

To:	Hunter Ridley	From:	Paul Kos
	DRMS	Cc:	Jerald Schnabel, Castle Aggregate
Project/File:	Pikeview Quarry Reclamation Project	Date:	June 7, 2024

Reference: Responses to Adequacy Review for Technical Revision (TR-24), Pikeview Quarry, M-1977-211

Castle Aggregate (Castle) in the process of reclaiming the Pikeview Quarry located northwest of Colorado Springs, Colorado. As part of the detailed design process and recent communications with staff with City of Colorado Springs (City), Division of Reclamation, Mining, and Safety (DRMS), United States Forest Service (USFS), and construction and revegetation contractors, Castle requested a Technical Revision (TR) to the site reclamation drainage plan on May 13, 2024. On May 30, 2024, DRMS provided comments following their adequacy review of the TR. This memorandum summarizes the comments and Stantec's responses to those comments.

Comment 1. Please provide an updated list of species added to the seed mix and or shrub and tree list for the site if new species have been added to the site.

Response: Stantec was unable to procure the required number of pinon pine and juniper plants despite contacting federal, state, and private nurseries. The plants were ordered, but the nursery could not deliver the complete order. Consequently, the following plants were purchased:

- Skunkbrush sumac (*Rhus trilobata*)
- Sagebrush (*Artemisia tridentata*)
- Chokecherry (*prunus virginiana*)
- Serviceberry (*Amelanchier*)

Also, Austrian Pine (*Pinus nigra*) has been planted in addition to ponderosa pine (*Pinus ponderosae scopulorum*).

Comment 2. The design plans for TR-24 have been reviewed by the Division's surface water specialist, Rob Zuber. His comments are attached below. Responses to these items should be included with the responses to the above adequacy item.

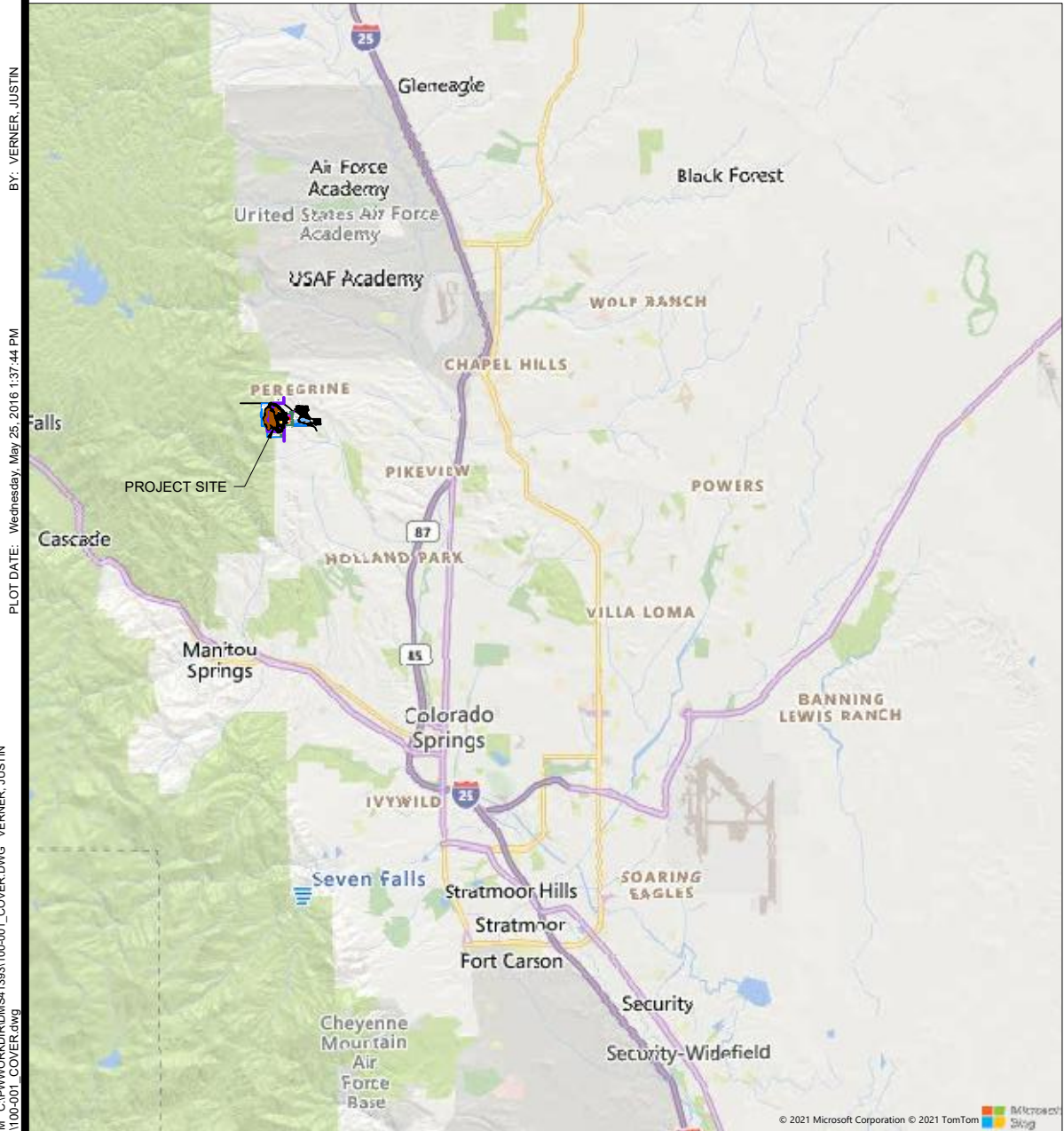
On Sheet 300-001 (Channel Plan), there is a label "Tie into Existing Drainage," but it appears that the leader associated with this label points to the wrong location. This drawing needs to be revised.

The title for Sheet 300-006 is "Transition Zone North Channel." However, this sheet also includes figures for the South Channel (namely, the Plunge Pool). The title should be revised to include both channels.

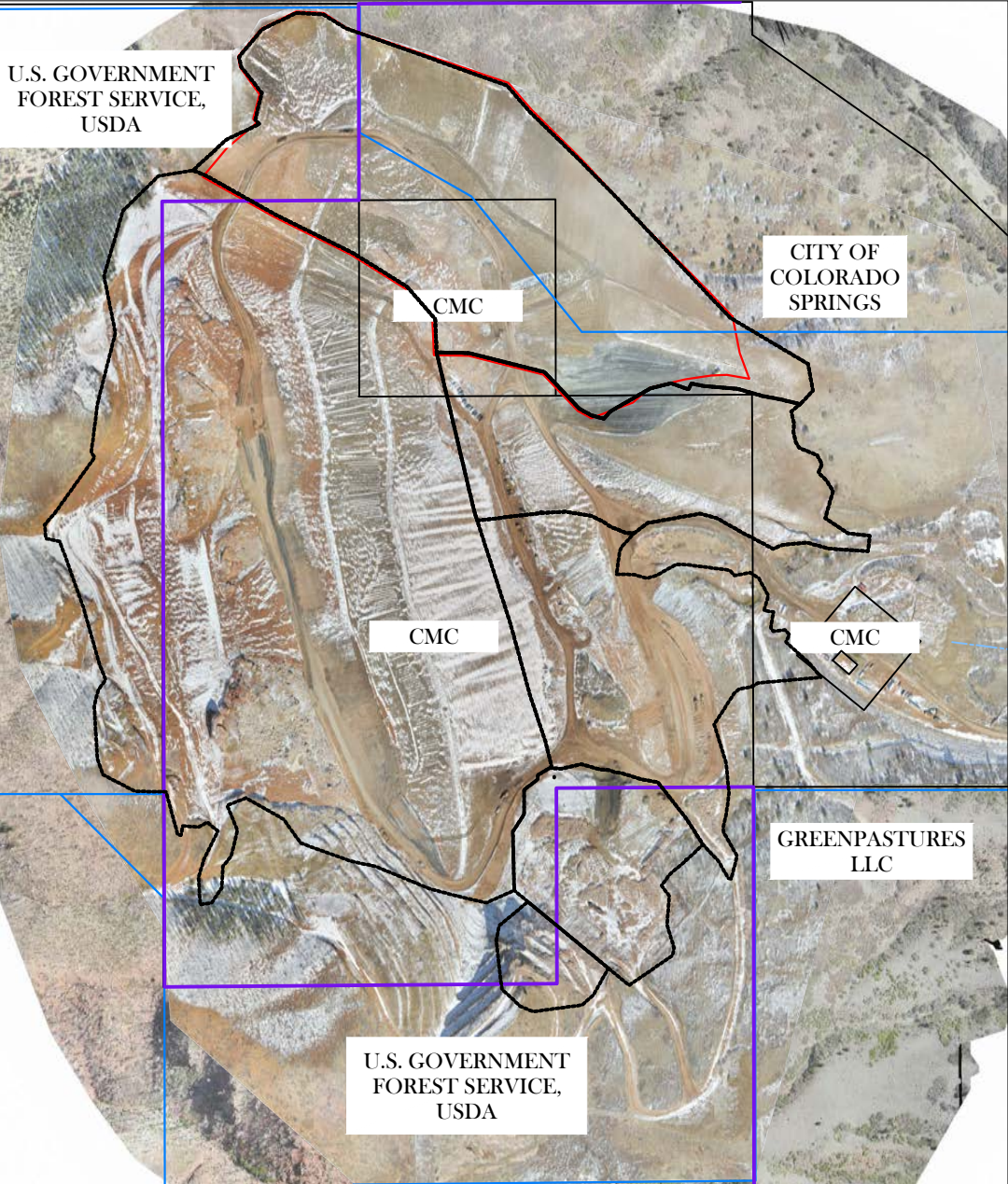
Response: The plan sheets have been updated to address Mr. Zuber's comments. The cover sheet was also updated with the revised sheet title. The updated sheets area attached.

PIKEVIEW QUARRY RECLAMATION PROJECT

JUNE 2024



SITE VICINITY MAP
NOT TO SCALE



SITE MAP

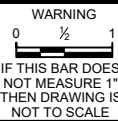


SHEET NUMBER	SHEET TITLE
100-001	COVER SHEET
100-002	GENERAL NOTES AND ABBREVIATIONS
100-003	SITE PLAN- AERIAL
100-004	PROJECT SITE PLAN EXISTING CONTOURS AND CONTROL POINTS
100-005	OVERALL GRADING PLAN
100-006	OVERALL DRAINAGE PLAN
100-008	PARCEL AND OWNERSHIP PLAN
200-001	BUTTRESS AREA GRADING PLAN
200-002	BUTTRESS AREA SECTIONS
200-004	NORTHERN BORROW AREA GRADING PLAN
200-005	NORTHERN BORROW AREA SECTIONS
200-007	LOWER BORROW AREA GRADING PLAN
200-008	LOWER BORROW AREA SECTIONS
200-010	SOUTHERN BORROW AREA GRADING PLAN
200-011	SOUTHERN BORROW AREA SECTIONS
300-001	OVERALL CHANNEL PLAN
300-002	CROSS CHANNEL PLAN AND PROFILE
300-003	NORTH CHANNEL PLAN AND PROFILE
300-004	SOUTH CHANNEL PLAN AND PROFILE
300-005	TYPICAL CHANNEL DETAILS
300-006	TRANSITION ZONE AND PLUNGE POOL DETAILS



REV	DATE	BY	DESCRIPTION
J	06/2024	JTV	UPDATE DRAWING INDEX
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED



DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
COVER SHEET

SHEET
100-001
JobNumber

BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
Tuesday, April 2, 2024 12:16:20 PM C:\p\work\DIR\MS41393100-002_NOTES.DWG VERNER, JUSTIN
DWG FILE: C:\p\work\dir\ms41393100-002_NOTES.dwg

GENERAL

1.

THE CONTRACTOR WILL REFER TO THE CONSTRUCTION DRAWINGS, PROJECT MANUAL, CONTRACT, PERMITS, PROJECT DOCUMENTS (MEETING MINUTES, PUNCH LISTS, ETC.) FOR COMPLETE INFORMATION ABOUT THE REQUIRED WORK. ANY ONE OF THESE PARTS OF THE "CONSTRUCTION DOCUMENTS" MAY NOT CONTAIN ALL OF THE INFORMATION REQUIRED TO COMPLETE THE WORK.
2.

FOR ANY INCONSISTENCIES ENCOUNTERED IN THE PLAN SET OR BETWEEN PLAN AND SPECIFICATION, CONTRACTOR SHALL POINT THESE OUT TO ENGINEER AND SEEK FURTHER DIRECTION/RESOLUTION.
3.

PRIOR TO CLEARING AND GRUBBING, CONTRACTOR SHALL STAKE OUT LIMITS OF DISTURBANCE.
4.

CONTRACTOR MAY ONLY EXTEND LIMITS OF DISTURBANCE WITH THE WRITTEN APPROVAL OF ENGINEER.
5.

CONTRACTOR SHALL MINIMIZE IMPACTS TO ADJACENT TREES AND VEGETATION.
6.

GRADING TO ACHIEVE SPECIFIED CONTOURS AND MINIMUM DIMENSIONS SHOWN
 - AS GRADES ARE FINAL AND INCLUDE TOPSOIL AND CHANNEL ARMORING
 - CHANNEL DEPTH/WIDTH, BANK SLOPE, CROSS SECTIONAL AREA SHALL BE WITHIN 0.1' OF DESIGN.
 - ALL GRADING WILL BE WITHIN 1.0' OF THE REQUIRED HORIZONTAL LOCATION(S) SHOWN ON THE PLANS AND TYPICAL SECTIONS UNLESS OTHERWISE SPECIFIED.
7.

ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
8.

SLOPES BETWEEN PROPOSED BENCHES AND EXISTING GROUND SHALL BE GRADED TO PROVIDE A SMOOTH AND NATURAL TRANSITION.
9.

NATURAL VARIABILITY AT THE SITE MAY REQUIRE ADAPTATION OF THE DRAWINGS, NOTES, QUANTITIES, ETC., AND WILL NOT NECESSARILY CONSTITUTE A CHANGE IN THE WORK. ANY REQUESTED CHANGE IN PRICE WILL BE IDENTIFIED, SPECIFIED IN WRITING, AND APPROVED BY THE OWNER PRIOR TO THE START OF THE CHANGE.
10.

THE QUANTITY OF ANY ITEM SHOWN ON THE DRAWINGS OR PROJECT MANUAL MAY BE ADJUSTED BY THE OWNER'S REPRESENTATIVE BASED ON FIELD CONDITIONS AT THE TIME THE WORK IS PERFORMED AND PER APPROVAL OF THE ENGINEER AND WILL NOT NECESSARILY CONSTITUTE A CHANGE IN THE WORK.
11.

EXISTING SITE CONDITIONS SHOWN ON THE PLANS ARE BASED ON AERIAL IMAGES AND FIELD SURVEY DATA 05/31/2022, AND AS SUCH DOES NOT REFLECT CHANGES TO THE SITE THAT HAVE OCCURRED SINCE THEY WERE PERFORMED.
12.

AFTER CONSTRUCTION, ACCESS ROADS LEADING TO THE PROJECT SITE SHALL BE RESTORED TO AS GOOD OR BETTER CONDITION THAN BEFORE CONSTRUCTION.
13.

EXISTING TOPOGRAPHY AND AERIAL PHOTOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 05/31/2022.
14.

SITE COORDINATE SYSTEM - STATE PLAN, COLORADO CENTRAL, NAD83 (NSRS2011).

UTILITIES

1.

NO SUBSURFACE PLANS ARE AVAILABLE FOR THIS PROJECT. THE CONTRACTOR SHALL MAKE THEIR OWN INVESTIGATION TO DETERMINE SUBSURFACE CONDITIONS.
2.

THE UTILITY/INFRASTRUCTURE FACILITIES/INFORMATION SHOWN ON THESE PLANS IS PROVIDED FOR INFORMATIONAL PURPOSES. COMPLIANCE WITH THESE NOTES AND PLANS DOES NOT CONSTITUTE RESPONSIBILITY BY THE OWNER, THEIR REPRESENTATIVE(S), AND/OR THE UTILITY/INFRASTRUCTURE FACILITY OWNER.
3.

THE CONTRACTOR IS RESPONSIBLE FOR DIRECT COORDINATION WITH UTILITY/INFRASTRUCTURE FACILITY OWNERS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY COORDINATION ACTIVITIES.
4.

THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE ACTUAL LOCATION OF UTILITY AND INFRASTRUCTURE FACILITIES WITHIN THE PROJECT LIMITS INCLUDING PROJECT ACCESS, STAGING, AND CONSTRUCTION AREAS.
5.

THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING DAMAGE TO OR INTERFERENCE WITH EXISTING POWER LINES, COMMUNICATIONS FACILITIES, ROADWAYS, BURIED CABLES, AND OTHER FACILITIES ADJACENT TO OR CROSSING THE PROJECT AREA, FROM CONSTRUCTION ACTIVITIES RELATED TO THE PROPOSED WORK.
6.

ANY REMEDIAL ACTION, RESULTING FROM THE CONSTRUCTION ACTIVITIES, REQUIRED BY THE UTILITY/INFRASTRUCTURE OWNER(S), SHALL BE AT THE CONTRACTOR'S SOLE COST AND EXPENSE.

SWPPP CONSTRUCTION NOTES

1.

CONTRACTOR SHALL DEVELOP, OBTAIN, AND MANAGE SWPPP.
2.

CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT, OR ROCK TRACKED FROM THE EXCAVATED AREA.
3.

CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
4.

CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
 - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
 - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - STRUCTURAL CONTROL MEASURES.
 - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
5.

CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND/OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES.
6.

PRIOR TO ANY CONSTRUCTION ACTIVITY, INCLUDING CLEARING AND GRUBBING, BMPS SHALL BE ESTABLISHED PER SWPPP.

HEALTH AND SAFETY

1.

IN ALL CONSTRUCTION ACTIVITIES SAFETY OF LIFE SHALL OUTWEIGH ALL OTHER CONSIDERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF THEIR EMPLOYEES, THEIR SUB-CONTRACTED EMPLOYEES AND OWNER'S REPRESENTATIVE INSPECTORS.
2.

ALL OPERATIONS SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S (OSHA) "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" AS WELL AS ANY APPLICABLE LOCAL, STATE, OR FEDERAL SAFETY REQUIREMENTS.
3.

THE CONTRACTOR IS REQUIRED TO SUBMIT A "SAFETY PLAN" IN WRITING TO THE OWNER FOR REVIEW FIFTEEN (15) BUSINESS DAYS PRIOR TO ANY SITE ACTIVITY. THE OWNER IS NOT REQUIRED TO REVIEW AND/OR APPROVE THE CONTRACTOR'S SAFETY PLAN.
4.

THE OWNER'S REPRESENTATIVE MAY REQUEST ADDITIONAL SAFETY MEASURES AT THAT TIME AND/OR ANY TIME THROUGHOUT THE DURATION OF THE PROJECT.
5.

THE CONTRACTOR SHALL POST A COPY OF ALL APPLICABLE SAFETY RULES AND REGULATIONS ON-SITE. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE "SAFETY PLAN" ON-SITE THROUGHOUT CONSTRUCTION.
6.

THE CONTRACTOR SHALL CONDUCT AN ON-SITE PRE-CONSTRUCTION SAFETY MEETING FOR ALL EMPLOYEES AND SUBCONTRACTOR EMPLOYEES WORKING ON THE PROJECT SITE. THE CONTRACTOR SHALL REVIEW THE SAFETY PLAN AT THE PRE-CONSTRUCTION SAFETY MEETING. THE OWNER, ENGINEER, AND/OR FACILITY OWNER(S) SHALL BE NOTIFIED TEN (10) CALENDAR DAYS PRIOR TO THE PRE-CONSTRUCTION SAFETY MEETING SO THAT THEIR REPRESENTATIVE(S) MAY ATTEND.
7.

WORK DONE ADJACENT TO UTILITIES/FACILITIES/HIGHWAYS SHALL COMPLY WITH SAFETY AND CONSTRUCTION PRACTICES REQUIRED BY THE UTILITY/FACILITY/HIGHWAY DEPARTMENT, IN ADDITION TO THOSE REQUIRED BY LOCAL, STATE AND FEDERAL LAWS.
8.

THE CONTRACTOR SHALL HOLD SAFETY MEETINGS WITH ALL EMPLOYEES ON A REGULAR BASIS AND PROVIDE THE OWNER'S REPRESENTATIVE WITH A COPY OF THE MEETING MINUTES.
9.

THE CONTRACTOR SHALL MAINTAIN ON-SITE A "SAFETY SIGN-IN SHEET" OF ALL EMPLOYEES AND SUB-CONTRACTOR EMPLOYEES ATTENDING THE PRE-CONSTRUCTION SAFETY MEETING. ANY CONTRACTOR AND SUB-CONTRACTOR EMPLOYEES ADDED DURING THE DURATION OF THE PROJECT SHALL ATTEND AN "ON-SITE" CONSTRUCTION SITE SAFETY MEETING PRIOR TO
10.

STARTING WORK. IN ADDITION, THEIR NAMES SHALL BE ADDED TO THE "SAFETY SIGN-IN SHEET".
11.

A VISITOR "SIGN-IN" LOG SHALL BE KEPT ON-SITE BY THE CONTRACTOR. THE LOG SHALL AT A MINIMUM IDENTIFY THE NAME, ORGANIZATION, DATE, TIME OF ARRIVAL AND THE TIME OF DEPARTURE.

LEGEND

- EXISTING CONTOURS
- DESIGN CONTOURS
- AREA BOUNDARY
- EXISTING ROAD
- PROPOSED ROAD
- MAIN CHANNEL
- MINOR CHANNEL
- ISOPACH CUT CONTOURS
- ISOPACH FILL CONTOURS
- EXISTING ROADS
- EXISTING BUILDING
- EXISTING POWER LINES
- EXISTING STREAMS
- EXISTING TOP SOIL STOCKPILE
- CDRMS PERMIT BOUNDARY
- CITY OF COLORADO SPRINGS PERMIT BOUNDARY
- RECLAIMED PRISM LOCATION
- EXISTING PRISM LOCATION
- USFS LAND SEED MIX (20 AC)
- PRIVATE SURFACE SEED MIX (110 AC)
- HIGHWALL (6.2 AC)
- PONDEROSA PINE & DOUGLAS FIR (30.39 AC) (30 STEMS PER AC.REVEGETATED) (43 STEMS/AC. PLANTED)
- ROCKY MOUNTAIN JUNIPER & GRASS (37.52 AC) (21-42 TREES REVEGETATED) (30-60 TREES PLANTED)
- MTN MAHOGANY/GAMBEL OAK (69.40 AC)
- LOWER BORROW AREA ADDITIONAL MATERIAL
- PRIME DESIGNATED WORK AREA
- PARCEL LINE
- USFS PROPERTY BOUNDARY



H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION
REV	DATE	BY	DESCRIPTION

SCALE

AS NOTED

WARNING

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. LEIDICH

DRAWN J. VERNER

CHECKED P. KOS



PROJECT

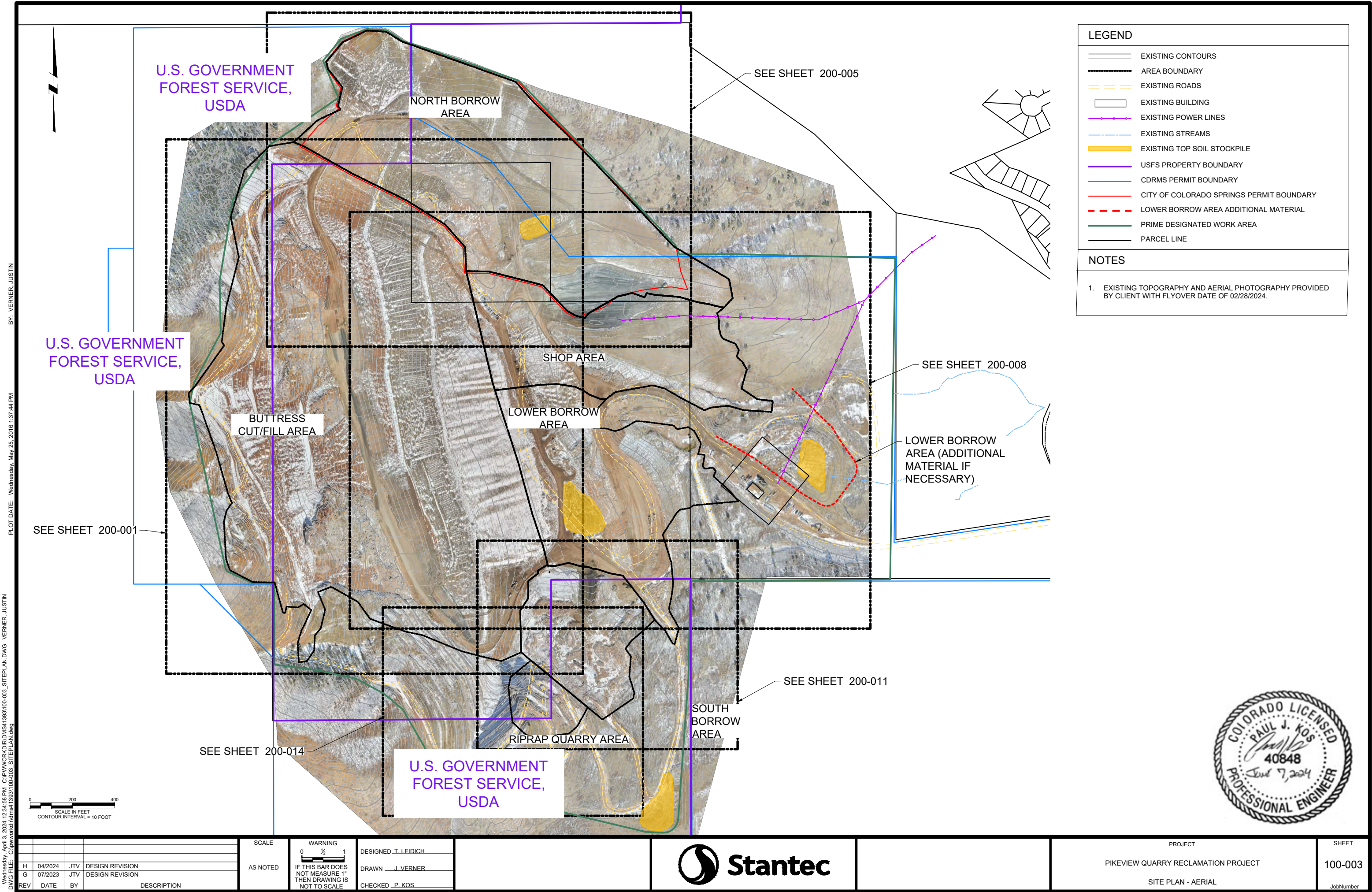
PIKEVIEW QUARRY RECLAMATION PROJECT

GENERAL NOTES AND ABBREVIATIONS

SHEET

100-002

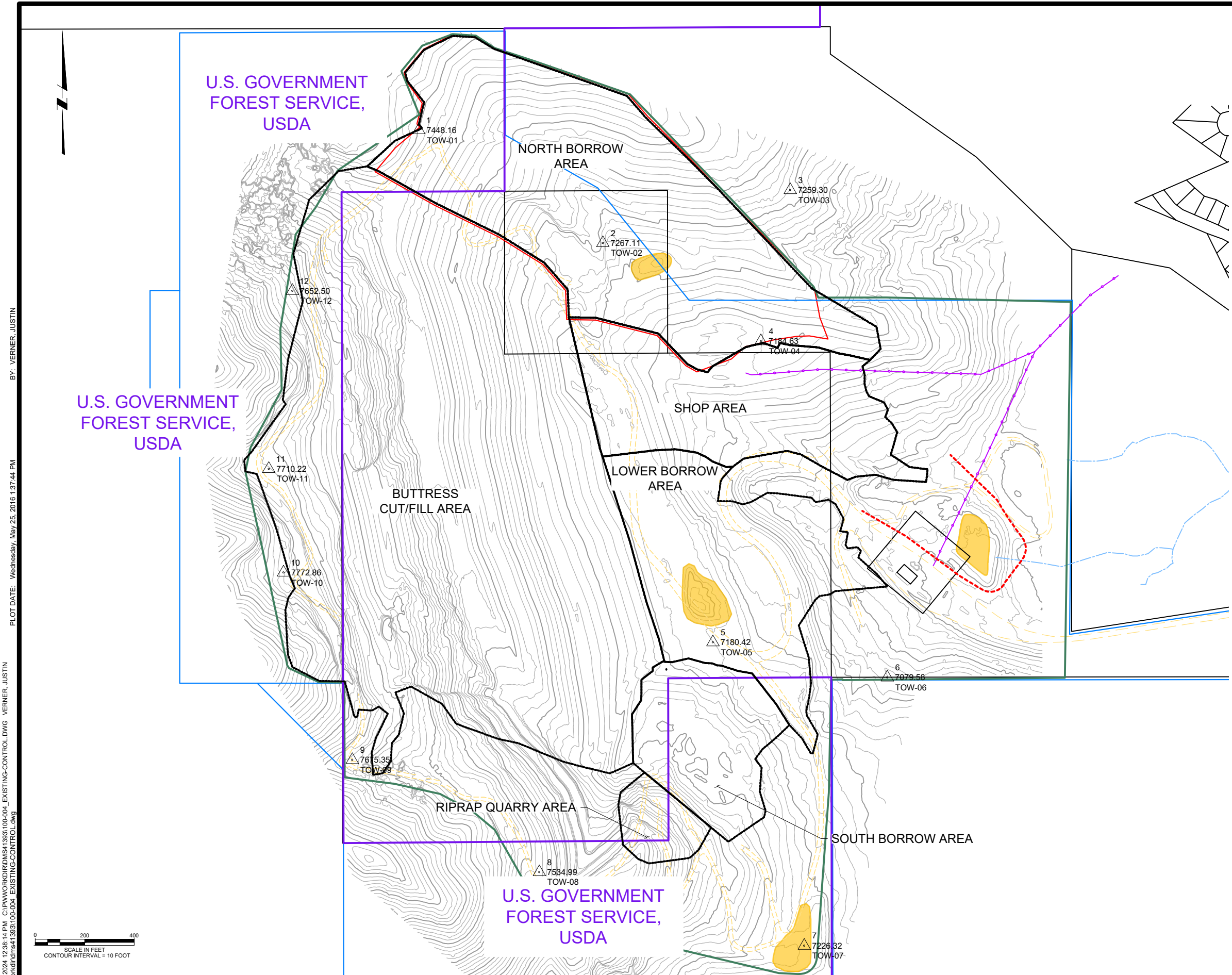
JobNumber



BY: VERNER, JUSTIN

PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM

Wednesday, April 3, 2024 12:34:58 PM C:\p\WORK\DRMS\41393100-003 SITEPLAN.DWG VERNER, JUSTIN
DWG FILE: C:\p\WORK\DRMS\41393100-003 SITEPLAN.dwg



LEGEND

- EXISTING CONTOURS
- AREA BOUNDARY
- EXISTING ROADS
- EXISTING BUILDING
- EXISTING POWER LINES
- EXISTING STREAMS
- EXISTING TOP SOIL STOCKPILE
- CDRMS PERMIT BOUNDARY
- CITY OF COLORADO SPRINGS PERMIT BOUNDARY
- LOWER BORROW AREA ADDITIONAL MATERIAL
- PRIME DESIGNATED WORK AREA
- PARCEL LINE
- USFS PROPERTY BOUNDARY

