ABBREVIATIONS

BTM

BW

CAB

CB

CH

···CL

CLG

CLR

CMP

COL

CUST

DBA

DBL

DEPT

DIAG

DISP DIST

DL

DN

DR

DS

DTL

DW

DWG

EOS

ETR

EW

EX

EXT

FD

FS

FT

GΑ

FTG

GALV

GWB

HDG

HDR

HR

CAMBER

CABINET

CATCH BASIN

CEILING HEIGHT

CAST IN PLACE

CEMENTITIOUS

COMP COMPACT, COMPACTED

CERAMIC TILE

CUSTODIAL

DIAGONAL

DIMENSION

DEAD LOAD

DOWNSPOUT

DISHWASHER

DRAWING

EXISTING

EACH FACE

ELEVATION

EDGE OF

EACH WAY

EXTERIOR

FLOOR DRAIN

CONTRACTOR

FLOOR

FIELD NAIL

FACE OF

FOOTING

GAUGE

GALVANIZED

GLU-LAM BEAM

GYPSUM WALL BOARD

HOT-DIP GALVANIZED

GRAB BAR

GRANULAR

HANDICAP

HEADER

HEM-FIR

HORIZ HORIZONTAL

HOUR

HARDWARE

HOLLOW METAL

FOUNDATION

BY CONTRACTOR

ENGR ENGINEER

EQUIV EQUIVALENT

EXIT

EXSTG EXISTING

ELECTRIC(AL)

EDGE OF SLAB

PANEL EDGE NAIL

ENGINEER OF RECORD

EXISTING TO REMAIN

FIRE EXTINGUISHER

FIRE EXTINGUISHER CABINET

FURNISHED & INSTALLED BY

FURNISHED & INSTALLED BY

FURNISHED BY OWNER, INSTALLED

FIBERGLAS REINFORCED PLASTIC

FIRE-RESISTANCE RATED

FRTW FIRE RETARDANT TREATED WOOD

FLAME SPREAD, FLOOR SINK

DOOR

DOUBLE

COLUMN

CONC CONCRETE

CONN CONNECTION

CONT CONTINUOUS

CONTR CONTRACTOR

CORRUGATED METAL PIPE

CONCRETE MASONRY UNIT

DEFORMED BAR ANCHOR

DEMOLISH, DEMOLITION

DRINKING FOUNTAIN

DISPENSER, DISPOSAL

A/C	ASPHALT CONCRETE	HSA	HEADED STUD ANCHOR
AB	ANCHOR BOLT	HSS	HOLLOW STRUCTURAL SECTION
AC	ABOVE COUNTER	HT	HEIGHT
ACT	ACOUSTIC CEILING TILE	ID	INSIDE DIAMETER
ADDL	ADDITIONAL	IN	INCH
ADJ	ADJACENT	INCL	INCLUDED, INCLUDING
AFF	ABOVE FINISHED FLOOR	INSUL	INSULATED, INSULATION
ALUM	ALUMINUM	INT	INTERIOR
ANOD	ANODIZED	JAN	JANITOR
AOR	ARCHITECT OF RECORD	JST	JOIST
ARCH	ARCHITECTURAL	JT	JOINT
ASSY	ASSEMBLY	K	KIP(S)
ATR	ALL THILLAD HOD	KB	KEYBOARD
BD	BOARD	KD	KNOCK DOWN
BLDG	BUILDING	KSI	KIPS PER SQUARE INCH
BLKG	BLOCKING	L	ANGLE
BM	BEAM	LF	LINEAR FOOT
BOF	BOTTOM OF	LLH	LONG LEG HORIZONTAL
BRG	BEARING	LLV	LONG LEG VERTICAL
RCMT	RASEMENT	LONG	LONGITUDINAL

LTG LIGHTING

MANUF MANUFACTURER

MAXIMUM

MKR BD MARKER BOARD

NEW

NOT APPLICABLE

NOT TO EXCEED

OUTSIDE DIAMETER

OPPOSITE HAND

OPEN WEB JOIST

PERPENDICULAR

PLAM PLASTIC LAMINATE

PLUMBING

QUANTITY

RISER(S)

RECESSED

REFERENCE

RESTL STEEL REINFORCEMENT,

REVISED, REVISION

ROUGH OPENING

STAIN & VARNISH

SOAP DISPENSER

SHEET METAL SCREW

SLAB ON GRADE/GROUND

SLIP CRITICAL

RADIUS

REQD REQUIRED

SFNT STOREFRONT

SHEET

SIMILAR

SHTG SHEATHING

SLDG SLIDING

SPKR SPEAKER

SPRK SPRINKLER

. STD STANDARD STL STEEL

STOR STORAGE

SUSP SUSPENDED

TOPO TOPOGRAPHY

TYP TYPICAL

SHEET VINYL

TOP & BOTTOM

TONGUE & GROOVE

TPD TOILET PAPER DISPENSER

TRANS TRANSVERSE, TRANSITION

VAPOR BARRIER

VERIFY IN FIELD

WATER CLOSET

WIDE FLANGE

WATER HEATER

WWR WELDED WIRE REINFORCING

VERTICAL

WITHOUT

WOOD

WINDOW

WITH

UNLESS NOTED OTHERWISE

VINYL COMPOSITION TILE

TREAD(S)

SQUARE

STAINLESS STEEL

SHT

SIM

NOT TO SCALE

ON CENTER

OVERHEAD

OPP

LWC LIGHT WEIGHT CONCRETE

METAL BUILDING SUPPLIER

MEDIUM DENSITY FIBERBOARD

NOT INCLUDED IN CONTRACT

POWER ACTUATED FASTENER

PARTIAL JOINT PENETRATION

POUNDS PER SQUARE FOOT

POUNDS PER SQUARE INCH

PAPER TOWEL DISPENSER

REINFORCING STEEL BARS

SEAT COVER DISPENSER

STOREFRONT, SQUARE FEET

PRESSURE TREATED

PRE-ENGINEERED METAL BUILDING

NEW ACCESS DOOR LIBERTY HIGH SCHOOL

BIDDING INFORMATION

THE DOOR AND WITHIN THE WALL.

PROJECT OVERVIEW

EXITING & FIRE LIFE SAFETY:

See Egress Plan for exit access.

New casework to match existing.

New interior glazing system.

for additional info.

others) under separate permit.

DEFERRED SUBMITTALS:

Add wiring for EPT hinge at new door.

MECHANICAL:

SPRINKLERS:

Existing ceilings are suspended grid.

New exit signage for new exterior exit door.

reinforcement for existing steel beams.

of existing steel beams, and concrete paving replacement.

• No increase in common path or exit access travel distance.

New interior solid core wood door and hollow metal frame.

Add electrical box, conduit and wiring for new exit sign.

• Add door limit switch, conduit and wiring for new air curtain.

See floor plan sheet for schedules and minimum requirements.

BID THE WORK TO ASSUME ONE ELECTRICAL BRANCH CIRCUIT IN

CREATED DOOR OPENING AND WILL NEED TO BE RE-ROUTED OVER

PLEASE NOTE THERE IS A BID ALTERNATE TO REPLACE ALL CARPET

FIELD VERIFY EXISTING COLORS AT INTERIOR DOOR PANEL, HOLLOV

Minor tenant improvement for Reception area within existing E occupancy. Work includes new

interior glazing assembly, new interior wood door with hollow metal frame, and new/relocated

interior casework. Electrical work includes new electrical boxes, conduit, and EPT wiring at new

existing awning includes removal of existing steel posts, new steel posts/footings, reinforcement

door. Mechanical work includes new hot water air curtain at existing ceiling. Exterior work at

At existing exterior canopy: new load bearing steel columns and footings, and

• Structural work designed by Miller Consulting Engineers. See structural sheets for

Metal stud framing and GWB typ at interior walls. See floor plan for wall callouts.

New ceiling mounted recessed hot water air curtain and thermostat. See floor plan sheet.

Minor sprinkler head adjustment may be required to accommodate new interior wall layout.

• New head locations, if required, should be determined by a qualified sprinkler system

Project includes rough-in of conduit and junction boxes for future security upgrade (by

• Sprinkler work (and design) is by others. If plan review is required it will be a deferred

• Remove and relocate existing electrical in wall as required for new construction.

• Mechanical work designed by Corbin Consulting Engineers, Inc.. See mechanical sheets

• New custom exterior insulated hollow metal door with hollow metal frame.

exterior wall signage, new exterior hollow metal door and frame at existing window opening, new

FIELD VERIFY CUSTOM DOOR HEIGHT AT EXTERIOR DOOR. ALLOW

EACH WALL TO BE OPENED. WILL BE FOUND AT EACH NEWLY

AT LOBBY UP TO TRANSITIONS SHOWN ON FLOOR PLAN.

METAL FRAMES, CARPET, AND CASEWORK LAMINATE.

SYMBOLS

EXISTING WALL NEW WALL

WALL TO BE REMOVED





ROOM NUMBER FOUNDATION TYPE



WALL TYPE.



WINDOW TYPE



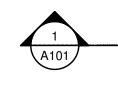
DOOR NUMBER



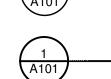
KEYED NOTE



NORTH ARROW



BUILDING SECTION



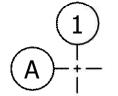
DETAIL SECTION



BUILDING ELEVATION

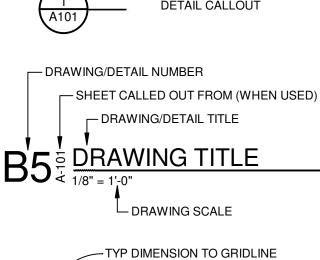


INTERIOR ELEVATIONS CALLOUT





DETAIL CALLOUT



OR FACE OF FINISH UNO DIMENSION TO CENTERLINE UNO







SHEET NUMBER	SHEET NAME	REV#	REV DATE	COMMENT
G-001	COVER SHEET			
G-002	EGRESS PLAN			
G-003	CONSTRUCTION REQS			
G-004	PRODUCT NOTES			
G-005	DEMO PLAN			
S-101	FOUNDATION PLAN			
A-101	FLOOR PLAN			
A-202	INTERIOR ELEVATIONS			
A-501	DETAILS			
ME-001	MECHANICAL LEGEND, ABBREVIATIONS, & GENERAL NOTES			
ME-002	ELECTRICAL LEGEND, ABBREVIATIONS, & GENERAL NOTES			
ME-101	MECHANICAL/ELECTRICAL PLAN			***************************************
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PROJECT DATA

APPLICABLE CODES:

2014 Oregon Structural Specialty Code 2014 Oregon Mechanical Specialty Code

2014 Oregon Energy Efficiency Specialty Code 2014 Oregon Fire Code

2017 Oregon Electrical Specialty Code 2017 Oregon Plumbing Specialty Code

OCCUPANCY CLASSIFICATIONS: E Educational

CONSTRUCTION TYPE: IIA

FULLY SPRINKLERED?: Fully Sprinklered

BLDG AREA:

First Floor Exstg: 157,348 sf (No change) Second Floor Exstg: 134,652 sf (No change) 292,000 sf (No change)

BLDG HEIGHT: Exstg: 2-story (No change)

BLDG & OCCUPANCY SEPARATIONS: No change in building or occupancy separations.

