ARCH D - 24"x36" - 610mmx914mm (rounded)

WAYNE STATE UNIVERSITY

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1 ELEVATOR MODERNIZATION

5143 Cass Ave
Detroit, MI 48202
Wayne State Project No.: 16-327661
NORR Project No.: JCDT18-0229

PROJECT DIRECTORY

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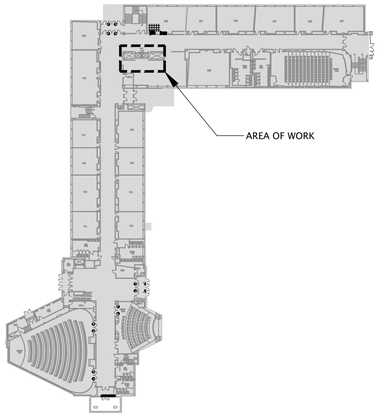


KEY PLAN -

LOCATION MAP

PROJECT NOTES

1. PROJECT SCALES ARE PROVIDED FOR REFERENCE ONLY. INCASE OF A DIMENSIONAL QUESTION OR DISCREPANCY SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CONSTRUCTION COORDINATOR
2. ALL WORK IS TO BE DONE IN ACCORDANCE WITH ALL LOCAL. STATE AND NATIONAL CODES HAVING JURISDICTION.
3. COORDINATE WITH WAYNE STATE UNIVERSITY PROJECT MANAGER AND FACILITY ENGINEERS FOR CONSTRUCTION ROUTES LOCATION OF DUMPSTER AND PROTECTION OF EXISTING OCCUPANTS AND MATERIAL FINISHES
4. AREA OUTSIDE OF PROJECT SCOPE ARE TO REMAIN OCCUPIED DURING RENOVATION. PROTECT ELECTRICAL POWER, LIGHTING AND DATA CABLES TO MAINTAIN FUNCTIONAL USE.
5. PROVIDE A SCHEDULE FOR SHUTDOWN OF MECHANICAL AND ELECTRICAL SYSTEMS
6. PROVIDE PROTECTION ALONG ENTIRE ROUT FOR REMOVAL OF DEBRIS INCLUDING CORRIDOR AND ALL ELEVATOR LOBBIES
7. ELEVATORS TO BE PROTECTED & "NOT IN SERVICE" SIGNAGE INSTALLED DURING PROJECT LENGTH.
8. DEMO (NOISY) WORK TO BE COMPLETED AFTER HOURS.

SCOPE OF WORK

1. ARCHITECTURAL, MECHANICAL AND ELECTRICAL IMPROVEMENTS TO SUPPORT THE MODERNIZATION OF THE TWO (2) EXISTING STATE HALL ELEVATORS & HOISTWAY (BY OWNERS VENDOR) AND ALLOW THE MACHINE ROOM AND HOISTWAY (BASEMENT THROUGH FOURTH FLOOR) TO BE UPGRADED TO MEET CURRENT ELEVATOR CODES. OWNER HAS CONTRACTED CONVEYING SYSTEMS SCOPE OF WORK SEPARATELY WITH ELEVATOR MANUFACTURER/INSTALLER (KONE). THIS WORK INCLUDES BUT IS NOT LIMITED TO THE EXISTING CONTROLLERS, DEFLECTOR SHEAVES, TAIL END SHEAVES, CAB DOORS, DOOR DETECTORS, OPERATORS, FANS, CABLES, EMERGENCY LIGHTS, AND ROLLER GUIDES BEING REPLACED IN THEIR ENTIRETY. GENERAL CONTRACTOR RESPONSIBLE FOR COORDINATING WITH OWNER'S VENDOR (KONE).
2. EXISTING SMOKE EXHAUST LOUVER WILL BE ENLARGED AND CONNECTED TO AN AUTOMATIC SMOKE/FIRE DAMPER
3. FIRE SUPPRESSION SPRINKLER HEADS WILL BE ADDED TO THE TOP OF SHAFT & MACHINE ROOM. A SHUNT TRIP IS TO BE INSTALLED AT THE ELEVATOR EQUIPMENT ROOM.
4. EXISTING ELECTRICAL SERVICE WILL BE UPGRADED TO MEET CURRENT CODE REQUIREMENTS .

ALTERNATE #1: PAINT EXIST CORRIDOR ELEVATORS DOORS & FRAMES. PAINT TBD

CODES / STANDARDS

AUTHORITY HAVING JURISDICTION: *CITY OF DETROIT, MI*		
MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA)	BUREAU OF CONSTRUCTION CODES	*(MRCEB) MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS* *(MBC) MICHIGAN BUILDING CODE - 2015* *(MMC) MICHIGAN MECHANICAL CODE - 2015 PART 9A MECHANICAL CODE - 2015* *(MPC) MICHIGAN PLUMBING CODE - 2015* *(MEC) NATIONAL ELECTRICAL CODE - 2014 MICHIGAN ELECTRICAL CODE RULES PART 8* *(MUEC) MICHIGAN ENERGY CODE - 2015*
	BUREAU OF FIRE SERVICES	*NFPA 101 LIFE SAFETY CODE - 2012*
ASME A17.1 -2004 - SAFETY CODE FOR ELEVATORS AND ESCALATORS		
ASME A17.1 -2004 - SAFETY CODE FOR ELEVATORS AND ESCALATORS		
ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDING AND FACILITIES		
DEPARTMENT OF JUSTICE, FEDERAL ADA ACCESSIBILITY GUIDELINES FOR BUILDING AND FACILITIES (28 CFR PART-35)		

PROJECT CODE SUMMARY

BUILDING CLASSIFICATION:

OCCUPANCY CLASSIFICATION AND CONSTRUCTION TYPES PER MBC CHAPTERS 3, 4, 5, AND 6

BASIC OCCUPANCY GROUP(S) : *[PER MBC CHAPTER 3]*

○ GROUP A-1	○ GROUP	○ GROUP
○ GROUP	○ GROUP	● GROUP B
○ GROUP E	○ GROUP F-1	○ GROUP F-2
○ GROUP H-1	○ GROUP H-2	○ GROUP H-3
○ GROUP H-4	○ GROUP H-5	○ GROUP I-1
○ GROUP I-2	○ GROUP I-3	○ GROUP I-4
○ GROUP M	○ GROUP R-1	○ GROUP R-2
○ GROUP R-3	○ GROUP R-4	○ GROUP S-1
○ GROUP S-2	○ GROUP U	

MIXED USE AND OCCUPANCY : *[PER MBC SECTION 508]*

● ACCESSORY OCCUPANCIES *[MBC 508.2]*
[Accessory Occupancies <10% of Story]
○ INCIDENTAL ACCESSORY *[MBC 509]*
○ NONSEPARATED *[MBC 508.3]*
○ SEPARATED OCCUPANCIES *[MBC 508.4]*

*REFER TO FIRE AND LIFE SAFETY PLANS FOR REQUIREMENTS

TYPE(S) OF CONSTRUCTION : *[PER MBC CHAPTER 6]*
TYPE I : ○ A ● B
TYPE II : ○ A ○ B
TYPE III : ○ A ○ B
TYPE IV : ○ HT
TYPE V : ○ A ○ B

SPECIAL DETAILED REQUIREMENTS :

○ HIGH-RISE BUILDING *[PER MBC SECTION 403]*
○ ATRIUM *[PER MBC SECTION 404]*
○ OPEN PARKING *[PER MBC SECTION 406.5]*
○ GROUP I-2: *[PER MBC SECTION 407]*
- SMOKE COMPARTMENTS
- REFUGE AREA
○ HAZARDOUS MATERIALS: *[PER MBC SECTION 414]*
- CONTROL
○ MEZZANINE *[PER MBC SECTION 505]*

MEANS OF EGRESS:

*REFER TO THE LIFE SAFETY PLANS FOR ACTUAL MEASURED DISTANCES.

DOORS :
[PER MBC 1010.1.1]
THE MINIMUM CLEAR WIDTH AND HEIGHT OF A DOOR SHALL NOT BE LESS THAN 32 INCHES AND 80 INCHES RESPECTIVELY.

[PER MBC 1010.1.2.1]
DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL, WHERE SERVING AN OCCUPANT LOAD OF 50 OR MORE PERSONS.

CORRIDORS:
[PER MBC 1020.2]
CORRIDOR WIDTH SHALL BE 44 INCHES MINIMUM.

COMMON PATH OF EGRESS TRAVEL (MBC 1006.2.1)		
OCCUPANCY	SPRINKLERED	MAX. DISTANCE
B	*NO*	*75' - 0"*

EXIT ACCESS TRAVEL DISTANCE (MBC TABLE 1017.2)		
OCCUPANCY	SPRINKLERED	MAX. DISTANCE
B	*NO*	*200' - 0"*

DEAD ENDS (MBC 1020.4 EX 2)		
OCCUPANCY	SPRINKLERED	MAX. DISTANCE
B	*NO*	*20' - 0"*

MIN. NUMBER OF EXITS FOR OCCUPANT LOAD (MBC 1006.3.1)	
OCCUPANT LOAD	MIN. # OF EXITS PER STORY
1-500	*2*
501-1,000	*3*
MORE THAN 1,000	*4*

EXIT CAPACITY FACTORS:

[PER MBC 1005.3.1, 1005.3.2]

MINIMUM REQUIRED EGRESS WIDTH : ◒ SPRINKLERED
STAIRWAYS *0.2* (4TH FLOOR ONLY)
OTHER EGRESS COMPONENTS *0.15*

*REFER TO THE LIFE SAFETY PLANS FOR COMPLIANCE WITH MEANS OF EGRESS WIDTH REQUIREMENTS.

LIFE SAFETY SYSTEMS:

(PER MBC AND IFC CHAPTER 9)

AUTOMATIC SPRINKLER SYSTEM : ◒ PROVIDED PER NFPA 13
(FOURTH FLOOR ONLY)

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS : ○ PROVIDED - REFER TO FIRE PROTECTION DRAWINGS

STANDPIPE SYSTEM (FOURTH FLOOR COVERAGE) : ● PROVIDED PER NFPA 14

PORTABLE FIRE EXTINGUISHERS : ● PROVIDED PER NFPA 10

FIRE ALARM SYSTEM : ● PROVIDED PER NFPA 72

MINIMUM FIRE-RESISTANCE REQUIREMENTS:

FIRE-RESISTIVE RATING REQUIREMENTS FOR BUILDING ELEMENTS :
[PER MBC TABLE 601]

TYPE OF CONSTRUCTION: *IB*

PRIMARY STRUCTURAL FRAME	*2 HOURS*
BEARING WALLS (EXT) :	*2 HOURS*
BEARING WALLS (INTR) :	*2 HOURS*
NON-BRG WALLS AND PARTITIONS (EXT) *PER MBC TABLE 602:*	*0 HOURS*
NON-BRG WALLS AND PARTITIONS (INTR)	*0 HOURS*
FLOOR CONSTR AND SECONDARY MEMBERS	*2 HOURS*
ROOF CONSTR AND SECONDARY MEMBERS	*1 HOURS*

FIRE-RESISTANCE RATING FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE {X} : *[PER MBC TABLE 602]*

CONSTRUCTION TYPE / OCCUPANCY *IB / B*

X < 5 FT	*1 HOURS*
5 FT ≤ X < 10 FT	*1 HOURS*
10 FT ≤ X < 30 FT	*1 HOURS*
X > 30 FT	*0 HOURS*

MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE:*[PER MBC TABLE 705.8]*

FIRE SEPARATION DISTANCE	DEGREE OF OPENING PROTECTION (UP, NS)	(UP, S)	(P)
10 < 15 FT	15%	45%	45%

UP - UNPROTECTED, P - PROTECTED,
NS - NOT SPRINKLERED, S - SPRINKLERED

ADDITIONAL FIRE-RESISTIVE RATINGS :

DESCRIPTION	CODE SECTION	RATING (HR)
SHAFT ENCLOSURES	*MBC 713.4*	
FOUR STORIES OR MORE :		*2*
LESS THAN FOUR STORIES:		*1*
EXIT ENCLOSURES	*MBC 1023.2*	
FOUR STORIES OR MORE :		*2*
LESS THAN FOUR STORIES:		*1*
EXIT PASSAGEWAYS :	*MBC 1024.3*	*2*
HOISTWAY ENCLOSURES :	*MBC 713.4*	*2*
ELEVATOR MACHINE ROOMS :	*MBC 3005.4*	*2*

CORRIDORS: SPRINKLERED: ○ *[MBC TABLE 1020.1]*
OCCUPANCY: *B* OCC LOAD SERVED: *ALL* RATING (HR):*1 (0 @ FOURTH FLOOR)*

ARCHITECTURAL INDEX

Sheet Number	Sheet Title		ADDENDUM #1	PERMIT & BID SET	OWNER REVIEW
G0-00	COVER SHEET		●	●	●
G0-01	CODE COMPLIANCE PLANS			●	●
G0-02	CODE COMPLIANCE PLANS			●	●
A1-01	DEMOLITION AND NEW WORK FLOOR PLANS		●	●	●

ELECTRICAL INDEX

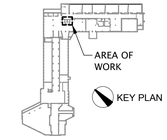
Sheet Number	Sheet Title		ADDENDUM #1	PERMIT & BID SET	OWNER REVIEW
E0-01	ELECTRICAL SYMBOLS AND ABBREVIATIONS			●	●
E0-02	ONE LINE DIAGRAM AND PANEL SCHEDULES		●	●	●
ED-01	ELECTRICAL DEMOLITION PLANS		●	●	●
E1-01	ELECTRICAL NEW PLANS		●	●	●

MECHANICAL INDEX

Sheet Number	Sheet Title		ADDENDUM #1	PERMIT & BID SET	OWNER REVIEW
FP1-01	FIRE PROTECTION AND PLUMBING PLANS - BASEMENT		●	●	●
M1-01	MECHANICAL DEMOLITION AND NEW WORK PLANS NOTES AND SCHEDULES		●	●	●

DATE	ISSUED FOR	REV
08-02-19	OWNER REVIEW	-
08-19-19	PERMIT AND BID SET	-
09-05-19	ADDENDUM #1	-
09-18-19	PERMIT AND BID SET	-

Keyplan



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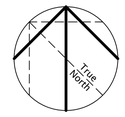

Detail Symbol

Detail No.
Sheet No.

Seal(s)

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A. NOLFF	R. HAAS
Project Leader	Checked
R. HAAS	G. KARANFILOVSKI

Client

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Drawing Title

Check Scale (may be photo reduced)
0 1inch 0 10mm

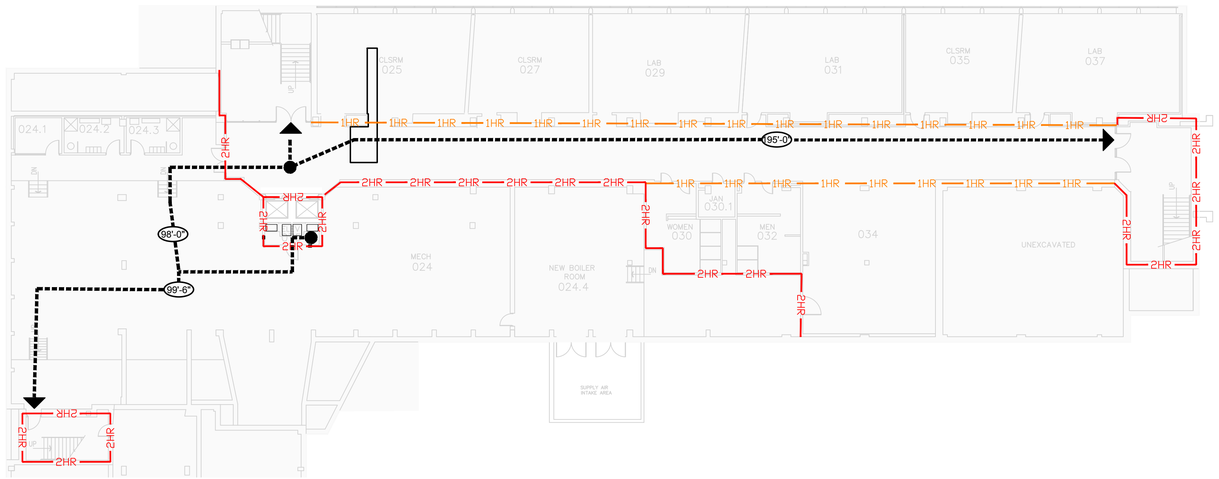
Project No. JCDT18-0229

Drawing No.

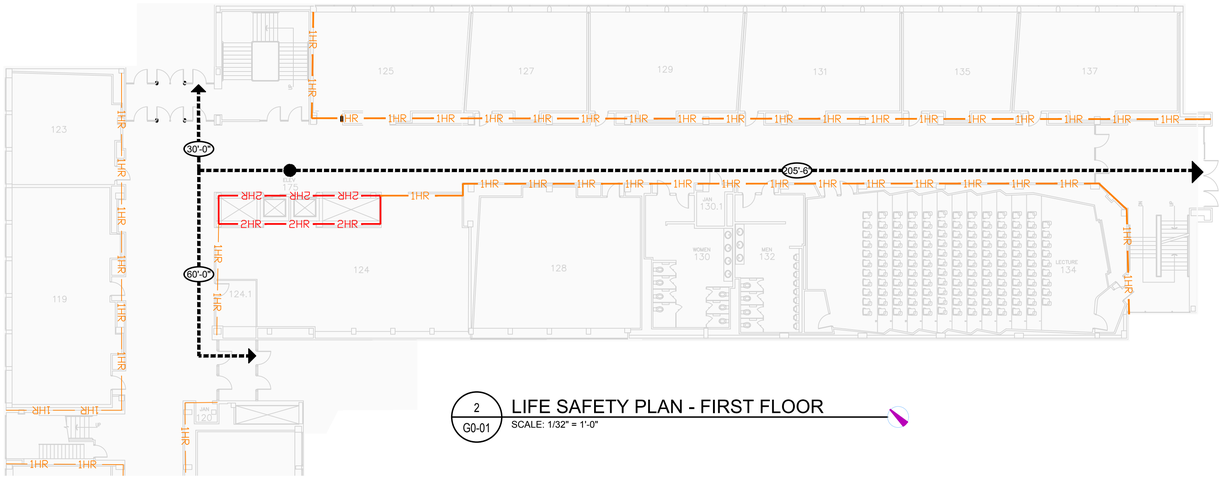
ARCH D - 24"x36" - 610mmx914mm (rounded)

PARTITION LEGEND

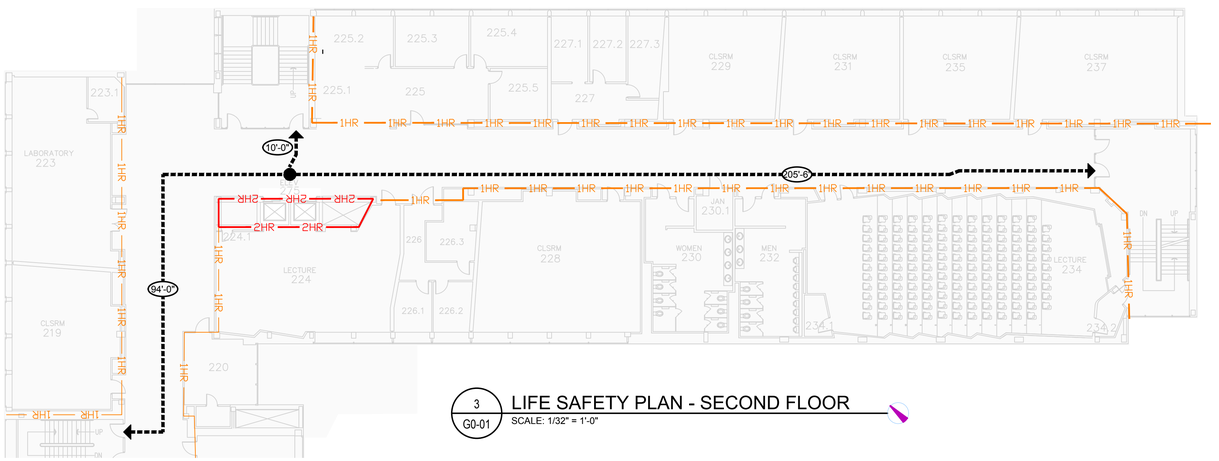
NFPA 101 - LIFE SAFETY CODE- 2000 / 2006 EDITION	
WALL RATING	
One - Hour NFPA 1HR	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * No Fire Dampers Required * 3/4 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
Two - Hour 2HR	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * Fire Dampers Required * 1 1/2 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
Exterior Entry / Egress Door	* Entry / Egress Door Way
	* Egress Travel Pass
	EXISTING AREA NOT IN PROJECT SCOPE



1 / G0-01 LIFE SAFETY PLAN - BASEMENT
SCALE: 1/32" = 1'-0"



2 / G0-01 LIFE SAFETY PLAN - FIRST FLOOR
SCALE: 1/32" = 1'-0"



3 / G0-01 LIFE SAFETY PLAN - SECOND FLOOR
SCALE: 1/32" = 1'-0"

DATE	ISSUED FOR	REV
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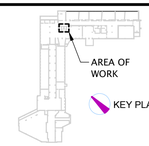
09-05-19	ADDENDUM #1	
09-18-19	PERMIT AND BID SET	-

Keyplan



North Arrow

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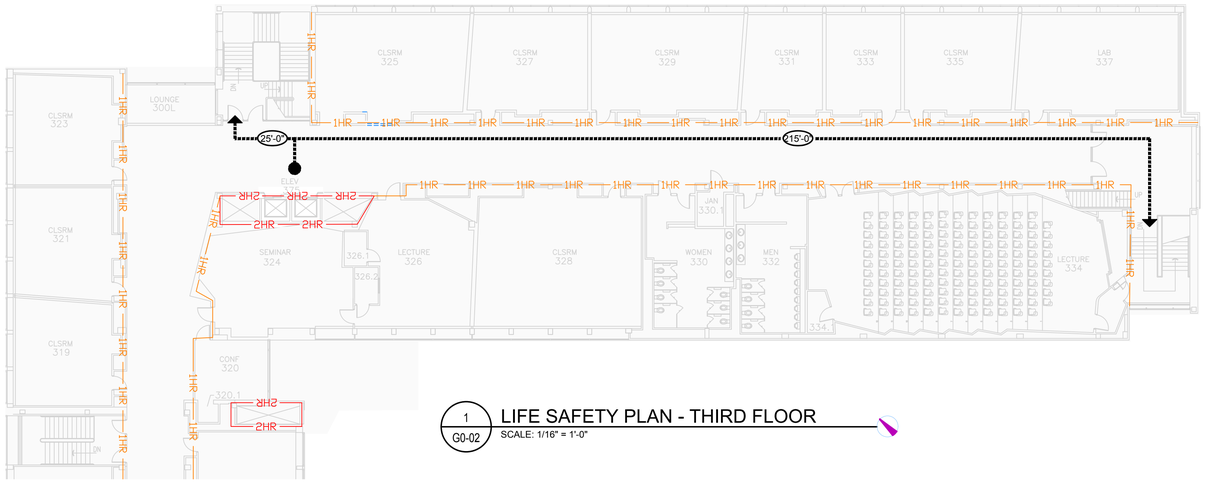

1 G0-02 LIFE SAFETY PLAN - THIRD FLOOR
SCALE: 1/16" = 1'-0"

2 G0-02 LIFE SAFETY PLAN - FOURTH FLOOR
SCALE: 1/16" = 1'-0"

PARTITION LEGEND

NFPA 101 - LIFE SAFETY CODE- 2000 / 2006 EDITION	
WALL RATING	
One - Hour 1HR	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm. * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * No Fire Dampers Required * 3/4 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
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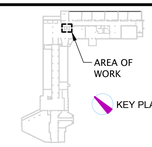
Keyplan



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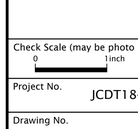

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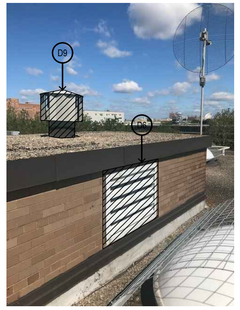
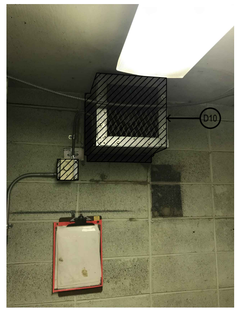
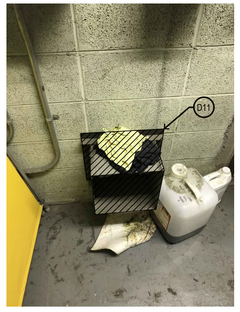


9A / A1-01 PENTHOUSE DEMO
SCALE: 1/8" = 1'-0"



9B / A1-01 MACHINE ROOM DEMO
SCALE: 1/8" = 1'-0"



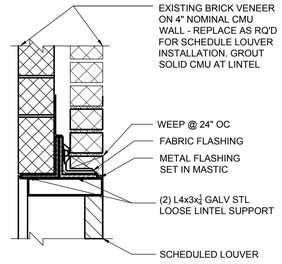
9C / A1-01 MACHINE ROOM DEMO
SCALE: 1/8" = 1'-0"

STEEL LINTELS FOR CMU WALLS

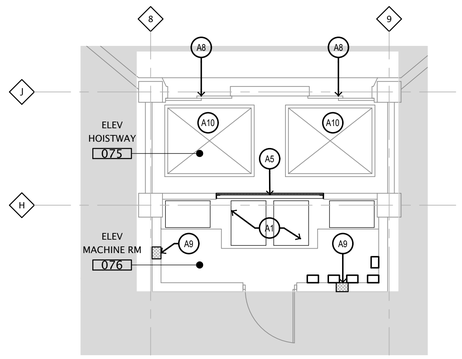
SPAN	4"	6"
< 3'-11"	L3x3x¼	(2) L3x2½x¼ (LLV) OR WT 4x9

NOTES:

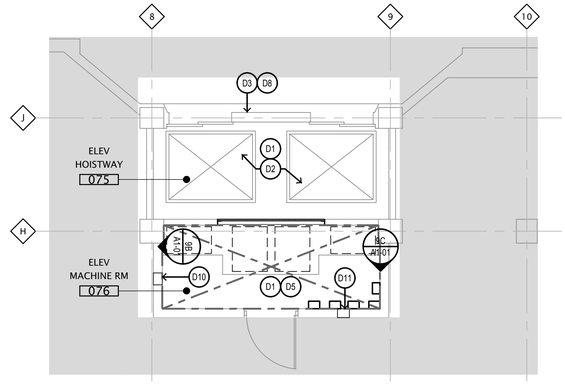
1. LINTELS FOR SPANS TO 7'-11" REQUIRE 6" BEARING EACH END.
2. GROUT CMU SOLID OR USE SOLID CMU 12" BACK FROM OPENING 2 COURSES BELOW BEARING POINT.
3. LINTEL DESIGN BASED ON NON LOAD BEARING WALL CONDITIONS
4. COPE ENDS OF LINTELS AS REQUIRED TO PROVIDE 3/4"" MIN MORTAR IN JOINT.



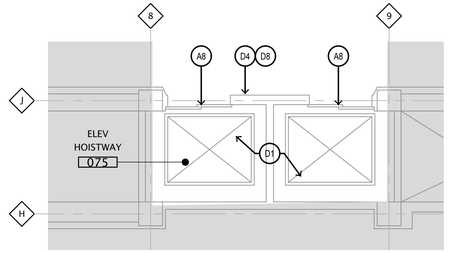
10 / A1-01 MECHANICAL LOUVER LINTEL
SCALE: 1/8" = 1'-0"



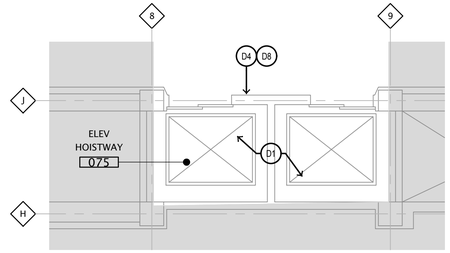
5 / A1-01 BASEMENT FLOOR PLAN
SCALE: 1/8" = 1'-0"



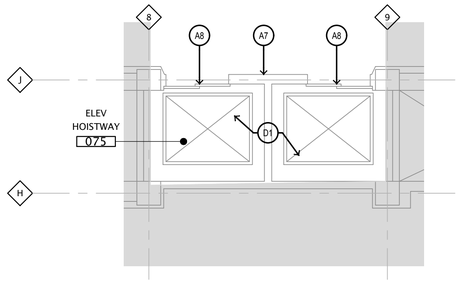
1 / A1-01 DEMOLITION PLAN - BASEMENT
SCALE: 1/8" = 1'-0"



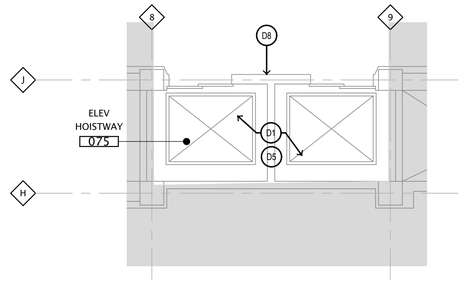
6 / A1-01 FIRST FLOOR PLAN
DEMOLITION PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"



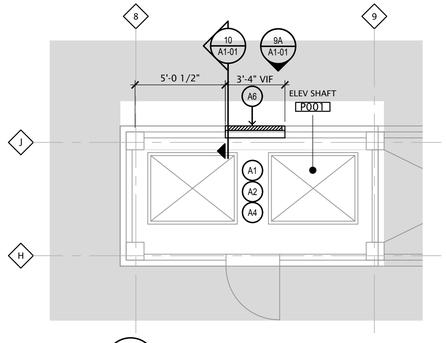
2 / A1-01 DEMOLITION PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"



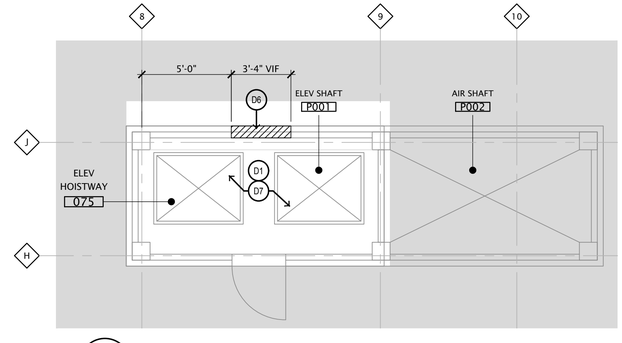
7 / A1-01 SECOND THROUGH FOURTH FLOOR PLAN
SCALE: 1/8" = 1'-0"



3 / A1-01 DEMOLITION PLAN - SECOND THROUGH FOURTH FLOOR
SCALE: 1/8" = 1'-0"



8 / A1-01 PENTHOUSE PLAN
SCALE: 1/8" = 1'-0"



4 / A1-01 DEMOLITION PLAN - PENTHOUSE
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	EXISTING PARTITIONS TO REMAIN. PATCH AND REPAIR CMU BLOCK & GYP. BD. AS NECESSARY TO ENSURE A SMOOTH, SEAMLESS FINISH SUITABLE FOR NEW PAINT OR WALL COVERING.
	EXISTING PARTITION OR EQUIPMENT TO BE REMOVED.
← #	KEY NOTE DESIGNATION
	AREA OF EXISTING NOT IN CONTRACT

GENERAL DEMOLITION NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODES, ORDINANCES, AND REGULATIONS, INCLUDING THE RULES AND STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, BOCA, NFPA AND OSHA.
2. THE CONTRACTOR SHALL VISIT THE EXISTING SITE AND BUILDING AND SHALL EXAMINE ALL OF THE PHYSICAL CONDITIONS THAT AFFECT THE CONTRACT PRICE, NOTING THE LOCATION OF EXISTING EQUIPMENT AND SERVICES, ETC. NO ADDITIONS TO THE CONTRACT PRICE WILL BE PERMITTED DUE TO AN IGNORANCE OF EXISTING CONDITIONS THAT ARE OBSERVABLE PRIOR TO CONSTRUCTION.
3. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING FIELD CONDITIONS TO FAMILIARIZE HIMSELF WITH DEMOLITION AND OR REMOVAL WORK WHICH MAY BE REQUIRED TO PRODUCE THE END RESULTS OF THE CONTRACT DOCUMENTS.
4. PROTECT ALL ITEMS AND FINISHES INCLUDING BUT NOT LIMITED TO EXISTING COLUMNS, EXISTING TO REMAINING WINDOWS, DOORS, GLAZING, STRUCTURAL MEMBERS NOT SPECIFIED TO BE DEMOLISHED OR REMOVED FROM DUST AND DAMAGE.
5. CONTRACTOR SHALL PROVIDE OWN DUMPSTER(S). ALL DEMOLITION DEBRIS SHALL BE REMOVED FROM SITE BY DEMOLITION CONTRACTOR. DUMPSTER LOCATION SHALL BE APPROVED BY OWNER OR PROJECT MANAGER.
6. AREA OF DEMOLITION/ CONSTRUCTION SHALL BE LEFT BROOM CLEAN.
7. IN AREA OF CONSTRUCTION REMOVE FLOORING, WALL BASE, WALL COVERING LIGHTING AND OTHER ITEMS AS SHOWN ON DRAWING (U.O.N.)
8. MOST SCHEDULED SHUT DOWNS OF BUILDING SYSTEMS WILL BE AT NIGHT OR ON WEEKENDS.
9. SECURE CONSTRUCTION ZONE OF BUILDING THROUGHOUT ENTIRE DEMOLITION PROCESS.

DEMOLITION NOTES BY SYMBOL:

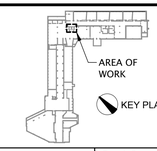
- D1 OWNER'S ELEVATOR INSTALLER RESPONSIBLE TO REMOVE EXISTING ELEVATOR CONTROLLERS, MOTORS, GOVERNORS AND MISC. ADDITIONAL EQUIPMENT AS REQUIRED FOR ELEVATOR MODERNIZATION UPGRADES. GC TO COORDINATE WITH OWNER'S VENDOR.
- D2 DEMOLISH AND REPLACE EXIST ELEVATOR PIT LIGHT FIXTURES AND GFCI POWER OUTLETS. REFER TO ELEC DWGS FOR ADDITIONAL INFO.
- D3 DEMOLISH EXIST ELEVATOR KEYSWITCH @ BASEMENT LEVEL. PROVIDE COVERPLATE AT FORMER LOCATION. PAINT WALL TO MATCH EXIST ADJACENT FINISH.
- D4 MOVE EXIST FIRST FLOOR KEYSWITCH TO APPROX 60" AFF FROM ITS CURRENT LOCATION. ABANDON EXIST FIRST FLOOR AND BASEMENT KEYSWITCH JUNCTION BOX AND PROVIDE STEEL COVERPLATE AT EXISTING LOCATION. PATCH & PAINT WALL TO MATCH EXIST ADJACENT
- D5 ALL PENETRATIONS INTO MACHINE ROOM & HOISTWAY TO RECEIVE A 2-HOUR FIRE RATED ASSEMBLY. REFER TO MECH DWGS FOR ADDITIONAL INFO
- D6 EXIST ELEVATOR HOISTWAY EXHAUST LOUVER TO BE DEMOLISHED IN IT'S ENTIRETY. ADJACENT EXTERIOR MASONRY WALL AND ROOF EDGE ASSEMBLY TO BE PARTIALLY DEMOLISHED AS REQ'D FOR INSTALLED SCHEDULED LOUVER AND MISC. STEEL LINTEL. PATCH AND REPAIR ROOF EDGE ASSEMBLY AS NECESSARY.
- D7 EXISTING SMOKE DETECTOR TO BE REPLACED & TIED INTO EXISTING BUILDING MANAGEMENT SYSTEM. SMOKE DETECTOR IN SHAFT TO ACTIVATE DAMPER AT EXTERIOR EXHAUST LOUVER. REFER TO ELECTRICAL DWGS FOR ADDITIONAL INFORMATION.
- D8 OWNER'S ELEVATOR VENDOR RESPONSIBLE TO REMOVE EXIST ELEVATOR LANTERNS/CALL BUTTON CONTROL PANELS AS REQUIRED FOR ELEVATOR MODERNIZATION UPGRADES - TYP @ EA FLOOR. GC TO COORDINATE WITH OWNER'S VENDOR.
- D9 REMOVE EXIST PASSIVE EXHAUST VENT ON HOISTWAY ROOF. PATCH AND REPAIR ROOF AND GROUT SOLID EXIST CORED CONCRETE OPENING.
- D10 REMOVE EXIST AIR EXHAUST FAN & ASSOCIATED CONDUIT AND SWITCHING. PROVIDE 2-HR RATED BLOCK INFILL IN REMAINING OPENING. REFER TO MECH & ELEC DWGS FOR ADDITIONAL INFORMATION.
- D11 REMOVE EXIST AIR INTAKE GRILLE. PROVIDE 2-HR RATED BLOCK INFILL IN REMAINING OPENING. REFER TO MECH DWGS FOR ADDITIONAL INFO.

CONSTRUCTION NOTES BY SYMBOL:

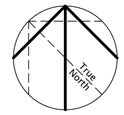
- A1 OWNER'S ELEVATOR VENDOR RESPONSIBLE FOR SCHEDULED ELEVATOR MODERNIZATION EQUIPMENT UPGRADES/REPLACMENT THROUGHOUT HOISTWAY, CABS AND MACHINE ROOM. GC TO COORDINATE WITH OWNER'S VENDOR.
- A2 GC TO PROVIDE NEW SMOKE DETECTOR TIED INTO SCHEDULED EXHAUST LOUVER - REFER TO MECH & ELEC DWGS.
- A3 GC TO INSTALL SCHEDULED ELEVATOR PIT LIGHTS AND REPLACMENT GFCI JUNCTION BOXES. REFER TO ELEC DWGS
- A4 INSTALL NEW SPRINKLER HEAD @ TOP OF HOISTWAY SHAFT CONNECTED WITH SHUNT HEAT TRIP DETECTOR. SEE FP & ELEC DWGS
- A5 MESH SCREENWALL DIVIDER BETWEEN HOISTWAY SHAFT AND MECHANICAL ROOM BY OWNER'S ELEVATOR VENDOR. GC TO COORDINATE WITH OWNER'S VENDOR.
- A6 SCHEDULED HOISTWAY VENTILATION LOUVER. PROVIDE (2) L3x3x¼" STEEL LINTEL ANGLES. LENGTH TO ACCOMMODATE NEW MASONRY OPENING. PATCH AND REPAIR EDGE OF AND PORTION OF ROOF AND FLASHING THAT MAY BE DAMAGED DURING LOUVER INSTALLATION.
- A7 REPLACEMENT ELEVATOR CALL BUTTON PANEL BY ELEVATOR VENDOR
- A8 ALTERNATE #1: PAINT CORRIDOR FACING ELEVATOR DOOR AND FRAME - PAINT COLOR TBD
- A9 INFILL OPENING W/ 2-HR RATED CMU BLOCK.
- A10 REPLACE EXISTING ELEVATOR CAB RESILIENT BASE. PROVIDE & INSTALL JOHNSONITE 4" RUBBER COVE BASE, COLOR: 040 BLACK.

DATE	ISSUED FOR	REV
08-02-19	OWNER REVIEW	-
08-19-19	PERMIT AND BID SET	-
09-05-19	**ADDENDUM #2**	-
09-18-19	PERMIT AND BID SET	-

Keyplan



North Arrow



Detail Symbol

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STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

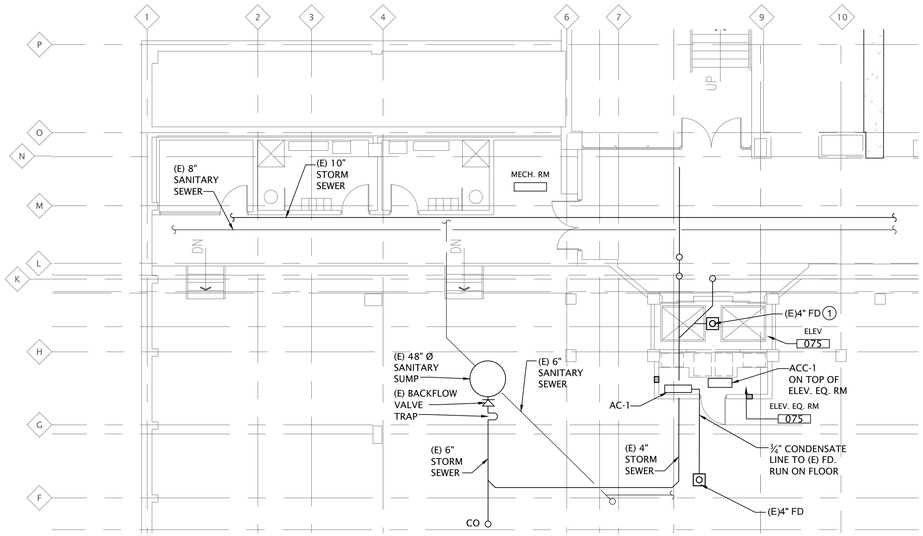
Drawing Title

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No.
JCDT18-0229

Drawing No.

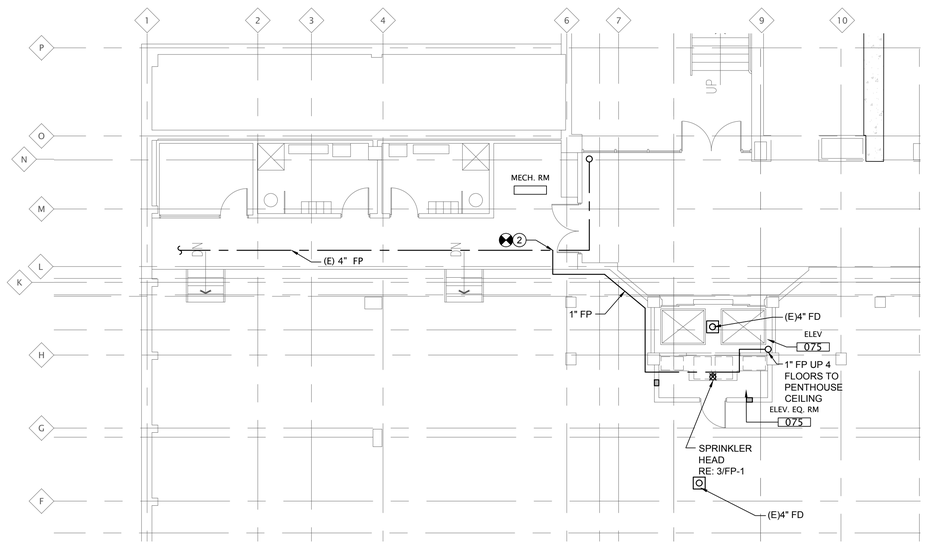
ARCH D - 24"x36" - 610mmx914mm (rounded)



2 PLUMBING PLAN - BASEMENT

FP1-01

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



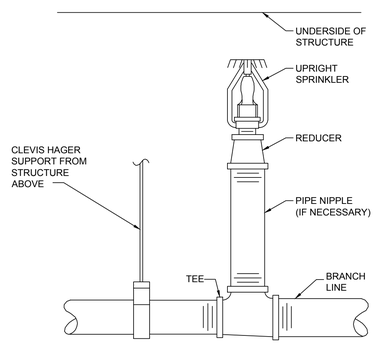
1 FIRE PROTECTION PLAN - BASEMENT

FP1-01

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

NOTES BY SYMBOL:

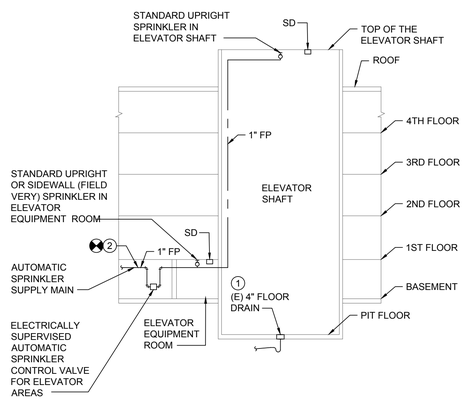
1. EXISTING 4" FLOOR DRAIN TO BE REUSED. INSTALL TRAP SEAL PRIMER FOR THE EXISTING DRAIN.
2. NEW 1" FIRE PROTECTION PIPE TO BE CONNECTED TO 6" EXISTING FIRE PROTECTION MAIN IN BASEMENT MECHANICAL ROOM. FIELD VERIFY EXACT SIZE AND POINT OF CONNECTION TO THE EXISTING PIPE.



