

# **Appendix G. Adaptive Management Plan Reclamation Planting Documentation**

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## 2011 Planting Plan ERRG Blue Ledge Mine Project

**WRP4** The access road to this area was scheduled to be closed for the winter prior to planting due to project sequence logistics and the need for rain prior to planting. Therefore, hydroseeding was not possible.

WRP4 soil is native soil that has a low pH due to the waste rock. This area is defined as reclamation. Because of the low pH, David recommended adding compost and agricultural limestone to the planting hole in lieu of bark mulch at the surface. Avoiding grass competition is not as important as providing a good planting medium for the plants.

David performed tests on the WRP4 soil and determined that it should have 1 pound or 1 cup of agricultural lime added to each plant hole, along with 0.25 CF of compost (approximately 33% in a 12"x12"x10 deep hole).

No bark mulch was required at the surface to agree on a no-cost Work Order to add compost and agricultural limestone at WRP3.

Based on the takeoffs from the drawings, the estimated area of WRP4 was 0.88 acres and required 768 plants. The actual field measurements of the plantable area is 0.4 acres and should require 348 plants. Therefore there are 419 extra plants (120% extra) installed on WRP4.

Grass seed and endo ecto was spread between the plants, 18 inches away. The entire area was covered by straw.

Because the pH of the remaining soil is very low at WRP3 and WRP4, the USFS provided an acid tolerant grass seed for installation on WRP3 and WRP4 instead of the native grass seed as previously supplied by the USFS.

### Rock Stockpile/Log Deck

The rock stockpile/log deck was planted per the specifications. The disturbed area was regraded after rocks and logs removed, and some native soil from the repository excavation added to provide a planting surface.

endo ectom was added to the plant soaking water, and to the grass seed.

Plants were installed into native soil with a fertilizer tablet at 10 foot spacing, 3 feet of bark placed around the plant, and the area between the plants and bark mulch was hydroseeded with Flexterra/grass seed.

Based on the takeoffs from the drawings, the estimated area of the Rock Stockpile/Log Deck was 0.27 acres and required 235 plants. The actual field measurements of the plantable area found no measureable difference. Therefore there are 237 plants installed on the rock stockpile/log deck to use up available plants.

The road through this area was strawed and not seeded with grass. The east edge of the road was strawed and seeded with grass.

### South Staging Area

The south staging area was planted per the specifications. The disturbed area was regraded after rocks were removed, and some native soil from the repository excavation added to provide a planting surface.

endo ectom was added to the plant soaking water. The area was designated as wetland by Pete and David.

Plants were installed into native soil with a fertilizer tablet at 3 to 5 foot spacing, with 3 feet of bark placed around the plant. Because the area between the plants and bark mulch is less than 1 foot, no grass seed and Flexterra was applied. The entire area is covered with 3" of bark mulch.

It is not practical to properly apply Flexterra in a 1 foot wide strip between bark mulch and plants. It must be applied from 2 directions, and trying to control it into a 1 foot strip without getting it all over the bark and plants is not practical.

The south staging area is flat and is not susceptible to excessive erosion that the bark mulch cannot adequately handle.

Based on the takeoffs from the drawings, the estimated area of the South Staging Area was 0.23 acres and required 557 plants. The actual field measurements of the disturbed and plantable area is 0.14 acres and should require 339 plants. 490 plants were actually installed and there are 151 extra plants (44% extra) installed on the south staging area.

### North Stockpile

The North Stockpile area was planted in clusters to be able to properly apply Flexterra in larger strips between the clusters. The disturbed area was regraded after the stockpile was removed, and some residual native soil from the repository excavation was regraded to provide a planting surface.

Approximately 25,000 SF of flat area at the end of the spur road was covered with Grass and Flexterra to allow for future disturbance by maintenance activities if needed. Excess riprap rock and excess logs are stored at this area.

The remaining 37,500 SF was planted and Flexterra applied.

endo ectom was added to the plant soaking water. The area is designated as Reclamation planting.

Plants were installed into native soil with a fertilizer tablet in clusters of 4 each at 3 foot spacing, 3 feet of bark placed around the plants to form a 6'x6' bark area. The area between the edge of bark at the plant clusters was approximately 9 feet wide of Flexterra and grass seed.

Based on the takeoffs from the drawings, the estimated area of the North Stockpile was 1.37 acres and required 784 plants. The actual field measurements of the disturbed and plantable area is 1.55 acres and requires 1,194 plants. ERRG planted 1366 plants (14% extra) on the North Stockpile area to exceed the required number of plants.

### Repository Stockpile

The Repository Stockpile area was planted per the specifications. The disturbed area was regraded after the stockpile was removed, and some residual native soil from the repository excavation was regraded to provide a planting surface.

endo ectom was added to the plant soaking water. The area is designated as Reclamation planting.

Plants were installed into native soil with a fertilizer tablet at 10 foot spacing, and 3 feet of bark placed around the plant. The area between the plants was covered with Flexterra and grass seed.

Based on the takeoffs from the drawings, the estimated area of the Repository Stockpile was 0.5 acres and required 436 plants. The actual field measurements of the disturbed and plantable area showed no measureable difference. Therefore ERRG planted 443 plants (2% extra) on the Repository Stockpile area.

### Repository

The Repository will be planted with an adjustment to the specifications. The plants will be clustered and a continuous bark mulch layer placed around the shrubs, and the Flexterra and grass seed will be placed in a continuous layer. This will avoid a checkerboard pattern that may cause the Flexterra to fail and allow erosion on the cap.

endo ectom will be added to the plant soaking water. The area is designated as Reclamation planting.

Plants will be installed into native soil with a fertilizer tablet at 3.5 foot spacing, and 3 feet of bark placed around the plant. The area between the plants will be covered with bark mulch to form a continuous bark area.

Scoulers Willow was determined by the Forest Service to have the potential for deep roots. Therefore, Pete Jones directed the willows will be planted on the west slope below the repository access road and outside of the repository cap and drainage system.

As many willows were substituted with other planting area shrubs as possible. 65 snowbrush from WRP3 were substituted for willows, and the 65 willows planted on WRP 3.

135 snowbrush from the North Stockpile were substituted for willows, and the 135 willows planted on the North Stockpile. 43 snowbrush from the Repository Stockpile were substituted for willows, and the 43 willows planted on the Repository Stockpile.

A total of 243 willows were substituted from the Repository to other areas, leaving 652 Scouler's Willows on the repository. All willows were planted on the exterior slopes, outside of the geomembrane footprint.

The design engineer determined that shrubs should not be planted within 50 feet of the hinge point, where the top deck geocomposite drainage layer connects to the side slope pea gravel drainage layer. The area will be covered with Flexterra and grass seed.

Because the cover soil gets thicker near the bottom of the slope, the shrubs were preferentially planted within 50 feet of the west side perimeter road. As these shrubs mature they will also create a barrier to ATV access. This leaves approximately 75 feet of slope up to the hinge point to be covered by Flexterra.

Because the cover soil on the top deck is minimum 3 feet thick up to 7 feet thick, the shrubs were planted within 50 feet of the east side perimeter road. This is the uphill side of the slopes and the geocomposite drainage system is not as critical to function if roots penetrate it.

This leaves approximately 50 feet from the edge of shrubs to the hinge point to be covered by Flexterra.

Shrubs were planted on the outside edge of the perimeter road on the north and south ends of the repository. Shrubs were also planted on the adjacent disturbed slopes around the Repository as locations are available.

Based on the takeoffs from the drawings, the estimated area of the Repository was 2.78 acres and required 4,844 plants. The actual field measurements of the plantable area minus roads and riprap ditches is 2.28 acres and requires 3,970 plants. 4,992 plants were actually installed. Therefore there are 1,022 extra plants (26% extra) on the Repository area.

### Plant survival

O&M Plan Section 8.1 states that plants will be inspected on a monthly basis, starting in the spring after the snow melts. Assume site is accessible April to October, 6 site visits per year.

