

## CITY COUNCIL AGENDA REPORT

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August 4, 2020  
Engineering

**TITLE: APPROVE AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH HMH ENGINEERS IN THE AMOUNT OF \$231,200 TO COMPLETE THE DESIGN AND PREPARE BIDDABLE CONSTRUCTION DOCUMENTS FROM THE 35 PERCENT DESIGN FOR A SECOND WESTBOUND LEFT-TURN LANE ON BERNAL AVENUE AT FIRST STREET AND SUNOL BOULEVARD, CIP NO. 17556**

### **SUMMARY**

On December 18, 2018, City Council approved a professional services agreement with HMH Engineers (HMH) to prepare alternatives to a 35 percent level of engineering design for a second left-turn lane from westbound Bernal Avenue onto southbound Sunol Boulevard. The design alternatives subsequently considered included widening to the north, widening to the south, or a combination of both. After considering the design alternatives and the implications of each regarding the land acquisition necessary, as well as the constructability and other impacts, staff believes widening Bernal Avenue to the north, encroaching onto the Pleasanton Unified School District's (PUSD) property, to be the best alternative. The alternatives were presented to the PUSD Board on December 10, 2019, and the Board supported widening to the north as the preferred alternative. Amendment No. 1 was issued to HMH to complete a right-of-way appraisal for the PUSD property. In addition, it was determined that how the frontage of the PUSD property would look after construction was complete is important. As part of Amendment No. 1, HMH also developed landscape concepts, which include a school monument sign as well as City "downtown entry" features. The landscape concepts developed were important to understand the level of effort needed to complete the design of the project, both adjacent to the PUSD property and throughout the project area. Currently, staff recommends approval of a second amendment to the agreement with HMH in the not-to-exceed amount of \$231,200 to complete the design and prepare biddable construction documents.

### **RECOMMENDATION**

1. Approve Amendment No. 2 to the professional services agreement with HMH Engineers in the not-to-exceed amount of \$231,200 to complete the design and prepare biddable construction documents (an increase in the contract amount from \$130,000 to \$361,200).
2. Approve Design Alternative No. 1, expanding the intersection to the north into PUSD property.

3. Authorize the City Manager to enter negotiations for the procurement of the necessary right-of-way.
4. Authorize the City Manager to execute the amendment to the agreement.

### **FINANCIAL STATEMENT**

The current Capital Improvement Program budget includes \$2,750,000 to fund the design and construction of the Second Westbound Left-Turn Lane on Bernal Avenue at First Street and Sunol Boulevard Project, CIP No. 17556. This amendment, plus the original contract, will be charged to the project budget, which will leave \$2,388,800 available to fund the construction costs.

### **BACKGROUND**

As a part of the 2010 traffic fee update, a second left-turn lane from westbound Bernal Avenue onto southbound Sunol Boulevard was identified as a necessary project. In 2017, the Junipero Street and Independence Drive traffic calming study (approved by City Council) recommended to pursue the design of the intersection improvements, and the improvements were part of the overall traffic calming plan. The project will increase the capacity of the signalized intersection to serve the left-turn movement without affecting the overall signal timing of the intersection. The additional lane will allow the queue of motorists turning left to clear the intersection without altering the duration of green light time given to the movement, or the duration of green light time given to any other intersection movement. In addition to the second left-turn lane, the project will include pedestrian and bicycle improvements at the intersection in conformance with the City's Complete Streets Policy.

On December 18, 2018, City Council approved a professional services agreement in the not-to-exceed amount of \$108,000 with HMM to develop design alternatives for the construction of a second westbound left-turn lane from Bernal Avenue onto southbound Sunol Boulevard. It was understood that widening Bernal Avenue, as required to construct another left-turn lane, would potentially require construction of retaining walls and acquisition of the adjacent land. The agreement was for HMM to develop design alternatives to the 35 percent complete level that considered both physical impacts to adjacent properties, as well as right-of-way acquisition requirements.

On November 5, 2019, City Council approved the first amendment to the agreement with HMM for \$22,000 for the appraisal of the PUSD property and to prepare landscape design concepts. In addition to the right-of-way, the value of temporary construction easements (beyond the right-of-way needed to construct the project) will be determined. HMM, in consultation with the City's Landscape Architect developed concept boards depicting options for the landscaping restoration/enhancements along the school property frontages, and throughout the project area.

On December 26, 2019, the City received a letter from the Pleasanton Hills Board of Directors raising concern about additional traffic noise migration from the proposed project and requested a landscape design to add foliage at the bottom of the hill. The City had HMM commission a noise study conducted by Illingworth & Rodkin, Inc. The

study concluded that the impact is less than significant as the existing conditions plus the project's anticipated outcome would only net an increased noise level between 0 to 0.4 dBA, and would not exceed the 4 dBA significance threshold as established in Program 1.3 of the General Plan. Noise level increase less than 1 dBA are not measurable nor detectable outside of a laboratory environment.

HMH has completed the 35 percent design, right-of-way appraisal, sound study and preliminary landscape design concepts. The amendment before City Council is for HMH to complete the 100 percent design, develop a detailed landscape design and prepare biddable construction documents. The construction contract award and right-of-way acquisitions will be presented to City Council at a future meeting.

## **DISCUSSION**

### Design Alternatives

HMH completed the alternative designs for the intersection and identified three potential intersection layouts. All three options will provide the second left turn lane, remove the porkchop island in the southeast corner, narrow the center medians on First Street and Bernal Avenue, install protected bike lanes and wider sidewalks, lengthen the southbound First Street trap lane for motorist turning onto westbound Bernal Avenue (allowing the intersection to function more efficiently), and include landscape improvements.

The first alternative (see Attachment 1) widens the intersection to the north, into the PUSD property. This option has the best geometrics for the intersection, the lowest cost of construction, and will not require any major retaining walls. This alternative will require some heritage trees (in declining health) to be removed along the PUSD property frontage on Bernal Avenue, and requires acquisition of approximately 5,400 square feet of property from PUSD.

The second alternative (see Attachment 2) widens the intersection to the south, into the Pleasanton Hills Homeowners Association (HOA) hillside. This option is the most expensive due to the construction of a retaining wall required to retain the steep hillside. The retaining wall would vary in height, but the portion immediately adjacent to the intersection of Bernal Avenue and Sunol Boulevard would be 10 feet tall. The road geometrics would also cause travel lanes to be offset through the intersection, which could require a reduction to the speed limit on Bernal Avenue in the vicinity of the intersection. Acquisition of approximately 9,250 square feet of right-of-way from the Pleasanton Hills HOA will be required for this option.

The third alternative (see Attachment 3) widens the intersection both to the north and to the south. This option would reduce the maximum height of the retaining wall discussed in the second alternative to 6 feet. It would also cause, but to a lesser degree, the travel lanes to be offset through the intersection, and may also require a reduction in the speed limit on Bernal Avenue at the intersection. As designed, this alternative would require acquisition of 1,500 square feet of right-of-way from the PUSD, and 3,900 square feet of right-of-way from Pleasanton Hills HOA. Removal of the heritage trees

along the PUSD property frontage would also be required. This option would have the second highest cost, due to the reduced retaining wall height as compared to the second alternative.

Alternative	Right of Way (sq ft)	R/W (\$38/sq ft)	Construction Easement (sq ft)	Easement (\$3.80/sq ft)	Retaining Wall	Total*
Alt-1 - North	5,900	\$224,200	14,650	\$55,670	\$0	\$279,870
Alt 2 - South	10,600	\$402,800	17,100	\$64,980	\$525,000	\$992,780
Alt 3 - Both	5,900	\$224,200	10,200	\$38,760	\$225,000	\$487,960

\* Civil and Landscape costs are assumed to be similar for all three options and therefore not included in this table for clarity of presenting cost differential between alternatives.

After reviewing the alternative options, staff believes the first alternative (widening to the north onto the PUSD property) to be the best option. This option provides the best geometric alignment, pedestrian and bicycle improvements, the least impacts to the area and the lowest cost of construction. It will not require the installation of large retaining walls; however, it will have an impact to the PUSD property.

Staff presented all three alternative options to PUSD staff and they were supportive of expanding the intersection to the north but noted that the District would be interested in updating the fencing to the new school standard black iron fence, restoring the lawn area after construction with native drought-tolerant plants, and including an element to help identify the property as the school district offices. PUSD staff expressed an interest in utilizing the historic school bell as part of the identifying element. The City had the design team come up with landscape concepts with these design features in mind and worked with PUSD staff to identify a monument-type structure to showcase the historic bell, surrounded by native drought-tolerant plantings.

On December 10, 2019, City staff presented the three alternatives to the PUSD Board and discussed the impacts associated with each alternative design. The PUSD Board was supportive of the collective recommendation of the first alternative option of widening Bernal Avenue to the north. The landscape and monument signage adjacent to the PUSD was discussed generally, but the meeting on December 10, 2019, was prior to the development of the landscape concepts discussed above.

Right-of-way Acquisition

The project requires additional right-of-way to be acquired to allow for the expansion of the intersection. The design alternatives reviewed the necessary right of away acquisitions and temporary construction easements to perform the work.

