

APPENDIX B

DOT&PF DEVELOPMENT GUIDELINES AND MINING AND RECLAMATION PLAN

DEVELOPMENT GUIDELINES FOR MATERIAL SITE M.S. No. 208-016-1

DEFINITIONS:

THE DEVELOPMENT GUIDELINES describe the general guidelines to be used in site planning, along with use stipulations that apply to differing types of sites.

THE MINING AND RECLAMATION PLAN is a site and project specific sketch map and narrative that conforms to the development guidelines and conditions, and which is prepared and submitted by a contractor to the Engineer prior to site use. Approval by the Department of Natural Resources is also a requirement of A.S. 27.19 and 11 AAC 97.

DEVELOPMENT GUIDELINES

1) **OBJECTIVES**

- a) To eliminate or minimize unauthorized uses, including dumping of waste, discharge of firearms, and unauthorized removal of materials.
- b) To minimize disturbance to the public and to adjacent lands and resources during site operation.
- c) To minimize soil erosion and air or water pollution.
- d) To rehabilitate the site after operations, leaving it in a natural appealing state; final site conditions adaptable to multipurpose utilization, specific wildlife enhancement or minimum deviation from surroundings, or to modify the site for fish/wildlife habitat enhancement.

2) **AESTHETICS** Consideration must be given to all aesthetic values in the planning of site extraction and production operations, including associated roads and facilities.

- a) The location, size, shape, and depth of excavation will be considered to the extent that these factors create a visual impact related to the traveling public's angle of views, distance to view, and duration of view.
- b) Mitigating measures incorporated in site design will include the use of vegetation screens and existing landforms to eliminate or modify visual impact to the traveling public when practicable.
- c) When sites are located in areas of high scenic value, final site boundaries will be irregular and blend into land contours to approximate natural features as closely as is feasible.

3) **SURVEY MONUMENTS**

The Department of Transportation or its contractors shall mark and protect all survey monuments within or near the site against destruction, obliteration, or damage during the life of this contract. If any public land monuments, or corners, or accessories, including but not limited to, U.S. Coast and Geodetic, U.S. Geological Survey, and/or Bureau of Land Management survey monuments, are destroyed, obliterated or damaged, the Department of Transportation or its contractors, by utilization of a registered land surveyor, shall reestablish or restore the monuments, corners or accessories using surveying procedures in accordance with the "Manual of Instruction for the Survey of Public Lands of the United States, 1973 Ed.," and shall record such survey in the appropriate records.

4) **BONDING**

Department of Transportation contractors are required to furnish a bond to insure performance and compliance with Department of Transportation project objectives and stipulations, including material source development guidelines and mining and reclamation plan conditions. Said bond shall remain in effect until the Department of Transportation, Resident Engineer, is satisfied that the contractor has complied with all applicable conditions. Noncompliance by a contractor will result in a forfeiture of all, or that portion of, the bond required to bring the site into compliance with said conditions.

5) **VEGETATION SCREENS AND BUFFER AREAS**

- a) A 100-foot vegetation screen of undisturbed land (with the exception of access roads) will be maintained between site clearing or excavation, and any public roads or navigable waterbodies.
- b) A 100 foot diameter undisturbed buffer will be maintained around any existing structures on the site, such as telephone or power line supports.

c) A 50 foot undisturbed buffer shall be maintained adjacent to any permanent streams or site boundaries not adjacent to roads or navigable waterbodies, with the exception of sites situated on flood plains or submerged lands or sites requiring drainage ditches or connections to waterbodies, such as sites developed in connection with fishery enhancement purposes.

6) **CULTURAL/ARCHAEOLOGICAL**

Reasonable measures shall be taken to avoid destroying, damaging, or removing paleontological, historical, or archaeological sites or artifacts. In the event that objects of historic or scientific interest, or antiquities are discovered on the land, they will be left intact and immediately brought to the attention of the State archaeologist and Department of Transportation, Resident Engineer, and operations upon that portion of the site shall cease.