FIRE ALARM:

No changes to existing. **SPECIAL INSPECTIONS:**

No special inspections required

PROPERTY:

Hillsboro, OR 97124 Tax Map & Lot: 1N2230000102 Lot Size: 53.2 acres

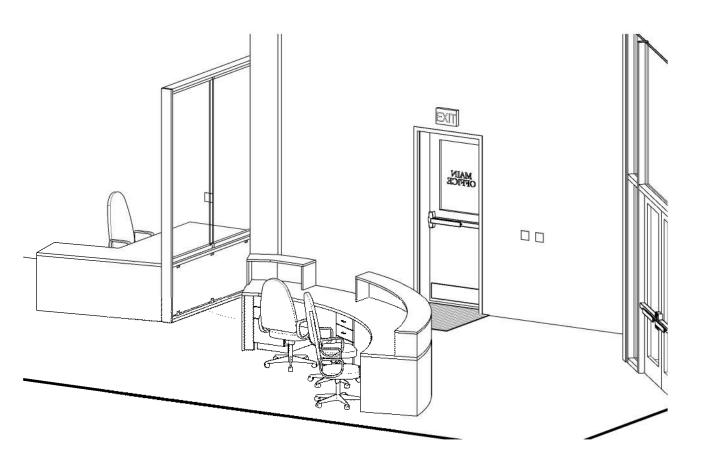
STRUCTURAL ENGINEER: Miller Consulting Engineers, Inc

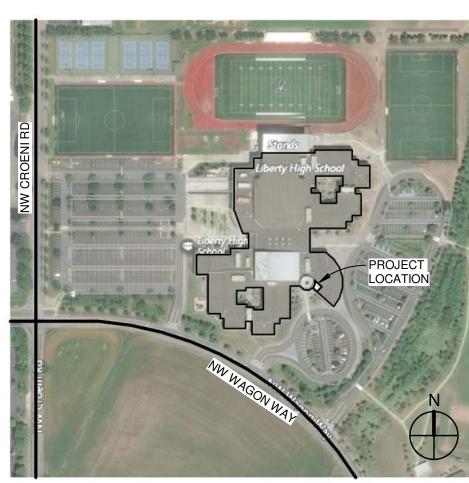
CONSULTANTS

9570 SW Barbur Blvd, Suite 100 Portland, Oregon 97219-5412 (503) 246-1250

MECHANICAL ENGINEER:

Corbin Consulting Engineers, Inc. 1905 N.W. 169th Place Suite 121 Beaverton, OR 97006 (503) 645-0176 Fax: (503) 645-0415





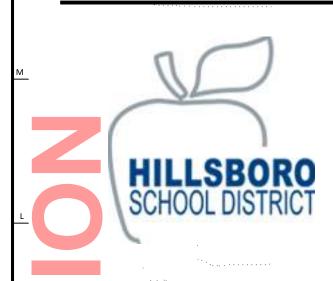
VICINITY MAP

180969 G-001 DRAWN BY: DC CHECKED BY:

Line is 3 inches at full scale (if not 3 inches then scale accordingly)

PREPARED FOR:

HILLSBORO SCHOOL DISTRICT 4901 SE Witch Hazel Rd, Hillsboro, OR



PROJECT NAME & ADDRESS:

NEW ACCESS DOOR

LIBERTY HIGH SCHOOL

7445 NW Wagon Way Hillsboro, OR 97124



KERRY W. VANDERZANDEN ARCHITECT, P.C.

13981 NW MAIN STREET BANKS, OREGON 97106 (503) 324-5220 / (503) 324-0883 FAX

REVISIONS: Description

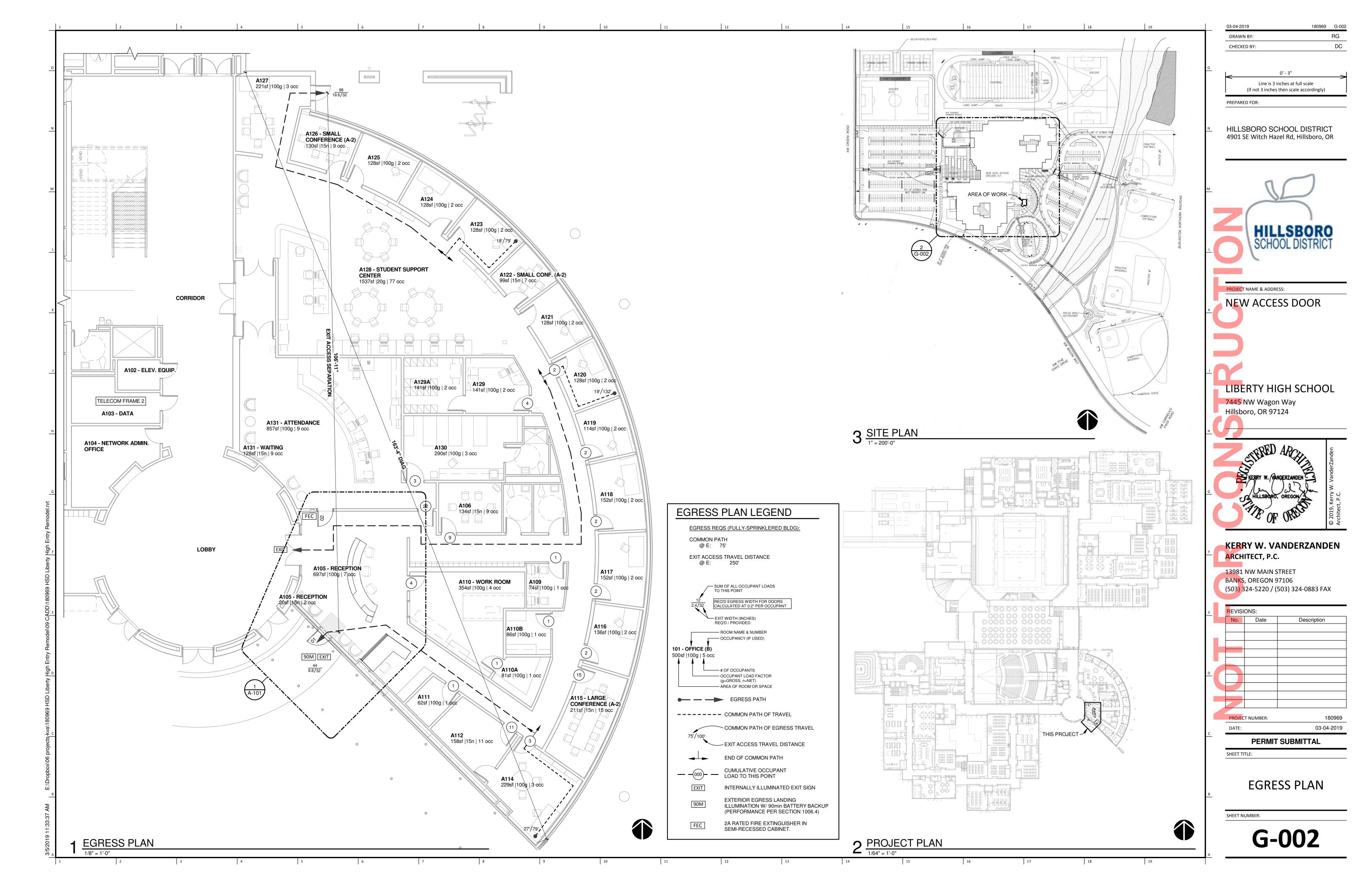
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		PROJEC	T NUMBER:	180969
		DATE:		03-04-2019

PERMIT SUBMITTAL

COVER SHEET

SHEET NUMBER:

G-001



00 00 00 - PROJECT SPECIFIC PRODUCT NOTES Also see Project Specific Product Notes. When those requirements conflict with the

01 00 00 - GENERAL REQUIREMENTS

- A. When accompanied by structural drawings and specifications prepared by a registered Engineer, where those requirements conflict with the requirements
- below, structural drawings and specifications shall take precedence. B. When accompanied by specifications prepared for this project and bound within a Project Manual, or issued by Addendum, where those requirements conflict with
- C. Conform to minimum standards of current edition of the International Building Code as amended by state and local jurisdictions and all other applicable construction codes, local ordinances, and regulations.
- D. Coordinate with local governing agencies and with serving utilities for all permits, regulations for work on public property and for utility services. Water service backflow devices must be tested by certified tester for all applications.
- E. The drawings and specifications represent the finished structure. The Contractor shall review and be fully familiarized with all Drawings and Specifications prior to starting the Work. Confusing, obscured or vague information, or unresolvable dimensions, shall be brought to the attention of the project Architect immediately. Larger scale detail dimensions override smaller. Do not scale drawings.
- F. Contractor shall investigate existing conditions and report discrepancies or potential problems to project Architect immediately.
- G. The Contractor is responsible for construction methods and safeguards during construction (IBC Chapter 33). The Contractor shall determine where and how temporary precautionary measures shall be used and to inspect same in the field. Construction loads upon the structure shall not be in excess of the design loads (50 psf floor, 25 psf roof unless otherwise indicated).
- H. Special Inspections: The Contractor shall provide notice as required by Structural Drawings and Specifications for scheduling of special inspections. Where not otherwise indicated, provide 5 business days notice for all special inspections. The Owner will provide required special inspections by a qualified testing agency. Test reports will be reviewed by the Engineer and approved by the building official. Re-inspections caused by initial failure will be provided by the Contractor. Contractor shall bear any costs of such re-inspections.
- Schedule structural observations by Engineer a minimum of 7 days prior.
- Provide new commercial quality products throughout, except where noted otherwise. All manufactured products shall be installed, cleaned, and commissioned in accordance with manufacturer's printed instructions.
- K. Dispose of all excavation, demolition, excess, and waste materials off site unless otherwise noted. Dispose of hazardous materials in accordance with disposal requirements of authorities having jurisdiction.
- L. Contractor requests for redesign of the work shall be performed at contractor's expense, including re-engineering and redesign of related systems and assemblies. Contractor shall maintain schedule and complete the project within the time
- required by the Contract Documents including the time required for redesign. M. Cut, fit, or patch where required to complete the work or to make its parts fit together properly. Restore these areas to the condition existing prior to cutting, fitting, and patching.
- N. Contractor shall coordinate delivery, unloading, and storage of products and materials. Store products and materials according to manufacturer's printed instructions and protect from damage by the elements. Maintain temperature and humidity within ranges specified by manufacturer's printed instructions.
- O. Where specified items, products, or materials include the words "or equivalent," "or approved equivalent," "or equivalent by other manufacturer," "or equal," or "as approved by Architect" submit for Architect approval according to submittal
- requirements and procedures. Substitutions: Requests for alternative products, equipment, materials, or manufacturers or other requirements for items that do not include an example of equivalency language as noted above, must be approved by substitution request
- prior to award of contract. Substitutions after award of contract are not permitted Q. Submit items required for review by Architect or Engineer on forms provided, or approved by, Architect or Engineer (as applies). Submit the number of copies required by Contractor plus 2. Allow sufficient time for review, return, resubmittal and second review. Allow 5 business days minimum for each review.
- At final cleanup: Wash and polish all hard surface items, clean all dust and debris from all accessible surfaces, vacuum carpets, sweep and damp mop hard surface floors, clean lamp lenses, install new filters in forced air duct work, clear exterior debris, rake level finish graded earthwork, and broom clean exterior decks or slabs.