Specification section 626.13 states that plants will be inspected at the end of 1 year. Section 626.14 states an inspection of the plants will be 15 days before the end of the plant establishment period to identify plants for replacement. A final inspection of all plants within 15 days after completion of all replacement planting will be final acceptance.

Plants that do not survive and must be replaced will be inspected 15 days after replanting.

Given the plantable area for each site and the actual numbers of plants installed usually being more than required, if after one year there are adequate live plants for the given surface area, plants may not be replaced.

Planting began on 10-10-2011. 15 days before end of 1 year plant establishment period = September 25, 2012. Final plant inspection 15 days after replanting, if needed.

### Grass Coverage

Specification section 713 is the grass establishment section. There is no inspection period or minimum coverage specified grass.

### Haul Roads

Straw, grass seed, mycorrhizae, and fertilizer were applied at the specified rates.

Haul road 4 from the WPR3 sediment basin to WRP3 was decommissioned by outslowing the road bed, compacting the fill slope, installing water bars, seeding, fertilizing, straw, and slash.

Haul road 2 from the Miners Trail parking area to WRP1 was decommissioned by outslowing the road bed, compacting the fill slope, installing water bars, seeding, fertilizing, straw, and slash.

The remaining Haul roads were winterized by outslowing the road bed, grading down exterior berms at the road edge, compacting the fill slope, installing water bars, straw and slash. (no seed or fertilizer)

Creek crossing culverts were removed and the creek bed and slopes armored with geotextile and rip rap. Silt fence was installed on each side of the creek disturbed area.

The 1060 road was winterized by adding 4 inches of gravel surfacing. Ditches and culvert inlets were cleaned out as needed.

The 400 road was winterized by adding 4 inches of gravel surfacing. Rolling water bars were installed. The disturbed edges of the road were hydroseeded with Flexterra and grass seed.

The 1060 road from the 400 road to the Joe Creek bridge was graded and rolled with a smooth drum roller. Ditches and culvert inlets were cleaned out as needed.

The 1050 road potholed areas were graded and rolled with a smooth drum roller.

### WRP1 and WRP4 Sediment Basins and Gully

The perimeter slopes of the gully below WRP1 and WRP4 were reclaimed by applying hydroseed containing Flexterra, grass seed, mycorrhizae, and fertilizer. The Flexterra was applied at 4,500 lb/acre.

Planting Material Sources:	Source	Product
Plants	Silver Springs Nursery, Ruch 541-899-1065	plants
Mycorrhizae	US Forest Service, Pete Jones 541-951-142	powdered for grass seed and plant root soaking, granular for hydroseeding
Compost	Grange Co-op, Medford (541) 772-4730	Gardner & Bloome Soil Building Compost (3 cubic feet bags) and if you run out, use Grange Co-op Rogue Natural and Organic Planting Compost (1.5 cubic feet bags).
Fertilizer Tablets	Forestry Suppliers 800-647-5368	Tablets, Planting 20-10-5, 5G
Agricultural Limestone	Knife River Materials 541-621-1683	Joe Coffman, Sales Manager
Bark Mulch	Hilton Landscape Supply, 541-664-3374	Multibark
Sheet Mulch	Home Depot, (541) 512-1458	Easy Gardener WeedBlock 3 ft. x 50 ft. Polypropylene Landscape Fabric, 10 year life, plus fabric staples
Fertilizer	Ewing, Medford, 541-535-8230	Biosol organic fertilizer 7-2-1
Straw	United Rentals, Medford 541-773-7323	Weed free straw bales
Flexterra	Ewing, Medford, 541-535-8230	Flexterra HP-FGM
Grass Seed	US Forest Service, Pete Jones 541-951-142	native grass seed
Big Game Repellent	Forestry Suppliers 800-647-5368	Animal Repellent, PLANTSKYDD/BK

### Material Application Rates:

Straw: 3,200#/acre = 1 bale per 33 ft x 33 ft area

Bark Mulch at surface: 3'x3'x3" = 2.25 CF = 17 gallons per plant

Compost at WRP3 & 4 only: 0.25 CF/plant = 0.25 CF = 2 gallons per plant, 1 compost bale = 3 CF = 12 plants/bale

Limestone at WRP3 & 4 only: upper half #3 = 3.5 cups/plant; lower half #3 = 1.5 cups/plant; and WRP 4 = 1 cup/plant

Big Game Repellent= Mix and apply per label, apply when plant is dry

Grass fertilizer: 1,000#/acre = 1 - 30# bag = 35 ft x 35 ft area

micronized endo ecto flour: 10 #/acre = 2.5 # per 1/4 acre seed bag

micronized endo plant soaking: 1#/100 gallons = 0.05# = 1 oz/5 gallon bucket = 2 tablespoons/5 gallon bucket

plant fertilizer tablets: 1 - 5 gram tablet per plant, 3 inches from the root ball (corner of hole)

3 inch berm at each plant

soak plants for 1 hour minimum per plant

Grass Seed for WRP3 & 4: 13.63 #/acre = 1/3 lb per 1,000 SF (30' x 30' area)

Flexterra: 4,500 #/acre

**Grass Seeding Plan**

ERRG Blue Ledge Mine Project  
2011 Seeding Plan

11-Oct-11

Cool = 27 #/acre  
Warm = 36 #/acre

Location	Type	Acres	Hand Straw Application	Seed acres	Seed Mix	Seed # provided by USFS	Total Materials for Plants and Seeding							
							Straw #	Bark Mulch CF	Compost CF	Limestone	BGR gallons	Grass Fertilizer 1000 #/Ac 7-2-3	Plant Fertilizer	Micronized endo ectom
WRP1	riparian	0.08		0.08	Cool	2	0	0				80	192	0.8
WRP2	riparian	0.01	0.01	0.01	Cool	0.3	35	54				10	24	0.1
WRP3	reclamation	0.8	0.8	0.8	USFS	11	2,800	0	174	1742	2	800	697	8.0
WRP4	reclamation	0.4	0.4	0.4	USFS	5	700	0	87	348	1	400	348	4.0
South Stockpile	riparian/wetland	0.14		0.14	Cool	4	0	763			1	140	339	1.4
North Stockpile	reclamation	1.37		1.37	Warm	49	0	2,685			3	1,370	1,194	13.7
Repository	reclamation	2.78		2.78	Warm	100	0	10,899			12	2,780	4,844	0.0
Repository Stockpile	reclamation	0.5		0.5	Warm	18	0	980			1	500	436	5.0
Rock Stockpile	reclamation	0.27		0.27	Cool	7	0	529			1	270	235	2.7
Miners Trail road decommission	seed	0.11	0.11	0.11	Cool	3	352	0			0	110	0	1.1
WRP3 road decommission	seed	0.32	0.32	0.32	Cool	9	1,024	0			0	320	0	3.2
Haul Truck Site	seed	0.1	0.1	0.1	Cool	3	320	0			0	100	0	1.0
WRP 1 landslide	seed	0.1	0.1	0.1	Cool	3	320	0			0	100	0	1.0
WRP 3 lower road fill	seed	2.44	0.61	2.44	Cool	66	7,808	0			0	2,440	0	6.1
WRP 2 road fill	seed	0	0.61	0	Cool		0	0			0	0	0	6.1
WRP 1 road fill	seed	0		0	Cool		0	0			0	0	0	0.0
1060 Road slopes	seed	0		0	Cool		0	0			0	0	0	0.0
log deck	seed	0.09	0.09	0.09	Cool	2	288	0			0	90	0	0.9
WRP2 bypass road	seed	0.06	0.06	0.06	Cool	2	192	0	0	0	0	60	0	0.6
<b>Total:</b>		<b>9.57</b>	<b>3.21</b>	<b>9.57</b>		<b>284 #</b>	<b>13,839</b>	<b>15,911</b>	<b>261</b>	<b>2,091</b>	<b>21</b>	<b>9,570</b>	<b>8,309</b>	<b>55.7</b>
		acres	acres	acres			pounds	CF	CF	pounds	gallons	pounds	tablets	pounds
				4.92	Cool acres =	117 #	6.9	589	10			4.8		10 #/acre
				4.65	Warm acres =	167 #	tons	CY	CY			tons		mix w/seed

