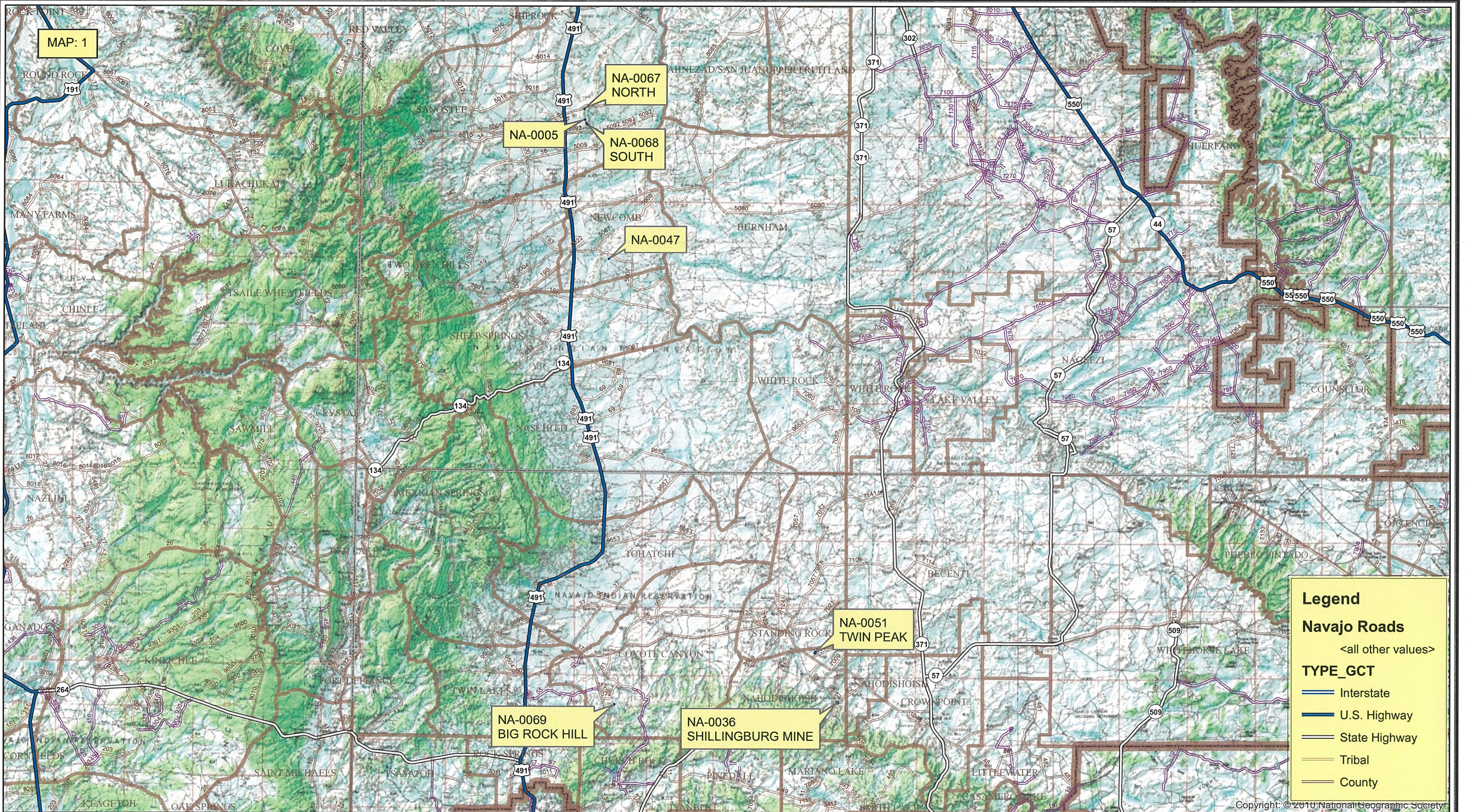




MAP: 1

NA-0067
NORTH

NA-0005

NA-0068
SOUTH

NA-0047

NA-0051
TWIN PEAK

NA-0036
SHILLINGBURG MINE

NA-0069
BIG ROCK HILL

Legend

Navajo Roads
<all other values>

TYPE_GCT

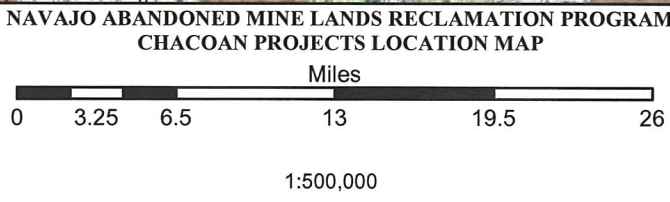
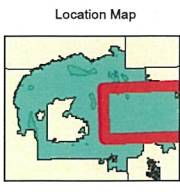
Interstate

