GMA ARCHITECTS

25 February 2021

ADDENDUM #02

PROJECT: ESD 4J Gilham Elementary School Renovation & Expansion Phase 02

PROJECT NUMBERS: Architect's Project No. 20235

The following deletions and additions are
hereby made a part of Bidding and Contract Documents, effective this date.

ATTENTION:

PROJECT MANUAL

Item

1. Reference Document 00 01 15 LIST OF DRAWING SHEETS:
   Add: T5.05 DIAGRAMS - TECHNOLOGY:

2. Reference Document 03 45 00 Precast Architectural Concrete, 2.1, B. 1. a. :

   Add: 1). Basis of Design: Olympian Precast, Inc mix design per table below

   Olympian Precast, Inc. 19150 Union Hill Road, Redmond, WA 98053. Tel. 425.868.1922

China White #1	lbs	186
Valley Yellow #00	lbs	74
Lane Mountain #30	lbs	74
Lehigh White (Monterrey)	lbs	92.6
Davis #5237	oz.	0.93

3. Reference Document 07 95 13 Expansion Joint Cover Assemblies, 2.2 F. 1.
   Add: a. 1-hour fire resistance rating

4. Reference Document 07 95 13 Expansion Joint Cover Assemblies, 2.2 H. 1.
   Add: a. 1-hour fire resistance rating

5. Reference Document 08 73 01 Door Hardware Types, Hardware Set 1:

Delete: DOOR A122-D

6. Reference Document 08 73 01 Door Hardware Types, Hardware Set 5A:
   Add: Qty: 1; Description: Auto Door Bottom; Catalog Number: 4131_RLD; Finish: ALUM; Mfr: PEM

7. Reference Document 08 87 23 Glazing Film, 2.1 Manufacturers/Products, B. 5:
   Delete: Finish – gloss
   Add: Finish – Solid matte black

8. Reference Document 08 87 23 Glazing Film, 2.1 Manufacturers/Products, B. 6:
   Delete: Product – Texture Series, Satin Crystal (NRMV SC) or as selected by Architect
   Add: Product – Specialties Series, Matte Black or as selected by Architect

9. Reference Document 09 51 00 Acoustical Ceilings, 2.2 Acoustical Ceiling Units:
   Add: D. ACT-5: 2x4 Lay-in Acoustical mineral fiber tile, square edge
      1. Match existing In-Place Materials manufacturer, product, and surface pattern.
   E. ACT-6: 2x2 Lay-in Acoustical mineral fiber tile, tegular edge
      1. Match existing In-Place Materials manufacturer, product, and surface pattern.

10. Reference Document 10 21 23 Ceiling Mount Track, 2.2 Curtain Tracks, A. 1. Finish:
    Delete: Stainless Steel.
    Add: Anodized.

11. Reference Document 10 21 23 Ceiling Mount Track, 2.3 Accessories, A. 1.:
    Delete: b. Curtain Width: 102
    Add: b. Curtain Width: Track length +18”
    Delete: c. Curtain Height: 94
    Add: c. Curtain Height: 80” (Top of curtain at 7’-0” AFF, suspend 4” AFF)

12. Reference Document 10 21 23 Ceiling Mount Track, 2.3 Accessories:
    Add: B. Drop Chain with S Hook
        1. Basis of Design: Curtain Rod Connection DC-s
            a. Length: As required for top of curtain to be 7’-0” AFF (Ceiling height, minus track height, minus S hook length, minus 7’-0” curtain height)

13. Reference Document 11 66 23 Gymnasium Equipment, 2.4 Interior Basketball, A.:
    Add: 16. Manual Height Adjuster: Raises or lowers assembly by 2 feet to adjust goal height.

14. Reference Document 12 24 00 Window Shades, 2.2 Shade Fabric, A. 1. b.:

Delete: Openness: 3 percent.

15. Reference Document 23 40 00 HVAC Air Cleaning Devices:
    Delete: Section 23 40 00 in entirety
    Add: Section 23 40 00 in entirety, with Revision 1, attached

16. Reference Document 27 13 00 Communications Backbone Cabling:
    Delete: Section 27 13 00 in entirety
    Add: Section 27 13 00 in entirety, with Revision 1, attached

17. Reference Document 27 41 16 Integrated Audio-Video Systems and Equipment:
    Delete: Section 27 41 16 in entirety
    Add: Section 27 41 16 in entirety, with Revision 1, attached

18. Reference Document 32 31 13 Chain Link Fences and Gates 2.2-A.2:
    Add: c. Black-polymer coating where noted: ASTM F934 applied to zinc coated steel chain link fabric

19. Reference Document 32 31 13 Chain Link Fences and Gates 2.3-A.:
    Add: 7. Black-polymer coating where noted: ASTM F934

20. Reference Document 32 31 13 Chain Link Fences and Gates 2.7 Finishes:
    Delete: Section 2.7 Finishes in entirety
    Add: 2.7 FINISHES
    A. Components (Other than Fabric):
        1. Galvanized in accordance with ASTM A123/A123M, at 2.0 ounces per square foot.
        2. Black powder coated over coating of 1.8 oz per square foot galvanizing
    B. Hardware:
        1. Hot-dip galvanized to weight required by ASTM A153/A153M.
        2. Powder coated over hot-dip galvanized to weight required by ASTM A153/A153M
    C. Accessories: Same finish as framing.

Drawings

Item

1. Reference Drawing G1.01 COVER SHEET, DRAWING INDEX:
    Add: A8.00 FOUNDATION DETAILS

2. Reference Drawing C2.0 HORIZONTAL CONTROL & PAVING PLAN:
    Delete: Sheet C2.0 in entirety.
    Add: Sheet C2.0 in entirety, with Revision 1, attached.

3. Reference Drawing C2.1 HORIZONTAL CONTROL & PAVING PLAN:

Delete: Sheet C2.1 in entirety.
Add: Sheet C2.1 in entirety, with Revision 1, attached.

4. Reference Drawing C5.0 CIVIL DETAILS:
   Delete: Sheet C2.0 in entirety.
   Add: Sheet C2.0 in entirety, with Revision 1, attached.

5. Reference Drawing L-3 LANDSCAPE DETAILS, Drawing 13 CONCRETE SEAT WALL:
   Delete: SAND FINISH ON OUTSIDE WALL FACE
   Add: SAND FINISH ON EXPOSED SIDES AND TOP WALL

6. Reference Drawing AD1.21 DEMOLITION FLOOR PLAN - NORTH:
   Delete: Sheet AD1.21 in entirety.
   Add: Sheet AD1.21 in entirety, with Revision 1, attached.

7. Reference Drawing A2.12 PARTIAL FLOOR PLAN A-BUILDING:
   Delete: Sheet A2.12 in entirety.
   Add: Sheet A2.12 in entirety, with Revision 1, attached.

8. Reference Drawing A2.13 PARTIAL FLOOR PLANS:
   Delete: Sheet A2.13 in entirety.
   Add: Sheet A2.13 in entirety, with Revision 1, attached.

9. Reference Drawing A2.21 PARTIAL REFLECTED CEILING PLAN G-BUILDING:
   Delete: Sheet A2.21 in entirety.
   Add: Sheet A2.21 in entirety, with Revision 1, attached.

10. Reference Drawing A5.12 ENLARGED PLANS:
    Delete: Sheet A5.12 in entirety.
    Add: Sheet A5.12 in entirety, with Revision 1, attached.

11. Reference Drawing A5.13 ENLARGED PLANS:
    Delete: Sheet A5.13 in entirety.
    Add: Sheet A5.13 in entirety, with Revision 1, attached.

12. Reference Drawing A6.12 INTERIOR ELEVATIONS:
    Delete: Sheet A6.12 in entirety.
    Add: Sheet A6.12 in entirety, with Revision 1, attached.

13. Reference Drawing A6.13 INTERIOR ELEVATIONS G-BUILDING:
    Delete: Sheet A6.13 in entirety.
    Add: Sheet A6.13 in entirety, with Revision 1, attached.

14. Reference Drawing A6.15 INTERIOR ELEVATIONS:
    Delete: Sheet A6.15 in entirety.

Add: Sheet A6.15 in entirety, with Revision 1, attached.

15. Reference Drawing A8.10 EXTERIOR DETAILS:
    Delete: Sheet A8.10 in entirety.
    Add: Sheet A8.10 in entirety, with Revision 1, attached.

16. Reference Drawing A8.20 ROOF DETAILS:
    Delete: Sheet A8.20 in entirety.
    Add: Sheet A8.20 in entirety, with Revision 1, attached.

17. Reference Drawing A8.40 INTERIOR DETAILS:
    Delete: Sheet A8.40 in entirety.
    Add: Sheet A8.40 in entirety, with Revision 1, attached.

18. Reference Drawing A9.10 ASSEMBLIES:
    Delete: Sheet A9.10 in entirety.
    Add: Sheet A9.10 in entirety, with Revision 1, attached.

19. Reference Drawing A9.12 SCHEDULES:
    Delete: Sheet A9.12 in entirety.
    Add: Sheet A9.12 in entirety, with Revision 1, attached.

20. Reference Drawing S2.11 FOUNDATION PLAN G-BUILDING:
    Delete: Sheet S2.11 in entirety.
    Add: Sheet S2.11 in entirety, with Revision 1, attached.

21. Reference Drawing S2.12 FOUNDATION PLAN GYM:
    Delete: Sheet S2.12 in entirety.
    Add: Sheet S2.12 in entirety, with Revision 1, attached.

22. Reference Drawing S2.31 ROOF FRAMING PLAN G-BUILDING:
    Delete: Sheet S2.31 in entirety.
    Add: Sheet S2.31 in entirety, with Revision 1, attached.

23. Reference Drawing S5.12 FOUNDATION DETAILS:
    Delete: Sheet S5.12 in entirety.
    Add: Sheet S5.12 in entirety, with Revision 1, attached.

24. Reference Drawing S8.10 TYPICAL WOOD FRAMING DETAILS:
    Delete: Sheet S8.10 in entirety.
    Add: Sheet S8.10 in entirety, with Revision 1, attached.

25. Reference Drawing P2.11 PARTIAL FLOOR PLAN - PLUMBING:
    Delete: Sheet P2.11 in entirety.
    Add: Sheet P2.11 in entirety, with Revision 1, attached.

26. Reference Drawing P5.01 DETAILS & DIAGRAMS - PLUMBING:
    Delete: Detail 1.

27. Reference Drawing M2.12 PARTIAL FLOOR PLAN - MECHANICAL:
    Delete: Sheet M2.12 in entirety.
    Add: Sheet M2.12 in entirety, with Revision 1, attached.

28. Reference Drawing M4.11 ENLARGED PLANS - MECHANICAL:
    Delete: Sheet M4.11 in entirety.
    Add: Sheet M4.11 in entirety, with Revision 1, attached.

29. Reference Drawing E0.02 ELECTRICAL SCHEDULE:
    Delete: Sheet E0.02 in entirety.
    Add: Sheet E0.02 in entirety, with Revision 1, attached.

30. Reference Drawing E2.11 PARTIAL FLOOR PLAN - LIGHTING:
    Delete: Sheet E2.11 in entirety.
    Add: Sheet E2.11 in entirety, with Revision 1, attached.

31. Reference Drawing E2.13 PARTIAL FLOOR PLAN - LIGHTING:
    Delete: Sheet E2.13 in entirety.
    Add: Sheet E2.13 in entirety, with Revision 1, attached.

32. Reference Drawing E4.12 PARTIAL FLOOR PLAN - ELECTRICAL:
    Delete: Sheet E4.12 in entirety.
    Add: Sheet E4.12 in entirety, with Revision 1, attached.

33. Reference Drawing E8.01 PANEL SCHEDULE:
    Delete: Sheet E8.01 in entirety.
    Add: Sheet E8.01 in entirety, with Revision 1, attached.

34. Reference Drawing ED2.13 DEMOLITION PARTIAL FLOOR PLAN - ELECTRICAL:
    Delete: Sheet ED2.13 in entirety.
    Add: Sheet ED2.13 in entirety, with Revision 1, attached.

35. Reference Drawing T0.01 SYMBOLS, LEGENDS, AND ABBREVIATIONS - TECHNOLOGY:
    Delete: Sheet T0.01 in entirety.
    Add: Sheet T0.01 in entirety, with Revision 1, attached.

36. Reference Drawing T2.11 PARTIAL FLOOR PLAN – TECHNOLOGY, GENERAL NOTES:
    Add: F. REFER TO DIV 26 FOR ELECTRICAL REQUIREMENTS

37. Reference Drawing T2.12 PARTIAL FLOOR PLAN - TECHNOLOGY:
    Delete: Sheet T2.12 in entirety.

Add: Sheet T2.12 in entirety, with Revision 1, attached.

38. Reference Drawing T2.13 PARTIAL FLOOR PLAN – TECHNOLOGY, GENERAL NOTES:
    Add: G. REFER TO DIV 26 FOR ELECTRICAL REQUIREMENTS

39. Reference Drawing T4.03 AUX GYM ELEVATION VIEWS - TECHNOLOGY:
    Delete: Sheet T4.03 in entirety.
    Add: Sheet T4.03 in entirety, with Revision 1, attached.

40. Reference Drawing T5.02 DETAILS - TECHNOLOGY:
    Delete: Sheet T5.02 in entirety.
    Add: Sheet T5.02 in entirety, with Revision 1, attached.

41. Reference Drawing T5.03 DIAGRAMS - TECHNOLOGY:
    Delete: Sheet T5.03 in entirety.
    Add: Sheet T5.03 in entirety, with Revision 1, attached.

42. Reference Drawing T5.05 DIAGRAMS - TECHNOLOGY:
    Add: Sheet T5.05 in entirety.

PRODUCT APPROVALS

Add the following to the list of acceptable manufacturers and products as noted:

1. Reference section 07 54 00 Single-Ply Membrane Roofing, 2.1 Manufacturers
    a. MuleHide TPO Membrane System
2. Reference section 23 33 00 Air Duct Accessories, 2.2K Automatic Dampers:
    a. Pottorff model CD-45/46 Airfoil Blade Control Damper
3. Reference section 08 91 00 Wall Louvers, 2.1B Wall Louvers:
    a. Pottorff model EFD-645 Extruded Aluminum Louver, 6” Deep
4. Reference section 06 17 33 Wood I-Joists, 2.1.A.:
    a. Web Joist NW Web-I joist
5. Reference section Luminaire Schedule:
    a. L5: Lithonia ZL1F Suspended Linear LED
    b. S1: Lithonia VCPG Surface Mounted Canopy
    c. S4: Targetti MRS Surface Wall Area Light

Attachments:

1. *Specification Sections: 23 40 00, 27 13 00, 27 41 16*

2. *Drawings: C2.0, C2.1, C5.0, AD1.21, A2.12, A2.13, A2.21, A5.12, A5.13, A6.12, A6.13, A6.15, A8.10, A8.20, A8.40, A9.10, A9.12, S2.11, S2.12, S2.31, S5.12, S8.10, P2.11, M2.12, M4.11, E0.02, E2.11, E2.13, E4.12, E8.01, ED2.13, T0.01, T2.12, T4.03, T5.02, T5.03, T5.05*

END OF ADDENDUM TWO

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
1. High~~Medium~~ Efficiency Pleated Filters
~~1.~~2. Bipolar Ionization Units

1.2 RELATED SECTIONS

A. Division 01, General Requirements

B. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

1.3 SUBMITTALS

A. Submit the following:
1. Shop Drawings: Details of construction and dimensional data.
2. Product Data: Air filters, gauges, including performance data.
3. Operation and maintenance data

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. High~~Medium~~ Efficiency Pleated Filters:
1. Camfil ~~Farr 30 30~~ AP, Cambridge, American Air Filter, Eco-Air Products, Flanders Precisionaire.
2. Other Manufacturers: Submit Substitution Request.

B. Bipolar Ionization Units:
1. Nu-Calgon iWave-C
2. Global Plasma Solutions GPS-DM48-AC
~~2.~~3. Other Manufacturers: Submit Substitution Request.

2.2 HIGH~~MEDIUM~~ EFFICIENCY PLEATED FILTERS

A. Description:
1. 2-inch thick high~~medium~~ efficiency, pleated fabric media disposable type filter with support grid and enclosing frame.
2. UL 900~~Class 2~~.
3. Size as indicated on drawings.

B. Rating: ~~30 percent~~ MERV 13~~8~~ efficiency rated on ASHRAE Standard 52.1-1992 and 52.2-1999 respectively.

C. Performance: Filters capable of maintaining rated efficiency at 500 fpm face velocity with initial pressure drop not to exceed 0.3~~90~~-inch wg and final pressure drop at 0.90-inch wg.

D. Frame: Provide complete factory assembled galvanized steel frame assembly suitable for filters, including necessary hardware for supporting and holding filters in place with an air tight seal around frame, side access on air handling units.

2.3 BIPOLAR IONICATION UNITS (BIU-XXX)

A. Description: Duct-mounted auto-cleaning needlepoint bipolar ionization system to reduce particles and control smoke, kill bacteria, viruses and mold.

B. Electrical: 120/1 input, 12 watt power consumption; integral alarm contact.

C. Ion Output: 400 million ions/cc, with no ozone output.

D. Airflow Capacity: 4800 cfm per unit.

E. Weight: Less than 3 pounds.

F. Listing: UL 867

~~D.~~G. Warranty: 3 years, materials.

PART 3 EXECUTION

3.1 INSTALLATION, PLEATED FILTERS

A. Arrange for access and removal of filter elements.

B. Install filters in air handling unit filter racks.

C. Air handling unit or fans not operated without specified filters properly installed.

3.2 INSTALLATION, BIPOLAR IONIZATION UNITS

A. Mount on supply duct near air handler.

~~C.~~B. Coordinate power with Div. 23, to be powered off of air handler circuit, to operate whenever air handler runs.

~~3.2~~3.3 PROTECTION

A. Equipment Operation During Construction:
   1. Pleated Filters:
      a. If air handlers are operated during construction, replace filters periodically as required to prevent dirt carryover.
      b. Install clean filters prior to air balancing.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
1. Multi-Cell Innerduct
2. Premise – Optical Fiber
3. Optical Fiber Connectors – SM~~/MM~~
4. Premise Copper Cabling

B. Work covered by this Section consists of furnishing labor, equipment, supplies, materials, and testing unless otherwise specified for a complete Backbone Cabling system for the communications systems.

C. Work Included: Provision of materials, installation and testing of:
1. Multi-Cell Innerduct
2. Premise Optical Fiber Cable
3. Optical Fiber Connectors
4. Premise Copper Cable

1.2 RELATED SECTIONS:

A. Division 01, General Requirements

B. Division 26, Electrical

C. Division 27, Communications

1.3 REFERENCES

A. References, Codes and Standards as required by Section 27 05 00, Common Work Results for Communications and Division 01, General Requirements.

B. ISO/IEC 11801-1 – Information technology - Generic Cabling Customer Premises

C. ANSI/TIA-455-78-B – Optical Fibres Part 1-40: - Measurement Methods and Test Procedures - Attenuation

D. ANSI/TIA-455-175-B - Optical Fibres Part 1-42: - Measurement Methods and Test Procedures – Chromatic Dispersion

~~E. ANSI/TIA-455-204-A – Measurement of Bandwidth on Multimode Fiber~~

~~F. ANSI/TIA-492AAAF - Detail Specification for Class 1a Graded Index Multimode Optical Fibers; Modification of IEC 60793-2-10:2017, Optical Fibres- Part 2-10: Product Specifications- Sectional Specification for Category A1 Multimode Fibres~~

~~G.~~E. ANSI/TIA-492CAAC - Sectional Specification for Class B Single-Mode Optical Fibers

~~H.~~F. ANSI/TIA-568 SET- Commercial Building Telecommunications Cabling Standard Part 1: General Requirements, Part 2: Balanced Twisted-Pair Cabling Components, and Part 3: Optical Fiber Cabling Components Standard - Includes: TIA-568.0-D, TIA-568.0-D-1, TIA-568.1-D, TIA-568.1-D-1,TIA-568.2-D, TIA-568.3-D, TIA-568-4-D

1.4 QUALITY ASSURANCE

A. Conform to the quality assurance requirements of Section 27 05 00, Common Work Results for Communications and Division 01, General Requirements.

1.5 SUBMITTALS

A. Including, but not limited to: Product Data Sheets, Shop Drawings, etc.

B. General:
1. Submit in accordance with Section 270500, Common Work Results for Communications submittal requirements.

C. Closeout Submittals:
1. Submit in accordance with Section 270500, Common Work Results for Communications submittal requirements.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Multi-Cell Innerduct:
1. Maxcell
2. Duraline
3. Thomas & Betts
4. Or approved equal.

B. Premise – Optical Fiber:
~~1. Multimode Fiber:~~
~~a. Corning~~
~~2.~~1. Single Mode Fiber:
a. Corning.

C. Optical Fiber Connectors – SM~~/MM~~:
1. Corning

D. Premise Copper Cabling:
1. Commscope/Systimax
2. Panduit

2.2 PREMISE OPTICAL FIBER CABLE

~~A. Multimode Fiber:~~
~~1. Provide new and defect free cabling.~~
~~2. Cabling consists of strands count as indicated on Drawings.~~
~~3. Graded-index optical fiber waveguide with nominal 50/125um core/cladding diameter. The primary coating diameter of 900um UV-cured acrylate buffer material.~~
~~4. Fiber Category: OM4~~
~~5. Physical Characteristics:~~
~~a. Environmental jacket rating: Plenum~~
~~b. 12-Fiber subunits~~
~~c. Strength Member: Aramid Yard~~
~~d. Color: Aqua~~

~~B.~~A. Single Mode Fiber:
1. New and defect free cabling.
2. Cabling consists of strands count as indicated on Drawings.
3. Fiber Category: OS2, Tight Buffer
4. Physical Characteristics:
a. Environmental jacket rating: Plenum
b. 12-Fiber subunits
c. Strength Member: Aramid Yard
d. Color: Black

2.3 INNERDUCT

A. Provide and install innerduct in each conduit used for inside plant pathway that are to be used for optical cable systems.

B. Innerduct system with detectable type.

C. Provide inner ducts with integrated pull-strings.

D. Color: Orange

2.4 OPTICAL FIBER CONNECTORS – SM~~/MM~~

A. Physical Characteristics:
1. Meet ANSI/TIA-604-3-B standards.
2. Optical axial pull strength of 33 N at 0 degree angle and an optical off axial pull strength of 2.2 N at a 90 degree angle, with a maximum 0.5 dB increase in attenuation for both tests when tested in accordance with ANSI/EIA/TIA-455-6B.
3. Fusion-spliced, factory polished pigtails.
4. Terminate backbone cabling with LC type connectors.

B. Transmission Characteristics:
1. Maximum optical attenuation per each mated field installed fiber connector pair not to exceed 0.5 dB.
2. Total optical attenuation through the cross-connect from terminated optical fiber to other terminated fiber not to exceed 1.0 dB.
   a. Return loss greater than or approved equal to 2.~~0~~6 dB for ~~multimode~~singlemode.~~ fiber and greater than or approved equal to 2.6 dB for single mode fiber~~.
   b. Sustain a minimum of 500 mating cycles without degrading this performance.

2.5 PREMISE COPPER CABLING

A. Provide new and defective free cabling.

B. Backbone UTP cables consist of groups of 4 pair, 26 AWG cabling.

C. Provide listed cable appropriate for installed environment.

D. Category 6A.

E. Physical Characteristics:
1. Color: Blue

PART 3 EXECUTION

3.1 CABLING – GENERAL

A. Adhere to industry standards and manufacturer installation guidelines.

B. Service loop of 15-feet maintained at points of termination. Service loops not to exceed manufacturer's recommended bend radius.

C. Neatly dress cabling and do not interfere with other cables and termination equipment.

D. Pulling tensions not to exceed those recommended by the fiber optic cable manufacturer. Adhere to manufacturer’s requirements regarding pulling tension and allowable lubricants.

E. Do not exceed manufacturer's minimum specified bend radius.

F. Install fiber optic cable in innerduct, cable tray, or supported from building structure at 18-inch centers.

G. Continuous cabling between rooms. No splicing of cables is permitted outside of fiber optic distribution units.

H. Verify actual footage’s and distances identified on the drawings in the field prior to procurement and installation.

I. Verify that conduits and raceways are ready for occupancy before cable placement.

J. Test cabling prior to installation and assume responsibility for difficulties or damage to the cable during placement.

K. Test, label, and document as per Division 27, Communications.

3.2 RISER RATED OPTICAL FIBER CABLES

A. Where fiber optic cable passes through a vertical riser closet or TR secure fiber to wall vertically every 48 inches. Review fasteners, strain relief, and routing with customer.

3.3 RISER AND PLENUM RATED INNERDUCT

A. Adhere to manufacturer installation guidelines.

B. Independently support innerduct every 36-inches on center.

3.4 OPTICAL FIBER CONNECTORS – SM~~/MM~~

A. Adhere to manufacturer installation guidelines.

B. Backbone connectors must be fusion-spliced, factory polished pigtails.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
1. Racks
2. Equipment Boxes
3. Control Processing, Core Switching, Distribution, and Interfaces
4. Audio/Video Source Equipment
5. Assistive Listening System
6. Audio Source, Processing, and Output
7. Video Projectors
8. Projector Screens Motorized
9. Power Distribution
10. Cabling and Connectors
11. Wire Guards

B. Work covered by this document includes design, engineering, labor, material, products, guarantee, training, services for and incidental to the complete installation of new and complete audiovisual systems for the Owner.

C. Coordinate with the Owner and Design teams for a complete list of Owner-provided components.

D. Responsible for submitting requests for information (RFIs) associated with discrepancies found in these Contract Documents (Drawings and Specifications) to the General Contractor prior to installation commencement.

E. Responsible for coordination between General Contractor and associated trades, work resulting from incomplete or insufficient coordination with other subcontractor trades completed at no cost to the Owner or project.

F. Verify additional requirements with the Owner and Design Team prior to beginning the submittal and construction process. Responsible for attending Owner meetings and coordinating requirements with the responsible stakeholders.

G. Verify wireless spectrum information with authority having jurisdiction (AHJ) and select wireless frequencies used within rooms specified to achieve no amount of frequency interference.

1.2 RELATED SECTIONS

1. Division 01, General Requirements
2. Division 27, Communications

1.3 REFERENCES

A. References, Codes and Standards as required by Section 27 05 00, Common Work Results for Communications and Division 01, General Requirements.

B. In addition, meet the following:
1. NEC
2. NESC
3. Underwriters Laboratories:
   a. UL 65 — Standard for Wired Cabinets
   b. UL 468 — Standard for Grounding and Bonding Equipment
   c. UL 1449 — Standard for transient voltage surge suppressors
   d. UL 60950 — Information Technology Equipment – Safety
4. Institute of Electrical and Electronics Engineers:
   a. IEEE 1100 — Recommended Practice for Powering Grounding Sensitive Electronics

5. Telecommunications Industry Association:
   a. TIA 568-B1.1 Commercial Building Telecommunications Cabling Standard Part 1: General Requirements
   b. TIA 569-A-7 Commercial Building Standard for Telecommunications Pathways and Spaces
6. International Communications Industry Association (~~ICIA, Infocomm~~AVIXA):
   a. 1M-2009 Audio Coverage Uniformity Standard
   b. ANSI/INFOCOMM 2M-2010 Standard Guide for Audiovisual Systems Design and Coordination Processes
   c. ANSI/INFOCOMM 3M-2011 Projected Image System Contrast Ratio
   d. ANSI/INFOCOMM 4: 2012 Audiovisual Systems Energy Management

1.4 QUALITY ASSURANCE

A. Conform to the quality assurance requirements of Section 27 05 00, Common Work Results for Communications and Division 01, General Requirements.

1.5 SUBMITTALS

A. Including, but not limited to: Product Data Sheets, Shop Drawings, etc.

B. General: Submit in accordance with Section 27 05 00, Common Work Results for Communications submittal requirements.

C. Closeout Submittals: Submit in accordance with Section 27 05 00, Common Work Results for Communications submittal requirements.

D. Additional requirements specific to this section:
   1. Include each interface distribution cabinet layout drawing, as they are to be installed.
   2. Submit screenshots of touch panel graphical user interface screens for review and approval prior to programming.

1.6 DEFINITIONS

A. CTS, CTS-D, CTS-I: Professional certifications regarding entry-level, Design, and Installation expertise in audiovisual technology from ~~InfoComm International~~AVIXA.

B. HDMI: High-Definition Multimedia Interface

C. RGBHV: Red-Green-Blue-Horizontal Sync-Vertical Sync

D. SDI: Serial Digital Interface

1.7 QUALIFICATIONS

A. Experience with three or more installations of systems comparable in size, complexity, type, and design as specified herein. Perform installations satisfactorily for at least one year after final acceptance by the user. Include the names, locations, and point of contact for these installations as a part of the initial submittal documentation.

B. Submit certified documentation that they have been an authorized reseller, integrator, and service organization for the Manufacturers for a minimum of 3 years. Authorized by the Manufacturers to pass thru the Manufacturer's warranty of the installed equipment to the Owner.

C. Accept complete responsibility for the design, installation, certification, operation, and physical support for the system. Provide documentation, along with the AV Contractor and Installer certifications in writing as part of the Contractor's Technical submittal prior to Installation.

D. Contractor's Installation Technicians assigned to the system fully trained, qualified, and certified by the Contractor on the engineering, installation, operation, and testing of Integrated Audiovisual systems.

E. Provide formal written evidence of current Contractor certification(s) for the installer(s), design engineers, and project managers as a part of the submittal to Owner, Architect, or General Contractor prior to commencement work on the system.
   1. Acceptable Certifications:
      a. AVIXA:
         1) CTS
         2) CTS-D
         3) CTS-I
      b. BICSI:
         1) RCDD
         2) Installer 1 or 2
      c. National Systems Contractors Association:
         1) C-EST

F. Certificate of successful completion of Contractor's installation/training school for installing technicians of the equipment being proposed. Where certain products and/or systems from the Manufacturers require a specific certification or training courses for installation. Provide proof of certification or course completion.

1.8 SYSTEMS SUMMARY AND GENERAL FUNCTIONAL REQUIREMENTS

A. Systems and components detailed within this specification, unless otherwise noted, are Contractor Furnished, Contractor Installed (CFCI). Contractor is responsible for the supply, installation, testing, and end-user training of components and fully configured systems. Where components are labeled Owner Furnished, Contractor Installed (OFCI) or Owner Furnished Equipment (OFE), Contractor responsibility includes cleaning, testing, refurbishment (if required), and provision of cabling and accessories of existing equipment.

B. Program Audiovisual systems to implement a stringent energy management policy for audiovisual systems included in the project. Energy Management strategy meet or exceed the recommendations set forth in ANSI/INFOCOMM 4:2012 Audiovisual Systems Energy Management standard.

C. Audio Processing, Typical:
   1. Program audio content to output through flat panel or front of room loudspeakers.
   2. Speech reinforcement audio content to output through overhead ceiling loudspeakers. If spaces have only flat panel or front of room loudspeakers, they are to provide output of mixed program audio and speech reinforcement audio.
   3. Where zoned ceiling loudspeakers are provided: Provide increased speech reinforcement the further from the presenter location.
   4. For spaces over 25-feet deep with overhead loudspeakers, provide audio delay as required so that direct acoustical source energy arrives to the listener at the same time as the reinforced overhead audio.
   5. Provide feedback suppression at spaces where local source microphones are permanently installed nearby or can be moved nearby systems reinforcement loudspeakers.
   6. Provide echo cancellation at microphone inputs.
   7. Loudspeakers located above perforated ceilings are to be located within 3-inches above ceiling maximum and equalized for clear sound reproduction through ceiling.
   8. Calculate potential acoustic gain and needed acoustic gain to determine exact elevation of ceiling-hung loudspeaker placement for sufficient speech pickup and audio playback.

D. Video Processing, Typical:
   1. Configure extended display identification data (EDID) for native resolutions of permanently installed source and display devices, as well as the typical modern auxiliary source resolutions.

E. Equipment Racks:
   1. Provide blank plates at unused openings.

2. Provide fans as required to keep the interior of each equipment rack at a temperature of at least 10 degrees cooler than equipment manufacturer's recommended operating temperature.
3. Fans to not emit more noise than 30 dB.
4. While grounding and bonding is not the sole responsibility of the audio-visual contractor, the AV contractor is responsible for coordinating grounding facilities inside rooms where AV distribution equipment is installed. Racks and AV equipment located within bonded to grounding busbar within Telecom or dedicated audio-visual rooms.

F. Control Systems.
1. Prior to programming, the Contractor is to meet with the Owner to learn specific control system or functional requirement.
2. Where existing systems are in place, new interfaces with same or similar functions to existing interfaces on campus are to mimic the same look, feel, graphics, nomenclature, and functional operation style. New or unique control features are to follow the same look, feel, graphics, and functional operation style. Submit touch panel menus during Shop Drawing process for review and approval.
3. Upon receipt of closure relay from fire alarm system duck AV system, speech reinforcement, and background music audio.
4. Room systems without occupancy sensors are to automatically turn systems off after 10 p.m.
5. General Touch panel Programming Requirements:
   a. Organize user interface in terms of automated scenes, so that the selection of a specific source or mode button triggers associated system functions. After source or mode selection, a set of submenus provide the operator with relevant options related to that scene (i.e., transport control, levels, etc.).
   b. A single button on each page should provide the means of returning the user to the master menu screen.
   c. Provide passcode authorization to access advanced touchpanel functions.
   d. Conference Room interfaces to provide complete room lighting and shade controls, including on/off, up/down control, and a minimum of three presets each.

G. Power.
1. Unless otherwise noted, devices are to be remotely powered via PoE, PoE+ or other low voltage supply means from the serving equipment room/rack. Provide PoE network switches for connection to PoE capable devices.
2. Provide additional power supplies as required within AV racks to provide sufficient operating power for AV equipment.

1.9 SYSTEM AND ROOM SPECIFIC FUNCTIONAL DESCRIPTIONS

A. Systems and components detailed within this specification are Contractor Furnished, Contractor Installed (CFCI). Responsible for supply, installation, testing, and end-user training of components and fully configured systems.

B. Coordination:
1. Systems described herein require coordination with multiple trades and disparate systems.
2. Verify pertinent system requirements and coordinate with other trades to provide a complete and working system.
3. Failure to coordinate system requirements with other trades that result in incomplete or non-functioning systems remedied at no additional cost to the Owner.

C. Pre-Installation Meeting:
1. Prior to installation, meet with the Owner, Architect, and Owner’s Authorized Representative to discuss specific requirements.
2. Failure to comply with Owner system requirements that result in incomplete or non-functioning systems remedied at no additional cost to the Owner.

D. Auxiliary Gym:
   1. The Auxiliary Gym audiovisual scope will include a projection screen and rolling-cart mounted projector. Owner to provide rolling cart. Contractor to provide projector and projector screen. Contractor to ensure projector and screen compatibility with environment installed, Provide submittals for review to owner and design team prior to acquisition. ~~Owner to provide projector and rolling cart, contractor to install. Contractor to coordinate with owner of projector type and specifications to provide compatible projector screen.~~ Projector screen to be motorized with control panel mounted in a secure location near projector screen to control motorized projector, lighting, and shades within auxiliary gym. Refer to drawings for screen size. HDMI, USB 3.0, Cat6 and 3.5mm audio connections will be provided where shown on drawings. Surveillance cameras, wireless access points, public address, and AV speakers to be provided where shown on drawings. The AV system in the Auxillary Gym is to be interoperable with the Main Gym Av system.

E. Main Gym
   1. The Main Gym audiovisual scope will include a projection screen and rolling-cart mounted projector. Owner to provide rolling cart. Contractor to provide projector and projector screen. Contractor to ensure projector and screen compatibility with environment installed. Provide submittals for review to owner and design team prior to acquisition. Projector screen to be motorized with control panel mounted in a secure location near projector screen to control motorized projector. Refer to drawings for screen size. HDMI, USB 3.0, Cat6 and 3.5mm audio connections will be provided where shown on drawings. Surveillance cameras to be provided where shown on drawings. The Av system in the Main Gym is to be interoperable with the Auxiliary Gym.
   ~~1.~~2. ~~The Main Gym audiovisual scope will include the integration of a Camera with Microphone to be installed where shown on drawings to view stage area and transmit audio and video to Auxiliary Gym AV system~~.

1.10 USE OF THE SITE

A. Use of the site at the General Contractor's direction.

B. Coordinate with the General Contractor for lay-down areas for product storage and administration areas.

C. Coordinate work with the General Contractor and their sub-contractors.

D. Access to buildings wherein the work is performed directed by the General Contractor.

1.11 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft.

B. Store products in original containers.

C. Coordinate with the General Contractor for product storage. There may be little or no storage space available on site. Plan to potentially store materials off-site.

D. Do not install damaged products. Remove damaged products from the site and replaced with new product at no cost to the Owner.

1.12 PROJECT CLOSEOUT

A. Prior to final inspection and acceptance of the work, remove debris, rubbish, waste material, tools, construction equipment, machinery, and surplus materials from the project site and thoroughly clean your work area.

B. Test reports: Submit minimum of two weeks prior to final punch walkthrough. Maintain test equipment on-site during punch for sample proof-of-performance tests.

C. Before the project closeout date submit the following:
   1. Warranty certificate.
   2. Evidence of compliance with requirements of governing authorities such as the Low Voltage Certificate of Inspection.
   3. Project record documents.
   4. Instruction manuals and software, including control systems programming code that is a part of the system.

D. Submit written notice to the Owners Authorized Representative that:
   1. Contract Documents have been reviewed.
   2. Project has been inspected for compliance with Contract.
   3. Work has been completed in accordance with the Contract.

PART 2 PRODUCTS

2.1 MANUFACTURERS[JH1]

A. Racks:
   1. ~~Wall (RKE-WAL)~~AV Cabinet:
      a. Basis of design: Middle Atlantic DWR Series, Part # SR-24-28.
      ~~b. Lowell~~
      ~~c.~~b. Or approved equal.

B. Equipment Boxes:
   1. Wall (EB1):
      a. Chief PAC526 series
      b. FSR
      c. Or approved equal.

C. Control Processing, Core Switching, Distribution, and Interfaces:
   1. Hard-Button Control Pad (CP1):
      a. Basis of design: Extron MLC-104IP Plus
      b. Or approved equal.
   2. Input Transmitters/Audio-Video Extenders (MP1/MP2/MP3):
      a. Extron
      b. Or approved equal.

D. Audio/Video Source Equipment:
   1. Wireless Streaming Audio/Video Receiver (AVC-WRL-A):
      a. Basis of design: AppleTV

E. Audio Source, Processing, and Output:
   1. Wireless Microphones and Receivers (MIC-WRL):
      a. ~~Lightspeed 955 Access Classroom Audio System~~[JH2]Shure
      b. Or approved equal.
   2. Audio Input Plates (MP1):
      a. Extron
      ~~b. Neutrik~~
      ~~c.~~b. Or approved equal.
   3. Amplification (AUD-AMP):
      ~~a. QSC~~
      ~~b. Crown~~
      ~~c. Stewart Audio~~
      ~~d.~~a. ~~Lab Gruppen~~Extron
      ~~e.~~b. Or approved equal.

4. Loudspeakers (AVX):[JH3]
   a. Pendant (AV2):
      1) Extron
      ~~2) Soundtube~~
      ~~3) Tannoy~~
      ~~4)~~2) Or approved equal.
   b. In-Ceiling (AV):
      1) JBL
      2) Soundtube
      3) Tannoy
      4) Or approved equal.

F. Video Projectors (PROJECTOR):
1. ~~Owner Furnished, Contractor Installed~~Epson
2. Sony
3. Barco
~~1.~~4. Christie
~~2.~~5. Or approved equal.

G. Projection Screens, Motorized (SCN-WAL):
1. Da-Lite
2. Draper
3. Or approved equal.

H. Cabling and Connectors:
1. Audio:
   a. Legrand
   b. Or approved equal.
2. Video and Audio/Video:
   a. RGBHV:
      1) Legrand
      2) Or approved equal.
   b. HDM1:
      1) Legrand
      2) Or approved equal.
   c. USB
      1) Legrand
      2) Or approved equal.
3. Audio/Video Media Distribution:
   a. Legrand
   b. TE/AMP
   c. Belden
   d. Berk-Tek
   e. Or approved equal.
4. Network Control Cabling:
   a. Legrand
   b. TE/AMP.
   c. Belden.
   d. Berk-Tek.
   e. Or approved equal.
5. RS232 Cabling:
   a. Legrand
   b. Belden
   c. West-Penn

d. Liberty
e. Or approved equal.

I. Wire Guard
a. STI
b. Or approved equal.

2.2 RACKS

A. General Requirements:
1. EIA-310 19-inch rack mounting space.
2. Front and rear rack rails with EIA-310 hole pattern.
3. Rear rack rails include cable lacing bars.
4. Height sized as required to furnish equipment indicated on the contract documents with 15 percent spare capacity.
5. Four posts
6. Provide blank plates at unused openings.
7. Provide brush panels for cables transition from the rear of the rack and connecting to front rack rail mounted equipment.
8. Provide rack-mount horizontal wire management panels.
9. Provide fans as required to keep the interior of each equipment rack at a temperature of at least 10 degrees cooler than equipment manufacturer's recommended operating temperature.
10. Fans not to emit more noise than 30 dB.
11. Rack-mount bonding bus-bar (on rear rack rail).
12. Provide vertical lacing/mounting plates on both interior sides of the rack.
13. Provide rack-mount sliding drawers in sizes and quantities as required to support the following equipment and accessories, including but not limited to:
    a. Wireless and wired microphones
    b. Batteries
    c. Assistive listening receivers
    d. Manuals and documentation
    e. Cables
    f. Tablet computers/wireless control interfaces
14. Provide rack-mount shelves in sizes and quantities as required to support the following equipment and accessories, including but not limited to:
    a. Equipment without rack-mount accessories
    b. Blu-ray/DVD players
    c. Charging docks
15. Rack mount shelves integral mounting holes and lacing slots.

B. Wall (RKE-WAL):
1. Dual-hinge design allowing rack to swing out to access rear equipment.
2. 16-gauge steel construction.
3. Suitable for side-by-side installations with adjacent rack of matching type.
4. Backpan with multiple conduit knockouts, and an open back panel for installing over the top of flush installed junction boxes for cable pass-through.
5. Field configurable swing adjustment.
6. Fully enclosed.
7. Black finish.
8. 30-inch usable depth.
9. 24-inch width.
10. 48-inch height.
11. Locking, vented, front door assembly.

2.3 EQUIPMENT BOXES

A. Wall (EB1):
1. Provide at AV monitor locations, and where shown on drawings.
2. Suitable for installation within wall stud-bay.
3. Flush mount flange and cover.
4. Conduit knockouts and device plate knockouts on 4 sides of box.
5. Provide wire management/mounting holes.
6. Minimum 14-inch by 14-inch square.

2.4 CONTROL PROCESSING, CORE SWITCHING AND DISTRIBUTION, AND INTERFACES (CBP/CTP-WAL/TBL)

A. Hard-Button Control Pad (CP1):
1. Provide where noted on the contract drawings.
2. Provide hard button functionality as detailed earlier in this document.
3. Provide button labels to correspond with specified functionality.
4. Provide contact relay from nearest occupancy sensor.

