STATE OF COLORADO

Lennberg - DNR, Patrick <patrick.lennberg@state.co.us>

IHC Scott, Inc. – W. Max (Bill Nelson) Borrow Pit, File No. M-2023-010, New 111 Construction Materials Application Adequacy Review Letter No. 1 Response State Hwy 71

JC York <jcyork@j-tconsulting.com> Mon, May 22, 2023 at 2:38 PM
To: "patrick.lennberg@state.co.us" <patrick.lennberg@state.co.us>
Cc: Blake Foerster <bfoerster@ihcscott.com>, Brian Martinez <bmartinez@ihcscott.com>, Tony Roberts <troberts@ihcscott.com>, Anthony Wiarda <awiarda@ihcscott.com>, Todd Yee <toddyee@j-tconsulting.com>

Patrick –

Attached is an authorization letter from IHC Scott, Inc. for J&T Consulting, Inc. to act on their behalf for the W. Max (Bill Nelson) Borrow Pit, File No. M-2023-010 New 111 Construction Materials Application. I have also attached the Adequacy Review Letter No. 1 Comment Response from us with attachments. Blake will be getting a stamped received copy of the first page of the letter from Washington County once he places a hard copy of this submittal with them this week. We will include that with the hard copy of these materials that we will mail to you this week as well. Let me know if you have any questions or concerns.

Regards,

J.C.

J.C. York, P.E.

J&T Consulting, Inc.

305 Denver Avenue, Suite D

Fort Lupton, CO 80621

Office: (303) 857-6222

Mobile: (970) 222-9530

FAX: (303) 857-6224

2 attachments

J and T Consulting Authorization.pdf
153K

M-2023-010 JT DRMS Nelson Adequacy Review Letter Response 5.22.23.pdf
7131K

May 22, 2023

Division of Reclamation, Mining and Safety, Room 215
1001 East 62nd Avenue
Denver, CO 80216

Subject: IHC Scott, Inc. – W. Max (Bill Nelson) Borrow Pit, File No. M-2023-010, New 111 Construction Materials Application Adequacy Review Letter No. 1 Response State Hwy 71

Mr. Patrick Lennberg,

Please be informed that IHC Scott, Inc. has authorized J & T consulting Inc, to conduct all permitting matters and processes on behalf of IHC Scott, Inc. for the above referenced permit.

If you have any comments or concerns, please feel free to contact me directly.

Sincerely,

Brian L. Martinez
Denver Area Manager
Bmartinez@ihcscott.com
775.843.4645

J&T Consulting, Inc.

May 22, 2023

Mr. Patrick Lennberg
Environmental Protection Specialist

Physical Address:
1313 Sherman Street, Room 215
Denver, CO 80203

Mailing Address:
Division of Reclamation, Mining and Safety, Room 215
1001 East 62nd Avenue
Denver, CO 80216

RE: IHC Scott, Inc. – W. Max (Bill Nelson) Borrow Pit, File No. M-2023-010, New 111 Construction Materials Application Adequacy Review Letter No. 1 Response

Dear Mr. Lennberg,

IHC Scott, Inc has received the Division's Adequacy Review of the Special Operation 111 Construction Materials Permit Application letter dated May 17, 2023. Below are the comments and the corresponding responses that we have provided to address the adequacy review comments.

Exhibit A – Legal Description (Rule 6.3.1)

1. Pursuant to Rule 6.3.1(3) the names of all immediately adjacent surface owners of record need to be shown on the map. Additionally Pursuant to Rule 6.2.1(2) all maps must meet the following requirements:

   Maps, except the index map, must conform to the following criteria:
   (a) Show name of Applicants;
   (b) Must be prepared and signed by a registered land surveyor, professional engineer, or other qualified persons;
   (c) Give date prepared;
   (d) Identify and outline the area which corresponds with the application;
   (e) With the exception of the map of the affected lands required in Section 34-32.5-112(2)(d), C>R>S. 1984, as amended, shall be prepared at a scale that is appropriate to clearly show all elements that are required to be delineated by the Act and these Rules. The acceptable range of map scales shall not be larger than 1 inch = 50 feet nor smaller than 1 inch = 660 feet. Also, that a map scale, appropriate legend, map title, date and a north arrow shall be included.

Please update Exhibit A map according to the items mentioned above. Please not coordinates for points depicted on the map need to be complete and legible.

Response: Exhibits A2 & A3 Location Maps have been updated according to the items mentioned above.

Exhibit B – Site Description (Rule 6.3.2)

2. Please provide a description of the vegetation and soil characteristics in the area of the proposed operation pursuant to Rule 6.3.2(a). A Soil Report can be obtained from http://websoilsurvey.sc.egov.usda.gov/ for free. Please use the general area of the proposed mine site on the new soil report map. Please also provide the soil unit description printouts for any soil map units included within the proposed permit boundary.

   Response: A memorandum by Ecological Resource Consultants is attached that describes the vegetation in the area of the proposed operation. A National Resources Conservation Service soils report and soils descriptions is attached that describes the soil characteristics in the area of the proposed operation.

Exhibit C – Mining Plan (Rule 6.3.3)

3. Please provide the estimated depth to which soil, suitable as a plant growth medium, will be salvaged for use in the reclamation process. This description must be consistent with information provided in Exhibit B. Sufficient soil must be salvaged to meet the vegetation establishment criteria of Rule 3.1.10.

   Response: The estimated depth to which soil will be salvaged for use in the reclamation process is six inches.

4. Please specify the thickness of overburden or quantity of waste rock, if any, to be removed.

   Response: The estimated thickness of overburden to be removed is six inches.

