STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

JUNEAU

MONTANA CREEK ROAD AND
SKATER'S CABIN ROAD
INTERSECTION IMPROVEMENTS

HRO-STP-0964 (2)
PROJECT No. 67756

DESIGN DESIGNATION

ADT 2001 = 900
ADT 2006 = 940
GVW 12K (2006) = 11.3
V = 50 KM/H
EAL = 50,000

PROJECT SUMMARY

LENGTH OF PROJECT= 90 meters
LENGTH OF GRADE= 66.39 meters
LENGTH OF PAVING= 66.39 meters
WIDTH OF PAVING = 8 meters

VICINITY MAP

INDEX OF SHEETS

SHEET No. DESCRIPTION
1 TITLE SHEET
2 TYPICAL SECTION
3 ESTIMATE OF QUANTITIES
4 PLAN & PROFILE
5-7 TRAFFIC CONTROL PLAN
8-9 SIGNING, LIGHTING & STRIPING
10 SPECIAL SIGN DETAIL
11-12 ILLUMINATION DETAILS
13 LOAD CENTER DETAILS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
A=10(M) L=30.00(M) L=30.00(M) L=30.00(M) L=30.00(M) L=20.00(M) L=20.00(M) L=20.00(M) L=20.00(M)
L=50.00(M) L=15.00(M) L=15.00(M) L=15.00(M) L=15.00(M) L=15.00(M) L=15.00(M) L=15.00(M)

AS BUILT PLANS

contractor: MILLER CONSTRUCTION
project engineer: AL CULPREATH
begin date: 2-21-00
end date: 6-15-00

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

APPROVED

Date

APPROVED

Date

PROJECT NUMBER

67756

DATE

1999

SHEET 1 of 19
BASIS OF CONTROL

HORIZONTAL CONTROL

THE ORIGINAL BASIS OF BEARING FOR THIS PROJECT WAS THE BEARING OF 5° 61' 48" S 50° E BETWEEN THE BACK LOOP ROAD CENTERLINE MONUMENTS PC 2773.359 TO PC 2784.536 (POINTS SR-2 & SR-1)

THE PROJECT BASIS OF BEARING IS THE BEARING OF N 35° 54' 38" E FROM DOTABY CONTROL POINT SR-8, A 2" ALUMINUM CAP ON REBAR, AND DOTABY CONTROL POINT SR-7, A PK NAIL SET IN THE NORTH EDGE OF SKATER'S CABIN ROAD.

THE BASIS OF COORDINATES IS THE DOTABY CONTROL POINT SR-8, WITH LOCAL COORDINATES OF 32063.471'E 49983.576'N.

VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL IS THE IBM "SKATER" WITH AN ACCEPTED ELEVATION OF 72.15' NDLM. SKATER IS A SPIKE IN THE FIRST POWER POLE ON THE LEFT OF MONTANA CREEK ROAD, NORTH OF THE INTERSECTION.

SR-7 N32971.525'E 50278.534'N
SKATER N32912.668'E 49944.456'

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS
TRAFFIC CONTROL NOTES

1. A minimum of one lane shall be maintained at all times, through all work areas.
2. Two lanes shall be maintained at all times in non-work areas and during non-working hours.
3. Temporary driving lanes shall have a minimum width of 3m.
4. Construction signs shall be in place only when the conditions they warn about exist.
5. The contractor shall delineate pedestrian and bicycle access with traffic cones as required during construction activities. Cone spacing shall be 3m maximum.
6. The contractor shall provide vehicular access through work zones as required by the engineer.
7. Flood lights shall be provided for flagger stations during night operations.
8. Channelization devices if used at night shall be lit in accordance with the Alaska Traffic Manual.
9. It is the intent of this Traffic Control Plan (TCP) to illustrate some, not all, of the Traffic Control Setups which will be required on this project. Plans for configurations not covered by the TCP shall be created by the contractor and submitted to the engineer for approval where appropriate, they shall incorporate applicable portions of details on these sheets.

ROADWAY ENCROACHMENT

Note: if only one lane is affected by road work (that is, the cones along the work area are no closer than 3m to centerline) the signs and centerline cones for the opposite lane may be deleted.

SHOULDER WORK

TCP TABLE SETUP

<table>
<thead>
<tr>
<th>SPEED LIMIT (MPH)</th>
<th>SPEED LIMIT (KMPH)</th>
<th>BEYOND CONES (M)</th>
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NOTE: do not scale from these plans-use dimensions.
J-BOX SUMMARY

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<th>TYPE</th>
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ELECTROLIGHT SUMMARY

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SIGN SUMMARY

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SIGNING NOTES

1. The post types indicated in this summary are:
   - P: Perforated Steel Tube
   - T: Round Steel Pipe
   - W: W Shape Beam
   - TS: Square Steel Tubing

2. Install concrete emplacement for the perforated steel tube post foundations as shown on Standard Drawing 5-33.00.001. Foundations for P and TS posts shall be in conformance with Standard Drawing 5-34.00.001.

3. Sign locations are approximate only and are subject to minor revision by the engineer.

4. The minimum allowable space between posts in multiple post installations is 1.8 meters.

5. Torque slip base bolts within the following ranges:
   - Bolt Diameter: 1.3 mm to 16 mm
   - Torque Range: 11 to 16
   - 16 mm: 26 to 39
   - 19 mm: 40 to 62
   - 25 mm: 52 to 83

6. All signs shall be class "T" as designated by the Alaska Sign Design Specifications. Unless noted otherwise, sign mounting height is 21 m as shown on Standard Drawing 5-05.00.001.

7. Special signs shall be fabricated in conformance with the Alaska Sign Design Specifications.

8. Prior to installing posts, the contractor shall locate and protect all existing and new underground utilities. Including but not limited to pipelines, interconnect cables, signal systems, lighting systems, storm and sanitary sewers, water systems, and telephone and electrical cables. All existing utilities are not necessarily shown on the plans.

