WILLIAMSTON COMMUNITY SCHOOLS

KID'S CORNER SECURE ENTRANCE

WILLIAMSTON, MICHIGAN PROJECT NO. 2020-006

11/15/2021 **BIDS**



architects planners interior

LIST OF DRAWINGS

|ARCHITECTURAL

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A3.01B DOOR SCHEDULE, DOOR & FRAME TYPES, DETAILS & INTERIOR

A3.02B ROOM FINISH SCHEDULE & COLOR & MATERIAL SCHEDULE

A5.02 TYPICAL CONSTRUCTION DETAILS

STRUCTURAL

S2.20 NEW LINTEL FRAMING PLAN

IMECHANICAL

M5.00 MECHANICAL SCHEDULES AND DETAILS

|ELECTRICAL

E0.00 ELECTRICAL GENERAL INFORMATION

PARTIAL ELECTRICAL DEMO & NEW WORK PLANS

E5.00 ELECTRICAL SCHEDULE AND DETAILS



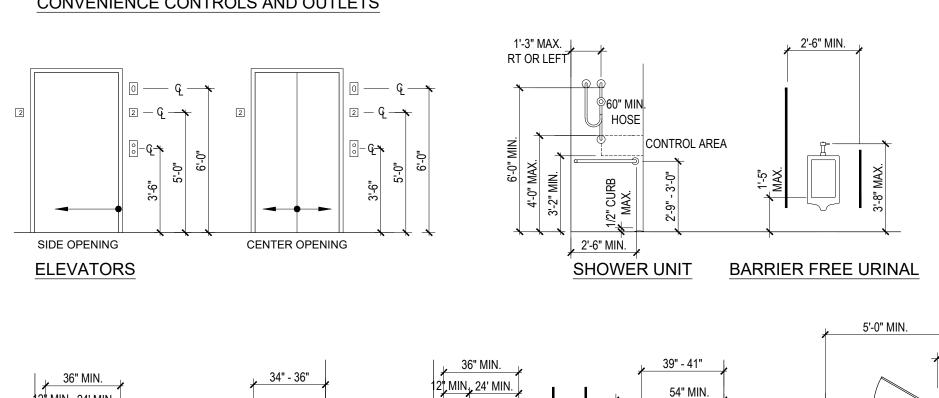
MATER	IAL LEGEND	•	REVIATIONS			SYMBOL LEGEND
		AC ACOUST ACT	AIR CONDITIONING ACOUSTICAL ACOUSTICAL CEILING TILE	L LAM LAV	LENGTH LAMINATE(D) LAVATORY	DETAIL IDENTIFICATION
	SOIL	ADA ADJ AFF	AMERICANS WITH DISABILITIES ACT ADJUSTABLE ABOVE FINISHED FLOOR	LB/# LGF LIN	POUND LIGHT GAUGE FRAMING LINOLEUM	A DETAIL TITLE SCALE: 1" = 1'-0"
	ASPHALT AGGREGATE	AGG ALT AL/ALUM	AGGREGATE ALTERNATE ALUMINUM	LKR LLH LLV	LOCKER LONG LEG HORIZONTAL LONG LEG VERTICAL	A2.20 FOR CROSS-REFERENCING:
	GRANULAR FILL	ANOD APC APPROX ARCH	ANODIZED ARCHITECTURAL PRECAST LINTEL APPROXIMATE ARCHITECT(URAL)	LMC LOC LP	LINEAR METAL CEILING LOCATION(S) LOW POINT	SHEETS WHERE DETAIL IS CUT DRAWING SYMBOL
	STONE/GRAVEL	ASPH AV L	ASPHALT AUDIO/VISUAL ANGLE	MANUF MAR MB MAS	MANUFACTURER MARBLE THRESHOLD MARKER BOARD MASONRY	DETAIL IDENTIFICATION
	CONCRETE	B CMU BIT BD BF	BURNISHED CMU BITUMINOUS BOARD BARRIER FREE	MAT MAU MAZ MECH	MATERIAL/MAT MAKE UP AIR UNIT MAXIMUM MECHANICAL	SHEET WHERE DETAIL IS DRAWN
	CONCRETE MASONRY UNIT	BLDG BLK BLKG BM	BUILDING BLOCK BLOCKING BENCH MARK/BEAM	MEZZ MIN MISC ML	MEZZANINE MINIMUM/MINUTE MISCELLANEOUS MASONRY LINTEL	DETAIL LOCATOR
	BRICK	BOT BRG BUR	BOTTOM BEARING BUILT-UP ROOF	MP MWP MO MET/MTL	METAL PANEL METAL WALL PANEL MASONYOPENING METAL	INTERIOR ELEVATION IDENTIFICATION EXTERIOR ELEVATION IDENTIFICATION
	GLAZED HOLLOW CMU	CAB CUH CB CEM	CABINET CABINET UNIT HEATER CHALKBOARD/CATCH BASIN CEMENT	MSF MT NIC	METAL STUD FRAMING METAL THRESHOLD NOT IN CONTRACT	D (A5,10) B
	STRUCTURAL GLAZED TILE	CER CFM CJ CL	CERAMIC CUBIC FEET PER MINUTE CONTROL JOINT CENTERLINE	NO/# NOM NSF NTS	NUMBER NOMINAL NON-SLIP FINISH NOT TO SCALE	ELEVATION SYMBOL
	LIMESTONE	CLG CLR CMU	CEILING CLEAR CONCRETE MASONRY UNIT COLUMN	OC OD OHD	ON CENTER OUTSIDE DIAMETER OVERHEAD DOOR	BUILDING SECTION IDENTIFICATION ———
	MARBLE	COL COMP CONC CONST	COMPACTED CONCRETE CONSTRUCTION	OPNG OPP OS	OPENING OPPOSITE OVERFLOW SUMP	X XX XX
	FINISH WOOD	CONT CONTR CORR CPL CPT	CONTINUOUS/CONTINUE CONTRACTOR CORRUGATED CEMENT PLASTER CARPET	PART PART'N PC PL	PARTICLE MOVABLE PARTITION PRECAST CONCRETE PLATE/PROPERTY LINE	SHEET WHERE BUILDING SECTION IS DRAWN BUILDING SECTION LOCATOR
	COMPOSITION/PLYWOOD	CT CU CUSP CWF	CERAMIC TILE CONDENSING UNIT CUSPIDOR CURTAINWALL FRAMING	PLAS PLAM PLYWD PREFAB		
	CONTINUOUS WOOD BLOCKING	D _。 DC	DEPTH/DEEP DEGREE DISPLAY CASE	PREFIN PSF PSI PTD	PREFINISHED POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PAINTED	PLAN OR DETAIL IDENTIFICATION
	BLOCKING OR SHIMS	DEMO DTL DF DIA/Ø DIM	DEMOLISH/DEMOLITION DETAIL DRINKING FOUNTAIN DIAMETER DIMENSION	PVC QT R	POLYVINYL CHLORIDE QUARRY TILE RISER/RADIUM	XX SHEET WHERE
	BATT INSULATION	DIV DS DWG	DIVISION DOWNSPOUT DRAWING	RB RBF RC RES	RESILIENT WALL BASE/RUBBER BASE RUBBER FLOORING RAIN CONDUCTOR RESILIENT	PLAN OR DETAIL BLOW-UP
	RIGID INSULATION	EA EJ EL ELEC	EACH EXPANSION JOINT ELEVATION ELECTRIC(AL)	RS REF REFR REINF	ROOF SUMP REFERENCE REFRIGERATOR REINFORCING	X
	PREMOLDED EXPANSION JOINT/ COMPRESSIBLE FILLER STRIP	ELEV EQ EQUIP EIFS	ELEVATOR EQUAL EQUIPMENT EXTERIOR INSULATION FINISH	REQ'D REV RF RM	REQUIRED REVISION(S) ROOF EXHAUST FAN REMOVABLE MULLION/ROOM	x — - — - — - — - — - — - — - — - — - —
	PLASTER OR GYPSUM BOARD	EWC EXH EX/EXIST EXP EXT	ELECTRIC WATER COOLER EXHAUST EXISTING EXPANSION EXTERIOR	RO RWO RTU RV	ROUGH OPENING RIGHT OF WAY ROOF TOP UNIT ROOF VENT	COLUMN GRID
	CERAMIC OR QUARRY TILE	FD	FLOOR DRAIN	S SAAC	SINK SPRAY APPLIED ACOUSTICAL COATING	NAME_
The second of th	TERRAZZO	FEC FF FHC FIN FIN FL	FIRE EXTINGUISHER CABINET FORCED FLOW CABINET HEATER FIRE HOSE CABINET FINISH FINISH FLOOR	SCHED SEAL SEC SFF SHT	SCHEDULE CONCRETE SEALER SECTION STOREFRONT FRAMING SHEET	ROOM FLOOR BUILDING/UNIT
	ACOUSTICAL PANEL OR ACOUSTICAL TILE	FLR FOUND FT/' FTG	FLOOR FOUNDATION FEET FOOTING	SIM SPEC(S) SP CMU SPI	SIMILAR	ROOM NAME AND NUMBER
	EXISTING MATERIAL (IN SECTION)	FRP GA	FIBERGLASS REINFORCED POLYESTER GAUGE	SPKR SQ SS SSM	SPEAKER SQUARE SERVICE SINK/STAINLESS STEEL SOLID SURFACE MATERIAL	BUILDING/UNIT FLOOR ROOM
	EXISTING MATERIAL (IN PLAN)	GALV GB GHT GL	GALVANIZE(D) GRAB BARS GLAZED HOLLOW TILE GLASS	STD STL STRUCT SUSP	STANDARD STEEL STRUCTURAL SUSPENDED	A101A DOOR IF MORE
	DEMOLITION - TO BE REMOVED	GLCMU GLZD GYP	GLAZED CMU GLAZED GYPSUM	SVT SV	SOLID VINYL TILE SHEET VINYL TREAD	THAN ONE DOOR NEW DOOR NEW DOOR PER ROOM EXISTING DOOR DOOR NUMBER AND SYMBOLS
		H/HGT HB HM HORIZ HP HR HVAC ID IN/"	HEIGHT HOSE BIB HOLLOW METAL HORIZONTAL HIGH POINT HOUR HEATING/VENTILATING/AIR CONDITIONING INSIDE DIAMETER INCH INCLUDE(D),(ING)	T&B TB TC TEMP TER TOC TOF TOM TOS TS TV TYP	TOP AND BOTTOM TACK BOARD TOP OF CURB TEMPERED TERRAZZO TOP OF CONCRETE TOP OF FOOTING TOP OF MASONRY TOP OF STEEL TUBE STEEL TELEVISION TYPICAL	PARTITION EQUIPMENT CONSTRUCTION / DEMO TYPE TYPE NOTE ADDENDUM (ADD), CONSTRUCTION CHANGE DIRECTIVE (CCD), OR ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS (ASI)
		INSUL INT	INSULATION/INSULATE(D) INTERIOR	UNO UV	UNLESS NOTED OTHERWISE UNIT VENTILATOR	ITEM NUMBER
		KIT JST JT	JOIST JOINT	VCT VCG VERT VIF VUV	VINYL COMPOSITION TILE VINYL COVERED GYPSUM BOARD VERTICAL VERIFY IN FIELD VERTICAL UNIT VENTILATOR	AREA OF CURRENT CHANGE AREA OF PREVIOUS CHANGE MISCELLANEOUS SYMBOLS
				W/ W/O WC WD	WITH WITHOUT WATER CLOSET WOOD	

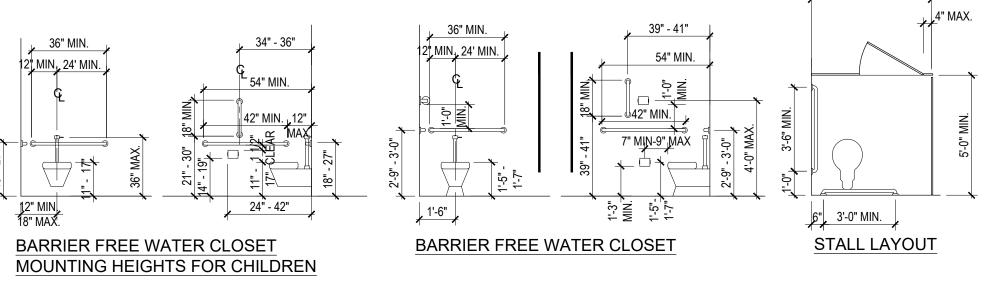
WOOD SOUND CONTROL WATER HEATER

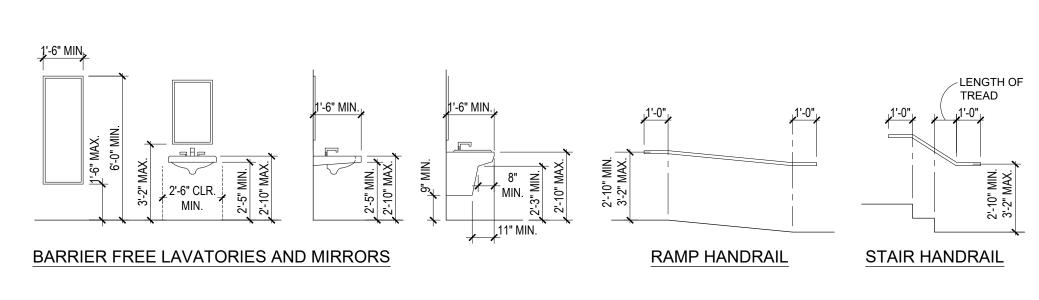
WELDED WIRE FABRIC

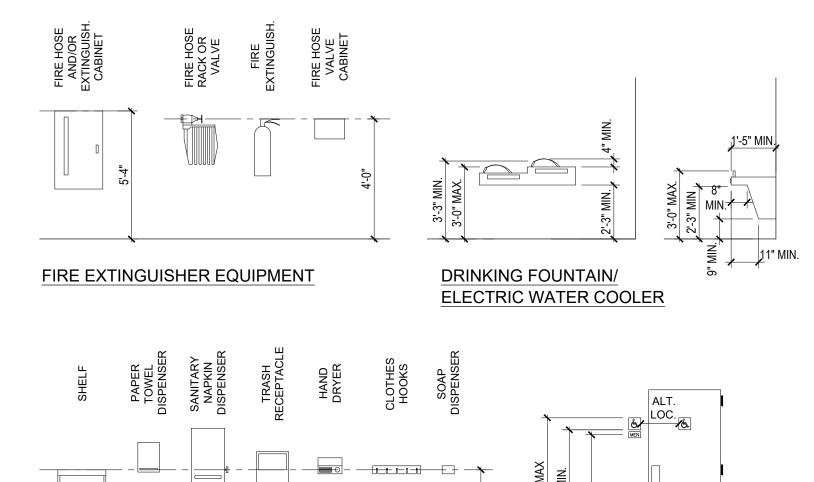
WORKING POINT / WATERPROOF

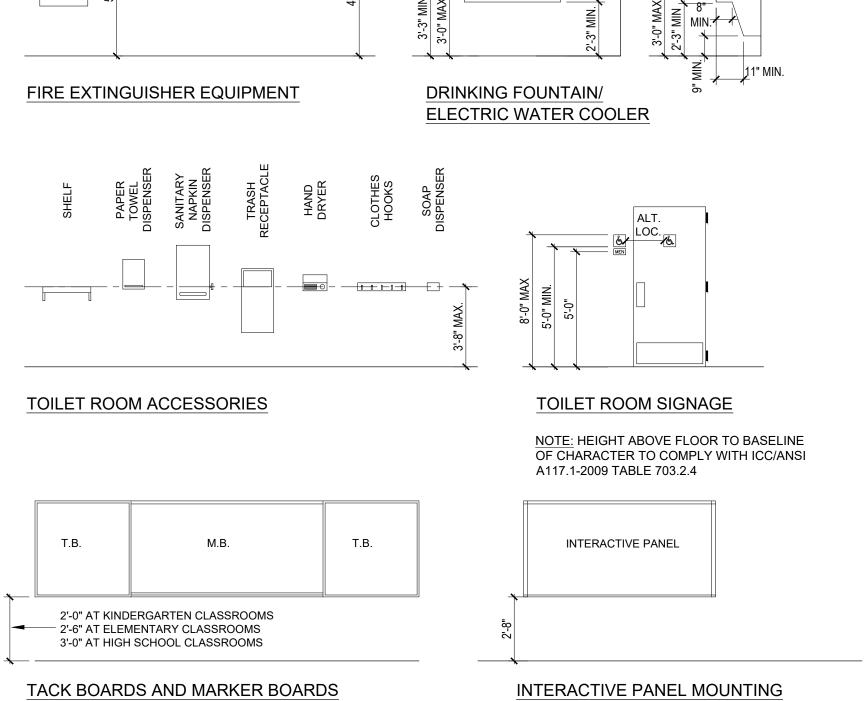
MOUNTING HEIGHTS CONVENIENCE CONTROLS AND OUTLETS

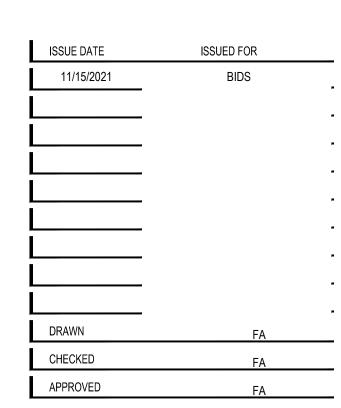














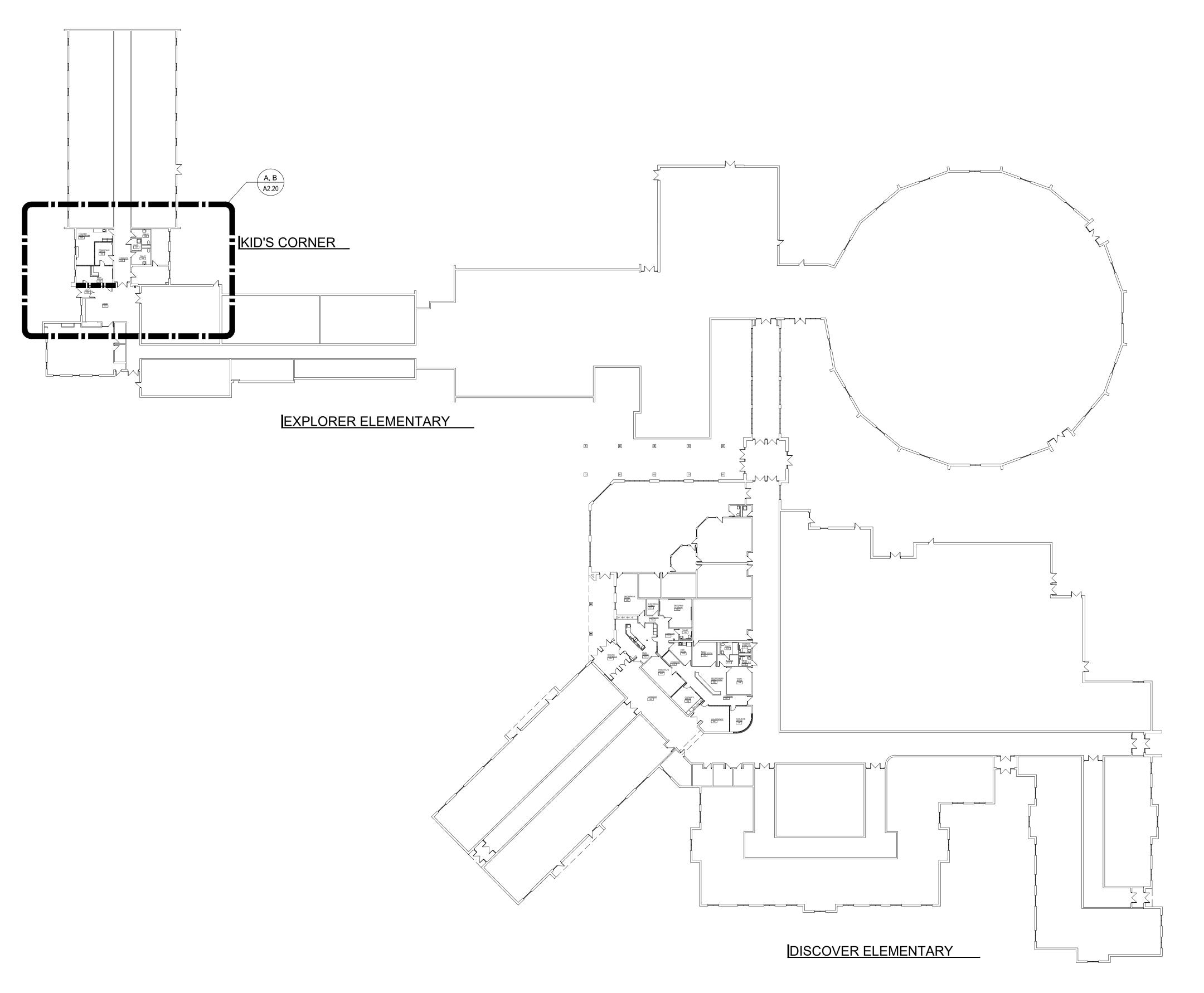
PROJECT Williamston Community Schools Kid's Corner Secure Entrance WILLIAMSTON