5. Please specify if explosives will be used in conjunction with the mining or reclamation operation.

   Response: No explosives will be used in conjunction with the mining or reclamation operation.

6. In the Description of Mining Operation the applicant states that unsuitable geotechnical material will be used as backfill meets the definition of inert pursuant to Rule 1.1(22): "Inert Material" means non-water-soluble and non-putrescible solids together with such minor amounts and types of other materials, unless such materials are acid or toxic producing, as will not significantly affect the inert nature of such solids. The term includes, but is not limited to, earth, sand, gravel, rock, concrete which has been in a hardened state for a least sixty (60) days, masonry, asphalt paving fragments, and other inert solids.

   Response: The unsuitable geotechnical materials to be used as backfill material at the borrow site will be overburden materials that meet the definition of inert per Rule 1.1(22)..

Exhibit D – Reclamation Plan (Rule 6.3.4)

7. Pursuant to Rule 6.3.4(c) please provide the following:

Specify the measures that will be taken to revegetate the site, if applicable, including:

(i) state the thickness of plant growth medium to be replaced. Sample and analyze

available soils sufficiently to establish quantity and quality;

Response: The plant growth medium (overburden and top soil) will be replaced to a thickness of six inches.

(ii) state at what point in the mining plan the site will be seeded. Explain how the seedbed will be prepared to eliminate compacted conditions (e.g., plowed, chiseled, disced). State the type, application rate, and soil incorporation methods of fertilizer application, if any. NOTE: Soil amendments shall only be applied where soil tests indicate nutrient deficiencies for the plant species to be established;

Response: The site will be seeded at the completion of the mining activities. The seed bed will be scarified with a disc prior to seed placement. No soil amendments are planned to be applied to the seeded areas.

(iii) state the grass, forb, shrub and tree species to be planted and the applicable quantities. Specify the application rate shall be twice the rate required for seed drilling. If the seedbed has not been adequately roughened prior to seeding, the seed shall be raked or harrowed after broadcast application;

Response: The grass and forb species to be planted, and the quantities for each are shown in the below. This is the seed mix being used for the CDOT disturbed areas. It is similar to the DRMS recommended seed mix for "Zone 1, Eastern Plains", and is appropriate for this site. If seed is broadcast the application rate shall be twice the rate required for seed drilling:

Reclamation Seed Mix			
Seed	**Common Name**	**Scientific Name**	**PLS Application Per Acre**
Grasses	Oats	*Avena Sativa*	7.5
	Saltgrass	*Distichlis Spicata VNS*	0.8
	Blue Grama	*Bouteloua Gracilis Hachita*	0.6
	Western Wheatgrass	*Pascoprum Smithii Arriba*	4.3
	Alkali Sacaton	*Sporobolis Airoides Saltalk*	0.4
	Little Bluestem	*Schizachyrium Scoparium Cimarron*	1.4
	Prairie Sandreed	*Calamovilfa Longifolla Goshen*	1.3
	Sand Dropseed	*Sporobolus Cryptandrus VNS*	0.8
Forbs	Purple Verbena	*Verbena Stricta VNS*	1.3
	Blanketflower	*Gailardia Aristata VNS*	0.3
	Upright prairie coneflower	*Ratibida Columnifera VNS*	0.3
		Total	**18.6**

(iv) specify the application method for grass and forb seeding. If the seed is to be broadcast, the application rate shall be twice the rate required for seed drilling. If the seedbed has not been adequately roughened prior to seeding, the seed shall be raked or harrowed after broadcast application;

Response: The grass and forb seed will be applied by drilling methods.

(v) if a mulch is needed, specify the kind to be used, the crimping method, and rate of application; and

Response: Weed free straw will be used for mulch at the rate of 2 tons per acre and will be crimped by discing.

(vi) (vi) explain the establishment methods for each species of shrub and/or tree, and state the number of each to be established per acre.

Response: No shrubs and/or trees will be used in the reclamation of the operation area.

Exhibit E – Maps (Rule 6.3.5)

8. Please update and resubmit the Mining and Reclamation Plan maps to satisfy the criteria mentioned in item #1 above.

Response: The Mining and Reclamation Plan maps have been updated to satisfy the criteria mentioned in item #1 above.

Other:

9. Pursuant to rule 1.6.2(2), please demonstrate that the Applicant's response to these adequacy issues have been placed with the application materials previously placed with the County Clerk or Recorders Office, and made available for public review.

Response: A copy of the Applicant's response to these adequacy issues has been made available for public review at the County Clerk and Recorders Office. A copy of the transmittal stamped received is attached.

Thank you for your consideration of our responses to the comments. Please feel free to contact me with any questions or if you need additional information.

Sincerely,

J.C. York, P.E.
J&T Consulting, Inc.

Attachments:

1) Exhibit A1 – Legal Description
2) Exhibit A2 – Location Map
3) Exhibit A3 – Location Map
4) Exhibit B1 – Vegetation Memo
5) Exhibit B2 – Soil Map
6) Exhibit B3 – Soil Descriptions
7) Exhibit E – Mining Plan Map
8) Exhibit E – Reclamation Plan Map

EXHIBIT A1 – PERMIT BOUNDARY LEGAL DESCRIPTION

A parcel of land situated in the northeast 1/4 of Section 17, and the southeast 1/4 of Section 8, Township 5 South, Range 55 West of the 6th Principal Meridian, in Washington County, Colorado, more particularly described as follows:

The TRUE POINT OF BEGINNING being the northeast corner of said Section 17;

Thence following the east line of said Section 17, S 00° 06' 14.64" E for a distance of 61.81 feet to the beginning of a non-tangential curve;