02 00 00 - EXISTING CONDITIONS

A. Verify locations of all underground utilities. Call Utilities Notification Center 1 (800) 332-2344 before any groundwork.

- A. INSTALLATION: Unless indicated otherwise, mixing, placing, and curing of concrete shall be in accordance with the American Concrete Institute ACI 318 and IBC Section 1903, ready mix concrete per ASTM C94 Standard Specifications for Ready-Mixed Concrete with minimum compressive strength of 3000 psi at 28 days (4000 at tilt-up wall panels). Water/Cement ratio of 0.45 maximum, except footing shall be 0.50 maximum. Provide 5% (+/- 1%) air entrainment in exterior concrete slabs. Use non-chlorine based accelerators only. Provide adequate drainage at retaining structures, (foundation walls, retaining walls and similar).
- STANDARDS: Conform to ACI 301, ACI 315 and ACI 318 (moderate temperature), ACI 305R (hot weather), ACI 306R (cold weather) and current state building code
- VAPOR BARRIER: If not otherwise indicated, provide 10 mil fabric reinforced plastic vapor barrier, conforming to ASTM E 1745, (Stego Wrap or equivalent), directly under interior slabs. Seal penetrations and 6" lapped edges with manufacturer's
- D. SLAB REINFORCEMENT: If not otherwise indicated, minimum slab reinforcement shall be mesh or reinforcing steel as follows:
- 1. Mesh reinforcing: WWF 6x6-W2.9xW2.9 conforming to ASTM A185. Lap sides and ends of mesh reinforcement not less than one mesh plus 2 inches. 2. Bar reinforcing: #3 Grade 60 rebar at 18" centers each way. Lap bars 18" minimum. Cut alternate bars at control joints.
- REINFORCING STEEL
- 1. Place reinforcing steel in accordance with CRSI "Manual of Standard Practice" and ACI 315, latest edition. Lap bars as indicated. Secure against displacement. 2. Bars: Deformed steel bars of sizes indicated conforming to ASTM A615, grade 60, clean and free of loose rust or other condition that reduces bond. Rebar for welding
- 3. Lapped bar splice length minimums (unless noted otherwise): 55 diameters at straight splices, 40 diameters at corners.

- 4. Frame openings with at least 2 bars at sides, above and below and extending 2'-6" beyond edges of openings. Request special instructions for special conditions. 5. Provide corner bars same size and spacings as horizontal. Bend reinforcing cold. Do not weld.
- F. CONCRETE ACCESSORIES AND CEMENTICIOUS PRODUCTS.
- 1. Provide anchor bolts cast into concrete conforming to ASTM A307, minimum, or other as indicated. Provide hoop ties, thrust plates or other accessories as indicated
- 2. Non-shrink grout to conform to ASTM A-1107, 5000 psi at 28 days. Install under base plates after column is erected.
- 3. Tilt-up panel pick-up attachments design by others. Design shall be by Engineer licensed in the state of the project.
- G. FORMING CONCRETE
- 1. Form to provide plumb, level, and square shapes unless noted otherwise. Form to sizes, locations, and grades shown on drawings. Provide chamfer or fillet inserts at all edges above slab line.
- 2. Ensure that reinforcement is protected by 2" of concrete cover at formed surfaces and 3" at earth. Center slab reinforcing by concrete dobies.
- 3. Place construction and contraction joints as indicated on drawings. H. PLACING & CURING CONCRETE.
- 1. Place concrete in conformance to ACI 318 and IBC Section 1903, within temperature range not below 50 degrees F and not above 85 degrees F at time of pour. In freezing weather, provide suitable means to maintain the concrete at a temperature not lower than 50 degrees F for three days.
- 2. Place construction joints when pour is interrupted, as required by ACI 318.
- 3. Locate contraction joints in reinforced slabs every 20'-0" (max) each direction. For unreinforced slabs, contraction joints shall be spaced at 36 times slab thickness (maximum). Fill joints with sealant (unless noted otherwise).
- 4. Construction and contraction joint sealant: At areas exposed to truck or forklift traffic, fill with Sure Fil J52 or equivalent (Shore A Hardness 80 minimum). All other areas fill with Sikaflex-1c SL (or approved equivalent).
- 5. Wood float and steel trowel all interior slabs monolithically, free of depressions
- or projections. Surface tolerance shall be $\pm 1/4$ " in 10 feet. I. EXTERIOR WALKS AND SLABS. (if indicated)
- 1. Concrete sidewalks, aprons, and curbs in Right-of-Way per current applicable governmental ordinances. 2. Texture walkway locations indicated for accessible traffic warning according to
- requirements of authority having jurisdiction. 3. Provide preformed exterior expansion joint, conforming to ASTM D1751 for
- asphalt saturated fiberboard, 3/8" thick minimum, length and depth sufficient to fully separate the contact surfaces, at 20 foot maximum spacing and where slab abuts another slab, isolated slab, or wall.
- 4. Unless noted otherwise, pitch exposed slab surfaces at 2% slope for drainage and provide medium broom non-slip surfaces in cross direction of travel.
- 5. Provide tooled crack control joints at 5 foot centers each way maximum. 6. Concrete testing is not required for non-structural fully supported sitework
- concrete (walkways).
- 04 00 00 MASONRY A. REFERENCES
- 1. ASTM International (ASTM) C90 (Latest Version) Standard Specification for Loadbearing Concrete Masonry Units
- 2. ASTM International (ASTM) C270 (Latest Version) Standard Specification for Mortar for Unit Masonry
- 3. ASTM International (ASTM) C 476 (Latest Version) Standard Specification for **Grout for Masonry**
- 4. The Masonry Society (TMS) 602 (Latest Edition) Specification for Masonry
- 5. The Masonry Society (TMS) 402 (Latest Edition) Building Code Requirements for
- B. SUBMITTALS
- 1. Submit shop drawings, product data, and samples, as applies, for the following items: Concrete Masonry Units (CMU), Grout Mix Design, Mortar, CMU Reinforcing
- C. PRODUCTS
- 1. Masonry materials shall conform to the requirements of TMS 602 except as
- modified by the requirements of these construction drawings and specifications. 2. CONCRETE MASONRY UNITS (CMU): Medium weight sand units and 115 lbs per cubic foot conforming to ASTM C90 with linear drying shrinkage limited to 0.065% and rate of absorption not exceeding 0.035 ounces of water per sq. in. of surface at the time of placement. Minimum compressive strength of masonry, f'm=1500 psi on net area by method of proportion. Type and color as selected from manufacturer's standard.
- 3. HOLLOW BRICK UNITS (HBU): Clay or shale units conforming to ASTM C 625, type and color as selected from manufacturer's standard.
- 4. MORTAR: All mortar to conform to ASTM C270, Type S.
- 5. GROUT: Fine grout conforming to ASTM C476 with a minimum compressive strength of 2,000 psi at 28 days.
- 6. REINFORCING STEEL BARS: ASTM A615 Grade 60.
- 7. LOOSE FILL INSULATION: "Perlite" loose granular insulation.
- 8. MISCELLANEOUS ANCHORS AND INSERTS: Epoxy or zinc coated steel, stainless
- 9. FLASHINGS: If not otherwise indicated 26 gauge (minimum) galvanized steel at exposed areas. Stainless steel sheet at through-wall or concealed locations. 10. EXPANSION JOINTS: Flanged neoprene strip, in vertical joint, spaced as
- indicated. 11. WATER REPELLENT SEALER: BASF Enviroseal Double 7 or approved equivalent by
- 12. PROTECTION BOARD: As required to protect waterproofing at or below grade.
- D. EXECUTION 1. All CMU to be constructed in accordance with IBC chapter 21 and TMS 602.
- 2. Lay CMU dry. Lay brick saturated with dry surfaces.
- 3. Clean all masonry units and support surfaces.
- 4. Completely cover the bedding area of the units at all bed, head and web joints with mortar (100% mortar filling is required).
- 5. Unit masonry shall be laid in running bond (common), with shallow concave tooled joints, unless otherwise indicated. Provide returns, caps and other special shaped units as indicated or required.
- 6. Masonry shall be laid plumb, true to line, with uniform joints to maintain pattern both vertically and horizontally, and with level courses accurately spaced. Lay out courses with symmetrical vertical joint patterns between corners. Distribute "fillers" symmetrically at each panel.

