

ATTACHMENT A

Surface Mining & Reclamation Plan

For The McKnight CUP Renewal

3/14/2025

The purpose of this project is to continue extraction of aggregate materials from APN# 524-052-002 & 004. Prepared as a part of Surface and Mining Reclamation Plan Renewal

Property Owner/Applicant Owner

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CHAPTER I - GENERAL INFORMATION

APPLICANT: McKnight

PROJECT DESCRIPTION: Continuation of aggregate extraction and renewal of Conditional Use Permit/Mining Plan/Reclamation Plan for the seasonal extraction in Humboldt County of up to 10,000 cubic yards of sand and gravel per year from river gravel bars.

LOCAL APPROVALS RECEIVED: Humboldt County Conditional Use Permit and Surface Mining/Reclamation Plan (CUP-21-88).

OTHER APPROVALS REQUIRED: Division of Mines and Geology Mine I.D. # H91-12-0006; U.S. Army Corps of Engineers Section 404 permit LOP 2009-1; Annual Agreements with CA Dept. of Fish and Game Streambed Alteration Code Section 1600, Regional Water Quality Control Board Clean Water Act Section 401 Certification

GENERAL INFORMATION

Name of Mineral Property/ Project Name -McKnight Bar Site

Applicant/ Property Owners- Thomas McKnight, P.O. Box 38 Salyar, CA 95563, (530) 629-2071

Agent- Mad River Properties Inc, 2660 Clay Road, CA 95519, (707) 496-0054, Michael Atkins (Owner)

Located along the Trinity River, River Mile 29.5, on the Salyer 7.5' Quadrangle, within the NE 1/4 of Section 95 T6N, R5E, H.B.&M, the site is accessed for the east side of Highway 299, approximately 1.6 miles south east of the town of Willow Creek, in Humboldt County (APNs 524-052-02,04). The portion of gravel bar on this property is approximately 2.5 acres, as depicted on the site maps. This site is adjacent to an existing construction/storage yard located uphill from the river on the same parcels. See attached Project Vicinity Map (Figure 1), Project location Map (Figure2), Typical Mining Plan/2006 Aerial Photograph (Figure 3).

Access Route

From eureka travel northbound along Highway 101 towards Arcata and exit east on Highway 299. Travel east along Highway 299 and proceed through the town of Willow Creek. Approximately 1.3 miles south of the town of Willow Creek the entrance to the site resides behind a locked gate on the east side of Highway 299.

The majority of aggregate produced from the site is initially expected to be hauled to another processing site located on Highway 96 just north of the town of Willow Creek.

Lead Agency Information

Lead Agency Humboldt County Planning and Building Dept, 3015 H Street, Eureka, Ca 95501, (707) 268-3727, FAX (707) 445-7446

CHAPTER II- MINING PLAN/ PLAN OF OPERATIONS

A, PROJECT OVERVIEW

The existing aggregate extraction site primarily involves aggregate removal from the exposed bar surface within the property. Secondary activities such as temporary equipment storage during active periods of operation will also occur. Consistent with the previous Conditional Use Permit and Mining Plan, activities such as processing and on-site storage shall not occur.

The Site has operated at this site for over 50 years and received County approval in 1992 for an annual extraction rate of up to 10,000 cubic yards. The operation has historically varied with market demands and river conditions. Monitoring information that has been collected since 1992 indicates that extraction at average historical levels is appropriate at this site and that such operations will not cause immediate nor cumulative significant adverse environmental impacts. The proposal is to renew a conditional use permit and update the surface mining and reclamation plan. This project will remain consistent with the previous terms and conditions found within the previous permits. This project is subject to conditions and oversight found within the County of Humboldt's Interim Adaptive Management plan as described in Chapter II

The proposal is for the continued extraction of up to 10,000 cubic yards of aggregate (sand and gravel) from adjacent gravel bars on an annual basis. The ongoing operation will continue to extract material as long as material is available on the gravel bar and operations conform to that established within the Interim Adaptive Management Plan. The extraction activity will continue to occur during the summer season between June 1st and November 1st. Aggregate materials will be extracted, loaded onto trucks and transported to an off-site location two miles north west of the project area where processing and storage will occur. The approximate 1.8-acre project area in Humboldt County is a portion of one parcel totaling approximately 73 acres (see Figure (2)).

In any given year; project extraction volumes, locations, and methods will be submitted by the applicant for approval by local, state, and federal agencies, including the County of Humboldt, CHERT, Dept. of Fish and Game, and Army Corps of Engineers. This interagency process is more specifically described later in this report (see Chapter II (Section III)).

1. Acreage Permitted

Property that is utilized for gravel extraction operations in Humboldt County total approximately 1.8 acres. Based on present conditions approximately 1.8 of the 20.8 acres located below Ordinary High Water (OHW) are presently available for extraction. Approximately 8.8 acres are utilized as a construction storage area. The upland portion of the site, located above OWH consists of approximately 43.4 acres and is privately owned, and consist of rural residential, and forested slopes (see Table 1), and are outside the project area, unless substantial flooding changes the ratio of upland areas to river wash areas. The area where surface mining occurs can change after a substantial flood event and change in river configuration. The area subject to this Reclamation Plan will be determined annually based on the review contained herein.

