

MEMORANDUM

State of Alaska

Department of Transportation and Public Facilities
Central Region Design and Engineering Services
Preliminary Design and Environmental

To: Matt Dietrick
NEPA Program Manager

Date: 3/7/19

From: Brian Elliott
Regional Environmental Manager

Project: George Parks Highway
Name: Systemic Passing Lanes &
Parks Hwy MP 90-99
Resurfacing

Subject: Re-Evaluation Approval Form

Project No: Z573010000 & Z561770000
/ 00011498 & 0A41032

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017 and executed by FHWA and DOT&PF.

The project meets the criteria for classification as a categorical exclusion per 23 CFR 771.117(d)(13). It does not qualify for programmatic approval because it does not meet one of the general conditions (o) because it is a Type 1 project (23 CFR 772.5). The purpose of this re-evaluation is to account for changes to design (a shift in passing lane location) and minor changes to the affected environment, environmental impacts, and proposed mitigation.

Enclosures: Re-Evaluation Documentation

cc: Ryan Riddle, Environmental Impact Analyst, PD&E
Kelly Summers, Project Manager, PD&E

State of Alaska
Department of Transportation & Public Facilities

RE-EVALUATION APPROVAL FORM
(NEPA Assignment Program Projects)



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.

I. Project Information:

A. Project Name: George Parks Highway Systemic Passing Lanes & Parks Highway MP 90 - 99 Resurfacing

B. Federal Project Number: 00011498 & 0A41032

C. State Project Number: Z573010000 & Z561770000

D. Primary/Ancillary Project Connections:

Parent Projects:

George Parks Highway Systemic Passing Lanes (00011498/Z573010000) & Parks Highway MP 90-99 Resurfacing (0A41032/Z561770000)

Child Projects:

- 1) HSIP: Parks Hwy: Systemic Passing Lanes MP 83-99 (in construction); (0A41037/CFHWY00127)
- 2) HSIP: Parks Hwy: Systemic Passing Lanes MP 99-123.5 (in construction); (0A42010/CFHWY00092)
- 3) HSIP: Parks Hwy Systemic Passing Lanes MP 123.5-163 (in design, going to construction); (0001498/CFHWY00128)

E. Document Type:

- CE: 23 CFR 771.117(d)(13)
 EA
 EIS

F. Project Scope (Use STIP Project Description):

Z573010000 STIP Description:

"This project will provide systemic passing lanes along the Parks Highway from approximate MP 83 to region boundary at MP 163. The passing lanes will be roughly 1 mile long and will be spaced every 6-10 miles in each travel direction. The project will be phased to coordinate with current Parks Highway Projects. This is the design parent project."

Z561770000 STIP Description:

Resurface approximately 9 miles of the Parks Highway. Project may include base stabilization and shoulder widening as appropriate, Project is coordinated with Highway Safety Improvement Program project Need ID 19217 Parks Highway: Systemic Passing Lanes Project.

G. Approval date(s) and impact summary(ies) of the original environmental document and any re-evaluations:

Original CE: 8/28/15

Expedited Re-Evaluation: 7/3/17. The re-evaluation was completed to advance a child project (CFHWY00127) to construction.

Expedited Re-Evaluation: 11/3/17. The re-evaluation was completed to change verbiage on a PID form.

Expedited Re-Evaluation: 3/22/18. The re-evaluation evaluated the entire parent project for changes, and found no changes; the re-evaluation was prepared to advance a child project (CFHWY00092) to construction.

H. List of Attachments:

- Figure 1: Project Location and Phasing
- Appendix A: Section 106 Consultation
- Appendix B: Traffic Noise Analysis
- Appendix C: Section 4(f)/6(f) Consultation
- Appendix D: Public and Agency Coordination

II. Proposed Action:

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- | | | |
|---|-------------------------------------|-------------------------------------|
| A. Project scope? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| B. Project design? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| C. Project limits: | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| D. Project funding sources? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| E. Describe any changes, including prior re-evaluations, compared to original environmental document: | | |

The Alaska Department of Transportation and Public Facilities (DOT&PF) approved a Categorical Exclusion (CE) to improve the Parks Highway from milepost (MP) 83 to MP 163 in the Matanuska-Susitna Borough (MSB) (Figure 1) on August 28, 2015.

The project has been divided into three phases based on logical break points for design and construction:

- Phase 1: HSIP: Parks Hwy: Systemic Passing Lanes MP 83-99 & Parks Hwy: MP 90-99 Rehabilitation
- Phase 2: HSIP: Parks Hwy: Systemic Passing Lanes MP 99-123.5
- Phase 3: HSIP: Parks Hwy Systemic Passing Lanes MP 123.5-163

Construction for Phase 1 began in early summer 2018; construction for Phase 2 began in late summer 2018; construction for Phase 3 is scheduled to begin in spring 2019. Environmental commitments and mitigation measures stated in the 2015 CE are being implemented during construction of Phase 1 and 2.

The intent of this re-evaluation is to evaluate the validity of the 2015 CE in light of changes in regulatory requirements, affected environment, the proposed design, environmental impacts, and proposed mitigation. This re-evaluation is supplementing a request to advance HSIP: Parks Hwy: Systemic Passing Lanes MP 123.5-163 (Phase 3) to construction.

2015 CE

The proposed project included the following scope of work:

- Widen the roadway to install passing lanes in each travel direction, spaced approximately every six to eight miles
- Resurface the George Parks Highway between MP 90 to MP 99, including new asphalt pavement and a foam stabilized base course
- Remove or reassign ‘unofficial’ slow-vehicle turn-outs
- Improve or replace drainage and stream culverts, including fish passage culverts
- Conduct bridge maintenance
- Widen shoulders within the MP 90 to MP 99 project limits
- Dig-outs, as needed to improve deficient embankment

- Vegetation clearing within DOT&PF right-of-way (ROW)
- Relocate utilities, as needed
- Add roadside turnouts at Goose Creek and Montana Creek
- Improve drainage, driveways and approaches, signs and striping, guardrail and guardrail end treatments

2019 Re-Evaluation

The overall scope of work for the project has not changed. However, the limits of individual passing lanes have been modified slightly. The passing lane limits of northbound passing lane MP 137.5-138.7 was lengthened by approximately 1,500 feet from its original location at MP 137.8-138.7. The passing lane was shifted south, following analysis of sight distances and grades, to take advantage of the uphill climb out of the Troublesome Creek drainage.

III. Purpose and Need:

YES NO

Have there been any changes in the project purpose and need from that described in the original environmental document?

Describe any changes:

2015 CE

According to the 2015 CE, the purpose of the proposed project is to improve safety and traffic flow along the George Parks Highway between MP 83 – MP 163. The Parks Highway links areas in the south, such as Anchorage and Wasilla, with northern areas such as Denali National Park and Fairbanks. The corridor is a major commercial trucking route that also experiences significant increases in traffic numbers during the summer months as recreational trips to Denali National Park peak. Traffic congestion increases travel times along the corridor, particularly during the height of tourist season when local, freight, and tourist traffic can be delayed in traffic queues, in part because of the limited opportunities to pass safely. Narrow shoulders on the highway segment between MP 90 – 99 are inconsistent with the adjacent highway segments which are up to four feet wider on each side.

2019 Re-Evaluation

There have been no changes to the purpose and need since approval of the 2015 CE.

IV. Environmental Consequences

YES NO

Identify (yes or no) if there have been any changes in project impacts from those identified in the original environmental document, including prior re-evaluations. For each “yes”, describe changes, including any changes to previously proposed mitigation and/or environmental commitments compared to the original environmental document. Attach any supporting analysis or studies.

1. Have there been any changes in the affected environment within or adjacent to the project area that could affect any of the impact categories (e.g. new regulations, transportation infrastructure, protected resources, land use plans, etc.)?

2. Describe any changes:

There have been minor changes to the affected environment since the 2015 CE. These changes include adoption of a new MSB 2035 Long-Range Transportation Plan (in December 2017), discovery of a new contaminated site in the vicinity of the project, and designation of a previously uncatalogued anadromous stream at MP 138.2. While changes have occurred, they do not alter the overall conclusions reached in the 2015 CE.

A. Right-of-Way Impacts

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. Right-of-way requirements for the project? YES NO
- 2. Project effects on minority or low income populations as defined in [E.O. 12898](#) (FHWA Order 6640.23A, June 2012)? YES NO
- 3. Project use of ANILCA land? YES NO
- 4. Describe any changes:

2015 CE

No ROW acquisitions are required as all proposed work would be limited to the existing DOT&PF ROW. No use of ANILCA land is required and there would be no disproportional impacts to minority or disadvantaged populations. Temporary construction easements and/or permits may be required during construction. No permanent ROW impacts are expected to occur as a result of the proposed project.

2019 Re-Evaluation

The proposed permanent improvements would still be limited to the existing ROW and no additional ROW acquisitions are required. Temporary construction easements within Phase 3 are discussed in Section IV.Q. There have been no changes to the project’s effects on minority or low-income populations or use of ANILCA land.

B. Social and Cultural Impacts

YES NO

Have there been any changes to the project’s effect on the following since the approval of the original environmental document:

- 1. Neighborhoods or community cohesion? YES NO
- 2. Travel patterns and accessibility (e.g. vehicular, commuter, bicycle, or pedestrian)? YES NO
- 3. Schools, recreation areas, churches, businesses, police and fire protection, etc.? YES NO
- 4. Elderly, handicapped, non-drivers, transit-dependent, minority and ethnic groups, or the economically disadvantaged? YES NO
- 5. Unresolved project issues or concerns of a federally recognized Indian Tribe [as defined in [36 CFR 800.16\(m\)](#)]? YES NO
- 6. Describe any changes:

2015 CE

The proposed project would provide the traveling public with the long-term benefit of improving travel conditions and safety in the project area. Post construction travel patterns would remain the same, while accessibility and passing opportunities would be improved with the addition of systemic passing lanes and an improved road surface. No adverse social or cultural impacts are anticipated.

2019 Re-Evaluation

Since the 2015 CE, no new residential neighborhoods or major commercial developments have been constructed along the project corridor. The project is still anticipated to have a beneficial impact to the travelling public, local residents, recreational resources, and businesses by improving travel and enhancing safety.

C. Economic Impacts

YES NO

Have there been any changes to the project’s potential effect on the following since the approval of the original environmental document:

- 1. To have adverse economic impacts on the regional and/or local economy, such as the effects of the project on development, tax revenues and public expenditures, employment opportunities, accessibility, and retail sales?
- 2. To have adverse effect on established businesses or business districts?
- 3. Describe any changes:

2015 CE

The proposed project would provide a long-term economic benefit by improving the safety and efficiency of commercial and tourist traffic on the Parks Highway. Several businesses are located in the vicinity of the proposed project; however, the proposed project would not change access to these properties and no permanent adverse economic impacts are anticipated.

2019 Re-Evaluation

There have been no changes to established businesses or local or regional economic conditions that could potentially be impacted by the project since the 2015 CE. The project is still not anticipated to result in permanent adverse economic impacts.

D. Local Land Use and Transportation Plan

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. Local land use or transportation plan(s)?
- 2. The potential for the project to have adverse indirect and cumulative effects on land use or transportation?
- 3. Is the project, as currently proposed, consistent with current land use and transportation plans?
- 4. Describe any changes:

2015 CE

Land use and transportation plans covering the project area include MSB Comprehensive Plan (2005), Denali State Park Management Plan (2006), and MSB Long-Range Transportation Plan (2007). Although not specifically mentioned in the plans listed above, the proposed project is consistent with their general goals of preserving and modernizing transportation corridors for safety, economic development, efficiency and connectivity. The proposed project would not result in an adverse impact to current or future land uses.

2019 Re-Evaluation

The MSB adopted a new 2035 Long-Range Transportation Plan in December 2017. The new plan does not specifically identify a passing lane project on the Parks Highway, but does include rehabilitation of two adjacent sections of the Parks Highway between MP 99-123.5 and MP 163-183. No other land use or transportation plans have changed since signature of the CE. The project remains listed in the latest version of the Statewide Transportation Improvement Program (2018-2021, last amended August 2018) and is consistent with the project description contained therein.

E. Impacts to Historic Properties

YES NO

Have there been any changes to the following since the approval of the original environmental document:

E. Impacts to Historic Properties

YES NO

- 1. Involvement of any road that is included on the “[List of Roads Treated as Eligible](#)” in the Alaska Historic Roads PA?
- 2. Project qualifications as a Programmatic Allowance under the Section 106 programmatic Agreement?
- 3. The status of National Register-listed or eligible sites in the project area?
- 4. Conclusions reached in the original environmental document regarding the project’s effect on cultural and historical resources?
- 5. Project activities described in consultation or findings letters previously submitted SHPO or other consulting parties?
- 6. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

Cultural resource surveys identified five properties as potentially eligible for listing on the National Register of Historic Places (NRHP), but were found not eligible for listing for lack of significance. Therefore, DOT&PF found that no historic properties would be affected by the proposed projects. The Alaska State Historic Preservation Officer (SHPO) concurred with DOT&PF’s finding of no historic properties affected on April 2, 2015.

2019 Re-Evaluation

Changes to the project design since the 2015 CE include extension of the proposed passing lane at MP 137.8 - 138.7. The passing lane has been extended south to 137.5, impacting the access point for the Upper Troublesome Creek Trailhead. The area of potential effect has been modified to include this additional project area, and a cultural resource survey of the additional APE was completed in August 2018. The survey did not identify any potentially NRHP-eligible properties. The DOT&PF notified the SHPO and consulting parties of the revised APE and finding of no historic properties affected on December 13, 2018. The SHPO concurred with this finding on December 24, 2018. The finding that no historic properties would be affected by the proposed project remains valid.

Section 106 Consultation documents are included in Appendix A.

F. Wetlands Impacts

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. Project wetland impacts? *If yes, complete a through d and resource agency coordination is required.*
 - a. List total acres of impact (original/changed): 3.5/1.35
 - b. List total fill quantities in wetlands (original/changed): 60,000 cy/6,000
 - c. List total dredge quantities (original/changed): 33,000 cy/186
 - d. Have mitigation measures changed?
- 2. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

Impacts to wetlands would include the permanent placement of dredged and fill material to widen shoulders, repair and replace culverts, and install passing lanes. The locations of proposed passing lanes were selected to avoid wetlands where possible while also maximizing sight distance within the passing lanes in order to meet the purpose and need of improving safety and traffic flow along the Parks Highway. While minimization measures such as steepening slopes and limiting fill to the extent possible would be incorporated into final design, unavoidable impacts are still anticipated. A Section 404 permit from the U.S. Army Corps of Engineers (USACE) would be obtained to authorize work in jurisdictional waters and any mitigation would occur according to USACE guidelines.

2019 Re-Evaluation

The total area of wetland impact changed from 3.50 acres to 1.35 acres since the 2015 CE. Changes that reduced the project’s impacts to wetlands include refinement of passing lane limits, steepening side slopes where practicable, and limiting in-water work to the minimum necessary to construct the project.

In 2017, DOT&PF obtained verification to use USACE Nationwide Permit (NWP) 14 for the discharge of fill material into 0.38 acre of wetlands and waters of the U.S associated with Phase 1 of the project. DOT&PF proposed permittee responsible mitigation comprised of designing and installing fish passage culverts at two anadromous fish crossings.

In 2018, DOT&PF obtained permit verification under NWP 14 for the discharge of fill material into 0.48 acre of wetlands and waters of the U.S associated with Phase 2. The USACE determined that compensatory mitigation for unavoidable impacts was not required.

A separate NWP application has been submitted for Phase 3 for impacts to approximately 0.49 acre of wetlands and waters of the U.S. DOT&PF proposed installing a fish passage culvert in an anadromous stream as permittee-responsible mitigation.

G. Water Body Involvement

YES **NO**

Have there been any changes to the project’s effects on the following since the approval of the original environmental document:

- 1. Water bodies? YES NO
- 2. Navigable water body as defined by USCG (Section 9)? YES NO
- 3. Waters of the U.S. as defined by the USACE (Section 404)? YES NO
- 4. Navigable Waters of the U.S. as defined by the USACE (Section 10)? YES NO
- 5. Fish passage across a stream frequented by salmon or other fish (i.e. [Title 16.05.841](#))? YES NO
- 6. A resident fish stream ([Title 16.05.841](#))? YES NO
- 7. A catalogued anadromous fish stream ([Title 16.05.871](#))? YES NO
- 8. A designated Wild and Scenic River or land adjacent to a Wild and Scenic River? YES NO
- 9. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

The proposed project includes in-stream culvert replacements and upstream/downstream channel work within approximately 27 streams that flow under the Parks Highway (see Table 1 below). No substantial changes to drainage are anticipated because the culverts would be replaced with similar structures, and similar drainage conditions are anticipated after construction. Culvert replacements in fish bearing streams would include fish passage improvements. The streams would be temporarily diverted during construction of the culverts; no permanent diversions are anticipated.

Table 1. Streams located within and adjacent to project work areas (2015 CE)

Name	Receiving Water body	Approx. Milepost	Anadromous Stream?	Anadromous Catalog Code / Notes	Fish Passage Improvements?
Unnamed	Sheep Creek	90.1			
Unnamed	Susitna River	92.5	Y	247-41-10200-2226	Y
Unnamed	Susitna River	92.5	Y	Located 340' from previous	Y
Unnamed	Goose Creek	93.0			
Unnamed	Goose Creek	93.3	Y	Overflow at Goose Creek	Y
Goose Creek	Goose Creek	93.3	Y	247-41-10200-2230	Y
Unnamed	Susitna River	95.1			
Unnamed	Susitna River	96.3			
Unnamed	Montana Creek	96.4			
Montana Creek	Montana Creek	96.5	Y	247-41-10200-2250	
Section House Creek	Susitna River	101.3	Y	247-41-10200-2256	Y
Unnamed	Rabideux Creek	107.6	Y	No code listed	Y
Unnamed	Rabideux Creek	107.7	Y	247-41-10200-2291-3025	Y
Sawmill Creek	Rabideux Creek	109.7	Y	247-41-10200-2291-3041	Y
Unnamed	Rabideux Creek	111.6	Y	247-41-10200-2291	Y
Unnamed	Chulitna River	119.3	Y	No code listed	Y
Unnamed	Chulitna River	120.3	Y	247-41-10200-2381-3007-4029	Y
Railroad Creek	Chulitna River	128.5	Y	247-41-10200-2381-3073	Y
Unnamed	Chulitna River	136.1	Y	247-41-10200-2381-3116-4006	Further coordination with ADFG required
Unnamed	Chulitna River	136.7			
Unnamed	Chulitna River	138.2	Y	No code listed * 247-41-10200-2381-3140	Further coordination with ADFG required *Y
Unnamed	Chulitna River	138.7			
Unnamed	Chulitna River	144.8			
Horseshoe Creek	Chulitna River	159.8	Y	247-41-10200-2381-3220	Y
Unnamed	Chulitna River	159.9	Y	No code listed	Y
Unnamed	Chulitna River	161.3	Y	No code listed	Further coordination with ADFG required

Unnamed	Chulitna River	161.4	Y	No code listed	Further coordination with ADFG required
Unnamed	Chulitna River	162.2			

*Unnamed tributary of Chulitna River at MP 388.2 was added to the Anadromous Waters Catalog in 2018.

2019 Re-Evaluation

Culvert improvements for streams within Phase 1 of the project, with the exception of Goose Creek and its overflow culvert (MP 93.3), were constructed in accordance with Table 1 in 2018. All in-water work was carried out under the Phase 1 USACE Section 404 Nationwide Permit described in Section F and a Fish Habitat Permit from the Alaska Department of Fish and Game (ADFG). Improvements at Goose Creek have been programmed under a separate project.

No culvert improvements for streams listed in Table 1 were constructed as part of Phase 2 of the project since none were located within any of the passing lane project limits. Culvert improvements for these streams are anticipated to be constructed under a separate project.

Culvert improvements for streams within Phase 3 of the project include unnamed streams at MPs 136.7, 138.2, 138.7, and 162.2. An unnamed tributary of the Chulitna River, crossing the Parks Highway at MP 138.2, was added to the ADFG Anadromous Waters Catalog (AWC) in 2018. The proposed culvert replacement at MP 138.2 has been designed in accordance with the DOT&PF-ADFG fish passage memorandum of agreement and Tier I fish passage design criteria. In-water work is anticipated to be authorized under the Phase 3 USACE Section 404 Nationwide Permit described in Section F and a Fish Habitat Permit from ADFG. Culvert improvements for the remaining streams listed in Table 1 between MP 123.5 and 163 are outside the passing lane limits and are anticipated to be constructed under a separate project.

H. Fish and Wildlife Impacts

YES NO

Have there been any changes to the project’s effects on the following since the approval of the original environmental document:

- | | | |
|--|-------------------------------------|-------------------------------------|
| 1. Anadromous or resident fish habitat? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Essential Fish Habitat (EFH)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Wildlife resources? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Bald eagles or golden eagles? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Migratory birds? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments: | | |

2015 CE

Anadromous or Resident Fish and Essential Fish Habitat

Several anadromous streams were identified during a review of the ADFG AWC mapper. A site visit including the DOT&PF and consultant design team, and ADFG on August 26 - 27, 2014, investigated nearly all of the culverts that pass beneath the roadway in or near proposed construction areas. Most of the anadromous streams were previously identified in a review of the ADFG mapper; ADFG staff conducted in-office research after the site visit to verify additional anadromous streams located within the project corridor. ADFG will be consulted during culvert design and a Title 16 Fish Habitat permit will be obtained for construction in anadromous waters. DOT&PF has determined the proposed project would not result in an adverse effect to EFH. In addition, all in-water work would be timed to avoid fish-spawning periods and would be scheduled in

accordance with all stipulations set forth in the Title 16 Fish Habitat permit. The long-term effects of culvert work are expected to benefit EFH by improving fish passage and habitat.

Wildlife Resources

A review of the Statewide DOT&PF Moose-Vehicle Collision Rankings 2006 – 2010 indicated the proposed project area has not historically been identified as an area with a high rate of wildlife-vehicle collisions. The proposed project is not expected to result in an increase in wildlife-vehicle collisions along the roadway as travel patterns and roadway capacity would remain unaltered. Although proposed activities include widening the roadway for passing lanes and shoulders, there will be no further segmentation or bisection of migration corridors. No adverse impacts to wildlife or wildlife habitat are anticipated as a result of the proposed project.

Bald Eagles and Other Migratory Birds

Suitable nesting habitat for eagles and other migratory birds such as mature trees and proximity to numerous streams and rivers exist adjacent to the proposed project corridor. An eagle survey conducted along a portion of the project corridor on July 23, 2014, did not identify any eagle nests, although a small bundle of twigs and other nesting materials in a tree near MP 143.5 indicated a bird may have been in the process of building a nest. Additional eagle surveys will be conducted prior to each phase of construction.

The proposed project would include vegetation clearing to make room for shoulder widening, installation of passing lanes, and to provide for safe sight distance along the corridor. Vegetation clearing would not occur between May 1 – July 15 as recommended by U.S. Fish and Wildlife Service (USFWS) in Recommended Time Periods for Avoiding Vegetation Clearing in Southcentral and Interior Alaska. No adverse impacts to eagles or other migratory birds are anticipated as a result of the proposed project.

2019 Re-Evaluation

A review of the most current version of the AWC mapper (2018 update), indicates the unnamed tributary of the Chulitna River at MP 138.2 has been identified as coho salmon habitat downstream of the Parks Highway. The ADFG Fish Passage mapper identifies the cross-culvert at this location as condition “red”, or “likely to impact fish passage.” As a result, the culvert replacement design has been modified to include Tier I fish passage design in accordance with the 2001 *Design, Permitting, and Construction of Culverts for Fish Passage* MOA. There have been no changes to the project’s effects on wildlife, eagle, or migratory bird resources since the 2015 CE. Eagle nest surveys were conducted prior to construction of Phase 1 and Phase 2; no nests or eagles were spotted. The project is still not anticipated to adversely affect EFH, fish, or wildlife resources.

I. Threatened and Endangered Species (T&E) Impacts

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- | | | |
|---|--------------------------|-------------------------------------|
| 1. The status of listed, proposed or candidate T&E species that will be directly or indirectly affected by the project? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. The status of critical habitat in the project area? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. The project’s effect on listed, proposed or candidate T&E species or designated critical habitat? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments: | | |

2015 CE

No threatened or endangered species protected by the USFWS occur in the proposed project area per the Anchorage Fish and Wildlife Field Office Letter to Agency Representatives regarding Section 7 Consultations in Anchorage and the Matanuska – Susitna Area dated November 1, 2012.

2019 Re-Evaluation

A review of the USFWS website in December 2018 indicates there have been no changes to listed, proposed, or candidate species, or critical habitat areas since the 2015 CE. The project will still have no effect on listed species or their habitat.

J. Invasive Species

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. The measures that will be used to minimize the introduction or spread of invasive species?
- 2. The project’s consistency with [E.O. 13112](#) (Invasive Species)?
- 3. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

Several non-native or invasive species occur along the project corridor. The proposed project includes vegetation clearing as required to widen shoulders, install passing lanes, and maintain sight distances and road safety. To minimize the risk of introducing or spreading invasive species, the area of ground disturbance would be limited to the extent possible for the purposes of the project. Certified weed-free soil would be used to reestablish vegetation after construction.

2019 Re-Evaluation

DOT&PF cannot commit to the use of certified weed-free seed on this project. However, in accordance with E.O. 13112, DOT&PF will ensure that ground disturbing activities are minimized and that disturbed areas are re-vegetated with seed recommended for the region by the Alaska Department of Natural Resources’ (ADNR) *A Revegetation Manual for Alaska*.

K. Contaminated Sites

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. The status of known or potentially contaminated sites within or adjacent to the existing and/or proposed ROW?
- 2. Any proposed excavation dewatering within 1,500 feet of a known contaminated site?
- 3. The potential for encountering a contaminated site during construction?
- 4. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

A review of the Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Database indicated six contaminated sites within the project vicinity as described in Table 2, including two ‘active’ sites, one ‘cleanup complete with institutional controls’ site, and three ‘cleanup complete’ sites. Work in the vicinity of the contaminated sites would include ground disturbance for widening the road to accommodate the new passing lanes and vegetation clearing. However, extensive excavation within any of the sites is not anticipated, and the potential for encountering hazardous waste during construction is low.

Table 2. Hazardous Materials sites adjacent to proposed passing lanes

Hazard ID	Status	Name	MP	Adjacent to passing lane or widening?
3178	Active	Goose Creek Community Center	MP 94	Yes
25385	Active	Big Su Lodge, HOT	MP 104	Close
23604	Cleanup Complete-Institutional Controls	ADOT&PF Chulitna Maintenance	MP 121	Close
24730	Cleanup Complete	Big Su Lodge USTs	MP 104	Close
23514	Cleanup Complete	Chevron Cache Creek	MP 114.5	Close
2045	Cleanup Complete	Cache Creek Chevron	MP 114.5	Close

2019 Re-Evaluation

A review of the Contaminated Sites Database in December 2018 indicates there is one new active contaminated site in the project area since the approval of the 2015 CE. The site, “ADOT&PF Chulitna Maintenance Station Class V Injection Well” (Hazard ID 26571), is listed as active due to the presence of metals, semi-volatile organic compound, and volatile organic compound concentrations above ADEC cleanup levels in soils and groundwater. Contaminated soils have been transported off-site; however, stockpiles of potentially contaminated soil still remain on-site. The project would still have a low potential for encountering hazardous waste as Hazard ID 26571 is approximately 1,000 feet south of the nearest passing lane location, on the opposite side of the roadway outside of DOT&PF ROW.

L. Air Quality (Conformity)

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. The project’s effect on an air quality nonattainment or maintenance area, which will require a new or revised conformity determination?
- 2. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

A review of the U.S. Environmental Protection Agency’s (EPA) Green Book webpage for Non-attainment Areas for Criteria Pollutants in Alaska, and the ADEC Division of Air Quality Air Non-Point Mobile Source Air Pollution in Alaska Communities webpage indicated the proposed project is not located within an air quality non-attainment or maintenance area. The proposed project would not result in a substantial long-term increase in emissions along the project corridor.

2019 Re-Evaluation

The proposed project area remains in attainment for all pollutants used by the EPA to evaluate air quality. The finding that no adverse impacts to air quality are expected as a result of the project remains valid.

M. Floodplains Impacts

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. The project’s encroachment into the 100-year floodplain (i.e. base floodplain in fresh or marine waters). *If yes, attach documentation of public involvement conducted per [E.O. 11988](#) and [23 CFR 650.109](#). Consult with the regional or*

M. Floodplains Impacts

YES NO

statewide Hydraulics/Hydrology expert, and attach the required location hydraulic study per 23 CFR 650.111.

- 2. The project’s potential to have significant encroachment as defined by [23 CFR 650.105\(q\)](#)?
- 3. The project’s potential to encroach on a regulatory floodway?
- 4. The status of local flood hazard ordinances?
- 5. The project’s consistency with local flood protection standards and [E.O. 11988](#)?
- 6. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

The proposed project is located within Zone A floodplain designations. Zone A floodplains are within the 100-year flood area, but base flood elevations and flood hazard factors have not been determined. Work within the floodplain at MP 93.3 near Goose Creek (Federal Emergency Management Agency [FEMA] Firm Panels 4210E and 4220E) would include embankment widening to support 8-foot shoulders and roadside turnouts. Additional improvements would likely include replacement of the existing culverts with an alternative drainage structure or structures.

Work within the floodplain at MP 96.3 near Montana Creek (FEMA Firm panel 4210E) would include embankment widening to support eight-foot shoulders, tapered down to match the existing embankment width at the Montana Creek Bridge, and new roadside turnouts on each side of the roadway. The road surface would be widened and fill material would be added to the road embankment fill slope within the floodplain. These improvements would not significantly modify the roadway elevation or width at the bridge location. Adverse floodplain impacts are not anticipated to result from the proposed project because the improvements described above and detailed in the Floodplain Consultation Memorandum would be designed to ensure the base flood elevation remains unchanged or lowered.

Although multiple FEMA mapped floodplains are located within the MP 83 – MP 163 corridor, proposed work would only occur within the floodplains described in this section.

2019 Re-Evaluation

There have been no changes to Federal Emergency Management Agency flood maps for the project area since the 2015 CE. Culvert improvements within the Goose Creek Zone A floodplain are being completed under a separate project. Work within the Zone A floodplain at Montana Creek was completed under Phase 1 of the project and was authorized under a MSB Flood Hazard Development Permit in April 2017. The project still conforms to local flood hazard requirements and E.O. 11988, and the finding that no adverse impacts to floodplains are anticipated remains valid.

N. Noise Impacts

N/A YES NO

- 1. Does the project as currently proposed involve any of the activities, listed below, that would trigger the need for a noise analysis? Activity list:
 - a. Construction of highway on a new location.
 - b. Substantial alteration in vertical or horizontal alignment as defined in [23 CFR 772.5](#).
 - c. An increase in the number of through lanes.
 - d. Addition of an auxiliary lane (except a turn lane).

N. Noise Impacts

N/A YES NO

- e. Addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange.
 - f. Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane.
 - g. Addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
2. Was a noise analysis completed on the original project?
- a. Was the noise analysis completed prior to implementation of the final noise rule ([23 CFR 772](#)) and the current DOT&PF Noise Policy (April 2011)?
NOTE: If yes, the project likely needs a revised noise analysis to comply with the current noise rule.
3. If the project needed a noise analysis are there any newly identified noise sensitive receptors in the project area?
4. Describe results of a new noise analysis, identification of new impacts, newly identified noise sensitive receptors or changes in noise abatement measures:

2015 CE

The proposed project would add passing lanes between MP 83 – MP 163, spaced every six-eight miles in each direction of travel. A noise analysis was conducted because the addition of auxiliary lanes makes this a Type 1 project as defined in the DOT&PF Noise Policy and in 23 CFR 772.5.

Traffic noise levels and concurrent traffic counts were measured at 35 representative locations along the proposed project corridor. Five additional noise sensitive areas were input into FHWA Traffic Noise Model Version 2.5 to predict noise levels for:

- The existing year (2015)
- The design year build alternative (2035)
- The design year no-build alternative (2035)

The evaluation of existing noise levels indicated traffic noise impacts at two noise sensitive areas. Regardless of project construction, (no-build and future-build alternatives), impacts are predicted to exist at the same two noise sensitive areas. A feasibility analysis of noise barriers was conducted for both locations where noise impacts are predicted. The analysis indicated that construction of a noise barrier at one of the locations (M27) was feasible, as it would result in a 5.7 decibel (dBA) reduction for at least 50 percent of the front row of dwelling units. Once the noise barrier was determined to be feasible, a reasonableness analysis was conducted which determined a noise barrier at this location is not reasonable because it would exceed the cost effectiveness guideline per benefited receptor as defined in the DOT&PF Noise Policy. The second noise barrier feasibility test was conducted at the other location (M21) which is predicted to experience a noise level increase. A noise barrier at this location was determined to be unfeasible because the minimum noise reduction of 5dBA was not achieved. No reasonableness analysis was done for this location because once a noise barrier is determined to be unfeasible, it need not be evaluated for reasonableness.

No noise barriers are recommended for the proposed project.

2019 Re-Evaluation

During final design for Phase 3 of the project, the design of the passing lane at MP 137.8-138.7 was extended 1,500 feet south to MP 137.5. As a result, the passing lane has moved closer to the Upper Troublesome Creek Trailhead. To account for this change, the proposed condition model was amended to include the new passing

lane limits and add a receptor at the Upper Troublesome Creek Trailhead. Results of the revised noise analysis indicate that there are no newly identified noise impacts.

In November 2018, DOT&PF approved a new noise policy. Since there have been changes to the project design that affects the noise model, the June 2015 Traffic Noise Analysis has been updated to conform with 2018 noise policy requirements. The Revised 2019 Traffic Noise Analysis is included in Appendix B.

O. Water Quality Impacts

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. The project’s involvement with a public or private drinking water source? YES NO
- 2. The project’s effect on discharges of storm water into Waters of the U.S.? YES NO
- 3. The project’s effect on ADEC designated Impaired Waterbody? YES NO
- 4. The project’s involvement with an area that is covered by a Municipal Separate Storm Sewer System (MS4) APDES permit? YES NO
- 5. The potential for the project’s runoff to be mixed with discharges from a APDES permitted industrial facility? YES NO
- 6. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

A review of Alaska’s Final 2012 Integrated Water Quality Monitoring and Assessment Report and associated mapper did not indicated the presence of any impaired waterbodies within the vicinity of the proposed project. While the proposed project would increase impervious surface area along the project corridor, surface water is expected to filter through gravel and vegetated ditches before entering adjacent streams. No impacts to water quality are anticipated.

A Tier 3 waterbody consultation with ADEC for work within Denali State Park (between MP 132 – MP 163) will occur prior to construction of the project.

2019 Re-Evaluation

A review of the ADEC Drinking Water Protection Areas (DWPA) mapper indicates there are several DWPA’s intersecting the project area; however, the project does not perform excavation within those areas, and is still not anticipated to involve a public or private drinking water source. A review of the ADEC Impaired Waters mapper indicates there are no new designated impaired water bodies within or adjacent to the project area since the 2015 CE. Long-term adverse impacts to water quality are still not expected to occur as a result of the proposed project.

P. Construction Impacts

YES NO

Have there been any changes to the following since the approval of the original environmental document:

- 1. Temporary degradation of water quality? YES NO
- 2. Temporary stream diversion? YES NO
- 3. Temporary degradation of air quality? YES NO
- 4. Temporary delays and detours of traffic? YES NO
- 5. Temporary impacts on businesses? YES NO
- 6. Temporary noise impacts? YES NO

P. Construction Impacts

YES NO

- 7. Other construction impacts? (e.g. TCEs/TCPs, utility relocates, staging areas, etc.).
- 8. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments :

2015 CE

Water Quality

Temporary degradation of water quality may occur in adjacent streams, wetlands, and other waterbodies due to ground disturbing activities and storm water runoff. Impacts would be minimized through implementation of a SWPPP and utilization of suitable BMPs.

Temporary Stream Diversion

Temporary stream diversions are required during construction of the in-stream culverts. An ADFG Title 16 permit is required for in-water work in anadromous streams. All permit stipulations will be followed to minimize impacts to fish.

Air Quality

The operation of construction equipment may lead to a temporary decrease in air quality as a result of increased airborne dust and emission-related particulate matter. Air quality impacts would be temporary and could be eased by watering surface areas and ensuring that construction equipment receives regular maintenance.

Traffic and Business Impacts

Local businesses and road users may experience delays during project construction. Impacts would be mitigated by providing advance notice to the public and implementation of a traffic control plan. Construction activities may be scheduled at off-peak hours in order to limit delays, and when possible coordination with adjacent construction project engineers will occur to minimize overlapping traffic impacts. Access to adjacent properties will be maintained throughout construction. Access to adjacent Section 4(f) resources will be maintained throughout the project.

Noise Impacts

Temporary noise impacts are anticipated from the use of heavy equipment, the presence of construction crews and other construction related activities. No permanent noise impacts are anticipated. Conditions of the Section 4(f) consultations as will be met.

2019 Re-Evaluation

There have been no changes in the project’s anticipated construction impacts since the 2015 CE. Construction-related mitigation measures have been implemented during Phase 1 and Phase 2 construction and will continue to be implemented for Phase 3.

Q. Section 4(f)/6(f)

YES NO

- 1. Have there been any changes to the following since the approval of the original environmental document:
- 2. The status of Section 4(f) properties affected by the proposed action or the project’s effects on such properties?
- 3. The determination of whether the project would “use” land from a Section 4(f) property?
- 4. The status of Section 6(f) properties affected by the proposed action?

Q. Section 4(f)/6(f)

YES NO

- 5. The determination of whether the use of a Section 6(f) property is a “conversion of use” per Section 6(f) of the LWCF?

If yes to any of the above, attach appropriate Section 4(f) and Section (f) documentation.

- 6. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

2015 CE

Several Section 4(f) resources are located adjacent to the proposed project corridor, including campgrounds, trailheads and the Alaska Veterans Memorial site. Other than the Montana Creek Recreation Site which is located near MP 96, all of the Section 4(f) resources are located within the boundaries of Denali State Park (between MP 132 to MP 163). The Alaska State Park Superintendent for the Mat-Su Copper Basin Area agreed with the DOT&PF determination that the project would not adversely impact any of the Section 4(f) resources along the proposed project corridor on May 18, 2015. On May 26, 2015, the DOT&PF NEPA Program Manager was consulted and determined that the proposed project would not result in the use of a Section 4(f) Resource.

The project will not affect any properties that have received LWCF funds.

2019 Re-Evaluation

Section 4(f)

During final design for Phase 3, DOT&PF identified the following changes to project design that involve a Section 4(f) resource:

- Work near Lower Troublesome Creek Campground has moved several hundred feet closer to the resource
- Upper Troublesome Creek Trailhead now has work adjacent to it, including reconstruction of its driveway access
- Ermine Hill Trailhead no longer has any work activities occurring adjacent to it
- Denali State Park now has four temporary occupancies

Activities in the vicinity of all other Section 4(f) resources remain unchanged. All mitigation measures stated in the 2015 CE (including nighttime work restrictions in the vicinity of campgrounds, staging area restrictions, and maintenance of public access) are currently being implemented on Phases 1 and 2 and will be carried forward through Phase 3.

Temporary occupancy of Denali State Park lands outside DOT&PF ROW will occur at four locations. The purpose of the temporary occupancy is to provide ground surface access and sufficient work area around stream channel improvements within the ROW. On January 8, 2019, the Statewide NEPA Manager determined the work meets the criteria for the exception to Section 4(f) approval stated in 23 CFR 774.13(d) – temporary occupancies of land that are so minimal as to not constitute a use.

On January 8, 2019, the Statewide NEPA Manager determined that the project would not result in the use of a Section 4(f) property; therefore, the requirements of Section 4(f) do not apply. Consultation documents are included in Appendix C.

Section 6(f)

A review of LWCF grants in December 2018 indicates several projects/improvements within Denali State Park received grant funding that qualify the property for protection under Section 6(f). Within Phase 3, four locations necessitate acquisition of Temporary Construction Easements within Denali State Park lands in order to provide sufficient work area around stream channel improvements. DOT&PF determined the proposed temporary use of park land does not constitute a conversion of use under 6(f) or result in a substantial impact

to public outdoor recreation use. The ADNR LWCFA Grants Administrator concurred with this determination on December 11, 2018. Section 6(f) consultation documents are included in Appendix C.

V. Permits and Authorizations

YES NO

Have there been any changes to the status of the following permits and authorizations since the approval of the original environmental document:

- A. USACE, Section 404/10 includes abbreviated permit process, Nationwide Permit, and General Permit
- B. Coast Guard, Section 9
- C. ADF&G Fish Habitat Permit ([Title 16.05.871](#) and [Title 16.05.841](#))
- D. Flood Hazard
- E. ADEC Non-domestic Wastewater Plan Approval
- F. ADEC 401
- G. ADEC APDES
- H. Noise
- I. Eagle Permit

- J. Other. If yes, list below.

K. Describe changes:

There have been no changes to permit requirements since the 2015 CE. A USACE Section 404 Nationwide Permit, ADFG Fish Habitat Permit, and MSB Flood Hazard Development Permit were obtained prior to construction of Phase 1. A USACE Section 404 Nationwide Permit was obtained prior to construction of Phase 2. A USACE Section 404 Nationwide Permit and ADFG Fish Habitat Permit will be required prior to construction of Phase 3. The Contractor would still be responsible for obtaining all necessary permits and clearances for material and disposal sites, and borrow or equipment storage areas, including compliance with the ADEC Construction General Permit for storm water discharges.

VI. Comments and Coordination Conducted for the Re-evaluation

YES NO

- A. Has any public/agency coordination occurred since the original environmental document was approved?
- B. Describe all outreach and coordination efforts taken for this project since approval of the original environmental document. Discuss pertinent issues raised by the public and other agencies. *Attach applicable correspondence and responses.*

Public coordination conducted since the 2015 CE includes the following:

- Mat-Su Transportation Fair: The project had a table combined with other Parks Highway projects in design (2015-2018).
- Anchorage Transportation Fair: The project had a table combined with other Parks Highway projects in design (2016-2018).
- Stakeholder Correspondence: DOT&PF sent a postcard mailer to the project mailing list to provide project updates (September 2016).
- Stakeholder Correspondence: Received, responded to, and documented public questions and comments (2015-2018).

- Project Website: DOT&PF continues to maintain a combined webpage for Parks Highway projects currently in design, providing information about scope, schedule, design, and opportunities to provide input.

Input received from the public was primarily related to property/visual impacts due to vegetation clearing, noise, the construction timeline, passing lane locations, trail continuity, mailbox placement/locations, use of herbicides, turn lanes, speeding, drainage issues, location of DOT&PF right-of-way limits, and general questions regarding how the project would impact individual properties. This project will continue to address stakeholder comments during final design. Copies of public involvement documents (including an issue-response summary) are included in Appendix D.

Agency coordination since the 2015 CE consisted of the following:

- Informal consultation with the MSB Permit Center regarding the scope of work within designated flood zones in Phase 1.
- Informal consultation with ADFG, Division of Habitat regarding fish passage design for fish-bearing culvert replacements within Phase 1 and Phase 3.

VII. Changes in Environmental Commitments or Mitigation Measures

YES NO

- A. Have there been any changes in the environmental commitments or proposed mitigation as addressed in the original environmental document?
- B. Describe all changes:

The DOT&PF cannot commit to the use of certified weed-free seed on this project. However, in accordance with E.O. 13112, DOT&PF will ensure that ground disturbing activities are minimized and that disturbed areas are re-vegetated with seed recommended for the region by ADNR’s *A Revegetation Manual for Alaska*.

All other environmental commitments and mitigation measures have not changed since the 2015 CE.

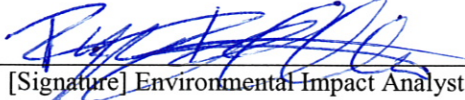
VIII. Environmental Re-evaluation Determination

N/A YES NO

- A. The conclusions of the original environmental document approval remain valid.
 The project meets the criteria of the following [DOT&PF Programmatic Approval](#) authorized in the Nov. 13, 2017 “[Chief Engineer Directive – Programmatic Categorical Exclusions](#)”:
1. Programmatic Approval 1
 2. Programmatic Approval 2
 3. Programmatic Approval 3
- If yes, the Re-evaluation may be approved by the Regional Environmental Manager. If no, the Re-evaluation must be approved by a NEPA Program Manager.*
- B. The changes in the project scope, environmental consequences, environmental commitments or public controversy require a new or supplemental environmental document. *If yes, consultation with the NEPA Program Manager is required.*

VIII. Environmental Documentation Approval Signatures

Prepared by:


[Signature] Environmental Impact Analyst

Date:

3/7/19

Ryan Riddle
[Print Name] Environmental Impact Analyst

Reviewed by:


[Signature] Engineering Manager

Date:

3/7/19

Kelly Summers
[Print Name] Engineering Manager

Programmatic CE Re-evaluation

Approved by:

[Signature] Regional Environmental Manager

Date:

[Print Name] Regional Environmental Manager

Non-Programmatic CE Re-evaluation

Recommended for
Approval by:


[Signature] Regional Environmental Manager

Date:

3-7-19

Brian Elliott
[Print Name] Regional Environmental Manager

Approved by:

[Signature] NEPA Program Manager

Date:

[Print Name] NEPA Program Manager

EA Re-evaluation

Approved by:

[Signature] Statewide Environmental Manager

Date:

[Print Name] Statewide Environmental Manager

VIII. Environmental Documentation Approval Signatures

EIS Re-evaluation

Approved by:

Date:

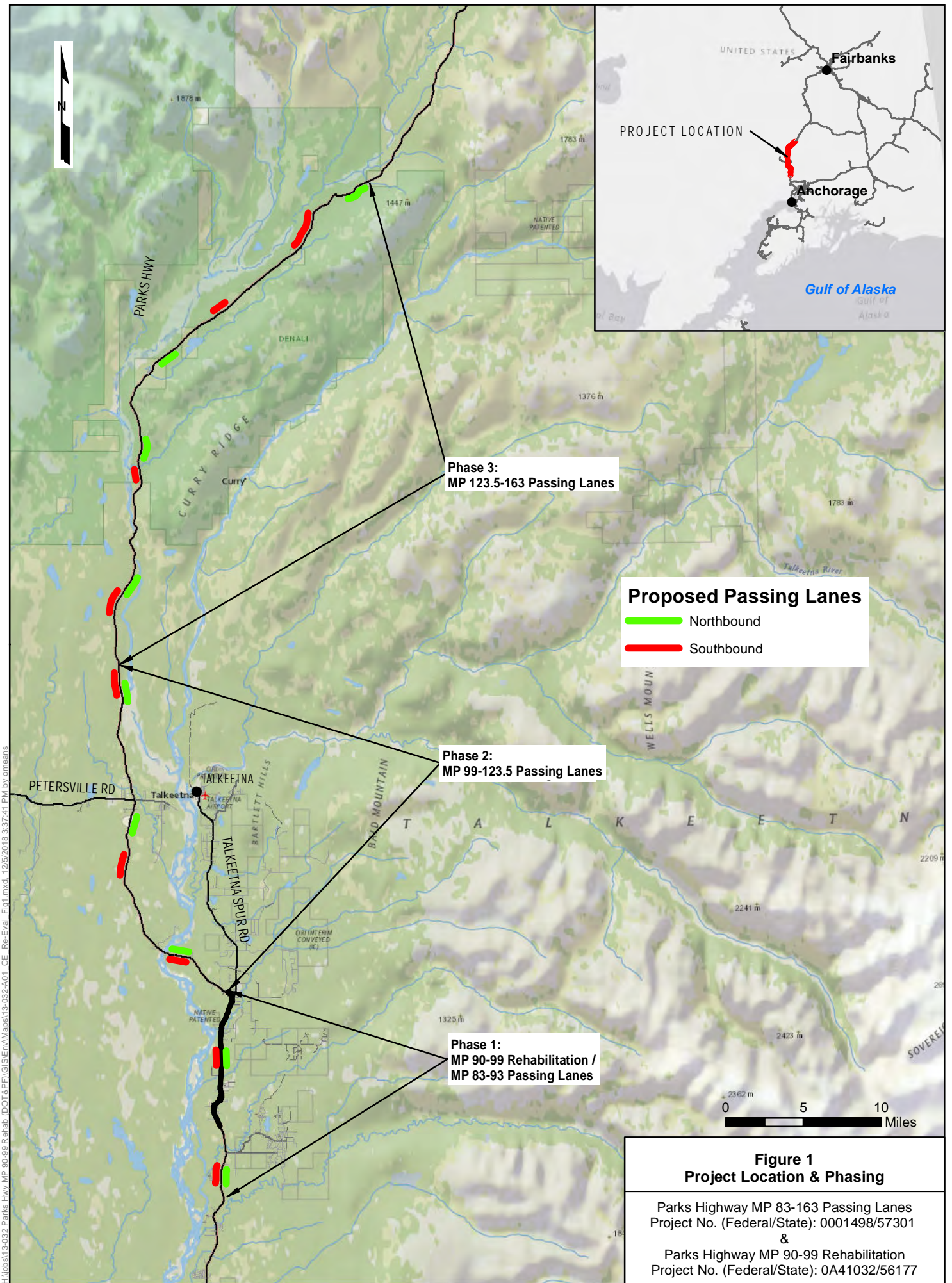
[Signature] Statewide Environmental Manager

[Print Name] Statewide Environmental Manager

George Parks Highway Systemic Passing Lanes &
Parks Highway MP 90 - 99 Resurfacing

FIGURES

Figure 1: Project Location & Phasing



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George Parks Highway Systemic Passing Lanes &
Parks Highway MP 90 - 99 Resurfacing

APPENDIX A

Section 106 Consultation



THE STATE
of **ALASKA**

GOVERNOR MICHAEL J. DUNLEAVY

Department of Natural Resources

DIVISION OF PARKS & OUTDOOR RECREATION
Office of History & Archaeology

550 West 7th Avenue, Suite 1310
Anchorage, AK 99501-3561
907.269-8700
<http://dnr.alaska.gov/parks/oha>

December 24, 2018

File No.: 3130-1R FHWA/ 2018-01438

Subject: George Parks Systemic Passing Lane Project Milepost 123.5-163,
001498/CFHWY00128

Michael Wanzenried
Department of Transportation & Public Facilities
PO Box 196900
Anchorage, AK 99519-6900

Dear Mr. Wanzenried,

The Alaska State Historic Preservation Office (AK SHPO) received your letter (dated December 13, 2018) and report, titled *Cultural Resource Survey Report of Troublesome Creek Milepost 137-138 for the George Parks Highway Systemic Passing Lanes Project*, on December 18, 2018. Following our review of the documentation provided, pursuant to Section 106 of the National Historic Preservation Act, we concur with your finding of no historic properties affected for the subject project.

Please note that as stipulated in 36 CFR § 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our comment letter does not end the 30-day review period provided to other consulting parties. Should unidentified cultural resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR § 60.4) in consultation with our office.

Thank you for the opportunity to review and comment on the subject undertaking. Please contact Mark Rollins at 269-8722 or mark.rollins@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Judith E. Bittner".

Judith E. Bittner
State Historic Preservation Officer
JEB:mwr



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Transportation and Public Facilities

DESIGN & ENGINEERING SERVICES
Preliminary Design and Environmental

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dot.state.ak.us

In Reply Refer To:

George Parks Systemic Passing Lane Project Milepost 123.5-163
001498/CFHWY00128

No Historic Properties Affected

ATTENTION: This finding contains **zero** DOEs

December 13, 2018

Judith Bittner
State Historic Preservation Officer
Alaska Office of History and Archaeology
550 W. 7th Avenue, Suite 1310
Anchorage, Alaska 99501-3565

Dear Ms. Bittner:

The Alaska Department of Transportation and Public Facilities (DOT&PF) has assumed the responsibilities of the Federal Highway Administration (FHWA) under 23 U.S.C. 327, and is providing an updated finding of effect for the last phase of this project, the George Parks Systemic Passing Lane Project Milepost (MP)123.5-163 (001498/CFHWY00128). The update is in regards to a decision that would move the location of a passing lane farther south than in a previous design. The new location would begin shortly after the Troublesome Creek Bridge and terminate shortly after the entrance to the Upper Troublesome Creek Trailhead – approximately MP 137.2 – 137.8. The proposed project is located approximately 20 miles north of Talkeetna, Alaska, in T 29N, R 5W, Section 4, Seward Meridian, on the USGS quad map Talkeetna C-1, WGS84 62.629123°N -150.228609°E, Seward Meridian (Figure 1). The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by the Alaska Department of Transportation and Public Facilities (DOT&PF) pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017 and executed by FHWA and DOT&PF.

Consultation for this project is being conducted in accordance with the 2017 *First Amended Programmatic Agreement... for the Federal-Aid Highway Program in Alaska*. The DOT&PF, acting as a Federal agency, finds that no historic properties would be affected by the proposed project pursuant to 36 CFR 800.4(d)(1), implementing regulations of Section 106 of the National

Historic Preservation Act. This submission provides documentation in support of this finding, as required at 36 CFR 800.11(d).

Project Description

In the original (2014) design, the George Park Systemic Passing Lane project MP 83-163 consisted of widening the highway to install passing lanes that would be approximately one mile in length and spaced every 6-8 miles in each travel direction. This project has proceeded in three main phases. The first two, George Parks Highway Systemic Passing Lanes MP 83-99 (0A41037/CFHWY00127) and George Parks Highway Systemic Passing Lanes MP 99-123.5 (0A42010/CFHWY00092), both of which have already gone to construction. This last phase, Parks Highway Systemic Passing Lanes MP 123.5-163 (001498/CFHWY00128), is scheduled to go to construction in 2019. Construction activities included with the MP 123.5-163 phase includes the following actions:

- Widen the roadway to install a passing lane
- Improving or replacing culverts and drainage facilities
- Installing guardrail and guardrail end treatments
- Clearing vegetation within DOT&PF right-of-way
- Improve drainage, driveways and approaches, signing and striping, guardrail and guardrail end treatments
- Relocating utilities

The updated (2018) project design has retained the same construction elements from before but has shifted one of those segments previously located between MP 137.4 – 138.9 to MP 137.2 – 137.8 (Figure 2).

Area of Potential Effects

The APE for the proposed design changes consists of a 6.2 acre section of DOT&PF right-of-way located on the east side of the Parks Highway. Its boundary spans the edge of pavement to the edge of right-of-way (150 feet) and runs approximately 1,800 feet north from the Troublesome Creek Bridge to just past the turn-off for the Upper Troublesome Creek Trailhead – approximately MP 137.2 – 137.8. The northern end of the 2018 survey area abuts the southern boundary of an area surveyed by Northern Land Use Research Alaska, LLC (NLURA) in 2014 (Figure 2).

Efforts to Identify Historic Properties

Over the last 40 years, there have been over 20 cultural resource investigations of the entire project area (see Table 1 for those that occurred over the last 20 years). These investigations and other efforts have resulted in the identification of approximately forty sites within one mile of the entire MP 83-163 project corridor. A review of the AHRS mapper on July 25, 2018, indicated there were no AHRS sites in the 2018 survey area and three sites located between 0.75 and 1 mile from the survey area, which include TAL-00180, TAL-00194, and TAL-00196. These sites are associated with activities that occurred during the 20th century. TAL-00180 is eligible for listing in the National Register of Historic Places under Criterion D. TAL-00194 and TAL-00196 have been determined not eligible for listing in the National Register of Historic Places.

In 2014, NLURA conducted a Phase II evaluation-level survey of the Systemic Passing Lanes project area between MP 83-163. Pedestrian surveys covered eighteen survey areas associated with the proposed project (Blanchard *et al.* 2015 [2016]). The results of the NLURA survey of the corridor led to DOT&PF’s finding of no historic properties affected for the project, which received concurrence from SHPO on April 2, 2015 (see attached letter). To evaluate potential effects on historic properties, DOT&PF conducted a supplemental 6.2 acre survey on August 16, 2018 of the proposed design change area (MP 137.2-137.8) (see attached report). DOT&PF cultural resource specialists (PQIs) did not identify any historic properties during the 2018 survey.

Table 1: Previous Cultural Resource Surveys in the Project Area

Year	Description	AHRS Sites	Reference
1998	BLM Report of Examination for Cultural Resources, Matanuska Telephone Association, AA-80571.	N/A	(Redding 1998)
2002	Replacement of Alaska Railroad Corporation Bridges Over Willow Creek (Milepost 187.6), Caswell Creek (Milepost 200.9), and an Unnamed Tributary of the Susitna River (Milepost 233.4).	TYO-00097	(Yarborough and Faith 2002)
2003	Letter Correspondence between Rodney “Norwood” Marsh member of the Mat-Su Borough Commission on Historic Preservation and Judith E. Bittner of the Alaska Office of History and Archaeology concerning the Rabideux Cabin.	TAL-00076	(Marsh 2003)
2005	Coastal Zone Management: Middle Susitna Archaeological Survey and Inventory	TAL-00096, 97, 98, 99	(Seager-Boss and Stone 2005)
2006	Archaeological Reconnaissance Survey of Two Alternative Areas of Proposed Development in the South Denali Region	N/A	(Depew and Thompson 2006)
2007	Cultural Resources Survey of the Proposed Broad Pass Siding Extension and Access Road North of MP 304 of the AKRR.	N/A	(Neely 2007)
2008	Cultural Resource Survey MP 18-33 Petersville Road, Alaska.	TAL-00117	(Walrussia 2008)
2009	Alaska Heritage Resources Survey for TAL-00147.	TAL-00147	(McClenahan 2009)
2008	2008 Matanuska-Susitna Borough Archaeological Surveys.	N/A	(Stone and Seager Boss 2009)
2010-2011	Alaska Stand Alone Gas Pipeline (ASAP) from Prudhoe Bay to Cook Inlet.	TAL-00149, 00150	ASRC 2011, 2012
2011	Knik Arm Crossing Cultural Resource Survey.	N/A	(Stone 2011)
2011	Cultural Resource Investigation of the Parks Highway Milepost 163-305 Passing Lanes: DOT&PF Project IM-000S(716)/63515.	N/A	(Thompson 2011)
2012	Alaska Heritage Resources Survey and Historic Context for TAL-00148.	TAL-00148	(McClenahan 2012)
2014	Cultural Resource Evaluation, Alaska LNG 2014 Geotechnical Site Investigation Field Studies.	TAL-00117, 180, 181; TLM-00327	Report not available, OHA IBS
2014	Cultural Resource Evaluation, Alaska Stand Alone Gas Pipeline Cultural Resources Field Studies.	N/A	Report not available, OHA IBS
2016	Parks Highway Milepost 83 to 163 Systemic Passing Lanes Cultural Resource Survey	TYO-00329, 330, 331, 332, 333,	(Blanchard et al. 2016)

In the APE, PQIs observed previous impacts caused by the construction of the Parks Highway and routine maintenance activities. The survey area is marked by a wide cleared-area immediately adjacent to the road shoulder; the cleared area terminates at the foot of a steep cut bank that has been somewhat stabilized by moss, large rocks, and small plants (Figure 3). The terrain above the slope consists of a relatively dense growth of spruce and birch trees with a dense understory of such plants as willow, fern, bog cranberry, and rosehip. PQIs conducted a single two-person transect of the survey area at a 10 meter interval that was occasionally re-directed by dense undergrowth and fallen trees. PQIs observed two different piles of 55-gallon drums of Chevron RPN Delo industrial oil/lubricant for use in heavy machinery on a barely distinguishable dozer cut (Figure 4).

A post-field review of aerial photographs from 1980 and 1976 revealed a linear feature that appears only on the 1980 photograph and corresponds to the location of the dozer-cut observed in the field (Figure 5). Due to the lack of other objects or evidence for other human activities in the vicinity, PQIs presumed these oil drums to be associated with the dozer cut and represent a single-use dump site associated with work at the trailhead or highway. Due to their relatively young age, the drums and dozer cut were noted but not formally recorded for submission to the AHRS. No additional cultural resources were identified during the cultural resource survey.

Findings of Effect

Because there are no historic properties located within the APE, DOT&PF finds that no historic properties would be affected by the proposed design changes and construction of a passing lane on the east side of the Parks Highway between MP 137.2-137.8 and continues to find no historic properties affected for the Systemic Passing Lanes Project.

Consultation Efforts

Initiation of consultation letters were sent to the following parties on October 29, 2014: the State Historic Preservation Officer (SHPO); the Matanuska-Susitna Borough (and MSB Historic Preservation Commission); and Cook Inlet Region, Inc. Only SHPO responded on November 3, 2014, with an email noting there was no objection to the proposed APE or level of effort proposed. These parties will receive this updated finding of effect and a copy of the survey report.

Please direct your concurrence or comments to me at the address above, by telephone at 907-269-0535, or by e-mail at michael.wanzenried@alaska.gov.

Sincerely,



Michael Wanzenried
Cultural Resources Specialist

Enclosures:

- Figure 1: Project Location and Vicinity Map
- Figure 2: Area of Potential Effects Map
- Figure 3: Area of Potential Effects and Cultural Resources Pedestrian Survey Areas
- Figure 3: Overview of disturbance along the Parks Highway, facing south and north.

Figure 4: DOT&PF PQI and two 55-gallon oil drums in survey area.

Figure 5: 1980 and 1976 aerial photographs showing presence/absence of linear feature from Upper Troublesome Creek Trailhead.

SHPO Concurrence Letter, dated April 2, 2015

Report: *Cultural Resource Survey Report of Troublesome Creek Milepost 137-138 for the George Parks Highway Systemic Passing Lanes Project*

cc w/ enclosures:

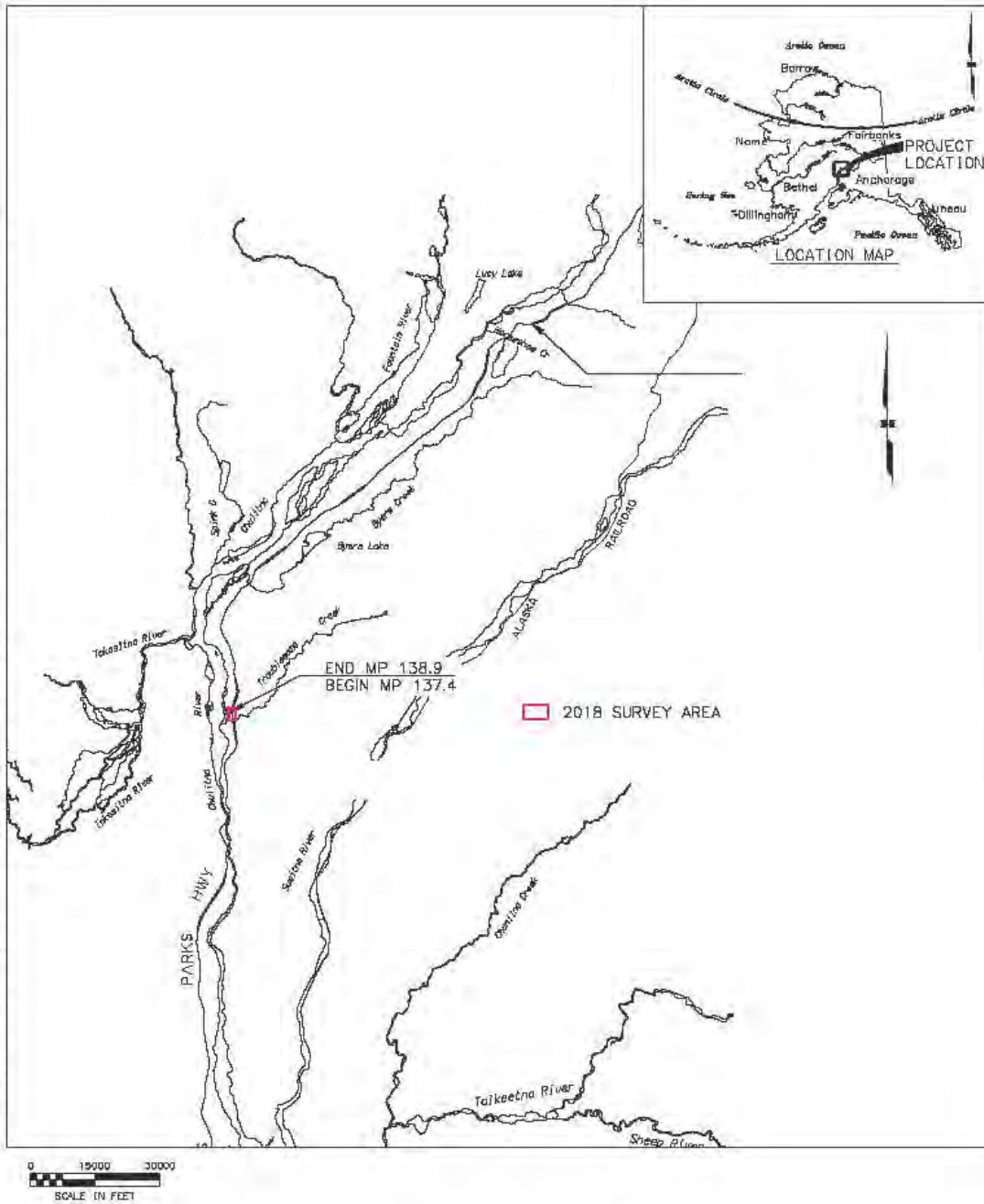
Brian Elliott, DOT&PF Central Region, Regional Environmental Manager

Kathy Price, DOT&PF Statewide, Cultural Resources Manager

Ryan Riddle, DOT&PF Central Region, Environmental Analyst/Team Leader

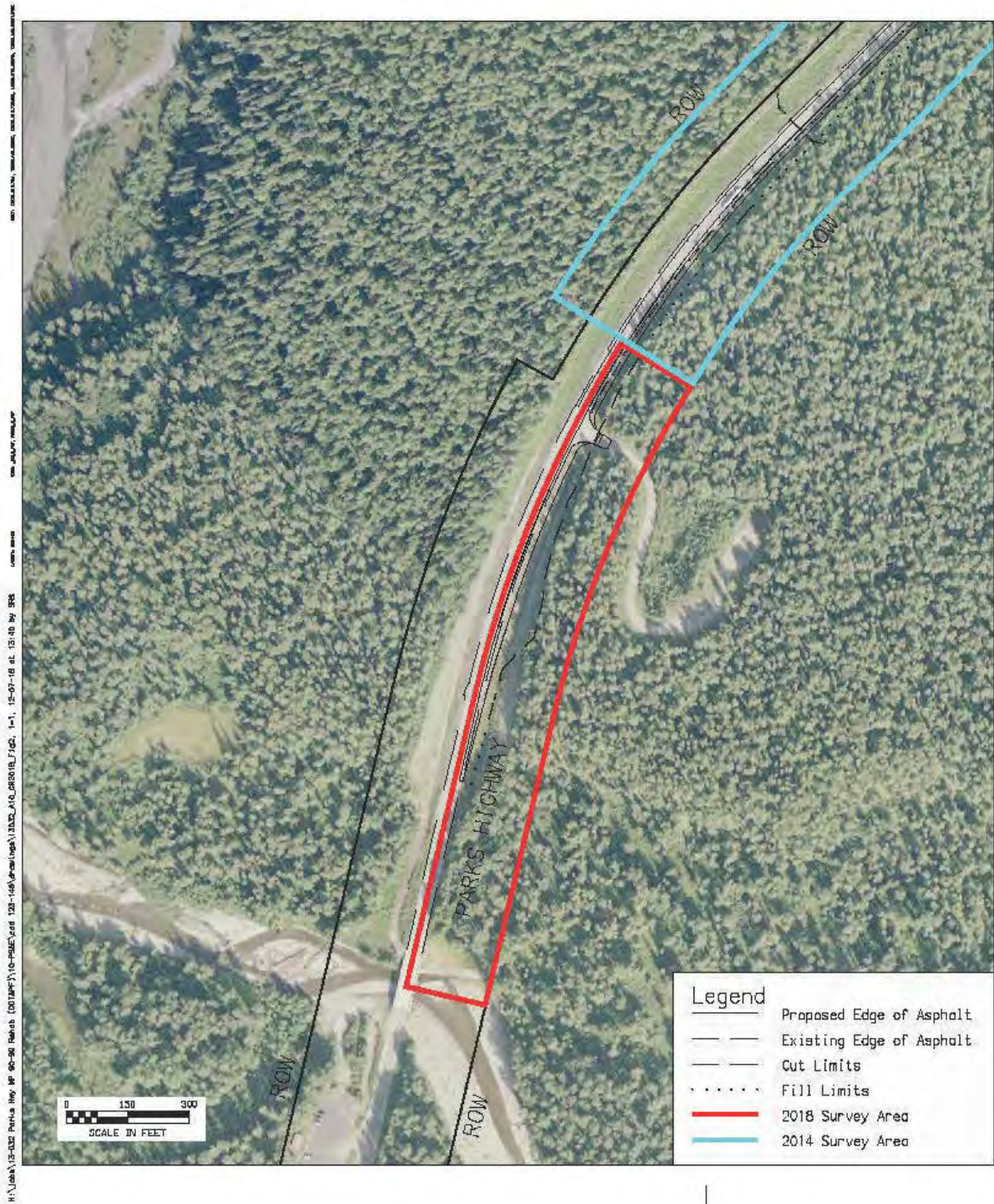
Kelly Summers, P.E., DOT&PF Central Region, Project Manager

H:_data\13-022 Parks Hwy MP 90-96 Rehab (DOT\DOT)\10-PS&E\road 123-146\drawings\10032.A10.02001\Fig_L_Vicinity_1-1_09-12-18 at 10:17 by 363



HSIP: Parks Hwy; Systemic Passing Lanes MP 129.5-163
Project No. (Federal/State): 0001498/CFHWY00123

Figure 1
Location Map



HSIP: Parks Hwy: Systemic Passing Lanes MP 123.5-163
Project No. (Federal/State): 0001498/CFHWY00123

Figure 2
2018 Survey Area



Figure 3: Overview of disturbance along the Parks Highway, facing south and north.



Figure 4: DOT&PF PQI and two 55-gallon oil drums in survey area.

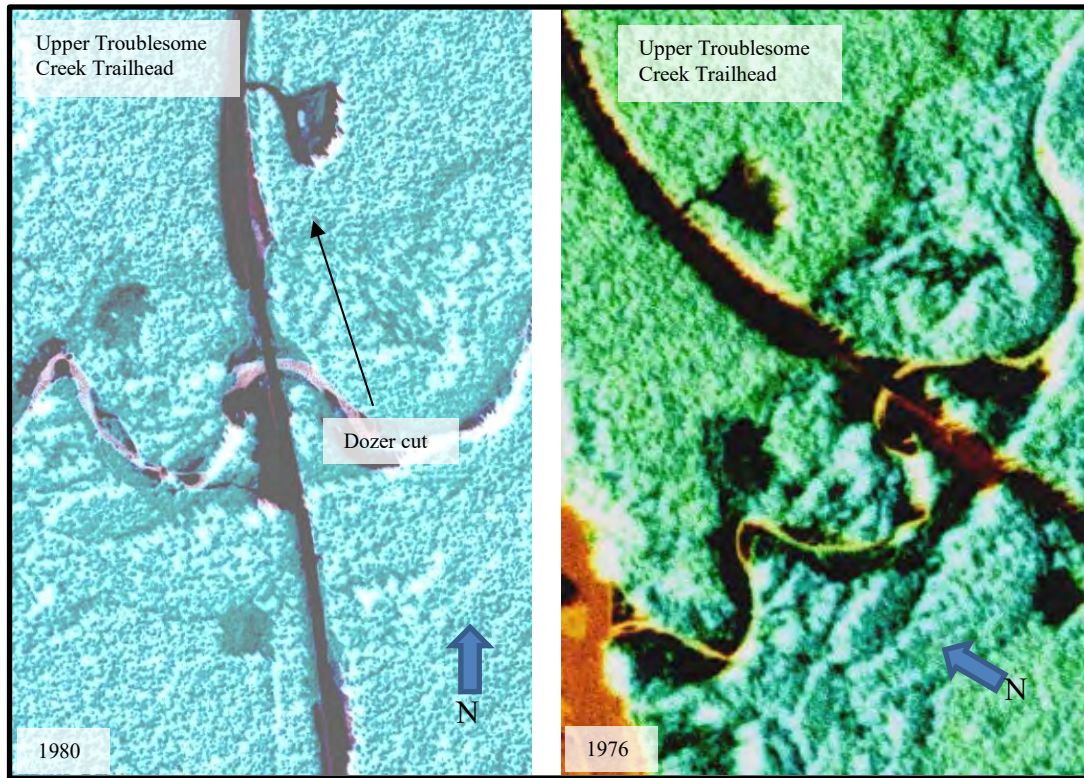


Figure 5: 1980 and 1976 aerial photographs showing presence/absence of the overgrown dozer cut near Upper Troublesome Creek Trailhead.