An appraisal was performed by Associated Right of Way Services, Inc. (ARWS) to identify the fair market value of the PUSD property and the temporary construction easement needed for the project. For the preferred concept, it is anticipated that 5,400

square feet of right-of-way will be needed from PUSD and 14,650 square feet for the temporary construction easement. ARWS estimated the cost for acquisition of the property at \$205,200 (\$38 per square foot) and construction easement at \$55,670 (\$3.80 per square foot).

In developing the landscape concepts, staff identified the opportunity to install a downtown monument sign offsetting the school monument sign at the northwest corner of the intersection. The owners of 4725 First Street have tentatively approved the concept of the downtown sign. It is anticipated that approximately 500 square feet of right-of-way will need to be acquired to install the downtown monument at a cost of \$19,000.

### Landscape Design Concept

Staff believes the landscape improvements for this project are essential in providing a consistent user experience appropriate for the gateway to downtown Pleasanton. The signage, furnishings, and plant palette help define the gateway as well as the pedestrian and vehicular spaces within the right-of-way. In addition, the design elements provide the necessary storm water treatment and enhance the visual appearance of the intersection.

The City's Landscape Architect, working in conjunction with HMM and PUSD, developed a landscape design concept that incorporates monuments and signage to transform the intersection into a gateway suitable for and representative of downtown Pleasanton. The concepts were developed to help identify design parameters of the project as well as to provide PUSD with a vision of what could be accomplished with the restoration and enhancement of the intersection.

The proposed landscape design (see Attachment 4) is centered on developing a downtown gateway experience. That experience complements Pleasanton's other gateways, providing a consistent identity; with monument signage and drought tolerant planting, all intended to draw people off adjacent roads onto Bernal Avenue, then further on to Main Street. Approaching from the south on Sunol Boulevard, a vertical monument sign appears around the roadway curve, guiding visitors to the downtown monument sign on the corner of First Street and Bernal Avenue. Each monument would be designed to encapsulate some of Pleasanton's history with the east corner sign dedicated to the PUSD and incorporating their historic school bell. Once they are on Bernal Avenue, visitors are guided around the corner plaza on the right, directly into the heart of downtown. Materials used in the design concept are based on the aesthetics of the Firehouse Arts Center, transportation corridor, and the Bernal/I680 gateway and may include rustic brick, Corten steel, white stucco, and warm lighting.

### Finance

The current Capital Improvement Program budget includes \$2.75 million to fund the design and construction of the Second Westbound Left-Turn Lane on Bernal Avenue at First Street and Sunol Boulevard Project, CIP No. 17556. The total design cost for this

project will be \$361,200, including Amendments No. 1 and No. 2, and will be charged to the project budget.

The total cost of the project is estimated at \$3,279,070 based on expanding the intersection to the north, the attached landscape concept and right-of-way acquisition, leaving an anticipated shortfall of \$529,070. The original CIP funding of \$2,750,000 did not include the acquisition costs for the right-of-way and construction easement as the extent of the impacts at the time were unknown. The total estimated right-of-way and construction easement cost for the project is now estimated at \$279,870. During the preliminary design, monument features that were not included in the original budgeting were added in the landscape design to enhance the intersection into the downtown gateway. These items account for the increased costs; however, since these numbers are concept level estimates, no budget change is recommended at this time. As the design is further developed, including the landscape plans, as well as the “plats and legals” defining the property needed for right of way, the cost estimates will also become more refined. While unknown at this time, the landscape improvements on the adjacent PUSD property may offset the actual payment to PUSD to acquire the property. It is envisioned that as the design is finalized these items will become more defined and a funding request will be presented to City Council, when appropriate, prior to construction.

Total \$3,279,070 project cost estimate breakdown as follows:

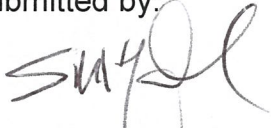
Design (including Amendment No. 2)		\$361,200
Civil Improvements		\$2,000,000
Landscape Improvements		\$638,000
Landscape Areas	132,000	
Monument Signs	88,000	
Plaza Area	30,000	
PUSD Landscape Area	349,500	
PUSD Monument Sign	38,500	
Right-of-Way & Construction Easement		\$279,870
PUSD Right-of-Way	205,200	
PUSD Construction Easement	55,670	
4725 First Street Right-of-Way	19,000	
 Total		 \$3,279,070

Schedule

Plans and specifications will be prepared over the next several months with completion targeted for spring 2021. The City will immediately enter negotiations for the procurement of the necessary right-of-way. After completion of the construction documents, the project will be advertised for bid. When bids are received the full project costs will be known and presented to City Council with a recommendation on how to

proceed. It is anticipated that construction of the intersection will begin in late 2021 with major closures targeted for summer 2022 when school is not in session.

Submitted by:




Stephen Kirkpatrick  
Director of Engineering

Fiscal Review:



Tina Olson  
Director of Finance

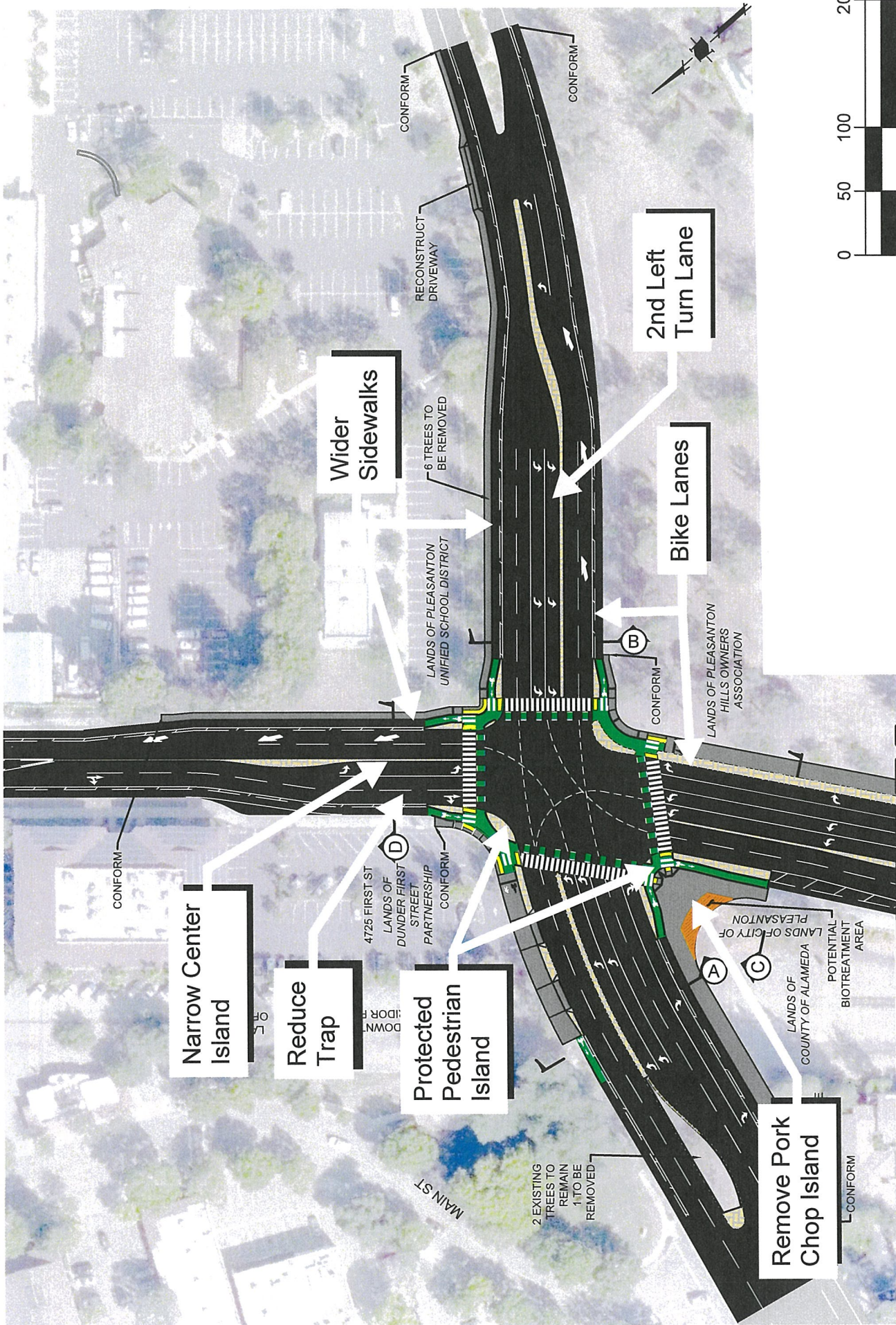
Approved by:



Nelson Fialho  
City Manager

Attachments:

1. Design Alternative One - North
2. Design Alternative Two - South
3. Design Alternative Three - Both
4. Landscape Design Concept
5. HMH Contract Amendment No. 2



