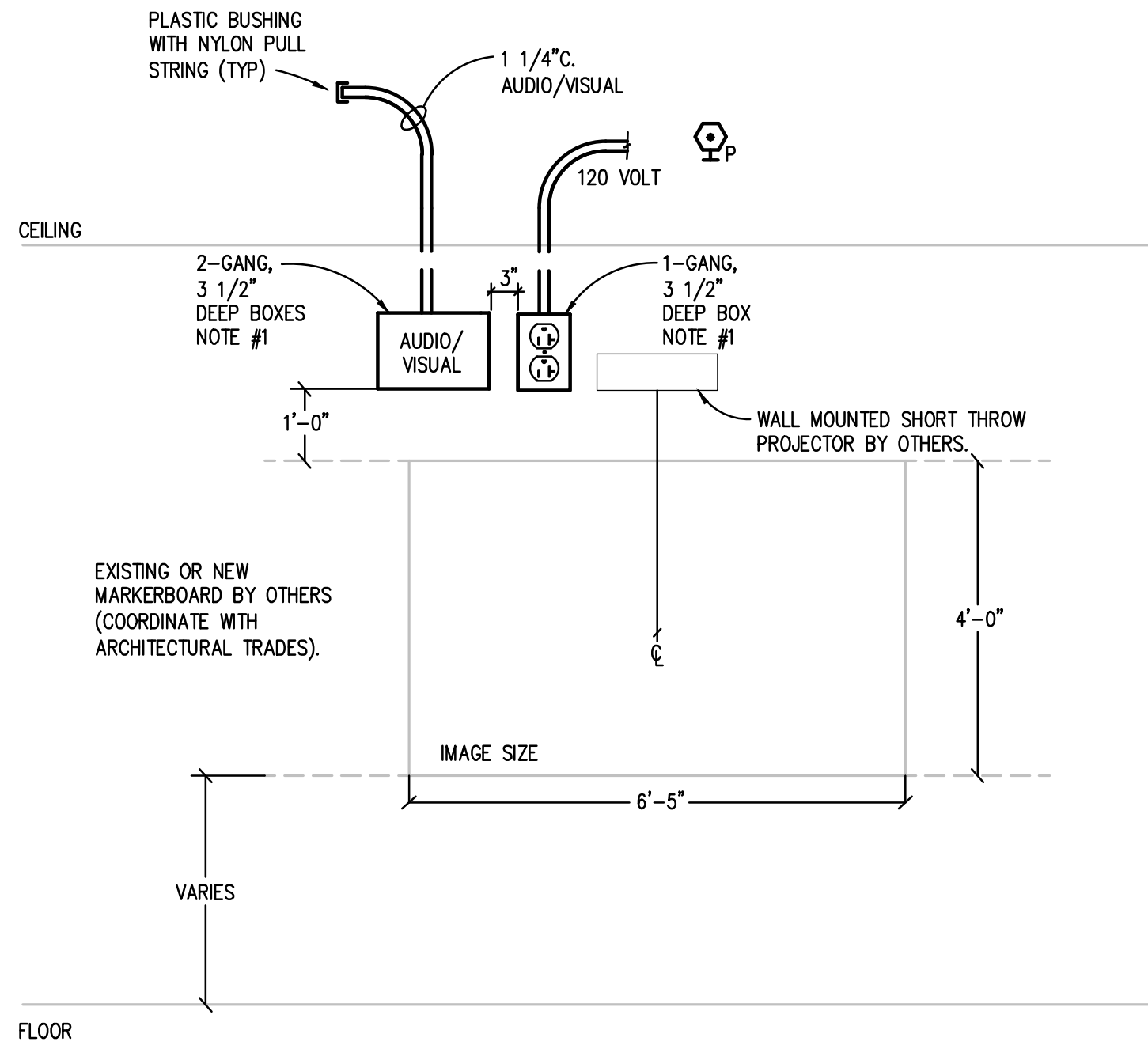
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