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources
DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

550 West 7th Avenue, Suite 1310
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Main: 907.269.8721
Fax: 907.269.8908

April 2, 2015

File No.: 3130-1R FHWA / 2015-00450 and 2015-00451
3330-6N TAL-00204, 3330-6N TAL-00191, 3330-6N TAL-00192, 3330-6N TAL-00203, and
3330-6N TAL-00205

Erik Hilsinger
Cultural Resources Specialist
Department of Transportation & Public Facilities
4111 Aviation Avenue
P.O. Box 196900
Anchorage, Alaska 99519-6900

Subject: Parks Highway MP 83-163 Systemic Passing Lanes (0001(498) / 57301) and Parks Highway MP 90-99 Rehabilitation (0A41(32) / 56177)

Dear Mr. Hilsinger:

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated March 5, 2015) on March 9, 2015. Following our review of the documentation provided, we concur that the following sites are **not eligible** for the National Register of Historic Places (NRHP): TAL-00204, TAL-00191, TAL-00192, TAL-00203, and TAL-00205. As such, we concur that a finding of **no historic properties affected** is appropriate for the proposed undertaking.

As stipulated in 36 CFR 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our comment letter does not end the 30-day review period provided to other consulting parties.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) or the Alaska Landmarks Register in consultation with our office.

Thank you for the opportunity to comment. Please contact Shina duVall at 269-8720 or shina.duvall@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Judith E. Bittner".

Judith E. Bittner
State Historic Preservation Officer
JEB:sad



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Transportation and Public Facilities

DESIGN & ENGINEERING SERVICES
Preliminary Design and Environmental

PO Box 196900
Anchorage, Alaska 99519-6900
Main: 907.269.0542
Toll Free: 800.770.5263
TDD: 907.269.0473
TTY: 800 770 8973
dot.state.ak.us

In Reply Refer To:

George Parks Systemic Passing Lane Project Milepost 123.5-163
001498/CFHWY00128

No Historic Properties Affected

ATTENTION: This finding contains **zero** DOEs

December 13, 2018

Ben Mohr
Attention Land and Resources
Cook Inlet Region, Inc.
P.O. Box 93330
Anchorage, Alaska 99509

Dear Mr. Mohr,

The Alaska Department of Transportation and Public Facilities (DOT&PF) has assumed the responsibilities of the Federal Highway Administration (FHWA) under 23 U.S.C. 327, and is providing an updated finding of effect for the last phase of this project, the George Parks Systemic Passing Lane Project Milepost (MP)123.5-163 (001498/CFHWY00128). The update is in regards to a decision that would move the location of a passing lane farther south than in a previous design. The new location would begin shortly after the Troublesome Creek Bridge and terminate shortly after the entrance to the Upper Troublesome Creek Trailhead – approximately MP 137.2 – 137.8. The proposed project is located approximately 20 miles north of Talkeetna, Alaska, in T 29N, R 5W, Section 4, Seward Meridian, on the USGS quad map Talkeetna C-1, WGS84 62.629123°N -150.228609°E, Seward Meridian (Figure 1). The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by the Alaska Department of Transportation and Public Facilities (DOT&PF) pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017 and executed by FHWA and DOT&PF.

Consultation for this project is being conducted in accordance with the 2017 *First Amended Programmatic Agreement... for the Federal-Aid Highway Program in Alaska*. The DOT&PF, acting as a Federal agency, finds that no historic properties would be affected by the proposed

project pursuant to 36 CFR 800.4(d)(1), implementing regulations of Section 106 of the National Historic Preservation Act. This submission provides documentation in support of this finding, as required at 36 CFR 800.11(d).

Project Description

In the original (2014) design, the George Park Systemic Passing Lane project MP 83-163 consisted of widening the highway to install passing lanes that would be approximately one mile in length and spaced every 6-8 miles in each travel direction. This project has proceeded in three main phases. The first two, George Parks Highway Systemic Passing Lanes MP 83-99 (0A41037/CFHWY00127) and George Parks Highway Systemic Passing Lanes MP 99-123.5 (0A42010/CFHWY00092), both of which have already gone to construction. This last phase, Parks Highway Systemic Passing Lanes MP 123.5-163 (001498/CFHWY00128), is scheduled to go to construction in 2019. Construction activities included with the MP 123.5-163 phase includes the following actions:

- Widen the roadway to install a passing lane
- Improving or replacing culverts and drainage facilities
- Installing guardrail and guardrail end treatments
- Clearing vegetation within DOT&PF right-of-way
- Improve drainage, driveways and approaches, signing and striping, guardrail and guardrail end treatments
- Relocating utilities

The updated (2018) project design has retained the same construction elements from before but has shifted one of those segments previously located between MP 137.4 – 138.9 to MP 137.2 – 137.8 (Figure 2).

Area of Potential Effects

The APE for the proposed design changes consists of a 6.2 acre section of DOT&PF right-of-way located on the east side of the Parks Highway. Its boundary spans the edge of pavement to the edge of right-of-way (150 feet) and runs approximately 1,800 feet north from the Troublesome Creek Bridge to just past the turn-off for the Upper Troublesome Creek Trailhead – approximately MP 137.2 – 137.8. The northern end of the 2018 survey area abuts the southern boundary of an area surveyed by Northern Land Use Research Alaska, LLC (NLURA) in 2014 (Figure 2).

Efforts to Identify Historic Properties

Over the last 40 years, there have been over 20 cultural resource investigations of the entire project area (see Table 1 for those that occurred over the last 20 years). These investigations and other efforts have resulted in the identification of approximately forty sites within one mile of the entire MP 83-163 project corridor. A review of the AHRS mapper on July 25, 2018, indicated there were no AHRS sites in the 2018 survey area and three sites located between 0.75 and 1 mile from the survey area, which include TAL-00180, TAL-00194, and TAL-00196. These sites are associated with activities that occurred during the 20th century. TAL-00180 is eligible for listing in the National Register of Historic Places under Criterion D. TAL-00194 and TAL-00196 have been determined not eligible for listing in the National Register of Historic Places.

In 2014, NLURA conducted a Phase II evaluation-level survey of the Systemic Passing Lanes project area between MP 83-163. Pedestrian surveys covered eighteen survey areas associated with the proposed project (Blanchard *et al.* 2015 [2016]). The results of the NLURA survey of the corridor led to DOT&PF’s finding of no historic properties affected for the project, which received concurrence from SHPO on April 2, 2015 (see attached letter). To evaluate potential effects on historic properties, DOT&PF conducted a supplemental 6.2 acre survey on August 16, 2018 of the proposed design change area (MP 137.2-137.8) (see attached report). DOT&PF cultural resource specialists (PQIs) did not identify any historic properties during the 2018 survey.

Table 1: Previous Cultural Resource Surveys in the Project Area

Year	Description	AHRS Sites	Reference
1998	BLM Report of Examination for Cultural Resources, Matanuska Telephone Association, AA-80571.	N/A	(Redding 1998)
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2003	Letter Correspondence between Rodney “Norwood” Marsh member of the Mat-Su Borough Commission on Historic Preservation and Judith E. Bittner of the Alaska Office of History and Archaeology concerning the Rabideux Cabin.	TAL-00076	(Marsh 2003)
2005	Coastal Zone Management: Middle Susitna Archaeological Survey and Inventory	TAL-00096, 97, 98, 99	(Seager-Boss and Stone 2005)
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2007	Cultural Resources Survey of the Proposed Broad Pass Siding Extension and Access Road North of MP 304 of the AKRR.	N/A	(Neely 2007)
2008	Cultural Resource Survey MP 18-33 Petersville Road, Alaska.	TAL-00117	(Walrussia 2008)
2009	Alaska Heritage Resources Survey for TAL-00147.	TAL-00147	(McClenahan 2009)
2008	2008 Matanuska-Susitna Borough Archaeological Surveys.	N/A	(Stone and Seager Boss 2009)
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2011	Cultural Resource Investigation of the Parks Highway Milepost 163-305 Passing Lanes: DOT&PF Project IM-000S(716)/63515.	N/A	(Thompson 2011)
2012	Alaska Heritage Resources Survey and Historic Context for TAL-00148.	TAL-00148	(McClenahan 2012)
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Please direct your comments to me at the address above, by telephone at 907-269-0535, or by e-mail at michael.wanzenried@alaska.gov. Your timely response will greatly assist us in incorporating your concerns into project development. For that purpose, we request that you respond within thirty days of your receipt of this correspondence.

Sincerely,



Michael Wanzenried
Cultural Resources Specialist

Enclosures:

Figure 1: Project Location and Vicinity Map

Figure 2: Area of Potential Effects Map

Figure 3: Area of Potential Effects and Cultural Resources Pedestrian Survey Areas

Figure 3: Overview of disturbance along the Parks Highway, facing south and north.

Figure 4: DOT&PF PQI and two 55-gallon oil drums in survey area.

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SHPO Concurrence Letter, dated April 2, 2015

Report: *Cultural Resource Survey Report of Troublesome Creek Milepost 137-138 for the George Parks Highway Systemic Passing Lanes Project*

cc w/ enclosures:

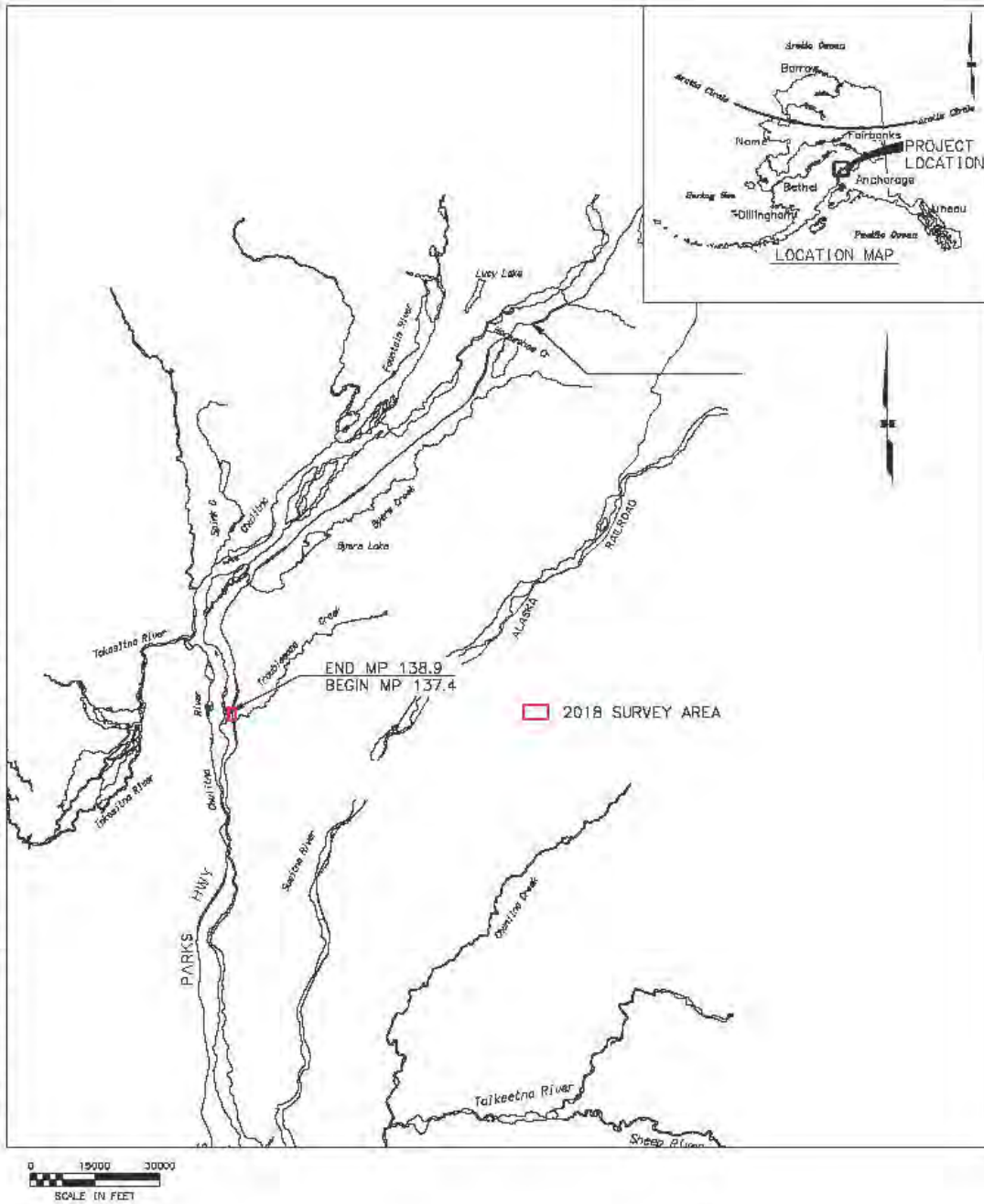
Brian Elliott, DOT&PF Central Region, Regional Environmental Manager

Kathy Price, DOT&PF Statewide, Cultural Resources Manager

Ryan Riddle, DOT&PF Central Region, Environmental Analyst/Team Leader

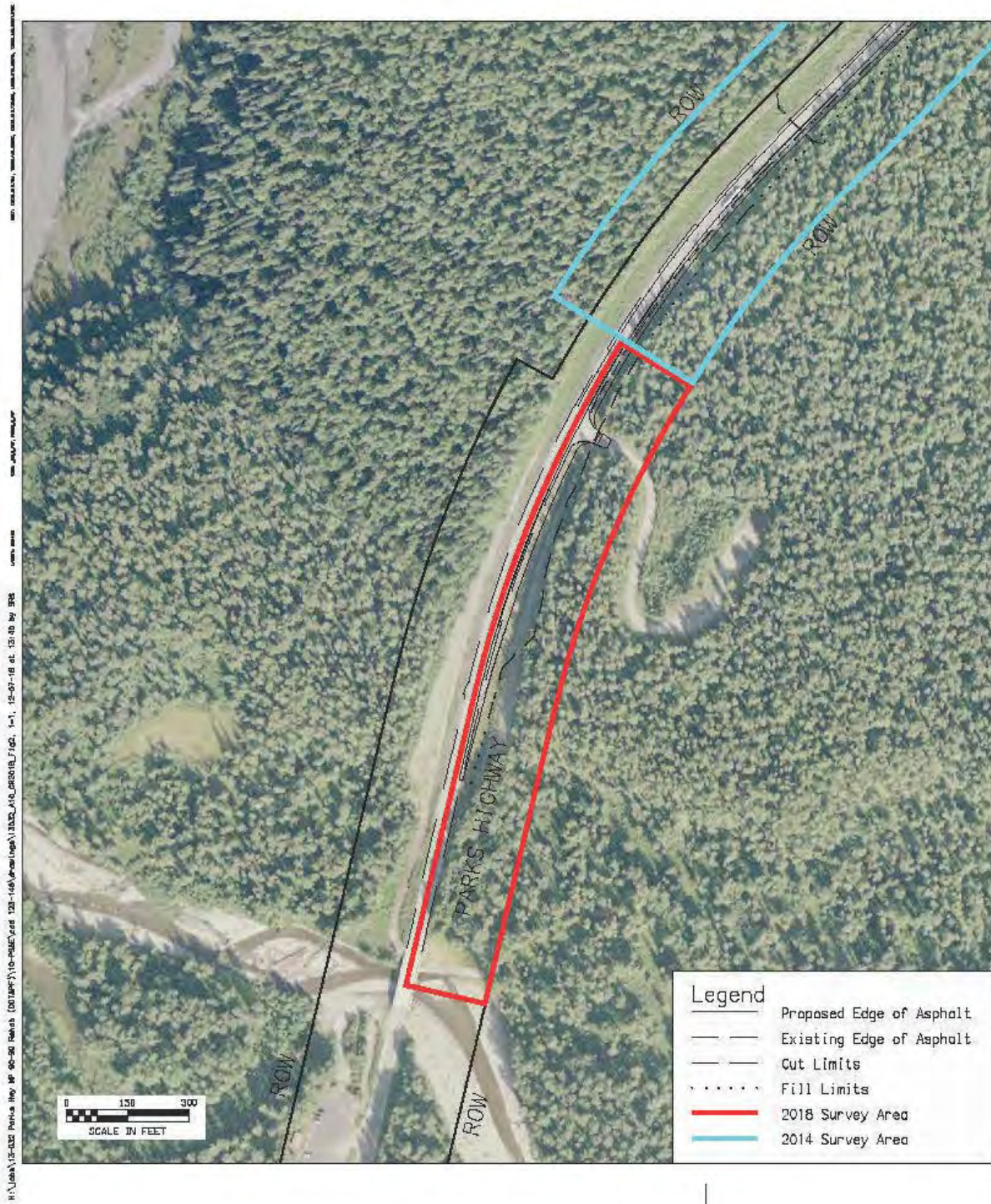
Kelly Summers, P.E., DOT&PF Central Region, Project Manager

H:\data\13-022 Parks Hwy MP 90-96 Rehab (DOT\ART)\10-PS&E\road 123-146\drawings\10032.A10.02001\Fig_L_Vicinity_1-1_09-12-18 at 10:17 by 363



HSIP: Parks Hwy; Systemic Passing Lanes MP 129.5-163
Project No. (Federal/State): 0001498/CFHWY00123

Figure 1
Location Map



HSIP: Parks Hwy: Systemic Passing Lanes MP 123.5-163
 Project No. (Federal/State): 0001498/CFHWY00123

Figure 2
2018 Survey Area



Figure 3: Overview of disturbance along the Parks Highway, facing south and north.



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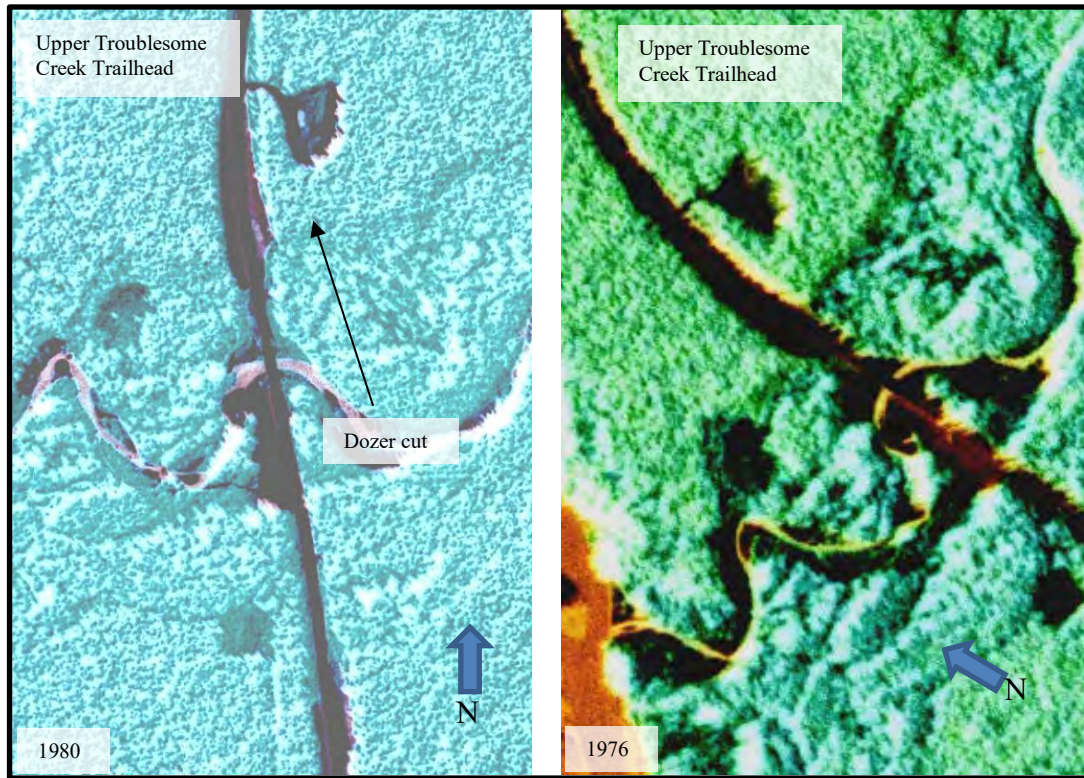


Figure 5: 1980 and 1976 aerial photographs showing presence/absence of the overgrown dozer cut near Upper Troublesome Creek Trailhead.



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Department of Natural Resources
DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

550 West 7th Avenue, Suite 1310
Anchorage, AK 99501-3565
Main: 907.269.8721
Fax: 907.269.8908

April 2, 2015

File No.: 3130-1R FHWA / 2015-00450 and 2015-00451
3330-6N TAL-00204, 3330-6N TAL-00191, 3330-6N TAL-00192, 3330-6N TAL-00203, and
3330-6N TAL-00205

Erik Hilsinger
Cultural Resources Specialist
Department of Transportation & Public Facilities
4111 Aviation Avenue
P.O. Box 196900
Anchorage, Alaska 99519-6900

Subject: Parks Highway MP 83-163 Systemic Passing Lanes (0001(498) / 57301) and Parks Highway MP 90-99 Rehabilitation (0A41(32) / 56177)

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Thank you for the opportunity to comment. Please contact Shina duVall at 269-8720 or shina.duvall@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Judith E. Bittner".

Judith E. Bittner
State Historic Preservation Officer
JEB:sad



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Transportation and Public Facilities

DESIGN & ENGINEERING SERVICES
Preliminary Design and Environmental

PO Box 196900
Anchorage, Alaska 99519-6900
Main: 907.269.0542
Toll Free: 800.770.5263
TDD: 907.269.0473
TTY: 800 770 8973
dot.state.ak.us

In Reply Refer To:

George Parks Systemic Passing Lane Project Milepost 123.5-163
001498/CFHWY00128

No Historic Properties Affected

ATTENTION: This finding contains **zero** DOEs

December 13, 2018

Mayor Vern Halter
c/o Ted Eischeid
Matanuska Susitna Borough
350 E Dahlia Avenue
Palmer, AK 99645

Dear Mayor Halter:

The Alaska Department of Transportation and Public Facilities (DOT&PF) has assumed the responsibilities of the Federal Highway Administration (FHWA) under 23 U.S.C. 327, and is providing an updated finding of effect for the last phase of this project, the George Parks Systemic Passing Lane Project Milepost (MP)123.5-163 (001498/CFHWY00128). The update is in regards to a decision that would move the location of a passing lane farther south than in a previous design. The new location would begin shortly after the Troublesome Creek Bridge and terminate shortly after the entrance to the Upper Troublesome Creek Trailhead – approximately MP 137.2 – 137.8. The proposed project is located approximately 20 miles north of Talkeetna, Alaska, in T 29N, R 5W, Section 4, Seward Meridian, on the USGS quad map Talkeetna C-1, WGS84 62.629123°N -150.228609°E, Seward Meridian (Figure 1). The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by the Alaska Department of Transportation and Public Facilities (DOT&PF) pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017 and executed by FHWA and DOT&PF.

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2012	Alaska Heritage Resources Survey and Historic Context for TAL-00148.	TAL-00148	(McClenahan 2012)
2014	Cultural Resource Evaluation, Alaska LNG 2014 Geotechnical Site Investigation Field Studies.	TAL-00117, 180, 181; TLM-00327	Report not available, OHA IBS
2014	Cultural Resource Evaluation, Alaska Stand Alone Gas Pipeline Cultural Resources Field Studies.	N/A	Report not available, OHA IBS
2016	Parks Highway Milepost 83 to 163 Systemic Passing Lanes Cultural Resource Survey	TYO-00329, 330, 331, 332, 333,	(Blanchard et al. 2016)

In the APE, PQIs observed previous impacts caused by the construction of the Parks Highway and routine maintenance activities. The survey area is marked by a wide cleared-area immediately adjacent to the road shoulder; the cleared area terminates at the foot of a steep cut bank that has been somewhat stabilized by moss, large rocks, and small plants (Figure 3). The terrain above the slope consists of a relatively dense growth of spruce and birch trees with a dense understory of such plants as willow, fern, bog cranberry, and rosehip. PQIs conducted a single two-person transect of the survey area at a 10 meter interval that was occasionally re-directed by dense undergrowth and fallen trees. PQIs observed two different piles of 55-gallon drums of Chevron RPN Delo industrial oil/lubricant for use in heavy machinery on a barely distinguishable dozer cut (Figure 4).

A post-field review of aerial photographs from 1980 and 1976 revealed a linear feature that appears only on the 1980 photograph and corresponds to the location of the dozer-cut observed in the field (Figure 5). Due to the lack of other objects or evidence for other human activities in the vicinity, PQIs presumed these oil drums to be associated with the dozer cut and represent a single-use dump site associated with work at the trailhead or highway. Due to their relatively young age, the drums and dozer cut were noted but not formally recorded for submission to the AHRS. No additional cultural resources were identified during the cultural resource survey.

Findings of Effect

Because there are no historic properties located within the APE, DOT&PF finds that no historic properties would be affected by the proposed design changes and construction of a passing lane on the east side of the Parks Highway between MP 137.2-137.8 and continues to find no historic properties affected for the Systemic Passing Lanes Project.

Consultation Efforts

Initiation of consultation letters were sent to the following parties on October 29, 2014: the State Historic Preservation Officer (SHPO); the Matanuska-Susitna Borough (and MSB Historic Preservation Commission); and Cook Inlet Region, Inc. Only SHPO responded on November 3, 2014, with an email noting there was no objection to the proposed APE or level of effort proposed. These parties will receive this updated finding of effect and a copy of the survey report.

Please direct your comments to me at the address above, by telephone at 907-269-0535, or by e-mail at michael.wanzenried@alaska.gov. Your timely response will greatly assist us in incorporating your concerns into project development. For that purpose, we request that you respond within thirty days of your receipt of this correspondence.

Sincerely,



Michael Wanzenried
Cultural Resources Specialist

Enclosures:

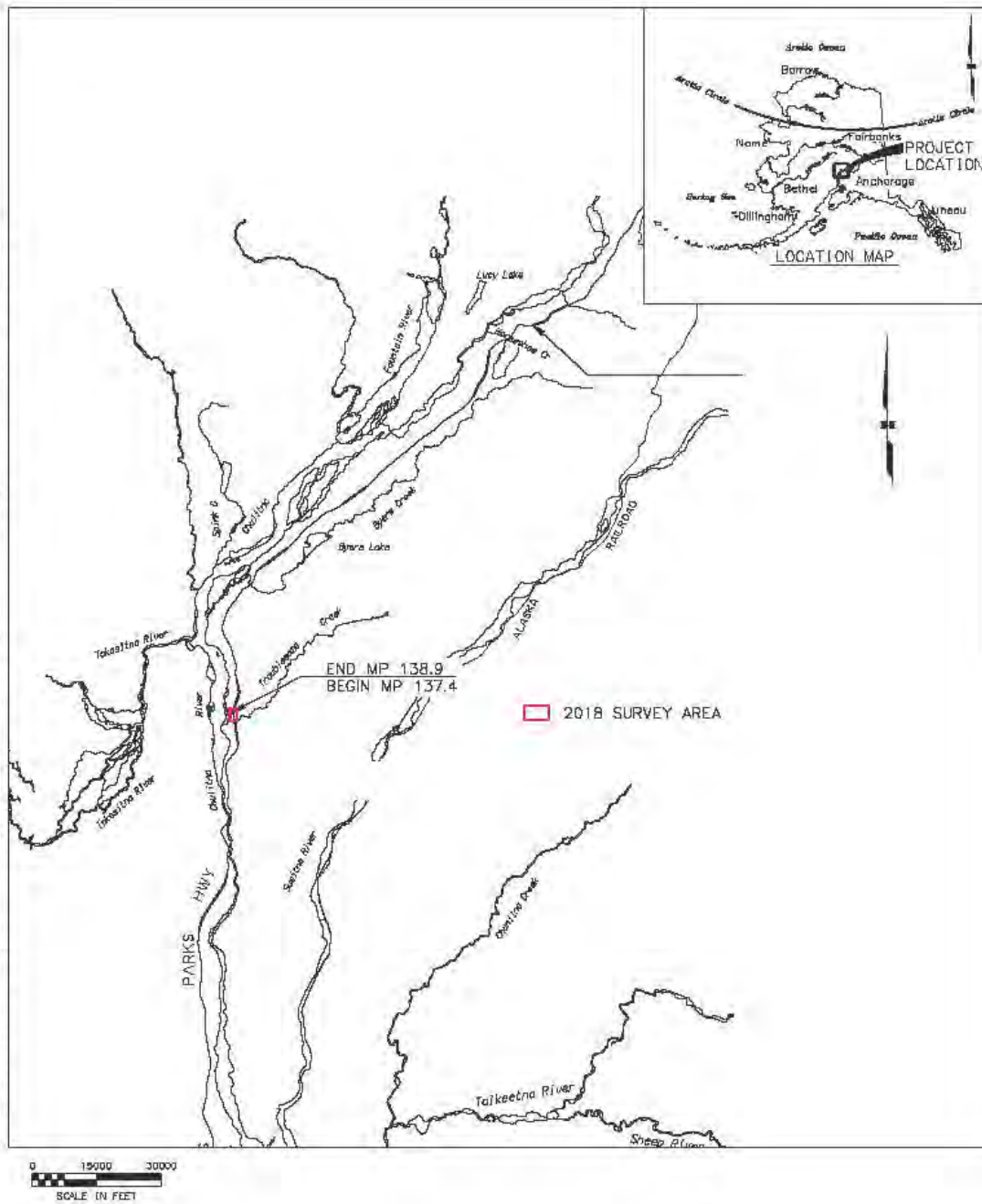
Figure 1: Project Location and Vicinity Map

Figure 2: Area of Potential Effects Map

Figure 3: Area of Potential Effects and Cultural Resources Pedestrian Survey Areas
Figure 3: Overview of disturbance along the Parks Highway, facing south and north.
Figure 4: DOT&PF PQI and two 55-gallon oil drums in survey area.
Figure 5: 1980 and 1976 aerial photographs showing presence/absence of linear feature from Upper Troublesome Creek Trailhead.
SHPO Concurrence Letter, dated April 2, 2015
Report: *Cultural Resource Survey Report of Troublesome Creek Milepost 137-138 for the George Parks Highway Systemic Passing Lanes Project*

cc w/ enclosures:

Brian Elliott, DOT&PF Central Region, Regional Environmental Manager
Kathy Price, DOT&PF Statewide, Cultural Resources Manager
Ryan Riddle, DOT&PF Central Region, Environmental Analyst/Team Leader
Kelly Summers, P.E., DOT&PF Central Region, Project Manager



HSIP: Parks Hwy Systemic Passing Lanes MP 129.5-163
Project No. (Federal/State): 0001498/CFHWY00123

Figure 1
Location Map



Figure 3: Overview of disturbance along the Parks Highway, facing south and north.



Figure 4: DOT&PF PQI and two 55-gallon oil drums in survey area.

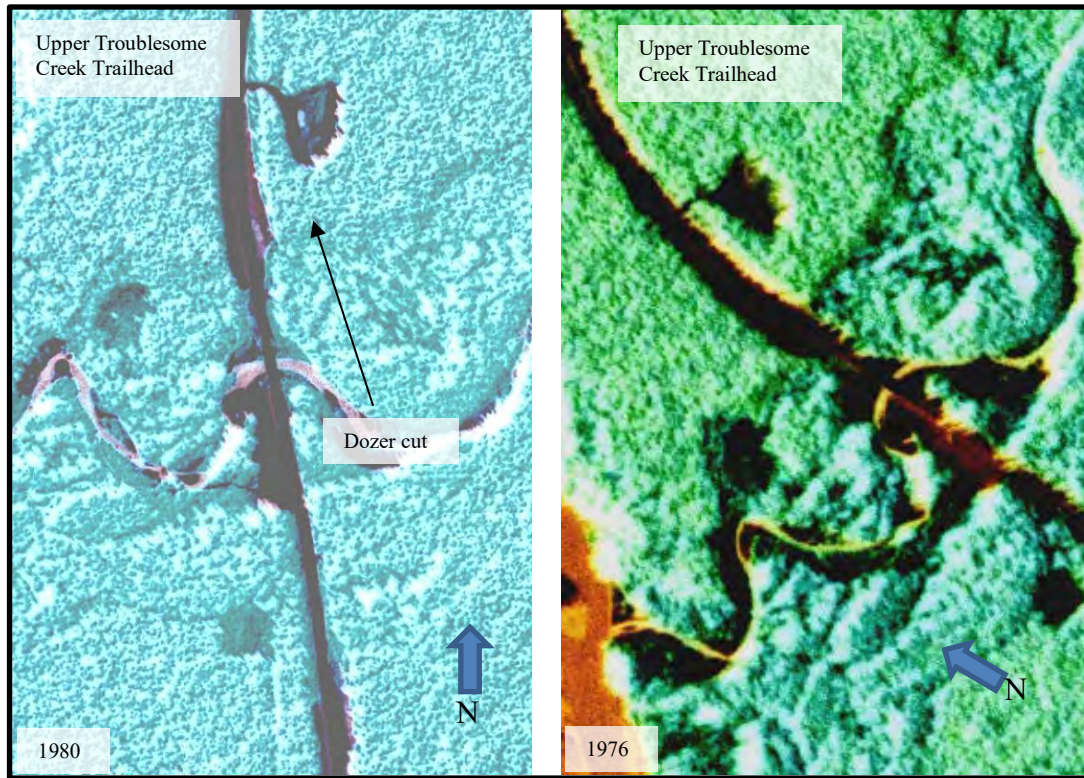


Figure 5: 1980 and 1976 aerial photographs showing presence/absence of the overgrown dozer cut near Upper Troublesome Creek Trailhead.



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources
DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

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April 2, 2015

File No.: 3130-1R FHWA / 2015-00450 and 2015-00451
3330-6N TAL-00204, 3330-6N TAL-00191, 3330-6N TAL-00192, 3330-6N TAL-00203, and
3330-6N TAL-00205

Erik Hilsinger
Cultural Resources Specialist
Department of Transportation & Public Facilities
4111 Aviation Avenue
P.O. Box 196900
Anchorage, Alaska 99519-6900

Subject: Parks Highway MP 83-163 Systemic Passing Lanes (0001(498) / 57301) and Parks Highway MP 90-99 Rehabilitation (0A41(32) / 56177)

Dear Mr. Hilsinger:

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated March 5, 2015) on March 9, 2015. Following our review of the documentation provided, we concur that the following sites are **not eligible** for the National Register of Historic Places (NRHP): TAL-00204, TAL-00191, TAL-00192, TAL-00203, and TAL-00205. As such, we concur that a finding of **no historic properties affected** is appropriate for the proposed undertaking.

As stipulated in 36 CFR 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our comment letter does not end the 30-day review period provided to other consulting parties.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) or the Alaska Landmarks Register in consultation with our office.

Thank you for the opportunity to comment. Please contact Shina duVall at 269-8720 or shina.duvall@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Judith E. Bittner".

Judith E. Bittner
State Historic Preservation Officer
JEB:sad

CULTURAL RESOURCES REPORT COVERSHEET**Must Accompany All Reports Submitted To OHA/SHPO****Alaska Department of Natural Resources, Office of History and Archaeology**

550 W. 7th Ave., Suite 1310 Anchorage, AK 99501-3565

Phone: (907) 269-8718; Fax (907) 269-8908

<http://www.dnr.state.ak.us/parks/oha/index.htm>For Office
Use Only

Date Received: _____

ID: _____

Reset Form

A. Project/Report Cover Sheet Information

1. Date Submitted: _____ 2. Project Number: _____
4. Project Name: _____
5. Report Title: _____
6. Report Authors: _____
7. Submitting Organization/Agency: _____
8. Organization/Agency Prepared For: _____
9. Principal Investigator(s): _____
10. Type of Investigation: _____ 11. Sites found/revisited: Yes No
11. List New AHRS Site #: _____
12. List Updated AHRS Site #: _____

B. Geographic Information1. Brief Description of
the Project Area:

2. USGS Map Sheet(s): _____

3. MTRS (ex.
C41S67E23): _____

4. Land Owner(s): _____

5. Acres Surveyed: _____

C. Cultural Resources Management Questions

1. Is the report part of a National Historic Preservation Act - Section 106 Consultation? Yes No
2. Is the report part of an Alaska Historic Preservation Act Compliance Consultation? Yes No
3. Does the report's data support the submitting agency's determination of eligibility? Yes No
4. Does the report's data support the submitting agency's determination of effect? Yes No
5. Was this report submitted to fulfill State Field Archaeology Permit Requirements
If yes, please provide the Permit #: _____ Yes No
6. Was this project and/or report overseen or authored by someone meeting the minimum
qualifications of the Secretary of the Interior Standards and Guidelines (48 FR 44738-44739)? Yes No
7. Is the Principal Investigator's resume appended to the report or on file at OHA? Yes No

8. Additional
Comments:

Cultural Resource Survey Report of Troublesome Creek Milepost 137-138
for the George Parks Highway Systemic Passing Lanes Project



State of Alaska Department of Transportation and Public Facilities
Project No. (Federal/State): 001498/CFHWY00128



State of Alaska Permit 2018-29

Report prepared by:

Michael Wanzenried, M.A.
Cultural Resource Specialist
Alaska Department of Transportation and Public Facilities

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Project Background

In support of the Parks Highway Systemic Passing Lanes Project, Cultural Resource Specialists (PQIs) from the Alaska Department of Transportation and Public Facilities (DOT&PF) conducted a 6.2 acre pedestrian survey on the east side of the Parks Highway approximately 20 miles north of Talkeetna on August 16, 2018 (Figure 1). The survey supplemented a previous cultural resource survey conducted in support of the George Parks Highway Systemic Passing Lanes Project Milepost (MP) 83-163 in 2014 (State of Alaska Field Archaeology Permit 2014-50). Both surveys were done in accordance with Section 106 of the National Historic Preservation Act (NHPA 1966, as amended) and its implementing regulations codified in the Code of Federal Regulations (CFR), 36 CFR 800 (as amended 2004).

As designed, the George Parks Highway Systemic Passing Lanes project MP 83 to 163 would include widening the road to install passing lanes, approximately one mile in length and spaced every 6-8 miles in each travel direction. The George Parks Systemic Passing Lanes MP 83-163 project has proceeded in three phases. The first two phases of this project included George Parks Highway Systemic Passing Lanes MP 83-99 (0A41037/CFHWY00127) and George Parks Highway Systemic Passing Lanes MP 99-123.5 (0A42010 /CFHWY00092), both of which have already gone to construction.

The 2018 survey was conducted for the last phase, Parks Highway Systemic Passing Lanes MP 123.5-163 (001498/CFHWY00128), which is scheduled to go to construction in 2019. Construction activities included with the MP 123.5-163 phase includes the following actions:

- Widen the roadway to install a passing lane
- Improving or replacing culverts and drainage facilities
- Installing guardrail and guardrail end treatments
- Clearing vegetation within DOT&PF right-of-way
- Improve drainage, driveways and approaches, signing and striping, guardrail and guardrail end treatments
- Relocating utilities

In 2014, NLURA conducted a Phase II evaluation-level survey of the George Parks Systemic Passing Lanes project area between MP 83-163. Pedestrian surveys covered eighteen survey areas associated with the proposed project (Blanchard *et al.* 2015 [2016]). The results of the NLURA survey of the corridor led to DOT&PF's finding of no historic properties affected for the project, which received concurrence from SHPO on April 2, 2015 (see attached letter).

In July 2018, DOT&PF proposed moving the location of a passing lane further south from a previous design (Figure 2). The new location would begin shortly after the Troublesome Creek Bridge and terminate shortly after the entrance to the Upper Troublesome Creek Trailhead – approximately MP 137.2 – 137.8. This specific section had not been previously surveyed during the 2014 cultural resource survey conducted by NLURA. Although NLURA recommended that no additional cultural resource work should be required for the proposed project, the proximity of the location to the confluence of Troublesome Creek and the Chulitna River (both anadromous waters), plus Troublesome Creek's status as a named place for local Dena'ina necessitated a field investigation. The cultural resource survey for this project resulted in no additional cultural sites identified.

Project Location and Setting

The 6.2 acre survey area was located approximately 20 miles north of Talkeetna, Alaska, in T 29N, R 5W, Section 4, Seward Meridian, on the USGS quad map Talkeetna C-1. The survey area spans the east side of the Parks Highway from the edge of pavement to the edge of right-of-way (~150

feet) and runs 1,800 feet north from Troublesome Creek to the southern boundary of a another highway section surveyed by NLRUA in 2014 (Figure 1, Figure 2). The survey area consisted of a relatively flat landform that sits at the base of foothills leading to Curry Ridge and Kesugi Ridge to the east and the Chulitna River to the west. Predominate vegetation in the survey area was lowland spruce-poplar forest with thickets of alder, willow, fern, and bog cranberry (USDA 2015).

Methods

Literature Review and Background Research

Prior to conducting fieldwork, PQIs reviewed the Alaska Heritage Resources Survey (AHRs) and reports available through its online document repository. PQIs also reviewed available historic aerial photographs and USGS maps. The information gathered during the literature review helped develop a frame of reference for potential cultural resources (sites, structures, modified landforms) likely to be encountered during the survey.

Field Survey Methods

PQIs walked 10-15 m transects across the 6.2 acre section of DOT&PF right-of-way. Professional assessment of the landform did not deem the excavation of shovel pits necessary. Survey transects were recorded using handheld GPS units. PQIs used digital camera to document the survey area and objects encountered. Field observations were made in “Rite in the Rain” journals.

Cultural Context

Early Human History to Contact Era

The earliest evidence for human occupation and use of the Upper Cook Inlet region has been speculated to date back to the early holocene (~10000 – 7500 years ago) based on morphological similarities between artifact assemblages from the Beluga Point site (among others) and Paleo-Arctic assemblages from Interior Alaska (Reger 1998: 162; Reger 2003: 15). Artifact assemblages similar to those of Ocean Bay I, Ocean Bay II, and Arctic Small Tool Traditions indicate people continued to use the area through 4000 years BP (Rogers et al. 2013: 122-123). There is limited evidence for human occupation or use of the Turnagain Arm region between approximately 4000-3000 years ago; although, based on proximity, people associated with the Kachemak Riverine tradition on the Kenai Peninsula likely utilized the area (Reger 1998: 164-166). Archaeological evidence suggests ancestors to ethnographically-described Dena’ina began occupying coastal and inland contexts of the Upper Cook Inlet region between 1,500 and 1,000 years ago (Reger 1998: 168; Reger 2003: 16).

Historic and ethnographic accounts document how individual families would travel to fish camps during the summer for fish, game, and vegetable resources for immediate use and to be used throughout the year (Townsend 1981). Before contact, structures at the fish camp consisted of above-ground log buildings covered with sod, meat and fish drying racks, cache pits, and smoke houses (Townsend 1981). After contact most families began using canvas wall tents as their primary living structure at fish camps. People traveled to different resource locations on foot and in canoes. Among other nearby landforms, Troublesome Creek is described in Kari and Fall’s (2003) collection of Dena’ina native place names as *Nelnikda Ey’unt*, or ‘Where There is a Shabby Steambath’.

Contact Era to Present

Following British exploration of the Cook Inlet region in the late 1700’s, Russian fur traders, their creole operatives, and orthodox missionaries attempted to establish trading posts and churches adjacent to or in Dena’ina communities in an effort to influence trade (Kari and Fall 2003: 17). Although Russian interests were successful on the Kenai Peninsula and in the lower reaches of the Cook Inlet, no permanent Russian

trading posts were ever established in the Upper Cook Inlet (Kari and Fall 2003: 17). Despite this, Dena'ina communities in the Upper Cook Inlet underwent profound change as trade goods, religious conversion, and contagious diseases forced people to integrate new ways of being in the world with existing traditions and social structures (Znamenski 1999).

After the sale of Alaska to the United States in 1867, Americans and Europeans slowly traveled throughout the state in pursuit of extractive industry opportunities. Like their Russian counterparts, the Alaska Commercial Company established trading stations close to Dena'ina villages along Cook Inlet at Knik and Tyonek (Cook and Norris 1998:73). By the late 1800's, a series of gold-strikes brought thousands of prospectors into the Hope-Sunrise and Moose Pass areas and then up Turnagain Arm with claims on Bird Creek and Indian Creek (Capps 1940: 7-8).

The economic potential for gold and coal in Alaska spurred the concomitant construction of the Alaska Railroad (AKRR) and permanent settlements like Seward (1904) and Anchorage (1914). More remote settlements like Talkeetna emerged in the early 1900s when companies established trading posts with native populations (Orth 1967 [1971]). By 1916, Talkeetna was selected as the district headquarters of the AKRR, which was followed by a formal survey and auction of eighty lots within the community in 1919 (Alaska Railroad Record 1919).

With the incremental construction of the railroad, people formalized a patchwork of native trails into more functional roads between mining camps and communities (Potter 1963). The Alaska Roads Commission provided financial and material support in improving and connecting this improvised system for decades prior to the completion of the Glenn Highway in 1943, the Seward Highway in 1951, and the ongoing improvements to the Richardson and Glenn Highways throughout the 1940s. Construction on the George Parks Highway did not begin until 1959 when a direct route between Fairbanks to Anchorage became a primary infrastructural need. Although construction of the Parks Highway started in 1959, the stretch of highway from the Chulitna River Bridge to Little Coal Creek – which includes the survey area – was completed in 1970 (DOT&PF 1983:5). This stretch consisted of constructing the Chulitna River Bridge, the Troublesome Creek Bridge, Byers Creek Bridge, and a roadway built to the top of the sub-base to a 44-foot width (DOT&PF 1983: 5). In 1972, a project paved the twenty-four foot driving lanes of roadway between the Chulitna River Bridge and Hurricane Gulch but left the eight-foot shoulders unpaved (DOT&PF: 5).

Previous Research

Over the last 40 years, there have been over 20 cultural resource investigations of the entire project area (see Table 1 for those that occurred over the last 20 years). These investigations and other efforts have resulted in the identification of approximately forty sites within one mile of the entire MP 83-163 project corridor. A review of the AHRS mapper on July 25, 2018, indicated there were no AHRS sites in the 2018 survey area and three sites located between 0.75 and 1 mile from the survey area, which include TAL-00180, TAL-00194, and TAL-00196. These sites are associated with activities that occurred during the 20th century. TAL-00180 is eligible for listing in the National Register of Historic Places under Criterion D. TAL-00194, and TAL-00196 have been determined not eligible for listing in the National Register of Historic Places. All three are outside of the area surveyed.

Table 1: Previous Cultural Resource Surveys in the Project Area

<i>Year</i>	<i>Description</i>	<i>AHRS Sites</i>	<i>Reference</i>
1998	BLM Report of Examination for Cultural Resources, Matanuska Telephone Association, AA-80571.	N/A	(Redding 1998)
2002	Replacement of Alaska Railroad Corporation Bridges Over Willow Creek (Milepost 187.6), Caswell Creek (Milepost 200.9), and an Unnamed Tributary of the Susitna River (Milepost 233.4).	TYO-00097	(Yarborough and Faith 2002)
2003	Letter Correspondence between Rodney "Norwood" Marsh member of the Mat-Su Borough Commission on Historic Preservation and Judith E. Bittner of the Alaska Office of History and Archaeology concerning the Rabideux Cabin.	TAL-00076	(Marsh 2003)
2005	Coastal Zone Management: Middle Susitna Archaeological Survey and Inventory	TAL-00096, 97, 98, 99	(Seager-Boss and Stone 2005)
2006	Archaeological Reconnaissance Survey of Two Alternative Areas of Proposed Development in the South Denali Region	N/A	(Depew and Thompson 2006)
2007	Cultural Resources Survey of the Proposed Broad Pass Siding Extension and Access Road North of MP 304 of the AKRR.	N/A	(Neely 2007)
2008	Cultural Resource Survey MP 18-33 Petersville Road, Alaska.	TAL-00117	(Walrussia 2008)
2009	Alaska Heritage Resources Survey for TAL-00147.	TAL-00147	(McClenahan 2009)
2008	2008 Matanuska-Susitna Borough Archaeological Surveys.	N/A	(Stone and Seager Boss 2009)
2010-2011	Alaska Stand Alone Gas Pipeline (ASAP) from Prudhoe Bay to Cook Inlet.	TAL-00149, 00150	ASRC 2011, 2012
2011	Knik Arm Crossing Cultural Resource Survey.	N/A	(Stone 2011)
2011	Cultural Resource Investigation of the Parks Highway Milepost 163-305 Passing Lanes: DOT&PF Project IM-0005(716)/63515.	N/A	(Thompson 2011)
2012	Alaska Heritage Resources Survey and Historic Context for TAL-00148.	TAL-00148	(McClenahan 2012)
2014	Cultural Resource Evaluation, Alaska LNG 2014 Geotechnical Site Investigation Field Studies.	TAL-00117, 180, 181; TLM-00327	Report not available, OHA IBS
2014	Cultural Resource Evaluation, Alaska Stand Alone Gas Pipeline Cultural Resources Field Studies.	N/A	Report not available, OHA IBS
2016	Parks Highway Milepost 83 to 163 Systemic Passing Lanes Cultural Resource Survey	TYO-00329, 330, 331, 332, 333.	(Blanchard et al. 2016)

Survey Results

On August 16, DOT&PF PQIs Michael Wanzenried and Erik Hilsinger surveyed the approximately 6.2 acre survey area. They noted that the majority of the survey area had been previously impacted by construction of the Parks Highway and routine maintenance activities. The survey area is marked by a wide cleared-area immediately adjacent to the shoulder; the cleared area terminates at the foot of a steep cut bank that has been somewhat stabilized by moss, large rocks, and small plants (Figure 3). The terrain above the slope consists of a relatively dense growth of spruce and birch trees with a dense understory of such plants as willow, fern, bog cranberry, and rosehip (Figure 4). PQIs conducted a single two-person transect of the at a 10 meter interval that was occasionally re-directed by dense undergrowth and fallen trees.

Not far from the turn-off to the Troublesome Creek trailhead, PQIs could just make out the outline of a dozer-cut trail through the vegetation on a north-northeast/south-southwest axis approximately 30 feet from the embankment. PQIs observed two different piles of 55-gallon oil drums of Chevron RPN Delo industrial oil/lubricant for use in heavy machinery on a barely distinguishable dozer cut (Figure 5). A post-field review of aerial photographs from 1980 and 1976 revealed a barely distinguishable linear feature that only appears on the 1980 photograph and corresponds to the location of the dozer-cut observed in the field (Figure 6). Due to the lack of other objects or evidence for other human activities in the vicinity, PQIs presumed these oil drums to be associated with the dozer cut and represent a single-use dump site associated with work at the trailhead or highway. Due to their relatively young age, the drums and dozer cut were noted but not formally recorded for submission to the AHRS. No additional cultural resources were identified during the cultural resource survey.

Summary

On August 16, 2018, DOT&PF PQIs did not identify any new cultural resources during their 6.2 acre survey of the area along the east side of the Parks Highway between, approximately, Troublesome Creek and the entrance to the Troublesome Creek Trailhead. The proposed change in the location of a passing lane would have no effect on any historic properties or other AHRS-sites. As such, DOT&PF will submit a letter outlining a finding of no historic properties affected to the State Historic Preservation Officer.

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April 2, 2015 Concurrence Letter from the State Historic Preservation Officer



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources
DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

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Fax: 907.269.8908

April 2, 2015

File No.: 3130-1R FHWA / 2015-00450 and 2015-00451
3330-6N TAL-00204, 3330-6N TAL-00191, 3330-6N TAL-00192, 3330-6N TAL-00203, and
3330-6N TAL-00205

Erik Hilsinger
Cultural Resources Specialist
Department of Transportation & Public Facilities
4111 Aviation Avenue
P.O. Box 196900
Anchorage, Alaska 99519-6900

Subject: Parks Highway MP 83-163 Systemic Passing Lanes (0001(498) / 57301) and Parks Highway MP 90-99 Rehabilitation (0A41(32) / 56177)

Dear Mr. Hilsinger:

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated March 5, 2015) on March 9, 2015. Following our review of the documentation provided, we concur that the following sites are **not eligible** for the National Register of Historic Places (NRHP): TAL-00204, TAL-00191, TAL-00192, TAL-00203, and TAL-00205. As such, we concur that a finding of **no historic properties affected** is appropriate for the proposed undertaking.

As stipulated in 36 CFR 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our comment letter does not end the 30-day review period provided to other consulting parties.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) or the Alaska Landmarks Register in consultation with our office.

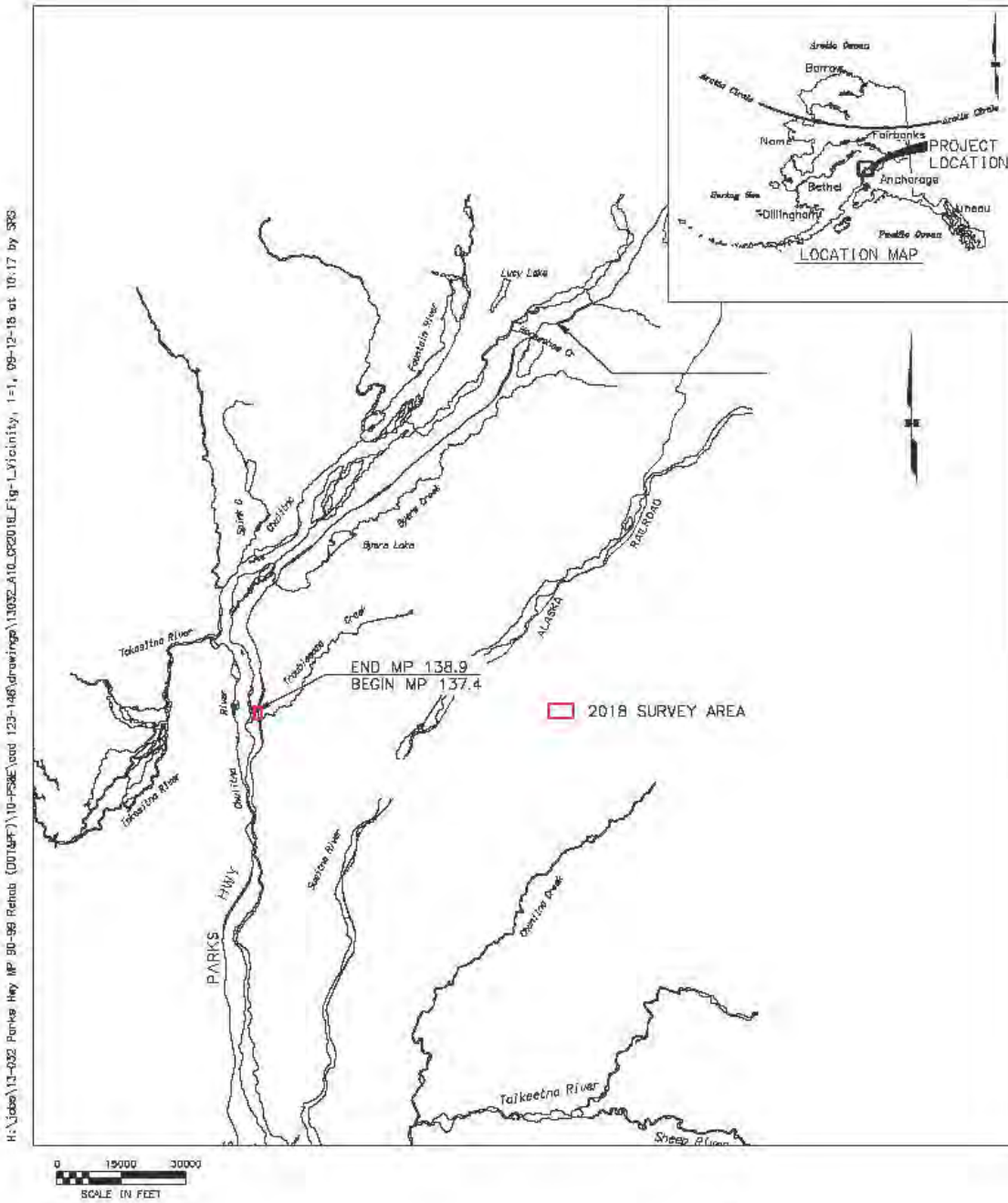
Thank you for the opportunity to comment. Please contact Shina duVall at 269-8720 or shina.duvall@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Judith E. Bittner".

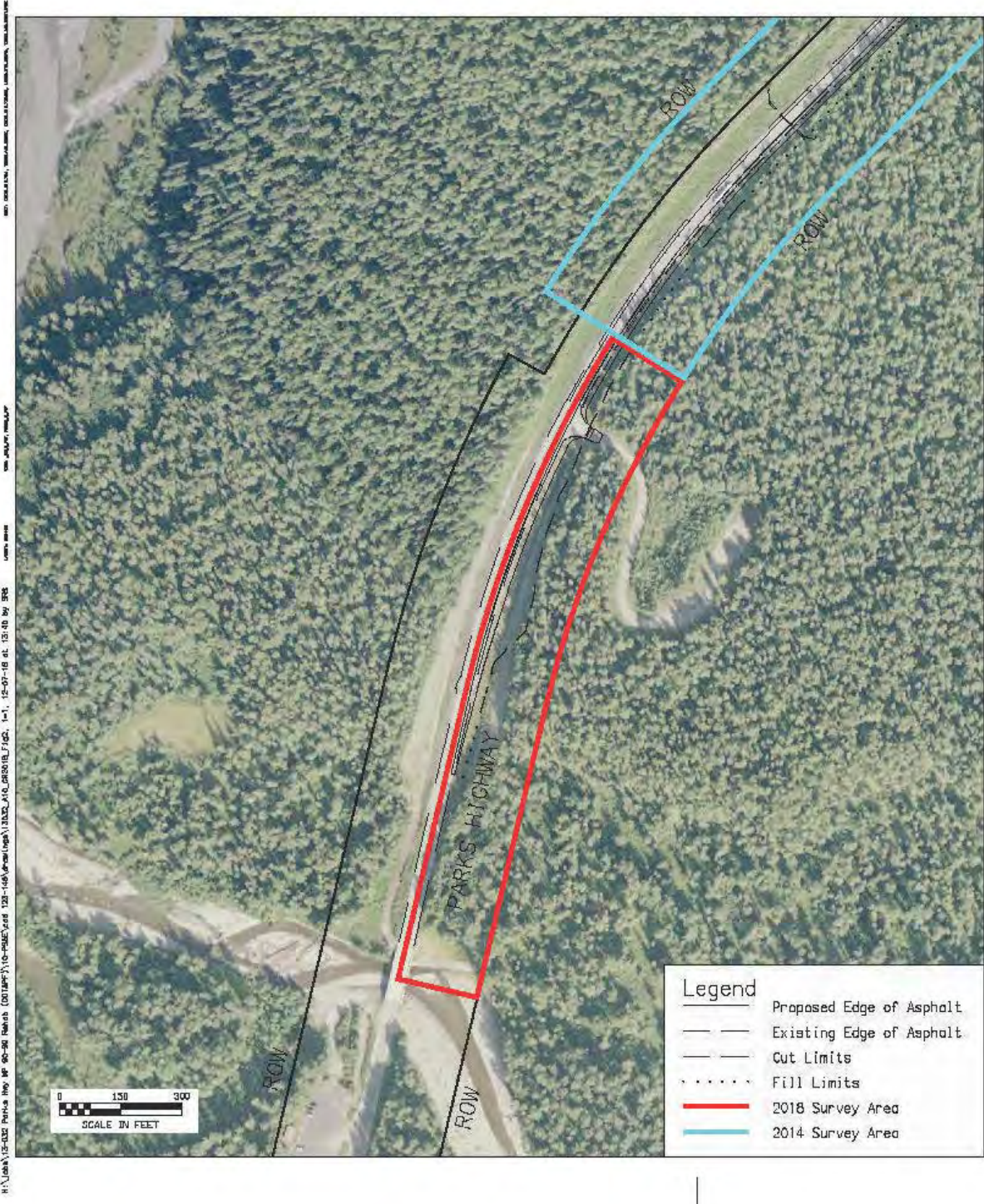
Judith E. Bittner
State Historic Preservation Officer
JEB:sad

Figures



HSIP: Parks Hwy, Systemic Passing Lanes MP 123.5-163
Project No. (Federal/State): 0001498/CFHWY00123

Figure 1
Location Map



HSIP: Parks Hwy: Systemic Passing Lanes MP 123.5-163
 Project No. (Federal/State): 0001498/CFHWY00123

Figure 2
 2018 Survey Area

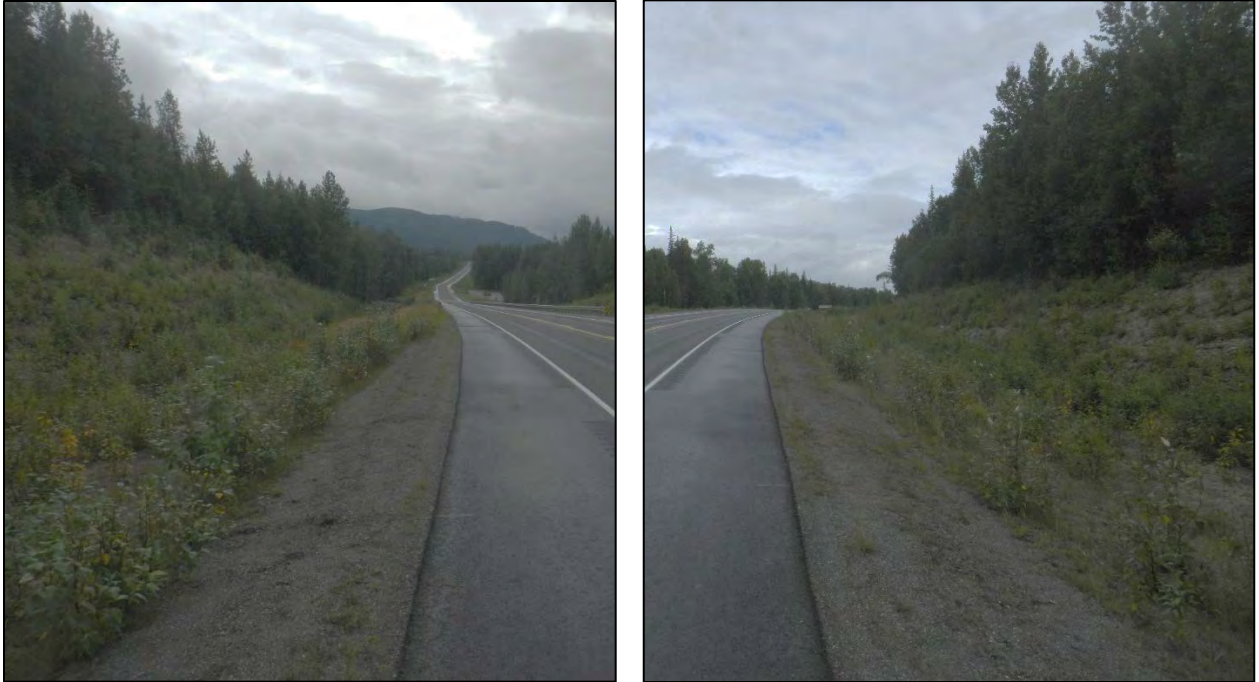


Figure 3: Overview of disturbance along the Parks Highway, facing south and north.



Figure 4: Overview of survey area and local vegetation on top of the slope.



Figure 5: DOT&PF PQI and two 55-gallon oil drums in survey area.

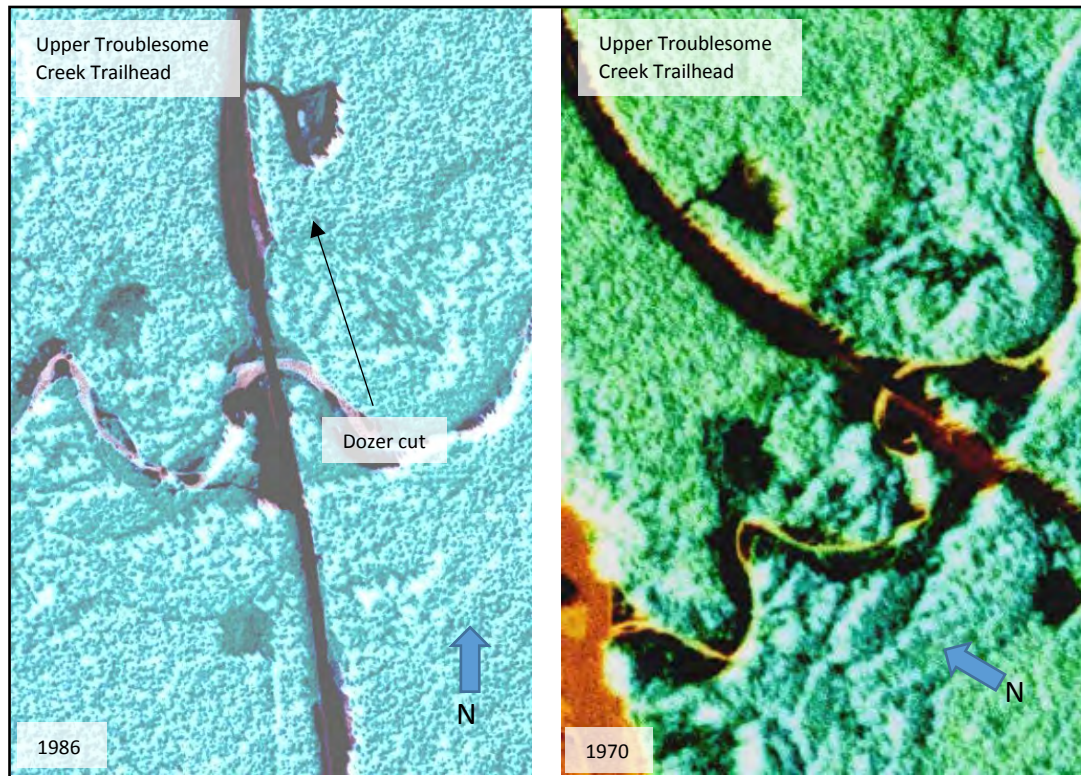


Figure 6: 1980 and 1976 aerial photographs showing presence/absence of the overgrown dozer cut near Upper Troublesome Creek Trailhead.

George Parks Highway Systemic Passing Lanes &
Parks Highway MP 90 - 99 Resurfacing

APPENDIX B

Traffic Noise Analysis

TRAFFIC NOISE ANALYSIS REVISED

Parks Highway MP 83-163 Systemic Passing Lanes
Project No. (Federal/State): 0001(498)/Z573010000



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ACRONYMNS

AADT	Annual Average Daily Traffic
DOT&PF	Department of Transportation and Public Facilities
ANSI	American National Standards Institute
CFR	Code of Federal Regulations
dBA	Decibels, A-weighted
dB	Decibels
FHWA	Federal Highway Administration
Ldn	Day-Night Noise Level
Leq	Equivalent Steady-State Sound Level
MADT	Monthly Average Daily Traffic
MP	Milepost
NAC	Noise Abatement Criteria
Sq	Square Feet
TDM	Transportation Demand Management
TNM	Traffic Noise Model
TSM	Transportation System Management
YMCA	Young Men's Christian Association

ACOUSTICAL TERMINOLOGY

Ambient Noise Level - All-encompassing noise (level) at a given place and time, usually a composite of sounds from all sources near and far, including any specific source(s) of interest.

A-Weighted Sound Level (dBA) - Frequency weighted sound level approximating the frequency response of the human ear. It is defined as the sound level, in decibels, measured with a sound level meter having the metering characteristics and a frequency weighting specified in the American National Standards Institute Specification for Sound Level Meters (ANSI) S-1.4-1983. The A-weighting de-emphasizes lower frequency sounds below 1000 Hz (1 kHz) and higher frequency sounds above 4 kHz. A-weighting is the most generally used measure for traffic and environmental noise throughout the world.

Benefitted Receptor - The recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dBA.

Decibel (dB) - A decibel is one-tenth of a Bel. It is a measure on a logarithmic scale which indicates the squared ratio of sound pressure to a reference sound power (unit for sound power level).

Day-Night Noise Level (Ldn) - A noise level that takes into account all the A-weighted noise energy from a source during 24 hours and weights the nighttime (10 p.m. to 7 a.m.) noise by adding 10 dBA, during that period.

Existing Noise Levels - The noise, resulting from the natural and mechanical sources and human activity, considered to be usually present in a particular area.

Leq - The equivalent steady state sound level, which in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period.

Lmax - The highest sound pressure level in a specific time period.

Ln - The sound pressure level exceeded n percent of a specific time period.

Noise Sensitive Area - A geographic location chosen to represent a worst case noise scenario for any of the land use Activity Categories found along the project corridor, in accordance with the Alaska Department of Transportation and Public Facilities Noise Policy. May contain multiple discrete receptors or be attributed multiple receptors based on Activity Category.

Receptor - A discrete or representative location of a noise sensitive area(s), for any of the land uses listed in Table 3.

EXECUTIVE SUMMARY

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), is proposing to add systemic passing lanes every 6-10 miles in each direction of travel and repair drainage structures along the Parks Highway between mileposts 83 and 163.

Traffic noise levels were measured at 35 representative locations in the project area. Concurrent vehicle counts and classifications were performed at these sites for use in validating the FHWA Traffic Noise Model Version 2.5. The design year used for the purpose of this analysis to predict future traffic noise levels is 2035. Noise levels at five additional noise sensitive areas were modeled for the following:

- the existing year (2015)
- the design year build alternative (2035)
- the design year no-build alternative (2035)

This traffic noise analysis conforms to FHWA and DOT&PF traffic noise analysis guidelines and requirements.

The evaluation of existing noise levels yielded traffic noise impacts at two noise sensitive areas. Under the no-build and future build alternatives, impacts are predicted to exist at the same two noise sensitive areas. No feasible mitigation options were available for the noise impacts; therefore, no noise abatement is proposed as a part of this project. This recommendation is based on design information and existing policies.

This analysis was revised in January 2019 to consider changes in proposed project geometry. These changes potentially affected two noise sensitive areas previously evaluated in the 2015 analysis and one noise sensitive area that had not been previously evaluated. A new receptor was added at the additional noise sensitive area to evaluate the revised geometry, and the existing and proposed model was updated with these changes. Existing, future project build, and future no-build noise levels were predicted for these three sites. No impacts currently exist or are anticipated under the project build or no-build alternatives based on the design changes.

In November 2018, the Federal Highways Administration Alaska Division approved a new statewide Noise Policy for the Alaska Department of Transportation and Public Facilities. This document has been updated to reflect the changes in guidance, and meets the requirements of the November 2018 Noise Policy.

