

STAFF REPORT

DATE: October 30, 2018

TO: City Council

FROM: Dianna Jensen, City Engineer
Brian Abbanat, Senior Transportation Planner

SUBJECT: Authorize Task Order #10 to Wood Rodgers, as Part of their On-Call Engineering Services Agreement, for Design of Pole Line Road-Olive Drive Connection/Montgomery WBAR Improvements, CIP No. 8313

Recommendations

1. Approve the resolution approving Task Order #10 in the amount of \$299,740 and authorizing the City Manager to sign the Task Order with Wood Rodgers (Consultant), as part of the 2016 On-Call Engineering Services Agreement, for design of the Pole Line Road-Olive Drive Connection/Montgomery Walk Bike Audit Report (WBAR) Improvements, CIP No. 8313.
2. Approve the Budget Adjustment (Attachment #2) in the amount of \$300,740 to fund Phase 2: Final Design which includes consultant cost and staff time.

Fiscal Impact

\$310,000 was allocated in FY 2017/18 to bring the project to 30% design. The requested budget adjustment of \$300,740 will enable the projected \$318,740 total final design using \$300,740 from the excess General funds from the Cannery Bike Connection (Fund 001 - CIP 8288) and \$18,000 in Road Impact Funds (Fund 485 – CIP 8313). The Cannery Bike Connection was already awarded and construction is under way and there is additional money available to finish the project. Even moving the funds will still leave excess money in the project budget. These local funds leverage \$3,540,000 in state Active Transportation Program (ATP) funds, which will be applied toward project construction, anticipated to occur in FY 2019/20. Attachment 3 to this report shows the existing CIP budget sheet and also the updated one using the 30% design projected construction costs. The original construction cost were developed after the Walk Bike Audit Report was completed in 2014. The updated cost reflect current construction prices.

Total anticipated project costs follow:

| Description | Amount | Anticipated Funding Source | Timing |
|--|---|---|------------------|
| Non-construction Phase 1: <ul style="list-style-type: none"> • Project Approval and Environmental Documentation (PA&ED) • Preliminary Engineering | \$310,000 <ul style="list-style-type: none"> • \$290,875 TO #6 • \$9,125 contingency • \$10,000 staff time | Local Funds: <ul style="list-style-type: none"> • \$212,000 Road Impact Fees • \$98,000 Unallocated General Fund | Nearly complete. |
| Non-construction Phase 2: Final Design (PS&E)* | \$318,740 <ul style="list-style-type: none"> • \$299,740 TO #10 • \$9000 contingency • \$10,000 staff time | Local Funds: <ul style="list-style-type: none"> • \$300,740 General Fund from BA • \$18,000 Road Impact Fees | FY 18/19 |
| Phase 3: Construction | \$4,441,078 (construction costs @ 30% design) <ul style="list-style-type: none"> • \$2,268,310 contract for Poleline Connection • \$1,057,122 for WBAR • \$599,374 contingency • \$556,272 staff costs | <ul style="list-style-type: none"> • State (Active Transportation Program): up to \$3,540,000 • \$901,078 Road Impact Fee | FY 19/20 |
| Total Estimated Project Cost | \$5,069,818 | Total Local: \$1,529,818 Total State: \$3,540,000 | |

*Denotes subject of staff report

Council Goal(s)

This project supports the Council Goal 6 - Fund, Maintain and Improve Infrastructure and relates to the objective to Provide a Safe and Efficient Circulation System.

Background and Analysis

The Transportation Implementation Plan (TIP) identified the Pole Line Road-Olive Drive Connection/Montgomery WBAR Improvements, CIP No. 8313, as a high priority project. This project was studied as part of the Richards/Olive Corridor Study (ROCS), and presented to City Council in November 2016.

This project was submitted for regional and/or state grant funding four times in four years. The project was selected for funding in the 2017 ATP Augmentation Round. Recognizing the large

number of excellent unfunded projects throughout the state from the previous cycle, the CTC opted to select projects from that list via a short, supplemental application, which staff submitted in July 2017. On August 31st, the CTC released its list of recommended projects, including the City's Pole Line Road / Olive Drive Connection project for \$3,540,000.

The below excerpt from the supplemental grant application briefly summarizes the project:

“This project will construct a new bike and pedestrian facility, connecting the Olive Drive neighborhood to the existing multi-use path on the Pole Line Road overcrossing, significantly strengthening the City's multi-use path network, reducing the distance to community destinations (including Montgomery Elementary School), and improving safety for this disadvantaged community. The Montgomery Elementary School improvements will benefit all children that attend the school by improving safety by eliminating right turn slip-lanes, conflicts between turning vehicles and crossing bike paths, and poor yield rate by drivers in right turn lanes.”

As alluded to in the above project description, the project also includes High Priority recommendations from the City's 2014 Walk Bike Audit Report for Montgomery Elementary School, indicated in Attachment 7.

On July 12, 2016, City Council approved Professional Services Agreements with ten engineering firms to perform On-Call Engineering Services. Wood Rodgers is among those firms.

The Consultant was tasked under the 2016 On-Call Master Agreement to provide the City with a Scope and Fee to perform Phase 1, PA&ED. The Consultant's Phase 1 fee, is \$290,875. The additional \$19,125 is for contingency, incidental, and staff costs. Phase 1 is nearly complete.

The Consultant also provided a proposal for Phase 2, Final Design at \$299,740. The total cost of Phase 2 is estimated at \$318,740 including contingency and staff time. Staff seeks a budget adjustment to perform this work. The money is being moved from CIP 8288, the Cannery Bike Connection, as there are excess funds in this project that will not be needed to finish the construction currently under way.

Total non-construction consultant costs are estimated at \$608,740. The Consultant will provide surveying to topographic map and design at 65%, 90% and 100% plans and specifications for Phase 2. Total project cost including construction is estimated at \$5,069,818.

Construction for the Pole Line Road / Olive Drive Connection (CIP No. 8313) is anticipated to bid in summer of 2019.

Attachments

1. Resolution
2. Budget Adjustment
3. CIP Worksheet (Existing and Modified)
4. Task Order #10
5. Wood Rodgers Scope and Fee
6. Location Map & Exhibits
7. Montgomery WBAR Improvements List

RESOLUTION NO. 18-XXX, SERIES 2018

**RESOLUTION AUTHORIZING THE CITY MANAGER
TO SIGN TASK ORDER NO. 10 TO WOOD RODGERS AS PART OF THEIR ON-
CALL ENGINEERING SERVICES FOR FINAL DESIGN OF POLE LINE ROAD /
OLIVE DRIVE CONNECTION, CIP 8313**

WHEREAS, the Pole Line Road / Olive Drive Connection project will 1) Construct a bicycle/pedestrian facility connecting the Pole Line Road overcrossing to the US40 bike path at Olive Drive, and 2) Construct High Priority recommendations from the 2014 Walk Bike Audit Report for Montgomery Elementary School; and,

WHEREAS, on August 31st, 2017 the California Transportation Commission announced the City was awarded \$3,540,000 in state Active Transportation Program funds for the Pole Line Road / Olive Drive Connection project; and,

WHEREAS, the City requires consultant assistance for design of the Pole Line Road / Olive Drive Connection project; and,

WHEREAS, the City Council, on July 12, 2016, approved Wood Rodgers (Consultant) for professional services for on-call engineering services in support of City projects; and,

WHEREAS, the City did issue Task Order #6 with Consultant on December 19, 2017 for performing the 30% design on this project.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Davis that Task Order No. 10 is approved and the City Manager is authorized to execute Task Order No. 10 with Consultant as part of the Agreement in a not-to-exceed amount of \$299,740 for Phase 2, PS&E; and,

BE IT FURTHER RESOLVED that the sum of \$9,000 be and is hereby allocated from project funds for contingency purposes; and

BE IT FURTHER RESOLVED that all terms, conditions, and covenants of said agreement be, and the same are, hereby approved, ratified, and confirmed.

PASSED AND ADOPTED by the City Council of the City of Davis this 30th of October 2018, by the following vote:

AYES:

NOES:

ABSENT:

Brett Lee
Mayor

ATTEST:

Zoe S. Mirabile, CMC
City Clerk

CITY OF DAVIS
Request for Budget Adjustment

TO: City Manager
VIA: Finance Administrator

FROM: Public Works

Dept Head

[Signature]
Signature and Date

I request the following budget adjustments:

A. Internal Transfers of Currently Appropriated Funds:

| TRANSFERS FROM PROGRAM NAME | FUND NO. | DIV/ PROG. | ACTIVITY | ELEMENT/ OBJECT | AMOUNT (CR) | HOURS |
|--------------------------------|-------------|---------------|----------|--------------------|----------------|-------|
| Cannery Grade Sep Crossing | 001 | 8288 | 480 | 45-30 | \$300,740 .00 | |
| | | | | | | .00 |
| | | | | | | .00 |
| | | | | | | .00 |
| | | | | | | .00 |
| | | | | | <u>300,740</u> | |

B. New Appropriation's Source of funding/Revised Revenue Change:

| | | | | | |
|-----------------------------|-------|------------------------|-------|----------|-------|
| Deposit Account | _____ | Fund Name | _____ | Fund No. | _____ |
| Unallocated Reserve | _____ | Fund Name | _____ | Fund No. | _____ |
| New/Revised Revenue Account | _____ | Revenue Account Number | _____ | | _____ |

C. Allocation of Internal Transfers and/or New Appropriations:

| TRANSFERS TO PROGRAM NAME | FUND NO. | DIV/ PROG. | ACTIVITY | ELEMENT/ OBJECT | AMOUNT (DR) | HOURS |
|------------------------------|-------------|---------------|----------|--------------------|----------------|-------|
| POLE LN/OLIVE/MONTG WBAR | 001 | 8313 | 480 | 45-06 | \$300,740 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | <u>300,740</u> | |

D: Reason For Adjustment (Explain fully. Attach sheet if necessary. If new revenue, record a description on reverse side on Part VI.)
Funding for final design was anticipated in 19/20, but staff has decided to move design to 18/19 to ensure meeting construction deadlines for grant funding. High priority state grant-funded project leveraging >\$3.5 million in construction funds.

FINANCE DIRECTOR

- A. Funds have been appropriated & are available.
- B. Funds have been appropriated.
- Funds must be appropriated.

Comments:

[Signature] 10/25/18
Signature and Date

CITY MANAGER

- A. Approved
 Disapproved
- B. City Council appropriated funds.
 City Council informed of revised revenue estimate.

