New Connector for

Micro Elementary School

Johnston County Schools NCDSP Unit 510 - School 343

301 E Main St / Micro / North Carolina 27555



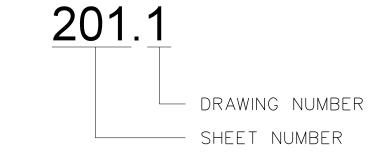
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ABBREVIATIONS



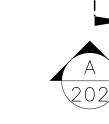
DRAWING SYMBOLS

DRAWING IDENTIFICATION MARKERS





SECTION MARKER



ELEVATION (DRAWINGS)



DOOR MARKER/NUMBER

HIDDEN LINE OR ABSTRACT LINE ----- LINE ABOVE

----- CENTERLINE

MATERIAL SYMBOLS

EARTH

MORTAR OR GROUT

CONCRETE

BRICK

CONCRETE MASONRY UNIT

STEEL

ROUGH WOOD (CONTINUOUS)

ROUGH WOOD (INTERMITTENT)

FINISH WOOD

PLYWOOD

BATT OR BLOWN INSULATION

RIGID INSULATION

METAL STUD / GYPBOARD WALL

DRAWING INDEX

COVER T-1 INDEX / LEGEND / ABBREVIATIONS BCS-100 PROJECT DATA LS-101 LIFE SAFETY PLAN

OVERALL FIRST FLOOR PLAN / SITE PLAN FLOOR PLAN, DEMOLITION, ROOF & REFLECTION CEILING PLANS

NOT USED EXTERIOR ELEVATIONS WALL SECTIONS FOUNDATION PLAN

A-106

CONNECTOR ROOF FRAMING & FOUNDATION PLAN STRUCTURAL DETAILS

S-1201 STRUCTURAL GENERAL NOTES

EQUIPMENT SCHEDULES / NOTES / DETAILS MECHANICAL FLOOR PLAN

ELECTRICAL GENERAL NOTES / LEGEND / DETAILS CONNECTOR POWER PLAN / LOAD SUMMARY

CONNECTOR LIGHTING PLAN / PANEL SCHEDULES / RISER DETAIL





School

Micro

Building Code Summary 100 Unit

| Address:30 | IE Main St, Micro, NC | 27555 | | | |
|-------------------------|---------------------------|---------------------------|-----------|--------------------|---------------------------------|
| Proposed Use: Peo | destrian Walkway | | | | |
| Owner or Authorized Ag | ent: <u>James G. Hite</u> | Phone No. (252) | 757-0333 | e-mail jgh@hiteass | oc.com |
| Owned by: | X City/Cour | nty Private | | tate | |
| Code Enforcement Juris | sdiction: X City | County | | tate | |
| LEAD DESIGN PRO | DFESSIONAL: | James G. Hite, AIA | | | |
| Designer | Firm | Name | License # | Telephone # | e-mail |
| Architectural | Hite Associates | James G. Hite, AIA | NC 3754 | (252) 757-0333 | jgh@hiteassoc.com |
| Civil | Rivers & Associates | Stephen J. Janowski, P.E. | NC 12324 | (252) 714-3002 | sjanowski@riversandassociates.c |
| Electrical | Engineering Source | Wilson Pou, P.E. | NC 021993 | (252) 439-0338 | Wilson@engrsource.com |
| Fire Alarm | Engineering Source | Wilson Pou, P.E. | NC 021993 | (252) 439-0338 | Wilson@engrsource.com |
| Plumbing | Engineering Source | Wilson Pou, P.E. | NC 021993 | (252) 439-0338 | Wilson@engrsource.com |
| Mechanical | Engineering Source | Wilson Pou, P.E. | NC 021993 | (252) 439-0338 | Wilson@engrsource.com |
| Sprinkler-Standpipe | Engineering Source | Wilson Pou, P.E. | NC 021993 | (252) 439-0338 | Wilson@engrsource.com |
| Structural | Queen Engineering | Bruce Queen, P.E. | NC 018991 | (919) 420-0480 | bruce@qedpa.net |
| Retaining Walls>5' High | NA | | | | |
| Other | NA | | | | |

CONSTRUCTED NA ORIGINAL USE Educational

Chapter 14

RENOVATED NA CURRENT USE Educational PROPOSED USE Educational

Alteration Level III

| BUILDING DATA | | | |
|--------------------|-------------|-------------|-------------------------------------|
| Construction Type: | I-A | II-A | □ III-A □ IV □ V-A |
| | I-B | XII-B | □ III-B □ V-B |
| Mixed Co | nstruction: | X No | Yes Types |
| Sprinklers: | | | |
| Ground Floor | No | XYes | Partial X NFPA 13 NFPA 13R NFPA 13D |
| Equipment Platform | X No | Yes | Partial NFPA 13 NFPA 13R NFPA 13D |
| Standpipes: | X No | Yes | Class I III Wet Dry |
| Fire District: | X No | Yes | Flood Hazard Area: 🔀 No 🗌 Yes |
| Building Height: | F | Teet: 15' | Number of Stories: 1 |
| Mezzanine: | X No | Yes | |

| Gross Building Area: | | | |
|----------------------|------------------|-------------|-----------|
| Floor | Existing (SQ FT) | New (SQ FT) | Sub-Total |
| | | | |
| | | | |
| Equipment Platform | | | |
| Third Floor | | | |
| Second Floor | | | |
| | | | |

| rst Floor | 893 | 893 |
|-----------|-----|-----|
| | | |
| otal | | 893 |

| ALLOW | ABLE | AREA | |
|---------|-------|-------|--|
| Primary | Occup | ancy: | |
| | Asse | mbly | |

| Assembly | |
|----------------|--|
| | Business |
| | old X Educational |
| Factory | F-1 Moderate F-2 Low |
| Hazardous | ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM |
| Institutional | ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4 |
| | I-3 Condition 1 2 3 4 5 |
| | Mercantile |
| Residential | R-1 R-2 R-3 R-4 |
| Storage | S-1 Moderate S-2 Low High-Piled |
| Parking Garage | Open Enclosed Repair |

Utility and Miscellaneous Accessory Occupancy Classification(s): Pedestrian Walkway

This Separation is not exempt as a Non-Separated Use (see exceptions)

Special Uses (Chapter 4 - List code Sections): NA

Special Provisions (Chapter 5 - List code Sections): NA

Mixed Occupancy: No X Yes Separation:

X Non-Separated Use (508.3) The required type of construction of the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

Separated Use (508.4) - See below for area calculations For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1. Actual Area of Occupancy A Actual Area of Occupancy B Allowable Area of Occupancy A Allowable Area of Occupancy B

| _ | 0 | | <u> </u> | | 0 < 1.00 |
|--------------|------------------------|---|---|---|---|
| | 0 | • | 0 | | 0 \(\) 1.00 |
| STORY NO. | DESCRIPTION AND USE | (A) BLDG AREA PER STORY (ACTUAL) | (B) TABLE 506.2 AREA ₄ | (C) AREA FOR OPEN SPACE INCREASE 1,5 | (D) ALLOWABLE AREA OR UNLIMITED 2, |
| 1 | Pedestrian Walkway | 1,137 | NA | NA | NA |
| | | | | | |
| | | | | | |
| | | | | | |

1 Frontage increases from Section 506.2 are computed thus:

a. Perimeter which fronts a public way or open space having 20 feet minimum width = 0 (F)

b. TotalBuilding Perimeter = 0 (P) c. Ratio (F/P) = 0 (F/P)

d. W= Minimum width of public way = 0 (W) 2 Unlimited area applicable under conditions of Section 507.

3 Maximum Building Area = total number of stories in the building x D (506.2)

4 The maximum area of parking garages must comply with 406.5.4. The maximum area of air traffic control towers must comply with 412.3.1.

5 Frontage increase is based on the unsprinkled area value in Table 506.2.

ALLOWABLE HEIGHT

| | ALLOWABLE | SHOWN ON PLANS | CODE REFERENCE |
|--|-----------|-------------------|-------------------|
| Building Height in Feet (Table 504.3) | Feet 75 | 15 | |
| Building Height in Stories (Table 504.4) | Stories 3 | 1 | |

FIRE PROTECTION REQUIREMENTS

| BUILDING | FIRE | f | RATING | DETAIL NO. | DESIGN NO. | DESIGN NO. | DESIGN |
|--|----------------------------------|-------|---------------------------|------------------|-----------------------|--------------------------|---------------------------|
| ELEMENT | SEPARATION DISTANCE (FEET) | REQ'D | PROVIDED (W/ * REDUCTION) | AND SHEET NO. | FOR RATED ASSEMBLY | FOR RATED PENETRATION | NO. FOR RATED JOIST |
| Structural frame, including columns, girders, trusses | | 0 | NA | NA | NA | NA | NA |
| Bearing walls | | | | | | | |
| Exterior | | | | | | | |
| North | NA | NA | NA | NA | NA | NA | NA |
| East | NA | NA | NA | NA | NA | NA | NA |
| West | NA | NA | NA | NA | NA | NA | NA |
| South | NA | NA | NA | NA | NA | NA | NA |
| Interior | NA | NA | NA | NA | NA | NA | NA |
| Nonbearing walls and partitions Exterior | | | | | | | |
| North | > 30 | 0 | NA | NA | NA | NA | NA |
| East | > 20 | 0 | NA | NA | NA | NA | NA |
| West | > 20 | 0 | NA | NA | NA | NA | NA |
| South | > 30 | 0 | NA | NA | NA | NA | NA |
| Interior | NA | 0 | NA | NA | NA | NA | NA |
| Floor construction including support beams and joist | | 0 | NA | NA | NA | NA | NA |
| Above Corridor | | 0 | NA | NA | NA | NA | NA |
| Columns Supporting Floors Roof construction including support beams and joist | | 0 | NA | NA | NA | NA | NA |
| Roof Ceiling Assembly | | NA | NA | NA | NA | NA | NA |
| Columns Supporting Roof | | NA | NA | NA | NA | NA | NA |
| Shafts - Exit | | NA | NA | NA | NA | NA | NA |
| Shafts - Other | | NA | NA | NA | NA | NA | NA |
| Corridor Separation | | 0 | NA | NA | NA | NA | NA |
| Occupancy Separation | | NA | NA | NA | NA | NA | NA |
| Party/Fire Wall Separation | | NA | NA | NA | NA | NA | NA |
| Fire Barrier Separation | | NA | NA | NA | NA | NA | NA |
| Smoke Partition | | NA | NA | NA | NA | NA | NA |
| Tenant Separation | | NA | NA | NA | NA | NA | NA |
| Incidental Use Separation | | NA | NA | NA | NA | NA | NA |

706.4 Exception (a)

PERCENTAGE OF WALL AREA CALCULATIONS

| FIRE SEPARATION DISTANCE FROM PROPERTY LINES | DEGREE OF OPENINGS PROTECTION (TABLE 705.8) | ALLOWABLE AREA | ACTUAL SHOWN ON PLANS |
|---|---|----------------|--------------------------|
| >30 | Unprotected, Sprinkled | No Limit | NA |
| | | | |

* 705.8 Exception 2

LIFE SAFETY SYSTEM REQUIREMENTS

| Emergency Lighting: | No | X Yes |
|-----------------------------|----|--------------|
| Exit Signs: | No | X Yes |
| Fire Alarm: | No | X Yes |
| Smoke Detection Systems: | No | X Yes |
| Carbon Monoxide Detesction: | No | X Yes |

Life Safety Plan Sheet *: LS-001

 \mathbf{X} Fire and/or smoke rated wall-locations (Chapter 7)

Assumed and real property line locations

Exterior wall opening area with respect to distance to assumed property lines (705.8) $\overline{\mathbf{X}}$ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)

 $oldsymbol{X}$ Occupant loads for each area

X Exit access travel distances (1017)

Common path of traveldistances (Tables 1006.2.1 & 1006.3.2(1))

Dead end lengths (1020.4)

X Clear exit widths for each exit door

X Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3) X Actual occupant load for each exit door

 \square A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation

X Location of doors with panic hardware (1010.1.10)

Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

Location of doors with electromagnetic egress locks (1010.1.9.9) $\overline{\mathbf{X}}$ Location of doors equipped with hold-open devices

Location of emergency escape windows (1030)

 $\overline{\mathbf{X}}$ The square footage of each fire area (202)

☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)

| LOT OR PARKING AREA | ACCESSIBLE UNITS REQUIRED | ACCESSIBLE UNITS PROVIDED | TYPE A UNITS REQUIRED | TYPE A UNITS PROVIDED | TYPE B UNITS REQUIRED | TYPE B UNITS PROVIDED | TOTAL ACCESSIBLE UNITS PROVIDED |
|------------------------|---------------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------------|
| | | | | | | | |

ACCESSIBLE PARKING (SECTION 1106)

| LOT OR | | NO. OF SPACES | NO. OF ACCESSIBI | ACCESSIBLE SPACES REQUIRED / PROVIDED | | | | | | |
|--------------|----------|------------------|------------------------------|---------------------------------------|--------------------|------------------------|--|--|--|--|
| PARKING AREA | REQUIRED | PROVIDED | REGULAR WITH 5' ACCESS AISLE | VAN SPA | CES WITH | ACCESSIBLE PROVIDED | | | | |
| | | | ACCESS AISEE | 132" ACCESS AISLE | 8' ACCESS AISLE | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TOTAL | | NA | NA | | NA | NA | | | | |

PLUMBING FIXTURE REQUIREMENTS

| LICE | | WATERO | CLOSETS | URINALS | LAVA | TORIES | SHOWERS/ | DRINKING FOUNTAINS | | | |
|---------|----------|-------------|---------|---------|------|--------|----------|--------------------|------------|--|--|
| USE | | MALE FEMALE | | | MALE | FEMALE | TUBS | REGULAR | ACCESSIBLE | | |
| | NEW | | | | | | | | | | |
| Student | EXISTING | | | | | | | | | | |
| | REQ'D | NA | NA | | NA | NA | | NA | NA | | |
| | NEW | | | | | | | | | | |
| Staff | EXISTING | | | | | | | | | | |
| | REQ'D | | | | | | | | | | |
| | NEW | | | | | | | | | | |
| | EXISTING | | | | | | | | | | |
| | REQ'D | | | | | | | | | | |

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SBCCI, ICC, etc., describe below) NC Department of Insurance

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.

Method of Compliance:

X Prescriptive (Energy Code) Performance (Energy Code) Prescriptive (ASHRAE 90.1) Performance (ASHRAE 90.1)

THERMAL ENVELOPE

Roof/ceiling Assembly (each assembly) METAL DECK / RIGID INSULATION Description of assembly U-Value of total assembly 0.033 R-Value of insulation NONE Skylights in each assembly N/A U-Value of skylight total square footage of skylights in each assembly N/A

Exterior Walls (each assembly)

BRICK / AIR SPACE / SPRAYED INSULATION / 8" CMU Description of assembly 0.0598 U-Value of total assembly R-Value of insulation 13 c.i.

Openings (windows or doors with glazing) Openings (windows) U-Value of total assembly 0.32 solar heat gain coefficient projection factor

Door R-Values N/A Walls below grade -Description of assembly - Block, foam filled cells, 2" c.i.

U-Value of total assembly - 0.0667 R-Value of insulation - 13 c.i. Floor over unconditioned space (each assembly) - NOT USED

Description of assembly - 8" Block, foam filled cells, 2" c.i. U-Value of total assembly - 0.11 R-Value of insulation - 7.5R

Floor slab on grade Description of assembly = 4" thick concrete slab

U-Value of total assembly = 0.21 R-Value of insulation - N/A Horizontal/vertical requirement slab heated - NO

Drawing no.

No. Date: Revision

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ARCHITECTURE / PLANNING / TECHNOLOGY



Micro Elementary Schools

Johnston County Schools

301 E Main St / Micro / North Carolina 27555

Project No.
22423

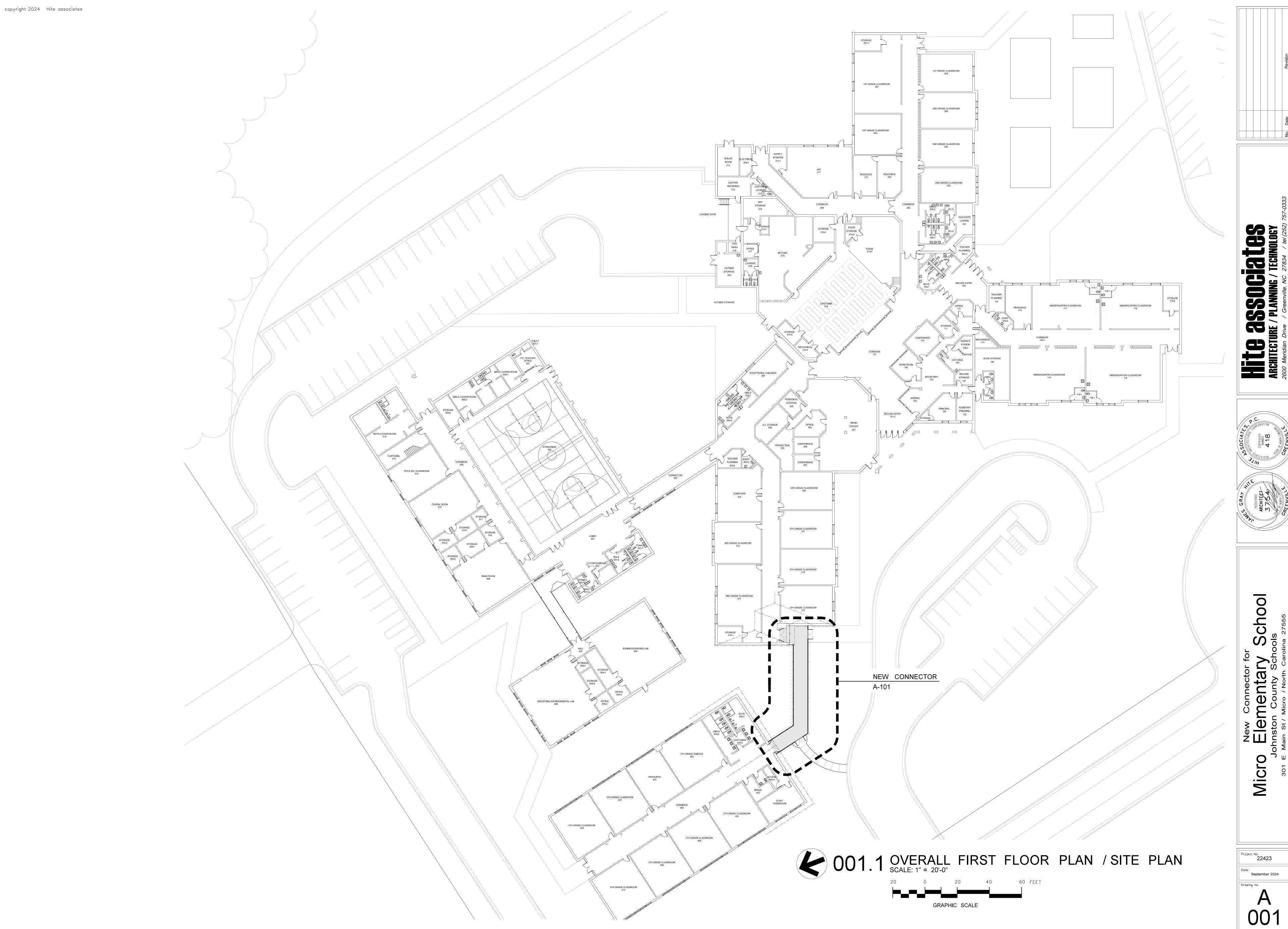
Date:
September 2024

Drawing no.

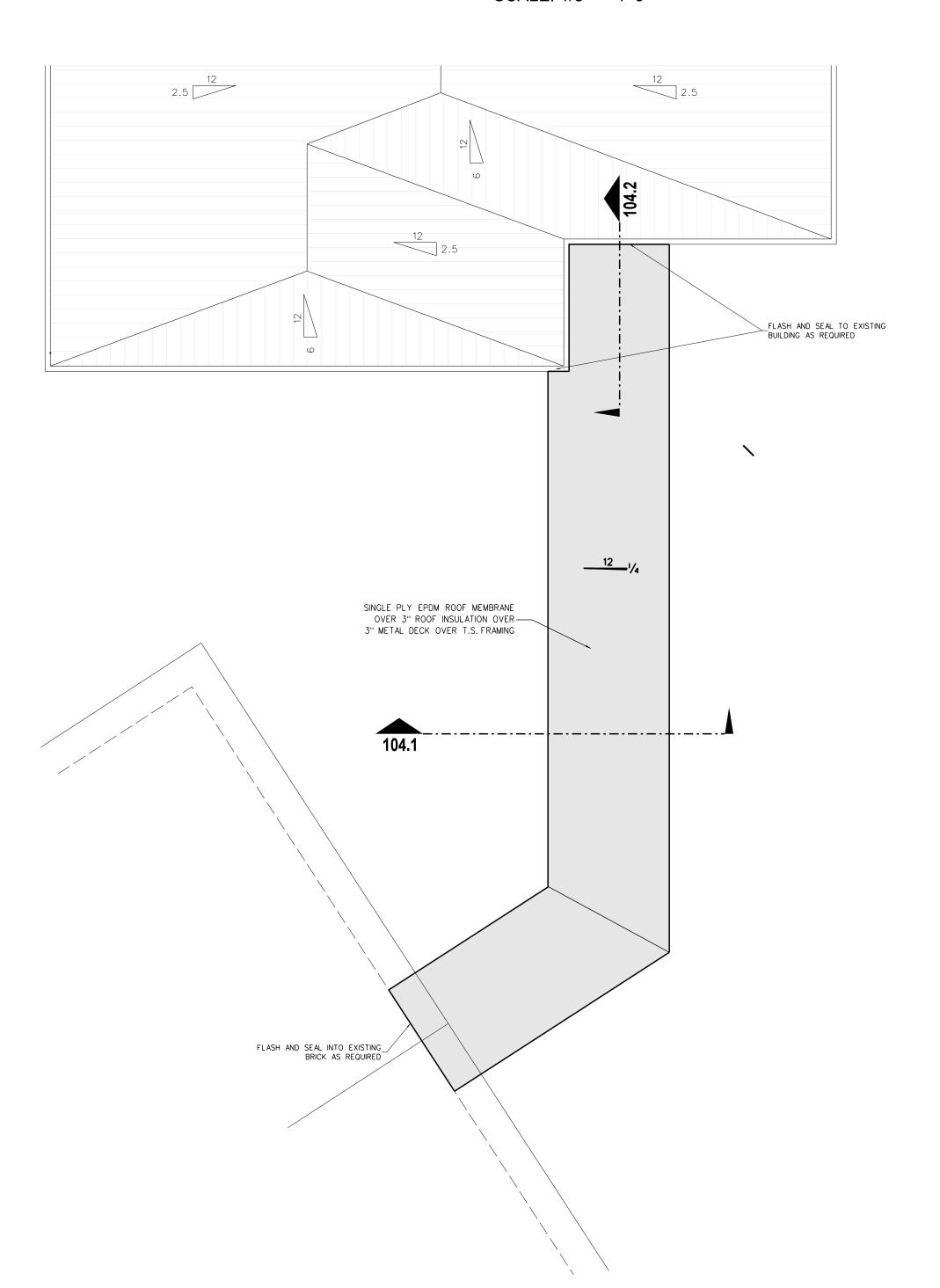
Drawing no.

LS

101



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



101.3 ROOF PLAN SCALE: 1/8" = 1'-0"

DOOR SCHEDULE

| | | | | | | | | | | | \$10°5 | 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | \$ 50 50 50 50 50 50 50 50 50 50 50 50 50 | | STORIGE IN CONTROL OF THE PARTY | 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1 00 00 00 00 00 00 00 00 00 00 00 00 00 | 2 43 6 4 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 1.68%.68 | 1/ 77 V | ,0 ¹ / ₂ 0 | | | St Of the left of | And the state of t |
|---|------|------|------|------|-----|-----------------------|------|--------------------------|--------------------|-------------|--------|---|---|---|--|--|--|--|----------|---------|----------------------------------|---|---|---|--|
| | MARK | | | SIZE | | LOCATION | TYPE | DESCRIPTION | FRM WID | FIRE RATING | | | | | | | | | | | | | | | COMMENTS |
| L | | | THK | WID | HT | | | | | | | | | | | | | | \perp | \perp | | | | | |
| | 100A | PAIR | 1.75 | 36 | 86 | CONNECTOR TO EXTERIOR | AL-1 | ALUMINUM / GLASS | 4-1/2" ALUM. FRAME | | | 1 2 | 1 | 2 | | | | | | | | 1 | | 2 | |
| | 100B | PAIR | 1.75 | 36 | 86 | CONNECTOR TO EXTERIOR | AL-1 | ALUMINUM / GLASS | 4-1/2" ALUM. FRAME | | | 1 2 | 1 | 2 | | | | | | | | 1 | | 2 | |
| | 100C | PAIR | 1.75 | 36 | 102 | EXISTING TO CONNECTOR | HM-1 | FLUSH STEEL / VIEW GLASS | 7-3/4" STEEL | 1 1/2 HR | | 1 2 | 1 2 | | 2 | | | | | | | 2 | 1 | F | FIELD VERIFY OPENING AND DOOR-FRAME SIZES |
| | 100D | PΔIR | 1 75 | 36 | 87 | EXISTING TO CONNECTOR | HM-2 | FLUSH STEEL / VIEW GLASS | 7-3/4" STFFI | 1 1/2 HR | | 1 2 | 1 2 | |]]] | | | | | | | 2 | 1 | F | IFID VERIEV OPENING AND DOOR-ERAME SIZES |

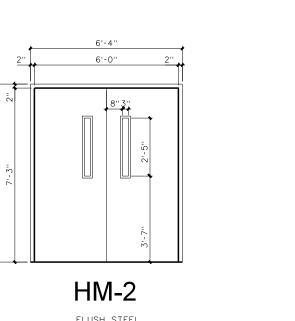
- NOTES AND GENERAL AND SPECIAL HARDWARE REQUIRED
- 1 ALL DOORS TO RECEIVE HINGES AS SPECIFIED
- 2 ALL DOORS TO RECEIVE WALL OR OVERHEAD STOPS TO SUIT CONDITION OF USE. DOORS WITH MA 3 PROVIDE CLOSERS WITH BACKSTOPS EXTERIOR DOORS AND TO SUIT CONDITION OF USE
- 4 ALL STEEL FRAMES TO BE PROVIDED WITH SILENCERS
- 5 EXTERIOR DOORS TO BE PROVIDED WITH WEATHERSTRIPPING AND THRESHOLDS
- 6 EXIT DEVICES TO BE PROVIDED WITH CYLINDERS
- 7 AT PAIRS OF DOORS, PULL SIDE, PROVIDE PULL OR LEVER RIGHT SIDE ONLY 8 ALUMINUM DOORS - SEE SPECIFICATIONS FOR HARDWARE NOT INDICATED ABOVE
- 9 PROVIDE CYLINDERS FOR KEYED MULLIONS SUPPLIED BY ALUMINUM DOOR SUPPLIER 10 PROVIDE SOLID WOOD BLOCKING FOR DOOR STOPS AND HOLD OPEN DEVICES
- 11 EXIT DEVICES AT EXTERIOR DOORS TO BE NL WITH PULL 12 EXIT DEVICES AT INTERIOR DOORS TO BE CLASSROOM FUNCTION WITH LEVER
- 13 PROVIDE 4" WIDE STEEL JAMBS FOR DOORS ABUTTING STEEL COLUMNS
- FINISH SCHEDULE

| MARK | AREA | FLOOR | BASE | WALLS | CEILING | CLG HEIGHT | REMARKS |
|------|-----------|----------------------|-----------|-----------------|-------------|------------|---------|
| 100 | CONNECTOR | VCT - MATCH 400 BLDG | 4" RUBBER | PAINTED DRYWALL | ACOUST TILE | 10'-0" | |
| | | | | | | | |

___ 3000* PSICONCRETE WITH BROOM FINISH SLOPE TO DRAIN

REINFORCE WITH 6x6-W1.4xW1.4

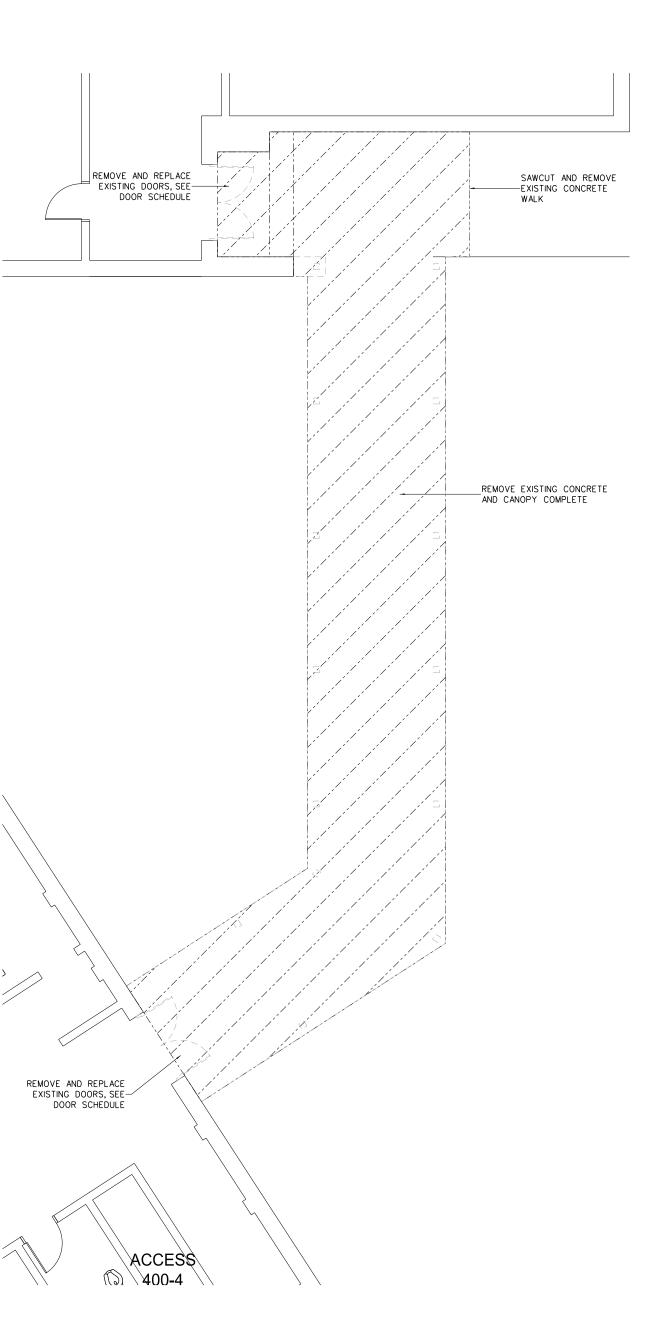
PROVIDE SAWCUT JOINTS AT 5'-0" O.C., VERIFY LAYOUT WITH ARCHITECT. SAWCUT JOINTS MIN. $rac{1}{3}$ SLAB THICKNESS NO MORE THAN 24 HOURS AFTER PLACEMENT, SEE JOINT DETAILS. PROVIDE $\frac{1}{2}$ " EXPANSION JOINTS AS SPECIFIED, 30'-0" O.C. MAX., VERIFY LAYOUT WITH ARCHITECT