MICHIGAN

SHEET ARCHITECTURAL REFERENCE SHEET

PROJECT NUMBER 2020-006

SHEET NUMBER A0.01



CODE PLAN INFORMATION

Explorer Elementary remodeling

Design Codes a)2015 Michigan Rehabilitation Code (Existing Building) b)1999 School Fire Safety Rules and NFPA 101 Life Safety Code 1997 Design Professional in Responsible Charge (106.6) a)A representative of French Associates will be the Design Professional in Responsible Charge. Existing Building information a)1 story, first floor = 69,749 square feet b)The building is not sprinkled. c)Type of Construction is IIB (II-000 from School Fire Safety Rules) d)Use Group is Occupancy E (Education) Compliance Method (Chapter 3) a)Work Area Compliance Method (301.1.2) - The work shall comply with the applicable requirements of Chapters 5 through 11. Classification of Work (Chapter 5) a)As defined by the Michigan Rehabilitation Code, the work includes Level 1 Alterations and Level 2 Alterations. The Work Area does not exceeds 50% of the Building Area. b)There is no change of occupancy. c)There is no addition. d)Under the School Fire Safety Rules, the scope of work in the Level 1 Alterations is the replacement of existing finishes and systems. As a result, the Level 1 Alteration areas do NOT qualify as remodeling. e) The Level 2 Alteration areas are being remodeled as defined by the School Fire Safety Rules. The Level 2 Alteration area is less than 50% of the building area so we are NOT required to bring the whole building into compliance. 6) Chapter 7- Alterations- Level 1 a)Section 702.1- New interior finishes will comply with Chapter 8 of the Michigan Building Code. i) From Table 803.9- Corridors are Class B finishes, Rooms are Class C finishes b)Interior floor finishes shall comply with Section 804 of MBC. 7) Chapter 8- Alterations- Level 2 a)Section 803.4- New interior finishes will comply with Chapter 8 of the Michigan Building Code. i) From Table 803.9- Corridors are Class B finishes, Rooms are Class C finishes b)803.4.1- The new and existing finishes of corridors serving the work area comply with Section 804 of MBC. c)Section 804- Fire Protection i) 804.2.2- In work areas, the fire protection (sprinkler) system will be modified as required to comply with the Michigan Building Code. ii) 804.4- The existing building has an existing, previously approved fire alarm system (Exception 804.4.1.1 The existing fire alarm system is already in place in the Work Areas and shall be maintained. Modifications shall comply with Section 907 of the MBC. d)Section 805.3- The existing number of exits being maintained comply with MBC Chapter 10 d)Section 805.3- The existing number of exits being maintained comply with MBC Chapter 10 requirements for quantity and sizing. e)Section 805.5- Corridor doors in the work area that are being replaced shall be solid core wood or hollow metal and shall not contain louvers. f) 805.5.3- Other corridor opening- The existing corridor walls provide a smoke barrier separation. New corridor openings shall maintain the smoke barrier. g)805.6- Dead end corridors in the work areas do not exceed 35' h)805.7- Means of egress and emergency lightling are provided as required in the Level 1 and Level 2 Alteration areas Level 2 Alteration areas i) 805.8- Exit signs as provided as required in the Level 1 and Level 2 Alteration areas. 9) NFPA 101 Life Safety Code, Chapter 11, Existing Educational Occupancies 9) NFPA 101 Life Safety Code, Chapter 11, Existing Educational Occupancies a)The spaces being remodeled (Level 2 Alterations) are designed to comply with the requirements of Chapter 11, Existing Educational Occupancies. b)11-2.2 through 11-2.5 Existing Means of Egress components comply. c)11-2.6 travel Distance to Exits- Existing exit travel distances are being maintained. In locations where the travel distance to an exit is being changed by the Addition, the rooms have an Exit Travel Distance of less than 200'. d)11-2.8 through 11-2.10- New light fixtures, emergency lighting and exit signs are part of the work and will comply.

work and will comply.

e)11-3.2- The existing Boiler Room is separated from the rest of the building by a 1 hour fire

g)The existing fire alarm system is being maintained.
h)11-3-6- The existing corridor walls consist of a smoke barrier to deck. We are not remodeling the corridors or most classroom spaces, just replacing ceilings, lights and finishes. In locations where we are remodeling, the corridor wall smoke barrier is being maintained.
i) 11-3.7- The existing building is sub-divided into existing fire areas.

CODE PLAN LEGEND

INDICATES 1-HOUR FIRE RATED WALLS

|BUILDING INFORMATION

EXISTING BUILDING AREA: FIRST FLOOR 69,479 SF.

STUDENT POPULATION IS NOT CHANGING

WORK AREA COMPLIANCE METHOD: LEVEL 1 & 2 ALTERATIONS

NO CHANGE OF USE

EXISTING BUILDING IS NOT SPRINKLED.

ALTERATION DESCRIPTION:

OFFICE RENOVATION, FLOORING, CEILINGS, MINOR MECHANICAL AND ELECTRICAL UPGRADES

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COMPOSITE FIRST FLOOR PLAN & CODE PLAN

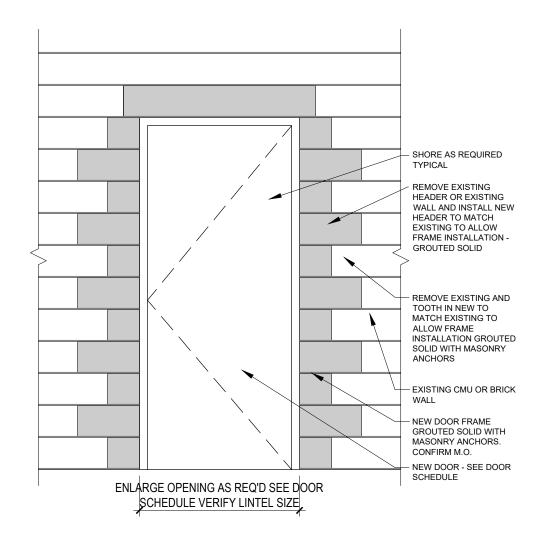
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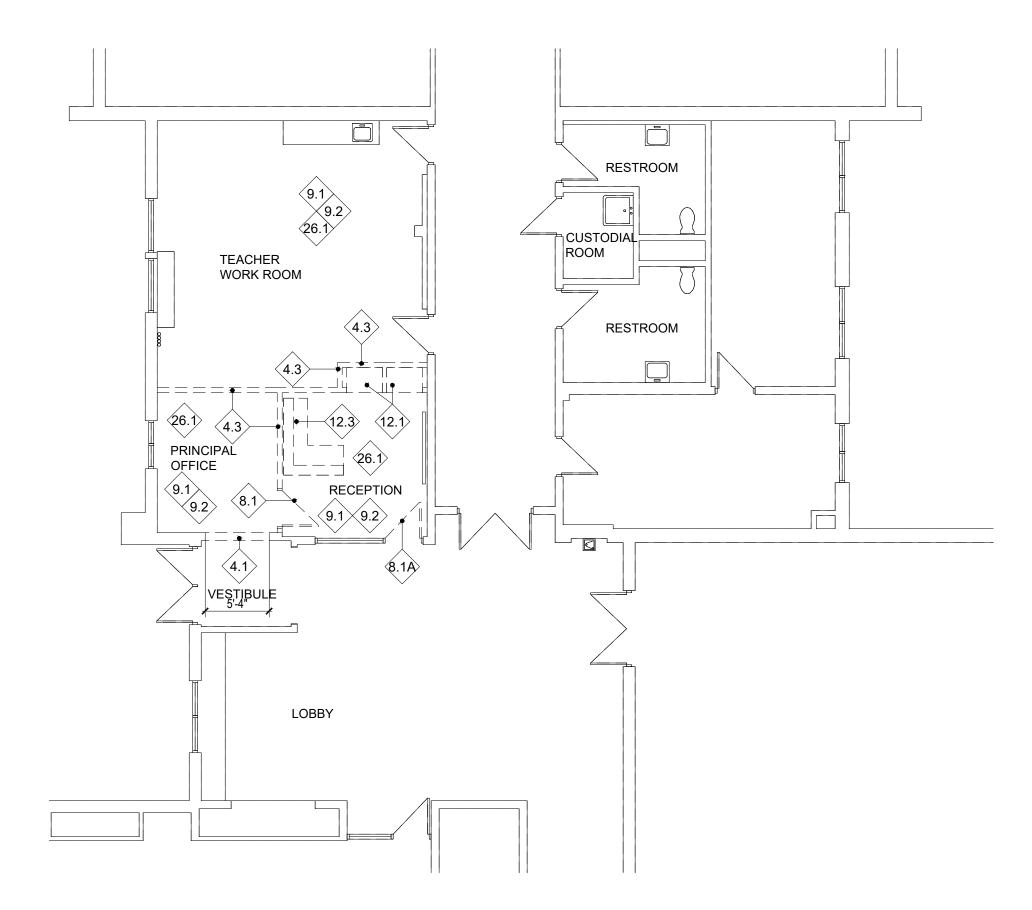
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A2.02











KEY PLAN

IDEMOLITION PLAN NOTES

I. REFER TO SHEET AD2.00 FOR DEMOLITION GENERAL NOTES AND KEY NOTES.

2. ==== DASHED LINES REPRESENTS DEMOLITION.

IDEMOLITION GENERAL NOTES

- 1. REFER TO PROJECT SPECIFICATION MANUAL FOR DEMOLITION CRITERIA BEFORE REMOVING ANY ITEMS.
- 2. REMOVE AND REPLACE EXISTING CONSTRUCTION AS REQUIRED FOR THE EXECUTION OF NEW WORK.
- 3. PROTECT EXISTING CONSTRUCTION TO REMAIN AS REQUIRED DURING DEMOLITION.
- 4. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS AND FOR COORDINATION OF WORK.
- 5. DISCONNECT ALL MISCELLANEOUS FEATURES (I.E. ELECTRICAL, MECHANICAL, PLUMBING, ETC.) ASSOCIATED WITH ITEMS TO BE DEMOLISHED (I.E. PARTITIONS, WALLS, CEILINGS, CABINETS ETC.).
- 6. REMOVAL OF ANY MECHANICAL, ELECTRICAL AND MISCELLANEOUS ITEMS WILL REQUIRE PATCH AND REPAIR OF ADJACENT MATERIALS TO REMAIN.
- 7. REMOVE EXISTING UNUSED NAILS, SCREWS AND OTHER WALL PROTRUSIONS FROM EXISTING SURFACES TO REMAIN. PATCH AND REPAIR TO MATCH EXISTING ADJACENT SURFACES AS REQUIRED TO RECEIVE NEW FINISHES.
- 8. PATCH AND REPAIR ALL SURFACES TO REMAIN TO MATCH EXISTING ADJACENT SURFACES AS REQUIRED TO RECEIVE NEW FINISHES SEE ROOM FINISH SCHEDULE.
- 9. CONTRACTOR SHALL PLACE ANY ITEMS OR MATERIALS TO BE RETAINED AS DIRECTED BY OWNER.

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DEMOLITION PLAN KEY NOTES

NOTES BELOW ARE INDICATED ON THE DRAWING BY THIS SYMBOL:

- 4.1 REMOVE PORTION OF EXISTING CMU WALL CONSTRUCTION AS INDICATED FOR NEW DOOR OPENING. REMOVE TO 8" BELOW FLOOR SLAB. PATCH AND REPAIR ADJACENT SURFACES AS REQUIRED TO ACCEPT NEW FINISHES.
- REMOVE EXISTING CMU WALL CONSTRUCTION, ASSOCIATED ELECTRICAL DEVICES, WALL MOUNTED EQUIPMENT AND DOOR OR WINDOW AND FRAME AS INDICATED. REMOVE TO 8" BELOW FLOOR SLAB. PATCH AND REPAIR ADJACENT SURFACES AS REQUIRED TO ACCEPT NEW FINISHES.
- 8.1 REMOVE EXISTING INTERIOR DOOR AND FRAME IN ITS ENTIRETY.
- 8.1A REMOVE EXISTING INTERIOR DOOR (EXISTING FRAME TO REMAIN) FOR INSTALLATION OF NEW REPLACEMENT DOOR. PATCH AND REPAIR ALL SURFACES TO REMAIN AS REQUIRED TO RECEIVE NEW FINISHES.
- 9.1 REMOVE EXISTING CEILING TILES, GRID, HANGERS. SEE MECHANICAL AND ELECTRICAL FOR MORE INFORMATION.
- 9.2 REMOVE EXISTING CARPET FLOORING AND WALL BASE. PATCH AND REPAIR ALL SURFACES TO REMAIN AS REQUIRED TO RECEIVE NEW FINISHES.
- 12.1 REMOVE EXISTING CASEWORK. PATCH AND REPAIR ALL SURFACES TO REMAIN AS REQUIRED TO RECEIVE NEW FINISHES.
- 12.3 REMOVE EXISTING WORK STATION AND SALVAGE FOR RELOCATION.
- 26.1 REMOVE EXISTING LIGHT FIXTURES. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

PROJECT

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SHEET

PARTIAL DEMOLITION FLOOR PLAN, NOTES & DETAILS

PROJECT NUMBER

2020-006

SHEET NUMBER

AD2.20

|FLOOR PLAN LEGEND

C.M.U. PARTITION AS DIMENSIONED

5/8" ABUSE RESISTANT GYPSUM BOARD EACH SIDE OF 3 5/8" METAL STUD AT 16" O.C. (WALL THICKNESS = 4 7/8" - NOMINAL 5")

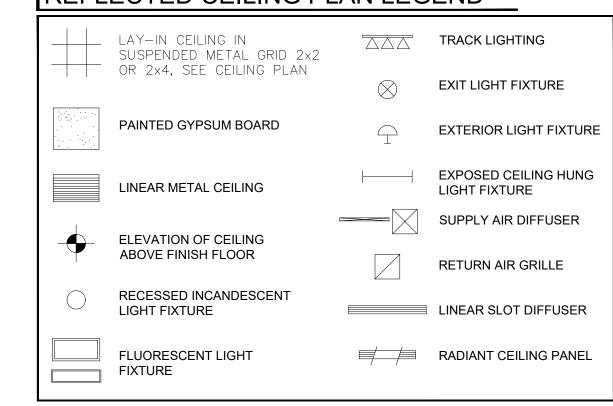
INDICATES BATT SOUND ATTENUATION INSULATION

SHADING INDICATES PARTITIONS TO EXTEND UP TO DECK HEIGHT UNLESS OTHERWISE INDICATED.

|FLOOR PLAN NOTES

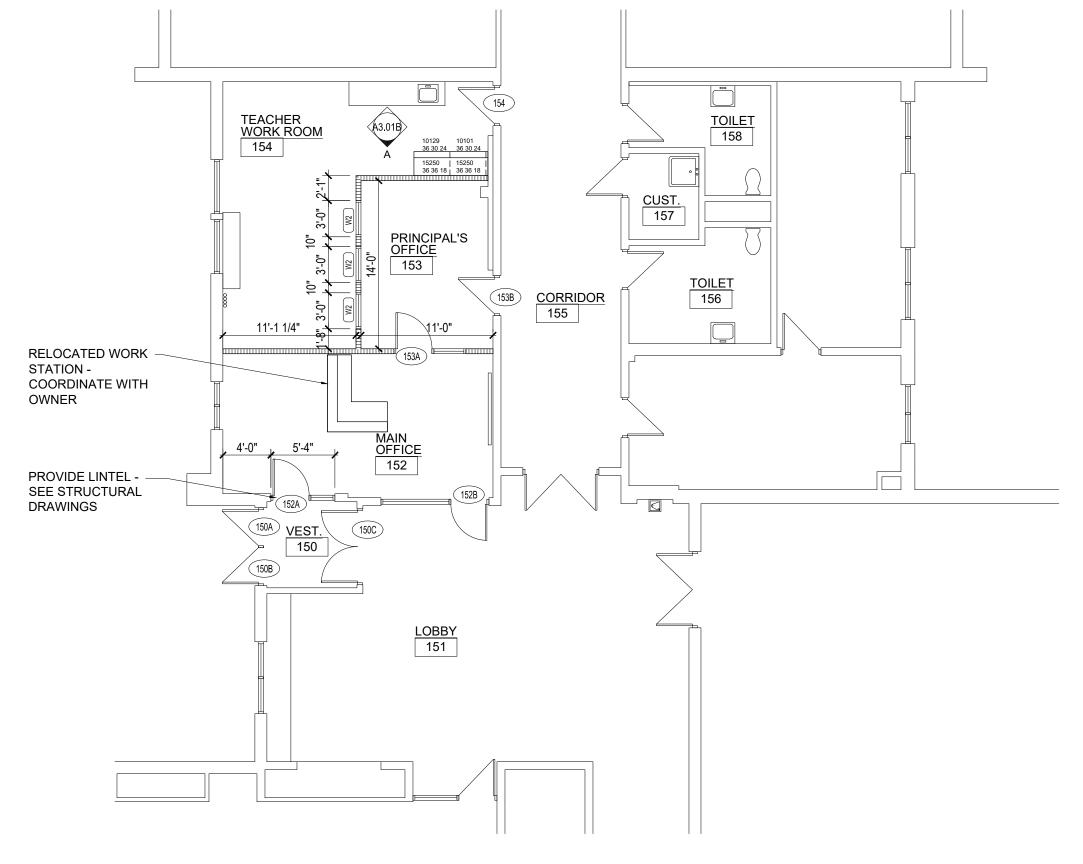
- PROVIDE BATT SOUND ATTENUATION INSULATION ABOVE CEILING, 4'-0" EACH SIDE OF PARTITION, FOR PARTITIONS THAT DO NOT EXTEND UP TO ROOF DECK.
- 2. PATCH ALL HOLES FROM REMOVED ITEMS SUCH AS, BUT NOT LIMITED TO THERMOSTATS, NAIL HOLES, WALL MOUNTED CASEWORK, ETC.
- 3. COORDINATE EXACT LOCATION FOR NEW CASEWORK IN FIELD.
- 4. PROVIDE ABUSE RESISTANT GYPSUM BOARD IN NEW PARTITION LOCATIONS

| REFLECTED CEILING PLAN LEGEND

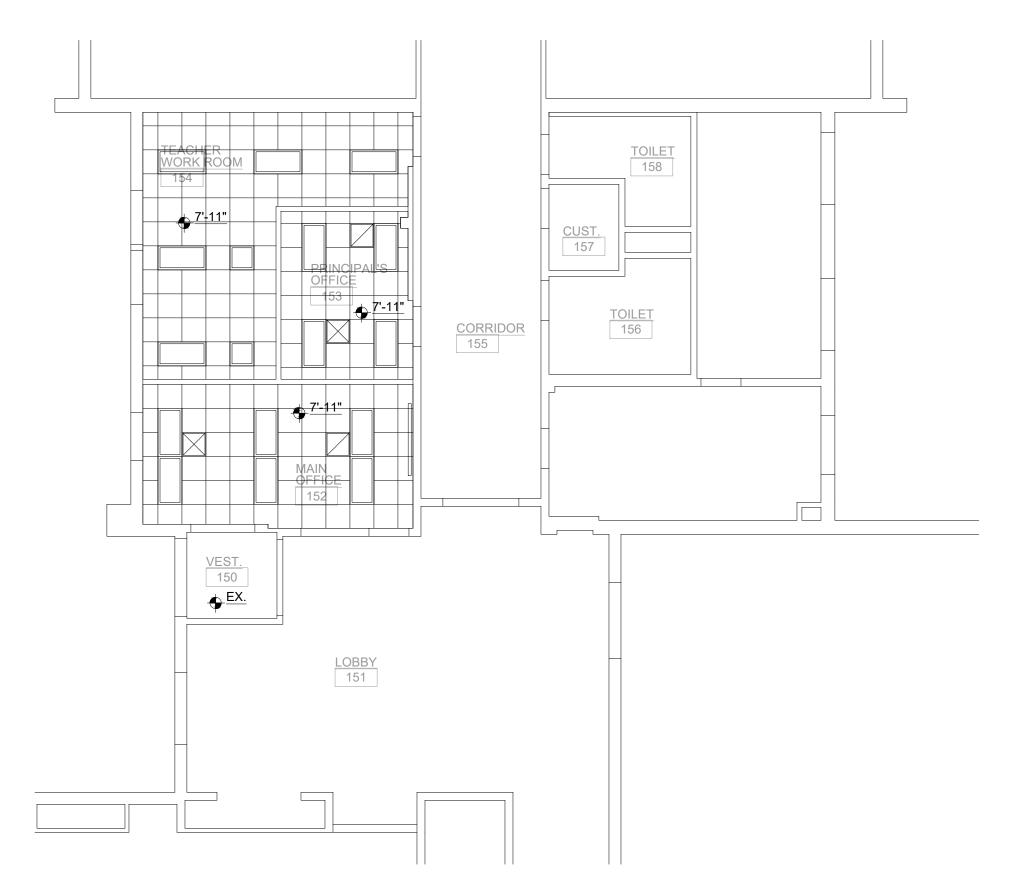


IREFLECTED CEILING PLAN NOTES

- ALL INTERIOR PARTITIONS SHALL EXTEND UP TO UNDERSIDE OF ROOF DECK
 UNLESS OTHERWISE INDICATED.
- 2. PROVIDE BATT SOUND ATTENUATION INSULATION ABOVE CEILING, 4'-0" EACH SIDE OF PARTITION, FOR PARTITIONS THAT DO NOT EXTEND UP TO ROOF DECK.
- 3. THE ELEVATION OF NEW CEILING HEIGHTS OF EXISTING ROOMS ARE GIVEN FROM EXISTING FINISH FLOOR.
- COORDINATE INSTALLATION OF NEW TV MONITORS AND BRACKETS WITH ELECTRICAL AND TECHNOLOGY.









