January 3, 2022

Rob Zuber
Colorado Division of Reclamation, Mining, and Safety
1313 Sherman St, Rm 215
Denver, CO 80203
(303) 866-3567

Delivered Via Email
RE: Bennett Pit, Permit No. M-1979-166
Technical Revision 01 Adequacy Response

Mr. Zuber

In response to your adequacy letter dated December 20, 2021, Lewicki & Associates is providing this letter on behalf of the permittee (Elam Construction). A technical revision is appropriate for the proposed changes to the mining and reclamation plans at the Bennett Pit. The currently approved permit does not explicitly exclude any areas from mining. The proposed mining and reclamation plans do not change the affected area or the approved post mine land use. The landowner has approved of the proposed mining and reclamation plans. A technical revision is appropriate for the proposed mining and reclamation plan revisions at the Bennett Pit.

The Bennett Pit is currently approved to operate within a 32.6 acre permit and affected area. This is shown on the approved Exhibit C pre-mine and mining maps. The first sheet, noting the “Pasture No Disturbance” area to the northeast shows the condition of the site at the time of the conversion; **it is not the mining plan**. The second sheet, which shows the mining plan, does not specify any area as being excluded from mining.

Nowhere in the narrative in Exhibit D of the approved conversion (CN-01) are any areas explicitly excluded from disturbance. Within that Exhibit D, the total extraction area is limited at 9.5 acres so that groundwater exposure stays within the approved gravel well permit. Exhibit E similarly notes the final groundwater lake size of 9.5 acres, again in line with the gravel well permit.

The technical revision provided by Elam Construction (permittee) outlines an updated mining plan. This updated plan covers two phases shows the maximum disturbance anticipated for each phase. Again, these extents are shown to assist in bond calculations. In fact, Exhibit L specifically ties each Phases bond amount to one of the two mining plan maps shown in Exhibit C. Changes in mining disturbance extents often require bond recalculations and refreshed maps facilitate this.

CDRMS Construction Materials Rule 1.1(6) defines an amendment as:

> *"Amendment" means a change in the permit or an application which increases the acreage of the affected land, or which has a significant effect upon the approved or proposed Mining Plan or Reclamation Plan.”*

It has been Lewicki & Associates experience across numerous CDRMS permits that this definition is applied via two practical standards: expansion in the affected area and/or change to the post-mine land use. If neither of this area being proposed by a permit revision, it has typically been processed by CDRMS as a technical revision. The proposed changes to the Bennett Pit mining plan do not change the affected area or propose a different post-mine land use.

Mr. John Elam, representing the landowner, was provided a copy of the proposed technical revision prior to submittal and approved of the proposed changes. Mr. Elam expressed no issue with the extents of proposed mining and no indication that any portion of the site was specifically excluded from mining.

No portion of the affected was explicitly excluded from mining in the original permit or the conversion to a 112c permit. The technical revision proposed by Elam Construction does not change the affected area or the post mine land use, which have been the typical standards for when an amendment is required. The landowner concurs with the proposed mine plan and proposed reclamation plan. The proposed technical revision should be reviewed by CDRMS as such; no amendment is proposed, and none is required.

Please contact my office with any questions.

Regards,

Ben Langenfeld, P.E.
Lewicki & Associates, PLLC
benl@lewicki.biz
(720) 842-531, ex. 1