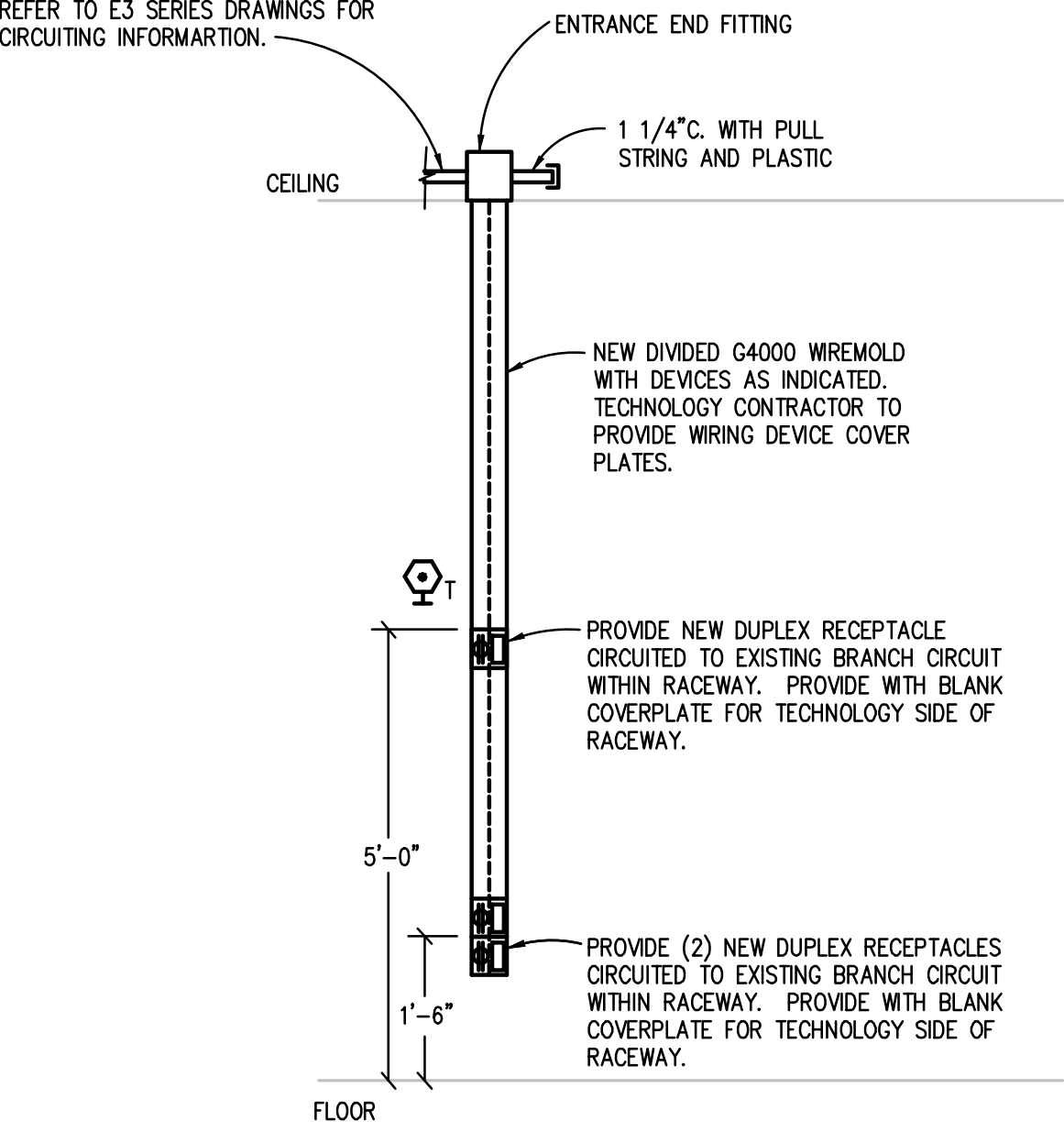
TEACHER STATION DETAIL - NEW WALL
NO SCALE

