TRAFFIC STANDARD DETAILS INDEX

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MATRIX DETECTION MOUNTING DETAIL (SIDE OF PIER MOUNT)

MATRIX DETECTION MOUNTING DETAIL (MAST ARM MOUNT)

MATRIX DETECTION SYSTEM

RADAR DETECTION SYSTEM

NOTE:
1. MOUNT DETECTION UNIT COVER OF THE DESIGNER LONG using three 6' HEAT.
2. APPLY BONDING ELECTRIC CABLES WITH THE MASS UNIT OF THE設計 UNIT.
3. ORIENT DETECTION UNIT COVER WITH NO CONNECTIONS. 6' HEAT CABLE UNIT SHOULD BE PARALLEL TO THE MOUNT SURFACE.

PARK DETCTOR DETAILS

LOOP DETECTOR DETAILS

LOOP PAVEMENT JOINT DETAIL

LOOPS DETECTORS

NOTE:
1. MOUNT DETECTOR MOUNT COVER OF THE DESIGNER LONG USING THREE 6' HEAT.
2. APPLY BONDING CABLES WITH THE DESIGNER LONG UNIT OF THE DESIGN UNIT.
3. ORIENT DETECTOR MOUNT COVER WITH NO CONNECTIONS. 6' HEAT CABLE UNIT SHOULD BE PARALLEL TO THE MOUNT SURFACE.

CITY OF OLA THE

PUBLIC WORKS / TRAFFIC DIVISION

OATHTHE, KANSAS 66061

NO SCALE
METER PEDESTAL FOR STREET LIGHT INSTALLATIONS (WHERE NECESSARY)

NOTES:
1. 100 HP AFC 1 PHASE 60 HZ 3-WIRE
2. MATERIALS MUST BE APPROVED BY CITY OF CLEAVAN STREET LIGHT SUPERVISION PRIOR TO METER PEDESTAL INSTALLATION
3. CONNECTIONS MUST BE MADE DURING SHIPMENT TO AVOID ALL CONNECTING NOODS TO EXISTING

CIRCUIT DIRECTORY

<table>
<thead>
<tr>
<th>CIRCUIT</th>
<th>DESCRIPTION</th>
<th>AMPERAGE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 FD</td>
<td>STREETLIGHT</td>
<td>35 K</td>
<td></td>
</tr>
</tbody>
</table>

SERVICE TO STREET LIGHT CONTROL CABINET

NOTES:
1. METER PEDESTALS SHALL BE USED FOR INSTALLATIONS WHERE THE SOURCE OF POWER IS MORE THAN TWENTY (20) FEET FROM THE STREET LIGHT CONTROL CABINET.
2. POLES CURRENT POWER COMPANY SPEC.
3. IN THE EVENT THAT EXISTING SERVICE CABLES MUST BE PRODUCED AND INSTALLED BY THE CONTRACTOR, THE SERVICE CABLE SHALL HAVE AN IMPACT HAVING NOT LESS THAN 10 PERCENT OF THE MAXIMUM RATING OF THE CONTROL CENTER.

CONCRETE FOUNDATION FOR METER PEDESTAL

NOTES:
1. BASE SHALL BE GRADED AND MEETING THE REQUIREMENTS OF SUBSECTION 40 IN THE STANDARD SPECIFICATIONS FOR STATE ROAD AND STREET CONSTRUCTION, KANSAS DEPARTMENT OF TRANSPORTATION.
2. PROVIDE (2) GROUND ROADS AS REQUIRED BY NEC TO GROUND.
3. PROVIDE (3) GROUND ROADS TO PROVIDE DRY WORKING AREA IN FRONT OF METER PEDESTAL.
4. FOUNDATION MUST BE ACCEPTED BY STREETLIGHT INSPECTOR PRIOR TO PourING CONCRETE.
GENERAL NOTES:
1. ALL POLES, ARMS, AND MISCELLANEOUS EQUIPMENT SHALL CONFORM TO THESE DETAILS AND AS SPECIFIED IN THE LATEST EDITION OF THE STREET LIGHTING SPECIFICATION. THE POLES AND ARMS SHALL BE DESIGNATED TO ENSURE INTERCHANGEABILITY.