- 7. Each individual unit shall be set level and square to the unit module so that no variation in the surrounding mortar joint can be noticed, and so that uniform joint shadows will be cast.
- 8. Fill all holes, replace all defective face shells, tuck point for uniform mortar joints, "holy stone" surface projections. Clean all exposed surfaces, free of mortar droppings, mortar "scum", efforescence and all foreign material.
- 9. REINFORCING STEEL: a. Placement: Where not otherwise indicated, place rebar as follows:
- (2) #4 in grouted lintel over openings (2) #4 in grouted cells at jambs and wall ends
- (2) #4 in grouted bond beams at sills and top of walls
- b. Provide minimum #5 vertical bar at 48 inches O.C. and at corners and intersections. Provide two #4 horizontal bars at 48 inches O.C. Provide corner bars at intersections, corners, and at each horizontal bar.
- c. Extend all reinforcing steel a minimum of 24 inches beyond edges of opening. Provide matching corner bars for all bond beams. Center vertical reinforcing steel at
- center line of wall unless indicated otherwise.
- d. Lap horizontal reinforcement ends 50 diameters minimum. e. Restrain reinforcement with wire-tying or prefabricated positioners to prevent movement from construction loads and during placement of mortar and grout.
- f. Discontinue reinforcement at expansion joints as indicated
- g. Do not wet set reinforcement. 10. GROUTING
- a. Grout pour height shall not exceed the limits of TMS 402. Provide cleanouts at grout pour heights greater than 5 feet.
- b. Grout lifts shall not exceed 5 feet in height.
- c. Consolidate each grouted cell with mechanical vibrator immediately after grout placement. Reconsolidate by mechanical vibration after initial water loss and
- d. High lift grouting not permitted except as approved by Engineer of Record (EOR). Submit detailed plans to EOR for approval of high lift grouting requests.
- e. Grout solid all cells containing anchors or rebar, or where drilled-in anchors are indicated. Grout all cells with reinforcement. Grout bond beams simultaneously with lift below.
- f. Maintain grout spaces clean and clear until grouting. Fully grout intended spaces. Stop vertical grout pours 1/2" below the top of the topmost unit.
- g. Rodding is not an acceptable means of grout consolidation.
- a. At grout pours exceeding 5 feet in height, provide cleanouts at every vertical bar and at 32" on center maximum spacing for solid grouted masonry.
- b. Construct cleanouts with an opening of sufficient size to permit removal of debris, with a minimum opening dimension of 3 inches.
- c. Cleanouts shall be adequately sealed after inspection and before grouting to resist grout pressure.
- 12. Mortar: Discard unused mortar after 2 1/2 hours of initial mixing. 13. Hot and cold weather construction requirements per ACI 530.1/ASCE 6/TMS 602 specifications shall apply.
- 14. Temporary bracing of masonry walls is the responsibility of the Contractor. 15. Moisture protection: Unless indicated otherwise, seal above grade unpainted exterior masonry with water repellant sealer. Seal masonry below grade or exposed to soil with two coats waterproof emulsion. Apply per manufacturer's printed
- 16. Fill all non-grouted CMU or HBU cells with loose granular insulation. 17. Miscellaneous anchors and inserts: Install anchors, flashings, and other embedded items as the work progresses.
- 05 00 00 MFTALS
- A. REFERENCES (Latest Version): ASTM International (ASTM) A36, A53, A153, A307, A325, A500, A653, A992, C881
- B. Rectangular HSS to conform to ASTM A500, Grade B, Fy = 46ksi. Round HSS (tube) to conform to ASTM A500, Grade B, Fy = 42ksi. Structural pipe to conform to ASTM A53 Type E or S, Fy = 35ksi, Wide Flange to ASTM A992, Fy=50ksi, other sections, plates and bars ASTM A36 Fy - 36ksi.
- C. Machine Bolts: Conform to ASTM A325. Tighten all bolts in steel per AISC specifications for strength rating. Galvanized coatings shall conform to ASTM A153.
- D. Anchor bolts for embedment in concrete fabricated with a bent leg: Conform to ASTM A307 F. All field welds, shop welds, welding inspections, and welder qualifications to comply
- with specifications in IBC Sections 2205, 2206, 2207, 2209 and 2210. Welds shall be special inspected per IBC Section 1704. G. Structural steel items not intended for embedment in masonry or concrete shall be
- prime painted or galvanized. Zinc galvanized coatings on iron and steel products shall conform to ASTM A123. H. Fabricated items indicated for hot dip galvanization shall be galvanized after all
- fabrication is completed. I. Repair galvanized coatings per ASTM A780.
- J. Light gauge structural metal framing to comply with the latest edition of Steel Stud Manufacturers Association published load and span tables and "Cold Formed Steel Details."
- 1. All structural light gauge steel members shall be mill certified prime steel meeting ASTM A653 structural quality; Grade 33 for steels thinner than 16 gage (54 mils) and Grade 50 for steels 16 gage (54 mils) and thicker. Grade 33 steel shall have a fy = 33000 psi and fu = 45000 psi. Grade 50 steel shall have a fy =50000 psi and fu = 60000 psi.
- 2. All light gauge steel shall be galvanized per ASTM A653 with minimum coating of G60 for exterior and/or load bearing members and G40 for interior non-load bearing members
- 3. Use web stiffners at concentrated loads perpendicular to unit web and where
- 4. Align roof or floor joists over load bearing studs, unless otherwise indicated. 5. Use #6 (minimum) truss head fasteners for all concealed light gauge metal
- 6. Do not use self drilling fasteners in units less than 20 gauge.
- K. All open web steel girders and joists to conform to the requirements of IBC Section 2206 and the Steel Joist Institute specifications CJ-1.0, K-1.1, LH/DLH-1.1, and JG-1.1 as applies.
- L. Provide dielectric insulation for dissimilar metals in contact. M. Submit for review reproducible shop drawings for all vendor designed metal
- N. Bolt in epoxy adhesives per ASTM C881.
- O. All exposed structural steel to have one finish coat of rust inhibiting paint. Color by Owner
- P. WELDING:

- 1. All field welds, shop welds, welding inspections, and welder qualifications to comply with specifications in IBC Sections 2205, 2206, 2207, 2209 and 2210. Welds shall be special inspected per IBC Section 1704.
- 2. All welding shall conform to American Welding Society (AWS) D1.1 using E70xx electrodes.
- 3. Weld lengths shown are effective as specified per the specifications of the American Institute of Steel Construction (AISC).
- 4. Where weld lengths are not shown, the weld shall be full length of members being joined.
- 5. All butt welds shall be full penetration welds unless noted otherwise on structural drawings.
- 6. Welding shall be performed by AWS certified welders for weld types specified. 7. All welds shall receive the same finish coat as the member being welded.
- 07 00 00 THERMAL AND MOISTURE PROTECTION
- A. Flexible blanket insulation shall be mineral wool conforming to ASTM C665 or fiberglass. Provide 1 perm vapor barrier on heated side of insulation. Seal membrane at openings.
- C. Combustible (foam, Styrofoam, urethane, etc.) insulations shall be separated from building interior with a minimum of 1/2 inch gypsum board.
- E. Minimum 'R' values as indicated on drawings. Otherwise, provide R-15 wall (R-21 at 2x6 studs), R-30 floor (above crawl space) and R-38 roof insulation around heated spaces. Fill all voids. Insulating materials and facings at exposed and concealed locations (except facings that meet the requirements of 719.2.1): Flame spread index 25 or less; Smoke-developed index of 450 or less.
- G. Flashings (unless indicated otherwise): Min 24 gauge galvanized. Provide at intersections of roofs with vertical surfaces, over exterior door and window frames, window sill with end dams, and as indicated on drawings. Step flashings at shingle type roofing and at masonry to sloped roof. Hem at exposed edges.
- steel gutters and downspouts. Provide gutter spike and ferrule at 48 inches O.C. Scuppers and Overflows: Formed from stainless steel or copper sheet per SMACNA

H. Gutters and Downspouts (unless indicated otherwise): Min 26 gauge pre-finished

standard detail, 4 inches high (above flow line), area equivalent to three times Waterproofing: Provide fluid-applied elastomeric coating, Tremco Barrier Solutions

'Tuff-N-Dri XTS' or approved equivalent, and protection-draingage board at concrete

walls below grade at habitable spaces. Extend to grade or to above water flow line

- if known. K. Bituminous coat all structural or plate steel surfaces exposed to earth, gravel or
- damp conditions. L. Provide weather barrier complying with ASTM D226 over wood or gypsum exterior sheathing.
- M. Seal, caulk or gasket perimeter of all penetrations and miscellaneous openings in building shell. Provide 3/8 inch joint for caulking and sealant materials, backer rod diameter 110% minimum of joint width, set 3/8 inch deep, or as follows: 1. At concrete and masonry: low modulus, 2-part, non-sag polyurethane rubber.
- 2. At opening frames: silicone rubber, non-acid, porous bond type at joints abutting concrete or masonry; acid non-porous type elsewhere. N. Provide firestop at penetrations of fire-resistance rated assemblies. Firestopping shall provide fire-resistance rating not less than assembly being penetrated, tested
- to ASTM E814. Install in accordance with manufacturer's printed instructions. P. Vapor barrier (unless indicated otherwise): asphalt saturated felt meeting ASTM D226, 15 or 30 pound as indicated.
- R. Protect exposed exterior slab edge insulation with rigid, opaque, weather resistant protective covering to minimum 6" below grade. S. Determine U-factors of windows, doors, and skylights per NFRC 100 or the

commercial size category values listed in Chapter 15 of the 2009 ASHRAE Handbook

- of Fundamentals. T. The temporary label affixed to fenestration products shall not be removed prior to
- 08 00 00 OPENINGS A. Install packaged unit doors, windows and skylights per manufacturers printed instructions and AAMA/WDMA/CSA 101/I.S.2/A440, latest editions with all updates.
- Include sealant bedding joint at nail flange. B. Provide safety or tempered glass at locations within 24 inches of a door edge (if bottom of glazing is within 60 inches of a walking surface) and at all hazardous locations as defined by IBC Section 2406.4. Each pane of safety glazing installed in hazardous locations shall be identified by a manufacturer's designation specifying who applied the designation, the manufacturer or installer, and the safety glazing standard with which it complies and designating the type and thickness. The designation shall be acid etched, sand blasted, ceramic fired, laser etched, embossed or of a type that once applied, cannot be removed without being
- destroyed (unless otherwise approved by the Building Official). C. Provide exterior, heat envelope windows with low 'e' coated, tinted, insulating glass, SHGC < 0.40, U < 0.46 at metal frames, U < 0.35 at all others.
- D. If not otherwise indicated, provide ANSI/BHMA light commercial (Grade 2) hardware minimum with return bend lever handled type lock and latchsets. All locksets to have "always exit" function, except where deadbolts are indicated.
- F. Where indicated, install swinging fire-rated doors per manufacturer's instructions with closers, panic bars and intumescent smoke seals, Pemko HSS 2000 or equivalent. Provide intumescent glazing tape at vision lites. Always operable lever handle latchsets acceptable at occupancies other than "A" and "E" unless noted
- G. Seal, caulk, gasket or weatherstrip site-constructed doors and windows to limit air leakage and infiltration. Manufactured doors, windows, and storefront assemblies shall meet current Oregon Energy Efficiency Specialty Code requirements for air leakage and thermal performance.
- H. Provide products, components, and attachments sufficient to withstand stated wind I. Mount operable window hardware within accessible reach ranges according to
- ICC/ANSI A117.1-2003. Operable door hardware shall be located not lower than 34 inches and not higher than 48 inches above finished floor. J. Doors with closers must be operable with a maximum 15 lb unlatch force, 30 lb to
- initiate movement and 15 lb to complete opening. K. Provide metal door frames with welded miter joints and removable spreader bar unless indicated as 'KD.'
- M. Deadbolts are not permitted unless specifically indicated.

of Fundamentals.