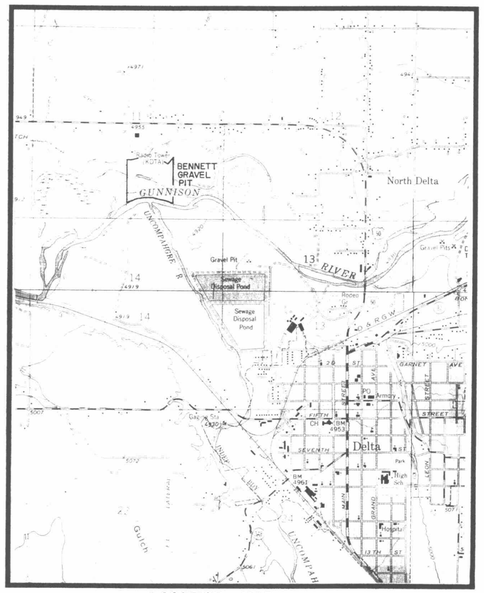
Attachments

Approved Exhibit C maps

- Sheet 1
- Sheet 2

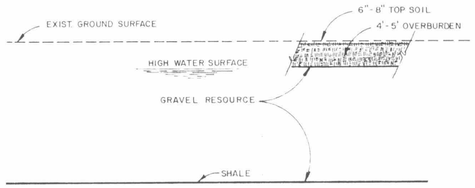
Approved Exhibit F map

Approved Exhibits D & E

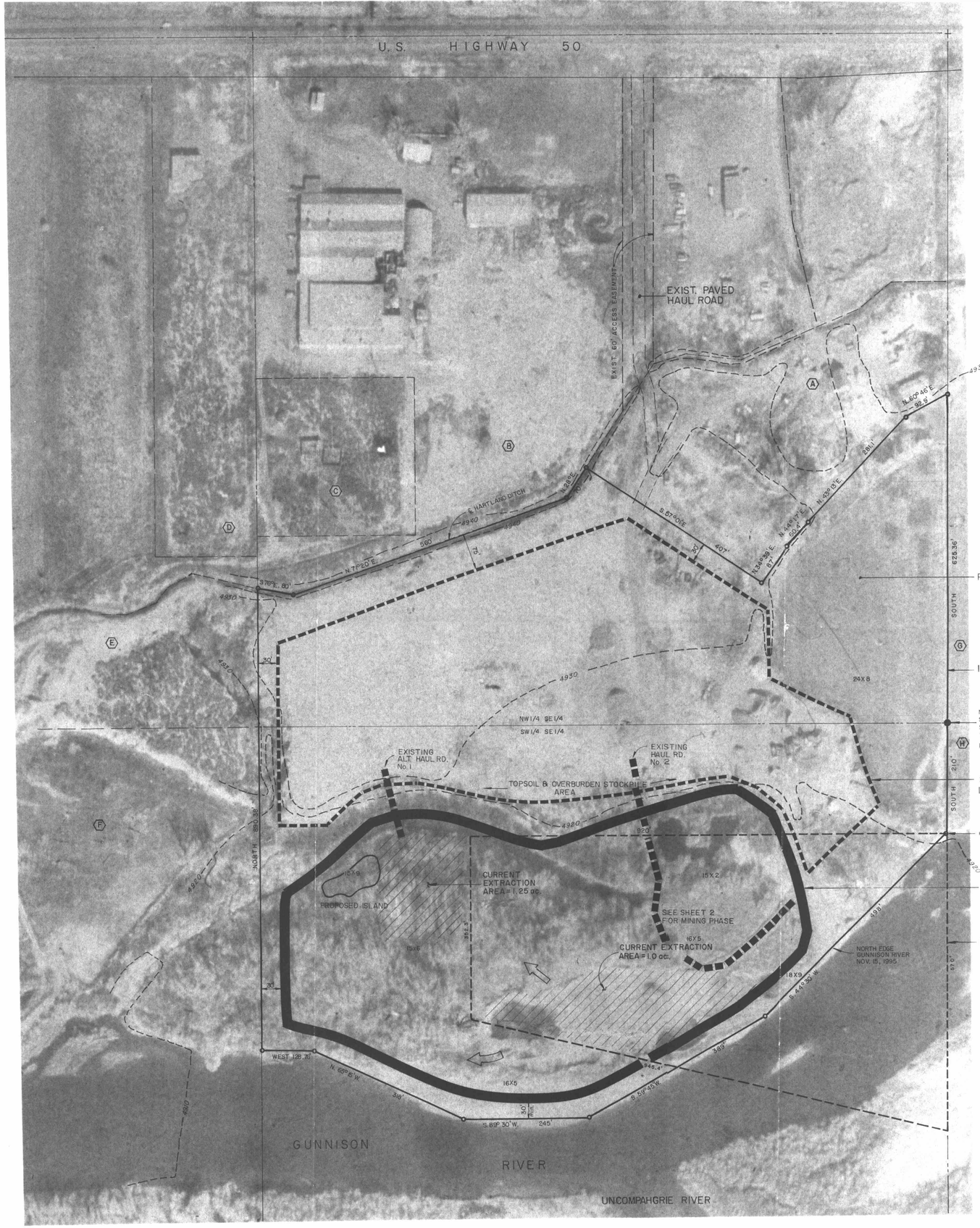


LOCATION MAP

LAND USE SUMMARY		
I.D.	USE	OWNER
A	Single Family, Shop, Storage	Earl & Becky Bennett
B	Industrial	Inza Mowbray
C	Radio Tower	KDTA Radio
D	Shop, Agricultural Cultivation	William Chick
E	Fallow, Vacant	Earl & Becky Bennett
F	Fallow, Vacant	City of Delta
G	Agricultural Cultivation	Gerald & Donna Kaiser
H	Agricultural Cultivation	Raymond Toole



TYP. MINING SECTION



Scale: 1" = 100'

LEGEND	
~ ~ ~ ~ ~	EXISTING 10 FOOT CONTOUR
15X6	EXISTING SPOT ELEVATION
⇦	DIRECTION OF MINING
(A)	LAND USE ID

PASTURE - NO DISTURBANCE

112 PERMIT BDY. - 32.6 ac.

NE CORNER SW1/4 SE1/4 SECTION 11 T. 15 S., R. 96 W., 6th. P.M. POB 112 BDY.

STOCK PILE, PROCESS & STAGING AREA 10.2 ac.

POB, 110 BDY.

LIMITS OF GRAVEL EXTRACTION - 9.5 ac.

110 PERMIT BDY. - 9.7 ac.

RECEIVED
DEC 23 1997
Division of Minerals & Geology

Permit# M-1979-166
Date: 12-16-97
Doc Name: Exhibit C See Map
Origin: Conversion

Received
DENVER OFFICE
DEC 16 1997
Durango Field Office
Division of Minerals & Geology