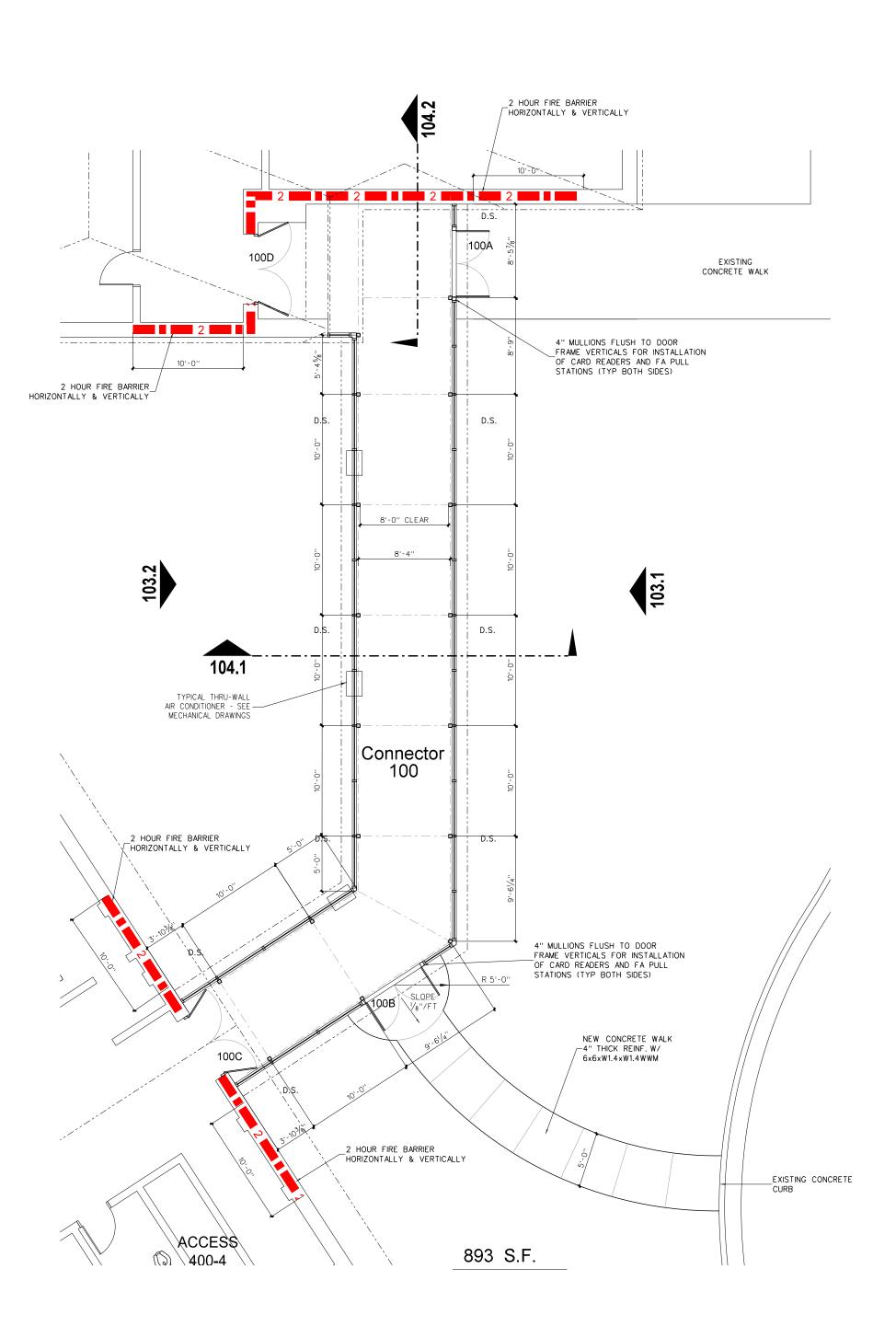
FLUSH STEEL
WITH VIEW GLASS IN
NEW STEEL FRAME 11TH
11/2" HOUR RATING

101.6 LIGHT-DUTY CONCRETE SLAB

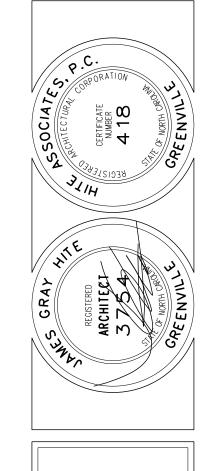
101.5 DOOR ELEVATIONS SCALE: 1/4" = 1'-0"



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



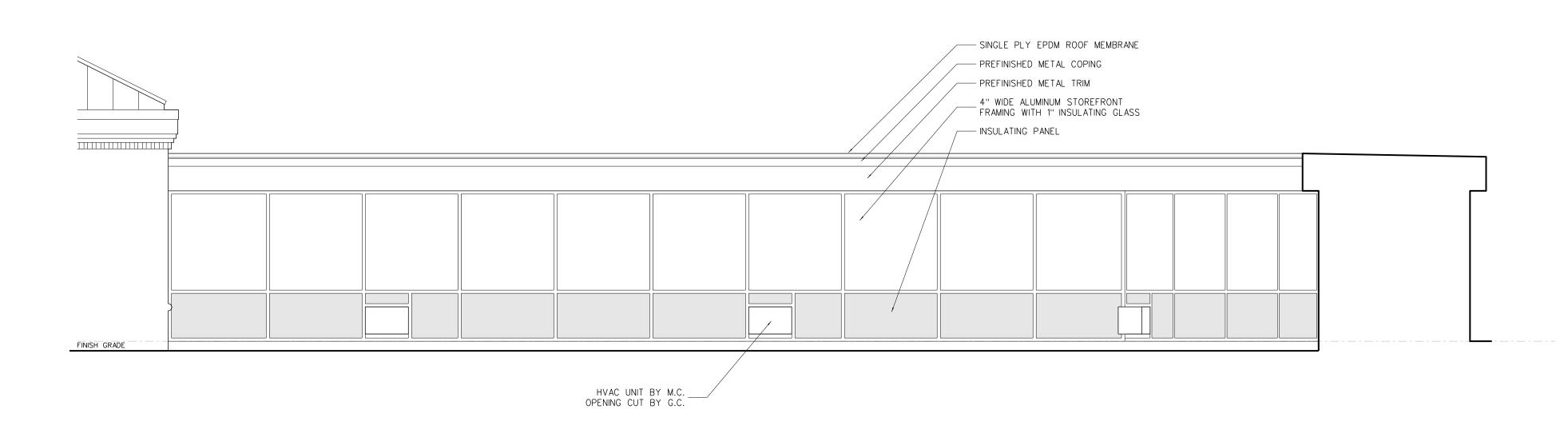
101.1 CONNECTOR FLOOR PLAN SCALE: 1/8" = 1'-0"



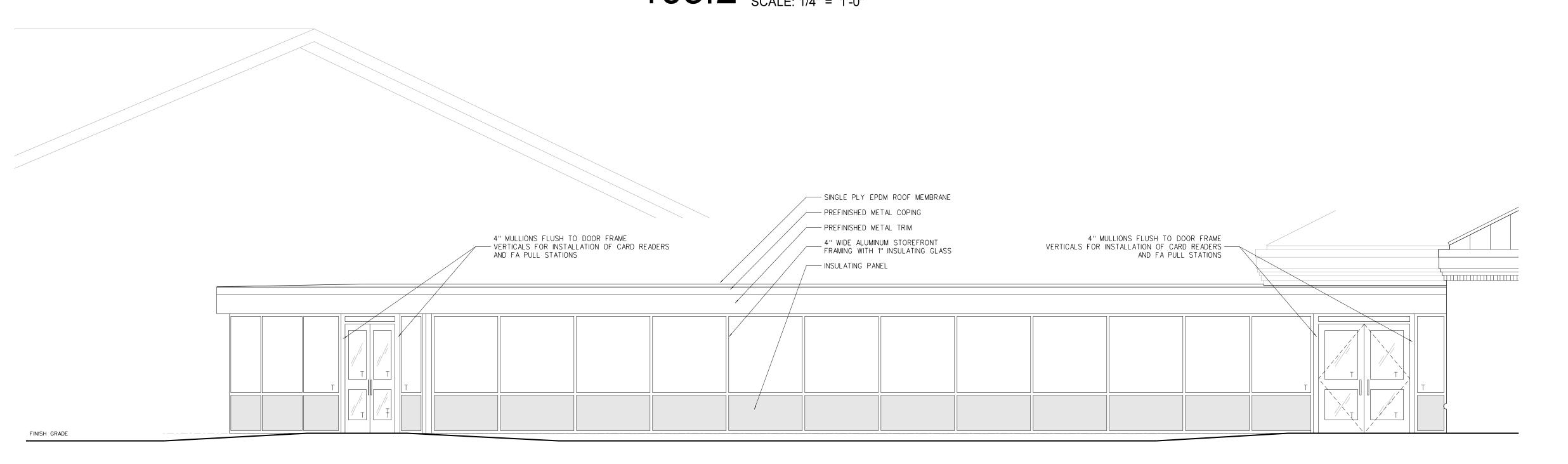
School Micro

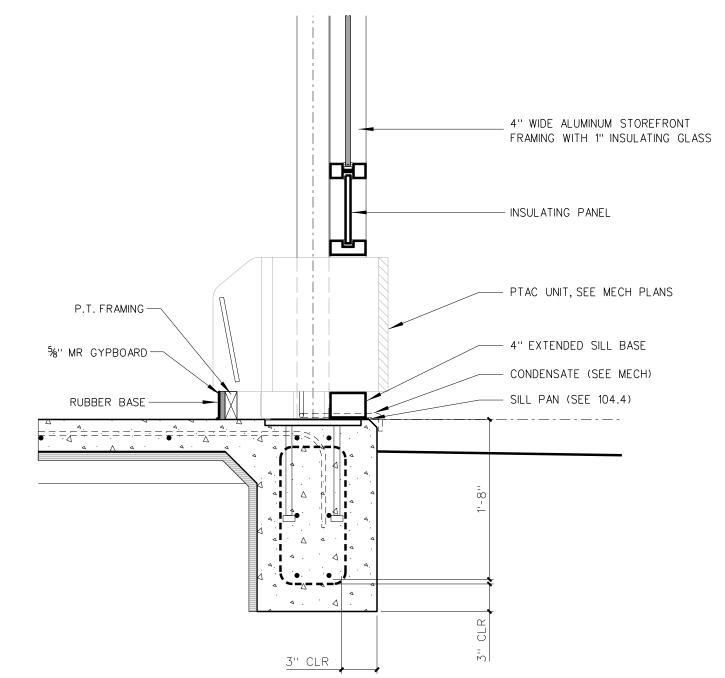
Project No. 22423 September 2024 Drawing no.



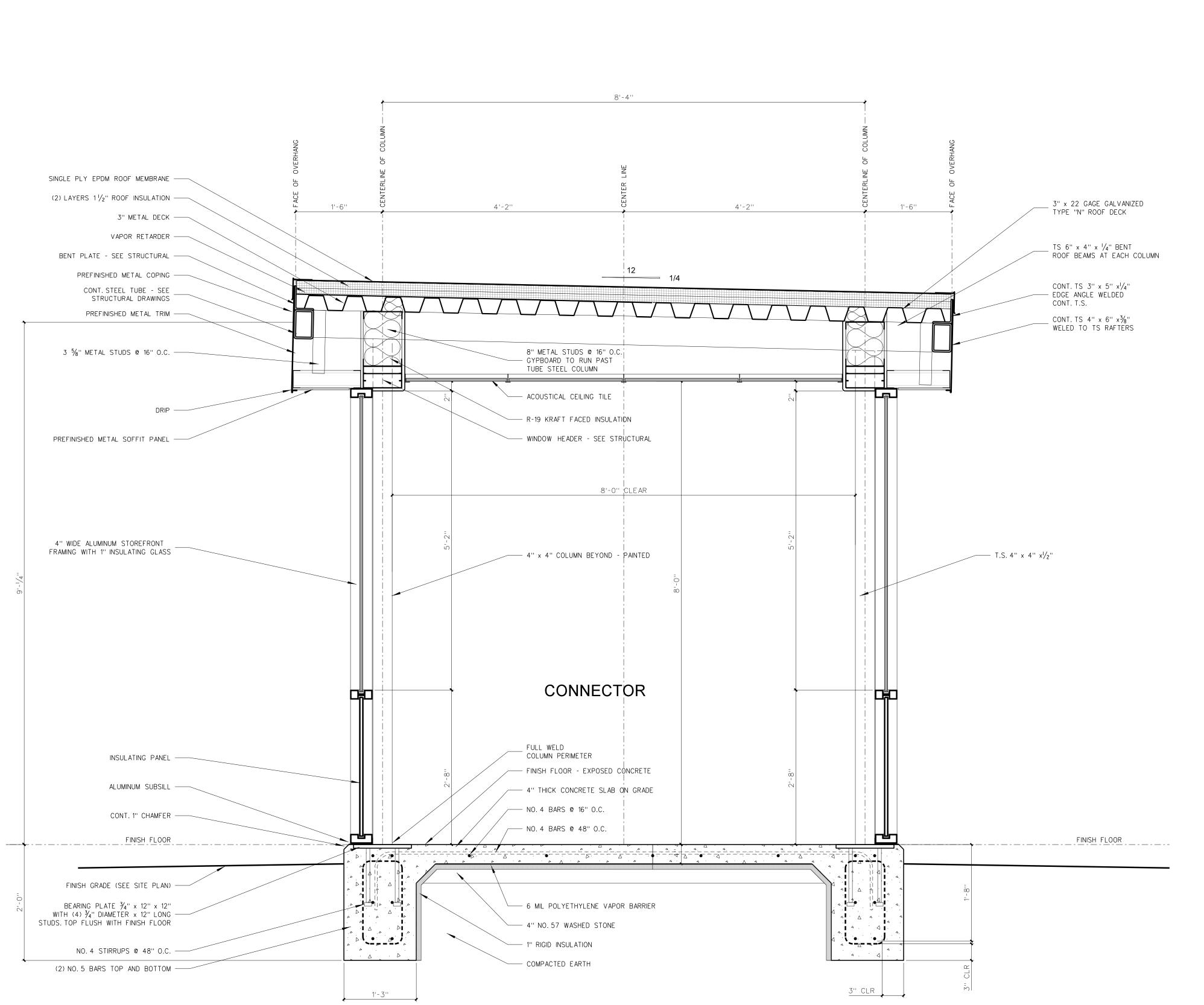


103.2 EXTERIOR ELEVATION - NORTH

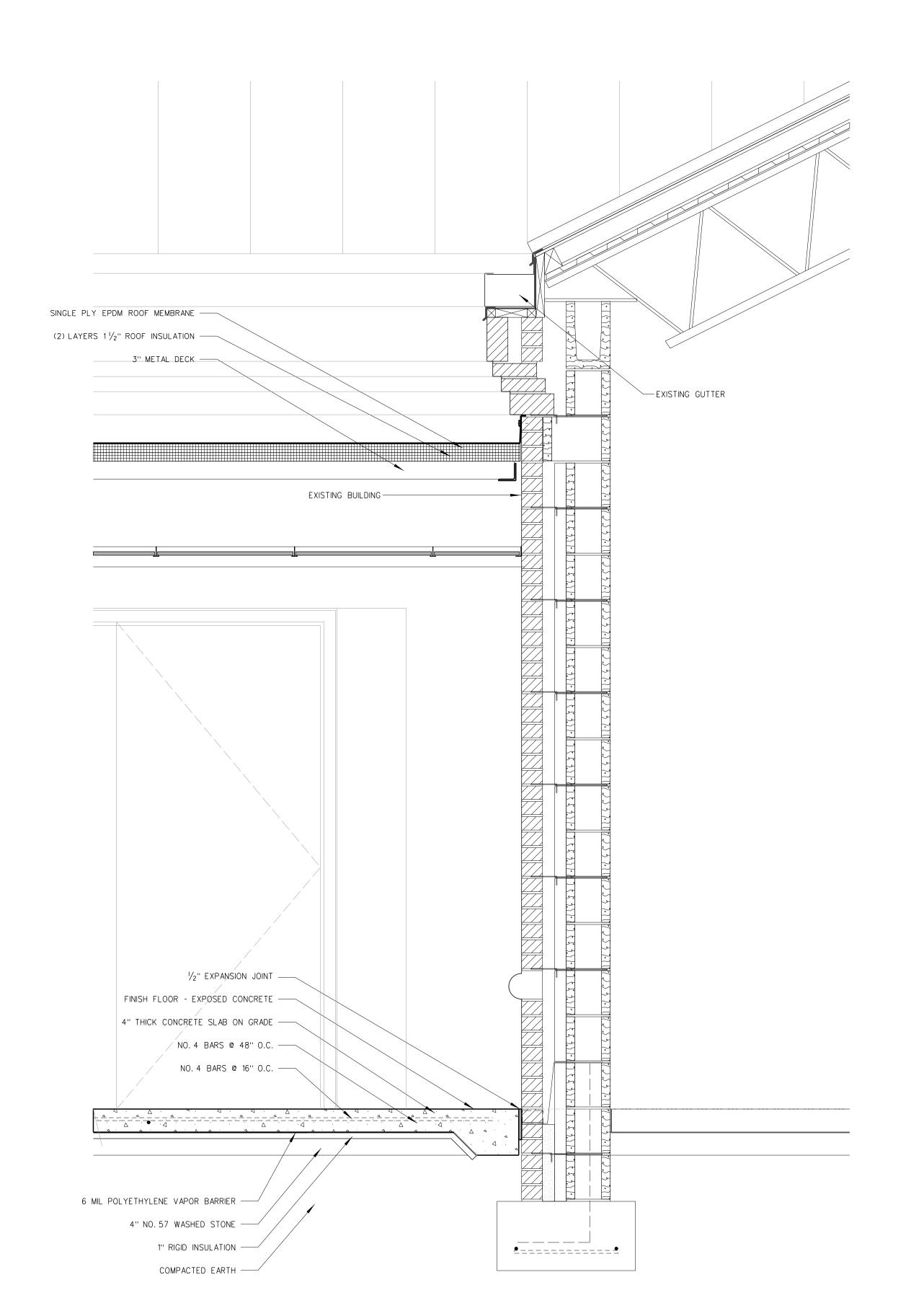




104.3 WALL SECTION @ PTAC UNIT



104.1 WALL SECTION - CONNECTOR SCALE: 1" = 1'-0"



104.2 WALL SECTION AT EXISTING WALL/ROOF

No. Date: Revision

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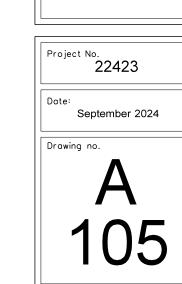
Micro Elementary Schools

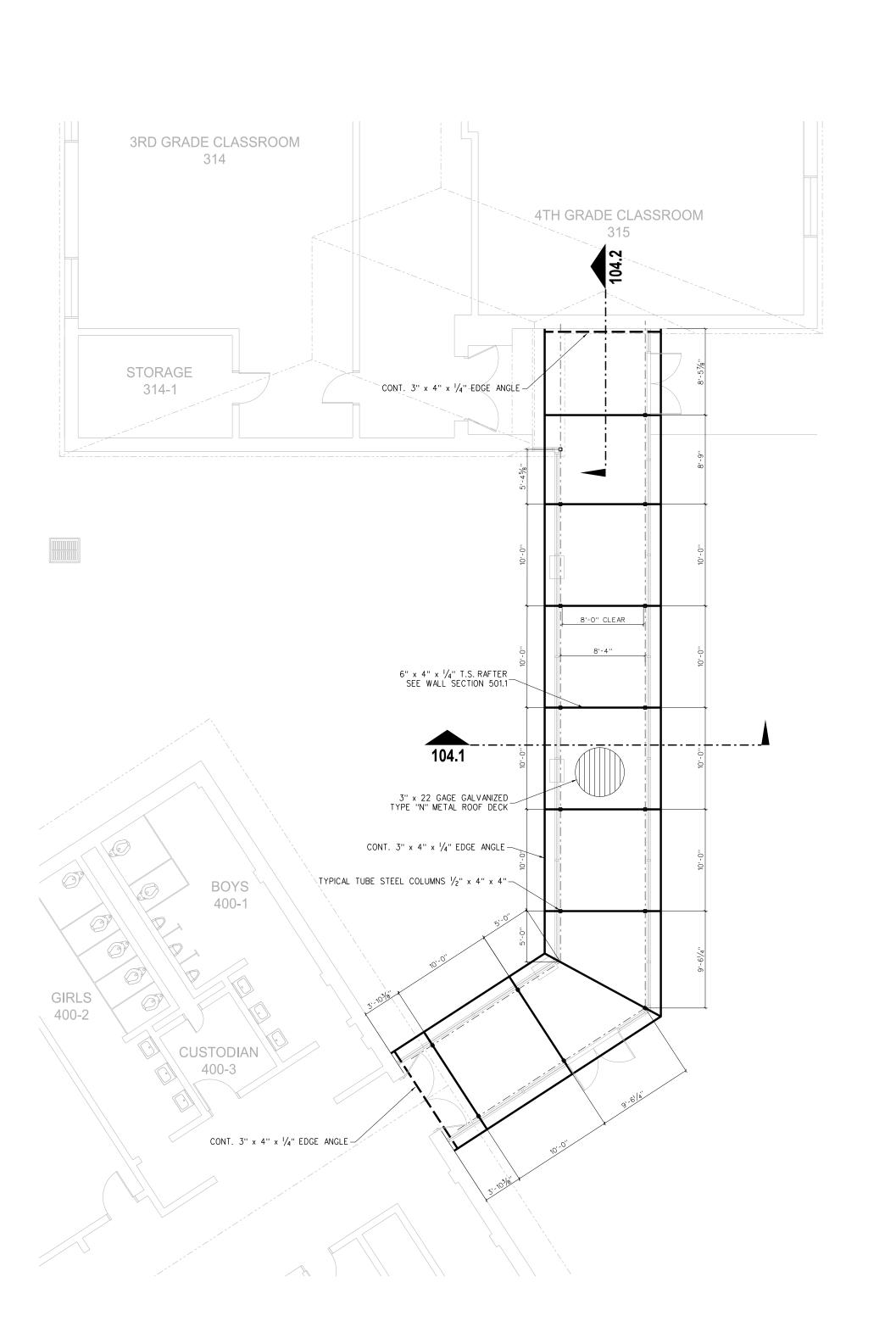
Project No.
22423

Date:
September 2024

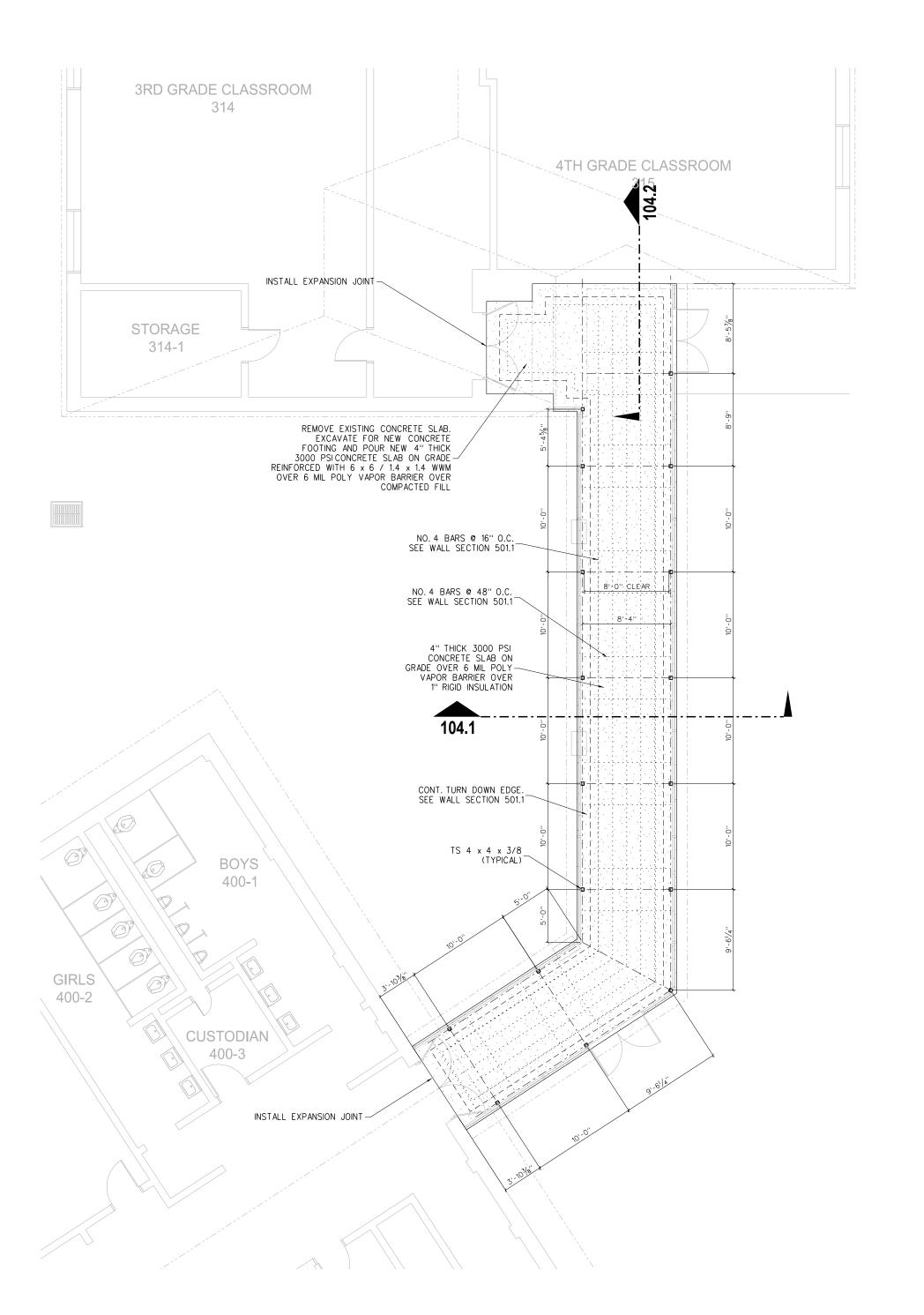
Drawing no.

A 104





105.2 ROOF FRAMING PLAN SCALE: 1/8" = 1'-0"



105.1 FOUNDATION PLAN SCALE: 1/8" = 1'-0"

OPERATIONS SHALL BE SO MONITORED 3. ALL FILL INSIDE THE BUILDING AND TO 10'OUTSIDE THE BUILDING INCLUDING RAMPS AND DOORS SHALL BE CLEAN SELECT MATERIAL FREE OF DELETERIOUS MATERIALS SUCH AS WOOD, ROOTS, TRASH, OR OTHER EXTRANEOUS MATERIALS. PLACE FILL IN 8" LIFTS MEASURED LOOSE, AND COMPACT EACH LIFT TO MINIMUM 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698. REFER TO

4. ALL FOOTING EXCAVATIONS SHALL BE APPROVED BY THE GEOTECHNICAL LABORATORY PRIOR TO PLACING FOOTING CONCRETE

5. FOOTING ELEVATIONS SHALL NOT BE RAISED OR LOWERED UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT 6. FOOTINGS MAY CARRIED TO LOWER ELEVATIONS WHERE DIRECTED BY THE

7. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONAL LOCATIONS OF MASONRY PARTITIONS THAT REQUIRE THICKENED SLAB FOR SUPPORT.

8. CONSTRUCTION JOINTS IN CONTINUOUS WALL FOOTING SHALL BE MADE MIDWAY BETWEEN COLUMNS AND AT LEAST 4" FROM THE INTERSECTION OF ANOTHER WALL FOOTING.