U.S. Highway

State Highway

Tribal

County



- Project Areas
- Problem Areas
- Chapters
- State

Copyright: © 2010 National Geographic Society

MAP: 2

NA-0067 NORTH

NA-0005

NA-0068 SOUTH

NAVAJO

Little Water

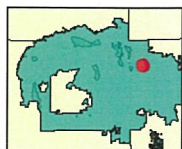
Mines

Wash

PIPELINE

Prospects

Location Map



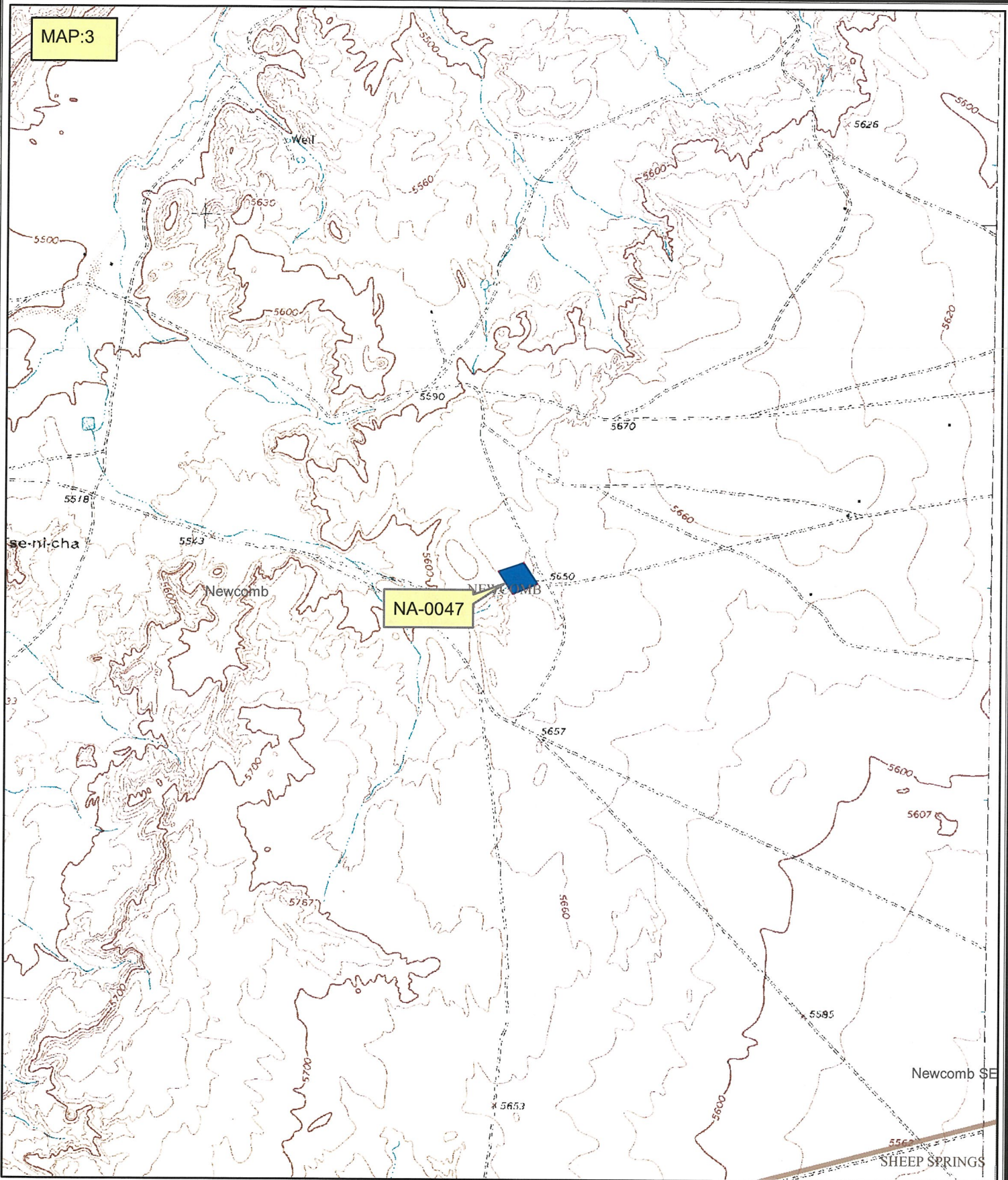
Miles
0 0.125 0.25 0.5

1:24,000

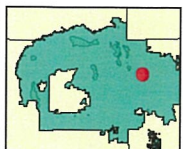


- Project Areas
- Problem Areas
- Chapters
- State

MAP:3



Location Map



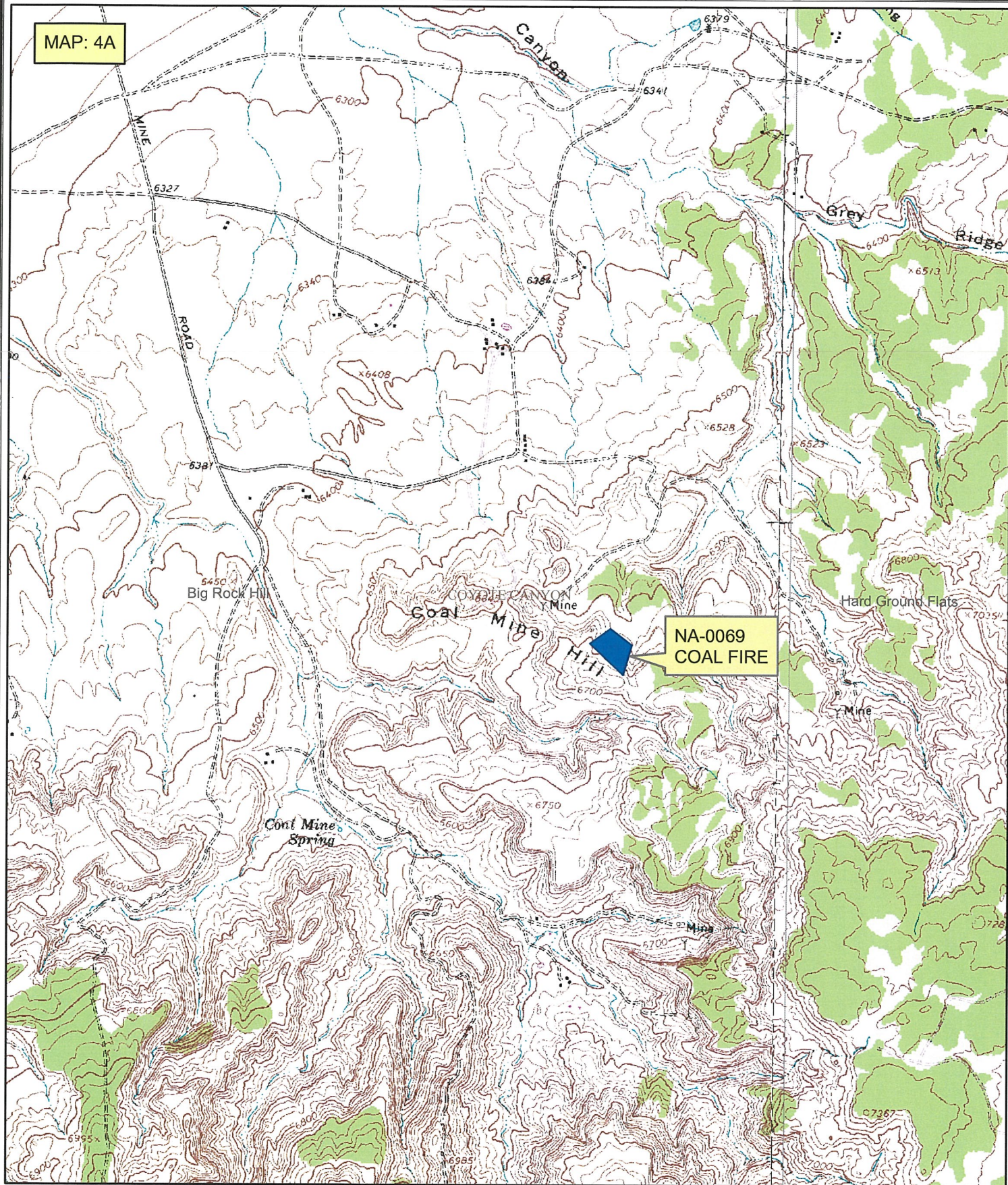
Miles
0 0.125 0.25 0.5

1:24,000



-  Project Areas
-  Problem Areas
-  Chapters
-  State

MAP: 4A



NA-0069
COAL FIRE

Location Map

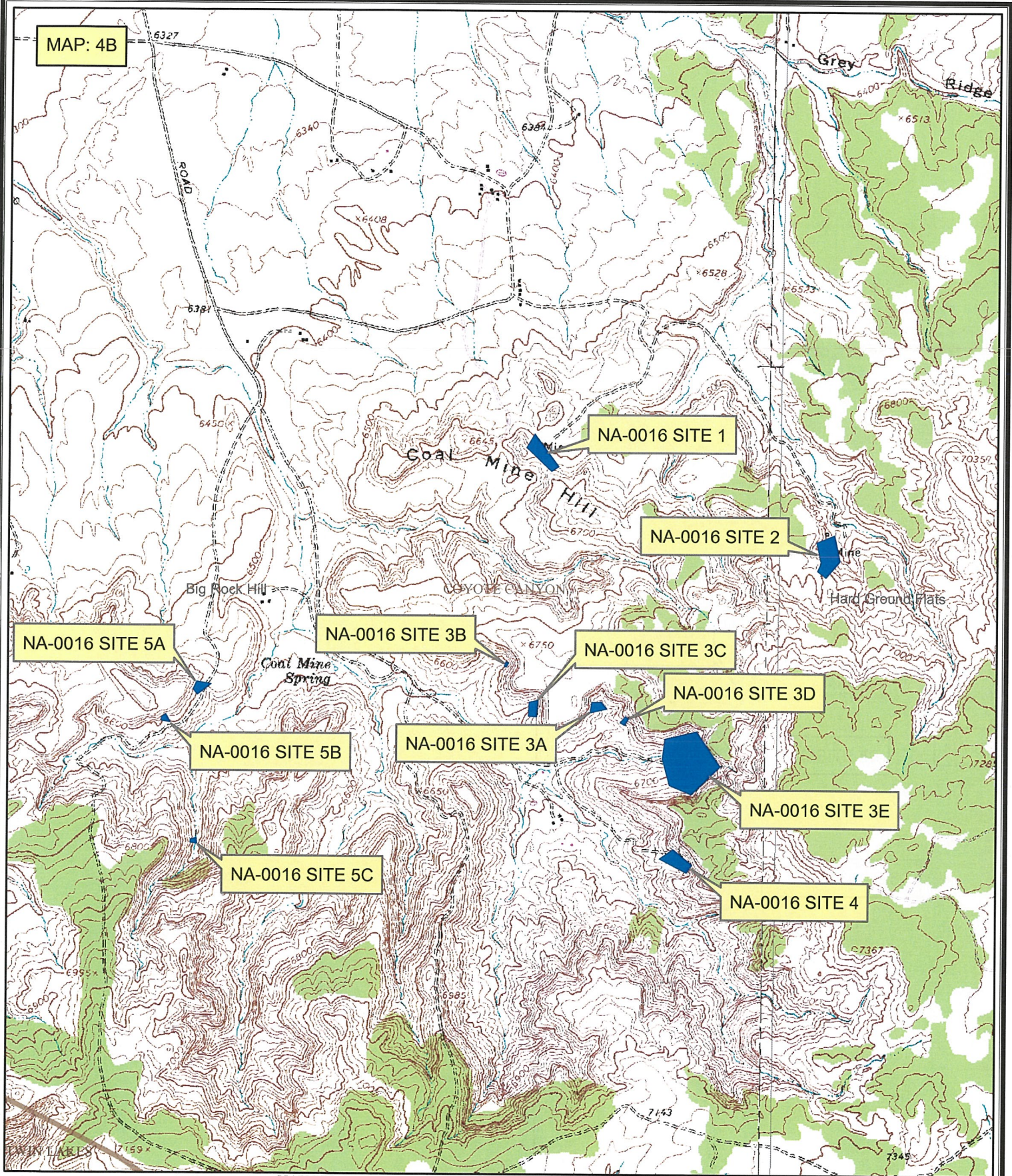


Miles
0 0.125 0.25 0.5

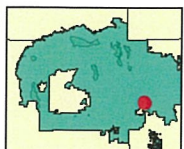
1:24,000



-  Project Areas
-  Problem Areas
-  Chapters
-  State



Location Map



Miles
0 0.125 0.25 0.5

1:24,000



- Project Areas
- Problem Areas
- Chapters
- State

NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM
NA-0016 TOHATCHI COAL MINES, QUAD BIG ROCK HILL/HARD GROUND FLATS

MAP: 5

Twin Peaks c

STANDING ROCK

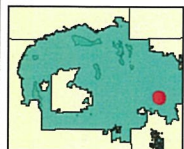
Standing Rock

NA-0051
TWIN PEAK

NAMODISHGISH

NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM
NA-0051 TWIN PEAK, QUAD STANDING ROCK

Location Map



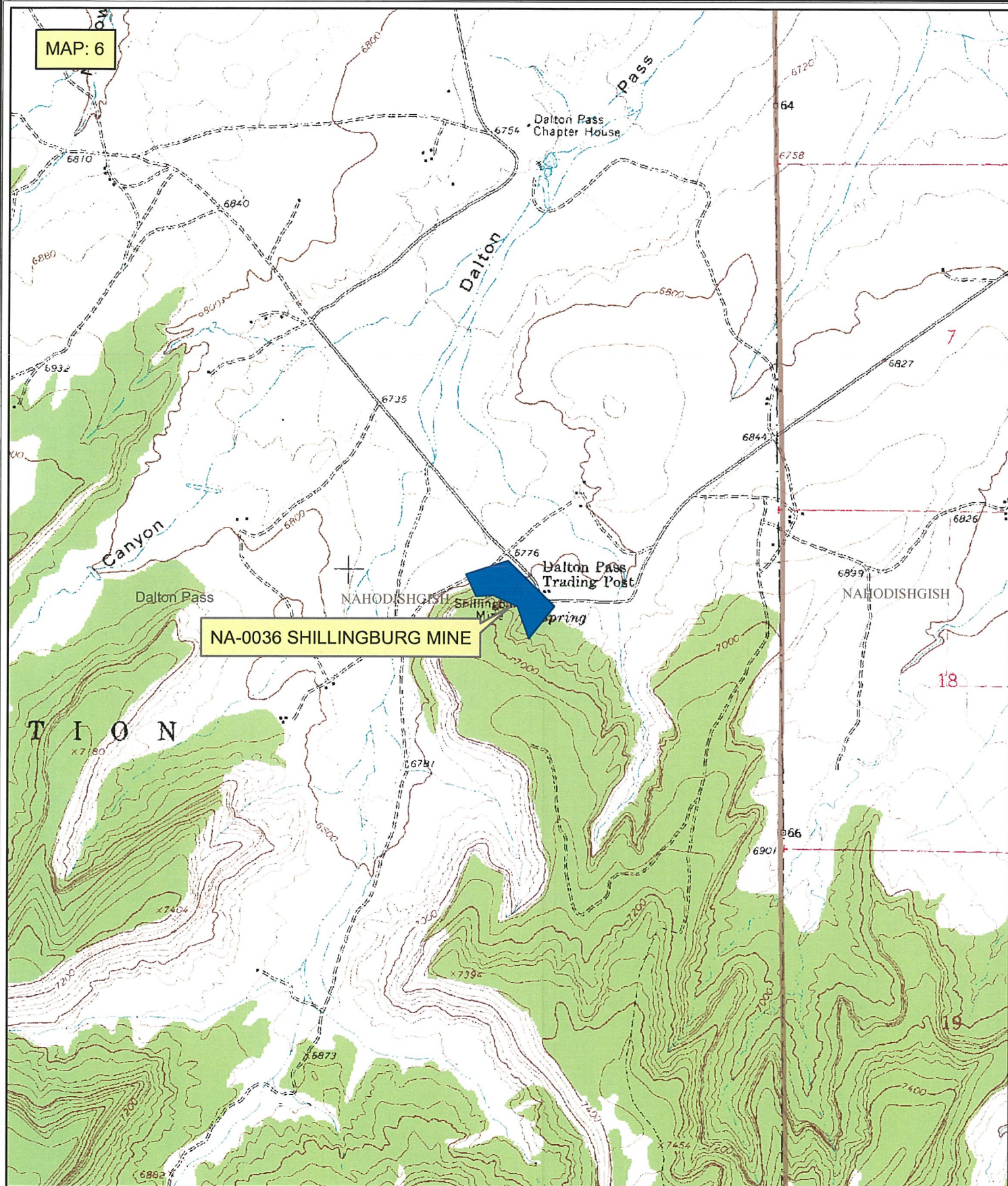
Miles
0 0.125 0.25 0.5

1:24,000



- Project Areas
- Problem Areas
- Chapters
- State

MAP: 6



NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM
NA-0036 SHILLINGBURG MINE, QUAD DALTON PASS



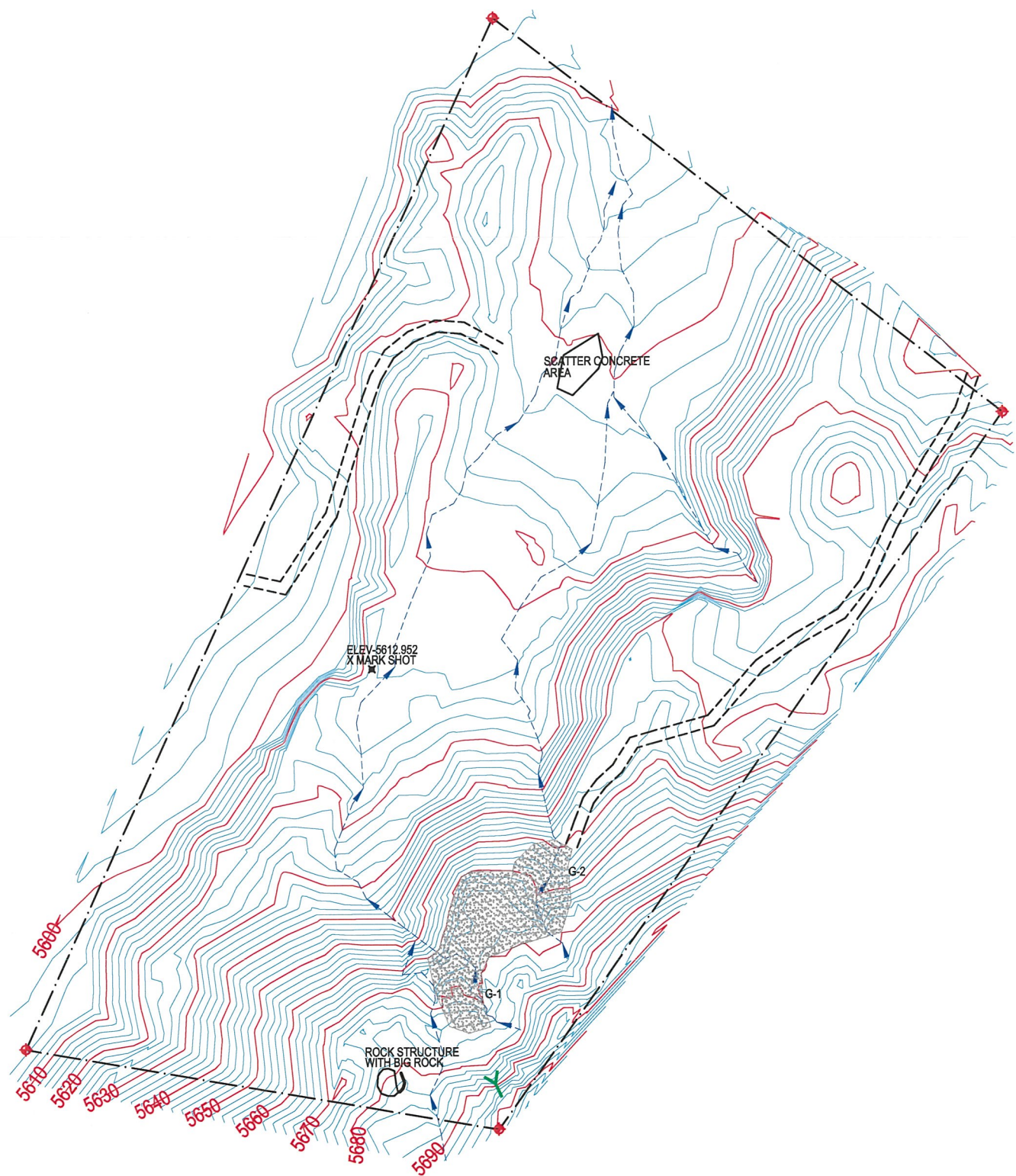
A number line is shown with tick marks at 0, 0.125, 0.25, and 0.5. A bracket above the line, spanning from 0 to 0.125, is labeled "Miles".

1:24,000



-  Project Areas
-  Problem Areas
-  Chapters
-  State

DRAWING: 1



LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- CONTOUR 2FT. INTERVAL
- PORTAL
- GOB PILE



REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
LITTLEWATER, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROJECT NO. NA-0067			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 10/28/13	DATE:	DATE: 10/24/13	DRAWING
FILENAME: CHACOAN I	SHEET: 9 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	

DRAWING: 2



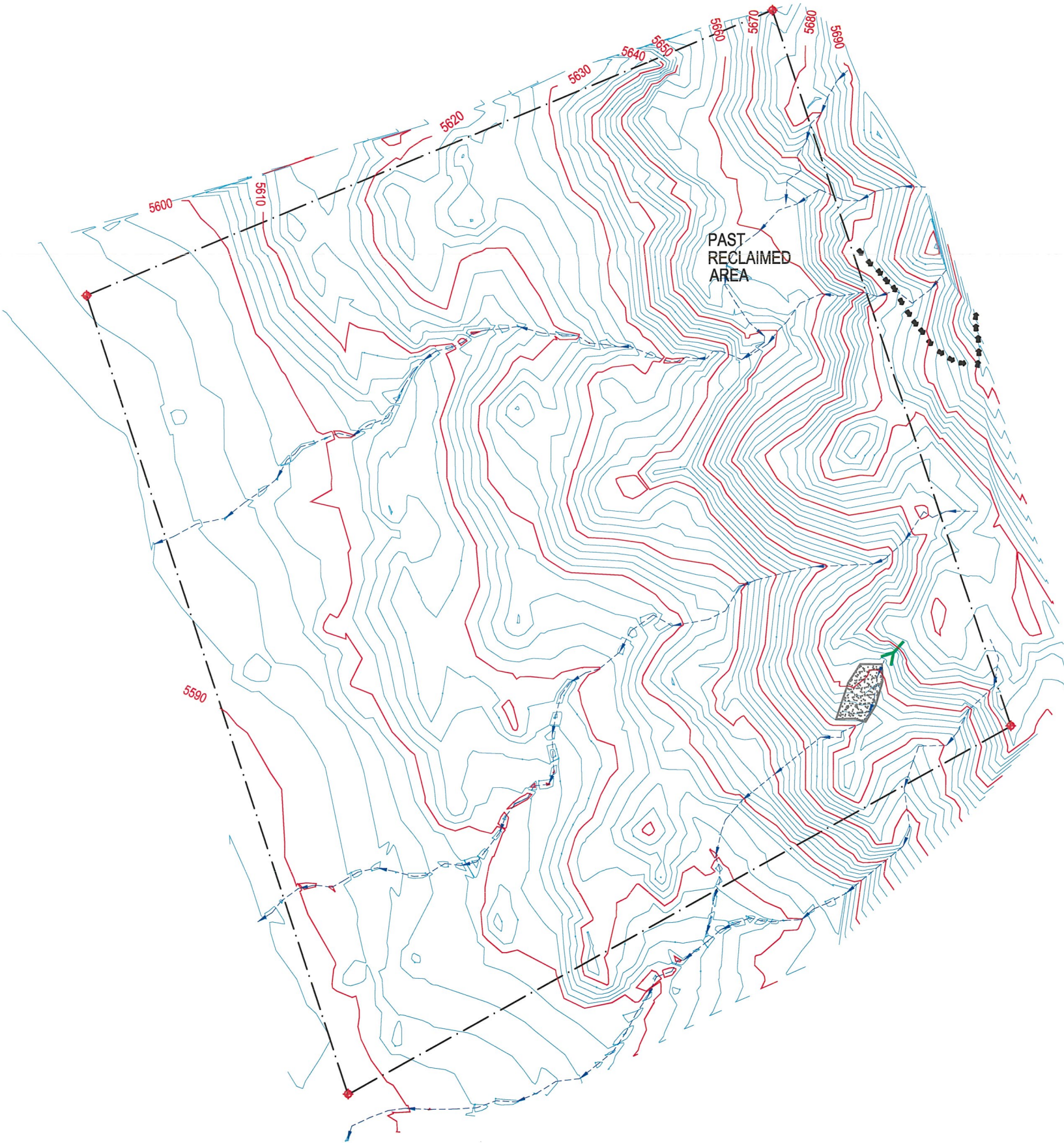
LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- CONTOUR 2FT. INTERVAL
- PORTAL
- GOB PILE