Comments:

Signature and Date

CAPITAL IMPROVEMENT PROJECTS



City of Davis
Capital Improvement Project Planning Sheet 18/19

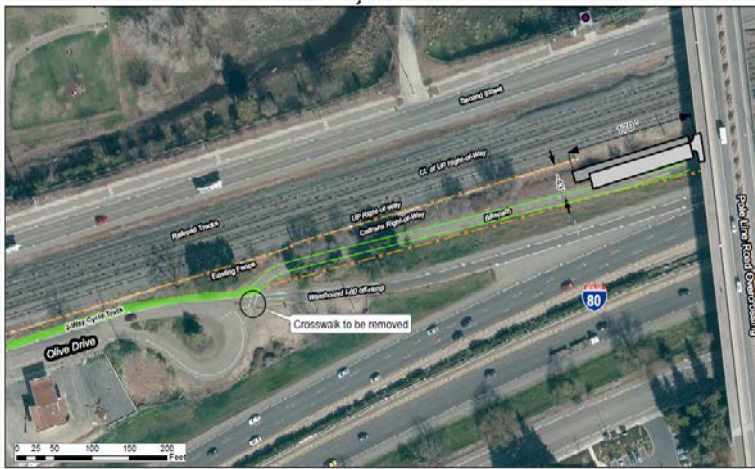
| | | | |
|----------------------------|--|--|---------------------------|
| Project Name: | Pole Line Road-Olive Drive Connection/Montgomery WBAR Improvements | | |
| Requested By: | _____ | Dept/Div | PW/ Transportation |
| CIP Project Number: | 8313 | Transportation Project Manager: | Brian Abbanat |
| Last Revision Date: | 3/5/2018 | Public Works Project Manager: | _____ |

| | | | | | | |
|--------------------------|------------|--------------------------|----------------|-------------------------------------|------------|--------------------------|
| Project Category: | CIP Admin. | <input type="checkbox"/> | Transportation | <input checked="" type="checkbox"/> | Stormwater | <input type="checkbox"/> |
| | Facilities | <input type="checkbox"/> | Fleet/Equip | <input type="checkbox"/> | Wastewater | <input type="checkbox"/> |
| | Parks/OS | <input type="checkbox"/> | I/S | <input type="checkbox"/> | Water | <input type="checkbox"/> |

Description:

Professional services for planning and design of a bicycle/pedestrian facility connecting the Pole Line Road overcrossing with the US40 bike path at Olive Drive. Also includes Montgomery Elementary Walk Bike Audit Report Improvements. This project is No. 1 in the Transportation Improvement Plan.

Location: Brief description of area or provide street address



| Location | Improvement |
|---|--|
| Lillard Drive at Cowell Boulevard | Evaluate impacts to closing the right-turn slip lanes to auto traffic. |
| Putah Creek Crossing | Study the feasibility of constructing a formal crossing of Putah Creek. |
| Erma Lane at Path Path behind School | Construct a path connection from Erma Lane Add striping and signage to path at Danbury St/ Putah Creek Crossing. |
| Path behind School | Mark conflict points at path. |
| Danbury Street at Lillard Drive | Relocate stop sign outside bike. |
| Path behind School | Create 'bicycle slow zone' near school bike |
| Lillard Drive at Drummond Avenue | Stencil STOP and stripe stop bars at all stop |
| Lillard Drive at Faragut Circle | Install tactile domes on all three curb ramps. |
| Lillard Drive at Cowell Boulevard | Install two stage turn boxes. |
| Path behind School | Install wayfinding . |
| Walnut Park Parking Lot | Refresh existing white curb in loading zone. |
| Lillard Drive at Cowell Boulevard | Restripe all crosswalks as high-visibility white, move back to accommodate two-stage turn |
| Lillard Drive at Faragut Circle | Replace existing white transverse crosswalks with high-visibility white. |
| Lillard Drive at Drummond Avenue | Restripe crosswalk as high-visibility white. |
| Danbury Street at Lillard Drive | Restripe crosswalks as high-visibility yellow. |



CAPITAL IMPROVEMENT PROJECTS



City of Davis
Capital Improvement Project Planning Sheet 18/19

| | | | |
|----------------------------|--|--|---------------------------|
| Project Name: | Pole Line Road-Olive Drive Connection/Montgomery WBAR Improvements | | |
| Requested By: | | Dept/Div | PW/ Transportation |
| CIP Project Number: | 8313 | Transportation Project Manager: | Brian Abbanat |
| Last Revision Date: | 3/5/2018 | Public Works Project Manager: | |

| | | | |
|--------------------------|-------------------------------------|--|-------------------------------------|
| Project Category: | CIP Admin. <input type="checkbox"/> | Transportation <input checked="" type="checkbox"/> | Stormwater <input type="checkbox"/> |
| | Facilities <input type="checkbox"/> | Fleet/Equip <input type="checkbox"/> | Wastewater <input type="checkbox"/> |
| | Parks/OS <input type="checkbox"/> | VS <input type="checkbox"/> | Water <input type="checkbox"/> |

Cost Estimate:

| Item | Description | Units | Quantity | Unit Price | Total |
|-----------------------|---|-------|----------|-------------|--------------------|
| 1 | Construction (PLRODC) | LS | 1 | \$2,433,000 | \$2,433,000 |
| 2 | Construction (Montgomery WBAR) | LS | \$1 | \$200,000 | \$200,000 |
| 3 | | | | | \$0 |
| 4 | | | | | \$0 |
| 5 | | | | | \$0 |
| Subtotal | | | | | \$2,633,000 |
| Other Costs | | | | | |
| | Initiation | | | N/A | \$0 |
| | Options Analysis | | | N/A | \$0 |
| | Planning/Study | | | 11% | \$299,875 |
| | Engineering & Design | | | 11% | \$299,740 |
| | Materials Testing | | | 3% | \$78,990 |
| | Construction Contingency | | | 23% | \$595,500 |
| | Municipal Arts Fund* | | | 1% | \$26,330 |
| | Constuction Administration and Inspection | | | 15% | \$400,000 |
| | Project Closeout | | | 1% | \$26,330 |
| Subtotal Other | | | | | \$1,717,765 |
| Grand Total | | | | | \$4,350,765 |

| Source Estimate: | |
|----------------------|---|
| Planning | |
| Prelim. Eng. | X |
| Detailed Eng. | |
| Source: See Column G | |

* Only for new Public Works. Does not apply to replacement or repair work. 1% of Construction Cost only

| Financing Sources: | Total Amount | Prior yrs. Actual | FY 17/18 Est. | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|--------------------------------|--------------------|-------------------|------------------|-----------------|--------------------|------------|------------|
| General Fund (001): | \$110,500 | | \$98,000 | \$12,500 | | | |
| Construction Tax (200): | \$0 | | | | | | |
| Federal/State Hwy (210): | \$3,540,000 | | | | \$3,540,000 | | |
| Devel Impact Fees (Parks-483): | \$0 | | | | | | |
| Devel Impact Fees (Roads-485): | \$700,265 | | \$189,886 | \$22,114 | \$488,265 | | |
| Downtown Revitalization (476): | \$0 | | | | | | |
| Solid Waste (520): | \$0 | | | | | | |
| Sewer Cap Replace(532): | \$0 | | | | | | |
| Storm Drain O&M (541): | \$0 | | | | | | |
| Storm Dr Cap Expans(543): | \$0 | | | | | | |
| | \$0 | | | | | | |
| Total Project Cost: | \$4,350,765 | \$0 | \$287,886 | \$34,614 | \$4,028,265 | \$0 | \$0 |

| Project/Funding Schedule: | | Prior yrs. Actual | FY 17/18 Est. | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|----------------------------|--------------------|-------------------|------------------|-----------------|--------------------|------------|------------|
| Planning: | \$287,886 | | \$287,886 | | | | |
| Design: | \$299,740 | | | \$34,614 | \$265,126 | | |
| Construction: | \$3,763,139 | | | | \$3,763,139 | \$0 | |
| Total Project Cost: | \$4,350,765 | \$0 | \$287,886 | \$34,614 | \$4,028,265 | \$0 | \$0 |



City of Davis

Capital Improvement Project Planning Sheet 18/19 updated 10/30/18

Project Name: Pole Line Road-Olive Drive Connection/Montgomery WBAR Improvements
Requested By: Div 72 **Department:** Department/**Public Works/Transportation**
CIP Project Number: 8313 **Public Works/ Project Manager:** Brian Abbanat
Public Works Project Manager:

| | | | | | | |
|--------------------------|------------|--------------------------|----------------|--------------------------|------------|--------------------------|
| Project Category: | CIP Admin. | <input type="checkbox"/> | Transportation | <input type="checkbox"/> | Stormwater | <input type="checkbox"/> |
| | Facilities | <input type="checkbox"/> | Fleet/Equip | <input type="checkbox"/> | Wastewater | <input type="checkbox"/> |
| | Parks/OS | <input type="checkbox"/> | I/S | <input type="checkbox"/> | Water | <input type="checkbox"/> |

Description:

Professional services for planning and design of a bicycle/pedestrian facility connecting the Pole Line Road overcrossing with the US40 bike path at Olive Drive. Also includes Montgomery Elementary Walk Bike Audit Report Improvements.