7) **FIRE SUPPRESSION**

The Department of Transportation and its contractors shall take all reasonable steps to prevent and suppress forest, brush, grass, or tundra fires on the site and in its vicinity.

8) **ACCESS ROADS**

Access to the site shall be limited to the existing access roads, which connect with the Talkeetna Spur Road at approximately Milepost 11. During dry conditions, dust along the access route shall be controlled by water trucks or by the application of calcium chloride.

9) **CLEARING**

Clearing of vegetation and overburden shall be limited to the minimum acreage necessary to provide the required volume of materials (see 14(a) below). Additional clearing may not exceed five-acre increments in advance of excavation. Areas where any doubt exists about quantity or quality of material shall be proven with minimal disturbance prior to clearing and stripping.

10) **TIMBER**

Standing timber over 5" BHD in areas to be excavated will be offered to the public for cutting prior to clearing operations. The clearing area must be flagged and measures taken to prevent public cutting of timber in vegetation screens and buffers. In lieu of offering the timber for public cutting, said timber may be cut into eight-foot sections, limbed, and stacked in an area made available for public removal. All trees, snag and other woody material cut in connection with clearing operations shall be felled into the permit area and away from live water courses. All trees, snags, or other woody material cut in connection with clearing operations shall be cut so that the resulting stumps shall not be higher than six inches measured from the ground on the uphill side. Loose stumps shall be buried in depleted portions of the site and covered by a minimum of six inches of earthen materials.

11) **BRUSH**

All brush and waste timber shall be stockpiled for spreading with or beneath the overburden for rehabilitation of non-expandable slopes and surfaces.

12) **OVERBURDEN**

Overburden will be cleared only to the extent necessary to provide either specific project quantities, or anticipated M&O needs for a specific time frame and stripped overburden will be stockpiled within the confines of the site. After excavation and contouring is complete, the stockpiled overburden will be spread evenly over worked-out portions of the site and non-expandable slopes as directed by the Resident Engineer. Pushing overburden into standing timber or drainage courses is not authorized.

13) **SLOPES**

The site will be excavated leaving side slopes of 2:1 or flatter and all excavated surfaces dressed to smooth contours. All excavation shall proceed toward non-expandable slopes. The excavation of the sides of the pit shall be done in such a way that at no time will backfilling be required in order to meet the final 2:1 slope stipulations. Excavated slopes suitable for future site expansion shall not be rehabilitated until site expansion is completed.

14) **EXCAVATION DEPTH**

- a) The existing pit area shall be excavated to a minimum depth of 14 feet before new land is stripped and excavated.
- b) This site will be excavated no lower than two feet above any existing water table.

15) **REJECT MATERIALS**

Reject materials shall be stockpiled separately within the site at a location identified and approved through the mining and reclamation plan. No materials less than 10" in diameter (except for overburden and designated waste or unusable materials) shall be rejected and stockpiled in the Site, unless specifically authorized by the Resident Engineer.

16) **STREAMS AND DRAINAGES**

- a) Existing drainage patterns should be altered only if necessary to prevent runoff contamination from the site causing erosion to adjacent lands or the entry of unacceptable levels of sediments into local water bodies.
- b) Upland site excavations shall be daylighted and graded to drain when necessary and feasible to prevent seasonal ponding, except when fishery or wildlife enhancement is intended.