2. Acreage Disturbed

The construction storage area is 8.8 acres. Acreage disturbed in any year as a result of extraction activities will be dependent on the area permitted for gravel extraction. Based on current river conditions, approximately 20 acres are available. Extraction area has and will continue to vary each year.

3. Acreage Reclaimed

Acreage to be left in a reclaimed manner will be dependent on the amount of acreage disturbed as described above. Reclamation is limited to disturbed areas as described in the Reclamation Plan (Chapter III). All extraction areas are annually mined in

TABLE DESCRIPTION OF APPROXIMATE PROJECT AREA (ACRES), 2003

	Total Acreage (approx.)
Parcel Size	73
Extraction Area	1.8
River Bar	20.8
Construction Storage Area	8.8

4. Site History

The site as it exists today was developed in 1992 by The McKnight Family. to supplement the growing need for aggregate materials to supply ongoing highway projects on Highways 299 and 96. Operators have also used aggregate materials from this site for several other contracted projects within local markets from 1992 to the present. Since that time, up to 10,000 cubic yards (Approximately 15,000 tons) have been extracted annually. Extraction at this site is expected to continue indefinitely.

5. Area Importance

The McKnight site has provided aggregate materials that have been continually used by private contractors and public agencies since 1992 Cal Trans utilizes aggregate materials from this site for construction and maintenance along Highways 299 and 96. In addition materials from this site help supply local public and private projects.

The market area for the McKnight site is generally defined as the area west to the City of Blue Lake, east to Weaverville (Trinity County), north from Willow Creek to past Weitchpec and Orleans. The next closest asphalt plants occur approximately 10 miles away adjacent to the City of Willow Creek. It is anticipated that as additional funding becomes available for road maintenance, an increased need for aggregate materials will occur. Since aggregate materials from this site are stored and processed a short distance away at the Willow Creek extraction and processing site, these materials are of paramount importance for local construction and improvement projects. The Humboldt County General Plan Frame Work Plan recognizes the importance of existing gravel extraction sites as follows:

"Sand, grave/ and rock, being necessary to construction and development, are an essential component for the continued well-being of the county. They are the basis for much of the construction materials for roads, concrete, streambank protection, erosion control, septic systems and passive solar projects. Importation of these materials would raise costs and negatively impact the development and maintenance within the County. It is important to protect specific sites and haul routes against land use incompatibilities to assure the continued utilization of this resource."

B. MINING PLAN/ PLAN OF OPERATIONS

Section 1. Maps of Operations – See Figures 3 and 4 for Project Details.

Section 2. Process Facilities/ Plan of Operation

a. Plan of Operations -Operations at this site will be limited to extraction activities, excavated materials will be trucked to processing sites located outside of project area. Highways 299 & 96 provide access between the extraction and processing sites. These roads are well capable of handling the small amount of truck traffic this project proposes, and in a larger context will reduce the amount of truck traffic county wide as raw materials will not have been trucked into and through Humboldt County. Site access is provided by a privately maintained road from Highway 299 down to the river bar. This roadway has been part of the permitted extraction operations for the last twenty-five plus years. The number of employees on site will range between (2) and (10) depending on the number of trucks being to transfer raw materials. Normal hours of operation are between 7:30 am and 5 pm Monday through Friday. This schedule may change due to an emergency event requiring a greater need of raw materials; however, this would only occur after notification of adjacent neighbors on a concerned neighbors list and submittal of request to the County Planning Director,

b. Production Schedule -The applicant proposes to remove 10,000 cubic yards of aggregate on an annual basis. The applicant will be the only operator/hauler for the extent of operations. Seasonal, intermittent peak activity is anticipated during construction season, but may occur during anytime of the extraction season. The duration and intensity of operation will be dependent on demand, but can be expected to be active on a seasonal basis for the next fifteen plus years.

c. Operations Plan Detail

Top Soil

There is no native topsoil located within the extraction area. Any existing vegetation on the gravel bar is a compilation of river bar and wasteland species which will be relatively unaffected by extraction operations. No topsoil will subsequently be required to be removed or stockpiled. Surrounding land is similarly situated with gravelly (river run) substrate, and when irrigated produces minimal cover with little or no topsoil horizon development.

Overburden

No overburden exists at the extraction areas.

Mine Waste

No waste is produced from this type of project. All materials will be trucked off-site. Due to the nature of the activity and the proposed methods of extraction, no waste will be either retained on-site or disposed of off-site. No discharge from industrial activities into state waters occurs.

Extraction Method

See Chapter II (B) (3) for details on Extraction activities

Water Requirements

No water use is required for extraction activities. Watering for dust control along the haul road may occur in conjunction with trucking of raw materials.

Water Impoundments and Diversions

No water impoundments or diversions are associated with this project

Wastewater Treatment

By the nature of the described extraction activities, no wastewater is produced by this operation. Portable chemical toilets are provided for employees and are maintained by a pumper licensed in Humboldt County.

