March 25, 2015

David Mohlenbrok
Environmental Services Manager
City of Rocklin
4081 Alvis Court
Rocklin, CA 95677

RE: Quarry Park Improvements Drainage Assessment

Dear Mr. Mohlenbrok:

The following letter summarizes the quarry drainage assessment performed for the approximately 9-acre Quarry Park Improvements Project (Project Site), located in the City of Rocklin, Placer County, California. The purpose of the drainage assessment is to evaluate if the two quarry ponds within the Project Site have a hydrologic connection to off-site waterbodies.

Location

The Project Site is bordered by the City of Rocklin's Memorial Park and Rocklin Civic Center to the north, the City of Rocklin Police Department to the east, residential development to the south, and terminates approximately 345 feet from Pacific Street to the west. The Project Site is located within Township 11 North, Range 7 East, Section 19 of the USGS 7.5-minute series *Rocklin, California* topographic quadrangle (**Figure 1**).

Methodology

Foothill Associates' biologists reviewed available materials on the historic condition of the Project Site including aerial photographs, topographic maps, soil surveys, land use changes relative to drainage patterns, the *Quinn Quarry Stormwater Quality Treatment Evaluation* (UBORA 2014), and other relevant materials. Following the desktop review, the biologists surveyed the Project Site on February 19, 2015 and March 9 and 20, 2015. The surveys consisted of ground-truthing the Project Site to determine whether any aquatic features have a hydrologic connection to off-site waterbodies. Photographs are provided in **Attachment A**.

Boundaries of aquatic features within the Project Site were surveyed and mapped with a Trimble GeoXT Global Positioning System (GPS) hand-held unit. This is a mapping-grade GPS unit capable of real-time differential correction and sub-meter accuracy. The GPS data were downloaded from the unit and differentially corrected utilizing Trimble Pathfinder Office software and appropriate base station data, and then converted to ESRI ® shape file format. Data are typically exported to the Geographic Information System (GIS) software in the State Plane coordinate system (NAD 83) with units as "survey feet." Within the GIS, data are edited

and linear features are built into polygons using recorded width information. All aquatic feature shape files are merged to create a single file with calculated acreages. Aquatic features are illustrated in **Figure 2**.

Regulatory Framework

The U.S. Army Corps of Engineers (Corps) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharge of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)].

Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Section 404 of the Clean Water Act requires approval prior to discharging dredged or fill material into the waters of the United States. Typical activities requiring Section 404 permits are:

- Depositing of fill or dredged material in waters of the U.S. or adjacent wetlands.
- Site development fill for residential, commercial, or recreational developments.
- Construction of revetments, groins, breakwaters, levees, dams, dikes, and weirs.
- Placement of riprap and road fills.

Section 10 of the Rivers and Harbors Act of 1899 requires approval prior to the accomplishment of any work in or over navigable waters of the United States, or which affects the course, location, condition or capacity of such waters. Typical activities requiring Section 10 permits are: Construction of piers, wharves, bulkheads, dolphins, marinas, ramps, floats intake structures, and cable or pipeline crossings.

Any person, firm, or agency (including federal, State, and local government agencies) planning to work in navigable waters of the United States, or dump or place dredged or fill material in waters of the United States, must first obtain a permit from the Corps. Permits, licenses, variances, or similar authorization may also be required by other federal, State and local statutes.

Waters of the United States

33 C.F.R. Section 328.3 provides that "waters of the United States" include all waters that are currently used, or were used in the past or are susceptible to use in interstate commerce, all interstate waters and wetlands, and all intrastate lakes, rivers or streams which could affect interstate commerce. In addition, this regulation provides jurisdiction over waters that are tributary to these waters, and "wetlands" adjacent to them. Section 10 and/or Section 404

permits are required for construction activities in these waters. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of water is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit positive indicators of three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.

