NOTES:
1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND
2. SEE DRAWING E-103 FOR CHANGES TO EXISTING PANEL SCHEDULES
3. EXISTING RECEPTACLES DESIGNATED TO BE FOR THE UPS TO HAVE NEW CONDUIT AND WIRE INSTALLED FROM THE UPS BRANCH CIRCUIT PANEL TO THE NEW RECEPTACLE. RECEPTACLES NOT DESIGNATED FOR UPS BUT PRESENTLY SHARING THE EXISTING CIRCUIT AND TO BE DISCONNECTED FROM THE UPS RECEPTACLE AND ADDED TO MAIN PANEL CONNECTION TO THE RIGHT. CONTRACTOR TO INSTALL NEW CONDUIT AND WIRE WHERE REQUIRED AND REPAIR ACCESS POINTS PER SHT. E-1.
4. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT SCHEDULES TO BE REDISTRIBUTED TO THE DESIGNATED LOADS THROUGHOUT THE CHEMISTRY BUILDING. EACH CIRCUIT TO HAVE ITS OWN HOT AND NEUTRAL.
5. COORDINATE WITH WSU FOR EXACT LOCATION AND TYPE OF DEVICE TO BE CHANGED TO UPS USE. REPLACE EXISTING RECEPTACLE WITH NEW AND WIRE TO UPS PANEL AS NOTED ON THE DRAWINGS
6. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.
7. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT CORED HOLES TO BE NO CLOSER THAN 6" SPACING.
8. SEE CONDUIT RISER DIAGRAM ON DWG. E-102, E-102.1 FOR DIAGRAMMATIC VIEW OF CONDUIT ENTERING THIS ROOM.
9. PROVIDE FIRE STOPPING AROUND ALL CONDUITS AND AROUND ALL SLEEVES PASSING THROUGH FIRE-RATED WALLS AND FLOORS.
10. INSTALL CONDUIT IN A LOCATION AND MANNER THAT DOES NOT CAUSE INTERFERENCE WITH EXISTING ACCESS, EQUIPMENT, DEVICES, ETC. COORDINATE WITH OWNERS REP.
NOTES:

1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND

2. SEE DRAWING E-103 FOR CHANGES TO EXISTING PANEL SCHEDULES

3. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT/PANEL SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED LOADS THROUGHOUT THE CHEMISTRY BUILDING.

4. COORDINATE WITH WSU FOR EXACT LOCATION AND TYPE OF DEVICE TO BE CHANGED TO UPS USE. REPLACE EXISTING RECEPTACLE WITH NEW AND WIRE TO UPS PANEL AS NOTED ON THE DRAWINGS.

5. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.

6. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT ROOMS TO BE NO CLOSER THAN 30 SPACING.

7. PROVIDE FIRE STOPPING AROUND ALL CONDUIT AND SLEEVES PASSING THROUGH FIRE RATED WALLS AND FLOORS.

8. INSTALL CONDUIT RISER IN A LOCATION AND MANNER THAT DOES NOT CAUSE INTERFERENCE WITH EXISTING ACCESS, EQUIPMENT, DEVICES, ETC. COORDINATE WITH OWNERS REP.

9. EXISTING RECEPTACLES DESIGNATED TO BE FOR THE UPS TO HAVE NEW CONDUIT AND WIRE INSTALLED FROM THE UPS BRANCH CIRCUIT PANEL TO THE NEW RECEPTACLE. RECEPTACLES NOT DESIGNATED FOR UPS BUT PRESENTLY SHARING THE EXISTING CIRCUIT ARE TO BE DISCONNECTED FROM THE UPS RECEPTACLE.

10. INSTALL CONDUIT RISER IN A LOCATION AND MANNER THAT DOES NOT CAUSE INTERFERENCE WITH EXISTING ACCESS, EQUIPMENT, DEVICES, ETC. COORDINATE WITH OWNERS REP.