Contaminants

No servicing of equipment (fueling or lubricating) occurs within the extraction area. In the event of an accidental fuel or lubricant leak (i.e. hydraulic lines, etc.), operators have been instructed to move equipment to safer high ground (roadway or upper bench). If gravel is contaminated with a spill, the material will be removed and properly disposed of.

Processing

No processing will occur within the project area

In-Stream Mining

No in-stream mining will occur within the scope of this project, unless approved by supervising agencies.

Section 3 Extraction Description

a. Production Schedule - This surface mining project entails the seasonal extraction of up to 10,000 cubic yards of aggregate on an annual basis, the instillation of seasonal crossings over low flow river channels to facilitate gravel transport, and reclamation of extraction areas. This is a continuation of a 40-year-old permitted operation. A minimum fifteen-year approval is proposed and is supported based on analysis of submitted monitoring information.

b. Extraction Location- Extraction has generally occurred within the private McKnight ownership located 1&1/2 miles southeast of the Town of Willow Creek. Extraction has and will continue to primarily occur alongside of the active channel. The morphology of this site consists of a stretch of the Trinity River with a bend at the upstream and downstream extents. Gravel deposits occur on the western portion of the project site. The upland areas consist of river valley deposits associated with the meandering river channel. The morphology at this site generally consists of a straight run between two bends in the river with bedrock control on both sides of the channel and in the channel (see Figure (3)). As a result: 1) bedrock constrictions cause velocity decreases at flood stages and bedload deposits greater in volume and size at this location than other less confined reaches; 2) channel configuration is controlled by existing site features to a greater extent than bar changes due to gravel extraction. Extraction is designed to complement these influencing features rather than working contrary to the natural forces that have formed the prevailing stream morphology.

A single area along the existing gravel bar is proposed for mining. The primary activity has and will continue to occur adjacent to the low flow river channel. This area is subject to frequent inundation resulting in annual replenishment. The area adjacent to the active channel will continue to be mined using skimming as the primary mode of extraction, and wet pit or trench mining will be used as a secondary method. Other alternatives may be an option but will be subject to annual conditions and specific management purposes.

Reclamation of the extraction area is completed on an annual basis through extraction design and is left in a reclaimed manner at the end of the extraction season. The extraction area will be recontoured as a function of natural flow events and annual high flow events. Mitigation imposed as part of the project and final extraction slopes allow natural processes to reclaim the site on an annual basis and not significantly impact natural geomorphic processes or channel configuration. Extraction has been designed to complement the natural processes resulting in no significant impacts.

Of the approximate 20.8 acres located below the Ordinary High Water (OHW) level of the river, approximately 1.8 acres will be available for gravel extraction. This area will be available for extraction activity depending on the location of the river and the condition of the gravel bar, The extraction site runs from the western bank of the Main stem of the Trinity River, south along the western side of the river bank. A single designated extraction site exists along the established gravel bar adjacent to the existing haul road.

Topography at the end of each extraction season is described in Section (4, D) of this Reclamation Plan and is further specified annually by approvals from local, state, and federal agencies such as the County annual extraction approval process, 1603 Agreements with the CA Department of Fish and Game (DFG), and letters of permission (LOP) or individual permits (Section 404) with the Army Corps of Engineers (ACOE). Annual monitoring and extraction information will be submitted to the appropriate agencies as part of the annual review

c. Extraction Depth - The specific mining proposals are as follows.

1. Extraction through various skimming techniques and designs is the primary mode of extraction. The morphology of this type of site generally consists of gravel bars on a straight or sometimes meandering portion of the river channel. The primary method of extraction will continue to be bar skimming. Skimming would generally be conducted with a loader or scraper starting generally at a minimum elevation of one foot above the low water channel and proceeding with a longitudinal slope equal to the river and/or a cross-bar slope of 0% to 2%. Reclamation for this option consists of ensuring the bar is left in a 'free-draining' configuration so as not to trap fish, and encourage future gravel recruitment.

2. Other extraction techniques have been utilized to respond to annual conditions of channel morphology. When specifically proposed as part of an annual extraction plan, such plans will be approved by the County (currently through the CHERT process), DFG as part of the 1603 agreement process, and/or the Army Corps of Engineers through their 404 or LOP process. For instance, resource agencies may desire wet pit options to improve fish holding and passage or other needs, as has historically occurred here and is done at other locations on the Trinity River. Wet pit mining and/or trenching also occurs typically adjacent to, but outside of the river channel and may at times be utilized to increase channel capacity and/or maintain the adjacent bar morphology to encourage subsequent gravel recruitment. This method is also utilized to reduce bank erosion, create deep water habitat, and to reduce the aerial extent of excavation. Some grading may also occur along off-channel areas, consisting of removing high areas or terrace deposits. This may be proposed to increase overflow channel capacity, riparian vegetation, and habitat values. Such grading will occur in a manner that does not lower the flow regime of the channel, and would not remove established riparian vegetation or cause depressions that would increase the danger of trapping salmonids at high flows. Any such proposal would require County, Department of Fish and Game (DFG), and Army Corps of Engineers (ACOE) approval.

d. Extraction Standards- Since 1992 regulatory extraction standards have been modified on an almost annual basis, as techniques of monitoring and review are field-tested and refined to suit site specific conditions on local rivers. The extraction standards described below may therefore be modified during the annual review process, if the operator, County, Department of Fish and Game, and Army Corps of Engineers agree alternate standards will adequately protect river resource values.

