1. Foundations are designed based on soil bearing of 1500 PSF. If soil of this capacity is not found, the foundation may need to be increased.
2. Place structural backfill in layers not exceeding 9" loose thickness. Compact each layer to at least 95% of the maximum density per ASTM D-1557. Compacting by flooding is not permitted.
3. Disturbance of the foundation bearing soils shall be avoided.
4. Footings, walls, piers: $F' = 3000$ PSI. Concrete slabs: $F' = 3500$ PSI.
5. Foundation rebar reinforcing lap length: minimum 30", 24" if laps staggered.
6. Special inspections: (Refer to the building code and specifications for detailed information on special inspections.)
7. The following types of work require special inspections: (Refer to the building code and specifications for detailed information on special inspections.)
8. Verify openings in the framing plans with the architectural, mechanical, and electrical drawings.
10. General notes:
   a. Special inspections shall be in accordance with the Michigan Building Code 2015 Section 1700.
   b. Verify openings in the framing plans with the architectural, mechanical, and electrical drawings.
BASEMENT FLOOR PLAN - MECHANICAL DEMOLITION

LOCATION AND ROUTING OF NEW DUCTWORK ON FIRST FLOOR SHALL REMAIN. MECHANICAL KEYED NOTES

EXISTING SANITARY PIPING ROUTED ABOVE GRADE AND ROUTED TO SEWAGE

EXISTING RETURN AIR DUCT WILL BE REUSED. CONTRACTOR SHALL CLEAN CONNECTION TO NEW CIRCULATING PUMP.

EXISTING HEATING PIPING SERVING EXISTING AHU BEYOND FIRST FLOOR STRUCTURE. THE EXISTING FIRE DAMPERS, DUCT HANGERS, ETC.

REMOVE EXISTING COOLING TOWER AND CONDENSER & COMPRESSOR WILL BE CONNECTED FOR SERVING NEW RTU & VAV BOX HOT WATER COILS.

EXISTING 3/4" DOMESTIC COLD WATER PUMP & EXISTING JANITORS SINK AND JUNIOR SANITARY IS REMOVE EXISTING JANITORS SINK AND JUNIOR SANITARY IS REMOVE EXISTING JANITORS SINK AND JUNIOR SANITARY IS

EXISTING SANITARY IS REMOVE EXISTING JANITORS SINK AND JUNIOR SANITARY IS REMOVE EXISTING JANITORS SINK AND JUNIOR SANITARY IS

BASEMENT FLOOR PLAN - MECHANICAL DEMOLITION

ABOVE GRADE AND ROUTED TO SEWAGE
BASEMENT FLOOR PLAN - SANITARY & VENT PIPING REVISIONS

1. All plumbing, piping, vents, etc. shall be mating.

BASEMENT FLOOR PLAN - DOMESTIC PIPING REVISIONS

1. All plumbing, piping, vents, etc. shall be mating.

NOTE:
1. All plumbing, piping, venting, etc. shall meet code.
EXTEND HOUSE KEEPING PAD AS NECESSARY.

CONNECT NEW 1 1/2" HHW PIPING TO EXISTING 1 1/2" NEAR RISER.

OA TEMP BELOW 40DEG & NO CALL FOR HEAT: PUMP ON MECHANICAL ROOM. SEE DETAIL ON SHEET BOXES OFF BOTTOM OF MAIN. PENETRATE INTO SUPPLY AIR DUCTWORK IN CORRIDOR TIGHT TO AREAWAY TO NEW HOT WATER RTU ON GRADE.

ARCHITECTURAL METAL PANEL.

REPLACE UNUSED LOUVER AREA WITH 14" THROUGH EXISTING 10'-0"x2'-6" LOUVER OPENING.

LARGE AREAWAY.

COMPLETELY SEALED.

INSULATION AND COVERED WITH VENTURE CLAD HHWS.

INSULATE SUPPLY AND RETURN AIR DUCTWORK 0.8gpm 1 1/2" 4 CONNECT EXISTING RETURN AIR DUCT ROUTED 2 1/2" HHWR UP

3-WAY 3-WAY 1.0gpm 4

0.9gpm 4

VARIABLE AIR VOLUME BOX WITH HOT WATER EXHAUST DUCT UP THRU FIRST FLOOR.

