LARAMIE COUNTY COMMUNITY COLLEGE

EDUCATIONAL ENRICHMENT CENTER - BASEMENT RENOVATION
### Code Information

<table>
<thead>
<tr>
<th>Classification of Work</th>
<th>Area of Renovation (sq ft)</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1, Level 2, Level 3</td>
<td>Level 2, Level 3</td>
<td>1,882 SF - Replacing finishes only for level 2 and level 3, 1,882 SF - Replacing finishes only for level 1</td>
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</tbody>
</table>

### Plumbing Fixture Count

<table>
<thead>
<tr>
<th>Classification</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 1</th>
</tr>
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<tbody>
<tr>
<td>Occupancy Load</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Door Egress</td>
<td>Level 2</td>
<td>Level 3</td>
<td>Level 1</td>
</tr>
<tr>
<td>Area of Renovation (sq ft)</td>
<td>1,882 SF</td>
<td>1,882 SF</td>
<td>1,882 SF</td>
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</tbody>
</table>

### Code Plan Legend

- **Door Egress Tag**
- **Area of Renovation Tag**
- **Travel Distance**
- **Level 1 Alterations - Renovation consists of replacement of finishes only, 1,882 SF**
- **Occupancy Load Tag**
- **Door Egress Tag**
- **Area of Renovation Tag**
- **Travel Distance**
**EXISTING GAS LINE**
**EXISTING SANITARY SEWER LINE**
**EXISTING STORM SEWER LINE**
**EXISTING WATER LINE**
**EXISTING UNDERGROUND ELECTRICAL LINE**
**EXISTING MAJOR CONTOUR**
**EXISTING MINOR CONTOUR**

**PROPOSED FIRE LINE**

**GENERAL NOTES**
1. MAINTAIN A MINIMUM COVER OF 6.5-FEET OVER PROPOSED FIRE LINE
2. MAINTAIN A MINIMUM OF 18-INCHES OF SEPARATION AT SANITARY AND STORM SEWER CROSSINGS. IF SEPARATION IS LESS THAN 18-INCHES CONTRACTOR SHALL INSTALL CROSSING PROTECTION PER DETAIL ON SHEET C102.
3. THE UTILITY LOCATIONS SHOWN ARE AS MARKED BY THEIR OWNERS, FROM THE OWNERS RECORDS. THE SIZE AND LOCATION OF UNDERGROUND UTILITIES WAS NOT VERIFIED BY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING UTILITIES DURING CONSTRUCTION.
4. EXISTING UTILITIES BURIED DEPTHS ARE SHOWN FOR REFERENCE AND CONVENIENCE ONLY. ACTUAL DEPTHS MAY NOT BE ACCURATE OR CORRECT. FOR EXCAVATION DRAWINGS SEE SHEET C102.
5. IRRIGATION LINES ARE NOT SHOWN ON DRAWING. CONTRACTOR RESPONSIBLE FOR LOCATING AND PROTECTING/REPLACING ANY IRRIGATION LINES FOUND DURING CONSTRUCTION.

**EXISTING SIDEWALKS**

**DATE**

**ISSUE**

**PLOTTED ON:**

**ARCHITECT #:**

**OWNER:**

**OWNERSHIP OF DOCUMENTS:**

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**CONTACT(S):**

William W. Wedemeyer AIA, ALEP, LEED AP
307-632-3144 x120
Zandria Tolliver
307-632-3144 x119