- NOTES:
- COORDINATE FINAL TECHNOLOGY DROP AND ASSOCIATED POWER LOCATIONS WITH TECHNOLOGY CONTRACTOR PRIOR TO ROUGH IN.
 - LOCATIONS FOR ALL TECHNOLOGY DEVICES INCLUDING TEACHERS WORKSTATIONS SHALL BE COORDINATED WITH TECHNOLOGY CONTRACTOR PRIOR TO ROUGH-IN.
 - DATA DEVICES AND COVER PLATES SHALL BE PROVIDED BY TECHNOLOGY CONTRACTOR.
 - ALL BLANK COVER PLATES SHALL BE STAINLESS STEEL.
 - QUAD RECEPTACLES FOR SOUND ENHANCEMENT EQUIPMENT. COORDINATE MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.



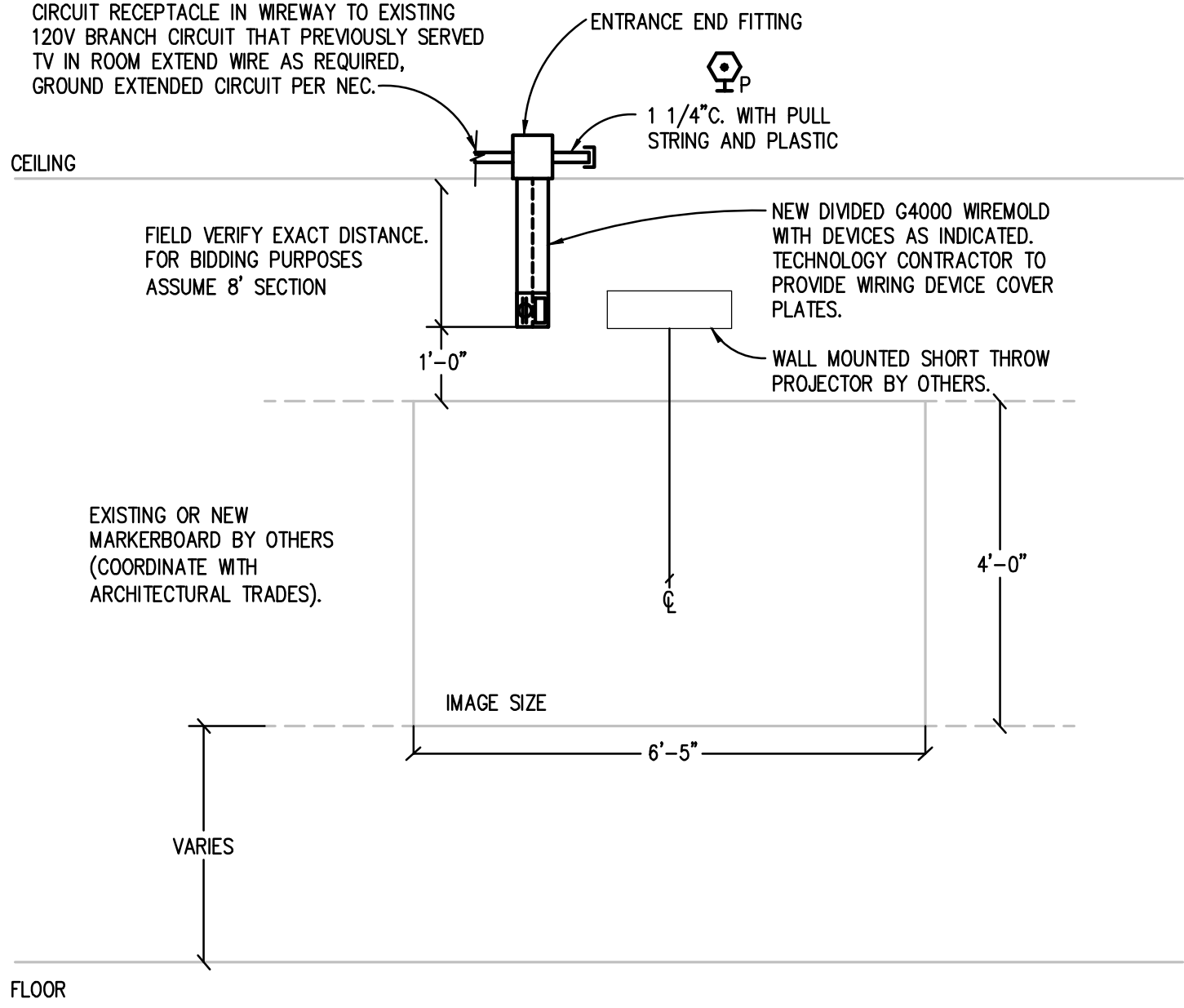
SHORT THROW PROJECTOR POWER/DATA MOUNTING DETAIL - NEW WALL
NO SCALE

- NOTES:
- COORDINATE FINAL LOCATION OF RECESSED POWER/AV DEVICES WITH OWNERS TECHNOLOGY CONTRACTOR PRIOR TO ROUGH IN. (LOCATION WILL BE DETERMINED BY TYPE OF PROJECTOR TO BE PROVIDED BY OTHERS).
 - AV DEVICES AND COVER PLATES SHALL BE PROVIDED BY TECHNOLOGY CONTRACTOR.
 - ALL BLANK COVER PLATES SHALL BE STAINLESS STEEL.



