<table>
<thead>
<tr>
<th>Drawing Number</th>
<th>Title</th>
<th>Nature of Change</th>
<th>Effective Date</th>
</tr>
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<tbody>
<tr>
<td>404.406B</td>
<td>Type XX-B-30'-0” Signal and Luminaire Pole (65' Thru 85' Mast Arms) (sheet 1 of 3), Type XX-B-30'-0” Signal and Luminaire Pole Details (65' Thru 85' Mast Arms) (sheet 2 of 3), and Loading Information (sheet 3 of 3)</td>
<td>Addition for use with Type M foundations.</td>
<td>01/01/06</td>
</tr>
<tr>
<td>404.412</td>
<td>School Sign Pole Type XX-A</td>
<td>Revision to Drawing No. 404.412, “School Sign Pole Type XX-30’ ” has had its title changed to “School Sign Pole Type XX-A”.</td>
<td>01/01/06</td>
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<tr>
<td>404.417</td>
<td>Street Name Sign Internally Illuminated</td>
<td>Revised to change the Gauge of the polycarbonate clear substrate panel from 0.060” to 0.1875”</td>
<td>7/1/2006</td>
</tr>
<tr>
<td>404.417A</td>
<td>Alternative Street Name Sign Internally Illuminated (sheet 1 of 3), Alternative Pole Mounted Street Name Sign Internally Illuminated Attachment Detail (sheet 2 of 3), and Alternative Pole Mounted Street Name Sign Internally Illuminated Bracket Detail (sheet 3 of 3)</td>
<td>Addition to allow the use of an alternate flag mount bracket.</td>
<td>01/01/06</td>
</tr>
</tbody>
</table>
LUMINAIRE ARM DATA

<table>
<thead>
<tr>
<th>ARM SPAN (FT)</th>
<th>FIXED END DIA. (IN)</th>
<th>FREE END DIA. (IN)</th>
<th>GAUGE</th>
<th>LUMINAIRE MOUNTING HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3.42</td>
<td>2.36</td>
<td>11</td>
<td>32'-0&quot;</td>
</tr>
<tr>
<td>8</td>
<td>3.75</td>
<td>2.36</td>
<td>11</td>
<td>33'-5&quot;</td>
</tr>
<tr>
<td>10</td>
<td>4.15</td>
<td>2.36</td>
<td>11</td>
<td>35'-0&quot;</td>
</tr>
<tr>
<td>12</td>
<td>4.52</td>
<td>2.36</td>
<td>11</td>
<td>36'-6&quot;</td>
</tr>
<tr>
<td>15</td>
<td>4.85</td>
<td>2.36</td>
<td>11</td>
<td>37'-0&quot;</td>
</tr>
</tbody>
</table>

REMOVABLE ARM END CAP

LENGTH "L" SEE SIGNAL PLANS OR CONTRACT

LENGTH "T" SEE SIGNAL PLANS OR CONTRACT

TAPEAR MAST ARM

LENGTH "T2" SEE SIGNAL PLANS OR CONTRACT

TENON LOCATIONS SHALL BE REFERRED TO THE LOADING INFORMATION STANDARD DRAWING 404.408S SHEET 3 OF 3

NOTES:

1. LOW BIDDER MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL BEFORE CONTRACT CAN BE AWARDED.

2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.

3. HANDHOLE COVERS SHALL BE ATTACHED VIA TWO SCREWS INTO PLATES MOUNTED INSIDE THE HANDHOLE.

4. PEDESTRIAN PUSH BUTTON SHALL NOT BE LOCATED MORE THAN 24" FROM THE BACK OF WALK. IF DISTANCE FROM BACK OF WALK TO PUSH BUTTON IS 20" TO 24", THE BUTTON SHALL BE LOCATED A MAXIMUM OF 42" FROM THE SURFACE OF THE WALK.

5. WHERE SIGNALS AND STANDARDS ARE INSTALLED BELOW OVERHEAD POWER LINES, CLEARANCES SHALL BE PER NATIONAL ELECTRIC SAFETY CODE SECTION 254 REQUIREMENTS. INSTALLATION OF STRAIGHT ARM STREETLIGHT ASSEMBLIES WHERE ADDITIONAL CLEARANCE IS REQUIRED SHALL BE APPROVED BY THE ENGINEER.

6. IF DUAL LUMINAIRE ARMS ARE NOT SPECIFIED IN THE PLANS, THE SECOND CONNECTION POINT SHALL BE COVERED BY A COVER PLATE UNTIL SUCH TIME AS A SECOND ARM MIGHT BE ADDED.


UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE XX - B - 30'-0" SIGNAL & LUMINAIRE POLE (65' THRU 85' MAST ARMS)

DATE 11/10/05 DWG. NO. 404.408S SHEET 1 OF 3
### Mast Arm Connection Detail

1. **Bolts:** 3-EA. 3/4"x1-3/4" A325-X
2. **Wire Entry:** 2" dia. Wire entry with root edges
3. **Thickness:** 3/4" THK. Top Bottom & side gussets

### Luminaire Arm Connection Detail

- **Base Thickness:** 2-1/4"
- **Bolt Circle:** 25" dia.
- **Diameter:** 25.2 sq.
- **Handhole and Cover:** 6" x 9" (inside diam)

### Pole Mounting Detail

- **Square Nut for Ground:** 1/2" NC.
- **Anchor Bolts:** 2-1/4" x 93/4 x 9" Bolt
- **Hot-Dip Galv. Anchor Bolts:** 3/2 Hot-Dip Galv. Hex Nuts & Washers Per Bolt

### Specification Reference

<table>
<thead>
<tr>
<th>Uniform Standard Drawings</th>
<th>Clark County Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type XX - B - 30'-0&quot;</strong></td>
<td>(65' thru 85' Mast Arms)</td>
</tr>
<tr>
<td><strong>Signal &amp; Luminaire Pole Details</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Date:** 11/10/05 **DWG. No.:** 404.406B **Sheet 2 of 3**
**TYPE XX-B**

**Alternate Sign Installation**

- 65' thru 85' spans
- Alternate loading

**NOTE:**
- Type XX-B pole shall also support the alternate loading shown above.

**Max. 85' span**

<table>
<thead>
<tr>
<th>Device</th>
<th>Description</th>
<th>Proj. Area (ft²)</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Signal 12'-3 sec. w/ backplates (H-2)</td>
<td>9.80</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>Sign R8-5 24&quot; x 30&quot;</td>
<td>5.00</td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>Sign R8-4 24&quot; x 24&quot;</td>
<td>4.00</td>
<td>10</td>
</tr>
<tr>
<td>D</td>
<td>Signal 12'-6 sec. w/ backplates</td>
<td>13.88</td>
<td>80</td>
</tr>
<tr>
<td>E</td>
<td>Signal R10-6/48(8) 24&quot; x 36&quot;</td>
<td>0.00</td>
<td>15</td>
</tr>
<tr>
<td>F</td>
<td>Sign Street Name-Free Swinging-16' X 6'</td>
<td>13.44</td>
<td>100</td>
</tr>
<tr>
<td>G</td>
<td>Signal Dual-12'-3 sec. w/ backplates</td>
<td>17.34</td>
<td>80</td>
</tr>
<tr>
<td>H</td>
<td>Signal Dual-Pedestrian</td>
<td>0.80</td>
<td>60</td>
</tr>
</tbody>
</table>

**Design Criteria:**

- AASHTO STANDARD SPECIFICATIONS (1994 edition) for structural supports for highway signs, luminaires, and traffic signals.
- Design minimum yield strength for tubular members shall be limited to 46,000 psi for cold worked materials and 20,000 psi for non-cold worked materials.

**Wind Velocity:**
- 80 MPH ISOTACH
NOTES:

1. LOW BIDDER MUST SUPPLY SHOP DRAWING FOR
   DESIGN APPROVAL BEFORE CONTRACT CAN BE
   AWARDED.

2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER
   OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED
   BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED
   BY THE ENTITY.


4. HANDHOLE COVERS SHALL BE MOUNTED WITH
   TAMPER-RESISTANT SCREWS.

5. SCHOOL SIGN SHALL BE MOUNTED AS SHOWN IN
   STANDARD DRAWING NO. 404.410

6. REFER TO DRAWING NO. 404.407 SHEET 1 OF 2
   IF XX-20 POLE IS REQUIRED.

   FOR 1'-8" FOUNDATION
   DRAWINGS NO. 404.208

   IN THE CITY OF NORTH LAS VEGAS, USE ONLY XX-A POLE DWG. 406.406 HNT 3 & 6
   FOR 1'-8" FOUNDATION SEE DWG. 404.208

SPECIFICATION REFERENCE

CLARK COUNTY AREA

SCHOOL SIGN POLE
TYPE XX-A

DATE 06/11/05 | DWG. NO. 404.412 | SHEET 1 OF 1
NOTES:
1. SIGN SHALL BE DOUBLE FACED.
2. SIGN PANEL SHALL BE WHITE WIDE-ANGLE PRISMATIC TRANSLUCENT CLASS 6 REFLECTIVE SHEETING, EITHER REVERSE-SCREENED WITH MANUFACTURER'S RECOMMENDED GREEN INK AND CLEAR COATING OR OVERLayed WITH GREEN ELECTRONIC CUTABLE TRANSPARENT OVERLAY FILM, APPLIED TO A POLYCARBONATE CLEAR SUBSTRATE, 0.0175" THICK.
3. LETTERS SHALL BE 8" SERIES E AND, UNLESS OTHERWISE SPECIFIED BY THE TRAFFIC ENGINEER, SHALL BE ALL UPPERCASE WITH NO STREET NAME SUFFIX. IF NECESSARY TO MAKE SPACING FIT, REDUCE TO 6" SERIES D.
4. SPACING BETWEEN LETTERS MAY BE INCREASED BY UP TO 28% (MAX) TO ACHIEVE 4" END SPACES.
5. APPROVAL OF SHOP DRAWING OF SIGNFACE LAYOUT BY TRAFFIC ENGINEER IS REQUIRED PRIOR TO FABRICATION OF SIGN PANELS.
6. SHEETING SHALL BE APPLIED IN A VERTICAL ORIENTATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
7. ADVANCE BALLAST RSM476STP FOR EACH FLUORESCENT TUBE IS REQUIRED AND NO SUBSTITUTES.