11. PROVIDE FIRE STOPPING AROUND ALL CONDUIT AND SLEEVES PASSING THROUGH FIRE RATED WALLS AND FLOORS.

12. INSTALL CONDUIT RISER IN A LOCATION AND MANNER THAT DOES NOT CAUSE INTERFERENCE WITH EXISTING ACCESS, EQUIPMENT, DEVICES, ETC. COORDINATE WITH OWNERS REP.
1. See drawing G-1 for general notes and legend.
2. See drawings E-101 and E-104 for changes to existing panel schedules.
3. New circuits as indicated in the cable/conduit/panel schedules extend from listed panels to the designated loads throughout the chemistry building. Each circuit to have its own hot and neutral.
4. Verify all electrical loads for voltage and amperage prior to making final connection. Notify us if any loads that do not comply.
5. Core drilling shall be coordinated with WSO and adjacent core holes to be as far apart as possible.
6. See conduit riser diagram on Dwg. E-102 for diagrammatic view of conduit entering this room.
7. Power feeders conduit and wire from exist panel DP-3 in electric rm to exist panel UP-S in vestibule, to be disconnected and removed. New power feeders conduit and wire to be installed from new panel UPS-MDP in penthouse to exist panel RP-3SK, which now becomes UPS-RP-3SK. Plug unused knockout and relabeled circuits as required.
8. Contractor shall provide new modular UPS for this load and connect UPS to existing non-UPS receptacle. UPS Toshiba 1500VA 1050W Model UT1A1A015C6. Load is a tissue lyser currently powered by recept. RP-3SJ-20.
9. Existing 30A, 250 volt disconnect switch (typ 4 places in lab 380), disconnect from exist circuits in panel RP-3SH and reconnect to new circuits in new panel UPS-RP-3SE. See, circuit schedule, this drawing, for circuit numbers.
10. Existing receptacles designated to be for the UPS to have new conduit and wire installed from the UPS branch circuit panel to the new receptacle. Receptacles not designated for UPS but presently sharing the existing circuit are to be disconnected from the UPS receptacle, and are to maintain their connection to the existing panel with new conduit and wire where required and repair access points per Sh. G-1.
11. Provide fire stopping around all conduit and around all sleeves passing through fire rated walls and floors.
12. Install conduit riser in a location and manner that does not cause interference with existing access equipment, devices, etc. Coordinate with WSO.
13. The existing cables for receptacles connected to panel UP-S are (originally RP-3SK) to be removed and new two wires installed. Each circuit to have its own hot and neutral. The existing receptacles to be replaced with new yellow colored receptacles of matching configuration.
NOTES:

1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND.
2. SEE DRAWING E-103 FOR CHANGES TO EXISTING PANEL SCHEDULES.
3. PROVIDE FIRE STOPPING AROUND ALL CONDUITS AND AROUND ALL SLEEVES PASSING THROUGH FIRE RATED WALLS AND FLOORS.
4. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT PANEL SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED LOADS THROUGHOUT THE CHEMISTRY BUILDING. EACH CIRCUIT TO HAVE ITS OWN HOT AND NEUTRAL.
5. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.
6. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT CORED HOLES TO BE NO CLOSER THAN 30 INCHES SPACING.
7. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.

CONDUIT/COBBLE SCHEDULE

<table>
<thead>
<tr>
<th>PANEL</th>
<th>LOAD TYPE</th>
<th>PANEL BREAKER</th>
<th>PANEL FUSE</th>
<th>PANEL NAME</th>
<th>PANEL LOCATION</th>
<th>PANEL RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS-RP-4N</td>
<td>3 Phase 480V</td>
<td>200 A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPS-RP-4N</td>
<td>3 Phase 208V</td>
<td>200 A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FIFTH FLOOR LEVEL - EL. = 193'-10"
**NOTES:**

1. SEE DRAWING C-1 FOR GENERAL NOTES AND LEGEND.
2. SEE DRAWING 6-113 FOR CABLE/CONDUIT PANEL SCHEDULE.
3. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT PANEL SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED LOCATIONS THROUGHOUT THE CHEMISTRY BUILDING.
4. COORDINATE WITH WSU REPS FOR EXACT LOCATION AND TYPE OF DEVICE TO BE CHANGED TO UPS USE. REPLACE EXISTING RECEPTACLE WITH NEW AND WIRE TO UPS PANEL AS NOTED ON THE DRAWINGS.
5. CONTRACTOR TO FIELD ROUTE 1" PVC PIPING FROM HVAC UNIT TO NEAREST DRAIN. DRAIN PIPING TO BE ROUTED AND SECURED TO THE FLOOR TO MINIMIZE TRIP HAZARDS.
6. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING 3 PHA CONNECTION. NOTIFY OWNERS OF LOADS CURRENTLY IN SERVICE AND FOR ANY LOADS THAT DO NOT COMPLY.
7. CORE DRILLING SHALL BE COORDINATED WITH WSU AND CONTRACTOR TO FIELD ROUTE 1" PVC PIPING FROM HVAC UNIT TO NEAREST DRAIN. DRAIN PIPING TO BE ROUTED AND SECURED TO THE FLOOR TO MINIMIZE TRIP HAZARDS.
8. SEE DISTRIBUTION RISER DIAGRAM ON DWG. E-115 FOR DIAGRAMATIC VIEW OF CONDUIT ENTERING THIS ROOM.
9. PROVIDE FIRE STOPPING AROUND ALL CONDUITS AND AROUND THE WALL.