**PROJECT INFORMATION**

1820 Dillon Ave
Suite 200A
Cheyenne, WY 82001

**MECHANICAL ENGINEER:**
Wood
920 E. Sheridan Street, Suite A
Laramie, WY 82070
303-919-2184

**ELECTRICAL ENGINEER:**
Wood
920 E. Sheridan Street, Suite A
Laramie, WY 82070
303-919-2184

**CIVIL ENGINEER:**
Inberg-Miller Engineers
350 Parsley Boulevard
Cheyenne, WY 82007
307-635-6827

**STRUCTURAL ENGINEER:**
Martin/Martin Wyoming
4020 Laramie Street
Cheyenne, WY 82001

**3/11/2019 2:15:50 PM**

100% CDs 03/19/19

**SCALE 1"=20'**

**LEGAL INFORMATION**

LCCC EDUCATIONAL ENRICHMENT CENTER BASEMENT RENOVATION
LCCC 2020

**CONTRACTOR:**
Laramie County Community College
1400 E College Dr
Cheyenne, WY 82007

**PROJECT NUMBER:**

**PROJECT INFORMATION**

**CONTACT PERSON(S):**

Bill Zink
(307) 778-5222

**LCCC EDUCATIONAL ENRICHMENT CENTER BASEMENT RENOVATION**

**DATE:**

**TIME:**

**SCALE:**

**20422 HE TOBIN AND ASSOCIATES LCCC EEC Fire Line**

**DWG:**

**LCCC EEC Titleblock MAR11.dwg, Site Plan, 3/18/2019 4:38:57 PM**

**C100**

**FIRE LINE SITE PLAN**
Underground Electric Crossing @ Station 2+49.32

10" Existing Sewer Crossing @ Station 2+74.10

Storm Sewer Catch Basin Crossing @ Station 1+86.14

10" Existing Storm Sewer @ Station 0+23.48

Tie Into Existing 6" Waterline with Thrust Blocking @ Station 0+00

Install 6" Gate Valve with Thrust Blocking @ Station 0+05

Install Bend with Thrust Blocking @ Station 0+35.43

Install Bend with Thrust Blocking @ Station 1+71.66

Install Bend with Thrust Blocking @ Station 2+64.10

Dip pipe per detail 537

Connect to Building Fire lane (See Mechanical Drawings)
GENERAL NOTES

1. CONTRACTOR SHALL PROTECT EXISTING CONSTRUCTION TO REMAIN FROM DAMAGE DURING DEMOLITION ACTIVITIES. ANY DAMAGE THAT OCCURS SHALL BE REPAIRED TO THE FULL SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE CONTRACTOR.

2. CONTRACTOR SHALL FIELD VERIFY EXISTING CONSTRUCTION PRIOR TO THE START OF DEMOLITION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS IMMEDIATELY.

3. CONTRACTOR SHALL COORDINATE ANY WORK REQUIRED IN ADJACENT AREAS, OUTSIDE OF LIMITS OF PHASED RENOVATIONS, WITH OWNER PRIOR TO THE START OF WORK.

4. COORDINATE RENOVATIONS WITH MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS.

5. CONTRACTOR SHALL NOT BLOCK EGRESS (EXIST, STAIRS, ETC.) FROM THE BUILDING AT ANY TIME THAT THE BUILDING IS OCCUPIED.

6. CONTRACTOR SHALL NOT ALTER EXISTING Structural, Architectural, or Engineering Features.

7. CONTRACTOR SHALL PROVIDE ALL MATERIALS IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.

8. CONTRACTOR SHALL MAINTAIN ALL EXISTING Construction TO REMAIN FROM DAMAGE DURING DEMOLITION ACTIVITIES. ANY DAMAGE THAT OCCURS SHALL BE REPAIRED TO THE FULL SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE CONTRACTOR.

9. CONTRACTOR SHALL FIELD VERIFY EXISTING CONSTRUCTION PRIOR TO THE START OF DEMOLITION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN (E) CONDITIONS AND CONSTRUCTION DOCUMENTS IMMEDIATELY.

10. CONTRACTOR SHALL NOT BLOCK EGRESS (EXIST, STAIRS, ETC.) FROM THE BUILDING AT ANY TIME THAT THE BUILDING IS OCCUPIED.

11. CONTRACTOR SHALL NOT ALTER EXISTING Structural, Architectural, or Engineering Features.

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GENERAL NOTES

1. DO NOT SCALE DRAWINGS. FIELD VERIFY ALL DRAWINGS. NOTIFY ARCHITECT IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED.

2. PROVIDE VERTICAL CONTROL JOINTS AT GYPSUM BOARD WALLS EXCEEDING 30'-0" MAXIMUM LENGTH. PROVIDE JOINTS AT DOOR HEAD ON LATCH SIDE AND AT WINDOWS ABOVE AND BELOW WINDOW ON ONE SIDE. COORDINATE JOINT LOCATIONS WITH ARCHITECT.

3. CONTRACTOR SHALL SEAL ALL NEW AND EXISTING THROUGH WALL PENETRATIONS.

4. CONTRACTOR SHALL COORDINATE LOCATIONS OF ELECTRICAL OUTLETS, DATA OUTLETS, SUN TUBES AND ANY OTHER NEW WALL MOUNTED EQUIPMENT WITH CABINETRY, FURNITURE AND OTHER EQUIPMENT SHOWN ON ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL PROVIDE PLUMBING COORDINATION.

5. CONTRACTOR SHALL COORDINATE AND PROVIDE BLOCKING AT LOCATIONS WHERE WALL MOUNTED EQUIPMENT IS TO BE INSTALLED.

6. PROTECT EXISTING CONSTRUCTION DURING DEMOLITION AND RENOVATION ACTIVITIES. CONTRACTOR SHALL REPAIR OR REPLACE ANY PORTIONS OF EXISTING BUILDING DAMAGED DURING THESE ACTIVITIES AT NO COST TO OWNER.

7. CONTRACTOR SHALL COORDINATE WORK BETWEEN ALL TRADES AND RESPECTIVE MECHANICAL, ELECTRICAL AND ARCHITECTURAL SCOPES OF WORK AND INFORM ARCHITECT OF ANY DISCREPANCIES PRIOR TO SUBMITTAL DATES.

