1075268 - R8 SDMS

FINAL REMEDIAL ACTION WORK PLAN ADDENDUM

HYDRATED BIOTITE REMOVAL

FORMER W. R. GRACE FACILITY TRACK ACCESS AREA

LIBBY, MONTANA

EMR PROJECT 5539

Prepared for:

Mr. David Smith
BNSF Railway Company
139 North Last Chance Gulch
Helena, Montana 59601

Prepared by:

EMR, INC.
5301 East River Road, Suite 114
Minneapolis, MN 55421

EMR
INCORPORATED

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JUNE 2005

1.0 INTRODUCTION

EMR, Inc. (EMR) has prepared this Addendum to the Final Remedial Action Work Plan, BNSF Libby Railyard Hydrated Biotite Removal, Libby, Montana (Work Plan) for BNSF Railway Company (BNSF) in order to remove Libby Amphibole (tremolite/actinolite series) asbestos from the surface at two Libby Amphibole-impacted zones in the BNSF railyard in Libby, Montana, herein referred to as the Site. The Project Specification prepared by Kennedy/Jenks Consultants and EMR in July 2004, the Health and Safety Plan, and the Work Plan should be referenced for information and requirements specific to this Addendum.

All excavation work in this Addendum is to be completed by the end of August 2005, weather permitting. Construction of replacement spur tracks may be conducted thereafter.

The Site location is shown on Figure 1. Grid 9, west of the overpass, is depicted on Figure 2. Grid 20, east of the overpass, is depicted on Figure 3. Grid 9 can be cross-referenced to Soil Sample Location Map Sheet 3, drawing number C-4S from the "Libby Railyard Response Action 2004, Revised Construction Completion Report" (Completion Report) completed in March 2005 by Kennedy/Jenks Consultants and EMR, Inc. The south half of Grid 9 requiring excavation is located south of the main line, south of soil clearance samples BR-44002 and BR-44003. Grid 20 can be cross-referenced to Soil Sample Location Map Sheet 5, drawing number C-6S from the Completion Report. The southeast quadrant of Grid 20 requiring excavation is located south of the main line, south of soil clearance sample BR-05002.

1.1 BACKGROUND

Following completion of the field work, it was discovered that two grids had previously been tested and found to contain trace levels of the Libby Amphibole tremolite/actinolite; these areas were inadvertently omitted from the 2004 Work Plan. The two Libby Amphibole-impacted zones are located on the south side of the main line tracks and require decontamination facilities and access from the south, to avoid crossing the mainline.

Upon realizing the omission, this information was brought to the USEPA. The discussion of these two impact areas was included in the EMR November 12, 2004 Weekly Progress Report dated December 1, 2004 to Jim Christiansen of EPA; a copy of this correspondence was included in the Completion Report.

The southern half of Grid 9, corresponding to soil sample composite BN-09000 contained trace/less than one percent (<1%) tremolite/actinolite. The discrete samples for this composite analyzed in December of 2001 indicated that the southeast (sample BN-09003) and southwest (sample BN-09004) corners of the grid to contain detectable tremolite/actinolite. One discreet sample from Grid 20, corresponding to soil sample composite BN-20000 contained <1% tremolite/actinolite. The discrete samples for this composite analyzed in December of 2001 indicated that the southeast (sample BN-20004) corner of the grid had detectable tremolite/actinolite.

The spur tracks under the grids will be reconstructed.

1.2 DIVISION OF WORK

Project construction is divided into three phases:

- Phase 1 – Rail and tie removal and washing.
- Phase 2 – Soil excavation/removal/clean subballast backfill, compaction and re-grading for surface soils containing Libby Amphibole.
- Phase 3 – Track reconstruction.