**SPEC GRADE**

- **INDUSTRIAL ENCLOSED & GASKETED,** 3 TON UNIT W/ 5KW HEATER WALL MOUNT.
- **TRANSFORMER:** MODEL BARD WA 30 2-A10XXXXXG OR EQUAL
- **DISCONNECT:** 2 LAMP T8 W/ BUILT IN BATTERY BACK UP
- **SCALE:** 3/8" = 1'-0"

**EQUIPMENT SHOP DRAWINGS PRIOR TO ALL AROUND CHAMFER.

**HOUSE KEEPING PAD PLAN**

- **Existing 5" CONCRETE SLAB:** REMOVE EXISTING FLOOR COATING
- **SHELF WAS:** REMOVE EXISTING CONTAINMENT
- **BATTERY:** 2" C-3 #3/0, #6 GND
- **UPG:** #6 GND

**PENTHOUSE FLOOR LEVEL KEY MAP**

- **Scale: NOT TO SCALE**
- **Location of Work:**
  - **UPS-MDP**
  - **UPS-AUX-PP**
  - **UPS-AUX-PP4**
  - **UPS-AUX-PP2**
  - **XFMR-UPS-MDP**
  - **XFMR-UPS-AUX**
  - **XFMR-UPS-PP**
  - **HOUSE KEEPING PAD**
  - **SPEC DETAIL**

**ELECTRICAL RELIABILITY UPGRADES**

- **5101 CASS AVENUE DETROIT, MICHIGAN**
- **Office: (517) 788-3000**
- **Fax: (517) 788-3003**
- **Wayne State University**
- **Facilities Planning & Management**
- **5454 Cass Avenue Detroit, Michigan**
- **Project No. 320006**
- **JAS**
- **PA007 - CHEMISTRY BUILDING 5101 CASS AVENUE**
- **Scale: 1" = 1'-0"**

**TYPICAL DETAIL**

- **Scale: 1/4" = 1'-0"**

**ENLARGED PLAN DETAIL**

- **PENTHOUSE EL. = 207'-3/4"**

**FILE NAME:** C:\pw_work\pw_proj\dlmaier\d0447957\E-PH.dwg

**PLOTTED DATE:** 11/24/2014 11:12 AM

**PLOTTED BY:** Daniel L. Maier
DISCONNECT CIRCUIT FOR RP-3SK FROM DP-3S CIRCUIT 10 AND LABEL AS SPARE.

CONNECT RP-3SK TO UPS AND RENAME AS UPS-RP-3SK. SEE DWG. E-102
**SHUNT TRIP CONTROL, LAB PNLS**

**NEW WORK**

1. **KEYED NOTES**

   - REMOVE EXISTING CABLE/CONDUIT FOR EXISTING DISCONNECT/RECEPTACLE IN ROOM 380. DISCONNECTS TO BE RE-FOCUSED FROM NEW UPS-RP-3SE.

   - DISCONNECT AND REMOVE EXISTING SHUNT TRIP MODULE FROM MAIN BREAKER IN PANEL RP-3SK. TEST MAIN BREAKER TO ENSURE RELIABILITY OF USE.

---

**FILE NAME:** C:\pw_work\pw_proj\dlmaier\d0447957\E-106.4.dwg

**PLOTTED DATE:** 11/24/2014 10:43 AM

**PLOTTED BY:** Daniel L. Maier
EXIST RENAMED
DISCONNECT AND REMOVE EXIST 60A PANEL, CONDUIT AND WIRE. INSTALL NEW PANEL, CONDUIT AND WIRE. FEED FROM UPS-MDP, AND BRANCH CIRCUITS AS NOTED IN PANEL SCHEDULE. EXISTING BRANCH CIRCUITS TO REMAIN.

