SAMPLE DRAWING
FULL SIZE DRAWING WILL BE PROVIDED IN AUTOCAD FORMAT BY
TREATMENT PLANT SERVICES AND SHALL BE USED BY DESIGN ENGINEER
IN PREPARING PUMP STATION CONSTRUCTION DRAWINGS.

Clean Water Services

PUMP STATION STANDARD
DRAWINGS

Location Map

Drawing Index

FEBRUARY 2007
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<table>
<thead>
<tr>
<th>ONE-LINE DIAGRAM SYM.</th>
<th>CONTROL SCHEMATIC SYM.</th>
<th>CONTROL SCHEMATIC SYM. CONT.</th>
<th>ELECTRICAL PLAN SYM.</th>
<th>LIGHTING PLAN SYM.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

ABBREVIATIONS & SYMBOLS
REVISED 2-07

CleanWater Services

PUMP STATION STANDARD DRAWINGS

ELECTRICAL ABBREVIATIONS & SYMBOLS

GENERAL NOTES

1. THIS DRAWING IS MEANT TO BE USED AS A REFERENCE FOR THE PROJECT AND SHOULD NOT BE CONSTRUED AS A SUBSTITUTE FOR THE ORIGINAL DRAWINGS.
2. THE DRAWING IS INTENDED TO SHOW THE GENERAL ARRANGEMENT AND FUNCTIONAL relationships OF THE EQUIPMENT AND SYSTEMS.
3. THE DRAWING IS NOT INTENDED TO SHOW ALL DETAILS, AND WHEREVER NECESSARY, SHEET TAXES AND ADDITIONAL DETAIL DRAWINGS WILL BE PROVIDED.
4. THE DRAWING IS NOT INTENDED TO SHOW ALL COMPONENTS AND PARTS, AND WHEREVER NECESSARY, DETAILS AND详细 DRAWINGS WILL BE PROVIDED.
5. THE DRAWING IS NOT INTENDED TO SHOW ALL CONNECTIONS AND INTERCONNECTIONS, AND WHEREVER NECESSARY, CONNECTIONS DRAWINGS WILL BE PROVIDED.
6. THE DRAWING IS NOT INTENDED TO SHOW ALL INSTALLATION AND OPERATION INSTRUCTIONS, AND WHEREVER NECESSARY, INSTRUCTIONS DRAWINGS WILL BE PROVIDED.
7. THE DRAWING IS NOT INTENDED TO SHOW ALL SAFETY PRECAUTIONS AND EMERGENCY PROCEDURES, AND WHEREVER NECESSARY, PRECAUTIONS DRAWINGS WILL BE PROVIDED.

2021/07/28

CleanWater Services
SAMPLE DRAWING
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LOAD CENTER 3P:
- VOLTAGE: 120/240
- BPS RATING (A): 100
- ENCLOSURE: NEMA I

NO. PANELBOARD LOAD CENTER
- OPERATION: BIFACIAL LOAD CENTER, 100 Amps
- LOCATION: ENCLOSURE I

CONNECTED LOAD (kVA): DGP
- INPUT: 20, 18, 20
- OUTPUT: 20, 18, 20
- TOTAL: 200

CONNECTED LOAD (kVA): DCP
- INPUT: 300
- OUTPUT: 200
- TOTAL: 200

LOAD SUMMARY
- INPUT: 500
- OUTPUT: 200
- TOTAL: 200

DESIGN LOAD (kVA): DCP
- INPUT: 1,080
- OUTPUT: 200
- TOTAL: 200

WEATHER: VENTILATED
- PROTECTION: DUAL CIRCUIT BREAKER

MOTOR:
- FPS: 300
- HP: 200
- VOLTAGE: 120/240

RATING:
- 300 kVA
- 200 kVA

SPECIFICATIONS:
- PANELBOARD: 200 Amps
- CIRCUIT BREAKER: 100 Amps

GENERAL NOTE:
A. SHORT EQUIPMENT SHORT CIRCUIT RATING
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KEYED NOTES & NAMEPLATE DESIGNATIONS:

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>NAMEPLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FLOOR TRANSFER</td>
</tr>
<tr>
<td>2</td>
<td>FLEXIBLE HOSE</td>
</tr>
<tr>
<td>3</td>
<td>EXTERIOR HOUSING</td>
</tr>
<tr>
<td>4</td>
<td>INTERIOR HOUSING</td>
</tr>
<tr>
<td>5</td>
<td>EXTERIOR HOUSING</td>
</tr>
<tr>
<td>6</td>
<td>INTERIOR HOUSING</td>
</tr>
<tr>
<td>7</td>
<td>EXTERIOR HOUSING</td>
</tr>
<tr>
<td>8</td>
<td>INTERIOR HOUSING</td>
</tr>
<tr>
<td>9</td>
<td>EXTERIOR HOUSING</td>
</tr>
<tr>
<td>10</td>
<td>INTERIOR HOUSING</td>
</tr>
</tbody>
</table>

GENERAL NOTES:

A. ALL MOUNTING BRACKETS FOR EXTERIOR ENCLOSURE SHALL BE EPOXY COATED, CONCRETE IS REQUIRED FOR EXTERIOR ENCLOSURE INSTALLATION.
B. EXTERIOR ENCLOSURES SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN AND SHALL BE SHIELDED.
C. MOTOR FIELD ELECTRICAL SHIELDED CONCRETE ENCLOSURE SHALL BE EPOXY COATED ON OUTSIDE OF ENCLOSURE, BE SHIELDED AND PAINTED.
D. R寿GULAR ENCLOSURES SHALL BE EPOXY COATED ON OUTSIDE OF ENCLOSURE, BE SHIELDED AND PAINTED.
E. PCB DETAILS AND CONNECTION TO PAD SHOULD BE DESIGNED TO RESIST RECOIL AND MINIMIZE ANY MOVEMENT OF THE DETAILS IN SHIELDED ENCLOSURE.
F. THE EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
G. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
H. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
I. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
J. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
K. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
L. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
M. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
N. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
O. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
P. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
Q. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
R. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
S. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
T. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
U. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
V. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
W. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
X. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
Y. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
Z. EXTERIOR ENCLOSURE SHALL BE EPOXY COATED AND SHALL BE PROVIDED AS SHOWN.
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KEYED NOTES & NAMEPLATE DESIGNATIONS:

<table>
<thead>
<tr>
<th>KEY</th>
<th>Device</th>
<th>Nameplate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Weatherproof Enclosure</td>
<td>Pump Station XXXX</td>
</tr>
<tr>
<td>2</td>
<td>Load Center</td>
<td>Load Center</td>
</tr>
<tr>
<td>3</td>
<td>Panel Heater with Internal Thermostat</td>
<td>Circuit Volt</td>
</tr>
<tr>
<td>4</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
<tr>
<td>5</td>
<td>Dry Type Main Fuse Breaker</td>
<td>Dry Type Main Fuse Breaker</td>
</tr>
<tr>
<td>6</td>
<td>Dry Type Fuses</td>
<td>Dry Type Fuses</td>
</tr>
<tr>
<td>7</td>
<td>0 &amp; N Rack</td>
<td>0 &amp; N Rack</td>
</tr>
<tr>
<td>8</td>
<td>Dual Rectifier</td>
<td>Dual Rectifier</td>
</tr>
<tr>
<td>9</td>
<td>Transformer</td>
<td>Transformer</td>
</tr>
<tr>
<td>10</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
<tr>
<td>11</td>
<td>Automatic Transfer Switch</td>
<td>Automatic Transfer Switch</td>
</tr>
<tr>
<td>12</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
<tr>
<td>13</td>
<td>Panel Mount Contact</td>
<td>Panel Mount Contact</td>
</tr>
<tr>
<td>14</td>
<td>Circuit Volt</td>
<td>Circuit Volt</td>
</tr>
<tr>
<td>15</td>
<td>Fuse Block/Panel Cover</td>
<td>Fuse Block/Panel Cover</td>
</tr>
<tr>
<td>16</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
<tr>
<td>17</td>
<td>Terminal Strip</td>
<td>Terminal Strip</td>
</tr>
<tr>
<td>18</td>
<td>Panel Heater Thermostat</td>
<td>Panel Heater Thermostat</td>
</tr>
<tr>
<td>19</td>
<td>Minimum 1/2&quot; UNC Machine Screw</td>
<td>Minimum 1/2&quot; UNC Machine Screw</td>
</tr>
<tr>
<td>20</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
<tr>
<td>21</td>
<td>Main - 15&quot; Schedule 40 Pipe (Stainless Steel)</td>
<td>Main - 15&quot; Schedule 40 Pipe (Stainless Steel)</td>
</tr>
<tr>
<td>22</td>
<td>Main Water Mains</td>
<td>Main Water Mains</td>
</tr>
<tr>
<td>23</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
<tr>
<td>24</td>
<td>Stainless Steel SS 304</td>
<td>Stainless Steel SS 304</td>
</tr>
<tr>
<td>25</td>
<td>Not Used</td>
<td>Not Used</td>
</tr>
</tbody>
</table>

GENERAL NOTES:

A. NOT USED
B. INTERIOR RACKAGE ROUTING BETWEEN PANELS MUST BE CLEAR. COORDINATES SHALL BE SHOWN IN SCALE DRAWING SHOWN.
C. PROVIDE ACCESSIBILITY TO PANEL ELECTRICAL TERMINALS, PANEL BOXES, AND BREAKER PANELS. SUBSTATION ACCESS DOORS SHALL BE SHOWN. ADEQUATE CLEARANCE SHOULD BE PROVIDED FOR ALL CLEARANCE REQUIREMENTS.
D. PANEL COVERS AND ACCESS DOORS SHOULD BE DESIGNED TO BE REMOVABLE AND HAVE LATCH LOCKS. WHEN INSTALLING, THE PANEL COVER SHOULD BE INSTALLED IN A MANNER THAT ALLOWS FOR ACCESS TO THE TERMINAL BLOCKS.
E. EXPOSED WIRES ARE NOT ACCEPTABLE.
F. WIRE MASTERS INSTALLED PER MAXIMUM VOLTAGE REQUIREMENTS AND NATIONAL ELECTRICAL CODES.
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KEYED NOTES & NAMEPLATE DESIGNATIONS (PSCP);

NOTES:
1. PROVIDE PSCP WITH 15% EXTRA SPACE AND DOOR STOP;
2. PROVIDE NAMEPLATES PER SPECIFICATION.
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