REVISION			
REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
LITTLEWATER, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROPOSED DRAWING			
PROJECT NO. NA-0067			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 10/28/13	DATE:	DATE: 10/24/13	DRAWING
FILENAME: CHACOAN I	SHEET: 9 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	



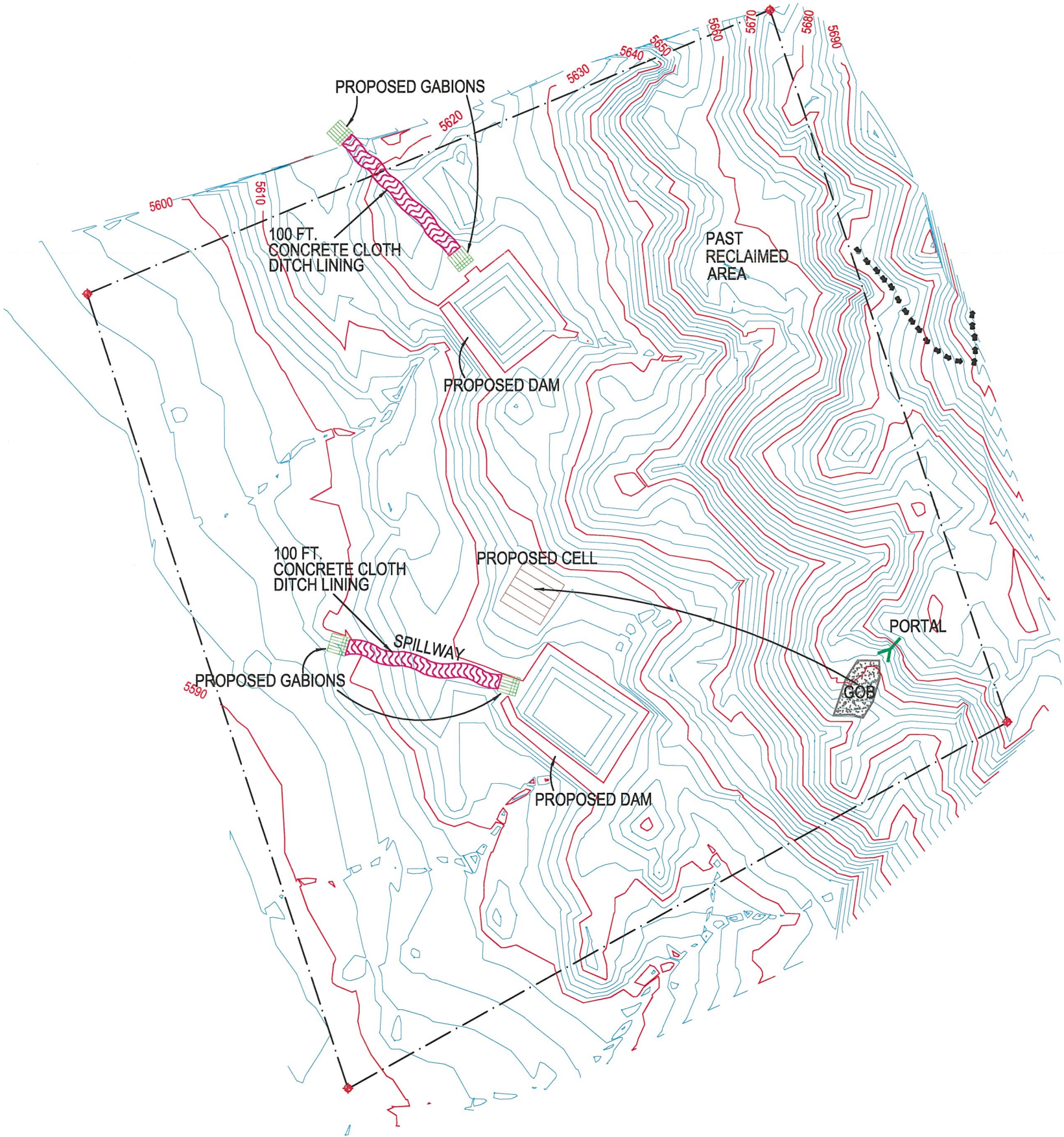
LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- CONTOUR 2FT. INTERVAL
- FOOT TRAIL
- PORTAL
- GOB PILE



NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
LITTLEWATER, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROJECT NO. NA-0005			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 12/06/13	DATE:	DATE: 10/28/13	DRAWING
FILENAME: CHACOAN I	SHEET: 1 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	



LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- CONTOUR 2FT. INTERVAL
- FOOT TRAIL
- PORTAL
- GOB PILE

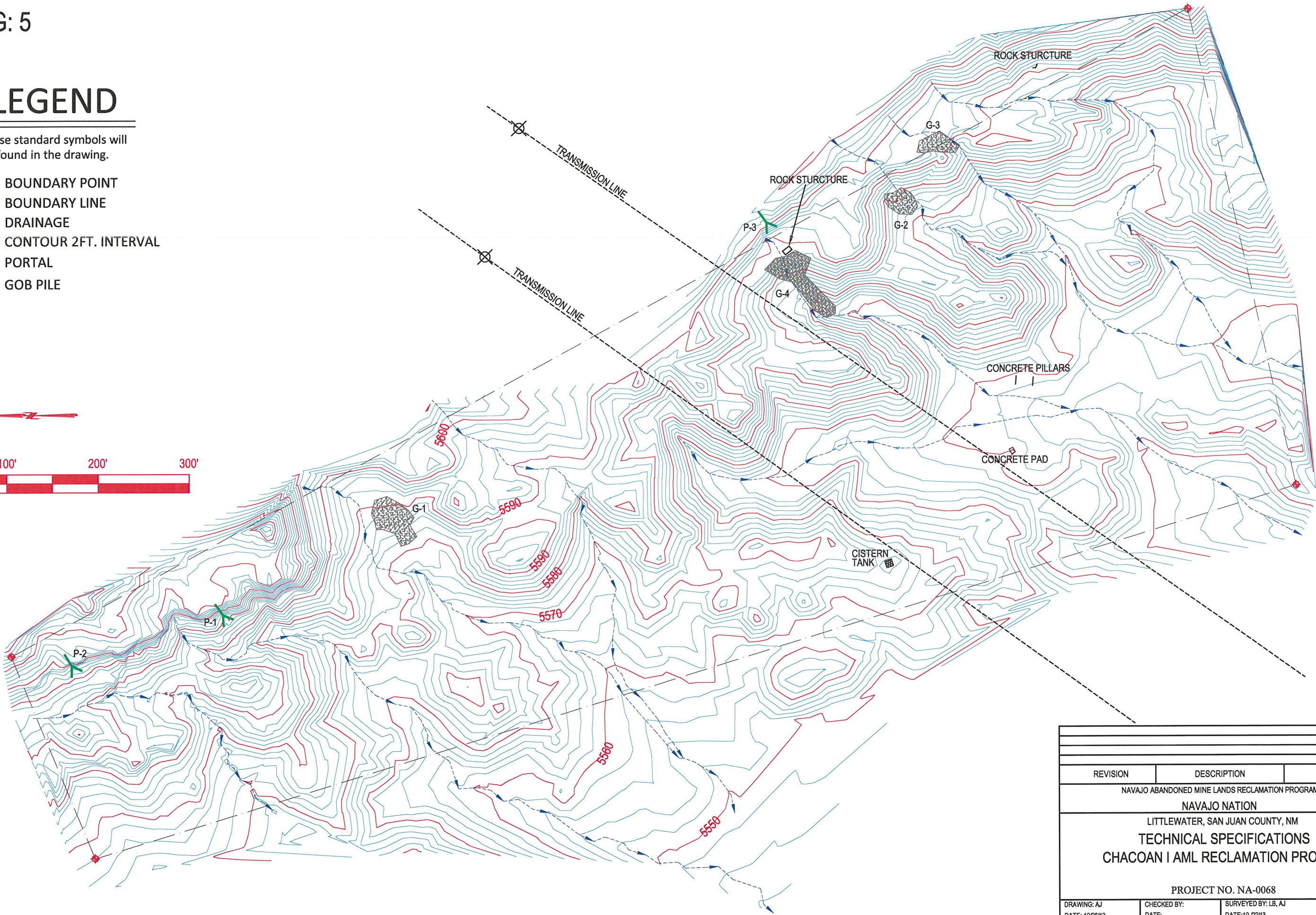


REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
LITTLEWATER, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROPOSED DRAWING			
PROJECT NO. NA-0005			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 12/06/13	DATE:	DATE: 10/28/13	DRAWING
FILENAME: CHACOAN I	SHEET: 2 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	

LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- CONTOUR 2FT. INTERVAL
- PORTAL
- GOB PILE



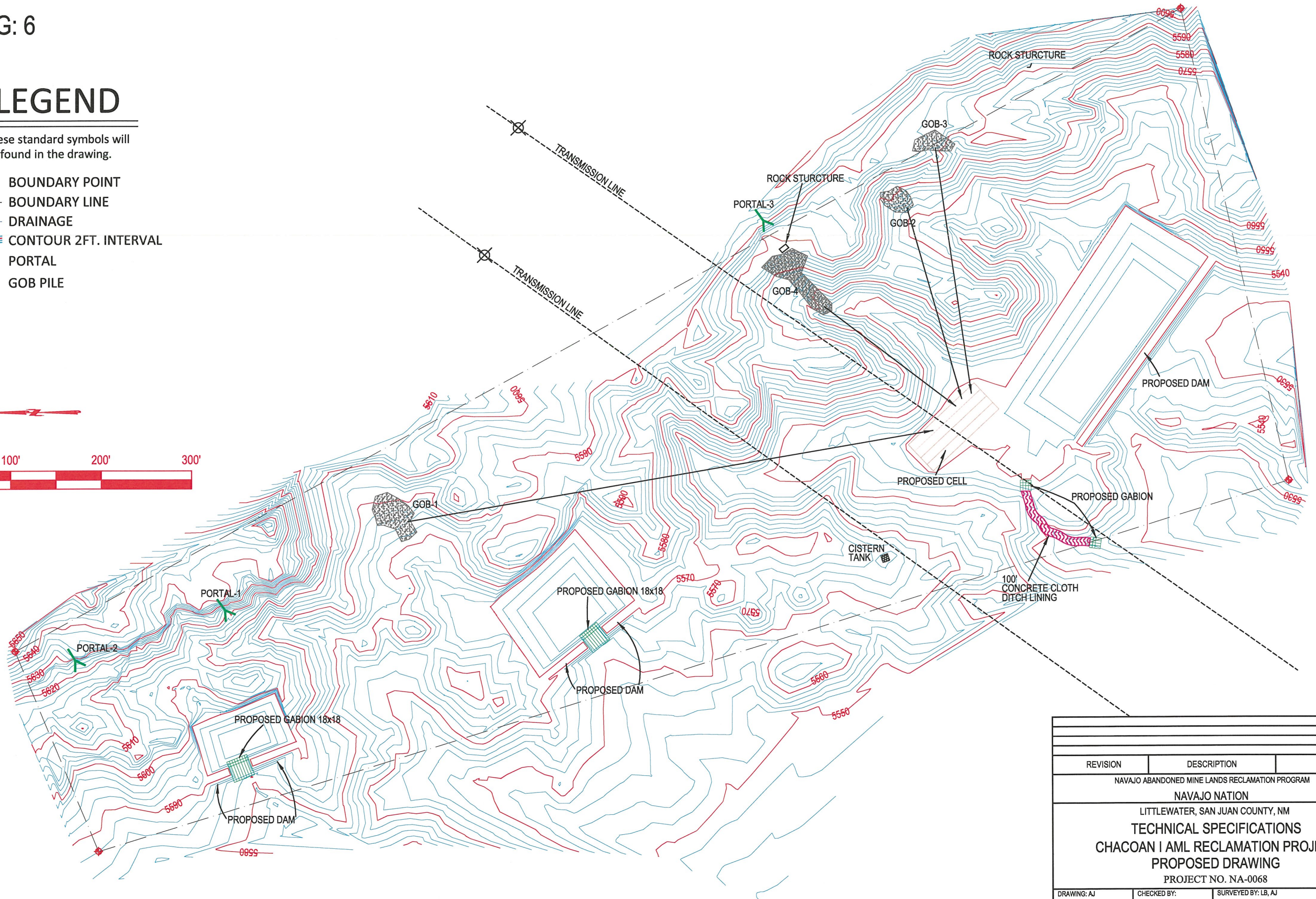
REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
LITTLEWATER, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROJECT NO. NA-0068			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 10/28/13	DATE:	DATE:10 /22/13	DRAWING
FILENAME: CHACOAN I	SHEET: 11 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	

DRAWING: 6

LEGEND

These standard symbols will be found in the drawing.

