



PLANNING AND COMMUNITY ENVIRONMENT DEPARTMENT

MEMORANDUM

TO: Parks and Recreation Commission

FROM: Shahla Yazdy **DEPARTMENT:** Transportation

AGENDA DATE: April 26, 2016

SUBJECT: Quarry Road Improvements and Transit Center Access Project

RECOMMENDATION

Staff requests that the Parks and Recreation Commission provide feedback on the proposed conceptual design for the Quarry Road Improvements and Transit Center Access Project's pathway connection plan.

BACKGROUND

The August 2011 Development Agreement between Stanford Hospital and Clinics, the Lucile Salter Packard Children's Hospital at Stanford, the Board of Trustees of the Leland Stanford Junior University and the City of Palo Alto obligated the City to design and construct enhancements of various pedestrian and bicycle connections between the Palo Alto Intermodal Transit Center and the Stanford University Medical Campus (SUMC). Stanford provided funds for these projects. Specifically, the agreement called for:

- 1) Improvements to Enhance the Pedestrian and Bicycle Connection from the Palo Alto Intermodal Transit Center to the existing intersection at El Camino Real and Quarry Road, including development of an attractive, landscaped passive park/green space with a clearly marked and lighted pedestrian pathway, benches and flower borders; and
- 2) Improvements to and within the public right of way to enhance the pedestrian and bicycle connection from the west side of El Camino Real to Welch Road, including way finding, wider bicycle lanes, as necessary on Quarry Road, enhanced transit nodes for bus and/or shuttle stops, and prominent bicycle facilities.

DISCUSSION

Staff has been working with design consultant, Siegfried Engineering, to develop the proposed concept plan (Attachment A) for the connection from the intersection of Quarry Road and El Camino Real and the Transit Center.

The purpose of the project in this area is to provide safe, clear, and directly connected pathway system for travel by both bicyclists and pedestrians from the transit center to Quarry Road. The park area is a

connection point between the crosswalk at El Camino Real and Quarry Road, El Camino Park, University Circle, and the Transit Center. The existing asphalt pathway consists of blind corners sharp turns, inadequate wayfinding signage, lack of transitional space, and an unsafe interface between bicyclists and pedestrians at the El Camino Real/Quarry Road intersection crosswalk.

The proposed design consists of a Class 1, 8 foot wide striped asphalt bike path with 2 foot decomposed granite fines paths on both sides, for a total width of 12 feet (Per Highway Design Manual Figure 1003.1A). The alignment of the path provides a smooth and direct transition between the existing El Camino Park bike path, the crosswalk area, and the direct connection to the Transit Center. The proposed bike path is also consistent with the recently completed bike path at El Camino Park. The proposed alignment generally follows the criteria set forth in the Highway Design Manual Chapter 1000 for Bicycle Transportation Design, 2015 Edition. The proposed pathway provides for minimum centerline radius of 40 feet which corresponds to a design speed of approximately 12.5 mph. The desired minimum speed for a Class 1 bike path is 20 mph, however this is not achievable given the site constraints, therefore the path will be signed appropriately to limit bike speeds to 10 mph. In order to achieve an unrestricted 20 mph design speed in accordance with Table 1003.1 and Section 1003.1 (10), the minimum radius would need to be 90 feet, and the path would need to take a much more circuitous route and it would have to mitigate the numerous obstructions on the project site. In addition the proposed path alignment eliminates the existing sharp turn in the current alignment that has a roughly 15 foot centerline radius with horizontal obstructions that restrict the line of sight around the curve. In accordance with Figure 1003.1D the proposed alignment maintains a minimum horizontal distance from the center of the lane of 8.7 feet, which corresponds to the 40 foot minimum radius utilized. In short, the pathway successfully increases the design speed while taking a route that avoids the existing Oak tree grove, power poles, guy anchors, SFPUC Utility obstructions, and various sightline obstructions, all while taking advantage of the existing open space area. All visibility and pavement markings will be in accordance with MUTCD, Section 9C101 (CA).

Bicyclists and pedestrians are provided new highly visible wayfinding signage at key transition nodes to help them navigate to their desired destinations. To address the tendency for pedestrians to take the shortest distance between two points, pedestrians are provided a separate 4 foot wide decomposed granite fines path connection to the crosswalk with proper visibility. The entire pathway system is to be lit by LED pathway lights to at least minimum safety standards in accordance with the Highway Design Manual Section 1003.1 (18). The fixtures will match the recently installed park light fixtures and poles. Landscape planting will be used sparingly due to maintenance concerns yet when installed it will be installed with the goal of improving the aesthetics at the street frontage and pathway intersections. The plant material will be harmonious and compatible with the newly installed plants located at the adjacent El Camino Park. The plants will be drought tolerant and irrigated with a drip system. The layout will be low accent shrubs and groundcovers. The views into the area and along the path will be clear. The remainder of the area to be covered with a 4" thick recycled mulch layer.

Timeline

The tentative project timeline, subject to change, is as follows:

- ARB Board Review/Approval – May/June 2016
- Parks and Recreation Commission Recommendation/PIO – May/June 2016 (The Commission makes a recommendation to Council to approve a PIO)
- Council Concept Plan Approval/PIO – June 20, 2016
- Final Design and Construction Document Completion – June 2016

- Council Approval of Construction Contract – Late Summer 2016
- Construction Completion– Spring 2017

NEXT STEPS

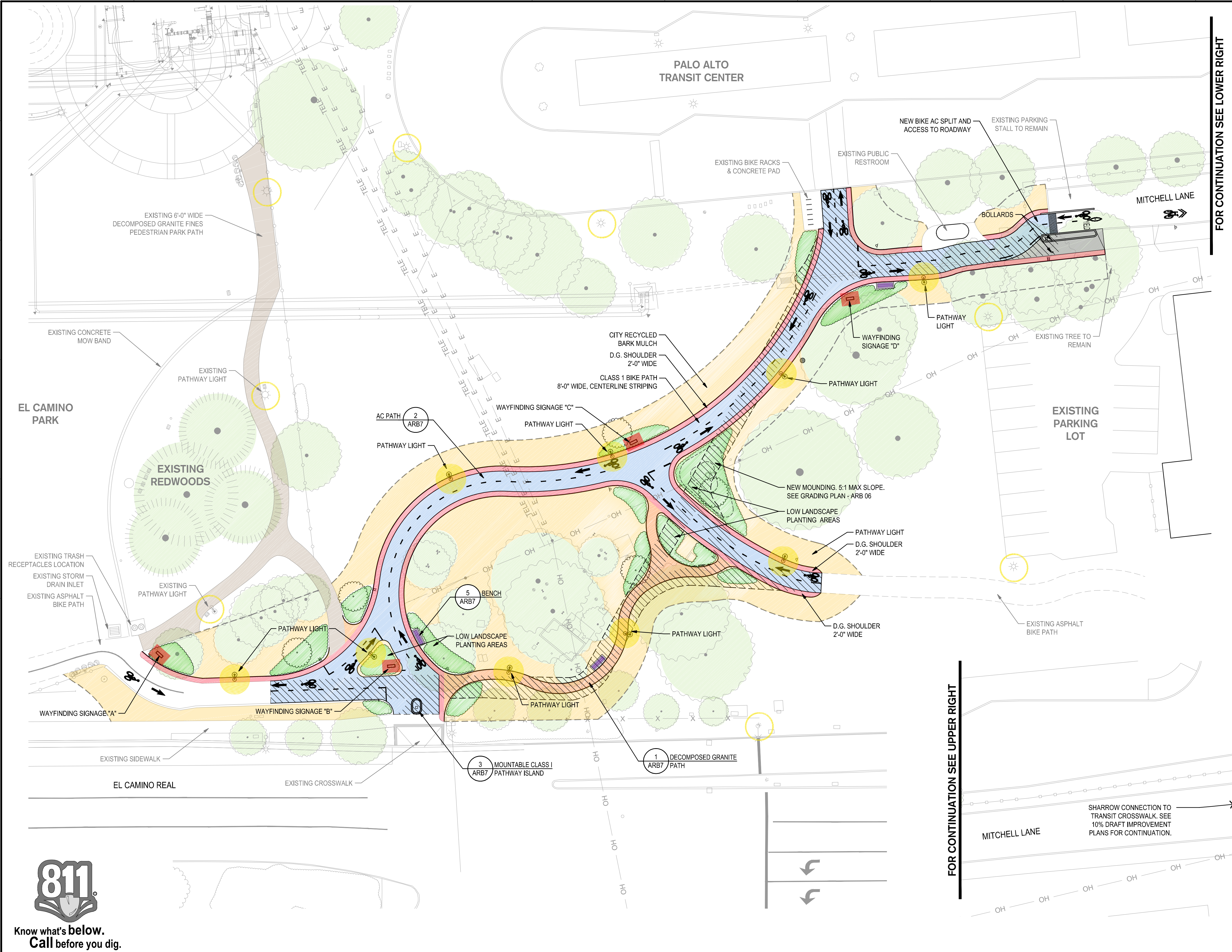
Staff will go to City Council on June 20, 2016 for the PIO and to present the conceptual plans with feedback from PABAC, Parks and Recreation Commission and the Architectural Review Board.