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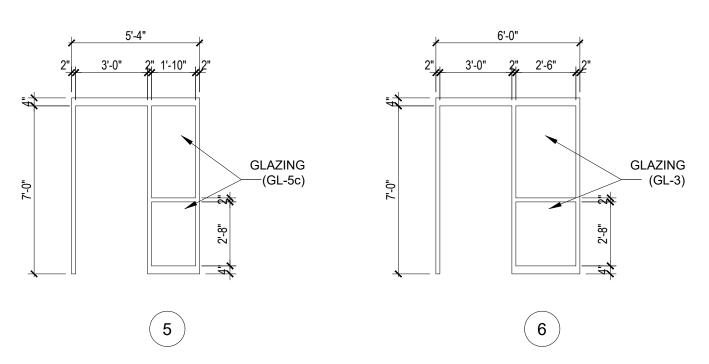
PARTIAL FLOOR
PLAN &
PARTIAL REFLECTED
CEILING PLAN

PROJECT NUMBER

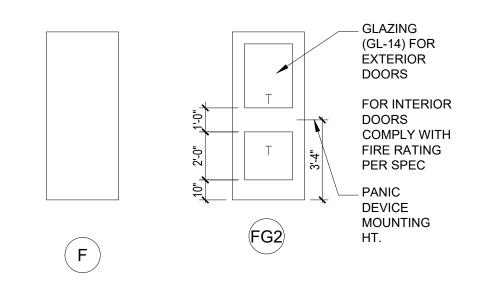
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12.20



FRAME TYPES



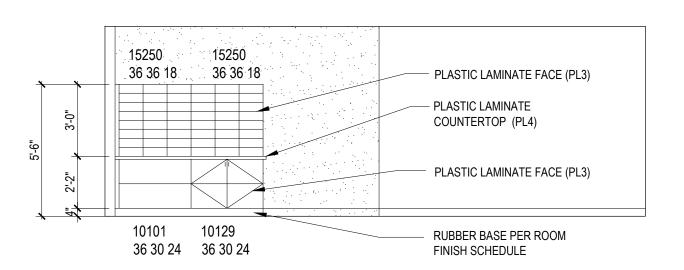
DOOR TYPES

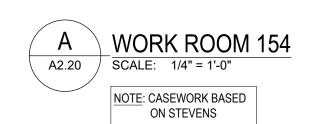
GENERAL NOTES

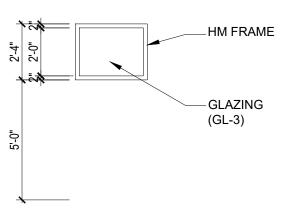
- 1. FOR DOOR STYLES REFER TO DOOR SCHEDULE.
- FOR FRAME STYLES REFER TO DOOR SCHEDULE.
 REFER TO THE GLAZING SCHEDULE IN THE SPECIFICATIONS FOR THE GLAZING TYPES
- * MANUFACTURE'S NOTE: FOR WOOD DOORS WITH MORTIS LOCKS PROVIDE THE MINIMUM SIZE STILL AVAILABLE WHILE MAINTAINING WARRANTY

FRAME SCHEDULE

HM HOLLOW METAL FRAME









WINDOW TYPES

UNLESS OTHERWISE

- METAL STUD JAMB

- 5/8" GYP. BOARD (PAINTED)

- CONTINUOUS PERIMETER

SEALANT BOTH SIDES

- HOLLOW METAL FRAME

- DOOR - SEE SCHEDULE

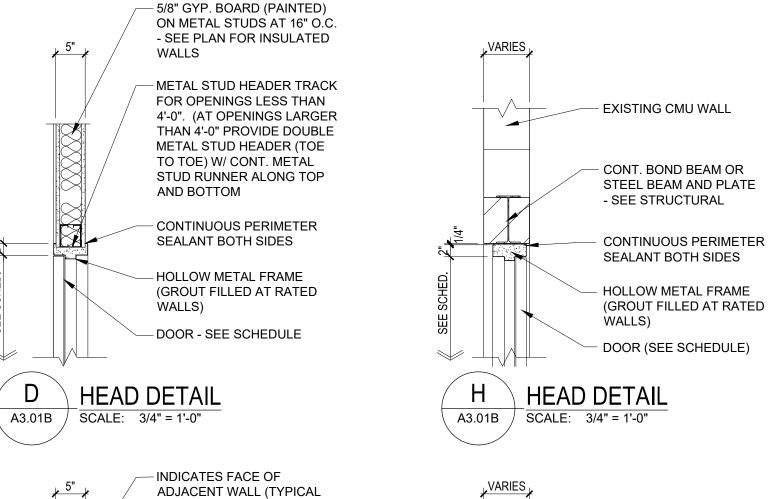
_JAMB DETAIL

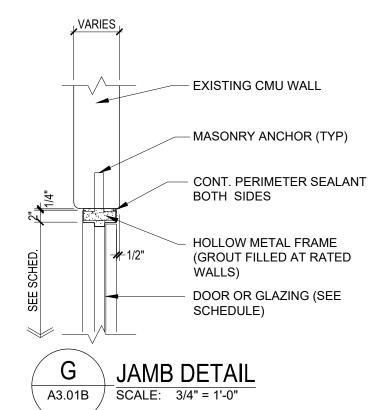
A3.01B SCALE: 3/4" = 1'-0"

(GROUT FILLED AT RATED

ON METAL STUDS AT 16" O.C. - SEE PLAN FOR INSULATED

INDICATED)





DOOR SCHEDULE

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DOOR SCHEDULE ABBREVIATIONS

DOOR SCHEDULE ABBREVIATIONS							
AL ANOD APC CWF EXIST FRP GL	ALUMINUM ANODIZED ARCHITECTURAL PRECAST LINTEL CURTAINWALL FRAMING EXISTING FIBERGLASS REINFORCED POLYESTER GLASS	PC PLAM PREF PTD SIM SS STL	PRECAST CONCRETE PLASTIC LAMINATE PREFINISHED PAINTED SIMILAR STAINLESS STEEL STEEL				
HM LGF ML	HOLLOW METAL LIGHT GAUGE FRAMING MASONRY LINTEL	SFF TS WD	STOREFRONT FRAMING TUBE STEEL WOOD				
MSF	METAL STUD FRAMING	WDSC	WOOD - SOUND CONTROL				

DOOR SCHEDULE GENERAL NOTES

- 1. FRAME DETAILS ARE NOTED ON SHEET A3.01A UNLESS NOTED OTHERWISE.
- DOOR UNDERCUTS FOR MECHANICAL REQUIREMENTS ARE LIMITED TO 5/8" MAX. CLEAR DISTANCE MEASURED FROM THE TOP OF THE FINISHED FLOOR MATERIAL OR THRESHOLD TO THE BOTTOM EDGE OF THE DOOR. STANDARD TOLERANCES OF UNDERCUTTING OF DOORS FOR THRESHOLDS AND OTHER FLOOR COVERING MATERIALS ARE NOT NOTED AND MUST BE CONSIDERED IN DETERMINING THE ACTUAL OVERALL HEIGHT OF THE DOOR. COORDINATE WITH AFFECTED TRADES.
- FIRE RATED DOORS AND FRAMES ARE LISTED IN MINUTES.
- 4. ALL FIRE RATED HOLLOW METAL DOOR FRAMES SHALL BE CEMENT GROUTED SOLID UNLESS SPECIFICALLY NOTED OTHERWISE. COORDINATE CAVITY LOCATIONS FOR SCHEDULED HARDWARE.
- ALL WOOD DOORS SHALL BE SOLID CORE.
- 6. ALL EXISTING DOOR AND WINDOW OPENINGS MUST BE FIELD VERIFIED AND MEASURED PRIOR TO FABRICATION.

DOOR SCHEDULE REMARKS

- 10. EXISTING DOOR, FRAME, FINISH AND EXISTING CARD READER TO REMAIN.
- 11. NEW WOOD DOOR IN EXISTING WOOD FRAME. PATCH FRAME AS REQUIRED AND RE-FINISH WOOD. PROVIDE NEW CARD READER.
- 12. NEW WOOD DOOR IN NEW HM FRAME. DOOR BELL FROM DOOR 18 TO BE MOVED TO DOOR 152A.
- 13. NEW WOOD DOOR IN EXISTING WOOD FRAME. PROVIDE CARD READER AND MOTION SENSOR.
- 14. NEW WOOD DOOR IN NEW HM FRAME.
- 15. EXISTING DOOR, FRAME AND EXISTING FINISH TO REMAIN.

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PRO.

Williamston Community
Schools
Kid's Corner
Secure Entrance

WILLIAMSTON MICHIGAN

DOOR SCHEDULE,
DOOR & FRAME
TYPES, DETAILS &
INTERIOR ELEVATIONS

PROJECT NUMBER

2020-006

SHEET NUMBER

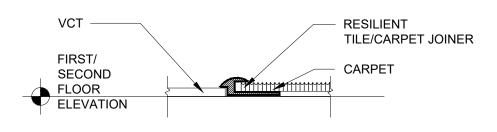
3.01B

MATERIAL AND COLOR SCHEDULE

<u>M</u> A	MATERIAL AND COLOR SCHEDULE								
	KEY	MANUFACTURER	STYLE	COLOR	SPECS	NOTES			
BASE	B2	JOHNSONITE	4" COVED	TBD	ROLLED RUBBER GOODS	-			
CARPET	C3	SHAW	TBD	TBD	2' X 2' CARPET TILE				
	P1E-B	SHERWIN WILLIAMS	EGGSHELL	TBD	SINGLE COMPONENT EPOXY	FIELD			
TS	P1SG-E	SHERWIN WILLIAMS	SEMI-GLOSS	TBD	SINGLE COMPONENT EPOXY	DOOR FRAMES & HM DOORS			
PAINTS									
		ARMSTRONG	TUNDRA	WHITE	2'-0"x2'-0" 15/16" ANGLED TEGULAR	FINE TEXTURE 303 - OFFICES			
CEILING									
O									
<u> </u>	PL3	WILSONART	STANDARD LAMINATE	TBD	MATTE FINISH	CABINETS			
PLAST. LAM.	PL4	WILSONART	STANDARD LAMINATE	TBD	MATTE FINISH	COUNTERTOPS			

ROOM FINISH SCHEDULE ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE	EF	EPOXY FLOORING	PLAM	PLASTIC LAMINATE	SS	STAINLESS STEEL
ANOD	ANODIZED	EX	EXISTING	PLAS	VENEER PLASTER	SSM	SOLID SURFACE MATERIAL
B CMU	BURNISHED CMU	EXPO	EXPOSED	PT	PORCELAIN TILE	SP CMU	SPLIT FACE CMU
BRICK	BRICK	GL	GLASS	PTD	PAINTED	SPI	SPORTS IMPACT
CMU	CONCRETE MASONRY UNIT	GCMU	GLAZED CMU	QT	QUARRY TILE	SV	SHEET VINYL
CONC	CONCRETE	GYP	GYPSUM BOARD	RBF	RUBBER TILE	TER	TERRAZZO
CPL	CEMENT PLASTER	LMC	LINEAR METAL CEILING	RB	RESILIENT WALL BASE	TURF	INDOOR TURF
CPT	CARPET	MP	METAL PANEL	SAAC	SPRAY-APPLIED ACOUSTICAL COATING	VCT	VINYL COMPOSITION TILE
CT	CERAMIC TILE	NSF	NON-SLIP FINISH	SEAL	CONCRETE SEALER	WP	WATERPROOF
		PART'N	MOVEABLE PARTITION				





ROOM FINISH SCHEDULE

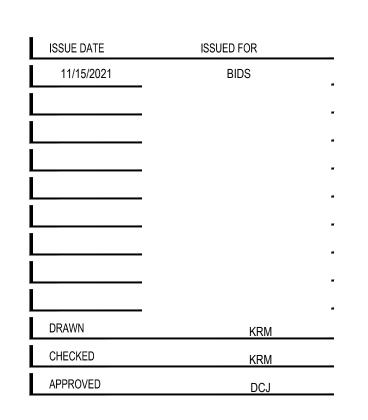
RM. ROOM NAME
MAT. FINISH MAT. FINISH <th< th=""></th<>
151 LOBBY EX P1E-B GYP P1E-B GYP P1E-B GYP P1E-B EX P1E-B EX P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B E
152 MAIN OFFICE CPT C3 RB B2 GYP P1E-B EX P1E-B GYP P1E-B GYP P1E-B GYP P1E-B GYP P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B EX P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B EX P1E-B EX P1E-B EX P1E-B GYP P1E-B EX P1E-B
153 PRINCIPAL'S OFFICE CPT C3 RB B2 GYP P1E-B EX P1E-B GYP P1E-B GYP P1E-B P1SG-E ACT AT1 7'-11"
154 TEACHER WORK ROOM CPT C3 RB B2 EX P1E-B EX, GYP P1E-B GYP P1E-B EX P1E-B EX ACT AT1 7'-11" PL 155 CORRIDOR EX
155 CORRIDOR EX
156 TOILET EX
157 CUST. EX
158 TOILET EX

ROOM FINISH SCHEDULE ABBREVIATIONS

ACT ANOD B CMU BRICK CMU	ACOUSTICAL CEILING TILE ANODIZED BURNISHED CMU BRICK CONCRETE MASONRY UNIT	EXIST EXPO GL GCMU GYP	EXISTING EXPOSED GLASS GLAZED CMU GYPSUM BOARD	PLAM PLAS PT PTD QT	PLASTIC LAMINATE VENEER PLASTER PORCELAIN TILE PAINTED QUARRY TILE	SS SSM SP CMU SPI SV	STAINLESS STEEL SOLID SURFACE MATERIAL SPLIT FACE CMU SPORTS IMPACT SHEET VINYL
CONC	CONCRETE	LMC	LINEAR METAL CEILING	RBF	RUBBER TILE	TER	TERRAZZO
CPL	CEMENT PLASTER	MP	METAL PANEL	RB	RESILIENT WALL BASE	VCT	VINYL COMPOSITION TILE
CPT	CARPET	NSF	NON-SLIP FINISH	SAAC	SPRAY-APPLIED ACOUSTICAL COATING	WP	WATERPROOF
CT	CERAMIC TILE	PART'N	MOVEABLE PARTITION	SEAL	CONCRETE SEALER		

ROOM FINISH SCHEDULE GENERAL NOTES

A. PROVIDE RADIUS EDGE AT COUNTERTOPS.





PROJE

Williamston Community
Schools
Kid's Corner
Secure Entrance

WILLIAMSTON MICHIGAN

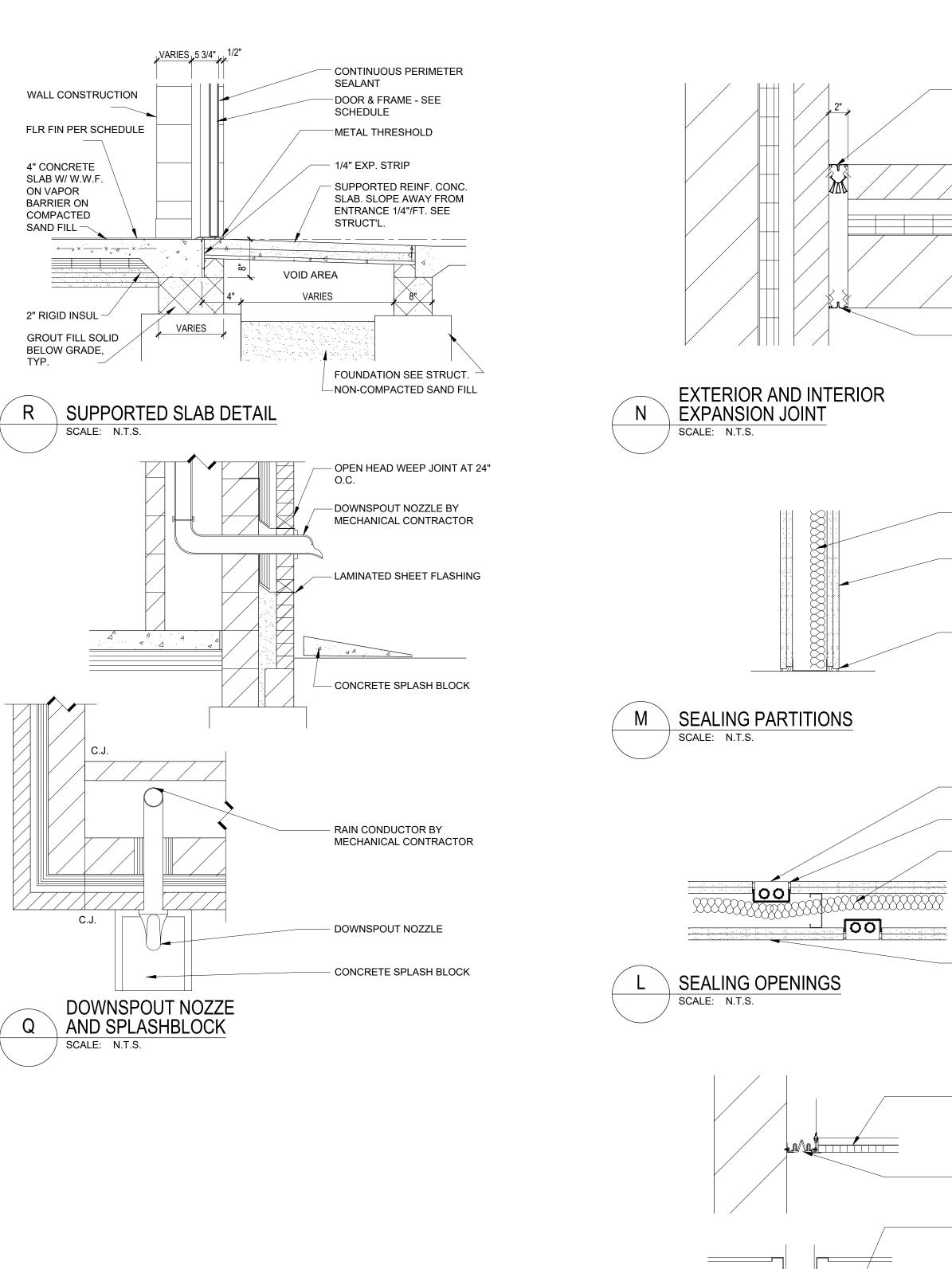
ROOM FINISH
SCHEDULE &
COLOR & MATERIAL
SCHEDULE