1.0 INTRODUCTION

The Parks Highway is the primary link between Anchorage, the Matanuska-Susitna Borough, and interior Alaska. It is a rural interstate highway that extends 324 miles from its intersection with the Glenn Highway east of Wasilla to its termination in Fairbanks. This document presents the traffic noise analysis and noise abatement recommendations for the proposed project, which includes new passing lanes and the repair of drainage structures along the Parks Highway from milepost (MP) 83 to 163.

1.1 Project Background

The segment of the Parks Highway between MP 83 and 163 consists of a two-lane, two-way highway designated as a Rural Principal Arterial Interstate, and is part of the National Highway System. The terrain is rolling and comprises a significant commercial trucking route and recreational area that includes Denali State Park. This portion of the Parks Highway experiences large percent traffic increases during the summer months with a peak monthly average daily traffic (MADT) in July at 155.1% of the average annual daily traffic (AADT). The mixture of lower speed “sightseeing” RVs, large trucks, and personal vehicles causes conflict and results in driver impatience, inattention, following too close, excessive speed, improper passing, or fatigue. These are contributing factors in severe head-on type collisions when opportunities are not regularly available for drivers to safely pass. There are no passing lanes and no officially designated slow vehicle turnouts between Kashwitna River (MP 83) and MP 198. Therefore, passing must be done in the opposing lane of travel where sight distance, grades, and opposing gaps allow drivers to make a decision. Additional turnout and/or passing opportunities are proposed to help accommodate the differing types of uses and existing traffic platooning, as well as address the existing crash patterns associated with poor driver passing maneuvers within this corridor.

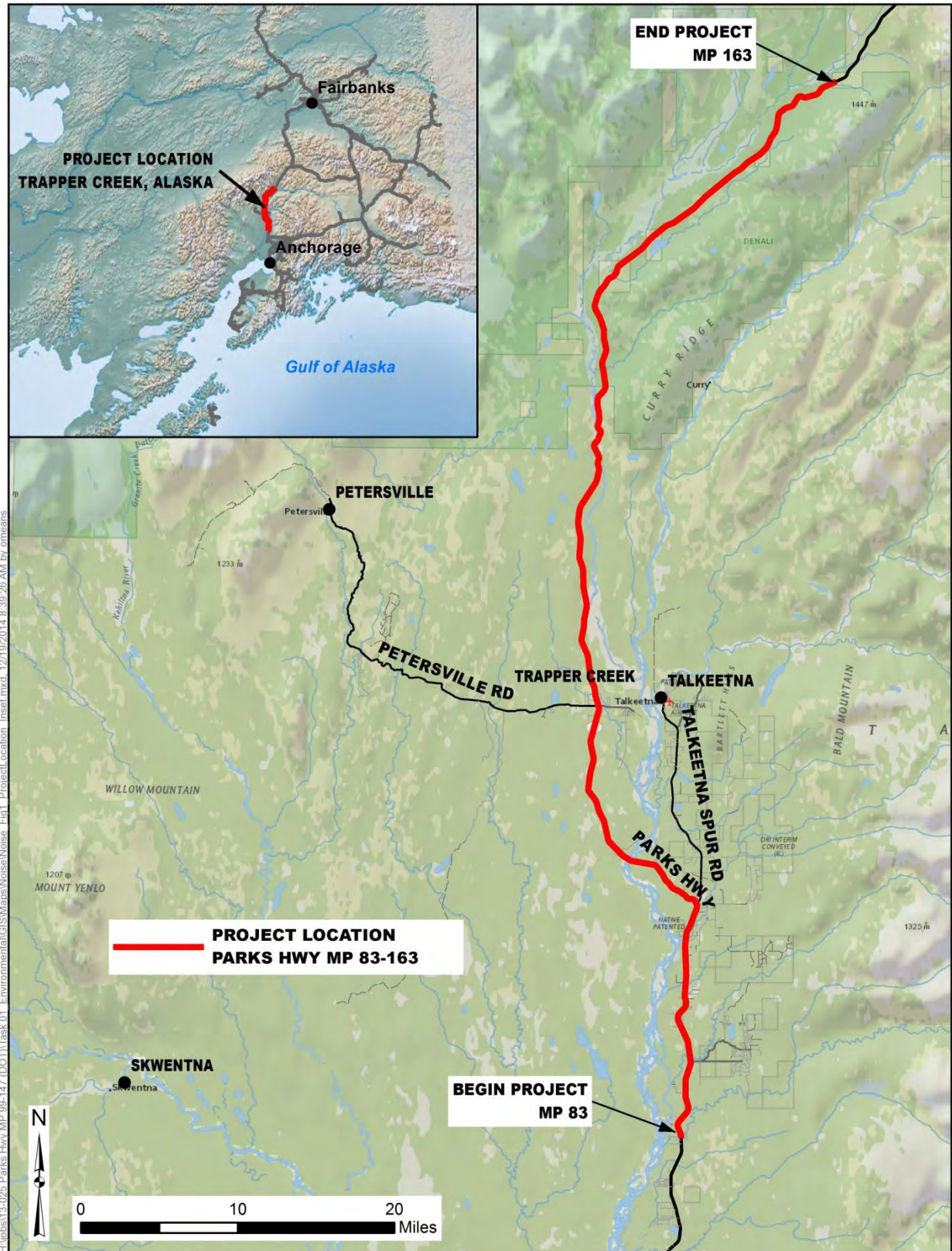


Figure 1: Project Location

1.2 Proposed Design Improvements

To help mitigate the number of fatal and injury crashes involving passing or attempting to get around slower and/or slowing traffic, driver fatigue and recklessness, the entire corridor will be upgraded systemically to include passing lanes approximately one mile long, every six to ten miles in each travel direction. The following locations have been selected for passing lanes (Table 1) and are depicted on Figure 2 (Sheets 1-39).

Table 1: Passing Lane Locations

Northbound MP	Figure 2 Sheet #	Southbound MP	Figure 2 Sheet #
86-87	Sheet 2	86-87.5	Sheet 2
94-95.5	Sheet 6	94.5-96.5	Sheet 6
102.7-103.7	Sheet 10	102.7-103.8	Sheet 10
112.9-113.9	Sheet 15	109.8-111.2	Sheet 14
121.3-122.4	Sheet 19-20	121.8-123.1	Sheet 20
128.6-129.9	Sheet 23	127-128.4	Sheet 22-23
137.8-138.9	Sheet 27-28	136.3-137	Sheet 27
144.9-145.9	Sheet 31	149.6-150.5	Sheet 37
161.6-162.8	Sheet 33	161.6-162.8	Sheet 39

Two of the passing lanes listed in Table 1 were revised for length or location as a part of changes in the proposed design in September 2018. These changes are noted on Figure 2, sheets 27 and 29. An expanded discussion of the design revisions and resulting analysis is included in Section 7.0

1.3 Purpose of Study

The purpose of this analysis is to assess potential noise impacts that increased future traffic volumes will have on nearby noise-sensitive areas based on no-build and finalized future build alternative geometry. If a traffic noise impact exists, this analysis will determine whether noise abatement measures are feasible and reasonable according to the current Department of Transportation and Public Facilities (DOT&PF) 2011 Noise Policy. This analysis evaluates the entire project corridor from MP 83 to MP 163, including sections without proposed improvements.

Existing noise levels are evaluated at locations determined to be noise sensitive areas within the project corridor. These levels were compared to predicted future (2035) noise impacts from increased traffic on the Parks Highway based on the existing highway geometry (i.e., the no-build alternative) and future (2035) noise impacts from increased traffic based on the future build alternative. The analysis also assesses potential construction noise impacts and recommends the level of mitigation required.

1.4 Terminology

Locations were selected for analysis as representative worst case noise scenarios for each land use Activity Category found within the project corridor. The DOT&PF Noise Policy sometimes

refers to these locations as "receivers". However, the term "receiver" is defined within the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) as "*the modeling point where sound level is to be calculated for a receptor*". Using this term to denote locations chosen for noise analysis can become problematic for large outdoor areas because while TNM can attribute multiple dwelling units to a receiver, it cannot spread those units out geographically. According to the DOT&PF Noise Policy, the number of receptors for an analysis site such as a park is calculated by dividing the area of the park by the average residential lot size in the vicinity. If the average residential lot size along the project corridor is 10,000 square feet (sq ft) and the park is 80,000 sq ft, the park would be attributed eight receptors. However, placing one TNM receiver within the geographic area of the park and attributing eight dwelling units to the receiver in the input parameters would be imprudent since the park is such a large area. Using this method, the model would output identical noise levels for all eight dwelling units when, in reality, areas of the park that are farther from the roadway and/or shielded by vegetation would experience lower sound levels than areas bordering the roadway. A more accurate method of modeling the park would be to divide it into eight equal sections geographically and place one TNM receiver in each section with one dwelling unit attributed to each receiver. However, this creates an inconsistency in terminology between TNM where the park is modeled using eight **receivers** to represent eight receptors, and the report where the park is considered a single **receiver**.

In order to maintain consistency and clarity between the TNM and this report, the current analysis refers to the geographic locations chosen to represent worst case noise scenarios as **noise sensitive areas**. Some of these locations contain multiple discrete receptors within the larger noise sensitive areas, which are attributed and analyzed for impacts and abatement measures in accordance with the Code of Federal Regulations 23 CFR 772 and the current DOT&PF Noise Policy.

2.0 ELEMENTS OF TRAFFIC NOISE

Sound is measured on a logarithmic scale. In order to understand the relationship between changes in sound level and relative changes in human perception of volume, a reference level such as 50 decibels A-weighted (dBA), or a sound volume similar to that of a clothes dryer is useful. This reference level is used to help describe the volume of common sounds in Table 2. All sound levels reported in this analysis are in dBA. A-weighting de-emphasizes the very low or very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting as it provides a high degree of correlation with human annoyance and health effects.

Table 2: Typical Sound Levels for Common Noise Sources

A-Weighted Noise Level (decibels)	Noise Environment	Perception of Loudness
10	Normal Breathing	1/16 as loud as 50 dBA
20	Broadcast Studio	1/8 as loud as 50 dBA
30	Library	1/4 as loud as 50 dBA
40	Refrigerator	1/2 as loud as 50 dBA
50	Clothes Dryer	Reference Level
60	Air Conditioning Unit	2 times louder than 50 dBA
70	Pick-up Truck @ 50 mph	4 times louder than 50 dBA
80	Medium Truck @ 50 mph	8 times louder than 50 dBA
90	Motorcycle @ 50 mph	16 times louder than 50 dBA
100	Jet flyover @ 1000 ft	32 times louder than 50 dBA

Source: <http://www.dot.ca.gov/dist2/projects/sixer/loud.pdf>

Other significant variables to consider for noise impacts include the time of day when noise impacts occur and the duration of the noise. Generally, noise levels from a highway decrease at rates of 3 dBA to 4.5 dBA for each doubling of distance from the highway depending on the type of terrain between the highway and noise sensitive areas. Changes in noise levels are perceived as follows:

- 3 dBA change is barely perceptible.
- 5 dBA change is readily perceptible.
- 10 dBA change is perceived as a doubling or halving of noise.

3.0 METHODS

Existing (2014) and future (2035) traffic noise levels were evaluated using the TNM Version 2.5 (FHWA 2004). The FHWA TNM is based on reference energy emission levels for automobiles, medium trucks (2 axles), heavy trucks (3 or more axles), buses, and motorcycles, with consideration given to vehicle volume, vehicle speed, roadway configuration, distance to the noise sensitive area, and the acoustical characteristics of the site. The FHWA TNM was developed to predict noise levels for both constant-flow and interrupted-flow traffic conditions. The model enables the user to account for the effects of different pavement types, graded roadways, and noise attenuation by buildings and dense vegetation. Terrain elevation lines may be created to account for shielding effects of natural terrain. The model also allows the user to specify various intervening ground types with different sound absorption qualities. The ground types available for use include hard and soft soil, snow-covered ground, water, and pavement.

Existing highway geometry data, based on as-built surveys and geographic information system data, were used to model the roadways, noise sensitive areas, and intervening topography within the project corridor. Traffic noise levels calculated by TNM were validated using on-site traffic noise level measurement data and concurrent traffic counts obtained at 35 locations within the project corridor. Aerial photos of the measurement sites and photos taken at each site location are

provided in Figure 2 (Sheets 1-39). Site data is included in Appendix A, and details regarding the results of the analysis for each site in Appendix B.

Traffic data used for the assessment of project future (2035) noise exposure, including peak-hour volumes, truck volumes, directional splits, and vehicle speeds was derived from the *Annual Traffic Volume Report Central Region, 2011-2013* (DOT&PF 2013). The design year used in this analysis to predict future traffic noise levels is 2035.

3.1 DOT&PF and FHWA Noise Level Criteria

The FHWA Design Noise Level/Activity Relationships used for determining noise abatement criterion (NAC) for specific land uses (e.g., residential, commercial, etc.) are provided in Table 3.

Table 3: FHWA Land Use Activity Categories

Activity Category	Activity Leq(h)	Evaluation Location	Description of Land Use Activity Category
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential areas of single-family and multi-family homes.
C	67	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day cares centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	Exterior	Hotels, motels, offices, restaurants/bars and other developed lands, properties or activities not included in A-D or F.
F	None	None	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities, (water resources, water treatment, electrical) and warehousing.
G	None	None	Undeveloped lands that are not permitted.

Source: Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR 772, 2004) DOT&PF Noise Policy (2011)

A noise impact is determined to occur if noise levels approach the defined Activity equivalent steady state sound level (Leq). The DOT&PF defines "approach" as noise levels within one dBA of the Activity Leq for Activity Categories A-E in Table 3. For example, a Young Men's

Christian Association (YMCA) gymnasium is most accurately defined by Category C (nonprofit institutional structures), for which the Activity Leq is 67 dBA. A noise level approaching 67 dBA within 1 dBA would be 66 dBA. Therefore, the DOT&PF modified NAC for the gymnasium and all Category C sites is 66 dBA. A hair salon is most accurately described by Category F (retail facilities). No NAC is provided for Category F sites, and as such no noise abatement would be considered. All sites used for this analysis and their respective DOT&PF NAC Categories are described in Table 4

Table 4: Site Activity Categories

Location	Activity Category	NAC	Figure 2 Sheet #
M1.) Talachulitna Rd	B, Residence	66	Sheet 1
M2.) Residence	B, Residence	66	Sheet 1
M3.) Residence (passing lane)	B, Residence	66	Sheet 2
M4.) Camp Caswell Food and Tackle	E, Restaurant	71	Sheet 3
M5.) Sheep Creek Lodge	E, Restaurant/ Hotel	71	Sheet 3
M6.) Lichen Dr	B, Residence	66	Sheet 5
M7.) Sezgo Rd (passing lane)	B, Residence	66	Sheet 6
M8.) Empty Lot	B, Residence	66	Sheet 7
M9.) Montana Creek Campground	C, Campground	66	Sheet 7
M10.) Upper Susitna Seniors Inc.	B, Senior Center	66	Sheet 8
M11.) Susitna Valley High School	C, School	66	Sheet 8
M12.) Church on the Rock North Campus	C, Place of Worship	66	Sheet 8
M13.) H&H Cafe	E, Restaurant	71	Sheet 9
M14.) Pullout across from residence	B, Residence	66	Sheet 10
M15.) Residence (passing lane)	B, Residence	66	Sheet 10
M16.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 14
M17.) McKinley B&B (passing Lane)	B, Residence	66	Sheet 15
M18.) Trapper Creek Inn/Rv Park	C, Campground	66	Sheet 16
M19.) St. Philip's Catholic Church	C, Place of Worship	66	Sheet 16
M20.) East/West Susitna Access (passing lane)	C, Campground	66	Sheet 19
M21.) Pullout across from residence	B, Residence	66	Sheet 22
M22.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 22
M23.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 23
M24.) Residence near Mckinley Princess Lodge	B, Residence	66	Sheet 25
M25.) Denali View South Pullout	C, RV Park/ Campground	66	Sheet 26
M26.) Moose Flats Campground	C, Campground	66	Sheet 26
M27.) Residence	B, Residence	66	Sheet 26
M28.) Troublesome Creek RV Park	C, Campground	66	Sheet 27
M29.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 28
M30.) Driveway across from Byers Creek Lodge	E, Restaurant/ Hotel	71	Sheet 30
M31.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 31
M32.) Alaska Veterans Memorial	C, Park	66	Sheet 32
M33.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 33

M34.) Roadside (passing lane)	G, Undeveloped Lands	N/A	Sheet 37
M35.) Denali View North Pullout	C, RV Park/ Campground	66	Sheet 39
R1.) Wytchwood Gift Shop	B, Residence	66	Sheet 2
R2.) Montana Creek Baptist Church	C, Place of Worship	66	Sheet 8
R3.) Big Su Lodge	E, Restaurant/Hotel	71	Sheet 11
R4.) Mckinley Piness Lodge	E, Restaurant/Hotel	71	Sheet 25
R5.) Mckinley View Lodge	E, Restaurant/Hotel	71	Sheet 26
R6.) Upper Troublesome Creek Trailhead*	C, Trailhead	66	Sheet 27

*Added as a part of the January 2019 analysis revision.

All sites in this analysis fall within Activity Categories B, C, E, F, and G. Category D refers to the interior of Category C sites (schools, hospitals, libraries, etc.). The DOT&PF Noise Policy states that "An indoor analysis shall be done only after exhausting all reasonable outdoor analysis options" (page 12). All sites possess a reasonable exterior option, and thus none fall under Category D. Category A refers to lands where low noise levels serve an important public need. These areas are only designated as Category A lands after justification to FHWA by the DOT&PF. There are no areas along the project corridor where the need for a Category A designation exists.

Much of the land use along the project corridor is considered Category G, which is defined by the DOT&PF Noise Policy as "Undeveloped Lands that are not permitted". Although Category G lands do not require abatement, noise levels are predicted at seven representative areas throughout the corridor. (**M16, M22, M23, M29, M31, M33, and M34**). Several additional undeveloped properties present along the project corridor were not analyzed using TNM; however, their predicted noise levels are represented by adjacent areas where future noise levels were modeled. The distance from these areas to the edge of the highway traveled way is reported in accordance with the DOT&PF Noise Policy (Table 5).

The above-described noise abatement criteria are determined at the exterior of structures during peak hour traffic levels, except Category D. The peak hour traffic level for this project is defined as 11 percent of the AADT.

In addition to the criterion sound levels, FHWA and DOT&PF consider traffic noise impacts to occur if predicted sound levels substantially exceed existing noise levels. The DOT&PF defines "substantial" as 15 dBA above existing noise levels. Therefore, noise abatement features must be considered for the proposed project if predicted design year noise levels will result in a noise level increase of 15 dBA or more, or if the design year noise level equals or exceeds one dBA less than the Activity Leq established for the appropriate activity category in Table 3.

4.0 EXISTING CONDITIONS

Vehicular traffic on the Parks Highway is the dominant source of noise in the project area. Other environmental noise sources contributing to the ambient noise include traffic on adjacent local roadways, heavy small aircraft traffic and noise from local community activities.

4.1 Existing Land Use

The project corridor passes through several communities, including Willow, Sunshine, and Trapper Creek. The project begins within the community of Willow and continues beyond Trapper Creek, ending near the Denali View North rest area. Land along either side of the Parks Highway is primarily zoned as rural residential and commercial. However, due to the layout of the communities within the project corridor, the Activity Category for each site was determined based on the actual land use of the site itself and the surrounding area, rather than solely based on the mapped zoning designations for the area. For areas where the land use does not reflect the zoning of the area, the more conservative Activity Category was applied.

4.2 Noise Measurement Procedures

Traffic noise level measurements were conducted within the project corridor in September and October of 2014. Two continuous 20-minute measurements were taken at each location, during both the morning and evening peak hours of traffic. The Leq from minutes 0-15 was recorded using instantaneous measurements taken every second throughout the 15-minute period. These samples were used to validate TNM. Concurrent traffic counts were taken manually from minute 0-15 along the Parks Highway, noting speed, volume, direction, and vehicle class at each site. Weather readings were also obtained from the nearest weather station, in accordance with the DOT&PF Noise Policy. The measurements were considered in five minute intervals, solely for the purpose of noting extraneous noises on the data sheet while recording.

Measurement equipment consisted of a Rion Model NL-22 sound level meter and an Extech Instruments Model 407744 sound level calibrator. The sound meter was calibrated to 93.9 dBA at every site prior to taking measurements in order to ensure accuracy. Measurements were recorded manually and digitally and stored as electronic files on the sound level meter for future reference. The meter was placed in the area of most frequent exterior human use (patios, picnic tables, yards, balconies, etc.) for each noise sensitive area. The measurement equipment complies with the requirements of the American National Standards Institute (ANSI).

4.3 Model and Validation Process

The most current version of the FHWA TNM software (2.5) was used to model the project corridor and measured sites. The TNM does have its limitations, such as an inability to account for other sources of ambient noise. In addition, TNM cannot account for excess noise or barrier loss insertion for traffic-related noises such as studded tires, roadside rumble strips, frequency of police and emergency sirens, and engine exhaust or compression brakes. For this reason, any

noise sources other than highway sources were noted on the field data sheets. These measurements are compared to the TNM output values for the 35 measurement sites in Table 5.

Table 5: Comparison of Measured and Predicted Traffic Noise Levels

Location	Activity Category	Distance to Roadway (feet)	Measured Leq (dBA)	Predicted Leq (dBA)	Difference (dBA)
M1.) Talachulitna Rd	B	192	49.2	47	-2
M2.) Residence	B	121	58.8	59	0
M3.) Residence (passing lane)	B	56	64.0	62	-2
M4.) Camp Caswell Food and Tackle	E	126	61.7	60	-2
M5.) Sheep Creek Lodge	E	46	61.0	59	-2
M6.) Lichen Dr	B	88	61.3	64	+3
M07.) Sezgo Rd (passing lane)	B	664	45.4	44	-1
M8.) Empty Lot	B	251	53.6	53	-1
M9.) Montana Creek Campground	C	375	55.6	53	-3
M10.) Upper Susitna Seniors Inc.	B	490	53.2	52	-1
M11.) Susitna Valley High School	C	631	47.7	47	-1
M12.) Church on the Rock North Campus	C	97	59.0	60	+1
M13.) H&H Cafe	E	91	64.0	62	-2
M14.) Pullout across from residence	B	44	64.0	62	-2
M15.) Residence (passing lane)	B	171	56.2	55	-1
M16.) Roadside (passing lane)	G	54	62.8	63	0
M17.) McKinley B&B (passing Lane)	B	221	51.8	50	-2
M18.) Trapper Creek Inn/Rv Park	C	186	46.1	48	+2
M19.) St. Philip's Catholic Church	C	98	58.0	58	0
M20.) East/West Susitna Access (passing lane)	C	203	55.8	53	-3
M21.) Pullout across from residence	B	61	66.3	66	0
M22.) Roadside (passing lane)	G	77	58.6	60	+1
M23.) Roadside (passing lane)	G	87	58.5	60	+2
M24.) Residence near Mckinley Princess Lodge	B	2,474	48.6	50	+1
M25.) Denali View South Pullout	C	233	51.4	51	0
M26.) Moose Flats Campground	C	234	45.8	45	-1
M27.) Residence	B	21	64.0	66	+2
M28.) Troublesome Creek RV Park	C	105	56.4	55	-1
M29.) Roadside (passing lane)	G	34	67.8	65	-3
M30.) Driveway across from Byers Creek Lodge	E	98	60.6	61	0
M31.) Roadside (passing lane)	G	31	64.8	67	+2
M32.) Alaska Veterans Memorial	C	215	49.4	51	+2
M33.) Roadside (passing lane)	G	26	65.8	67	+1
M34.) Roadside (passing lane)	G	15	66.9	68	+1
M35.) Denali View North Pullout	C	374	39.8	41	+1

Noise levels predicted by TNM and the difference between predicted and measured levels are rounded to the nearest whole decibel, as required by the DOT&PF Noise Policy, which allows for a positive or negative difference between predicted and measured levels of three dBA—the threshold of human perception of a volume change. Noise levels predicted by TNM for this project were within +3 and -3 dBA of those measured. Therefore, the FHWA TNM may be used to accurately calculate noise exposure for existing and projected future conditions.

Modeling procedures as applied to the 35 measured sites were submitted to the DOT&PF on December 11th, 2014. An additional five noise sensitive areas were then added to the model. The noise at these sites was generated by the model after calibration. All 40 sites may be viewed on Figure 2 (Sheets 1-39).

To calculate existing (2014) peak-hour noise levels for noise sensitive areas, modelers used 11 percent of the AADT. Only traffic along the Parks Highway was considered in this modeling as noise levels from the Parks Highway overwhelmed noise generated from other adjacent roadways. Models with or without these roadways generated the same noise levels for all considered noise sensitive areas. Existing peak-hour noise levels for these sites are presented in Table 6.

Table 6: Additional Modeled Sites

Noise Sensitive Area #	Distance to Roadway (feet)	(2014) Existing (dBA)
R1.) Wytchwood Gift Shop	95	50
R2.) Montana Creek Baptist Church	62	56
R3.) Big Su Lodge	107	50
R4.) McKinley Princess Lodge	2,057	48
R5.) McKinley View Lodge	88	51
R6.) Upper Troublesome Creek Trailhead*	437	45

**Added as a part of the January 2019 analysis revision*

4.4 Traffic Parameters

The traffic volumes, mix, and directional splits used in this analysis were derived from the *Annual Traffic Volume Report Central Region, 2011-2013* (DOT&PF 2013). These values were calculated in Table 7 for a design hourly volume correlating with Level of Service D.

Table 7: Vehicle Volume, Mix, and Directional Splits Used in TNM

Percentage Type	Existing 2013
Design Hour Volume %	11%
Directional Distribution (North/South) %	59/41%
Cars %	81.6%
Medium Trucks/Recreational Vehicles %	14.5%
Heavy Trucks %	2.1%
Buses %	1.6%
Motorcycles %	0.2%

For proposed traffic volumes in the design year, a compound growth factor of 1.6 percent was used. The Parks Highway experiences notable seasonal traffic changes, resulting in an increase in traffic related to recreation and tourism during the summer months. Traffic volumes were calculated to represent the worst traffic noise hour for both the existing (2013) and design year (2035).

5.0 IDENTIFICATION OF NOISE IMPACTS

Potential noise impacts associated with the proposed project include permanent impacts due to additional lanes moving vehicular traffic closer to noise sensitive areas, changes to the physical characteristics of the roadway, and temporary impacts related to roadway construction activities.

5.1 Traffic Noise Impacts

The noise model used forecasted (2035) traffic volumes for the Parks Highway derived from the *Annual Traffic Volume Report Central Region, 2011-2013* (DOT&PF 2013). A compounded growth rate for the area indicates that traffic volumes on the roadway are expected to increase regardless of proposed roadway improvements.

The FHWA TNM was used to calculate future (2035) build and no-build traffic noise levels in terms of peak-hour noise for 40 sites. The main factors affecting traffic noise exposure for each receptor location are speed, distance, and elevation in reference to the roadway. Table 8 presents existing, no-build, and future build traffic noise levels at each noise sensitive area. Noise levels that exceed the NAC for the site's category are listed in red.

Table 8: Existing, No-Build, and Future Build Peak Hour Noise Levels

Location	DOT&PF Modified NAC	(2014) Existing (dBA)	(2035) No-Build Alternative (dBA)	(2035) Future Build Alternative (dBA)
M1.) Talachulitna Rd	66	47	50	50
M2.) Residence	66	59	61	62
M3.) Residence (passing lane)	66	62	63	64
M4.) Camp Caswell Food and Tackle	71	60	53	53
M5.) Sheep Creek Lodge	71	59	54	54
M6.) Lichen Dr	66	64	65	65
M7.) Sezgo Rd (passing lane)	66	44	46	47
M8.) Empty Lot	66	53	56	56
M9.) Montana Creek Campground	66	53	55	55
M10.) Upper Susitna Seniors Inc.	66	52	54	54
M11.) Susitna Valley High School	66	47	50	51
M12.) Church on the Rock North Campus	66	60	62	63
M13.) H&H Cafe	71	62	65	65
M14.) Pullout across from Residence	66	62	65	65
M15.) Residence (passing lane)	66	55	58	60
M16.) Roadside (passing lane)	N/A	63	67	69
M17.) McKinley B&B (passing Lane)	66	50	53	56
M18.) Trapper Creek Inn/Rv Park	66	48	52	52
M19.) St. Philip's Catholic Church	66	59	62	63
M20.) East/West Susitna Access (passing lane)	66	53	57	59
M21.) Pullout across from residence	66	66	69	69
M22.) Roadside (passing lane)	N/A	60	63	65
M23.) Roadside (passing lane)	N/A	60	64	65
M24.) Residence near Mckinley Princess Lodge	66	50	53	53
M25.) Denali View South Pullout	66	51	53	54
M26.) Moose Flats Campground	66	45	48	49
M27.) Residence	66	66	68	68
M28.) Troublesome Creek RV Park*	66	55	59	60
M29.) Roadside (passing lane)	N/A	65	68	68
M30.) Driveway across from Byers Creek Lodge	71	61	63	64
M31.) Roadside (passing lane)	N/A	67	70	72
M32.) Alaska Veterans Memorial	66	51	54	54
M33.) Roadside (passing lane)	N/A	67	70	71
M34.) Roadside (passing lane)	N/A	68	70	72
M35.) Denali View North Pullout	66	41	43	44
R1.) Wytchwood Gift Shop	66	50	53	54
R2.) Montana Creek Baptist Church	66	56	60	60
R3.) Big Su Lodge	71	50	51	52
R4.) Mckinley Pincess Lodge	71	48	50	50
R5.) Mckinley View Lodge	71	51	54	55
R6.) Upper Troublesome Creek Trailhead*	66	45	47	48

Note: Impacted sites are in red.

*Added/updated as a part of the January 2019 analysis revision.

The future build alternative increases noise in areas where project improvements would allow traffic to flow closer to the noise sensitive areas due to passing lanes. Two sites will experience a noise impact under the future build alternative. These sites are already experiencing noise levels

that exceed the NAC for their Activity Category, and will be impacted under both the no-build or future build alternative, based on predicted traffic volume increase.

5.2 Construction Noise Impacts

Noise from construction activities would add to the overall noise environment in the immediate project area. Activities involved in construction would generate noise levels as indicated in Table 9 ranging from 83 to 86 dBA at a distance of 100 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Construction noise impacts could result in annoyance or sleep disruption if nighttime operations occur or if unusually noisy equipment is used.

Noise would also be generated during the construction phase by increased truck traffic on area roadways associated with transport of heavy materials and equipment. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Table 9: Construction Equipment Noise

Construction Phase	Loudest Equipment	Maximum Sound Level at 100 feet (dBA)
Clearing and Grubbing	Bulldozer, backhoe	83
Foundation	Scraper, bulldozer	85
Superstructure	Crane, loader	83
Base Preparation	Truck, bulldozer	85
Paving	Paver, truck	86

6.0 NOISE ABATEMENT ANALYSIS

6.1 Feasibility and Reasonableness

The DOT&PF Noise Policy states that "the two required criteria to consider when evaluating the incorporation of noise abatement measures into a specific project are FEASIBILITY and REASONABLENESS."

Feasibility is a relatively objective concept, dealing primarily with engineering and physical considerations. In other words, feasibility is based on whether limiting factors exist such as access requirements (driveways, ramps), cross streets, or topography. In addition, noise abatement measures are not considered feasible if they create a hazard to the driving public, are predicted to require extensive maintenance, or do not provide a minimum noise reduction of at least five dBA for at least 50 percent of the front row dwelling units.

If abatement is considered feasible, it may then be evaluated for reasonableness. Reasonableness is more subjective and assumes common sense and good judgment will be applied to the decision making process. The FHWA provides the following three mandatory categories to be considered when evaluating noise abatement reasonableness:

- Viewpoints of residents and property owners of impacted or benefited receptors.
- Cost effectiveness (\$36,500 per receptor, including all items necessary for construction).
- Noise reduction design goal (DOT&PF: 7 dBA).

If abatement is not considered feasible, it need not be evaluated for reasonableness.

6.1.1 Cost per Benefitted Receptor

The DOT&PF Noise Policy states "*The cost per benefitted receptor must be adjusted for inflation. Use the most recent annual composite price index available from the FHWA Office of Program Administration www.fhwa.dot.gov/programadmin/pricetrends.cfm. The latest price index that FHWA developed is from 2006. This will be used until FHWA provides a more current index. In the event that FHWA does not provide a more current index, DOT&PF will use the 2006 index and adjust it for inflation as necessary. This will be accomplished by determining the ratio between the 2006 annual composite index (221.3) and the most recent annual composite index available at the time of completion of the Noise Abatement Recommendation Worksheet and adjust the \$32,000 cost accordingly. DOT&PF will also take into consideration the actual costs associated with project costs completed within the time since 2006 in determining a more accurate cost per benefitted receptor.*"

The DOT&PF Noise Policy states that the cost per benefitted receptor was last updated in 2006, and thus must be inflated for the current analysis. The indices referenced in this portion of the Noise Policy have not been updated since 2006 and therefore cannot be used. While the policy specifies the 2006 annual composite index of 221.3, it does not state where the other number of the ratio should be found, and it would not be prudent to use numbers from two separate indices to calculate an inflation rate.

In February of 2015, FHWA published an updated National Highway Construction Cost Index. According to the language used in the preceding paragraph from the Noise Policy, this would appear to be the most applicable index for use in calculating inflation. However, this index is heavily weighted to the cost of oil, which is not a major component of noise wall construction, and may give misleading results.

After thorough consideration, the Gross Domestic Product: Implicit Price Deflator was used as an index to compute inflation for 2014. The DOT&PF Alaska Highway Safety Improvement Program Handbook recommends using this index to perform inflation computations for cost/benefit analyses. These calculations yielded an inflated cost per benefitted receptor of \$36,500. This method and cost per benefitted receptor was determined to be acceptable by DOT&PF (Appendix C) and is used in calculating cost effectiveness for benefitted receptors in this analysis.

6.2 Traffic Noise Mitigation

Potential traffic noise mitigation measures include the following:

- Construction of noise barriers along the right-of-way.
- Creating buffer zones along the corridor.
- Transportation Demand Management (TDM) and Transportation System Management (TSM).
- Modifying the proposed alignment of the roadway.
- Insulation of noise sensitive public-use or non-profit institutional structures.

6.2.1 Barrier Modeling

For impacted sites where a barrier could conceivably be built, the FHWA TNM Version 2.5 was used to model possible designs. Barriers were divided into 100-foot long panels so that each panel could be adjusted in height at two-foot increments, ranging from six to 24 feet, to achieve optimal insertion loss. These locations included **M21** (Residence, Parks Highway MP 126.6) and **M27** (Residence, Parks Highway MP 136.1). Both of these sites are classified as Activity Category B (residential). At each of these noise sensitive areas, the minimum DOT&PF Noise Reduction Design Goal of seven dBA for at least 50 percent of the front row of dwelling units was not reached without exceeding the DOT&PF cost effectiveness guideline of \$36,500 per benefitted receptor, as depicted in Table 10.

In November 2018, the FHWA Alaska Division approved a new statewide Noise Policy for DOT&PF. This new policy established an increased cost per benefitted receptor of \$38,000. The cost per benefitted receptor depicted in Table 10 exceeds this new guideline, and the barriers considered are not economically reasonable.

DOT&PF's Noise Policy states that no single factor shall be used to determine that a noise abatement measure is unreasonable. However, each modeled barrier fails the mandatory reasonableness criteria for both cost effectiveness and design reduction goal. Consequently, noise barriers are not recommended for this project.

Table 10: Barrier Cost Effectiveness

Location	Number of Benefitted Receptors	Barrier Height (ft)	Insertion Loss (dBA)	Barrier Area (sq ft)	Barrier Cost (\$/sq ft)	Current Total Cost	Cost per Benefitted Receptor	Economically Reasonable?
M21.)	1	12	4.4	2,376	\$85	\$201,960	\$201,960	NO
M27.)	1	16	5.7	2,592	\$85	\$220,320	\$220,320	NO

The Feasibility and Reasonableness of noise abatement at each impacted receptor is discussed in more detail in the DOT&PF Noise Abatement Recommendation Worksheets included in Appendix B at the end of this analysis.

6.2.2 Other Mitigation Methods

While clearing vegetation would not increase the noise levels substantially, noise could be perceived differently because trees currently prevent some residents from viewing the road. When residents are afforded new views of a road, some people believe that the noise levels have risen when in fact the noise has remained constant.

Vegetation removal from project improvements is not expected to raise the noise levels along the corridor. The *FHWA Fundamentals and Abatement of Highway Traffic Noise* textbook (FHWA 2008) states "*If the woods are so dense that there is no clear line of sight between observer and source and if the tree height exceeds 5 meters above the line of sight, then 5 dBA attenuation can be expected if the woods are 30 meters deep.*" There is no area along the corridor where vegetation would be removed to this extent for project improvements.

Acquisition of real property to serve as a buffer was considered but determined unreasonable. Vegetation in the project corridor is primarily deciduous with little undergrowth and would offer minimal noise absorption. A buffer (in the case of the Parks Highway) would need to be a densely wooded area with tree growth at least 15 feet above the line of sight, with a depth of 100 feet. These conditions would reduce the noise levels by 5 dBA. If the wooded area was deeper than 100 feet, the reduction would be greater with a maximum reduction of 10 dBA (FHWA 2008). Property acquisition of this magnitude is impractical and the impacts would outweigh the reduction in noise levels. Vegetation that currently shields the sites from the road does provide a visual barrier and therefore a perceived benefit.

TDM/TSM were not considered for the Parks Highway. TDM strategies focus on attracting users to alternative or higher occupant modes of transportation thereby reducing the number of vehicles. TSM strategies focus on increases to the overall transportation system's efficiency and thereby increasing the capacity of the system. Consideration of implementation of TDM/TSM strategies to reduce the number of or eliminate the addition of general-purpose lanes is not a feasible method of noise reduction for the Parks Highway due to the rural low density community surrounding the project corridor.

The possibility of modifying the proposed alignment of the roadway was considered. The Parks Highway is flanked on both the north and south sides by rural residential areas. Deviating from the existing alignment substantially increases the number of property acquisitions and residential relocations and is determined to be unreasonable.

6.3 Construction Noise Mitigation

For this project, equipment operating at the project site would conform to contractual specifications requiring the contractor to comply with all local sound control noise rules, regulations and ordinances. Although construction noise impacts would be temporary, the following standard measures are recommended to minimize such impacts. Whenever possible, limit operations of heavy equipment and other noisy procedures to daylight hours and:

- Install and maintain effective mufflers on equipment.
- Locate equipment and vehicle staging as far from residential areas as possible.
- Limit unnecessary idling of equipment.

7.0 2019 RE-EVALUATION

The following revisions were made to the location and length of two proposed passing lanes in September 2018 (Figure 2, sheets 27 and 39):

- MP 137.8 – MP 138.9: Shifted south roughly one-half mile.
- MP 161.6 – MP 162.8: Extended north by 200 feet.

The existing and future models for the project were revised to reflect this change in geometry in September 2018, and new noise levels were predicted for any noise sensitive areas potentially impacted by these changes. Since the revisions to the passing lane at MP 137.8 – 138.9 shifted traffic closer to an existing trailhead, an additional receptor was placed in the model at this location (**R6**). Upper Troublesome Creek Trailhead (**R6**) is a Category C site, 437 feet from the edge of the Parks Highway. Noise levels for **R6** and the other sites with in the vicinity of the geometry changes are shown in Table 11:

Table 11: Revised TNM Results

Location	DOT&PF Modified NAC	(2014) Existing (dBA)	(2035) No-Build Alternative (dBA)	(2035) Future Build Alternative (dBA)
M28.)	66	55	59	60
R6.)	66	45	47	48
M35.)	66	41	43	44

Noise levels for site **M28** are slightly higher due to the change in proposed passing lane location. Noise levels for **M35** are unchanged by the revised design. No noise impact currently exists or is predicted to exist for any of the sites affected by the geometry change under either the no-build or future build alternatives. A barrier worksheet for site **R6** and revised worksheets for sites **M28** and **M35** are included in Appendix B.

A new Noise Policy was approved by the FHWA Alaska Division in November of 2018. This report meets the requirements of the new policy.

8.0 STATEMENT OF LIKELIHOOD

As a result of the feasibility and reasonableness analysis conducted as a part of this noise study, the DOT&PF does not propose to incorporate any noise abatement measures into the proposed project. These noise abatement recommendations are preliminary and based upon the feasibility and reasonableness analysis completed at the time of the environmental document. Any changes in the final abatement recommendations will result in the re-evaluation of the approved environmental document.

9.0 CONCLUSION

Noise barriers reduce noise by absorbing, reflecting, transmitting, or forcing the sound to take a longer path. Barriers have little effect for structures on hillsides with direct line of sight to the roadway, or structures that rise above the barrier. Openings in noise barriers for driveways, side streets, pathways, etc., destroy the effectiveness of the barrier by allowing the sound to be transmitted through the opening. Due to topography, the low density of residences, and the numerous breaks required for direct driveway access to properties and cross streets, noise barriers are not considered feasible or reasonable and are not recommended for this project. It has been determined that barriers would not provide adequate barrier insertion loss, or would not be cost-effective under DOT&PF Noise Policy guidelines.

10.0 LIST OF PREPARERS

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11.0 REFERENCES

DOT&PF. 2018. Alaska Department of Transportation and Public Facilities - *Alaska Environmental Procedures Manual: Noise Policy*. p.22.

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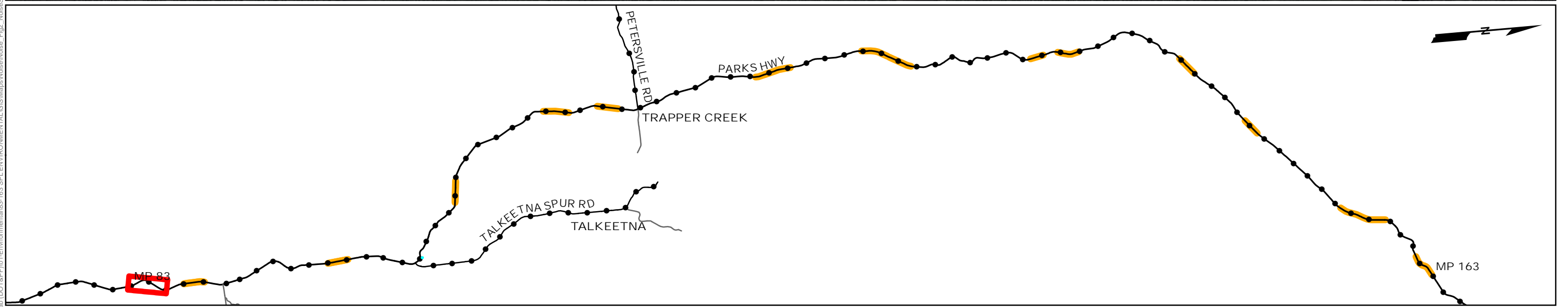
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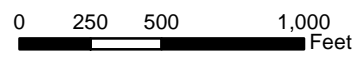
FHWA. 2004. *Federal Highway Administration's Traffic Noise Model*. Version 2.5.

FHWA. 2010. Noise Abatement Criteria (NAC) as specified in 23 CFR. 722.

FIGURES



- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
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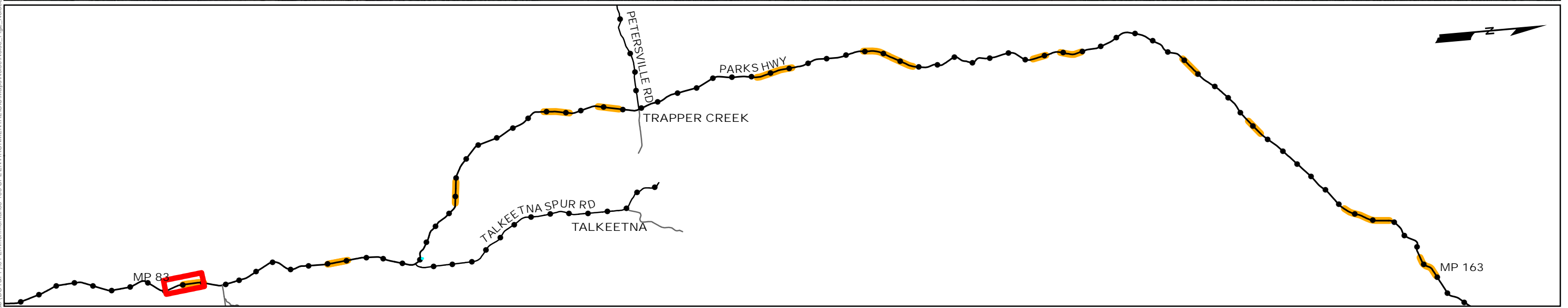


Figure 2 Sheet 1
 Noise Analysis Sites

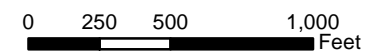
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
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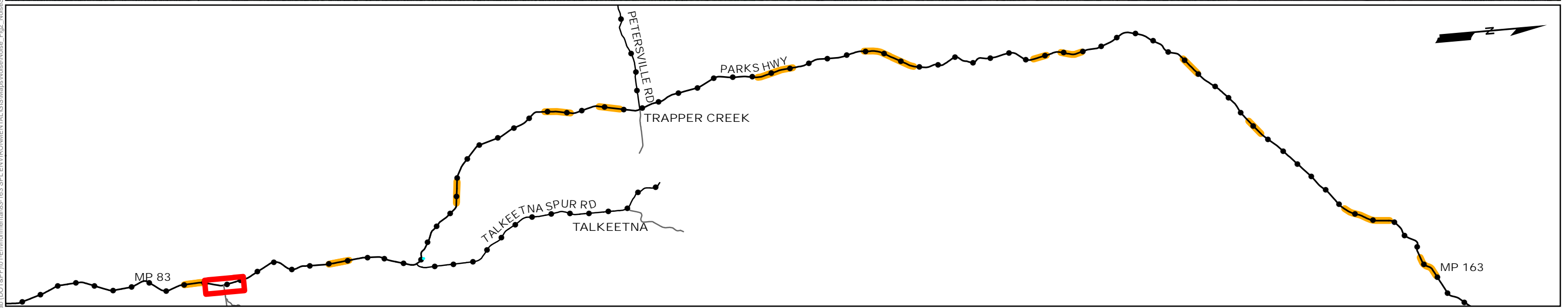
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 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
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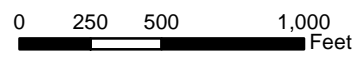
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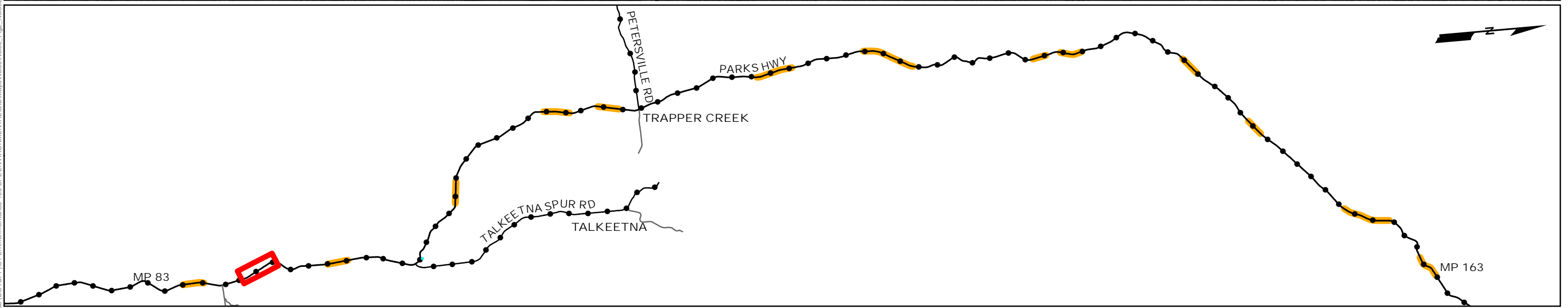


Figure 2 Sheet 3
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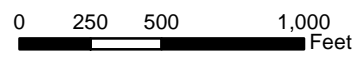
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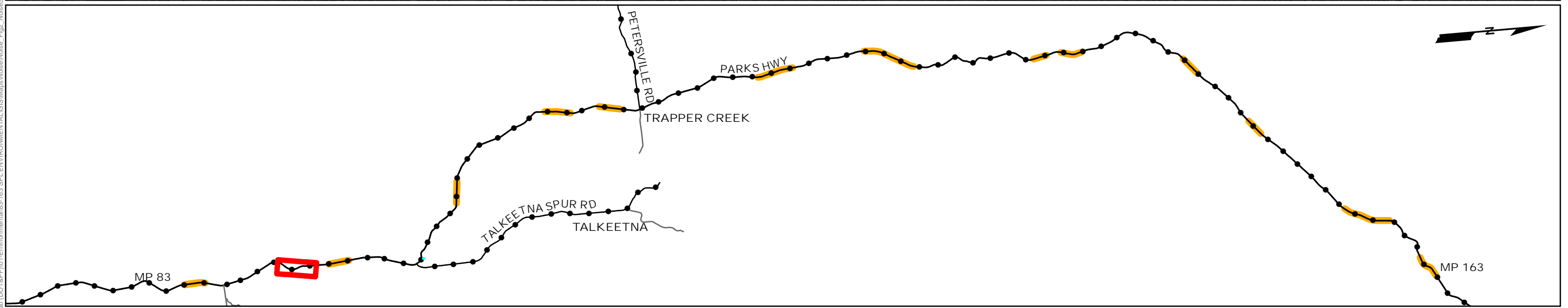


Figure 2 Sheet 4
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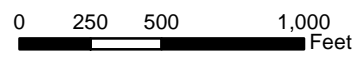
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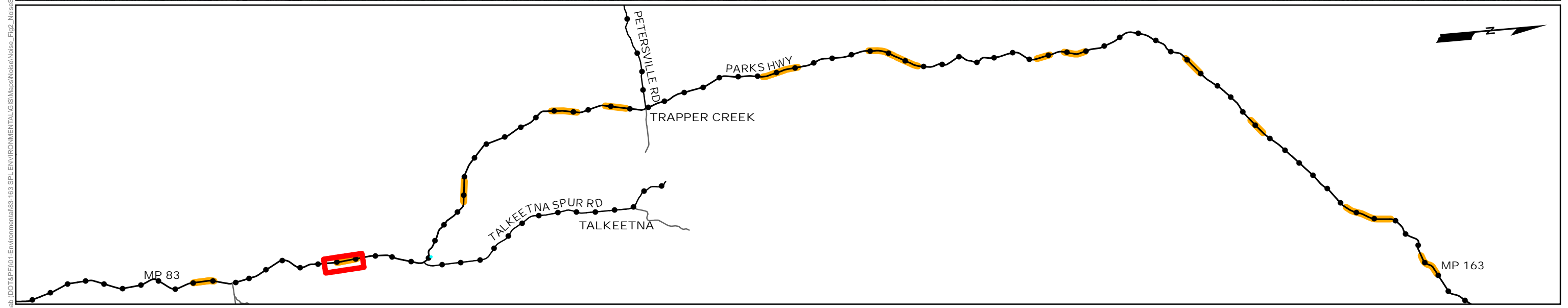


Figure 2 Sheet 5
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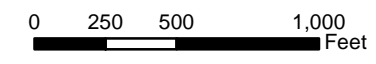
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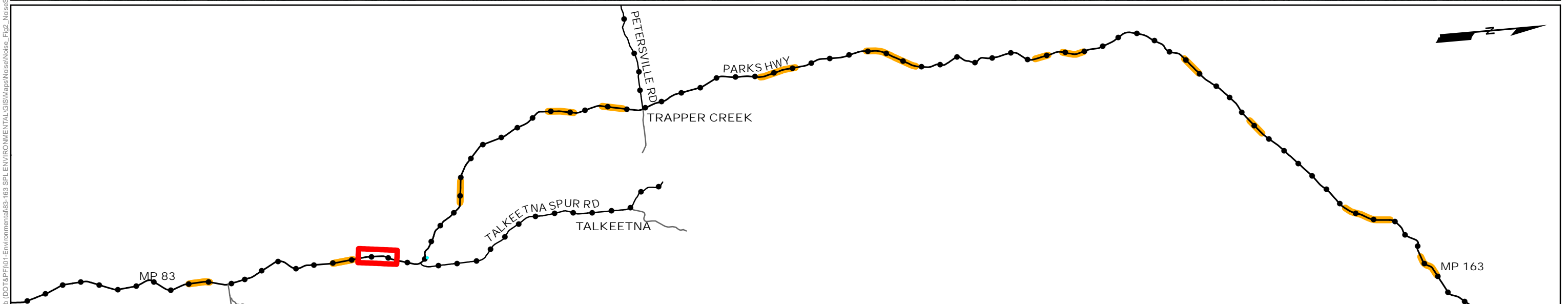


Figure 2 Sheet 6
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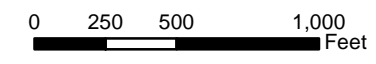
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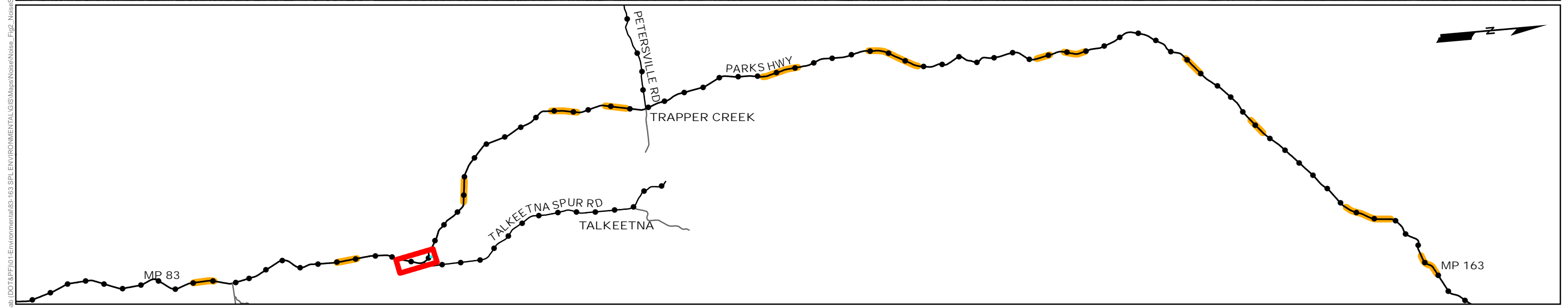


Figure 2 Sheet 7
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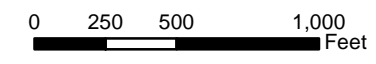
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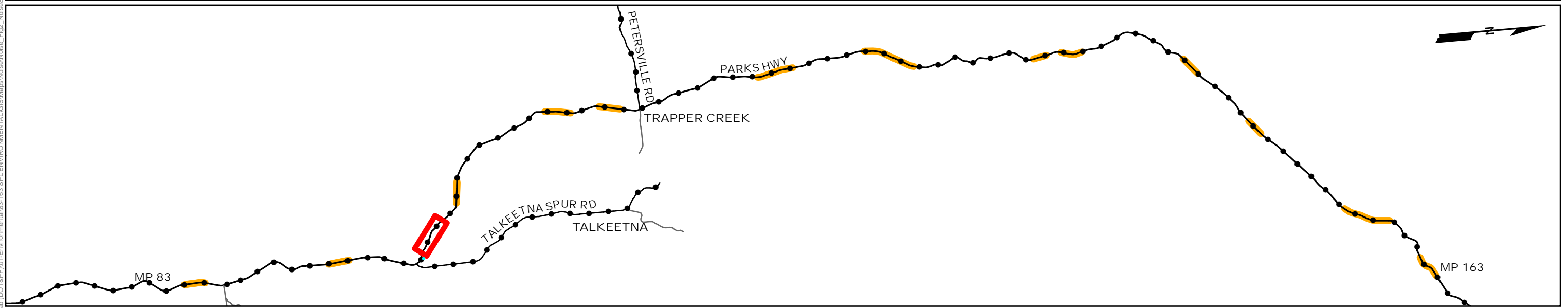


Figure 2 Sheet 8
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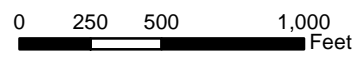
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 Compiled 7/14/2015 by HDL

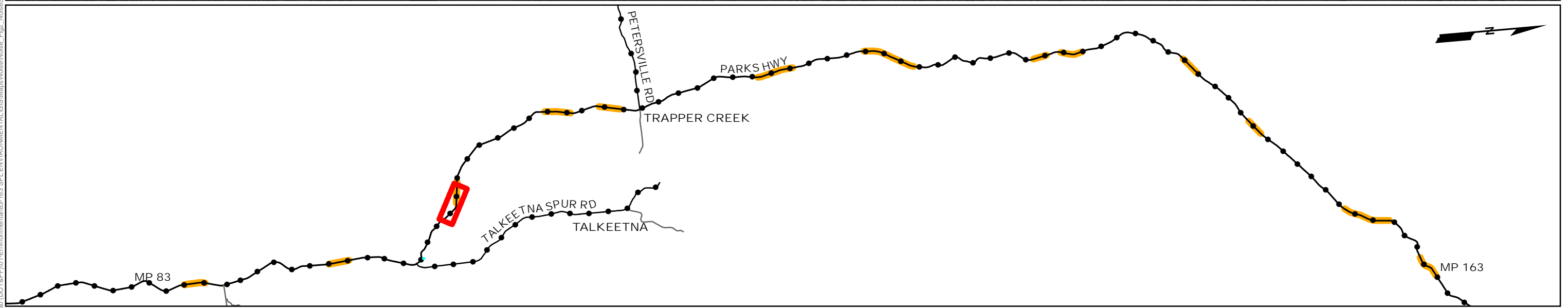


Figure 2 Sheet 9
 Noise Analysis Sites

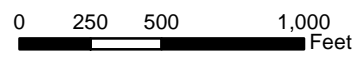
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

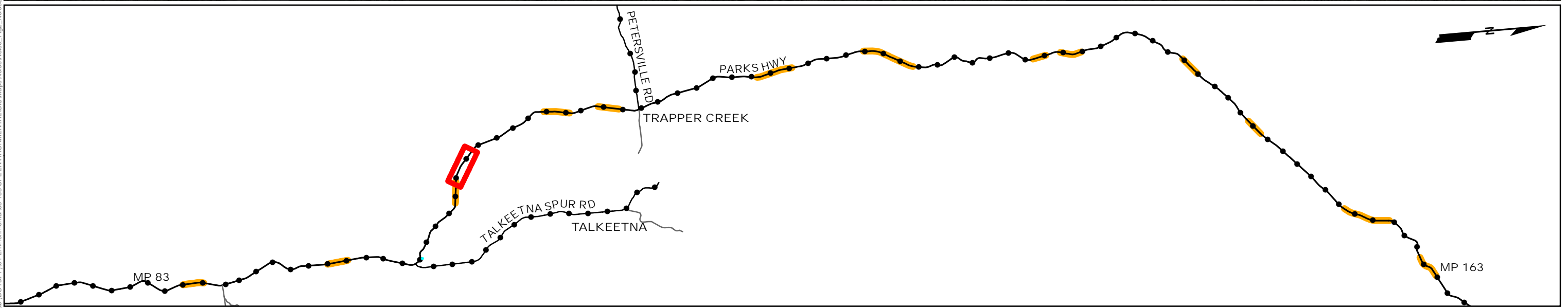


Figure 2 Sheet 10
 Noise Analysis Sites

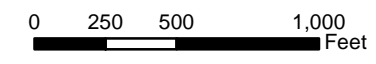
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

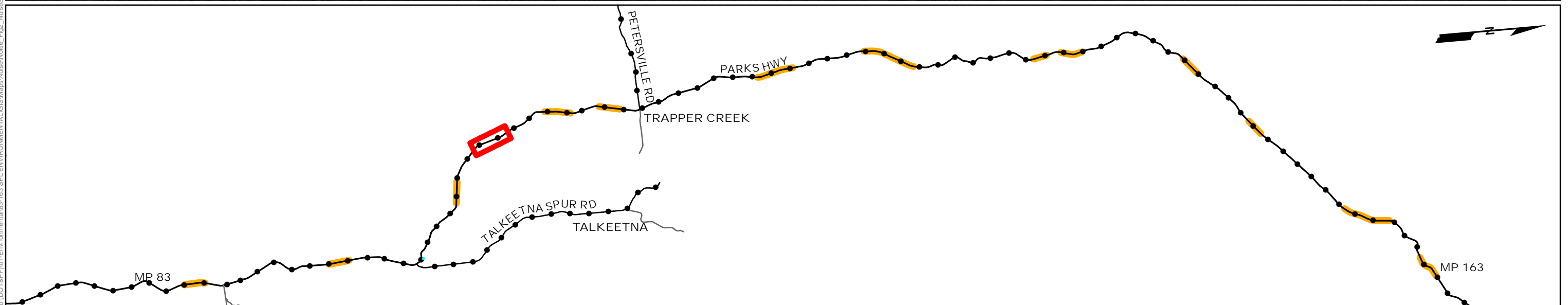


Figure 2 Sheet 11
 Noise Analysis Sites

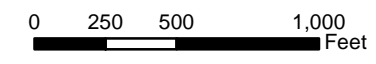
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis	July 2015
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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

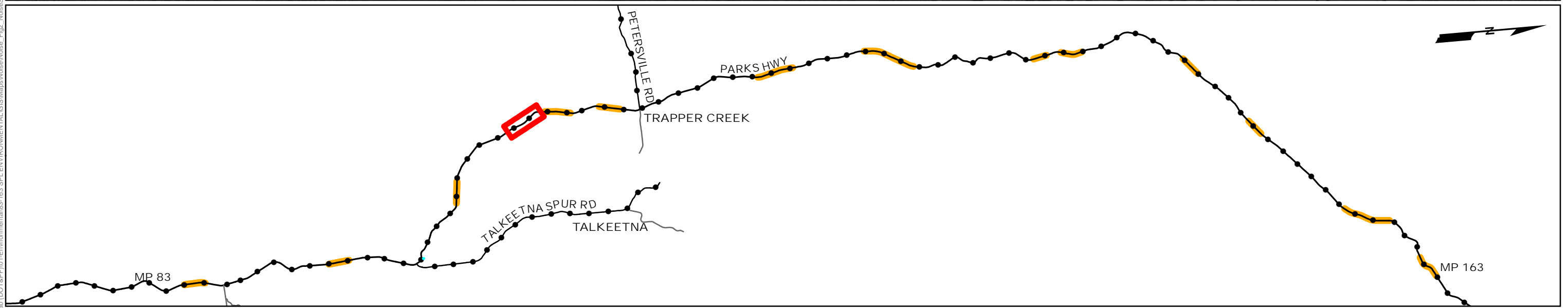


Figure 2 Sheet 12
 Noise Analysis Sites

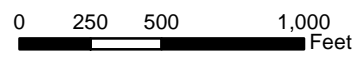
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

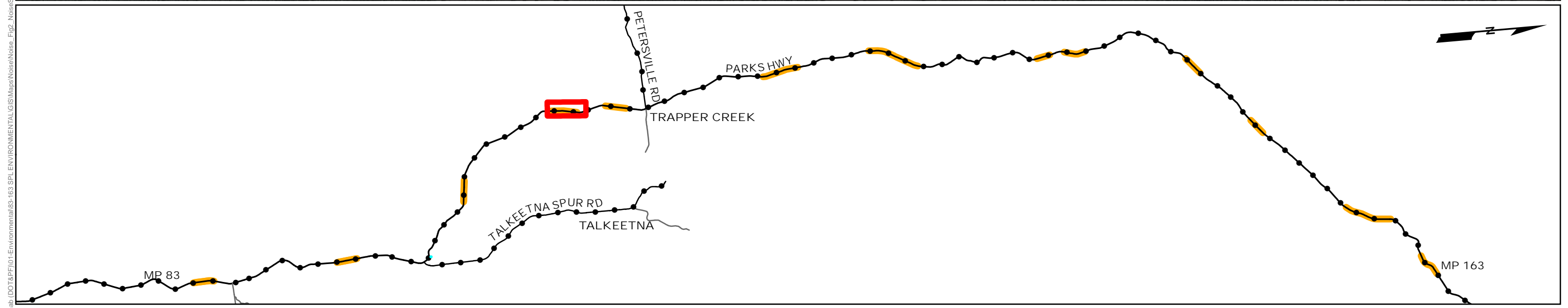


Figure 2 Sheet 13
 Noise Analysis Sites

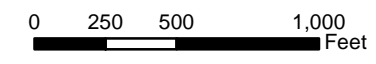
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis	July 2015
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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

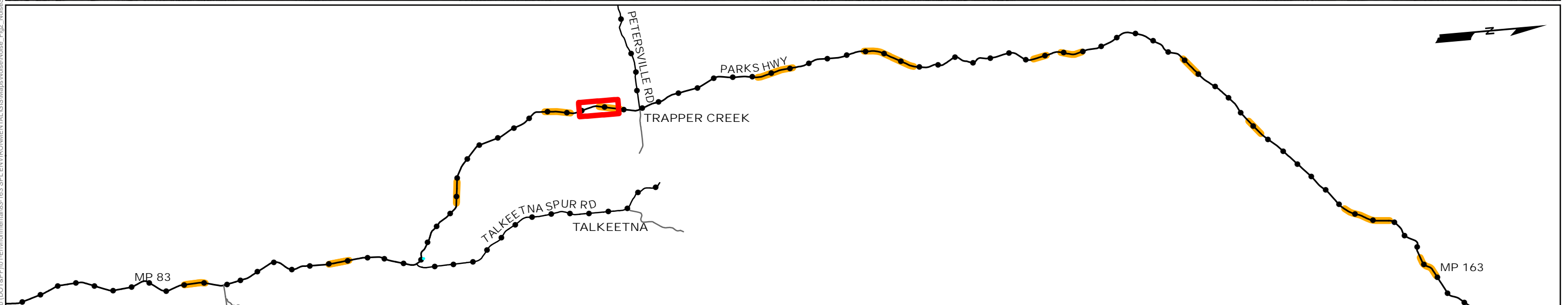


Figure 2 Sheet 14
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

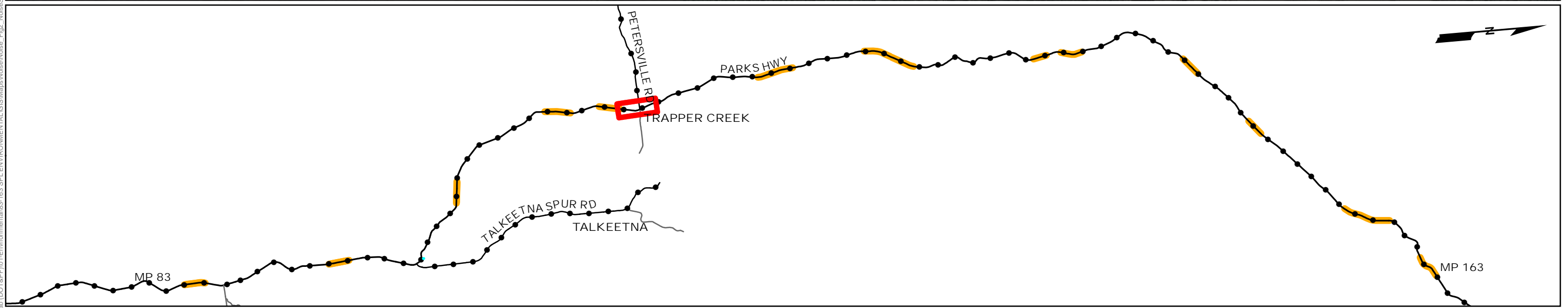
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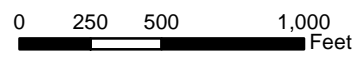
<ul style="list-style-type: none"> Location of Top Frame Milepost Proposed Passing Lane Noise Sensitive Area Noise Measurement Site 	<p>0 255 510 1,020 Feet</p>		<p>Figure 2 Sheet 15 Noise Analysis Sites</p> <p>Parks Highway MP 83-163 Systemic Passing Lanes Project No. (Federal/State): 0001(498)/Z573010000</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Traffic Noise Analysis</td> <td style="width: 50%; text-align: center;">July 2015</td> </tr> </table>	Traffic Noise Analysis	July 2015
Traffic Noise Analysis	July 2015				

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Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
Background photo provided by Matanuska-Susitna Borough/GINA
Compiled 7/14/2015 by HDL



- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

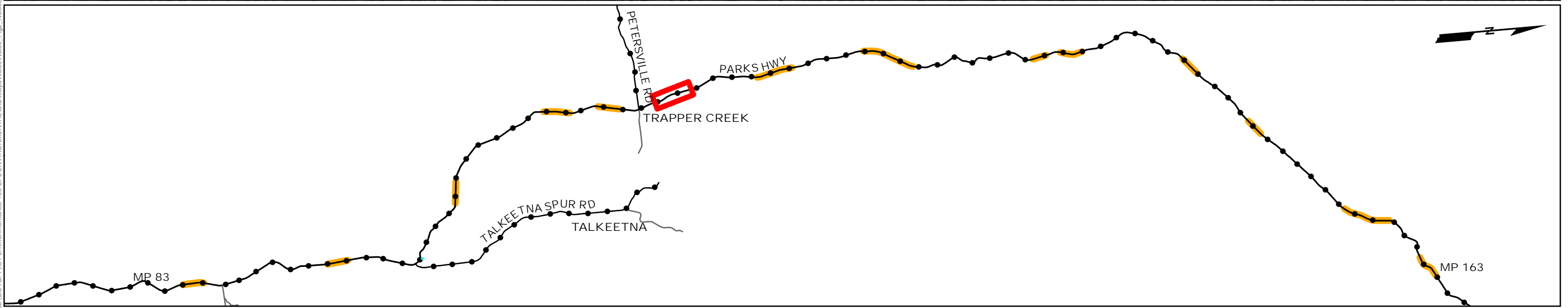


Figure 2 Sheet 16
 Noise Analysis Sites

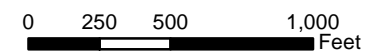
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL



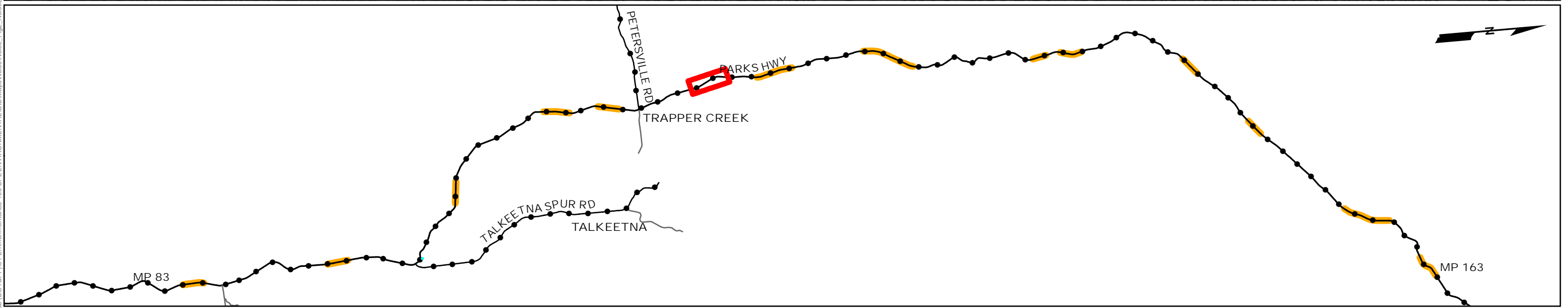
Figure 2 Sheet 17
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site

