November 13, 2019

TO THE PROSPECTIVE BIDDER:

RE: Des Moines Fire Station No. 11
Activity ID: 10-2019-001

We are issuing Addendum No. 1 on the above-referenced project. This Addendum No. 1 modifies, supplements, or replaces information contained in the contract documents. This addendum is hereby made a part of the contract documents.

Each bidder shall acknowledge receipt of each addendum in its proposal in order to have its bid read and considered. Acknowledgment of the receipt of each addendum shall be made by inserting the number of each addendum in the appropriate blank provided for such acknowledgment in the proposal.

The original proposal shall be used to bid this project.

The current bidders list is available on our web page: https://www.dsm.city/ProjectBidInfo

If you have any questions regarding this Addendum No. 1, please contact the Project Manager, Tim Brady at 515-283-4025.

Sincerely,

[Signature]

Steven L. Nabcr
City Engineer

Attach.
ADDENDUM NO. 1
To Contract Documents for:
DES MOINES FIRE STATION NO. 11
ACTIVITY ID 10-2019-001
SVPA Project No. 18079

DATE: November 12, 2019

ARCHITECT:
SVPA ARCHITECTS INC.
1466 28th Street, Suite 200
West Des Moines, IA 50266
515.280.2419
Contact: Josh Ridgely, AIA, CDT, LEED AP BD+C
j-ridgely@svpa-architects.com

CIVIL ENGINEER:
BISHOP ENGINEERING
3501 104th Street
Urbandale, IA 50322
515.276.0467
Contact: Chuck Bishop, PE
cbishop@bishopengr.com

STRUCTURAL ENGINEER:
IMEG CORP
2882 106th Street
Urbandale, IA 50322
515.334.7936
Contact: Alex Carnahan, PE
alex.d.carnahan@imegcorp.com

M/E/P ENGINEER:
IMEG CORP
2882 106th Street
Urbandale, IA 50322
515.334.4325
Mechanical Contact: Dave Inghram, PE
515.334.4325, david.c.ingham@imegcorp.com
Electrical Contact: Isaac Stoll, PE
515.334.4321, isaac.p.stoll@imegcorp.com

This addendum is issued to modify, clarify, or amend the original Project Manual and/or Drawings and is hereby made part of the Contract Documents dated October 15, 2019. The Contractor shall be responsible for incorporating items in this Addendum to the Work. Attach this addendum to the Project Manual(s) in your possession. Acknowledge receipt of this Addendum by number where indicated on the Bid Form. Failure to do so may subject Bidder to disqualification. The following shall take precedence over anything to the contrary in the Project Manual, in the Drawings, or in prior Addenda:

This Addendum consists of 3 pages and the following attachments:
(1) Page CSI Form 1.5C Substitution Request (During the Bid Period)
(19) Full Size Revised Drawings C.1, D.1, R.1, C2.1, S002, S101, S102, S103, S503, MH102, E000, E001, EL101, EP101, EP102, E400, E500, E502, E503

PRODUCT APPROVALS

Preliminary approvals of products are indicative of the general acceptability of the product based on the quality, manufacturer’s and representative’s integrity, availability of service and similar general considerations. Final approval will be contingent upon compliance with detailed Specifications.

<table>
<thead>
<tr>
<th>Section</th>
<th>Product</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 21 00</td>
<td>Foam-Control Plus+250 25 psi R-10 ACH Foam Technologies</td>
<td></td>
</tr>
<tr>
<td>23 09 00</td>
<td>CO / NO2 Sensors</td>
<td>Honeywell Analytics</td>
</tr>
<tr>
<td>23 34 23</td>
<td>HVLS Ceiling Fans</td>
<td>Hunter, SkyBlade Corp.</td>
</tr>
<tr>
<td>23 34 23</td>
<td>In-Line Cabinet Fans</td>
<td>Twin City Fan</td>
</tr>
<tr>
<td>23 37 00</td>
<td>Louvers</td>
<td>United Enertech</td>
</tr>
<tr>
<td>23 82 00</td>
<td>Electric Cabinet Heaters</td>
<td>Raywall</td>
</tr>
<tr>
<td>23 82 00</td>
<td>Electric Unit Heaters</td>
<td>Raywall, Redd-I</td>
</tr>
<tr>
<td>23 82 00</td>
<td>Gas-Fired Radiant Tube Heaters</td>
<td>Superior</td>
</tr>
<tr>
<td>23 82 16</td>
<td>Electric Coils</td>
<td>Thermolec, Neptronic</td>
</tr>
</tbody>
</table>
CHANGES TO THE PROCUREMENT DOCUMENTS

1. Document 00 26 00 Procurement Substitution Procedures
   A. ADD attached CSI Form 1.5C Substitution Request (During the Bid Period) to Document 00 26 00.

CHANGES TO THE SPECIFICATIONS

1. None in this Addendum.

CHANGES TO THE DRAWINGS

1. C.1 Estimated Quantities & Reference Notes (East 42nd Street Plan)
   A. ADD Item 8.04, Inductive Loop Vehicle Detector as shown on attached revised C.1.

2. D.1 East 42nd Street Plan & Profile
   A. Add two 6’x20’ inductive loop vehicle detectors as shown on attached revised D.1.

3. R.1 Removals Plan (East 42nd Street Plan)
   A. Add disconnect of existing inductive loop vehicle detectors as shown on attached revised R.1.

4. C2.1 Layout Plan (Fire Station Site Plan)
   A. Add structural stoops and callouts as shown on attached revised C2.1.
   B. Revise locations and callout for four-fold door timer activation loop detectors as shown on attached revised C2.1.

5. Sheet S002 - SHELTER WIND LOAD PLAN
   A. Revise detail 3 to show masonry wall and not a precast wall as shown on revised attached sheet S002.

6. Sheet S101 - FOUNDATION PLAN
   A. Revise masonry wall and footing along grid 4 near grid C to show updated wall and footing location as shown on revised attached sheet S101.
   B. Revise stoop size near grid F as shown on revised attached sheet S101.
   C. Add dimensions for stoop along grid 5 as shown on revised attached sheet S101.