Location: Brief description of area or provide street address



| Location | Improvement |
|---|---|
| Lillard Drive at Cowell Boulevard | Evaluate impacts to closing the right-turn slip lanes to auto traffic. |
| Danbury Street | Refresh bike lane markings and trim vegetation at driveway. |
| Erma Lane at Path Path behind School | Evaluate feasibility of a path connection from Erma Add striping and signage to path at Danbury St/ Putah Creek Crossing. |
| Path behind School | Mark conflict points at path. |
| Danbury Street at Lillard Drive | Relocate stop sign outside bike. |
| Path behind School | Create 'bicycle slow zone' near school bike parking |
| Lillard Drive at Drummond Avenue | Stencil STOP and stripe stop bars at all stop signs. |
| Lillard Drive at Faragut Circle | Install tactile domes on all three curb ramps. |
| Lillard Drive at Cowell Boulevard | Install two stage turn boxes. |
| Path behind School | Install wayfinding . |
| Walnut Park Parking Lot | Refresh existing white curb in loading zone. |
| Lillard Drive at Cowell Boulevard | Restripe all crosswalks as high-visibility white, move back to accommodate two-stage turn boxes. |
| Lillard Drive at Faragut Circle | Replace existing white transverse crosswalks with high-visibility white. |
| Lillard Drive at Drummond Avenue | Restripe crosswalk as high-visibility white. |
| Danbury Street at Lillard Drive | Restripe crosswalks as high-visibility yellow. |



| City of Davis Capital Improvement Project Planning Sheet 18/19 updated 10/30/18 | | | | | | | |
|--|--|---------------------------------------|-----------------|------------------------------------|--------------------|--|------------|
| Project Name: | Pole Line Road-Olive Drive Connection/Montgomery WBAR Improvements | | | | | | |
| Requested By: | Div 72 | Department | Department/ | Public Works/Transportation | | | |
| CIP Project Number: | 8313 | Public Works/ Project Manager: | | Brian Abbanat | | | |
| | | Public Works Project Manager: | | | | | |
| Cost Estimate: | | | | | | | |
| Item | Description | Units | Quantity | Unit Price | Total | | |
| 1 | Construction (PLRODC) | LS | 1 | \$2,268,310 | \$2,268,310 | ROCS | |
| 2 | Construction (Montgomery WBAR) | LS | \$1 | \$1,057,122 | \$1,057,122 | ATP app. | |
| 3 | | | | | \$0 | | |
| 4 | | | | | \$0 | | |
| 5 | | | | | \$0 | | |
| Subtotal | | | | | \$3,325,432 | | |
| Other Costs | | | | | | | |
| | Initiation | | | N/A | \$0 | N/A | |
| | Options Analysis | | | N/A | \$0 | N/A | |
| | Planning/Study | | | 9% | \$310,000 | Wood Rogers proposal + \$10,000 staff time | |
| | Engineering & Design | | | 10% | \$318,740 | Wood Rogers proposal + \$10,000 staff time | |
| | Materials Testing | | | 3% | \$99,763 | Default Formula | |
| | Construction Contingency | | | 17% | \$559,374 | ROCS + ATP app. | |
| | Municipal Arts Fund* | | | 1% | \$33,254 | Default Formula | |
| | Constuction Administration and Inspection | | | 12% | \$390,000 | ATP app. | |
| | Project Closeout | | | 1% | \$33,254 | Default Formula | |
| Subtotal Other | | | | | \$1,744,386 | | |
| Grand Total | | | | | \$5,069,818 | | |
| * Only for new Public Works. Does not apply to replacement or repair work. 1% of Construction Cost only | | | | | | | |
| Financing Sources: | | | | | | | |
| | Total Amount | Prior yrs. Actual | FY 18/19 Est. | FY19/20 | FY20/21 | FY21/22 | |
| | General Fund (001): | \$512,740 | \$25,897 | \$486,843 | | | |
| | Construction Tax (200): | \$0 | | | | | |
| | Federal/State Hwy (210): | \$3,540,000 | | | \$3,540,000 | | |
| | Devel Impact Fees (Parks): | \$0 | | | | | |
| | Devel Impact Fees (Roads): | \$1,017,078 | \$26,429 | \$89,571 | \$901,078 | | |
| | Downtown Revitalization (476): | \$0 | | | | | |
| | Solid Waste (520): | \$0 | | | | | |
| | Sewer Cap Replace(532): | \$0 | | | | | |
| | Storm Drain O&M (541): | \$0 | | | | | |
| | Storm Dr Cap Expans(543): | \$0 | | | | | |
| | | \$0 | | | | | |
| | Total Project Cost: | \$5,069,818 | \$52,326 | \$576,414 | \$4,441,078 | \$0 | \$0 |
| Project/Funding Schedule: | | | | | | | |
| | | Prior yrs. Actual | FY 18/19 Est. | FY19/20 | FY20/21 | FY21/22 | |
| | Planning: | \$310,000 | \$52,326 | \$257,674 | | | |
| | Design: | \$318,740 | | \$318,740 | | | |
| | Construction: | \$4,441,078 | | | \$4,441,078 | \$0 | \$0 |
| | Total Project Cost: | \$5,069,818 | \$52,326 | \$576,414 | \$4,441,078 | \$0 | \$0 |

| Source Estimate: | |
|----------------------|--|
| Planning | |
| | |
| Prelim. Eng. | |
| | |
| Detailed Eng. | |
| Source: See Column G | |

CITY OF DAVIS TASK ORDER

Task Order No. 10 – Professional Services for Design of Pole Line Road / Olive Drive Connection

Contract: On-Call Engineering Master Agreement 2016

Consultant: Wood Rodgers

Staff Contact: Dianna Jensen

The Consultant is hereby authorized to perform the following work subject to the provisions of the Contract identified above:

Phase 2: Final design and engineering

List any attachments: Wood Rodgers scope of work dated 9/31/16

Fee - Dollar Amount of Task Order: Not to exceed \$299,740

Funding for Task Order (List all funding sources and/or programs and amounts):

001-8313-480-4506 \$281,740

485-8313-480-4506 \$18,000

Completion Date: June 30, 2019

The undersigned consultant hereby agrees that it will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services for the work above specified in accordance with the Contract identified above and will accept as full payment therefore the amount shown above.

City of Davis

Consultant

Dated: _____

Dated: _____

Sign: _____

Sign: _____

Print Name _____

Print Name _____

Title: _____

Title: _____



September 6, 2017

Mr. Brian Abbanat
Senior Transportation Planner
City of Davis, Public Works Department
1717 5th Street
Davis, CA 95616

Subject: Proposal for Olive Drive/Pole Line Bike Connection and select Walk Bike Audit Report (WBAR) Improvements

Wood Rodgers appreciates the opportunity to provide a proposal for these projects which will improve bicycle and pedestrian connectivity. Wood Rodgers has supplemented our Team with the following highly qualified subconsultants to successfully deliver this project.

- ESA – Environmental analysis, and documentation
- Crawford Associates – Geotechnical exploration and design

Both subconsultants are also involved with the Richards Boulevard Interchange project, and one of the first items would be to discuss opportunities to reduce net costs to the City given the overlaps/adjacencies of the projects. This would also apply to the survey/mapping work being undertaken.

I, Pete Tobia, PE will serve as the Principal-in-Charge for this project. A resident of the City, I am committed to providing our citizenry a project of lasting value.

We are confident that our experience will allow us to “hit the ground running”, and deliver a high-quality project that the City of Davis will be proud of. I am happy to answer any further questions you might have about our Team and/or our approach. I can be contacted via telephone at (916) 326-4491, e-mail at ptobia@woodrogers.com.

Sincerely,

Pete Tobia, PE, LEED AP
Vice President

Attachments:

- Scope of Work
- Fee Estimate (Summary and with hours)
- Project Schedule

SCOPE OF WORK

Understanding

OLIVE DRIVE/POLE LINE BIKE CONNECTION (Olive Drive Connection)

The City of Davis is proposing to connect the Olive Drive Pedestrian/Bicycle Trail to the Pole Line Road Overcrossing Bridge at I-80 and UPRR railroad. The proposed connection will consist of a ramp bridge with switchback alignment and profile grades that are compliant with the American Disabilities Act (ADA) requirements. In addition, the existing trail between the Olive Drive cycle track and the Pole Line Road Overcrossing will be repaired or replaced as necessary due to the failed condition of the existing trail pavement. The trail will be realigned at the location the structure connects to the existing trail to create adequate space for the connection. Lighting of the structure is included. The Wood Rodgers Team will provide environmental review, geotechnical investigation, survey and mapping, civil and structural engineering, and construction support services for this project. Environmental Services Associates (ESA) will be responsible for environmental work and Crawford & Associates, Inc. (CAInc) for geotechnical work; while Wood Rodgers will provide the survey and mapping, civil, and structural support services.

WALK AND BIKE AUDIT REPORT - SELECT MONTGOMERY ELEMENTARY SCHOOL IMPROVEMENTS (WBAR Improvements)

The scope also includes preliminary and final engineering design and opinions of probable cost for locations four (4), five (5), six (6), seven (7), eight (8), nine (9) (within City ROW), and eleven (11) (Feasibility study only) of the Montgomery Elementary Improvement Plan as shown in Figure 2-4 of the 2014 City of Davis Walk and Bike Audit Report (WBAR).

The project will be delivered in phases. The design phases are separated out as the Olive Drive Connection will be processed through Caltrans and the WBAR Improvements will not.

Phase 1

- Olive Drive Connection - Project Report and Environmental Documentation (PA&ED), Geotechnical Studies; Structure Type Selection Report, and 30% Plans Specifications and Engineer's Estimate (PS&E).
- WBAR Improvements - Preliminary design of the improvements noted above in the WBAR.

Phase 2A

- Olive Drive Connection – Final Design of Plans Specifications and Engineer's Estimate (PS&E).

Phase 2B

- WBAR Improvements – Final Design of Plans Specifications and Engineer's Estimate (PS&E).

Tasks and deliverables that the Wood Rodgers Team will provide:

Approach – Tasks and Deliverables

PHASE 1 INCLUDES TASKS 1 – 9

PHASE 2A UNCLUDES TASKS 10 – 13

PHASE 2B UNCLUDES TASKS 14 – 18

TASK 1. PROJECT MANAGEMENT AND COORDINATION (PHASE ONE)

The Wood Rodgers Team will provide the overall project management and coordination for the project preliminary design and environmental document. This includes the following:

1.1 Management

The Team's Project Manager will perform project management related activities such as providing monthly invoices, progress reports, and budget/schedule monitoring.

1.2 City Coordination and Meetings

This task includes attending project meetings with the City – a Kick-Off Meeting and up to five additional project meetings are assumed.

1.3 Quality Assurance/Quality Control

The Team will perform Quality Assurance/Quality Control (QA/QC). QA refers to those actions, procedures, and methods to be incorporated at management levels to observe and assure that quality control procedures are in place, are being carried out, and that the desired result of quality professional services is being achieved. Quality Control (QC) refers to actions, procedures, and methods that shall be implemented at production and administrative levels, to produce the desired result of quality, professional services, and documents.

Task 1 Deliverables:

- ❖ *Monthly Invoices and Progress Reports (1 copy, PDF file)*
- ❖ *Project Schedules (5 copies, PDF file)*
- ❖ *Meeting Agendas and Notes (5 copies, PDF file)*

TASK 2. ENVIRONMENTAL DOCUMENTATION (CEQA/NEPA) AND PERMITTING**2.1 Preliminary Environmental Study (PES) Form**

Environmental Services Associates (ESA) will prepare, for the City's review, a Draft Preliminary Environmental Study (PES) form in accordance with the requirements of the Local Assistance Procedures Manual Chapter 6. Once the City has approved the Draft PES, the Draft PES will be submitted to Caltrans. It is assumed that a field review with the City, Caltrans, and our team will be held. After the field review, ESA will prepare any needed revisions to the Draft PES and submit it to Caltrans for approval.