CONNECT EXISTING RETURN AIR DUCT ROUTED 3/4" EXHAUST DUCT UP THRU FIRST FLOOR.

INSTALLED PER MANUFACTURER'S INSTALLATION

3-WAY 0.5gpm 4

VB-03 EXISTING RETURN AIR DUCT BELOW FLOOR SLAB

0.9gpm 4

VARIABLE AIR VOLUME BOX WITH HOT WATER

2-WAY INSTALLED PER MANUFACTURER'S INSTALLATION

1.0gpm 4

VB-05 2-WAY INSTALLED PER MANUFACTURER'S INSTALLATION
1. THE MECHANICAL TRADES SHALL FAMILIARIZE THEMSELVES WITH ALL EXISTING AND NEW CONDITIONS. THESE DRAWINGS, SPECIFICATIONS AND DESIGN STANDARDS WILL BE UPATED TO INCLUDE SUCH CONDITIONS AS THEY ARE DISCOVERED. THE MECHANICAL TRADES ARE RESPONSIBLE TO GIVE NOTICE TO THE ENGINEER AND CONTRACTOR PUBLIC WORKS AND SEWER DEPARTMENT PRIOR TO INSTALLATION OF ANY EQUIPMENT THAT MIGHT IMPACT THE NEW CONDITIONS AS MENTIONED ABOVE. WHEN A NEW CONDITION IS NOT DISCOVERED PRIOR TO INSTALLATION, THE MECHANICAL TRADES WILL BE RESPONSIBLE FOR REMOVING ANY EQUIPMENT THAT IS IMPACTED BY THE NEW CONDITION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE ENGINEER/FHWA PRIOR TO INSTALLATION TO CONFIRM THE INSTALLATION OF ANY NEW EQUIPMENT.

2. DRAWINGS ARE DRAWN IN ACCORDANCE WITH STANDARD PRACTICES AND ARE INTENDED TO SHOW APPROXIMATE LOCATION, SCALE, MATERIALS AND EQUIPMENT. DIFFERENCES FROM THE REAL THING ARE TO BE EXPECTED DURING EXECUTION OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADJUSTMENTS TO THE DRAWINGS DUE TO DIFFERENCES BETWEEN THE REAL THING AND THE DRAWINGS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR MAKING THE NECESSARY ADJUSTMENTS TO THE WORK TO COMPLY WITH ALL LAWS, CODES AND SPECIFICATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE NECESSARY MATERIALS TO COMPLETE THE WORK AS SHOWN ON THE DRAWINGS.

3. THE INSTALLATION OF ALL EQUIPMENT, SYSTEMS, ETC. IS SUBJECT TO CHANGE DUE TO VARIOUS FACTORS INCLUDING, BUT NOT LIMITED TO: MANDATORY CODES, SPECIFICATIONS, ETC.; MATERIAL STORED ON THE SITE DISCOVERED TO BE DEFECTIVE; SIZE AND LOCATION OF SPACE AVAILABLE FOR INSTALLATION; DESCRIPTION OF THE FINAL INSTALLATION AS INSTRUCTED BY DRES PEER TO PERFORM THE WORK.

4. THE MECHANICAL CONTRACTOR SHALL CORRESPOND, Locator, of all Equipment, Systems, ETC. at the Time of Power ON. ALL Equipment Shall be Install as SHOWN on the Drawings. A strengthened accordance with the Drawings, All equipment described herein shall be installed and operated as per the Drawings and specifications. ANY equipment that MIGHT IMPACT THE NEW CONDITIONS AS MENTIONED ABOVE. WHEN A NEW CONDITION IS NOT DISCOVERED PRIOR TO INSTALLATION, THE MECHANICAL TRADES WILL BE RESPONSIBLE FOR REMOVING ANY EQUIPMENT THAT IS IMPACTED BY THE NEW CONDITION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE ENGINEER/FHWA PRIOR TO INSTALLATION TO CONFIRM THE INSTALLATION OF ANY NEW EQUIPMENT.