Said curve turning to the left through an angle of 71° 08' 42.40", having a radius of 47.00 feet, and whose long chord bears N 54° 25' 38.80" W for a distance of 54.68 feet;

Thence, N 90° 00' 00.00" W for a distance of 329.70 feet to the beginning of a curve;

Said curve turning to the right through an angle of 22° 14' 17.77", having a radius of 515.00 feet, and whose long chord bears N 78° 52' 51.11" W for a distance of 198.64 feet;

Thence, N 67° 45' 42.23" W for a distance of 278.77 feet;

Thence, N 67° 07' 13.75" W for a distance of 386.09 feet to the beginning of a curve;

Said curve turning to the right through an angle of 25° 27' 49.81", having a radius of 115.00 feet, and whose long chord bears N 54° 23' 18.85" W for a distance of 50.69 feet;

Thence, N 41° 39' 23.94" W for a distance of 228.93 feet to the beginning of a curve;

Said curve turning to the right through an angle of 86° 15' 00.34", having a radius of 115.00 feet, and whose long chord bears N 01° 28' 06.23" E for a distance of 157.23 feet;

Thence, N 44° 35' 36.40" E for a distance of 131.54 feet;

Thence, N 45° 24' 23.60" W for a distance of 48.17 feet;

Thence, N 14° 30' 04.84" E for a distance of 59.05 feet to the beginning of a curve;

Said curve turning to the left through an angle of 94° 41' 42.82", having a radius of 130.00 feet, and whose long chord bears N 32° 50' 46.57" W for a distance of 191.22 feet;

Thence, N 80° 11' 37.98" W for a distance of 154.71 feet to the beginning of a curve;

Said curve turning to the right through an angle of 21° 08' 24.73", having a radius of 500.00 feet, and whose long chord bears N 69° 37' 25.62" W for a distance of 183.44 feet;

Thence, N 59° 03' 13.25" W for a distance of 255.99 feet to the beginning of a curve;

Said curve turning to the right through an angle of 51° 08' 31.60", having a radius of 300.00 feet, and whose long chord bears N 33° 28' 57.45" W for a distance of 258.98 feet;

Thence, N 07° 54' 41.65" W for a distance of 65.69 feet to the beginning of a curve;

Said curve turning to the right through an angle of 19° 35' 40.50", having a radius of 200.00 feet, and whose long chord bears N 01° 53' 08.59" E for a distance of 68.07 feet;

Thence, N 11° 40' 58.84" E for a distance of 32.96 feet to the beginning of a curve;

Said curve turning to the right through an angle of 67° 06' 01.50", having a radius of 100.00 feet, and whose long chord bears N 45° 13' 59.59" E for a distance of 110.53 feet;

Thence, N 78° 47' 00.35" E for a distance of 21.12 feet to the beginning of a curve;

Said curve turning to the right through an angle of 77° 06' 33.30", having a radius of 100.00 feet, and whose long chord bears S 62° 39' 43.00" E for a distance of 124.65 feet;

Thence, S 24° 06' 26.35" E for a distance of 108.80 feet to the beginning of a curve;

Said curve turning to the left through an angle of 10° 52' 31.76", having a radius of 500.00 feet, and whose long chord bears S 29° 32' 42.23" E for a distance of 94.76 feet;

Thence, S 34° 58' 58.11" E for a distance of 78.83 feet to the beginning of a curve;

Said curve turning to the left through an angle of 52° 39' 52.27", having a radius of 100.00 feet, and whose long chord bears S 61° 18' 54.25" E for a distance of 88.72 feet;

Thence, S 87° 38' 50.38" E for a distance of 333.41 feet to the beginning of a curve;

Said curve turning to the right through an angle of 15° 25' 52.86", having a radius of 300.00 feet, and whose long chord bears S 79° 55' 53.95" E for a distance of 80.55 feet;

Thence, S 72° 12' 57.52" E for a distance of 129.35 feet to the beginning of a curve;

Said curve turning to the right through an angle of 74° 08' 01.56", having a radius of 50.00 feet, and whose long chord bears S 35° 08' 56.74" E for a distance of 60.27 feet;

Thence, S 01° 55' 04.03" W for a distance of 289.51 feet to the beginning of a curve;

Said curve turning to the right through an angle of 39° 49' 30.71", having a radius of 300.00 feet, and whose long chord bears S 21° 49' 49.39" W for a distance of 204.35 feet;

Thence, S 41° 44' 34.74" W for a distance of 65.76 feet;

Thence, N 45° 24' 23.60" W for a distance of 46.92 feet;

Thence, S 44° 35' 36.40" W for a distance of 131.54 feet to the beginning of a curve;

Said curve turning to the left through an angle of 86° 15' 00.34", having a radius of 85.00 feet, and whose long chord bears S 01° 28' 06.23" W for a distance of 116.21 feet;

Thence, S 41° 39' 23.94" E for a distance of 228.93 feet to the beginning of a curve;

Said curve turning to the left through an angle of 25° 27' 49.81", having a radius of 85.00 feet, and whose long chord bears S 54° 23' 18.85" E for a distance of 37.47 feet;

Thence, S 67° 07' 13.75" E for a distance of 385.93 feet to a point on a line;

Thence, S 67° 45' 42.23" E for a distance of 278.60 feet to the beginning of a curve;