4 UPRIGHT SPRINKLER HEAD DETAIL

FP1-01

SCALE: NOT TO SCALE



NOTES:

1. AUTOMATIC SPRINKLER IN ELEVATOR EQUIPMENT ROOM TO BE 1/2" ORIFICE , 212 °F RATED.
2. SMOKE DETECTORS IN ELEVATOR EQUIPMENT ROOM AND AT TOP OF ELEVATOR SHAFT TO BE 160°F RATED.
3. SMOKE DETECTOR AND AUTOMATIC SPRINKLER CONTROL VALVE TO BE WIRED TO ELEVATOR CONTROLS TO SHUT DOWN ELEVATOR PRIOR TO ACTUATION OF AUTOMATIC SPRINKLERS.
4. SPRINKLERS INDICATED ARE SCHEMATIC ONLY, ACTUAL LOCATION AND SPACING OF SPRINKLERS TO BE IN ACCORDANCE WITH NFPA 13.

3 AUTOMATIC SPRINKLERS FOR ELEVATOR HOISTWAY DIAGRAM

FP1-01

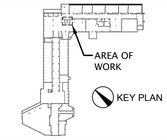
SCALE: NOT TO SCALE

FIRE PROTECTION GENERAL NOTES:

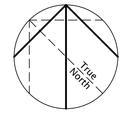
1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL INTENT OF THE WORK. PROVIDE FIRE PROTECTION SYSTEMS COMPLETE, PER APPLICABLE CODES, PER NFPA, AND PER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION INCLUDING ALL PIPING, OFFSETS, FITTINGS, DRAINS, VALVES, SPRINKLER HEADS, ETC.AS REQUIRED FOR A COMPLETE OPERABLE SYSTEM.
2. FIRE PROTECTION CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES.
3. MINIMUM RUN-OUT PIPE SIZE TO SPRINKLER HEADS SHALL BE 1".
4. FIRE PROTECTION WATER SUPPLY SOURCE SHALL BE PER NFPA 24.
5. CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL INSPECTION, PERMIT AND LICENSE REQUIRED BY THE LOCAL AUTHORITY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE TURN KEY INSTALLATION USING UNDERWRITER LABORATORIES UL LISTED PRODUCTS INCLUDING DESIGN, OBTAINING APPROVALS AND COORDINATION WITH OTHER TRADES.
7. INSTALL TO MEET NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS AND NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.
8. NORR DESIGN DOCUMENTS ARE FOR PERMIT PURPOSES.
9. THE DESIGN IS NOT INTENDED TO LIMIT THE CONTRACTOR FROM PROVIDING ANOTHER DESIGN THAT MAY BE MORE ECONOMICAL AND STILL MEET THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
10. HYDRAULIC CALCULATIONS:
    - A. SUBMIT WORKING PLANS PER NFPA 13 AND HYDRAULIC CALCULATIONS USING HYDRAULIC CALCULATIONS PROCEDURES IN ACCORDANCE WITH NFPA 13. SIGNED AND SEALED BY A REGISTERED PROFESSIONAL FIRE PROTECTION ENGINEER TO THE AUTHORITY THAT HAVE JURISDICTION.
    - B. WORKING PLANS AND COMPUTERIZED HYDRAULIC CALCULATIONS SHALL BE PREPARED A MINIMUM LEVEL 3 N.I.C.E.T. CERTIFIED SPRINKLER LAYOUT DESIGNER. DRAWINGS SHALL BE SIGNED AND THE N.I.C.E.T. CERTIFICATE NUMBER INDICATED ON PLAN. ALL DRAWINGS, INCLUDING AS-BUILTS, SHALL BE SUBMITTED ON DISC USING AUTO CAD.
    - C. THE HYDRAULIC CALCULATIONS SHALL INCLUDE THE PRESSURE DROP THROUGH ALL PIPE, FITTINGS AND DEVICES, INCLUDING THE PRESSURE DROP THROUGH THE REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER, FROM THE MOST HYDRAULIC REMOTE POINT OF THE SPRINKLER SYSTEM TO THE LOCATION OF THE TEST HYDRANT.
    - D. THE HYDRAULIC CALCULATIONS SHALL BE BASED ON THE LATEST FLOW TEST DATA.
11. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A GUARANTEE COVERING ALL DESIGNED, INSTALLATION, MATERIAL AND WORKMANSHIP FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE.
12. PIPING SHALL BE SLOPED TO DRAIN BACK TO SPRINKLER RISER. AUXILIARY DRAINAGE IN ACCORDANCE WITH NFPA 13 SHALL BE PROVIDED FOR ALL TRAPPED SECTIONS OF PIPE.
13. SPRINKLER DESIGN SHALL BE IN CONFORMANCE WITH NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
14. SPRINKLER DISIGN:
    - A. PROVIDE AUTOMATIC SPRINKLER BELOW OBSTRUCTIONS 48 INCHES AND WIDER. (PLATFORMS, DUCTWORK, STAIRWAYS, UNIT HEATER, ETC.)
    - B. THE SPRINKLER DESIGN SHALL BE BASED ON LISTED SPRINKLERS. AT THE CONTRACTOR'S OPTION. LISTED QUICK-RESPONSE SPRINKLERS MAY BE USED, IN CONFORMANCE WITH NFPA 13 AND AUTHORITY HAVING JURISDICTION.
    - C. SPRINKLERS WITH A TEMPERATURE RATING OF 135°F TO 170°F ARE CLASSIFIED AS ORDINARY TEMPERATURE RATED SPRINKLERS. SPRINKLERS WITH A RATING OF 175°F TO 225°F ARE CLASSIFIED AS INTERMEDIATE TEMPERATURE RATED SPRINKLERS.
15. CONTRACTOR SHALL MAKE PRESSURE AND FLOW TEST PRIOR TO SYSTEM DESIGN. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
16. THE FOLLOWING INFORMATION SHALL BE PROVIDED BY THE FIRE PROTECTION CONTRACTOR AT SUBMITTAL OF SHOP DRAWINGS AND CALCULATIONS:
    - A. STATIC PRESSURE PSI: XX
    - B. RESIDUAL PRESSURE PSI: XX
    - C. FLOW GPM: XX
    - D. FLOW TEST HYDRANT LOCATIONS: HYD. #1 - LOCATION, HYD #2 - IOCATION
    - E. DATE OF TEST: XX-XX-XXXX
    - F. TIME OF TEST: XXXX
    - G. RESPONSIBLE PARTY CONDUCTING TEST: XXXXX
    - H. HYDRANT OUTLET DISCHARGE COEFFICIENT: XXX
17. PIPE ALL DRAINS AND INSPECTOR'S TEST TO OUTSIDE, OR DISCHARGE TO A DRAIN APPROVED BY THE OWNER FOR SPRINKLER DISCHARGE.

DATE	ISSUED FOR	REV
08-02-19	OWNER REVIEW	-
08-19-19	PERMIT AND BID SET	-
09-05-19	**ADDENDUM #1**	-
09-18-19	PERMIT AND BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

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STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

Drawing Title

FIRE PROTECTION AND PLUMBING PLANS - BASEMENT

Check Scale (may be photo reduced)

0 1inch 0 10mm

Project No. JCDT18-0229

Drawing No. FP1-01

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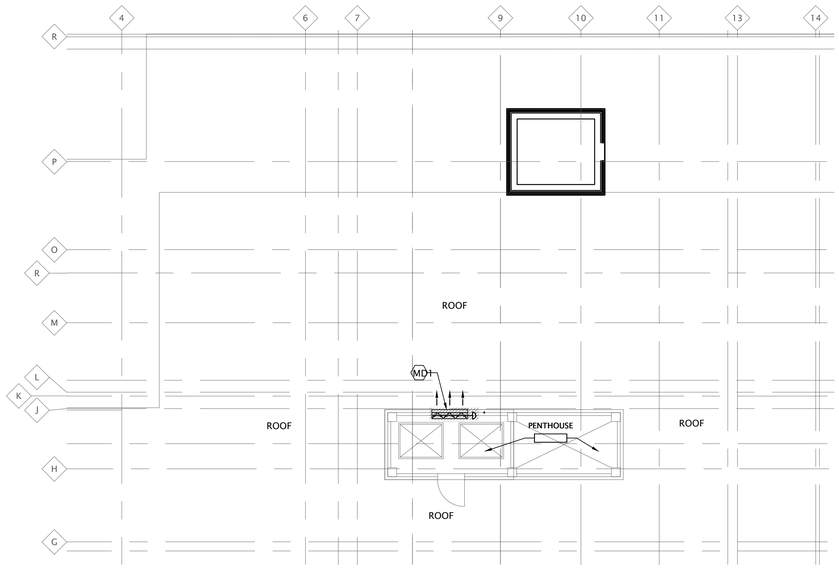


1 / M1-01 MECHANICAL DEMOLITION PLAN - PENTHOUSE
SCALE: 1/8" = 1'-0"

DEMOLITION NOTES BY SYMBOL:

(MD1) EXISTING ELEVATOR HOISTWAY VENTILATION LOUVER AND MOTORIZED DAMPER TO BE REMOVED COMPLETELY. CONTRACTOR FIELD VERIFY EXACT SIZE.

NEW WORK NOTES BY SYMBOL:

(M1) INSTALL NEW HOISTWAY VENTILATION LOUVER AND MOTORIZED DAMPER. COORDINATE OPENING WITH ARCHITECTURAL. CONNECT DAMPER ACTUATOR WITH SMOKE DETECTOR, HEAT DETECTOR AND ELECTRICAL

GENERAL NOTES:

1. THE FACILITY SHALL REMAIN OPERATIONAL DURING CONSTRUCTION
2. THE CONTRACTOR SHALL REPLACE/RESTORE ANY ITEM OR EQUIPMENT REQUIRED TO REMAIN OPERATIONAL OR BEING RELOCATED, THAT IS DAMAGED DURING CONSTRUCTION. EQUIPMENT THAT IS TEMPORARILY REMOVED TO FACILITATE THE INSTALLATION OF NEW WORK SHALL BE REINSTALLED AND RESTORED TO ITS ORIGINAL CONDITION. PATCH ALL WALL OPENINGS AS REQUIRED TO MATCH EXISTING
3. VERIFY ALL BUILDING DIMENSIONS AND LOCATIONS IN FIELD AND NOTIFY THE RESPECTIVE DISCIPLINE OF ANY DISCREPANCIES BEFORE COMMENCEMENT OF WORK
4. THE CONTRACTOR SHALL PERFORM WORK SO AS NOT TO INTERFERE WITH THE OWNER'S USE OF THE BUILDING AND SHALL NOTIFY THE OWNER IN WRITING 5 DAYS PRIOR TO CONNECTING TO EXISTING UTILITIES. AT NO TIME SHALL THE PLUMBING, HVAC OR FIRE PROTECTION SYSTEMS BE INOPERATIVE UNLESS APPROVED BY THE OWNER. THE CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN ALL NECESSARY SERVICES FOR THE BUILDING, AT NO ADDITIONAL COST. THE RELOCATION OF EXISTING UTILITIES SHALL BE SCHEDULED AT THE CONVENIENCE OF THE OWNER.
5. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING MECHANICAL SERVICES BEING REUSED.
6. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

LOUVER SCHEDULE

TAG	QTY	WIDTH	HEIGHT	FRAME	COMMENTS
LV-1	1	3'-0"	2'-1"	STANDARD	INSTALL BIRD AND INSECT SCREEN, PRIME COAT, BAKED ENAMEL FINISH, COLOUR TO BE SELECTED BY ARCHITECT

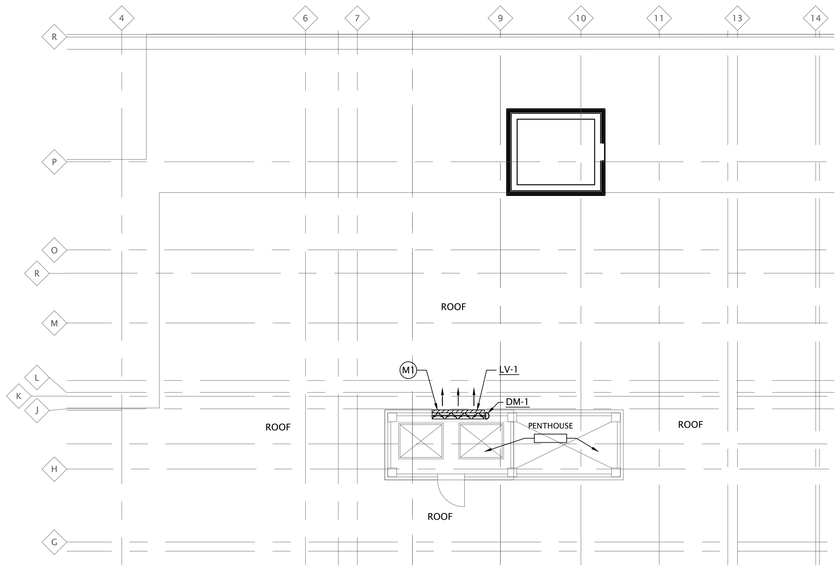
MOTORIZED DAMPER SCHEDULE

TAG	QTY	WIDTH	HEIGHT	DEPTH	BLADE ACTION	FRAME	COMMENTS
DM-1	1	3'-0"	2'-1"	0'-8 1/8"	OPPOSED BLADE	STANDARD	ANODIZED FINISH, FACTORY INSTALLED ELECTRIC ACTUATOR (24V, 2.5W, 5.5VA TRANSFORMER), WITH FRAME MOUNTING BRACKET AND SP100 SWITCH PACKAGE TO REMOTELY INDICATE BLADE POSITION, FRONT FLANGE FRAME - INSULATED

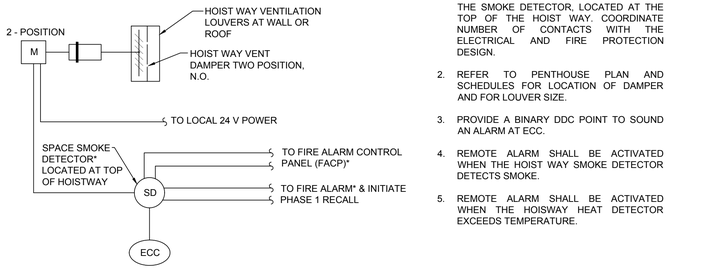
SPLIT SYSTEM COOLING SCHEDULE

EQUIPMENT TAG	AREA SERVED	CAPACITY (BTUH)	DB (°F)	WB (°F)	AIRFLOW (CFM)	REFRIGERANT	DIMENSION HxWxL (IN)	WEIGHT (LBS)	SEER	MODEL NUMBER	ELECTRICAL						REMARKS
											VOLT	PHASE	HZ	HP	MCA	MOP	
AC-1	ELEV EQ ROOM	12000	80	67	425-320	R-410A	12x10x36	29	20.8	PKA-A12HA7	208/230	1	60	0.16	1	-	1,2,3 & 4
ACC-1	ELEV EQ ROOM	12000	95	75	1590	R-410A	24x12x32	92	-	PUY-A12NKA7	208/230	1	60	0.20	11	28	1 & 3

NOTES:
1. MODEL NUMBERS ARE MITSUBISHI UNLESS OTHERWISE NOTED.
2. ROUTE CONDENSATE LINE TO EXIST FLOOR DRAIN LOCATED IN MER ADJACENT TO ELEVATOR MACHINE ROOM
3. ROUTE REFRIGERANT LINES BETWEEN AC-1 AND ACC-1.
4. WALL MOUNT UNIT.



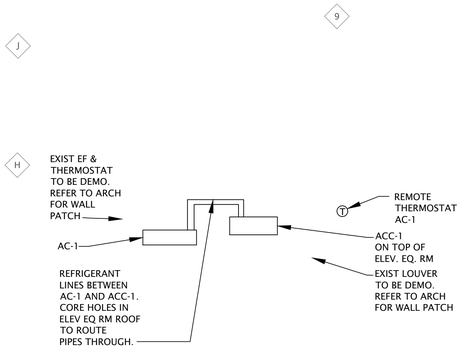
2 / M1-01 MECHANICAL NEW WORK PLAN - PENTHOUSE
SCALE: 1/8" = 1'-0"



*BY ELECTRICAL

1. THE DAMPER SHALL REMAIN CLOSED DURING NORMAL OPERATION AND OPEN UPON LOSS OF POWER ON A SIGNAL FROM THE SMOKE DETECTOR, LOCATED AT THE TOP OF THE HOIST WAY. COORDINATE NUMBER OF CONTACTS WITH THE ELECTRICAL AND FIRE PROTECTION DESIGN.
2. REFER TO PENTHOUSE PLAN AND SCHEDULES FOR LOCATION OF DAMPER AND FOR LOUVER SIZE.
3. PROVIDE A BINARY DDC POINT TO SOUND AN ALARM AT ECC.
4. REMOTE ALARM SHALL BE ACTIVATED WHEN THE HOIST WAY SMOKE DETECTOR DETECTS SMOKE.
5. REMOTE ALARM SHALL BE ACTIVATED WHEN THE HOISWAY HEAT DETECTOR EXCEEDS TEMPERATURE.

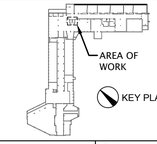
3 / M1-01 HOISTWAY VENT DAMPER CONTROLS
SCALE: NOT TO SCALE



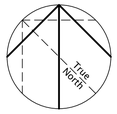
4 / M1-01 MECHANICAL - BASEMENT
SCALE: 1/4"=1'-0"

DATE	ISSUED FOR	REV
08-02-19	OWNER REVIEW	-
08-19-19	PERMIT AND BID SET	-
09-05-19	**ADDENDUM #1**	-
09-18-19	PERMIT AND BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

Drawing Title

MECHANICAL DEMOLITION AND NEW WORK PLANS
NOTES AND SCHEDULES

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. JCDT18-0229

Drawing No. M1-01

ARCH D - 24"x36" - 610mmx914mm (rounded)

ELECTRICAL SYMBOL LIST

CONDUIT SYSTEM

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING EXPOSED IN UNFINISHED AREAS
- CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
- CONDUIT OR CABLE TURNED UP
- CONDUIT OR CABLE TURNED DOWN
- BRANCH CIRCUIT HOMERUNS TO PANELS OR AS NOTED, LINES INDICATE NUMBER OF WIRES IN CONDUIT SHORT LINE IS NEUTRAL OPPOSITE SHORT SLANT IS GROUND
- (J) JUNCTION BOX (SIZE PER NEC OR AS INDICATED)
- PB PULL BOX (SIZE PER NEC OR AS INDICATED)

MOUNTING HEIGHTS

(ALL MOUNTING HEIGHTS ARE TO THE CENTER OF THE DEVICE, UNLESS OTHERWISE NOTED)

RECEPTACLE	18" AFF
LIGHT SWITCHES	48" AFF
CLOCK OUTLETS	7'-6" AFF
FIRE ALARM AUDIO AND VISUAL SIGNALS, OFFICE AREA	7'-6" AFF
MANUAL PULL STATION	48" AFF
CARD READERS	48" AFF
DISTRIBUTION PANELS	7'-0" AFF TO TOP
LIGHTING OR RECEPTACLE PANELS	6'-0" AFF TO TOP
MOTOR STARTERS OR SAFETY SWITCHES	5'-0" AFF TO TOP

POWER SYSTEMS

- PANEL BOARD
- T TRANSFORMER, 480-208Y/120 VOLT DRY TYPE UNLESS OTHERWISE NOTED
- MOTOR CONTROL CENTER
- MULTI-OUTLET ASSEMBLY WITH OUTLETS UNLESS OTHERWISE NOTED
- MOTOR - SIZE AS INDICATED
- PUSH BUTTON STATION
- UNFUSED DISCONNECT SWITCH
- F FUSED DISCONNECT SWITCH
- $_M MANUAL STARTER, WITH PILOT LIGHT
- 3 PHASE FUSIBLE COMBINATION STARTER
- $_C 20A, 125V, 3W, SINGLE GROUNDING RECEPTACLE, NEMA 5-20R 'C' INDICATES CEILING MOUNTED
- $_C 20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R 'C' INDICATES CEILING MOUNTED
- 20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R MOUNTED 6" ABOVE FINISHED COUNTER
- $_C 20A, 125V, 3W, DOUBLE DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R 'C' INDICATES CEILING MOUNTED
- SPECIAL RECEPTACLE. REFER TO DRAWINGS FOR NEMA CONFIGURATION
- (C) CLOCK OUTLET
- FB FLOOR BOX
- PT POKE THROUGH

LIGHTING CONTROL SYSTEMS

- $ SWITCH, SINGLE POLE, 20A
- $_2 SWITCH, DOUBLE POLE, 20A
- $_3 SWITCH, THREE WAY, 20A
- $_D DIMMER SWITCH
- $_L SWITCH, LOW VOLTAGE
- $_O SWITCH, OCCUPANCY SENSOR
- $_T SWITCH, TIMER
- LC LIGHTING CONTROL BOX/RELAY
- (OS) (OS) OCCUPANCY SENSOR - WALL/CEILING MOUNTED
- (DS) DAYLIGHT SENSOR
- (P) PHOTOCELL

FIRE ALARM SYSTEM

- F MANUAL PULL STATION
- S AREA SMOKE DETECTOR
- SD DUCT TYPE SMOKE DETECTOR
- (F) $_C AUDIO/VISUAL ALARM SIGNAL RECESSED MOUNTED 'C' INDICATES CEILING MOUNTED
- (P) (P) VISUAL ALARM STROBE SIGNAL - WALL/CEILING MOUNTED
- F $_C AUDIO ALARM SIGNAL SIGNAL 'C' INDICATES CEILING MOUNTED
- H HEAT DETECTOR
- F FLAME DETECTOR
- BD $_R BEAM SMOKE DETECTOR - RECEIVER
- BD $_T BEAM SMOKE DETECTOR - TRANSMITTER
- IM ADDRESSABLE INTERFACE MODULE
- WF SPRINKLER FLOW SWITCH
- PS SPRINKLER PRESSURE SWITCH
- TS SPRINKLER VALVE TAMPER SWITCH
- FT FIREMANS TELEPHONE JACK
- FA FIRE ALARM SYSTEM CONTROL PANEL
- FAA REMOTE FIRE ALARM SYSTEM ANNUCIATOR PANEL

TELECOMMUNICAITON SYSTEM

- AP WIRELESS ACCESS POINT
- $_C TELECOMMUNICATION OUTLET - EMPTY 'C' INDICATES CEILING MOUNTED
- $^{XX}_C TELECOMMUNICATION OUTLET - CABLES AS INDICATED 'C' INDICATES CEILING MOUNTED

CLOCK

- CLOCK - WALL/CEILING MOUNTED
- CLOCK- DOUBLE FACED - WALL/CEILING MOUNTED

GROUNDING

- GROUND ROD
- G 1/4 " X 2" COPPER GROUND BAR
- DOT INDICATES THERMIT WELD OR CONNECTION

LIGHTING SYSTEM

- 2'X4' FIXTURE 'X' INDICATES FIXTURE TYPE
- 2'X2' FIXTURE 'X' INDICATES FIXTURE TYPE
- 1'X4' FIXTURE 'X' INDICATES FIXTURE TYPE
- FIXTURE WITH NIGHT LIGHT CIRCUIT 'X' INDICATES FIXTURE TYPE
- STRIP FIXTURE 'X' INDICATES FIXTURE TYPE
- DOWNLIGHT FIXTURE 'X' INDICATES FIXTURE TYPE
- NIGHT LIGHT DOWNLIGHT FIXTURE 'X' INDICATES FIXTURE TYPE
- EXIT LIGHT DIRECTIONAL ARROWS IF INDICATED
- BATTERY OPERATED AUTOMATIC EMERGENCY LIGHTING UNIT WITH NUMBER OF HEADS AS SHOWN
- REMOTE MOUNTED LIGHT HEAD FROM BATTERY EMERGENCY UNIT
- POLE MOUNTED FIXTURE
- FLOODLIGHT

SECURITY SYSTEM

- TV CCTV CAMERA
- TV CCTV MONITOR
- M MOTION DETECTOR
- D MAGNETIC DOOR CONTACTS
- B SIGNAL BELL
- I INTERCOM STATION
- CR CARD READER

PAGING SYSTEM

- (S) (S) SPEAKER - WALL/CEILING MOUNTED
- AMP PAGING SYSTEM AMPLIFIER & CONTROL PANEL
- (M) (M) MICROPHONE OUTLET - WALL/CEILING MOUNTED

NURSE CALL SYSTEM

- (N) (N) CALL LIGHT - WALL/CEILING MOUNTED
- N CALL/PULL STATION

TELEVISION SYSTEM

- TV TELEVISION OUTLET

ONE LINE DIAGRAMS

- DRAW OUT SUBSTATION CIRCUIT BREAKER
- AS AMMETER SWITCH
- VS VOLTMETER SWITCH
- K KEY INTERLOCK
- AM AMMETER
- VM VOLTMETER
- WH WATT-HOUR METER
- KWH KILOWATT HOUR METER
- GROUND CONNECTION
- 46 REVERSE PHASE OR PHASE BALANCE CURRENT RELAY
- 47 PHASE SEQUENCE VOLTAGE RELAY
- 51 TIME OVERCURRENT RELAY
- 50 GS INSTANTANEOUS OVERCURRENT GROUND SENSING RELAY
- FUSE
- CIRCUIT BREAKER
- SINGLE THROW SWITCH
- LIGHTNING ARRESTOR
- AUTOMATIC TRANSFER SWITCH
- POWER TRANSFORMER
- POTENTIAL TRANSFORMER
- CURRENT TRANSFORMER

ELECTRICAL ABBREVIATIONS

A	AMPERE
AC	ARMORED CABLE
ALC	ALTERNATING CURRENT
ADD	ADDENDUM
AF	AMPERES,FRAME (BREAKER RATING)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AG	ABOVE GROUND
AL	ALUMINUM
AM	AMMETER
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AS	AMMETER SWITCH
ASR	AUTOMATIC SPRINKLER RISER
AT	AMPERE TRIP (BREAKER SETTING)
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BC	BOTTOM CHORD
BD	BUS DUCT
BLDG	BUILDING
BRK	BREAKER
C	CONDUIT
CAS	CONTROLLED ACCESS SYSTEM
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CLF	CURRENT LIMITING FUSE
CLG	CEILING
CKT	CIRCUIT
COAX	COAXIAL CABLE
COL	COLUMN
CONT	CONTINUATION (CONTINUOUS)
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CTB	CURRENT TEST BLOCK
CU	COPPER
DC	DIRECT CURRENT
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DISC	DISCONNECT
DN	DOWN
DP	DISTRIBUTION PANEL
DT	DOUBLE THROW
DWG	DRAWING
EA	EACH
EDP	EMERGENCY POWER DISTRIBUTION PANEL
EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC (ELECTRICAL)
ELP	EMERGENCY LIGHTING PANEL
ELR	END-OF-LINE RESISTOR
EM	EMERGENCY
EMCC	EMERGENCY MOTOR CONTROL CENTER
EMT	ELECTRIC METALLIC TUBING
EO	ELECTRIC OPERATED
EPO	EMERGENCY POWER OFF
EQPT	EQUIPMENT
ERP	EMERGENCY RECEPTACLE PANEL
EUH	ELECTRIC UNIT HEATER
EWC	ELECTRIC WATER COOLER
EXST/(E)	EXISTING
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FU	FUSE
FUT	FUTURE
GND/G	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
HID	HIGH INTENSITY DISCHARGE
HGT	HEIGHT
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING VENTILATING AND AIR CONDITIONING
IAC	INTERLOCKING ARMOR CABLE
IC	INTERCOM
IE	INVERT ELEVATION
INC	INCANDESCENT, INCORPORATE
ISO	ISOLATED NEUTRAL
JB	JUNCTION BOX
kcmil	THOUSAND CIRCULAR MIL(S)
KV	KILOVOLT
KVA	KILOVOLT-AMPERES
KVAR	KILOVOLT-AMPERES REACTIVE
KW	KILOWATT
KWH	KILOWATT-HOUR
LA	LIGHTNING ARRESTOR
LDP	LIGHTING DISTRIBUTION PANEL
LP	LIGHTING PANEL
LT	LIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
M	METER
MA	MILLIAMPERE
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MEZZ	MEZZANINE
MFG	MANUFACTURING
MFR	MANUFACTURER
MH	MANHOLE, METAL HALIDE MOUNTING HEIGHT
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MO	MOTOR OPERATED
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
N	NEW, NEUTRAL, NORTH
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NF	NOT FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN, NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OFF	OFFICE
OL	OVERLOAD
OPNG	OPENING
P	POLE
PA	PUBLIC ADDRESS SYSTEM
PB	PULLBOX
PBS	PUSH BUTTON STATION
PDP	POWER DISTRIBUTION PANEL
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATOR VALVE
PL	PILOT LIGHT
PNL	PANEL
PP	POWER PANEL
PR	PAIR
PRI	PRIMARY
PS	PULL SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
R, (R)	RELOCATED (EXISTING)
RC	REMOTE CONTROL
RECPT	RECEPTACLE
RP	RECEPTACLE PANEL
RSC	RIGID STEEL CONDUIT
SD	SMOKE DETECTOR
SEC	SECONDARY
SHLD	SHIELDED
SHT	SHEET
SIG	SIGNAL
SP	SINGLE POLE
SPEC	SPECIFICATION
SPKR	SPEAKER
SS	SELECTION SWITCH
ST	SINGLE THROW
STP	SHIELDED TWISTED PAIR
STP/OS	SHIELDED TWISTED PAIR W/ OVERALL SHIELD
STRUCT	STRUCTURAL
SUBST	SUBSTATION
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYS	SYSTEM
T	THERMOSTAT
TB	TERMINAL BLOCK
TEL	TELEPHONE
TRP	POWER FACTOR TRANSDUCER
TOS	TOP OF STEEL
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR
UTP/OS	UNSHIELDED TWISTED PAIR W/ OVERALL SHIELD
V	VOLT OR VOLTAGE
VM	VOLTMETER
VP	VAPOR PROOF
VS	VOLTMETER SWITCH
VTR	VOLTAGE TRANSDUCER
W	WATT
WH	WATT-HOUR METER
WHD	WATT-HOUR DEMAND METER
WP	WEATHER PROOF
WLR	WELDING RECEPTACLE
WR	WEATHER RESISTANT
W/	WITH
W/O	WITHOUT
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

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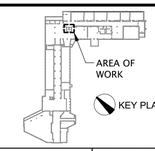
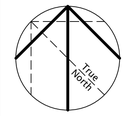
Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project Leader	Checked G. KARAFILOVSKI

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

Drawing Title

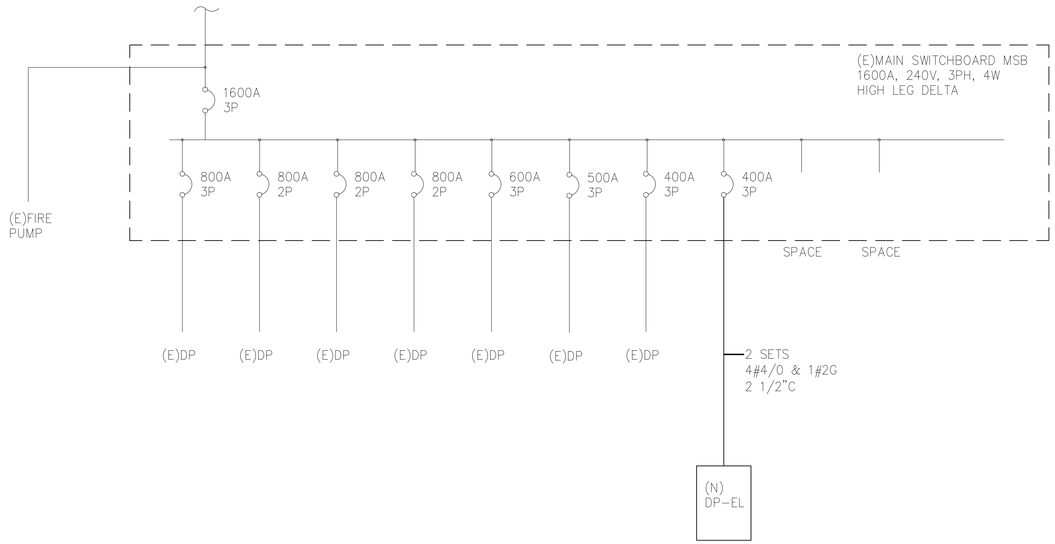
ELECTRICAL SYMBOLS AND ABBREVIATIONS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No.
JCDT18-0229

Drawing No.
E0-01

MAIN SWITCHBOARD IS BEING PROVIDED WITH THE PLD/DTE UTILITY SWITCH OVER PROJECT. CONSTRUCTION IS DUE TO START FALL OF 2019. COORDINATE CONNECTION TO MAIN SWITCHBOARD WITH PLD/DTE PROJECT.



1 E0-02 **ONE LINE DIAGRAM**
SCALE: NONE

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	LAMP
A	24" WALL MOUNTED LED SEALED STRIP FIXTURE. IP65 RATED.	LITHONIA DMW2-L24-3000LM-ACL-MD-120-GZ10-35K-80CRI	LED, 27W

EXISTING PANELBOARD RP-ELEV SCHEDULE

VOLTAGE: 240/120 MAINS 100A MCB MOUNTING: SURFACE REMARKS:
BUS SIZE: 100 AMP FAULT DUTY: 10k

No.	SERVES	LOAD (KVA) LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A	C	P	BRKR TRIP	LOAD (KVA) MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	ELEV ROOM LIGHTS	0.5						20	1	X		1	20					0.2		ELEV ROOM GFI	2
3	CAB LIGHTS ELEV 2	0.5						20	1		X	1	20						0.5	CAB LIGHTS ELEV 1	4
5	EXHAUST FAN			0.5				15	1	X		1	20					0.4		PIT GFI	6
7	SUMP PUMP			1.0					2		X	1	20						0.2	PIT LIGHTS	8
9	SPACE									X										SPACE	10
11	PIT GFCI		0.2								X									SPACE	12
13	PLT LIGHT	0.2								X										SPACE	14
15	SPACE										X									SPACE	16
17	SPACE									X										SPACE	18
19	SPACE										X									SPACE	20
														0.0	0.0	0.0	1.5	0.7	1.9	CONNECTED KVA	4.1
														0.0	0.0	0.0	1.8	0.7	1.9	DEMAND KVA	4.5
																				DEMAND AMPS	19

NEW PANELBOARD DP-EL SCHEDULE

VOLTAGE: 240HLD/120 MAINS: 400A MLO MOUNTING: RECESSED REMARKS:
BUS SIZE: 400 AMP FAULT DUTY 42k

No.	SERVES	LOAD (KVA) LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A	B	C	P	BRKR TRIP	LOAD (KVA) MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1										X												2
3	ELEVATOR 1			14.9				60	3		X		3	60				14.9			ELEVATOR 2	4
5												X										6
7	SPACE									X			2	15			0.2				AC-1	8
9	SPACE										X											10
11	SPACE											X	2	30			2.6				ACC-1	12
13	SPACE									X												14
15	SPACE										X										SPACE	16
17	SPACE											X									SPACE	18
19	SPACE									X											SPACE	20
21	SPACE										X										SPACE	22
23	SPACE											X									SPACE	24
25	SPACE									X											SPACE	26
27	SPACE										X										SPACE	28
29	SPACE											X									SPACE	30
31	SPACE									X											SPACE	32
33	SPACE										X										SPACE	34
35	SPACE											X									SPACE	36
37	SPACE									X											SPACE	38
39	SPACE										X										SPACE	40
41	SPACE											X									SPACE	42
															0.0	0.0	2.9	29.8	0.0	0.0	CONNECTED KVA	32.7
															0.0	0.0	2.9	37.3	0.0	0.0	DEMAND KVA	40.1
																					DEMAND AMPS	97

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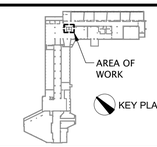

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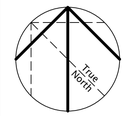

Detail Symbol

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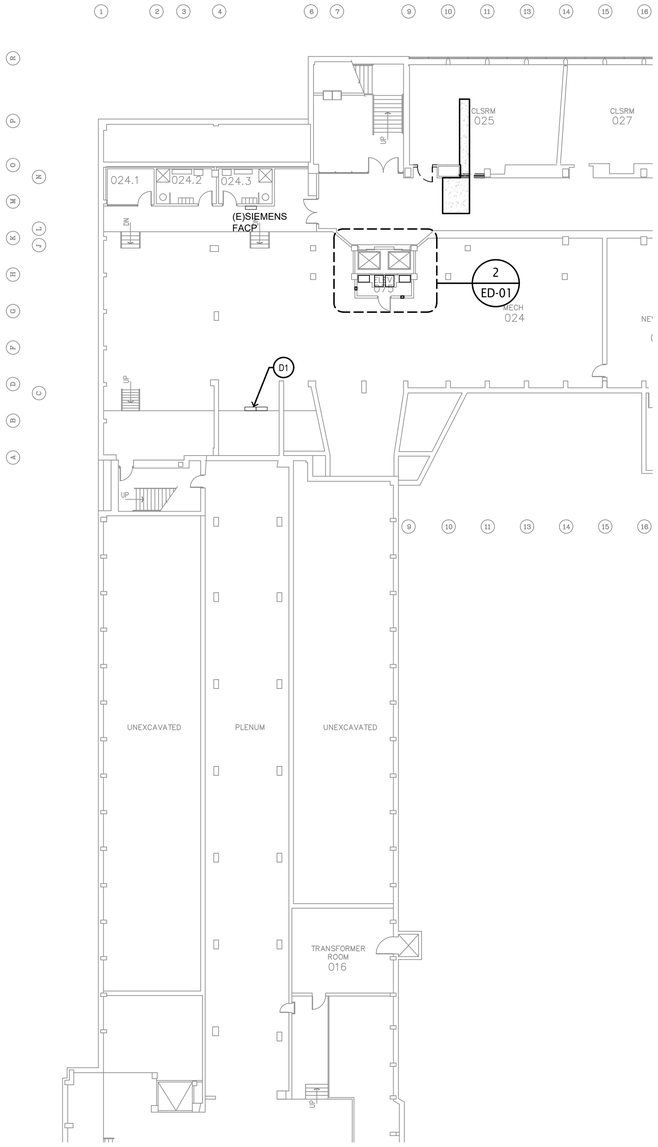
Drawing Title

ONE LINE DIAGRAM AND SCHEDULES

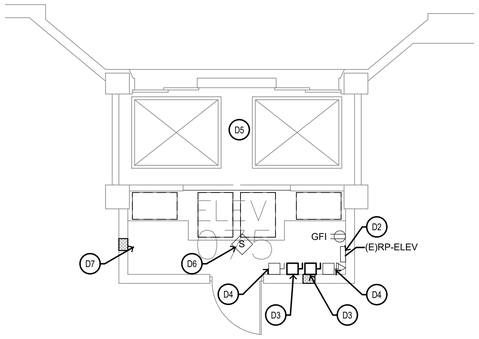
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. JCDT18-0229

Drawing No. E0-02



1 ED-01 DEMOLITION PLAN - BASEMENT
SCALE: 1/16" = 1'-0"



2 ED-01 DEMOLITION PLAN - BASEMENT
SCALE: 1/4" = 1'-0"

ELECTRICAL DEMOLITION KEY NOTES:

- D1 EXISTING DISTRIBUTION PANEL. DISCONNECT EXISTING ELEVATORS FROM DISTRIBUTION PANEL. RELABEL CIRCUIT BREAKERS 'SPARE'.
- D2 EXISTING 100A, 240V, 1PH PANEL TO REMAIN.
- D3 DISCONNECT AND REMOVE ELEVATOR DISCONNECT SWITCH AND ASSOCIATED FEEDERS BACK TO SOURCE.
- D4 EXISTING ELEVATOR CAB LIGHT DISCONNECT SWITCH TO REMAIN. DISCONNECT AND EXTEND CABLES TO EXISTING ELEVATOR CABS.
- D5 DISCONNECT AND REMOVE PIT LIGHT FIXTURES AND RECEPTACLES. SAVE CIRCUIT FOR REUSE.
- D6 EXISTING SMOKE DETECTOR TO REMAIN.
- D7 DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND ASSOCIATED STARTER, DISCONNECT SWITCH, CONDUIT AND WIRE.