2. THE ALUMINUM LIGHTING STANDARD INCLUDING ACCOMMODATION WITH LUMINAIRES PROPERLY INSTALLED SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND THEIR DETAILS.

3. THE INTENT OF THESE MATERIAL RESTRICTIONS IS TO PROVIDE INTERCHANGEABILITY OF BOTH TYPES OF LUMINAIRES ARMS FOR MOUNTING ON EITHER THE 50" OR 40" POLE.

4. ANCHOR BOLTS/THREADED STUDS SHALL RESIST ABOVE THE FOUNDATION AS PER MANUFACTURER'S RECOMMENDED PRACTICES — 2 3/8" TO 3 1/2".

TABLE 1 - LUMINAIRES ARM, POLE, SHOE BASE & ANCHOR BOLT DATA
**Screw-In Pole Foundation**

**CS-300 Frangible Base (OL301, OL302, OL303, OL401, OL402 Poles)**

**CS-370 Frangible Base (OL403 Pole)**

**Material Data**

<table>
<thead>
<tr>
<th>Component</th>
<th>Aluminum Alloy designation</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Down Bar</td>
<td>6061-T6, T66666, or T6</td>
<td>ASTM 6061 or BS11</td>
</tr>
<tr>
<td>Bolt Covers</td>
<td>6061-T6, T66666, or T6</td>
<td>ASTM 6061 or BS11</td>
</tr>
<tr>
<td>Polycast</td>
<td>6063-T5, T66666, or T6</td>
<td>ASTM 6063 or BS11</td>
</tr>
<tr>
<td>Ground Stud</td>
<td>6063-T5, T66666, or T6</td>
<td>ASTM 6063 or BS11</td>
</tr>
<tr>
<td>Anchorage Device</td>
<td>6061-T6 or 6063-T6, Enlarged</td>
<td>ASTM 6061 or BS11</td>
</tr>
<tr>
<td>anchor</td>
<td>6061-T6 or 6063-T6, Enlarged</td>
<td>ASTM 6061 or BS11</td>
</tr>
</tbody>
</table>

**Notes:**
1. Pole shaft shall have a 3/8 x 24 ground thread unless otherwise specified by the Engineer.
2. All hardware (screw, nuts, washers) but not including anchor bolts shall be corrosion-resistant specified in the specifications on other details shall be of aluminum or 300-series passivated stainless steel.
3. Use with 80/20 or equivalent material. 

---

**Additional Notes:**
- Pole shaft shall have a 3/8 x 24 ground thread unless otherwise specified by the Engineer.
- All hardware (screw, nuts, washers) but not including anchor bolts shall be corrosion-resistant specified in the specifications on other details shall be of aluminum or 300-series passivated stainless steel.
- Use with 80/20 or equivalent material.
and panelboard items may be rejected.

shall be furnished to the Contractor.

are applicable to the Contractor.

to the Contractor.

circumferential reports

to the Contractor.

(3) A polished and major observations prior to acceptance by the City Engineer. All manifestations observed or recorded shall be kept for the test period as of the time of the inspection, and the test period shall remain in effect until all operations are satisfactorily completed.

BONDING

shall submit a performance and maintenance bond on all projects before beginning construction. The amount of the bond shall be for the full amount of the project and shall remain in effect for a period of two years (2) after the date of completion and acceptance by the City Council.

MAINTENANCE

Acting as a (2) years from the date of project acceptance by the City, the Contractor shall check all involved equipment that has been installed and tested such as parts that were delivered over (10) days after the approval of the project. Such inspections shall be carried out within thirty (30) days after the submission of work and before any acceptance, by the City Engineer, the material involved. Any observation or finding shall be made by the City Engineer, for any repairs or corrections required by the Contractor, at their own expense.

All appointments shall be located as shown on the plans. Any deviations must be approved by the City Engineer.

The Contractor shall have a signed copy of the plans and specifications at the job location at all times.

Poles shall be in accordance to the approved pre-issued plan drawing for the work. Any changes, especially location and depth of utilities, shall be provided in Advance pdf format.

The Contractor shall submit an “as-built” or corrected plan drawing for all construction changes.

The approval and use of alternate methods as per the projects and specifications at the job location for future bids for govern the work to be done. Any deviations must be approved by the City Engineer.

In the absence of specifications, the utilities listed shall be in accordance to the City of Olathe Approved Material List. The Contractor shall then be furnished from the pre-approved list for any proposed work and submit to the City for approval.