8. ALL HOLLOW METAL DOORS AND DOOR FRAMES MUST BE PAINTED IN COMPLIANCE WITH THE ARCHITECT. INTERIOR AND EXTERIOR顏色 TO BE PAINTED.

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LIGHT FIXTURES CUT INTO METAL PANEL (TYP). PROVIDE MANUFACTURER'S PERIMETER TRIM TO CONCEAL CUT EDGE. COORDINATE WITH ELECTRICAL.
ANY SEALER, HARDENER, CURING MEMBRANE, PAINT, OIL, ADHESIVES OR ANY PENETRATING MATERIAL BEFORE INSTALLATION OF LUXURY VINYL TILE.

CONTACT PERSON(S):
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Cheyenne, WY 82001
307-632-1610

Zandria Tolliver
1400 E College Dr,
Cheyenne, WY 82001
307-632-1610

Inberg Miller Engineers
Cheyenne, WY 82001
307-632-1610

Nick Pickering, P.E.
Daniel Hayes, P.E.
John Shaffer, P.E.

CONC. B.G. GYF FREE DRAINAGE LAYERS, ASSURANCE IN COMPLIANCE WITH 2.27.1 B SLABS, MONOTRANS, P.S. 90, 700, 1000, STANDARD ADHESIVE, WEATHER POOLING.

GENERAL NOTES:
1. DO NOT BOLT DRAINAGE. field verify all drains, notify architect immediately if discrepancies are discovered.
2. PRESCRIBE MORTAR, COVERS, CURBS AT EXISTING BOUNDARIES OF WALKWAYS & LANDING, PROVIDE CURB AT BOOTH EDGE ON LATTICE RISE AND AT WINDOWS ABOVE AND BLOWER WINDOW ON ONE SIDE (SEE ATTACH SHEET FOR LOCATIONS AND SPECIFICATIONS).
3. CONTRACTOR SHALL INSTALL ALL HINGE AND DOOR FRAME THROUGH WALL PERIMETER.
4. CONTRACTOR SHALL COORDINATE LOCATIONS AND ELEVATIONS OF ELECTRICAL OUTLETS, DATA OUTLETS, SWITCHES AND ANY OTHER WALL MOUNTED EQUIPMENT WITH CASEWORK, FURNISHINGS AND OTHER EQUIPMENT SHOWN ON ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. CONTACT ARCHITECT SHOULD DISCREPANCIES EXIST.
5. CONTRACTOR SHALL VERIFY EXISTING SLAB MOISTURE CONTENT IS BELOW 4% BEFORE INSTALLATION.
6. CONTRACTOR TO PROVIDE FLOOR TRANSITIONS AS NECESSARY AT ALL FLOOR TERMINATIONS OR TRANSITIONS. ALL FLOORING TRANSITIONS AT DOORWAYS ARE AT THE CENTERLINE OF THE DOORFRAME (INSTALLED BY CONTRACTOR).
7. CONTRACTOR TO VERIFY TRANSITION SELECTIONS AND MATERIALS.

FINISH FLOOR PLAN

Dimensions: 1728.0 x 2592.0

GENERAL:
1. CONTRACTOR SHALL VERIFY EXISTING SLAB MOISTURE CONTENT IS BELOW 4% BEFORE INSTALLATION.
2. CONTRACTOR SHALL PROVIDE BLOCKING AT LOCATIONS WHERE WALL MOUNTED EQUIPMENT IS TO BE INSTALLED.
3. CONTRACTOR SHALL REPLACE OR REPAIR ANY PORTION OF EXISTING BUILDING DAMAGED DURING THESE ACTIVITIES AT NO COST TO OWNER.
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## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>NAT</td>
<td>Natural Gas</td>
</tr>
<tr>
<td>ETL</td>
<td>Electrically Thermo-Laminated</td>
</tr>
<tr>
<td>PVC</td>
<td>PolyVinyl Chloride</td>
</tr>
<tr>
<td>COP</td>
<td>Coefficient of Performance</td>
</tr>
<tr>
<td>HX</td>
<td>Heat Exchanger</td>
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<tr>
<td>NT</td>
<td>Neutral Trap</td>
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<tr>
<td>MC</td>
<td>Main Collector</td>
</tr>
<tr>
<td>TIC</td>
<td>Temperature Indicator</td>
</tr>
<tr>
<td>PLC</td>
<td>Programmable Logic Controller</td>
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<tr>
<td>DDC</td>
<td>Direct Digital Control</td>
</tr>
<tr>
<td>SCADA</td>
<td>Supervisory Control and Data Acquisition</td>
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## Piping Symbols