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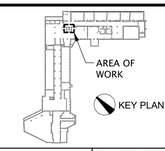
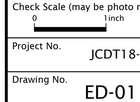


North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

NORR

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Client

WAYNE STATE UNIVERSITY
Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

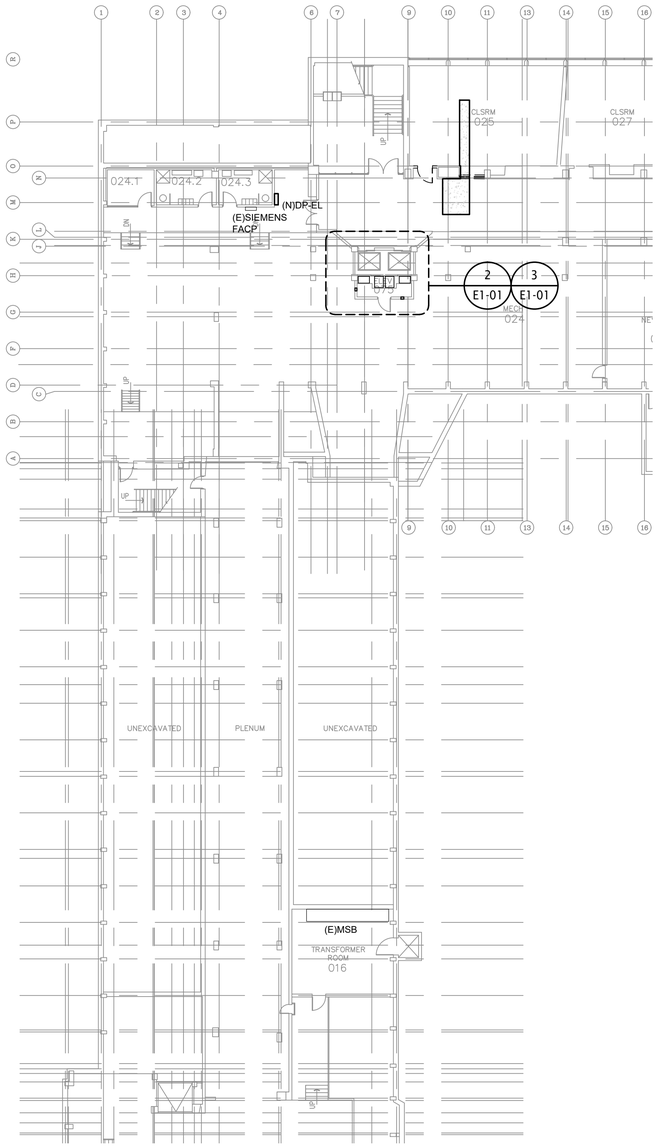
STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

Drawing Title
ELECTRICAL DEMOLITION PLANS

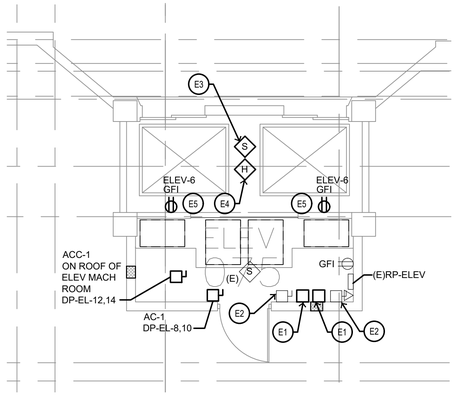
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. JCDT18-0229

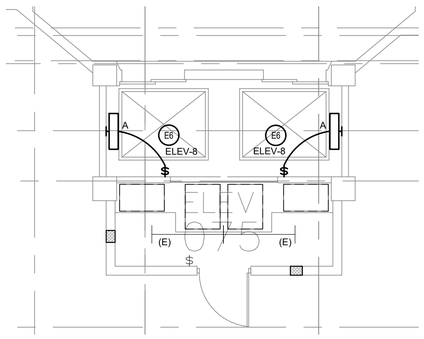
Drawing No. ED-01



1 E1-01 POWER PLAN - BASEMENT
SCALE: 1/16" = 1'-0"



2 E1-01 POWER PLAN - BASEMENT
SCALE: 1/8" = 1'-0"



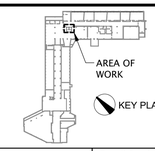
3 E1-01 LIGHTING PLAN - BASEMENT
SCALE: 1/8" = 1'-0"

NEW WORK KEY NOTES:

- E1 NEW 60A, 3P SHUNT TRIP CIRCUIT BREAKER FOR ELEVATOR. PROVIDE 4#6 & 1#8G - 1"C TO PANEL DP-EL.
- E2 EXISTING DISCONNECT TO ELEVATOR CAB LIGHT. CONNECT TO NEW ELEVATOR CAB LIGHTS. COORDINATE WORK WITH ELEVATOR MANUFACTURER.
- E3 NEW SMOKE DETECTOR LOCATED AT THE TOP OF ELEVATOR SHAFT. CONNECT TO ELEVATOR SMOKE EXHAUST DAMPER.
- E4 NEW HEAT DETECTOR LOCATED AT THE TOP OF ELEVATOR SHAFT. HEAT DETECTOR SHALL HAVE RATE-OF RISE AND FIXED TEMPERATURE SETTINGS. CONNECT HEAT DETECTOR TO ELEVATOR SHUNT TRIP CIRCUIT BREAKER.
- E5 CONNECT RECEPTACLES TO EXISTING CIRCUIT AS INDICATED.
- E6 CONNECT LIGHT TO EXISTING CIRCUIT AS INDICATED.

DATE	ISSUED FOR	REV
08-02-19	OWNER REVIEW	-
08-19-19	PERMIT AND BID SET	-
09-05-19	ADDENDUM #1	-
09-18-19	PERMIT AND BID SET	-

Keyplan



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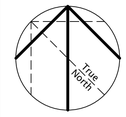

Detail Symbol

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Seal(s)

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Project Manager	Drawn
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Project Leader	Checked
	G. KARANFILOVSKI

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Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

Drawing Title
ELECTRICAL NEW PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No.
JCDT18-0229

Drawing No.
E1-01

ARCH D - 24"x36" - 610mmx914mm (rounded)

WAYNE STATE UNIVERSITY

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE #2 NEW ADA ELEVATOR INSTALLATION

5143 Cass Ave
Detroit, MI 48202
Wayne State Project No.: 16-327661
NORR Project No.: JCDT18-0229

PROJECT DIRECTORY

WAYNE STATE PROJECT MANAGER:
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STRUCTURAL ENGINEER:
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NORR LLC
150. W JEFFERSON AVENUE
SUITE 1300
DETROIT, MI 48226
313 324 3164

PROJECT NOTES

1. PROJECT SCALES ARE PROVIDED FOR REFERENCE ONLY. INCASE OF A DIMENSIONAL QUESTION OR DISCREPANCY SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CONSTRUCTION COORDINATOR
2. ALL WORK IS TO BE DONE IN ACCORDANCE WITH ALL LOCAL. STATE AND NATIONAL CODES HAVING JURISDICTION.
3. COORDINATE WITH WAYNE STATE UNIVERSITY PROJECT MANAGER AND FACILITY ENGINEERS FOR CONSTRUCTION ROUTES LOCATION OF DUMPSTER AND PROTECTION OF EXISTING OCCUPANTS AND MATERIAL FINISHES
4. AREA OUTSIDE OF PROJECT SCOPE ARE TO REMAIN OCCUPIED DURING RENOVATION. PROTECT ELECTRICAL POWER, LIGHTING AND DATA CABLES TO MAINTAIN FUNCTIONAL USE.
5. PROVIDE A SCHEDULE FOR SHUTDOWN OF MECHANICAL AND ELECTRICAL SYSTEMS
6. PROVIDE PROTECTION ALONG ENTIRE ROUT FOR REMOVAL OF DEBRIS INCLUDING CORRIDOR AND ALL ELEVATOR LOBBIES
7. ELEVATORS TO BE PROTECTED & "NOT IN SERVICE" SIGNAGE INSTALLED DURING PROJECT LENGTH.

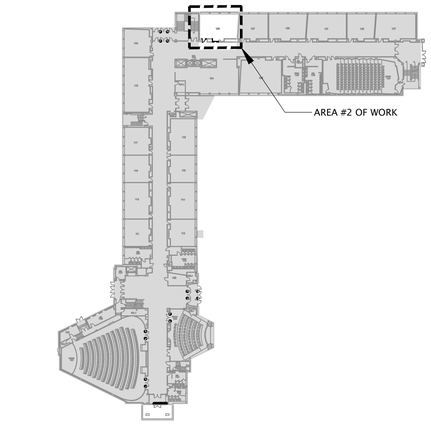
SCOPE OF WORK

1. PARTIAL DEMOLITION @ FLOORS 1-4, BASEMENT AND ROOF AS REQUIRED FOR PLANNED INSTALLATION OF 3500 LBS ADA COMPLIANT PASSENGER ELEVATOR.
2. INSTALLATION OF MACHINE ROOM-LESS TRACTION ELEVATOR.
3. REWORK OF SURROUNDING ROOMS AND CORRIDORS INCLUDING HVAC AND ELECTRICAL COMPONENTS AS NEEDED TO SERVE BUILDING OCCUPANCY AS HIGHER EDUCATION CLASSROOMS.

ALTERNATE #1: EXCLUDE TEMPORARY 1-HR FIRE RATED PARTITIONS TO SEPARATE CONSTRUCTION AREA FROM OCCUPIED AREA FROM BID.
ALTERNATE #2: PROVIDE PRICING FOR 3RD SHIFT HOURS FOR HEAVY CONSTRUCTION PERIODS.
ALTERNATE #3: CONNECT SUMP TO STORM DRAIN IN CORRIDOR.

CODES / STANDARDS

AUTHORITY HAVING JURISDICTION: *CITY OF DETROIT, MI*		
MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA)	BUREAU OF CONSTRUCTION CODES	*(MRCEB) MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS* *(MBC) MICHIGAN BUILDING CODE - 2015* *(MMC) MICHIGAN MECHANICAL CODE - 2015 PART 9A MECHANICAL CODE - 2015* *(MPC) MICHIGAN PLUMBING CODE - 2015* *(MEC) NATIONAL ELECTRICAL CODE - 2014 MICHIGAN ELECTRICAL CODE RULES PART 8* *(MUEC) MICHIGAN ENERGY CODE - 2015*
	BUREAU OF FIRE SERVICES	*NFPA 101 LIFE SAFETY CODE - 2012* *NFPA 99 - 2012 EDITION*
ASME A17.1 -2004 - SAFETY CODE FOR ELEVATORS AND ESCALATORS		
ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDING AND FACILITIES		
DEPARTMENT OF JUSTICE, FEDERAL ADA ACCESSIBILITY GUIDELINES FOR BUILDING AND FACILITIES (28 CFR PART-35)		
CITY OF DETROIT 1993 ELEVATOR CODE		



KEY PLAN -

LOCATION MAP

PROJECT CODE SUMMARY

BUILDING CLASSIFICATION:

OCCUPANCY CLASSIFICATION AND CONSTRUCTION TYPES PER MBC CHAPTERS 3, 4, 5, AND 6

BASIC OCCUPANCY GROUP(S) : *[PER MBC CHAPTER 3]*

○ GROUP A-1	○ GROUP	○ GROUP
○ GROUP	○ GROUP	● GROUP B
○ GROUP E	○ GROUP F-1	○ GROUP F-2
○ GROUP H-1	○ GROUP H-2	○ GROUP H-3
○ GROUP H-4	○ GROUP H-5	○ GROUP I-1
○ GROUP I-2	○ GROUP I-3	○ GROUP I-4
○ GROUP M	○ GROUP R-1	○ GROUP R-2
○ GROUP R-3	○ GROUP R-4	○ GROUP S-1
○ GROUP S-2	○ GROUP U	

MIXED USE AND OCCUPANCY : *[PER MBC SECTION 508]*

● ACCESSORY OCCUPANCIES *[MBC 508.2]*
[Accessory Occupancies <10% of Story]
○ INCIDENTAL ACCESSORY *[MBC 509]*
○ NONSEPARATED *[MBC 508.3]*
○ SEPARATED OCCUPANCIES *[MBC 508.4]*

*REFER TO FIRE AND LIFE SAFETY PLANS FOR REQUIREMENTS

TYPE(S) OF CONSTRUCTION : *[PER MBC CHAPTER 6]*
TYPE I : ○ A ● B
TYPE II : ○ A ○ B
TYPE III : ○ A ○ B
TYPE IV : ○ HT
TYPE V : ○ A ○ B

SPECIAL DETAILED REQUIREMENTS :
○ HIGH-RISE BUILDING *[PER MBC SECTION 403]*
○ ATRIUM *[PER MBC SECTION 404]*
○ OPEN PARKING *[PER MBC SECTION 406.5]*
○ GROUP I-2: *[PER MBC SECTION 407]*
- SMOKE COMPARTMENTS
- REFUGE AREA
○ HAZARDOUS MATERIALS: *[PER MBC SECTION 414]*
- CONTROL
○ MEZZANINE *[PER MBC SECTION 505]*

MEANS OF EGRESS:

*REFER TO THE LIFE SAFETY PLANS FOR ACTUAL MEASURED DISTANCES.

DOORS :
[PER MBC 1010.1.1]
THE MINIMUM CLEAR WIDTH AND HEIGHT OF A DOOR SHALL NOT BE LESS THAN 32 INCHES AND 80 INCHES RESPECTIVELY.

[PER MBC 1010.1.2.1]
DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL, WHERE SERVING AN OCCUPANT LOAD OF 50 OR MORE PERSONS.

CORRIDORS:
[PER MBC 1020.2]
CORRIDOR WIDTH SHALL BE 44 INCHES MINIMUM.

COMMON PATH OF EGRESS TRAVEL (MBC 1006.2.1)		
OCCUPANCY	SPRINKLERED	MAX. DISTANCE
B	*NO*	*75'-0"*

EXIT ACCESS TRAVEL DISTANCE (MBC TABLE 1017.2)		
OCCUPANCY	SPRINKLERED	MAX. DISTANCE
B	*NO*	*200'-0"*

DEAD ENDS (MBC 1020.4 EX 2)		
OCCUPANCY	SPRINKLERED	MAX. DISTANCE
B	*NO*	*20' -0"*

MIN. NUMBER OF EXITS FOR OCCUPANT LOAD (MBC 1006.3.1)	
OCCUPANT LOAD	MIN. # OF EXITS PER STORY
1-500	*2*
501-1,000	*3*
MORE THAN 1,000	*4*

EXIT CAPACITY FACTORS:

[PER MBC 1005.3.1, 1005.3.2]

MINIMUM REQUIRED EGRESS WIDTH : ◒ SPRINKLERED
STAIRWAYS *0.2* (4TH FLOOR ONLY)
OTHER EGRESS COMPONENTS *0.15*

*REFER TO THE LIFE SAFETY PLANS FOR COMPLIANCE WITH MEANS OF EGRESS WIDTH REQUIREMENTS.

LIFE SAFETY SYSTEMS:

(PER MBC AND IFC CHAPTER 9)

AUTOMATIC SPRINKLER SYSTEM : ◒ PROVIDED PER NFPA 13
(FOURTH FLOOR ONLY)

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS : ○ PROVIDED - REFER TO FIRE PROTECTION DRAWINGS

STANDPIPE SYSTEM (FOURTH FLOOR COVERAGE) : ● PROVIDED PER NFPA 14

PORTABLE FIRE EXTINGUISHERS : ● PROVIDED PER NFPA 10

FIRE ALARM SYSTEM : ● PROVIDED PER NFPA 72

MINIMUM FIRE-RESISTANCE REQUIREMENTS:

FIRE-RESISTIVE RATING REQUIREMENTS FOR BUILDING ELEMENTS : *[PER MBC TABLE 601]*

TYPE OF CONSTRUCTION: *IB*

PRIMARY STRUCTURAL FRAME	*2 HOURS*
BEARING WALLS (EXT) :	*2 HOURS*
BEARING WALLS (INTR) :	*2 HOURS*
NON-BRG WALLS AND PARTITIONS (EXT) *PER MBC TABLE 602:*	*0 HOURS*
NON-BRG WALLS AND PARTITIONS (INTR)	*0 HOURS*
FLOOR CONSTR AND SECONDARY MEMBERS	*2 HOURS*
ROOF CONSTR AND SECONDARY MEMBERS	*1 HOURS*

FIRE-RESISTANCE RATING FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE (X) : *[PER MBC TABLE 602]*

CONSTRUCTION TYPE / OCCUPANCY: *IB* / *B*

X < 5 FT	*1 HOURS*
5 FT ≤ X < 10 FT	*1 HOURS*
10 FT ≤ X < 30 FT	*1 HOURS*
X > 30 FT	*0 HOURS*

MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE:*[PER MBC TABLE 705.8]*

FIRE SEPARATION DISTANCE	DEGREE OF OPENING PROTECTION (UP, NS)	(UP, S)	(P)
10 < 15 FT	15%	45%	45%

UP - UNPROTECTED, P - PROTECTED,
NS - NOT SPRINKLERED, S - SPRINKLERED

ADDITIONAL FIRE-RESISTIVE RATINGS :

DESCRIPTION	CODE SECTION	RATING (HR)
SHAFT ENCLOSURES	*MBC 713.4*	
FOUR STORIES OR MORE :		*2*
LESS THAN FOUR STORIES:		*1*
EXIT ENCLOSURES	*MBC 1023.2*	
FOUR STORIES OR MORE :		*2*
LESS THAN FOUR STORIES:		*1*
EXIT PASSAGEWAYS :	*MBC 1024.3*	*2*
HOISTWAY ENCLOSURES :	*MBC 713.4*	*2*
ELEVATOR MACHINE ROOMS :	*MBC 3005.4*	*2*

CORRIDORS: SPRINKLERED: ○ *[MBC TABLE 1020.1]*
OCCUPANCY: *B* OCC LOAD SERVED: *ALL* RATING (HR): *1 (0 @ FOURTH FLOOR)*

ARCHITECTURAL INDEX

Sheet Number	Sheet Title	PERMIT AND BID SET	CD REVIEW	DD OWNER REVIEW	OWNER REVIEW
G0-00	COVER SHEET	●	●	●	●
G0-01	CODE COMPLIANCE PLANS	●	●	●	●
G0-02	CODE COMPLIANCE PLANS	●	●	●	●
AD1-01	DEMOLITION PLANS	●	●	●	●
AD1-02	DEMOLITION PLAN	●	●	●	●
A1-01	FLOOR PLANS	●	●	●	●
A1-02	FLOOR PLANS, ELEVATIONS AND DETAILS	●	●	●	●
A1-03	FLOOR PLANS, ELEVATIONS AND DETAILS	●			
A6-01	REFLECTED CEILING PLANS	●	●	●	
A6-02	REFLECTED CEILING PLAN	●	●	●	
A7-01	PARTITION TYPES AND DOOR SCHEDULE	●	●	●	●

STRUCTURAL INDEX

Sheet Number	Sheet Title	PERMIT & BID SET	CD REVIEW	DD OWNER REVIEW	SD REVIEW
S0-01	GENERAL STRUCTURAL NOTES	●	●	●	
S1-01	FLOOR PLANS	●	●	●	
S2-01	SECTIONS AND DETAILS	●	●	●	
S5-01	FLOOR PLANS	●			

ELECTRICAL INDEX

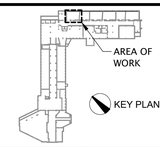
Sheet Number	Sheet Title	PERMIT & BID SET	CD REVIEW	DD OWNER REVIEW	OWNER REVIEW
E0-01	ELECTRICAL SYMBOLS AND ABBREVIATIONS	●	●		
E0-02	ONE LINE DIAGRAM AND PANEL SCHEDULES	●	●	●	●
ED-01	ELECTRICAL DEMOLITION PLANS	●	●	●	
E1-01	BASEMENT AND FIRST FLOOR LIGHTING PLANS	●	●	●	
E1-02	SECOND, THIRD AND FOURTH FLOOR LIGHTING PLANS	●	●	●	
E2-01	BASEMENT AND FIRST FLOOR POWER PLANS	●	●	●	
E2-02	SECOND, THIRD AND FOURTH FLOOR POWER PLANS	●	●	●	

MECHANICAL INDEX

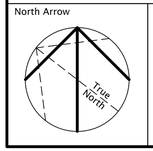
Sheet Number	Sheet Title	PERMIT & BID SET	CD REVIEW	DD OWNER REVIEW	OWNER REVIEW
F1-01	FIRE PROTECTION PLANS AND DETAILS	●	●		
M0-01	GENERAL NOTES	●	●		
M0-02	MECHANICAL ABBREVIATIONS AND SYMBOLS	●			
M0-03	MECHANICAL DETAILS	●			
MD-01	DEMOLITION PLANS HVAC	●	●	●	
M1-01	HVAC PLANS	●	●	●	
M1-02	MECHANICAL PLANS AND DETAILS	●	●	●	
P1-01	FIRE PROTECTION AND PLUMBING FLOOR PLANS	●	●	●	

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

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Project Leader R. HAAS	Checked G. KARANFILOVSKI

Client

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Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

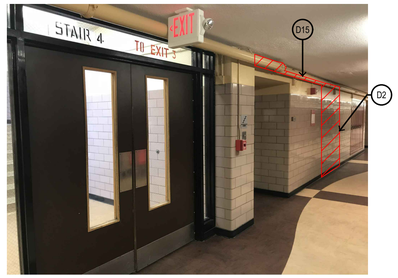
Drawing Title
COVER SHEET

Check Scale (may be photo reduced)
0 1inch 0 10mm

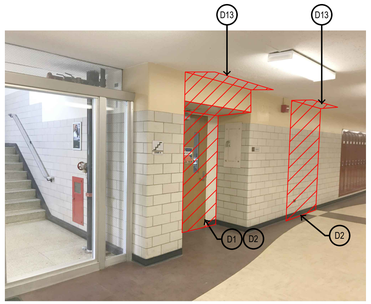
Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
G0-00

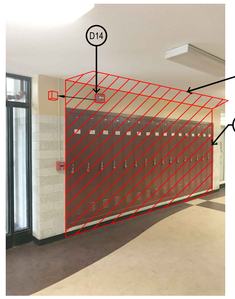
ARCH D - 24"x36" - 610mm x 914mm (rounded)



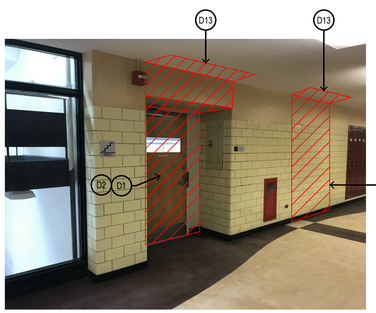
5 AD-01 **DEMOLITION PHOTO - BASEMENT**
SCALE: 1/8" = 1'-0"



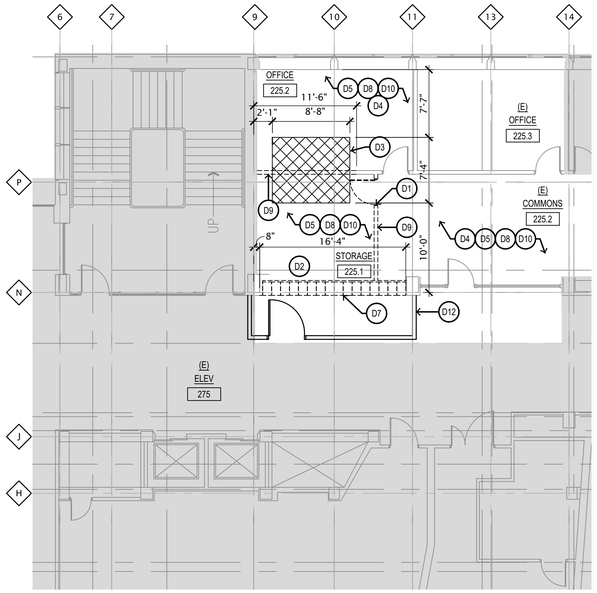
6 AD-01 **DEMOLITION PHOTO - 1ST FLOOR**
SCALE: 1/8" = 1'-0"



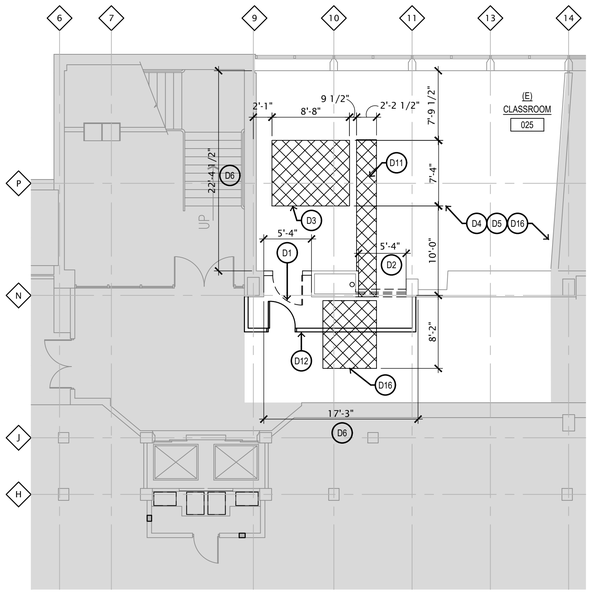
7 AD-01 **DEMOLITION PHOTO - 2ND FLOOR**
SCALE: 1/8" = 1'-0"



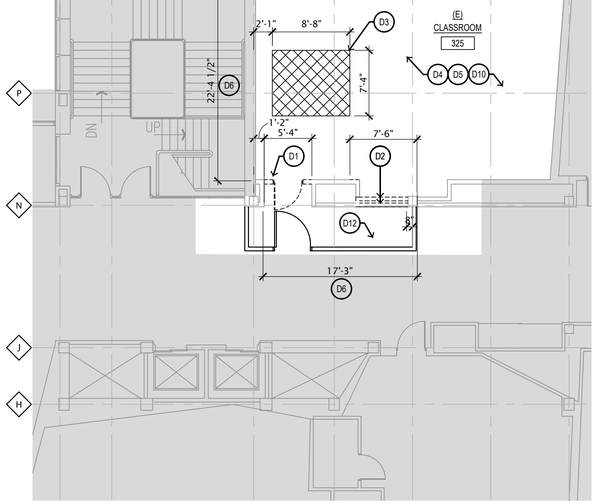
8 AD-01 **DEMOLITION PHOTO - 3RD FLOOR**
SCALE: 1/8" = 1'-0"



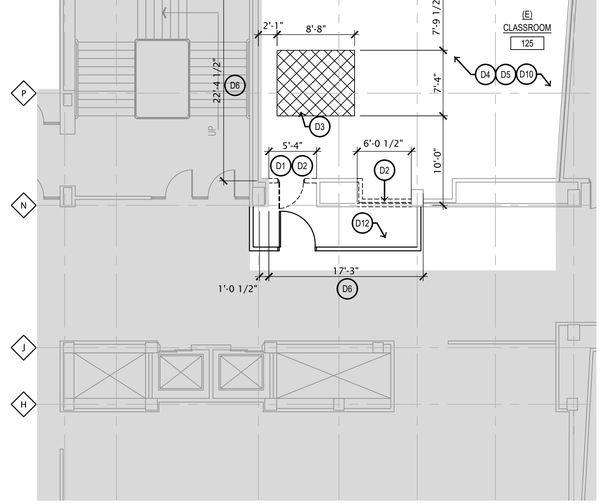
3 AD-01 **DEMOLITION PLAN - SECOND FLOOR**
SCALE: 1/8" = 1'-0"



1 AD-01 **DEMOLITION PLAN - BASEMENT**
SCALE: 1/8" = 1'-0"



4 AD-01 **DEMOLITION PLAN - THIRD FLOOR**
SCALE: 1/8" = 1'-0"



2 AD-01 **DEMOLITION PLAN - FIRST FLOOR**
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	EXISTING PARTITIONS TO REMAIN. PATCH AND REPAIR GYP. BD/CMU BLOCKING AS NECESSARY TO ENSURE A SMOOTH, SEAMLESS FINISH SUITABLE FOR NEW PAINT OR WALL COVERING.
	EXISTING PARTITION OR CASEWORK TO BE REMOVED. ALL LARGE CASEWORK SHALL BE DISASSEMBLED AND RELOCATED INTO DESIGNATED STAGING AREA WHERE THE SECTIONS MAY BE SAW CUT OR BROKEN DOWN INTO DISPOSABLE PIECES.
	EXISTING DOOR AND FRAME TO BE REMOVED AND RELOCATED.
	EXISTING FLOOR SLAB ON GRADE TO BE SAWCUT & REMOVED IN THIS AREA, TO ALLOW FOR SCHEDULED PLUMBING WORK.
#	KEY NOTE DESIGNATION
	AREA OF EXISTING NOT IN CONTRACT

GENERAL DEMOLITION NOTES:

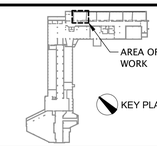
1. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODES, ORDINANCES, AND REGULATIONS, INCLUDING THE RULES AND STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, BOCA, NFPA AND OSHA.
2. THE CONTRACTOR SHALL VISIT THE EXISTING SITE AND BUILDING AND SHALL EXAMINE ALL OF THE PHYSICAL CONDITIONS THAT AFFECT THE CONTRACT PRICE, NOTING THE LOCATION OF EXISTING EQUIPMENT AND SERVICES, ETC. NO ADDITIONS TO THE CONTRACT PRICE WILL BE PERMITTED DUE TO AN IGNORANCE OF EXISTING CONDITIONS THAT ARE OBSERVABLE PRIOR TO CONSTRUCTION.
3. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING FIELD CONDITIONS TO FAMILIARIZE HIMSELF WITH DEMOLITION AND OR REMOVAL WORK WHICH MAY BE REQUIRED TO PRODUCE THE END RESULTS OF THE CONTRACT DOCUMENTS.
4. PROTECT ALL ITEMS AND FINISHES INCLUDING BUT NOT LIMITED TO EXISTING COLUMNS, EXISTING TO REMAINING WINDOWS, DOORS, GLAZING, STRUCTURAL MEMBERS NOT SPECIFIED TO BE DEMOLISHED OR REMOVED FROM DUST AND DAMAGE.
5. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES. COORDINATE ANY WORK WITH CURRENT BUILDINGS FACILITIES AND SECURITIES TEAM.
6. CUT MEMBERS BY METHODS LEAST LIKELY TO DAMAGE THE MEMBERS TO BE RETAINED AND WORK ADJOINING. EXISTING CONSTRUCTION NOT UNDERGOING ALTERATION IS TO REMAIN UNDISTURBED AND PROTECTED FROM DAMAGE. WHERE SUCH CONSTRUCTION IS DISTURBED AS A RESULT OF THE OPERATIONS OF THIS CONTRACT, IT SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS REQUIRED AND TO THE SATISFACTION OF THE OWNER.
7. CONTRACTOR SHALL PROVIDE OWN DUMPSTER(S). ALL DEMOLITION DEBRIS SHALL BE REMOVED FROM SITE BY DEMOLITION CONTRACTOR. DUMPSTER LOCATION SHALL BE APPROVED BY OWNER OR PROJECT MANAGER.
8. AREA OF DEMOLITION/ CONSTRUCTION SHALL BE LEFT BROOM CLEAN.
9. SALVAGE ALL LIGHT FIXTURES FOR RELOCATION. IF NOT REUSED CONFIRM WITH OWNER WHETHER TO DISPOSE OF OR RETURN TO OWNER
10. WHERE EXISTING CONSTRUCTION IS TO BE ALTERED, PROVIDE TEMPORARY BRACING AND/OR SHORING AS REQUIRED UNTIL THE WORK IS SAFELY COMPLETED. IF THE STABILITY OF ADJACENT STRUCTURES APPEARS THREATENED OR IN DOUBT, CEASE OPERATIONS AND NOTIFY ARCHITECT/OWNER IMMEDIATELY, DO NOT RESUME OPERATIONS UNTIL CORRECTIVE MEASURES HAVE BEEN TAKEN.

DEMOLITION NOTES BY SYMBOL:

- D1 DEMOLISH EXISTING DOOR FRAME. SALVAGE EXIST DOOR FOR RE-USE AS PART OF SCHEDULED WORK.
- D2 PARTIALLY DEMOLISH EXISTING MASONRY WALL TO UNDERSIDE OF STRUCTURE. EXISTING ADJACENT MASONRY TO REMAIN TO BE PATCHED TO PROVIDE SMOOTH FINISHED APPEARANCE.
- D3 DEMOLISH EXISTING SLAB TO THE EXTENTS SHOWN. EXCAVATE AND PREP FOR ELEVATOR PIT CONSTRUCTION. REFER TO STRUCTURAL SHEET FOR ADDITIONAL INFO.
- D4 REWORK MECHANICAL HVAC AND ELECTRICAL LIGHT FIXTURES AS REQUIRED FOR INSTALLATION OF ELEVATOR HOISTWAY. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFO.
- D5 PARTIALLY DEMOLISH EXISTING FLOOR FINISHES AND WALL BASES AS NECESSARY FOR THE INSTALLATION OF SCHEDULED ELEVATOR HOISTWAY AND SUPPORT SPACES. MINIMIZE DAMAGE TO ADJACENT FINISHES. MATCH AND REPLACE DEMOLISHED FLOOR TILES AND BASES 1:1
- D6 EXISTING WALL MOUNTED ACOUSTICAL PANELS AND TRIM PIECES LOCATED IN WORK AREA TO BE SALVAGED AND RE-USED TO THE GREATIST EXTENT POSSIBLE.
- D7 EXISTING LOCKERS AND BUILT UP SILL TO BE TO COMPLETELY DEMOLISHED TO ALLOW FOR NECESSARY ELEVATOR ACCESS OPENING.
- D8 COMPLETELY DEMOLISH EXIST GYPSUM BOARD AND CEILING GRID AS REQ'D FOR INSTALLATION OF ELEVATOR HOISTWAY.
- D9 PARTIALLY DEMOLISH EXIST GYP BD PARTITIONS AS REQ'D FOR INSTALLATION OF ELEVATOR HOISTWAY.
- D10 EXISTING WALL MOUNTED ACCESSORIES (CORKBOARDS, DRY-ERASE BOARDS, MARKER HOLDERS, CLOCKS ETC...) TO BE REMOVED AND TURNED OVER TO OWNER PRIOR TO DEMOLITION.
- D11 DEMOLISH EXISTING SLAB TO THE EXTENTS SHOWN. EXCAVATE AND PREP FOR SUMP PLUMB CONNECTION TO EXIST DRAIN LINE. REFER TO STRUCT & MECH SHEETS FOR ADDITIONAL INFO.
- D12 PROVIDE TEMPORARY 1-HR FIRE RATED PARTITIONS TO SEPARATE WORK AREA FROM REST OF BUILDING. PROVIDE 4'-0"x7'-0" 45 MINUTE RATED ACCESS DOORS W/ CLOSERS IN LOCATIONS SHOWN.
- D13 PARTIALLY DEMOLISH EXIST HARD GYP BD/PLASTER CEILING AS REQ'D FOR INSTALLATION OF NEW 1-HR RATED GYP BD CORRIDOR PARTITIONS. PATCH AND REPAIR CEILING AFTER PARTITION CONSTRUCTION IS COMPLETE.
- D14 UNINSTALL EXIST FIRE ALARM STROBE. REINSTALL AT NEAREST ADJACENT CORRIDOR WALL SURFACE @ SAME ELEVATION.
- D15 EXIST PLUMBING LINE TO REMAIN IN PLACE. PROVIDE TEMPORARY SHUTDOWN & PARTIAL PIPE REMOVAL IN EVENT THAT REQUIRED DEMOLITION AND CONSTRUCTION WORK MAKE IT IMPOSSIBLE TO KEEP PLUMBING LINE IN PLACE.
- D16 ALTERNATE #3: SLAB CUT EXTENDS TO CORRIDOR FOR STORM CONNECTION IN LIEU OF DRAIN CONNECTION

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



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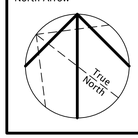

Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project Leader	Checked ---

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
DEMOLITION PLAN

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

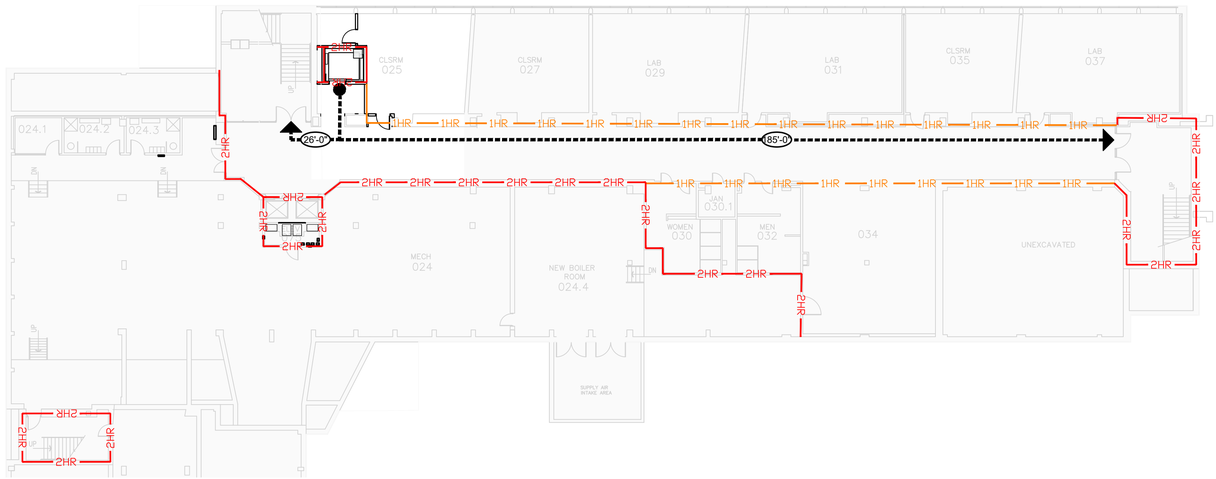
Drawing No.
AD-01

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500-DELIV\ARCH_PROD\SHEETS\PHASE 2 - ADA ELEVATOR\AD-01.DWG, PLOTSYLE TABLE: ----, PLOT DATE: September 18, 2019, TIME: 10:53 PM

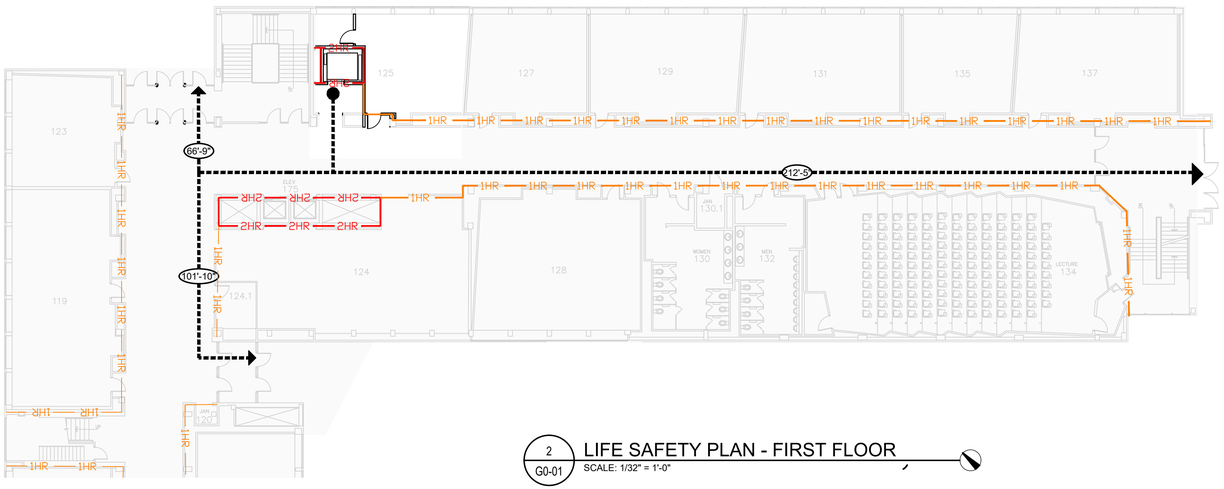
ARCH D - 24"x36" - 610mmx914mm (rounded)

PARTITION LEGEND

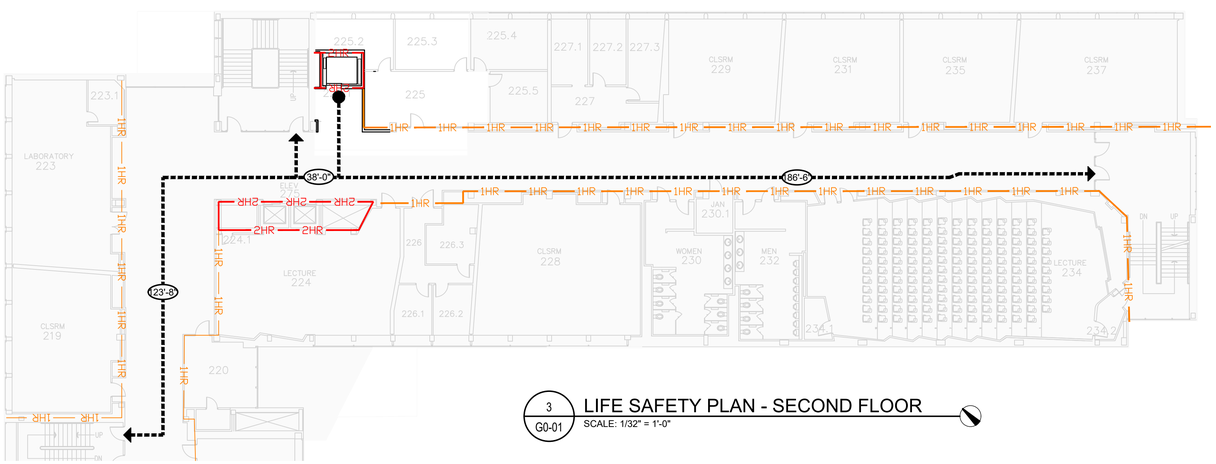
NFPA 101 - LIFE SAFETY CODE- 2000 / 2006 EDITION	
WALL RATING	
One - Hour 1HR (NFPA)	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm. * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * No Fire Dampers Required * 3/4 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
Two - Hour 2HR	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm. * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * Fire Dampers Required * 1 1/2 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
Exterior Entry / Egress Door	* Entry / Egress Door Way
	* Egress Travel Pass
	EXISTING AREA NOT IN PROJECT SCOPE



1 G0-01 LIFE SAFETY PLAN - BASEMENT
SCALE: 1/32" = 1'-0"



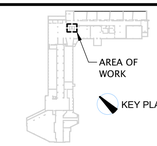
2 G0-01 LIFE SAFETY PLAN - FIRST FLOOR
SCALE: 1/32" = 1'-0"



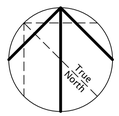
3 G0-01 LIFE SAFETY PLAN - SECOND FLOOR
SCALE: 1/32" = 1'-0"

DATE	ISSUED FOR	REV
08-02-19	OWNER REVIEW	-
08-19-19	PERMIT AND BID SET	-
09-05-19	ADDENDUM #1	
09-18-19	PERMIT AND BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 1
5143 Cass Ave, Detroit, MI 48202

Drawing Title
CODE COMPLIANCE PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. JCDT18-0229

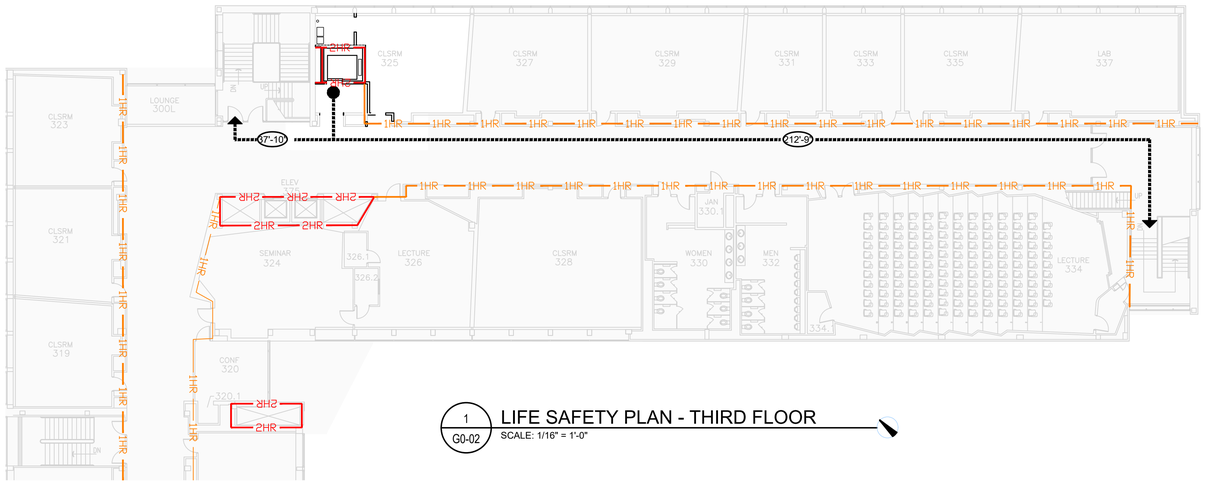
Drawing No. G0-01

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500-DELIV\ARCH_PROD\SHEETS\PHASE 2 - ADA ELEVATOR\G0-01.DWG PLOTSYLE TABLE: Ingenium.ctb PLOT DATE: September 18, 2019 TIME: 10:53 PM

ARCH D - 24"x36" - 610mmx914mm (rounded)

PARTITION LEGEND

NFPA 101 - LIFE SAFETY CODE- 2000 / 2006 EDITION	
WALL RATING	
One - Hour 1HR	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm. * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * No Fire Dampers Required * 3/4 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
Two - Hour 2HR	* Opening Protectives Shall Be Self Closing Or Released Upon Activation Of Fire Alarm. * Positive Latching Doors * Gap At Door Stop Max. 1/8" * Double Doors Require Astragals If Gap Between Doors Is Greater Than 1/8" * Door Undercuts Max. 3/4" * Maximum Measurement For Doors That Are Skewed Or Out Of Plum Is 1/2" * Fire Dampers Required * 1 1/2 Hour Door * All Penetrations Shall Be Sealed With Approved (HILTI) Fire Stopping - Floor To Deck
Exterior Entry / Egress Door	* Entry / Egress Door Way
	* Egress Travel Pass
	EXISTING AREA NOT IN PROJECT SCOPE



1 G0-02 **LIFE SAFETY PLAN - THIRD FLOOR**
SCALE: 1/16" = 1'-0"

2 G0-02 **LIFE SAFETY PLAN - FOURTH FLOOR**
SCALE: 1/16" = 1'-0"

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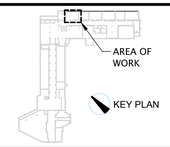
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



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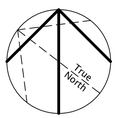

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

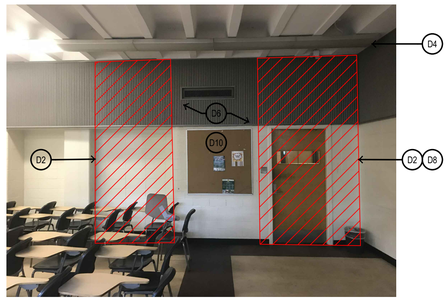
Drawing Title
CODE COMPLIANCE PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

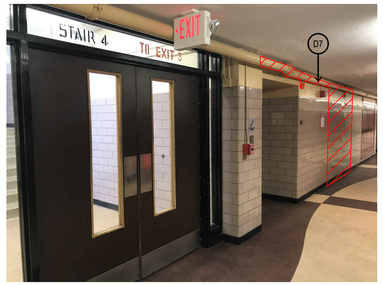
Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. G0-02

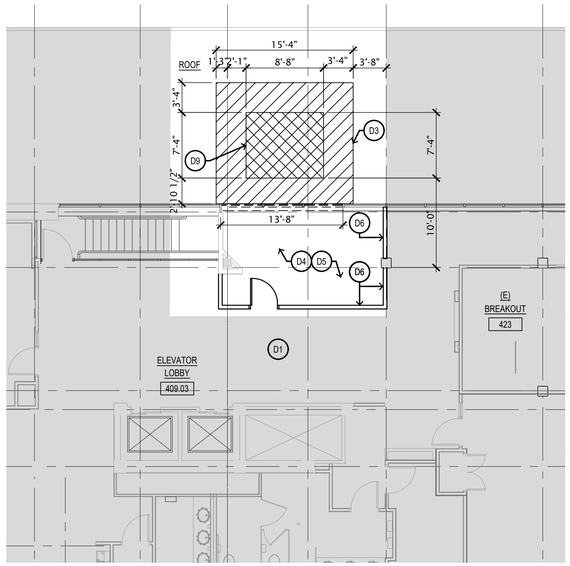
ARCH D - 24"x36" - 610mm x 914mm (rounded)



4 AD-02 DEMO PLAN - BASEMENT
NTS



5 AD-02 DEMO PHOTO- BASEMENT
NTS



1 AD-02 DEMOLITION PLAN - FOURTH FLOOR
SCALE: 1/8" = 1'-0"

6 AD-02 DEMOLITION PHOTO - 4TH FLOOR
NTS

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	EXISTING PARTITIONS TO REMAIN. PATCH AND REPAIR GYP. BD AS NECESSARY TO ENSURE A SMOOTH, SEAMLESS FINISH SUITABLE FOR NEW PAINT OR WALL COVERING.
	EXISTING PARTITION OR CASEWORK TO BE REMOVED. ALL LARGE CASEWORK SHALL BE DISASSEMBLED AND RELOCATED INTO DESIGNATED STAGING AREA WHERE THE SECTIONS MAY BE SAW CUT OR BROKEN DOWN INTO DISPOSABLE PIECES.
	EXISTING FLOOR SLAB ON GRADE TO BE SAWCUT & REMOVED IN THIS AREA, TO ALLOW FOR NEW MECHANICAL WORK, STRUCTURAL AND ELECTRICAL WORK.
#	KEY NOTE DESIGNATION
	AREA OF EXISTING NOT IN CONTRACT
	AREA OF ROOF REMOVAL

DEMOLITION NOTES BY SYMBOL:

D1 PARTIALLY DEMOLISH EXISTING GLASS CURTAIN WALL SYSTEM AND HALF-HEIGHT EXTERIOR SILL CONDITION AS REQ'D FOR SCHEDULED ELEVATOR INSTALLATION. EXISTING STOREFRONT SEALANT IS AN ASBESTOS CONTAINING MATERIAL THAT MUST BE ABATED BEFORE DEMOLITION OF STOREFRONT CAN COMMENCE.

