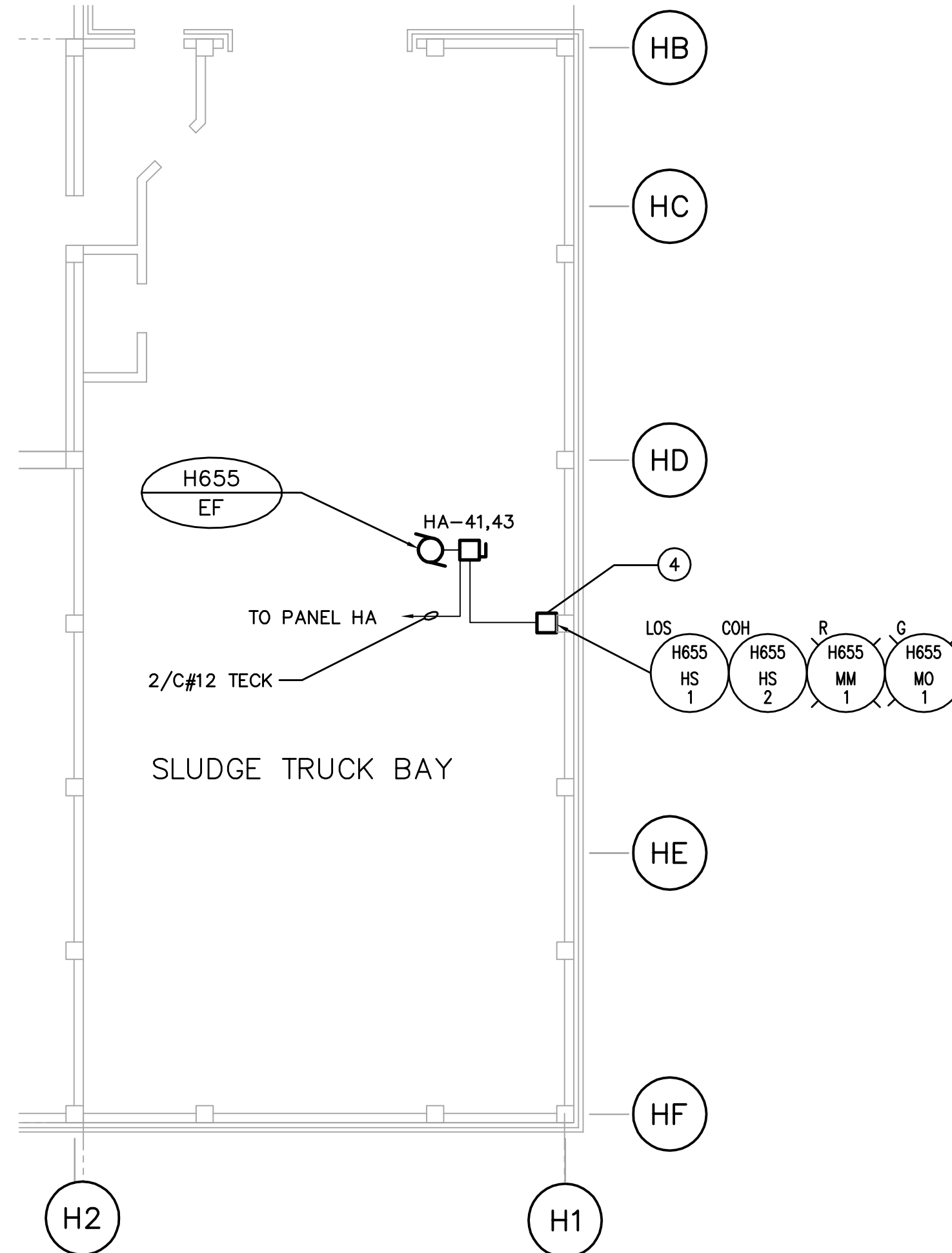