ATTACHMENTS

- A–Park Concept Plan

Prepared by:

Shahla Yazdy
Project Engineer, Transportation



LEGEND

- CLASS 1 BIKE PATH**
8'-0" Wide asphalt path, two-way traffic, centerline striped, 2'-0" wide clear shoulders each side.
- BIKE PATH DECOMPOSED GRANITE SHOULDER**
2'-0" wide pedestrian shoulder edge with d.g. and stabilizer. Redwood header installed. Unobstructed clearance.
- DECOMPOSED GRANITE PEDESTRIAN PATH**
4'-0" Wide decomposed granite fines with stabilizer. Pedestrian connection to crosswalk.
- LANDSCAPE ACCENT PLANTING**
Areas to be planted with low, drought tolerant plant material. Intersection and wayfinding signage accent. See planting plan ARB 13 for more details.
- CONCRETE SIDEWALK**
Sidewalk replacement area at bike path connection & bench pads.
- WAYFINDING SIGNAGE LOCATIONS (4)**
See ARB 9 for more details.
- PATH SECURITY LIGHTS (9)**
14' high light fixture. Pole with railroad strap smooth mount to match El Camino Park lights.
- BENCH**
6 foot long backless bench. Product to match benches installed at El Camino Park. DUMOR 103-60PL 6' bench or equal. Recycled plastic Redwood color. Black powder coated frame. Embedment installation on concrete pad.
- BARK MULCH**
Recycled chip mulch. 4" thick layer minimum. Landscape areas within the project site to receive City-supplied recycled chipped bark mulch.
- EXISTING DECOMPOSED GRANITE PATH**
Existing El Camino Park pedestrian path adjacent to and connected to proposed improvements.
- EXISTING TREES**
Existing trees to remain and be protected during construction.
- EXISTING AC PATH TO BE REMOVED**
See Demolition Plan ARB 4.

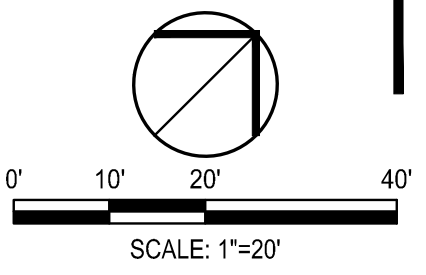
FOR CONTINUATION SEE LOWER RIGHT

FOR CONTINUATION SEE UPPER RIGHT

END IMPROVEMENTS



Know what's below.
Call before you dig.



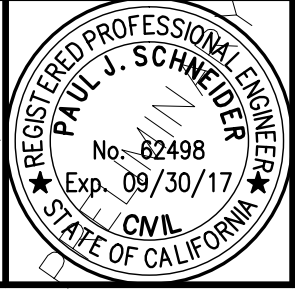
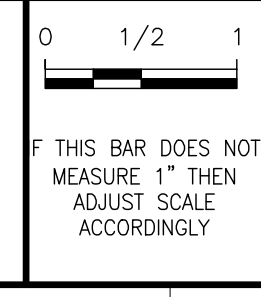
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RJN
 DRAWN BY: MWK
 SHEET CHK'D BY: PJS
 CROSS CHK'D BY: ---
 APPROVED BY: ---
 DATE: 3-25-2016

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- CIVIL ENGINEERING
- STRUCTURAL ENGINEERING
- LANDSCAPE ARCHITECTURE
- LAND SURVEYING



City of Palo Alto
City Project Number
PL-16000

City of Palo Alto El Camino Park & Transit Center Project
SITE & PAVING PLAN
EL CAMINO PARK / TRANSIT CENTER
PALO ALTO, CALIFORNIA

PROJECT NO. PL-16000
SEI-15246
SHEET NO.
ARB 5

APRIL 15, 2016