D2 PARTIALLY DEMOLISH EXISTING MASONRY WALL TO UNDERSIDE OF STRUCTURE. EXISTING ADJACENT MASONRY TO REMAIN TO BE PATCHED TO PROVIDE SMOOTH, FINISHED APPEARANCE.

D3 DEMOLISH EXIST BALLASTED. ROOF ASSEMBLY DOWN TO EXIST SLOPED CONCRETE SLAB.

D4 REWORK MECHANICAL AND ELECTRICAL AS REQUIRED. SEE NARRATIVE FOR DETAIL

D5 PARTIALLY DEMOLISH EXISTING FLOOR FINISH AS REQUIRED FOR NEW HOISTWAY INSTALLATION. PREPARE SLAB TO RECEIVE NEW FINISHES.

D6 PROVIDE TEMPORARY 1-HR FIRE RATED PARTITIONS TO SEPARATE WORK AREA FROM REST OF BUILDING. PROVIDE 4'-0"x7'-0" 45 MINUTE RATED ACCESS DOORS W/ CLOSER IN LOCATION SHOWN.

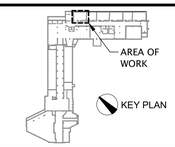
D7 EXIST PLUMBING LINE TO REMAIN IN PLACE. PROVIDE TEMPORARY SHUTDOWN & PARTIAL PIPE REMOVAL IN EVENT THAT REQUIRED DEMOLITION AND CONSTRUCTION WORK MAKE IT IMPOSSIBLE TO KEEP PLUMBING LINE IN PLACE.

D8 DEMOLISH EXIST DOOR FRAME. SALVAGE EXIST DOOR FOR RE-USE AS PART OF SCHEDULED WORK.

D9 PARTIALLY DEMOLISH EXISTING ROOF SLAB AS REQ'D FOR ELEVATOR HOISTWAY INSTALLATION.

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



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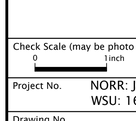

Detail Symbol

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Seal(s)

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
DEMOLITION PLAN

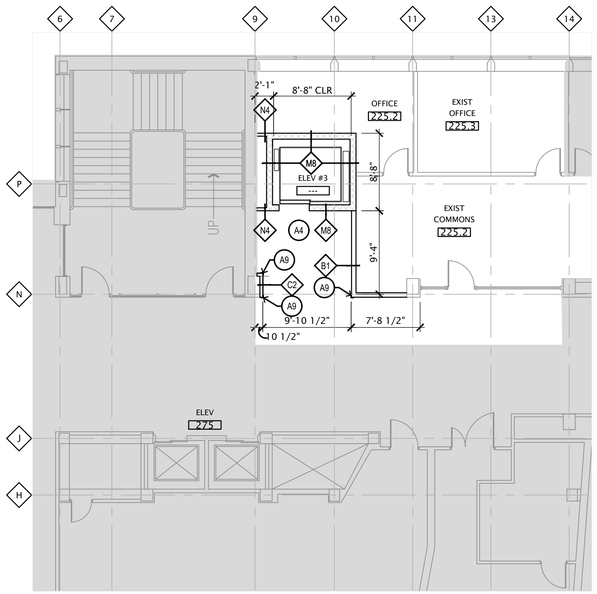
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

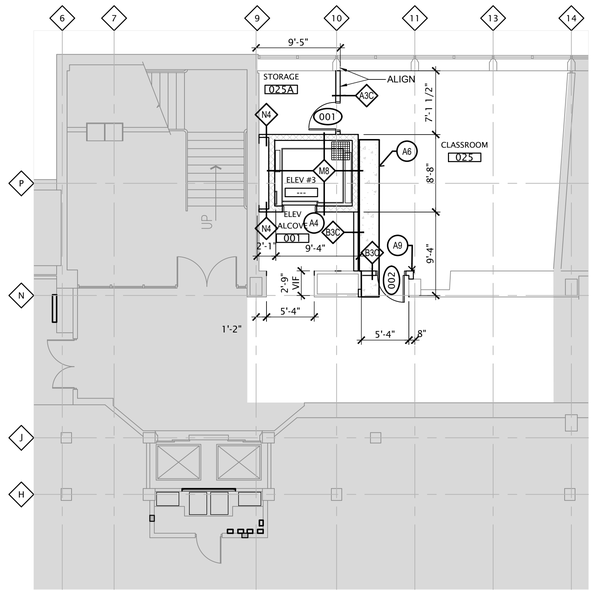
Drawing No. AD-02

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500-DELIV\ARCH_PROD\SHEETS\PHASE 2 - ADA ELEVATOR\AD-02.DWG, PLOTSYLE TABLE: ----, PLOT DATE: September 18, 2019, TIME: 10:54 PM

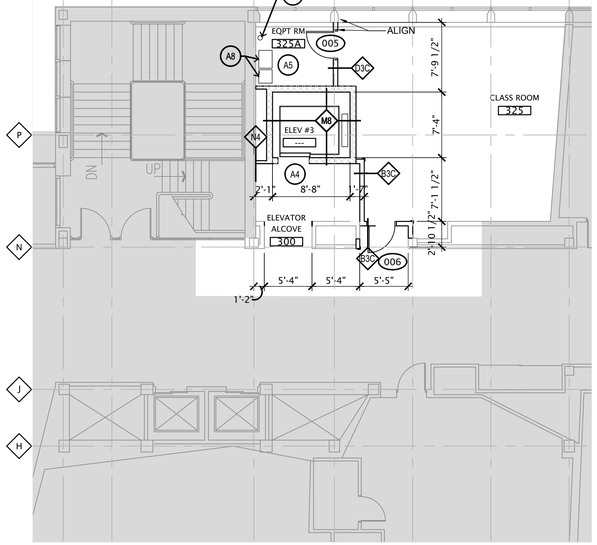
ARCH D - 24"x36" - 610mmx914mm (rounded)



3 AD-01 **SECOND FLOOR PLAN**
SCALE: 1/8" = 1'-0"



1 AD-01 **BASEMENT FLOOR PLAN**
SCALE: 1/8" = 1'-0"



4 AD-01 **THIRD FLOOR PLAN**
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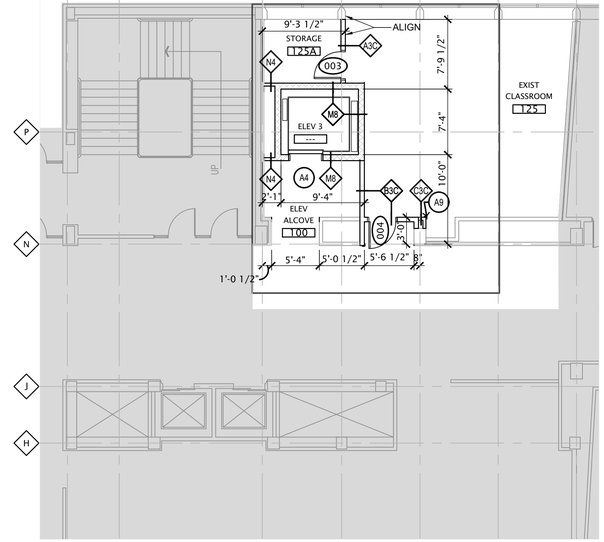


2 AD-01 **FIRST FLOOR PLAN**
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

HATCH/SYMBOL	DESCRIPTION
	AREA NOT IN SCOPE
—##	PARTITION TYPE - RE: SHEET A7-00
←##	KEY NOTE DESIGNATION
XXX	DOOR DESIGNATION, SEE DOOR SCHEDULE ON DRAWING A7-01

GENERAL ARCHITECTURAL NOTES:

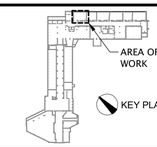
1. CONTRACTORS SHALL NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES, IN THE EVENT OF OMISSION OF NECESSARY DIMENSIONS OR INFORMATION, CONTRACTOR SHALL NOTIFY ARCHITECT.
2. GENERAL CONTRACTOR TO COORDINATE ALL IN-FLOOR UTILITY RUNS AND INTERFACE WITH OTHER TRADES AND PROVIDE SLEEVES AS REQUIRED.
3. DIMENSIONS AND PARTITION TYPES NOTED AS TYPICAL OR SIMILAR WILL APPLY TO CORRESPONDING WALLS THROUGHOUT BUILDING.
4. COORDINATE SIZE AND LOCATION OF ALL EQUIPMENT PADS AND/OR SUPPORTS WITH INFORMATION PROVIDED BY APPROPRIATE EQUIPMENT MANUFACTURER.
5. GYPSUM BOARD PARTITIONS CAN BE LEFT UNFINISHED (WITH FIRE TAPING EXPOSED) ABOVE FINISHED CEILINGS (TYP).
6. ALL WOOD BLOCKING TO BE FIRE-RETARDANT TREATED OR PRESERVATIVE TREATED, REFER TO DETAILS.
7. VERIFY SIZE, LOCATION AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED PRIOR TO INSTALLATION AND REPORT ANY DISCREPANCIES TO ARCHITECT / ENGINEER.
8. ADD SUFFICIENT BLOCKING IN STUD WALLS TO SUPPORT ALL ITEMS OR EQUIPMENT SHOWN OR SPECIFIED TO BE ATTACHED TO THE WALLS.
9. ALL DUCT & PIPE PENETRATIONS THRU FIRE RATED FLOOR AND WALL CONSTRUCTION TO BE SEALED TO SAME FIRE RATING AS ASSEMBLY PER UL APPROVED DETAILS.
10. ALL DIMENSIONS ARE TO FACE OF DRYWALL UNLESS OTHERWISE NOTED.
11. EXISTING FIREPROOFING ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED AS A RESULT OF ANY WORK WHICH DISTURBS CONTINUITY. PROVIDE FIRE RATING TO MATCH.
12. INTERIOR DOORS TO BE PLACED OFF CORNER OF PERPENDICULAR WALL SO THAT MIN. 4" REMAINS BETWEEN DOOR FRAME AND WALL, UNLESS OTHERWISE NOTED

CONSTRUCTION NOTES BY SYMBOL:

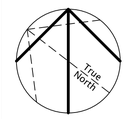
- A1 SCHEDULED 3500LBS MACHINE ROOM LESS ELEVATOR. BASIS OF DESIGN: KONE ECOSPACE
- A2 POURED-IN-PLACE 5'-0" DEEP CONCRETE ELEVATOR PIT BELOW.
- A3 ELEVATOR PIT TO INCLUDE LINEAR LED LIGHTS, GFI OUTLET, SUMP PUMP W/ PROTECTIVE GRATE, SMOKE AND HEAT DETECTORS, SPRINKLER HEADS AND SHUNT TRIP CONNECTOR.
- A4 SMOKE DETECTORS TIED INTO FIRE ALARM PANEL & BUILDING MANAGEMENT SYSTEM @ EA LANDING
- A5 INSTALL NEW LIGHTING AND PROVIDE THERMOSTAT CONTROLLED SPLIT SYSTEM
- A6 REPLACEMENT SLAB ON GRADE CONCRETE TO REPAIR CLAB CUT REQUIRED FOR SUMP CONNECTION TO EXISTING STORM DRAINAGE LINE.
- A7 BRACKET MOUNTED MOUNTED FIRE EXTINGUISHER
- A8 REFER TO ELEVATOR MANUFACTURER DOCUMENTS FOR MACHINE ROOM-LESS TRACTION ELEVATOR EQUIPMENT
- A9 STAINLESS STEEL CORNER GUARD FROM 4" TO 8'-0" AFF

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



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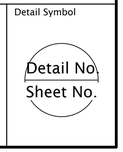

Seal(s)

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Project Manager A. NOLFF	Drawn ---
Project Leader	Checked ---

Client

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Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

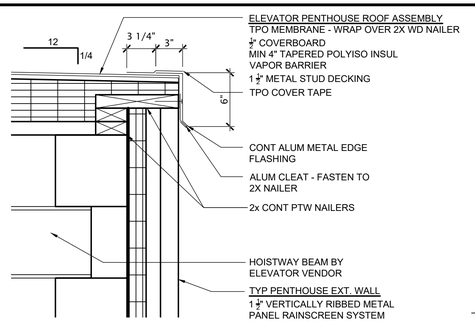
Drawing Title
FLOOR PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

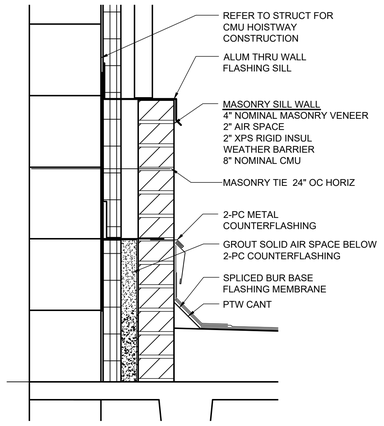
Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
A1-01

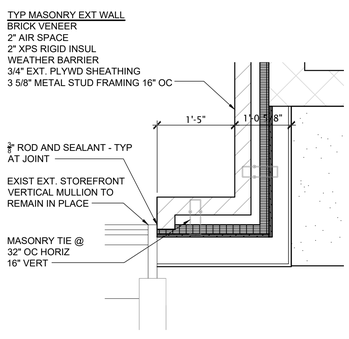
ARCH D - 24"x36" - 610mm x914mm (rounded)



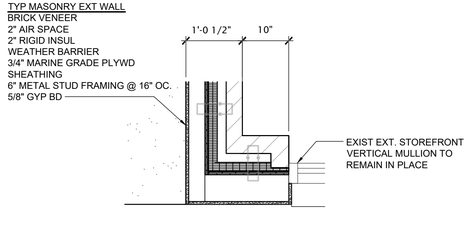
5 / A1-02 SECTION DETAIL
SCALE: 1 1/2" = 1'-0"



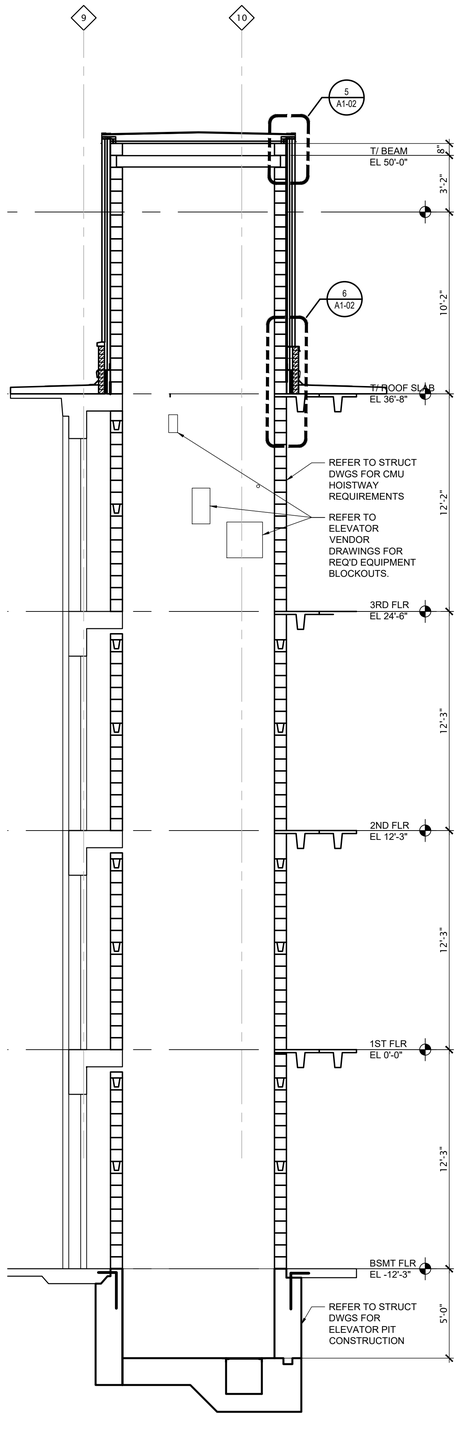
6 / A1-02 SECTION DETAIL
SCALE:1 1/2" = 1'-0"



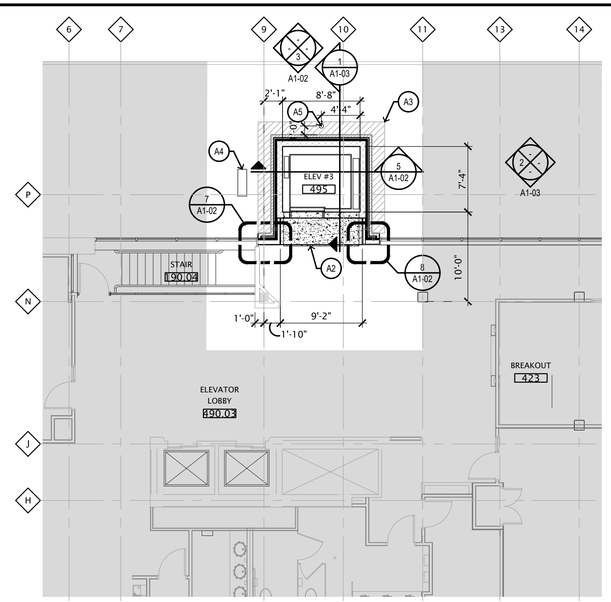
7 / A1-02 PLAN DETAIL
SCALE: 3/4" = 1'-0"



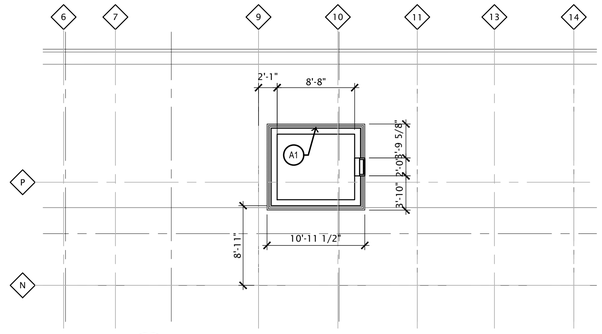
8 / A1-02 PLAN DETAIL
SCALE: 3/4" = 1'-0"



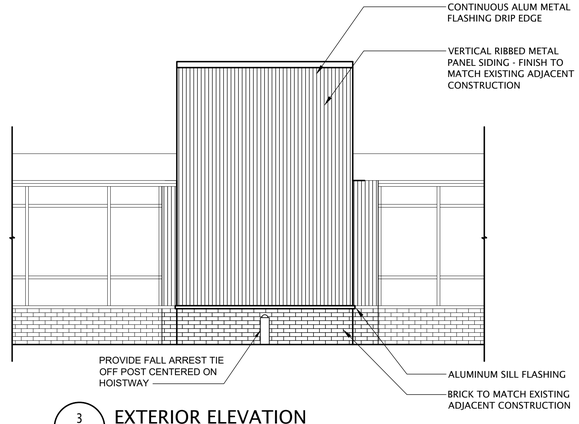
4 / A1-02 BUILDING SECTION
SCALE: 1/4" = 1'-0"



1 / A1-02 FOURTH FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 / A1-02 PENTHOUSE PLAN
SCALE: 1/8" = 1'-0"



3 / A1-02 EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

HATCH/SYMBOL	DESCRIPTION
	AREA NOT IN SCOPE
##	PARTITION TYPE - RE: SHEET A7-00
##	KEY NOTE DESIGNATION
XXX	DOOR DESIGNATION, SEE DOOR SCHEDULE ON DRAWING A7-01

ARCHITECTURE NOTES BY SYMBOL:

A1 PROVIDE 2'-0"x2'-0" INSULTED SMOKE EXHAUST LOUVER WITHIN EXTERIOR SHAFT WALL. LOUVER ACTIVATION TO BE TIED TO SMOKE DETECTOR CONNECTING TO EXIST FIRE ALARM PANEL AND BUILDING MANAGEMENT SYSTEM.

A2 PROVIDE SOLID, LEVEL CONCRETE INFILL AT EXISTING SLOPED ROOF SLAB TO FORM CONNECTING WALKING SURFACE TO SCHEDULED ELEVATOR

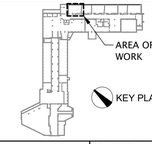
A3 PATCH AND REPAIR EXISTING BALLASTED BUR ROOF ADJACENT TO NEW ELEVATOR HOISTWAY ASSEMBLY. TIE REPAIRED ROOF MEMRBANE AND FLASHING INTO NEW EXTERIOR MASONRY SILL WALL.

A4 CONDENSING UNIT. PROVIDE CURB ACCORDING TO MANUFACTURER'S INSTRUCTIONS

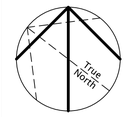
A5 GUARDIAN FALL PROTECTION CB-18 ANCHOR POINT POST OR EQUIVALENT

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project Manager A. NOLFF	Drawn ---
Project Leader	Checked ---

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
FLOOR PLANS, ELEVATIONS AND DETAILS

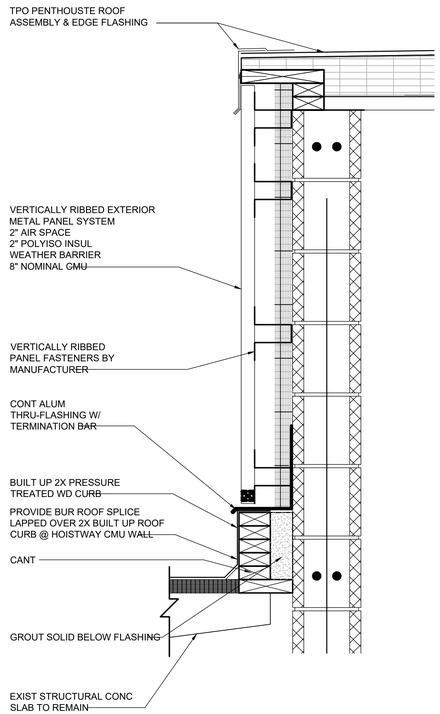
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
A1-02

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500-DELIV\ARCH_PROD\SHEETS\PHASE 2 - ADA ELEVATOR\A1-02.DWG, PLOTSYLE TABLE: Ingenium.ctb, PLOT DATE: September 18, 2019, TIME: 10:54 PM

ARCH D - 24"x36" - 610mm x 914mm (rounded)



3 A1-02 ROOF DETAIL
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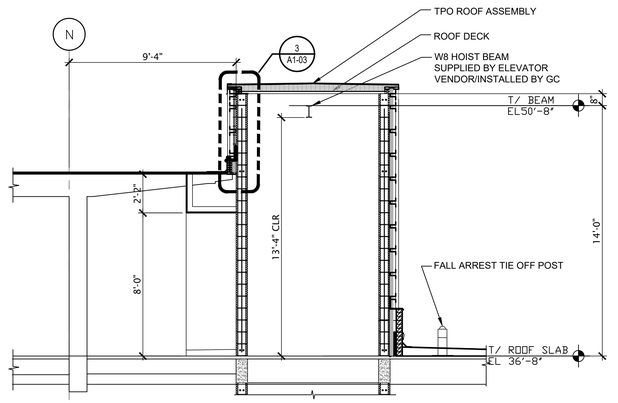
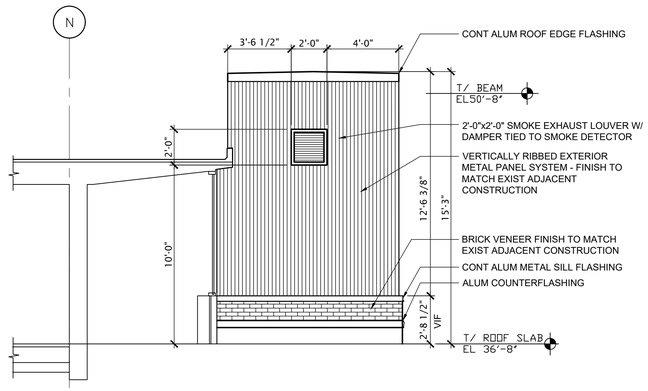


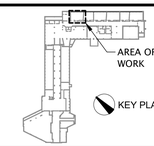
1 A1-02 PARTIAL ELEVATOR SECTION
SCALE: 1/8" = 1'-0"



2 A1-02 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



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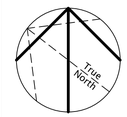

Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project Manager A. NOLFF	Drawn RPH
Project Leader	Checked G. KARANFILOVSKI

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5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
FLOOR PLANS, ELEVATIONS AND DETAILS

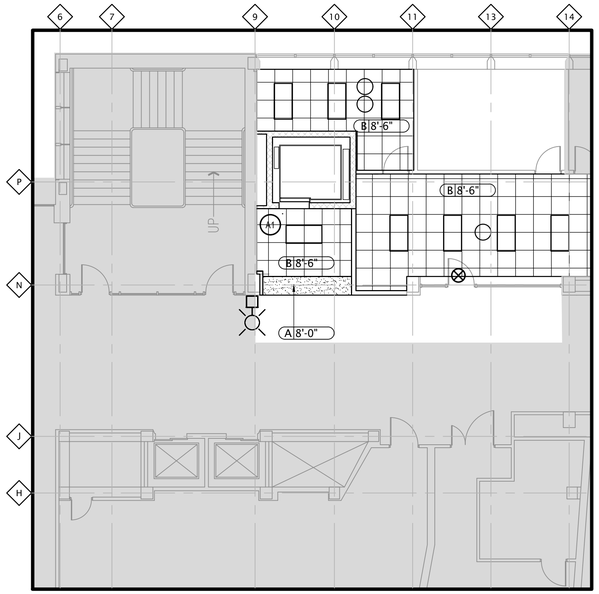
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

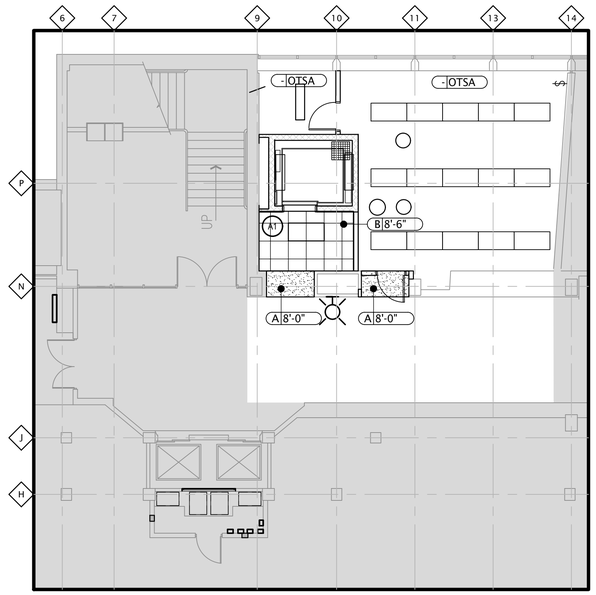
Drawing No. A1-03

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500-DELIV\ARCH_PROD\SHEETS\PHASE 2 - ADA ELEVATOR\A1-03.DWG, PLOTSYLE TABLE: Ingenium.ctb, PLOT DATE: September 18, 2019, TIME: 10:54 PM

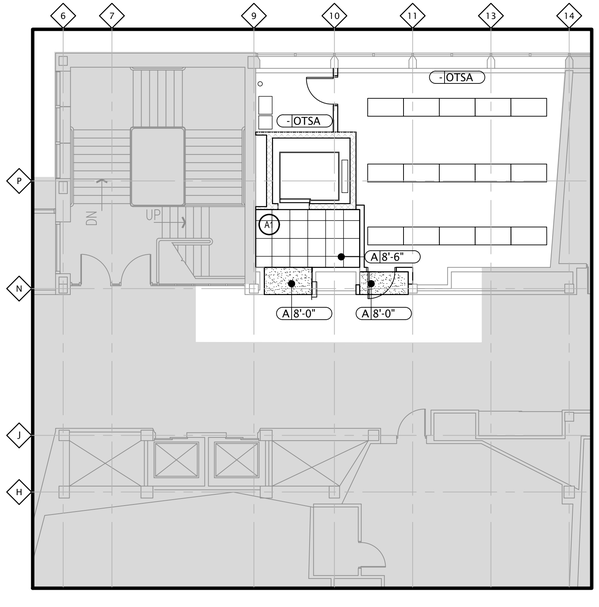
ARCH D - 24"x36" - 610mm x 914mm (rounded)



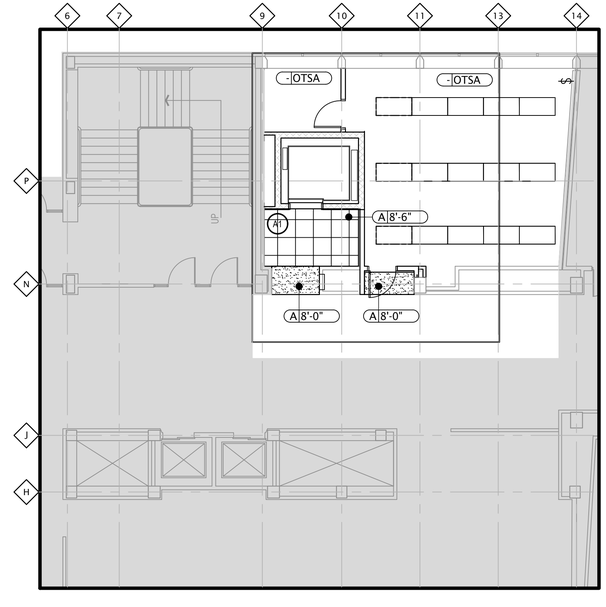
3 AD-01 **SECOND FLOOR PLAN**
SCALE: 1/8" = 1'-0"



1 AD-01 **BASEMENT FLOOR PLAN**
SCALE: 1/8" = 1'-0"



4 AD-01 **THIRD FLOOR PLAN**
SCALE: 1/8" = 1'-0"



2 AD-01 **FIRST FLOOR PLAN**
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

- CEILING TYPE DESIGNATION
- A 7'-9" ← TYP HEIGHT ABOVE LEVEL FINISHED FLOOR UNO
- -ETR ← EXIST TO REMAIN
- -OTSA ← OPEN TO STRUCTURE ABOVE

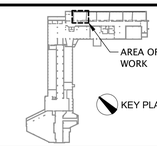
SYMBOL	DESCRIPTION	
	CEILING TYPE 'A'	NEW GYP. BD. CEILING, PROVIDE METAL STUD CEILING FRAMING @ 16" O.C.
	CEILING TYPE 'B'	NEW 2x2 CEILING GRID AND LAY-IN TILE
		NEW OR RELOCATED 2x2 LAY-IN LED LIGHT FIXTURE.
←(#)		KEY NOTE DESIGNATION
		AREA OF EXISTING NOT IN CONTRACT

CONSTRUCTION NOTES BY SYMBOL:

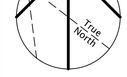
(A1) INSTALL NEW SMOKE DETECTORS @ EA LANDING DIRECTLY OUTSIDE OF ELEVATOR DOORS

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project Leader	Checked ---

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

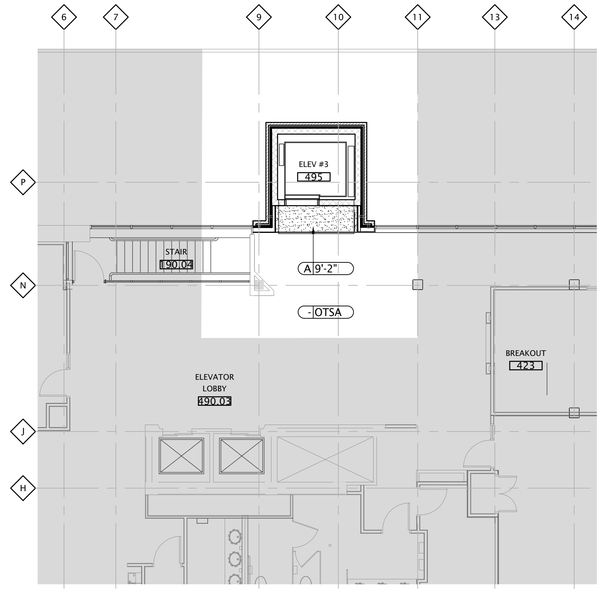
Drawing Title
REFLECTED CEILING PLAN

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
A6-01

ARCH D - 24"x36" - 610mm x 914mm (rounded)



1 / A1-02 FOURTH FLOOR REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

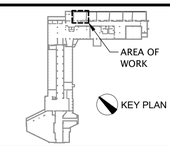
SYMBOL LEGEND

CEILING TYPE DESIGNATION
A 7'-9" — TYP HEIGHT ABOVE LEVEL FINISHED FLOOR UNO
ETR — EXIST TO REMAIN
OTSA — OPEN TO STRUCTURE ABOVE

SYMBOL	DESCRIPTION
	CEILING TYPE 'A' NEW GYP. BD. CEILING, PROVIDE METAL STUD CEILING FRAMING @ 16" O.C.
	AREA OF EXISTING NOT IN CONTRACT

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



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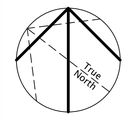

Detail Symbol

Detail No.
Sheet No.

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Drawing Title
REFLECTED CEILING PLAN

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
A6-02

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500-DELIV\ARCH_PROD\SHEETS\PHASE 2 - ADA ELEVATOR\A6-02.DWG, PLOTSYLE TABLE: Ingenium.ctb, PLOT DATE: September 18, 2019, TIME: 10:54 PM

ARCH D - 24"x36" - 610mmx914mm (rounded)

Door Schedule

Door Number	Door: Description	Thick	Type	Mat'l	Finish	Glass	Frame: Mat'l	Type	Finish	Rating	Details: Head	Jamb	Threshold/Sill	Remarks
01	STORAGE	1 3/4	F	SD-HD	P-1	-	HM	F1	PNT TME	-	1A/A7-01	1B/A7-01		1. 3. 4.
02	CLASSROOM	EXST	EXST	EXST	EXST	G-1	HM	F1	PNT TME	45	1A/A7-01	1B/A7-01		SALVAGED EXIST DOOR AND HARDWARE/NEW FRAME
03	STORAGE	1 3/4	F	SD-HD	P-1	-	HM	F1	PNT TME	-	1A/A7-01	1B/A7-01		1. 3. 4.
04	CLASSROOM	EXST	EXST	EXST	EXST	G-1	HM	F1	PNT TME	45	1A/A7-01	1B/A7-01		SALVAGED EXIST DOOR AND HARDWARE/NEW FRAME
05	ELEV MACHINE ROOM	1 3/4	F	SD-HD-FR	P-1	-	HM	F1	PNT TME	90	1A/A7-01	1B/A7-01		1. 3. 4.
06	CLASSROOM	1 3/4	EXST	WD-WT	P-1	G-1	HM	F1	PNT TME	45	1A/A7-01	1B/A7-01		SALVAGED EXIST DOOR AND HARDWARE/NEW FRAME

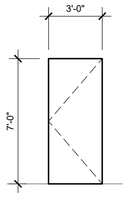
Remarks

1. ADA COMPLIANT STORAGE ROOM SET
2. SURFACE MOUNTED DOOR CLOSER.
3. 10" STAINLESS STEEL KICK PLATE ON PUSH SIDE OF DOOR.
4. (3) HEAVY-DUTY BUTT HINGES

NOT SCHEDULED: (5) 4'-0" x 7'-0" 45 MIN FIRE RATED TEMPORARY CONSTRUCTION DOORS W/ CLOSERS TO BE SEPARATE THE WORK ARE FROM THE OCCUPIED BUILDING SPACE.

