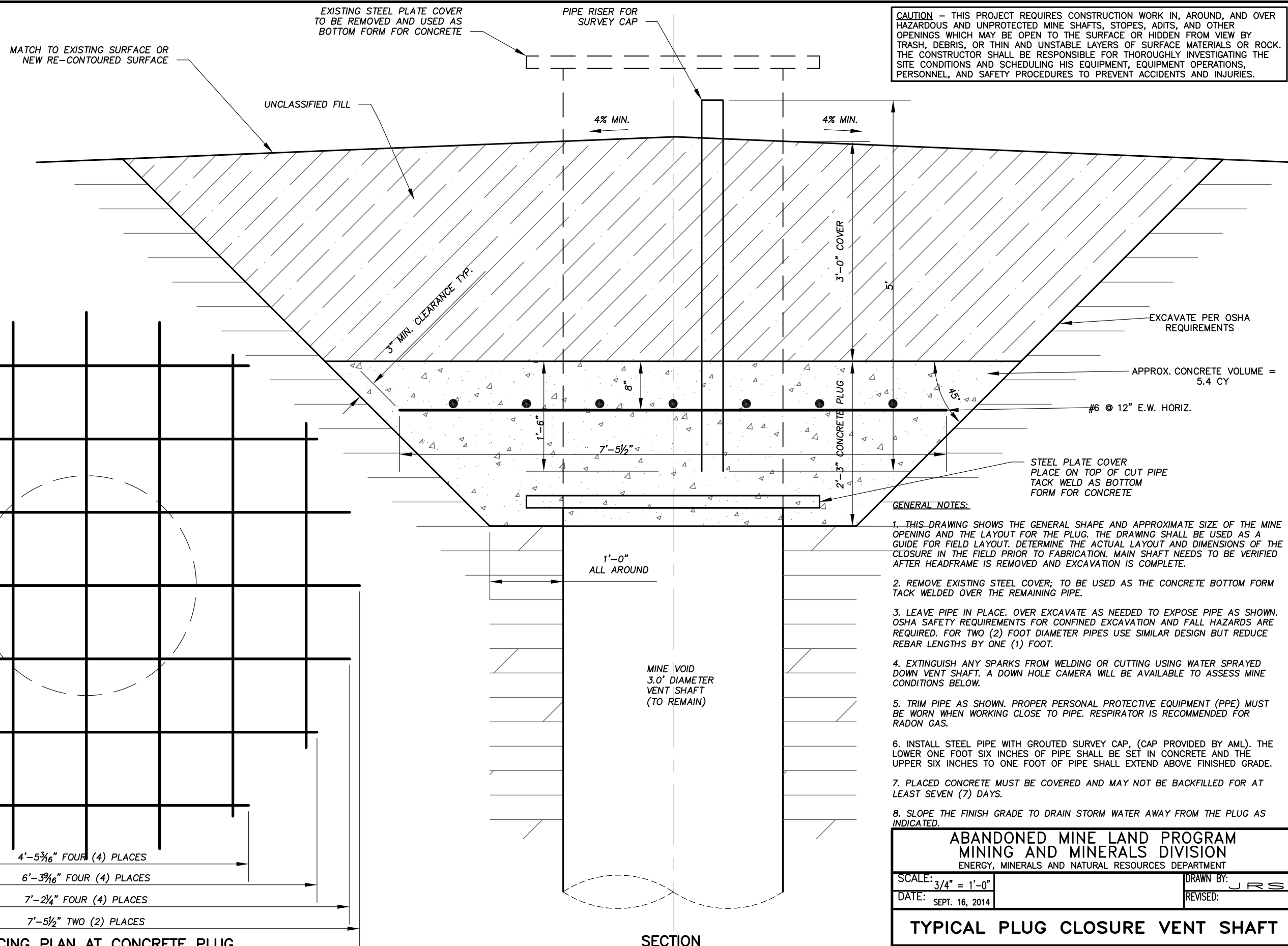


CAUTION - THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING HIS EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL, AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.