-  BOUNDARY POINT
 BOUNDARY LINE
 DRAINAGE
 CONTOUR 2FT. INTERVAL
 PORTAL
 GOB PILE

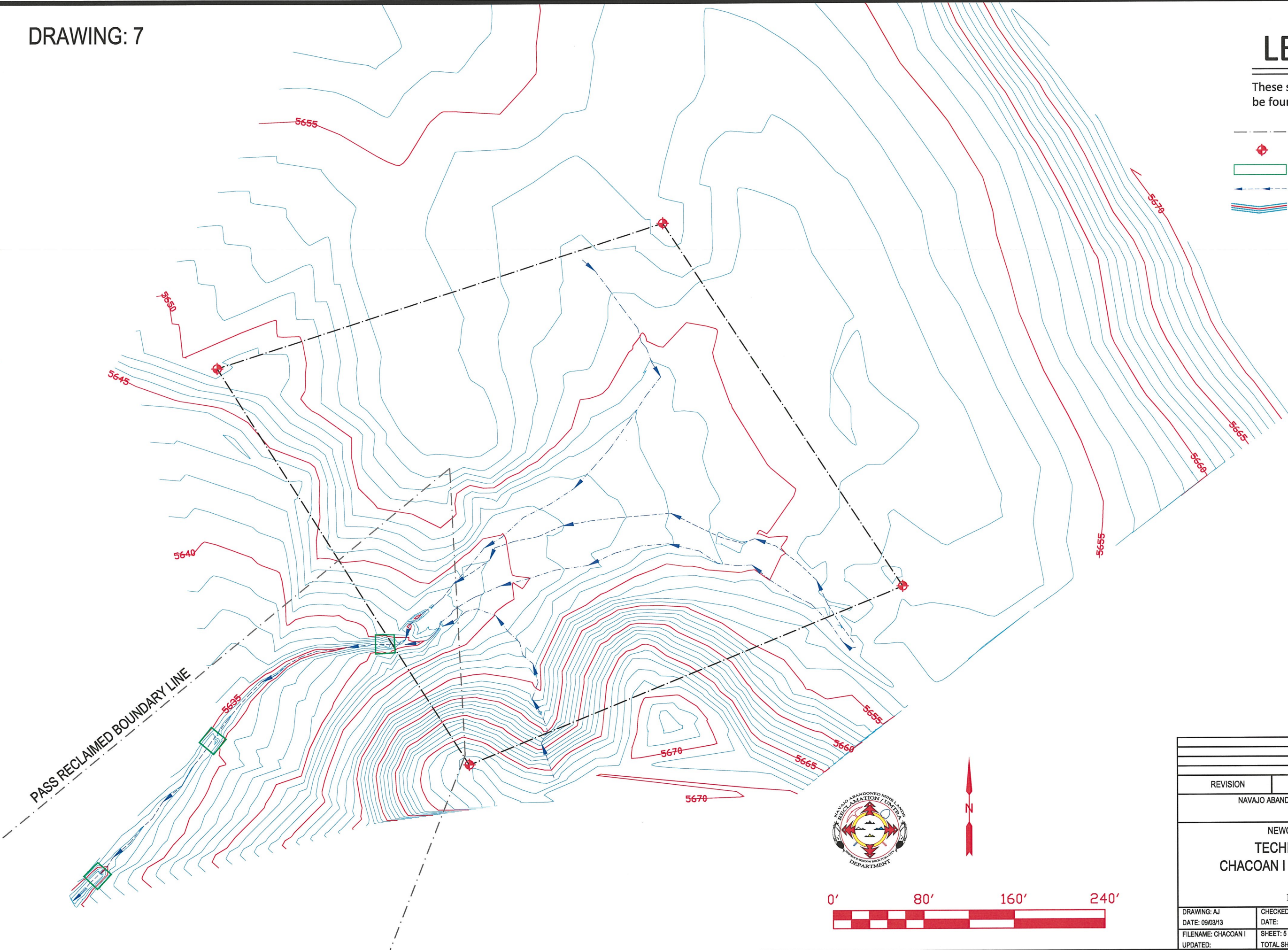


REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
LITTLEWATER, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROPOSED DRAWING			
PROJECT NO. NA-0068			
DRAWING: AJ DATE: 10/28/13	CHECKED BY: DATE:	SURVEYED BY: LB, AJ DATE: 10/22/13	AUTOCAD DRAWING
FILENAME: CHACOAN I UPDATED:	SHEET: 12 OF 14 TOTAL SHEET:	SHIPROCK AML PROGRAM OFFICE SHIPROCK, NEW MEXICO	

LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY
- BOUNDARY POINT
- EXISTING GABIONS
- DRAINAGE
- CONTOUR 1FT. INTERVAL

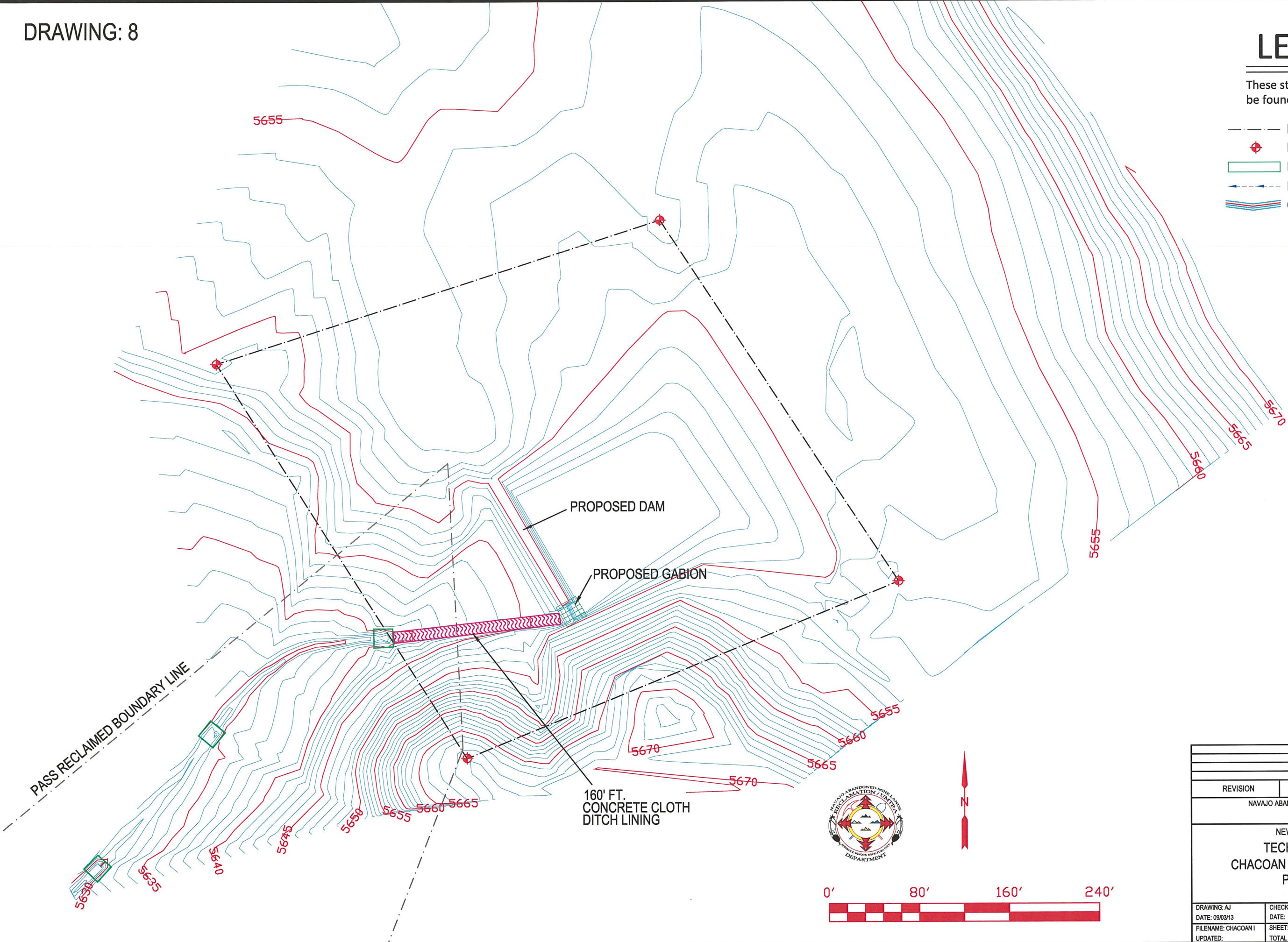


REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
NEWCOMB, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROJECT NO. NA-0047			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 09/03/13	DATE:	DATE: 08/28/13	DRAWING
FILENAME: CHACOAN I	SHEET: 5 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	

LEGEND

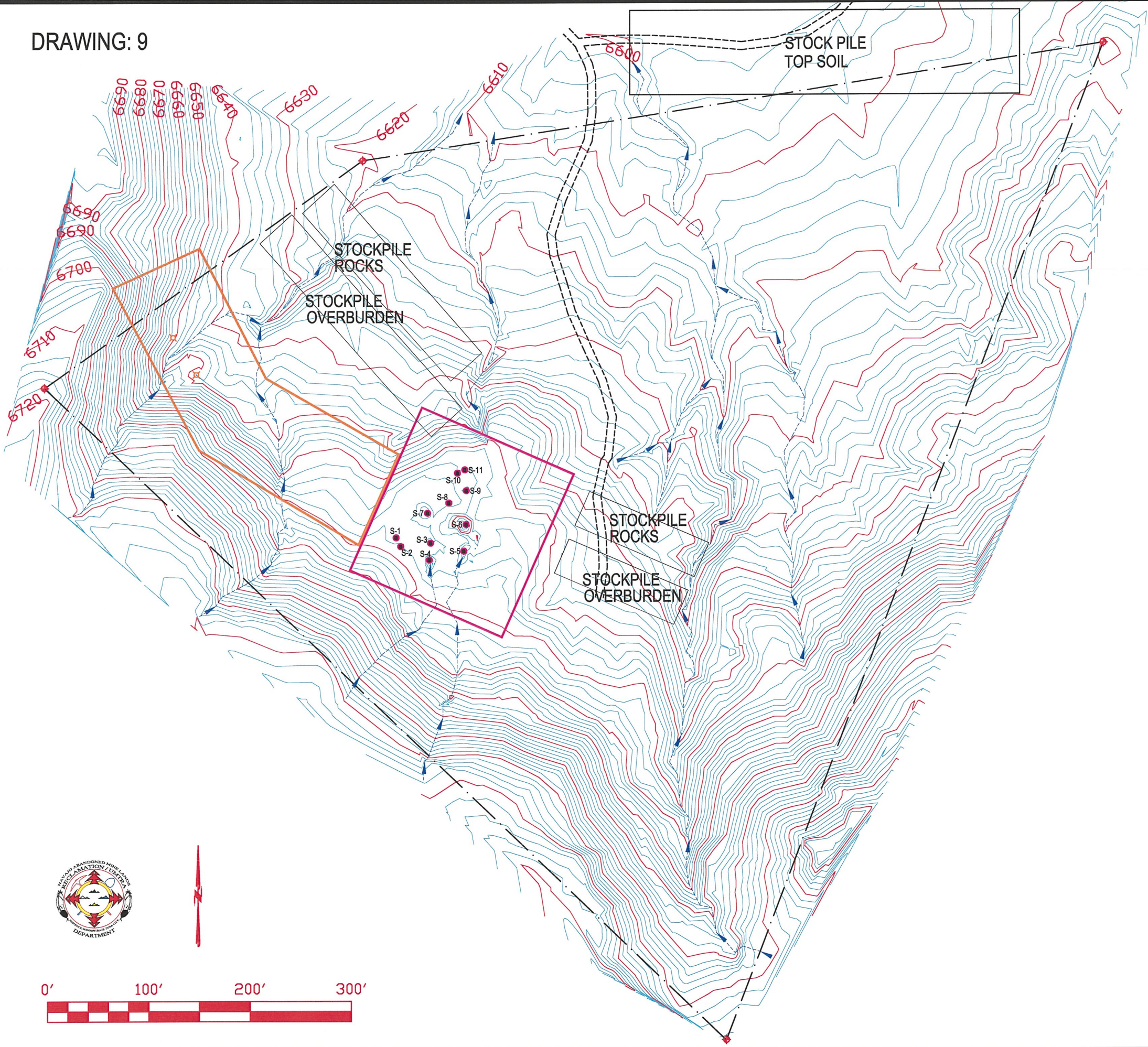
These standard symbols will be found in the drawing.

- BOUNDARY
- BOUNDARY POINT
- EXISTING GABIONS
- DRAINAGE
- CONTOUR 1FT. INTERVAL

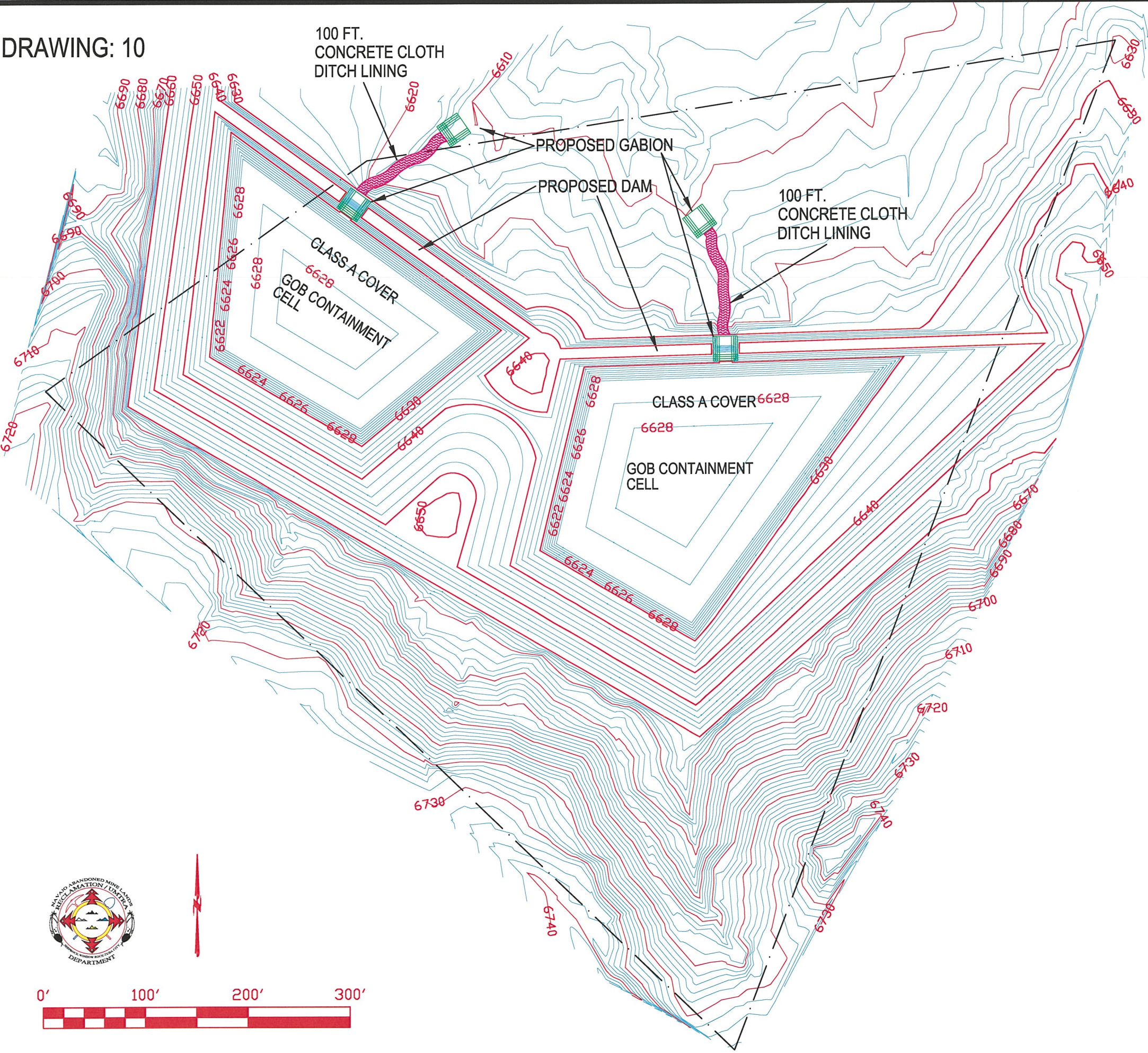


REVISION			DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM				
NAVAJO NATION				
NEWCOMB, SAN JUAN COUNTY, NM				
TECHNICAL SPECIFICATIONS				
CHACOAN I AML RECLAMATION PROJECT				
PROPOSED DRAWING				
PROJECT NO. NA-0047				
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ		AUTOCAD
DATE: 09/03/13	DATE:	DATE: 08/28/13		DRAWING
FILENAME: CHACOAN I	SHEET: 6 OF 14		SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:		SHIPROCK, NEW MEXICO	