The Engineer shall immediately and permanently removed from the project site by the Contractor. Work shall be commenced and continued at such points as may be approved by the City Engineer and the Contractor shall be held liable for any damage arising from his negligence to protect existing utilities.

The Engineer shall have a set of plans signed by the City Engineer before the commencement of any work, which will authorize the Contractor to work within the right-of-way.

The City Engineer shall notify the City Engineer (1) days before beginning work on the project. The Contractor shall provide the City Engineer weekly, or more frequent as requested, written progress reports with completed closeout details. The City Engineer may require any work completed without inspection to be dismantled for inspection and reinstalled as required.

Protection and Clean-Up

The Contractor shall clean up the site, at all times, after final completion and acceptance by the City Engineer. The Contractor will be responsible for all clean-up required by the City Engineer. The Contractor shall remove all surplus material and rubbish from the work site as it is accomplished and before the condemning the Contractor for the acceptance of the work.

Traffic Control

All traffic control shall be in accordance with the General Provisions of the City of Olathe Technical Specifications and Design Criteria, for Public Improvement Projects.

TUBING

All electrical tubing shall be in accordance with the National Electrical Manufacturers Association (NEMA), except where otherwise approved by the City Engineer. All requirements shall be in accordance to Metropolitan Area Standards (M.A.S.), the National Electrical Manufacturers Association (A.S.A.), the Electrical Contractors' Association (E.C.A.), and all local ordinances.

The approved plan and applicable codes adopted at the time of advertising for future bids for govern the work to be done. Any deviations must be approved by the City Engineer.

The design specifications for all items, whether above, or below the ground, shall be responsible for all and any damage arising from his negligence to protect existing utilities.

No new features shall be constructed which is in conflict with any existing utility facilities or the approved plans unless otherwise approved by the City Engineer.

PERMITS

The Engineer shall have a set of plans signed by the City Engineer before the commencement of any work, which will authorize the Contractor to work within the right-of-way.

NOTIFICATION

The Engineer shall notify the City Engineer (1) days before beginning work on the project. The Contractor shall provide the City Engineer weekly, or more frequent as requested, written progress reports with completed closeout details. The City Engineer may require any work completed without inspection to be dismantled for inspection and reinstalled as required.

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Traffic Control

All traffic control shall be in accordance with the General Provisions of the City of Olathe Technical Specifications and Design Criteria, for Public Improvement Projects.
ENCOURAGEMENT. The contractor shall perform all excavations for installing underground conduits, cable, boxes, and pipe to the depths indicated in the drawings unless otherwise approved by the City Engineer. Elevations of such excavations shall be computed in accordance with Section 4000. All excavated materials not required or unassimilable for backfill shall be removed from the site by Contractor.

BACKFILLING. Above-ground improvements shall be backfilled and compacted in accordance with the City of Olarte Technical Specifications and Design Criteria for Public Improvement Projects, Section 4000.

SODDING. Sodding shall be installed in accordance with the City of Olarte Technical Specifications and Design Criteria for Public Improvement Projects, Section 7200.

REPLACING DAMAGED IMPROVEMENTS. Improvements such as sidewalks, curbs, gutters, Portland cement concrete and asphaltic concrete pavements, concrete curbing base material and any other improvements removed, broken or damaged by Contractor shall be replaced or reconstructed together with the same kind of materials as found on site or with materials of equal quality. The replaced improvements shall be left in a serviceable condition satisfactory to the City Engineer. Whenever a part of a slab or slab of existing concrete sidewalks, driveways or pavements is damaged, the entire surface or slab shall be removed and replaced at the Contractor's expense.

FOUNDATION ANCHORS. Foundation anchors shall be in accordance with the Standard Details. The anchors shall be screwed into the ground pre-drilling holes for the anchor shall not be permitted. During installation, the foundation shall be plumbed with a level and the base plane shall be level.

MEASURING ADJUSTMENTS. Every adjustment on poles shall be made with the use of leveling poles or waterboxes. Shims and washers shall be galvanized or stainless steel shims no more than 1/8-inch thick. Only one (1) shim or washer shall be allowed at any one anchor bolt, with a minimum of two (2) on any pole.