1.3 STAKING

The soil excavation areas fall within two 100' x 100' grids (Grid 9 and Grid 20) that were established in 2001. These grids correspond to composite soil samples BN-09000 and BN-20000. The soil removal area for Grid 9 will consist of an approximate 50' x 100' block and defines the south half of the grid and included discrete soil samples BN-09003 and BN-09004 (See Figure 2). The soil removal area for grid 20 will consist of an approximate 50' x 50' block and defines the southeast quadrant of the grid or the area defined by discrete soil sample BN-20004 (See Figure 3). Figures 2 and 3 depict the limits of excavation as they are understood at the time of the creation of this Addendum.

2.0 SITE CONSTRUCTION

Construction oversight for Phases 1 and 2 will be conducted by EMR on behalf of BNSF. Contractors will be asked to bid on and complete both Phase 1 and 2 work. EMR will provide asbestos oversight: conduct air monitoring, visual inspection, confirmation soil sampling, and monitor for visible dust or particle emissions. EMR will complete the Daily Soil Removal Report and Daily Safety Report. GPS readings and the grid established in October 2001 will be used to determine the location of soil removal, and this information will be recorded on the Daily Soil Removal Report.

BNSF or a separate contractor will perform Phase 3 track reconstruction using its standard supervision and safety procedures for railroad construction. No special health and safety precautions will be required during track reconstruction because soils containing Libby Amphibole will have been removed.

2.1 PHASE 1 and 2: RAIL REMOVAL, EXCAVATION, AND DISPOSAL

2.1.1 Mobilization, Setup, Demobilization

These activities will be conducted as described in the Work Plan with the following additions and changes.

The vehicle decontamination area will be within the CRZ as described in the Work Plan. The location of the decontamination pad will be located on the south side of the main line tracks to avoid truck and equipment crossing the main line tracks; however exact location will be determined in the field with BNSF, EPA, and contractor input. No truck scale will be required for this phase.

All work will be conducted in accordance with the Site Health and Safety Plan (HASP). The HASP will be updated to reflect current site contacts; however no other changes will be made to the 2004 HASP without approval of the USEPA.

Utility location and asbestos notification will be conducted by the Phase 1 and 2 contractor as documented in the Work Plan.

2.1.2 Scope of Track Removal

Rails from the spur tracks traversing grids 9 and 20 will be removed from areas depicted in Figures 2 and 3. Removal will include rails, tie plates, spikes, joint bars, bolts, and all other metallic appurtenances. Panels of ties and rail may be pulled in tact if possible. Additional soil samples may be collected in the vicinity of Grid 20, to evaluate whether the frog junction in the grid removal or possible hand digging.

Rail and ties will be pressure washed in the immediate vicinity of the point of removal. Railroad tie coring samples collected in 2004 following decontamination did not indicate detectable concentrations of Libby Amphibole.

Dust suppression procedures are outlined in Section 2.2 of the HASP.

2.1.3 Scope of Excavation, Backfill, and Cap Installation

Site soil will be excavated and imported fill placed as shown on Figures 2 and 3. Soil within the south half of Grid 9 and southeast quadrant of Grid 20 will be excavated to remove detectable Libby Amphibole. Soil in Grid 9 and Grid 20 that contain Libby Amphibole will be excavated in accordance with EMR's specifications as identified in Section 2.2.5.1 and the Work Plan.

2.1.4 Scope of Track Reconstruction

Track spurs will be reconstructed at the approximate locations shown in Figures 2 and 3. BNSF will use materials suitable for future use of those tracks according to the Railroad's operational and engineering needs. BNSF forces will use the track and ties that were removed and washed for rebuilding these two sections of track.

2.2 FINAL SITE RESTORATION

The Phase 1 and 2 contractor will restore grade outside of the track footprint to the grade present prior to excavation. In the track footprint the sub ballast will be placed and compacted. BNSF will accomplish final site restoration, which will consist of placement of fresh railroad ballast material over the track areas and grading as necessary.

2.3 SCHEDULE

The currently anticipated project schedule is as follows:

- June 2005 – Pre-bid conference call
- July 5, 2005 – Bid Opening Date
- July 18, 2005 - Rail removal, tie removal, soil excavation, soil clearance sampling in Grid 9 and Grid 20 zones.
- BNSF reconstructs designated track spurs as weather and operational needs allow.

Field work will be put to bid following approval of this Addendum by the USEPA.

Actual field dates will be scheduled with input from the USEPA. As of the time that this Work Plan Addendum was being prepared, it is understood that the cell at the Lincoln County Landfill will be operational every other Monday through the first part of August and then may change to be every Monday thereafter. To the extent possible, this field work will be scheduled to coincide with the scheduled operation dates at the landfill. As a result, the proposed schedule above may vary dependant upon that landfill operation schedule once this Addendum is approved.

2.4 REPORTING AND COORDINATING ACTIVITIES

Progress reports will be submitted to the USEPA as per the Work Plan.

3.0 SAMPLING AND ANALYSIS PLAN

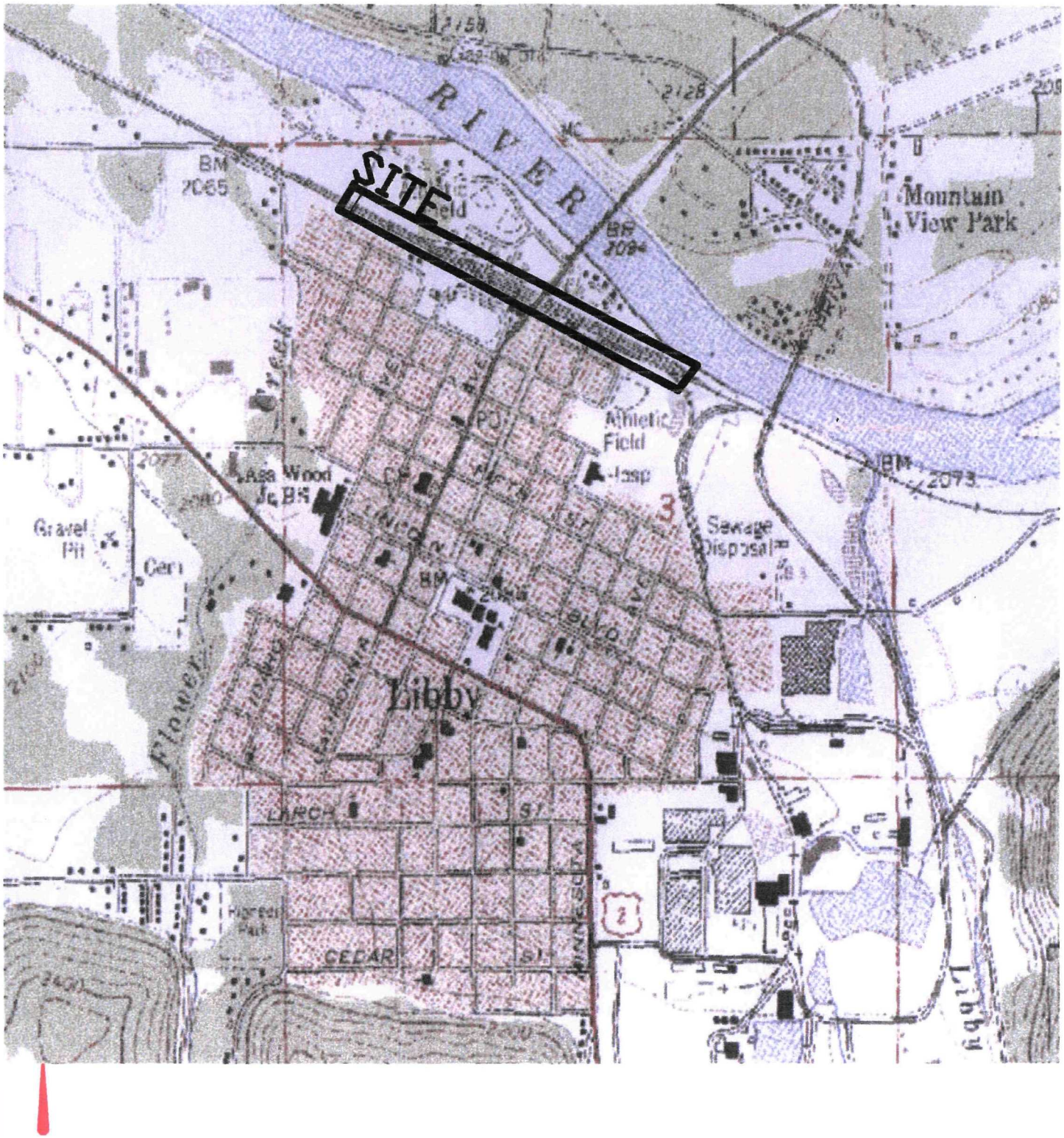
Air and soil sampling and analysis procedures will follow those set forth in the Work Plan with the following additions or changes.

As depicted on Figures 2 and 3, Libby Amphibole is present in Grid 9 and Grid 20. Following the removal action, a five point composite sample will be collected from the excavated portion of each grid and submitted to EMSL Laboratories for analysis. Soil samples will be collected, documented, and analyzed in accordance with procedures set forth in the Work Plan.

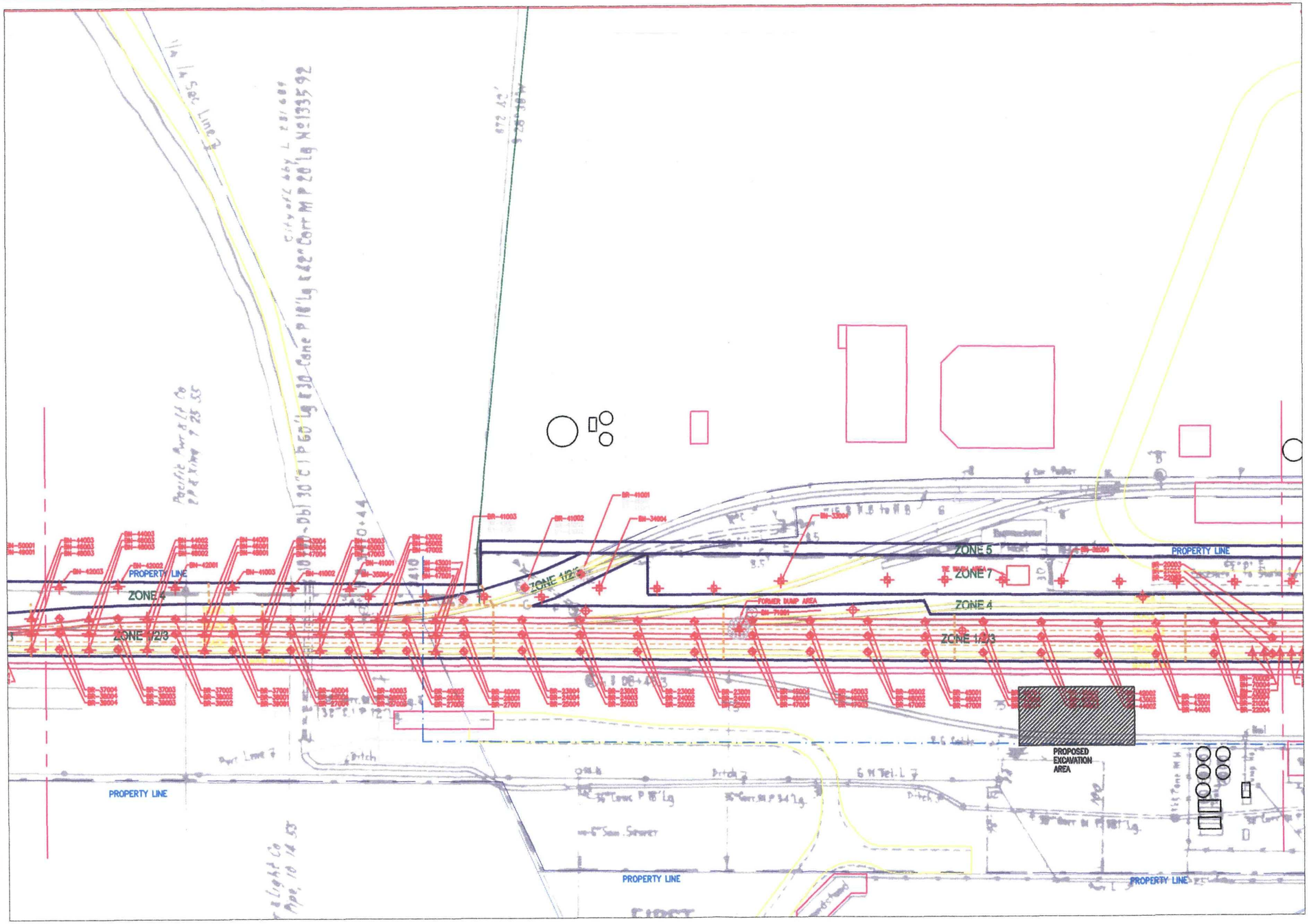
Discrete samples will be submitted to the laboratory and held pending results of the composite samples. Discrete samples may be analyzed if the corresponding composite sample is positive for asbestos (Libby Amphibole detected).

Should any detectable Libby Amphibole (tremolite/actinolite series) by the PLM method 9002, Issue 2 (Appendix C), be observed in the samples, an additional 6-inch lift of soil will be removed in the vicinity of the sample with detectable Libby Amphibole, and a new soil clearance sample will be collected in the same location. Initial soil clearance samples will be labeled with the "BR" prefix. If over excavation soil samples are required, these samples will be labeled with the "BX" prefix. If the excavation is at a depth of 24 inches bgs and sample results continue to indicate the presence of Libby Amphibole, BNSF or its representative will engage the USEPA in discussions to determine the appropriate course of action. Soils at deeper depths may remain in place if that is the decision of the BNSF and the USEPA.

Figures



Legend	FIGURE 1	
0 — 2000	Topographic Site Map	EMR INCORPORATED ENVIRONMENTAL MANAGEMENT RESOURCES
	Drawn By: MG Checked By: TLD Revision No:	Date: 06-27-05 Project: 5539.006 Scale: As Noted



PLAN
SCALE: 1" = 40'

LEGEND:

- CHARACTERIZATION SAMPLES 2003 OR LATER
- CHARACTERIZATION SAMPLES 2002 OR EARLIER
- CLEARANCE SAMPLES
- DEEPER CLEARANCE SAMPLES AT APPROXIMATE LOCATIONS OF EARLIER FAILED CLEARANCE SAMPLE
- AREA EXCAVATED MORE THAN 4 FEET BELOW GROUND SURFACE, BUT DEEPEST SAMPLE CONTAINED DETECTABLE LIBBY AMPHIBOLE

MONTANA
RICHARD C. GUGLOMO
No. 9406PE
LICENSED PROFESSIONAL ENGINEER
EXPIRES – 6/30/2006
SIGNED – 7/26/2004

0 20 40 80 120
SCALE: 1"=40'-0"