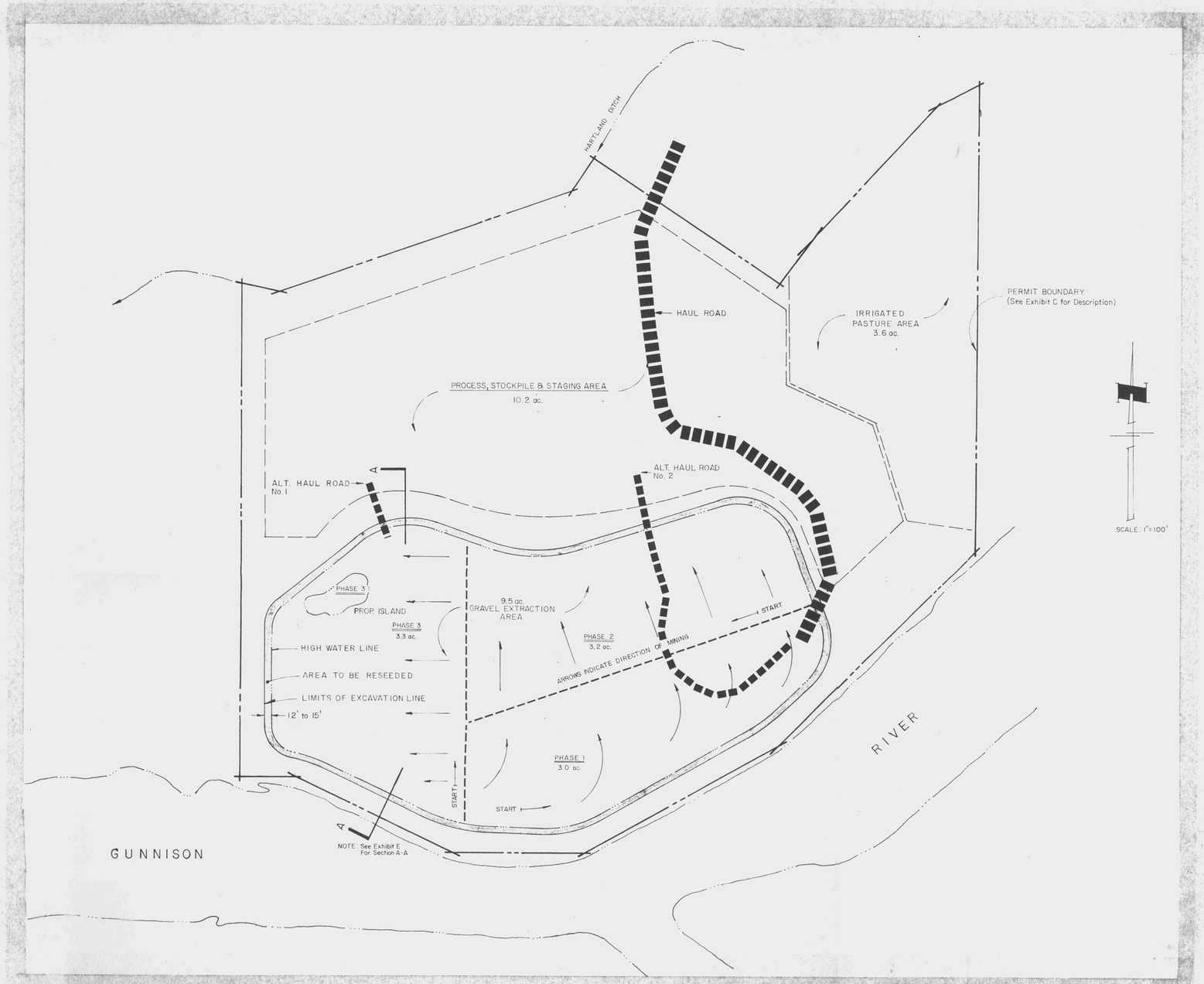
EXHIBIT C
PRE-MINING & MINING MAP
Sheet One of Two

CONVERSION APPLICATION
BENNETT GRAVEL PIT (M-79-166)
Delta County, Colorado
September, 1997
rev. November, 1997

Prepared By:
Thomas A. Logue, Govt. Affairs Mgr.
ELAM CONSTRUCTION, INC., Grand Junction, Colorado

00015356

Thomas A. Logue DEC 15 1997



REVISIONS	BY

112 CONVERSION APPLICATION
BENNETT GRAVEL PIT (M-79-166)
Delta County, Colorado

Permit# M1979166
Date: 12/4/97
Doc Name: EXHIBIT See Map
Origin: CONVERSION

EXHIBIT C
PRE-MINING AND MINING MAP

Prepared By:
Thomas A. Logue, Govt. Affairs Mgr.
ELAM CONSTRUCTION, INC.,
Grand Junction, Colorado

DRAWN	TAL
CHECKED	TAL
DATE	NOV., 1997
SCALE	1"= 100'
JOB NO.	
SHEET	TWO
OF	TWO SHEETS

Received
DEC 16 1997
Durango Field Office
Division of Minerals & Geology
DENVER OFFICE

00015355

DEC 15 1997

"M" TELEDYNE NATIONAL TRACING PAPER NO. 186 A-24X36

REVISIONS	BY
11-25-97 Comments	TAL

112 CONVERSION APPLICATION

BENNETT GRAVEL PIT (M-79-166)