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## Plumbing Symbols

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## General Notes

- **02/19/1950% SUBMITTAL**
- **03/11/1995% SUBMITTAL**
- **03/19/2019 100% CD's**

## Mechanical Ductwork Symbols

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## Medical Gas

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## Controls in Plan Symbols

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## Index of Drawings

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>M000</td>
<td>General Notes</td>
</tr>
<tr>
<td>M001</td>
<td>Piping Symbols</td>
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<tr>
<td>M002</td>
<td>Plumbing Symbols</td>
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<tr>
<td>M003</td>
<td>Mechanical Ductwork Symbols</td>
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<td>M004</td>
<td>Medical Gas Symbols</td>
</tr>
<tr>
<td>M005</td>
<td>Controls in Plan Symbols</td>
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SCOPE OF WORK

2.2 PIPE AND DUCTWORK PENETRATIONS

I. ALL EQUIPMENT AND PRODUCTS TO BE THOROUGHLY CLEANED AT THE COMPLETION OF THE WORK;

2.3 PIPING AND FITTINGS INSIDE THE BUILDING

A. SHOP DRAWINGS: SUBMIT FOR THE FOLLOWING IN ACCORDANCE WITH SECTION 15010.
B. COPPER, TYPE K SEAMLESS COPPER TUBING, ANSI H23.1.  FITTINGS SHALL BE WROUGHT COPPER OR COPPER, TYPE K, OR SPUTTER COPPER, TYPE L, JOINED WITH SILVER SOLDER (45% SILVER).  ALL SCREWED FITTINGS; BLACK CAST IRON, 125 LB. CLASS IN ACCORDANCE WITH ANSI B16.4 OR BLACK CAST IRON, 150 LB. CLASS IN ACCORDANCE WITH ANSI B16.10 OR TUBE FITTINGS.  COUPLINGS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

2.4 VALVES

A. GENERAL:  ALL VALVES SHALL BE UL LISTED.
B. HEADS TO BE PROVIDED AS FOLLOWS:
   1. HEADS IN FINISHED AREAS PROVIDE ESCUTCHEONS TO BE COMPATIBLE WITH SPRINKLER HEADS WHERE NECESSARY.
   2. FOR SYSTEM OPERATING PRESSURES LESS THAN 175 PSI: 2" AND SMALLER; O.S. & Y., BRONZE, 175 LB. TEST PRESSURE, CLAMPS OR RINGS, INTERNAL SPRING VALVES, 1/2" OR 3/4" THREADED OR RIGID CONNECTED, NO SEGMENTALLY WELDED FITTINGS ARE ALLOWED.  COUPLING GASKET FLANGE BOLTS SHALL BE HEXAGON HEAD MACHINE BOLTS WITH HEAVY SEMI-FINISHED HEXAGON HEAD AND A MINIMUM ROOM TEMPERATURE REDUCTION COEFFICIENT (NRC) OF NOT LESS THAN 0.60 WHEN TESTED IN COMPLIANCE WITH ASTM C651-86, DISINFECTING WATER MAINS, AND ALL SUBSEQUENT ADDENDA.  AFTER THIS PROJECT, THE WORK AND PAY ALL ASSOCIATED FEES.
   3. WIRING
   4. ALL ASTM A135 SPRINKLER PIPE MUST BE TESTED WITH A NON-DESTRUCTIVE ELECTRIC TEST FOR DEFECTS BEFORE INSTALLATION.

2.6 ELECTRICAL WIRING OF MECHANICAL DEVICES

A. EXISTING CONDITIONS:  EXAMINE EXISTING CONDITIONS AT THE JOB SITE PRIOR TO ANY WORK.
   a. ALL WIRING WILL BE DONE UNDER ELECTRICAL DIVISION, PROVIDE SUPERVISION FOR PROPER OPERATION.
   b. STANDARD OF DESIGN.
   c) DUCT LINER (INSIDE THE DUCT): 1" THICK, RESIN BONDED GLASS FIBER, BLACK COATING OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

2.7 THERMAL INSULATION

A. INSULATION OF ALL PC PIPE CONNECTIONS SHALL BE EXPOSED TO SWEAT BY THE BRASS CONNECTION FITTINGS.  THE NON-EXPOSED INSULATION OF PC PIPE SHALL BE OF THE SAME MATERIAL AND SAME R-VALUE.

C. ALL PIPE OF THE EQUIPMENT WHICH IS TO BE EXPOSED TO SWEAT BY THE BRASS CONNECTION FITTINGS.  THE NON-EXPOSED INSULATION OF PC PIPE SHALL BE OF THE SAME MATERIAL AND SAME R-VALUE.