The following standards have been incorporated into this Project's Proposed Mitigation Measures.

1. At the time of extraction, a vertical buffer (freeboard) of at least 1 foot will be maintained between the stream water surface and the extraction area.
2. The residual bar slope will generally follow the slope of the water level in an upstream and downstream direction and maintain a vertical buffer of at least one foot; or b Generally follow the annual pre-extraction downriver bar slope; or c. Slope towards the water with a grade of at least 0.5 percent.

3. Subsurface extraction slope in an up-stream to down stream direction.
4. Changes to the above may occur only after regulatory agency approval pursuant to County and Army Corps annual approval process, and the Dept. of Fish and Game Stream Alteration Agreement process.

e. Seasonal Stream Crossing- Much of the extraction area is currently on the western side of the low flow channel of the Trinity River, however a small inlet often separates the bar itself from the haul road. To allow access for extraction and hauling equipment, the applicant proposes to install a single seasonal crossing. This crossing would consist of two railroad flatcars placed on gravel abutments with a minimum clearance above the water surface. Approximately 200 cubic yards of gravel would be scraped from adjoining areas to form each of the abutments for the crossing. The crossing will be removed at the end of each extraction season and the abutment material will be regarded to blend in with surrounding topography.

f. Annual Extraction Plan Review - This adaptive management program, with its annual review will regulate and monitor gravel extraction, gravel replenishment, and bed morphology to assure that a degree of dynamic equilibrium is maintained.

Extraction as described herein and proposed in annual submittals has been designed based on 1992 — 2008 conditions and monitoring information. Annual high flow events (particularly such as occurred in January and March of 1995, December of 1996 and January of 1997) may alter specifics for extraction standards on an annual basis. Mining will follow the adaptive management strategies outlined below.

Extraction for a given season will occur after preparation of a specific operating plan for mining and reclamation developed on the basis of annual assessments and monitoring of the proposed project site. Annual assessments and site evaluation will be used to determine when, where and how aggregate can be extracted in a manner providing for reclamation while reducing or preventing potential impacts. The County, Department of Fish and Game, and Army Corps of Engineers have developed a monitoring and adaptive management program that includes annual scientific reviews and recommendations by other agencies, this program which has been subject to annual revision will continue to be followed.

The annual extraction of 10,000 cubic yards of gravel from this private land ownership in Humboldt County, CA is an upper limit. Monitoring and adaptive management strategies will determine the appropriate locations

and volumes to be extracted based on current bar configuration. Extraction plans will identify appropriate areas of mining as well as appropriate volumes.

The applicant will continue to develop cross-sectional data and/or other monitoring information based on field surveys in accordance with accepted monitoring standards, such as those presently conducted by the operator in cooperation with regions 1 and 3 of the Department of Fish and Game, the Army Corps of Engineers} and NOAA Fisheries. As information is analyzed these monitoring standards are subject to revision by resource agencies.

g. Annual Bar Morphology Analysis- in 1992 monitoring cross sections were established. These cross-sections would show any sequential changes in bar and river configuration, if that was occurring. When extraction is proposed to occur during the season the appropriate cross^w sections will be re-measured and supplemented as necessary with additional cross sections. After the extraction season, cross-sections will be used to monitor conformance to extraction prescriptions, volume extracted, and post-extraction bar configuration.

Data from monitoring cross-sections were collected from (1992) to (2010). These cross-sections have been and will continue to be analyzed and utilized in developing annual extraction plans.

h. Management Principles and Practices - Dates of operation, elevation and slope limitations may change annually as approved by the County, Department of Fish and Game, and Army Corps of Engineers through extensions or modifications of operating conditions.

1. Extraction will occur adjacent to but outside of the live stream, or in existing or overflow channels for an alternative source of material, maintaining slopes towards the downriver portions of the bar.
2. Subsurface extraction adjacent to but outside of the live stream will continue as a method to enhance fishery values by creating a deeper and colder environment for holding (thermal refuge) and passage for smolts and adult salmonids. (This will only be proposed if recommended by a qualified fisheries biologist).
3. Extraction of gravel will occur in a manner that represents a final reclamation configuration for the gravel bar for the year.

4. Post-mining topography of gravel bars will be consistent and homogenous with the upstream and downstream topography.

5. Potential Tools and Methodologies that will be periodically utilized to assist in Managing Aggregate Resources.

- Annual reports of extraction/replenishment submitted to government agencies by operators and their consultants;
- Annual record keeping and reporting of extraction volumes, finished site elevations and project area characteristics;
- Periodic field inspections to identify fish and wildlife species presence/use at the sites;
- Studies of fisheries resources and salmonid use of area;
- Aerial photography, on-site photography and videotaping of site conditions;
- Standardization of cross-section locations and methodologies;
- Continuing compilation and analysis of historical and current data, particularly as a result of monitoring at the project site and in conjunction with information developed by others, including resource agencies;
- Enhancement programs for the development of fishery and wildlife habitat, etc., to be implemented by the operator working in concert with agency personnel, river consultants and other professionals.

