DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

MEMORANDUM

To:	Jim Whalen, J. Whalen Associates, Inc.
From:	Dennis Pascua, Transportation Services Manager Sabita Tewani, AICP, Transportation Planner
Subject:	Transportation Screening Analysis for the Rugged Solar Project, County of San Diego
Date:	March 9, 2022
cc:	Scott Molloy, Molloy Planning & Entitlements, Inc. Brock Ortega, Dudek
Attachment(s):	A – Construction Trip Estimates

The following memorandum is a transportation screening analysis for the Rugged Solar project located in the southeastern portion of the County of San Diego (County). The Rugged Solar project was previously analyzed as one of four individual solar energy projects analyzed in the Soitec Solar Development Program EIR (PEIR). Since the applicants are seeking an extension of, and modification to, the previously approved Major Use Permit (PDS2017-MUP-12-007), this memo has been prepared to provide a trip generation comparison of the proposed Rugged Solar project (Proposed Project) with the previously approved Rugged Solar project (Approved Project).

The purpose of this memo is to compare the potential traffic impacts of the Proposed Project with the Approved Project. The *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements* (August 24, 2011)[1] were utilized to evaluate the project's potential to result in impacts to local intersections and road segments. Since the time of the approval of the Approved Project, Senate Bill 743 (SB 743) was adopted and the State Office of Planning and Research (OPR) changed CEQA Guidelines to require project impacts be analyzed under the vehicle miles traveled (VMT) metric instead of the level of service (LOS) metric. The traditional LOS analysis of roadway segments and intersections is no longer required under CEQA, and instead, Local Mobility Analyses (LMAs) are used to address traffic impacts to intersections and road segments from the standpoint of operations and safety.

It should be noted that the more recent *County of San Diego Transportation Study Guidelines* (TSG, June 2020) was recently rescinded by the County Board of Supervisors in their September 15, 2021 hearing. Therefore, for purposes of this screening analysis, the August 2011 guidelines will continue to be used as it relates to potential traffic operational impacts, and OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) will be used as it relates to potential VMT impacts.

[1] See the 2011 Guidelines here: https://www.sandiegocounty.gov/dplu/docs/Traffic_Guidelines.pdf

1 Methodology and Criteria

As shown in Table 1, the County uses the number of average daily trips or peak hour trips generated by a project to determine whether a Transportation Impact Study (TIS) is required, and what type of TIS is most appropriate for the project. Tables 2 and 3 outline the County's significance thresholds for roadways and intersections operating at a failing LOS.

Table 1. County Criteria to Prepare a Traffic Impact Study

Project-Generated Traffic	Issue-Specific TIS	Focused TIS	Full TIS Needed	Congestion Management Analysis Needed
Less than 200 Average Daily Trips OR Less than 20 Peak Hour Trips	No[1]	No[1]	No	No
200–500 Average Daily Trips OR 20– 50 Peak Hour Trips	Yes	No	No	No
500 Average Daily Trips OR 50 Peak Hour Trips	No	Yes	No	No
1,000 Average Daily Trips OR 100 Peak Hour Trips	No	No	Yes	No
2,400 Average Daily Trips OR 200 Peak Hour Trips	No	No	Yes	Yes

Source: County of San Diego Report Format & Content Requirements, Department of Planning and Land Use, 2011
Note: Analysis of cumulative traffic impacts may require a TIS, even when project-generated traffic volumes alone do not.
[1] Other situations could result in a request for an Issue-Specific or Focused TIS. These include, but are not limited to, issues addressed in this report.

Table 2. Measure of Significant Project Impacts to Congestion of Road Segments: Allowable Increases on Congested Road Segments

Level of Service	Two-Lane Road	Four-Lane Road	Six-Lane Road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

Source: County of San Diego Guidelines for Determining Significance, Department of Planning and Land Use, 2011
Notes:
[1] By adding Proposed Project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
[2] The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable LOS, for example, when such traffic accounts for a significant amount of the remaining road capacity.