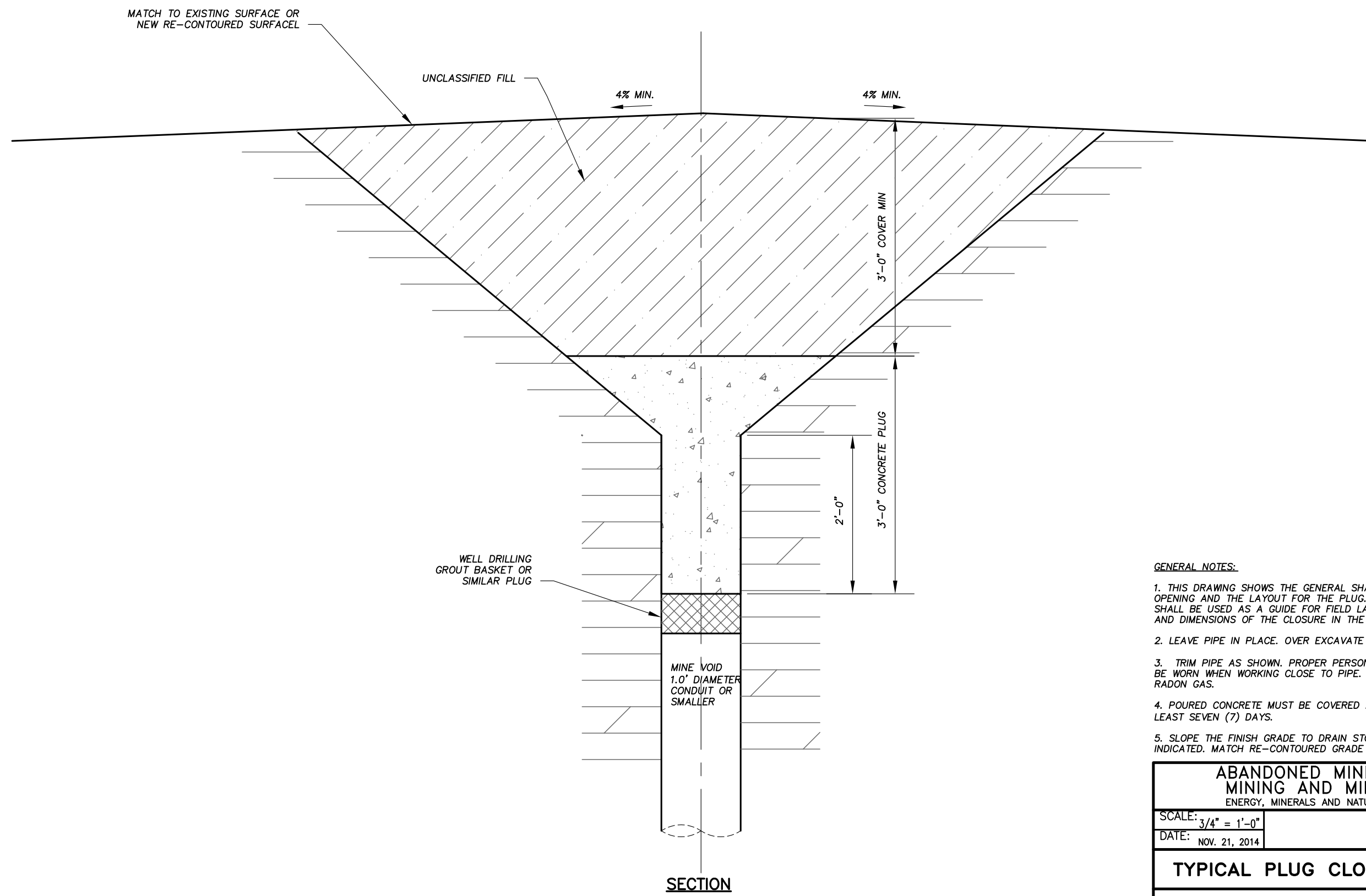
- GENERAL NOTES:
- THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE SIZE OF THE MINE OPENING AND THE LAYOUT FOR THE PLUG. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUT AND DIMENSIONS OF THE CLOSURE IN THE FIELD PRIOR TO FABRICATION. MAIN SHAFT NEEDS TO BE VERIFIED AFTER HEADFRAME IS REMOVED AND EXCAVATION IS COMPLETE.
  - REMOVE EXISTING STEEL COVER; TO BE USED AS THE CONCRETE BOTTOM FORM TACK WELDED OVER THE REMAINING PIPE.
  - LEAVE PIPE IN PLACE. OVER EXCAVATE AS NEEDED TO EXPOSE PIPE AS SHOWN. OSHA SAFETY REQUIREMENTS FOR CONFINED EXCAVATION AND FALL HAZARDS ARE REQUIRED. FOR TWO (2) FOOT DIAMETER PIPES USE SIMILAR DESIGN BUT REDUCE REBAR LENGTHS BY ONE (1) FOOT.
  - EXTINGUISH ANY SPARKS FROM WELDING OR CUTTING USING WATER SPRAYED DOWN VENT SHAFT. A DOWN HOLE CAMERA WILL BE AVAILABLE TO ASSESS MINE CONDITIONS BELOW.
  - TRIM PIPE AS SHOWN. PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) MUST BE WORN WHEN WORKING CLOSE TO PIPE. RESPIRATOR IS RECOMMENDED FOR RADON GAS.
  - INSTALL STEEL PIPE WITH GROUTED SURVEY CAP, (CAP PROVIDED BY AML). THE LOWER ONE FOOT SIX INCHES OF PIPE SHALL BE SET IN CONCRETE AND THE UPPER SIX INCHES TO ONE FOOT OF PIPE SHALL EXTEND ABOVE FINISHED GRADE.
  - PLACED CONCRETE MUST BE COVERED AND MAY NOT BE BACKFILLED FOR AT LEAST SEVEN (7) DAYS.
  - SLOPE THE FINISH GRADE TO DRAIN STORM WATER AWAY FROM THE PLUG AS INDICATED.