B. Input Transmitters/Audio-Video Extenders (MP1/MP2/MP3):
1. Single twisted pair cable audio/video/control capable transmitter.
2. Minimum resolution supported: 1920x1080
3. HDMI connector
4. VGA connector
5. USB 3.0
6. Component Video with Stereo audio
7. 3.5mm audio
8. Capable of extending signals up to 100M
9. Extender receivers (AVC-ERX) to include integral RS232 connector for providing control of the remote display device.
10. Available in both decora wall plate and stand-alone configurations
    a. Provide decora wall plate versions as indicated on contract drawings
    b. Provide stand-alone units where device is located within equipment enclosure/rack. Provide rack-mount ear accessories when mounting in standard 19-inch racks.

2.5 AUDIO/VIDEO SOURCE EQUIPMENT

A. Wireless Streaming Audio/Video Receiver (AVC-WRL-A):
1. Capable of receiving audio and video over TCP/IP networks.
2. Receiving streaming content from user tablets and smart phones.

2.6 AUDIO SOURCE, PROCESSING, AND OUTPUT

A. Wireless Microphones and Receivers (MIC-WRL):
1. Operating Range: 60 meters.
2. Audio Frequency Response (+/– 3 dB): Minimum: 120 Hz.
3. Maximum: 7 kHz.
4. Total Harmonic Distortion (ref. +/– 38 kHz deviation, 1 kHz. tone):<1%, typical.
5. At a minimum, 4 independent channels per system where wireless microphones are deployed:
    a. One hand-held (MIC-WLH)
    b. One pendant (MIC-PEN)
    c. One paging input
    d. One auxiliary source input

B. Amplification (AUD-AMP):
1. Solid-state devices with positive circuit protection.
2. Stable over current protection.
3. Integral cooling fans.

4. Frequency Response: 10 Hz – 20 kHz.
5. THD: Less than 0.25 percent
6. Commercial/Professional-grade
7. Power output per channel: To accommodate maximum simultaneous loudspeaker load no more than 60 percent of total rated output required.
   a. Accompany submittals with total rated output power calculations for each loudspeaker zone for review.
   b. Provide quantities of amplifiers/channels to support total speakers of a given system shown on the plans.
8. 70V, 6 Ohm, and 8 Ohm impedance to match serving devices.
9. Network control, monitoring, and audio input capable.
10. RS232 control accessories add-ons as required to accommodate functions shown on drawings.

C. Loudspeakers (AVX):
   1. Pendant (AV2):
      a. Two-way with low and high frequency transducer.
      b. 5-inch low frequency driver minimum.
      c. Minimum 70 volt taps: 3 – 7.5 watts.
      d. Frequency response: 55 Hz – 20k Hz (-10 db).
      e. 86 dB sensitivity.
      f. Free-hanging suspension system from structure above.
      g. Nominal 120 degree dispersion.
   2. In-Ceiling (AV):
      a. Two-way with low and high frequency transducer.
      b. 5-inch low frequency driver minimum.
      c. Minimum 70V taps: 3 – 7.5W
      d. Frequency response: 55 Hz – 20 kHz (-10dB).
      e. 86 dB sensitivity.
      f. Mounts flush in ceiling.
      g. Nominal 120 degree dispersion.

2.7 VIDEO PROJECTORS (PROJECTOR)

A. Owner to furnish video projectors, contractor installed. Coordinate with owner to identify projector type and specifications.

2.8 PROJECTION SCREENS, MOTORIZED (SCN-WAL)

A. Fully motorized.

B. Automatic up/down activation from the system controller.

C. RS232 and relay control interfaces.

D. UL listed.

E. Electrical:
   1. Motor of the permanently lubricated reversal-type, attached to header and include automatic thermal overload protection, integral gears, capacitor, and electric brake to prevent coasting.
   2. 115VAC at 2.4A
   3. Include preset and adjustable limit switches for automatically stopping the display in UP or DOWN position.

F. Mounting and Case:
   1. Include mounting hardware and screen case appropriate for the application shown on the drawings (ceiling, recessed ceiling, wall, etc.)
   2. Final powder coat finish selection by architect (black or white).

G. Screen Viewing Surface:
1. Provide screen in aspect ratio and size as shown on the drawings.
2. Screen fabric seamless for screen heights under 10-feet.
3. Front projection type and flame retardant, mildew resistant.
4. Gain: To SMPTE RP 94-2000, 1.1
5. Viewing angle: 60
6. Drop: Include additional material in screen drop as required to bring the viewing surface down to an acceptable viewing level.

2.9 POWER DISTRIBUTION

A. Surge Protection and Power Conditioners
1. UL 1449 Adjunct Classification Test result have zero failures at 1000 surges of 6000 volts, 3000A, B3 pulse. The measured suppressed voltage of this test 170V with zero failures.
2. The surge suppressor will also have an EMI and RFI filter for power conditioning. Following cut off frequencies in normal mode (50-Ohm load): 40 dB at 100 kHz; 50 dB at 300 kHz; 50 dB at 3MHz; 50 dB at 30MHz.
3. Rack Mount Type (SRG-RMT)
   a. Sound system have a 1U rack-mountable surge suppression unit and capable of a 20A load at 120V.
   b. Capable of remote turn-on with an applied voltage range of 5-30V DC.
   c. Contractor to provide quantities of units based on total quantity of 20A circuits provided for the system rack.
4. Stand Alone Type (SRG-SUR)
   a. Sensitive system components provided with surge suppression units capable of being wall or device mounted. Capable of an 8 AMP load at 120 volts.
   b. Provide quantities where indicated on drawings.

2.10 CABLING AND CONNECTORS

A. General:
1. Cabling installed as part of this project independently supported and neatly managed. Support cabling by racking hardware, cable tray or other cable support specifically made to support it. Remove and reroute cabling supported by floors or ceiling tiles at no additional cost to the Owner.
2. Cabling rated for its installation environment.
   a. Provide OSP rated (and UL listed) cabling where installed in exterior environments in below grade or exposed aerial applications.
   b. OSP cabling entering buildings transition to CMP rated cabling within 50-feet from leaving the conduit pathway.
   c. Use of dual listed indoor/outdoor rated cabling permissible.
3. Approve connectors by the cabling manufacturer for use with the cable's environment and application.
   a. Follow manufacturer's recommendations for bonding shielded connectors to shielded cables.

B. Audio:
1. Microphone and Line Level:
   a. Connectors XLR type unless otherwise noted.
   b. Shielded, balanced single twisted pair, with #20 AWG color coded stranded conductors and foil shield with drain wire.
   c. Conductors AWG #20.
   d. Conductors Stranding: 7 by 28.
   e. D.C. Resistance Per 1000-feet: 15 ohms maximum.
   f. Shield: Aluminum polyester foil with #20 AWG stranded tinned copper drain wire.

g. Diameter 0.24-inch maximum.

2. Loudspeaker:
   a. Performance:
      1) Connectors twist-lock type (Neutrik SpeakON NL4) unless otherwise noted.
      2) Twisted pair, jacketed, unshielded cables, AWG #12, #14, #16, or #18, as required to mitigate voltage drop and maintain optimal speaker output performance.
      3) Maximum diameter:
         a) 0.39-inch (#12).
         b) 0.34-inch (#14).
         c) 0.26-inch (#16).
         d) 0.23-inch (#18).
   b. Manufacturers:
      1) Belden.
      2) West-Penn.
      3) Liberty.
      4) Or approved equal.
3. Production Intercom:
   a. Performance:
      1) Connectors XLR type unless otherwise noted.
      2) Shielded, balanced single twisted pair
      3) Conductors: AWG 18
      4) D.C. Resistance Per 1000-feet: 6.5 ohms maximum.
      5) Diameter: 0.22-inch
   b. Manufacturers:
      1) Belden.
      2) West-Penn.
      3) Or approved equal.
4. Antenna, Assistive Listening System and Wireless Microphone System:
   a. Performance:
      1) Provided connector matching that of connected devices (typical Type N or BNC).
      2) Nominal 50 Ohms (actual 51 or 52 ohms) coaxial cable.
      3) Minimum 97 percent shield coverage.
      4) Construction:
         a) RG-8/U to JAN-C-17A.
         b) RG-8 A/U to MIL-C-17D.
         c) RG-9/U to JAN-C-17A.
      5) Plenum rated.
   b. Manufacturers:
      1) Belden.
      2) West-Penn.
      3) Liberty.
      4) Or approved equal.

C. Video and Audio/Video:
   1. RGBHV:
      a. Provide connector matching that of connected devices (typical 5-BNC or DSUB-15).
      b. Red-Green-Blue-Horizontal Sync-Vertical Sync (RGBHV) transmission method.
      c. 25 AWG minimum.
      d. 75 Ohms
      e. Sweep tested to 1 GHz.
      f. 100 percent tape shield.
      g. Maximum Attenuation:
         1) 10 MHz: 1.5 dB/100-feet.

2) 50 MHz: 3.5 dB/100-feet.
3) 100 MHz: 5.5 dB/100-feet.
4) 200 MHz: 7.5 dB/100-feet.
5) 400 MHz: 12 dB/100-feet.
6) 1000 MHz: 20 dB/100-feet.

2. HDMI:
   a. High speed, meets HDMI 2.0 standard.
   b. Supports resolution range up to 4096 x 2160 (4K) at 30 Hz.
   c. 8-bit color depth.
   d. 100 ohms.
   e. Connector maximum width: 0.85-inch.
3. USB
   a. 3.0 standard or greater.
   b. Minimum Bitrate: 5 Gbit/s (500 MB/s)

D. Audio/Video Media Distribution:
   1. Connectors: Shielded 8P8C type unless otherwise noted.
   2. Category 6A F/UTP
   3. Plenum rated.
   4. Compatible with and as recommended by AV distribution manufacturer.
   5. Yellow jacketed cabling in presentation room and between presentation room/spaces and telecommunications rooms.

E. Network Control Cabling:
   1. Un-shielded 8P8C type connectors unless otherwise noted.
   2. Category 6 UTP.
   3. Blue jacket.

F. RS232 Cabling:
   1. Connectors: 9-pin type unless otherwise noted.
   2. 2-pair, individual shielded conductors.
   3. 22 AWG minimum.

2.11 WIRE GUARD

A. Install wire guard assembly to protect Audio Visual components in places where probable damage may occur such as: cafeteria, gymnasiums, hallways, outdoors, etc.

B. Wire guard assembly to fit components.

C. 9 gauge wire frame, white vinyl absite coated.

PART 3 EXECUTION

3.1 PROJECT MANAGEMENT

A. Assign a single Project Manager to the project who will serve as the point of contact for the Owner, General Contractor, and Engineer.

B. Proactive in scheduling work at the site, specifically the Contractor will initiate and maintain discussion with the General Contractor regarding the schedule for ceiling cover up and install cables to meet that schedule.

3.2 COORDINATION WITH OTHER TRADES

A. Coordinate with the General Contractor the location of faceplates and the opening for needed back boxes or support bracing needed.

B. Before beginning work, verify the location, quantity, size and access for the following:
   1. Technical ground AC power circuits provided for systems.

2. Junction boxes, wall boxes, wire troughs, conduit stubs and other related infrastructure for the systems.
3. System support components installed by others.
4. Overhead supports and rigging hardware installed by others.

C. Immediately notify the Owner, General Contractor, and Consultant in writing of discrepancies.

3.3 NEEDS ASSESSMENT

A. Schedule meeting with General Contractor, Architect, Consultant, and end-user groups to capture complete requirements of audiovisual systems detailed in these specifications.

B. Review the floor plan drawing, educate the user group Project Manager with the functions of the equipment that is being provided, and gather details specific to the individual units and system coverage.

3.4 PROTECTION OF NETWORK DEVICES

A. Protect network devices during unpacking and installation by wearing manufacturer approved electrostatic discharge (ESD) wrist straps tied to chassis ground.

B. Wrist strap meet OSHA requirements for prevention of electrical shock, should technician encounter high voltage.

3.5 CUTTING AND PATCHING

A. Keep work area clear of debris and clean area daily at completion of work.

3.6 FIREPROOFING

A. Where cables penetrate fire rated walls, floors and ceilings, fireproof the opening, or conceal cables in approved conduit and firestop seal with approved methods.

3.7 CABLE

A. Label cables as specified herein

B. Where cable bundles are exposed (e.g. transitioning from table-box to floor box, or transitioning from equipment rack to junction box), provide overall split-loom, and comb cables in a neat and orderly fashion.

C. Do not exceed manufacturer's pulling tension

D. Splices occur only where required, and in junction boxes only
1. Do not splice balance twisted pair cabling, refer to Section 27 15 00, Communications Horizontal Cabling, for installation requirements of UTP cable.

E. Test cables and connectors

3.8 LABELING

A. Provide the number system.

B. At a minimum label, including but not limited to:
1. Cables (both ends)
2. Media input/output plates
3. Media input/output plate jacks
4. Patch panels
5. Patch panel input/output jacks
6. Rack equipment
7. Addressable equipment within the rack: Active Ethernet equipment labeled with its hostname AND IP address

C. Media input/output plates permanently labeled.

D. Labeling matches the shop drawings and included with O&Ms.

E. Refer to Section 27 08 00, Commissioning of Communications for additional labeling requirements.

3.9 NETWORK CONFIGURATION

A. For IP audio networks (e.g. Dante™, Q-Sys™, Livewire™) the following performance requirements met and coordinated with the owner's Information Systems department.
   1. Local Area Network (LAN) wholly independent of the owner's, and, no routes established that would allow devices on the IP Audio networks to communicate with devices on other networks unless explicit permission from the owner is given.
   2. The system's LAN network and sub-network assignments included on the shop drawings, and updated in the record drawings/O&M submittal at project closeout.
   3. Device's IP addresses statically assigned
   4. Layer 3 routing capabilities are required for IP audio networks.
      a. Layer 2 networks, such as CobraNet™, EtherSound™, and AVB not considered, however equipment provided with this project capable of interfacing with these protocols where required.
         1) Exception: AVB with AES67 allowing Layer 3 routing.
   5. Minimum network requirements:
      a. Final network requirements complies with the manufacturer's primary communication protocol.
         1) Confirm final requirements with manufacturer for deviations to the requirements listed herein, prior to making configurations to network switching equipment.
      b. Head-end devices a minimum of 1000BASE-T
      c. Power-saving Green Ethernet functionality disabled on switch ports connected to IP audio network equipment.
      d. The multicast protocol with IGMP
         1) IGMP is required to prevent foreign multi-casts from being sent to ports used for IP Audio networks.
         2) IGMP Querier present on the VLAN where IGMP Snooping is enabled.
         3) Where an IGMP Querier is not available, IGMP Snooping disabled on the head-end equipment.
      e. VLANs used to segment the following networks, including but not limited to:
         1) Control/Device Networks: Touch-screens, wireless peripheral devices, regular Ethernet connections, and main system controls
         2) Audio Networks: Each type of IP Audio technology (e.g. Dante™, Q-Sys™)
            a) Routes established between separate VLANs for interoperability.
            b) Where supported by equipment, AES67 utilized to bridge separate audio networks.
      f. Ethernet based devices must be wired in star topology. Do not use splices, mid-span devices, or secondary switches.
      g. Jumbo frames disabled on IP audio networks.
      h. IP audio network clock and audio stream traffic require real-time performance (QoS Strict Priority Queuing).
      i. IP audio network clock traffic marked DSCP 46 (ES), and always prioritized over other traffic on the network.
         1) IP audio networks traffic transmit on uplink interfaces between switches that are physically separate from other networks. Examples include, but are not limited to:
            a) Separate SFP transceiver(s) for the owner's network (control network traffic may be routed on the same transceiver since it is not real-time sensitive traffic).
            b) Separate SFP transceiver(s) for the Dante network
            c) Separate SFP transceiver(s) for the Q-Sys network
            d) Separate SFP transceiver(s) for the AVB network

j. HDBase-T equipment are not true Ethernet devices, and connect only to other HDBase-T equipment.
k. Ethernet devices in the system powered by the system's UPS, as specified in Section 27 11 00, Communications Equipment Room Fittings.

6. Clock Synchronization
   a. For EACH IP audio network type, only a single device may be the master world clock source in a given mode.
      1) In modes where the head-end DSP is set to automatically process and mix audio sources, the DSP is the master clock.
      2) In modes where a digital mixing console is utilized, the mixing console the master clock.
   b. Control system programed for clock source switching.

3.10 SOFTWARE AND FIRMWARE

A. Prior to installation of active equipment, update to the most recent stable release version of firmware or software available from the manufacturer.
   1. Verify that known issues listed in the firmware/software release notes will not interfere with the overall system architecture as part of this project.
   2. Where known issues do interfere, coordinate with manufacturer for resolution.

B. Document the final version of firmware and software for equipment installed, in the as-builts and O&M manuals at project closeout.

C. Document the username and passwords for equipment installed, in the as-builts and O&M manuals at project closeout.

3.11 GROUNDING

A. Ground cable shields and equipment to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments.

B. Signal Ground Terminal: Locate at main equipment cabinet. Isolate from power system and equipment grounding.

C. Install grounding electrodes as specified in Division 26, Electrical, documents.

D. Do not use third or fourth wire internal electrical system conductors for ground.

E. Do not connect system ground to the building's external lightning protection system.

F. Do not mix grounds of different systems.

3.12 TRAINING

A. Provide thorough training of the Owner's engineering and maintenance staff. Initial training to take place only after systems test reports have been received and approved, and Design Team proof-of-performance punch has been completed.

B. Provide the following minimum training times and durations:
   1. 8 hours initial, prior to first systems use.
   2. 16 hours during the opening week.
   3. 8 hours, following first few weeks of systems use.

END OF SECTION

POINT TABLE

ID	NORTHING	EASTING
1	127697.31	187956.13
2	127697.63	187963.23
3	127679.21	187953.53
4	127678.34	187961.85
5	127362.23	187379.62
6	127303.27	187361.76
7	127221.71	187393.35
8	127223.09	187384.25
9	127219.65	187384.31
10	127217.98	187383.74
11	127161.72	188054.59
12	127312.47	188053.59
13	127665.34	188051.27
14	127667.39	188032.09
15	127668.24	188024.13
16	127669.53	188012.14
17	127377.03	187494.56
18	127369.44	187475.62
22	127504.61	188052.33
23	127221.52	187598.51
24	127241.99	187601.32
25	127243.53	187601.53
26	127238.40	187600.82
27	127229.73	187656.40
28	127224.75	187655.97
29	127266.14	187644.96
30	127283.25	187646.46
31	127281.39	187666.37
32	127257.64	187664.30
33	127216.28	187752.71
34	127221.26	187753.15
35	127234.42	187788.29
36	127230.87	187791.81
37	127203.00	187715.17
38	127208.31	187654.53
39	127225.14	187691.57
40	127221.49	187801.06
41	127267.81	187847.37
42	127229.63	187885.56
43	127182.75	187839.80
44	127598.46	187844.46

POINT TABLE

ID	NORTHING	EASTING
45	127688.76	187854.07
46	127681.82	187919.25
47	127691.45	187846.30
48	127686.71	187843.81
49	127681.74	187843.28
50	127676.56	187844.73
51	127644.14	187841.27
52	127638.60	187836.69
53	127633.64	187836.15
54	127627.25	187839.48

EXISTING NEIGHBORHOOD "A"

EXISTING NEIGHBORHOOD "B"

EXISTING NEIGHBORHOOD "C"

EXISTING NEIGHBORHOOD "D"

EXISTING NEIGHBORHOOD "E"

EXISTING NEIGHBORHOOD "F"

PROPOSED NEIGHBORHOOD "G"

(9'x7') CONCRETE PAD WITH 5' FILTER STRIP

FILTER STRIP AREA. PROTECT EXISTING VEGETATION

4' GATE

4' GATE WITH PANIC HARDWARE

(4) RISERS

SURVEY CONTROL POINT 83 SEE TABLE

SURVEY CONTROL POINT 82 SEE TABLE

PROPOSED FIRE TRUCK ROUTE

PROPOSED COVERED PLAY AREA

MATCH EXISTING

END AT EXISTING FENCE

G3-GC GRIDLINE INTERSECTION
N 127278.45
E 187732.18

G6-GE GRIDLINE INTERSECTION
N 127223.27
E 187752.95

H1-HC GRIDLINE INTERSECTION
N 127261.32
E 187846.52

H3-HB GRIDLINE INTERSECTION
N 127206.99
E 187861.01

PT #	NORTHING	EASTING	ELEV.
80	127705.592	186838.145	408.22
81	127165.667	186875.119	411.13
82	127253.073	188070.920	410.49
83	127677.509	188062.003	410.59

SHEET NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF WALL.
2. ALL SIDEWALK PAVEMENT JOINTS SHALL BE CONSTRUCTED PER DETAIL 11/C5.0.

KEY NOTES

#	DESCRIPTION	DETAIL REF.
1	SAWCUT LINE, MATCH EXISTING	
2	STANDARD CURB	2/C5.0
3	RAISED CONCRETE CROSSING	3/C5.2
4	WHEEL STOP	5/C5.0
5	MOUNTABLE CURB	4/C5.0
6a	ADA PARKING STALLS AND STRIPING	7/C5.0
6b	'NO PARKING" ZONE STRIPING	7/C5.0
6c	4" WIDE WHITE STRIPE	7/C5.0
6d	WHITE 6" THERMOPLASTIC STRIPING	
7	ADA PARKING SIGN	8/C5.0
8	STAIRS WITH EQUALLY SIZED RISERS. NUMBER OF RISERS AS INDICATED.	1/C5.2
9	CURB RAMP	
10	CONCRETE PLANTER WALL	5/C5.1
11	4' BLACK POLYMER COATED FENCE WITH MOW STRIP	9/C5.0
12	MOW STRIP, WIDTH AS NOTED	10/C5.0
13	CONNECT TO EXISTING SITE WALL WITH DOWELS. MATCH EXISTING WALL HEIGHT AND FINISH.	
14	6' GALVANIZED STEEL FENCE WITH MOW STRIP	9/C5.0
15	INSTALL 6" WIDE, 12" LONG RED DASHES AT 8' O.C. TO MARK FIRE LANE ON ASPHALT PLAY AREA	
16	GATE. HEIGHT TO MATCH FENCE. WIDTH AS SHOWN	9/C5.0
17	INSTALL CONCRETE PAD AT EXISTING DOOR	1/C5.0
18	CONCRETE SEAT WALL. SEE LANDSCAPE PLANS.	
19	INSTALL NO PARKING FIRE LANE SIGN	4/C5.2
20	CONCRETE SPLASH PAD	12/C5.1
21	BIKE SHELTER WITH BLACK POLYMER COATED FENCE. SEE ARCHITECTUAL PLANS FOR BIKE SHELTER	

SHEET LEGEND

- PROPERTY LINE
- FILTER STRIP — 7/C5.1
- STORMWATER PLANTER — 3/C5.1
- CONCRETE SIDEWALK — 1/C5.0
- HEAVY CONCRETE PAVEMENT — 2/C5.0
- ASPHALT PAVEMENT — 3/C5.0
- REINFORCED LAWN — 6/C5.0
- LANDSCAPE REPAIR, SEE LANDSCAPE PLANS.
- (#) ALTERNATE (SEE PLANS FOR NUMBER)

SCALE 1 INCH = 30 FEET (30 0 30 60)

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REGISTERED PROFESSIONAL ENGINEER
56481
DIGITALLY SIGNED
OREGON
JUL. 19, 2005
MATTHEW M. KEENAN
EXPIRATION DATE: 6/30/2021

kpff
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REVISIONS

1	PERMIT RESPONSE	02/19/2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20245
ISSUE DATE: 26 JANUARY 2021

HORIZONTAL CONTROL & PAVING PLAN

C2.0

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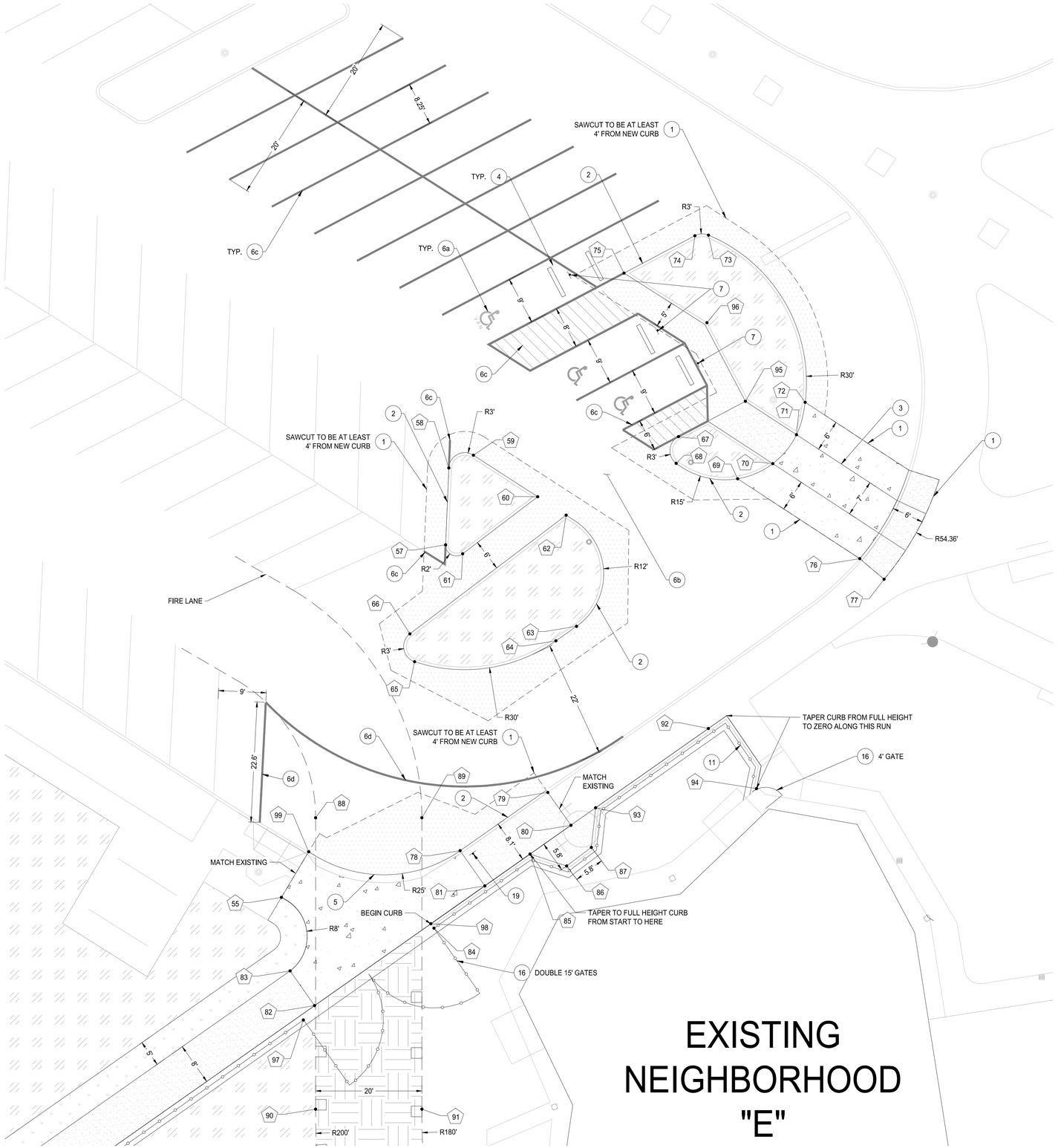
File: D:\C\p\2020\2000135-4\SD-Gilham-Elem\CAD\PLOT\000135-02HC.dwg TABC2.0
Plotted: 2/24/21 at 10:13pm By: ABeckus

POINT TABLE

ID	NORTHING	EASTING
55	127447.42	187465.52
57	127513.77	187496.42
58	127528.24	187497.03
59	127530.64	187501.66
60	127522.82	187513.75
61	127512.09	187499.63
62	127519.36	187519.11
63	127498.44	187521.06
64	127495.71	187517.18
65	127491.78	187490.59
66	127497.01	187489.71
67	127534.15	187540.25
68	127529.11	187539.82
69	127526.21	187551.38
70	127529.05	187558.00
71	127534.50	187562.46
72	127540.60	187564.09
73	127572.07	187545.89
74	127571.96	187543.34
75	127564.92	187530.00
76	127511.18	187574.37
77	127507.29	187578.94
78	127456.20	187499.15
79	127467.17	187515.66
80	127460.98	187520.01
81	127449.58	187503.81
82	127427.04	187471.75
83	127433.58	187467.15
84	127441.62	187494.22
85	127455.56	187512.31
86	127453.33	187519.21
87	127456.82	187523.85
88	127462.39	187471.96
89	127462.39	187491.96
90	127407.55	187471.96
91	127407.55	187491.96
92	127479.20	187545.88
93	127464.28	187524.66
94	127467.89	187554.93
95	127540.79	187552.85
96	127555.58	187545.61
97	127424.33	187469.64
98	127442.45	187493.64
99	127456.00	187470.65



EXISTING NEIGHBORHOOD "E"

SHEET NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF WALL.
2. ALL SIDEWALK PAVEMENT JOINTS SHALL BE CONSTRUCTED PER DETAIL 11/C5.0.

KEY NOTES

#	DESCRIPTION	DETAIL REF.
1	SAWCUT LINE, MATCH EXISTING	
2	STANDARD CURB	2/C5.0
3	RAISED CONCRETE CROSSING	3/C5.2
4	WHEEL STOP	5/C5.0
5	MOUNTABLE CURB	4/C5.0
6a	ADA PARKING STALLS AND STRIPING	7/C5.0
6b	'NO PARKING" ZONE STRIPING	7/C5.0
6c	4" WIDE WHITE STRIPE	7/C5.0
6d	WHITE 6" THERMOPLASTIC STRIPING	
7	ADA PARKING SIGN	8/C5.0
8	STAIRS WITH EQUALLY SIZED RISERS. NUMBER OF RISERS AS INDICATED.	1/C5.2
9	CURB RAMP	
10	CONCRETE PLANTER WALL	5/C5.1
1 11	4' BLACK POLYMER COATED FENCE WITH MOW STRIP	9/C5.0
12	MOW STRIP, WIDTH AS NOTED	10/C5.0
13	CONNECT TO EXISTING SITE WALL WITH DOWELS. MATCH EXISTING WALL HEIGHT AND FINISH.	
1 14	6' GALVANIZED STEEL FENCE WITH MOW STRIP	9/C5.0
15	INSTALL 6" WIDE, 12" LONG RED DASHES AT 8' O.C. TO MARK FIRE LANE ON ASPHALT PLAY AREA	
16	GATE. HEIGHT TO MATCH FENCE. WIDTH AS SHOWN	9/C5.0
17	INSTALL CONCRETE PAD AT EXISTING DOOR	1/C5.0
18	CONCRETE SEAT WALL. SEE LANDSCAPE PLANS.	
19	INSTALL NO PARKING FIRE LANE SIGN	4/C5.2
20	CONCRETE SPLASH PAD	12/C5.1
21	BIKE SHELTER WITH BLACK POLYMER COATED FENCE. SEE ARCHITECTUAL PLANS FOR BIKE SHELTER	

SHEET LEGEND

- PROPERTY LINE
- FILTER STRIP — 7/C5.1
- STORMWATER PLANTER — 3/C5.1
- CONCRETE SIDEWALK — 1/C5.0
- HEAVY CONCRETE PAVEMENT — 2/C5.0
- ASPHALT PAVEMENT — 3/C5.0
- REINFORCED LAWN — 6/C5.0
- LANDSCAPE REPAIR. SEE LANDSCAPE PLANS.
- # ALTERNATE (SEE PLANS FOR NUMBER)

SCALE 1 INCH = 10 FEET
10 0 10 20

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REGISTERED PROFESSIONAL ENGINEER 56481 DIGITALLY SIGNED OREGON JUL. 19, 2005 MATTHEW M. KEENAN

EXPIRATION DATE: 6/30/2021

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REVISIONS

1	PERMIT RESPONSE	02/19/2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20245
ISSUE DATE: 26 JANUARY 2021

HORIZONTAL CONTROL & PAVING PLAN

C2.1

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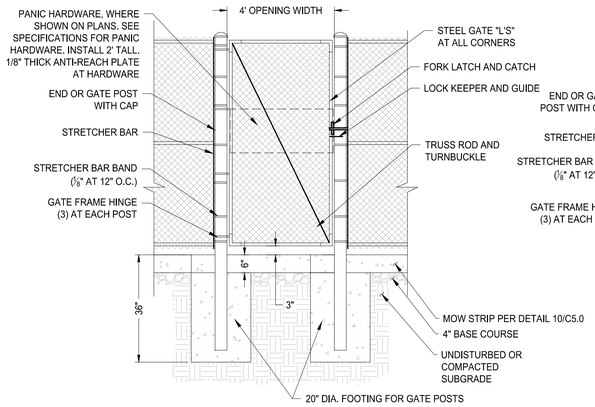
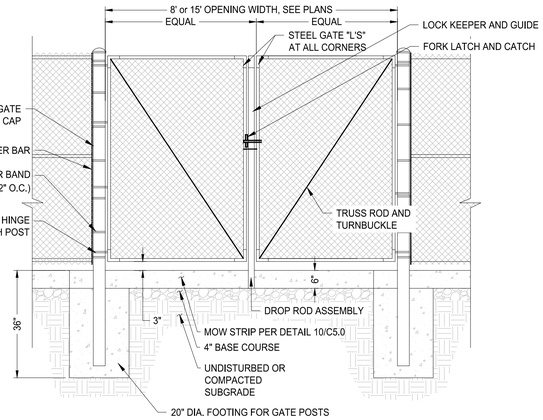
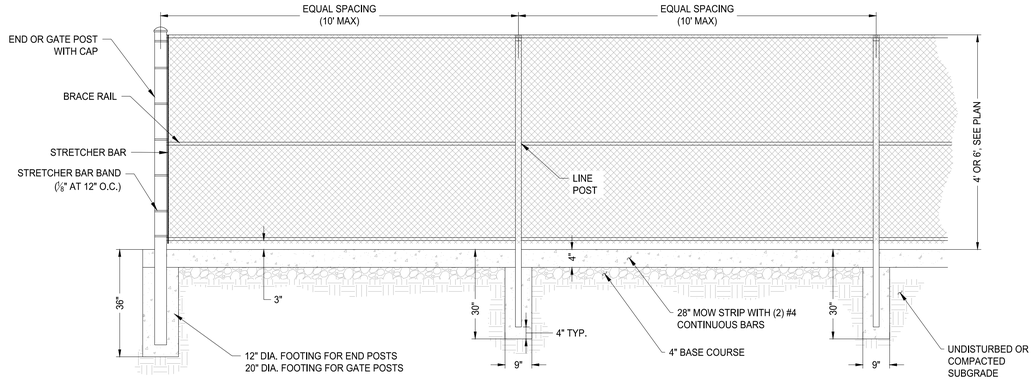


SINGLE SWING GATE



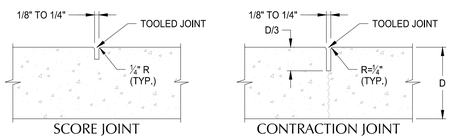
DOUBLE SWING GATE

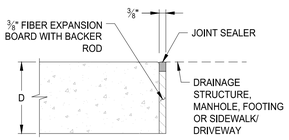


CHAIN LINK FENCE

FENCING NOTES:
1. COORDINATE LAYOUT WITH CONCRETE WORK.
2. SUBMIT SHOP DRAWINGS PER SPECIFICATIONS.
3. INSTALL BOTTOM RAIL 3" ABOVE GRADE AND BOTTOM OF CHAIN LINK 2" ABOVE GRADE.
4. CHAIN LINK TO BE GALVANIZED STEEL OR BLACK POLYMER COATED. SEE PLANS FOR TYPE. 1

9 CHAIN LINK FENCING & GATES
SCALE: NTS





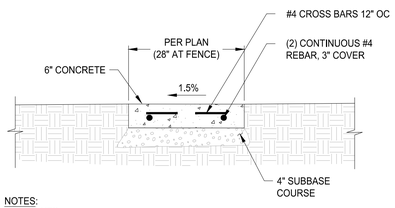
JOINT INTERVALS TABLE

TYPE	SPACING	OR AT...
SCORE	5' TYP.	LOCATIONS SHOWN ON PLANS
CONTRACTION	15' MAX.	END OF RAMPS AND DRIVEWAYS
EXPANSION/ ISOLATION	200' *	POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY OR OTHER FIXED OBJECTS

* MONOLITHIC CURB AND SIDEWALK SHALL BE 45' MAX.

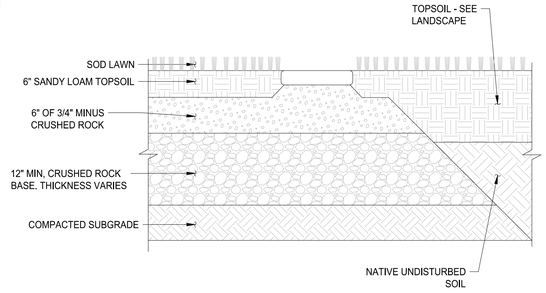
NOTES:
1. CONTRACTION JOINTS MAY BE USED IN PLACE OF SCORE JOINTS.
2. CONSTRUCTION COLD JOINTS MAY BE USED IN PLACE OF CONTRACTION JOINTS.
3. PROVIDE MEDIUM BROOM FINISH WITH NO TOOL MARKS.

11 SIDEWALK JOINTS
SCALE: NTS

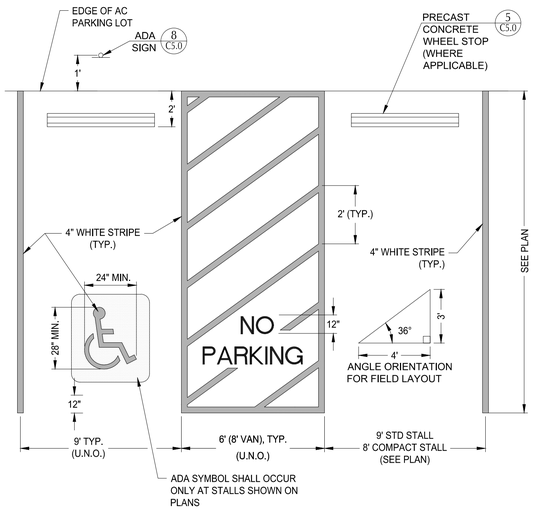


NOTES:
1. JOINTS:
   - CONSTRUCT SCORE JOINTS AT 3' MAX. SPACING AND CONTRACTION JOINTS AT 12' MAX. SPACING.
2. PROVIDE MEDIUM TO COARSE BROOM FINISH.

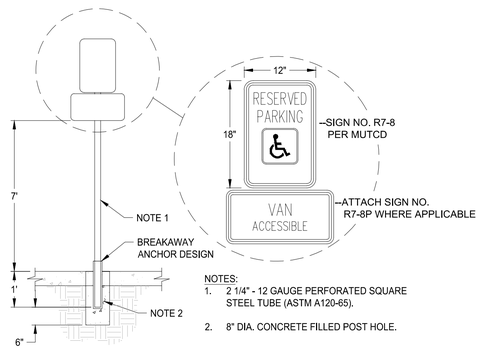
10 MOW STRIP
SCALE: NTS



6 REINFORCED LAWN WITH PAVERS
SCALE: NTS

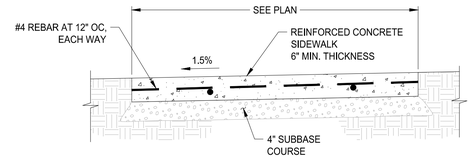


7 TYPICAL PARKING LAYOUT
SCALE: NTS



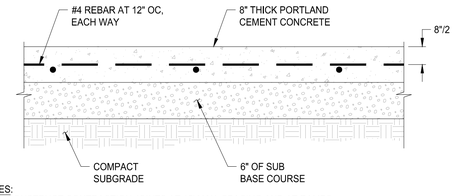
NOTES:
1. 2 1/4" - 12 GAUGE PERFORATED SQUARE STEEL TUBE (ASTM A120-65).
2. 8" DIA. CONCRETE FILLED POST HOLE.

8 ADA PARKING SIGN
SCALE: NTS



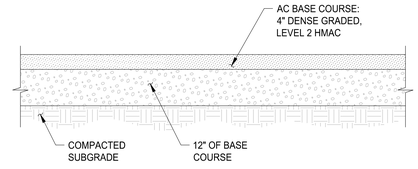
NOTES:
1. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS. CONSTRUCT EXPANSION JOINTS AT 200' MAX SPACING, AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY, UNLESS NOTED OTHERWISE.

1 CONCRETE SIDEWALK
SCALE: NTS

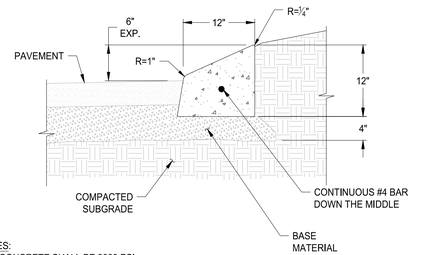


NOTES:
1. - CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS.
   - CONSTRUCT EXPANSION JOINTS AT 200' MAX. SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY.
2. PROVIDE MEDIUM TO COARSE BROOM FINISH.

2 HEAVY CONCRETE PAVEMENT SECTION
SCALE: NTS

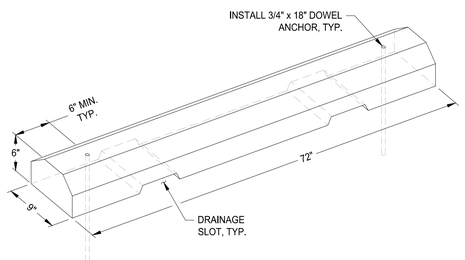


3 ASPHALT PAVEMENT SECTION
SCALE: NTS



NOTES:
1. CONCRETE SHALL BE 3000 PSI.
2. INSTALL CONTRACTION AND EXPANSION JOINTS AT SPECIFIED DISTANCE.

4 CONCRETE CURB - MOUNTABLE
SCALE: NTS



NOTES:
1. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM TO MANUFACTURER'S PRODUCTS APPROVED BY ENGINEER.