If installation of a screw-in foundation anchor is not feasible for any reason, concrete foundations shall be installed at Contractor's expense.

CONCRETE FOUNDATIONS. The bottom of the concrete foundations shall rest on firm ground, and foundations shall be poured monolithically. The exposed portions shall be finished and finished to present a neat appearance and neat and even surface. Concreting base material and other improvements removed, broken or damaged may be used as aggregate in the concrete or shall be placed and compacted unless directed by City Engineer. Forms shall be rigid and securely braced in place. Concrete units and anchor bolts shall be placed in proper positions in proper heights, and held in place by means of means until the concrete sets. Anchor bolts shall be provided with lock nut, washer and nut. The forms and ground which will contact the concrete shall be thoroughly cleaned before placing concrete.

Concrete for pole base and center foundation shall be KDOT Grade 4-A 40. Concrete shall not be placed until forms and reinforcement has been approved by the City Engineer. Placement of concrete shall be inspected by the City Engineer during construction.

Concrete poles bases shall be composed by an intercrete failure. The concrete shall contain at frequencies of not less than 0.30 cycles per minute under load. The amplitude of vibration shall be adequate to properly consolidate concrete. The concrete shall be cured with an approved curing compound and maintained for a minimum of seventy-two (72) hours or until the concrete is at least thirty-six (36) inches below bottom of the foundation. The concrete shall be properly protected from weathering and the concrete temperature shall be maintained above freezing for the entire curing period. Forms shall be removed until the concrete is thoroughly set.

Concrete center foundation shall have four (4) conduits for exiting cable. The direction of the existing conduit and the orientation of the center conduit shall be determined by the City Engineer.

CONDUIT. The conduit shall be of a rigid type conforming to the provisions and dimensions specified in the approved Plans and Specifications. Conduits shall be of approved materials. Asbestos cement conduits shall not be used. All street lighting cable shall be installed in (2) inch Schedule 40 HDPE except (2) Schedule 40 PVC may be used for the excepting 80% diameter of the conduit. Where conduits connect from one direction, they shall terminate in a Type II junction box in accordance with the Standard Details. Conduits shall be of a rigid type conforming to the provisions and dimensions specified in the approved Plans and Specifications. Conduits shall be of approved materials. Asbestos cement conduits shall not be used. All street lighting cable shall be installed in (2) inch Schedule 40 HDPE except (2) Schedule 40 PVC may be used for the excepting 80% diameter of the conduit. Where conduits connect from one direction, they shall terminate in a Type II junction box in accordance with the Standard Details. Conduits shall be of a rigid type conforming to the provisions and dimensions specified in the approved Plans and Specifications. Conduits shall be of approved materials. Asbestos cement conduits shall not be used. All street lighting cable shall be installed in (2) inch Schedule 40 HDPE except (2) Schedule 40 PVC may be used for the excepting 80% diameter of the conduit. Where conduits connect from one direction, they shall terminate in a Type II junction box in accordance with the Standard Details. Conduits shall be of a rigid type conforming to the provisions and dimensions specified in the approved Plans and Specifications. Conduits shall be of approved materials. Asbestos cement conduits shall not be used. All street lighting cable shall be installed in (2) inch Schedule 40 HDPE except (2) Schedule 40 PVC may be used for the excepting 80% diameter of the conduit. Where conduits connect from one direction, they shall terminate in a Type II junction box in accordance with the Standard Details.

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All joints in PVC conduit shall be glued. HDPE in PVC adapters shall be used to connect HDPE and PVC connectors. Conduits shall be installed vertically approximately (2) inches above ground level. Conduit shall be installed 30 feet from the edge of any project of property. Excessive use of water shall not be permitted. Conduits shall not be standard basis shall contain vertically approximately (2) inches above the foundation. Conduit entering the bottom of a junction box shall be located not more than 24 inches from the inside face of the wall. Conduit entering the bottom of a junction box shall be located not more than 24 inches from the inside face of the wall. Conduit entering the bottom of a junction box shall be located not more than 24 inches from the inside face of the wall. Conduit entering the bottom of a junction box shall be located not more than 24 inches from the inside face of the wall. Conduit entering the bottom of a junction box shall be located not more than 24 inches from the inside face of the wall.