DRAWING: 9



DRAWING: 10



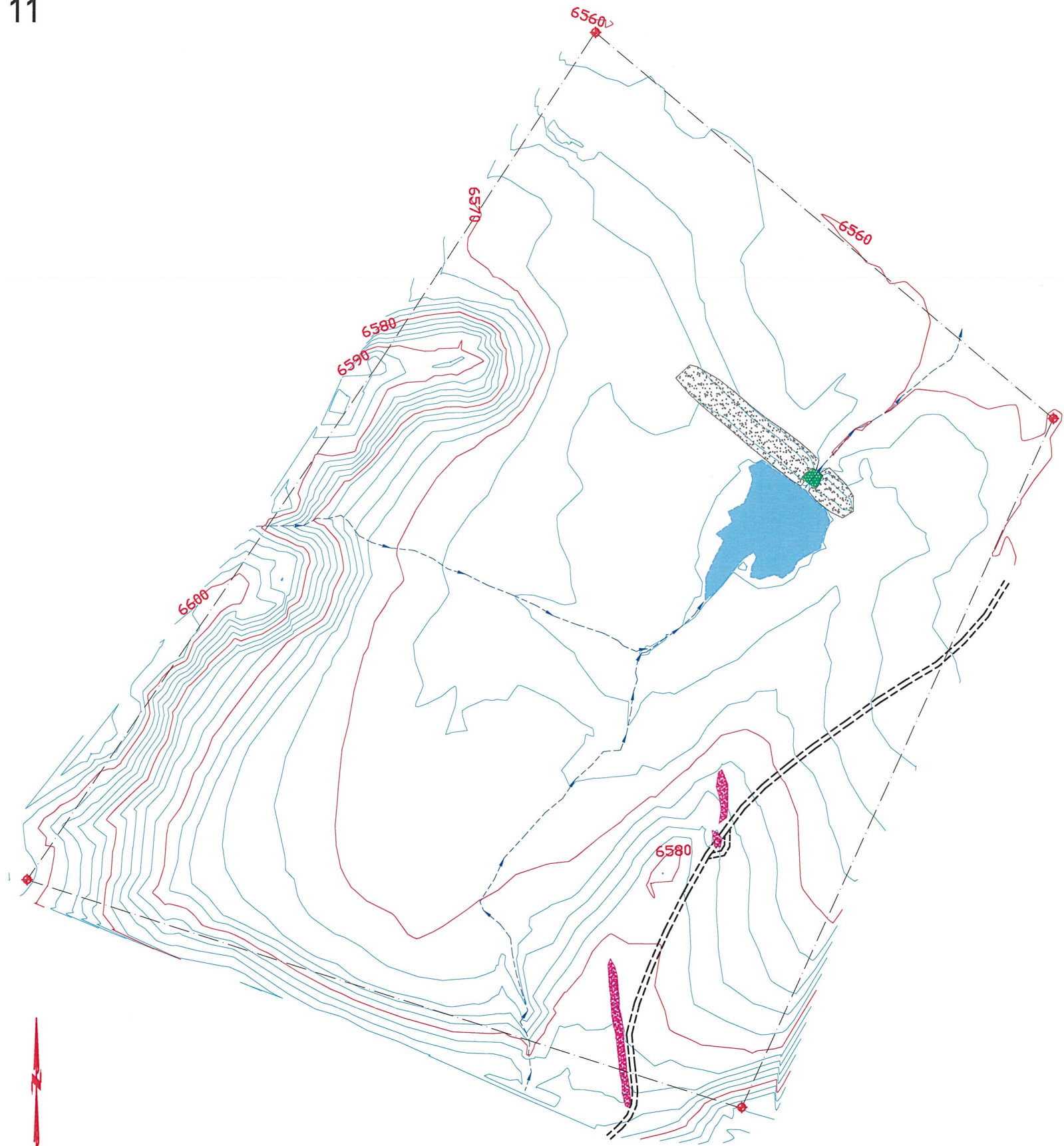
LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY
- CONCRETE CLOTH DITCH LINING
- PROPOSED GABIONS
- CONTOUR 2FT. INTERVAL



REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
COYOTE CANYON, MCKINLEY COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROPOSED DRAWING			
PROJECT NO. NA-0069			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 08/29/13	DATE:	DATE: 08/27/13	DRAWING
FILENAME: CHACOAN I	SHEET: 14 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	



LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- ROAD
- BERM
- GABION
- POND
- DAM
- CONTOUR 2FT. INTERVAL



REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
NAHODISHGISH, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROJECT NO. NA-0051			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 10/31/13	DATE:	DATE: 10/31/13	DRAWING
FILENAME: CHACOAN I	SHEET: 7 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	



LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY POINT
- BOUNDARY LINE
- DRAINAGE
- ROAD
- BERM
- GABION
- POND
- DAM
- CONTOUR 2FT. INTERVAL



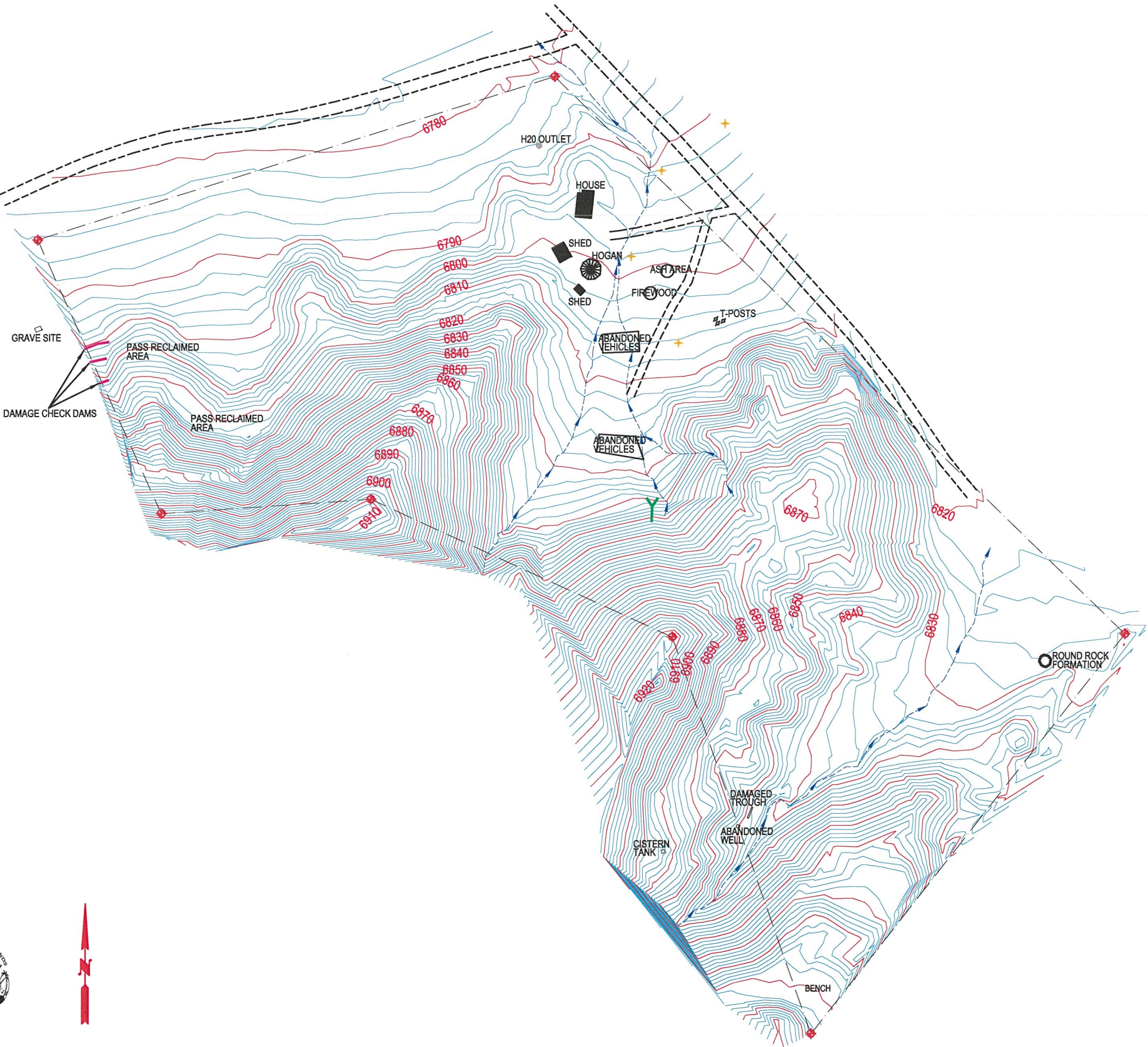
REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
NAHODISHGISH, SAN JUAN COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROPOSED DRAWING			
PROJECT NO. NA-0051			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 10/31/13	DATE:	DATE:10 /31/13	DRAWING
FILENAME: CHACOAN I	SHEET: 8 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	

DRAWING: 13

LEGEND

These standard symbols will be found in the drawing.

- ACCESS ROAD
- BOUNDARY
- DRAINAGE
- CONTOUR 2FT. INTERVAL
- PORTAL
- POWER POLE

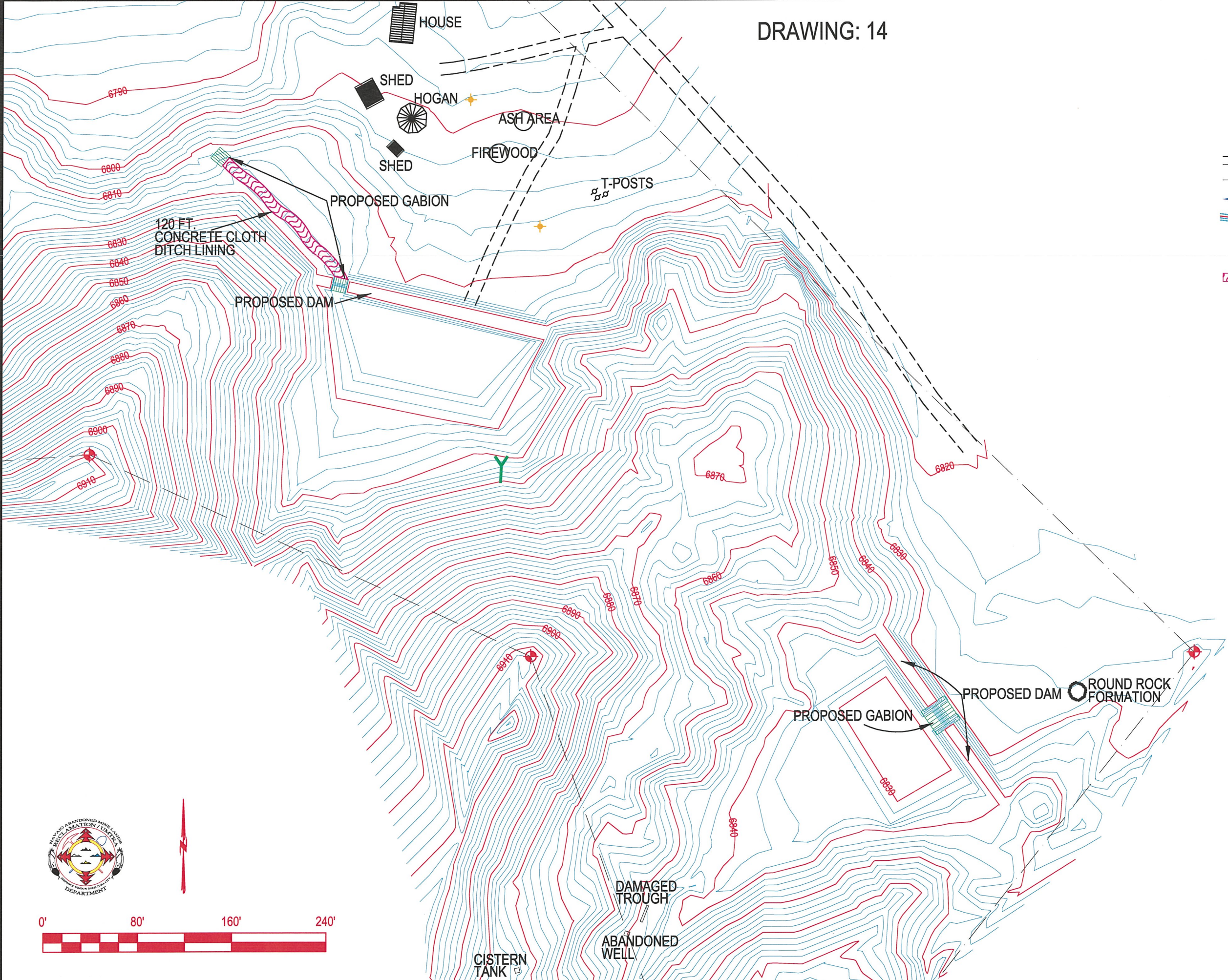


REVISION		DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM			
NAVAJO NATION			
NAHODISHGISH, MCKINLEY COUNTY, NM			
TECHNICAL SPECIFICATIONS			
CHACOAN I AML RECLAMATION PROJECT			
PROJECT NO. NA-0036			
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ	AUTOCAD
DATE: 10/21/13	DATE:	DATE: 10/17/13	DRAWING
FILENAME: CHACOAN I	SHEET: 3 OF 14	SHIPROCK AML PROGRAM OFFICE	
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO	

LEGEND

These standard symbols will be found in the drawing.