Task 2.1 Deliverables:

- ❖ *Draft and Final Preliminary Environmental Study Form (PES) (2 copies, PDF file)*

2.2 CEQA/NEPA Environmental Documentation

ESA anticipates that the project will qualify for a categorical exclusion under NEPA [23 CFR 771.117(c)] and a categorical exemption under CEQA (15303 New Construction or Conversion of Small Structures or 15061(b)(3)). Our team will prepare the needed CEQA documentation in conformance with the County's CEQA procedures and the CEQA Guidelines. Caltrans has determined that the project is eligible for a categorical exclusion with technical studies for NEPA. We anticipate that the content of the technical studies used to support the NEPA categorical exclusion (CE) will also be sufficient to support the CEQA categorical exemption (CE). This scope anticipates a CE for CEQA and a NEPA CE with supporting technical studies.

The use of a CEQA CE is dependent upon the requirement that there are no potentially significant impacts and any replanting and aesthetic treatment to the structure is included in the project description. No mitigation will be required. If mitigation is required, then a CEQA Initial Study with Proposed Mitigated Negative Declaration will be necessary, which is not included in this scope.

Task 2.2 Deliverables:

- ❖ *NEPA Categorical Exclusion and CEQA Categorical Exemption (2 copies, PDF file)*

2.3 Environmental Technical Studies**2.3.1 – Natural Environment Study—Minimal Impact**

ESA will prepare the Natural Environment Study-Minimal Impact (NES-MI) in accordance with the NES-MI template found on the Caltrans SER. ESA's research and field review to date have not revealed the presence of sensitive species within the proposed project area; however, Caltrans will likely require an NES-MI to document the absence of sensitive species or to address migratory birds due to the removal of trees. The tasks for the NES-MI will include:

- Conduct database searches, literature review, and field surveys.
 - The study area will include the existing right-of-way (ROW), any proposed new ROW, and adjacent areas to assess the direct and indirect effects of the project.
 - Natural communities occurring in the study area will be characterized and their locations and extent will be mapped onto aerial photographs.
- Determine effects, if any, to sensitive species
- Determine regulatory requirements, if any
 - Clean Water Act Section 404 and 401, Porter-Cologne Water Quality Control Act, federal Endangered Species Act (ESA); California Endangered Species Act (CESA), California Fish and Game Code, Migratory Bird Treaty Act, and Executive Orders 13112 and 11990 related to invasive species and the protection of wetlands.
- Prepare NES-MI
 - Include a description of the project and its purpose and need, federal and State regulatory and permitting requirements pertinent to the proposed project, existing conditions and potential for special-status species and natural communities of concern to occur within the BSA, a description of project effects, and proposed avoidance and minimization measures and mitigation, as required.

Task 2.3.1 Deliverables:

- ❖ *Draft NES-MI and Final NES (2 copies, PDF file)*

Assumptions

- ❖ *It is assumed that no wetlands are present in the project area and, therefore, no Wetland Delineation Report or 404, 401, or Streambed Alteration will be required. These items are not included in this scope.*

2.3.2 – Cultural Resource Studies

ESA will perform studies and prepare cultural resources reports in order to comply with the requirements of CEQA (including provisions under California Assembly Bill 52 [AB 52]), NEPA, and Section 106 of the National Historic Preservation Act. In compliance with the Caltrans Standard Environmental Reference (SER) Volume 2 and applicable CEQA Guidelines, our team will complete the following tasks:

- 1) Area of Potential Effects Map. ESA will coordinate with the City and Caltrans staff to create a project map that identifies the Area of Potential Effects (APE). This scope assumes that the APE will be restricted to the proposed project footprint and any staging areas. Both the vertical and horizontal extent of the APE will be delineated.
- 2) Archival Review. Following approval of the APE by Caltrans, ESA will conduct a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information Center (CHRIS). The records search will cover the APE with a ½-mile buffer and will gather documents from previous cultural resources studies and previously recorded cultural resources. Additional archival research will include a review of historic topographic maps and aerial photography. The archival research will provide information regarding the potential sensitivity of the project APE for cultural resources.
- 3) Field Survey. An ESA archaeologist who meets Caltrans PQS Equivalent to Lead Archaeological Surveyor will conduct a pedestrian survey of the APE. The purpose of the survey will be to identify any cultural resources and assess the potential for cultural resources in the APE.

4) Native American Correspondence (AB 52 and Section 106 Consultation Support). ESA will contact the Native American Heritage Commission (NAHC) to request information on any known sacred sites within the APE and a list of Native American representatives who may have an interest in the proposed project. ESA will draft letters for the City to send to each Native American representative provided in the NAHC response. The letters will include a brief project description and map, language inviting the recipients to consult under AB 52 (all recipients) and Section 106 (only federally recognized tribes), and a request that the recipients contact the City with any concerns regarding potential project impacts to cultural resources. An ESA archaeologist will also assist the City in conducting one on-site visit with interested Native American representatives to review the project setting and proposed project elements. ESA will maintain documentation of Native American consultation activities. Any additional Native American correspondence will be conducted by the City and Caltrans.

5) Technical Reports. ESA will prepare an Archaeological Survey Report (ASR) and Historic Property Survey Report (HPSR) in accordance with Caltrans SER Volume 2 in support of the project. These reports will document the methods and findings of the records search, other archival research, pedestrian survey, and Native American coordination. ESA will submit one electronic draft copy of each document for review. ESA will prepare a final version of each report, incorporating one round of comments, and provide two paper copies and one electronic copy of each final version. ESA will provide a copy of the HPSR and ASR to the NWIC after Caltrans approval of the documents. This scope assumes that no analysis of built environment resources will be required and, therefore, that no Historical Resources Evaluation Report (HRER) will be required. This scope also assumes that no cultural resources are in the APE and that no cultural resources will need to be evaluated for National Register-eligibility.

Task 2.3.2 Deliverables:

- ❖ *Area of Potential Effects Map (2 copies, PDF file)*
- ❖ *Archaeological Survey Report (2 copies, PDF file)*
- ❖ *Historic Property Survey Report (2 copies, PDF file)*

Assumptions:

- ❖ *No HRER will be required – if Caltrans determines that an HRER is required, ESA may conduct the work under a contract amendment.*
- ❖ *No cultural resources are in the APE.*
- ❖ *Native American correspondence/consultation (including for AB 52) consists of drafting initial outreach letters and one on-site visit with the City and interested Native American representatives – if required, ESA could assist the City with additional consultation efforts under a contract amendment.*

2.3.3 – Minor Visual Impact Assessment

Based on the completion of the "Questionnaire to Determine Visual Impact Assessment Level", the VIA Level Score for the proposed project is 16, indicating a Minor VIA should be prepared. ESA staff will develop a Minor VIA for the proposed project based on the 2015 FHWA Guidelines for the Visual Impact Assessment of Highway Projects. ESA will gather and review applicable background information, project plans, and regional planning documents. Staff will conduct a site visit to inventory and evaluate viewpoints present within the project corridor, which are anticipated to include the school yard and the Community Gardens. ESA will coordinate with the design team to determine the preferred alternatives (up to 2) and potential viewpoints (up to two for each alternative). A Minor VIA report will be prepared following the Caltrans standard outline. ESA will coordinate with the design team throughout the process and participate in team conference calls. Up to two site visits are anticipated to complete the reconnaissance and site evaluation. A draft report will be prepared for initial review and comment, prior to finalizing the document.

Task 2.3.3 Deliverables:

- ❖ *Draft and Final Minor Level VIA (2 copies, PDF file)*

2.3.4 – Other Technical Memos (Likely Required by Caltrans; Necessary to Support CEQA)

- Community Impacts—technical memorandum discussing consistency with federal, state, and local plans; environmental justice; community character; potential business and community impacts during construction
- Noise—brief technical memorandum addressing CEQA noise compliance issues and, for NEPA, documentation that the proposed project is not a Type 1 project under 23 CFR 772

2.4- Environmental Permitting

If the project is not anticipated to result in impacts to wetlands and waters of the U.S., Section 404 or 401 permits are not required. The project is also not anticipated to impact a stream or lake/pond and a streambed and lakebed alteration agreement (SAA) application package, in compliance with Section 1602 of the California Fish and Game Code would not be required. Further, because the project site has limited potential for species listed under the California Endangered Species Act (CESA) to be present, it is assumed that an incidental take permit (ITP) under CESA would not be required and no permits are included in the scope.

TASK 3. SURVEY AND BASE MAPPING

This task includes surveying and mapping for the Olive Drive connection. The scope provides for this work to be done independently of the Richards Boulevard/Olive Drive Closure project. However, we would look to work with the City to complete this Task in the most efficient manner given the projects’ adjacencies.

3.1 Control and Topo

Wood Rodgers will provide design level topo with color orthophotos and one day of supplemental field topo.

3.2 Base Map

Wood Rodgers will provide a base map which includes APN’s 070-300-002, -003, & -005 and the Caltrans and UPRR right-of-way adjacent to said parcels.

Task 3 Deliverables:

- ❖ *Base Map (11x17 drawings, 5 copies, PDF file)*

TASK 4. WALK AND BIKE AUDIT REPORT PRELIMINARY ENGINEERING

This task includes preliminary engineering (30% design) for items 4, 5, 6, 7, 8, 9, and 11 of the Montgomery Elementary Improvement Plan that were identified for improvements in the 2014 City of Davis Walk and Bike Audit Report (WBAR). The deliverables will include exhibits at 1" = 50' scale for each location and will use GIS aerial imagery as the background/base mapping. Preliminary estimates of probable cost will be provided for the City.

Task 4 Deliverables

- ❖ *Full Size 24"x36" Reproducible Plans (1 copy, PDF file)*
- ❖ *Preliminary Estimates of Probable Cost (1 copy, PDF file)*

TASK 5. GEOTECHNICAL INVESTIGATION AND INITIAL SITE ASSESSMENT

Previously Taber Consultants (acquired by Crawford & Associates, Inc. in 2016) completed a Geotechnical/Foundation report for the I-80/Pole Line Road Overcrossing Bridge and completed borings in 1990 and 1993 that will be used for the project. Based on that experience at the site, Crawford & Associates, Inc. (CAInc) and Taber Consultants proposes the following scope of work to prepare Geotechnical Report for the project.

5.1 Coordination, Permits, and Mark for USA

CAInc will coordinate with the design team and the City to discuss the project needs and schedule, review published geologic mapping, and review preliminary project data. They will review the site for drill rig access, mark exploratory boring locations and notify Underground Service Alert (USA). They will obtain boring permits required by City and additionally obtain the required Caltrans (it is assumed that the City will acquire a parent permit with Caltrans) and City encroachment permits for the fieldwork.

