



January 31, 2024

Mr. Liam Norris
Balanced Rock Power
310 E 100 S
Moab, Utah 84532

Re: Taelor Solar Phase 2 Traffic Study Letter
Weld County, Colorado

Dear Mr. Norris:

This traffic study letter has been prepared for the proposed Taelor Solar Phase 2 project located in Weld County, Colorado. The purpose of this letter is to provide trip generation, trip distribution, and project traffic assignment for the construction phase of the proposed solar project to determine the anticipated increase in traffic attributable to the proposed project. The proposed development is located approximately 4.8 miles north of State Highway 52 (SH-52) at the end of Weld County Road 93 (WCR-93), and south of Interstate 76 (I-76). A vicinity map illustrating the location of Taelor Solar Phase 2 is attached as **Figure 1**.

The project is located on a site comprising approximately 4,400 acres of private land in Weld County and is proposed to consist of a solar facility with supporting infrastructure including up to 650MWac of PV plus 125MWac of BESS. A conceptual site plan for the proposed development is attached. This traffic study identifies the amount of traffic associated with this proposed development during both construction and operational phases, and the expected trip distribution and traffic assignment.

CONSTRUCTION ACTIVITY AND ACCESS

Construction activity to assemble the entire solar facility is estimated to commence in the 4th Quarter of 2025. The construction activities each month may vary based on phasing and the size of the phase. This traffic study was prepared analyzing the peak construction traffic during the highest months of activity. Construction will generally follow these steps:

- Mobilization
- Civil/site preparation
- Cable plow/foundations construction
- Post install
- Racking install
- Substation construction
- Set major equipment
- Module installation
- Testing, commissioning, and energization
- Demobilization

Regional access to Taelor Solar Phase 2 will be provided by SH-52 while primary and direct access will be provided by WCR-93.

The preferred access route to Taelor Solar Phase 2 is via SH-52. The anticipated vehicle route to the site from SH-52 is to travel north on WCR-93 into the project site. **Figure 2** illustrates the vehicle route to and from the site.

TRIP GENERATION

Site-generated traffic estimates are determined through a process known as trip generation. The number of trips for the Taelor Solar Phase 2 facility was based on anticipated construction activity and operations. In order to study the effect of construction traffic created by the solar facility, the expected trips during the peak period of construction were used as the basis for this study. The peak construction traffic activity is expected to occur in 2026.

Construction Traffic Generation

The typical construction peak season workday will see workers arriving during a four-hour window between 6:00 am and 10:00 am and departing during a three-hour window between 1:00 pm and 4:00 pm. The standard construction hours are anticipated to be 6:30 am to 3:30 pm. The highest proportion of workers will arrive to the site between 6:00 am and 7:00 am (half) and depart between 3:00 pm to 4:00 pm (one-third), although the volume will be fairly uniform during the arrival and departure hours. It is anticipated that construction of the facility will include an average of 300 construction workers. At construction peak, there may be up to 450 workers, although the peak hour traffic volumes will remain the same as projected with the traffic spread out further over the arrival and departure peak hours. It is important to note the truck trip generation also includes the volume adjusted for the three (3) passenger car equivalents (PCE) per truck. The following **Table 1** identifies the peak construction activity trip generation for the construction of Taelor Solar Phase 2 facility.

Table 1 – Trip Generation: Taelor Solar Phase 2 Development

User	Weekday Vehicles Trips							
	Daily Round Trips	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Heavy Duty Trucks (15)	15	30	3	1	4	1	2	3
Water Trucks (15)	15	30	2	0	2	0	2	2
Total Trucks	30	60	5	1	6	1	4	5
<i>PCE Trips</i>	90	180	15	3	18	3	12	15
Passenger Vehicles (300 construction workers)	300	600	150	1	151	1	100	101
Total Vehicles	330	660	155	2	157	2	104	106
Total PCE	390	780	165	4	169	4	112	116

As shown in the table, the Taelor Solar Phase 2 project is expected to generate approximately 660 daily trips with 157 of these trips occurring during the morning peak hour and 106 of these trips occurring during the afternoon peak hour during the peak construction activities. This volume of daily traffic of 660 trips are expected to be the highest volume generated during construction of the solar facility. It is believed that trips generated by the construction of the Taelor Solar Phase 2 project will not have major impacts on the transportation patterns or the roads in the area of the project site. Therefore, traffic impacts related to the construction of

the solar plant facility are anticipated to be insignificant and not requiring roadway improvements.

Solar Facility Operational Phase Traffic Generation

After the Taylor Solar Phase 2 project has been constructed, the number of trips generated by the solar plant is expected to be significantly less than during the construction period. The project will be an unmanned facility with weekly site visits by operational personnel, not exceeding 10 trips per month. On the occasional day when a site visit occurs, the trip generation is anticipated to be one employee entering and exiting throughout the day. Therefore, traffic impacts related to the operation of the solar plant facility are anticipated to be insignificant and not requiring roadway improvements.

TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

Trip distribution is based on the anticipated arrival location of employees along with the delivery route to be used for truck traffic. It is anticipated that truck traffic will utilize SH-52 to head east/west to WCR-93 and travel north along WCR-93 to the site. Construction worker trips will be based on the arrival location from place of residence (permanent or temporary). The distribution for construction worker trips was derived based on distances to nearby cities and populations. The City of Fort Morgan is located approximately 23 miles northeast of the site, the Town of Keenesburg is located approximately 32 miles southwest of the project site, the City of Evans is located approximately 42 miles northwest of the site. Based on these factors, it is anticipated that 70 percent of the traffic will be to and from SH-52 to the west and 30 percent of traffic will be to and from SH-52 to the east. Attached **Figure 3** illustrates the anticipated trip distribution. The project traffic assignment for vehicles is shown in attached **Figure 4**.

CDOT ACCESS PERMITS

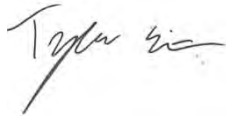
The threshold for requiring an access permit along Colorado Department of Transportation (CDOT) roadways occurs when project traffic is anticipated to increase the existing access traffic volumes by more than 20 percent. Based on traffic projections, the addition of construction traffic on the north leg at the SH-52 and WCR-93 is anticipated to increase existing traffic by more than 20 percent. However, it is believed project traffic will be minimal once the project is complete and in the operational phase. Therefore, a temporary access permit is anticipated to be needed at the SH-52 and WCR-93 intersection.

CONCLUSION

In summary, the Taelor Solar Phase 2 construction project traffic assignment shows low traffic volume assigned to the surrounding street network. Further, trips are negligible during the operational phase of the solar facility. Based on these results, Taelor Solar Phase 2 is anticipated to have minimal traffic impact. The public street roadways and adjacent intersections are anticipated to successfully accommodate this project traffic volume. If you have any questions or require anything further, please feel free to call.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Tyler E. Smith, P.E.
Traffic Engineer



Figures

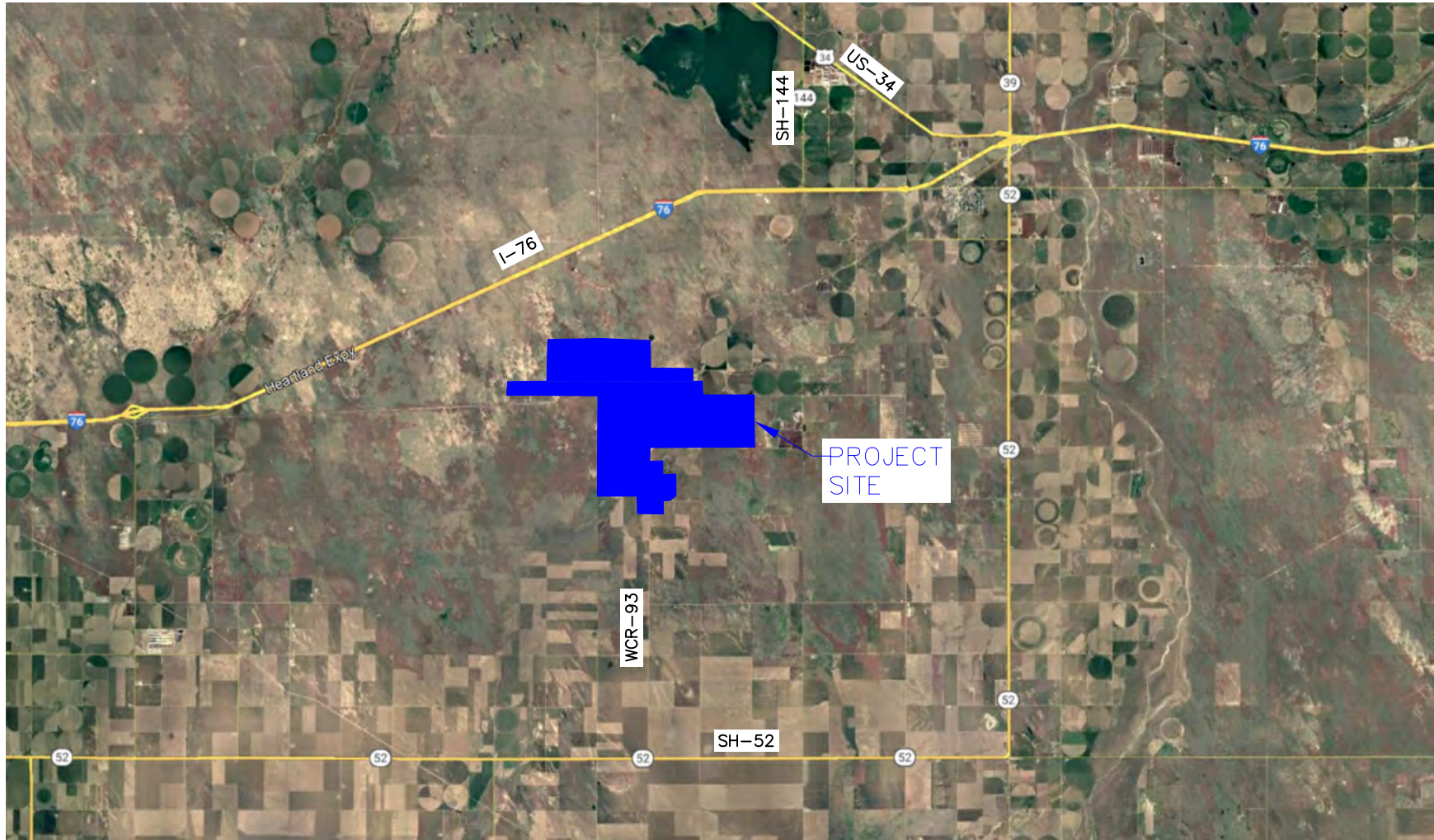


FIGURE 1
TAEOR SOLAR PHASE 2
WELD COUNTY, COLORADO
VICINITY MAP

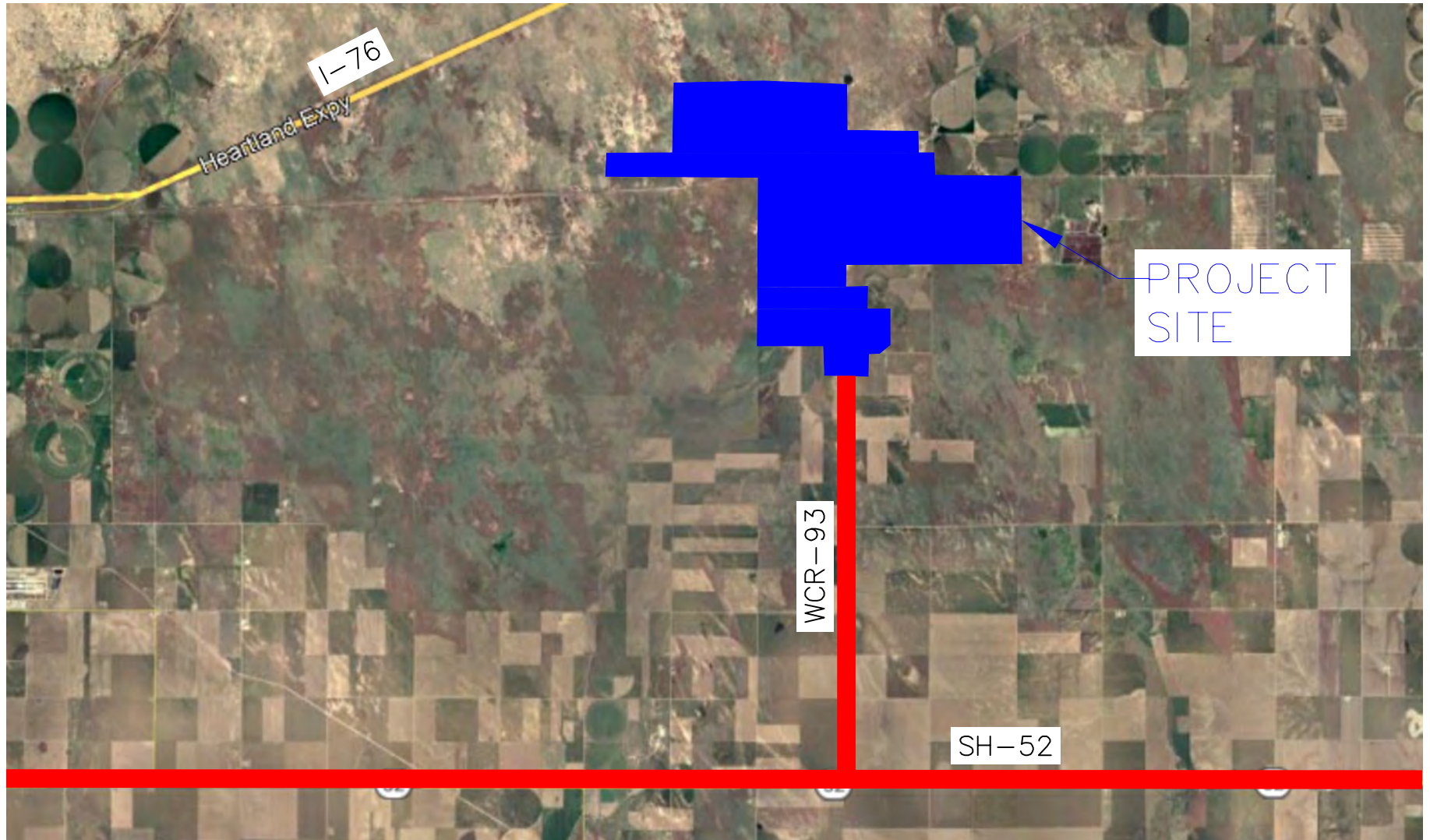
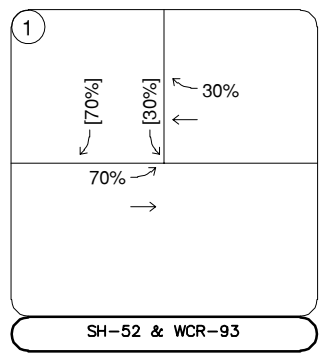
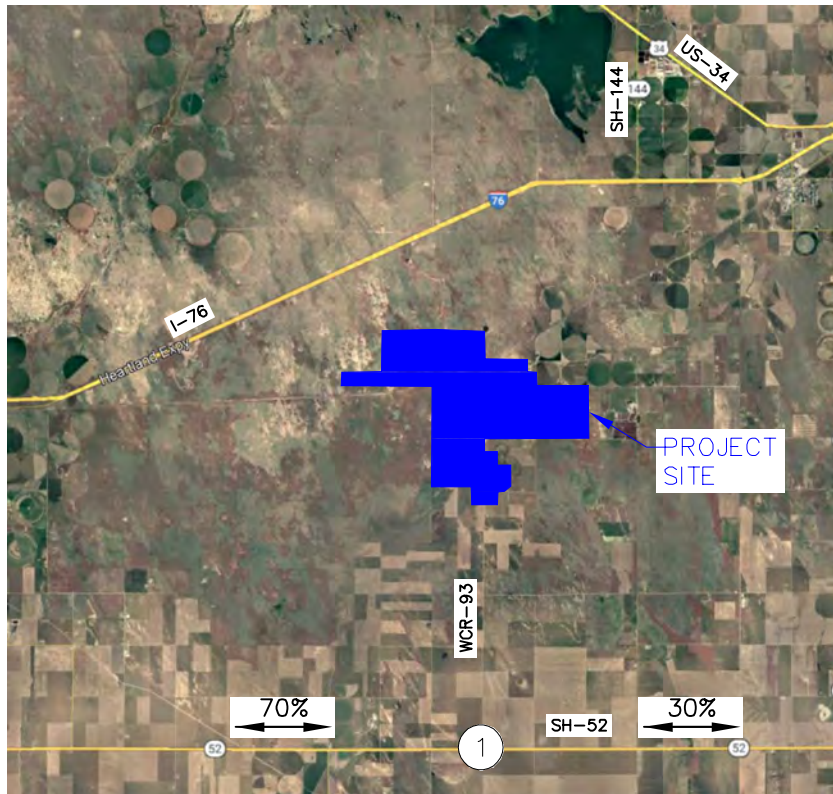


FIGURE 2
TAEOR SOLAR PHASE 2
WELD COUNTY, COLORADO
TRUCK ROUTE

LEGEND

 Proposed Truck Route



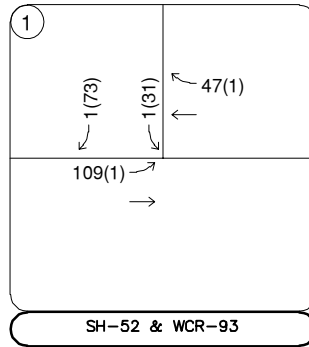
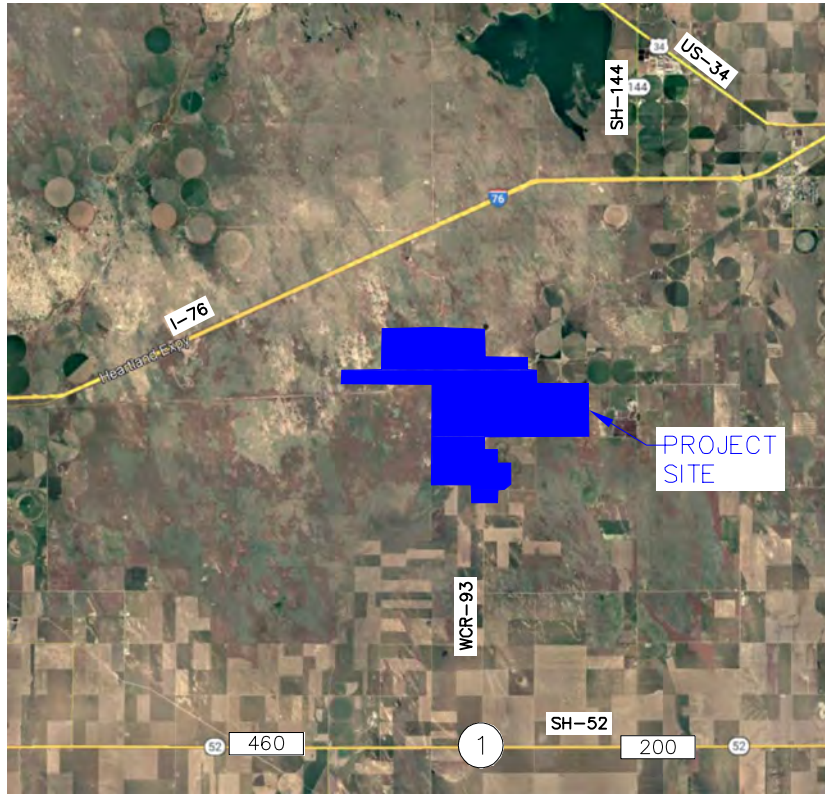
LEGEND

(X) Study Area Key Intersection

XX% External Trip Distribution Percentage

XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE 3
 TAEOR SOLAR PHASE 2
 WELD COUNTY, COLORADO
 PROJECT TRIP DISTRIBUTION