E. COPPER, TYPE K SEAMLESS COPPER TUBING, ANSI H23.1.  FITTINGS SHALL BE WROUGHT COPPER OR COPPER, TYPE K, OR SPUTTER COPPER, TYPE L, JOINED WITH SILVER SOLDER (45% SILVER).  ALL SCREWED FITTINGS; BLACK CAST IRON, 125 LB. CLASS IN ACCORDANCE WITH ANSI B16.4 OR BLACK CAST IRON, 150 LB. CLASS IN ACCORDANCE WITH ANSI B16.10 OR TUBE FITTINGS.  COUPLINGS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

F. AUTOMATIC BALLDRIP (1/2") RATED AT 175 PSI, POTTER ROEMER SERIES 5980, CROKER 6780, OR EQUIVALENT_MAKE SURE TO PROVIDE ESCUTCHEONS TO BE COMPATIBLE WITH SPRINKLER HEADS WHERE NECESSARY.

G. ALL LOW VOLTAGE CONDUCTORS SHALL BE 18-AWG MINIMUM EXCEPT FOR LONG RUNS WHERE THE WORKER TO BE DONE UNDER ELECTRICAL DIVISION, PROVIDE SUPERVISION FOR PROPER OPERATION.

H. AUTOMATIC BALL DRIP VALVES SHALL BE PROVIDED AS FOLLOWS:
   1. FOR SYSTEM OPERATING PRESSURES LESS THAN 175 PSI: 2" AND SMALLER, BRONZE, 125 LB. TEST PRESSURE, CLAMPS OR RINGS, INTERNAL SPRING VALVES, 1/2" OR 3/4" THREADED OR RIGID CONNECTED, NO SEGMENTALLY WELDED FITTINGS ARE ALLOWED.  COUPLING GASKET FLANGE BOLTS SHALL BE HEXAGON HEAD MACHINE BOLTS WITH HEAVY SEMI-FINISHED HEXAGON HEAD AND A MINIMUM ROOM TEMPERATURE REDUCTION COEFFICIENT (NRC) OF NOT LESS THAN 0.60 WHEN TESTED IN COMPLIANCE WITH ASTM C651-86, DISINFECTING WATER MAINS, AND ALL SUBSEQUENT ADDENDA.  AFTER THIS PROJECT, THE WORK AND PAY ALL ASSOCIATED FEES.

I. ALL DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

J. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

K. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

L. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

M. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

N. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

O. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

P. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

Q. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

R. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

S. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

T. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

U. DIAMETERS OF UNLESS OTHERWISE SPECIFIED, COILS SHALL BE OF THE ROLLED GROOVED TYPE OR PUSH-ON (LOCKING) TYPE.  MALLEABLE IRON OR ENAMELED OR IMPACT-DRIVEN TYPE PINS AND CLIPS WHICH SHALL COMPRESS THE LINER TO HOLD THE LINER IN PLACE.

V. DIA
1.7 SANITARY MATERIALS

2.3 BRANCHES; PROVIDE A UNIFORM SLOPE OF NOT LESS THAN ONE IN FOUR FEET FOR 3" WALLS, SCORIATED BRASS COVER FOR FLOOR INSTALLED FLUSH WITH FLOOR AND BRASS WALL CLEANOUTS SHALL BE LOCATED 4" TO 6" ABOVE FLOOR UNLESS CLEANOUT WOULD FALL WITHIN A HATCH LID OR IN AN AREA MORE STRINGENT. ALL DUCTWORK TO BE ASTM A525 AND ASTM A527 GALVANIZED SHEET METAL FITTINGS WITH 45 DEGREE ANGLE TAKE-OFF, ADHESIVE COATED ELASTOMERIC JOINTS (ASTM C564 GASKETS), HUBLESS CAST IRON WITH GASKET (ASTM C564) TYPE 304 STAINLESS STEEL SHIELD AND WORM DRIVE CLAMP FITTINGS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS, OR DWV COPPER WITH WROUGHT COPPER OR SILVABRITE 100 OR SOLDER END AND IMPERVIOUS ISOLATION GASKET APPROVED FOR USE ON GAS, OIL, AIR AND WATER; 8" AND SMALLER: 1-1/2" WROUGHT COPPER FITTINGS AND LEAD FREE SOLDER: 96_4 (TIN/SILVER), SILVABRITE 100 OR SOLDER END AND IMPERVIOUS ISOLATION GASKET APPROVED FOR USE ON GAS, OIL, AIR AND WATER.

3.3 INNER LINER FORMED BY A REINFORCED ALUMINUM LAMINATE OR OTHER REINFORCED METAL LAMINATE; ABSORBER SIZE SHALL BE BASED ON FIXTURE UNITS SHOWN ON THE DRAWINGS.