0 250 500 1,000 Feet

Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL



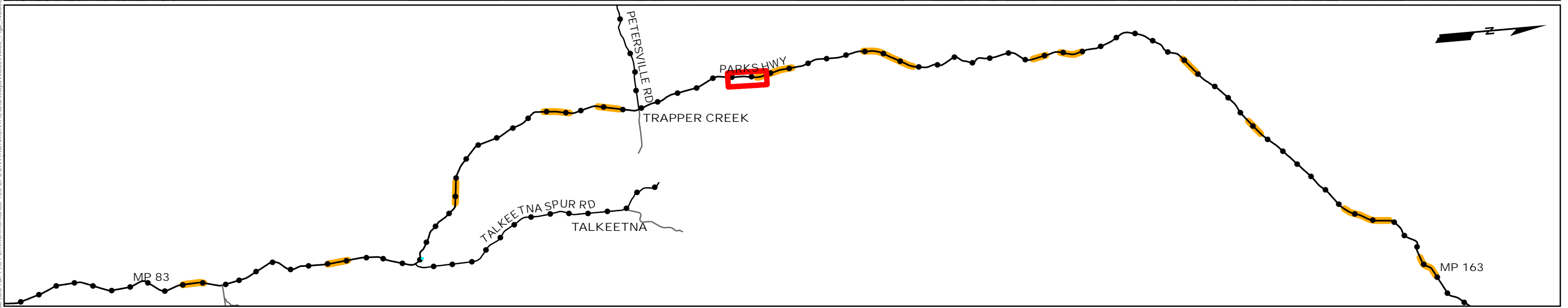
Figure 2 Sheet 18
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site

0 250 500 1,000
Feet

Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
Background photo provided by Matanuska-Susitna Borough/GINA
Compiled 7/14/2015 by HDL



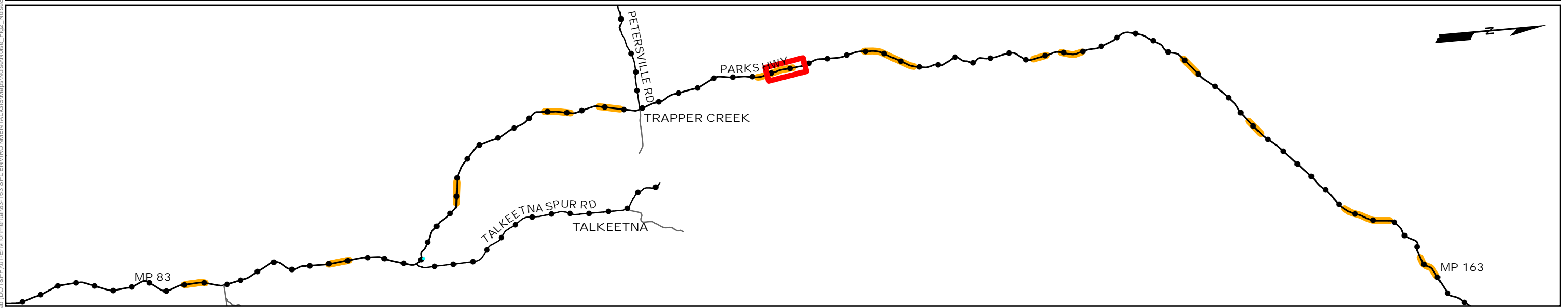
Figure 2 Sheet 19
Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
Project No. (Federal/State): 0001(498)/Z573010000

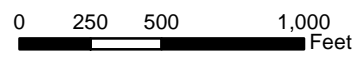
Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

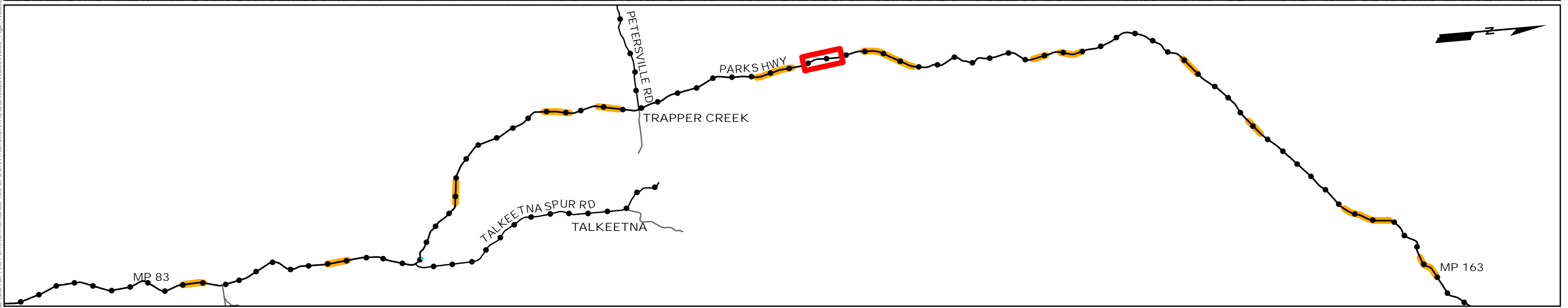


Figure 2 Sheet 20
 Noise Analysis Sites

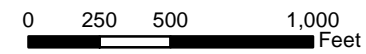
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL



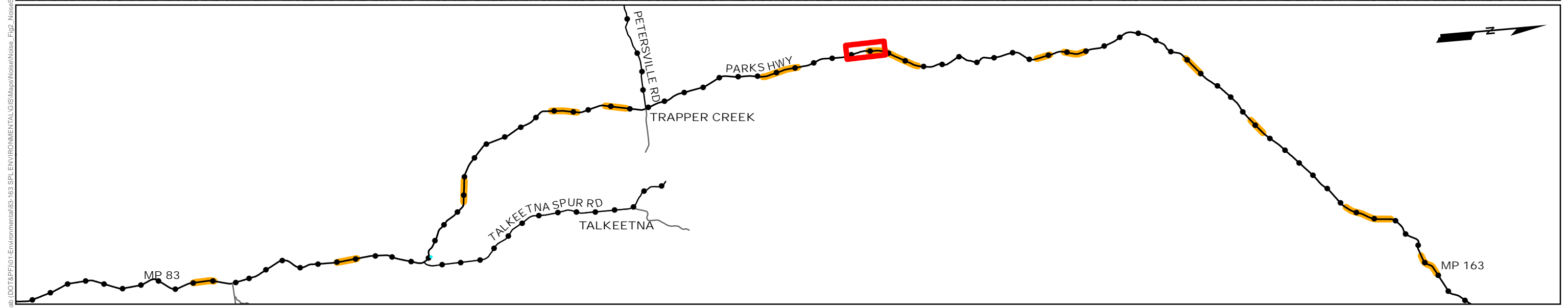
Figure 2 Sheet 21
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

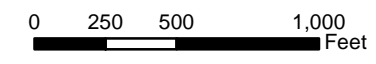
Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
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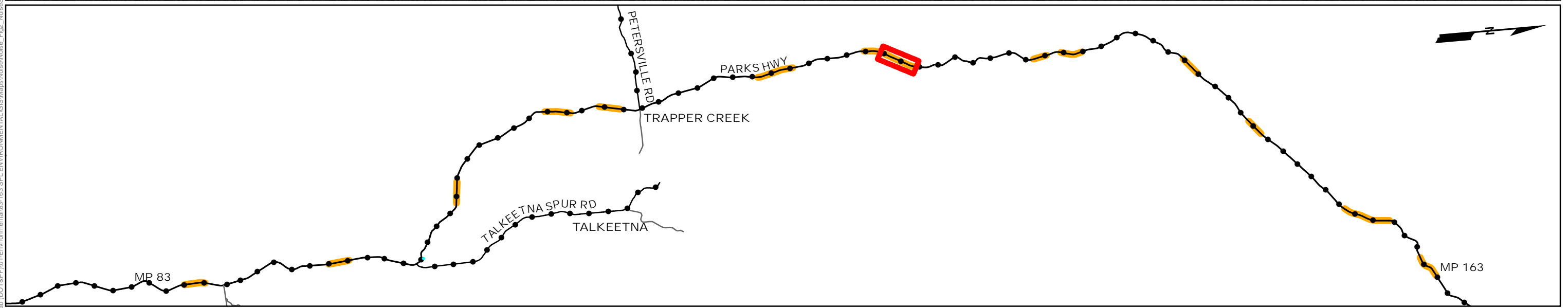


Figure 2 Sheet 22
 Noise Analysis Sites

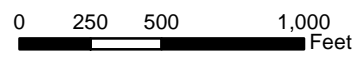
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
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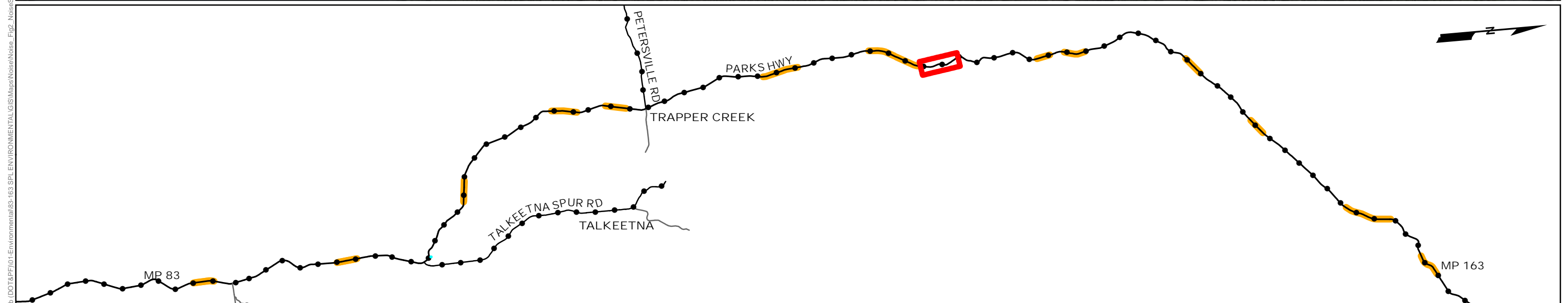


Figure 2 Sheet 23
 Noise Analysis Sites

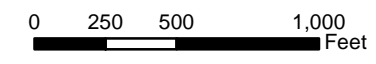
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

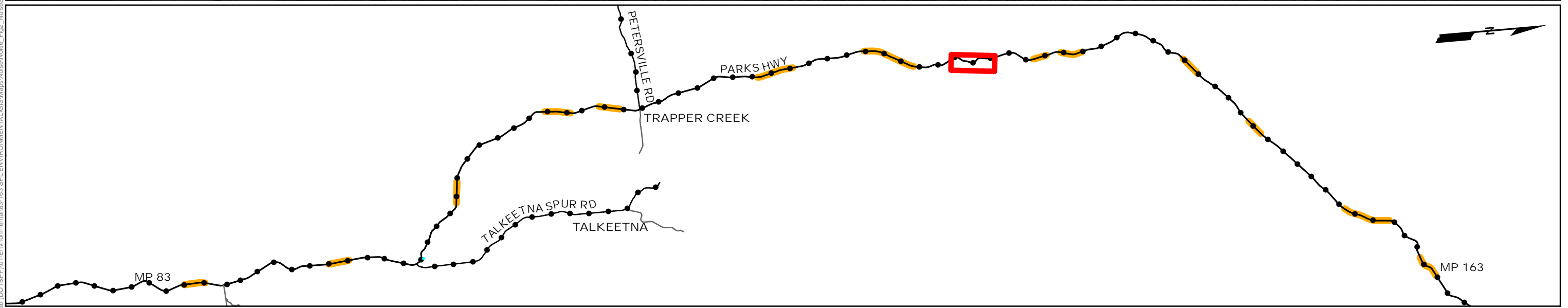


Figure 2 Sheet 24
 Noise Analysis Sites

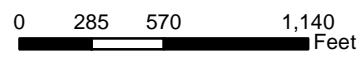
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
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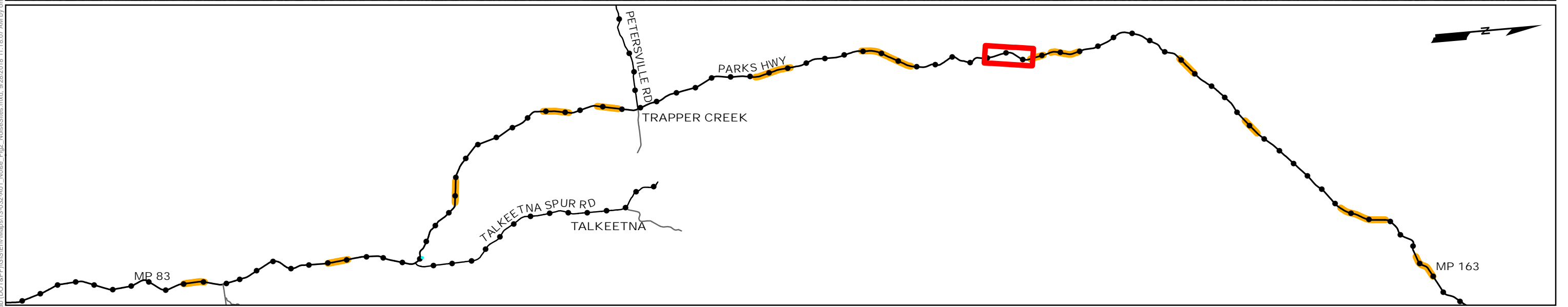







Figure 2 Sheet 25
 Noise Analysis Sites

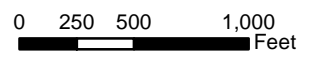
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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-  Location of Top Frame
-  Milepost
-  Proposed Passing Lane
-  Noise Sensitive Area
-  Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
Background photo provided by Matanuska-Susitna Borough/GINA
Compiled 9/28/2018 by HDL

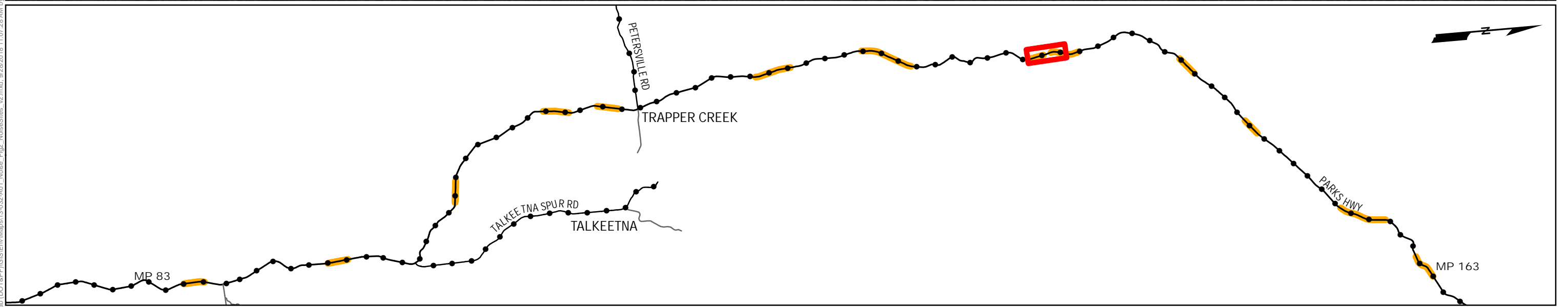
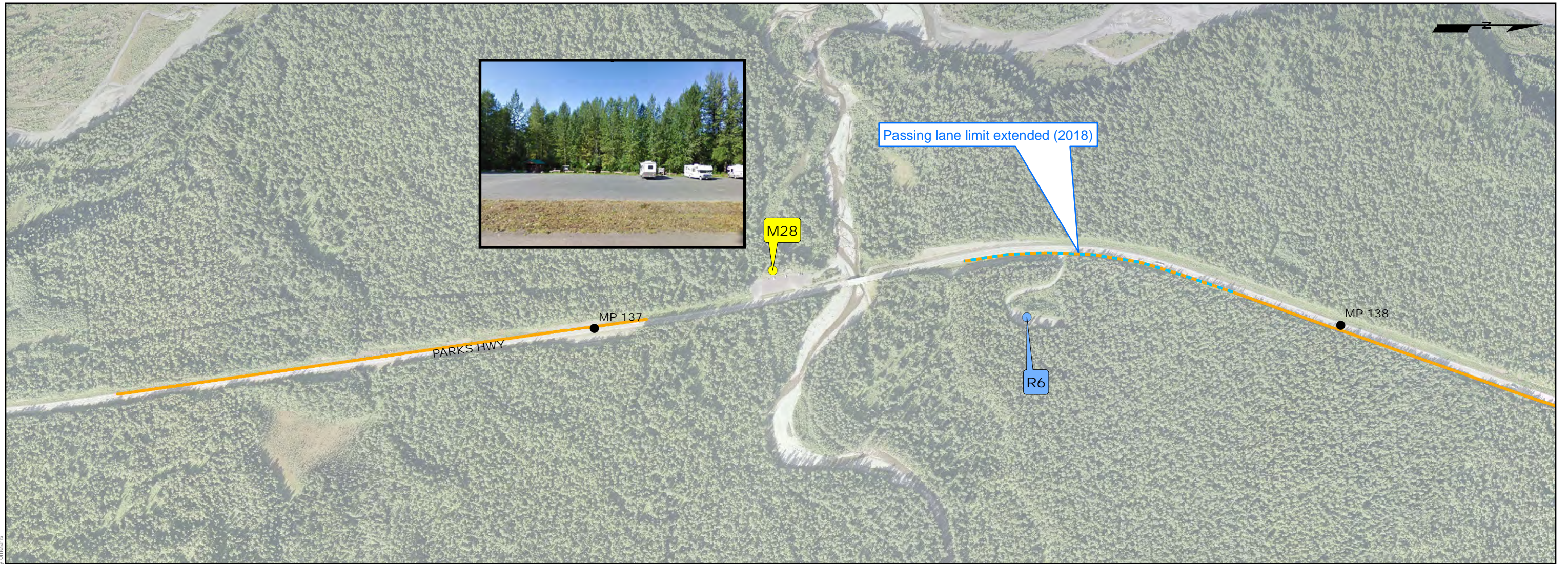


Figure 2 Sheet 26
Noise Analysis Sites

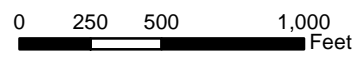
Parks Highway MP 83-163 Systemic Passing Lanes
Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Passing Lane Limits Extended (2018)
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 9/28/2018 by HDL

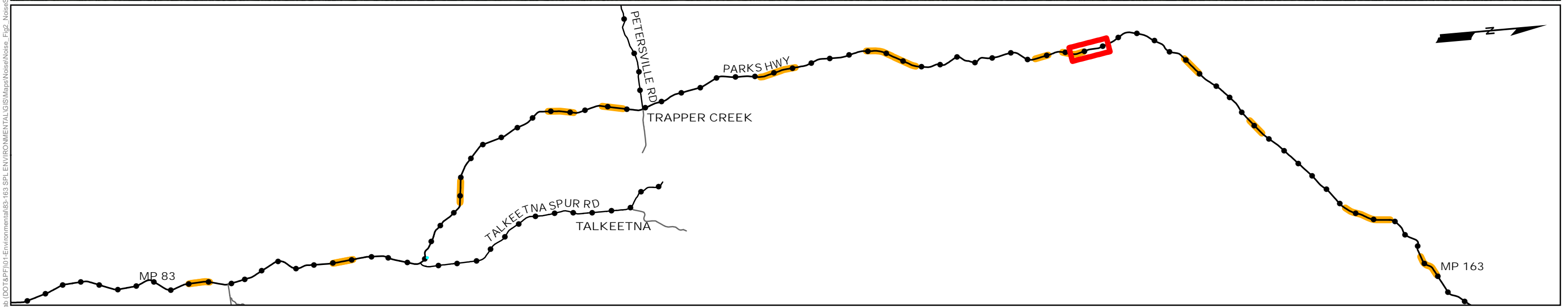


Figure 2 Sheet 27
 Noise Analysis Sites

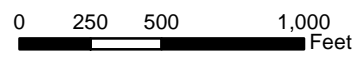
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis September 2018

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

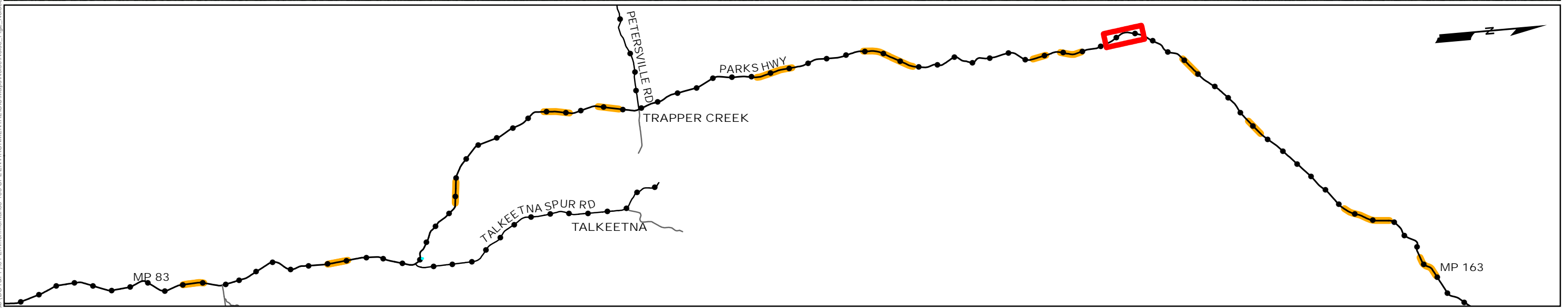


Figure 2 Sheet 28
 Noise Analysis Sites

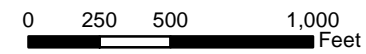
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL



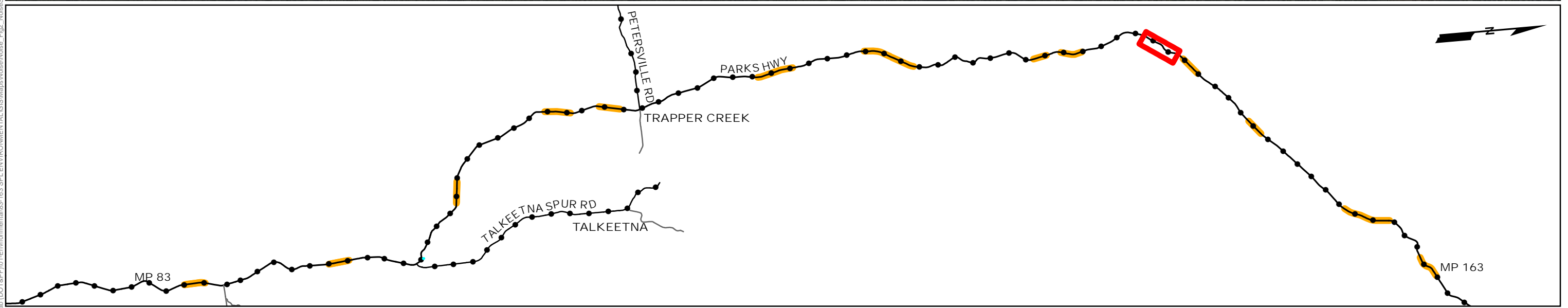
Figure 2 Sheet 29
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

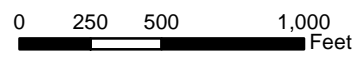
Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

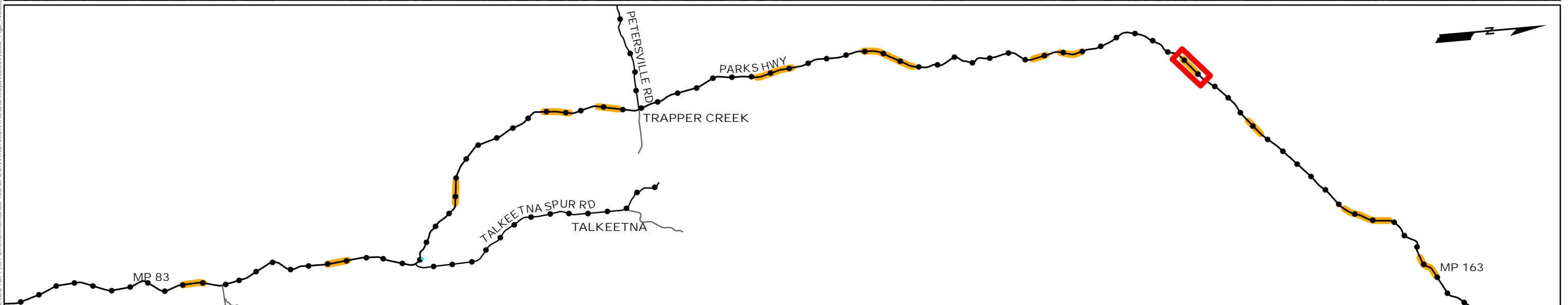
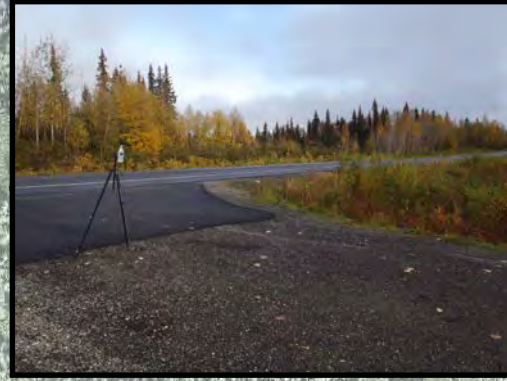


Figure 2 Sheet 30
 Noise Analysis Sites

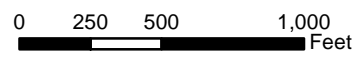
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

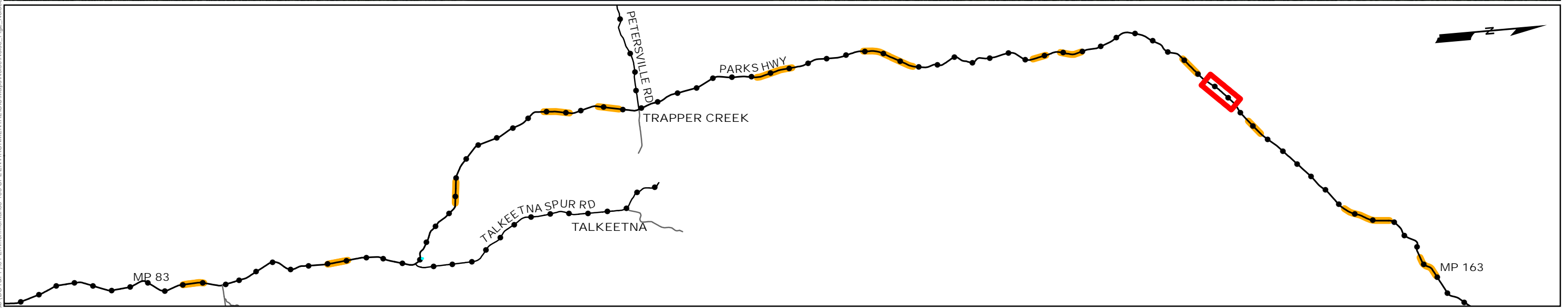


Figure 2 Sheet 31
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site

0 250 500 1,000
Feet

Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
Background photo provided by Matanuska-Susitna Borough/GINA
Compiled 7/14/2015 by HDL



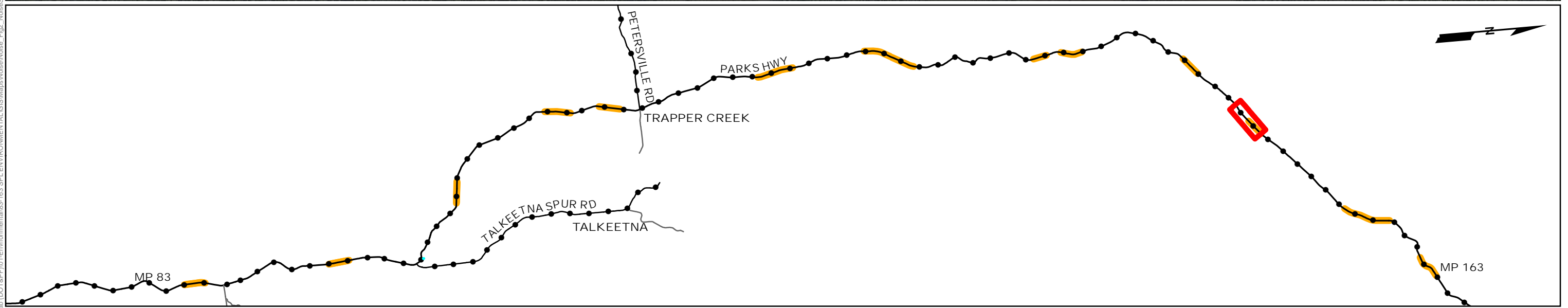
Figure 2 Sheet 32
Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
Project No. (Federal/State): 0001(498)/Z573010000

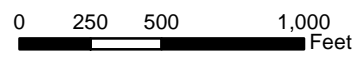
Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

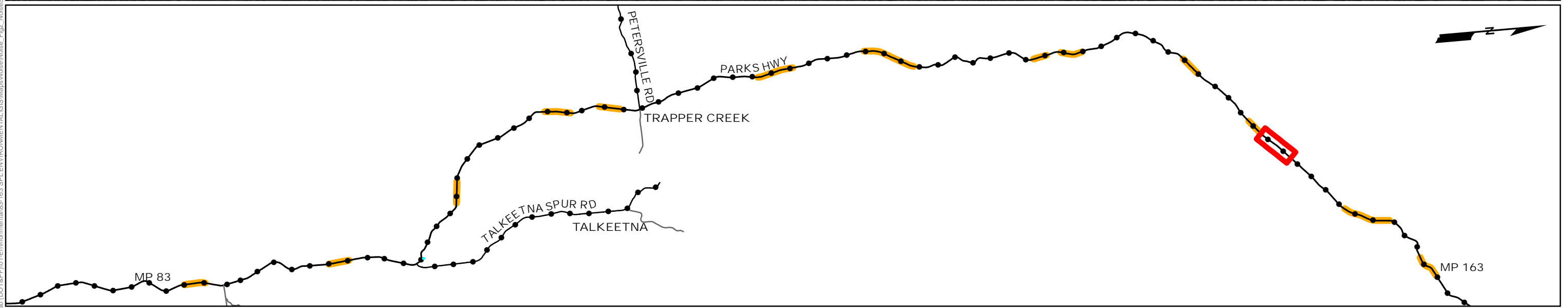


Figure 2 Sheet 33
 Noise Analysis Sites

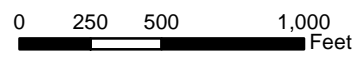
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

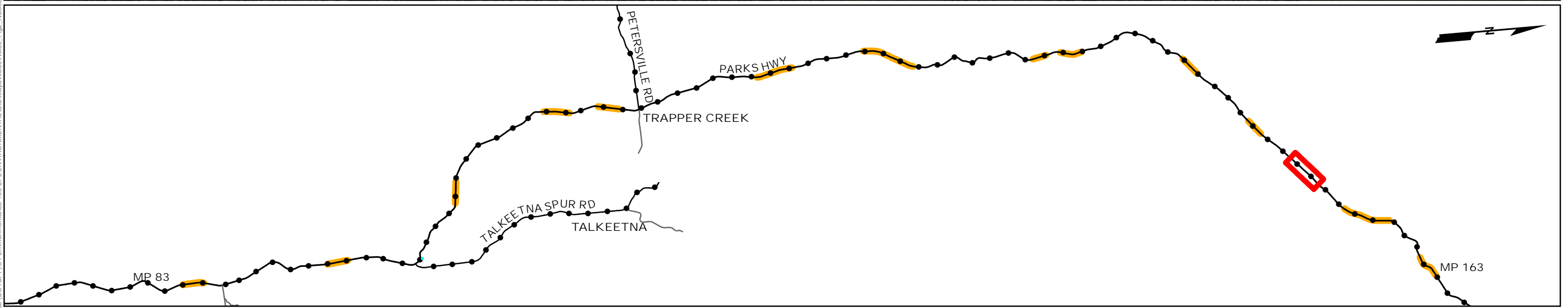


Figure 2 Sheet 34
 Noise Analysis Sites

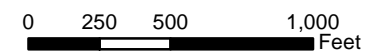
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL



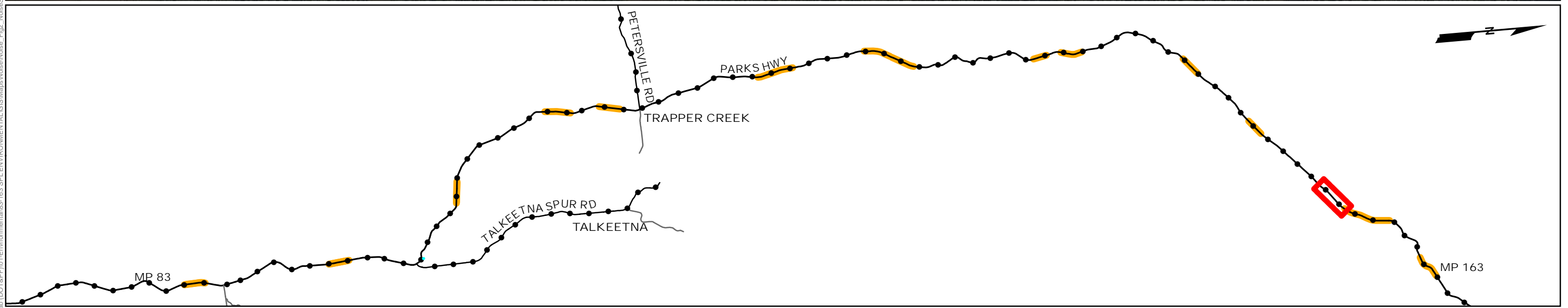
Figure 2 Sheet 35
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

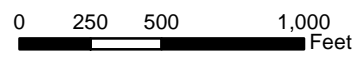
Traffic Noise Analysis

July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

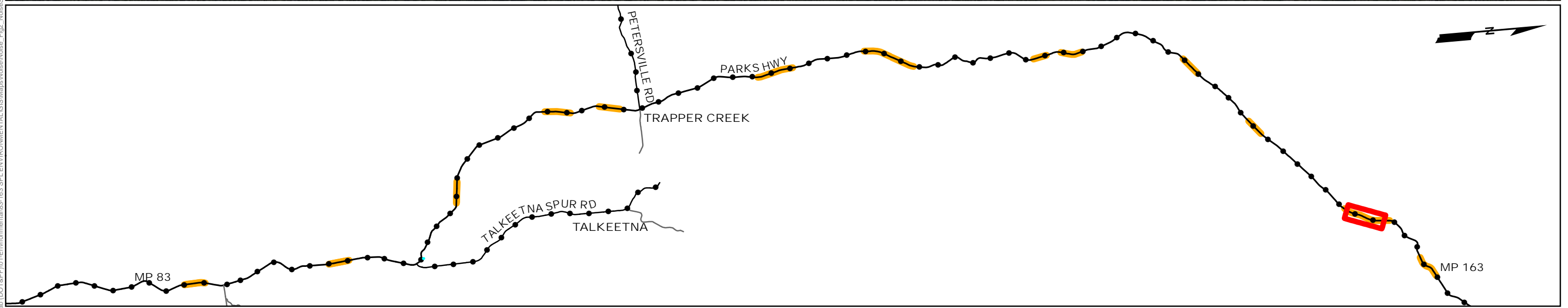


Figure 2 Sheet 36
 Noise Analysis Sites

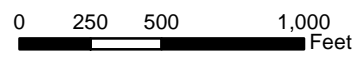
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

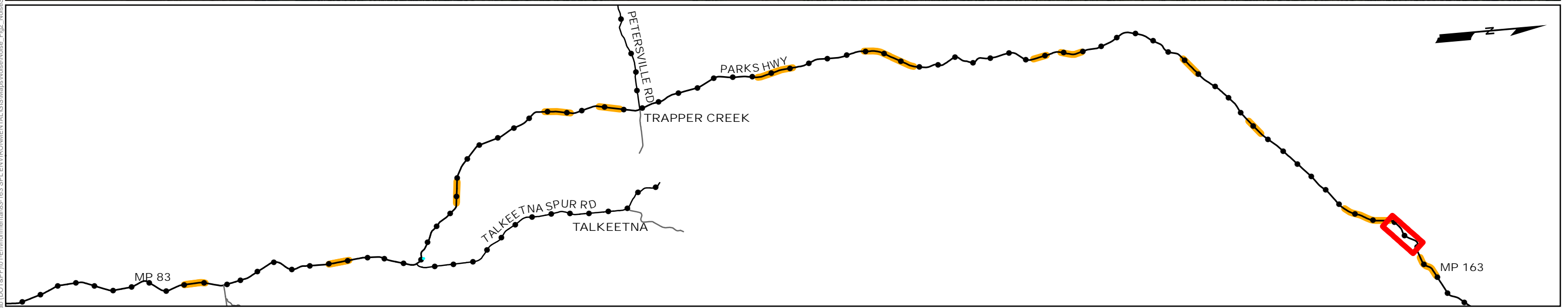


Figure 2 Sheet 37
 Noise Analysis Sites

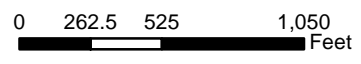
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 7/14/2015 by HDL

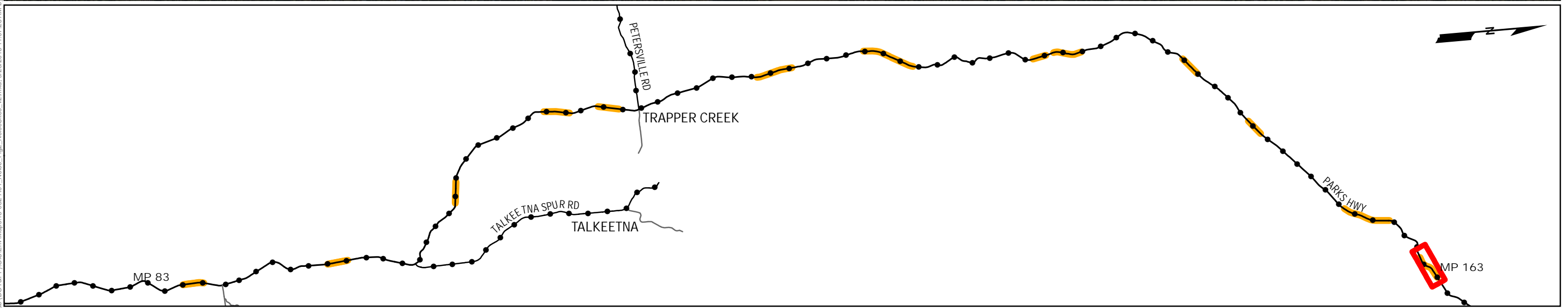


Figure 2 Sheet 38
 Noise Analysis Sites

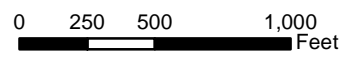
Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis July 2015

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- Location of Top Frame
- Milepost
- Proposed Passing Lane
- Passing Lane Limits Extended (2018)
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 9/28/2018 by HDL

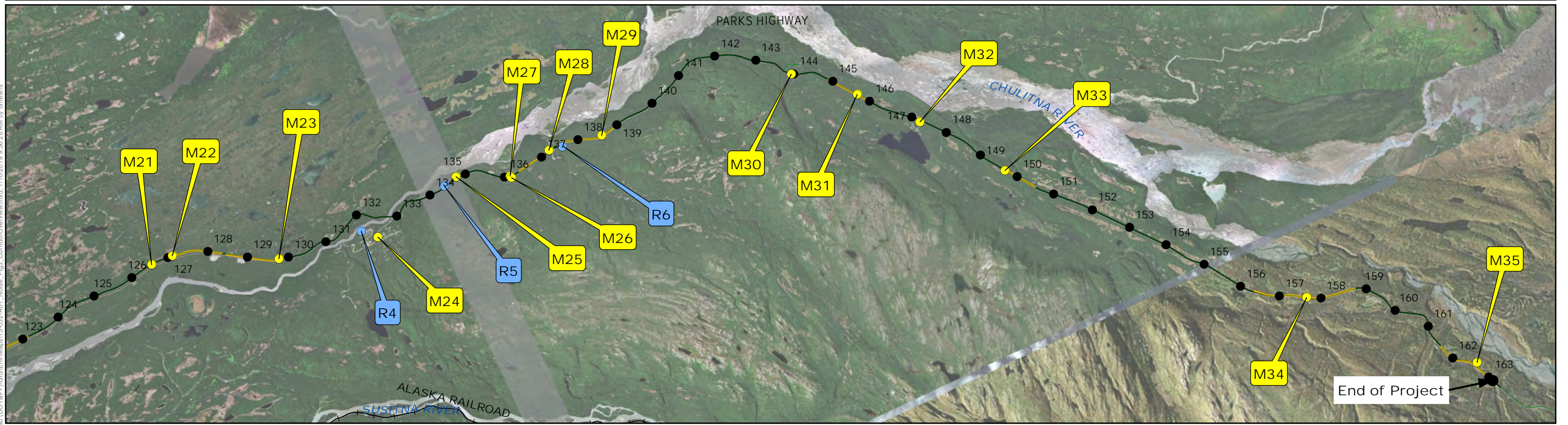
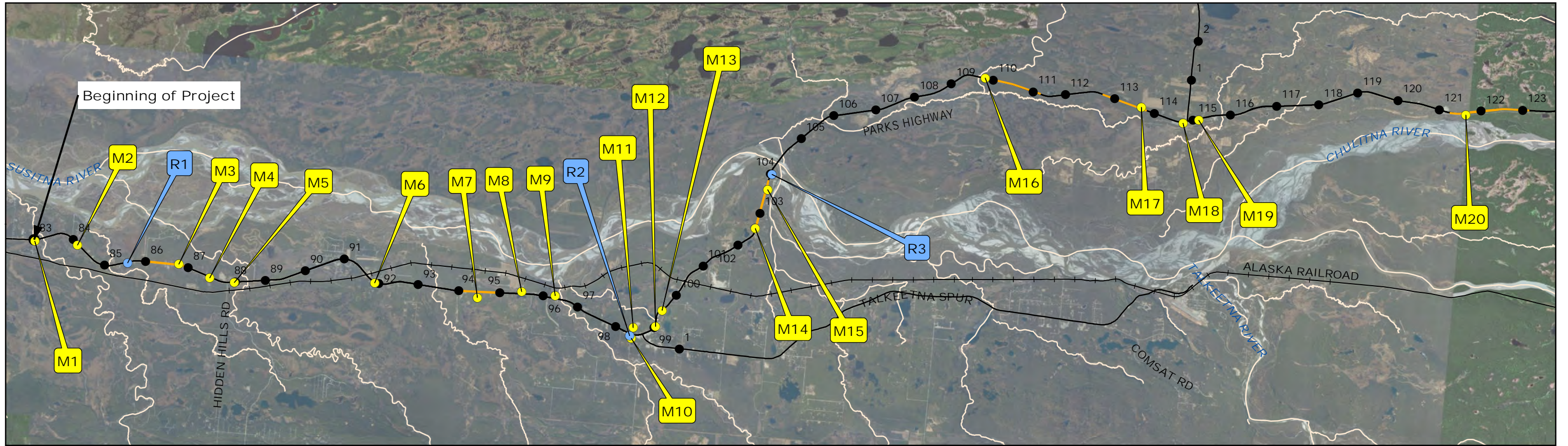


Figure 2 Sheet 39
 Noise Analysis Sites

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis	September 2018
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- Milepost
- Proposed Passing Lane
- Noise Sensitive Area
- Noise Measurement Site



Datum: NAD 83 Coordinate System: Alaska State Plane Zone 4
 Background photo provided by Matanuska-Susitna Borough/GINA
 Compiled 1/10/2019 by HDL



Figure 3
 Noise Analysis Overview

Parks Highway MP 83-163 Systemic Passing Lanes
 Project No. (Federal/State): 0001(498)/Z573010000

Traffic Noise Analysis

September 2018

**APPENDIX A:
FIELD DATA AND MEASUREMENT SITE DETAILS**

FIELD DATA AND MEASUREMENT SITE DETAILS

Receiver #	Activity Category	GPS Coordinates	Side of Hwy	Distance from EOP (ft)	Temp (F)	Cloud Cover	Wind Speed (mph)	Ground Cover	Precipitation	Snow Cover	Date	Time	Auto-mobiles	Truck and Trailer	Med. Truck	Heavy Truck	Buses	Motor-cycles	SPL (dBA)	Modeled SPL (dBA)	SPL Difference
M0101.) Talachulitna Rd	B, Residence	61.921209°N - 150.06852°W	East	192	37.0 °F	Scattered Clouds	6.9 mph N	Soft. Vegetation/field grass.	None	0%	10.9.14	12:44-13:04	N22 S34	N1 S2	N0 S0	N1 S2	N0 S0	N0 S0	49.2	47.1	-2.1
M0102.) Talachulitna Rd					28.0 °F	Partly Cloudy	5.8 mph N		None	0%	10.9.14	10:20-10:40	N13 S19	N4 S0	N1 S0	N0 S1	N0 S0	N0 S0			
M0201.) Residence	B, Residence	61.93609°N - 150.06849°W	East	121	37.0 °F	Scattered Clouds	6.9 mph N	Soft. Vegetation/field grass.	None	0%	10.9.14	13:17-13:37	N22 S29	N2 S1	N0 S3	N2 S2	N1 S1	N0 S0	58.8	58.9	0.1
M0202.) Residence					30.0 °F	Clear	10.4 mph NNE		None	0%	10.9.14	11:11-11:31	N5 S21	N2 S1	N0 S1	N0 S0	N0 S0	N0 S0			
M0301.) Residence (passing lane)	B, Residence	61.971746°N - 150.061008°W	West	56	37.9 °F	Clear	10.4 mph NNE	Soft. Vegetation/field grass.	None	0%	10.9.14	13:49-14:09	N6 S21	N1 S1	N1 S0	N3 S6	N0 S0	N0 S0	64	61.5	-2.5
M0302.) Residence (passing lane)					34.0 °F	Clear	11.5 mph NNE		None	0%	10.9.14	11:57-12:17	N25 S16	N2 S0	N0 S0	N0 S3	N0 S0	N0 S0			
M0401.) Camp Caswell Food and Tackle	E, Restaurant	61.936092°N - 150.068485°W	East	126	39.0 °F	Clear	5.8 mph NNE	Soft. Vegetation/field grass.	None	0%	10.8.14	17:19-17:39	N23 S22	N0 S3	N0 S0	N4 S2	N0 S0	N0 S0	61.7	59.9	-1.8
M0402.) Camp Caswell Food and Tackle					17.1 °F	Clear	3.5 mph NE		None	0%	10.8.14	09:06-9:26	N20 S20	N0 S0	N2 S0	N0 S2	N0 S0	N0 S0			
M0501.) Sheep Creek Lodge	E, Restaurant/Hotel	61.991555°N - 150.051098°W	East	46	35.1 °F	Clear	8.1 mph ENE	Hard. Asphalt parking lot.	None	0%	10.8.14	14:04-14:24	N17 S14	N1 S0	N0 S0	N1 S6	N0 S0	N0 S0	61	59.3	1.7
M0502.) Sheep Creek Lodge					21.0 °F	Clear	5.8 mph NE		None	0%	10.8.14	09:47-10:07	N19 S13	N1 S0	N0 S0	N0 S2	N1 S0	N0 S0			
M0601.) Lichen Dr	B, Residence	62.040126°N - 150.060024°W	East	88	37.0 °F	Clear	6.9 mph ENE	Soft. Vegetation/field grass.	None	0%	10.8.14	14:34-14:59	N18 S23	N1 S0	N0 S2	N1 S1	N0 S0	N0 S0	61.3	63.5	-2.2
M0602.) Lichen Dr					27.0 °F	Clear	5.8 mph Variable		None	0%	10.8.14	10:27-10:47	N16 N21	N3 S2	N0 S0	N3 S0	N0 S0	N0 S0			
M0701.) Sezgo Rd (passing lane)	B, Residence	62.076161°N - 150.056248°W	East	664	37.9 °F	Clear	6.9 mph N	Soft. Vegetation/field grass.	None	0%	10.8.14	17:57-18:17	N20 S23	N1 S1	N0 S0	N2 S1	N0 S0	N0 S0	45.4	43.7	-1.7
M0702.) Sezgo Rd (passing lane)					27.0 °F	Clear	5.8 mph Variable		None	0%	10.8.14	11:25-11:45	N14 S19	N0 S1	N0 S0	N3 S2	N0 S0	N0 S0			
M0801.) Empty Lot	B, Residence	62.091337°N - 150.063119°W	West	251	37.9 °F	Clear	5.8 mph NE	Soft. Gravel/Field grass.	None	0%	10.8.14	16:35-16:55	N8 S28	N1 S1	N0 S0	N3 S3	N0 S1	N0 S0	53.6	53.3	-0.3
M0802.) Empty Lot					30.0 °F	Clear	5.8 mph NE		None	0%	10.8.14	12:13-12:33	N19 S21	N0 S1	N0 S0	N2 S2	N0 S0	N0 S0			
M0901.) Montana Creek Campground	C, Campground	62.102986°N - 150.062295°W	West	375	55.0 °F	Clear	5.8 mph WNW	Soft. Vegetation/field grass.	None	0%	9.22.14	17:31-17:51	N19 S23	N4 S2	N0 S0	N5 S1	N0 S0	N0 S0	55.6	52.9	2.7
M0902.) Montana Creek Campground					36.0 °F	Overcast	Calm		None	0%	9.23.14	10:16-10:36	N31 S18	N1 N0	N0 S0	N3 S6	N0 S0	N1 S0			
M1001.) Upper Susitna Seniors Inc.	B, Senior Center	62.130568°N - 150.035897°W	East	490	55.0 °F	Scattered Clouds	Calm	Hard. Dirt.	None	0%	9.20.14	19:09-19:29	N21 S40	N2 N8	N0 S1	N2 N1	N0 S0	N1 S0	53.2	51.8	-1.4
M1002.) Upper Susitna Seniors Inc.					36.0 °F	Overcast	Calm		None	0%	9.23.14	09:25-09:45	N16 S13	N4 S0	N0 S0	N1 S1	N1 S0	N0 S0			
M1101.) Susitna Valley High school	C, School	62.131034° N - 150.043132°W	West	631	55.0 °F	Scattered Clouds	Calm	Hard. Asphalt parking lot.	None	0%	9.20.14	18:36-18:56	N20 S41	N1 S1	N0 S1	N0 S0	N0 S0	N0 S1	47.7	46.9	-0.8
M1102.) Susitna Valley High school					35.1 °F	Overcast	Calm		None	0%	9.23.14	08:53-09:13	N22 S17	N2 S0	N1 S0	N6 S1	N0 S0	N0 S0			
M1201.) Church on the Rock North Campus	C, Place of Worship	62.138639°N - 150.046058°W	East	97	53.1 °F	Clear	5.8 mph S	Hard. Asphalt parking lot.	None	0%	9.23.14	16:47-17:07	N17 S27	N11 S3	N1 S1	N1 S8	N0 S0	N0 S0	59	59.5	0.5
M1202.) Church on the Rock North Campus					45.0 °F	Mostly Cloudy	Calm		None	0%	9.23.14	11:25-11:45	N20 S17	N3 S4	N0 S0	N2 S2	N0 S0	N0 S0			
M1301.) H&H Cafe	E, Restaurant	62.140484°N - 150.058441°W	East	91	39.9 °F	Clear	5.8 mph N	Hard. Asphalt parking lot.	None	0%	9.22.14	16:13-16:33	N16 S22	N3 S4	N1 S5	N0 S0	N0 S0	N0 S0	64	61.8	-2.2
M1302.) H&H Cafe					39.0 °F	Scattered Clouds	Calm		None	0%	9.23.14	10:56-11:16	N31 S9	N2 S0	N0 S0	N6 S1	N3 S0	N0 S0			

FIELD DATA AND MEASUREMENT SITE DETAILS

Receiver #	Activity Category	GPS Coordinates	Side of Hwy	Distance from EOP (ft)	Temp (F)	Cloud Cover	Wind Speed (mph)	Ground Cover	Precipitation	Snow Cover	Date	Time	Auto-mobiles	Truck and Trailer	Med. Truck	Heavy Truck	Buses	Motor-cycles	SPL (dBA)	Modeled SPL (dBA)	SPL Difference
M1401.) Pullout across from residence	B, Residence	62.170348°N - 150.125249°W	West	44	37.9 °F	Clear	5.8 mph NE	Soft. Vegetation/field grass.	None	0%	10.8.14	15:58-16:18	N7 S14	N0 S0	N1 S0	N1 S2	N0 S0	N0 S0	64	62	-2
M1402.) Pullout across from residence					21.0 °F	Clear	3.5 mph NE		None	0%	10.7.14	08:50-09:10	N4 S7	N0 S0	N0 S0	N1 S0	N0 S0	N0 S0			
M1501.) Residence (passing lane)	B, Residence	62.173265°N - 150.154852°W	East	171	39.9 °F	Clear	3.5 mph NE	Soft. Vegetation/field grass.	None	0%	10.7.14	14:56-15:16	N8 S16	N0 S1	N0 S0	N1 S1	N1 S0	N0 S0	56.2	54.8	1.4
M1502.) Residence (passing lane)					26.1 °F	Clear	Calm		None	0%	10.7.14	09:31-09:51	N10 S9	N2 S0	N1 S0	N4 S3	N0 S0	N0 S0			
M1601.) Roadside (passing lane)	G, No Existing Development	62.244629°N - 150.252266°W	West	54	23.0 °F	Clear	Calm	Soft. Vegetation/field grass.	None	0%	10.7.14	15:31-15:51	N9 S16	N0 S0	N0 S1	N1 S2	N0 S0	N0 S0	62.8	62.9	0.1
M1602.) Roadside (passing lane)					26.1 °F	Clear	Calm		None	0%	10.7.14	10:12-10:22	N9 S9	N0 S1	N0 S1	N1 S0	N0 S0	N0 S0			
M1701.) McKinley B&B (passing Lane)	B, Residence	62.299981°N - 150.241231°W	West	221	30.9 °F	Overcast	Calm	Hard. Gravel driveway/lot.	None	0%	10.6.14	16:36-16:56	N13 S10	N1 S0	N0 S1	N0 S0	N1 S2	N0 S0	51.8	50.2	-1.6
M1702.) McKinley B&B (passing Lane)					28.9 °F	Partly Cloudy	Calm		None	0%	10.6.14	08:21-08:41	N6 S6	N0 S0	N0 S0	N0 S0	N0 S0	N0 S0			
M1801.) Trapper Creek Inn/Rv Park	C, Campground	62.314865°N - 150.231913°W	East	186	39.0 °F	Clear	5.8 mph N	Hard. Asphalt parking lot.	None	0%	10.7.14	18:49-19:09	N6 S4	N0 S0	N0 S0	N1 S1	N0 S0	N0 S1	46.1	48.4	2.3
M1802.) Trapper Creek Inn/Rv Park					28.9 °F	Partly Cloudy	Calm		None	0%	10.8.14	09:05-09:25	N8 S7	N1 N0	N0 S0	N3 S0	N0 S0	N0 S1			
M1901.) St. Philip's Catholic Church	C, Place of Worship	62.320177°N - 150.235175°W	East	98	57.0 °F	Partly Cloudy	Calm	Soft. Vegetation/field grass.	None	0%	9.20.14	17:50-18:10	N12 S16	N0 S11	N0 S1	N0 S1	N0 S1	N0 S6	58	58	0
M1902.) St. Philip's Catholic Church					48.0 °F	Mostly Cloudy	5.8 mph Variable		None	0%	9.23.14	12:44-13:04	N16 S19	N1 S1	N0 S0	N2 S3	N0 S0	N0 S0			
M2001.) East/West Susitna Access (passing lane)	B, Residence	62.412516°N - 150.25747°W	East	203	57.0 °F	Mostly Cloudy	4.6 mph SSW	Hard. Asphalt.	None	0%	9.20.14	17:10-17:30	N12 S19	N1 S5	N0 S0	N1 S1	N0 S0	N0 S0	55.8	53.1	2.7
M2002.) East/West Susitna Access (passing lane)					55.9 °F	Overcast	3.5 W		None	0%	9.23.14	13:27-13:47	N9 S13	N1 S3	N0 S0	N2 S2	N0 S0	N0 S0			
M2101.) Pullout across from residence	B, Residence	62.483422°N - 150.274879°W	East	61	37.9 °F	Clear	8.1 mph N	Hard. Asphalt (pullout).	None	0%	10.7.14	18:07-18:27	N3 S11	N0 S0	N0 S0	N0 S4	N0 S0	N0 S0	66.3	65.8	-0.5
M2102.) Pullout across from residence					34.0 °F	Clear	4.6 mph N		None	0%	10.7.14	11:32-11:52	N14 S4	N1 S0	N1 S0	N3 S2	N0 S0	N0 S0			
M2201.) Roadside (passing lane)	G, No Existing Development	62.49123°N - 150.274492°W	West	77	37.9 °F	Clear	8.1 mph N	Hard. Asphalt (pull-out).	None	0%	10.7.14	17:31-17:51	N2 S6	N2 S0	N0 S0	N5 S1	N0 S0	N0 S0	58.6	60	1.4
M2202.) Roadside (passing lane)					36.0 °F	Clear	3.5 mph Variable		None	0%	10.7.14	13:02-13:22	N11 S5	N0 S1	N1 S0	N1 S2	N0 S0	N0 S0			
M2301.) Roadside (passing lane)	G, No Existing Development	62.524518°N - 150.238993°W	West	87	42.1 °F	Clear	6.9 mph Variable	Soft. Vegetation/field grass.	None	0%	10.6.14	15:22-15:42	N16 S21	N1 S0	N0 S0	N1 S9	N0 S0	N0 S0	58.5	60.4	1.9
M2302.) Roadside (passing lane)					37.9 °F	Clear	6.9 mph NNW		None	0%	10.6.14	11:54-12:14	N10 S6	N0 S2	N0 S0	N2 S4	N0 S0	N0 S0			
M2401.) Residence near Mckinley Princess Lodge	B, Residence	62.558898°N - 150.222524°W	East	2,474	39.9 °F	Clear	9.2 mph NNE	Soft. Vegetation/field grass.	None	0%	10.7.14	16:51-17:11	N8 S6	N3 S0	N0 S1	N2 S3	N0 S0	N0 S0	48.6	50.2	1.6
M2402.) Residence near Mckinely Princess Lodge					36.0 °F	Clear	3.5 mph Variable		None	0%	10.7.14	12:22-12:42	N11 S5	N0 S0	N0 S0	N2 S4	N0 S0	N0 S0			
M2501.) Denali View South Pullout	C, RV Park/ Campground	62.592314°N - 150.239067°W	West	233	57.0 °F	Mostly Cloudy	4.6 mph SSW	Hard. Asphalt.	None	0%	9.20.14	15:47-16:07	N21 S20	N0 S1	N0 S0	N0 S4	N0 S0	N0 S0	51.4	50.7	-1.4
M2502.) Denali View South Pullout					39.9 °F	Clear	6.9 mph NNE		None	0%	10.6.14	12:38-12:58	N7 S2	N0 S3	N0 S0	N0 S0	N0 S0	N0 S0			
M2601.) Moose Flats Campground	C, Campground	62.609456°N - 150.221043°W	East	234	41.0 °F	Clear	9.2 mph N	Soft. Vegetation/field grass.	None	0%	10.6.14	14:00-14:20	N5 S4	N0 S0	N0 S0	N0 S2	N0 S0	N0 S0	45.8	45.1	-0.7

FIELD DATA AND MEASUREMENT SITE DETAILS

Receiver #	Activity Category	GPS Coordinates	Side of Hwy	Distance from EOP (ft)	Temp (F)	Cloud Cover	Wind Speed (mph)	Ground Cover	Precipitation	Snow Cover	Date	Time	Auto-mobiles	Truck and Trailer	Med. Truck	Heavy Truck	Buses	Motor-cycles	SPL (dBA)	Modeled SPL (dBA)	SPL Difference
M2602.) Moose Flats Campground					34.0 °F	Clear	4.6 mph ENE		None	0%	10.6.14	10:31-10:51	N14 S3	N3 S0	N0 S0	N2 S0	N0 S0	N0 S0			
M2701.) Residence	B, Residence	62.609377°N - 150.222588°W	West	21	41.0 °F	Clear	10.4 mph NE	Soft. Vegetation/field grass.	None	0%	10.6.14	14:32-14:52	N10 S8	N0 S0	N0 S0	N1 S2	N0 S1	N0 S0	64	65.9	1.4
M2702.) Residence					34.0 °F	Clear	4.6 mph ENE		None	0%	10.6.14	10:58-11:18	N15 S5	N1 S0	S0 S0	N3 S2	N1 S0	N0 S0			
M2801.) Troublesome Creek RV Park	C, Campground	62.625404°N - 150.228081°W	West	105	51.1 °F	Clear	5.8 mph Variable	Hard. Asphalt (pull-out).	None	0%	9.23.14	14:25-14:45	N4 S6	N1 S1	N0 S0	N8 S9	N3 S0	N0 S0	56.4	54.8	-1.6
M2802.) Troublesome Creek RV Park					52.0 °F	Clear	5.8 mph W		None	0%	9.22.14	13:48-14:08	N16 S11	N0 S2	N0 S0	N2 S3	N2 S0	N0 S0			
M2901.) Roadside (passing lane)	F, No Existing Development	62.644297°N - 150.221242°W	West	34	51.1 °F	Clear	5.8 mph Variable	Hard. Asphalt (pull-out).	None	0%	9.23.14	14:59-15:19	N7 S10	N0 S0	N0 S0	N12 S5	N0 S0	N0 S0	67.8	65.4	-2.4
M2902.) Roadside (passing lane)					50.0 °F	Clear	4.6 mph N		None	0%	9.22.14	13:05-13:25	N9 S14	N0 S1	N1 S0	N12 S0	N0 S0	N0 S0			
M3001.) Driveway across from Byers Creek Lodge	E, Restaurant/Hotel	62.712913°N - 150.203112°W	East	98	55.9 °F	Overcast	3.5 mph W	Soft. Vegetation/field grass.	None	0%	9.20.14	14:15-14:35	N9 S19	N2 S2	N0 S0	N0 S2	N0 S0	N0 S0	60.6	60.7	0.1
M3002.) Driveway across from Byers Creek Lodge					48.0 °F	Clear	8.1 mph NW		None	0%	9.22.14	12:18-12:38	N15 S14	N1 S0	N0 S0	N1 S2	N0 S0	N0 S0			
M3101.) Roadside (passing lane)	G, No Existing Development	62.730826°N - 150.168343°W	West	31	55.9 °F	Clear	3.5 mph W	Hard. Asphalt (pull-out).	None	0%	9.20.14	13:28-13:48	N18 S27	N2 S3	N0 S0	N1 S0	N0 S0	N0 S0	64.8	67.1	2.3
M3102.) Roadside (passing lane)					45.0 °F	Clear	5.8 mph Variable		None	0%	9.22.14	10:46-11:06	N3 S8	N0 S0	N1 S0	N1 S0	N1 S0	N0 S0			
M3201.) Alaska Veterans Memorial	C, Park	62.746546°N - 150.069139°W	East	215	55.9 °F	Mostly Cloudy	4.6 mph W	Soft. Vegetation/field grass.	None	0%	9.20.14	12:44-13:04	N9 S17	N0 S5	N1 S1	N2 S1	N0 S0	N0 S0	49.4	51	0.6
M3202.) Alaska Veterans Memorial					48.0 °F	Clear	8.1 mph NW		None	0%	9.22.14	11:25-11:45	N9 S3	N1 S2	N0 S0	N0 S1	N0 S0	N0 S0			
M3301.) Roadside (passing lane)	G, No Existing Development	62.766207°N - 150.069139°W	East	26	51.1 °F	Overcast	4.6 mph NNW	Hard. Asphalt (pull-out).	None	0%	9.18.14	12:45-13:05	N14 S7	N0 S0	N3 S0	N0 S1	N0 S0	N0 S0	65.8	67.1	1.3
M3302.) Roadside (passing lane)					53.1 °F	Clear	3.5 mph NNE		None	0%	9.20.14	12:01-12:21	N10 S15	N0 S0	N0 S0	N0 S0	N0 S0	N0 S0			
M3401.) Roadside (passing lane)	G, No Existing Development	62.842533°N - 149.884758°W	West	15	57.0 °F	Overcast	4.6 mph N	Hard. Asphalt (pull-out).	None	0%	9.17.14	18:26-18:46	N7 S11	N3 S2	N1 S0	N3 S1	N0 S0	N0 S0	66.9	68.4	1.5
M3402.) Roadside (passing lane)					53.1 °F	Clear	3.5 mph NNE		None	0%	9.20.14	11:16-11:36	N8 S10	N0 S2	N0 S0	N3 S0	N1 S0	N0 S0			
M3501.) Denali View North Pullout	C, RV Park/Campground	62.886472°N - 149.785196°W	West	374	57.9 °F	Overcast	5.8 mph N	Soft. Vegetation/field grass.	None	0%	9.17.14	17:36-17:56	N7 S5	N2 S2	N0 S1	N1 S0	N0 S0	N0 S0	39.8	40.6	0.8
M3502.) Denali View North Pullout					51.1 °F	Mostly Cloudy	3.5 mph N		None	0%	9.20.14	10:33-10:53	N10 S10	N0 S3	N0 S0	N1 S0	N0 S1	N0 S0			

APPENDIX B: NOISE ABATEMENT RECCOMMENDATION WORKSHEETS

Talachulitna Rd

NOISE SENSITIVE AREA ID NO.(S):	M1
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 1
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	47
FUTURE BUILD NOISE LEVEL (LEQ):	50
FUTURE NO-BUILD NOISE LEVEL:	50
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR  Breanna Mahoney
 DOT&PF Regional Environmental Manager

8/17/15
 Date


 DOT&PF Project Manager

8/17/15
 Date

Residence

NOISE SENSITIVE AREA ID NO.(S):	M2
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 2
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	59
FUTURE BUILD NOISE LEVEL (LEQ):	62
FUTURE NO-BUILD NOISE LEVEL:	61
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Residence (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M3
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 3
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	62
FUTURE BUILD NOISE LEVEL (LEQ):	64
FUTURE NO-BUILD NOISE LEVEL:	63
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Camp Caswell Food and Tackle

NOISE SENSITIVE AREA ID NO.(S):	M4
LOCATION/DESCRIPTION:	Restaurant
SHEET NUMBER:	Sheet 3
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	60
FUTURE BUILD NOISE LEVEL (LEQ):	53
FUTURE NO-BUILD NOISE LEVEL:	53
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Sheep Creek Lodge

NOISE SENSITIVE AREA ID NO.(S):	M5
LOCATION/DESCRIPTION:	Restaurant
SHEET NUMBER:	Sheet 3
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	59
FUTURE BUILD NOISE LEVEL (LEQ):	54
FUTURE NO-BUILD NOISE LEVEL:	54
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.



For _____
 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Lichen Dr

NOISE SENSITIVE AREA ID NO.(S):	M6
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 5
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	64
FUTURE BUILD NOISE LEVEL (LEQ):	65
FUTURE NO-BUILD NOISE LEVEL:	65
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Sezgo Rd (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M7
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 6
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	44
FUTURE BUILD NOISE LEVEL (LEQ):	47
FUTURE NO-BUILD NOISE LEVEL:	46
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Empty Lot

NOISE SENSITIVE AREA ID NO.(S):	M8
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 7
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	53
FUTURE BUILD NOISE LEVEL (LEQ):	56
FUTURE NO-BUILD NOISE LEVEL:	56
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Montana Creek Campground

NOISE SENSITIVE AREA ID NO.(S):	M9
LOCATION/DESCRIPTION:	Campground
SHEET NUMBER:	Sheet 7
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	53
FUTURE BUILD NOISE LEVEL (LEQ):	55
FUTURE NO-BUILD NOISE LEVEL:	55
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Upper Susitna Seniors Inc.

NOISE SENSITIVE AREA ID NO.(S):	M10
LOCATION/DESCRIPTION:	Senior Center
SHEET NUMBER:	Sheet 8
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	52
FUTURE BUILD NOISE LEVEL (LEQ):	53
FUTURE NO-BUILD NOISE LEVEL:	54
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

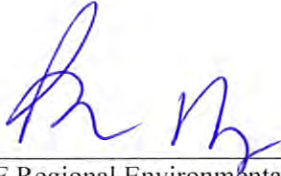
Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For



DOT&PF Regional Environmental Manager

8/17/15

Date



DOT&PF Project Manager

8/19/15

Date

Susitna Valley High School

NOISE SENSITIVE AREA ID NO.(S):	M11
LOCATION/DESCRIPTION:	School
SHEET NUMBER:	Sheet 8
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	47
FUTURE BUILD NOISE LEVEL (LEQ):	51
FUTURE NO-BUILD NOISE LEVEL:	50
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Church on the Rock North Campus

NOISE SENSITIVE AREA ID NO.(S):	M12
LOCATION/DESCRIPTION:	Place of Worship
SHEET NUMBER:	Sheet 8
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	60
FUTURE BUILD NOISE LEVEL (LEQ):	63
FUTURE NO-BUILD NOISE LEVEL:	62
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

H&H Cafe

NOISE SENSITIVE AREA ID NO.(S):	M13
LOCATION/DESCRIPTION:	Restaurant
SHEET NUMBER:	Sheet 9
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	62
FUTURE BUILD NOISE LEVEL (LEQ):	65
FUTURE NO-BUILD NOISE LEVEL:	65
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Pullout across from Residence

NOISE SENSITIVE AREA ID NO.(S):	M14
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 10
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	62
FUTURE BUILD NOISE LEVEL (LEQ):	65
FUTURE NO-BUILD NOISE LEVEL:	65
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Residence (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M15
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 10
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	55
FUTURE BUILD NOISE LEVEL (LEQ):	60
FUTURE NO-BUILD NOISE LEVEL:	58
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

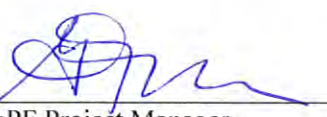
N/A.



DOT&PF Regional Environmental Manager

8/17/15

Date



DOT&PF Project Manager

8/17/15

Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M16
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 14
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	63
FUTURE BUILD NOISE LEVEL (LEQ):	69
66.5FUTURE NO-BUILD NOISE LEVEL:	67
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

Fox


 DOT&PF Regional Environmental Manager

8/17/15
 Date



 DOT&PF Project Manager

8/17/15
 Date

McKinley B&B (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M17
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 15
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	50
FUTURE BUILD NOISE LEVEL (LEQ):	56
FUTURE NO-BUILD NOISE LEVEL:	53
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Trapper Creek Inn/Rv Park

NOISE SENSITIVE AREA ID NO.(S):	M18
LOCATION/DESCRIPTION:	Campground
SHEET NUMBER:	Sheet 16
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	48
FUTURE BUILD NOISE LEVEL (LEQ):	52
FUTURE NO-BUILD NOISE LEVEL:	52
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR

 DOT&PF Regional Environmental Manager

8/17/15

 Date

 DOT&PF Project Manager

8/17/15

 Date

St. Philip's Catholic Church

NOISE SENSITIVE AREA ID NO.(S):	M19
LOCATION/DESCRIPTION:	Place of Worship
SHEET NUMBER:	Sheet 16
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	59
FUTURE BUILD NOISE LEVEL (LEQ):	63
FUTURE NO-BUILD NOISE LEVEL:	62
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

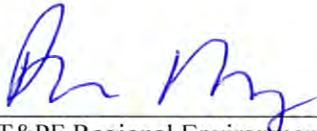
Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FR



DOT&PF Regional Environmental Manager

8/17/15

Date



DOT&PF Project Manager

8/17/15

Date

East/West Susitna Access (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M20
LOCATION/DESCRIPTION:	Campground
SHEET NUMBER:	Sheet 19
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	53
FUTURE BUILD NOISE LEVEL (LEQ):	59
FUTURE NO-BUILD NOISE LEVEL:	57
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Pullout across from Residence

NOISE SENSITIVE AREA ID NO.(S):	M21
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 22
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	66
FUTURE BUILD NOISE LEVEL (LEQ):	69
FUTURE NO-BUILD NOISE LEVEL:	69
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	YES
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	YES
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE COST EFFECTIVE?	NO

Is Noise Abatement recommended for this impacted receptor(s)? NO.