- The lateral regulatory extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

The SWANCC Decision

The Solid Waste Agency of Northern Cook County v. the U.S. Army Corps of Engineers, 531 U.S. 159 (2001), is more commonly referred to as the SWANCC decision. SWANCC involved a challenge to Clean Water Act jurisdiction over certain isolated, intrastate, non-navigable ponds in Illinois that formerly had been gravel mine pits, but which, over time, provided habitat for migratory birds. Although these ponds served as migratory bird habitat, they were non-navigable and isolated from the tributary system of other waters regulated under the Clean Water Act. In SWANCC, the Supreme Court held that the Corps had exceeded its authority in asserting CWA jurisdiction pursuant to § 404(a) over the waters at issue based on their use as habitat for migratory birds, pursuant to preamble language, commonly referred to as the Migratory Bird Rule (51 Fed. Reg. 41217 (1986)).

SWANCC eliminates Clean Water Act jurisdiction over isolated waters that are intrastate and non-navigable, where the sole basis for asserting Clean Water Act jurisdiction is the actual or potential use of the waters as habitat for migratory birds that cross state lines in their migrations. CWA jurisdiction extends to waters, including wetlands, which are adjacent to navigable waters pursuant to the *Supreme Court holding in Riverside Bayview Homes*, which was endorsed in SWANCC as controlling law. Corps and the U.S. Environmental Protection Agency regulations currently define the term adjacent as "bordering, contiguous, or neighboring" 33 C.F.R. § 328.3(b).

Results

