### Estimate of Quantities

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Unit</th>
<th>Sheet Number</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 (1)</td>
<td>DBE Adjustment</td>
<td>C.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>202 (2)</td>
<td>Removal of Pavement</td>
<td>S.Y.</td>
<td></td>
<td>541</td>
<td>916</td>
<td>1,257</td>
<td>3,318</td>
<td></td>
</tr>
<tr>
<td>202 (4)</td>
<td>Removal of Culvert Pipe</td>
<td>L.F.</td>
<td></td>
<td>525</td>
<td>57</td>
<td></td>
<td>582</td>
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<tr>
<td>202 (9)</td>
<td>Removal of Curb and Gutter</td>
<td>L.F.</td>
<td></td>
<td>257</td>
<td></td>
<td></td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>203 (3)</td>
<td>Unclassified Excavation</td>
<td>C.Y.</td>
<td></td>
<td>411</td>
<td>444</td>
<td>1,648</td>
<td>5,008</td>
<td></td>
</tr>
</tbody>
</table>

### Basis of Estimate

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Item Details</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>301 (1)</td>
<td>Crushed Aggregate Base Course</td>
<td>1.92 Ton/Cubic Yard</td>
<td></td>
</tr>
<tr>
<td>304 (1)</td>
<td>Subbase Grading &quot;E&quot;</td>
<td>1.92 Ton/Cubic Yard</td>
<td></td>
</tr>
<tr>
<td>401 (1)</td>
<td>Asphalt Concrete, Type II, Class B</td>
<td>115.0 lbs/Sq Yd./In Depth</td>
<td></td>
</tr>
<tr>
<td>402 (2)</td>
<td>PBA-2 Asphalt Cement</td>
<td>6.0% of Item 401(1)</td>
<td></td>
</tr>
<tr>
<td>403 (3)</td>
<td>MC-250 Liquid Asphalt for Prime Coat</td>
<td>0.20 Gal./Sq Yd., 258 Gal./Ton</td>
<td></td>
</tr>
</tbody>
</table>

### General Notes

1. Grades and alignment as shown on the plans are subject to minor revision.
2. Culvert locations are subject to minor revision.
3. Superelevation is varied about Baseline (\(\pm\)).

### List of Items

- **Adjust Fire Hydrant C.O.**
- **Adjust Valve Boxes C.O.**
- **Standard Sign**
- **Service Driveways**
- **Special Construction Sign**
- **Mobilization and Demobilization**
- **Temporary Erosion and Pollution Control**
- **Construction Surveying**
- **Three Person Survey Party**
- **Traffic Maintenance**
- **Permanent Construction Sign**
- **Construction Sign**
- **Type III Barricade**
- **Traffic Cone**
- **Drum**
- **Electrical Consultant C.O.**
- **Temporary Pavement Marking Station**
- **Flagging**
- **Watering**
- **Highway Lighting System Complete**
- **Electroliner Foundation Bedding**
- **Painted Traffic Markings**

**NOTE:** DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS.

**PROJECT NO.:** 20520
**DESIGNED BY:** F. Murphy
**DRAWN BY:** AutoCAD/R. Snyder
**DATE:** Aug. 1992
**CHECKED BY:** D. Doerflinger
**LIGHTING SUMMARY**

<table>
<thead>
<tr>
<th>ELECTRICAL NO.</th>
<th>J-BOX NO.</th>
<th>EXISTING STATION</th>
<th>EXISTING OFFSET</th>
<th>PROPOSED STATION</th>
<th>PROPOSED OFFSET</th>
<th>RELOCATE</th>
<th>NEW</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td></td>
<td>'O' 20+50</td>
<td>'O' 10+50</td>
<td>'O' 20+50</td>
<td>'O' 10+50</td>
<td>X</td>
<td></td>
<td>REMOVE EXISTING</td>
</tr>
<tr>
<td>C-7</td>
<td></td>
<td>'O' 20+67</td>
<td>24' LI</td>
<td>24' LI</td>
<td>24' LI</td>
<td>X</td>
<td></td>
<td>RAISE TO MATCH GRADE</td>
</tr>
<tr>
<td>C-8</td>
<td></td>
<td>'O' 18+50</td>
<td>29' LT</td>
<td>29' LT</td>
<td>29' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-9</td>
<td></td>
<td>'O' 27+04</td>
<td>50' LT</td>
<td>24' LT</td>
<td>24' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-10</td>
<td></td>
<td>'O' 26+55</td>
<td>54' LT</td>
<td>22' LT</td>
<td>22' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-11</td>
<td></td>
<td>'O' 24+81</td>
<td>46' LI</td>
<td>24' LT</td>
<td>24' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-12</td>
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<td>'O' 22+70</td>
<td>27' LT</td>
<td>22' LT</td>
<td>22' LT</td>
<td>X</td>
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<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-13</td>
<td></td>
<td>'O' 16+35</td>
<td>24' LT</td>
<td>24' LT</td>
<td>24' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-14</td>
<td></td>
<td>'O' 14+24</td>
<td>24' LT</td>
<td>24' LT</td>
<td>24' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-15</td>
<td></td>
<td>'O' 12+13</td>
<td>24' LT</td>
<td>24' LT</td>
<td>24' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-16</td>
<td></td>
<td>'O' 10+35</td>
<td>20' LT</td>
<td>20' LT</td>
<td>20' LT</td>
<td>X</td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
<tr>
<td>C-17</td>
<td></td>
<td>'O' 34+83</td>
<td>51' LT</td>
<td>15' MAST ARM</td>
<td></td>
<td></td>
<td></td>
<td>REMOVE &amp; DISPOSE EXISTING</td>
</tr>
</tbody>
</table>