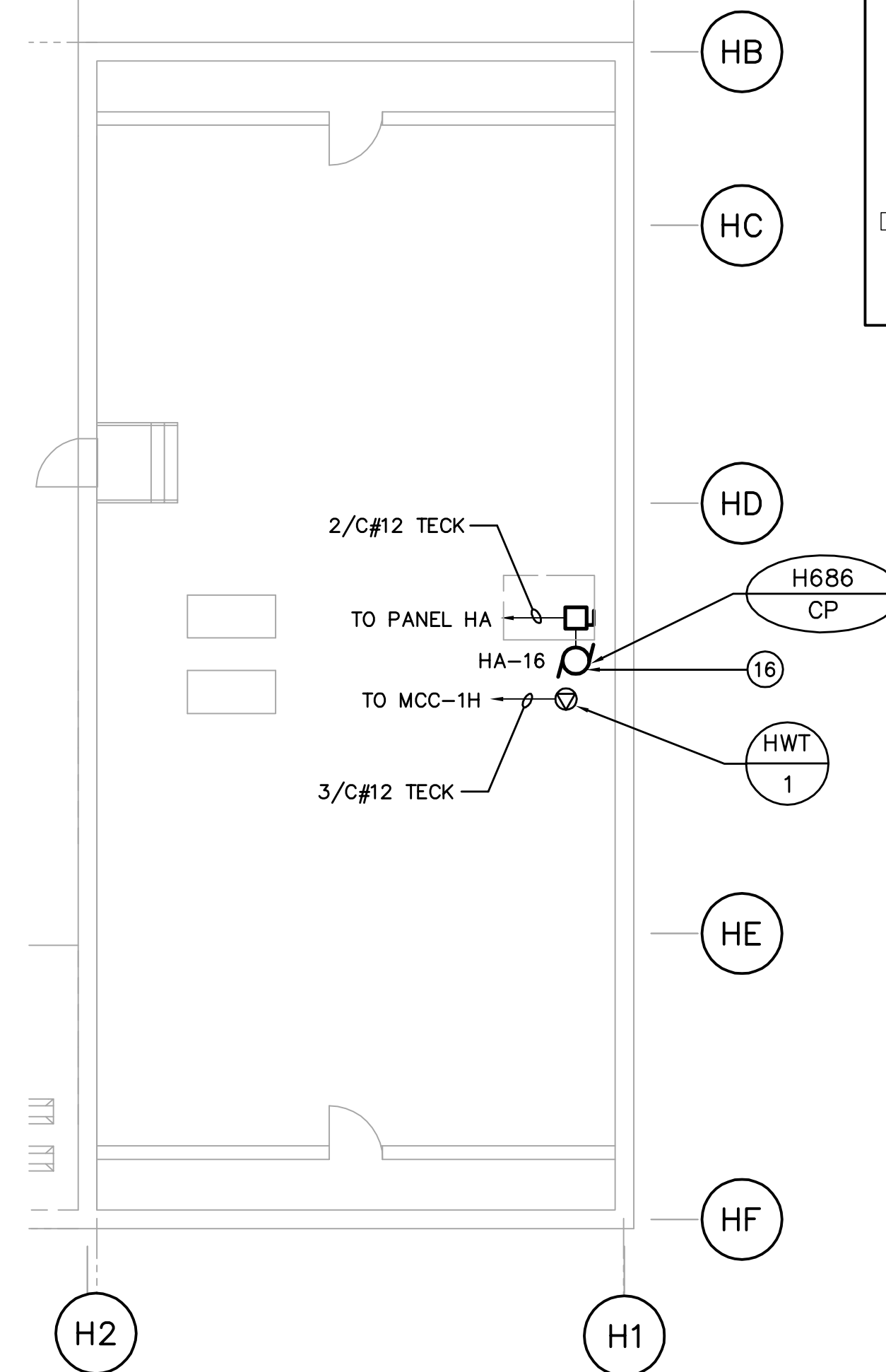
SLUDGE PUMP PIT - POWER PLAN