Table 3. Measure of Significant Project Impacts to Congestion on Signalized and Unsignalized Intersections

Allowable Increases on Congested Intersections - LOS	Signalized	Unsignalized
LOS E	Delay of 2 seconds or less	20 or less Peak Hour trips on a critical movement
LOS F	Either a delay of 1 second, or 5 Peak Hour trips or less on a critical movement	5 or less Peak Hour trips on a critical movement

Source: County of San Diego Guidelines for Determining Significance, Department of Planning and Land Use, 2011
Notes:
1 A critical movement is an intersection movement (right turn, left turn, through-movement) that experiences excessive queues, which typically operate at LOS F. Also, if a project adds significant volume to a minor roadway approach, a gap study should be provided that details the headways between vehicles on the major roadway.
2 By adding Proposed Project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project is responsible for mitigating its share of the cumulative impact.
3 The County may also determine impacts have occurred on roads even when a project's direct or cumulative impacts do not trigger an unacceptable LOS, when such traffic uses a significant amount of remaining road capacity.
4 For determining significance at signalized intersections with LOS F conditions, the analysis must evaluate both the delay and the number of trips on a critical movement.

2 Existing Conditions

Access to the project site would be via Interstate 8 (I-8) and locally via Ribbonwood Road, Old Highway 80, and McCain Valley Road. The intersections of I-8/Ribbonwood Road Ramps, Ribbonwood Road/Old Highway 80, and Old Highway 80/McCain Valley Road are stop-control (unsignalized) intersections.

Given the largely rural, undeveloped nature of the area, existing traffic volumes in the project vicinity are relatively low as shown in Figures 3, Existing Traffic Volumes, and 11, Existing plus Project plus Cumulative Projects, in the Traffic Impact Analysis (TIA) prepared for the recently approved Campo Wind Project with Boulder Brush Facilities[2]. Also, as shown in Table 16 of that TIA, the roadway segments and intersections in the vicinity of the project are currently operating at LOS B or better and are forecast to continue to operate with acceptable LOS (LOS C or better) in the Existing plus Project plus Cumulative Projects scenario.

2 Trip Generation Analysis

2.1 Previous Project

2.1.1 Construction

Construction of the previously approved Rugged Solar Project ("Approved Project") was anticipated to occur over a 12-month period. Construction trips for the Approved Project were estimated based on three factors: 1) a daily estimate of the number of onsite construction project personnel (including construction managers,

[2] Traffic Impact Analysis for the Campo Wind Project with Boulder Brush Facilities, Dudek, December 2019.

superintendents, inspectors, monitors, subcontractors, and administrative staff); 2) a daily estimate for the number of pieces of construction equipment operating to construct to the project; and, 3) the average number of daily deliveries required to construct the project. The Approved Project also included a mitigation measure, M-AQ-PP-2, which required the project to implement a ride-share program to ensure that at least 30% of the construction worker trips be eliminated with carpooling, as follows:

M-AQ-PP-2 To reduce NOx and PM10 emissions associated with construction worker trips required during Proposed Project construction, the construction manager will implement a construction worker ridership program to encourage at least 30% of workers to carpool to and from the construction site to reduce single-occupancy vehicle trips. The construction manager will log all daily construction worker trips using the San Diego iCommute program (SANDAG 2013) (accessed at http://www.icommutesd.com/) or similar program. The construction manager will notify all construction personnel of the program prior to the start of construction activities and will notify construction personnel of the iCommute program RideMatcher feature, or similar communication method, to ensure personnel can identify potential carpooling program participants. Trip data will be made readily available to County inspectors at the construction trailer on site during construction.

Based on the construction schedule and phasing, the project construction was estimated to generate an average of 160 daily trips and a peak of 200 or more daily trips (during most intense/overlapping phases of construction during a 9-month period). Most of the daily trips were estimated to occur during the AM or PM peak hours. In total, trip generation for construction workers and delivery vehicles was estimated to generate approximately 50,000 vehicle trips over the course of the 12-month construction period, which equals to approximately an average of 160 daily trips.[3]

Under the Approved Project, construction workers and delivery vehicles would access the Rugged Solar project site regionally via I-8 and locally via Ribbonwood Road, Old Highway 80, and McCain Valley Road. The intersections of I-8/Ribbonwood Road Ramps, Ribbonwood Road/Old Highway 80, and Old Highway 80/McCain Valley Road are stop-control (unsignalized) intersections. Based on review of traffic data contained in the Campo Wind Project and Boulder Brush Facilities TIA (Dudek 2019), it was concluded that there was a relatively low traffic volume in the project area and the operating traffic conditions were at LOS A.