7. Sheet S102 - MEZZANINE FRAMING PLAN
   A. Remove masonry wall along grid C north of grid 4. Wall is not load bearing as shown on revised attached sheet S102.

8. Sheet S103 - ROOF FRAMING PLAN
   A. Add lintels along grid 2 for openings in mezzanine walls as shown on revised attached sheet S103.
   B. Revise masonry wall near grids 4 and C as shown on revised attached sheet S103.
   C. Revise beam in canopy adjacent to grid 4.8 to be keynote 12 as shown on revised attached sheet S103.
   D. Revise detail cuts around canopy as shown on revised attached sheet S103.
   E. Revise keynote definitions for 5, 6 and 12 as shown on revised attached sheet S103.
   F. Add four (4) fall protection anchor points between grids 3 and 4 as shown on revised attached sheet S103.
9. **Sheet S503 - STRUCTURAL DETAILS**
   A. Revise details 1, 2, and 5 as shown on revised attached sheet S503.
   B. Delete detail 3 and replace with “Not used” as shown on revised attached sheet S503.

10. **Sheet MH102 - MEZZANINE PLAN - VENTILATION**
    A. Revise MAU-1 visibility issue as shown on revised attached sheet MH102.

11. **Sheet E000 - ELECTRICAL COVERSHEET**
    A. Add electrical devices to symbols list as shown on revised attached sheet E000.
    B. Delete electrical devices from symbols list as shown on revised attached sheet E000.

12. **Sheet E001 - SITE PLAN - ELECTRICAL**
    A. Revise keynote as shown on revised attached sheet E001.

13. **Sheet EL101 - FLOOR PLAN - LIGHTING**
    A. Revise luminaire fixture type in Room 116 as shown on revised attached sheet EL101.
    B. Add EM1 fixture in Room 128B as shown on revised attached sheet EL101.
    C. Add F2 fixture in Room 109 as shown on revised attached sheet EL101.

14. **Sheet EP101 - FLOOR PLAN - POWER**
    A. Revise keynotes as shown on revised attached sheet EP101.
    B. Add GAP-1 to Room 106 as shown on revised attached sheet EP101.

15. **Sheet EP102 - MEZZANINE PLAN - POWER**
    A. Revise keynote as shown on revised attached sheet EP102.

16. **Sheet E400 - ELECTRICAL ONE-LINE DIAGRAM**
    A. Revise circuit breaker serving Panel PV in MPD-1 as shown on revised attached sheet E400.
    B. Revise wire and conduit serving Panel PV as shown on revised attached sheet E400.
    C. Revise wire and conduit information for vehicle charging stations as shown on revised attached sheet E400.
    D. Revise electrical load for vehicle charging stations as shown on revised attached sheet E400.
    E. Revise electrical load for Panel PV as shown on revised attached sheet E400.
    F. Revise electrical load for MDP-1 as shown on revised attached sheet E400.
    G. Revise feeder wire size for MDP-1 as shown on revised attached sheet E400.
    H. Revise ground wire size for MDP-1 as shown on revised attached sheet E400.

17. **Sheet E500 - ELECTRICAL SCHEDULES**
    A. Revise circuit breaker size as shown on revised attached sheet E500.
    B. Revise circuit breaker type as shown on revised attached sheet E500.

18. **Sheet E502 - ELECTRICAL SCHEDULES**
    A. Revise approved manufacturers model types as shown on revised attached sheet E502.
    B. Revise generator start time as shown on revised attached sheet E502.

19. **Sheet E503 - ELECTRICAL SCHEDULES**
    A. Delete luminaire type “S2” as shown on revised attached sheet E502.

END OF ADDENDUM 01
CSI Form 1.5C

SUBSTITUTION REQUEST
(During the Bid Period)

<table>
<thead>
<tr>
<th>Project:</th>
<th>Substitution Request Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From:</td>
</tr>
<tr>
<td></td>
<td>Date:</td>
</tr>
<tr>
<td>To:</td>
<td>A/E Project Number:</td>
</tr>
<tr>
<td>Re:</td>
<td>Contract For:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification Title:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section:</td>
<td>Page:</td>
</tr>
</tbody>
</table>

| Proposed Substitution: | |
| Manufacturer: | Address: | Phone: |
| Trade Name: | Model No.: |

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:
- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: 
Signed by: 
Firm: 
Address: 
Telephone: 

A/E’s REVIEW AND ACTION

- [ ] Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- [ ] Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- [ ] Substitution rejected - Use specified materials.
- [ ] Substitution Request received too late - Use specified materials.

Signed by: 
Date:

Supporting Data Attached:  [ ] Drawings  [ ] Product Data  [ ] Samples  [ ] Tests  [ ] Reports  [ ]
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>SUDS REFERENCE</th>
<th>SUDS ITEM CODE</th>
<th>BID ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
<th>ASBLURL</th>
<th>REFERENCE NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2010, 1, 08. C</td>
<td>2010-108-C-0</td>
<td>Clearing and grubbing</td>
<td>LS</td>
<td>1</td>
<td>Refer to R sheets for limits</td>
<td></td>
</tr>
<tr>
<td>2.02</td>
<td>2010, 1, 08. D, 1</td>
<td>2010-108-D-1</td>
<td>Topsoil, On-site</td>
<td>CY</td>
<td>644</td>
<td>Quantity refers to amount of topsoil to be preserved from excavation for backfilling of proposed pavement and includes 8' of topsoil placed prior to seeding on disturbed areas</td>
<td></td>
</tr>
<tr>
<td>2.03</td>
<td>2010, 1, 08. E</td>
<td>2010-108-E-0</td>
<td>Excavation, Class 10</td>
<td>LS</td>
<td>1</td>
<td>a. Site preparation for, and the construction of, embankment fills, shoulder backfill, and backfill behind curbs. b. Overcut, c. Finishing the soil surface, including roadways, shoulders, behind curbs, side ditches, slopes, and berm pits. d. Repair or replacement of any fences that have been unnecessarily damaged or removed</td>
<td></td>
</tr>
<tr>
<td>2.04</td>
<td>2010, 1, 08. G</td>
<td>2010-108-G-0</td>
<td>Subgrade Preparation</td>
<td>SY</td>
<td>1540</td>
<td>Include excavation, manipulating, recompacting, and trimming to the proper grade as shown on typical paving section detail</td>
<td></td>
</tr>
<tr>
<td>2.05</td>
<td>2010, 1, 08. I</td>
<td>2010-108-I-0</td>
<td>Modified Subbase Preparation</td>
<td>SY</td>
<td>1540</td>
<td>Includes furnishing, placing, compaction, and trimming to the proper grade as shown on typical paving section detail</td>
<td></td>
</tr>
<tr>
<td>2.06</td>
<td>2010, 1, 08. J, 3, C</td>
<td>2010-108-J-C-0</td>
<td>Removal of Pipe Culvert, 15-In. PVC</td>
<td>LF</td>
<td>20</td>
<td>Removal and disposal of pipe culvert, refer to R sheets for location</td>
<td></td>
</tr>
<tr>
<td>4.01</td>
<td>4020, 1, 08. A, 1</td>
<td>4020-108-A-1</td>
<td>Storm Sewer, Trench, 15-Inch RCP</td>
<td>LF</td>
<td>90</td>
<td>Trench excavation, backfilling, furnishing bedding material, placing bedding and backfill material, point planting, paving, and other fittings, pipe joints, pipe connections, testing, and inspection, refer to M sheets</td>
<td></td>
</tr>
<tr>
<td>4.02</td>
<td>4020, 1, 08. B</td>
<td>4020-108-B-0</td>
<td>Pipe Apron, 15-Inch RCP</td>
<td>EA</td>
<td>1</td>
<td>Trench excavation, backfilling, furnishing bedding material, placing bedding and backfill material, connections, and other appurtenances, refer to M sheets</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.01</td>
<td>6010, 1, 08. B</td>
<td>6010-108-B-0</td>
<td>Intake, SW-905 with SW-603 Type R casing</td>
<td>EA</td>
<td>1</td>
<td>Excavation, furnishing bedding material, placing backfill and backfill material, compaction, base, structural concrete, reinforcing steel, precast units (if used), concrete tiles, pipe connections, casings, and adjustment rings, refer to R sheets</td>
<td></td>
</tr>
<tr>
<td>6.02</td>
<td>6010, 1, 08. B</td>
<td>6010-108-B-0</td>
<td>Intake, SW-906 with SW-603 Type R casing</td>
<td>EA</td>
<td>1</td>
<td>Excavation, furnishing bedding material, placing backfill and backfill material, compaction, base, structural concrete, reinforcing steel, precast units (if used), concrete tiles, pipe connections, casings, and adjustment rings, refer to R sheets</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.01</td>
<td>7010, 1, 08. A</td>
<td>7010-108-A-0</td>
<td>Pavement, PCC, 7-Inch Reinforced with CD Baskets</td>
<td>SY</td>
<td>412</td>
<td>Includes final trimming of subgrade or subbase, integral curb, bar and reinforcement, joints and sealing, surface curing and pavement protection, safety concrete for rigid headers, basco for futures, and pavement smoothness testing, refer to L sheets</td>
<td></td>
</tr>
<tr>
<td>7.02</td>
<td>7010, 1, 08. A</td>
<td>7010-108-A-0</td>
<td>Pavement, PCC, 8-Inch Reinforced with CD Baskets</td>
<td>SY</td>
<td>904</td>
<td>Includes final trimming of subgrade or subbase, integral curb, bar and reinforcement, joints and sealing, surface curing and pavement protection, safety concrete for rigid headers, basco for futures, and pavement smoothness testing, refer to L sheets</td>
<td></td>
</tr>
<tr>
<td>7.03</td>
<td>7000, 1, 08. E</td>
<td>7000-108-E-0</td>
<td>Sidewalk, PCC, 5-Inch</td>
<td>SY</td>
<td>150</td>
<td>Minor grade adjustments at crossings and other intersections, subgrade preparation, formwork, additional thickness, at thicknessed edges, jointing, paving, smoothing, testing and inspection, and testing, refer to L sheets</td>
<td></td>
</tr>
<tr>
<td>7.04</td>
<td>7030, 1, 08. H, 2</td>
<td>7030-108-H-2</td>
<td>Storm Drainage, Gravel</td>
<td>SY</td>
<td>30</td>
<td>Excavation and preparation to subgrade, refer to M sheets</td>
<td></td>
</tr>
<tr>
<td>7.05</td>
<td>7040, 1, 08. H</td>
<td>7040-108-H-0</td>
<td>Pavement Removal</td>
<td>SY</td>
<td>1,159</td>
<td>Sewing, breaking, removing, and disposing of existing pavement and reinforcing steel, refer to R sheets</td>
<td></td>
</tr>
<tr>
<td>7.06</td>
<td>7040, 1, 08. I</td>
<td>7040-108-I-0</td>
<td>Curb and Gutter Removal</td>
<td>LF</td>
<td>203</td>
<td>Includes wet sawing, break sawing, removing, and disposing of existing curb and gutter as shown on Demonstration Plan</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.01</td>
<td>8020, 1, 08. C</td>
<td>8020-108-C-0</td>
<td>Painted Pavement Markings, Durable</td>
<td>STA</td>
<td>2.25</td>
<td>Layout, surface preparation, and application of marking tape, refer to R sheets</td>
<td></td>
</tr>
<tr>
<td>8.02</td>
<td>8020, 1, 08. E</td>
<td>8020-108-E-0</td>
<td>Permanent Tape Markings</td>
<td>STA</td>
<td>7.14</td>
<td>Layout, surface preparation, and application of marking tape, refer to R sheets</td>
<td></td>
</tr>
<tr>
<td>8.03</td>
<td>8030, 1, 08. A</td>
<td>8030-108-A-0</td>
<td>Temporary Traffic Control</td>
<td>LS</td>
<td>1</td>
<td>Installation, maintenance, and removal of temporary traffic control, total roadway closures with installation and removal of detour signage as shown in the contract documents, removal and reinstatement or covering of permanent traffic control devices that conflict with the temporary traffic control plan, monitoring and documenting temporary traffic control conditions, and flagging. When required in the contract documents, the following are also included in traffic control unless a separate bid item is provided: portable dynamic message signs, temporary barrier rail, temporary flood lighting, and pile caps, refer to R sheets</td>
<td></td>
</tr>
<tr>
<td>8.04</td>
<td>8010, 2, 02. A</td>
<td>8010-208-A-0</td>
<td>Inductive Loop Vehicle Detector</td>
<td>LS</td>
<td>1</td>
<td>Disconnect existing detector loops at existing traffic handboxes. Install new programmable detector loops and connect to existing traffic handboxes, refer R sheets for removal and D sheets for installation, refer Figure 8010, 104</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.01</td>
<td>9010, 1, 08. B</td>
<td>9010-108-B-0</td>
<td>Hydraulic Seeding, Seeding, Fertilizing, and Mulching</td>
<td>AC</td>
<td>0.20</td>
<td>Seeding of disturbed areas behind proposed curbs, removal of rock and other debris from the area, preparing the seedbed, furnishing and planting seed, furnishing and placing fertilizer and mulch, and furnishing water and other care during the cure period</td>
<td></td>
</tr>
<tr>
<td>9.02</td>
<td>9040, 1, 08. D, 1</td>
<td>9040-108-D-1</td>
<td>Filter Socks, 15-Inch Diameter</td>
<td>LF</td>
<td>138</td>
<td>Includes anchoring stakes, refer to C sheets</td>
<td></td>
</tr>
<tr>
<td>9.03</td>
<td>9040, 1, 08. D, 2</td>
<td>9040-108-D-2</td>
<td>Filter Socks, Removal</td>
<td>LF</td>
<td>138</td>
<td>Includes anchoring stakes, refer to C sheets</td>
<td></td>
</tr>
<tr>
<td>9.04</td>
<td>9040, 1, 08. N, 1</td>
<td>9040-108-N-1</td>
<td>Silt Fence or Silt Fence Ditch Check</td>
<td>LF</td>
<td>541</td>
<td>Includes removal of area to finished grade and offsite disposal of silt socks and accumulated sediment</td>
<td></td>
</tr>
<tr>
<td>9.05</td>
<td>9040, 1, 08. N, 3</td>
<td>9040-108-N-3</td>
<td>Silt Fence or Silt Fence Ditch Check, Removal of Devices</td>
<td>LF</td>
<td>541</td>
<td>Includes anchoring stakes, refer to C sheets</td>
<td></td>
</tr>
<tr>
<td>9.06</td>
<td>9040, 1, 08. T, 1</td>
<td>9040-108-T-1</td>
<td>Interception Device</td>
<td>EA</td>
<td>2</td>
<td>Restoration of the area to finished grade and offsite disposal of fence, posts, and accumulated sediment</td>
<td></td>
</tr>
<tr>
<td>9.07</td>
<td>9040, 1, 08. T, 2</td>
<td>9040-108-T-2</td>
<td>Filter Transmission Mat</td>
<td>ST</td>
<td>30</td>
<td>Removal of the device upon completion of the project, refer to C sheets</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.01</td>
<td>11,020, 1, 08. A</td>
<td>11,020-A-0</td>
<td>Mobilization</td>
<td>LS</td>
<td>1</td>
<td>The movement of personnel, equipment, and supplies to the project site, the establishment of offices, buildings, and other facilities necessary for the project, and, in accordance with, permits, and other expenses incurred prior to construction</td>
<td></td>
</tr>
<tr>
<td>11.02</td>
<td>11,050, 1, 08. A, 0</td>
<td>11,050-A-0</td>
<td>Concrete Washout</td>
<td>LS</td>
<td>1</td>
<td>Includes coordination with City &amp; Utility Provider for all work related to adjusting/recycling power pole, refer to R sheets</td>
<td></td>
</tr>
</tbody>
</table>