5. ALL EXISTING EQUIPMENT, PIPING, ELECTRICAL, ETC. THAT IS TO BE REMOVED SHALL BE LEFT IN GOOD CONDITION AND WORKING ORDER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE REMAINING MATERIALS FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL MATERIALS AND WILL BE RESPONSIBLE FOR PAYING ALL DISPOSAL FEES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL RENTALS, INSURANCE AND ALL COSTS INCURRED IN REMOVAL AND DISPOSAL OF ALL MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL RENTALS, INSURANCE AND ALL COSTS INCURRED IN REMOVAL AND DISPOSAL OF ALL MATERIALS.

6. THE MECHANICAL TRADES SHALL TAKE OUT ALL PERMITS AND ARRANGE FOR REMOVAL AND DISPOSAL OF ALL REMOVED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL RENTALS, INSURANCE AND ALL COSTS INCURRED IN REMOVAL AND DISPOSAL OF ALL MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL RENTALS, INSURANCE AND ALL COSTS INCURRED IN REMOVAL AND DISPOSAL OF ALL MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL RENTALS, INSURANCE AND ALL COSTS INCURRED IN REMOVAL AND DISPOSAL OF ALL MATERIALS.


8. THE MECHANICAL TRADES SHALL FURNISH AND INSTALL ACCESS DOORS AS REQUIRED TO SERVICE THE EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING MATERIAL FROM THE SITE.

9. THE MECHANICAL TRADES SHALL COORDINATE ANY SYSTEMS SHOWN ON THE ARCHITECT’S DRAWINGS OR SPECIFICATIONS TO THE GENERAL TRADES. THE MECHANICAL TRADES SHALL COORDINATE ANY SYSTEMS SHOWN ON THE ARCHITECT’S DRAWINGS OR SPECIFICATIONS TO THE GENERAL TRADES. THE MECHANICAL TRADES SHALL COORDINATE ANY SYSTEMS SHOWN ON THE ARCHITECT’S DRAWINGS OR SPECIFICATIONS TO THE GENERAL TRADES. THE MECHANICAL TRADES SHALL COORDINATE ANY SYSTEMS SHOWN ON THE ARCHITECT’S DRAWINGS OR SPECIFICATIONS TO THE GENERAL TRADES. THE MECHANICAL TRADES SHALL COORDINATE ANY SYSTEMS SHOWN ON THE ARCHITECT’S DRAWINGS OR SPECIFICATIONS TO THE GENERAL TRADES.

10. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC.

11. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND INSTALL GENERAL MECHANICAL NOTES AS REQUIRED TO THE ADDITIONAL COST TO THE PROJECT.

12. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND INSTALL GENERAL MECHANICAL NOTES AS REQUIRED TO THE ADDITIONAL COST TO THE PROJECT.

13. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND INSTALL GENERAL MECHANICAL NOTES AS REQUIRED TO THE ADDITIONAL COST TO THE PROJECT.

14. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND INSTALL GENERAL MECHANICAL NOTES AS REQUIRED TO THE ADDITIONAL COST TO THE PROJECT.
EXISTING BASEMENT ELECTRICAL DISTRIBUTION ELEVATION