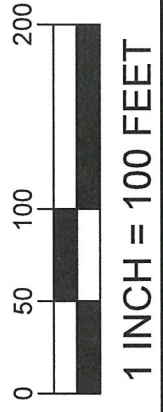
MATCH LINE A - SEE FOLLOWING

**BERNAL AVE/SUNOL BLVD/FIRST ST INTERSECTION  
 PROTECTED INTERSECTION EXHIBIT**

PLEASANTON, CALIFORNIA  
 Date: 05.06.20



1570 Oakland Road San Jose, CA 95131

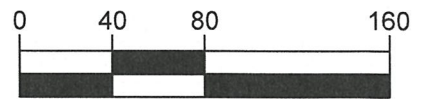
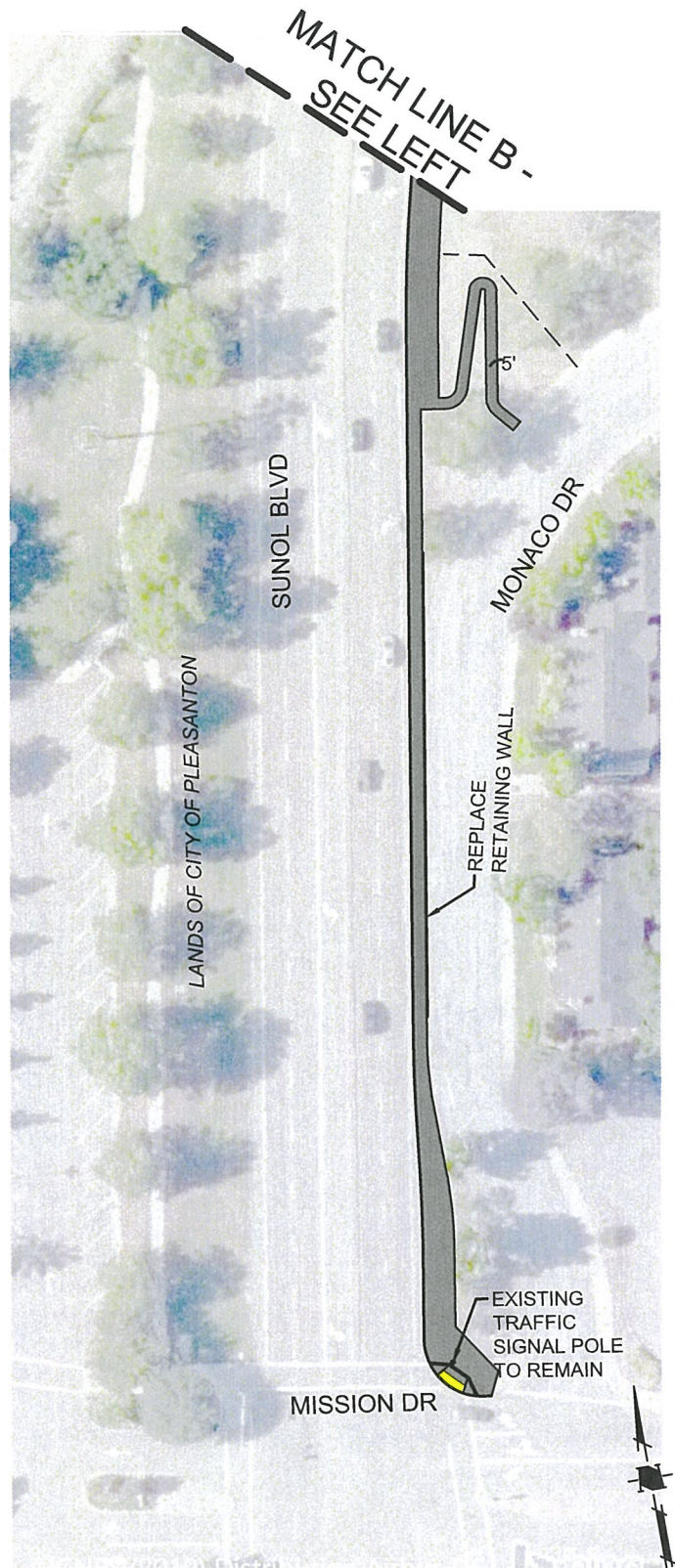




MATCH LINE A - SEE PREVIOUS



MATCH LINE B - SEE RIGHT

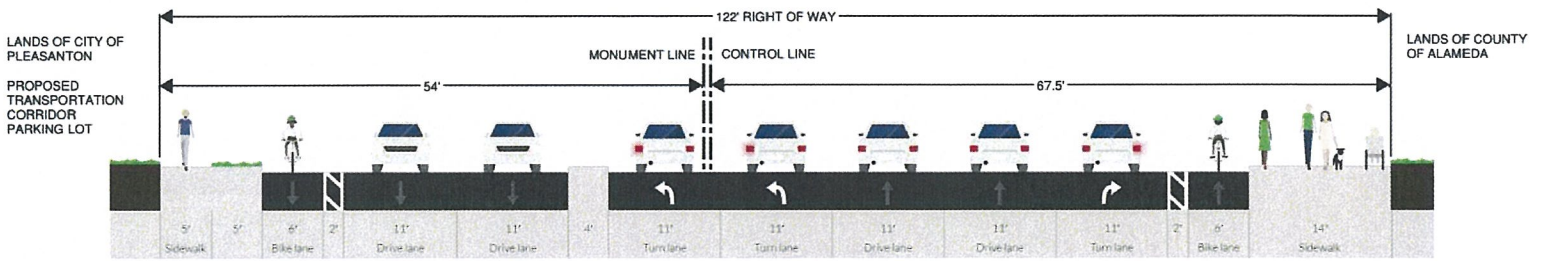


1 INCH = 80 FEET

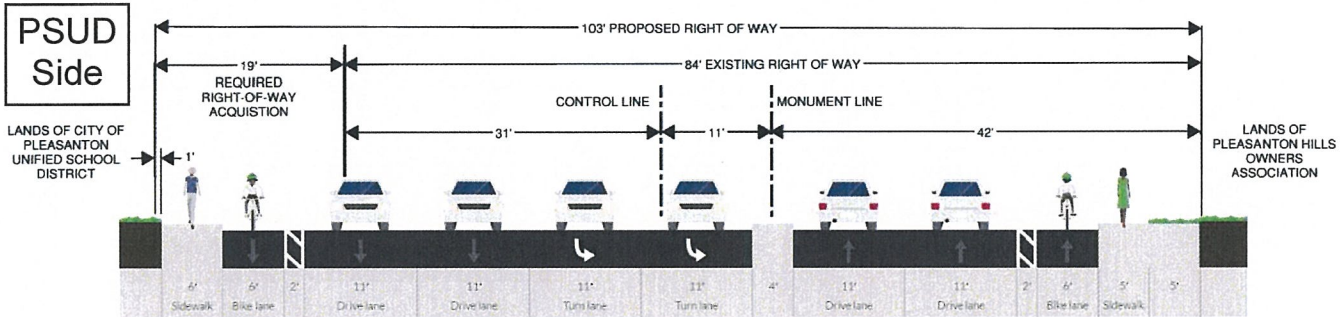
**BERNAL AVE/SUNOL BLVD/FIRST ST INTERSECTION  
PROTECTED INTERSECTION EXHIBIT  
PLEASANTON, CALIFORNIA**

Date: 05.06.20

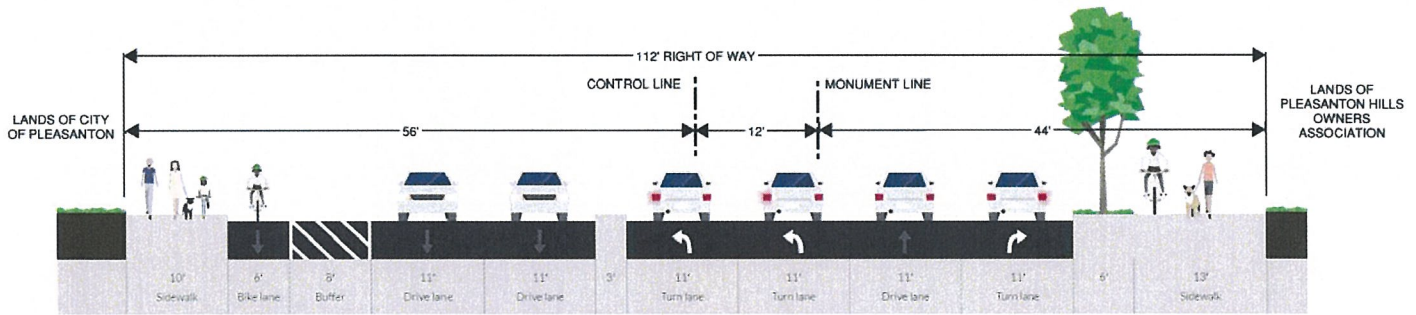




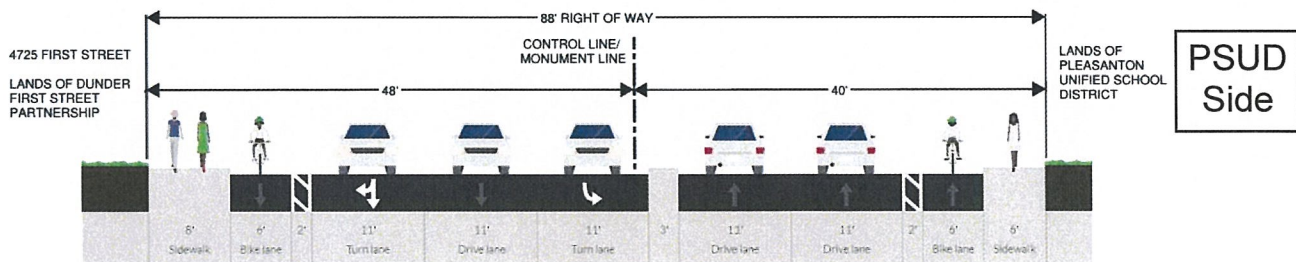
**A** **BERNAL AVE SECTION**  
SCALE: NTS