**Material Application Rates:**

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Compost at WRP3 & 4 only: 0.25 CF/plant = 0.25 CF = 2 gallons per plant, 1 compost bale = 3 CF = 12 plants/bale

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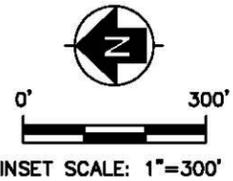
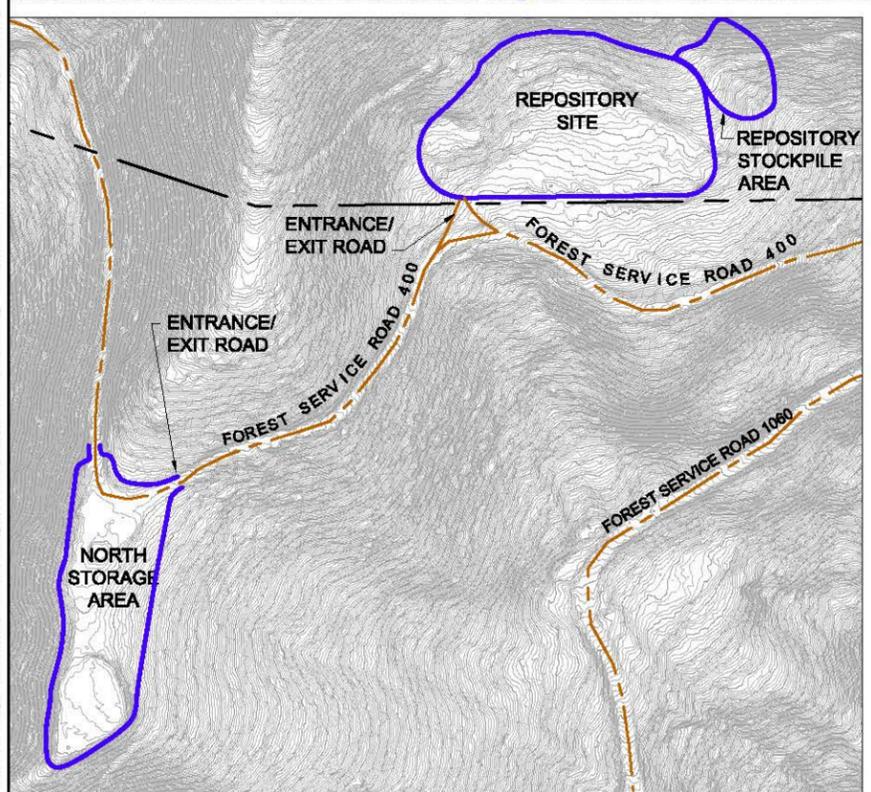
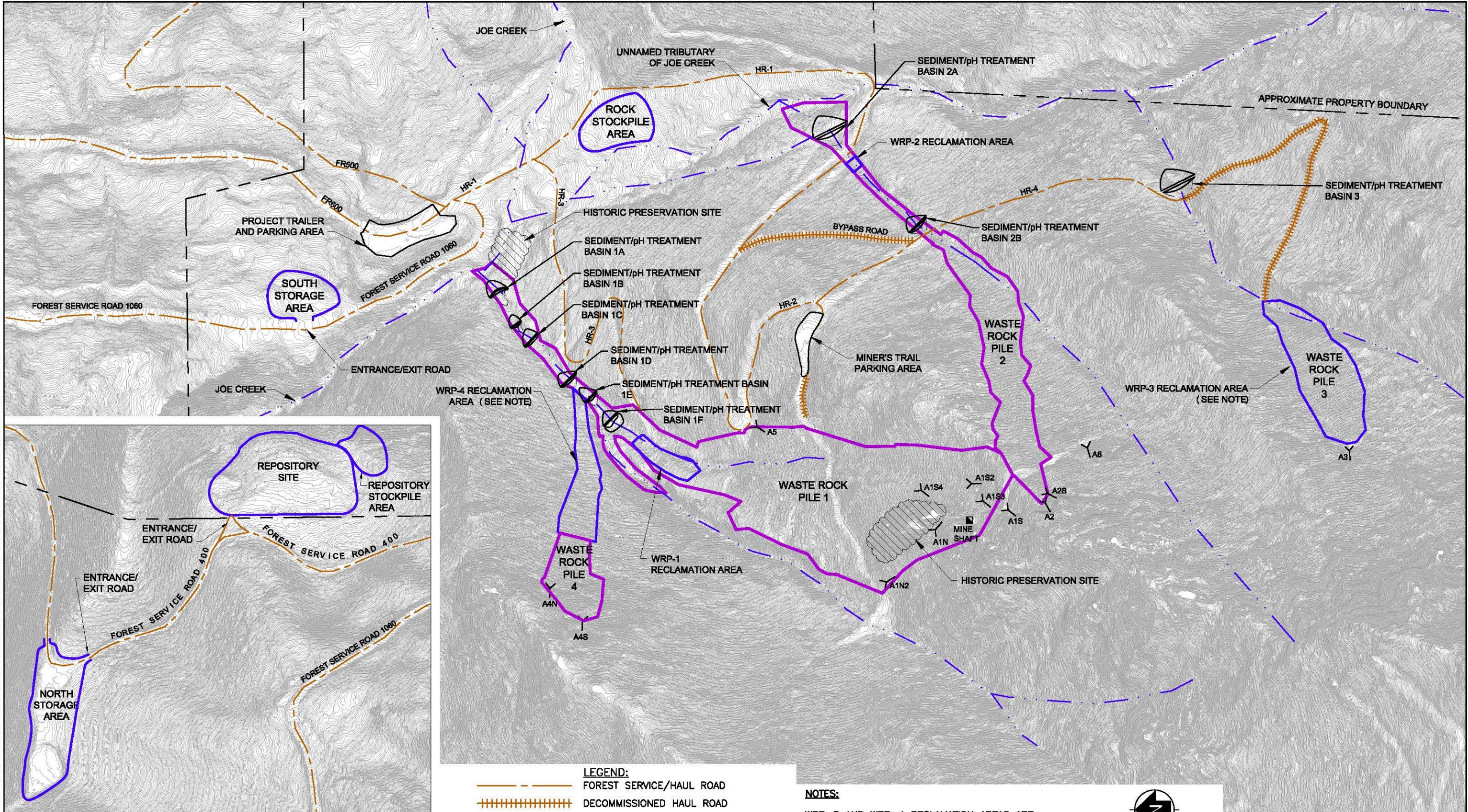
3 inch berm at each plant

soak plants for 1 hour minimum per plant

Grass Seed for WRP3 & 4: 13.63 #/acre = 1/3 lb per 1,000 SF (30' x 30')

Flexterra: 4,500 #/acre

FILE NAME: N:\graphics\2010\2010-064 USFS Blueledge Mine\Maps and Drawings\Final Report\Overall Site Planning Layout\NAME: 1 PLOTTED: Tuesday, February 07, 2012 - 4:52pm



- LEGEND:**
- FOREST SERVICE/HAUL ROAD
  - DECOMMISSIONED HAUL ROAD
  - PROPERTY BOUNDARY
  - RECLAMATION AREA
  - STREAM
  - WASTE ROCK BOUNDARY REMOVAL LIMIT
  - APPROXIMATE LOCATION OF ADIT
  - APPROXIMATE LOCATION OF MINE SHAFT

**NOTES:**

WRP-3 AND WRP-4 RECLAMATION AREAS ARE ALSO THE WASTE ROCK BOUNDARY REMOVAL LIMITS.