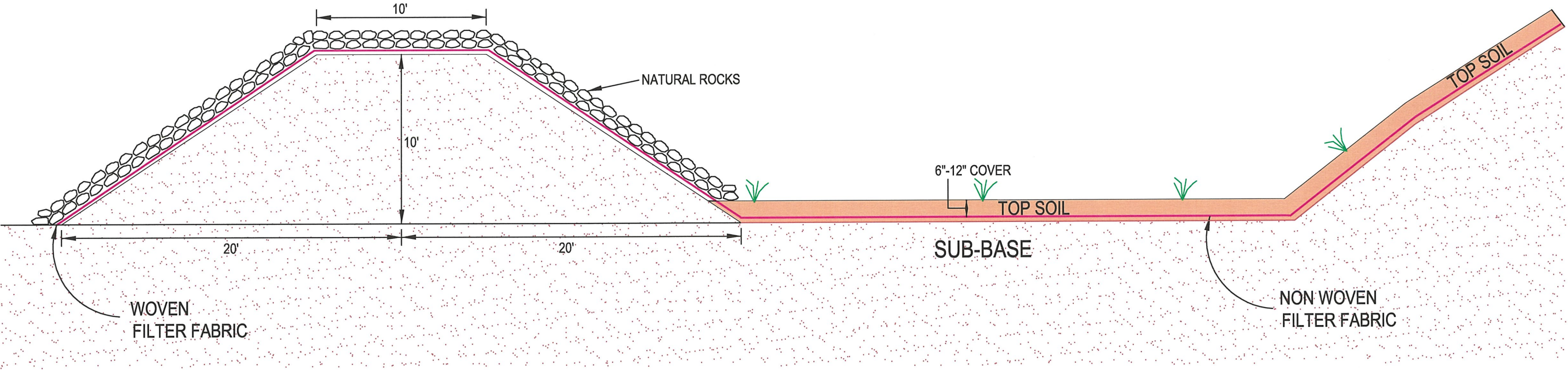
- ACCESS ROAD
- BOUNDARY
- - - DRAINAGE
- CONTOUR 2FT. INTERVAL
- PORTAL
- POWER POLE
- CONCRETE CLOTH DITCH LINING



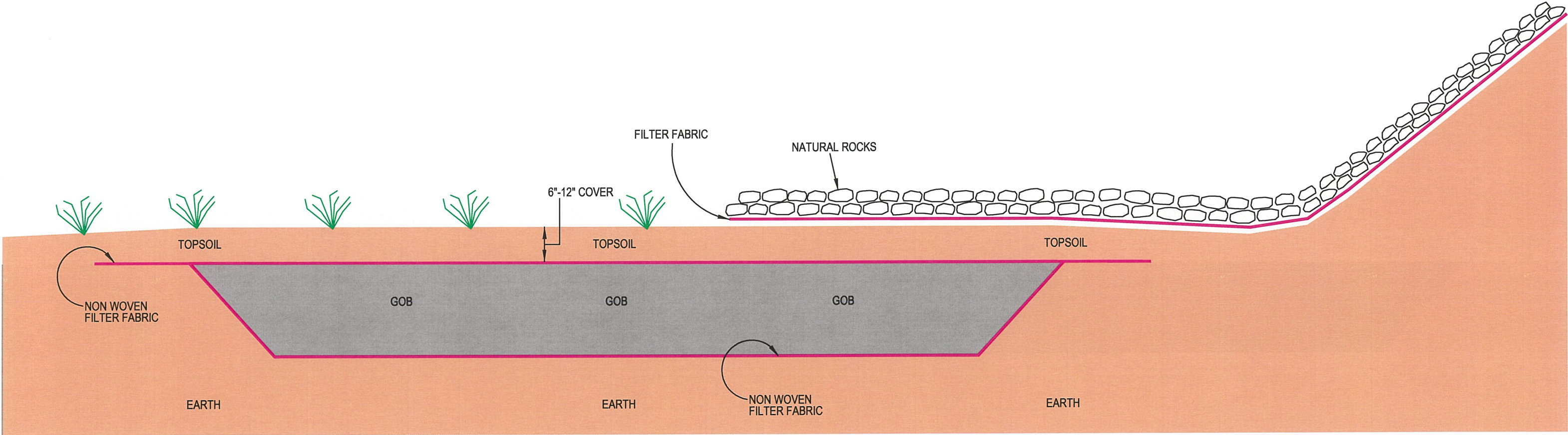
REVISION			DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM				
NAVAJO NATION				
NAHODISHGISH, MCKINLEY COUNTY, NM				
TECHNICAL SPECIFICATIONS				
CHACOAN I AML RECLAMATION PROJECT				
PROPOSED DRAWING				
PROJECT NO. NA-0036				
DRAWING: AJ	CHECKED BY:	SURVEYED BY: LB, AJ		AUTOCAD
DATE: 10/21/13	DATE:	DATE: 10/17/13		DRAWING
FILENAME: CHACOAN I	SHEET: 4 OF 14	SHIPROCK AML PROGRAM OFFICE		
UPDATED:	TOTAL SHEET:	SHIPROCK, NEW MEXICO		

DIAGRAM: 1

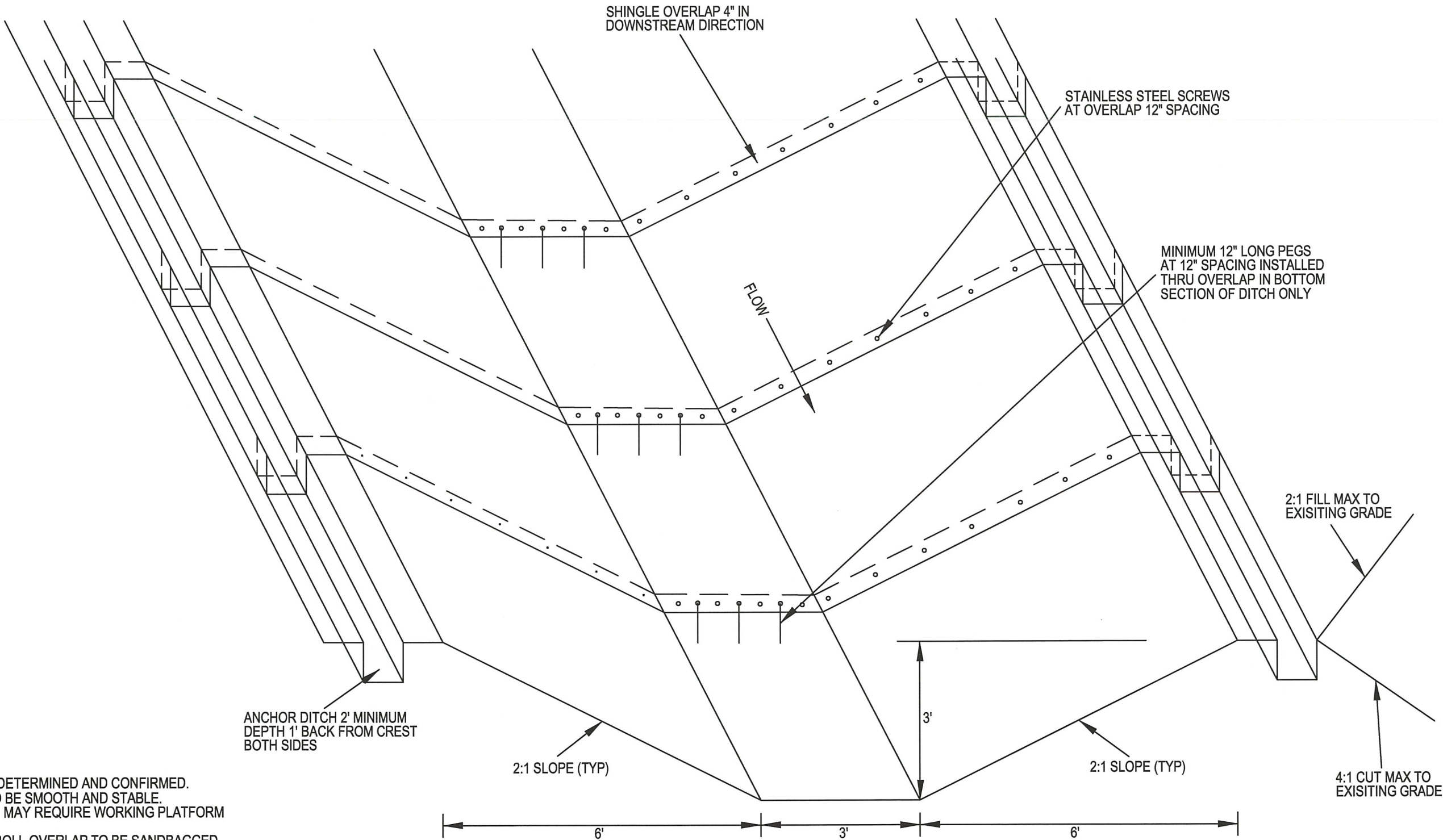
AML TYPICAL RETENSION POND PROFILE



AML CONTAINMENT CELL PROFILE



CONCRETE CLOTH DITCH LINING DETAILS



- NOTES:
- ALL DIMENSIONS TO BE DETERMINED AND CONFIRMED.
 - PREPARE SUBGRADE TO BE SMOOTH AND STABLE.
 - VERY SOFT SUBGRADES MAY REQUIRE WORKING PLATFORM DURING INSTALLATION
 - DOWNSTREAM END OF ROLL OVERLAP TO BE SANDBAGGED DURING CURING PERIOD (1 DAY MINIMUM).
 - SCREWS TO BE STAINLESS, FLAT HEAD, COARSE THREAD, AND 1" LONG MINIMUM.

