TRIM BROW OF LOOSE, UNSTABLE MATERIAL

.Clear sloshed soil as needed to access mine interior

ADIT BACKFILL CLOSURE

Scale: as noted
Design: LAA Drafting: JCR
Refer to Spec Section 0250

1
H

2H
(5' MINIMUM)

1.5
2 MIN.

HAND and/or MACHINE PLACED RANDOM FILL

ADIT DIMENSIONS VARY
SHAFT BACKFILL CLOSURE

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas and Mining
Abandoned Mine Reclamation Program

RECLAMATION PROJECT
CONSTRUCTION
SPECIFICATIONS
Chapter 6:
DESIGN DRAWINGS

Scale: as noted
Design: LAA
Drafting: JCR

Refer to Spec Section 0250
Drawing 2 of 20
**STATE OF UTAH**  
**NATURAL RESOURCES**  
**Oil, Gas and Mining**  
Abandoned Mine Reclamation Program

**RECLAMATION PROJECT CONSTRUCTION SPECIFICATIONS**  
Chapter 6:  
DESIGN DRAWINGS

**BLOCK WALL CLOSURE**

- **Scale:** as noted
- **Design:** LAA  
- **Drafting:** JCR

Refer to Spec Sections 0250-0252  
Drawing 3 of 20

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**TYPICAL ELEVATION**

- **8" x 8" x 15" CONCRETE BLOCK**
- **KEY WALL INTO RIBS AND TOP OF OPENING**
- **TRIM BLOCK TO FIT SNUGLY**

**TYPICAL SECTION**

- **CONCRETE FOOTER AND REBAR ANCHOR PINS MAY BE OMITTED WITH OWNER'S APPROVAL WHERE THE SILL IS COMPETENT ROCK**

**FOOTING DETAIL**

- **PILING DETAIL**

**PLAN VIEW**

- **12" O.C.**
- **24" MIN.**
- **18" MIN.**
- **3" COVER**

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**Scale:** as noted  
**Design:** LAA  
**Drafting:** JCR

Refer to Spec Sections 0250-0252  
Drawing 3 of 20
NATIVE STONE WALL CLOSURE

STANDARDS:
- Footing detail: 1/2" rebar anchor pins (if required)
- Fill all spaces between stones with mortar
- 3" cover
- 32" min.
- 12" o.c. 24" o.c.

FOOTING DETAIL

TYPICAL ELEVATION
KEY WALL INTO RIBS AND TOP OF OPENING

TYPICAL SECTION
CONCRETE FOOTER AND REBAR ANCHOR PINS MAY BE OMITTED WITH OWNER'S APPROVAL WHERE THE SILL IS COMPETENT ROCK

STATE OF UTAH
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RECLAMATION PROJECT
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DESIGN DRAWINGS

Scale: as noted
Design: LAA Drafting: JCR
Refer to Spec Sections 0250-0252 Drawing 4 of 20
WALL AND BACKFILL CLOSURE

TRIM BROW OF LOOSE, UNSTABLE MATERIAL

CLEAR SLOUGHED SOIL AS NEEDED TO ACCESS MINE INTERIOR

2H (5' MINIMUM)

BLOCK OR NATIVE STONE WALL

BACKFILL

ADIT DIMENSIONS VARY

HAND and/or MACHINE PLACED RANDOM FILL

Refer to Spec Sections 0250-0252

Drawing 5 of 20
NOTE: ALL GATE STEEL TO BE 12-14% MANGANESE STEEL (MANGANAL OR EQUIV.)
NOTE: ALL GATE STEEL TO BE 12-14% MANGANESE STEEL (MANGANAL OR EQUIV.)
STATE OF UTAH
NATURAL RESOURCES
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RECLAMATION PROJECT CONSTRUCTION SPECIFICATIONS
Chapter 6: DESIGN DRAWINGS

CMP BAT GATE CLOSURE

Scale: as noted
Design: LAA  Drafting: JCR
Refer to Spec Sections 0250-0254
Drawing 10 of 20

Hand and/or machine placed random fill

4' MIN

2 MIN.

TRIM BROW OF LOOSE, UNSTABLE MATERIAL

BACKFILL

BAT GATE & HEADWALL (SEE DETAIL)

COM CULVERT

H

PIPE BED (4" MIN. THICKNESS)

ADIT DIMENSIONS VARY
CONCRETE HEADWALL EXTENDS 12" MIN. FROM WALL OF CMP CULVERT

LOCKBOX/REMOVABLE BAR
SEE DETAIL

CROSSBARS AND VERTICAL SUPPORTS EXTEND 6" MIN. THROUGH WALL OF CMP CULVERT

VERTICAL SUPPORT
4" x 1/2" PLATE

4" x 24" MAX. OPENING (OUTSIDE OF CULVERT)

PERIMETER BAR (OUTSIDE OF CULVERT)

12" MIN.

CONCRETE REINFORCEMENT:
#4 REBAR, 12" O.C., ONE MAT

NOTE: ALL GATE STEEL TO BE 12-14% MANGANESE STEEL (MANGANAL OR EQUIV.)
CMP contoured to fit against portal

SURFACE

adit dimensions vary

H

BACKFILL

REBAR GRATE

SEE DETAIL

CMP bedded using adjacent/dump materials (1" diameter max)

CMP CULVERT (72" Diameter)
Note: Field dimensions may vary slightly
NATURAL RESOURCES
Abandoned Mine Reclamation Program

REBAR SHAFT GRATE CLOSURE

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas and Mining
Abandoned Mine Reclamation Program

RECLAMATION PROJECT
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SPECIFICATIONS
Chapter 6:
DESIGN DRAWINGS

Scale: as noted
Design: LAA  Drafting: JCR
Refer to Spec Sections 0250-0253
Drawing 14 of 20
STATE OF UTAH
NATURAL RESOURCES
Oil, Gas and Mining
Abandoned Mine Reclamation Program

RECLAMATION PROJECT
CONSTRUCTION
SPECIFICATIONS
Chapter 6:
DESIGN DRAWINGS

REBAR SHAFT GRATE (WITH I-BEAM)

Anchor Pins: #8 Rebar 6 ft O.C.

Section: as noted

Refer to Spec Sections 0250-0253

Scale: as noted
Design: LAA
Drafting: JCR
Drawing 15 of 20
6" DIAMETER STEEL OR PVC PIPE

STEEL HINGE

OUTBY

1 IN. WIRE MESH WITH FRAME

NOTE: STEEL OR PVC PIPE TO EXTEND 12 INCHES INBY AND OUTBY WALL OR FILL MATERIAL
SHAFT PUF CLOSURE (Polyurethane Foam)

Scale: as noted
Design: LAA  Drafting: JCR
Refer to Spec Sections 0250-0254
Drawing 19 of 20
SHAFT PUF CLOSURE WITH CMP AND GRATE

Scale: as noted
Design: LAA  Drafting: JCR

Refer to Spec Sections 0250-0254
Drawing 20 of 20