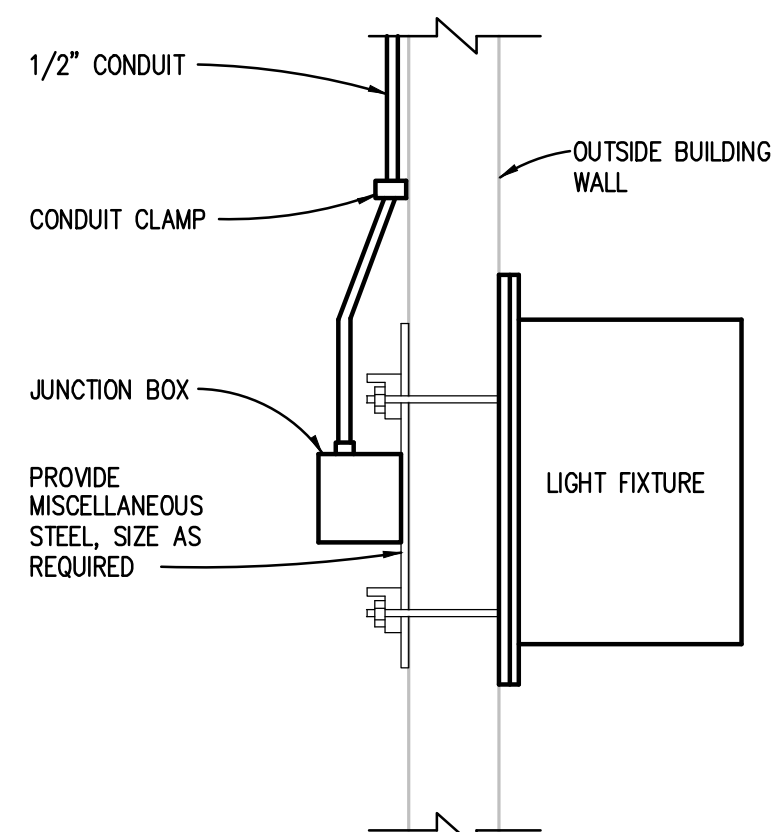
TEACHER STATION RACEWAY DETAIL
NO SCALE

- NOTES:
- COORDINATE FINAL LOCATION OF RECESSED POWER/AV DEVICES WITH OWNERS TECHNOLOGY CONTRACTOR PRIOR TO ROUGH IN. (LOCATION WILL BE DETERMINED BY TYPE OF PROJECTOR TO BE PROVIDED BY OTHERS).
 - AV DEVICES AND COVER PLATES SHALL BE PROVIDED BY TECHNOLOGY CONTRACTOR.