SCALE: 1:100



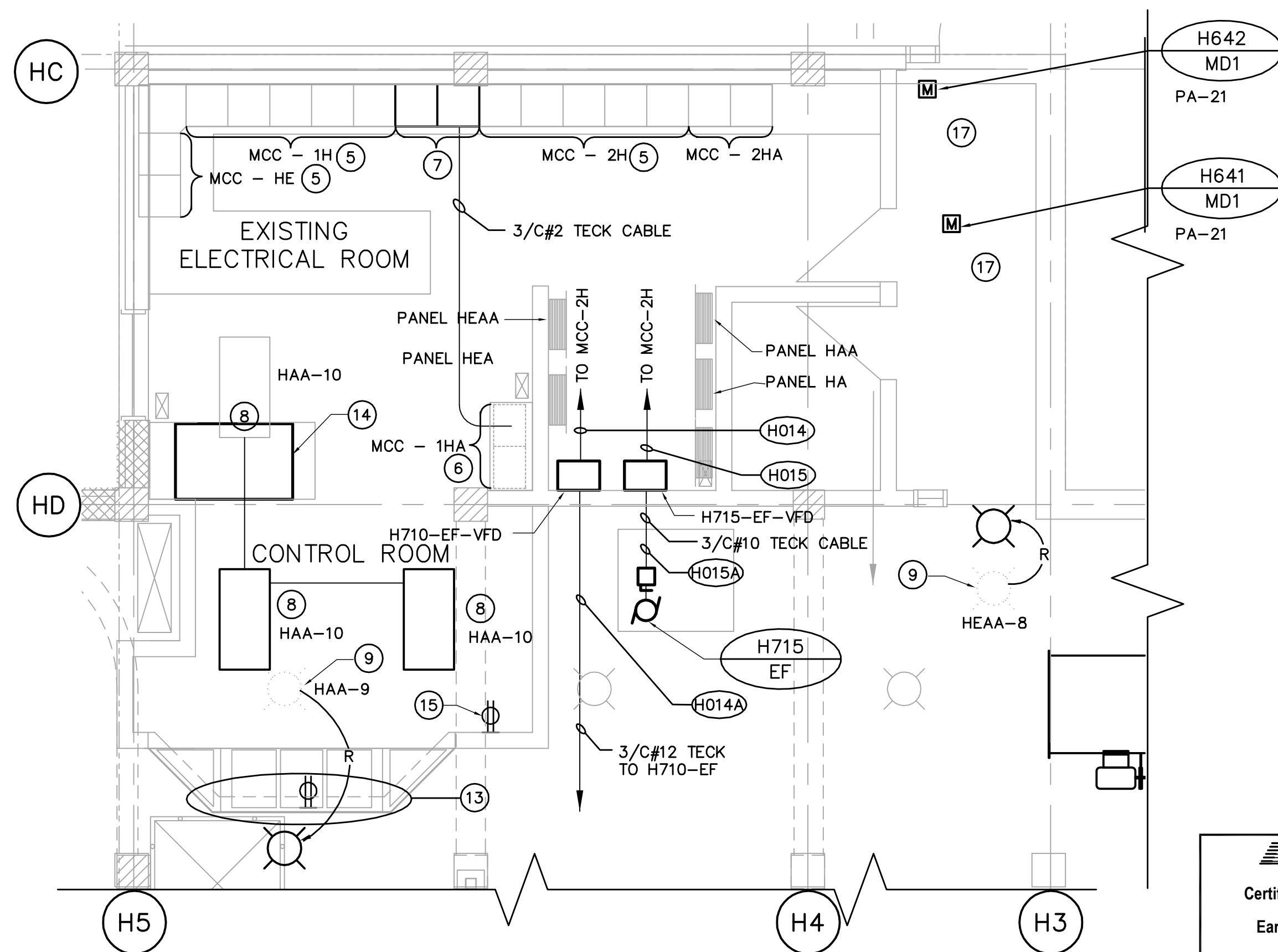