NOTES

- EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.
- DESIGN TOPOGRAPHY IS THE FINAL GRADE FOR TOPSOIL



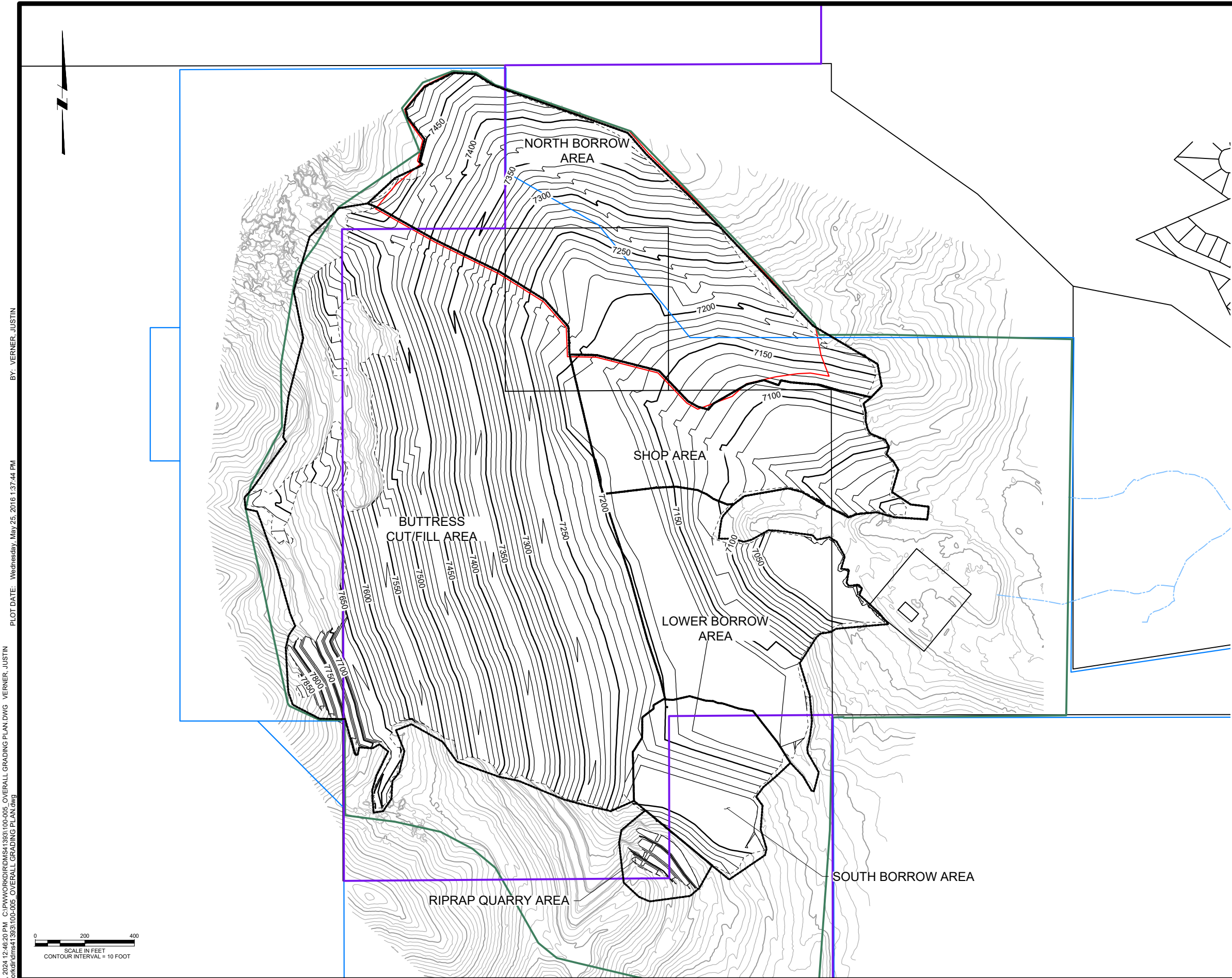
CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION (FT)	DESCRIPTION
1	1403340.35	3172780.52	7448.16	TOW-01
2	1402884.75	3173524.61	7267.11	TOW-02
3	1403098.91	3174281.57	7259.30	TOW-03
4	1402487.60	3174162.95	7184.63	TOW-04
5	1401271.01	3173969.48	7180.42	TOW-05
6	1401129.05	3174674.10	7079.58	TOW-06
7	1400045.02	3174338.42	7226.32	TOW-07
8	1400341.98	3173267.89	7534.99	TOW-08
9	1400795.80	3172512.04	7675.35	TOW-09
10	1401552.76	3172233.99	7772.86	TOW-10
11	1401971.86	3172174.20	7710.22	TOW-11
12	1402691.11	3172269.59	7652.50	TOW-12

Wednesday, April 3, 2024 12:38:14 PM C:\P\WORK\DRMS\41393\100-004_EXISTING-CONTROL.DWG VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\P\WORK\DRMS\41393\100-004_EXISTING-CONTROL.dwg

H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION
REV	DATE	BY	DESCRIPTION

SCALE	WARNING	DESIGNED <u>J. LEIDICH</u>
AS NOTED		DRAWN <u>J. VERNER</u>
		CHECKED <u>P. KOS</u>

PROJECT	SHEET
PIKEVIEW QUARRY RECLAMATION PROJECT	100-004
PROJECT SITE PLAN, EXISTING CONTOURS AND CONTROL POINTS	JobNumber



LEGEND

EXISTING CONTOURS

PROPOSED DESIGN CONTOURS

AREA BOUNDARY

EXISTING STREAMS

CDRMS PERMIT BOUNDARY

CITY OF COLORADO SPRINGS PERMIT BOUNDARY

USFS PROPERTY BOUNDARY

PRIME DESIGNATED WORK AREA

PARCEL LINE

1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER
DATE OF 02/28/2024.

Wednesday, April 3, 2024 12:46:20 PM C:\PIV\WORKDIR\DRMS41393\100-005 OVERALL GRADING PLAN.DWG VERNER, JUSTIN BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\PIV\WORKDIR\DRMS41393\100-005 OVERALL GRADING PLAN.dwg

REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

WARNING

0

1/2

1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED T. LEIDICH
DRAWN J. VERNER
CHECKED P. KQS

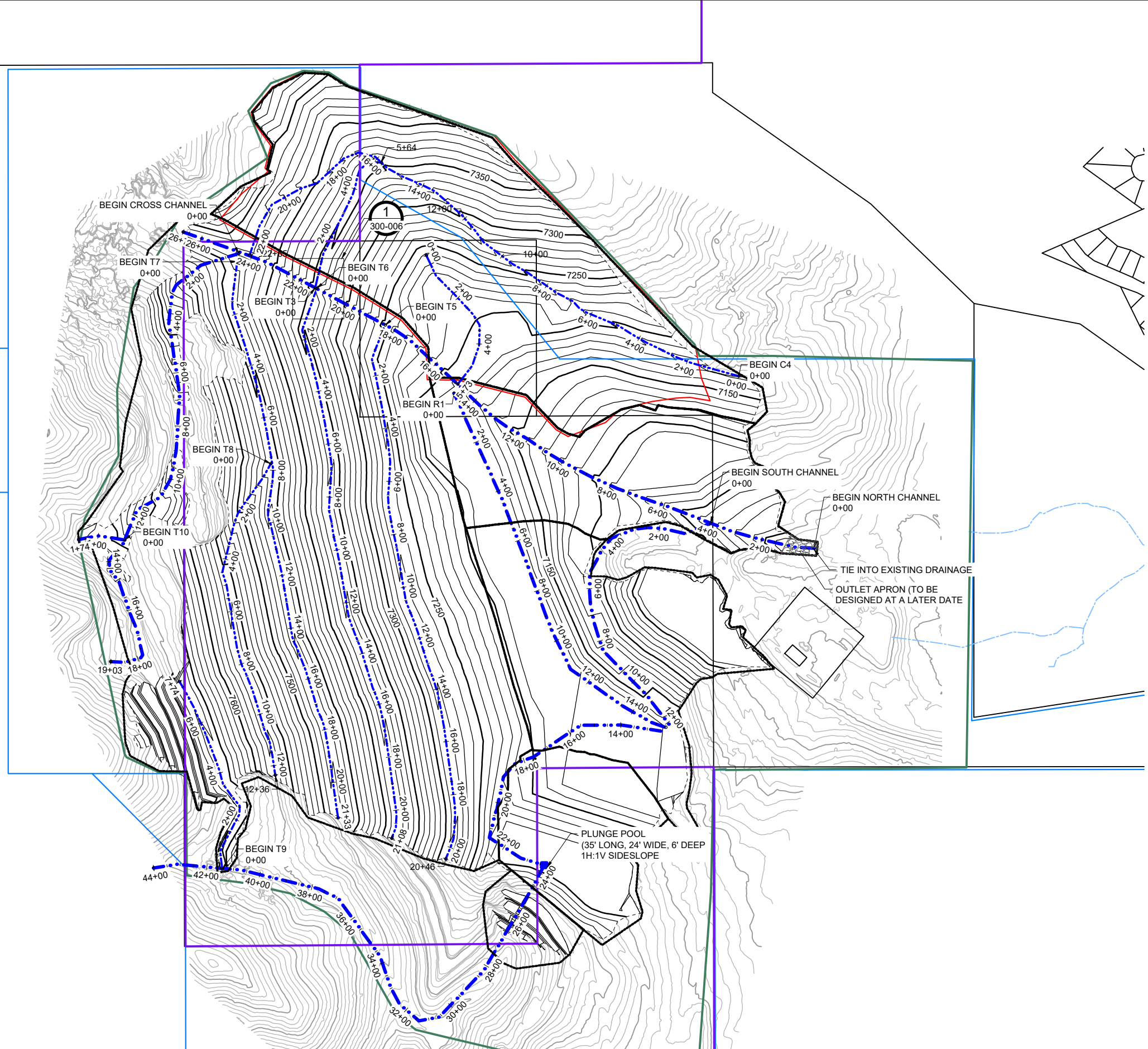


PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
OVERALL GRADING PLAN



SHEET
100-005
JobNumber

Wednesday, April 3, 2024 12:54:03 PM C:\PIWORK\DRMS41393100-006 OVERALL DRAINAGE PLAN.DWG VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Friday, January 13, 2023 9:20:59 AM
DWG FILE: C:\PIWORK\DRMS41393100-006 OVERALL DRAINAGE PLAN.dwg



LEGEND

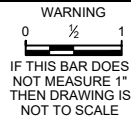
- EXISTING CONTOURS
- DESIGN CONTOURS
- AREA BOUNDARY
- MAIN CHANNEL
- MINOR CHANNEL
- EXISTING STREAMS
- CDRMS PERMIT BOUNDARY
- CITY OF COLORADO SPRINGS PERMIT BOUNDARY
- PRIME DESIGNATED WORK AREA
- USFS PROPERTY BOUNDARY
- PARCEL LINE

1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.



REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED



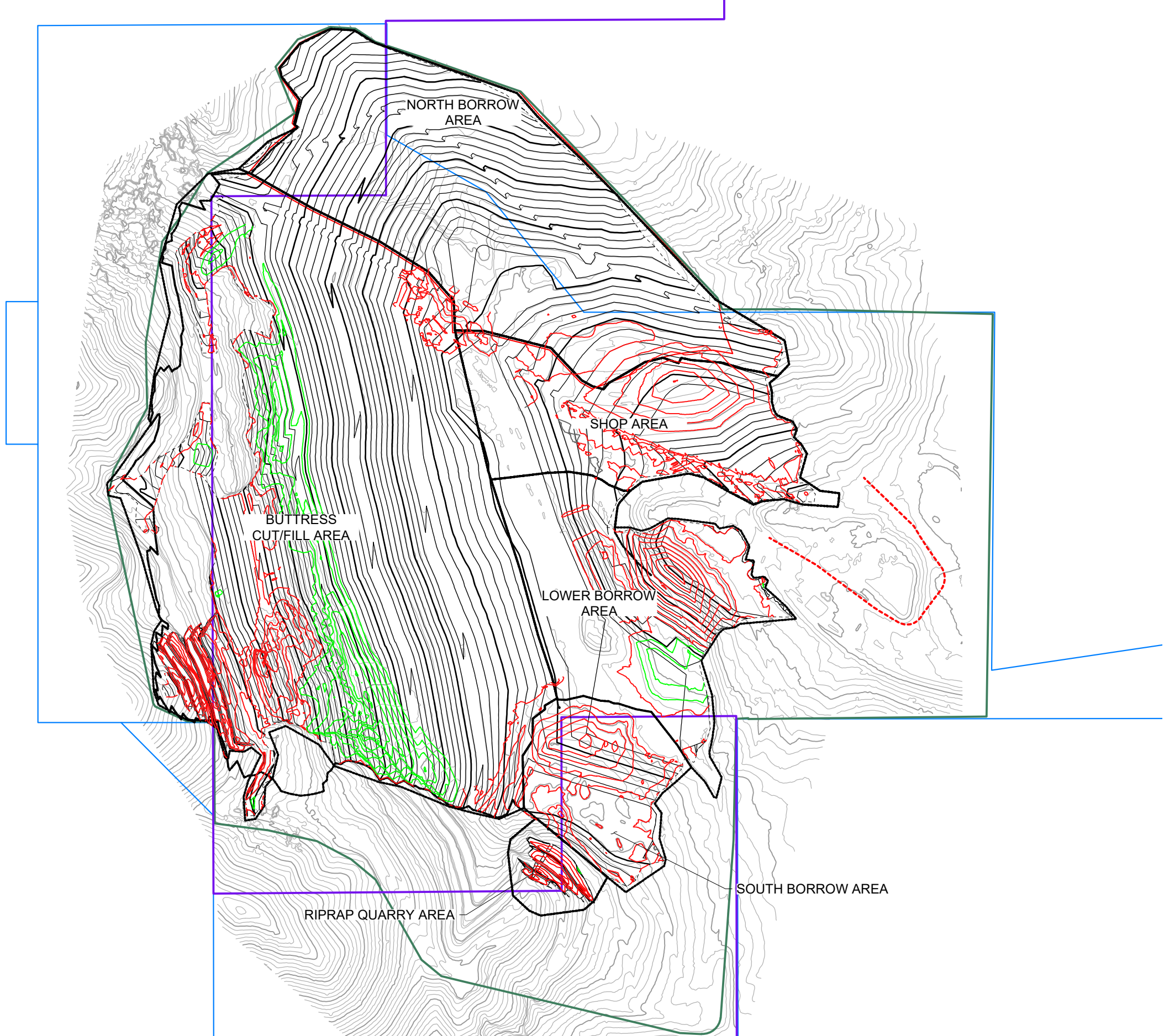
DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
OVERALL DRAINAGE PLAN

SHEET
100-006
JobNumber

Thursday, April 4, 2024 9:49:59 AM C:\P\WORK\ORDMS\1393100-007 OVERALL ISOPACH PLAN.DWG VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\P\WORK\ORDMS\1393100-007 OVERALL ISOPACH PLAN.dwg



LEGEND	
	EXISTING CONTOURS
	DESIGN CONTOURS
	AREA BOUNDARY
	ISOPACH CUT CONTOURS
	ISOPACH FILL CONTOURS
	CITY OF COLORADO SPRINGS PERMIT BOUNDARY
	CDRMS PERMIT BOUNDARY
	LOWER BORROW AREA ADDITIONAL MATERIAL
	PRIME DESIGNATED WORK AREA
	USFS PROPERTY BOUNDARY

NOTES	
1.	EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.