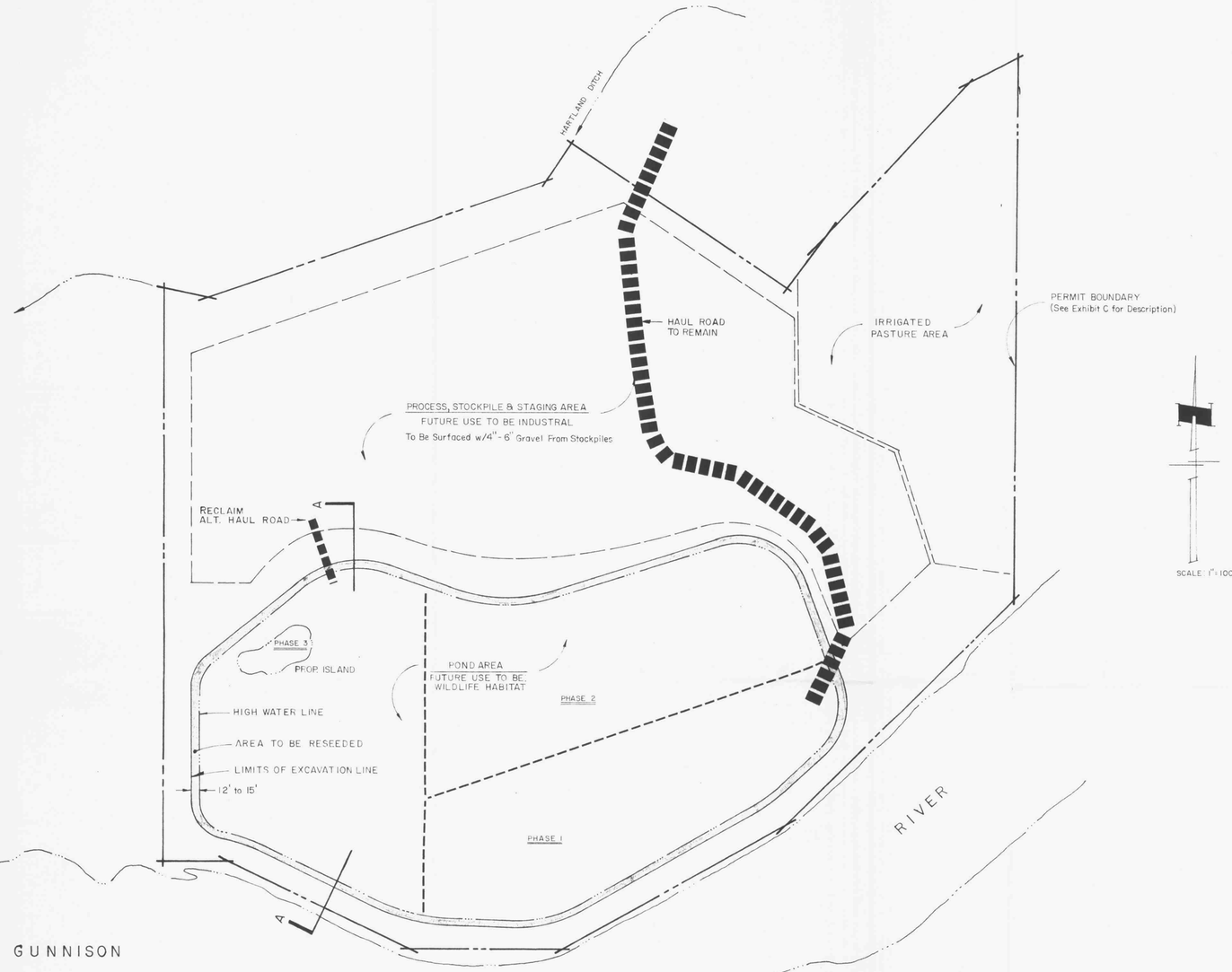
Delta County, Colorado

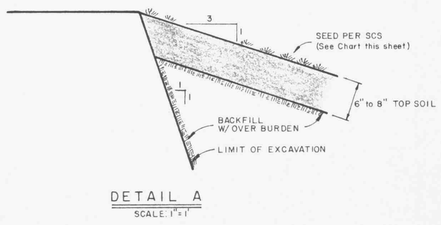
LAND USE AREA SUMMARY		
USE	AREA IN AC.	% OF TOTAL
Gravel Extraction Area	9.5	29.2
Stockpile, Process & Staging Area	10.2	31.3
No Disturbance - Pasture Area	3.6	11.0
No Disturbance - Other Area	9.3	28.5
TOTAL PERMIT AREA	32.6	100.0