9. COLUMN FOOTINGS IN LINE OF WALL FOOTINGS SHALL BE FIRST POURED BENEATH WITH WALL FOOTING WITH THE WALL FOOTING RUNNING

CONTINUOUS OVER THE COLUMN FOOTING. 10. FOUNDATIONS SHALL BE PLACED ONLY ON APPROVED NATURAL UNDISTURBED SOIL STRATA OR ON PROPERLY PLACED ENGINEERED CONTROLLED COMPACTED FILL UNDER THE SUPERVISION OF THE GEOTECHNICAL LABORATORY.

CONCRETE

1. CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE

C) PEDESTALS - 3000 PSI - 3000 PSI E) SLABS ON GRADE - 3000 PSI F) SUSPENDED SLABS - 4000 PSI G) FILL FOR MASONRY UNITS H) ALL OTHER CONCRETE

2. CONCRETE FOR FOOTINGS, SLABS ON GRADE, WALLS, PEDESTALS,

COLUMNS, SHALL BE REGULAR STONE CONCRETE. 3. CONCRETE FOR SUSPENDED SLABS ON COMPOSITE METAL DECK SHALL BE

LIGHTWEIGHT STRUCTURAL CONCRETE. 4. CONCRETE FOR FILL IN CONCRETE MASONRY BLOCK CELLS, BOND BEAMS, LINTEL BLOCKS, AND CAVITY WALL FILL BELOW FLOOR IN EXTERIOR WALLS AND OTHER MASONRY UNITS SHALL BE HIGH SLUMP PEA GRAVEL CONCRETE. MORTAR MIX WILL NOT BE ALLOWED FOR ANY BLOCK MASONRY FILL REQUIREMENTS.

5. CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL HAVE 5% AIR ENTRAINMENT. CONCRETE NOT EXPOSED TO WEATHER SHALL NOT HAVE AIR ADDED BY ADMIXTURES.

6. ALL CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS

FOR REINFORCED CONCRETE," ACI 318. 7. OBSERVE ALL AND STRICTLY FOLLOW ALL ACI 305 AND 306

REQUIREMENTS RESPECTIVELY FOR PROTECTION OF CONCRETE IN HOT AND COLD WEATHER. 8. ALL CONCRETE WORK SHALL BE PROPERLY CURED IN CONFORMANCE WITH ACI 308. EITHER WATER CURING OR SEALING MATERIALS METHOD WAY

EFFECT ON THE FINAL FINISH SPECIFIED FOR THE RESPECTIVE AREAS. 9. BUILDING SLABS ON GRADE SHALL BE 4" MINIMUM THICKNESS.

BE USED PROVIDED THAT THE METHOD CHOSEN HAS NO DETRIMENTAL

10. SUSPENDED SLAB ON COMPOSITE METAL DECK SHALL BE 6" MINIMUM THICKNESS MEASURED FROM THE BOTTOM OF DECK FLUTES. 11. PLACE 1/2" PREFORMED, IMPREGNATED EXPANSION JOINT FILLER FULL DEPTH OF SLAB ON GRADE AT ABUTTING WALL SURFACE UNLESS

OTHERWISE NOTED. 12. PROVIDE CONSTRUCTION OF CONTROL JOINTS IN SLABS ON GRADE IN LOCATIONS AS SHOWN ON FOUNDATION PLAN OR AT OTHER LOCATIONS APPROVED BY ARCHITECT, BUT SPACING OF JOINTS SHALL NOT

13. CHAMFER EXPOSED EDGES AND CORNERS OR CONCRETE $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

14. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED FLOOR FINISHES AND PROVIDE NECESSARY SLOPES RECESSIONS, DEPRESSION, AND SLAB

REINFORCING STEEL

EXCEED 36' IN ANY DIRECTION.

FINISH AS REQUIRED TO ACCEPT FINISHES.

1. BARS SHALL BE ROLLED FROM NEW BILLET-STEEL CONFORMING TO "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT," ASTM A615, GRADE 60.

2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE FURNISHED IN FLAT SHEETS.

3. DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI315.

4. REINFORCING SHALL BE IN PLACE AND REVIEWED BY THE ARCHITECT PRIOR TO PLACING CONCRETE.

5. PLACE ONE LAYER OF 6 \times 6 - W1.4 \times W1.4 WWF AT MIDDEPTH OF SLABS ON GRADE. LAP ALL WWF SPLICES TWO FULL MESHES AND ALL SIDE LAPS ONE FULL MESH AND TIE OFF WITH STANDARD TIE WIRES. 6. PLACE ONE LAYER OF 6 \times 6 - W1.4 \times W1.4 WWF 1 $\frac{1}{2}$ " CLEAR FROM TOP OF SUSPENDED SLABS ON COMPOSITE METAL DECK. LAP ALL WWF SPLICES TWO FULL MESHES AND ALL SIDE LAPS ONE FULL MESH AND

TIE OFF WITH STANDARD TIE WIRES. 7. PROVIDE PROPER HIGH CHAIRS AND BOLSTERS TO SUPPORT REINFORCING BARS AND WWF FIRMLY IN PLACE WHILE PLACING CONCRETE.

8. FABRICATE BARS IN CONTINUOUS FOOTINGS, WALLS, BOND BEAMS AND TURNED DOWN SLABS TO LONGEST PRACTICAL LENGTHS. 9. LAP REBAR SPLICES A MINIMUM OF 40 BAR DIAMETERS BUT A MINIMUM OF 24". PLAN REBAR SPLICES TO OCCUR AT POINTS OF MINIMUM

STRESS UNLESS OTHERWISE SHOWN. 10. TERMINATE CONTINUOUS BARS IN WALL FOOTINGS, WALLS, BOND BEAMS AND TURNED DOWN SLABS, WITH A STANDARD 90 DEGREE HOOK AT DISCONTINUOUS ENDS, CORNERS, AND INTERSECTIONS.

11. AT LOCATIONS REQUIRING VERTICAL DOWELS INTO FOOTINGS, THE PLACEMENT OT THE DOWEL SHALL MATCH THE SIZE AND CLOSELY MATCH THE LOCATIONS OF THE VERTICAL WALL REBARS REQUIRING THE DOWELS.

12. ALL DOWELS SHALL TERMINATE IN THE FOOTING WITH A STANDARD ACI 90 DEGREE HOOK UNLESS SPECIFICALLY SHOWN OTHERWISE. DOWELS SHALL LAP THEIR MATCHING VERTICAL REBAR 40 BAR DIAMETERS OR A MINIMUM OR 24".

13. UNLESS OTHERWISE NOTED ON THE DRAWINGS REBARS SHALL HAVE THE FOLLOWING MINIMUM CLEARANCES FROM THE FACE OF THE CONCRETE: A) FOOTINGS - 3" WITH EARTH FORMS, 2" WITH REMOVABLE FORMS. B) PEDESTALS - 2" TO TIES C) WALLS - 2" D) COLUMNS - 2" E) BEAMS - 11/2"

F) SLAB SOFFITS - 1"

G) SLAB TOP SURFACE - 3/4" 14. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. CONCRETE MASONRY

1. CONCRETE MASONRY UNITS (CMU) SHALL BE LIGHTWEIGHT OR BLENDED LIGHTWEIGHT UNITS CONFORMING TO ASTM C90 WITH A PRISM STRENGTH

2. MORTAR SHALL BE TYPE "S" THROUGHOUT.

3. WALLS SHALL BE ACCURATELY LAID OUT AND CONSTRUCTED SO THAT NO WALL VARIES MORE THAN 1/4" FROM ITS DESIGNATED LOCATION. THIS VARIATION LIMIT SHALL APPLY TO WALL PLUMBNESS AND WALL

4. ALL BED AND HEAD JOINTS SHALL BE FULLY MORTARED. 5. REINFORCING FOR ALL MASONRY WALLS SHALL BE NO. 9 GALVANIZED TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT SPACED AT 16" O.C. VERTICALLY WITH PREFABRICATED TEE AND CORNER PIECES. LAP ALL REINFORCEMENT JOINTS A MINIMUM OF 12". REFER TO ARCHITECTURAL DRAWINGS FOR HARDWARE CLOTH REQUIREMENT AT TEES AND CORNERS. 6. ALL MASONRY WALLS SHALL BE ANCHORED TO ALL CONTIGUOUS STEEL BEAMS AND COLUMNS WITH SUITABLE ADJUSTABLE TRIANGULAR WIRE TIES 3/6" DIAMETER. PROVIDE ADJUSTABLE FORMED STEEL PLATE

TYPE ANCHOR TO RESTRICT HORIZONTAL MOVEMENT OF THE WIRE TIE TO V_{16} ". WIRE TYPE, BENT STRAPS, OR CORRUGATED METAL TYPE ANCHORS SHALL NOT BE USED. ANCHORS WELDED TO BEAMS AND COLUMNS AT 32" O.C. 7. ANCHORS FOR BRICK VENEER WITH METAL STUD BACK UP SHALL BE THE SAME TYPE AS ABOVE AND SHALL BE SCREWED TO THE METAL STUDS WITH MINIMUM TWO SCREWS SO THAT NO COMPLETED ANCHOR ASSEMBLY TIES AN EFFECTIVE TRIBUTARY AREA OF MASONRY EXCEEDING 2 2/3

8. UNLESS OTHERWISE NOTED LINTELS FOR OPENINGS IN CONCRETE MASONRY WALLS SHALL BE BOND BEAM TYPE OR PRECAST TYPE LINTELS OF PROPER LENGTH TO PROVIDE 16" BEARING EACH END.

LINTELS FOR 8" CMU WYTHES WITH M.O. UP TO 4'-0" SHALL BE 8" HIGH AND SHALL HAVE (2) NO. 5 TOP AND BOTTOM. LINTELS FOR 8" CMU WYTHES WITH M.O. 4'-1" UP TO 6'-0" SHALL BE

LINTEL FOR 8" CMU WYTHES WITH M.O. 6'-1" UP TO 8'-0" SHALL BE 16" HIGH AND SHALL HAVE (2) NO. 5 TOP AND BOTTOM.

8" HIGH AND SHALL HAVE (2) NO. 6 TOP AND BOTTOM.

LINTEL FOR 8" CMU WYTHES WITH M.O. 8'-1" UP TO 10'-0" SHALL BE 16" HIGH AND SHALL HAVE (2) NO. 6 TOP AND BOTTOM.

LINTEL FOR 12" CMU WYTHES WITH M.O. UP TO 6'-0" SHALL BE 8" HIGH AND SHALL HAVE (2) NO. 5 TOP AND BOTTOM. LINTELS FOR 12" CMU WYTHES WITH M.O. 6'-1" TO 8'-0" SHALL BE 16" HIGH AND SHALL HAVE (2) NO. 6 TOP AND BOTTOM. LINTEL FOR 12" WYTHES WITH M.O. 8'-1" TO 12'-0" SHALL BE 16"

HIGH AND SHALL HAVE (2) NO. 8 TOP AND BOTTOM. FOR LINTELS EXCEEDING ABOVE REQUIREMENTS REFER CONTRACT

9. ALL DOORS AND WINDOW JAMBS AND OPENING JAMBS SHALL BE FILLED WITH 3000 PSICONCRETE FOR 2'-0" WIDTH FROM LINTEL BEARING DOWN TO FLOOR WITH (3) NO. 6 VERTICAL BARS (ONE EACH FILLES CELL) CONTINUOUS FROM FOUNDATION TO TOP OF WALL WITH MATCHING DOWELS DOWELS FROM FOUNDATION.

GRAVEL CONCRETE AT THE TIME THE WYTHES ARE BEING LAID.

10. ALL CONCRETE MASONRY UNITS BELOW FINISH MAIN FLOOR AND/OR BELOW FINISH GRADE SHALL BE FILLED WITH 3000 PSIPEA GRAVEL

11. IN ADDITION IN ALL MULTIPLE WYTHE MASONRY WALLS THE COLLAR JOINT SPACE BETWEEN WYTHES SHALL BE FILLED SOLID 3000 PSIPEA

12. MASONRY WALL REINFORCING IN 8" CMU EXTERIOR WALLS UNLESS OTHERWISE NOTED ON THE DRAWINGS:

UNSUPPORTED WALL HEIGHT UP TO 12'-0" - NO. 6 AT 72" O.C. UNSUPPORTED WALL HEIGHT 12'-1" TO 16'-0" - NO. 6 AT 48" O.C. UNSUPPORTED WALL HEIGHT 16'-1" TO 20'-0" - NO. 6 AT 32" O.C.

UNSUPPORTED WALL HEIGHT 24'-1" TO 28'-0" - NO. 6 AT 8" O.C. MASONRY WALL REINFORCING IN 8" CMU ALL OTHER INTERIOR CORRIDOR

MASONRY WALL REINFORCING IN 8" CMU ALL OTHER INTERIOR WALLS IN 100, 200, 300, 600, 700, 800 UNITS: *4 AT 96" O.C. UNLESS OTHERWISE NOTED ON THE DRAWINGS. FILL CELLS AT REBAR WITH 3000 PSICONCRETE. PROVIDE MATCHING

PROVIDE REBARS FULL HEIGHT OF WALLS. PLACE REBARS IN MAXIMUM 6'-8" LIFTS. LAPS SPLICES 32".

STRUCTURAL STEEL

BOLTS - ASTM A325.

1. STEEL SHAPES SHALL CONFORM TO "STRUCTURAL STEEL " - DUAL CERTIFIED TO ASTM A36 AND ASTM A572. STEEL PLATES, BARS, AND RODS - ASTM A36. PIPE COLUMNS - ASTM A 53

WELDS - AWS CLASS E70 LOW HYDROGEN ELECTRODES. TUBE COLUMNS - ASTM A500, GRADE B. ANCHOR BOLTS - ASTM A307.

2. ALL STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN" AND THE AISC CODE OF STANDARD PRACTICE.

3. CONNECTION BOLTS INCLUDING JOIST AND JOIST GIRDER CONNECTIONS SHALL BE 3/4" DIAMETER ASTM A325 BOLTS WITH PROPER HARDENED WASHERS AND HEX NUTS.

ALL BOLTS EXCEPT JOIST TO JOIST GIRDER CONNECTIONS SHALL BE TIGHTENED WITH A PRE-TENSION LOAD OF 28,000 POUNDS MINIMUM TENSION. BOLTS IN JOIST TO JOIST GIRDER CONNECTIONS SHALL BE

INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR SUITABLE HARDENED WASHER UNDER THE HEAD OR NUT. WHICHEVER IS USED AS THE TURNED ELEMENT FOR TIGHTENING AND OVER ALL EXPOSED SLOTTED OR OVERSIZED HOLES.

CONNECTIONS ARE BEARING TYPE WITH TREADS IN THE SHEAR PLANE. 4. WELDING SHALL BE DONE BY WELDING OPERATORS CERTIFIED WITH THE WELDING EQUIPMENT BEING USED FOR WELDING THIS JOB AS QUALIFIED ACCORDING TO AWS D1.

5. BEAMS AND LINTELS SHALL BEAR A MINIMUM OF 8" ON SOLID MASONRY SUPPORTS UNLESS OTHERWISE NOTED ON THE DRAWINGS. 6. LINTELS FOR OPENINGS IN MULTIWYTHE WALLS UNLESS OTHERWISE NOTED ON THE DRAWINGS:

UP TO 8' W8 x 18 WITH $\frac{1}{4}$ " BOTTOM PLATE 8'-1" TO 12'-4" W8 x 24 WITH $\frac{1}{4}$ " BOTTOM PLATE

7. LINTELS FOR OPENINGS IN SINGLE WYTHE 8" CMU WALLS UNLESS OTHERWISE NOTED ON THE DRAWINGS:

UP TO 8' W8 x 18 WITH $\frac{1}{4}$ " BOTTOM PLATE 8'-1" TO 12'-4" W8 x 24 WITH $\frac{1}{4}$ " BOTTOM PLATE 12'-5" TO 16'-4" W16 x 36

8. LINTELS FOR OPENINGS IN SINGLE WYTHE BRICK VENEER WALLS UNLESS OTHERWISE NOTED ON THE DRAWINGS: UP TO 8' L 6 x 4 x $\frac{5}{16}$ (LLV)

8'-1" TO 12'-4" L 6 x 4 x $\frac{3}{8}$ (LLV) 9. ALL COPES, CUTS, BLOCKS, NOTCHES SHALL HAVE SMOOTH RE-ENTRANT CORNERS OF $\frac{1}{2}$ " MINIMUM RADIUS.

10. RETURN ALL WELDS AT CORNERS A MINIMUM OF TWICE THE NOMINAL

SIZE OF THE WELD.

11. PROVIDE HOLES FOR BLOCKING AND NAILER BOLTS AS REQUIRED BY ARCHITECTURAL DRAWINGS.

12. STRUCTURAL STEEL PERMANENTLY EXPOSED TO VIEW SHALL RECEIVE ONE SHOP PRIME COAT RED OXIDE PAINT OF 2 MIL DET SURFACE PREPARATION SHALL BE POWER TOOLS CLEANING CONFORMING TO SSPC-SP3 STRUCTURAL STEEL PERMANENTLY CONCEALED FROM VIEW SHALL AT THE CONTRACTORS OPTION NOT BE SHOP PRIMED.

13. CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BRACING AND GUYING OF STEEL FRAMING AND LOAD BEARING WALLS TO PROVIDE FOR SAFETY OF THE STRUCTURE AND WORKMEN. BRACING TO REMAIN UNTIL NO LONGER REQUIRED FOR SAFE SUPPORT OF FRAME.

14. ALL COLUMNS SHALL HAVE MINIMUM 4 ANCHOR BOLTS SET ON A SQUARE

15 COLUMN CAP AND BASE PLATES SHALL BE MINIMUM 3/" THICKNESS AND SHALL BE FULLY WELDED ALL AROUND TO COLUMN SHAFT WITH $\%_6$ "

PATTERN.

FILLET WELDING. 16. PROVIDE AMPLE GROUT THICKNESS UNDER COLUMN BASE PLATES TO ALLOW FOR A HEAVY HEX LEVELING NUT AND STANDARD FLAT WASHER TO BE PLACED ONE EACH ANCHOR BOLT ON THE UNDERSIDE OF THE COLUMN BASE PLATE FOR PRECISION LEVELING AND PLUMBING THE COLUMN PROVIDE A STANDARD FLAT WASHER UNDER A HEAVY HEX CLAMPING NUT

ON TOP OF THE BASE PLATE FOR EACH ANCHOR BOLT. 17. PROVIDE A MINIMUM OF 3" CONCRETE ENCASEMENT PROTECTION FOR ALL

STEEL PARTS BELOW GRADE. 18. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. STEEL JOIST, JOIST GIRDER

1. STEEL JOIST SHALL CONFORM TO STEEL JOIST INSTITUTE (SJI) "K" SERIES JOISTS AND ACCESSORIES.

2. JOIST GIRDERS SHALL BE STANDARD "G" SERIES JOIST GIRDERS AND

3. BEARING DEPTH OF SLOPING "K" SERIES JOIST SHALL BE 5" UNLESS NOTED OTHERWISE ON THE DRAWINGS.

4. BEARING DEPTH OF JOIST GIRDERS SHALL BE 6" EXCEPT THE 96G GIRDERS SHALL HAVE 10" BEARING DEPTH UNLESS SPECIFICALLY NOTED 5. JOISTS SHALL BEAR A MINIMUM OF 2 $\frac{1}{2}$ " ON STEEL SUPPORTS ON 4"

ON MASONRY SUPPORTS UNLESS NOTED OTHERWISE ON THE DRAWINGS. 6. JOIST GIRDERS SHALL BEAR A MINIMUM OF 4" ON STEEL SUPPORTS AND UNLESS OTHERWISE NOTED ON THE DRAWINGS.

7. JOISTS BEARING ONLY ON ONE SIDE OF A STEEL SUPPORT SHALL BEAR A MINIMUM OF 2" PAST THE CENTERLINE OF THAT SUPPORT UNLESS 8. JOIST GIRDERS BEARING ONLY ON ONE SIDE OF A STEEL SUPPORT

9. THE BOTTOM CHORD STRUTS OF JOISTS AND JOIST GIRDERS SHALL NOT BE RIGIDLY FASTENED TO MASONRY WALLS UNLESS SPECIFICALLY SHOWN

SHALL BEAR THE FULL WIDTH OF THAT SUPPORT UNLESS OTHERWISE

TO DO SO ON THE DRAWINGS. 10. BOTTOM CHORD STRUTS OF JOISTS SHALL RIGIDLY ATTACHED TO STEEL SUPPORTS DURING THE STEEL ERECTION PROCESS. BOTTOM CHORD STRUTS OF JOIST GIRDERS SHALL BE RIGIDLY ATTACHED TO STEEL SUPPORTS ONLY AFTER THE FULL DEAD LOADS BEING SUPPORTED ARE IN

11. ALL STEEL JOISTS AT OR ADJACENT TO A COLUMN LINE SHALL BE BOLTED TO THE COLUMN OR BEAM OR TRUSS WITH (2) 3/4" DIAMETER A325 BOLTS. BOTTOM CHORDS OF THESE JOISTS SHALL HAVE THEIR BOTTOM CHORD EXTENDED AND POSITIVELY ATTACHED THERETO BY FIELD WELDING SUFFICIENT TO DEVELOP 6 KIPS FORCE.

12. PROVIDE CONTINUOUS HORIZONTAL BRIDGING IN SPACED ACCORDANCE WITH SJISTANDARDS WITH PROPER ALLOWANCE FOR EXTRA BOTTOM CHORD BRIDGING WHERE REQUIRED FOR UPLIFT. ALL BRIDGING SHALL BE WELDED TO TOP AND BOTTOM CHORDS AT ALL POINTS OF CONTACT WITH WELDS OF SUFFICIENT SIZE AND CONFIGURATION TO DEVELOP 2 KIPS FORCE. BRIDGING LINES SHALL TERMINATE AND BE WELDED TO STEEL BEAM, STEEL COLUMN, STEEL JOIST, OR BRIDGING ANCHOR AT MASONRY WALL. AT ALL BRIDGING RUNS. WHERE A JOIST IS PRESENT AT END OF BRIDGING RUN THE LAST JOIST SPACE THE BRIDGING SHALL BE DIAGONAL "X" BRIDGING IN ADDITION TO THE HORIZONTAL BRIDGING. BRIDGING MEMBERS SHALL BE MINIMUM 1 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " x $\frac{7}{64}$ "

13. ALL JOISTS NOT REQUIRING BOLTED ENDS SHALL BEAR A MINIMUM OF 2 $\frac{1}{2}$ " ON STEEL AND BE WELDED TO THE STEEL SUPPORT WITH A

 $\frac{3}{6}$ " x 2" FILLET WELD BOTH SIDES OF JOIST SEAT ANT EACH END. 14. ALL JOIST CHORD MEMBERS SHALL BE ANGLES.

ANGLE SHAPE UNLESS OTHERWISE NOTED.

15. BRIDGING SHALL BE IN PLACE AND WELDED FOR REVIEW BY THE ARCHITECT PRIOR TO INSTALLING THE METAL ROOF DECK.

16. JOISTS, JOIST GIRDERS, AND ACCESSORIES EXPOSED TO VIEW SHALL RECEIVE ONE SHOP DIP COAT OF STANDARD GREY OXIDE PRIMER. AT CONTRACTORS OPTION JOISTS, JOIST GIRDERS, AND ACCESSORIES NOT EXPOSED TO VIEW MAY BE LEFT UNPRIMED.

17. STEEL JOISTS, JOIST GIRDERS SHALL BE DESIGNED BY THEIR FABRICATOR FOR A NET UPLIFT OF NOT LESS THAN 15 PSF. ALLOWABLE STRESSES MAY BE INCREASED 1/3 FOR THIS CASE.

18. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

METAL ROOF DECK

DRILLING TEK SCREWS.

1 METAL ROOF DECK OVER STEEL JOISTS IN MAIN BUILDING ROOFS SHALL BE 1 1/2" DEEP, 22 GAGE, WIDE RIB, PRIMED STEEL DECK UNITS CONFORMING TO STEEL DECK INSTITUTE (SDI) STANDARDS. METAL ROOF DECK OVER STEEL JOISTS AT EXPOSED AREAS OF THE GYM

AREA SHALL BE 1 1/2" DEEP, 22 GAGE, WIDE RIB, PRIMED ACOUSTICAL STEEL DECK UNITS WITH SOUND ATTENUATION FILLED FLUTES CONFORMING TO STEEL DECK INSTITUTE (SDI) STANDARDS. METAL ROOF DECK OVER STEEL BEAMS AT CONNECTOR AND CANOPY ROOFS SHALL BE 3". 22 GAGE. WIDE RIB. PRIMED STEEL DECK UNITS

CONFORMING TO STEEL DECK INSTITUTE (SDI) STANDARDS. 2. METAL ROOF DECKING SHALL BE WELDED TO STEEL SUPPORTING MEMBERS WITH 3/4" DIAMETER PUDDLE WELDS AT 12" O.C. AT ALL END LAPS AND ALL INTERMEDIATE SUPPORTS EXCEPT THAT AT THE WELD SPACING SHALL BE DECREASED TO 6" O.C. FOR 20' AROUND PERIMETER OF THE MAIN ROOF, WELD SPACING IN CONNECTOR AND CANOPY ROOFS SHALL BE 8". SIDE LAPS SHALL BE MECHANICALLY FASTENED AT 1/3

3. DECKING UNITS SHALL BE LAID OUT BY THE SUPPLIER TO A PATTERN THAT PROVIDES FOR A MINIMUM THREE SPAN CONDITION AND SHALL BE LAPPED 3" AT ENDS.

POINTS OF DECK SPAN EITHER BY BUTTON PUNCHING OR WITH NO. 14 SELF

4. DECK UNITS SHALL BE SECURELY FASTENED IN STRAIGHT LINES AND TO TRUE PLANES TO ACCEPT THE SPECIFIED ROOFING SYSTEMS. UNEVEN, LOOSE, OR OTHERWISE BADLY INSTALLED DECK WILL BE REJECTED BY THE ARCHITECT AND SHALL BE REPLACED AT NO ADDITIONAL COST IF SO DIRECTED BY THE ARCHITECT.

5. PROVIDE ALL NECESSARY ACCESSORIES, SUCH AS CONTINUOUS RIDGE AND VALLEY AND EAVE AND RAKE CLOSURE PLATES OF PROPER SIZE AND SHAPE TO PROVIDE A FIRST CLASS WEATHERTIGHT JOB. MINIMUM WIDTH OF THESE CLOSURE PLATES SHALL BE 8" AND SHALL BE SAME 22 GAGE MATERIAL AS DECK AND SHALL BE FASTENED IN PLACE AT 6" O.C. WITH $rac{3}{4}$ " DIAMETER PUDDLE WELDS OR NO.14 TEK SCREWS.

6. METAL DECKING SHALL BE INSPECTED BY ARCHITECT AND ROOFING INSTALLER PRIOR TO COVERING. 7. PROPER CASE SHALL BE TAKEN BY THE ERECTOR SO AS NOT TO BURN HOLES IN DECK OR SUPPORTING MEMBERS. BURNED HOLES SHALL BE

CAUSE FOR REJECTION BY THE ARCHITECT. REJECTED WORK SHALL BE

8. TOUCH UP WELDS AND ABRASIONS WITH ZINC RICH PAINT. 9. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

REMOVED AND REPLACED AT NO ADDITIONAL COST.

COMPOSITE STEEL FLOOR DECK

1. COMPOSITE METAL DECK FOR SUSPENDED FLOOR SLABS SHALL BE 3" DEEP, 18 GAGE, GALVANIZED COMPOSITE DECK TYPE 3 VLI AS MANUFACTURED BY VULCRAFT OR AN APPROVED EQUAL.

2. DECK SHALL BE LAID OUT SO AS TO PROVIDE FOR SINGLE OR CONTINUOUS SPANS AS APPLICABLE.

3. TEMPORARY SHORING IS NOT REQUIRED FOR SPANS LESS THAN 10'-6". SPANS GREATER THAN 10'-6" WILL REQUIRE CONTINUOUS SHORING AT

MIDSPAN. 4. PROVIDE FOR MINIMUM 3" DECK BEARING AT SUPPORTS. 5. FASTEN DECK TO STEEL SUPPORTS WITH $\frac{3}{4}$ " DIAMETER PUDDLE WELDS

ACTUATED FASTENERS SPACED AT EVERY OTHER FLUTE. 6. WELD DECK UNITS TO SIDE SUPPORTS PARALLEL TO DECK FLUTES AT 12" O.C. WITH ¾" PUDDLE WELDS.

FVFRY OTHER FLUTE. FASTEN TO MASONRY SUPPORTS WITH POWDER

7. FASTEN SIDE LAPS AT 24" O.C. WITH BUTTON PUNCHING OR NO. 14 TEK

8. TO MINIMIZE FRESH CONCRETE LEAKAGE AT SIDE LAPS, PLAN CONCRETE PLACEMENT SEQUENCE SO THAT THE WEIGHT OF THE FRESH CONCRETE IS PLACED ON THE TOP MOST SHEET OF DECK FIRST.

9. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

LIGHT GAGE METAL FRAMING

1. LIGHT GAGE METAL STUDS SHALL BE AS NOTED ON THE DRAWINGS. 2. LIGHT GAGE STUDS FOR EXTERIOR WALLS SHALL BE 8" "CSJ" STYLE STUDS AS MANUFACTURED BY CLARK STEEL FRAMING SYSTEMS OR

APPROVED EQUAL FOR UNSUPPORTED HEIGHTS AS SCHEDULED BELOW STUDS UP TO 14'-0" - 18 GAGE AT 16" O.C. STUDS 14'-1" - 17'-0" 16 GAGE AT 16" O.C. STUDS 17'-1" - 20'-0" 14 GAGE AT 16" O.C. STUDS 20'-1" - 22'-0" 14 GAGE AT 12" O.C.

REFER TO PLANS FOR DOUBLE 3 %" STUD END WALLS AT VERTICAL BRACE LOCATIONS.