In light of the Approved Project's estimated average and peak construction traffic volumes and because the roadway segments and intersections in the area are operating at LOS D or better, based on the County's criteria to measure significant project impacts to congestion on road segments (Table 2) and intersections (Table 3), it was determined that the previous project construction traffic would not cause a significant impact. Furthermore, construction traffic would be temporary and short-term and would cease after construction was completed. Finally, as a Condition of Approval, the previous project proposed a traffic control plan (PDF-TR-1) to ensure the safe and efficient movement of local traffic through the project area during construction activities.

2.1.2 Operations and Maintenance

The operation of the Approved Project was anticipated to require approximately 15 to 20 full-time onsite employees that would generate up to 40 daily trips (up to 20 AM and 20 PM peak hour trips) to and from the project site.[4]

[3] Refer to the Soitec Solar Development Program EIR, Section 3.1.8, "Rugged," on page 3.1.8-12.
[4] Refer to the Soitec Solar Development Program EIR, Section 3.1.8, "Operation," on page 3.1.8-17.

Intermittent operational activities associated with the previous project would also consist of panel washing approximately every 6 weeks (a total of 36 trips per year was assumed for this aspect of the previous project's operation).

As the daily and peak hour trip generation of the previous project's operation and maintenance activities was less than 200 daily trips, a TIS was not required per the County's 2011 guidelines. Further, as mentioned in the PEIR, based on the operating traffic conditions and LOS of the roadway segment and intersections, the addition of up to 40 daily trips would not cause the LOS to fall below LOS D.

2.2 Proposed Project

2.2.1 Construction

Like the Approved Project, construction workers, equipment, and delivery vehicles would access the project site via the same road network. The Proposed Project's estimated construction trips can be found in Attachment A.

Construction of the Proposed Project is anticipated to occur at the beginning of 2022 and would require approximately 12 months. The construction process would employ an average of 50 workers per day and up to 76 workers per day during the six-month peak construction period between April and September 2022 when construction of the solar arrays and onsite storage building would occur. The Proposed Project would maintain M-AQ-PP-2.

With implementation of M-AQ-PP-2, on average, approximately 162 trips per day would be generated during project construction and a peak of 197 trips per day between April and September 2022 where construction of the solar arrays and other onsite facilities would generate the highest combination of daily worker and delivery vehicle trips. It's important to note, in accordance with the County's Guidelines, to calculate delivery vehicle trips, a passenger-car equivalence (PCE) factor of 2.5 passenger-vehicles equal to one delivery truck was used.

It is assumed that the majority of construction workers would arrive by 7:00 a.m. and depart by 3:00 or 4:00 p.m., partially overlapping with the peak hour commute periods. Delivery vehicles are assumed to be distributed between the hours of 7:00 a.m. and 2:00 p.m. In total, trip generation for construction workers and delivery vehicles is estimated to generate approximately 40,000 vehicle trips over the 12-month construction period, which equates to approximately 162 average daily trips. No road closures are anticipated during construction, however temporary diversion of traffic may be required to accommodate deliveries, site access improvements, and offsite work needed to construct the Gen-Tie Connection. Per the County's requirement, Traffic Control Plans would be required as a Condition of Approval to ensure safe and efficient traffic flow in the project vicinity and around the project site during project construction.

The County's guidelines indicate that an Issue-Specific TIS may be required for projects that generate 200 or more daily trips. The 197 peak daily trips that would occur during the construction phase of the Proposed Project would be temporary and would cease upon completion of the construction phase; and, would be managed by County-approved Traffic Control Plans as a Condition of Approval (PDF-TR-1). Furthermore, as indicated in the recently approved Campo Wind and Boulder Brush Facilities TIA (Dudek 2019), the roadway segments and intersections in the vicinity of the project are currently operating at LOS B or better and are forecast to continue to operate with acceptable LOS (LOS C or better) in the Existing plus Project plus Cumulative Projects scenario. Therefore, it is

anticipated that temporary construction traffic generated by the Proposed Project would not have a significant effect on traffic operations in the study area.

2.2.2 Operations and Maintenance

The Proposed Project facilities would be operated remotely, including automatic start-up, shutdown, self-diagnosis, and fault detection. As a result, the Proposed Project would not require any full-time onsite employees, but instead would only generate operational traffic in the invent of emergency repair work or routine or annual maintenance, including onsite access road maintenance (estimated to occur once a year), maintenance and repair of fencing, gates, and the storage building (estimated to occur less than once a year), fuel modification zone maintenance (estimated to occur once a year), maintenance and repair of the solar array (estimated to occur three to four times a year), and panel washing (estimated to occur once a year).

On a typical day, the operation of the project would generate zero to minimal trips, which is substantially less operational traffic than the Approved Project and well below the 200 daily trip threshold contained in the County guidelines (see Table 1 above). Further, in light of the LOS B or better conditions of the existing road network supporting the project, no significant traffic impacts are estimated to occur as a result of the operation of the Proposed Project. Therefore, the daily operational trip generation of the Proposed Project would be minimal and not warrant a TIS.

3 Vehicle Miles Traveled

Senate Bill 743, signed into law in 2013 and codified in Public Resources Code Section 21099, established a new metric for analyzing the transportation impacts from new development projects: vehicle miles traveled (VMT). In response, in 2018, OPR updated the CEQA Guidelines for VMT impacts and issued a Technical Advisory[5] which is a guidance document on how projects should evaluate VMT impacts. The California Natural Resources Agency subsequently certified and adopted OPR's recommended CEQA Guidelines.

On July 1, 2020, projects subject to CEQA were required to analyze VMT impacts in accordance with the State's new CEQA Guidelines (or locally adopted Guidelines addressing the same). In June 2020, the County adopted new Transportation Guidelines and Thresholds of Significance for projects in the unincorporated County, outlining how projects should analyze and address VMT impacts. However, the County Guidelines and Thresholds of Significance are being legally challenged. Accordingly, the County has rescinded these guidelines and until the litigation is resolved, projects in the County should be evaluated per the State Guidelines and should follow OPR's Technical Advisory for analyzing VMT impacts.

SB 743, the updated CEQA Guidelines, and the OPR Technical Advisory are primarily focused on the VMT impacts from the operation of new residential and office projects as well as the potential "induced travel" resulting from transportation projects (e.g., roadway or freeway widening projects). New retail projects are not generally considered to generate new travel but instead typically re-route travel from existing retail uses. While OPR's Technical Advisory did not specifically address solar projects, the Technical Advisory does recommend a screening threshold for small

[5] OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018): https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

projects of 110 daily trips, below which OPR recommends projects should be assumed to cause a less-than-significant impact.[6]

As outlined above, the Proposed Project would not require any full-time onsite employees, but instead would only generate operational traffic in the event of emergency repair work or routine or annual maintenance work. Therefore, the project's daily trips from operations would be zero to minimal on a typical day and would not be expected to exceed 40 trips (a maximum of 20 workers on site) on those days where maintenance or repair work would need to occur. Therefore, the project's operational daily trips would be well-below the screening threshold recommended by OPR and no significant VMT impact would occur. Furthermore, per direction from the County Department of Planning and Development Services (PDS), the construction phase of the Proposed Project would not be subject to a VMT analysis.[7]

4 Conclusion

Construction of the project would generate temporary traffic for approximately 12 months. The Proposed Project is estimated to generate similar construction trips on an average (162 daily trips) compared to the Approved Project (160 daily trips). During the peak construction phase, which would last approximately six months, the Proposed Project would have a peak construction trip generation of 197 daily trips compared to the previously Approved Project of 200 or more daily trips for a 9-month period. As the roadway segments and intersections in the vicinity of the project are currently operating at LOS B or better, neither the average nor the peak daily construction trips would cause a roadway segment and intersection to operate below LOS D.

The County's guidelines indicate that an Issue-Specific TIS may be required for projects that generate 200 or more daily trips. As the Proposed Project would generate an estimated 197 daily trips during the peak construction phase, the Proposed Project traffic would be temporary and would cease upon completion of the construction phase; and, would be managed by County-approved Traffic Control Plans as a Condition of Approval (PDF-TR-1). Furthermore, as indicated in the recently approved Campo Wind and Boulder Brush Facilities TIA (Dudek 2019), the roadway segments and intersections in the vicinity of the project are currently operating at LOS B or better and are forecast to continue to operate with acceptable LOS (LOS C or better) in the Existing plus Project plus Cumulative Projects scenario. Therefore, it is anticipated that temporary construction traffic generated by the Proposed Project would not have a significant effect on traffic operations in the study area. Additionally, a Local Mobility Analysis (LMA) is intended to be focused on operational/permanent traffic impacts to roadway segments and intersections that are operating at or near failing levels of service, not temporary impacts resulting from construction traffic for projects that don't generate any or appreciable operational traffic. Instead, traffic control plans are best suited for addressing temporary construction traffic impacts.

As the project would not generate any significant operational traffic, the project would not result in any significant impacts to roadway segments or intersections within the vicinity of the project. With no significant operational traffic, the Proposed Project would be below OPR's recommended screening threshold of 110 daily trips for VMT impacts and, therefore, would not result in a significant VMT impact. With no potential operational traffic impacts

[6] Refer to OPR Technical Advisory on Evaluating Transportation Impacts in CEQA, Section E.1., Screening Thresholds for Small Projects (Page 12).

[7] Correspondence with Jacob Armstrong, Chief of Operations, County of San Diego Department of Planning and Development Services, September 20, 2021.

and no VMT impacts determined, there would be no specific issues that would need to be addressed in an Issue-Specific TIS. Table 4 below provides a summary comparison of the Approved Project with the Proposed Project.

Table 4 Comparison of Impacts from Previously Approved Project and Proposed Project

Construction Traffic	Previously Approved Project	Proposed Project
Average Construction Trips/Day	160 daily trips	162 daily trips
Peak Construction Trips/Day	200+ daily trips	197 daily trips
Period of Peak Construction Trips	9 months	6 months
Average Daily Operations & Maintenance Trips	40 daily trips	zero (0) daily trips
Vehicle Miles Traveled Impacts	Not Analyzed	Less Than Significant/Below Screening Threshold

In summary, although the County's guidelines indicate that an Issue-Specific TIS may be required for projects that generate 200 or more daily trips, the 242 daily trips that would occur during the construction phase of the Proposed Project would be temporary and would cease upon completion of the construction phase; and, would be managed by County-approved Traffic Control Plans as a Condition of Approval (PDF-TR-1). Furthermore, the roadway segments and intersections in the vicinity of the project are currently operating at LOS B or better and are forecast to continue to operate with acceptable LOS (LOS C or better) in the Existing plus Project plus Cumulative Projects scenario. Therefore, it is anticipated that temporary construction traffic generated by the Proposed Project would not have a significant effect on traffic operations in the study area.

Additionally, the project's operational daily traffic would be zero (0) to nominal associated with periodic maintenance activities. This is well below OPR's recommended VMT screening criteria of 110 daily trips and, therefore, would not have a significant VMT impact. Per County's requirement, a Traffic Control Plan would be prepared as a project design feature (PDF-TR-1) and made a Condition of Approval to ensure safe and efficient traffic flow in the area and on the site. Therefore, an Issue-Specific TIS would not be required.