**GRAPHIC SCALE**

**BID NOTES:**

1. **THE 42ND STREET ROADWAY IMPROVEMENTS SHALL BE BID AS 1 LUMP SUM UNDER RECONSTRUCT E, 42ND STREET AND PART OF THE FIRE STATION NO. 11 PROJECT.**
2. **THE 42ND STREET ROADWAY IMPROVEMENTS SHALL BE COVERED BY THE NIPDES GENERAL PERMIT NO. 2 PREPARED FOR THE FIRE STATION NO. 711 PROJECT.**
1. SHELTER WIND LOAD PLAN

   1. SHELTER HAS BEEN DESIGNED TO COMPLY WITH ICC 500-14.
   2. INTERNAL PRESSURE COEFFICIENT FOR SHELTER IS 0.35.
   3. WIND EVENT WIND SPEED = 250 MPH.
   4. TERM OF THE PROJECT IS A COMMUNITY TORNADO SHELTER.
   5. SHELTER IS A COMMUNITY TORNADO SHELTER.
   6. MINIMUM DISTANCE FROM OPENING EDGE TO ANCHOR IS 5".
   7. DIMENSION MATCHES THE VERTICAL GAP DIMENSIONS.
   8. GAP FROM WALL TO PLATE IS SET BY MECHANICAL OR ELECTRICAL THAT PENETRATE THE WALLS OF THE SHELTER SPACE.
   9. THIS DETAIL APPLIES TO WINDOWS, DOORS AND LOUVERS:

2. WALL OPENING PROTECTION DETAIL

   1. PLUS AND MINUS SIGNS SIGNIFY PRESSURE ACTING TOWARD OR AWAY FROM SURFACE, RESPECTIVELY.
   2. MINIMUM ROOF DL FOR DESIGN (0.9DL) = 99 PSF.
   3. PLUS AND MINUS SIGNS SIGNIFY PRESSURE ACTING TOWARD OR AWAY FROM SURFACE, RESPECTIVELY.
   4. POSITIVE PRESSURE IS PRESSURIZED INTERNAL PRESSURE CONDITION.