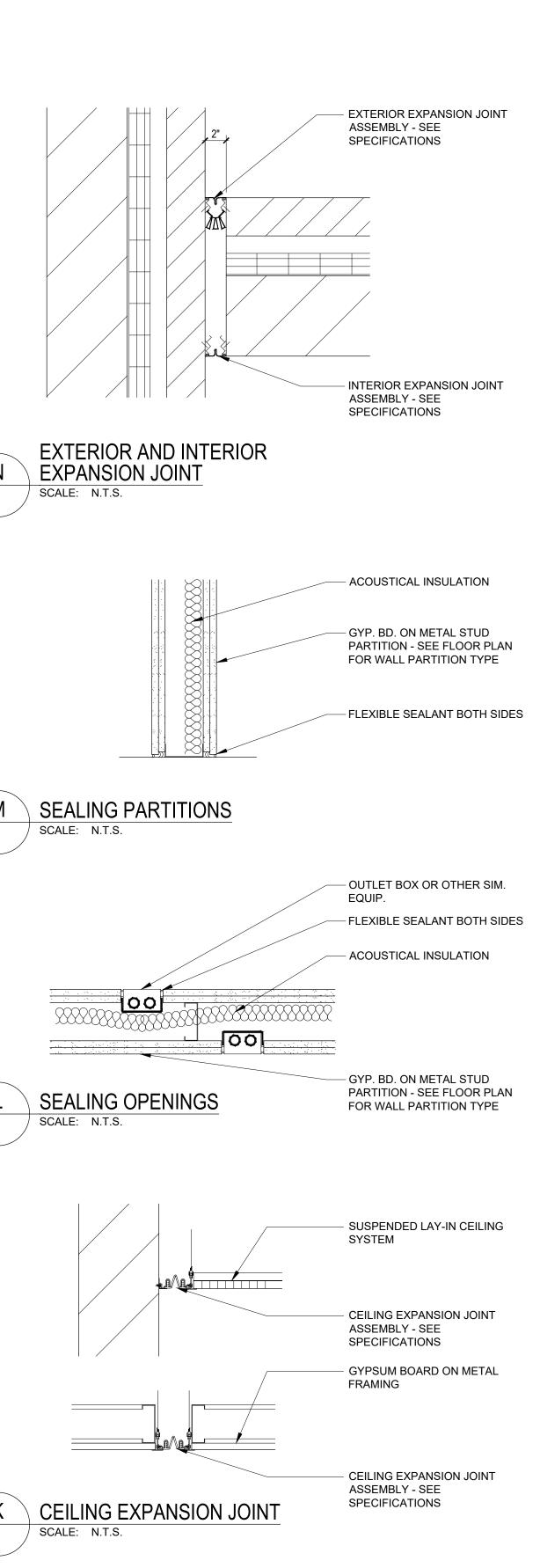
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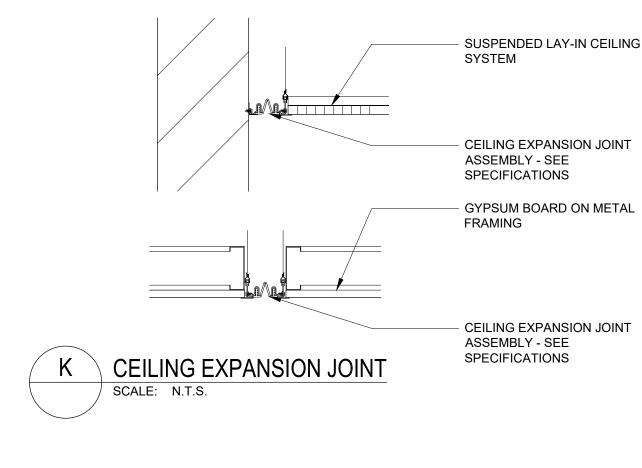
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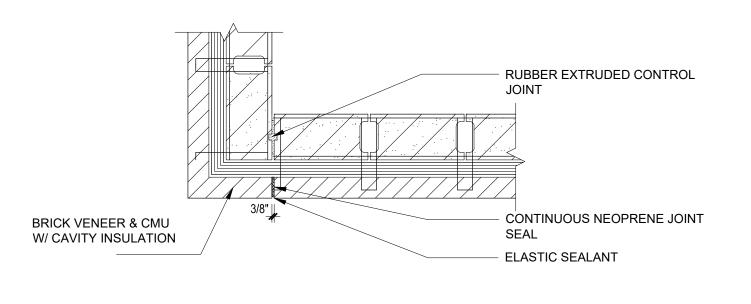
SHEET NUMBER

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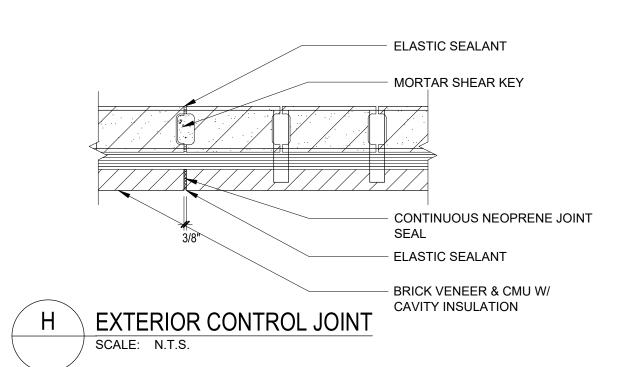


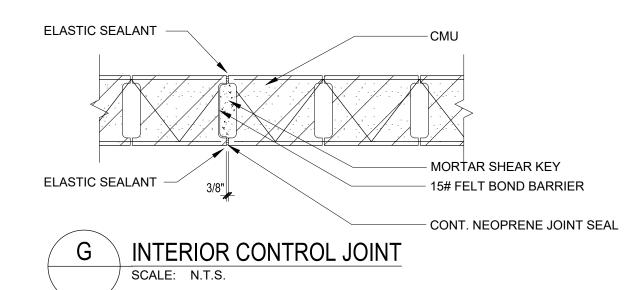


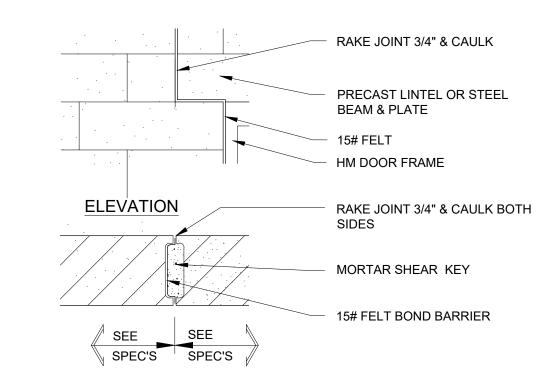






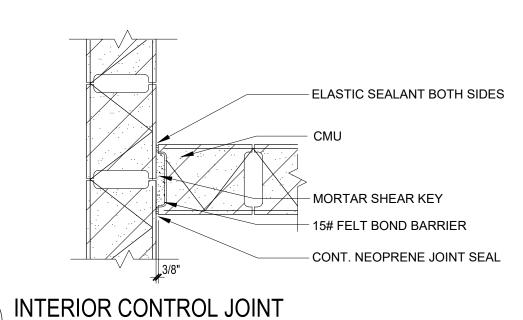


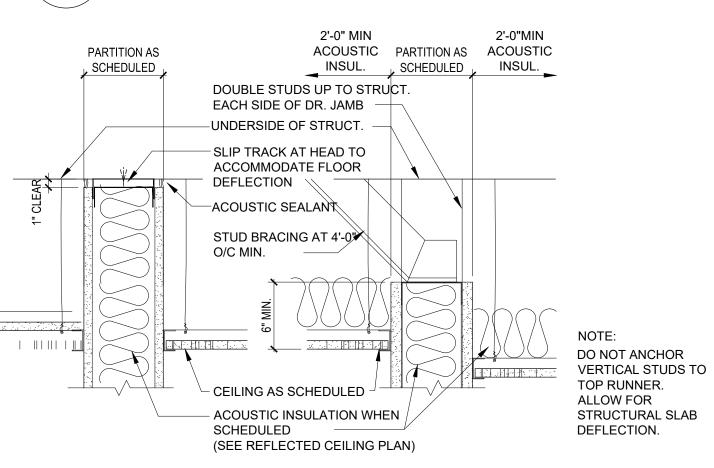




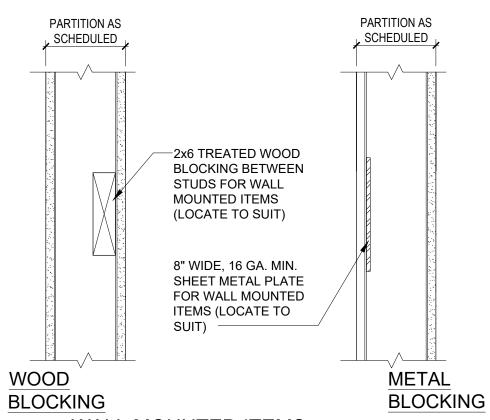


SCALE: N.T.S.

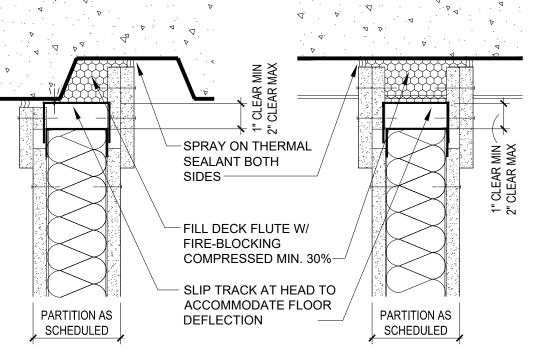








WALL MOUNTED ITEMS TYPICAL BLOCKING DETAIL SCALE: N.T.S.



TYPICAL FIRE-RATED

SPRAY ON THERMAL

SEALANT BOTH SIDES -

- PROVIDE FIRE-BLOCKING

TO SPAN OF DECK -

- 3-1/2x 3-1/2x 1/4" MIN. X 4"

LONG STEEL ANGLES @

CMU PARTITION CONSTRUCTION

4'-0" O.C. ALTERNATING

SIDES OF WALL

TYPICAL FIRE-RATED

AT DECK FLUTE OPENINGS

WHERE WALL RUNS PERP.

STUD PARTITION CONSTRUCTION

 PROVIDE FIRE-BLOCKING @ DECK FLUTE **OPENINGS WHERE** WALL RUNS PERP. TO SPAN OF DECK

2. ONE (1) OR TWO (2) HOUR RATING: UL DESIGN No. HW-0009 - SEE SPECIFICATION SECTION PENETRATION FIRESTOPPING.

PENETRATION

FIRESTOPPING.

No. HW-D-0002 - SEE SPECIFICATION

PENETRATION

FIRESTOPPING.

RATING: UL DESIGN

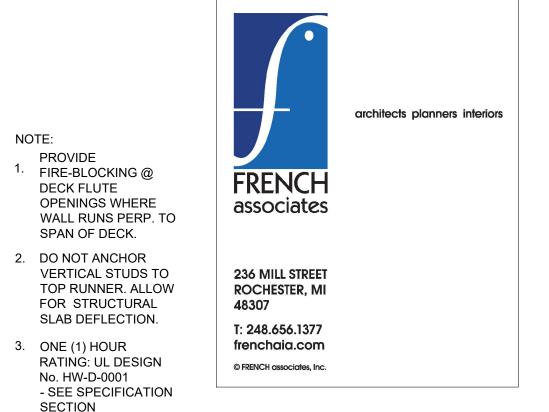
4. TWO (2) HOUR

SECTION

ISSUE DATE ISSUED FOR BIDS 11/15/2021 DRAWN FA CHECKED FA

FA

KEY PLAN



APPROVED

IGENERAL NOTES

CMU AS

SCHEDULED

1. INTERIOR WALL PARTITION TYPE CODE:

SCALE: N.T.S.

- INTERIOR WALL PARTITION CONSTRUCTION AS DETAILED:
- A) IN A NON RATED PARTITION, CARRY GYP. BD. MIN. 6" ABOVE SCHEDULED CEILING HEIGHT UNLESS NOTED OTHERWISE.

CMU AS

SCHEDULED

- B) ALL FIRE-RATED PARTITIONS ARE TO GO TO UNDERSIDE OF STRUCTURE.
- INTERIOR WALL PARTITION CONSTRUCTION WITH ACOUSTIC INSULATION AS DETAILED: A) IN A NON RATED PARTITION, CARRY GYP. BD. AND INSULATION MIN. 6" ABOVE SCHEDULED CEILING
- HEIGHT (UNLESS NOTED OTHERWISE) AND PROVIDE BATT SOUND INSULATION 2'-0" MIN. ON EACH SIDE OF PARTITION (SEE REFLECTED CEILING PLAN)
- B) IN A PARTITION NOTED TO GO TO THE UNDERSIDE OF STRUCTURE PROVIDE BATT SOUND INSULATION FULL HEIGHT OF PARTITION.
- C) PROVIDE / INSTALL SEALANT UNDER PARTITION FLOOR TRACK BOTH EDGES WHEN ACOUSTIC INSULATION IS INDICATED AND AT ALL FIRE-RATED PARTITIONS.
- D) ACOUSTIC INSULATION IS TO HAVE A MIN. STC RATING OF 50.
- . NOT ALL DETAILS ON THIS SHEET WILL BE USED ON THIS PROJECT. DETAILS ARE TYPICAL AND SHALL APPLY WHEN CONSTRUCTION CONDITION EXISTS.
- REFER TO STANDARD DETAILS THIS SHEET FOR TYPICAL INTERIOR PARTITION CONSTRUCTION INFORMATION. REFER TO DETAIL PLANS AND PLAN DETAILS FOR SPECIAL PARTITION CONSTRUCTION INFORMATION.
- 4. ADDITIONAL SURFACE FINISHES ON FACING MATERIAL ARE NOTED ON ROOM FINISH SCHEDULE & DETAILS. 5. REFER TO REFLECTED CEILING PLAN FOR LOCATION OF ACOUSTIC INSULATION ABOVE CEILING.

Williamston Community Schools Kid's Corner Secure Entrance

WILLIAMSTON **MICHIGAN**

SHEET **TYPICAL** CONSTRUCTION **DETAILS**

PROJECT NUMBER

2020-006

GENERAL NOTES

- 1. IF ANY GENERAL NOTE CONFLICTS WITH ANY DETAIL OR NOTE ON THE PLANS OR IN THE SPECIFICATIONS, THE STRICTEST PROVISION SHALL GOVERN.
- 2. THE STRUCTURAL DRAWINGS ARE FOR THE PLACEMENT AND SIZE OF STRUCTURAL COMPONENTS ONLY. O.S.H.A., LOCAL GOVERNMENT CODES AND SAFETY CODE REQUIREMENTS SHALL BE ADHERED TO BY THE CONTRACTOR.
- 3. VERIFY ALL EXISTING ASSUMED DIMENSIONS AND CONDITIONS (I.E. EXISTING MATERIALS; FRAMING MEMBER SIZES AND LOCATIONS; METHODS OF CONSTRUCTION; ETC.) AT THE SITE PRIOR TO CONSTRUCTION AND FABRICATION. IF DISCREPANCIES ARE FOUND, NOTIFY ARCHITECT BEFORE PROCEEDING WITH
- 4. THE MASONRY PORTIONS OF THIS STRUCTURE ARE DESIGNED ACCORDING TO THE LATEST ALLOWABLE STRESS DESIGN PROVISIONS OF THE MASONRY STANDARDS JOINT COMMITTEE (MSJC) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 602) INCLUDING SECTIONS 2106 AND 2107 OF CHAPTER 21 IN THE MICHIGAN BUILDING CODE. MASONRY COMPONENTS HAVE BEEN DESIGNED ACCORDING TO THE PROVISIONS FOR SEISMIC DESIGN CATEGORY B.
- 5. ALL STRUCTURAL MASONRY IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST MASONRY STANDARDS JOINT COMMITTEE (MSJC) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402/ACI 530/ASCE 5) AND SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602/ACI 530.1/ASCE 6) MASONRY SUBMITTALS ARE REQUIRED BY ACI 530.1/ASCE 6/TMS 602. SECTION 1.5 MASONRY TESTING AND INSPECTIONS ARE REQUIRED BY ACI 530.1/ASCE 6/TMS 602 SECTION 1.6, TABLE 5.
- 6. ALL STRUCTURAL MASONRY HAS BEEN ENGINEERED IN ACCORDANCE WITH CHAPTER 2 ALLOWABLE STRENGTH DESIGN. COMPRESSION STRENGTH SHALL BE DETERMINED ACCORDING TO THE UNIT STRENGTH METHOD FOR CONCRETE MASONRY MSJC SECTION 1.4. B.2.b.
- 7. ALL BLOCK SHALL CONFORM TO ASTM C90, TYPE I, WITH A MINIMUM UNIT NET AREA COMPRESSIVE STRENGTH OF 2800 PSI.
- 8. MASONRY COMPRESSIVE STRENGTH f'm = 2000 PSI MINIMUM.
- 9. MORTAR SHALL BE TYPE "S" (1800 PSI) CONFORMING TO ASTM C-270. USE MORTAR CEMENT WHERE EXTERIOR WALLS ARE UNREINFORCED.
- 10. ALL MASONRY BEARING STEEL BEAMS AND LINTELS TO BEAR 8" MINIMUM ON 3 COURSES SOLID MASONRY, WITH 2-3/4" DIAMETER BOLTS EACH END, UNLESS OTHERWISE NOTED.
- 11. MASONRY GROUT SHALL CONFORM TO ASTM C 476, WITH PEA GRAVEL AGGREGATE AND A MINIMUM STRENGTH OF 2000 PSI, BUT NOT LESS THAN SPECIFIED f'm.
- 12. MASONRY AND BRICK LINTELS SHALL BE GALVANIZED G90 PER ASTM A123.
- 13. ALL WIDE FLANGE LINTELS TO HAVE MINIMUM 7"x3/8"x0'-7" BEARING PLATE, ALL WIDE FLANGE FLOOR OR ROOF BEAMS TO HAVE MINIMUM 7"x3/8"x0'-7" BEARING PLATE UNLESS OTHERWISE NOTED

- 1. SHORE STRUCTURE AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY.
- 2. ALL SHORING, ETC., SHALL BE PERFORMED BY EXPERIENCED
- 3. SHORE ALL QUESTIONABLE AREAS PRIOR TO REMOVAL OF ANY STRUCTURAL SUPPORT TO INSURE STRUCTURAL INTEGRITY.
- 4. MAINTAIN SHORING UNTIL NEW PERMANENT STRUCTURE IS IN PLACE AND SECURE TO MAINTAIN STRUCTURAL INTEGRITY.