4.25 Ductwork shall comply with the requirements of the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Design Manual for Ventilation of Non-smoke Ducts. Ducts shall be installed in a manner that will protect the lining from mechanical damage and will be insulated in locations where space permits. Linings shall be selected to provide the best thermal insulation and protection to the duct contents. Flexible ductwork shall be fitted with a rubber or equivalent gasket between the union and the duct to meet the requirements of the American Society for Testing and Materials (ASTM) C-508, Type 301, 1" thick. Duct insulation shall be installed to provide R-6 thermal insulation. Duct insulation shall be installed over the length of the duct and the application of the insulation shall be uniform. All flex ductwork shall be attached with straps or clamps 18" on center. The thermal insulation shall be securely fastened with ties or straps at intervals, at each floor, change of direction and wherever necessary.

4.26 Insulation materials shall be compatible with the surface material of the duct. The insulation shall be installed in accordance with the manufacturer's recommendations. Insulation shall be installed with a maximum joint spacing of 24 inches and shall be supported at intervals of 12 inches.

4.27 Ductwork shall be labeled with the name of the manufacturer and the type and thickness of insulation used. Ductwork shall be labeled with the date of installation and the name of the person responsible for the installation.

4.28 Ductwork shall be cleansed and dried before the installation of the final lining. Ductwork shall be constructed of Class A material and shall be free of dust, grease, and other contaminants.

5.3 PIPE SUPPORTS

1. CHROME PLATED OR OTHER POLISHED FINISHED COMPONENTS SHALL BE INSTALLED WITH CARE SO AS TO AVOID IMPRESSIONS OR SCRATCHES. INSPECTOR TEST LINES SHALL BE INSTALLED AT THE MOST REMOTE POINT OF EACH SPRINKLER ZONE SYSTEM.

2. ALL VERTICAL LINES SHALL BE PLUMB AND HORIZONTAL LINES SHALL RUN PARALLEL TO BUILDING LINES.

3. PIPE SUPPORTS SHALL BE FURNISHED AND INSTALLED TO PROPERLY SUPPORT ALL PIPING SYSTEMS. PIPE SUPPORTS SHOWN ON DRAWINGS SHALL BE MANUFACTURERED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL SUPPORTS SHALL BE INSTALLED TO PERMITS OF THE LOCAL BUILDING CODE AND AS SPECIFIED BY THE LOCAL JURISDICTIONAL CODE AUTHORITY.

4. ALL SPRINKLER HEAD GUARDS SHALL BE FURNISHED.

B. PROVIDE AND INSTALL CONTROL ASSEMBLY FOR EACH SPRINKLER ZONE. CONTROL ASSEMBLY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. PLUMBING FIXTURES AND EQUIPMENT

1. PROVIDE AND INSTALL A EXPOSED 2 WAY WITH 2-1/2" OUTLETS X 4" INLET ROUGH BRASS FIRE DEPARTMENT DEPARTMENT CONNECTION, BALL DRIP, DRAIN VALVE, FLOW SWITCH AND EXTERIOR LIGHT AND HORN.

2. PROVIDE AND INSTALL COMPLETE FIRE PROTECTION SYSTEMS FOR EACH O & M MANUAL.

3. PROVIDE AND INSTALL A COMPLETE OPEN TO CLOSE VALVE OPERATION WITHOUT INTERFERENCE OF STRUCTURE, INTERNAL VACUUM BREAKERS, SERVICE SHUTOFF VALVES, QUICK ACTION CLAMP FITTINGS, ALUMINUM DRUM ASSEMBLIES, AND OTHER METHOD AS APPROVED BY THE ARCHITECT/ENGINEER.

4. PROVIDE AND INSTALL A COMPLETE OPEN TO CLOSE VALVE OPERATION WITHOUT INTERFERENCE OF STRUCTURE, INTERNAL VACUUM BREAKERS, SERVICE SHUTOFF VALVES, QUICK ACTION CLAMP FITTINGS, ALUMINUM DRUM ASSEMBLIES, AND OTHER METHOD AS APPROVED BY THE ARCHITECT/ENGINEER.

5. PROVIDE AND INSTALL A COMPLETE OPEN TO CLOSE VALVE OPERATION WITHOUT INTERFERENCE OF STRUCTURE, INTERNAL VACUUM BREAKERS, SERVICE SHUTOFF VALVES, QUICK ACTION CLAMP FITTINGS, ALUMINUM DRUM ASSEMBLIES, AND OTHER METHOD AS APPROVED BY THE ARCHITECT/ENGINEER.

6. PROVIDE AND INSTALL A COMPLETE OPEN TO CLOSE VALVE OPERATION WITHOUT INTERFERENCE OF STRUCTURE, INTERNAL VACUUM BREAKERS, SERVICE SHUTOFF VALVES, QUICK ACTION CLAMP FITTINGS, ALUMINUM DRUM ASSEMBLIES, AND OTHER METHOD AS APPROVED BY THE ARCHITECT/ENGINEER.