FLEXIBLE DELINEATOR

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS
SPECIAL SIGN "A"

COMMUNITY GARDEN

SIGN NOTES:
1. Shape shall be as shown on the plans.
2. Lettering shall be as shown on the plan.
3. Head and body shall be in white.

STOP BAR AND STOP SIGN

CENTER LINE MARKING

EDGE OF PAVEMENT

SIDE STREET

NOTE: DO NOT SCALE FROM THESE PLANS THE DIMENSIONS
ILLUMINATION GENERAL NOTES

1. All wiring shall be enclosed in 50mm dia. rigid metal conduit.
2. Each electrolizer shall have a J-box installed adjacent to the foundation as shown in the pole and J-box wiring detail.
3. All junction boxes shall be type 1, A, except at load centers. See standard drawing L-2307.
4. A rare expanded ground conductor shall be installed through all conduit. The grounding conductor shall be attached to all conduit end bushings and poles.
5. New electrolizer foundations may be pre-cast. Pre-cast foundations shall be transported using a device that spreads the load evenly between the anchor bolts.
6. Install the photovoltaic cell on top of the nearest electrolizer pole.
7. Illumination circuit wires shall be no. 6 amp, 2-conductor cable as specified in standard specification 600-208.
8. Luminaire shall be 240 volt, 250 watt, high pressure sodium, medium distribution, cut-off, ES type W and shall be have magnetic regulator ballasts, and HPS lamps with a 24,000 hour rated life.
9. Install 2 3/8 inch rigid metal conduit from the load center to the first junction box.
10. Non-breakaway portions of foundations shall not protrude more than 24 inches above any 60 inch chord starting and ending on the finished grade of the electrolizer pads.
11. Luminaire mastarms shall be 4.5m long unless noted elsewhere.

TYPICAL SECTION
FOR ELECTROLIZER

- 4-25mm multi-directional breakaway couplings and female concrete anchors required per the foundation. Each support to be furnished with control notes.
- 25mm chamfered corners.
- 5.3mm PVC.
- 1.3m of #8 copper grounding wire set according to 360.2.10 of the standard specifications.
- Breakaway skirts required.

FOUNDATION INSTALLATION DETAIL

- Indicate (embankment material) to be removed from around breakaway skirts.

FOUNDATION WITH
BREAKAWAY COUPLINGS

- 2-4 bars 0.5m long installed between anchor rings and anchor bolts.
TYPE 2 LOAD CENTER

TYPE 2 & 3 LOAD CENTER NOTES:

1. SIZE THE TYPE 2 AND 3 LOAD CENTER CUBICLES TO HOLD THE EQUIPMENT SHOWN IN THE WIRING DIAGRAM AND DETAILED IN EACH LOAD CENTER SUMMARY, ALLOWING SPACE FOR WIRING PER THE NATIONAL ELECTRICAL CODE.

   INSTALLING A METER BASE AND MAIN BREAKER IN A SEPARATE ENCLOSURE IS ALLOWABLE. HOWEVER, IN THIS CASE, FURNISH A BREAKER PANEL WITH A METER BASE.

2. WIRE ALL TYPE 2 AND 3 LOAD CENTERS PER THE WIRING DIAGRAM INDICATED ON THIS DETAIL SHEET.

3. INSTALL POLES OF SUFFICIENT LENGTH TO PROVIDE THE FOLLOWING MINIMUM GAP TO SERVICE CONDUCTOR CLEARANCE:

   A. 6.4 METERS, IF THE SERVICE CONDUCTORS ARE LOCATED ABOVE ROADWAYS OR PARKING AREAS.

   B. 8.5 METERS, IF THE SERVICE CONDUCTORS ARE LOCATED WITHIN 6.1 METERS OF A RAILROAD TRACK.

   C. 9.5 METERS AT ALL OTHER CIRCUMSTANCES.

4. SET THE BUTT END OF TYPE 3 LOAD CENTER POLES TO THE FOLLOWING MINIMUM DEPTH:

   A. 10 PERCENT OF ITS LENGTH PLUS 0.6 METER, OR 1.3 METER, WHICHER IS GREATER, IF IT IS INSTALLED IN EARTH OTHER THAN SOIL ROCK OR MUSKES.

   B. 10 PERCENT OF ITS LENGTH, OR 1.2 METERS, WHICHER IS GREATER, IF IT IS INSTALLED IN SOLID ROCK.

   C. CONSIDER MUSKES TO BE AIR, AND SET THE BUTT ENDS TO THE DEPTH GIVEN IN A C E, WHICHER APPEARS, IN THE UNDERLING EARTH OR ROCK.

   WHEREVER MORE THAN 0.6 METERS OF EARTH OVERLAYS ROCK, OR THE DIAMETER OF THE DRILLED HOLE IN ROCK EXCEEDS TWICE THE DIAMETER OF THE POLE AT THE GROUND LINE, CONSIDER THE INSTALLATION AS EARTH.

5. ATTACH ALL CONDUCTORS TO THE POSTS AND POLES USING TWO HOLE MUSKES.

6. ATTACH ALL GROUND CONDUCTORS TO THE POSTS AND POLES USING CABLE STAPLES LOCATED ON 0.3 METER CENTERS.

LOCATION NOTES:

1. INSTALL A 5.5 MM MINIMUM SIZE MUSKE METAL CONDUCTOR WITH FULLAPE TO WITHIN 0.6 METER OF THE POWER SOURCE AT A MINIMUM DEPTH OF 1.0 METER. INSTALL A CAP ON AND MARK THE BURIED END OF THE CONDUCT WIT A 50MM BY 150 MM STAKE.