What is the basis for this recommendation?

In order to achieve acoustic feasibility, proposed barrier would need to be built at a length and height which would cause the cost per benefitted receptor to exceed the DOT&PF criteria. In other words, a barrier which would be cost-effective would not have sufficient height to create a minimum barrier insertion loss of 7 dBA for at least 50% of front-row dwelling units.

FJR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M22
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 22
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	60
FUTURE BUILD NOISE LEVEL (LEQ):	65
FUTURE NO-BUILD NOISE LEVEL:	63
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

F&R


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M23
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 23
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	60
FUTURE BUILD NOISE LEVEL (LEQ):	65
FUTURE NO-BUILD NOISE LEVEL:	64
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FDR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Residence near McKinley Princess Lodge

NOISE SENSITIVE AREA ID NO.(S):	M24
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 25
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	50
FUTURE BUILD NOISE LEVEL (LEQ):	53
FUTURE NO-BUILD NOISE LEVEL:	53
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FWR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Denali View South Pullout

NOISE SENSITIVE AREA ID NO.(S):	M25
LOCATION/DESCRIPTION:	RV Park
SHEET NUMBER:	Sheet 26
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	51
FUTURE BUILD NOISE LEVEL (LEQ):	54
FUTURE NO-BUILD NOISE LEVEL:	53
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FUR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Moose Flats Campground

NOISE SENSITIVE AREA ID NO.(S):	M26
LOCATION/DESCRIPTION:	Campground
SHEET NUMBER:	Sheet 26
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	45
FUTURE BUILD NOISE LEVEL (LEQ):	49
FUTURE NO-BUILD NOISE LEVEL:	48
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FIR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Residence

NOISE SENSITIVE AREA ID NO.(S):	M27
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 26
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	66
FUTURE BUILD NOISE LEVEL (LEQ):	68
FUTURE NO-BUILD NOISE LEVEL:	68
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	YES
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	YES
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	YES
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE COST EFFECTIVE?	NO

Is Noise Abatement recommended for this impacted receptor(s)? NO.

What is the basis for this recommendation?

At a height of 16 feet and a length of 162 feet, the proposed barrier achieves the minimum acoustic feasibility standard of 5 dBA for at least 50% of the front-row dwelling units. However, at this length and height, the cost per benefitted receptor exceeds the DOT&PF criteria and is therefore not considered reasonable.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Troublesome Creek RV Park

NOISE SENSITIVE AREA ID NO.(S):	M28
LOCATION/DESCRIPTION:	RV Park
SHEET NUMBER:	Sheet 27
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	55
FUTURE BUILD NOISE LEVEL (LEQ):	60*
FUTURE NO-BUILD NOISE LEVEL:	59*
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

*Updated as a part of the January 2019 analysis revision.

Is Noise Abatement recommended for this impacted receptor(s)? N/A; No impact.

What is the basis for this recommendation? N/A.

B. Elwick
 DOT&PF Regional Environmental Manager

3-7-19
 Date

Kelly Sumner
 DOT&PF Project Manager

3/7/19
 Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M29
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 28
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	65
FUTURE BUILD NOISE LEVEL (LEQ):	68
FUTURE NO-BUILD NOISE LEVEL:	68
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.



DOT&PF Regional Environmental Manager

8/17/15

Date



DOT&PF Project Manager

8/17/15

Date

Driveway across from Byers Creek Lodge

NOISE SENSITIVE AREA ID NO.(S):	M30
LOCATION/DESCRIPTION:	Hotel
SHEET NUMBER:	Sheet 30
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	61
FUTURE BUILD NOISE LEVEL (LEQ):	64
FUTURE NO-BUILD NOISE LEVEL:	63
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M31
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 31
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	67
FUTURE BUILD NOISE LEVEL (LEQ):	72
FUTURE NO-BUILD NOISE LEVEL:	70
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

for 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Alaska Veterans Memorial

NOISE SENSITIVE AREA ID NO.(S):	M32
LOCATION/DESCRIPTION:	Park
SHEET NUMBER:	Sheet 32
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	51
FUTURE BUILD NOISE LEVEL (LEQ):	54
FUTURE NO-BUILD NOISE LEVEL:	54
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FDR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M33
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 33
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	67
FUTURE BUILD NOISE LEVEL (LEQ):	71
FUTURE NO-BUILD NOISE LEVEL:	70
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

for 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Roadside (passing lane)

NOISE SENSITIVE AREA ID NO.(S):	M34
LOCATION/DESCRIPTION:	Pullout
SHEET NUMBER:	Sheet 37
ACTIVITY CATEGORY TYPE:	Category G
DOT&PF NAC FOR THIS CATEGORY:	N/A
EXISTING NOISE LEVEL (LEQ):	68
FUTURE BUILD NOISE LEVEL (LEQ):	72
FUTURE NO-BUILD NOISE LEVEL:	70
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FK


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Denali View North Pullout

NOISE SENSITIVE AREA ID NO.(S):	M35
LOCATION/DESCRIPTION:	RV Park
SHEET NUMBER:	Sheet 39
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	41
FUTURE BUILD NOISE LEVEL (LEQ):	44*
FUTURE NO-BUILD NOISE LEVEL:	43*
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

**Updated as a part of the January 2019 analysis revision.*

Is Noise Abatement recommended for this impacted receptor(s)? N/A; No impact.

What is the basis for this recommendation? N/A.

B. Elliott
 DOT&PF Regional Environmental Manager

3-7-19
 Date

Kelly Summit
 DOT&PF Project Manager

3/7/19
 Date

Wytchwood Gift Shop

NOISE SENSITIVE AREA ID NO.(S):	R1
LOCATION/DESCRIPTION:	Residence
SHEET NUMBER:	Sheet 2
ACTIVITY CATEGORY TYPE:	Category B
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	50
FUTURE BUILD NOISE LEVEL (LEQ):	54
FUTURE NO-BUILD NOISE LEVEL:	53
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

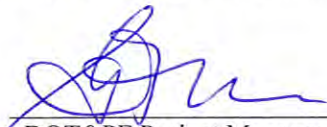
N/A.

FIR 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Montana Creek Baptist Church

NOISE SENSITIVE AREA ID NO.(S):	R2
LOCATION/DESCRIPTION:	Place of Worship
SHEET NUMBER:	Sheet 8
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	56
FUTURE BUILD NOISE LEVEL (LEQ):	60
FUTURE NO-BUILD NOISE LEVEL:	60
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

File 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Big Su Lodge

NOISE SENSITIVE AREA ID NO.(S):	R3
LOCATION/DESCRIPTION:	Hotel
SHEET NUMBER:	Sheet 11
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	50
FUTURE BUILD NOISE LEVEL (LEQ):	52
FUTURE NO-BUILD NOISE LEVEL:	51
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?


N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

McKinley Princess Lodge

NOISE SENSITIVE AREA ID NO.(S):	R4
LOCATION/DESCRIPTION:	Hotel
SHEET NUMBER:	Sheet 25
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	48
FUTURE BUILD NOISE LEVEL (LEQ):	50
FUTURE NO-BUILD NOISE LEVEL:	50
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

FOR


 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

McKinley View Lodge

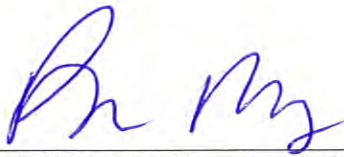
NOISE SENSITIVE AREA ID NO.(S):	R5
LOCATION/DESCRIPTION:	Hotel
SHEET NUMBER:	Sheet 26
ACTIVITY CATEGORY TYPE:	Category E
DOT&PF NAC FOR THIS CATEGORY:	71
EXISTING NOISE LEVEL (LEQ):	51
FUTURE BUILD NOISE LEVEL (LEQ):	55
FUTURE NO-BUILD NOISE LEVEL:	54
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

Is Noise Abatement recommended for this impacted receptor(s)?

N/A; No impact.

What is the basis for this recommendation?

N/A.

For 

 DOT&PF Regional Environmental Manager

8/17/15

 Date



 DOT&PF Project Manager

8/17/15

 Date

Upper Troublesome Creek Trailhead*

NOISE SENSITIVE AREA ID NO.(S):	R6
LOCATION/DESCRIPTION:	Trailhead
SHEET NUMBER:	Sheet 27
ACTIVITY CATEGORY TYPE:	Category C
DOT&PF NAC FOR THIS CATEGORY:	66
EXISTING NOISE LEVEL (LEQ):	45
FUTURE BUILD NOISE LEVEL (LEQ):	48
FUTURE NO-BUILD NOISE LEVEL:	47
HAS A NOISE IMPACT BEEN IDENTIFIED (IF YES CONTINUE FILLING OUT WORKSHEET. IF NO, NO NOISE ABATEMENT IS REQUIRED. SIGN WORKSHEET AND RECOMMEND NO NOISE ABATEMENT)?:	NO
IS THE PROPOSED NOISE ABATEMENT MEASURE ACOUSTICALLY FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE ENGINEERING FEASIBLE?	N/A
IS THE PROPOSED NOISE ABATEMENT MEASURE CONSIDERED REASONABLE?	N/A

*Added as a part of the January 2019 analysis revision.

Is Noise Abatement recommended for this impacted receptor(s)? N/A: No impact.

What is the basis for this recommendation? N/A.

B. Elliott
 DOT&PF Regional Environmental Manager

3-7-19
 Date

Kelly Summers
 DOT&PF Project Manager

3/7/19
 Date

**APPENDIX C:
ALASKA DOT&PF CORRESPONDENCE**

From: Riddle, Ryan N (DOT) [<mailto:ryan.riddle@alaska.gov>]
Sent: Wednesday, April 22, 2015 10:22 AM
To: Jeff M. Fuglestad
Subject: RE: Parks Hwy MP 44-52 Noise analysis inflation of \$32,000

Thanks, Jeff. Let's move forward with the methodology that you have presented. Please make sure that in the text of the noise analysis, you explain the method that you used, and why you believe that it is suitable.

Also, please send over the revised noise abatement worksheets ASAP so that I can get Eric and Brian's signatures on them.

Thanks,
Ryan

From: Jeff M. Fuglestad [<mailto:jfuglestad@hdlalaska.com>]
Sent: Wednesday, April 22, 2015 9:50 AM
To: Riddle, Ryan N (DOT)
Cc: Kelsey M. Creasman
Subject: RE: Parks Hwy MP 44-52 Noise analysis inflation of \$32,000

Ryan,

I've reviewed the procedures followed by your group and I have the following comments:

1) The index that was utilized for the KGB study (Consumer Price Index for Anchorage Municipality & US): This index is probably "just as good" as any that may be chosen. However, I don't agree with the actual computation used. I interpret the AK Noise Policy to state that the base year for the \$32,000 cost per benefited receiver is 2006. The computations used in this study chose 2009 as the base year. So, if we used this index, then the adjustment to the \$32,000 would be as follows (utilizing base year=2006, and current year=2014):
 $236.736/201.600=1.174$, so current value= $1.174 \times \$32,000 = \$37,600 +/-$

2) The discussion on utilizing the updated National Highway Construction Cost Index: This index is computed utilizing highway construction bid items, and would seem to be a "preferred" index to use, because it appears to be based on highway construction costs & the AK Noise policy refers to an index that is also based primarily based on highway construction costs. However, this index is heavily weighted to the cost of oil, which is not a major component of noise wall construction, so it may give misleading results. Again, per the above discussion, the base year that was utilized was 2009, and not 2006. So, if we use this index, then the adjustment to the \$32,000 would be as follows (utilizing base year=2006, and current year=2014):
The average for 2006 is: 1.3492
 $1.1103/1.3492=0.8229$, so current value= $0.8229 \times \$32,000 = \$26,000 +/-$.
The above computation deflates the base \$32,000 because the price of oil was high in 2006 compared with 2014.

The fundamental question that we need to answer, is which index is the "most appropriate" replacement to the referenced index in the current noise policy? Once that decision is made, then everyone can perform the same calculations to inflate the cost per benefited receiver.

I've attached my computations utilizing the Gross Domestic Product *Implicit Price Deflator* method and index. This is the index and method that is used in the ADOT Highway Safety Improvement Handbook to perform cost/benefit analysis.

Please let me know if you have any questions.

Jeff
564-2108 (Voice)

From: Riddle, Ryan N (DOT) [<mailto:ryan.riddle@alaska.gov>]
Sent: Tuesday, April 21, 2015 3:48 PM
To: Jeff M. Fuglestad
Cc: Kelsey M. Creasman
Subject: RE: Parks Hwy MP 44-52 Noise analysis inflation of \$32,000

Thanks, Jeff. Please do. Also, I've attached the adjusted figure and procedures followed by our engineering assistants for KGB Rd. Curious to know your take on what they did, and why you think that your method more closely meets the intent of the noise policy.

Also, please send the most recent version of the noise abatement worksheets so that I can start getting the necessary signatures on the worksheets.

Thanks,
Ryan

From: Jeff M. Fuglestad [<mailto:jfuglestad@hdlalaska.com>]
Sent: Tuesday, April 21, 2015 1:44 PM
To: Riddle, Ryan N (DOT)
Subject: Parks Hwy MP 44-52 Noise analysis inflation of \$32,000

Ryan,

I don't have time before my review meeting to finish my comp sheet, but the number I get, is \$36,500.

The method I am using is the "Implicit Price Deflator" method....I'll send more info on this when I get a chance...

Jeff Fuglestad, P.E.



3335 Arctic Boulevard Suite 100
Anchorage, Alaska 99503

(907) 564-2120 (Receptionist)

(907) 564-2108 (Voice)

(907) 564-2122 (Fax)

jfuglestad@hdlalaska.com

Kelsey M. Means

From: Owen L. Means
Sent: Tuesday, August 14, 2018 11:57 AM
To: Kelsey M. Means
Subject: FW: Parks 123-163 Passing Lanes Re-Evaluation

From: Owen L. Means
Sent: Tuesday, June 19, 2018 8:36 AM
To: 'Riddle, Ryan N (DOT)' <ryan.riddle@alaska.gov>
Subject: RE: Parks 123-163 Passing Lanes Re-Evaluation

Thank you!

From: Riddle, Ryan N (DOT) [<mailto:ryan.riddle@alaska.gov>]
Sent: Monday, June 18, 2018 1:48 PM
To: Owen L. Means <omeans@hdlalaska.com>
Cc: Roadifer, Carol J (DOT) <carol.roadifer@alaska.gov>; Schmid, Tom J (DOT) <tom.schmid@alaska.gov>; Rick D. Hammond <rhammond@hdlalaska.com>; Jeff M. Fuglestad <jfuglestad@hdlalaska.com>
Subject: RE: Parks 123-163 Passing Lanes Re-Evaluation

Hi Owen -

I agree that the noise analysis should be updated to account for the design change, and agree that the proposed level of effort described here is appropriate.

Ryan

From: Owen L. Means [<mailto:omeans@hdlalaska.com>]
Sent: Monday, June 18, 2018 12:02 PM
To: Riddle, Ryan N (DOT)
Cc: Roadifer, Carol J (DOT); Schmid, Tom J (DOT); Rick D. Hammond; Jeff M. Fuglestad
Subject: Parks 123-163 Passing Lanes Re-Evaluation

Hi Ryan,

I've reviewed the CE and Re-Eval form with an eye on the extended passing lane, and recommend adding one more item to the scope of work. We believe the noise analysis will need to be updated to account for the passing lane moving closer to the Upper Troublesome Creek 4(f) site. We would add a receptor at the 4(f) site, amend the proposed condition model, and prepare a brief report/memo that would be appended to the CE Re-Evaluation. We believe the existing condition model is still valid and do not recommend any new field measurements. If you concur, we will add this to the amendment.

Thanks,
Owen

Owen Means, Environmental Specialist



3335 Arctic Boulevard, Suite 100

Anchorage, AK 99503

907-564-2120 (Main Office)

907-564-2143 (Direct Line)

omeans@HDLAlaska.com

www.HDLAlaska.com

**APPENDIX D:
ALASKA DOT&PF NOISE POLICY**

Alaska Department of Transportation & Public Facilities
Alaska Environmental Procedures Manual

Noise Policy

April 2011



STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

SEAN PARNELL, GOVERNOR

3132 CHANNEL DRIVE
P.O. Box 112500
JUNEAU, ALASKA 99811-2500
PHONE: (907) 465-6958
FAX: (907) 465-2460

April 14, 2011

Mr. David Miller
Division Administrator
Federal Highway Administration
Alaska Division
709 West 9th Street, Rm 851
P.O. Box 21648
Juneau, AK 99802

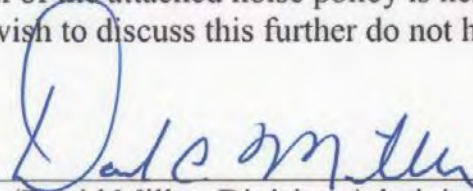
Reference: DOT&PF Noise Policy

Dear Mr. Miller:

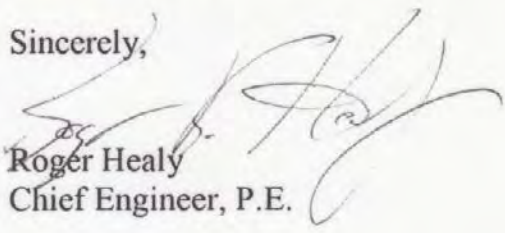
The Alaska Department of Transportation and Public Facilities (ADOT&PF) hereby submits a copy of the DOT&PF Noise Policy dated April 2001 for review and approval by the Federal Highway Administration Alaska Division. We would like to thank your staff and Mark Ferroni of your Washington D.C. office for your review and comments on previous drafts. These comments have been incorporated into this version of the document. This policy is in response to changes in 23 CFR 772. It is our intent that this noise policy will go into effect upon your approval of this policy.

Your approval of the attached noise policy is hereby requested. If you have any questions or wish to discuss this further do not hesitate to contact Ben White of my office.

Approved: _____


(David Miller, Division Administrator, FHWA Alaska Division)

Sincerely,


Roger Healy
Chief Engineer, P.E.

Enclosure: DOT&PF Noise Policy (April 2011)

"Providing for the safe movement of people and goods and the delivery of state services."

INTRODUCTION

This document contains the Alaska Department of Transportation and Public Facilities (DOT&PF) noise policy on highway traffic noise and construction noise. This policy describes DOT&PF's implementation of the requirements of the Federal Highway Administration (FHWA) Noise Standard at 23 Code of Federal Regulations (CFR) Part 772 (see Appendix A). This policy also addresses how traffic noise is considered on state funded projects. It applies to both design-build and design-bid-build projects. DOT&PF developed this policy and submitted it to FHWA for their review and concurrence.

Noise is defined as unwanted sound. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. Sound is composed of various frequencies, but the human ear does not respond to all frequencies. Frequencies to which the human ear does not respond must be filtered out when measuring highway noise levels. Since noise is measured on a logarithmic scale, an increase 10 dB in the sound pressure level will be perceived by an observer to be a doubling of the sound whereas a decrease in 10 dB will be perceived as a halving of the sound. For example, a sound at 70 dB will be perceived as twice as loud as a sound at 60 dB.

The level of highway traffic noise depends on three things: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of the traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater numbers of trucks. Vehicle noise is a combination of the noises produced by the engine, exhaust, and tires. The loudness of traffic noise can also be increased by defective mufflers or other faulty equipment on vehicles. Any condition (such as a steep incline) that causes heavy laboring of motor vehicle engines will also increase traffic noise levels. In addition, there are other more complicated factors that affect the loudness of traffic noise. For example, as a person moves away from a highway, traffic noise levels are reduced by distance, terrain, vegetation, and natural and manmade obstacles. While traffic noise is not usually a problem for people who live more than about 450 feet (150 meters) from heavily traveled freeways or more than about 90-180 feet (30 to 60 meters) from lightly traveled roads) there may be incidences (ex. quiet settings, rural areas, etc.) where people can detect highway noise over greater distances.

During the rapid expansion of the Interstate Highway System and other roadways in the 20th century, communities began to recognize that highway traffic noise and construction noise had become important environmental impacts. In the 1972 Federal-aid Highway Act, Congress required FHWA to develop a noise standard for new federal-aid highway projects. While providing national criteria and requirements for all highway agencies, the FHWA Noise Standard gives highway agencies flexibility that reflects state-specific attitudes and objectives in approaching the problem of highway traffic and

construction noise. This policy contains DOT&PF's policy on how highway traffic and construction noise impacts are defined, how noise abatement is evaluated, and how noise abatement decisions are made.

In addition to defining traffic noise impacts, the FHWA Noise Standard requires that noise abatement measures be considered when traffic noise impacts are identified for Type I federal projects, as defined in 23 CFR 772.5. For a more detailed definition of a Type I project see the definitions section of this policy. Noise abatement measures that are found to be feasible and reasonable must be constructed for Type I federal projects. Feasible and reasonable noise abatement measures are eligible for federal-aid participation at the same ratio or percentage as other eligible project costs. The DOT&PF has accepted the federal definition of a Type I project for all state-funded projects as well.

Federal regulations also include standards for Type II federal projects. A Type II federal project is defined as a federal or federal-aid highway project for noise abatement on an existing highway. For a Type II project to be eligible for federal-aid funding, the state highway agency must develop and implement a Type II program in accordance with 23 CFR 772.7(e). Type II programs are entirely voluntary. The DOT&PF has elected not to participate in a Type II program to retrofit existing state highways with noise abatement.

Type III federal projects are those that neither meet the definitions of Type I or Type II and for which a noise analysis is not required and no consideration of noise abatement is warranted. The DOT&PF has accepted the federal definition of a Type III projects for all state-funded projects as well.

PURPOSE

This policy describes the DOT&PF program to implement 23 CFR 772. Where FHWA has given DOT&PF flexibility in implementing the standard, this policy describes the DOT&PF approach to implementation. This policy also defines how the DOT&PF addresses traffic noise in the design and construction of state-funded projects.

NOISE STANDARDS

This policy outlines the DOT&PF program to implement the FHWA Noise Standards found in 23 CFR 772. It also describes how the DOT&PF addresses traffic noise on state-funded projects. These standards include traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials.

The State of Alaska does not have any traffic noise regulations. It is the DOT&PF policy to follow the federal standards for traffic noise prediction requirements, and noise analyses. Federal noise abatement criteria are followed to determine whether noise

impacts exist and if abatement is feasible and reasonable, however, the decision to provide noise abatement on state funded project follows slightly different procedures (discussed the section of this policy entitled *State-Funded Projects*).

DEFINITIONS

The federal noise regulations definitions are located at 23 CFR 772.5. These regulations are located in Appendix A.

Benefited Receptor. The recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dBA

Common Noise Environment. A group of receptors within the same Activity Category in Table 1 that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features. Generally, common noise environments occur between two secondary noise sources such as interchanges, intersections, and cross-roads.

Date of Public Knowledge. The date of approval of the Categorical Exclusion (CE), the Finding of No Significant Impact (FONSI) the Record of Decision (ROD), or in the case of a state-funded project, approval of the State Environmental Checklist.

Design Year. The future year used to estimate the probable traffic volume for which a highway is designed.

Existing Noise Levels: The worst noise hour, resulting from the combination of natural and mechanical sources and human activity, usually present in a particular area. It should be for the existing year of analysis.

Feasibility: The combination of acoustical and engineering factors considered in the evaluation of a noise abatement measure.

Federal-aid Project: Any project utilizing federal funds for one or more phases (i.e., Environmental, Design, Right of Way, or Construction) or that is otherwise subject to federal approval.

First Row Receivers: Closest residences or business impacted by noise from the highway facility.

Impacted Receptor: The recipient that has a traffic noise impact.

L10: The sound level that is exceeded 10 percent of the time (the 90th percentile) for the period under consideration, with L10(h) being the hourly value of L10.

Leq: The equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period, with $Leq(h)$ being the hourly value of Leq .

Multifamily Dwelling: A residential structure containing more than one residence. Each residence in a multifamily dwelling shall be counted as one receptor when determining impacted receptors and benefited receptors.

Noise Barrier: A physical obstruction constructed between the highway noise source and the noise sensitive receptor(s) that lowers the noise level, including stand alone noise walls, noise berms (earth or other material), and combination berm/wall systems.

Noise Reduction Design Goal: The optimum desired dBA noise reduction determined from calculating the difference between future build noise levels with abatement, to future build noise levels without abatement. The noise reduction design goal of the DOT&PF is 7dBA.

Permitted: A definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of a building permit.

Property Owner: An individual or group of individuals that holds a title, deed, or other legal documentation of ownership of a property or a residence.

Reasonableness: The combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure.

Receptor: A discrete or representative location of a noise sensitive area(s), for any of the land uses listed in Table 1.

Residence: A dwelling unit, either a single family residence or each dwelling unit in a multifamily dwelling.

Resident: Someone who resides at a dwelling unit. May not necessarily be the owner of the dwelling unit.

State-funded project: A project that is solely funded by state monies appropriated by the Alaska State Legislature and requires no federal approvals for implementation.

Statement of Likelihood: A statement provided in the environmental clearance document based on the feasibility and reasonableness analysis completed at the time the environmental document is being approved.

Substantial Construction: The granting of a building permit, prior to right-of-way acquisition or construction approval, for the highway.

Substantial noise increase: One of two types of highway traffic noise impacts.

For a Type I project, DOT&PF considers an increase in noise levels of 15 dBA in the design year over the existing noise level to be a substantial noise increase.

Traffic Noise Impacts: Design year build condition noise levels that approach or exceed the NAC listed in Table 1 in 23 CFR 772 for the future build condition; or design year build condition noise levels that create a substantial noise increase over existing noise levels. The DOT&PF defines “approach” as 1 dBA below the FHWA noise abatement criteria and a “substantial” noise increase as a 15 dBA increase over existing noise levels.

Type I Project:

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:
 - (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source.
This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
- (3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- (4) The addition of an auxiliary lane, except when the auxiliary lane is a turn lane; or,
- (5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- (6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
- (7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
- (8) If a project is determined to be a Type I project under this definition, the entire project area as defined in the environmental document is a Type I project.

Type II Project: For a Type II project to be eligible for federal-aid funding, the highway agency must develop and implement a Type II program in accordance with section

772.7(e). The DOT&PF has elected not to participate in the voluntary Type II program at this time¹, so the retrofitting of noise barriers on existing roads is not currently done.

Type III Project: A federal or federal aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis or consideration of noise Abatement.

APPLICABILITY

This DOT&PF policy applies to all Type I federal highway projects in the State of Alaska, that is, any projects that receive federal-aid funds or are otherwise subject to FHWA approval. They include federal projects that are administered by Local Public Agencies (LPAs) as well as DOT&PF.

This policy also applies to all Type I state-funded projects, and all Type I projects proposed by Toll Road Authorities in the State of Alaska. Presently, the Knik Arm Crossing Toll Authority (KABATA) is the only such authority in the State². This policy applies to state-funded design-build and design-bid-build projects. This policy does not apply to Type III state-funded maintenance and operations activities and projects. In general, the same methods are followed in the identification of noise impacts for state-funded projects as with federal-aid projects. For state-funded projects, results of noise analyses will be documented in the State Projects Environmental Checklist. If noise abatement is determined to be feasible and reasonable, the Regional Environmental Manager will make a noise abatement recommendation to the Preconstruction Engineer. The Preconstruction Engineer will decide whether the recommended abatement measure will be constructed on state-funded projects. Abatement will be provided only if it meets the feasibility and reasonableness criteria of this policy and the state-funded appropriation can accommodate this expenditure.

The requirements of this policy apply uniformly and consistently to all Type I federal projects, Type I state-funded projects, and Type I Toll Authority projects within the State of Alaska.

DOT&PF has elected not to participate in the voluntary Type II noise program. Consequently, the retrofitting of existing roads with noise abatement is not done by the Department, unless there is a special appropriation by the State Legislature for such abatement and the Department is designated the responsible agency for the project. In those cases, the noise abatement measures being proposed must meet the feasibility

¹ The Knik Arm Crossing Toll Authority (KABATA) has developed a PA that indicates that if Noise Abatement Criteria are exceeded then there will be noise barriers retrofitted to the project.

² Projects that come out of KABATA are state-funded, they follow the noise abatement procedures for State-funded projects, whereas if they are federally funded, they follow the procedures for federal projects.

and reasonableness criteria of this policy. Any disputes with this provision of the policy and state lawmakers should be resolved by the DOT&PF Commissioner.

Type III projects are those projects that neither meet the definition of a Type I or Type II project nor require a noise analysis or consideration of noise abatement.

If there are any questions about whether a project is subject to this policy or the FHWA Noise Standard, contact the Regional Environmental Manager. Disagreements on these determinations should be directed to the Statewide Environmental Manager. Due to the long lead time necessary to complete a traffic noise study, the need for a noise study should be determined early in project scoping.

TRAFFIC NOISE PREDICTION

The most recent version of the FHWA Traffic Noise Model (TNM), or other model found acceptable to FHWA, pursuant to 23 CFR 772.9, will be utilized for all noise predictions. The use of TNM Look-up Tables or any other model unacceptable to FHWA is prohibited. Existing noise levels and future design year noise levels must be predicted for all reasonable build alternatives carried forward in the National Environmental Policy Act (NEPA) document. The future design year noise levels for the No-Build alternative must also be predicted to satisfy documentation requirements of NEPA.

The average pavement type must be used for all noise predictions unless the DOT&PF obtains FHWA approval to use a different pavement type.

The use of noise contour lines can only be used for project alternative screening or for land use planning purposes. Noise contour lines cannot be used for determining traffic noise impacts. DOT&PF will use FHWA's Traffic Noise Model most recently available version to develop noise contours. The predictions will be for worst case hour noise conditions. Generally, worst case hour are traffic levels at Level of Service (LOS) C or D, rather than heavy traffic volumes. In heavily congested urban areas, the peak traffic period (often LOS E or F) may not represent the worst noise conditions. For example, speeds may be low and heavy truck volumes may drop as truckers try to avoid severe congestion. Seasonal traffic variations should also be considered when determining the worse case hour noise condition. The Project Manager should consult with appropriate traffic and planning staff and review the annual traffic report in order to determine the appropriate volumes and speeds to use in the analysis. This input and any assumptions must be documented in the noise analyses report. DOT&PF will use a design hourly volume (DHV) that correlate with Level C or D rather than peak hour traffic. This will require coordination with Planning and Traffic to collect this information.

The input parameters for the TNM noise predictions should be documented in the noise analysis report. Input parameters should be approved by the DOT&PF Environmental Impact Analyst prior to modeling. All prediction results will be rounded off to the closest whole number (i.e., 67.5 dBA will be rounded up to 68 dBA, 67.4 dBA will be rounded down to 67dBA).

ANALYSIS OF TRAFFIC NOISE IMPACTS AND NOISE MEASUREMENTS

It is the DOT&PF Policy to utilize TNM noise predictions to model existing and future worst case noise levels. Actual measurements of existing noise levels are only utilized to validate TNM or other models acceptable to FHWA.

Noise Measurements

All noise measurements will be taken with an ANSI Type 1 or 2 integrating sound level meter and will be A-weighted.

For proposed highways on new alignments where no highway currently exists, noise measurements will be taken at representative receptor locations along the proposed route in order to determine the existing noise level.

In general, noise measurements will be taken during either the morning or evening peak traffic periods; or if LOS E or F exist, DOT&PF will use the traffic levels at Level of Service (LOS) C or other time period to replicate the model. Noise measurements may be taken outside the peak traffic periods for the sole intent of validating the TNM or other model acceptable to FHWA. Noise measurements will follow FHWA procedures for measuring traffic noise³. The locations, date, time, weather (sky cover, approximate temperature, wind speed and direction, precipitation and snow cover), a description of ground cover (hard or soft site), and traffic conditions (number of vehicles, percentage medium and heavy trucks, motorcycles) will be recorded on each measurement data sheet. Average traffic speeds can be estimated or measured and should also be noted on the data sheet. A map depicting the measurement site relative to the road and adjacent buildings must be provided (use actual measurements or locations using GPS, estimated locations are not acceptable). Sufficient information should be provided to allow re-creation of the measurements if necessary.

Two fifteen minute measurements will be taken at each receptor. Any noise sources other than highway sources should be noted on the dated sheet.

Model Validation

³ FHWA Final Report – *Measurement of Highway – Related Noise*, 1996 [FHWA-PD-96-046DOT-VNTSC-FHWA-96-5]

Noise measurements will be taken at representative locations throughout the proposed project corridor. Locations of the measurements must be approved by the DOT&PF Environmental Impact Analyst prior to being taken. Traffic counts will be taken simultaneously with noise measurements. The actual traffic counts, vehicle types, and speeds (estimated or measured) collected during the measurements will be utilized as input to TNM for the purpose of validation. Noise prediction results will be compared with actual measured results. Differences between the actual and predicted noise measurements within $\pm 3\text{dBA}$ will be considered acceptable. If the difference is greater than 3dBA , DOT&PF will coordinate with FHWA for direction. Either the model input will be reevaluated at those locations to ensure an accurate representation of site geometry and input, the noise measurements will be retaken, or shielding factors⁴ might be input into TNM to offset these differences. Once the model is determined to be valid the existing, Design Year Build (for all reasonable alternatives) and No-Build Noise Levels can be predicted.

Noise Predictions and Impact Assessment

DOT&PF gives primary consideration to exterior areas of frequent human use. Noise levels should typically be measured and/or predicted at exterior areas that receive frequent human use at the first row of structures (i.e., residences and/or businesses). These include patios or balconies of residential receivers. If access cannot be obtained to take measurements on private property, then a location close to the highway right of way line should be utilized. Measurements should not occur any closer than 10 feet from a building or fence, because the object can reflect noise. The location of receptors for noise predictions should be located at areas that receive frequent human use rather than at the right of way line. Preferably, the receptor locations will be at locations that will remain after construction of the proposed facility. Typically, a receptor location should not be selected if the location will not exist after construction of the proposed project because the basis for comparison would be lost. However, there may be some receptors that are relocated with one Build Alternative and remain with another, so it is not always possible to select receptor location that will exist after the construction of the preferred alternative.

For Type I projects, a traffic noise analysis is required for all build alternatives under detailed study in the NEPA process. All reasonable alternatives that have been carried forward for detailed analysis within the categorical exclusion documentation, environmental assessment or environmental impact statement and NOT rejected as unreasonable during the alternatives screening process will be analyzed for noise impacts. For Environmental Impact Statements or other studies that will examine broad corridors, the appropriate scope and methodology of the noise analysis should be

⁴ Shielding factors are to be used only as an absolute last attempt option. In just about every case reviewing the location to ensure accuracy will either correct the differences. If not, then shielding factor is used as an adjustment factor that is applied to the single receiver to bring it into the 3 dB(A) range.

discussed with FHWA and other participating agencies early in the project planning process.

For state-funded Type I projects a similar method of analysis will be followed. The preferred alternative carried forward in the State Environmental Checklist will be evaluated for noise impacts.

If any segment or component of an alternative meets the definition of a Type I project, then the entire alternative is considered to be Type I and is subject to these noise analysis requirements.

For Type I projects, the noise study area will be consistent with project limits, beginning of the project to the end of the project based on logical termini for that specific project (Beginning of Project to End of Project). The noise analysis must include analysis for each Activity Category present in the study area.

LAND USE CATEGORIES

Federal land use activity categories are defined by 23 CFR 772. DOT&PF has accepted the FHWA definition of these activity categories.

Activity Category A: Lands on which serenity and quiet are of extraordinary significance and serve an important public need. DOT&PF must submit justifications to FHWA on a case-by-case basis to designate any lands as Category A. Proposals and justifications for designating land as Activity Category A will be submitted from the Regional Environmental Manager through the state's FHWA Division Office and FHWA Headquarters.

Activity Category B: Residential - exterior areas of single-family and multi-family homes. Noise receptors should be located in areas that receive frequent human use (i.e., patios, balconies, playgrounds, gardens, etc.).

Activity Category C: Non-residential exterior areas of lands such as active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings, etc. Receptors should be located in areas that represent the area that receives the most frequent human use. Noise measurements and predictions will be taken at an outdoor location that is representative of the typical use for this area that receives the most frequent use. For structures, noise measurements and predictions will be taken at a location that is representative of the exterior area that receives the

most frequent use. Since the impact determinations are based on each area of frequent human use, then the number of areas impacted would be calculated and an equivalent number of residential units would be calculated to assess the feasibility and reasonableness of any abatement measures. Equivalent number of residential units will be calculated by determining the average residential lot size for the vicinity and then dividing this into the non-residential area for a total amount of residential units. For example: if a park has an area of 87,120 square feet, and the average residential lot size is 60 feet by 200 feet or 12,000 square feet then we would use 8 equivalent residential units to assess the feasibility and reasonableness of a proposed abatement measure.

Activity Category D: Includes interiors of auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios. The impact determination will be based on the area of frequent human use; therefore the number of those areas that are impacted would be carried over to feasibility and reasonableness. For example: If a daycare center has 15 various areas of frequent human use (building and open space), but only 10 are impacted then 10 equivalent residential units would be used for the feasibility and reasonableness determination. An indoor analysis shall only be done after exhausting all reasonable outdoor analysis options. If there are no exterior areas that receive frequent human use then representative interior measurements may be appropriate if determined by DOT&PF. Permission will be obtained from property owner to take interior noise measurements at a designated receptor. Measurements will be taken with windows closed and open if possible. Traffic counts will be taken concurrent with the measurements.

Activity Category E: Exteriors of Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F or other developed lands that are less sensitive to highway noise. Noise measurements and predictions will be taken at a location that is representative of the exterior area that receives the most frequent use. The impact determination would be based on the total number of units within the complex, and/or the capacity limit of the facility. For example: If a hotel has 45 units and two meeting areas with a total capacity of 100 people each, then the number of receptors used for feasibility and reasonableness would be 200+ the 45 units.

Activity Category F: Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, ship-yards, utilities (water resources, water treatment, electrical), warehousing, and other land uses that are not sensitive to highway traffic noise. No highway noise analysis is required under 23 CFR 772 at Activity Category F land uses. For example, no noise analysis is required at locations that typically generate excessive levels of noise themselves or where the activities taking place on them are not considered noise

sensitive⁵) Proposals for designation of properties as Category F Activity Categories must be approved by the Environmental Impact Analyst assigned to the project.

Activity Category G: (Undeveloped lands that are not permitted) Land permitted for development (that is, a building permit has been issued on or before the date of public knowledge), that land shall be analyzed under the Activity Category for that type of development.

For land not permitted for development by the date of public knowledge (approval date of NEPA document or State Environmental Checklist), DOT&PF shall determine future noise levels pursuant to 23 CFR 772.17(a). The results shall be documented in the project environmental documentation and in the noise analysis report. The analysis should report the distance - measured from the proposed edge of the traveled way - to the Noise Abatement Criteria (NAC) for all exterior land use categories. Any noise abatement for such lands shall not be eligible for federal-aid participation.

DOT&PF DEFINITION OF “APPROACH THE NAC”

The DOT&PF defines “approach the NAC” as 1 dBA less than the NAC for Activity Categories A-E in Table 1 that is located in Appendix B of this policy.

A traffic noise impact may occur even if the future noise level is lower than the existing noise level. If the future noise level is 1 dBA less than or higher than the NAC for the activity category, then a noise impact exists.

DOT&PF DEFINITION OF “SUBSTANTIAL INCREASE OVER EXISTING NOISE LEVEL”

DOT&PF defines a “substantial increase over existing noise level” as 15 dBA over existing noise levels. A substantial increase is independent of the absolute noise level. A substantial increase over existing noise level is a noise impact, even if the future noise level does not approach or exceed the NAC.

The traffic noise analysis will identify all measurement sites with the predecessor capital letter M (i.e., M-1, M-2, M-3, etc.). All receptor sites where existing and future noise levels are being predicted and where noise measurements were not taken will be identified with the predecessor capital letter R (i.e., R-1, R-2, R-3, etc.). Receptors where noise impacts are predicted to exist will be identified by receptor identification number in the analyses report. Locations of the receptors will be identified on a map or

⁵ FAA does require noise analyses for certain types of airport projects, but this policy only applies to Highway Projects.

figure of appropriate scale and described in the text (physical location, address, GPS coordinates, etc.).

The following information will be identified in the noise analysis for each receptor:

- Receptor identification number
- Activity Category designation
- Specific noise abatement criteria for the receptor's activity category as modified by DOT&PF approach definition (i.e., For Activity Category B, the modified NAC would be 66dBA. For Activity Category E, it would be 71 dBA).
- Predicted existing noise level. It should be for the existing year of the analysis.
- Predicted future Design Year No-Build Noise Level
- Predicted future Design Year Build Noise Level for all reasonable alternatives
- Identification of whether a noise impact exists or will exist at this receptor in the future with and without the project.

ANALYSIS OF NOISE ABATEMENT MEASURES

A decision on whether to provide or not to provide a noise abatement measure must not be arbitrary or capricious. The basis for the decision must be documented and supportable, particularly if the decision is not to provide abatement and the affected residents want an abatement measure to be constructed. The decision must be based upon consistent and uniform application of this policy.

Noise abatement measures will be considered only when the existing or predicted future traffic noise levels approach or exceed the FHWA Noise Abatement Criteria (Table 1), or when the predicted future traffic noise levels (Design Year) of a build alternative results in a substantial increase over the existing traffic noise levels. DOT&PF considers a predicted noise level of 1 dBA below the FHWA Noise Abatement Criteria as the condition of "approach".

When traffic noise impacts are identified, then noise abatement shall be considered and evaluated for acoustic feasibility and reasonableness. On a federal Type I project, then the DOT&PF will construct it as a part of the project. For state Type I projects, if noise abatement is considered feasible and reasonable, then the Regional Environmental Manager will make a noise abatement recommendation to the Preconstruction Engineer. The Preconstruction Engineer will decide whether the recommended abatement measure will be constructed. Abatement will be provided on state funded projects only if the Preconstruction Engineer determines that the state funded appropriation can accommodate an expenditure on a noise abatement measure.

DOT&PF policy is that abatement for Activity Category A, B, C, D or E needs to be feasible and reasonable on their own merits. DOT&PF does not provide noise abatement measures for Activity Category F or G land uses unless it is necessary to

protect adjacent sensitive land uses (for example if there is an Activity Category F or G land use that is wedged into the project area that includes sensitive land uses, then by default it will be evaluated for abatement). Land uses not sensitive to highway traffic noise, and undeveloped lands will not be provided noise abatement.

Undeveloped land that is permitted for development (that is, a building permit has been issued on or before the date of public knowledge) will be analyzed under the Activity Category it has been permitted for. For example, if the undeveloped land is permitted to be developed for residential land use (Activity Category B), then it will be considered residential property in the analysis.

The following design principles from the *“Guide on Evaluation and Abatement of Traffic Noise, American Association of State Highway and Transportation Officials, 1993 and “FHWA Highway Noise Barrier Design Handbook”, Federal Highway Administration, December 2000* will be considered when determining whether to provide noise abatement at impacted receptors.

Noise barriers will be designed such that they do not pose a hazard to birds or other wildlife (i.e., clear panel barriers such as glass or plexiglass should not be used unless there is some means incorporated into the panel to prevent bird collisions).

FEASIBILITY AND REASONABLENESS ANALYSIS

The two required criteria to consider when evaluating the incorporation of noise abatement measures into a specific project are acoustic feasibility and reasonableness. A noise abatement measure will be determined acoustically feasible and reasonable as discussed below.

Acoustic Feasibility Criteria

Acoustic feasibility deals primarily with physics and engineering considerations (i.e., can a substantial noise reduction be achieved given the conditions of a specific location; is the ability to achieve noise reduction limited by factors such as topography, access requirements for driveways or ramps, the presence of cross streets, or other noise sources in the area).

1. Noise abatement measures are not feasible if a minimum of 5 dBA or more reduction cannot be achieved for at least 50 percent of the front row dwelling units. Noise abatement measures which do not achieve at least a 5 dBA reduction are not prudent expenditures of public funds as any less of a reduction is not easily detected by most people.

2. Noise abatement measures are not feasible if they create a safety hazard to the driving public, protected receptors or maintenance personnel. The Regional Environmental Manager will consult with the Design and Maintenance & Operations Sections when making this decision. The abatement measure should be consistent with the following general design principles:

- Noise abatement measures should be located beyond the recovery zone of the traveled way; if a noise abatement measure is within 30 feet of the traveled way, a traffic barrier may be warranted.
- Noise abatement measures should not block the recommended site distance (Alaska Highway Preconstruction Manual, Chapter 11) between vehicles and intersecting roadways or on/off-ramps.
- Protrusions on noise abatement measures near a traffic lane should be avoided.
- Facings on noise abatement measures that can become dislodged, or barrier components that could shatter during an accident, or facings that create excessive glare should be avoided.
- Access should be provided to all sides of noise abatement measures to allow for maintenance activities to take place.

All noise abatement measures should consider the design principles in the “*Guide on Evaluation and Abatement of Traffic Noise*”, AASHTO, 1993.

- a) Maintenance factors relating to replacement of materials damaged by impact, cleaning the noise barrier, and maintenance associated with adjoining landscape should be considered when determining feasibility.
- b) Barrier access points for emergencies or water sources needed during emergencies should be considered.
- c) Minimum setback distances and placement of noise abatement measures located at on/off-ramps and intersections should be based upon stopping sight distances, which depend on driver reaction time and deceleration rate.
- d) Placement of noise abatement measures should be a sufficient distance from the travel way to assure adequate space for storage of plowed snow and to assure that the abatement measure can withstand the additional loads that may result from blown snow being both thrown and piled up against the noise abatement measure.
- e) Noise abatement measure design should minimize shading highways in critical areas so that sunlight can melt ice or snow on the shoulders and travel lanes.

Reasonableness Criteria

Reasonableness is a more subjective criterion than feasibility. It implies that common sense and good judgment were applied in arriving at a decision. Reasonableness should be based on a number of factors, not just one criterion. FHWA noise regulations define three mandatory reasonableness factors that must be evaluated for a noise abatement measure to be considered reasonable. They are:

- A. Viewpoints of the property owners and residents of the benefitted receptors
- B. Cost Effectiveness
- C. Noise Reduction Design Goal

The DOT&PF considers these three mandatory reasonableness factors to determine reasonableness. The following optional reasonableness factors can only be used to increase the cost allowed only on state-funded projects:

- A. Date of development
- B. Length of time receivers have been exposed to highway traffic noise impacts
- C. Exposure to higher absolute traffic noise Levels
- D. Changes between existing and future build conditions
- E. Percentage of mixed zone development
- F. Use of noise compatible planning concepts by the local government

No single DOT&PF reasonableness factor shall be used to determine that a noise abatement measure is unreasonable.

1. Cost Effectiveness (federal mandatory criterion). The noise abatement measure cost is no more than \$32,000⁶ per receptor, based upon the design engineer's estimate. This is determined by counting all receptors (including owner-occupied, rental units, mobile homes, and businesses) benefitted by the noise abatement measure in any subdivision and/or given development, and dividing that number into the total cost of the noise abatement measure. A benefitted receptor is defined as the recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dBA. Each unit in a multi-family building will be counted as a separate receptor. Cost per benefitted receptor must be reanalyzed at a regular interval not to exceed 5 years.

When the design engineer determines abatement measure cost, the estimate will include all items necessary for the construction of the noise abatement measure. Examples of cost items that should be included are traffic control, drainage modification, foundations, retaining walls and right-of-way. Include a cost item

⁶ This figure was updated during DOT&PF 2009 development of a noise guideline to reflect inflation numbers of previous policies as well as updated with more current information that was provided by region offices.

only if it is directly related to the construction of the noise abatement measure⁷. If a necessary a project feature, such as a retaining wall is included, then that cost will not be added into the noise abatement construction cost estimate. If the project incorporates visual mitigation such as the use of a transparent barrier with surface texture, the additional cost will not be included in the abatement construction cost estimate for the purpose of determining reasonableness. Aesthetic treatments, such as artwork, re-vegetation, landscaping and barrier treatments will not be included in the abatement measure cost estimate for the purpose of determining reasonableness.

The cost per benefited receptor must be adjusted for inflation. Use the most recent annual composite price index available from the FHWA Office of Program Administration www.fhwa.dot.gov/programadmin/pricetrends.cfm. The latest price index that FHWA developed is from 2006. This will be used until FHWA provides more current index. In the event that FHWA does not provide a more current index, DOT&PF will use the 2006 index and adjust it for inflation as necessary. This will be accomplished by determining the ratio between the 2006 annual composite index (221.3) and the most recent annual composite index available at the time of the completion of the Noise Abatement Recommendation Worksheet and adjust the \$32,000 cost accordingly. DOT&PF will also take into consideration the actual costs associated with project costs completed within the time since 2006 in determining a more accurate cost per benefited receptor.

2. Views of the property owners and residents (federal mandatory criterion) that benefit from noise abatement measures. To determine the desires of benefited households and property owners, DOT&PF will contact all benefited households and property owners to determine the level of interest for a noise abatement measure. This contact could be in the form of a mail out questionnaire, phone call survey, or door to door interviews whichever is most practical and cost effective for the size of the proposed project. At least 60 percent of households and property owners surveyed must want the noise abatement measure. The term "household" is used instead of residents because a single dwelling unit could have more or less inhabitants than another. The idea is not to give a dwelling unit with multiple inhabitants more consideration than one with fewer inhabitants. Also, property owners are also included as the dwelling units might be rentals. The property owner should have a say in whether noise abatement is provided to their property.

3. Noise reduction design goal (federal mandatory criterion). The DOT&PF noise reduction design goal is 7dBA. 50 percent or more of the benefitted receptors in the first row of structures must achieve this design goal for the noise abatement

⁷ DOT&PF will need to provide proof to the FHWA Division Office that the cost of any of these are solely and directly related to the noise abatement measure

to be considered reasonable. The DOT&PF goal is to provide more than the minimum 7 dBA reduction to a majority of the benefitted receptors in the first row of structures. This design goal is not extended to benefitted receptors beyond the first row of structures, as the further one gets from the noise barrier the more difficult it is to obtain a 7 dBA reduction.

The following criteria only apply to those state funded projects:

1. Development vs. Highway Timing (State funded only criterion). At least 50 percent of impacted receptors in the development (subdivision, apartment complex, etc.) were built before initial construction of the highway. The date of development is an important part of the determination of reasonableness. More consideration is given to developments that were built before the highway was built.
2. Development Existence (State funded only criterion). At least 50 percent of impacted receptors in the development have existed for at least 10 years. More consideration is given to residents who have experienced traffic noise impacts for long periods of time.
3. Absolute Predicted Build Noise Level (State funded only criterion). The predicted future build noise levels are at least 66 dBA. More consideration should be given to areas with higher absolute traffic noise levels. Absolute noise levels typically found along highways, 60-75 dBA, are deemed undesirable and cause complaints from adjacent residents. In general, the higher the absolute noise, the more complaints.
4. Relative Predicted Build Noise Level (State funded only criterion). The predicted future build noise levels are at least 10 dBA greater than the existing noise levels. More consideration is given to areas with larger increases over existing noise levels. This gives greater consideration to projects for highways on new location and major reconstruction than it does to projects of smaller magnitude. For most people, a 3 dBA increase is barely perceptible, a 5 dBA increase is readily perceptible, and a 10 dBA increase doubles the perceived loudness of the noise.
5. Build vs. No-Build Noise Levels (State funded only criterion). The future build noise levels are at least 5 dBA greater than the future no-build noise levels. More consideration should be given to areas where larger changes in traffic noise levels are expected to occur if the project is constructed than if it is not.

6. Land use (State funded only criterion). Land use is not changing rapidly and there are local ordinances or zoning in place to control the new development of noise sensitive land uses adjacent to transportation corridors.

Noise Abatement Recommendation Worksheet

A noise abatement recommendation worksheet (Appendix B) will be filled out for each noise receptor in the noise study. The Regional Environmental Manager will approve and sign the worksheets. If an abatement measure is determined not feasible, then the reasonableness analysis section of the Worksheet does not need to be completed. Likewise, if it determined that the abatement measure is not reasonable, the feasibility portion of the checklist will not have to be filled out. DOT&PF will only implement a noise abatement measure if it has been determined both feasible and reasonable. The Regional Environmental Manager will recommend or not recommend that a noise abatement measure be implemented. The recommendation worksheet will be submitted to the Project Manager (PM) who will sign the recommendation worksheet. If the PM does not approve the recommendation then the Preconstruction Engineer will resolve the dispute. The Preconstruction Engineer only needs to sign the noise abatement recommendation worksheet if quiet pavements are recommended as abatement on State-funded projects. The Regional Environmental Manager will ensure that the recommendation is included in the project's environmental document.

NOISE ANALYSIS REPORT

The results of the noise analysis will be presented in noise analysis report. The report will discuss the purpose of the study, the methods utilized, the results of the study, any proposed mitigation recommendations and a statement of likelihood. The noise analysis will be appended to the environmental document. The following general format will be followed for noise analysis reports.

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DOT&PF NOISE POLICY

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During the detailed design of the proposed project, the recommendations for noise abatement made in the environmental document will be reevaluated to determine if they are still valid. If it is determined that any noise abatement measure recommendation is no longer valid, then the affected public will be notified and the environmental document reevaluated or supplemented as appropriate.

NOISE ABATEMENT MEASURE REPORTING PER 23 CFR772.13(f)

DOT&PF will maintain an inventory of all constructed noise abatement measures and report to FHWA per the requirements of 23 CFR 772.13(f). The inventory shall include the following parameters:

- 1) Type of abatement and cost (overall cost, unit cost per/sq. ft.);
- 2) Average height;
- 3) Length;
- 4) Area;
- 5) Location (state, city, route);
- 6) Year of construction;
- 7) Average insertion loss/noise reduction as reported by the model in the noise analysis; NAC category(s) protected;
- 8) Material(s) used (precast concrete, berm, lock, cast in place concrete, brick, metal, wood, fiberglass, combination, plastic (transparent, opaque, other); features (absorptive, reflective, surface texture); foundation (ground mounted, on structure); project type (Type I, other federal funding, state funding, local funding).

INFORMATION REQUIRED FOR NEPA DECISION

Prior to CE approval or issuance of a FONSI or ROD for a Type I project, the DOT&PF must identify,

- The noise abatement measures that are feasible and reasonable, and are likely to be incorporated into the project; Noise impacts for which no abatement appears to be feasible and reasonable; and
- The NEPA documentation shall identify the locations where noise impacts will occur, where noise abatement is feasible and reasonable, and the locations that have no feasible and reasonable abatement.

Statement of likelihood The statement of likelihood should identify the preliminary locations of feasible and reasonable abatement and a statement that the final noise abatement recommendation will be made after the final design and public involvement processes are complete. This statement of likelihood will be included in all NEPA documentation and noise analyses reports:

“As a result of the feasibility and reasonableness analysis conducted as a part of the environmental document, the DOT&PF proposes to incorporate the following noise abatement measures (type, locations) into the proposed project. These noise abatement recommendations are preliminary and based upon the feasibility and reasonableness analysis completed at the time the environmental document. Final recommendations for noise abatement will be based upon the feasibility and reasonable analysis conducted during the detailed design of the project. Any changes in the final abatement recommendations will result in the reevaluation of the approved NEPA document and the solicitation of additional public comment”.

THIRD PARTY FUNDING OF NOISE ABATEMENT

For federal projects, third party funding CANNOT be used to make up the difference in cost between the reasonable cost allowance and the actual cost. Third party funding can only be used to pay for additional features such as landscaping, aesthetic treatments, etc. for noise barriers that meet cost-effectiveness criteria.

FEDERAL PARTICIPATION FOR TYPE I FEDERAL PROJECTS

Federal Funds may be used for Noise Abatement measures when traffic noise impacts have been identified, and abatement measures have been determined to be feasible and reasonable pursuant to 23 CFR 772.13(d).

The following noise abatement measures may be considered for incorporation into a Type I project to reduce traffic noise impacts. The costs of such measures may be included in federal-aid participation project costs with the federal share being the same as that for the system on which the project is located.

- (1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise abatement measure.
- (2) Traffic management measures including, but not limited to, traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive lane designations.
- (3) Alteration of horizontal and vertical alignments.

(4) Acquisition of real property or interests therein (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise.

(5) Noise insulation of Activity Category D land use facilities listed in Table 1.

Post-installation maintenance and operational costs for noise insulation are not eligible for federal-aid funding.

Quieter pavement is currently not listed in federal regulations (23 CFR 772) as a noise abatement measure for which federal funding may be used. Consequently, quiet pavements cannot be used as noise abatement on federal-aid projects.

DOT&PF may consider quieter pavement to reduce traffic noise on a state-funded project. However, the decision to provide such a measure will be decided by the Preconstruction Engineer as described elsewhere in this policy.

INFORMATION FOR LOCAL OFFICIALS

In an effort to prevent future traffic noise impacts on currently undeveloped lands and to maintain compatibility between highways and future development, DOT&PF will inform local officials whose jurisdiction is within the highway project of the best estimation of future noise levels for both developed and undeveloped properties in the immediate vicinity of the project. In addition, information on federal-aid, non-eligibility of noise abatement for lands permitted for development after the date of public knowledge will also be provided to local officials. This usually will be accomplished by providing a copy of either the project's noise analysis or the approved environmental document to the local government. This information may also be provided through the plat review process.

CONSTRUCTION NOISE

For all Type I Federal and State Projects, it is the policy of DOT&PF to:

- (a) Identify land uses or activities that may be affected by noise from construction of the project. The identification is to be performed during the project development studies.
- (b) Determine the measures that are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community. This determination shall include a weighing of the benefits achieved and the overall adverse social, economic, and environmental effects and costs of the abatement measures.
- (c) Incorporate the needed abatement measures in the plans and specifications.

The Regional Environmental Manager will work with the Design Engineering Manager to reduce construction noise by requiring the contract specifications include the statement that all construction equipment be properly maintained and have mufflers in acceptable working condition. In the event that construction noise complaints occur during the

course of construction activities, measures will be taken by the Construction Project Engineer to resolve the problem to the extent practical. Measures might include locating stationary construction equipment as far from nearby noise sensitive receivers as possible, shutting off idling equipment, rescheduling construction operations to avoid periods of noise annoyance, notifying nearby residents whenever extremely noisy operations will be occurring, and installing permanent or portable acoustic abatement measures around stationary construction noise sources.

In some cases there are no alternatives to conducting construction activities during the night, on weekends, or on holidays. When deemed necessary, the Department will make every effort to notify the public prior to conducting these activities. The public involvement in these cases should occur during design and throughout the construction duration. In some communities, local ordinances may restrict noise generating activities. Where this is the case, the Department and its contractor will comply with local noise ordinances and acquire any necessary noise permits for these activities prior to their initiation.

STATE-FUNDED PROJECTS

In general, the same methods are followed in the identification of noise impacts for state-funded projects and federal-aid projects. Results of noise analyses will be documented in the State Projects Environmental Checklist. If noise abatement is determined to be feasible and reasonable, then the Regional Environmental Manager will make a recommendation to the Preconstruction Engineer. The Preconstruction Engineer will decide whether the recommended abatement measure will be constructed. Abatement will be provided only if it meets the feasibility and reasonableness criteria of this policy and the state funded appropriation can accommodate this expenditure.

SUPERCEDEENCE

This policy is effective upon signature and replaces the Department's March 1996 Noise Policy and the April 2009 Traffic Noise Abatement Guidance. This policy is applicable to any project that does not have an approved NEPA document prior to its implementation.

WEBLINKS as of November 2010.

<http://www.fhwa.dot.gov/environment/noise/>

FHWA *Highway Traffic Noise: Analysis and Abatement Guidance* June 2010 is available at the following website

http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/guidancedoc.pdf

Noise Model Web site at the following URL <http://www.fhwa.dot.gov/environment/noise/index.htm>.

APPENDIX A
FHWA 23 CFR 772,

APPENDIX B

NOISE ABATEMENT CRITERIA TABLE

FHWA NOISE ABATEMENT CRITERIA from 23 CFR 772 Table 1

Hourly A – Weighted Sound levels decibels (dBA)⁸

<u>Activity Category</u>	<u>Activity Leq(h)</u>	<u>Criteria⁹ L10</u>	<u>Evaluation Location</u>	<u>Description of Activity Category</u>
A	57	60	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ¹⁰	67	70	Exterior	Residential.
C ³	67	70	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	55	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	75	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A–D or F.
F	None	None	None	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	None	None	None	Undeveloped lands that are not permitted.

⁸ Either Leq(h) or L10(h) (but not both) may be used on a project

⁹ The Leq(h) or L10(h) Activity Criteria

¹⁰ Includes undeveloped lands permitted for this activity category.

APPENDIX C

Feasibility and Reasonableness Worksheet Example HIGHWAY TRAFFIC NOISE ABATEMENT FOR PROJECT:

Receiver ID No.(s):

Location/Description:

Activity Category type:

Noise Abatement Criteria for this Activity Category(Leq) (Table 1 DOT&PF Noise Policy):

Existing Noise Level (Leq):

Future Build Noise Level (Leq):

Future No-Build Noise Level:

Has a noise impact been identified (If yes continue filling out worksheet. If no, no noise abatement is required. Sign worksheet and recommend no noise abatement)?: Yes No

Highway Traffic Noise Abatement Feasibility and Reasonableness Analysis:

Feasibility

Is the proposed noise abatement measure acoustically feasible?	Yes	No
Is the proposed noise abatement measure engineering feasible	Yes	No

Reasonableness

Is the proposed noise abatement measure considered reasonable?	Yes	No
--	-----	----

Federal Mandatory Factors

- 1 **Cost Effectiveness.** Is the abatement measure cost effective?
- 2 **Views of Benefited Residents and Property Owners.** Do at least 60 percent of the impacted residents and property owners surveyed desire noise abatement?
- 3 **Noise reduction design goal?** Does the noise abatement measure provide 7 dBA reduction to 50 percent or more of the benefitted receptors in the first row of structures?

DOT&PF Mandatory Factors (State funded only)

4. **Development vs. Highway Timing.** Were at least 50 percent of benefited receptors in the development built before highway construction?
- 5 **Development Existence.** Have at least 50 percent of benefited receptors in the development existed for at least 10 years?
- 6 **Absolute Predicted Build Noise Level.** Are the predicted future build noise levels at least 66dBA?
- 7 **Relative Predicted Build Noise Level.** Are the predicted future build noise levels at least 10 dBA greater than the existing noise levels?
- 8..**Build vs. No-Build Noise Levels.** Are the future build noise levels at least 5 dBA greater

than the future No-Build noise levels?

9..Land Use. Is the land use changing rapidly and are there local ordinances or zoning in place to control the new development of noise sensitive land uses adjacent to transportation corridors?

Is Noise Abatement recommended for this impacted receptor(s)?

What type of noise abatement is recommended? (Note – The use of quiet pavements is not an approved noise abatement measure on Federal- Aid Projects. Quiet pavements can be utilized as an abatement measure on State-funded projects with the approval of the Regional Preconstruction Engineer)

What is the basis for this recommendation?

Regional Environmental Manager

Date

DOT&PF Project Manager

Date

I have determined that the use of quiet pavement to mitigate noise impacts on a state-funded project is within the cost constraints of the legislative appropriation for the proposed project.

Preconstruction Engineer ¹¹

Date

¹¹ The Preconstruction Engineer’s signature is only required if quiet pavements are recommended on State-funded projects. The Preconstruction Engineer must determine whether the incorporation of quiet pavements into the State-funded project is within the cost constraints of the legislative appropriation



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

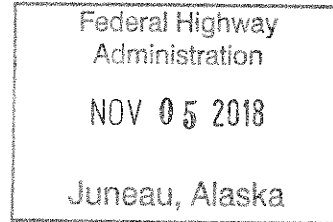
**Department of Transportation and
Public Facilities**

Statewide Design & Engineering Services
Environmental Section

3132 Channel Drive
Juneau, Alaska 99811-2500
Main: 907-465-2975
Toll free: 800-467-6955
Fax: 907-465-3124

November 1, 2018

Sandra Garcia-Aline
P.O. Box 21648
Juneau, AK 99802-1648



Reference: DOT&PF Noise Policy

Dear Mrs. Garcia-Aline,

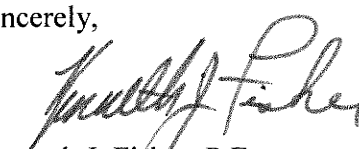
The Alaska Department of Transportation and Public Facilities (DOT&PF) hereby submits a copy of the DOT&PF Noise Policy dated October 2018 for review and approval by the Federal Highway Administration Alaska Division. We would like to thank your staff and Aileen Varela-Margolles of your Washington D.C. office for your review and comments on previous drafts. This policy is an update of DOT&PF's April 2011 policy and in response to changes in 23CFR 772. It is our intent that this Noise Policy will go into effect upon your approval.

Your approval of the attached noise policy is hereby requested. If you have any questions or wish to discuss further do not hesitate to contact Douglas Kolwaite of my office.

Approved: _____

(Sandra Garcia-Aline, Division Administrator, FHWA Alaska Division)

Sincerely,


Kenneth J. Fisher, P.E.
Chief Engineer

Enclosure: DOT&PF Noise Policy (October 2018)

"Keep Alaska Moving through service and infrastructure."

Alaska Department of Transportation & Public Facilities

Noise Policy

November 2018



ACRONYMS USED IN THIS DOCUMENT

ADT: Average Daily Traffic

ANSI: American National Standards Institute

BR: Benefitted Receptor

CE: Categorical Exclusion (as defined in 23 CFR Part 771)

CEI: Cost Effectiveness Index

CFR: Code of Federal Regulations

CPI: Consumer Price Index

dB: Decibel

dBA: Decibel when referring to an A-weighted sound level

DHV: Design Hourly Volume (for traffic)

DOT&PF: Alaska Department of Transportation and Public Facilities

EA: Environmental Assessment (as defined in 23 CFR 771)

EIS: Environmental Impact Statement (as defined in 23 CFR 771)

FHWA: Federal Highway Administration

FHWA TNM: Federal Highway Administration Traffic Noise Model

FONSI: Finding of No Significant Impact (as defined in 23 CFR 771)

LOS: Level of Service

L_{eq} : Equivalent sound level in dBA

$L_{eq}(h)$: One-hour equivalent sound level in dBA

NAC: Noise Abatement Criterion

NEPA: National Environmental Policy Act

NSA: Noise Study Areas

RCNM: Road Construction Noise Model

REM: Regional Environmental Manager

ROD: Record of Decision (as defined in 23 CFR 771)

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1.0 INTRODUCTION

This document contains the Alaska Department of Transportation and Public Facilities (DOT&PF) policy on highway traffic noise and construction noise as it affects the human environment. The policy describes DOT&PF's implementation of the requirements of the Federal Highway Administration (FHWA) Noise Standard at Title 23 Code of Federal Regulations (CFR) Part 772 (see Appendix A.) The policy also addresses how traffic noise is considered on state funded projects. DOT&PF developed this policy which was then, reviewed and approved by FHWA, and is considered effective as of the date on the title page. This policy replaces DOT&PF's Noise Policy dated April 2011.

During the rapid expansion of the Interstate Highway System and other roadways in the 20th century, communities began to recognize highway traffic noise and construction noise as important environmental impacts. In the 1972 Federal-aid Highway Act, Congress required FHWA to develop a noise standard for new Federal-aid highway projects. While providing national criteria and requirements for all highway agencies, the FHWA Noise Standard gives highway agencies flexibility that reflects state-specific attitudes and objectives in approaching the problem of highway traffic and construction noise. This document contains DOT&PF's policy on how highway traffic and construction noise impacts are defined, how noise abatement is evaluated, and how noise abatement decisions are made.

The FHWA Noise Standard requires noise abatement measures be considered when traffic noise impacts are identified for Type I federal projects, as defined in 23 CFR 772.5. Noise abatement measures found to be feasible and reasonable must be constructed for Type I federal projects. Feasible and reasonable noise abatement measures are eligible for federal-aid participation at the same ratio or percentage as other eligible project costs. As part of NEPA's requirement to consider the environmental effects of federally funded projects, the impact determinations and abatement considerations will be used to support development of the NEPA document.

2.0 PURPOSE

This policy outlines the DOT&PF program to implement the FHWA Noise Standards found in 23 CFR 772. These standards include traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials. Where FHWA has given DOT&PF flexibility in implementing the standard, this policy describes the DOT&PF approach to implementation. This policy also defines how the DOT&PF addresses traffic noise in State-funded projects.

The State of Alaska does not have any traffic noise regulations. It is the DOT&PF policy to follow the federal standards for traffic noise prediction requirements, and noise analyses. Federal noise abatement criteria are followed to determine whether noise

impacts exist and if abatement is feasible and reasonable, however, the decision to provide noise abatement on State-funded projects follows slightly different procedures (see Section 9.0 of this policy, *State-Funded Projects*.)

3.0 DEFINITIONS

A-Weighted Sound Level: The sound level in decibels measured with a frequency weighting network corresponding to the A-scale on a standard Type 1 or 2 sound level meter as specified by ANSI S1.4-1983 (R2006)/ANSI S1.4a-1985 (R2006,) American National Standard Specification for Sound Level meters (or latest version.) This is the most widely used weighting system for assessing transportation-related noise because it best approximates sound as heard by the normal human ear.

Acoustically Representative: A receptor location that represents the same land use category and magnitude of noise as another location. Proper acoustical representation includes nearly the same roadway geometry, topography, traffic flow, and distance from source to receptor.

Benefited Receptor: A receptor that receives at least a 5dBA noise reduction from an abatement measure.

Common Noise Environment: A group of receptors within the same Activity Category in 23 CFR 772, Table 1 that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features. Generally, common noise environments occur between two secondary noise sources such as interchanges, intersections, and cross-roads.

Date of Development: The date at which land is permitted for development.

Date of Public Knowledge: The date of approval of the Categorical Exclusion (CE), the Finding of No Significant Impact (FONSI), the Record of Decision (ROD), or in the case of a state-funded project, approval of the State Environmental Checklist.

Decibel (dB): A unit of sound pressure level which denotes the ratio between two sound pressures; the number of decibels is 10 times the base 10 logarithm of this ratio.

Design Hourly Volume (DHV): The 30th highest hourly volume of the future year traffic assigned for the design, expressed in vehicles per hour.

Design Year: The future year used to estimate the probable traffic volume for which a highway is designed. This is determined by adding the project's design life to the anticipated date of construction completion.

Existing Noise Levels: The representative worst noise hour level resulting from the combination of natural and mechanical sources and human activity usually present in a particular area.

Feasibility: The combination of acoustical and engineering factors considered in the evaluation of a noise abatement measure.

Federal-aid Project: Any project utilizing federal funds for one or more phases (*i.e.*, Environmental, Design, Right of Way, or Construction) or that is otherwise subject to federal approval.

Field Measurement Point: Physical noise measurement site within the noise study boundary used to validate TNM and document existing noise levels. A field noise measurement point may also serve as a receiver in the TNM.

First Row Receptors: Closest residences or businesses impacted by noise from the highway facility.

Impacted Receptor: A noise-sensitive location for which a traffic noise impact has been calculated.

Leq: The equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period, with $L_{eq}(h)$ being the L_{eq} for one hour.

Multifamily Dwelling: A residential structure containing more than one residence. Each residence with a private exterior space in a multifamily dwelling shall be counted as one receptor when determining impacted receptors and benefited receptors and determining barrier reasonableness.