N. Locate doors 4" from adjacent perpendicular wall to hinge plate unless noted O. Determine U-factors of windows, doors, and skylights per NFRC 100 or the commercial size category values listed in Chapter 15 of the 2009 ASHRAE Handbook P. The temporary label affixed to fenestration products shall not be removed prior to

09 00 00 - FINISHES

- A. Unless otherwise indicated provide 5/8" Type 'X' gypsum wallboard for all interior work. Use exterior gypsum sheathing or equivalent moisture resistant products in exterior or wet-prone areas.
- B. Provide at least 2 typical anchors in any section of sill plate or stud wall bottom
- C. Where non-load bearing interior partitions are not otherwise specified or detailed on architectural or structural drawings, framing shall comply with IBC Chapter 22 Section 2211 for steel framing and Chapter 23 Section 2308 for wood framing.
- G. Install 'heavy duty' ceiling tee grid suspension system per ASTM C635 and C636 for seismic restraint. Provide 2 inch wall angle at perimeter. Attach grid at 2 adjacent walls, maintaining 3/4 inch edge clearance of acoustic panels at opposite walls. Provide seismic separation at ceiling areas over 2500 SF.
- H. Provide resilient floor finish transition strips, typical. Locate at centerline of doors
- and where indicated. I. Provide finished resilient base in roll stock, groove and bend around corners.
- and shall meet the limits of IBC Table 803.9 K. 2. All light gauge steel shall be galvanized per ASTM A653 with minimum coating of

Interior wall and ceiling finish materials shall be classified according to ASTM E84

- G40 for interior non-load bearing members.
- 12 00 00 FURNISHINGS A. CASEWORK
- 1. Comply with the IBC Section 1109 accessibility provisions regarding counters at sinks, wall storage cabinets and other features. Provide sink case with plastic
- laminate finished interior, removable bottom shelf and base (toe kick) member. 2. Coordinate with the requirements of built-in appliances.
- 3. Use AWI 'Custom Grade' specifications for all work. 4. Provide NEMI General Purpose Grade plastic laminate surfaces at countertops and 4" high back and side splashes. Provide plastic laminate faced individual cases, unless otherwise indicated, and melamine surfaces at interior. Provide adjustable
- shelves with 'pin' brackets in holes at 1" centers. 5. Provide 'European' style self closing hinges at all doors, heavy duty full extension guides at drawers (extra heavy at file drawers), 4" cc. wire pulls, unless otherwise
- B. Provide Shop Drawings for all non-modular commercial custom casework.

envelope.

- 21 00 00 FIRE SUPPRESSION A. Fire protection piping and components to comply with national, state and local
- B. Provide a complete wet fire sprinkler system (dry system at nonconditioned spaces), as indicated, for occupancy in accordance with NFPA 13 and local fire marshal's requirements. Submit copy of permit drawings with head locations to Architect for
- Provide freeze protection for piping in areas exterior of building insulation
- 23 00 00 HEATING. VENTILATING, AND AIR CONDITIONING
- A. Conform to all applicable codes, laws and ordinances. Brace ducts per ANSI/SMACNA Seismic Support Manuals.
- C. Vent all exhaust fans to exterior with appropriate weatherproof hoods.
- D. Provide independant ventilation/exhaust fan and ductwork for elevator machine rooms, as applicable E. Submit intended location of exterior HVAC condensers, wall louvers, and vents to

B. Comply with current state building code for required outside air ventilation design

inches deep, 44 inch maximum height at obstructions up to 25 inches deep. Do not install over obstructions greater than 25 inches deep.

F. Mount thermostats and other control devices between 15 and 48 inches above floor

line at areas free of obstructions, 48 inch maximum height at obstructions up to 20

G. Provide Oregon Non-residential Energy Code Calculations on applicable form sheets.

otherwise indicated.

lighting for 90 minutes minimum.

- 26 00 00 ELECTRICAL A. Electrical lighting and device plans are diagrammatic with intent to show only point of use equipment and control requirements. System design by others. Coordinate
- installation of telephone, signal, computer, control and other similar wiring with B. Install in accordance with current Oregon Electrical Specialty Code and
- requirements of electrical utility. C. Electrical materials and equipment to be U.L. approved and installed by licensed
- and corrections made as required, by qualified contractor. Provide all systems and F. Mount switches at 48" above floor to center, outlets at 15" to center, unless
- G. Light fixtures in contact with insulation to be insulation coverage (IC) rated, and sealed airtight to gypsum wall board or other finish. Provide programmable automatic shut-off relay controls, overriding local switching,

Before final payment from Owner, systems shall be tested for required operation,

- in interior office rooms larger that 2000 sf, PCI 'Control Keeper' or approved Provide emergency egress lighting where indicated. System shall provide required
- N. Where exterior egress lighting is indicated or required by code, provide 1 foot-candle minimum light level within 50' of exterior wall with light fixtures equipped with battery back-up and trickle charger, sufficient for 90 minute emergency operation. Emergency egress lighting to comply with IBC Chapter 10 Section 1006.

- 03-04-2019 180969 G-003 DRAWN BY: RG CHECKED BY: DC
 - Line is 3 inches at full scale
- (if not 3 inches then scale accordingly)
- HILLSBORO SCHOOL DISTRICT 4901 SE Witch Hazel Rd, Hillsboro, OR

PREPARED FOR:



PROJECT NAME & ADDRESS:

NEW ACCESS DOOR

LIBERTY HIGH SCHOOL 7445 NW Wagon Way

Hillsboro, OR 97124



KERRY W. VANDERZANDEN ARCHITECT, P.C.

13981 NW MAIN STREET BANKS, OREGON 97106 (503) 324-5220 / (503) 324-0883 FAX

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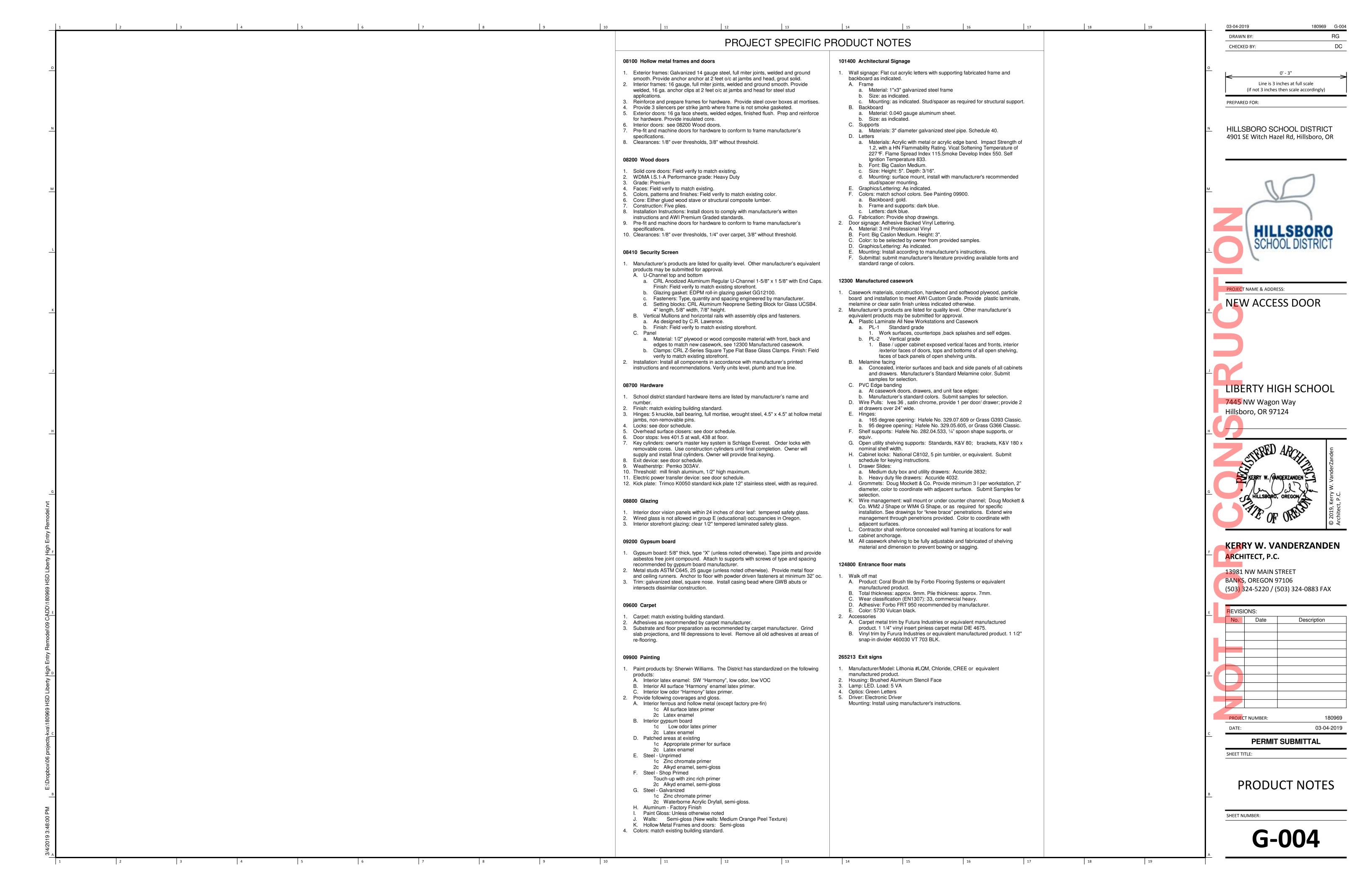
CONSTRUCTION REQS