ELECTRICAL DEMOLITION PLAN

1. DISCONNECT/REMOVE THE EXISTING POWER CIRCUIT SERVING THE WATER HEATER.
2. REMOVE ALL EXISTING LIGHTING AND WIRING. SEE REVISED LIGHTING PLAN.
3. ELECTRICAL TRADES SHALL REMOVE ALL SURFACE MOUNTED CONDUIT, LOUVERS, TOWER PUMP, TOWER FAN, "TRANE" CONDENSER, EJECTORS TO REMAIN. EXTEND THE EXISTING 480 VOLT INCOMING CIRCUITS AND TO FLOOR MOUNTED SUPPORTS. COORDINATE THE REMOVAL WITH THE OWNER.
4. DISCONNECT/REMOVE THE EXISTING 120 VOLT CONTACTOR SERVING THE SEWAGE EJECTORS TO REMAIN. EXTEND THE EXISTING 480 VOLT INCOMING CIRCUITS AND TO FLOOR MOUNTED SUPPORTS. COORDINATE THE REMOVAL WITH THE OWNER.
5. DISCONNECT/REMOVE THE EXISTING SQUARE-D 200 AMP RATED FUSIBLE SWITCHING FOR REUSE WITH NEW LIGHTING.
6. UNLESS NOTED OTHERWISE ELECTRICAL TRADES SHALL REMOVE ALL EXISTING LIGHT FIXTURES, RECEPTACLES, AND LIGHTING INSTALLED BY THE OWNER. THE BASEMENT LEVEL ITSELF HAS TEMPORARY POWER. THE EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT AND BRANCH CIRCUITS AREッシュ CURRICALS AND LIGHTING INSTALLED BY THE OWNER. THE BASEMENT LEVEL ITSELF HAS TEMPORARY POWER. THE EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT AND BRANCH CIRCUITS ARE SHUDDER WITH THE OWNER.
7. REMOVE ALL SURFACE MOUNTED CONDUIT, LOUVERS, TOWER PUMP, TOWER FAN, "TRANE" CONDENSER, EJECTORS TO REMAIN. EXTEND THE EXISTING 480 VOLT INCOMING CIRCUITS AND TO FLOOR MOUNTED SUPPORTS. COORDINATE THE REMOVAL WITH THE OWNER.
8. REMOVE ALL EXISTING LIGHTING AND WIRING. SEE REVISED LIGHTING PLAN.
9. DISCONNECT/REMOVE THE EXITING SQUARE D 200 AMP RATED FUSIBLE CONTACTOR SERVING THE SEWAGE EJECTORS TO REMAIN. EXTEND THE EXISTING 480 VOLT INCOMING CIRCUITS AND TO FLOOR MOUNTED SUPPORTS. COORDINATE THE REMOVAL WITH THE OWNER.
10. EX = EXISTING.
LIGHTING CONTROLS, FEATURES AND REMARKS

1. All lights shall be on a central control panel. The control panel shall be located in the main entrance area.
2. Lighting controls shall be operateable from a central location and from individual locations as specified.
3. Lighting controls may be specified to operate as follows:
   a. AUTO-ON
   b. AUTO-OFF
   c. MANUAL

ADDITIONAL LIGHTING FEATURES

1. All lights shall be on a central control panel. The control panel shall be located in the main entrance area.
2. Lighting controls shall be operateable from a central location and from individual locations as specified.
3. Lighting controls may be specified to operate as follows:
   a. AUTO-ON
   b. AUTO-OFF
   c. MANUAL

LIGHTING WIRING METHODS

1. Lighting wiring shall be in accordance with the National Electrical Code.
2. Lighting wiring shall be generously sized to accommodate future expansion.
3. Lighting wiring shall be protected by circuit breakers.

LIGHTING CONTROL EXECUTIVE SUMMARY

1. Provide central lighting control system for all common areas.
2. Provide emergency lighting control system for all common areas.
3. Provide security lighting control system for all common areas.
4. Provide general illumination lighting control system for all common areas.
5. Provide emergency illumination lighting control system for all common areas.
6. Provide security illumination lighting control system for all common areas.

ADDITIONAL LIGHTING REQUIREMENTS

1. Provide emergency lighting for all common areas.
2. Provide emergency lighting for all exits.
3. Provide emergency lighting for all stairwells.
4. Provide emergency lighting for all common areas.
5. Provide emergency lighting for all restrooms.

LIGHTING SCHEDULE

1. Provide lighting schedule for all common areas.
2. Provide lighting schedule for all exits.
3. Provide lighting schedule for all stairwells.
4. Provide lighting schedule for all common areas.
5. Provide lighting schedule for all restrooms.

LIGHTING CONTROL

1. Provide lighting control system for all common areas.
2. Provide emergency lighting control system for all common areas.
3. Provide security lighting control system for all common areas.
4. Provide general illumination lighting control system for all common areas.
5. Provide emergency illumination lighting control system for all common areas.
6. Provide security illumination lighting control system for all common areas.

LIGHTING WIRING

1. Provide lighting wiring for all common areas.
2. Provide emergency lighting wiring for all common areas.
3. Provide security lighting wiring for all common areas.
4. Provide general illumination lighting wiring for all common areas.
5. Provide emergency illumination lighting wiring for all common areas.
6. Provide security illumination lighting wiring for all common areas.

LIGHTING FIXTURES

1. Provide lighting fixtures for all common areas.
2. Provide emergency lighting fixtures for all common areas.
3. Provide security lighting fixtures for all common areas.
4. Provide general illumination lighting fixtures for all common areas.
5. Provide emergency illumination lighting fixtures for all common areas.
6. Provide security illumination lighting fixtures for all common areas.