Noise Analysis Boundary: Limits of analysis for the proposed project(s). Boundaries typically extend 500 feet on either side of a proposed projects improvements; however, some geometric conditions and traffic volumes/mixes may cause noise impacts beyond 500 feet. The boundaries must encompass all potential noise impacts.

Noise Barrier: A physical obstruction constructed between the highway noise source and the noise sensitive receptor(s) that lowers the noise level by reducing the transmission of sound, including stand-alone noise walls, noise berms (earth or other material), and combination berm/wall systems.

Noise Contour: A line on a map representing points of equal sound level (similar to ground elevation contour lines on a topographic map.)

Noise Reduction Design Goal: The minimum desired sound level reduction, determined by calculating the difference between future build noise levels with and without abatement. The DOT&PF noise reduction design goal is 7 dBA.

Permitted: A definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of a building permit.

Property Owner: An individual or group of individuals that holds a title, deed, or other legal documentation of ownership of a property or a residence.

Reasonableness: The combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure.

Receiver: A modeling point in the FHWA Traffic Noise Model (TNM) at which sound levels are predicted. An individual receiver may represent multiple receptors.

Receptor: A discrete or representative location (such as a residence or an activity area on a parcel of land) being studied for noise impacts.

Residence: A dwelling unit, such as a single family home or each dwelling unit in a multifamily dwelling.

Resident: Someone who resides at a dwelling unit. May not necessarily be the owner of the dwelling unit.

State-funded Project: A project that is solely funded by state monies appropriated by the Alaska State Legislature and requires no federal approvals for implementation.

Statement of Likelihood: A statement provided in the environmental clearance document based on the feasibility and reasonableness analysis completed at the time the environmental document is being approved.

Substantial Noise Increase: One of two types of highway traffic noise impacts. For a Type I project, DOT&PF defines it as an increase in design year noise levels of 15 or more dBA over the existing noise level.

Traffic Noise Impacts: Design year build condition noise levels that create a substantial noise increase (defined above) over existing noise levels or design year build condition noise levels that approach or exceed the Noise Abatement Criteria (NAC) listed in Table 1 in 23 CFR 772 for the future build condition. The DOT&PF defines “approach” as one dBA below the NAC.

Type I Project: As defined in 23 CFR 772:

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:
 - (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,

- (3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- (4) The addition of an auxiliary lane, except when the auxiliary lane is a turn lane; or,
- (5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- (6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
- (7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
- (8) If a project is determined to be a Type I project under this definition, the entire project area as defined in the environmental document is a Type I project.

Type II Project: A Federal or Federal aid highway project for noise abatement on an existing highway. For a Type II project to be eligible for Federal-aid funding, the highway agency must develop and implement a Type II program in accordance with section 772.7(e). DOT&PF does not have a Type II program.

Type III Project: A Federal or Federal aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

Worst Noise Hour: A period of 60 minutes within a 24-hour day that reflects the noisiest hour resulting from the maximum amount of traffic traveling at the greatest speed. The worst noise hour may be when the vehicle mix is dominated by truck traffic rather than a high volume of automobile traffic.

4.0 APPLICABILITY

This Noise Policy applies to all Federal or Federal Aid Highway Projects authorized under Title 23, United States Code; therefore, this Noise Policy applies to any highway or multimodal project that:

1. Requires FHWA approval regardless of funding sources, or
2. Is funded with Federal Aid highway funds. This includes Federal or Federal-aid projects that are administered by Local Public Agencies as well as Alaska DOT&PF.

All projects without an approved noise report before the 2018 Noise Policy update adoption date shall use the 2018 Noise Policy update. Projects that have an approved noise report under the 2011 Noise Policy may continue to use the existing noise report or prepare a new noise report using the 2018 Noise Policy update. Projects that have an approved noise report under the 2011 Noise Policy have three years from the adoption date of the 2018 Noise Policy update to obtain an Authority to Proceed with Construction; otherwise, the noise report shall be updated to conform to the 2018 Noise Policy update.

4.1 Type I Projects

The requirements of this policy apply uniformly and consistently to all Type I federal projects, Type I State-funded projects (see Section 9.0 of this policy), and Type I Toll Authority projects within the State of Alaska. If a project is determined to be a Type I project under the definition outlined in 23 CFR 772.5, then the entire project area as defined in the environmental document is a Type I project.

4.2 Type II Projects

DOT&PF has elected not to participate in the voluntary Type II noise program; therefore, no noise analyses will be completed for Type II projects. Type II projects are not discussed further in this policy.

4.3 Type III Projects

Type III projects are those projects that neither meet the definition of a Type I or Type II project nor require a noise analysis or consideration of noise abatement. However, it may be necessary to consider conducting a construction noise analyses in certain circumstances (*e.g.*, pile driving near residences.) Construction noise is discussed in Section 8.0 of this policy.

5.0 ANALYSIS OF TRAFFIC NOISE IMPACTS

It is important to determine early on in project scoping if a noise analysis is necessary, in order to accurately plan a project timeline.

5.1 Minimum Qualifications for Noise Analysts

DOT&PF highway traffic noise analyses must be performed by qualified personnel who have successfully completed training in the area of highway noise analysis and are proficient in the use of the latest version of the FHWA-approved traffic noise modeling software. These personnel must have experience conducting noise analysis studies for highway transportation projects and have a working knowledge of this policy and the regulations outlined in 23 CFR 772.

5.2 General Requirements for All Type I Projects

All Type I projects require a noise analysis; however, projects may not require the same level of analysis. This policy describes three levels of analyses:

- **Narrative Analysis** – a non-quantitative analysis of noise impacts where noise impacts are not anticipated.
- **Screening Analysis** – a streamlined quantitative analysis where noise impacts are unlikely or abatement actions are clearly not feasible and/or reasonable.

- Detailed Analysis – a comprehensive quantitative analysis where noise impacts are possible and noise abatement may be feasible and reasonable.

Coordination with the Statewide Environmental Office (SEO) is required before a narrative or screening analysis is conducted. Failure to coordinate with the SEO may result in a need to reanalyze the project using a detailed analysis. There are limitations to the narrative and screening procedures, and they are not applicable to all projects. The appropriate level of noise analysis will depend on the presence of noise sensitive land uses (existing or permitted), probable occurrence of highway traffic noise impacts, the potential for noise abatement measures, and/or noise-related public controversy. The levels of analysis are described in detail in Sections 5.4 through 5.6 of this policy.

For Type I projects, a traffic noise analysis is required for all build alternatives under detailed study in the NEPA process. All reasonable alternatives that have been carried forward for detailed analysis and were not rejected as unreasonable during the alternatives screening process will be analyzed for noise impacts. For Environmental Impact Statements or other studies that will examine broad corridors, the appropriate scope and methodology of the noise analysis should be discussed with participating agencies early in the project planning process.

A Type I traffic noise analysis generally consists of the following steps, which are described in more detail in subsequent sections of this policy:

1. Identify noise analysis boundaries and receptors by land use Activity Category (Section 5.3) and distance to the edge of the closest travel lane of the proposed project;
2. Determine existing noise levels at a representative subset of receptors;
3. Predict future “build” noise levels at a larger representative subset of receptors. Predict future “no-build” noise levels for the proposed project;
4. Determine traffic noise impacts;
5. Evaluate abatement feasibility and reasonableness if there are traffic noise impacts;
6. Address coordination with local officials;
7. Address construction noise; and
8. Prepare the noise analysis report (Section 6.7.)

Noise impact modeling and abatement evaluation/design for DOT&PF projects require use of the latest approved version of the FHWA Traffic Noise Model (FHWA TNM) or another model determined by FHWA to be consistent with the methodology of the FHWA TNM, pursuant to 23 CFR 772.9(a.)

If any segment or component of an alternative meets the definition of a Type I project, then the entire alternative is considered to be Type I and is subject to these noise analysis requirements. The noise analysis boundaries will be consistent with project limits, from the beginning of the project to the end of the project based on logical termini for that specific project (BOP to EOP).

5.3 Land Use Activity Categories

Federal land use activity categories are defined in 23 CFR 772. DOT&PF has accepted the FHWA definition of these activity categories (Appendix B, Table 1.) Noise analyses must address each activity category present within the noise analysis boundaries. If undeveloped land has been permitted for development (*i.e.*, a building permit has been issued on or before the date of public knowledge,) that land should be assigned to the appropriate activity category and analyzed in the same manner as developed lands in that category.

Activity Category A: Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.

Activity Category B: Residential (single-family and multi-family homes.) Noise receivers should be located in exterior areas that receive frequent human use (*i.e.*, patios, balconies, playgrounds, gardens, etc.) When an area of frequent use cannot be determined, an area mid-way between the residence and the right-of-way line should be chosen. For residences and structures that face the highway, choose an area of frequent use in the front, such as a front door landing. For apartment buildings, second-floor or higher balconies should be used in addition to ground floor units. For any shared-use exterior areas, the number of residential equivalents will be equal to the total number of dwelling units in multi-family building(s).

Activity Category C: Exterior areas of non-residential lands such as schools, parks, cemeteries, etc., as listed in Appendix B. Receivers should be located in areas that receive the most frequent human use and represent the typical use of the area. Since impact determinations are based on each area of frequent human use, the number of areas impacted should be calculated and an equivalent number of residential units should then be calculated to assess the feasibility and reasonableness of abatement measures. The equivalent number of residential units is calculated by determining the average residential lot size for the vicinity and dividing it into the non-residential area, for a total number of residential units. For example: if a park has an area of 87,120 square feet, and the average residential lot size is 60 feet by 200 feet, or 12,000 square feet, use 8 equivalent residential units to assess the feasibility and reasonableness of a proposed abatement measure. Receiver placement for non-residential use sites is similar to that of the residential analysis. Receivers should be placed at the closest location to the highway right of way (ROW) line where outdoor activity normally occurs to determine if the NAC is exceeded. In addition, receivers should be placed at locations away from the ROW line to determine the extent of impact and to consider sensitive receptors if the NAC are exceeded at the ROW line.

Activity Category D: Interiors of certain Category C facilities, such as those listed in Appendix B. Interior receptor locations should only be used if there are no reasonable

exterior (Category C) receptor options. Only consider the interior levels at these land uses after fully completing an analysis of any outdoor activity areas or determining that exterior abatement measures are not feasible or reasonable. The 52 dB(A) criteria for the category only apply to the interior areas of this category.

An interior analysis will only be performed after exhaustion all exterior options.

This will involve:

1.) identify the expected noise reduction due to the composition of the building envelope: Table 6.1 found in the FHWA publication HEP-18-065, Noise Measurement Handbook Final Report (2018)

www.fhwa.dot.gov/environment/noise/measurement/handbook.cfm#toc492990722

2.) Determine if interior noise levels should assume an open-window or closed window conditions; Open window should be assumed unless there is reliable information that the windows are in fact kept closed almost all of the time while the facility is in use.

3.) If the expected reductions cannot be determined as identified in #1 or #2, physical measurements of the amount of noise reduction provided by the building envelop will be conducted consistent with methodology found in the FHWA publication HEP-18-065, Noise Measurement Handbook Final Report (2018)

www.fhwa.dot.gov/environment/noise/measurement/handbook.cfm#toc492990722

Activity Category E: Exteriors of developed lands that are less sensitive to highway noise that are not included in Categories A-D of F. Noise measurements will be taken and predictions will be made at locations that receive the most frequent use. Category E are specifically excluded from Category D and no interior noise analysis is required. The FHWA research publication A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations shall be used to assess whether noise abatement is feasible and/or reasonable.

www.fhwa.dot.gov/environMent/noise/noise_barriers/abatement/reasonableness_2009/met02.cfm

Activity Category F: Land uses that are not sensitive to highway noise (examples listed in Appendix B.) No highway noise analysis is required under 23 CFR 772 for Activity Category F land uses. The noise analysis report should identify any Category F land uses by name, location, and type of land use.

Activity Category G: Undeveloped lands that are not permitted. Land permitted for development (*i.e.*, a building permit has been issued on or before the date of public knowledge) shall be analyzed under the Activity Category for that type of development. When possible, use the filed plat to choose receptor locations representing the exterior

areas of frequent human use. For residential plats, determine if each lot represents a single-family or multifamily dwelling. Choose representative receptor locations for second row residences as well (these receptors may be grouped two or three at a time.)

For lands not permitted for development by the date of public knowledge, DOT&PF shall determine future noise levels pursuant to 23 CFR 772.17(a). For detailed noise analyses, this analysis should report (at a minimum) the distances from the proposed edge of the near travel lane out to where worst hour $L_{eq}(h)$ levels of 60 and 64 dBA are modeled to occur. The results shall be documented in the project environmental documentation and in the noise analysis report, when applicable. Federal participation in noise abatement measures will not be considered for Category G lands unless another future Type I project is planned adjacent to such lands.

5.4 Narrative Analysis for Type I Projects

A narrative analysis is a qualitative analysis that may be completed for Type I projects where noise-related impacts are not anticipated. If there are no receptors that could potentially be exposed to traffic noise impacts, a narrative analysis is appropriate, and no further analysis is required. If there are receptors that could potentially be exposed to traffic noise impacts, and the project has the potential to adversely affect the acoustic environment based on an evaluation of the following factors, a quantitative analysis (i.e., screening or detailed analysis) is required and a narrative analysis is not applicable.

- The identification of any existing activities, developed lands, and undeveloped lands for which development is permitted which may be affected by noise from the proposed project;
- Change of traffic volume (greater than 10%);
- Change of traffic composition (increased truck volumes);
- Change of traffic speed (greater than 10 miles per hour);
- Change of geometric relationships (either horizontal or vertical) between the roadway facility and receptors;
- Projects on new location;
- Change in distribution of traffic patterns; and/or;
- Public controversy based on noise-related issues or perceptions.

It is impossible to identify and account for every special consideration that may arise on a specific highway project and address it in the corresponding noise analysis. Therefore, the list above is to be used as a guide and not considered inclusive.

A narrative analysis will consist of a discussion of the proposed project, its relationship to receptors (if present) and why further analysis is not required. If no receptors are present, a brief statement should be included that summarizes the fact that there are no noise-sensitive land uses within the noise analysis boundaries. Depending on the project circumstances, some analysis may be required to justify the results of the narrative analysis and to document the non-significance of the change in the acoustical

environment (e.g. noise measurements or using a simplified two-dimensional FHWA TNM run to assess the worst-case conditions.)

If local officials associated with undeveloped lands in the project area could benefit from information regarding future noise levels for planning purposes, then that information still needs to be provided even if a narrative analysis has been performed. This can be done using the simplified modeling procedure described in Section 5.5, below.

5.5 Screening Analysis for Type I Projects

For some Type I projects, a screening analysis may be appropriate. The screening analysis is a streamlined procedure in which simplified TNM modeling is used to predict traffic noise levels and make a conservative estimation of noise impacts. This procedure can be effective for reducing time and resources associated with a detailed analysis. If a project passes the screening analysis, additional noise analysis under 23 CFR 772 is normally not necessary. If a project is considered controversial, a detailed analysis (see “Detailed Analysis”) is warranted regardless of whether the screening procedure indicates otherwise.

A screening analysis is generally appropriate for projects where the following conditions occur:

- No noise impacts are anticipated;
- Noise impacts are anticipated but potential noise abatement actions will clearly not be feasible and reasonable.

Typically, these will be rural highway projects with uncontrolled access, few receptors, and large distances between receptors.

For example, acoustical feasibility (Section 6.4.1) requires that at least three receptors be protected by a continuous proposed noise barrier that guarantees at least a 5 dBA reduction in noise. If there are less than three receptors in the area where noise abatement is being considered, then no further analysis of noise abatement is required.

Unless or until there are other FHWA-approved screening methods available, TNM modeling must still be performed. However, the models may be simpler than for a detailed analysis. There are several simplifying measures that can be used in screening TNM template models, including using flat ground elevation data with straight-line roads. Receptors will be offset perpendicularly from the center of the model roads at distances that represent the distances from project roads to the nearest noise-sensitive receptors, and/or spaced at 50-foot intervals out to 500 feet to identify distances to NAC approach levels. The model roads will extend a minimum of 1,500 feet past the model receptors at each end of the study area.

The following items must be considered when using a screening analysis:

- Model validation is not required, but the need for onsite noise measurements will be determined on a case by case basis;
- Non-traffic noise sources important to the analysis area must be taken into account;
- Existing conditions for the analysis area must be modeled to determine if future noise levels may increase by 15 dBA or more;
- All of the future alternatives under consideration for the project must be modeled;
- Future noise levels must be evaluated for noise impacts according to the criteria in Section 3;
- If design year noise levels are 64 dBA or less or if noise levels are not predicted to increase more than 10 dBA over existing, then the screening analysis is sufficient;
- Traffic noise abatement actions will not be modeled;
- Noise measurements may be needed to justify results of a screening analysis that has identified impacts and feasible abatement appears unlikely.

This procedure can be used for Type I projects void of sensitive receptors in order to satisfy the requirement of analyzing noise impacts for undeveloped lands for use in local noise compatible planning (see Sections 5.4. and 5.6.4 of this policy.)

The decision to use a screening analysis in place of a detailed analysis should be made carefully. If the screening procedure is passed and no need for a detailed analysis is indicated, the results of the screening procedure are documented in a Noise Analysis report. If impacts are noted and abatement is clearly NOT feasible (e.g. driveway access), the screening procedure should suffice and a detailed analysis is not needed. However, impacts and the rationale for determining that noise abatement would not be feasible and reasonable must be clearly documented in a Noise Analysis report. If a project does not pass the screening procedure or if warranted by other conditions (e.g. public controversy), a detailed noise impact analysis must be performed.

5.6 Detailed Analysis for Type I Projects

A detailed noise analysis is the level of analysis performed for DOT&PF Type I projects when a narrative or screening analysis has been determined to not be appropriate. DOT&PF's processes for determining which projects qualify for a narrative or screening level analysis are described in Sections 5.4 and 5.5, respectively.

5.6.1 Identification of Analysis Boundaries, Noise Study Areas, and Receptors

Noise analysis boundaries must encompass all potential impacts. Potential benefits and impacts outside of the project limits may also need to be considered (e.g., changes in traffic volumes on other facilities due to the proposed project.) All land uses within the noise analysis boundaries are identified and assigned to the appropriate Activity Categories.

It is usually beneficial on large projects to group land uses together into smaller noise study areas for the purposes of noise modeling and abatement evaluation. A noise

study area (NSA) is generally not longer than a mile. Decision factors for dividing a project into NSAs include the extents of individual neighborhoods or residential subdivisions, major terrain features, location of large tracts of undeveloped lands, and boundaries defining major changes in land use. Individual receptor locations within the land uses are also chosen, as outlined above in Section 5.3, Land Use Activity Categories.

5.6.2 Determination of Existing Noise Levels and Model Validation

For projects on new alignments, determine the worst hour existing noise levels (including non-highway traffic noise sources) for developed land uses and activities by field noise measurements. For projects on existing alignments, existing noise levels can be determined by modeling, although field measurements are recommended.

5.6.2.1 Ambient Noise Level Measurements

Field measurements are conducted in accordance with procedures outlined in FHWA's *Measurement of Highway-Related Noise* report (FHWA Report Number FHWA-PD-96-046, 1996) or the most recent available protocols. Field measurement points are generally a subset of all identified receptors, and should be chosen to be acoustically representative of a grouping of similarly located receptors.

Noise measurements typically consist of a series of 15-minute measurements (minimum of two at roughly the same time of day.) If these measurements differ by more than 3 dBA, a third measurement is needed, unless the variation can be explained by specific noise events that occurred during the measurement period.

On rural or smaller widening road projects, there may be a small number of receptors, such that determination of existing noise levels along the entire project may not be necessary. One approach to this situation is to make a longer term measurement (including peak traffic periods and daytime off-peak periods) at one measurement location close to the existing road. The results can then be used to determine the worst noise hour. Short term measurements taken at other locations during this longer term measurement can be adjusted later to represent the worst hour based on data from the longer term measurement location. While ambient noise level measurements should be made during the worst noise hour, it may not always be practical to do so in rural areas of Alaska.

5.6.2.2 Model Validation

Model validation is done by comparing measured noise levels with modeled noise levels using the same traffic volumes, mix, and speeds tallied during field noise measurements. Noise measurements for model validation do not have to be during the worst noise hour, but should not be made during periods of slow-moving traffic congestion.

Validation measurement locations should be representative of first-row receptor locations and should not be blocked by buildings or terrain features. Two or three measurements of at least 15 minutes in length are made at each location. Directional

traffic classification counts and average travel speeds of the five FHWA TNM vehicle types are made during each measurement. Pavement type must be noted and used in FHWA TNM.

For a FHWA TNM run of an NSA to be considered valid, two of the three modeled levels at each validation location must be within +/-3 dBA of the corresponding measured levels. When a discrepancy is over 3 dBA, the model input data should be examined for errors and refinements made. If a measured/modeled difference remains over 3 dBA after revision of the model, the discrepancy (and potential explanation) is noted in the noise analysis report.

5.6.3 Prediction of Future Noise Levels

Future condition noise predictions are made for each alternative under consideration, including the no-build alternative, using the latest version of the FHWA TNM program. Design year traffic conditions representing the worst noise hour (generally, Level of Service (LOS) C or D,) are used. Highway traffic noise analysis should consider absolute noise levels as well as substantial increases in noise levels for abatement evaluations.

Where appropriate, take into account any seasonal variations in traffic. Use the guidance in Sections 5.3 and 5.4.1 of this policy when choosing receptors for modeling as receivers in FHWA TNM. Loss of shielding of the roadway due to topography, buildings, or vegetation that may be eliminated when the roadway is built should be taken into account.

5.6.4 Determination of Future Noise Levels on Undeveloped Lands

Design year noise levels based on design hourly volumes need to be predicted for Category G lands. This can be done using the simplified modeling procedure described in Section 5.5 of this policy. At a minimum, this analysis should report the distances from the proposed edge of the near travel lane out to where worst hour $L_{eq}(h)$ levels of 60 and 64 dBA are modeled to occur. These results are then provided to local public agencies to assist them in planning.

Creation of noise contours for undeveloped lands will be considered on an individual project basis. Noise contours may only be used for project alternative screening or for land use planning purposes. They may not be used for determining highway traffic noise impacts.

5.6.5 Determination of Traffic Noise Impacts

For Type I projects, noise impacts must be determined for all Activity Category A-E land uses in the analysis area. Impacts occur when a proposed project results in a substantial noise increase or when the predicted design year noise levels approach, meet, or exceed the NAC. As defined in Section 3.0, a “substantial noise increase” occurs when a design year noise level ($L_{eq}(h)$) is predicted to increase 15 or more dBA above the existing level and “approach” means a design year noise level is predicted to be one decibel below the NAC for Activity Categories A-E (Appendix B, Table 1.) When

one or both impact type(s) occur, noise abatement measures must be evaluated for Type I projects.

6.0 ANALYSIS OF NOISE ABATEMENT MEASURES

Depending upon the date of public knowledge of the project and the Activity Category of the receptors, traffic noise abatement measures are to be considered when traffic noise impacts have been identified through the noise analysis process, with the exceptions noted in Sections 5.4 and 5.5.

6.1 Date of Public Knowledge

The date of public knowledge of a proposed transportation project is used to determine whether noise abatement should be considered as part of the project. This date (as defined in 23 CFR 772) is the date that a NEPA decision document was approved for the project. DOT&PF will only consider abatement measures if the impacted receptor was developed or permitted for development before the date of public knowledge.

6.2 Abatement Considerations

Noise abatement measures must be found to be both feasible and reasonable in order to be included in a proposed project. A Noise Abatement Recommendation Worksheet (located in Appendix C) should be completed to assist in the decision-making process. Feasibility and reasonableness are each described in detail later in this section.

For Type I projects that have had a Detailed Noise Analysis conducted, DOT&PF will evaluate noise abatement when traffic noise impacts are predicted for land use Activity Categories A-E, with some exceptions as noted in Section 5.3. When an impact is identified, noise abatement measures will be evaluated after first considering whether project design changes (*e.g.*, altering the horizontal and/or vertical alignment) may reduce or eliminate the impact.

6.3 Possible Noise Abatement Measures

Federal funds may be used for the following noise abatement measures when traffic noise impacts have been identified and abatement measures have been determined to be feasible and reasonable, pursuant to 23 CFR 772.13(d). The costs of such measures may be included in Federal-aid participation project costs with the Federal share being the same as that for the system on which the project is located.

The following noise abatement measures may be considered for incorporation into a Type I project to reduce traffic noise impacts.

- (1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise abatement measure.

- (2) Traffic management measures including, but not limited to, traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive lane designations.
- (3) Alteration of horizontal and vertical alignments.
- (4) Acquisition of real property or interests therein (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise.
- (5) Noise insulation of Activity Category D land use facilities listed in Table 1. Post-installation maintenance and operational costs for noise insulation are not eligible for federal-aid funding.

Alternative (quieter) pavement is not a FHWA-approved noise abatement measure for Federal-aid projects and consequently cannot be used as noise abatement on Federal-aid projects. DOT&PF may consider using alternative pavements to reduce traffic noise on State-funded projects (see Section 9.0 of this policy.)

At this time, DOT&PF does not use absorptive treatments as a functional enhancement of noise barriers.

6.4 Feasibility

Determinations of noise abatement measure feasibility are made by considering whether a certain amount of noise reduction can be achieved by the measure and whether the measure is possible to design and construct.

6.4.1 Acoustical Feasibility

Acoustical feasibility refers to the minimum number of impacted receptors that must receive 5 dBA highway traffic noise reduction for a proposed abatement measure to be feasible. For DOT&PF projects, a 5 dBA or more reduction must be achieved for at least three impacted front row receptors in order for the abatement measure to be considered acoustically feasible.

If significant non-highway noise sources exist in the project area, such as rail lines or airports, noise barrier effectiveness may be compromised. These situations will be carefully evaluated to determine if a noise barrier for the highway noise sources is feasible.

6.4.2 Engineering Feasibility

Noise abatement measures are not feasible if they create a safety hazard to the driving public, protected receptors, or maintenance personnel. The project development team will consult with the appropriate DOT&PF functional groups when determining whether it is possible to design and construct a noise abatement measure. Noise abatement measures should be consistent with the following general design principles:

- Noise abatement measures should be located beyond the recovery zone of the traveled way; if a noise abatement measure must be located within the recovery zone, a traffic barrier may be warranted.

- Noise abatement measures may not block the recommended sight distance (Alaska Highway Preconstruction Manual, Chapter 11) between vehicles and intersecting roadways or on/off-ramps.
- Protrusions on noise abatement measures near a traffic lane should be avoided.
- Facings on noise abatement measures that can become dislodged, or barrier components that could shatter during an accident, or facings that create excessive glare should be avoided.
- Access should be provided to all sides of noise abatement measures to allow for maintenance activities to take place.

All noise abatement measures should consider the design principles outlined in the “*Guide on Evaluation and Abatement of Traffic Noise*”, AASHTO, 1993 and the “*FHWA Highway Noise Barrier Design Handbook*”, FHWA, 2000.

6.5 Reasonableness

The following three reasonableness factors must be evaluated in order for a noise abatement measure to be considered reasonable, pursuant to 23 CFR 772.13:

- 1) Viewpoints of the property owners and residents of the benefited receptors.
- 2) Cost Effectiveness.
- 3) Noise Reduction Design Goal.

These three reasonableness factors must collectively be achieved in order for a noise abatement measure to be deemed reasonable. Refer to Section 9.0 for a list of additional optional reasonableness factors that may be used only on State-funded projects.

6.5.1 Viewpoints of the property owners and residents of the benefited receptors

Public involvement for noise abatement is required for all categories of environmental document. To determine the views of benefited households and property owners, DOT&PF will contact all benefited households and property owners to determine the level of interest for a noise abatement measure. This contact can be in the form of a mail out questionnaire, phone call survey, or door to door interviews - whichever is most practical and cost effective for the size of the proposed project.

Noise abatement will be carried forward if there is a 60% majority of viewpoints received in support of the barrier. If a property has multiple dwelling units, the owner(s) of the multi-unit dwelling will provide input for the property as a whole, not for each individual dwelling unit. A second outreach attempt will be made if the response rate is less than 40% of all possible respondents.

6.5.2 Cost Effectiveness

The noise abatement measure cost is no more than \$38,000¹ per benefitted receptor, based upon the design engineer's estimate. This is determined by counting all receptors (including owner-occupied, rental units, mobile homes, and businesses) benefitted by the noise abatement measure in any subdivision and/or given development, and dividing that number into the total cost of the noise abatement measure. A benefitted receptor is defined as the recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dBA. Each unit in a multi-family building will be counted as a separate receptor. Cost per benefitted receptor must be reanalyzed at a regular interval not to exceed 5 years.

When the design engineer determines abatement measure cost, the estimate will include all items necessary for the construction of the noise abatement measure. Examples of cost items that should be included are traffic control (related to the noise barrier), drainage modification, foundations, retaining walls and right-of-way. Include a cost item only if it is directly related to the construction of the noise abatement measure². If a necessary project feature such as a retaining wall is included, then that cost will not be added into the noise abatement construction cost estimate. If the project incorporates visual mitigation such as the use of a transparent barrier with surface texture, the additional cost will not be included in the abatement construction cost estimate for the purpose of determining reasonableness. Aesthetic treatments, such as artwork, re-vegetation, landscaping, and barrier treatments will not be included in the abatement measure cost estimate for the purpose of determining reasonableness.

6.5.3 Noise Reduction Design Goal

The DOT&PF noise reduction design goal is 7 dBA. At least 50 percent of the benefitted receptors in the first row of structures must achieve this design goal for the noise abatement to be considered reasonable. If this design goal is not attainable, then the noise abatement cannot be carried forward. Refer to Section 9.0 for a list of additional criteria that apply only to State-funded projects.

6.5.4 Noise Abatement Recommendation Worksheet

A noise abatement recommendation worksheet (Appendix C) will be filled out for each NSA in the noise analysis. The REM will approve and sign the worksheets. If an abatement measure is determined to not be feasible, then the reasonableness analysis section of the worksheet does not need to be completed. Likewise, if it is determined that the abatement measure is not reasonable, the feasibility portion of the worksheet does not have to be filled out.

¹ DOT&PFs April 2011 cost per benefitted receptor was adjusted for inflation (CPI September 2018) to \$38,000 cost per benefitted receptor.

² DOT&PF will need to provide proof to the FHWA Division Office that the cost of any of these are solely and directly related to the noise abatement measure

DOT&PF will only implement a noise abatement measure if it has been determined to be both feasible and reasonable. The REM will recommend or not recommend that a noise abatement measure be implemented. The recommendation worksheet will be submitted to the Project Manager (PM) who will sign the recommendation worksheet. If the PM does not approve the recommendation then the Preconstruction Engineer will resolve the dispute. The Preconstruction Engineer only needs to sign the noise abatement recommendation worksheet if alternative pavements are recommended as abatement on State-funded projects. The REM will ensure that the recommendation is included in the project's environmental document.

6.6 Third Party Funding

For Type I Federal-aid projects, third party funding cannot be used if the noise abatement would require the additional funding in order to be considered feasible and/or reasonable. Third party funding can be used to pay for additional features such as landscaping, aesthetic treatments, and functional enhancements for noise barriers that have already been determined to be feasible and reasonable.

6.7 Information Required for a NEPA Decision

It is important to maintain accurate and complete documentation of noise impact analyses and any decisions to provide noise abatement. The noise analysis reports for Type I projects are stand-alone documents. Information is taken from the noise analysis report to support the NEPA analysis and decision. The specific information required is outlined in 23 CFR 772.13.

Decisions to provide or not provide noise abatement must be well-explained and defensible. Prior to the NEPA decision, DOT&PF must identify and document:

- 1) Where noise impacts occur;
- 2) The prospective noise abatement measures that are feasible and reasonable, and are likely to be incorporated into the project; and
- 3) Noise impact locations for which no abatement appears to be feasible and reasonable.

For noise abatement measures that have been found to be feasible and reasonable, a statement of likelihood, similar to the following, should be included in the environmental document narrative in the interest of public disclosure:

"As a result of the feasibility and reasonableness analysis conducted as a part of the environmental document, the DOT&PF proposes to incorporate the following noise abatement measures (type, locations) into the proposed project. These noise abatement recommendations are preliminary and based upon the feasibility and reasonableness analysis completed at the time the environmental document. Final recommendations for noise abatement will be based upon the feasibility and reasonable analysis conducted during the detailed design of the project. Any changes in the final abatement

recommendations will result in the reevaluation of the approved NEPA document and the solicitation of additional public comment.”

The noise analysis report should include a description of each abatement measure considered, a discussion of the anticipated costs, problems, and disadvantages associated with that abatement measure, and a discussion of the anticipated benefits. The noise analysis must be appended to the environmental document, and should be in the following general format:

Cover Page
Table of Contents
Summary
Project Background
Purpose of Analysis
Methods
 Model
 Validation Process
Description of Land Use Categories along the Corridor
Results
Identification of Noise Impacts
Noise Abatement Analysis
Abatement Recommendations
Statement of Likelihood
Construction Noise
Conclusion
Appendices
 DOT&PF NOISE POLICY
 TNM Model inputs/outputs and supporting CAD/design files

During the detailed design of the proposed project, recommendations for noise abatement made in the environmental document will be reevaluated to determine if they are still valid. If it is determined that any noise abatement measure recommendation is no longer valid, then the affected public will be notified and the environmental document will be reevaluated or supplemented as appropriate.

6.8 Design-Build Projects

For design-build projects, as with any DOT&PF project, DOT&PF is ultimately responsible for the NEPA decisions and as such, noise abatement measures must be considered, developed, and constructed in accordance with the provisions of 23 CFR 772, 23 CFR 636.109, and this policy.

6.9 Inventory and Reporting of Abatement Measures

DOT&PF will maintain an inventory of all constructed noise abatement measures and will on a periodic basis provide the Alaska Division of FHWA the parameters outlined in

23 CFR 772.13(f). DOT&PF will enter the data into a spreadsheet as abatement measures are implemented.

7.0 INFORMATION FOR LOCAL OFFICIALS

In an effort to reduce future traffic noise impacts on currently undeveloped lands and to maintain compatibility between highways and future development, DOT&PF will provide the results of Type I highway traffic noise analyses to local government officials. With regard to undeveloped lands that have not been permitted for development, the results will include at a minimum the distances from the proposed edge of the traveled way to where the design year $L_{eq}(h)$ of 60 and 64 dBA are predicted to occur.

8.0 CONSTRUCTION NOISE

Construction of a highway project may cause localized, short-duration noise impacts. Construction noise can adversely affect people living in the area. Analysis and mitigation of construction noise impacts will be addressed when noise and vibration issues arise during project development or if complaints are received by the public.

For all Type I Federal and State Projects, it is DOT&PF policy to:

- (a) Identify land uses or activities that may be affected by noise from construction of the project. The identification is to be performed during the project development studies.
- (b) Determine the measures that are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community. This determination shall include a weighing of the benefits achieved and the overall adverse social, economic, and environmental effects and costs of the abatement measures.
- (c) Incorporate the needed abatement measures in the plans and specifications.

The REM, environmental analyst and design engineering manager will coordinate to incorporate appropriate mitigation measures for construction noise as determined appropriate by DOT&PF. These may be incorporated into the plans and specifications and include: requirements for staging areas, time periods where no noise generating activities can occur, and public outreach requirements.

In the event that construction noise complaints occur during the course of construction activities, measures will be taken by the Construction Project Engineer, in consultation with the REM, to resolve the problem to the extent practical. Measures might include locating stationary construction equipment as far from nearby noise sensitive receivers as possible, shutting off idling equipment, rescheduling construction operations to avoid periods of noise annoyance, notifying nearby residents whenever extremely noisy operations will be occurring, and installing permanent or portable acoustic abatement measures around stationary construction noise sources.

In some cases there are no alternatives to conducting construction activities during the night, on weekends, or on holidays. When deemed necessary, DOT&PF will make every effort to notify the public prior to conducting these activities. Public involvement in these cases should occur during design and throughout the construction duration. In some communities, local ordinances may restrict noise generating activities. DOT&PF and its contractor(s) will comply with local noise ordinances and acquire any necessary noise permits for construction activities prior to their initiation.

While construction noise modeling is not regularly done for Type I noise studies, the FHWA Roadway Construction Noise Model (RCNM) may be used to predict noise levels from various types of equipment and construction activities. In some cases (e.g., pile driving near residences,) construction noise modeling may be warranted for Type III projects as well.

9.0 STATE-FUNDED PROJECTS

In general, the same methods are followed in the identification of noise impacts for Type I State-funded projects as for Type I Federal-aid projects. Results of noise analyses will be documented in the State Project Environmental Checklist. If noise abatement is determined to be feasible and reasonable, then the REM will make a recommendation to the Preconstruction Engineer. The Preconstruction Engineer will decide whether the recommended abatement measure will be constructed. Abatement will be provided only if it meets the feasibility and reasonableness criteria of this policy and the Preconstruction Engineer determines that the state funded appropriation can accommodate the expenditure.

In addition to the reasonableness factors outlined for Federal-aid projects in Section 6.5, above, the following optional reasonableness factors may be used to increase the cost allowed on State-funded projects:

- 1) Date of development.
- 2) Length of time receivers have been exposed to highway traffic noise impacts.
- 3) Exposure to higher absolute traffic noise levels.
- 4) Changes between existing and future build conditions.
- 5) Percentage of mixed zone development.
- 6) Use of noise compatible planning concepts by the local government.

No single optional reasonableness factor shall be used to determine that a noise abatement measure is unreasonable.

In addition to the criteria outlined for Federal-aid projects in Section 6.5.3, above, the following noise reduction design goal criteria apply only to State-funded projects:

- 1) Development vs. Highway Timing. At least 50 percent of impacted receptors in the development (subdivision, apartment complex, etc.) were built before initial construction of the highway. The date of development is an important part of the determination of reasonableness. More consideration is given to developments that were built before the highway was built.
- 2) Development Existence. At least 50 percent of impacted receptors in the development have existed for at least 10 years. More consideration is given to residents who have experienced traffic noise impacts for long periods of time.
- 3) Absolute Predicted Build Noise Level. The predicted future build noise levels are at least 66 dBA. More consideration should be given to areas with higher absolute traffic noise levels. Absolute noise levels typically found along highways, 60-75 dBA, are deemed undesirable and cause complaints from adjacent residents. In general, the higher the absolute noise, the more complaints.
- 4) Relative Predicted Build Noise Level. The predicted future build noise levels are at least 10 dBA greater than the existing noise levels. More consideration is given to areas with larger increases over existing noise levels. This gives greater consideration to projects for highways on new location and major reconstruction than it does to projects of smaller magnitude. For most people, a 3 dBA increase is barely perceptible, a 5 dBA increase is readily perceptible, and a 10 dBA increase doubles the perceived loudness of the noise.
- 5) Build vs. No-Build Noise Levels. The future build noise levels are at least 5 dBA greater than the future no-build noise levels. More consideration should be given to areas where larger changes in traffic noise levels are expected to occur if the project is constructed than if it is not.
- 6) Land use. Land use is not changing rapidly and there are local ordinances or zoning in place to control the new development of noise sensitive land uses adjacent to transportation corridors.

DOT&PF may consider using alternative pavements to reduce traffic noise on State-funded projects. However, the decision to provide such a measure will be made by the Preconstruction Engineer.

10.0 UPDATES TO POLICY

This policy is effective upon signature and replaces the Alaska DOT&PF April 2011 Noise Policy. Changes to the policy will be made as needed, or every 5 years, per FHWA recommendation.

REFERENCES

"Guide on Evaluation and Abatement of Traffic Noise" (AASHTO, 1993)

"FHWA Highway Noise Barrier Design Handbook" (FHWA, 2000)

"Measurement of Highway-Related Noise" report (FHWA Report Number FHWA-PD-96-046, 1996)

<http://www.fhwa.dot.gov/environment/noise/>

FHWA *Highway Traffic Noise: Analysis and Abatement Guidance* June 2010 is available at the following website

[http://www.fhwa.dot.gov/environment/noise/regulations and guidance/analysis and abatement guidance/guidancedoc.pdf](http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/guidancedoc.pdf)

Noise Model Web site at the following URL <http://www.fhwa.dot.gov/environment/noise/index.htm>.

APPENDIX A - FHWA 23 CFR 772

Code of Federal Regulations

Current as of October 12, 2018

Title 23 → Chapter I → Subchapter H → Part 772

PART 772—PROCEDURES FOR ABATEMENT OF HIGHWAY TRAFFIC NOISE AND CONSTRUCTION NOISE

Contents

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Table 1 to Part 772—Noise Abatement Criteria

AUTHORITY: 23 U.S.C. 109(h) and (i); 42 U.S.C. 4331, 4332; sec. 339(b), Pub. L. 104-59, 109 Stat. 568, 605; 49 CFR 1.48(b).

SOURCE: 75 FR 39834, July 13, 2010, unless otherwise noted.

§772.1 Purpose.

To provide procedures for noise studies and noise abatement measures to help protect the public's health, welfare and livability, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways approved pursuant to title 23 U.S.C.

§772.3 Noise standards.

The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this regulation constitute the noise standards mandated by 23 U.S.C. 109(1). All highway projects which are developed in conformance with this regulation shall be deemed to be in accordance with the FHWA noise standards.

§772.5 Definitions.

Benefited receptor. The recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dB(A), but not to exceed the highway agency's reasonableness design goal.

Common Noise Environment. A group of receptors within the same Activity Category in Table 1 that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features. Generally, common noise environments occur between two secondary noise sources, such as interchanges, intersections, cross-roads.

Date of public knowledge. The date of approval of the Categorical Exclusion (CE), the Finding of No Significant Impact (FONSI), or the Record of Decision (ROD), as defined in 23 CFR part 771.

Design year. The future year used to estimate the probable traffic volume for which a highway is designed.

Existing noise levels. The worst noise hour resulting from the combination of natural and mechanical sources and human activity usually present in a particular area.

Feasibility. The combination of acoustical and engineering factors considered in the evaluation of a noise abatement measure.

Impacted Receptor. The recipient that has a traffic noise impact.

L10. The sound level that is exceeded 10 percent of the time (the 90th percentile) for the period under consideration, with L10(h) being the hourly value of L10.

Leq. The equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period, with Leq(h) being the hourly value of Leq.

Multifamily dwelling. A residential structure containing more than one residence. Each residence in a multifamily dwelling shall be counted as one receptor when determining impacted and benefited receptors.

Noise barrier. A physical obstruction that is constructed between the highway noise source and the noise sensitive receptor(s) that lowers the noise level, including stand alone noise walls, noise berms (earth or other material), and combination berm/wall systems.

Noise reduction design goal. The optimum desired dB(A) noise reduction determined from calculating the difference between future build noise levels with abatement, to future build noise levels without abatement. The noise reduction design goal shall be at least 7 dB(A), but not more than 10 dB(A).

Permitted. A definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of a building permit.

Property owner. An individual or group of individuals that holds a title, deed, or other legal documentation of ownership of a property or a residence.

Reasonableness. The combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure.

Receptor. A discrete or representative location of a noise sensitive area(s), for any of the land uses listed in Table 1.

Residence. A dwelling unit. Either a single family residence or each dwelling unit in a multifamily dwelling.

Statement of likelihood. A statement provided in the environmental clearance document based on the feasibility and reasonableness analysis completed at the time the environmental document is being approved.

Substantial construction. The granting of a building permit, prior to right-of-way acquisition or construction approval for the highway.

Substantial noise increase. One of two types of highway traffic noise impacts. For a Type I project, an increase in noise levels of 5 to 15 dB(A) in the design year over the existing noise level.

Traffic noise impacts. Design year build condition noise levels that approach or exceed the NAC listed in Table 1 for the future build condition; or design year build condition noise levels that create a substantial noise increase over existing noise levels.

Type I project. (1) The construction of a highway on new location; or,

(2) The physical alteration of an existing highway where there is either:

(i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,

(ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,

(3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,

(4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,

(5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,

(6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,

(7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

(8) If a project is determined to be a Type I project under this definition then the entire project area as defined in the environmental document is a Type I project.

Type II project. A Federal or Federal-aid highway project for noise abatement on an existing highway. For a Type II project to be eligible for Federal-aid funding, the highway agency must develop and implement a Type II program in accordance with section 772.7(e).

Type III project. A Federal or Federal-aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

§772.7 Applicability.

(a) This regulation applies to all Federal or Federal-aid Highway Projects authorized under title 23, United States Code. Therefore, this regulation applies to any highway project or multimodal project that:

(1) Requires FHWA approval regardless of funding sources, or

(2) Is funded with Federal-aid highway funds.

(b) In order to obtain FHWA approval, the highway agency shall develop noise policies in conformance with this regulation and shall apply these policies uniformly and consistently statewide.

(c) This regulation applies to all Type I projects unless the regulation specifically indicates that a section only applies to Type II or Type III projects.

(d) The development and implementation of Type II projects are not mandatory requirements of section 109(i) of title 23, United States Code.

(e) If a highway agency chooses to participate in a Type II program, the highway agency shall develop a priority system, based on a variety of factors, to rank the projects in the program. This priority system shall be submitted to and approved by FHWA before the highway agency is allowed to use Federal-aid funds for a project in the program. The highway agency shall re-analyze the priority system on a regular interval, not to exceed 5 years.

(f) For a Type III project, a highway agency is not required to complete a noise analysis or consider abatement measures.

§772.9 Traffic noise prediction.

(a) Any analysis required by this subpart must use the FHWA Traffic Noise Model (TNM), which is described in “FHWA Traffic Noise Model” Report No. FHWA-PD-96-010, including Revision No. 1, dated April 14, 2004, or any other model determined by the FHWA to be consistent with the methodology of the FHWA TNM. These publications are incorporated by reference in accordance with section 552(a) of title 5, U.S.C. and part 51 of title 1, CFR, and are on file at the National Archives and Record Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. These documents are available for copying and inspection at the Federal Highway Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590, as provided in part 7 of title 49, CFR. These documents are also available on the FHWA's Traffic Noise Model Web site at the following URL: <http://www.fhwa.dot.gov/environment/noise/index.htm>.

(b) Average pavement type shall be used in the FHWA TNM for future noise level prediction unless a highway agency substantiates the use of a different pavement type for approval by the FHWA.

(c) Noise contour lines may be used for project alternative screening or for land use planning to comply with §772.17 of this part, but shall not be used for determining highway traffic noise impacts.

(d) In predicting noise levels and assessing noise impacts, traffic characteristics that would yield the worst traffic noise impact for the design year shall be used.

§772.11 Analysis of traffic noise impacts.

(a) The highway agency shall determine and analyze expected traffic noise impacts.

- (1) For projects on new alignments, determine traffic noise impacts by field measurements.
 - (2) For projects on existing alignments, predict existing and design year traffic noise impacts.
- (b) In determining traffic noise impacts, a highway agency shall give primary consideration to exterior areas where frequent human use occurs.
- (c) A traffic noise analysis shall be completed for:
- (1) Each alternative under detailed study;
 - (2) Each Activity Category of the NAC listed in Table 1 that is present in the study area;
- (i) *Activity Category A.* This activity category includes the exterior impact criteria for lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential for the area to continue to serve its intended purpose. Highway agencies shall submit justifications to the FHWA on a case-by-case basis for approval of an Activity Category A designation.
- (ii) *Activity Category B.* This activity category includes the exterior impact criteria for single-family and multifamily residences.
- (iii) *Activity Category C.* This activity category includes the exterior impact criteria for a variety of land use facilities. Each highway agency shall adopt a standard practice for analyzing these land use facilities that is consistent and uniformly applied statewide.
- (iv) *Activity Category D.* This activity category includes the interior impact criteria for certain land use facilities listed in Activity Category C that may have interior uses. A highway agency shall conduct an indoor analysis after a determination is made that exterior abatement measures will not be feasible and reasonable. An indoor analysis shall only be done after exhausting all outdoor analysis options. In situations where no exterior activities are to be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the highway agency shall use Activity Category D as the basis of determining noise impacts. Each highway agency shall adopt a standard practice for analyzing these land use facilities that is consistent and uniformly applied statewide.
- (v) *Activity Category E.* This activity category includes the exterior impact criteria for developed lands that are less sensitive to highway noise. Each highway agency shall adopt a standard practice for analyzing these land use facilities that is consistent and uniformly applied statewide.
- (vi) *Activity Category F.* This activity category includes developed lands that are not sensitive to highway traffic noise. There is no impact criteria for the land use facilities in this activity category and no analysis of noise impacts is required.

(vii) *Activity Category G*. This activity includes undeveloped lands.

(A) A highway agency shall determine if undeveloped land is permitted for development. The milestone and its associated date for acknowledging when undeveloped land is considered permitted shall be the date of issuance of a building permit by the local jurisdiction or by the appropriate governing entity.

(B) If undeveloped land is determined to be permitted, then the highway agency shall assign the land to the appropriate Activity Category and analyze it in the same manner as developed lands in that Activity Category.

(C) If undeveloped land is not permitted for development by the date of public knowledge, the highway agency shall determine noise levels in accordance with 772.17(a) and document the results in the project's environmental clearance documents and noise analysis documents. Federal participation in noise abatement measures will not be considered for lands that are not permitted by the date of public knowledge.

(d) The analysis of traffic noise impacts shall include:

(1) Identification of existing activities, developed lands, and undeveloped lands, which may be affected by noise from the highway;

(2) For projects on new or existing alignments, validate predicted noise level through comparison between measured and predicted levels;

(3) Measurement of noise levels. Use an ANSI Type I or Type II integrating sound level meter;

(4) Identification of project limits to determine all traffic noise impacts for the design year for the build alternative. For Type II projects, traffic noise impacts shall be determined from current year conditions;

(e) Highway agencies shall establish an approach level to be used when determining a traffic noise impact. The approach level shall be at least 1 dB(A) less than the Noise Abatement Criteria for Activity Categories A to E listed in Table 1 to part 772;

(f) Highway agencies shall define substantial noise increase between 5 dB(A) to 15 dB(A) over existing noise levels. The substantial noise increase criterion is independent of the absolute noise level.

(g) A highway agency proposing to use Federal-aid highway funds for a Type II project shall perform a noise analysis in accordance with §772.11 of this part in order to provide information needed to make the determination required by §772.13(a) of this part.

§772.13 Analysis of noise abatement.

(a) When traffic noise impacts are identified, noise abatement shall be considered and evaluated for feasibility and reasonableness. The highway agency shall determine and analyze alternative noise abatement measures to abate identified impacts by giving weight to the benefits and costs of abatement and the overall social, economic, and environmental effects by using feasible and reasonable noise abatement measures for decision-making.

(b) In abating traffic noise impacts, a highway agency shall give primary consideration to exterior areas where frequent human use occurs.

(c) If a noise impact is identified, a highway agency shall consider abatement measures. The abatement measures listed in §772.15(c) of this part are eligible for Federal funding.

(1) At a minimum, the highway agency shall consider noise abatement in the form of a noise barrier.

(2) If a highway agency chooses to use absorptive treatments as a functional enhancement, the highway agency shall adopt a standard practice for using absorptive treatment that is consistent and uniformly applied statewide.

(d) *Examination and evaluation of feasible and reasonable noise abatement measures for reducing the traffic noise impacts.* Each highway agency, with FHWA approval, shall develop feasibility and reasonableness factors.

(1) *Feasibility:* (i) Achievement of at least a 5 dB(A) highway traffic noise reduction at impacted receptors. The highway agency shall define, and receive FHWA approval for, the number of receptors that must achieve this reduction for the noise abatement measure to be acoustically feasible and explain the basis for this determination; and

(ii) Determination that it is possible to design and construct the noise abatement measure. Factors to consider are safety, barrier height, topography, drainage, utilities, and maintenance of the abatement measure, maintenance access to adjacent properties, and access to adjacent properties (*i.e.* arterial widening projects).

(2) *Reasonableness:*(i) *Consideration of the viewpoints of the property owners and residents of the benefited receptors.* The highway agency shall solicit the viewpoints of all of the benefited receptors and obtain enough responses to document a decision on either desiring or not desiring the noise abatement measure. The highway agency shall define, and receive FHWA approval for, the number of receptors that are needed to constitute a decision and explain the basis for this determination.

(ii) *Cost effectiveness of the highway traffic noise abatement measures.* Each highway agency shall determine, and receive FHWA approval for, the allowable cost of abatement by determining a baseline cost reasonableness value. This determination may include the actual construction cost of noise abatement, cost per square foot of abatement, the maximum square

footage of abatement/benefited receptor and either the cost/benefited receptor or cost/benefited receptor/dB(A) reduction. The highway agency shall re-analyze the allowable cost for abatement on a regular interval, not to exceed 5 years. A highway agency has the option of justifying, for FHWA approval, different cost allowances for a particular geographic area(s) within the State, however, the highway agency must use the same cost reasonableness/construction cost ratio statewide.

(iii) *Noise reduction design goals for highway traffic noise abatement measures.* When noise abatement measure(s) are being considered, a highway agency shall achieve a noise reduction design goal. The highway agency shall define, and receive FHWA approval for, the design goal of at least 7 dB(A) but not more than 10 dB(A), and shall define the number of benefited receptors that must achieve this design goal and explain the basis for this determination.

(iv) The reasonableness factors listed in §772.13(d)(5)(i), (ii) and (iii), must collectively be achieved in order for a noise abatement measure to be deemed reasonable. Failure to achieve §772.13(d)(5)(i), (ii) or (iii), will result in the noise abatement measure being deemed not reasonable.

(v) In addition to the required reasonableness factors listed in §772.13(d)(5)(i), (ii), and (iii), a highway agency has the option to also include the following reasonableness factors: Date of development, length of time receivers have been exposed to highway traffic noise impacts, exposure to higher absolute highway traffic noise levels, changes between existing and future build conditions, percentage of mixed zoning development, and use of noise compatible planning concepts by the local government. No single optional reasonableness factor can be used to determine reasonableness.

(e) *Assessment of Benefited Receptors.* Each highway agency shall define the threshold for the noise reduction which determines a benefited receptor as at or above the 5 dB(A), but not to exceed the highway agency's reasonableness design goal.

(f) *Abatement measure reporting:* Each highway agency shall maintain an inventory of all constructed noise abatement measures. The inventory shall include the following parameters: type of abatement; cost (overall cost, unit cost per/sq. ft.); average height; length; area; location (State, county, city, route); year of construction; average insertion loss/noise reduction as reported by the model in the noise analysis; NAC category(s) protected; material(s) used (precast concrete, berm, block, cast in place concrete, brick, metal, wood, fiberglass, combination, plastic (transparent, opaque, other); features (absorptive, reflective, surface texture); foundation (ground mounted, on structure); project type (Type I, Type II, and optional project types such as State funded, county funded, tollway/turnpike funded, other, unknown). The FHWA will collect this information, in accordance with OMB's Information Collection requirements.

(g) Before adoption of a CE, FONSI, or ROD, the highway agency shall identify:

(1) Noise abatement measures which are feasible and reasonable, and which are likely to be incorporated in the project; and

(2) Noise impacts for which no noise abatement measures are feasible and reasonable.

(3) *Documentation of highway traffic noise abatement:* The environmental document shall identify locations where noise impacts are predicted to occur, where noise abatement is feasible and reasonable, and locations with impacts that have no feasible or reasonable noise abatement alternative. For environmental clearance, this analysis shall be completed to the extent that design information on the alternative(s) under study in the environmental document is available at the time the environmental clearance document is completed. A statement of likelihood shall be included in the environmental document since feasibility and reasonableness determinations may change due to changes in project design after approval of the environmental document. The statement of likelihood shall include the preliminary location and physical description of noise abatement measures determined feasible and reasonable in the preliminary analysis. The statement of likelihood shall also indicate that final recommendations on the construction of an abatement measure(s) is determined during the completion of the project's final design and the public involvement processes.

(h) The FHWA will not approve project plans and specifications unless feasible and reasonable noise abatement measures are incorporated into the plans and specifications to reduce the noise impact on existing activities, developed lands, or undeveloped lands for which development is permitted.

(i) For design-build projects, the preliminary technical noise study shall document all considered and proposed noise abatement measures for inclusion in the NEPA document. Final design of design-build noise abatement measures shall be based on the preliminary noise abatement design developed in the technical noise analysis. Noise abatement measures shall be considered, developed, and constructed in accordance with this standard and in conformance with the provisions of 40 CFR 1506.5(c) and 23 CFR 636.109.

(j) Third party funding is not allowed on a Federal or Federal-aid Type I or Type II project if the noise abatement measure would require the additional funding from the third party to be considered feasible and/or reasonable. Third party funding is acceptable on a Federal or Federal-aid highway Type I or Type II project to make functional enhancements, such as absorptive treatment and access doors or aesthetic enhancements, to a noise abatement measure already determined feasible and reasonable.

(k) On a Type I or Type II projects, a highway agency has the option to cost average noise abatement among benefited receptors within common noise environments if no single common noise environment exceeds two times the highway agency's cost reasonableness criteria and collectively all common noise environments being averaged do not exceed the highway agency's cost reasonableness criteria.

§772.15 Federal participation.

(a) *Type I and Type II projects.* Federal funds may be used for noise abatement measures when:

(1) Traffic noise impacts have been identified; and

(2) Abatement measures have been determined to be feasible and reasonable pursuant to §772.13(d) of this chapter.

(b) *For Type II projects.* (1) No funds made available out of the Highway Trust Fund may be used to construct Type II noise barriers, as defined by this regulation, if such noise barriers were not part of a project approved by the FHWA before the November 28, 1995.

(2) Federal funds are available for Type II noise barriers along lands that were developed or were under substantial construction before approval of the acquisition of the rights-of-ways for, or construction of, the existing highway.

(3) FHWA will not approve noise abatement measures for locations where such measures were previously determined not to be feasible and reasonable for a Type I project.

(c) *Noise abatement measures.* The following noise abatement measures may be considered for incorporation into a Type I or Type II project to reduce traffic noise impacts. The costs of such measures may be included in Federal-aid participating project costs with the Federal share being the same as that for the system on which the project is located.

(1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise abatement measure.

(2) Traffic management measures including, but not limited to, traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive lane designations.

(3) Alteration of horizontal and vertical alignments.

(4) Acquisition of real property or interests therein (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise. This measure may be included in Type I projects only.

(5) Noise insulation of Activity Category D land use facilities listed in Table 1. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

§772.17 Information for local officials.

(a) To minimize future traffic noise impacts on currently undeveloped lands of Type I projects, a highway agency shall inform local officials within whose jurisdiction the highway project is located of:

(1) Noise compatible planning concepts;

(2) The best estimation of the future design year noise levels at various distances from the edge of the nearest travel lane of the highway improvement where the future noise levels meet the highway agency's definition of "approach" for undeveloped lands or properties within the project limits. At a minimum, identify the distance to the exterior noise abatement criteria in Table 1;

(3) Non-eligibility for Federal-aid participation for a Type II project as described in §772.15(b).

(b) If a highway agency chooses to participate in a Type II noise program or to use the date of development as one of the factors in determining the reasonableness of a Type I noise abatement measure, the highway agency shall have a statewide outreach program to inform local officials and the public of the items in §772.17(a)(1) through (3).

§772.19 Construction noise.

For all Type I and II projects, a highway agency shall:

(a) Identify land uses or activities that may be affected by noise from construction of the project. The identification is to be performed during the project development studies.

(b) Determine the measures that are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community. This determination shall include a weighing of the benefits achieved and the overall adverse social, economic, and environmental effects and costs of the abatement measures.

(c) Incorporate the needed abatement measures in the plans and specifications.

Table 1 to Part 772—Noise Abatement Criteria

[Hourly A-Weighted Sound Level_{decibels (dB(A))}¹]

Activity category	Activity Leq(h)	Criteria ² L10(h)	Evaluation location	Activity description
A	57	60	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ³	67	70	Exterior	Residential.
C ³	67	70	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of

			worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	55 Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ³	72	75 Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F			Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G			Undeveloped lands that are not permitted.

¹Either Leq(h) or L10(h) (but not both) may be used on a project.

²The Leq(h) and L10(h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement measures.

³Includes undeveloped lands permitted for this activity category.

APPENDIX B - Land Use Activity Categories and Noise Abatement Criteria

Table 1. Land Use Activity Categories and Noise Abatement Criteria

<u>Activity Category</u>	<u>Activity Criteria</u> ¹ <u>L_{eq}(h), dBA</u>	<u>Evaluation Location</u>	<u>Activity Description</u>
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ²	67	Exterior	Residential.
C ²	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ²	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A–D or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

¹Activity Criteria values are for impact determination only, and are not design standards for noise abatement measures.

²Includes undeveloped lands permitted for this activity category.

APPENDIX C - Feasibility and Reasonableness Worksheet

Feasibility and Reasonableness Worksheet Example

HIGHWAY TRAFFIC NOISE ABATEMENT FOR PROJECT:

Receiver ID No.(s):

Location/Description:

Activity Category type:

Noise Abatement Criteria for this Activity Category(Leq) (Table 1 DOT&PF Noise Policy):

Existing Noise Level (Leq):

Future Build Noise Level (Leq):

Future No-Build Noise Level:

Has a noise impact been identified (If yes continue filling out worksheet. If no, no noise abatement is required. Sign worksheet and recommend no noise abatement)?: Yes No

Highway Traffic Noise Abatement Feasibility and Reasonableness Analysis:

Feasibility

Is the proposed noise abatement measure acoustically feasible?

Yes

No

Is the proposed noise abatement measure engineering feasible

Yes No

Reasonableness

Is the proposed noise abatement measure considered reasonable?

Yes No

Federal Mandatory Factors

1 Cost Effectiveness. Is the abatement measure cost effective?

2 Views of Benefited Residents and Property Owners. Do at least 60 percent of the impacted residents and property owners' surveyed desire noise abatement?

3 Noise reduction design goal? Does the noise abatement measure provide 7 dBA reduction to 50 percent or more of the benefitted receptors in the first row of structures?

DOT&PF Mandatory Factors (State funded only)

4. Development vs. Highway Timing. Were at least 50 percent of benefitted receptors in the development built before highway construction?

5 Development Existence. Have at least 50 percent of benefitted receptors in the development existed for at least 10 years?

6 Absolute Predicted Build Noise Level. Are the predicted future build noise levels at least 66dBA?

7 Relative Predicted Build Noise Level. Are the predicted future build noise levels at least 10 dBA greater than the existing noise levels?

8 Build vs. No-Build Noise Levels. Are the future build noise levels at least 5 dBA greater than the future No-Build noise levels?

9..Land Use. Is the land use changing rapidly and are there local ordinances or zoning in place to control the new development of noise sensitive land uses adjacent to transportation corridors?

Is Noise Abatement recommended for this impacted receptor(s)?

What type of noise abatement is recommended? (Note – The use of quiet pavements is not an approved noise abatement measure on Federal- Aid Projects. Quiet pavements can be utilized as an abatement measure on State-funded projects with the approval of the Regional Preconstruction Engineer)

What is the basis for this recommendation?

Regional Environmental Manager

Date

DOT&PF Project Manager

Date

I have determined that the use of quiet pavement to mitigate noise impacts on a state-funded project is within the cost constraints of the legislative appropriation for the proposed project.

Preconstruction Engineer ³

Date

³ The Preconstruction Engineer’s signature is only required if quiet pavements are recommended on State-funded projects. The Preconstruction Engineer must determine whether the incorporation of quiet pavements into the State-funded project is within the cost constraints of the legislative appropriation

George Parks Highway Systemic Passing Lanes &
Parks Highway MP 90 - 99 Resurfacing

APPENDIX C

Section 4(f)/6(f) Consultation

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Owen L. Means

From: Riddle, Ryan N (DOT) <ryan.riddle@alaska.gov>
Sent: Tuesday, January 8, 2019 5:47 PM
To: Owen L. Means
Subject: FW: SEO Section 4(f) Determination RE: Parks Hwy Systemic Passing Lanes (57301) and MP 90-99 Resurf (56177) Section 4(f) consult
Attachments: 4f Attachments.pdf

FYI

From: Dietrick, Matthew V (DOT) <matthew.dietrick@alaska.gov>
Sent: Tuesday, January 8, 2019 5:06 PM
To: Riddle, Ryan N (DOT) <ryan.riddle@alaska.gov>
Cc: Elliott, Brian A (DOT) <brian.elliott@alaska.gov>; Dietrick, Matthew V (DOT) <matthew.dietrick@alaska.gov>
Subject: SEO Section 4(f) Determination RE: Parks Hwy Systemic Passing Lanes (57301) and MP 90-99 Resurf (56177) Section 4(f) consult

Hi Ryan

As I understand the information provided, adjustments to the project design resulted in the following changes to Section 4(f) resources:

- Work near Lower Troublesome Creek Campground has moved several hundred feet closer to the resource
- Upper Troublesome Creek Trailhead now has work adjacent to it, including reconstruction of its driveway access
- Ermine Hill Trailhead no longer has any work activities occurring adjacent to it
- Denali State Park now has four temporary occupancies

Activities in the vicinity of all other Section 4(f) resources remain unchanged. All previous mitigation measures and those stated below, including night time work restrictions in the vicinity of campgrounds, staging area restrictions, and maintenance of public access are currently being implemented on phases 1 and 2 and will be carried forward through phase 3.

4(f) Applicability Determination

Based on the information provided below and attached, I agree that the **Parks Hwy Systemic Passing Lanes (57301) and MP 90-99 Resurfacing (56177)** projects will not use/affect the following Section 4(f) protected resource:

- Montana Creek Campground
- Denali View South
- K'esugi Ken Campground
- Lower Troublesome Creek Campground
- Upper Troublesome Creek Trailhead
- Byers Lake Campground
- Alaska Veterans Memorial
- Ermine Hill Trailhead
- Denali View North

DOT&PF has determined that the proposed project will not use these Section 4(f) properties. Therefore, the requirements of Section 4(f) do not apply.

4(f) Temporary Occupancy Determination

Based on the information provided below and attached, and written concurrence from the official with jurisdiction, Matthew Wedeking-Division Ops Manager at the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, I have determined that the **Parks Hwy Systemic Passing Lanes (57301) and MP 90-99 Resurfacing (56177)** work being conducted within Denali State Park, a Section 4(f) resource, meets the conditions for the exception to Section 4(f) approval stated in 23 CFR 774.13(d) – Temporary occupancies of land that are so minimal as to not constitute a use.

DOT&PF has determined that the proposed project meets an exception to a Section 4(f) approval. Therefore, the requirements of Section 4(f) do not apply.

Ensure a copy of this email is placed in the project file.

Best to you
Matt

Matt Dietrick
DOT&PF NEPA Program Manager
269-6229

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.

From: Riddle, Ryan N (DOT)
Sent: Tuesday, January 08, 2019 9:47 AM
To: Dietrick, Matthew V (DOT) <matthew.dietrick@alaska.gov>
Cc: Elliott, Brian A (DOT) <brian.elliott@alaska.gov>
Subject: Parks Hwy Systemic Passing Lanes (57301) and MP 90-99 Resurf (56177) Section 4(f) consult

Hi Matt –

The Alaska Department of Transportation and Public Facilities (DOT&PF) proposes a project to install passing lanes along the Parks Highway between MP 83 and MP 163 (Figure 1). The proposed project includes two separate projects, Parks Hwy: MP 90 - 99 Rehabilitation and Parks Hwy: Systemic Passing Lanes MP 83 - 163, combined in a single Categorical Exclusion (CE) approved in August 2015. Since approval of the original CE, the project has been separated into three phases for design and construction:

- **Phase 1.** Parks Hwy: MP 90 - 99 Rehabilitation and HSIP: Parks Hwy: Systemic Passing Lanes MP 83 – 99. Construction began in spring 2018.
- **Phase 2.** HSIP: Parks Hwy: Systemic Passing Lanes MP 99 - 123.5. Construction began in fall 2018.
- **Phase 3.** HSIP: Parks Hwy: Systemic Passing Lanes MP 123.5 – 163. Construction is anticipated to commence in summer 2019.

We are re-consulting with you, in accordance with Chapter 8 of the Environmental Procedures Manual, to determine if the proposed project will result in the use of Section 4(f) resources, described below. Since consultation in 2015, proposed passing lane locations have shifted between MP 123.5 and 163, necessitating re-examination of the project's potential impact to 4(f) resources. We believe the project would still not result in a permanent incorporation, adverse temporary occupancy, or constructive use of a 4(f) resource and are requesting your concurrence.

Project Description

The project includes the following scope of work:

- Widen the roadway to install passing lanes in each travel direction, spaced approximately every six to eight miles
- Resurface the Parks Highway from MP 90 to MP 99, including new asphalt pavement and a foam stabilized base course
- Remove or reassign 'unofficial' slow-vehicle turn-outs
- Improve or replace drainage and stream culverts, including fish passage culverts
- Conduct bridge maintenance
- Widen shoulders within the MP 90 to MP 99 project limits
- Dig-outs, as needed to improve deficient embankment
- Vegetation clearing within DOT&PF right-of-way (ROW)
- Relocate utilities, as needed
- Add roadside turnouts at Goose Creek and Montana Creek
- Improve drainage, driveways and approaches, signs and striping, guardrail and guardrail end Treatments

Section 4(f) Resources

The following recreational resources (Figures 1, 3-4) are owned and managed by the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation for public use.

- Montana Creek Campground. A public campground is located at MP 96.3 of the Parks Highway. In 2015, the Statewide Environmental Office determined the project would not result in a 4(f) use of the campground. Construction of the adjacent Phase 1 project area is currently underway, and is anticipated to be complete in 2019. Noise restrictions adjacent to the campground are being implemented during the construction season.
- Denali State Park. Denali State Park covers 325,240 acres and provides visitors with recreational activities such as multi-use trails, public use cabins, picnic areas, campgrounds, and boat launches. The Parks Highway travels through Denali State Park from MP 132 to approximately MP 170. Generally, work along the corridor will occur entirely within DOT&PF ROW; however, limited temporary occupancy is anticipated outside DOT&PF ROW (see Temporary Occupancy bullet).
 - Denali View South. Denali Viewpoint South is a public rest area located at MP 135.8 of the Parks Highway, and approximately 1.5 miles south of the passing lane project area at MP 136.3-137.0. The rest area is not adjacent to the project area; no project activities will be occurring within 1,000 feet of the property. Accordingly, the rest area will not be analyzed as a potential Section 4(f) resource. The 2019 CE Re-Evaluation will reflect this change in status.
 - K'esugi Ken Campground. The access road to K'esugi Ken Campground is located at approximately MP 135.4 on the Parks Highway. This area includes a campground, day use area, trailhead, and public-use cabins. The nearest proposed passing lane work would occur approximately 0.9 mile north of the access road. The site is not adjacent to the project area; no project activities will be occurring within 1,000 feet of the property. Accordingly, the site will not be analyzed as a potential Section 4(f) resource. The 2019 CE Re-Evaluation will reflect this change in status.
 - Lower Troublesome Creek Campground. A public campground is located at MP 137.2 of the Parks Highway (Figure 3). Features include camping, hiking, fishing, wildlife observation, ten walk-in campsites, a large parking area for recreational vehicles, restrooms, and a trail to the confluence of Troublesome Creek and the Chulitna River. There are no restricted hours at this facility. The nearest proposed work would occur 470 feet south of the site. No work would be allowed between 2200 and 0700 hours within 1,000 feet of the site.
 - Upper Troublesome Creek Trailhead. A public trailhead is located at MP 137.6 of the Parks Highway (Figure 3). This site provides access to the K'esugi Ridge Trail System along with a parking area, restrooms, potable water, information kiosk, and sign-in area. Passing lane installation is proposed adjacent to the trailhead on the near (east) side of highway and will involve reconstructing the driveway approach within DOT&PF ROW. Access will be maintained during construction; however, traffic leaving the site may experience brief delays during flagging operations for grading and paving work on the new driveway approach (~1 week duration).
 - Byers Lake Campground. Byers Lake Campground is located at MP 146.9 on the Parks Highway. The campground offers 73 campsites, three cabins, a boat launch, fishing, and access to trails. The nearest

proposed work would occur approximately one mile south of the Byers Lake Campground access road. The rest area is not adjacent to the project area; no project activities will be occurring within 1,000 feet of the property. Accordingly, the campground will not be analyzed as a potential Section 4(f) resource. The 2019 CE Re-Evaluation will reflect this change in status.