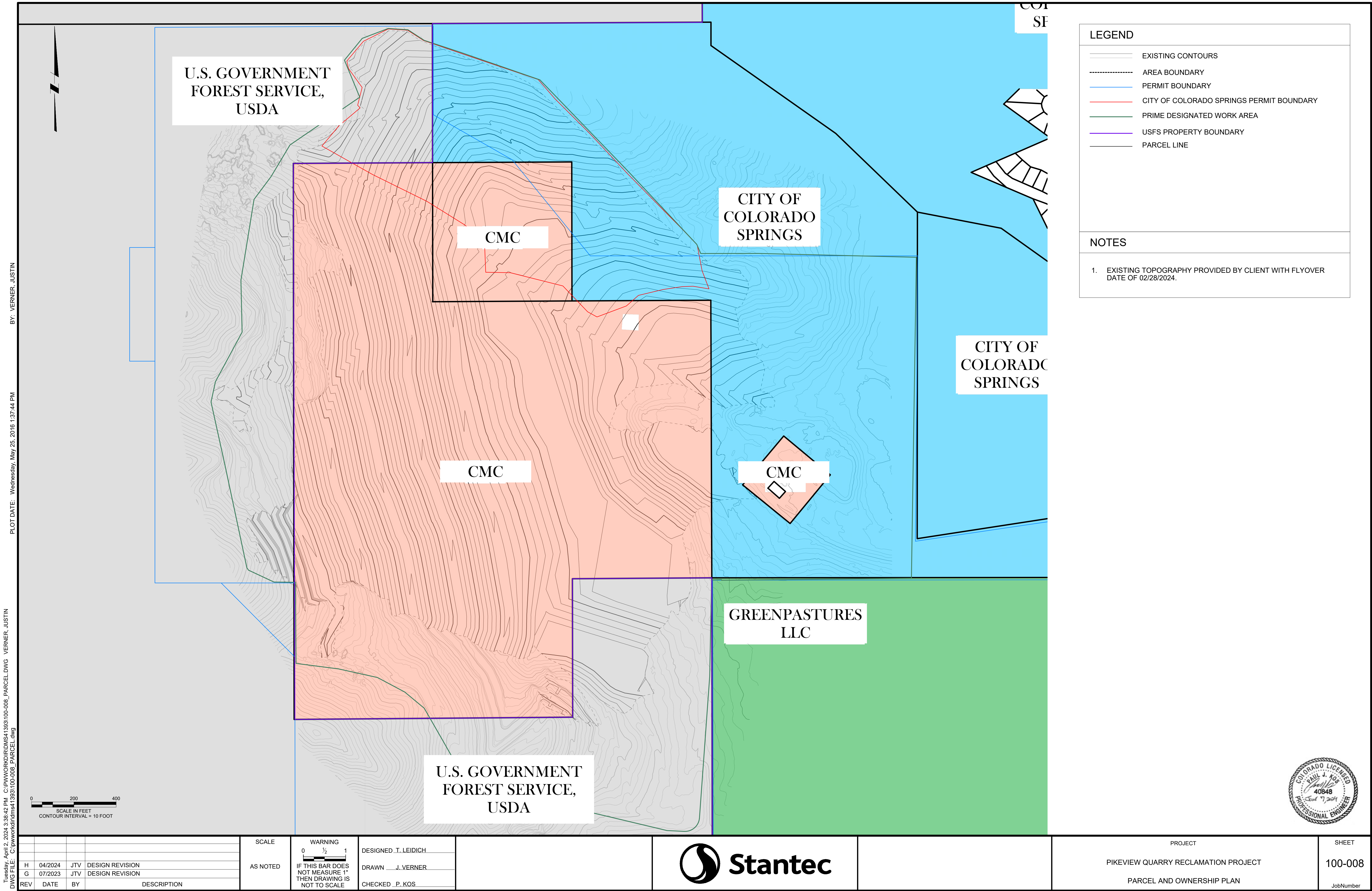


REV	DATE	BY	DESCRIPTION
G	04/2024	JTV	DESIGN REVISION
F	07/2023	JTV	DESIGN REVISION

SCALE	WARNING	DESIGNED <u>J. LEIDICH</u>
AS NOTED		DRAWN <u>J. VERNER</u>
		CHECKED <u>P. KOS</u>



PROJECT	SHEET
PIKEVIEW QUARRY RECLAMATION PROJECT	100-007
OVERALL CUT/FILL ISOPACH	JobNumber



Tuesday, April 2, 2024 3:38:42 PM C:\pwworkdir\dms4\393100-008_PARCEL.DWG VERNER, JUSTIN
DWG FILE: C:\pwworkdir\dms4\393100-008_PARCEL.dwg
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
BY: VERNER, JUSTIN

LEGEND

EXISTING CONTOURS

AREA BOUNDARY

PERMIT BOUNDARY

CITY OF COLORADO SPRINGS PERMIT BOUNDARY

PRIME DESIGNATED WORK AREA

USFS PROPERTY BOUNDARY

PARCEL LINE

NOTES

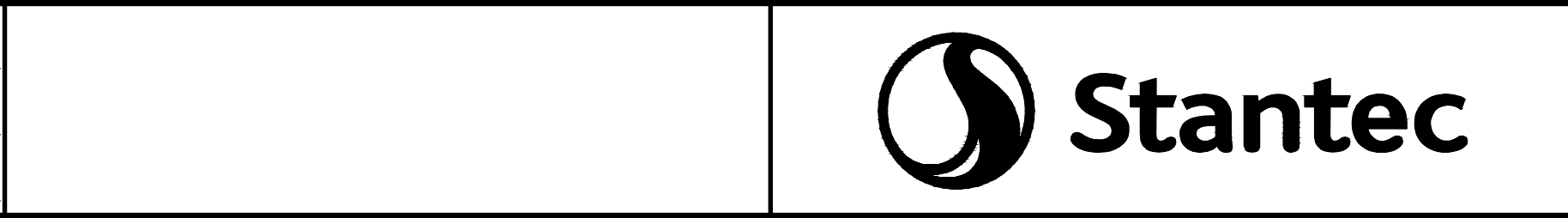
1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.

H	04/2024	JTV	DESIGN REVISION	
G	07/2023	JTV	DESIGN REVISION	
REV	DATE	BY	DESCRIPTION	

SCALE
AS NOTED

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

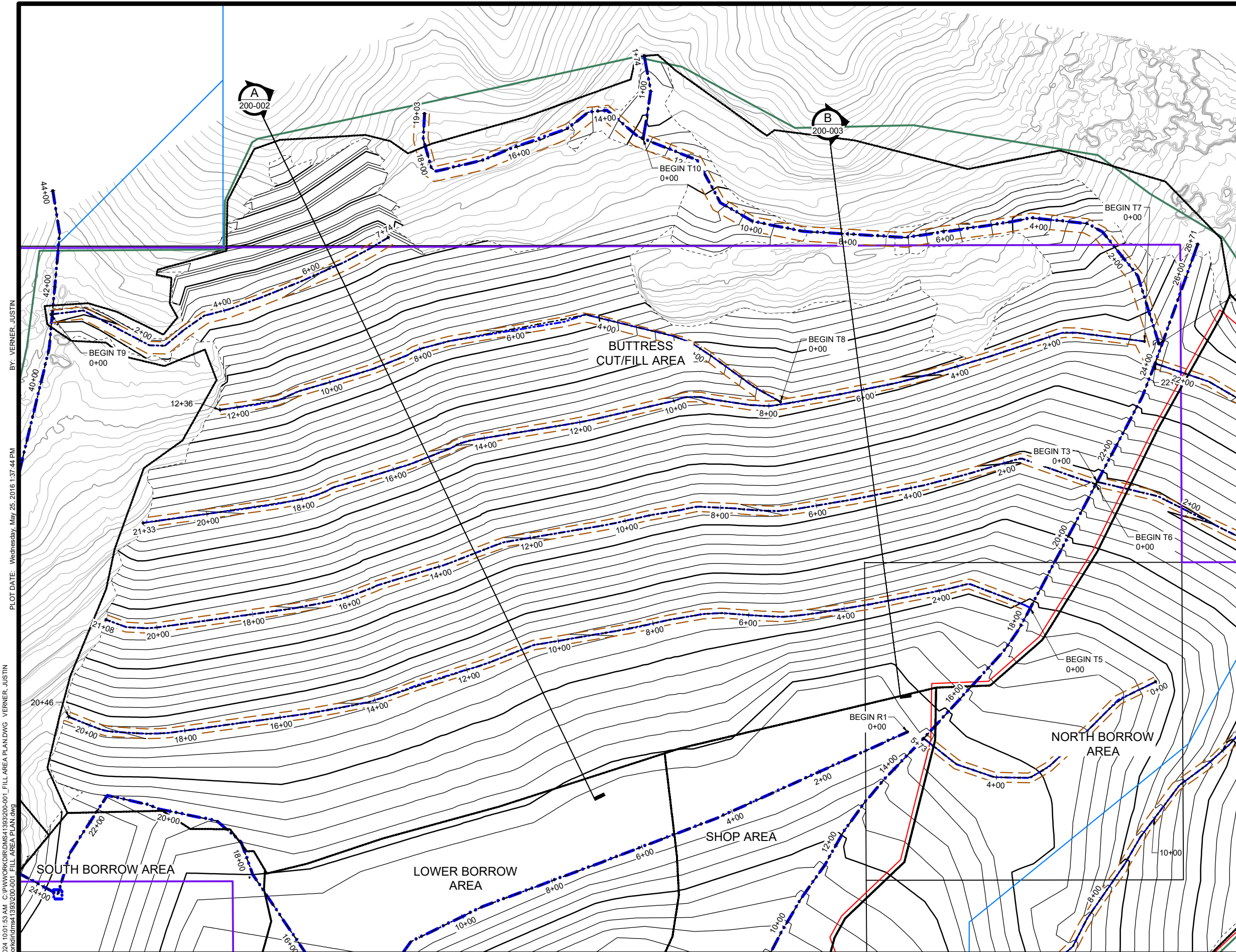
DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
PARCEL AND OWNERSHIP PLAN

SHEET
100-008
JobNumber





LEGEND

EXISTING CONTOURS

DESIGN CONTOURS

AREA BOUNDARY

ROAD

MAIN CHANNEL

MINOR CHANNEL

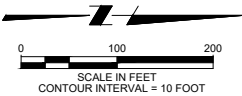
EXISTING POWER LINES

CDRMS PERMIT BOUNDARY

CITY OF COLORADO SPRINGS PERMIT BOUNDARY

USFS PROPERTY BOUNDARY

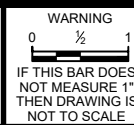
1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.



Thursday, April 4, 2024 10:01:53 AM C:\PIV\WORK\CDRMS\1393200-001_FILL AREA PLAN.DWG VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\work\cd\cdms\1393200-001_FILL AREA PLAN.dwg

REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED



DESIGNED T. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT

PIKEVIEW QUARRY RECLAMATION PROJECT

BUTTRUSS AREA GRADING PLAN

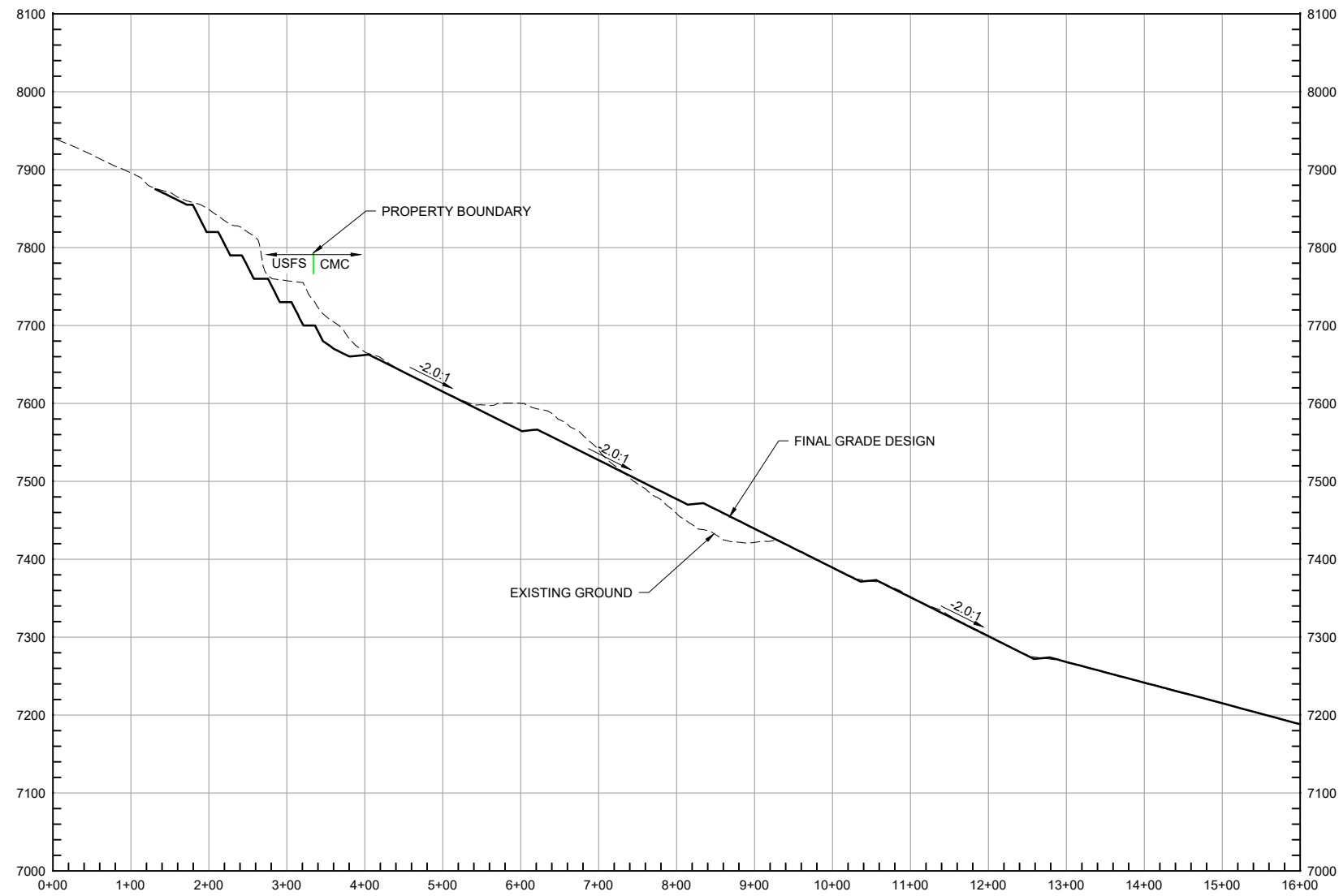
SHEET

200-001

JobNumber

Tuesday, April 2, 2024 5:34:19 PM C:\PIV\WORKDIR\DRMS\1393\200-001_FILL AREA PLAN.DWG VERNER, JUSTIN
DWG FILE: C:\PIV\WORKDIR\DRMS\1393\200-001_FILL AREA PLAN.DWG

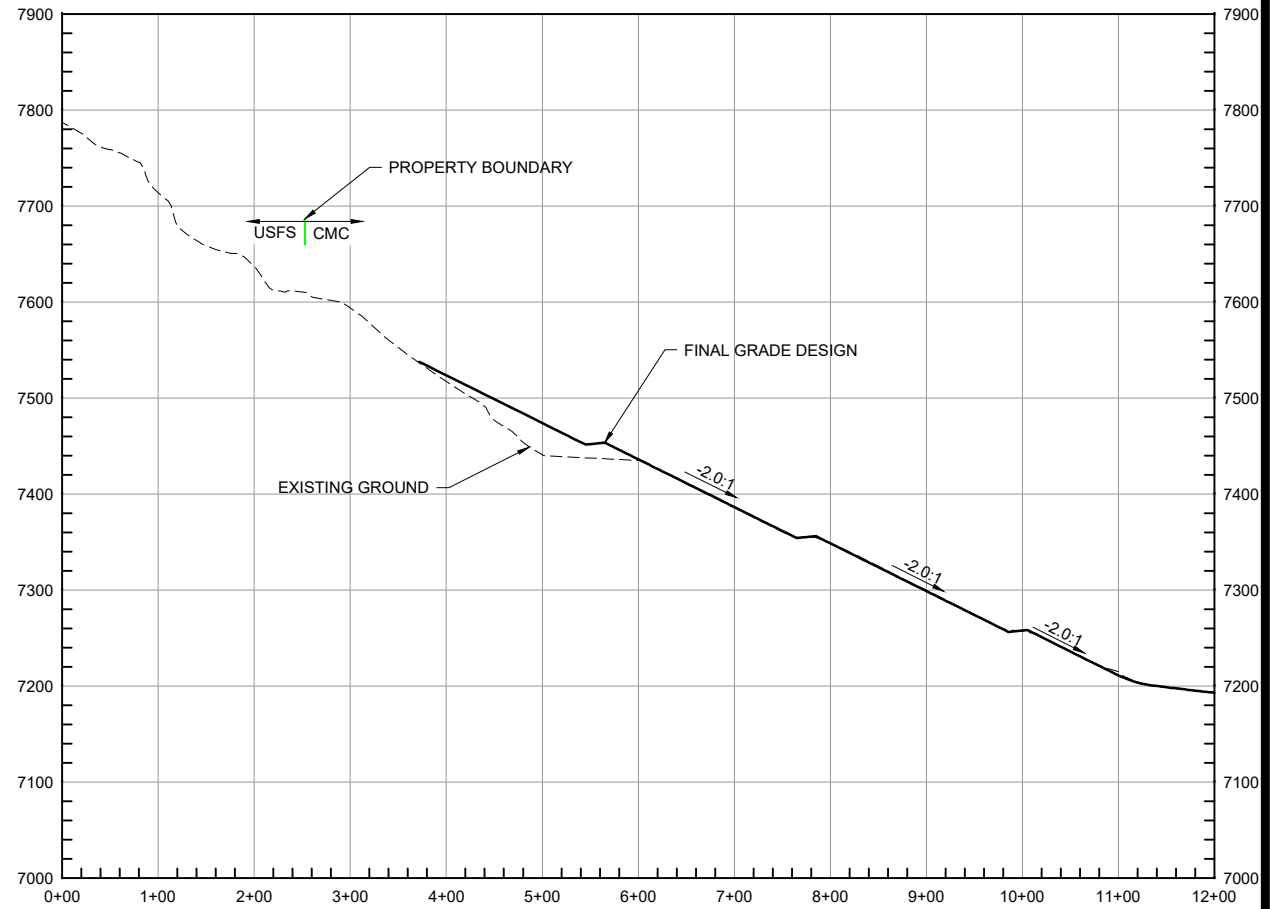
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM



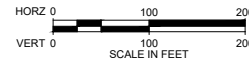
A SECTION
200-001



1. DESIGN SURFACE SHOWN IS FINAL GRADE SUBGRADE IS 6" LOWER.



B SECTION
200-001



REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

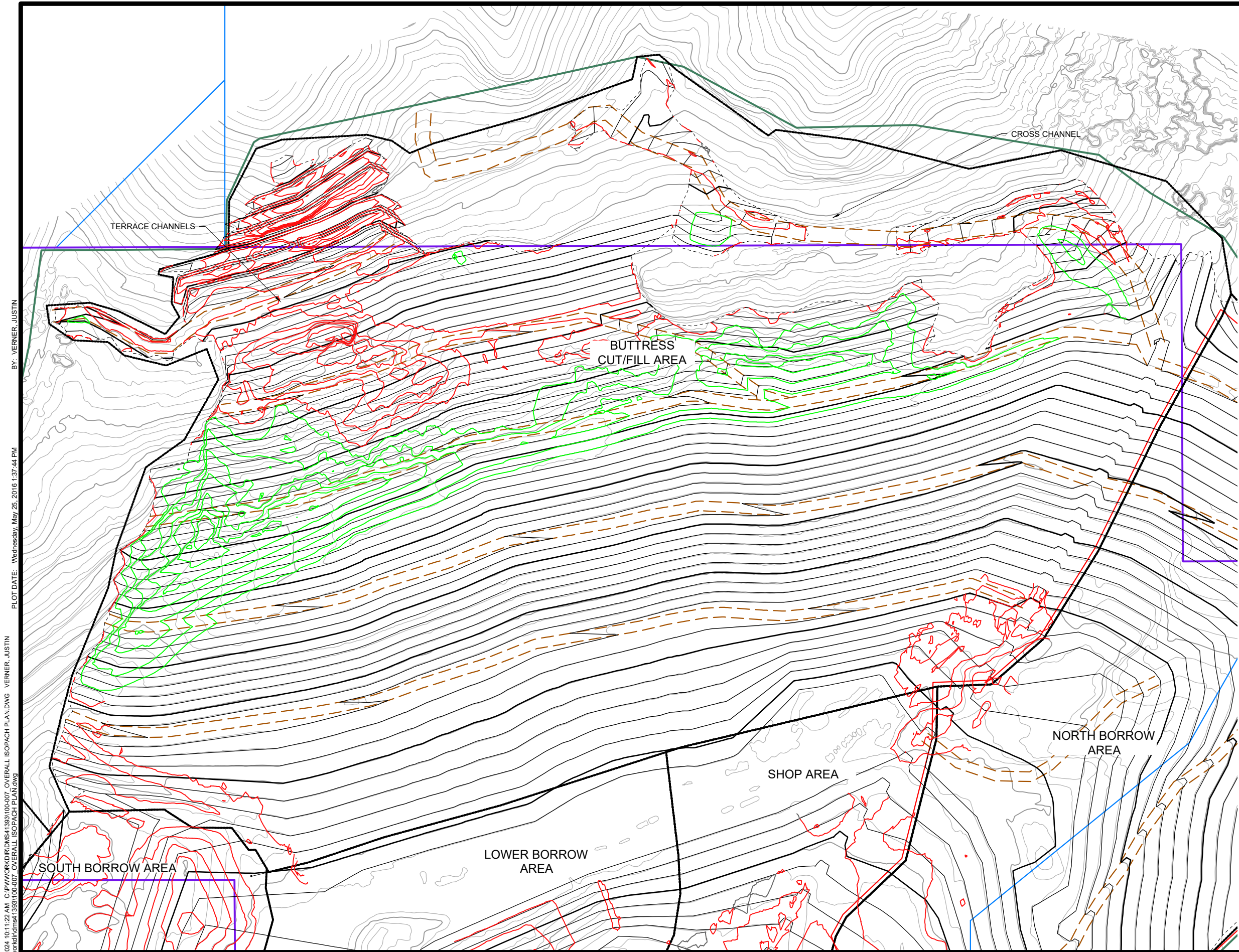
WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED T. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
OVERALL DRAINAGE PLAN

SHEET
200.002
JobNumber



LEGEND

EXISTING CONTOURS

DESIGN CONTOURS

AREA BOUNDARY

ISOPACH CUT CONTOURS

ISOPACH FILL CONTOURS

CITY OF COLORADO SPRINGS PERMIT BOUNDARY

CDRMS PERMIT BOUNDARY

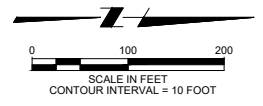
LOWER BORROW AREA ADDITIONAL MATERIAL

PRIME DESIGNATED WORK AREA

USFS PROPERTY BOUNDARY

NOTES

1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER
DATE OF 02/28/2024.



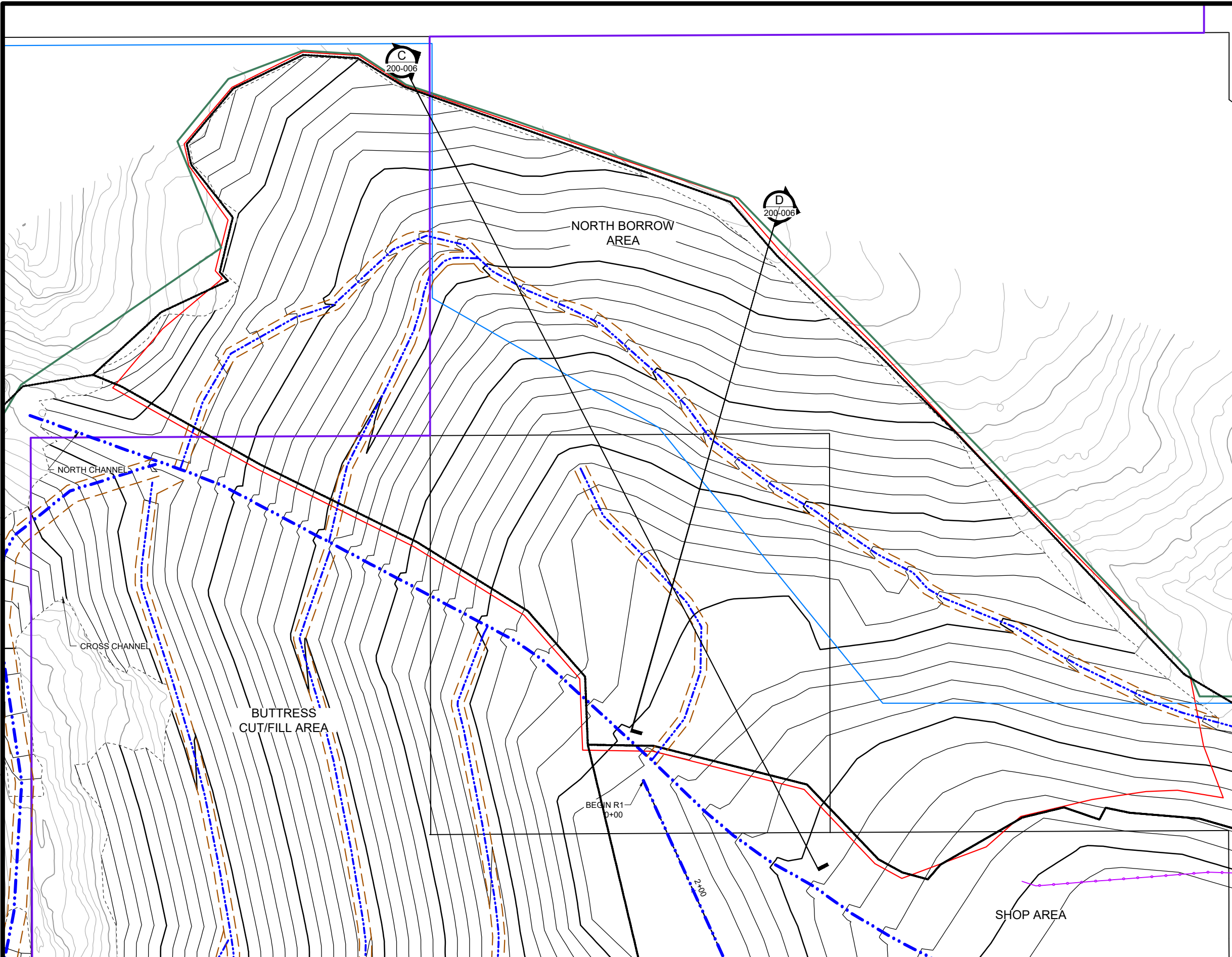
Thursday, April 4, 2024 10:11:22 AM C:\PIV\WORK\CDRMS\41393100-007 OVERALL ISOPACH PLAN.dwg VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\PIV\WORK\CDRMS\41393100-007 OVERALL ISOPACH PLAN.dwg

				SCALE AS NOTED	WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	DESIGNED <u>T. LEIDICH</u> DRAWN <u>J. VERNER</u> CHECKED <u>P. KOS</u>		PROJECT PIKEVIEW QUARRY RECLAMATION PROJECT BUTTRESS AREA CUT/FILL ISOPACH		SHEET 200-003 JobNumber
REV	DATE	BY	DESCRIPTION							
G	04/2024	JTV	DESIGN REVISION							
F	07/2023	JTV	DESIGN REVISION							

Thursday, April 4, 2024 10:08:37 AM C:\P\WORK\DIRMS4\393\200-005 NORTHERN BORROW AREA.DWG VERNER, JUSTIN
DWG FILE: C:\p\work\dirms4\393\200-005 NORTHERN BORROW AREA.dwg

BY: VERNER, JUSTIN

PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM



LEGEND

EXISTING CONTOURS

DESIGN CONTOURS

AREA BOUNDARY

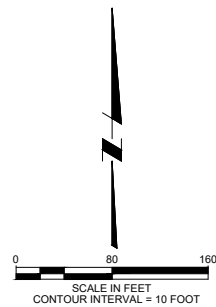
PROPOSED ROAD

MAIN CHANNEL

MINOR CHANNEL

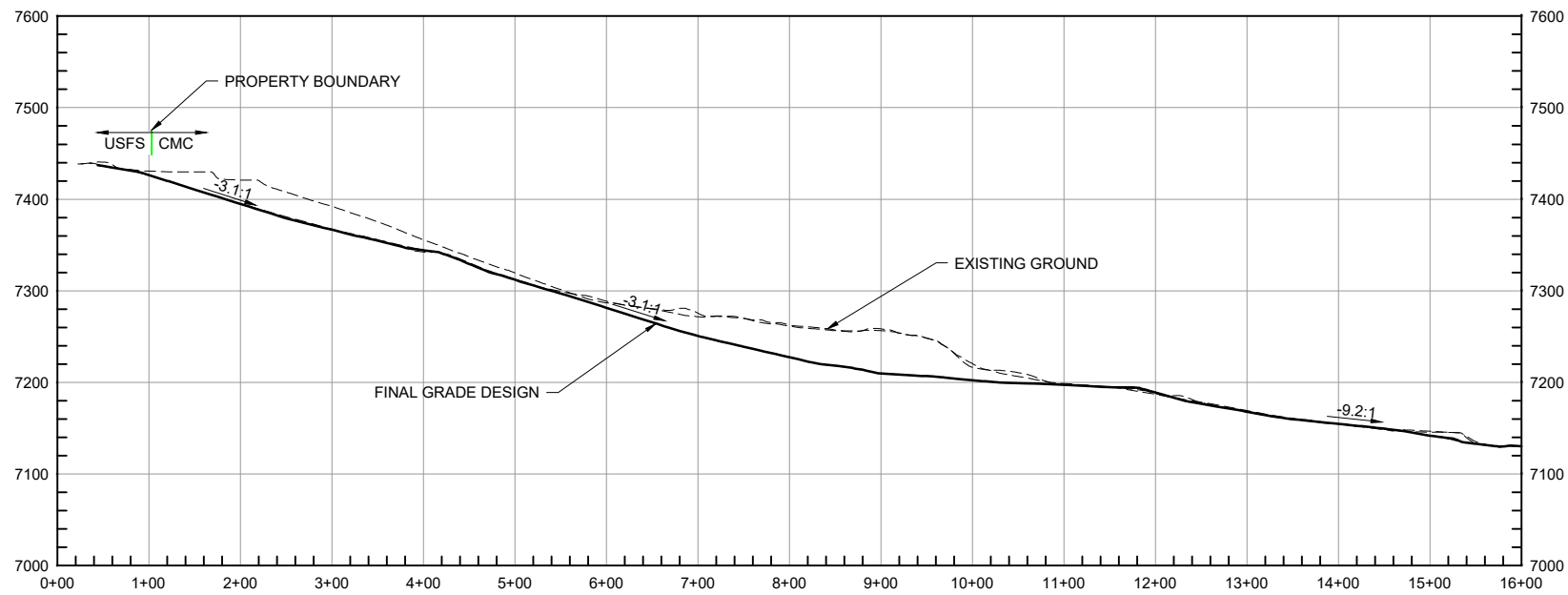
USFS PROPERTY BOUNDARY

1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.