5 PRECAST CONCRETE WHEEL STOP
SCALE: NTS

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REGISTERED PROFESSIONAL ENGINEER 56481 DIGITALLY SIGNED OREGON JUL. 19, 2005 MATTHEW M. KEENAN
EXPIRATION DATE: 6/30/2021

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REVISIONS
1 PERMIT RESPONSE 02/19/2021

GILHAM ELEMENTARY SCHOOL PHASE 02
3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20245
ISSUE DATE: 26 JANUARY 2021

CIVIL DETAILS

C5.0

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File: D:\cv\2020\2000135-4.SD-Gilham-Elem\CAD\PLOT\000135-05DT.dwg TABC5.0
Plotted: 2/24/21 at 10:13pm By: ABackus

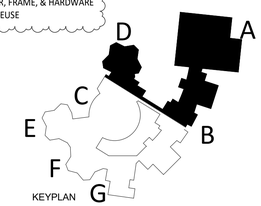
1 DEMOLITION FLOOR PLAN - NORTH
1/16" = 1'-0"

LEGEND

NO WORK

KEYNOTES

1. DEMOLISH ASPHALT PAVING AS REQUIRED BY NEW WORK
2. DEMOLISH BIKE RACKS, SALVAGE TO OWNER
3. DEMOLISH OPERABLE PARTITION & OVERHEAD TRACK
4. DEMOLISH WALL AS REQ'D BY NEW WORK
5. DEMOLISH BRICK COLUMN SURROUND
6. DEMOLISH STOREFRONT FRAME & GLAZING, AS REQ'D BY NEW WORK
7. DEMOLISH DOOR, FRAME & HARDWARE, SALVAGE TO OWNER UNLESS OTHERWISE NOTED
8. FLOOR FINISH DEMOLITION BY OTHERS, COORDINATE WITH ABATEMENT CONTRACTOR
9. DEMOLISH CONCRETE STEMWALL & MASONRY SHELF AS REQ'D FOR (N) OPENING - SEE STRUCTURAL
10. DEMOLISH CONCRETE FOUNDATION @ MASONRY VENEER TO FLUSH W/ (N) CONCRETE SLAB ON GRADE, MAINTAIN FOOTING BELOW (E) HSS COLUMN ANCHOR PLATE - SEE STRUCTURAL
11. DEMOLISH INGROUND SUMP PUMP, SEE PLUMBING
12. (E) STEEL COLUMN TO REMAIN
13. DEMOLISH FLOOR & WALL FINISH AND SUBSTRATE AS REQ'D FOR (N) WORK
14. CASEWORK DEMOLITION BY OTHERS, COORDINATE WITH ABATEMENT CONTRACTOR
15. DEMOLISH MARKERBOARD, SMARTBOARD W/ MOUNT AND/OR SHORT-THROW PROJECTOR W/ MOUNT, SALVAGE TO OWNER
16. DASHED LINE INDICATES EXTENT INTERIOR WALL FINISH & INSULATION DEMOLITION BY OTHERS THIS SECTION OF WALL, COORDINATE WITH ABATEMENT CONTRACTOR (1)
17. SINK DEMOLITION BY OTHERS, COORDINATE WITH ABATEMENT CONTRACTOR
18. DEMOLISH EXTERIOR FINISHES & WALL SHEATHING TO STUD, SEE STRUCTURAL
19. DEMOLISH PORTION/WALL AS REQ'D BY NEW WORK
20. DEMOLISH AS REQ'D FOR (N) OPENING TO MECHANICAL ROOM ABOVE- SEE FLOOR PLANS
21. DEMOLISH FLOOR FINISH & BASE
22. DEMOLISH ACOUSTIC CEILING GRID AS REQ'D BY (N) WORK
23. DEMOLISH LIGHT FIXTURE
24. DEMOLISH SUSPENDED BASKETBALL HOOP ASSY AND BLOCKING AT ROOF FRAMING
25. DEMOLISH WALL AS REQ'D BY NEW WORK
26. DEMOLISH MASONRY VENEER
27. DEMOLISH BOLLARD
28. DEMOLISH DOWNSPOUT BELOW, DRAIN TO GRADE, SEE ALSO CIVIL, PLUMB'G
29. DEMOLISH BIRD SPIKES @ TOP/MASONRY
30. INTERIOR WALL FINISH (BOTH SIDES) & INSULATION DEMOLITION BY OTHERS THIS SECTION OF WALL, COORDINATE WITH ABATEMENT CONTRACTOR
31. DEMOLISH GRID AND CEILING TILES AS REQ'D FOR ABATEMENT DEMOLITION, SALVAGE FOR REINSTALLATION COORDINATE WITH ABATEMENT CONTRACTOR
32. DISCONNECT AV CABLING AS REQ'D, SALVAGE AND PROTECT FOR RECONNECTION, SEE ELECT
33. NOT USED
34. DEMOLISH DOOR, FRAME, & HARDWARE -SALVAGE FOR REUSE



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REVISIONS

1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

DEMOLITION FLOOR PLAN - NORTH

AD1.21

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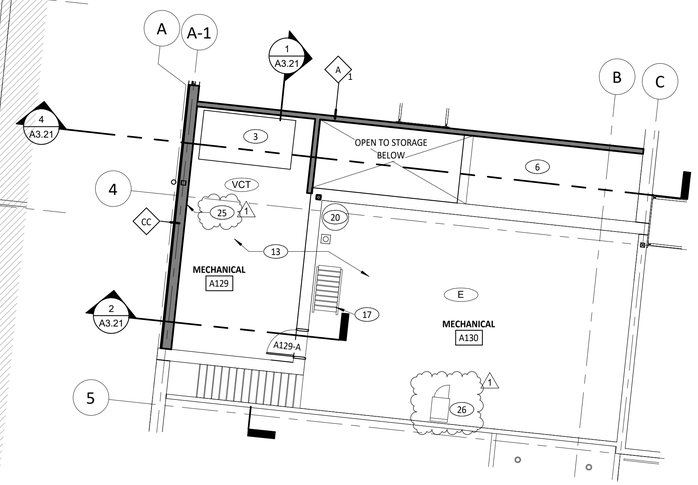
LEGEND

NO WORK

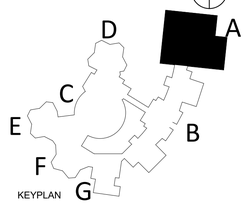
KEYNOTES

1. WALL-MOUNTED FOLDAWAY SINGLE-DROP BASKETBALL HOOP W/ TEMPERED GLASS BACKBOARD
2. ROOF OVERHANG ABOVE
3. APPROX. LOCATION/ (N) HVAC EQUIPMENT, SEE MECHANICAL
4. (E) COURT MARKINGS AT A101 GYM
5. WALL-MOUNT FOLD-AWAY VERTICAL BIKE RACK
6. PLYWOOD FLR OVER 2x6 CEILING FRAMING, SEE STRUCTURAL
7. PROVIDE 4" HIGH STENCIL LETTERING @ TOP/WALL 'NO STORAGE ABOVE'
8. WINDOW ABOVE, SEE ELEVATIONS
9. COURT MARKINGS @ AUX GYM
10. COORDINATE W/ (N) HVAC WORK
11. DOWNSPOUT, SEE PLUMBING
12. DEPRESSED SLAB BELOW FINISH FLOOR SYSTEM @ GYM, SEE STRUCTURAL & DETAILS
13. VERIFY LEVEL OF (N) DECK FLUSH W/ (E)
14. SOLID BLACK WINDOW FILM @ (E) WINDOW
15. LSL STUDS THIS WALL, SEE STRUCTURAL
16. PATCH WALL, FLOOR AND BASE AS REQ'D @ NEW OPENING
17. (E) ROOF ACCESS STAIRS TO REMAIN
18. ROOM NAME/NUMBER SIGNAGE TYPE D
19. SEMI-RECESSED FIRE EXTINGUISHER CABINET
20. (E) WATER HEATER TO REMAIN, SEE PLUMBING
21. WALL MOUNT PROJECTOR SCREEN, SEE ALSO TECHNOLOGY
22. CONCRETE STAIR & LANDING, SEE CIVIL
23. AREA DRAIN, SEE CIVIL
24. POINT OF USE WATER HEATER, SEE PLUMBING
25. OMIT MDO WALL FINISH, THIS WALL
26. AV EQUIPMENT CABINET APPROX. LOCATION, SEE ALSO TECHNOLOGY & ELECTRICAL
27. PATCH FINISHES AS REQ'D BY (N) WORK

1 PARTIAL FIRST FLOOR PLAN - A-BUILDING
1/8" = 1'-0"



2 A BUILDING MECHANICAL ROOM PLAN
1/8" = 1'-0"



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PARTIAL FLOOR PLAN A-BUILDING

A2.12

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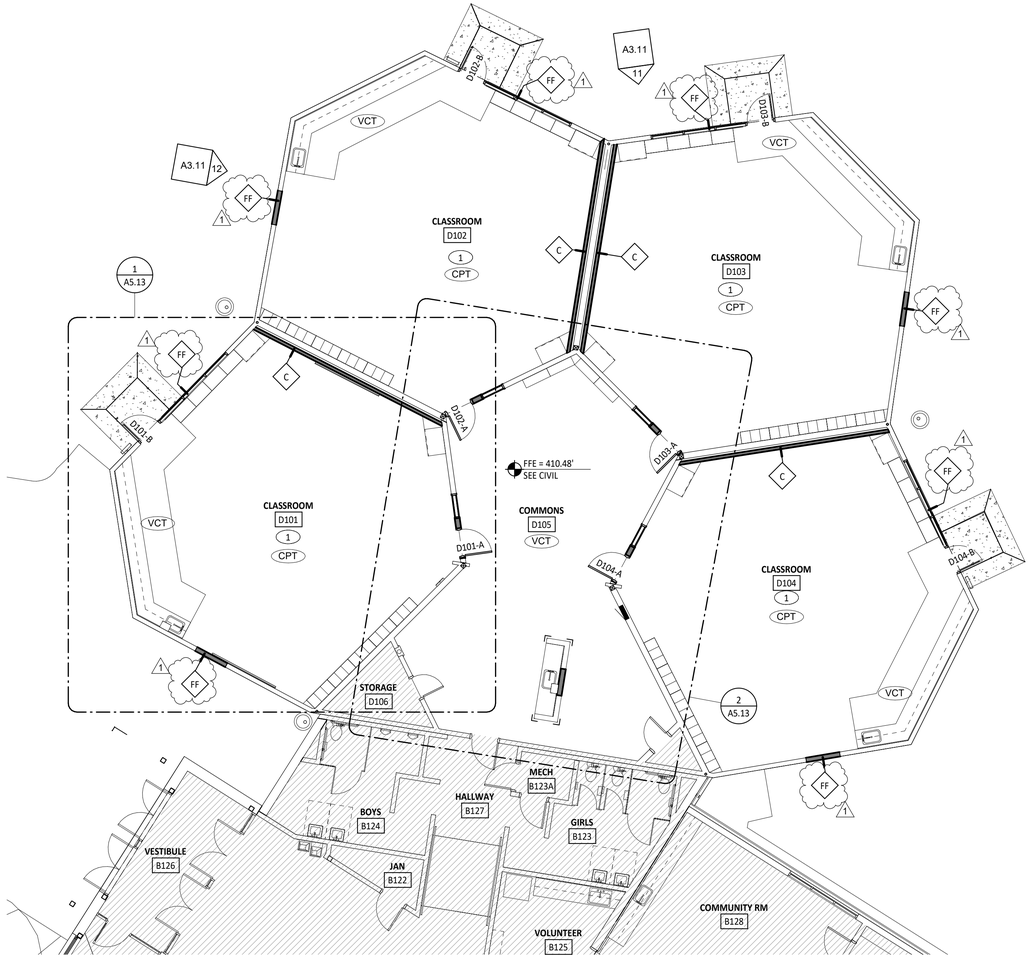
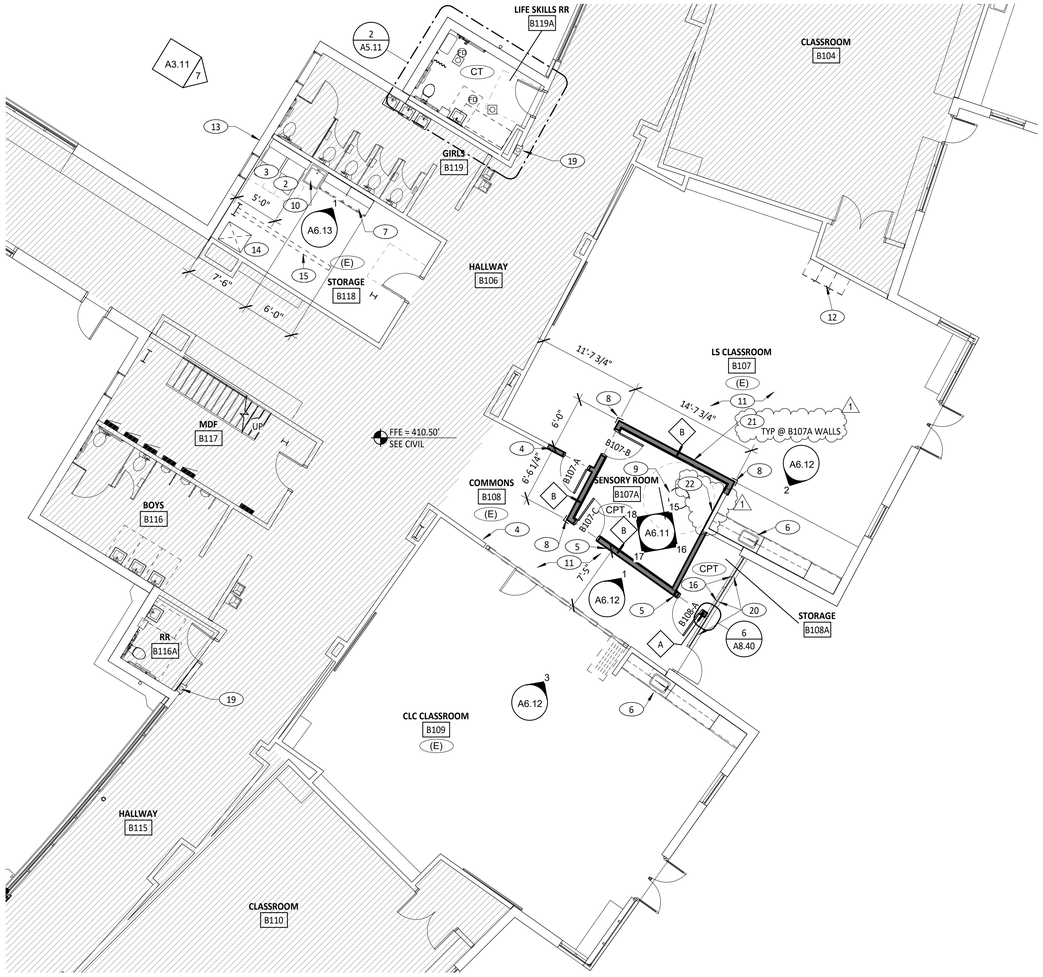


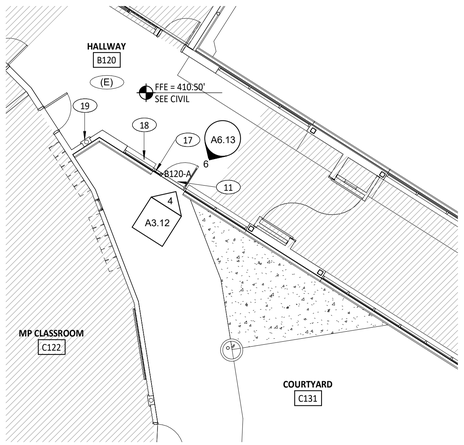
1 PARTIAL FIRST FLOOR PLAN - D POD

1/8" = 1'-0"



2 PARTIAL FIRST FLOOR PLAN - MULTIPURPOSE

1/8" = 1'-0"



3 PARTIAL FIRST FLOOR PLAN - COURTYARD ENTRY

1/8" = 1'-0"

KEYNOTES

1. REFER TO CLASSROOM PLAN A5.13, SIM
2. ADA COMPLIANT CLOTHES WASHER
3. ADA COMPLIANT CLOTHES DRYER
4. ROOM NAME/NUMBER SIGNAGE TYPE D
5. ROOM NAME/NUMBER SIGNAGE TYPE C
6. (E) CASEWORK & SINK TO REMAIN
7. CASEWORK, SEE ELEVATIONS
8. SS CORNER GUARD, SEE ELEVATIONS
9. OWNER-FURNISHED SENSORY SWING ON CONTRACTOR INSTALLED CEILING MOUNT, SEE REFLECTED CEILING PLAN
10. UTILITY SINK W/ GOOSENECK FAUCET
11. PATCH FLOOR COVERING & BASE AS REQ'D @ (N) WALLS
12. RELOCATE CASEWORK
13. DRYER LOUVER VENT @ (E) EXTERIOR WALL, SEE MECH
14. EXPOSED (E) HVAC DUCTWORK
15. (E) DIAGONAL STEEL HSS BRACE FRAME
16. PROVIDE (N) GLAZING FILM @ (E) GLAZING
17. (N) STOREFRONT ASSY @ (E) ASSY, SEE ELEVATIONS
18. PATCH WALL FINISH AS REQ'D
19. (E) FEC TO REMAIN
20. (E) SAFETY GLAZING

1 21. EXTEND WALL ASSY TO UNDERSIDE/(E) STRUCTURE
-PROVIDE ACOUSTIC SEALANT @ BASE/GYP BD, TYP EA SIDE/WALL

22. (N) RESILIENT CHANNEL & GYB BD FINISH @ (E) WALL
-ALIGN W/(N) WALL FINISH

LEGEND

NO WORK

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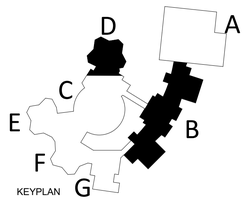
PARTIAL FLOOR PLANS



A2.13

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KEYNOTES

1. EXTERIOR LED WALL PACK LIGHT FIXTURE
2. OPEN TO STRUCTURE
3. SUSPENDED 5/8" TYPE 'X' GYP BD & GRID CEILING ASSY
4. SUSPENDED ACOUSTICAL TILE & GRID CEILING ASSY
5. PATCH EXISTING HEADWALL TO REMAIN
6. SEISMIC JOINT SEPARATION COVER
7. PATCH CEILING GRID WHERE DEMOLITION OCCURS
8. 5/8" TYPE 'X' GYP BD @ UNDERSIDE OF STRUCTURE
9. 1'X1' GLUE-UP ACOUSTICAL TILE CEILING ASSY, ACT-3 @ (E) CEILING
10. HEADWALL @ 9'-0" AFF
11. CEILING AT 9'-8" AFF AT LOWER LANDING OF RAMP
12. PATCH (E) CEILING AS REQ'D WHERE WORK OCCURS, SEE MEP
13. LABEL BOTH SIDES/WALL W/ 4" HIGH LETTERS @ 8' OC ABOVE CEILING ASSY "2-HOUR FIRE RATED WALL"

1 PARTIAL REFLECTED CEILING PLAN G-BUILDING
1/8" = 1'-0"

2 PARTIAL RCP G-BUILDING MECHANICAL PENTHOUSE
1/8" = 1'-0"

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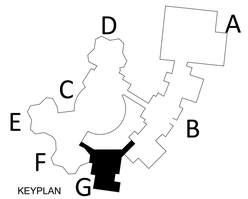
PARTIAL REFLECTED CEILING PLAN G-BUILDING

A2.21



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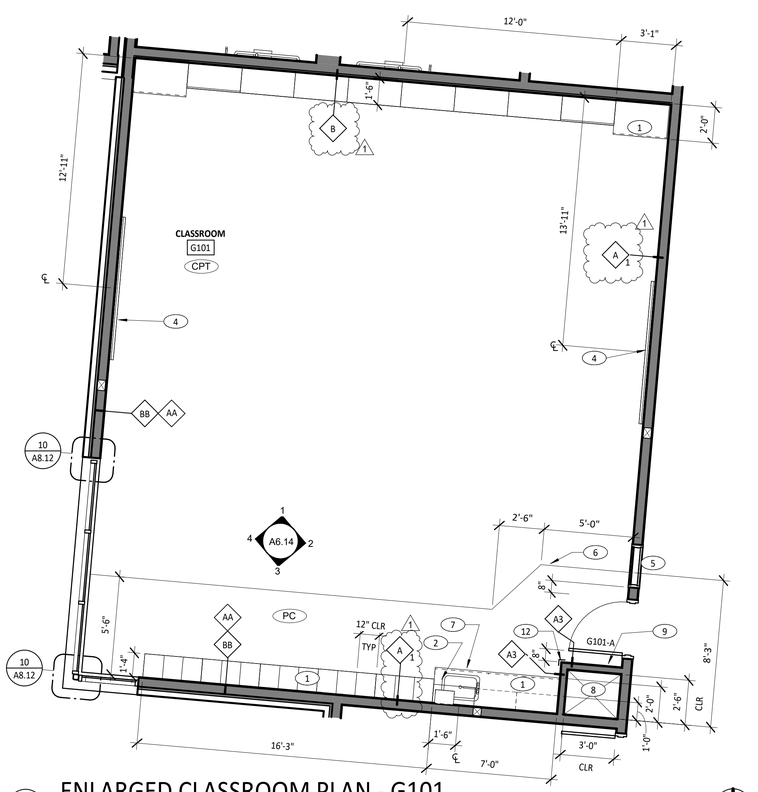
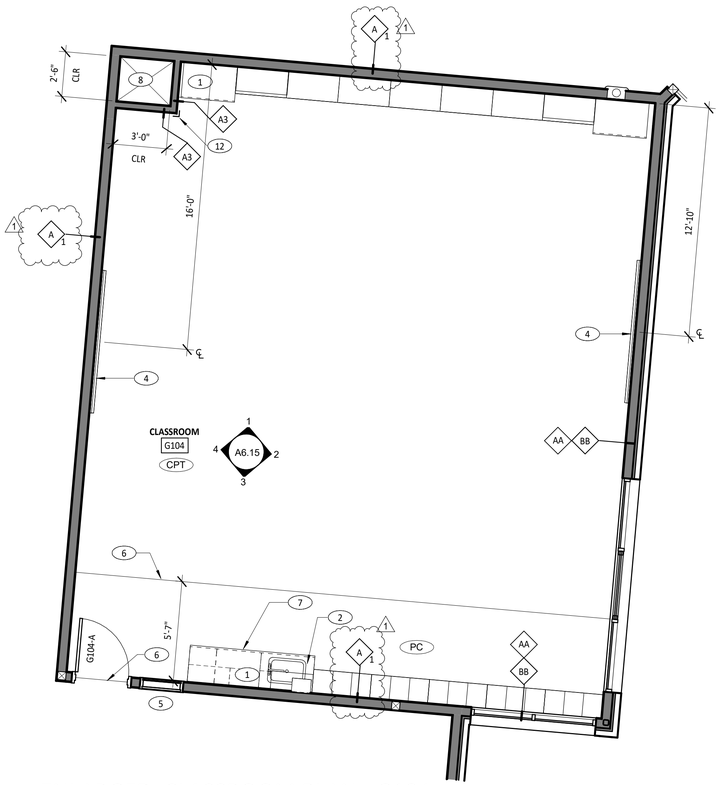
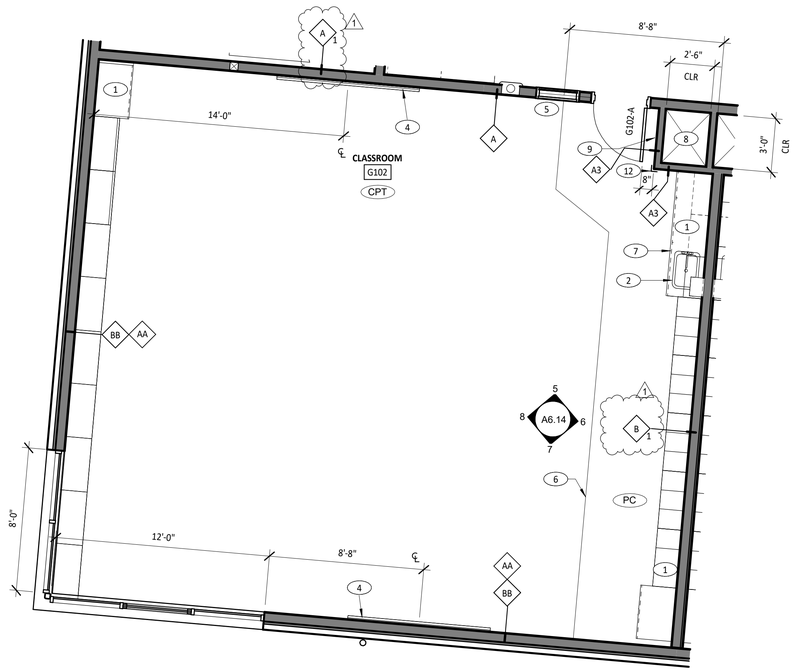


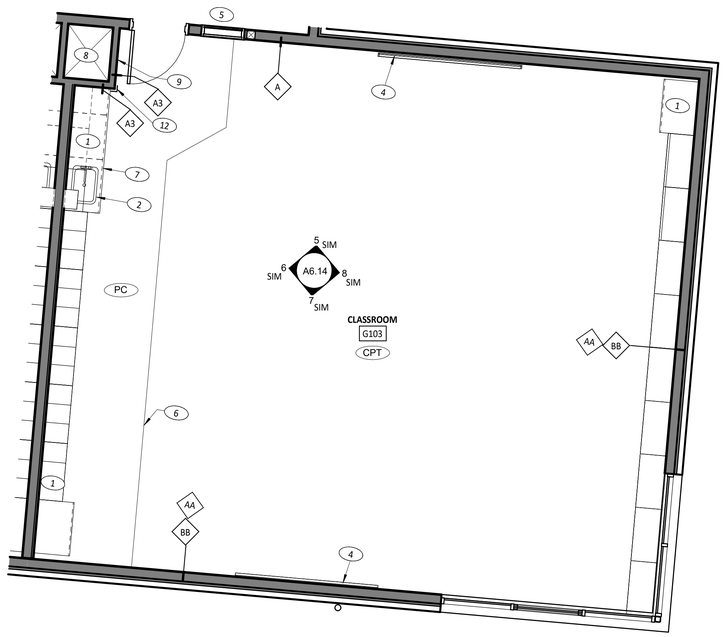
1 ENLARGED CLASSROOM PLAN - G101
1/4" = 1'-0"



3 ENLARGED CLASSROOM PLAN - G104
1/4" = 1'-0"



2 ENLARGED CLASSROOM PLAN - G102 (G103 SIM)
1/4" = 1'-0"



4 ENLARGED CLASSROOM PLAN - G103
1/4" = 1'-0"

KEYNOTES

1. CASEWORK, SEE ELEVATIONS
2. CLASSROOM SINK W/ GOOSENECK FAUCET & BUBBLER, SEE PLUMBING
3. ROOM NAME/NUMBER SIGNAGE TYPE C
4. TEACHING WALL, SEE ELEVATIONS
5. RELITE, SEE ELEVATIONS
6. FLOOR FINISH TRANSITION
7. CONTIN. FLOOR FINISH BELOW CASEWORK
8. OMIT GB AT INSIDE OF HVAC CHASE
9. LOW WALL RETURN GRILLE, SEE MECHANICAL
10. ALUMINUM SHIP'S LADDER
11. FLOOR SINK, SEE PLUMBING
12. SS CORNERGUARD, SEE ELEVATIONS

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JOB NO: 20235
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ENLARGED PLANS

A5.12

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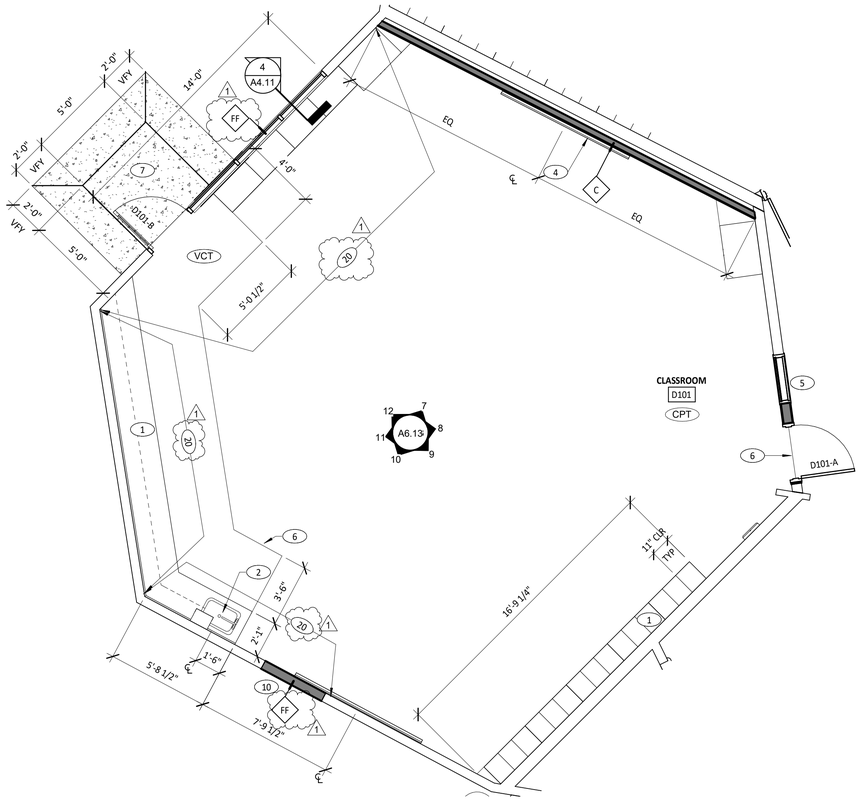
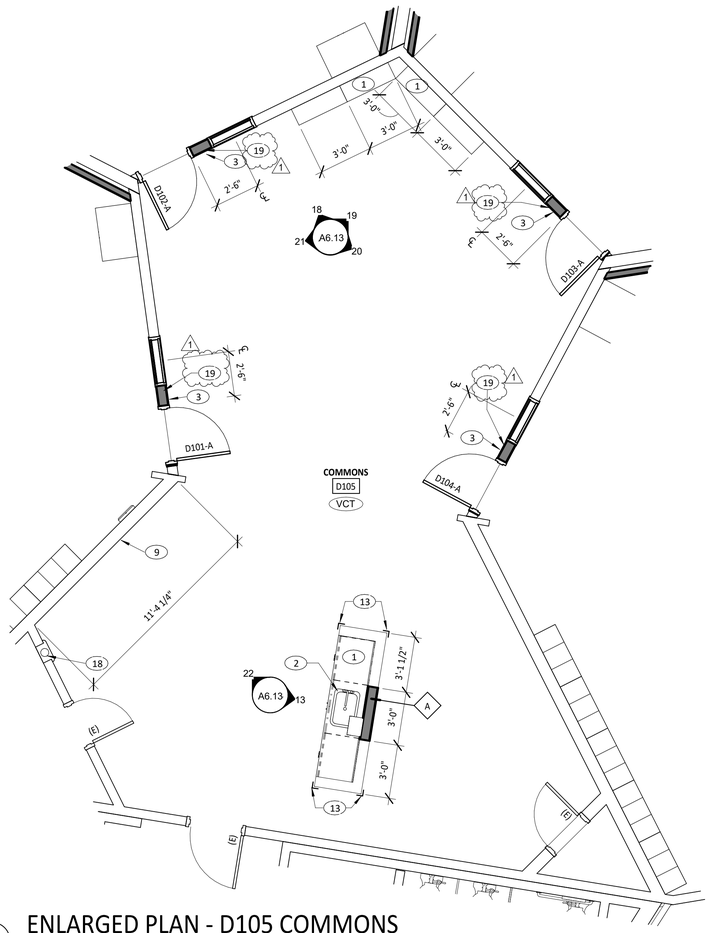


1 ENLARGED CLASSROOM PLAN - D101

1/4" = 1'-0"

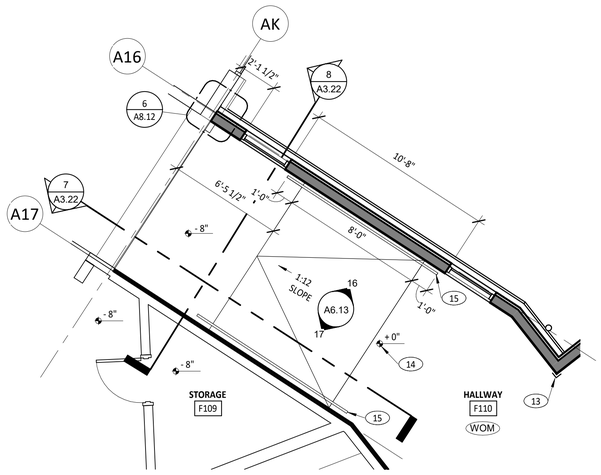


2 ENLARGED PLAN - D105 COMMONS

1/4" = 1'-0"

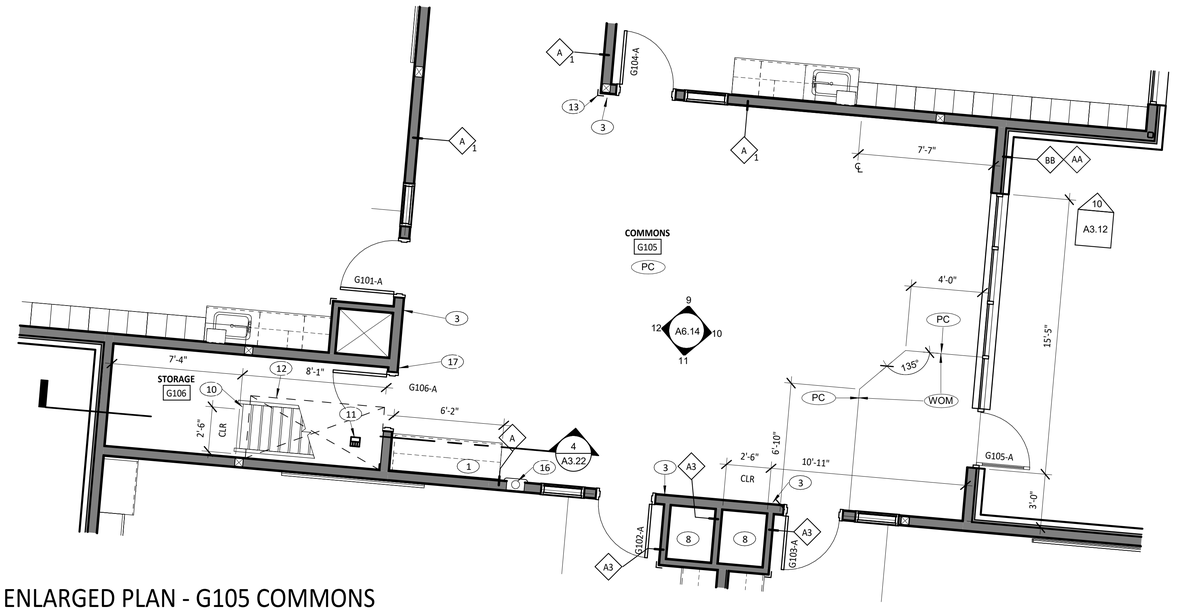
KEYNOTES

1. CASEWORK, SEE ELEVATIONS
2. CLASSROOM SINK W/ GOOSENECK FAUCET & BUBBLER, SEE PLUMBING
3. ROOM NAME/NUMBER SIGNAGE TYPE C
4. TEACHING WALL, SEE ELEVATIONS
5. RELITE, SEE ELEVATIONS
6. FLOOR FINISH TRANSITION
7. CONCRETE DOOR LANDING, SEE TYP DETAIL 5 - A8.10
8. (E) CLOCK SYSTEM TO REMAIN
9. OFOI WALL MONITOR
10. INFILL OPENING
11. FLOOR SINK, SEE PLUMBING
12. OPEN ABOVE
13. SS CORNER GUARD, SEE ELEVATIONS
14. INDICATES APPROX ELEVATION RELATIVE TO FFE NOTED @ BUILDING G CLASSROOMS
15. STEEL PIPE HANDRAIL W/PAINT SYSTEM FINISH
16. SEMI-RECESSED FIRE EXTINGUISHER CABINET
17. ROOM NAME/NUMBER SIGNAGE TYPE D
18. (E) FEC TO REMAIN
19. (N) WALL ASSY
    -2x4 NOM WD STUD @ 16" OC W/ 5/8" TYPE 'X' GYP BD EA SIDE, PS WALL FINISH
    -ALIGN FINISHES EA SIDE/(N) WALL W/(E) ADJACENT WALL
    -SEE ALSO INTERIOR ELEVATIONS
20. (N) 5/8" TYPE 'X' GYP BD WALL FINISH @ (E) WALL FRAMING
    -PROVIDE VAPOR BARRIER
    -SEE ALSO INTERIOR ELEVATIONS



3 ENLARGED HALLWAY F110 PLAN

1/4" = 1'-0"



4 ENLARGED PLAN - G105 COMMONS

1/4" = 1'-0"

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ENLARGED PLANS

A5.13

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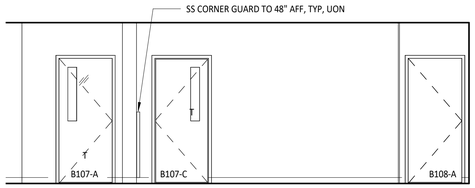
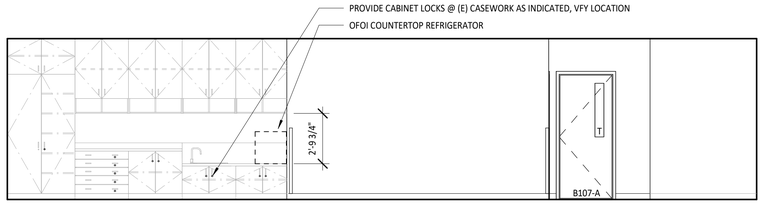
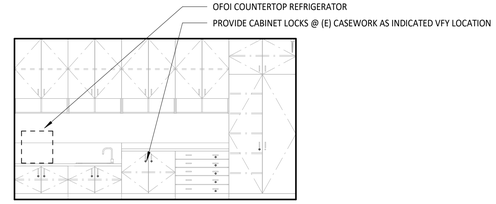


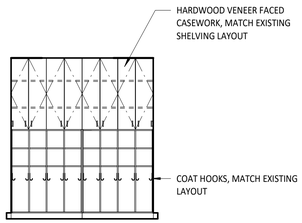
1 B108 COMMONS - NORTH EAST
1/4" = 1'-0"



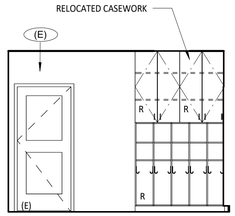
2 B107 LS CLASSROOM - SOUTH
1/4" = 1'-0"



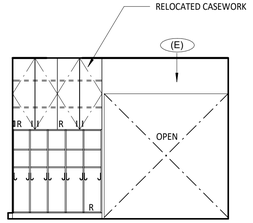
3 B109 CLC CLASSROOM - NORTH EAST
1/4" = 1'-0"



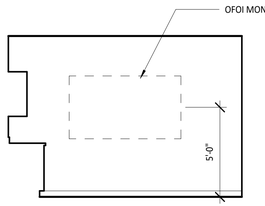
4 B111 - NORTH EAST
1/4" = 1'-0"



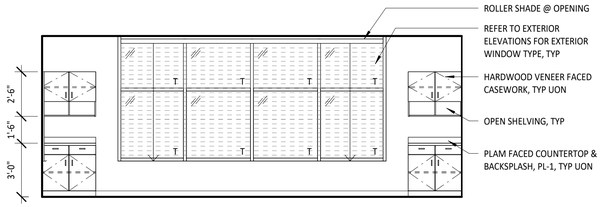
5 B111 - NORTH WEST
1/4" = 1'-0"



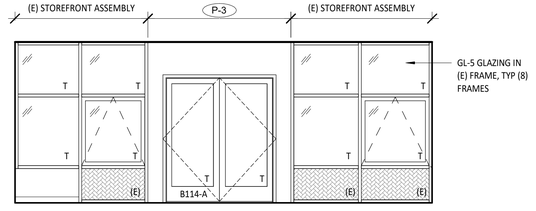
6 B111 - SOUTH EAST
1/4" = 1'-0"



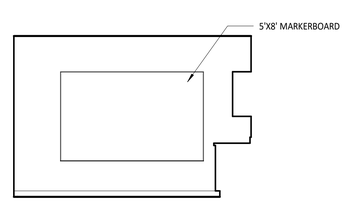
7 B114A FLEX - NORTH EAST
1/4" = 1'-0"



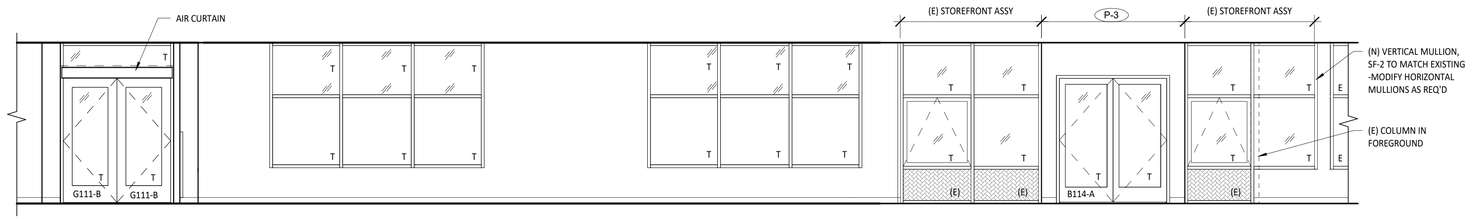
8 B114A FLEX - NORTH WEST
1/4" = 1'-0"



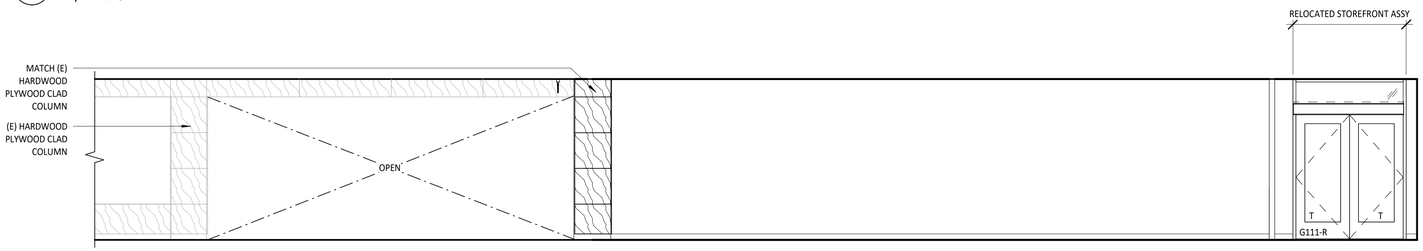
9 B114A FLEX - SOUTH EAST
1/4" = 1'-0"



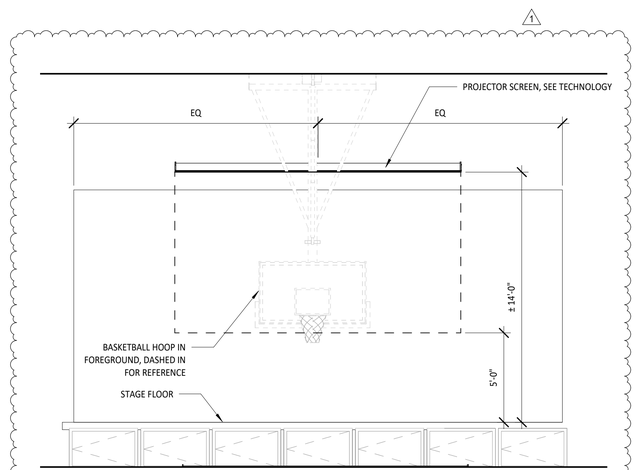
10 B114A FLEX - SOUTH WEST
1/4" = 1'-0"