7. PROVIDE AND INSTALL A COMPLETE OPEN TO CLOSE VALVE OPERATION WITHOUT INTERFERENCE OF STRUCTURE, INTERNAL VACUUM BREAKERS, SERVICE SHUTOFF VALVES, QUICK ACTION CLAMP FITTINGS, ALUMINUM DRUM ASSEMBLIES, AND OTHER METHOD AS APPROVED BY THE ARCHITECT/ENGINEER.

8. PROVIDE AND INSTALL A COMPLETE OPEN TO CLOSE VALVE OPERATION WITHOUT INTERFERENCE OF STRUCTURE, INTERNAL VACUUM BREAKERS, SERVICE SHUTOFF VALVES, QUICK ACTION CLAMP FITTINGS, ALUMINUM DRUM ASSEMBLIES, AND OTHER METHOD AS APPROVED BY THE ARCHITECT/ENGINEER.
PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

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<th>CODE</th>
<th>FIXTURE</th>
<th>JACOBS DATA/ASTM COMPLIANT #</th>
<th>MANUFACTURER</th>
<th>SERIES</th>
<th>SUPPLIED</th>
<th>TRASH</th>
<th>DRIP</th>
<th>CIP</th>
<th>HIP</th>
<th>WALL</th>
<th>VENT</th>
<th>WATER</th>
<th>CONSUMPTION</th>
<th>2 ROUTE WASTE TO MAIN DRAIN OR VENT PIPING</th>
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<tr>
<td>B1-1</td>
<td>BEVERAGE DISPOSER BACKFLOW PREVENTER</td>
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<td>807</td>
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<td>EQUIPMENT FLOOD PROOF</td>
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<td>——</td>
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<td>SMITH</td>
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<td>METAL CUT, SWEEP VENT LOUVER</td>
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<td>ELECTRIC WATER COMMUNICATION, VALVE, BUTTERFLYFx2</td>
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<td>G89</td>
<td>WATTE</td>
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<td>F2-1</td>
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<td>——</td>
<td>JCHI</td>
<td>SMITH</td>
<td>265</td>
<td>——</td>
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PLUMBING SCHEDULES AND DETAILS
P201
# ELECTRICAL COVER SHEET

## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AC</td>
<td>Alternating Current</td>
</tr>
<tr>
<td>DC</td>
<td>Direct Current</td>
</tr>
<tr>
<td>MVAC</td>
<td>Medium Voltage Alternating Current</td>
</tr>
<tr>
<td>LVAC</td>
<td>Low Voltage Alternating Current</td>
</tr>
<tr>
<td>HVAC</td>
<td>High Voltage Alternating Current</td>
</tr>
<tr>
<td>MVDC</td>
<td>Medium Voltage Direct Current</td>
</tr>
<tr>
<td>LVDC</td>
<td>Low Voltage Direct Current</td>
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<tr>
<td>HVAC</td>
<td>Heating, Ventilation, and Air Conditioning</td>
</tr>
<tr>
<td>PSC</td>
<td>Photovoltaic System Connection</td>
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<tr>
<td>LSC</td>
<td>Low Voltage System Connection</td>
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<td>HSC</td>
<td>High Voltage System Connection</td>
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<tr>
<td>EPC</td>
<td>Electrical Panel Connection</td>
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<tr>
<td>EFC</td>
<td>Electrical Furniture Connection</td>
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## LIGHTING SYMBOLS

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<td>Flicker</td>
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<td>H</td>
<td>Harlequin</td>
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<td>Balloon</td>
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## FIRE ALARM SYMBOLS

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<td>R</td>
<td>Refuge Area</td>
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<td>E</td>
<td>Emergency Exit</td>
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<td>Horn</td>
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<tr>
<td>M</td>
<td>Manual</td>
</tr>
<tr>
<td>V</td>
<td>Voice Alarm</td>
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## GENERAL NOTES

1. **E000**
   - LCCC EDUCATIONAL ENRICHMENT CENTER
   - BASEMENT RENOVATION
   - 1400 E College Dr, Cheyenne, WY 82007

2. **MECHANICAL ENGINEER**
   - Wood
   - 920 E. Sheridan Street, Suite A, Laramie, WY 82070
   - 303-919-2184

3. **ELECTRICAL ENGINEER**
   - Wood
   - 920 E. Sheridan Street, Suite A, Laramie, WY 82070
   - 303-919-2184

4. **CIVIL ENGINEER**
   - Inberg-Miller Engineers
   - 350 Parsley Boulevard, Cheyenne, WY 82007
   - 307-635-6827

5. **CONTACT(S):**
   - William W. Wedemeyer, AIA, ALEP, LEED AP
     - 307-632-3144 x120
   - Zandria Tolliver
     - 307-632-3144 x119