SPECIFICATION REFERENCE

| UNIFORM STANDARD DRAWINGS               |
| CLARK COUNTY AREA                      |
| STREET NAME SIGN                      |
| INTERNALLY ILLUMINATED                |

DATE 3-9-06 DWG. NO. 404.417 SHEET 1 OF 1
NOTES:
1. SIGN SHALL BE DOUBLE FACED.
2. ALUMINUM EXTRUSION CABINET 12" DEEP - MILL FINISH WITH ALL ALUMINUM INTERNAL STRUCTURE.
3. TOP-HINGED RETAINER SYSTEM WITH PROP ROD FOR ACCESS AND SERVICE.
4. T52 800MA CWHO FLUORESCENT ILLUMINATION INTERNALLY.
5. SIGN PANEL SHALL BE WHITE WIDE-ANGLE PRISMATIC TRANSLUCENT REFLECTIVE SHEETING, EITHER REVERSE-ScreenED WITH MANUFACTURER'S RECOMMENDED GREEN INK AND CLEAR COATING OR OVERLAYED WITH GREEN ELECTRONIC CUTTABLE TRANSPARENT OVERLAY FILM, APPLIED TO A POLYCARBONATE CLEAR SUBSTRATE, 0.077" THICK.
6. LETTERS SHALL BE 8" SERIES E AND UNLESS OTHERWISE SPECIFIED BY THE TRAFFIC ENGINEER, SHALL BE ALL UPPERCASE WITH NO STREET NAME SUFFIX. IF NECESSARY TO MAKE SPACING FIT, REDUCE TO 8" SERIES D. SPACING BETWEEN LETTERS MAY BE INCREASED BY UP TO 25% (MAX) TO ACHIEVE 4" END SPACES.
7. STEEL BRACKETS SHALL BE USED FOR FLAG MOUNT POLE ATTACHMENT.
8. THE USE OF THE POLE MOUNTED STREET NAME SIGN SHALL BE APPROVED BY THE ENTITY ENGINEER.
INSTALLATION INSTRUCTIONS

* ATTACH BRACKETS ① TO CABINET END AT TOP AND BOTTOM WITH BOLTS PROVIDED LOOSELY TIGHTEN BOLTS (SNUG).

* LIFT CABINET WITH BRACKETS TO POLE AT FINISHED HEIGHT USING A NYLON LIFTING STRAP NEAR THE BRACKETS (WHERE BALANCED).

* ATTACH BRACKET HALVES ② TOGETHER AROUND POLE WITH PROVIDED HARDWARE AS SHOWN.

* MOVE LIFTING STRAP TO CENTER OF CABINET & LEVEL THEN TIGHTEN BOLTS INTO CABINET.

* ATTACH SET SCREWS ③ THROUGH BRACKET INTO POLE AS SHOWN.

* HOOK UP ELECTRICAL CONNECTION (SEE PAGE 2 FOR AN EXAMPLE)

WIRING RECOMMENDATIONS

* LOCATE & DRILL A 3/4" DIA. HOLE ④ THRU POLE. THREAD HOLE WITH 1/2" PIPE THREAD TAP.

* PULL WIRES FROM GROUND THRU TAPPED HOLE GUIDE WIRES TO AVOID SCRAPING INSULATION.

*ASSEMBLE LIQUID TIGHT 1/2" CONDUIT ⑤ & FITTINGS ⑥ TO CONNECT POLE TO CABINET.

* FEED WIRES THRU CONDUIT & INTO CABINET, USE A 2 X 4 HANDY BOX INSIDE OF CABINET TO FACILITATE WIRE PULLING.

* AFTER FEEDING WIRES, THEN THREAD FITTINGS INTO THREADED HOLE IN POLE & CABINET.

* WIRE BALLAST INSIDE CABINET AS REQ'D:

NOTE: THE STREET NAME SIGN SHALL BE MOUNTED 18" ABOVE THE MAST ARM

<table>
<thead>
<tr>
<th>SPECIFICATION REFERENCE</th>
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<table>
<thead>
<tr>
<th>UNIFORM STANDARD DRAWINGS</th>
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<tr>
<td>CLARK COUNTY AREA</td>
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</table>

| ALTERNATIVE POLE MOUNTED STREET NAME SIGN INTERNALLY ILLUMINATED BRACKET DETAIL |

DATE 11/10/05  DWG. NO. 404.417A  SHEET 3 OF 3