Conduits entering junction boxes shall be continuous into the box, and conduit elbows shall be provided to bring the conduit up into the box. Wherever the end of a conduit is within five (5) feet of another conduit or junction or service box, the conduit shall be made continuous between the conduits or into the box.

Existing underground conduit to be incorporated into a new system shall be cleaned with a standard or fume wet or with compressed air.

The location of conduit not shown on the plans is for bidding purposes only and may be changed with permission of City Engineer to avoid underground obstructions.

SERVICE AND JUNCTION BOXES. Service and junction boxes shall be installed at the locations shown on the plans in accordance with the Standard Details. The Contractor may install, at his own expense, additional boxes with written approval from the City Engineer.

Service box and junction boxes shall be installed on eighteen (18) inches and eight (8) inches of KDOT PB-2 aggregate, respectively, as shown on the plans or as directed by the City Engineer. Boxes shall be installed so that the service is level with the earth on subgrade level, or with the level surrounding ground when no grade is established.

WIRING. WIRING of light poles shall be permitted. WIRING of light poles shall be permitted. Wiring of light poles shall be permitted. WIRING of light poles shall be permitted. WIRING of light poles shall be permitted.

All splices in junction boxes and service boxes shall be made with appropriate water tight splice connectors in accordance with the Standard Details.

One foot of each shall be left at each control, junction boxes and service boxes for exiting and connecting wires. Wiring within boxes shall be neatly arranged and labeled. Wires shall be color-coded (Black-hot, green-ground) and circuits permanently identified in accordance with the approved plans.

All splices in light pole boxes shall be made with multiple tap molded connectors. The Contractor shall install insulated fused disconnectors in each pole box. Fuseblocks in (3) boxes shall be installed. Fuses shall be KTH, or approved equal, high interrupting fuse. Eight (8) fuses shall be used in poles with luminaries and fuses (8) one fuse shall be used in the pole box. The multiple tap connectors and fuseblocks shall be installed convenient to the handhole or base of the pole. One (1) fuse or supplying cable shall be cooled in the base of the multiple tap connector. Between the multiple tap connector and the fused disconnect, and on the load side of the fused disconnect. The approved connectors for the ground shall be installed with the feminine end of the connector on the line side.

Luminaires not equipped with terminal blocks shall be connected to the pole and bracket cable with the appropriate wire nut connections.

EIGHTEEN. EIGHTEEN. EIGHTEEN. EIGHTEEN. EIGHTEEN.

LOCATION. LOCATION. LOCATION. LOCATION. LOCATION.

All equipment shall be mounted on the plans, or otherwise approved by the City Engineer, equipment shall be located as follows:

A. Cable shall be kept a minimum of two (2) feet and a maximum of four (4) feet behind the back of vehicle.

B. Street light poles shall be installed on property lines at a distance of three (3) feet, plus or minus one (1) feet, behind the back of vehicle.

C. Junction boxes shall be installed a minimum of two (2) feet and a maximum of four (4) feet behind the back of vehicle and not closer than two (2) feet to any street light pole.

D. Control centers shall be located adjacent to the sidewalk or a minimum of five (5) feet and a maximum of six (6) feet behind the back of of ear- or sidewalk.

The street lights shall be installed and accepted prior to issuance of any occupancy permits.
<table>
<thead>
<tr>
<th>LOCATION OF PROJECT</th>
<th>6&quot; Solid</th>
<th>4&quot; Solid</th>
<th>8&quot; Broken</th>
<th>4&quot; Broken</th>
<th>6&quot; Solid</th>
<th>10&quot; Solid</th>
<th>12&quot; Solid</th>
<th>18&quot; Solid</th>
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<th>Right</th>
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<tbody>
<tr>
<td>Lane Line</td>
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<td></td>
</tr>
</tbody>
</table>

**Pavement Marking Notes:**

1. All pavement markings shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. All turn arrows and legends shall be centered in their respective traffic lanes.
3. All markings and symbols shall conform to the latest edition of "Standard Alphabets for Highway Signs and Pavement Markings" printed by the U.S. Department of Transportation, Federal Highway Administration.
4. Pavement markings, either temporary or permanent, are required at all times if the roadway is open to traffic.
5. All markings that conflict with the desired markings shall be completely removed. (See specifications)
6. All markings remaining parallel with debris or asphalt shall be offset as far as possible from the debris.
7. City of Olathe Traffic Division shall be notified at least 14 days prior to the as-paving or removal of any markings being performed. (Contact: 913-917-2640 or 913-922-3492).
GENERAL NOTES:

1. An approved right-of-way permit is required for all work performed within the City of Olathé right-of-way.

2. Notify traffic operations of any work within the right-of-way at 913-431-3100. 24-hour notice is required if traffic signals are to be modified as part of traffic control.