3. FLOOR AND HEAD TRACK SHALL BE DEEP TRACK OF SAME GAGE AS 4. ALL MATERIALS SHALL BE GALVANIZED AND ALL SCREWS SHALL BE SUITABLE GRADE STAINLESS STEEL OR ZINC PLATED AND ALL WELDS

5. LIGHT GAGE HEADERS OVER DOOR AND WINDOW OPENINGS IN EXTERIOR WALLS SHALL BE COMPOSED OF MULTIPLE MEMBERS AS NOTED ON THE DRAWINGS. MULTIPLE MEMBERS SHALL BE INTERCONNECTED BY SCREWS OR WELDS BOTH SIDES TO MAKE MULTIPLE UNITS ACT AS A SINGLE

SHALL BE TOUCHED UP WITH ZINC RICH PAINT.

6. ALL CONNECTIONS SHALL BE SCREWED OR WELDED TOGETHER WITH SUFFICIENT WELDS OR SCREWS TO SAFELY SUPPORT THE LOADS IMPOSED ON THE CONNECTIONS. ALL CONNECTIONS SHALL BE ACCOMPLISHED WITH STANDARD ACCESSORY COMPONENTS SUPPLIED FOR THAT PURPOSE. ALL CONNECTION DESIGNS FOR THE LIGHT GAGE FRAMING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECTED TO THE APPROVAL OF THE ARCHITECT.

7. REFER TO ARCHITECTURAL DRAWINGS FOR INTERIOR METAL STUD PARTITION WALL REQUIREMENTS.

LIGHT GAGE METAL FRAMING

1. LOAD BEARING INTERIOR AND EXTERIOR WALL STUDS SHALL BE TYPE CSJ 3 5/8" x 16 GAGE AS MANUFACTURED BY CLARK STEEL FRAMING SYSTEM OR APPROVED EQUAL. (FLANGE WIDTH 1 1/2" + 1/2" STIFFENING RETURN LIP).

2. NON-LOAD BEARING INTERIOR PARTITION WALL STUDS FOR ALL FLOORS SHALL BE TYPE PCW 3 1/8" x 20 GAGE AS MANUFACTURED BY CLARK STEEL FRAMING SYSTEM OR APPROVED EQUAL. (FLANGE WIDTH 1 $\frac{3}{8}$ " + STIFFENING RETURN LIP).

3. ALL HEAD AND FLOOR TRACK FOR LOAD BEARING INTERIOR AND ALL EXTERIOR WALLS SHALL BE 16 GAGE DEEP TRACK. TRACK SHALL BE FURNISHED WITHOUT PUNCHOUTS.

ALL NON-LOAD BEARING INTERIOR PARTITION HEAD AND FLOOR TRACK SHALL BE 20 GAGE DEEP TRACK. 4. HORIZONTAL STRAP BRIDGING SHALL BE 18 GAGE x 1 $\frac{1}{2}$ ".

5. DIAGONAL STRAP BRACING SHALL BE 18 GAGE x 4".

6. ALL STUD MATERIAL SHALL BE PRE-PUNCHED WITH 1 %6" x 4" WEB PUNCH OUTS SPACED ON 24" CENTERS WITH PUNCHOUTS A MINIMUM OF 12" FROM ENDS OF STUD.

7. ALL HEADER AND TRACK MATERIAL SHALL BE UNPUNCHED. 8. SPACING FOR EXTERIOR WALL STUDS AND INTERIOR LOAD BEARING WALL STUDS SHALL NOT EXCEED 16" O.C.

9. SPACING OF INTERIOR NON LOAD BEARING WALL STUDS SHALL NOT EXCEED 24" O.C. 10. HORIZONTAL STRAP BRIDGING SHALL BE SPACED AT THIRD POINTS FOR STUDS UP TO 120" LONG. STRAP BRIDGING SHALL BE PLACED ON BOTH FACES OF METAL STUDS AND SHALL BE SCREWED TO

EACH FLANGE OF EACH STUD WITH (1) NO. 12 SCREW. BRIDGING SHALL

BE INSTALLED PRIOR TO PLACING ANY LOADING ON THE STUD WALLS.

OPFNINGS WITH 2 SCREWS. PROVIDE SOLID BRIDGING COMPOSED OF

14. LOAD BEARING INTERIOR AND ALL EXTERIOR WALL STUDS SHALL BE SAW

11. HORIZONTAL BRIDGING IS REQUIRED FOR ALL EXTERIOR WALLS AND ALL

INTERIOR LOAD BEARING WALLS. 12. HORIZONTAL BRIDGING SHALL BE ATTACHED TO JAMBS OF WALL

TRACK MATERIAL IN THE STUD SPACE AT EACH SIDE OF EACH OPENING, AND AT THE LAST STUD SPACE AT EACH OF WALLS. 13. BRIDGING SHALL BE INSTALLED IN A TAUT CONDITION.

CUT (NOT GAS CUT) TO FIT SQUARELY AND EVENLY AGAINST THE TOP AND BOTTOM TRACK 15. PROVIDE (2) NO. 10 x 16 HEX WASHER HEAD SCREWS EACH FLANGE OF

STUDS AT TOP AND BOTTOM TRACK.

16. INSTALL DIAGONAL STRAP BRACING IN APPROXIMATELY 45 DEGREE PANELS IN ALL EXTERIOR STUD WALLS. PROVIDE SEPARATE BRACING LIFTS FOR EACH OF THE TWO UPPER STORIES.

STRAPPING SHALL BE "X" ON EACH SIDE OF EXTERIOR WALLS FROM THE TOP CORNER TO THE BOTTOM CORNER OF THE WALL EXTREMITY OR INTERRUPTING OPENING. PROVIDE MINIMUM DOUBLE STUD AT EACH EXTREME END OF WALLS FOR FASTENING STRAP BRACING. FASTEN STRAP BRACING TO DOUBLE STUDS AND TRACK AT EACH END

WITH (20) NO. 10 x 16 HEX WASHER HEAD SCREWS. PROVIDE AUXILIARY

SPACERS OR FULL STUDS IF REQUIRED TO OBTAIN PROPER NUMBER OF

DIAGONAL "X" STRAP BRACING SHALL BE 4" x 18" GAGE STRAPPING.

SCREWS WITHOUT VIOLATING SPECIFIED MINIMUM SPACING AND EDGE DISTANCES. FASTEN TO EACH INTERMEDIATE STUD WITH ONE SCREW. SPLICE SHEAR WALL STRAPS WITH LAP SPLICE WITH 20 SCREWS. MINIMUM LAP

LENGTH SHALL BE 12". 17. STRAP BRACING SHALL BE INSTALLED IN A TAUT CONDITION.

18. PLACE SCREWS MINIMUM 1" APART AND MINIMUM $\frac{1}{2}$ " FROM EDGES. 19. HEADERS OVER OPENINGS IN LOAD BEARING STUD WALLS SHALL BE DOUBLE 9 1/4" x 16 GAGE PCS (1 5/8" FLANGE WIDTH WITH 1/2" RETURN LIP) MEMBERS AS MANUFACTURED BY CLARK METAL FRAMING SYSTEMS OR APPROVED EQUAL WITH 16 GAGE TRACK TOP AND BOTTOM

UNLESS OTHERWISE NOTED. 20. ALL MATERIALS SHALL BE GALVANIZED. ALL SCREWS SHALL BE ZINC

21. ALL CONNECTIONS SHALL BE SCREWED TOGETHER WITH SUFFICIENT SCREWS TO SAFELY SUPPORT THE LOADS IMPOSED ON THE CONNECTIONS ALL CONNECTIONS SHALL BE ACCOMPLISHED WITH STANDARD ACCESSORY COMPONENTS SUPPLIED FOR THAT PURPOSE.

TO ASTM A 446 GRADE A WITH A MINIMUM YIELD STRENGTH OF 33 KSI. 23. ALL 16 GAGE MATERIAL AND TRACK MATERIAL SHALL CONFORM TO ASTM A 446 GRADE D WITH A MINIMUM YIELD STRENGTH OF 50 KSI. 24. ALL MATERIAL SHALL BE COLOR CODED FOR THE DIFFERENT GAGES.

22. ALL 20 AND 18 GAGE MATERIAL AND TRACK MATERIAL SHALL CONFORM

26. CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BRACING AND GUYING OF STEEL FRAMING AND LOAD BEARING WALLS TO PROVIDE FOR SAFETY OF THE STRUCTURE AND WORKMEN. BRACING TO REMAIN UNTIL NO LONGER REQUIRED FOR SAFE SUPPORT OF FRAME.

25. ALL LOAD BEARING STUDS SHALL ALIGN FROM BOTTOM STORY TOP

27. ALL TEE INTERSECTIONS AND ALL CORNER INTERSECTIONS OF ALL INTERIOR LOAD BEARING, ALL EXTERIOR, AND ALL INTERIOR LOAD BEARING TO EXTERIOR METAL STUD WALLS SHALL BE TIED TOGETHER AT THE TOP TRACK WITH 16 GAGE x 4" WIDE x 8" LONG STRAP TIE. MATERIAL SCREWED TO TOP OF JOINED WALL TRACK WITH 8 SCREWS AT EACH END OF STRAP OR BY OVERLAPPING TRACK WEBS.

28. ALL FLOOR JOISTS SHALL BE 9 $\frac{1}{4}$ " x 16 GAGE PCS (1 $\frac{5}{8}$ " FLANGE WIDTH WITH $\frac{1}{2}$ " RETURN LIP) MEMBERS AS MANUFACTURED BY CLARK STEEL FRAMING SYSTEMS OR APPROVED EQUAL. 29. PROVIDE STANDARD BEARING STIFFENERS AT ALL JOIST BEARING POINTS. 30. PROVIDE 16 GAGE CONTINUOUS PERIMETER BAND AT ENDS OF ALL FLOOR

31. PLYWOOD SUBFLOOR SHALL BE SCREWED TO ALL FLOOR JOISTS WITH NO. 12

SCREWS SPACED AT 8" O.C.

1. PROVIDE NON-SHRINK, NON-METALLIC PRE-MIXED GROUT UNDER ALL COLUMN BASE PLATES AND BEAMS BEARING PLATES. GROUT SHALL HAVE A COMPRESSIVE STRENGTH OF 7,000 PSIAT 7 DAYS.

DESIGN LIVE LOADS

1. ROOF LIVE LOAD - 20 PSF 2. GROUND SNOW - 10 PSF

3. WIND - 80 MPH

4. SEISMIC - Av = 0.075, Aa = 0.050, SPC = "B", EXPOSURE II, SOIL - 1.2, R - 8, Cd - 5 1/2, PROCEDURE 1607.4. LATERAL FORCE DESIGN CONTROLLED BY WIND.

DIMENSIONS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DIMENSIONS IN THE DRAWINGS AND ADVISING THE ARCHITECT OF ANY DIFFERENCES IN THE DIMENSIONS ON THE DRAWINGS PRIOR TO COMMENCING CONSTRUCTION.

EXISTING CONDITIONS

THE CONTRACTOR.

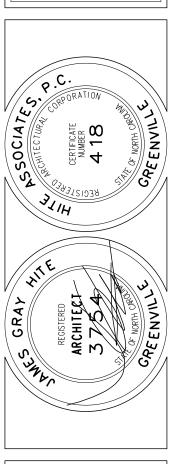
CONSTRUCTION SAFETY

JOB CONDITIONS. ANY ADVERSE EXISTING CONDITION AFFECTING WORK SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR POSSIBLE CLARIFICATION OF RECONCILIATION.

1. THESE DRAWINGS DO NOT CONTAIN THE REQUIREMENTS FOR JOB SAFETY.

ALL PROVISIONS FOR SAFETY SHALL BE THE SOLE RESPONSIBILITY OF

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL EXISTING



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Drawing no.

NEW CONNECTOR FOUNDATION PART PLAN

9.) CJ - CONTROL JOINT. SEE DETAIL ON S1101.

FOOTING DESIGN BASED ON AN ASSUMED SOIL BRG. CAPACITY OF 1500 PSF.
 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF RECORD IF UNSTABLE, ORGANIC, WEAK OR OTHERWISE UNACCEPTABLE SOIL CONDITIONS ARE ENCOUNTERED DURING EXCAVATIONS OR SUBSEQUENT GEOTECHNICAL INVESTIGATIONS.
 ELEV. NOTED (-) ARE BELOW REFERENCE FINISHED FLOOR TO TOP OF FOOTING.
 SLAB ON GRADE IS 4" NORMAL WEIGHT CONCRETE REINFORCED PER 1/S1101 ON ON 4" NO. 57/67 WASHED STONE AND 6 MIL POLY VAPOR BARRIER, TYP. U.O.N.

b'' = 1'-0''

4.) ALL CONCRETE SHALL BE A MINIMUM STRENGTH OF 3000 PSI MEETING ACI 301 AND ACI 318. ALL CONCRETE SHALL BE MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES SUBJECT TO PUMPING SHALL BE TAKEN AT THE EXIT END OF THE PUMP AT THE ELEVATION

OF PLACEMENT. (REFERENCE ACI MANUAL OF CONCRETE PRACTICE).

5.) ALL REINFORCING BARS SHALL BE GRADE 60 CONFORMING TO ASTM 615. LAP
BARS WHERE REQUIRED USING CLASS B TENSION LAP SPLICES, OR 40 BAR DIAMETERS.
DEVELOPMENT LENGTHS SHALL BE CRSI MINIMUM UON.

6.) SEE S1101 FOR ADDITIONAL NOTES THAT APPLY.

7.) REFERENCE ARCHITECTURAL AND PLUMBING DRAWINGS FOR COORDINATION OF SLOPED FLOORS AT FLOOR DRAINS, AND DEPRESSED FLOOR SLAB LOCATIONS.8.) LOCATE ALL WALLS AND OPENINGS PER ARCHITECTURAL DRAWINGS.

CONTROL 2

| Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Control 2 | Contr

NEW CONNECTOR ROOF FRAMING PART PLAN

1.) METAL ROOF DECK IS 3" x 22 GA TYPE "N" GALVANIZED M.R.D., TYP. U.O.N. FOR ATTACHMENT, SEE TYPICAL M.R.D. FASTENING DETAIL ON S1101.

FOR ATTACHMENT, SEE TYPICAL M.R.D. FASTENING DETAIL ON S1101.

2.) ELEV NOTED(+) ARE ABOVE REFERENCED FINISHED FLOOR.

3.) NO FABRICATION OR ERECTION SHALL COMMENCE PRIOR TO THE APPROVAL OF ALL STRUCTURAL STEEL SHOP DRAWINGS BY THE ENGINEER OF RECORD.

 COORDINATE AND VERIFY ALL DECK EDGE LOCATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

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Date:

XX XXX XXXX

Drawing no.

FACE/EXIST.
EXTERIOR WALL

- NESTED UNDER DECK FLUTES

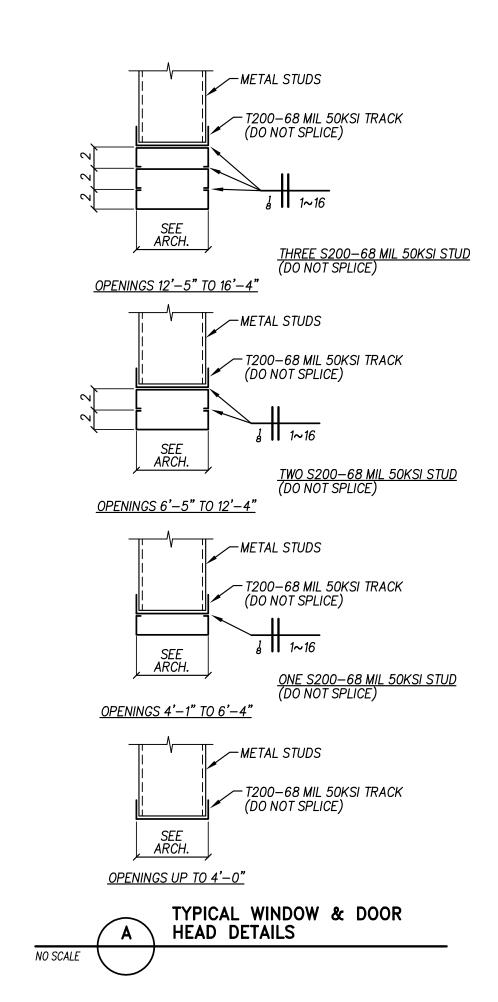
SPACED @ 2'-0" o/c., MAX.

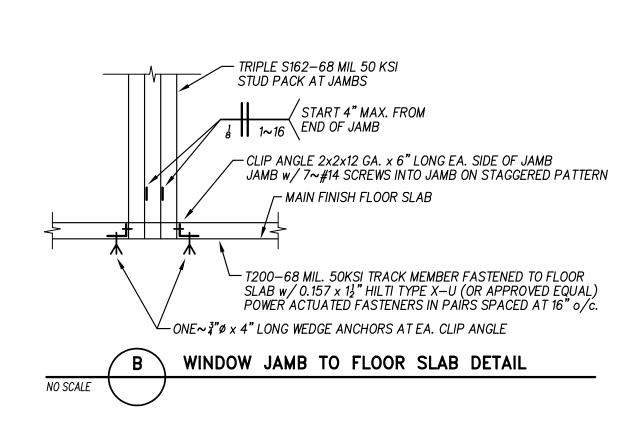
OF OUTRIGGERS TO COINCIDE w/ DECK FLUTE LAYOUT.

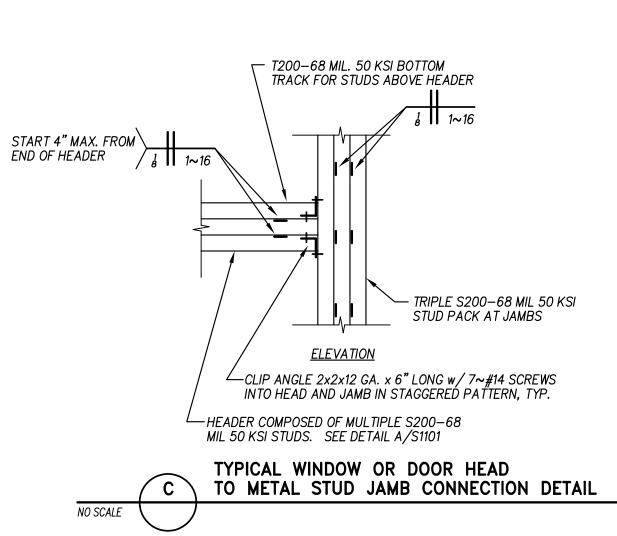
CONNECTOR BEAM -

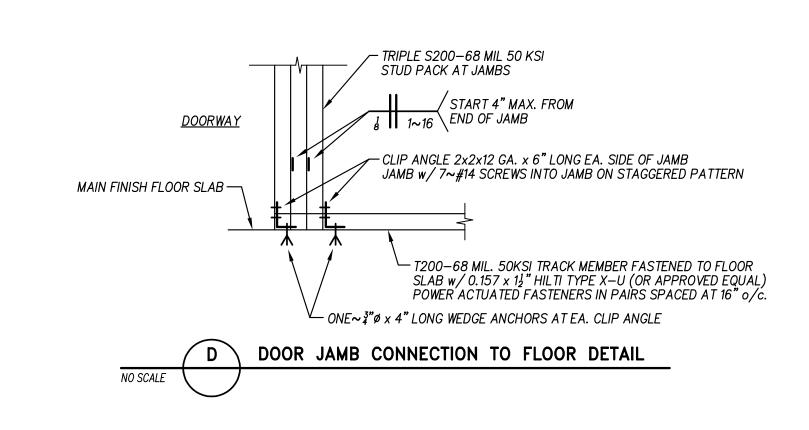
(SEE FRAMING PLANS)

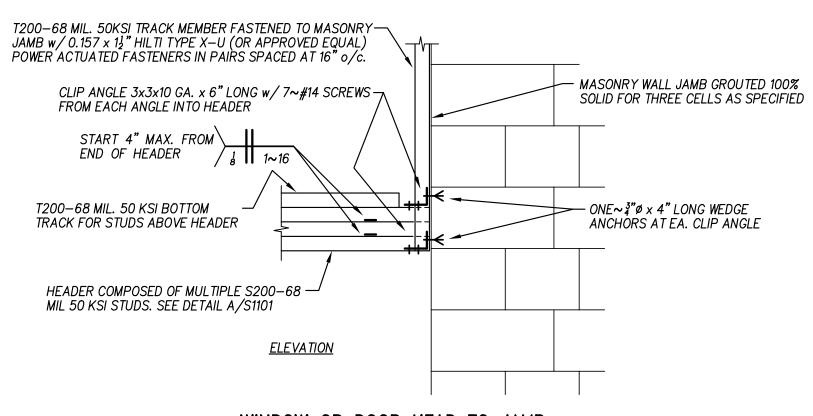
- COORDINATE LOCATION OF



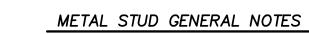




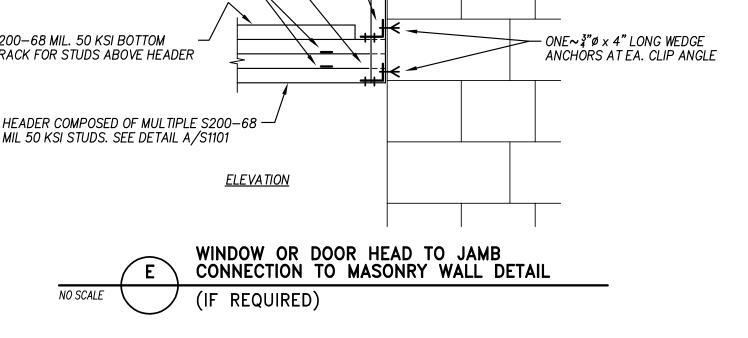




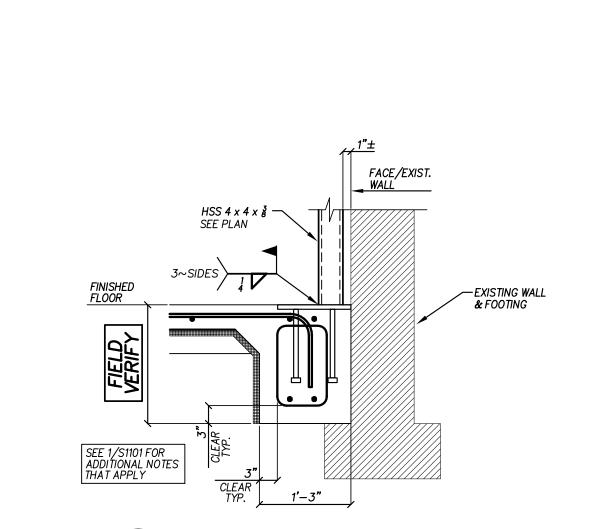
| | MANUFACTU | STUDS AND METAL SYSTEM TO BE RED BY DIETRICH INDUSTRIES OR EQUAL |
|----------------|---------------------|---|
| | | SCHEDULE #10 TEK SCREWS (U.N.O) |
| CONNEC | TION TYPE | COMMENTS |
| BOTTOM TR | PACK TO FLOOR | 2 ~ POWDER DRIVEN FASTENERS @ 24" o/c |
| STUD TO BO | OTTOM TRACK | ONE SCREW IN EA. FLANGE, U.O.N. |
| STUD TO TO | OP TRACK | ONE SCREW IN EA. FLANGE, U.O.N. |
| CTIONS PLYWOOD | TO STUDS | SCREW @ 6" o/c ALONG EA. STUD |
| TOP PL TO | TRACK | #10 TEK AT 12" o/c. |
| FC TO STU | ID | 4∼#10 TEK |
| FC TO SLA | В | ½"ø EXP. ANCH. |
| JOIST TO T | OP TRACK (BEARING) | (2) SCREWS IN FLANGE |
| PLYWOOD | FLOORING TO JOIST | SCREW @ 12" o/c ALONG EA. JOIST |
| TIONS BRIDGING | TO JOISTS | 16 GA. CLIP ANGLE w/ 4 SCREWS |
| BLOCKING | TO JOISTS | 16 GA. CLIP ANGLE w/ 4 SCREWS |
| L TREAD TO | VERTICAL STUD | (4) #10 TEK SCREWS IN WEB |
| WOOD SHE | TA THING | 8d, 12" o/c AT SUPPORTS, 6" o/c. AT EDGES |
| HEADER T | O HEADER | #10 TEK AT 12" o/c. STAGGERED (WEB TO WEB, |
| HEADER T | O CRIPPLE | SA18 GA. w/ 4#8 TEK PER LEG |
| CRIPPLE 1 | O LOWER TRACK | 2∼#8 TEK EA. FL. |
| HEADER T | O BEARING STUD | SA 18 GA. w/4~#8 TEK PER LEG |
| BEARING S | STUD TO CRC BRACE | BRIDGE CLIP |
| BEARING S | STUD TO BRIDGE CLIP | 4∼#10 TEK |
| BRIDGE CL | IP TO CRC | 4∼#10 TEK |
| STUD TO V | VALL | 2 SCREWS IN EA. WEB @ 16" o/c |
| JOIST TO J | OIST INTERFACE | ONE SCREW IN EA. FLANGE |
| PLYWOOD | FLOORING TO JOIST | SCREW @ 12" o/c ALONG EA. JOIST |
| BRIDGING | TO JOISTS | 16 GA. CLIP ANGLE w/ 4 SCREWS |
| BLOCKING | TO JOISTS | 16 GA. CLIP ANGLE w/ 4 SCREWS |



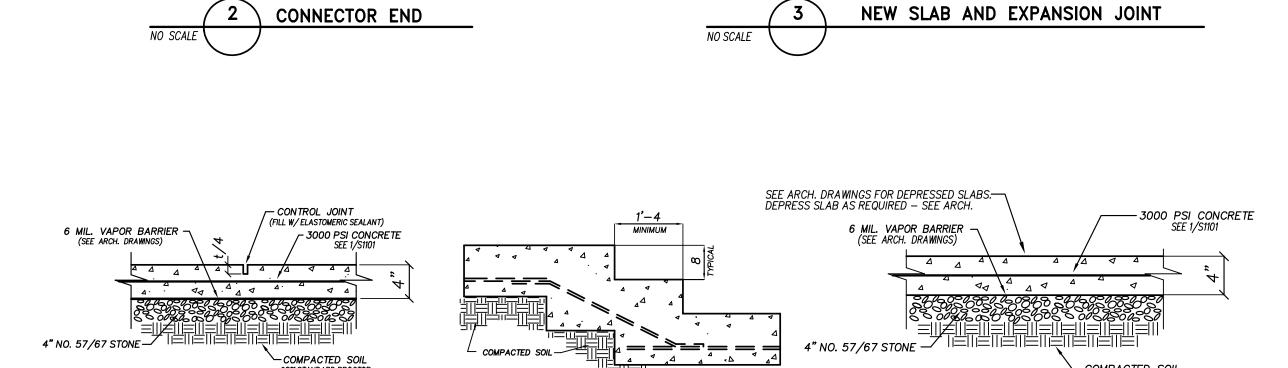
- 1. ALL METAL STUD MATERIAL SHALL BE MANUFACTURED BY DIETRICH INDUSTRIES
- 2. CONTRACTOR SHALL INSTALL ALL COMPONENTS IN STRICT COMPLIANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 4. ALL METAL STUD MEMBERS SHALL HAVE Fy = 33 KSI, MINIMUM.



- OR APPROVED EQUAL.
- 3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETAILS
 - PRIOR TO CONSTRUCTION.



NEW LUG AND COLUMN AT EXISTING WALL



TYPICAL STEPPED FOOTING DETAIL

IF REQUIRED TO MEET EARTH COVER REQUIREMENTS

SEE ARCH. DRAWINGS FOR ADDITIONAL ROOF CONSTRUCTION NOTES/DETAILS THAT APPLY

`— ‡" BENT ₽ (FIELD WELD TO HSS3 OUTRIGGERS)

─ METAL ROOF DECK

COMPACTED SOIL
98% STANDARD PROCTOR

TYPICAL SLAB CONTROL JOINT

SHOWN THUS ON PLAN... ___ C.J. ___

(SEE FRAMING PLANS)

FACE OF EXISTING

EXPANSION JOINT MATERIAL PER SPECS.

— SEE ARCH. DRAWINGS FOR DEPRESSED SLABS. DEPRESS SLAB AS REQUIRED — SEE ARCH.

FINISHED FLOOR

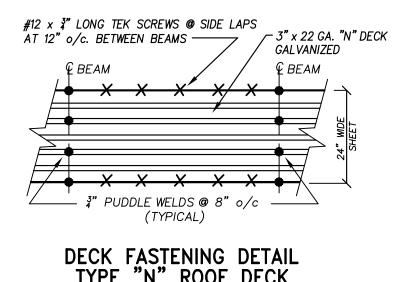
98% STANDARD PROCTOR

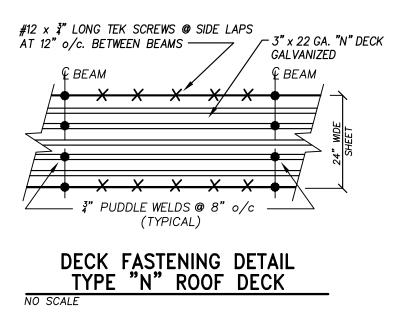
TYPICAL SLAB DETAIL

NO SCALE

— SUB—BASE & COMPACTED EARTH, AS SPECIFIED.

- NEW 3000 PSI CONCRETE SEE 1/S1101 FOR REINF.