6. Standards and/or protocols for some of the physical and biological information listed above has been formalized and accepted by both Federal and State agencies. These will further define the monitoring/management that will occur at this site. Such standards, since they are subject to annual change, will become part of the project as required by the Army Corps 404 individual Permit or "Letter of Permission" permit process (for example) rather than incorporating them into the Project

7. The exact method of extraction will be determined based on annual river conditions. The County, Army Corps of Engineers and the California Department of Fish & Game will continue to receive specific annual extraction plans for their review and comment.

CHAPTER III RECLAMATION PLAN ACTIVITIES

This Chapter contains a description of reclamation activity. Specific performance standards have been included in Chapter IV RECLAMATION STANDARDS

A. PROPOSED USE OF SITE AFTERWARDS

This site has been operated as an extraction facility for aggregate materials since 1992, over fifteen years ago. As can be supported by the numerous agency comments during the permitting cycle in 1992, the McKnight site is strategically located in a market area that is important to federal, state, County, and local construction projects in Humboldt County. It is for both local and regional importance that this extraction site continues to operate, since it helps ensure a nearby source of aggregate is available to the community.

The extraction area consists of a portion of the current Trinity River stream course (approximately river mile 29), sparsely vegetated gravel bar and stream banks with associated riparian vegetation. Approximately 1.8 acres of the site is presently riverside gravel bar, which is seasonally inundated and replenished by average annual winter flows of the Trinity River. The extraction areas delineated on the attached map (Figure 4) are generally below where permanently established riparian vegetation occurs. The designated extraction area includes the active gravel bar and overflow channels. With the current river condition, approximately 1.8 acres of gravel bar on the western side of the river channel would be utilized for either gravel bar skimming (graded towards the river) or other approved extraction alternatives (i.e. trenching) based on annual river conditions. The physical condition of the project site is currently the gravel bar on the western side of the low flow channel, and a haul road used to access the site from Highway 299; the ultimate conditions of the project site would be similar. No change in use is proposed for the site. It is anticipated that the extraction area would be utilized for floodway management, wildlife habitat, and recreation if extraction activities cease,

The extraction area is left in a reclaimed condition annually and needs no further reclamation. The existing access road has remained in the same condition and is necessary for property management purposes

The McKnight ownership is zoned Agricultural (AG); surrounding lands are zoned Residential

Suburban Transitional (RST), Community Commercial (C-2), Agriculture Exclusive (AE), and Agricultural General (AG). Much of the immediate area is used for rural residential with pasture for livestock, tree crops, and gardens. A

small commercial lot is located directly across the highway from the entrance to the haul road. The parcel slopes sharply into the river basin, and has been historically used as a site for dredge mining. As a result, the site quality in relation to timber production is very poor.

B. RECLAMATION ACTIVITY

Reestablishment of berms across access roads during winter months and any necessary grading activities for drainage and/or erosion control purposes will continue to occur as annual management activity occurring at the extraction site. Revegetation of the project area is not appropriate. Grass seed will be planted in select places as needed for drainage and/or erosion control. Naturally occurring species have colonized the gravelly areas in less active portions of the extraction site, and will be left until the area is needed. At present it is not anticipated that any erosion control will be necessary for areas exceeding 1 ,000 square feet.

The extraction area in the active channel will be left in a reclaimed condition at the end of extraction each year, and will be consistent and homogenous with the upstream and downstream topography. Prior to October 15th grading will be completed on the gravel bar, and on November 1st extraction ceases unless extended by the appropriate agencies through their permitting process. In conjunction with the end of the extraction season, the Operator is responsible for removing any and all machinery equipment, waste or other evidence of the operation from the river channel and gravel bar. Subsequent annual high flows recontour the extraction area.

The Applicant/Owner will be responsible for smoothing out the river bar so that no topographic features remain that degrade the environment (such as ponding, erosion, sedimentation or stream channel alteration). Site specific requirements are also required seasonally by annual County approval, CA Department of Fish and Game (DFC) for seasonal completion through the Stream Alteration Agreement (1603), and by the Army Corps of Engineers (ACOE) as part of the LOP process or Individual Permits (Section 404).

If surface mining activity were to cease, no further reclamation of extraction areas would be necessary, other than that preformed on an annual basis. Access roads to the river would remain for property access and management activities, but these would have a berm installed annually prior to the onset of winter. The river would be utilized for open space/recreational purposes, and private property access

See overall Performance Standards section (IV) Reclamation Standards

C. TIME SCHEDULE OF RECLAMATION ACTIVITIES

The Gravel bar will be left in a reclaimed condition at the end of each extraction season, as specified during annual review and verified by annual agency site inspections, including the County, the Department of Fish and Game and the Army Corps of Engineers. Berms across the access road are required prior to each winter as part of meeting Regional Water Quality Control Board specifications, these activities will continue to occur each year, meeting reclamation specifications and can be confirmed as part of the County's annual SMARA inspections.