SEE PLAN

ROOF OPENING

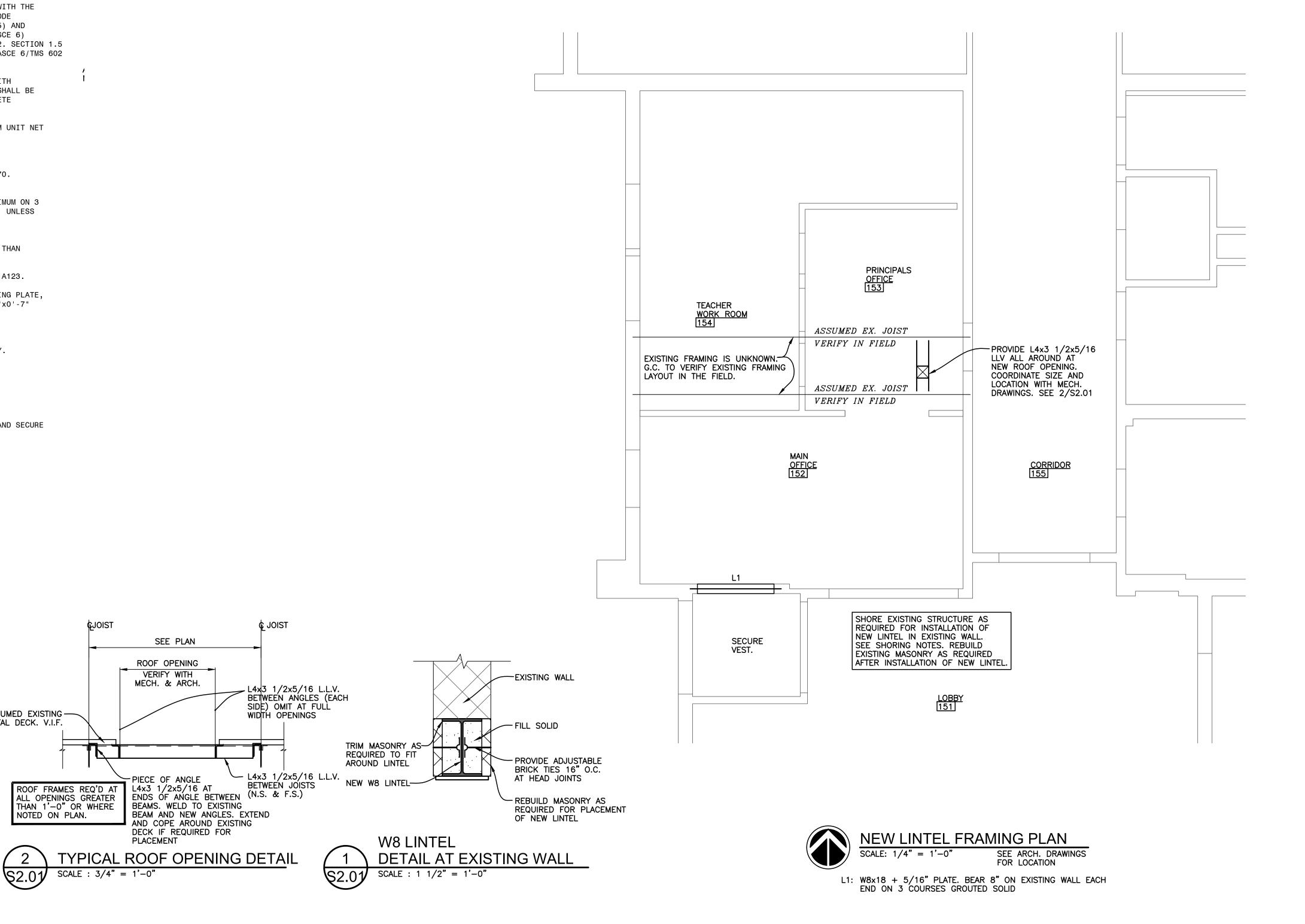
MECH. & ARCH.

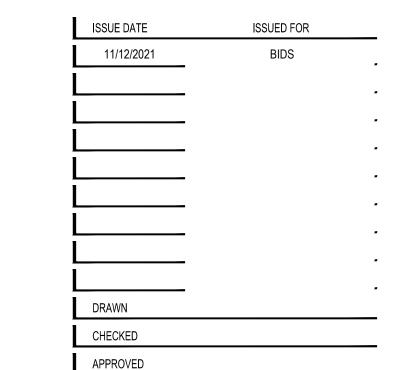
ASSUMED EXISTING — METAL DECK. V.I.F.

NOTED ON PLAN.

VERIFY WITH

5. REMOVE SHORING AFTER NEW WORK IS IN PLACE AND CONNECTED.





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PROJECT

Williamston Community Schools Kid's Corner Secure Entrance

WILLIAMSTON **MICHIGAN**

SHEET

NEW LINTEL FRAMING PLAN

PROJECT NUMBER

2020-006

	HANICAL ABBREVIATIONS	
ABBREV.	DESCRIPTION	
AAV	AUTOMATIC AIR VENT / AIR ADMITTANCE VALVE	
AD	ACCESS DOOR	
AE	AIR EXTRACTOR	
AFF	ABOVE FINISHED FLOOR	
APD	AIR PRESSURE DROP	
ASR		
BFP	BACKFLOW PREVENTER	
BHP	BRAKE HORSEPOWER	
BOD BTU	BOTTOM OF DUCT BRITISH THERMAL UNIT	
BTUH	BRITISH THERMAL UNITS PER HOUR	
BWV	BACKWATER VALVE	
CAP	CAPACITY	
CAV	CONSTANT AIR VOLUME	
CFH	CUBIC FEET PER HOUR	
CFM	CUBIC FEET PER MINUTE	
CIRC	CIRCULATING	
CLG	COOLING	
СО	CLEAN OUT	
CONT	CONTINUATION OR CONTINUED	
CONV	CONVECTOR	
CUH	CABINET UNIT HEATER	
CV	CONTROL VALVE	
DB	DRY BULB TEMPERATURE	
DEG	DEGREES	
DDC	DIRECT DIGITAL CONTROL	
DN DOWN		
DTC	DRAIN TILE CONNECTION	
DWH	DOMESTIC WATER HEATER	
(E)	EXISTING	
EA/EXH EXHAUST AIR		
EAT	ENTERING AIR TEMPERATURE	
EDB	ENTERING DRY BULB TEMPERATURE	
EF EJ	EXHAUST FAN EXPANSION JOINT	
 EL	ELEVATION COINT	
ELECT	ELECTRICAL	
EMS	ENERGY MANAGEMENT SYSTEM	
ESP	EXTERNAL STATIC PRESSURE	
EWB	ENTERING WET BULB TEMPERATURE	
EWC	ELECTRIC WATER COOLER	
' F	DEGREES FAHRENHEIT	
FA	FACE AREA (COIL) / FREE AREA (LOUVER)	
FC	FLEXIBLE CONNECTION	
FD	FLOOR DRAIN	
FDC	FIRE DEPARTMENT CONNECTION	
FH	FIRE HYDRANT	
FHC	FIRE HOSE CABINET	
FHR	FIRE HOSE RACK	
FHV	FIRE HOSE VALVE	
FLA	FULL LOAD AMPS	
FLR	FLOOR	
FPM	FEET PER MINUTE	
FFD	FUNNEL FLOOR DRAIN	
FFE	FINISHED FLOOR ELEVATION	
FS	FLOOR SINK	
FT	FEET	
FURN	FURNISHED	
FV	FACE VELOCITY	
FVC	FIRE VALVE CABINET	
GAL	GALLONS DEPLICITE	
GPH	GALLONS PER HOUR	
GPM HR	GALLONS PER MINUTE HOSE BIBB	
HB HO	HOSE BIBB	
ш	HOD OUTLET	

BBREV.	DESCRIPTION
HR	HOUR
HTG	HEATING
HYD	HYDRANT
HZ	HERTZ
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
INST	INSTALLED
INV	INVERT
ISP	INTERNAL STATIC PRESSURE
IW	INDIRECT WASTE
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
BS/HR	POUNDS PER HOUR
LDB	LEAVING DRY BULB TEMPERATURE
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB TEMPERATURE
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBH	1000 BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MECH	MECHANICAL MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	
	MINIMUM
MISC	MISCELLANEOUS
MOD	MOTOR OPERATED DAMPER (AUTOMATIC)
MOP	MAXIMUM OVER-CURRENT PROTECTION
N.C.	NOISE CRITERIA
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NOM	NOMINAL
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER / CENTER TO CENTER
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
ORS	OVERFLOW ROOF SUMP
OS&Y	OUTSIDE SCREW AND YOKE
PD	PRESSURE DROP (FEET OF WATER)
PRV	PRESSURE REDUCING VALVE
PSIA	POUNDS PER SQUARE INCH - ABSOLUTE
PSIG	POUNDS PER SQUARE INCH - GAUGE
PT	PRESSURE / TEMPERATURE PORT
RA	RETURN AIR
RH	RELATIVE HUMIDITY
REQD	REQUIRED
REL.A	RELIEF AIR
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RS	ROOF SUMP
SA	SUPPLY AIR
SH	SHOWER
SP	STATIC PRESSURE
ft / SF	SQUARE FOOT/SQUARE FEET
SS	SERVICE SINK
TC	TEMPERATURE CONTROL
& P	TEMPERATURE AND PRESSURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORY
	1

MECHANICAL ABBREVIATIONS	
ABBREV.	DESCRIPTION
UR	URINAL
VD	VOLUME DAMPER (MANUALLY ADJUSTABLE)
VTR	VENT THRU ROOF
W	WASTE
W&V	WASTE AND VENT
WB	WET BULB TEMPERATURE
WC	WATER CLOSET
WG	WATER GAUGE
WH	WALL HYDRANT

ABBREV.	DESCRIPTION		
	PIPE ELBOW UP		
	PIPE ELBOW DOWN		
	PIPE TEE DOWN		
DIRECTION OF FLOW			
UNION STRAINER			
· ·			
CONCENTRIC REDUCER ECCENTRIC REDUCER			
	EXPANSION JOINT		
	FLEXIBLE CONNECTION		
<u> </u>			
<u> </u>	- PIPE ANCHOR		
	— PIPE GUIDE		
	PIPE CAP OR PLUG		
→ ISOLATION VALVE			
	CIRCULATING PUMP		
GLOBE VALVE			
BALL VALVE			
BUTTERFLY VALVE			
BACKWATER VALVE			
ANGLE VALVE			
CHECK VALVE (SWING)			
CHECK VALVE (SPRING)			
——I√I—— PLUG VALVE			
NEEDLE VALVE			
OUTSIDE SCREW AND YOKE VALVE (OS&Y)			
PRESSURE REGULATING VALVE			
SOLENOID VALVE			
CONTROL VALVE (2-WAY / 3-WAY)			
CENTRIFUGAL FAN			
6	AUTOMATIC GAS SHUT-OFF VALVE		
∞— TRAP (PLAN VIEW)			
	FLOOR DRAIN / FUNNEL FLOOR DRAIN (PLAN VIEW)		
-Y -Y	FLOOR DRAIN / FUNNEL FLOOR DRAIN (ELEVATION)		
 (©)	ROOF SUMP		
—— CO	CLEAN OUT (IN FLOOR)		
<u> </u>	CLEAN OUT (IN LINE)		
lwco	CLEAN OUT (WALL)		
BFP	BACKFLOW PREVENTER		
1 /₩-₩	WATER METER ASSEMBLY		
+	HOSE BIBB, WALL HYDRANT		
_	DIRECTION OF PIPE PITCH		
(SPRINKLER HEAD (UPRIGHT)		
\triangleleft	SPRINKLER HEAD (SIDEWALL)		
—FS	FLOW SWITCH		
ď,	SIAMESE CONNECTION (YARD)		
\rightarrow	SIAMESE CONNECTION (WALL MOUNTED)		
⊢ ∐ -i	FIRE HYDRANT		
~ <u>`</u>	FLOW MEASURING DEVICE		
Ż	BALANCING VALVE		
₫	COMBINATION FLOW MEASURING AND BALANCING DEVICE		
_			
☐ AAV	AUTOMATIC AIR VALVE		

ABBREV.	ECHANICAL SYMBOLS DESCRIPTION
ADDICEV.	
	RECTANGULAR TAKE—OFF (SINGLE LINE)
	RECTANGULAR TAKE—OFF (DOUBLE LINE)
\	ROUND TAKE-OFF (SINGLE LINE)
 	ROUND TAKE-OFF (DOUBLE LINE)
	SPIN-IN FITTING (WITH VOLUME DAMPER)
	ELBOW (WITH TURNING VANES)
	RADIUS RECTANGULAR ELBOW
	RADIUS ROUND ELBOW
	RECTANGULAR ELBOW UP
	ROUND ELBOW UP
	RECTANGULAR ELBOW DOWN
	ROUND ELBOW DOWN
	CONCENTRIC TRANSITION (DOUBLE LINE)
├	CONCENTRIC TRANSITION (SINGLE LINE)
	ECCENTRIC TRANSITION (DOUBLE LINE)
├	ECCENTRIC TRANSITION (SINGLE LINE)
R	INCLINED RISE IN DIRECTION OF AIR FLOW
R	(DOUBLE LINE) INCLINED RISE IN DIRECTION OF AIR FLOW
D D	(SINGLE LINE) INCLINED DROP IN DIRECTION OF AIR FLOW
	(DOUBLE LINE) INCLINED DROP IN DIRECTION OF AIR FLOW
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(SINGLE LINE)
<u> </u>	FLEXIBLE CONNECTION TO SUPPLY
	FLEXIBLE DUCT CONNECTION TO SUPPLY DIFFUSER
	SUPPLY DIFFUSER
	LINEAR SLOT DIFFUSER
\	RETURN OR EXHAUST GRILLE
1	TRANSFER GRILLE
	CROSS SECTION OF SUPPLY AIR DUCT
	CROSS SECTION OF EXHAUST OR RETURN AIR DUCT
	EXISTING (HODIZONTAL)
	FIRE DAMPER (HORIZONTAL) NEW
	EXISTING FIRE DAMPER (VERTICAL)
	NEW EXISTING
O	SMOKE DAMPER NEW
	EXISTING COMBINATION FIRE/SMOKE DAMPER
•	NEW (VERTICAL)
_B	EXISTING COMBINATION FIRE/SMOKE DAMPER (HORIZONTAL)
	NEW ,
	VOLUME DAMPER (MANUALLY ADJUSTABLE)
M	MOTORIZED DAMPER
SD	SMOKE DETECTOR
(CO2)	CO2 SENSOR
T	THERMOSTAT OR TEMPERATURE SENSOR
\mathbb{H}	HUMIDISTAT OR HUMIDITY SENSOR

—— CA——————————————————————————————————	COMPRESSED AIR PIPING CONDENSATE DRAIN PIPING
	CONDENSATE DRAIN PIPING
——DT——	
	DRAIN TILE
——F——	FIRE PROTECTION PIPING
FOR	FUEL OIL RETURN PIPING
——F0S——	FUEL OIL SUPPLY PIPING
G	NATURAL GAS PIPING
BCW	BOOSTED-DOMESTIC COLD WATER PIPING
——ВНW——	BOOSTED-DOMESTIC HOT WATER PIPING
CW	DOMESTIC COLD WATER PIPING
NPCW	NON POTABLE COLD WATER PIPING
TW	TEMPERED WATER PIPING
——HW——	DOMESTIC HOT WATER PIPING
—HW(140°F)—	DOMESTIC 140°F HOT WATER PIPING
——HWR——	DOMESTIC HOT WATER RETURN PIPING
——SAN——	SANITARY WASTE PIPING
PSAN	PUMPED SANITARY PIPING
V	VENT PIPING
ST	STORM SEWER PIPING
——PST——	PUMPED STORM PIPING
RC	RAIN CONDUCTOR PIPING
ORC	OVERFLOW RAIN CONDUCTOR PIPING
——CHWR——	CHILLED WATER RETURN PIPING
——CHWS—	CHILLED WATER SUPPLY PIPING
CWR	CONDENSER WATER RETURN PIPING
——cws——	CONDENSER WATER SUPPLY PIPING
—HHWR—	HEATING HOT WATER RETURN PIPING
—HHWS—	HEATING HOT WATER SUPPLY PIPING
—HPLR—	HEAT PUMP LOOP RETURN PIPING
HPLS	HEAT PUMP LOOP SUPPLY PIPING
RL	REFRIGERANT LIQUID PIPING
——RS——	REFRIGERANT SUCTION PIPING
HGB	HOT GAS BY-PASS PIPING
——GXHR——	GEO HEAT EXCHANGE RETURN
GXHS	GEO HEAT EXCHANGE SUPPLY
——STM——	STEAM PIPING
——HPS——	HIGH PRESSURE STEAM PIPING
——LPS——	LOW PRESSURE STEAM PIPING
——CR——	STEAM CONDENSATE RETURN PIPING
——PCR——	PUMPED STEAM CONDENSATE RETURN PIPING
——LPC——	LOW PRESSURE CONDENSATE PIPING
——HPC——	HIGH PRESSURE CONDENSATE PIPING
——MA——	MEDICAL AIR PIPING
N	NITROGEN GAS PIPING
<u> </u>	OXYGEN GAS PIPING
VAC	VACUUM PIPING

PIPING LEGEND

DESCRIPTION

APPLICABLE CODES AND REGULATIONS		
YEAR	CODE	
2015	MICHIGAN BUILDING CODE	
2015	MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS	
2018	MICHIGAN PLUMBING CODE	
2015	MICHIGAN MECHANICAL CODE	
2015	MICHIGAN UNIFORM ENERGY CODE	
2012	NFPA 101 WITH BFS AMENDMENTS	
2009	ICC/ANSI ACCESSIBLE AND USABLE BUILDING & FACILITIES	
_	AMERICANS WITH DISABILITIES ACT ACCESSIBILITIES GUIDELINE (ADA—AG)	

		DRAWING INDEX
SHT NO DESCRIPTION MO.00 MECHANICAL GENERAL INFORMATION M2.10 PARTIAL MECHANICAL DEMO & NEW WORK PLANS		DESCRIPTION
		MECHANICAL GENERAL INFORMATION
		PARTIAL MECHANICAL DEMO & NEW WORK PLANS
	M5.00	MECHANICAL SCHEDULES AND DETAILS

[DRAWING NOTATION		
SYMBOL DESCRIPTION			
1	NEW WORK KEY NOTE NO. 1		
DEMOLITION KEY NOTE NO. 1			
<u>EF-1</u>	EQUIPMENT TAG		
S-1 10x10 100-2	AIR TERMINAL TAG: S = SUPPLY R = RETURN IE: DIFFUSER TYPE = S-1 NECK SIZE = 10x10 CFM = 100 (TYPICAL FOR 2)		
EXISTING DEVICES OR EQUIPMENT			
	NEW OR MODIFIED DEVICES OR EQUIPMENT		
////	EXISTING SYSTEM COMPONENT TO BE REMOVED		
POINT OF NEW CONNECTION			
_	SHEET M5.2 ON WHICH SECTION DRAWN		
SECTION SCALE: 1/4" = 1' - 0" SHEET M5.2 ON WHICH SECTION IS CUT (ENLARGED PARTIAL PLAN SIMILAR)			
	(STEM RISER S: SANITARY ESIGNATION D: DOMESTIC WATER H: HVAC PIPING SP: STAIRWELL PRESSURIZATION V: VENT • RISER NUMBER E: EXHAUST		

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PROJECT

Williamston Community
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WILLIAMSTON MICHIGAN