11 B115 & B115A HALLWAY - NORTH WEST
1/4" = 1'-0"



12 B115 & B115A HALLWAY - SOUTH EAST
1/4" = 1'-0"



13 MAIN GYM SOUTH ELEVATION
1/4" = 1'-0"

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REVISIONS

1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

INTERIOR ELEVATIONS

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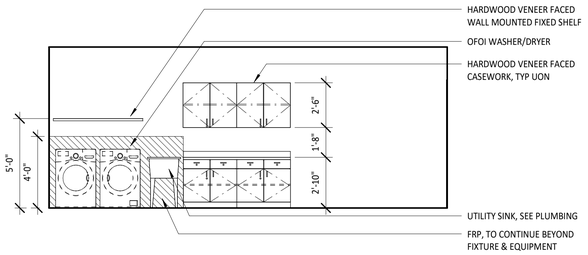
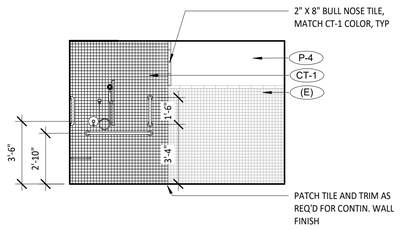
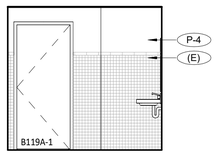


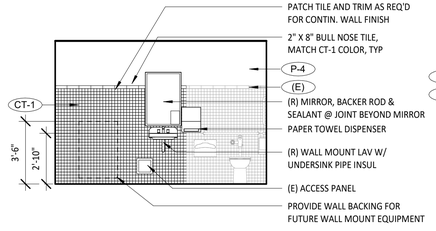
1 B118 STORAGE - NORTH EAST
1/4" = 1'-0"



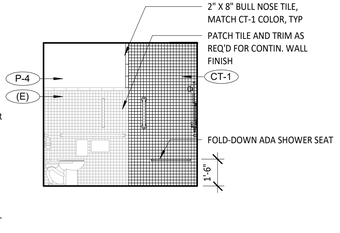
2 B119A RR - NORTH EAST
1/4" = 1'-0"



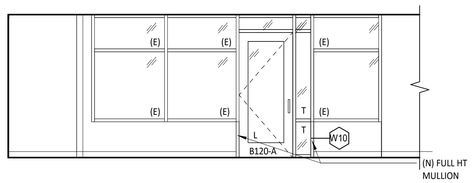
3 B119A RR - SOUTH EAST
1/4" = 1'-0"



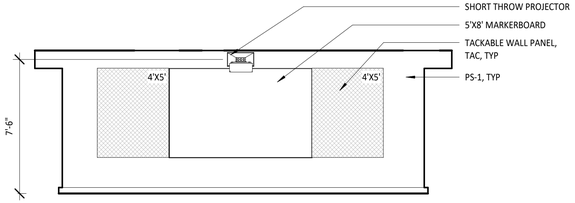
4 B119A RR - SOUTH WEST
1/4" = 1'-0"



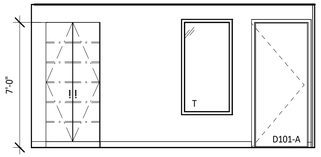
5 B119A RR - NORTH WEST
1/4" = 1'-0"



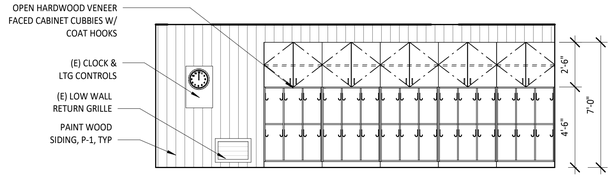
6 B120A HALLWAY - SOUTH WEST
1/4" = 1'-0"



7 D101 CLASSROOM - WALL 1 (NORTH EAST)
1/4" = 1'-0"



8 D101 CLASSROOM - WALL 2 (EAST)
1/4" = 1'-0"



9 D101 CLASSROOM - WALL 3 (SOUTH EAST)
1/4" = 1'-0"

10 D101 CLASSROOM - WALL 4 (SOUTH WEST)
1/4" = 1'-0"

11 D101 CLASSROOM - WALL 5 (WEST)
1/4" = 1'-0"

12 D101 CLASSROOM - WALL 6 (NORTH WEST)
1/4" = 1'-0"

18 D105 COMMONS - NORTH WEST
1/4" = 1'-0"

19 D105 COMMONS - NORTH EAST
1/4" = 1'-0"

20 D105 COMMONS - SOUTH EAST
1/4" = 1'-0"

21 D105 COMMONS - SOUTH WEST
1/4" = 1'-0"

22 D105 - NORTH WEST 2
1/4" = 1'-0"

13 D105 COMMONS - ISLAND
1/4" = 1'-0"

14 F110 HALLWAY - NORTH
1/4" = 1'-0"

15 F110 HALLWAY - SOUTH
1/4" = 1'-0"

16 F110 HALLWAY RAMP - NORTH
1/4" = 1'-0"

17 F110 HALLWAY RAMP - SOUTH
1/4" = 1'-0"

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1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
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INTERIOR
ELEVATIONS

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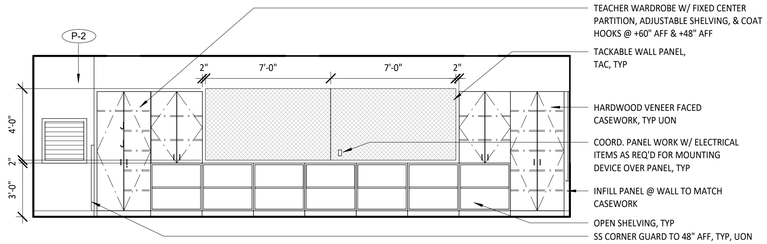
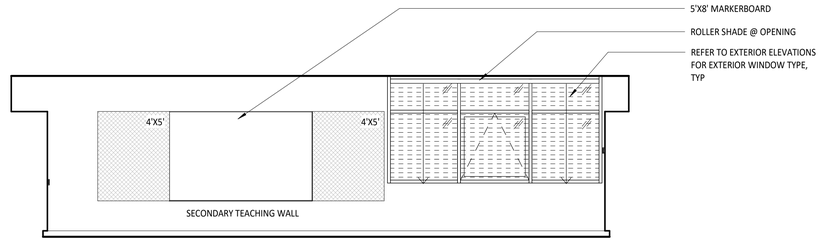
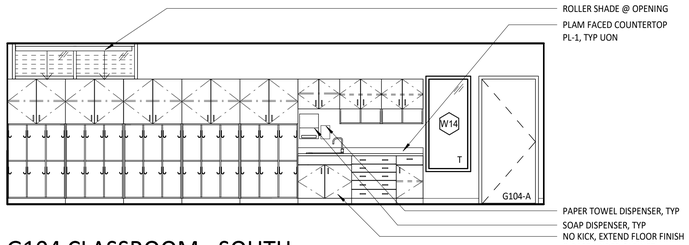


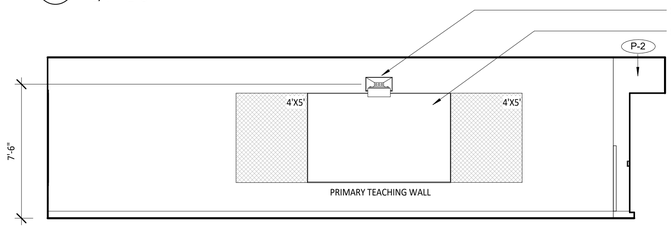
1 G104 CLASSROOM - NORTH
1/4" = 1'-0"



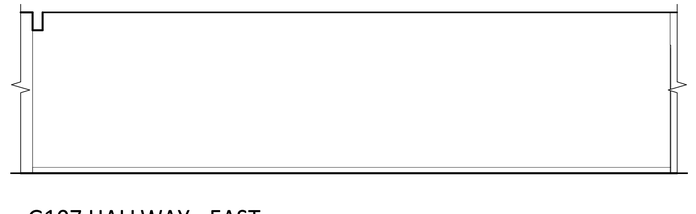
2 G104 CLASSROOM - EAST
1/4" = 1'-0"



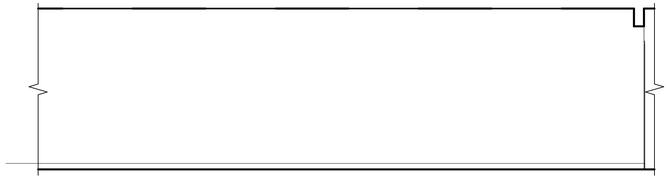
3 G104 CLASSROOM - SOUTH
1/4" = 1'-0"



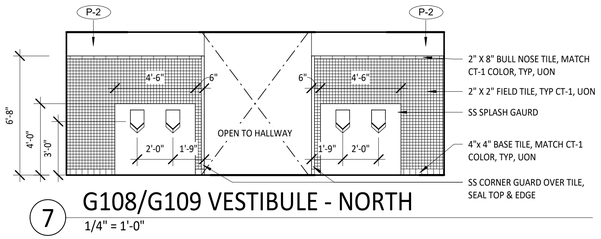
4 G104 CLASSROOM - WEST
1/4" = 1'-0"



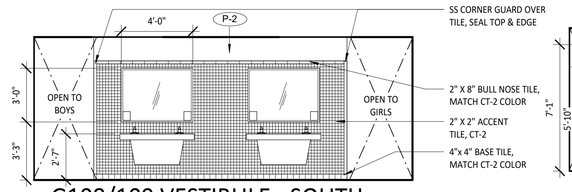
5 G107 HALLWAY - EAST
1/4" = 1'-0"



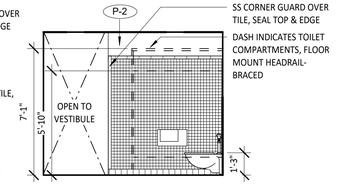
6 G107 HALLWAY - WEST
1/4" = 1'-0"



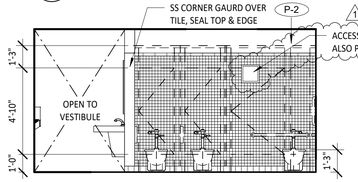
7 G108/G109 VESTIBULE - NORTH
1/4" = 1'-0"



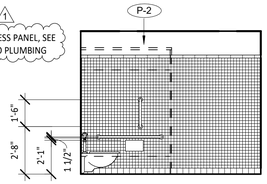
8 G108/109 VESTIBULE - SOUTH
1/4" = 1'-0"



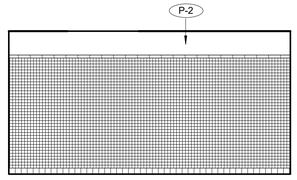
9 G108 GIRLS - NORTH
1/4" = 1'-0"



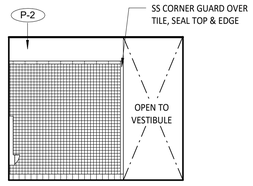
10 G108 GIRLS - EAST
1/4" = 1'-0"



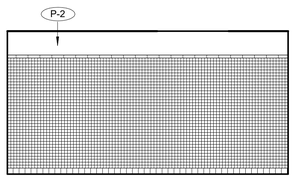
11 G108 GIRLS - SOUTH
1/4" = 1'-0"



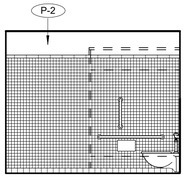
12 G108 GIRLS - WEST
1/4" = 1'-0"



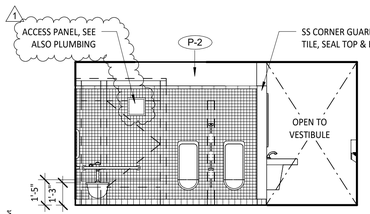
13 G109 BOYS - NORTH
1/4" = 1'-0"



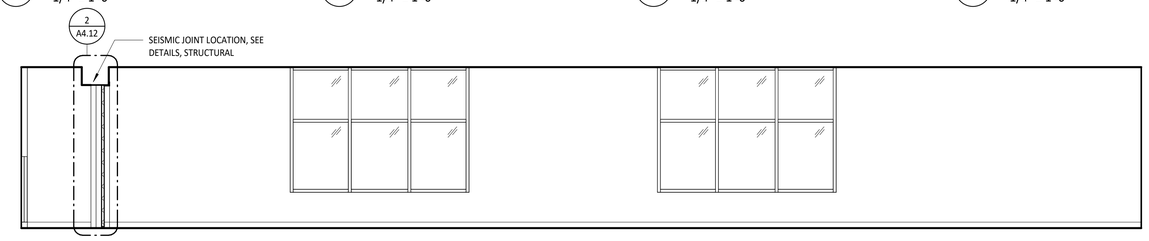
14 G109 BOYS - EAST
1/4" = 1'-0"



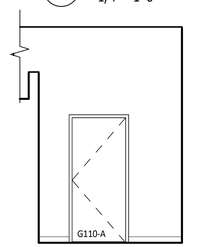
15 G109 BOYS - SOUTH
1/4" = 1'-0"



16 G109 BOYS - WEST
1/4" = 1'-0"

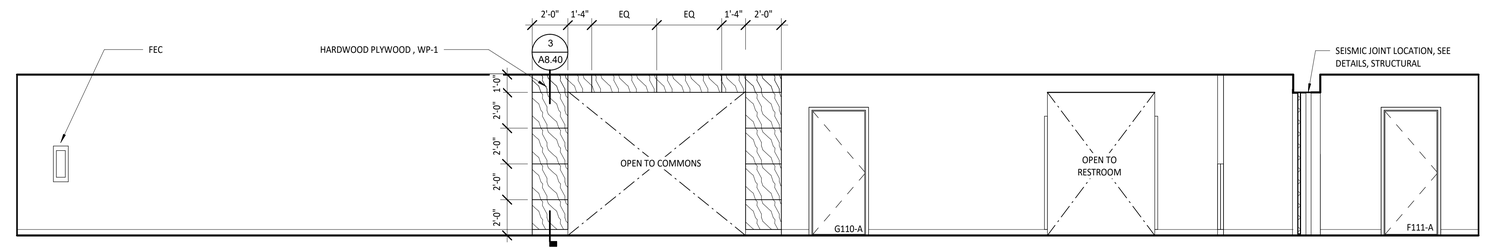


17 G111 HALLWAY - NORTH
1/4" = 1'-0"

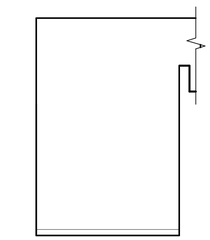


19 G110 - NORTH
1/4" = 1'-0"

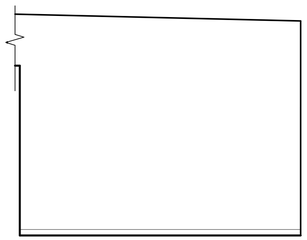
20 G110 STORAGE - EAST
1/4" = 1'-0"



18 G111 HALLWAY - SOUTH
1/4" = 1'-0"



21 G110 - SOUTH
1/4" = 1'-0"



22 G110 STORAGE - WEST
1/4" = 1'-0"

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1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

INTERIOR ELEVATIONS G-BUILDING

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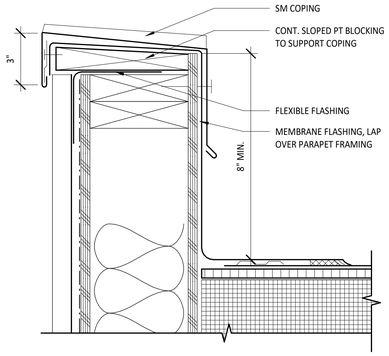
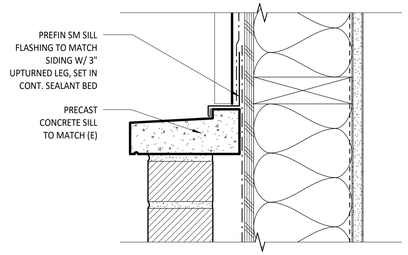
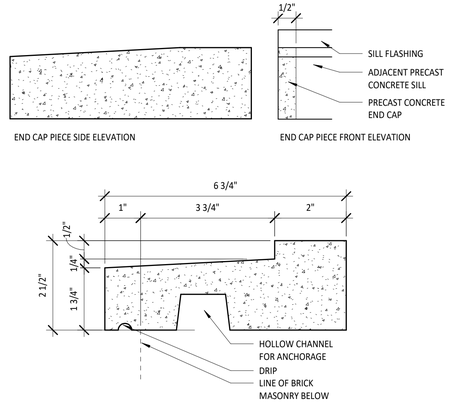


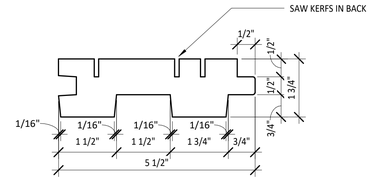
7 PARAPET @ SHEET METAL SIDING TYP
3" = 1'-0"



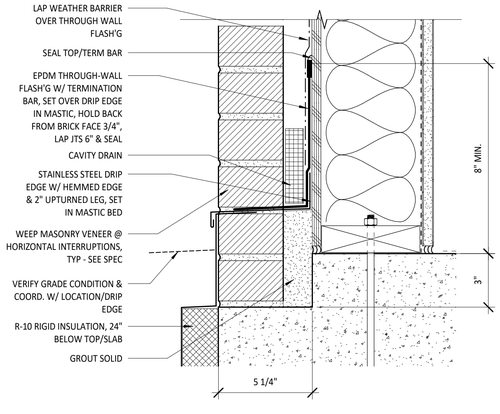
1 METAL SIDING @ PRECAST SILL TYP
3" = 1'-0"



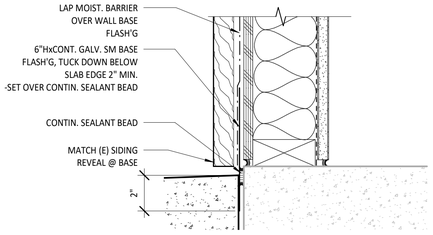
4 PRECAST SILL SECTION
6" = 1'-0"



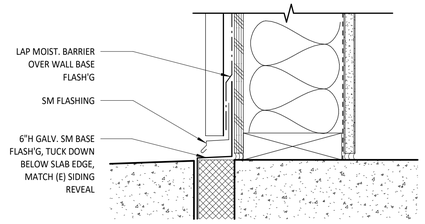
10 WOOD SIDING BD SECTION
6" = 1'-0"



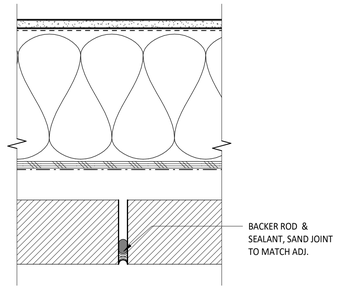
2 WALL BASE @ BRICK MASONRY TYP
3" = 1'-0"



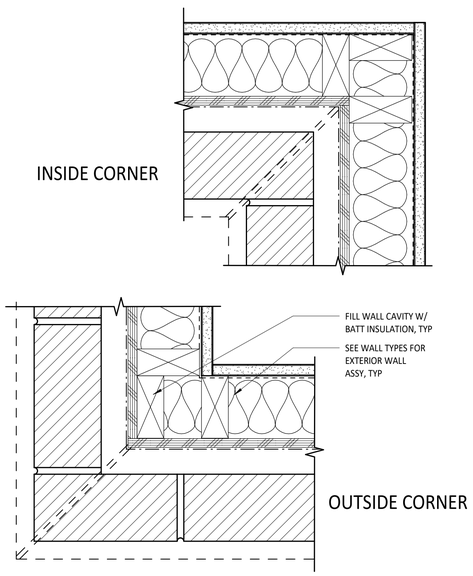
5 WALL BASE @ WOOD SIDING TYP
3" = 1'-0"



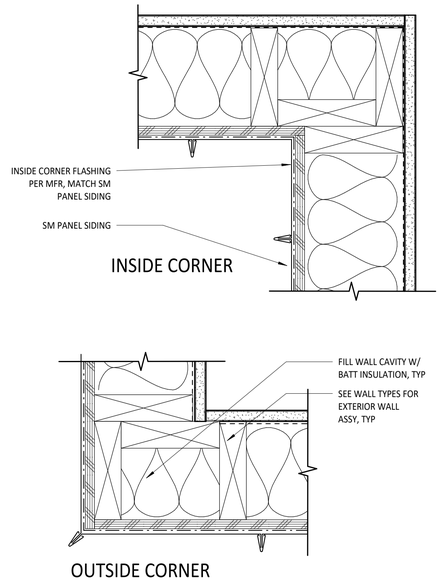
8 WALL BASE @ SHEET METAL SIDING TYP
3" = 1'-0"



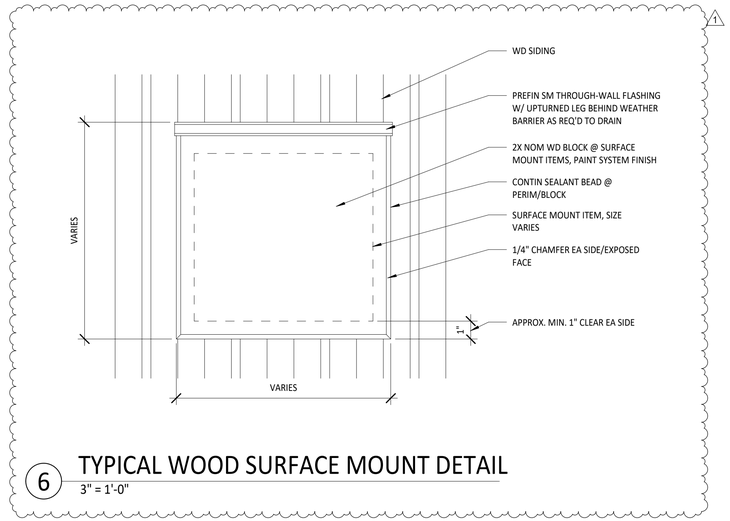
11 MASONRY EXP. JT TYP
3" = 1'-0"



3 CORNERS @ BRICK MASONRY TYP
3" = 1'-0"



9 CORNERS @ SHEET METAL SIDING TYP
3" = 1'-0"



6 TYPICAL WOOD SURFACE MOUNT DETAIL
3" = 1'-0"

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REVISIONS

1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

EXTERIOR DETAILS

A8.10

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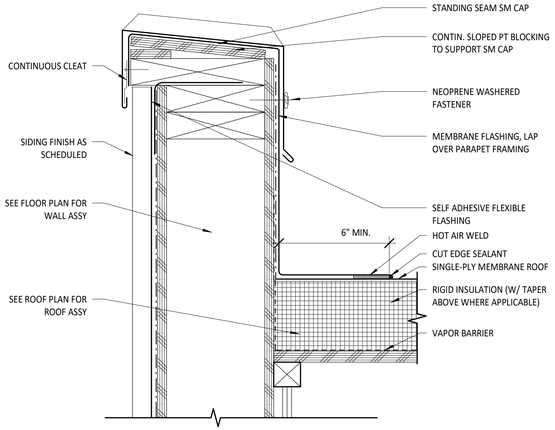
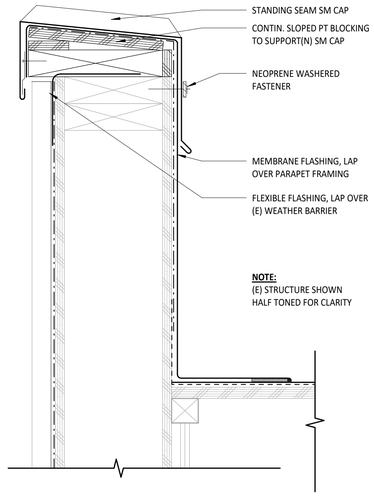
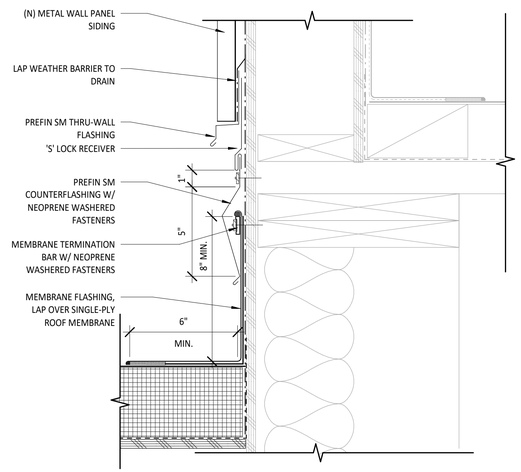


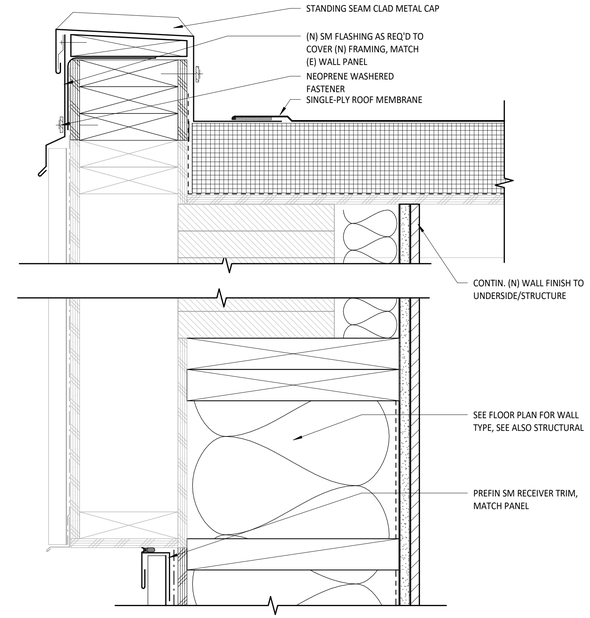
1 (N) PARAPET - TYPICAL
3" = 1'-0"



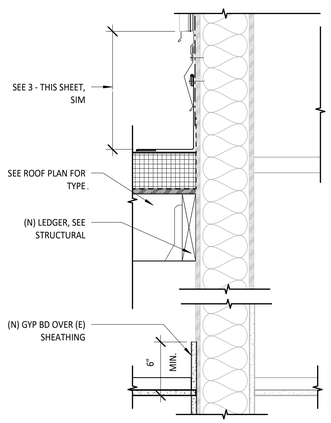
2 PARAPET @ GYM OVERHANG
3" = 1'-0"



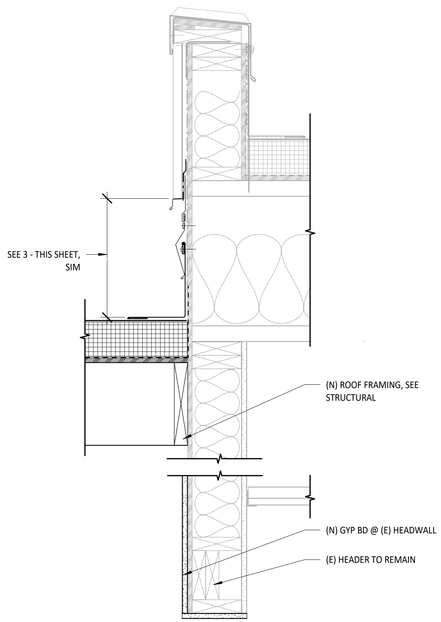
3 NEW ROOF @ EXISTING GYM WALL
3" = 1'-0"



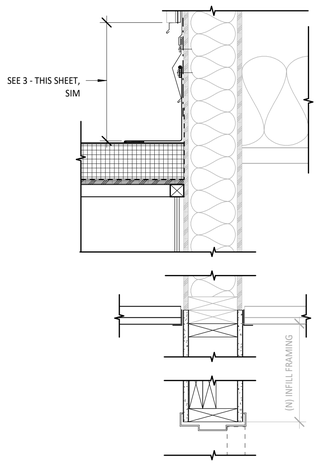
4 (N) PARAPET EXTENSION @ GYM
3" = 1'-0"



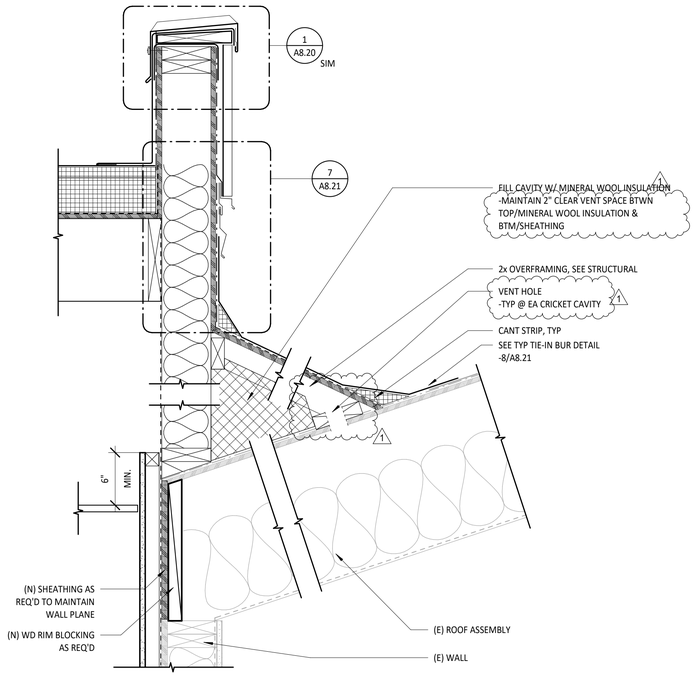
5 NEW ROOF @ BUILDING B
1 1/2" = 1'-0"



6 HEADWALL @ F110 TO C128
1 1/2" = 1'-0"



7 NEW ROOF/WALL @ FLEX
1 1/2" = 1'-0"



8 CRICKET @ F BUILDING
1 1/2" = 1'-0"

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REVISIONS

1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
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JOB NO: 20235
ISSUE DATE: 26 JAN 2021

ROOF DETAILS

A8.20

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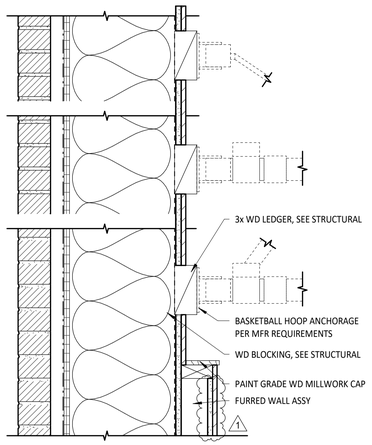
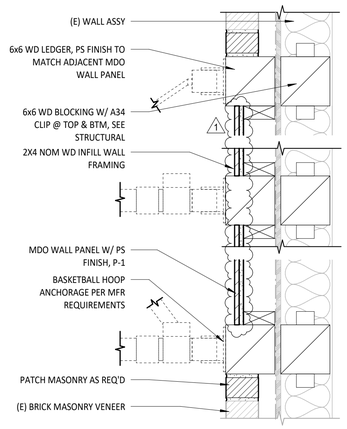
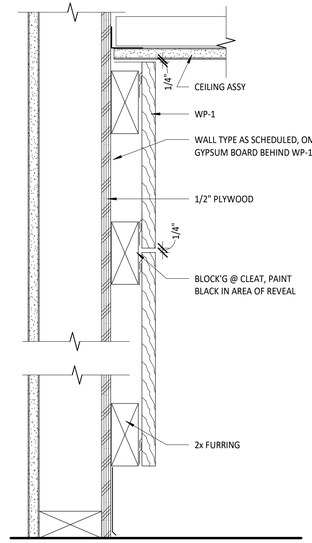


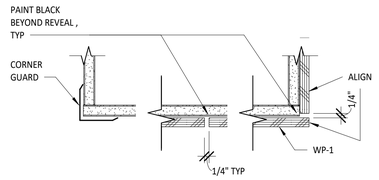
1 BASKETBALL MOUNTING @ PANEL WALL
1 1/2" = 1'-0"



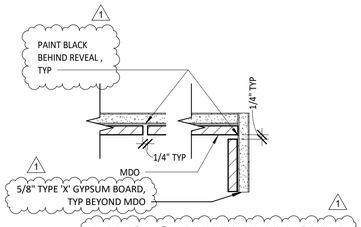
2 BASKETBALL MOUNTING @ (E) MASONRY
1 1/2" = 1'-0"



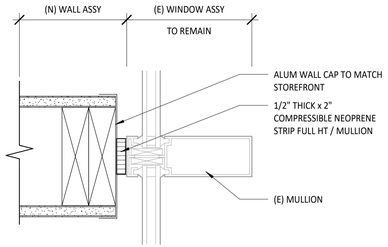
3 WP-1 PANEL JOINT
3" = 1'-0"



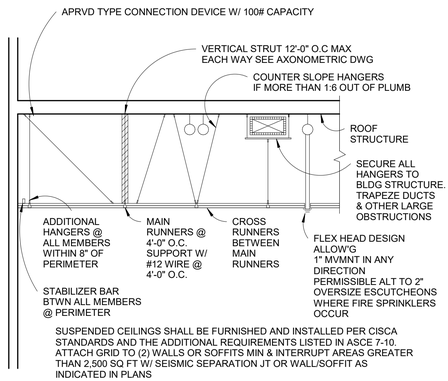
4 TYPICAL JOINTS
3" = 1'-0" PLAN VIEW



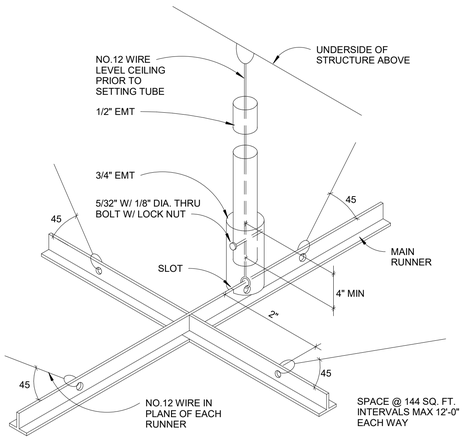
5 MDO @ AUXILIARY GYM
3" = 1'-0" PLAN VIEW

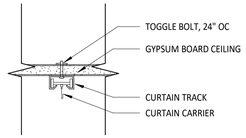


6 WALL TO MULLION DETAIL
3" = 1'-0"

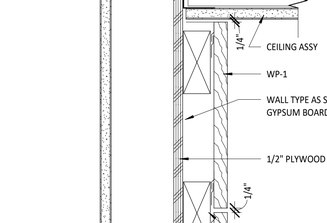


7 TYPICAL SUSPENDED CEILING
1" = 1'-0"

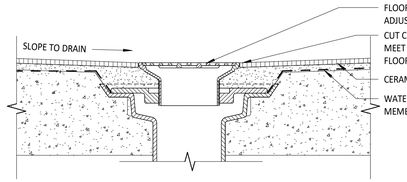




8 CEILING MOUNT TRACK
3" = 1'-0"

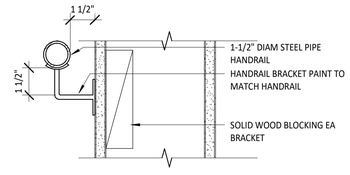


9 WOOD CAP
3" = 1'-0"

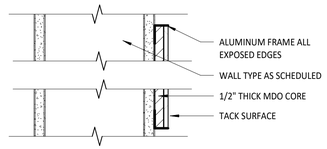


10 FLOOR DRAIN @ CERAMIC TILE
3" = 1'-0"

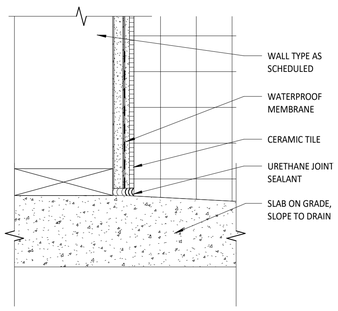
11 FLOOR DRAIN @ POLISHED CONCRETE
3" = 1'-0"



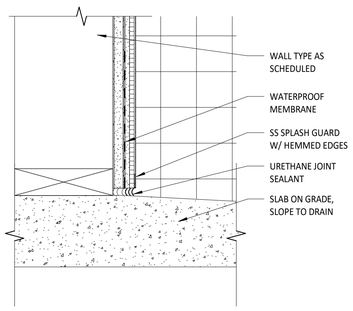
12 STEEL PIPE HANDRAIL
3" = 1'-0"



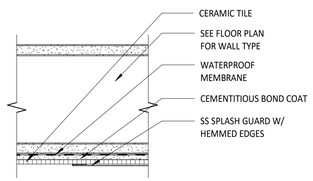
13 TACKABLE WALL PANEL
3" = 1'-0"



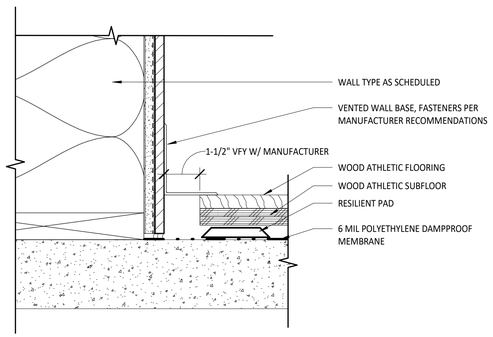
14 CERAMIC TILE BASE
3" = 1'-0"



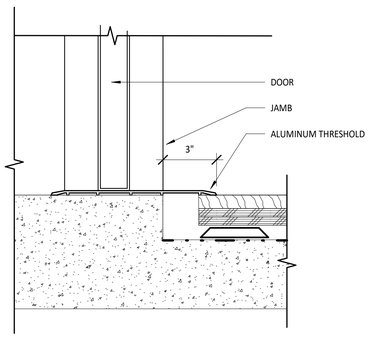
15 SS SPLASH GUARD BASE
3" = 1'-0"



16 SS SPLASH GUARD AT TILE
3" = 1'-0"



17 WAF @ VWB
3" = 1'-0"



18 WAF @ THRESHOLD
3" = 1'-0"

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REVISIONS

1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

INTERIOR DETAILS

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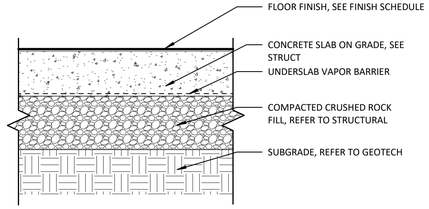
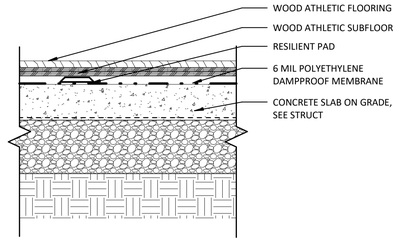


F1 F1

FIRE RATING:
SOUND RATING:
NOTES:



F2 F2

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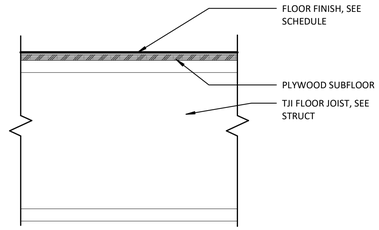
SOUND RATING:
NOTES:



F3 F3

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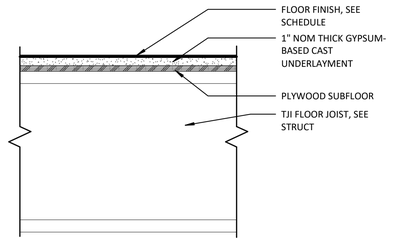
SOUND RATING:
NOTES:

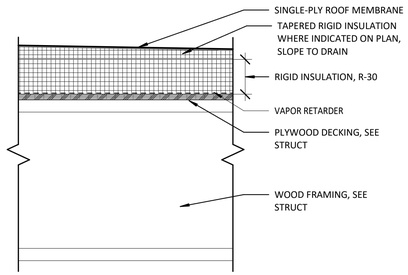


F4 F4

FIRE RATING:
SOUND RATING:
NOTES:

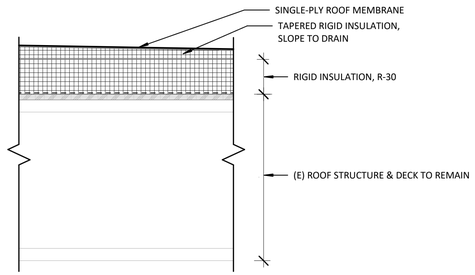
1 FLOOR TYPES

1 1/2" = 1'-0"



R1 R1

FIRE RATING:
SOUND RATING:
NOTES:

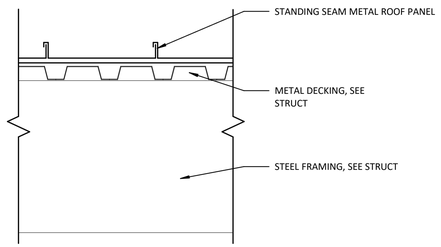


R2 R2

FIRE RATING:
SOUND RATING:
NOTES:

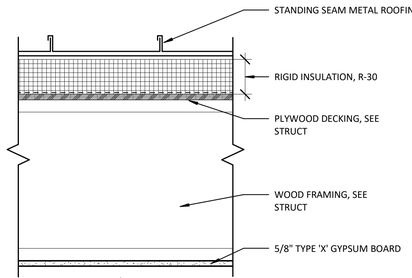
R2 1 OMIT RIGID INSULATION @ ROOF OVERHANG

R2 2 OMIT R-30 RIGID INSULATION WHERE (E) INSULATION TO REMAIN ABOVE (E) DECK, APPLY RIGID INSULATION AS REQUIRED TO ACHIEVE R-30, APPLY TAPERED INSULATION AS REQUIRED TO MAINTAIN SLOPE TO DRAIN



R3 R3

FIRE RATING:
SOUND RATING:
NOTES:



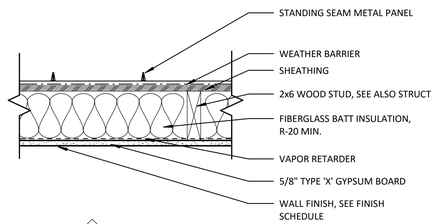
R4 R4

FIRE RATING:
SOUND RATING:
NOTES:

R4 1 OMIT GYPSUM BOARD @ STAIR LANDING OUTSIDE PLENUM

2 ROOF TYPES

1 1/2" = 1'-0"

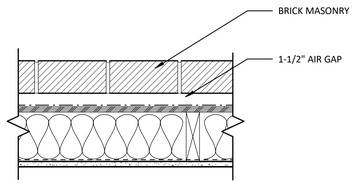


AA AA

FIRE RATING:
SOUND RATING:
NOTES:

AA 1 2x6 WOOD STUD @ 16" O.C., SEE ALSO STRUCT
FIRE RATING: 1 HR WP-1244

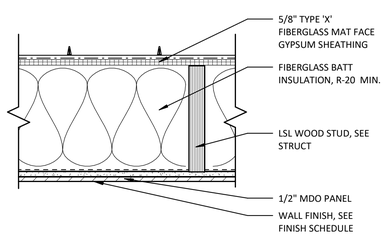
AA 2 2x10 WOOD STUD, SEE ALSO STRUCT



BB BB

FIRE RATING:
SOUND RATING:
NOTES:

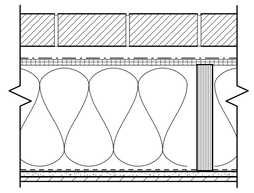
BB 2 2x6 WOOD STUD @ 16" O.C., SEE ALSO STRUCT
FIRE RATING: 1 HR WP-1244



CC CC

1

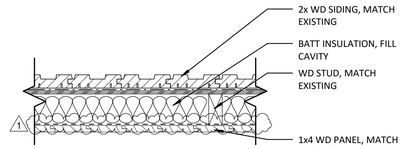
FIRE RATING: 1-HOUR FIRE RATING
-ASSEMBLY BASED ON 2019 OSSC 721.1(2) 15-1.14
-2"x6" WOOD STUDS AT 16" WITH DOUBLE TOP PLATES, SINGLE BOTTOM PLATE;
INTERIOR AND EXTERIOR SIDES COVERED WITH 5/8" TYPE X GYPSUM WALLBOARD, 4' WIDE, APPLIED HORIZONTALLY OR VERTICALLY WITH VERTICAL JOINTS OVER STUDS, AND FASTENED WITH 2 1/4" TYPE S DRYWALL SCREWS, SPACED 7" ON CENTER
SOUND RATING:
NOTES:



DD DD

1

FIRE RATING: 1-HOUR FIRE RATING
-ASSEMBLY BASED ON 2019 OSSC 721.1(2) 15-1.14
-2"x6" WOOD STUDS AT 16" WITH DOUBLE TOP PLATES, SINGLE BOTTOM PLATE;
INTERIOR AND EXTERIOR SIDES COVERED WITH 5/8" TYPE X GYPSUM WALLBOARD, 4' WIDE, APPLIED HORIZONTALLY OR VERTICALLY WITH VERTICAL JOINTS OVER STUDS, AND FASTENED WITH 2 1/4" TYPE S DRYWALL SCREWS, SPACED 7" ON CENTER
SOUND RATING:
NOTES:



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FIRE RATING:
SOUND RATING:
NOTES:

3 WALL TYPES - EXTERIOR

1 1/2" = 1'-0"

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REGISTERED ARCHITECT
JOSEPH E. MOORE
EUGENE, OREGON
6033
STATE OF OREGON

REVISIONS

1 ADDENDUM 02 25 FEB 2021

GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

ASSEMBLIES

A9.10

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ROOM FINISH SCHEDULE

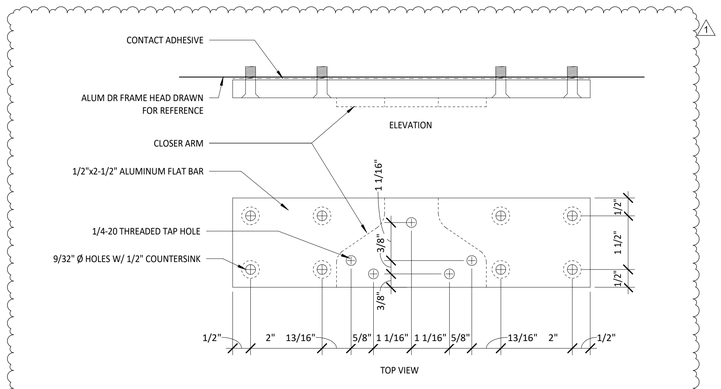
NUMBER	ROOM NAME	FLOOR	BASE	WALLS								CEILING	*REMARKS
				NORTH		EAST		SOUTH		WEST			
				FIN	MAT	FIN	MAT	FIN	MAT	FIN	MAT		
A101	GYMNASIUM	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	PATCH FINISHES AT NEW OPENINGS
A117A	HALLWAY	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	
A117B	HALLWAY	PC	RB	PS-1	GB	(E)	(E)	(E)	(E)	PS-1	GB	ACT-2	
A120	BOYS	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	
A121	GIRLS	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	
A122	AUXILIARY GYM	WAF	VWB	PS-4	MDO	(E)	(E)	PS-4	MDO	PS	MDO	ACT-4/PS-4	
A123	RR	PC	RB	CT/PS-2	GB	CT/PS-2	GB	(E)	(E)	CT/PS-2	GB	GB/PS-2	2" SQ CERAMIC TILE TO 7' AFF, EPOXY PAINT SYSTEM FINISH ABOVE & AT CLG
A124	STORAGE	PC	RB	PS-1	GB	PS-1	GB	(E)	(E)	PS-1	GB	-	
A125	STORAGE	PC	RB	PS-1	GB	PS-1	GB	(E)	(E)	PS-1	GB	-	
A129	MECHANICAL	VCT	RB	PS-1	GB	(E)	(E)	(E)	(E)	PS-1	GB	(E)	
A130	MECHANICAL	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	PS-1	GB	OPEN	PATCH FINISHES AT NEW OPENINGS
B107	LS CLASSROOM	(E)/CPT/VCT	(E)/RB	(E)	(E)	PS-1	(E)/GB	PS-1	(E)/GB	PS-1	(E)/GB	(E)/ACT-5	PATCH CEILING AND FLOOR FINISH AS REQUIRED BY (N) WORK
B107A	SENSORY ROOM	CPT	RB	PS-1	IRGB	PS-1	IRGB	PS-1	IRGB	PS-1	IRGB	ACT-1	
B108	COMMONS	(E)	(E)/RB	-	(E)/GB	PS-1	(E)	(E)	(E)	(E)	(E)	(E)/ACT-6	PATCH CEILING
B108A	STORAGE	CPT	RB	PS-1	(E)/GB	PS-1	(E)/GB	PS-1	GB	PS-1	GB	-	
B109	CLC CLASSROOM	(E)	RB	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	
B111	CLASSROOM	(E)/CPT/VCT	(E)/RB	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)/ACT-5	PATCH CEILING, REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES
B114A	FLEX	CPT	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-1	
B115	HALLWAY	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)/ACT-6	PATCH CEILING
B115A	HALLWAY	PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-2/GB	
B118	STORAGE	(E)	(E)	FRP/PS-2	(E)	PS-1	(E)	PS-1	(E)	PS-1	(E)	(E)	
B119A	LIFE SKILLS RR	(E)/CT	(E)	(E)/PS-2/CT	(E)/GB	PS-2/(E)	(E)	(E)/PS-2/CT	(E)/GB	(E)/PS-2/CT	(E)/GB	(E)/GB	PATCH CEILING, WALL TILE, AND FLOOR TILE AS REQ'D
D101	CLASSROOM	CPT/ VCT	RB									(E)/ACT-5	PATCH CEILING, REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES
D102	CLASSROOM	CPT/ VCT	RB									(E)/ACT-5	PATCH CEILING, REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES
D103	CLASSROOM	CPT/ VCT	RB									(E)/ACT-5	PATCH CEILING, REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES
D104	CLASSROOM	CPT/ VCT	RB									(E)/ACT-5	PATCH CEILING, REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES
D105	COMMONS	CPT/ VCT	RB									(E)	REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES
F110	HALLWAY	WOM	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-2/GB	
F111	IDF	PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	-	
F112	IDF	PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	GB	
G101	CLASSROOM	CPT/ PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-1	
G102	CLASSROOM	CPT/ PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-1	
G103	CLASSROOM	CPT/ PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-1	
G104	CLASSROOM	CPT/ PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-1	
G105	COMMONS	PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	ACT-2	
G106	STORAGE	PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	GB	
G106A	MECHANICAL PENTHOUSE PLENUM	RCC	RB	FRP	GB	FRP	GB	FRP	GB	FRP	GB	GB/FRP	
G107	HALLWAY	PC	RB	-	-	PS-1	GB	-	-	PS-1	GB	ACT-2	
G108	GIRLS	PC	RB	CT/PS-2	GB	CT/PS-2	GB	CT/PS	GB	CT/PS	GB	GB	2" SQ CERAMIC TILE TO 7' AFF, EPOXY PAINT SYSTEM FINISH ABOVE & AT CLG
G109	BOYS	PC	RB	CT/PS-2	GB	CT/PS-2	GB	CT/PS	GB	CT/PS	GB	GB	2" SQ CERAMIC TILE TO 7' AFF, EPOXY PAINT SYSTEM FINISH ABOVE & AT CLG
G110	STORAGE	PC	RB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	GB	-	
G111	HALLWAY	PC/WOM	RB	GB	PS-1	GB	PS-1	GB	PS-1	GB	PS-1	ACT-2 /GB	

GENERAL NOTES

1. REFER TO PLANS AND ELEVATIONS FOR EXTENT OF PATCHING
2. REFER TO FLOOR PLANS, REFLECTED CEILING PLANS, COLOR SCHEDULE, AND INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION
3. WALLS TO RECIEVE P-1 PAINT, UON
4. PROVIDE IMPACT RESISTANT GYPSUM BOARD @ BTM 4' OF OUTTER LAYER WHERE (N) FINISH SCHEDULED AT HALLWAYS B115, B115A, F110, G111, G107, COMMONS G105, & COMMONS D105 (1)

ROOM FINISH SCHEDULE LEGEND

ACT-1	2X4 ACOUSTIC CEILING TILE
ACT-2	2X2 ACOUSTIC CEILING TILE
ACT-3	1X1 GLUE-UP ACOUSTIC CEILING TILE ON 5/8" GYPSUM BOARD
ACT-4	TECTUM DIRECT ATTACHED CEILING PANELS (1)
ACT-5	2X4 ACOUSTIC CEILING TILE, IDENTICAL (E) TO IN-PLACE MATERIALS
ACT-6	2X2 ACOUSTIC CEILING TILE, IDENTICAL (E) TO IN-PLACE MATERIALS
CPT	CARPET
CT	CERAMIC TILE
RCC	RESINOUS CONCRETE COATING
FRP	FIBERGLASS-REINFORCED PLASTIC
GB	GYPSUM BOARD (1)
IRGB	IMPACT RESISTANT GYPSUM BOARD
PC	POLISHED CONCRETE
PS	REFER TO PAINTING AND COATING SCHEDULE
RB	RESILIENT BASE
VCT	VINYL COMPOSITION TILE
VWB	4" VENTED WALL BASE
WAF	WOOD ATHLETIC FLOORING



1 REINFORCEMENT PLATE @ CLOSER SHOE
6" = 1'-0"

DOOR SCHEDULE

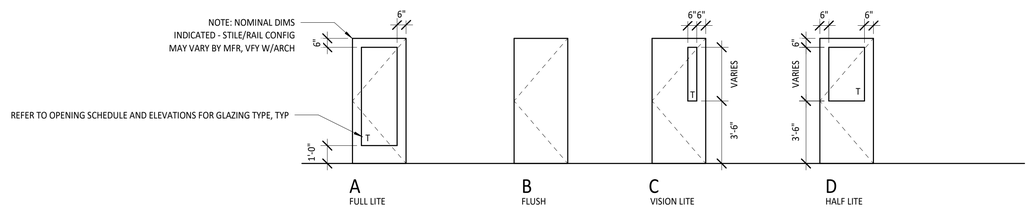
Mark	Opening Size		Door			Frame		Hardware Type	Rating/Label	Comments
	Width	Height	Door Type	Door Material	Door Finish	Frame Material	Frame Finish			
A101-R	3'-8"	7'-0"	(R)	(R) HM	PS	(R) HM	PS	2B	-	RELOCATE DOOR, FRAME, & HARDWARE
A117-A	6'-0"	7'-0"		-	-	HM	PS	-	-	CASED OPEN FRAME
A117-B	6'-0"	7'-0"	C	SCWD	FAC	HM	PS	1	20 MIN	PR 3'-0" X 7'-0", LAMINATED SAFETY GLAZING @ LITES
A122-A	3'-8"	7'-0"	C	HM	PS	HM	PS	2	-	INSULATED EXTERIOR DOOR, MAX U-FACTOR = 0.37, ACCESS CONTROL DOOR W/ CARD READER
A122-B	3'-8"	7'-0"	B	HM	PS	HM	PS	2A	-	INSULATED EXTERIOR DOOR, MAX U-FACTOR = 0.37
A122-C	3'-8"	7'-0"	B	HM	PS	HM	PS	2A	-	INSULATED EXTERIOR DOOR, MAX U-FACTOR = 0.37
A122-R	6'-0"	7'-0"	(R)	(R) AL	FAC	(R) AL	FAC	(R)	-	PR 3'-0" X 7'-0", RELOCATE DOOR, FRAME, & HARDWARE; NOTE 1
A123-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	3	-	
A124-A	3'-0"	7'-0"		-	-	HM	PS	-	-	CASED OPEN FRAME
A125-A	3'-0"	7'-0"	B	HM	PS	HM	PS	4	-	
A129-A	3'-0"	7'-0"	B	HM	PS	HM	PS	5	-	
B107-A	3'-0"	7'-0"	C	SCWD	FAC	HM	PS	6	-	
B107-B	3'-0"	7'-0"	C	SCWD	FAC	HM	PS	5A	-	
B107-C	3'-0"	7'-0"	C	SCWD	FAC	HM	PS	6A	-	
B108-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	4	-	
B114-A	6'-0"	7'-0"	A	SCWD	FAC	HM	PS	1A	-	(1)
B120-A	3'-0"	7'-0"	A	AL	FAC	AL	FAC	7	-	NOTE 1
D101-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6B	-	
D101-B	3'-0"	7'-0"	D	AL	FAC	AL	FAC	2A	-	NOTE 1
D102-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6	-	
D102-B	3'-0"	7'-0"	D	AL	FAC	AL	FAC	2A	-	NOTE 1
D103-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6	-	
D103-B	3'-0"	7'-0"	D	AL	FAC	AL	FAC	2A	-	NOTE 1
D104-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6B	-	
D104-B	3'-0"	7'-0"	D	AL	FAC	AL	FAC	2A	-	NOTE 1
F110-A	3'-0"	7'-0"	A	AL	FAC	(R) AL	(R) AL	7A	-	DOOR & HARDWARE IN (R) FRAME; NOTE 1 (1)
F111-A	3'-0"	7'-0"	B	SCWD	FAC	AL	FAC	4C	-	
G101-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6C	-	
G102-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6C	-	
G103-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6C	-	
G104-A	3'-0"	7'-0"	B	SCWD	FAC	HM	PS	6A	-	
G105-A	3'-0"	7'-0"	A	AL	FAC	AL	FAC	7B	-	ACCESS CONTROL DOOR W/ CARD READER; NOTE 1 (1)
G106-A	3'-0"	7'-0"	B	HM	PS	HM	PS	4A	-	
G106-B	3'-0"	7'-0"	B	HM	PS	HM	PS	4B	-	
G106-C	3'-0"	7'-0"	B	HM	PS	HM	PS	5	-	
G110-A	3'-0"	7'-0"	B	HM	PS	HM	PS	4		
G111-A	7'-6"	8'-0"	B	WD	FAC	HM	PS	9	90 MIN	PR 3'-9" X 7'-0", ELECTRIFIED CONTROL DOOR
G111-B	6'-0"	7'-0"	A	AL	FAC	AL	FAC	8	-	PR 3'-0" X 7'-0
G111-R	6'-0"	7'-0"	(R)	(R) AL	FAC	(R) AL	FAC	8A	-	PR 3'-0" X 7'-0"; RELOCATE DOOR, FRAME, & HARDWARE - ACCESS CONTROL DOOR W/ CARD READER. PROVIDE POWER SUPPLY, BACKBOXES, CONDUIT FOR CARD ACCESS SYSTEM; NOTE 1 (1)
GN101-A	4'-0"	6'-0"						10	-	BALANCE OF HARDWARE BY CHAINLINK SUPPLIER
GN101-B	4'-0"	4'-0"						10	-	BALANCE OF HARDWARE BY CHAINLINK SUPPLIER
GN101-C	4'-0"	4'-0"						10	-	BALANCE OF HARDWARE BY CHAINLINK SUPPLIER
GN101-D	3'-6"	7'-0"						10A	-	BALANCE OF HARDWARE BY CHAINLINK SUPPLIER

NOTES

1. PROVIDE REINFORCEMENT PLATE @ CLOSER, SEE DETAIL 1 THIS SHEET

ABBREVIATIONS

AL	ALUMINUM
WD	WOOD
E	EXISTING
FAC	FACTORY FINISH
HM	HOLLOW METAL
N	NEW
PS	PAINT SYSTEM
R	RELOCATE
SCWD	SOLID CORE WOOD
CHLK	CHAINLINK FENCE



DOOR TYPES

1/4" = 1'-0"

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SCHEDULES

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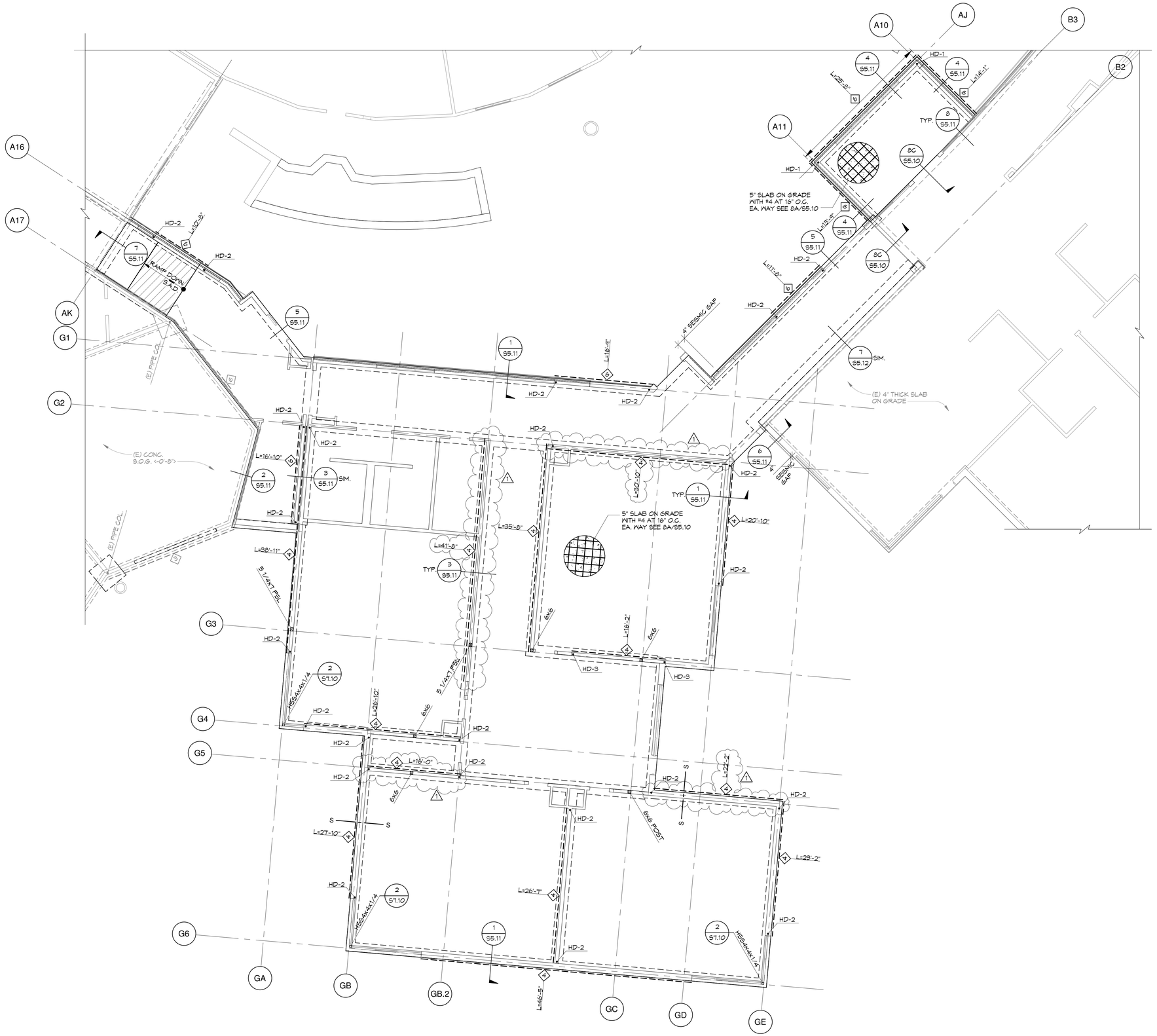

1 FOUNDATION PLAN - G - BUILDING

1/8" = 1'-0"

FOUNDATION PLAN NOTES

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S1.01.
2. FOR TYPICAL CONCRETE DETAILS, SEE SHEETS S5.10 AND S5.11.
3. FOR BUILDING LAYOUT AND DIMENSIONS, SEE ARCHITECTURAL DRAWINGS, TYP. U.O.N.
4. FOR FINISH FLOOR ELEVATIONS, DEPRESSIONS, DRAINS, ETC., SEE ARCHITECTURAL DRAWINGS.
5. FOR PAD ELEVATIONS, SEE CIVIL DRAWINGS.
6. FOR MECHANICAL, ELECTRICAL, AND PLUMBING OPENINGS, ETC., SEE DRAWINGS OTHER THAN STRUCTURAL.
7. TOP OF FOOTINGS SHALL BE AT ELEVATION [-1'-0"] WITH RESPECT TO DATUM ELEVATION OR [-0'-6"] BELOW LOWEST ADJACENT SOIL PAD GRADE ELEVATIONS, WHICHEVER IS LOWER. TYP. U.O.N.
8. EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE LINES REQUIRED BY THE FOUNDATION. NO MATERIAL IS TO BE OVER EXCAVATED UNNECESSARILY.
9. VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION. IN THE EVENT THAT SUCH UTILITIES ARE ENCOUNTERED DURING EXCAVATION, NOTIFY ARCHITECT IMMEDIATELY.
10. FOR DRAINAGE DETAILS, SUMPS, PITS, WATERPROOFING, MOISTURE BARRIERS, TRENCHES, CURBS, EXTERIOR WALKS, UTILITIES, EQUIPMENT DETAILS, STEPS, ETC., SEE DRAWINGS OTHER THAN STRUCTURAL.
11. SETBACK CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO TRENCHING OR FORMING FOUNDATIONS. THE FOUNDATION SUBCONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, SURVEYOR, AND THE ARCHITECT.
12. THE GEOTECHNICAL ENGINEER SHALL BE RETAINED TO PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF CONSTRUCTION. THEIR INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT.

FOUNDATION PLAN SYMBOLS

- DENOTES FOOTING
- DENOTES (E) FOOTING
- DENOTES PLYWOOD SHEATHED WOOD SHEARWALL SEE DETAILS 5 & 6/S8.11.
- DENOTES EXTENT OF PERFORATED SHEARWALL SHEATHING AND PANEL EDGE NAILING REQUIRED FULL LENGTH OF WALL, INCLUDING ABOVE AND BELOW ALL WALL OPENINGS
- DENOTES (N) STUD WALL
- DENOTES (E) STUD WALL
- POST — WOOD POST SIZE AS NOTED ON PLAN
- HD-X — DENOTES HOLDOWN, SEE DETAIL 8/S8.11 AT (N) CONSTRUCTION SEE DETAIL 11/S8.11 AT CLASSROOM PODS.
- S——S DENOTES STEP IN FOOTING, SEE DETAIL 10/S5.10
- DENOTES STEP IN SLAB, SEE DETAIL 11/S5.10
- < +X-XX" > DENOTES TOP OF SLAB ELEVATION
- HSS — DENOTES STEEL COLUMN
- DENOTES (E) COLUMN OR (E) POST
- DENOTES BRICK VENEER

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STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 94548 OREGON MARCH 23, 2010 SAMUEL SHIOTANI
Expires: 06-30-22
DIGITAL SIGNATURE

HOHBACH-LEWIN, INC.
STRUCTURAL ENGINEERS
296 East 5th Ave. Suite 302
Eugene, OR 97401
(541) 349-1701

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FOUNDATION PLAN
G - BUILDING

S2.11

HOHBACH-LEWIN # 14706

KEYPLAN

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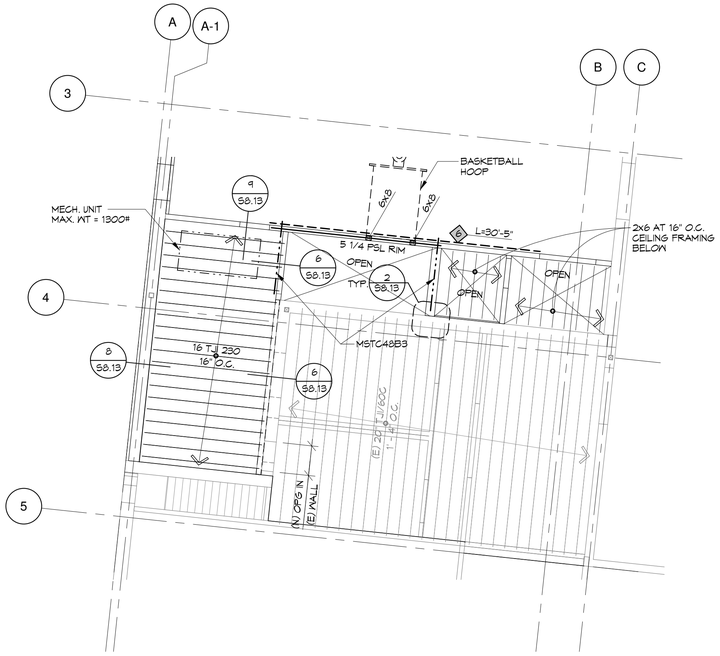
FOUNDATION PLAN NOTES & SYMBOLS

1. SEE S2.11 FOR FOUNDATION PLAN NOTES AND SYMBOLS.

1 FOUNDATION PLAN - GYM

1/8" = 1'-0"



2 MECH. BLDG ROOM PLAN

1/8" = 1'-0"

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REVISIONS

REVISION 1 25 FEB 2021

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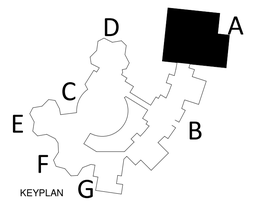
FOUNDATION PLAN - GYM



S2.12

HOHBACH-LEWIN # 14706

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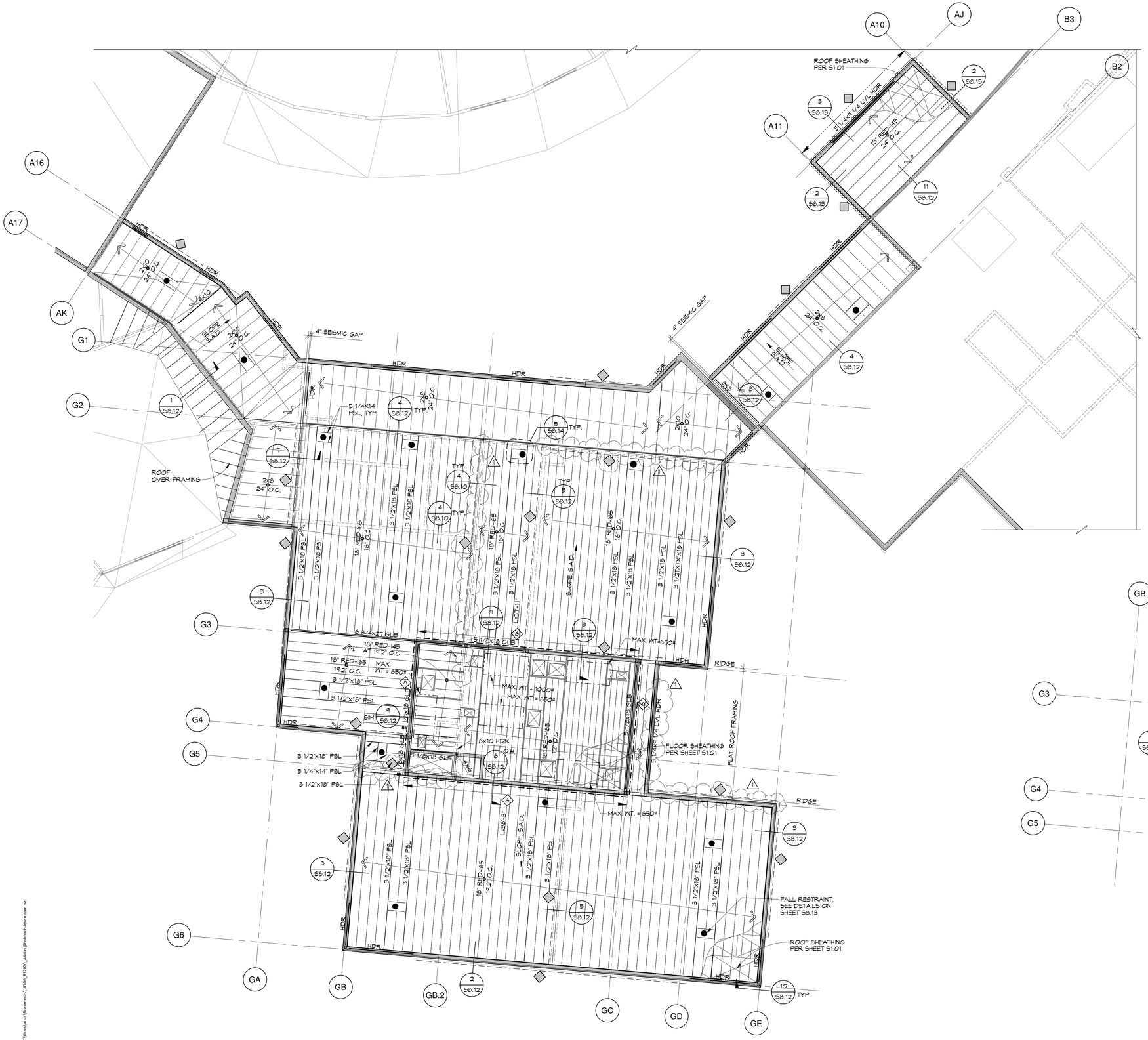
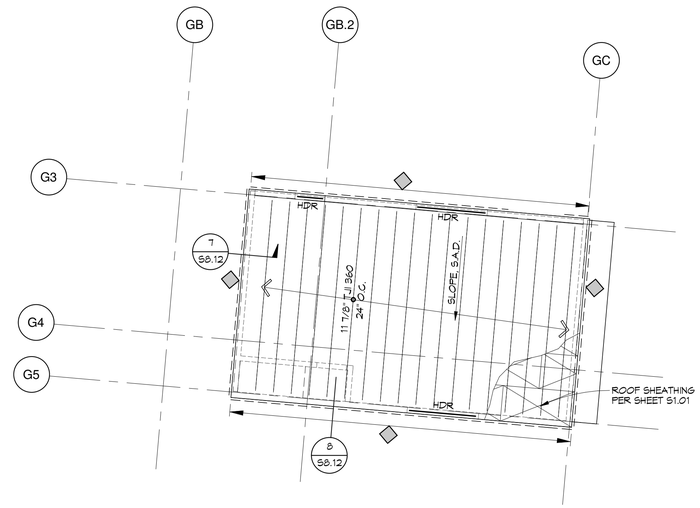


1 ROOF FRAMING PLAN - G - BUILDING
1/8" = 1'-0"



2 ROOF FRAMING PLAN - PENTHOUSE
1/8" = 1'-0"

ROOF FRAMING PLAN NOTES

1. SEE GENERAL NOTES AND SYMBOLS ON SHEET S1.01.
2. SEE TYPICAL WOOD FRAMING DETAILS ON SHEETS S8.10 AND S8.11.
3. FRAMING IS NEW UNLESS NOTED AS EXISTING (E).
4. SEE DRAWING OTHER THAN STRUCTURAL FOR FLOOR DEPRESSIONS, MECHANICAL, ELECTRICAL AND SHAFT OPENINGS, ETC.
5. SEE ARCHITECTURAL DRAWING FOR OVERALL BUILDING ELEVATIONS AND DIMENSIONS, INTERIOR WALLS & ALL WALL OPENINGS, AND MISCELLANEOUS ARCHITECTURAL FEATURES.

ROOF FRAMING PLAN SYMBOLS

- DENOTES SHEARWALL BELOW SEE PLAN BELOW FOR NAILING.
- HDR — DENOTES HEADER BELOW SEE SCHEDULE ON DETAIL 9/S8.10.
- DENOTES BEARING WALL BELOW
- DENOTES WALL BELOW
- DENOTES PARAPET WALL
- DENOTES STEEL COLUMN BELOW SEE PLAN BELOW FOR SIZE
- DENOTES POST BELOW SEE PLAN BELOW FOR SIZE. SEE DETAIL 8/S8.10 FOR TYP. BEAM TO POST CONN.
- DENOTES HANGER, SEE SCHED. ON DETAIL 11/S8.10.

ROOF JOIST DESIGN NOTES

1. ROOF I-JOISTS SHALL BE DESIGNED TO SUPPORT THE FOLLOWING LOADS:
   a. UNIFORM DEAD LOAD = 20 psf
   b. UNIFORM SNOW LOAD = 27 psf
   c. WIND UPLIFT LOADS PER S1.01
   d. SUSPENDED MECHANICAL UNIT LOADS; SEE MECH. DWGS
   e. 250# CONCENTRATED LOAD AT ANY LOCATION.
2. ROOF JOIST DEFLECTIONS SHALL NOT EXCEED:
   a. L/360 (SNOW LOADS)
   b. L/240 (TOTAL LOADS), 1" MAX.
3. PROVIDE BLOCKING, STIFFENERS, WEB FILLERS, BRIDGING, HANGERS BEVELLED BEARING PLATES AND ADDITIONAL FRAMING AND ACCESSORIES AS REQUIRED FOR THE COMPLETE FRAMING SYSTEM. NOT ALL JOISTS ARE NECESSARILY SHOWN ON THE FRAMING PLAN. PROVIDE ADDITIONAL JOISTS AS REQUIRED TO COMPLY WITH THE DESIGN REQUIRMENTS.
4. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.

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STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 94548 OREGON MARCH 23, 2010 SAMUEL SHIOTANI
Expires: 06-30-22
DIGITAL SIGNATURE

HOHBACH-LEWIN, INC.
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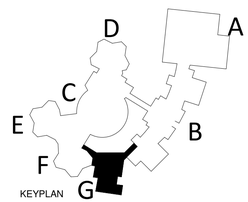
ISSUE DATE: 26 JAN 2021

ROOF FRAMING PLAN
G - BUILDING

S2.31

HOHBACH-LEWIN # 14706



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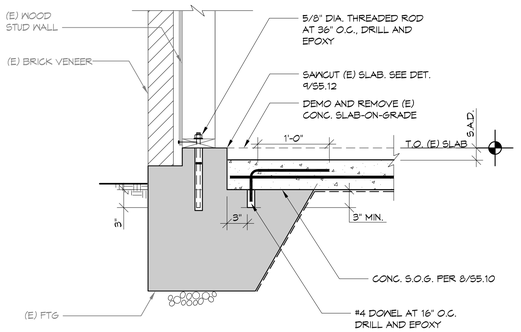
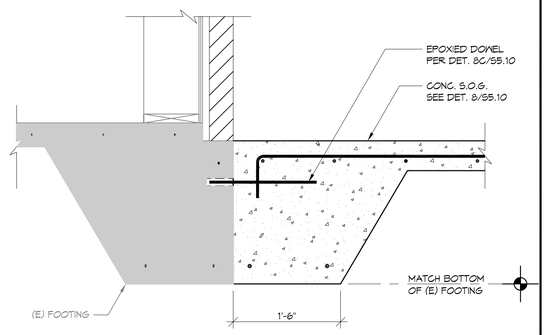
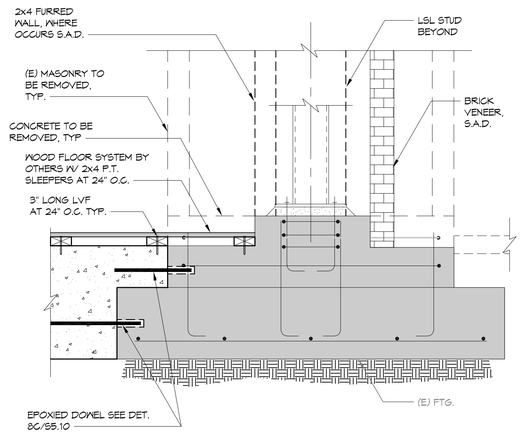


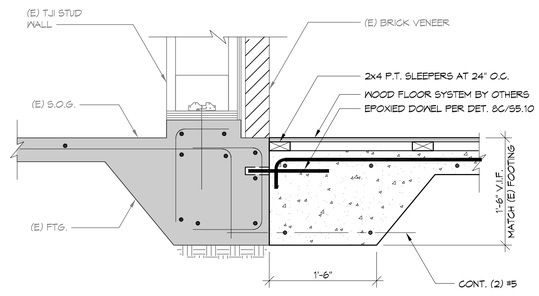
10 DEPRESSED SLAB AT (E) S.O.G. 1"=1'-0"



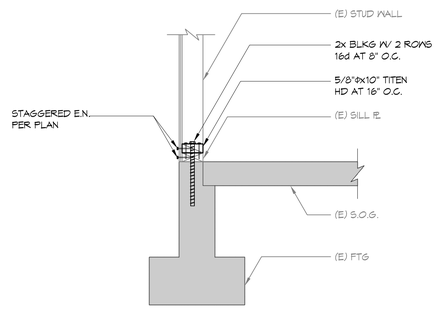
7 SLAB AT (E) FTG 1"=1'-0"



4 COLUMN FOOTING AT GYM 1"=1'-0"

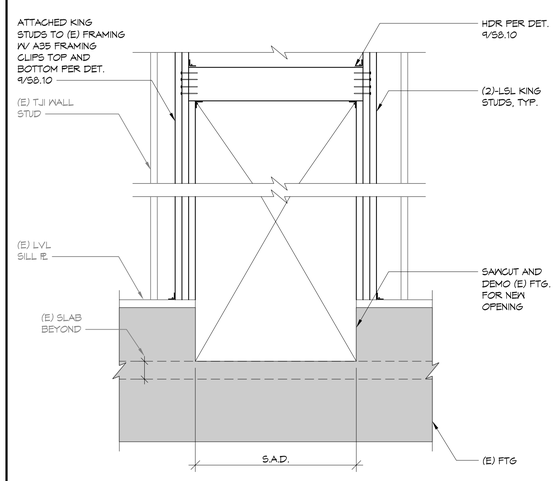


1 EXTERIOR WALL FOOTING AT STEP IN BRICK 1"=1'-0"

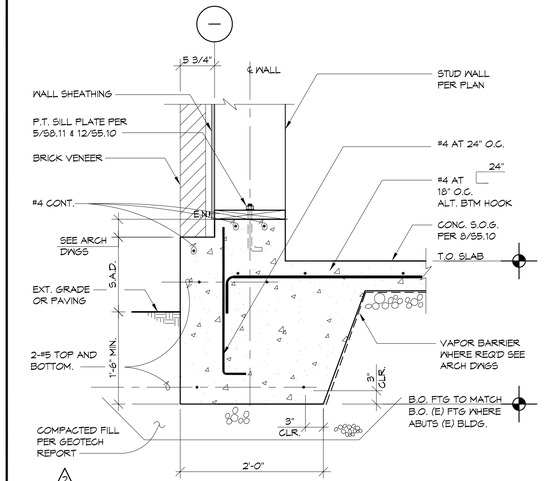


11 SHEARWALL STRENGTHENING AT CLASSROOM POD 1"=1'-0"

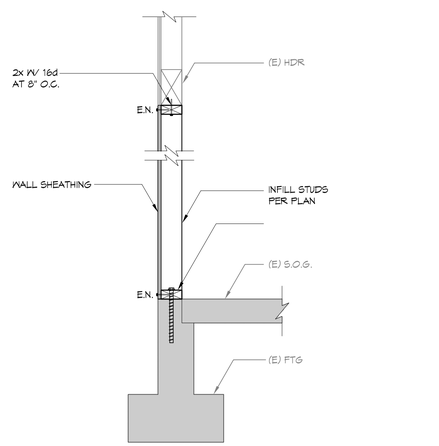
8



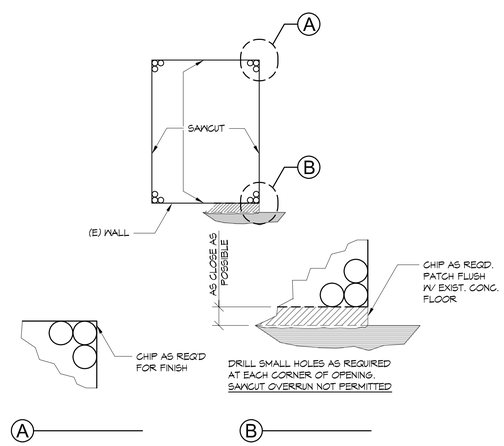
5 NEW AND ENLARGED OPENING IN (E) WALL 3/4"=1'-0"



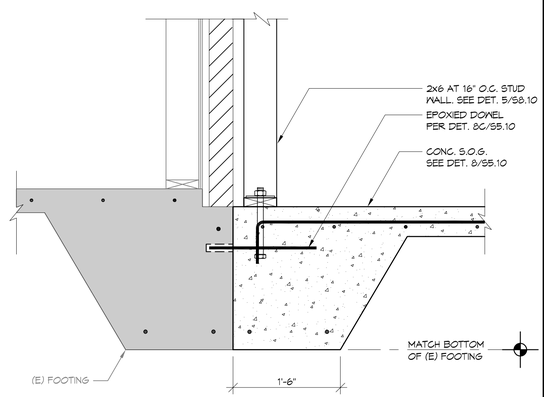
2 EXTERIOR WALL FOOTING AT STEP IN BRICK 1"=1'-0"



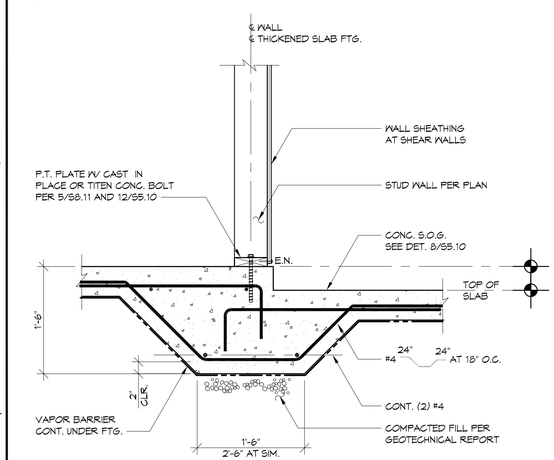
12 INFILL AT (E) DOOR OPENING AT CLASSROOM POD 1"=1'-0"



9 SAWCUT DETAIL S5.11-01 1 1/2"=1'-0"



6 WALL FOUNDATION AT (E) FTG 1"=1'-0"



3 TYPICAL THICKENED SLAB AT INTERIOR STRUCTURAL WALL 1"=1'-0"

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FOUNDATION DETAILS

S5.12

HOHBACH-LEWIN # 19.706

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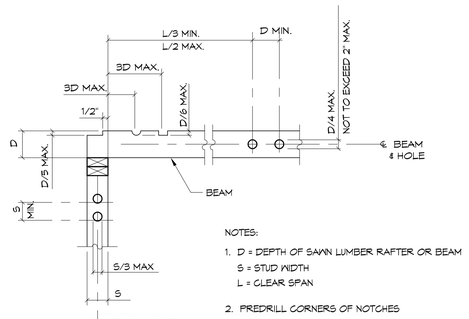
CONNECTION	NAILING (1) (2) (3)
1. Blocking between joists or rafters to top plate	3-8d toe nails
6. Rafter or roof truss to top plate.	3-10d toe nails
8. Double studs	16d at 24" o.c.
9. Double studs at braced wall panels	16d at 16" o.c.
12. Double top plates	16d at 16" o.c.
13. Double top plates, lap splice (EXCEPT SHEAR WALLS/LINES)	8-16d
15. Sole plate to joist, rim joist or blocking	16d at 16" o.c.
16. Sole plate to joist, rim joist or blocking at braced wall panels	2-16d per 16"
17. Top or sole plate to stud	2-16d end nails or 4-8d toe nails to 2x 2-20d toe nails to 3x
18. Top plates, lap at corners and intersections	4-16d
22. Joist to sill , top plate, or girder	3-8d toe nails
23. Rim joist to top plate	8d toe nails at 6" o.c.
27. Built-up girder and beams (4)	16d at 24" o.c. top and bottom staggered and 3-16d at ends
30. Bridging to joist	2-8d toe nails each end

NOTES:
1. FACE NAIL U.O.N.
2. NAILING PER SCHEDULE ABOVE IS TO BE USED WHERE NAILING IS NOT SPECIFIED ON PLANS OR DETAILS. NAILING PER PLANS AND DETAILS SUPERCEDE NAILING SCHEDULE UNLESS APPROVED BY ENGINEER.
3. NAILS SPECIFIED ARE COMMON: 8d = 2 1/2"x0.131"
   10d = 3"x0.148"
   16d = 3 1/2"x0.162"
   20d = 4"x0.192"
   FOR ALTERNATE NAILING AND INFORMATION NOT SHOWN, SEE COMPLETE OSSC TABLE 2304.91
4. FOR SAWN LUMBER. FOR DBL OR TRIPLE LSL OR LVL BEAMS, USE 16d COMMON NAILS AT 12" O.C TOP AND BOTTOM, ONE FACE FOR DOUBLE, BOTH FACES FOR TRIPLE.