DITCH CROSS SECTION TRANSVERSE ROLLS



DIAGRAM: 4

MINE OPENING, CROSS-SECTION DETAIL

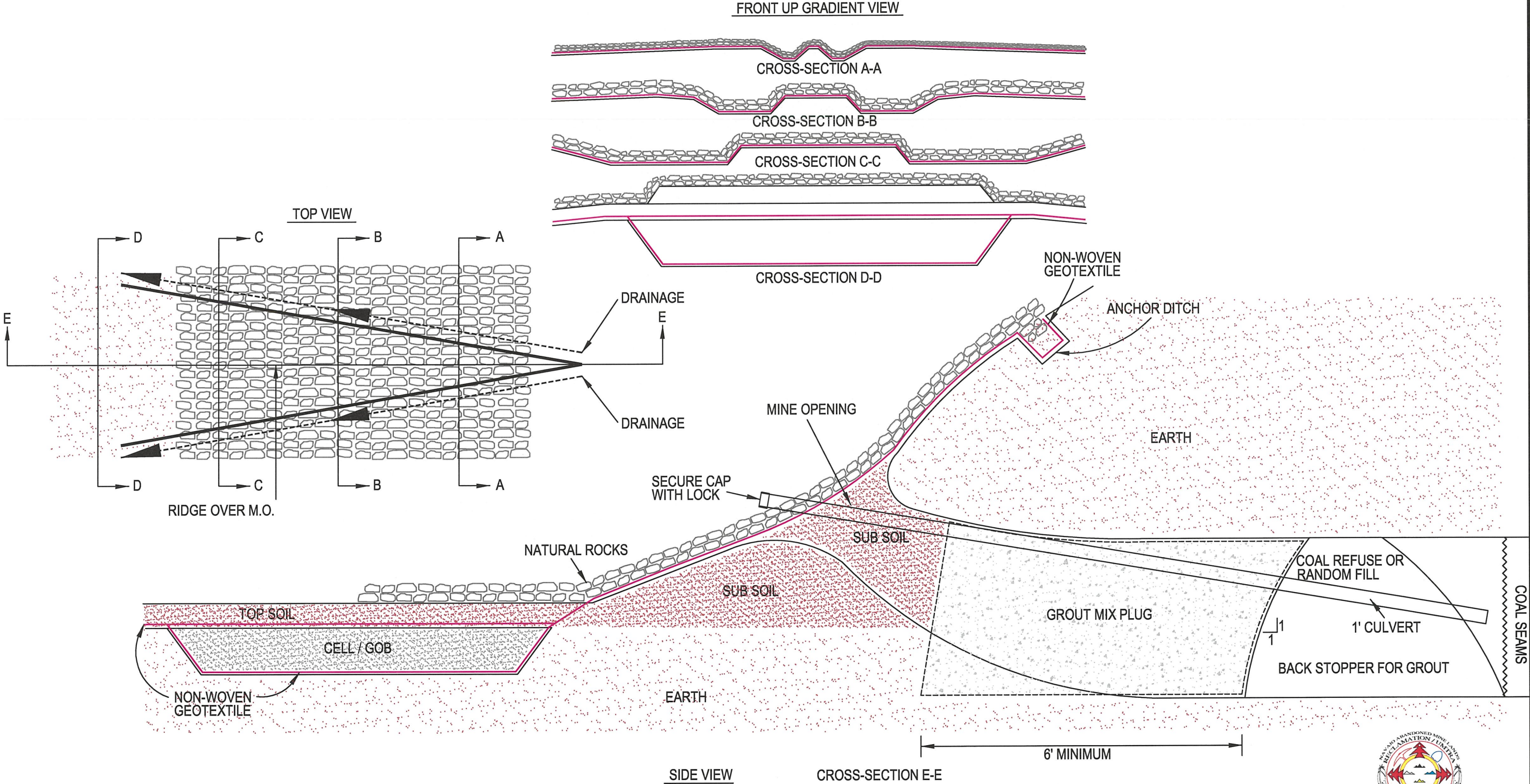


DIAGRAM: 5

FILTER, ROCK BERM

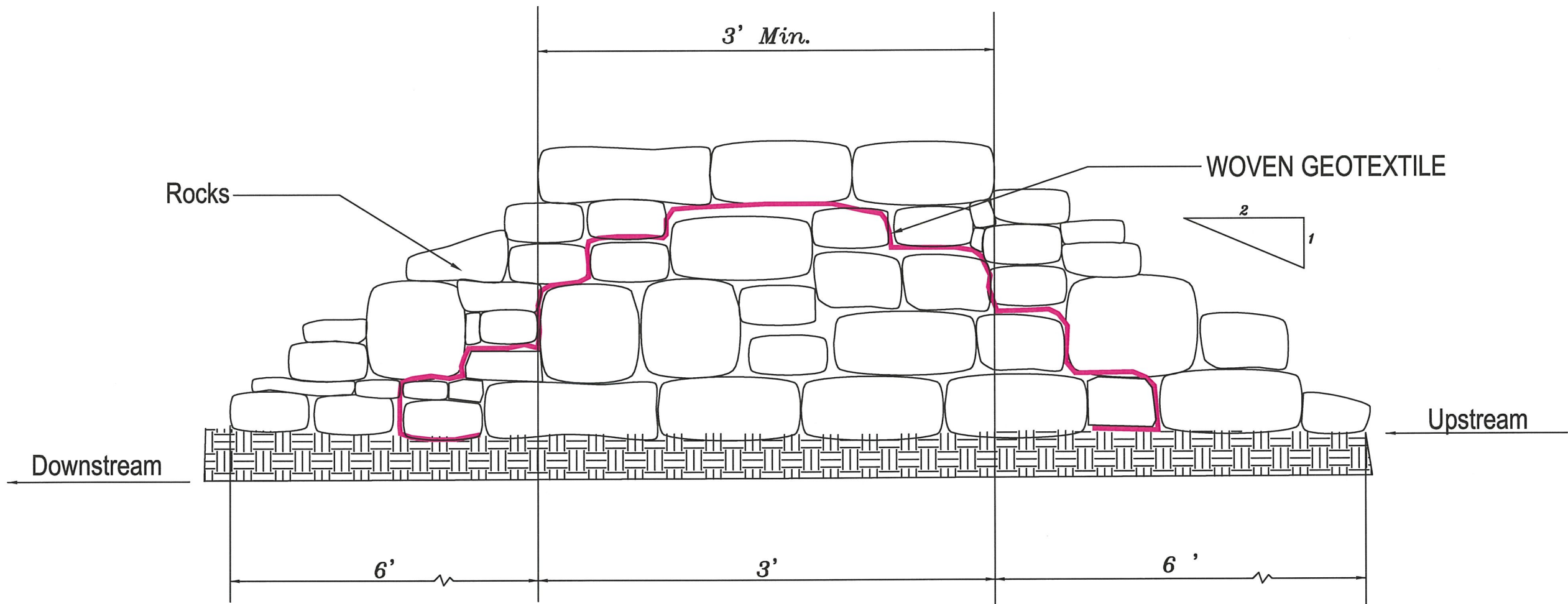
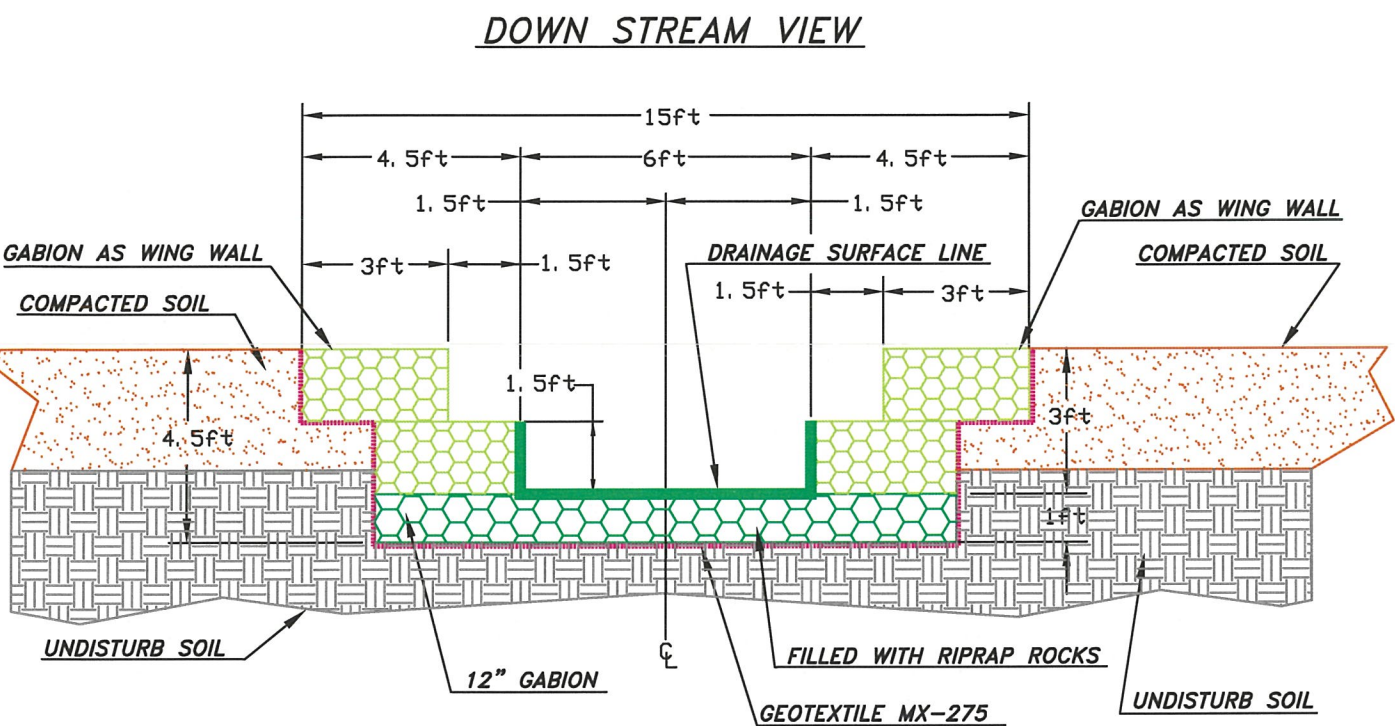
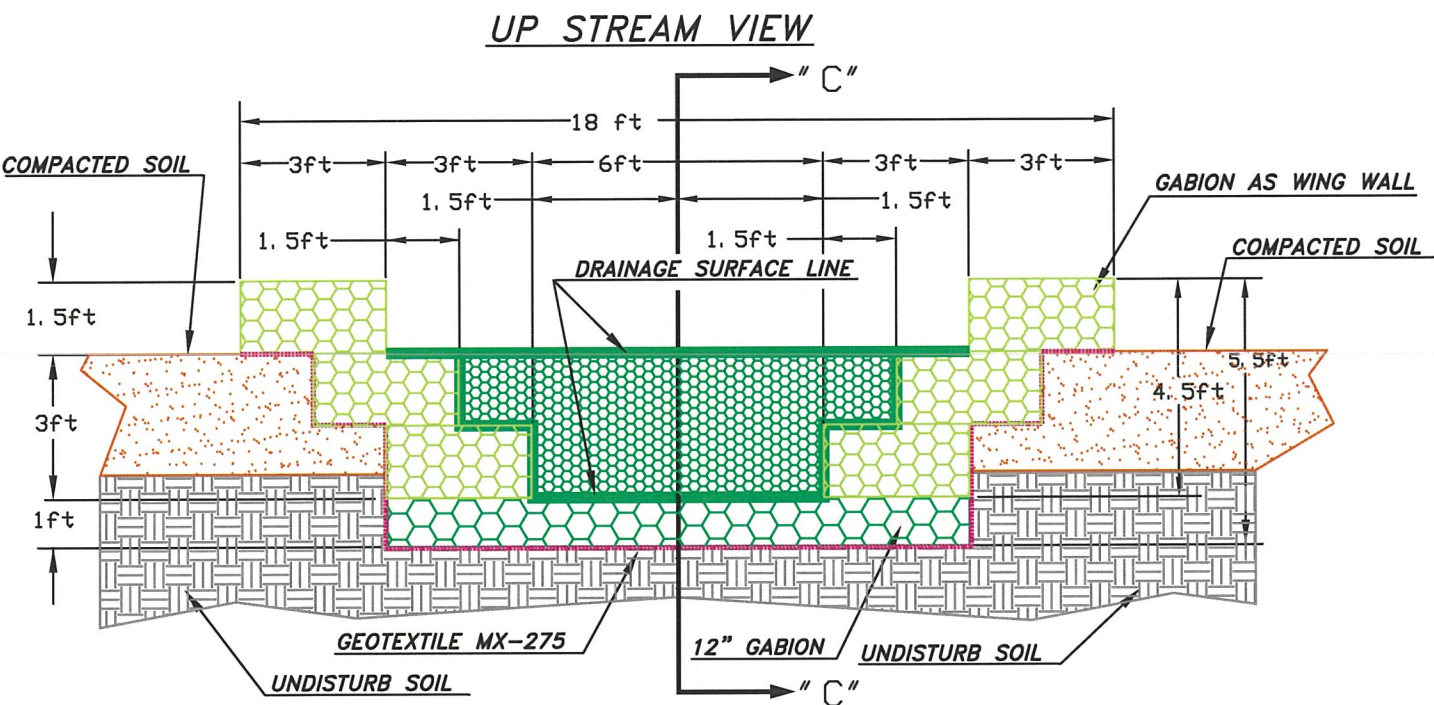


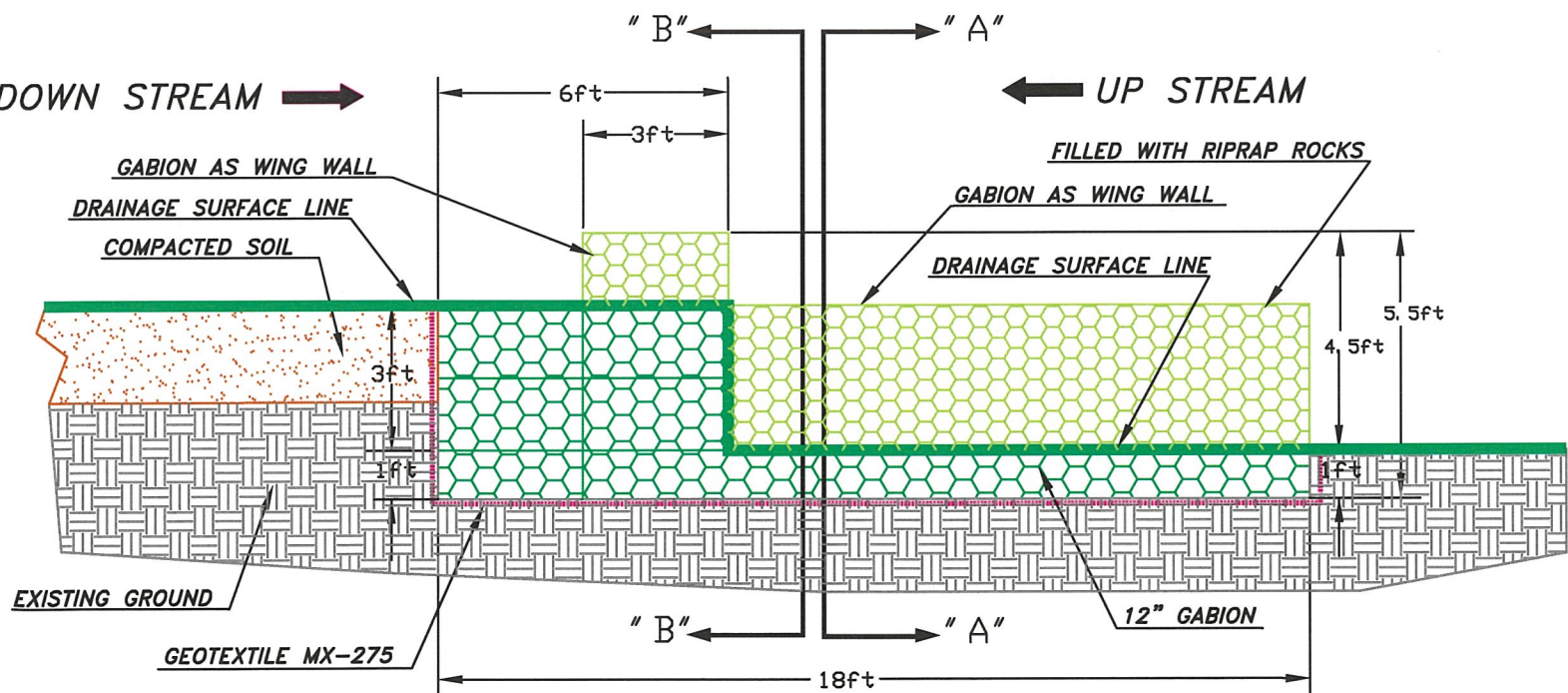
DIAGRAM: 6



CROSS SECTION A-A



CROSS SECTION B-B



PLAN VIEW
SECTIONAL VIEW C-C

NOTE: THE ROCK SHALL BE SOLID, ANGULAR OR SUBANGULAR FRAGMENT OF QUARRY STONE, **ROUND RIVERBED TYPE ROCK IS NOT ACCEPTABLE.**