GRADING & SEEDING SCHEDULE			
PHASE	GRADED AREA IN ACRES	GRADED AREA IN CY	SEEDED AREA IN ACRES
One	1.3	54,000	0.25
Two	1.1	48,000	0.20
Three	1.5	65,500	0.30
TOTAL	3.9	167,500	0.75

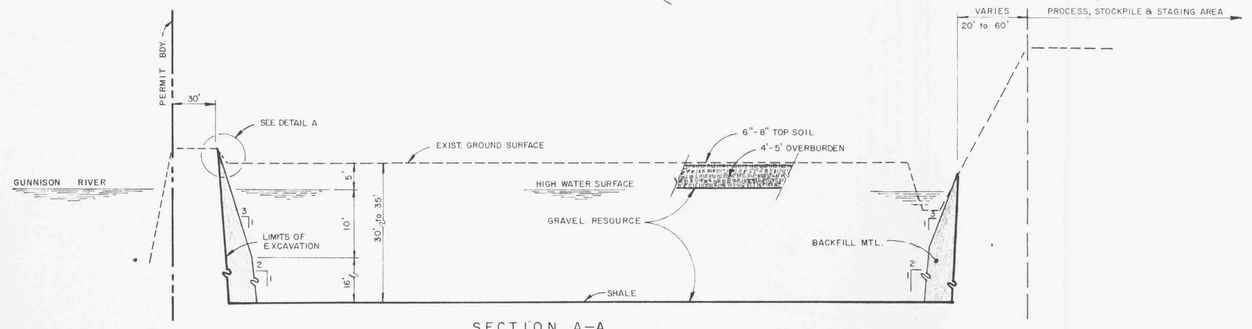
SEEDING - OUTSIDE TOP OF SLOPE	
SPECIE	PLS/AC.
Jose Tall Wheatgrass	10.2
Alkalai Sacton	0.6
Yellow Sweet Clover	2.8
Sand Dropseed	0.2
Crested Wheatgrass	4.0

SEEDING - TOP OF SLOPE TO WATER LEVEL	
SPECIE	PLS/AC.
Reed Canarygrass	5.3
Red Top	0.3





DETAIL A
SCALE: 1"=1'



SECTION A-A
SCALE: 1"=50' horz.
1"=10' vert.

EXHIBIT F
RECLAMATION PLAN MAP

Prepared By:
Thomas A. Logue, Govt. Affairs Mgr.
ELAM CONSTRUCTION, INC.
Grand Junction, Colorado

Permit# M1979166
Date: 12-3-97
Doc Name: See Map
Origin: Division

Received
DEC 03 1997
DENVER OFFICE

Durango Field Office
Division of Minerals & Geology

00015351

DRAWN	TAL
CHECKED	TAL
DATE	SEPT., 1997
SCALE	AS SHOWN
JOB NO.	
SHEET	ONE

OF ONE SHEETS

EXHIBIT D
MINE PLAN

The plan calls for the expansion of an existing gravel extraction operation. Together with the continued gravel screening, crushing, washing, asphalt and concrete production. Exhibit C Depicts the original and proposed permit boundary, the existing mining area, site features, and the location of other uses ancillary to the operation.

Operations within the pit area will be limited to the hours of 7:00 A.M. to 7:00 P.M. and will occur intermittently through out any given year. Asphalt production will normally occur intermittently between the months of March and November.

MINING AREA - Gravel extraction began in 1981 near the southeast corner of the original permitted boundary and proceeded towards the west. Approximately 1.5 acres of the original pit boundary has had some gravel extraction activity. Extraction of the gravel resource has resulted in the creation of a small pond. Water in the pond is intercepted ground water and fluctuates throughout the year depending upon the elevation of the Gunnison River. The mining plan call for the future extraction of the resource to occur in three almost equal sized phases within the 9.5 acre extraction area. The **maximum area** disturbed at any one time within the extraction area will be 3.3 acres. Due to the unknown nature of the future sand and gravel needs in the Delta area, it is difficult to determine exact resource requirements. However, a 5 year to 7 year **life expectancy**, per phase, is considered to be a reasonable forecast.