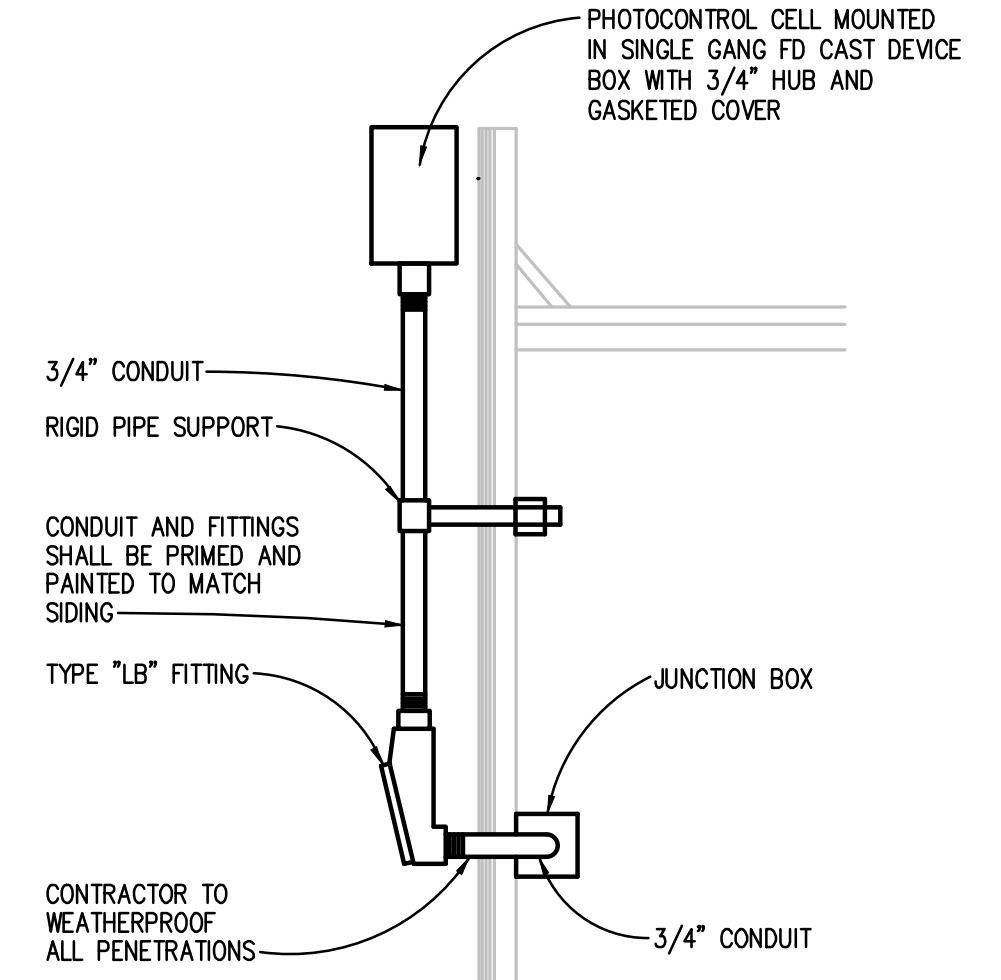


SHORT THROW PROJECTOR POWER/DATA MOUNTING DETAIL
NO SCALE

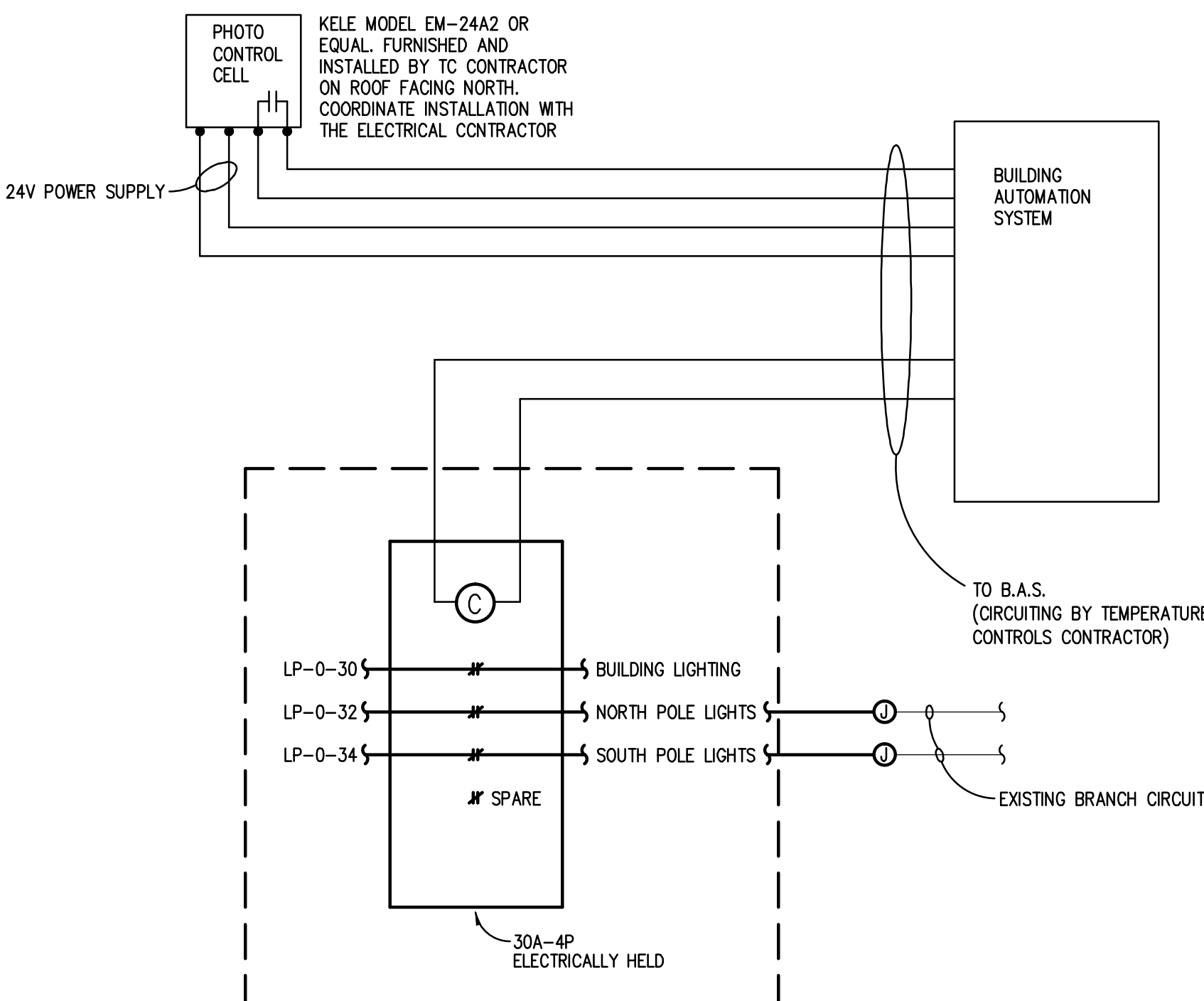
- NOTES:
- COORDINATE FINAL LOCATION OF RECESSED POWER/AV DEVICES WITH OWNERS TECHNOLOGY CONTRACTOR PRIOR TO ROUGH IN. (LOCATION WILL BE DETERMINED BY TYPE OF PROJECTOR TO BE PROVIDED BY OTHERS).
 - AV DEVICES AND COVER PLATES SHALL BE PROVIDED BY TECHNOLOGY CONTRACTOR.