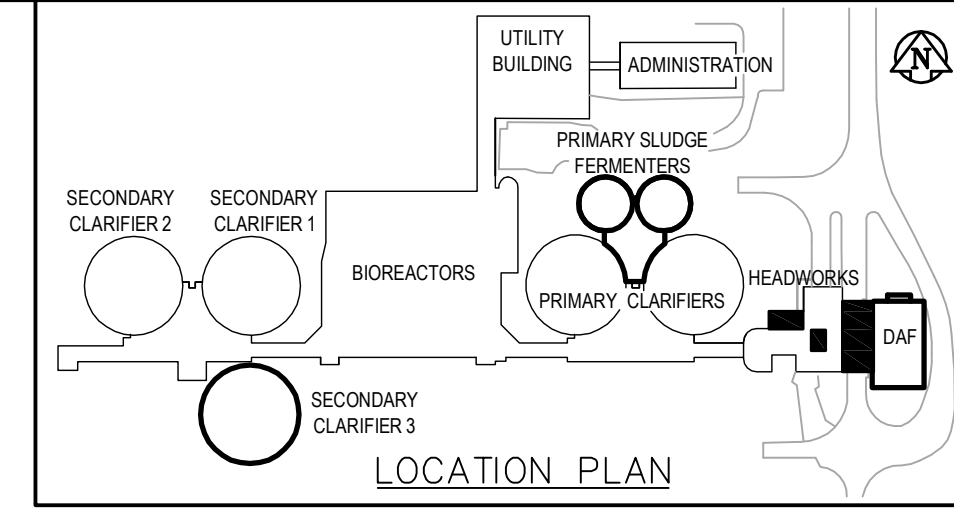
SLUDGE TRUCK BAY - POWER PLAN