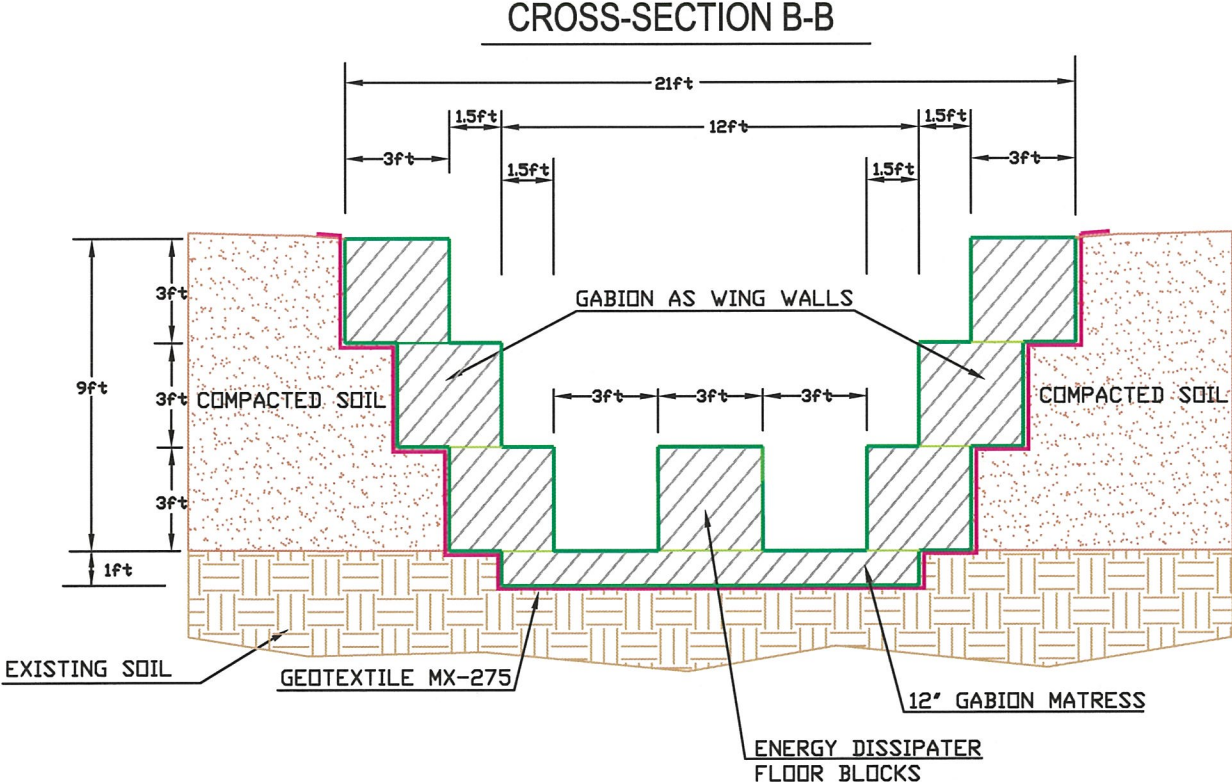
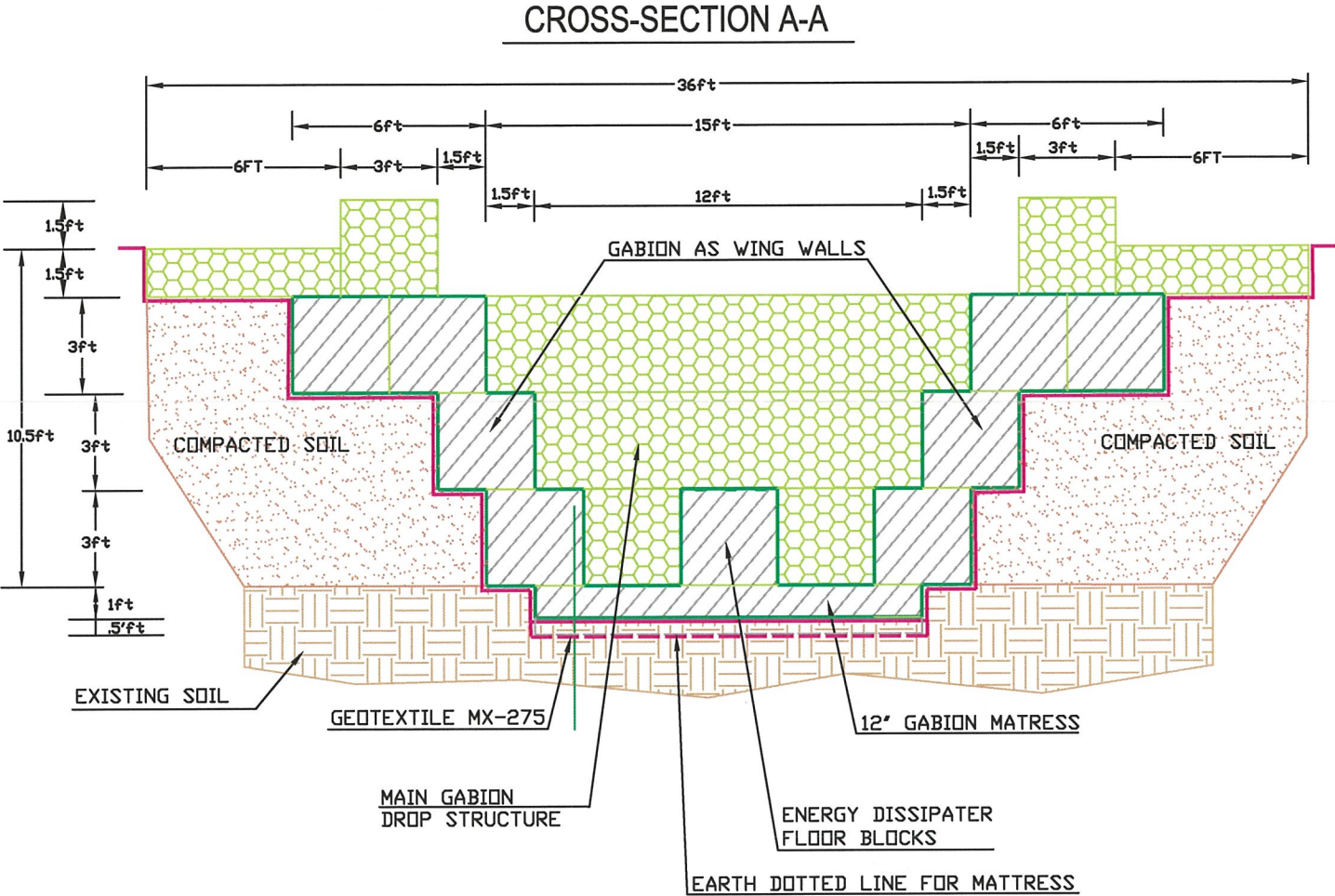
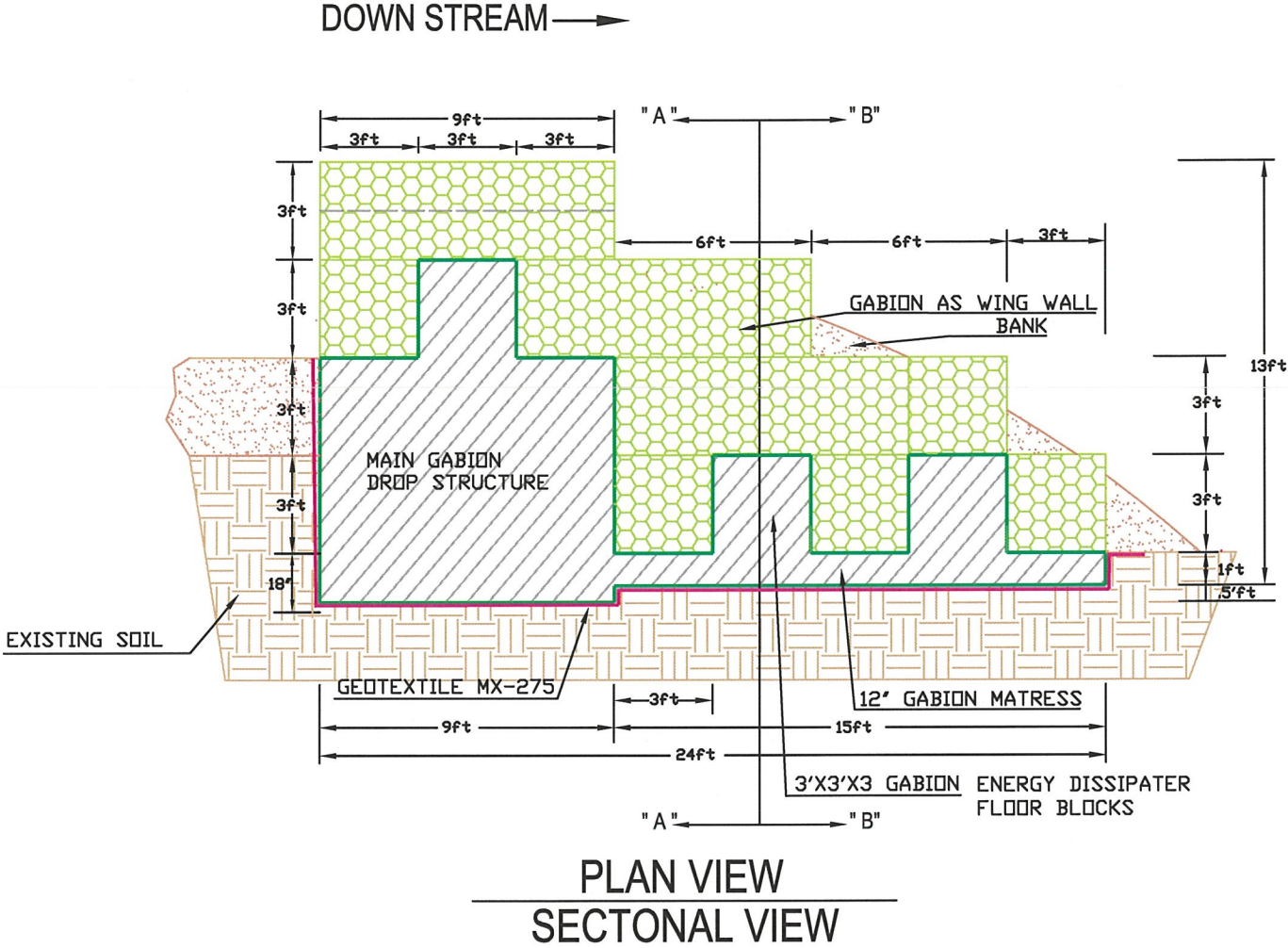
LEGEND

- GABION
- UNDISTURB SOIL
- COMPACTED SOIL



REVISION	DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM NAVAJO NATION		
CHACOAN AML RECLAMATION PROJECT 18'X18' GABION CROSS SECTION		
DRAWING: HAC DATE: 12/09/2005	CHECKED BY: CD DATE:	SURVEYED BY: DATE:
FILENAME: UPDATED: 02/11/2014	SHEET: of TOTAL SHEET:	SHIPROCK AML PROGRAM OFFICE SHIPROCK, NEW MEXICO

DIAGRAM: 7

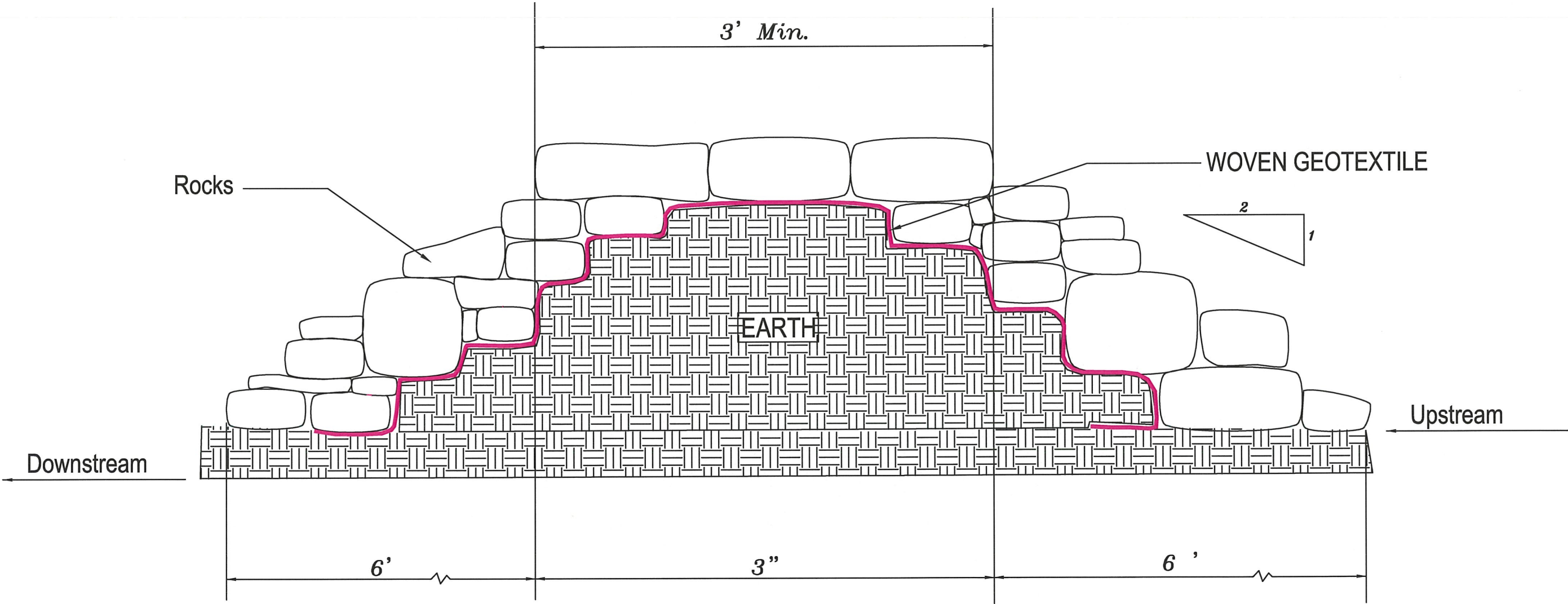


- LEGEND
- GABION
 - UNDISTURB SOIL
 - COMPACTED SOIL
 - GEOTEXTILE

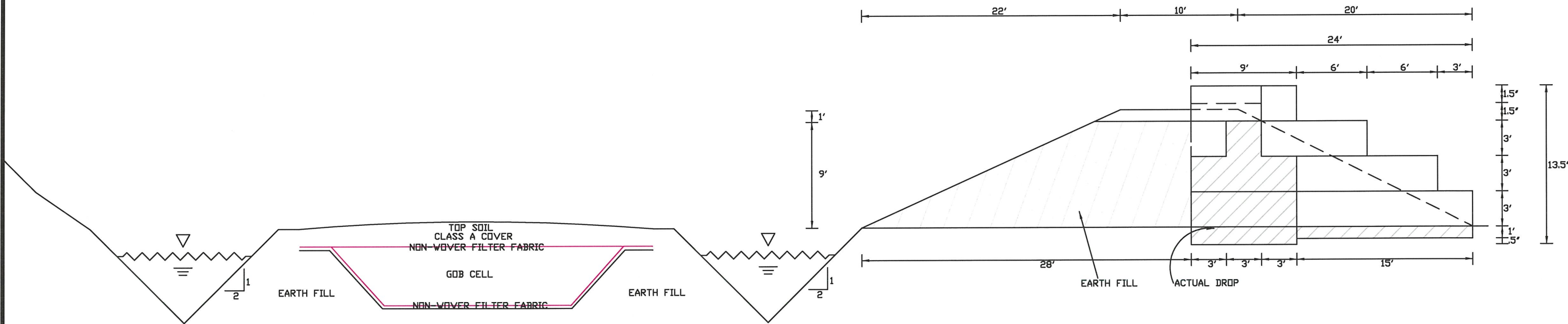


REVISION				DESCRIPTION	BY
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM					
NAVAJO NATION					
CHACOAN AML RECLAMATION PROJECT					
24'X24' GABION CROSS SECTION					
DRAWING: AJ	CHECKED BY:	SURVEYED BY:	AUTOCAD		
DATE: 02/15/2014	DATE:	DATE:	DRAWING		
FILENAME:	SHEET: of	SHIPROCK AML PROGRAM OFFICE			
UPDATED: 12/09/2005	TOTAL SHEET:	SHIPROCK, NEW MEXICO			

BASIC AML BERM

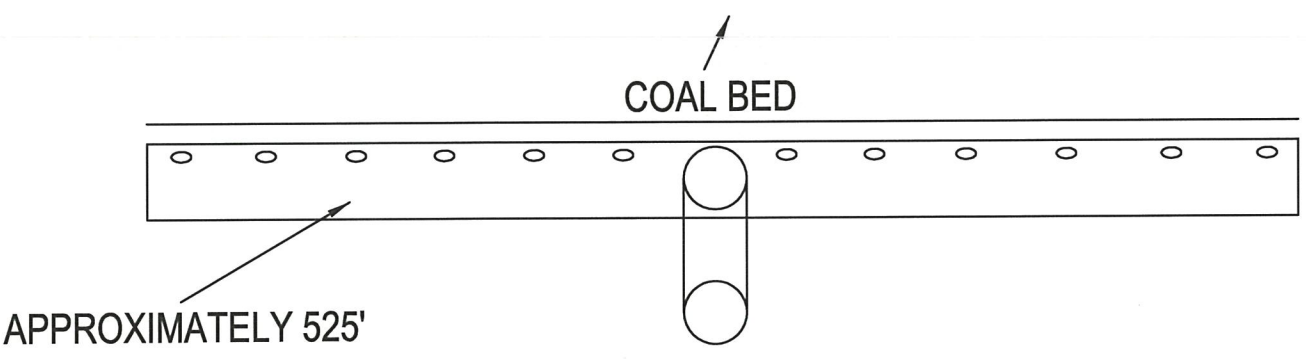


FINAL CONTOUR PROFILE FOR COAL FIRE



COAL BED AIR QUALITY MONITORY SYSTEM

PLAN VIEW



PROFILE