17) **SITE FACILITIES**

- a) The contractor shall provide portable sanitation facilities. The contractor may also install a trailer or mobile home for an office or night watchman's use. If a trailer or mobile home is provided for a night watchman, provisions must be made for sanitary waste and garbage disposal. If the grantee constructs any camp on the land, such location shall be indicated on the mining and reclamation plan and approved by the resident engineer, and such engineer shall have authority to require that said camp be kept in a neat and sanitary condition. The contractor(s) may leave equipment on the site until completion of project utilization with the understanding that the State does not accept any responsibility for theft or damage.
- b) No garbage or trash generated during site use will be buried or disposed of within the site.
- c) If a wash plant is to be located on the site, in accordance with the contractors mining and reclamation plan, sediment settling basins shall be constructed to permit the removal of silt prior to runoff entering any water bodies. Sediments shall not be released in any lake or water drainage in such concentrations as would exceed acceptable water standards.
- d) Petroleum product storage tanks shall be surrounded by berms of sufficient volume to contain 150 percent of the total volume of the tank and have an impervious liner within the berm and under the tank. Measures must be taken during equipment servicing to prevent any petroleum products from spilling on the ground. Said storage tanks and liner shall be removed and the containment berm shall be graded to conform with the site floor upon completion of the project.
- e) Crushers, asphalt hot plants, or other processing facilities may be located on the site in accordance with the contractors mining and reclamation plan and must be operated in such a manner that no local, state, or federal laws, regulations, and guidelines are violated.
- f) No construction materials shall be stored in the site unless directly associated with the site operation or production of aggregate products for the State construction project.

18) **EMISSIONS**

Emissions from pumps, motors, equipment, installations, and burning material must meet the air quality standards of the United States Public Health Service and the State of Alaska. All burning shall meet the requirements of all applicable State and Federal laws and regulations and shall be used with maximum precautions to prevent forest and tundra fires. After burning, unconsumed material shall be disposed of in a manner approved in advance by the Resident Engineer.

19) **EXPLOSIVES**

Blasting materials, blasting caps, and related materials may be stored in approved magazines at the site. All explosive materials shall be handled and stored in strict accordance with BATF regulations. All explosive materials shall be transported in strict accordance with all applicable laws and regulations.

20) **PETROLEUM PRODUCTS**

In addition to 17d, petroleum spills of any size will be reported immediately to the Alaska Department of Environmental Conservation and the Department of Transportation, Resident Engineer. Waste petroleum products shall be removed from the material site and disposed elsewhere.

21) **MAINTENANCE AND OPERATIONS**

This site shall remain available for use by Department of Transportation, Maintenance and Operations personnel, for their needs during the contractor's use.

22) **USE OF MATERIALS**

a) The site is available for contractor's usage in the production of any materials for Project No. 60045, Talkeetna Airport Improvements. If the contractor elects to utilize this site, he shall abide by the stipulations of the development guidelines and the approved mining and reclamation plan.

b) Contractor shall not remove material of any kind or quality other than that needed for use on State projects.

c) Should a contractor decide to use the site, it is his responsibility to determine the suitability of the site for the project quality and volume requirements. The State does not assume any liability or responsibility to guarantee the quantity or suitability of site materials.

23) **HAZARDS**

The site shall be operated in a manner that is not hazardous to humans or to wildlife.

24) **SITE CLEAN-UP**

All site clean-up shall be performed and all contractor's equipment shall be removed from the site within 30 days following the completion of product haul and/or the production and utilization of asphalt concrete or aggregate products from this site by the contractor.

25) **REHABILITATION**

a) The rehabilitation of worked-out portions of the site not susceptible to erosion and not required for access or staging areas shall be by scarifying and fertilizing to allow natural revegetation.

b) Rehabilitation areas susceptible to erosion will be seeded with 1 pound of arctared fescue per 1,000 feet. Fertilizer application will consist of 400 pounds per acre of 10-20-10.

c) If it is not possible to have seeding completed by August 15, seeding and fertilizing shall be performed at the beginning of the next growing season.

d) A final pit inspection will be done by the Resident Engineer or his representative, and the contractor's representative, after completion of operations and prior to the removal of equipment to ensure compliance with the appropriate stipulations. Release of the contractor's bond will not be authorized until the Resident Engineer determines that the mining and reclamation plan and site use conditions have been satisfactorily observed. The State's Resident Engineer shall be notified by the contractor at least 21 days prior to the scheduled removal of rehabilitation equipment from the site in order that an inspection can be performed.