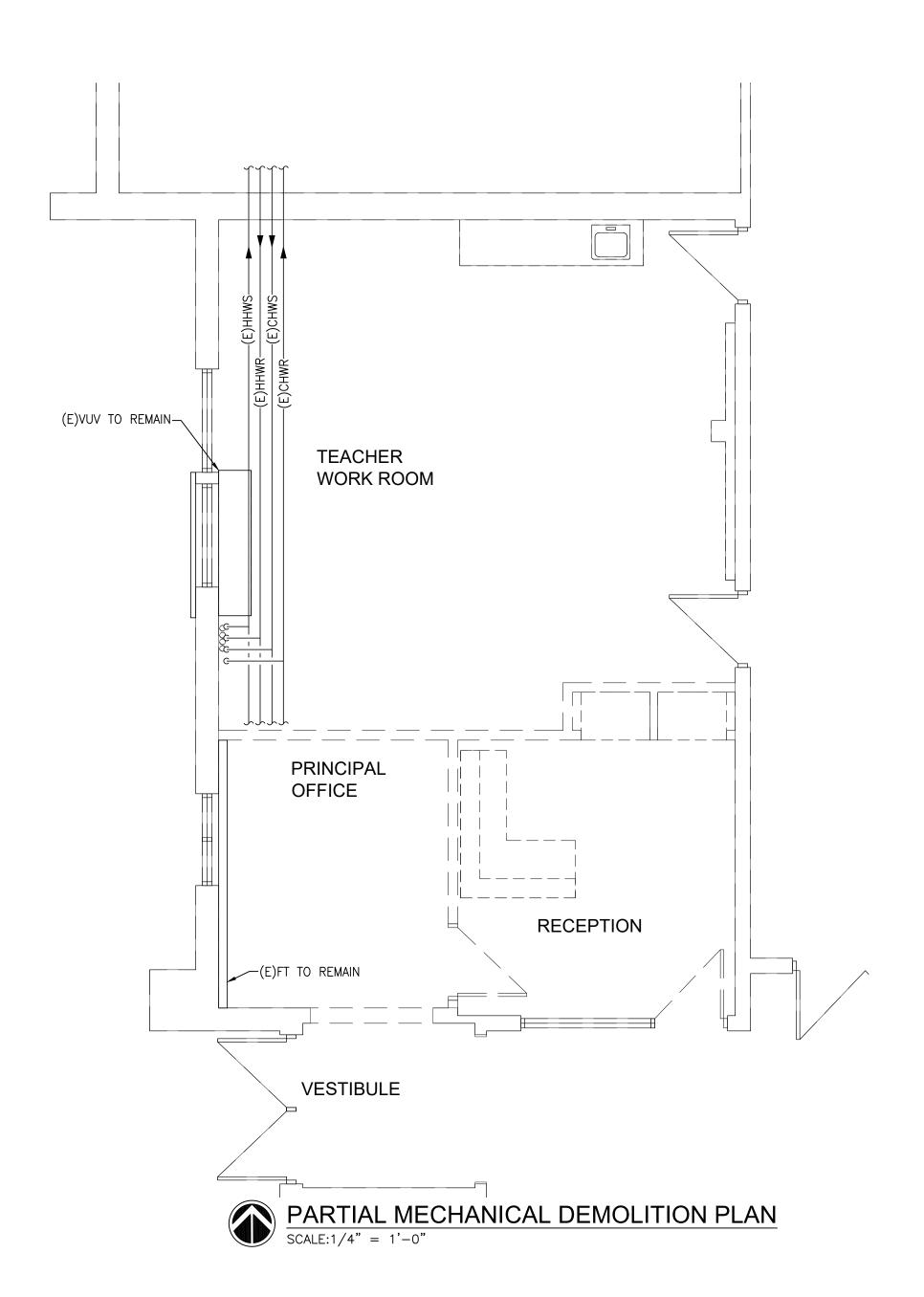
MECHANICAL GENERAL INFORMATION

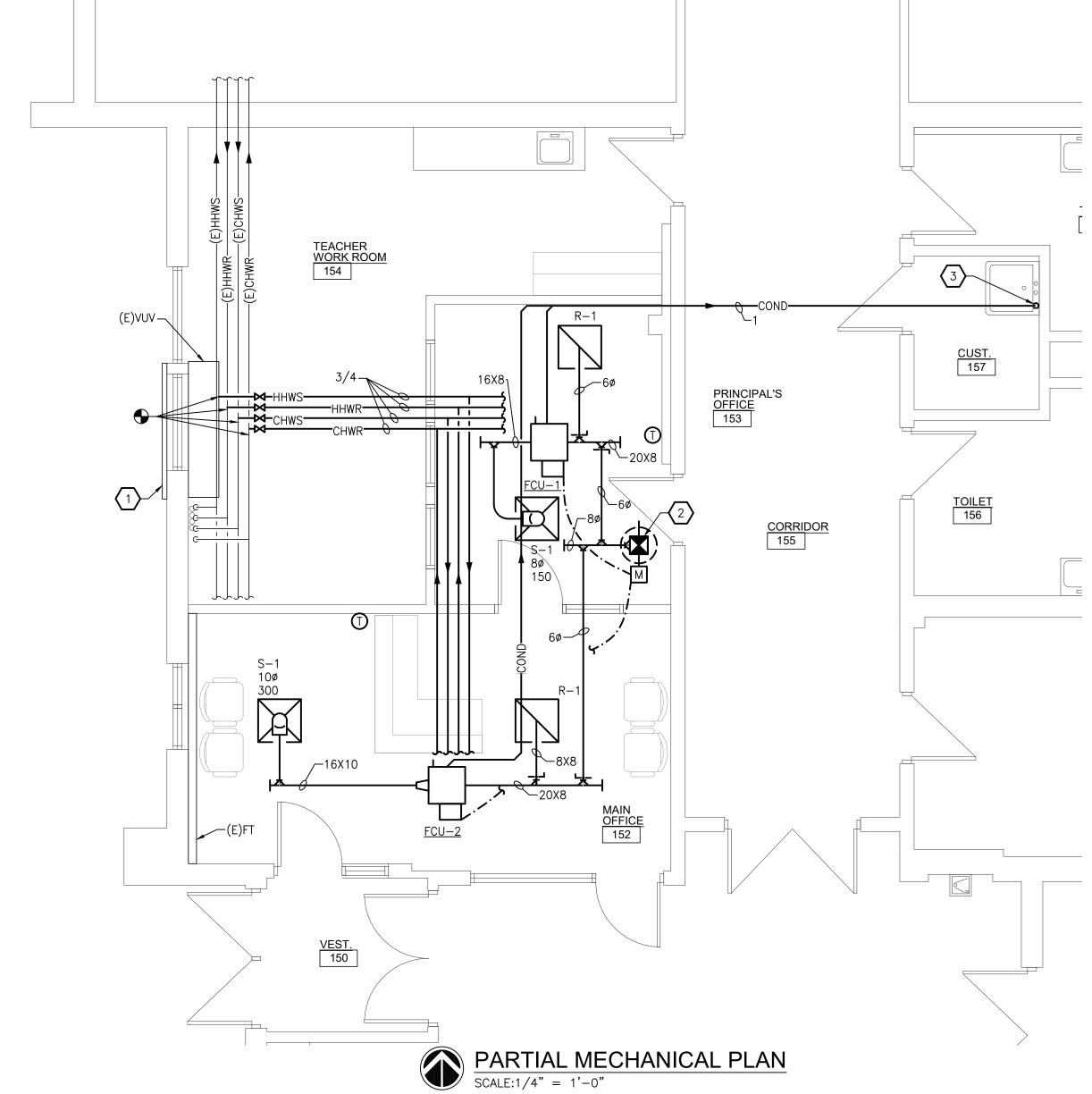
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2020-006

SHEET NUMBER

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MECHANICAL DEMOLITION NOTES

- 1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF WORK TO BE PERFORMED. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.
- 2. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING SITE CONDITIONS, SYSTEMS, AND UTILITIES. NOTIFY ARCHITECT OF ANY INTERFERENCES OR DISCREPANCIES.
- 3. VERIFY DEPTH, SIZE, LOCATIONS AND CONDITION OF EXISTING UTILITIES IN THE FIELD, INCLUDING POINTS OF CONNECTION PRIOR TO STARTING ANY WORK.
- 4. ANY INTERRUPTIONS OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING'S OPERATION.
- ALL ITEMS ON DEMOLITION PLAN SHALL BE CONSIDERED EXISTING UNLESS
 OTHERWISE NOTED. ALL WORK INDICATED ON PLANS HAS BEEN LOCATED PER
 EXISTING DRAWINGS AND/OR FIELD OBSERVATION AND REQUIRES FIELD
 VERIFICATION.
- 6. ALL ITEMS INDICATED WITH CROSS—HATCHING SHALL BE REMOVED COMPLETE, WITH ALL RELATED ITEMS INCLUDING HANGERS, SUPPORTS, INSULATION, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTS.
- 7. ALL EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DAMAGE. WHERE DUCT OR PIPE INSULATION HAS BEEN DAMAGED DURING DEMOLITION, THE CONTRACTOR SHALL REPAIR INSULATION AS REQUIRED TO MATCH EXISTING.
- 8. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED. ALL ITEMS REMOVED SHALL BE LEGALLY DISPOSED OF. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING RELOCATED AND OWNER PROVIDED EQUIPMENT.

DEMOLITION KEYED NOTES

1. DISCONNECT AND DEMOLISH THE EXISTING FIN TUBE RADIATOR. DEMO SUPPLY AND RETURN PIPING UP TO MAINS AND CAP.

HVAC GENERAL NOTES

- 1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE HVAC SYSTEMS COMPLETE PER SPECIFICATION, SMACNA STANDARDS, AND PER APPLICABLE CODES INCLUDING ALL NECESSARY OFFSETS, FITTINGS, SPECIAL RADIUS OR MITERED ELBOWS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR STRUCTURAL CONDITIONS OR OTHER CONDITIONS.
- 2. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WORK OF ALL OTHER TRADES. ALL DUCTWORK IS TO BE ROUTED AS HIGH A POSSIBLE. PROVIDE ACCESS AROUND ALL NEW EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK.
- 3. DUCTWORK/PIPING SHALL BE ROUTED AS HIGH AS POSSIBLE AND SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. DUCTWORK/PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
- 4. DUCTWORK/PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.
- 5. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.
- 6. COORDINATE FLOOR, WALL, ROOF PENETRATIONS, LOUVER SIZES, PAD LOCATIONS ETC. WITH ARCHITECTURAL TRADES. SEAL ALL PIPING AND DUCT PENETRATIONS.
- 7. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF GRILLES, REGISTERS, AND DIFFUSERS.
- 8. COORDINATE AND PROVIDE ACCESS DOORS IN HARD CEILING AREAS FOR ACCESS TO BALANCING DAMPERS, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- 9. BRANCH DUCTWORK TO GRILLES, REGISTERS AND DIFFUSERS SHALL BE THE SAME SIZE AS THE GRILLE, REGISTER OR DIFFUSER NECK SIZE WHERE NO DUCT SIZE IS INDICATED ON PLAN.
- 10. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0".
- 11. THE CEILING SPACE IS USED AS A RETURN AIR PLENUM. NO PLASTIC MATERIALS INCLUDING PVC PIPING, CONDUIT, WIRING, ETC. SHALL BE USED. ALL MATERIAL IN THE CEILING SPACE IS TO BE PLENUM RATED.
- 12. PROVIDE CODE REQUIRED CLEARANCE/ACCESS DOORS FOR DAMPERS, VALVES, AND CLEANOUTS LOCATED IN WALLS OR ABOVE HARD CEILINGS. COORDINATE LOCATIONS WITH ARCHITECT. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES
- 13. CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR EQUIPMENT FURNISHED.

KEYED NOTES

- 1. REMOVE THE EXISTING PLYWOOD BLANK OFF PANEL ON THE EXTERIOR WALL AND BLANK OFF THE EXISTING LOUVER OPENING 8" ABOVE GRADE. BALANCE THE EXITING UNIT VENTILATOR OUTSIDE AIR INTAKE PER THE VENTILATION SCHEDULE ON DRAWING M5.00
- 2. 10X10 UP TO $\underline{\text{IH}-1}$ ON ROOF. COORDINATE WITH THE OWNER TO PATCH THE EXISTING ROOF AS NECESSARY IN ORDER TO MAINTAIN THE EXISTING ROOF WARRANTY.
- 3. 3/4" CONDENSATE LINE DOWN TO DISCHARGE INTO THE SERVICE SINK.

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WILLIAMSTON MICHIGAN

PARTIAL
MECHANICAL DEMO
& NEW WORK
PLANS

PROJECT NUMBER

2020-006

SHEET NUME

M2.10

GRILLE, REGISTER AND DIFFUSER SCHEDULE PRICE/ UNIT ID FACE SIZE **NECK SIZE** MOUNTING ACCESSORY FINISH MATERIAL REMARKS MODEL NO. SEE PLANS CEILING STEEL 24x24 SPD PROVIDE WITH SOUND ATTEN. 24x24 STEEL 22x22 CEILING BOOT IF NOT DUCTED.

OUTSIDE AIR

1. REFER TO ARCHITECTURAL CEILING PLAN AND COORDINATE FRAME TYPE ACCORDINGLY.

FAN COIL UNIT S	CHEDULE
-----------------	---------

		FAI	N				(COOLING	COIL							HE	ATING CO	OIL				AXIMUM UN				EL EC	TRICAL		DISCON	NECT		
UNIT ID	NOMINAL AIRFLOW	ESP			SENSIBLE		A	IR			W	/ATER		MIN	A1	R		W	ATER			DIMENSION	S	FILTER TYPE		LLLC	INICAL		DISCON	INLC1	MANUFACTURER/	REMARKS
	(CFM)	(IN WG)	HP	CAPACITY (MBH)	CAPACITY (MBH)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	FLOW (GPM)	EWT (°F)	LWT (°F)	MAX WPD (FT HD)	CAPACITY (MBH)	EAT (°F)		FLOW (GPM)	EWT (°F)	LWT (°F)	MAX WPD (FT HD)	LENGTH (IN)	DEPTH (IN)	HEIGHT (IN)	ITPE	МОСР	MCA	VOLTS	PHASE FUF	N. INST BY	TYPE	MODEL NO.	
FCU-1	300	0.3	1/8	6.6	6.0	77.2	64.6	59.0	57.5	1.3	45	55	0.57	12.6	65	101	0.7	180	140	1.85	30.5	20.2	9.9	MERV 8	15	2.2	120	1 M	М	SWITCH	DAIKIN/FCH203	
FCU-2	100	0.3	1/20	2.6	2.1	77.2	64.6	58.0	56.1	1.3	45	55	0.09	4.0	65	100	0.2	180	140	0.18	30.5	20.2	9.9	MERV 8	15	1.5	120	1 M	М	SWITCH	DAIKIN/FCH203	

NOTES:

- 1. COOLING COIL CAPACITY BASED ON 77.2° FDB, 64.6° FWB EAT. 2. PROVIDE CONDENSATE PUMP IF REOUIRED TO LIFT CONDENSATE TO A GRAVITY DRAIN CONDENSATE PIPE
- 3. PROVIDE AN EXTENDED CONDENSATE DRAIN PAN TO CAPTURE CONDENSATE AT COIL CONNECTIONS.

4. CONTROL VALVES SHALL BE SELECTED FOR A PRESSURE DROP EQUAL TO TWO TIMES THE PRESSURE DROP OF THE ASSOCIATED HEAT TRANSFER DEVICE. PRESSURE DROP OF THE SELECTED VALVE SHALL NOT EXCEED A MAXIMUM OF 15 FEET OF HEAD OR A MINIMUM OF 2.3 FEET OF HEAD.

	OUTSIDE AIR VENTILATION SCHEDULE										
	OCCUPANCY		OCCUPANT DENSITY		OUTSIDE AII	R FLOWRATE	OA REQUIRED				
ROOM/ SPACE	CLASSIFICATION	SF	(P/1000 SF)	OCCUPANTS	CFM/ PERSON	CFM/ SF	(CFM)	OA PROVIDED	REMARKS		
TEACHER WORKROOM	OFFICE SPACES	334	5	3	5	.06	35	40			
PRINCIPALS OFFICE	OFFICE SPACES	154	5	1	5	.06	14	20			
MAIN OFFICE	OFFICE SPACES	270	5	4	5	.06	36	40			

TEMPERATURE

	INTAKE/RELIEF HOOD SCHEDULE												
UNIT ID	SYSTEM SERVED	AIRFLOW (CFM)	THROAT SIZE (IN)	THROAT VELOCITY (FPM)	STATIC PRESSURE DROP (IN WG)	WIDTH	HOOD SIZE	HEIGHT	CURB HEIGHT (IN)	HOOD CONSTRUCTION	MANUFACTURER/ MODEL NO.	REMARKS	
						(IN)	(IN)	(IN)			ODEENUEOU/	DROVIDE WITH INCECT AND DIDD	
IH-1	FCU1,2	60	10X10	162	0.005	19	19	19.25	12	ALUMINUM	GREENHECK/ GRSI-8	PROVIDE WITH INSECT AND BIRD SCREEN TYPICAL	

RETURN AIR DUCT

MANUAL

DAMPER-

OUTSIDE AIR

ROUND DUCT CONNECTION

(SEE PLANS FOR SIZE)-

BALANCING

TO RETURN GRILLE-

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T: 248.656.1377 frenchaia.com LINE DUCT 5' DOWNSTREAM OF DISCHARGE) © FRENCH associates, Inc.

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4 PIPE HORIZONTAL FAN COIL UNIT INSTALLATION DETAIL

-3/4" CONDENSATE

FAN COIL UNIT

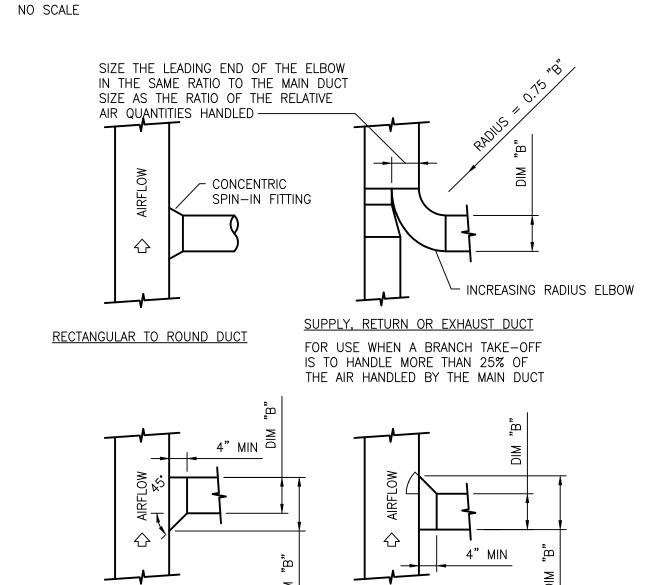
-FLEX CONNECTION

THREADED ROD HANGERS,

NUTS, WASHERS & SPRING VIBRATION ISOLATORS (TYP)

-SUPPLY DUCT TO SYSTEM (ACOUSTICALLY

DUCT SIZE SHOWN ON PLAN SHALL TRANSITION TO UNIT SIZE CONNECTION



RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS NO SCALE

RETURN OR EXHAUST DUCT

SUPPLY DUCT

DISCHARGE AIR SENSOR SUPPLY AIR RETURN AIR CHILLED WATER HYDRONIC HEATING M S - - DO FAN START/STOP C - - DI FAN STATUS

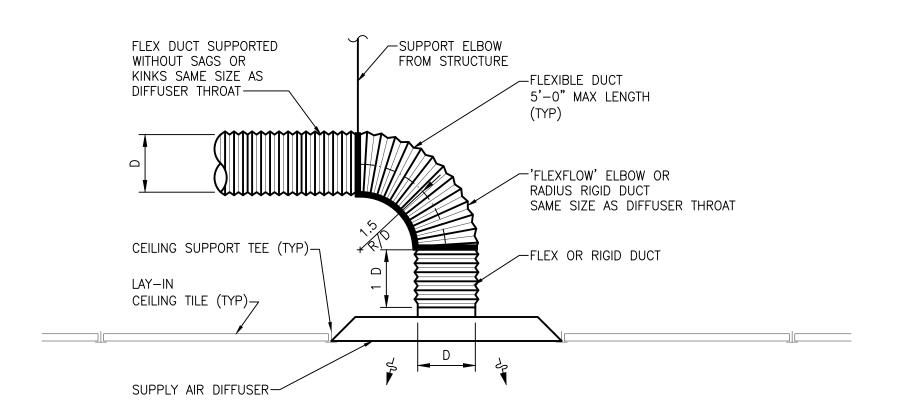
1. OCCUPANT DENSITIES AND OUTSIDE AIR FLOW RATES BASED ON THE 2015 MICHIGAN MECHANICAL CODE TABLE 403.3.

——CHWS→ ———HHWS→

FAN COIL UNIT CONTROL DIAGRAM

FAN COIL UNIT SEQUENCE OF OPERATIONS: NOTE: ALL SETPOINTS AND TIME INTERVALS SHALL BE ADJUSTABLE BY THE SYSTEM

- 1. UNOCCUPIED MODE: WITH THE SUPPLY FAN HAND/OFF/AUTO SWITCH IN THE "AUTO" POSITION, THE SUPPLY FAN SHALL BE AUTOMATICALLY STARTED AND STOPPED BASED ON A CALL FOR HEATING OR COOLING IN THE SPACE. THE OUTDOOR AIR DAMPER SHALL REMAIN CLOSED.
- 2. NORMAL OCCUPIED MODE: THE OUTDOOR AIR DAMPER SHALL BE OPENED. THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY. THE FAN COIL UNIT CONTROLLER SHALL MODULATE THE HEATING AND COOLING CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
- 3. IF THE HEATING COIL LEAVING TEMPERATURE FALLS BELOW THE LOW LIMIT FREEZE STAT SETTING (40 DEG F), THE FAN SHALL STOP, THE OA DAMPER SHALL BE CLOSED AND AN ALARM SHALL BE GENERATED AT THE BMS.
- 4. THE BUILDING DDC SYSTEM SHALL MONITOR AND GRAPHICALLY SHOW THE FOLLOWING POINTS: ROOM TEMPERATURE, ROOM TEMPERATURE SETPOINT, DISCHARGE AIR TEMPERATURE, SUPPLY FAN START/STOP, SUPPLY FAN STATUS, CALL FOR HEATING OR CALL FOR COOLING.



'FLEXFLOW' BY THERMAFLEX WWW.FLEXFLOWELBOW.COM

SUPPLY AIR DIFFUSER DETAIL

NO SCALE

INTAKE HOOD INSTALLATION DETAIL NO SCALE

X X X

S CHWS/HHWS—

S——CHWR/HHWR-

CAPPED DRAIN VALVE (BALL)-

TEMPERING COIL-

FAN COIL UNIT COIL PIPING DIAGRAM (2-WAY VALVE)

NOTE: REFER TO RISER DIAGRAMS FOR CONTROL VALVE CONFIGURATION TYPE.