ABBREVIATIONS
EXST: EXISTING
PNT: PAINT
TME: TO MATCH EXISTING
HM: HOLLOW METAL
SD-HD: STEEL DUTY, HEAVY DUTY
SD-HD-FR: STEEL DOOR, HEAVY DUTY,FIRE RATED
WD-WT: WOOD DOOR, TRANSPARENT FINISH

Door Types



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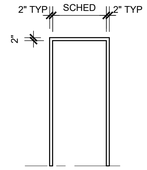
Frame Types



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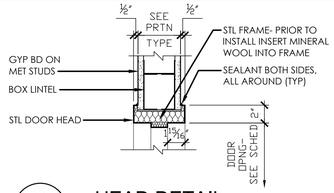
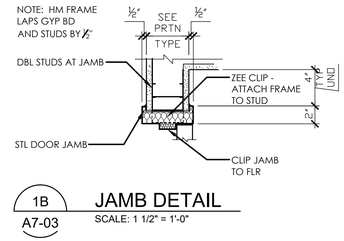
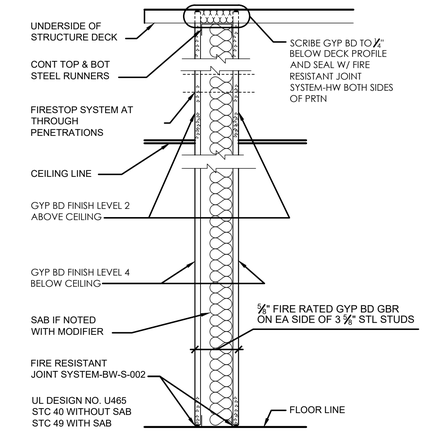


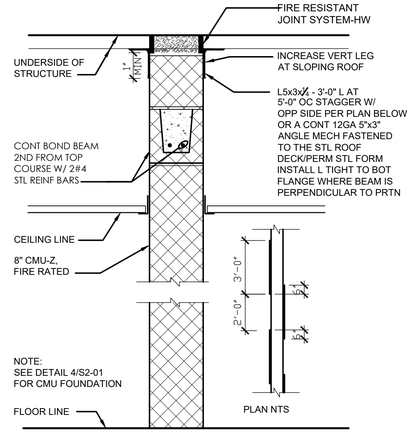
1A / A7-03 HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



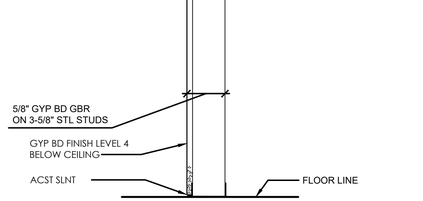
1B / A7-03 JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



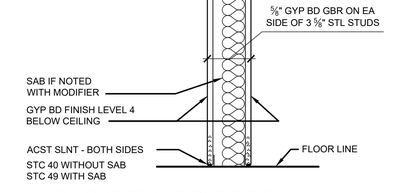
B 1 HOUR FIRE RATED PARTITION
1 1/2" = 1'-0"



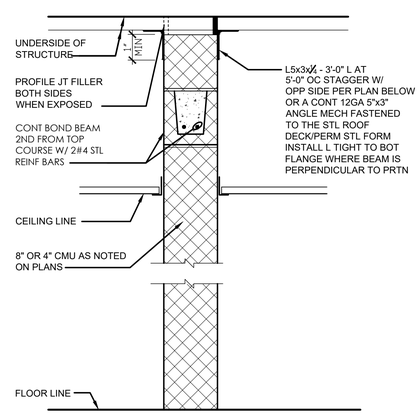
M 2 HR CMU PARTITION TO DECK
1 1/2" = 1'-0"



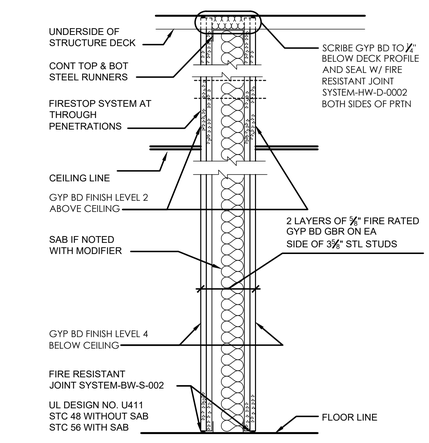
C ONE FINISHED SIDE PARTITION
1 1/2" = 1'-0"



A SMOKE TIGHT PARTITION/ SOUND CONTROL PARTITION
1 1/2" = 1'-0"



N CMU PARTITION TO DECK
1 1/2" = 1'-0"

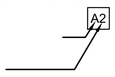


D 2 HR RATED PARTITION
1 1/2" = 1'-0"

KEY TO PARTITION TYPES

EACH PARTITION IS INDICATED WITH EITHER:
- A LETTER
- A LETTER AND A NUMERIC MODIFIER
- A LETTER, A NUMERIC MODIFIER, AND A LETTER MODIFIER

EXAMPLE -
LETTER INDICATES PARTITION TYPE
NUMBER INDICATES MODIFICATION TO THE PARTITION TYPE



NUMERICAL MODIFIERS FOR STEEL STUDS

MODIFIER	STUD WIDTH
1	1⅝"
2	2½"
3	3⅝"
4	4"
6	6"
8	8"

NUMERICAL MODIFIERS FOR CMU

NUMERICAL MODIFIERS FOR CMU ARE THE NOMINAL CMU DEPTH.

LETTER MODIFIERS

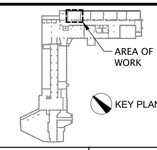
MODIFIER	DEFINITION
A	SAB
B	IMPACT RESISTANT GYPSUM BOARD
C	SAB AND IMPACT RESISTANT GYPSUM BOARD

PARTITION TYPE - GENERAL NOTES

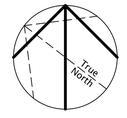
1. FOR CLARITY, PARTITION TYPES DO NOT INDICATE BASES AND FLOOR FINISHES. ALL FLOOR FINISHES & WALL BASES ARE TO MATCH EXISTING ADJACENT CONSTRUCTION.
2. PROVIDE THROUGH PENETRATION FIRE STOP SYSTEM AT FIRE RATED PARTITIONS, SHAFT WALLS, AND FLOOR OPENINGS.

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

NORR

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WAYNE STATE UNIVERSITY
Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title

PARTITION TYPES & DOOR SCHEDULE

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.

A7-01

ARCH D - 24"x36" - 610mmx914mm (rounded)

GENERAL NOTES:

1. BUILDING AND DESIGN CODES:

A. 2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS

B. AISC 360-10: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (14TH EDITION STRUCTURAL STEEL MANUAL)

C. AISI S100-12 WITH 2012 NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, 2010

D. AWS STRUCTURAL WELDING CODE-SHEET STEEL, D1.3-2008.

E. ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 2014 EDITION

F. ACI DETAILING MANUAL, 2004

G. STRUCTURAL WELDED WIRE REINFORCEMENT MANUAL OF STANDARD PRACTICE, WIRE REINFORCEMENT INSTITUTE, 2011.

H. ACI 530 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, 2013 EDITION

I. CRSI MANUAL OF STANDARD PRACTICE, 2009.

2. DESIGN LOADS:

A. LIVE LOADS: UNIFORM

ROOF	20 PSF
SLAB ON GRADE	100 PSF
CORRIDOR	80 PSF
CLASS ROOMS - FIXED SEATS	50 PSF
CLASS ROOMS - MOVEABLE SEATS	60 PSF

B. DEAD LOADS:

ROOF DEAD LOAD	20 PSF
EXST JOIST FLOOR	65 PSF
EXST JOIST ROOF	72 PSF

C. WIND LOADS:

3 SECOND GUST WIND SPEED:	120 MPH ULT
EXPOSURE:	B
RISK FACTOR:	III

D. SNOW LOADS:

Ce: EXPOSURE FACTOR = 1.0
Cr: THERMAL FACTOR = 1.0
Pg: GROUND SNOW LOAD = 20 PSF

E. ADDITIONAL DESIGN LOADS INDICATED ON STRUCTURAL DRAWINGS SHALL BE IDENTIFIED AS FOLLOWS:

DL = DEAD LOAD
LL = LIVE LOAD
WL = WIND LOAD
EL = SEISMIC LOAD

3. GENERAL REQUIREMENTS:

A. SPECIFICATIONS ARE LISTED IN THE NOTES FOUND ON THIS SHEET. NO ADDITIONAL SPECIFICATION MANUAL IS INCLUDED FOR STRUCTURAL WORK.

B. VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK OR FABRICATING MATERIALS. NOTIFY A/E OF DISCREPANCIES BEFORE PROCEEDING WITH ANY PHASE OF WORK.

C. VERIFY THE LOCATION OF CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS, PADS, AND WALL OPENINGS.

D. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS.

E. DETAILS LABELED "TYPICAL DETAILS" ON DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY ENGINEER OF CONFLICTS REGARDING APPLICABILITY OF "TYPICAL DETAILS".

F. DO NOT LOAD THE SLAB ON GRADE OR SUPPORTED SLAB WITH ERECTION CRANES OR ERECTION EQUIPMENT. THE SLABS HAVE NOT BEEN DESIGNED FOR CRANE LOADS AND WILL REQUIRE AN INCREASE IN THICKNESS AND/OR REINFORCEMENT. OBTAIN A/E APPROVAL ON PROPOSED CRANE SUPPORT PLAN FOR SLABS PRIOR TO COMMENCING WORK.

G. DO NOT STORE OR STACK CONSTRUCTION MATERIALS ON POURED OR ERECTED FLOORS/ROOFS IN EXCESS OF 80 PERCENT OF LIVE LOAD. GENERAL CONTRACTOR WILL ENSURE THAT ALL SUB-CONTRACTORS ARE INFORMED OF LOADING RESTRICTIONS. AVOID IMPACT WHEN PLACING MATERIALS ON POURED OR ERECTED FLOORS OR ROOF.

H. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION; INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, SHORING OF RETAINING WALLS AND OTHER TEMPORARY SUPPORTS AS REQUIRED. COMPLY WITH APPLICABLE REQUIREMENTS OF OSHA AND OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.

I. PRINCIPAL OPENINGS THROUGH THE FRAMING ARE SHOWN ON DRAWINGS. EXAMINE THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR THE REQUIRED OPENINGS AND PROVIDE FOR REQUIRED OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT, VERIFY SIZE AND LOCATION OF OPENINGS WITH THE MECHANICAL CONTRACTOR. DEVIATIONS FROM THE OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED PRIOR TO IMPLEMENTING THE CHANGES.

J. LOADINGS FOR MECHANICAL EQUIPMENT ARE BASED ON THE UNITS SHOWN ON THE MECHANICAL DRAWINGS. ANY CHANGES IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE ARCHITECT FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.

K. SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL SLAB DEPRESSIONS. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL SECTIONS WITH ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO FABRICATING OR INSTALLING STRUCTURAL MEMBERS.

FOUNDATION:

1. NO GEOTECHNICAL ENGINEERING REPORT WAS AVAILABLE AT TIME OF PERMITTING. FOOTING DESIGN IS BASED ON 3500 PSF ASSUMED ALLOWABLE SOILS PRESSURE. SOIL BEARING PRESSURE FROM GENERAL NOTES ON SHEET S-1 OF "ADDITON TO STATE HALL" DATED 1955.
2. CONTRACTOR SHALL TREAT SOIL BELOW SLAB FOR TERMITES.
3. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2 INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTINGS AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS OR THROUGH THE GRADE BEAMS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS. LOWER FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.
4. MAINTAIN SUBGRADE AND FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED.
5. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.
6. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE
7. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.

CONCRETE:

1. PROVIDE BATCH MIXING, TRANSPORTATION, PLACING AND CURING OF CONCRETE IN ACCORDANCE WITH RECOMMENDATIONS OF ACI 301 AND ACI 318. USE TYPE I PORTLAND CEMENT UNLESS NOTED OTHERWISE. PROVIDE ADMIXTURES AND SPECIAL REQUIREMENTS AS SPECIFIED.
   A. ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) CONCRETE AND: f'c=3,000 PSI AT 28 DAYS.
2. PROVIDE CONCRETE MIXES DESIGNED BY A QUALIFIED TESTING LABORATORY FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.
3. PROVIDE CONSTRUCTION AND CONTROL JOINTS AS INDICATED ON DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED UNLESS SPECIFICALLY NOTED OR APPROVED BY STRUCTURAL ENGINEER. NOTIFY STRUCTURAL ENGINEER OF PROPOSED CONSTRUCTION JOINT OR CONTROL JOINT LOCATIONS THAT ARE DIFFERENT OR IN ADDITION TO JOINTS INDICATED ON DRAWINGS.
4. CHAMFER EXPOSED EDGES 3/4 INCH UNLESS NOTED OTHERWISE.
5. WIRE BRUSH AND CLEAN CONSTRUCTION JOINTS PRIOR TO POURING NEW CONCRETE.
6. REFERENCE THE APPROPRIATE DISCIPLINE DRAWINGS FOR SUBSLAB PIPING, FLOOR DRAINS AND SLAB AND WALL PENETRATIONS.
7. PROVIDE ADEQUATE STRUCTURAL FRAMING AS APPROVED BY STRUCTURAL ENGINEER FOR MECHANICAL OPENINGS THROUGH THE SLABS, WALLS AND FLOOR DECK. OPENINGS WILL NOT BE PERMITTED THROUGH BEAMS UNLESS SPECIFICALLY DETAILED.
8. ADMIXTURES CERTIFIED BY MANUFACTURER TO CONTAIN NOT MORE THAN 0.1 PERCENT WATER-SOLUBLE CHLORIDE IONS BY MASS OF CEMENTITIOUS MATERIAL AND TO BE COMPATIBLE WITH OTHER ADMIXTURES AND CEMENTITOUS MATERIALS. DO NOT USE ADMIXTURES CONTAINING CALCIUM CHLORIDE.
   A. AIR-ENTRAINING ADMIXTURE: ASTM C 260
   B. WATER-REDUCING ADMIXTURE: ASTM C 494, TYPE A
   C. HIGH-RANGE, WATER REDUCING ADMIXTURE: ASTM C 494, TYPE F
   D. WATER REDUCING AND ACCELERATING ADMIXTURE: ASTM C 494, TYPE E
   E. WATER REDUCING AND RETARDING ADMIXTURE: ASTM C 494, TYPE D
   F. XYPEX ADMIX C-500NF IN ELEVATOR PIT AND SUMP DOSAGE RATE FOR ADMIX C-500NF (NO FINES GRADE) IS 1.4% BY WEIGHT OF CEMENT.
9. COMPLY WITH RECOMMENDATIONS IN ACI 302.1R FOR SCREEDING, RESTRAIGHTENING AND FINISHING OPERATIONS FOR CONCRETE SURFACES. DO NOT WET CONCRETE.
   A. INTERIOR FLOOR SLABS: MACHINE TROWEL FINISH
   B. EXTERIOR SLABS: LIGHT FLEXIBLE BRISTLE BROOM FINISH
10. PROVIDE ACI "CLASS A" TOLERANCE, 1/8 INCH VARIATION IN 10 FEET. MEASURED WITH A STRAIGHT EDGE LAID IN ANY DIRECTION.
11. SUBMIT MIX DESIGNS FOR EACH CONCRETE MIX FOR THE PROJECT PER CHAPTER 5 OF ACI 318. MIX DESIGNS SHALL INCLUDE ALL BACK UP MATERIAL WITH COMPRESSIVE STRENGTH BREAKS BASED ON FIELD TEST DATA OR BREAKS FROM A TRIAL MIX PER CHAPTER 5.

REINFORCING STEEL:

1. PROVIDE DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING AND ACCESSORIES IN ACCORDANCE WITH ACI 315 AND ACI 318.
2. PROVIDE NEW BILLET STEEL REINFORCING BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60.
3. COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDS AND ANCHOR RODS. SET ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBED ITEMS TO FORMWORK OR REINFORCING.
4. PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. PROVIDE STANDARD 90-DEGREE HOOKS IN ACCORDANCE WITH ACI 318, UNLESS NOTED OTHERWISE.
5. MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL UNLESS NOTED OTHERWISE:
   A. CONCRETE CAST AGAINST EARTH: 3 INCHES
   B. CONCRETE EXPOSED TO WEATHER
   NO. 6 AND LARGER: 2 INCHES
   NO. 5 AND SMALLER: 1 1/2 INCHES
   C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:
   SLABS AND WALLS
   NO. 14 AND NO. 18: 1 1/2 INCHES
   NO. 11 AND SMALLER: 3/4 INCHES
6. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY STRUCTURAL ENGINEER.
7. WHEN SPECIFICALLY APPROVED, PROVIDE WELDED REINFORCEMENT ACCORDANCE WITH ASTM A 706 GRADE 60. USE LOW HYDROGEN ELECTRODES FOR WELDING OF REINFORCEMENT IN CONFORMANCE WITH "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL", AMERICAN WELDING SOCIETY, AWS D12.1. PROVIDE ASTM GRADE 40 REINFORCING BARS WHERE DETAILED BARS ARE TO BE WELDED TO A STEEL SECTION.
8. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING.
9. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90-DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.
10. WHEN SHOWN ON DRAWINGS PROVIDE FIBER REINFORCING IN ACCORDANCE WITH SPECIFICATIONS. ADD FIBER REINFORCING TO THE CONCRETE MIX IN ACCORDANCE WITH ASTM C 1116 AND THE MANUFACTURERS RECOMMENDATIONS.

STRUCTURAL STEEL:

1. DESIGN, DETAIL AND ERECT STRUCTURAL STEEL ELEMENTS IN ACCORDANCE WITH THE FOLLOWING:
   A. AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
   B. AISC MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN.
   C. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
   D. AWS STRUCTURAL WELDING CODE, D1.1.
2. PROVIDE STRUCTURAL STEEL OF THE FOLLOWING ASTM DESIGNATIONS UNLESS NOTED OTHERWISE:
   A. STRUCTURAL STEEL WIDE FLANGE SHAPES: ASTM A 992
   B. EDGE ANGLES, BENT PLATES, HANGERS AND BRACES: ASTM A 36
   C. STRUCTURAL PIPE: ASTM A 53, GRADE B, TYPE E OR S
   D. HOLLOW STRUCTURAL SHAPES: ASTM A 500, GRADE B
   E. BASE PLATES AND MISCELLANEOUS STEEL PLATES: ASTM A 36
   F. ANCHOR RODS: ASTM F 1554, GRADE 36
3. CONNECTION MATERIALS:
   A. BEAM-COLUMN STIFFENER PLATES AND DOUBLER PLATES TO MATCH THE GRADE STEEL OF STRUCTURAL ELEMENT:
   B. HIGH STRENGTH BOLTS (SLIP CRITICAL JOINTS FOR ALL BRACES WHERE SPECIFIED): ASTM A 325
   C. HARDENED STEEL WASHERS: ASTM F 436
4. WELD MINIMUM SIZE AND STRENGTH:
   A. PROVIDE MINIMUM SIZE OF FILLET WELDS AS SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.
   B. PROVIDE MINIMUM EFFECTIVE THROAT THICKNESS OF PARTIAL PENETRATION GROOVE WELDS AS SPECIFIED IN TABLE J2.3 OF THE AISC MANUAL.
   C. DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER ELEMENT JOINED, ON ALL SHOP AND FIELD WELDS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
   D. WHERE CONNECTIONS ARE NOTED ON DRAWINGS AS MOMENT CONNECTIONS, PROVIDE WELDS TO DEVELOP FULL FLEXURAL CAPACITY OF THE LESSER MEMBER.

STRUCTURAL STEEL CONT:

   E. PROVIDE ELECTRODES FOR FIELD OR SHOP WELDING THAT CONFORM TO ASTM A 233 (CLASS 70).
   F. ALL WELDS ARE CONTINUOUS FOR THE FULL LENGTH OF THE CONNECTION UNLESS NOTED OTHERWISE ON DRAWINGS.
5. PROVIDE MINIMUM OF TWO BOLTS PER CONNECTION. PROVIDE MINIMUM BOLT DIAMETER OF 3/4 INCH.
6. PROVIDE BOLTS, NUTS AND WASHERS THAT ARE HOT DIP GALVANIZED ACCORDING TO ASTM A 153, CLASS C WHEN USED TO CONNECT STEEL ELEMENTS THAT ARE HOT DIP GALVANIZED AFTER FABRICATION.
7. PROVIDE SIMPLE SHEAR CONNECTIONS FOR STEEL CONNECTIONS NOT SPECIFIED OTHERWISE UTILIZING HIGH STRENGTH BEARING BOLTS IN SINGLE OR DOUBLE SHEAR. PROVIDE DOUBLE ANGLE OR SINGLE PLATE SHEAR TAB BOLTED CONNECTIONS.
   A. UNLESS LARGER REACTION IS SHOWN ON DRAWINGS, PROVIDE MINIMUM DESIGN FORCES AS FOLLOWS:
      1. NONCOMPOSITE BEAMS: BEAM-TO-BEAM OR BEAM-TO-COLUMN CONNECTION TO DEVELOP THE REACTION OF CONNECTED BEAM. OBTAIN END REACTION FROM ALLOWABLE UNIFORM LOAD TABLES IN PART 2 OF THE AISC MANUAL OF STEEL CONSTRUCTION.
8. ADD TO REACTIONS LISTED ABOVE, LOADS OR REACTIONS OF MEMBERS SUPPORTED BY BEAM WITHIN THREE FEET OF BEAM END AND VERTICAL COMPONENTS OF FORCES IN BRACE MEMBERS FRAMING INTO BEAM.
9. BRACE CONNECTIONS SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS. ANGLE SIZES, PLATE SIZES, AND SIZE AND LENGTHS OF WELDS SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING:
   A. DESIGN CONNECTIONS OF DIAGONAL MEMBERS TO DEVELOP THE LOADS SHOWN ON THE BRACE DETAILS.
   B. WHERE FORCES ARE NOT INDICATED ON THE DETAILS, DESIGN CONNECTIONS OF DIAGONAL MEMBERS TO DEVELOP THE FULL TENSILE CAPACITY OF THE DIAGONAL MEMBER.
   C. SIZE GUSSET PLATES AND ALL WELDS TO RESIST THE FORCE OF THE DIAGONAL MEMBERS. PLATES AND WELDS SHALL BE SIZED FOR TENSIONS, SHEARS, AND MOMENTS CAUSED BY CONCENTRIC AND ECCENTRIC FORCES.
   D. ALL BRACE CONNECTIONS SHALL USE WELDS OR FULLY TENSIONED A325 CLASS A SLIP CRITICAL BOLTS.
10. STEEL FABRICATION:
   A. FABRICATE AND ASSEMBLE STRUCTURAL MEMBERS/ASSEMBLIES IN SHOP TO GREATEST EXTENT POSSIBLE.
   B. CAMBER OF STRUCTURAL STEEL MEMBERS IS INDICATED ON THE DRAWINGS. WHERE POSSIBLE, CAMBER OF BEAMS TO BE APPLIED BY COLD BEND PROCESS. CAMBER INDICATED ON DRAWINGS IS INTENDED TO BE FINAL CAMBER AT TIME OF ERECTION, AND WITHIN A TOLERANCE OF MINUS ZERO TO PLUS ONE-EIGHTH INCH FOR EACH TEN FEET OF MEMBER LENGTH.
   C. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL BY THE A/E.
   D. BE RESPONSIBLE FOR ALL ERRORS OF DETAILING ON THE SHOP DRAWINGS, ERRORS IN FABRICATION, AND THE CORRECT FITTING OF STRUCTURAL STEEL MEMBERS.
   E. CONFORM TO THE AISC CODE OF STANDARD PRACTICE, FOR ERECTION TOLERANCES. FIELD MODIFICATION TO STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL BY THE A/E.
   F. CLEAN STEEL OF RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS WHERE REQUIRED FOR FABRICATION, FITTING UP, OR WELDING.
   G. DO NOT CUT STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR REVIEW AND APPROVAL OF THE A/E.
11. HOT DIP GALVANIZE AFTER FABRICATION ALL STRUCTURAL STEEL AND THEIR CONNECTIONS PERMANENTLY EXPOSED TO THE OUTSIDE. ITEMS INCLUDED BUT NOT LIMITED TO:
   A. SHELF ANGLES.
   B. PARAPET WALL SUPPORTING MEMBERS
   C. EMBEDDED PLATES IN CONCRETE
   D. BUILDING CLADDING SUPPORT STEEL
   E. EXAMINE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR OTHER ITEMS THAT REQUIRE HOT DIPPED GALVANIZATION.
12. PROVIDE GROUT FOR BASE PLATES THAT IS NON-SHRINK, NON-METALLIC GROUT WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 6000 PSI. COMPLETE GROUT WORK PRIOR TO PLACING DECK CONCRETE OF A SINGLE STORY BUILDING OR PRIOR TO PLACING SECOND FLOOR CONCRETE OF A MULTIPLE STORY BUILDING.
13. SUBMIT CALCULATIONS FOR CONNECTION DESIGNS NOT DETAILED ON DRAWINGS. DESIGN CONNECTIONS UNDER SUPERVISION OF REGISTERED PROFESSIONAL ENGINEER, REGISTERED IN THE STATE WHERE PROJECT IS BEING CONSTRUCTED, EMPLOYED BY THE STEEL FABRICATOR. DESIGN CALCULATIONS TO BE SEALED BY FABRICATOR'S REGISTERED PROFESSIONAL ENGINEER. SHOP DRAWINGS SUBMITTED WITHOUT COMPLETE DESIGN CALCULATIONS WILL NOT BE REVIEWED. WHERE PREDESIGNED CONNECTIONS ARE TAKEN DIRECTLY FROM TABLES IN AISC MANUAL, CALCULATIONS NEED NOT BE SUBMITTED PROVIDED HOLES. FOR LONG-SLOTTED HOLES PROVIDE WASHERS OR A CONTINUOUS BAR OF SUFFICIENT JOB DESIGN CONDITIONS PRECISELY MATCH THOSE ASSUMED IN THE AISC MANUAL.
14. PROVIDE WASHERS FOR ALL CONNECTIONS WITH STANDARD, OVERSIZE AND SHORT-SLOTTED SIZE TO COMPLETELY COVER THE SLOT. PLATE WASHERS OR BARS TO BE MINIMUM OF 5/16 INCH THICK FOR LONG-SLOTTED HOLES.
15. WIDE FLANGE BEAM CONNECTIONS TO TUBE COLUMNS SHALL BE MADE WITH BOLTED SHEAR TAB PLATE TYPE CONNECTIONS UNLESS OTHERWISE NOTED ON PLAN. ONE-SIDED CONNECTIONS SHALL BE DESIGNED AS ECCENTRIC CONNECTIONS.
16. FURNISH STEEL SHOP DRAWINGS FOR ARCHITECT'S AND STRUCTURAL ENGINEER'S REVIEW PRIOR TO FABRICATION. INCLUDE WELDING PROCEDURES, TESTING PROGRAMS FOR WELDING AND HIGH STRENGTH BOLTING, COATING MATERIAL AND ERECTION SEQUENCE ON SHOP DRAWINGS.
17. MILL STEEL COLUMN ENDS TO FIT FLUSH WITH BASE PLATE, CAP PLATE AND END PLATES. FIELD ASSEMBLY OF THESE STEEL ELEMENTS TO THE COLUMNS IS PROHIBITED.
18. HEADED STUDS (SHEAR AND ANCHOR) AND DEFORMED ANCHORS:AR
   A. PROVIDE HEADED STUDS (SHEAR AND ANCHOR) MADE OF MATERIAL CONFORMING TO
   B. PROVIDE DEFORMED ANCHORS MADE OF MATERIAL CONFORMING TO ASTM A 496.
   C. WELD STUDS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MANUAL ARC (STICK) WELDING OF HEADED STUDS AND/OR DEFORMED ANCHORS IS NOT ALLOWED.
19. PRIOR TO DECK PLACEMENT, VERIFY THAT STEEL BEAMS BEARING ON MASONRY HAVE 8 INCH MINIMUM BEARING AND ARE ANCHORED AS SHOWN ON DRAWINGS.
20. PROVIDE TEMPORARY SHORING OR BRACING DURING CONSTRUCTION PHASE, PRIOR TO COMPLETING CONNECTIONS AND POURING OF FLOOR SLAB. TEMPORARY CONSTRUCTION BRACING OF THE STRUCTURAL STEEL FRAME IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL AFTER THE PERMANENT BRACING SYSTEM HAS BEEN COMPLETED. ASTM A 108.
21. CLEAN STEEL TO BE PAINTED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL POWER TOOL CLEANED SSPC-SP3.
22. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED WHITE OR LIGHT GREY TO PROVIDE DRY FILM THICKNESS NOT LESS THAN 1.0 MIL: ASPHALTIC PAINTS ARE NOT ACCEPTABLE.

LIGHT GAGE STEEL:

1. PROVIDE ALL STUDS AND/OR JOISTS AND ACCESSORIES OF THE TYPE, SIZE, GAGE AND SPACING SHOWN ON THE DRAWINGS.
2. DESIGN ALL STRUCTURAL MEMBERS IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.
3. FORM ALL FRAMING MEMBERS FROM CORROSION RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A653 AND THE FOLLOWING STRENGTH REQUIREMENTS:

FRAMING MEMBER	GAGE	MINIMUM YIELD
STUDS, JOISTS	20,18	33 KSI
STUDS, JOISTS	10,12,14,16	50 KSI
RUNNERS, SOLID BLOCKING	20	33 KSI

LIGHT GAGE STEEL CONT:

4. PLACE ALL COLD-FORMED STEEL STUD WALL BRIDGING HORIZONTALLY WITH A MAXIMUM VERTICAL SPACING OF FOUR FEET UNLESS NOTED OTHERWISE. AS AN OPTION, CONTINUOUS COLD-FORMED CHANNELS MAY BE POSITIONED THROUGH THE STUD PUNCH OUTS AS BRIDGING PROVIDED THE CHANNEL IS PROPERLY FASTENED TO EACH STUD.
5. INSTALL AXIALLY LOADED STUDS IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED AGAINST THE INSIDE OF RUNNER WEB PRIOR TO FASTENING.
6. FASTEN COMPONENTS WITH SELF-DRILLING SCREWS OR WELDING. PROVIDE SCREWS OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS IS NOT PERMITTED. TOUCH UP ALL WELDS WITH A ZINC-RICH PAINT.
7. WELDING OF COLD-FORMED STUDS MAY BE PERFORMED USING A MINIMUM ONE-EIGHTH INCH AWS TYPE 6013 WELDING ROD.
8. SECURELY ANCHOR RUNNERS TO THE SUPPORTING STRUCTURE. PROVIDE COMPLETE, UNIFORM, AND LEVEL BEARING SUPPORT FOR THE BOTTOM RUNNER.
9. SECURELY ANCHOR ABUTTING LENGTHS OF RUNNER TO A COMMON STRUCTURAL ELEMENT, BUTT-WELDED OR SPLICED.
10. PLUMB, ALIGN, AND SECURELY ATTACH STUDS TO THE FLANGES OF BOTH UPPER AND LOWER RUNNERS. SPLICES IN STUDS ARE NOT PERMITTED.
11. PROVIDE HEADERS AND SUPPORTING STUDS FOR FRAMING OF WALL OPENINGS.
12. STABILITY BRIDGING SHALL BE INSTALLED AT A MAXIMUM 4'-0" O.C. FOR SUSPENDED SOFFITS UNLESS NOTED OTHERWISE.
13. DESIGN OF METAL STUD FRAMING SHOWN IS BASED ON CEE TYPE (1 5/8" FLANGE) STUDS BY DALE INDUSTRIES.
13. SHOP DRAWINGS AND CALCULATIONS FOR COLD FORMED METAL FRAMING TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

METAL DECK:

1. PROVIDE DESIGN, FABRICATION, AND ERECTION OF METAL DECK CONFORMING TO THE STEEL DECK INSTITUTE'S "CODE OF RECOMMENDED STANDARD PRACTICE AND BASIC DESIGN SPECIFICATIONS".
2. FORM ROOF AND FLOOR DECK FROM STEEL SHEETS CONFORMING TO ASTM A 611 GRADE C AND D OR A 653 OR HIGHER SPECIFICATIONS WITH A MINIMUM YIELD STRENGTH OF 33 KSI.
3. ATTACH SHEETS TO STEEL SUPPORT MEMBERS AS INDICATED AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. WHEN DECK IS SCHEDULED TO BE EXPOSED, DE-SLAG, CLEAN AND TOUCHED UP WELDS WITH A ZINC-RICH PRIMER.
4. LAP ROOF AND FLOOR DECK ENDS MINIMUM OF 2 INCHES. WHEN FASTENING DECK TO SUPPORT MEMBERS PROVIDE WELDING MATERIALS INSTALLATION PROCEDURES TO PREVENT BURNING OF HOLES IN DECK.
5. PROVIDE SIX INCH CLOSURE STRIP WHERE CHANGES IN DECK DIRECTION OCCUR. CLOSURE TO BE SAME GAGE AS DECK.
6. AT ENDS OF DECKS OR WHERE CHANGES OF DECK DIRECTION OCCUR, FASTEN TO SUPPORTS AT EACH FLUTE. PROVIDE ADEQUATE CLOSURES AND FASTENERS TO SIDES AT EIGHTEEN INCHES ON CENTER.
7. WHERE PARTIAL PANELS MAY BE REQUIRED TO COMPLETE DECK INSTALLATION AT PERIMETER OF STRUCTURE, PROVIDE WELDS IN EACH FLUTE TO STRUCTURAL MEMBERS. INSTALL DECK IN THREE CONTINUOUS SPAN LENGTHS.
8. AT PERIMETER OF DECK, SECURE DECK TO STRUCTURAL MEMBERS WITH SAME ATTACHMENT AND SPACING SUPPORT ATTACHMENT AS INDICATED ON PLANS.
9. SHOP DRAWINGS FOR METAL DECK TO BE PREPARED BY THE METAL DECK DETAILERS.

MASONRY:

1. REINFORCED MASONRY WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES: ACI 530-95/ASCE 5-95/TMS 402-95.
2. REINFORCED MASONRY TO CONFORM TO THE SPECIFICATIONS FOR MASONRY STRUCTURES: ACI 530.1-95/ASCE 6-95/TMS 602-95 (WITH THE EXCEPTIONS NOTED IN JOB SPECIFICATIONS).
3. PROVIDE CONCRETE MASONRY UNITS (CMU) OF NORMAL WEIGHT (125 PCF MINIMUM), GRADE N, TYPE I OR II, CONFORMING TO THE LATEST EDITION OF ASTM C 90. LAY UNITS IN RUNNING BOND UNLESS NOTED OTHERWISE.
4. PROVIDE MASONRY ASSEMBLAGES WITH MINIMUM PRISM STRENGTH (f'm) OF 1,500 PSI, TESTED IN ACCORDANCE WITH ASTM C 140.
5. PROVIDE CONCRETE MASONRY UNITS IN ACCORDANCE ASTM C 426 LIMITS FOR DRYING SHRINKAGE OF CONCRETE BLOCKS.
6. PROVIDE VERTICAL REINFORCEMENT IN CMU WALLS AS SHOWN IN DRAWINGS. FILL THE REINFORCED CELLS SOLID WITH GROUT. MAXIMUM HEIGHT OF GROUT POURS TO BE AS PER THE SPECIFICATION FOR MASONRY STRUCTURES TABLE NO. 7. UNTIL WALL IS PERMANENTLY BRACED BY ROOF.
7. LAY HOLLOW UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. PROVIDE FULL MORTAR COVERAGE FOR WEBS WHEN ADJACENT TO GROUTED CELLS.
8. ALIGN VERTICAL CELLS TO BE FILLED WITH GROUT TO PROVIDE CONTINUOUS UNOBSTRUCTED VERTICAL CELLS. REMOVE OVERHANGING MORTAR OR OTHER OBSTRUCTION AND DEBRIS FROM THE INSIDES OF CELL WALLS. PROVIDE GROUT WITH 8 INCH SLUMP AND CONSOLIDATE BY MEANS OF HAND TAMPING TO ENSURE COMPLETE FILLING OF CELLS.
9. INSTALL ANCHORS, ACCESSORIES, AND OTHER ITEMS TO BE BUILT IN AS WORK PROGRESSES.
10. PERFORM CUTTING AND FITTING OF MASONRY WITH MASONRY SAWS PROVIDING CUT FINISHED UNITS.
11. GROUT CELLS AT OR BELOW FINISHED GRADE ARE TO BE GROUTED SOLID.
12. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, DO NOT SLOPE DOWEL MORE THAN ONE HORIZONTAL TO SIX VERTICAL.
13. WALL SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED BY ROOF.
14. SPECIAL INSPECTION IS REQUIRED AS FOLLOWS:
   A. DURING PREPARATION OF REQUIRED PRISMS OR TEST SPECIMENS.
   B. DURING THE LAYING OF MASONRY UNITS.
   C. DURING PLACEMENT OF REINFORCING STEEL.
   D. FOR GROUT SPACES PRIOR TO CLOSING OF CLEANOUTS AND GROUTING.
   E. DURING ALL GROUTING OPERATIONS.

   FORWARD INSPECTION RESULTS TO THE ENGINEER OF RECORD.
15. GROUT FILL CORES SHALL CONFORM TO ASTM C478 WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS.
16. MORTAR SHALL COMFORM TO ASTM C270
   A. MASONRY BELOW GRADE: TYPE M MORTAR
   B. EXTERIOR ABOVE GRADE MASONRY: TYPE S MORTAR
17. GALVANIZED HORIZONTAL REINFORCEMENT SHALL HAVE 9 GAGE SIDE AND CROSS RODS SPACED 16" ON CENTER. LAP REINFORCEMENT 7".

SPECIAL INSPECTIONS:

SPECIAL INSPECTION SHALL MEET THE REQUIREMENTS OF IBC SECTION 1704. SPECIAL INSPECTOR(S) SHALL BE HIRED BY THE OWNER TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE NAMES OF PERSONS OR FIRMS WHO ARE TO PERFORM THE SPECIAL INSPECTIONS SHALL BE FORWARDED TO THE BUILDING OFFICIAL FOR APPROVAL. THE SPECIAL INSPECTOR(S) SHALL COMPLETE AND SUBMIT ALL FORMS REQUIRED BY DETROIT, MICHIGAN

1. THE SPECIAL INSPECTOR(S) SHALL:
   A. OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DRAWING AND SPECIFICATIONS.
   B. FURNISH INSPECTION REPORTS TO THE ENGINEER OF RECORD AND BUILDING DEPARTMENT. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED TO THE ENGINEER AND THE BUILDING DEPARTMENT.
   C. SUBMIT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT A SIGNED FINAL REPORT STATING THAT THE WORK WAS IN CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC.
2. SPECIAL INSPECTION NOTES:
   A. CONTINUOUS SPECIAL INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS SPECIFICALLY NOTED BELOW.
   B. WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING THE PERFORMANCE OF THE WORK EXCEPT AS ALLOWED IN IBC SECTION 1704.2.2 AND UNLESS SPECIFICALLY NOTED BELOW.
   C. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE SPECIAL INSPECTOR(S) WITH ADVANCE NOTICE, NO LESS THAN ONE WORKING DAY, OF THE INITIATION OF ANY WORK REQUIRED TO HAVE SPECIAL INSPECTIONS. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION WILL BE SUBJECT TO REMOVAL.

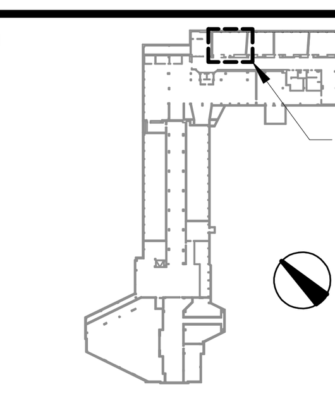
   RE: STATEMENT OF SPECIAL INSPECTIONS AND SCHEDULE OF SPECIAL INSPECTIONS SUBMITTED AS A SEPARATE DOCUMENT BY NORR, LLC AS REQUIRED BY BUILDING CODE

MASONRY REINFORCEMENT SPLICE TABLE

REINFORCING SIZE	8" MASONRY 1 BAR CENTERED	8" MASONRY 2 BARS IN CELL OR OFFSET BARS
#4	15"	26" (2" CLR)
#5	23"	40" (2" CLR)
#6	43"	74" (2" CLR)

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

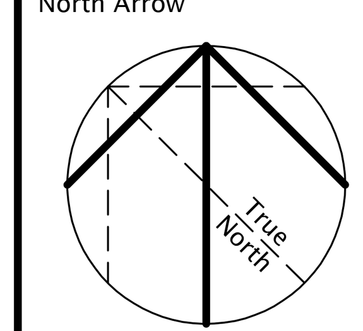
Keyplan



AREA OF WORK

KEY PLAN

North Arrow



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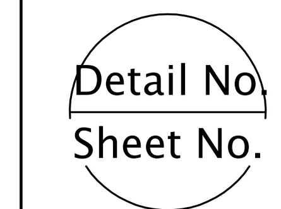

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION
5143 Cass Ave, Detroit, MI 48202

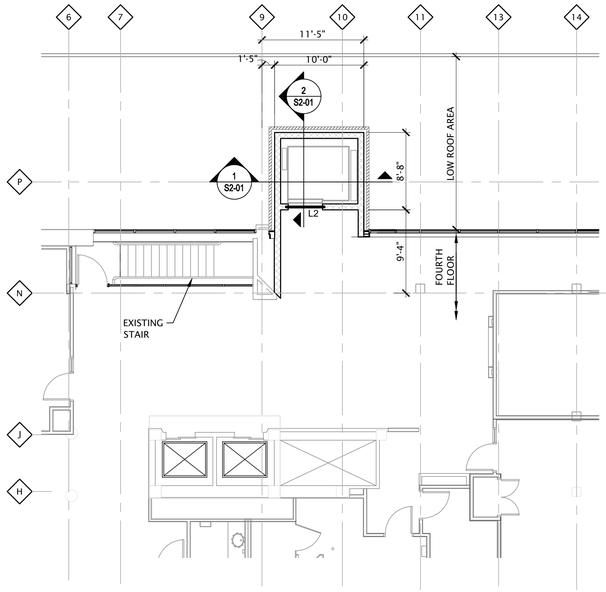
Drawing Title

GENERAL STRUCTURAL NOTES

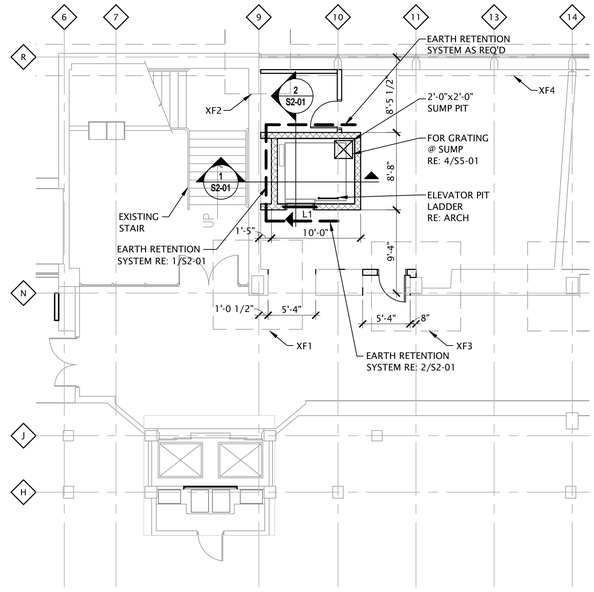
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. S0-01



3 / S1-01 FOURTHFLOOR PLAN
SCALE: 1/8" = 1'-0"



1 / S1-01 BASEMENT FLOOR PLAN
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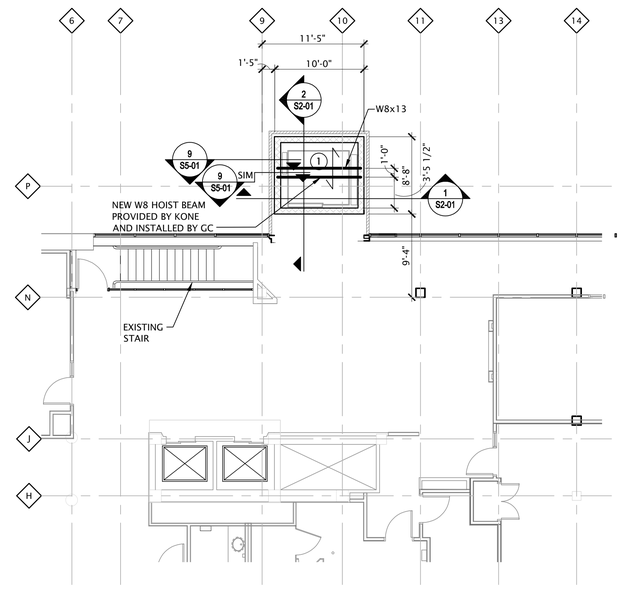
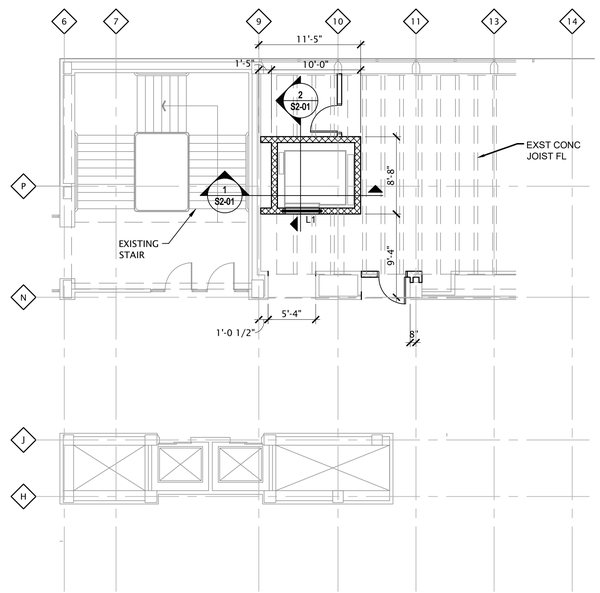


4 / AD-01 ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"



2 / AD-01 FIRST THRU THIRD FLOOR PLAN
SCALE: 1/8" = 1'-0"

FRAMING NOTES:

1. ALL DIMENSIONS SHALL BE COORDINATED WITH ARCH DWGS.
2. ⟷ INDICATES DIRECTION OF DECK SPAN.
3. RE: SHEET S0-01 FOR GENERAL NOTES.
4. L-x INDICATES CMU LINTEL MARK. RE: 2/S5-01.
5. PROVIDE CORNER BAR IN ELEVATOR PIT WALLS PER 1/S5-01

KEYNOTES:

(1) 1 1/2"-20 GA GALVANIZED WIDE RIB ROOF DECK. FASTEN PER 3/S5-01.