D. POST-MINING TOPOGRAPHY

Extraction Areas

The post mining topography of the extraction area will be left in a manner representing reclamation as described in more detail earlier in this document. Natural bedload transport processes will also continue to annually be a factor at site with the advent of annual high water flowing over the bar, depositing gravel and reshaping the bar. Cross-sections have been completed since 1992 to establish the baseline condition for extraction proposals and annual

Review criteria by resource agencies, Cross-sections will continue to be performed by experienced professionals in a manner that allows cross-sections to be reestablished should flooding substantially change the site. A permanent benchmark has been established on site and tied to both NGVD & NAVD elevations. Pre- and post-mining cross-section information will be submitted to Humboldt County, CA Department of Fish and Game (DFG); and the Army Corps of Engineers (ACOE), on an annual basis as long as information is required by those agencies.

The riverbanks adjacent to the extraction site consist of bedrock, riprapped banks, and or aggregate deposits. Extraction does not occur adjacent to erosional riverbanks; slopes will not be destabilized. Site observations and analysis of aerial photographs and cross-sections have determined the acceptability of currently proposed extraction methods and locations. The river bank on the western side of the river where extraction and hauling will occur is currently heavily vegetated} and will not be degraded by extraction activities. Therefore, no planting is currently proposed,

Slope Design Calculations - N/A.

E. EFFECT OF RECLAMATION ON FUTURE MINING

Annual extraction at the McKnight ownership will not affect the opportunity to continue to mine at this location or adjacent lands.

F. PUBLIC HEALTH AND SAFETY

Public health and safety concerns include both on-site and off-site impacts. The project will not have a significant increase of risk to people on-site due to the following: it is an isolated location; access is controlled by a locked gate; material to be extracted is structurally stable and; no attractive nuisance to encourage trespass exists.

Equipment requiring fuel will be filled off-site; subsequently no fuel storage will occur on site. No 'abandoned' equipment, structures, refuse, etc. associated with extraction activity will remain within extraction areas after extraction has been discontinued.

G. CONTROL OF CONTAMINANTS

The potential for contaminants is limited to operation-related activities such as equipment leaks or spills. Such contaminants from equipment shall continue to be controlled through proper equipment maintenance and operation; major equipment maintenance work will be conducted off of extraction areas. Any materials contaminated from equipment leaks will be properly disposed, as required by state and federal laws.

Run-off from the processing facility will continue to be directed away from the river and to the settling basin. As a secondary precaution measure, run-off will be contained by existing berms and stockpiles surrounding the site, retaining surface runoff until it percolates into the gravel underlying the process facility.

H. REVEGETATION

The extraction area is located outside of established riparian areas. The flood washed portion of the gravel bar contains primarily annual vegetation. Natural processes of removal by flood and replacement by deposition annually renews vegetation to these areas. Site reviews and annual aerial photographs show that existing riparian vegetation is not affected by extraction activities, The gravel bar on the McKnight ownership is similarly vegetated as adjacent un-mined gravel bars.

No established vegetation is proposed to be removed from the stream channel and as a result, other than natural reoccurrence no revegetation is proposed. Riparian vegetation that begins to become established in the floodway may be moved to a suitable location or mitigated. These management decisions will be based on a specific year's extraction proposal and management considerations and reviewed by agencies as part of the annual review process. However, these actions have not been necessary nor have occurred in the recent past.

CHAPTER IV RECLAMATION PLAN STANDARDS

The following defines performance standards for this project described in Article 9. Reclamation Standards of the State Mining & Reclamation Act. Section numbers noted references Article 9.

3700. Applicability

Reclamation of mined lands shall be implemented in conformance with the standards in this Attachment.

(a) The standards shall apply to this surface mining operation to the extent that:

They are consistent with required mitigation identified in conformance with the California Environmental Quality Act, provided that such mitigation is at least as stringent as the standards; and

They are consistent with the planned or actual subsequent use or uses of the mining site. (b) Where an applicant demonstrates to the satisfaction of the lead agency that an exception to the standards specified in this article is necessary based upon the approved end use, the lead agency may approve a different standard for inclusion in the approved reclamation plan.

Approval of substantial amendments proposed to this reclamation plan requires that the standards set forth in this Attachment be applied by the lead agency in approving amended reclamation plans.

The standards in this Attachment shall not apply to the existing access roads where consistent with the proposed end use and as described in the approved Reclamation Plan.

3701. Definitions - Incorporated by Reference

3702. Financial Assurances

Lead agencies shall require financial assurances for reclamation in accordance with Public Resources Code section 2773.1 to ensure that reclamation is performed in accordance with the approved reclamation plan and with this Attachment. See CHAPTER VI to be used in annual assessment.

3703. Wildlife Protection

Objective: Adjacent wildlife habitat outside of the extraction area will be protected from adverse activities in accordance with CCR Section 3703 as described below. Reclamation activities in the extraction area will provide an end use that provides a compatible habitat for wildlife as surrounding lands.