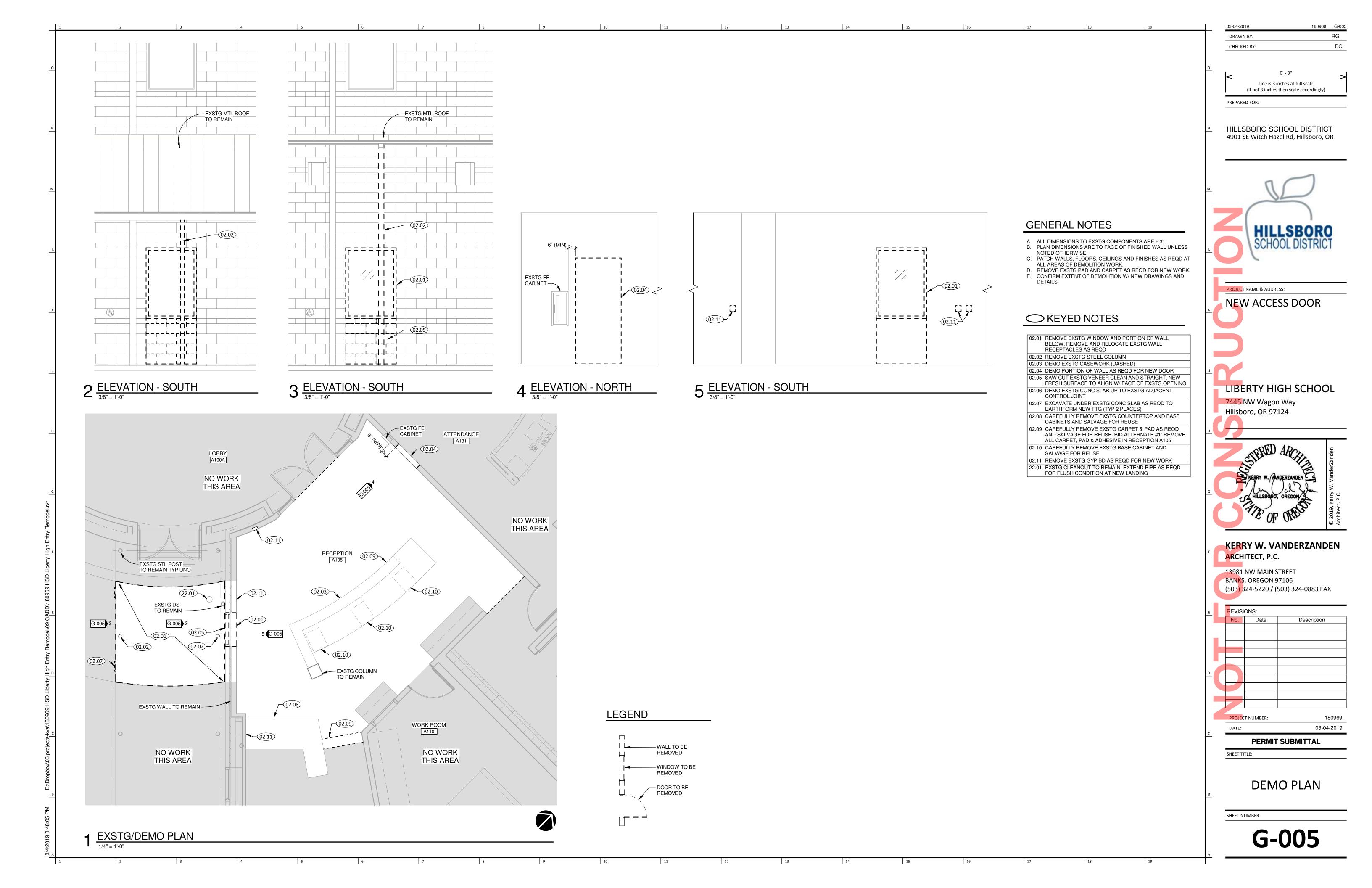
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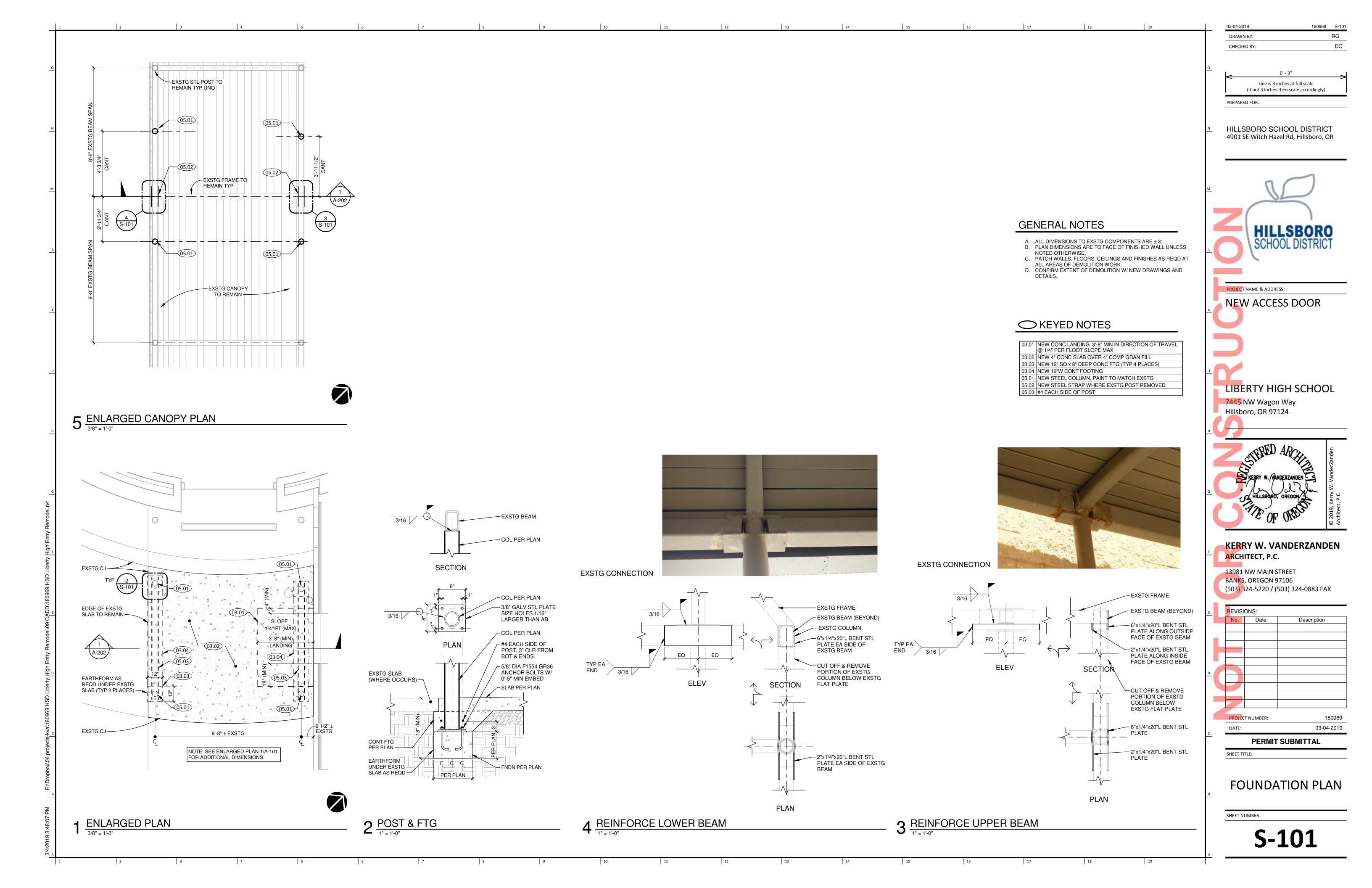
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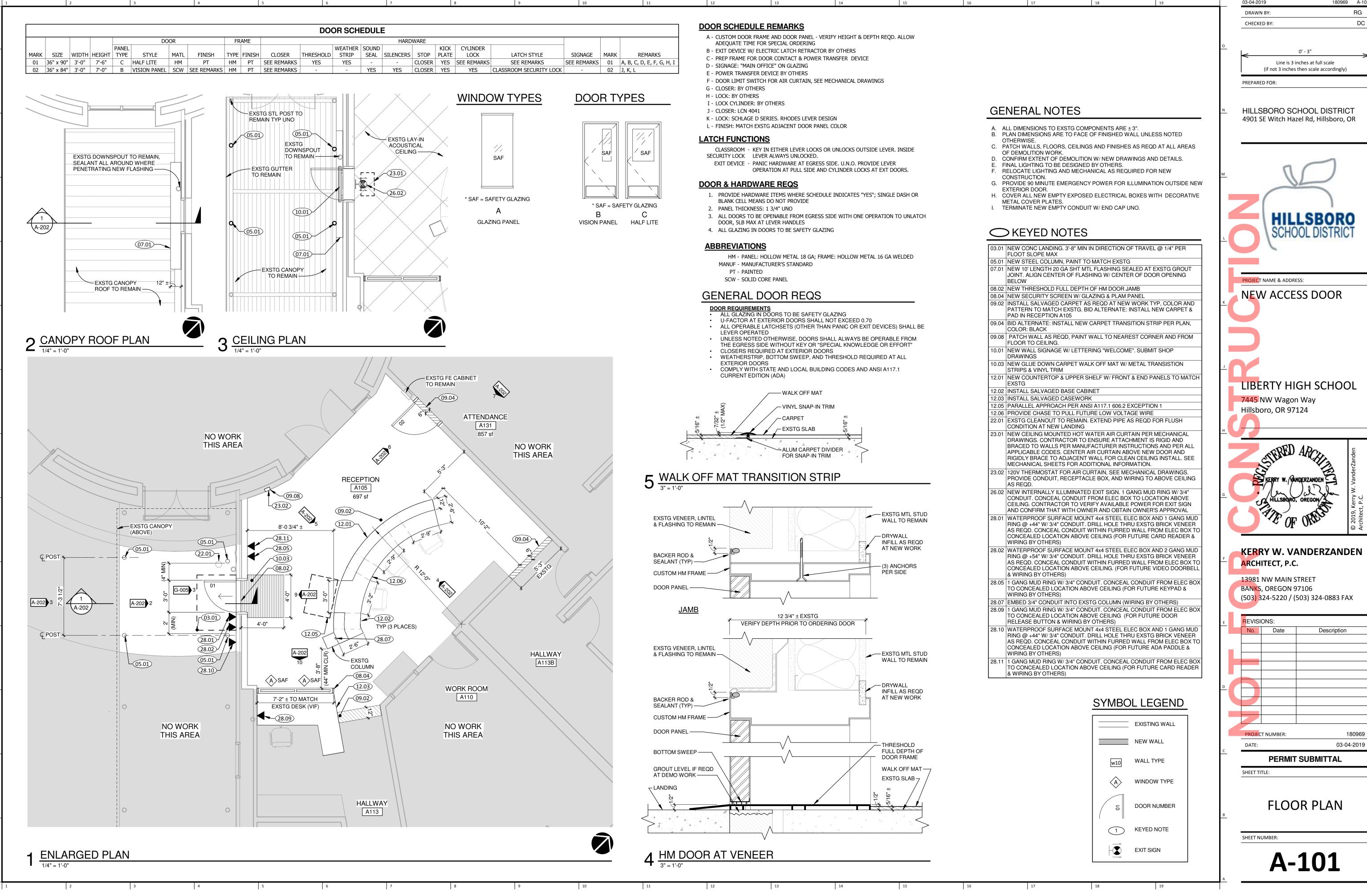