<b>ABANDONED MINE LAND PROGRAM</b>	
<b>MINING AND MINERALS DIVISION</b>	
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT	
SCALE: 3/4" = 1'-0"	DRAWN BY: JRS
DATE: SEPT. 16, 2014	REVISED:
<b>TYPICAL PLUG CLOSURE VENT SHAFT</b>	
GRANTS URANIUM-SPENCER MINE SAFEGUARD AND RECLAMATION PROJECT	
DRAWING NUMBER: <b>FIGURE 1</b>	

SPENCER\_VENT\_CLOSURE\_DESIGN.DWG PLOT SCALE 1 = 16

**REINFORCING PLAN AT CONCRETE PLUG**  
(FOR TWO (2) FOOT SHAFT REBAR IS ONE FOOT SHORTER)

CAUTION - THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING HIS EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL, AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

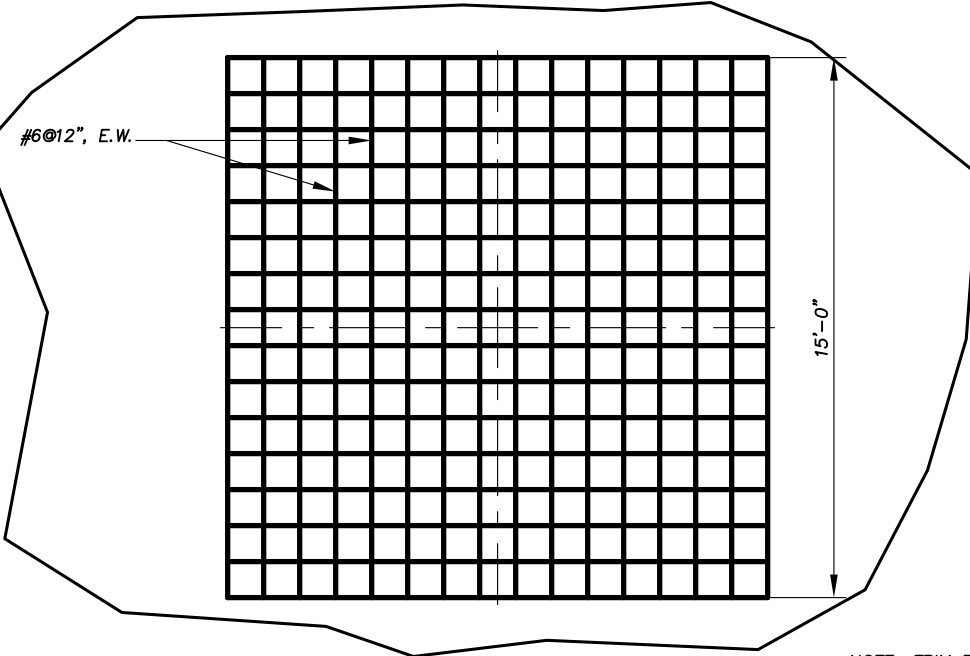


- GENERAL NOTES:**
1. THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE SIZE OF THE MINE OPENING AND THE LAYOUT FOR THE PLUG. HOLES VARY IN SIZE. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUT AND DIMENSIONS OF THE CLOSURE IN THE FIELD PRIOR TO FABRICATION.
  2. LEAVE PIPE IN PLACE. OVER EXCAVATE AS NEEDED TO EXPOSE PIPE AS SHOWN.
  3. TRIM PIPE AS SHOWN. PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) MUST BE WORN WHEN WORKING CLOSE TO PIPE. RESPIRATOR IS RECOMMENDED FOR RADON GAS.
  4. POURED CONCRETE MUST BE COVERED AND MAY NOT BE BACKFILLED FOR AT LEAST SEVEN (7) DAYS.
  5. SLOPE THE FINISH GRADE TO DRAIN STORM WATER AWAY FROM THE PLUG AS INDICATED. MATCH RE-CONTOURED GRADE OR EXISTING.

<b>ABANDONED MINE LAND PROGRAM</b> <b>MINING AND MINERALS DIVISION</b> ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT	
SCALE: 3/4" = 1'-0"	DRAWN BY: JRS
DATE: NOV. 21, 2014	REVISED:
<b>TYPICAL PLUG CLOSURE CONDUIT PIPE</b>	
GRANTS URANIUM-SPENCER MINE SAFEGUARD AND RECLAMATION PROJECT	DRAWING NUMBER: <b>FIGURE 2</b>