3. WALL OPENING DETAIL

   1. PLUS AND MINUS SIGNS SIGNIFY PRESSURE ACTING TOWARD OR AWAY FROM SURFACE, RESPECTIVELY.
   2. MINIMUM ROOF DL FOR DESIGN (0.9DL) = 99 PSF.
   3. MINIMUM ROOF DL FOR DESIGN (0.9DL) = 99 PSF.
   4. WIND LOADS INDICATED ARE STRENGTH LEVELS (1.0WL).

4. ROOF OPENING DETAIL

   1. PLUS AND MINUS SIGNS SIGNIFY PRESSURE ACTING TOWARD OR AWAY FROM SURFACE, RESPECTIVELY.
   2. WIDTH OF ROOF ZONES 2 AND 3 AND WIDTH OF WALL ZONE 5 = 3'-0".
   3. MINIMUM ROOF DL FOR DESIGN (0.9DL) = 99 PSF.
   4. WIND LOADS INDICATED ARE STRENGTH LEVELS (1.0WL).

MWFRS WIND LOAD SCHEDULE

<table>
<thead>
<tr>
<th>ZONE</th>
<th>EFFECTIVE WIND AREA</th>
<th>POSITIVE PRESSURE (IN2/PSF)</th>
<th>NEGATIVE PRESSURE (IN2/PSF)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMPONENTS & CLADDING WIND LOAD SCHEDULE

<table>
<thead>
<tr>
<th>ZONE</th>
<th>EFFECTIVE WIND AREA</th>
<th>POSITIVE PRESSURE (IN2/PSF)</th>
<th>NEGATIVE PRESSURE (IN2/PSF)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. 4" CONCRETE SLAB ON GRADE WITH 6x6 - W1.4xW1.4
2. 8" CONCRETE SLAB ON GRADE WITH #5 @ 12" OC.
3. 8" CAST IN PLACE CONCRETE WALL WITH #5 @ 8" OC.
4. REFER TO 1, 2 AND 3 ON S500 FOR TYPICAL HOUSEKEEPING PAD DETAIL.
5. TOP OF CURB WALL EL (+0' - 0") UNO.
6. PROVIDE CORNER BARS AT ALL FOOTINGS AND WALL INTERSECTIONS - REFER TO 8/S500 AND 11/S500.
7. REFER TO 1/S501 FOR TYPICAL STOOP DETAIL.
1. MEZZANINE FRAMING PLAN

NOTES:

1. REFER TO GENERAL NOTES FOR LINTELS IN STRUCTURAL NOTES.
2. FOR NON-STRUCTURAL MASONRY PARTITIONS AND NON-STRUCTURAL MASONRY WALLS.
3. REFER TO GENERAL NOTES FOR LOOSE LINTELS.
4. PROVIDE ANGLE FRAMING AROUND OPENINGS PER X/X.
5. WALL WITH DEAD LOAD WEIGHT OF 720 PLF.
6. PRECAST SLAB TO BE DESIGNED TO SUPPORT MASONRY LOADS ON S000.
7. WITH W2.1xW2.1 WWR. PRECASTER TO DESIGN FOR 10" HOLLOW CORE SLAB WITH 3" COMPOSITE TOPPING LOADS ON S000 AND S002.
8. WITH W2.1xW2.1 WWR. PRECASTER TO DESIGN FOR 10" HOLLOW CORE SLAB WITH 3" COMPOSITE TOPPING.
9. BRACE NON-STRUCTURAL MASONRY WALLS AND PARTITIONS.
10. REFER TO S502 FOR LINTELS IN STRUCTURAL NOTES.
11. PROVIDE ANGLE FRAMING AROUND OPENINGS.
12. KEYNOTES: PER X/X.
13. SCHEDULE.
14. REFER TO GENERAL NOTES FOR LOOSE LINTELS.
15. IMEG CORP RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. SAID DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF IMEG CORP AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF IMEG CORP. © 2019 IMEG CORP.
MASONRY LINTEL SCHEDULE

<table>
<thead>
<tr>
<th>DRAW</th>
<th>MEMBER SIZE</th>
<th>MATERIAL</th>
<th>KEYNOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>6&quot;</td>
<td>C</td>
<td>H</td>
</tr>
<tr>
<td>L2</td>
<td>6&quot;</td>
<td>C</td>
<td>J</td>
</tr>
<tr>
<td>L3</td>
<td>6&quot;</td>
<td>C</td>
<td>L</td>
</tr>
<tr>
<td>L4</td>
<td>6&quot;</td>
<td>C</td>
<td>M</td>
</tr>
<tr>
<td>L5</td>
<td>6&quot;</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td>L6</td>
<td>6&quot;</td>
<td>C</td>
<td>O</td>
</tr>
<tr>
<td>L7</td>
<td>6&quot;</td>
<td>C</td>
<td>P</td>
</tr>
<tr>
<td>L8</td>
<td>6&quot;</td>
<td>C</td>
<td>Q</td>
</tr>
<tr>
<td>L9</td>
<td>6&quot;</td>
<td>C</td>
<td>R</td>
</tr>
<tr>
<td>L10</td>
<td>6&quot;</td>
<td>C</td>
<td>S</td>
</tr>
</tbody>
</table>

NOTES:
1. PROVIDE ANGLE FRAMING AROUND OPENINGS WITH ROOF DRAIN AND MECHANICAL CONTRACTOR.
2. REFER TO S502 FOR LINTELS IN STRUCTURAL MASONRY WALLS.
3. REFER TO S503 FOR MISCELLANEOUS LINTELS FOR OPENINGS IN NON-BEARING WALLS.
4. REFER TO S504 FOR EXTERIOR CONDITION SUPPORTING BRICK FACADE.
5. REFER TO NOTE 3/S300 FOR DETAILING BETWEEN LINTEL CLEAR SPANS.
6. INDICATES ROOF ANCHOR POINT. REFER TO 1/S300.
7. KEYNOTES:
   - D.7
   - C
   - HSS8x2x3/8 (LSV) T.O.  STEEL ELEVATION ( +10' - 11").
   - 11. L3x3x1/4 KICKER.
   - 8. 2.5K1 CANTILEVER OUTRIGGER @ 5'-0" MAXIMUM.
   - 3. TOP CHORD PITCHED JOIST. REFER TO 1/S300.
   - 1. 1 1/2" (20 GA) TYPE B STEEL DECK, 2 SPAN MINIMUM.
   - 2. 2" (18 GA) TYPE DA STEEL DECK, 2 SPAN MINIMUM.