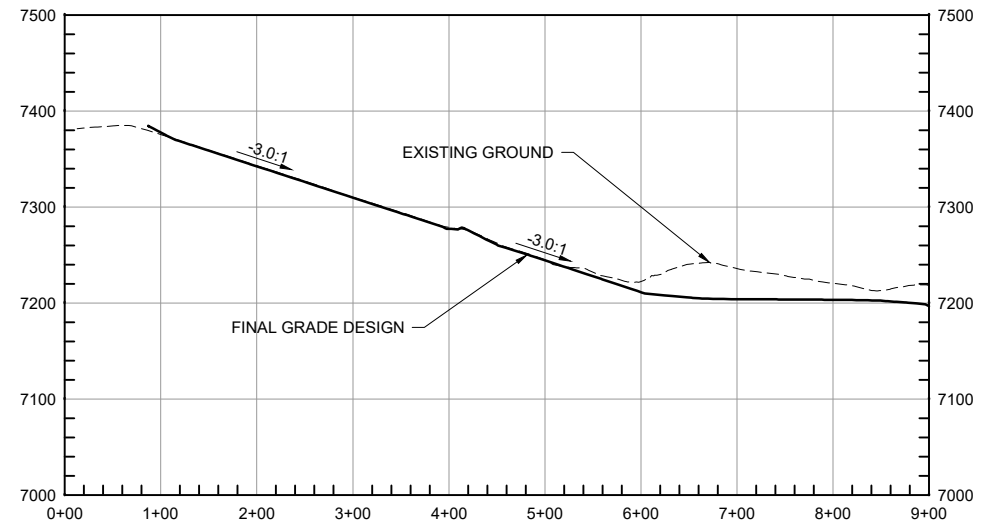
				SCALE	WARNING	DESIGNED <u>T. LEIDICH</u>		PROJECT PIKEVIEW QUARRY RECLAMATION PROJECT NORTHERN BORROW AREA GRADING PLAN	SHEET 200-004 Job Number	
				AS NOTED		DRAWN <u>J. VERNER</u>				
						CHECKED <u>P. KOS</u>				
REV	DATE	BY	DESCRIPTION							
H	04/2024	JTV	DESIGN REVISION							
G	07/2023	JTV	DESIGN REVISION							

Tuesday, April 2, 2024 5:50:54 PM C:\PIV\WORKDIR\DN\1393\200-005 NORTHERN BORROW AREA\DWG VERNER, JUSTIN BY: VERNER, JUSTIN
DWG FILE: C:\PIV\WORKDIR\DN\1393\200-005 NORTHERN BORROW AREA.dwg PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM



C SECTION
200-005

HORIZ 0 100 200
VERT 0 100 200
SCALE IN FEET



D SECTION
200-005

HORIZ 0 100 200
VERT 0 100 200
SCALE IN FEET



REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

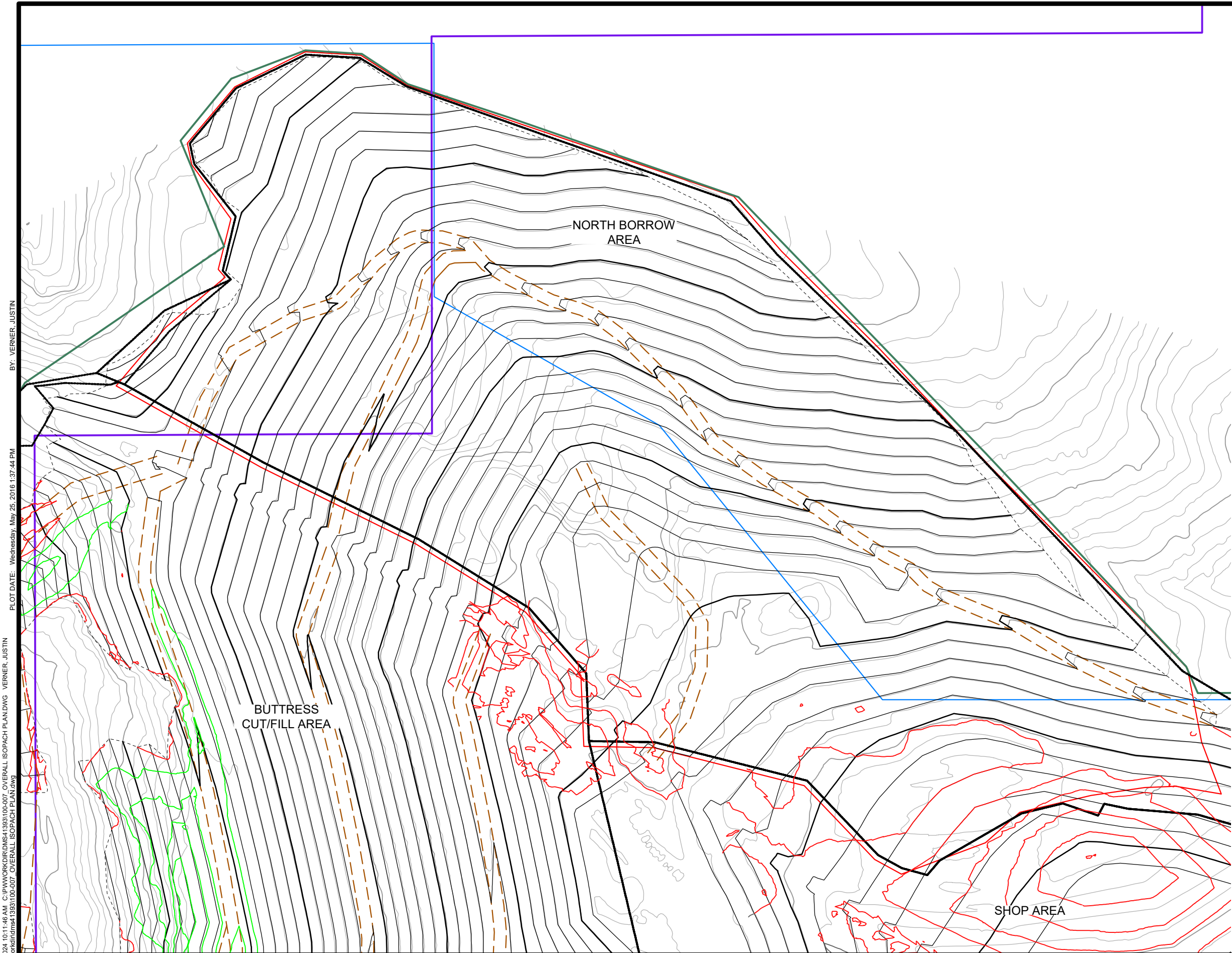
WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
NORTHERN BORROW AREA SECTIONS

SHEET
200.005
JobNumber



LEGEND

EXISTING CONTOURS

DESIGN CONTOURS

AREA BOUNDARY

ISOPACH CUT CONTOURS

ISOPACH FILL CONTOURS

CITY OF COLORADO SPRINGS PERMIT BOUNDARY

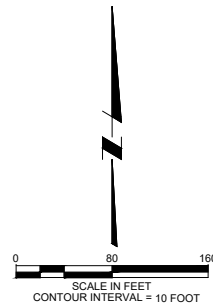
CDRMS PERMIT BOUNDARY

LOWER BORROW AREA ADDITIONAL MATERIAL

PRIME DESIGNATED WORK AREA

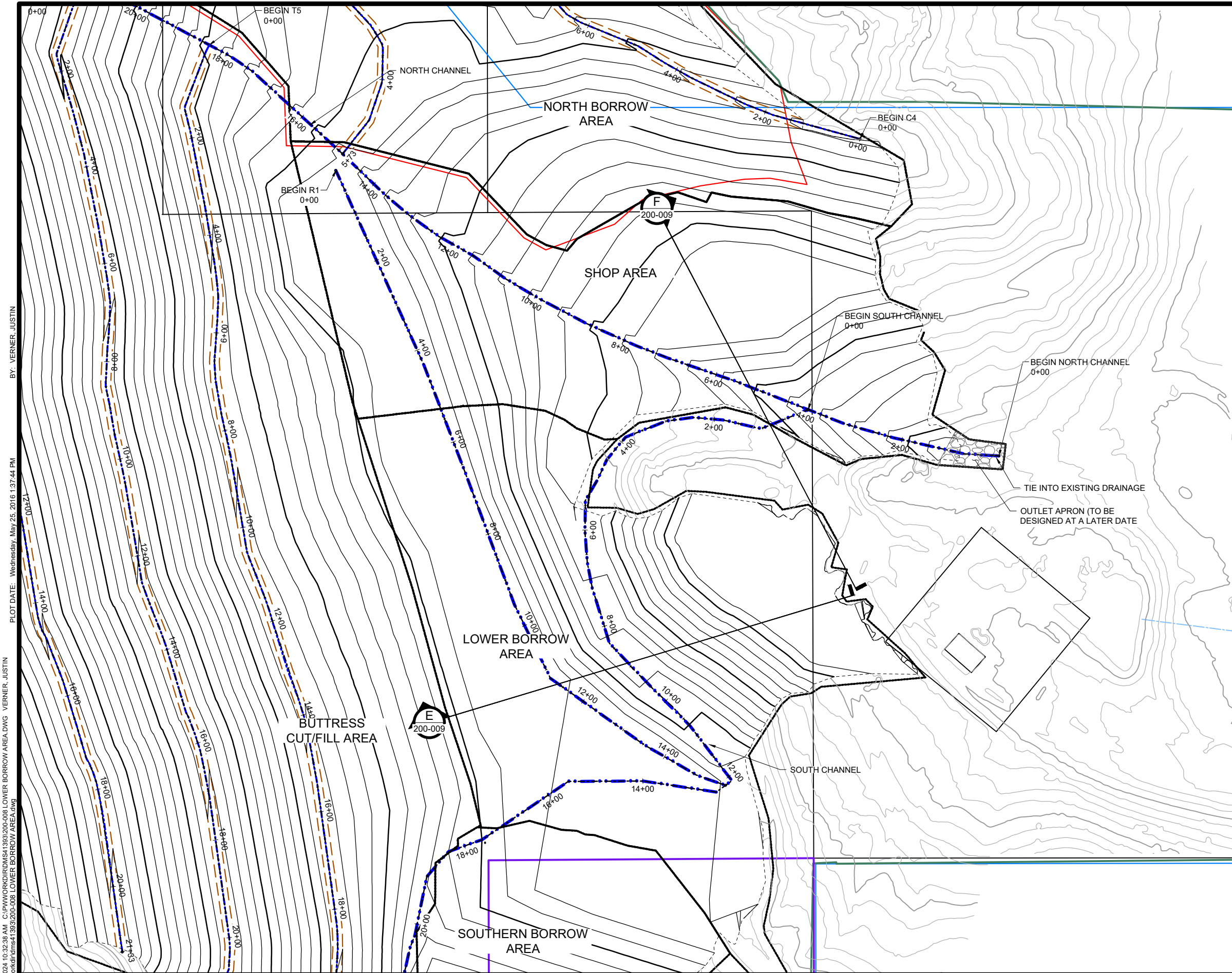
USFS PROPERTY BOUNDARY

NOTES

1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER
DATE OF 02/28/2024.

Thursday, April 4, 2024 10:11:46 AM C:\PIV\WORK\CDRMS\41393100-007 OVERALL ISOPACH PLANDWG VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\work\drms\41393100-007 OVERALL ISOPACH PLAN.dwg

				SCALE	WARNING	DESIGNED <u>T. LEIDICH</u>		PROJECT		SHEET	
				AS NOTED		DRAWN <u>J. VERNER</u>		PIKEVIEW QUARRY RECLAMATION PROJECT		200-006	
						CHECKED <u>P. KOS</u>		NORTHERN BORROW AREA CUT/FILL ISOPACH		JobNumber	
REV	DATE	BY	DESCRIPTION								
G	04/2024	JTV	DESIGN REVISION								
F	07/2023	JTV	DESIGN REVISION								



LEGEND

EXISTING CONTOURS

DESIGN CONTOURS

AREA BOUNDARY

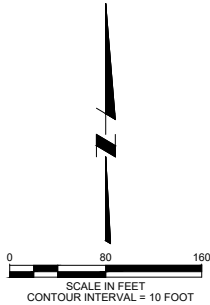
PROPOSED ROAD

MAIN CHANNEL

MINOR CHANNEL

USFS PROPERTY BOUNDARY

1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER
DATE OF 02/28/2024.



REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

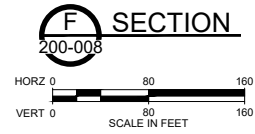
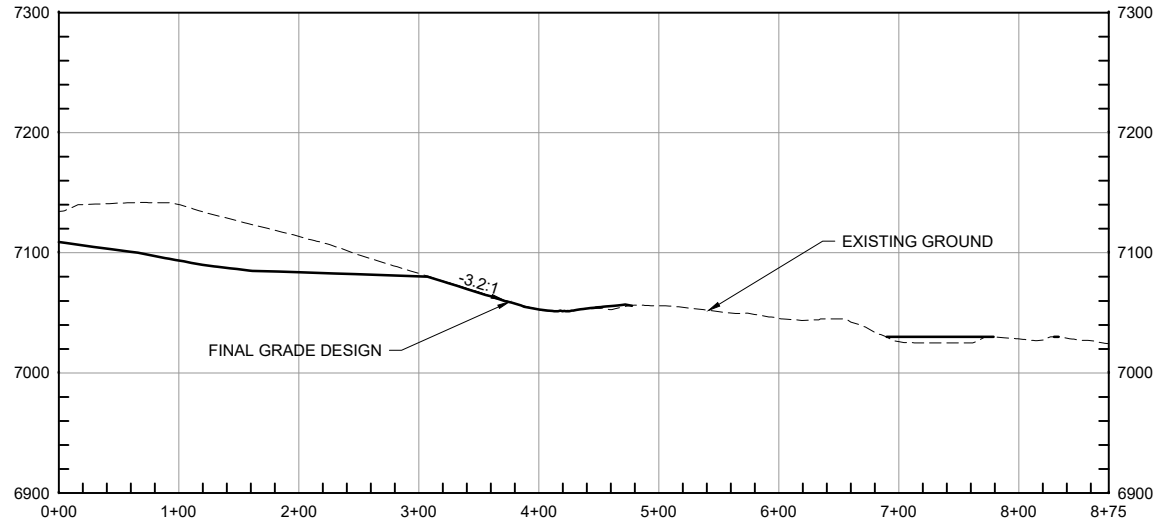
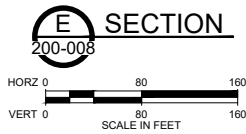
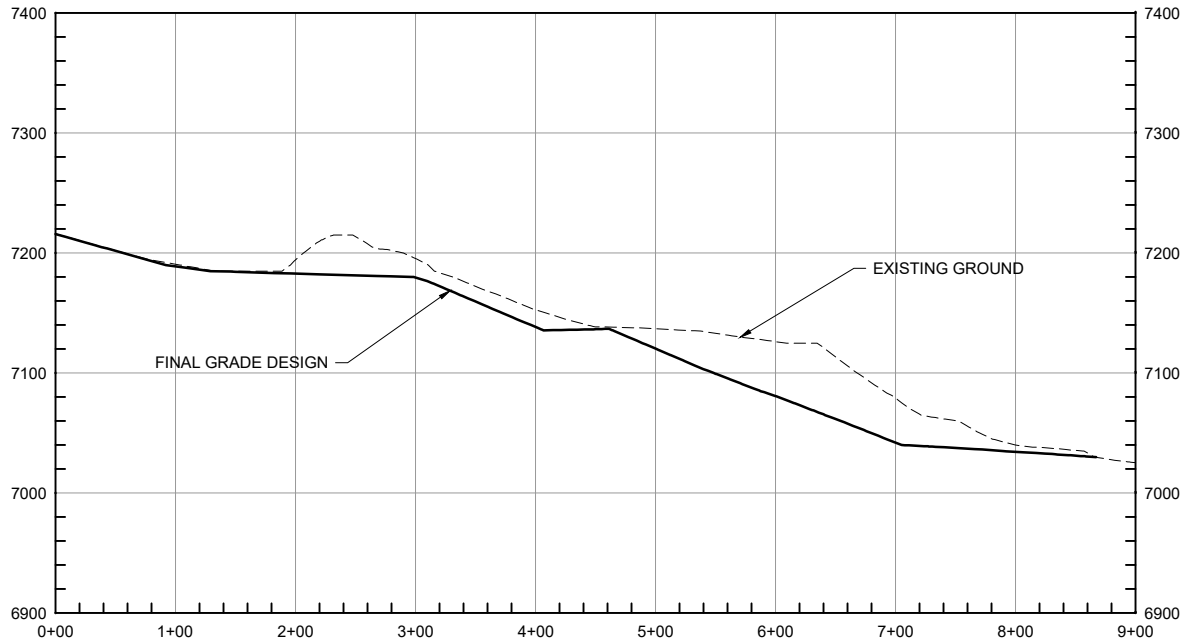
DESIGNED T. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
LOWER BORROW AREA GRADING PLAN

SHEET
200-007
JobNumber

Tuesday, April 2, 2024 7:10:06 PM C:\PIV\WORKDIR\DN\1393\200-008 LOWER BORROW AREA.DWG VERNER, JUSTIN BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\PIV\WORKDIR\DN\1393\200-008 LOWER BORROW AREA.dwg



REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

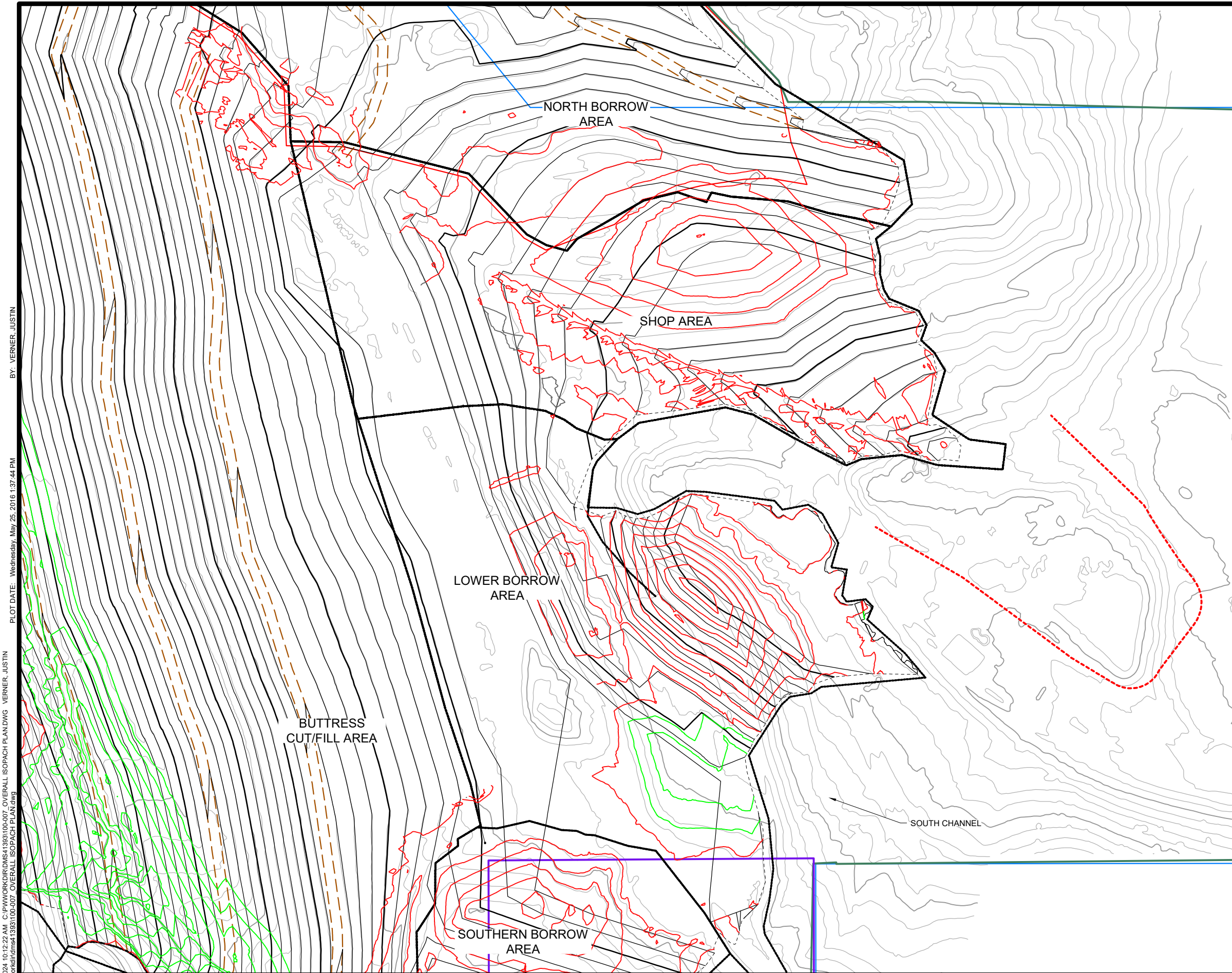
WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



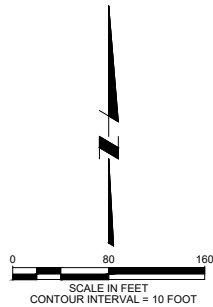
PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
LOWER BORROW AREA SECTIONS

SHEET
200.008
JobNumber



LEGEND	
	EXISTING CONTOURS
	DESIGN CONTOURS
	AREA BOUNDARY
	ISOPACH CUT CONTOURS
	ISOPACH FILL CONTOURS
	CITY OF COLORADO SPRINGS PERMIT BOUNDARY
	CDRMS PERMIT BOUNDARY
	LOWER BORROW AREA ADDITIONAL MATERIAL
	PRIME DESIGNATED WORK AREA
	USFS PROPERTY BOUNDARY

NOTES	
1.	EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.



Thursday, April 4, 2024 10:12:22 AM C:\PIV\WORK\CDRMS\1393100-007 OVERALL ISOPACH PLAN.dwg VERNER, JUSTIN BY: VERNER, JUSTIN
DWG FILE: C:\PIV\WORK\CDRMS\1393100-007 OVERALL ISOPACH PLAN.dwg PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM

REV	DATE	BY	DESCRIPTION
G	04/2024	JTV	DESIGN REVISION
F	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED <u>J. LEIDICH</u>
DRAWN <u>J. VERNER</u>
CHECKED <u>P. KOS</u>

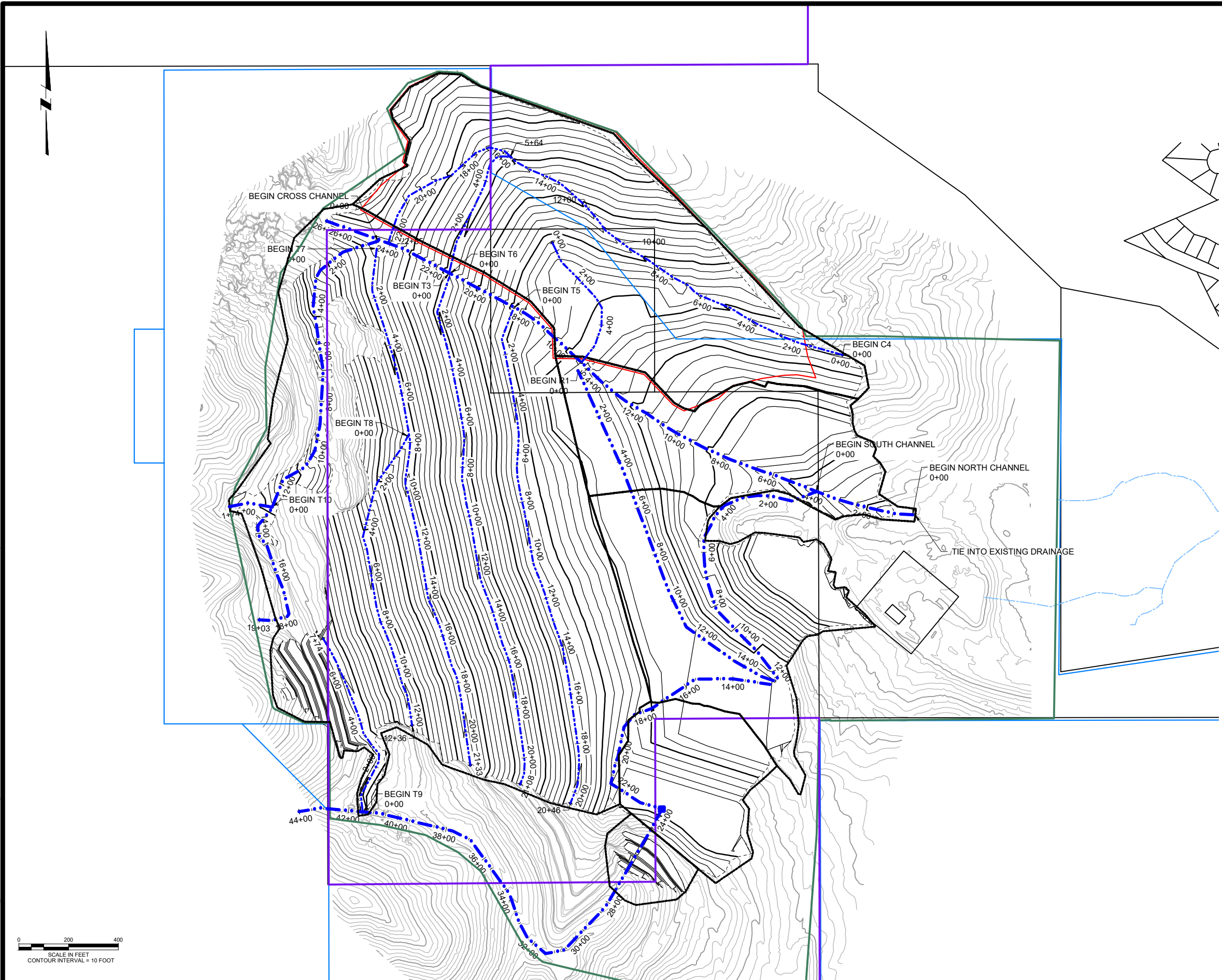


PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
LOWER BORROW AREA CUT/FILL ISOPACH

SHEET
200-009
JobNumber

Wednesday, June 5, 2024 12:13:52 PM C:\PIV\WORK\PIV\QMS4\393\300-002 OVERALL CHANNEL PLAN.DWG VERNER, JUSTIN BY: VERNER, JUSTIN PLOT DATE: Wednesday, November 15, 2023 8:41:47 AM

DWG FILE: C:\PIV\WORK\PIV\QMS4\393\300-002 OVERALL CHANNEL PLAN.dwg



LEGEND

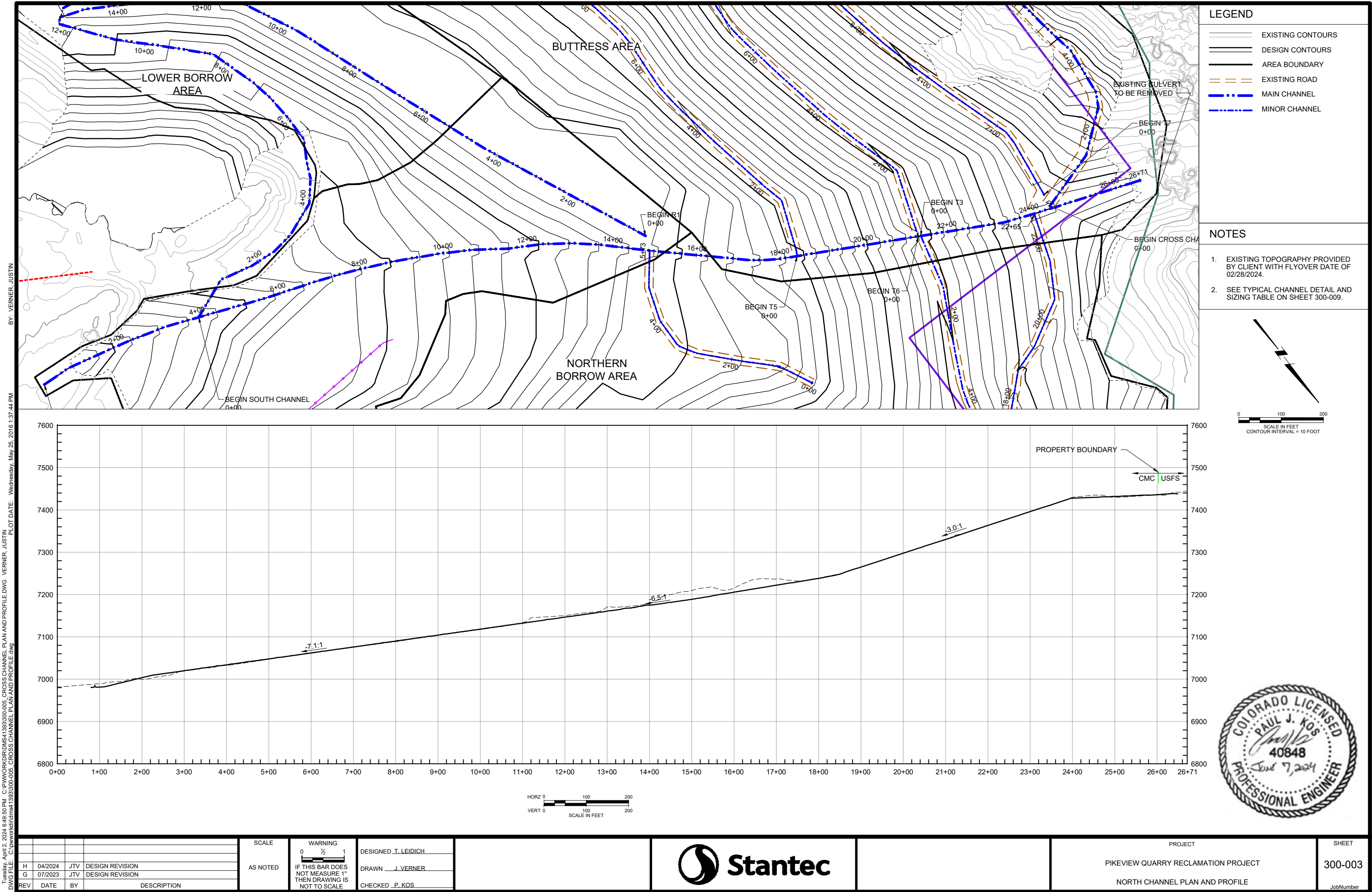
- EXISTING CONTOURS
- DESIGN CONTOURS
- AREA BOUNDARY
- MAIN CHANNEL
- MINOR CHANNEL
- USFS PROPERTY BOUNDARY

NOTE

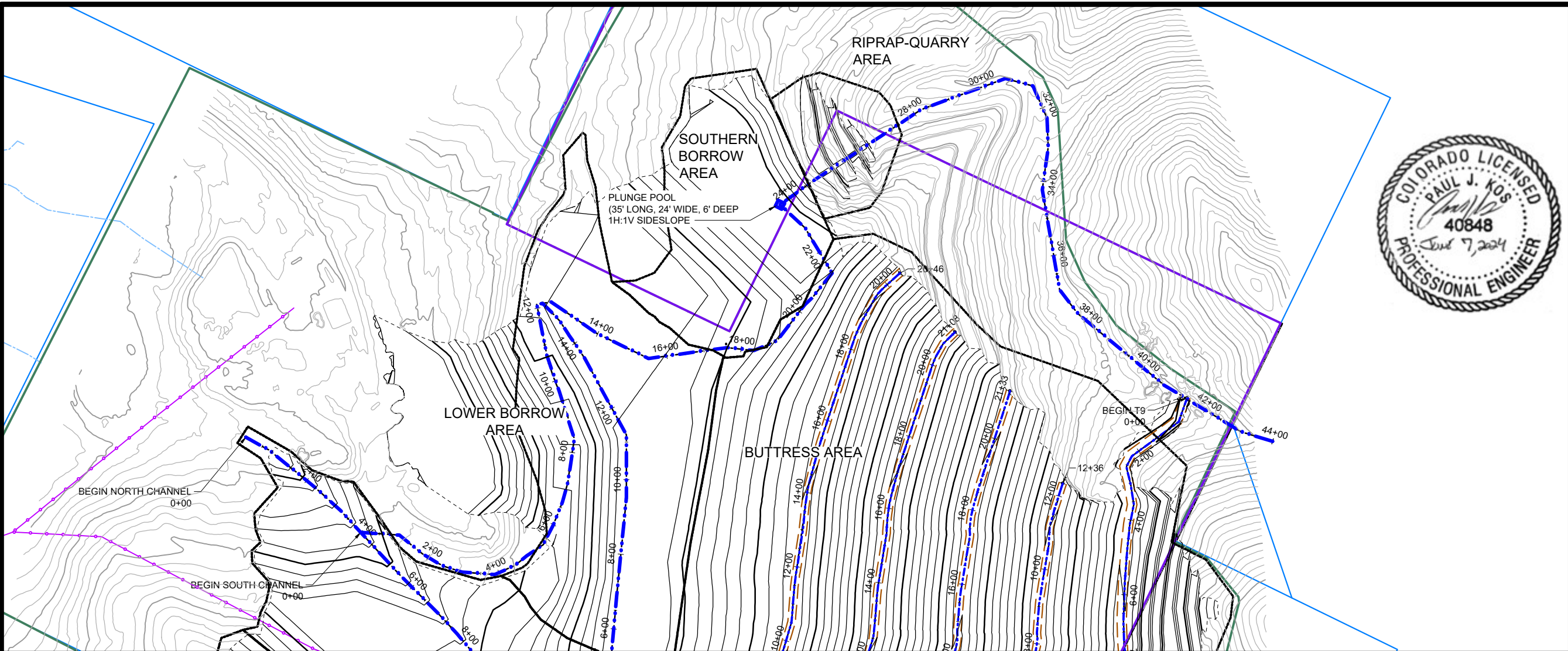
1. EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.