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- 2. CONTINUOUS WALL FOOTINGS SHALL BE PLACED UPON BEARING SOIL THAT IS EITHER UNIMPROVED OR IMPROVED TO THE SAME ALLOWABLE NET BEARING VALUE AS THE CONTIGUOUS COLUMN FOOTINGS.
- 3. SITE CONDITIONS MAY DICTATE THAT THE SOIL IMPROVEMENT MEASURES BE TRANSITIONED OUT FROM THE AREAS OF UNIMPROVED OR SHALLOW IMPROVED DEPTHS. SUCH TRANSITIONING SHALL BE AS DIRECTED BY THE GEOTECHNICAL LABORATORY AT THE TIME OF
- 4. SITE PREPARATION AND PLACEMENT OF ENGINEERED COMPACTED FILL AND THE INTERMEDIATE SOIL IMPROVEMENT WORKS SHALL BE MONITORED BY THE GEOTECHNICAL LABORATORY. ALL NECESSARY PREPARATORY STRIPPING, CUTTING, PROOF ROLLING, AND FILLING AND IMPROVEMENT OPERATIONS SHALL BE SO MONITORED.
- 5. ALL FILL INSIDE THE BUILDING AND TO 10' OUTSIDE THE BUILDING INCLUDING RAMPS, STOOPS, AND STEPS SHALL BE CLEAN SELECT MATERIAL FREE OF DELETERIOUS MATERIALS SUCH AS WOOD, ROOTS, TRASH, OR OTHER EXTRANEOUS MATERIALS. PLACE FILL TO BE COMPACTED IN 9" LIFTS, MEASURED LOOSE, AND COMPACT EACH LIFT TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698. COMPACT THE TOP THREE 9" LIFTS TO 100% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698.
- 6. ALL FOOTING EXCAVATIONS SHALL BE APPROVED BY THE GEOTECHNICAL LABORATORY PRIOR TO PLACING FOOTING CONCRETE.
- 7. FOOTING ELEVATIONS SHALL NOT BE RAISED OR LOWERED UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT.
- 8. FOOTINGS MAY BE CARRIED TO LOWER ELEVATION WHERE DIRECTED BY THE ARCHITECT. 9. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONAL LOCATIONS OF
- MASONRY WALLS AND PARTITIONS THAT REQUIRE CONTINUOUS WALL FOOTINGS AND/OR MONOLITHIC THICKENED SLAB FOOTINGS FOR
- 10. CONSTRUCTION JOINTS IN CONTINUOUS WALL FOOTINGS SHALL BE MADE MIDWAY BETWEEN COLUMNS AND AT LEAST 4' FROM THE INTERSECTION OF ANOTHER WALL FOOTING.
- 11. COLUMN FOOTINGS IN LINE WITH WALL FOOTINGS SHALL BE PLACED MONOLITHICALLY AND FLUSH TOP WITH THE CONTIGUOUS WALLS
- 12. STEPPED WALL FOOTINGS IF REQUIRED SHALL START OR TERMINATE AT LEAST 4' FROM A COLUMN FOOTING, WALL CORNER, OR WALL INTERSECTIONS.
- 13. AT LOCATIONS WHERE SLAB BLOCK OUTS ARE REQUIRED AWAITING THE STEEL COLUMN ERECTION PROVIDE FOR A SLAB TURNDOWN OF 8" MINIMUM CONCRETE THICKNESS AROUND THE BLOCKOUT TO RETAIN THE SUPPORTING SOIL UNDER THE SLAB. AT THE CONTRACTORS OPTION THIS SOIL RETAINING TURNDOWN MAY BE CONSTRUCTED WITH 8" CMU FILLED 100% SOLID WITH 3000 PSI CONCRETE.
- 14. FOUNDATIONS SHALL BE PLACED ONLY ON APPROVED NATURAL UNDISTURBED SOIL STRATA OR ON PROPERLY PLACED ENGINEERED CONTROLLED COMPACTED IMPROVED FILL UNDER THE SUPERVISION OF THE GEOTECHNICAL LABORATORY.

CONCRETE

1. CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:

- FOOTINGS AND PEDESTALS INTERIOR SLABS ON GRADE 3000 PSI FILL FOR MASONRY UNITS 3000 PSI OTHER INTERIOR CONCRETE EXPOSED EXTERIOR CONCRETE - 4000 PSI MASONRY CAVITY WALL FILL - 3000 KSI
- 2. CONCRETE FOR FOOTINGS AND SLABS ON GRADE SHALL BE REGULAR STONE CONCRETE.
- 3. CONCRETE FOR FILL IN CONCRETE MASONRY BLOCK CELLS, BOND BEAMS, LINTEL BLOCKS, AND CAVITY WALL FILL BELOW FLOOR IN EXTERIOR WALLS AND OTHER MASONRY UNITS SHALL BE FINE AGGREGATE CONCRETE MASONRY GROUT CONFORMING TO ASTM C476 OR 3000 PSI CONCRETE WITH 3/8" MAXIMUM COARSE AGGREGATE SIZE. AT CONTRACTORS OPTION 3000 PSI SELF CONSOLIDATING CONCRETE GROUT MAY BE UTILIZED FOR MASONRY GROUTING PURPOSES WITH PROPER PRECAUTIONS TAKEN FOR THE HYDROSTATIC PRESSURE ISSUES.
- 4. UNLESS SELF CONSOLIDATING CONCRETE GROUT IS UTILIZED THE CONCRETE MIX FOR CONCRETE MASONRY BLOCK AND CAVITY WALL GROUT SHALL BE PROPORTIONED AT THE PLANT FOR A HIGH SLUMP OF 8" TO 11" TO FACILITATE PLACEMENT AND TO ACCOMMODATE WATER ABSORPTION BY THE MASONRY UNITS. HIGH SLUMP SHALL BE ACHIEVED WHILE KEEPING THE WATER CEMENT RATIO IN THE NORMAL RANGE FOR A 3000 PSI MIX. THIS WILL REQUIRE ADDITIONAL CEMENT IN THE BATCH TO GO ALONG WITH THE WATER ADDED FOR THE SLUMP REQUIREMENT.
- 5. MORTAR MIX SHALL NOT BE ALLOWED FOR ANY BLOCK MASONRY FILL REQUIREMENTS.
- 6. CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL HAVE 5% (+/-1%) AIR ENTRAINMENT.
- 7. CONCRETE NOT PERMANENTLY EXPOSED TO THE WEATHER SHALL NOT HAVE AIR ADDED BY ENTRAINMENT. THIS REQUIREMENT SHALL BE VERIFIED AND REPORTED BY LABORATORY TESTS.
- 8. ALL CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318.
- OBSERVE ALL AND STRICTLY FOLLOW ALL ACI 305 AND 306 REQUIREMENTS RESPECTIVELY FOR PROTECTION OF CONCRETE IN HOT AND COLD WEATHER.
- 10. ALL CONCRETE SLAB WORK SHALL BE PROPERLY CURED IN CONFORMANCE WITH ACL 308. FITHER WATER CURING, WATERPROOF PAPER CURING PLASTIC SHEET. OR SPRAY-ON SEALING MATERIALS METHOD MAY BE USED PROVIDED THAT THE METHOD CHOSEN HAS NO DETRIMENTAL EFFECT ON THE FINAL FINISH SPECIFIED FOR THE RESPECTIVE AREAS. THE PROPOSED CURING METHOD TO BE USED SHALL BE APPROVED BY THE ARCHITECT.
- 11. BUILDING SLABS ON GRADE SHALL BE 4" MINIMUM THICKNESS.
- 12. PLACE 1/4" PRE-FORMED, IMPREGNATED EXPANSION JOINT FILLER FULL DEPTH OF SLAB ON GRADE AT ABUTTING WALL SURFACES UNLESS OTHERWISE NOTED.

13. PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS ON GRADE IN

- LOCATIONS AS SHOWN ON FOUNDATION PLAN OR AT OTHER LOCATIONS APPROVED OR REQUIRED BY THE ARCHITECT. BUT SPACING OF JOINTS SHALL NOT EXCEED 12' IN ANY DIRECTION. 14. THE TYPE OF JOINT USED WHETHER CONTROL JOINT OR CONSTRUCTION
- JOINT IS THE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 15. SAW JOINTS AT CONTROL JOINTS IN THE CONCRETE SLABS SHALL BE MADE AS SOON AS THE CONCRETE HAS SUFFICIENT STRENGTH TO PREVENT SPALLING OF THE JOINT DUE TO THE ACTION OF THE SAW. BUT IN NO CASE GREATER THAN 4 HOURS AFTER INITIAL PLACEMENT OF THE CONCRETE.
- 16. SLAB JOINT FILLER SHALL BE OF THE TYPE COMPATIBLE WITH THE FINAL FLOOR COVERING USED. SLAB JOINTS UNDER PERMANENT PARTITIONS OR CASE WORK NEED NOT BE FILLED.
- 17. CHAMFER EXPOSED EDGES AND CORNERS OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.
- 18. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED FLOOR FINAL FINISHES AND PROVIDE NECESSARY SLOPES, DEPRESSIONS, AND SLAB FINISH AS REQUIRED TO ACCEPT THE SPECIFIED FINAL FINISHES.

REINFORCING STEEL

- 1. BARS SHALL BE ROLLED FROM NEW BILLET—STEEL CONFORMING TO "SPECIFICATION FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE
- 2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185.

REINFORCEMENT," ASTM A615, GRADE 60.

- DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
- 4. REINFORCING STEEL SHALL BE IN PLACE AND REVIEWED BY THE ARCHITECT PRIOR TO PLACING CONCRETE.
- 5. PROVIDE WWF IN FLAT SHEETS. ROLLED WWF WILL NOT BE ACCEPTED ON THIS PROJECT.
- 6. LAP ALL WWF END SPLICES TWO FULL MESHES AND ALL SIDE LAP SPLICES ONE FULL MESH AND TIE OFF WITH STANDARD TIE WIRES. 7. FABRICATE REBARS IN CONTINUOUS FOOTINGS, WALLS, BOND BEAMS,

AND MONOLITHIC TURNED DOWN SLABS TO LONGEST PRACTICAL

- 8. LAP HORIZONTAL REBAR SPLICES A MINIMUM OF 40 BAR DIAMETERS BUT A MINIMUM OF 24" UNLESS OTHERWISE NOTED. PLAN REBAR SPLICES TO OCCUR AT POINTS OF MINIMUM STRESS UNLESS OTHERWISE
- 9. LAP VERTICAL REBAR SPLICES INCLUDING DOWELS FROM FOOTINGS IN
- CMU WALLS A MINIMUM OF 60 BAR DIAMETERS. 10. BARS IN INDIVIDUAL COLUMN SPREAD FOOTINGS SHALL NOT BE SPLICED.
- 11. TERMINATE CONTINUOUS BARS IN WALL FOOTINGS, WALLS, BOND BEAMS AND TURNED DOWN SLABS, WITH A STANDARD 90 DEGREE HOOK AT DISCONTINUOUS ENDS, CORNERS, AND INTERSECTIONS.
- 12. AT LOCATIONS REQUIRING VERTICAL DOWELS INTO FOOTINGS AND ELEVATED SLABS. THE PLACEMENT OF THE DOWELS SHALL MATCH THE SIZE AND CLOSELY MATCH THE LOCATION OF THE VERTICAL WALL REBARS REQUIRING THE DOWELS.
- 13. ALL DOWELS SHALL TERMINATE IN THE FOOTING OR ELEVATED SLAB WITH A STANDARD ACI 90 OR 180 DEGREE HOOK AS APPROPRIATE UNLESS SPECIFICALLY SHOWN OTHERWISE. DOWELS SHALL LAP THEIR MATCHING VERTICAL REBAR 60 BAR DIAMETERS.
- 14. PROVIDE THE FOLLOWING CLEARANCES FROM REBARS TO CONCRETE FACE UNLESS OTHERWISE NOTED ON DRAWINGS: EARTH FORMS WALL FORMS - 2 TOP OF SLAB - 3/4"
- SLAB FORMS CMU WYTHE — CENTER BARS IN CENTER OF WYTHE
- 15. UNLESS OTHERWISE NOTED OR SPECIFIED PROVIDE #6 VERTICAL REINFORCING AT 24" OC FOR EXTERIOR MASONRY WALLS. 16. UNLESS OTHERWISE NOTED OR SPECIFIED PROVIDE #5 VERTICAL
- REINFORCING AT 48" OC FOR INTERIOR MASONRY WALLS. 17. PROVIDE INDUSTRY APPROVED REBAR CENTERING DEVICES FOR HOLDING VERTICAL REINFORCING BARS SECURELY IN THE CENTER OF THE CMU
- 18. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

STRUCTURAL STEEL

- 1. STEEL WIDE FLANGE SHAPES SHALL CONFORM TO STRUCTURAL STEEL -ASTM A992, $F_V = 50$ KSI, $F_U = 65$ KSI. STEEL CHANNÉLS, PLATES, ANGLES, BARS, AND RODS — ASTM A36, FY = 36 KSI. Fu = 58 KSI. PIPE COLUMNS – ASTM A53, GRADE B, Fy = 35 KSI, Fu = 60 KSI. BOLTS - ASTM A325.
 - FLAT WASHERS ASTM F436. WELDS - AWS CLASS E70 LOW HYDROGEN ELECTRODES. HSS MEMBERS – ASTM A500, GRADE B, Fy = 46 KSI, Fu = 58 KSI. COLUMN ANCHOR RODS - ASTM F1554 GRADE 36. HEADED SHEAR STUDS — ASTM A108.
 - 2. ALL STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN" AND THE AISC CODE OF STANDARD PRACTICE.
 - 3. CONNECTION BOLTS SHALL BE 3/4" DIAMETER ASTM A325 BOLTS WITH PROPER HARDENED WASHERS AND HEX NUTS UNLESS OTHERWISE NOTED. ALL BOLTS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 AND A490 BOLTS.
 - 4. UNLESS OTHERWISE NOTED ALL CONNECTION BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
 - 5. INSTALL A SUITABLE HARDENED WASHER UNDER THE HEAD OR NUT, WHICHEVER IS USED AS THE TURNED ELEMENT FOR TIGHTENING AND OVER ALL EXPOSED SLOTTED OR OVERSIZED HOLES.
 - SHALL BE DESIGNED AS BEARING TYPE WITH TREADS IN THE SHEAR 7. ALL WELDING SHALL BE DONE BY WELDING OPERATORS CERTIFIED JOB. ACCORDING TO AWS D1. FOR THE WELDING POSITIONS AND WELDING

6. UNLESS OTHERWISE NOTED ON THE PLANS ALL CONNECTION BOLTS

EQUIPMENT BEING USED FOR MAKING THE CONNECTIONS REQUIRED FOR 8. UNLESS OTHERWISE NOTED MASONRY SUPPORTED BEAMS BEARING PERPENDICULAR TO MASONRY WALLS SHALL BEAR A MINIMUM OF 6" ON

SOLID MASONRY AT EXPOSED 8" CMU WALLS AND 8" ON SOLID MASONRY

AT CONCEALED 8" CMU WALLS AND 8" ON SOLID MASONRY AT 12" CMU WALLS. MASONRY SUPPORTED BEAMS AND PLATE LINTELS BEARING

PARALLEL TO MASONRY WALLS SHALL BEAR A MINIMUM OF 12" ON

SOLID MASONRY. 9. ALL COPES, CUTS, BLOCKS, NOTCHES SHALL HAVE SMOOTH RE-ENTRANT

CORNERS OF 1/2" MINIMUM RADIUS.

- 10. RETURN ALL WELDS AT CORNERS A MINIMUM OF TWICE THE NOMINAL SIZE OF THE WELD.
- 11. PROVIDE HOLES FOR BLOCKING AND NAILER BOLTS AS REQUIRED BY ARCHITECTURAL DRAWINGS.
- 12. STRUCTURAL STEEL SHALL RECEIVE ONE COAT OF GREY OXIDE PAINT OF 2 MIL DFT. SURFACE PREPARATION SHALL BE POWER TOOL
- CLEANING CONFORMING TO SSPC-SP3. 13. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE TEMPORARY
- BRACING AND GUYING OF STEEL FRAMING AND LOAD BEARING WALLS TO PROVIDE FOR SAFETY OF THE STRUCTURE AND WORKMEN. BRACING TO REMAIN UNTIL NO LONGER REQUIRED FOR SAFE SUPPORT OF FRAME.
- 14. COLUMN CAP AND BASE PLATES SHALL BE FULLY WELDED ALL AROUND TO COLUMN SHAFT WITH 5/16" FILLET WELDING UNLESS OTHERWISE
- 15. ALL COLUMNS SHALL HAVE A MINIMUM OF 4 ANCHOR RODS SET ON A
- 16. ALL COLUMN CAP PLATES SUPPORTING OR BEING CONNECTED TO OTHER MEMBERS SHALL BE 3/4" MINIMUM THICKNESS. 17. ALL OTHER COLUMN CAP PLATES NOT SUPPORTING OR BEING CONNECTED
- TO OTHER MEMBERS SHALL BE CAPPED WITH 1/2" MINIMUM THICKNESS.
- 18. SHEAR TAB PLATES ATTACHED TO COLUMN OR BEAMS SHALL BE 1/2" MINIMUM THICKNESS AND SHALL BE WELDED TO THE SUPPORT MEMBER WITH 5/16" CONTINUOUS FILLET WELDS BOTH SIDES.
- 19. UNLESS OTHERWISE NOTED PROVIDE 2" NOMINAL GROUT THICKNESS UNDER COLUMN BASE PLATES TO ALLOW FOR A HEAVY HEX LEVELING NUT AND STANDARD FLAT WASHER TO BE PLACED ON EACH ANCHOR BOLT ON THE UNDERSIDE OF THE COLUMN BASE PLATE FOR PRECISION LEVELING AND PLUMBING THE COLUMN. PROVIDE A STANDARD FLAT WASHER UNDER A HEAVY HEX CLAMPING NUT ON TOP OF THE BASE PLATE FOR EACH ANCHOR BOLT.
- 20. ALL LINTEL ANGLES, BEAMS AND PLATES IN EXTERIOR WALLS SHALL BE HOT DIP GALVANIZED TO G60 STANDARDS AFTER FABRICATION ALL INTERMITTENT WELDS AND OTHER SEAMS ON BEAM AND PLATE LINTELS SHALL BE SEALED.
- 21. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

METAL ROOF DECK

- 1. ALL DECKING UNITS SHALL BE LAID OUT BY THE SUPPLIER TO A PATTERN THAT PROVIDES FOR A MINIMUM THREE SPAN CONDITION AND SHALL BE LAPPED 3" MINIMUM AT END JOINTS OVER SUPPORTS.
- 2. DECK UNITS SHALL BE SECURELY FASTENED IN STRAIGHT LINES AND TO TRUE PLANES TO ACCEPT THE SPECIFIED ROOFING SYSTEMS. UNEVEN, LOOSE, BENT, OR OTHERWISE BADLY INSTALLED DECK WILL BE REJECTED AND SHALL BE REPLACED AT NO ADDITIONAL COST IF SO DIRECTED BY THE ARCHITECT.
- 3. PROVIDE ALL NECESSARY ACCESSORIES, SUCH AS CONTINUOUS RIDGE, HIP, VALLEY, EAVE, RAKE CLOSURE PLATES, SUMP PANS, ANOTHER DECK RELATED ACCESSORIES OF PROPER SIZE AND SHAPE TO PROVIDE A COMPLETE FIRST CLASS WEATHERTIGHT JOB. MINIMUM WIDTH OF THESE CLOSURE PLATES SHALL BE 8" AND SHALL BE 22 GAGE G60 GALVANIZED MATERIAL AND SHALL BE WELDED WITH PAIRS OF 3/4" DIAMETER PUDDLE WELDS SPACED AT 6" OC OR FASTENED INTO PLACE WITH PAIRS OF #12 SDST TEK SCREWS SPACED AT 6" OC.
- 4. PROPER CARE SHALL BE TAKEN BY THE ERECTOR SO AS NOT TO BURN HOLES IN DECK OR SUPPORTING MEMBERS. BURNED HOLES OR DAMAGES SUPPORTING MEMBERS SHALL BE CAUSE FOR REJECTION. REJECTED WORK SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST IF SO DIRECTED BY THE ARCHITECT.
- 5. TOUCH UP WELDS AND ABRASIONS WITH ZINC RICH PAINT.
- 6. METAL DECKING SHALL BE INSPECTED BY ARCHITECT AND ROOFING INSTALLER PRIOR TO COVERING.
- 7. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

LIGHT GAGE METAL FRAMING

- 1. LIGHT GAGE METAL STUD LOCATIONS SHALL BE AS NOTED ON THE DRAWINGS.
- 2. LIGHT GAGE METAL STUDS FOR EXTERIOR WALLS AT WINDOW HEADS SHALL BE 600S162-68 50 KSI AT 16" o/c. STUDS AS MANUFACTURED BY CLARK STEEL FRAMING SYSTEMS OR APPROVED
- WINDOW HEADER MATERIAL SHALL BE 600S200-68 50 KSI, TYP. U.O.N. TRACK MATERIAL SHALL BE 600T200-68 50 KSI, TYP. U.O.N.
- 4. ALL MATERIAL SHALL BE GALVANIZED AND ALL SCREWS SHALL BE SUITABLE GRADE STAINLESS STEEL OR ZINC PLATED.
- 5. ALL WELDS AND ABRASIONS IF ANY SHALL BE TOUCHED UP WITH ZINC RICH PAINT.
- 6. LIGHT GAGE HEADERS OVER DOOR AND WINDOW OPENINGS IN EXTERIOR WALLS SHALL BE COMPOSED OF MULTIPLE MEMBERS AS NOTED ON THE ON THE DRAWINGS.
- 7. ALL MULTIPLE MEMBERS SHALL BE INTERCONNECTED SO AS TO ACT AS A COMPOSITE UNIT. ALL INDIVIDUAL MEMBERS COMPRISING A
- MULTIPLE MEMBER SHALL BE FULL LENGTH UNSPLICED MATERIAL. 8. ALL CONNECTIONS SHALL BE SCREWED OR WELDED TOGETHER BOTH SIDES WITH SUFFICIENT WELDS OR SCREWS TO SAFELY SUPPORT THE
- LOADS TO BE IMPOSED ON THE CONNECTIONS. 9. ALL CONNECTIONS SHALL BE ACCOMPLISHED WITH STANDARD
- ACCESSORY COMPONENTS SUPPLIED FOR THAT PURPOSE. 10. ALL CONNECTION DESIGNS FOR THE LIGHT GAGE FRAMING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT
- 11. REFER TO ARCHITECTURAL DRAWINGS FOR INTERIOR METAL STUD PARTITION WALL REQUIREMENTS. PROVIDE BRACING FOR TOPS OF ALL PARTITIONS TO MAIN STRUCTURE FOR PROPER PARTITION STABILITY.

A COMPRESSIVE STRENGTH OF 7,000 PSI AT 7 DAYS.

1. PROVIDE NON-SHRINK, NON-METALLIC PRE-MIXED GROUT UNDER ALL

TO THE APPROVAL OF THE ARCHITECT.

COLUMN BASE PLATÉS AND BEAM BEARING PLATES. GROUT SHALL HAVE

DIMENSIONS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DIMENSIONS IN THE DRAWINGS AND ADVISING THE ARCHITECT OF ANY DIFFERENCES IN THE DIMENSIONS ON THE DRAWINGS PRIOR TO COMMENCING CONSTRUCTION.

DESIGN CODE DATA

1. IMPORTANCE FACTORS: lw = 1.15SEISMIC le = 1.25

LIVE LOAD: CORRIDORS J. DEAD LOAD:

SNOW LOAD: 15.0 PSF

10.4 PSF **10.4** PSF 5. WIND LOAD: $V_{ULT} = 127$ 3 SEC PEAK GUST MPH (ASCE 7 – 10)

EXPOSURE INTERNAL PRES. COEFF. MWFRS DESIGN WIND PRES. 35.1 PSF WIND BASE SHEARS (SEE TABLE) → V_X (KIPS) V_Y (KIPS) COMPONENTS & CLADDING

DESIGN WIND PRESSURES +19.4 PSF

6. SEISMIC DESIGN (ASCE 7 - 10):

0.074 0.241 0.178 0.161 0.119 DESIGN CATEGORY SITE CLASS USE GROUP B. BUILDING FRAME SYSTEM 3. STEEL ORDINARY CONCENTRICALLY BRACED FRAMES

EQUIV. LATERAL FORCE

ANCHORED

WIND BASE SHEARS

43.2 16.4

SEISMIC BASE SHEARS

 V_{x} (KIPS) V_{y} (KIPS)

9.35 9.35

SEISMIC BASE SHEARS: (SEE TABLE) ────

7. SOIL BEARING VALUE 1500 PSF.

MASONRY OPENING UP TO 4'-0"

PROCEDURE

COMPONENTS

LATERAL DESIGN CONTROLS:

LINTEL SCHEDULE FOR MASONRY OPENINGS NOT SPECIFIED OTHERWISE EXTERIOR MASONRY WALL OPENINGS

MASONRY OPENING UP TO 4'-0" 8" CMU WYTHE 8" X 8" BOND BEAM W/ 2 -#5 CONTINUOUS TOP AND

MASONRY OPENING 4'-1" TO 6'-8" BRICK WYTHE L6 X 4 X 5/16 LLV 8" CMU WYTHE 8" X 8" BÓND BEAM W/ 2 -#5 CONTINUOUS TOP AND

MASONRY OPENING 6'-9" TO 8'-0" BRICK WYTHE L6 X 4 X 3/8 LLV 8" CMU WYTHE 8" X 8" BOND BEAM W/ 2 -#6 CONTINUOUS TOP AND

12" CMU WYTHE 12" X 8" BOND BEAM W/ 2 -#5 CONTINUOUS TOP AND MASONRY OPENING 4'-1" TO 6'-8"

12" CMU WYTHE 12" X 8" BÓND BEAM W/ 2 -#5 CONTINUOUS TOP AND

MASONRY OPENING 6'-9" TO 8'-0" BRICK WYTHE L6 X 4 X 3/8 II V 12" CMU WYTHE 12" X 8" BÓND BEAM W/ 2 -#6 CONTINUOUS TOP AND

INTERIOR MASONRY WALL OPENINGS MASONRY OPENING UP TO 4'-0"

8" CMU WYTHE 8" X 8" BOND BEAM W/ 2 -#5 CONTINUOUS TOP AND

BOTTOM MASONRY OPENING 4'-1" TO 6'-0" 8" CMU WYTHE 8" X 8" BOND BEAM W/ 2 -#5 CONTINUOUS TOP AND

MASONRY OPENING 6'-1" TO 8'-0" 8" CMU WYTHE W8X10 W/ BOTTOM PLATE 1/4" X 7" FULL LENGTH MASONRY OPENING UP TO 4'-0" 12" CMU WYTHE 12" X 8" BOND BEAM W/ 2 -#5 CONTINUOUS TOP AND

MASONRY OPENING 4'-1" TO 6'-0"
12" CMU WYTHE 12" X 8" BOND BEAM W/ 2 -#5 CONTINUOUS TOP AND MASONRY OPENING 6'-1" TO 8'-0" 12" CMU WYTHE W8X10 W/ BOTTOM PLATE 1/4" X 11" FULL LENGTH

SPECIAL INSPECTIONS

- 1. SPECIAL INSPECTIONS SHALL BE PERFORMED CONTINUOUSLY OR PERIODICALLY AS REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (IBC BUILDING CODE) AS SCHEDULED BELOW.
- 2. SPECIAL INSPECTORS SHALL BE DULY CERTIFIED TO INSPECT THE WORK REQUIRING THE INSPECTION AS SCHEDULED.
- 3. SPECIAL INSPECTION NOTES:
- AREAS UNDER THE BUILDING AND TO 10' OUTSIDE THE BUILDING AREA IN ACCORDANCE WITH TABLE 1705.6 OF THE IBC BUILDING

A) THE INSPECTOR SHALL MONITOR ALL SOIL CUTTING AND FILLING

- B) STEEL FABRICATION SHOPS NOT CERTIFIED BY AISC WILL REQUIRE IN SHOP INSPECTION BY THE SPECIAL INSPECTOR. AISC SHOPS MAY WAIVE THIS REQUIREMENT.
- C) ALL STRUCTURAL STEEL FABRICATION SHALL BE PERFORMED IN SHOPS WITH MINIMUM OF FIVE YEARS OF SATISFACTORY
- COMPLETION OF WORK SIMILAR TO WORK ON THIS PROJECT. D) WELD CERTIFICATION PAPERS FOR ALL FIELD WELDERS SHALL BE
- VERIFIED BY THE SPECIAL INSPECTOR. E) ALL FIELD WELDING OF LIGHT GAGE MEMBERS TO STRUCTURAL STEEL PARTS SHALL BE PERIODICALLY INSPECTED.
- F) LIGHT GAGE FRAMING SHALL BE PERIODICALLY INSPECTED. G) INSPECTION SHALL COVER METAL STUD SIZES, SHAPES, THICKNESS, STRAIGHTNESS, SCREW SIZES AND NUMBER, STUD BEARING AGAINST TRACK WEBS, STRAP BRACING SIZE AND CONNECTION DETAILS, BRIDGING SIZE AND CONNECTION DETAILS WALL OPENING HEADER SIZE AND DETAILS. WALL ALIGNMENT AND PLUMBNESS. AND DETAILS OF WORKMANSHIP AND INTERCONNECTION OF LIGHT GAGE MEMBERS CONNECTED BY SCREWS OR FIELD
- H) SPECIAL INSPECTORS SHALL BE IN DIRECT COMMUNICATION WITH THE ENGINEER OF RECORD DURING THE INSPECTION PROCESS.
- FULL REPORTS OF ALL INSPECTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.