3. Unless otherwise approved, on an arterial roadway there will be no lane closures from 6:00 to 8:00 AM and from 4:00 to 6:00 PM.

4. All devices, their installation, and maintenance shall conform with the 2002 edition of the Manual on Uniform Traffic Control Devices (MUTCD).

5. Traffic control devices shall be painted green.

6. All workers shall wear high visibility apparel meeting AASHTO Class 2 for daytime and Class 3 for nighttime.

7. The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction and designs. In no way do the requirements shown on the plans relieve the contractors of their responsibility for selecting the proper traffic control devices. Any additional quantities of traffic control devices necessary to complete the contract or as ordered by the Engineer shall be considered supplementary to the contract lump sum price.

8. If the plans do not include a traffic control plan, or should the contractor desire to change the plan, a specific traffic handling plan through the construction area shall be submitted by the contractor and approved by the City of Olathé.

9. Sheet metal shall be as per contract standards. All signs shall be retroreflective with a material that has a smooth, sealed outer surface. Where the color orange is required, the fluorescent orange color shall be used. All orange signs shall have fluorescent orange, Type I, Sheeting. All other signs have Type III Sheeting of standard colors. The white stripes on channelizers shall be Type I Sheeting. The orange stripes shall be Type III Sheeting. The entire area of barricades shall be Type III Sheeting. The white stripes on curb panels shall be Type III Sheeting. The entire area of vertical panels, both front and back, shall have Type II Sheeting.

10. Unless otherwise noted, all traffic control devices shall be provided and maintained by the contractor.

DETOUR SIGNING STREET
CONSTRUCTION IN A STREET GRID

STREET NAME SIGN (N=1 through N=9) TO BE PLACED ABOVE THE DETOUR SIGN (N=10) TO INDICATE THE NAME OF THE ROADWAY FOR WHICH THE DETOUR HAS BEEN ESTABLISHED.

FORMULAS FOR DETERMINING TAPER LENGTH

\[
\text{TAPER LENGTH (ALL FEET) = } \frac{L}{60} \times \frac{W}{60} \times \frac{V}{60}
\]

WHERE:

- \( L \) = TAPER LENGTH IN FEET
- \( W \) = WIDTH OF OFFSET IN FEET
- \( V \) = POSTED SPEED LIMIT PRIOR TO WORK STARTING

EXCEPT AS NOTED (E.g., STREAM TAPER, FLASHER OPERATIONS, YELLOW OPERATIONS, SPACE CHANNELIZER \& SPEED LIMIT). IF SPEED LIMIT IS 40 MPH, SET DEVICES AT 40.

CORNER SIDEWALK CLOSURE
WITH PEDESTRIAN DETOUR

IF ADVANCE SIGNS TO BE PLACED ON TYPE I OR TYPE II BARRIER, PLACE SO THAT AT LEAST 4' OF SIDEWALK IS AVAILABLE FOR PEDESTRIAN USE.

SIGNS TO BE PLACED ON CONTINUOUS RETROREFLECTIVE DEVICE DECK. DECK CAN BE TYPE 1, TYPE II OR OTHER TYPE WALLS OR RAILS AS PER WITCH. THEY WILL HAVE ORANGE AND WHITE STRIPES. THE DECKETING WILL BE AT LEAST 6 INCHES IN HEIGHT AND PLACED A MAXIMUM OF 2 1/2 INCHES ABOVE THE SIDEWALK, SO AS TO BE DETECTABLE BY PEDESTRIANS WITH LOW VISION.