A total of 1.79 acres of aquatic features was mapped on the Project Site. This acreage is comprised of 1.62 acres of man-made quarry ponds (Big Gun Quarry and Quinn Quarry), 0.15 acres of settling basin, and 0.02 acres of man-made ditch. Quinn Quarry contained ponded water more than 10 feet below the surrounding upland land surface within the Project Site. Big Gun

Quarry is more than 50 feet deep and contained a relatively small amount of ponded water at the bottom. The man-made ditch is lined with riprap and lacks vegetation.

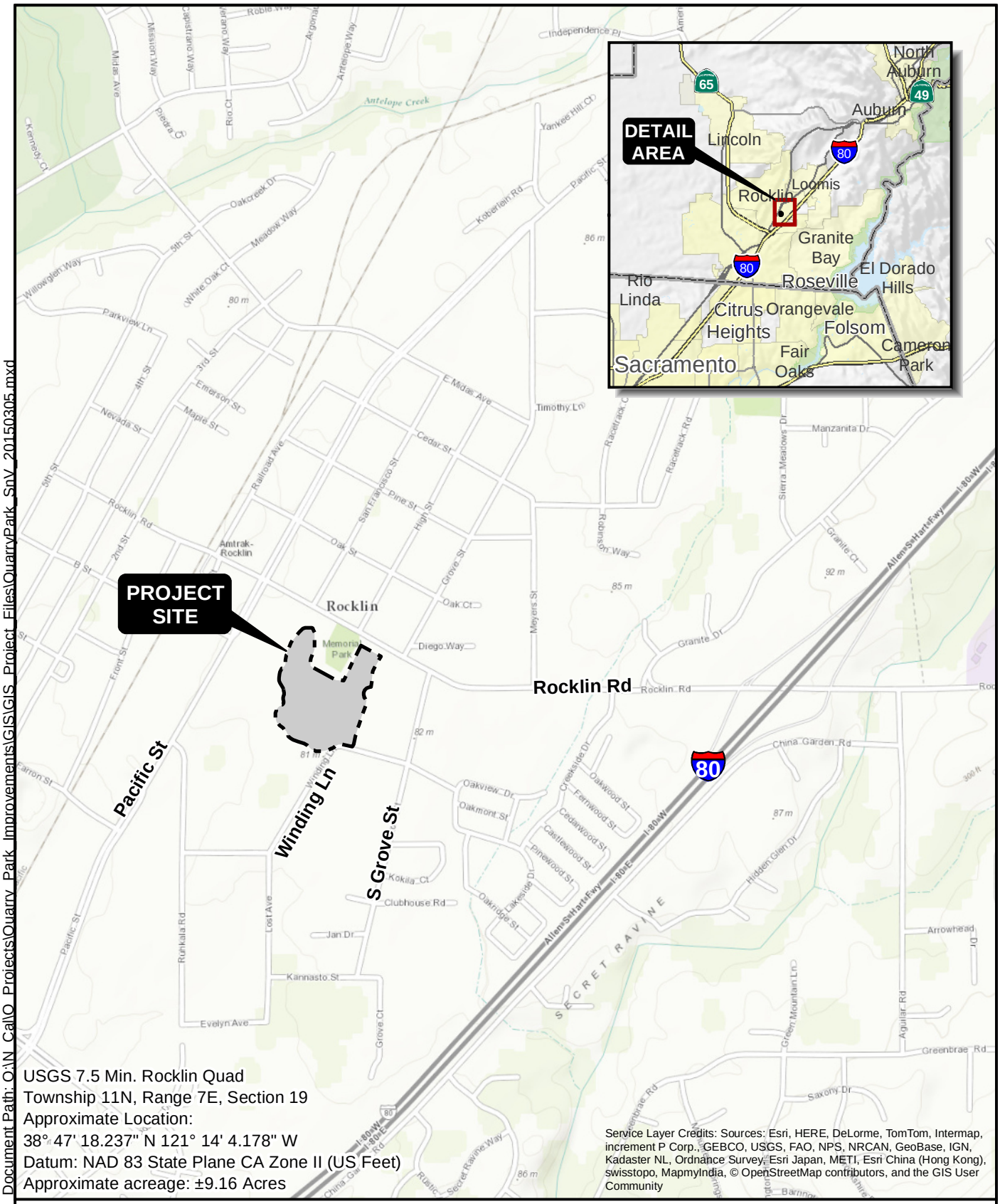
Water drains into the depressional seasonal wetland from runoff from the surrounding uplands following storm events. The water ponds until it evaporates or percolates into the ground. Water drains into the two man-made quarry ponds within the Project Site following storm events. The man-made drainage comprised of riprap drains the overflow of water within the southern quarry pond (Quinn Quarry) to a culvert that transports the water to the northern quarry pond (Big Gun Quarry). Water is pumped underground by the City of Rocklin to the Rocklin Road Stormwater Drainage System to the north of the Project Site. Drainage patterns are illustrated in **Figure 3**. The two man-made quarry ponds, man-made ditch, and settling basin within the Project Site are isolated features, with no tributary connections to downstream navigable waters. While the U.S. Army Corps of Engineers is ultimately responsible for determining the limit of their jurisdiction under the Clean Water Act, we believe that the aquatic features on the Project Site are not subject to Clean Water Act jurisdiction.