NO.	DATE	DESCRIPTION OF REVISIONS

SCALE BAR: 0 1" / 0 25.4mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY

EMR INCORPORATED

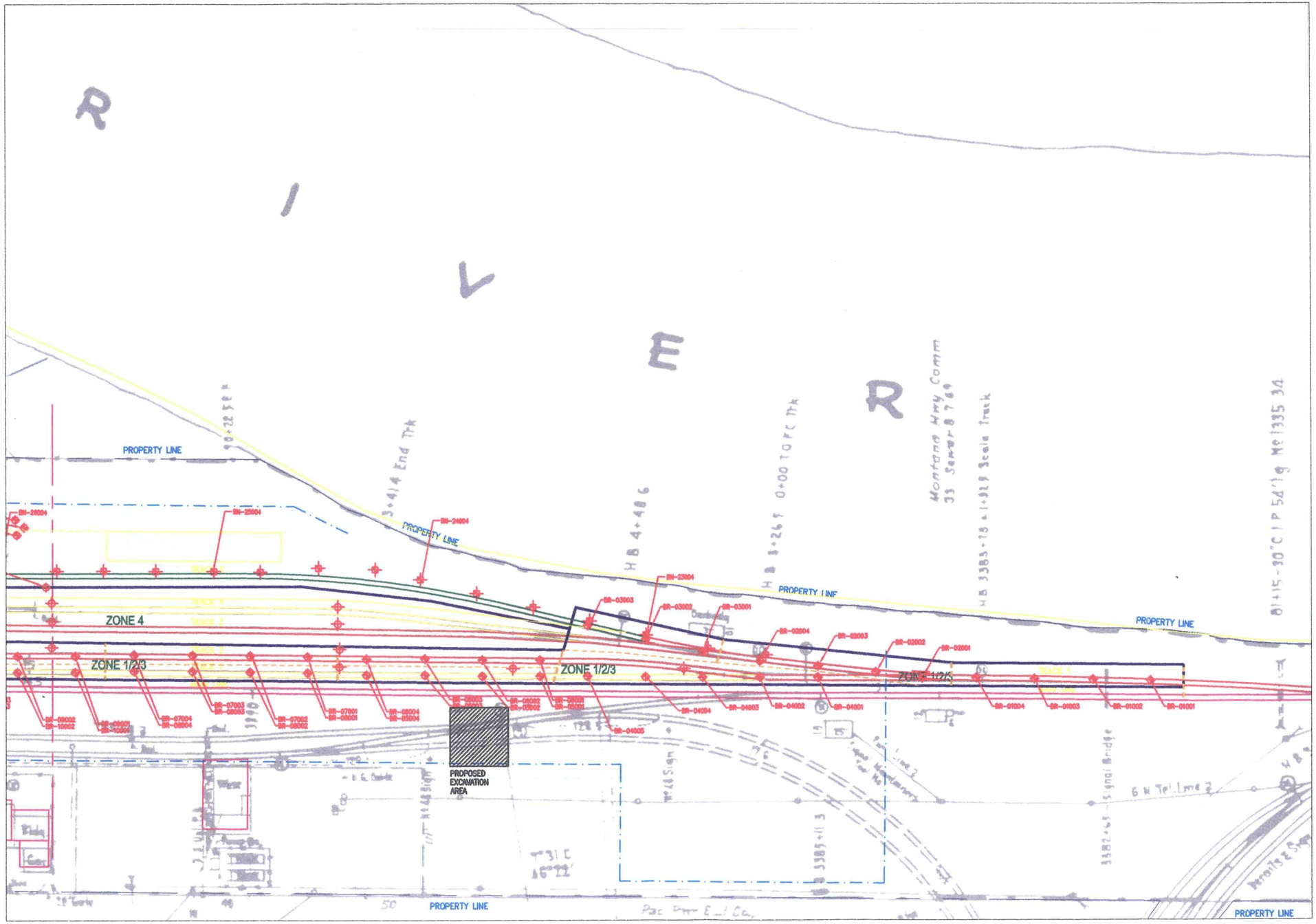
ENGR: C. SOULE
DRWN: D. ROTH
CHKD: R. GUGLOMO
BNSF APPROVAL
BY: DATE:

&
32001 32nd Ave. S, Suite 100
Federal Way, Washington
98001

The Burlington Northern and Santa Fe Railway Company
LIBBY RAILYARD
RESPONSE ACTION
LIBBY, MONTANA

GRID 9
FIGURE 2

BID ISSUE
JULY, 2004
DRAWING NUMBER
C-4S
OF



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ENGR: C. SOULE
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BNSF APPROVAL
BY: DATE:

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The Burlington Northern and Santa Fe Railway Company
LIBBY RAILYARD
RESPONSE ACTION
LIBBY, MONTANA

GRID 20
FIGURE 3

BID ISSUE
JULY, 2004
DRAWING NUMBER
C-6S
OF