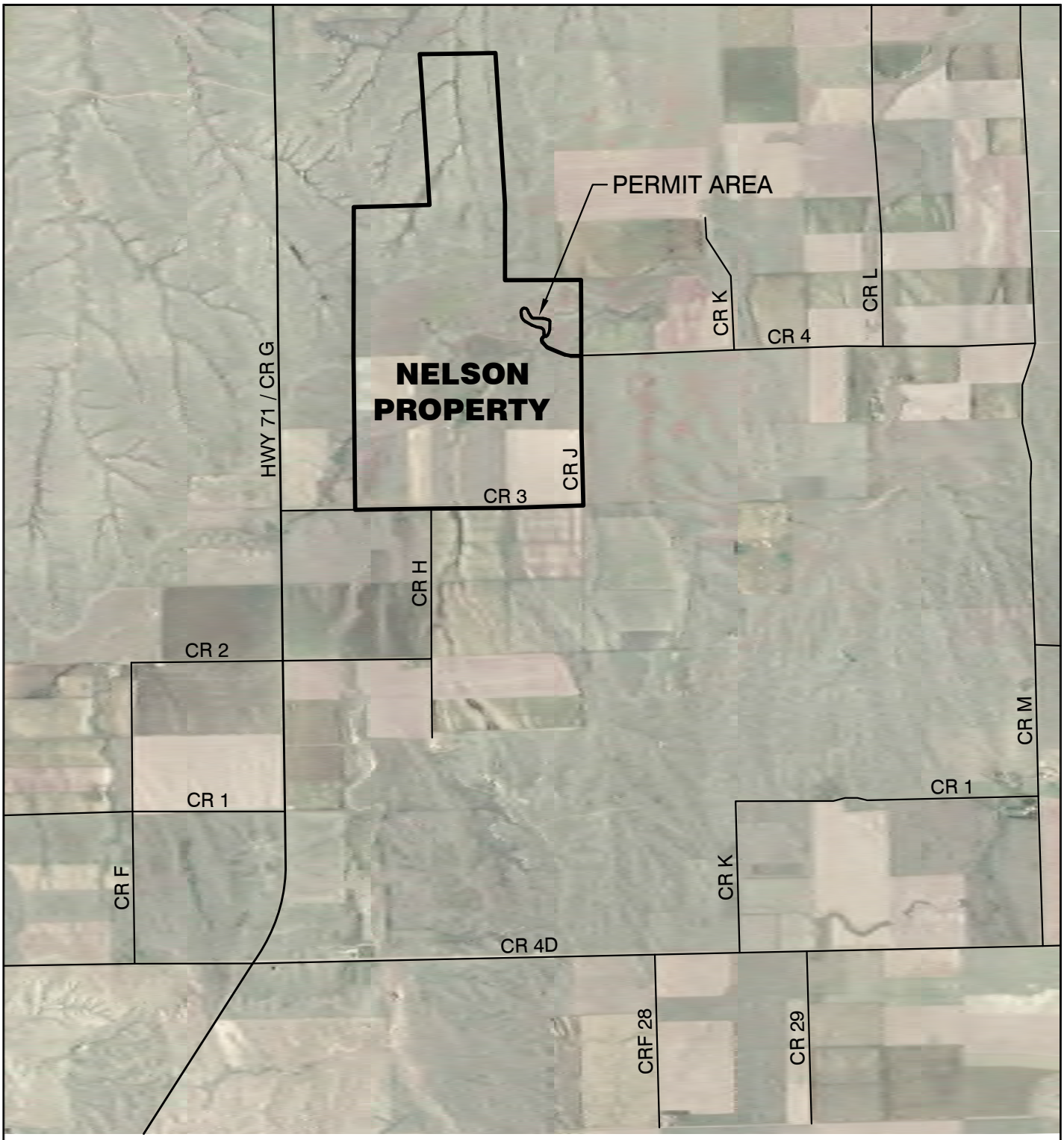
Said curve turning to the left through an angle of 22° 14' 17.77", having a radius of 485.00 feet, and whose long chord bears S 78° 52' 51.11" E for a distance of 187.06 feet;

Thence N 90° 00' 00.00" E a distance of 374.06 feet to the TRUE POINT OF BEGINNING.

Said parcel contains 433,131 square-feet or 9.94 acres more or less.

The proposed mine entrance coordinates are as follows:

Latitude:	(N) 39.715234°
Longitude:	(W) -107.940060°



5000 2500 0 5000

SCALE IN FEET

J&T Consulting, Inc.