**B** **BERNAL AVE SECTION**  
SCALE: NTS



**C** **SUNOL BLVD SECTION**  
SCALE: NTS



**D** **FIRST ST SECTION**  
SCALE: NTS

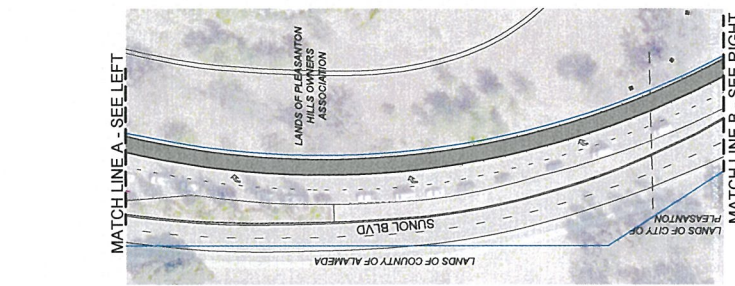
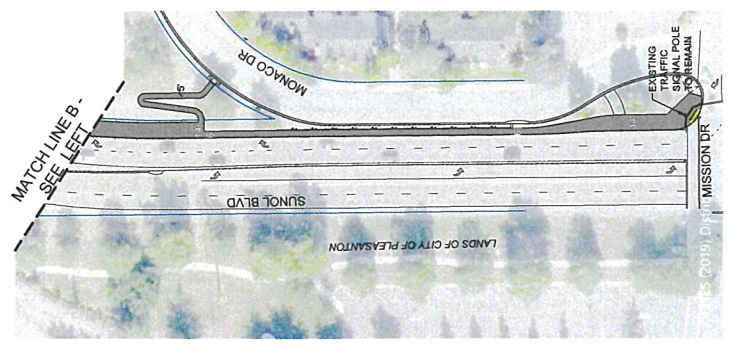
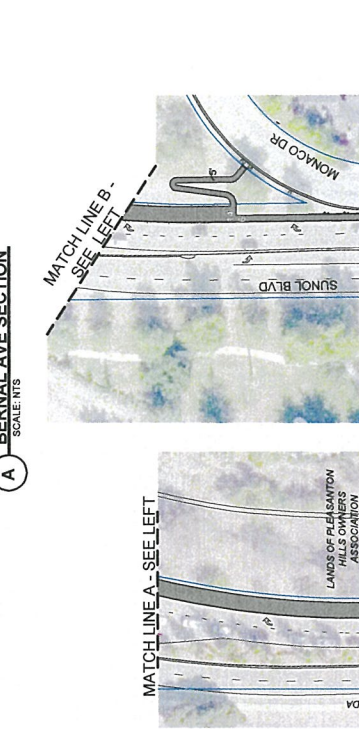
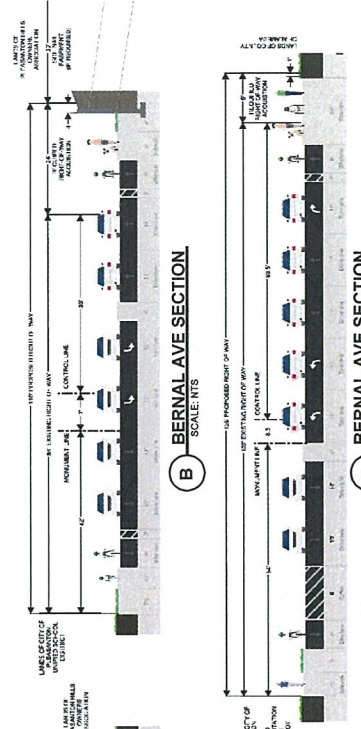
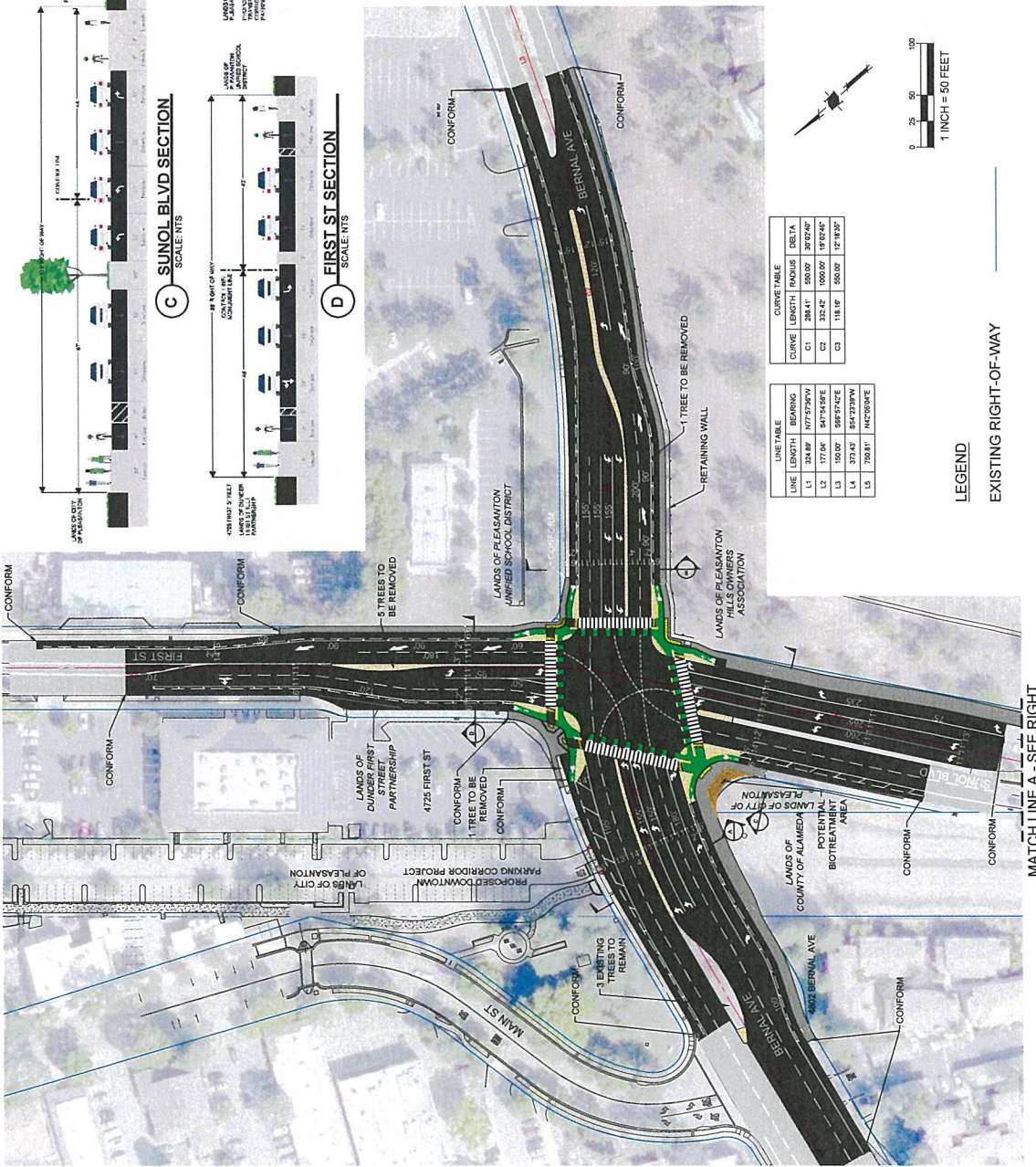
**BERNAL AVE/SUNOL BLVD/FIRST ST INTERSECTION  
PROTECTED INTERSECTION EXHIBIT  
PLEASANTON, CALIFORNIA**

Date: 05.06.20



# BERNAL AVE / SUNOL BLVD / FIRST ST INTERSECTION IMPROVEMENTS

ALTERNATIVE 2 - ALIGNED TO THE SOUTH



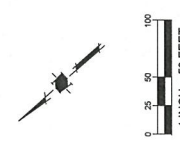
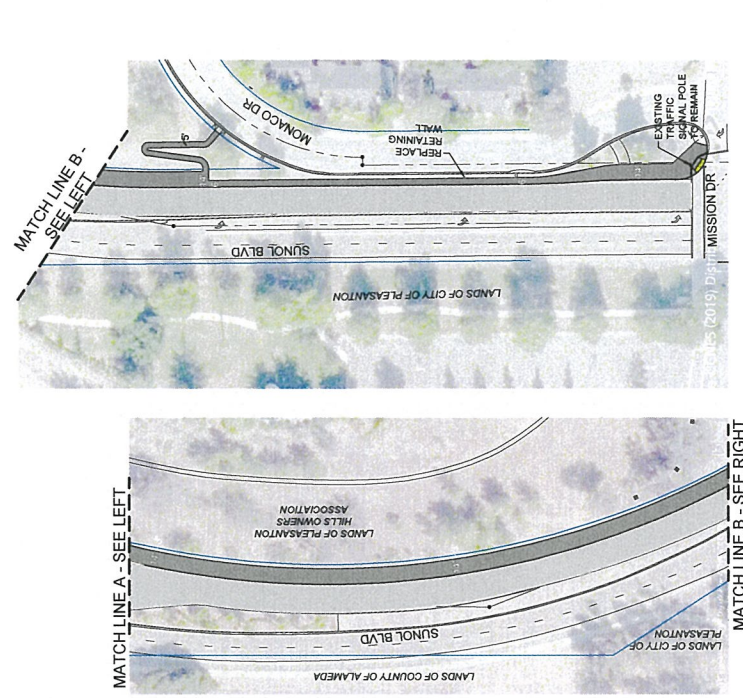
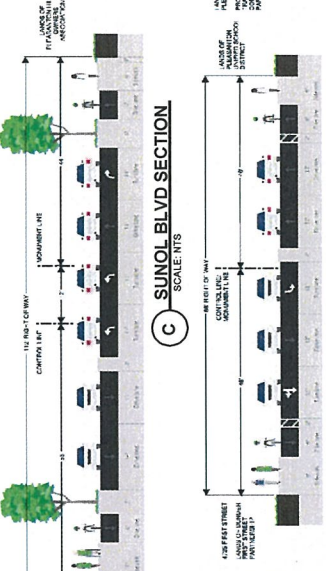
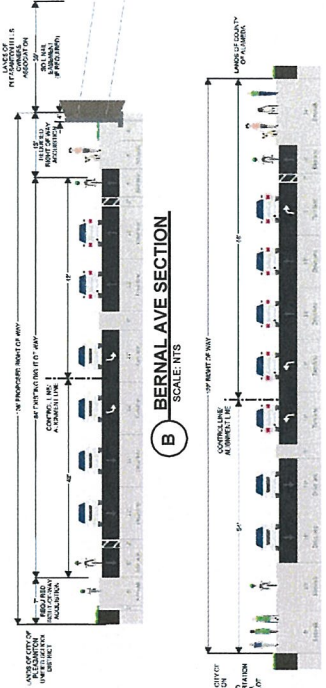
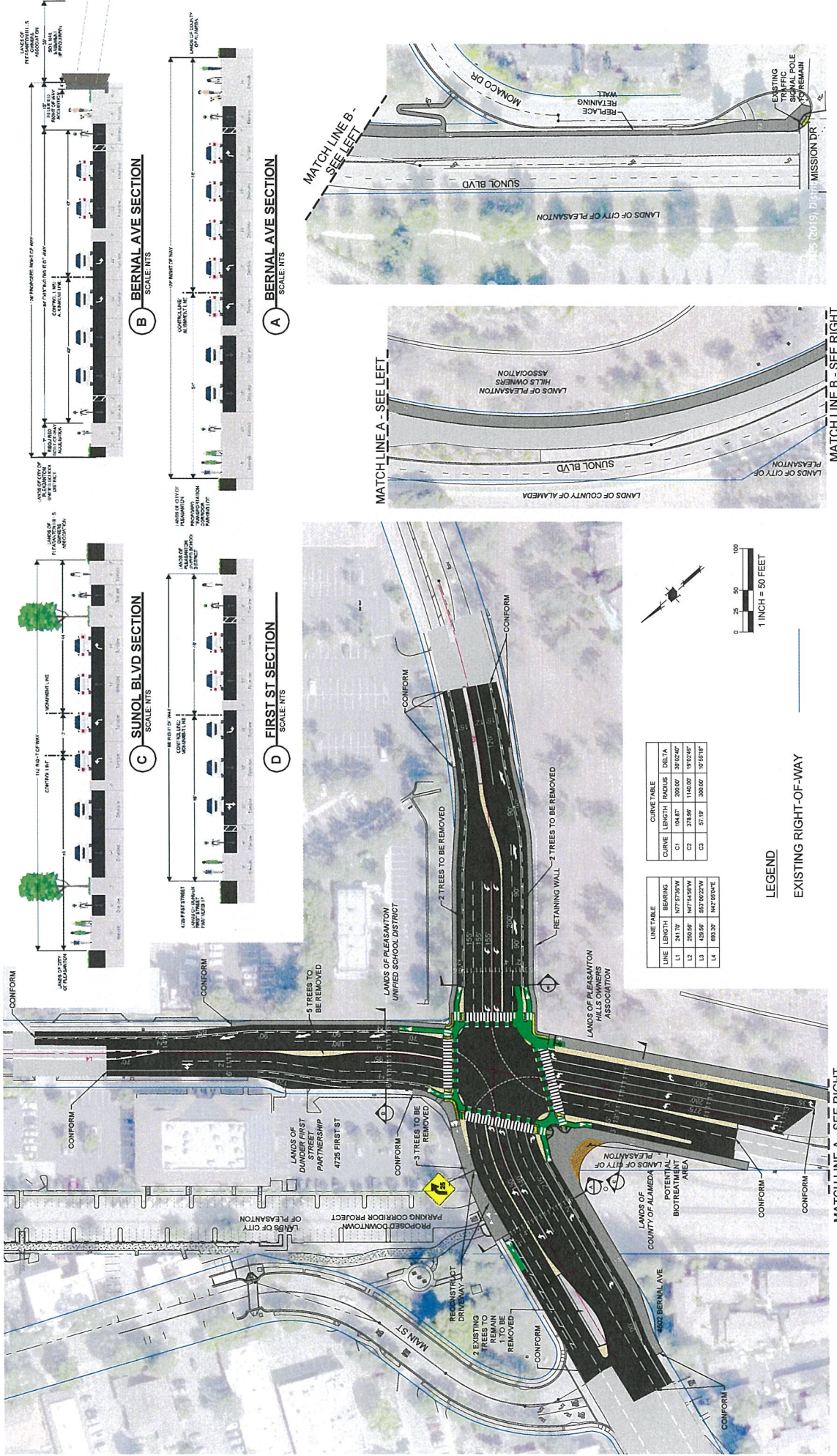
LINE	LENGTH	BEARING
L1	324.87'	N77°53'30"W
L2	177.04'	S41°54'59"E
L3	100.00'	S89°51'42"E
L4	373.43'	S54°23'30"W
L5	750.81'	N42°00'04"E

CURVE	LENGTH	RADIUS	DELTA
C1	288.41'	500.00'	30°02'00"
C2	332.42'	1000.00'	19°02'46"
C3	118.16'	500.00'	17°18'30"

LEGEND  
EXISTING RIGHT-OF-WAY

# BERNAL AVE / SUNOL BLVD / 1ST STREET INTERSECTION IMPROVEMENTS

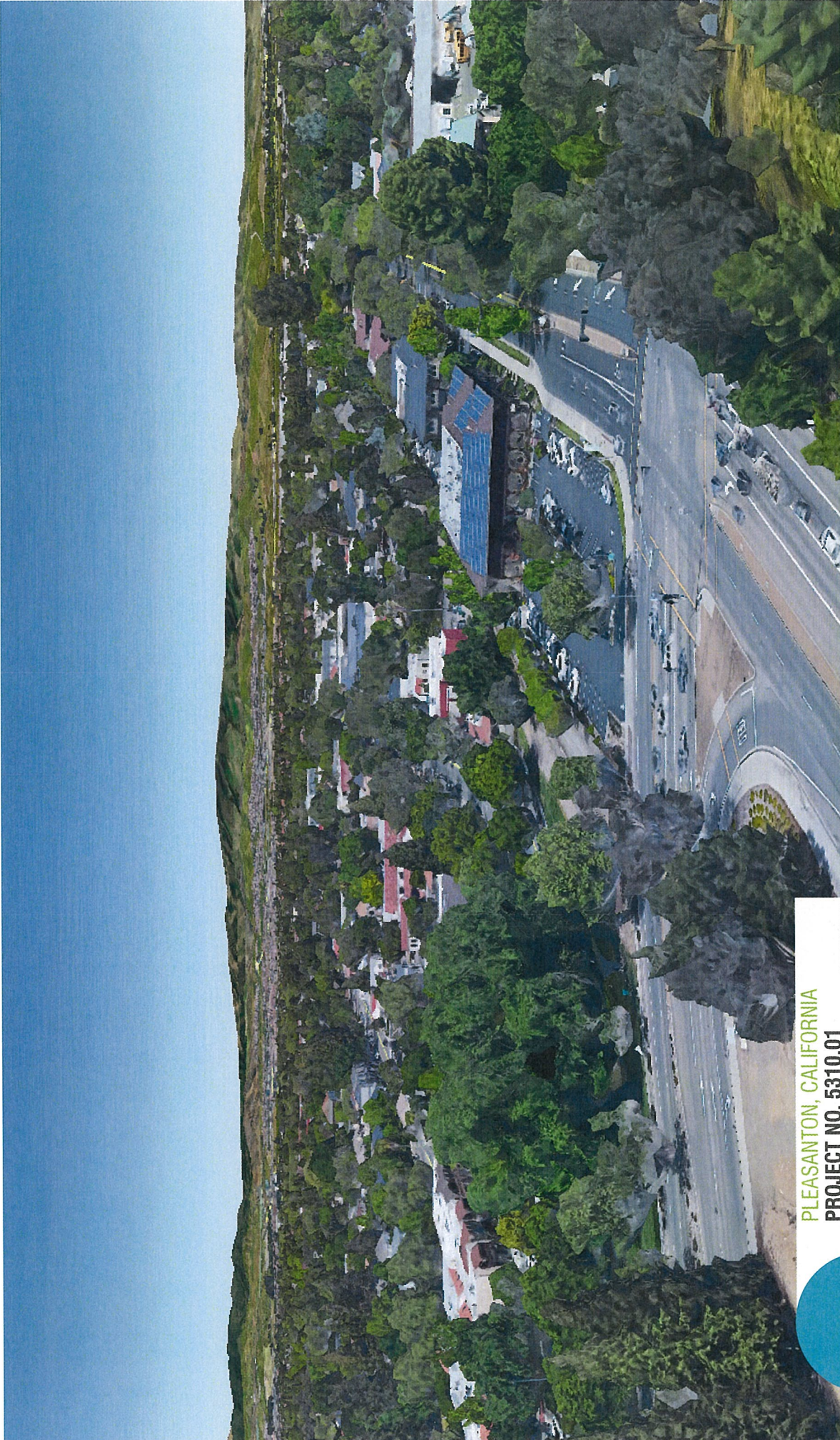
## ALTERNATIVE 3 - 25 MPH INTERSECTION DESIGN SPEED



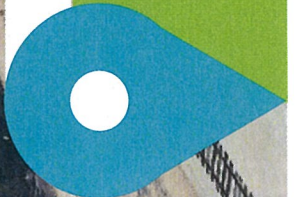
CURVE	LENGTH	RADIUS	DELTA
C1	104.87'	200.00'	30°02'40"
C2	378.96'	1145.00'	19°02'40"
C3	97.19'	300.00'	10°25'18"

LINE	LENGTH	BEARING
L1	241.72'	N47°57'25"W
L2	250.56'	N47°54'59"W
L3	429.56'	S53°00'22"W
L4	693.30'	N47°05'58"E

**LEGEND**  
EXISTING RIGHT-OF-WAY



PLEASANTON, CALIFORNIA  
PROJECT NO. 5310.01



# DOWNTOWN IMPROVEMENTS

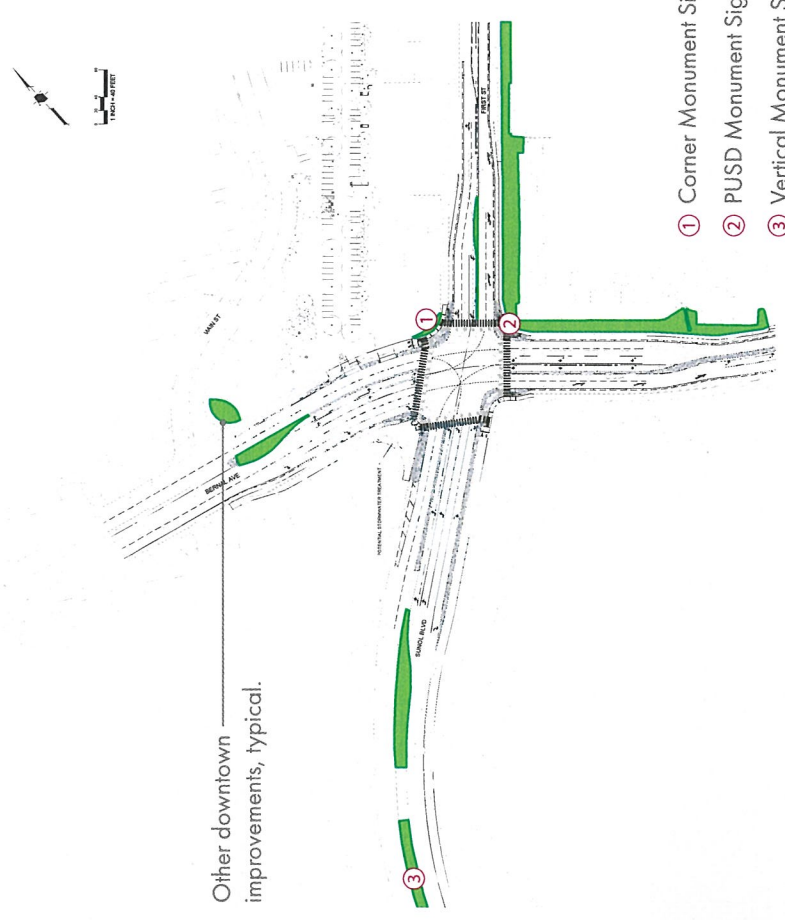


# CITY OF PLEASANTON DOWNTOWN IMPROVEMENTS

## PLAN & FEATURE LOCATIONS

### DESIGN INTENT AND EXPERIENCE

This proposed City of Pleasanton Downtown Gateway experience introduces monument signage, drought-tolerant native planting, and a corner plaza, which draw people off adjacent roads onto Bernal Avenue, then Main Street, and through to downtown. Approaching from the south on Sunol Boulevard, a vertical monument sign identifies that downtown Pleasanton is upcoming, and a monument sign on the north corner of First Street and Bernal Avenue serves to guide visitors into the downtown. On the east corner of the same intersection, a monument sign dedicated to the Pleasanton Unified School District incorporates the historic school bell. Once on Bernal Avenue, visitors are guided around the corner plaza on the right, directly into the heart of downtown. Materials include rustic brick, corten steel, and warm lighting.



Other downtown improvements, typical.



Firehouse Arts Center



Corten Steel



School Bell

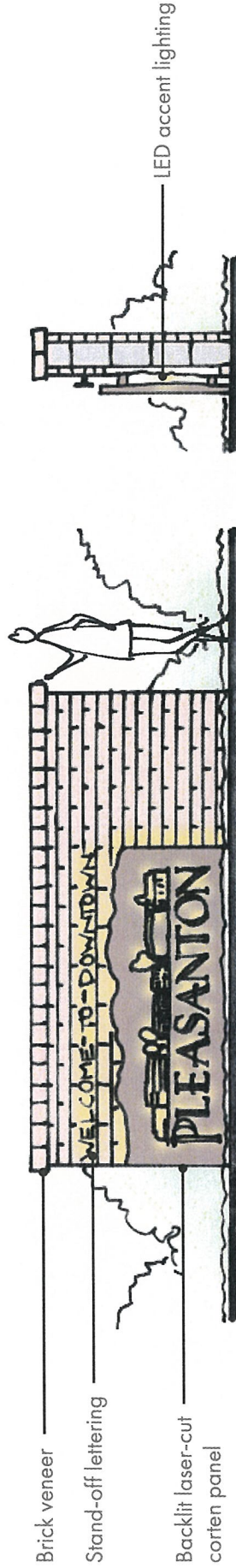
- ① Corner Monument Sign
- ② PUSD Monument Sign
- ③ Vertical Monument Sign