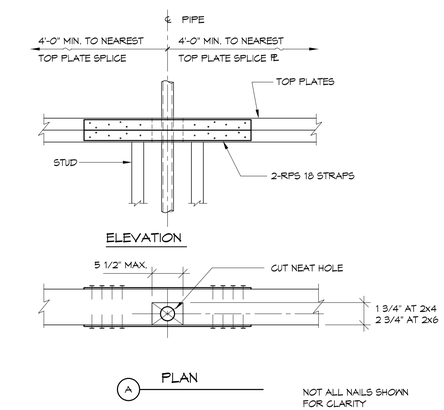
10 NAILING SCHEDULE (PER OSSC TABLE 2304.9.1) — NO SCALE



NOTES:
1. D = DEPTH OF SAWN LUMBER RAFTER OR BEAM
   S = STUD WIDTH
   L = CLEAR SPAN
2. PREDRILL CORNERS OF NOTCHES
3. NOTCH MAY OCCUR TOP OR BOTTOM, NOT BOTH.
4. NO HOLES WITHIN 2 INCHES OF TOP OR BOTTOM.

7 TYPICAL ALLOWABLE HOLES IN SAWN LUMBER MEMBERS — 1"=1'-0"

4 NON-STRUCTURAL PARTITION DETAILS — 1"=1'-0"

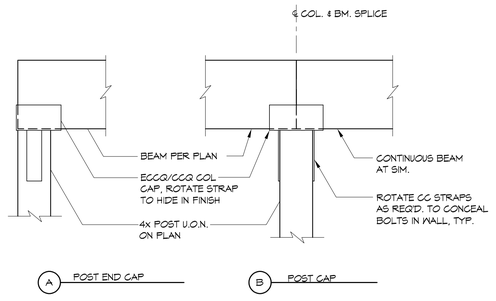


1 STRENGTHENING AT PENETRATION THRU SHEAR WALL — 1"=1'-0"

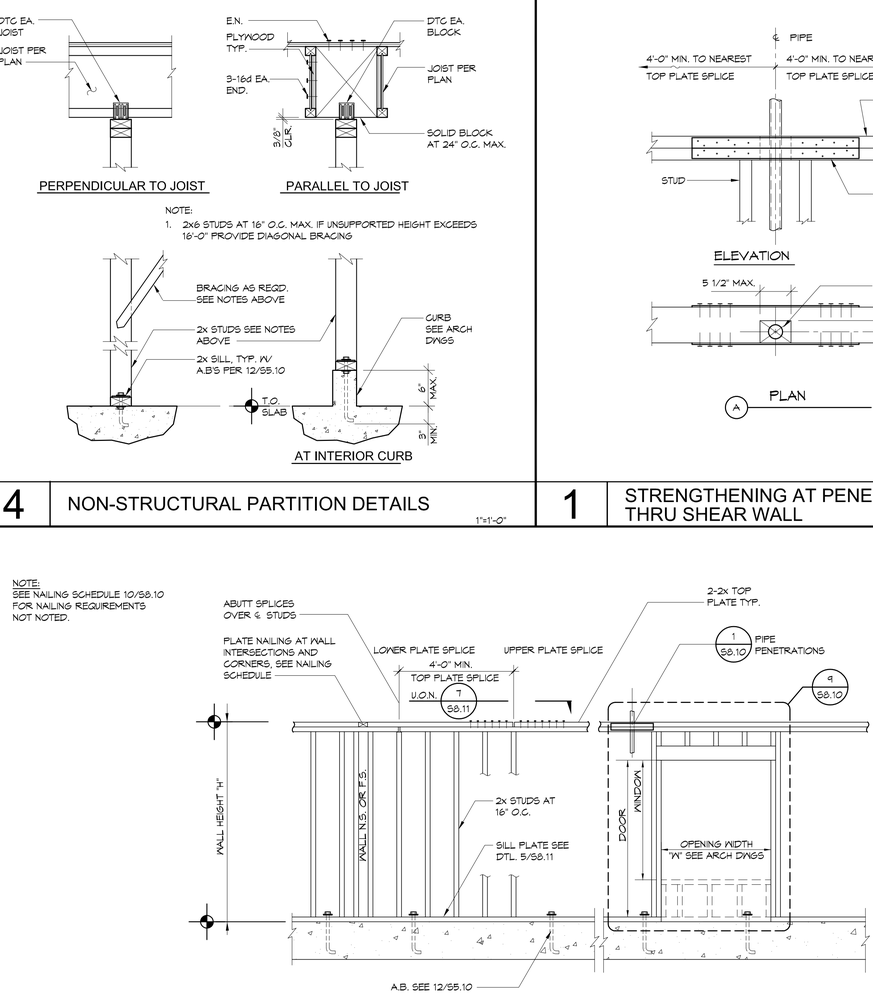
SIMPSON DESIGNATION	
MEMBER	FACE MOUNT U.O.N.
2x6	U26
3x8	U36
2x8	LUS28
2x10	LUS210
4x6	HU46 MAX.
4x8	HU48 MAX.
4x10	HU410 MAX.
4x12	HU412
11 7/8", 18" I-JOIST	MIU w/ ADD'L UPLIFT NAILS
GLB 3 1/8/LVL 3 1/2	HGUS
GLB 5 1/8/LVL 5 1/4	HGUS

NOTES:
1. INSTALL PER MANUFACTURER'S INSTRUCTIONS. FILL ALL HOLES WITH FASTENERS SPECIFIED.
2. USE SKEWED AND/OR SLOPED HANGERS AS REQ'D.
3. HANGERS ARE TYP. U.O.N. IN DRAWINGS.

11 HANGER SCHEDULE — NO SCALE

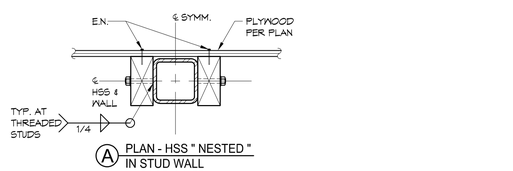


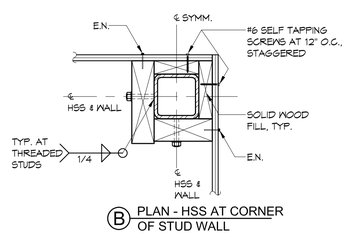
8 TYP. BEAM TO POST CONN.



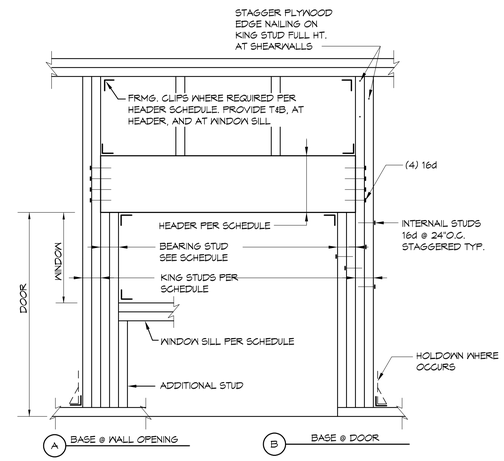
5 BEARING OR SHEAR WALL FRAMING — N.T.S.

NOTE:
PROVIDE 2x OR 3x NAILERS AS SHOWN W/ 5/8"ø THREADED STUDS (COUNTER SUNK 1" MAX.) AT 2'-8" O.C. (MAX.) LOCATE FIRST STUDS 12" ABOVE F. FLR. ELEV.; NAILERS SHALL EXTEND FROM 6" ABOVE F. FLR TO 12" BELOW TOP OF HSS

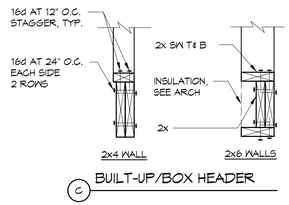




12 TYPICAL NAILER AND JAMB DETAIL AT HSS COLUMN — 1 1/2"=1'-0"



NOTES
1. UNLESS OTHERWISE NOTED ON PLANS
2. USE NAILING SCHEDULE DTL. 10/S8.10 FOR OTHER NAILING REQUIREMENTS NOT NOTED.
3. SEE ⓒ FOR BUILT-UP OR BOX HEADER
4. STUDS TO MATCH STUDWALL WIDTH
5. USE 2-2x KING STUD MIN. AT HOLDOWN LOCATIONS, SEE DETAIL 8/S8.11
6. USE 2-2x AT INTERIOR BEARING WALL WINDOW SILLS.



HEADER SCHEDULE

MAX. OPENING WIDTH	EXTERIOR WALL OR INTERIOR BEARING WALL (1) (2) (3)					INTERIOR NON BEARING WALL (4)		
	BEARING STUD	KING STUD (5)	MIN. HEADER (1) (3)	MIN. WINDOW SILL (1) (6)	FRAMING CLIPS	BEARING STUD (4)	KING STUD (4) (5)	MIN. HEADER SIZE
4'-0" MAX	2x6	2x6	2-2x8 (3)	2x6 FLAT	NONE	2x	2x	2-2x FLAT
8'-0" MAX	2x6	2-2x6	5 1/4x 7 1/4 LVL	2-2x6 FLAT	NONE	2x	2-2x	2x6 OR 5/4x6
10'-0" MAX	2-2x6 OR 4x6	2-2x6	5 1/4x 7 1/4 LVL	3-2x6 FLAT	A35'S WHERE SHOWN	2x	3-2x	2x10 OR 5/4x6
12'-0" MAX	2-2x6 OR 4x6	2-2x6	5 1/4x 9 1/4 LVL	3-2x6 FLAT	A35'S WHERE SHOWN	2x	3-2x	2x10 OR 5/4x6
LARGER	2-2x6 OR 4x6	2-2x6	HDR PER PLAN	3-2x6 FLAT	A35'S WHERE SHOWN	2x	3-2x	2-2x10 OR 5/4x6

1

9 TYPICAL FRAMING OPENINGS IN WALLS — N.T.S.

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TYPICAL WOOD FRAMING DETAILS

S8.10

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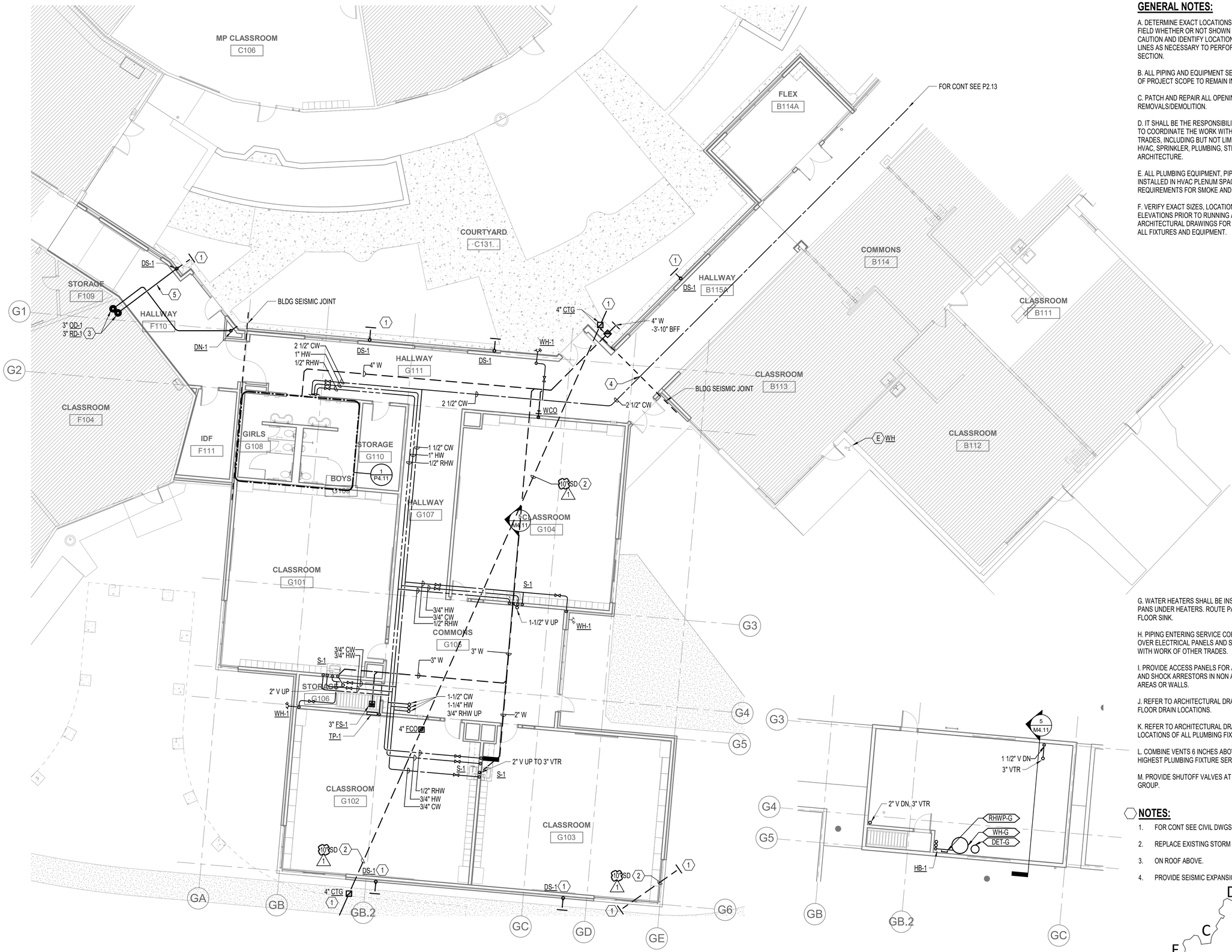


1 PARTIAL FIRST FLOOR PLAN - G BUILDING - PLUMBING
1/8" = 1'-0"

2 G BUILDING MECHANICAL PENTHOUSE PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES:

A. DETERMINE EXACT LOCATIONS OF EXISTING UTILITIES IN FIELD WHETHER OR NOT SHOWN ON DRAWINGS. EXERCISE CAUTION AND IDENTIFY LOCATIONS OF UNMARKED UTILITY LINES AS NECESSARY TO PERFORM WORK OF THIS SECTION.

B. ALL PIPING AND EQUIPMENT SERVING AREAS OUTSIDE OF PROJECT SCOPE TO REMAIN IN SERVICE.

C. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS/DEMOLITION.

D. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE THE WORK WITH THAT OF ALL OTHER TRADES, INCLUDING BUT NOT LIMITED TO: ELECTRICAL, HVAC, SPRINKLER, PLUMBING, STRUCTURAL AND GENERAL ARCHITECTURE.

E. ALL PLUMBING EQUIPMENT, PIPING, INSULATION, ETC. INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.

F. VERIFY EXACT SIZES, LOCATIONS, INVERTS AND ELEVATIONS PRIOR TO RUNNING ANY PIPING. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL FIXTURES AND EQUIPMENT.

G. WATER HEATERS SHALL BE INSTALLED WITH DRAIN PANS UNDER HEATERS. ROUTE PAN DRAINS TO NEAREST FLOOR SINK.

H. PIPING ENTERING SERVICE CORRIDOR SHALL NOT RUN OVER ELECTRICAL PANELS AND SHALL BE COORDINATED WITH WORK OF OTHER TRADES.

I. PROVIDE ACCESS PANELS FOR ALL SHUTOFF VALVES AND SHOCK ARRESTORS IN NON ACCESSIBLE CEILING AREAS OR WALLS.

J. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FLOOR DRAIN LOCATIONS.

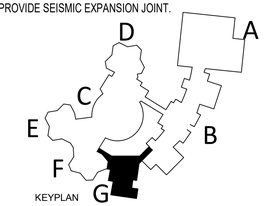
K. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING FIXTURES.

L. COMBINE VENTS 6 INCHES ABOVE FLOOD-LEVEL RIM OF HIGHEST PLUMBING FIXTURE SERVED.

M. PROVIDE SHUTOFF VALVES AT EACH RESTROOM GROUP.

NOTES:

1. FOR CONT SEE CIVIL DWGS.
2. REPLACE EXISTING STORM DRAIN LINE.
3. ON ROOF ABOVE.
4. PROVIDE SEISMIC EXPANSION JOINT.



KEYPLAN

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PARTIAL FLOOR PLAN - PLUMBING

P2.11

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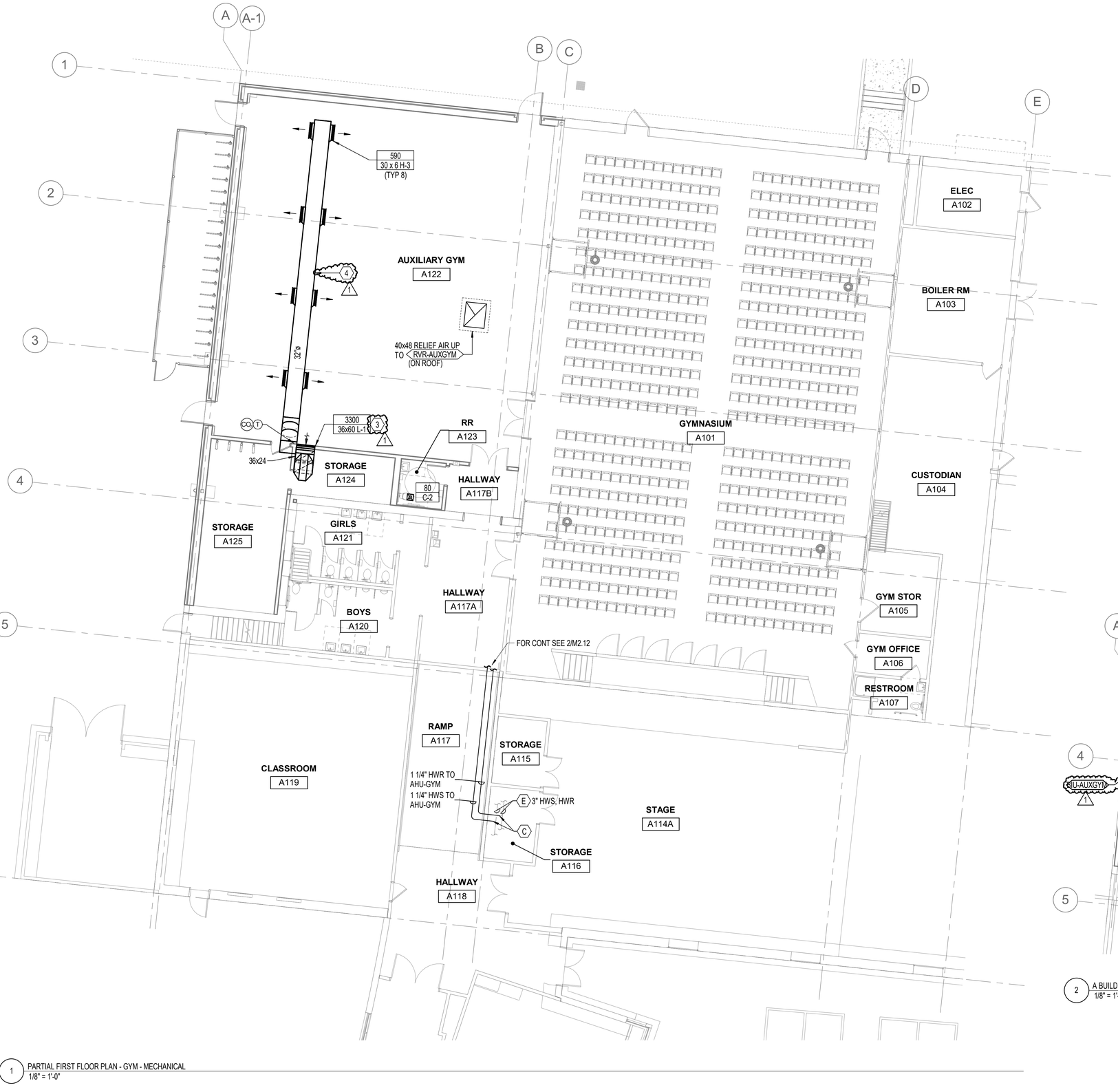
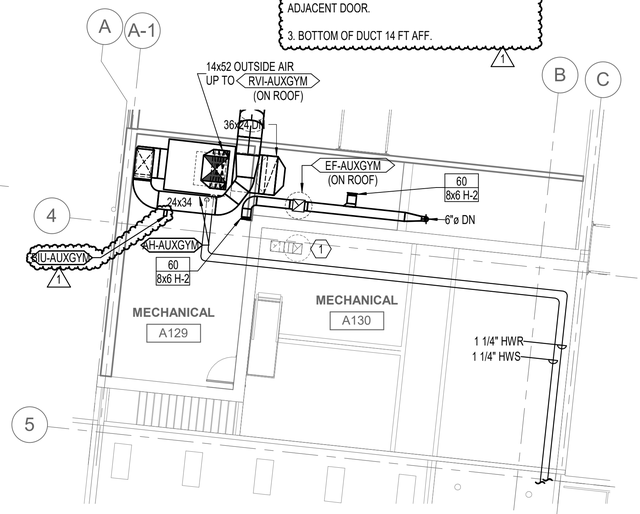


1 PARTIAL FIRST FLOOR PLAN - GYM - MECHANICAL
1/8" = 1'-0"



2 A BUILDING MECHANICAL ROOM PLAN - MECHANICAL
1/8" = 1'-0"

GENERAL NOTES:

A. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

B. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS.

C. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR REQUIRED DEMOLITION OF ELECTRICAL CONDUITS AND ROOFING WORK.

D. OBTAIN THE AIRFLOW AND WATER FLOW MEASUREMENTS FOR EXISTING MECHANICAL SYSTEMS SERVING THE PROJECT AREA PRIOR TO MODIFICATION OF THE EXISTING SYSTEM.

E. PROVIDE VOLUME DAMPER AT EACH BRANCH OUTLET/INLET.

F. PROVIDE CABLE OPERATED VOLUME DAMPERS AT ALL INACCESSIBLE VOLUME DAMPERS.

G. RUN DUCTS AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

H. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

I. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.

J. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.

K. BRANCH DUCTWORK SIZE TO MATCH EQUIPMENT CONNECTION, UNLESS OTHERWISE NOTED.

L. BRANCH DUCTWORK TO DIFFUSERS AND GRILLES TO MATCH DIFFUSER CONNECTION, UNLESS OTHERWISE NOTED.

NOTES:

1. TEMPORARY REMOVAL OF EXISTING EXHAUST FAN TO ACCOMMODATE ROOF IMPROVEMENTS, REINSTALL IN SAME LOCATION.

2. MOUNT WITH TOP OF GRILLE AT SAME HEIGHT AS TOP OF ADJACENT DOOR.

3. BOTTOM OF DUCT 14 FT AFF.

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7655PE
OREGON
MAY 13, 2006
CONRAD JOHN BROWN
2-25-2021
EXPIRES 12-31-2021

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REVISIONS

ADD 2	02/25/21

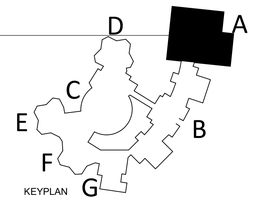
GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO: 20235
ISSUE DATE: 26 JAN 2021

PARTIAL FLOOR PLAN - MECHANICAL

M2.12



KEYPLAN

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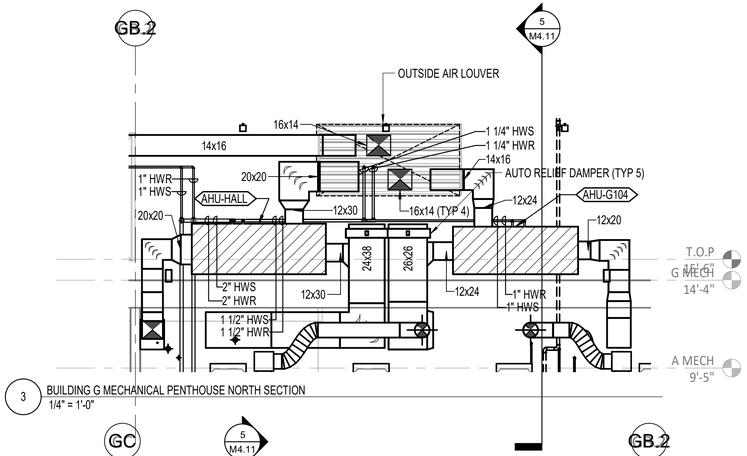
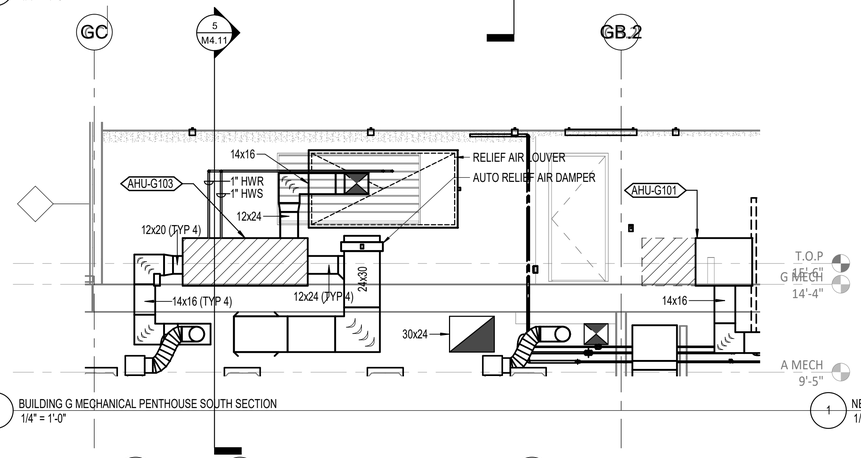
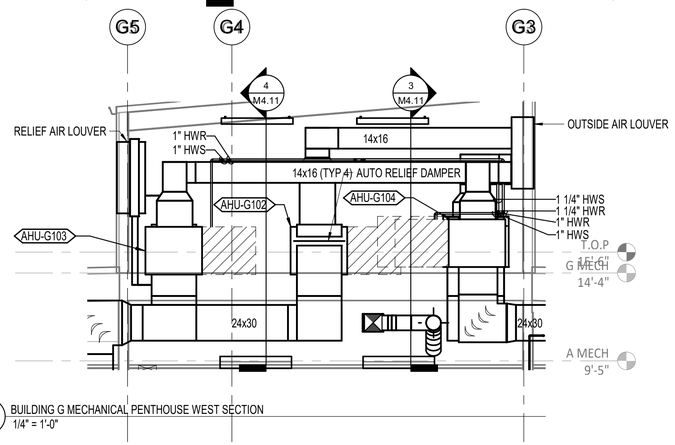


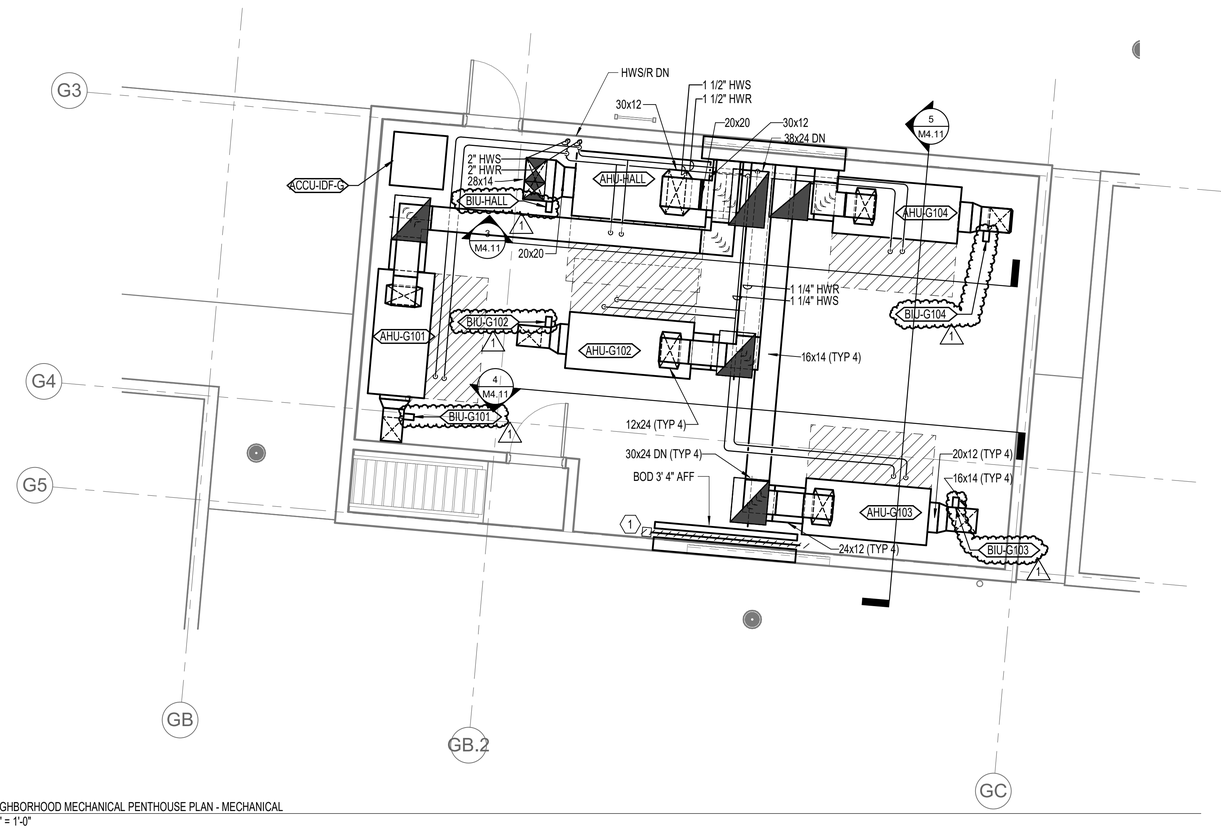
3 BUILDING G MECHANICAL PENTHOUSE NORTH SECTION
1/4" = 1'-0"



4 BUILDING G MEQHANICAL PENTHOUSE SOUTH SECTION
1/4" = 1'-0"



5 BUILDING G MECHANICAL PENTHOUSE WEST SECTION
1/4" = 1'-0"



1 NEIGHBORHOOD MECHANICAL PENTHOUSE PLAN - MECHANICAL
1/4" = 1'-0"

NOTES:

1. RELIEF AIR PLENUM AND AUTO DAMPER.

2. PROVIDE CONDENSATE PUMP FOR FCU. PUMP 3/4" DRAIN THROUGH ROOF, TERMINATE AT GOOSENECK.

3. PROVIDE SEISMIC EXPANSION JOINT AT REFRIGERANT LINES CROSSING SEISMIC JOINT. ORIENT SO AS TO AVOID TRAPPING OF LINES.

4. MAINTAIN MIN 3 FT DISTANCE FROM SEISMIC JOINT.

GENERAL NOTES:

A. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

B. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS.

C. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR REQUIRED DEMOLITION OF ELECTRICAL CONDUITS AND ROOFING WORK.

D. RUN DUCTS AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

E. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

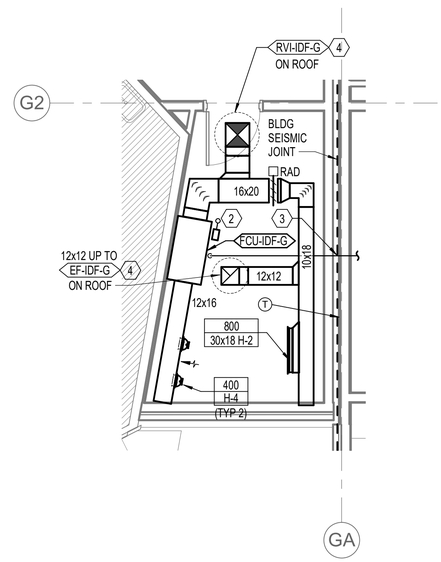
F. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.

G. BRANCH DUCTWORK SIZE TO MATCH EQUIPMENT CONNECTION, UNLESS OTHERWISE NOTED.

H. BRANCH DUCTWORK TO DIFFUSERS AND GRILLES TO MATCH DIFFUSER CONNECTION, UNLESS OTHERWISE NOTED.

I. MAINTAIN MIN 36" WIDE SERVICE ACCESS TO ALL UNITS WITH MIN 6' 8" HEAD CLEARANCE.

J. PIPING RUNOUTS TO AIR HANDLERS ARE ALL 1-INCH.



2 PARTIAL FIRST FLOOR PLAN - IDF G MECHANICAL
1/4" = 1'-0"

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JOB NO: 20235
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ENLARGED PLANS - MECHANICAL

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INTERIOR LUMINAIRE SCHEDULE

FIXTURE TYPE	PRODUCT DESCRIPTION	BASIS OF DESIGN MANUFACTURER	SIZE	INPUT WATTS	LAMP SOURCE (Type, CCT, Delivered Lumens)	POWER SUPPLY (Integral/Remote) (Electronic/Magn.) (Dimming Type)	INPUT VOLTAGE	FINISH	MOUNTING	NOTES
L1	LED RECESSED LINEAR	MAXLITE MLFP CCT AND WATTAGE SELECTABLE SERIES	2'W X 4'L	45	LED 4000K, 80 CRI 4920 LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L1A	LED RECESSED LINEAR	MAXLITE MLFP CCT AND WATTAGE SELECTABLE SERIES	2'W X 2'L	45	LED 4000K, 80 CRI 4920 LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L1B	LED RECESSED LINEAR	MAXLITE MLFP CCT AND WATTAGE SELECTABLE SERIES	2'W X 4'L	45	LED 4000K, 80 CRI 4920 LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L2	LED RECESSED LINEAR	MAXLITE MLFP CCT AND WATTAGE SELECTABLE SERIES	1'W X 4'L	30	LED 4000K, 80 CRI 3700 LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L3	SURFACE LINEAR	LITHONIA - SB	4'	25	LED, 4000K 3236 LM/LF	INTEGRAL ELECTRONIC 0-10V DIMMING	120	PER ARCHITECT	RECESSED	
L4	LED RECESSED LINEAR	MAXLITE MLFP CCT AND WATTAGE SELECTABLE SERIES	2'W X 2'L	36	LED 4000K, 80 CRI 4000 LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L5	LED ENCLOSED SUSPENDED	CORELITE RZL SERIES	4'L	30	LED 4000K 3120 LUMEN 80+CRI	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	SUSPENDED	
L2A	LED LINEAR STRIPLIGHT	LITHONIA ZL1D SERIES METALUX SNLED SERIES	4'	60	LED 4000K, 90CRI 6291 DELIVERED LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	WHITE	SEE PLANS	PROVIDE WIREGUARD.
L6	SURFACE MOUNT LINEAR STRIP	LITHONIA C	4-3/8" X 4" X 4'	32	LED TUBE LAMPS T8 EQUIVELENT	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	SURFACE/ SUSPENDED	
L7	PENDANT ROUND LED HIGH BAY, FROSTED LENS, ENCLOSED, GASKETED,WIDE...	HOLOPHANE PHUZION PHS	21.5" H X 22" DIA	296	LED, 85+ CRI, 4000K, 24,000 LUMENS	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	SUSPENDED	PROVIDE WIREGUARD.
L8	RECESSED PARABOLIC TROFFER	LITHONIA PM3N	2' X 4'	32	LED TUBE LAMPS T8 EQUIVELENT	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L8A	RECESSED PARABOLIC TROFFER	LITHONIA PM3N	1' X 4'	32	LED TUBE LAMPS T8 EQUIVELENT	INTEGRAL ELECTRONIC 0-10V DIMMING	MVOLT	PER ARCHITECT	RECESSED	
L9	SURFACE LINEAR DIRECT LED, ACRYLIC LENS, EXTRUDED ALUMINUM HOUSING	AXIS BEAM 4	4"X LENGTH AS SHOWN ON PLAN	5 W/LF	LED, 90 CRI, 4000K, 500 LM/FT	INTEGRAL 0-10V 1% DIMMING	MVOLT	STANDARD PER ARCHITECT	SURFACE	
L10	RECESSED ROUND DOWNLIGHT - WIDE BEAM	GOTHAM EVO	4"	8.8	LED, 85+ CRI, 4000K, 1000LM	INTEGRAL 0-10V 10% DIMMING	MVOLT	STANDARD PER ARCHITECT	RECESSED	
X1	EXIT SIGN	LITHONIA LQM SERIES	11-3/4"W X 7-5/8"H	3	LED	-	MVOLT	WHITE	SURFACE	PROVIDE GREEN LED LETTERING

EXTERIOR LUMINAIRE SCHEDULE

FIXTURE TYPE	PRODUCT DESCRIPTION	BASIS OF DESIGN MANUFACTURER	SIZE	INPUT WATTS	LAMP SOURCE (Type, CCT, Delivered Lumens)	POWER SUPPLY (Integral/Remote) (Electronic/Magn.) (Dimming Type)	INPUT VOLTAGE	FINISH	MOUNTING	NOTES
S1	SURFACE MOUNTED AREA LUMINAIRE, CANOPY DISTRIBUTION	MAXLITE MPULSE MP-CP-28-U-C-40-FINISH	11.22" x 11.81" x 4.86"H	56	LED, 4000K, 6635LM	INTEGRAL 0-10V DIMMING	MVOLT	SILVER	SURFACE MOUNT	
S3	PEDESTRIAN POLE - TYPE V DISTRIBUTION WITH 10' ROUND STEEL POLE.	LITHONIA RADEAN	24" D x 4" H	54	LED, 4000K	INTEGRAL 0-10V DIMMING	MVOLT	STANDARD PER ARCHITECT	10' POLE	
S4	SURFACE WALL MOUNTED AREA LUMINAIRE	LIGMAN GINO 4 SERIES	8"W x 3.2"H x 4.3"D	8	LED, 4000K	INTEGRAL 0-10V DIMMING	MVOLT	STANDARD PER ARCHITECT	SURFACE WALL	
X2	EXIT SIGN	HOLOPHANE DLTL SERIES	11-3/4"W X 7-5/8"H	3	LED	-	MVOLT	WHITE	SURFACE	PROVIDE GREEN LED LETTERING

CONTROL STATION SCHEDULE

CONTROL STATION ID	ZONES	DIMMING
CS1	1	YES

NOTE:
A. PROVIDE ALL ON/OFF AND INDIVIDUAL ON/OFF AND DIMMING CONTROL PER ZONE.