∕INTAKE HOOD

-ROOF CURB (REFER TO SCHEDULE FOR CURB HEIGHT)

-INTAKE AIR DUCT (REFER

TO PLAN FOR SIZE)

CONNECT BRANCH

PIPING AT BOTTOM

COMBINATION FLOW

MEASURING AND BALANCING DEVICE-

STRAINER -

BIRD SCREEN-

MOTORIZED DAMPER

OF MAINS-

Williamston Community Schools Kid's Corner Secure Entrance

WILLIAMSTON **MICHIGAN**

SHEET **MECHANICAL** SCHEDULES AND **DETAILS**

PROJECT NUMBER

2020-006

	APPLICABLE CODES AND REGULATIONS											
YEAR	CODE											
2015	MICHIGAN BUILDING CODE											
2015	MICHIGAN ENERGY CODE											
2015	MICHIGAN RESIDENTIAL CODE											
2015	MICHIGAN REHABILITATION CODE											
2017	MICHIGAN ELECTRICAL CODE RULES, PART 8											
2017	NATIONAL ELECTRICAL CODE (NFPA 70)											
2013	NFPA 20											
2013	NFPA 72											
2013	NFPA 101											
2013	NFPA 110											
2009	ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS & FACILITIES											
1985	DETROIT ELEVATOR CODE											

O OWNER PROVIDED

E EMERGENCY EGRESS

X EXIT LIGHTS

TEC	HNOLOGY SYMBOL LIST									
SYMBOL	DESCRIPTION									
	CAMERA									
CR	CARD READER									
-	TECHNOLOGY OUTLET - 6" ABOVE COUNTER									
▼	TECHNOLOGY OUTLET - FLOOR									
▼	TECHNOLOGY OUTLET - WALL									
DH	MAGNETIC DOOR HOLDER									
•	PUSH BUTTON									
(S)	SPEAKER									
Ю	WALL CLOCK — SINGLE FACE									
$\vdash \bigoplus$	WALL CLOCK — DOUBLE FACE									
	WALL CLOCK AND SPEAKER UNIT									
WAP WIRELESS ACCESS POINT										

NOTES:

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR BOX AND CONDUIT FOR ALL DEVICES INDICATED.

2. LOW VOLTAGE CONTRACTOR SHALL PROVIDE EXACT SPECIFICATIONS AND LOCATIONS OF ALL DEVICES.

	CAMERA	\$	SINGLE POLE SWITCH
CR	CARD READER	\$3	THREE WAY SWITCH
₩	TECHNOLOGY OUTLET - 6" ABOVE COUNTER	\$4	FOUR WAY SWITCH
▼	TECHNOLOGY OUTLET - FLOOR	\$L	LIGHT CONTROL LOCATION
▼	TECHNOLOGY OUTLET - WALL	G	GENERATOR TRANSFER
DH	MAGNETIC DOOR HOLDER		
•	PUSH BUTTON		
S	SPEAKER		
	WALL CLOCK - SINGLE FACE		

								ı	.IG	HT	IN	G C	CONTROLS MATRIX
TAG NUMBER #	SPACE TYPE	MANUAL ON/OFF SWITCH	DIMMING SWITCH	IDE SV	TI ZONE CONTROL	KEY SWITCH	000	SENSOR ROLDIMMING	R PHOTOCELL	COLOR TUNING	RGB/RGBW	BACNET INTEGRATION	SEQUENCE OF OPERATIONS
1	OFFICE, CONFERENCE, WORKROOM, SICK ROOM,	x	x)						MANUAL ON/AUTOMATIC OFF WITHIN 20 MIN OF OCCUPANTS LEAVING SPACE (VACANCY MODE). CONTINUOUS DIMMING.

	TAG NUMBER #	SPACE TYPE	MANUAL ON/OFF SWITCH	DIMMING SWITCH	OVERRIDE SWITCH	MULTI ZONE CONTROL	KEY SWITCH	OCCUPANCY SENSOR	OTOCONT	R PHOTC	COLOR TUNING	RGB/RGBW	BACNET INTEGRATION	SEQUENCE OF OPERATIONS
	1	OFFICE, CONFERENCE, WORKROOM, SICK ROOM,	x	x				x					1 1	MANUAL ON/AUTOMATIC OFF WITHIN 20 MIN OF OCCUPANTS LEAVING SPACE (VACANCY MODE). CONTINUOUS DIMMING.
•								•						

			LUMINAIRE SC	HEDULE			
TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LIGHT ENGINE	WATTAGE	VOLTAGE	REMARKS
L1 RECESSED	2X4 LED TROFFER	LITHONIA	2BLT4-48L-ADP-EZ1-LP835	3500K CCT LED, 80 CRI	38W	MVOLT	
L1E SAME AS T	YPE L1 WITH EM BATTERY	LITHONIA	2BLT4-48L-ADP-EZ1-LP835-EL14L	3500K CCT LED, 80 CRI	38W	MVOLT	
L2 LED 2X2 RE	CESSED LIGHT FIXTURE	LITHONIA	2BLT2-33L-ADP-EZ1-LP835	3500K CCT LED, 80 CRI	26W	MVOLT	
X1 LED EXIT S	GN	LITHONIA	LQM-S-W-3-R-120/277-EL-N	LED	1W	MVOLT	

L1	LE SAME AS TYPE L1 WITH EM BATTERY	LITHONIA	2BLT4-48L-ADP-EZ1-LP835-EL14L
L	2 LED 2X2 RECESSED LIGHT FIXTURE	LITHONIA	2BLT2-33L-ADP-EZ1-LP835
Х	1 LED EXIT SIGN	LITHONIA	LQM-S-W-3-R-120/277-EL-N
FIX	TURE TYPE KEY:		
l	_ STANDARD		
9	S SITE		
F	R RESIDENTIAL		
		•	

LIGHTING CONTROLS LEGEND								
DESCRIPTION								
SINGLE POLE SWITCH								
THREE WAY SWITCH								
FOUR WAY SWITCH								
LIGHT CONTROL LOCATION								
G GENERATOR TRANSFER DEVICE								

SYMBOL DESCRIPTION										
•	CONDUIT DOWN									
0	CONDUIT UP									
<u> </u>	DISCONNECT SWITCH - NON FUSED									
4	DISCONNECT SWITCH - FUSED									
4	DISCONNECT SWITCH — COMB. MOTOR STARTER									
	ELECTRICAL PANEL									
•	GROUNDING ROD									
=	GROUND									
	GROUNDING BAR									
J	JUNCTION BOX									
M	METER									
<i>\</i>	MOTOR - SINGLE PHASE									
\@\	MOTOR - THREE PHASE									
\$м	MOTOR RATED SWITCH									
φ	POWER RECEPTACLE - SIMPLEX TYPE									
φ	POWER RECEPTACLE - DUPLEX TYPE									
 	POWER RECEPTACLE - DUPLEX 6" ABOVE COUNTER									
Pusb	POWER RECEPTACLE - USB/DUPLEX COMBO. DEVICE									
#	POWER RECEPTACLE — QUADRUPLEX TYPE									
\Box	POWER RECEPTACLE - RECESSED FLOOR TYPE									
\Diamond	POWER RECEPTACLE - SPECIALTY TYPE									
TC	TIME CLOCK									

NOTES:

1. ALL DEVICE RATINGS/SIZES SHALL BE COORDINATED WITH PLANS AND SCHEDULES.

FIRE ALARM SYMBOL LIST										
SYMBOL	DESCRIPTION									
FK	AUDIBLE DEVICE/WALL MOUNTED									
Ē	VISUAL DEVICE/WALL MOUNTED									
FK	COMBO AUDIBLE/VISUAL DEVICE/WALL MOUNTED									
F	AUDIBLE DEVICE/CEILING MOUNTED									
F	VISUAL DEVICE/CEILING MOUNTED									
F	COMBO AUDIBLE/VISUAL DEVICE/CEILING MOUNTED									
© \$	CO ALARM/SMOKE DETECTOR									
Ś	SMOKE DETECTOR									
$\bigcirc \Diamond$	CO ALARM									
\$	DUCT MOUNTED SMOKE DETECTOR									
H	HEAT DETECTOR									
√FD	FIRE DEPARTMENT COMMUNICATION OUTLET									
78	EXISTING COMBINATION FIRE/SMOKE DAMPER									
-	NEW (HORIZONTAL)									
1	EXISTING COMBINATION FIRE/SMOKE DAMPER									
	NEW (VERTICAL)									
F	MANUAL PULL STATION									
FS	FLOW SWITCH									
TS	TAMPER SWITCH									
FAA	FIRE ALARM ANNUNCIATOR PANEL									
FACP	FIRE ALARM CONTROL PANEL									
1/0	INPUT/OUTPUT CONTROL MODULE									

NOTES:

1. DRAWINGS INDICATE DESIGN INTENT ONLY, FINAL LOCATIONS AND DEVICE SPECIFICATIONS SHALL BE PROVIDED BY FIRE ALARM MANUFACTURER. REFER TO PROJECT SPECIFICATIONS FOR APPROVED MANUFACTURERS.

ELEC	CTRICAL ABBREVIATIONS							
ABBREV.	DESCRIPTION							
AFF	ABOVE FINISHED FLOOR							
Α	AMPERE							
AF	AMPERE FUSE/AMPERE FRAME							
AWG	AMERICAN WIRE GAUGE							
ATC	AMPERE TRIP							
ATS	AUTOMATIC TRANSFER SWITCH AVAILABLE INTERRUPTING CURRENT (AMPS)							
C	CONDUIT OR CEILING MOUNTED							
СВ	CIRCUIT BREAKER							
CU	COPPER							
СТ	CURRENT TRANSFORMER							
DIA	DIAMETER							
DISC	DISCONNECT							
EMT	ELECTRICAL METALLIC TUBING							
EWC	ELECTRIC WATER COOLER							
EPO	EMERGENCY POWER OFF							
(E)	EXISTING ELECTRICAL EQUIPMENT OR WORK							
FA	FIRE ALARM							
FACP	FIRE ALARM CONTROL PANEL							
FLA F	FULL LOAD AMPS FUSE							
G/GRD	GROUND							
GFCI/GFI	GROUND FAULT CIRCUIT INTERRUPTER							
HOA	HAND-OFF-AUTO							
HP	HORSEPOWER							
IG	ISOLATED GROUND							
KV	KILOVOLT							
KVA	KILOVOLT AMPERE							
KW	KILOWATT							
KWH	KILOWATT HOUR							
LP	LIGHTING PANEL							
MCB	MAIN CIRCUIT BREAKER							
MDP	MAIN DISTRIBUTION PANEL							
MLO MAX	MAIN LUG ONLY MAXIMUM							
MIN	MINIMUM							
NEC	NATIONAL ELECTRICAL CODE							
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.							
N/NEU	NEUTRAL							
NF	NON-FUSIBLE							
NC	NORMALLY CLOSED							
NO	NORMALLY OPEN							
NIC	NOT IN CONTRACT							
PH. OR Ø	PHASE							
Р	POLE							
PF PV (2	POWER FACTOR							
PVC (R)	POLYVINYL CHLORIDE (PLASTIC) RELOCATED EXISTING ELECTRICAL EQUIPMENT							
(RR)	REMOVE AND REINSTALL							
RMC	RIGID METALLIC CONDUIT							
RP	RECEPTACLE PANEL							
TBB	TELEPHONE BACKBOARD							
TYP.	TYPICAL							
UC	UNDER COUNTER							
UL	UNDERWRITERS LABORATORIES							
UPS	UNINTERRUPTIBLE POWER SUPPLY							
USB	UNIVERSAL SERIAL BUS							
V	VOLT							
VA	VOLT AMPERE							
W	WATT							
WG	WIRE GUARD							

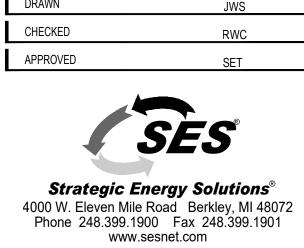
WEATHERPROOF

TRANSFORMER

DRAWING INDEX									
SHT NO	DESCRIPTION								
E0.00	ELECTRICAL GENERAL INFORMATION								
E2.10	PARTIAL ELECTRICAL DEMO & NEW WORK PLANS								
E5.00	ELECTRICAL SCHEDULES & DETAILS								

DRAWING NOTATION												
SYMBOL	DESCRIPTION											
L1	LIGHTING FIXTURE TAG											
1	CONSTRUCTION KEY NOTE NUMBER 1 DEMOLITION KEY NOTE NUMBER 1											
1												
20	COPPER FEEDER SIZE TAG (REFER TO FEEDER SCHEDULE) ALUMINUM FEEDER SIZE TAG (REFER TO FEEDER SCHEDULE) EQUIPMENT TAG EXISTING DEVICES OR EQUIPMENT											
20												
<u>EQUIPMENT</u>												
	NEW OR MODIFIED DEVICES OR EQUIPMENT											
	NEW OR MODIFIED UNDERGROUND WIRING EXISTING SYSTEM COMPONENT TO BE REMOVED											
\$//////												
•	POINT OF NEW CONNECTION											
	SECTION NUMBER 4 E5.2 SHEET E5.2 ON WHICH SECTION IS DRAWN											
,	SECTION NO. 6											
6 E5.2	SECTION SCALE: 1/4" = 1' - 0"											
- \	SHEET E5.2 ON WHICH SECTION IS CUT (ENLARGED PARTIAL PLAN SIMILAR)											
LIGHTING COI SPACE TYPE												

ISSUE DATE	ISSUED FOR
11/15/2021	BIDS
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Williamston Community Schools Kid's Corner Secure Entrance

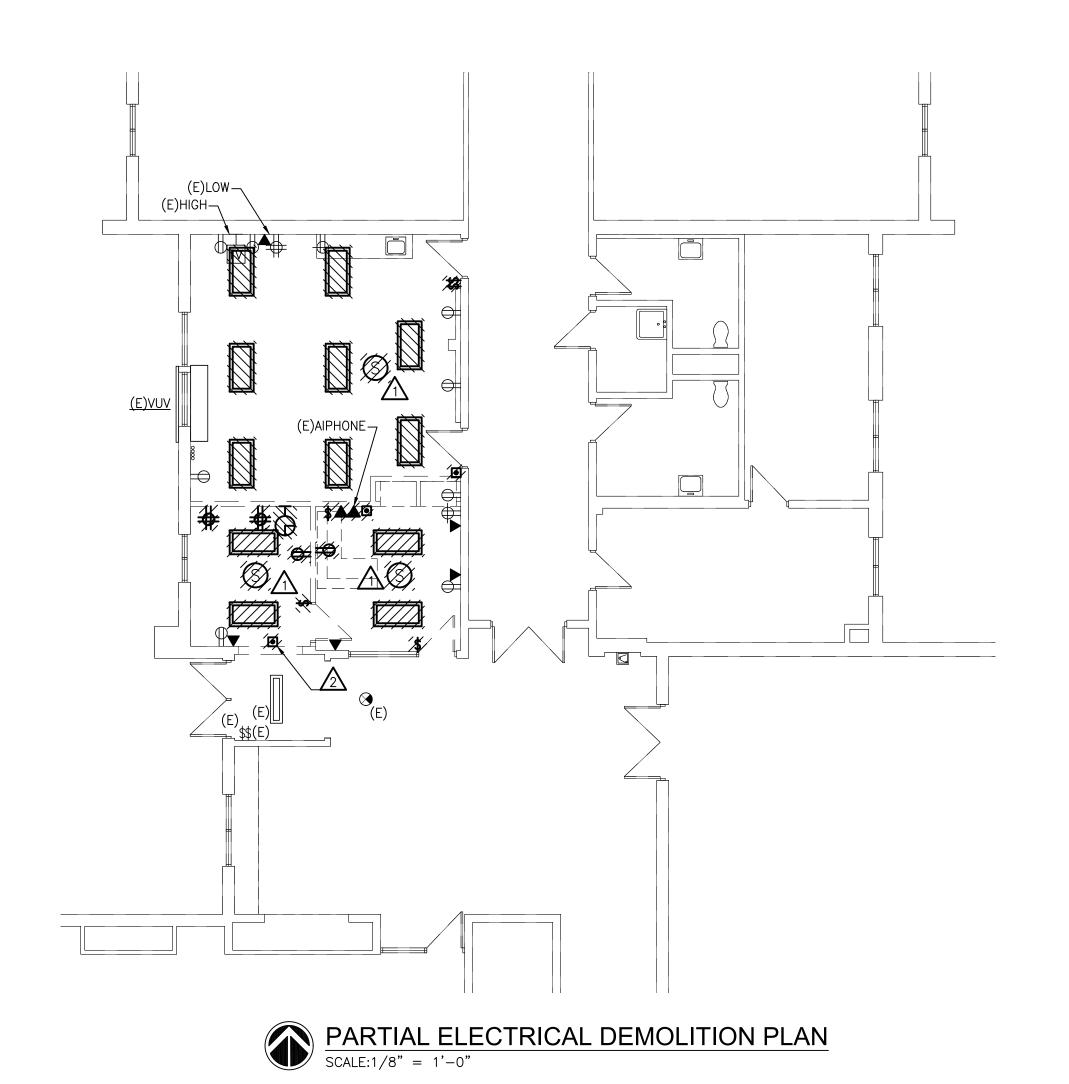
WILLIAMSTON MICHIGAN

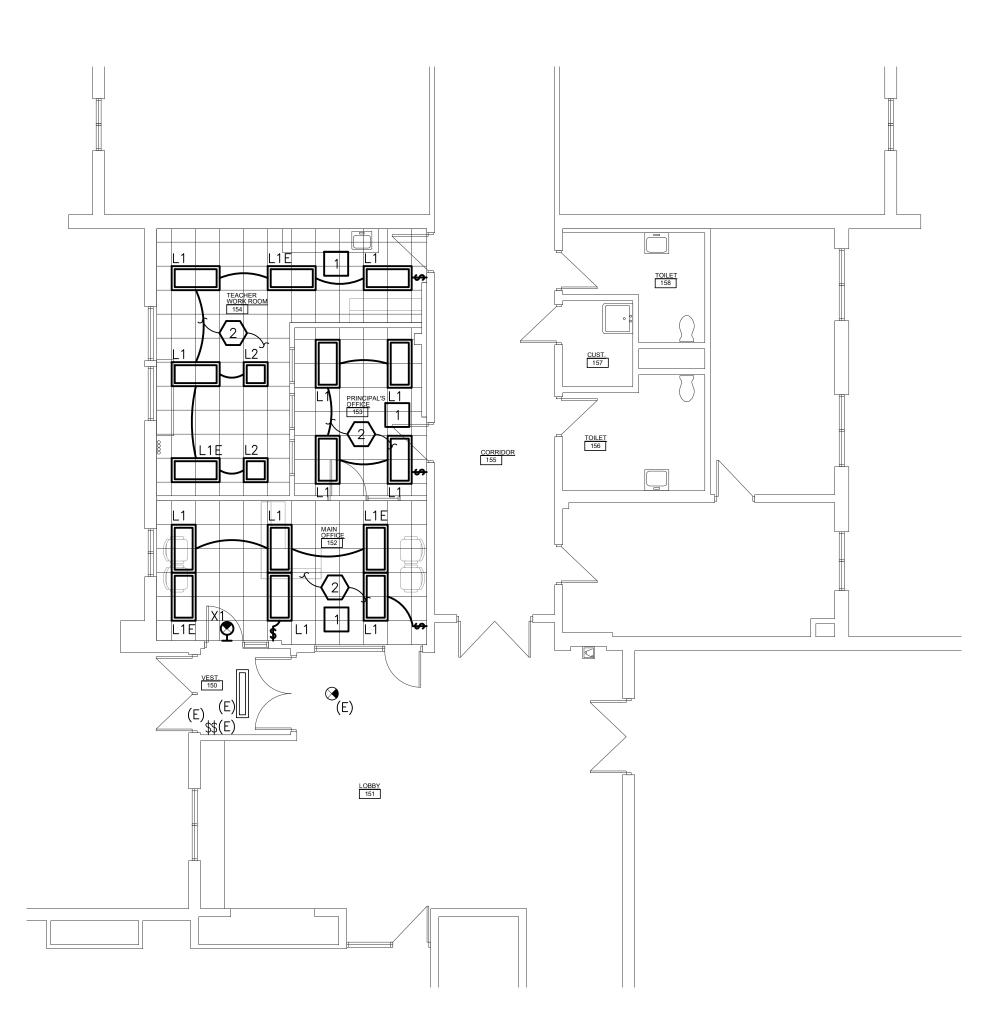
ELECTRICAL **GENERAL** INFORMATION

PROJECT NUMBER

2020-006









ELECTRICAL DEMOLITION NOTES

- 1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
- 2. EXAMINE THE DRAWINGS OF OTHER TRADES, BE FAMILIAR WITH THE DEMOLITION
- REQUIRED BY OTHER TRADES.