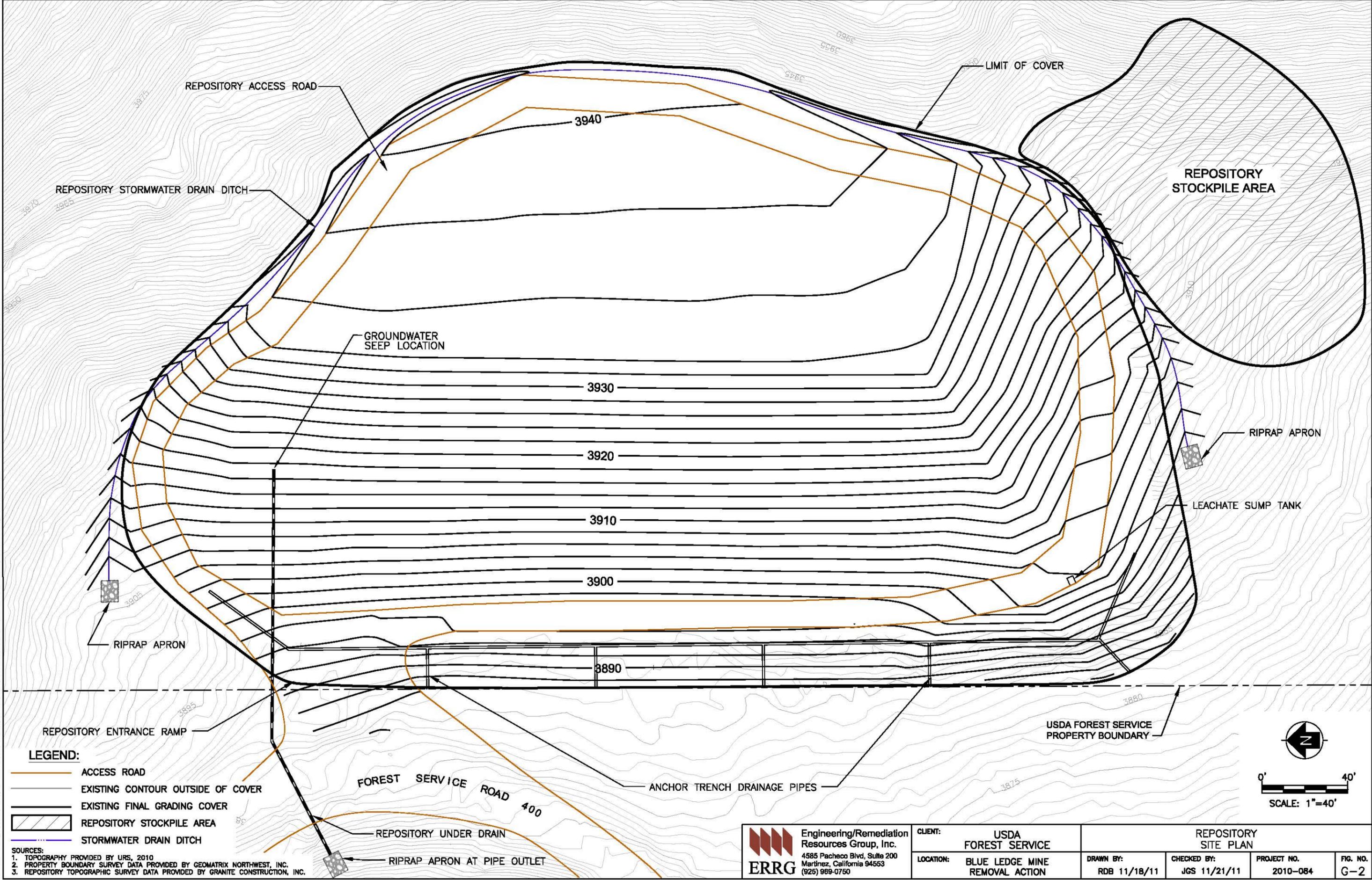
FR = FOREST SERVICE ROAD  
HR = HAUL ROAD

SCALE: 1"=200'

SOURCE: URS BLUE LEDGE MINE REMOVAL ACTION, DRAWING NO. 101, SHEET 7 OF 60, CAD FILE NO. 101, DATED: 2/2010.

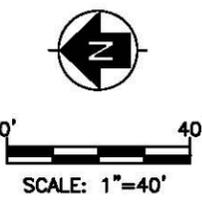
<b>Engineering/Remediation Resources Group, Inc.</b> 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 969-0750	<b>CLIENT:</b> USDA FOREST SERVICE	<b>OVERALL SITE PLAN</b>		
	<b>LOCATION:</b> BLUE LEDGE MINE REMOVAL ACTION	<b>DRAWN BY:</b> RDB 11/18/11	<b>CHECKED BY:</b> JGS 11/21/11	<b>PROJECT NO.</b> 2010-084

FILE NAME: H:\graphics\2010\2010-084 USFS Blueledge Mine\Maps and Drawings\G and M Plan\Repository Site Planning Layout Name: 2 PLOTTED: Friday, February 03, 2012 - 2:04pm



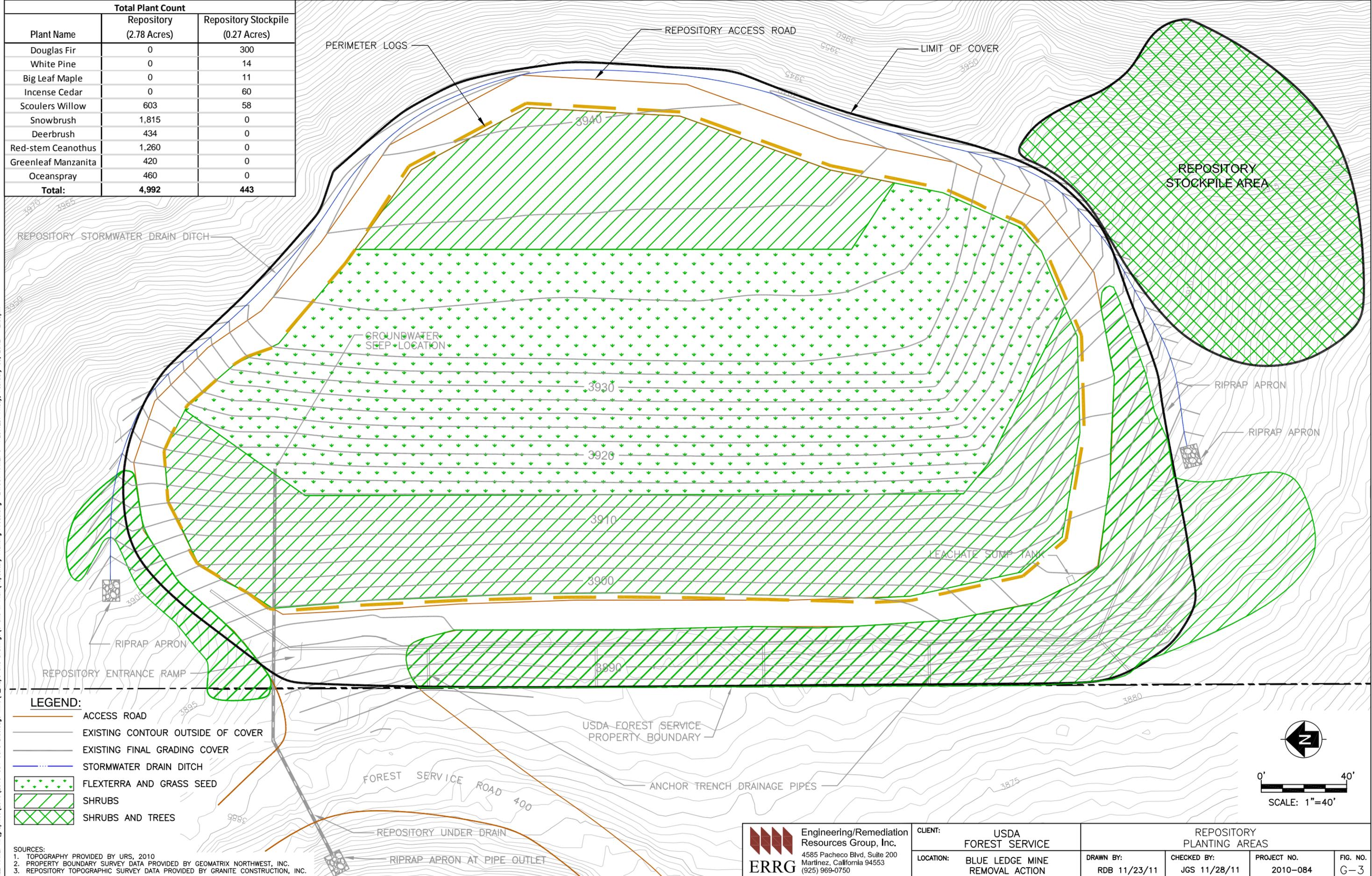
- LEGEND:**
- ACCESS ROAD
  - EXISTING CONTOUR OUTSIDE OF COVER
  - EXISTING FINAL GRADING COVER
  - REPOSITORY STOCKPILE AREA
  - STORMWATER DRAIN DITCH

**SOURCES:**  
 1. TOPOGRAPHY PROVIDED BY URS, 2010  
 2. PROPERTY BOUNDARY SURVEY DATA PROVIDED BY GEOMATRIX NORTHWEST, INC.  
 3. REPOSITORY TOPOGRAPHIC SURVEY DATA PROVIDED BY GRANITE CONSTRUCTION, INC.

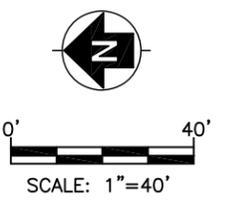


<b>Engineering/Remediation Resources Group, Inc.</b> 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 989-0750	<b>CLIENT:</b> USDA FOREST SERVICE	<b>REPOSITORY SITE PLAN</b>		
	<b>LOCATION:</b> BLUE LEDGE MINE REMOVAL ACTION	<b>DRAWN BY:</b> RDB 11/18/11	<b>CHECKED BY:</b> JGS 11/21/11	<b>PROJECT NO.</b> 2010-084

Total Plant Count		
Plant Name	Repository (2.78 Acres)	Repository Stockpile (0.27 Acres)
Douglas Fir	0	300
White Pine	0	14
Big Leaf Maple	0	11
Incense Cedar	0	60
Scoulers Willow	603	58
Snowbrush	1,815	0
Deerbrush	434	0
Red-stem Ceanothus	1,260	0
Greenleaf Manzanita	420	0
Oceanspray	460	0
<b>Total:</b>	<b>4,992</b>	<b>443</b>



- LEGEND:**
- ACCESS ROAD
  - EXISTING CONTOUR OUTSIDE OF COVER
  - EXISTING FINAL GRADING COVER
  - STORMWATER DRAIN DITCH
  - FLEXTERRA AND GRASS SEED
  - SHRUBS
  - SHRUBS AND TREES



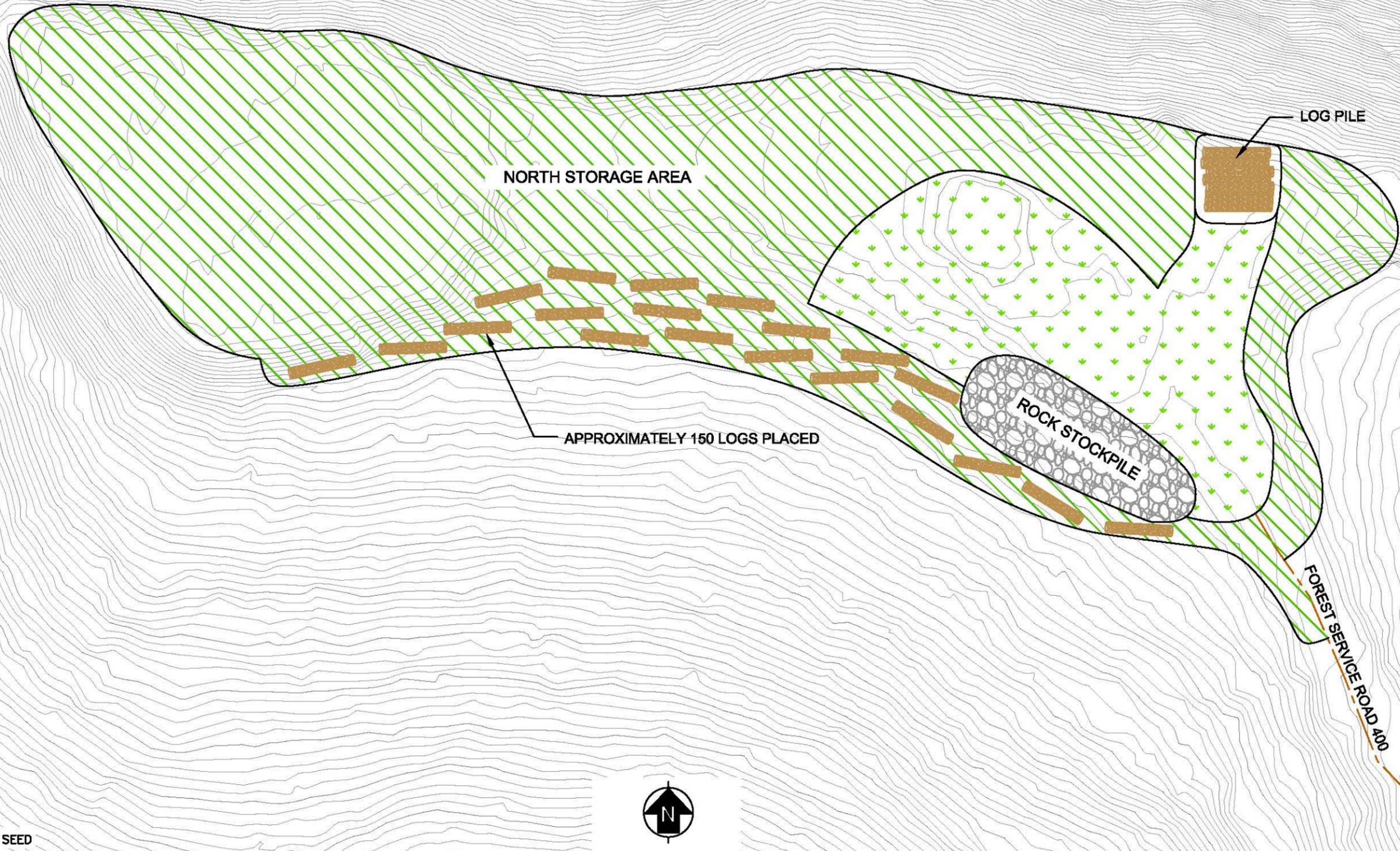
SOURCES:  
 1. TOPOGRAPHY PROVIDED BY URS, 2010  
 2. PROPERTY BOUNDARY SURVEY DATA PROVIDED BY GEOMATRIX NORTHWEST, INC.  
 3. REPOSITORY TOPOGRAPHIC SURVEY DATA PROVIDED BY GRANITE CONSTRUCTION, INC.

<b>Engineering/Remediation Resources Group, Inc.</b> 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 969-0750	<b>CLIENT:</b> USDA FOREST SERVICE	<b>REPOSITORY PLANTING AREAS</b>		
	<b>LOCATION:</b> BLUE LEDGE MINE REMOVAL ACTION	<b>DRAWN BY:</b> RDB 11/23/11	<b>CHECKED BY:</b> JGS 11/28/11	<b>PROJECT NO.:</b> 2010-084

FILE NAME: N:\graphics\2010\084 USFS Blueledge Mine\Maps and Drawings\O and M Plan\Repository Planting Areas.dwg LAYOUT NAME: 3 PLOTTED: Friday, February 03, 2012 - 2:05pm

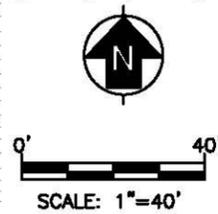
FILE NAME: H:\graphics\2010\2010-084 USFS Blueledge Mine\Map and Drawings\0 and M Plan\North Storage Planting Area.dwg LAYOUT NAME: Layout1 PLOTTED: Friday, February 03, 2012 - 2:06pm

Total Plant Count	
Plant Name	North Storage Area (1.37 Acres)
Douglas Fir	600
Ponderosa Pine	260
White Pine	166
Big Leaf Maple	40
Incense Cedar	300
<b>Total:</b>	<b>1,366</b>



**LEGEND:**

	TREES
	FLEX TERRA AND GRASS SEED
	ACCESS ROAD



SOURCE: TOPOGRAPHY PROVIDED BY URS, 2010

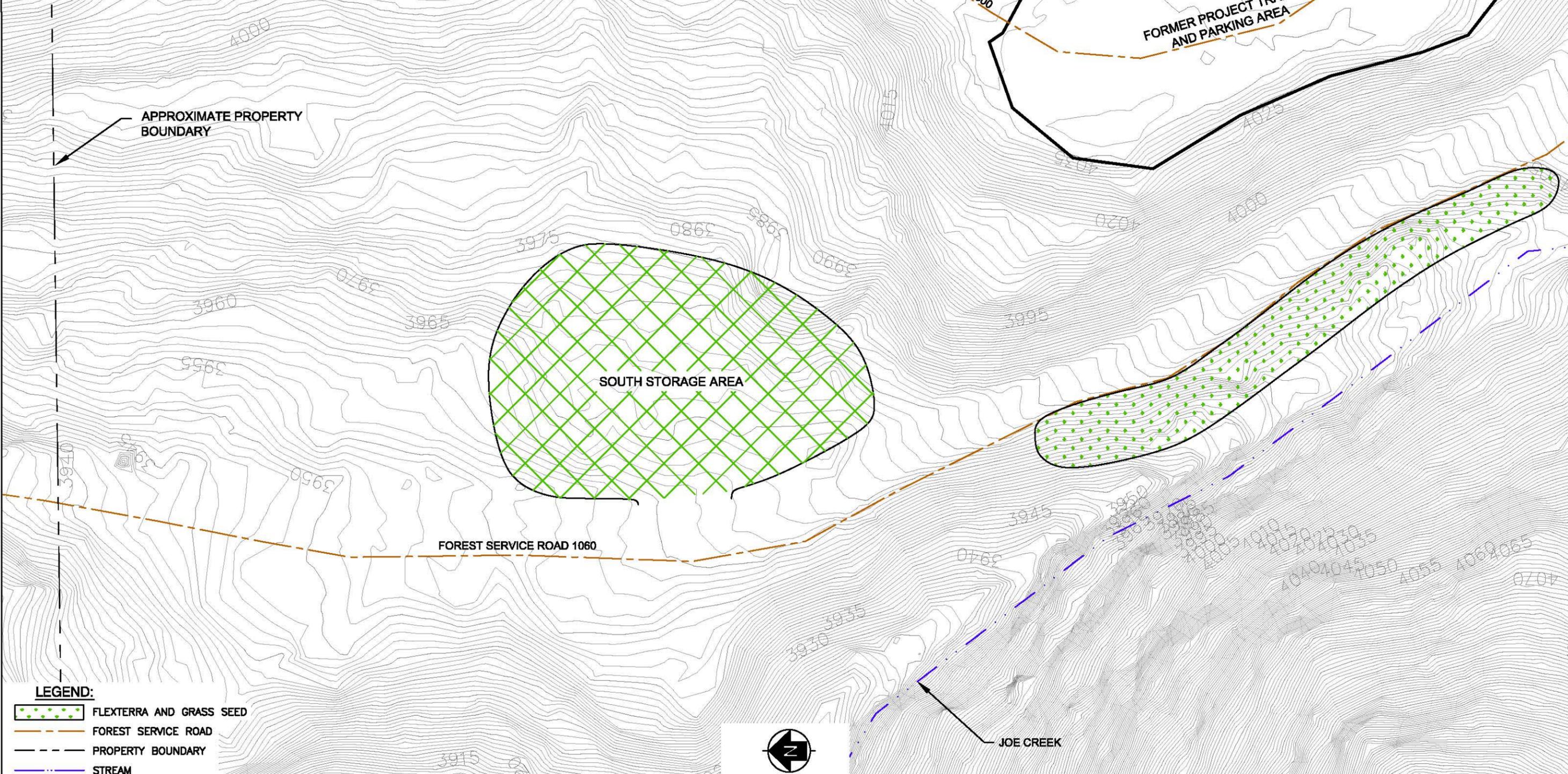
**ERRG** Engineering/Remediation Resources Group, Inc.  
4585 Pacheco Blvd, Suite 200  
Martinez, California 94553  
(925) 969-0750

CLIENT: USDA FOREST SERVICE  
LOCATION: BLUE LEDGE MINE REMOVAL ACTION

NORTH STORAGE PLANTING AREA			
DRAWN BY: RDB 11/21/11	CHECKED BY: JGS 11/22/11	PROJECT NO. 2010-084	FIG. NO. G-4

FILE NAME: H:\graphics\2010\084 USFS Blueledge Mine\Jobs and Drawings\0 and M Plan\South Storage Planting Area.dwg LAYOUT NAME: Layout1 PLOTTED: Friday, February 03, 2012 - 1:56pm

Total Plant Count	
Plant Name	South Storage Area (0.14 Acres)
Douglas Fir	52
Big Leaf Maple	52
White Alder	53
Scoulers Willow	60
Big-leaved Sedge	273
<b>Total:</b>	<b>490</b>



APPROXIMATE PROPERTY BOUNDARY

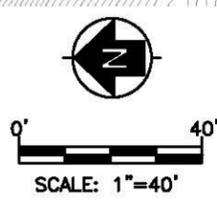
SOUTH STORAGE AREA

FORMER PROJECT TRAILER AND PARKING AREA

JOE CREEK

**LEGEND:**

-  FLEXTERRA AND GRASS SEED
-  FOREST SERVICE ROAD
-  PROPERTY BOUNDARY
-  STREAM
-  TREES AND SHRUBS

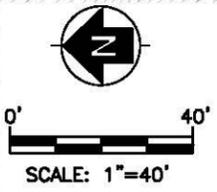
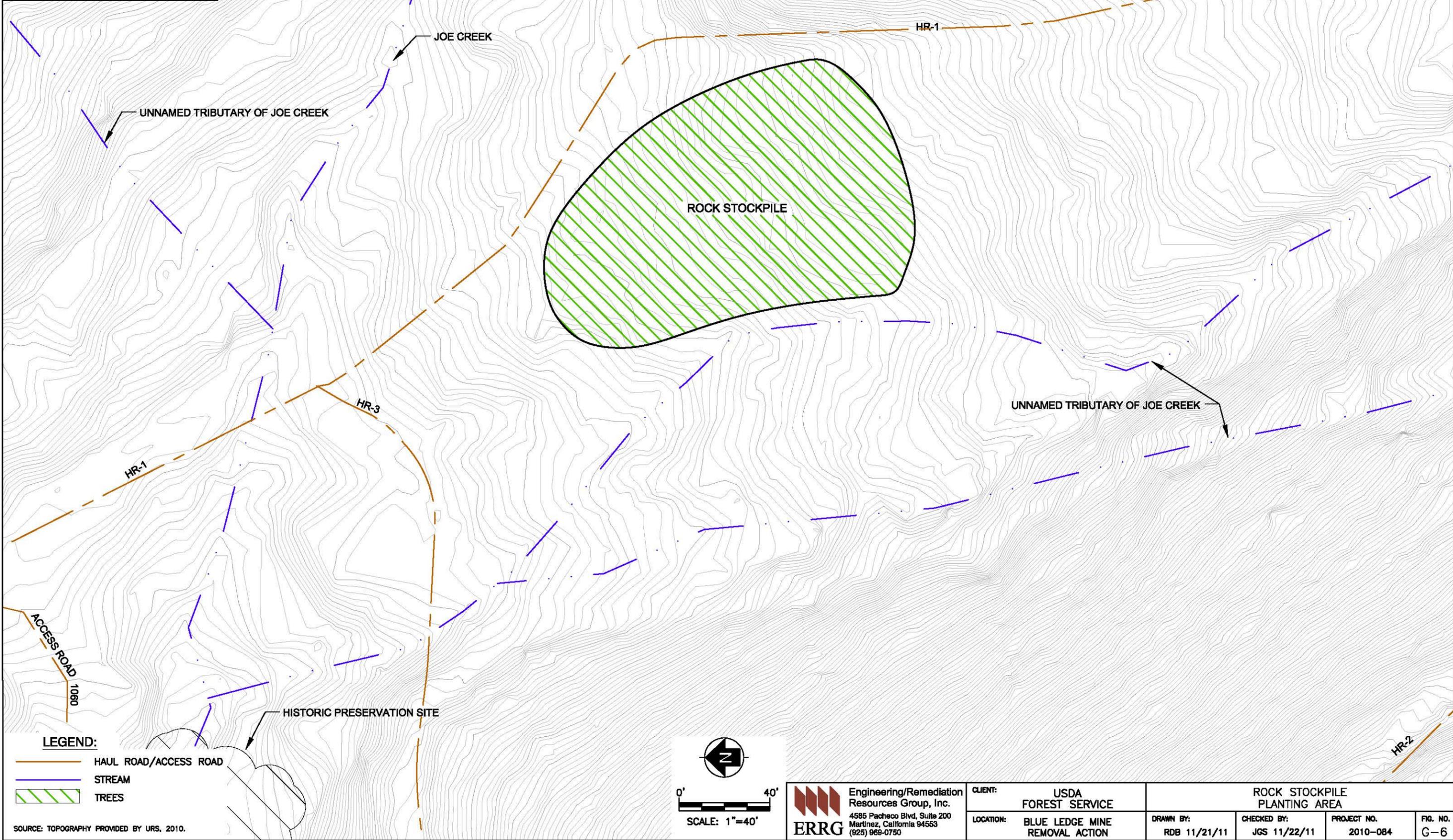


SOURCES:  
 1. TOPOGRAPHY PROVIDED BY URS, 2010.  
 2. PROPERTY BOUNDARY SURVEY DATA PROVIDED BY URS, 2010.

 <b>Engineering/Remediation Resources Group, Inc.</b> 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 989-0750	<b>CLIENT:</b> USDA FOREST SERVICE	<b>SOUTH STORAGE PLANTING AREA</b>		
	<b>LOCATION:</b> BLUE LEDGE MINE REMOVAL ACTION	<b>DRAWN BY:</b> RDB 11/21/11	<b>CHECKED BY:</b> JGS 11/22/11	<b>PROJECT NO.:</b> 2010-084

FILE NAME: N:\graphics\2010\084 USFS Blueledge Mine\Maps and Drawings\0 and M Plan\Rock Stockpile Planting Area.dwg LAYOUT NAME: Layout1 PLOTTED: Friday, February 03, 2012 - 2:06pm

Total Plant Count	
Plant Name	Rock Stockpile Area (0.27 Acres)
Douglas Fir	121
Incense Cedar	116
<b>Total:</b>	<b>237</b>



**LEGEND:**

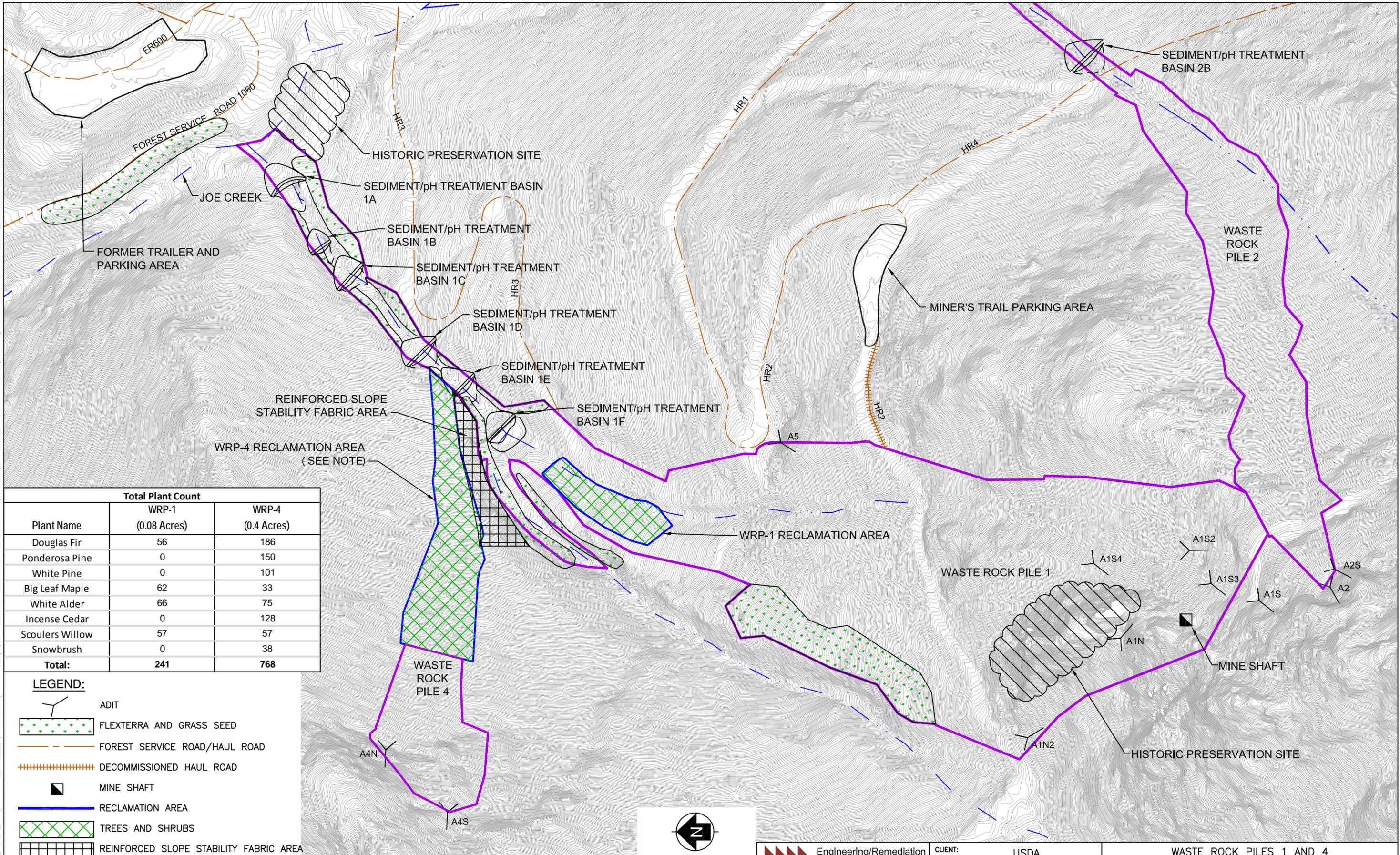
	HAUL ROAD/ACCESS ROAD
	STREAM
	TREES

SOURCE: TOPOGRAPHY PROVIDED BY URS, 2010.

**ERRG** Engineering/Remediation Resources Group, Inc.  
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CLIENT:	USDA FOREST SERVICE	ROCK STOCKPILE PLANTING AREA		
LOCATION:	BLUE LEDGE MINE REMOVAL ACTION	DRAWN BY:	CHECKED BY:	PROJECT NO.
		RDB 11/21/11	JGS 11/22/11	2010-084
				FIG. NO. G-6

FILE NAME: N:\graphics\2010\084 USFS Blueledge Mine\Maps and Drawings\0 and M Plan\Waste Rock Piles 1 and 4 Planting Areas.dwg LAYOUT NAME: 7 PLOTTED: Friday, February 03, 2012 - 2:09pm

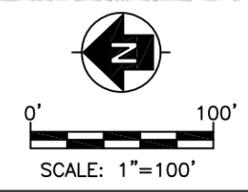


**Total Plant Count**

Plant Name	WRP-1 (0.08 Acres)	WRP-4 (0.4 Acres)
Douglas Fir	56	186
Ponderosa Pine	0	150
White Pine	0	101
Big Leaf Maple	62	33
White Alder	66	75
Incense Cedar	0	128
Scoulers Willow	57	57
Snowbrush	0	38
<b>Total:</b>	<b>241</b>	<b>768</b>

- LEGEND:**
- ADIT
  - FLEXTERRA AND GRASS SEED
  - FOREST SERVICE ROAD/HAUL ROAD
  - DECOMMISSIONED HAUL ROAD
  - MINE SHAFT
  - RECLAMATION AREA
  - TREES AND SHRUBS
  - REINFORCED SLOPE STABILITY FABRIC AREA
  - WASTE ROCK BOUNDARY REMOVAL LIMITS

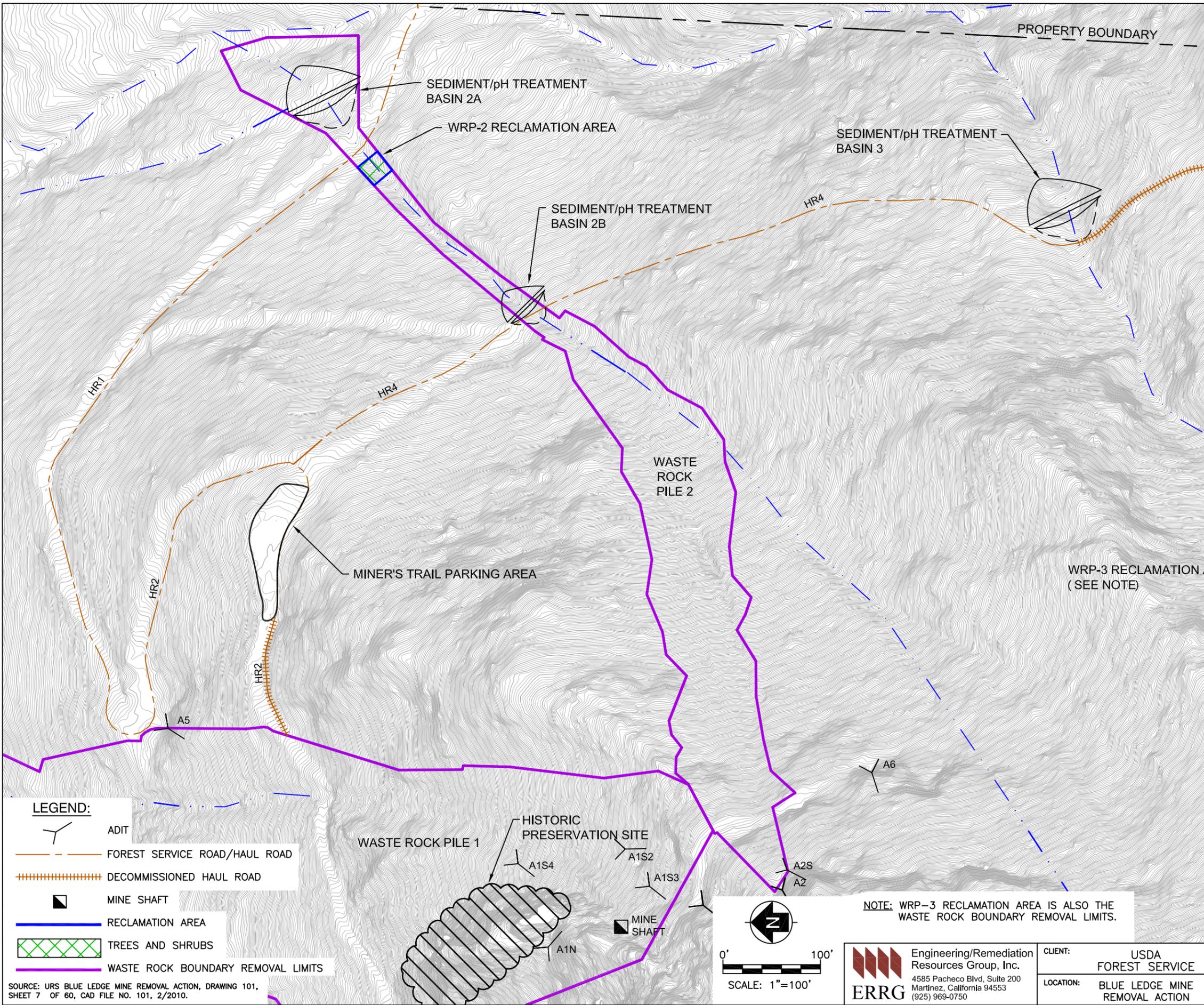
**NOTE:** WRP-4 RECLAMATION AREA IS ALSO THE WASTE ROCK BOUNDARY REMOVAL LIMITS.



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CLIENT:	USDA FOREST SERVICE		WASTE ROCK PILES 1 AND 4 PLANTING AREAS		
LOCATION:	BLUE LEDGE MINE REMOVAL ACTION	DRAWN BY:	CHECKED BY:	PROJECT NO.	FIG. NO.
		RDB 11/21/11	JGS 11/22/11	2010-084	G-7

FILE NAME: N:\graphics\2010\084-USFS-BlueLedge-Mine\Maps and Drawings\O and M Plan\Waste Rock Piles 2 and 3 Planting Area.dwg LAYOUT NAME: 8 PLOTTED: Friday, February 03, 2012 - 2:12pm

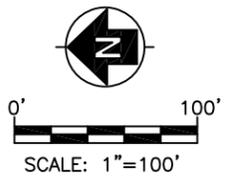
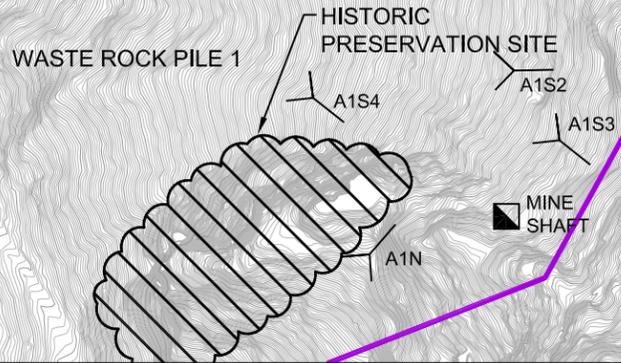


Plant Name	Total Plant Count	
	WRP-2 (0.01 Acres)	WRP-3 (0.8 Acres)
Douglas Fir	2	238
Ponderosa Pine	0	210
White Pine	0	98
Big Leaf Maple	14	129
White Alder	2	64
Incense Cedar	0	179
Scoulers Willow	6	149
<b>Total:</b>	<b>24</b>	<b>1,067</b>

**LEGEND:**

	ADIT
	FOREST SERVICE ROAD/HAUL ROAD
	DECOMMISSIONED HAUL ROAD
	MINE SHAFT
	RECLAMATION AREA
	TREES AND SHRUBS
	WASTE ROCK BOUNDARY REMOVAL LIMITS

SOURCE: URS BLUE LEDGE MINE REMOVAL ACTION, DRAWING 101, SHEET 7 OF 60, CAD FILE NO. 101, 2/2010.



NOTE: WRP-3 RECLAMATION AREA IS ALSO THE WASTE ROCK BOUNDARY REMOVAL LIMITS.

<b>Engineering/Remediation Resources Group, Inc.</b> 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 969-0750	<b>CLIENT:</b> USDA FOREST SERVICE	<b>WASTE ROCK PILES 2 AND 3 PLANTING AREAS</b>		
	<b>LOCATION:</b> BLUE LEDGE MINE REMOVAL ACTION	<b>DRAWN BY:</b> RDB 11/21/11	<b>CHECKED BY:</b> JGS 11/22/11	<b>PROJECT NO.:</b> 2010-084