EXISTING FOOTING SCHEDULE:

XF1 - 9'-6"x9'-6"x2'-2" THICK, BOTTOM OF FTG 2'-6" BELOW BASEMENT FIN FL

XF2 - 7'-4"x7'-4"x2'-0" THICK , BOTTOM OF FTG 2'-4" BELOW BASEMENT FIN FL

XF3 - 9'-3x9'-3"x2'-2" THICK , BOTTOM OF FTG 2'-6" BELOW BASEMENT FL

XF4 - 3'-6" WIDE x 1'-6" CONT BOTTOM OF FTG 2'-10" BELOW BASEMENT FIN FL

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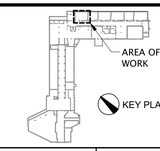
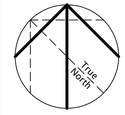
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project

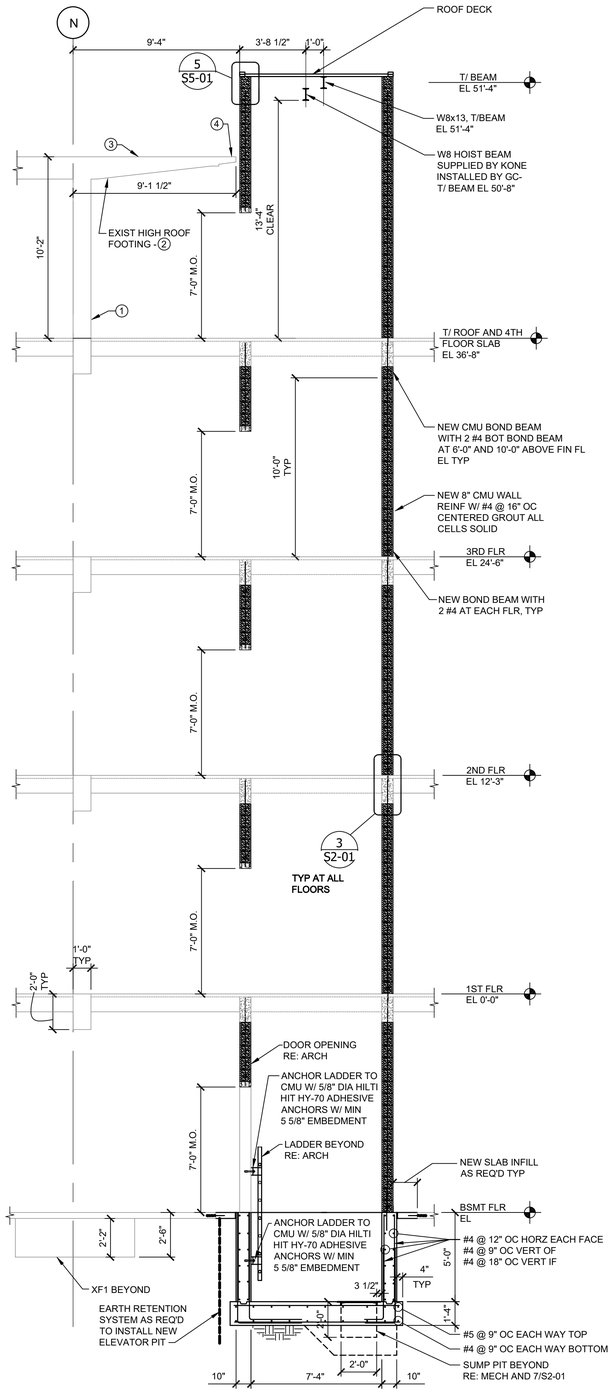
STATE HALL ELEVATOR REFURBISHMENT & RENOVATION
5143 Cass Ave, Detroit, MI 48202

Drawing Title
FLOOR PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

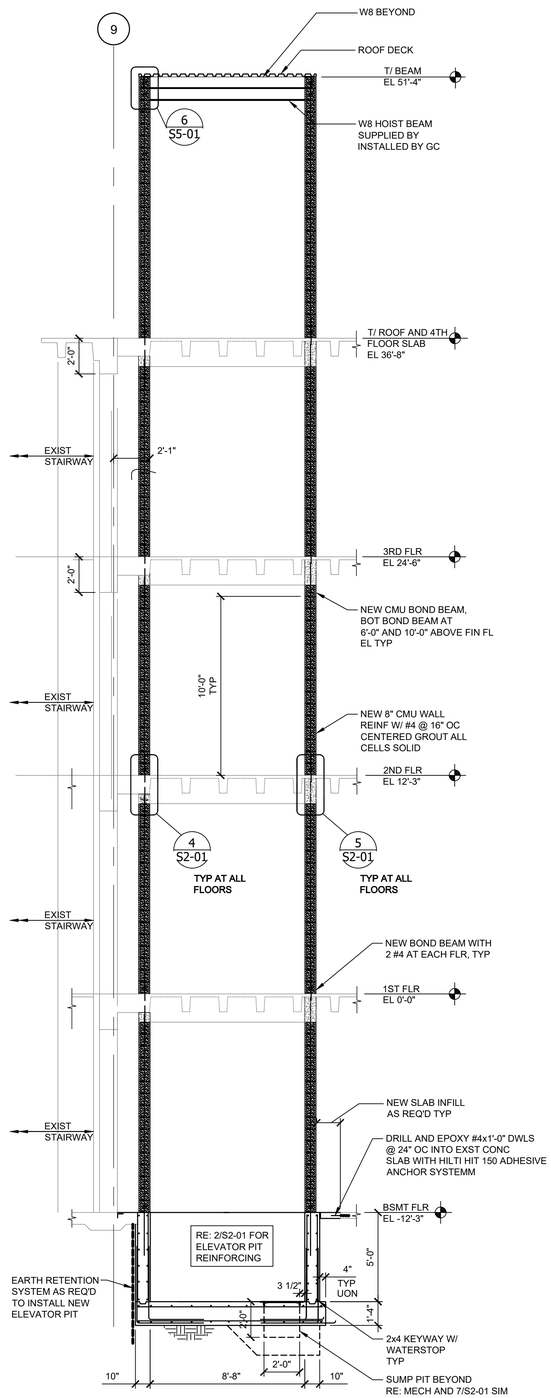
Drawing No.
S1-01



2 SECTION S2-01
SCALE: 1/4" =1'-0"

FRAMIING NOTES:

1. 12"x12" CONCRETE COLUMN.
2. 18" WIDE BEAM EXISTING CONCRETE BEAM ON COLUMN GRID DEPTH VARIES FROM 15" TO 6".
3. EXISTING 5" CONCRETE SLAB BETWEEN EXISTING BEAMS - ON COLUMN GRID.
4. EXISTING CONCRETE SLAB OVERHANG, DEPTH VARIES FROM 3 3/4" TO 3 1/2" AT TIP, RE: 7/S5-01.



1 SECTION S2-01
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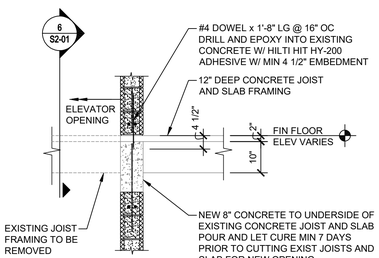

3 SECTION S2-01
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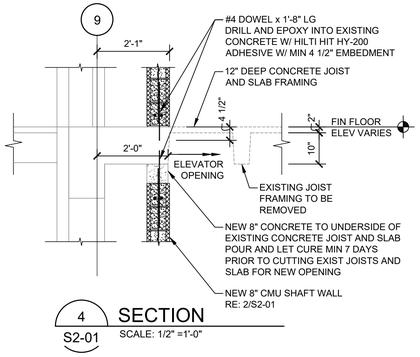

4 SECTION S2-01
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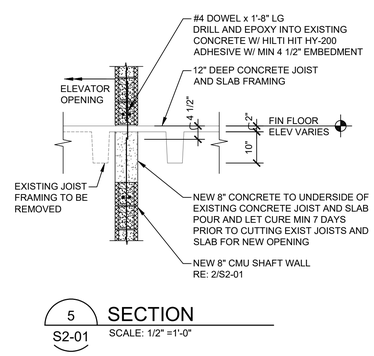

5 SECTION S2-01
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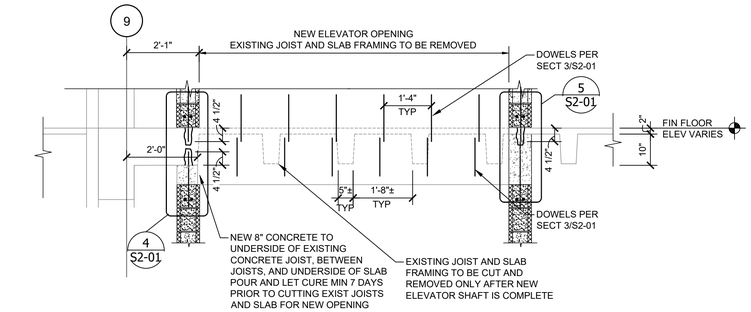


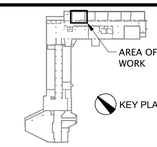
6 SECTION S2-01
SCALE: 1/2" =1'-0"

EARTH RETENTION SHORING NOTES:

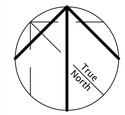
1. DESIGN DOCUMENTS INDICATE MINIMUM REQUIREMENTS.
2. CONTRACTOR SHALL SUBMIT FOR APPROVAL CALCULATIONS AND A DETAILED "FIELD WORK" SHOP DRAWING SHOWING EARTH RETENTION SYSTEM, BRACING AS REQUIRED, AND INSTALLATION OF RETENTION SYSTEM INCLUDING BRACING PRIOR TO BEGINNING OF WORK. CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN.
3. EARTH RETENTION ENGINEER SHALL ACCOUNT FOR ALL STAIR DEAD AND LIVE LOADING IN THE STAIRWAY ADJACENT TO THE WALL REQUIRING EARTH RETENTION SYSTEM. MAINTAIN THIS CONDITION UNTIL PROJECT IS COMPLETE.
4. REMOVE AND RECONNECT OR REPLACE ALL UTILITIES AS REQUIRED TO PERFORM WORK.

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

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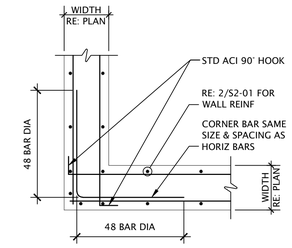
Drawing Title
SECTIONS AND DETAILS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
S2-01

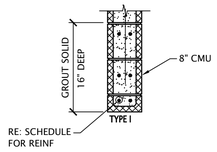


1 S5-01 TYP WALL AND BOND BEAM CORNER REINF

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

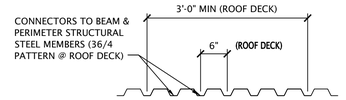
LINTEL SCHEDULE					
MARK	MAX SPAN	WALL CONSTR	DESCRIPTION	REMARKS	BEARING EACH END RE: 5/S5-01
L1	SEE PLAN	8" CMU	(2) #5 CONT TOP AND BOTTOM	TYPE I	16" SOLID MASONRY
L2	SEE PLAN	8" CMU	(2) #4 CONT TOP AND BOTTOM	TYPE I	16" SOLID MASONRY

NOTE: PROVIDE LINTELS @ ALL MASONRY WALL OPENINGS REQUIRED FOR MECHANICAL, HVAC OR PLUMBING PENETRATIONS. USE THE ABOVE SCHEDULE AS A GUIDE FOR LINTEL SELECTION FOR LINTELS NOT SHOWN.



2 S5-01 TYPICAL LINTEL DETAILS

SCALE: NTS



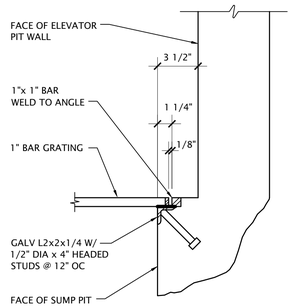
CONNECTOR PATTERN DIAGRAM

NOTES:
1. POWDER ACTUATED FASTENERS HILTI X-HSN 24 WITH A BASE MATERIAL BETWEEN 3/16" TO 3/8"

DIAPHRAGM SCHEDULE		
AREA	DECK TO STEEL MEMBER CONNECTOR TYPE	NUMBER OF SIDE LAP CONNECTORS PER SPAN (#10-16 TEK SCREWS)
ROOF	POWDER ACTUATED HILTI X-HSN 24	3 CONNECTORS @ 4 EQUAL SPACES

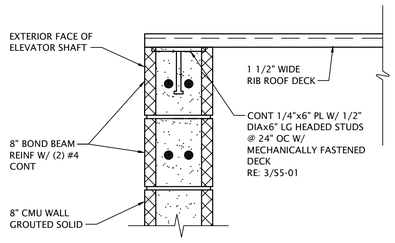
3 S5-01 DIAPHARGM SCHEDULE

SCALE: NTS



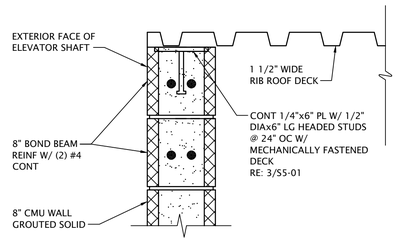
4 S5-01 ELEVATOR SUMP PIT SECTION

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



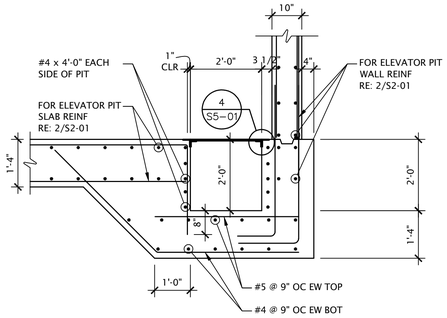
5 S5-01 DETAIL @ TOP OF SHAFT WALL

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



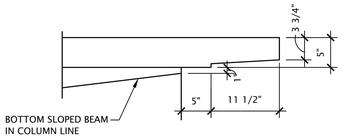
6 S5-01 DETAIL @ TOP OF SHAFT WALL

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



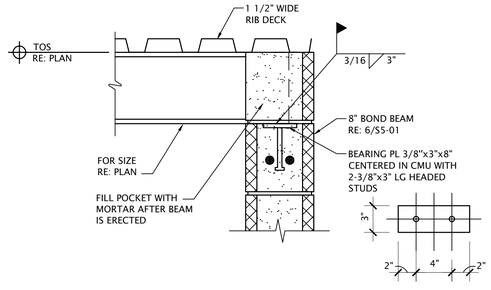
7 S5-01 TYP WALL CORNER REINF

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



8 S5-01 TYP DETAIL

SCALE: 1" = 1'-0"

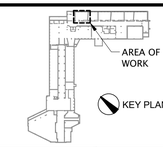


9 S5-01 SECTION

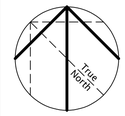
SCALE: 1 1/2" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION
5143 Cass Ave, Detroit, MI 48202

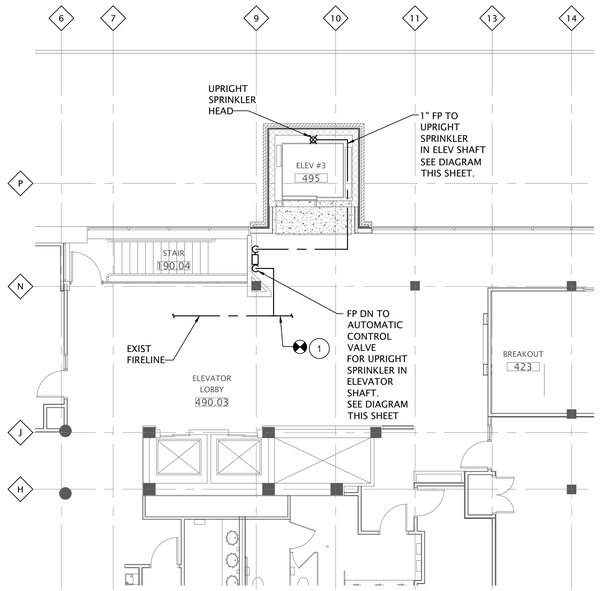
Drawing Title
FLOOR PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

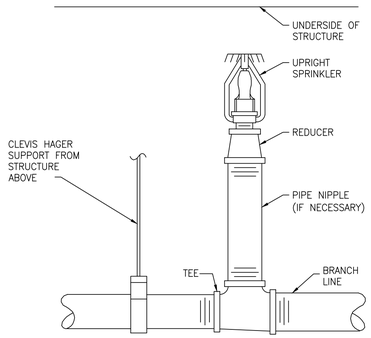
Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.
S5-01

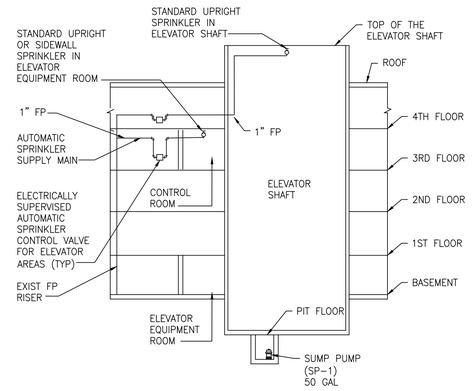
ARCH D - 24"x36" - 610mmx914mm (rounded)



1 F1-01 **FOURTH FLOOR PLAN**
SCALE: 1/8" = 1'-0"



4 F1-01 **UPRIGHT SPRINKLER HEAD DETAIL**
SCALE: NOT TO SCALE



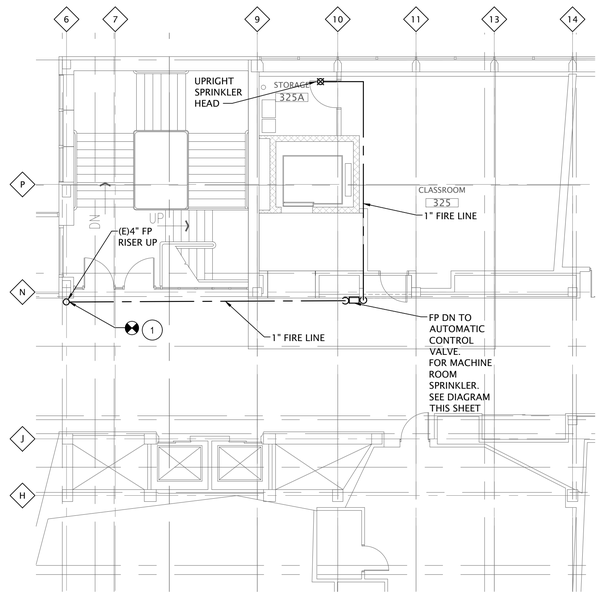
3 F1-01 **AUTOMATIC SPRINKLERS FOR ELEVATOR HOISTWAY DIAGRAM**
SCALE: NOT TO SCALE

NOTES:

1. AUTOMATIC SPRINKLER IN ELEVATOR EQUIPMENT ROOM TO BE 1/2" ORIFICE, 212°F RATED.
2. AUTOMATIC SPRINKLER CONTROL VALVE TO BE WIRED TO ELEVATOR CONTROLS TO SHUT DOWN ELEVATOR PRIOR TO ACTUATION OF AUTOMATIC SPRINKLERS.
3. SPRINKLERS INDICATED ARE SCHEMATICE ONLY, ACTUAL LOCATION AND SPACING OF SPRINKLERS TO BE IN ACCORDANCE WITH NFPA 13.

NOTES BY SYMBOL:

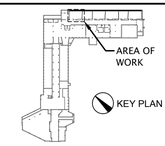
1. NEW 1" FIRE PROTECTION PIPE TO BE CONNECTED TO EXISTING FIRE PROTECTION LINE. FIELD VERIFY EXACT SIZE AND POINT OF CONNECTION TO THE EXISTING PIPE.



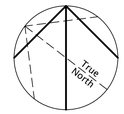
4 F1-01 **THIRD FLOOR PLAN**
SCALE: 1/8" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



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5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title

FIRE PROTECTION
PLANS AND DETAILS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. F1-01

ARCH D - 24"x36" - 610mmx914mm (rounded)

GENERAL NOTES:

1. THE FACILITY SHALL REMAIN OPERATIONAL DURING CONSTRUCTION
2. THE CONTRACTOR SHALL REPLACE/RESTORE ANY ITEM OR EQUIPMENT REQUIRED TO REMAIN OPERATIONAL OR BEING RELOCATED, THAT IS DAMAGED DURING CONSTRUCTION. EQUIPMENT THAT IS TEMPORARILY REMOVED TO FACILITATE THE INSTALLATION OF NEW WORK SHALL BE REINSTALLED AND RESTORED TO ITS ORIGINAL CONDITION. PATCH ALL WALL OPENINGS AS REQUIRED TO MATCH EXISTING
3. VERIFY ALL BUILDING DIMENSIONS AND LOCATIONS IN FIELD AND NOTIFY THE RESPECTIVE DISCIPLINE OF ANY DISCREPANCIES BEFORE COMMENCEMENT OF WORK
4. THE CONTRACTOR SHALL PERFORM WORK SO AS NOT TO INTERFERE WITH THE OWNER'S USE OF THE BUILDING AND SHALL NOTIFY THE OWNER IN WRITING 5 DAYS PRIOR TO CONNECTING TO EXISTING UTILITIES. AT NO TIME SHALL THE PLUMBING, HVAC OR FIRE PROTECTION SYSTEMS BE INOPERATIVE UNLESS APPROVED BY THE OWNER. THE CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN ALL NECESSARY SERVICES FOR THE BUILDING, AT NO ADDITIONAL COST. THE RELOCATION OF EXISTING UTILITIES SHALL BE SCHEDULED AT THE CONVENIENCE OF THE OWNER.
5. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING MECHANICAL SERVICES BEING REUSED.
6. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

HVAC GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK.
2. PROVIDE SHEET METAL 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 OTHER CONDITIONS.
3. MECHANICAL CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK.
4. DUCTWORK SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. DUCTWORK SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
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.
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. PROVIDE 4" DIAMETER CONCEALED CEILING BOX FOR CABLE OPERATED DAMPERS FROM ROUND CABLE DRIVE ZONE CONTROL DAMPER.
9. PAINT ALL VISIBLE INSIDE SURFACES OF GRILLES, REGISTERS AND DIFFUSERS FLAT BLACK.
10. 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.
11. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0".
12. ALL WIRING AND/OR TUBING TO THERMOSTATS SHALL BE ROUTED CONCEALED. WIREMOLD IS NOT ACCEPTABLE. COORDINATE THERMOSTAT LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO WALL CONSTRUCTION.
13. MOUNT THERMOSTATS AT 56" AFF UNLESS NOTED OTHERWISE.
14. COLORS OF EXPOSED UNITS SHALL BE SELECTED BY THE ARCHITECT. COLORS SHALL BE MANUFACTURERS STANDARD OR CUSTOM COLOR AS REQUESTED. SUBMIT COLOR CHARTS WITH SHOP DRAWINGS.
15. INSTALL FIRE DAMPER AT ALL FLOOR PENETRATIONS.
16. BRANCH DUCTS TO DIFFUSERS SHALL BE 45 DEGREE BOOT TAP FROM SIDE OF MAIN.
17. PROVIDE VOLUME DAMPERS IN ALL BRANCH DUCTS TO DIFFUSERS, EXHAUST GRILLES, ETC.

PLUMBING GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL INTENT OF THE WORK. PROVIDE PIPING SYSTEMS COMPLETE PER SPECIFICATION, AND PER APPLICABLE CODES.
2. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF PLUMBING AND PIPING WITH THE WORK OF ALL OTHER TRADES.
3. PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
4. PROVIDE CODE REQUIRED CLEARANCE FOR ALL CLEAN OUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.
5. MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".
6. FIELD VERIFY LOCATION AND SIZE OF EXISTING PIPING. THOROUGHLY CLEAN STORM AND SANITARY PIPING TO ENSURE PROPER FLOW. REPLACE CORED PIPING AS INDICATED OR AS NECESSARY.
7. ALL WORK SHALL CONFORM TO ALL APPLICABLE BUILDING CODES AND ALL STATE AND LOCAL AMENDMENTS.
8. GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPILCABLE TO ALL PLUMBING DRAWINGS.
9. REFER TO ARCHITECTURAL PLANS FOR GENERAL CONSTRUCTION NOTES.
10. DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL DETERMINE LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD, OFF OF ARCHITECTURAL AND STRUCTURAL PLANS.
11. THE PLUMBING CONTRACTOR SHALL DETERMINE EXACT LOCATIONS OF EXISTING UTILITIES IN FIELD. WHETHER OR NOT SHOWN ON THE DRAWINGS. EXERCISE CAUTION AND IDENTIFY LOCATIONS OF UNMARKED UTILITY LINES AS NECESSARY TO PERFORM THIS WORK.
12. THE PLUMBING CONTRACTOR SHALL PREPARE "SLEEVE AND INSERT" COORDINATION PLANS (LOCATING ALL ROOF, FLOOR AND WALL PENETRATIONS) AND SUBMIT TO ARCHITECT FOR REVIEW. EACH PENETRATION SHALL BE LOCATED WITH A MINIMUM OF (2) DIMENSIONS IN (2) DIRECTIONS.
13. THE PLUMBING CONTRACTOR SHALL PREPARE "COORDINATION" DRAWINGS THAT COORDINATE ALL PLUMBING WORK WITH OTHER TRADES INCLUDING, BUT NOT LIMITED TO, ELECTRICAL, HVAC, PROCESS PIPING, FIRE PROTECTION, STRUCTURAL AND ARCHITECTURE.
14. ANY INTERFERENCE BETWEEN TRADES SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR/OWNERS REPRESENTATIVE, AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK.
15. ALL PIPE SLEEVES IN FLOORS SHALL EXTEND A MINIMUM OF TWO INCHES (2) ABOVE THE FINISHED FLOOR UNLESS NOTED OTHERWISE. FILL ANNULAR SPACE WITH WATERPROOF, FIRE RETARDANT CAULKING PENETRATIONS.
16. ALL PIPING PENETRATING CEILINGS AND WALLS SHALL BE INSTALLED WITH ESCUTCHEONS AT THE PENETRATION. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOF SHALL BE FLASHED IN AN APPROVED MANNER AND SHALL BE SEALED WEATHERTIGHT. PIPING PENETRATING FIRE RATED ASSEMBLIES SHALL BE PROVIDED WITH FIRE RATED SEALS AS REQUIRED BY CODE OR THE AUTHORITY HAVING JURISDICTION..
17. ALL PIPING ABOVE GRADE SHALL BE PROPERLY SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING STRUCTURE OR COMPONENTS.
18. ALL PLUMBING PIPING, EQUIPMENT, INSULATION, ETC. INSTALLED IN HVAC PLENUM SPACES SHALL MEET ALL CODE RQUIREMENTS FOR SMOKE AND COMBUSTION.
19. THE PLUMBING CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO INSTALLING POWER DRIVEN FASTENERS.
20. PROVIDE CLAMPS, OFFSETS EXPANSION JOINTS, ANCHORS AND GUIDES AS ECESSARY TO PREVENT STRESS ON PIPING.
21. ALL PIPIE HANGERS ON INSULATED PIPING SHALL BE PROVIDED WITH HANGER SHIELDS.
22. ALL VALVES, CLEANOUTS AND COMPONENTS REQUIRING ACCESS BEHIND WALLS OR INACCESSIBLE CEILINGS SHALL BE PROVIDED WITH ACCESS PANELS. COORDINATE WITH ARCHITECT FOR REQUIRED TYPE, LOCATION AND FINISH.
23. PROVIDE GAUGE FITTINGS AND THERMOMETER WELLS AT HOT WATER SUPPLY AND RETURN BRANCHES, AND A PUMP INLETS AND OUTLETS.
24. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL NEW CORED OR CUT HOLES IN THE EXISTING CONCRETE STRUCTURE, INCLUDING WALLS, FLOORS, AND ROOF, WITH THE STRUCTURAL ENGINEER, PRIOR TO ANY WORK.

FIRE PROTECTION GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL INTENT OF THE WORK. PROVIDE FIRE PROTECTION SYSTEMS COMPLETE, PER APPLICABLE CODES, PER NFPA, AND PER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION INCLUDING ALL PIPING, OFFSETS, FITTINGS, DRAINS, VALVES, SPRINKLER HEADS, ETC. AS REQUIRED FOR A COMPLETE OPERABLE SYSTEM.
2. FIRE PROTECTION CONTRACTOR SHALL COORDINATE WORK WITH THE WORK OF ALL OTHER TRADES.
3. MINIMUM RUN-OUT PIPE SIZE TO SPRINKLER HEADS SHALL BE 1".
4. FIRE PROTECTION WATER SUPPLY SOURCE SHALL BE PER NFPA 24.
5. CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL INSPECTION, PERMIT AND LICENSE REQUIRED BY THE LOCAL AUTHORITY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE TURN KEY INSTALLATION USING UNDERWRITER LABORATORIES UL LISTED PRODUCTS INCLUDING DESIGN, OBTAINING APPROVALS AND COORDINATION WITH OTHER TRADES.
7. INSTALL TO MEET NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS AND NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.
8. NORR DESIGN DOCUMENTS ARE FOR PERMIT PURPOSES.
9. THE DESIGN IS NOT INTENDED TO LIMIT THE CONTRACTOR FROM PROVIDING ANOTHER DESIGN THAT MAY BE MORE ECONOMICAL AND STILL MEET THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
10. HYDRAULIC CALCULATIONS:
    A. SUBMIT WORKING PLANS PER NFPA 13 AND HYDRAULIC CALCULATIONS USING HYDRAULIC CALCULATIONS PROCEDURES IN ACCORDANCE WITH NFPA 13. SIGNED AND SEALED BY A REGISTERED PROFESSIONAL FIRE PROTECTION ENGINEER TO THE AUTHORITY THAT HAVE JURISDICTION.
    B. WORKING PLANS AND COMPUTERIZED HYDRAULIC CALCULATIONS SHALL BE PREPARED A MINIMUM LEVEL 3 N.I.C.E.T. CERTIFIED SPRINKLER LAYOUT DESIGNER. DRAWINGS SHALL BE SIGNED AND THE N.I.C.E.T. CERTIFICATE NUMBER INDICATED ON PLAN. ALL DRAWINGS, INCLUDING AS-BUILTS, SHALL BE SUBMITTED ON DISC USING AUTO CAD.
    C. THE HYDRAULIC CALCULATIONS SHALL INCLUDE THE PRESSURE DROP THROUCH ALL PIPE, FITTINGS AND DEVICES, INCLUDING THE PRESSURE DROP THROUGH THE REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER, FROM THE MOST HYDRAULIC REMOTE POINT OF THE SPRINKLER SYSTEM TO THE LOCATION OF THE TEST HYDRANT.
    D. THE HYDRAULIC CALCULATIONS SHALL BE BASED ON THE LATEST FLOW TEST DATA.
11. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A GUARANTEE COVERING ALL DESIGNED, INSTALLATION, MATERIAL AND WORKMANSHIP FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE.
12. PIPING SHALL BE SLOPED TO DRAIN BACK TO SPRINKLER RISER. AUXILIARY DRAINAGE IN ACCORDANCE WITH NFPA 13 SHALL BE PROVIDED FOR ALL TRAPPED SECTIONS OF PIPE.
13. SPRINKLER DESIGN SHALL BE IN CONFORMANCE WITH NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
14. SPRINKLER DESIGN:
    A. PROVIDE AUTOMATIC SPRINKLER BELOW OBSTRUCTIONS 48 INCHES AND WIDER. (PLATFORMS, DUCTWORK, STAIRWAYS, UNIT HEATER, ETC.)
    B. THE SPRINKLER DESIGN SHALL BE BASED ON LISTED SPRINKLERS. AT THE CONTRACTOR'S OPTION. LISTED QUICK-RESPONSE SPRINKLERS MAY BE USED, IN CONFORMANCE WITH NFPA 13 AND AUTHORITY HAVING JURISDICTION.
    C. SPRINKLERS WITH A TEMPERATURE RATING OF 135°F TO 170°F ARE CLASSIFIED AS ORDINARY TEMPERATURE RATED SPRINKLERS. SPRINKLERS WITH A RATING OF 175°F TO 225°F ARE CLASSIFIED AS INTERMEDIATE TEMPERATURE RATED SPRINKLERS.
15. CONTRACTOR SHALL MAKE PRESSURE AND FLOW TEST PRIOR TO SYSTEM DESIGN. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
16. THE FOLLOWING INFORMATION SHALL BE PROVIDED BY THE FIRE PROTECTION CONTRACTOR AT SUBMITTAL OF SHOP DRAWINGS AND CALCULATIONS:
    A. STATIC PRESSURE PSI: XX
    B. RESIDUAL PRESSURE PSI: XX
    C. FLOW GPM: XX
    D. FLOW TEST HYDRANT LOCATIONS: HYD. #1 - LOCATION, HYD #2 - IOCATION
    E. DATE OF TEST: XX-XX-XXXX
    F. TIME OF TEST: XXXX
    G. RESPONSIBLE PARTY CONDUCTING TEST: XXXXX
    H. HYDRANT OUTLET DISCHARGE COEFFICIENT: XXX
17. PIPE ALL DRAINS AND INSPECTOR'S TEST TO OUTSIDE, OR DISCHARGE TO A DRAIN APPROVED BY THE OWNER FOR SPRINKLER DISCHARGE.

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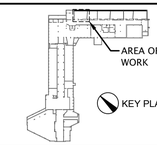
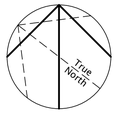
Keyplan



North Arrow



Detail Symbol

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Drawing Title
GENERAL NOTES

Check Scale (may be photo reduced)
0 1inch 0 10mm

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Drawing No.
M0-01

ARCH D - 24"x36" - 610mmx914mm (rounded)

ABBREVIATIONS

ABBREVIATIONS

AD ACCESS DOOR
AP ACCESS PANEL
AW ACID WASTE
AFMS AIR FLOW MEASURING STATION
B BATH
BBH BASE BOARD HEATER
BD BIDET
BDD BACK DRAFT DAMPER
BFP BACKFLOW PREVENTER
BOP BOTTOM OF PIPE
CB CATCH BASIN
CBV CIRCUIT BALANCING VALVE
CC COOLING COIL
CO CLEANOUT
CODP CLEANOUT DECK PLATE
COG CLEANOUT GRADE
COND CONDENSATE
COWP CLEANOUT WALL PLATE
CS CUP SINK
CUH CABINET UNIT HEATER
DCW DOMESTIC COLD WATER
DHW DOMESTIC HOT WATER
DHWR DOMESTIC HOT WATER RETURN
DF DRINKING FOUNTAIN
DFU DRAINAGE FIXTURE UNIT
DG DOOR GRILLE
DN DOWN (PENETRATES FLOOR SLAB)
DPAV DRY PIPE ALARM VALVE
(E) EXISTING
EA EXHAUST AIR
EF EXHAUST AIR FAN
EG EXHAUST AIR GRILLE
ER EXHAUST AIR REGISTER
EJDIS EJECTOR DISCHARGE
ELEV ELEVATION
ESH EMERGENCY SHOWER
EWF EMERGENCY EYE FACE WASH
ESH EMERGENCY SHOWER
EWC ELECTRIC WATER COOLER
EWF EYE WASH FOUNTAIN
FCU FAN COIL UNIT
FD FLOOR DRAIN
FDR FIRE DAMPER
FE FIRE EXTINGUISHER
FFD FUNNEL FLOOR DRAIN
FHC FIRE HOSE CABINET
FHR FIRE HOSE REEL
FPWS FROST PROOF WALL HYDRANT
FS FLOW SWITCH (WATER)
FSD FIRE SMOKE DAMPER
FT FEET
FU FIXTURE UNIT
G GAS
GAL GALLONS
GPM GALLONS PER MINUTE
GW GREY WATER
HC HEATING COIL
HB HOSE BIBB
HD HUB DRAIN
HWHR HOT WATER HEATING RETURN
HWHS HOT WATER HEATING SUPPLY
INV INVERT
IW INDIRECT WASTE
JS JANITOR SINK
LAV LAVATORY
LS LAVATORY SINK
MCD MOTORIZED CONTROL DAMPER
MH MANHOLE
MS MOP SINK
NC NORMALLY CLOSED
NFWH NON FREEZE WALL HYDRANT
NIC NOT IN CONTRACT
NO NORMALLY OPEN
OSY OUTSIDE SCREW & YOKE GATE VALVE
P PUMP
PHC PREHEAT COIL
PIV POST INDICATOR VALVE
PSI POUNDS PER SQUARE INCH (GUAGE)
RA RETURN AIR
RD ROOF DRAIN
RF RETURN AIR FAN
RG RETURN AIR GRILLE
RH REHEAT COIL
RWL RAIN WATER LEADER
S SINK
SA SUPPLY AIR
SAN SANITARY
SD SMOKE DAMPER
SF SUPPLY AIR FAN
SFCV SPRINKLER FLOOR CONTROL VALVE
SG SUPPLY AIR GRILLE
SH SHOWER
SQ FT SQUARE FOOT
SS SERVICE SINK
SST SOIL STACK
ST STORM
STV STACK VENT
TD TRANSFER AIR DUCT
UR URINAL
UG UNDERGROUND
UP UP (PENETRATES FLOOR SLAB)
V VENT
VAV VARIABLE AIR VOLUME
VB VACUUM BREAKER
VD VOLUME DAMPER
VIF VERIFY IN FIELD
VTR VENT THROUGH ROOF
VS VENT STACK
WC WATER CLOSET
WF WALL FIN
WFU WATER FIXTURE UNITS
WH WATER HEATER
WHA WATER HAMMER ARRESTOR
WST WASTE STACK
WFS WATER FLOW SWITCH
WPAV WET PIPE ALARM VALVE

MECHANICAL ABBREVIATIONS

AD ACCESS DOOR
AP ACCESS PANEL
AFMS AIR FLOW MEASURING STATION
BDD BACK DRAFT DAMPER
BOP BOTTOM OF PIPE
CBV CIRCUIT BALANCING VALVE
CC COOLING COIL
COND CONDENSATE
CUH CABINET UNIT HEATER
DG DOOR GRILLE
DN DOWN (PENETRATES FLOOR SLAB)
EA EXHAUST AIR
ED EXHAUST AIR DIFFUSER
EF EXHAUST AIR FAN
EG EXHAUST AIR GRILLE
ER EXHAUST AIR REGISTER
ELEV ELEVATION
FCU FAN COIL UNIT
FDR FIRE DAMPER
FSD FIRE SMOKE DAMPER
FT FEET
GAL GALLONS
GPM GALLONS PER MINUTE
HC HEATING COIL
HWHR HOT WATER HEATING RETURN
HWHS HOT WATER HEATING SUPPLY
MCD MOTORIZED CONTROL DAMPER
MD MANUAL DAMPER
NC NORMALLY CLOSED
NIC NOT IN CONTRACT
NO NORMALLY OPEN
OSY OUTSIDE SCREW & YOKE GATE VALVE
P PUMP
PHC PREHEAT COIL
PSI POUNDS PER SQUARE INCH (GUAGE)
RA RETURN AIR
RD RETURN AIR DIFFUSER
RF RETURN AIR FAN
RG RETURN AIR GRILLE
RH REHEAT COIL
SA SUPPLY AIR
SD SUPPLY AIR DIFFUSER
SD SMOKE DAMPER
SF SUPPLY AIR FAN
SG SUPPLY AIR GRILLE
SQ FT SQUARE FOOT
TD TRANSFER AIR DIFFUSER
UP UP (PENETRATES FLOOR SLAB)
VAV VARIABLE AIR VOLUME
VD VOLUME DAMPER
VIF VERIFY IN FIELD
VTR VENT THROUGH ROOF
VS VENT STACK
WF WALL FIN

PLUMBING ABBREVIATIONS

AD ACCESS DOOR
AFF ABOVE FINISHED FLOOR
AFG ABOVE FINISHED GRADE
AP ACCESS PANEL
AW ACID WASTE
B BATH
BD BIDET
BFP BACKFLOW PREVENTER
BOP BOTTOM OF PIPE
CB CATCH BASIN
CBV CIRCUIT BALANCING VALVE
CO CLEANOUT
CODP CLEANOUT DECK PLATE
COG CLEANOUT GRADE
COWP CLEANOUT WALL PLATE
CS CUP SINK
DCW DOMESTIC COLD WATER
DHW DOMESTIC HOT WATER
DHWR DOMESTIC HOT WATER RETURN
DF DRINKING FOUNTAIN
DFU DRAINAGE FIXTURE UNIT
DG DOOR GRILLE
DN DOWN (PENETRATES FLOOR SLAB)
DPAV DRY PIPE ALARM VALVE
EJDIS EJECTOR DISCHARGE
ELEV ELEVATION
ESH EMERGENCY SHOWER
EWF EMERGENCY EYE FACE WASH
ESH EMERGENCY SHOWER
EWC ELECTRIC WATER COOLER
EWF EYE WASH FOUNTAIN
FD FLOOR DRAIN
FFD FUNNEL FLOOR DRAIN
FPWS FROST PROOF WALL HYDRANT
FS FLOW SWITCH (WATER)
FT FEET
FU FIXTURE UNIT
G GAS
GAL GALLONS
GPM GALLONS PER MINUTE
GW GREY WATER
HB HOSE BIBB
HD HUB DRAIN
INV INVERT
IW INDIRECT WASTE
JS JANITOR SINK
LAV LAVATORY
LS LAVATORY SINK]
MV MANUAL VALVE
MH MANHOLE
MS MOP SINK
NC NORMALLY CLOSED
NFWH NON FREEZE WALL HYDRANT
NIC NOT IN CONTRACT
NO NORMALLY OPEN
NTS NOT TO SCALE
OSY OUTSIDE SCREW & YOKE GATE VALVE
P PUMP
PHC PREHEAT COIL
PIV POST INDICATOR VALVE
PSI POUNDS PER SQUARE INCH (GUAGE)
RD ROOF DRAIN
RWL RAIN WATER LEADER
S SINK
SA SUPPLY AIR
SAN SANITARY
SH SHOWER
SQ FT SQUARE FOOT
SS SERVICE SINK
SST SOIL STACK
ST STORM
STV STACK VENT
UR URINAL
UG UNDERGROUND
UP UP (PENETRATES FLOOR SLAB)
V VENT
VB VACUUM BREAKER
VD VOLUME DAMPER
VIF VERIFY IN FIELD
VTR VENT THROUGH ROOF
VS VENT STACK
W&V WASTE AND VENT
WC WATER CLOSET
WFU WATER FIXTURE UNITS
WH WATER HEATER
WHA WATER HAMMER ARRESTOR
WST WASTE STACK
WFS WATER FLOW SWITCH