5.2 Subsurface Exploration

CAInc will supplement the previous explorations perform by this office with two additional borings to depths ranging between 50 to 75 feet below existing grade.

CAInc's Engineer/Geologist will direct the sampling and log the borings. At a minimum, samples will be taken at 5-foot intervals. They will deliver the samples to their laboratory for testing. The drilling contractor will advance the borings with a rubber-tired, truck-mounted drill rig using 6 to 8-inch-diameter hollow and solid stem augers and mud-rotary techniques. Standard Penetration Testing (SPT) and California Modified sampling will be performed within the borings to obtain samples and blow count information. The borings will be backfilled according to the City permit requirements.

5.3 Laboratory Testing

CAInc will perform the following laboratory tests on relatively undisturbed samples obtained from the exploratory borings: Moisture Content and Unit Weight for bearing/lateral capacity and settlement; Compression and/or Direct Shear for bearing/lateral capacity; Sieve Analysis and Plasticity Index testing for liquefaction analysis and expansion potential; Resistance Value for pavement design; and, Resistivity, pH, Sulfate Content and Chloride Content for soil corrosivity analysis.

5.4 Geotechnical/Foundation Report

CAInc will prepare and submit a Draft Geotechnical/Foundation Report consistent with current Caltrans for the planned ramp bridge. The report will include: Scope of Work; Site Description; Project Description; Field Exploration; Laboratory Testing; Site Geology; Subsurface Soil and Groundwater Conditions; Laboratory Test Results; Current CBC and Seismic Data and Evaluation; Liquefaction Evaluation; Corrosion Investigation; Foundation Recommendations (i.e., type, elevation and allowable loading (axial and lateral) of foundation elements); Construction Considerations; Location Map; ARS Curve; Fault Map; Geologic Map; Log of Test Borings; Laboratory Test Results.

Following receipt of all draft report comments, CAInc will prepare Final Reports.

5.5 Initial Site Assessment (ISA)

CAInc will prepare an Initial Site Assessment (ISA) for evidence of recognized environmental conditions (RECs) and/or potential RECs that may significantly impact the project. The ISA will include the following tasks:

- Review and discuss the project with the design team.
- Review available project documents and reports including; existing ISA reports for nearby projects, APN parcel maps, site geology and groundwater data. We will review this information for evidence of suspected or known contamination/hazardous materials issues (such as dredge tailings, pesticide usage, railroad alignments, industrial parks, orchards, etc.).
- Conduct a limited site reconnaissance to observe current land use and indications of potential contamination at the site, and to view publicly accessible portions of the adjacent properties.
- Review owner representative provided information, if available, regarding past and present operations conducted on the property to assess the potential for REC's.
- Review historical aerial photographs, topographic maps, and soil maps of the site and surrounding properties for indications of site use and potential sources of contamination.
- Perform federal, state, and city records review for indications of the use, misuse, or storage of hazardous and/or potentially hazardous materials on or near the site. The federal, state, and city database search will be provided by a professional record check service.
- Based on the results of the database search, site review, land use and existing assessments, CAInc will determine the risk of potential hazardous materials within and adjacent to the project area.
- Prepare a report summarizing the findings of our review, site reconnaissance, historical photograph evaluation, and regulatory records review. We will address identified potential contamination and hazardous material impacts to provide recommendations and determine additional investigation and analysis.

Task 5 Deliverables:

- ❖ Draft and Final Geotechnical/Foundation Reports (5 copies, PDF file)
- ❖ Draft and Final ISA Reports (5 copies, PDF file)

Task 5 Assumptions

Our above scope of services assumes the following

- Traffic control will consist of shoulder work with signs and cones
- The City of Davis will acquire a Caltrans parent permit
- The City will waive the encroachment permit fees
- The structure will be supported on deep foundations, likely drilled or driven piles

TASK 6. UTILITY COORDINATION

The Wood Rodgers Team will identify, and coordinate with, companies or agencies operating utility facilities that may be impacted by the project. Wood Rodgers will take a proactive approach with utility companies or agencies and incorporate a high level of coordination to ensure that no delays occur due to utility company reviews or relocations. If at any point Wood Rodgers becomes aware of any issue that would produce a significant delay in the project due to a utility company or agency activity, Wood Rodgers' Project Manager will inform the City immediately and arrange for a meeting with the utility company or agency, the City, and Wood Rodgers' staff. During the project development process Wood Rodgers will set up a meeting with the City, and local utility agencies/companies to present proposed project and request utility verification.

Wood Rodgers will produce and distribute "A" Plans to the pertinent utility companies. Wood Rodgers will send project sets of "B", and "C" Plans to all utility companies or agencies whose utilities are within the limits of this project. Notification letters and plan sets will be provided to utility owners during PS&E development process. The following is a detailed description of these submittals:

6.1 - "A" Letters

"A" Plans (base plans) – Wood Rodgers will produce and distribute "A" Plans to the pertinent utility companies. City will provide inventory list of utilities within the project limits to design. Wood Rodgers will transfer information regarding existing utilities provided by the utility companies to the base plans in both plan and profile view.

6.2 - "B" Letters

As part of our continued Utility Coordination, Wood Rodgers will send "B" Plans to companies or agencies operating utility facilities that may be impacted by the project.

"B" Plans - "B" Plans are defined as plans that are 60 to 90 percent complete. Wood Rodgers will send out the "B" Plans when the final horizontal and vertical alignment is calculated, the depth of the final structural section is determined, when the proposed and existing utilities are illustrated in accordance with Roadway Design section that is identified elsewhere in this proposal. The letter will request that utility owners verify any utility conflicts with proposed improvements and indicate whether any future utilities are proposed in the area that may require accommodation through the project area. Wood Rodgers will identify potential conflicts with utility facilities on the "B" Plans and perform the necessary coordination to resolve the conflict. This may include revising the plans to avoid the conflict. (Note: Hours/Fee for "B" plans are included in Task 11.)

6.3 - "C" Letters

Wood Rodgers will send "C" Plans and a Utility Information Form to all affected utility companies after the City has approved the "C" Plans and transmittal letter. The "C" Plans will be clearly marked as such and the transmittal letter will clearly identify this project as a City project as noted elsewhere in this proposal. (Note: Hours/Fee for "C" plans are included in Task 13.)

Task 6 Deliverables:

- ❖ "A" letters to Utility Companies (5 copies, PDF file)
- ❖ "B" Letters to Utility Companies (5 copies, PDF file)

- ❖ "C" Utility Information Forms and Plans to Utility Companies (11x17 drawings, 5 copies, PDF file)

TASK 7. AGENCY COORDINATION

The Olive Drive Connection will require an Encroachment Permit from Caltrans since the proposed structure is within Caltrans Right of Way. Wood Rodgers will provide all services to process, coordinate, and obtain the encroachment permit on behalf of the City. The task includes up to 2 meetings with Caltrans.

It is assumed that the project will be constructed completely within the existing City right of way. However, the construction will occur adjacent to Union Pacific Railroad (UPRR) right of way and will require coordination with them. The task includes up to 2 local meetings with UPRR are assumed for this scope of work.

Right of Way services are not anticipated. If a need for this service is identified during project development it can be added at the City's request.

TASK 8. PROJECT REPORT AND PRELIMINARY ENGINEERING (30% COMPLETE)

For the Olive Drive Connection, Wood Rodgers Team will provide a Project Report, preliminary ramp bridge design, Structure Type Selection Report, and 30% complete drawings for the proposed trail modifications and ramp bridge connection to the overcrossing bridge. The Project Report and Structure Type Selection Report will be submitted to the City and Caltrans for their review and approval. This 30% complete task will give the City, Caltrans, and the Team the opportunity to meet, agree on, and approve the preliminary details and costs for the bridge before proceeding with final design and PS&E efforts.

8.1 Civil Preparation of Project Report and 30% Plans

This task includes the preparation of a Project Report (PR), which will be used to identify, discuss, facilitate approval of the Environmental Document and approve the proposed Project. The Project Report will be formatted in accordance with *Caltrans Project Development Procedures Manual (PDPM)* and will utilize the template found in Appendix K of the document.

The project will be designed to comply with the Class I trail design standards shown in the *AASHTO Guide for the Development of Bicycle Facilities*; the *Caltrans Highway Design Manual Chapter 1000 for Bicycle Transportation Design*; the *California Manual on Uniform Traffic Control Devices (MUTCD)* and local agency standards.

It is anticipated that this project will obtain a CE under CEQA. A Draft Project Report will be submitted to the City along with the Draft Environmental Document for review.

Following any comments received for the Draft Environmental Document and Draft Project Report, the Draft Project Report and Draft Environmental Document will be revised and submitted as the Final Project Report and Environmental Documentation (PA&ED) for City approval. City approval of the PA&ED will finalize Phase One of the project and will initiate Phase Two.

The 30% plans will include plan (geometrics), profile, and typical sections for City and Caltrans approval. This approval will form the basis for the final design.

The 30% improvement plans will be included as an attachment to the Project Report. The 30% structure plans, the Environmental Document, and engineer's cost estimates will also be attached.

8.2 Bridge Preparation of Structure Type Selection Report and 30% Plans

This task includes investigating different structure alternatives for the ramp bridge. Two alternatives will be considered: cast-in-place reinforced concrete and structural steel. A detailed General Plan drawing and preliminary cost estimate will be prepared for each of the bridge alternatives. A Draft Structure Type Selection Report will be prepared in accordance with *Caltrans Memo to Designers "1-29 Type Selection Review Meeting"*; *Caltrans Bridge Design Aids "10-21 Selection of Type"*; and *Caltrans OSFP Information and Procedures Guide "4-2 Structure Type Selection"*. The Draft Report will be submitted to the City and Caltrans for review and comment.

The Team will arrange and conduct a Structure Type Selection Meeting with the City, Caltrans, and selected Team members to discuss the Draft Report and its recommendations. Notes from the meeting will be documented in writing.

Revisions will be made to the Draft Structure Type Selection based on the Type Selection Meeting and the documented notes from that meeting. An approved Final Structure Type Selection Report will be issued to the City and Caltrans. The Final Report will include the recommendation for the selected bridge configuration and structure type that is to be designed and constructed.