QUALITY ASSURANCE WIND AND SEISMIC SUBMITTALS

- 1) MILL TEST REPORTS FOR ALL STRUCTURAL STEEL MATERIAL SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS.
- 2) MILL TEST REPORTS FOR ALL METAL DECK AND STRUCTURAL
- PROPERTIES OF DECK PROFILES SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR APPROVAL. 3) ALL METAL ROOF DECK SHALL BE ROLL FORMED IN A STEEL DECK
- INSTITUTE (SDI) CERTIFIED SHOP. 4) MILL TEST REPORTS FOR ALL BOLTS AND SHEAR STUDS SHALL BE
- SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. 5) ALL FIELD WELDING SHALL BE PERFORMED BY WELDING PERSONNEL
- HOLDING CURRENT CERTIFICATION BY AWS FOR THE TYPES OF WELDING BEING PERFORMED. THE CERTIFICATION PAPERS SHALL BE EXAMINED AND APPROVED BY THE TESTING AGENCY. 6) TEST REPORTS FOR ALL CONCRETE MASONRY UNITS SHALL BE
- SUBMITTED PRIOR TO CONSTRUCTION. 7) TEST REPORTS FOR ALL MORTARS AND GROUTS SHALL BE SUBMITTED
- PRIOR TO CONSTRUCTION.
- 8) MILL TEST REPORTS FOR ALL REINFORCING STEEL SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.

EXISTING CONDITIONS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL EXISTING JOB CONDITIONS. ANY ADVERSE EXISTING CONDITIONS AFFECTING WORK SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR POSSIBLE CLARIFICATION OF

9) TEST REPORTS FOR ALL CONCRETE SHALL BE SUBMITTED PRIOR TO

CONSTRUCTION SAFETY

RECONCILIATION.

1. THESE DRAWINGS DO NOT CONTAIN THE REQUIREMENTS FOR JOB SAFETY. ALL PROVISIONS FOR SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

STATEMENT OF SPECIAL INSPECTIONS

QUALITY ASSURANCE FOR WIND AND SEISMIC
EACH OF THE FOLLOWING COMPONENTS (STEEL, MASONRY, DESIGNATED SEISMIC)
ARE IN EITHER THE SEISMIC OR WIND FORCE RESISTING SYSTEMS OR BOTH.
EACH REQUIRES STRUCTURAL OBSERVATION IN ACCORDANCE WITH CH.17 OF THE IBC SEISMIC DESIGN CATEGORY B
WIND EXPOSURE C, 127 MPH 3 SEC GUST
MAIN WIND FORCE RESISTING SYSTEM = B. BUILDING FRAME SYSTEM

3. STEEL ORDINARY CONCENTRICALLY BRACED FRAMES

| LTEM STEEL | OBSERVATION FREQUENCY | REFERENCE STANDARD | WIND OR SEISMIC |
|---|--|---------------------------------|--|
| BOLTING | | | |
| ID MARKING MILL CERTS SNUG TIGHT | PERIODIC PERIODIC PERIODIC | AISC 360 | WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC |
| CALIBRATED TURN OF NUT DTI | PERIODIC PERIODIC | AISC 360 AISC 360 | WIND AND SEISMIC WIND AND SEISMIC |
| UNCALIBRATED TURN OF NUT | NOT PERMITTED | | WIND AND SEISMIC |
| <u>ERECTION</u> | | | |
| PIECE ID MARKS OTHER STEEL ID MARKS MILL CERTS FRAME BRACING MEMBER LOCATIONS JOINT DETAILS AT EACH CONNECTION | PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC | AISC 360 ASTM | WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC |
| WELDMENTS | | | |
| WELDFILLER ID MARKINGS MANUFACTURER'S CERTIFICATION MULTIPASS FILLET SINGLE PASS FILLET → 1/8 SINGLE PASS FILLET ← 1/8 FLOOR AND ROOF DECK WELDS AND SCREWS | PERIODIC PERIODIC CONTINUOUS CONTINUOUS PERIODIC PERIODIC | AWS AWS AWS AWS AWS | WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC WIND AND SEISMIC |
| MASONRY | | | |
| MATERIALS | | | |
| VERIFY f'm | PERIODIC | TMS 602 | WIND AND SEISMIC |
| VERIFY f'acc PROPORTIONS OF MATERIALS | PERIODIC | TMS 602 | WIND AND SEISMIC |
| MORTAR GROUT | PERIODIC PERIODIC | TMS 602 TMS 602 | WIND AND SEISMIC WIND AND SEISMIC |
| SLUMP OF GROUT | PERIODIC | TMS 602 | WIND AND SEISMIC |
| PLACEMENT OF | | | |
| MASONRY UNITS MORTAR JOINTS | PERIODIC PERIODIC | TMS 602 TMS 602 | WIND AND SEISMIC WIND AND SEISMIC |
| REINFORCEMENT | PERIODIC | TMS 602 | WIND AND SEISMIC |
| VERIFY GROUT SPACE PRIOR TO GROUT | CONTINUOUS | TMS 602 | WIND AND SEISMIC |
| PLACEMENT OF GROUT | CONTINUOUS | TMS 602 | WIND AND SEISMIC |
| SIZE OF MASONRY UNITS | PERIODIC | TMS 602 | WIND AND SEISMIC |
| LOCATIONS OF MASONRY UNITS | PERIODIC | TMS 602 | WIND AND SEISMIC |
| PREPARE GROUT PRISMS | CONTINUOUS | TMC 600 | WIND AND SEISMIC |
| GRADE AND TYPE OF ANCHORS SIZE OF ANCHORS | CONTINUOUS CONTINUOUS | TMS 602 TMS 602 | WIND AND SEISMIC WIND AND SEISMIC |
| LOCATIONS OF ANCHORS | CONTINUOUS | TMS 602 | WIND AND SEISMIC |
| GRADE AND TYPE OF REINFORCEMENT | PERIODIC | | WIND AND SEISMIC |
| SIZE OF REINFORCEMENT | PERIODIC | | WIND AND SEISMIC |
| WELDING OF REINFORCEMENT | NOT PERMITTED | | WIND AND SEISMIC |
| VERIFY VERTICAL REINFORCEMENT | CONTINUOUS | | WIND AND SEISMIC |
| VERIFY CONNECTION TO FOUNDATION COLD WEATHER PROCEDURES (\angle 40° F) | CONTINUOUS PERIODIC | TMS 602 | WIND AND SEISMIC WIND AND SEISMIC |
| HOT WEATHER PROCEDURES (\geq 90° F) | PERIODIC | TMS 602 | WIND AND SEISMIC |
| SEISMIC | | | |
| DESIGNATED SEISMIC SYSTEMS | | | |
| EXTERIOR WALL PANELS AND ANCHORAGE* | PERIODIC | | SEISMIC |
| SUSPENDED CEILINGS SYSTEMS AND ANCHORAGE* | PERIODIC | | SEISMIC |
| ANCHORAGE OF EMERGENCY ELECTRICAL EQUIPMENT* | PERIODIC | | SEISMIC |
| SPRINKLER PIPE CONNECTIONS* | PERIODIC | | SEISMIC |
| | PERIODIC | | |
| DUCTWORK SUPPORTS* | | | SEISMIC |
| MECHANICAL EQUIPMENT SUPPORTS* | PERIODIC | | SEISMIC |

<u>INSPECTION</u>

| STATEMENT OF STECIAL HISTERTONS | FREQUENCY | |
|---|---------------|--|
| CONCRETE | <u> </u> | |
| 1. INSPECTION OF REINFORCING STEEL, AND PLACEMENT. | PERIODIC | ACI 318: 3.5, 7.1–7.7 |
| 2. REINFORCING STEEL WELDING. | NOT PERMITTED | AWS D1.4, ACI 318: 3.5.2 |
| 3. INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE. | CONTINUOUS | ACI 318: 8.1.3, 21.2.8 |
| 4. INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE. | PERIODIC | ACI 318: 3.8.6, 8.1.3, 21.2.8 |
| 5. VERIFYING USE OF REQUIRED DESIGN MIX. | PERIODIC | ACI 318: CH.4, 5.2–5.4 |
| 6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. | CONTINUOUS | ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8 |
| INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES. | CONTINUOUS | ACI 318: 5.9, 5,.10 |
| 8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES. | PERIODIC | ACI 318: 5.11–5.13 |
| 9. N/A | | |
| 10. N/A | | |
| 11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS. | PERIODIC | ACI 318: 6.2 |
| 12. INSPECT FORMWORK FOR SHAPE, LOCATOIN AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED. | PERIODIC | ACI 318: 6.1.1 |
| SOILS | | |
| VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. | PERIODIC | |
| VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. | PERIODIC | |
| PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. | PERIODIC | |
| 4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL. | CONTINUOUS | |
| PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY. | PERIODIC | |
| SPRAYED FIRE-RESISTANT MATERIALS | | |
| VERIFY SURFACE PREPARATION (NO PAINT) ADEQUATE FOR SPRAY—ON FIRE PROOFING. | PERIODIC | UL D902 |
| 2. VERIFY DEPTH AND EXTENT OF SPRAY-ON FIRE PROOFING | PERIODIC | UL D902 |
| | | |

MANUFACTURER'S CERTIFICATE OF COMPLIANCE.

STATEMENT OF SPECIAL INSPECTIONS

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Project No. 22423 23 JAN 2025

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MECHANICAL GENERAL NOTES:

1. REFERENCE ARCHITECTURAL, STRUCTURAL, PLUMBING, & ELECTRICAL DRAWINGS, AND SPECIFICATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID.

2. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE NC BUILDING CODE & CONTRACTOR. SHALL NOTIFY ENGINEER IN WRITING REGARDING ANY CODE DISCREPANCIES FOUND ON PLANS. CONTRACTOR. IS RESPONSIBLE FOR PERMITS, INSPECTIONS AND FEES. THE CONTROLS CONTRACTOR (C.C.) SHALL PROVIDE ALL CONTROL VALVES, ACTUATORS, DAMPERS, FAN COIL COMBINATION STARTERS. C.C. SHALL PROVIDE ALL LOAD SIDE WIRING ASSOCIATED WITH ALL FAN COIL COMBINATION STARTERS. VALVE TAGS AND LABELING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR (M.C.).

3. DO NOT SCALE THESE DRAWINGS; REFER TO LARGEST SCALE ARCHITECTURAL DRAWINGS. THESE DRAWINGS ARE DIAGRAMMATIC ONLY & ARE NOT INTENDED TO SHOW MINOR DETAILS & EXACT LOCATIONS. DESIGN ADJUSTMENTS SHALL BE ANTICIPATED BY THE CONTRACTORS TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.

4. "PROVIDE" IS DEFINED AS FURNISH & INSTALL AS PER MANUFACTURERS RECOMMENDATIONS.5. THE MECHANICAL & CONTROLS CONTRACTOR SHALL COORDINATE THE INSTALLATION OF HVAC EQUIPMENT & CONTROLS WITH

5. THE MECHANICAL & CONTROLS CONTRACTOR SHALL COORDINATE THE INSTALLATION OF HVAC EQUIPMENT & CONTROLS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION TO AVOID CONFLICT. CONTACT ARCHITECT IF ALTERNATE INSTALLATION METHOD IS REQUIRED.

6. SYSTEMS INDICATED ON PLANS ARE DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL EXAMINE SITE CONDITIONS PRIOR TO DUCT CONSTRUCTION AND COORDINATE INSTALLATION WITH OTHER TRADES. CONTRACTOR SHALL PROVIDE NECESSARY HANGERS, FASTENERS ETC. TO PROVIDE A COMPLETE AND WORKING SYSTEM.

7. CONTRACTOR SHALL SEAL ALL DUCTWORK WITH A PAINT ON MASTIC. ALL WALL PENETRATIONS SHALL BE SEALED AIR

CONTRACTOR SHALL SEAL ALL DUCTWORK WITH A PAINT ON MASTIC. ALL WALL PENETRATIONS SHALL BE SEALED AIR TIGHT.
 CONTRACTOR SHALL COORDINATE ALL DUCTWORK, DIFFUSER AND GRILLE LOCATION WITH OTHER CEILING MOUNTED

DEVICES SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLAN.

9. CONTRACTOR SHALL INSTALL BALANCING DAMPERS IN EACH BRANCH DUCT TO PROVIDE PROPER AIRFLOW TO EACH ZONE.

10. LOCATE THERMOSTATS AND TEMPERATURE SENSORS AT 4'-0" A.F.F. (CENTER OF BOX FOR GYP BRD, TOP OF BOX FOR

MASONRY) IN LOCATIONS INDICATED ON PLANS.

11. ALL DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.

BE INSTALLED PRIOR TO FIREPROOFING OF ROOF STRUCTURE.

ALL DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.
 CONTRACTOR SHALL COORDINATE ALL ROOF AND FLOOR PENETRATION LOCATIONS AND SIZES.

13. FABRICATE AND INSTALL ALL DUCT WORK PER SMACNA 1.5" W.C. PRESSURE. ALL ELBOWS SHALL HAVE 1.5R CENTERLINE. ALL DUCT UNDER SLAB SHALL BE FIBERGLASS.

14. ALL DUCT WORK SHALL BE SUPPORTED WITH METAL STRAPS AT LEAST 1" WIDE AND SHALL BE THE SAME GAUGE OR

HEAVIER THAN THE DUCT. STRAPPING SHOULD BE SPACED AT NO MORE THAN 64" APART AND SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE.

15. SUSPEND ALL CEILING MOUNT AIR DISTRIBUTION DEVICES FROM STRUCTURE WITH 12 GA. WIRE. ALL HANGERS AND SUPPORTS TO

16. ALL FLEXIBLE ROUND DUCT SHALL BE PRE-INSULATED DOUBLE WALLED WITH SPIRAL METAL RIB, AND SHALL HAVE MIN. RESISTANCE VALUE OF R-6. MAXIMUM LENGTH SHALL BE 10'-0" UNLESS SHOWN SPECIFICALLY OTHERWISE IN PLAN. SECURE ENDS WITH NYLON BANDS AND TAPE.
 17. ALL SUPPLY AND RETURN DUCT SHALL BE INSULATED WITH A MINIMUM OF 2-3/16" 3/4 LB. OR 2" OF 1.0 LB. DENSITY

17. ALL SUPPLY AND RETURN DUCT SHALL BE INSULATED WITH A MINIMUM OF 2-3/16" 3/4 LB. OR 2" OF 1.0 LB. DENSITY FIBERGLASS WRAP. INSULATED DOUBLE WALLED SPIRAL DUCT SHALL HAVE A MINIMUM INSULATION THICKNESS OF 2" OF 1.5 LB. DENSITY. PIPING INSULATION (REFRIGERANT OR WATER) SHALL BE A MINIMUM OF 1-1/2" THICK OR PER LATEST NC ENERGY CODE, WHICHEVER IS GREATER.

18. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALUMINUM JACKET PROTECTIVE COVERING FOR ALL REFRIGERANT PIPE INSULATION INSTALLED ON THE BUILDING EXTERIOR.

19. CABLE TRAY HAS RIGHT-OF-WAY OVER DUCTWORK; SEE ELECTRICAL DRAWINGS FOR LOCATION.

20. SIDEWALL SUPPLY REGISTERS AND RETURN GRILLES ARE TO BE INSTALLED PLUMB AND LEVEL ALONG A COMMON ELEVATION.

SIDEWALL SUPPLY REGISTERS AND RETURN GRILLES ARE TO BE INSTALLED PLUMB AND LEVEL ALONG A COMMON ELEVATION INSULATE BACK OF ALL LAY—IN CEILING SUPPLY REGISTERS AND DIFFUSERS.
 PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN CONNECTIONS TO HVAC UNITS.

22. PROVIDE AUXILIARY CONDENSATE DRAIN PAN FOR ALL AIR HANDLING UNITS, FAN COIL UNITS, FURNACE WITH COOLING COIL, ETC. CONTRACTOR SHALL PROVIDE AND INSTALL WATER LEVEL FLOAT SWITCH IN AUXILIARY DRAIN PAN. FLOAT SWITCH SHALL SHUT DOWN INDOOR AND ASSOCIATED OUTDOOR UNIT WHEN ACTIVATED.
23. CONDENSATE PIPE SHALL BE HARD DRAWN COPPER. INSTALL WITH PROPER SLOPE AND NO SAGS. COPPER PIPE SHALL BE INSULATED WITH 1/2" THICK CLOSED CELL INSULATION.

WITH 1/2" THICK CLOSED CELL INSULATION.

24. ALL DUCTWORK AND PIPING SHALL BE CONCEALED ABOVE CEILINGS, TRUSSES AND SOFFITS EXCEPT IN MECHANICAL ROOMS, UTILITY PLATFORMS, AREAS WITH EXPOSED STRUCTURE (NO CEILINGS), AND WHERE NOTED OTHERWISE.

25. CONTROLS CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL WIRING AND CONNECTIONS TO MECHANICAL EQUIPMENT.

26. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL EXTERNAL DISCONNECTS THAT ARE REQUIRED FOR EQUIPMENT PROVIDED UNDER THIS CONTRACT. MECHANICAL CONTRACTOR SHALL FURNISH ALL REQUIRED FUSES FOR ALL FUSED DISCONNECT SWITCHES. COORDINATE DISCONNECT AND FUSE INSTALLATION WITH ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING DISCONNECT SWITCHES AND FUSES. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LINE SIDE WIRING AND CONDUIT TO EXTERNALLY MOUNTED DISCONNECTS AND SHALL PROVIDE AND INSTALL LOAD SIDE WIRING AND CONDUIT FROM EXTERNALLY MOUNTED DISCONNECT SWITCHES TO MECHANICAL EQUIPMENT. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT PROVIDED BY THE MECHANICAL CONTRACTOR. SEE "MECHANICAL EQUIPMENT ELECTRICAL CONNECTION DETAIL".

DISCONNECT SWITCHES INDICATED TO BE PROVIDED BY MECHANICAL CONTRACTOR SHALL BE HEAVY DUTY NEMA-1 FOR INTERIOR INSTALLATIONS AND HEAVY DUTY NEMA-3R FOR EXTERIOR INSTALLATIONS. SEE ALSO DIVISION 16 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 MINIMUM GAS PIPING SIZE SHALL BE 3/4" FOR ALL BRANCH LINES. CONTRACTOR SHALL REDUCE TO SMALLER SIZES AT

GAS FIRED EQ UIPMENT, AS REQUIRED, FOR CONNECTION TO EQUIPMENT.

30. MECHANICAL CONTRACTOR MAY USE ROUND DUCT OF EQUIV. AREA IN LIEU OF RECTANGULAR. COOR'D. ROUND DUCT SIZES W/ ENGINEER. USE INSULATED DOUBLE WALLED SPIRAL DUCT WITH PAINT GRIP FINISH WHERE DUCT IS TO BE

31. MECHANICAL CONTRACTOR SHALL PROVIDE ENGR. WITH AN AIR BALANCE REPORT INDICATING INITIAL AND FINAL READINGS AT EACH DIFFUSER AND TOTAL CFM PER UNIT. INCLUDE IN DOCUMENTS PROVIDED TO OWNER AT JOB CLOSEOUT.32. MECHANICAL CONTRACTOR SHALL LABEL ALL EQUIPMENT WITH ENGRAVED PLASTIC LAMINATE, SCREWED TO PIECE OF

33. M.C. SHALL COORDINATE ALL EXTERIOR MECHANICAL EQUIPMENT LOCATIONS WITH G.C. PRIOR TO INSTALLATION AND SHALL PROVIDE 3'-0" MIN. SERVICE CLEARANCE OR MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS GREATER, BETWEEN ALL MECHANICAL EQUIPMENT AND ALL OBSTRUCTIONS. IF THERE ARE MECHANICAL ENCLOSURES OR FENCING, M.C. SHALL COORDINATE THE SIZES AND CLEARANCES IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION MANUAL AND PROVIDE 3'-0" MIN. CLEARANCE OR MANUFACTURER'S RECOMMENDED CLEARANCES, WHICHEVER IS GREATER. M.C. SHALL VERIFY AND COORDINATE THAT FENCING BEING PROVIDED BY G.C. IS APPROVED FOR OPERATION WITH THE MECHANICAL EQUIPMENT MANUFACTURER. FENCING AND CLEARANCE DIMENSIONS SHOWN ON THESE PLANS ARE DIAGRAMMATIC ONLY. IF CHANGES TO FENCE SIZES AND UNIT CLEARANCES ARE NEEDED, THE M.C. SHALL BE RESPONSIBLE FOR NOTIFYING THE G.C. AND THE ENGINEER/ARCHITECT.

34. UNIT CONTROLLER OR PROGRAMMABLE THERMOSTAT SHALL HAVE 7 DAY PROGRAMING, TIMED OVER-RIDE AND THE ABILITY TO RUN FANS IN OCCUP. MODE & CYCLE FANS IN UN-OCCUP. MODE.

35. THE M.C. & C.C. SHALL PROTECT EQUIPMENT DURING CONSTRUCTION & BRAZING AS REQ'D. CLEAN ALL EQUIP. SURFACES OF GREASE, DIRT, DUST, & OTHER FOREIGN MATERIALS PRIOR TO PROJECT CLOSEOUT.

36. MECHANICAL CONTRACTOR SHALL CHANGE UNIT FILTERS AFTER EACH TWO WEEKS OF RUN TIME, AND SHALL LEAVE ONE CHANGE OF FILTERS FOR OWNER TO USE FOR NEXT FILTER CHANGE.

37. MECHANICAL CONTRACTOR SHALL NOT ALLOW DUCTWORK TO CONTACT LAY—IN LIGHT FIXTURES. ROUTE ACCORDINGLY.

38. MECHANICAL CONTRACTOR SHALL INSTALL DUCT MOUNTED SMOKE DETECTORS WHERE INDICATED ON PLANS. IF AN EXISTING FIRE ALARM SYSTEM IS PRESENT, DUCT DETECTORS SHALL BE CONNECTED TO EXISTING FIRE ALARM SYSTEM.

MECHANICAL CONTRACTOR SHALL COORDINATE CONNECTION TO FIRE ALARM SYSTEM WITH ELECTRICAL CONTRACTOR AND/OR FIRE ALARM CONTRACTOR. IF A FIRE ALARM SYSTEM IS NOT PRESENT, PROVIDE DETECTOR & ASSOCIATED HORN/STROBE ALARM (HONEYWELL RTS2—AOS MULTI—SIGNALING) AS REQUIRED BY N.C. MECHANICAL CODE SECTION 606.4.1. M.C. IS RESPONSIBLE FOR DUCT ACCESS DOORS UNDER ALL CIRCUMSTANCES.

39. PROVIDE HEAT PUMP WITH CONTROLS TO PREVENT HEAT STRIP FROM OPERATING WHEN OUTSIDE AIR TEMP. IS ABOVE 40°F. HEAT STRIP LOCKOUT SHALL NOT PREVENT HEAT STRIP OPERATION DURING DEFROST. (403.2.4.1.1 NCEC)

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE:

PRESCRIPTIVE

ENERGY COST BUDGET

CLIMATE ZONE: IBC — 3A (JOHNSTON CO.)
THERMAL ZONE

WINTER DRY BULB: 18.8°F
SUMMER DRY BULB: 91.7°F

INTERIOR DESIGN CONDITIONS
WINTER DRY BULB: 70°F

SUMMER DRY BULB: 75°F
RELATIVE HUMIDITY: 50%

BUILDING HEATING LOAD: 33.6 ME

BUILDING HEATING LOAD: 33.6 MBH
BUILDING COOLING LOAD: 48.0 MBH

MECHANICAL SPACE CONDITIONING SYSTEM
UNITARY
DESCRIPTION OF UNIT: PTAC HEAT PUMP
HEATING EFFICIENCY: 4.35 COP

HEATING EFFICIENCY:

COOLING EFFICIENCY:

HEAT OUTPUT OF UNIT:

COOLING OUTPUT OF UNIT:

BOILER

4.35 COP

10.5 EER

SEE SCHEDULE

SEE SCHEDULE

CHILLER

LIST EQUIPMENT EFFICIENCIES

EQUIPMENT SCHEDULES WITH MOTORS (Not used for mechanical systems)
MOTOR HORSEPOWER:
NUMBER OF PHASES:

MINIMUM EFFICIENCY:
MOTOR TYPE:
OF POLES:

DESIGNER STATEMENT:

To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the 2012 North Carolina

SIGNED: D. WILSON POU, P.E.

TITLE: PRESIDENT

energy conservation code.

CONNECTOR VENTILATION / AIR BALANCE SCHEDULE

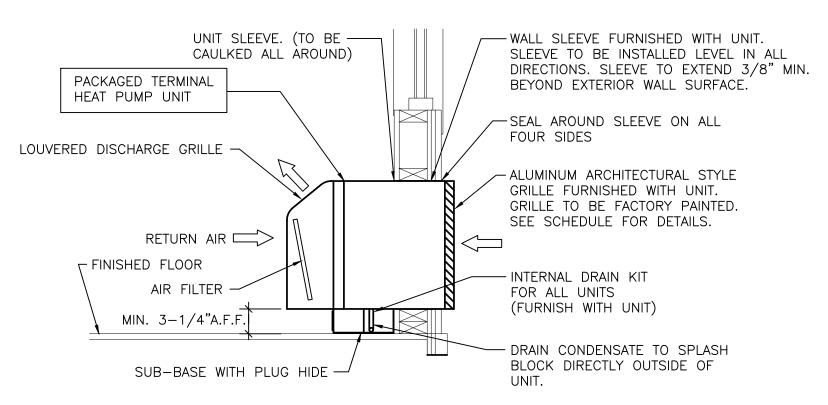
OCCUPANCY TYPE SQ. FT. O.A. PER SQ. FT. OCCUPANTS PERSON REQUIRED PROVIDED PROVIDED PROVIDED TOTAL O.A. CFM PROVIDED

CORRIDOR 874 0.06 - - - - - - - 53 75

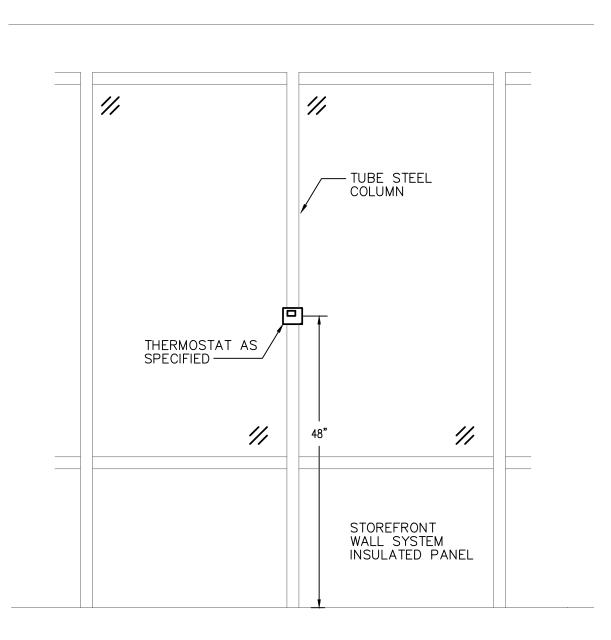
TOTALS

* OUTSIDE AIR CALCULATED BASED ON 2018 NORTH CAROLINA STATE BUILDING MECHANICAL CODE.

| NOTES: 1) TOTAL COOLING L 2) PROVIDE UNIT WIT | | | LOAD ARI | E MBtuh. | | | | | | | | | |
|---|----------|------|----------|----------|------|------|---------------|----------|----------|------|------------------------|---------|-------|
| PTAC-3 | CORRIDOR | 10.5 | 25 | 400 | 14.7 | 13.8 | LG / LP153IHP | 208V/1PH | 28.0 | 30 | AYUH2330 30A 4.6 KW | 107 LBS | 1,3,5 |
| PTAC-2 | CORRIDOR | 10.5 | 25 | 400 | 14.7 | 13.8 | LG / LP153IHP | 208V/1PH | 28.0 | 30 | AYUH2330 30A 4.6 KW | 107 LBS | 1,3,5 |
| PTAC-1 | CORRIDOR | 10.5 | 25 | 400 | 14.7 | 13.8 | LG / LP153IHP | 208V/1PH | 28.0 | 30 | AYUH2330 30A 4.6 KW | 107 LBS | 1,3,5 |
| SYSTEM/TAG(S) | SERVES | EER | O.A. | CFM | TCL | THL | MFR / MODEL | POWER | MCA | МОСР | POWER CORD | WEIGHT | NOTES |
| | | CA | PACITY | DATA | | | EQUIPMENT | ELECTR | RICAL DA | ΑTA | | | |
| | | PT | 4C | E | QU | IPI | MENT | SHED | UL | .E | | | |



THRU-WALL AIR
CONDITIONING UNIT DETAIL
SCALE: N.T.S.



001.2 THERMOSTAT INSTALLATION DETAIL

ENGINEERING

S O U R C E of NC, PA.

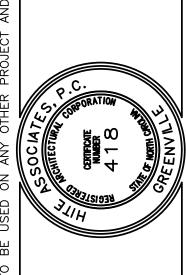
102-A2 Regency Blvd. Greenville, NC 27834
E-Mail Address: generalmail@engrsource.com
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm (C-1973

ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.