FIRE PROTECTION ABBREVIATIONS

AD ACCESS DOOR
AP ACCESS PANEL
BFP BACKFLOW PREVENTER
BOP BOTTOM OF PIPE
DN DOWN (PENETRATES FLOOR SLAB)
DPAV DRY PIPE ALARM VALVE
ELEV ELEVATION
FE FIRE EXTINGUISHER
FHC FIRE HOSE CABINET
FHR FIRE HOSE REEL
FS FLOW SWITCH (WATER)
FT FEET
GAL GALLONS
GPM GALLONS PER MINUTE
INV INVERT
NIC NOT IN CONTRACT
P PUMP
PIV POST INDICATOR VALVE
PSI POUNDS PER SQUARE INCH (GUAGE)
SFCV SPRINKLER FLOOR CONTROL VALVE
SQ FT SQUARE FOOT
UG UNDERGROUND
UP UP (PENETRATES FLOOR SLAB)
VIF VERIFY IN FIELD
WFS WATER FLOW SWITCH
WPAV WET PIPE ALARM VALVE

PIPE LEGEND

DESIGNATION	SERVICE
	CHILLED WATER RETURN
	CHILLED WATER SUPPLY
	HEATING HOT WATER SUPPLY
	HEATING HOT WATER RETURN
CD	CONDENSATE DRAIN
RS	REFRIGERATION SUCTION
RL	REFRIGERATION LIQUID
RHG	REFRIGERATION HOT GAS
	EXISTING PIPE TO BE REMOVED
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATION
V	VENT
SAN	SANITARY ABOVE GRADE OR FLOOR
SAN	SANITARY BELOW GRADE OR FLOOR
ST	STORM ABOVE GRADE OR FLOOR
ST	STORM BELOW GRADE OR FLOOR
D	DRAIN
DS	DISTILLED WATER
LD	LABORATORY DRAIN
SW	SOFT WATER SUPPLY
SD	SPRINKLER DRAIN
CA	COMPRESSED AIR
NG	NATURAL GAS
RWL	RAIN WATER LEADER
PLUMBING FIXTURE TAG	X-X SEE ASSOCIATED SCHEDULE FOR EQUIPMENT INFORMATION

SYMBOLS

DESIGNATION	SERVICE
	GLOBE VALVE
	BALL VALVE
	GATE VALVE
	BUTTERFLY VALVE
	BUTTERFLY VALVE
	LOCKSHIELD VALVE
	PLUG VALVE
	BALANCING VALVE
	2-WAY CONTROL VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	OS&Y VALVE
	3-WAY VALVE
	3-WAY CONTROL VALVE
CBV	CIRCUIT BALANCING VALVE
SV	SOLENOID VALVE
	RELIEF VALVE
MV	MANUAL AIR VENT
AAV	AUTOMATIC AIR VENT
VB	VACUUM BREAKER
	ELECTRIC (DDC) VALVE ACTUATOR
	UNION
	EXPANSION JOINT
	ANCHOR POINT
	PIPE GUIDE
	ECCENTRIC FITTING
	CONCENTRIC FITTING
PG	PRESSURE GAUGE WITH GAUGE COCK
	THERMOMETER
	STRAINER
	PIPE DN
	PIPE UP
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
	FLOOR DRAIN
	NEW CONNECTION

SYMBOLS

DESIGNATION	SERVICE
	HOSE END DRAIN VALVE
TC	TEST COCK
CO	CLEANOUT TURNED UP THROUGH FLOOR
CO	CLEANOUT ABOVE GRADE OR FLOOR
BFP	BACKFLOW PREVENTOR (REDUCED PRESSURE TYPE)
HB	HOSE BIBB
NFWH	NON FREEZE WALL HYDRANT
U/C	UNDERCUT DOOR
T	THERMOSTAT
TE	SPACE TEMPERATURE SENSOR
H	HUMIDISTAT
SP	STATIC PRESSURE SENSOR
	PUMP
	UNIT HEATER HORIZONTAL
	SUPPLY DUCT UP
	SUPPLY DUCT DN
	RETURN OR EXHAUST DUCT UP
	RETURN OR EXHAUST DUCT DN
	ACOUSTICALLY LINED DUCT

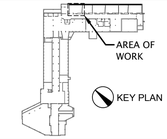
SYMBOLS

DESIGNATION	SERVICE
	FLEXIBLE DUCT CONNECTION
R	RISE IN DUCT
D	DROP IN DUCT
	FLEXIBLE PIPE/DUCT
	ACOUSTICAL DUCT LINING
	DUCT SILENCER
	TURNING VANES
BDD	BACKDRAFT DAMPER
FD	FIRE DAMPER
M	MOTORIZED CONTROL DAMPER
SD	SMOKE DAMPER
FD/SD	COMBINATION FIRE & SMOKE DAMPER
BD	BALANCING DAMPER
	BALANCING DAMPER
	DUCT CAPPED CONNECTION
	OPEN ENDED DUCT WITH WIRE MESH SCREEN
	VAV BOX W/ HOT WATER RE-HEAT COIL
DIFFUSER TAG	DIFFUSER/REGISTER TYPE
NECK SIZE (in) / AIRFLOW (CFM)	XXX-X DIFFUSER NUMBER (ROW LOCATION) / XX / XXX CFM
VAV BOX (TERMINAL UNIT) TYPE TAG	TU-X SEE SCHEDULE FOR FLOW RATES
EQUIPMENT TYPE TAG TAG NUMBER (ROW LOCATION)	X-X DESIGNATION TAG NAME / SEE ASSOCIATED SCHEDULE FOR EQUIPMENT INFORMATION
	FAN
C H C C	HEATING OR COOLING COIL
	SUPPLY AIR BOOT WITH DIFFUSER
	LINEAR SUPPLY AIR DIFFUSER
	LINEAR DIFFUSER FRAME
	SUPPLY AIR DIFFUSERS
	RETURN OR EXHAUST AIR GRILLE OR REGISTER
	EXISTING DUCT TO BE REMOVED
	EXIST. GRILLE/DIFFUSER TO BE REMOVED
M	ELECTRIC (DDC) DAMPER ACTUATOR
PT	PRESSURE TRANSMITTER

SYMBOLS

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



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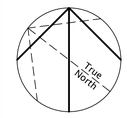

Detail Symbol

Detail No.
Sheet No.

Seal(s)

NORR

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Project Leader B. PESMARK	Checked H. MONTAGUE

Client

WAYNE STATE UNIVERSITY
Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title

MECHANICAL ABBREVIATIONS AND SYMBOLS

Check Scale (may be photo reduced)
0 1inch 0 10mm

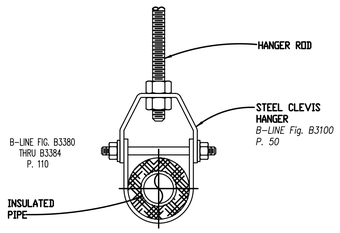
Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. M0-02

ARCH D - 24"x36" - 610mmx914mm (rounded)

Designer notes:
1. *THIS DETAIL IS NORMALLY NOT TO BE INCLUDED WITH CONSTRUCTION DOCUMENTS. USE WITH EXTREME CAUTION AND CAREFULLY COORDINATE WITH THE SPECIFICATIONS IF IT IS TO BE USED.*

NOTES:
1. SIZE HANGER TO ADEQUATELY SUPPORT LOAD (REFER TO B-LINE HANGER CATALOG).
2. SIZE CALCIUM SILICATE SHIELD TO FIT PIPE AND INSULATION THICKNESS.
3. SIZE HANGER TO FIT B3380 THRU B3384 CALCIUM SILICATE SHIELDS.
4. FOR COPPER TUBING SUBSTITUTE B3380CT FOR B3380.
5. FOR CHILLED WATER LINES SUBSTITUTE B3380CW FOR B3380 OR B3380CTCW FOR B3380CT.



INSULATED PIPE HANGER DETAIL
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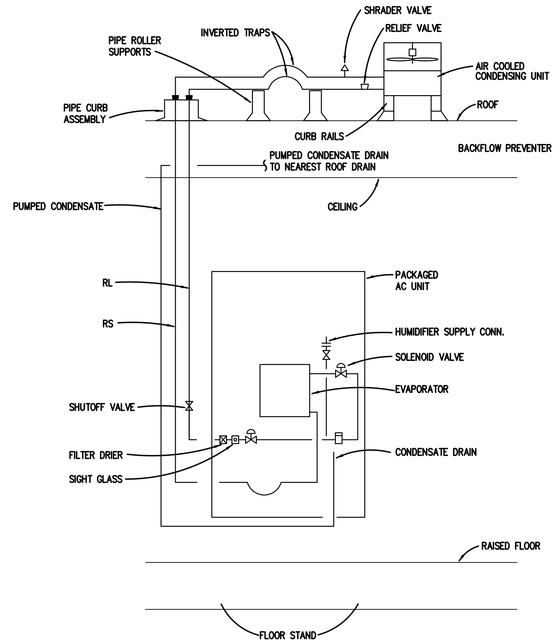
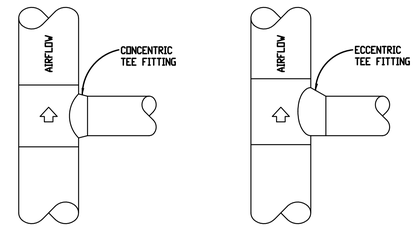


NOTE
SIZE REFRIGERANT PIPING AND PROVIDE TRAPS AND ACCESSORIES PER UNIT MANUFACTURERS RECOMMENDATIONS.

AIR-COOLED SPLIT SYSTEM PACKAGED AIR CONDITIONING UNIT (PAC-2) PIPING DIAGRAM
NO SCALE

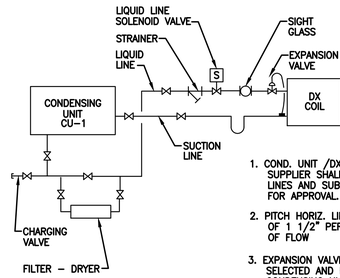


SUPPLY DUCT

RETURN OR EXHAUST DUCT

FLAT OVAL DUCT BRANCH TAKE-OFF SIMILAR

ROUND DUCT BRANCH TAKE-OFF DETAILS
NO SCALE



1. COND. UNIT /DX COIL SUPPLIER SHALL SIZE ALL LINES AND SUBMIT SCHEMATIC FOR APPROVAL.
2. PITCH HORIZ. LINES A MIN. OF 1 1/2" PER 10' IN DIRECTION OF FLOW
3. EXPANSION VALVE SHALL BE SELECTED AND FURNISHED BY CONDENSING UNIT MANUFACTURER.
4. PRESSURE SWITCH CONTROLLING ELECTRIC UNLOADERS TO BE INSTALLED PER MFR'S INSTRUCTION.

REFRIGERANT PIPING SCHEMATIC
NO SCALE

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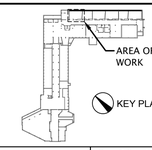
09-18-19	PERMIT & BID SET	-

Keyplan



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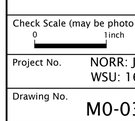

Detail Symbol

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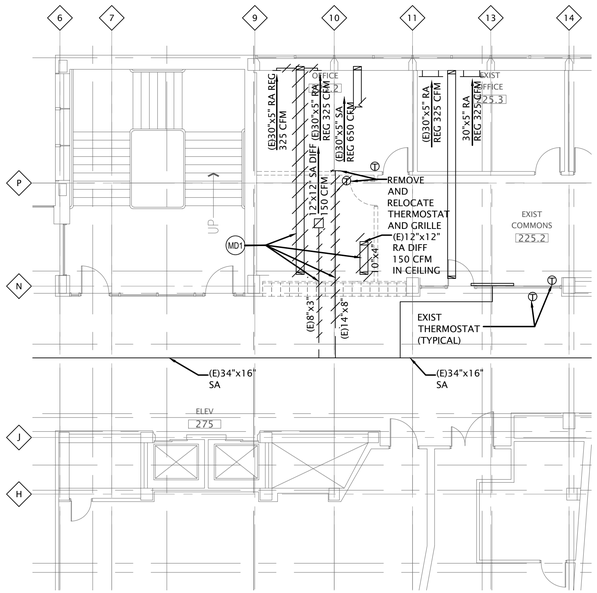
Drawing Title
MECHANICAL
DETAILS

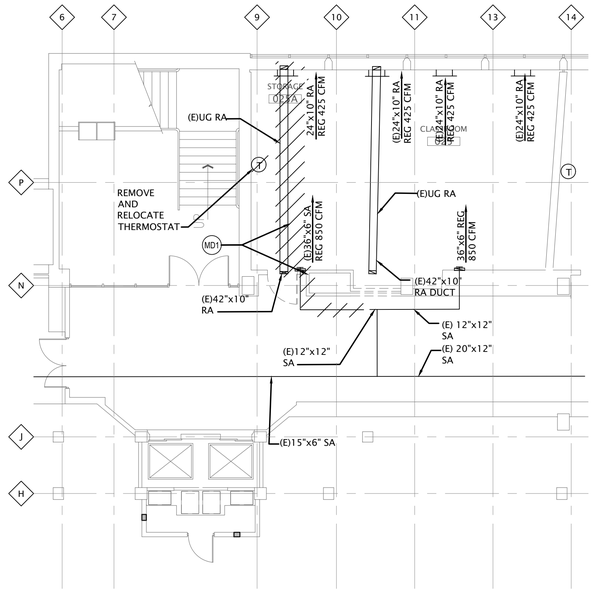
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

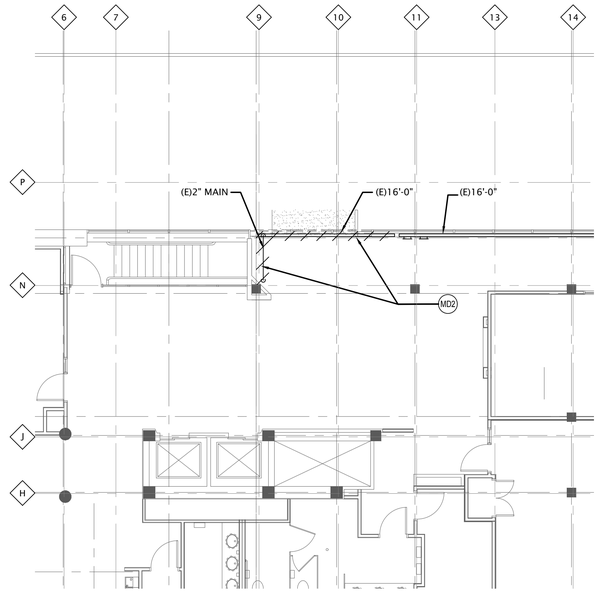
Drawing No. M0-03



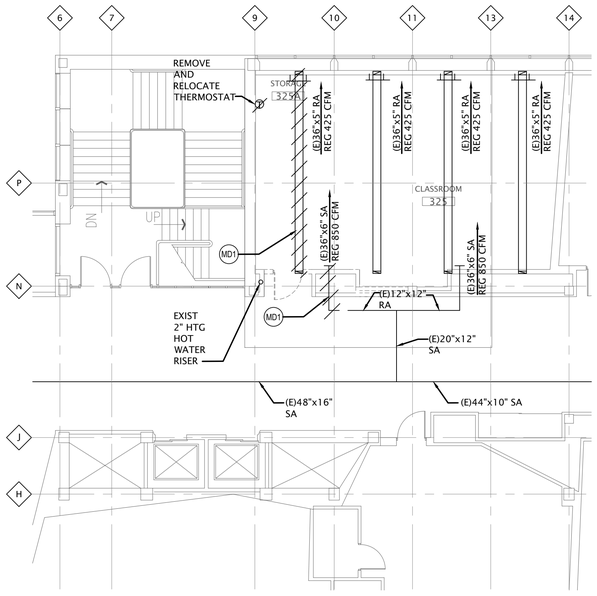
3 MD-01 DEMOLITION PLAN - SECOND FLOOR
SCALE: 1/8" = 1'-0"



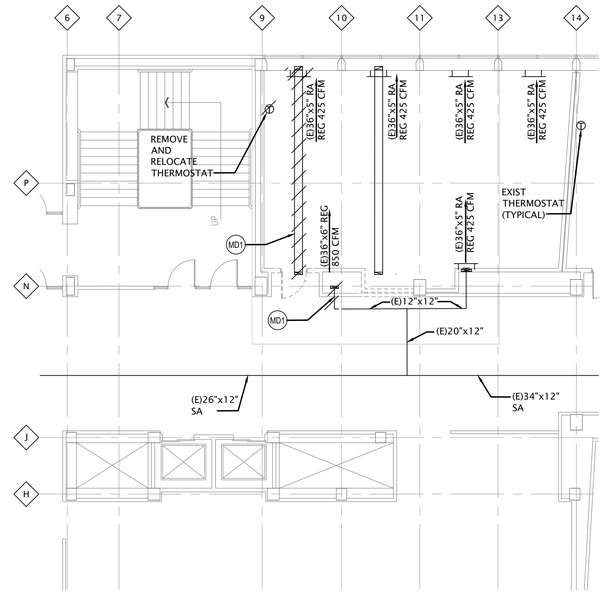
1 MD-01 DEMOLITION PLAN - BASEMENT
SCALE: 1/8" = 1'-0"



5 MD-01 DEMOLITION PLAN - FOURTH FLOOR
SCALE: 1/8" = 1'-0"



4 MD-01 DEMOLITION PLAN - THIRD FLOOR
SCALE: 1/8" = 1'-0"



2 MD-01 DEMOLITION PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

NOTE:

1. PROVIDE A PRE-TEST AND BALANCE REPORT BEFORE CONSTRUCTION; INCLUDING AHU OUTSIDE AIR PERCENTAGE.

DEMOLITION NOTES BY SYMBOL:

MD1 EXISTING RETURN AIR DUCTS TO BE REMOVED COMPLETELY. CONTRACTOR FIELD VERIFY EXACT SIZE.

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07-26-19	SD REVIEW	-
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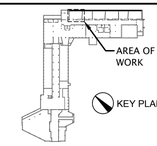
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow

Detail Symbol

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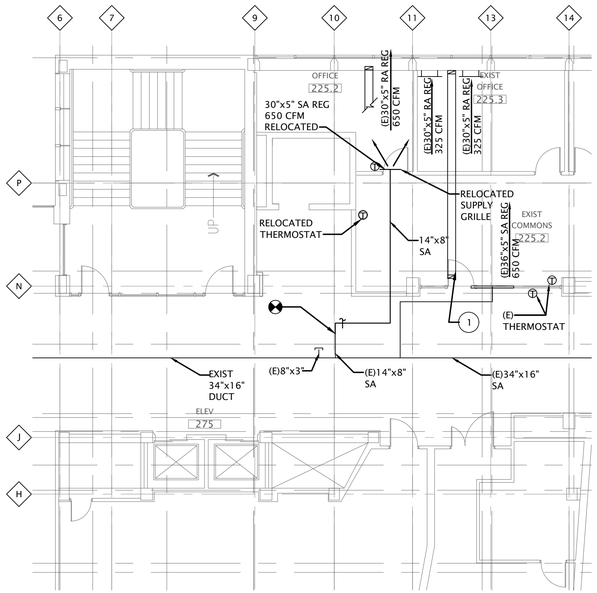
Drawing Title
DEMOLITION PLANS
HVAC

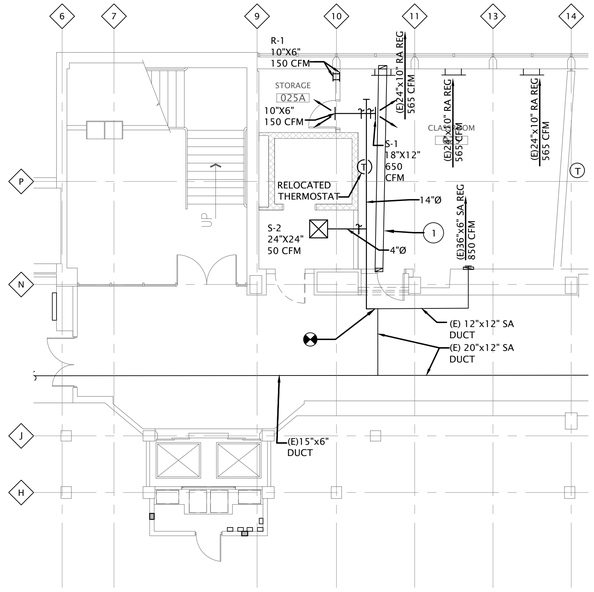
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

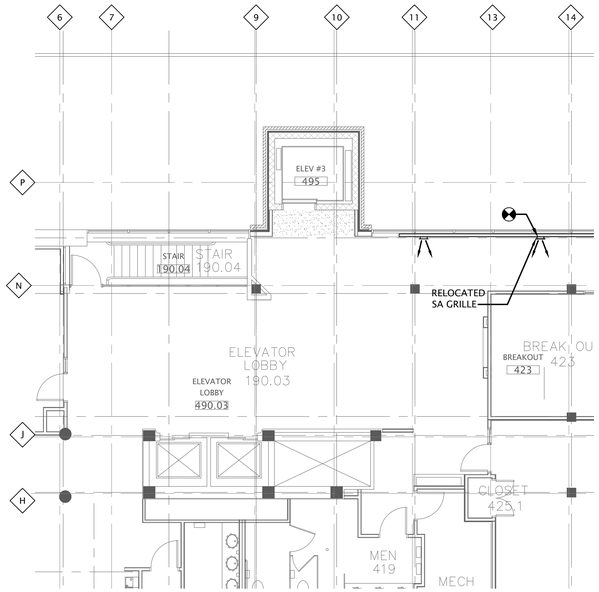
Drawing No.
MD-01



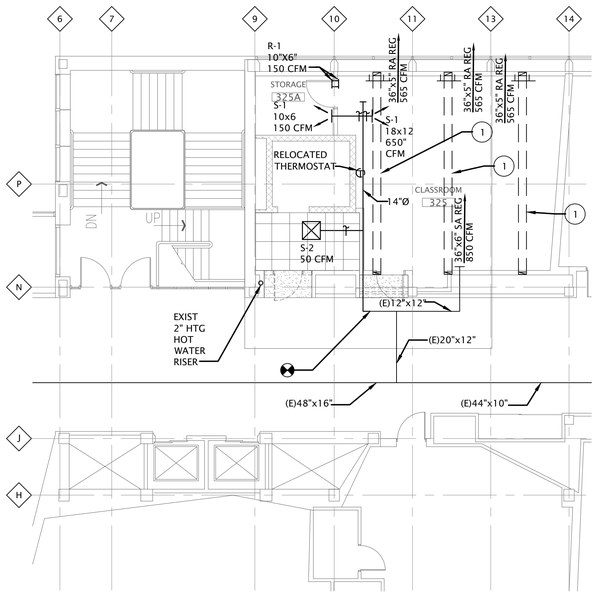
3 M1-01 NEW WORK PLAN - SECOND FLOOR
SCALE: 1/8" = 1'-0"



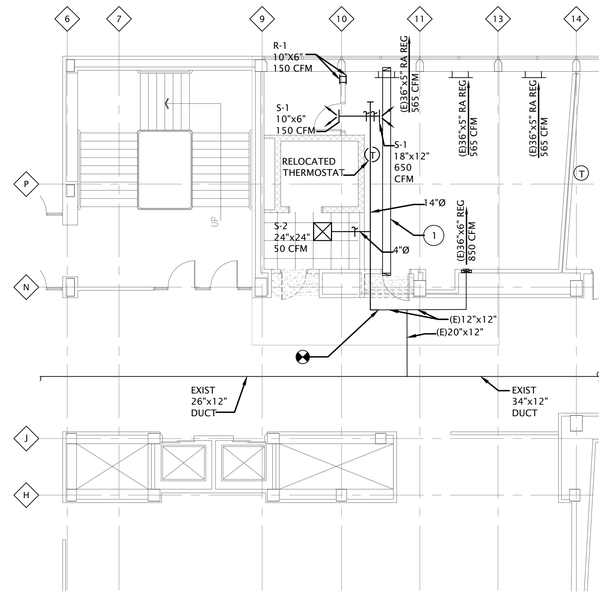
1 M1-01 NEW WORK PLAN - BASEMENT
SCALE: 1/8" = 1'-0"



5 M1-01 NEW WORK PLAN - FOURTH FLOOR
SCALE: 1/8" = 1'-0"



4 M1-01 NEW WORK PLAN - THIRD FLOOR
SCALE: 1/8" = 1'-0"



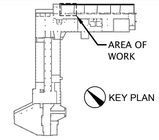
2 M1-01 NEW WORK PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

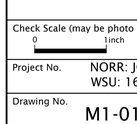
1. DUCTWORK LOCATED AT THE UNDERFLOOR ABOVE.

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

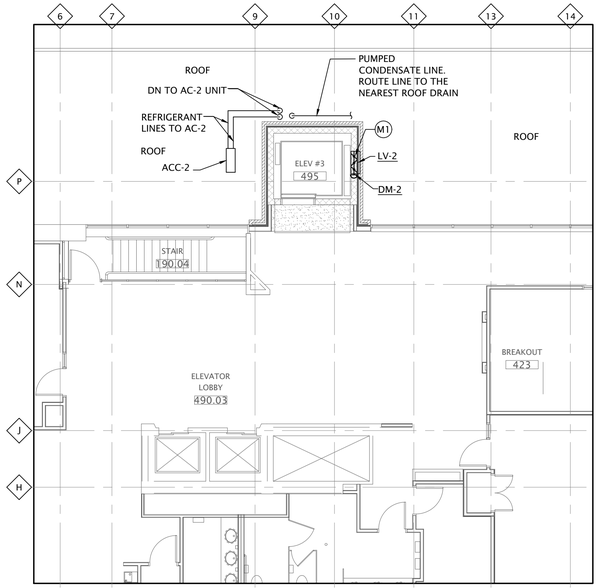
STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
HVAC PLANS

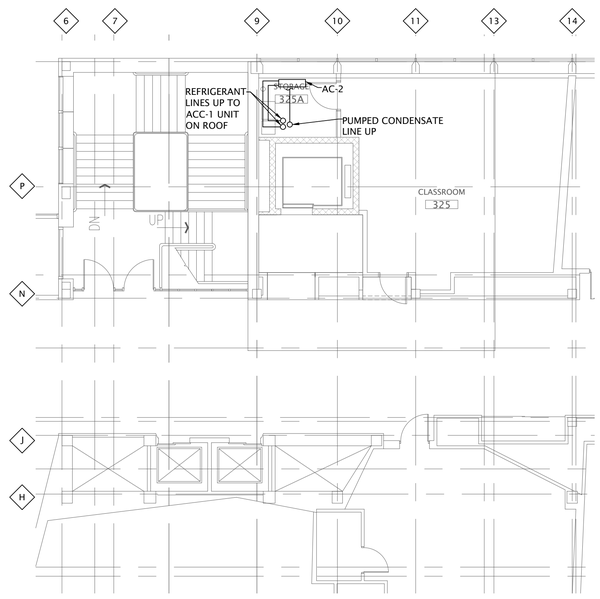
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

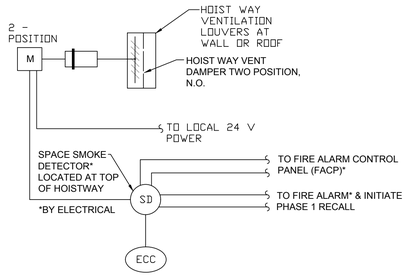
Drawing No.
M1-01



1 M1-02 FOURTH FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 M1-02 THIRD FLOOR PLAN
SCALE: 1/8" = 1'-0"



3 M1-01 HOISTWAY VENT DAMPER CONTROLS
SCALE: NOT TO SCALE

NOTES:

1. THE DAMPER SHALL REMAIN CLOSED DURING NORMAL OPERATION AND OPEN UPON LOSS OF POWER ON A SIGNAL FROM THE SMOKE DETECTOR, LOCATED AT THE TOP OF THE HOISTWAY. COORDINATE NUMBER OF CONTACTS WITH THE ELECTRICAL AND FIRE PROTECTION DESIGN.
2. REFER TO FOURTH FLOOR PLAN AND SCHEDULES FOR LOCATION OF DAMPER AND FOR LOUVER SIZE.
3. PROVIDE A BINARY DDC POINT TO SOUND AN ALARM AT ECC.
4. REMOTE ALARM SHALL BE ACTIVATED WHEN THE HOISTWAY SMOKE DETECTOR DETECTS SMOKE.

(#) NEW WORK NOTES BY SYMBOL:

(M1) INSTALL NEW HOISTWAY VENTILATION LOUVER AND MOTORIZED DAMPER. COORDINATE OPENING WITH ARCHITECTURAL. CONNECT DAMPER ACTUATOR WITH SMOKE DETECTOR, AND ELECTRICAL.

LOUVER SCHEDULE

TAG	QTY	WIDTH	HEIGHT	FRAME	COMMENTS
LV-2	1	2'-6"	2'-6"	STANDARD	INSTALL BIRD AND INSECT SCREEN, PRIME COAT, BAKED ENAMEL FINISH, COLOUR:TO BE SELECTED BY ARCHITECT

MOTORIZED DAMPER SCHEDULE

TAG	QTY	WIDTH	HEIGHT	DEPTH	BLADE ACTION	FRAME	COMMENTS
DM-2	2'-6"		2'-6"	0'-8 1/8"	OPPOSED BLADE	STANDARD	ANODIZED FINISH, FACTORY INSTALLED ELECTRIC ACTUATOR (24V, 2.5W, 5.5VA TRANSFORMER), WITH FRAME MOUNTING BRACKET AND SP100 SWITCH PACKAGE TO REMOTELY INDICATE BLADE POSITION, FRONT FLANGE FRAME

SPLIT SYSTEM COOLING SCHEDULE

EQUIPMENT TAG	AREA SERVED	CAPACITY (BTUH) COOLING	CAPACITY (BTUH) HEATING	DB (°F)	WB (°F)	AIRFLOW (CFM)	REFRIGERANT	DIMENSION HxWxL (IN)	WEIGHT (LBS)	SEER	MODEL NUMBER	ELECTRICAL						REMARKS
												VOLT	PHASE	HZ	HP	MCA	MOP	
AC-1	ELEV EQ ROOM	12000	14000	80	67	425-320	R-410A	12x10x36	29	20.8	PKA-A1 2HA7	208/230	1	60	0.16	1	-	1,2,3,4 & 5
ACC-1	ELEV EQ ROOM	12000	-	95	75	1590	R-410A	24x12x32	92	-	PUY-A1 2NKA7	208/230	1	60	0.20	11	28	1 & 3

NOTES:
1. MODEL NUMBERS ARE MITSUBISHI UNLESS OTHERWISE NOTED.
2. ROUTE CONDENSATE LINE TO NEAREST EXIST ROOF DRAIN.
3. ROUTE REFRIGERANT LINES BETWEEN AC-1 AND ACC-1.
4. WALL MOUNT UNIT WITH WALL MOUNTING BRACKET.
5. MINI-CONDENSATION PUMP W/ RESERVOIR AND SENSOR. (208/230V)

GRILLE, REGISTER, & DIFFUSER SCHEDULE

TAG	SERVICE	NECK SIZE	MATERIAL	FINISH	MODEL NUMBER	REMARKS
S-1	SUPPLY	SEE PLANS	STEEL	WHITE	300RL	¾" SPACING OPPOSED BLADE DAMPER
S-2	SUPPLY	SEE PLANS	STEEL	WHITE	OMNI	24"x24"
R-1	RETURN	SEE PLANS	STEEL	WHITE	350RL	¾" SPACING OPPOSED BLADE DAMPER

NOTE:
1. MODEL NUMBERS ARE TITUS UNLESS OTHERWISE NOTED.
2. PROVIDE TRANSITION TO DIFFUSER WHERE REQUIRED.

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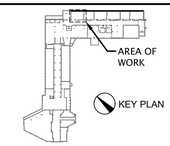
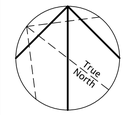
Keyplan



North Arrow



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STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
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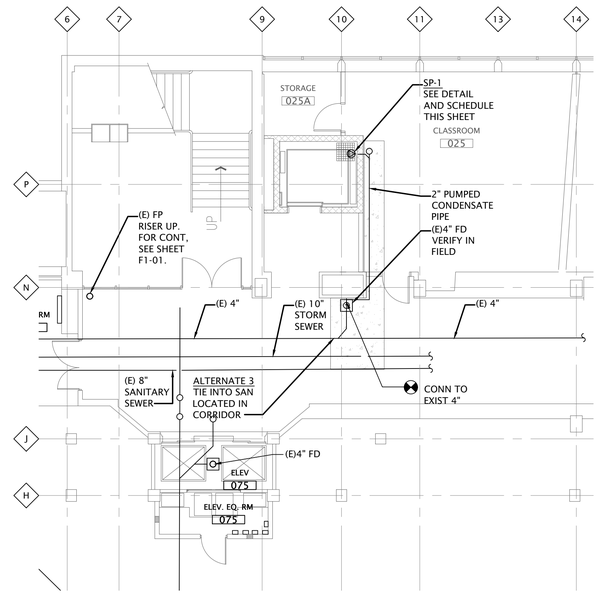
Drawing Title
MECHANICAL PLANS AND DETAILS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. M1-02

ARCH D - 24"x36" - 610mmx914mm (rounded)

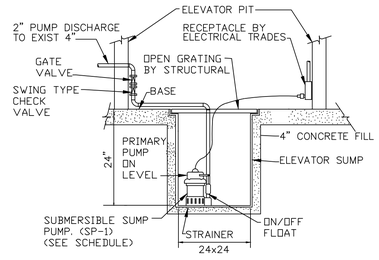


1 / P1-01 BASEMENT FLOOR PLAN
SCALE: 1/8" = 1'-0"

PUMP SCHEDULE

EQUIPMENT TAG	SERVING	TYPE	FLOW (GPM)	PRESSURE (FT. HD)	PUMP EFFICIENCY	MOTOR			ELECTRICAL		MODEL NUMBER	REMARKS
						RPM	HP	DRIVE	VOLT	PHASE		
SP-1	ELEVATOR PIT	SUMP	50	20	51.8	3500	0.5	-	230	1	2EC0512	

NOTES:
1. ALL MODEL NUMBERS ARE BELL AND GOSSETT UNLESS OTHERWISE NOTED.
2. COORDINATE INSTALLATION W/ ELECTRICAL.



5 / P1-01 SUMP PUMP DETAIL
SCALE: NOT TO SCALE

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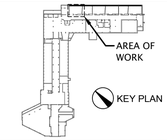
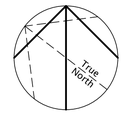
Keyplan



North Arrow



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5143 Cass Ave, Detroit, MI 48202

Drawing Title

FIRE PROTECTION AND PLUMBING FLOOR PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. P1-01

ARCH D - 24"x36" - 610mmx914mm (rounded)

ELECTRICAL SYMBOL LIST

CONDUIT SYSTEM

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING EXPOSED IN UNFINISHED AREAS
- CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
- CONDUIT OR CABLE TURNED UP
- CONDUIT OR CABLE TURNED DOWN
- BRANCH CIRCUIT HOMERUNS TO PANELS OR AS NOTED, LINES INDICATE NUMBER OF WIRES IN CONDUIT SHORT LINE IS NEUTRAL OPPOSITE SHORT SLANT IS GROUND
- (J) JUNCTION BOX (SIZE PER NEC OR AS INDICATED)
- PB PULL BOX (SIZE PER NEC OR AS INDICATED)

MOUNTING HEIGHTS

(ALL MOUNTING HEIGHTS ARE TO THE CENTER OF THE DEVICE, UNLESS OTHERWISE NOTED)

RECEPTACLE	18" AFF
LIGHT SWITCHES	48" AFF
CLOCK OUTLETS	7'-6" AFF
FIRE ALARM AUDIO AND VISUAL SIGNALS, OFFICE AREA	7'-6" AFF
MANUAL PULL STATION	48" AFF
CARD READERS	48" AFF
DISTRIBUTION PANELS	7'-0" AFF TO TOP
LIGHTING OR RECEPTACLE PANELS	6'-0" AFF TO TOP
MOTOR STARTERS OR SAFETY SWITCHES	5'-0" AFF TO TOP

POWER SYSTEMS

- PANEL BOARD
- T TRANSFORMER, 480-208Y/120 VOLT DRY TYPE UNLESS OTHERWISE NOTED
- MOTOR CONTROL CENTER
- MULTI-OUTLET ASSEMBLY WITH OUTLETS UNLESS OTHERWISE NOTED
- MOTOR - SIZE AS INDICATED
- PUSH BUTTON STATION
- UNFUSED DISCONNECT SWITCH
- F FUSED DISCONNECT SWITCH
- $_M MANUAL STARTER, WITH PILOT LIGHT
- 3 PHASE FUSIBLE COMBINATION STARTER
- $_C 20A, 125V, 3W, SINGLE GROUNDING RECEPTACLE, NEMA 5-20R 'C' INDICATES CEILING MOUNTED
- $_C 20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R 'C' INDICATES CEILING MOUNTED
- 20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R MOUNTED 6" ABOVE FINISHED COUNTER
- $_C 20A, 125V, 3W, DOUBLE DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R 'C' INDICATES CEILING MOUNTED
- SPECIAL RECEPTACLE. REFER TO DRAWINGS FOR NEMA CONFIGURATION
- (C) CLOCK OUTLET
- FB FLOOR BOX
- PT POKE THROUGH

LIGHTING CONTROL SYSTEMS

- $ SWITCH, SINGLE POLE, 20A
- $_2 SWITCH, DOUBLE POLE, 20A
- $_3 SWITCH, THREE WAY, 20A
- $_D DIMMER SWITCH
- $_L SWITCH, LOW VOLTAGE
- $_O SWITCH, OCCUPANCY SENSOR
- $_T SWITCH, TIMER
- LC LIGHTING CONTROL BOX/RELAY
- (OS) (OS) OCCUPANCY SENSOR - WALL/CEILING MOUNTED
- (DS) DAYLIGHT SENSOR
- (P) PHOTOCELL

FIRE ALARM SYSTEM

- F MANUAL PULL STATION
- S AREA SMOKE DETECTOR
- SD DUCT TYPE SMOKE DETECTOR
- (F) $_C AUDIO/VISUAL ALARM SIGNAL RECESSED MOUNTED 'C' INDICATES CEILING MOUNTED
- (P) (P) VISUAL ALARM STROBE SIGNAL - WALL/CEILING MOUNTED
- F $_C AUDIO ALARM SIGNAL SIGNAL 'C' INDICATES CEILING MOUNTED
- H HEAT DETECTOR
- F FLAME DETECTOR
- BD $_R BEAM SMOKE DETECTOR - RECEIVER
- BD $_T BEAM SMOKE DETECTOR - TRANSMITTER
- IM ADDRESSABLE INTERFACE MODULE
- WF SPRINKLER FLOW SWITCH
- PS SPRINKLER PRESSURE SWITCH
- TS SPRINKLER VALVE TAMPER SWITCH
- FT FIREMANS TELEPHONE JACK
- FA FIRE ALARM SYSTEM CONTROL PANEL
- FAA REMOTE FIRE ALARM SYSTEM ANNUCIATOR PANEL

TELECOMMUNICAITON SYSTEM

- AP WIRELESS ACCESS POINT
- $_C TELECOMMUNICATION OUTLET - EMPTY 'C' INDICATES CEILING MOUNTED
- $^{XX}_C TELECOMMUNICATION OUTLET - CABLES AS INDICATED 'C' INDICATES CEILING MOUNTED

CLOCK

- CLOCK - WALL/CEILING MOUNTED
- CLOCK- DOUBLE FACED - WALL/CEILING MOUNTED

GROUNDING

- GROUND ROD
- G 1/4 " X 2" COPPER GROUND BAR
- DOT INDICATES THERMIT WELD OR CONNECTION

LIGHTING SYSTEM

- 2'X4' FIXTURE 'X' INDICATES FIXTURE TYPE
- 2'X2' FIXTURE 'X' INDICATES FIXTURE TYPE
- 1'X4' FIXTURE 'X' INDICATES FIXTURE TYPE
- FIXTURE WITH NIGHT LIGHT CIRCUIT 'X' INDICATES FIXTURE TYPE
- STRIP FIXTURE 'X' INDICATES FIXTURE TYPE
- DOWNLIGHT FIXTURE 'X' INDICATES FIXTURE TYPE
- NIGHT LIGHT DOWNLIGHT FIXTURE 'X' INDICATES FIXTURE TYPE
- EXIT LIGHT DIRECTIONAL ARROWS IF INDICATED
- BATTERY OPERATED AUTOMATIC EMERGENCY LIGHTING UNIT WITH NUMBER OF HEADS AS SHOWN
- REMOTE MOUNTED LIGHT HEAD FROM BATTERY EMERGENCY UNIT
- POLE MOUNTED FIXTURE
- FLOODLIGHT

SECURITY SYSTEM

- TV CCTV CAMERA
- TV CCTV MONITOR
- M MOTION DETECTOR
- D MAGNETIC DOOR CONTACTS
- B SIGNAL BELL
- I INTERCOM STATION
- CR CARD READER

PAGING SYSTEM

- (S) (S) SPEAKER - WALL/CEILING MOUNTED
- AMP PAGING SYSTEM AMPLIFIER & CONTROL PANEL
- (M) (M) MICROPHONE OUTLET - WALL/CEILING MOUNTED

NURSE CALL SYSTEM

- (N) (N) CALL LIGHT - WALL/CEILING MOUNTED
- N CALL/PULL STATION

TELEVISION SYSTEM

- TV TELEVISION OUTLET

ONE LINE DIAGRAMS

- DRAW OUT SUBSTATION CIRCUIT BREAKER
- AS AMMETER SWITCH
- VS VOLTMETER SWITCH
- K KEY INTERLOCK
- AM AMMETER
- VM VOLTMETER
- WH WATT-HOUR METER
- KWH KILOWATT HOUR METER
- GROUND CONNECTION
- 46 REVERSE PHASE OR PHASE BALANCE CURRENT RELAY
- 47 PHASE SEQUENCE VOLTAGE RELAY
- 51 TIME OVERCURRENT RELAY
- 50 GS INSTANTANEOUS OVERCURRENT GROUND SENSING RELAY
- FUSE
- CIRCUIT BREAKER
- SINGLE THROW SWITCH
- LIGHTNING ARRESTOR
- AUTOMATIC TRANSFER SWITCH
- POWER TRANSFORMER
- POTENTIAL TRANSFORMER
- CURRENT TRANSFORMER