Task 8 Deliverables

- ❖ *Project Report (5 copies, PDF file)*
- ❖ *Structure Type Selection Report (5 copies, PDF file)*
- ❖ *30% Complete Drawings (11x17 drawings, 5 copies, PDF file)*

TASK 9. PUBLIC MEETING

The Wood Rodgers will attend one (1) public meeting with residents, businesses and interested stakeholders in coordination with the City of Davis. The primary goals of the public meeting are to inform the community of the Project and solicit input/feedback. For the meeting, Wood Rodgers will provide exhibits and fact sheets showing and describing the project. Wood Rodgers will provide key staff including the Project Manager, Project Engineer, and Structure Lead Engineer. Wood Rodgers will record notes and transcribe them into Microsoft Word for each meeting for City records and documentation. It is assumed that the City will provide the hosting facility, postcard/flyer notification, comment cards, and refreshments.

END OF PHASE 1 TASKS

PHASE 2A TASKS – Olive Drive Connection Final Design

TASK 10. PROJECT MANAGEMENT AND COORDINATION (PHASE 2A)

The Wood Rodgers Team will provide the overall project management and coordination necessary to complete the final design and produce a bid-ready PS&E package. This includes the following:

10.1 Management

The Team's Project Manager will perform project management related activities such as providing monthly invoices, progress reports, and budget/schedule monitoring.

10.2 City Coordination and Meetings

This task includes attending project meetings with the City – a Kick-Off Meeting and up to five additional project meetings are assumed.

10.3 Quality Assurance/Quality Control

The Team will perform Quality Assurance/Quality Control (QA/QC). QA refers to those actions, procedures, and methods to be incorporated at management levels to observe and assure that quality control procedures are in place, are being carried out, and that the desired result of quality professional services is being achieved. Quality Control (QC) refers to actions, procedures, and methods that shall be implemented at production and administrative levels, to produce the desired result of quality, professional services, and documents.

Task 10 Deliverables:

- ❖ *Monthly Invoices and Progress Reports (1 copy, PDF file)*
- ❖ *Project Schedules (5 copies, PDF file)*
- ❖ *Meeting Agendas and Notes (5 copies, PDF file)*

TASK 11. FINAL DESIGN AND ENGINEERING (65% COMPLETE)

The Wood Rodgers Team will provide all the design, plans, specifications, and estimates (PS&E) services for the proposed trail modifications and ramp bridge connection to the overcrossing bridge. This task will provide 65% complete drawings, technical special provisions (index only), quantity take-offs, and construction cost estimate. Specifications and technical special provisions for the bridge will be based on Caltrans 2015 standards. It is recommended that a meeting be held after the review of the 65% Submittal to discuss comments and resolutions. This will facilitate the development of the 95% Design and PS&E Submittal.

11.1 Civil Preparation of 65% Design and PS&E Submittal

The purpose of this task is to perform the detailed final design and detailing of the trail modifications. This task will provide 65% complete drawings, technical special provisions (index only), quantity take-offs, and construction cost estimate. The project will be designed to comply with the Class I trail design standards shown in the *AASHTO Guide for the Development of Bicycle Facilities*; the *Caltrans Highway Design Manual, Sixth Edition, Chapter 1000 for Bicycle Transportation Design*; the *California Manual on Uniform Traffic Control Devices (MUTCD)*; and local agency standards. Trail improvements not incorporated within the structure and separate from Caltrans' Standard Specification and Standard Plan jurisdictional requirements will adhere to the City of Davis Public Works Standard Specifications and Standard Plans.

Following is a list of anticipated civil plan sheets (approximately 16 sheets total):

- ❖ Title and Location Map
- ❖ Typical Cross Sections (2)
- ❖ Layout and Profile (4)
- ❖ Construction Details
- ❖ Drainage (2)
- ❖ Electrical (2)
- ❖ Construction Area Signs
- ❖ Traffic Handling
- ❖ Summary of Quantities
- ❖ Erosion Control
- ❖ Revised Standard Plans

11.2 Bridge Preparation of 65% Design and PS&E Submittal

The purpose of this task is to perform the detailed final design and detailing of the ramp bridge. This task will provide 65% complete drawings, technical special provisions (index only), quantity take-offs, and construction cost estimate. The design will be in accordance with *AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications*, Sixth Edition 2012, with Caltrans Blue Sheet Addendums and *Caltrans Seismic Design Criteria (SDC)*, Version 1.7 April 2013. Additionally, *Caltrans Memos to Designers, Bridge Design Aids*, and *Bridge Design Details* will be followed. This task will provide 65% complete bridge drawings, technical bridge special provisions (index only), quantity take-offs, and construction cost estimate. Specifications and technical special provisions for the bridge will be based on Caltrans 2015 standards. It is recommended that a meeting be held after the review of the 65% Submittal to discuss comments and resolutions. This will facilitate the development of the 95% Design and PS&E Submittal.

Following is a list of anticipated ramp bridge plan sheets (approximately 18 sheets total):

- ❖ General Plan
- ❖ Index to Plans and General Notes
- ❖ Deck Contours
- ❖ Foundation Plan
- ❖ Structure Plan
- ❖ Abutment Layout and Details (2)
- ❖ Bent Layout and Details (4)
- ❖ Typical Section
- ❖ Girder Layout and Details (2)
- ❖ Railing Plan and Details
- ❖ Joint Seal Details
- ❖ Log of Test Borings (2)

Task 11 Deliverables

- ❖ Half Size 11"x17" Plans (5 copies, PDF file)
- ❖ Full Size 22"x34" Plans (1 copy, PDF file)
- ❖ Special Provisions Index (5 copies, PDF file)
- ❖ Construction Cost Estimate (5 copies, PDF file)

TASK 12. FINAL DESIGN AND ENGINEERING (95% COMPLETE)

This task will start with providing written responses to all review comments on the 65% Submittal. Specifications and technical special provisions for the bridge will be based on Caltrans 2015 standards.

12.1 Civil Preparation of 95% Design and PS&E Submittal

This task includes trail plans, technical special provisions, quantity take-offs, check quantity take-offs, and construction cost estimates.

12.2 Bridge Preparation of the 95% Design and PS&E Submittal

This task includes ramp bridge final design calculations, independent design check, ramp bridge plans, technical special provisions, quantity take-offs, check quantity take-offs, and construction cost estimates. This independent design check of the ramp bridge design is a significant part of the Bridge Team's QA/QC process.

Task 12 Deliverables

- ❖ *Written Responses to Comments on the 65% Submittal*
- ❖ *Half Size 11"x17" Plans (5 copies, PDF file)*
- ❖ *Full Size 22"x34" Plans (1 copy, PDF file)*
- ❖ *Special Provisions (5 copies, PDF file)*
- ❖ *Construction Cost Estimate (5 copies, PDF file)*

TASK 13. FINAL DESIGN AND ENGINEERING (FINAL 100% COMPLETE)

This task will start with providing written responses to all review comments on the 95% Submittal. The final PS&E documents from this task will be used for the bid and construction phases of the project.

13.1 Civil Preparation of 100% Final Design and PS&E Submittal

Services provided in this task include submitting the final trail plans, technical special provisions, quantity take-off and check quantity take-off calculations, and construction cost estimate (Engineer's Estimate) for the trail.

13.2 Bridge Preparation of 100% Final Design and PS&E Submittal

Services provided in this task include submitting the final ramp bridge design and independent check calculations, plans, technical special provisions, quantity take-off and check quantity take-off calculations, and construction cost estimate (Engineer's Estimate) for the ramp bridge.

Task 13 Deliverables

- ❖ *Written Responses to Comments on the 95% Submittal*
- ❖ *Final Design and Independent Check Calculations (1 copy, PDF file)*
- ❖ *Half Size 11"x17" Plans (5 copies, PDF file)*
- ❖ *Full Size 22"x34" Reproducible Plans (1 copy, PDF file)*
- ❖ *Special Provisions (5 copies, PDF file)*
- ❖ *Final Quantity Take-Off and Check Take-Off Calculations (1 copies, PDF file)*
- ❖ *Construction Cost Estimate (Engineer's Estimate) (5 copies, PDF file)*

END OF PHASE 2A TASKS

PHASE 2B TASKS – WBAR Improvements Final Design

TASK 14. SURVEY AND BASE MAPPING

This task includes surveying and mapping for the WBAR Improvements. It is deferred from Phase 1 as it is not needed for the preliminary engineering.

14.1 Control and Topo

Wood Rodgers will provide design level topo with color orthophotos and one day of supplemental field topo.

14.2 Base Map

Wood Rodgers will provide a base map.

Task 14 Deliverables:

- ❖ *Base Map (11x17 drawings, 5 copies, PDF file)*

TASK 15. PROJECT MANAGEMENT AND COORDINATION (PHASE 2B)

The Wood Rodgers Team will provide the overall project management and coordination necessary to complete the final design and produce a bid-ready PS&E package. This includes the following:

15.1 Management

The Team's Project Manager will perform project management related activities such as providing monthly invoices, progress reports, and budget/schedule monitoring.

15.2 City Coordination and Meetings

This task includes attending project meetings with the City – a Kick-Off Meeting and up to three additional project meetings are assumed.

15.3 Quality Assurance/Quality Control

The Team will perform Quality Assurance/Quality Control (QA/QC). QA refers to those actions, procedures, and methods to be incorporated at management levels to observe and assure that quality control procedures are in place, are being carried out, and that the desired result of quality professional services is being achieved. Quality Control (QC) refers to actions, procedures, and methods that shall be implemented at production and administrative levels, to produce the desired result of quality, professional services, and documents.

Task 15 Deliverables:

- ❖ *Monthly Invoices and Progress Reports (1 copy, PDF file)*
- ❖ *Project Schedules (5 copies, PDF file)*
- ❖ *Meeting Agendas and Notes (5 copies, PDF file)*

TASK 16. FINAL DESIGN AND ENGINEERING (65% COMPLETE)

The Wood Rodgers Team will provide all the design, plans, specifications, and estimates (PS&E) services for the proposed WBAR Improvements. This task will provide 65% complete drawings, quantity take-offs, and construction cost estimate. It is recommended that a meeting be held after the review of the 65% Submittal to discuss comments and resolutions. This will facilitate the development of the 95% Design and PS&E Submittal.

Following is a list of anticipated civil plan sheets (approximately 14 sheets total):

- | | | |
|------------------------------|-----------------------------|------------------------|
| ❖ Title and Location Map | ❖ Drainage (1) | ❖ Erosion Control |
| ❖ Typical Cross Sections (1) | ❖ Signal and Electrical (4) | ❖ Construction Details |
| ❖ Layout and Profile (4) | ❖ Traffic Handling | |

Task 16 Deliverables

- ❖ *Half Size 11"x17" Plans (5 copies, PDF file)*
- ❖ *Full Size 22"x34" Plans (1 copy, PDF file)*
- ❖ *Construction Cost Estimate (5 copies, PDF file)*

TASK 17. FINAL DESIGN AND ENGINEERING (95% COMPLETE)

This task will start with providing written responses to all review comments on the 65% Submittal.

Task 17 Deliverables

- ❖ *Written Responses to Comments on the 65% Submittal*
- ❖ *Half Size 11"x17" Plans (5 copies, PDF file)*
- ❖ *Full Size 22"x34" Plans (1 copy, PDF file)*
- ❖ *Construction Cost Estimate (5 copies, PDF file)*

TASK 18. FINAL DESIGN AND ENGINEERING (FINAL 100% COMPLETE)

This task will start with providing written responses to all review comments on the 95% Submittal. The final PS&E documents from this task will be used for the bid and construction phases of the project.

Task 18 Deliverables

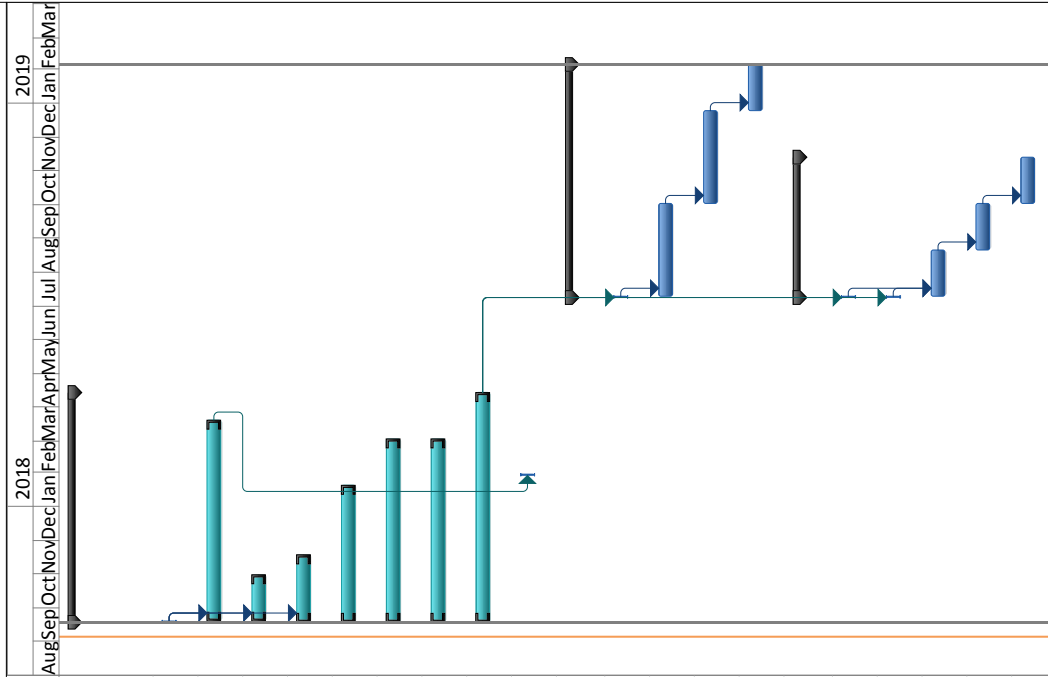
- ❖ *Written Responses to Comments on the 95% Submittal*
- ❖ *Half Size 11"x17" Plans (5 copies, PDF file)*
- ❖ *Full Size 22"x34" Reproducible Plans (1 copy, PDF file)*
- ❖ *Final Quantity Take-Off and Check Take-Off Calculations (1 copies, PDF file)*
- ❖ *Construction Cost Estimate (Engineer's Estimate) (5 copies, PDF file)*

| Task | Total |
|--|-------------------|
| | Total Task Budget |
| Rates | |
| PHASE ONE - (PA & ED); PRELIM WBAR IMPROVEMENTS | |
| TASK 1. PROJECT MANAGEMENT AND COORDINATION | |
| 1.1 Management | \$ 10,520 |
| 1.2 City Coordination and Meetings | \$ 6,080 |
| 1.3 Quality Assurance/Quality Control | \$ 5,380 |
| Task 1 Total | \$ 21,980 |
| TASK 2. ENVIRONMENTAL DOCUMENTATION (CEQA/NEPA) AND PERMITTING | |
| 2.1 Preliminary Environmental Study (PES) Form | \$ 6,370 |
| 2.2 CEQA/NEPA Environmental Documentation | \$ 13,120 |
| 2.3 Environmental Technical Studies | \$ 1,790 |
| 2.3.1 NES-MI | \$ 10,020 |
| 2.3.2 Cultural Resources | \$ 17,630 |
| 2.3.3 Minor VIA | \$ 10,860 |
| 2.3.4 Other tech memos (community, noise) | \$ 8,860 |
| 2.4 Environmental Permitting | \$ - |
| Task 2 Total | \$ 68,650 |
| TASK 3. SURVEY AND BASE MAPPING | |
| 3.1 Control and Topo | \$ 6,800 |
| 3.2 Base Map | \$ 6,200 |
| Task 3 Total | \$ 13,000 |
| TASK 4. WALK AND BIKE AUDIT REPORT PRELIMINARY ENGINEERING | |
| Walk and Bike Audit Report Preliminary Engineering | \$ 20,620 |
| Walk and Bike Audit Report Traffic Analysis | \$ 3,550 |
| Task 4 Total | \$ 24,170 |
| TASK 5. GEOTECHNICAL INVESTIGATION | |
| 5.1 - 5.4 Geotechnical Report | \$ 40,568 |
| 5.5 Initial Site Assessment (ISA) | \$ 19,829 |
| Task 5 Total | \$ 60,397 |
| TASK 6. UTILITY COORDINATION | |
| 6.1 "A" Letters | \$ 1,620 |
| 6.2 "B" Letters (Included in Task 11) | \$ - |
| 6.3 "C" Letters (Included in Task 13) | \$ - |
| Task 6 Total | \$ 1,620 |
| TASK 7. AGENCY COORDINATION | |
| Agency Coordination | \$ 12,340 |
| Task 7 Total | \$ 12,340 |
| TASK 8. PROJECT REPORT AND PRELIMINARY ENGINEERING (30% COMPLETE) | |
| 8.1 Civil Preparation of Project Report and 30% Plans | \$ 41,780 |
| 8.2 Bridge Preparation of Structure Type Selection Report and 30% Plans | \$ 34,850 |
| Task 8 Total | \$ 76,630 |
| TASK 9. PUBLIC MEETING | |
| Public Meeting | \$ 5,960 |
| Task 9 Total | \$ 5,960 |
| PHASE 2A (FINAL DESIGN - OLIVE DR/POLE LINE RD BIKE CONNECTION) | |
| TASK 10. PROJECT MANAGEMENT AND COORDINATION | |
| 10.1 Management | \$ 10,740 |
| 10.2 City Coordination and Meetings | \$ 6,860 |
| 10.3 Quality Assurance/Quality Control | \$ 5,380 |
| Task 10 Total | \$ 22,980 |
| TASK 11. FINAL DESIGN AND ENGINEERING (65% COMPLETE) | |
| 11.1 Civil Preparation of 65% Design and PS&E Submittal | \$ 31,540 |
| 11.2 Bridge Preparation of 65% Design and PS&E Submittal | \$ 52,640 |
| Task 11 Total | \$ 84,180 |
| TASK 12. FINAL DESIGN AND ENGINEERING (95% COMPLETE) | |
| 12.1 Civil Preparation of 95% Design and PS&E Submittal | \$ 24,660 |
| 12.2 Bridge Preparation of 95% Design and PS&E Submittal | \$ 42,860 |
| Task 12 Total | \$ 67,520 |
| TASK 13. FINAL DESIGN AND ENGINEERING (FINAL 100% COMPLETE) | |
| 13.1 Civil Preparation of 100% Final Design and PS&E Submittal | \$ 14,660 |
| 13.2 Bridge Preparation of 100% Design and PS&E Submittal | \$ 14,720 |
| Task 13 Total | \$ 29,380 |
| PHASE 2B (FINAL DESIGN - DAVIS WALK AND BIKE AUDIT REPORT - MONTGOMERY ELEMENTARY IMPROVEMENT PLAN) | |
| TASK 14. SURVEY AND BASE MAPPING | |
| 3.1 Control and Topo | \$ 5,800 |
| 3.2 Base Map | \$ 3,500 |
| Task 14 Total | \$ 9,300 |
| TASK 15. PROJECT MANAGEMENT AND COORDINATION | |
| 15.1 Management | \$ 3,060 |
| 15.2 City Coordination and Meetings | \$ 3,740 |
| 15.3 Quality Assurance/Quality Control | \$ 4,130 |
| Task 15 Total | \$ 10,930 |
| TASK 16. FINAL DESIGN AND ENGINEERING (65% COMPLETE) | |
| 16.1 Preparation of 65% Design and PS&E Submittal | \$ 35,410 |
| Task 16 Total | \$ 35,410 |
| TASK 17. FINAL DESIGN AND ENGINEERING (95% COMPLETE) | |
| 17.1 Preparation of 95% Design and PS&E Submittal | \$ 22,560 |
| Task 17 Total | \$ 22,560 |
| TASK 18. FINAL DESIGN AND ENGINEERING (FINAL 100% COMPLETE) | |
| 18.1 Preparation of 100% Final Design and PS&E Submittal | \$ 17,480 |
| Task 18 Total | \$ 17,480 |
| Total Budget (By Firm) | \$ 584,487 |
| 5% Mark Up on Subconsultants | \$ 6,127 |
| GRAND TOTAL | \$ 590,615 |
| TOTALS | |

| | |
|--|-------------------|
| PHASE 1 (PA&ED); WBAR Prelim | \$ 290,875 |
| PHASE 2A (FINAL DESIGN) - Olive Drive | \$ 204,060 |
| PHASE 2B (FINAL DESIGN) - WBAR | \$ 95,680 |

CITY OF DAVIS OLIVE DRIVE/BRIDGE CONNECTION IMPROVEMENTS PROPOSED PROJECT SCHEDULE

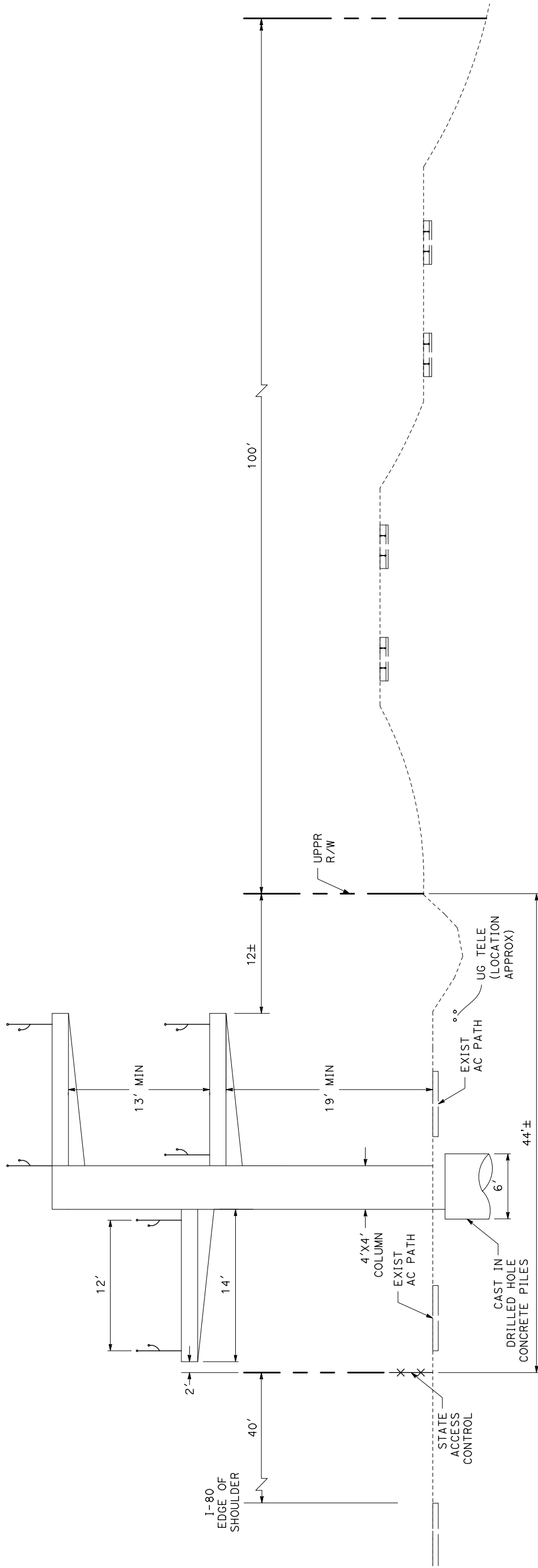
| ID | Task Name | Duration | Start | Finish |
|----|---|-----------------|--------------------|---------------------|
| 1 | PHASE 1 - PROJECT REPORT AND ENVIRONMENTAL DOCUMENT (PA/ED) | 150 days | Mon 9/18/17 | Fri 4/13/18 |
| 2 | TASK 1 - PROJECT MANAGEMENT/ADMINISTRATION | 1 day | Mon 9/18/17 | Mon 9/18/17 |
| 3 | TASK 2 - ENVIRONMENTAL DOCUMENT | 130 days | Tue 9/19/17 | Mon 3/19/18 |
| 4 | TASK 3 - SURVEYS AND BASE MAPPING | 30 days | Tue 9/19/17 | Mon 10/30/17 |
| 5 | TASK 4 - WBAR PRELIMINARY ENGINEERING | 45 days | Mon 9/18/17 | Fri 11/17/17 |
| 6 | TASK 5 - GEOTECHNICAL INVESTIGATION | 90 days | Mon 9/18/17 | Fri 1/19/18 |
| 7 | TASK 6 - UTILITY COORDINATION | 120 days | Mon 9/18/17 | Fri 3/2/18 |
| 8 | TASK 7 - AGENCY COORDINATION | 120 days | Mon 9/18/17 | Fri 3/2/18 |
| 9 | TASK 8 - PROJECT REPORT AND PRELIM ENGINEERING | 150 days | Mon 9/18/17 | Fri 4/13/18 |
| 10 | TASK 9 - PUBLIC MEETING | 1 day | Mon 1/29/18 | Mon 1/29/18 |
| 11 | PHASE 2 A- PREPARE PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E) | 151 days | Mon 7/9/18 | Mon 2/4/19 |
| 12 | TASK 10 - PROJECT MANAGEMENT/ADMINISTRATION | 1 day | Mon 7/9/18 | Mon 7/9/18 |
| 13 | TASK 11 - PREPARE 65% PLANS AND ESTIMATES | 60 days | Tue 7/10/18 | Mon 10/1/18 |
| 14 | TASK 12- PREPARE 95% PS&E | 60 days | Tue 10/2/18 | Mon 12/24/18 |
| 15 | TASK 13 - FINAL PS&E | 30 days | Tue 12/25/18 | Mon 2/4/19 |
| 16 | PHASE 2B - PREPARE PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E) | 91 days | Mon 7/9/18 | Mon 11/12/18 |
| 17 | TASK 14 - MAPPING AND SURVEYS | 1 day | Mon 7/9/18 | Mon 7/9/18 |
| 18 | TASK 15 - PROJECT MANAGEMENT/ADMINISTRATION | 1 day | Mon 7/9/18 | Mon 7/9/18 |
| 19 | TASK 16 - PREPARE 65% PLANS AND ESTIMATES | 30 days | Tue 7/10/18 | Mon 8/20/18 |
| 20 | TASK 17- PREPARE 95% PS&E | 30 days | Tue 8/21/18 | Mon 10/1/18 |
| 21 | TASK 18 - FINAL PS&E | 30 days | Tue 10/2/18 | Mon 11/12/18 |



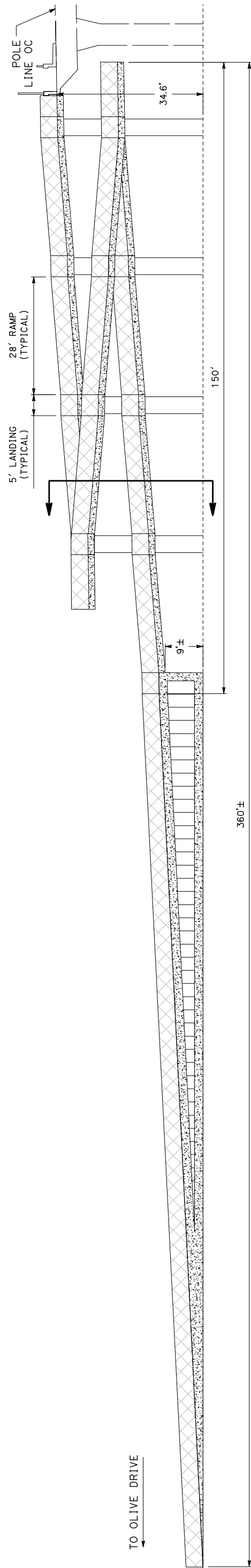
Project: Davis-Olive_Pole Line Sch
Date: Tue 9/5/17

| | | | | | |
|--|-----------------|--|--------------------|--|-----------------------|
| | Task | | External Tasks | | Manual Task |
| | Split | | External Milestone | | Duration-only |
| | Milestone | | Inactive Task | | Manual Summary Rollup |
| | Summary | | Inactive Milestone | | Manual Summary |
| | Project Summary | | Inactive Summary | | Start-only |

Finish-only
 Deadline
 Progress



SECTION
NO SCALE



ELEVATION
NO SCALE



Montgomery Elementary Improvement Plan

- ② **Walnut Park Parking Lot**
 - Refresh existing white curb in loading zone
- ③ **Lillard Drive at Danbury Street**
 - Trim vegetation
- ④ **Lillard Drive at Cowell Boulevard**
 - Evaluate impacts to closing the right-turn slip lanes to auto traffic, allow through traffic for turning bicyclists
 - Restripe all crosswalks as high-visibility white, move back to accommodate two-stage turn boxes
 - Install two stage turn boxes
- ⑤ **Lillard Drive at Faragut Circle**
 - Replace existing white transverse crosswalks with high-visibility white
 - Install tactile domes on all three curb ramps
- ⑥ **Danbury Street**
 - Refresh bike lane markings
 - Trim hedge at parking lot exit
- ⑦ **Danbury Street at Lillard Drive**
 - Restripe crosswalks as high-visibility yellow
 - Install curb ramp
 - Relocate stop sign outside bike lane
- ⑧ **Lillard Drive at Drummond**
 - Restripe crosswalk as high-visibility
 - Stencil "STOP" and stripe stop bars at all stop signs
 - Construct curb extension on all four corners
- ⑨ **Path behind School**
 - Add striping and signage to path at Danbury St/ Putah Creek Crossing
 - Mark conflict points at path intersections
 - Create 'bicycle slow zone' near school bike parking area
 - Install wayfinding
- ⑩ **Putah Creek Crossing**
 - Study the feasibility of constructing a formal crossing of Putah Creek
- ⑪ **Erma Lane at Path**
 - Study the feasibility of constructing a path connection from Erma Lane



MONTGOMERY WBAR IMPROVEMENTS LIST

| Attachment #5 ID | Location | Improvement |
|------------------|-----------------------------------|--|
| 3 | Lillard Drive at Cowell Boulevard | Evaluate impacts to closing the right-turn slip lanes to auto traffic. |
| 6 | Danbury Street | Refresh bike lane markings and trim vegetation at driveway |
| 11 | Erma Lane at Path | Evaluate feasibility of a path connection from Erma Lane Path. |
| 9 | Path behind School | Add striping and signage to path at Danbury St/ Putah Creek Crossing. |
| 9 | Path behind School | Mark conflict points at path. |
| 7 | Danbury Street at Lillard Drive | Relocate stop sign outside bike. |
| 9 | Path behind School | Create 'bicycle slow zone' near school bike parking area |
| 8 | Lillard Drive at Drummond Avenue | Stencil STOP and stripe stop bars at all stop signs. |
| 5 | Lillard Drive at Faragut Circle | Install tactile domes on all three curb ramps. |
| 4 | Lillard Drive at Cowell Boulevard | Install two stage turn boxes. |
| 9 | Path behind School | Install wayfinding . |
| 2 | Walnut Park Parking Lot | Refresh existing white curb in loading zone. |
| 4 | Lillard Drive at Cowell Boulevard | Restripe all crosswalks as high-visibility white, move back to accommodate two-stage turn boxes. |
| 5 | Lillard Drive at Faragut Circle | Replace existing white transverse crosswalks with high-visibility white. |
| 8 | Lillard Drive at Drummond Avenue | Restripe crosswalk as high-visibility white. |
| 7 | Danbury Street at Lillard Drive | Restripe crosswalks as high-visibility yellow. |