

EASTSIDE ROAD PASTURES ADDITIONAL REMEDIAL REVEGETATION PROJECT

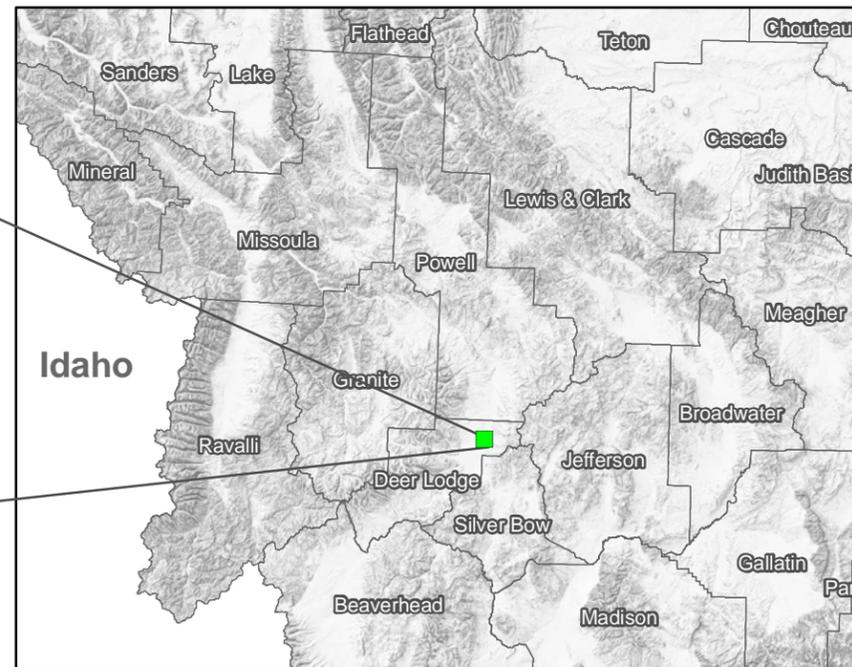
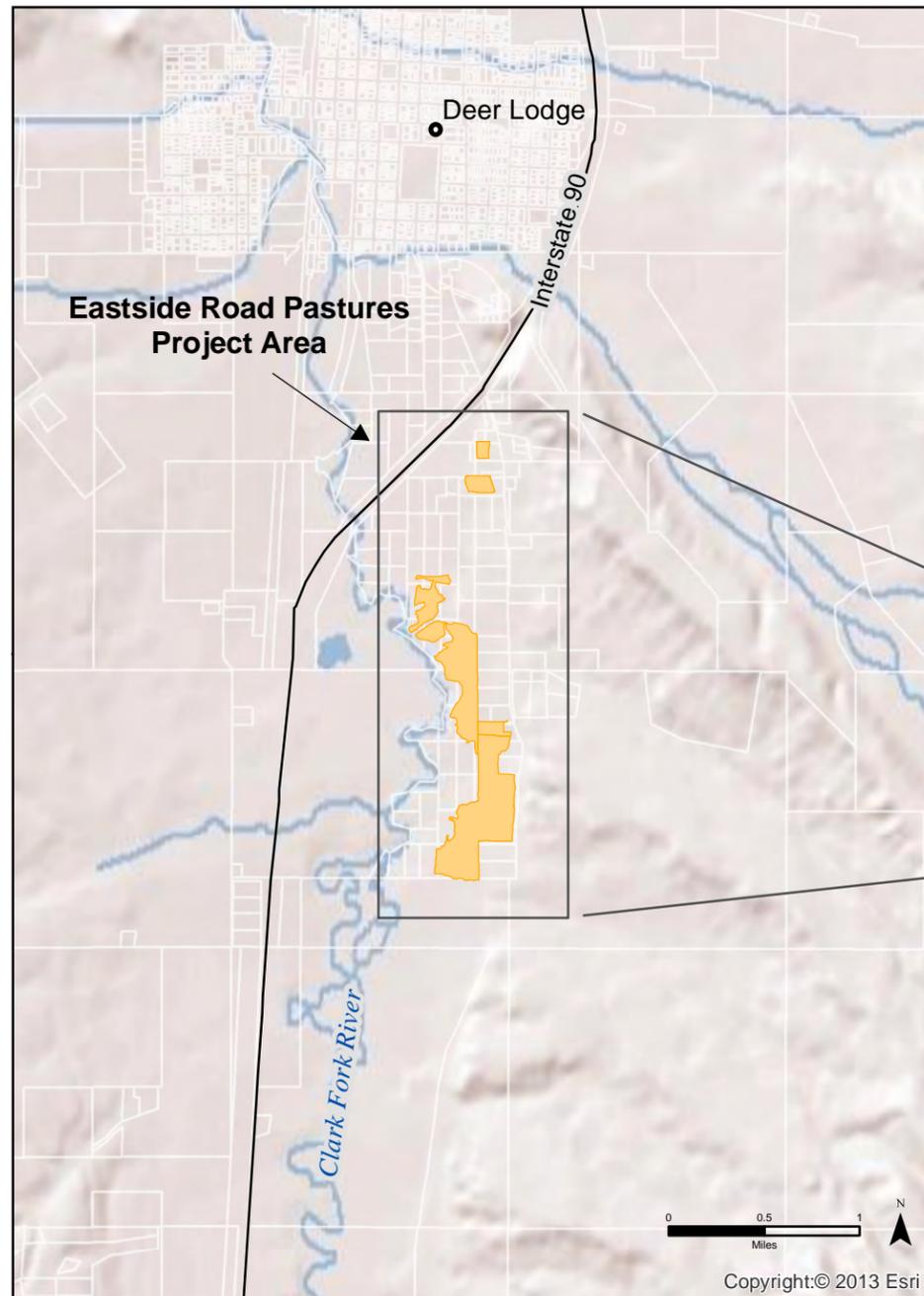
DEQ CONTRACT NO. 415013

October 28, 2014

Prepared for:



The Montana Department of Environmental Quality
Mine Waste Cleanup Bureau



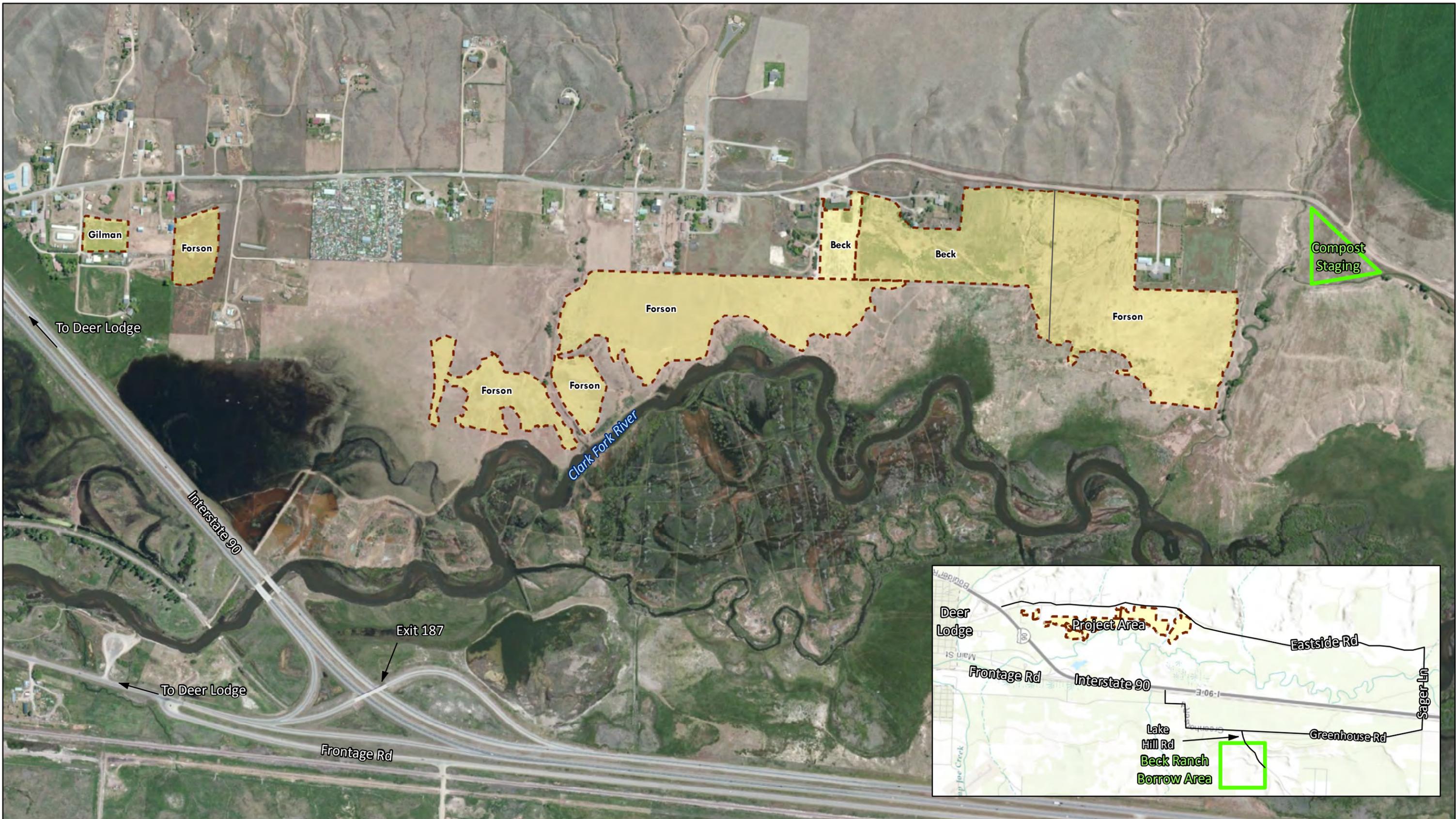
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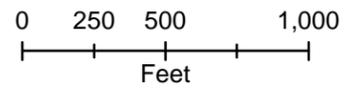
Prepared by:



Geum Environmental Consulting, Inc.



**EASTSIDE ROAD PASTURES ADDITIONAL
REMEDIAL REVEGETATION PROJECT**

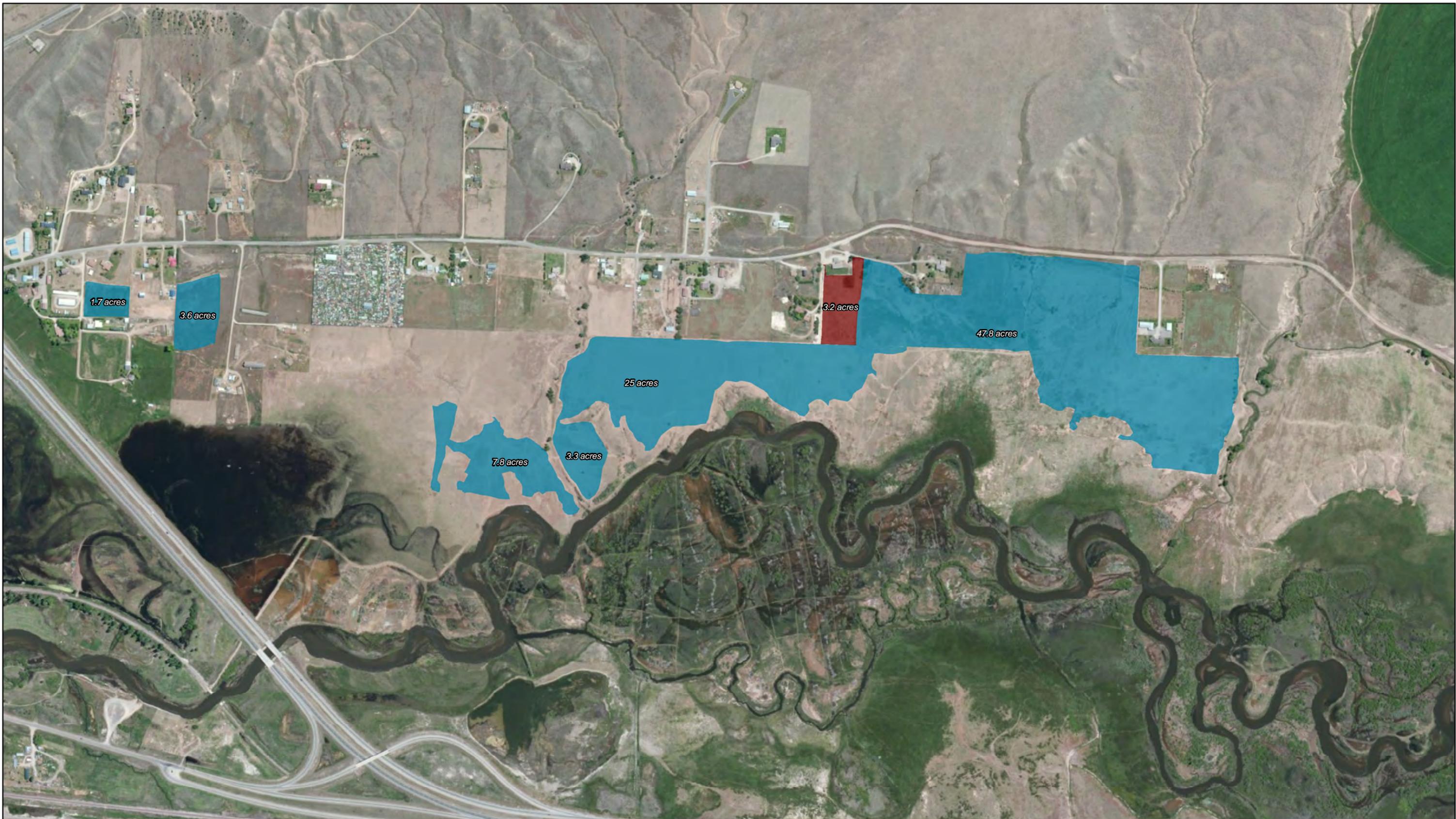


 Project area

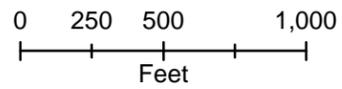
Note: Staging areas and access roads will be identified by contractor and approved per Transportation Plan.

**PROJECT OVERVIEW &
LAND OWNERSHIP**
October 28, 2014

SHEET 02



**EASTSIDE ROAD PASTURES ADDITIONAL
REMEDIAL REVEGETATION PROJECT**



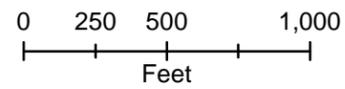
- Tilled lime, compost & cover soil (1) (Bid Items 3 & 4)
- Tilled compost (2) (Bid Items 4)

**SOIL AMENDMENT
LOCATIONS**
October 28, 2014

SHEET 03



**EASTSIDE ROAD PASTURES ADDITIONAL
REMEDIAL REVEGETATION PROJECT**



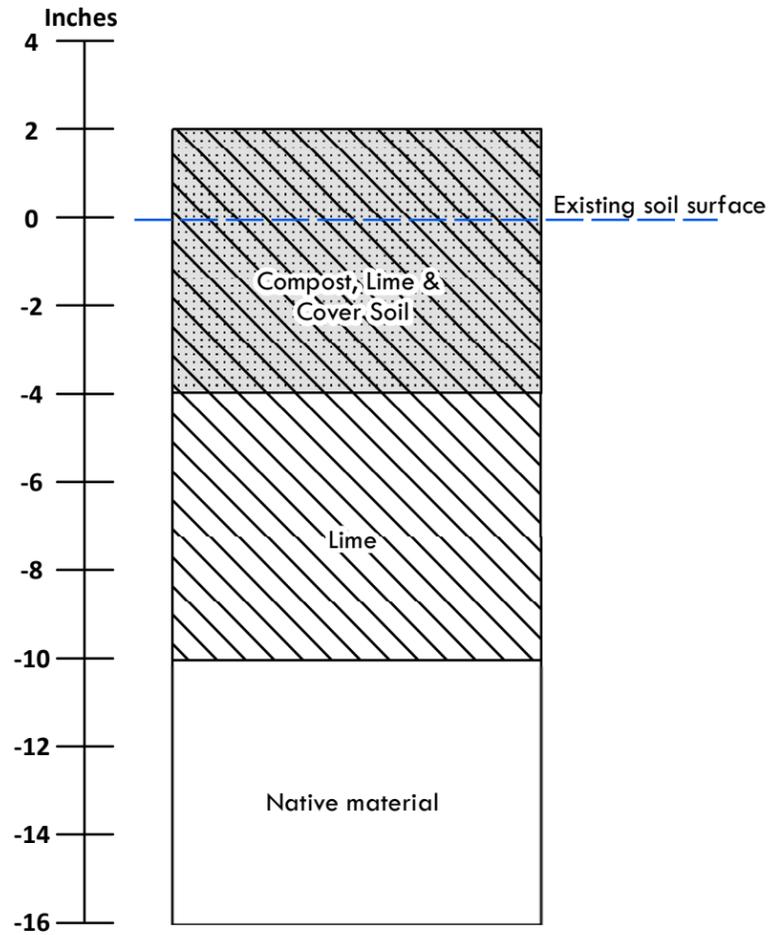
 Prepare seedbed (Bid Item 7) and Seeding (Bid Item 8)
Straw crimping (Bid Item 9) OR Hydromulch & Tackifier (Bid Item 10)
(\approx 93 acres)

**SEEDBED PREP &
SEEDING LOCATIONS**
October 28, 2014

SHEET 04

Note: Seed rates or mixes may vary across the site.

(1) TILLED COMPOST & LIME & COVER SOIL



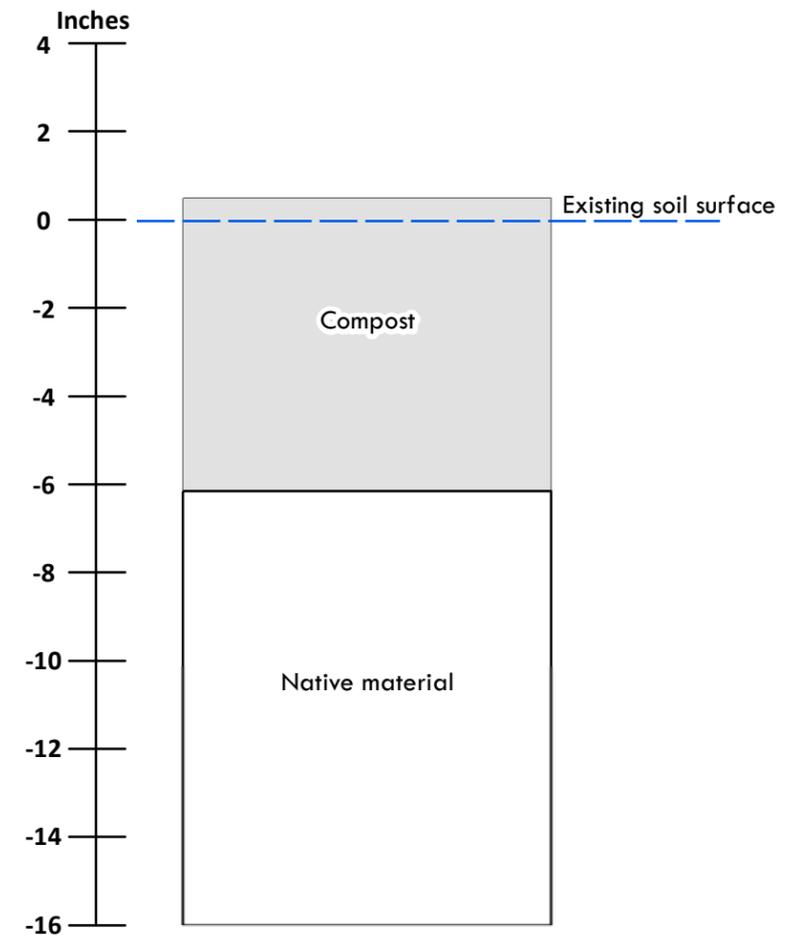
CONSTRUCTION NOTES:

Lime (Bid Item 3) should be evenly mixed in the soil to 10in deep at a rate of 15tons/acre OR at a rate requested by DEQ's Revegetation Consultant depending on water and calcium carbonate content of the lime. Even mixing means lime is present in sufficient quantities within each 27 cubic inch volume of soil (3in x 3in x 3in) such that an HCl fizz reaction is observed, and lime is visible. Lime should be moist at the time of incorporation to ensure uniformity. Lime must be incorporated into the soil within 2 hours of being spread or as soon as necessary to prevent lime from drying and blowing.

Compost (Bid Item 4) should be evenly mixed to a final mixed depth of 6in at a rate of 70cy/acre OR at a rate specified by DEQ's Revegetation Consultant depending on compost content. Even mixing means compost is present in sufficient quantities within any randomly selected 27 cubic inch volume of soil (3in x 3in x 3in) such that compost is visible throughout the soil and is not concentrated in isolated pockets.

Cover Soil (Bid Item 6) should be evenly mixed to a final mixed depth of 6in at a rate of 200cy/acre and should be approximately 1.5in deep when spread. Even mixing means compost is present in sufficient quantities within any randomly selected 27 cubic inch volume of soil (3in x 3in x 3in) such that cover soil is visible throughout the soil and is not concentrated in isolated pockets.

(2) TILLED COMPOST

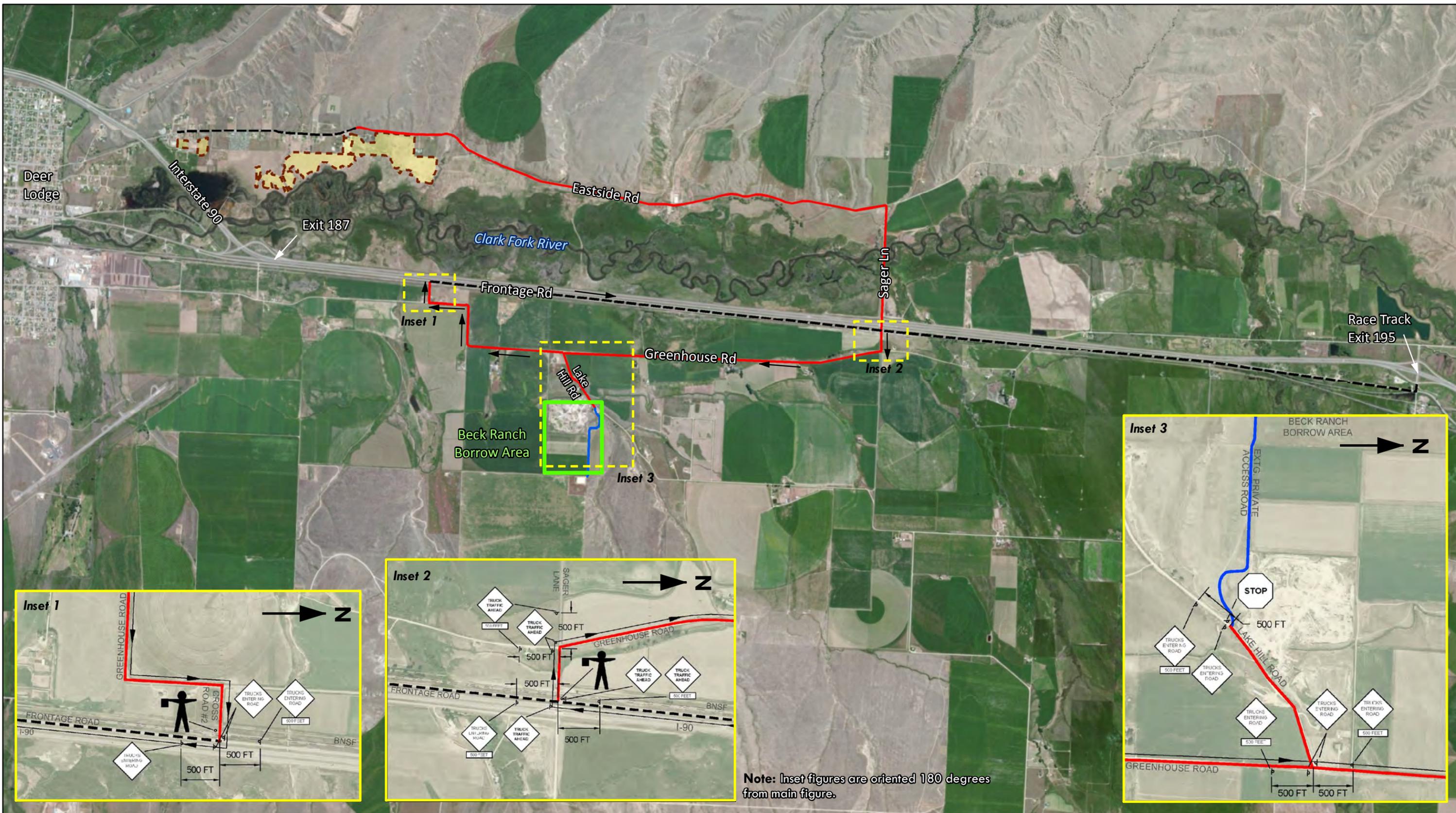


CONSTRUCTION NOTES:

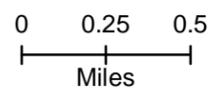
Compost (Bid Item 4) should be evenly mixed to a final mixed depth of 6in at a rate of 70cy/acre OR at a rate specified by DEQ's Revegetation Consultant depending on compost content. Even mixing means compost is present in sufficient quantities within any randomly selected 27 cubic inch volume of soil (3in x 3in x 3in) such that compost is visible throughout the soil and is not concentrated in isolated pockets.

MATERIAL SCHEDULE

MATERIAL	DEPTH (IN)	UNITS / ACRE	ACRES	TOTAL
LIME	10	15 TONS	90	1,350 TONS
COMPOST	6	70 C.Y.	93	6,510 C.Y.
COVER SOIL	6	200 C.Y.	90	18,000 C.Y.



**EASTSIDE ROAD PASTURES ADDITIONAL
REMEDIAL REVEGETATION PROJECT**



Project area

- Public Gravel Road
- Private Road
- Public Paved Road
- One way traffic

Note: Flaggers at railroad crossing shall be railroad flaggers.

TRANSPORTATION PLAN
October 28, 2014

SHEET 06