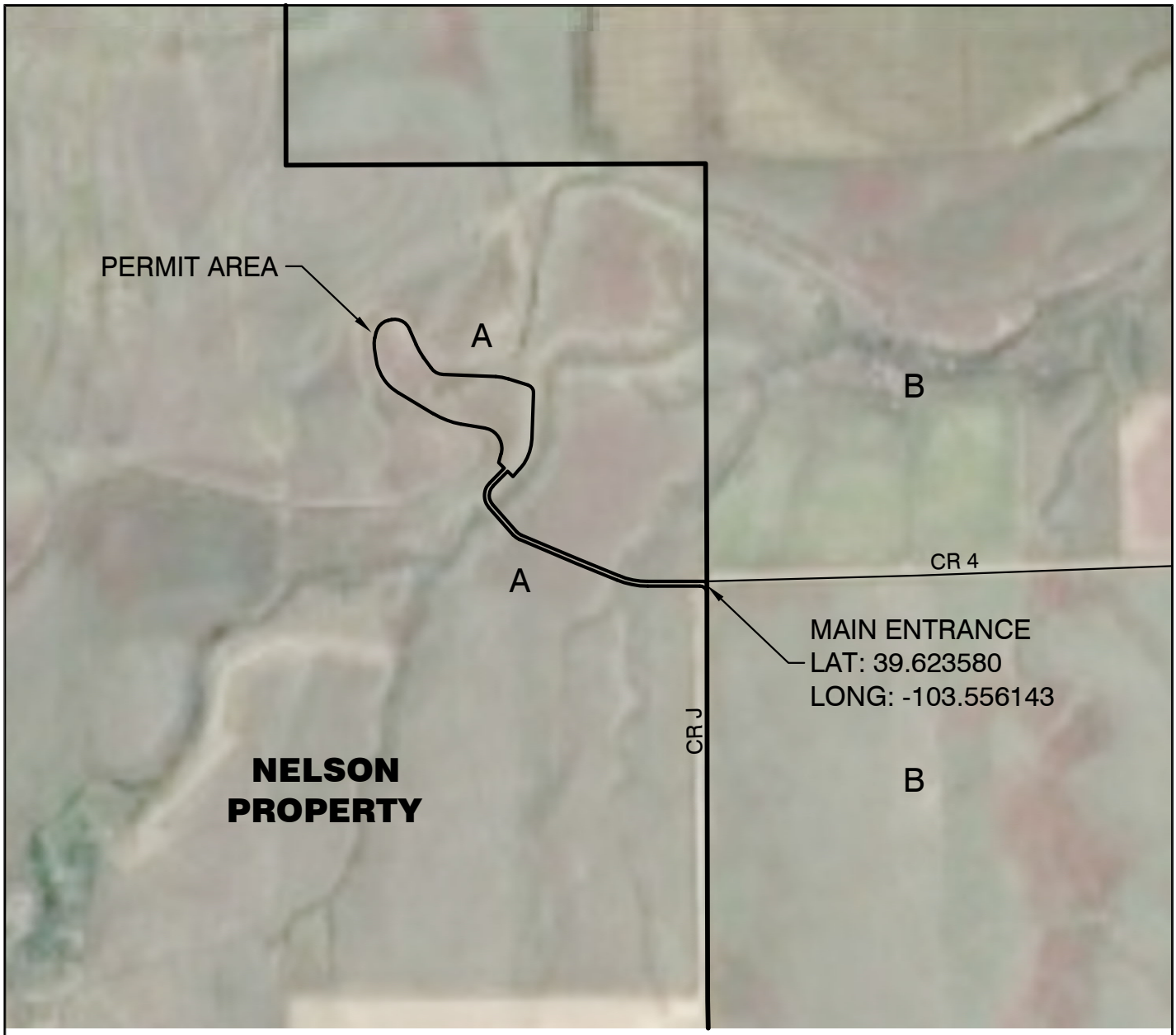
5/19/2023

P:\23018 IHC Scott DRMS 111 Nelson Pit\Drawings\Xref\JT-IHCS-Nelson-GROUND-Base.dwg, Exhibit A2, 5/19/2023 11:14:30 AM

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
303-857-6222

IHC Scott
W. Max (Bill Nelson) Borrow Pit
Exhibit A2 - Location Map

Date:	5.19.23
Job No:	23018
Drawn:	TPY
Scale:	1"=5000'
Sheet: 1	Of: 1



IMMEDIATELY ADJACENT SURFACE OWNERS

MAP ID	NAME/ADDRESS	ASSESSORS ID NO.
WASHINGTON COUNTY		
A	W. MAX & KENDALL NELSON 3502 CO RD H GENOA, CO 80818	7305000110
B	WILLIAM & HANNAH SCHUELLER 7811 CO RD O GENOA, CO 80818	7303000077 7309000027

J&T Consulting, Inc.

5/19/2023

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
303-857-6222

IHC Scott, Inc.
W. Max (Bill Nelson) Borrow Pit
Exhibit A3 - Location Map

Date:	5.19.23
Job No:	23018
Drawn:	TPY
Scale:	1"=1000'
Sheet: 1	Of: 1

P:\23018 IHC Scott DRMS 111 Nelson Pit\Drawings\Xref\JT-IHCS-Nelson-GROUND-Base.dwg, Exhibit A3, 5/19/2023 1:38:18 PM

Ecological Resource Consultants, LLC
2820 Wilderness Place, Suite A~ Boulder, CO 80301~ (303) 679-4820

Technical Memorandum

Date: May 19, 2023

To: JC York, J&T Consulting

From: Tyler Worley, Project Ecologist, Certified Ecologist

Re: **Nelson Borrow Pit Site Code of Regulations – Division of Reclamation, Mining and Safety Rule 6.3.2(a) – Description of Vegetation**

Ecological Resource Consultants (ERC) provides the following technical memorandum (memo) which details the existing vegetative community as required per the Colorado Division of Reclamation, Mining, and Safety (DRMS) Rule 6 – Permit Application Exhibit Requirements, Section 3.2(a) – Site Description of Vegetation.

1.0 INTRODUCTION

ERC has prepared this vegetation characterization memo for the Nelson Property Borrow Site (project area) located approximately 30 miles north of Limon, in Washington County, Colorado. More specifically, the project area is located in Section 8, Township 5 South, Range 55W. The center point of the project area is 39.626975° N Longitude and -103.561754°W Longitude. **Figure 1** below shows an aerial image of the approximate project area (red polygon) as well as the proposed access road (yellow line).

Figure 1. Aerial image of Project Area.

2.0 METHODOLOGY

ERC evaluated the project area through desktop review utilizing existing available mapping as follows:

- GoogleEarth Satellite aerial imagery (6/2017)
- ESRI, Digital Globe (5/9/2023)
- USGS Geological Survey (USGS) GAP Analysis Program – Land Cover Data v2.2
- USGS Geological Survey Topographical Mapping – Lusto Springs, CO 2022
- NatureServe's Ecological System Classification (Comer et al. 2013)

Next, the data was reviewed, and the general extents and characterization of land use classes and vegetative cover types were documented within the project area.