As a result of the past gravel extraction the **nature of the gravel deposit** has been determined. The 30 foot thick sand gravel layer is in an alluvial deposit overlain with 4 feet to 5 feet of overburden. Material contained within the overburden consist of 6 inches to 8 inches of topsoil underlain by a layer of sandy silts and some clay deposits. The sand and gravel is situated on top of a relative flat bedrock layer of shale.

When the gravel extraction process begins outside of it existing area, the first step of the process will be the **topsoil removal**. The 6 inches to 8 inches of top soil will be removed from the extraction area by phase at any given time. The topsoil will be removed using scrapers, loaders and dump trucks and stored in a stockpile along the southerly side of the identified processing area.

Once the topsoil has been removed from the mining area, the **overburden removal** will begin. As was the case with the topsoil removal, overburden will be excavated using scrapers, loaders, and dump trucks. Overburden will also be stockpiled along the southerly boundary of the process area in separate stockpiles from the topsoil. To prevent erosion the stockpile(s) will be seeded within 12 months of there establishment. All of the stockpiled overburden will ultimately be used in the reclamation process.

The **sand and gravel extraction** process will be conducted using loaders, and/or excavators. Dump trucks will transport the resource to the identified process area, or to the ultimate delivery site. Each phase that is mined will be done in a succession of 10 foot to 20 foot layers untill the deposit reaches the underlying bedrock strata. Since ground water will be present during the early stages of the extraction process an NPDES permit will be

required. Ground water will be pumped to the existing slough found adjacent to the extraction area and ultimately to the Gunnison River.

CRUSHING AND STOCKPILE AREA - All of the gravel processing of the excavated material will occur within the identified process area. The screened or crushed material will be stockpiled nearby according to size in an area separate from overburden and top soil stockpiles.

ASPHALT PRODUCTION - A portable asphalt plan may be erected on the site. Any asphalt production which occurs will be limited to the identified process area. Maximum production for portable plants is about 2000 tons per day. Operation of the plant is typically limited to the months between March and November. The plant will meet or exceed all State and Federal pollution requirements, and is inspected on a regular basis by governmental authorities.

HAUL ROAD - The existing roads and access serving the site are well maintained and are in good repair. Access to the site is gained from US Highway 50 utilizing a separate ingress/egress easement. Production levels will not increase as a result of the permit boundary modification. Therefore, increases in traffic will not change over the historic volumes. The northerly 600 feet of the haul route is paved the remaining haul routes will have a gravel surface.

Given the maximum production of the crushing, asphalt and concrete production coupled with available trucks, it is estimated that a peak of 5 trips per hour will utilize the haul route at maximum production.

Two types of trucks will be used; 10 yard dump trucks with a capacity of 15 tons and 23 ton capacity belly dump trucks.

In order to control dust on the haul road and within the mining area, water will be used. Dust control measures will be conducted on an as needed bases.

OTHER USES - In addition to the above listed activities the following are also ancillary to the mining and processing activities:

- ☐ Parking for workers
- ☐ Scales
- ☐ Portable office and lab
- ☐ Equipment storage and maintenance
- ☐ Portable toilets
- ☐ Portable fuel and water storage

There will be no permanent storage of oil, fuel or hazardous material within the permit boundary. Since the stroage of these products is tempoary, earthen containment dikes will be constructed around the containers. Dikes will constructed in a fashon to contain at least 110 percent of the volume of the largest storage vessel within the containment area.

EXHIBIT E
RECLAMATION PLAN

GENERAL -Two existing land uses exist on the site, wildlife habitat adjacent to the Gunnison River and industrial on the higher ground above the river. The reclamation plan calls for returning the disturbed areas, after mining and reclamation, to a land use that is aquatic and wildlife habitat adjacent to the river and industrial on those portions of the property which have historically be used for industrial purposes. Both land uses are consistent with those found in the surrounding area.