EQUIPMENT CONNECTION SCHEDULE

EQUIPMENT DESCRIPTIONS			ELECTRICAL CHARACTERISTICS						CONNECTION CHARACTERISTICS					FEEDER CHARACTERISTICS				PANEL INFORMATION	SCCA	NOTES
TAG	DESCRIPTION	LOCATION	KW	HP	FLA	MOCP	VOLTS	PHASE	VFD	ECM	1-POINT CONNECT	STARTER SIZE	DISCONNECT SIZE	CONDUIT DIA (INCH)	PHASE CONDUCTORS	NEUTRAL CONDUCTOR	GROUND CONDUCTOR		AVAILABLE FAULT AT EQUIPMENT...	
MECHANICAL																				
DDC PANEL	CONTROL PANEL	BLDG G PENTHOUSE	0.10	-	-	-	120	1	NO	NO	YES	-	BREAKER	3/4"	12 AWG	12 AWG	12 AWG	2F	1036	
DDC PANEL	CONTROL PANEL	GYM MECH ROOM	0.10	-	-	-	120	1	NO	NO	YES	-	BREAKER	3/4"	12 AWG	12 AWG	12 AWG	2D2	1036	
AHU-HALL-G	AIR HANDLING UNIT	BLDG G PENTHOUSE	-	-	5.2	15	208	3	NO	YES	YES	-	30A / 3P / NF	3/4"	12 AWG	-	12 AWG	2F	1036	
BIU-HALL-G	BIPOLAR IONIZATION UNIT	BLDG G PENTHOUSE	0.01				120	1	NO	NO	YES		MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1036	
AHU-AUXGYM	AIR HANDLING UNIT	GYM MECH ROOM	-	-	10.4	20	208	3	NO	YES	YES	-	30A / 3P / NF	3/4"	12 AWG	-	12 AWG	2D2	1013	
BIU-AUXGYM	BIPOLAR IONIZATION UNIT	GYM MECH ROOM	0.01				120	1	NO	NO	YES		MRSS	3/4"	12 AWG	12 AWG	12 AWG	2D2	1013	
AHU-G101	AIR HANDLING UNIT	BLDG G PENTHOUSE	-	-	3.8	15	208	3	NO	YES	YES	-	30A / 3P / NF	3/4"	12 AWG	-	12 AWG	2F	1013	
BIU-G101	BIPOLAR IONIZATION UNIT	BLDG G PENTHOUSE	0.01				120	1	NO	NO	YES		MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
AHU-G102	AIR HANDLING UNIT	BLDG G PENTHOUSE	-	-	3.8	15	208	3	NO	YES	YES	-	30A / 3P / NF	3/4"	12 AWG	-	12 AWG	2F	1013	
BIU-G102	BIPOLAR IONIZATION UNIT	BLDG G PENTHOUSE	0.01				120	1	NO	NO	YES		MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
AHU-G103	AIR HANDLING UNIT	BLDG G PENTHOUSE	-	-	3.8	15	208	3	NO	YES	YES	-	30A / 3P / NF	3/4"	12 AWG	-	12 AWG	2F	1013	
BIU-G103	BIPOLAR IONIZATION UNIT	BLDG G PENTHOUSE	0.01				120	1	NO	NO	YES		MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
AHU-G104	AIR HANDLING UNIT	BLDG G PENTHOUSE	-	-	3.8	15	208	3	NO	YES	YES	-	30A / 3P / NF	3/4"	12 AWG	-	12 AWG	2F	1013	
BIU-G104	BIPOLAR IONIZATION UNIT	BLDG G PENTHOUSE	0.01				120	1	NO	NO	YES		MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
EF-RR-G	EXHAUST FAN	BLDG G ROOF	-	1/6	-	-	120	1	NO	YES	YES	-	30AS/10AF	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
EF-IDF-G	EXHAUST FAN	BLDG G ROOF	-	1/4	-	-	120	1	NO	YES	YES	-	MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
EF-SENS	EXHAUST FAN	ABOVE SENSORY RM	0.01				120	1	NO	NO	YES	-	30AS/1AF	3/4"	12 AWG	12 AWG	12 AWG	2A	724	
EF-AUXGYM	EXHAUST FAN	AUX GYM ROOF	-	1/6	-	-	120	1	NO	YES	YES	-	30AS/10AF	3/4"	12 AWG	12 AWG	12 AWG	2D2	1036	1
ACUR-G1	AIR CURTAIN	HALLWAY B115A	0.56				120	1	NO	NO	YES	-	MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	653	1
ACUR-G2	AIR CURTAIN	HALLWAY B115A	0.56				120	1	NO	NO	YES	-	MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	653	1
FCU-IDF-G	SPLIT SYSTEM AC INDOOR-	BLDG G 'IDF ROOM	-	-	4.30	-	208	1	NO	NO	YES	-	30AS	3/4"	12 AWG	-	12 AWG	2F	4084	
	-CONDENSATE PUMP						120	1	NO	NO	YES	-								
ACCU-IDF-G	AIR COOLED CONDENSING UNIT	BLDG G PENTHOUSE	-	-	11.70	-	208	1	NO	NO	YES	-	30AS/NF	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
PLUMBING																				
RHWP-G	RECIRCULATION HW PUMP	BLDG G PENTHOUSE	-	-	0.52	-	120	1	NO	NO	YES	-	MRSS	3/4"	12 AWG	12 AWG	12 AWG	2F	1013	
WH-G	ELECTRIC WATER HEATER	BLDG G PENTHOUSE	12.00	-		-	208	1	NO	NO	YES	-	MRSS	3/4"	12 AWG	-	12 AWG	2F	1013	
WH-GYM	ELECTRIC PT OF USE WATER...	AUX GYM RESTROOM	4.10				208	1	NO	NO	YES	-	30AS/NF	3/4"	8 AWG	-	10 AWG	2D2	1036	

GENERAL NOTES: (SOME MAY NT BE USED ON THIS SHEET)

A. REFER TO ONE-LINE DIAGRAM OR PANEL SCHEDULES FOR OVERCURRENT PROTECTION CHARACTERISTICS AND CIRCUIT NUMBERS.

B. COORDINATE ALL EQUIPMENT CONNECTION REQUIREMENTS WITH INSTALLING CONTRACTOR PRIOR TO THE INSTALLATION OF ANY ELECTRICAL WORK.

C. VFD'S ARE FURNISHED BY DIVISION 23. INSTALL VFD AND PROVIDE LINE AND LOAD SIDE FEEDERS IN ELECTRICAL WORK.

D. COMBINATION STARTER/DISCONNECTS AND DISCONNECT SWITCHES SHALL BE LOCATED WITHIN SIGHT OF AND ADJACENT TO EQUIPMENT SERVED. COORDINATE DISCONNECT INSTALLATION AND LOCATION WITH EQUIPMENT INSTALLER.

E. NOT ALL EQUIPMENT IDENTIFIED HERE IS SHOWN ON FLOOR PLANS. REFER TO DRAWINGS IN OTHER DISCIPLINES FOR EQUIPMENT LOCATIONS.

F. 'MRSS' STANDS FOR MOTOR RATED SNAP SWITCH. RATED FOR 20A

NOTES: (SOME MAY NOT BE USED ON THIS SHEET)

1. MRSS TO BE FLUSH MOUNT WITH FACEPLATE AND LOCKABLE COVER. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

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ELECTRICAL SCHEDULES

E0.02

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GENERAL NOTES:

A. ALL ELECTRICAL SHOWN IN BOLD WITHIN DRAWINGS ARE NEW, DEVICES SHOWN IN GREYED BACK ARE EXISTING, UNLESS OTHERWISE NOTED.

B. PROVIDE UL924 DEVICES IN APPLICABLE AREAS FOR EGRESS LIGHTS (DESIGNATED BY 'EM') TO OPERATE WITH NORMAL POWERED LIGHTS DURING NORMAL POWER CONDITIONS, AND OVERRIDE TO FULL OUTPUT ON DURING EMERGENCY POWER CONDITIONS.

C. REFER TO ARCHITECTURAL CEILING PLANS, ELEVATIONS, AND FLOOR PLANS FOR ACTUAL LOCATIONS OF ALL CEILING, WALL, AND FLOOR MOUNTED DEVICES AND EQUIPMENT. WHERE INTERIOR ELEVATIONS DIFFER BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS, CONTRACTOR TO NOTIFY ENGINEER.

D. OCCUPANY SENSORS SHOWN IN SPACES ARE DIAGRAMMATIC AND INDICATE FULL COVERAGE IN SPACE. CONTRACTOR TO CONFIRM EXACT COUNT AND SPACING REQUIREMENTS FROM SUPPLIER PROVIDE TO PROCUREMENT AND INSTALLATION. IF LOCATIONS DIFFER FROM WHAT IS SHOWN ON THE ENGINEERING DRAWINGS, COORDINATE WITH ARCHITECT PRIOR TO INSTALLATION.

E. PROVIDE UNSWITCHED HOT TO ALL EXIT SIGNS.

NOTES:

1. EXTEND CIRCUIT SALVAGED DURING DEMOLITION TO NEW FIXTURE LOCATION.

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PARTIAL FLOOR PLAN - LIGHTING

E2.11

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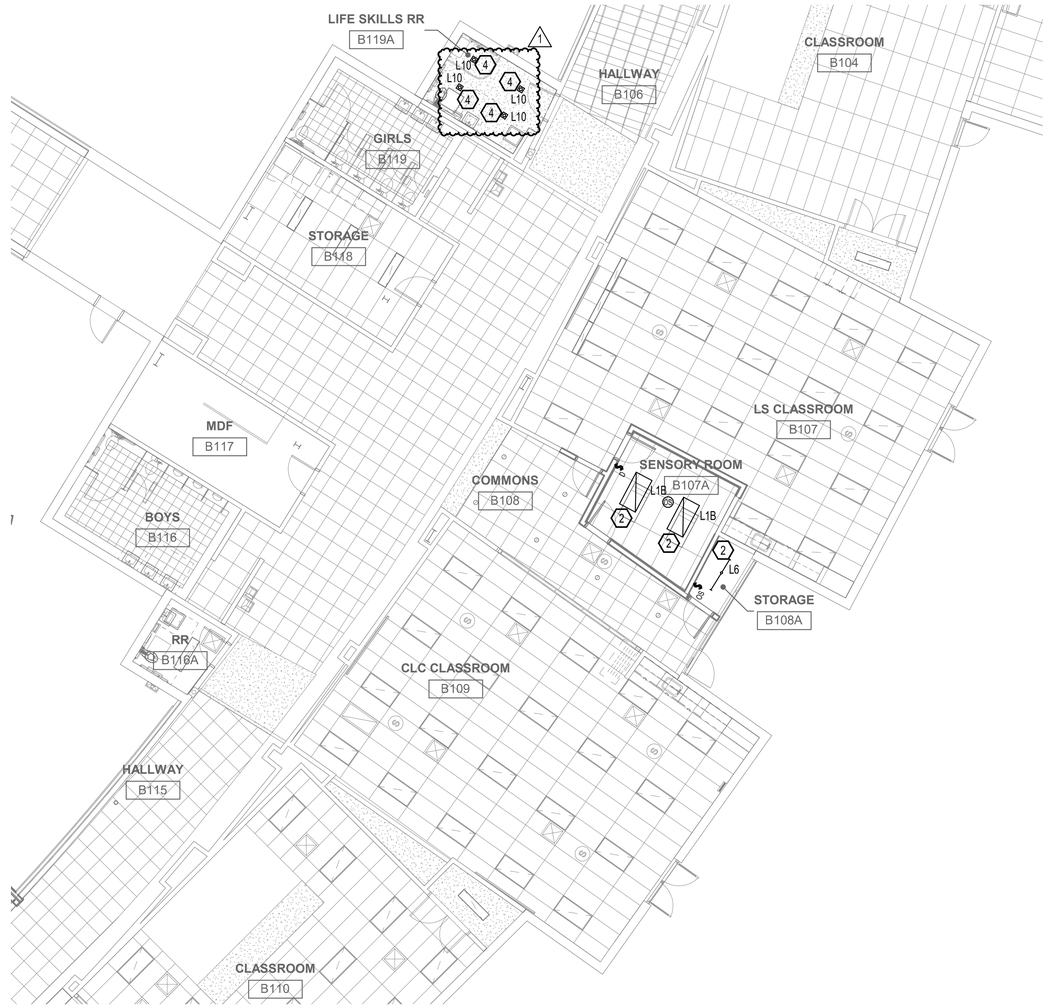
1 PARTIAL FIRST FLOOR PLAN - NEIGHBORHOOD - LIGHTING
1/8" = 1'-0"

2 NEIGHBORHOOD MECHANICAL PENTHOUSE PLAN - LIGHTING
1/8" = 1'-0"

1 PARTIAL FIRST FLOOR PLAN - D POD - LIGHTING
1/8" = 1'-0"



2 PARTIAL FIRST FLOOR PLAN - MULTIPURPOSE - LIGHTING
1/8" = 1'-0"

GENERAL NOTES:

A. ALL ELECTRICAL SHOWN IN BOLD WITHIN DRAWINGS ARE NEW, DEVICES SHOWN IN GREYED BACK ARE EXISTING, UNLESS OTHERWISE NOTED.

B. PROVIDE UL924 DEVICES IN APPLICABLE AREAS FOR EGRESS LIGHTS (DESIGNATED BY 'EM') TO OPERATE WITH NORMAL POWERED LIGHTS DURING NORMAL POWER CONDITIONS, AND OVERRIDE TO FULL OUTPUT ON DURING EMERGENCY POWER CONDITIONS.

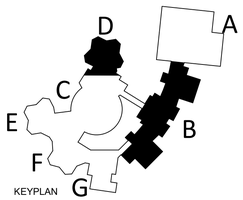
C. REFER TO ARCHITECTURAL CEILING PLANS, ELEVATIONS, AND FLOOR PLANS FOR ACTUAL LOCATIONS OF ALL CEILING, WALL, AND FLOOR MOUNTED DEVICES AND EQUIPMENT. WHERE INTERIOR ELEVATIONS DIFFER BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS, CONTRACTOR TO NOTIFY ENGINEER.

D. OCCUPANY SENSORS SHOWN IN SPACES ARE DIAGRAMMATIC AND INDICATE FULL COVERAGE IN SPACE. CONTRACTOR TO CONFIRM EXACT COUNT AND SPACING REQUIREMENTS FROM SUPPLIER PROVIDE TO PROCUREMENT AND INSTALLATION. IF LOCATIONS DIFFER FROM WHAT IS SHOWN ON THE ENGINEERING DRAWINGS, COORDINATE WITH ARCHITECT PRIOR TO INSTALLATION.

E. PROVIDE UNSWITCHED HOT TO ALL EXIT SIGNS.

NOTES:

1. RELOCATE EXISTING EXIT SIGN SALAVED DURING DEMOLITION PHASE. EXTEND SALVAGED CIRCUIT TO NEW LOCATION.
2. EXTEND CIRCUIT SALVAGED DURING DEMOLITION TO NEW FIXTURE LOCATION.
3. EXTEND CIRCUIT AND CONTROLS SALVAGED DURING DEMOLITION TO NEW FIXTURE LOCATION.
1 4. EXTEND SALVAGED CIRCUIT AND CONTROL TO NEW FIXTURE LOCATION.



KEYPLAN

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SEPTEMBER 17, 2010
ROBERT A. MILLS
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GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
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JOB NO:	20235
ISSUE DATE:	26 JAN 2021

PARTIAL FLOOR PLAN - LIGHTING

E2.13

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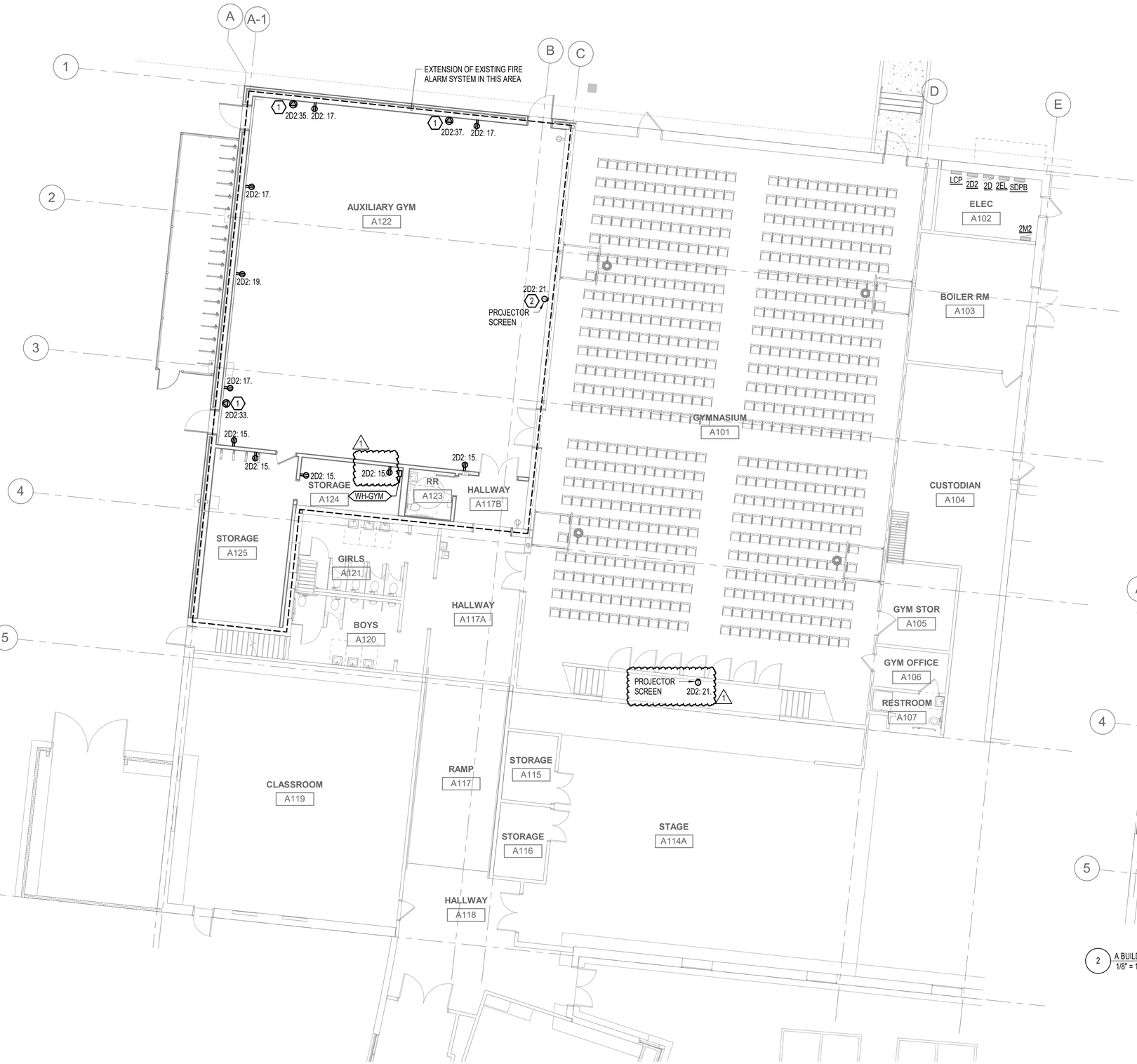
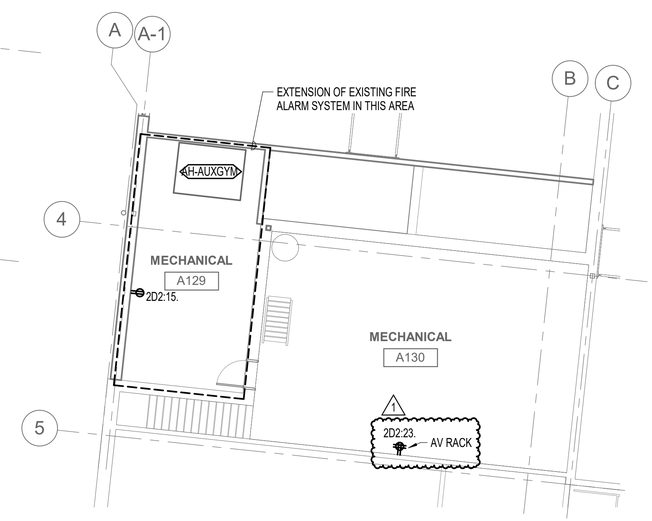


1 PARTIAL FIRST FLOOR PLAN - GYM - ELECTRICAL
1/8" = 1'-0"



2 A BUILDING MECHANICAL ROOM PLAN - ELECTRICAL
1/8" = 1'-0"

GENERAL NOTES:

A. THE FIRE ALARM SYSTEM IS AN EXTENSION OF AND EXISTING SYSTEM AND IS SHOWN FOR GUIDANCE AND IS INTENDED TO BE USED TO PROVIDE INFORMATION FOR A FIRE ALARM DESIGN-BUILD SYSTEM. EQUIPMENT SHOWN IS TO AID IN ESTABLISHING A BASIS OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR CREATION OF SHOP DRAWINGS, AND TO PROVIDE FULL DESIGN, PERMITTING, INSTALLATION, TESTING, AND COORDINATION WITH OTHER TRADES. PROVIDE A COMPLETE SYSTEM THAT MEETS CURRENT CODE AND FUNCTIONALITY REQUIREMENTS.

⬡ NOTES:

1. PROVIDE ELECTRICAL CONNECTION TO AUTOMATIC WINDOW SHADE SYSTEM. PROVIDE (1) 3/4" CONDUIT FOR SHADE CONTROLS LOCATED ADJACENT TO AV CONNTROLLER. REVER TO ARCHITECTRUAL ELEVATIONS FOR ADDITIONAL INFORMATION. COORDINATE WITH SHADE SUPPLIER FOR A FULLY FUNCTIONAL SYSTEM.

2. SURFACE MOUNT CONDUIT AT EXISTING BRICK WALL. COORDINATE ROUTEING WITH ARCHITECT.

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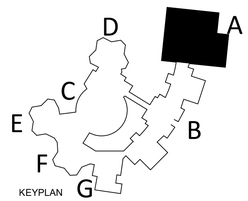
PARTIAL FLOOR PLAN - ELECTRICAL

E4.12



KEYPLAN

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GILHAM ES - PANEL SCHEDULE - PANEL 2F

PANEL: 2F LOCATION: G110 VOLTAGE: 208 Y/ 120 P: 3 W: 4 35KAIC
MLO [ ] MCB [X] BUS RATING: 400A (250A MCB) MOUNTING: [X] SURFACE [ ] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEMA 1 NEUTRAL: 100% FED FROM: SDP-A

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
LIGHTING - CLASSROOMS G101 & G104	LTG	1.16	20	1	1	A	2	1	20	0.18	REC	RECEPTS - CLASSROOM G101
LIGHTING - CLASSROOMS G102 & G103	LTG	1.08	20	1	3	B	4	1	20	0.90	REC	RECEPTS - CLASSROOM G101
LIGHTING - CORRIDOR / SHARED LEARNING / MEZZ	LTG	0.67	20	1	5	C	6	1	20	0.72	REC	RECEPTS - CLASSROOM G101
LIGHTING - COURTYARD AND PLAY CANOPY	LTG	1.04	20	1	7	A	8	1	20	0.90	REC	RECEPTS - CLASSROOM G104
DDC PANEL	MISC	0.10	20	1	9	B	10	1	20	0.18	REC	RECEPTS - CLASSROOM G104
AHU-HALL-G	MTR	0.65	15	3	11	C	12	1	20	0.72	REC	RECEPTS - CLASSROOM G104
-	MTR	0.65	-	-	13	A	14	1	20	0.18	REC	RECEPTS - CLASSROOM G103
-	MTR	0.65	-	-	15	B	16	1	20	0.72	REC	RECEPTS - CLASSROOM G103
AHU-G101	MTR	0.46	20	3	17	C	18	1	20	0.90	REC	RECEPTS - CLASSROOM G103
-	MTR	0.46	-	-	19	A	20	1	20	0.90	REC	RECEPTS - CLASSROOM G102
-	MTR	0.46	-	-	21	B	22	1	20	0.72	REC	RECEPTS - CLASSROOM G102
AHU-G102	MTR	0.46	15	3	23	C	24	1	20	0.18	REC	RECEPTS - CLASSROOM G102
-	MTR	0.46	-	-	25	A	26	1	20	0.36	REC	RECEPTS - STORAGE
-	MTR	0.46	-	-	27	B	28	1	20	0.36	REC	RECEPTS - MEZZANINE
AHU-G103	MTR	0.46	15	3	29	C	30	1	20	0.90	REC	RECEPTS - FLEX SPACE
-	MTR	0.46	-	-	31	A	32	1	20	1.00	MISC	HAND DRYER - RESTROOMS G108
-	MTR	0.46	-	-	33	B	34	1	20	1.08	REC	RECEPTS - GEN CORRIDOR & SHARED LEARNING
AHU-G104	MTR	0.46	15	3	35	C	36	1	20	0.54	REC	RECEPTS - SHARED LEARNING G105
-	MTR	0.46	-	-	37	A	38	1	20	0.54	REC	RECEPTS - EXTERIOR
-	MTR	0.46	-	-	39	B	40	1	20	1.00	MISC	HAND DRYER - RESTROOMS G108
1 BIU-HALL-G, G101, G102, G103, G104	MTR	0.06	20	1	41	C	42	1	20	1.00	MISC	HAND DRYER - RESTROOMS G109
SPARE			20	1	43	A	44	1	20	1.00	MISC	HAND DRYER - RESTROOMS G109
SPARE			20	1	45	B	46	1	20	0.56	MISC	ACUR-G1
EF-RR-G, EF-IDF-G	MTR	1.22	20	1	47	C	48	1	20	0.56	MISC	ACUR-G1
FCU-IDF-G	MTR	0.30	20	3	49	A	50	1	20			SPARE
-	MTR	0.30	-	-	51	B	52	1	20			SPARE
-	MTR	0.30	-	-	53	C	54	1	20			SPARE
ACCU-IDF-G	MTR	0.81	30	3	55	A	56	1	20			SPARE
-	MTR	0.81	-	-	57	B	58	1	20			SPARE
-	MTR	0.81	-	-	59	C	60	1	20			SPARE
RHWP-G	MTR	0.53	20	1	61	A	62	1	20			SPARE
WH-G	MISC	1.25	20	2	63	B	64	1	20			SPARE
-	MISC	1.25	-	-	65	C	66	1	20			SPARE
TP-G	MISC	0.10	20	1	67	A	68	1	20			SPARE
SPARE			20	1	69	B	70	1	20			SPARE
SPARE			20	1	71	C	72	1	20			SPARE
SPARE			20	1	73	A	74	1	20			SPARE
SPARE			20	1	75	B	76					SPACE
SPARE			20	1	77	C	78					SPACE
SPARE			20	1	79	A	80	3	40	0.72	COMB	PANEL 2G
SPARE			20	1	81	B	82	-	-	2.28	COMB	
SPARE			20	1	83	C	84	-	-	2.28	COMB	

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	3.96 KVA	4.95 KVA (125%)
RESIDENT LTG/REC	RES	0.00 KVA	0.00 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.00 KVA	0.00 KVA (100/35/25 %)
LARGEST MOTOR	MTR	12.56 KVA	15.70 KVA (125%)
REMAINING MOTORS	MTR	0.00 KVA	0.00 KVA (100%)
GEN PURPOSE REC	REC	16.26 KVA	13.13 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.00 KVA	0.00 KVA (100%)
EQUIP/OTHER	MISC	7.82 KVA	7.82 KVA (100%)
HEATING	MISC	0.00 KVA	0.00 KVA (100%)
ELEVATOR	ELEV	0.00 KVA	0.00 KVA (100%)
KITCHEN EQPT	KITCH	0.00 KVA	0.00 KVA (100/90/80/70/65 %)
TOTALS:		40.59 KVA	41.59 KVA
		112.66 AMP	115.43 AMP

CONNECTED PHASE LOADING
PHASE A: 12.20 KVA
PHASE B: 13.81 KVA
PHASE C: 14.58 KVA

NOTES:

GILHAM ES - PANEL SCHEDULE - PANEL 2G

PANEL: 2G LOCATION: IDF F111 VOLTAGE: 208 Y/ 120 P: 3 W: 4 22KAIC
MLO [X] MCB [ ] BUS RATING: 100A MOUNTING: [X] SURFACE [ ] FLUSH
TYPE: EXISTING [ ] NEW [X] STYLE: NEMA 1 NEUTRAL: 100% FED FROM: 2F

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
RECEPT - N WALL	REC	0.36	20	1	1	A	2	1	20			
RECEPT - E WALL	REC	0.36	20	1	3	B	4	1	20			
RECEPT -S WALL	REC	0.36	20	1	5	C	6	1	20			
RECEPT - W WALL	REC	0.36	20	1	7	A	8	1	20			
2-POST RACK RECEPT	REC	1.92	20	1	9	B	10	1	20			
2-POST RACK RECEPT	REC	1.92	20	1	11	C	12	1	20			
			20	1	13	A	14	1	20			
			20	1	15	B	16	1	20			
			20	1	17	C	18	1	20			
			20	1	19	A	20	1	20			
			20	1	21	B	22	1	20			
			20	1	23	C	24	1	20			

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.00 KVA	0.00 KVA (125%)
RESIDENT LTG/REC	RES	0.00 KVA	0.00 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.00 KVA	0.00 KVA (100/35/25 %)
LARGEST MOTOR	MTR	0.00 KVA	0.00 KVA (125%)
REMAINING MOTORS	MTR	0.00 KVA	0.00 KVA (100%)
GEN PURPOSE REC	REC	5.28 KVA	5.28 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.00 KVA	0.00 KVA (100%)
EQUIP/OTHER	MISC	0.00 KVA	0.00 KVA (100%)
HEATING	MISC	0.00 KVA	0.00 KVA (100%)
ELEVATOR	ELEV	0.00 KVA	0.00 KVA (100%)
KITCHEN EQPT	KITCH	0.00 KVA	0.00 KVA (100/90/80/70/65 %)
TOTALS:		5.28 KVA	5.28 KVA
		14.66 AMP	14.66 AMP

CONNECTED PHASE LOADING
PHASE A: 0.72 KVA
PHASE B: 2.28 KVA
PHASE C: 2.28 KVA

NOTES:

GILHAM ES - PANEL SCHEDULE - PANEL 2A

PANEL: 2A LOCATION: MDF B117 VOLTAGE: 208 Y/ 120 P: 3 W: 4 22KAIC
MLO [ ] MCB [X] BUS RATING: 225A MOUNTING: [X] SURFACE [ ] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEMA 1 NEUTRAL: 100% FED FROM: SDP-A

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) L - B113	MISC	1.56	20	1	1	A	2	1	20	0.50	MISC	(E) DF-B106
(E) L - B112	MISC	1.47	20	1	3	B	4	1	20	0.50	MISC	(E) DF-B115
(E) L - B111	MISC	1.47	20	1	5	C	6	1	20	0.10	MTR	(E) EF-1
(E) L - B110	MISC	1.75	20	1	7	A	8	1	20	0.10	MTR	(E) EF-2
(E) L - B108, B120	MISC	0.85	20	1	9	B	10	1	20	0.90	MTR	(E) EF-3
(E) L - B114, B115	MISC	0.68	20	1	11	C	12	3	40	8.54	MTR	(E) RF-1
(E) L - B105, B106	MISC	0.68	20	1	13	A	14	-	-	8.54	MTR	-
(E) L - B106, B115	MISC	1.89	20	1	15	B	16	-	-	8.54	MTR	-
(E) L- ALCOVE, B106	MISC	0.96	20	1	17	C	18	1	20	0.10	MISC	(E) UH-4
(E) LTG CNTRL B117	MISC	1.00	20	1	19	A	20	1	20	0.36	MISC	(E) R-TEL. TERM. BOARD
(E) CATV RACK	MISC	1.00	20	1	21	B	22					(E) SPACE
(N) RECEPTS RM B118	REC	0.54	20	1	23	C	24					(E) SPACE
(N) EF-SENS	MTR	0.01	20	1	25	A	26					(E) SPACE
(N) WASHER	MISC	1.00	20	1	27	B	28					(E) SPACE
(N) DRYER	MISC	3.00	**30**	**2**	29	C	30					(E) SPACE
-	**MISC**	**3.00**	-	-	31	A	32					(E) SPACE
(N) RECEPT RM B118	**REC**	**0.18**	20	1	33	B	34					(E) SPACE
(E) SPARE			20	1	35	C	36					(E) SPACE
(E) SPARE			20	1	37	A	38					(E) SPACE
(E) SPARE			20	1	39	B	40					(E) SPACE
(E) SPARE			20	1	41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.00 KVA	0.00 KVA (125%)
RESIDENT LTG/REC	RES	0.00 KVA	0.00 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.00 KVA	0.00 KVA (100/35/25 %)
LARGEST MOTOR	MTR	26.72 KVA	33.40 KVA (125%)
REMAINING MOTORS	MTR	0.00 KVA	0.00 KVA (100%)
GEN PURPOSE REC	REC	0.72 KVA	0.72 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.00 KVA	0.00 KVA (100%)
EQUIP/OTHER	MISC	21.77 KVA	21.77 KVA (100%)
HEATING	MISC	0.00 KVA	0.00 KVA (100%)
ELEVATOR	ELEV	0.00 KVA	0.00 KVA (100%)
KITCHEN EQPT	KITCH	0.00 KVA	0.00 KVA (100/90/80/70/65 %)
TOTALS:		49.21 KVA	55.89 KVA
		136.60 AMP	155.14 AMP

CONNECTED PHASE LOADING
PHASE A: 17.50 KVA
PHASE B: 16.33 KVA
PHASE C: 15.39 KVA

NOTES:
1. (E) AND LIGHT LINEWEIGHT INDICATE EXISTING
2. BOLD TEXT INDICATES NEW

GILHAM ES - PANEL SCHEDULE - PANEL 2D2

PANEL: 2D2 LOCATION: ELEC A102 VOLTAGE: 208 Y/ 120 P: 3 W: 4 22KAIC
MLO [ ] MCB [X] BUS RATING: 400A MOUNTING: [X] SURFACE [ ] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEMA 1 NEUTRAL: 100% FED FROM: 2D

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) L-EXTERIOR			20	1	1	A	2	2	20	0.57	MISC	(E) L - SITE
(E) PANEL 2C			100	3	3	B	4	-	-	0.57	MISC	-
-			-	-	5	C	6	2	20	0.57	MISC	(E) L - SITE
-			-	-	7	A	8	-	-	0.57	MISC	-
(N) LIGHTING - AUXILLARY GYM	**LTG**	**1.48**	20	1	9	B	10	2	20	0.46	MISC	(E) L - SITE
(N) LIGHTING - AUXILLARY GYM	**LTG**	**1.48**	20	1	11	C	12	-	-	0.46	MISC	-
(N) LIGHTING - AUX GYM RR, VEST, STGE, MEZ	**LTG**	**0.26**	20	1	13	A	14	2	20	0.46	MISC	(E) L - SITE
(N) RECEPT - AUX GYM, STORAGE, MEZ	**REC**	**0.90**	20	1	15	B	16	-	-	0.46	MISC	-
(N) RECEPT - AUX GYM	**REC**	**0.72**	20	1	17	C	18	2	20	0.60	MISC	(E) L - SITE
(N) AUX GYM - PROJECTOR	**REC**	**0.18**	20	1	19	A	20	-	-	0.60	MISC	-
(N) AUX GYM - PROJECTOR SCREEN	**MISC**	**1.00**	20	1	21	B	22	2	20	0.60	MISC	(E) L - SITE
(N) AUX GYM - AV RACK	**REC**	**0.36**	20	1	23	C	24	-	-	0.60	MISC	-
(N) AHU-AUXGYM	**MTR**	**1.25**	20	3	25	A	26	1	20	0.84	MISC	(E) L - COVERED PLAN
-	**MTR**	**1.25**	-	-	27	B	28	1	20	0.35	MISC	(E) L - LOADING AREA
-	**MTR**	**1.25**	-	-	29	C	30	**1**	**20**	**1.00**	**MISC**	**(N) AUX GYM - PROJECTOR SCREEN** 1
(N) EF-AUXGYM, DDC PANEL	**COMB**	**0.63**			31	A	32	**1**	**20**	**0.01**	**MISC**	**(N) BIU-AUXGYM**
(N) AUXGYM SHADES	**MTR**	**1.00**	20	1	33	B	34					(E) SPACE
(N) AUXGYM SHADES	**MTR**	**1.00**	20	1	35	C	36					(E) SPACE
(N) AUXGYM SHADES	**MTR**	**1.00**	20	1	37	A	38					(E) SPACE
(N) WH-GYM	**MISC**	**2.05**	**25**	**2**	39	B	40					(E) SPACE
-	**MISC**	**2.05**	**-**	**-**	41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	3.22 KVA	4.03 KVA (125%)
RESIDENT LTG/REC	RES	0.00 KVA	0.00 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.00 KVA	0.00 KVA (100/35/25 %)
LARGEST MOTOR	MTR	7.27 KVA	9.09 KVA (125%)
REMAINING MOTORS	MTR	0.00 KVA	0.00 KVA (100%)
GEN PURPOSE REC	REC	2.16 KVA	2.16 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.00 KVA	0.00 KVA (100%)
EQUIP/OTHER	MISC	13.90 KVA	13.90 KVA (100%)
HEATING	MISC	0.00 KVA	0.00 KVA (100%)
ELEVATOR	ELEV	0.00 KVA	0.00 KVA (100%)
KITCHEN EQPT	KITCH	0.00 KVA	0.00 KVA (100/90/80/70/65 %)
TOTALS:		26.55 KVA	29.17 KVA
		73.70 AMP	80.98 AMP

CONNECTED PHASE LOADING
PHASE A: 6.36 KVA
PHASE B: 10.11 KVA
PHASE C: 10.08 KVA

NOTES:
1. (E) AND LIGHT LINEWEIGHT INDICATE EXISTING
2. BOLD TEXT INDICATES NEW

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JOB NO: 20235
ISSUE DATE: 26 JAN 2021

PANEL SCHEDULES

E8.01

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1 DEMOLITION PARTIAL FIRST FLOOR PLAN - D POD - ELECTRICAL
1/8" = 1'-0"

2 DEMOLITION PARTIAL FIRST FLOOR PLAN - MULTIPURPOSE - ELECTRICAL
1/8" = 1'-0"

GENERAL NOTES:

A. THE PROJECT GOAL IS TO ELIMINATE ALL EXISTING SURFACE RACEWAY BY PROVIDING NEW PATHWAY THROUGH EXISTING WALLS. COORDINATE WITH ARCHITECT THE CUTTING AND PATCHING OF EXISTING WALLS.

NOTES:

1. DEVICE IS FED BY SURFACE MOUNTED RACEWAY. REMOVE DEVICE AND CONDUCTORS BACK TO NEAREST JUNCTION BOX FOR RECONNECTION. SEE SHEET E4.13 FOR ADDITIONAL INFORMATION.
2. SALVAGE CIRCUIT FOR RECONNECTION. SEE SHEET E4.13 FOR ADDITIONAL INFORMATION.
3. SALVAGE EXIT SIGN AND CIRCUIT FOR RECONNECTION SEE SHEET E2.13 FOR ADDITIONAL INFORMATION.
4. SALVAGE EXISTING FIXTURES AND CIRCUIT FOR RECONNECTION. SEE E2.13 FOR ADDITIONAL INFORMATION.
5. SALVAGE EXISTING CIRCUIT AND CONTROL FOR RECONNECTION TO NEW EXTERIOR LIGHTS. SEE SHEET E2.13 FOR ADDITIONAL INFORMAITON.
6. DEMOLISH EXISTING FIXTURES IN COMMONS TO ACCOMODATE NEW SENSORY ROOM.

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REVISIONS

ADD 2	02/25/21

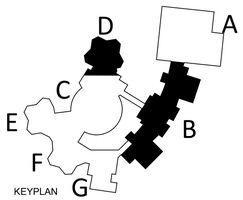
GILHAM ELEMENTARY SCHOOL PHASE 02

3307 HONEYWOOD STREET EUGENE, OREGON 97408
CONSTRUCTION DOCUMENTS

JOB NO:	20235
ISSUE DATE:	26 JAN 2021

DEMOLITION PARTIAL FLOOR PLAN - ELECTRICAL

ED2.13



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ABBREVIATIONS

ABF	AIRBLOWN FIBER	IG	ISOLATED GROUND
AFF	ABOVE FINISHED FLOOR	IMC	INTERMEDIATE METAL CONDUIT
AHJ	AUTHORITY HAVING JURISDICTION	JB	JUNCTION BOX
AN	ANALOG	LEC	LOCAL EXCHANGE CARRIER
ARCH	ARCHITECT / ARCHITECTURAL	MATV	MASTER ANTENNA TELEVISION
ARM	ARMORED	MDF	MAIN BUILDING DISTRIBUTION FACILITY
AVC	AUDIOVISUAL CONTRACTOR	MECH	MECHANICAL
BBC	BACKBONE BONDING CONDUCTOR (GE)	MH	MAINTENANCE HOLE (OUTSIDE PLANT)
BCT	BONDING CONDUCTOR FOR TELECOMMUNICATIONS (TBC)	MHz	MEGAHERTZ
BDF	BUILDING DISTRIBUTION FACILITY	MPOE	MINIMUM POINT OF ENTRY
BET	BUILDING ENTRANCE TERMINAL (PET)	(N)	NEW
BOC	BOTTOM OF CONDUIT	NIC	NOT IN CONTRACT
BOCT	BOTTOM OF CABLE TRAY	NVR	NETWORK VIDEO RECORDER
BOD	BASIS OF DESIGN	OFC	OPTICAL FIBER CABLE
BTP	BALANCED TWISTED PAIR (COPPER)	OLT	OPTICAL LINE TERMINAL
C	CONDUIT	ONT	OPTICAL NETWORK TERMINAL
CAM	CAMERA	OSP	OUTSIDE PLANT
CATV	COMMUNITY ACCESS TELEVISION	PA	PUBLIC ADDRESS
CCTV	CLOSED CIRCUIT TELEVISION	PB	PULLBOX
CF	CELLULAR FLOOR	PBB	PRIMARY BONDING BUSBAR (TMGB)
CLG	CEILING	PET	PROTECTED ENTRANCE TERMINAL (BET)
CO	CENTRAL OFFICE	PMV	PROJECT MANAGER VERIFICATION
CPE	CUSTOMER PREMISE EQUIPMENT	POE	POWER OVER ETHERNET
DAS	DISTRIBUTED ANTENNA SYSTEM	PON	PASSIVE OPTICAL NETWORK
dB	DECIBEL	POTS	PLAIN OLD TELEPHONE SERVICE
DB	DUCTBANK	PVC	POLYVINYL CHLORIDE CONDUIT
DEMARC	DEMARCATION POINT	PWR	POWER
DN	DOWN	R/W	RIGHT OF WAY
(E)	EXISTING	RAD	RADIUS
EQ	EQUAL DISTANCE	RG	RADIO GRADE
EC	ELECTRICAL CONTRACTOR	SBB	SECONDARY BONDING BUSBAR (TGB)
EF	ENTRANCE FACILITY	SBN	SUPPLEMENTARY BONDING NETWORK
EMC	ELECTROMAGNETIC COMPATIBILITY	SCH40	SCHEDULE 40 PVC CONDUIT
EMERG	EMERGENCY	SCH80	SCHEDULE 80 PVC CONDUIT
EMI	ELECTROMAGNETIC INTERFERER	TBB	TELECOMMUNICATION BONDING BACKBONE
EMT	ELECTRIC METALLIC TUBING	TBC	TELECOMMUNICATION BONDING CONDUCTOR (BCT)
EP	ENTRANCE POINT (OUTSIDE PLANT)	TE	TELECOMMUNICATION ENCLOSURE
EPO	EMERGENCY POWER OFF	TGB	TELECOMMUNICATION GROUNDING BUSBAR (SBB)
ER	EQUIPMENT ROOM	TMGB	TELECOMMUNICATION MAIN GROUNDING BUSBAR (PBB)
ERRC	EMERGENCY RESPONDER RADIO COVERAGE	TO	TELECOMMUNICATIONS OUTLET
FA	FIRE ALARM CONTROL PANEL	TR	TELECOMMUNICATIONS ROOM
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR	TTB	TELEPHONE TERMINAL BOARD
FO	FIBER OPTIC	TTC	TELEPHONE TERMINAL CABINET
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR	TV	TELEVISION
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER	TYP	TYPICAL
GC	GENERAL CONTRACTOR	UG	UNDERGROUND
GE	GROUNDING EQUALIZER (BBC)	UON	UNLESS OTHERWISE NOTED
GHz	GIGAHERTZ	UPS	UNINTERRUPTIBLE POWER SUPPLY
GPON	GIGABIT PASSIVE OPTICAL NETWORK	W	WATTS
GRC	GALVANIZED RIGID CONDUIT	WAO	WORK AREA OUTLET
GRD	GROUND	WAP	WIRELESS ACCESS POINT
HH	HANDHOLE	WP	WEATHER PROOF
Hz	HERTZ		
IDF	INTERMEDIATE DISTRIBUTION FRAME		

DESIGNATION SYMBOLS

- EQUIPMENT DESIGNATORS SEE SCHEDULE.
- EXISTING TO REMAIN, EXISTING TO BE REMOVED
- EXISTING TO BE RELOCATED, FUTURE
- NEW, CONNECT TO
- NOTE
- REVISION NOTE
- DETAIL CALLOUT
- DEVICE MOUNTED ABOVE COUNTER

PATHWAYS

- CONDUIT
- UNDERGROUND CONDUIT
- CONTINUATION, STUB, HOMERUN
- AERIAL
- SPLICE
- TERMINATION
- STUB UP
- STUB DOWN
- JUNCTION BOX
- "PB" PULL BOX, "DB" DAS PULL-BOX, "VT" VAULT/MANHOLE, "HH" HAND HOLE
- CABLE TRAY: LADDER, WIRE MESH
- OPEN RUN CABLE PATHWAY
- CT: 12x4 / BOCT:8'-6" — CABLE TRAY TYPE, SIZE, AND BOTTOM OF CABLE TRAY CALLOUT. "CT" CABLE TRAY, "CR" CABLE RUNWAY, "WM" WIRE MESH
- (4) 2"/ BOC:8'-6" — QUANTITY, SIZE, AND BOTTOM OF CONDUIT CALLOUT.