18" AFF
6" ABOVE
COUNTERTOP

FUSED DISCONNECT

4" THICK CONCRETE
HOUSEKEEPING PAD.
SIZE PAD SUCH THAT 4" SPACE BETWEEN EQUIPMENT & EDGE OF PAD.

9. SEE CONDUIT RISER DIAGRAM ON DWG. E-102 FOR DIAGRAMMATIC VIEW OF CONDUIT ENTERING THIS ROOM.

10. NOT USED

11. UPS RECEPTACLES TO BE YELLOW IN COLOR AND TO HAVE A YELLOW WITH BLACK LETTERING NAMEPLATE.

12. UPS PANEL BOARDS AND EQUIPMENT SHALL BE LABELED WITH A YELLOW WITH BLACK LETTERING NAMEPLATE

13. INSTALL DRIP SHIELD MIN. 24" ABOVE UPS & TRANSFORMER. DRIP SHIELD TO BE 18GA. GALVANIZED MOUNTED WITH 1/2" THREADED ROD TO EXISTING STRUCTURE. DRIP SHIELD DRAIN TO BE LOCATED IN A CORNER WITH PVC PIPING FIELD ROUTED TO FLOOR WITH SUPPORTS EVERY THREE FEET.

14. PROVIDE FIRE STOPPING AROUND ALL CONDUITS, AND IN AROUND ALL SLEEVES PASSING THROUGH FIRE-RATED WALLS AND FLOORS.

15. ROUTE HORIZONTAL CONDUIT RUNS ABOVE FINISHED CEILING AND VERTICAL RISERS APPROXIMATELY 18" EATH CENTER IN A NEAT ORGANIZED MANNER, AND SUCH AS TO CAUSE NO INTERFERENCE WITH HEADROOM OR EXISTING EQUIPMENT, DEVICES, ETC. COORDINATE WITH WSU REP FOR EXACT INSTALLATION.

NOTES:

1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND

2. COOLING REQUIREMENTS FOR ROOM WAS ARE TO BE HANDLED BY THE EXISTING HVAC SYSTEM. ADJUSTMENTS TO THE EXISTING HVAC SYSTEM IS NOT PART OF THE SCOPE OF THIS PROJECT. WSU TO PROVIDE THE ADDITIONAL 1 TON OF COOLING REQUIRED FOR THIS ROOM.

3. NOT USED

4. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT/PANEL SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED LOADS THROUGHOUT THE BIOLOGICAL SCIENCE BUILDING.

5. COORDINATE WITH WSU REPRESENTATIVE FOR EXACT LOCATION AND TYPE OF DEVICE TO BE INSTALLED FOR UPS USE.

6. NOT USED

7. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.

8. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT CORED HOLES TO BE NO CLOSER THAN 20" SPACING.

9. SEE CONDUIT RISER DIAGRAM ON DWG. E-102 FOR DIAGRAMMATIC VIEW OF CONDUIT ENTERING THIS ROOM.

10. NOT USED

11. UPS RECEPTACLES TO BE YELLOW IN COLOR AND TO HAVE A YELLOW WITH BLACK LETTERING NAMEPLATE.

12. UPS PANEL BOARDS AND EQUIPMENT SHALL BE LABELED WITH A YELLOW WITH BLACK LETTERING NAMEPLATE

13. INSTALL DRIP SHIELD MIN. 24" ABOVE UPS & TRANSFORMER. DRIP SHIELD TO BE 18GA. GALVANIZED MOUNTED WITH 1/2" THREADED ROD TO EXISTING STRUCTURE. DRIP SHIELD DRAIN TO BE LOCATED IN A CORNER WITH PVC PIPING FIELD ROUTED TO FLOOR WITH SUPPORTS EVERY THREE FEET.

14. PROVIDE FIRE STOPPING AROUND ALL CONDUITS, AND IN AROUND ALL SLEEVES PASSING THROUGH FIRE-RATED WALLS AND FLOORS.

15. ROUTE HORIZONTAL CONDUIT RUNS ABOVE FINISHED CEILING AND VERTICAL RISERS APPROXIMATELY 18" EATH CENTER IN A NEAT ORGANIZED MANNER, AND SUCH AS TO CAUSE NO INTERFERENCE WITH HEADROOM OR EXISTING EQUIPMENT, DEVICES, ETC. COORDINATE WITH WSU REP FOR EXACT INSTALLATION.