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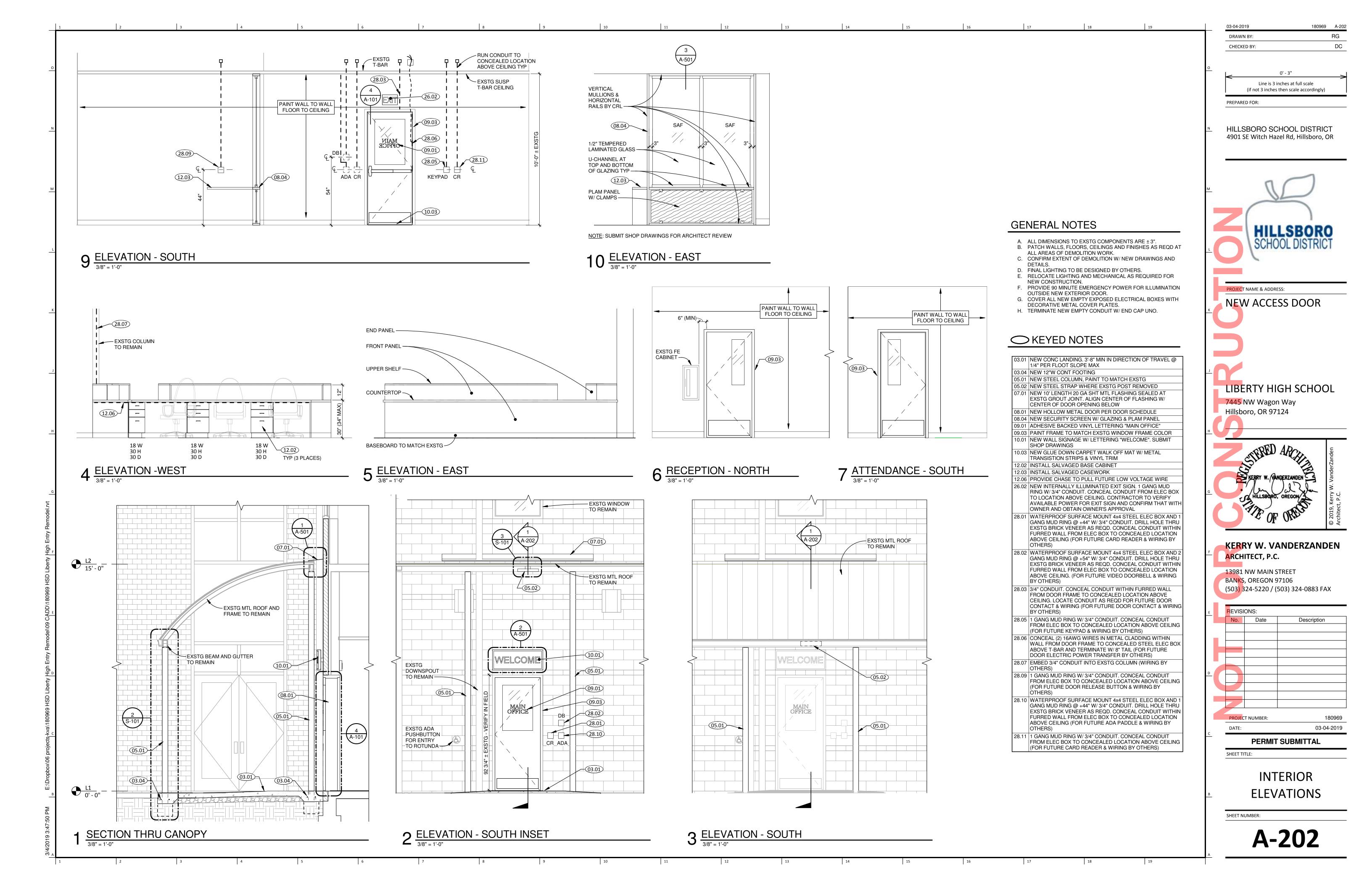
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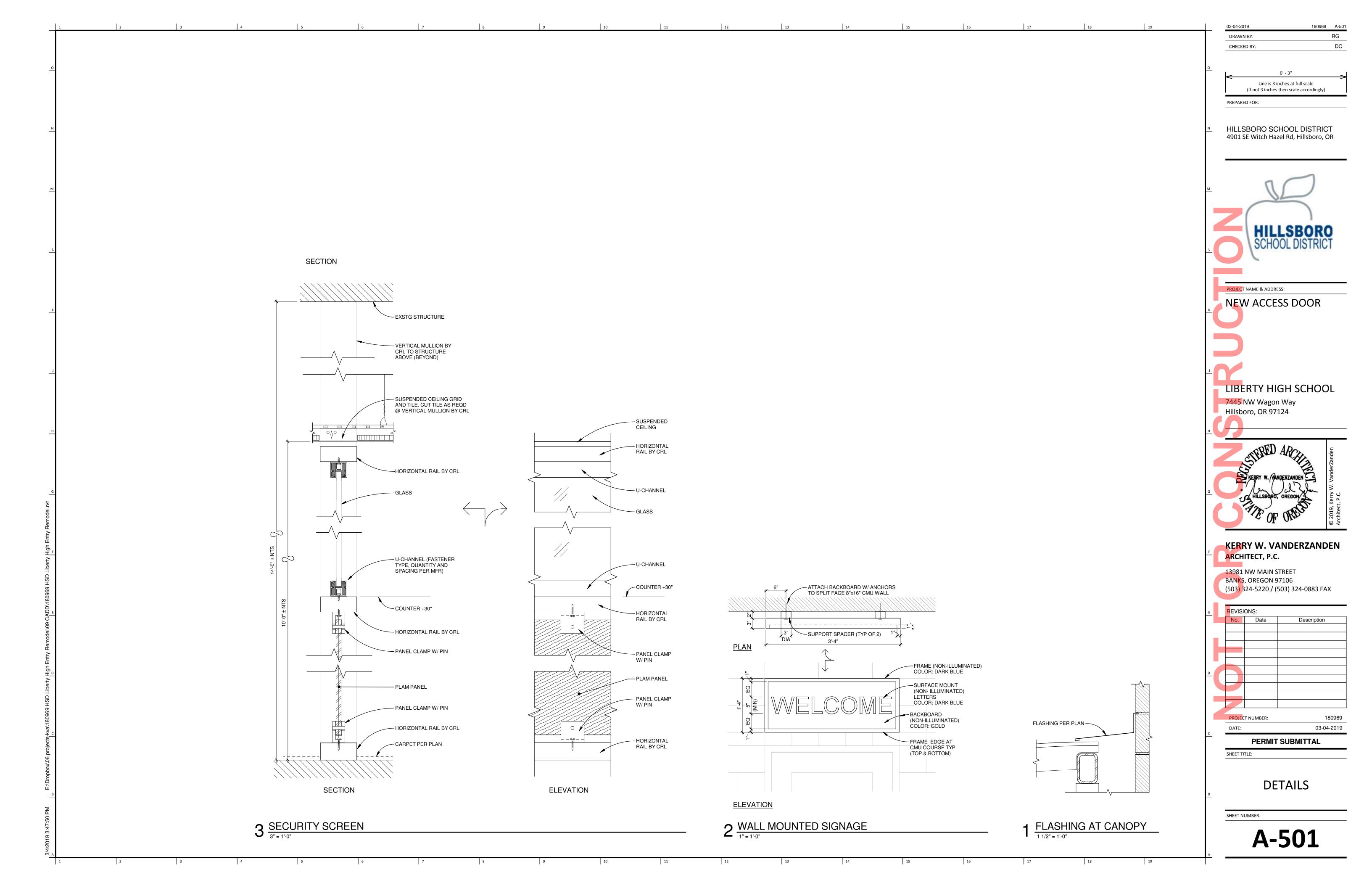


