State of Alaska
Department of Transportation and Public Facilities
Statewide Design and Engineering Services Division

JUNEAU, ALASKA
MENDENHALL VALLEY MULTI-USE PATH IMPROVEMENTS PHASE II
CM-0003(81) / 68314

PROJECT SUMMARY
LENGTH OF GRADING = 1.75 miles
LENGTH OF PAVING = 1.75 miles
WIDTH OF PAVING = 10'
LENGTH OF PROJECT = 1.75 miles

VICINITY MAP

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
A-01.00   I-01.01   I-20.13   I-21.00   I-22.00
**Estimate of Quantities**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PAY ITEM</th>
<th>UNIT</th>
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<tbody>
<tr>
<td>201</td>
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<td>202</td>
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<tr>
<td>203</td>
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<tr>
<td>204</td>
<td>165 - 12</td>
<td>Precast premiere of Timber Structures</td>
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<tr>
<td>205</td>
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<td>Bridge Foundations</td>
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<td>208</td>
<td>165 - 16</td>
<td>Chain Link Fence</td>
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<td>210</td>
<td>165 - 18</td>
<td>Bed Course Material, Grading C</td>
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<tr>
<td>212</td>
<td>165 - 20</td>
<td>Adjustment Of Valve Box</td>
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<td>213</td>
<td>165 - 21</td>
<td>Castellate, Reinforcement</td>
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<td>Geomembrane, Root Barrier</td>
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<td>Microwave Handhole</td>
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<td>223</td>
<td>165 - 31</td>
<td>Sign Interconnect, E-per Telephone Cable, 18-sockets</td>
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<tr>
<td>224</td>
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**Basis Of Estimate**

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**Removal of Structures and Obstructions**

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<td>214</td>
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**Slope-Widening Summary**

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<th>STATION</th>
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<th>RIGHT PATH</th>
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<tr>
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**Pipe Summary**

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**Fence Re-Construction Summary**

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**Electrolier Adjustment Summary**

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**Estimate of Quantities**

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<td>212</td>
<td>212 (4)</td>
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</tbody>
</table>

**NOTE:** Refer to Typical Section Sheets for Slope-Widening Details on paths adjacent to Mendehall Loop Road. Slope widening must occur in directions indicated to avoid filling Class B Wetlands.
General Typical

Section Notes:
1. CROSS SLOPE WILL BE 2:1. OR. DIRECTION OF CROSS SLOPE WILL BE INDICATED IN THE PLANS OR AS DIRECTED.
2. SEE PLAN SHEETS FOR TYPICAL LOCATIONS.
3. GRADER BASE ANCHORS WILL BE APPLIED TO弁HOLD EXISTING ELEVATIONS AT INTERSECTIONS AND DRIVES. THE ACTUAL NUMBER OF BASE ANCHORS IS TO ELIMINATE STANDING WATER FROM PAVED PRIMARY SURFACES.
4. LIMITS OF CLEAVING AND GRADING SEE NOTE #1.

Typical Section #1

1. EXISTING 6" CHAIN LINK FENCE (TO REMAIN)
2. SILT FENCE
3. HORIZONTAL CONTROL POINT
4. GEO Textile Fabric for ENVIRONMENTAL STABILIZATION
5. INSTALL ROOT BARRIER, SEE ROOT BARRIER DETAIL SHEET FOR SPECIFICATIONS
6. REMOVE EXISTING ASPHALT PAVEMENT
7. BORROWED, SELECTED MATERIAL, TYPE A, AS REQUIRED. 8 INCHES MINIMUM (FOR LEVELING)
8. MIRROR FOR BOTH SIDES OF EIDAN DRIVE

Typical Section #2

1. EXISTING 6" CHAIN LINK FENCE (TO REMAIN)
2. 3" BED COURSE MATERIAL, GRADING C
3. 1 1/2" ASPHALT SIDEWALK
4. BORROWED, SELECTED MATERIAL, TYPE A, AS REQUIRED. 8 INCHES MINIMUM (FOR LEVELING)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS
Typical Section #3

LIMITS OF CLEARING AND
GRADING SEE NOTE ③

EXISTING GROUND

INSTALL ROOT BARRIER
DETAIL & SUMMARY
ON SHEET ①

REMOVE EXISTING
ASPHALT PAVEMENT

ROOT BARRIER

1 1/2" ASPHALT SIDEWALK

3" BED COURSE MATERIAL, GRADE C

BORROW, SELECTED MATERIAL TYPE A,
AS REQUIRED, 6 INCHES MINIMUM (for leveling)

Typical Section #4

DISTANCE VARIES

MENDEHALL LOOP ROAD

EXISTING ROADWAY
FILL SLOPE

CLEARING LIMITS

SEE NOTE ③

HORIZONTAL
CONTROL POINT

25 CROSS-SLOPE

EXISTING RETAINING WALL
(TO REMAIN)

EXISTING GROUND

1 1/2" ASPHALT SIDEWALK.

REMOVE EXISTING ASPHALT PAVEMENT

3" BED COURSE MATERIAL, GRADE C

BORROW, SELECTED MATERIAL TYPE A,
AS REQUIRED, 6 INCHES MINIMUM (for leveling)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS
Typical Section #5

- Remove existing asphalt sidewalk.
- Remove existing asphalt pavement.
- 3" bed course material, grading C
- Borrow, selected material type A, as required. 6 inches minimum (for leveling)

* Mirror for both sides of Mendenhall Loop Road

Typical Section #6

- Remove existing asphalt pavement.
- 1 1/2" asphalt sidewalk
- 3" bed course material, grading C
- Borrow, selected material type A, as required. 6 inches minimum (for leveling)
CULVERT EXTENSION/REPLACEMENT DETAILS

PLAN VIEW

SECTION A-A

EXISTING PAVEMENT
2" ASPHALT

EXISTING CULVERT

PROVIDE MIN. 12" COVER BETWEEN CULVERT & SURFACE

SHOULDER
10.0' 10.0'

SHOULDER

2" ASPHALT

EXISTING CULVERT

EXTENSION

SECTION B-B

FISH PASSAGE CULVERT DETAILS

PLAN VIEW

SECTION VIEW

SHOULDER
1.0'

1.0'

1.0'

10.0'

1.0'

1.0'

8.0'

4" CHAIN-LINK FENCE (TO REMAIN)

FISH PASSAGE TRENCH

PROPOSED 24" CMP

8" GRAVEL SUBSTRATE

EXISTING 18" CMP

EXISTING ASPHALT

5" CHAIN-LINK FENCE (TO REMAIN)
**PROJECT 68314 - BEGIN RIGHT PATH RECONSTRUCT S1+00s**

**TYPICAL SECTION #8**
Raise Grade 12"

**TYPICAL SECTION #1**
Raise Grade 12"

**GENERAL PLAN NOTES:**

1. APPLICATION OF TYPICAL SECTIONS MAY BE VARIED AS DIRECTED.
2. SMOOTH PAVEMENT AT EDGES OF ALL INTERSECTIONS AND DRIVeways AS DIRECTED. ALL SWIRLS WILL BE CLEANED AND TACKED PRIOR TO PLACEMENT OF NEW ASPHALT.
3. CONTRACTOR SHALL STAGE CONSTRUCTION AS SPECIFIED IN SECTION 106-1.04.
4. LOCATIONS OF ALL EXISTING AND ABANDONED UTILITIES ARE NOT KNOW. THE CONTRACTOR SHALL REMOVE ALL UTILITY LOCATED AND PERFORM HAND WORK AS NECESSARY TO AVOID ALL UTILITY DAMAGE. SEE SPECIAL PROVISION 100 AND 107-1.16.
5. ALL COSTS FOR DAMAGING ANY UTILITY LINE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE AREA BETWEEN FRED MEYERS AND ST. PAUL'S CATHOLIC CHURCH (EGAN DRIVE RIGHT) IS SUBJECT TO FLOODING.

**PROJECT 68314 - BEGIN LEFT PATH RECONSTRUCT 50+65s**

**LEGEND**

- - BILT FENCE
- - TEMPORARY CHECK DAM
**EXISTING SIGNAL INTERCONNECT LINE**

**UTILITY NOTES:**
1. SIGNAL INTERCONNECT TO REMAIN IN SERVICE DURING CONSTRUCTION.
2. REPLACE CONDUIT HANGER ASSEMBLY WITH EQUAL OR SIMILAR.
3. ALL COSTS FOR DAMAGING ANY UTILITY LINE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**SECTION VIEW**

**PLAN VIEW**

**BRIDGE NOTES:**

**GENERAL:**
All bridge details are not shown. Final design of bridge shall be the responsibility of the contractor. Alternatives to the general features, orientation of members and materials noted may be proposed for approval by the engineer. Supporting documentation and structural calculations shall be performed by a registered engineer in the state of Alaska. Detailed shop drawings and calculations shall be provided for review and approval prior to Fabrication.

**DESIGN CRITERIA:**
All design and fabrication shall be performed in accordance with the following codes:

1. Uniform Building Code, 1997 or later edition
4. AWS D1.1 & D1.6, Structural Welding Code (latest edition)
5. Applicable ASTM Standards

**LOADS:**

- **DEAD LOAD - ALL**
- **LIVE LOAD - UNIFORM 95 PSF**
- **VEHICULAR LOAD - HS-10**
- **WIND LOAD - 90 MPH, EXPOSURE “B”**
- **SOILS:**
  - ALLOWABLE BEARING CAPACITY - 1500 PSF
  - FROST DEPTH - 3 FEET
TRAFFIC CONTROL NOTES

1. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.

2. TWO WAY TRAFFIC (ON EGAN DRIVE, LOOP ROAD AND SIDE STREETS) SHALL BE MAINTAINED AT ALL TIMES.

3. TRAFFIC LANES SHALL BE A MINIMUM OF 10 FT. WIDE.

4. A PLACARD SHALL BE USED TO DIRECT TRUCKS AND CONSTRUCTION EQUIPMENT WHEN THEY ENTER OR CROSS THE TRAVELED WAY.

5. CONSTRUCTION SIGNS SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.

6. CHANNELIZATION DEVICES WILL BE IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL IF USED AT NIGHT.

7. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ORDER OF WORK, PATH CLOSURES, AND PEDESTRIAN BRIDGE CONSTRUCTION ACTIVITIES.

8. ACCESS TO BUSINESSES AND HOMES WILL BE OPENED AT THE END OF THE DAILY WORK SHIFT.

9. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ORDER OF WORK, GRADING, PAVING, AND CHANGES IN THE LANE CONFIGURATIONS.

10. THE CONTRACTOR SHALL STAGE OPERATIONS IN SUCH A MANNER THAT AT LEAST ONE PAVED PATH IS OPEN FOR UNRESTRICTED USE, AT NO TIME WILL BOTH THE LEFT AND RIGHT PATHS BE CLOSED CONCURRENTLY.

11. CONSTRUCTION OF THE PATH BETWEEN THE CLIFF-DE-BAC AT THE ESOP AND THE INTERSECTION OF EGAN DRIVE AND GLACIER HIGHWAY SHALL BE CONSIDERED IN THE EVENING HOURS OF 5:00PM-9:00AM. THE PATH SHALL BE LEFT IN A FULLY TRAVELABLE CONDITION EACH DAY AT THE END OF OPERATIONS.

12. THE CONTRACTOR MAY NOT STAGE EQUIPMENT ALONGSIDE OR WITHIN 30 FEET OF THE CLEAR ZONE.

13. ALL ROADS WITHIN THE PROJECT LIMITS SHALL REMAIN OPEN TO TRAFFIC. SHORT-TERM SINGLE LANE CLOSURES ARE ALLOWED FOR BRIDGE PLACEMENT AND OTHERlesc. BRIDGE WORK.

LEGEND

SIGNALS

TYPE III BARRICADE

PATHWAY WORK
MENDENHALL LOOP ROAD

PATHWAY WORK
EGAN DRIVE

MENDENHALL LOOP ROAD IMPROVEMENTS
PROJECT NO. 88314

Traffic Control Plans

PROJECT DESIGNATION NUMBER
CM-0003/01 / 88314

STATE YEAR
ALASKA 2002

SHEET NUMBER TOTAL SHEETS
J1 10
**MENDENHALL VALLEY MULTIPLE USE PATH IMPROVEMENTS II**

**PROJECT NO. 68314**

**Traffic Control Plans**

**STATE:** ALASKA  
**YEAR:** 2002  
**SHEET NO.:** 18  
**TOTAL SHEETS:** 18

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**Traffic Control Plans**

**PATH:** C/M-000391/88314  
**DATE:** 06/26/03  
**CHECKED BY:** K. MATTSON  
**DRAWN BY:** B. BEWICK  
**DEPARTMENT OF ALASKA:** DIVISION OF HIGHWAYS  
**ENGINEERING & LANDSCAPE DESIGN & ENGINEERING**

**PROJECT DESIGNATION NUMBER:** C/M-000391/88314

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**Legend:**
- **SIGN**
- **CONES**
- **DRUM**
- **TYPE III BARRIERS**
- **FLAGGING STATION**

**WHERE:**
- **L** = LENGTH OF TAPER
- **W** = WIDTH OF OFFSET
- **T** = TAPER RATE

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**ROADWAY ENCLOSEDMENT**

**NOTE:** If only one lane is affected by road work (that is, the cones along the work area are no closer than 10 ft to centerline) the centerline cones for the opposing lane may be deleted.

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**SHOULDER WORK**

- **NO PARKING WITHIN 200' OF CONES**
- **MAX. LENGTH OF WORK ZONE = 400'**

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**SINGLE LANE CLOSURE**

**TWO LANE ROAD**

- **NO PARKING WITHIN 200' OF CONES**

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**TRAVELLED WAY**

- **200'**
- **100' MIN.**
- **TAPER**
- **WORK AREA**

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**50'-100' TAPER**

**BUFFER WORK AREA**

**MAX. LENGTH OF WORK ZONE = 3280'**

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**CMR-5**
- **46" x 46"**

**CMR-1**
- **48" x 46"**

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**CM21-4F**
- **46" x 48"**

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**CMR-1**
- **48" x 46"**

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**CMR-20**
- **46" x 46"**

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Notes:

1. The project is located in both the Duck Creek and Jordan Creek Watersheds, a portion of the drainage from the project work limits (highlighted in green) into these creeks. They are both classified by the EPA as designated impaired watersheds, listed under Section 303(d) of the Clean Water Act. Special controls are required to restore Duck Creek’s water quality. The stream is part of a Joint Authority Recovery effort.

2. The fish passage channel, existing at the trench in the bottom of the ditch along Edam Dr. (E5A, 31-57 to 38-86 ft), MUST NOT BE DISTURBED, except for any construction necessary at either end of the culvert.

3. INSTALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE EARTH DISTURBING ACTIVITIES.

4. MAINTENANCE DEVICES, MIRRORED DAILY, DRAINAGE CHANNELS AFTER 4' OF SEDIMENT ACCUMULATES. ENSURE SILT FENCE IS TIGHT AGAINST GROUND.

5. IF INSPECTION REVEALS WATER IS DISCHARGING BEYOND THE PROJECT WORK LIMITS, IMMEDIATELY IMPLEMENT CONNECTIONS, ENSURE ADJACENT SLOPES ARE NOT DISTURBED. NO SMALL, EROSIVE, UNSTABILIZED SURFACES ARE DISTURBED.

6. STABILIZED GROUND AS SOON AS POSSIBLE, UNSTABILIZED SURFACES MUST BE TEMPORARILY STABILIZED WITH SEEDING, MATTING, OR OTHER EFFECTIVE MEASURES. THE CONTROLLER IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL UNTIL PROJECT WORK AREAS ARE PAVED AND SEEDED.

7. SEE SHEETS E1-A3 FOR EROSION AND SEDIMENT CONTROL PLAN (ESCP) SHEETS.

Site Characteristics:

A. PHYSICAL LOCATION:

JUANITA IS SITUATED AT THE NORTHERN END OF THE ALEXANDER ARCHFORM.

54°20'58" N., LATITUDE
124°27'52" W., LONGITUDE

HORIZONTAL COORDS: NAD 83

SECTIONS 30 & 31, TOWNSHIP 040 SOUTH, RANGE 066 EAST, COPPER RIVER MERIDIAN

B. PRECIPITATION AND HYDROLOGY:

JUANITA AVERAGE 54" P+11 INCHES OF PRECIPITATION PER YEAR AND 100 INCHES OF SNOW.

ESTIMATED PRE-CONSTRUCTION RUNOFF COEFFICIENT: C=0.40

ESTIMATED POST-CONSTRUCTION RUNOFF COEFFICIENT: C=0.40

RECOMMEND WATERS ARE DUCK CREEK AND JORDAN CREEK.

AREA OF PROJECT = 5.2 ACRES.

Description of Construction Activity:

A. PATH RECONSTRUCTION:

The plans call for the reconstruction of the existing 8-foot wide paved path. Work on the new 10-foot wide path will begin with construction of the fish passage culvert, unless the local area is flooded or work begins outside of the permitting window, in which case work will begin on the left-right path at the end of the project working downstream. Soft soils exist on the right path between Fred Meyers and the Jordan Creek Pk. Bridge. It is possible that a separate slab may be needed to accommodate for soft ground prior to placement in the area. Select trees removal and grubbing on the left path will occur prior to placement of the root barrier.

B. PED, BRIDGE APPROACH CONSTRUCTION:

The plan calls for the construction of a 10 to 15 foot footpath approach at both ends of the pedestrian bridges. The approaches link the bridge with the multi-use path and transition to the grade of the new pedestrian bridges. The contractor may choose some options on how to build the approaches, but they must be designed to meet the criteria of the project. The approaches must meet the criteria of the project. Once the bridges are complete, the path approaches at both ends can be constructed. The construction of an A-Grade concrete abutment in addition to the foundation, if recommended by the engineer, is recommended as a part of the approach. The remaining work will involve placement of the road surface material to the ground. Slopes, grades, and slopes will be designed to reduce erosion.

C. PEDESTRIAN BRIDGE CONSTRUCTION:

Installation of the pedestrian bridges will begin once the foundations and approaches have been completed. Access from Jordan Creek Bridge site may be reached by using the existing road while the Duck Creek Bridge site may be reached by Mundenhall Loop Road. Installations shall occur sequentially and any work is only allowed to occur within the off-peak season (May to mid-October) without a special permit. The bridges shall be loaded on a flat-bed truck and transported to the site from the contractors temporary storage location. The crane or other properly loaded truck will move the bridge from the flat-bed truck to its final resting place on the foundation. The contractor is responsible for obtaining and maintaining any necessary permits to maintain construction in the class B wetlands, but there is no permission to work below O.H.W. in Duck and Jordan Creeks.

Silt Fence Summary

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<tr>
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Updated: 12/06/2002 9:32
**Estimate of Quantities**

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**Pipe Summary**

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**Fence Re-Construction Summary**

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**estimateOfQuantities**

**LOCATION**

**STATE**

**YEAR**

**PROJECT DESIGNATION NUMBER**

**DRAFT**

**REVIEWED**

**CHECKED BY:**

**DRAWN BY:**

**DEPARTMENT OF TRANSPORTATION, STATE OF WYOMING**

**MULTIPLE PATH IMPROVEMENTS PROJECT NO. 98114**

**MENDENHALL LOOP ROAD IMPROVEMENTS**

**JUNEAU, ALASKA**

**PROJECT NUMBER:**

**CONTRACTOR:**

**CONTRACTOR’S NAME:**

**CONTRACTOR’S ADDRESS:**

**CONTRACTOR’S PHONE NUMBER:**

**CONTRACTOR’S FAX NUMBER:**

---

**NOTE:** Refer to Typical Section Sheets for Slope-Widening Details on pages adjacent to Mendenhall Loop Road. Slope widening must occur in directions indicated to avoid filling Class B Wetlands.
General Typical

Section Notes:

1. Cross slope will be 2:1 or direction of cross slope will vary by location as indicated in the plans or as directed.

2. See plan sheets for typical locations.

3. Bridge abutment areas will taper to match existing elevations at intersections and driveways. The intention of bridge abutments is to eliminate standing water from paved primary surfaces.

4. Minimum longitudinal grade is 5%.

5. Topsoil and seed all new slopes and disturbed areas. Topsoil shall be placed with a minimum depth of 3". Existing topsoil may be stripped and reused when present. Do not reuse any soil containing weed growth (vegetative plant) without following procedures specified in the environmental commitments. Do not plate topsoil on path shoulders.

6. Clearing and grubbing only as required or directed within the right-of-way limits. Remove and dispose of weed growth (vegetative plant) under the right-of-way that are damaging the existing path will be cleared and grubbed as directed. This work includes stump removal as specified in section 21.

7. Remove 4" chain-link fence at start of project; replace according to typical section details. (For fence details, refer to Std. Spec. F-01.01)

8. Vary width of path fill slope to fit physical constraints as directed.

9. Soft soils exist on right path (striped Meyer to Jordan Creek bed). Backfill place geotextile as directed by engineer.

Typical Section #1

- Existing 6" chain-link fence (to remain)
- Limits of clearing and grubbing see note 3.
- 3' max.
- 10.0'
- 3' max.
- Silt fence (see sheet F-1)
- Horizontal control point
- Existing ground
- Geotextile fabric for environmental stabilization (see note 3)
- Install root barrier. See root barrier detail sheet for summary
- Borrow, selected material type A, as required. 8 inches minimum (for leveling)
- Mirror for both sides of road drive
- Typical Section #2

- Existing roadway fill slope
- 1 1/2" asphalt sidewalk
- 3" bed course material, grading C
- Borrow, selected material type A, as required. 8 inches minimum (for leveling).

Typical Section #1

- Existing 6" chain-link fence (to remain)
- Limits of clearing and grubbing see note 3.
- 3' max.
- 10.0'
- 3' max.
- See note 3.
- Existing ground
- 1 1/2" asphalt sidewalk
- 3" bed course material, grading C
- Borrow, selected material type A, as required. 8 inches minimum (for leveling).
**Typical Section #3**

- **3' Max.** 10.0' 3' Max.
- **Limits of Clearing and Grubbing:** See Note ③

- **Existing Ground:**
  - Install Root Barrier: Detail & Summary on Sheet ①
  - Remove Existing Asphalt Pavement
  - Root Barrier
  - 1 1/2" Asphalt Sidewalk
  - 3" Bed Course Material, Grading C
  - Borrow, Selected Material Type A, as Required, 6 Inches Minimum (for leveling)

**Typical Section #4**

- **Distance Varies**

- **Existing Roadway Fill Slope**

- **Clearing Limits:**
  - 1.0' 10.0'
  - See Note ③

- **20 Cross-Slope**

- **Horizontal Control Point**

- **Existing Retaining Wall (to remain)**

- **Existing Ground**

- **1 1/2" Asphalt Sidewalk**

- **Remove Existing Asphalt Pavement**

- **3" Bed Course Material, Grading C**

- **Borrow, Selected Material Type A, as Required, 6 Inches Minimum (for leveling)**

**Note:** Do not scale from these plans—use dimensions.
Typical Section #6

- **1 1/2" Asphalt Sidewalk**
- **Remove Existing Asphalt Pavement**
- **3" Bed Course Material, Grading C**
- **Borrow, Selected Material Type A, as required, 8 inches minimum (for leveling)**

*Mirror for both sides of Mendenhall Loop Road*
CULVERT EXTENSION/REPLACEMENT DETAILS

FISH PASSAGE CULVERT DETAILS
**PROJECT 56514 - BEGIN RIGHT PATH RECONSTRUCT S1+00±**

**GENERAL PLAN NOTES:**

1. **APPLICATION OF TYPICAL SECTIONS MAY BE VARIED AS DIRECTED.**

2. **SWITCH PAVEMENT AT EDGES OF ALL INTERSECTIONS AND DRIVINGWAY AS DIRECTED. ALL SWIRLSCUT WILL BE CLEANED AND TACKED PRIOR TO PLACEMENT OF NEW ASPHALT.**

3. **CONTRACTOR SHALL STAGE CONSTRUCTION AS SPECIFIED IN SECTION 106-1.04.**

4. **LOCATIONS OF ALL EXISTING AND ABANDONED UTILITIES ARE NOT KNOWN. THE CONTRACTOR SHALL DETERMINE ALL UTILITY LOCATIONS AND PERFORM HAND WORK AS NECESSARY TO AVOID ALL UTILITY DAMAGE. SEE SPECIAL PROVISION 160 AND 160-1.16.**

5. **ALL COSTS FOR DAMAGE ANY UTILITY LINE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.**

6. **THE AREA BETWEEN FRAN MEYERS AND ST. PAUL'S CATHOLIC CHURCH (EGAN DRIVE RIGHT) IS SUBJECT TO FLOODING.**
TRAFFIC CONTROL NOTES

1. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.

2. TWO WAY TRAFFIC (ON EGAN DRIVE, LOOP ROAD AND SIDE STREETS) SHALL BE MAINTAINED AT ALL TIMES.

3. TRAFFIC LANES SHALL BE A MINIMUM OF 10FT WIDE.

4. A FLAUGGER SHALL BE USED TO DIRECT TRUCKS AND CONSTRUCTION EQUIPMENT WHEN THEY ENTER OR CROSS THE TRAVELLED WAY.

5. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.

6. CHANNELIZATIONS DEVICES WILL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL IF USED AT NIGHT.

7. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO THE ONSET OF WORK, PATH CLOSURES, AND PEDESTRIAN BRIDGE CONSTRUCTION ACTIVITIES.

8. ACCESS TO BUSINESSES AND HOMES WILL BE OPENED AT THE END OF THE DAILY WORK SHIFT.

9. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO THE ONSET OF WORK, GROUNDBREAKING, PARKING, AND CHANGES IN THE LANE CONFIGURATIONS.

10. THE CONTRACTOR SHALL START OPERATIONS SO THAT AT LEAST ONE PAVED PATH IS OPEN FOR UNRESTRICTED USE. AT NO TIME WILL BOTH THE LEFT AND RIGHT PATH BE UNDER CONSTRUCTION AT THE SAME TIME.

11. CONSTRUCTION OF THE PATH BETWEEN THE CLU-DE-SAC AT THE JBP AND THE INTERSECTION OF EGAN DRIVE AND GLACIER HIGHWAY SHALL BE CONCEDED IN THE EVENING HOURS OF 8:00PM - 8:00AM. THE PATH SHALL BE LEFT IN A FULLY TRANSITABLE CONDITION EACH DAY AT THE END OF OPERATIONS.

12. THE CONTRACTOR MAY NOT STAGE EQUIPMENT ANYWHERE ALONG EGAN DRIVE AND/OR WITHIN THE CLEAR ZONE (30 FEET FROM THE EDGE OF PAVEMENT).

13. ALL ROADS WITHIN THE PROJECT LIMITS SHALL REMAIN OPEN TO TRAFFIC. SHORT-TERM SINGLE LANE CLOSURES ARE ALLOWED FOR BRIDGE PLACEMENT AND OTHER MSC. BRIDGE WORK.
**SHOULDER WORK**

- No parking within 200' of cones.
- Max. length of work zone = 400'

**SINGLE LANE CLOSURE**

- Two lane road
- Max. length of work zone = 3280'

**ROADWAY ENCROACHMENT**

- Note: If only one lane is affected by road work (that is, the cones along the work area are no closer than 10' to centerline), the centerline cones for the opposing lane may be deleted.
Notes:
1. The project is located in both the Duck Creek and Jordan Creek Watersheds, a portion of the drainage from the project work limits downstream into these creeks. They are both subject to the EPA as designated impaired watersheds, listed under Section 303(d) of the Clean Water Act. Special controls are required to restore Duck Creek’s water quality. The stream is the focus of a joint dredging recovery effort.
2. The fish passage channel, existing as a trench in the bottom of the ditch along Edam Dr. (ETA: 51 to 58-06 m) must not be disturbed, except for any construction necessary at either end of the culvert.
3. Install erosion and sediment control devices before earth disturbing activities.
4. Maintain devices, monitor daily, excavate check dams when 4’ of sediment accumulates. Ensure silt fence is tight against ground.
5. If inspection reveals water is bifurcating beyond the project work limits, immediately implement emergency connection and ensure actual diversion. Silt fencing on check dams may be required. Sheet of paved surfaces and temporary seeding and posting may also be required.
6. Stabilize disturbed ground as soon as possible. Unstabilized surfaces must be temporarily stabilized with seeding, posting, or other effective measures. The contractor is responsible for maintaining erosion and sediment control until project work areas are paved and seeded areas have been properly restored.
7. See sheets E1-E3 for erosion and sediment control plan (ESCP) sheets.

Site Characteristics:

A. Physical Location:
Jukau is situated at the northern end of the Alexander Archipelago. 52°27’47” N Latitude 134°41’02” W Longitude
Horizontal datum: NAD-83
Sections 30 & 31, Townships 40 South, Range 066 East, Copper River Meridian

B. Precipitation and Hydrology:
Average annual precipitation is 64.7 inches. Precipitation per year and 100 inches of snow.
Estimated pre-construction runoff coefficient: C=0.40
Estimated post-construction runoff coefficient: C=0.40
Receiving waters are Duck Creek and Jordan Creek. Area of Project is 3.2 acres.