SOURCE STRUCTURELANNING / TECHNOLOGY

Benville, NC 27834 / tel (252) 757-0333

ARCHITECTURE / PLA
2600 Meridian Drive / Greenv



ementor for School

on County Schools

Vicro / North Carolina 2755

Project No. 22423

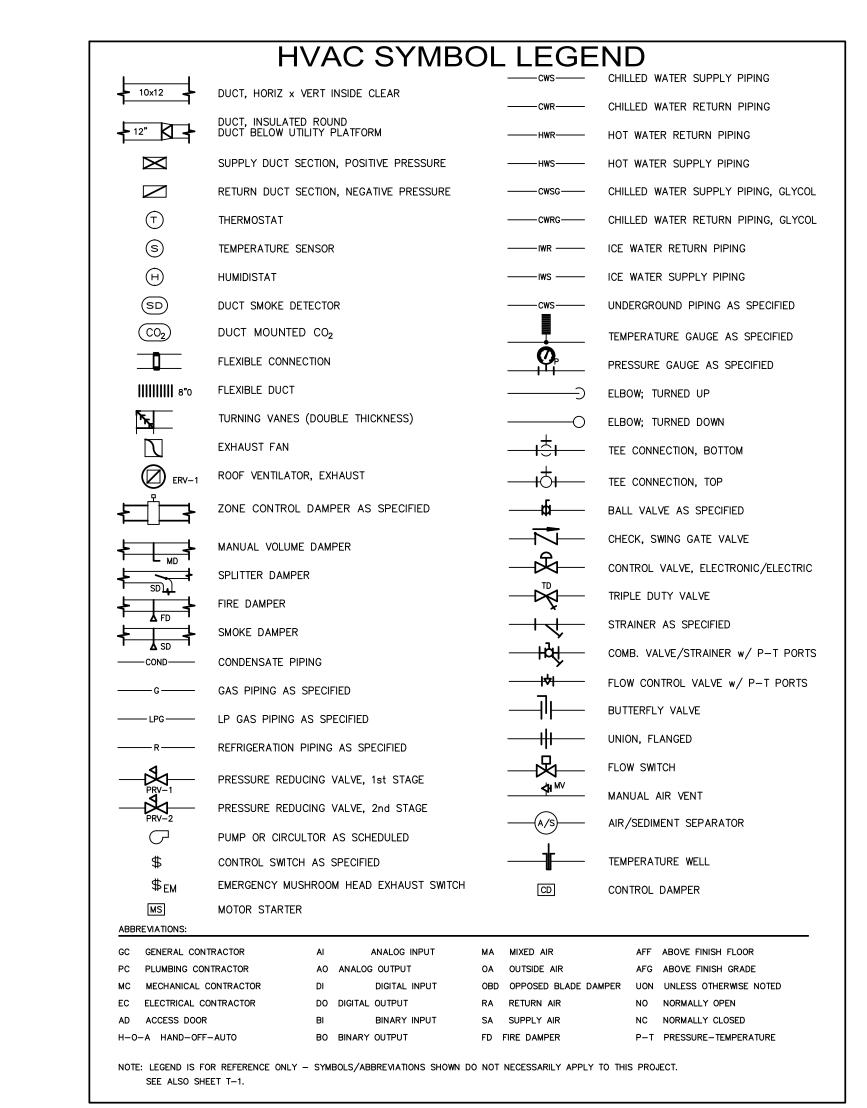
Micro

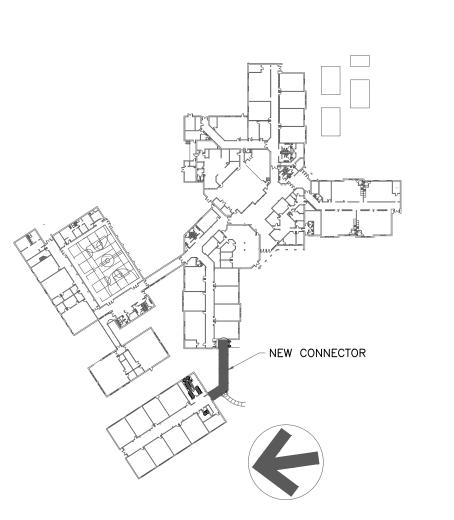
Drawing no.

Drawing no.

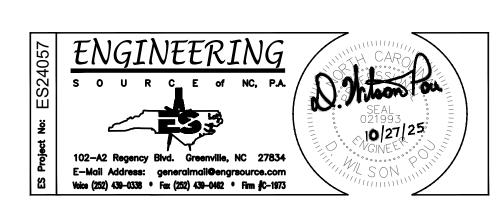
101.1 MECHANICAL CORRIDOR PLAN

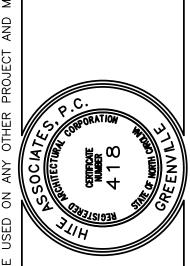
SCALE: 1/8" = 1'-0"





101.1 KEYPLAN SCALE: N.T.S





Micro Elementary School
Johnston County Schools
Main St / Micro / North Carolina 2

Project No. 22423

Drawing no.

| | ELECTRICAL SYMBOL LEGEND |
|-------------------------------------|---|
| SYMBOL | DESCRIPTION |
| Ф | DUPLEX CONVENIENCE OUTLETS FOR GENERAL USE SHALL BE RATED 20 AMPERES, 125 VOLTS, DUPLEX, FOR STANDARD PARALLEL BLADE THREE—WIRE GROUNDED TYPE CAPS, HUBBELL NO. 5362 (BROWN) OR 5362—I (IVORY), OR EQUAL. |
| | QUADRUPLEX OUTLET AS SPECIFIED 240V OUTLET - AMPERAGE PER CIRCUIT BREAKER FED FROM |
| ⊕ ⊕ _{GFI} | DUPLEX OUTLET - GFI AS SPECIFIED |
| ₩P/GF | DUPLEX OUTLET - GFI - EXTERIOR WATERPROOF AS SPECIFIED |
| The Horiz | DUPLEX OUTLET - INSTALL HORIZONTALLY |
| Ф тр | TAMPER PROOF DUPLEX OUTLET EQUAL TO HUBBELL No. SG62 |
| TVSS | DUPLEX w/ TRANSIENT VOLTAGE SURGE SUPPRESSION w/ LIGHT (NEMA 5-15), EQUAL TO HUBBELL No. 5260 |
| ⊕ _{IG} | NEMA 5-20R ISOLATED GROUND RECEPTACLE WATERTIGHT TWISTLOCK RECEPTACLE IN KITCHEN UTILITY DISTRIBUTION WALL |
| Φ Φ | DUAL COMPARTMENT ALUMINUM RACEWAY SYSTEM, WIREMOLD No. ALA4800 w/ TWIN COVER; COLOR SELECTED BY ARCHITECT (SEE PLANS FOR RECEPTACLE & DATA OUTLET QUANITITES & LOCATIONS) |
| • | RECEPTACLES MOUNTED IN STEEL CITY GAB SERIES AFM PRE SET FLOOR BOX. EACH BOX CONTAINS (6) DUPLEX RECEPTS |
| • | (TYPICAL). SECURE SQUARE OF CARPET TO MATCH IN LID OF BOX (BY ELECT. CONTR., TYP) DATA OUTLETS MOUNTED IN STEEL CITY GAB SERIES AFM PRE SET FLOOR BOX. EACH BOX CONTAINS (4) DUAL DATA |
| | OUTLETS (TYPICAL). ROUTE (2) 1 ,"C FROM EACH BOX BACK TO MDF ROOM. SECURE SQUARE OF CARPET TO MATCH IN LID OF BOX (BY ELECT. CONTR., TYP) |
| F,S,H | FIRE ALARM INITIATING DEVICES; SEE LEGEND SHEET E-004 |
| ⋈ ,∐,₩ | FIRE ALARM NOTIFICATION DEVICES; SEE LEGEND SHEET E-004 |
| 7, ∀ , etc | VOICE/DATA DEVICES, SEE ICS LEGEND SHEETIC—101. E.C. RESPONSIBLE FOR ROUGH—IN AS INDICATED ON ELECTRICAL DRAWINGS |
| <u>⟨k</u> ⟩,⟨ <u>0</u> ⟩ | SECURITY DEVICES; SEE LEGEND THESE DWGS. E.C. RESPONSIBLE FOR ROUGH—IN AS INDICATED ON ELECTRICAL DRAWINGS SINCLE DOLE SWITCH 48" A F.E. LLON 20 AMB 120 (277 VOLT SPECIFICATION CRADE |
| \$ \$3,\$4 | SINGLE POLE SWITCH - 48" A.F.F. U.O.N., 20 AMP, 120/277 VOLT, SPECIFICATION GRADE 3 OR 4-WAY SWITCH - 48" A.F.F. U.O.N., SPECIFICATION GRADE, SEE SPECIFICATION SECTION 16140 |
| \$ _K | KEY-OPERATED SWITCH - 48" A.F.F. U.O.N. |
| \$0 | DIMMER SWITCH RATED FOR LOAD — 48" A.F.F., LUTRON No. MAR OR APPROVED EQUAL |
| \$00 | DOUBLE POLE SINGLE THROW SWITCH - 48" A.F.F. |
| \$\$ | MASTER / SATELLITE OR SPLIT BALLAST WIRING — SEE DETAILS THESE DRAWINGS |
| \$16 | ELECTRONIC LIGHTING CONTROLLER AS SPECIFIED MOTOR STARTER SWITCH w/ PILOT LIGHT, HUBBELL No. HBL3031PL OR EQUAL BY SQUARE D |
| →w T & S | VERTICAL J-BOX FOR THERMOSTATS & SENSORS - 54"AFF U.O.N ?" E.C. TO UTILITY PLATFORM; COORDINATE w/ M.C. |
| <u></u> | FUSED EQUIPMENT DISCONNECT U.O.N.— SEE SPECIFICATION SECTION 16400 |
| └ MS | COMBINATION MOTOR STARTER DISCONNECT |
| • | COMBINATION START/STOP BUTTON MOTOR STARTER- SQUARE D No. MBG2 FOR WELDING (EF-6D) & SQUARE D No. MCG3 FOR CARPENTRY (EF-6E) |
| • | EMERGENCY STOP BUTTON — STI No. 040 OR APPROVED EQUAL WITH STOPPER II WARNING ALARM COVER, INDICATOR LIGHT, KEY RESET, YELLOW COLOR, & "EMERGENCY" GRAPHIC MESSAGE |
| or J | JUNCTION BOX, FLUSH MOUNTED IN ALL FINISHED SPACES |
| | ELECTRICAL PANEL AS SPECIFIED - SEE SPECIFICATION SECTION 16400 |
| ② | GROUNDING ELECTRODE CONDUCTOR INSTALLED IN ACCORDANCE WITH 1999 NEC ARTICLES 250-26 &/or 250-81 |
| | REFER TO KEY NOTE No. 2 |
| SP | CEILING MOUNT SPEAKER BY TECHNOLOGY CONTRACTOR UNDER DIVISION 17 |
| | RECESSED WALL MOUNT SPEAKER BY TECHNOLOGY CONTRACTOR, FURNISH & INSTALL BACKBOX & RACEWAY TO UTILITY |
| SP | PLATFORM |
| M SP WP | RECESSED WEATHER—PROOF WALL MOUNT SPEAKER BY TECHNOLOGY CONTRACTOR UNDER DIVISION 17; E.C. FURNISH & INSTALL BACKBOX & RACEWAY TO UTILITY PLATFORM |
| ©C | CEILING MOUNTED SPACE OCCUPANCY SENSOR FOR LIGHTING CONTROL (SEE OC SENSOR LEGEND FOR TYPE DESCRIPTIONS.) |
| ОС | WALL MOUNTED SPACE OCCUPANCY SENSOR FOR LIGHTING CONTROL (SEE OC SENSOR LEGEND FOR TYPE DESCRIPTIONS.) |
| | EMERGENCY LIGHTS AS SPECIFIED — SEE LIGHT FIXTURE SCHEDULE |
| CCTV | |
| | FUTURE CCTV CAMERA BY OWNER UNDER SEPARATE CONTRACT — PROVIDE f"C FROM BELOW UTILITY PLATFORM TO CABLE MANAGEMENT HOOK ABOVE; CABLE UNDER DIVISION 17 |
| 3 | VIDEO STUDIO CAMERA BY OWNER |
| $\overline{\Diamond}$ | EXIT SIGN w/ DIRECTIONAL ARROW(S) & BATTERY BACK-UP - SEE LIGHT FIXTURE SCHEDULE |
| \ | EVIT SIGN w./ PATTERY BACK UP & EN LIGHTS - CEE LIGHT EVITIES CONTENTS |
| ⊗ EM | EXIT SIGN w/ BATTERY BACK-UP & EM LIGHTS - SEE LIGHT FIXTURE SCHEDULE |
| *** | DRY-TYPE TRANSFORMER AS SPECIFIED - SEE RISER DIAGRAMS, INSTALLATION DETAILS, & SPECIFICATION SECTION 16460 |
| | SLEEVE ROUGH-INS UNDER PAVING/CONCRETE; 3" FOR FUTURE USE, & 2" FOR SITE LIGHTING BY CP&L |
| | |
| — UE — | UNDERGROUND PRIMARY ELECTRICAL FEEDERS BY ELECTRICAL UTILITY |
| — Е — | UNDERGROUND SECONDARY ELECTRICAL FEEDERS BY ELECTRICAL CONTRACTOR |
| - CATV — | TO FUTURE GROUND MOUNTED SATELLITE BY OWNER TV CABLING BY OTHERS SERVICE BY OWNER TO CABLING BY OTHERS CATV AMPLIFIER INSIDE No. IRN—1924 OR EQUIVALENT NEMA 1 LOCKABLE CAB'T |
| - TELCOM — | AUSTIN CO. OR EQUAL TELECOMMUNICATIONS CABLING BY OTHERS |
| — F0 — | FIBER OPTIC CABLE BY TECHNOLOGY CONTRACTOR; WIRE MANAGEMENT BY E.C. |
| | |
| | RACEWAY AS SPECIFIED CONCEALED ABOVE CEILING |
| | RACEWAY AS SPECIFIED CONCEALED U.G. |
| > | HOME-RUN TO PANEL w/ CONDUCTORS, NEUTRAL, & GROUND |
| | CABLE TRAY (CENTER SPLINE & LADDER TYPES), SEE DETAILS THESE DRAWINGS |
| ABBREVIA | TIONS: |
| A.F.F. | BOVE CEILING C CONDUIT AS SPECIFIED BOVE FINISH FLOOR NL 24 HOUR NIGHT LIGHT |
| EF E | UTHORITY HAVING JURISDICTION NTS NOT TO SCALE XHAUST FAN P.B. PUSH BUTTON LECTRIC WATER COOLER T.C. TECHNOLOGY CONTRACTOR |
| EWH E | LECTRIC WATER COOLER T.C. TECHNOLOGY CONTRACTOR LECTRIC WATER HEATER TP TAMPER-PROOF ROUND CONDUCTOR U.O.N. UNLESS OTHERWISE NOTED |
| G.C. (P.C. F | ENERAL CONTRACTOR U.G. UNDERGROUND PLUMBING CONTRACTOR WP WEATHERPROOF ENCLOSURE |
| E.C. E | IECHANICAL CONTRACTOR U.P. UTILITY PLATFORM LECTRICAL CONTRACTOR OR EMPTY CONDUIT |
| | YPICAL CIRCUIT DESIGNATION: PANEL 'B', BREAKER #2 |

NOTE: LEGEND IS FOR REFERENCE ONLY - SYMBOLS/ABBREVIATIONS SHOWN DO NOT NECESSARILY APPLY TO THIS PROJECT

GENERAL ELECTRICAL NOTES:

CONTACT WITH THE EARTH.

- * "NEC" IS DEFINED AS BEING THE CURRENT NFPA-70 THAT HAS BEEN ADOPTED BY THE NC CODE COUNCIL AND THE NC DEPT OF
- 1. DO NOT SCALE THESE DRAWINGS; REFER TO LARGEST SCALE ARCHITECTURAL PLANS.
- 2. THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND ARE NOT INTENDED TO SHOW MINOR DETAILS AND EXACT LOCATIONS. DESIGN ADJUSTMENTS SHALL BE ANTICIPATED BY THE CONTRACTOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- 3. REFERENCE SPECIFICATIONS AND ARCHITECTURAL, STRUCTURAL, PLUMBING, & HVAC DRAWINGS PRIOR TO CONSTRUCTION.
- 4. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NEC/NFPA 70. CONTRACTOR SHALL NOTIFY ENGINEER REGARDING ANY CODE DISCREPANCIES SHOWN ON PLANS. ANY PERMIT OR INSPECTION FEES ARE THE RESPONSIBILITY OF THE ELECTRICAL
- 5. CONTRACTOR SHALL INSTALL, GROUND AND BOND SYSTEM PER THE NEC WITH ALL NC MODIFICATIONS.
- 6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE METHOD & HAVE NOT BEEN VERIFIED; CONTRACTOR SHALL DETERMINE EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK & IS RESPONSIBLE FOR ANY DAMAGE INCURRED BY FAILURE TO DO SO. EACH PRIME CONTRACTOR PERFORMING EXCAVATIONS OR UNDERGROUND WORK SHALL BE RESPONSIBLE FOR THE LOCATION OF ANY EXISTING UTILITIES IN THE AREA OF THEIR WORK. NOTIFY THE UTILITY LOCATOR SERVICE (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION IN ORDER THAT EXISTING UTILITIES IN THE AREA MAY BE FLAGGED AND CONTRACTOR SHALL USE ALL CARE NECESSARY WHEN WORKING IN AREAS KNOWN OR SUSPECTED TO CONTAIN UNDERGROUND UTILITIES, INCLUDING HAND DIGGING.
- 7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL FIXTURES AND EQUIPMENT WITH OTHER PRIME CONTRACTORS PRIOR TO INSTALLATION TO AVOID CONFLICTS. CONTACT ARCHITECT IF ALTERNATE INSTALLATION METHOD IS REQUIRED.
- 8. CONTRACTOR SHALL NOT PUT MORE THAN SIX (6) DUPLEX RECEPTACLES ON ANY GIVEN 1P-20A CIRCUIT UNLESS SHOWN
- 9. MINIMUM WIRE SIZE SHALL BE #12 AWG., MINIMUM CONDUIT SIZE SHALL BE 3/4".
- 10. CONTRACTOR SHALL COORDINATE TELEPHONE AND DATA OUTLETS REQUIRED WITH OWNER PRIOR TO GYP. BOARD BEING INSTALLED.
- 11. HALLWAY AND MAINTENANCE RECEPTACLES SHALL NOT BE CIRCUITED WITH OFFICE OR OTHER GENERAL PURPOSE RECEPTACLES.
- 12. ELECTRICAL CONTRACTOR SHALL PROVIDE HACR RATED CIRCUIT BREAKERS ON ALL HVAC EQUIPMENT.
- 13. CONDUCTORS SHALL BE TYPE THWN OR THW. BRANCH CIRCUIT CONDUCTOR SHALL NOT BE SMALLER THAN No. 12 AWG., EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. HOME RUNS ORIGINATING MORE THAN 80' AT 120V FROM PANEL LOCATION SHALL BE No. 10 AWG MINIMUM SIZE. WIRES No. 10 AWG AND SMALLER SHALL BE SOLID; WIRES No. 8 AWG AND LARGER SHALL BE STRANDED. PROVISIONS OF NEC SECTION 210-5 COLOR CODE SHALL BE STRICTLY COMPLIED WITH AND BE CONSISTENT THROUGHOUT ENTIRE

14. ALL CIRCUITS SHALL BE PROVIDED WITH AN INSULATED EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250-122. HASHMARK FOR GROUNDING CONDUCTOR IS NOT INDICATED ON THESE DRAWINGS. RACEWAY SHALL NOT BE USED AS

- 15. IN ADDITION TO MECHANICAL FASTENING TO CEILING TRACK, SUPPORT LIGHT FIXTURES AT EACH CORNER INDEPENDENTLY OF SUSPENDED CEILING WITH 12 GAUGE WIRE. CONNECT TO STRUCTURAL SYSTEM OF BUILDING PRIOR TO FIRE-PROOFING APPLICATION.
- 16. ALL CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED. ALL EMPTY CONDUIT SHALL HAVE A PULL WIRE.

17. ALL CONDUIT SHALL BE ELECTRICAL METALLIC TUBING. EMT SHALL NOT BE INSTALLED WHERE IT MAY BE SUBJECT TO PHYSICAL DAMAGE, WHERE IT WILL BE SUBJECT TO SEVERE CORROSIVE INFLUENCE, WHERE THE SIZE IS LARGER THAN 2". OR WHERE TUBING, ELBOWS, COUPLINGS. AND FITTINGS WOULD BE IN CONCRETE OR IN DIRECT CONTACT WITH THE EARTH. SCHEDULE 40 PVC CONDUIT SHALL BE USED IN ALL CONCRETE FLOOR SLABS AND WHEN IN DIRECT CONTACT WITH THE EARTH. PVC CONDUIT SHALL BE USED FOR ALL CONDUIT INSTALLED IN MASONRY WALLS AND SHALL TRANSITION BACK TO EMT OR RIGID CONDUIT AT THE TOP OF THE MASONRY WALL. PVC CONDUIT IS NOT ALLOWED IN STUD WALLS. 18. ALL CONDUIT ON THE EXTERIOR OF THE BUILDING SHALL BE EMT OR SHALL BE RIGID CONDUIT WHERE IT WILL BE EXPOSED TO PHYSICAL DAMAGE. PVC CONDUIT IS NOT ACCEPTABLE TO BE USED ON THE EXTERIOR OF THE BUILDING UNLESS IT IS IN DIRECT

19. CONDUIT SHALL NOT BE RUN EXPOSED IN FINISHED AREAS UNLESS APPROVED BY ARCHITECT / OWNER. CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO WALL & FLOOR CONSTRUCTION IN FIRST CLASS WORKMANSHIP MANNER. CONDUIT SHALL BE BENT IN ACCORDANCE WITH NEC MINIMUM RADIUS REQUIREMENTS. WHERE SCHD 40 PVC IS INSTALLED UNDER FLOOR SLABS, THE ELBOWS REQUIRED TO TURN THE RACEWAY UP INTO CABINETS, EQUIPMENT, ETC., WHERE SUBJECT TO DAMAGE, SHALL BE OF RIGID STEEL.

20. ALL CONDUIT FITTINGS SHALL BE COMPRESSION TYPE WITH INSULATED THROATS. ALL EXTERIOR CONDUIT FITTINGS SHALL BE LISTED FOR USE IN WET LOCATIONS PER NEC ARTICLE 314.

21. PROVIDE 3" WIDE RED MAGNETIC WARNING TAPE MARKED "BURIED ELECTRIC LINE BELOW" SIX INCHES BELOW FINISH GRADE FOR ALL U.G. CONDUIT. ENCASE ALL U.G. CONDUITS NOT UNDER BLDG SLAB IN 3" OF CONCRETE.

22. SERVICE ENTRANCE CONDUCTORS SHALL BE IN CONDUIT (RIGID OR PVC). EXTERIOR CONDUIT EXPOSED ABOVE SLAB SHALL BE RIGID. INTERIOR CONDUIT EXPOSED SHALL BE ELECTRICAL METALLIC TUBING (EMT). EMT SHALL BE COLD—ROLLED STEEL TUBING WITH A COATING ON THE OUTSIDE AND PROTECTED ON THE INSIDE BY A ZINC, ENAMEL, OR EQUIVALENT CORROSION RESISTANT COATING AND CONFORMING TO THE REQUIREMENTS OF ANSI C 80.3-1996 OR LATER EDITION. ALL UNDERGROUND CONDUIT SHALL BE UL LISTED SCHD 40 PVC CONFORMING TO ARTICLES 352 & 300 OF THE NEC. WHERE SCHD 40 PVC IS INSTALLED BELOW GRADE OR UNDER FLOOR SLABS, THE ELBOWS REQUIRED TO TURN THE RACEWAY UP INTO CABINETS, EQUIPMENT, ETC., SHALL BE OF RIGID STEEL AND SHALL CONTINUE AS RIGID STEEL TO THE CABINET, EQUIPMENT, ETC. FEEDER CIRCUITS SHALL BE IN CONDUIT.

23. ALL JUNCTION OR DEVICE BOXES SHALL HAVE A COVER; PROVIDE COVER PLATES AS SPECIFIED IN SECTION 16140.

- 24. ALL 1P-20A CIRCUITS SHALL BE 2-#12 & 1-#12G IN 3/4"C WITH NO SHARED NEUTRALS U.N.O.
- 25. WHERE DISTANCE TO FIRST OUTLET ON A 20 AMP CIRCUIT EXCEEDS 50 FEET, MINIMUM SIZE OF CONDUCTOR TO BE #10 AWG TO FIRST

26. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH ALL VOLUMES OF THE NCSBC, INSPECTORS HAVING JURISDICTION, AND ALL OTHER APPLICABLE CODES AND ORDINANCES.

- 27. EACH PIECE OF ELECTRICAL GEAR, EQUIPMENT, ETC., SHALL BEAR A "UL" LABEL.
- 28. ALL HOLES CUT IN FLOOR, CEILING AND WALLS SHALL BE CORE-DRILLED OR SAWED.
- 29. ROOF DECKING SHALL NOT BE PENETRATED TO SUPPORT ELECTRICAL ITEMS.
- 30. ALL EMERGENCY AND EXIT LIGHTS SHALL BE CONNECTED TO THE UNINTERRUPTED SIDE OF THE LOCAL LIGHTING CIRCUIT.
- 32. WHERE PROVIDED BY E.C., DISCONNECTS SHALL BE HEAVY DUTY NEMA-1 RATED AT ALL INTERIOR LOCATIONS INDICATED AND HEAVY

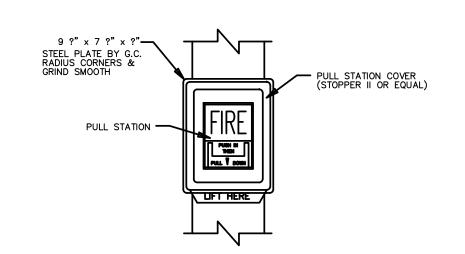
31. PROVIDE AND INSTALL ENGRAVED PHENOLIC LABELS ON ALL ELECTRICAL GEAR, DISCONNECTS, ETC. FASTEN WITH SCREW FASTENERS.

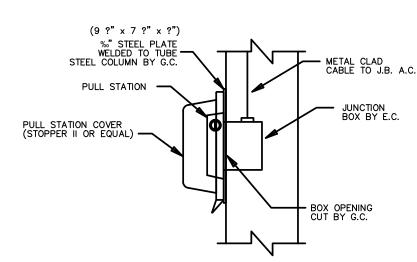
DUTY NEMA-3R RATED AT ALL EXTERIOR LOCATIONS INDICATED ON THESE DRAWINGS. 33. VERIFY WITH OWNER LOCATION/TYPE OF ALL FIXTURES, PANEL BOXES, OUTLET PLACEMENT, ETC. BY HOLDING AN ELECTRICAL

WALKTHROUGH ON THE BUILDING SITE ONCE FRAMING IS COMPLETED.

34. ELECTRICAL BOXES INSTALLED IN U.L. RATED WALLS SHALL BE LOCATED A MINIMUM OF 2'-0" FROM ANY OTHER ELECTRICAL BOX

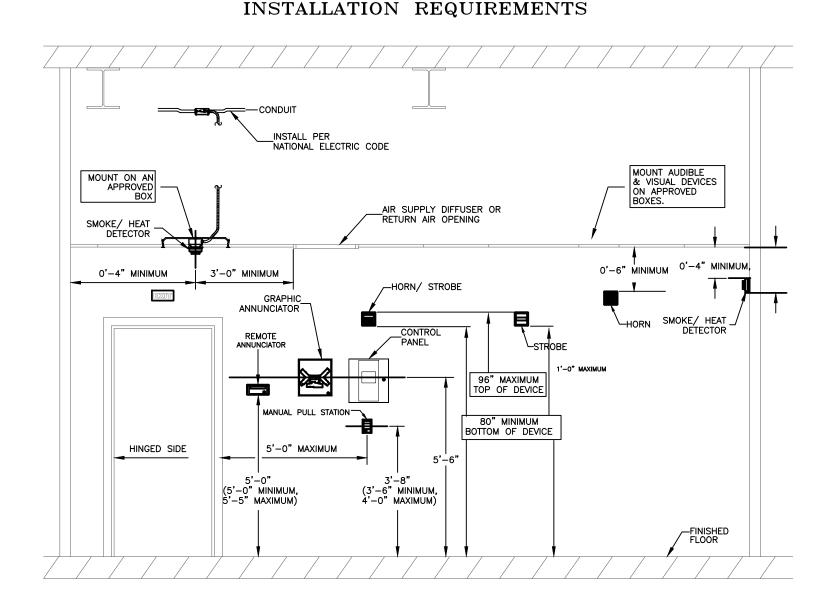
- 35. LIGHTING SWITCHES, RECEPTACLES AND/OR DATA OUTLETS SHALL NOT BE MOUNTED BACK TO BACK IN ANY WALL.
- 36. CABLE LOCATED IN PLENUMS SHALL BE PLENUM-RATED. ALL CABLE INSTALLED IN AREAS WITH EXPOSED STRUCTURE SHALL BE IN
- 37. E.C. SHALL INSTALL COMPLY WITH ANSI A117.1 FOR OUTLET AND CONTROL SWITCH MOUNTING HEIGHTS FOR ADA ACCESSIBILITY. 38. E.C. SHALL BE RESPONSIBLE FOR ALL LINE SIDE AND LOAD SIDE WIRING ON ALL EQUIPMENT REQUIRING ELECTRICAL POWER, INCLUDING EQUIPMENT PROVIDED BY OTHERS. E.C. SHALL BE RESPONSIBLE FOR LINE SIDE WIRING AND INSTALLING DISCONNECT SWITCHES FOR EQUIPMENT PROVIDED BY OTHERS. DISCONNECT SWITCHES FOR EQUIPMENT PROVIDED BY OTHERS SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTORS. LOAD SIDE WIRING FROM DISCONNECT SWITCH SHALL BE BY E.C. AND ALL FINAL CONNECTIONS TO EQUIPMENT PROVIDED BY OTHERS SHALL BE BY THE RESPECTIVE CONTRACTOR. FUSING FOR EQUIPMENT PROVIDED BY OTHERS SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR. SEE "ELECTRICAL CONNECTION DETAIL".
- 39. "PROVIDE" IS DEFINED AS FURNISH AND INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
- 40. THE TERM "VERIFY" RELATIVE TO THESE DRAWINGS SHALL BE DEFINED AS OBTAINING EQUIPMENT INSTALLATION INSTRUCTIONS FROM EQUIPMENT SUPPLIER OR OBTAINED OWNER'S REPRESENTATIVE'S APPROVAL.
- 41. E.C. IS RESPONSIBLE FOR DEMOLITION OF EXISTING LIGHTS FIXTURES THAT ARE INDICATED TO BE REPLACED. E.C. SHALL FIELD VERIFY EXISTING SWITCH CIRCUITING AND REWORK SWITCH WIRING TO PROVIDE CONTROL OF LIGHTS AS INDICATED ON PLANS.
- 42. ALL 15 AND 20 AMP, 125V AND 250V NONLOCKING-TYPE RECEPTACLES SHALL BE TAMPER-RESISTANT IN THE FOLLOWING AREAS: (1) EDUCATION FACILITIES, (2) GUEST ROOMS AND GUEST SUITES OF HOTELS AND MOTELS AND THEIR COMMON AREAS, (3) BUSINESS OFFICES, CORRIDORS, WAITING ROOMS, EXAM ROOMS, AND THE LIKE IN CLINICS, MEDICAL AND DENTAL OFFICES, AND OUTPATIENT FACILITIES, (4) ALL ASSEMBLY OCCUPANCIES, (5) ALL OTHER AREAS LISTED IN THE RECEPTACLES ARTICLE OF THE NEC THE REQUIRE TAMPER-RESISTANT
- 43, ALL RECEPTACLES IN KITCHENS AND FOOD PREPARATION AREAS SHALL BE GFCI PROTECTED.
- 44. ALL RECEPTACLES WITHIN 6 FEET OF A SINK, BATHTUB, SHOWER, OR THE LIKE SHALL BE GFCI PROTECTED REGARDLESS OF WHETHER THEY ARE INDICATED ON THESE PLANS. E.C. SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXACT DISTANCES AND PROVIDING THE GFCI PROTECTION AS
- 45. ALL CLOTHES WASHING MACHINES AND CLOTHES DRYER ELECTRICAL CIRCUITS SHALL BE FED FROM A GFI BREAKER OR SHALL HAVE A GFI OUTLET INSTALLED. GAS FIRED DRYERS THAT BEAR A MANUFACTURER'S LABEL STATING THAT THEIR EQUIPMENT MUST NOT BE FED BY GFI WILL NOT REQUIRE GFI PROTECTION AND SHALL BE FED FROM A STANDARD CIRCUIT BREAKER.
- 46, ALL OUTLETS OR JUNCTION BOXES THAT ARE FED FROM A GFI BREAKER SHALL BEAR A LABEL THAT SHOWS THE CIRCUIT NUMBER AND PANEL IT IS BEING FED FROM AND SHALL READ "PROTECTED BY GFI BREAKER".
- 47. ALL CIRCUITS SHOWN ON THESE PLANS ARE INTENDED TO BE IN THEIR OWN RACEWAY. E.C. MAY ROUTE MULTIPLE CIRCUITS IN A SINGLE RACEWAY BUT SHALL DERATE ALL CONDUCTORS IN ACCORDANCE WITH NEC TABLE 310.15(C)(1). 48. ALL SERVICE ENTRANCE MAIN BREAKERS 1000 AMPS OR LARGER SHALL BE GFI MAIN BREAKERS.



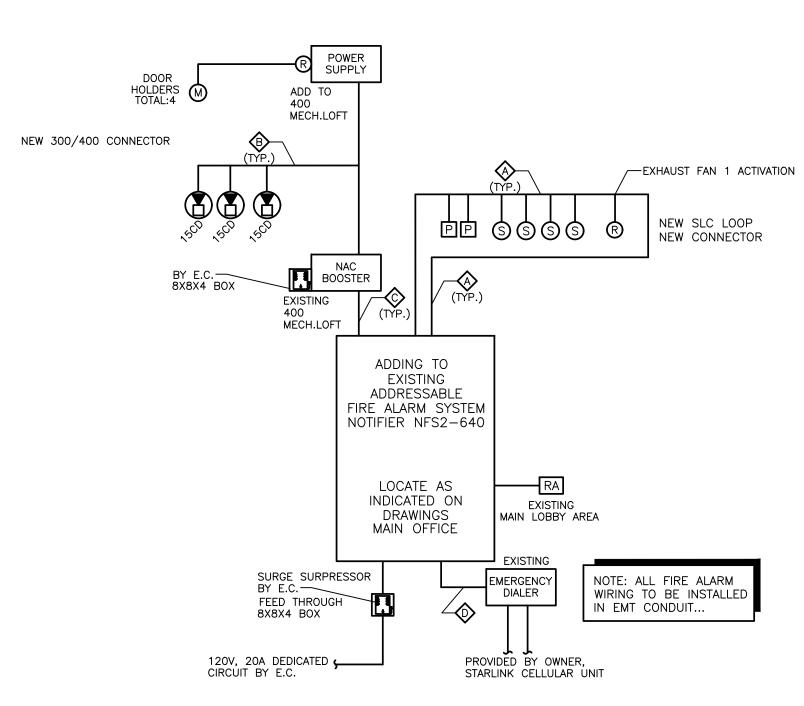


001.3 CONNECTOR PULL STATION DETAIL

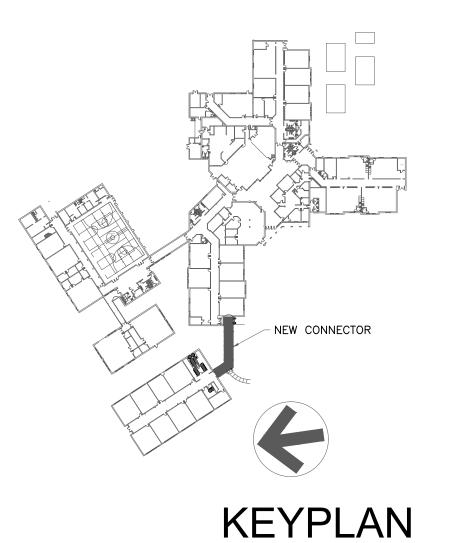
NFPA 72 AND ADA DEVICE



001.2 FIRE ALARM DEVICE DETAILS

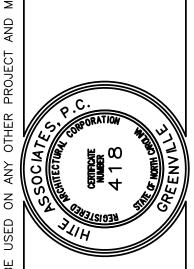


001.1 FIRE ALARM RISER SCALE: N.T.S



FIRE ALARM SYMBOL LEGEND (SEE MOUNTING HEIGHT SCHEDULE FOR MOUNTING INFORMATION UNLESS NOTED OTHERWISE) FIRE ALARM MANUAL PULL STATION CEILING FIRE ALARM HORN STROBE SMOKE DETECTOR DOOR MAGNET SHUT DOWN RELAY PROVIDED AND AND WIRED BY E.C.



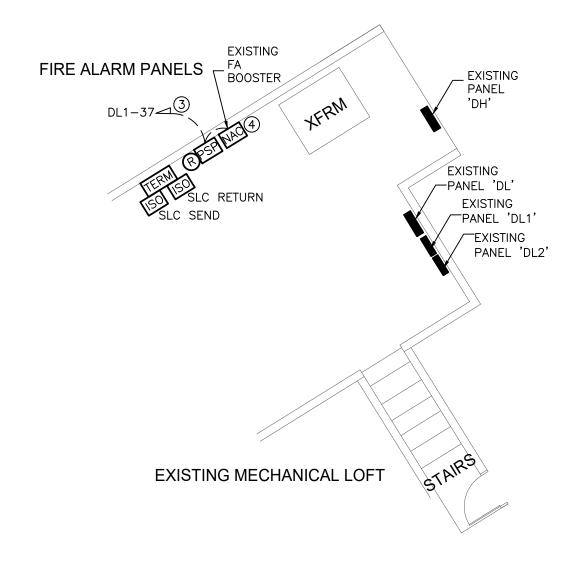


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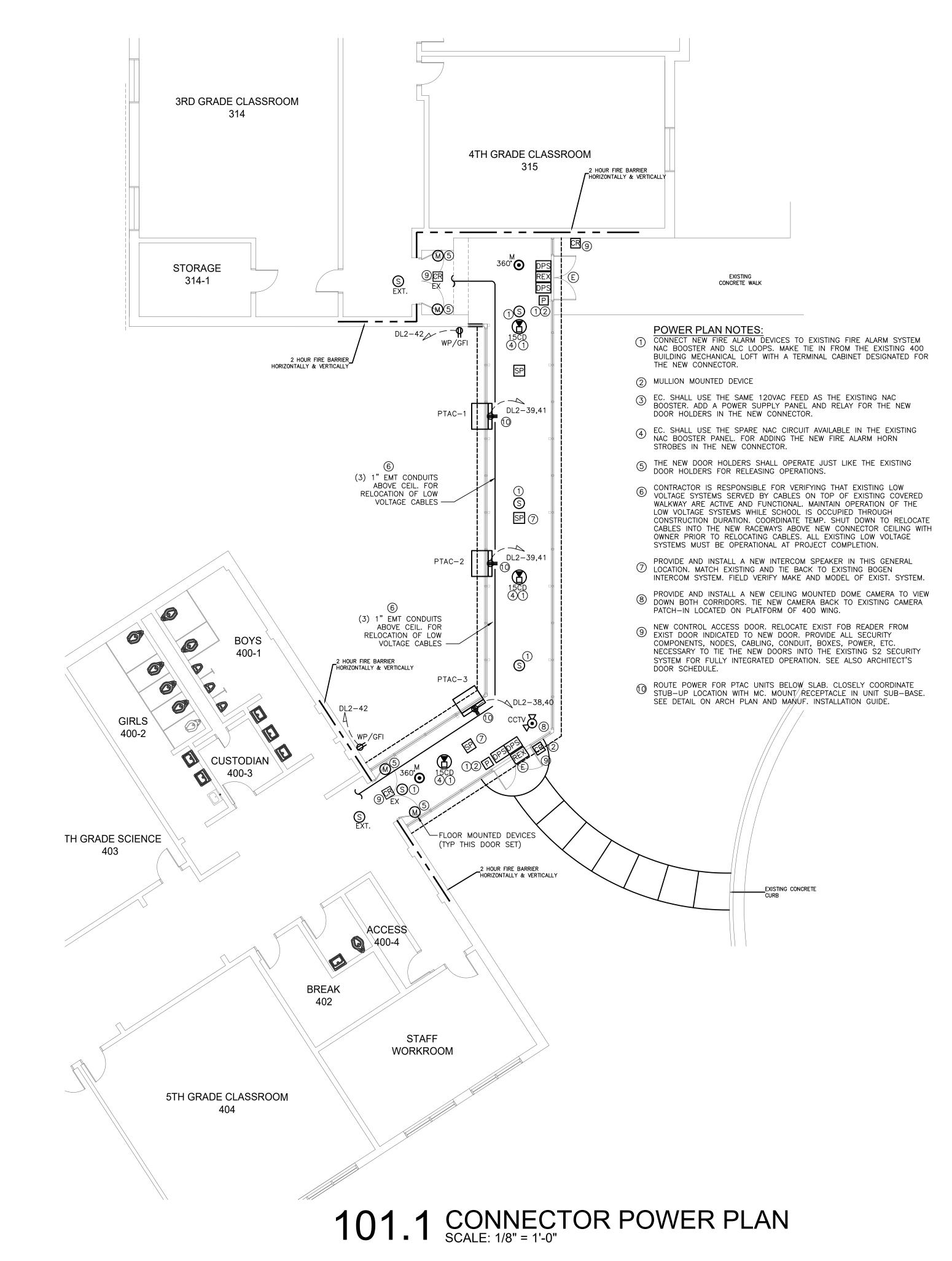
Date: OCTOBER 2025

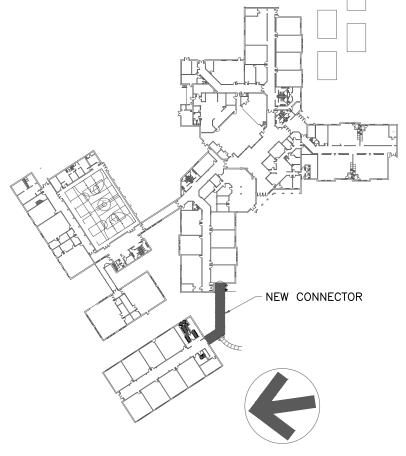
909 SF ● 0.66 W/SF FOR CONNECTOR x 0.9 506 COMPLIANCE TOTAL BUILDING INTERIOR LIGHTS WATTAGE: 315 (x .90)= 283W SPECIFIED C406.3 RLPD. ** ZONE 3 ● 750W (12Wx2=24W) TOTAL SPECIFIED.**

101.3 LIGHTING LOAD SUMMARY

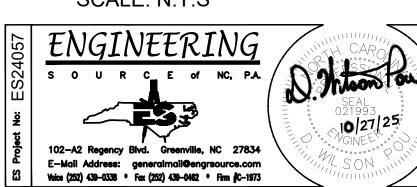


101.2 EXISTING MECH. LOFT SCALE: 1/8" = 1'-0"





KEYPLAN SCALE: N.T.S

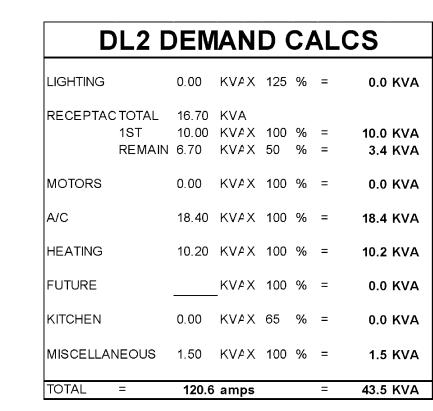


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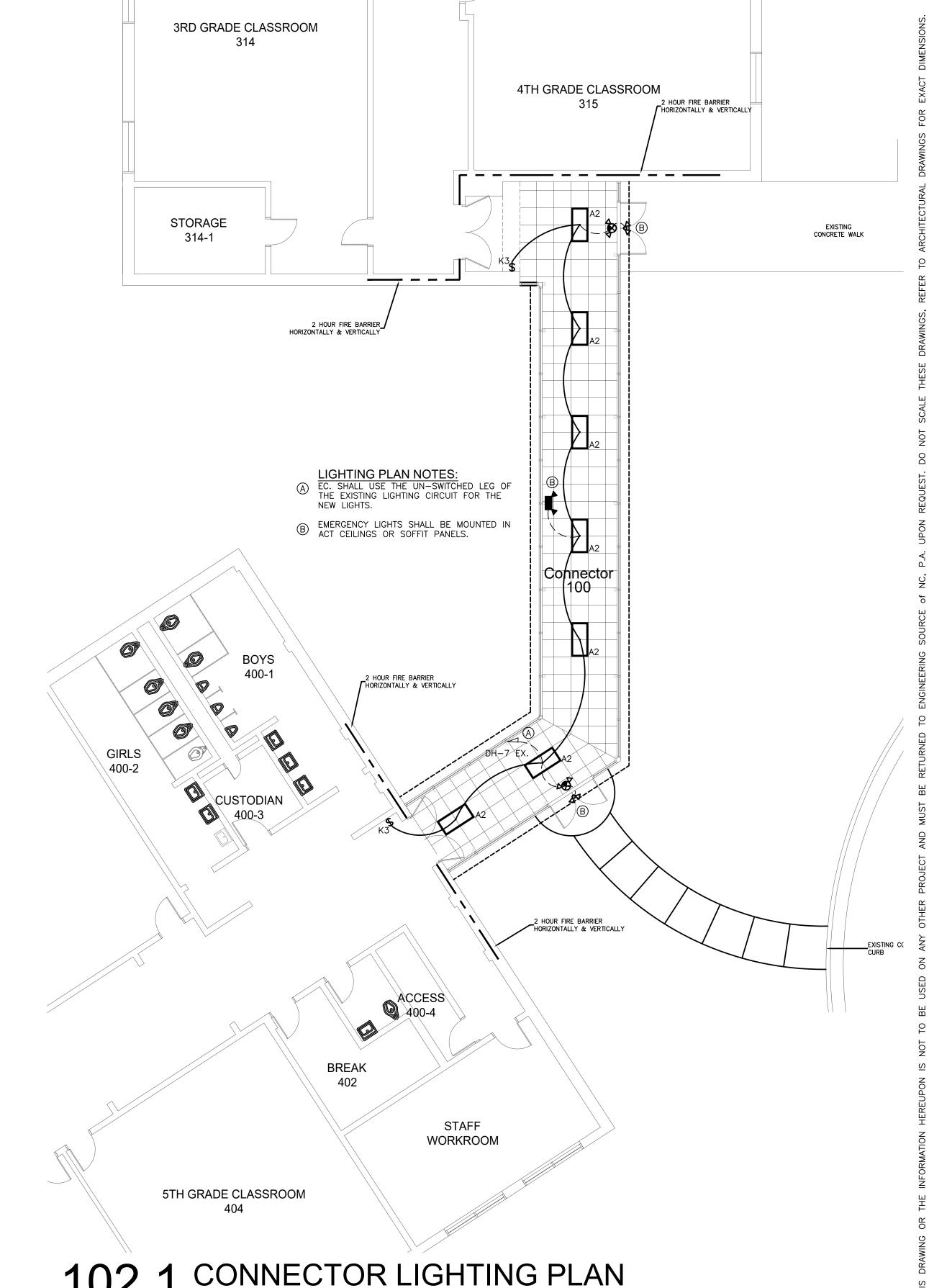
| | | | | | | EXIS | AITE | IG F | AN | | | | D S | SCI | HED | ULE | - "[| | | | | | | | |
|----------|------------------|---------|--------------|--------|--------------------------------------|--------|----------|---------|-------|----------|--------|-------|--------------|--------|-------------|---------|-------|---------|-------|--|--------------|--------------|------|-------------|--------------|
| IIAM | N: 100 | | | | VOLTAGE: 208/120 | | PH | IASE: (| 3 | WI | IRE: 4 | 4 | | MOU | NTING: | SURFA | CE | / | AIC: | 22,000 BUS BARS: COPPER | | | | | |
| CKT # | BKR TRIP | POLE | WIRE SIZE | | | LTG | REC | | D (KV | | KIT | | PHASE ABC | | REC | LOAD (| | G KIT | MISC | DESCRIPTION | COND SIZE | WIRE SIZE | POLE | BKR TRIP | CKT # |
| 1 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D118 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES | 3/4" | 12 | 1 | 20 | 2 |
| 3 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D118 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES | 3/4" | 12 | 1 | 20 | 4 |
| 5 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D118 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES | 3/4" | 12 | 1 | 20 | 6 |
| 7 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D118 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES | 3/4" | 12 | 1 | 20 | 8 |
| 9 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D118 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES | 3/4" | 12 | 1 | 20 | 10 |
| 11 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D120 | | 0.6 | | | | | | ITI | | | | | | 0.3 | PROJECTOR - D122 | 3/4" | 12 | 1 | 20 | 12 |
| 13 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D120 | | 0.6 | | | | | | | | | | | | 0.3 | PROJECTOR - D120 | 3/4" | 12 | 1 | 20 | 14 |
| 15 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D120 | | 0.6 | | | | | | | | | | | | 0.3 | PROJECTOR - D118 | 3/4" | 12 | 1 | 20 | 16 |
| 17 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D120 | | 0.6 | | | | | | | | | | | | 0.3 | PROJECTOR | 3/4" | 12 | 1 | 20 | 18 |
| 19 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D120 | | 0.6 | | | | | | İΙΤ | | 0.6 | | | | | RECEPTACLES - D114 | 3/4" | 12 | 1 | 20 | 20 |
| 21 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D122 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES - D114 | 3/4" | 12 | 1 | 20 | 22 |
| 23 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D122 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES - D114 | 3/4" | 12 | 1 | 20 | 24 |
| 25 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D122 | | 0.6 | | | | | | ĖΙΤ | | | | | | 0.3 | PROJECTOR - D114 | 3/4" | 12 | 1 | 20 | 26 |
| 27 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D122 | | 0.6 | | | | | | | | | | | | | SPARE | 3/4" | 12 | 2 | 20 | 28 |
| 29 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D122 | | 0.6 | | | | | | | | | | | | | OF AIL | 3/4 | 12 | | 20 | 30 |
| 31 | 20 | 1 | 12 | 3/4" | RECEPTACLES - D114 | | 0.6 | | | | | | | | 0.6 | | | | | RECEPTACLES - D114 | 3/4" | 10 | 1 | 25 | 32 |
| 33 | 20 | 1 | 12 | 3/4" | COPIER | | 0.5 | | | | | | | | 0.6 | | | | | RECEPTACLES - D116 | 3/4" | 10 | 1 | 25 | 34 |
| 35 | 30 | 2 | 10 | 3/4" | "#" PTAC-1 - CONNECTOR | | | | 3.0 | | | | | | 0.6 | | | | | RECEPTACLES - D116 | 3/4" | 10 | 1 | 30 | 36 |
| 37 | 30 | 2 | 10 | 3/4 | # FIAC-1 - CONNECTOR | | | | 3.0 | | | | | | | 3. | 0 | | | "+" PTAC-3 - CONNECTOR | 3/4" | 10 | 2 | 30 | 38 |
| 39 | 30 | 2 | 10 | 3/4" | "#" PTAC-2 - CONNECTOR | | | | 3.0 | | | | | | | 3. | 0 | | | + FIACS - CONNECTOR | 3/4 | 10 | _ | 30 | 40 |
| 41 | 30 | 2 | 10 | 3/4 | # FIAC-2 - CONNECTOR | | | | 3.0 | | | | | | | 0. | 4 | | | "+" EXTERIOR RECEPT | 3/4" | 12 | 1 | 20 | 42 |
| | TING (K | • | | | 0.0 | 0.0 | 10.1 | 0.0 | 12.0 | 10.2 | 0.0 | 0.0 | | 0.0 | 6.6 | 0.0 6. | 4 0.0 | 0.0 | | CONNECTED LOAD (KVA): | | | | | 6.8 |
| | PTACL | • | VA): | | 16.7 | | | | | | | | | | | | | | | DEMAND LOAD (KVA): | | | | 4 | 13.5 |
| | DRS (K) | /A): | | | 0.0 | | | | | | | | | | 5.0 | | | | | DONNE OTED LOAD (AMBC) | | | | | |
| A/C (ŀ | KVA): TNG (K\ | / A) · | | | 18.4 10.2 | | | | | | | | 12 12 | | 1.7 8.3 | | | | | CONNECTED LOAD (AMPS): DEMAND LOAD (AMPS): | | | | | 29.9 20.6 |
| | HEN (K) | , | | | 0.0 | | | | | <u> </u> | THE | | r∠ KVA | | <u>и</u> РЅ | | | | | DEIVIAND LOAD (AIVIPS). | | | | 1. | 20.0 |
| | ELLANE | , | (KVA) | | 1.5 | + | | | | | | | 1 V V 🗥 | | ,,, 0 | | | | | | | | | | |
| | | | , | EW CIF | RCUIT BREAKERS IN EXISTING SPACE. "# | " INDI | CATES | NEW | BRE/ | KER IN | N PL | ACE O |)F EX | (ISTIN | IG SPA | ARE BRE | AKERS | S. TURN | l REI | L MOVED BREAKERS OVER TO OWN | ER FOR S | SURPL | US | | |
| | | | | | | | <u> </u> | | | | , | | | | | | , | | \ | | | | | | |

| LIC | SHT FIXTURE SCH | EDULI | E | | |
|-----------|---|---------------|------------|-------|------|
| TYPE | DESCRIPTION | LAMPS | VOLTS | WATTS | B.F. |
| A2 /NL | 2'x4' LAY-IN LED FLAT PANEL WITH ACRYLIC LENS. PROVIDE WITH MEDIUM LUMEN PACKAGE (4,600-5,600 LUMENS) AND DIMMING DRIVER. PROVIDE: DAY-BRITE#: 2FPZ48L840-4-DS-UNV-DIM LITHONIA#: EPANL-2X4-4800LM-80CRI-40K-MIN10-DIM-MVOLT OR WILLIAMS#: BP24-LS-8CS-DIM-UNV * /NL INDICATES FIXTURE TO BE USED AS NIGHT LIGHT AND SHALL HAVE POWER 24/7. | LED | UNV | 45W | _ |
| - | RECESSED CEIL. MOUNTED AUTOMATIC, SELF—CONTAINED, SELF DIAGNOSTIC, MAINTENANCE FREE 2—HEAD EMERGENCY LIGHT. UL 924 LISTED AND NFPA 101 COMPLIANT, ABS THERMOPLASTIC HOUSING, PILOT & STATUS INDICATING LIGHTS. SELF DIAGNOSTICS SHALL INCLUDE CONTINUOS SELF CHECKS AND 30 MINUTE FULL LOAD TEST WITH CHARGER OFF EVERY 30 DAYS. PROVIDE: EXITRONIX #: FRM DUAL LIGHT #: EV4R | 2-10W | 277/ 6V | 20W | N/A |
| 484 | CEILING OR WALL MOUNTED LED EXIT & 2-HEAD EMERGENCY LIGHT CONFORMING TO NFPA 101 STANDARDS, w/ BATTERY & SOLID STATE CHARGER, SELF DIAGNOSTICS w/ A TEST CYCLE EVERY 30 DAYS MINIMUM, SELF CONTAINED, SELF—CONTAINED, DOUBLE OR SINGLE WHITE FACE/BODY, ABS THERMOPLASTIC HOUSING, PILOT & STATUS INDICATING LIGHTS, TEST SWITCH, & 90 MIN. EMERGENCY RUN TIME, EXIT LIGHT SHALL CONTINUE TO OPERATE FOR 24 HOURS FOLLOWING POWER OUTAGE; EXIT SIGN SHALL HAVE 5 YEAR WARRANTY & POWER FOR REMOTE HEADS PROVIDE HUBBELL #: CCRSD OR LITHONIA #: LHQM—LED—R—HO—SD OR EXITRONIX #: ILXC—RG | 2-10W HALOGEN | 277/ 6V | 20 | N/A |
| 46 | CEILING/SOFFIT MOUNTED 2 HEAD EGRESS LIGHT WITH MARINE GRADE DIE—CAST ALUMINUM HOUSING AND POLYCARBONATE GASKETED LENS TO WITHSTAND EXTREME WEATHER. DAMP LOC. RATED. MOUNT ABOVE EXTERIOR DOOR. EMERGENCY LIGHT SHALL CONFORM WITH NFPA 101 STANDARDS AND NEC—700.16. | 2-6W | 277/6VDC | 12W | _ |

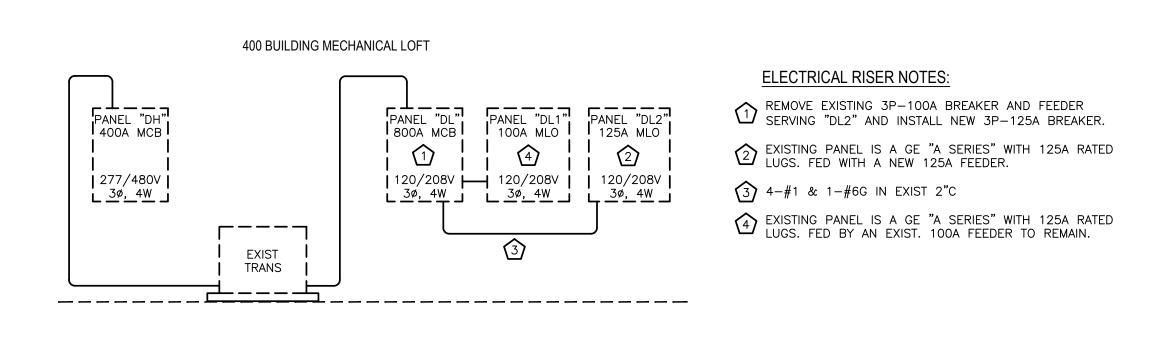
PROVIDE HUBBELL #: EVODW-PC OR

EXITRONIX #: RL52

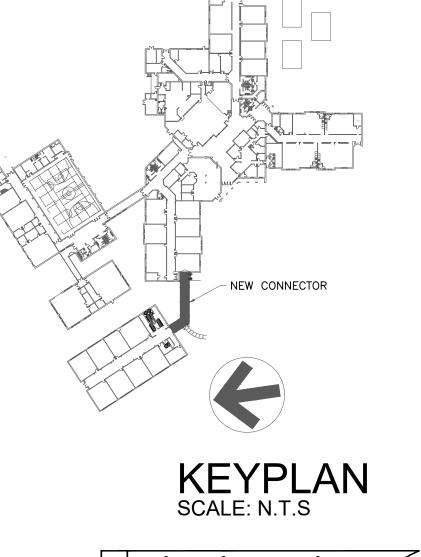
LITHONIA #: ELMRE-DB-EXT



102.1 CONNECTOR LIGHTING PLAN SCALE: 1/8" = 1'-0"



102.2 EXISTING ELECTRICAL RISER



ENGINEERING E-Mail Address: generalmail@engrsource.com Voice (252) 439-0338 * Fax (252) 439-0462 * Firm #C-1973

Project No. 22423 Date: OCTOBER 2025

Schools hools Carolina

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