SCALE: 1:100



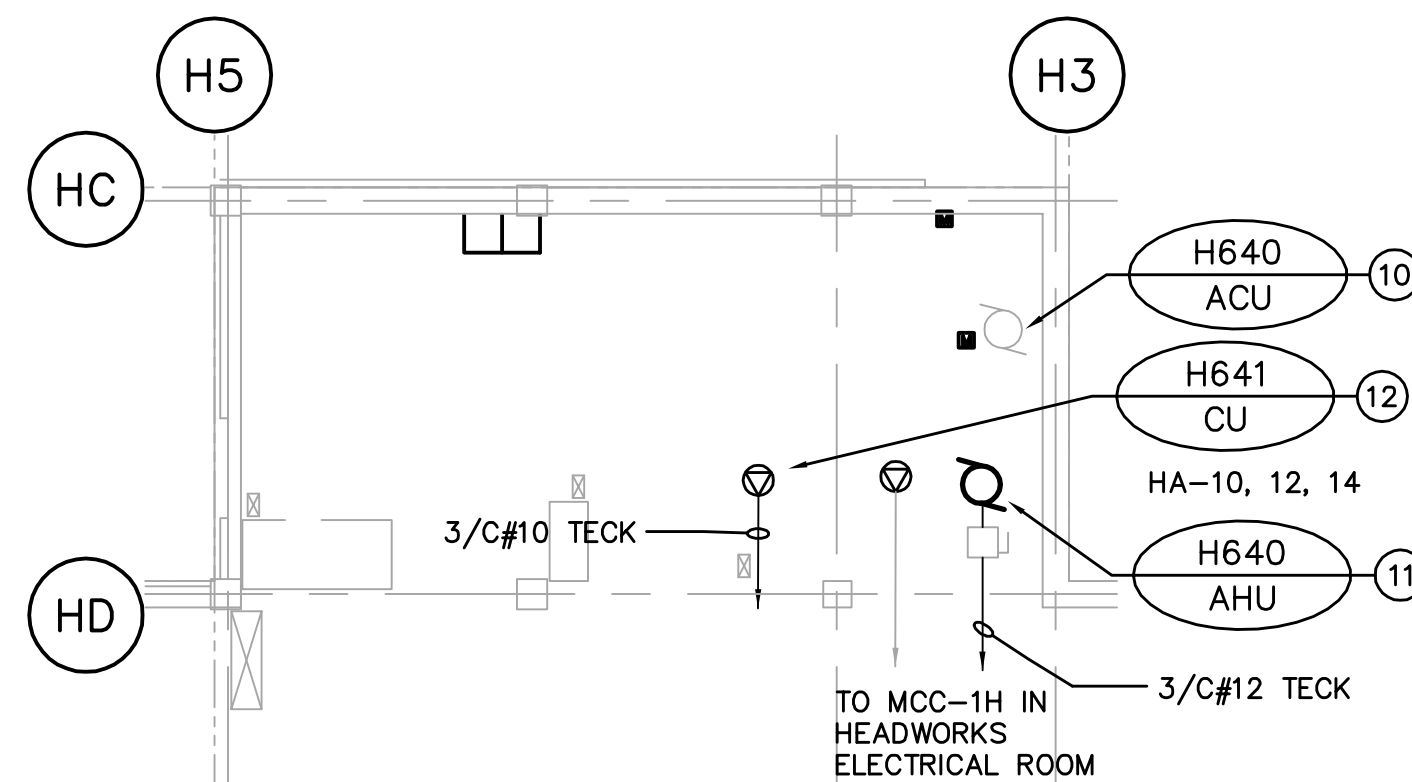
UPPER LEVEL - POWER PLAN

SCALE: 1:100



ELECTRICAL ROOM - LIGHTING AND POWER PLAN

SCALE: 1:50



LOWER LEVEL - POWER PLAN

SCALE: 1:100

GENERAL NOTES

- COORDINATE WITH OTHER TRADES TO PREVENT CONFLICTS.
 - USE PVC JACKETED HITECK CABLE FOR ALL POWER WIRING.
 - WIRING FOR LIGHTING, RECEPTACLES AND COMMUNICATIONS TO IN RIGID ALUMINUM CONDUIT.
- ALL CONDUIT TO BE 21mmØ MINIMUM UNLESS OTHERWISE NOTED.