- Alaska Veterans Memorial. The Alaska Veterans Memorial is located at MP 147.1 on the Parks Highway within Denali State Park. Features include a memorial, visitor center, historic information, hiking trails, picnic sites, and views of Denali. The nearest proposed work would occur approximately 1.2 miles south of the Alaska Veterans Memorial. The memorial is not adjacent to the project area; no project activities will be occurring within 1,000 feet of the property. Accordingly, the memorial will not be analyzed as a potential Section 4(f) resource. The 2019 CE Re-Evaluation will reflect this change in status.
- Ermine Hill Trailhead. Ermine Hill Trailhead is located at MP 156.5 of the Parks Highway. This site provides access to the K'esugi Ridge Trail System. The nearest proposed work would occur approximately 0.4 mile south of the trailhead. The site is not adjacent to the project area; no project activities will be occurring within 1,000 feet of the property. Accordingly, the site will not be analyzed as a potential Section 4(f) resource. The 2019 CE Re-Evaluation will reflect this change in status.
- Denali View North. Denali Viewpoint North is located at MP 162.7 of the Parks Highway (Figure 4). This area offers camping, picnic sites, trail access, and views of Denali. There are no restricted hours at this facility. Passing lane installation is proposed adjacent to Denali Viewpoint North. The nearest campsite is located approximately 300 feet from proposed work. The campground is separated from the roadway by trees and a tall berm. All work will occur on the opposite (east) side of highway from the site. No work would be allowed between 2200 and 0700 hours within 1,000 feet of the site.

No staging of equipment or materials will be allowed at parking areas, driveways, or access roads to any of the sites listed above.

Section 4(f) Use

We believe the project would not result in a permanent incorporation, adverse temporary occupancy, or constructive use of a Section 4(f) resource for the following reasons:

- Permanent Incorporation: The proposed project will not require additional ROW acquisition or permanent incorporation of land from any of the Section 4(f) resources described above.
- Temporary Occupancy: Temporary occupancy of Denali State Park lands outside DOT&PF ROW will occur at four locations. The purpose of the temporary occupancy is to provide ground surface access and sufficient work area around stream channel improvements within the ROW. The four temporary occupancy areas are depicted on the enclosed Figure 2. Temporary Construction Easements (TCEs), also shown on Figure 2, will be acquired at each location. These activities meet the conditions listed in 23 CFR 774.13(d)(1-4) and will be so minimal that they do not constitute a use within the meaning of 4(f). Concurrence from the official with jurisdiction is attached.
- Constructive Use: A constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the activities, features, or attributes that qualify the property for protection under 4(f) are substantially impaired. The proposed project was evaluated against the five situations listed in 23 CFR 774.15(e)(1-5) to determine whether it would meet any of the five situations that constitute a constructive use:
 - Substantial Noise Interference: The proposed project has the potential to cause temporary noise impacts from heavy machinery use and the presence of work crews during construction. However, the project is not anticipated to involve extended periods of construction noise interference during noise sensitive time periods that could substantially impair 4(f) resources. Construction activity will be prohibited within 1000 feet of Lower Troublesome Creek Campground and Denali View North campsites during 2200 and 0700. The DOT&PF completed a Traffic Noise Analysis in 2014 (revised 2018) and determined the proposed project

would not result in a permanent noise level increase that would substantially interfere with the use and enjoyment of any Section 4(f) properties.

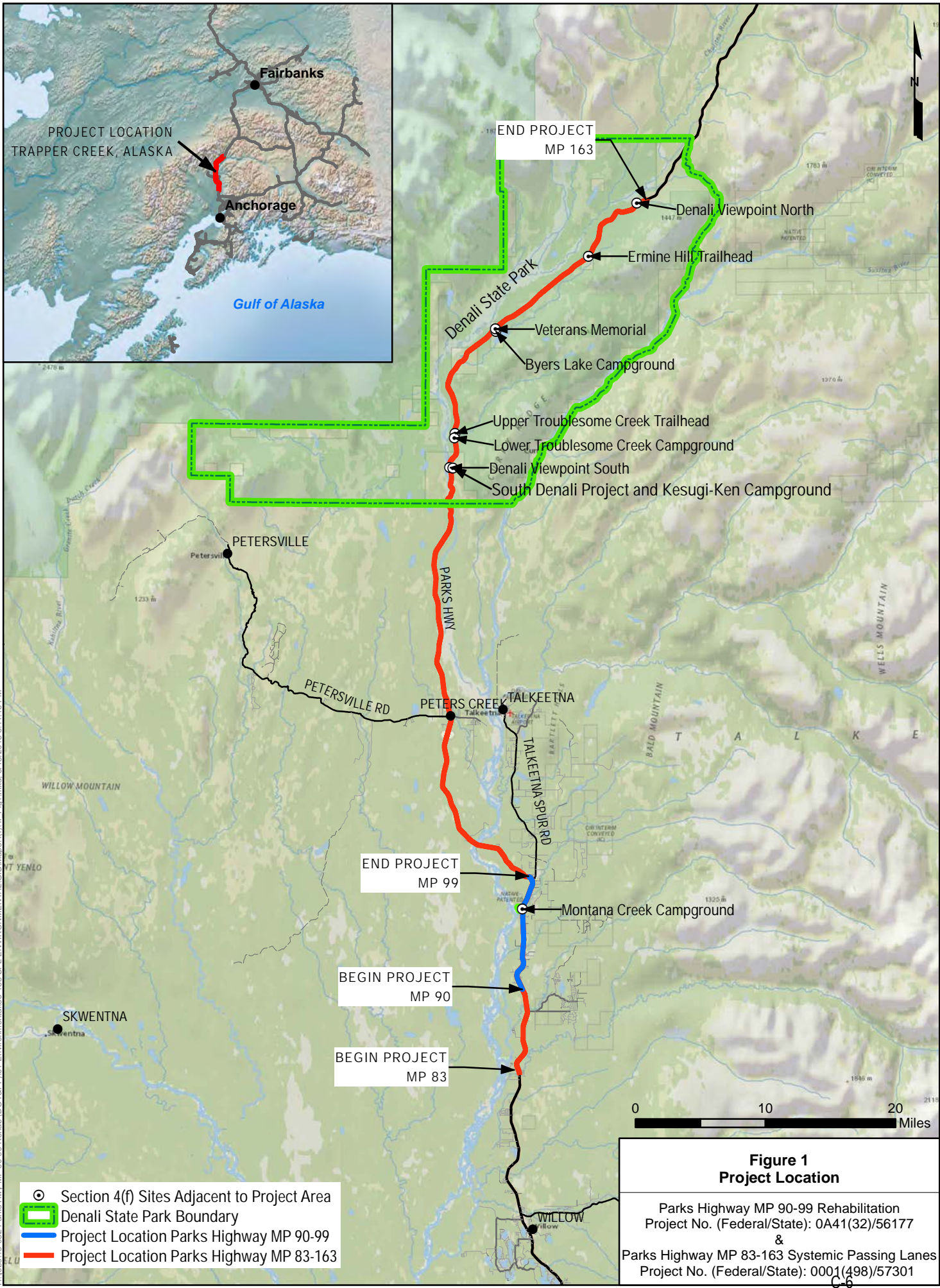
- *Aesthetic Features/Attributes*: The proposed project would not permanently obstruct or eliminate the viewshed or detract from the character or setting for which any of the adjacent 4(f) resources were designated.
- *Access Restriction*: The proposed project would not result in a restriction of access that would substantially diminish the utility of any of the Section 4(f) resources described above. During project construction, access to the Section 4(f) resources would be maintained as required by Section 643 of the Alaska DOT&PF Standard Specifications for Highway Construction. A Traffic Control Plan would be prepared for the proposed project.
- *Vibration Impact*: The proposed project would not involve extended periods of vibration during construction that could substantially impair the 4(f) resources.
- *Ecological Intrusion*: Wildlife habitat in the proposed project area is already bisected by the existing roadway. The proposed project is not located adjacent to a wildlife or waterfowl refuge and would not substantially diminish the value or use of any wildlife habitat, or affect migration or life cycle processes.

Attachments:

- Figure 1 – Project Location
- Figure 2 – Section 4(f) Involvement
- Figure 3 – Adjacent Section 4(f) Properties
- Figure 4 – Adjacent Section 4(f) Properties
- Signed OWJ Letter and Accompanying Figures

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017 and executed by FHWA and DOT&PF.

Ryan Riddle, Environmental Team Leader
Alaska Department of Transportation & Public Facilities
Preliminary Design and Environmental Section
P.O. Box 196900, Anchorage, Alaska 99519
(907) 269-0545

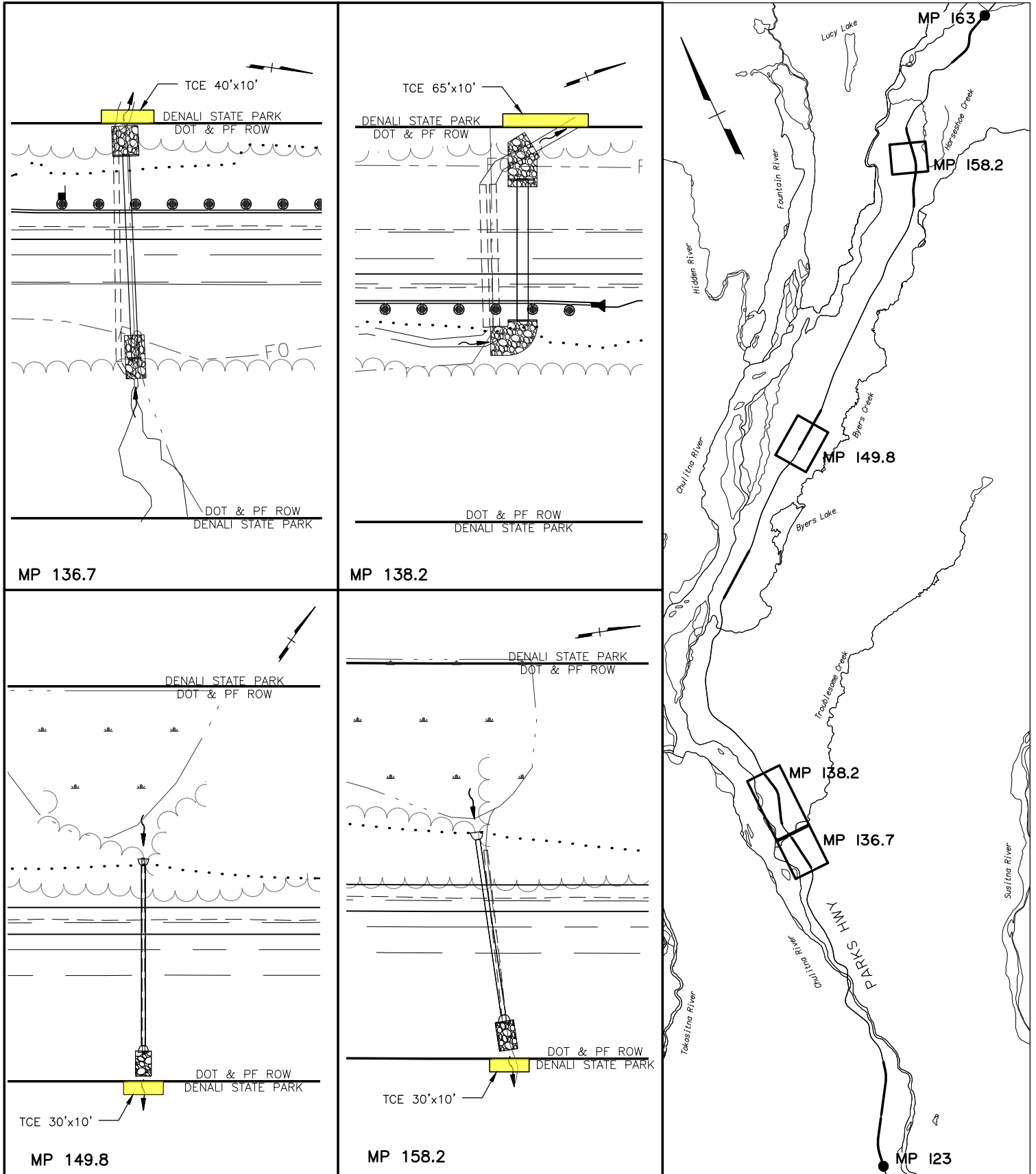


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- ⊙ Section 4(f) Sites Adjacent to Project Area
- ▭ Denali State Park Boundary
- ▬ Project Location Parks Highway MP 90-99
- ▬ Project Location Parks Highway MP 83-163

Figure 1
Project Location

Parks Highway MP 90-99 Rehabilitation
Project No. (Federal/State): 0A41(32)/56177
&
Parks Highway MP 83-163 Systemic Passing Lanes
Project No. (Federal/State): 0001(498)/57301

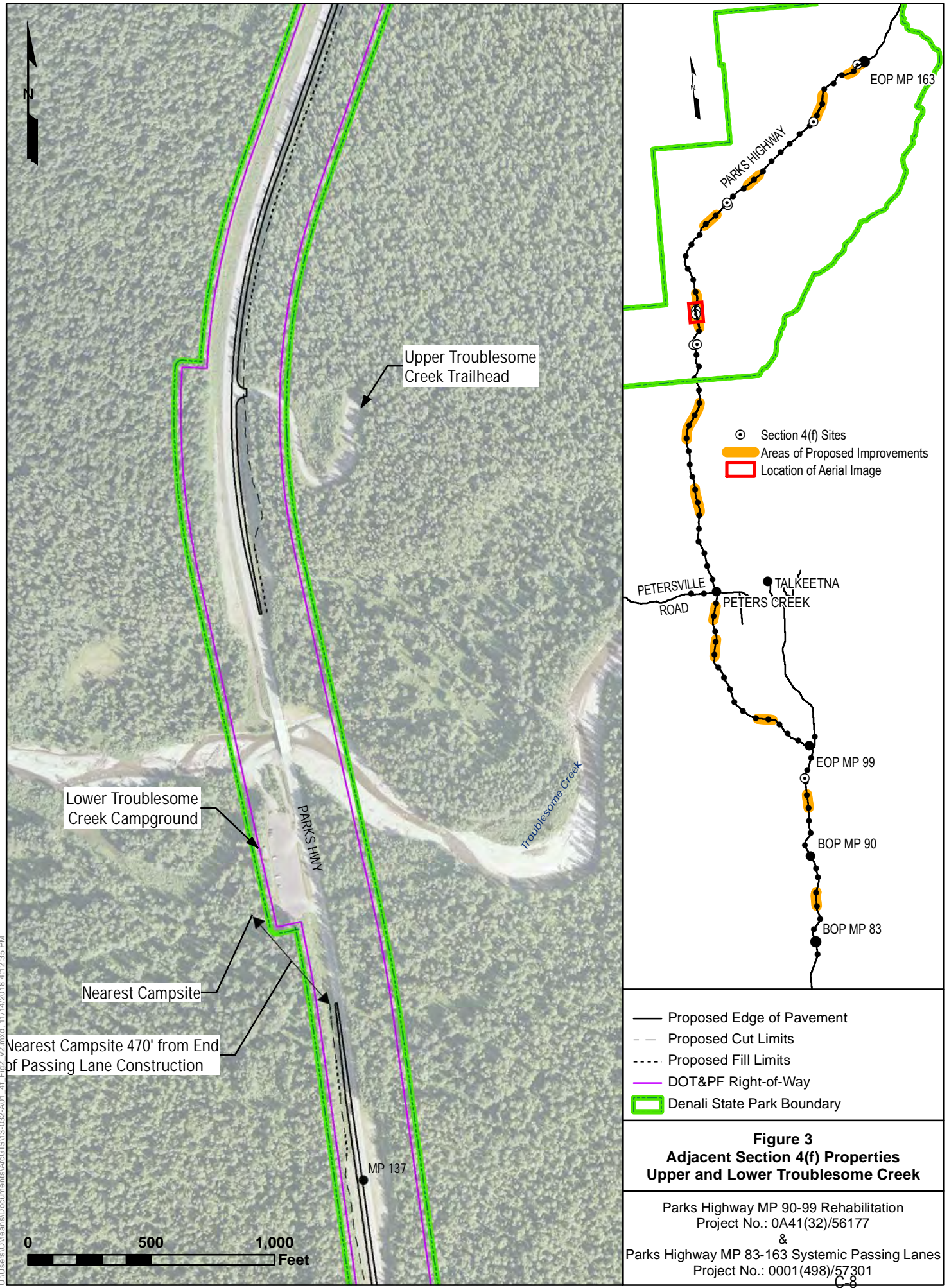


LEGEND
 TEMPORARY OCCUPANCY AREA

State of Alaska
 Department of Transportation
 & Public Facilities

HSIP: Parks Highway Systemic Passing Lanes
 MP 123.5-163
 Project No.: CFHWY00128
 Date: September, 2018

Figure 2
Section 4(f)
Involvement
 C-7



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Nearest Campsite 470' from End of Passing Lane Construction

Lower Troublesome Creek Campground

Upper Troublesome Creek Trailhead

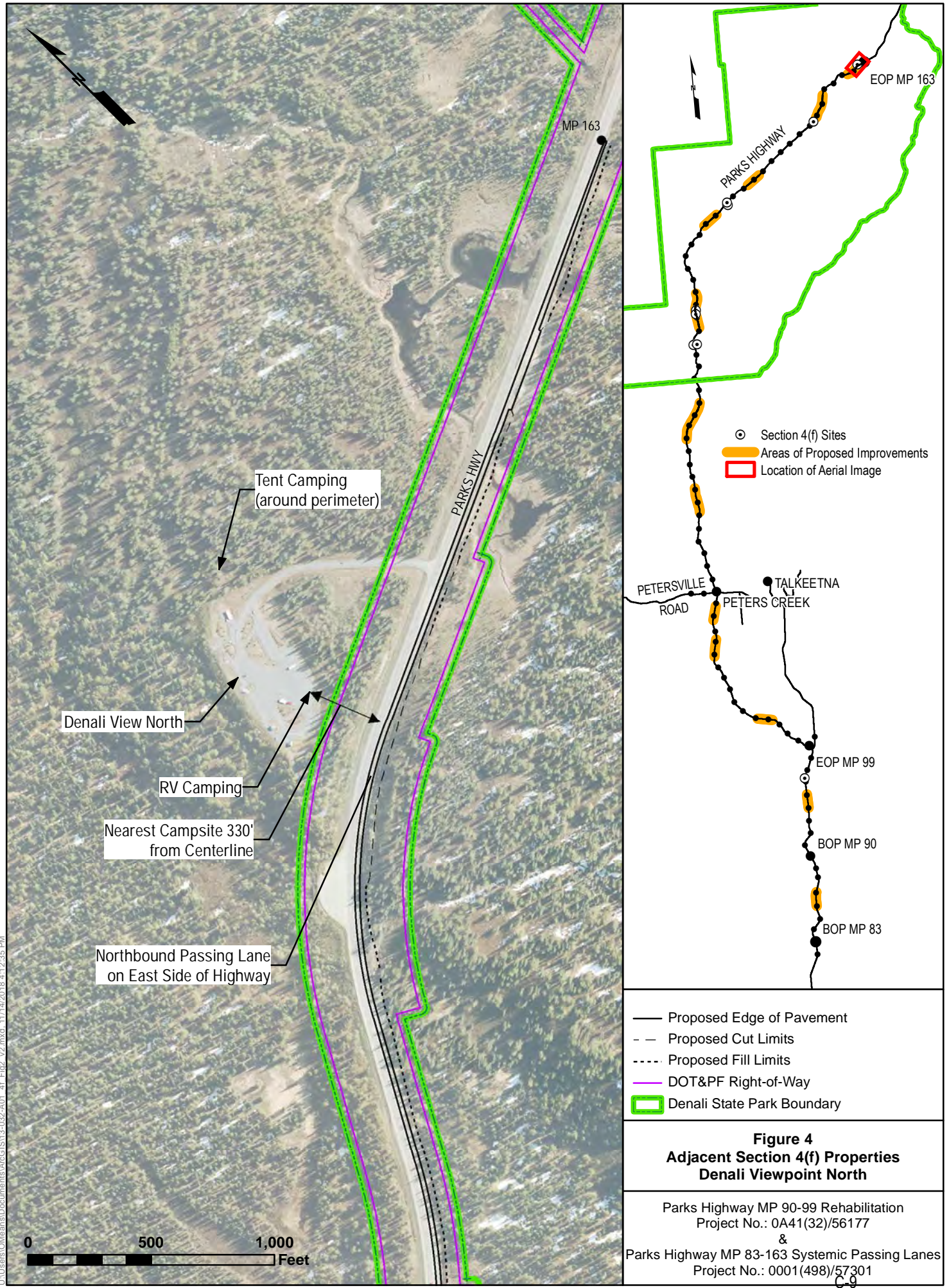
0 500 1,000 Feet

- ⊙ Section 4(f) Sites
- ▬ Areas of Proposed Improvements
- ▭ Location of Aerial Image

- Proposed Edge of Pavement
- - Proposed Cut Limits
- Proposed Fill Limits
- ▬ DOT&PF Right-of-Way
- ▭ Denali State Park Boundary

Figure 3
Adjacent Section 4(f) Properties
Upper and Lower Troublesome Creek

Parks Highway MP 90-99 Rehabilitation
 Project No.: 0A41(32)/56177
 &
 Parks Highway MP 83-163 Systemic Passing Lanes
 Project No.: 0001(498)/57301



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- Proposed Edge of Pavement
- - Proposed Cut Limits
- Proposed Fill Limits
- DOT&PF Right-of-Way
- ▭ Denali State Park Boundary

Figure 4
Adjacent Section 4(f) Properties
Denali Viewpoint North

Parks Highway MP 90-99 Rehabilitation
 Project No.: 0A41(32)/56177
 &
 Parks Highway MP 83-163 Systemic Passing Lanes
 Project No.: 0001(498)/57301



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Transportation
and Public Facilities**

DESIGN & ENGINEERING SERVICES
PRELIMINARY DESIGN & ENVIRONMENTAL

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Main: 907.269.0542
Toll Free: 800.770.5263
TDD: 907.269.0473

October 1, 2018

In Reply Refer To:

HSIP: Parks Highway Systemic Passing Lanes
Project No.: Z573010000/0001498

Wayne Biessel
Park Superintendent
Alaska Department of Natural Resources – Division of Parks and Outdoor Recreation
7278 E. Bogard Rd.
Wasilla, AK 99654

Subject: Section 4(f) Exception – Temporary Occupancy

Dear Mr. Biessel,

The Alaska Department of Transportation and Public Facilities (DOT&PF) has assumed the responsibilities of the Federal Highway Administration under 23 U.S.C. 327, and is proposing a project to install passing lanes along the Parks Highway between MP 83 and MP 163 (Figure 1). The purpose of the proposed project is to improve safety and traffic flow along this segment of the Parks Highway.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.

The proposed project would involve activities within, and adjacent to, Denali State Park, a property protected under 23 CFR 774 (Section 4(f) of the U.S. Department of Transportation Act of 1966). The purpose of this letter is to request your concurrence that the temporary occupancy exception to Section 4(f) approval [23 CFR 774.13(d)] applies to the proposed activities. Section 4(f) was enacted as a means to protect significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges as well as historic sites of national, state, or local significance from conversion to transportation uses. Further discussion of how Section 4(f) relates to the proposed project follows below.

Project Description

The proposed work would:

- Widen the roadway to install passing lanes in each travel direction, spaced approximately every six to eight miles;
- improve or replace drainage and stream culverts, including fish passage culverts;

- dig-outs, as needed to improve deficient embankment;
- vegetation clearing within DOT&PF right-of-way (ROW);
- relocate utilities, as needed; and
- improve drainage, driveways and approaches, signs and striping, guardrail and guardrail end treatments.

This project has been broken into three phases based on logical break points for design and construction.

- Phase 1: MP 83 - 99
- Phase 2: MP 99 - 123.5
- Phase 3: MP 123.5 - 163

Construction of Phase 1 began in spring 2018 and is anticipated to be complete in summer 2019. Construction of Phase 2 began in fall 2018 and is scheduled to be completed in summer 2019. Construction of Phase 3 is expected to begin in summer 2019.

Section 4(f) Resource Involvement

Between May 6 and May 18, 2015, DOT&PF consulted with you via email regarding the overall project covering Parks Highway MP 83 to MP 163. There have been no changes to the proposed involvement in any Section 4(f) resources or environmental commitments made by DOT&PF since that time. All mitigation measures, including night time work restrictions in the vicinity of campgrounds, staging area restrictions, and maintenance of public access, have been or are currently being implemented during construction of phases 1 and 2.

During the development of design for phase 3 of the project, DOT&PF has identified four locations that will involve temporary occupancy of Denali State Park lands outside DOT&PF ROW. The purpose of the temporary occupancy is to provide ground surface access and sufficient work area around stream channel improvements within the ROW. The four temporary occupancy areas are depicted on the enclosed Figure 2. Temporary Construction Easements (TCEs), shown on Figure 2, will be acquired at each location.

Exception to the Requirement for Section 4(f) Approval

DOT&PF believes the proposed project meets the exception to the requirement for Section 4(f) approval because the following conditions of use under 23 CFR 774.13(d)(1-4) would be satisfied:

1) Duration [of the use] must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;

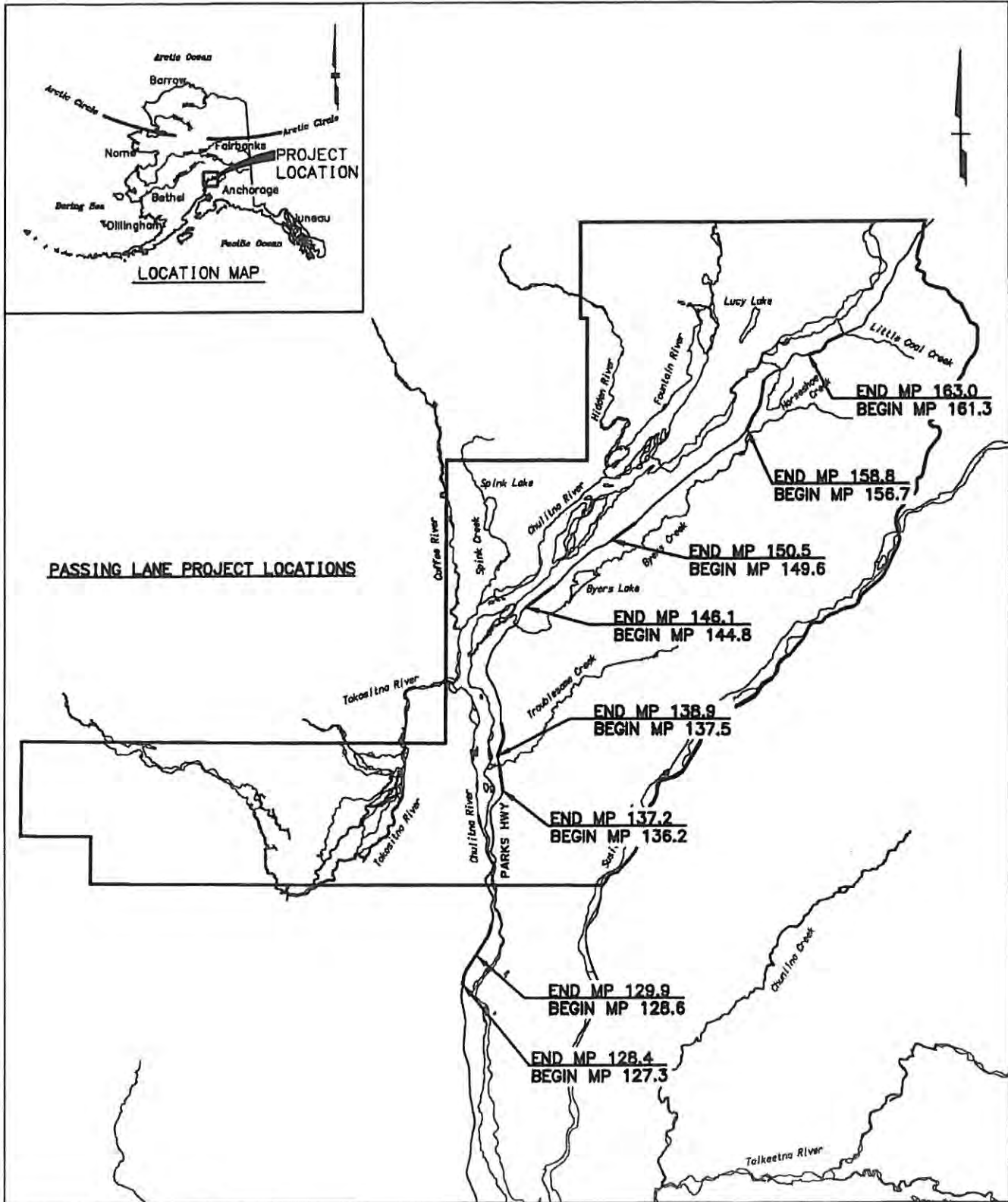
Occupancy of the Section 4(f) resource is anticipated to last approximately three days for each of the four temporary occupancy location, while the total anticipated duration for the construction of the project is two construction seasons. There will be no change in ownership for the State Park area.

2) Scope of the work must be minor, i.e., both the nature and magnitude of the changes to the Section 4(f) property are minimal;

Only a very small portion of the resource that is not currently used for recreational activities will be affected (TCEs are approximately 400 square feet in area). No permanent improvements will be constructed within Denali State Park as part of the stream channel improvements. The affected areas will be returned to pre-construction conditions or better and changes to the Section 4(f) property will be minimal.

3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis; and

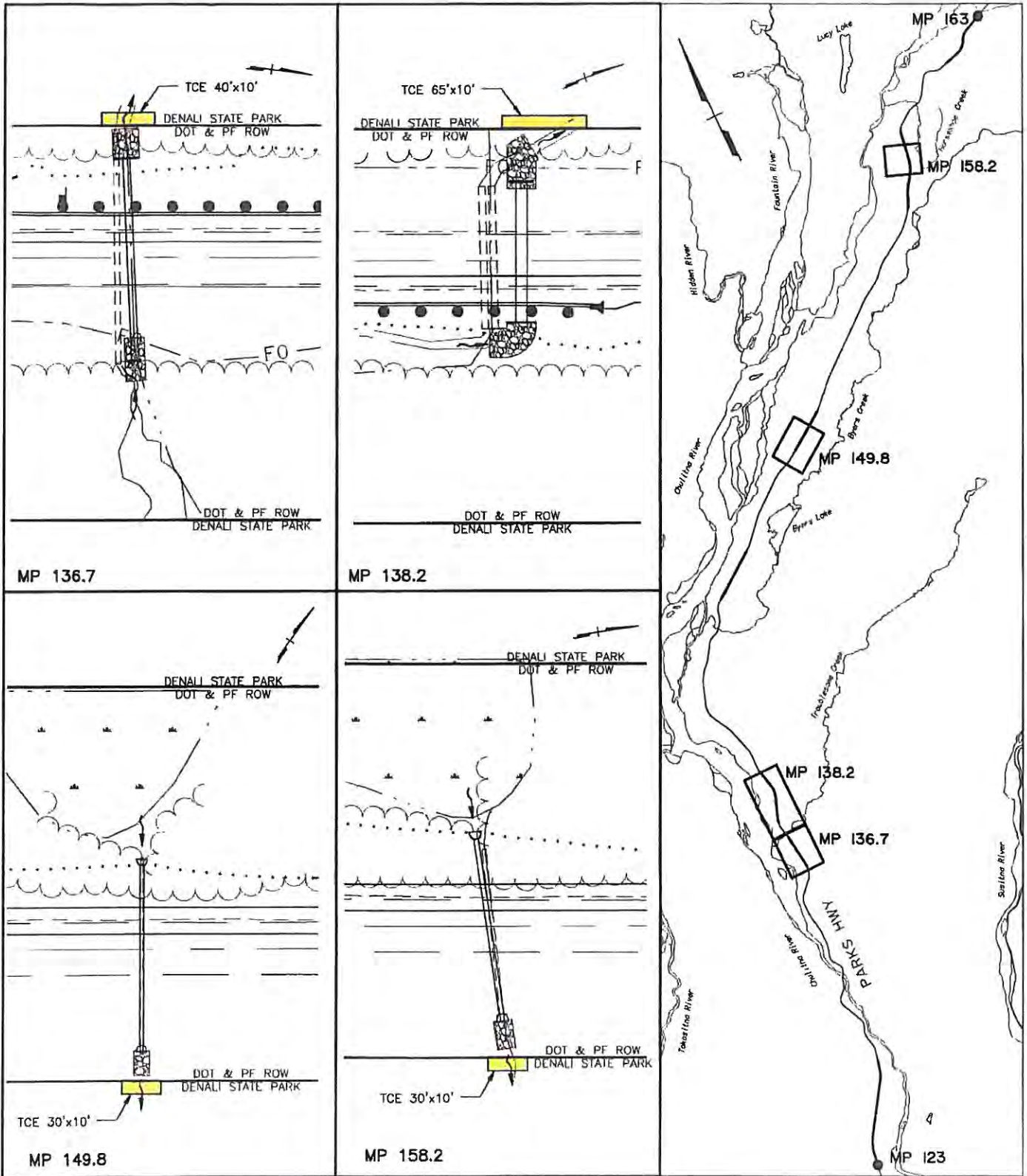
The proposed project will not result in any permanent adverse physical impacts to the State Park. The proposed temporary occupancy is only for temporary work area access and will not interfere with the protected activities, features, or attributes of the property, on either a temporary or permanent basis.



State of Alaska
Department of Transportation
& Public Facilities

HSIP: Parks Highway Systemic Passing Lanes
MP 123.5-163
Project No.: CFHWY00128
Date: September, 2018

Figure 1
Location &
Vicinity Map



LEGEND
 TEMPORARY OCCUPANCY AREA

State of Alaska
 Department of Transportation
 & Public Facilities

HSIP: Parks Highway Systemic Passing Lanes
 MP 123.5-163
 Project No.: CFHWY00128
 Date: September, 2018

Figure 2
Section 4(f)
Involvement

Owen L. Means

From: Dietrick, Matthew V (DOT) <matthew.dietrick@alaska.gov>
Sent: Wednesday, September 05, 2018 2:58 PM
To: Owen L. Means
Cc: Riddle, Ryan N (DOT); Elliott, Brian A (DOT)
Subject: RE: 57301 & 56177 Parks 83-163 3R and Passing Lanes - 4(f) Temporary Occupancy Processing

Owen, Based on the information provided below, it appears the temporary occupancy exception at 23 CFR 774.13(d) is appropriate for the proposed project's temporary use of **Denali State Park**. Consultation with the official with jurisdiction at Denali State Park to verify their agreement with the conditions at 23 CFR 774.13(d)(1-4) may proceed.

All Section 4(f) consultations should follow Chapter 8 of the Environmental Procedures Manual. If there are any changes to the below information or other project changes affecting Section 4(f) resources, additional consultation with the NEPA Manager may be necessary.

Please keep me informed of project developments.

Best
Matt

Matt Dietrick
DOT&PF NEPA Program Manager
269-6229

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.

From: Owen L. Means [mailto:omeans@hdalaska.com]
Sent: Wednesday, September 05, 2018 2:02 PM
To: Dietrick, Matthew V (DOT) <matthew.dietrick@alaska.gov>
Cc: Riddle, Ryan N (DOT) <ryan.riddle@alaska.gov>
Subject: 57301 & 56177 Parks 83-163 3R and Passing Lanes - 4(f) Temporary Occupancy Processing

Hi Matt,

Following our conversation last week, I am consulting with you because I believe the temporary occupancy exception at 23 CFR 774.13(d) is appropriate for work affecting Denali State Park as part of the George Parks Highway Systemic Passing Lanes & Parks Highway MP 90 - 99 Resurfacing (Z573010000 & Z561770000) project.

DOT&PF CR previously consulted with the NEPA Program Manager, who determined on May 26, 2015 that the project will not affect several Section 4(f) resources within Denali State Park. Since then, the project's design has been refined, resulting in the need for temporary construction easements at four locations within the Park.

- The proposed project would replace culverts and construct stream channel improvements at the four TCE locations.
- The four TCE locations are not within areas that are currently used for recreation (i.e., they are in undeveloped, forested areas and are not adjacent to trails, trailheads, parking areas, campgrounds, or other park amenities.)
- Due to insufficient work area space within the existing DOT&PF ROW, DOT&PF needs to access land outside of the ROW for the operation of equipment used to perform the stream channel improvements.

- No permanent improvements will be constructed within the resource.

Temporary occupancy conditions will be satisfied by the following:

1. Duration of the work will be less than the time needed to construct the entire project and there will be no change in ownership of the land.
2. The scope of work is minor. Only a very small portion of the resource that is not currently used for recreational activities will be affected (TCEs range from 300 to 400 square feet in area). Appearance and function of the resource after construction will be consistent with the existing conditions.
3. Permanent adverse physical impacts will not occur. The proposed temporary occupancy is only for temporary work area access and will not interfere with the protected activities, features, or attributes of the property, on either a temporary or permanent basis.
4. The land being used will be returned to a condition which is at least as good as that which existed prior to the project.
5. I anticipate the official with jurisdiction will provide written agreement with the above conditions.

Please let me know if you agree with this approach.

Thank you,
Owen

Owen Means, Environmental Specialist



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Anchorage, AK 99503

907-564-2120 (Main Office)

907-564-2143 (Direct Line)

omeans@HDLAlaska.com

www.HDLAlaska.com

Owen L. Means

From: Riddle, Ryan N (DOT) <ryan.riddle@alaska.gov>
Sent: Tuesday, December 11, 2018 12:35 PM
To: Owen L. Means
Subject: FW: 6(f) consultation for DOT&PF Parks Highway MP 123.5-163 Systemic Passing Lane Project

FYI

From: Ayers, Jean M (DNR) <jean.ayers@alaska.gov>
Sent: Tuesday, December 11, 2018 11:56 AM
To: Riddle, Ryan N (DOT) <ryan.riddle@alaska.gov>
Subject: RE: 6(f) consultation for DOT&PF Parks Highway MP 123.5-163 Systemic Passing Lane Project

Hi Ryan,

Sorry it has taken longer than usual to respond to this type of request. The earthquake and other major disruptions have affected my schedule recently. In any case, I appreciate the opportunity to review the proposed development of systemic passing lanes along the Parks Highway adjacent to Denali State Park (DSP). As you know, this park is protected under Section 6(f)(3) of the Land and Water Conservation Fund (LWCF) Act of 1965. The Act requires that LWCF-assisted property be protected in perpetuity for public outdoor recreation use. Since 1972, the State of Alaska has used seven different LWCF grants to develop recreational facilities such as campgrounds, roads, utilities, trails and other amenities within the park.

DOTPF's synopsis below indicates that this project will involve temporary occupancy of DSP outside the DOTPF right-of-way. I understand that occupancy is anticipated to last approximately three days at each of four temporary locations, the size of park land affected shall not significantly affect recreational use, no permanent adverse impacts are anticipated, and disturbed areas shall be restored to conditions at least as good as that which existed prior to disturbance. Further, DOTPF will coordinate with the Division of Parks & Outdoor Recreation to minimize impacts to the park throughout the construction process.

Based on information provided by DOTPF, I determine that no 6(f)(3) protected property will be converted to other than public outdoor recreation use. The proposed temporary occupancy will not constitute a conversion; nor will it require a formal request to the National Park Service for temporary non-conforming use, as the duration at any one location is less than 6 months.

If future plans or development result in a significant change to this project, please contact me again to review the 6(f)(3) determination.

Jean Ayers

Grants Administrator, State of Alaska: DNR

Division of Parks and Outdoor Recreation

(907) 269-8694

From: Riddle, Ryan N (DOT) <ryan.riddle@alaska.gov>
Sent: Thursday, December 6, 2018 3:44 PM
To: Ayers, Jean M (DNR) <jean.ayers@alaska.gov>
Subject: FW: 6(f) consultation for DOT&PF Parks Highway MP 123.5-163 Systemic Passing Lane Project

Hi Jean –

Hope you fared ok in the earthquake. Checking in with you to see if you've had time to look at this request.

Thank you,
Ryan

From: Riddle, Ryan N (DOT)

Sent: Wednesday, November 21, 2018 3:27 PM

To: Ayers, Jean M (DNR) <jean.ayers@alaska.gov>

Subject: 6(f) consultation for DOT&PF Parks Highway MP 123.5-163 Systemic Passing Lane Project

Hi Jean –

The Alaska Department of Transportation and Public Facilities (DOT&PF) is proposing a project to install passing lanes along the Parks Highway between MP 123.5 and 163 (Figure 1). The purpose of the proposed project is to improve safety and traffic flow along this segment of the Parks Highway.

The proposed project would involve a minor amount of work within Denali State Park, a property protected under 36 CFR 59 (Section 6(f) of the Land and Water Conservation Fund Act of 1965). DOT&PF is requesting your concurrence that proposed temporary use of Denali State Park (see below) does not constitute a conversion of use and would not result in a substantial impact to public outdoor recreation use.

Project Description

The proposed work would:

- Widen the roadway to install passing lanes in each travel direction, spaced approximately every six to eight miles;
- improve or replace drainage and stream culverts, including fish passage culverts;
- dig-outs, as needed to improve deficient embankment;
- vegetation clearing within DOT&PF right-of-way (ROW);
- relocate utilities, as needed; and
- improve drainage, driveways and approaches, signs and striping, guardrail and guardrail end treatments.

Construction is expected to begin in summer 2019 and is anticipated to last two seasons.

Section 6(f) Resource Involvement

DOT&PF has identified four locations that will involve temporary use and occupancy of Denali State Park lands outside DOT&PF ROW. The purpose of the temporary occupancy is to provide ground surface access and sufficient work area around stream channel improvements within ROW. The four temporary occupancy areas are depicted on the enclosed Figure 2. Temporary Construction Easements (TCEs), shown on Figure 2, will be acquired at each location.

Use of the Section 6(f) resource is anticipated to last approximately three days at each of the four locations. There will be no change in ownership for the State Park area. Only a very small portion of the resource that is not currently used for recreational activities will be affected (TCEs are approximately 400 square feet in area). No permanent improvements will be constructed within Denali State Park as part of the stream channel improvements. The affected areas will be returned to pre-construction conditions or better and changes to the Section 6(f) property will be minimal.

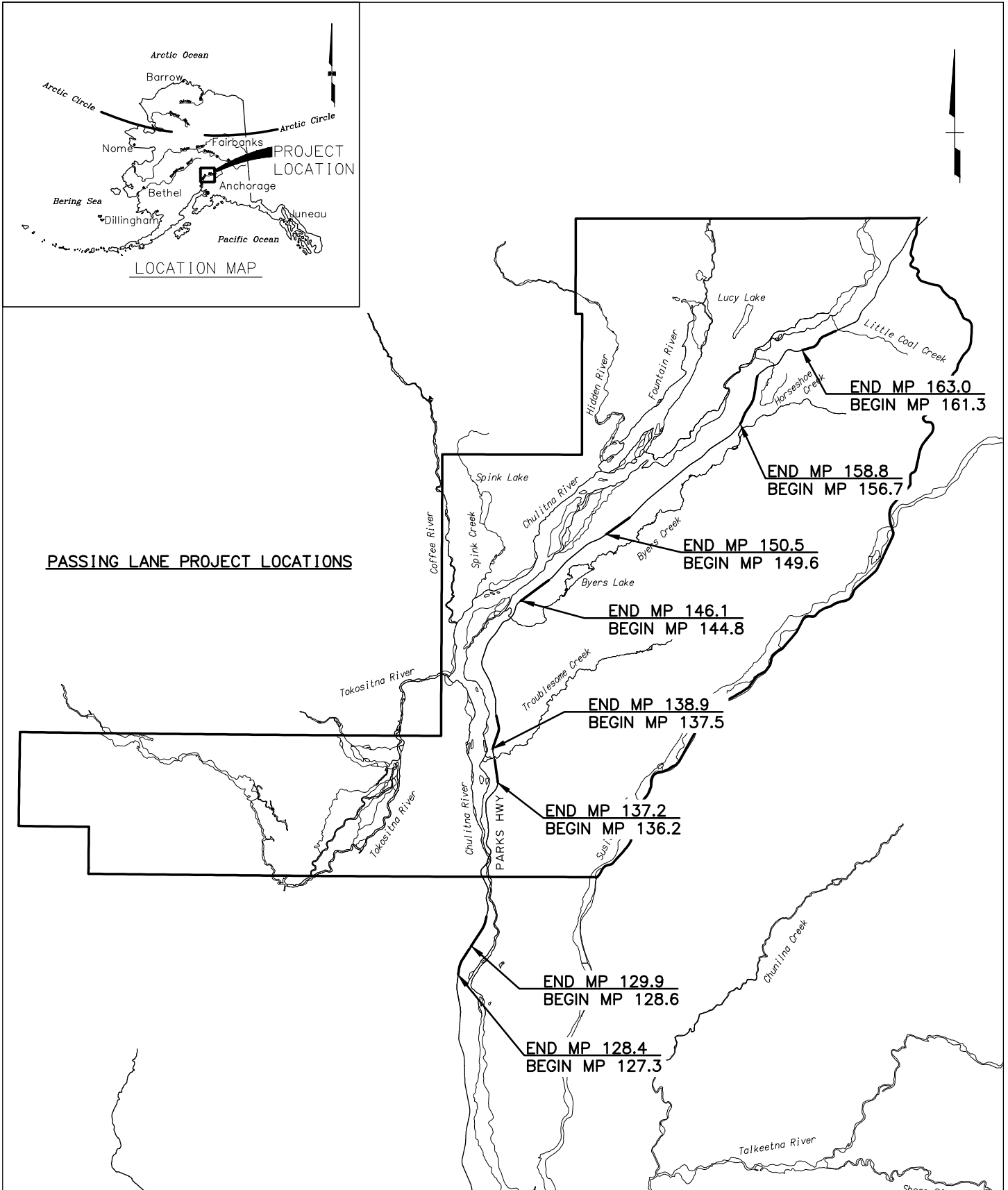
Disclosure:

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017 and executed by FHWA and DOT&PF.

Please email or call if you have questions.

Thank you,

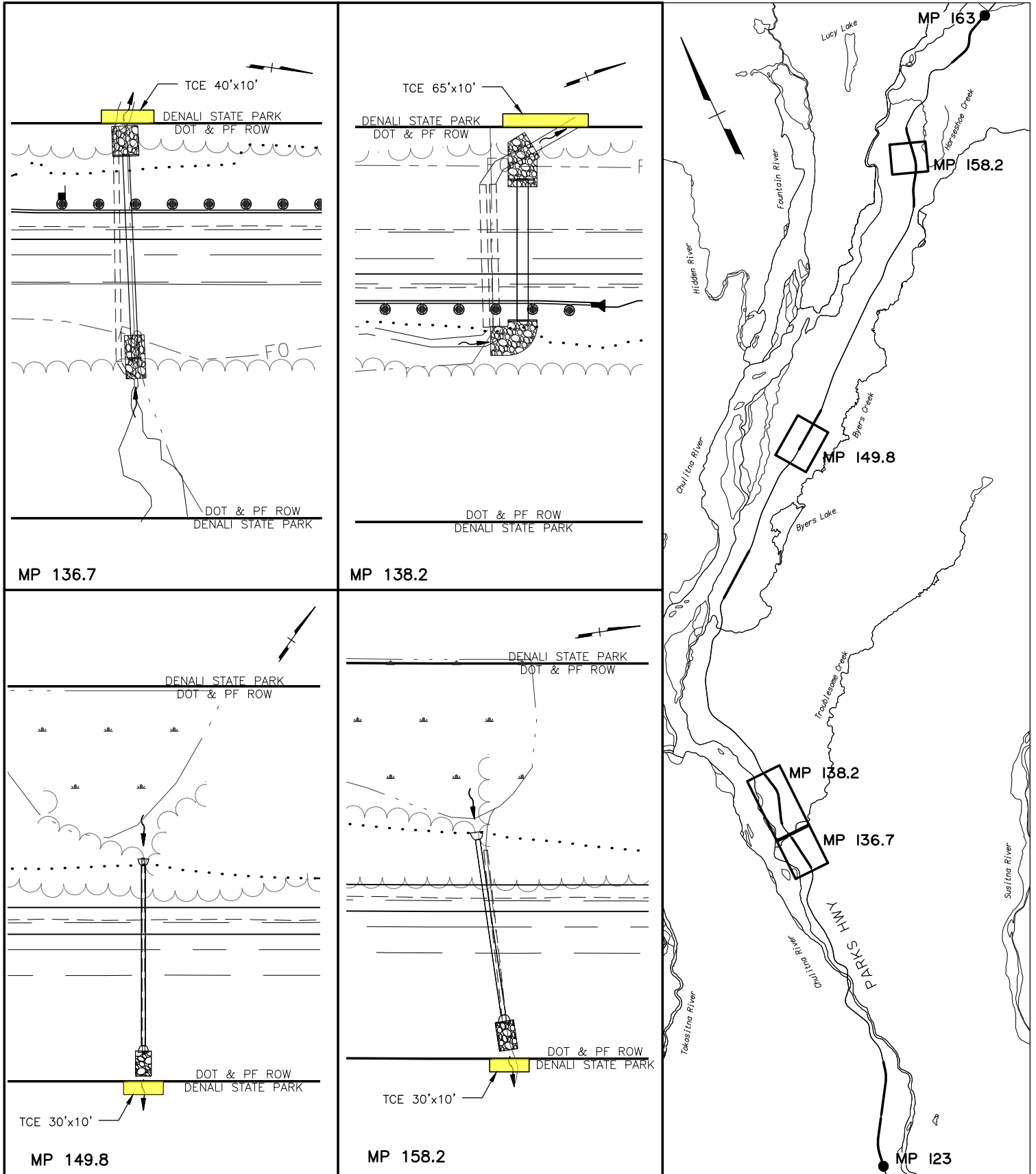
Ryan Riddle, Environmental Team Leader
Alaska Department of Transportation & Public Facilities
Preliminary Design and Environmental Section
P.O. Box 196900, Anchorage, Alaska 99519
(907) 269-0545



State of Alaska
Department of Transportation
& Public Facilities

HSIP: Parks Highway Systemic Passing Lanes
MP 123.5-163
Project No.: CFHWY00128
Date: September, 2018

Figure 1
Location &
Vicinity Map



LEGEND

TEMPORARY OCCUPANCY AREA

State of Alaska
Department of Transportation
& Public Facilities

HSIP: Parks Highway Systemic Passing Lanes
MP 123.5-163
Project No.: CFHWY00128
Date: September, 2018

Figure 2
Section 6(f)
Involvement
C-21

APPENDIX D

Public Coordination

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**Parks 83-163 Systemic Passing Lanes & Parks 90-99 Resurfacing
Comment-Response Summary**

MP	Date	From	Comment	Response
86	4/26/16	Angela and Johnathon Davis HC 89 Box 374, Willow, AK 99688, email: tripletsak@gmail.com, telephone: 907-322-2316	<p>Angela — Contact information for project files: Angela and Johnathon Davis, HC 89 Box 374, Willow, AK 99688, email: tripletsak@gmail.com, telephone: 907-322-2316 Here is the website link I promised on the telephone — http://dot.alaska.gov/creg/parkshwy/ The website shows all the projects in design along the Parks Highway between Wasilla and Denali State Park. Contact information is available for the project managers working on these projects. I will record your concerns about passing lanes at mile 86 to include: increased noise if the passing lanes are placed adjacent to your property; loss of vegetation and screening if the ROW needs to be cleared in the area and reduced safety when accessing your mail. I also understand your concerns for safety extend to your children. You also stated in our telephone call that you believe there are other areas where the pavement work needs to be done and your belief that the passing lanes could be constructed in those locations effectively fixing the poor pavement and adding the passing lanes at the same time. If I missed a concern, don't hesitate to let me know.</p> <p>I've attached the ROW Control drawings from the project engineer for the project that shows the centerline of the highway offset in the 300-foot right of way. I've also attached screen shot from the Matsu Borough's Parcel Viewer showing the same offset. I've attached a fact sheet that you can share with your neighbors about the project.</p>	I received the email at gmail.com, and will get back to you once I read everything and do research. Will talk to locals and share this info. Thank you for your time and answering questions. Angela Davis

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			Do not hesitate to call or email if you have additional questions or comments. Anne	
86	12/25/16	Angela Davis tripletsak@gmail.com	<p>Ms. Anne Brooks, Mr. Jeff Fuglestad, and Mr. Tom Schmid</p> <p>Why is there going to be a double passing lane installed in front of a densely populated part of the highway?</p> <p>There are larger, straighter, and less populated areas of the highway to put in a double passing lane.</p> <p>Why would a double passing lane be installed where there are two sets of 10+ mail boxes on the side of the highway between miles 86 & 87. That alone should indicate how populated this area is. I would actually have to start up my car to get the mail safely. I would have to cross four lanes of traffic if I walked.</p> <p>When this was brought to my attention and I inquired upon it I was told that the companies does not like to install passing lanes on corners. From Willow to Wasilla there are passing lanes on corners.</p> <p>Why was this specific area chosen, it has corners on both ends?</p> <p>Is the federal government offering sound barriers for this federally funded highway expansion. How many trees do you plan on cutting back on the property.</p> <p>The Davis Family aka Concerned neighbors</p>	<p>Davis Family:</p> <p>In an effort to improve we have begun a series of projects to provide passing lanes on the Parks and other Alaska highways. Passing lanes are effective in improving highway capacity and safety on two-lane highways. The purpose of these lanes is to reduce aggressive driving behavior where, in the absence of a passing lane, passing would have to occur in the opposing traffic lane.</p> <p>The team identified passing lane locations by evaluating the corridor with the following questions in mind.</p> <ul style="list-style-type: none"> • Where will a slow vehicle be encountered? <i>These sites are typically on uphill grades and at separation intervals between successive dedicated passing lanes along the highway.</i> • How far is the passing lane from the last one? <i>In the direction of travel, passing lanes spaced 3 to 10 miles apart, depending on traffic volume and terrain, are effective in achieving expected goals.</i> • What other considerations were made in locating passing lanes? Traffic character and terrain. <i>For example: Passing lane locations were avoided where higher turning traffic is likely to occur. Locations where steep grades or sharp horizontal curvature exists are likely to be candidates for constructing passing lanes.</i>

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				<ul style="list-style-type: none"> • Where will sight distance, vertical, and horizontal road geometry work for passing? <i>Passing lanes work best where there is sufficient sight distance ahead at the passing lane’s beginning and ending sides.</i> • Where will passing lanes be anticipated or expected by motorists? <i>Areas where slow moving vehicles ahead are likely to be encountered, or at sufficient distance from the last passing lane where traffic platoons are likely to develop.</i> • Will construction of the passing lanes avoid environmentally sensitive locations or locations requiring significant cut or fill? <i>The team considered the cost to construct the additional lanes and impacts to wetlands, parkland, utilities, bridges, and fill/cut needs.</i> <p>A Noise Analysis was conducted at the proposed passing lane locations. Based on that analysis, noise mitigation (construction of sound barriers) is not required in this project.</p> <p>Tree clearing will occur within the DOT&PF rights-of-way extending 100-feet on both sides of the proposed highway centerline. The purpose of the clearing is to provide increased visibility and reduce moose/vehicle collisions.</p> <p>We appreciate your comments. Do not hesitate to contact us if you have additional questions.</p>
86	12/28/16	Angela Davis tripletsak@gmail.com	Ms. Anne Brooks, Mr. Jeff Fuglestad, and Mr. Tom Schmid	12/28/16 Ms. Davis.

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			<p>Why is there going to be a double passing lane installed in front of a densely populated part of the highway? There are larger, straighter, and less populated areas of the highway to put in a double passing lane.</p> <p>Why would a double passing lane be installed where there are two sets of 10+ mail boxes on the side of the highway between miles 86 & 87. That alone should indicate how populated this area is. I would actually have to start up my car to get the mail safely. I would have to cross four lanes of traffic if I walked.</p> <p>When this was brought to my attention and I inquired upon it I was told that the companies does not like to install passing lanes on corners. From Willow to Wasilla there are passing lanes on corners.</p> <p>Why was this specific area chosen, it has corners on both ends.</p> <p>Is the federal government offering sound barriers for this federally funded highway expansion. How many trees do you plan on cutting back on the property.</p> <p>The Davis Family aka Concerned neighbors</p>	<p>Sorry for he delay getting back to you. I received your first message Christmas Eve.</p> <p>We have received your questions. I will work with the team to get back to you. Anne</p> <p>1/13/17 Response</p> <p>Davis Family: In an effort to improve we have begun a series of projects to provide passing lanes on the Parks and other Alaska highways. Passing lanes are effective in improving highway capacity and safety on two-lane highways. The purpose of these lanes is to reduce aggressive driving behavior where, in the absence of a passing lane, passing would have to occur in the opposing traffic lane.</p> <p>The team identified passing lane locations by evaluating the corridor with the following questions in mind.</p> <p>Where will a slow vehicle be encountered? These sites are typically on uphill grades and at separation intervals between successive dedicated passing lanes along the highway.</p> <p>How far is the passing lane from the last one? In the direction of travel, passing lanes spaced 3 to 10 miles apart, depending on traffic volume and terrain, are effective in achieving expected goals.</p> <p>What other considerations were made in locating passing</p>

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				<p>lanes? Traffic character and terrain. For example: Passing lane locations were avoided where higher turning traffic is likely to occur. Locations where steep grades or sharp horizontal curvature exists are likely to be candidates for constructing passing lanes.</p> <p>Where will sight distance, vertical, and horizontal road geometry work for passing? Passing lanes work best where there is sufficient sight distance ahead at the passing lane’s beginning and ending sides.</p> <p>Where will passing lanes be anticipated or expected by motorists? Areas where slow moving vehicles ahead are likely to be encountered, or at sufficient distance from the last passing lane where traffic platoons are likely to develop.</p> <p>Will construction of the passing lanes avoid environmentally sensitive locations or locations requiring significant cut or fill? The team considered the cost to construct the additional lanes and impacts to wetlands, parkland, utilities, bridges, and fill/cut needs.</p> <p>A Noise Analysis was conducted at the proposed passing lane locations. Based on that analysis, noise mitigation (construction of sound barriers) is not required in this project.</p> <p>Tree clearing will occur within the DOT&PF rights-of-way extending 100-feet on both sides of the proposed highway centerline. The purpose of the clearing is to provide increased visibility and reduce moose/vehicle</p>

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				collisions. We appreciate your comments. Do not hesitate to contact us if you have additional questions. Anne
86	12/29/16	Angela Davis tripletsak@gmail.com	No problem. My husband also reminded me that most people get the 26th off. I forgot this, i apologize. I am a homeschooler and never get a day off work. Davis	
86	12/29/16	Angela Davis tripletsak@gmail.com	I sent it out <u>Christmas Day</u> at <u>9:46 PM</u> Davis	12/29/16 Thanks for the correction.
86.5	11/13/16	Tracey Schaeffer arcticot@gmail.com, 907-355-6025	Hello Anne, I wanted to share some comments about the passing lane addition project at mile 86-87. I live at mile 86.5, and am a dog musher. This stretch of the highway is used extensively starting in about August until the rivers have frozen and enough snow has fallen for us to use trails out back, usually November or early December. There are at least 25 different dog mushers on this trail currently that are all hoping that the integrity of a right of way trail can still be maintained. There are some people who live near me who have a significant amount of buildings and cars in the right of way we all have to go around, I know that is not likely an issue for your project but could be.	N/A

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			<p>Another issue I thought I'd throw out there: when this stretch of road was redone 4 years ago I was told there would be a trail put in on the east side of the highway that would include a bridge over Caswell Creek (at about mile 86). Not sure if that is part of the project but it would be kind like Christmas for lots of people if it happened!</p> <p>Thanks for your time! Tracey Schaeffer</p>	
90.8	11/26/16	<p>Therese Jankowski (MatSu RV Park) mile 90.8 Parks Highway Willow, AK. 99688 907.495.6300 907.495.3949 954.990.9082 cell matsurvpark@aol.com</p>	<p>Ms. Brooks - Just to let you know that if any of the road crew wishes to park rv's at the park, spaces are available. Depending on when they would be starting the project the rates will reflect on whether the water has been turned on or not. Last spring, the workers for the overpass project began arriving in early April before the water was on so the rate was \$300 per month. Once the water is on (mid May usually) the rate will be \$695 per month which includes showers and wifi. Drinking water is available at the spring (mile 89) and if necessary tank water can be obtained from my house faucet, however the crew last year used their water truck to fill tanks. We also have weekly rates but obviously the monthly rate is less expensive \$225 per week. If this is of any interest to you please let us know and we will do our best to accommodate the crew. Thank you.</p>	<p>Therese — I just wanted to let you know we received your letter, brochures and business cards. I've passed the information on to the project team. Happy Holidays.</p> <p>Anne Brooks</p>
91.5	12/16/16	<p>Nancy Moss HC 89 Box 471, Willow, AK 99688 907-495-</p>	<p>I am attaching a copy of email sent to Anne Brooks, Public Involvement Coordinator regarding posts/mailboxes on Parka. All other</p>	<p>Ms. Moss,</p>

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		2348	<p>highway projects received new posts and mailboxes. We did not plus there is no place to turn around in after getting your mail unless you turn in a private driveway or go to end of road and make a Uturn. Will there be a solution to this problem in 2017???? Thank you for your time.</p> <p>Letter: Our community wants to know why new mailbox posts and mailboxes were not installed as were after other Parks Highway projects. Post and boxes (using old boxes) were installed on the corner of Parks Highway and Parka. There is no place to turn around after getting your mail except to turn around in someone's private driveway or going all the way to the end of Parka and making a U-turn. Why wasn't this figured out in advance - what an inconvenience this is, not to mention the inconvenience to our mail carrier? Also, on South Jassue Drive (across the street from Parka) DOT has left mileage penalty signs up. One of either side of the street, just pass our driveway. I think they were forgotten!!!! I would appreciate an answer if there will be a solution to this mailbox situation in the Spring. Thank you for your time. I will also send a complaint to dot.alaska.</p>	<p>Thank you for the note and bringing your concerns about the clearing at Mile 92 to our attention.</p> <p>We have coordinated postal service delivery with USPS personnel from the Willow office. Their preference is to keep delivery service on side roads so that delivery can be made from the vehicle's driver side. Where widening the Parks Highway impacts an existing mailbox installation, and the mailboxes are located:</p> <ul style="list-style-type: none"> • On a side road, new mailboxes will be constructed further down that same side road. • Adjacent to the roadway, a 12-foot shoulder will be constructed and new mailboxes will be installed. <p>No changes will be made to existing mailboxes that are unaffected by proposed highway improvements.</p>
92	12/22/16	Laura Wright lauraw@mtaonline.net	I am writing with my concern about the clear treeing for the rehabilitation project from MP 83-123.5 have looked on the website and at the plans but I do not see the width of tree clearing that will be happening. I am especially concerned	Tree clearing will occur within the DOT&PF rights-of-way extending 100-feet on both sides of the proposed highway centerline. The purpose of the clearing is to provide increased visibility and reduce moose/vehicle collisions.

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			<p>with the milepost 92 where the Upper Sustina Shooters have a shooting range. The only on buffer between the shooting tables and the highway is a strip of trees about 25' wide and then the power line.</p> <p>It is very important that those trees remain. I don't want to see what I already do see of the range and clearing all the trees would make it worse. I certainly do not want to see the amount of clearing that was done in Willow in the mile 70 vicinity. Further north of Trapper Creek I also think it is important for the highway to maintain its scenic value and not have a manicured look that I see with other highway projects.</p> <p>Please let me know what the tree clearing widths will be for this project.</p> <p>Laura Wright, Talkeetna</p>	<p>We appreciate your comments. Do not hesitate to contact us if you have additional questions.</p>
94.5	2/13/17	Jim Brazeau Upper Susitna Shooters 907-733-3111	<p>Jim called to ask about the clearing near the Upper Susitna Shooters. The shooting club would like to retain some screening from the highway.</p>	
97	1/30/17	Christie 907-355-5788	<p>Record of telephone call with commenter:</p> <p>Rick received a message that Christie (907-355-5788) called about the Parks Highway project. She resides at Milepost 97. I returned her call today and she had two basic questions.</p>	N/A

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			<p>1) Would any herbicide be used as part of our project? I explained that we would not be using herbicide for vegetation control.</p> <p>2) Where will the clearing be done? I explained we would be clearing 100-feet either side of the right of way. I also explained how to she could pace this off of the road centerline so she could get a better idea where the limits are. She is planning to begin raising bees and wanted to protect them.</p> <p>She thanked me for returning the call and answering her questions. She said that she believes the project will make the road safer. She said she thought we were probably getting calls opposing the project, but she fully supported it.</p>	
97.2	11/17/16	Sassan Mossanen sassanm@denalibrewi ng.com	<p>Hi Jill, My family and I live at mile 97.2 of the parks on the East side of the road. We are generally in support of the good work getting done to improve the Parks. I was wondering if there is a survey or map with greater detail that you can forward to me. I would like to know how if at all the new improvement projects will impact our property. We are specifically interested to see which direction the widening will take place. Our property is directly east of the electrical easement. The parks is directly west of the electrical easement. Our basic questions are what direction will the widening be through our</p>	<p>There is no passing lane adjacent to your property. We will be clearing the right of way 100-feet either side of the centerline to provide increased visibility. Do not hesitate to let us know if you have additional concerns.</p>

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			area, will the electric easement be moving or staying the same. We greatly appreciate the help and the info. Thank you, Sassan Mossanen	
98	11/15/16	Bill Sklyer 280-9188	I received a call from Bill Sklyer (cell: 2809188) about the Parks Highway MP 90-99 project. He had received our postcard mailer. He suggests several improvements that would provide access to Cubbies Marketplace, 42751 South Parks Highway. 1) acceleration and deceleration lanes to help him enter and exit the business. 2) a left turn lane for southbound drivers. 3) extension of the turn lane for the Talkeetna Spur Road to the south to cover access to Cubbies. He said that he is off the grid and he and his neighbors do most of their shopping at Cubbies. He also said that it is a big deal getting into and out of the business because drivers in the area are speeding. He said this is more of a concern because he is almost 70. It would be good to get back. Anne	N/A
99.1	11/15/16	Matt Clark 907-733-3376 mclark_29@hotmail.com	I received a call from Matt Clark (907-733-3376, mclark_29@hotmail.com), former principal at Su Valley. He resides near MP 99.1 on the Parks Highway. He received our postcard mailer about MP 8399 Passing Lanes and MP 9099 rehabilitation. The card also indicates that these projects will be combined with Talkeetna Spur Road Pedestrian Improvements and MP 99123.5 Pavement Preservation. He said he reviewed the passing lanes project and supports that effort fully. He drives the corridor frequently and	Mr. Clark You raised several questions in our November conversation that we will respond to in this email. <i>What is the extent of tree clearing? Tree clearing will occur within the DOT&PF rights-of-way extending 100-feet on both sides of the proposed highway centerline. The purpose of the clearing is to provide increased visibility and reduce moose/vehicle collisions.</i> Would the DOT&PF consider one on one meetings to

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			<p>believes it will make the road safer. He expressed concerns about the MP 9099 rehabilitation project and the reference to “Clearing vegetation within the DOT&PF right-of-way.” He is hoping the clearing is not going to be a wide as what was done in the Willow area several years ago. He would like to see 1 on 1 communication with property owners so they can see what will impact them. He thinks it is difficult to have a bureaucrat making the decisions without data. He also had comments on the Talkeetna Spur Road Pedestrian Improvements project. He said when he was principal, he had talked to Scott Thomas at length and requested changes to the speed limit. He said he was told that the speed limits would not be reduced. He did say that the flashing school zone lights seem to be working well, but understands that they are only activated during the school year. He wants to know 1) why aren’t blinking lights effective enough? and 2) what local entities or groups support the pedestrian tunnel? He also wanted to know who was to maintain the facility. I responded, that the DOT&PF would be responsible for maintenance at this time but explained that they budgets are being impacts. He would like responses to: What is the extent of the ROW clearing? Would the DOT&PF consider 1-on-1 meetings to discuss the clearing with property owners? Why aren’t blinking lights effective enough? What local entities or groups support the pedestrian tunnel? He and his wife</p>	<p>discuss the clearing with property owners? <i>The tree clearing is consistent with other projects along the Parks Highway. We do not believe one on one meetings are necessary if the purpose is to vary the clearing limits throughout the project corridor.</i></p> <p>Why aren’t blinking lights effective enough? <i>At grade crossings put pedestrians at a greater risk of conflicts with vehicles. The tunnel is a physical barrier that eliminates this conflict and improves the functionality of the highway. Due to the intersection with the Spur Road, the speed limit reduction zone will still be maintained.</i></p> <p>What local entities or groups support the pedestrian tunnel? <i>Susitna Community Council, Matanuska-Susitna Borough School District, Matanuska-Susitna Borough, Upper Susitna Seniors</i></p>

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			own two lots at 42202 S. Parks Highway, across from the Church of the Rock North Campus, on Little Montana Lake. Anne Brooks	
102.7	9/20/16	Vivian de Walque 38019 S Parks Hwy (MP102.7), vivclee@me.com, 907-505-9027	Hi! I bought a piece of property last year at, well, Mile 102.7 which I understand is going to have both north and south bound passing lanes being constructed next summer. I know when I had the property surveyed they had accounted for a chunk of it going to Parks Highway, but I would really love to know exactly where those boundaries are, and how this will affect my driveway/accessibility to and from my property. We have a quarter mile driveway which is our only access to the road system. To compound the issue, we also have a lovely chain link fence around the entire property with a single gate so really the driveway IS our only way in and out. The fence was quite costly so we obviously would also like to know if that will be affected in any way by road development. It looks like the project is still in design. It'd be lovely to push it over to the other side of Parks (uninhabited, whereas my side of Parks has a few houses ;) but I know that something like this has been years in the making, and I'm sure all rights were acquired long before I bought the property; I figured it wouldn't hurt to ask anyway. Thanks for taking the time to read this and hopefully I will be hearing from you soon. Sincerely, Vivian de Walque	Ms. de Walque: Thank you for contacting the design team regarding the Parks Highway Systemic Passing Lanes project. You are correct in that the DOT&PF intends to widen the highway on both sides at MP 102.7, sometime after 2019. The new passing lanes will begin at approximately MP 102.7 and extend north to MP 103.8 for both northbound and southbound traffic. The roadway will be widened 12 feet on each side to provide the additional passing lanes and all improvements are anticipated to be contained within the existing DOT&PF right-of-way. Traveling north, DOT&PF's existing right-of-way extends approximately 100 feet left of, and approximately 200 feet right of the existing highway's centerline. During construction of the passing lanes, the driveway approaches will be reconstructed to provide access to adjacent properties where existing driveway access is provided. Therefore, after construction you will have access to the highway similar to what you have today. There may be pavement improvements to the highway in 2017 that do not include widening and are not part of the passing lane improvements. The purpose of this is to extend the life of the existing pavement until more extensive improvements can be made. We suspect that when the property was surveyed, the surveyor likely left monuments to mark property corners. These corners would also mark the edge of the DOT&PF right-of-way. If you have any additional comments, or need additional information, please do not hesitate to contact us.