**GENERAL NOTES**

1. **NEW CONDUIT** shall be 2" GALVANIZED RIGID METAL (RMC).
2. **REMOVE EXISTING CONDUCTORS AND REPLACE WITH NEW 3 CONDUCTOR (3C) CABLE WHEN ADDITIONAL CIRCUIT IS ADDED TO SAME CONDUCT.
3. **DESIGN DATA**. The ILLUMINATION SYSTEM installed under this project is designed to meet the following AASHO REQUIREMENTS:
   - MOUNTING HEIGHT = 40 FT
   - ROADWAY CLASSIFICATION = EXPRESSWAY RESIDENTIAL
   - AVERAGE ILLUMINANCE = 0.8 FOOT CANDLES
   - UNIFORMITY RATIO = 3:1 (avg/min)
   - BREAKAWAY STANDARDS = SECTION 7 OF THE 1985 AASHO SPECIFICATIONS
   - FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS
4. **ELECTROLIERS SHALL BE DESIGNED TO WITHSTAND AN AASHO 100 MPH WIND LOAD.**
5. **LUMINAIRES SHALL BE A ANSI-EES (AMERICAN NATIONAL STANDARD INSTITUTE: ILLUMINATION ENGINEERING STANDARDS) MEDIUM SEMI CUT-OFF TYPE II, WITH 250 WATT HIGH PRESSURE SODIUM LAMPS, 480 VOLTS, WITH THE OPTICAL ASSEMBLY FILTERED BY A CHARCOAL FILTER.**
6. **ALL JUNCTION BOXES SHALL BE TYPE I, SEE STANDARD DRAWING L-23.00.**
7. **ALL MAST ARMS SHALL BE 12 FEET LONG, UNLESS OTHERWISE NOTED.**
8. **ALL EXISTING ELECTROLIERS HAVE STANDARD SLP BASES. SEE STANDARD DRAWING L-10.02 FOR DETAILS.**
9. **ALL NEW ELECTROLIERS SHALL HAVE MULTI-DIRECTIONAL BREAKAWAY COUPLINGS.**
10. **PRE-CAST FOUNDATIONS MAY BE TRANSPORTED USING TWO OR MORE FEMALE CONCRETE ANCHORS, TWO ONE INCH BOLTS, AND A DEVICE THAT SPREADS THE LOAD EVENLY BETWEEN THE TWO ANCHORS.**
11. **EXISTING ELECTROLIERS FOUNDATIONS MAY BE RE-USED. NEW FOUNDATIONS SHALL BE EITHER PRECAST OR CAST IN DRILLED HOLE. NEW FOUNDATIONS FOR EXISTING ELECTROLIERS SHALL BE TYPE II AS SHOWN ON STANDARD DRAWING L-30.02. NEW FOUNDATIONS FOR NEW ELECTROLIERS SHALL CONFORM TO THE FOUNDATIONS WITH BREAKAWAY COUPLING DETAIL.**
12. **THE REMOVED POLE AND MAST ARM SHALL BE DELIVERED TO DOT/CF MAINTENANCE AT 6660 GLACIER HIGHWAY (7 MILE).**
13. **AT EXISTING ELECTROLIERS C-4 AND C-5 REMOVE ENCAPSULATION AROUND BASES AS PER "FOUNDATION INSTALLATION DETAIL" THIS PLAN SET, AND REGRADE ROADWAY SHOULDER.**

**TYPICAL SECTION FOR ELECTROLIER**

**NOTE:**
Although this contradicts the plan view and schematic in some cases, J-boxes at Electroliers shall be located on the back side of the Electrolier (the side away from the road) and in the roadway fill slope, as shown above.

**NOTE:** Do not scale from these plans--use dimensions.

**SOUTHEAST REGION DESIGN & CONSTRUCTION**

**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**

**STATE OF ALASKA**

**JUNEAU**

**YANDUKIN DR./EGAN EXPRESSWAY INTERSECTION**

**ILLUMINATION DETAILS**

**RECORD OF REVISIONS**

**STATE OF ALASKA**

**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**

**SOUTHEAST REGION DESIGN & CONSTRUCTION**

**JUNEAU**

**YANDUKIN DR./EGAN EXPRESSWAY INTERSECTION**

**ILLUMINATION DETAILS**

**RECORD OF REVISIONS**
**A** TRAFFIC CONTROL PLAN – ROAD CLOSED TO EASTBOUND TRAFFIC ONLY

**B** TRAFFIC CONTROL PLAN – ROAD CLOSED TO WESTBOUND TRAFFIC ONLY

**PERMANENT CONSTRUCTION SIGNS**

**LEGEND**

- ◆ = SIGN
- □ = BARRICADE, TYPE II
- □ = BARRICADE, TYPE III
- ● = DRUM
- ◼ = CONE
- ◼ = FLAGGER

**NOTES**

1. SPACING AND PLACEMENT OF SIGNS, AND OTHER DEVICES SHALL BE AS SHOWN ON THE STANDARD DRAWINGS AND ALASKA TRAFFIC MANUAL.

2. EGAN DRIVE INBOUND THROUGH LANES SHALL NOT HAVE ANY RESTRICTIONS TO TRAFFIC FLOW, BETWEEN 7:00 A.M. AND 8:30 A.M., MONDAY THROUGH FRIDAY.

3. ONLY ONE DIRECTION OF TRAFFIC MAY BE CLOSED AT A TIME.

4. ONE DIRECTIONAL CLOSURES (A & B) MAY BE EXTENDED TO THE E.O.P. BY ADJUSTING SIGN & BARRICADE LOCATIONS PROPORTIONATELY.


6. WESTBOUND TRAFFIC MAY NOT BE CLOSED BETWEEN THE HOURS OF 4:00 AND 6:00 P.M. ON WEEKDAYS.

**NOTE:** DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS