



# ***TRANS TECH CONSULTANTS***

*Engineering and Environmental Compliance Services  
License # 697833 (A-Haz)*

February 5, 2018  
Job No. 2795.01

Mr. Lee Howard  
Lee Howard Construction  
3900 Parducci Road  
Ukiah, CA 95482

Subject: 2017 Wildfire - Fire Debris Cleanup  
Phelps Property - 10081 East Road, Redwood Valley  
Mendocino County APN 161-080-06

Dear Lee,

This communication presents detailed comments specific to the fire debris cleanup at the Phelps property and general comments relative to the fire debris cleanup at several other properties within Redwood Valley. On Saturday February 3, 2018 we performed a site visit to the Phelps property and 2398 Road L, 10640 Monterey Road, and several other properties, all in Redwood Valley. The fire debris cleanup had apparently been completed at the subject site and other locations we visited. Red caution tape was present along the edges of the excavation. The purpose of this letter is to document the lateral and vertical extent of excavation at the Phelps property that was apparently relevant to the recent cleanup; and to provide an opinion on whether or not the extent of the excavation was excessive, or reasonable and necessary. A secondary purpose is to provide an opinion whether or not the extent of excavation at other cleanups observed was likely to be excessive or reasonable and necessary.

The approximate location of the Phelps Property is shown on the attached Site Location Map, Plate 1. An aerial image before the 2017 wildfire is shown on Plate 2. An aerial image after the 2017 wildfire is shown on Plate 3. The Phelps residence and associated shop (the two structures that were reportedly destroyed by the wildfire) are outlined on Plates 2 and 3.

We have provided consulting services on over 70 fire debris cleanups in Sonoma County. In virtually all cases, the lateral extent of the debris footprint could be closely approximated using available aerial images taken after the October 2017 wildfire. We calculated the area of the fire debris at the Phelps residence and shop to be approximately 2900 square feet. Based upon field measurements, the extent of excavation apparently associated with the cleanup was calculated to be approximately 14,600 square feet. Please refer to Plate 3. A construction grade laser level was used to approximate the depth of the excavation. We estimate on average the depth of the excavation to be in the range of 2 feet.

## Discussion

Based upon our observations on projects of a similar nature, the vertical extent of excavation needed to remove impacts from the wildfires is in the range of a couple inches. Site specific conditions do vary. The published protocols we are aware of cite 3 to 6 inches as a reasonable “first pass” excavation depth. I suggest that the analytical data is reviewed to determine the rationale for the depth of the excavation in the subject case.

The extent excavation outside of the apparent fire debris footprint is in the range of 11,800 square feet. I suggest that the contractor notes are reviewed to determine the rationale for the lateral extent of excavation.

The lateral extent of the excavation absent a credible justification outlined in the contractor field notes does not appear to be reasonable or necessary to meet the Cleanup Goals of Mendocino County in the subject matter. We suspect the vertical extent of excavation is also unreasonable and unnecessary to meet the Cleanup Goals.

The amount of soil that needs to be imported to bring the Phelps property back to pre wildfire grade is estimated to be in the range of 1,000 yards. The amount of material that may have been taken unnecessarily is estimated to be upwards of 750 yards.

Based upon what we saw last Saturday at other sites in Redwood Valley, we conclude that it is likely a significant amount of unreasonable and unnecessary over excavation work was performed at the majority of the fire debris cleanup sites we visited.

Please do not hesitate to contact me if you have any questions. We appreciate the opportunity to be of service.