Description of Construction Activity:

A. Path Reconstruction:
The Plans Call for the Reconstruction of the existing 8-foot-wide paved path, work on the new 10-foot-wide path will begin with construction of the fish passage culverts, unless the local area is flooded or work begins outside of the permit windows. In either case, work will be started on the left-hand path at the end of the project working downstream, after that, the path will be parallel to the existing ground on the right side of the path. The path will be fine graded with crushed aggregate base course and a 5-inch lift of asphalt pavement. The contractor may install additional pavement in order to fill in any wetlands or other o.h.w. In that case, the slopes will be properly graded with soil, seeding and posting to reduce erosion.

B. Ped. Bridge Approach Construction:
The plans call for the construction of a 10- to 15-foot-long path approaches at both ends of the pedestrian bridges. The approaches link the bridge with the multi-use path and transition to the grade of the new pedestrian bridges. The contractor has several options on how to build the approaches, but environmental permitting does not allow the placement of fill onto class B wetlands or below original high water (h.w.) levels. Once the bridge foundations are completed, the path approaches at both ends can be constructed. The construction of an at-grade concrete abutment in addition to the foundation is recommended as a cost-effective option for containing materials used to construct the approaches. The remaining work will involve placement of riprap material to the line, grades and slopes on the contractor’s portion of the plan sheets. The path will be fine graded with crushed aggregate base course and a 15-inch lift of asphalt pavement. The contractor may install additional pavement in order to fill in any wetlands or other o.h.w. In that case, the slopes will be properly graded with soil, seeding and posting to reduce erosion.

C. Pedestrian Bridge Construction:
Installation of the pedestrian bridges will begin once the foundations and approaches have been constructed. Connected to the Jordan Creek bridge site may be reached by a 10-foot-wide path while the Duck Creek Bridge site may be reached by the Mendenhall Loop Road. Installations shall occur separately and may only occur within the off-peak hours (see water quality permit) timeframe. Bridges shall be loaded on a flatbed truck and transported to the site from the Contractor's temporary storage location. A crane or properly loaded road truck will then erect the bridge from the flatbed truck to its final resting place on the foundation. The contractor is responsible for employing NPS Environmental Permit to place minimum fill quantities in the class B wetlands, but there is no permission to work below o.h.w. in Duck and Jordan Creeks.

Silt Fence Summary:

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*Updated 12/2020 9:20*
JUNEAU, ALASKA
MENDENHALL VALLEY MULTI-USE PATH IMPROVEMENTS PHASE II
CM-0003(81) / 68314

PROJECT SUMMARY
LENGTH OF GRADING = 1.75 miles
LENGTH OF PAVING = 1.75 miles
WIDTH OF PAVING = 10'
LENGTH OF PROJECT = 1.75 miles

VICINITY MAP

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
A-01.00  F-01.01  I-20.13  I-21.00  I-22.00
### Estimate of Quantities

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<th>PAY ITEM</th>
<th>UNIT</th>
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<td>(1-2) Precast Setting</td>
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<td>213</td>
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### Basis Of Estimate

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<tr>
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<th>UNIT</th>
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<tr>
<td>203</td>
<td>(28) Borrow, Selected Material, Type A</td>
<td>1.81</td>
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<td>508</td>
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<td>508</td>
<td>(4) Bed Course Material, Grading B-1</td>
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### Removal of Structures and Obstructions

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<tr>
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<td>Asphalt Pavement</td>
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<td>Square Yard</td>
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<td>Steel Pedestrian Bridge</td>
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<td>Miscellaneous Culverts</td>
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<td>Linear Foot</td>
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<td>Manhole</td>
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### Electrifier Adjustment Summary

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<tr>
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</thead>
<tbody>
<tr>
<td>&quot;A&quot;</td>
<td>23+50</td>
<td>X</td>
</tr>
<tr>
<td>&quot;B&quot;</td>
<td>24+40</td>
<td>X</td>
</tr>
<tr>
<td>&quot;C&quot;</td>
<td>29+90</td>
<td>X</td>
</tr>
<tr>
<td>&quot;D&quot;</td>
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### Pipe Summary

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<tr>
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<th>ACTION</th>
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<td>24&quot;</td>
<td>REPLACE</td>
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<tr>
<td>&quot;F&quot;</td>
<td>49+85</td>
<td>X</td>
<td>24&quot;</td>
<td>REPLACE</td>
</tr>
<tr>
<td>&quot;G&quot;</td>
<td>75+04</td>
<td>X</td>
<td>18&quot;</td>
<td>EXTEND</td>
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<tr>
<td>&quot;H&quot;</td>
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<td>X</td>
<td>18&quot;</td>
<td>EXTEND</td>
</tr>
<tr>
<td>&quot;I&quot;</td>
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### Slope-Widening Summary

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<th>DIRECTION</th>
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<td>LT</td>
<td>51+70</td>
<td>68+70</td>
<td>RT</td>
<td>68+70</td>
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<tr>
<td>LT</td>
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<td>LT</td>
<td>69+70</td>
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### Fence Re-Construction Summary

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<thead>
<tr>
<th>SIDE OF ROAD</th>
<th>STATION</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td>RT</td>
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<tr>
<td>LT</td>
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<td>70+60</td>
</tr>
<tr>
<td>RT</td>
<td>71+21</td>
<td>76+20</td>
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### Estimate of Quantities

<table>
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<th>STATION</th>
<th>LEFT PATH</th>
<th>RIGHT PATH</th>
</tr>
</thead>
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<td>34+10</td>
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<td>&quot;G&quot;</td>
<td>75+04</td>
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<td>&quot;H&quot;</td>
<td>75+85</td>
<td>X</td>
</tr>
<tr>
<td>&quot;I&quot;</td>
<td>21+75</td>
<td>X</td>
</tr>
</tbody>
</table>
General Typical
Section Notes:

1. Cross slope will be 3:1. Direction of cross slope will vary by location as indicated in the plans or as directed.
2. See plan sheets for typical locations.
3. Bridge deck areas will taper to match existing elevations at intersections and driveways. The intention of bridge deck tapers is to eliminate standing water from paved primary surfaces.
4. Minimum longitudinal grade is 5%.
5. Topsoil and seed all new slopes and disturbed areas. Topsoil shall be placed with a minimum depth of 3". Existing topsoil may be stripped and reseeded when feasible. Do not reuse any soil containing weed-cherry grass (Krasante plant) without following procedure specified in the environmental comments. Do not place topsoil on path shoulders.
6. Clearing and grubbing only as required or directed within the right-of-way limits. Remove and dispose of weed-cherry grass. All trees within the right-of-way that are damaging the existing path will be cleared and grubbed as directed. This work includes stump removal as specified in Section 21.
7. Remove 4' chain-link fence at start of project; replace according to typical section details. (For fence details, refer to STD. ENG. F-01-01)
8. Varied width of path fill slope to fit physical constraints as directed.
9. Soft soils exist on right path (cross depressions to Jordan Creek). Bed drain and place geotextile as directed by engineer.

Typical Section #1

- Existing roadway fill slope
- Mirror for both sides of erosion drive

Typical Section #2

- Existing roadway fill slope
- Mirror for both sides of erosion drive

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS
**Typical Section #6**

- **EXISTING GROUND**
- **2% CROSS-SLOPE**
- **1 1/2" ASPHALT SIDEWALK**
- **REMOVE EXISTING ASPHALT PAVEMENT**
- **3" BED COURSE MATERIAL, GRADING C**
- **BOREW, SELECTED MATERIAL TYPE A, AS REQUIRED. 6 INCHES MINIMUM (for leveling)**

*Mirror for both sides of Mendenhall Loop Road*
Typical Section #7

Root Barrier Summary

<table>
<thead>
<tr>
<th>STATION</th>
<th>LEFT PATH</th>
<th>RIGHT PATH</th>
<th>LENGTH OF BARRIER</th>
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</thead>
<tbody>
<tr>
<td>E 68+25 to E 68+65</td>
<td>X</td>
<td>X</td>
<td>40</td>
</tr>
<tr>
<td>E 70+60 to E 71+60</td>
<td>X</td>
<td>X</td>
<td>105</td>
</tr>
<tr>
<td>E 72+60 to E 73+85</td>
<td>X</td>
<td>X</td>
<td>85</td>
</tr>
<tr>
<td>TOTAL</td>
<td>X</td>
<td>X</td>
<td>230</td>
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</tbody>
</table>

Detail Of Geomembrane Root Barrier

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS
CULVERT EXTENSION/REPLACEMENT DETAILS

SECTION A-A

SECTION B-B

FISH PASSAGE CULVERT DETAILS

NOTE:
1. TRANSITION PROFILE TO ACHIEVE MINIMUM COVER OVER CULVERT, AS REQUIRED. DO NOT EXCEED 15" ON GRADE.
**UTILITY NOTES:**

1. SIGNAL INTERCONNECT TO REMAIN IN SERVICE DURING CONSTRUCTION.
2. REPLACE CONDUIT HANGER ASSEMBLY WITH EQUAL OR SIMILAR.
3. ALL COSTS FOR DAMAGING ANY UTILITY LINE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**SECTION VIEW**

**PLAN VIEW**

**BRIDGE NOTES:**

**GENERAL:**
ALL BRIDGE DETAILS ARE NOT SHOWN. FINAL DESIGN OF BRIDGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALTERNATIVES TO THE GENERAL FEATURES, ORIENTATION OF MEMBERS AND MATERIALS NOTED MAY BE PROPOSED FOR APPROVAL BY THE ENGINEER. SUPPORTING DOCUMENTATION AND STRUCTURAL CALCULATIONS SHALL BE PERFORMED BY A REGISTERED ENGINEER IN THE STATE OF ALASKA. DETAILED SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

**DESIGN CRITERIA:**
ALL DESIGN AND FABRICATION SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES:
1. UNIFORM BUILDING CODE, 1997 OR LATER EDITION
2. AMERICAN COUNCIL OF ENGINEERS SPECIFICATIONS FOR THE DESIGN OF BRIDGES, 1997
3. ANSI A 30.1 & A 30.2, STRUCTURAL WELDING CODE (LATEST EDITION)
4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL, LATEST EDITION
5. APPLICABLE ASTM STANDARDS

**LOADS:**
- **DEAD LOAD — ALL**
- **LIVE LOAD — UNIFORM 85 PSF**
- **VEHICULAR LOAD — HS-10**
- **WIND LOAD — 90 MPH, EXPOSURE "B"**
- **SOILS**:
  - ALLOWABLE BEARING CAPACITY — 1500 PSF
  - FROST DEPTH — 3 FEET
TRAFFIC CONTROL NOTES

1. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.

2. TWO WAY TRAFFIC ON EGAN DRIVE, LOOP ROAD AND SIDE STREETS SHALL BE MAINTAINED AT ALL TIMES.

3. TRAFFIC LANES SHALL BE A MINIMUM OF 10 FT. WIDE.

4. A PLACER SHALL BE USED TO DIRECT TRUCKS AND CONSTRUCTION EQUIPMENT WHEN THEY EXIT OR CROSS THE TRAVELLED WAY.

5. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.

6. CHANNELLIZATION DEVICES WILL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL IF USED AT NIGHT.

7. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE RECALLED BUT NOT LIMITED TO THE ORDER OF WORK, PATH CLOSURES, AND PEDESTRIAN BRIDGE CONSTRUCTION ACTIVITIES.

8. ACCESS TO BUSINESSES AND HOMES WILL BE OPENED AT THE END OF THE DAILY WORK SHIFT.

9. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE RECALLED BUT NOT LIMITED TO THE ORDER OF WORK, GRADING, PAWING, AND CHANGES IN THE LANE CONFIGURATIONS.