SPENCER\_CONDUIT\_CLOSURE\_DESIGN.DWG PLOT SCALE 1 = 16

EXCAVATED SHAFT PROFILE =  
EDGE OF CONCRETE

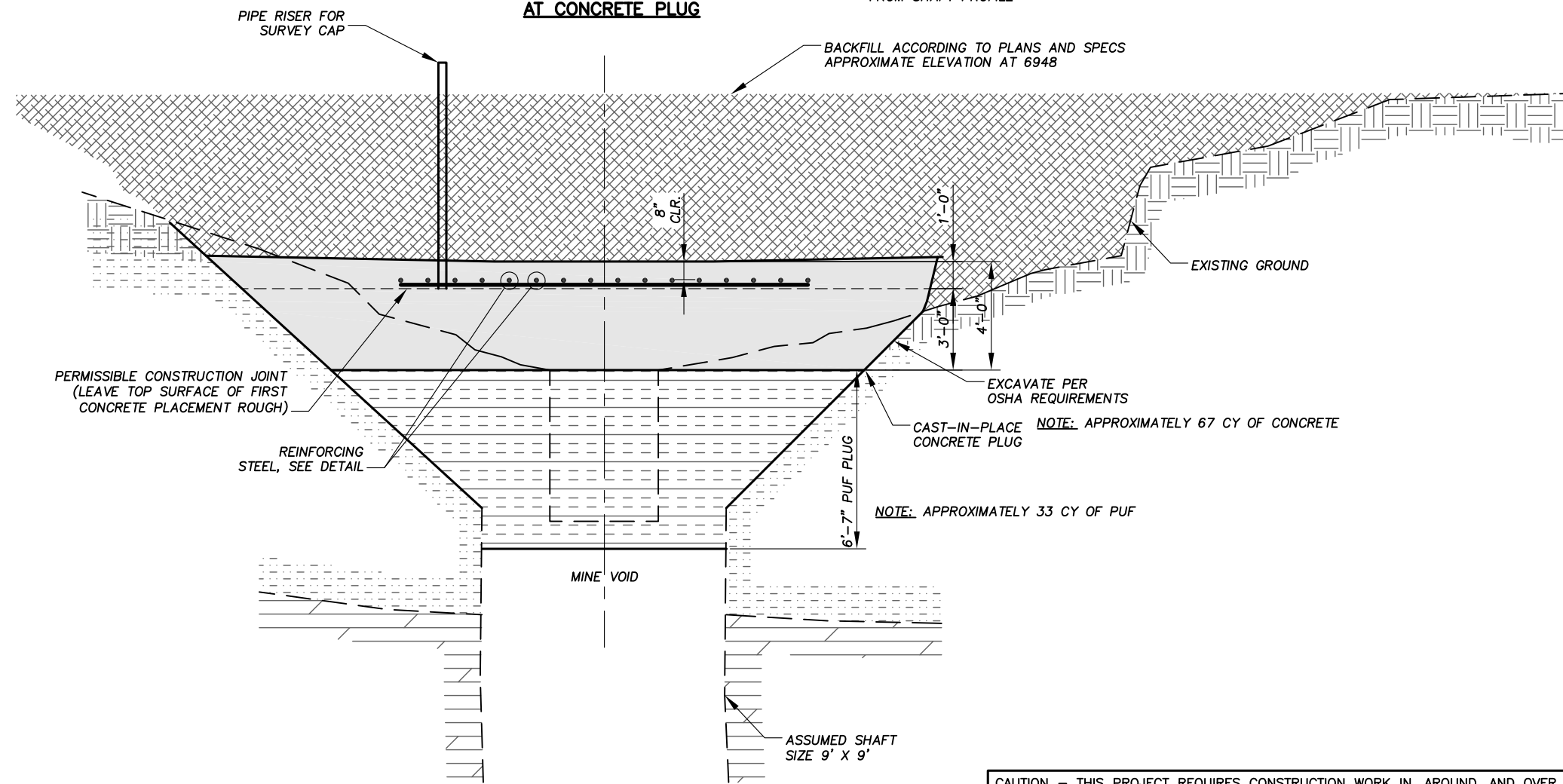


**REINFORCING PLAN  
AT CONCRETE PLUG**

NOTE: TRIM REBAR AS NEEDED  
TO PROVIDE 3" MIN. CLEARANCE  
FROM SHAFT PROFILE



**PHOTO OF HEADFRAME AND CONCRETE SLAB**



**SECTION**

**GENERAL NOTES:**

1. THIS DRAWING SHOWS THE EXPECTED GENERAL SHAPE AND APPROXIMATE SIZE OF THE EXCAVATED MINE OPENING. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUT AND DIMENSIONS OF THE CLOSURE IN THE FIELD PRIOR TO FABRICATION.
2. USE OF FALL PROTECTION IS REQUIRED ANYWHERE NEAR SHAFT OPENING.
3. CAREFULLY EXCAVATE CURRENT SHAFT ELEVATION.
4. THE LARGE CONCRETE SLAB, AS SEEN IN PHOTO ABOVE, MAY BE SUBSTITUTED FOR PUF IF IT CAN BE MOVED AND PLACED COMPLETELY OVER EXCAVATED SHAFT IN ONE SOLID PIECE. BID MUST INCLUDE PUF COST.