DRAWING NOTES

- DISCONNECT EXISTING SLUDGE TRANSFER PUMPS H410 AND H420 AND MAKE READY FOR REMOVAL. WIRE AND CONNECT NEW PUMPS AND CONTROLS ONCE PUMPS HAVE BEEN PLACED. REMOVE EXISTING CABLES FROM MOTORS TO MCC-1H AND MCC-2H. PROVIDE 3/C#4 TECK HL CABLE FROM PUMP MOTORS TO RELATED MCC-1H AND MCC-2H VIA EXISTING ROUTING. REFER TO PROCESS DRAWING HP1.01.
- EXISTING CONTROLS FOR SLUDGE TRANSFER PUMP H410 AND FLOW CONTROL VALVE H445.
- EXISTING CONTROLS FOR SLUDGE TRANSFER PUMP H420 AND FLOW CONTROL VALVE H446.
- TIME CONTROL STATION SUPPLIED BY DIVISION 15, INSTALLED BY DIVISION 16.
- EXISTING MCC'S. REFER TO DRAWING HE2.01 FOR DETAILS AND MODIFICATIONS.
- DISCONNECT MCC-1HA FROM SHUNT BREAKERS IN MCC-1H. RELOCATE TO LOCATION INDICATED. EXTEND 3/C#2 TECK FROM SHUNT BREAKER TO NEW LOCATION OF MCC-1HA.
- PROVIDE 2 NEW MCC CELLS TO MATCH EXISTING. NEW CELLS TO HAVE 800A, 600V HORIZONTAL BUS AND 600A VERTICAL BUS. CONNECT HORIZONTAL BUS TO EXISTING MCC-1H. ADJUST CIRCUIT WIRING AS MAY BE REQUIRED FOR MCC-1HA.
- PROVIDE 2 NEW 2x4 LUMINAIRES TO MATCH EXISTING. NEW LUMINAIRES TO BE CONNECTED TO EXISTING LIGHTING CIRCUIT HAA-10 AT EXISTING LUMINAIRE AS SHOWN ON DRAWING.
- RELOCATE EXISTING LUMINAIRE AS SHOWN. PROVIDE NEW CONDUCTOR NECESSARY TO ENSURE CONTINUITY OF ENTIRE EXISTING LIGHTING CIRCUIT. COORDINATE LUMINAIRE CONNECTIONS WITH MECHANICAL PIPING AND DUCTWORK. WHERE REQUIRED SUSPEND LUMINAIRES BELOW SUCH EQUIPMENT.
- DISCONNECT EXISTING AIR CLEANING UNIT H640-ACU AND MAKE READY FOR REMOVAL. CONDUCTORS TO REMAIN.
- WIRE AND CONNECT NEW AIR HANDLING UNIT H640-AHU HEATER AND CONTROLS TO EXISTING 15A BREAKER IN MCC-1H USING EXISTING CONDUCTORS FROM H640-CU. WIRE AND CONNECT NEW AIR HANDLING UNIT H640-AHU FAN AND CONTROLS TO NEW MOTOR STARTER IN MCC-1H.
- WIRE AND CONNECT NEW CONDENSING UNIT H641-CU AND CONTROLS TO NEW 15A-3P BREAKER IN PANEL HA.
- RELOCATE AND RECONNECT EXISTING POWER AND COMMUNICATION DEVICES ON RELOCATED CONTROL ROOM WALL.
- MARSHALLING PANEL AND TERMINATION UNIT CABINET.
- NEW RECEPTACLE TO BE CONNECTED TO EXISTING RECEPTACLE CIRCUIT
- DISCONNECT EXISTING AND MAKE READY FOR REMOVAL. CONNECT NEW PUMP AND CONTROLS.
- MOTORIZED DAMPERS SUPPLIED AND INSTALLED BY DIVISION 15, CONNECTED BY DIVISION 16. REFER TO MECHANICAL DRAWINGS FOR DAMPER LOCATIONS.



| B.M. ELEV. | | EarthTech A Tyco International Ltd. Company | | ENGINEER'S SEAL | |
|------------|-------------------------|------------------------------------------------|-----|-----------------|------------|
| 04 | ISSUED FOR CONSTRUCTION | 06/09/22 | SRP | DESIGNED BY | GSN |
| 03 | 21-2006 ADDENDUM 6 | 06/07/05 | SRP | CHECKED BY | PS |
| 02 | 21-2006 ADDENDUM 3 | 06/05/19 | ERC | DRAWN BY | ERC |
| 01 | 21-2006 ADDENDUM 1 | 06/05/10 | ERC | APPROVED BY | JEH |
| 00 | ISSUED FOR TENDER | 06/04/26 | ERC | HOR. SCALE: | AS NOTED |
| NO. | REVISIONS | DATE | BY | DATE | 2006/02/24 |
| | | | | DATE | 2006/04/26 |

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|-----------------------------------------------------------------------------------|--|-----------------------------------------------------|-----------------------------------------------------|
| THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION | | ORIGINAL SIGNED BY P. STRYK 2006/04/26 | CITY FILE NUMBER SHEET OF CITY DRAWING NUMBER |
| WEWPC BIOLOGICAL NUTRIENT REMOVAL UPGRADE CONTRACT 3 | | CONSULTANT DRAWING NO. HE1.01 | ELECTRICAL AREA H - HEADWORKS POWER PLANS |