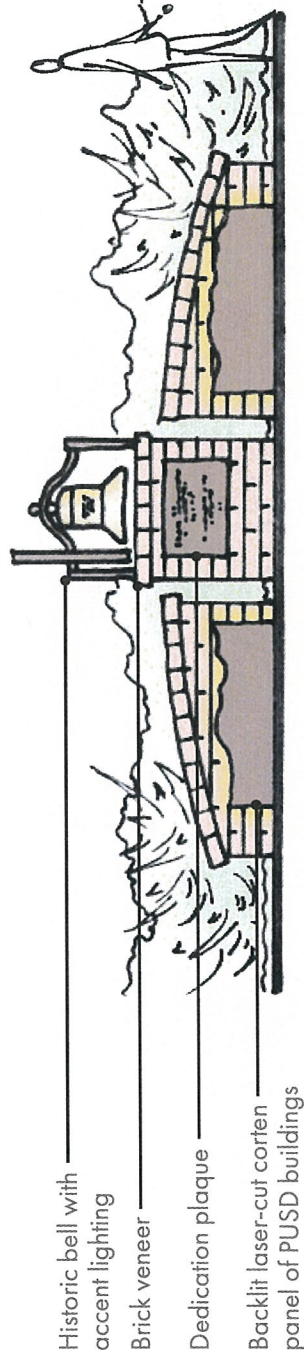
LANDSCAPE ARCHITECTURE

# CITY OF PLEASANTON DOWNTOWN IMPROVEMENTS

## MONUMENT SIGN CONCEPTS



Corner Monument Sign

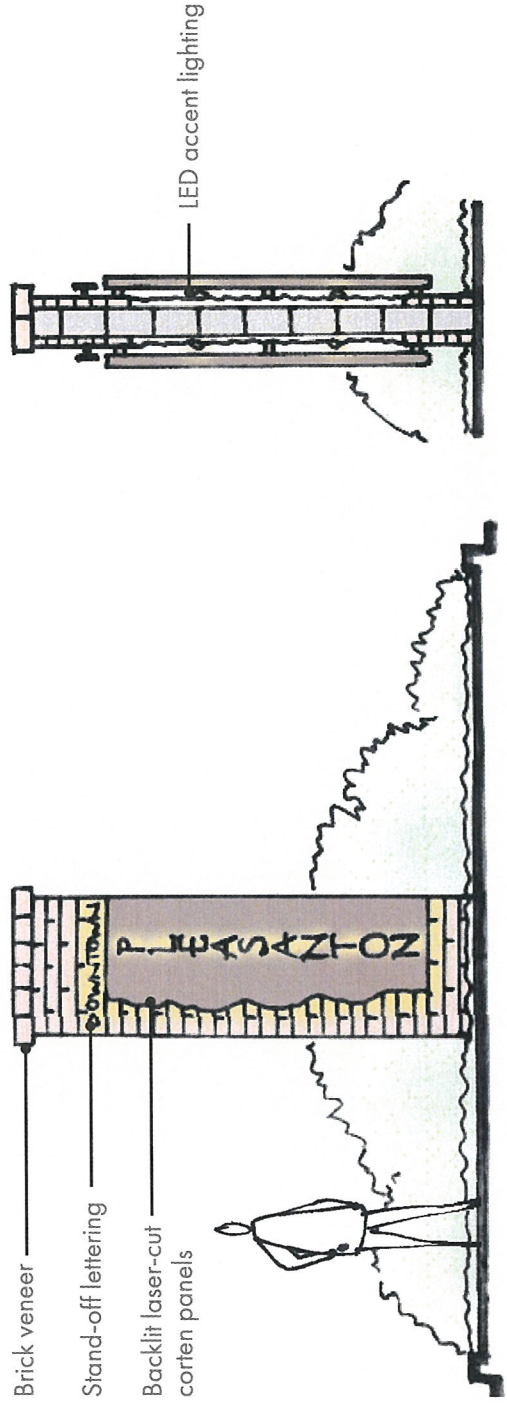


Pleasanton Unified School District Monument Sign



LANDSCAPE ARCHITECTURE

# CITY OF PLEASANTON DOWNTOWN IMPROVEMENTS



Vertical Monument Sign



# CITY OF PLEASANTON DOWNTOWN IMPROVEMENTS

## PLANTING PALETTE



*Achillea millefolium* 'Moonshine'



*Angozanthos* 'Ruby Velvet'



*Chondropetalum tectorum* 'El Campo'



*Lomandra* 'Platinum Beauty'



*Mimulus aurantiacus*



*Myrtis communis* 'Compacta'



*Nepeta racemosa* 'Walker's Low'



*Salvia clevelandii*



*Salvia greggii* 'Furman's Red'



*Samolus chamaecyparissus*



*Trachelospermum jasminoides*



*Westringia fruticosa* 'Morning Light'



*Celtis sinensis*



*Cercis comadenis*



*Liriodendron tulipifera*



LANDSCAPE ARCHITECTURE



HMHCA.COM | HMHLSTUDIO.COM | 408.487.2200 | 1570 oakland road san jose, ca 95131



**SECOND AMENDMENT TO AGREEMENT**  
**Bernal Avenue at First Street/Sunol Blvd, CIP No. 17556**

This First Amendment to Agreement ("First Amendment") is entered into the 5<sup>th</sup> day of November 2019 by the City of Pleasanton ("City") and HMH ("Consultant").

**Whereas**, on December 18, 2018, the City and Consultant entered into an Agreement for Professional Services ("Agreement") (Agreement No. 2019322) where Consultant is providing professional engineering and design services for the 35 percent plans design level for the reconstruction of the Bernal Avenue at First Street/Sunol Boulevard intersection Project, CIP No.17556, for the not-to-exceed amount of \$108,000; and

**Whereas**, on November 5, 2019, the City and Consultant entered First Amendment where Consultant is providing additional professional engineering and design services to provide a property appraisal and prepare landscape design concepts, for the not-to-exceed amount of \$22,000; and

**Whereas**, additional services are needed from the Consultant for professional engineering and design services to complete the 100 percent project design and develop biddable construction documents; and

**Whereas**, the parties desire to amend to the Agreement to add additional compensation for such additional services.

Now, therefore, in exchange for valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows:

1. Exhibit A of the Agreement is amended to add the following: Provide 100% design and biddable construction documents as outlined on scope of services dated April 23, 2020, as attached here in as Exhibit 1.
2. The total compensation for all services and reimbursement listed under Section 5 Compensation of the Agreement shall be increased to Three Hundred and Sixty One Thousand and Two Hundred Dollars (\$361,200). [Additional services for 100% design and biddable construction documents for an additional \$231,200].
3. All other terms and conditions of the Agreement shall remain in full force and effect.

In witness whereof, authorized representatives of the parties have executed this First Amendment to the Agreement as of the date and year first above written.

**CITY OF PLEASANTON**

**CONSULTANT – HMH**

\_\_\_\_\_  
Nelson Fialho, City Manager

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Print name

ATTEST:

Title: \_\_\_\_\_

\_\_\_\_\_  
Karen Diaz, City Clerk

*[If Consultant is a corporation, signatures must comply with California Corporations Code §313]*

APPROVED AS TO FORM:

\_\_\_\_\_  
Daniel Sodergren, City Attorney

By:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print name

Title:

\_\_\_\_\_

## **FIRST ST / BERNAL AVE INTERSECTION IMPROVEMENTS**

The First / Bernal Intersection Improvements will install a protected intersection and add a second left turn lane from westbound Bernal Avenue to southbound Sunol Boulevard. The project will reconstruct and/or upgrade bicycle and pedestrian facilities from the Sunol Boulevard / Mission Drive intersection to the project intersection along the east side of Sunol Boulevard. The project will relocate or modify the signal poles at all four corners of the intersection and shift the alignment of the south approach to the intersection. The basis for design shall be Alternative 1 as described in the Design Alternative Memorandum dated May 17, 2019.

The project will reconstruct all four (4) quadrants of the First / Bernal intersection to accommodate the protected intersection configuration. The project will eliminate the pork-chop in the SW quadrant and tighten the curb return to shorten pedestrian crosswalk distances.

Landscape Architecture improvements shall be incorporated into the project, including median planting upgrades, monument signage, hardscape improvements and planting and irrigation along Bernal Avenue, Sunol Boulevard and First Street. The existing non-standard lane drop along eastbound Bernal Ave east of the intersection will be maintained within the new project. Basis for landscape design shall be the Downtown Signage Concept package dated April 7, 2020.

This proposal will progress the project from the Preliminary Design phase to 100% PS&E and bid documents.

### **300 Project Management**

Brendin Christolear will be the Project Manager and will be responsible for HMM services on the project. See will manage our subconsultants and coordinate the team with CITY and other agencies involved. Jon Cacciotti will be the Principle in Charge.

The Project Manager will be responsible for project organization and monitoring. This involves planning the work program, organizing the team personnel to implement the program, monitoring the team progress, and controlling the quality of the work products to complete the project on time and within budget.

The work program will include periodic team meetings with CITY to establish clear, concise project goals, design criteria, schedules and budgets. Minutes will be taken at meetings summarizing topics discussed, decisions made and action to be taken. Meeting minutes will be distributed to participants and appropriate affected parties.

It is assumed that four (4) meetings are included in this task.

### **305 Quality Control / Quality Assurance**

Implement Quality Control procedures including identification of senior staff responsible for independent reviews, scheduling review periods and documenting the QC/QA process.

Conduct an internal quality assurance reviews of the plans, specifications, and estimates prior to with the 65%, 100% and Bid Submittals to CITY.

### **310 Supplemental Survey**

Collect supplemental field surveys of features not previously surveyed, but necessary for the completion of design elements. Four mobilizations are assumed for this task.

### **315 Community Outreach – Landscape Architecture**

Assist CITY in coordinating information related to project design as directed at public meetings. Prepare illustrative exhibits and conduct presentations at the community meetings. Gather input regarding issues which may be of special concern to residents and businesses.

It is assumed that three (3) meetings will be held within this scope of work.

### **270 Plats and Legal Descriptions**

Preparation of plats and legal descriptions, as required, per City of Pleasanton standard for the recordation of easements and use by the City for preparation of grant deed. This scope of services will be limited to three (3) plats and legal descriptions. Any additional plats and legal descriptions will be billed as extra work.

### **320 Geotechnical Investigation**

Engage a geotechnical engineering subconsultant, Cal Engineering and Geology to review historic geological data, conduct field investigations and up to four (4) soils borings, perform laboratory testing and prepare geotechnical recommendations.