3.0 PROJECT AREA DESCRIPTION

The project area comprises 10-acres of primarily flat and gently rolling grasslands with an approximate elevation of 5,103 above mean sea level. The project area is bound on all sides by open grassland with Vega Creek, an intermittent stream depicted on aerials and the latest topographical mapping, located immediately to the south, west and north. The project area is located in the high plains and is surrounded by rolling grasslands and prairie.

Based on aerial imagery, the landscape of the project area is relatively natural and lacks significant disturbance or fragmentation. Located southeast of the project area is the corner of County Road J and County Road 4. Approximately 1.6 miles west, Colorado Highway 71, also known as the Heartland Expressway, runs in a north/south direction.

4.0 VEGETATIVE COVER TYPE

One land use class was identified by ERC within the project area and is classified as the Western Great Plains Shortgrass Prairie. The vegetative cover type is based on NatureServe's Ecological System Classification per the USGS GAP Analysis land cover data set. A detailed summary of the vegetative cover type is detailed below.

Western Great Plains Shortgrass Prairie

The Western Great Plains Shortgrass Prairie is found east of the Rocky Mountains and ranges from southeastern Wyoming and the western Nebraska panhandle south into the panhandles of Oklahoma and Texas and eastern New Mexico. The vegetation is primarily dominated by blue grama (*Bouteloua gracilis*) and buffalograss (*Bouteloua dactyloides*) throughout its range, with various associated graminoid species changing depending on latitude, precipitation, soils, and management. Associated graminoids may include Indian ricegrass (*Achnatherum hymenoides*), purple threeawan (*Aristida purpurea*), Sideoats grama (*Bouteloua curtipendula*), hairy grama *Bouteloua hirsuta,* threadleaf sedge (*Carex filifolia*), sun sedge (*Carex inops ssp. Heliophile*), plains lovegrass (*Eragrostis intermedia*), needle-and-thread grass (*Hesperostipa comata*), prairie junegrass (*Koeleria macrantha*), ring muhly (*Muhlenbergia torreyi*), western wheatgrass (*Pascopyrum smithii*), James' galleta (*Pleuraphis jamesii*), alkali sacaton (*Sporobolus airoides*), and sand dropseed (*Sporobolus cryptandrus*). Although mid-height grass species may be present, especially on more mesic land positions and soils, they are secondary in

importance to the sod-forming short grasses. Sandy soils have higher cover of needle-and-thread grass, sand dropseed and soapweed yucca (*Yucca glauca*). Scattered shrub and dwarf-shrub species may also be present. Broom snakeweed (*Gutierrezia sarothrae*) is often present to codominant especially in disturbed areas. Cacti species such as cholla (*Cylindropuntia imbricata*) and prickly-pears (*Opuntia polyacantha* and *Opuntia phaeacantha*) can be abundant on some sites. Stands occur on primarily flat to rolling uplands. Soils typically are loamy and ustic but range from sandy to clayey. Climate is temperate, semi-arid continental with mean annual precipitation generally about 300 mm, ranging up to 500 mm in the warmer south extent where precipitation is less effective. Annual precipitation has a bimodal distribution, occurring mostly before the growing season in winter and early spring and then during summer as monsoon thunderstorms. Summer precipitation events are mostly <10 cm but occasionally larger. High variation in amount and timing of annual precipitation impacts the relative cover of cool- and warm-season herbaceous species (NatureServe 2023).

Based on aerial imagery, vegetation throughout the project area contains big sagebrush (*Artemisia tridentata*). The herbaceous understory mixed within the shrubs in the project area consists of blue grama, needle-and-thread, buffalo grass, prairie junegrass and comprises 75-90% ground cover, which is typical vegetation species composition in the region and of the vegetative community. **Figure 2** below shows typical features and the vegetation community that would be found within the project area. **Figure 2** below is not of the project area, but an area that is found along Highway 71, located 1.6 miles west of the actual project area.

Figure 2. Typical Features and Vegetation Communities within the Region

5.0 SUMMARY

ERC has completed this memo to provide site-specific vegetation community descriptions for the 10-acre project area north of Limon, in Washington County, Colorado to satisfy DRMS Rule 6 Section 3.2(a) – Site Description of Vegetation. One vegetative cover type exists within the 10-acre project area and is classified as the Western Great Plains Shortgrass Prairie. This vegetative community within the project area is dominated by big sagebrush with the herbaceous understory consisting of upland grass species including blue grama, needle-and-thread, buffalo grass and prairie junegrass with 75-90% ground cover. The project area, based on the latest aerial imagery, is relatively natural and lacks significant disturbance or fragmentation.

This technical memorandum has been prepared by:
ECOLOGICAL RESOURCE CONSULTANTS

Tyler Worley, Project Ecologist, Certified Ecologist

Reviewed and approved by:

David J. Blauch, V.P., Senior Ecologist, PWS #2130

Map Scale: 1:2,280 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washington County, Colorado
Survey Area Data: Version 24, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 11, 2022—Apr 18, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	9.3	93.4%
64	Sampson loam	0.7	6.6%
Totals for Area of Interest		**9.9**	**100.0%**

Component Text Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The component descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the associated soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas (components) for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Component Nontechnical Descriptions" report gives a brief, general description of the soil components that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Component Text Descriptions

Washington County, Colorado

Map Unit: 7—Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded

Description Category: GENSOIL

Ellicott, rarely flooded: 65 percent

The Ellicott, rarely flooded component makes up 65 percent of the map unit. Slopes are 0 to 3 percent. This component is on drainageways on uplands, flood plains on intermittent streams on uplands. The parent material consists of noncalcareous, stratified sandy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R067BY031CO Sandy Bottomland ecological site. Nonirrigated land capability classification is 7s. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Description Category: GENSOIL

Ellicott sandy-skeletal, rarely flooded: 25 percent

The Ellicott sandy-skeletal, rarely flooded component makes up 25 percent of the map unit. Slopes are 0 to 3 percent. This component is on channels on intermittent streams on uplands, channels on drainageways on uplands. The parent material consists of noncalcareous, stratified sandy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R067BY031CO Sandy Bottomland ecological site. Nonirrigated land capability classification is 8s. Irrigated land capability classification is 4s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Description Category: GENSOIL

Haverson: 10 percent

Generated brief soil descriptions are created for major soil components. The Haverson soil is a minor component.