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				<p>Information about this project, and others being designed for the Parks Highway, are shown on the following website: http://dot.alaska.gov/creg/parkshwy/. Feel free to contact me or the DOT&PF Project Manager, Tom Schmid, at 907-269-0543. Anne Brooks</p>
103	08/02/18	<p>Allen & Vickie McNulty POB 1224 Willow, AK 99688</p> <p>Physical Address 37601 S. Parks Hwy (Mile 103) Talkeetna, AK 99676 907-315-1366</p>	<p>Hello Anne, Would you please provide an update for the Parks Hwy. road construction project near mile 103.</p> <p>Have there been any changes to the plans or schedule for expanding the road to 4 lanes?</p> <p>I see new markers all along the right of way tied to vegetation ~ 60' in from the existing pavement edge on the east and west sides of the road. Do these new markers indicate where the vegetation will be cut down?</p> <p>In your response to my email last year you indicated DOT would be cutting down the vegetation a distance of 100' from the existing center line. Have these plans changed?</p> <p>Regarding the Parks Hwy. construction that has already begun south of Montana Creek... I have noticed the vegetation has been cut all the way to the power lines... in most areas this is more than 100' from the old road center line. Will DOT eventually be clearing all the vegetation on the 200' right of way on the east side of the Parks Hwy. to the power lines at mile 103?</p>	<p>Allen — sorry you haven't gotten a reply yet. I forwarded to who I thought would be able to answer the question. I'm on my way over to DOT for a meeting and I'll find out who to you can talk to.</p> <p>I don't believe the clearing limits have changed so the 100' from the center line should still hold, but will find someone to provide details. Anne Brooks</p> <p>Received the following information from DOT's Merle Sena and conveyed via telephone to Mr. MdNulty.</p> <p>On the MP 99-123.5 project we have begun staking clearing limits through the project, slope stakes for the passing lanes, and marking out the asphalt areas to be repaired.</p> <p>Repair work for the distressed pavement areas will start around the middle of August, and be completed this year. Passing lane work is currently scheduled to be performed next season, starting in May.</p> <p>The clearing limits in the passing lane areas are marked at 80' from the existing road centerline. No clearing will be performed outside of the passing lane areas.</p>

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			<p>Thank you in advance for your reply.</p> <p>Best regards, Allen & Vickie McNulty</p>	<p>Clearing limits for the MP 90-99 project are 100' off of centerline, or to the edge of the Right of Way, whichever is closest. Clearing for the power lines was performed prior to the MP 90-99 project, and not part of the current project.</p> <p>Minimal, if any, clearing for utility relocations are planned for the MP 99-123.5 Project.</p>
115	4/4/14	Warren McCorkell 907-376-1485	<p>Warren McCorkell (907-376-1485) called to find out more about the Parks Highway MP 123.5 146 project. He said he used to work for DOT&PF Maintenance back in the 80's in the area of the project and now has a cabin off of the parking lot beyond Trappers Creek. He asked why the bounds of the project seemed so arbitrary. I responded that there are plans to resurface the Parks Highway all the way from MP 90 to 146, but there were other improvements in this section, like new signing and guardrail, which is why there will be the public meeting about this section specifically. He said the he thinks he can make it to the meeting. He was also interested in work and what material sources would be used. He requested Steve Ryan's phone number, which I provided. Camden Yehle</p>	No response necessary.
115	11/11/16	Debbie Tilton snowland@mtaonline.net, 907-733-7377, www.alaskasnorthlandinn.com	<p>Team— I received a call on Friday, November 11, 2016 from Debbie Tilton (snowland@mtaonline.net, 9077337377, www.alaskasnorthlandinn.com). She was calling to make us aware of accommodations she has at</p>	Followed up with team

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			<p>Alaska Northland Inn in Trapper Creek about ¾ mile up Petersville Road. She said she had provided accommodations to DOT&PF construction staff. She said that Jonathan Teague and others could vouch for their facility. I told Debbie that I would pass the information on the team. Anne</p>	
116	4/3/14	<p>Kristie May Parsons 907-982-3330 arctic_kristie@yahoo.com</p>	<p>Hi, I cannot attend the informational meeting that will be held in Trapper Creek. I own a gravel deposit at mile 116 Parks Highway and wanted to know how I get contact information for those who are doing the work for you on the Parks Highway and Petersville Road area? Thank you, Kristie May Parsons</p> <p>Follow up email: Hi Anne, My property is located off the Parks Highway at mile 115.5, just north of the Trapper Creek Bridge on the West. Incorrect maps use to label it Trapper Creek Park Road, which is actually signed south of this road. The State had a large gravel pit in front of mine property in the 1970's and then the land was selected by the Borough. I have 80+ feet of gravel in uplands, totally above the water. I have had the Army Corps of Engineers do the wetlands determination and there isn't any in my extraction site. No I have not done permitting as I am new to the business and was advised that a contractor would have the staff with the credentials that could do the required surveying and SWPP. From what the Borough has told me</p>	<p>Kristie - I'll pass on to the designers and DOT personnel. Do you have any permits in place for gravel mining? This might be useful to know. Thanks for sharing this information. Anne Brooks</p> <p>Follow up response: Kristie, Your best bet would probably be to keep checking back to see when we put the project out to bid. At that time there will be a list of plan-holders. If you look over that list you should be able to tell who the contractors are that are planning on bidding the project. You could then contact them to let them know what you have available. To get the list go to this link: http://www.dot.state.ak.us/apps/contracts?ACTION=BIDCAL&REGION_CODE=C find the Parks Highway MP 123.5 to 146 project and click on the planholders list which is just to the right of the project name. Some of our contractors get their plans from the Associated General Contractors of Alaska, 561-5354, so you would need to contact them as well. Steve Ryan</p>

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			<p>and the Borough & State permitting will be pretty simple for a contractor. I do have exposed gravel and hauled some for personal use last year. I logged the property 4 years ago in preparation to mine some gravel. I am only looking to mine 20 acres which is clearly marked. Please let me know how I can further let the right people know about my gravel availability or if I need to do something to participate. Kristie May Parsons</p>	
118	8/8/13	<p>John Quinley nordic@gci.net 907-632-8045</p>	<p>Hi Anne, I didn't realize you were working on the DOT's project to repave the Parks Highway up near our cabin. One of our board members spoke with a DOT engineer recently, and there was some confusion on whether our homeowner association comments had gotten plugged in back when the project scoping was under way. I've attached our letter, and I think our interest in the project remains the same. Happy to answer any questions if you or others have them. Let us know if you're up there for any highway meetings or other work – we can try to rendezvous and run out to the cabin. Or if you & Tom are up for a visit, that would be fun, too. Our place is about a 2.5-3 mile trail walk/ski/ride from the Mile 118 parking lot. Hope all's well. Liz said she had fun at your place over New Years. Appreciate you letting that gang all gather there. John Quinley</p> <p>Dear Mr. Elliott: These comments from Trapper Creek Glen Homeowners Association Board of Directors are</p>	<p>John — Thanks for sending this letter to me. I'll coordinate with the project engineer to see if they are able to accommodate the homeowner association comments/requests. I do not always get a copy of the comments that go directly to the Environmental Lead at the DOT but they consistently get passed to the project engineer. I'll also check to see if the DOT&PF has any additional meetings scheduled on the project. We did have a booth at the fall Mat Su Transportation Fair. I'll keep you posted if Tom and I are in the area. It would be fun to get together with you and Connie and get caught up. Anne</p>

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			<p>in regards to the “Notice of Intent to Begin Engineering and Environmental Studies on the Parks Highway MP 99-146 Resurfacing, Project No. 56169.” The association represents the owners of approximately 250 residential and recreational lots located west of the Parks Highway between approximately Mile 117 and Mile 121. As an association, we collect annual dues from property owners in the subdivision and primarily use the funds to improve and maintain access on ATV and foot trails within the subdivision, many of which either traverse or lead to public land owned by the State of Alaska or the Matanuska-Susitna Borough. Our interests and opinions on the resurfacing project include these topics:</p> <ul style="list-style-type: none"> • Access to the subdivision is primarily through the parking lots at Mile 118.2 and 120.5. The lots are currently screened from view from the highway by vegetation at Mile 120.5 and a mix of vegetation and an elevation gain at Mile 118.2. Our preference is for the State to retain as much of the vegetation and elevation screening in front of those parking lots as possible as our property owners frequently leave building materials and other items at their vehicles or trailers for several hours or more while going back and forth to their property. Some year-round residents leave vehicle in the lots for days at a time. • The parking lot at Mile 118.2 is currently reached by a relatively steep driveway off the highway. Our preference is that the grade not be 	

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			<p>any steeper due to the highway project.</p> <ul style="list-style-type: none"> • At many times of the summer and winter, primarily weekends, both parking lots are quite full with property owner vehicles and other users. We do not believe these lots are big enough for equipment staging for the highway project, and ask that those activities take place elsewhere. • As mentioned above, the association works to provide property owner and public access west of the highway. These volunteer-run projects at times involve providing drainage of rainwater off of the trails. To the extent that the road project will be replacing driveway sized culverts that remain in fair or better condition, the association would like the opportunity to re-use them if they could be left in one of the parking lots. The same is true for any oversupply of gravel that is delivered to the road project in our area. We would be able to move the additional gravel to improve access for property owners and the public. Thank you for the opportunity to comment on the project. We look forward to enjoying the results of the repaving project in the years to come. Feel free to address any questions for the board of directors to me at 907-644-3512 (days) or by e-mail at nordic@gci.net. Additional information about the subdivision is available at www.tcghoa.org. Sincerely, John Quinley Board Member 	
118	12/31/14	Ralph Lee	Anne, Hoping to get an update on the Parks	Hi Ralph – please correct our email address in your

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MP	Date	From	Comment	Response
		alaskalees@hotmail.com	Highway rehab /constructions projects. Believe the section from Talkeetna Spur to Mile 123 is slated to receive upgrades, paving, etc. this summer. I live off the highway at Mile 118 in Trapper Creek Glen Subdivision. Our homeowner association board will meet next month and would like to find out the status of the project along this section. I met you at the scoping meeting last April. Thanks, Ralph Lee	contact list, it is anne.brooksalaska@gmail.com. You are correct that Parks Highway MP 99 to 123.5 is slated to receive upgrades, however construction won't begin until summer 2016. I have attached the fact sheet provided at this fall's Mat Su Transportation Fair. Camden Yehle
118	1/15/16	Ralph Lee alaskalees@hotmail.com	Camden, It may be too late to get anything changed, but thought I would pass on that there is a culvert at about mile 117.8. This little creek drains quite a bit of country. It crosses our atv trail that starts at mile 118 1/4. The creek is about a mile west of the Parks highway on our trail. Anyway it seems like the culvert may not be big enough particularly in spring breakup and like this early winter when there was quite a bit of rain. the creek backed up and even overflowed our trail in a couple places. we have a bridge over the creek that is usually about 4 feet above normal summer flow. looking at the creek near where it crosses the highway it seemed to be backing up there as well. not sure if a bigger culvert would help the situation, but the creek seems constricted at the highway crossing and I think slows the current quite a ways upstream. Hoping you can pass this on to the DOT engineers to see if they can help the situation. thanks, Ralph	Hi Ralph thank you for your comment. I have copied the Steve Ryan with DOT&PF for his information. Camden Yehle

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MP	Date	From	Comment	Response
118	4/1/16	Ralph Lee alaskalees@hotmail.com	Hoping to get an update on the MP 99 to 123.5 Parks Highway project. Wondering if it is a go for this summer. See work and clearing being done at the railroad crossing in a couple places. Has a contractor been determined? thanks, Ralph Lee	<p>Ralph — Nice to hear from you again. The projects between Milepost 99 and 123 that include pavement rehabilitation and systemic passing lanes is not slated for construction until 2017. I have attached a fact sheet containing current information about these projects. We are holding a meeting this month to discuss the Parks MP 99123.5 project with area stakeholders. Time and location details follow. We are mailing postcards later this week. Thursday, April 28, 2014, 4 p.m. to 7 p.m., (Stop by anytime between these hours) Trapper Creek Community Center, Mile 115 Parks Highway, Trapper Creek. You will be interested a recently created website showing all the design projects being undertaken by DOT&PF's Central Region: http://dot.alaska.gov/creg/parkshwy/ The clearing you are seeing at the railroad crossings is the beginning of construction to grade separate these facilities. Log on to the Alaska Navigator for more information. The direct link to the grade separations is here: http://www.alaskanavigator.org/projects/hsipparkshighwaymp912tomp920andmp1000tomp1008gradeseparationsdesignbuild. Thanks for your continued interest in the Parks Highway projects. Anne Brooks, P.E., Public Involvement Specialist</p> <p>Ralph — Just a quick not to let you know that the public meeting, planned for Thursday, April 28 at the Trapper Creek Community Center has been cancelled. We will let you know when it has been rescheduled. I hope this does not cause any inconvenience. Anne Brooks, P.E., Public Involvement Specialist</p>

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MP	Date	From	Comment	Response
120.5	4/9/15	John Quinley john_quinley@nps.gov	Anne, Writing from the office because I saw your name in a Peg Tileston "What's Up" email item, and it reminded me that I had a chore for our cabin homeowner's association. At our northern parking lot, at Mile 120.5, folks have noticed flagging in the trees near the gravel parking area (a ways off the highway). They are wondering if that marks something of import for the 2016 paving project, like the edge of tree clearing? Our association's preference has been that trees can be left to screen the parking lot from the highway. Folks feel like their cars and other gear left there is somewhat safer if the lot is not so obvious to highway traffic. Thanks, John	John — Sorry it taken me some time to get back to you. No one on the team can determine why there is flagging at MP 120.5. The design consultant/survey has done some surveying for the passing lanes portion of the project that could have left flagging in the area. There is no construction project ongoing at that milepost. The project will bid this winter. Clearing limits for any projects in the area will be 60 feet from the existing edge of pavement. I'm not sure where this clearing limit is as it relates to the parking area. DOT&PF typically clears the right of way to provide clear sight lines to reduce vehicle/moose collisions. Don't hesitate to contact us if you have additional questions. Anne
129.5	3/21/14	Bob Sanders 907-345-0203	Bob Sanders (907-345-0203) called to request that access is maintained during construction to the parking area at mile 129.5 of the Parks Highway because that is the access to his summer cabin. I told him that I would pass along his request to the team and explained the construction contractor, instead of the design team, is usually responsible for arranging access.	N/A
129.8	3/29/14	Heather Ireland alaskaheather@hotmail.com	Hi Anne! I hope you are well and enjoying the sunshine we have had lately. We are all hoping for an early spring. We received you yellow postcard regarding the Parks Highway MP 123.5-146 Rehabilitation. Gary and I own a parcel of land on Sunny Lake, accessed around Mile 129.8 (ish). In the past 12 years, we have probably gone three times, so I am not exactly sure. Currently,	Heather — thanks for the comments. We are primarily repaving the highway and will not be changing any current roadside uses. I'll share your comments with the team. My best to you, Gary and the girls. Anne

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			<p>there is a small cleared area where cars are parked. In the plans to rehabilitate the road, it is important to maintain some parking or pull off at this intersection. This access road is impassable at times. If parking is not maintained, cars would park along the highway, which would be dangerous in my opinion. We are unable to attend the 4/3/14 meeting, but wanted these comments to be included for consideration in the planning and design. Hopefully, it is not too late for that! Since we went there last summer, I doubt we will go this summer. We might miss all the construction. If they make too man changes, we might not be able to recognize the turn off! Take care, Heather Ireland</p>	
133	4/3/16	<p>Carol Starbuck PO 13302, Trapper Creek, AK 99683, carolstarbuck@gmail.com, carol.starbuck@matsu gov.us, 733-0387</p>	<p>Trapper Creek ambulance makes numerous runs up to Princess McKinley Hotel (mile 133) during the summer. Most calls are Code Red lights and sirens. Just want to make sure construction knows that we are on the way and need to get through! Also my District Chief was concerned that we do not lose any turnouts or have them made smaller – as we use them for LZ (helicopter landing zones). During the Willow construction we had a telephone number to call ahead, so the ambulance is not hled up on way to a call. Please feel [free] to contact me on details over page. Provide contact # during construction.</p>	N/A
134	3/19/14	<p>Paul Nangle 907-274-8866</p>	<p>Paul Nangle called (907-274-8866) to request any information or graphics that will be provided at</p>	N/A

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MP	Date	From	Comment	Response
			<p>the meeting as he will be out of town at the time and he owns real estate in the area of the project. He also said that he would like to see a trail from MP 134 to Buyers Lake. He requested that the meeting materials be mailed to 101 Christensen Dr, Anchorage, AK 99501. Camden Yehle</p>	
134	3/24/14	Paul Nangle 907-274-8866	<p>Dear Anne: Your website does not work. I will be out of town on April 3, 2014. Please forward to me a copy of whatever you are proposing about the rehabilitation and the time frame of when this would place. We would like to see a bluff trail from the new visitor's turnoff at Mile 134 to Byers Lake Campground. There is the old construction road already in place. Our subdivision at Mile 143. 9 needs to get graded, if you could get that done. We are also requesting a bicycle trail from the bridge at 133 to Byers Lake Campground. Very truly yours, Paul J. Nangle & Associates</p>	See 4/8/2014 phone call.
134	4/8/14	Paul Nangle 907-274-8866	<p>I received a call from Paul Nangle today. He wanted to know if we had received his letter and whether we were able to provide the pathway from the new visitor's center to the Byers Lake Campground. I explained that this was outside the scope and budget of our project. I explained the project scope and schedule for this pavement preservation project. He said that his homeowner's association would be meeting July 12th (Byers Creek Subdivision, Lot 7, Block 2) and</p>	N/A

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			<p>would be discussing whether to hire the contractor to provide some maintenance on the subdivision roads. He said they hadn't been graded in several years. He thought the contractor would be interested when he had equipment in the area. I explained that any arrangement would need to be between the homeowners association and the contractor. He said he would call back to determine who the contractor was later in the summer. I offered to send him the link and he explained that he is not a "web" guy. Anne</p>	
134.7	10/22/14	<p>Laura Lahrson PO 873411, Wasilla, AK 99687 nosrhal@mtaonline.net</p>	<p>134.7+00 LT – Please provide advanced notification during construction if closures are to occur. ATV – rig turn out.</p>	N/A
135	9/24/14	<p>Katie Lasater 719-465-8459</p>	<p>Hi Laura and Stephen - Katie Lasater called yesterday to find out if the Parks Highway between MP 135 and 139 is a passing zone. She had just been in a crash there and needed to know. I was not provided any details on the crash. Her call back number is 719-465-8459. Camden Yehle</p>	<p>Hi, There are passing zones within that range, but it's not passing the whole way. I would estimate approximately 50-60% passing overall, but the exact location would be needed to tell definitively. We just milled to MP 135.5 last night. The striping hasn't been touched between there and MP 139. I tried to call back to that number, but the mobile device is not in service. Thanks, Laura Paul</p> <p>Hi Laura the number worked for me so I left a message passing along the information you provided. I suggested she call you directly if she needs more specific information. Camden Yehle</p>

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MP	Date	From	Comment	Response
N/A	3/25/14	Mike 907-301-6178	Mike (907-301-6178) called to ask if the construction contract had been awarded yet for the Parks Highway 123-146 project. I told him that it had not and encouraged him to come to the public meeting. Camden Yehle	N/A
N/A	11/28/16	Kristie May Parsons 907-982-3330	Regarding Parks Highway projects mile 88-123. 1) The trapper creek community council does not advertise timely anything you send them. Do not count on them for advertisements about DOT projects. I learned from the mailer to my po box. 2) It is important to clear trees back as far as the DOT right-of-way boundaries for safety sake of moose collisions. The clearing in the Willow area on the Parks is wonderful. It greatly enables us to see moose on the side of the road. 3) can I be added to an email list for updates? Kristie May Parsons	Kristie - thanks for your email about the Parks Highway projects. I will share them with the project team as they continue their work. Anne
N/A	12/13/16	Ronda Michael PO Box 1130, Willow, AK 99688	Dear Ms Brooks: Why are you doing passing lanes in the middle of nowhere when they are desperately needed between Willow and Big Lake cut off on Parks Highway??? Currently that stretch is not badly built up but it soon will be and then will be far more difficult to acquire the land. Disgusted, Ronda Michael	Dear Ms. Michael: Thank you for the written comment we received on December 13, 2016. The Parks Highway between Willow and Big Lake cut off is outside this project's study area. We did look into this and found that there are two southbound and three northbound dedicated passing lanes currently located within the Parks Highway segment you identified. In an effort to improve safety on Alaska's highways we have begun a series of projects to provide passing lanes on the Parks and other state highways. The passing lanes in this project were identified in a highway safety

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				<p>improvement program 14CR01: George Parks Highway Systemic Passing Lane Project. The purpose of that study was to identify potential locations for constructing passing lanes on the Parks Highway between milepost (MP) 83 and MP 163. Passing lanes are effective in improving highway capacity and safety on two-lane highways. The purpose of these lanes is to reduce aggressive driving behavior where, in the absence of a passing lane, passing would have to occur in the opposing traffic lane.</p> <p>Sincerely, Tom Schmid</p>
N/A	1/13/17	Angela Davis tripletsak@gmail.com	<p>First of all what is your companies qualifications for your densely populated stretch of highway standards? There are 15+ driveways and heavily populated roads along this stretch of highway your company wants to expand into a double passing lane. Not to mention three plus pullouts along the highway, connected to the highway, for the mailboxes.</p> <p>What about the safety of children getting on school buses in a double passing lane? One stop I know of is up the hill and around the corner.</p> <p>How did you get your figures and how many vehicles are passing on the highway? I did not see any road counters whatsoever. You would have had to place at least three counters across the highway to get an accurate count on how many cars are passing.</p>	<p>1/17/17 Angela — We received your follow up message and will get back to you with answers shortly.</p> <p>Anne</p> <p>Draft Response 2/10/2017 Response Angela — we haven't forgotten you asked these questions. Around the time our responses were reviewed by our project manager, I had a death in the family so the response slipped through the cracks. My personal apologies for that. I'll give you a call shortly to see if you have any further questions and to confirm you received our response.</p> <p>We have attached a graphic showing your property (Lot C11) as it relates to the proposed changes. We have also</p>

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MP	Date	From	Comment	Response
			<p>How did you get your averages for the amount of cars traveling to justify tearing up a newer road? There are so few vehicles traveling out here that last year I seen your company's car drive back-and-forth 15 times in front of my house, measuring to see if they could put in a double passing lane. There is not enough traffic to justify putting in a double passing lane.</p> <p>There are no slow moving vehicles. Even the motorhomes go the speed limit. There is very little traffic so there is safe passing. The closer you get to Willow the more traffic. The roads are empty 80% of the time. No more then five cars in a row with no one passing each other.</p> <p>A noise analysis was not conducted. Yet your company concluded that there is not enough traffic to make noise. So there is no need for a double passing because there isn't enough traffic to make noise.</p> <p>Your company does not live out here. Your company doesn't drive these roads regularly, in both directions in all season. Maybe ask locals where they have the biggest problems and the 'congestion' is on the roads.</p> <p>Speaking of locals. When was the community hearing on this expansive project? When was the time period afforded for public comments?</p>	<p>answered the questions you posed in your January 13, 2017 email. Our responses are in italics below.</p> <p>First of all what is your companies qualifications for your densely populated stretch of highway standards?</p> <p><i>The Alaska Department of Transportation and Public Facilities (DOT&PF) employ and secures the services of licensed professional engineers to design projects. These engineers (project team) follow design guidance set by the US Department of Transportation and the American Association of State Highway Transportation Officials (AASHTO) and the DOT&PF when determining highway improvements. The purpose of passing lanes is to improve highway safety and capacity. Systemic Passing Lanes were determined to be needed along the Parks Highway MP83 to MP163 based on the FFY2014 Highway Safety Improvement Program (HSIP) analyses completed by DOT&PF which looked at crash data along the corridor.</i></p> <p>Passing lane locations are selected based on numerous factors including:</p> <ul style="list-style-type: none"> • Where will a slow vehicle be encountered? <i>These sites are typically on uphill grades and at separation intervals between successive dedicated passing lanes along the highway.</i> • How far is the passing lane from the last one? <i>In the direction of travel, passing lanes spaced 3 to 10 miles apart, depending on traffic volume and terrain, are effective in achieving expected goals.</i>

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			<p>I am sure people wouldn't mind a single alternating passing lane, with signs. The signs are helpful and I am sure put anxious drivers at ease when they see that there is 1 mile till the passing lane. But a double is to much for this populated area.</p> <p>Davis</p>	<ul style="list-style-type: none"> • What other considerations were made in locating passing lanes? <i>Traffic character and terrain. For example: Passing lane locations were avoided where higher turning traffic is likely to occur. Locations where steep grades or sharp horizontal curvature exists are likely to be candidates for constructing passing lanes.</i> • Where will sight distance, vertical, and horizontal road geometry work for passing? <i>Passing lanes work best where there is sufficient sight distance ahead at the passing lane's beginning and ending sides.</i> • Where will passing lanes be anticipated or expected by motorists? <i>Areas where slow moving vehicles ahead are likely to be encountered, or at sufficient distance from the last passing lane where traffic platoons are likely to develop.</i> • Will construction of the passing lanes avoid environmentally sensitive locations or locations requiring significant cut or fill? <i>The team considered the cost to construct the additional lanes and impacts to wetlands, parkland, utilities, bridges, and fill/cut needs.</i> <p><i>The separation interval between successive passing lanes led to candidate passing lanes being constructed between MP86 to MP87. The project team looked at the section of highway in your area and concluded that the passing lanes would need to be completed between Caswell Creek and Willow Creek (MP85 to MP88, respectively) to reduce cost and environmental impacts.</i></p>

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				<p>There are 15+ driveways and heavily populated roads along this stretch of highway your company wants to expand into a double passing lane. Not to mention three plus pullouts along the highway, connected to the highway, for the mailboxes.</p> <p><i>Passing lanes are recommended to be one to two miles in length to be effective. In your area, the total length of southbound passing improvements will affect 1.5 miles of highway and driveway densities (# of driveways per mile) for southbound travel are consistently spaced at approximately 10 driveways/mile between MP85 and MP88. Therefore, the affected number of driveways will not change by shifting the southbound passing lane one way or the other.</i></p> <p>What about the safety of children getting on school buses in a double passing lane? One stop I know of is up the hill and around the corner.</p> <p><i>Bus stop locations are determined by the Matanuska Susitna Borough and may change based on a number of factors. Bus stop operations will remain the same as required in Alaska Statute AS 28.35.145. The addition of passing lanes on a highway does not constitute a 'separate roadway' and therefore both lanes and both directions of travel must yield to the stopped school bus.</i></p> <p>How did you get your figures and how many vehicles are passing on the highway? I did not see any road counters whatsoever. You would have had to place at least three counters across the</p>

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				<p>highway to get an accurate count on how many cars are passing.</p> <p>How did you get your averages for the amount of cars traveling to justify tearing up a newer road? There are so few vehicles traveling out here that last year I seen your company's car drive back-and-forth 15 times in front of my house, measuring to see if they could put in a double passing lane. There is not enough traffic to justify putting in a double passing lane.</p> <p><i>The DOT&PF has three permanent traffic recorder locations on the Parks Highway to provide data for planning and design. DOT&PF also monitors crash data and causation factors on their highways through police records. This information is compared to national and statewide trends to determine the need for highway improvements such as passing lanes.</i></p> <p>There are no slow moving vehicles. Even the motorhomes go the speed limit. There is very little traffic so there is safe passing. The closer you get to Willow the more traffic. The roads are empty 80% of the time. No more then five cars in a row with no one passing each other.</p> <p>A noise analysis was not conducted. Yet your company concluded that there is not enough traffic to make noise. So there is no need for a double passing because there isn't enough traffic to make noise.</p> <p><i>A Noise Analysis was conducted conforming to DOT&PF</i></p>

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				<p><i>Noise Policy, 2011. Noise measurements were taken at the proposed passing lane sites in September and October 2014. Based on that analysis, noise mitigation (construction of sound barriers) is not required in this project.</i></p> <p>Your company does not live out here. Your company doesn't drive these roads regularly, in both directions in all season. Maybe ask locals where they have the biggest problems and the 'congestion' is on the roads.</p> <p><i>You are correct that project team members do not live in the area. That is why we reach out to the public to seek input on the design. Local input is important to work and helps us to fine tune our design. We began the discussions with the public in 2014 at the Mat-Su Transportation Fair and continue to address concerns, such as yours, as they are received.</i></p> <p>Speaking of locals. When was the community hearing on this expansive project? When was the time period afforded for public comments?</p> <p><i>The project has been represented at the Mat-Su Transportation Fair since 2014. We recently sent the postcard mailer addressing these projects and are soliciting input. We also noted that construction of the passing lanes will begin in 2017. All the work can be completed within the DOT&PF right-of-way. The DOT&PF is scheduled to solicit competitive bids from construction contractors in April.</i></p>

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				<p>I am sure people wouldn't mind a single alternating passing lane, with signs. The signs are helpful and I am sure put anxious drivers at ease when they see that there is 1 mile till the passing lane. But a double is to much for this populated area.</p> <p>Davis</p>
Unkn own	5/26/14	Marita Crosby southdenalisweetpea@yahoo.com	I attended the meeting concerning the highway rehabilitation project you held in Trapper Creek last month. We were informed that the bid would be awarded in May with construction starting in June. I was wondering if the bid has been awarded and if you will be back to inform the community of the new status. I live in the middle of the construction zone and would be interested in what the plans are. Sincerely Marita Crosby	Marita — the bids will open on the 30th of May. The contractor will set the start of construction and likely hold a construction kick off meeting. I expect it will take about 4-6 weeks to get them under contract. Once the contractor is under contract, you can sign up for schedule, detour or closure notices by going to www.alaskanavigator.org . We'll send you a note when the web site is available and when we know more about the start of construction. Anne Brooks
Unkn own	7/6/14	Marita Crosby southdenalisweetpea@yahoo.com	Hi I am interested in status of the road construction for this project. I saw the bids went out on June 6, 2014 and was awarded to Quality Asphalt & Paving. I would like to get the contact information of the manager in charge of the project to find out what the plans are. Do you know if there will be another informational meeting before construction starts. I would appreciate any information you can give me. Thank You Marita Crosby	Marita, The DOT Project Manager for the construction phase of this project will be Laura Paul. She can be reached at laura.paul@alaska.gov or 269-0463. The DOT project engineer on site will be Jonathan Tague. He can be reached at jonathan.tague@alaska.gov or 351-3711. They should be able to answer your project related questions. Steve Ryan

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MP	Date	From	Comment	Response
Variou us	4/9/14	Ralph Lee aklees@hotmail.com	Ralph — I've attached a copy of the graphic showing the possible locations of passing lanes on the Parks Highway as you requested at last Thursday's meeting. The project team will be back to solicit comment on these locations at a later day. Let us know if you have questions or comments. Anne Brooks	N/A
Vario us	3/11/16	Beth Rogers of USPS 907-495-6266/495-5040 beth.a.rogers@usps.gov 13232 N. McKinley Way, Willow, AK 99688	The following information was discussed: <ul style="list-style-type: none"> • USPS is supportive of moving mailbox clusters from driveways to widened area on highway. • There are no mailboxes north of Petersville Rd. • There are 6 mailbox clusters (33 addresses) at locations to be identified by USPS. USPS will provide locations by adjacent street names (if available), I could be able to meet with them to go over plans to identify exact locations. Further coordination to follow. <ul style="list-style-type: none"> • USPS wants to be involved early and continuous during development so that they can coordinate with customers on the scheduled work and changeover so that service is not interrupted. 	N/A
Vario us	12/6/16	Gerald Berryman HC 89 Box 616, Willow, AK 99688, 907-733-2415	Re: Parks Highway Projects MP 83-99 & MP 90-99 plus Parks Highway MP 99-123.5. #1. Street lighting from sta. 12+00 to sta. 57+00. #2. Replace CMP @ sta.39+04. 60"x[?]. #3. Excavate hill on right @ sta. 41+50 thru sta. 44+00. #4. Excavate hill on right @ sta. 48+/- . #5. Set speed limit to 45 mph. This is all for sight distance and safety. As I see this the work at MP 99 to MP 123.5 will not be done until 2022. Is this right?	Dear Mr. Berryman: Thank you for the written comment we received on December 7, 2016. Our design team is looking at and considering your recommendations. You are correct in that the improvements, outlined 1 through 4 in your comment, will be evaluated in a later project to be completed after 2022. These improvements are beyond this project's

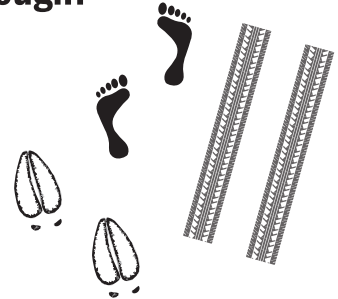
**Parks 83-163 Systemic Passing Lanes & Parks 90-99 Resurfacing
Comment-Response Summary**

MP	Date	From	Comment	Response
			Thank you, Gerald Berryman	scope of work, which is intended to provide the time needed to study, permit, and acquire funding necessary to complete the types of improvements you identified. Sincerely, Tom Schmid

Mat-Su Transportation Fair



Make tracks to the transportation fair to learn about the many transportation projects under way in the Mat-Su Borough!



Thursday, October 22, 2015

Save the date!

4 - 8 pm

**Curtis D. Menard Memorial Sports Center
1101 S. Mack Drive, Wasilla**

The Alaska Department of Transportation & Public Facilities, cities of Palmer, Wasilla and Houston, the Alaska Railroad Corporation, Mat-Su Community Transit, and the Mat-Su Borough have teamed up again to bring you the latest on roads, rails and trails at this one-stop transportation fair. The event provides you an opportunity to view information on many transportation projects underway in the Mat-Su Borough.

Bring the family for children's activities, food and fun!

Stop by anytime to find out more about:

- ◆ Bogard Road Extension
- ◆ Fairview Loop Rehabilitation
- ◆ Glenn Hwy Reconstruction: Parks Hwy to Old Glenn Hwy
- ◆ Traffic Safety
- ◆ Knik Arm Crossing
- ◆ Mat-Su Transit
- ◆ Mat-Su Borough Planning Efforts
- ◆ Mat-Su Borough Fish Passage
- ◆ Palmer-Wasilla Highway Eastern Terminus
- ◆ Parks Highway Milepost 44-52, Wasilla to Houston
- ◆ Seldon Road Extension
- ◆ Seward Meridian Phase II
- ◆ South Big Lake Road Realignment
- ◆ Wasilla Main Street Project

And many more projects...

For more information contact:

Anne Brooks, Brooks & Associates, Toll Free: 866-535-1877, E-mail: comments.brooksalaska@gmail.com

Event Blog: <http://matsutranspofair.blogspot.com>

SPONSORS

Alaska Department of Transportation



Mat-Su Borough



City of Houston



City of Palmer



City of Wasilla



Alaska Railroad Corporation



KABATA



DOT&PF operates Federal Programs without regard to race, color, national origin, sex, age, or disability. Full Title VI Nondiscrimination Policy: dot.alaska.gov/tvi_statement.shtml. To file a complaint go to: dot.alaska.gov/cvlrts/titlevi.shtml. DOT&PF complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to participate in this event should contact Anne Brooks at (907) 272-1877 to make necessary arrangements. Individuals with a hearing impairment can contact Relay Alaska at 711 for assistance.



ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



FACT SHEET

Parks Highway Systemic Passing Lanes, MP 83 to 163

Project No. Z573010000/ 0001(498)

Project Scope

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), is working on a project to improve safety by increasing passing opportunities along the Parks Highway. The proposed improvements are anticipated to reduce accidents along the highway by alleviating driver impatience, following too close, excessive speeding, improper passing, and fatigue. The project will construct passing lanes at the following approximate milepost (MP) locations:

- MP 86 to 87, construct both northbound and southbound passing lanes
- MP 94 to 95, construct both northbound and southbound passing lanes
- MP 102.7 to 103.8, construct both northbound and southbound passing lanes
- MP 109.8 to 111.22, construct southbound passing lane
- MP 112.9 to 113.9, construct northbound passing lane
- MP 121.3 to 123.1, construct both northbound and southbound passing lanes
- MP 127 to 128.4, construct northbound passing lane
- MP 128.6 to 129.9, construct southbound passing lane
- MP 136.3 to 137, construct southbound passing lane
- MP 137.8 to 138.9, construct northbound passing lane
- MP 144.9 to 145.9, construct northbound passing lane
- MP 149.6 to 150.5, construct southbound passing lane
- MP 157 to 158.7, construct southbound passing lane
- MP 161.6 to 162.8, construct northbound passing lane

Schedule

Construction is anticipated to begin in summer 2016 in conjunction with the Parks Highway MP 99 to 123.5 Resurfacing project and be completed with the completion of the Parks Highway MP 90 to 99 Rehabilitation projects in 2018. Systemic Passing Lanes MP 123.5 to 163 will be constructed in summer 2018. The project is currently in the environmental design and survey development phase. Public meetings will be held during the design phase to hear and process public comments.

For more information:

Anne Brooks, P.E.

Public Involvement Coordinator
Brooks & Associates
Toll Free Telephone: (866) 535-1877
Email: comments.brooksalaska@gmail.com

Tom Schmid, P.E.

Project Manager
DOT&PF
Telephone: (907) 269-0543
Email: tom.schmid@alaska.gov

Jeff Fuglestad, P.E.

Design Project Manager
Hattenburg Dilley & Linnell
Telephone: (907) 564-2120
Email: jfuglestad@hdlalaska.com

MEETING NOTES

SUBJECT: 2015 Mat-Su Transportation Fair

PROJECT NO.: Z561770000/ 0A41(032), Z561690000/ 0A42(008),
Z573010000/ 0001(498)

GROUP: Public

DATE: October 22, 2015

TIME: 4 to 8 p.m.

LOCATION: Curtis D. Menard Memorial Sports Center, 1001 S Mack Drive,
Wasilla, Alaska

MEETING OUTREACH: See Table 1. Meeting Outreach

MEETING ATTENDANCE: 404 people signed in

MEETING MATERIALS: Aerial photo, comment sheets, fact sheet, sign-in sheet

STAFF PRESENT: *DOT&PF*: Tom Schmid
HDL: Rick Hammond

MEETING INFORMATION:

Attendees were greeted at the door and asked to sign in. They were provided with an event program showing the layout of the event. Over 80 Mat-Su transportation projects, agencies, and transportation providers were represented. Community members were encouraged to ask questions of the project teams and to provide written comments.

A poster showing all DOT&PF Central Region Parks Highway projects represented these Parks Highway projects. The poster included descriptions and project manager contact information for each project.

Table 1. Mat-Su Transportation Fair Outreach

Date	Outreach Method
08/20/2015	Mat-Su Transportation Fair event dates posted on the following Mat-Su area project websites: Fairview Loop Rehabilitation, Glenn Highway MP 34-42, Parks Highway MP 44-52, Palmer Wasilla Highway, Parks Highway Bridge Replacement: Montana Creek and Sheep Creek, and Seward Meridian Road, Phase II
09/01/2015	Request sent to the online calendars at <i>Frontiersman</i> , <i>Alaska Dispatch News</i> , and <i>Make a Scene</i>
09/15/2015	Save the Date email notice and reminder sent to the following project lists: Parks

Date	Outreach Method
10/21/2015	Highway MP 44-52, Glenn Highway MP 34-42, Lucille Reconstruction, Trunk Road: Proposed southern extension, South Mack Dr. (Clapp Road) Extension, Parks Connectors: Museum Dr. & Machen Rd., Fairview Loop Rehabilitation, Trunk Rd: Parks Hwy-Palmer Fishhook, Palmer-Wasilla Highway, Lucus Rd, Vine Road Upgrade, 2014 Mt-Su Transportation Fair, Palmer Municipal Airport Master Plan, Montana Creek & Sheep Creek Parks Highway, Grade Separations, Parks Highway MP 99-146 Rehabilitation, and Mat-Su Government lists
09/22/2015 10/12/2015 10/19/2015 10/22/2015	Notices posted on the DOT&PF Facebook page
09/22/2015 10/12/2015 10/15/2015 10/18/2015 10/21/2015	Notice posted via DOT&PF Twitter feed
09/25/2015 10/02/2015	Invitation sent by DOT&PF to all area legislators
10/01/2015	Project specific postcard mailer sent to Parks Highway Bridge Replacement: Montana Creek and Sheep Creek with an invitation to the Transportation Fair. A postcard invitation sent to the Parks Highway MP 44-52, Glenn Highway MP 34-42, Fairview Loop, Lucus Road, Palmer-Wasilla Highway, and Seward Meridian Road, Phase II mailing lists
9/16/15 - 10/21/15	Event notice in the weekly What's Up listserv
10/08/2015	City of Palmer sponsored Robo call to all Palmer residents and businesses
10/08/2015	Central Region DOT&PF online calendar
10/08/2015 10/22/2015	GovDelivery notice
10/11/2015 10/18/2015	<i>Frontiersman</i> display advertising sponsored by the City of Wasilla
10/14/2015 10/21/2015	<i>Alaska Dispatch News</i> display advertising sponsored by the Alaska Railroad
10/20/2015	<i>Frontiersman</i> article

Related documents on file:

- Display Ad
- Sign-In Sheet
- Fact Sheet
- Comment Sheet
- Poster

Anchorage Transportation Fair



Website: <http://anchoragetranspofair.blogspot.com/>

Partners:



The Alaska Department of Transportation and Public Facilities (DOT&PF) and partners, including the Municipality of Anchorage, Anchorage Police Department, Alaska Railroad, and Anchorage Water and Wastewater Utility, invite you to participate in the 2016 Anchorage Transportation Fair. The event is a "super open house" providing a showcase of transportation projects, planning efforts or existing plans concerning walking, biking, and driving within the Municipality of Anchorage. The Transportation Fair is free and open to the public.



When: Thursday, February 4, 2016, 4 to 8 p.m.

Where: Alaska Airlines Center Auxiliary

University of Alaska Anchorage

3550 Providence Drive, Anchorage

FREE PARKING!



Partial project list:

- Anchorage Area-wide Trails Rehab - Fish Creek Trail
- Anchorage Bike & Pedestrian Plan
- C St Railroad Crossing
- Arctic Boulevard Improvements Phase III: 36th to Tudor
- Bicycle and Pedestrian Plan Implementation
- Bragaw at 16th Channelization
- Campbell Airstrip Rd Upgrade and Trail Improvements: Tudor Rd to Mile 0.7
- Glenn Highway/Muldoon Interchange Improvements
- Highway Safety Improvement Program
- Jewel Lake Widening: 88th to Strawberry
- Lake Otis at 68th Channelization
- Minnesota Reconnaissance Study
- O'Malley, Phases I and II: Seward Highway to Hillside Dr
- Parks Highway Projects
- People Mover and Public Transportation
- Seward Highway Reconstruction: Dimond to Dowling
- Seward Highway, MP 105-107 Windy Corner
- Spenard Road Reconstruction Phase II: Hillcrest to 30th
- And many more...

To reserve a table for your transportation project or program, send us a request by email at comments.brooksalaska@gmail.com.

Sponsors are critical to make this event a success. If you would like to be an event sponsor, send us an email or call 907-272-1877.

Event Organizer:

Anne Brooks, Public Participation Specialist

Brooks & Associates

907-272-1877, anne.brooksalaska@gmail.com



ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



FACT SHEET

Parks Highway Systemic Passing Lanes, MP 83 to 163

Design Project No. Z573010000/TBD
Construction Project No. CFHWY00128/TBD

Project Scope

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), is working on a project to improve safety by increasing passing opportunities along the Parks Highway. The proposed improvements are anticipated to reduce accidents along the highway by alleviating driver impatience, following too close, excessive speeding, improper passing, and fatigue. The project will construct passing lanes at the following approximate milepost (MP) locations:

- MP 127 to 128, construct northbound passing lane
- MP 128.5 to 129.5, construct southbound passing lane
- MP 136.3 to 137.2, construct southbound passing lane
- MP 137.5 to 138.3, construct northbound passing lane
- MP 146 to 147, construct northbound passing lane
- MP 150 to 151, construct southbound passing lane
- MP 157.5 to 158.5, construct southbound passing lane
- MP 161.5 to 162.5, construct northbound passing lane

Schedule

Construction is anticipated to begin in summer 2018. The project is currently in the environmental design and survey development phase. Public meetings will be held during the design phase to hear and consider public comments.

For more information, contact:

Anne Brooks, P.E., Public Involvement
Coordinator
Brooks & Associates
Toll Free Telephone: (866) 535-1877
Email: comments.brooksalaska@gmail.com

Tom Schmid, Project Manager
DOT&PF
Telephone: (907) 269-0543
Email: tom.schmid@alaska.gov

Jeff Fuglestad, P.E. Design Project Manager
Hattenburg Dilley & Linnell
Telephone: (907) 564-2120
Email: jfuglestad@hdlalaska.com



Parks Highway MP 90 to 99 - Rehabilitation

Project No. Z561770000/ 0A41(032)

Parks Highway MP 99 to 123.5 - Rehabilitation

Project No. CFHWY00089/0A42(011)

Parks Highway MP 83 to 163 - Systemic Passing Lanes

Project No.s: MP 83-99 CFHWY00127/0001(489)

MP 99-123.5 CFHWY00092/0A41(32)

MP 123.5-163 CFHWY00128/TBD

MEETING NOTES

SUBJECT: 2016 Mat-Su Transportation Fair

PROJECT NO.: Z561770000/ 0A41(032), CFHWY00089/0A42(011), MP 83-99 CFHWY00127/0001(489), MP 99-123.5 CFHWY00092/0A41(32), MP 123.5-163 CFHWY00128/TBD

GROUP: Public

DATE: Thursday, February 4, 2016

TIME: 4 to 8 p.m.

LOCATION: Alaska Airlines Center Auxiliary, University of Alaska Anchorage, 3550 Providence Drive, Anchorage

MEETING OUTREACH: See Table 1. Meeting Outreach

MEETING ATTENDANCE: 383 people signed in

MEETING MATERIALS: Poster showing all projects along the Parks Highway, comment sheets, fact sheets for each project, sign-in sheet

STAFF PRESENT: *DOT&PF*: Robert DeVassie

MEETING INFORMATION:

Attendees were greeted at the door and asked to sign in. They were provided with a program showing the layout of the event and a passport highlighting major projects. Over 80 Anchorage area transportation projects were represented. Community members were encouraged to ask questions of the project teams and to provide written comments. The Parks Highway projects were represented on a poster showing all Central Region Parks Highway projects, and by fact sheets at the Parks Highway Corridor table.

Attendees submitted the following general comments about the Transportation Fair.

- Very good presentation, very knowledgeable. Thanks!
- The fair was awesome! I wish I knew about it earlier. The food was awesome as well. Hope to see this expand!
- Please incorporate BMP's into all new and ongoing projects to prevent the introduction and spread of non-native invasive species through our transportation corridors. Together, we can make a difference for Alaska. Thanks!
- This fair is an excellent use of state money. Thanks.

- Thank you for again providing a convenient way for the public to learn of the many transportation related issues and projects in South Central Alaska. As usual, I learned about projects that I hadn't been aware of and now have current contacts. Items about which I want to continue to receive updated information. Thank you, too, for having the fire department there to demonstrate child safety equipment. For the last year I had a question about a booster seat that I didn't take the time to stop at a station to get an answer. The fire personnel at your event were able to quickly answer my question and demonstrate the use of the particular booster seat about which I had a concern. Thank you to Quantum Spatial for providing the handy bags. It made it much easier to carry the information sheets that I gathered during the event. I'm looking forward to this event next year.

Table 1. Meeting Outreach

Date	Outreach method	Description
12/04/2015	Blog post	Information posted on the event blog, 1,100 page views in the last month
01/04/2016	Meeting notice to Brooks & Associates (BA) projects websites	Meeting notice posted on the public involvement page
01/06/2016	DOT&PF Online Calendar	Inviting the public to the event
01/13/2015 02/01/2016	Email notice and reminder to BA project lists	Provide email invitation to project stakeholders, 1,383 sent, 31-36% open rate
01/13/2016	Community calendars	A request was sent to the <i>Alaska Dispatch News</i> , <i>Anchorage Press</i> , and KTUU to post the event on online calendars
01/14/2016	Event flier and a request to forward sent to all Anchorage area elected officials	Inviting the public to the event
01/20/2016 02/02/2016	Notice sent to all community councils	Notice of event sent to community council memberships
01/21/2016 02/04/2016	Facebook and Twitter update on DOT&PF's page	Inviting the public to the event
01/22/2016 01/29/2016 02/03/2016	What's Up Listserve	Announcement inviting the public to the event
01/22/2016 01/29/2016	Municipality of Anchorage Bulletin	Inviting the public to the event
01/22/2016	Municipality of Anchorage website notice	Inviting the public to the event
01/23/2016	Facebook boosted post about event	Reach of 13,658, 125 photo clicks, 206 post likes, 53 new DOT&PF page likes, 35 shares, and 12

Date	Outreach method	Description
		comments
01/26/2016	<i>Alaska Dispatch News</i> display ad	Inviting the public to the event
01/28/2016	Facebook notice on People Mover page	Inviting the public to the event
02/01/2016		
02/04/2016		
02/01/2016	Press release	Released by DOT&PF
02/02/2016	GovDelivery	Inviting the public to the event, sent to 3,432 email addresses, 1,678 total opens
02/02/2016	Flyers on People Mover buses	Event flyer posted on People Mover bus bulkheads
02/03/2016	Channel 11 news piece about the Fish Creek Trail project that mention the Anchorage Transportation Fair	Earned media event notice
02/04/2016	Public service announcement	Request to air the event announcement sent to Anchorage area radio and television stations

Related documents on file:

- Advertising
- Sign-In Sheet
- Fact Sheet
- Comment Sheet
- Poster

Mat-Su Transportation Fair



Make tracks to the Transportation Fair to learn about the many transportation projects under way in the Mat-Su Borough!



Thursday, September 22, 2016

Save the date!

**4 - 8 pm
Raven Hall, Alaska State Fairgrounds
2075 Glenn Highway, Palmer**

The Alaska Department of Transportation & Public Facilities, cities of Palmer, Wasilla and Houston, the Alaska Railroad Corporation, Mat-Su Community Transit, and the Mat-Su Borough have teamed up again to bring you the latest on roads, rails and trails at this one-stop transportation fair. The event provides you an opportunity to view information on many transportation projects underway in the Mat-Su Borough.

Bring the family for children's activities, food and fun!

Finger food available between 5-7 pm, or while supply lasts.

Stop by anytime to find out more about:

- ◆ Big Lake Road Intersection Improvements
- ◆ Fairview Loop Rehabilitation
- ◆ Glenn Highway, MP 66.5 to 92
- ◆ Glenn Hwy Reconstruction: Parks Hwy to Old Glenn Hwy
- ◆ Knik Goose Bay Road Reconstruction
- ◆ Mat-Su Transit
- ◆ Mat-Su Borough Long-Range Transportation Plan
- ◆ Mat-Su Borough Fish Passage
- ◆ Mat-Su New Trails
- ◆ Palmer-Wasilla Highway Eastern Terminus
- ◆ Parks Highway MP 44-52
- ◆ Alaska Railroad Positive Train Control, Bridges and Crossings
- ◆ Seldon Road Extension Phase II
- ◆ Seward Meridian Phase II
- ◆ Traffic Safety
- ◆ Trunk Road Extension South
- ◆ Wasilla Main Street

And many more projects...

For more information contact:

Anne Brooks, Brooks & Associates, Toll Free: 866-535-1877, E-mail: comments.brooksalaska@gmail.com

Event Blog: <http://matsutranspofair.blogspot.com>

SPONSORS

Alaska Department of Transportation



Mat-Su Borough



City of Houston



City of Palmer



City of Wasilla



Alaska Railroad Corporation



DOT&PF operates Federal Programs without regard to race, color, national origin, sex, age, or disability. Full Title VI Nondiscrimination Policy: dot.alaska.gov/tvi_statement.shtml. To file a complaint go to: dot.alaska.gov/cvlrts/titlevi.shtml. DOT&PF complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to participate in this event should contact Anne Brooks at (907) 272-1877 to make necessary arrangements. Individuals with a hearing impairment can contact Relay Alaska at 711 for assistance.



ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



FACT SHEET

Parks Highway MP 90 to 99 Rehabilitation

Project No: 0A41(032)/Z561770000

Parks Highway MP 83 to 99 Systemic Passing Lanes

Project No. 0001(498)/CFHWY00127

Project Scope

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), is working on two Parks Highway projects located between Mileposts (MP) 83 and 99. The Rehabilitation Project located between MP 90 and MP 99 will widen the existing roadway and repair the pavement, which will help to improve safety, eliminate seasonal weight restrictions, reduce maintenance costs, and extend the service life of the roadway. The Systemic Passing Lanes Project located between MP 83 and MP 99 will add passing lanes at various locations within the project area to increase passing opportunities.

Rehabilitation and widening of the existing roadway's pavement structure between mileposts 90 to 99 and will consist of new asphalt pavement over a reconstructed base. The rehabilitation includes:

- Reconstruction of the roadway to new grades and widened shoulders
- Channelization improvements at the Talkeetna Wye and Susitna Valley High School
- Drainage and culvert improvements
- Vegetative clearing within the DOT&PF right-of-way
- Replace, repair or improve as needed:
 - Driveways and approaches
 - Signs and striping
 - Guardrail and guardrail end treatments

Passing lanes will be constructed at the following approximate locations:

- MP 86 to 87, construct both northbound and southbound passing lanes
- MP 94 to 95, construct both northbound and southbound passing lanes

Schedule

Construction is anticipated to begin in summer 2017. Project is currently in design and public meetings will be held during the design phase to hear and process public comments.

For more information:

Anne Brooks, P.E., Public
Involvement Coordinator
Brooks & Associates
Toll Free Tel: (866) 535-1877
anne.brooksalaska@gmail.com

Jeff Fuglestad, P.E.
Design Project Manager
HDL Engineering Consultants, LLC
Tel: (907) 564-2120
jfuglestad@hdlalaska.com

Tom Schmid, P.E.,
Project Manager
DOT&PF
Tel: (907) 269-0543
tom.schmid@alaska.gov

<http://dot.alaska.gov/creg/parkshwy/>

Update 9/19/16



Parks Highway MP 90 to 99 - Rehabilitation

0A41032/Z561770000

Parks Highway MP 99 to 123.5 - Rehabilitation

0A42011/CFHWY00089

Parks Highway MP 83 to 163 - Systemic Passing Lanes

Project No.s: MP 83-99 0001489/CFHWY00127

MP 99-123.5 0A4132/CFHWY00092

MP 123.5-163 TBD/CFHWY00128

MEETING NOTES

SUBJECT: 2016 Mat-Su Transportation Fair

PROJECT NO.: See above.

GROUP: Public

DATE: Thursday, September 22, 2016

TIME: 4 to 8 p.m.

LOCATION: Alaska State Fairgrounds, Palmer, AK

OUTREACH: See Table 1. Meeting Outreach

ATTENDANCE: 283 people signed in, 81 returned the Passport

MATERIALS: Poster showing all projects along the Parks Highway, and comment sheets and fact sheets for each project

STAFF PRESENT: *DOT&PF:* Tom Schmid, Steven Jochens

MEETING INFORMATION:

Attendees were greeted at the door and asked to sign in. Over 60 Mat-Su area transportation projects and programs were represented. Community members were encouraged to ask questions of the project teams and to provide written comments.

Attendees thanked staff for another great transportation fair this year and said they learned a lot about what was going on around the Matanuska Susitna Borough.

No written comments were received.

Table 1. Event Outreach

Date	Outreach Method	Description
06/01/2016	Blog post	Information posted on the event blog, 1,500 page views in the last month
08/15/2016	Meeting notice posted on projects websites (Glenn Highway MP 34-42, Parks Highway MP 44-52, Fairview Loop, Palmer-Wasilla Highway, Seward Meridian)	Meeting notice posted on the public involvement page

Date	Outreach Method	Description
08/26/2016	Email "Save the Date" notice sent to Mat-Su project email lists	Inviting the public to the event (1586 sent, 599 opened, 32.5% clicks)
08/29/2016	Community calendars	A request was sent to the <i>Mat-Su Frontiersman</i> , <i>Anchorage Daily News</i> , and <i>Make a Scene</i> to post the event on online calendars
09/01/2016	Email to Glenn Highway MP 34-42 project list providing project update and notice of 2016 Mat-Su Transportation Fair	Inviting the public to the event. 428 sent, 47.0% open rate
09/01/2016	DOT&PF Online Calendar	Inviting the public to the event
09/01/2016	Event postcards sent to project lists for the following projects: Parks Highway MP 44-52, Glenn Highway MP 34-42, Palmer-Wasilla Highway, Fairview Loop Reconstruction, and Seward Meridian Parkway Phase 2	Inviting the public to the event
09/01/2016 09/07/2016 09/15/2016	What's Up Listserve	Announcement inviting the public to the event
09/13/2016	Email to Parks Highway MP 44-52 project email list providing project update and Mat-Su Transportation Fair details	Inviting the public to the event
09/13/2016	Big Lake Community Council	Event announcement made at the Big Lake Community Council meeting
09/14/2016	Email to Mat-Su project lists announcing KSKA Hometown Alaska show concerning Mat-Su Transportation Fair	Inviting the public to listen to show and participate. 2154 sent, 33.2% open rate, 55 clicks
09/14/2016	KSKA (FM 91.1) Radio Program, Hometown Alaska show about transportation fairs	Raise awareness and invite public to event
09/15/2016	Facebook posts	Requests were sent to the City of Palmer, DOT&PF, City of Wasilla, City of Houston, and Mat-Su Community Transit to post about the event on Facebook
09/15/2016	GovDelivery message sent by DOT&PF	Inviting the public to the event, Sent to 733 recipients, 35% open rate

Parks Highway MP 90-99 Rehabilitation, Parks Highway MP 99-123.5 Rehabilitation, Parks Highway MP 83-163 Systemic Passing Lanes – September 22, 2016 Mat-Su Transportation Fair Notes

Date	Outreach Method	Description
09/16/2016	Request to Alaska State Fair to provide notice of transportation fair on electronic messaging sign and online calendar	Inviting the public to the event
09/16/2016 to 09/18/2016	KAYO-FM, Country Legends 100.9 Radio Ads aired 72 times. Sponsored by Alaska Railroad Corporation.	Invitation to Mat-Su Transportation Fair
09/16/2016	Notice of Mat-Su Transportation Fair posted on Mat-Su Borough website homepage	Inviting the public to the event
09/17/2016	Facebook ads sponsored by City of Wasilla	Inviting the public to the event. 3484 people reached
09/21/2016	Email to Mat-Su project lists including layout for transportation fair	Inviting the public to the event, letting them know what projects to be included. 1454 sent, 38.9% open rate, 141 clicks
09/19/2016 to 9/21/2016	KSKA (FM 91.1) Radio Advertising airing 14 times. Sponsored by City of Palmer.	Inviting the public to the event

Documents on file:

- Outreach Materials
- Fact Sheet
- Comment Sheet
- Sign-In Sheet
- Parks Highway Projects in Design Poster

The Alaska Department of Transportation & Public Facilities invites you to comment on the Parks Highway MP 83 to 99 Systemic Passing Lanes and Parks Highway MP 90 to 99 Rehabilitation projects which are scheduled to begin construction in summer of 2017.

Parks Highway MP 83-99 Systemic Passing Lanes

Project Number: TBD/CFHWY00127

Passing lanes will be constructed at the following approximate locations:

- ★ MP 86 to 87, construct both northbound and southbound passing lanes
- ★ MP 94 to 95, construct both northbound and southbound passing lanes

The above projects will be combined and advertised with the following:

- ★ Parks Highway Talkeetna Spur Road Pedestrian Improvements Project, No. 0A4-1(030)/Z581170000 adding a pedestrian undercrossing at Helena Avenue; and
- ★ Parks Highway MP 99-123.5 Pavement Preservation Project, No. TBD/CFHWY00089 which will resurface the highway driving lanes with new pavement.

For more information visit us on the web!

► dot.alaska.gov/creg/parkshwy



Parks Highway MP 90-99 Rehabilitation

Project Number: 0A41(032)/Z561770000

Rehabilitation and widening of the existing roadway's pavement between mileposts 90 to 99 with new pavement. The rehabilitation includes:

- ★ Reconstruction of the roadway to new grades and widened shoulders
- ★ Channelization improvements at the Talkeetna Wye and Susitna Valley High School
- ★ Drainage and culvert improvements
- ★ Clearing vegetation within the DOT&PF right-of-way
- ★ Replace, repair or improve as needed:
 - Driveways and approaches
 - Signs and striping
 - Guardrail and guardrail end treatments

To submit a comment, contact:

Anne Brooks, Public Involvement Coordinator
Brooks & Associates, Toll Free Phone: 866-535-1877
E-mail: comments.brooksalaska@gmail.com

The DOT&PF operates Federal Programs without regard to race, color, national origin, sex, age, or disability. Full Title VI Nondiscrimination Policy: dot.alaska.gov/tvi_statement.shtml. To file a complaint go to: dot.alaska.gov/cvlrts/titlevi.shtml.

Brooks & Associates
1704 Rogers Park Court
Anchorage, AK 99508

★ Parks Highway Projects: MP 83-99 Systemic Passing Lanes MP 90-99 Rehabilitation

We invite your comments!

Mat-Su Transportation Fair



Make tracks to the Transportation Fair to learn about the many transportation projects under way in the Mat-Su Borough!



Thursday, September 28, 2017

Save the date!

3-7 pm (new earlier time this year)

**Curtis D. Menard Memorial Sports Center
1001 S. Clapp Street, Wasilla**

The Alaska Department of Transportation & Public Facilities, cities of Palmer, Wasilla and Houston, the Alaska Railroad Corporation, and the Mat-Su Borough have teamed up for the 10th year in a row to bring you the latest updates on roads, rails and trails at this one-stop transportation fair. The family-friendly event provides you an opportunity to view information about many projects in your neighborhood and beyond.

Bring the family for children's activities

Stop by anytime to find out more about:

- ◆ Big Lake Road Intersection Improvements
- ◆ Glenn Highway, MP 66.5 to 92
- ◆ Glenn Hwy Reconstruction: Parks Hwy to Old Glenn Hwy
- ◆ Knik Goose Bay Road Reconstruction
- ◆ Mat-Su Transit
- ◆ Mat-Su Borough Long-Range Transportation Plan
- ◆ Mat-Su Borough Fish Passage
- ◆ Mat-Su New Trails
- ◆ Palmer-Wasilla Highway Eastern Terminus
- ◆ Parks Highway MP 44-52
- ◆ Alaska Railroad Bridges and Crossings
- ◆ Seldon Road Extension Phase II
- ◆ Seward Meridian Phase II
- ◆ Traffic Safety
- ◆ Trunk Road Extension South
- ◆ Wasilla Main Street

And many more projects...

For more information contact:

Anne Brooks, Brooks & Associates, Toll Free: 866-535-1877, E-mail: comments.brooksalaska@gmail.com

Event Blog: <http://matsutranspofair.blogspot.com>

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Alaska Department of Transportation



Mat-Su Borough



City of Houston



City of Palmer



City of Wasilla



Alaska Railroad Corporation



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ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



FACT SHEET

Parks Highway MP 83 to 99 Systemic Passing Lanes

Project No. 0A41037/CFHWY00127

Parks Highway MP 90 to 99 Rehabilitation

Project No: 0A41032/Z561770000

Parks Highway MP 83 to 99 Systemic Passing Lanes

This project is the first phase to add passing lanes along the Parks Highway from MP 83 to MP 163. Passing lanes will be roughly 1-mile long and spaced every 6-10 miles in each travel direction. This project will construct both northbound and southbound passing lanes at MP 86 to MP 87 and at MP 94 to MP 95. Phasing is coordinated with various Parks Highway improvement projects.

Parks Highway MP 90 to 99 Rehabilitation

The project will resurface and widen the existing roadway's pavement between mileposts 90 to 99 with new asphalt pavement over a reconstructed base. Shoulders will be widened from 4 feet to 8 feet and include rumble strips. Lane channelization improvements will be constructed along the highway in the community of Sunshine. The project will also:

- Construct new drainage culverts
- Clear the vegetation adjacent to the roadway
- Signing and striping where impacted by the project
- Other miscellaneous items of work as necessary

To gain cost efficiencies, the above projects will be combined with the Parks Highway Talkeetna Spur Road Pedestrian Improvements Project.

More information on the web at: <http://dot.alaska.gov/creg/parkshwy/>.

Schedule

Construction for both projects is anticipated to begin in summer 2018.

For more information:

Anne Brooks, P.E.

Public Involvement Coordinator
Brooks & Associates
Toll Free Tel: (866) 535-1877
anne.brooksalaska@gmail.com

Rick Hammond, P.E.

Design Project Manager
HDL Engineering Consultants
Tel: (907) 564-2120
rhammond@hdlalaska.com

Tom Schmid, P.E.

Project Manager
DOT&PF
Tel: (907) 269-0543
tom.schmid@alaska.gov

<http://dot.alaska.gov/creg/parkshwy/>

Updated July 27, 2017

Attendees submitted the following general written comments about the Transportation Fair.

- Couple of phone questions about how to get to the Transportation Fair from people who no longer drive.
- No more plastic bags.
- Add restroom location to map.
- Why not have the event on a Saturday?

Table 1. Event Outreach

Date	Outreach Method	Description
08/01/2017	Meeting notice posted to project website	Mat-Su Transportation Fair notice posted to public involvement page
08/02/2017 09/27/2017	Blog post	Information to https://matsutranspofair.blogspot.com/ , 1,500 page views in last month
08/17/2017	Email notice	Inviting the public to the Mat-Su Transportation Fair, 1,601 sent, 37% open rate, 55 clicks
08/22/2017	Sent request to forward to area legislators	Invitation to Mat-Su Transportation Fair
08/24/2017	Request to forward event information to all Mat-Su area community councils	Invitation to Mat-Su Transportation Fair
08/29/2017	Community calendars	A request was sent to the <i>Mat-Su Frontiersman</i> and <i>Alaska Dispatch News</i> to post the event on online calendars
08/29/2017	DOT&PF online calendar	Inviting the public to the Mat-Su Transportation Fair
08/29/2017	GovDelivery message sent by DOT&PF	Invitation to Mat-Su Transportation Fair
09/07/2017 09/14/2017 09/21/2017 09/27/2017	What's Up Listserve	Invitation to Mat-Su Transportation Fair
09/01/2017	Postcard mailer	Inviting the public to Mat-Su Transportation Fair, 8,000 total sent to the mailing lists: Parks MP 44-52, Parks MP 90-163 Paving and Passing Lanes projects, Seward Meridian, and Glenn Highway MP 34-42

Date	Outreach Method	Description
09/01/2017	Request sent to all teams to forward event info to their lists	Invitation to Mat-Su Transportation Fair
09/15/2017	Mat-Su Borough area radio advertising sponsored by Mat-Su Borough	Invitation to Mat-Su Transportation Fair
09/15/2017	KSKA (FM 91.1) radio advertising sponsored by City of Palmer	Invitation to Mat-Su Transportation Fair
09/20/2017	Press release	Invitation to Mat-Su Transportation Fair
09/22/2017 09/28/2017	Facebook posts by DOT&PF	Invitation to Mat-Su Transportation Fair
09/22/2017	Facebook sponsored post by DOT&PF	Invitation to Mat-Su Transportation Fair
09/27/2017	Email to Mat-Su project lists including layout for transportation fair	Inviting the public to Mat-Su Transportation Fair, 1,718 sent, 39% open rate, 199 clicks

Documents on file:

- Outreach
- Fact sheet
- Comment sheets
- Sign-in sheets
- Project graphics
- Passport

Anchorage Transportation Fair



Website: anchoragetranspofair.blogspot.com

The Alaska Department of Transportation and Public Facilities and partners, including the Municipality of Anchorage, Alaska Railroad, and Anchorage Water and Wastewater Utility, invite you to participate in the 2018 Anchorage Transportation Fair. The event is a

"super open house" providing a showcase of walking, biking, and driving projects and plans within the Municipality of Anchorage. The Anchorage Transportation Fair is free and open to the public. There is no cost for parking.

**When: Thursday, February 8, 2018
3 to 7 p.m.**

**Where: Alaska Airlines Center Auxiliary
University of Alaska Anchorage
3550 Providence Drive, Anchorage
Ride bus routes: 10, 20, or 55**

Project Hot List:

- Downtown Lighting and Signals Upgrade
- Fish Creek Trail Rehabilitation
- Glenn/Muldoon Interchange Improvements
- Metropolitan Transportation Plan 2040
- Midtown Congestion Relief
- Midtown Corridor Improvements, Denali Street Area:
Benson Boulevard to Tudor Road
- Municipality of Anchorage Long-Range Planning Division
- Public Transportation
- National Highway Corridors: Seward, Glenn, Parks,
Sterling Highways
- Non-Motorized Plan
- O'Malley Road: Reconstruction Seward Highway to
Hillside Drive
- Seward Highway: Improvements Milepost
105 to 107, Windy Corner
- Seward Highway: Reconstruction Dimond
Boulevard to Dowling Road
- Seward Highway: Reconstruction O'Malley Road to
Dimond Boulevard
- Seward Highway: Rehabilitation Milepost 75 to 90
- Tudor Road: Pavement Preservation Minnesota to
East 36th Avenue
- Vision Zero
- W 32nd Avenue & E 33rd Avenue Upgrades
- And many more...

Contact:

Send an email to Anne Brooks at comments.brooks.alaska@gmail.com to:

- Reserve a table for your transportation project or program.
- Become a Sponsor.
- Find out more about the event.

Event Organizer:

Anne Brooks, Public Participation Specialist, Brooks & Associates, Anchorage
Phone: 907-272-1877; Email: anne.brooksalaska@gmail.com

Partners:



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Mat-Su Transportation Fair



Make tracks to the Transportation Fair to learn about the many transportation projects under way in the Mat-Su Borough!



Thursday, September 13, 2018

Save the date!

3-7 pm

**Curtis D. Menard Memorial Sports Center
1001 S. Clapp Street, Wasilla**

The Alaska Department of Transportation & Public Facilities, Mat-Su Borough, cities of Palmer, Wasilla and Houston, and the Alaska Railroad Corporation invite you to the view and discuss project designs, updates, and programs at this one-stop transportation fair. The family-friendly event covers roads, rails, and trails in the Mat-Su Borough and beyond.

Bring the family for children's activities

Stop by anytime to find out more about:

- ◆ Aspen Ridge Rd Extension to Palmer Fishhook Rd
- ◆ Bogard Rd Extension East Phase III
- ◆ Cheri Lake/Karen/King Arthur Improvements
- ◆ Glenn Highway Reconstruction: Parks to Old Glenn
- ◆ Glenn Highway: Milepost 66.5 to 92
- ◆ Hemmer Rd Upgrade & Extension to Bogard Rd
- ◆ Hermon Rd Upgrade & Extension to Palmer-Wasilla Hwy
- ◆ Knik Goose Bay Road Reconstruction
- ◆ Safe Routes to School Plan Implementation
- ◆ Mat-Su Transit
- ◆ Old Glenn Pathway Phase II
- ◆ Parks Highway Reconstruction: Milepost 44-52
- ◆ Reddane Ave Extension (part of Port Mackenzie Rail Extension)
- ◆ Seldon Rd Extension Phase II
- ◆ Seward Meridian Improvements Phase II
- ◆ Smith Rd Upgrade
- ◆ Tex-Al Dr Upgrade & Extension
- ◆ Traffic Safety
- ◆ Trunk Rd Connector/Katherine Dr (Stringfield)
- ◆ Trunk Rd Extension South Phase III
- ◆ Wasilla Main Street

And many more projects...

For more information contact:

Anne Brooks, Brooks & Associates, Toll Free: 866-535-1877, E-mail: comments.brooksalaska@gmail.com

Event Blog: <http://matsutranspofair.blogspot.com>

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