Geotechnical analyses will be completed to develop seismic design parameters and calculate retaining wall loads and foundation capacities for monument signage. A geotechnical report will be prepared in conformance with Caltrans Division of Engineering Services' Foundation Reports for Earth Retaining Systems (ERS) dated August 2015.

### **325 Intersection Sound Study**

Engage a subconsultant, Illingworth & Rodkin, Inc. to perform the following:

**Measure Existing Noise Levels.** Existing noise levels will be monitored at one long-term (24-hour +) and up to 4 short-term (10-minute) representative locations along the study area to characterize the existing noise environment and to provide data for model calibration purposes. These data will be summarized to establish existing conditions at noise-sensitive land uses in the project vicinity.

**Calculate Future Noise Levels.** FHWA's Traffic Noise Model (TNM) will be used to calculate existing noise levels and predict future noise levels with and without the project. The model will be validated to measured noise and traffic conditions and then used to predict existing and future noise levels. Traffic noise modeling will be conducted in accordance with State and Federal recommended procedures. One build alternative will be modeled.

**Assess Noise Levels and Recommend Mitigation.** The potential for operational noise impacts will be identified. An operational noise impact would occur if a receptor would be exposed to noise levels or increases in excess of the criteria established by the City of Pleasanton. Preliminary noise abatement will be evaluated to reduce noise levels where noise impacts are identified.

### 330 Draft PS&E (65%)

Based on comments received from Preliminary Design, advance the design to the point that all major design issues and solutions are represented in the plans. Fehr & Peers will complete a lighting analysis of the intersection. The following types of plans will be prepared:

- Title Sheet, Legend and Notes
- Typical Cross Sections
- Improvement Plans
- Construction Details
- Stage Construction and Traffic Handling Plan
- Signing and Striping Plan
- Structural Plan
- Structural Details
- Signal Plans
- Signal Details
- Pole Schedule and Conductor Schedule
- Landscape Plan (if applicable)
- Landscape Details (if applicable)
- Irrigation Plan (if applicable)
- Irrigation Details (if applicable)
- Electrical Plans
- Electrical Details

Engage a structural engineering subconsultant, Biggs Cardosa and Associates, to perform structural calculations and prepare design drawings for the proposed monument signage and a retaining wall on the NB side of Sunol Blvd just north of Mission Drive to retain the grade difference between Monaco Drive and the proposed improvements on Sunol Blvd. The retaining wall is anticipated to be a non-standard concrete retaining wall on a spread footing requiring a special design. The three monument signs are anticipated to incorporate concrete masonry unit (CMU) block walls on concrete spread footings with a brick veneer and lighting. It is assumed that the three monument signs consist of the approximate dimensions below:

- Corner Monument Sign - approximately 6'-0" tall and 15'-0" long.
- Pleasanton Unified School District Monument Sign - approximately 20'-0" long with a maximum height of 4'-0".
- Vertical Monument Sign - approximately 4'-0" long and 12'-0" tall.

It is assumed that the existing streetlight and signal service from PG&E can be re-used for this work. No PG&E coordination or new service requests are assumed in this task.

A draft of the technical specifications sections will be prepared and included with the submittal. The technical specifications will reference City standard specifications sections for the various items of work, with specific consideration of measurement and payment provisions. Format for specifications shall be determined in conjunction with City staff prior to completion of draft. It is anticipated that the structural specifications shall be in Caltrans format.

The Preliminary Estimate of Probable Construction Cost will be updated to reflect the refinements from the Preliminary Design to the Preliminary PS&E (65%) Submittal.

### **335 City Storm Water Check List**

Perform calculations and analysis related to storm water control requirements and complete the City's Storm Water Check List. Demonstrate compliance with state, regional, and local requirements through the city's process.

### **340 PS&E (100%)**

After review of the Draft PS&E (65%) by CITY, utility companies and other agencies, work with CITY and other reviewers to resolve any conflicts between the comments. Incorporate the resolved comments into the plans.

Update the technical specifications using City and Caltrans Standard Specifications and incorporate "boilerplate" legal and contractual provisions provided by CITY.

Update the preliminary Estimate of Probable Construction Cost.

### **350 PS&E Bid Documents**

After review of the PS&E (100%) by CITY and other agencies, prepare the PS&E Bid Documents in accordance with CITY's instructions.

Provide the PS&E Bid Documents to CITY to confirm the PS&E documents are ready for advertisement and construction. Submit PS&E Bid Documents for signature.

### **360 Bid Support**

Make available project staff to answer questions during the bidding process. The scope of work for this task assumes formal response to two (2) bid inquiries.

Assist City in preparation of addenda to the bid documents. The scope of work for this task assumes preparation of one (1) addendum.

### **Deliverables**

All deliverables assumed to be electronic, unless otherwise noted.

- Meeting Minutes (8)
- 35% Plans
- 35% Estimate



- 65% Plans
- 65% Estimate
- Draft Specifications
- Storm Water Check List
- 100% Plans
- 100% Estimate
- Bid Plans (1 wet-signed set of drawings plotted on 22"x34")
- Bid Estimate
- Bid Specifications
- Geotechnical Recommendations Memorandum (1)
- Basis of Design Memorandum (1)
- Bid Support Responses (2)
- Bid Addendum (1)

### **Exceptions and Assumptions**

No easement vacation or resolution services are included within this scope of services.

No utility relocations are assumed within this scope of services.

Design of private utility facilities to be relocated by the project are excluded from this scope of services.

Specifications will be prepared as a separate document than the plans. Specifications will reference City of Pleasanton Standard Specifications and will be supplemented by applicable specifications in CSI format. CITY will provide front-end general provisions for incorporation by the consultant.

It is assumed the retaining wall in this scope of services will be designed using the AASHTO LRFD 6<sup>th</sup> Edition with Caltrans Amendments. A concrete facing is assumed to be the final wall facing incorporation either cast-in-place or shotcrete wall construction.

No environmental clearance or permitting services are included in this scope of services.

No preparation of a SWPPP is assumed within this scope of services. The Risk Level Determination will be prepared within Task 365.

No separate demolition plan is assumed within this scope of services.

It is assumed that existing water services can be used for landscape irrigation.

It is assumed that existing PG&E services can be used for lighting and traffic signals.

No control or boundary survey is included in this work. CITY will provide right-of-way information, plotted in AutoCAD, compliant with the CITY's CAD standards for use by the consultant for design. The consultant shall be able to rely on the accuracy of the information provided by CITY.

CITY will provide survey control monumentation used in the preparation of topographic survey.

CITY will provide topographic survey to the design professional which is accurate for the design professional to rely upon for detailed grading calculations. The topographic survey provided will include the raw survey data, in .txt format, along with AutoCAD linework, drafted compliant with the City's CAD standards, which depict existing surface features including curbs, gutters, drainage inlets, manholes, utility boxes, trees, sidewalk, asphalt, lane markings and other visible surface features. The city will provide dip information depicting the depth, orientation and diameter of all storm drain and sanitary sewer manholes within the project area.

No Traffic Control Plans will be prepared for soil boring operations on the project site.

No vehicle counts are included within this scope of services.

No traffic simulation or modelling is included with this scope of services. CITY will provide desired turning pocket lengths. When not specified, the project will assume to match the existing turning pocket lengths.

No signal timing calculations are proposed within this scope of services.

### **Additional Services**

If records identify boundary discrepancies or require monumentation, a Record of Survey will be prepared as an additional service.

If surveys identify existing easements or property encumbrances no longer in use, consultant can provide vacation documents as an additional service.

**HOURLY FEE SCHEDULE**



**FIRST / BERNAL INTERSECTION**

City of Pleasanton

5/7/2020

TASK	HMMH						F&P		BCA		CE&G		(\$) OTHER DIRECT COSTS	(\$) TOTAL FEE	
	Principal	Civil Engineering Manager	Project Civil Engineer	Junior Engineer	Project Landscape Architect	Senior Land Surveyor	2-Person Field Crew	HMM HOURS	HMM FEE	F&P HOURS	F&P FEE	BCA HOURS			BCA FEE
<b>FIRST / BERNAL INTERSECTION</b>															
300 Project Management (35%-100%)	6	48	16												
305 Quality Control / Quality Assurance (65%, 100%)	8	16	8		4										
310 Supplemental Survey							32								
311 Plats and Legal Descriptions							24								
315 Community Outreach - Landscape Architecture	10	10			24										
320 Geotechnical Investigation							8								
325 Sound Study							2								
330 Draft PS&E (65%)	16	24	40	110	60						202				
335 City Stormwater Check List					24										
340 PS&E (100%)	8	20	32	80	50						156				
350 PS&E Bid Documents			4	40	20						4				
360 Bid Support			4	8	4						4				
<b>TOTAL</b>	<b>48</b>	<b>134</b>	<b>152</b>	<b>190</b>	<b>186</b>	<b>32</b>	<b>742</b>	<b>\$135,000</b>	<b>120</b>	<b>\$19,600</b>	<b>362</b>	<b>\$30,300</b>	<b>87</b>	<b>\$14,800</b>	<b>\$31,500</b>