10. THE CONTRACTOR SHALL STAGE OPERATIONS SO THAT AT LEAST ONE PAVED PATH IS OPEN FOR UNRESTRICTED USE. NO TIME WILL BE BOTH THE LEFT AND RIGHT PATHS BE UNDER CONSTRUCTION AT THE SAME TIME.


12. THE CONTRACTOR MAY NOT STAGE EQUIPMENT ALONGSIDE ALGAR DRIVE AND/OR WITHIN THE CLEAR ZONE (20 FEET FROM THE EDGE OF PAVEMENT).

13. ALL ROADS WITHIN THE PROJECT LIMITS SHALL REMAIN OPEN TO TRAFFIC. SHORT-TERM SINGLE LANE CLOSURES ARE ALLOWED FOR BRIDGE PLACEMENT AND OTHER WORK.

LEGEND

- SIGN

- TYPE III BARRICADE

PATHWAY WORK
MENDENHALL LOOP ROAD

PATHWAY WORK
EGAN DRIVE

MENDENHALL VALLEY MULTIPLE PATH IMPROVEMENTS II
PROJECT NO. 68314

TRAFFIC CONTROL PLANS
PROJECT DESIGNATION NUMBER
CM-0003(81)/ 68314
STATE
ALASKA
YEAR
2002
SHEET NUMBER TOTAL SHEETS
J1 18

CHECKED BY: K. MATTSON
DRAWN BY: B. BENNETT

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY & BRIDGE DESIGN & ENGINEERING SERVICES
MENDENHALL VALLEY MULTIPLE PATH IMPROVEMENTS II

J. OSBURN

ADDENDUM NUMBER
ATTACHMENT NUMBER
RECORD OF REVISIONS
No. DATE DESCRIPTION
**SHOULDER WORK**

- **No parking within 200' of cones.**
- Max. length of work zone = 400'.

**SINGLE LANE CLOSURE**

- **50'-100' taper**
- **Min. buffer**
- **Work area**
- **100'**

- Max. length of work zone = 3280'.

- **No parking within 200' of cones.**

**TWO LANE ROAD**

**ROADWAY ENCROACHMENT**

- **No parking within 200' of cones.**

**LEGEND**

- Sign
- Cone
- Drum
- Type III barrier
- Flagging station

**WHERE**

- L = LENGTH OF TAPER
- W = WIDTH OF OFFSET
- T = TAPER RATE

**NOTE:** If only one lane is affected by road work (that is, the cones along the work area are no closer than 15' to centerline) the centerline cones for the opposing lane may be deleted.
**Notes:**

1. The project is located in both the Duck Creek and Jordan Creek Watersheds. A portion of the drainage from the project work limits discharges into these creeks. They are both classified by the EPA as designated impaired watersheds, listed under Section 303(d) of the Clean Water Act. Special controls are required to restore Duck Creek's water quality. The stream is the focus of a joint interagency recovery effort.

2. The fish passage channel, existing as a trench in the bottom of the ditch along Edam Dr. (ETA: 31-37 to 38-08 ft.), must not be disturbed, except for any construction necessary at either end of the culvert.

3. Install erosion and sediment control devices before earth disturbing activities.


5. If inspection reveals water is discharging beyond the project work limits, immediately implement corrective actions. The actual additional Silt Fence may be required. Skeeding of paved surfaces and temporary seeding and watt are also required.

6. Stabilize disturbed ground as soon as possible. Unstabilized surfaces must be temporarily stabilized with seeding, watt, or other effective measures. The contractor is responsible for maintaining erosion and sediment control until project work areas are paved and seeded areas have been returned to a veetable cover.

7. See sheets E1-E3 for erosion and sediment control plan (ESCP) sheets.

---

**Site Characteristics:**

**A. PHYSICAL LOCATION:**


**B. PRECIPITATION AND HYDROLOGY:**

Average annual precipitation per year and 100 inches of snow. Estimated pre-construction runoff coefficient: C=0.40.

Estimated post-construction runoff coefficient: C0=0.40.

Receiving waters are Duck Creek and Jordan Creek.

Area of Project = 5.2 acres.

---

**Description of Construction Activity:**

**A. PATH RECONSTRUCTION:**

The plans call for the reconstruction of the existing 8-foot wide paved path. Work on the new 10-foot wide path will begin with construction of the fish passage culvert. Unless the local area is flooded or work begins outside of the permit windows, in which case work will begin on the left-right path at the end of the project working downstream. Soft soils exist on the right path between Fred Meyers and the Jordan Creek Rd. A geotextile will be used to protect the existing ground prior to borrow placement in this area. Select trees, shrubs, and root growth on the left path will occur prior to placement of the root barrier.

**B. PED. BRIDGE APPROACH CONSTRUCTION:**

The plans call for the construction of a 16-foot long path approaches at both ends of the pedestrian bridges. The approach is designed with the bridge approach, transition to meet the grade of the new pedestrian bridges. The contractor has several options on how to build the approaches, but environmental permitting does not allow the placement of fill. A combination of native soils and fill is required. Once the bridge foundations are completed, the path approaches at both ends can be constructed. The construction of an at-grade concrete embankment, in addition to the foundation, is recommended as a method of containing material used to construct the approaches. The remainder of the work will involve placement of native soil material to the grade, slopes, and seed to be added to the Contractor-Purchased Approach Plan sheets. The path will be fine graded with crushed aggregate base course and a 1.5-inch lift of asphalt pavement. The Contractor may obtain additional permitting in order to fill on Class B wetlands or below O.H.W. In that case, soils may be added to the site.

**C. PEDESTRIAN BRIDGE CONSTRUCTION:**

Installation of the pedestrian bridges will begin once the foundations and approaches have been completed. Construction of the Jordan Creek Bridge site may be reached by Edam Dr. Only through the creeks. The crane will be located on a flat bed truck and transported to the site from the contractors temporary storage location. The crane, or possibly a loaded truck will then be used to place the site. The crane for the Jordan Creek Bridge is set back several feet to provide for full quantities in the Wetlands, but there is no permission to work below O.H.W. in Duck and Jordan Creeks.