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SCOPE OF WORK – Draft 2
Balboa Reservoir Transportation and Circulation Section

Kittelson & Associates, Inc. (Kittelson) is pleased to submit this Draft Scope of Work for the transportation study of the proposed Balboa Reservoir Project (Case No. 2018-007883ENV) in the Balboa Park neighborhood in San Francisco, California (herein referred to as the "proposed project").

The project site is the 17.4-acre parcel located across Phelan Avenue from the City College of San Francisco (CCSF) campus and adjacent to a City College parking lot that fronts onto Phelan Avenue. The parcel (Lot 190 of Assessor's Block 3180) is within Traffic Analysis Zone (TAZ) 915. The property is located within the P (Public) Zoning District, and the 65-A, 55-X, and 40-X Height and Bulk Districts. The project site is currently used as a 1,007-space surface parking lot (known as the "Lower Reservoir Lot") for CCSF, supplementing the 1,167 vehicle parking spaces in the Upper Reservoir Lot.[1]

As documented in the Balboa Reservoir Development Project Description dated June 1, 2018 and depicted in Figures 1 through 9 in the attachment, and discussed in subsequent project check-in meetings, the following scenarios are under consideration:

Base Density Scenario: The Base Density scenario would include 1,100 dwelling units in 1,283,000 gross square feet, 50% of which would be designated affordable. The housing will be composed of studios and one-, two- and three-bedroom units in flats and townhomes in buildings ranging in height from east to west within the site (see Attachment, Figure 4). The Base Density scenario would additionally include 750 new public, non-accessory parking spaces in a 198,900 gross square foot garage. In addition to the public parking, accessory parking may be provided at a ratio of up to 0.5 spaces per unit throughout the site (up to 550 total spaces). Residential accessory parking would be provided in an additional 141,000 gross square feet of parking podiums beneath buildings onsite. Blocks A through I would allow one below-grade level for vehicle parking spaces. The Base Density scenario also includes 7,500 square feet of commercial (retail) use and 10,000 square feet of onsite childcare. Buildings on the site would range from 2 stories (25 feet) to 7 stories (75 feet), and Blocks A through I would include ground floor building lobbies and common space (see Attachment, Figure 4 and Figure 3, respectively).

High Density Scenario: The High Density scenario would include 1,550 dwelling units and 650 residential parking spaces.[2] There would be no public parking provided under this scenario. The High Density scenario would have a reduced average unit size and buildings on the site would generally be one story taller compared to the Base Density scenario. The High Density scenario would have the same street network as the Base Density scenario.

[1] The parking supply data is based on counts conducted in December 2017. The number of vehicle parking spaces differ slightly from that shown in Figure 5: Balboa Reservoir Vehicle Parking Context in the *SFPUC Balboa Reservoir Site Plan Study Transportation Analysis* (March 17, 2015). The March 2015 study show's 1,005 spaces in the Lower Reservoir Lot and 1,182 spaces in the Upper Reservoir Lot, a difference of -2 spaces and +15 spaces, respectively.

[2] The number of units in the High Density scenario is based on information presented by the Project Sponsor at the scoping meeting on August 16, 2018.

Both scenarios include approximately 4 acres of publicly accessible open space. Walking and bicycle access to the site would be provided on Lee Avenue and the existing east-west connection through the CCSF site to Frida Kahlo Way. Additional walking and bicycle access would be provided via Brighton Avenue and San Ramon Way. The project would provide at least 936 class 1 bicycle parking spaces throughout the buildings onsite and 75 class 2 bicycle parking spaces in the onsite right-of-way.

In addition to the scenarios identified above, the following five variants are under consideration:

- **Variant 1 – Above Ground Public Parking (750 Spaces):** Variant 1 would be the same configuration as the Base Density scenario except the 750-space public parking garage would be constructed on Blocks A and B and be wrapped by housing. Variant 1 does not include any changes to the land use programs or changes to the interior streets. Variant 1 is depicted in Figure 10 and Figure 11 of the Attachment.
- **Variant 2 – Above Ground Public Parking (500 Spaces):** Variant 2 would be the same configuration as Variant 1 except the public parking garage would include 500 parking spaces instead of 750 spaces.
- **Variant 3 – Below Ground Public Parking at North End of Site**: Variant 3 would be the same configuration as the Base Density scenario, except the 750-space public parking garage would be constructed below Blocks E, F, and G towards the north end of the site. Variant 3 does not include any changes to the land use programs or changes to the interior streets. Variant 3 is depicted in Figure 14 of the Attachment.
- **Variant 4 – 1,300 Units:** Variant 4 would include 1,300 units.
- **Variant 5 – South Street on SFPUC:** Variant 5 would be the same configuration as the Base Density scenario, except South Street would be shifted to the SFPUC retained property south of Blocks A and B. Variant 5 does not include any changes to the land use programs. Variant 5 is depicted in Figure 15 of the Attachment.

Analysis of the proposed project and variants will be conducted as part of the transportation and circulation section of the environmental impact report (EIR). The following scope of work has been developed based on the San Francisco Planning Department guidelines for the environmental review of projects within the City (primarily Planning's *Transportation Impact Analysis Guidelines for Environmental* Review, published in October 2002), and supplemental guidance from the Environmental Planning Transportation team.

Based on discussion during the scoping meeting, the transportation analyses will be conducted iteratively using the following step-by-step process:

1. Travel demand analysis (Task 4) will be conducted for the scenario with the highest trip generation potential (i.e., High Density scenario)
2. Vehicle trip distribution and assignment will be conducted for the High Density scenario (public parking on the south end of the site, on blocks A/B) and the High Density with Variant 3 scenario (public parking on the north end of the site)
3. A Travel Demand and Transit Assessment Memo (Task 8) will be prepared summarizing results of Step 1 and Step 2. The memo will be reviewed by Planning and SFMTA and used to determine the scope of transit analysis (specifically, whether transit delay analysis is warranted and if so, for which corridors)
4. Impact analyses will be conducted for the High Density scenario and High Density with Variant 3 scenario and documented in the EIR section
    a. If impacts are identified, the Base Density scenario and Base Density with Variant 3 scenarios will be analyzed and documented in the EIR section
        i. If impacts under the Base Density scenario and Base Density with Variant 3 scenario differs from the High Density scenario or High Density with Variant 3 scenario than Variant 4: 1,300 Units will be analyzed
    b. If no impacts are identified, the Base Density scenario and variants will be analyzed qualitatively and documentation will be included in the EIR section

TASK 1: PROJECT DESCRIPTION

Task 1.1 – Transportation Demand Management Program

Selected transportation demand management (TDM) measures will be incorporated into the description of the proposed project scenarios and variants and analyzed in Draft 1 (and subsequent drafts) of the Transportation and Circulation Section. The TDM Application will be included in the administrative record.

A graphical representation of the project area and the project site will be provided and the transportation context within the Balboa Park neighborhood will be discussed. Kittelson will use the existing and proposed site plan(s) provided by the applicant to establish the location and associated dimensions of the walking, bicycle, and vehicular access points and public right-of-way adjacent to the site and/or the locations proposed to be changed by the project and variants, as well as the location and dimensions of any off-street parking spaces for vehicles (including car share and Americans with Disabilities Act [ADA] spaces), bicycle parking (Class 1 and class 2), commercial and passenger loading spaces, and recycling/trash facilities.

Task 1.2 – Planning Code Compliance Checklist

The proposed project scenarios and variants will be evaluated for compliance with the San Francisco Planning Code requirements. The Planning Code Compliance evaluates consistency with off-street vehicle parking spaces, car share parking spaces, freight loading spaces, and bicycle parking and amenities. Planning Code Compliance Checklists for the proposed project scenarios and variants will be included in the administrative record.

Task 1.3 – Better Streets Plan Checklist

The proposed project scenarios and variants will be evaluated for compliance with the *Better Streets Plan* sidewalk widths and public right-of-way requirements per San Francisco Planning Code §138.1 and in accordance with the City's "Better Streets Policy" (San Francisco Administrative Code §98.1) will be noted. Better Streets Plan Compliance Checklists for the proposed project and variants will be included in the administrative record.

TASK 2: DATA COLLECTION & FIELD OBSERVATIONS

Kittelson will document and describe the existing conditions in the approximately two-block vicinity of the project site (the study area). The study area is bounded by Frida Kahlo Way to the east, Miramar Avenue to the west, Holloway Avenue to the south, and Monterey Boulevard to the north.

Intersection Counts: Kittelson will obtain weekday a.m. (7 to 9 a.m.) and p.m. (4 to 6 p.m.) peak period vehicular turning movement and people walking and bicycling counts for the following intersections:

1. Ocean Avenue / Miramar Avenue*
2. Ocean Avenue / Lee Avenue
3. Ocean Avenue / Frida Kahlo Way / Geneva Avenue
4. Ocean Avenue / San Jose Avenue
5. Ocean Avenue / Plymouth Avenue*
6. San Ramon Way / Southwood Drive / Plymouth Avenue**
7. Greenwood Avenue / Plymouth Avenue
8. Geneva Avenue / San Jose Avenue
9. Judson Avenue / Frida Kahlo Way
10. Judson Avenue / Hazelwood Avenue
11. Judson Avenue / Gennessee Street
12. Monterey Boulevard / Gennessee Street
13. Cloud Circle (N) / Frida Kahlo Way
14. Cloud Circle (S) / Frida Kahlo Way
15. CCSF Upper Reservoir Lot (N) / Frida Kahlo Way
16. CCSF Upper Reservoir Lot (S) / Frida Kahlo Way
17. I-280 SB Off Ramp / Ocean Avenue*
18. I-280 SB Ramps / Geneva Avenue*
19. I-280 NB Ramps / Geneva Avenue*
20. I-280 NB Ramps / Ocean Avenue*
21. Ocean Avenue / Brighton Avenue
22. Ocean Avenue / Harold Avenue
23. Holloway Avenue / Harold Avenue

Weekday a.m. (7 to 9 a.m.) and p.m. (4 to 6 p.m.) peak period counts were collected on Thursday, December 7, 2017, and on Wednesday, January 31, 2018, for the locations listed above, except for the six intersections listed with an

asterisk (*) or double asterisk (**). For the asterisk, counts were collected on January 31, 2018 only. For the double asterisk, counts have not yet been collected. Counts will be collected within the first two weeks of the CCSF Fall Semester, before Friday August 31, 2018.[3]

Driveway and Parking Counts: The project site is currently used as a 1,007-space surface parking lot. The intersection count locations include site driveway access points at CCSF Upper Reservoir Lot (N) / Frida Kahlo Way (Intersection #14) and CCSF Upper Reservoir Lot (S) / Frida Kahlo Way (Intersection #15). Intersection turning movement count data is supplemented with parking occupancy counts collected at the Upper Reservoir Lot and Lower Reservoir Lot between 7 a.m. and 9 p.m. This data was collected on three occasions: Thursday, December 7, 2017; Wednesday, January 31, 2018; and Wednesday, April 18, 2018.

Crash History: Kittelson will summarize the most recent three years of vehicle, people walking, and bicycle collision data for intersections and roadway segments within a two-block radius of the project site. Kittelson will obtain data from the San Francisco's Department of Public Health TransBASE (transbasesf.org) website.

Vehicle Miles Traveled: Kittelson will utilize the San Francisco Transportation Information Map to obtain vehicle miles traveled data, which includes average daily VMT estimates by use for the region and the project's traffic analysis zone (TAZ 915).

Local and Regional Transit: Kittelson will compile and summarize data on all Muni routes and stop locations within the one-half mile study area. This will include a description of Muni's transit route service hours, peak periods, stops and headways on weekdays for the lines within the study area. For informational purposes, weekday a.m. and p.m. peak hour ridership and capacity for local transit routes within the study area will be referenced from the *Transit Data for Transportation Impact Studies Memorandum* (May 15, 2015), or subsequent memorandum, if available.

For informational purposes, Kittelson will also compile data and information on regional transit operators that provide service within the one-half mile study area (e.g., BART). Transit stop and service information would be obtained from the operators' websites. Weekday a.m. and p.m. peak hour ridership and capacity for regional transit operators will be referenced from the *Updated BART Regional Screenlines – Revised* (October 2016). Kittelson will describe general operations in terms of delays within the study area.

People Walking: Kittelson will observe and document general walking conditions on both sides of streets and at intersections adjacent to the site during the weekday a.m. (7 to 9 a.m.) and p.m. (4 to 6 p.m.) periods. Observations and documentation will include walking facilities and amenities (crosswalks, countdown signals), sidewalk widths (actual and effective), and compliance with Americans with Disabilities Act (ADA) requirements. Counts of people walking have been collected at all proposed study intersection locations. Walking conditions will be described as they relate to the study area, including safety, accessibility, and right-of-way issues, and general compliance with the *Better Streets Plan* sidewalk widths and requirements.

Bicycles: Kittelson will observe and document general bicyclist conditions on streets and intersections adjacent to the site during the weekday a.m. (7 to 9 a.m.) and p.m. (4 to 6 p.m.) periods. Observations and documentation will include bicycle activity level and bicycle facilities and amenities (e.g., bike lanes, bicycle parking) and potential hazards to bicyclists. Bicycle counts have been collected at all proposed study intersection locations. Bicyclist conditions will be described as they relate to the study area, including safety, accessibility, and right-of-way issues.

Commercial and Passenger Loading: Kittelson will observe commercial and passenger loading activity during the weekday a.m. (7 to 9 a.m.) and p.m. (4 to 6 p.m.) periods. Kittelson will document the usage and hour restrictions of existing on-street commercial and passenger loading spaces, ADA/blue zones, and car share spaces provided on streets and intersections adjacent to the site as well as any instances of illegal and double parking. This summary will include a

[3] CCSF Fall 2018 schedule available online: https://www.ccsf.edu/Schedule/Calendar/Fall/Fall_18.pdf, website accessed August 16, 2018.

description of the uses and hours of operation of the adjacent parcels and buildings to which they service/provide access and note any off-street facilities currently serving the existing site.

Emergency Vehicle Access: Kittelson will identify the nearest fire stations (including Fire Station 15 located on the corner of Ocean Avenue / Phelan Avenue with a parking lot of SFPUC property) and nearby police stations. Kittelson will qualitatively describe emergency vehicle access to the project site and any observed or reported traffic operational issues will be identified, including potential impacts of queuing at project-related facilities and the ability for emergency vehicles to maneuver around them.

TASK 3: DOCUMENT EXISTING CONDITIONS

Using the data collected in Task 2, Kittelson will document vehicle traffic and any existing traffic hazards, transit, walking, bicycle, emergency vehicle access, vehicle parking and loading conditions within the study area, which includes the following:

- Map and text for the study area, describing the street designations, street names, number of lanes, and traffic flow directions;
- Discussion of crash history within the study area;
- Discussion of vehicle miles traveled for the uses proposed by the project for the region and the proposed project's traffic analysis zone (TAZ);
- Discussion of vehicle access into and out of the site, including location and dimensions of existing curb cuts and driveway activity;
- Map and discussion of general transit services within the study area, including documentation of the Muni local and regional transit screenlines;
- Discussion of general walking conditions in the area, including access to transit and any roadways on the high injury network;
- Map and text describing the existing bicycle network and bicycle circulation conditions in the area, including any roadways on the high injury network;
- Discussion of nearby on-street and off-street commercial and passenger loading facilities and general occupancy conditions;
- Discussion of parking supply and occupancy conditions will be provided for informational purposes, as it relates to the significant impact criteria of secondary parking impacts; and,
- Discussion of area-wide emergency vehicle access conditions.

TASK 4: TRAVEL DEMAND ESTIMATES

The net-new travel demand for the High Density scenario will be estimated. The net-new travel demand reflects the difference between the vehicle trips on the existing street network and the vehicle trips generated by the High Density scenario. The proposed project would displace an existing surface parking lot, whose use reflects demand for proximate uses (e.g., CCSF) and not uses on the project site itself. As such, vehicle trip credits for the existing use will not be applied, as it is assumed that these vehicle trips would not be removed from the network but would be redistributed to available on- and off-street parking within the area.

Research conducted in San Francisco focused on whether or not a relationship exists between the provision of off-street parking and the choice to drive among individuals traveling to or from the site. Following data collection and an empirical review of the data, this research found that reductions in off-street vehicular parking for office, residential, and retail developments reduce the overall automobile mode share associated with those developments, relative to projects with the same land uses in similar contexts that provide more off-street vehicular parking.[4] In other words, more off-street vehicular parking is linked to more driving, indicating that people without dedicated parking spaces are

[4] Fehr and Peers, *Parking Analysis and Methodology Memo – Final*, April 27, 2015.

less likely to drive. Based on this research, the removal of the existing surface parking lot would be expected to result in some reduction in parking demand. Therefore, the net-new travel demand estimates, which do not include a vehicle trip credit for the existing use, are likely to overstate the background traffic and demand for parking and can be considered conservative.

SF Guidelines Trip Generation/Distribution/Mode Split: Kittelson will estimate the number of weekday daily, weekday a.m. and weekday p.m. peak hour person trips generated by the High Density scenario, followed by trip distribution by mode and by origin/destination. This analysis will utilize the updated trip rates from the *SF Guidelines* update. As this study would examine the weekday a.m. peak hour and the *SF Guidelines* does not include weekday a.m. rates, trip generation rates for the weekday a.m. peak hour will be developed using a ratio comparison of the Institute of Transportation Engineers' (ITE) Trip Generation (10th Edition) (Transportation Research Board) weekday a.m. peak hour and weekday p.m. peak hour rates for each proposed land use and applying that ratio to the weekday p.m. peak hour *SF Guidelines* rates to derive *SF Guidelines*-equivalent shares of daily trips for the weekday a.m. peak hour. Vehicle trips generated by the High Density scenario and High Density scenario with Variant 3 will be distributed and assigned to the study intersections based on the trip origin/destination and local street network.

Freight Loading Demand: Kittelson will estimate the daily, average, and peak hour freight loading demand for each land use component of the proposed project and variants. The freight loading demand will be estimated using *SF Guidelines* rates. If available, freight loading demand generated by the proposed project and variants will be estimated using updated rates from the SF TIA Guidelines update.

Passenger Loading Demand: Kittelson will estimate the peak hour passenger loading demand for each land use component of the proposed project and variants. If available, freight loading demand generated by the proposed project and variants will be estimated using updated rates from the SF TIA Guidelines update. If this data is unavailable, the passenger loading demand will be estimated assuming 100 percent of the "other" mode share would be pick-up/drop-off trips arriving and departing in taxis or transportation network company (e.g., Lyft) vehicles.

The results of this assessment will be summarized and included in the Travel Demand and Transit Assessment Memorandum (Task 8). This interim deliverable will be provided to Planning and SFMTA for review and comment prior to submission of the Administrative Draft 1 Transportation and Circulation Section. This assessment will be used to determine the scope of transit analysis, as discussed further in Task 5.3.

TASK 5: EXISTING PLUS PROJECT IMPACT ANALYSIS

Kittelson will evaluate potential for transportation impacts associated with the High Density scenario and High Density with Variant 3 scenario. This assessment will document the land use and transportation network changes proposed by the project, and their effects to circulation on transportation modes within the study area. The High Density scenario and High Density with Variant 3 scenarios will be reviewed for impacts to vehicle miles traveled, driving hazards, people walking, bicycle, transit, commercial and passenger loading, and emergency vehicle access, as described in this section. If impacts are identified, the Base Density scenario and Base Density with Variant 3 scenarios will be analyzed and documented in the EIR section. If impacts under the Base Density scenario and Base Density with Variant 3 scenario differs from the High Density scenario or High Density with Variant 3 scenario than the Variant 4: 1,300 Units scenario will be analyzed. If no impacts are identified, the Base Density scenario and variants will be analyzed qualitatively and documentation will be included in the EIR section.

Task 5.1 – Vehicle Miles Traveled and Induced Automobile Travel Analysis

Kittelson will provide a discussion of the existing vehicle miles traveled (VMT) for the region and the proposed project's transportation analysis zone for each of the uses proposed by the proposed project and variants. Kittelson will compare the existing neighborhood parking rate for each of the uses to that proposed by the proposed project and variant. Kittelson will review Planning's map-based screening criteria for VMT to assess whether or not the proposed project and variants screen out of a detailed VMT analysis. Kittelson will document compliance with these screening

criteria and established thresholds for the proposed land uses. The CEQA Section 21099 Eligibility Checklist will be completed by Planning and included in the appendix.

Task 5.2 – Driving Hazards Analysis

Site Access and Circulation. Kittelson will assess the site access, driveway and parking garage operations to determine the potential for vehicles to queue and affect operations of adjacent street traffic (e.g., on Ocean Avenue or Frida Kahlo Way) with the High Density scenario and High Density with Variant 3 scenario. If queueing concerns in the public right-of-way are identified, Kittelson will work with the project team to develop queue abatement solutions. Potential circulation issues or conflicts will be identified, including the potential for project-related traffic increases to create conflict with other vehicles, and if proposed streetscape modifications would cause sight distance concerns or other driving hazards.

Vehicle Parking. For informational purposes, Kittelson will prepare a vehicle parking supply/code analysis for the High Density scenario and High Density with Variant 3 scenario. If available, the updated TIA Guidelines rates will be used to estimate parking demand generated by the proposed project. If a substantial parking deficit is identified, the secondary effects of vehicle circulation and traffic added to the surrounding roadway network in regards to impacts to people walking, bicycling, riding transit, and emergency vehicle access will be qualitatively assessed. This discussion will be included in the appendix.

Task 5.3 – Transit

Kittelson will conduct a qualitative and quantitative assessment of the effect of the High Density scenario and High Density with Variant 3 scenario on local and regional transit operations. The transit analysis scope will be finalized as part of the Travel Demand and Transit Assessment Memorandum (Task 8). As currently scoped, the transit analyses will include the following elements:

Phelan Loop Analysis. Using intersection count data and field observations collected at Phelan Loop, and the travel demand estimates produced as part of Task 4, Kittelson will develop a narrative and figure illustrating the weekday a.m. and p.m. peak hour project-related vehicle traffic and bus movements at Phelan Loop. Kittelson will evaluate the impact of the proposed project on the ability of buses to enter/exit Phelan Loop or cause a substantial increase in delay for entering/exiting buses.

Ridership and Capacity Analysis. Kittelson will estimate the increase in weekday a.m. and p.m. peak hour transit ridership for individual Muni lines as a result of the High Density scenario. Using the trip distribution from the *SF Guidelines,* Kittelson will assign project-generated transit riders to nearby Muni lines (KJ, 8, 8BX, 29, 43, 49, 54). Transit riders with a regional destination would utilize local Muni routes to access regional transit stops that are located outside of walking distance (e.g., Caltrain). These regional transit riders will also be assigned to local Muni lines for purposes of the analysis. Kittelson will obtain ridership (boarding and alighting and passenger load) data from SFMTA for nearby stops. Based on these values, Muni ridership and capacity will be assessed and documented.

Delay Analysis. The need for project-related transit delay analysis will be determined as part of the Travel Demand and Transit Assessment Memorandum (Task 8). If necessary, the following corridors would be analyzed:

- Ocean Avenue from Plymouth Avenue to San Jose Avenue (Lines K, 29, 49)
- Frida Kahlo Way from Judson Avenue to Ocean Avenue (Line 43)
- Geneva Avenue from Phelan Avenue Bus Loop to San Jose Avenue (Lines 8, 8BX, 43, 54)

The transit delay analysis would consider the change in delay to transit vehicles due to the addition of vehicles along the corridor. Using the travel demand estimates produced as part of Task 4, Kittelson would calculate the intersection Level of Service (LOS) using the guidelines set forth in the Planning Department's *Guidelines for SYNCHRO Intersection LOS Analysis* memorandum (dated October 4, 2012). Intersection LOS would be calculated for the weekday a.m. and p.m. peak hour for a subset of the study intersections and used to evaluate the effects of project-related vehicle trips along Ocean Avenue, Frida Kahlo Way, and/or Geneva Avenue.

Additionally, as several Muni bus/metro lines currently operate along Ocean Avenue and Frida Kahlo Way, Kittelson will qualitatively assess transit operations and potential conflicts with vehicles entering and exiting the site. Access to nearby transit stops and potential for overcrowding on nearby routes will be assessed and described based on field observations and available transit data. The effects of proposed streetscape and public right-of-way modifications on transit service and operations will be described and evaluated and any potential conflicts will be identified.

Task 5.4 – People Walking

Kittelson will discuss existing conditions for people walking in the study area. Based on field observations and count data, Kittelson will qualitatively assess the walking conditions in and around the site. The adequacy of walking connections to nearby transit routes and other destinations will be determined and potential safety issues for people walking will be identified, including potential conflicts between vehicular or bicycle traffic. This assessment will include an evaluation of compliance with the *Better Streets Plan* requirements and will specifically address potential accessibility issues and hazards along study area sidewalks and at the proposed site access driveways, public right-of-way changes, and freight and passenger loading areas.

Task 5.5 – Bicycles

Kittelson will discuss existing conditions for bicyclists in the study area. Based on field observations and count data, Kittelson will qualitatively assess the bicycle conditions in and around the site. Potential bicycle safety issues will be identified, including potential conflicts between vehicular traffic and bicycle circulation, and the effect on adjacent bicycle facilities. This assessment will focus on potential accessibility issues and hazards at the proposed site access driveways, public right-of-way changes, and freight and passenger loading areas. The analysis will qualitatively assess proposed street improvements as they relate to bicycle conditions. In addition, the City and County of San Francisco *Planning Code* requirements for bicycle parking, showers and lockers (if applicable) will be identified and compared to the proposed supply.

Task 5.6 – Freight Loading

Delivery/Service Vehicles: Kittelson will prepare a freight loading supply/code/demand analysis. The freight loading demand calculated as part of Task 2 will be compared to the proposed loading supply and Planning Code requirements for the with respect to location, number of spaces, and minimum dimensions. The analysis will determine if proposed loading supply will accommodate anticipated demand. If the anticipated demand is not met, the analysis will determine if any potential hazards between freight loading and other vehicles, transit operations, bicyclists, or people walking would occur. Discussion of truck access to proposed freight loading spaces that interact with the public right-of-way and internal circulation will be provided.

Task 5.7 – Passenger Loading

Kittelson will prepare a passenger loading supply/ demand analysis. The passenger loading demand calculated as part of Task 2 will be compared to the proposed supply with respect to location, number of spaces, and dimensions. The analysis will determine if proposed supply and arrangement of passenger loading spaces will accommodate anticipated demand. If the anticipated demand is not met, the analysis will determine if any potential hazards between passenger loading and transit, bicyclists, or people walking would occur. Discussion of vehicle access to proposed passenger loading spaces will be provided.

Task 5.8 – Emergency Vehicle Access

Kittelson will assess potential impacts to emergency vehicle access as a result of the proposed project. This evaluation will identify potential off-site emergency vehicle access conflicts and overall accessibility to the site, including the potential for queuing at project-related facilities and the ability for emergency vehicles to maneuver around them. If needed, Kittelson will coordinate with Planning, SFMTA, and SFFD to review site circulation for emergency vehicles. This task assumes Kittelson participation in two meetings/calls to review emergency vehicle access.

Task 5.9: Construction Impacts

Kittelson will obtain construction information from the project sponsor and will evaluate potential construction impacts that would be generated as part of buildout of the proposed project and variants. Construction impact evaluation will address the phasing, staging, and duration of construction activity, truck routings, estimated daily truck volumes, street and/or sidewalk closures (which will be described in the Project Description), impacts on Muni bus operations and bicycle facilities, and construction worker trips and vehicle parking. As part of the analysis, Kittelson will identify areas of coordination needed between SFMTA and Planning staff regarding items such as, transit stop relocation and re-routing, sidewalk/travel lane closures and vehicle/bicycle/walking detours, as applicable.

TASK 6: CUMULATIVE (YEAR 2040) CONDITIONS

The cumulative (Year 2040) conditions analysis will consider the proposed infrastructure, roadway, and transit operations changes, including proposed changes under the San Francisco 2017-2021 Capital Improvement Plan, and 20-Year Capital Improvement Plan (adopted 2013), Muni Forward, CCSF Facilities Master Plan, and other proposed land use and development projects within the study area.

Land Use and Transportation Network Changes: Kittelson will work with Planning staff to identify land use and transportation network changes that have been proposed and/or approved that would have the potential to substantively change circulation and access conditions in the study area.

Vehicle Miles Traveled: Similar to the discussion included in the Existing Conditions section, Kittelson will provide a discussion of the future year (Year 2040) VMT for the region and the proposed project's transportation analysis zone for each of the uses proposed by the proposed project and variants. Kittelson will document compliance with these screening criteria and established thresholds for the proposed land uses.

Local and Regional Transit: Kittelson will document planned transit improvements and their effect on bus routes and vehicular circulation in the study area. Proposals to alter local or regional service will be obtained from Planning and/or SFMTA and described. Muni and regional transit provider screenlines will be provided by Planning/SFMTA and presented for the cumulative (Year 2040) scenario, which will include any future assumed modifications to the transit lines and operations. The contribution of the proposed project and variants to the cumulative (Year 2040) conditions will be calculated based on the number of project-generated transit riders through each screenline that is projected to operate over-capacity in the future.

People Walking: Kittelson will describe any planned land use and transportation network changes that would have the potential to alter walking access and circulation. This assessment will address potential of the proposed project and variants to contribute considerably to any significant cumulative walking impacts and conflict with such transportation network changes.

Bicycles: Kittelson will describe any planned land use and transportation network changes that would have the potential to alter bicycle access and circulation. Planned bicycle network improvements identified in the San Francisco 2017-2021 Capital Improvement Plan and 20-Year Capital Improvement Plan (adopted 2013) will be discussed, as well as the potential for bike share expansion in the study area. This assessment will address potential of the proposed project and variants to contribute considerably to any significant cumulative bicycle impacts and conflict with such transportation network changes.

Freight and Passenger Loading: Kittelson will describe any planned land use and transportation network changes that would have the potential to alter freight and passenger loading conditions. This assessment will address potential of the proposed project and variants to contribute considerably to any significant cumulative freight and/or passenger loading impacts and conflict with such transportation network changes.

Emergency Vehicle Access: Kittelson will describe any planned land use and transportation network changes that would have the potential to alter emergency vehicle access to the site. This assessment will address potential of the proposed project and variants to contribute to any cumulatively significant emergency vehicle access impacts.

Cumulative Construction: Kittelson will describe any construction activities that have the potential to overlap with those of the proposed project and variants. This assessment will address potential of the proposed project and variants to contribute considerably to any significant cumulative construction impacts

TASK 7: DEVELOP MITIGATION MEASURES

The Transportation and Circulation Section will include an impact statement for each analysis topic. Mitigation measures will be identified and developed in consultation with Planning and SFMTA staff for the proposed project and variants, as needed. In addition, the section will briefly evaluate the secondary effects of any mitigation measures.

TASK 8: PREPARE TRAVEL DEMAND AND TRANSIT ANALYSIS MEMORANDUM

Kittelson will prepare a Travel Demand and Transit Analysis Memorandum sharing the results of Tasks 4 and Task 5.3 as described above as an interim deliverable. Three printed and bound copies and one electronic copy of this memo will be submitted to Planning for review by the Environmental Planning Division and other relevant agencies (e.g., SFMTA staff). All background information used in the analysis will be submitted to Planning as technical appendices to the memo.

Kittelson will present findings to Planning and SFMTA, via a teleconference or in-person meeting. The transit analysis scope (Task 5.3) will be determined at this meeting. Kittelson will incorporate one consolidated set of comments and prepare the Final Travel Demand and Transit Analysis Memorandum prior to preparing the Draft 1 EIR section. The Travel Demand and Transit Analysis Memorandum will be included as an appendix to the EIR.

TASK 9: PREPARE TRANSPORTATION AND CIRCULATION SECTION

Kittelson will present draft results for review by Planning, via a teleconference or in-person meeting, at least two weeks prior to submittal of the Draft 1 EIR Section. The goal of this preliminary review would be to assess results and impact determinations and determine if model refinements or additional information is necessary. Furthermore, if required, the review will help identify feasible mitigation measures to reduce project impacts and the methodology for evaluating the effectiveness of those mitigation measures. Planning will not accept Preliminary Draft 1 EIR Section until two weeks after the occurrence of the meeting, unless unusual circumstances prevent the meeting from occurring within a timely manner. Kittelson will also provide an updated schedule to Planning with the preliminary check-in meeting and two weeks prior to every deliverable, if the schedule has changed since the preliminary check-in meeting.

Kittelson will prepare an Administrative Draft 1 Transportation and Circulation Section (EIR Section), incorporating the data, analysis and conclusions from the above tasks. Kittelson will use the template prepared by the environmental consultant for the EIR Section. Five printed and bound copies and one electronic copy of the Administrative Draft 1 EIR Section will be submitted to Planning for review by the Environmental Planning Division and other relevant agencies (e.g., SFMTA staff). All background information used in the analysis will also be submitted to Planning as part of the technical appendices to deliverables. Kittelson will prepare an Administrative Draft 2 EIR Section, followed by a Final Draft EIR Section for Planning's approval. The Final Draft EIR Section will be included in the Draft EIR document. Kittelson will incorporate one consolidated set of comments and prepare a response to comments document for each administrative draft EIR Section. All deliverables will be submitted in hard copy and in electronic format (PDF and WORD formats). Three printed and bound copies and one electronic copy will be provided to Planning.

ANTICIPATED SCHEDULE

The delivery of the Balboa Reservoir Transportation and Circulation Section is anticipated to follow the attached schedule. The schedule will be equitably adjusted as the work progresses, allowing for change in scope, character or

size of the proposed project, or delays or other causes beyond our reasonable control. Updated schedule will be submitted as a stand-alone document to Planning, as needed.

Attachments:
Site Plan and Diagrams (dated July 13, 2018)
CEQA Draft Schedule (dated July 20, 2018)