Map Unit: 64—Sampson loam

Description Category: GENSOIL

Sampson: 85 percent

The Sampson component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on intermittent streams, stream terraces. The parent material consists of calcareous loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R067BY002CO Loamy Plains ecological site. Nonirrigated land capability classification is 3c. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Description Category: GENSOIL

Bridgeport: 15 percent

Generated brief soil descriptions are created for major soil components. The Bridgeport soil is a minor component.

Data Source Information

Soil Survey Area: Washington County, Colorado
Survey Area Data: Version 24, Sep 1, 2022

LEGEND:

- EXISTING CONTOURS (5280)
- PROPERTY LINE
- EXISTING FENCE
- EXISTING OVERHEAD ELECTRIC (OE)
- EXISTING POWER POLE
- SECTION LINE
- PERMIT BOUNDARY
- MINING LIMIT
- STOCKPILE AREA
- A — PROPERTY OWNER MAP ID

PROPERTY OWNERS WITHIN 200 FEET

MAP ID	NAME/ADDRESS	ASSESSORS ID NO.
	WASHINGTON COUNTY	
A	W. MAX & KENDALL NELSON 3502 CO RD H GENOA, CO 80818	7305000110
B	WILLIAM & HANNAH SCHUELLER 7811 CO RD O GENOA, CO 80818	7303000077 7309000027

VEGETATION:

THE VEGETATION THROUGHOUT THE PROJECT AREA CONTAINS BIG SAGEBRUSH (ARTEMISIA TRIDENTATA). THE HERBACEOUS UNDERSTORY MIXED WITHIN THE SHRUBS IN THE PROJECT AREA CONSISTS OF BLUE GRAMA, NEEDLE–AND–THREAD, BUFFALO GRASS, PRAIRIE JUNEGRASS AND COMPRISES 75–90% GROUND COVER, WHICH IS TYPICAL VEGETATION SPECIES COMPOSITION IN THE REGION AND OF THE VEGETATIVE COMMUNITY.

NOTE:
W. MAX AND KENDALL NELSON. ARE THE SURFACE AND SUBSURFACE OWNERS WITHIN THE PERMIT AREA.

PERMIT AREA = 9.94 AC
MINING AREA = 2.89 AC

N

100 50 0 100 200 300
SCALE IN FEET

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-6222
www.j-tconsulting.com

W.Max (Bill Nelson) Borrow Pit

Exhibit E - Mining Plan Map

IHC Scott, Inc.