OUTDOOR WALL MOUNTED LIGHTING FIXTURE
NO SCALE

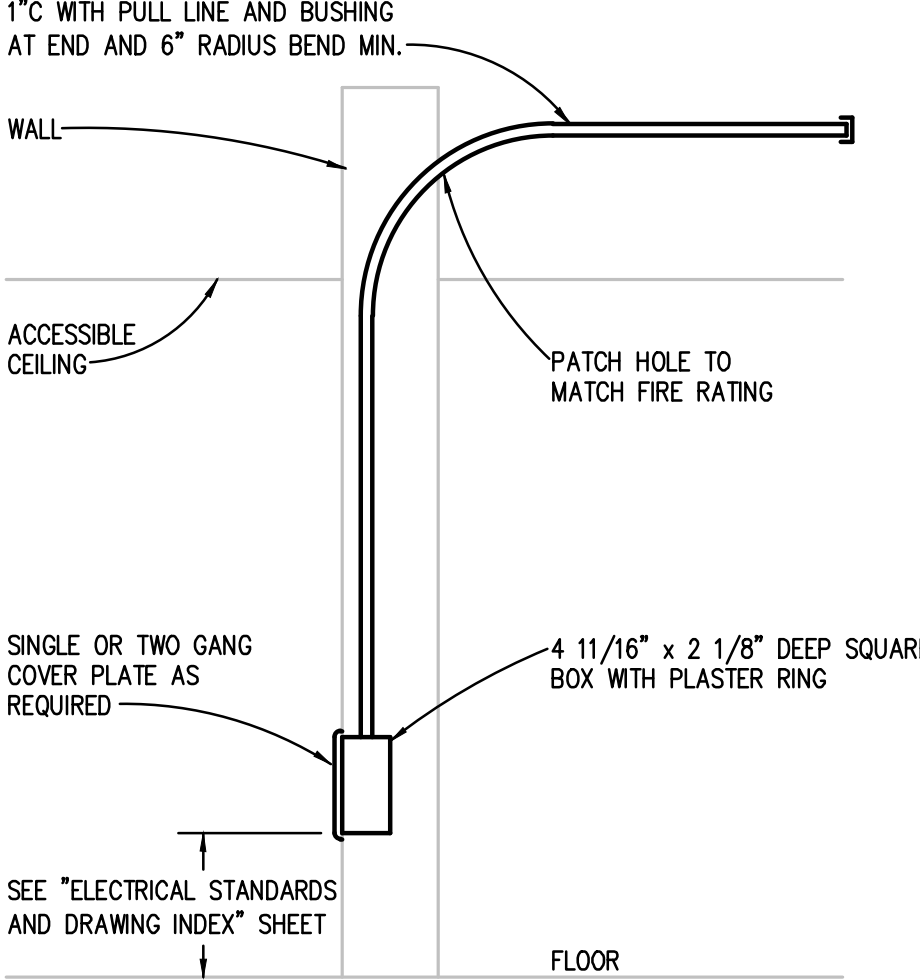


PHOTOCONTROL CELL MOUNTING DETAIL
NO SCALE



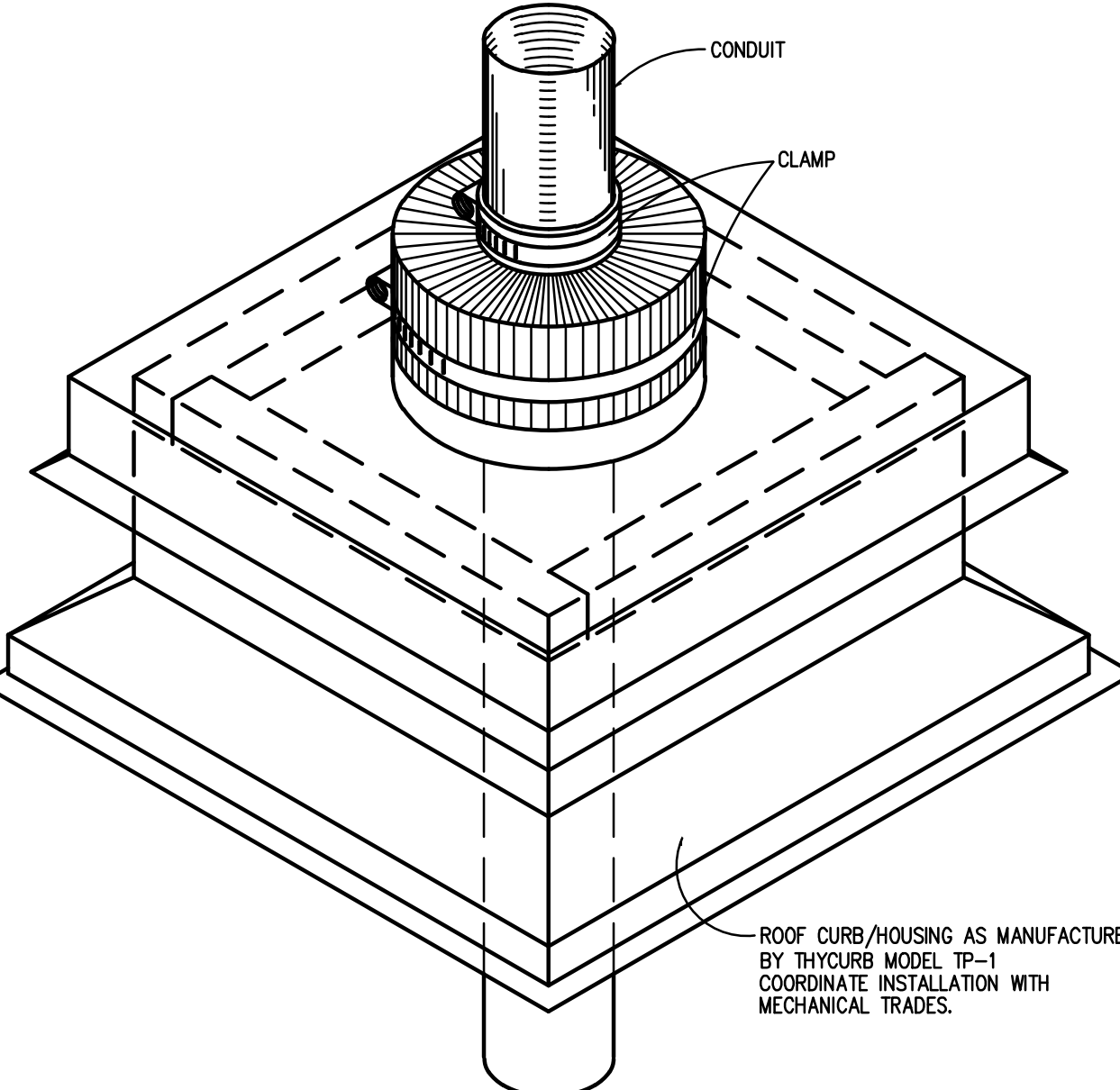
EXTERIOR LIGHTING CONTROLLER (PART OF ADD ALTERNATE E2L)
NO SCALE

- NOTES:
- PROGRAM B.A.S. SYSTEM TIME SCHEDULE PER THE OWNER'S DIRECTION.
 - LIGHTING SHALL BE PHOTO CELL ON AND B.A.S. CONTROL OFF AS DIRECTED BY OWNER.
 - INTERCEPT EXISTING CIRCUITING AND EXTEND CIRCUITING AS REQUIRED. MATCH EXISTING WIRE SIZE. VERIFY AND CIRCUIT TRACE EXISTING CIRCUITS.