CLOCK SYSTEMS

- WALL CLOCK, ANALOG FACE: STANDARD, LARGE.
- CEILING CLOCK, ANALOG FACE: STANDARD, LARGE.
- WALL CLOCK, DIGITAL FACE: STANDARD, LARGE.
- CEILING CLOCK, DIGITAL FACE: STANDARD, LARGE.
- COMBINATION ANALOG CLOCK / SPEAKER, FLUSH WALL MOUNT.
- COMBINATION DIGITAL CLOCK / SPEAKER, FLUSH WALL MOUNT.

TELECOMMUNICATIONS

- OUTLET TYPE: DATA. PROVIDE TWO (2) CAT6A CABLES PER OUTLET (UON).
- OUTLET TYPE: COMBINATION TELEPHONE/DATA
- OUTLET TYPE: TELEPHONE
- E,W,# — OUTLET DESIGNATORS: "E" EQUIPMENT OUTLET, "W" TELEPHONE OUTLET WITH MOUNTING STUDS, "#" QTY OF CABLES. TYPICAL ALL OUTLETS: PROVIDE TWO (2) CABLES PER OUTLET (UON)
- OUTLET MOUNTING: WALL, ABOVE COUNTER, CEILING
- CD — OUTLET MOUNTING: CORD-DROP
- FB — OUTLET MOUNTING, FLUSH FLOORBOX PROVIDE 1"C. HOME-RUN TO NEAREST TELECOM ROOM (UON). FOR FLOORBOX TYPE REFER TO DIV 26 SPECIFICATIONS.
- PT# — OUTLET MOUNTING, FLUSH POKE-THROUGH: REFER TO SCHEDULE FOR TYPES OF DEVICES. TYPICAL ALL FLOORBOXES/POKE-THROUGHS: SEE ELECTRICAL DRAWINGS FOR COMBINED SERVICE REQUIREMENTS.
- SYMBOL/DEVICE # — DATA CONNECTION FOR DEVICE. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- DATA OUTLET FOR WIRELESS ACCESS POINT: WALL, CEILING. PROVIDE TWO (2) CAT6A CABLES PER OUTLET (UON).
- CONSOLIDATION POINT
- TV / TV D — CATV/MATV OUTLET: COAXIAL ONLY, COMBINATION COAX/DATA
- E — EMERGENCY TELEPHONE
- IMS/ICS — INTERCOM: "IMS" MASTER STATION, "ICS" CALL STATION
- ACU/ACS — AREA OF RESCUE: "ACU" COMMAND UNIT, "ACS" CALL STATION

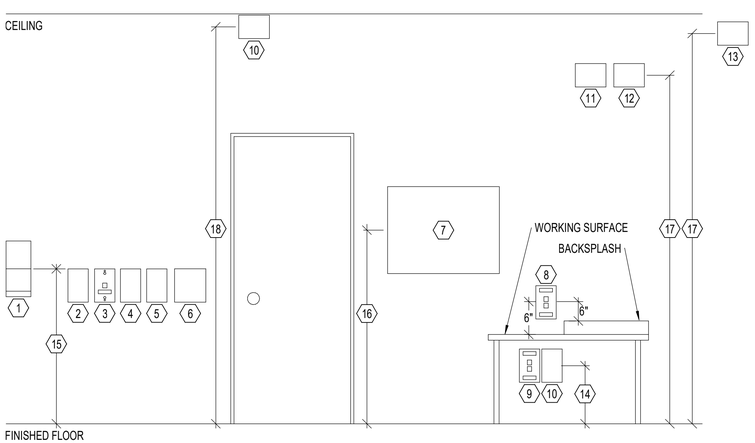
EQUIPMENT

- VERTICAL CABLE MANAGERS
- RACK (19") OPEN: TWO POST, FOUR POST
- ARROW INDICATES AIRFLOW AT FRONT OF RACK (TYP)
- RACK (19") ENCLOSURE: WALL MOUNT, FLOOR MOUNT
- RACK (19"): IN-CABINET/CASEWORK (PULL OUT AND ROTATING)
- PLYWOOD BACKBOARD, WALL MOUNT
- BUSBAR, WALL MOUNT
- 110 PUNCH-DOWN BLOCK, WALL MOUNT
- COPPER TERMINAL/DEMARC (PROTECTED/FUSED), WALL MOUNT
- FIBER TERMINAL/DEMARC, WALL MOUNT

SECURITY

- DOOR REQUIRING ELECTRONIC SECURITY: "101" INDICATES DOOR NUMBER, "A" AND "B" INDICATES SECURED/NON-SECURED SIDES OF DOOR. SEE SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- CR B,P,M — CREDENTIAL READER: "B" COMBINATION BIOMETRIC AND CARD READER, "P" COMBINATION KEYPAD AND CARD READER, "B,P" COMBINATION BIOMETRIC/KEYPAD/CARD READER, "M" MAG-STRIPE READER
- OB — DOOR OPERATOR (ADA) BUTTON
- RB — DOOR RELEASE BUTTON
- DOOR CONTACT
- KP I,A — KEYPAD: "I" INTRUSION ALARM, "A" ACCESS CONTROL
- DB W,D — DURESS ALARM BUTTON: WALL, UNDER DESK/COUNTER
- MS — MOTION SENSOR: WALL, CEILING
- GB — GLASS BREAK DETECTOR: WALL, CEILING
- STROBE: WALL, CEILING
- S — SPEAKER: WALL, CEILING
- S — SURVEILLANCE CAM., FIXED: WALL, POLE/PARAPET, CEILING
- S — SURVEILLANCE CAM., PTZ: WALL, POLE/PARAPET, CEILING
- S — SURVEILLANCE CAM., MULTI-SENSOR: WALL, POLE/PARAPET, CEILING
- CAM:E - # — CAMERA TYPE AND NUMBER. SEE SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- EL — ELECTRIC STRIKE

DEVICE MOUNTING HEIGHTS



GENERAL NOTES:

A. WHERE APPLICABLE, ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER THIS DETAIL FOR DEVICE ELEVATIONS.

B. LOCATE ACCESSIBLE SWITCHES PER ADA GUIDELINES.

C. FIELD COORDINATE ABOVE COUNTER DEVICES WITH MILLWORK CONTRACTOR.

D. CONFIRM FINAL DEVICE LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.

E. LOCATE DEVICES PER CODE. WALL MOUNTED DEVICES SHALL NOT PROTRUDE BEYOND ADA REQUIREMENTS.

NOTES:

1. EMERGENCY COMMUNICATION WALL MOUNT STATION
2. CARD READER
3. TELEPHONE OUTLET WITH MOUNTING STUDS
4. INTERCOM
5. AV CONTROL PANEL
6. AREA OF RESCUE STATION
7. DISPLAY (PRESENTATION OR DIGITAL SIGNAGE). SHALL NOT PROTRUDE MORE THAN 4" INTO WALKWAYS.
8. ABOVE COUNTER DEVICE (MAINTAIN A CONSISTENT HEIGHT THROUGHOUT SPACE)
9. TELECOM OUTLET
10. AV INPUT/OUTPUT PLATE
11. WIRELESS ACCESS POINT
12. INTERIOR SURVEILLANCE CAMERA
13. EXTERIOR SURVEILLANCE CAMERA
14. 18" AFF (UON)
15. 48" AFF (UON)
16. 60" AFF (UON)
17. HEIGHT AS NOTED ON DRAWINGS
18. 94" AFF (UON)

AUDIOVISUAL

- CP# — CONTROL PANEL
- MP1 — MEDIA INPUT PLATE OR DEVICE. (1) 3.5MM AUDIO AND (1) XLR
- MP2 — MEDIA INPUT/OUTPUT PLATE OR DEVICE. (2) CAT6A
- MP3 — MEDIA OUTPUT PLATE OR DEVICE. (1) 3.5MM AUDIO
- MP4 — MEDIA INPUT PLATE OR DEVICE. (1) HDMI, (1) CAT6A, (1) USB 3.0 AND (1) 3.5MM AUDIO
- MP5 — MEDIA OUTPUT PLATE OR DEVICE. (1) HDMI, (1) CAT6A, (1) USB 3.0 AND (1) 3.5MM AUDIO
- MICROPHONE
- WR — WIRELESS MICROPHONE RECEIVER ANTENNA
- BT — BLUETOOTH RECEIVER
- AT — ASSISTIVE LISTENING TRANSMITTER ANTENNA
- VOLUME CONTROL: WALL
- S # / S # — LOUDSPEAKER: WALL, CEILING. "AV" AUDIOVISUAL, "PA" PUBLIC ADDRESS. # = TYPE. REFERENCE SPECIFICATIONS.
- S # — LOUDSPEAKER, HIGH OUTPUT. # = TYPE. REFERENCE SPECIFICATIONS.
- SB# — SPEAKER SOUND BAR: WALL. # = TYPE. REFERENCE SPECIFICATIONS.
- # / # — VIDEO DISPLAY: WALL, CEILING. # = TYPE. REFERENCE SPECIFICATIONS.
- # / # — PROJECTION SCREEN: WALL, CEILING. # = TYPE. REFERENCE SPECIFICATIONS.
- S — PROJECTION SCREEN SWITCH: WALL
- # / # — PROJECTOR: WALL, CEILING. # = TYPE. REFERENCE SPECIFICATIONS.
- # — PROJECTOR: SHORT-THROW WALL. # = TYPE. REFERENCE SPECIFICATIONS.
- # — PTZ CAMERA DEVICE LOCATION: (1) HD-BASE-T

REFERENCE NOTES (APPLIES TO ALL DRAWINGS):

A. THIS IS A STANDARD LEGEND SHEET, THEREFORE SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

B. WHERE ENLARGED PLANS CALL-OUTS ARE SHOWN, REFER TO REFERENCED SHEET FOR REQUIRED SCOPE OF WORK.

C. REQUIRED OFFSETS IN CONDUIT, CABLE TRAY, DEVICES, BOXES, AND PATHWAY TRANSITIONS AROUND OBSTRUCTIONS ARE PART OF THE BASE SCOPE OF WORK. EXACT PATHWAYS TO BE DETERMINED AND COORDINATED BY THE CONTRACTOR BETWEEN TRADES. PROVIDE A MINIMUM OF ONE PULL BOX FOR EVERY 100 FEET OF STRAIGHT EMPTY CONDUIT AND A PULL BOX FOR MORE THAN 180 DEGREES OF BEND IN A CONDUIT RUN. DEBURR, CLEAN, CAP, AND TAG ALL CONDUITS AND FURNISH WITH A MINIMUM OF TWO (2) PULL STRINGS.

D. LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE, ARCHITECTURAL DRAWING DEVICE LOCATIONS TAKE PRECEDENCE. WHERE EXACT DIMENSIONS FOR DEVICES ARE NOT SHOWN, DRAWINGS ARE TO BE SCALED TO DETERMINE DEVICE LOCATION, AND COORDINATED IN THE FIELD. INSTALL DEVICES IN AN ORDERLY MANNER AT THE SAME ELEVATION AS ADJACENT DEVICES, COORDINATED BETWEEN TRADES. WHERE INSTALLED DEVICES FEED OR ARE ASSOCIATED WITH FURNITURE, COORDINATE EXACT LOCATIONS WITH FINAL FURNITURE PLAN AND CASEWORK INSTALLER, PRIOR TO ROUGH-IN.

E. MOUNT AV MEDIA PLATES AND DEVICES SHOWN IN GROUPINGS DIRECTLY ADJACENT TO EACH OTHER IN THE FIELD UON. REFER TO AV SYSTEM DETAILS AND ELEVATIONS FOR ADDITIONAL REQUIREMENTS.

F. WHERE MULTI-SERVICE FLOOR, WALL OR CEILING DEVICES ARE SHOWN,PROVIDE (1)1"C FOR STRUCTURED CABLING SYSTEM OUTLETS, AND (2)1-1/4"C FOR AUDIOVISUAL SYSTEM DEVICES. PROVIDE ADDITIONAL CONDUITS AS REQUIRED FOR OTHER SYSTEMS CABLING. IN ADDITION, REFER TO ELECTRICAL DRAWINGS FOR ASSOCIATED POWER REQUIREMENTS AND INFRASTRUCTURE.

G. COORDINATE POWER REQUIREMENTS WITH DIVISION 26.

H. PROVIDE CABLING RATED FOR ITS INSTALLED ENVIRONMENT (I.E. PLENUM, RISER). PRIVDE DEDICATED PATHWAYS (OR SEPARATED BUNDLES IN CABLE TRAY) FOR: DATA/VOICE, VIDEO SURVEILLANCE, AUDIOVISUAL, DAS AND ACCESS CONTROL.

I. FLAT PANEL DISPLAYS AND CLASSROOM AUDIOVISUAL SYSTEMS ARE FURNISHED BY OWNER, INSTALLED BY CONTRACTOR (FOIC).

J. ACCESS CONTROL CABLING TO BE FURNISHED BY OWNER, INSTALLED BY CONTRACTOR (FOIC). PROVIDE FOOTAGE REQUIREMENTS OF EACH TYPE TO OWNER AT LEAST FOUR WEEKS IN ADVANCE.

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SYMBOLS, LEGENDS AND ABBREVIATIONS - TECHNOLOGY

T0.01

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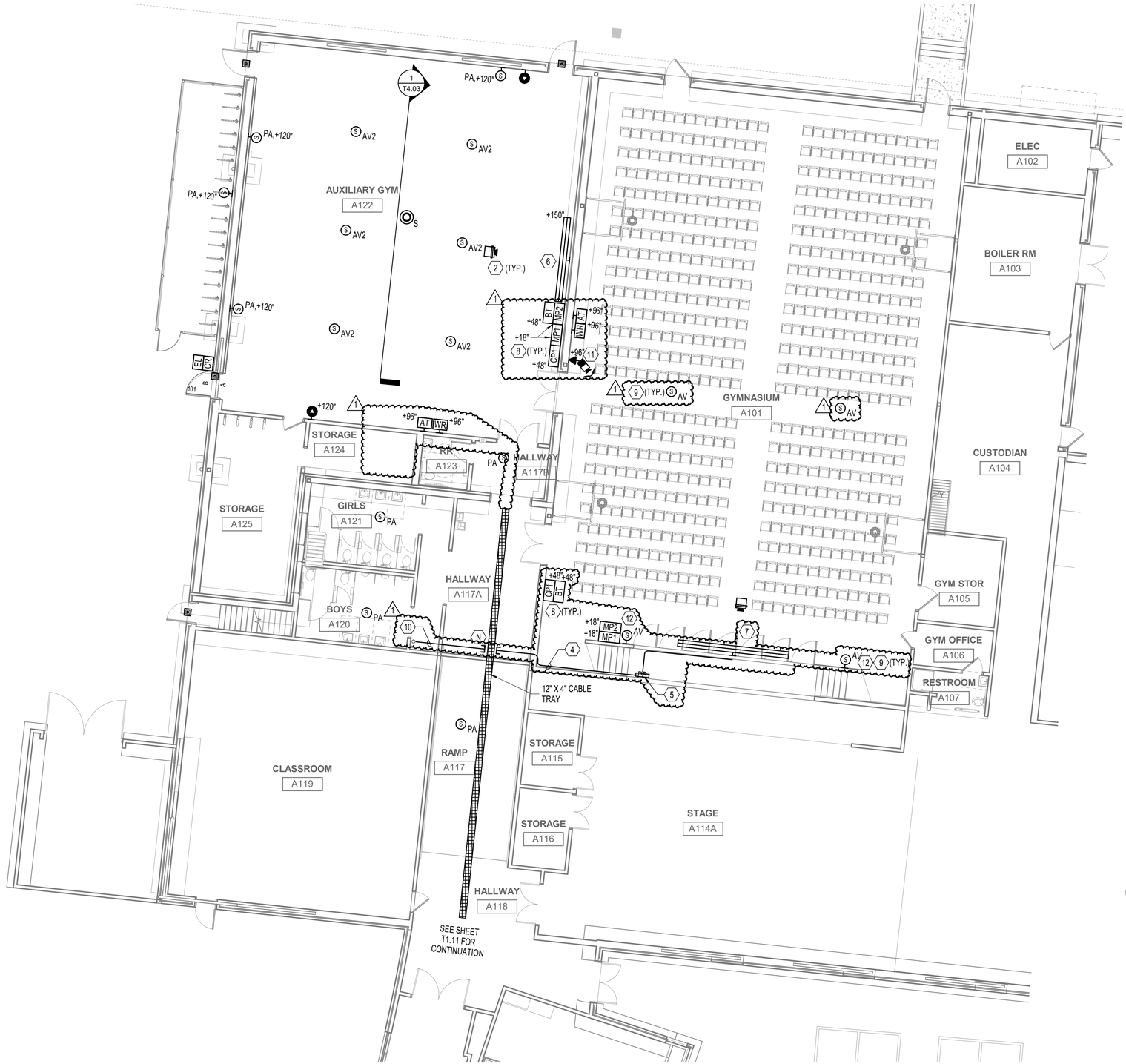
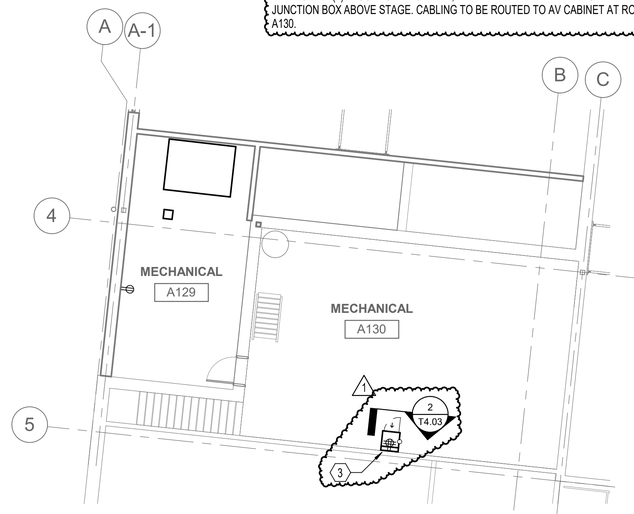


1 PARTIAL FIRST FLOOR PLAN - GYM - TECHNOLOGY
1/8" = 1'-0"



2 A BUILDING MECHANICAL ROOM PLAN - TECHNOLOGY
1/8" = 1'-0"

GENERAL NOTES:

A. WIRELESS ACCESS POINTS ARE FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. COORDINATE INSTALLATION AND LABELING WITH OWNER.

B. CLASSROOM SHORT THROW PROJECTORS ARE FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. SCREENS PROVIDED BY CONTRACTOR, INSTALLED BY CONTRACTOR.

C. AV MEDIA PLATES AND DEVICES SHOWN IN GROUPINGS SHALL BE MOUNTED DIRECTLY ADJACENT TO EACH OTHER IN THE FIELD UON. REFER TO AV SYSTEM DETAILS AND ELEVATIONS FOR ADDITIONAL REQUIREMENTS.

D. PROVIDE PROTECTIVE COVER FOR WALL-MOUNTED DEVICES INSTALLED WITHIN GYMNASIUMS. PROVIDE OBERON ENCLOSURE FOR WAPS AND ANTENNAS. PROVIDE WIRE MESH COVERS FOR CLOCKS AND SPEAKERS. PROVIDE LOCKABLE TRANSPARENT COVERS FOR MP1 AND CP1 LOCATIONS. SEE SPECIFICATIONS FOR MORE INFORMATION.

E. ALL PUBLIC ADDRESS SPEAKERS ON THIS PLAN TO BE CONNECTED BACK TO IDF C104.

1
F. REFER TO DIV 26 FOR ELECTRICAL REQUIREMENTS.

G. SEE DETAIL 1/T5.05 FOR MORE INFORMATION.

NOTES:

1. PROVIDE (1) CAT6A HOMERUN TO AUDIOVISUAL RACK IN STORAGE ROOM A124 FOR EXTRON DTP.

2. SHORT THROW PROJECTOR TO BE MOUNTED ON ROLLING CART (TYP.).

1
3. PROVIDE 24" W X 62" H X 26" D LOCKABLE AV CABINET. PROVIDE (4) CAT6A CABLES FROM NEAREST TDR AND TERMINATE AT PATCH PANEL INSIDE AV EQUIPMENT CABINET. SEE DETAIL 2/T4.03 FOR MORE INFORMATION.

4. PROVIDE (1) 2" C ROUTED IN CEILING SPACE FROM NEW CABLE TRAY IN CORRIDOR TO CENTER OF EXISTING STAGE. CONDUIT TO BE SURFACE MOUNTED AT MAIN GYM.

5. PROVIDE 12" X 12" X 6" NEMA1 RATED PULL BOX BOD HOFFMAN, PART #ASE12X12X4.

6. PROVIDE 78" H X 139" W WALL MOUNTED MOTORIZED PROJECTION SCREEN.

7. PROVIDE 108" H X 192" W WALL MOUNTED MOTORIZED PROJECTOR SCREEN.

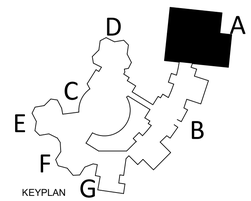
8. PROVIDE (1) 1" CONDUIT FROM NEAREST CABLE TRAY TO EACH CAMERA, CONTROL PANEL, MEDIA PLATE, ANTENNA AND BLUETOOTH LOCATION. ROUTE CABLING TO AV CABINET AT ROOM A130 (TYP.)

9. MOUNT SPEAKERS PER MANUFACTURER RECOMMENDATIONS. UTILIZE ACOUSTIC SIMULATION SOFTWARE FOR OPTIMAL SPEAKER PLACEMENT. CONFIRM DIMENSIONAL LOCATION LOCATION WITH ARCHITECT PRIOR TO INSTALLATION. (TYP.)

10. PROVIDE (1) 2" C ROUTED IN CEILING SPACE FROM CABLE TRAY IN CORRIDOR THROUGH ROOM A120 AND STUBBED UP UNDER AV CABINET AT ROOM A130. SEE DETAIL 2/T2.12 FOR MORE INFORMATION.

11. SHELF MOUNTED PTZ CAMERA. PROVIDE PATCH CABLE FROM ADJACENT DATA OUTLET TO CAMERA. WIRE GUARD NOT REQUIRED FOR PTZ CAMERA LOCATION.

12. PROVIDE (1) 1" CONDUIT FROM MP1, MP2 AND SPEAKERS AT STAGE AREA TO JUNCTION BOX ABOVE STAGE. CABLING TO BE ROUTED TO AV CABINET AT ROOM A130.



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PARTIAL FLOOR PLAN - TECHNOLOGY

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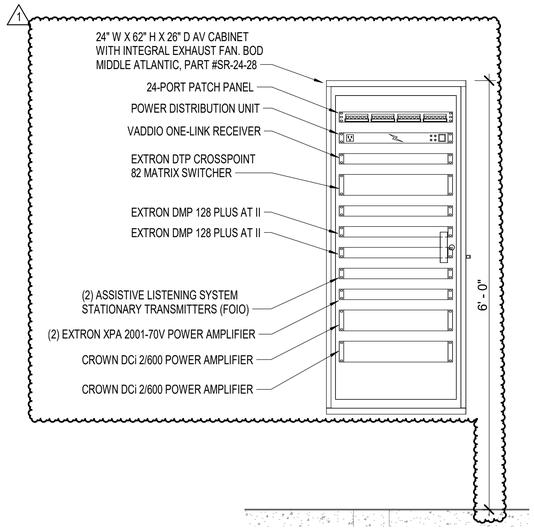
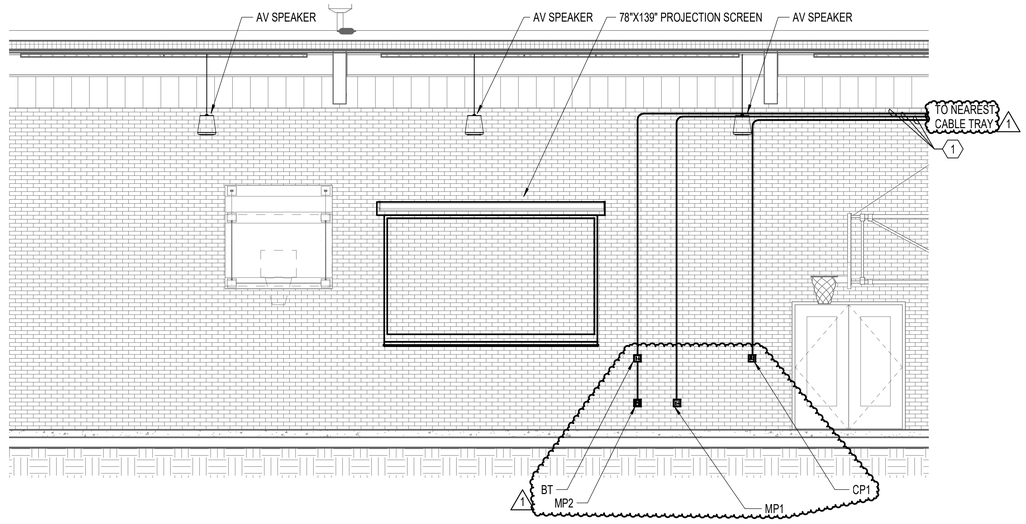


2 ELEVATION - AV EQUIPMENT CABINET - TECHNOLOGY
1" = 1'-0"



1 ELEVATION - AUXILIARY GYM EAST INTERIOR - TECHNOLOGY
1/4" = 1'-0"

GENERAL NOTES:

A. AUX GYM PROJECTOR TO BE CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.

B. COORDINATE DIMENSIONAL LOCATIONS WITH ARCHITECT. CONDUIT ROUTES ARE APPROXIMATE. COORDINATE CONDUIT ROUTING WITH STRUCTURAL AND ARCHITECTURAL ELEMENTS AND OTHER OBSTRUCTIONS.

C. REFER TO DIV 26 FOR ELECTRICAL REQUIREMENTS.

NOTES:

1. SURFACE MOUNTED CONDUIT.

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AUX GYM ELEVATION VIEWS - TECHNOLOGY

T4.03

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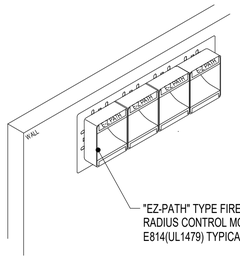
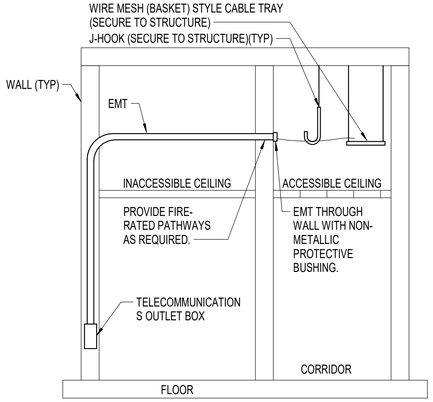


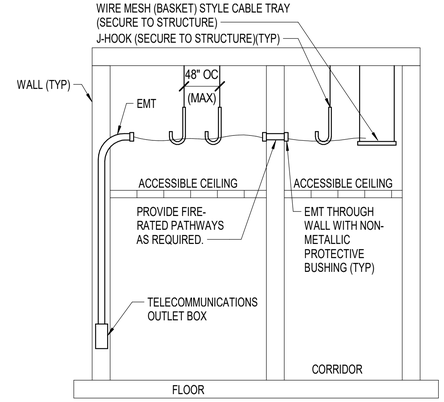
NOTES

1. REFER TO ROOM PLANS FOR CABLE RUNWAY SIZE AND ROUTE.
2. REFER TO ROOM PLANS FOR "EZ-PATH" QUANTITY AND LOCATION.

5 TYPICAL EZ-PATH FIRE RATED ASSEMBLY
1/8" = 1'-0"



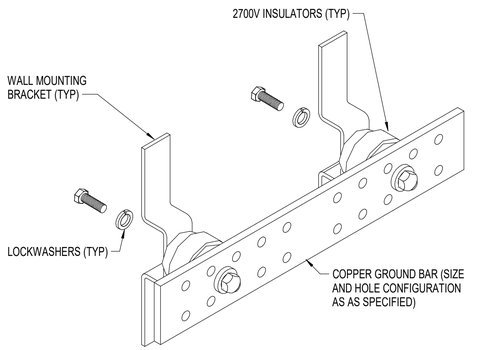
2 TYPICAL ROUTING FOR AREAS WITH INACCESSIBLE CEILINGS
1/8" = 1'-0"



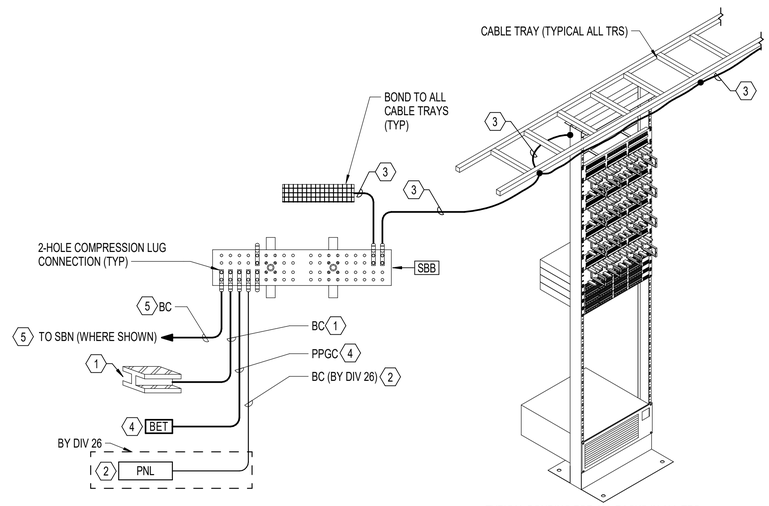
1 TYPICAL ROUTING FOR AREAS WITH ACCESSIBLE CEILING
1/8" = 1'-0"

GENERAL NOTES

A. ALL CONDUCTORS SHALL BE COPPER WITH A GREEN OUTER JACKET



4 TYPICAL GROUNDING BAR
1/8" = 1'-0"



3 GROUNDING AND BONDING SYSTEM DETAIL
1/8" = 1'-0"

NOTES

1. WHERE STRUCTURAL STEEL IS IN THE SAME ROOM AS THE PBB/SBB AND READIBLY ACCESSIBLE, PROVIDE BONDING CONDUCTOR (#6 AWG-CU) TO BUILDING STEEL.
2. WHERE ELECTRICAL PANELBOARD IS IN THE SAME ROOM AS THE PBB/SBB, PROVIDE BONDING CONDUCTOR (SIZED PER NEC 250.122) TO THE ALTERNATING CURRENT EQUIPMENT GROUND BUS OF THE PANELBOARD.
3. PROVIDE TELECOMMUNICATIONS EQUIPMENT BONDING CONDUCTOR (TEBC)(#6 AWG-CU)
4. PROVIDE PRIMARY PROTECTOR GROUNDING CONDUCTOR (PPGC)(#6 AWG-CU) TO BUILDING ENTRANCE TERMINAL/PROTECTOR.
5. WHERE SHOWN ON THE DRAWINGS, PROVIDE BONDING CONDUCTOR (#6 AWG-CU) TO SUPPLEMENTARY BONDING NETWORK SYSTEMS (E.G. MESH BONDING NETWORKS, SIGNAL REFERENCE GRIDS) .
6. PROVIDE TELECOMMUNICATIONS BONDING CONDUCTOR (TBC) TO THE ELECTRICAL SERVICE GROUNDING SYSTEM. THE TBC SHALL BE, AS A MINIMUM, THE SAME SIZE AS THE LARGEST TBB.

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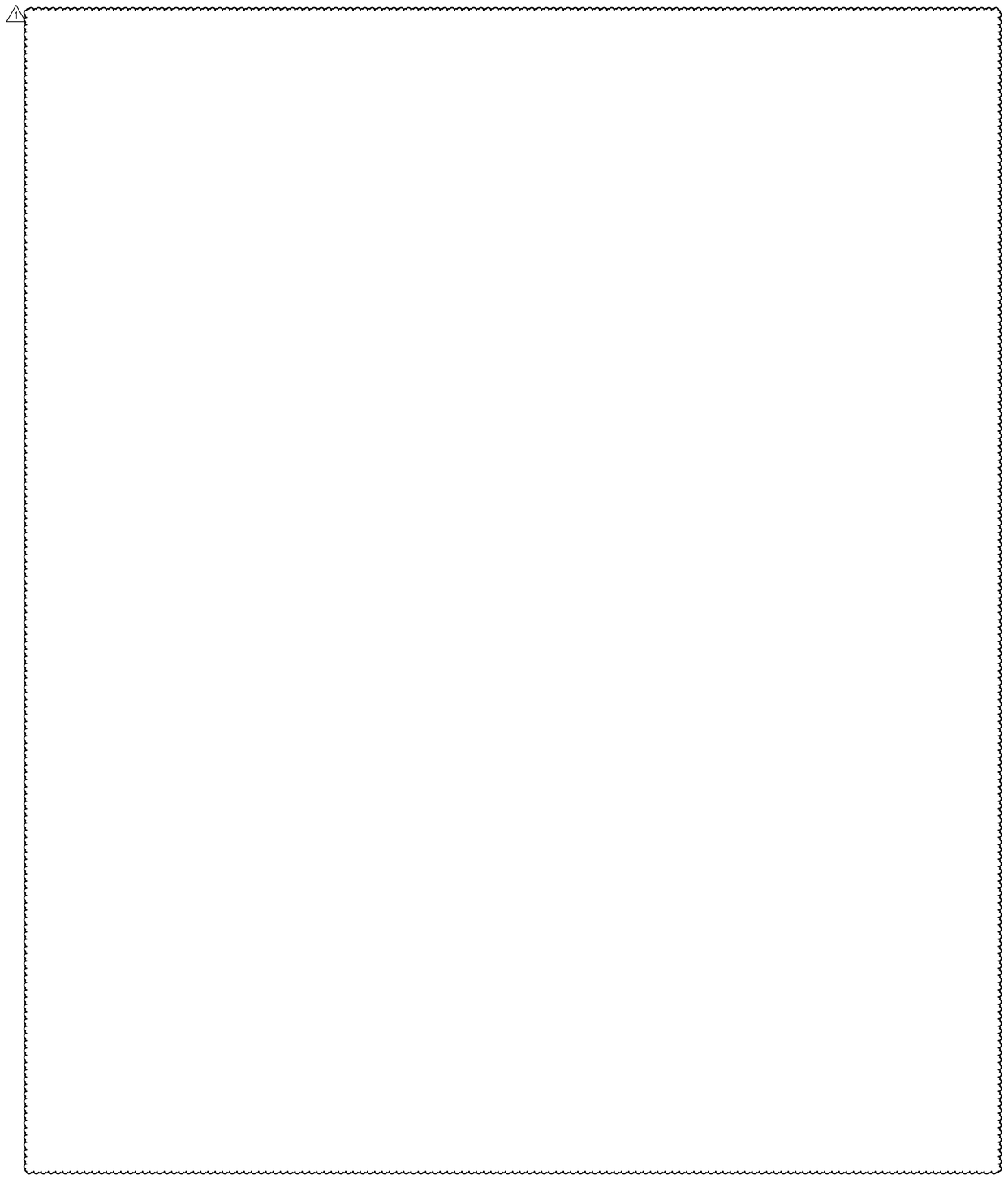
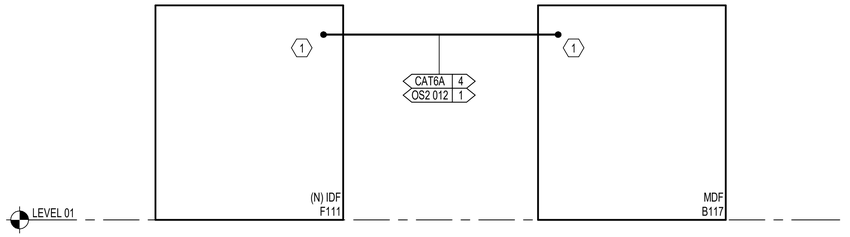
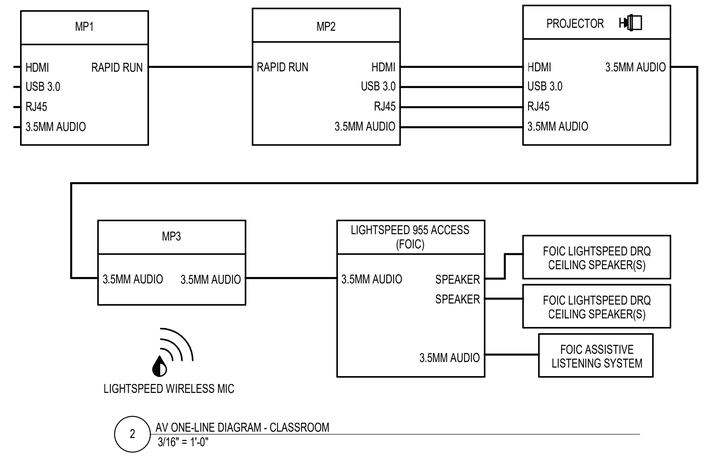




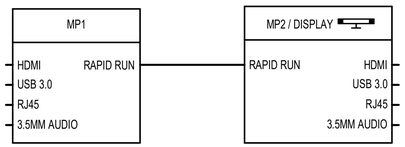
NOTES

1. ALL PENETRATIONS TO BE FIRE-STOPPED.

1 BACKBONE CABLING ONE-LINE RISER DIAGRAM



2 AV ONE-LINE DIAGRAM - CLASSROOM
3/16" = 1'-0"



4 AV LINE DIAGRAM - COMMON / FLEX SPACE
3/16" = 1'-0"

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Equipment Rack

MAIN GYM

AUX GYM

Remote Antenna

Antenna

MP1

Wall Plate transformer

MP1

XLR

CP 1

CP 2

Bluetooth Receiver

In-Wall Bluetooth Interface

Ethernet

PTZ Camera

PTZ Camera

HDMI OP

CAT 6A (HDBaseT)

Owner Furnished Cart

Laptop

Generic
Laptop

HDMI OP

DTP Transmitter

HDMI IP

HDMI Loop Thru

RS-232 Over TP

EFP Out

IR Over TP

Config

Power I/P

MP2 (Partial)

HDBaseT

HDBaseT

CP1

Touchpanel

USB

Ethernet/PoE

Owner Furnished Cart

Laptop

Generic
Laptop

HDMI OP

DTP Transmitter

HDMI IP

HDMI Loop Thru

RS-232 Over TP

EFP Out

IR Over TP

Config

Power I/P

MP2 (Partial)

HDBaseT

HDBaseT

Remote Antenna

Antenna

MP1

Wall Plate transformer

MP1

XLR

CP 1

CP 2

Bluetooth Receiver

In-Wall Bluetooth Interface

Ethernet

Antenna

Antenna/Power Distribution System

ANT OP

RF O/P

POWER O/P

POWER I/P

Digital Receiver

Antenna IP A

Antenna IP B

Mic/Line O/P

Ins/Aux O/P

LAN

Power I/P

Shure QLXD4

Matrix Processor

Mic/Line I/P 1

Mic/Line I/P 2

Mic/Line I/P 3

Mic/Line I/P 4

Mic/Line I/P 5

Mic/Line I/P 6

Mic/Line I/P 7

Mic/Line I/P 8

Mic/Line I/P 9

Mic/Line I/P 10

Mic/Line I/P 11

Mic/Line I/P 12

Digital I/O 1

Digital I/O 2

Digital I/O 3

Digital I/O 4

Digital I/O 5

Digital I/O 6

Digital I/O 7

Digital I/O 8

USB Audio

Dante

Config (Front Panel)

Remote (RS-232)

IDIP

LAN

MAINS I/P

Line O/P 1

Line O/P 2

Line O/P 3

Line O/P 4

Line O/P 5

Line O/P 6

Line O/P 7

Line O/P 8

Matrix output 1

Matrix Output 2

Matrix output 2

Matrix Output 4

2-Channel Amplifier

IP 1

IP 2

Attenuation 1+2

Aux

MAINS I/P

OP 1

OP 2

Stationary Transmitter

IP 1

IP 2

Monitor O/P

Audio O/P

Aux Ant O/P

Power I/P

Power Amplifier

IP Left

IP 2 Right

Remote 10V

Remote Volt/Mute

Remote Standby

MAINS I/P

10V O/P

BNC

Network Switch

PoE Port 1

PoE Port 2

PoE Port 3

PoE Port 4

Port 5

Port 6

Port 7

Port 8

Power I/P

Aux Gym DSP Dante

Tx Gym DSP LAN

Tx Aux Gym DSP LAN

THDT Switch Port 6

THDT Switch Port 7

Interface

OneLink

HDMI

Network

RS232

Power I/P

Matrix Switcher

Display Port I/P 1

HDMI I/P 2

HDMI I/P 3

HDMI I/P 4

HDMI I/P 5

HDMI I/P 6

I/P 7

I/P 8

Mic/Line I/P 1

Mic/Line I/P 2

Mic/Line I/P 3

Mic/Line I/P 4

Aux I/P Left

Aux I/P Right

PSTalent 1

PSTalent 2

Digital I/O 1

Digital I/O 2

Digital I/O 3

Digital I/O 4

aMux

CCM 1

CCM 2

CCM 3

AV LAN 1

AV LAN 2

AV LAN 3

LAN

LAN

LAN

RS-232

Config

MAINS I/P

HDMI Loop O/P

HDMI CEC O/P 1

CAT 6

IR Over TP O/P

Audio O/P 1

Audio O/P 2

Audio O/P 3

Audio O/P 4

Relay 1

Relay 2

Relay 3

Relay 4

Amplifier O/P

Tx Gym DSP #7

Tx Gym DSP #8

Tx Aux Gym DSP #5

Tx Aux Gym DSP #7

DTP Transmitter

HDMI I/P

HDMI Loop Thru

RS-232 Over TP

EFP Out

IR Over TP

Config

Power I/P

Electric Projection Screen

Relay Up

Relay Down

MAINS I/P

Generic
Electric Ceiling Mount Projection Screen

MP2 (Partial)

HDBaseT

HDBaseT

Panelcraftpro
HDBaset Plate

Owner Furnished Cart

Owner Furnished Portable Projector

HDMI

HD Base T

RS-232

MAINS I/P

LCD Projector

(FOIO)

1 AV ONE-LINE DIAGRAM - GYMNASIUM(S)
3/16" = 1'-0"

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