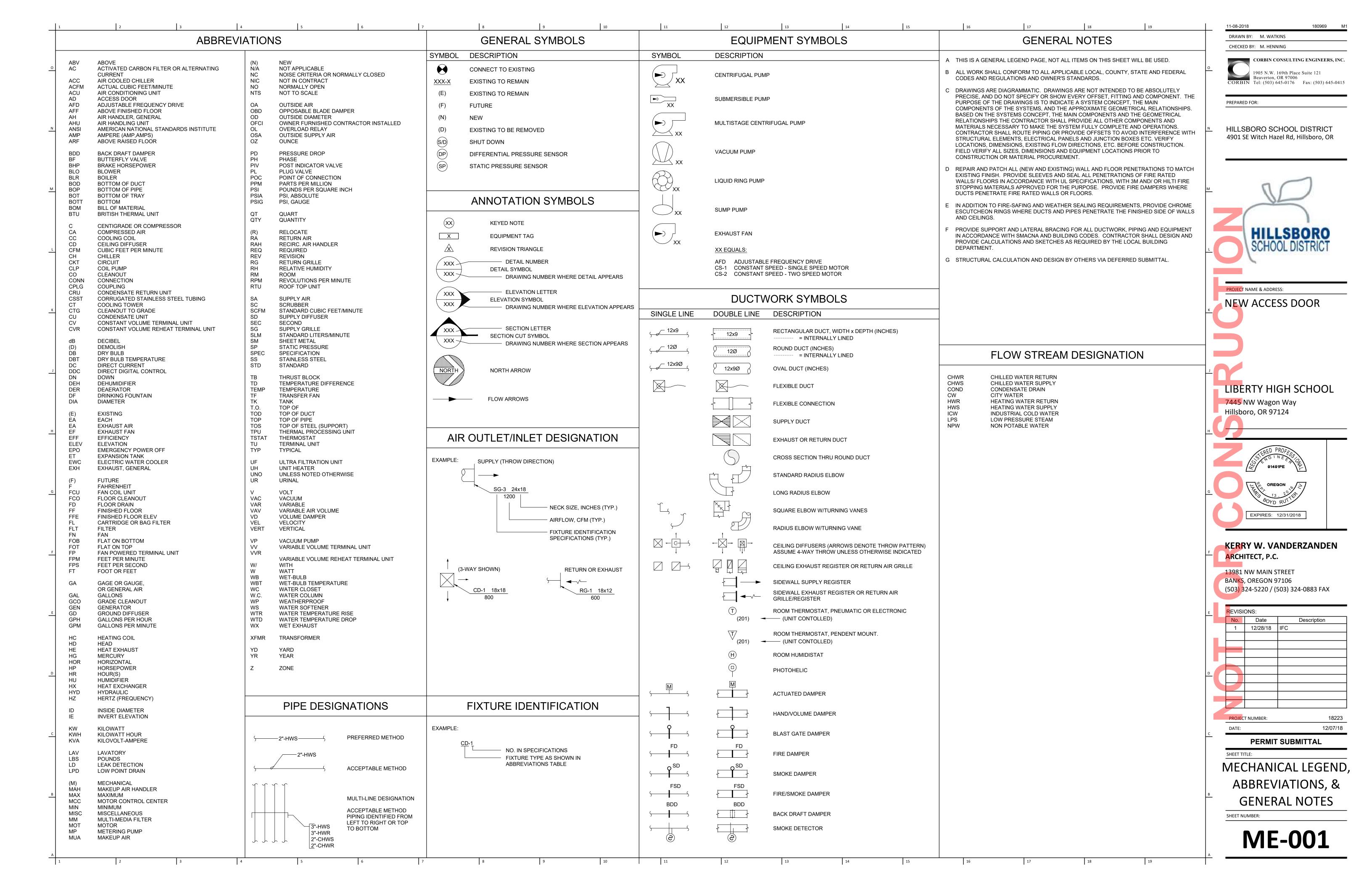
LIBERTY HIGH SCHOOL

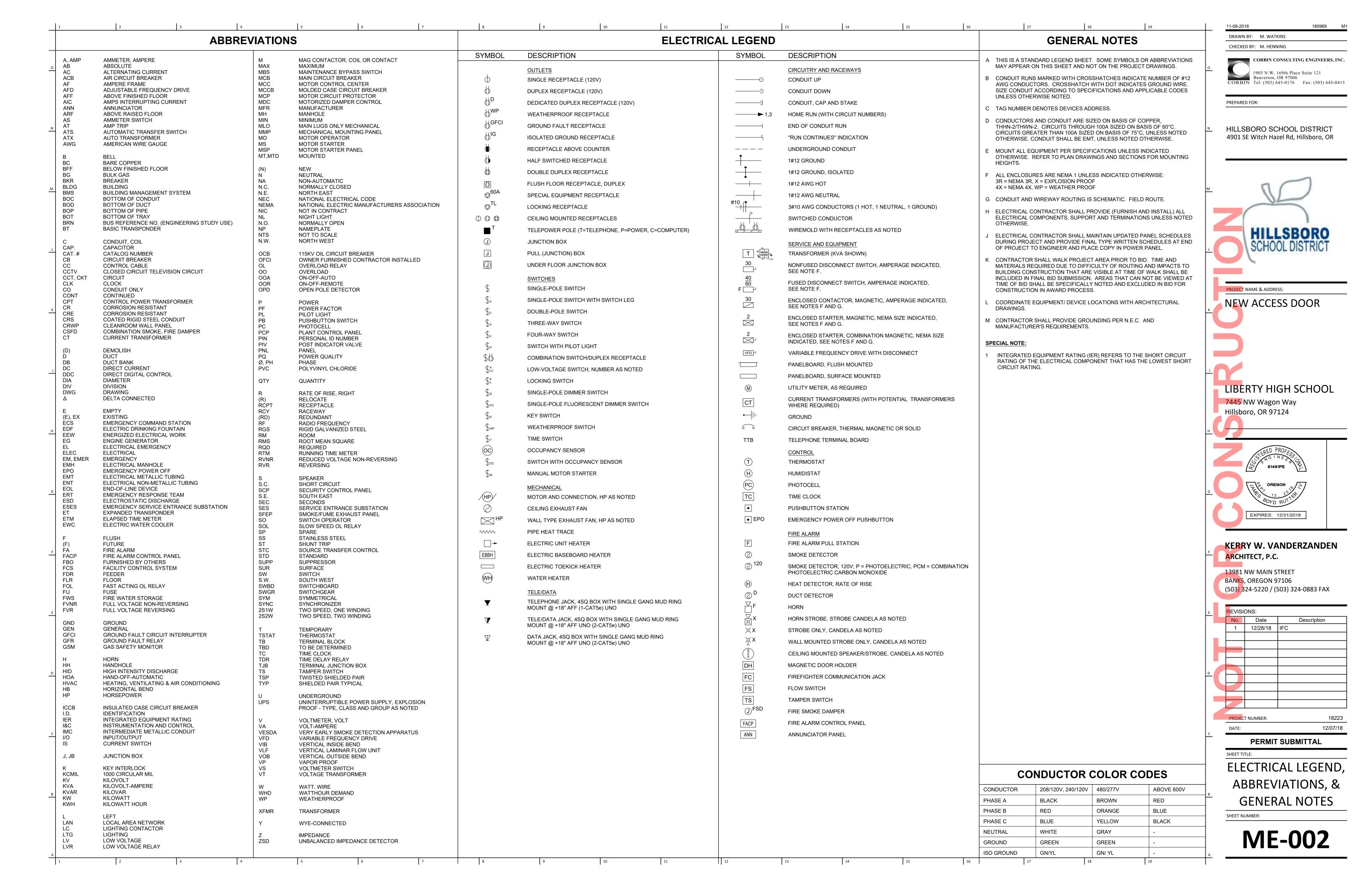
KERRY W. VANDERZANDEN

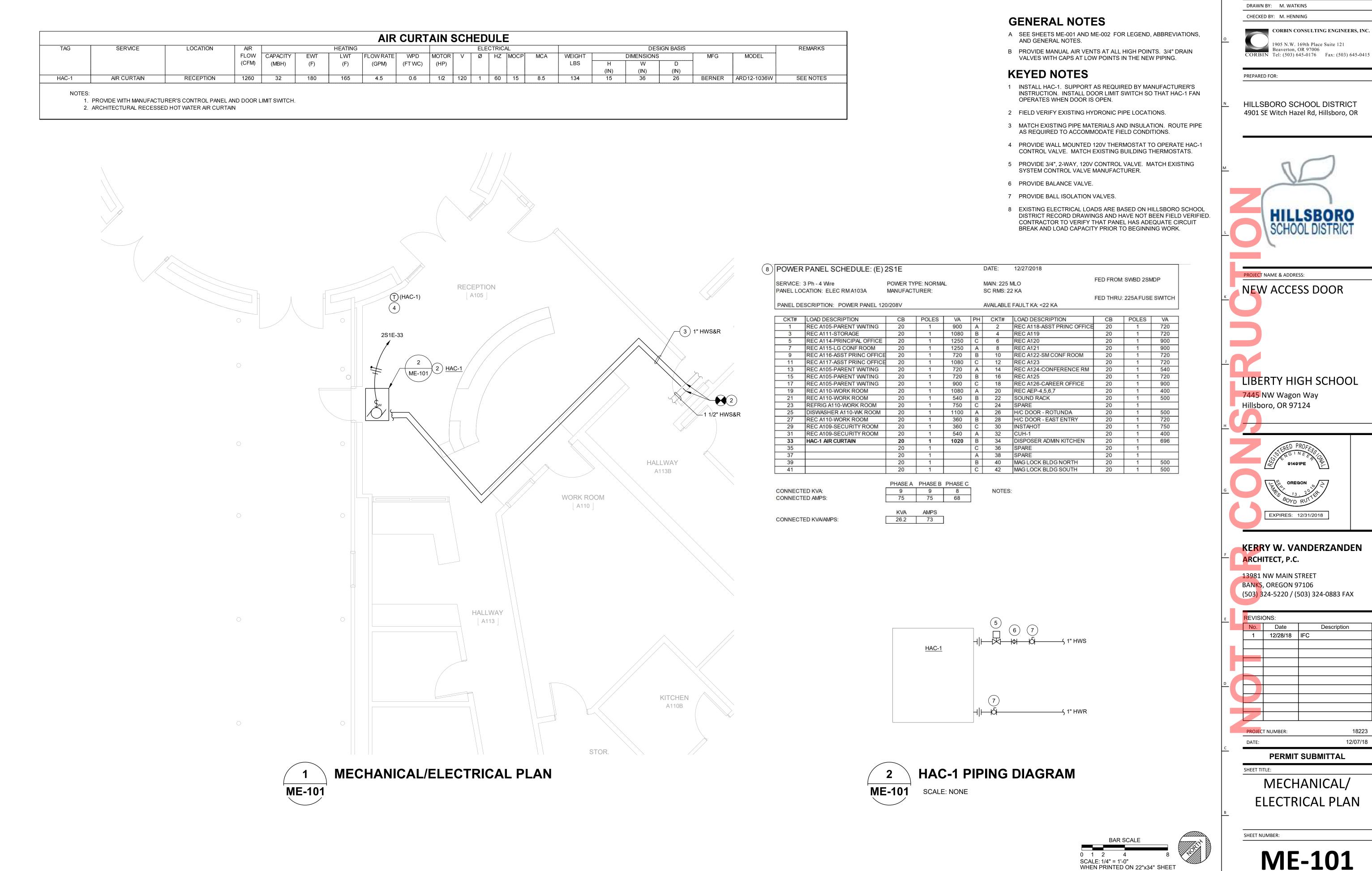
180969











11-08-2018 DRAWN BY: M. WATKINS

1905 N.W. 169th Place Suite 121 Beaverton, OR 97006

HILLSBORO SCHOOL DISTRICT 4901 SE Witch Hazel Rd, Hillsboro, OR



PROJECT NAME & ADDRESS:

NEW ACCESS DOOR

LIBERTY HIGH SCHOOL



EXPIRES: 12/31/2018

KERRY W. VANDERZANDEN

13981 NW MAIN STREET BANKS, OREGON 97106 (503) 324-5220 / (503) 324-0883 FAX

E	REVISIONS:				
	No.	Date		Description	
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	PROJEC	T NUMBER:		18223	
	DATE:		12/07/18		

PERMIT SUBMITTAL

MECHANICAL/ **ELECTRICAL PLAN**

ME-101