ELECTRICAL ABBREVIATIONS

A	AMPERE
AC	ARMORED CABLE
ALC	ALTERNATING CURRENT
ADD	ADDENDUM
AF	AMPERES,FRAME (BREAKER RATING)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AG	ABOVE GROUND
AL	ALUMINUM
AM	AMMETER
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AS	AMMETER SWITCH
ASR	AUTOMATIC SPRINKLER RISER
AT	AMPERE TRIP (BREAKER SETTING)
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BC	BOTTOM CHORD
BD	BUS DUCT
BLDG	BUILDING
BRK	BREAKER
C	CONDUIT
CAS	CONTROLLED ACCESS SYSTEM
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CLF	CURRENT LIMITING FUSE
CLG	CEILING
CKT	CIRCUIT
COAX	COAXIAL CABLE
COL	COLUMN
CONT	CONTINUATION (CONTINUOUS)
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CTB	CURRENT TEST BLOCK
CU	COPPER
DC	DIRECT CURRENT
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DISC	DISCONNECT
DN	DOWN
DP	DISTRIBUTION PANEL
DT	DOUBLE THROW
DWG	DRAWING
EA	EACH
EDP	EMERGENCY POWER DISTRIBUTION PANEL
EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC (ELECTRICAL)
ELP	EMERGENCY LIGHTING PANEL
ELR	END-OF-LINE RESISTOR
EM	EMERGENCY
EMCC	EMERGENCY MOTOR CONTROL CENTER
EMT	ELECTRIC METALLIC TUBING
EO	ELECTRIC OPERATED
EPO	EMERGENCY POWER OFF
EQPT	EQUIPMENT
ERP	EMERGENCY RECEPTACLE PANEL
EUH	ELECTRIC UNIT HEATER
EWC	ELECTRIC WATER COOLER
EXST/(E)	EXISTING
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FU	FUSE
FUT	FUTURE
GND/G	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
HID	HIGH INTENSITY DISCHARGE
HGT	HEIGHT
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING VENTILATING AND AIR CONDITIONING
IAC	INTERLOCKING ARMOR CABLE
IC	INTERCOM
IE	INVERT ELEVATION
INC	INCANDESCENT, INCORPORATE
ISO	ISOLATED NEUTRAL
JB	JUNCTION BOX
kcmil	THOUSAND CIRCULAR MIL(S)
KV	KILOVOLT
KVA	KILOVOLT-AMPERES
KVAR	KILOVOLT-AMPERES REACTIVE
KW	KILOWATT
KWH	KILOWATT-HOUR
LA	LIGHTNING ARRESTOR
LDP	LIGHTING DISTRIBUTION PANEL
LP	LIGHTING PANEL
LT	LIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
M	METER
MA	MILLIAMPERE
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MEZZ	MEZZANINE
MFG	MANUFACTURING
MFR	MANUFACTURER
MH	MANHOLE, METAL HALIDE MOUNTING HEIGHT
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MO	MOTOR OPERATED
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
N	NEW, NEUTRAL, NORTH
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NF	NOT FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN, NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OFF	OFFICE
OL	OVERLOAD
OPNG	OPENING
P	POLE
PA	PUBLIC ADDRESS SYSTEM
PB	PULLBOX
PBS	PUSH BUTTON STATION
PDP	POWER DISTRIBUTION PANEL
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATOR VALVE
PL	PILOT LIGHT
PNL	PANEL
PP	POWER PANEL
PR	PAIR
PRI	PRIMARY
PS	PULL SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
R, (R)	RELOCATED (EXISTING)
RC	REMOTE CONTROL
RECPT	RECEPTACLE
RP	RECEPTACLE PANEL
RSC	RIGID STEEL CONDUIT
SD	SMOKE DETECTOR
SEC	SECONDARY
SHLD	SHIELDED
SHT	SHEET
SIG	SIGNAL
SP	SINGLE POLE
SPEC	SPECIFICATION
SPKR	SPEAKER
SS	SELECTION SWITCH
ST	SINGLE THROW
STP	SHIELDED TWISTED PAIR
STP/OS	SHIELDED TWISTED PAIR W/ OVERALL SHIELD
STRUCT	STRUCTURAL
SUBST	SUBSTATION
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYS	SYSTEM
T	THERMOSTAT
TB	TERMINAL BLOCK
TEL	TELEPHONE
TRP	POWER FACTOR TRANSDUCER
TOS	TOP OF STEEL
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR
UTP/OS	UNSHIELDED TWISTED PAIR W/ OVERALL SHIELD
V	VOLT OR VOLTAGE
VM	VOLTMETER
VP	VAPOR PROOF
VS	VOLTMETER SWITCH
VTR	VOLTAGE TRANSDUCER
W	WATT
WH	WATT-HOUR METER
WHD	WATT-HOUR DEMAND METER
WP	WEATHER PROOF
WLR	WELDING RECEPTACLE
WR	WEATHER RESISTANT
W/	WITH
W/O	WITHOUT
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

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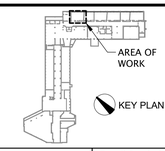
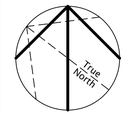


North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

NORR

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Project Manager A. NOLFF	Drawn S. MAGANA
Project Leader	Checked M. GOOD

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WAYNE STATE UNIVERSITY
Facilities Planning & Management
5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title

ELECTRICAL SYMBOLS AND ABBREVIATIONS

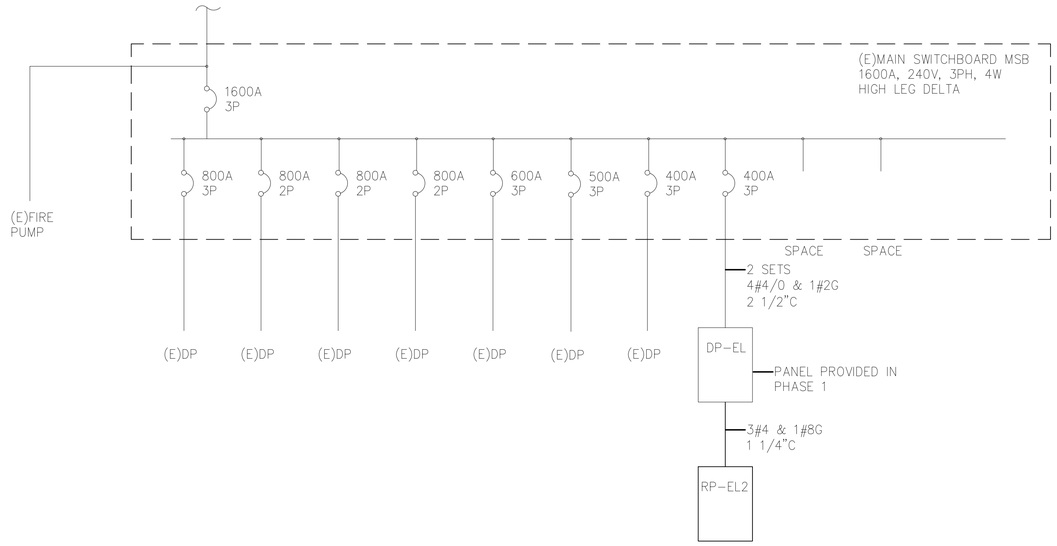
Check Scale (may be photo reduced)

0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No.

E0-01



1 E0-02 **ONE LINE DIAGRAM**
SCALE: NONE

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	LAMP
A	24" WALL MOUNTED LED SEALED STRIP FIXTURE. IP65 RATED.	LITHONIA DMW2-L24-3000LM-ACL-MD-120-GZ10-35K-80CRI	LED, 27W
B	48" SURFACE MOUNTED LED SEALED STRIP FIXTURE.	LITHONIA ZL1N-L48-3000LM-FST-MVOLT-35K-80CRI-WH	LED, 25W
BEM	48" SURFACE MOUNTED LED SEALED STRIP FIXTURE WITH EMERGENCY BATTERY BACKUP.	LITHONIA ZL1N-L48-3000LM-FST-MVOLT-35K-80CRI-E10WLCP-WH	LED, 25W
C	2'x4' RECESSED LED FLAT PANEL	LITHONIA EPANL-2x4-3000LM-80CRI-35K-MIN10-ZT-MVOLT-	LED, 27W
CEM	2'x4' RECESSED LED FLAT PANEL WITH EMERGENCY BATTERY BACKUP.	LITHONIA EPANL-2x4-3000LM-80CRI-35K-MIN10-ZT-MVOLT-E10WCP	LED, 27W
DEM	6" DIAMETER RECESSED LED DOWNLIGHT WITH EMERGENCY BATTERY BACKUP.	GOTHAM EVO35/10-6AR-MD-LSS-MVOLT-GZ10-EL	LED, 11.8W
X	GREEN EXIT SIGN WITH BATTERY BACKUP	LITHONIA LQMS-R-120/277V	GREEN LED

NEW PANELBOARD RP-EL2 SCHEDULE

VOLTAGE: 240/120 MAINS 60 MCB MOUNTING: SURFACE REMARKS:
BUS SIZE: 100 AMP FAULT DUTY: 10k

No.	SERVES	LOAD (KVA) LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A	C	BRKR P	TRIP	LOAD (KVA) MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	CONTROL ROOM LIGHTS	0.2						20	1	X		1	20						0.1	ELEVATOR CAB LIGHTS	2
3	CONTROL ROOM RECEPT		0.2					20	1		X	2	15			0.2				AC-2	4
5	ROOF RECEPT		0.2					20	1	X											6
7	CONDENSATE PUMP			0.1				20	1		X	2	30			2.6				ACC-2	8
9	SPACE										X										10
11	SPACE									X										SPACE	12
13	SPACE										X									SPACE	14
15	SPACE									X										SPACE	16
17	SPACE										X									SPACE	18
19	SPACE											X								SPACE	20
														0.0	0.0	2.9	0.1	0.4	0.3	CONNECTED KVA	3.6
														0.0	0.0	2.9	0.1	0.4	0.3	DEMAND KVA	3.7
																				DEMAND AMPS	15

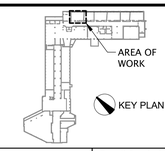
PANELBOARD DP-EL SCHEDULE

VOLTAGE: 240HLD/120 MAINS: 400A MLO MOUNTING: RECESSED REMARKS: PANEL PROVIDED IN PHASE 1
BUS SIZE: 400 AMP FAULT DUTY 42k

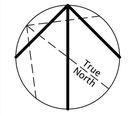
No.	SERVES	LOAD (KVA) LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A	B	C	BRKR P	TRIP	LOAD (KVA) MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	EXISTING									X											EXISTING	2
3	ELEVATOR 1			14.9				60	3		X		3	60				14.9			ELEVATOR 2	4
5												X										6
7										X			2	15			0.2				AC-1	8
9	**NEW ADA ELEVATOR**			**17.4**				**80**	**3**		X											10
11												X	2	30			2.6				ACC-1	12
13	**SP-1**			**1.9**				**20**	**2**	X												14
15											X										BLANK FOR HIGH LEG DELTA	16
17	**RECEPT - PIT RECEPTACLE**	**0.2**						**20**	**1**			X									SPACE	18
19	SPACE										X										SPACE	20
21	BLANK FOR HIGH LEG DELTA											X									BLANK FOR HIGH LEG DELTA	22
23	**RP-EL2**	**0.3**	**0.4**	**0.1**	**2.9**	**0.0**	**0.0**	**60**	**2**												SPACE	24
25										X											SPACE	26
27	BLANK FOR HIGH LEG DELTA										X										BLANK FOR HIGH LEG DELTA	28
29	SPACE											X									SPACE	30
31	SPACE									X											SPACE	32
33	BLANK FOR HIGH LEG DELTA										X										BLANK FOR HIGH LEG DELTA	34
35	SPACE											X									SPACE	36
37	SPACE									X											SPACE	38
39	BLANK FOR HIGH LEG DELTA										X										BLANK FOR HIGH LEG DELTA	40
41	SPACE											X									SPACE	42
															0.0	0.0	5.8	49.3	0.4	0.5	CONNECTED KVA	55.9
															0.0	0.0	5.8	61.6	0.4	0.5	DEMAND KVA	68.2
																					DEMAND AMPS	164

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project

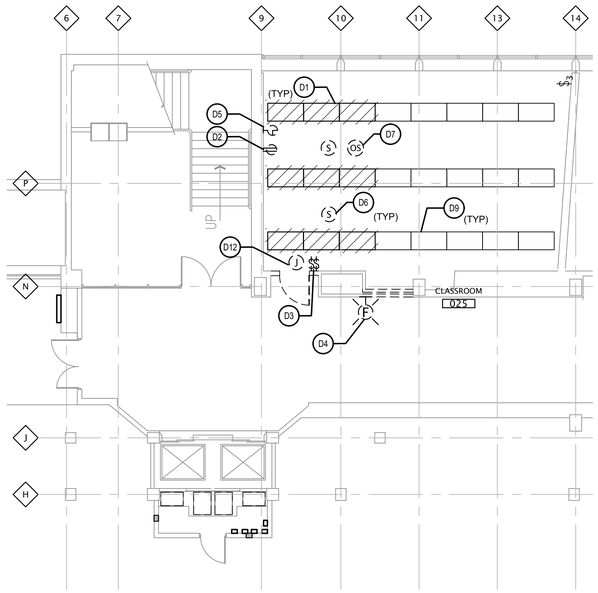
STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
ONE LINE DIAGRAM AND PANEL SCHEDULES

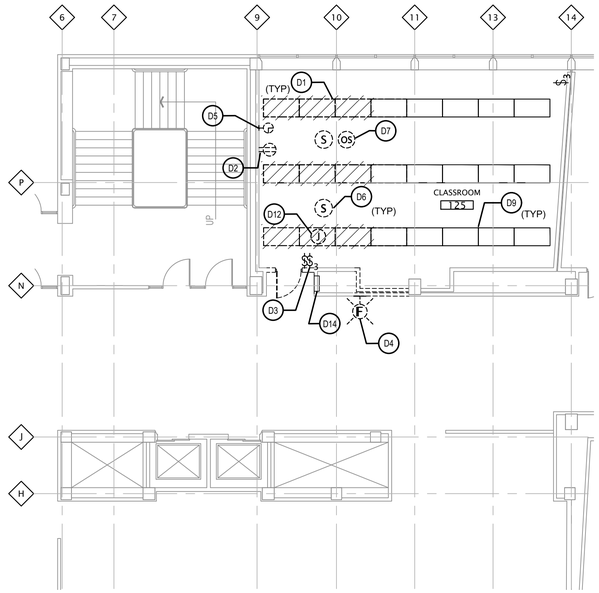
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. E0-02



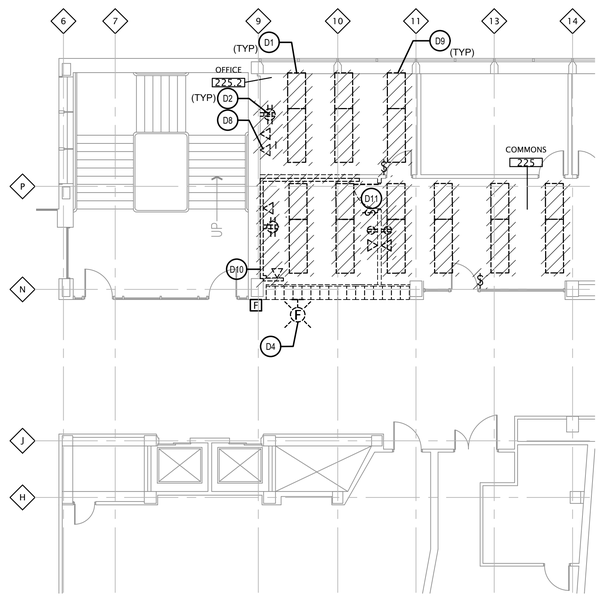
1 ED-01 BASEMENT FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"



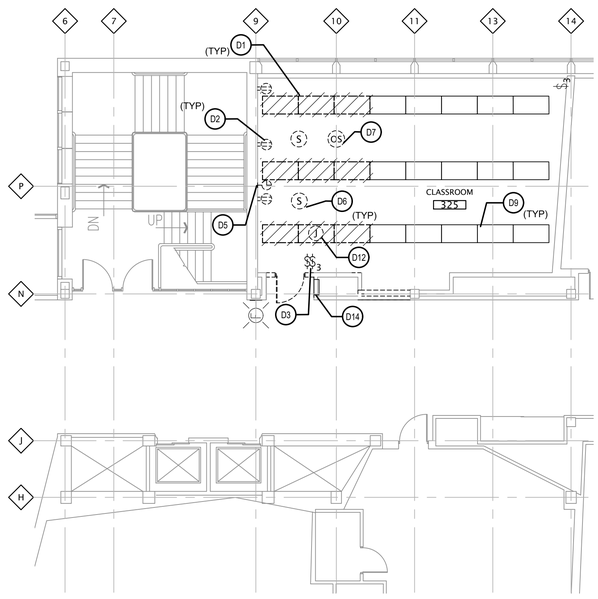
2 ED-01 FIRST FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"

DEMOLITION KEY NOTES:

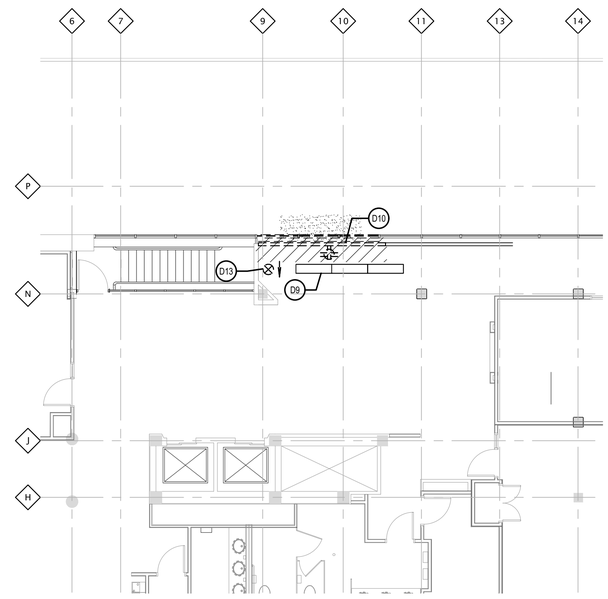
- D1 DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED LIGHT FIXTURE. RETAIN CIRCUIT TO REMAINING FIXTURES.
- D2 DISCONNECT AND REMOVE EXISTING RECEPTACLE. RETAIN CIRCUIT TO REMAINING RECEPTACLES ON THE SAME CIRCUIT.
- D3 DISCONNECT AND REMOVE EXISTING SWITCH(ES) FOR LIGHTING CONTROL. SAVE FOR RELOCATION. REFER TO SHEETS E1-01 AND E1-02 FOR NEW WORK.
- D4 DISCONNECT AND REMOVE EXISTING FIRE ALARM DEVICE. SAVE DEVICE FOR RELOCATION. RETAIN CIRCUIT FOR REMAINING DEVICES ON THE SAME CIRCUIT. REFER TO SHEETS E2-01 AND E2-02 FOR NEW WORK. CONNECT RECEPTACLES TO EXISTING CIRCUIT AS INDICATED.
- D5 DISCONNECT AND REMOVE EXISTING CLOCK. SAVE FOR RELOCATION. SAVE CIRCUIT FOR REMAINING CLOCKS ON THE SAME CIRCUIT. REFER TO SHEETS E2-01 AND E2-02 FOR NEW WORK.
- D6 DISCONNECT AND REMOVE EXISTING SPEAKER. SAVE FOR RELOCATION. REFER TO SHEETS E1-01 AND E1-02 FOR NEW WORK.
- D7 DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR. SAVE FOR RELOCATION. REFER TO SHEETS E1-01 AND E1-02 FOR NEW WORK.
- D8 DISCONNECT AND REMOVE EXISTING DATA OUTLET. SAVE FOR RELOCATION. REFER TO SHEETS E2-01 AND E2-02 FOR NEW WORK.
- D9 EXISTING LIGHT FIXTURE TO REMAIN.
- D10 DISCONNECT AND REMOVE SECTION OF WIREMOLD FOR NEW ELEVATOR. RETAIN CIRCUIT FOR REMAINING WIREMOLD TO REMAIN.
- D11 DISCONNECT AND REMOVE LIGHT SWITCH.
- D12 DISCONNECT AND RELOCATE OCCUPANCY SENSOR POWER PACK. COORDINATE NEW LOCATION WITH OCCUPANCY SENSOR MANUFACTURER.
- D13 DISCONNECT AND RELOCATE EXIT SIGN.
- D14 EXISTING RECESSED PANEL TO REMAIN.



3 ED-01 SECOND FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"



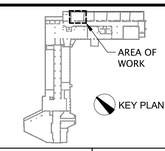
4 ED-01 THIRD FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"



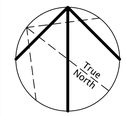
5 ED-01 FOURTH FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

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Project Leader	Checked M. GOOD

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5454 Cass Ave, Detroit, MI 48202

Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
DEMOLITION PLANS

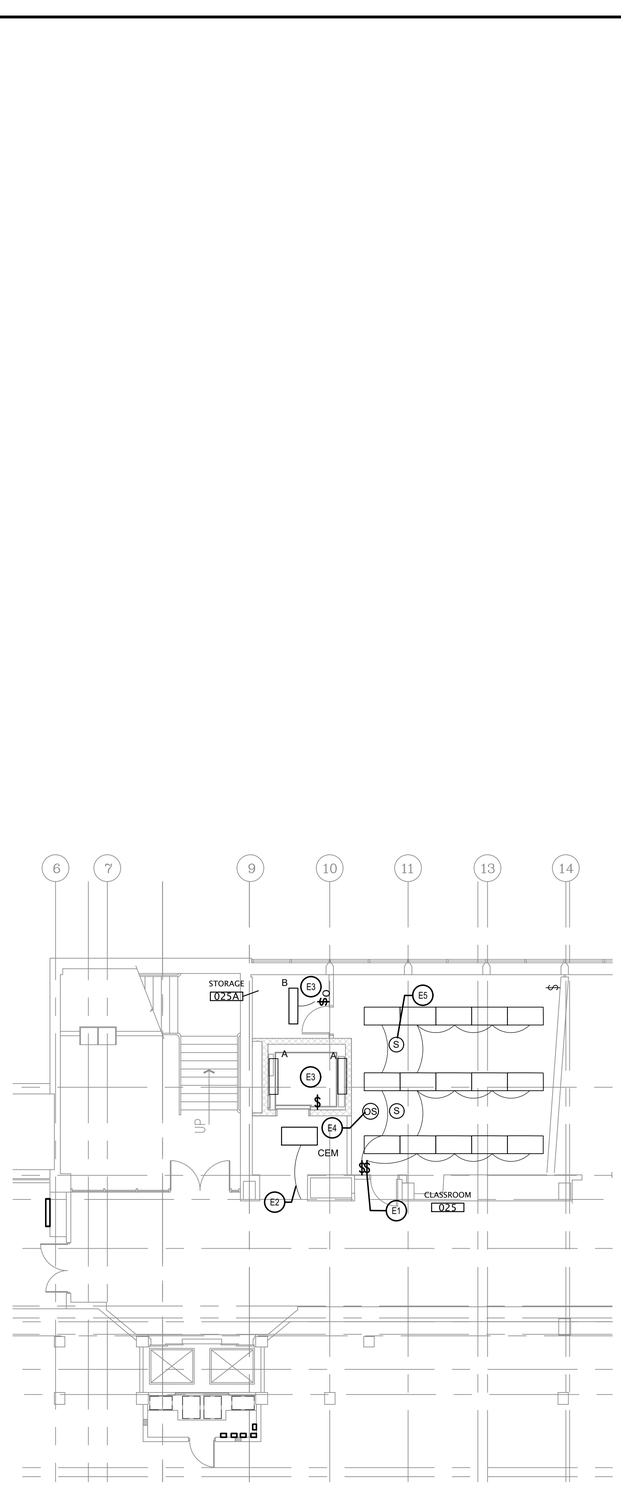
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

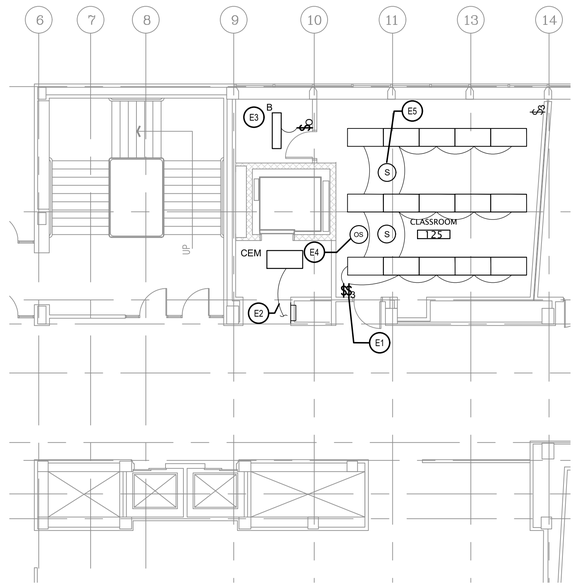
Drawing No. ED-01

LIGHTING PLAN KEY NOTES:

- E1 RELOCATED SWITCHES. RECONNECT TO EXISTING LIGHTS/OCCUPANCY SENSOR.
- E2 CONNECT TO EXISTING CORRIDOR CIRCUITS.
- E3 CONNECT NEW LIGHTS TO EXISTING CLASSROOM CIRCUIT.
- E4 RELOCATED OCCUPANCY SENSOR AND ASSOCIATED POWER PACK.
- E5 RELOCATED SPEAKER. RECONNECT TO EXISTING SYSTEM.



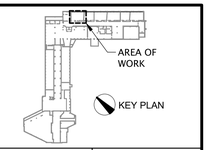
1 E1-01 BASEMENT FLOOR - LIGHTING PLAN
SCALE: 1/8" = 1'-0"



2 E1-01 FIRST FLOOR - LIGHTING PLAN
SCALE: 1/8" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow

Detail Symbol

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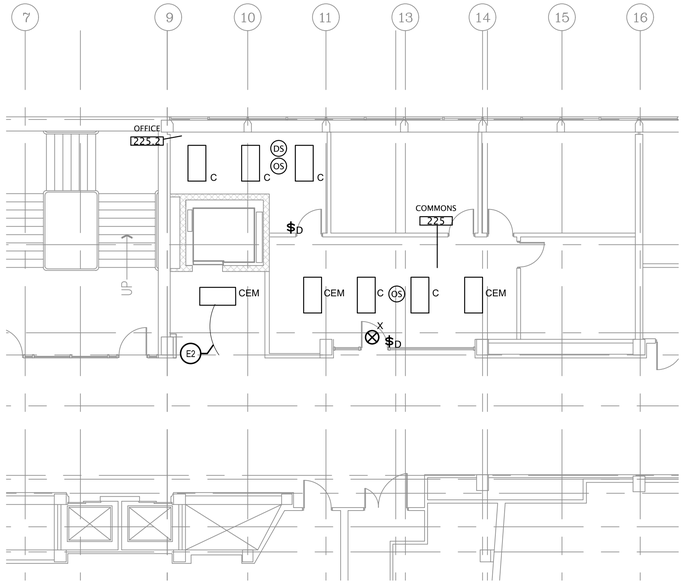
STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

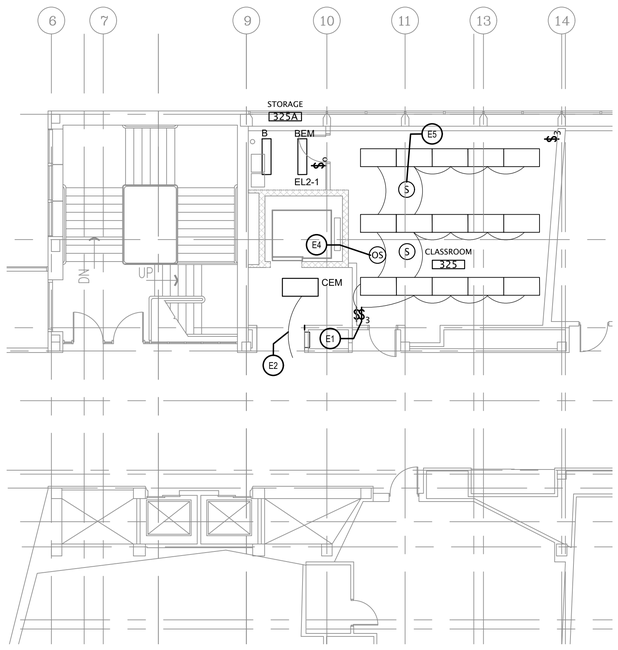
Drawing Title
BASEMENT AND FIRST FLOOR LIGHTING PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

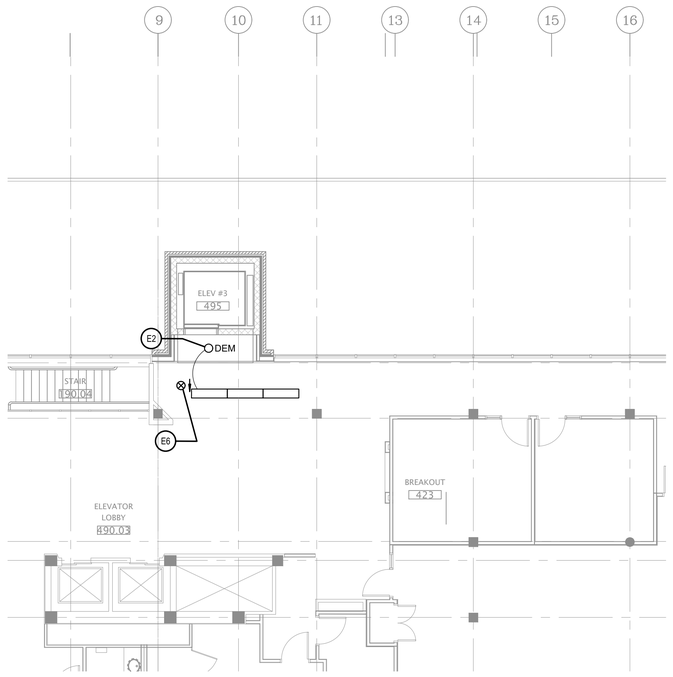
Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. E1-01





2 E1-02 THIRD FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"



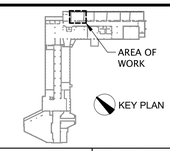
3 E1-02 FOURTH FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

LIGHTING PLAN KEY NOTES:

- E1 RELOCATED SWITCHES. RECONNECT TO EXISTING LIGHTS/OCCUPANCY SENSOR.
- E2 CONNECT TO EXISTING CORRIDOR CIRCUITS.
- E3 CONNECT NEW LIGHTS TO EXISTING CLASSROOM CIRCUIT.
- E4 RELOCATED OCCUPANCY SENSOR AND ASSOCIATED POWER PACK.
- E5 RELOCATED SPEAKER. RECONNECT TO EXISTING SYSTEM.
- E6 RELOCATED EXIT SIGN. RECONNECT TO EXISTING CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow

Detail Symbol

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	M. GOOD

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title
SECOND, THIRD AND FOURTH FLOOR LIGHTING PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. E1-02

ARCH D - 24"x36" - 610mm x 914mm (rounded)

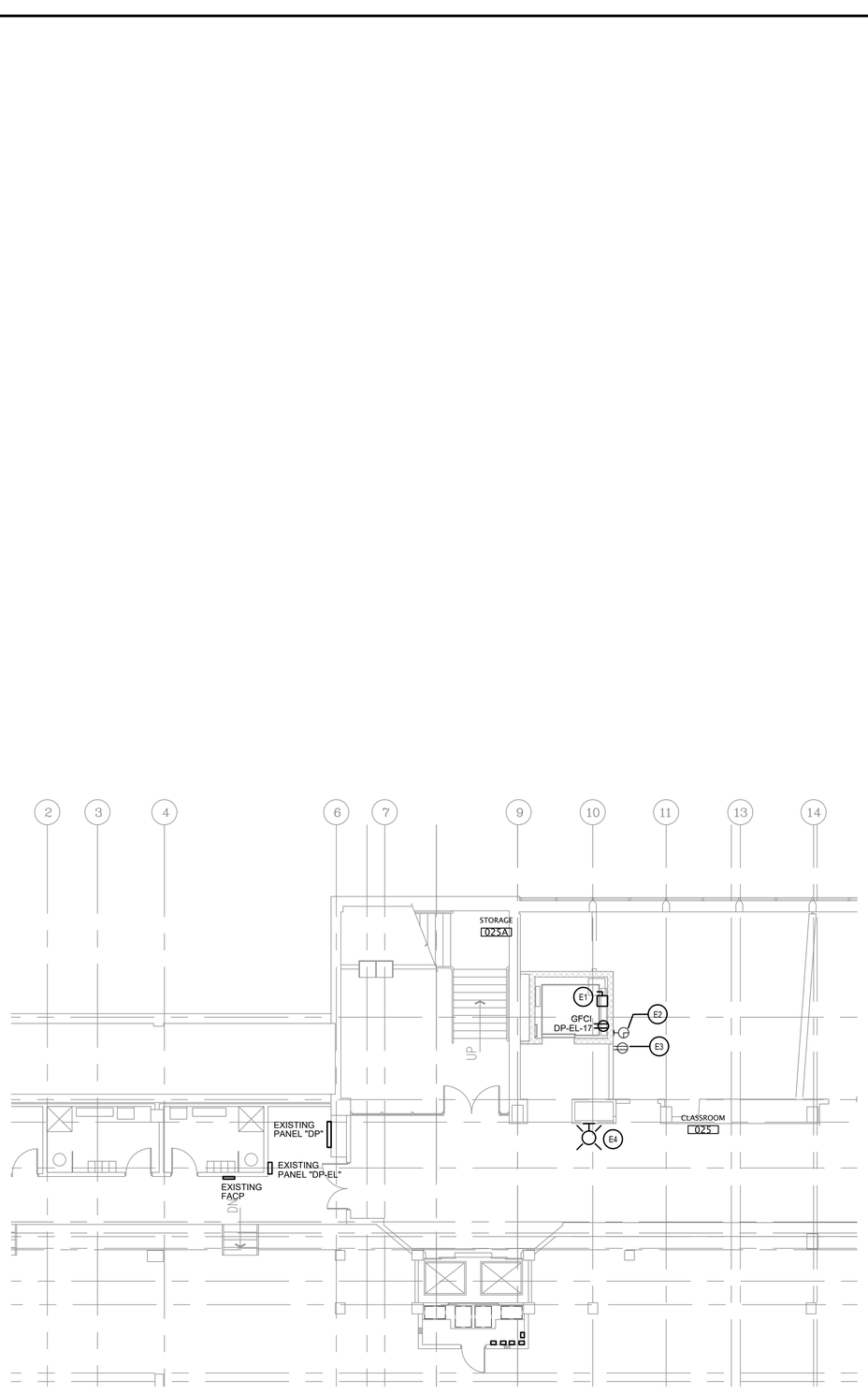
POWER PLANS KEY NOTES:

E1 SUMP PUMP. 1 HP. 240 V, 1PH. CONNECT TO DP-EL-13,15.

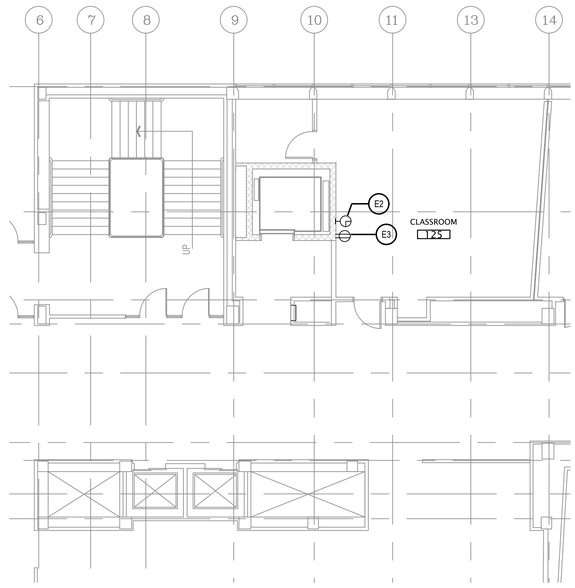
E2 EXISTING CLOCK, RELOCATED. RECONNECT TO EXISTING CIRCUIT.

E3 CONNECT NEW RECEPTACLE TO EXISTING CIRCUIT.

E4 RELOCATED FIRE ALARM DEVICE. CONNECT TO EXISTING CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.



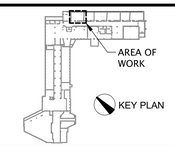
1 E2-01 BASEMENT FLOOR -POWER PLAN
SCALE: 1/8" = 1'-0"



2 E2-01 FIRST FLOOR - POWER PLAN
SCALE: 1/8" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow

Detail Symbol

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Drawing Title

BASEMENT AND FIRST FLOOR POWER PLANS

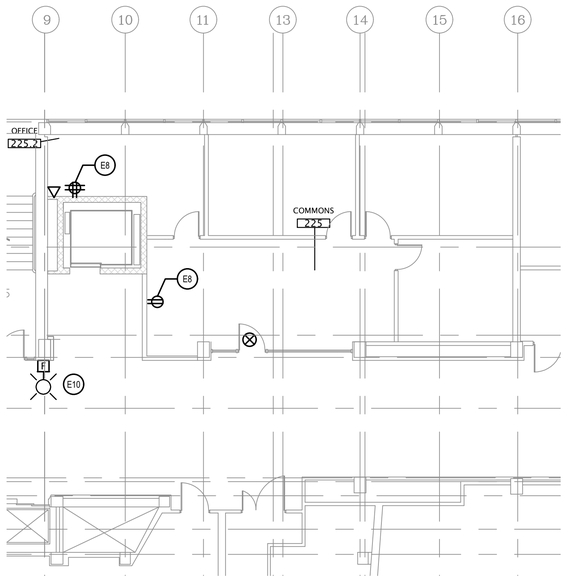
Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

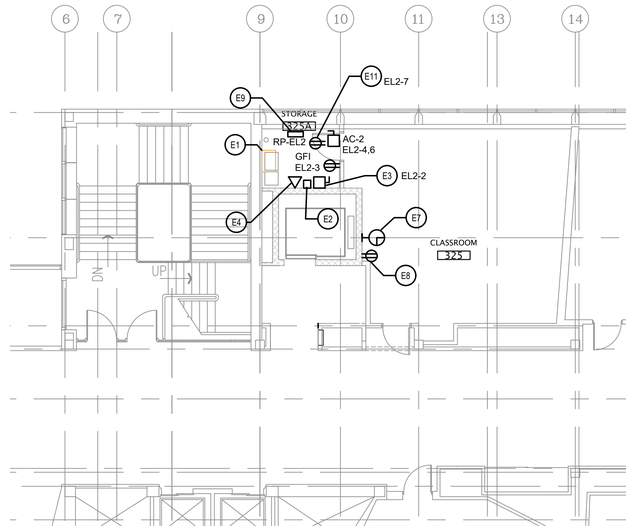
Drawing No. E2-01

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500 DELIV\ELEC\SHEETS\PHASE 2 - ADA ELEVATOR\E2-01.DWG, PLOTSTYLE TABLE: Ingenium.stb, PLOT DATE: September 18, 2019, TIME: 1:12 PM

ARCH D - 24"x36" - 610mmx914mm (rounded)



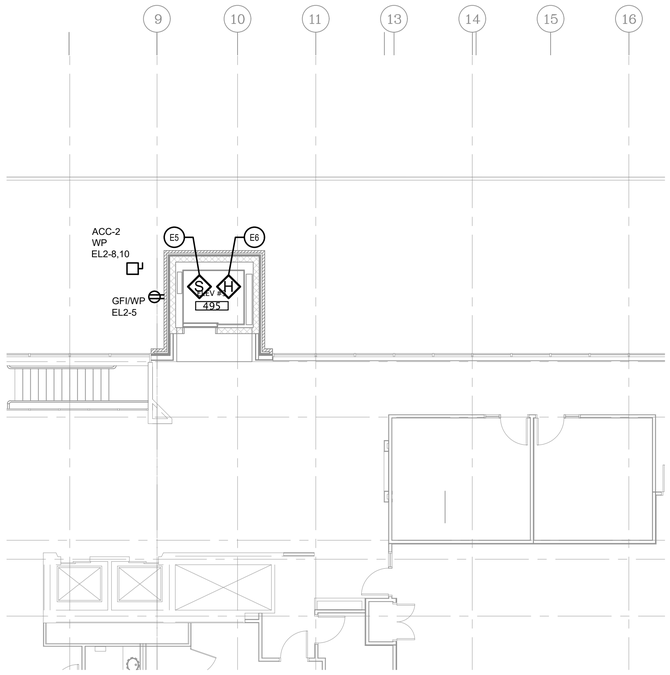
1 E2-02 SECOND FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"



2 E2-02 THIRD FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

POWER PLANS KEY NOTES:

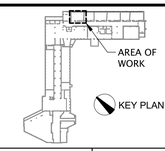
- E1 NEW ADA ELEVATOR CONTROLLER. CONNECT TO PANEL DP-EL WITH 3 #3 1 #8 GND, 1 1/4"C.
- E2 NEW SHUNT TRIP CIRCUIT BREAKER FOR NEW ELEVATOR.
- E3 NEW 30A, 1P DISCONNECT SWITCH FOR NEW ELEVATOR CAB LIGHTS.
- E4 NEW TELEPHONE OUTLET FOR NEW ELEVATOR.
- E5 NEW SMOKE DETECTOR LOCATED AT THE TOP OF ELEVATOR SHAFT. CONNECT TO ELEVATOR SMOKE EXHAUST DAMPER.
- E6 NEW HEAT DETECTOR LOCATED AT THE TOP OF ELEVATOR SHAFT. HEAT DETECTOR SHALL HAVE RATE-OF RISE AND FIXED TEMPERATURE SETTINGS. CONNECT HEAT DETECTOR TO ELEVATOR SHUNT TRIP CIRCUIT BREAKER.
- E7 EXISTING CLOCK, RELOCATED. RECONNECT TO EXISTING CIRCUIT.
- E8 CONNECT NEW RECEPTACLE TO EXISTING CIRCUIT.
- E9 NEW 60A, 240V, 1PH, 3W PANEL. MOUNT PANEL ON STEEL METAL CHANNEL.
- E10 RELOCATED FIRE ALARM DEVICE. CONNECT TO EXISTING CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.
- E11 RECEPTACLE FOR CONDENSATE PUMP. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.



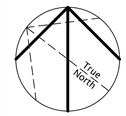
3 E2-02 FOURTH FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

DATE	ISSUED FOR	REV
07-26-19	SD REVIEW	-
08-22-19	DD REVIEW	-
09-10-19	CD REVIEW	-
09-18-19	PERMIT & BID SET	-

Keyplan



North Arrow



Detail Symbol

Detail No.
Sheet No.

Seal(s)

NORR

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Project

STATE HALL ELEVATOR REFURBISHMENT & RENOVATION - PHASE 2
5143 Cass Ave, Detroit, MI 48202

Drawing Title

SECOND, THIRD AND FOURTH FLOOR POWER PLANS

Check Scale (may be photo reduced)
0 1inch 0 10mm

Project No. NORR: JCDT18-0229
WSU: 16-327661

Drawing No. E2-02

PATH AND FILENAME: P:\EDUCATION\JCDT18-0229 - WSU HALL ELEVATOR STUDY\500 DELIV\ELEC\SHEETS\PHASE 2 - ADA ELEVATOR\E2-02.DWG, PLOTSTYLE TABLE: Ingenium.stb, PLOT DATE: September 18, 2019, TIME: 1:12 PM