26) **CONTRACTOR'S RESPONSIBILITY**

The contractor and his agents, employees, and subcontractors are bound by all pertinent conditions of the development guidelines and the approved mining and reclamation plan, along with all applicable State and local laws. Any variations from the specific or general stipulations must be approved through the Resident Engineer

27) **DISTRIBUTION**

The Department of Transportation shall provide copies of these conditions and stipulations to its agents, contractors and subcontractors, for distribution to their respective employees.

28) **EXPANSION OF SITES** Not applicable.

29) **CONTRACTORS MINING AND RECLAMATION PLAN**

a) Prior to use of the site for a specific project, a mining and reclamation plan shall be submitted by the contractor for approval by both the Department of Natural Resources and the Resident Engineer. The mining and reclamation plan will require a sketch map showing the site boundaries, the working boundary, proposed access route(s), temporary building and processing plant locations, and drainage diversion measures, if any. A narrative must accompany the sketch map and shall include dust suppression measures,

measures to insure oil spill containment, and measures to prevent working area runoff contamination to water bodies.

b) In addition to the sketch plan and narrative, all applicable conditions in the development guidelines must be complied with.

c) Attached to the development guidelines are additional guidelines to assist contractors in the drafting of the mining and reclamation plan.

30) **CHANGES IN CONDITIONS**

Unforeseen conditions arising during construction and operation may make it necessary to revise or amend the mining and reclamation plan. In that event, the contractor and the Resident Engineer shall agree as to what revisions or amendments shall be made.

MINING AND RECLAMATION PLAN

1) **GENERAL**

a) The mining and reclamation plan, by sketch map and narrative describes the contractor's proposed method of operation and must be in compliance with the conditions of the controlling development guidelines. After approval of the mining and reclamation plan by the Engineer, it will be used as a site use field guide by the contractor and Resident Engineer. Approval by the Department of Natural Resources is also a requirement of A.S. 27.19 and 11 AAC 97.

b) Sketch maps shall have a scale sufficient for clarity under field conditions and should not be overly complex or inflexible.

c) All data that can be shown graphically should be shown in that manner unless it can be better described in the accompanying narrative.

d) The use of multiple sheets should be avoided, if practical.

e) Section and profile drawings should be used as appropriate.

2) **SKETCH MAPS**

Items to be shown on sketch maps, when appropriate, shall include:

a) Site boundary,

b) Existing or proposed access route and design,

c) Proposed working limits to be marked on the ground,

d) Development stages,

e) Approximate contours before and after excavation,

f) High and low water lines,

g) Vegetation lines and type of vegetation, screens and dimensions,

h) Material stockpiling areas,

I) Overburden and reject stockpiling areas,

j) Other planned features, such as processing plants, temporary housing, well(s), weigh scales, etc.

k) Final slope ratios and site drainage measures including grade and, when appropriate, daylighting ditches or stream diversions,

l) Scale of drawing, North arrow, and specific dimensions as appropriate,

m) When sites are to be developed as wildlife or fishery enhancement ponds, pond configurations, connections to existing bodies of water, final pond depths, slopes, and any islands shall be shown on the sketch maps.

3) NARRATIVE

The mining and reclamation plan narrative may be made part of the sketch map or may be attached to the sketch map as conditions allow. Items to be addressed in the narrative shall include:

- a) Methods of operation,
- b) Length and times of operation (day, month, year, and working hours),
- c) Air and water pollution control measures,
- d) Rehabilitation measures.

4) SUPPLEMENTS AND AMENDMENTS

Supplements and amendments to an approved mining and reclamation plan may be initiated by the contractor or the Resident Engineer when conditions warrant such action. Supplements and amendments must be mutually agreed upon and proper approval obtained prior to commencement of work of a changed nature.

- a) Minor changes are those that affect the handling of the details of the operation, but remain in compliance with the development guidelines. These changes may be authorized by the Resident Engineer.
- b) Major changes are those which cause the final outcome of the site to be significantly different from the approved mining and reclamation plan or are not in compliance with the development guidelines.
- c) Changes in final site outcome must be approved in writing by the Engineer.
- d) Changes not in compliance with the development guidelines must be authorized in writing by the Engineer.