NOTES:

1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND

2. COOLING REQUIREMENTS FOR ROOM WAS ARE TO BE HANDLED BY THE EXISTING HVAC SYSTEM. ADJUSTMENTS TO THE EXISTING HVAC SYSTEM IS NOT PART OF THE SCOPE OF THIS PROJECT. WSU TO PROVIDE THE ADDITIONAL 1 TON OF COOLING REQUIRED FOR THIS ROOM.

3. NOT USED

4. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT/PANEL SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED LOADS THROUGHOUT THE BIOLOGICAL SCIENCE BUILDING.

5. COORDINATE WITH WSU REPRESENTATIVE FOR EXACT LOCATION AND TYPE OF DEVICE TO BE INSTALLED FOR UPS USE.

6. NOT USED

7. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.

8. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT CORED HOLES TO BE NO CLOSER THAN 20" SPACING.
1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND
2. FURNISH AND INSTALL NEW 100A TRIP. 3 POLE BREAKER SPACE
   COMPARTMENT OF EXISTING UNIT SUB-STATION. NEW BREAKER
   SHALL MATCH EXISTING UNIT SUB-STATION BREAKERS FOR
   BRAND AND MODEL. SEE DWG. E-101.1
3. NEW WIRE WAY AND BOXES ARE REQUIRED. MATCH EXISTING
   INSTALLATION FOR TYPE, STYLE, AND FLUSH OR SURFACE
   MOUNTING. NEW INSTALLATION TO BE IMMEDIATELY ABOVE THE
   EXISTING. COORDINATE WITH WSU.
4. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT/PANEL
   SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED
   LOADS THROUGHOUT THE BIOLOGICAL SCIENCE BUILDING.
5. COORDINATE WITH WSU REP FOR EXACT LOCATION AND TYPE
   OF DEVICE TO BE INSTALLED FOR UPS USE.
6. NOT USED
7. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE
   PRIOR TO MAKING FINAL CONNECTION. NOTIFY WSU
   FOR ANY LOADS THAT DO NOT COMPLY.
8. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT
   CORED HOLES TO BE NO CLOSER THAN 20 SPACING.
9. SEE CONDUIT RISER DIAGRAM ON DWG. E-102 FOR
   DIAGRAMMATIC VIEW OF CONDUIT ENTERING THIS ROOM.
10. UPS PANEL BOARDS AND EQUIPMENT SHALL BE LABELED WITH
    A YELLOW WITH BLACK LETTERING NAMEPLATE.
11. PROVIDE FIRE STOPPING AROUND ALL CONDUITS, AND IN
    AROUND ALL SLEEVES PASSING THROUGH FIRE RATED WALLS AND FLOORS.
12. ROUTE HORIZONTAL CONDUIT RUNS ABOVE FINISHED CEILING AND
    VERTICAL RISERS APPROXIMATELY AS SHOWN IN A NEAT ORDERLY
    MANNER, AND SUCH AS TO CAUSE NO INTERFERENCE WITH
    HEADROOM OR EXISTING EQUIPMENT, DEVICES, ETC. COORDINATE
    WITH WSU REP FOR EXACT INSTALLATION.
9. See conduit riser diagram on DWG. E-102 for diagrammatic view of conduit entering this room.

10. Install single channel wire way directly above the existing wire way complete with 208 volt receptacles and 120 volt duplex receptacles as noted. Coordinate installation with WSU rep.

11. UPS receptacles to be yellow in color, and to have a yellow with black lettering nameplate.

12. UPS panel, board, and equipment shall be labeled with a yellow with black lettering nameplate.

13. Provide fire stopping around all conduits, and in around all sleeves passing through fire rated walls and floors.

14. Route horizontal conduit runs above finished ceiling and vertical risers approximately as shown in a neat orderly manner, and such as to cause no interference with headroom or existing equipment, devices, etc. Coordinate with WSU rep for exact installation.
NOTES:

1. See drawing G-1 for general notes and legend
2. Not used
3. Not used
4. New circuits as indicated in the cable/conduit panel schedule extend from listed panels to the designated loads throughout the biological science building.
5. Coordinate with WSU rep for exact location and type of device to be installed for UPS use.
6. Not used
7. Verify all electrical loads for voltage and amperage prior to making final connection. Notify WSU for any loads that do not comply.
8. Core drilling shall be coordinated with WSU and adjacent core holes to be no closer than 30' spacing.
9. See conduit riser diagram on eng. E-102 for diagrammatic view of conduit entering this room.
10. New wire way and boxes are required. Match existing installation for type, style, and flush or surface mounting. New installation to be immediately above the existing. Coordinate with WSU.
11. UPS receptacles to be yellow in color. And to have a yellow with black lettering nameplate.
12. UPS panel board and equipment shall be labeled with a yellow with black lettering nameplate.
13. Provide fire stopping around all conduits, and in around all sleeves passing through fire rated walls and floors.
14. Route horizontal conduit runs above finished ceiling and vertical risers approximately as shown in neat orderly manner, and such as to cause no interference with headroom or existing equipment, devices, etc. Coordinate with WSU rep for exact installation.

SEE NOTE 10
SEE NOTE 11
SEE NOTE 12
SEE NOTE 2
SEE NOTE 3
SEE NOTE 4
SEE NOTE 5
SEE NOTE 6
SEE NOTE 7
SEE NOTE 8
SEE NOTE 9
TO 100A DISCONNECT
TO DWG E-102 & E-101

9' 100A 3P
FURNISH AND INSTALL NEW
IN SPARE SPACE EXISTING UNIT SUBSTATION NO. 1 SCHEMATIC DIAGRAM

EXISTING UNIT SUBSTATION NO. 1 SCHEMATIC DIAGRAM
(LOCATED IN ROOM 1135)

Electrical one-line diagrams

FILE NAME: C:\pw_work\pw_proj\jashinn\d0447958\E-101.1.dwg
PLOTTED DATE: 11/21/2014 3:33 PM
PLOTTED BY: Joseph A. Shinn

Typical Electrical Room-Lab Grounding
Module Wiring Diagram

089 - BIOLOGICAL SCIENCE BUILDING
ELECTRICAL RELIABILITY UPGRADES
WAYNE STATE UNIVERSITY
5047 GULLEN MALL RD.
ELECTRICAL ONE LINE DIAGRAM

089-248858 320006
AS SHOWN

JAS DA DHP JDM
OWNER REVIEW 10-14-2014
FOR BIDS 11-24-2014

ISSUED FOR/REVISIONS
DATE
DRAWN BY
PROJECT LEAD
DESIGNED BY
REVIEWED BY
APPROVED BY
DATE
CLIENT PROJECT NO.
PROJECT NO.
SCALE:
SHEET TITLE
SHEET NO.
REV NO.
NOTES:
1. SEE DRAWING G-1 FOR GENERAL NOTES AND LEGEND
2. SHIVAN TOSHIBA UPS, COMPLETE WITH INVERTER, BY-PASS AND BATTERY CABINET.
3. NOT USED
4. NEW CIRCUITS AS INDICATED IN THE CABLE/CONDUIT/PANEL SCHEDULES EXTEND FROM LISTED PANELS TO THE DESIGNATED LOADS THROUGHOUT THE BIOLOGICAL SCIENCE BUILDING.
5. COORDINATE WITH WSU/REP FOR EXACT LOCATION AND TYPE OF DEVICE TO BE INSTALLED FOR UPS USE.
6. NOT USED
7. VERIFY ALL ELECTRICAL LOADS FOR VOLTAGE AND AMPERAGE PRIOR TO MAKING FINAL CONNECTION; NOTIFY WSU FOR ANY LOADS THAT DO NOT COMPLY.
8. CORE DRILLING SHALL BE COORDINATED WITH WSU AND ADJACENT HOLES TO BE NO CLOSER THAN 28 SPACING.
9. NOT USED
10. THE UPS SHALL BE GROUNDED PER LATEST VERSION OF NEC. THE GROUNDED CONDUCTOR SHALL BE #2 AWG, INSULATED, 90 DEGREE C, COPPER. PROVIDE THE GROUNDING CONDUCTOR FROM THE UPS TO NEAREST BUILDING GROUND BUS. ROUTE GROUNDING CONDUCTOR THROUGH RIGID NON-METALLIC CONDUIT WHERE EXPOSED. USE BUSHINGS AT ENDS OF CONDUIT PROVIDE ENOUGH SLACK AT UPS END TO ALLOW THE UPS TO MOVE 4'-0" FOR MAINTENANCE.
11. UPS PANEL BOARDS AND EQUIPMENT SHALL BE LABELED WITH A YELLOW WITH BLACK LETTERING NAMEPLATE.