Wildlife and wildlife habitat shall be protected in accordance with the following standards:

(a) Rare, threatened or endangered species as listed by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service, or species of special concern as listed by the California Department of Fish and Wildlife in the Special Animals List, Natural Diversity Data Base and their respective habitat shall be conserved as prescribed by the Federal Endangered Species Act of 1973 and the California Endangered Species Act as updated. If avoidance cannot be achieved through the available alternatives, mitigation shall be proposed in accordance with the provisions of the California Endangered Species Act and the Federal Endangered Species Act of 1973.

(b) At the conclusion of surface mining activities, wildlife habitat shall be allowed to reestablish on gravel extraction areas in a condition at least as good as that which existed prior to extraction activities. The proposed end use of the process facility and access road limits its use as wildlife habitat as described in the reclamation plan.

(c) Wetland habitat shall be avoided. Any wetland habitat impacted as a consequence of surface mining operations shall be mitigated at a minimum of one-to-one ratio for wetland habitat acreage and wetland habitat value. Except where specific vegetation differentiates from normally expected bar vegetation, exposed gravel bars within the bank full discharge area should not be considered wetlands.

3704. Backfilling, Regrading, Slope Stability and Recontouring

Objective: Standards necessary for the future resource conservation use proposed per CCR Section 3704 will be accomplished as follows.

Backfilling, regrading, slope stabilization and recontouring shall conform with the following standards:

- a. Backfilling for urban uses N/A.
- b. Where backfilling is required for resource conservation purposes (e.g., agriculture, fish and wildlife habitat and wildlife conservation), fill material shall

be backfilled to the standards required for the resource conservation use involved and as specified in the Reclamation Plan.

c. Mining waste - N/A.

d. Final reclaimed fill slopes - N/A.

e. Fill slopes - N/A.

f. Cut slopes, left as part of annual surface mining operations, shall have a minimum slope stability factor of safety that is suitable for the proposed end use and conform with the surrounding topography and/or approved end use. (g)

Mining waste - N/A.

3705. Revegetation:

Objective: Revegetation to occur to the extent that it is consistent with the proposed end use in accordance with CCR Section 3705 as described below.

The process area contains surface materials that are too shallow or rocky and in conjunction with the proposed end use, makes revegetation infeasible. Such areas will be left to naturally occurring native species (blackberry, coyote brush). This is proposed with the continual use of "Industrial" in mind.

Any required revegetation, such as for erosion control purposes, shall include seeding with an erosion control plant seed mixture. An acceptable mixture would be "State Mix" grass seed (barley, annual rye; zorro fescue) at 20 lbs. per acre and straw mulch for the lower perimeter of the disturbed area of the project site, road fit slopes and other substantial excavations requiring erosion control treatment.

The mixture/application rate may be revised at time that the professional landscaper or forester is requested by the applicant to review actual site conditions (during the project operation).

(a) A vegetative cover suitable for the proposed end use and capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer will be allowed to become established on disturbed land where Industrial activity is not occurring. Vegetative cover or density and species-richness will be, where appropriate, sufficient to stabilize the surface against effects of, long-term erosion and shall be compatible to naturally occurring habitats in the surrounding area.

1. The surrounding land is managed for residential and timber harvesting activities. The vegetative density, cover and species richness of residential landscaping or timber production is not applicable to this site.

2. Test plots are not proposed to be conducted simultaneously with extraction due to (1) the limited requirement and extent of proposed reclamation measures; (2) the time-tested success of adjacent residential/agricultural efforts in surrounding areas and similar circumstances; (3) recommendation of reseeded was obtained by a professional familiar with the area and requirements of the project and; 4) it is anticipated that mining and processing will continue indefinitely at this location. For these reasons, it is requested that-the County (lead agency) waive the requirement to conduct test plots.

3. The proposed erosion control mixture was selected because it is utilized locally in surrounding lands and is out-competed in a short time by native vegetation,

4. Planting shall be conducted during the most favorable period of the year for plant establishment (Nov. - May.).

5. Soil stabilization practices shall be used when necessary to control erosion and for successful plant establishment.

a. Where surface mining activities have resulted in compaction of the soil, ripping, disking or other means shall be used in areas to be revegetated when necessary to eliminate compaction and to establish a suitable root zone in preparation for planting. Such areas will be limited to those areas necessary for erosion control.

b. Revegetation, as described herein, will not require protection measures } such as fencing of revegetated areas and/or placement of cages over individual plants. These are not necessary at this location.

c. Success of revegetation shall be judged based upon its ability for providing stable areas and for controlling erosion from site runoff.

3706, 3710. Drainage, Stream Protection (including Surface and Groundwater) and Erosion Control

Objective: Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses of water, and be protected from siltation and pollutants in accordance with the Porter-Cologne Water Quality Control Act, Water Code section 1 3000, et seq., and the Federal Clean Water Act 301 et seq (33 US.C. section 1251, 131 1, 1344 et seq.) the Regional Water Quality Control

Board or the State Water Resources Control Board and will be accomplished per CCR Section 3706 and 3710 as described below.