ROOF FRAMING PLAN

1. DECK BEARING
2. EL (+14' - 3"
3. EL ( +21' - 0"
4. EL (+22' - 0"
5. EL (+17' - 0"
6. EL (+14' - 0"
7. EL (+19' - 0"
8. EL (+10' - 0"
9. EL (+15' - 0"
10. EL (+21' - 0"

MEMBER SIZE

- TYP: 8 3/8" EOD
- TYP: 24" BOND BEAM WITH (2) #5
- TYP: 16" BOND BEAM WITH (2) #6
- TYP: 18K7
- TYP: 18K13
- TYP: 18K3
- TYP: 22K11
- TYP: 22K3
- TYP: 22K6
- TYP: 22K9
- TYP: 24K12
- TYP: 24K13
- TYP: 24K7
- TYP: 24K9
- TYP: 30K11
- TYP: 30K3
- TYP: 30K13
- TYP: 30K7
- TYP: 30K9

DECK BEARING

- HIGH EL (+17' - 0"
- HIGH EL (+20' - 0"
- LOW DECK BEARING
- HIGH EL (+14' - 0"
- HIGH EL (+17' - 0"
- LOW DECK BEARING
- HIGH EL (+11' - 0"
- LOW DECK BEARING
- HIGH EL (+14' - 0"
- LOW DECK BEARING

JOIST BEARING

- HIGH EL (+17' - 0"
- HIGH EL (+20' - 0"
- HIGH EL (+14' - 0"
- HIGH EL (+17' - 0"
- HIGH EL (+11' - 0"
- HIGH EL (+14' - 0"
- HIGH EL (+11' - 0"
- HIGH EL (+14' - 0"
- HIGH EL (+11' - 0"
- HIGH EL (+14' - 0"
- HIGH EL (+11' - 0"

TYP: 2'S502
MASONRY DETAIL
BEAM BEARING ON
REF TO 4/S502 FOR
REF PLAN
STEEL TUBE -
L2 1/2x2 1/2x1/4
REF PLAN
L4x4x3/8 -
STEEL DECK -
JOIST BEYOND
7 HSS COLUMN BASE PLATE

3. 3.  ALL TUBES TO HAVE 1/4" CAP PLATE
2. ALL SUN SHADE TUBES TO BE HOT DIPPED
1. ANGLE TO SPAN BETWEEN JOIST FRAMING. COPE

SUNSHADE DETAIL
3/16 4
3/16 4
HANGER.
EVERY OTHER
DIAGONALLY AT
3/16
3/16 4
3/16
L2 1/2x2 1/2x1/4
PL 3"x3"x1/4", TYP
REF PLAN

EDGE OF DECK DETAIL
3/16 2
3/16 2
EL (REF PLAN)
T.O. STEEL

JOIST KICKER DETAIL
3/16 2@12
3/16
3/16
ROOF OPENING DETAIL
8 ROOF OPENING DETAIL
3/16 2
3/16
L2x2x1/4 x
EL (REF PLAN)
DECK BEARING
REF PLAN
HSS TUBE -
3/16 2
3/16 2
L4x4x1/4 1' - 1" TO 4' - 6"
L4x4x1/4
L6x4x3/8 (LLV) 8' - 1" TO 10' - 0"
NOTE 3

SCHEDULE
1/4" TAB
PL1/4"x x 1'-0"
1/4" Ø ANCHOR RODS x 1'-6" EMBED
3/4" ANCHOR RODS x 9" EMBED
1 1/4"Ø ANCHOR RODS x 1'-6" EMBED
3/4"Ø ANCHOR RODS x 9" EMBED

BASE PLATE SCHEDULE
ELEVATION:
HSS COLUMN BASE PLATE
4' x 4'

NOTE:
1. USE ARCHITECTURAL AND MECHANICAL OPENINGS FOR SIZE AND
LOCATION OF ALL OPENINGS
2. ROOF OPENINGS Pharma NOT REQUIRED AT SIDE ENTRANCE
3. PROVIDE REUSABLE INDOOR SUE OF POOL INVERTER BOXES
IN THESE BAYS USE 1/2" ROOF AS REQUIRED

3/16 2
3/16 2
L4x4x1/4 x
L6x4x3/8 (LLV) 8' - 1" TO 10' - 0"
NOTE 3

NOTE 3

NOTE 3

NOTE 3

NOTE 3
1. All wiring of exposed conduits shall be reviewed prior to installation.
2. All wiring conduits shall be rigid and UL approved.
3. All wiring conduits shall be run tight to structure, and fastened to the structure.
4. All wiring conduits shall be installed prior to installation.
5. Egress lights shall be installed in accordance with the local electrical codes.
6. All electrical equipment shall be installed in accordance with the local electrical codes.
7. All electrical equipment shall be located in accordance with the local electrical codes.
8. All electrical equipment shall be installed in accordance with the local electrical codes.
9. All electrical equipment shall be installed in accordance with the local electrical codes.
10. All electrical equipment shall be installed in accordance with the local electrical codes.
11. All electrical equipment shall be installed in accordance with the local electrical codes.
12. All electrical equipment shall be installed in accordance with the local electrical codes.
13. All electrical equipment shall be installed in accordance with the local electrical codes.
14. All electrical equipment shall be installed in accordance with the local electrical codes.
15. All electrical equipment shall be installed in accordance with the local electrical codes.
16. All electrical equipment shall be installed in accordance with the local electrical codes.
17. All electrical equipment shall be installed in accordance with the local electrical codes.
18. All electrical equipment shall be installed in accordance with the local electrical codes.
19. All electrical equipment shall be installed in accordance with the local electrical codes.
20. All electrical equipment shall be installed in accordance with the local electrical codes.
21. All electrical equipment shall be installed in accordance with the local electrical codes.
22. All electrical equipment shall be installed in accordance with the local electrical codes.
23. All electrical equipment shall be installed in accordance with the local electrical codes.
24. All electrical equipment shall be installed in accordance with the local electrical codes.
25. All electrical equipment shall be installed in accordance with the local electrical codes.
26. All electrical equipment shall be installed in accordance with the local electrical codes.
27. All electrical equipment shall be installed in accordance with the local electrical codes.
28. All electrical equipment shall be installed in accordance with the local electrical codes.
29. All electrical equipment shall be installed in accordance with the local electrical codes.
30. All electrical equipment shall be installed in accordance with the local electrical codes.
31. All electrical equipment shall be installed in accordance with the local electrical codes.
32. All electrical equipment shall be installed in accordance with the local electrical codes.
33. All electrical equipment shall be installed in accordance with the local electrical codes.
1. INSTALL JUNCTION BOX IN LINE DIAGRAM FOR MORE INFORMATION.