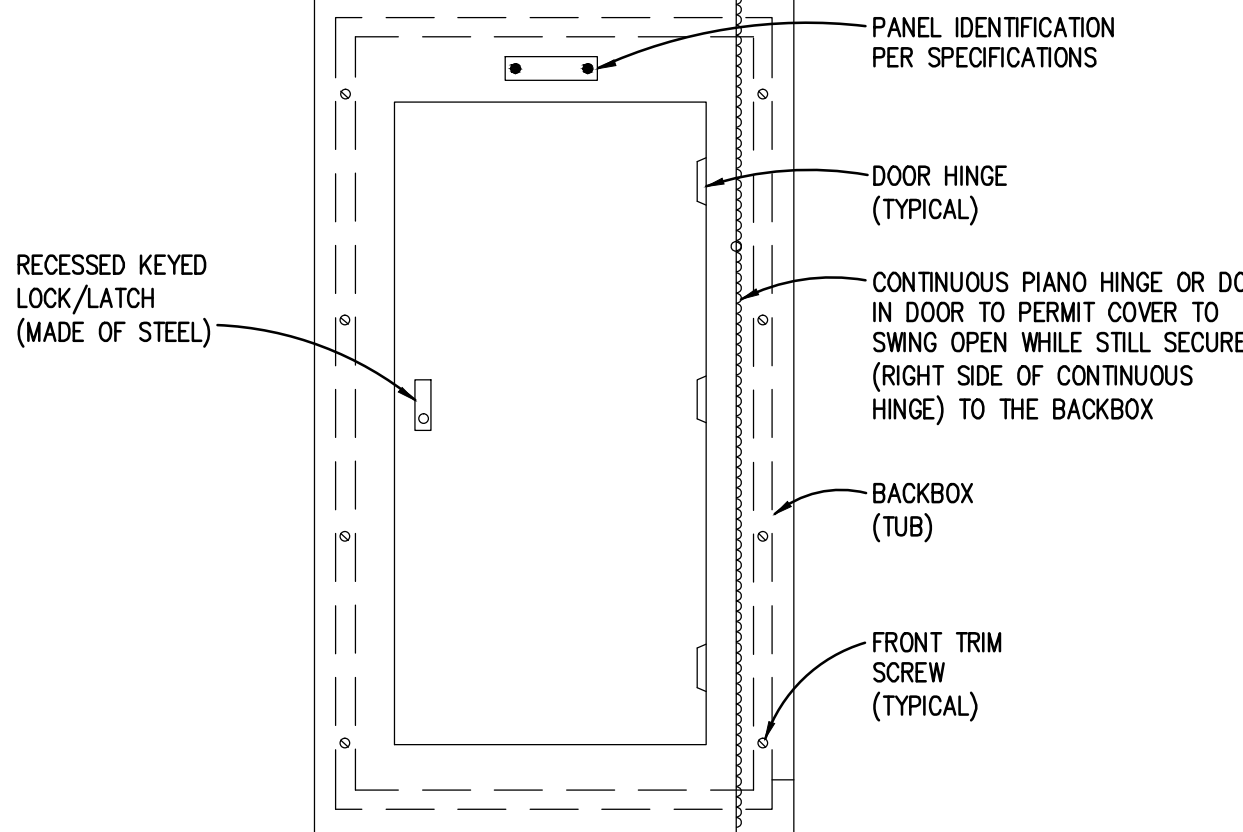
TELE/DATA OUTLET DETAIL
NO SCALE

- NOTE:
- IF CEILING IN ROOM IS NOT ACCESSIBLE ROUTE CONDUIT TO NEAREST ACCESSIBLE CEILING IN DIRECTION OF TELECOM ROOM.



CONDUIT ROOF PENETRATION DETAIL
NO SCALE

- NOTES:
- ELECTRICAL CONTRACTOR SHALL SUBCONTRACT BUILDING ROOF CONTRACTOR FOR INSTALLATION OF FLASHING.



PANELBOARD FRONT COVER DETAIL
NO SCALE

PRELIMINARY	<input type="checkbox"/>
DESIGN DEVELOPMENT	<input type="checkbox"/>
CONSTRUCTION	<input checked="" type="checkbox"/>
FINAL RECORD	<input type="checkbox"/>

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CHECKED BY: G.J.

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