Attachment A

Construction Trip Estimates

RUGGED SOLAR PROJECT CONSTRUCTION TRAFFIC ANALYSIS - UNMITIGATED

Equipment Identification	Typical Number of Pieces Operating Per Day	Start Date	End Date	Onsite Construction Personnel [1]	Average Daily Deliveries [2]	Average Daily Trips [3]	Total Trips (Const. Period)	Daily Peak Trips (for Period)
Construction Trailer	**1**	**1/1/2022**	**12/31/2022**	**4**	**2**	**18**	**4,368**	**242**
Generator	1							
	1							
Site Preparation (Clearing & Grubbing)	**5**	**1/16/2022**	**1/31/2022**	**11**	**10**	**72**	**720**	**90**
D6 Bulldozers	2							
Backhoe Loaders	1							
4000 Gallon Water Trucks	2							
Grading (Access Roads, Contouring for Solar Arrays)	**13**	**2/1/2022**	**3/31/2022**	**17**	**25**	**159**	**6,148**	**177**
D6 Bulldozer	1							
Pad Foot Vibratory Roller	1							
Mini Excavator (Rip Rap Placement)	1							
Concrete Trucks	4							
Belly Dump Trucks	2							
Form Trucks	2							
4000 Gallon Water Trucks	2							
Solar Array & Facilities Construction	**12**	**4/1/2022**	**9/30/2022**	**72**	**16**	**224**	**27,179**	**242**
Cranes	2							
Forklifts	2							
Generator Sets	2							
Delivery Trucks/Flatbeds (Solar Arrays, Conduit, Equipment)	2							
Backhoe Loaders	2							
Pile Driver	2							
Site Entrance Paving & Internal Access Finish Work	**4**	**10/1/2022**	**12/31/2022**	**6**	**6**	**42**	**2,548**	**150**
Drum Roller	1							
4000 Gallon Water Trucks	2							
Chip Seal Truck	1							
Offsite Gen-Tie Connection (to Substation)	**12**	**10/1/2022**	**12/31/2022**	**20**	**10**	**90**	**5,460**	**150**
Boom Trucks (Above Ground Work)	2							
Delivery Trucks/Flatbeds	4							
Backhoe Loaders	2							
Cranes	2							
Forklifts	2							

Average Const. Workers Per Day:	**50**	**Average Trips Per Day:**	**191**
Peak Construction Workers Per Day:	**76**	**Total Construction Trips [4]:**	**47,000**

[1] Includes Const. Manager, superintendent, subcontrators, admin. and SWPPP staff, bio monitor, archae monitor, geotech monitor, County inspectors, SDG&E personnel.

[2] For the purposes of calculating Average Daily Trips (ADTs), Daily Deliveries are treated as truck trips and, in accordance with the County's Guidelines, multiplied by 2.5.

[3] Average Daily Trips (ADTs) = 2 x ((Const. Personnel) + (2.5 x Daily Deliveries))

[4] Rounded up to the nearest 1,000.

DATE: 09.15.21

RUGGED SOLAR PROJECT CONSTRUCTION TRAFFIC ANALYSIS - MITIGATED

Equipment Identification	Typical Number of Pieces Operating Per Day	Start Date	End Date	Onsite Construction Personnel [1]	Average Daily Deliveries [2]	Average Daily Trips [3]	Total Trips (Const. Period)	Daily Peak Trips (for Period)
Construction Trailer	**1**	**1/1/2022**	**12/31/2022**	**4**	**2**	**16**	**3,883**	**197**
Generator	1							
	1							
Site Preparation (Clearing & Grubbing)	**5**	**1/16/2022**	**1/31/2022**	**11**	**10**	**66**	**660**	**82**
D6 Bulldozers	2							
Backhoe Loaders	1							
4000 Gallon Water Trucks	2							
Grading (Access Roads, Contouring for Solar Arrays)	**13**	**2/1/2022**	**3/31/2022**	**17**	**25**	**149**	**5,761**	**165**
D6 Bulldozer	1							
Pad Foot Vibratory Roller	1							
Mini Excavator (Rip Rap Placement)	1							
Concrete Trucks	4							
Belly Dump Trucks	2							
Form Trucks	2							
4000 Gallon Water Trucks	2							
Solar Array & Facilities Construction	**12**	**4/1/2022**	**9/30/2022**	**72**	**16**	**181**	**21,961**	**197**
Cranes	2							
Forklifts	2							
Generator Sets	2							
Delivery Trucks/Flatbeds (Solar Arrays, Conduit, Equipment)	2							
Backhoe Loaders	2							
Pile Driver	2							
Site Entrance Paving & Internal Access Finish Work	**4**	**10/1/2022**	**12/31/2022**	**6**	**6**	**39**	**2,366**	**133**
Drum Roller	1							
4000 Gallon Water Trucks	2							
Chip Seal Truck	1							
Offsite Gen-Tie Connection (to Substation)	**12**	**10/1/2022**	**12/31/2022**	**20**	**10**	**78**	**4,732**	**133**
Boom Trucks (Above Ground Work)	2							
Delivery Trucks/Flatbeds	4							
Backhoe Loaders	2							
Cranes	2							
Forklifts	2							

Average Const. Workers Per Day:	**50**	**Average Trips Per Day:**	**162**
Peak Construction Workers Per Day:	**76**	**Total Construction Trips [4]:**	**40,000**