If you have any questions regarding this report, please contact me at (916) 435-1202 or email ken@foothill.com.

Sincerely,

Kenneth D. Whitney, Ph.D.

Enclosures



Document Path: O:\N_Cal\O_Projects\Quarry_Park_Improvements\GIS\GIS_Project_Files\QuarryPark_SnV_20150305.mxd

USGS 7.5 Min. Rocklin Quad
Township 11N, Range 7E, Section 19
Approximate Location:
38° 47' 18.237" N 121° 14' 4.178" W
Datum: NAD 83 State Plane CA Zone II (US Feet)
Approximate acreage: ±9.16 Acres

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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FIGURE 1

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AQUATIC FEATURES

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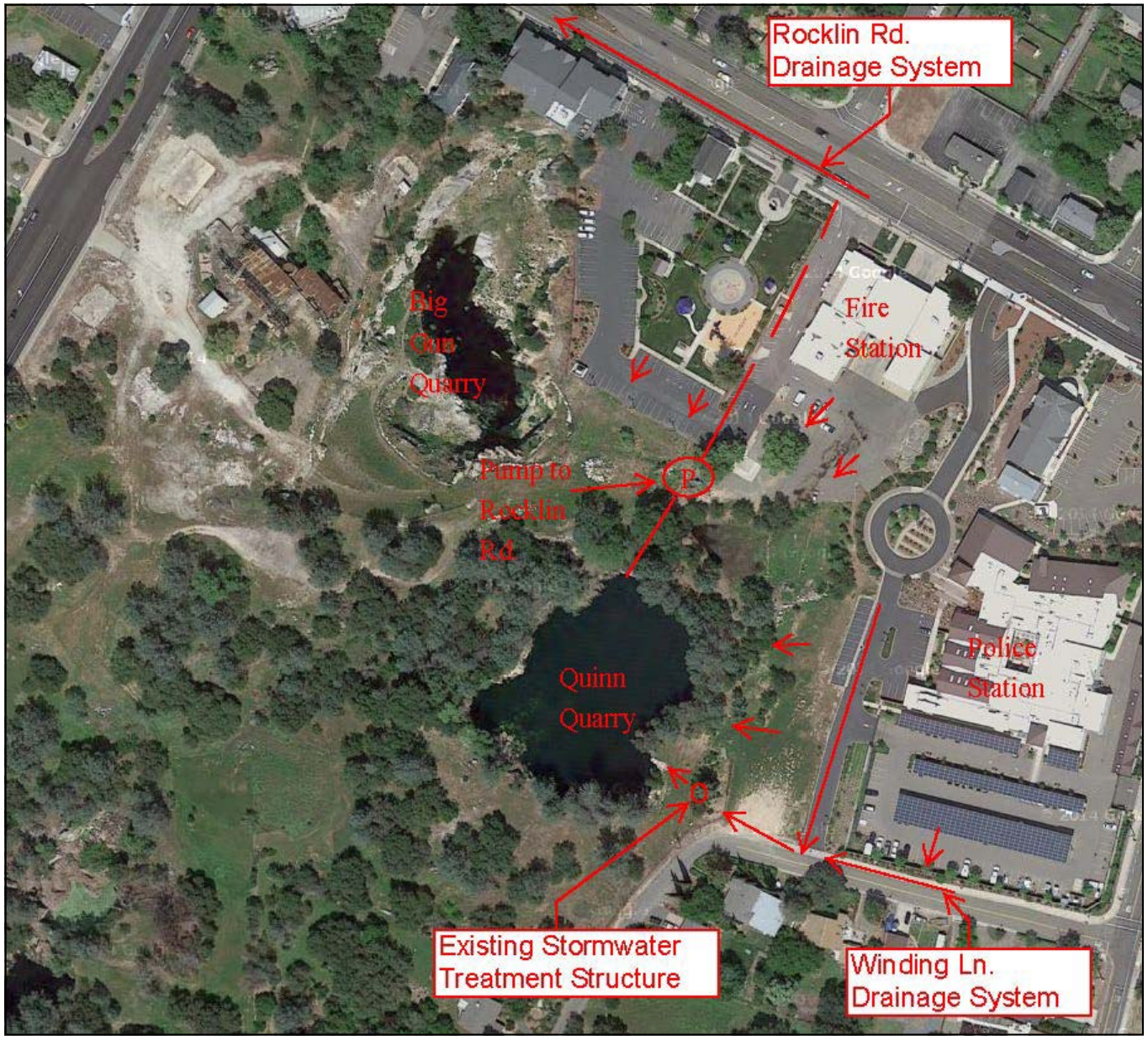
FIGURE 2



Digital Data Provided by Ubora Engineering & Planning, Inc.

FOOTHILL ASSOCIATES ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE	N	NOT TO SCALE	Layout By: CTG Date: 03/23/15	FIGURE 3 — EXISTING DRAINAGE

Photograph 1: View southwest of Quinn Quarry, the man-made quarry pond within the southern portion of the Project Site.

Date: March 11, 2015 Photographer: Kelly Bayne

Photograph 2: View north towards Big Gun Quarry, the man-made quarry pond within the northern portion of the Project Site.

Date: February 9, 2015 Photographer: Kelly Bayne

REPRESENTATIVE SITE PHOTOGRAPHS

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ATTACHMENT A

Photograph 3: Pump used to transport water from Quinn Quarry into the Rocklin Road Drainage System to the north of the Project Site.

Date: March 11, 2015 Photographer: Kelly Bayne

Photograph 4: View north of man-made ditch comprised of rip-rap.

Date: March 11, 2015 Photographer: Kelly Bayne

REPRESENTATIVE SITE PHOTOGRAPHS

Photograph 3: View east of man-made depressional seasonal wetland used as a settling pond.

Date: February 9, 2015 Photographer: Kelly Bayne

Photograph 4: View west of manmade depressional seasonal wetland used as a settling pond.

Date: March 11, 2015 Photographer: Kelly Bayne

REPRESENTATIVE SITE PHOTOGRAPHS