LIGHTING SUPPLIES

1. Provide lighting supplies for all common areas.
2. Provide emergency lighting supplies for all common areas.
3. Provide security lighting supplies for all common areas.
4. Provide general illumination lighting supplies for all common areas.
5. Provide emergency illumination lighting supplies for all common areas.
6. Provide security illumination lighting supplies for all common areas.

LIGHTING SYSTEMS

1. Provide lighting systems for all common areas.
2. Provide emergency lighting systems for all common areas.
3. Provide security lighting systems for all common areas.
4. Provide general illumination lighting systems for all common areas.
5. Provide emergency illumination lighting systems for all common areas.
6. Provide security illumination lighting systems for all common areas.

LIGHTING INSTALLATION

1. Provide lighting installation for all common areas.
2. Provide emergency lighting installation for all common areas.
3. Provide security lighting installation for all common areas.
4. Provide general illumination lighting installation for all common areas.
5. Provide emergency illumination lighting installation for all common areas.
6. Provide security illumination lighting installation for all common areas.

LIGHTING TESTING

1. Provide lighting testing for all common areas.
2. Provide emergency lighting testing for all common areas.
3. Provide security lighting testing for all common areas.
4. Provide general illumination lighting testing for all common areas.
5. Provide emergency illumination lighting testing for all common areas.
6. Provide security illumination lighting testing for all common areas.

LIGHTING MAINTENANCE

1. Provide lighting maintenance for all common areas.
2. Provide emergency lighting maintenance for all common areas.
3. Provide security lighting maintenance for all common areas.
4. Provide general illumination lighting maintenance for all common areas.
5. Provide emergency illumination lighting maintenance for all common areas.
6. Provide security illumination lighting maintenance for all common areas.

LIGHTING SAFETY

1. Provide lighting safety for all common areas.
2. Provide emergency lighting safety for all common areas.
3. Provide security lighting safety for all common areas.
4. Provide general illumination lighting safety for all common areas.
5. Provide emergency illumination lighting safety for all common areas.
6. Provide security illumination lighting safety for all common areas.

LIGHTING ACCESSIBILITY

1. Provide lighting accessibility for all common areas.
2. Provide emergency lighting accessibility for all common areas.
3. Provide security lighting accessibility for all common areas.
4. Provide general illumination lighting accessibility for all common areas.
5. Provide emergency illumination lighting accessibility for all common areas.
6. Provide security illumination lighting accessibility for all common areas.

LIGHTING CODE COMPLIANCE

1. All lighting systems shall comply with the latest edition of the National Electric Code.
2. All lighting fixtures shall comply with the latest edition of the National Electric Code.
3. All lighting wiring shall comply with the latest edition of the National Electric Code.
4. All lighting controls shall comply with the latest edition of the National Electric Code.
5. All lighting systems shall comply with the latest edition of the National Electric Code.
6. All lighting fixtures shall comply with the latest edition of the National Electric Code.

LIGHTING SYSTEMS DESIGN

1. Provide lighting systems design for all common areas.
2. Provide emergency lighting systems design for all common areas.
3. Provide security lighting systems design for all common areas.
4. Provide general illumination lighting systems design for all common areas.
5. Provide emergency illumination lighting systems design for all common areas.
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LIGHTING SYSTEMS INSTALLATION

1. Provide lighting systems installation for all common areas.
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LIGHTING SYSTEMS TESTING

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LIGHTING SYSTEMS MAINTENANCE

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3. Provide security lighting systems maintenance for all common areas.
4. Provide general illumination lighting systems maintenance for all common areas.
5. Provide emergency illumination lighting systems maintenance for all common areas.
6. Provide security illumination lighting systems maintenance for all common areas.

LIGHTING SAFETY PROVISIONS

1. Provide lighting safety provisions for all common areas.
2. Provide emergency lighting safety provisions for all common areas.
3. Provide security lighting safety provisions for all common areas.
4. Provide general illumination lighting safety provisions for all common areas.
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LIGHTING ACCESSIBILITY PROVISIONS

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LIGHTING CODE COMPLIANCE PROVISIONS

1. All lighting systems shall comply with the latest edition of the National Electric Code.
2. All lighting fixtures shall comply with the latest edition of the National Electric Code.
3. All lighting wiring shall comply with the latest edition of the National Electric Code.
4. All lighting controls shall comply with the latest edition of the National Electric Code.
5. All lighting systems shall comply with the latest edition of the National Electric Code.
6. All lighting fixtures shall comply with the latest edition of the National Electric Code.