5. USING A COMPRESSED AIR LANCE OR EQUIVALENT, REMOVE DIRT AND LOOSE ROCK FROM SURFACES AGAINST WHICH POLYURETHANE FOAM (PUF) AND CONCRETE WILL BE PLACED. PLACE PUF AGAINST CLEAN, DRY SURFACES. DAMPEN SURFACES AGAINST WHICH CONCRETE WILL BE PLACED.
6. THE INDICATED BEDROCK SURFACES ARE APPROXIMATE. BEDROCK SURFACES ARE EXPECTED TO BE ROUGH, IRREGULAR AND VARIABLE IN DEPTH.
7. REMOVE EXISTING TIMBERS WITHIN THE WORK AREAS INSIDE THE SHAFT.
8. MINIMIZE THE AMOUNT OF ROCK, TIMBER AND OTHER DEBRIS THAT FALLS INTO THE MINE OPENING DURING CONSTRUCTION.

CAUTION - THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPES, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING HIS EQUIPMENT, EQUIPMENT OPERATIONS, PERSONNEL, AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.

<b>ABANDONED MINE LAND PROGRAM MINING AND MINERALS DIVISION</b> ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT		
SCALE: 3/16" = 1'-0"	SPENCER MINE	DRAWN BY: JRS
DATE: APRIL 15, 2015		REVISED:
<b>MAIN SHAFT CLOSURE</b>		
GRANTS URANIUM - SPENCER MINE SAFEGUARD AND RECLAMATION PROJECT		DRAWING NUMBER: <b>FIGURE 3</b>