M-2023-010

REVISIONS

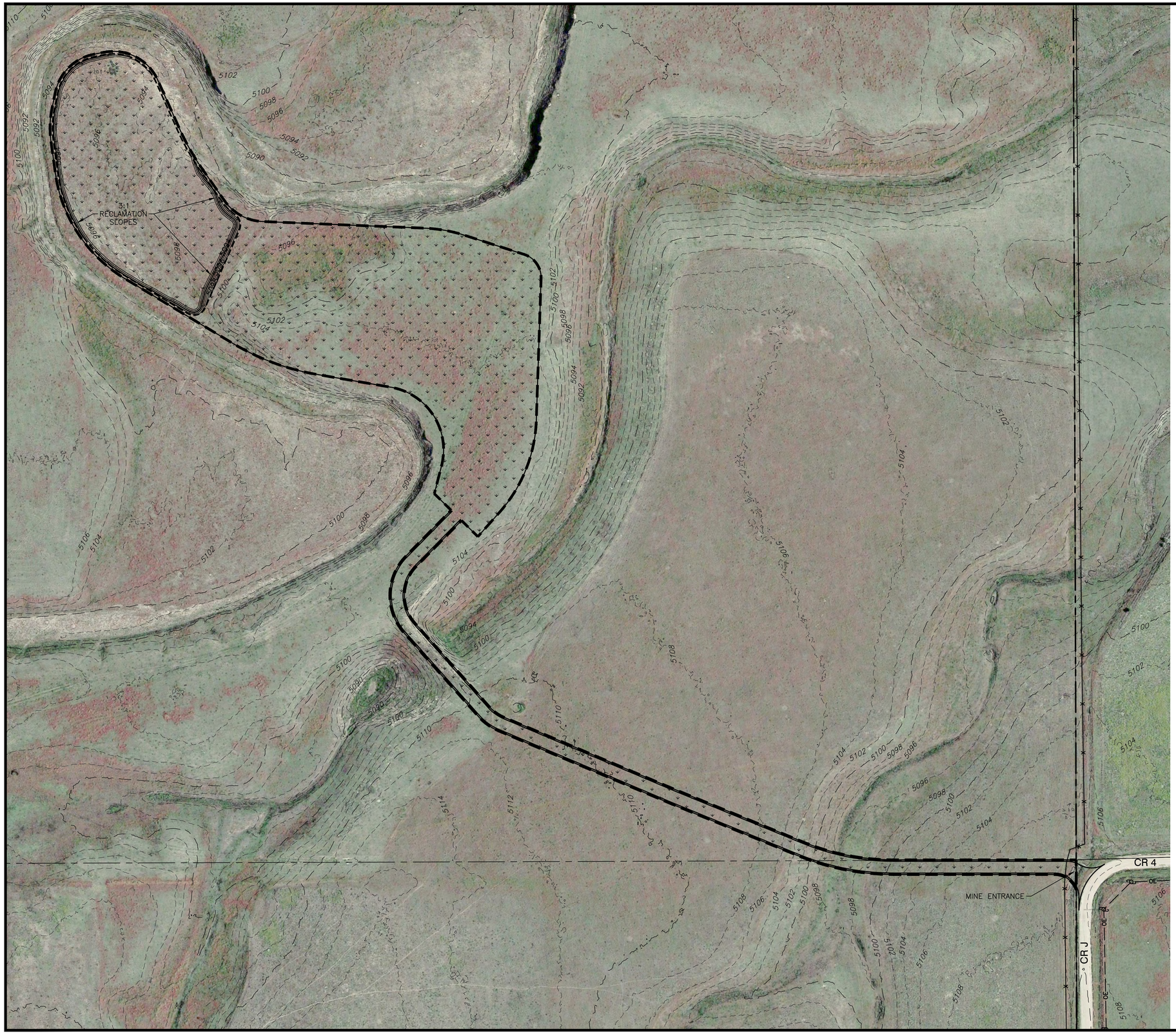
No	Description	Date	By	Chk

J&T Consulting, Inc.
5/22/2023

Job #	23018
Date	5.22.23
Drawn By	TPY
Designed By	TPY
Checked By	JCY
File	IHCS Nelson Mining.dwg
Scale	As Shown

Sheet: 1 Of: 2

P:\23018 IHC Scott DRMS 111 Nelson Pit\Drawings\Plan Sheets\Mining Plan\IHCS Nelson Mining.dwg, 1 Exhibit E - Mining Plan Map, 5/22/2023 2:03:48 PM



LEGEND:

- 5280 — EXISTING CONTOURS
- PROPERTY LINE
- EXISTING FENCE
- OE — EXISTING OVERHEAD ELECTRIC
- EXISTING POWER POLE
- SECTION LINE
- PERMIT BOUNDARY
- MINING LIMIT
- STOCKPILE AREA
- SCARIFY, TOPSOIL, SEED AREA

NOTE:
ALL DISTRUBED AREAS WILL BE SCARIFIED, TOPSOILED, AND SEEDED.

100 50 0 100 200 300
SCALE IN FEET

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Fort Lupton, CO 80621
Ph: 303-857-6222
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W.Max (Bill Nelson) Borrow Pit

Exhibit E - Reclamation Plan Map

IHC Scott, Inc.

M-2023-010

REVISIONS

No	Date	By	Chk	Description

J&T Consulting, Inc.

5/22/2023

Job #	23018
Date	5.22.23
Drawn By	TPY
Designed By	TPY
Checked By	JCY
File	IHCS Nelson Rec.dwg
Scale	As Shown

Sheet: 2 Of: 2

P:\23018 IHC Scott DRMS 111 Nelson Pit\Drawings\Plan Sheets\Reclamation Plan\IHCS Nelson Rec.dwg, 2 Exhibit E - Reclamation Plan Map, 5/22/2023 2:03:59 PM

STATE OF COLORADO

Lennberg - DNR, Patrick <patrick.lennberg@state.co.us>

IHC Scott, Inc. – W. Max (Bill Nelson) Borrow Pit, File No. M-2023-010, New 111 Construction Materials Application Adequacy Review Letter No. 1 Response State Hwy 71

JC York <jcyork@j-tconsulting.com> Tue, May 23, 2023 at 12:31 PM
To: "patrick.lennberg@state.co.us" <patrick.lennberg@state.co.us>
Cc: Blake Foerster <bfoerster@ihcscott.com>, Brian Martinez <bmartinez@ihcscott.com>, Tony Roberts <troberts@ihcscott.com>, Anthony Wiarda <awiarda@ihcscott.com>, Todd Yee <toddyee@j-tconsulting.com>

Patrick –

Attached is the signature from Washington County for the Adequacy Review Response Letter and attachments that were placed on file with them this morning.

[Quoted text hidden]

ihc3.pdf
588K

NOTICE OF FILING APPLICATION
FOR COLORADO MINED LAND RECLAMATION PERMIT
FOR **SPECIAL 111 OPERATION**

NOTICE TO THE BOARD OF COUNTY COMMISSIONERS
Washington COUNTY

JHC Scott (the "Applicant/Operator") has applied for a Special 111 reclamation permit from the Colorado Mined Land Reclamation Board (the "Board") to conduct the extraction of construction materials in Washington County. The attached information is being provided to notify you of the location and nature of the proposed operation. The entire application is on file with the Division of Reclamation, Mining, and Safety (the "Division") and the local county clerk or recorder.

The Applicant/Operator proposes to reclaim the affected land to Pastureland (PL) use. Pursuant to Section 34-32.5-116(4)(m), C.R.S., the Board may confer with the local Board of County Commissioners before approving of the post-mining land use. Accordingly, the Board would appreciate your comments on the proposed operation. Please note that, in order to preserve your right to a hearing before the Board on this application, you must submit written comments on the application within five (5) working days after the application was filed with the Division.

If you would like to discuss the proposed post-mining land use, or any other issue regarding this application, please contact the Division of Reclamation, Mining, and Safety, 1313 Sherman St., Room 215, Denver, Colorado 80203, (303) 866-3567.

NOTE TO APPLICANT/OPERATOR: You **must** attach a copy of the application form to this notice. If this is a notice of a change to a previously filed application you must either attach a copy of the changes, or attach a complete and accurate description of the changes.

Misty Peterson
County Administrator