The predominate feature of the reclaimed area will be a modest sized lake and a small island. The periphery of the lake will be essentially flat, preserving the elevation found in the pre-mining environment. Exhibit C depicts a configuration of the ultimate lake surface area which will result after the gravel resource has been removed. The resulting lake surface area will typically be in the range of 9.5 acres.

BACKFILLING AND GRADING - As each of the phased mining areas is completed, the backfilling and grading activities for that area will commence. Backfill will not be attempted adjacent to subsequent phases. Attention will be given to creating irregular shorelines and lake bottoms. There will be no connection between the lake and the Gunnison River. The backfilling and grading sequence will be as follows:

1. The stockpiled overburden will be hauled from its stockpile area located within the identified Process Area by mobile equipment to the extraction site and placed where required to achieve a level topography and properly backfilled slopes.

2. Backfill will be graded to proper slopes using dozers or similar equipment . The areas completely backfilled will be graded to elevation approximating the pre-mine elevation. All slopes will be graded no steeper that a ratio of 3:1 (horizontal to vertical) from a point 5 feet above and 10 feet below the normal water surface the balance of the slope to the pit bottom will be graded in a manner to achieve a minimum slope of 2:1 (horizontal to vertical). Grading will be done by dozers which will compact and stabilize the overburden material through normal operations.

Selective handling or placement of overburden materials will not be necessary. The overburden is a stream laid deposit which should not present any toxicity problems.

TOPSOIL REPLACEMENT - Topsoil replacement will occur once all regrading of an area disturbed by mining is complete. Topsoil will replaced to a thickness appropriate to establish vegetation communities consistent with the post mine land use.

Topsoil will be replaced to a thickness of at least 6 inches. Soil characteristics are described in Exhibit I, Soils Information. The topsoil will be replaced during final reclamation with mobile equipment.

REVEGETATION - The intent of the re-vegetation is the establishment of plant communities consistent with the post mine land use. After topsoil replacement from stockpiles, seed bed preparation and stabilization may include ripping, disking, dragging,

harrowing and furrowing. Continuous analysis of re-vegetation success will determine the best type of preparation which should be used.

The seed mixture was selected to vegetate the disturbed areas with a specie consistent with the post mine land use. Seeding recommendations follow:

SEEDING - OUTSIDE TOP OF SLOPE	
SPECIE	PLS/AC.
Jose Tall Wheatgrass	10.2
Alkalai Sacton	0.6
Yellow Sweet Clover	2.8
Sand Dropseed	0.2
Crested Wheatgrass	4.0

SEEDING - TOP OF SLOPE TO WATER LEVEL	
SPECIE	PLS/AC.
Reed Canarygrass	5.3
Red Top	0.3

Seeding will normally be done in the fall and spring when temperatures and adequate soil moisture are present. Seeding will be accomplished by either broadcasting or by using a seed drill. If broadcasting is used seed rates will be doubled. Due to the nature of the overburden and topsoil found in the area, hay, straw or fiber mulch is not considered to be necessary.

WEED CONTROL - If necessary, weed control measures will be employed for control of any noxious weed species. Control measures will also be used if the growth of weed species on the reclaimed area threatens further spread of the weeds to nearby areas. In the event that weed control is required, herbicides will be of those that are approved by the Soil Conservation Service. During the removal of topsoil, if an area of heavy seed infestation is encountered, it will be buried as overburden rather than used as a growth medium.

STOCKPILE, PROCESS, & STAGING AREA - Once all of the mineral resource has been removed from this area, it will be used as some type of industrial activity. Such as, outdoor storage of construction equipment and supplies. Since the site, in its current state, is well graded, modification to the existing conditions will not be attempted. Enough gravel will be salvaged from the resource stockpiles to cover the entire ground surface within the area with 4 to 6 inches of material .

HAUL ROADS - Other than graveling, no changes are anticipated to the primary haul route. The alternate haul route will be graded and seeded in accordance with the procedure previously outlined for the extraction area outside the top of the pit slopes. Seeding of the alternate haul route will be limited to between the stockpile area and the edge of the disturbed extraction area.