6. **SCHEDULE:**
   - 02/19/1950% SUBMITTAL
   - 03/11/1995% SUBMITTAL
   - 03/19/2019 100% CD’s

7. **GRAPHS:**
   - Bar graphs
   - Line graphs
   - Pie charts

8. **TABLES:**
   - Project data
   - Material specifications
   - Cost analysis

9. **NOTATIONS:**
   - Footnotes
   - Marginal notes
   - Callouts

10. **INDEX OF DRAWINGS:**
    - Electrical plans
    - Architectural plans
    - Structural plans

11. **ABBREVIATIONS:**
    - AC
    - DC
    - MVAC
    - LVAC
    - HVAC
    - MVDC
    - LVDC
    - HVAC
    - PSC
    - LSC
    - HSC
    - EPC
    - EFC

12. **LIGHTING SYMBOLS:**
    - L
    - S
    - F
    - H
    - B
    - C
    - D
    - A
    - Q
    - W
    - E
    - N
    - R

13. **FIRE ALARM SYMBOLS:**
    - F
    - P
    - R
    - E
    - L
    - A
    - D
    - S
    - T
    - C
    - H
    - M
    - V

14. **GENERAL NOTES-FIRE ALARM SYSTEMS:**
    - FIRE ALARM SYSTEMS
      - F
      - P
      - R
      - E
      - L
      - A
      - D
      - S
      - T
      - C
      - H
      - M
      - V

15. **INDEX OF DRAWINGS:**
    - Electrical plans
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- Footnotes
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- Architectural plans
- Structural plans
DEMO KEYED NOTES:

1. REMOVE ALL MOISTURE DAMAGE AND UPLISTED CAVES IN SCAFFOLDING, REMOVE CAVES AND FILL THE OPENINGS WITH CMAT.
2. REMOVE THE 1/2" CONCRETE OVER POWDER COATED ALUMINUM CONCRETE PLATES.
3. REMOVE THE BRICKWORK FROM ALL 2" WALLS AND ALL EXISTING CEILINGS.
4. REMOVE THE SUBDIVIDED ROOMS AND ALL EXISTING CEILINGS.
5. REMOVE ALL DATA JUMPS AND WIRING FROM CEILING TO FLOOR.
6. REMOVE ALL DRYWALL FROM CEILING TO FLOOR.

NEW GENERAL NOTES:

1. INSTALL NEW CONCRETE PLATES.
2. INSTALL NEW CONCRETE PLATES.
3. INSTALL NEW CONCRETE PLATES.
4. INSTALL NEW CONCRETE PLATES.
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27. INSTALL NEW CONCRETE PLATES.
28. INSTALL NEW CONCRETE PLATES.
29. INSTALL NEW CONCRETE PLATES.
30. INSTALL NEW CONCRETE PLATES.

NEW KEYED NOTES:

E103 SYSTEMS - DEMOLITION AND NEW PLANS

RICHARD A. SHIELDS
Professional Engineer
WYOMING
### LUMINARIE SCHEDULE

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SOURCE</th>
<th>DESCRIPTION</th>
<th>INPUT LOAD</th>
<th>INPUT VOLTAGE</th>
<th>MOUNTING</th>
<th>MANUFACTURER, SERIES</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>A</td>
<td>ALED</td>
<td>3500K 80 2700 LUMEN 2'X2' RECESSED TROFFER WITH CENTER BASKET</td>
<td>22</td>
<td>220v</td>
<td>RECESSED</td>
<td>H.E. WILLIAMS: LT-22-L27/835-AF-DIM-UNV-FS38</td>
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<td>41</td>
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<td>SURFACE</td>
<td>H.E. WILLIAMS: 75L-4-L38/835-A12125-DRV-UNV</td>
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<td>E1</td>
<td>LED</td>
<td>3200 LUMEN DIRECT / INDIRECT LENSED VANITY FIXTURE</td>
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<td>LED</td>
<td>2&quot; X 2' LINEAR RECESSED WITH SATIN FLUSH SHIELDING AND WHITE FLANGE</td>
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<td>LED</td>
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<td>LED</td>
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<td>WALL/CEILING</td>
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<tr>
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<td>LED</td>
<td>COMBINATION EXIT SIGN / EMERGENCY EGRESS LIGHT</td>
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<td>WALL/CEILING</td>
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<tr>
<td>X3</td>
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<td>120v</td>
<td>WALL/CEILING</td>
<td>H.E. WILLIAMS: EMER-WHT-D</td>
<td></td>
</tr>
</tbody>
</table>

### GENERAL NOTES:

- All fixtures are to be mounted in plenum space, unless otherwise noted.

### KEYED NOTES:

- **A**: Area of wall is to be kept clear of obstructions.
- **B**: Area marked with a number will be labeled with a number.
- **C**: Area marked with an arrow will be labeled with an arrow.
- **D**: Area marked with a circle will be labeled with a circle.

### TYPICAL ACCESS CONTROL DOOR DETAIL

![Typical Access Control Door Detail](image-url)