 3. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION OF DEVICES AND EQUIPMENT REQUIRED TO FACILITATE THE DEMOLITION WORK OF
- 4. COORDINATE WITH NEW WORK PLANS, ONE LINE, AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
- 5. COORDINATE ANY SHUTDOWN OF EXISTING SERVICES AND EQUIPMENT REMAINING IN USE WITH OWNERS' REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COST TO PERFORM THIS WORK DURING EVENING AND WEEKENDS. INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER.
- 6. REMOVE ALL CONDUIT AND WIRE BACK TO NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
- 7. WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM DEVICES TO REMAIN; EXTEND CONDUIT AND WIRE AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE.
- 8. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED AND WALL REMAINS INTACT. MARK ALL UNUSED CIRCUIT BREAKERS AS "SPARE".
- 9. CONTRACTOR TO TAG ALL CIRCUITS AT BOTH ENDS AFFECTED BY THIS SCOPE OF WORK.
- 10. CONTRACTOR SHALL PROVIDE UPDATED, TYPED—IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS SCOPE OF WORK.
- 11. CONTRACTOR SHALL VERIFY ALL UNDERGROUND AND IN-SLAB UTILITIES LOCATIONS PRIOR TO SAW CUTTING OR PENETRATING ANY FLOOR SLABS. CONTRACTOR SHALL REPAIR ALL UTILITIES DAMAGED BY SAW CUTTING.

DEMOLITION KEYED NOTES

- 1. EXISTING SPEAKER TO BE REMOVED AND RELOCATED. REFER TO NEW WORK
- 2. EXISTING PUSH-TO-CALL BUTTON TO BE REMOVED AND RELOCATED. REFER TO NEW WORK PLAN.

ISSUE DATE	ISSUED FOR
11/15/2021	BIDS
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- ALL RECEPTACLES ON EXTERIOR, IN KITCHEN, IN CONCESSION, IN LABORATORY, AND WITHIN 6'-0" OF SINK OR OTHER WATER SUPPLY SHALL BE READILY ACCESSIBLE GFCI TYPE RECEPTACLE.
- 2. REFER TO ARCHITECTURAL FLOOR PLANS AND ELEVATIONS TO VERIFY LOCATION OF DEVICES.
- 3. ALL CONDUITS SERVING 120 VOLTS OR GREATER SHALL INCLUDE A GROUND
- 4. ALL CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.
- 5. ALL 120 VOLT CIRCUITS SHALL UTILIZE A SEPARATE NEUTRAL.

A GFCI TYPE RECEPTACLE.

- 6. RECEPTACLES INSTALLED IN ELEVATOR HOISTWAY(S), ELEVATOR MACHINE ROOM(S), CONTROL ROOM(S)/SPACE(S) SHALL BE GROUND FAULT CIRCUIT INTERRUPTER TYPE (GFCI) WITH THE EXCEPTION OF A DEDICATED SINGLE PHASE RECEPTACLE SUPPLYING AN ELEVATOR PIT SUMP PUMP SHALL NOT BE
- 7. ALL BRANCH CIRCUITS THAT SUPPLY 125-V SINGLE PHASE, 15 AND 20 AMP OUTLETS TO BE INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER; COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.

LIGHTING GENERAL NOTES

- 1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES UNLESS OTHERWISE NOTED.
- 2. EXIT LIGHTS AND EMERGENCY BATTERY UNITS SHALL BE UNCONTROLLED AND TIED AHEAD OF LOCAL AREA LIGHTING SWITCH, UNLESS CIRCUITED OTHERWISE.
- 3. WHERE MORE THAN ONE LIGHT SWITCH IS INDICATED TO BE INSTALLED AT THE SAME LOCATION, THEY SHALL BE GROUPED UNDER ONE COMMON FACEPLATE.
- 4. ALL POWER PACKS TO BE LOCATED DIRECTLY ABOVE SWITCH.
- 5. LIGHT FIXTURES ARE LOOPED TOGETHER TO INDICATE CONTROL ZONE GROUPS. CONNECTED FIXTURES ARE TO BE CONTROLLED TOGETHER. CIRCUITS MAY BE SHARED AMONG SEPARATE CONTROL ZONE GROUPS. MULTIPLE ZONES ZONES MAY BE COMBINED IN SOFTWARE TO FORM SCENES. SEE LIGHTING CONTROL MATRIX: SCENE SCHEDULE (IF PROVIDED), AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
- 6. ALL CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.



KEYED NOTES

- 1. EXISTING SPEAKER TO BE REMOVED AND RELOCATED. REFER TO NEW WORK PLANS.
- 2. CONNECT NEW LIGHT FIXTURE TO EXISTING BRANCH CIRCUIT THAT FED REMOVED LIGHTING. EXTEND/MODIFY AS REQUIRED. PROVIDE NEW CONSTANT HOT FOR EMERGENCY FIXTURES AS REQUIRED. CONTRACTOR TO MARK UP CIRCUIT NUMBERS ON AS-BUILT DRAWING AND PROVIDE UPDATED TYPE WRITTEN PANEL DIRECTORIES.
- 3. RELOCATED PUSH-TO-CALL BUTTON. EXTEND WIRING AS REQUIRED.



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Schools
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WILLIAMSTON MICHIGAN

PARTIAL
ELECTRICAL DEMO
& NEW WORK
PLANS

PROJECT NUMBER

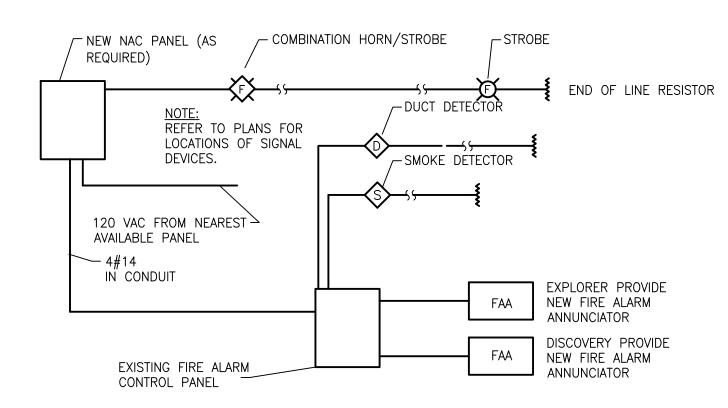
2020-006

SHEET NUMB

E2.10



Panel Designation		Main: MLO P-P Voltage: 208										208			
Panel Location: ELECTRICAL CLOSET Fed From: EXISTING			Bussing: 225A Ground Bus: STANDARD							P-N Voltage: 120 Phase: 3					
			Feeder Size: EXISTING						Mounting: SURFACE				4		
						Neutral: 100%									
Remarks	Light Load	Recept Load	Cont Load	nonC Load	OC Prot		Ø Ø			OC Prot	nonC Load	Cont Load	Recept Load	Light Load	Remarks
EXISTING PWR RECPT RM A134	Loud	900	LOGG	Loud	20		$\frac{\mathbf{x}}{\mathbf{x}}$		2	20	Loud	Loud	720	LOGG	il EXISTING PWR RECEPT RM A102
EXISTING PWR RECPT RM A134	-	720			20	3		x	4	20			540		EXISTING PWR RECEPT RM A103/105
EXISTING PWR RECPT RM A132	-	1080			20	5	+	$\frac{x}{x}$		20			900		EXISTING PWR RECEPT RM A105/114
EXISTING PWR RECPT RM A131	-	900			20		x	+^	8	20			720		EXISTING PWR RECEPT RM A108/110
EXISTING PWR RECPT RM A107		720			20	9		x	10	20			720		EXISTING PWR RECEPT RM A110/114
EXISTING PWR RECPT RM A107	-	540		1	20	11	+	^ _x		20	 		540		EXISTING PWR RECEPT RM A1129
EXISTING PWR RECPT RM A107	-	360			20		x	+^	14	20			720		EXISTING PWR RECEPT RM A110/111
EXISTING PWR RECPT RM A129	-	900			20	15		x	16	20			720		EXISTING PWR RECEPT RM A111
EXISTING PWR SOUND SYSTEM RM A128	-	/00		555	20	17	+	^ x		20			720		EXISTING PWR RECEPT RM A111
EXISTING PWR SOUND SYSTEM RM A128	-			787	20	19		$+\hat{x}$		20			540		EXISTING PWR TECH RECEPT RM A134
EXISTING PWR TECH RECPT RM A103	_	360		/0/	20	21		x ^	22	20			720		EXISTING PWR TECH RECEPT RM A102
EXISTING PWR TECH RECPT RM A105	-	900			20	23	+	$^{\downarrow}$	(24	20			900		EXISTING PWR TECH RECEPT RM A132
EXISTING PWR TECH RECPT RM A111	_	360			20	25	x	+^	26	20			540		
EXISTING PWR TECH RECPT RM ATTI	_	540		-	20	27		x	28	20	776		340		EXISTING PWR TECH RECEPT RM A131 EXISTING PWR CH
	-					27		_		20	888				
EXISTING PWR UVRM A127/128	_	1080			20		<u></u>	X			888		2/0		EXISTING PWR UV
Existing spare	_	900		0500	20		Х		32	20	750		360		PWR - RECEPT MAIN OFFICE
EXISTING PWR COPIER NORTH WALL				2500	30	33	- 1	X	34	20	750		700		EXISTING PWR BPS RM A115
	_			2500		35	.	X		20			720		EXISTING PWR TECH RECEPT RM A114
EXISTING PWR LOAD CHILLER HEATER	_			1200	20		X		38	20			900		PWR RECEPT MAIN OFFICE
SPACE						39	2	X	40	20	914				PWR - FCU-1 VESTIBULE & FRONT OFFICE
SPACE						41		X	42	20	850				PWR DOOR LATCH AND FIRE ALARM ANUN
		Connect	ed Load				Den	nand	d			Demana	Load]
Load Description	ØA	ØB	ØС	Total			Fac	ctor			ØA	ØB	ØС	Total	
Lighting or Continous Load (Volt-Amps)	0	0	0	0				.00			0	0	0	0	
180VA Receptacle Load (Volt-Amps)	7920	5940	7380	21240		1.00) (Firs	st 10)kVA)		3729	2797	3475	10000	Receptacle Demand Factor per Article
	Am	ount ove	r 10kVA	11240		0.5	50 (>	· 10k	(VA)		2096	1572	1953	5620	220.44 of the National Electrical Code.
Continuous Load (Volt-Amps)	0	0	0	0	1.00			0	0	0	0				
Non-Continuous Load (Volt-Amps)	1987	4940	4793	11720			1.	.00			1987	4940	4793	11720	
otal Load (kVA)	9.91	10.88	12.17	32.96	125% of Light/Cont and Recept				7.81	9.31	10.22	27.34			
otal Ampacity (Amps)	82.5	90.6	101.4	91.5	(<10kVA) load plus other load			65.0	77.5	85.1	75.9	1			
Minimum Feeder Sizing (Amps)	90.3	96.4	108.6	98.4	<	-		•			72.8	83.3	92.3	82.8	1

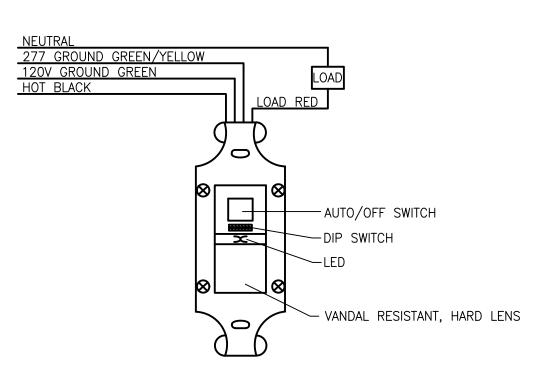


- FOR FIRE ALARM EQUIPMENT SPECIFICATION AND ADDITIONAL REQUIREMENTS, SEE SPECIFICATIONS.
- 2. ALL DUCT DETECTORS SHALL BE WIRED TO ACTIVATE ALARM SYSTEM AND SHUT DOWN FAN.
- 3. CANDELLA RATING ARE SHOWN IN ALL ROOMS, ALL AUDIO AND VISUAL RATINGS SHALL MEET OR EXCEED NFPA REQUIREMENTS. MINOR DEVIATIONS SUCH AS STROBE RATING, MISSING OF AUDIO/VISUAL UNITS, SMOKE DETECTORS UNITS, ETC. (MAX OF 10) SHALL BE INCLUDED.
- 4. PROVIDE REMOTE POWER SUPPLIES AS REQUIRED FOR NOTIFICATION APPLIANCE CIRCUITS, NOT TO EXCEED 80% OF CAPACITY.
- 5. PROVIDE SMOKE DETECTOR ABOVE EACH REMOTE POWER SUPPLY PANEL.
- 6. PROVIDE BATTERY, CURRENT LOAD AND VOLTAGE DROP CALCULATIONS.

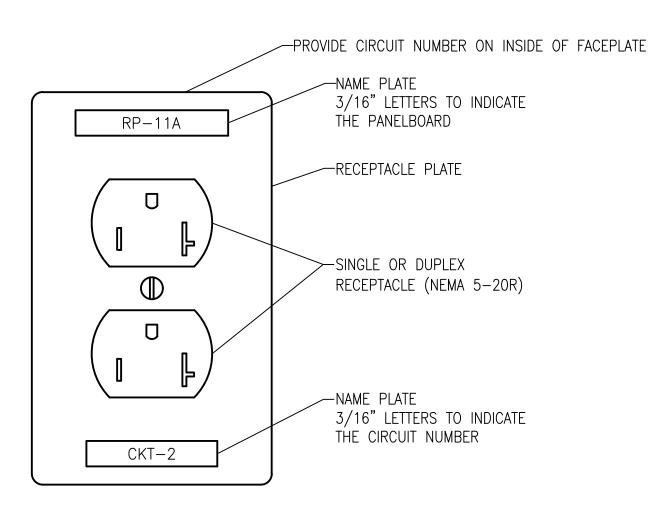
- 7. SEAL AROUND ALL PIPES & CONDUITS IN MASONRY AND DRYWALL WALLS.
- 8. ALL FIRE ALARM WIRING SHALL BE MINIMUM #14AWG. WIRING ABOVE CEILING SHALL BE PLENUM RATED AND RUN EXPOSED ON J-HOOKS, ANY WIRING IN WALLS SHALL BE RUN IN 3/4°C.
- 9. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHARGES INVOLVED IN OBTAINING APPROVAL AND CERTIFICATION FROM STATE ELECTRICAL INSPECTOR FOR A COMPLETE SYSTEM. CERTIFIED CONTRACTOR TO PAY ALL FEES REQUIRED.
- 10. THE ELEVATION DIAGRAM IS FOR REFERENCE PURPOSES. EXACT QUANTITIES OF DEVICES AND LOCATIONS SHALL COMPLY WITH NFPA GUIDELINES AND MEET APPROVAL OF THE STATE ELECTRICAL INSPECTOR. FIRE ALARM CONTRACTOR SHALL HAVE SHOP DRAWINGS APPROVED BY THE STATE ELECTRICAL INSPECTOR PRIOR TO COMMENCEMENT OF WORK.

11. FOR FIRE ALARM SYMBOL LEGEND SEE DRAWING E0.00.

PARTIAL FIRE ALARM RISER

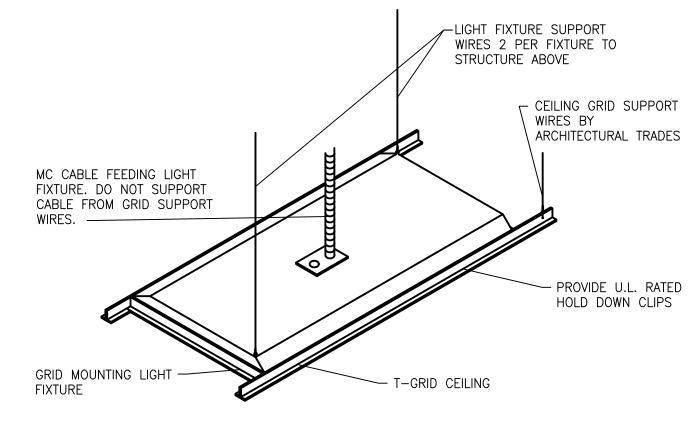


OFFICE OCCUPANCY SENSOR SCHEMATIC NO SCALE



DETAIL OF BRANCH CIRCUIT NUMBER ON RECEPTACLE PLATE

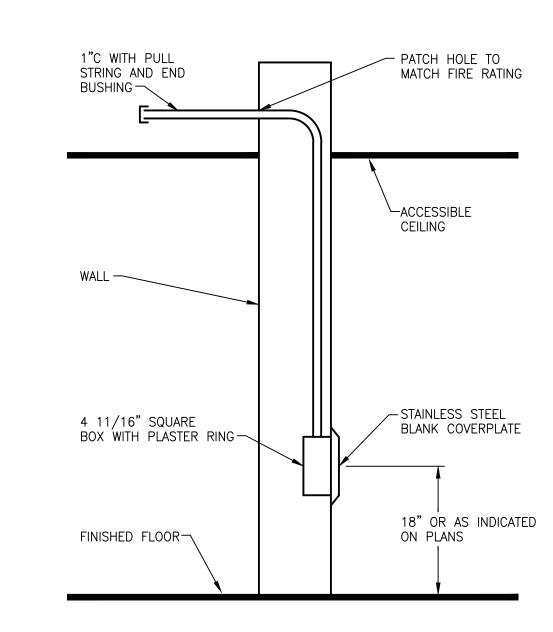
NO SCALE



ELECTRICAL FIXTURES

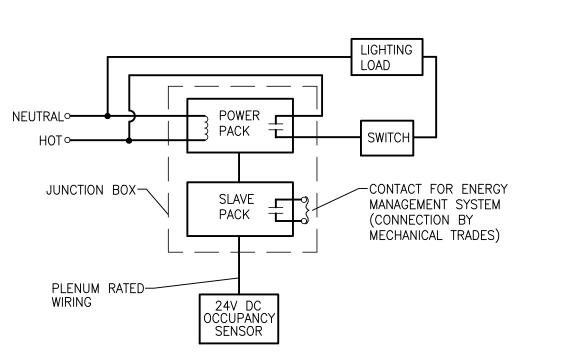
- 1. LIGHT FIXTURES WEIGHING LESS THAN 10 POUNDS SHALL HAVE ONE 12 GAUGE HANGER WIRE CONNECTED FROM THE FIXTURE TO THE STRUCTURE ABOVE. THIS WIRE MAY BE SLACK.
- 2. LIGHT FIXTURE WEIGHING MORE THAN 10 POUNDS AND LESS THAN 56 LBS. SHALL HAVE 12 GAUGE WIRES ATTACHED AT OPPOSING CORNERS OF THE LIGHT FIXTURE TO THE STRUCTURE ABOVE. THESE WIRES MAY BE
- 3. LIGHT FIXTURES WEIGHING MORE THAN 56 POUNDS SHALL BE SUPPORTED BY DIRECTLY FROM THE STRUCTURE ABOVE. THESE WIRES MUST BE TAUT.
- 4. PENDANT MOUNTED FIXTURES SHALL BE DIRECTLY SUPPORTED FROM THE STRUCTURE ABOVE USING A 9 GAUGE WIRE OR AN APPROVED ALTERNATE SUPPORT WITHOUT USING THE CEILING SUSPENSION SYSTEM FOR DIRECT
- 5. TANDEM FIXTURES MAY UTILIZE COMMON WIRES.

T-GRID FIXTURE MOUNTING DETAIL NO SCALE

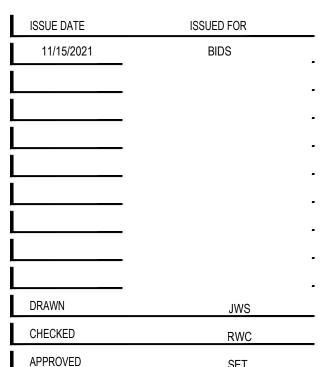


TELE/DATA OUTLET DETAIL

NO SCALE



TYPICAL CEILING MOUNTED OCCUPANCY SENSOR WIRING DIAGRAM NO SCALE





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WILLIAMSTON **MICHIGAN**

SHEET **ELECTRICAL** SCHEDULES & **DETAILS**

PROJECT NUMBER

2020-006