LIGHTING SYSTEMS DESIGN PROVISIONS

1. Provide lighting systems design provisions for all common areas.
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LIGHTING SYSTEMS INSTALLATION PROVISIONS

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LIGHTING SYSTEMS TESTING PROVISIONS

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6. Provide security illumination lighting systems testing provisions for all common areas.

LIGHTING SYSTEMS MAINTENANCE PROVISIONS

1. Provide lighting systems maintenance provisions for all common areas.
2. Provide emergency lighting systems maintenance provisions for all common areas.
3. Provide security lighting systems maintenance provisions for all common areas.
4. Provide general illumination lighting systems maintenance provisions for all common areas.
5. Provide emergency illumination lighting systems maintenance provisions for all common areas.
6. Provide security illumination lighting systems maintenance provisions for all common areas.

LIGHTING SAFETY PROVISIONS FOR COMMON AREAS

1. Provide lighting safety provisions for all common areas.
2. Provide emergency lighting safety provisions for all common areas.
3. Provide security lighting safety provisions for all common areas.
4. Provide general illumination lighting safety provisions for all common areas.
5. Provide emergency illumination lighting safety provisions for all common areas.
6. Provide security illumination lighting safety provisions for all common areas.

LIGHTING ACCESSIBILITY PROVISIONS FOR COMMON AREAS

1. Provide lighting accessibility provisions for all common areas.
2. Provide emergency lighting accessibility provisions for all common areas.
3. Provide security lighting accessibility provisions for all common areas.
4. Provide general illumination lighting accessibility provisions for all common areas.
5. Provide emergency illumination lighting accessibility provisions for all common areas.
6. Provide security illumination lighting accessibility provisions for all common areas.

LIGHTING CODE COMPLIANCE PROVISIONS FOR COMMON AREAS

1. All lighting systems shall comply with the latest edition of the National Electric Code.
2. All lighting fixtures shall comply with the latest edition of the National Electric Code.
3. All lighting wiring shall comply with the latest edition of the National Electric Code.
4. All lighting controls shall comply with the latest edition of the National Electric Code.
5. All lighting systems shall comply with the latest edition of the National Electric Code.
6. All lighting fixtures shall comply with the latest edition of the National Electric Code.
RENOVATIONS TO:
NORTHWOOD UNIVERSITY
MINER HALL LOWER LEVEL
MIDLAND, MICHIGAN 2021016
JULY 2022

TYPICAL CORRIDOR/RECEPTION/LOBBY OCCUPANCY SENSOR WIRING DIAGRAM

TYPICAL MEETING ROOMS, CONFERENCE, SMALL OFFICES

TYPICAL RESTROOM OCCUPANCY SENSOR WIRING DIAGRAM

STORAGE ROOMS TYPICAL WALL SWITCH SENSOR WIRING DIAGRAM

TYPICAL BREAKOUT ROOM OCCUPANCY SENSOR WIRING DIAGRAM

GATHERING ROOM OCCUPANCY SENSOR WIRING DIAGRAM

0-10 Volt Wiring (LCP) LIGHTING CONTROL PANEL

TYPICAL GATHERING ROOM OCCUPANCY SENSOR WIRING DIAGRAM

GENERAL NOTES
1. WIRING DIAGRAMS ARE BASED ON WATTSTOPPER COMPONENTS. ADJUST WIRING IF ACUITY CONTROLS ARE FURNISHED.

E3.02
EXISTING "LOWER MINER 2" MAIN DISTRIBUTION PANEL ONE-LINE DIAGRAM

GENERAL NOTES:
1. DRAWINGS Detail panels shall depict the electrical connections within the panels. The panels shall be identified with the appropriate switchgear symbols and equipment numbers. All switchgear symbols and equipment numbers shall be legible and in accordance with the National Electrical Code (NEC).
2. ALLEN BRADLEY CONTROL EQUIPMENT WITHIN THE EXISTING "LOWER MINER 2" PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE ALLEN BRADLEY SYMBOLS AND EQUIPMENT NUMBERS.
3. ALL ELECTRICAL CONNECTIONS WITHIN THE EXISTING "LOWER MINER 2" PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE ELECTRICAL SYMBOLS AND CIRCUIT NUMBERS.
4. MAIN PANEL IS WHERE OPERATIONS ARE SHOWN ON THIS DRAWING.
5. PANEL NUMBERS IN SHAPES ARE EQUIPMENT NUMBERS. PANEL NUMBERS ON DRAWING ARE HORIZONTAL.