- a. Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses of water in accordance with the Porter-Cologne Water Quality Control Act and the Federal Clean Water Act.
- b. Groundwater aquifers N/A.
- c. Erosion and sedimentation shall be controlled during all phases of construction, operation, reclamation and closure of a surface mining operation to minimize siltation of water courses, as required by the Regional Water Quality Control Board or the State Water Resources Control Board.
- d. Surface runoff and drainage from surface mining activities shall be controlled by site grading, berms, silt fences, sediment basins, revegetation, hay bales and/or other erosion control measures, to ensure that surrounding land and water resources are protected from erosion, gulying, sedimentation and contamination. Erosion control methods shall be designed to handle runoff from not less than the 20 year/1 hour intensity storm event.
- e. Where natural drainages are covered, restricted, rerouted or otherwise impacted by surface mining activities, mitigating alternatives shall be proposed and specifically approved in the reclamation plan or as part of annual review to assure that runoff shall not cause increased erosion or sedimentation.
- f. When stream diversions are required, they shall be constructed in accordance with: the stream and lake alteration agreement between the operator and the Department of Fish and Game; and the requirements of the Federal Clean Water Act, Sections 301 and Section 404 and/or Section 10 of the Rivers and Harbors Act of 1899.
- g. When no longer needed to achieve the purpose for which they were authorized, all temporary stream channel diversions shall be removed and the affected land reclaimed.

3707, 3708. Agriculture Resource

The site is not zoned nor utilized as Agriculture Exclusive. Any nearby agricultural uses will not be affected.

3709. Building, Structure and Equipment Removal

Objective: Buildings, structures and equipment shall be dismantled and removed prior to final mine closure in accordance with CCR Section 3709 and when consistent with the proposed or subsequent end use. Storage of all related equipment shall be in the defined machinery storage area, as indicated on Figure 7 — Reclamation Plan. This will most likely consist of an excavator, scrapers, front-end loader, and trucks for hauling materials off-site. All is generally portable. Any wastes on-site shall be properly disposed of in accordance with state and local health and safety ordinances.

a. Dismantling and removal of buildings, structures, and equipment used for extraction but not required for ongoing processing or future uses will occur prior to final mine closure. 3711. Topsoil Salvage, Maintenance and Distribution Not Applicable

3711. Tailing and Mine Waste Management Not Applicable

3712. Closure of Surface Opening Not Applicable

CHAPTER V MONITORING

Pursuant to CCR Section 2773 (a), the success of reclamation will be monitored for three years, or until performance standards are met, provided that, during the last two years, there has been no necessary human intervention, including irrigation, fertilization, or weeding. Remedial measures will be implemented as necessary to achieve the performance standards. The report will include the following items:

1. The name, addresses, and telephone number of the person, company, or other owner of the mining operation.
2. The name, address, and telephone number of a designated agent who resides in this state, and who will receive and accept service of all orders, notices, and processes of the lead agency, board, director, or court.
3. The location of the mining operation, its name, its mine number as issued by the Bureau of Mines or the director, its section, township, range, latitude, longitude, and approximate boundaries of the mining operation marked on a United States Geographical Survey 7 1/2- minute or 15minute quadrangle map.
4. The lead agency
5. The approved date of the mining operation's reclamation plan.
6. The mining operation's status as active, idle, reclaimed, or in the process of being reclaimed.
7. The commodities produced by the mine and the type of mining operation.
8. Proof of annual inspection by the lead agency.
9. Proof of financial assurances.
10. Ownership of the property, including government agencies, if applicable, by the assessor's parcel number, and total assessed value of the mining operation
11. The approximate permitted size of the mining operation subject to Chapter 9 (commencing with Section 2710), in acres.
12. The approximate total acreage of land newly disturbed by the mining operation during the previous calendar year.

13. The approximate total of disturbed acreage reclaimed during the previous calendar year.

14. The total un-reclaimed disturbed acreage remaining as of the end of the calendar year.

15. The total production for each mineral commodity produced during the previous year.

16. A copy of any approved reclamation plan and any amendments or conditions of approval to any existing reclamation plan approved by the lead agency.

In compliance with Section 2207(c), subsequent reports shall include only changes in the information submitted for the 14 items listed above. The annual reports shall include any reclamation plan amendments approved during the previous year. The reports shall state whether review of a reclamation plan, financial assurances, or an interim management plan is pending under subdivision (b), (c), (d), or (h) of Section 2770

Chapter VI Financial Assurances (see Annual Reports)

APPLICANT'S STATEMENT:

I, _____ hereby agree to accept full responsibility for reclaiming the mined lands as described and submitted herein in accordance with this Reclamation Plan and with any modifications required by Humboldt County as conditions of approval. Furthermore, activities will be in compliance with applicable requirements of articles 1 and 9 (commencing with Sections 3500 et Seq., respectively) of Chapter 8 of Division 2 of Title 14 of the Code of Regulations, and with the requirements of the Surface Mining and Reclamation Act, Section 2710 et seq (to be signed once final reclamation plan is approved)

Signature _____ Date _____