LEGEND

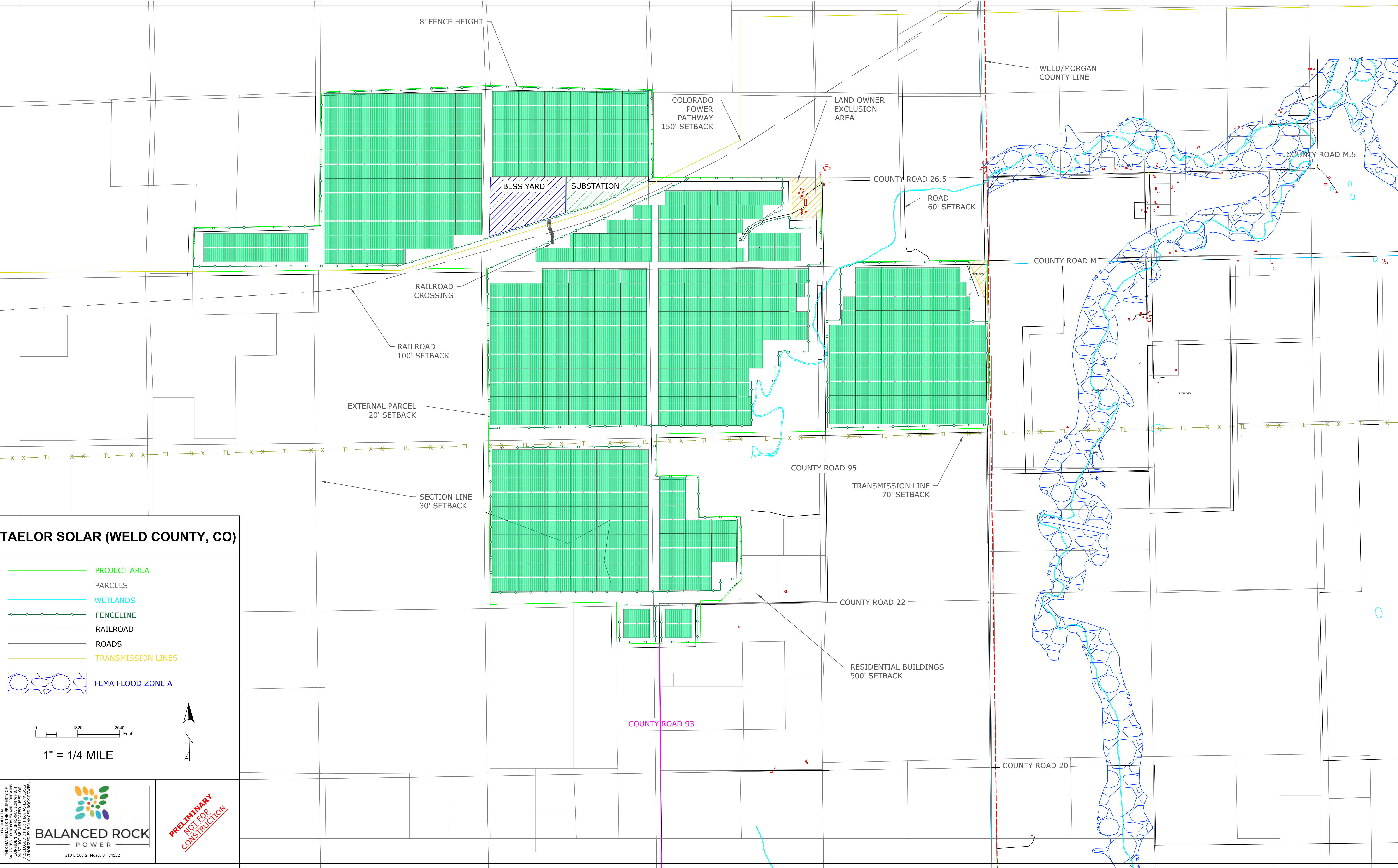
(X) Study Area Key Intersection

XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes

[XXX] Estimated Daily Traffic Volume

FIGURE 4
 TAEOR SOLAR PHASE 2
 WELD COUNTY, COLORADO
 PROJECT TRAFFIC ASSIGNMENT

Conceptual Site Plan

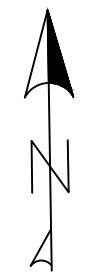


TAELOER SOLAR (WELD COUNTY, CO)

- PROJECT AREA
- PARCELS
- WETLANDS
- FENCELINE
- - - RAILROAD
- ROADS
- TRANSMISSION LINES
- FEMA FLOOD ZONE A

0 1320 2640 Feet

1" = 1/4 MILE




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NOT FOR
CONSTRUCTION**

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