2. INSTALL CONDUIT AND CONTROL WIRING PER PROVIDED BY G.C. AND INSTALLED BY E.C.. MULLION MOUNT DOOR PUSH PAD. OPERATOR EXACT LOCATION WITH ARCHITECT.

3. LOCATION WITH ARCHITECT/OWNER PRIOR TO INSTALLED IN SHELVING, COORDINATE EXACT CONTROLLER FOR FUTURE CONTROL WIRE. CONDUIT FROM JUNCTION BOX TO FAN MANUFACTURER'S REQUIREMENTS.

4. OPERATOR MOTOR PER DOOR CONTROLLER. MEETING FOR ELECTRICAL DEVICES PRIOR TO INSTALLATION. STRUCTURE. FINAL ROUTING TO BE RECONCILED WITH ARCHITECT/OWNER PRIOR TO LAYERING.

5. INSTALL AWNINGS ON THE FOLLOWING EXTERIOR SIDE WALLS AS SPECIFIED ON PRECEDING SHEETS. MECHANICAL DRAWINGS FOR MORE WIRING.

6. ALL EXPOSED RECEPTACLE MOUNTED IN RECESSED TV BOX, ONE PORTABLE GENERATOR CABINET. REFER TO MECHANICAL DRAWINGS FOR MORE INSTALLATION.

7. 1" CONDUIT FROM BOX TO ABOVE THE JUNCTION BOX FOR ANSUL PULL STATION. REFER 2/E301 FOR MORE INFORMATION.

8. INSTALL DISCONNECT/STARTER, WIRED BY E.C.. DISCONNECT OR DISCONNECT,BUS BAR, RECEPTACLE MOUNTED IN RECESSED TV BOX, ONE PORTABLE GENERATOR CABINET. REFER TO MECHANICAL DRAWINGS FOR MORE INSTALLATION.

9. INSTALL DISCONNECT/STARTER, WIRED BY E.C.. DISCONNECT OR DISCONNECT,BUS BAR, RECEPTACLE MOUNTED IN RECESSED TV BOX, ONE PORTABLE GENERATOR CABINET. REFER TO MECHANICAL DRAWINGS FOR MORE INSTALLATION.

10. INSTALL DISCONNECT/STARTER, WIRED BY E.C.. DISCONNECT OR DISCONNECT,BUS BAR, RECEPTACLE MOUNTED IN RECESSED TV BOX, ONE PORTABLE GENERATOR CABINET. REFER TO MECHANICAL DRAWINGS FOR MORE INSTALLATION.

11. INSTALL JUNCTION BOX IN LINE DIAGRAM FOR MORE INFORMATION.
MEZZANINE PLAN - POWER

1. MANUFACTURER PROVIDE DISCONNECT/STARTER, WIRED BY E.C.

2. ALL EXPOSED CONDUIT SHALL RUN TIGHT TO STRUCTURE. FINAL ROUTING TO BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLATION.

3. E.C. SHALL CONDUCT A PRE-INSTALLATION MEETING FOR ELECTRICAL DEVICES PRIOR TO START OF ANY ELECTRICAL ROUGH INS.

4. SURFACE MOUNTED CONDUIT ON PRECAST SHALL BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLATION.

5. ALL EXPOSED WIRING AND ELECTRICAL MOUNTING MOUNT TO STRUCTURAL CONCRETE WALLS WITH 3/8" MOUNTING HOLE TO PERMANENTLY SECURE ELECTRICAL DEVICES.

6. EACU CLIMBING STRUCTURE TO SUPPORT ELECTRICAL DEVICES MUST BE UPDATED PRIOR TO INSTALLATION.

7. KEYNOTES:
   - SURFACE MOUNTED CONDUIT ON PRECAST SHALE BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLATION.
<table>
<thead>
<tr>
<th>NO.</th>
<th>LOAD DESCRIPTION</th>
<th>VOLTS</th>
<th>ID</th>
<th>COS</th>
<th>PHASE</th>
<th>PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GFCI CIRCUIT BREAKER</td>
<td>120/208 Wye</td>
<td>A</td>
<td>0.36</td>
<td>120</td>
<td>GFCI</td>
</tr>
<tr>
<td>2</td>
<td>ARC-FAULT CIRCUIT BREAKER</td>
<td>120/208 Wye</td>
<td>A</td>
<td>0.18</td>
<td>120</td>
<td>ST</td>
</tr>
<tr>
<td>3</td>
<td>RECEPTACLE</td>
<td>120/208 Wye</td>
<td>A</td>
<td>0.36</td>
<td>120</td>
<td>RECEPTACLE</td>
</tr>
<tr>
<td>4</td>
<td>RANGE, RM-110</td>
<td>120/208 Wye</td>
<td>A</td>
<td>0.36</td>
<td>120</td>
<td>RECEPTACLE</td>
</tr>
<tr>
<td>5</td>
<td>FIRE GEAR EXTRACTOR</td>
<td>120/208 Wye</td>
<td>A</td>
<td>1.15</td>
<td>120</td>
<td>FIRE GEAR</td>
</tr>
<tr>
<td>6</td>
<td>AIR COMP.</td>
<td>120/208 Wye</td>
<td>A</td>
<td>0.6</td>
<td>120</td>
<td>AIR COMP.</td>
</tr>
<tr>
<td>7</td>
<td>RECEPTACLE, RM-125</td>
<td>120/208 Wye</td>
<td>A</td>
<td>1.34</td>
<td>120</td>
<td>RECEPTACLE</td>
</tr>
<tr>
<td>8</td>
<td>SPARE</td>
<td>120/208 Wye</td>
<td>A</td>
<td>0</td>
<td>120</td>
<td>SPARE</td>
</tr>
</tbody>
</table>