EXCEPTIONS:
1. TRANSFER CIRCUIT TO THE NEW MAIN DISTRIBUTION PANEL. SEQUENCE WORK WITH THE OWNER.
2. FIELD CONFIRM EXISTING FUSE AMP RATING.
3. REMOVE BRANCH CIRCUIT AND ELECTRICAL DISTRIBUTION.
4. ESTIMATED TCL = 166 KW (INCLUDES 1ST FLOOR DORMITORY ELECTRICAL DISTRIBUTION)
5. CIRCUIT NUMBERS AS SHOWN ARE TAKEN FROM THE EXISTING MDP
6. ALL EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT WITHIN THE LOWER MINER 2 PANEL IS DE-ENERGIZED THE ELECTRICAL EQUIPMENT ITSELF HAS TEMPORARY POWER AND LIGHTING INSTALLED BY THE OWNERS. THE LOWER MINER 2 PANEL IS ENERGIZED TO SERVE ACTIVE POWER FEEDS TO MAINTAIN 1ST FLOOR DORMITORY POWER.
7. THE CIRCUIT REMOVAL/TRANSFER WORK WITH THE OWNER.
8. TRANSFER CIRCUIT TO THE NEW MAIN DISTRIBUTION PANEL. SEQUENCE WORK WITH THE OWNER AND THE CM.
9. COMPLETE ASSOCIATED ELECTRICAL DEMOLITION.
INCLUDE FEED THRU LUGS FOR PANEL A1.

MAIN WATER SERVICE GROUND.

AND EXTEND THE EXISTING CIRCUIT.

FUSIBLE BRANCH SWITCH SIZE AND RATING. FURNISH AND INSTALL A JUNCTION BOX PROPERLY SIZED TO INTERCEPT CIRCUIT BREAKER AMP RATING IS BASED ON THE EXISTING AND MDP PANEL MATCH EXISTING CONDUCTOR SIZE.

NEW TOTAL LOAD: 164 KW/ 197.5 AMPS

ADDED BASEMENT LOAD: 71 KW

REMOVED BASEMENT LOAD: 73 KW

THE BOX OUTLINE REPRESENTS THE UTILIZATION OF THE EXISTING MDP DISTRIBUTION NETWORK.

MATCH EXISTING CONDUCTOR SIZE.

EX 5 HP

1 1/2 HP

EX 3/4 HP

NEW DISTRIBUTION PANEL

NEW PANEL A

1st FLOOR

EX PANEL LP-B1

EX 1965 DORMITORY

SEWAGE

LIGHTS

RECEPTACLES

HVAC

CONSULTING ENGINEERS

MacMILLAN ASSOCIATES

ADDRESS: 714 EAST MIDLAND STREET, BAY CITY, MICHIGAN 48706

PHONE: (989) 894-4300, FAX: (989) 894-9930, WEBSITE: www.macmillanassociates.com

LOAD SUMMARY

1. EXISTING LOAD DESCRIPTION AND LABELING IS BASED ON OWNER'S

2. NEUTRAL CENTER TAP CONDUCTOR.

3. 197.5/250 = 79% LOADING.

4. 110S Jefferson Ave, Suite 601, Saginaw, Michigan 48607

5. BID ISSUE:

6. THE BOX OUTLINE REPRESENTS THE UTILIZATION OF THE EXISTING MDP DISTRIBUTION NETWORK.

7. The detail is subject to confirm the information. Architectural Engineers shall review and confirm the data.

8. DRAWINGS AND FIELD INFORMATION. ELECTRICAL TRADES SHALL CONFIRM THE FIELD INSTALLATION.

9. Drawings and field information shall be used for field installation.

10. Drawings and field information shall not be used for bidding purposes.

11. Drawings and field information shall not be used for bidding purposes.