				SCALE	WARNING				PROJECT		SHEET
J	06/2024	JTV	ANNOTATION REVISION	AS NOTED		DESIGNED <u>T. LEIDICH</u>	PIKEVIEW QUARRY RECLAMATION PROJECT		300-001		
H	04/2024	JTV	DESIGN REVISION		IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	DRAWN <u>J. VERNER</u>					
G	07/2023	JTV	DESIGN REVISION			CHECKED <u>P. KOS</u>					
REV	DATE	BY	DESCRIPTION						JobNumber		



Tuesday, April 2, 2024 6:49:19 PM C:\P\WORKDIR\DIRMS\1393300-005 CROSS CHANNEL PLAN AND PROFILE.DWG VERNER, JUSTIN
BY: VERNER, JUSTIN
PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM
DWG FILE: C:\p\workdir\dirms\1393300-005 CROSS CHANNEL PLAN AND PROFILE.dwg

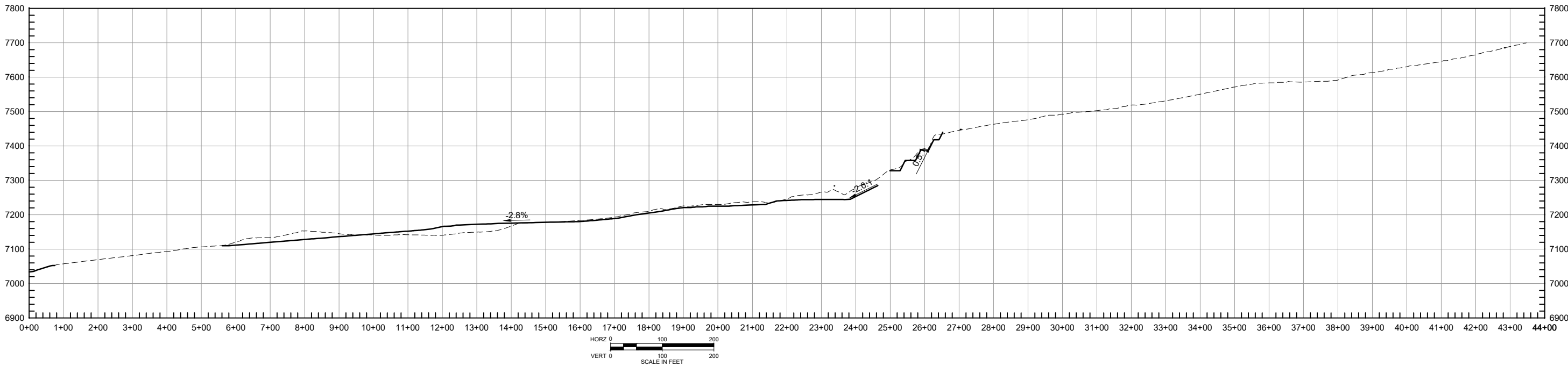
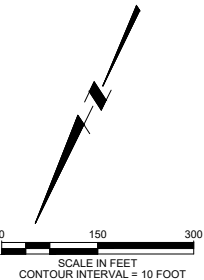


LEGEND

- EXISTING CONTOURS
- DESIGN CONTOURS
- AREA BOUNDARY
- EXISTING ROAD
- MAIN CHANNEL
- MINOR CHANNEL

NOTES

- EXISTING TOPOGRAPHY PROVIDED BY CLIENT WITH FLYOVER DATE OF 02/28/2024.
- SEE TYPICAL CHANNEL DETAIL AND SIZING TABLE ON SHEET 300-009.



REV	DATE	BY	DESCRIPTION
H	04/2024	JTV	DESIGN REVISION
G	07/2023	JTV	DESIGN REVISION

SCALE
AS NOTED

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

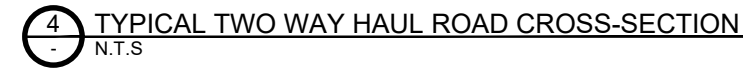
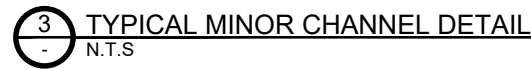
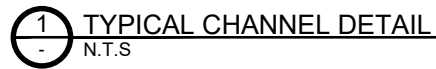
DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
SOUTH CHANNEL PLAN AND PROFILE

SHEET
300-004
JobNumber

Tuesday, April 2, 2024 4:34:14 PM C:\P\WORKDIR\DMS413933\300-009_TYPICAL CHANNEL DETAILS.DWG VERNER, JUSTIN
DWG FILE: C:\p\work\dir\dms413933\300-009_TYPICAL CHANNEL DETAILS.dwg



Channel Sizing Table												
Channel	Channel Depth	Channel Lining	Bottom width [ft]	Left Side Slope [xH:1V]	Right Side Slope [xH:1V]	Initial Station	Terminating Station	Channel Length	Rock D50 [inch]	"Riprap Layer Thickness (2 x D50) [ft]"	Minimum Channel Slope [%]	Maximum Channel Slope [%]
Cross Channel 1	2.0	Riprap	10.0	2.0	2.0	0+00	8+92	892.0000	12.0000	2.0000	11	33
Cross Channel 2	2.0	Riprap	5.0	2.0	2.0	8+92	13+00	408.0000	12.0000	2.0000	7	23
Cross Channel 3	2.0	Riprap	5.0	2.0	2.0	13+00	19+03	603.0000	6.0000	1.0000	2	17
Channel T9	2.0	Riprap	5.0	2.0	2.0	0+00	7+74	774.0000	3.0000	0.5000	2	4
Channel T8 Upper	2.0	Riprap	0.0	2.0	10.0	0+00	4+50	450.0000	3.0000	0.5000	2	2
Channel T8 Steep	2.0	Riprap	0.0	2.0	10.0	4+50	12+36	786.0000	12.0000	2.0000	23	23
Channel T7 Upper	2.0	Riprap	0.0	2.0	10.0	7+75	21+33	1358.0000	3.0000	0.5000	2	2
Channel T7 Lower	2.0	Riprap	0.0	2.0	10.0	0+00	7+75	775.0000	6.0000	1.0000	2	2
T10	2.0	Riprap	5.0	2.0	2.0	-	-	162.0000	12.0000	2.0000	6	25
Upper South Channel	2.0	Rockcut	10.0	2.0	2.0	22+73	43+07	2034.0000	N/A	N/A	N/A	N/A
Lower North Channel	2.5	Riprap	20.0	2.0	2.0	0+00	4+00	400.0000	18.0000	3.0000	14	14
Lower Middle North Channel	2.5	Riprap	20.0	2.0	2.0	4+00	14+00	1000.0000	12.0000	2.0000	13	14
Middle North Channel	2.5	Riprap	20.0	2.0	2.0	14+00	18+00	400.0000	18.0000	3.0000	15	18
Upper Middle North Channel	2.5	Riprap	20.0	2.0	2.0	18+00	24+00	600.0000	24.0000	4.0000	25	36
Upper North Channel	2.5	Riprap	20.0	2.0	2.0	24+00	26+00	200.0000	12.0000	2.0000	15	19
Lower South Channel 1	2.3	Riprap	10.0	2.0	2.0	0+00	2+00	200.0000	18.0000	3.0000	5	25
Lower South Channel 2	2.3	Riprap	10.0	2.0	2.0	2+00	11+64.54	964.5000	12.0000	2.0000	10	12
Middle South Channel	2.0	Riprap	10.0	2.0	2.0	11+64.54	22+73	1108.5000	12.0000	2.0000	2	23
South Channel 1A (R1)	2.3	Riprap	10.0	2.0	2.0	0+00	14+35	1435.0000	6.0000	1.0000	0	5
C4 Channel	2.3	Riprap	10.0	2.0	2.0	0+00	22+65	2265.0000	6.0000	1.0000	0	17
Minor Channel	2.0	Riprap	0.0	2.0	10.0	-	-	10000.0000	3.0000	0.5000	2	2



G	04/2024	JTV	DESIGN REVISION
REV	DATE	BY	DESCRIPTION

WARNING

0 $\frac{1}{2}$ 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED T. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
TYPICAL CHANNEL DETAILS

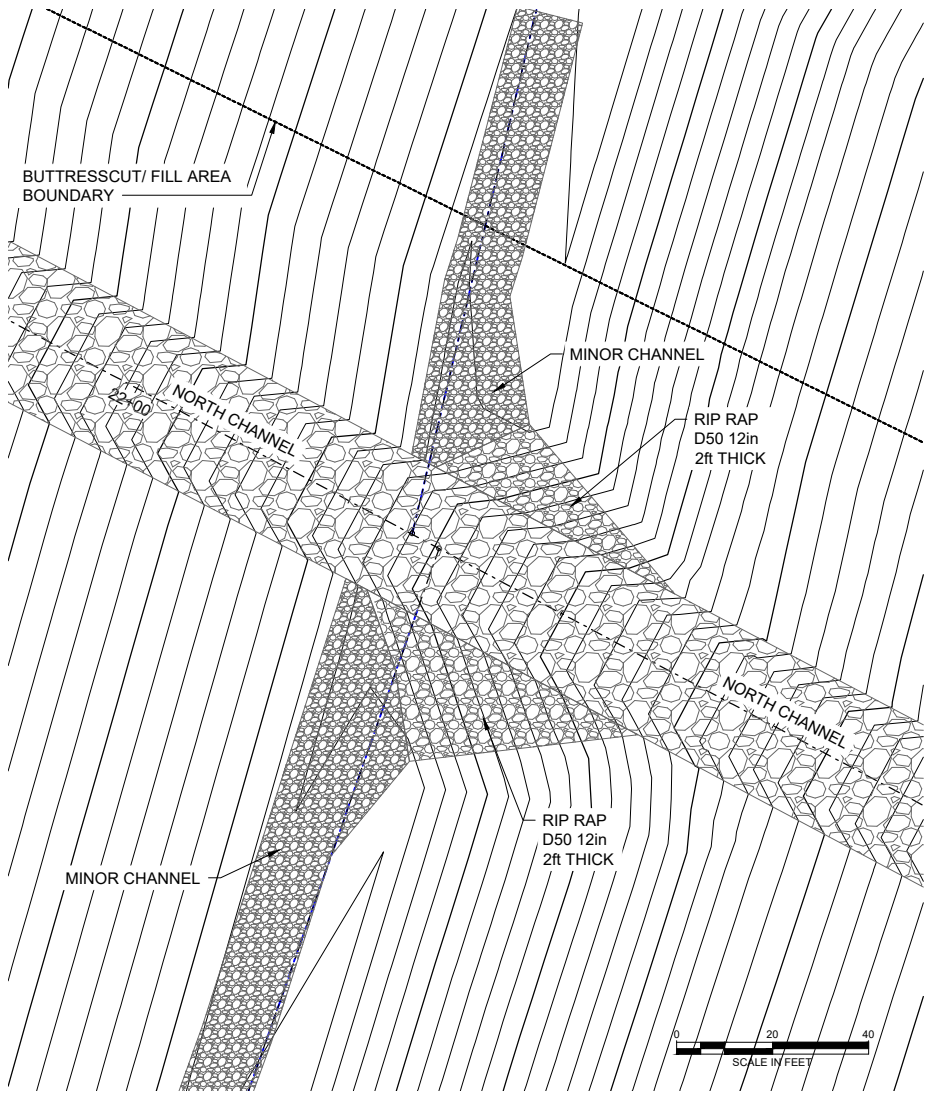
SHEET
00-005
JobNumber



- GENERAL SHEET NOTES
1.

PLUNGE POOL TO BE LOCATED AT TOE OF SLOPE.
2.

PLUNGE POOL TO BE EXCAVATED INTO BEDROCK.

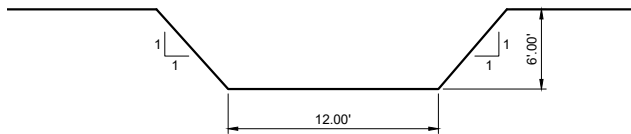


1

TYPICAL TRANSITION ZONE NORTH CHANNEL

-

RIPRAP DETAIL

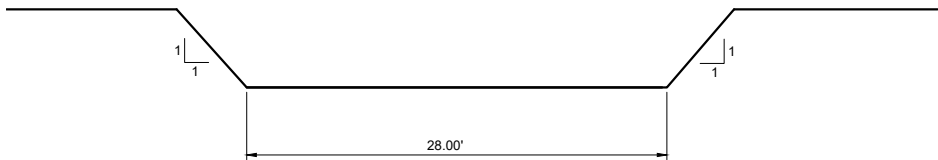


A

PLUNGE POOL CROSS SECTION

-

(N.T.S.)

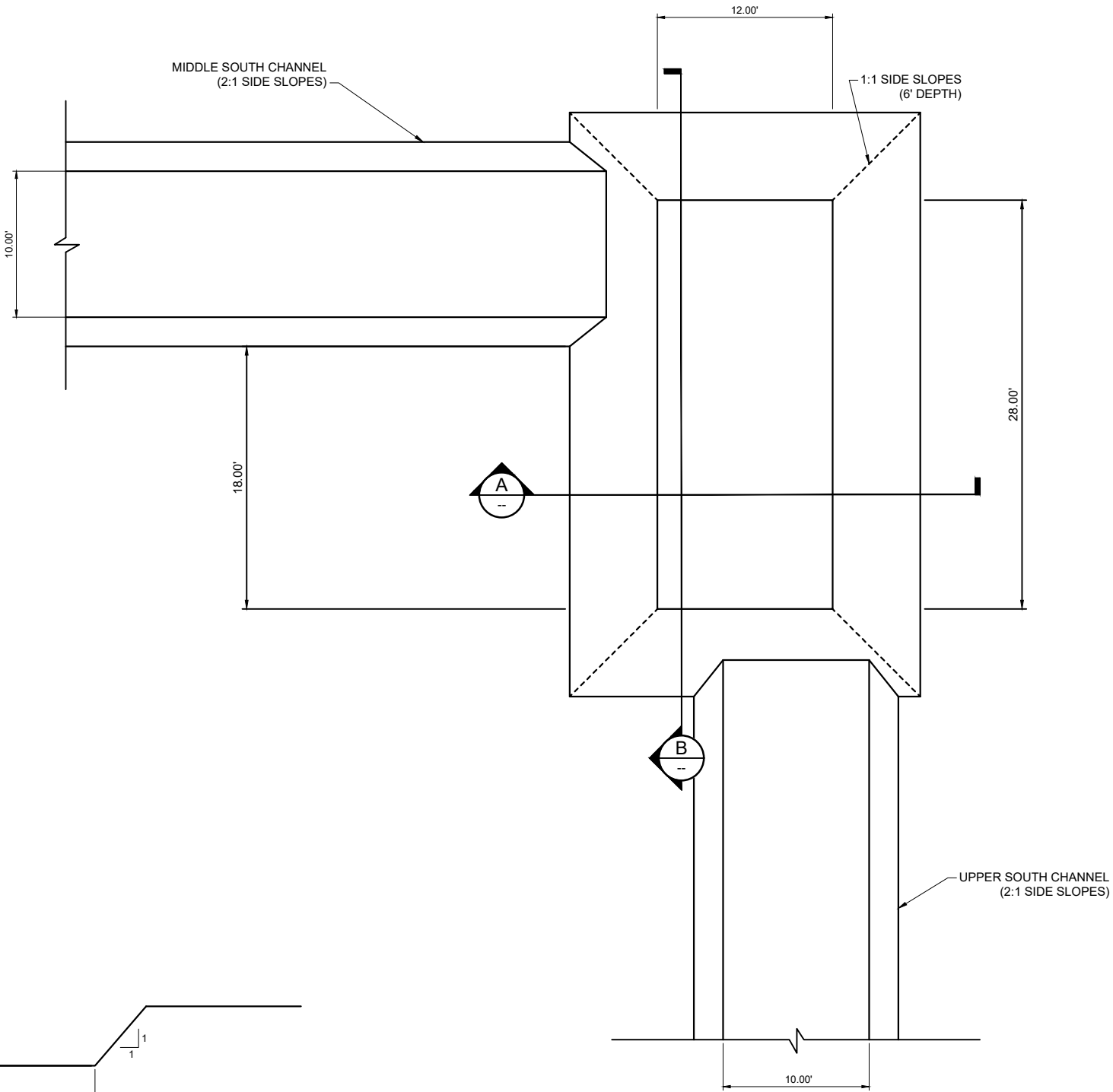


B

PLUNGE POOL CROSS SECTION

-

(N.T.S.)



2

PLUNGE POOL (PLAN VIEW)

-

TYPICAL DETAIL

REV	DATE	BY	DESCRIPTION
C	06/2024	JTV	TITLE CHANGE
B	02/2023	FT	PLUNGE POOL DETAIL ADDED
A	01/2023	FT	ISSUED FOR REVIEW

SCALE
AS NOTED

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. LEIDICH
DRAWN J. VERNER
CHECKED P. KOS



PROJECT
PIKEVIEW QUARRY RECLAMATION PROJECT
TRANSITION ZONE AND PLUNGE POOL DETAILS

SHEET
300-006
JobNumber