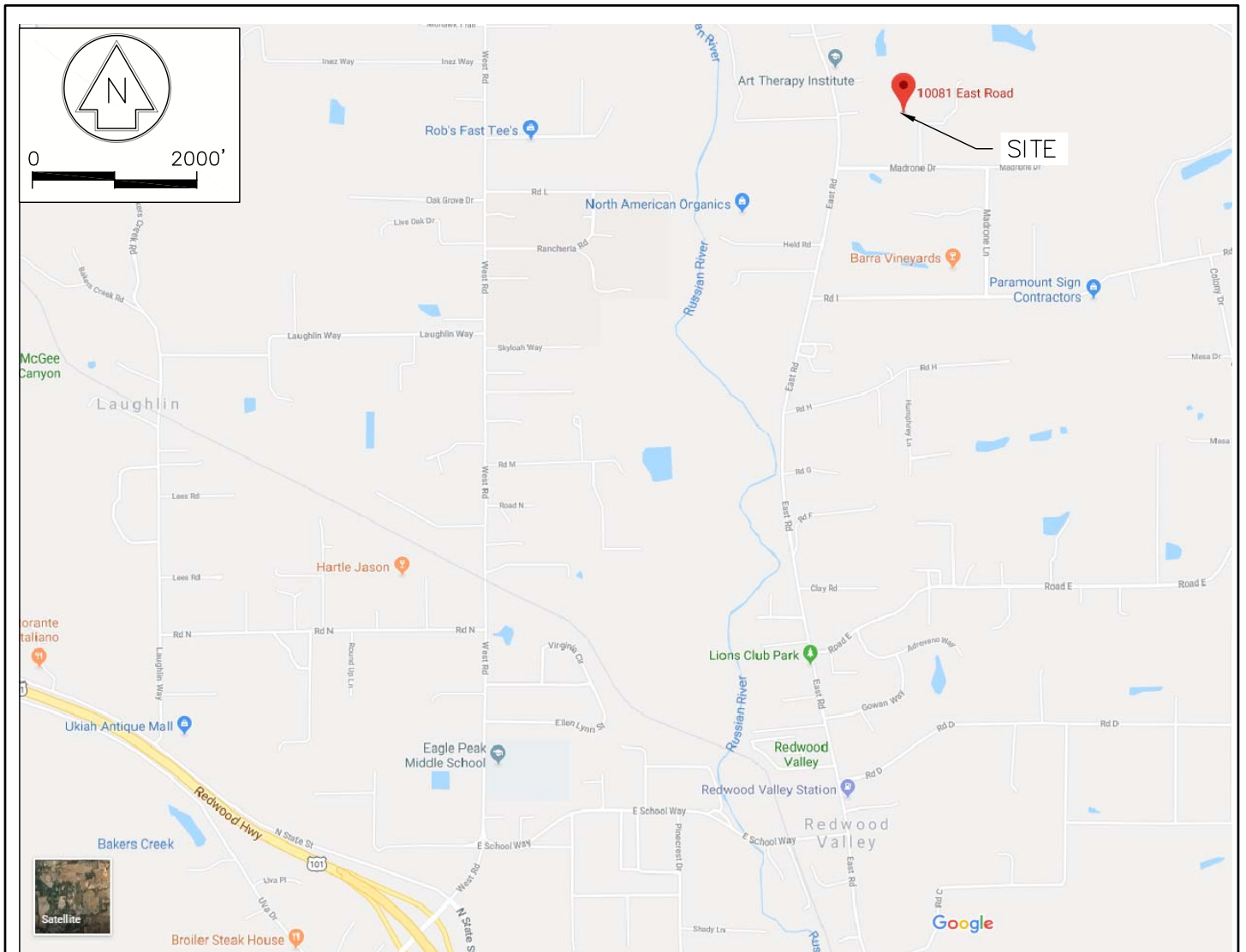
Very truly yours,  
Trans Tech Consultants



Bill C. Wiggins, P.E  
Registered Civil Engineer  
General Engineering Contractor (697833)

Attachments: Site Location Map, Plate SLM  
Site Plan – Aerial Before 2017 Wildfire  
Site Plan – Aerial After 2017 Wildfire





**TRANS TECH CONSULTANTS**

930 SHILOH RD., BLDG. 44, SUITE J  
WINDSOR, CA 95492  
PHONE: 707-837-8408 FAX: 707-837-7334

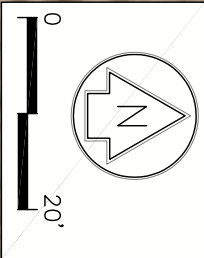
## VICINITY MAP/SITE LOCATION MAP

10081 EAST RD  
APN: 161-080-06-00  
REDWOOD VALLEY, CA 95470

PLATE:

SLM

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	DATE:
MAL	2795.01_BASE	BCW	2795.01	02/05/2018



<div><div>TRANS TECH CONSULTANTS</div><div>930 SHILOH RD., BLDG. 44, SUITE J WINDSOR, CA 95492 PHONE: 707-837-8408 FAX: 707-837-7334</div></div>				SITE PLAN — AERIAL BEFORE			SHEET 1
				10081 EAST RD REDWOOD VALLEY, CA 95470 APN: 161-080-06-00			
	NO.	DATE	DESC.	JOB #: 2795.01		DATE: 02/05/2018	DRAWN: MAL



<div><div>TRANS TECH CONSULTANTS</div><div>930 SHILOH RD., BLDG. 44, SUITE J WINDSOR, CA 95492 PHONE: 707-837-8408 FAX: 707-837-7334</div></div>				SITE PLAN – AERIAL AFTER			SHEET 2
				10081 EAST RD REDWOOD VALLEY, CA 95470 APN: 161-080-06-00			
				JOB #: 2795.01	DATE: 02/05/2018	DRAWN: MAL	
	NO.	DATE	DESC.				