**MOUNTING:** SURFACE SOLID NEUTRAL

**FED FROM:** DP-1 GROUND BUS

**LOCATION:** TURNOUT GEAR 128

**TYPE:** OVERCURRENT PROTECTION

**CONNECTED VOLTS:** 90.5 kVA

**SCCR:** 12.03 kVA

**DEMAND:** 38.52 kVA

**PROTECTION:** 55.6 kVA

**PANEL NAME:** P1

**ID A B C WIRE**

**REFERENCE SCALE IN INCHES**

**PROJECT #:** 10-2019-001

**ISSUANCE:** CONTRACT DOCUMENTS

**CONTRACT DOCUMENTS:**

**DES MOINES FIRE STATION NO. 11**

4150 E 41ST STREET

DES MOINES, IA 50312

**APPROVAL AND PARTICIPATION OF IMEG CORP.**

**PARTICIPATION OF SVPA ARCHITECTS INC.**

**REPRODUCTION IS PROHIBITED.**

**E500**

**ELECTRICAL SCHEDULES**

© 2019 IMEG CORP.
VARIABLE FREQUENCY DRIVE SCHEDULE

<table>
<thead>
<tr>
<th>UNIT</th>
<th>UNIT</th>
<th>UNIT</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIELD</td>
<td>FIELD</td>
<td>FIELD</td>
<td>FIELD</td>
</tr>
</tbody>
</table>

ASHRAE 90.1-2010

SEQUENCE DESCRIPTION:

LIGHTING CONTROL SEQUENCE DESCRIPTION:

TRANSFER SWITCH SCHEDULE

E - DISCONNECT AND STARTER SCHEDULE

NOTE: ALL DISCONNECTS (EXCEPT MANUAL STARTERS) SHALL BE HEAVY DUTY TYPE.
ALL LAMPS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.

COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS FOR DESIGN.

**DOOR:**

- **(MTG) MOUNTING:**
- **(Type) LAMP TECHNOLOGY:**
- **(L/L) LENS/LOUVER:**

- **F11A** SIMILAR TO F11 BUT, RECESSED IN DRYWALL CEILING . 96" 3.5" 4" NA RE 10
- **F4A** SIMILAR TO F4 BUT WITH A LOWER LUMEN PACKAGE
- **F10** ARCHITECTURAL PENDANT LUMINAIRE, IDEAL FOR
  - **CSA** - FINISH SELECTION BY ARCHITECT
  - **DIM10** - LINE DIMMING
  - **EM1** - EMERGENCY BALLAST/BALLAST
  - **PAF** - PAINT AFTER FABRICATION
  - **DIM07** - 0-10V DIMMING
  - **EB** - ELECTRONIC BALLAST / DRIVER
  - **RS** - REGRESSED
  - **FS** - FLAT STEEL
  - **WT** - EXTRUDED ALUMINUM LINE VOLTAGE
  - **F3** - HIGH BAY LED LUMINAIRE WITH WIDE DISTRIBUTION.
  - **F2** - LED STRIP LIGHT. 22 GAUGE STEEL HOUSING WITH
  - **PL** - POLE
  - **MH** - METAL HALIDE
  - **H** - WALL WASHER
  - **FR** - FLANGED RECESSED
  - **SMH** - SUPER METAL HALIDE
  - **P** - POLY CARBONATE

- **KITCHEN ISLAND. DIMMABLE. PROVIDE WITH ONE (1)
  - **SP** - CONTINUOUS RUNS UP TO 40'-0" MINIMUM. DIMMABLE.
  - **CONTROLLER AND DMX SIGNAL TO RGBW DECODER.
    - PROVIDE WITH DIITAL LED TOUCHSCREEN DMX

**LUMINAIRE SCHEDULE**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
</tbody>
</table>

**LUMINAIRE SCHEDULE - CONTINUED**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
<tr>
<td>LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
<td>ADVANCED LIGHTING TECHNOLOGIES</td>
</tr>
</tbody>
</table>

**S1A SITE LUMINAIRE, ALUMINUM DIE-CAST HOUSING, WHITE POWDER COAT, STEEL FRAME.**

- **LOCATION:**
- **LETTERS, UNIVERSAL ARROWS/MOUNTING, UL DAMP PLANS.**

**Exterior Exit Signs:**

- **EX1 EDGE-LIT SINGLE FACED EXIT SIGN, INJECTION MOLDED ACRYLIC MIRROR BACKGROUND AND CEILING MOUNTING AND ARROWS WITH PLANS.**
- **EX2 EDGE-LIT DOUBLE FACED EXIT SIGN, INJECTION MOLDED ACRYLIC MIRROR BACKGROUND AND CEILING MOUNTING AND ARROWS WITH PLANS.**
- **EX3 SINGLE-FACE EXIT SIGN, IMPACT RESISTANT, MOLDED ACRYLIC MIRROR BACKGROUND AND CEILING MOUNTING AND ARROWS WITH PLANS.**

**Emergency Exit Light:**

- **EM1 EMERGENCY UNIT, TWO ADJUSTABLE LED HEADS, PROVIDE WITH DIAGNOSTICS OF BATTERY AND LAMPS FINISH. TYPE V DISTRIBUTION. DIRECT LIGHT ONLY. IP LETTERS, UNIVERSAL ARROWS/MOUNTING, UL DAMP PLANS.**