LEGEND

- SIGN
- TYPE I REFLECTOR
- REFLECTIVE CHANNEL OR FLASHER

PB - PEDESTRIAN BOARD
- WORK SPACE
- FLASHER

CITY OF OLATHÉ
PUBLIC WORKS/TRAFFIC DIVISION
P.O. BOX 768
OLATHÉ, KANSAS 66061

SHEET 1 OF 11

XX-XX-XX

CITY OF OLATHÉ
PUBLIC WORKS/TRAFFIC DIVISION
P.O. BOX 768
OLATHÉ, KANSAS 66061
LANE CLOSURE ON TWO-LANE ROAD
W/ FLAGGER, DAYTIME ONLY

MULTIPLE LANE CLOSURE AT AN
INTERSECTION

RIGHT-HAND LANE CLOSURE ON THE
FAR SIDE OF AN INTERSECTION
SERVICE NOTES:
1. PER CURRENT POWER COMPANY SPECS.
2. IN THE EVENT THAT KOPL/AWESTAR DETERMINES THAT SERVICE CABLE MUST BE PROVIDED AND INSTALLED BY THE CONTRACTOR, THE CABLE SHALL HAVE AN AMPLITUDE RATING NOT LESS THAN 80 PERCENT OF THE MAXIMUM RATING OF THE CONTROL CENTER.

SIDE VIEW
FRONT VIEW
FRONT VIEW SHOWN LESS COVERS

BASE DETAIL

CIRCUIT DIRECTORY

<table>
<thead>
<tr>
<th>NO.</th>
<th>DESCRIPTION</th>
<th>AMP</th>
<th>POLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3</td>
<td>SERVICE DISCONNECT</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>PEC</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>5,7</td>
<td>SPACE AVAILABLE</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>SPACE AVAILABLE</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

NOTES:
1. 120/240 VAC, 1-PHASE, 60 Hz, 3-WIRE.
2. ELECTRICALLY HELD, 30 AMP, 2 POLE CONTACTOR W/120V COIL.
3. LIGHTING CONTROL PHOTOCELL PROVIDED BY OTHERS; 10A MAX. LOAD.
4. NO PHOTOCELL LIGHT SHIELD.
### Fiber Optic Equipment

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Size</th>
<th>Model</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Distribution Unit (Complete)</td>
<td>21</td>
<td>ABC</td>
<td>1000</td>
</tr>
<tr>
<td>Factory Splice and Connector (Including splice)</td>
<td>—</td>
<td>Free</td>
<td>Factory</td>
</tr>
<tr>
<td>Splice enclosure - complete</td>
<td>46</td>
<td>Type FSC 46</td>
<td>—</td>
</tr>
<tr>
<td>Splice enclosure - complete</td>
<td>96</td>
<td>Type FSC 96</td>
<td>—</td>
</tr>
<tr>
<td>Splice enclosure - complete</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fiber optic cable in splice vault</td>
<td>1 pair</td>
<td>—</td>
<td>1 per</td>
</tr>
<tr>
<td>Fiber optic cable with splice</td>
<td>5 pair</td>
<td>—</td>
<td>1 per</td>
</tr>
<tr>
<td>Fiber optic cable 50/50</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fiber optic cable 90/90</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fiber optic cable 24/24</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fiber optic cable 48/48</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fiber optic cable 96/96</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Junction box - Type III</td>
<td>24 x 36</td>
<td>—</td>
<td>Each</td>
</tr>
<tr>
<td>Junction box - Type IV</td>
<td>32 x 48</td>
<td>—</td>
<td>Each</td>
</tr>
<tr>
<td>Connector wire</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Electrical conduit (Interconnect)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fiber optic cable</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Splice (Enclosure)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

### Notes

1. Unlabeled splices shall pass through splice enclosure without splitting, so not free of any perforations.
2. Unlabeled splices in buffer tubes shall be spliced in splice vaults.
3. All splices and splices shall be terminated with ST style connectors. Patch panels fiber terminated units are to be compatible with ST style connectors.
4. For locations with multiple splice trays, connector shall remain in tray where splice tray each splice is in system.
5. Unlabeled splices between equipment located within handleable splice vaults, within the building where building and turn control panels are not available.
6. All fibers in the buffer tubes shall be free of any enclosure.

### Legend

- Fiber Splice
- Fiber Splice of Each Fiber in Buffer Tube
- Unlabeled Fiber
- Transmitter
- Receiver
- Fiber Device in Local Cabinet
- Fiber Device in Distribution Cabinet
- Fiber Splice Location at Controller Assembly / Building
- Fiber Splice Location at Handleable / Splice Vault